LG
Life's Good

MULTI V™

CEILING CASSETTE INDOOR UNIT ENGINEERING MANUAL

One-Way Ceiling Cassettes
7,500 to 24,200 Btu/h

Two-Way Ceiling Cassettes
19,100 to 24,200 Btu/h

Four-Way Ceiling Cassettes
5,500 to 48,100 Btu/h

PROPRIETARY DATA NOTICE

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This document is for design purposes only.

A summary list of safety precautions is on page 3.

For more technical materials such as submittals, catalogs, installation, owner's, and service manuals, visit www.lghvac.com.

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TABLE OF SYMBOLS

⚠ DANGER	*This symbol indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.*
⚠ WARNING	*This symbol indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.*
⚠ CAUTION	*This symbol indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.*
Note	*This symbol indicates situations that may result in equipment or property damage accidents only.*
⃠	*This symbol indicates an action should not be completed.*

UNIT NOMENCLATURE

Family
ARN = Multi V Indoor Unit
(Refrigerant R410A)

Type
U = DC Inverter Heat Pump

Indoor Unit Nominal Capacity

05 = 5,000 Btu/h	18 = 18,000 Btu/h	42 = 42,000 Btu/h
07 = 7,000 Btu/h	24 = 24,000 Btu/h	48 = 48,000 Btu/h
09 = 9,000 Btu/h	28 = 28,000 Btu/h	54 = 54,000 Btu/h
12 = 12,000 Btu/h	30 = 30,000 Btu/h	76 = 76,000 Btu/h
15 = 15,000 Btu/h	36 = 36,000 Btu/h	96 = 96,000 Btu/h

Electrical Ratings
3 = 208–230V/60Hz/1Ph

Model

B3 = Ducted (low static - bottom return)	L3 = Ducted (low static)	TN = 4-Way Ceiling Cassette
B4 = Ducted (low static - bottom return)	NJ = Vertical/Horizontal Air Handling Unit	TP = 4-Way Ceiling Cassette
B8 = Ducted (high static)	NK = Vertical/Horizontal Air Handling Unit	TQ = 4-Way Ceiling Cassette
BG = Ducted (high static)	SB = Wall Mounted / Art Cool™ Mirror	TR = 4-Way Ceiling Cassette
BH = Ducted (high static)	SC = Wall Mounted / Art Cool Mirror	VE = Convertible Surface Mounted
BR = Ducted (high static)	SF = Art Cool Gallery	VJ = Ceiling Suspended
CE = Floor Standing (small frame)	TT = 1-Way Ceiling Cassette	
CF = Floor Standing (large frame)	TU = 1-Way Ceiling Cassette	
L1 = Ducted (low static)	TL = 2-Way Ceiling Cassette	
L2 = Ducted (low static)	TM = 4-Way Ceiling Cassette	

Feature

A, C, L, R = Standard*	U = Uncased
G = Low Static	

**Plasma filter kit accessories are available separately. Always follow all local, state, and national building codes with the use of this or any product.*

Generation
2 = Second
4 = Fourth
A = Second, Revision A

LATS MULTI V PIPING DESIGN SOFTWARE

The proper design and installation of the refrigerant piping system is a critical element of a Multi V system. Multi V Heat Pump systems require two pipes between components – a liquid line and a vapor line. Multi V Heat Recovery systems require three pipes between the outdoor unit and the heat recovery unit – a liquid line, a low-pressure vapor line, and a high-pressure vapor line. A properly designed refrigerant piping system ensures that refrigerant is delivered to the indoor unit coils for optimal system performance and capacity.

LG Air Conditioner Technical Solution (LATS) software is a total design solution for LG Multi V air conditioning systems. This Windows®-based application assists the design engineer with specifying and sizing outdoor and indoor units (by calculating component capacity based on design conditions), laying out the refrigeration distribution pipe system, checking piping limitations, calculating refrigerant charge, and generating equipment schedules and piping diagrams in (.dxf) format for use on CAD building design drawings.*

* Windows® is a registered mark of Microsoft® Corporation.

To ensure that the refrigerant piping design meets LG's quality standards, a LATS refrigerant piping design must be provided with every Multi V order. Following the installation, if any changes or variations to the design are necessary, a new LATS file must be created and provided to LG prior to system commissioning to ensure the proper pipe size has not changed.

Design Choices

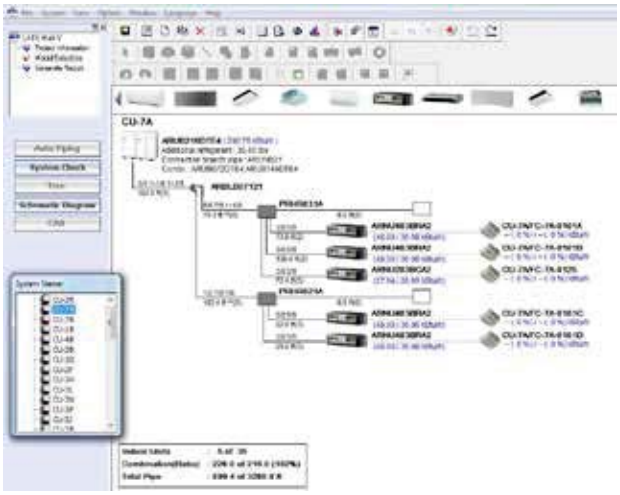
LATS Multi V software is flexible, offering the HVAC system engineer an easy to use Tree mode.

Tree Mode

Using the Tree mode, the engineer can quickly create a one-line schematic drawing of a Multi V system. Integration of the engineered pipe system into the building drawings is done at a later date by the draftsperson using standard drafting software tools.

- Import building loads from an external file (.xls format).
- System components selected using an easy drag and drop process.
- Automatically analyzes and checks the design complies with most piping design limitations.
- Sizes refrigerant piping.
- Generates a system engineering report (.xls format).
- Generates an equipment schedule (.xls or .dxf format).
- Generates a system piping diagram (.dxf format).

Figure 1: Screenshot of LATS Pipe System Design Tool in Tree Mode.



LATS Report

LATS Multi V software generates a report file (.xls format) containing project design parameters, cooling and heating design day system component performance, and capacity data. The report calculates the system combination ratio, calculates the system refrigerant charge, and provides detailed bill of material information including a list of Multi V outdoor units, air handlers, control devices, accessories, refrigerant pipe sizes segregated by building, by system, by pipe size, and by pipe segments.

ONE-WAY CEILING CASSETTE

ONE-WAY CEILING CASSETTE

MULTI V

Mechanical Specifications

Casing
The case is designed to mount recessed in the ceiling and has a surface-mounted concentric grille on the bottom of the unit. The unit case is manufactured with coated metal. Cold surfaces are covered with a coated polystyrene insulating material. The case is provided with metal ears designed to support the unit weight on four corners. Ears have pre-punched holes designed to accept field-supplied all-thread rod hangers.

Ventilation Air
The case has a factory designated cutout for the connection of a field-supplied outside air duct and flange.

Architectural Filter/Grille
The ceiling cassette assembly is provided with an off-white ABS polymeric resin architectural grille with a tapered trim edge and a hinged, spring clip (screw-less) return air filter-grille door.

Fan Assembly and Control
The indoor unit has a single, direct-drive, cross-flow tangential Sirocco fan made of high strength ABS GP-2305 polymeric resin. The fan motor is a Brushless Digitally Controlled (BLDC) design with permanently lubricated and sealed ball bearings. The fan motor includes thermal, overcurrent and low RPM protection. The fan / motor assembly is mounted on vibration attenuating rubber grommets. The fan impeller is statically and dynamically balanced. The fan speed is controlled using a microprocessor-based control algorithm that provides a high fan speed in cooling thermal ON and low fan speed in cooling thermal OFF, high fan speed in heating thermal ON and fan off in heating thermal OFF. The fan speeds can be field adjusted between low, medium, and high speeds. The fan speed algorithm provides a field-selectable fixed-speed or auto-speed setting that adjusts the fan speed to simulate natural airflow.

Air Filter
Return air is filtered with a removable, washable filter with anti-fungal treatment. Plasma filter accessories are also available separately.

Airflow Guide Vanes
The architectural grille has a single directional slot diffuser with an oscillating motorized guide vane designed to change the angle airflow is discharged. The discharge range of motion is 40º in an up/down direction with the capability of locking the vanes in a field adjusted fixed position.

Microprocessor Controls
The unit is provided with an integrated microprocessor controller capable of performing functions necessary to operate the system without the use of a wall-mounted controller. A temperature thermistor is factory-mounted in the return air stream. All unit operation parameters, excluding the operation schedule, are stored in non-volatile memory resident on the unit microprocessor. Operating schedules are stored in select models of the optional, wall-mounted, local, or central controller. The field-supplied communication cable between the indoor unit(s) and outdoor unit is to be a minimum of 18 AWG, 2 conductor, stranded, and shielded cable (RS-485), terminated via screw terminals on the control boards. The microprocessor control provides the following functions: auto addressing, self-diagnostics, auto restart following power restoration, test run, and will operate the indoor unit using one of five operating modes:

1. Auto Changeover (Heat Recovery only)
2. Heating
3. Cooling
4. Dry
5. Fan Only

For Heat Recovery systems the Auto Changeover setting automatically switches control of the indoor unit between Cooling and Heating modes based on space temperature conditions.

For Heat Pump systems, heated or cooled air delivery is dependent upon outdoor unit operating mode.

In Heating mode, the microprocessor control will activate indoor unit operation when the indoor room temperature falls below set-point temperature. At which point, a signal is sent to the outdoor unit to begin the heating cycle. The indoor unit fan operation is delayed until coil pipe temperature reaches 76ºF. Significant airflow is generated when pipe temperature reaches 80°F. The unit is equipped with an infrared receiver designed to communicate with an LG wireless remote controller. In lieu of wireless remote or factory return air thermistor, screw terminals on the microprocessor circuit board accommodate various models of wall-mounted local controllers and/or a wall-mounted remote temperature sensor. The unit microprocessor is capable of accepting space temperature readings concurrently or individually from either:

1. Wall-mounted wired controller(s)
2. Factory mounted return air thermistor or the optional wall-mounted wired remote temperature sensor

A single indoor unit has the capability of being controlled by up to two local wired controllers. The microprocessor controls space temperature using the value provided by the temperature sensor sensing a space temperature that is farthest away from the temperature set-point. The microprocessor control provides a cooling or heating mode test cycle that operates the unit for 18 minutes without regard to the space temperature. If the system is provided with an optional wall-mounted local or central controller, displayed diagnostic codes are specific, alpha-numeric, and provide the service technician with a reason for the code displayed.

Condensate Lift/Pump
The indoor unit comes with a factory installed and wired condensate lift/pump capable of providing a maximum 27.5 inch lift from the bottom surface of the unit. The lift pump comes with a safety switch that shuts off the indoor unit if condensate rises too high in the drain pan.

Condensate Drain Pan
The condensate drain pan is constructed of EPS (expandable polystyrene resin).

Coil
The indoor unit coil is constructed with grooved design copper tubes with slit coil fins, two (2) rows, twenty-one (21) fins per inch.

Controls Features
- Auto changeover (Heat Recovery only)
- Auto operation / auto restart
- External on/off control
- Dual thermistor control
- Dual setpoint control*
- Filter life and power consumption display*
- Multiple auxiliary heater applications*
- Group control
- High ceiling
- Hot start
- Self diagnostics
- Timer (on / off)
- Weekly schedule
- Auto direction/swing (up/down)
- Fan speed control
- Jet cool (fast cooling)

**To enable Generation 4 features, outdoor unit DIP Switch No. 3 must be set to ON. Please refer to the Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.*

LG

Table 1: One-Way Ceiling Cassette (TU Frames) Indoor Unit General Data.

Model No.	ARNU073TUC4	ARNU093TUC4	ARNU123TUC4
Cooling Mode Performance			
Capacity (Btu/h)	7,500	9,600	12,300
Power Input[1] (W)	40	40	40
Heating Mode Performance			
Capacity (Btu/h)	8,500	10,900	13,600
Power Input[1] (W)	40	40	40
Entering Mixed Air			
Cooling Max (°F WB)	76	76	76
Heating Min (°F DB)	59	59	59
Unit Data			
Refrigerant Type[2]	R410A	R410A	R410A
Refrigerant Control	EEV	EEV	EEV
Sound Pressure[3] dB(A) (H/M/L)	32 / 29 / 25	35 / 34 / 32	38 / 35 / 32
Net Unit Weight (lbs.)	33	33	33
Shipping Weight (lbs.)	40	40	40
Grille Weight (lbs)	10 / 12	10 / 12	10 / 12
Grille Shipping Weight (lbs)	16 / 18	16 / 18	16 / 18
Communication Cable[4] (No. x AWG)	2 x 18	2 x 18	2 x 18
Fan			
Type	Cross Flow	Cross Flow	Cross Flow
Quantity	1	1	1
Motor/Drive	Brushless Digitally Controlled / Direct		
Airflow Rate H/M/L (CFM)	290 / 258 / 226	325 / 304 / 290	353 / 325 / 290
Piping			
Liquid Line (in., O.D.)	1/4 Flare	1/4 Flare	1/4 Flare
Vapor Line (in., O.D.)	1/2 Flare	1/2 Flare	1/2 Flare
Condensate Line (in., I.D.)	1	1	1

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes.

This unit comes with a dry nitrogen charge.

This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.

Cooling capacity rating obtained with air entering the indoor coil at 80ºF dry bulb (DB) and 67ºF wet bulb (WB) and outdoor ambient conditions of 95ºF dry bulb (DB).

Heating capacity rating obtained with air entering the indoor unit at 70ºF dry bulb (DB) and outdoor ambient conditions of 47ºF dry bulb (DB) and 43ºF wet bulb (WB).

[1]Power Input is rated at high speed.

[2]Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

[3]Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.

[4]All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable and national code. Ensure the communication cable is properly grounded at the master outdoor unit only. Do not ground the ODU-IDU communications cable at any other point.

ONE-WAY CEILING CASSETTE

General Data

Table 2: One-Way Ceiling Cassette (TT Frames) Indoor Unit General Data.

Model No.	ARNU183TTC4	ARNU243TTC4
Cooling Mode Performance		
Capacity (Btu/h)	19,100	24,200
Power Input[1] (W)	70	70
Heating Mode Performance		
Capacity (Btu/h)	21,500	24,200
Power Input[1] (W)	70	70
Entering Mixed Air		
Cooling Max (°F WB)	76	76
Heating Min (°F DB)	59	59
Unit Data		
Refrigerant Type[2]	R410A	R410A
Refrigerant Control	EEV	EEV
Sound Pressure[3] dB(A) (H/M/L)	40 / 37 / 35	43 / 40 / 36
Net Unit Weight (lbs.)	42	42
Shipping Weight (lbs.)	49	49
Grille Weight (lbs)	13 / 15	13 / 15
Grille Shipping Weight (lbs)	20 / 22	20 / 22
Communication Cable[4] (No. x AWG)	2 x 18	2 x 18
Fan		
Type	Cross Flow	Cross Flow
Quantity	1	1
Motor/Drive	Brushless Digitally Controlled / Direct	
Airflow Rate H/M/L (CFM)	470 / 427 / 385	515 / 470 / 406
Piping		
Liquid Line (in., O.D.)	1/4 Flare	3/8 Flare
Vapor Line (in., O.D.)	1/2 Flare	5/8 Flare
Condensate Line (in., I.D.)	1	1

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes.

This unit comes with a dry nitrogen charge.

This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.

Cooling capacity rating obtained with air entering the indoor coil at 80ºF dry bulb (DB) and 67ºF wet bulb (WB) and outdoor ambient conditions of 95ºF dry bulb (DB).

Heating capacity rating obtained with air entering the indoor unit at 70ºF dry bulb (DB) and outdoor ambient conditions of 47ºF dry bulb (DB) and 43ºF wet bulb (WB).

[1]Power Input is rated at high speed.

[2]Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

[3]Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.

[4]All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable and national code. Ensure the communication cable is properly grounded at the master outdoor unit only. Do not ground the ODU-IDU communications cable at any other point.

ONE-WAY CEILING CASSETTE

Electrical Data

Table 3: One-Way Ceiling Cassette Indoor Unit Electrical Data.

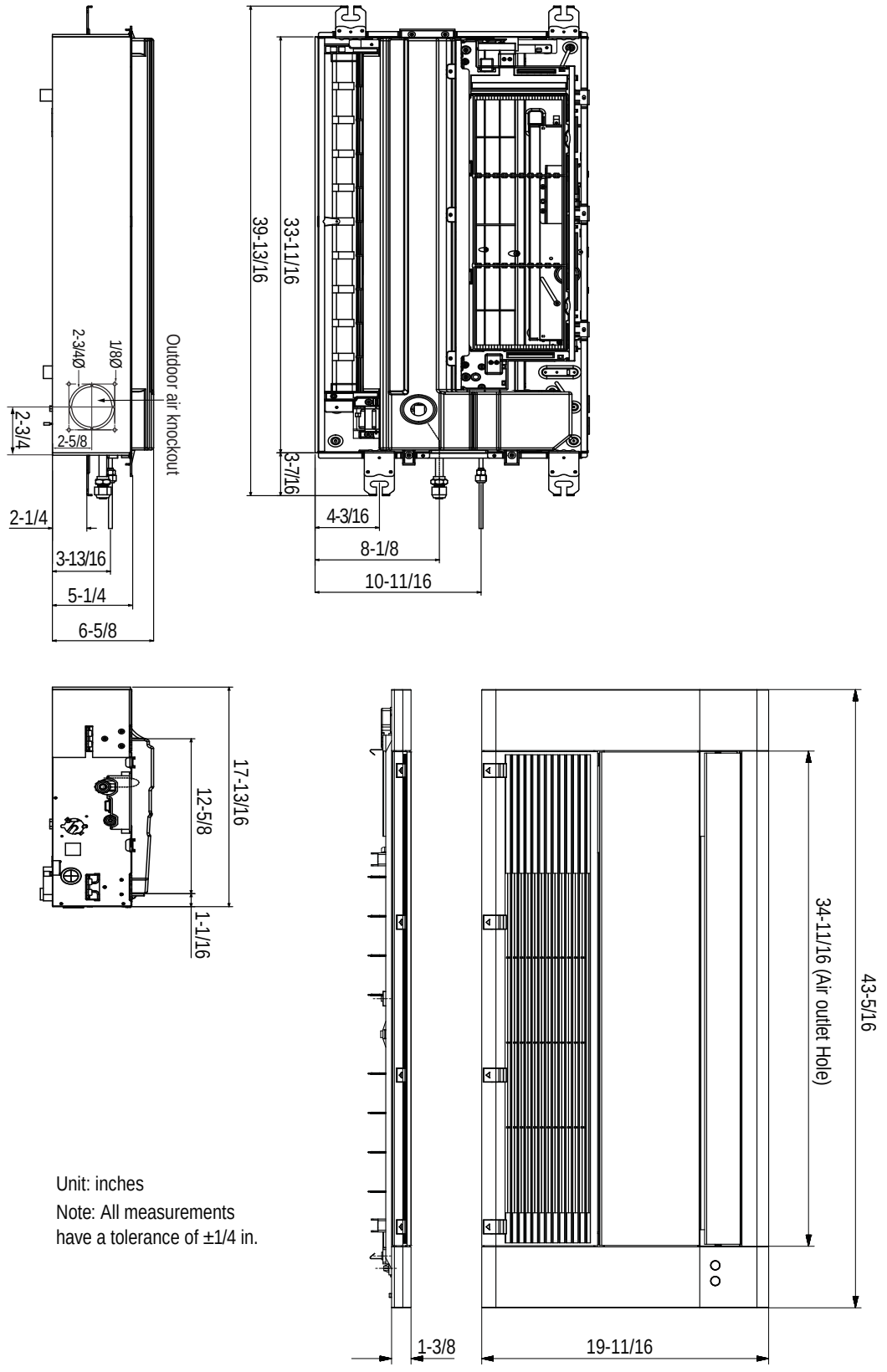
Model Number	Voltage Range	MCA	MOP	Rated Amps (A)	Power Supply			Power Input (W)	
					Hz	Volts	Phase	Cooling	Heating
TU Frames									
ARNU073TUC4	187-253	0.23	15	0.18	60	208-230	1	40	40
ARNU093TUC4		0.23		0.18				40	40
ARNU123TUC4		0.23		0.18				40	40
TT Frames									
ARNU183TTC4	187-253	0.38	15	0.30	60	208-230	1	70	70
ARNU243TTC4		0.38		0.30				70	70

ONE-WAY CEILING CASSETTE

External Dimensions

TU Frame with PT-UUC1 Grille

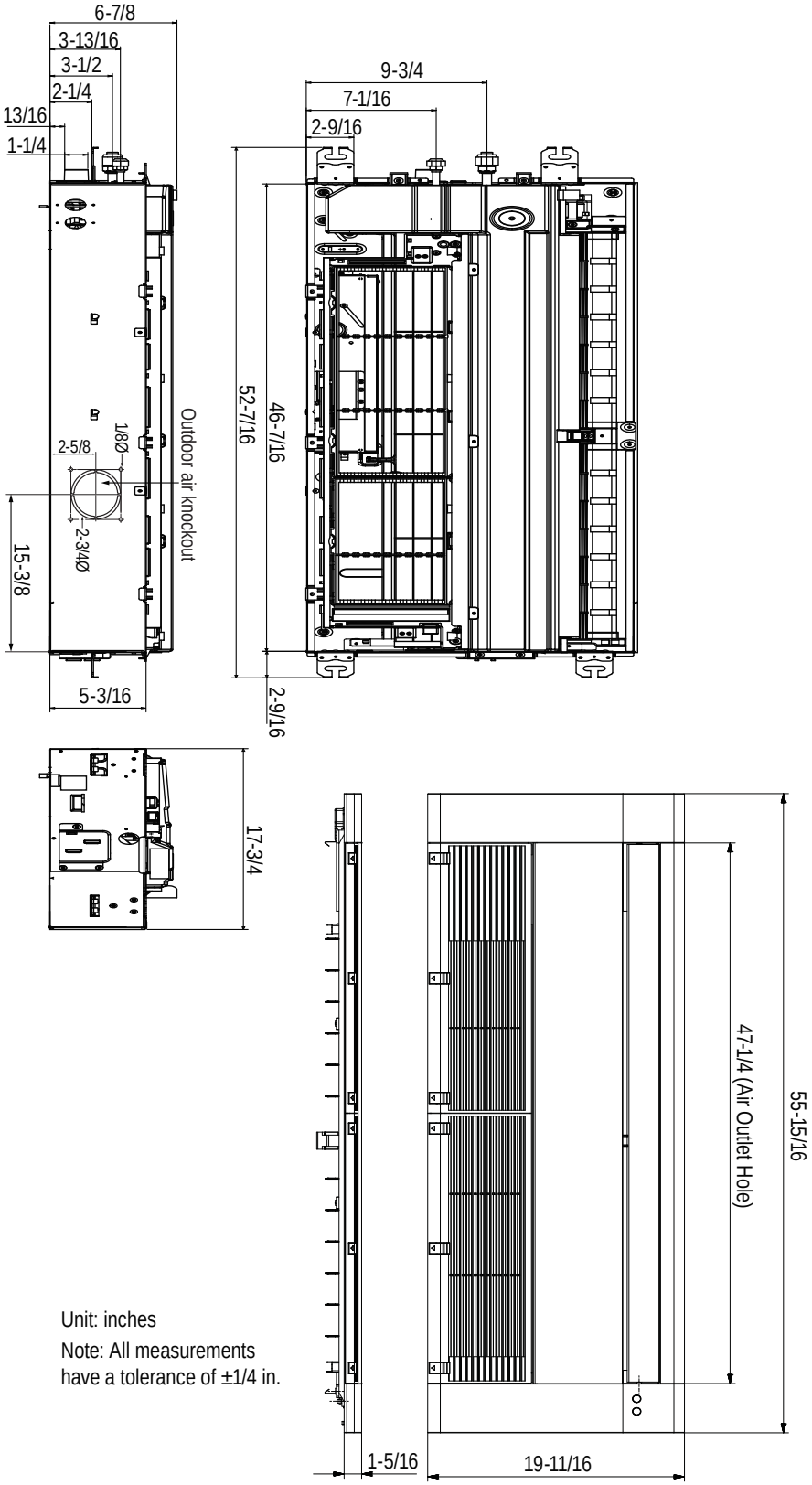
Figure 2: ARNU073TUC4, ARNU093TUC4, ARNU123TUC4 Dimensions (PT-UUC1 Grille).



Unit: inches

Note: All measurements have a tolerance of ±1/4 in.

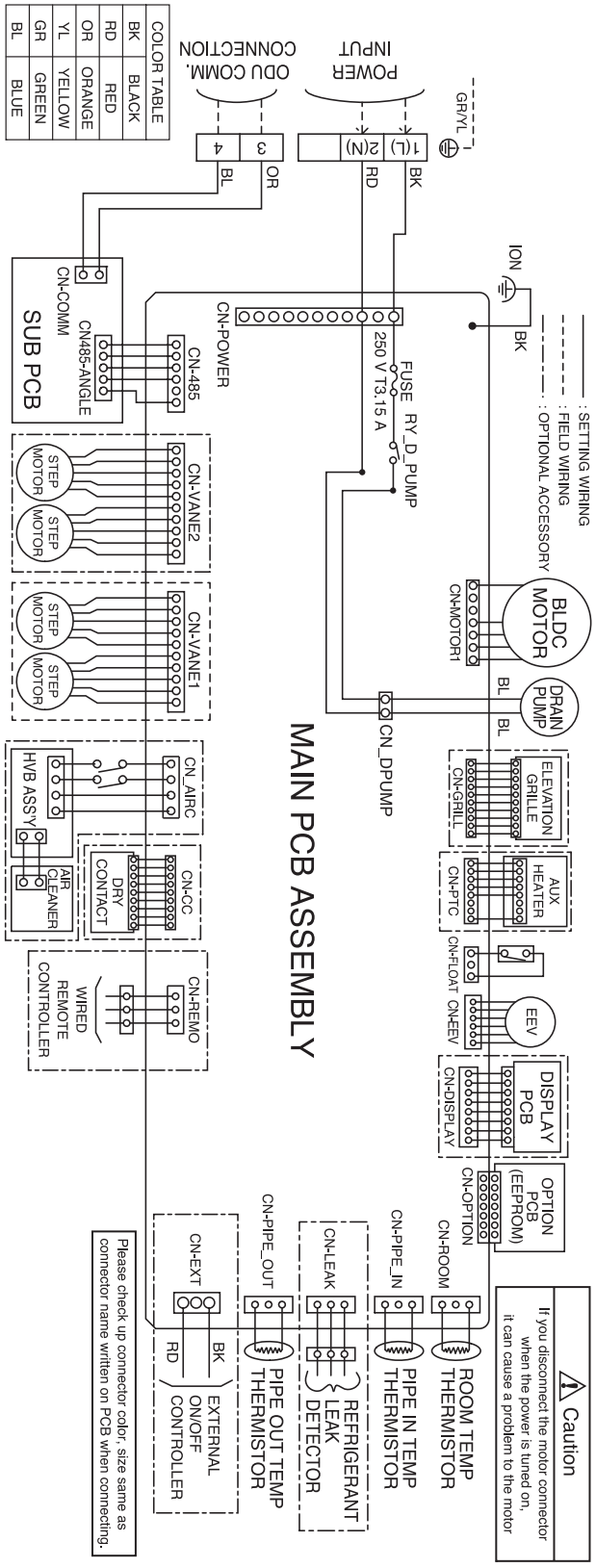
Figure 3: ARNU183TTC4, ARNU243TTC4 Dimensions (PT-UTC Grille).



ONE-WAY CEILING CASSETTE

Electrical Wiring Diagram
TU and TT Frames

Figure 4: TU, TT Frame Wiring Diagram.



**Plasma filter kit accessories are available separately. Always follow all local, state, and national building codes with the use of this or any product.*

Table 4: TU, TT Frame Wiring Diagram Legend.

Terminal	Purpose	Function
CN-POWER	AC Power supply	AC Power line input for indoor controller
CN-MOTOR1	Fan motor output	Motor output of BLDC
CN-D/PUMP	Drain pump output	AC output for drain pump
CN-PTC	Auxiliary heater	Auxiliary heater connection
CN-FLOAT	Float switch input	Float switch sensing
CN-EEV	EEV output	EEV Control output
CN-DISPLAY	Display	Display of indoor status
CN-OPTION	Option PCB (EPROM)	Option PCB connection
CN-ROOM	Room sensor	Room air thermistor
CN-PIPE/IN	Suction pipe sensor	Pipe in thermistor
CN-PIPE/OUT	Discharge pipe sensor	Pipe out thermistor
CN-EXT	External on/off controller	External on/off cotnroller connection
CN-REMO	Remote controller	Remote control line
CN-CC	Dry Contact	Connection to Dry Contact (Optional)
CN-AIRC*	Air cleaner*	Air cleaner control*
CN-VANE1	Step Motor	Step motor output
CN-VANE2	Step Motor	Step motor output
CN-485	Communication	Connection between indoor and outdoor units
CN-COM	Communication	Connection on Sub PCB between indoor and outdoor units

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Table 5: TU, TT Frame DIP Switch Settings.

DIP Switch Setting		Off	On	Remarks
SW3	GROUP CONTROL	Master	Slave	Group control setting using 7-Day Programmable Controller; selects Master/ Slave on each indoor unit
SW4	DRY CONTACT MODE	Variable	Auto	Sets operation mode for optional Dry Contact accessory 1. Variable: Auto or Manual Mode can be set through 7-Day Programmable Controller or Wireless Remote Controller (factory default setting is Auto if there is no setting) 2. Auto: For Dry Contact, it is always Auto mode

***For Gen 4 Multi V one-way ceiling cassette indoor units, DIP switches 1, 2, 5 through 8 must be set to OFF. These DIP switches are used for other models.**

****To enable Generation 4 features, outdoor unit DIP switch no. 3 must be set to ON. Please refer to the Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.**

ONE-WAY CEILING CASSETTE

Refrigerant Flow Diagram

TU and TT Frames

Figure 5: TU, TT Frame Piping Diagram.

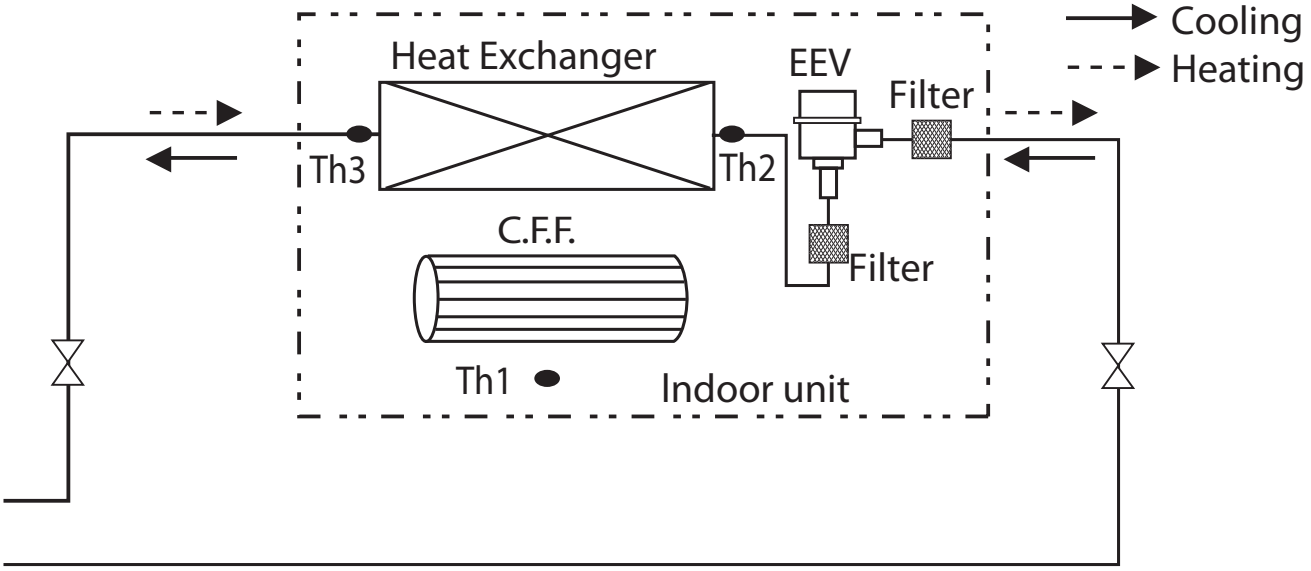


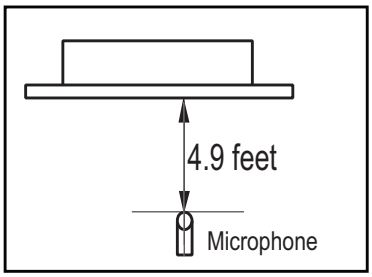
Table 6: TU, TT Frame Refrigerant Pipe Connection Port Diameters.

Model	Liquid (inch)	Gas (inch)
TU Frames		
ARNU073TUC4	1/4	1/2
ARNU093TUC4		
ARNU123TUC4		
TT Frames		
ARNU183TTC4	1/4	1/2
ARNU243TTC4	3/8	5/8

Table 7: TU, TT Frame Thermistors.

Thermistor	Description
TH1	Return air thermistor
TH2	Pipe in thermistor
TH3	Pipe out thermistor

Figure 6: Sound Pressure Measurement Location.



- Measurements are taken 4.9 ft away from the front of the unit.
- Sound pressure levels are measured in dB(A) with a tolerance of ±3.
- Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

Operating Conditions:

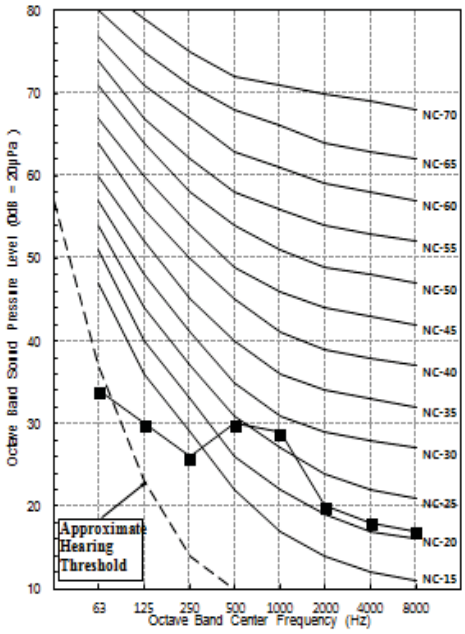
- Power source: 220V/60 Hz
- Sound level will vary depending on a range of factors including the construction (acoustic absorption coefficient) of a particular room in which the unit was installed.

Table 8: One-Way Ceiling Cassette Indoor Unit Sound Pressure Levels.

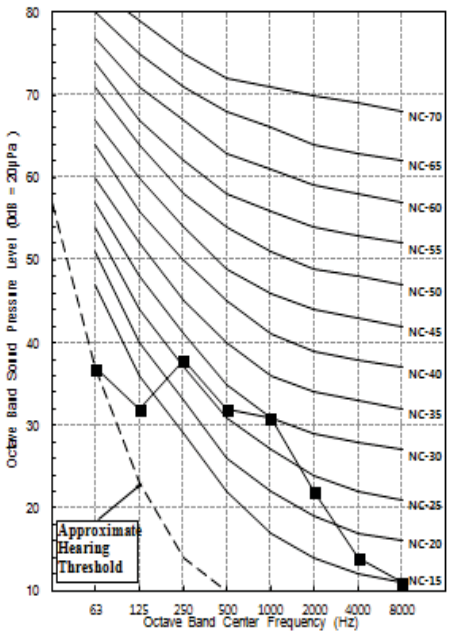
Model	Sound Levels dB(A)		
	High Fan Speed	Medium Fan Speed	Low Fan Speed
TU Frames			
ARNU073TUC4	32.0	29.0	25.0
ARNU093TUC4	35.0	34.0	32.0
ARNU123TUC4	38.0	35.0	32.0
TT Frames			
ARNU183TTC4	40.0	37.0	35.0
ARNU243TTC4	43.0	40.0	36.0

Figure 7: ARNU073TUC4, ARNU093TUC4, and ARNU123TUC4 Sound Pressure Level Diagrams.

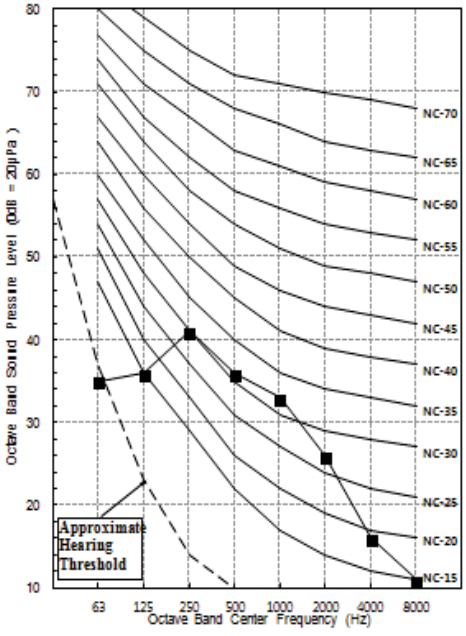
ARNU073TUC4



ARNU093TUC4



ARNU123TUC4



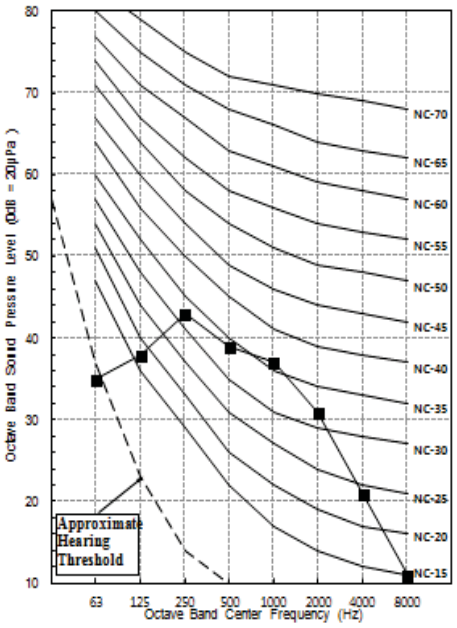
ONE-WAY CEILING CASSETTE

Acoustic Data

Sound Pressure Levels

Figure 8: ARNU183TTC4 and ARNU243TTC4 Sound Pressure Level Diagrams.

ARNU183TTC4



ARNU243TTC4

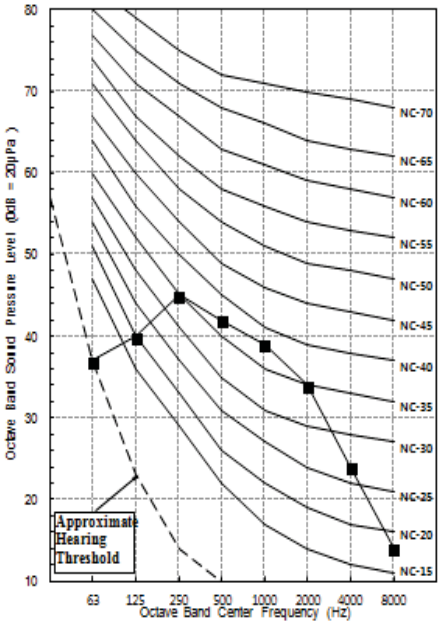


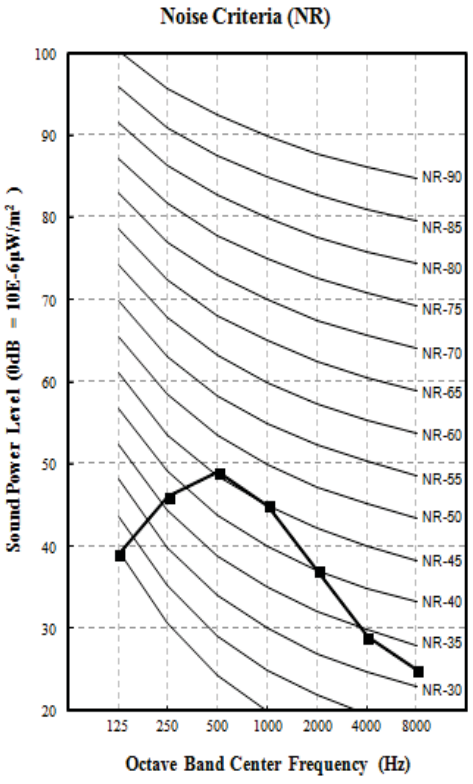
Table 9: One-Way Ceiling Cassette Indoor Unit Sound Power Levels.

Model	Sound Power Levels dB(A)
	High Fan Speed
TU Frames	
ARNU073TUC4	50.0
ARNU093TUC4	53.0
ARNU123TUC4	57.0
TT Frames	
ARNU183TTC4	59.0
ARNU243TTC4	62.0

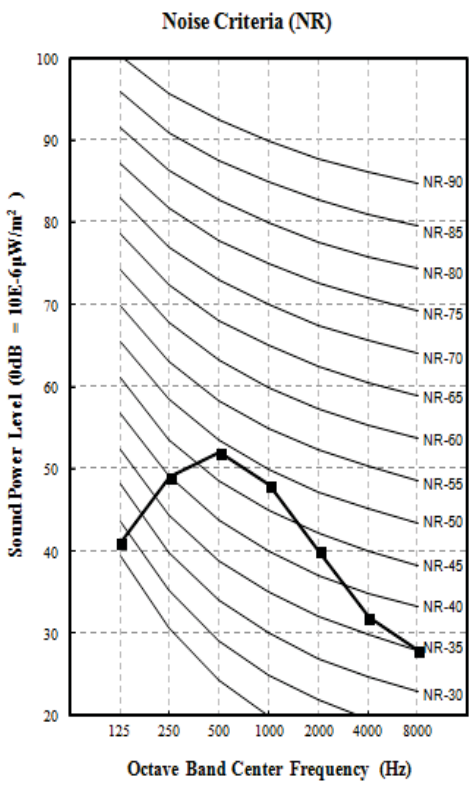
- Data is valid under diffuse field conditions.
- Data is valid under nominal operating conditions.
- Sound power level is measured using rated conditions, and tested in a reverberation room per ISO 3741 standards.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of particular area in which the equipment is installed.
- Reference acoustic intensity: 0dB = 10E-6μW/m^2.

Figure 9: ARNU073TUC4, ARNU093TUC4, and ARNU123TUC4 Sound Power Level Diagrams.

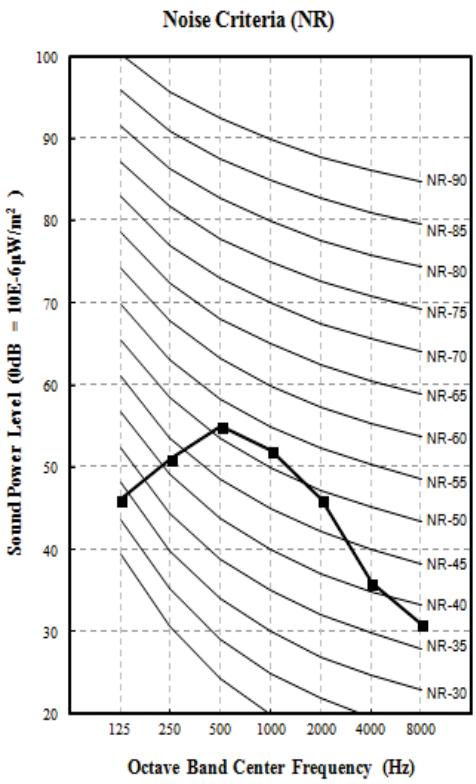
ARNU073TUC4



ARNU093TUC4



ARNU123TUC4



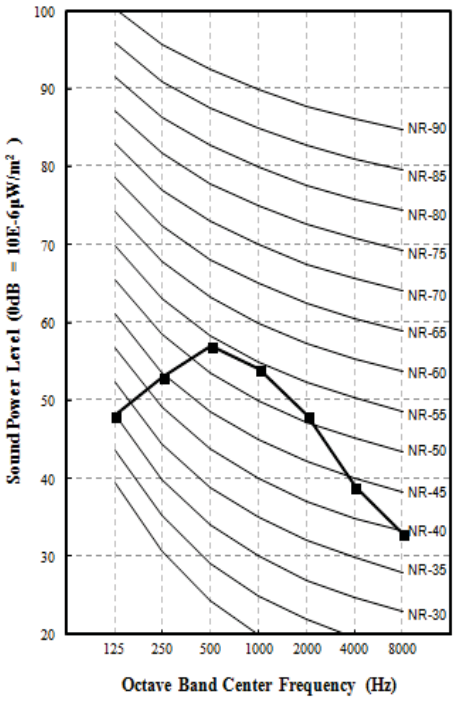
ONE-WAY CEILING CASSETTE

Acoustic Data

Sound Power Levels

Figure 10: ARNU183TTC4 and ARNU243TTC4 Sound Power Level Diagrams.

ARNU183TTC4



ARNU243TTC4

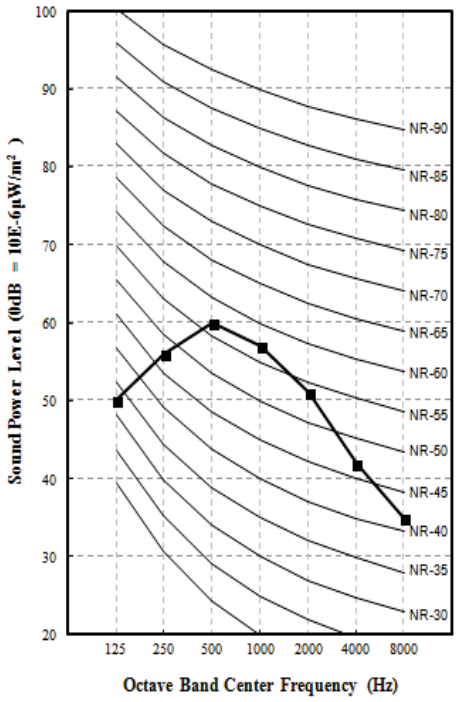
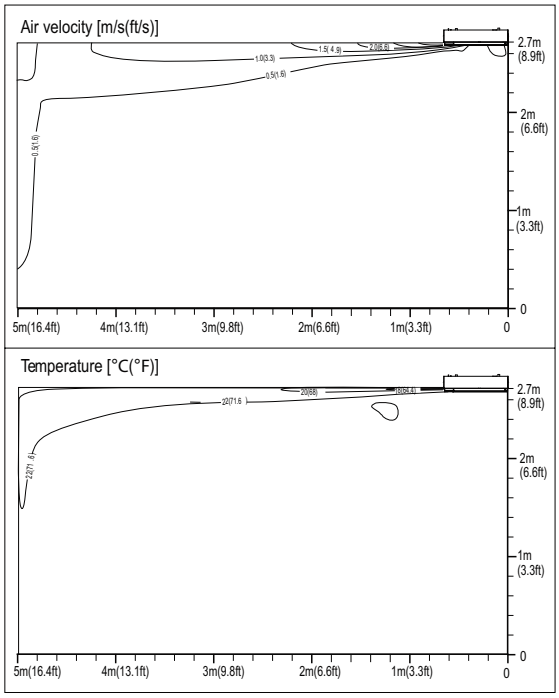


Figure 11: ARNU073TUC4.

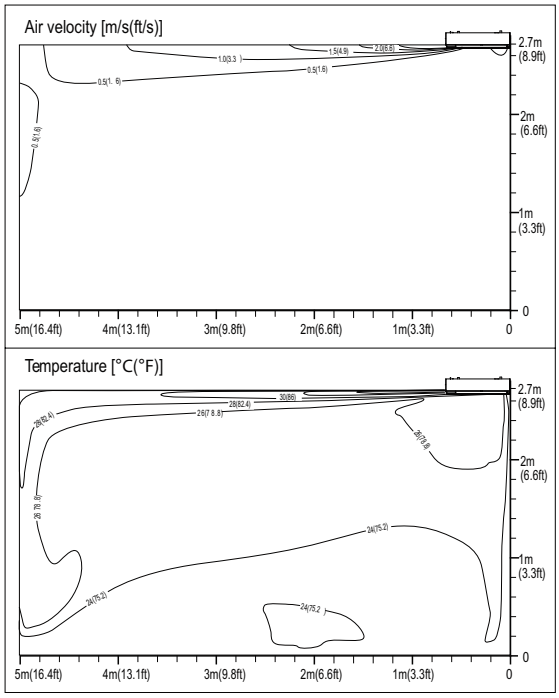
Cooling

Discharge angle: 20°



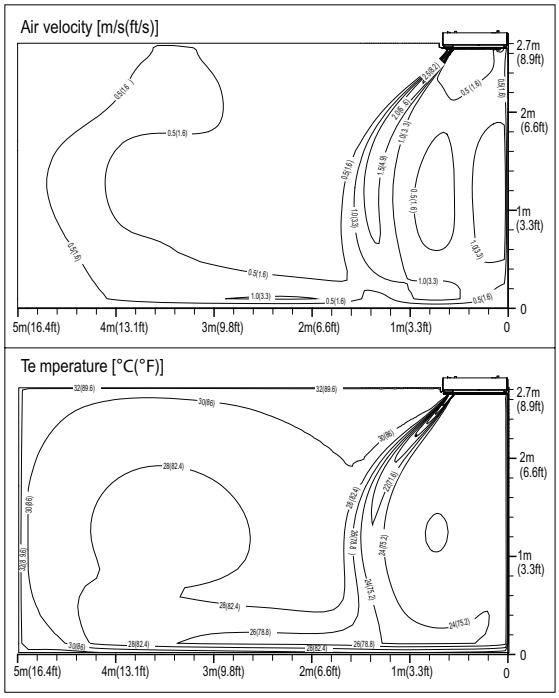
Heating

Discharge angle: 20°



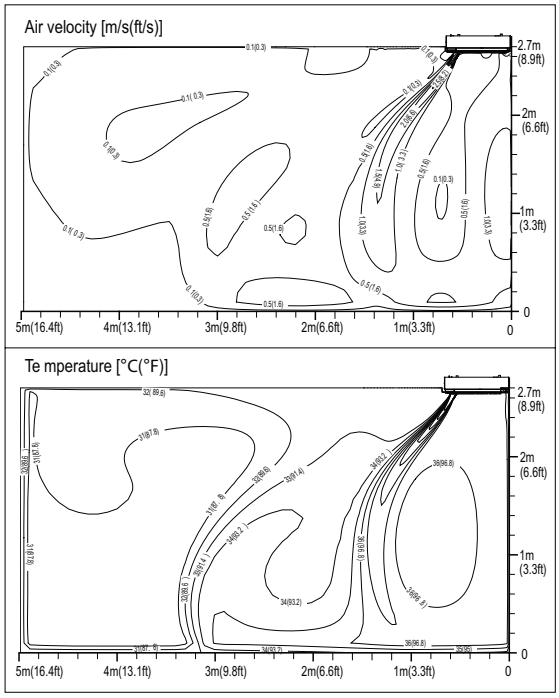
Cooling

Discharge angle: 50°



Heating

Discharge angle: 60°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

ONE-WAY CEILING CASSETTE

Air Velocity / Temperature Distribution

ARNU073TUC4, ARNU093TUC4

Figure 12: ARNU073TUC4, continued.

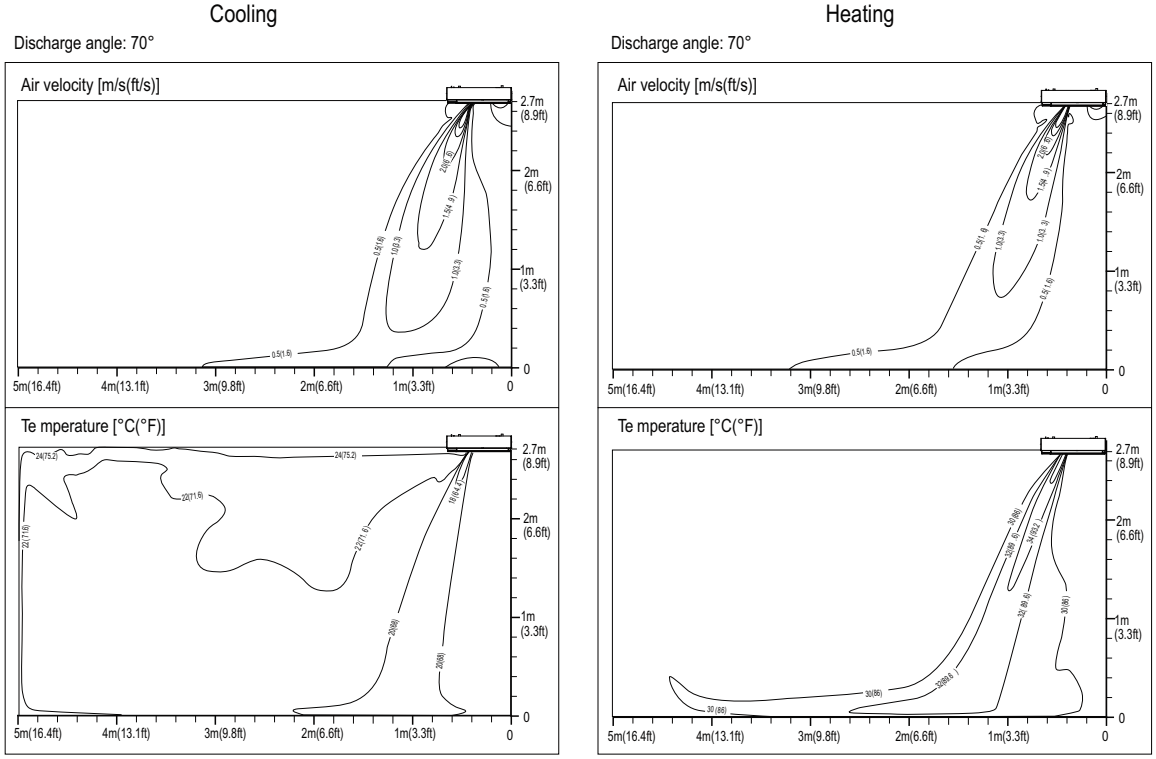
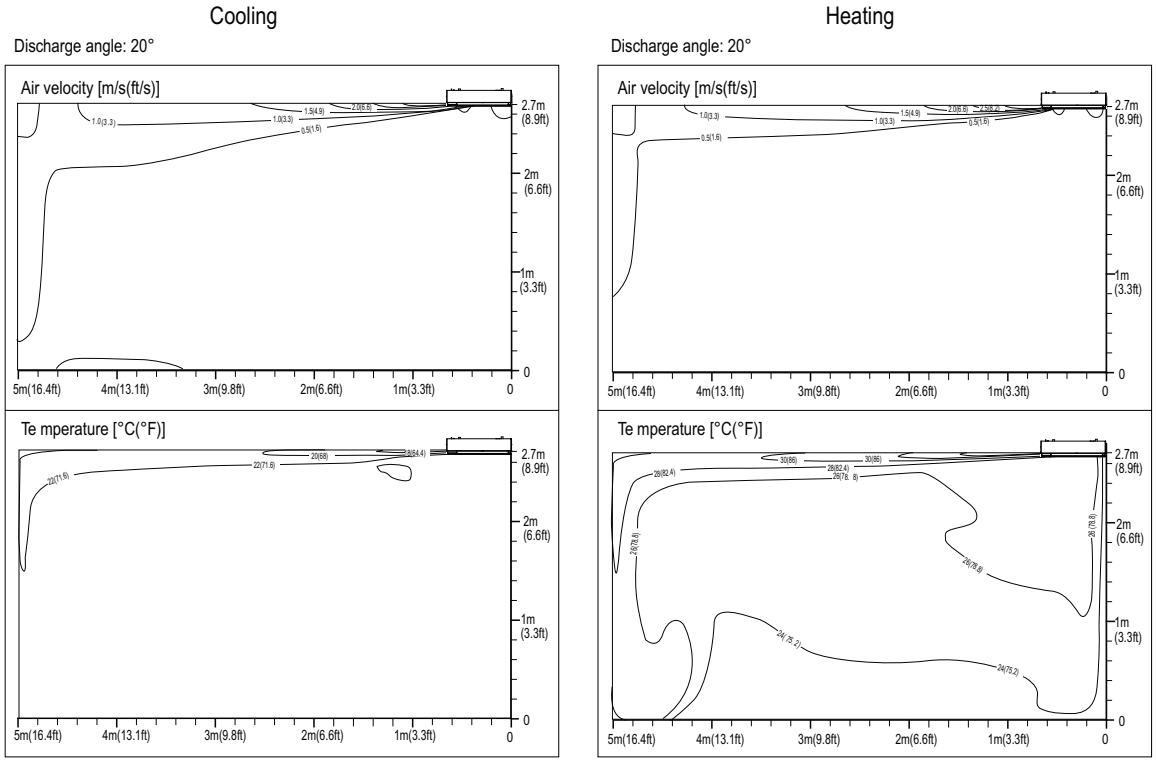


Figure 13: ARNU093TUC4.

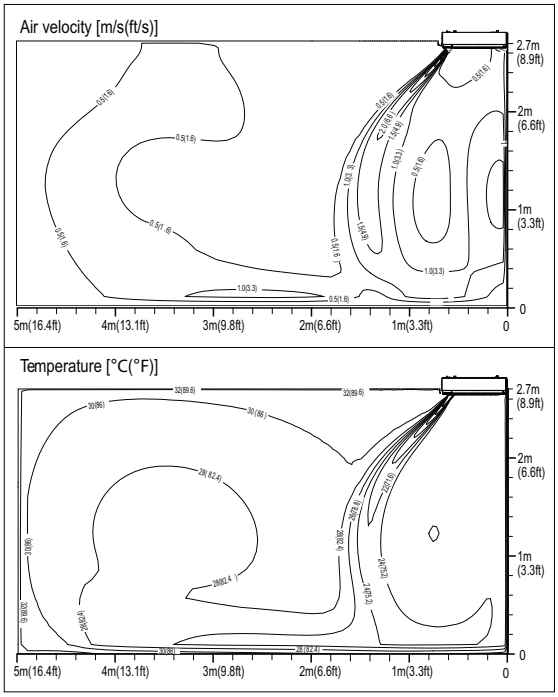


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 14: ARNU093TUC4, continued.

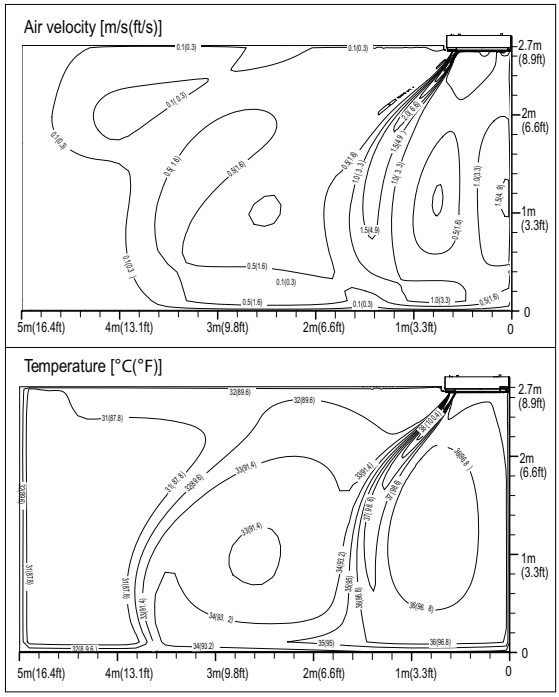
Cooling

Discharge angle: 50°



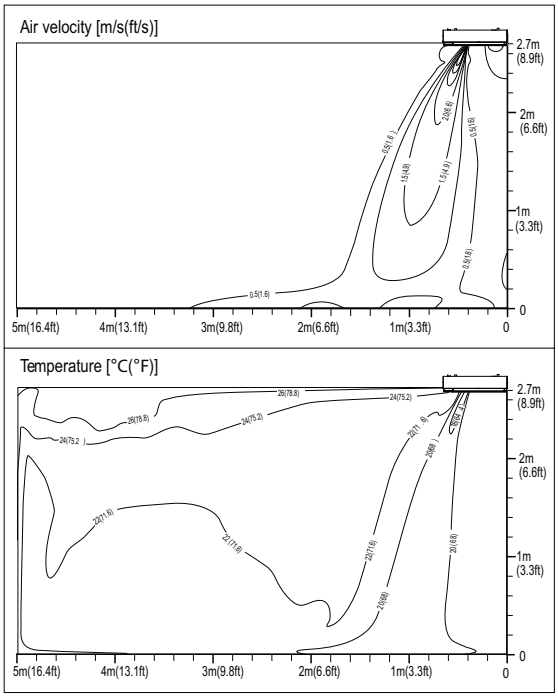
Heating

Discharge angle: 60°



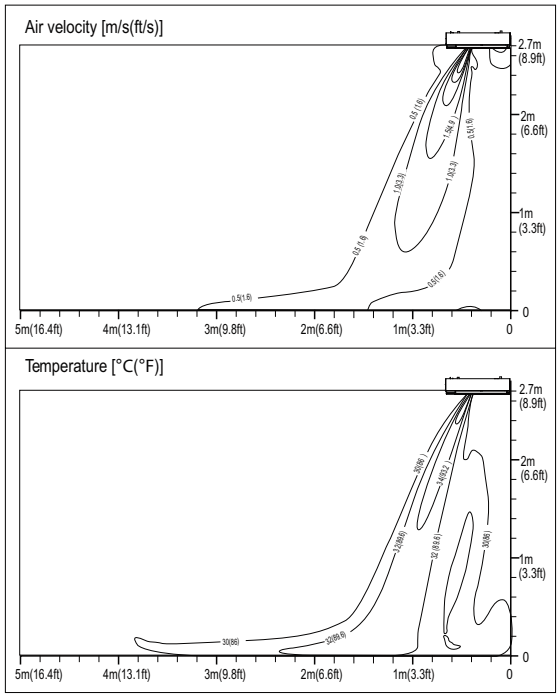
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

ONE-WAY CEILING CASSETTE

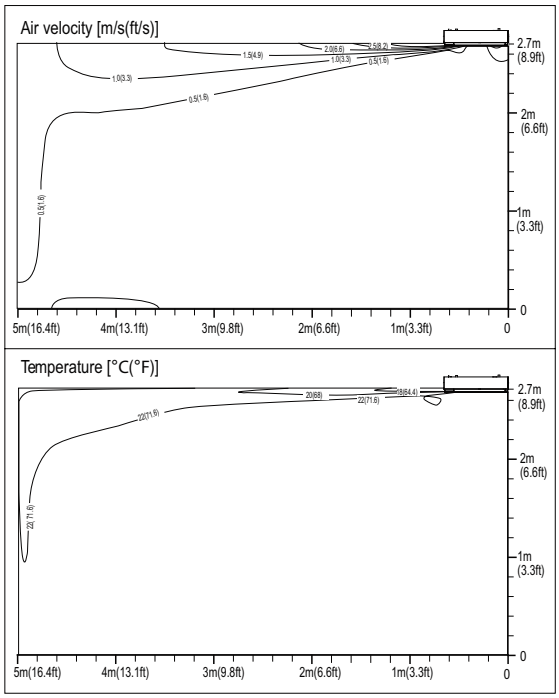
Air Velocity / Temperature Distribution

ARNU123TUC4

Figure 15: ARNU123TUC4.

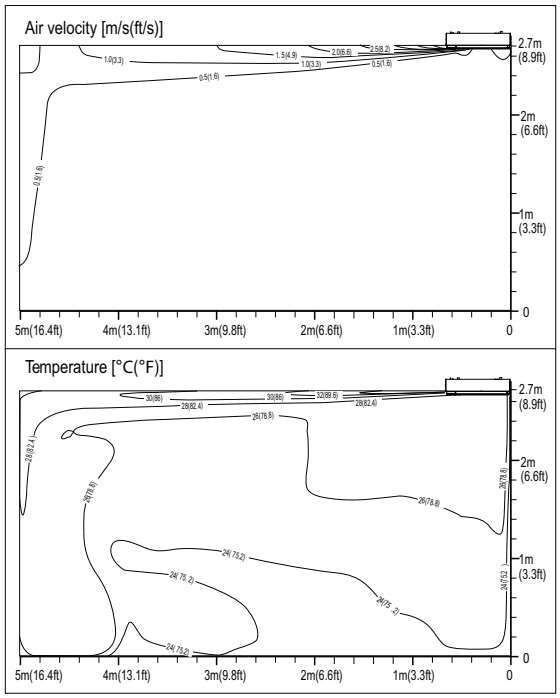
Cooling

Discharge angle: 20°



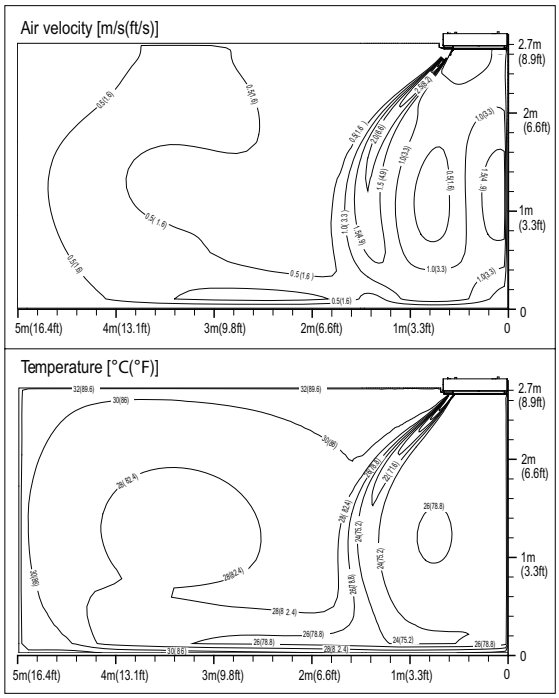
Heating

Discharge angle: 20°



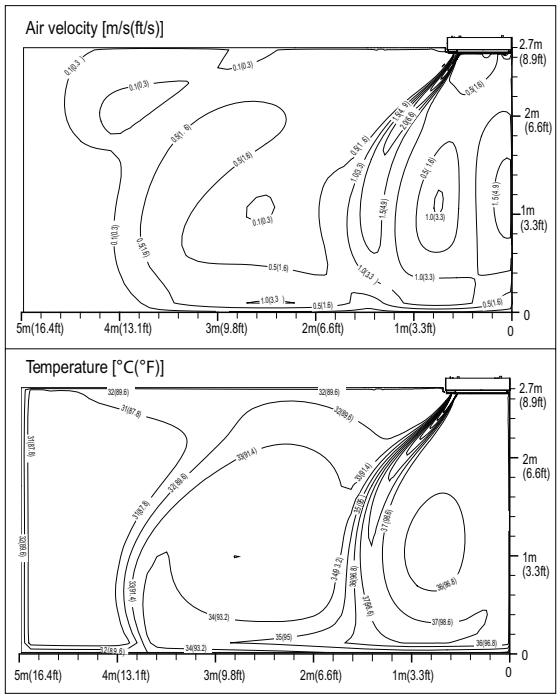
Cooling

Discharge angle: 50°



Heating

Discharge angle: 60°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 16: ARNU123TUC4, continued.

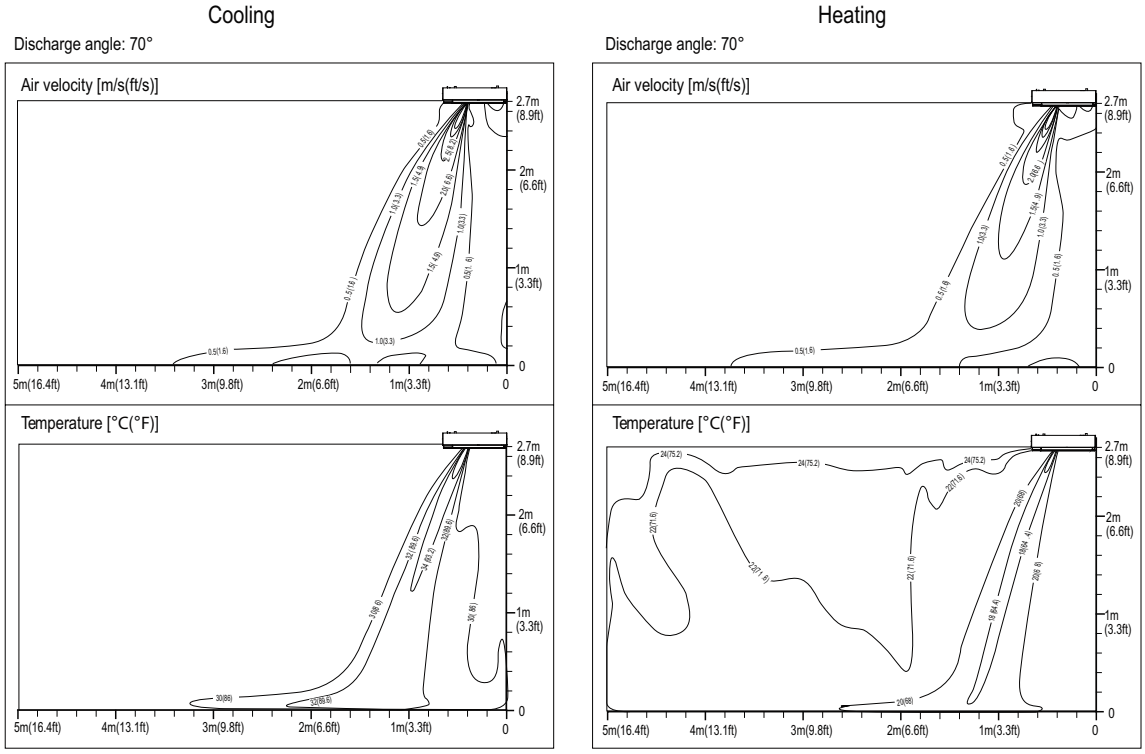
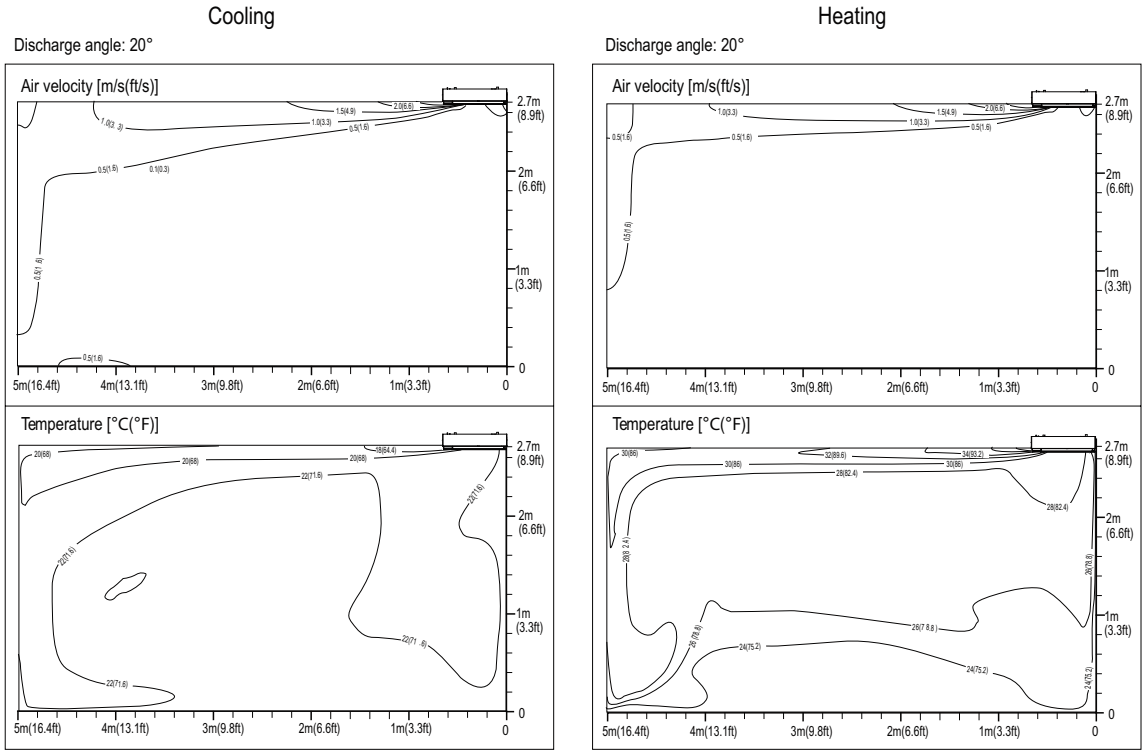


Figure 17: ARNU183TTC4.



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

ONE-WAY CEILING CASSETTE

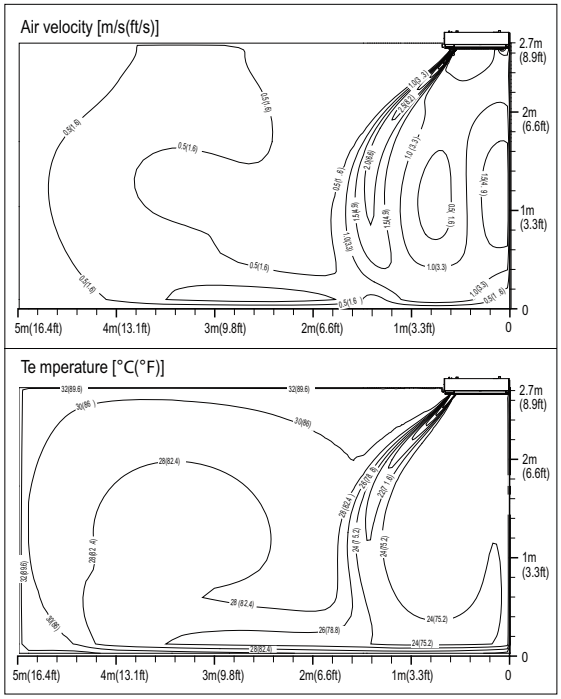
Air Velocity / Temperature Distribution

ARNU183TTC4

Figure 18: ARNU183TTC4, continued.

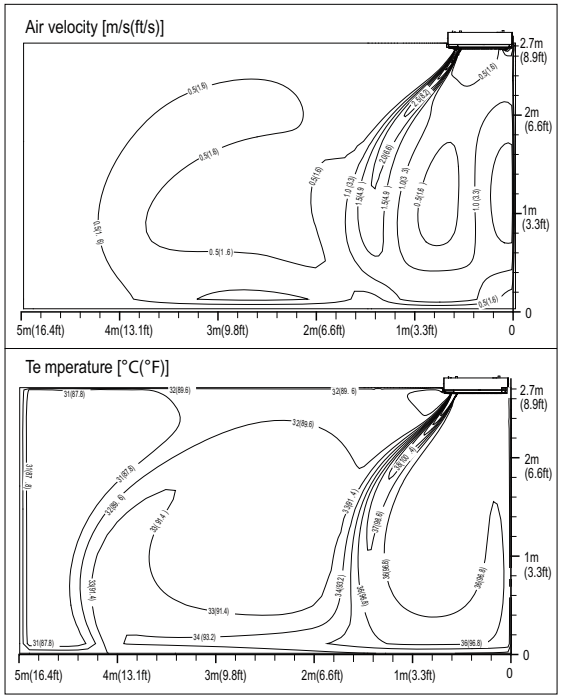
Cooling

Discharge angle: 50°



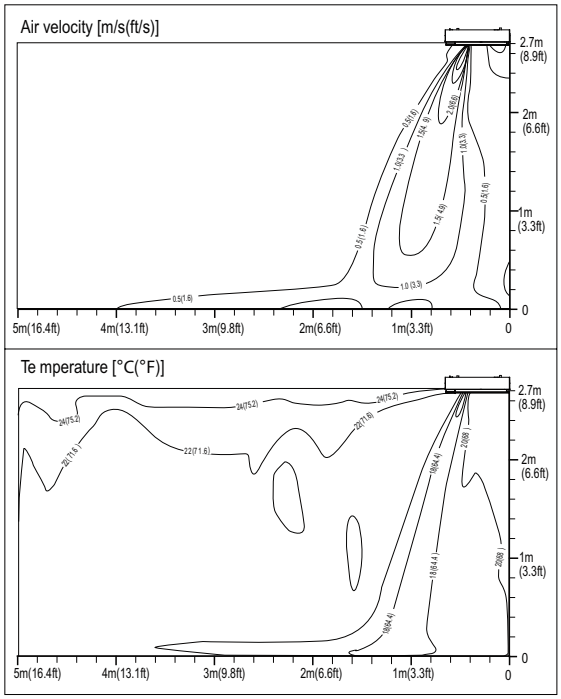
Heating

Discharge angle: 60°



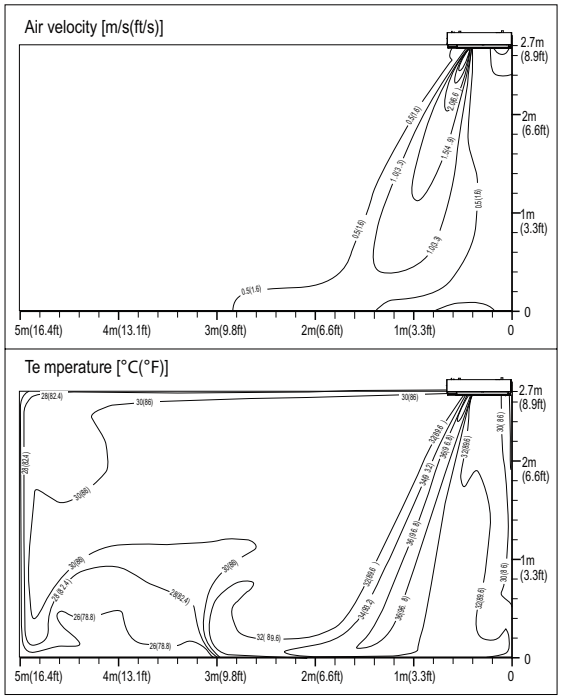
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

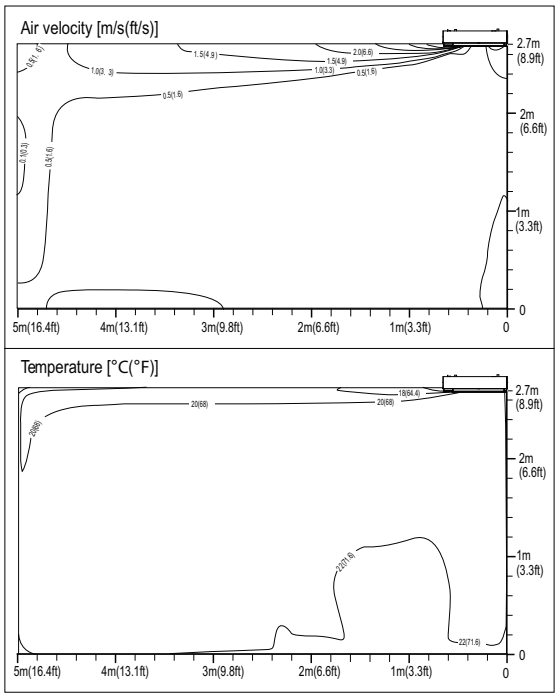


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 19: ARNU243TTC4.

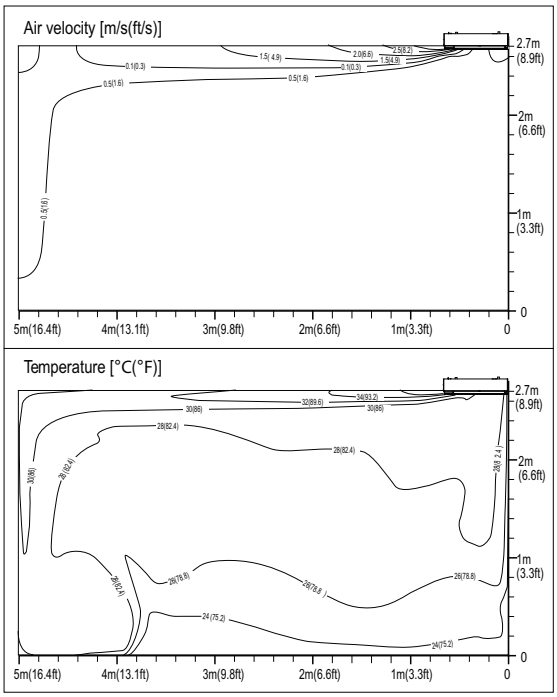
Cooling

Discharge angle: 20°



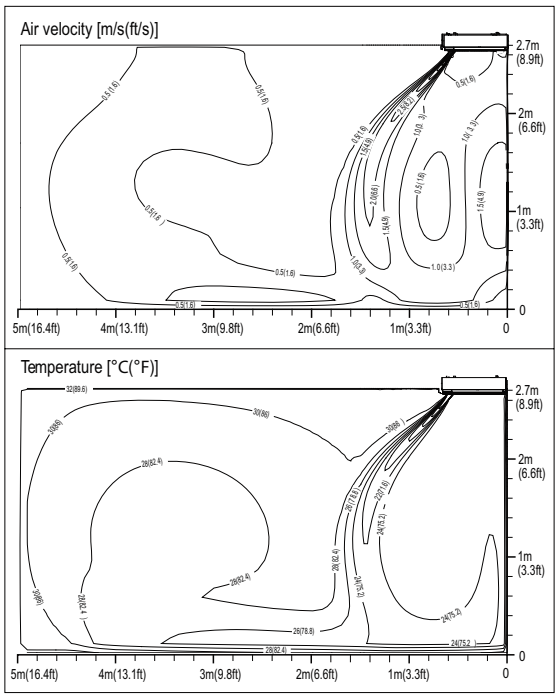
Heating

Discharge angle: 20°



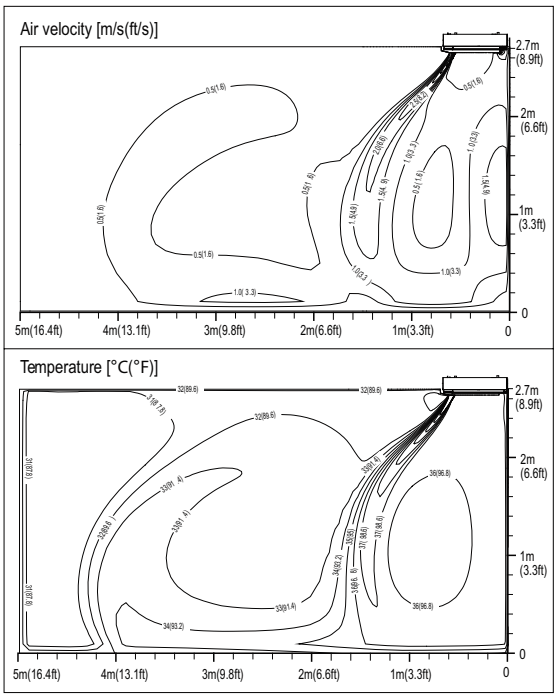
Cooling

Discharge angle: 50°



Heating

Discharge angle: 60°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

ONE-WAY CEILING CASSETTE

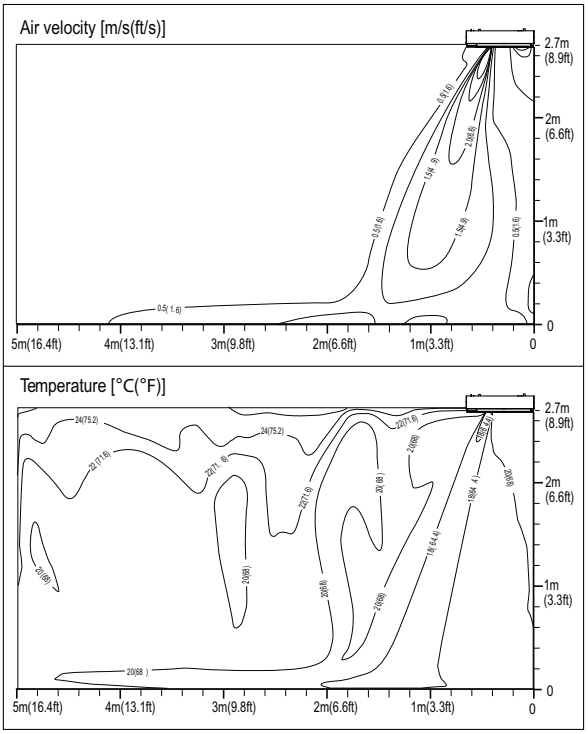
Air Velocity / Temperature Distribution

ARNU243TTC4

Figure 20: ARNU243TTC4, continued.

Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

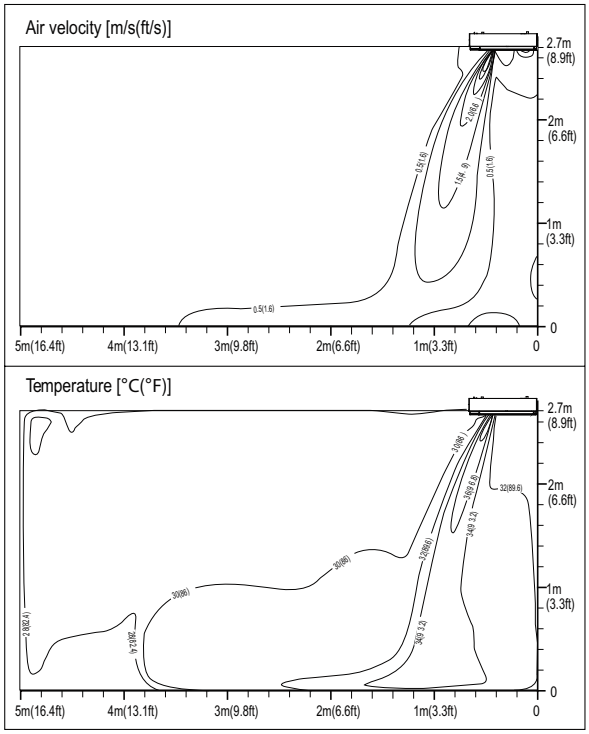


Figure 21: TU Frame Fresh Air Ventilation.

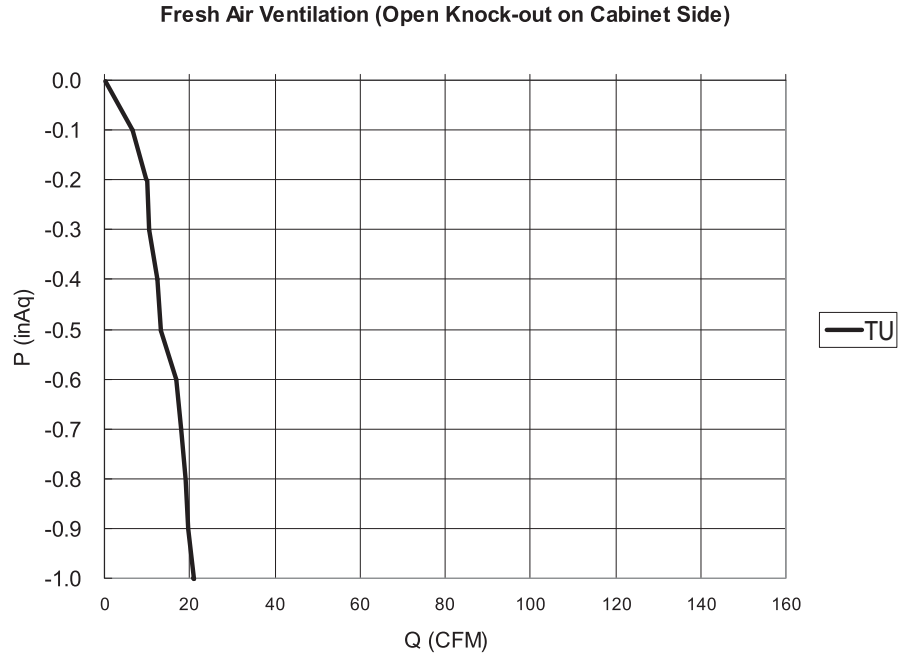
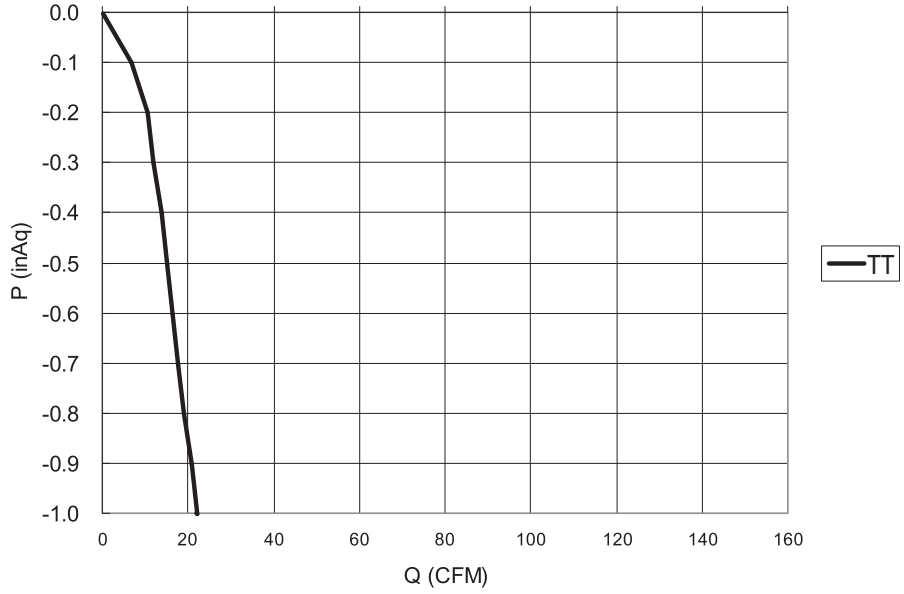


Figure 22: TT Frame Fresh Air Ventilation.



ONE-WAY CEILING CASSETTE

Cooling Capacity Tables

ARNU073TUC4, ARNU093TUC4, ARNU123TUC4

Table 10: ARNU073TUC4, ARNU093TUC4, ARNU123TUC4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU073TUC4 / 7.5	23	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.7	5.8
	25	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.7	5.8
	30	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.7	5.8
	35	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.7	5.8
	40	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.7	5.8
	45	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.7	5.8
	50	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.7	5.8
	55	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.7	5.8
	60	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.6	5.8
	65	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.4	5.7
	70	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.3	5.6
	75	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.9	5.8	9.1	5.5
	80	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.4	5.9	8.7	5.8	8.8	5.4
	85	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.3	5.8	8.4	5.5	8.6	5.2
	90	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	8.2	5.7	8.3	5.4	8.4	5.1
	95	4.9	4.2	6.0	4.8	6.8	5.1	**7.5**	**5.5**	8.0	5.7	8.2	5.4	8.3	5.1
	100	4.9	4.2	6.0	4.8	6.8	5.1	7.5	5.5	7.9	5.6	8.0	5.3	8.2	5.1
	105	4.9	4.2	5.7	4.6	6.4	4.9	7.2	5.2	7.3	5.2	7.7	5.1	7.9	4.9
	110	4.8	4.0	5.4	4.3	6.0	4.6	6.8	4.9	6.9	4.9	7.3	4.9	7.7	4.8
ARNU093TUC4 / 9.6	23	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.4	7.3
	25	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.4	7.3
	30	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.4	7.3
	35	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.4	7.3
	40	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.4	7.3
	45	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.4	7.3
	50	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.4	7.3
	55	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.4	7.3
	60	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.3	7.2
	65	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	12.1	7.1
	70	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	11.9	7.0
	75	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.4	7.3	11.6	6.9
	80	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.8	7.4	11.1	7.2	11.3	6.8
	85	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.6	7.3	10.8	6.9	11.0	6.5
	90	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.5	7.2	10.6	6.8	10.8	6.5
	95	6.3	5.2	7.7	6.0	8.6	6.4	**9.6**	**6.9**	10.3	7.1	10.5	6.8	10.6	6.4
	100	6.3	5.2	7.7	6.0	8.6	6.4	9.6	6.9	10.1	7.0	10.3	6.7	10.5	6.4
	105	6.3	5.2	7.3	5.7	8.2	6.2	9.2	6.5	9.4	6.5	9.9	6.5	10.1	6.2
	110	6.2	5.1	6.9	5.4	7.7	5.7	8.6	6.2	8.8	6.2	9.4	6.2	9.8	6.0
ARNU123TUC4 / 12.3	23	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.9	9.4
	25	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.9	9.4
	30	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.9	9.4
	35	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.9	9.4
	40	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.9	9.4
	45	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.9	9.4
	50	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.9	9.4
	55	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.9	9.4
	60	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.7	9.4
	65	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.5	9.2
	70	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	15.3	9.1
	75	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.7	9.4	14.9	8.9
	80	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.2	9.4	14.5	8.8
	85	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.6	9.4	13.8	9.0	14.0	8.5
	90	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.4	9.3	13.5	8.8	13.8	8.4
	95	8.1	6.8	9.8	7.8	11.1	8.3	**12.3**	**8.9**	13.2	9.2	13.4	8.8	13.6	8.3
	100	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	12.9	9.1	13.2	8.7	13.4	8.2
	105	8.1	6.8	9.3	7.4	10.6	8.0	11.8	8.5	12.0	8.5	12.7	8.4	12.9	8.0
	110	7.9	6.6	8.9	7.0	9.8	7.4	11.1	8.0	11.3	8.0	12.0	8.0	12.6	7.8

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

ONE-WAY CEILING CASSETTE

Cooling Capacity Tables

ARNU183TTC4, ARNU243TTC4

Table 11: ARNU183TTC4, ARNU243TTC4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU183TTC4 / 19.1	23	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.7	14.1
	25	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.7	14.1
	30	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.7	14.1
	35	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.7	14.1
	40	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.7	14.1
	45	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.7	14.1
	50	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.7	14.1
	55	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.7	14.1
	60	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.4	14.0
	65	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	24.0	13.8
	70	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	23.7	13.6
	75	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.8	14.1	23.1	13.3
	80	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.4	14.3	22.1	14.0	22.5	13.2
	85	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	21.2	14.1	21.4	13.4	21.8	12.7
	90	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	20.9	13.9	21.0	13.2	21.4	12.5
	95	12.6	10.2	15.3	11.7	17.2	12.5	**19.1**	**13.3**	20.5	13.8	20.9	13.1	21.2	12.4
	100	12.6	10.2	15.3	11.7	17.2	12.5	19.1	13.3	20.1	13.6	20.5	13.0	20.9	12.3
	105	12.6	10.2	14.5	11.1	16.4	11.9	18.3	12.7	18.7	12.7	19.7	12.5	20.1	12.0
	110	12.3	9.9	13.8	10.5	15.3	11.1	17.2	11.9	17.6	11.9	18.7	11.9	19.5	11.7
ARNU243TTC4 / 24.2	23	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	31.3	18.1
	25	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	31.3	18.1
	30	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	31.3	18.1
	35	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	31.3	18.1
	40	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	31.3	18.1
	45	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	31.3	18.1
	50	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	31.3	18.1
	55	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	31.3	18.1
	60	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	31.0	18.0
	65	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	30.5	17.7
	70	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	30.0	17.4
	75	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.8	18.1	29.2	17.0
	80	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	27.1	18.3	28.0	18.0	28.5	16.9
	85	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	26.8	18.1	27.1	17.2	27.6	16.3
	90	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	26.4	17.8	26.6	16.9	27.1	16.1
	95	15.9	13.0	19.4	15.0	21.8	16.0	**24.2**	**17.0**	25.9	17.7	26.4	16.8	26.8	15.9
	100	15.9	13.0	19.4	15.0	21.8	16.0	24.2	17.0	25.4	17.4	25.9	16.7	26.4	15.8
	105	15.9	13.0	18.4	14.3	20.8	15.3	23.2	16.3	23.7	16.3	24.9	16.1	25.4	15.4
	110	15.5	12.6	17.4	13.5	19.4	14.3	21.8	15.3	22.3	15.3	23.7	15.3	24.7	14.9

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

ONE-WAY CEILING CASSETTE

Heating Capacity Tables

ARNU073TUC4, ARNU093TUC4, ARNU123TUC4

Table 12: ARNU073TUC4, ARNU093TUC4, ARNU123TUC4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh
ARNU073TUC4 / 7.5	-4	-4.4	5.7	5.7	5.7	5.7	5.6	5.6	5.6	5.6
	0	-0.4	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8
	5.0	4.5	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	10.0	9.0	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8
	15.0	14.0	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1
	20.0	19.0	7.7	7.7	7.7	7.7	7.6	7.6	7.4	7.4
	25.0	23.0	8.1	8.1	8.1	8.1	8.1	7.9	7.8	7.4
	30.0	28.0	8.2	8.2	8.2	8.2	8.2	8.1	7.8	7.4
	35.0	32.0	8.5	8.5	8.5	8.5	8.4	8.2	7.8	7.4
	40.0	36.0	8.8	8.8	8.8	8.8	8.5	8.2	7.8	7.4
	45.0	41.0	9.2	9.2	9.2	8.9	8.5	8.2	7.8	7.4
	47.0	43.0	9.5	9.4	9.4	8.9	**8.5**	8.2	7.8	7.4
	50.0	46.0	10.2	9.8	9.4	8.9	8.5	8.2	7.8	7.4
	55.0	51.0	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
	60.0	56.0	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
ARNU093TUC4 / 9.6	-4	-4.4	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.2
	0	-0.4	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.4
	5.0	4.5	8.5	8.4	8.3	8.3	8.3	8.3	8.3	8.3
	10.0	9.0	8.8	8.8	8.8	8.7	8.7	8.7	8.7	8.7
	15.0	14.0	9.4	9.4	9.4	9.4	9.4	9.4	9.3	9.2
	20.0	19.0	9.9	9.9	9.9	9.9	9.7	9.7	9.5	9.4
	25.0	23.0	10.4	10.4	10.4	10.4	10.4	10.1	10.0	9.5
	30.0	28.0	10.6	10.6	10.6	10.6	10.6	10.4	10.0	9.5
	35.0	32.0	10.9	10.9	10.9	10.9	10.8	10.6	10.0	9.5
	40.0	36.0	11.3	11.3	11.3	11.3	10.9	10.6	10.0	9.5
	45.0	41.0	11.8	11.8	11.8	11.4	10.9	10.6	10.0	9.5
	47.0	43.0	12.2	12.1	12.0	11.4	10.9	10.6	10.0	9.5
	50.0	46.0	13.1	12.5	12.0	11.4	10.9	10.6	10.0	9.5
	55.0	51.0	13.4	12.6	12.0	11.4	10.9	10.6	10.0	9.5
	60.0	56.0	13.4	12.6	12.0	11.4	10.9	10.6	10.0	9.5
ARNU123TUC4 / 12.3	-4	-4.4	9.1	9.1	9.1	9.1	9.0	9.0	9.0	9.0
	0	-0.4	9.4	9.4	9.4	9.4	9.4	9.2	9.2	9.2
	5.0	4.5	10.6	10.5	10.3	10.3	10.3	10.3	10.3	10.3
	10.0	9.0	11.0	11.0	11.0	10.9	10.9	10.9	10.9	10.9
	15.0	14.0	11.7	11.7	11.7	11.7	11.7	11.7	11.6	11.4
	20.0	19.0	12.4	12.4	12.4	12.4	12.1	12.1	11.9	11.8
	25.0	23.0	12.9	12.9	12.9	12.9	12.9	12.6	12.5	11.9
	30.0	28.0	13.2	13.2	13.2	13.2	13.2	12.9	12.5	11.9
	35.0	32.0	13.6	13.6	13.6	13.6	13.5	13.2	12.5	11.9
	40.0	36.0	14.1	14.1	14.1	14.1	13.6	13.2	12.5	11.9
	45.0	41.0	14.7	14.7	14.7	14.3	13.6	13.2	12.5	11.9
	47.0	43.0	15.2	15.1	15.0	14.3	13.6	13.2	12.5	11.9
	50.0	46.0	16.3	15.6	15.0	14.3	13.6	13.2	12.5	11.9
	55.0	51.0	16.7	15.8	15.0	14.3	13.6	13.2	12.5	11.9
	60.0	56.0	16.7	15.8	15.0	14.3	13.6	13.2	12.5	11.9

TC: Total Capacity (MBh).

Table 13: ARNU183TTC4, ARNU243TTC4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh
ARNU183TTC4 / 19.1	-4	-4.4	14.4	14.4	14.4	14.4	14.2	14.2	14.2	14.2
	0	-0.4	14.8	14.8	14.8	14.8	14.8	14.6	14.6	14.6
	5.0	4.5	16.8	16.6	16.3	16.3	16.3	16.3	16.3	16.3
	10.0	9.0	17.4	17.4	17.4	17.2	17.2	17.2	17.2	17.2
	15.0	14.0	18.5	18.5	18.5	18.5	18.5	18.5	18.3	18.1
	20.0	19.0	19.6	19.6	19.6	19.6	19.1	19.1	18.8	18.6
	25.0	23.0	20.4	20.4	20.4	20.4	20.4	20.0	19.8	18.8
	30.0	28.0	20.9	20.9	20.9	20.9	20.9	20.4	19.8	18.8
	35.0	32.0	21.5	21.5	21.5	21.5	21.3	20.9	19.8	18.8
	40.0	36.0	22.4	22.4	22.4	22.4	21.5	20.9	19.8	18.8
	45.0	41.0	23.2	23.2	23.2	22.6	21.5	20.9	19.8	18.8
	47.0	43.0	24.1	23.9	23.7	22.6	**21.5**	20.9	19.8	18.8
	50.0	46.0	25.8	24.7	23.7	22.6	21.5	20.9	19.8	18.8
	55.0	51.0	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8
	60.0	56.0	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8
ARNU243TTC4 / 24.2Model	-4	-4.4	16.2	16.2	16.2	16.2	16.0	16.0	16.0	16.0
	0	-0.4	16.7	16.7	16.7	16.7	16.7	16.5	16.5	16.5
	5.0	4.5	18.9	18.6	18.4	18.4	18.4	18.4	18.4	18.4
	10.0	9.0	19.6	19.6	19.6	19.4	19.4	19.4	19.4	19.4
	15.0	14.0	20.8	20.8	20.8	20.8	20.8	20.8	20.6	20.3
	20.0	19.0	22.0	22.0	22.0	22.0	21.5	21.5	21.2	20.9
	25.0	23.0	23.0	23.0	23.0	23.0	23.0	22.5	22.3	21.2
	30.0	28.0	23.5	23.5	23.5	23.5	23.5	23.0	22.3	21.2
	35.0	32.0	24.2	24.2	24.2	24.2	24.0	23.5	22.3	21.2
	40.0	36.0	25.2	25.2	25.2	25.2	24.2	23.5	22.3	21.2
	45.0	41.0	26.1	26.1	26.1	25.4	24.2	23.5	22.3	21.2
	47.0	43.0	27.1	26.9	26.6	25.4	24.2	23.5	22.3	21.2
	50.0	46.0	29.0	27.8	26.6	25.4	24.2	23.5	22.3	21.2
	55.0	51.0	29.6	28.1	26.6	25.4	24.2	23.5	22.3	21.2
	60.0	56.0	29.6	28.1	26.6	25.4	24.2	23.5	22.3	21.2

TC: Total Capacity (MBh).

ONE-WAY CEILING CASSETTE

Optional Accessories

Table 14: Optional Accessories for One-Way Ceiling-Cassette Indoor Units.

Accessory	Model Number
One-Way Ceiling Cassette Grille Kit (One Required)[1]	PT-UUC1 (For 9 and 12MBh One-Way Indoor Units) PT-UTC (For 18 and 24MBh One-Way Indoor Units)
Plasma Filter Kit (One)[1]	PTPKU0 (For TU One-Way Indoor Units) PTPKT0 (For TT One-Way Indoor Units)

[1]For use with all one-way ceiling-cassette indoor units.

All accessories are sold separately.

TWO-WAY CEILING CASSETTE

TWO-WAY CEILING CASSETTE

MULTI V

Mechanical Specifications

Casing
The case is designed to mount recessed in the ceiling and has a surface-mounted concentric grille on the bottom of the unit. The unit case is manufactured with coated metal, and cold surfaces are covered with a coated polystyrene insulating material. The case is provided with metal ears designed to support the unit weight on four corners. Ears have pre-punched holes designed to accept field-supplied, all-thread rod hangers.

Architectural Filter/Grille
The ceiling cassette assembly is provided with an off-white ABS polymeric resin architectural grille with a tapered trim edge and a hinged, spring clip (screw-less) return air filter-grille door.

Fan Assembly and Control
The indoor unit has two direct-drive, cross flow tangential Sirocco fans made of high strength ABS GP-2305 polymeric resin. The fan motor is a Brushless Digitally-Controlled (BLDC) design with permanently lubricated and sealed ball bearings. The fan motor includes thermal, overcurrent and low RPM protection. The fan / motor assembly is mounted on vibration attenuating rubber grommets. The fan impeller is statically and dynamically balanced. The fan speed is controlled using a microprocessor-based direct digital control algorithm that provides a high fan speed in cooling thermal ON and low fan speed in cooling thermal OFF, high fan speed in heating thermal ON and fan off in heating thermal OFF. The fan speeds can be field adjusted between low, medium, and high speeds. The fan speed algorithm provides a field selectable, fixed-speed or auto-speed setting that adjusts the fan speed to simulate natural airflow.

Air Filter
Return air is filtered with a removable, washable filter with anti-fungal treatment. Plasma filter accessories are also available separately.

Airflow Guide Vanes
The architectural grille has two parallel directional slot diffusers each equipped with oscillating motorized guide vanes designed to change the angle airflow is discharged. Discharge range of motion is 40º in an up/down direction. The control algorithm provides the capability of locking guide vanes in a field adjusted fixed position.

Microprocessor Controls
The unit is provided with an integrated microprocessor controller capable of performing functions necessary to operate the system without the use of a wall-mounted controller. A temperature thermistor is factory-mounted in the return air stream. All unit operation parameters, excluding the units operating schedule, are stored in non-volatile memory resident on the unit microprocessor. Operating schedules are stored in select models of the optional, wall-mounted, local, or central controller. The field-supplied communication cable between the indoor unit(s) and outdoor unit is to be a minimum of 18 AWG, 2 conductor, stranded, and shielded cable (RS 485), terminated via screw terminals on the control boards. The microprocessor control provides the following functions: auto addressing, self-diagnostics, auto restart following power restoration, test run, and will operate the indoor unit using one of five operating modes:

1. Auto Changeover (Heat Recovery only)
2. Heating
3. Cooling
4. Dry
5. Fan Only

For Heat Recovery systems the Auto Changeover setting automatically switches control of the indoor unit between Cooling and Heating modes based on space temperature conditions.

For Heat Pump systems, heated or cooled air delivery is dependent upon outdoor unit operating mode.

In Heating mode, the microprocessor control will activate indoor unit operation when the indoor room temperature falls below set-point temperature. At which point, a signal is sent to the outdoor unit to begin the heating cycle. The indoor unit fan operation is delayed until coil pipe temperature reaches 76°F. Significant airflow is generated when pipe temperature reaches 80°F. The unit is equipped with an infrared receiver designed to communicate with an LG wireless remote controller. In lieu of wireless remote or factory return air thermistor, screw terminals on the microprocessor circuit board accommodate various models of wall-mounted local controllers and or wall-mounted temperature sensors. The unit microprocessor is capable of accepting space temperature readings concurrently or individually from either:

1. Wall-mounted wired controller(s)
2. Factory mounted return air thermistor or the optional wall mounted wired remote temperature sensor.

A single indoor unit has the capability of being controlled by up to two local wired controllers. The microprocessor controls space temperature using the value provided by the temperature sensor sensing a space temperature that is farthest away from the temperature set-point. The microprocessor control provides a cooling or heating mode test cycle that operates the unit for 18 minutes without regard to space temperature. If the system is provided with an optional wall-mounted or central controller, displayed diagnostic codes are specific, alpha numeric, and provide the service technician with the reason for the code displayed.

Condensate Lift/Pump
The indoor unit is provided with a factory installed and wired condensate lift/pump capable of providing a maximum 27.5 inch lift from the bottom surface of the unit. The lift pump comes with a safety switch that will shut off the indoor unit if condensate rises too high in the drain pan.

Condensate Drain Pan
The condensate drain pan is constructed of EPS (expandable polystyrene resin).

Coil
The indoor unit coil is constructed with grooved design copper tubes with slit coil fins, two (2) rows, twenty (20) fins per inch.

Controls Features
- Auto changeover (Heat Recovery only)
- Auto operation
- Auto restart
- External on/off control
- Dual thermistor control
- Dual set-point control*
- Filter life and power consumption display*
- Multiple auxiliary heater applications*
- Group control
- High ceiling
- Hot start
- Self diagnostics
- Timer (on / off)
- Weekly schedule
- Auto direction / swing (up / down)
- Fan speed control
- Jet cool (fast cooling)

**To enable Generation 4 features, outdoor unit DIP Switch No. 3 must be set to ON. Please refer to the Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.*

LG

Table 15: Two-Way Ceiling Cassette (TL Frames) Indoor Unit General Data.

Model No.	ARNU183TLC4	ARNU243TLC4
Cooling Mode Performance		
Capacity (Btu/h)	19,100	24,200
Power Input[1] (W)	70	70
Heating Mode Performance		
Capacity (Btu/h)	21,500	27,300
Power Input[1] (W)	70	70
Entering Mixed Air		
Cooling Max (°F WB)	76	76
Heating Min (°F DB)	59	59
Unit Data		
Refrigerant Type[2]	R410A	R410A
Refrigerant Control	EEV	EEV
Sound Pressure[3] dB(A) (H/M/L)	40 / 36 / 32	42 / 38 / 34
Net Unit Weight (lbs.)	49	49
Shipping Weight (lbs.)	56	56
Grille Weight (lbs)	11	11
Grille Shipping Weight (lbs)	13	13
Communication Cable[4] (No. x AWG)	2 x 18	2 x 18
Fan		
Type	Cross Flow	Cross Flow
Quantity	1	1
Motor/Drive	Brushless Digitally Controlled/Direct	Brushless Digitally Controlled/Direct
Airflow Rate H/M/L (CFM)	459 / 424 / 353	601 / 530 / 459
Piping		
Liquid Line (in., O.D.)	1/4 Flare	3/8 Flare
Vapor Line (in., O.D.)	1/2 Flare	5/8 Flare
Condensate Line (in., I.D.)	1	1

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes.

This unit comes with a dry nitrogen charge.

This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.

Cooling capacity rating obtained with air entering the indoor coil at 80ºF dry bulb (DB) and 67ºF wet bulb (WB) and outdoor ambient conditions of 95ºF dry bulb (DB).

Heating capacity rating obtained with air entering the indoor unit at 70ºF dry bulb (DB) and outdoor ambient conditions of 47ºF dry bulb (DB) and 43ºF wet bulb (WB).

[1]Power Input is rated at high speed.

[2]Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

[3]Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.

[4]All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with applicable and national code. Ensure the communication cable is properly grounded at the master outdoor unit only. Do not ground the ODU-IDU communications cable at any other point.

Table 16: Two-Way Ceiling Cassette Indoor Unit Electrical Data.

Model Number	Voltage Range	MCA	MOP	Rated Amps (A)	Power Supply			Power Input (W)	
					Hz	Volts	Phase	Cooling	Heating
ARNU183TLC4	187-253	0.47	15	0.37	60	208-230	1	70	70
ARNU243TLC4	187-253	0.47	15	0.37				70	70

MCA : Minimum Circuit Ampacity.

MOP : Maximum Overcurrent Protection.

Units are suitable for use on an electrical system where voltage supplied to unit terminals is within the listed range limits.

Select wire size based on the larger MCA value.

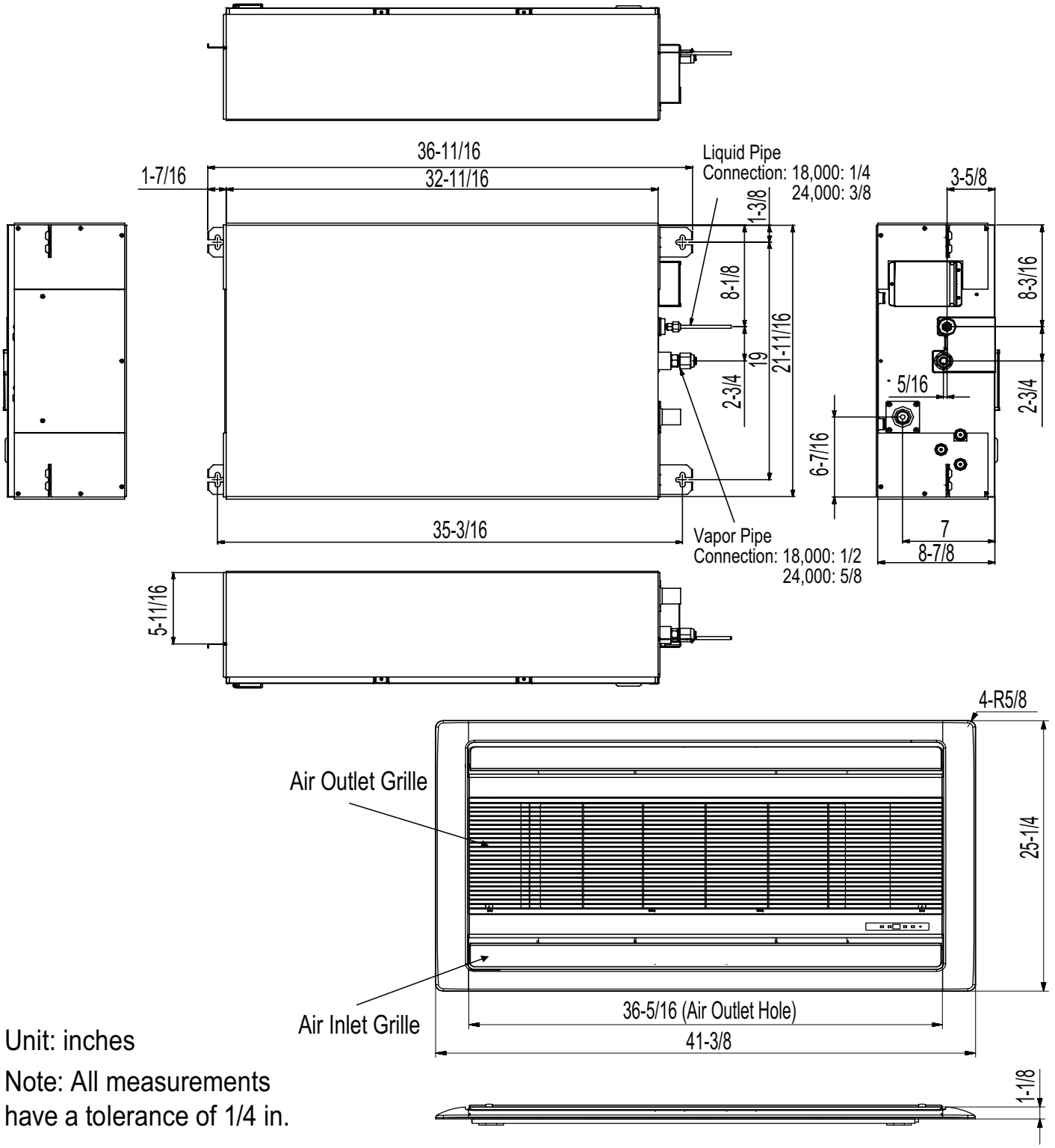
Instead of fuse, use the circuit breaker.

TWO-WAY CEILING CASSETTE

External Dimensions

TL Frame

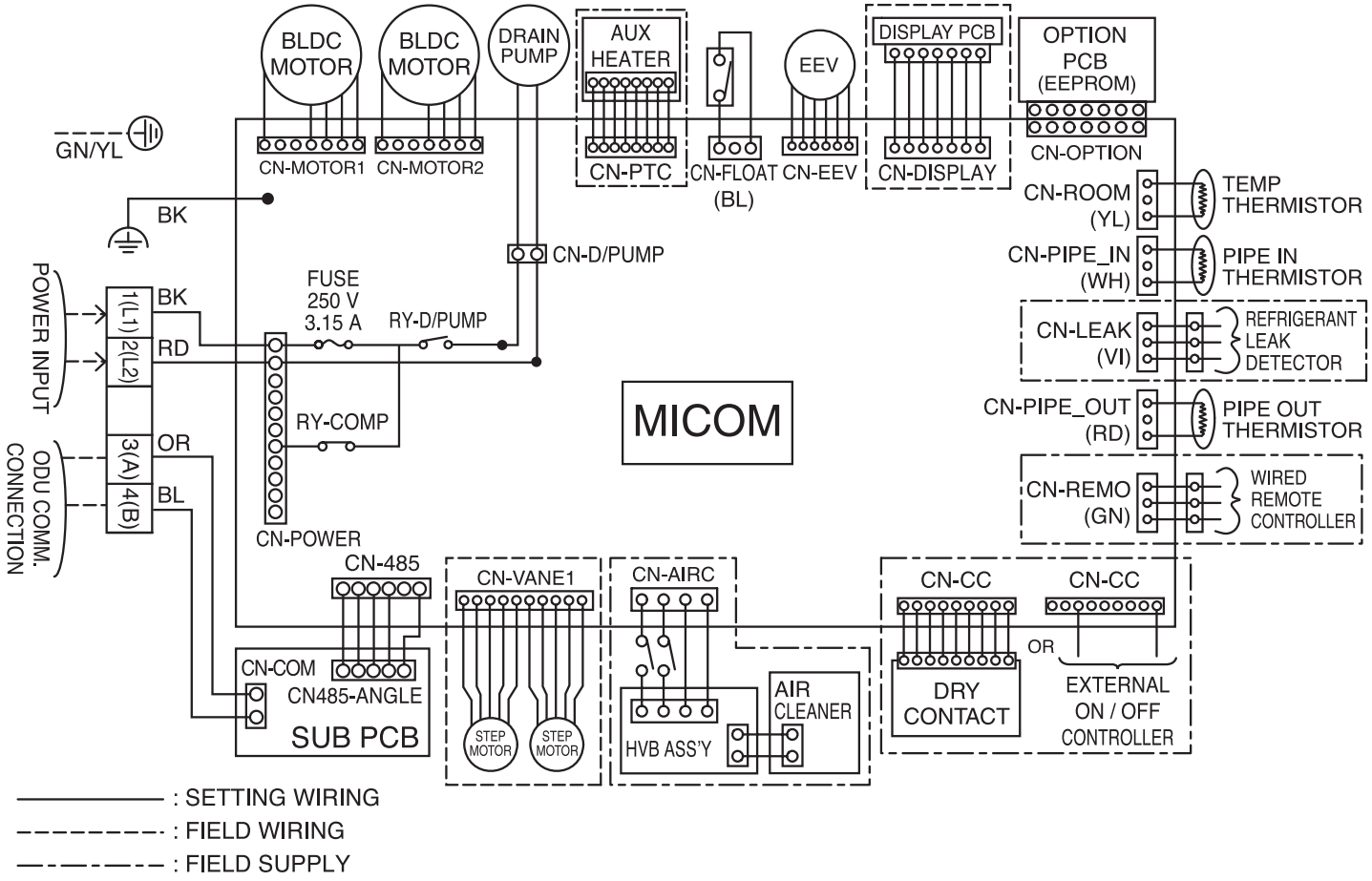
Figure 23: ARNU183TLC4, ARNU243TLC4 Dimensions.



Unit: inches

Note: All measurements have a tolerance of 1/4 in.

Figure 24: ARNU183TLC4, ARNU243TLC4 Wiring Diagram.



**Plasma filter kit accessories are available separately. Always follow all local, state, and national building codes with the use of this or any product.*

TWO-WAY CEILING CASSETTE

Electrical Wiring Diagram

TL Frame

Table 17: TL Frame Wiring Diagram Legend.

Terminal	Purpose	Function
CN-POWER	AC Power supply	AC Power line input for indoor controller
CN-MOTOR1	Fan motor output	Motor output of BLDC
CN-MOTOR2	Fan motor output	Motor output of BLDC
CN-D/PUMP	Drain pump output	AC output for drain pump
CN-PTC	Auxiliary heater	Auxiliary heater connection
CN-FLOAT	Float switch input	Float switch sensing
CN-EEV	EEV Output	EEV Control output
CN-DISPLAY	Display	Display of indoor status
CN-OPTION	Option PCB (EPROM)	Option PCB connection
CN-ROOM	Room sensor	Room air thermistor
CN-PIPE/IN	Suction pipe sensor	Pipe in thermistor
CN-PIPE/OUT	Discharge pipe sensor	Pipe out thermistor
CN-REMO	Remote controller	Remote control line
CN-CC or CN-EXT	Dry Contact or External on/off controller	Dry Contact or External on/off controller connection
CN-AIRC*	Air cleaner*	Air cleaner control*
CN-VANE1	Step Motor	Step motor output
CN-485	Communication	Connection between indoor and outdoor units
CN-COM	Communication	Connection on Sub PCB between indoor and outdoor units

**Plasma filter kit accessories are available separately. Always follow all local, state, and national building codes with the use of this or any product.*

Table 18: TL Frame DIP Switch Settings.

DIP Switch Setting		Off	On	Remarks
SW3	GROUP CONTROL	Master	Slave	Group control setting using 7-Day Programmable Controller; selects Master/ Slave on each indoor unit
SW4	DRY CONTACT MODE	Variable	Auto	Sets operation mode for optional Dry Contact accessory 1. Variable: Auto or Manual Mode can be set through 7-Day Programmable Controller or Wireless Remote Controller (factory default setting is Auto if there is no setting) 2. Auto: For Dry Contact, it is always Auto mode

***For Gen 4 Multi V two-way ceiling cassette indoor units, DIP switches 1, 2, 5 through 8 must be set to OFF. These DIP switches are used for other models.**
****To enable Generation 4 features, outdoor unit DIP switch no. 3 must be set to ON. Please refer to the Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.**

Figure 25: TL Piping Diagram.

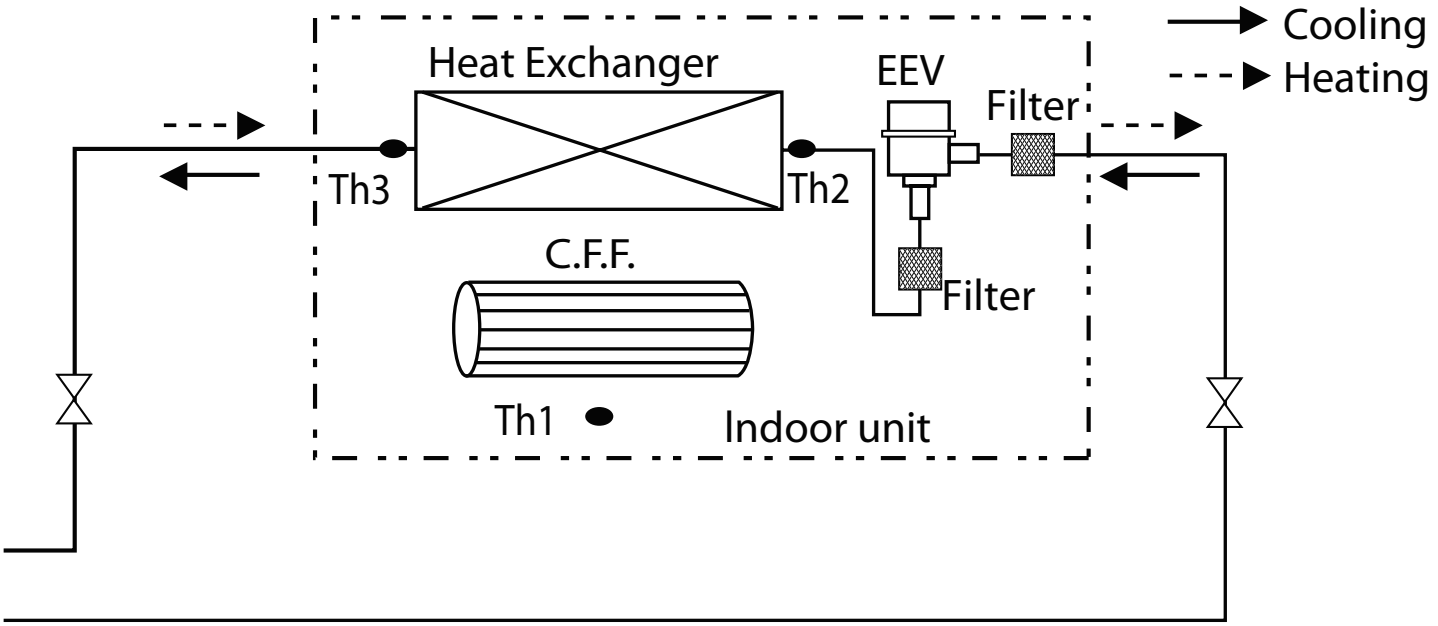


Table 19: TL Frame Refrigerant Pipe Connection Port Diameters.

Model	Liquid (inch)	Gas (inch)
ARNU183TLC4	1/4	1/2
ARNU243TLC4	3/8	5/8

Table 20: TL Frame Thermistors.

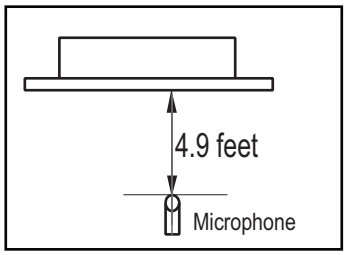
Thermistor	Description
TH1	Return air thermistor
TH2	Pipe in thermistor
TH3	Pipe out thermistor

TWO-WAY CEILING CASSETTE

Acoustic Data

Sound Pressure Levels

Figure 26: Sound Pressure Measurement Location.



- Measurements are taken 4.9 ft away from the front of the unit.
- Sound pressure levels are measured in dB(A) with a tolerance of ±3.
- Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

Operating Conditions :

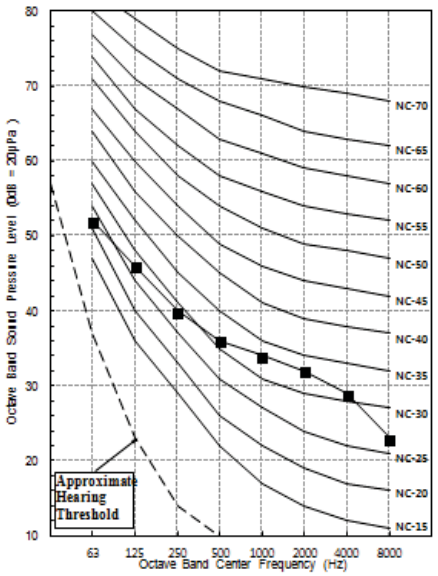
- Power source: 220V/60 Hz
- Sound level will vary depending on a range of factors including the construction (acoustic absorption coefficient) of a particular room in which the unit was installed.

Table 21: Two-Way Ceiling Cassette Indoor Unit Sound Pressure Levels.

Model	Sound Levels dB(A)		
	High Fan Speed	Medium Fan Speed	Low Fan Speed
ARNU183TLC4	40.0	36.0	32.0
ARNU243TLC4	42.0	38.0	34.0

Figure 27: ARNU183TLC4 and ARNU243TLC4 Sound Pressure Level Diagrams.

ARNU183TLC4



ARNU243TLC4

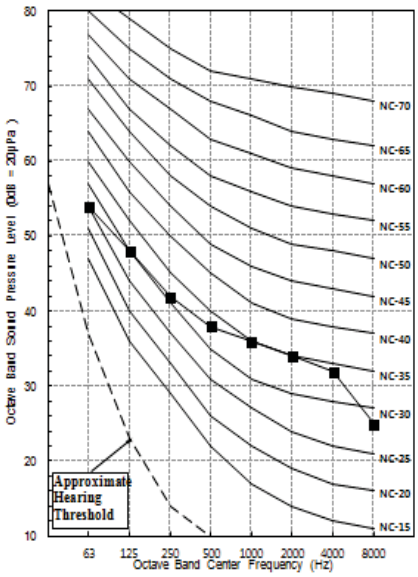


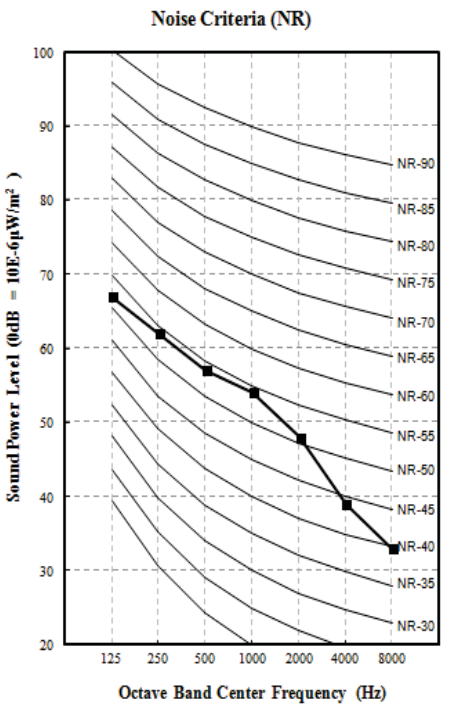
Table 22: Two-Way Ceiling Cassette Indoor Unit Sound Power Levels.

Model	Sound Levels dB(A)
	High Fan Speed
ARNU183TLC4	59.0
ARNU243TLC4	61.0

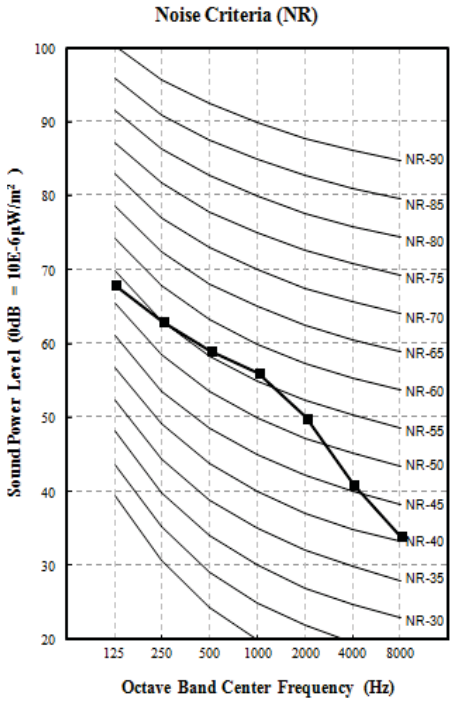
- Data is valid under diffuse field conditions.
- Data is valid under nominal operating conditions.
- Sound power level is measured using rated conditions, and tested in a reverberation room per ISO 3741 standards.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of particular area in which the equipment is installed.
- Reference acoustic intensity: 0dB = 10E-6μW/m^2

Figure 28: ARNU183TLC4 and ARNU243TLC4 Sound Power Level Diagrams.

ARNU183TLC4



ARNU243TLC4



TWO-WAY CEILING CASSETTE

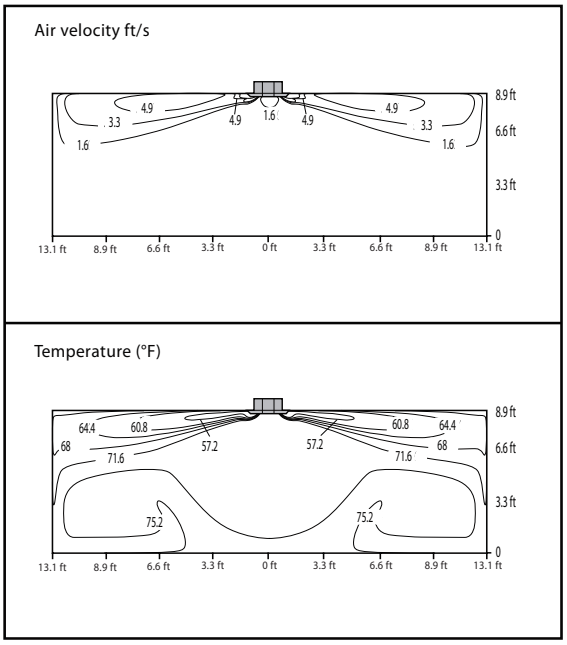
Air Velocity / Temperature Distribution

ARNU183TLC4

Figure 29: ARNU183TLC4.

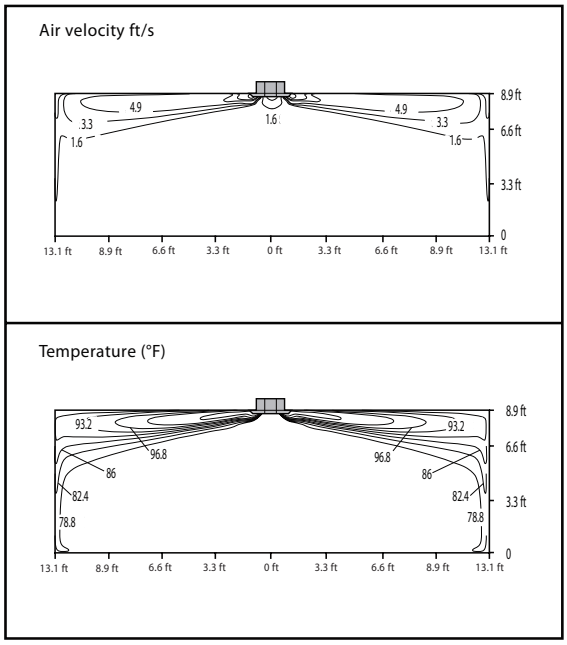
Cooling

Discharge angle: 20°



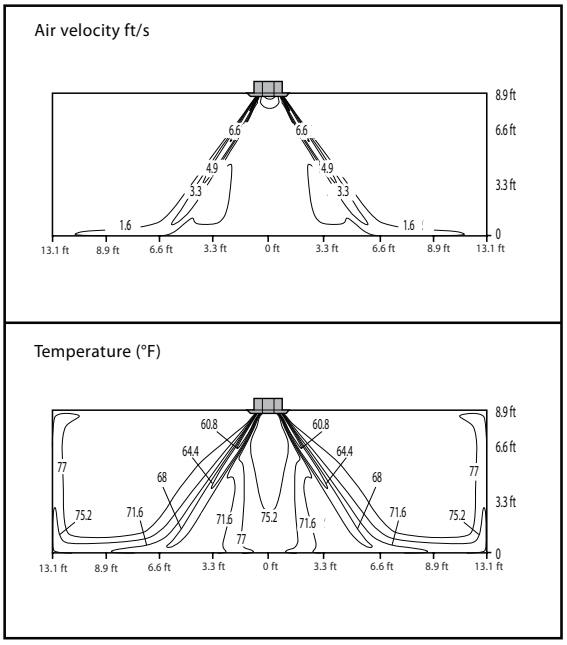
Heating

Discharge angle: 20°



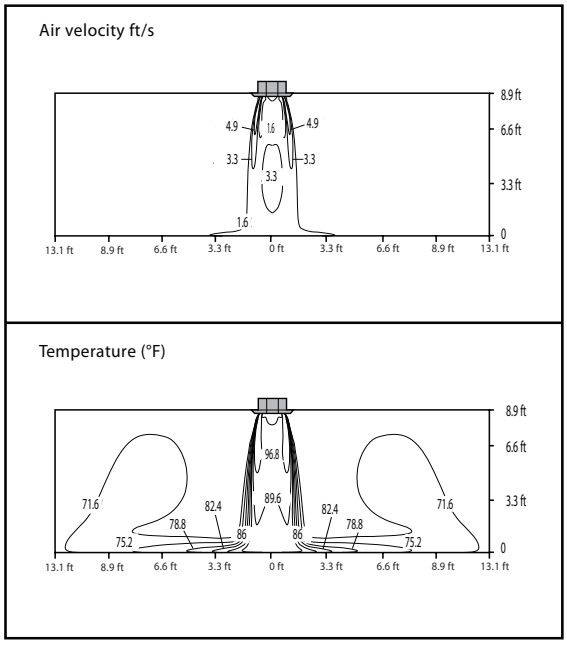
Cooling

Discharge angle: 40°



Heating

Discharge angle: 60°

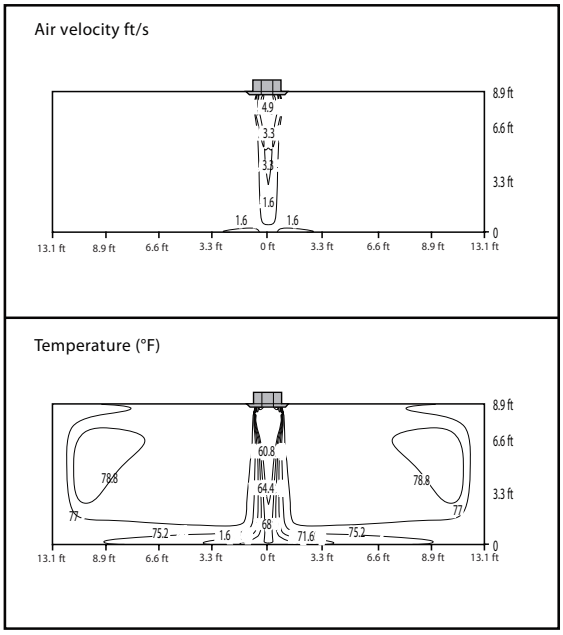


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 30: ARNU183TLC4 continued.

Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

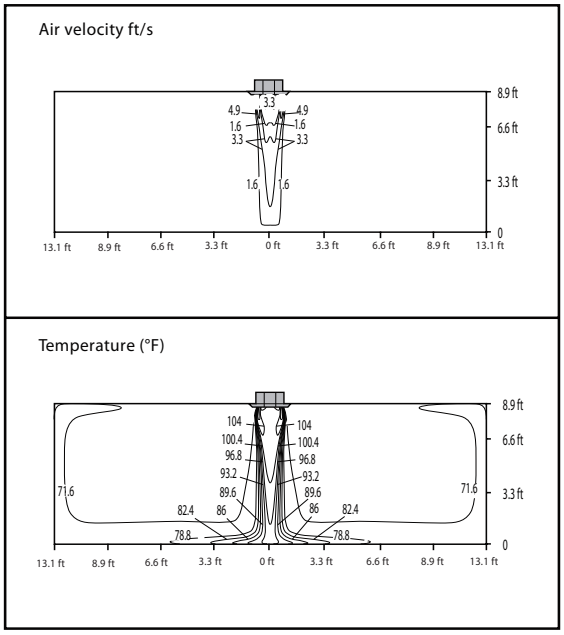
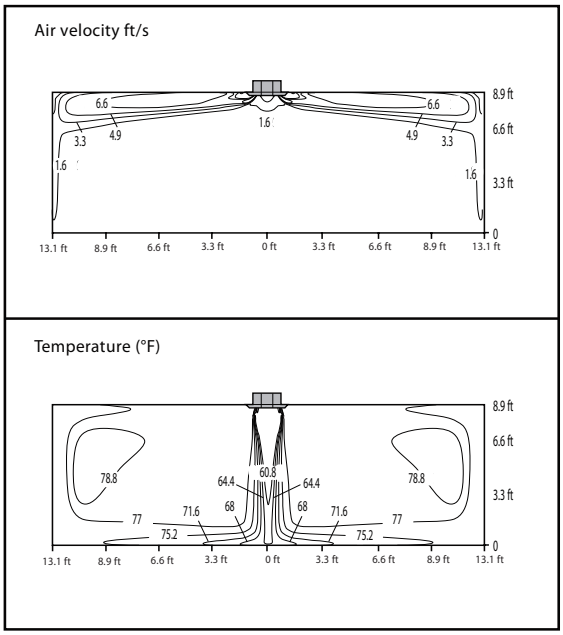


Figure 31: ARNU243TLC4.

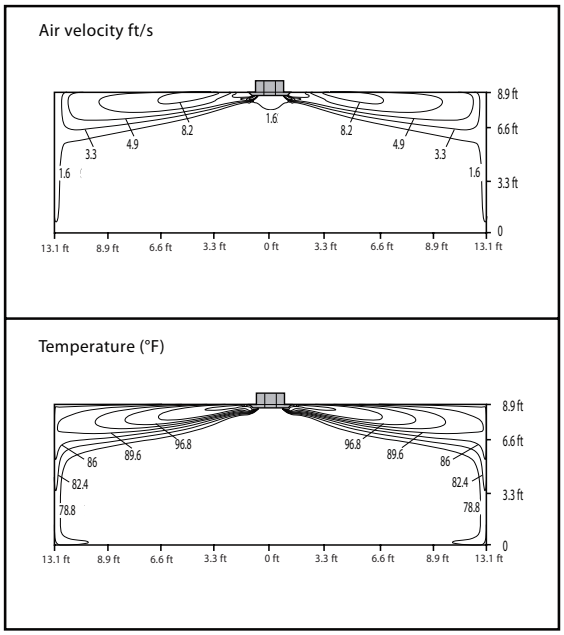
Cooling

Discharge angle: 20°



Heating

Discharge angle: 20°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

TWO-WAY CEILING CASSETTE

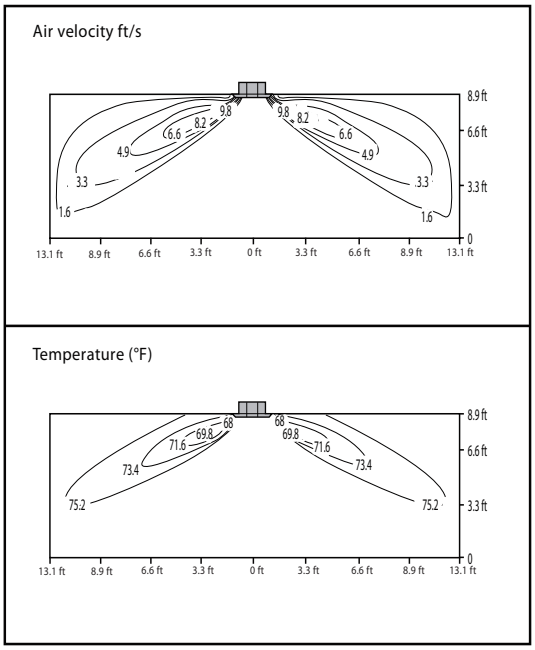
Air Velocity / Temperature Distribution

ARNU243TLC4

Figure 32: ARNU243TLC4 continued.

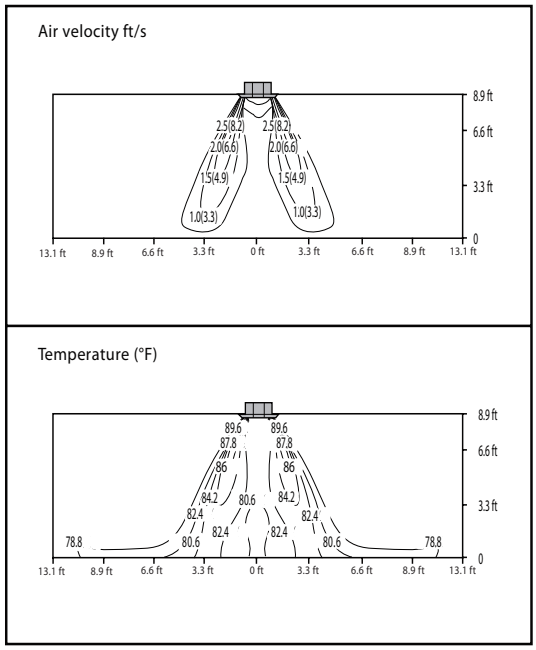
Cooling

Discharge angle: 40°



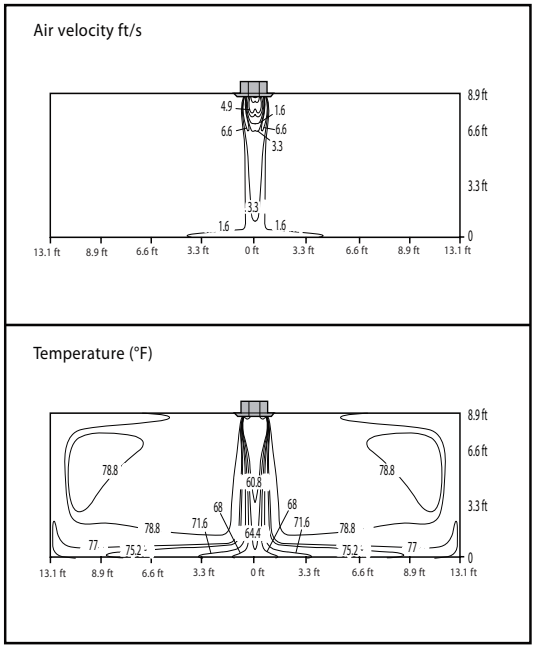
Heating

Discharge angle: 60°



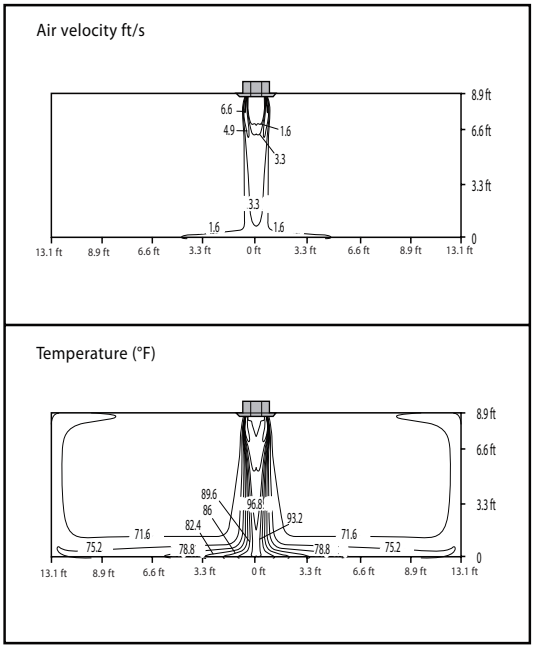
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Table 23: ARNU183TLC4, ARNU243TLC4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU183TLC4 / 19.1	23	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.6	14.2
	25	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.6	14.2
	30	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.6	14.2
	35	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.6	14.2
	40	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.6	14.2
	45	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.6	14.2
	50	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.6	14.2
	55	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.6	14.2
	60	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.4	14.1
	65	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	24.1	13.9
	70	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	23.7	13.7
	75	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.7	14.2	23.1	13.4
	80	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.4	14.4	22.2	14.2	22.5	13.3
	85	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	21.2	14.2	21.4	13.5	21.8	12.8
	90	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	20.8	14.0	21.0	13.3	21.4	12.6
	95	12.6	10.3	15.3	11.8	17.2	12.6	**19.1**	**13.4**	20.4	13.9	20.8	13.2	21.2	12.5
	100	12.6	10.3	15.3	11.8	17.2	12.6	19.1	13.4	20.1	13.7	20.4	13.1	20.8	12.4
	105	12.6	10.3	14.5	11.2	16.4	12.0	18.3	12.8	18.7	12.8	19.7	12.7	20.1	12.1
	110	12.2	10.0	13.8	10.6	15.3	11.2	17.2	12.0	17.6	12.0	18.7	12.1	19.5	11.8
ARNU243TLC4 / 24.2	23	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	31.2	18.0
	25	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	31.2	18.0
	30	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	31.2	18.0
	35	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	31.2	18.0
	40	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	31.2	18.0
	45	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	31.2	18.0
	50	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	31.2	18.0
	55	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	31.2	18.0
	60	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	31.0	17.9
	65	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	30.5	17.6
	70	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	30.0	17.4
	75	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.8	18.0	29.3	17.0
	80	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	27.1	18.2	28.1	17.9	28.6	16.9
	85	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	26.9	18.0	27.1	17.1	27.6	16.2
	90	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	26.4	17.7	26.6	16.9	27.1	16.0
	95	16.0	13.0	19.4	14.9	21.8	16.0	**24.2**	**16.9**	25.9	17.6	26.4	16.8	26.9	15.9
	100	16.0	13.0	19.4	14.9	21.8	16.0	24.2	16.9	25.4	17.3	25.9	16.6	26.4	15.7
	105	16.0	13.0	18.4	14.2	20.8	15.3	23.2	16.3	23.7	16.3	24.9	16.0	25.4	15.3
	110	15.5	12.6	17.4	13.5	19.4	14.2	21.8	15.2	22.3	15.3	23.7	15.3	24.7	14.9

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

TWO-WAY CEILING CASSETTE

Heating Capacity Tables

ARNU183TLC4, ARNU243TLC4

Table 24: ARNU183TLC4, ARNU243TLC4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC	TC	TC	TC	TC	TC	TC	TC
			MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh
ARNU183TLC4 / 19.1	-4	-4.4	14.4	14.4	14.4	14.4	14.2	14.2	14.2	14.2
	0	-0.4	14.8	14.8	14.8	14.8	14.8	14.6	14.6	14.6
	5.0	4.5	16.8	16.6	16.3	16.3	16.3	16.3	16.3	16.3
	10.0	9.0	17.4	17.4	17.4	17.2	17.2	17.2	17.2	17.2
	15.0	14.0	18.5	18.5	18.5	18.5	18.5	18.5	18.3	18.1
	20.0	19.0	19.6	19.6	19.6	19.6	19.1	19.1	18.8	18.5
	25.0	23.0	20.4	20.4	20.4	20.4	20.4	20.0	19.8	19.6
	30.0	28.0	20.9	20.9	20.9	20.9	20.9	20.4	19.8	19.2
	35.0	32.0	21.5	21.5	21.5	21.5	21.3	20.9	19.8	18.8
	40.0	36.0	22.4	22.4	22.4	22.4	21.5	20.9	19.8	18.8
	45.0	41.0	23.2	23.2	23.2	22.6	21.5	20.9	19.8	18.8
	47.0	43.0	24.1	23.9	23.7	22.6	**21.5**	20.9	19.8	18.8
	50.0	46.0	25.8	24.7	23.7	22.6	21.5	20.9	19.8	18.8
	55.0	51.0	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8
	60.0	56.0	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8
ARNU243TLC4 / 24.2	-4	-4.4	18.3	18.3	18.3	18.3	18.0	18.0	18.0	18.0
	0	-0.4	18.8	18.8	18.8	18.8	18.8	18.6	18.6	18.6
	5.0	4.5	21.3	21.0	20.7	20.7	20.7	20.7	20.7	20.7
	10.0	9.0	22.1	22.1	22.1	21.8	21.8	21.8	21.8	21.8
	15.0	14.0	23.5	23.5	23.5	23.5	23.5	23.5	23.2	22.9
	20.0	19.0	24.8	24.8	24.8	24.8	24.2	24.2	23.9	23.6
	25.0	23.0	25.9	25.9	25.9	25.9	25.9	25.4	25.1	24.8
	30.0	28.0	26.5	26.5	26.5	26.5	26.5	25.9	25.1	24.3
	35.0	32.0	27.3	27.3	27.3	27.3	27.0	26.5	25.1	23.8
	40.0	36.0	28.4	28.4	28.4	28.4	27.3	26.5	25.1	23.8
	45.0	41.0	29.5	29.5	29.5	28.7	27.3	26.5	25.1	23.8
	47.0	43.0	30.6	30.3	30.0	28.7	27.3	26.5	25.1	23.8
	50.0	46.0	32.8	31.4	30.0	28.7	27.3	26.5	25.1	23.8
	55.0	51.0	33.4	31.7	30.0	28.7	27.3	26.5	25.1	23.8
	60.0	56.0	33.4	31.7	30.0	28.7	27.3	26.5	25.1	23.8

TC: Total Capacity (MBh).

Table 25: Optional Accessories for Two-Way Ceiling Cassette Indoor Units.

Accessory	Model Number
Two-Way Ceiling Cassette Grille Kit (One Required)	PT-HLC1
Plasma Filter Kit (One)	PTPKL0

All accessories are sold separately.

FOUR-WAY CEILING CASSETTE

2' x 2' Frame

3' x 3' Frame

FOUR-WAY CEILING CASSETTE

Mechanical Specifications

Casing
The case is designed to mount recessed in the ceiling and has a surface-mounted concentric grille on the bottom of the unit. The unit case is manufactured with coated metal. Cold surfaces are covered with a coated polystyrene insulating material. The case is provided with metal ears designed to support the unit weight on four corners. Ears have pre-punched holes designed to accept field-supplied all-thread rod hangers.

Ventilation Air
TQ, TR Frame
The case has a factory designated cutout for the connection of a field-supplied outside air duct. An optional flange kit is available from LG.

TM, TN, TP Frame
The case has a factory designated cutout for the connection of a field-supplied outside air duct. LG offers two flange kits.

Supply Air Branch Duct Connections
Factory designated cutouts are marked on the unit case. Branch ducts provide the designer with the ability to duct up to ½ the unit airflow capacity to adjacent spaces. The adjacent space must be in the room where the ceiling cassette is installed. It cannot be branched to another room.

Architectural Filter/Grille
The ceiling cassette assembly is provided with an off-white ABS polymeric resin architectural grille equipped with a tapered trim edge and a hinged, spring clip (screwless) return air filter-grille door.

TM, TN, TP Frame
The unit case allows access to hanger rods and the inspection of piping through corner access panels on the architectural grille. The optional auto-elevating grille kit is designed to provide motorized ascent/descent of the return air grille/pre-filter assembly a distance of up to 14-3/4 feet allowing easy access to remove and clean the filter. The kit consists of two lifting mechanisms comprised of an electric motor driven winch with braided steel lifting cables. The winch kit is mounted behind the grille and is not visible during normal unit operation. The auto-elevating return air grille appearance and finish matches that of the architectural grille on similar indoor unit models equipped with the standard hinged filter grilles. The auto-elevating grille control algorithm accepts up, down, and stop control commands from either a wall-mounted or the lift remote controller. The algorithm does not permit the lowering of the grille while the indoor unit fan is operating. The pair of winch controllers work in unison to keep the return air grille level during lift and descent operations and will automatically stop the descent of the return air grille/filter if contact is made with any obstacle.

Fan Assembly and Control
The indoor unit has a single, direct-drive, turbo fan. The fan wheel is made of high strength ABS HT-700 polymeric resin. The fan motor is a Brushless Digitally-Controlled (BLDC) design with permanently lubricated and sealed ball bearings. The fan motor includes thermal, overcurrent and low RPM protection. The fan/motor assembly is mounted on vibration attenuating rubber grommets. The fan impeller is statically and dynamically balanced. The fan speed is controlled

using a microprocessor-based, direct digital control algorithm that provides a high fan speed in cooling thermal ON and low fan speed in cooling thermal OFF, high fan speed in heating thermal ON and fan off in heating thermal OFF. The fan speeds can be field adjusted between low, medium, and high speeds. The fan speed algorithm provides a field selectable, fixed-speed or auto-speed setting that adjusts the fan speed to simulate natural airflow.

Air Filter
Return air is filtered with a removable, washable filter with anti-fungal treatment. Plasma filter accessories are also available separately.

Airflow Guide Vanes
The architectural grille has four-directional slot diffusers each equipped with independent oscillating motorized guide vanes designed to change the angle airflow is discharged. Discharge range of motion is 40° in an up/down direction. The unit has a guide vane control algorithm designed to sequentially change the predominant discharge airflow direction in a counterclockwise pattern. The control algorithm also provides the capability of locking each guide vane independently in a field adjusted fixed position. Guide vanes provide airflow in all directions. The ends of each vane are tapered to provide airflow to the space in the direction of the four corners of the architectural grille.

Microprocessor Controls
The unit is provided with an integrated microprocessor controller capable of performing functions necessary to operate the system without the use of a wall-mounted controller. A temperature thermistor is factory-mounted in the return air stream. All unit operation parameters, excluding the unit operating schedule, are stored in non-volatile memory resident on the unit microprocessor. Operating schedules are stored in select models of the optional, wall-mounted, local, or central controller. The field-supplied communication cable between the indoor unit(s) and outdoor unit is to be a minimum of 18 AWG, 2 conductor, stranded, and shielded cable (RS-485), terminated via screw terminals on the control boards. The microprocessor control algorithms provide the following functions: auto addressing, self-diagnostics, auto restart following power restoration, test run, and will operate the indoor unit using one of five operating modes:

1. Auto Changeover (Heat Recovery only)
2. Heating
3. Cooling
4. Dry
5. Fan Only

For Heat Recovery systems the Auto Changeover setting automatically switches control of the indoor unit between cooling and heating modes based on space temperature conditions.

For Heat Pump systems, heated or cooled air delivery is dependent upon outdoor unit operating mode.

In Heating mode, the microprocessor control will activate indoor unit operation when the indoor room temperature falls below setpoint temperature. At which point, a signal is sent to the outdoor unit to begin the heating cycle. The indoor unit fan operation is delayed until coil pipe temperature reaches 76°F. Significant airflow is generated when pipe temperature reaches 80°F. The unit is equipped with an infrared receiver designed to communicate with an LG wireless remote controller. In lieu of wireless remote or factory return air thermistor, screw terminals on the microprocessor circuit board accommodate various models of wall-mounted local controllers and/or a wall-mounted remote temperature sensor. The unit microprocessor is capable of accepting space temperature readings concurrently or individually from either:

1. Wall-mounted wired controller(s)
2. Factory mounted return air thermistor or the optional wall-mounted wired remote temperature sensor.

A single indoor unit has the capability of being controlled by up to two local wired controllers. The microprocessor controls space temperature using the value provided by the temperature sensor sensing a space temperature that is farthest away from the temperature set-point. The microprocessor control provides a cooling or heating mode test cycle that operates the unit for 18 minutes without regard to the space temperature. If the system is provided with an optional wall-mounted, local, or central controller, displayed diagnostic codes are specific, alpha numeric, and provide the service technician with the reason for the code displayed.

Condensate Lift/Pump

The indoor unit is provided with a factory installed and wired condensate lift/pump capable of providing a maximum 27.5 inch lift from the bottom surface of the unit. The lift pump comes with a safety switch that shuts off the indoor unit if condensate rises too high in the drain pan.

Condensate Drain Pan

The condensate drain pan is constructed of EPS (expandable polystyrene resin).

Coil

The indoor unit coil is constructed with grooved design copper tubes with slit coil fins, one (1) to two (2) rows, eighteen (18) to nineteen (19) fins per inch.

Controls Features

- Auto changeover (Heat Recovery only)
- Auto operation
- Auto restart
- External on/off control
- Dual thermistor control
- Dual set-point control*
- Filter life and power consumption display*
- Multiple auxiliary heater applications*
- Group control
- High ceiling
- Hot start
- Self diagnostics
- Timer (on / off)
- Weekly schedule
- Auto direction / swing (up / down)
- Fan speed control
- Swirl wind (alternating vanes)
- Jet cool (fast cooling)

**To enable Generation 4 features, outdoor unit DIP Switch No. 3 must be set to ON. Please refer to the Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.*

FOUR-WAY CEILING CASSETTE

General Data

Table 26: Four-Way Ceiling Cassette (2' x 2' TR and TQ Frames) Indoor Unit General Data.

Model No.	ARNU053TRC4	ARNU073TRC4	ARNU093TRC4	ARNU123TRC4	ARNU153TQC4	ARNU183TQC4
Cooling Mode Performance						
Capacity (Btu/h)	5,500	7,500	9,600	12,300	15,400	19,100
Power Input[1] (W)	30	30	30	30	30	30
Heating Mode Performance						
Capacity (Btu/h)	6,100	8,500	10,900	13,600	17,100	21,500
Power Input[1] (W)	30	30	30	30	30	30
Entering Mixed Air						
Cooling Max. (°F WB)	76	76	76	76	76	76
Heating Min. (°F DB)	59	59	59	59	59	59
Unit Data						
Refrigerant Type[2]	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant Control	EEV	EEV	EEV	EEV	EEV	EEV
Sound Pressure[3] dB(A) (H/M/L)	29 / 27 / 26	29 / 27 / 26	30 / 29 / 27	32 / 30 / 27	36 / 34 / 32	37 / 35 / 34
Net Unit Weight (lbs.)	29	29	32	32	35	35
Shipping Weight (lbs.)	34	34	38	38	40	40
Grille Weight (lbs)	7	7	7	7	7	7
Grille Shipping Weight (lbs)	11	11	11	11	11	11
Communication Cable[4] (No. x AWG)	2 x 18	2 x 18	2 x 18	2 x 18	2 x 18	2 x 18
Fan						
Type	Turbo	Turbo	Turbo	Turbo	Turbo	Turbo
Quantity	1	1	1	1	1	1
Motor/Drive	Brushless Digitally Controlled / Direct					
Airflow Rate H/M/L (CFM)	265 / 247 / 212	265 / 247 / 212	283 / 265 / 251	307 / 283 / 247	388 / 353 / 328	396 / 388 / 353
Piping						
Liquid Line (in., O.D.)	1/4 Flare	1/4 Flare	1/4 Flare	1/4 Flare	1/4 Flare	1/4 Flare
Vapor Line (in., O.D.)	1/2 Flare	1/2 Flare	1/2 Flare	1/2 Flare	1/2 Flare	1/2 Flare
Condensate Line (in., I.D.)	1	1	1	1	1	1

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes.

This unit comes with a dry nitrogen charge.

This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.

Cooling capacity rating obtained with air entering the indoor coil at 80ºF dry bulb (DB) and 67ºF wet bulb (WB) and outdoor ambient conditions of 95ºF dry bulb (DB).

Heating capacity rating obtained with air entering the indoor unit at 70ºF dry bulb (DB) and outdoor ambient conditions of 47ºF dry bulb (DB) and 43ºF wet bulb (WB).

[1]Power Input is rated at high speed.

[2]Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

[3]Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.

[4]All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with the applicable local and national codes. Ensure the communication cable is properly grounded at the master outdoor unit only. Do not ground the ODU-IDU communications cable at any other point.

Table 27: Four-Way Ceiling Cassette (3' x 3' TP Frames) Indoor Unit General Data.

Model No.	ARNU243TPC4	ARNU283TPC4
Cooling Mode Performance		
Capacity (Btu/h)	24,200	28,000
Power Input[1] (W)	33	33
Heating Mode Performance		
Capacity (Btu/h)	27,300	31,500
Power Input[1] (W)	33	33
Entering Mixed Air		
Cooling Max (°F WB)	76	76
Heating Min (°F DB)	59	59
Unit Data		
Refrigerant Type[2]	R410A	R410A
Refrigerant Control	EEV	EEV
Sound Pressure[3] dB(A) (H/M/L)	36 / 34 / 31	39 / 35 / 33
Net Unit Weight (lbs.)	48	48
Shipping Weight (lbs.)	58	58
Grill Weight (lbs)	13	13
Grill Shipping Weight (lbs)	20	20
Communication Cable[4] (No. x AWG)	2 x 18	2 x 18
Fan		
Type	Turbo	Turbo
Quantity	1	1
Motor/Drive	Brushless Digitally Controlled / Direct	
Airflow Rate H/M/L (CFM)	600 / 530 / 459	671 / 565 / 494
Piping		
Liquid Line (in., O.D.)	3/8 Flare	3/8 Flare
Vapor Line (in., O.D.)	5/8 Flare	5/8 Flare
Condensate Line (in., I.D.)	1	1

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes.

This unit comes with a dry nitrogen charge.

This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.

Cooling capacity rating obtained with air entering the indoor coil at 80ºF dry bulb (DB) and 67ºF wet bulb (WB) and outdoor ambient conditions of 95ºF dry bulb (DB).

Heating capacity rating obtained with air entering the indoor unit at 70ºF dry bulb (DB) and outdoor ambient conditions of 47ºF dry bulb (DB) and 43ºF wet bulb (WB).

[1]Power Input is rated at high speed.

[2]Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

[3]Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.

[4]All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with the applicable local and national codes. Ensure the communication cable is properly grounded at the master outdoor unit only. Do not ground the ODU-IDU communications cable at any other point.

FOUR-WAY CEILING CASSETTE

General Data

Table 28: Four-Way Ceiling Cassette (3' x 3' TN Frames) Indoor Unit General Data.

Model No.	ARNU073TNA4	ARNU093TNA4	ARNU123TNA4	ARNU153TNA4
Cooling Mode Performance				
Capacity (Btu/h)	7,500	9,600	12,300	15,400
Power Input[1] (W)	144	144	144	144
Heating Mode Performance				
Capacity (Btu/h)	8,500	10,900	13,600	17,100
Power Input[1] (W)	144	144	144	144
Entering Mixed Air				
Cooling Max (°F WB)	76	76	76	76
Heating Min (°F DB)	59	59	59	59
Unit Data				
Refrigerant Type[2]	R410A	R410A	R410A	R410A
Refrigerant Control	EEV	EEV	EEV	EEV
Sound Pressure[3] dB(A) (H/M/L)	29 / 26 / 24	29 / 26 / 24	31 / 29 / 26	32 / 29 / 26
Net Unit Weight (lbs.)	53.6	53.6	53.6	53.6
Shipping Weight (lbs.)	66.1	66.1	66.1	66.1
Grill Weight (lbs)	13	13	13	13
Grill Shipping Weight (lbs)	20	20	20	20
Communication Cable[4] (No. x AWG)	2 x 18	2 x 18	2 x 18	2 x 18
Fan				
Type	Turbo	Turbo	Turbo	Turbo
Quantity	1	1	1	1
Motor/Drive	Brushless Digitally Controlled / Direct			
Airflow Rate H/M/L (CFM)	459 / 424 / 388	477 / 424 / 388	494 / 459 / 424	530 / 459 / 424
Piping				
Liquid Line (in., O.D.)	3/8 Flare	3/8 Flare	3/8 Flare	3/8 Flare
Vapor Line (in., O.D.)	5/8 Flare	5/8 Flare	5/8 Flare	5/8 Flare
Condensate Line (in., I.D.)	1	1	1	1

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes.

This unit comes with a dry nitrogen charge.

This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.

Cooling capacity rating obtained with air entering the indoor coil at 80ºF dry bulb (DB) and 67ºF wet bulb (WB) and outdoor ambient conditions of 95ºF dry bulb (DB).

Heating capacity rating obtained with air entering the indoor unit at 70ºF dry bulb (DB) and outdoor ambient conditions of 47ºF dry bulb (DB) and 43ºF wet bulb (WB).

[1]Power Input is rated at high speed.

[2]Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

[3]Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.

[4]All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with the applicable local and national codes. Ensure the communication cable is properly grounded at the master outdoor unit only. Do not ground the ODU-IDU communications cable at any other point.

Table 29: Four-Way Ceiling Cassette (3' x 3' TN Frames) Indoor Unit General Data, continued.

Model No.	ARNU183TNA4	ARNU243TNA4	ARNU363TNC4
Cooling Mode Performance			
Capacity (Btu/h)	19,100	24,200	36,200
Power Input[1] (W)	144	144	144
Heating Mode Performance			
Capacity (Btu/h)	21,500	27,300	40,600
Power Input[1] (W)	144	144	144
Entering Mixed Air			
Cooling Max (°F WB)	76	76	76
Heating Min (°F DB)	59	59	59
Unit Data			
Refrigerant Type[2]	R410A	R410A	R410A
Refrigerant Control	EEV	EEV	EEV
Sound Pressure[3] dB(A) (H/M/L)	34 / 30 / 26	40 / 38 / 35	44 / 41 / 38
Net Unit Weight (lbs.)	53.6	53.6	54
Shipping Weight (lbs.)	66.1	66.1	64
Grill Weight (lbs)	13	13	13
Grill Shipping Weight (lbs)	20	20	20
Communication Cable[4] (No. x AWG)	2 x 18	2 x 18	2 x 18
Fan			
Type	Turbo	Turbo	Turbo
Quantity	1	1	1
Motor/Drive	Brushless Digitally Controlled / Direct		
Airflow Rate H/M/L (CFM)	565 / 530 / 424	742 / 671 / 600	883 / 777 / 706
Piping			
Liquid Line (in., O.D.)	3/8 Flare	3/8 Flare	3/8 Flare
Vapor Line (in., O.D.)	5/8 Flare	5/8 Flare	5/8 Flare
Condensate Line (in., I.D.)	1	1	1

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes.

This unit comes with a dry nitrogen charge.

This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.

Cooling capacity rating obtained with air entering the indoor coil at 80ºF dry bulb (DB) and 67ºF wet bulb (WB) and outdoor ambient conditions of 95ºF dry bulb (DB).

Heating capacity rating obtained with air entering the indoor unit at 70ºF dry bulb (DB) and outdoor ambient conditions of 47ºF dry bulb (DB) and 43ºF wet bulb (WB).

[1]Power Input is rated at high speed.

[2]Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

[3]Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.

[4]All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with the applicable local and national codes. Ensure the communication cable is properly grounded at the master outdoor unit only. Do not ground the ODU-IDU communications cable at any other point.

FOUR-WAY CEILING CASSETTE

General Data

Table 30: Four-Way Ceiling Cassette (3' x 3' TM Frames) Indoor Unit General Data.

Model No.	ARNU243TMA4	ARNU283TMA4	ARNU363TMA4	ARNU423TMC4	ARNU483TMC4
Cooling Mode Performance					
Capacity (Btu/h)	24,200	28,000	36,200	42,000	48,100
Power Input[1] (W)	144	144	144	144	144
Heating Mode Performance					
Capacity (Btu/h)	27,300	31,500	40,600	43,800	51,200
Power Input[1] (W)	144	144	144	144	144
Entering Mixed Air					
Cooling Max (°F WB)	76	76	76	76	76
Heating Min (°F DB)	59	59	59	59	59
Unit Data					
Refrigerant Type[2]	R410A	R410A	R410A	R410A	R410A
Refrigerant Control	EEV	EEV	EEV	EEV	EEV
Sound Pressure[3] dB(A) (H/M/L)	41 / 38 / 35	41 / 39 / 35	44 / 41 / 37	45 / 41 / 38	46 / 42 / 40
Net Unit Weight (lbs.)	58.4	58.4	58.4	59	59
Shipping Weight (lbs.)	70.5	70.5	70.5	69	69
Grill Weight (lbs)	13	13	13	13	13
Grill Shipping Weight (lbs)	20	20	20	20	20
Communication Cable[4] (No. x AWG)	2 x 18	2 x 18	2 x 18	2 x 18	2 x 18
Fan					
Type	Turbo	Turbo	Turbo	Turbo	Turbo
Quantity	1	1	1	1	1
Motor/Drive	Brushless Digitally Controlled / Direct				
Airflow Rate H/M/L (CFM)	777 / 706 / 635	812 / 741 / 635	918 / 812 / 706	1,059 / 918 / 812	1,130 / 953 / 883
Piping					
Liquid Line (in., O.D.)	3/8 Flare	3/8 Flare	3/8 Flare	3/8 Flare	3/8 Flare
Vapor Line (in., O.D.)	5/8 Flare	5/8 Flare	5/8 Flare	5/8 Flare	5/8 Flare
Condensate Line (in., I.D.)	1	1	1	1	1

EEV: Electronic Expansion Valve

Power wiring is field supplied and must comply with the applicable local and national codes.

This unit comes with a dry nitrogen charge.

This data is rated 0 ft above sea level, with 25 ft of refrigerant line per indoor unit and a 0 ft level difference between outdoor and indoor units. All capacities are net with a combination ratio between 95-105%.

Cooling capacity rating obtained with air entering the indoor coil at 80ºF dry bulb (DB) and 67ºF wet bulb (WB) and outdoor ambient conditions of 95ºF dry bulb (DB).

Heating capacity rating obtained with air entering the indoor unit at 70ºF dry bulb (DB) and outdoor ambient conditions of 47ºF dry bulb (DB) and 43ºF wet bulb (WB).

[1]Power Input is rated at high speed.

[2]Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R410A refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

[3]Sound Pressure levels are tested in an anechoic chamber under ISO Standard 3745.

[4]All communication cable to be minimum 18 AWG, 2-conductor, stranded, shielded and must comply with the applicable local and national codes. Ensure the communication cable is properly grounded at the master outdoor unit only. Do not ground the ODU-IDU communications cable at any other point.

Table 31: Four-Way Ceiling Cassette (2' x 2' and 3' x 3' Frames) Indoor Unit Electrical Data.

Model	Voltage Range	MCA	MOP	Rated Amps (A)	Power Supply			Power Input (W)	
					Hz	Volts	Phase	Cooling	Heating
2' x 2' Frames									
ARNU053TRC4	187-253	0.25	15	0.2	60	208-230	1	30	30
ARNU073TRC4		0.25		0.2				30	30
ARNU093TRC4		0.25		0.2				30	30
ARNU123TRC4		0.25		0.2				30	30
ARNU153TQC4		0.25		0.2				30	30
ARNU183TQC4		0.25		0.2				30	30
3' x 3' Frames (TP, 8" High)									
ARNU243TPC4	187-253	0.19	15	0.15	60	208-230	1	33	33
ARNU283TPC4		0.19		0.15				33	33
3' x 3' Frames (TN, 9-11/16" High)									
ARNU073TNA4	187-253	0.71	15	0.56	60	208-230	1	144	144
ARNU093TNA4		0.71		0.56				144	144
ARNU123TNA4		0.71		0.56				144	144
ARNU153TNA4		0.71		0.56				144	144
ARNU183TNA4		0.71		0.56				144	144
ARNU243TNA4		0.71		0.56				144	144
ARNU363TNC4		0.71		0.56				144	144
3' x 3' Frames (TM, 11-5/16" High)									
ARNU243TMA4	187-253	1.6	15	1.3	60	208-230	1	144	144
ARNU283TMA4		1.6		1.3				144	144
ARNU363TMA4		1.6		1.3				144	144
ARNU423TMC4		1.6		1.3				144	144
ARNU483TMC4		1.6		1.3				144	144

MCA : Minimum Circuit Ampacity.
MOP : Maximum Overcurrent Protection.

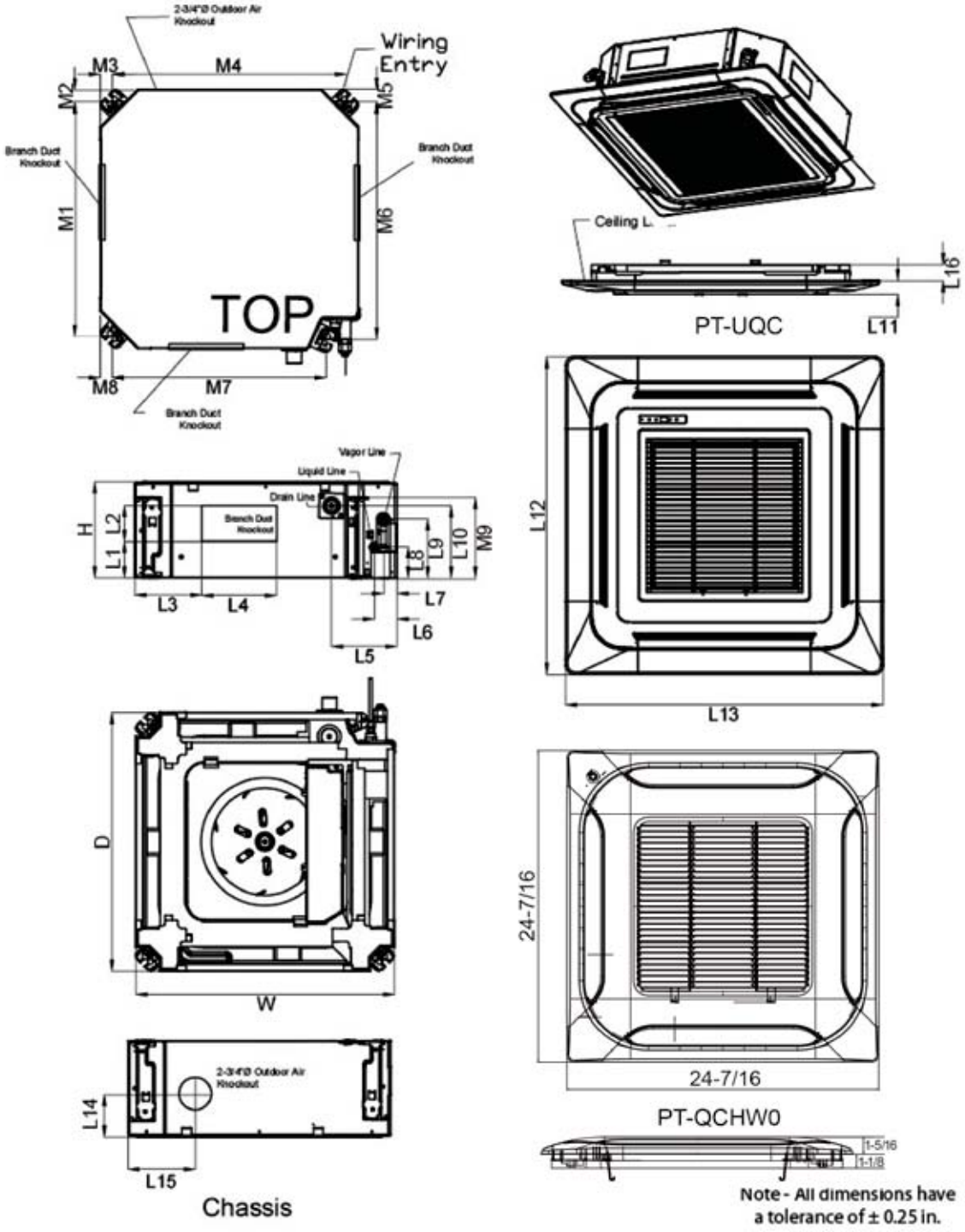
Units are suitable for use on an electrical system where voltage supplied to unit terminals is within the listed range limits.
Select wire size based on the larger MCA value.
Instead of a fuse, use the circuit breaker.

FOUR-WAY CEILING CASSETTE

External Dimensions

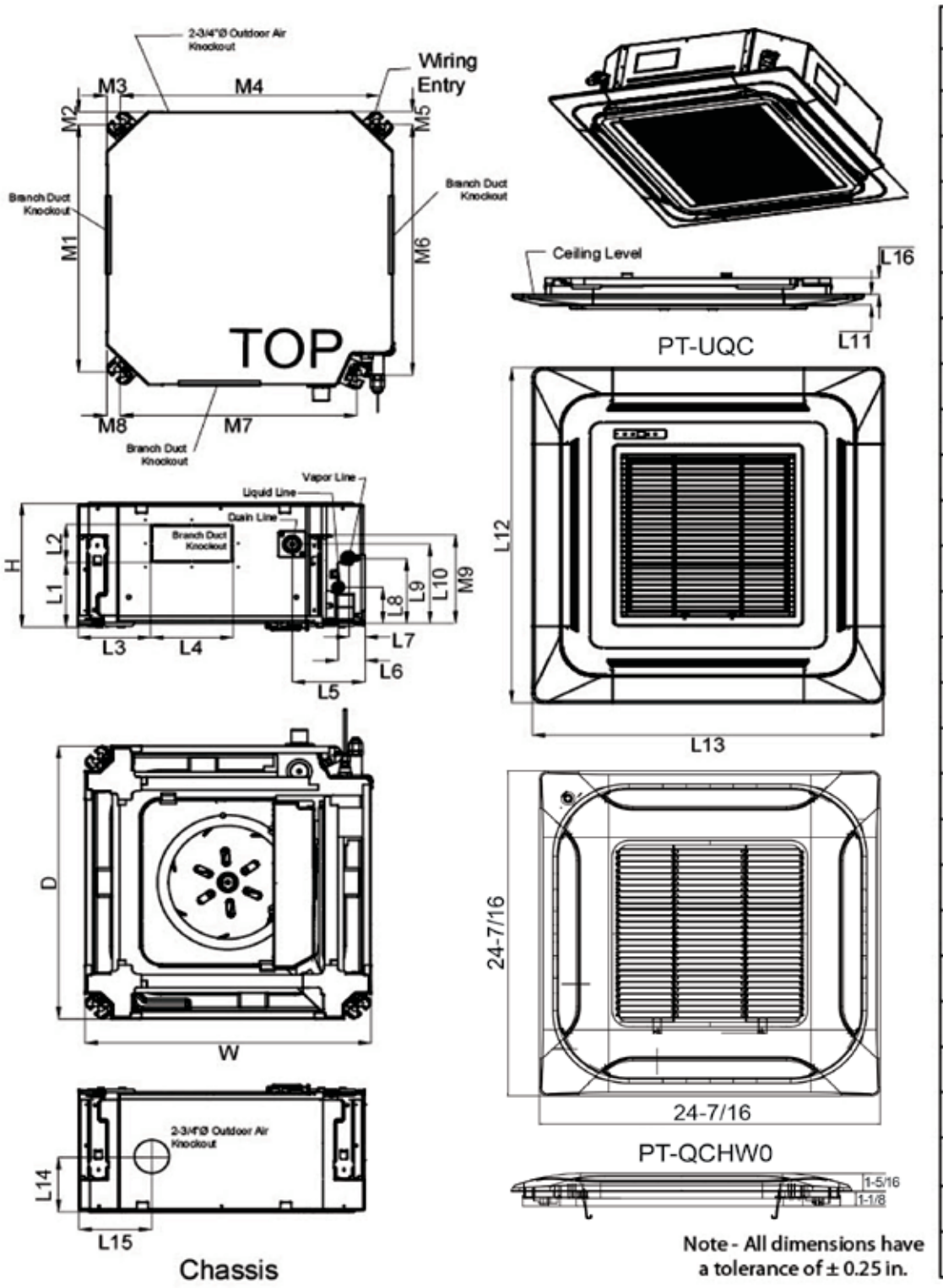
TR Frame

Figure 33: ARNU053TRC4, ARNU073TRC4, ARNU093TRC4, ARNU123TRC4 Dimensions.



W	22-7/16"
H	8-7/16"
D	22-7/16"
L1	2-1/8"
L2	3-1/8"
L3	5-13/16"
L4	6-1/2"
L5	5-5/8"
L6	1-15/16"
L7	1-3/16"
L8	2-3/4"
L9	5-1/8"
L10	6-5/16"
L11	7/8"
L12	27-9/16
L13	27-9/16"
L14	3-7/16"
L15	5-7/8"
L16	1-3/16"
M1	20-3/8"
M2	1-1/16"
M3	1-1/16"
M4	20-3/8"
M5	1-1/16"
M6	20-5/8"
M7	18-3/16"
M8	1-1/16"
M9	6-15/16

Figure 34: ARNU153TQC4, ARNU183TQC4 Dimensions.



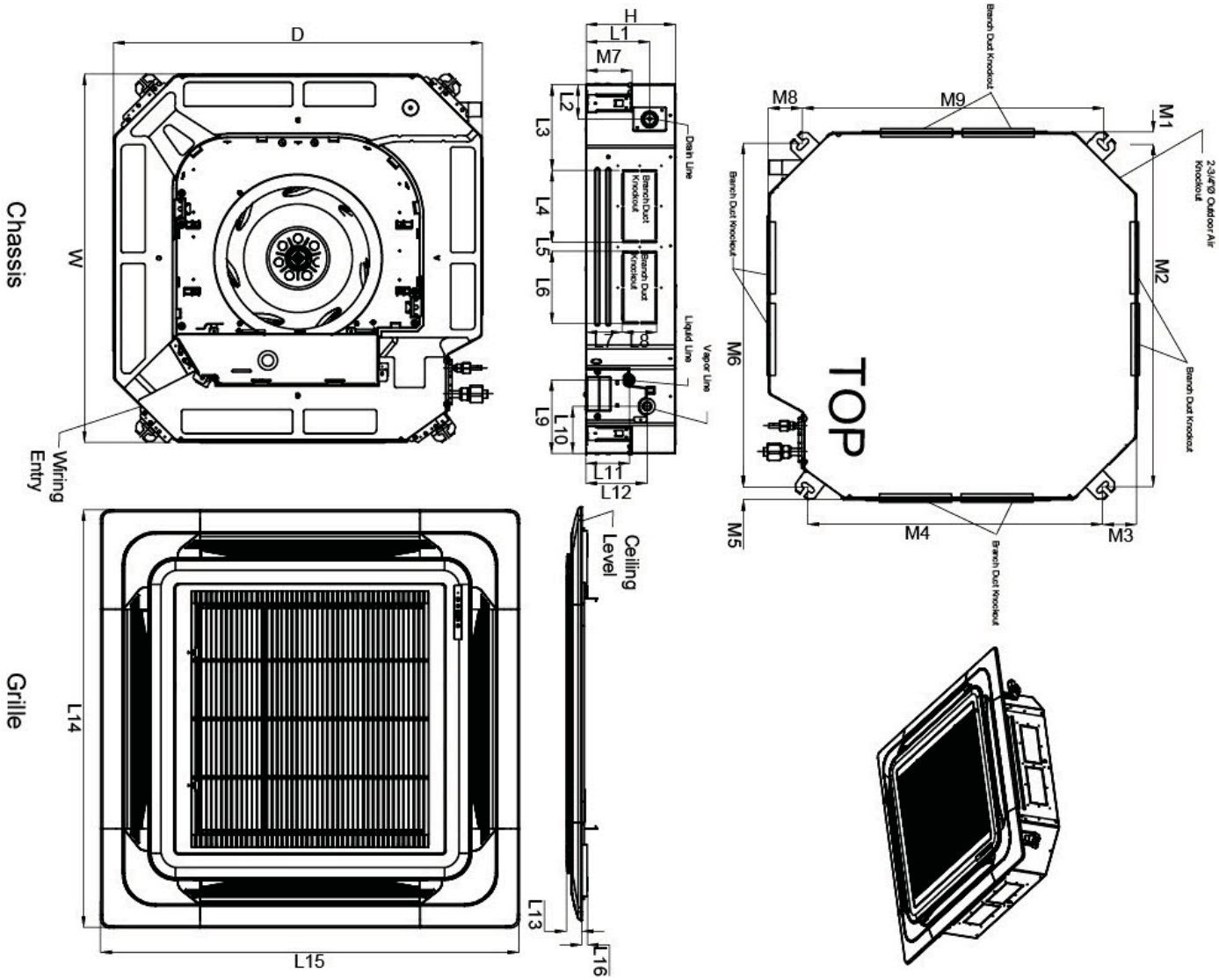
W	22-7/16"
H	10"
D	22-7/16"
L1	5"
L2	3-1/8"
L3	5-13/16"
L4	6-1/2"
L5	5-5/8"
L6	1-15/16"
L7	1-3/16"
L8	2-11/16"
L9	5-1/16"
L10	6-1/4"
L11	7/8"
L12	27-9/16
L13	27-9/16"
L14	3-1/8"
L15	5-5/8"
L16	1-3/16"
M1	20-3/8"
M2	1-1/16"
M3	1-1/16"
M4	20-3/8"
M5	1-1/16"
M6	20-5/8"
M7	18-3/16"
M8	1-1/16"
M9	6-5/16"

FOUR-WAY CEILING CASSETTE

External Dimensions

TP Frame

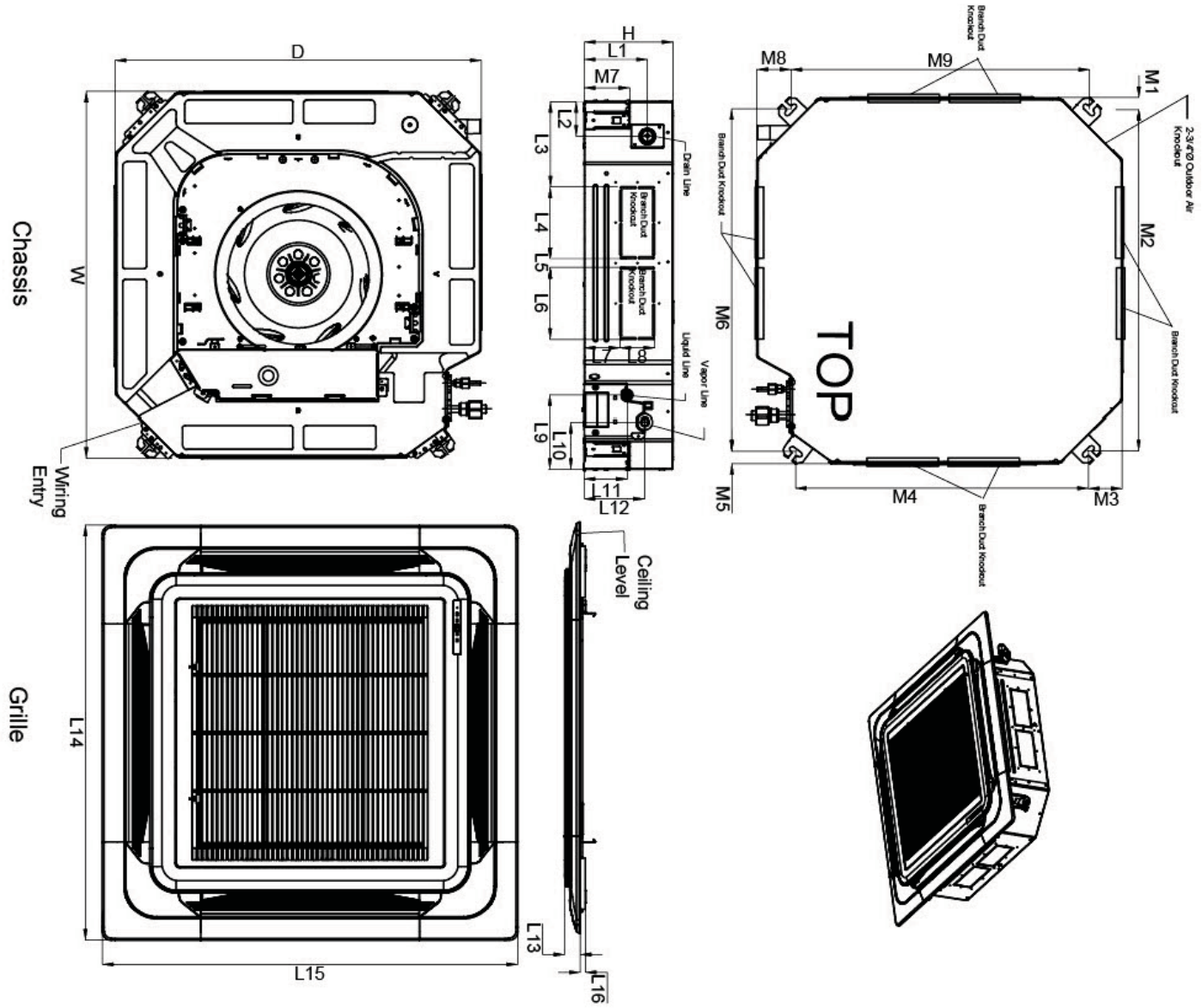
Figure 35: ARNU243TPC4, ARNU283TPC4 Dimensions.



W	H	D	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	M1	M2	M3	M4	M5	M6	M7	M8	M9
33-1/16"	8"	33-1/16"	5-11/16	3-1/8"	7-11/16"	6-1/2"	3/4"	6-1/2"	3-1/4"	3-1/8"	6-1/2"	4-3/16"	3-15/16"	5-7/16"	1-7/16"	37-3/8"	37-3/8"	1/2"	1-1/16"	30-15/16"	3-1/16"	26-7/16"	1-1/16"	30-15/16"	4-1/8"	3-1/16"	26-15/16"

Note - All dimensions have a tolerance of ± 0.25 in.

Figure 36: ARNU073TNA4, ARNU093TNA4, ARNU123TNA4, ARNU153TNA4, ARNU183TNA4, ARNU243TNA4, and ARNU363TNC4 Dimensions.



W	33-1/16"
H	9-11/16"
D	33-1/16"
L1	6-11/16"
L2	3-1/8"
L3	7-11/16"
L4	6-1/2"
L5	3/4"
L6	6-1/2"
L7	3-11/16"
L8	3-15/16"
L9	6-5/8"
L10	4-5/16"
L11	3-15/16"
L12	5-7/16"
L13	1-7/16"
L14	37-3/8"
L15	37-3/8"
L16	1/2"
M1	1-1/16"
M2	30-15/16"
M3	3-1/16"
M4	26-7/16"
M5	1-1/16"
M6	30-15/16"
M7	4-1/8"
M8	3-1/16"
M9	26-15/16

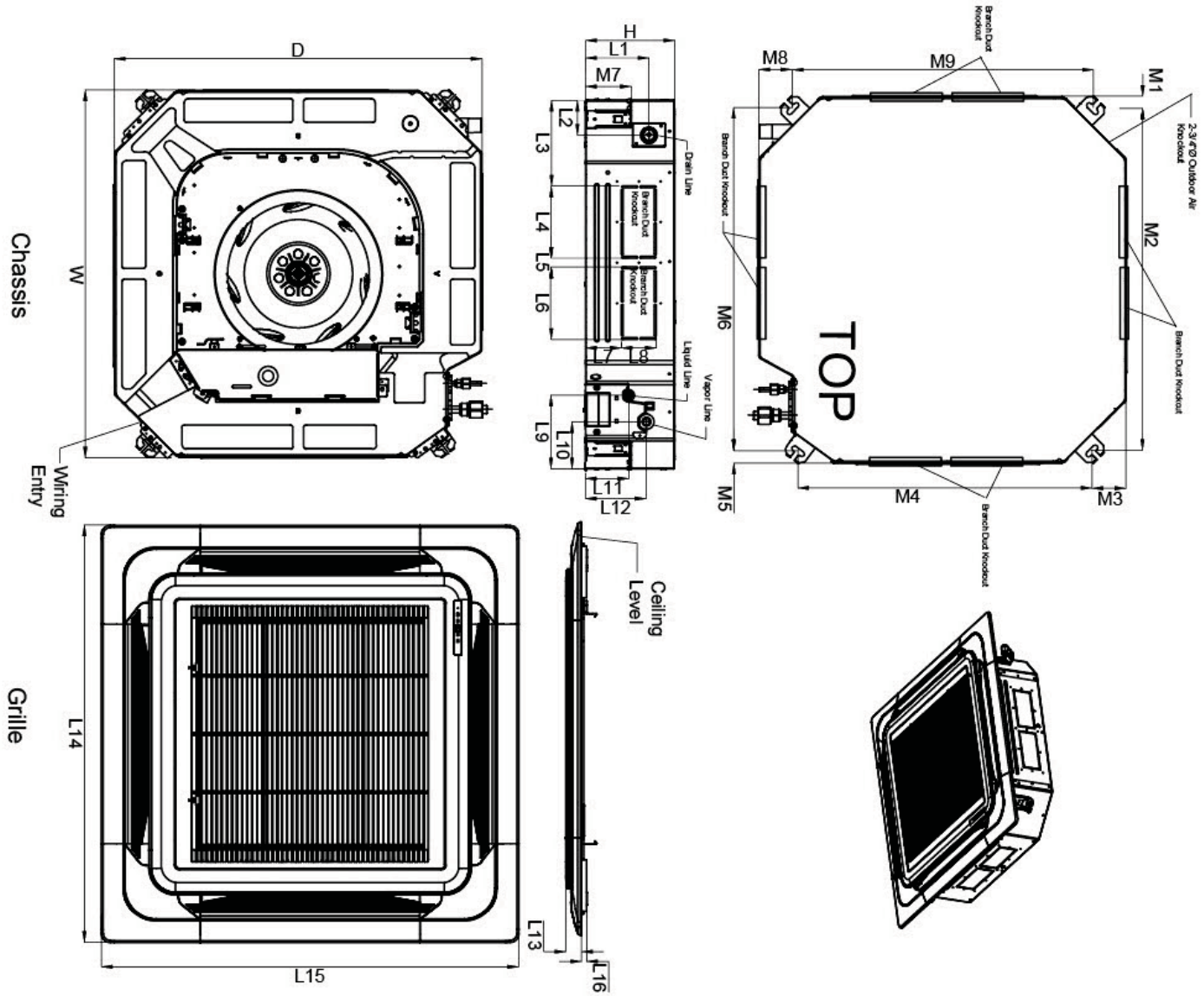
Note - All dimensions have a tolerance of ± 0.25 in.

FOUR-WAY CEILING CASSETTE

External Dimensions

TM Frame

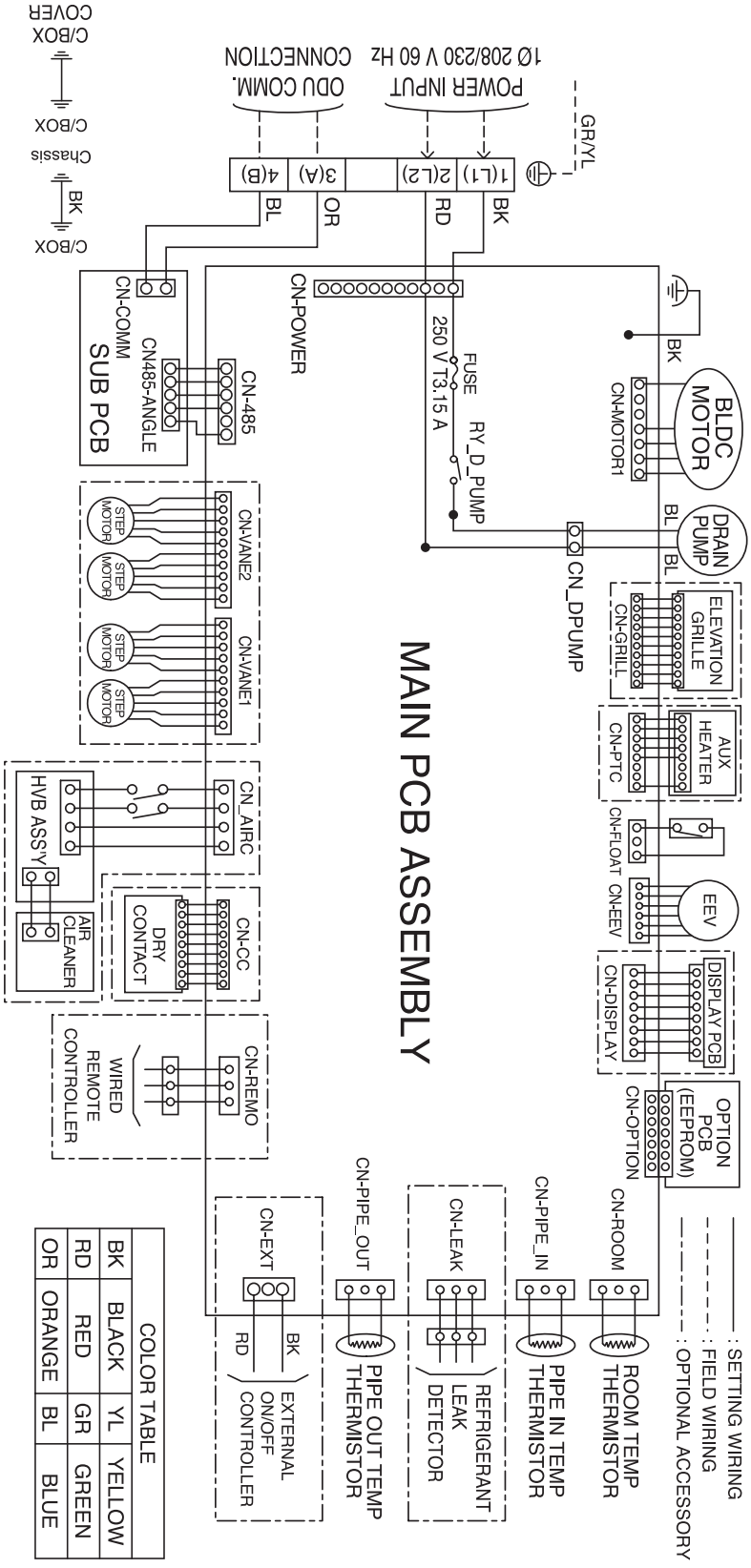
Figure 37: ARNU243TMA4, ARNU283TMA4, ARNU363TMA4, ARNU423TMC4, and ARNU483TMC4 Dimensions.



	W	H	D	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	M1	M2	M3	M4	M5	M6	M7	M8	M9
	33-1/16"	11-5/16"	33-1/16"	8-9/16"	3-1/8"	7-11/16"	6-1/2"	3/4"	6-1/2"	4-1/16"	3-15/16"	6-5/8"	4-5/16"	4"	5-1/2"	1-7/16"	37-3/8"	37-3/8"	1/2"	1-1/16"	30-15/16"	3-1/16"	26-7/16"	1-1/16"	30-15/16"	4-1/8"	3-1/16"	26-15/16"

Note - All dimensions have a tolerance of ± 0.25 in.

Figure 38: ARNU053TRC4, ARNU073TRC4, ARNU093TRC4, ARNU123TRC4, ARNU153TQC4, ARNU183TQC4 Wiring Diagram.



**Plasma filter kit accessories are available separately. Always follow all local, state, and national building codes with the use of this or any product.*

FOUR-WAY CEILING CASSETTE

Electrical Wiring Diagram

TR and TQ Frames

Table 32: TR / TQ Frame Wiring Diagram Legend.

Terminal	Purpose	Function
CN-POWER	AC Power supply	AC Power line
CN-MOTOR1	Fan motor output	Motor output of BLDC
CN-D/PUMP	Drain pump output	AC output for drain pump
CN-GRILL	Elevation grille	Elevation grille connection
CN-PTC	Auxiliary heater	Connection for Auxiliary Heater
CN-FLOAT	Float switch input	Float switch sensing
CN-EEV	EEV Output	EEV control output
CN-DISPLAY	Display	Display of indoor status
CN-OPTION	Optional PCB EPROM	Option PCB connection
CN-ROOM	Room sensor	Room air thermistor
CN-PIPE_IN	Suction pipe sensor	Pipe in thermistor
CN-PIPE_OUT	Discharge pipe sensor	Pipe out thermistor
CN-EXT	External on/off controller	External on/off controller connection
CN-REMO	Wired remote controller	Wired remote control connection
CN-CC	Dry contact	Dry Contact connection
CN-AIRC*	Air cleaner*	Air cleaner control*
CN-VANE1	Step motor	Step motor output
CN-VANE2	Step motor	Step motor output
CN-485	Communication	Connection between indoor and outdoor units

**Plasma filter kit accessories are available separately. Always follow all local, state, and national building codes with the use of this or any product.*

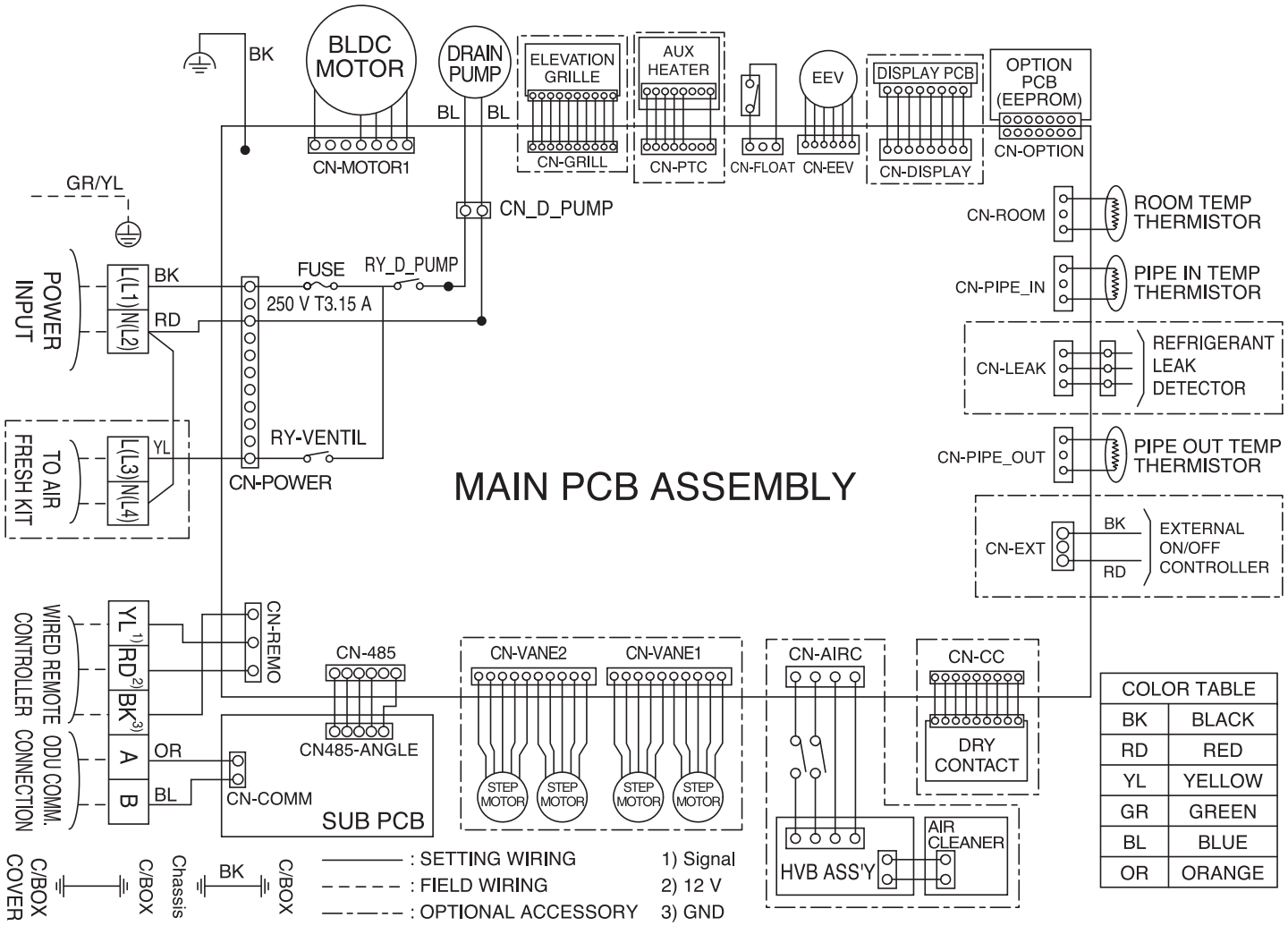
Table 33: TR / TQ Frame DIP Switch Settings.

DIP Switch Setting		Off	On	Remarks
SW3	GROUP CONTROL	Master	Slave	Group control setting using 7-Day Programmable Controller; selects Master / Slave on each indoor unit
SW4	DRY CONTACT MODE	Variable	Auto	Sets operation mode for optional Dry Contact accessory 1. Variable: Auto or Manual Mode can be set through 7-Day Programmable Controller or Wireless Remote Controller (factory default setting is Auto if there is no setting) 2. Auto: For Dry Contact, it is always Auto mode
SW7	VENTILATOR INTERLOCK	Off	On	Selects ventilator interlock function for four-way ceiling cassette indoor units. 1. On: Automatic (vent relay will be turned on after ten [10] seconds of indoor unit operation 2. Off: Manual (ventilator needs to be set through the controller)

***For Gen 4 Multi V four-way ceiling cassette indoor units, DIP switches 1, 2, 5, 6, and 8 must be set to OFF. These DIP switches are used for other models.**

****To enable Generation 4 features, outdoor unit DIP switch no. 3 must be set to ON. Please refer to the Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.**

Figure 39: ARNU243TPC4, ARNU283TPC4, ARNU073TNA4, ARNU093TNA4, ARNU123TNA4, ARNU153TNA4, ARNU183TNA4, ARNU243TNA4, ARNU363TNC4, ARNU243TMA4, ARNU283TMA4, ARNU363TMA4, ARNU423TMC4, ARNU483TMC4 Wiring Diagram.



**Plasma filter kit accessories are available separately. Always follow all local, state, and national building codes with the use of this or any product.*

FOUR-WAY CEILING CASSETTE

Electrical Wiring Diagram

TP, TN, and TM Frames

Table 34: TP, TN, and TM Frame Wiring Diagram Legend.

Terminal	Purpose	Function
CN-POWER	AC Power supply	AC Power line
CN-MOTOR1	Fan motor output	Motor output of BLDC
CN-D/PUMP	Drain pump output	AC output for drain pump
CN-GRILL	Elevation grille	Elevation grille connection
CN-PTC	Auxiliary heater	Connection for Auxiliary Heater
CN-FLOAT	Float switch input	Float switch sensing
CN-EEV	EEV Output	EEV control output
CN-DISPLAY	Display	Display of indoor status
CN-OPTION	Optional PCB EPROM	Option PCB connection
CN-ROOM	Room sensor	Room air thermistor
CN-PIPE_IN	Suction pipe sensor	Pipe in thermistor
CN-PIPE_OUT	Discharge pipe sensor	Pipe out thermistor
CN-EXT	External on/off controller	External on/off controller connection
CN-CC	Dry contact	Dry Contact connection
CN-AIRC	Air cleaner*	Air cleaner control*
CN-VANE1	Step motor	Step motor output
CN-VANE2	Step motor	Step motor output
CN-485	Communication	Connection between indoor and outdoor units
CN-REMO	Wired remote controller	Wired remote control connection
CN-GRILL	Elevation grille	Elevation grille connection

**Plasma filter kit accessories are available separately. Always follow all local, state, and national building codes with the use of this or any product.*

Table 35: TP, TNC, and TMC Frame DIP Switch Settings.

DIP Switch Setting		Off	On	Remarks
SW3	GROUP CONTROL	Master	Slave	Group control setting using 7-Day Programmable Controller; selects Master / Slave on each indoor unit
SW4	DRY CONTACT MODE	Variable	Auto	Sets operation mode for optional Dry Contact accessory 1. Variable: Auto or Manual Mode can be set through 7-Day Programmable Controller or Wireless Remote Controller (factory default setting is Auto if there is no setting) 2. Auto: For Dry Contact, it is always Auto mode
SW7	VENTILATOR INTERLOCK	Off	On	Selects ventilator interlock function for four-way ceiling cassette indoor units. 1. On: Automatic (vent relay will be turned on after ten [10] seconds of indoor unit operation 2. Off: Manual (ventilator needs to be set through the controller)

***For Gen 4 Multi V four-way ceiling cassette indoor units, DIP switches 1, 2, 5, 6, and 8 must be set to OFF. These DIP switches are used for other models.**

****To enable Generation 4 features, outdoor unit DIP switch no. 3 must be set to ON. Please refer to the Multi V IV, Multi V Water IV, Multi V S Engineering Manual for additional information.**

Figure 40: TR, TQ, TP, TN, TM Frame Piping Diagram.

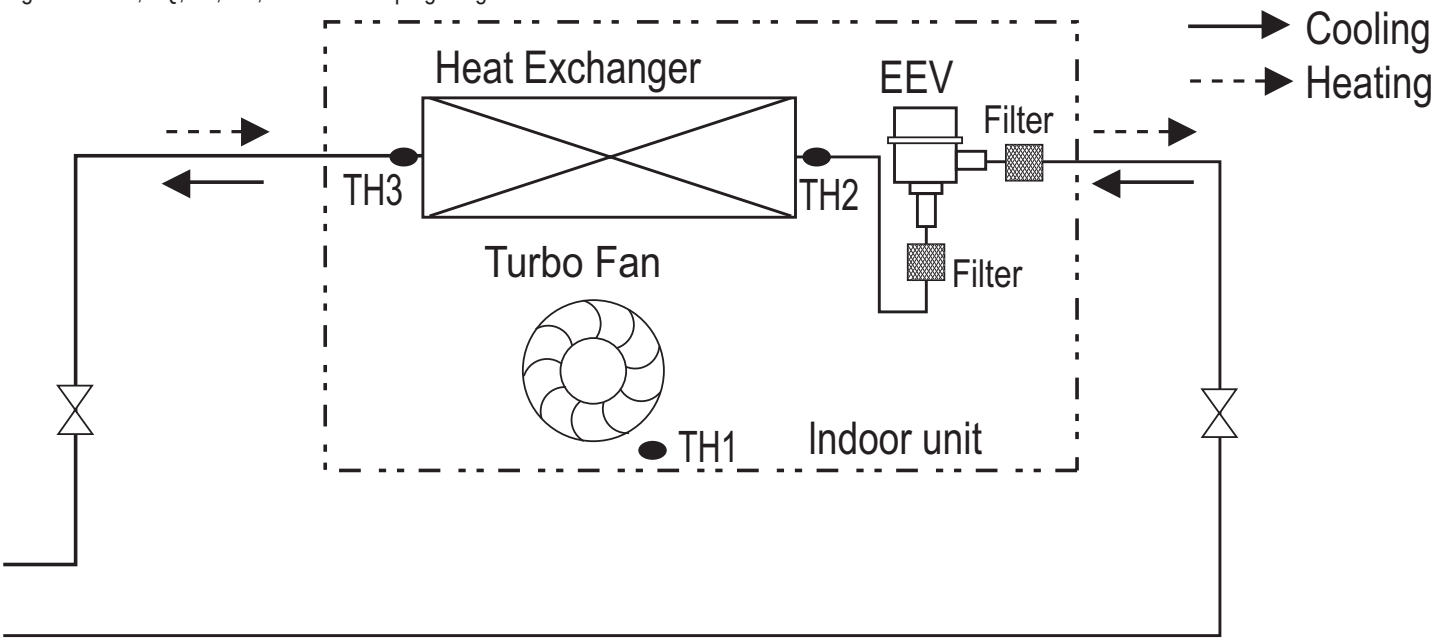


Table 36: TR, TQ, TP, TN, TM Frame Refrigerant Pipe Connection Port Diameters.

Model	Liquid (inch)	Vapor (inch)
2' x 2' Frames		
ARNU053TRC4	1/4 Flare	1/2 Flare
ARNU073TRC4		
ARNU093TRC4		
ARNU123TRC4		
ARNU153TQC4		
ARNU183TQC4		
3' x 3' Frames (TP, 8" High)		
ARNU243TPC4	3/8 Flare	5/8 Flare
ARNU283TPC4		
3' x 3' Frames (TN, 9-11/16" High)		
ARNU073TNA4	3/8 Flare	5/8 Flare
ARNU093TNA4		
ARNU123TNA4		
ARNU153TNA4		
ARNU183TNA4		
ARNU243TNA4		
ARNU363TNC4		
3' x 3' Frames (TM, 11-5/16" High)		
ARNU243TMA4	3/8 Flare	5/8 Flare
ARNU283TMA4		
ARNU363TMA4		
ARNU423TMC4		
ARNU483TMC4		

Table 37: TR, TQ, TP, TN, TM Frame Thermistors.

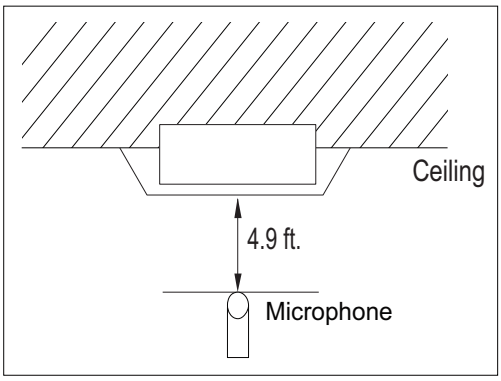
Thermistor	Description
TH1	Return air thermistor
TH2	Pipe in thermistor
TH3	Pipe out thermistor

FOUR-WAY CEILING CASSETTE

Acoustic Data

Sound Pressure Levels

Figure 41: Sound Pressure Measurement Location.



- Measurements are taken 4.9 ft away from the front of the unit.
- Sound pressure levels are measured in dB(A) with a tolerance of ±3.
- Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

Operating Conditions:

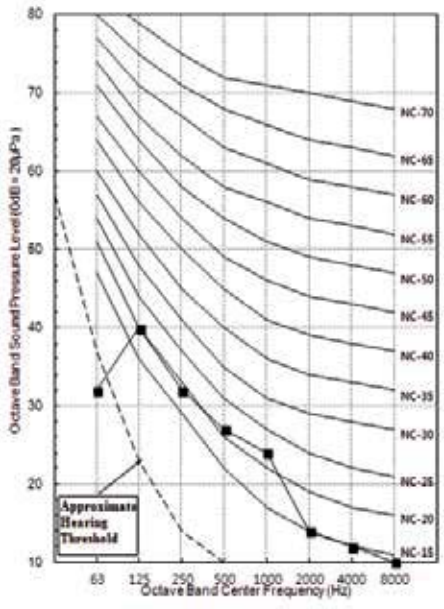
- Power source: 220V/60 Hz
- Sound level will vary depending on a range of factors including the construction (acoustic absorption coefficient) of a particular room in which the unit was installed.

Table 38: Four-Way Ceiling Cassette Indoor Unit Sound Pressure Levels.

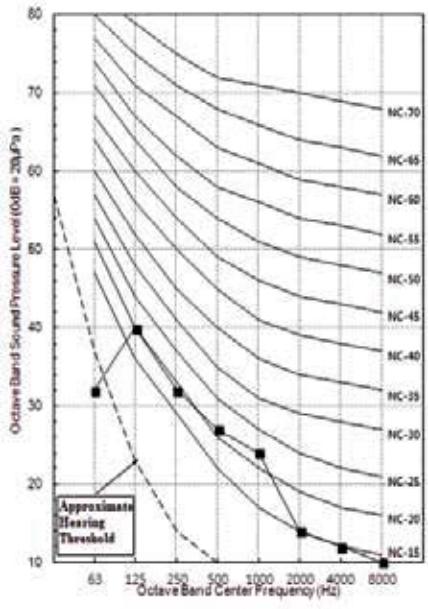
Model	Sound Pressure Levels dB(A)		
	High Fan Speed	Medium Fan Speed	Low Fan Speed
2' x 2' Frames			
ARNU053TRC4	29.0	27.0	26.0
ARNU073TRC4	29.0	27.0	26.0
ARNU093TRC4	30.0	29.0	27.0
ARNU123TRC4	32.0	30.0	27.0
ARNU153TQC4	36.0	34.0	32.0
ARNU183TQC4	37.0	35.0	34.0
3' x 3' Frames (TP, 8" High)			
ARNU243TPC4	36.0	34.0	31.0
ARNU283TPC4	39.0	35.0	33.0
3' x 3' Frames (TN, 9-11/16" High)			
ARNU073TNA4	29.0	26.0	24.0
ARNU093TNA4	29.0	26.0	24.0
ARNU123TNA4	31.0	29.0	26.0
ARNU153TNA4	32.0	29.0	26.0
ARNU183TNA4	34.0	30.0	26.0
ARNU243TNA4	40.0	38.0	35.0
ARNU363TNC4	44.0	41.0	38.0
3' x 3' Frames (TM, 11-5/16" High)			
ARNU243TMA4	41.0	38.0	35.0
ARNU283TMA4	41.0	39.0	35.0
ARNU363TMA4	44.0	41.0	37.0
ARNU423TMC4	45.0	41.0	38.0
ARNU483TMC4	46.0	42.0	40.0

Figure 42: ARNU053TRC4, ARNU073TRC4, and ARNU093TRC4 Sound Pressure Level Diagrams.

ARNU053TRC4



ARNU073TRC4



ARNU093TRC4

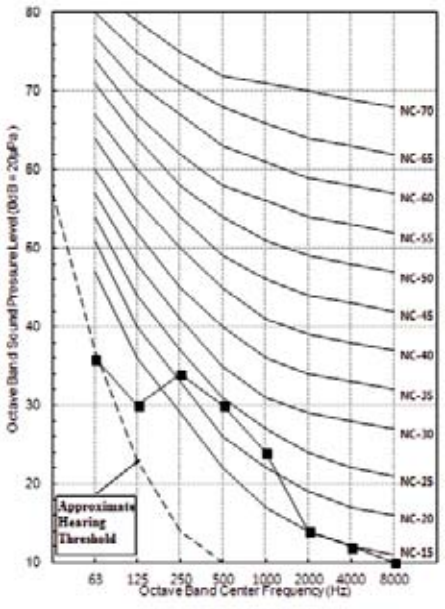
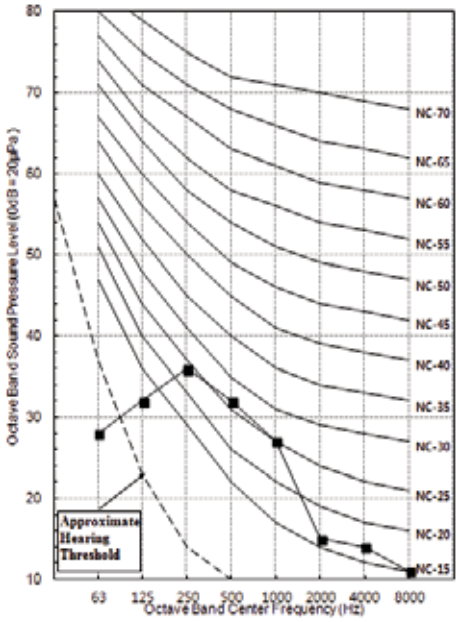
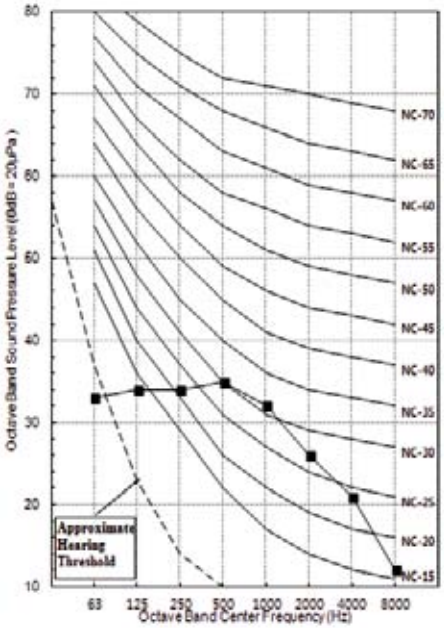


Figure 43: ARNU123TRC4, ARNU153TQC4, and ARNU183TQC4 Sound Pressure Level Diagrams.

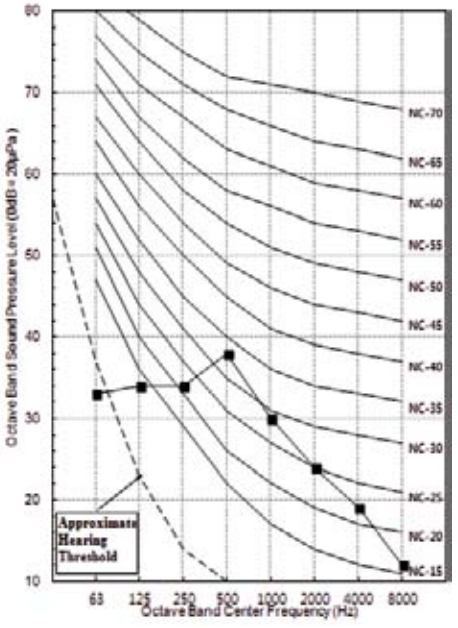
ARNU123TRC4



ARNU153TQC4



ARNU183TQC4



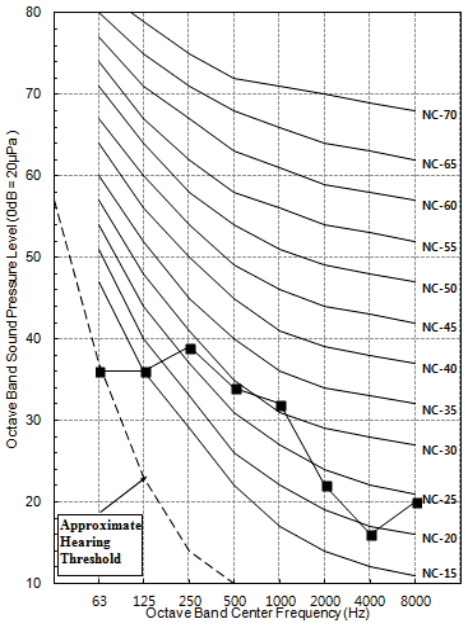
FOUR-WAY CEILING CASSETTE

Acoustic Data

Sound Pressure Levels

Figure 44: ARNU243TPC4 and ARNU283TPC4 Sound Pressure Level Diagrams.

ARNU243TPC4



ARNU283TPC4

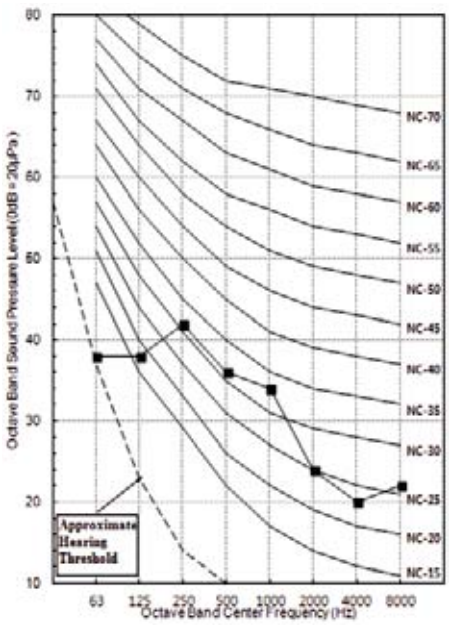
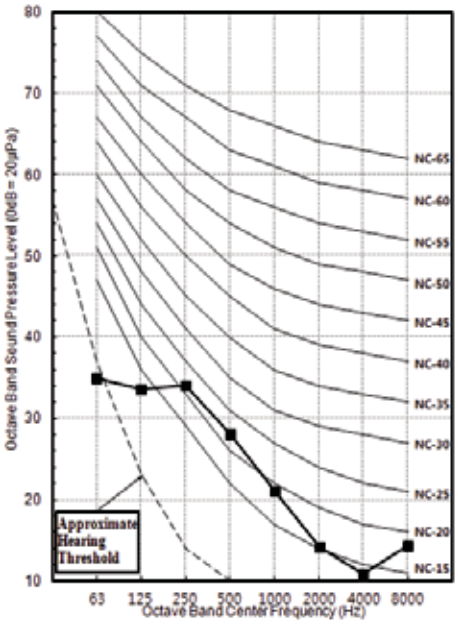
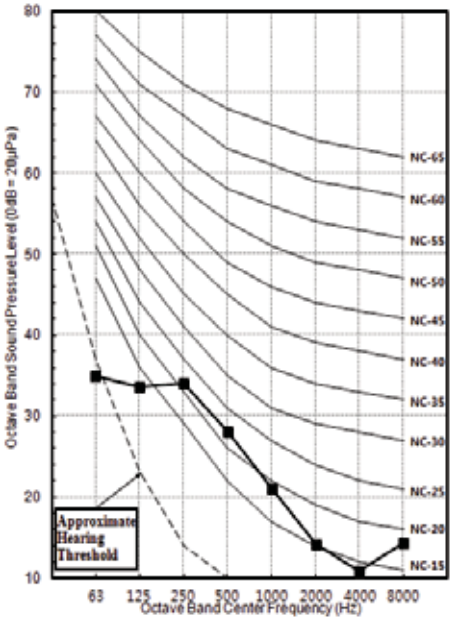


Figure 45: ARNU073TNA4, ARNU093TNA4, and ARNU123TNA4 Sound Pressure Level Diagrams.

ARNU073TNA4



ARNU093TNA4



ARNU123TNA4

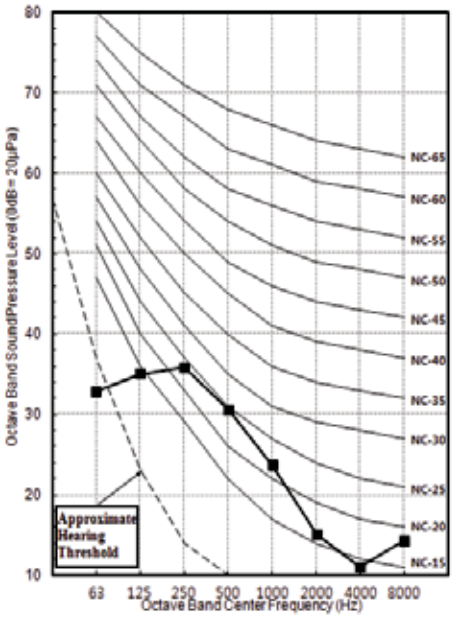
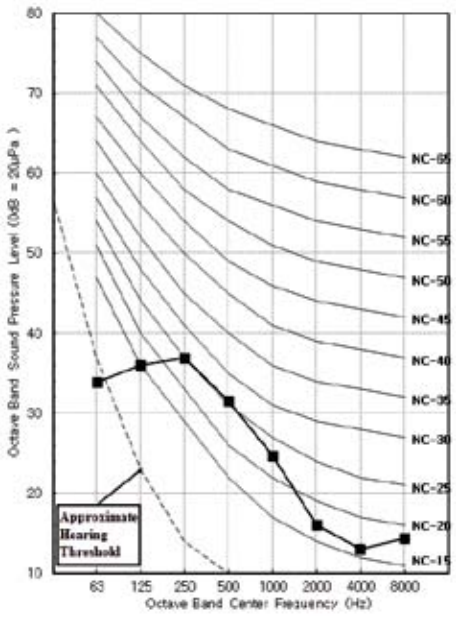
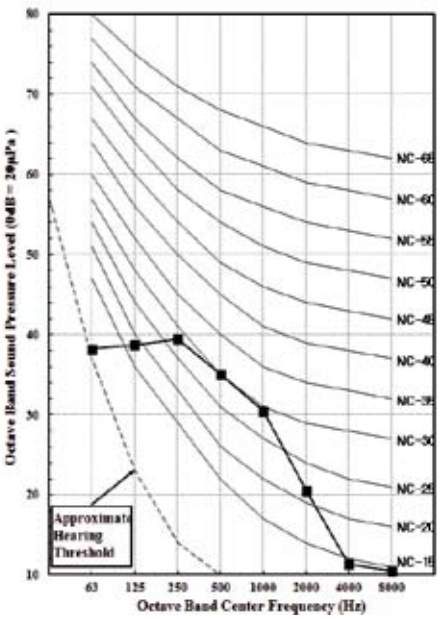


Figure 47: ARNU153TNA4, ARNU183TNA4, and ARNU243TNA4 Sound Pressure Level Diagrams.

ARNU153TNA4



ARNU183TNA4



ARNU243TNA4

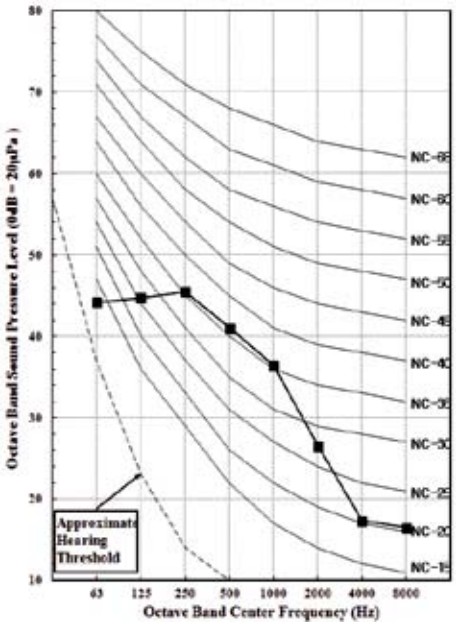


Figure 46: ARNU363TNC4 Sound Pressure Level Diagram.

ARNU363TNC4

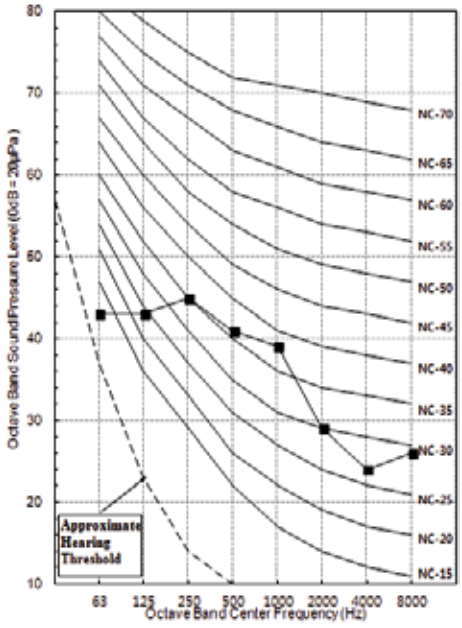
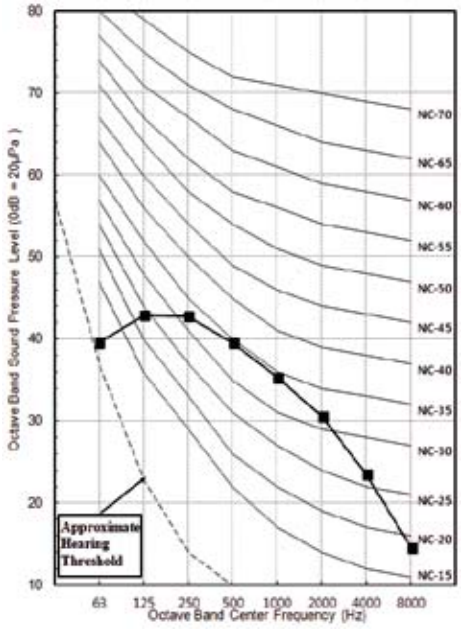
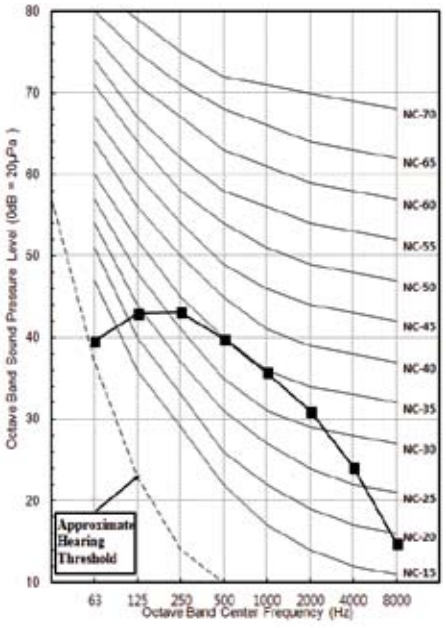


Figure 48: ARNU243TMA4 and ARNU283TMA4 Sound Pressure Level Diagrams.

ARNU243TMA4



ARNU283TMA4



FOUR-WAY CEILING CASSETTE

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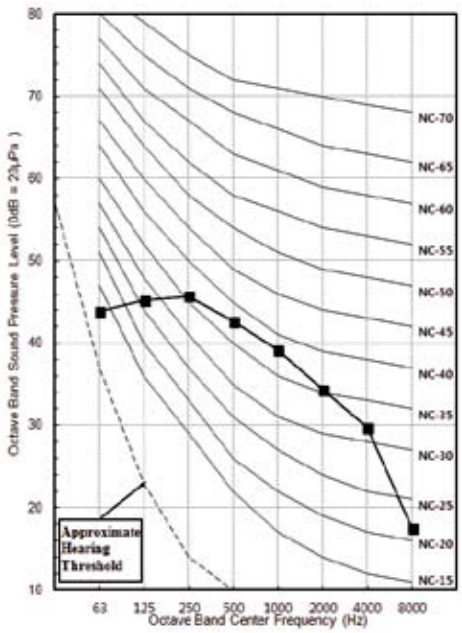
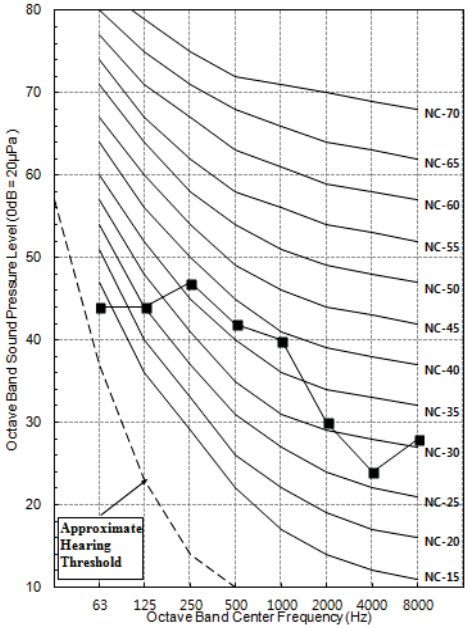
Figure 49: ARNU363TMA4, ARNU423TMCA, and ARNU483TMCA Sound Pressure Level Diagrams.

ARNU363TMA4



ARNU423TMC4



ARNU483TMC4

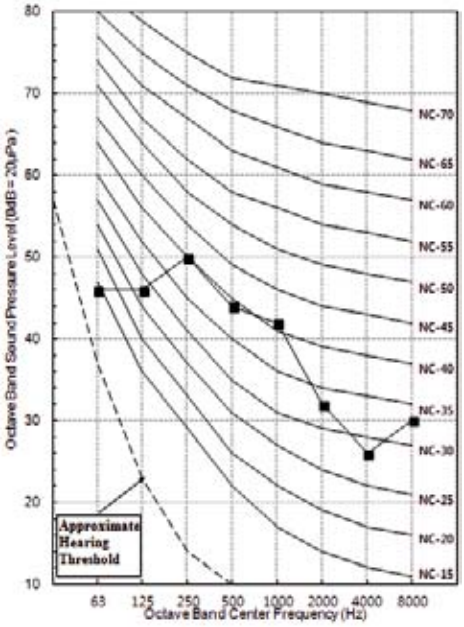


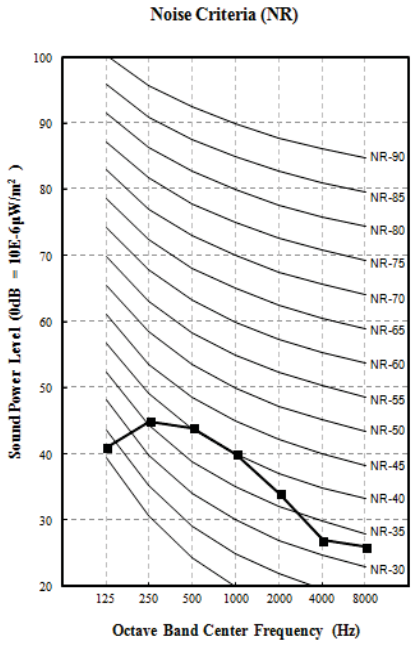
Table 39: Four-Way Ceiling Cassette Indoor Unit Sound Power Levels.

Model	Sound Pressure Levels dB(A)
	High Fan Speed
2' x 2' Frames	
ARNU053TRC4	46.0
ARNU073TRC4	46.0
ARNU093TRC4	47.0
ARNU123TRC4	48.0
ARNU153TQC4	51.0
ARNU183TQC4	52.0
3' x 3' Frames (TP, 8" High)	
ARNU243TPC4	55.0
ARNU283TPC4	56.0
3' x 3' Frames (TN, 9-11/16" High)	
ARNU073TNA4	44.0
ARNU093TNA4	44.0
ARNU123TNA4	46.0
ARNU153TNA4	47.0
ARNU183TNA4	48.0
ARNU243TNA4	58.0
ARNU363TNC4	62.0
3' x 3' Frames (TM, 11-5/16" High)	
ARNU243TMA4	56.0
ARNU283TMA4	56.0
ARNU363TMA4	63.0
ARNU423TMC4	63.0
ARNU483TMC4	65.0

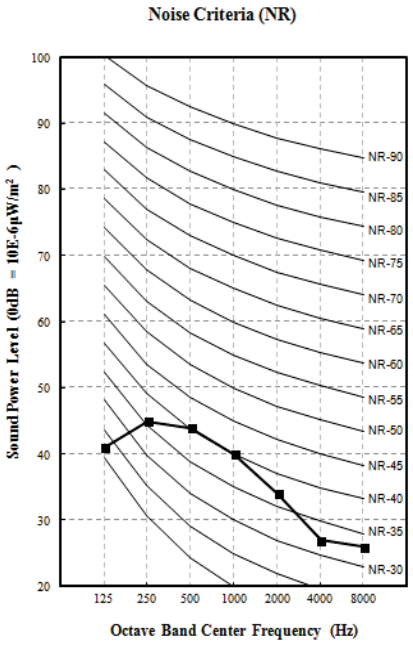
- Data is valid under diffuse field conditions.
- Data is valid under nominal operating conditions.
- Sound power level is measured using rated conditions, and tested in a reverberation room per ISO 3741 standards.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of particular area in which the equipment is installed.
- Reference acoustic intensity: 0dB = 10E-6μW/m^2

Figure 50: ARNU053TRC4, ARNU073TRC4, and ARNU093TRC4 Sound Power Level Diagrams.

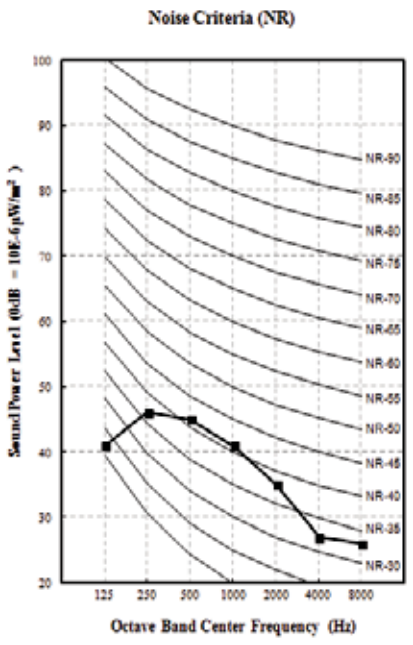
ARNU053TRC4



ARNU073TRC4



ARNU093TRC4



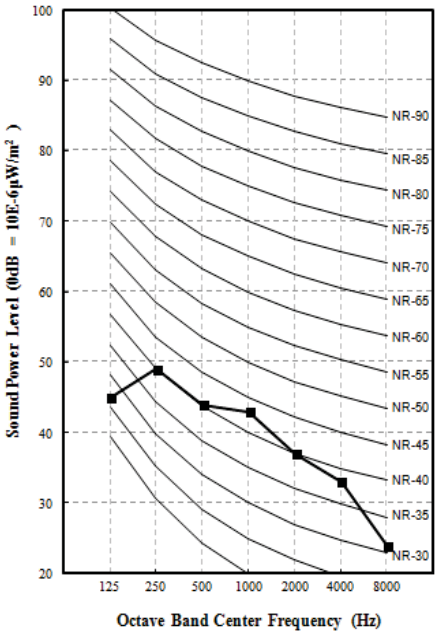
FOUR-WAY CEILING CASSETTE

Acoustic Data

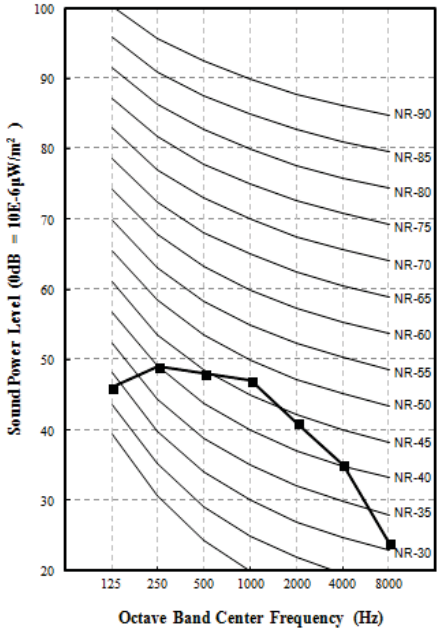
Sound Power Levels

Figure 51: ARNU123TRC4, ARNU153TQC4, and ARNU183TQC4 Sound Power Level Diagrams.

ARNU123TRC4



ARNU153TQC4



ARNU183TQC4

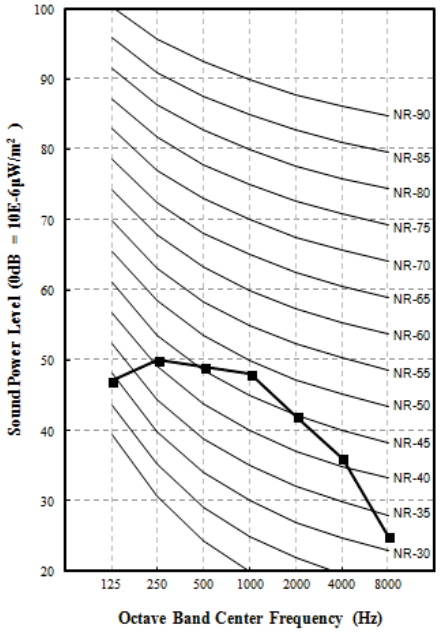
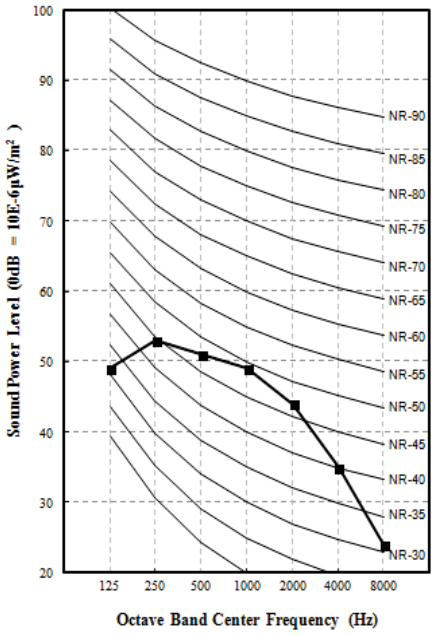


Figure 52: ARNU243TPC4 and ARNU283TPC4 Sound Power Level Diagrams.

ARNU243TPC4



ARNU283TPC4

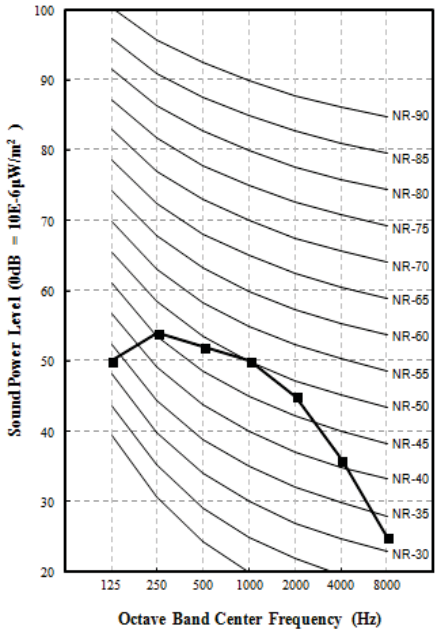
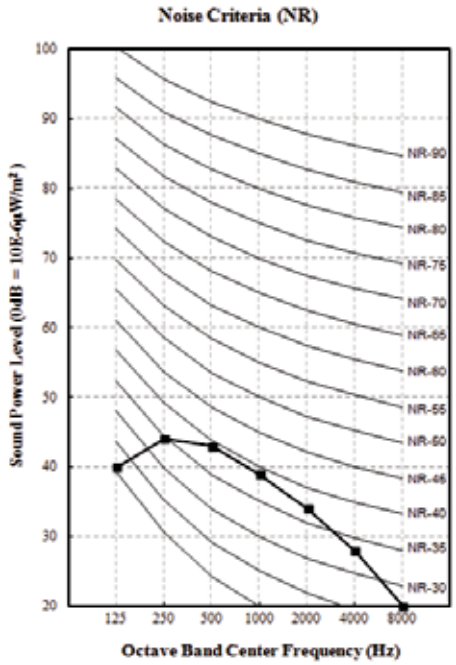
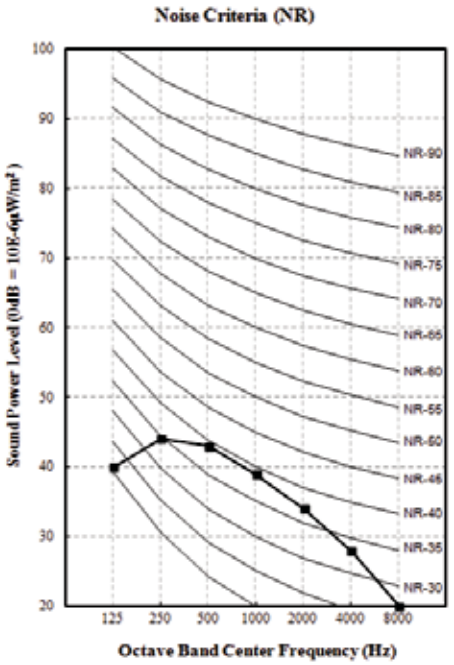


Figure 53: ARNU073TNA4, ARNU093TNA4, and ARNU123TNA4 Sound Power Level Diagrams.

ARNU073TNA4



ARNU093TNA4



ARNU123TNA4

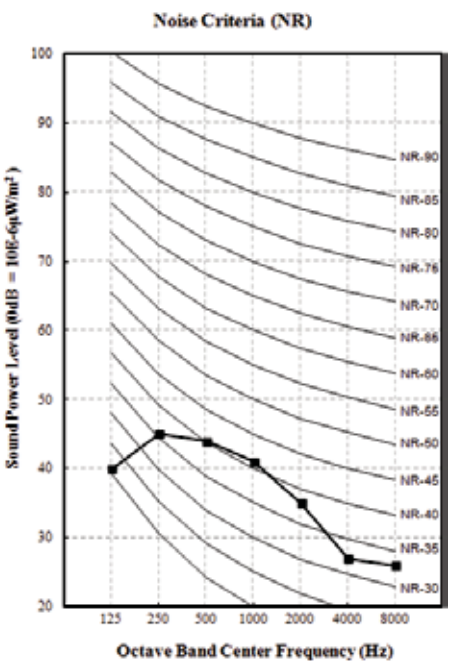
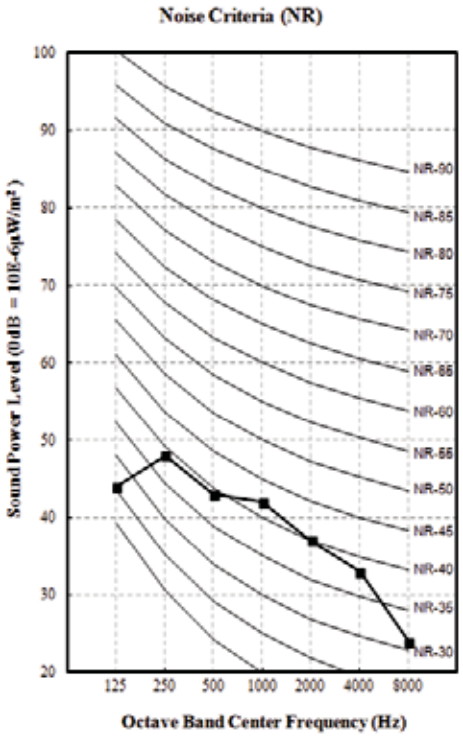
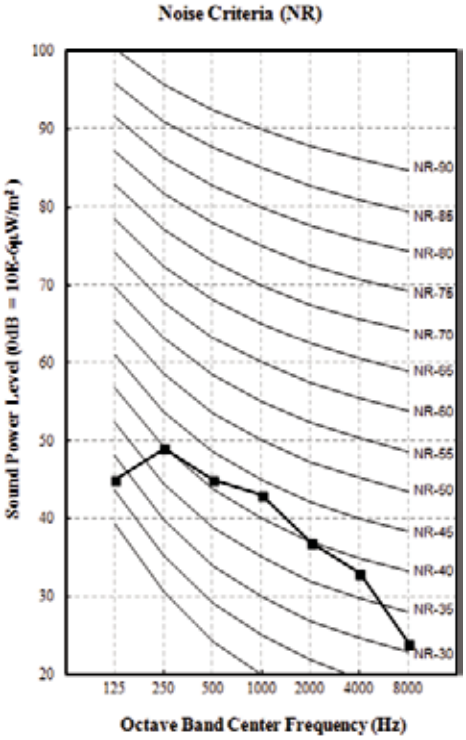


Figure 54: ARNU153TNA4, ARNU183TNA4, and ARNU243TNA4 Sound Power Level Diagrams.

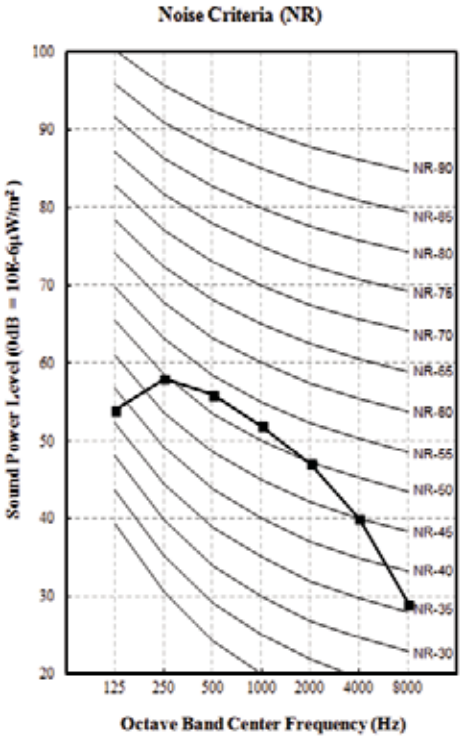
ARNU153TNA4



ARNU183TNA4



ARNU243TNA4



FOUR-WAY CEILING CASSETTE

Acoustic Data

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Figure 55: ARNU363TNC4 Sound Power Level Diagram.

ARNU363TNC4

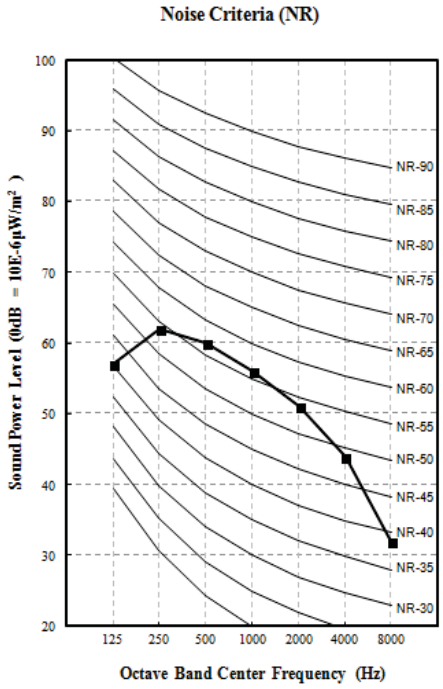
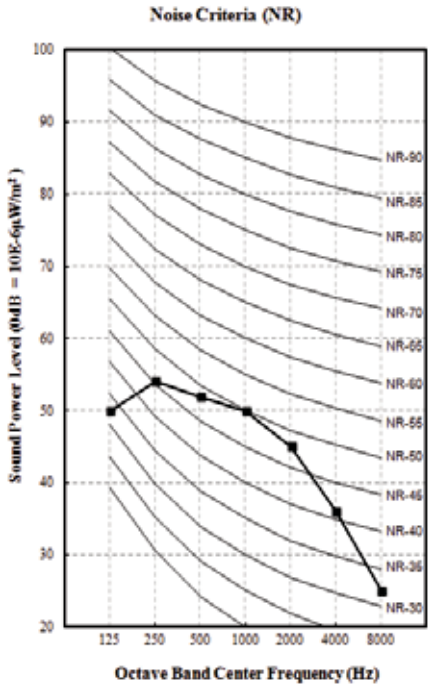


Figure 56: ARNU243TMA4 and ARNU283TMA4 Sound Power Level Diagrams.

ARNU243TMA4



ARNU283TMA4

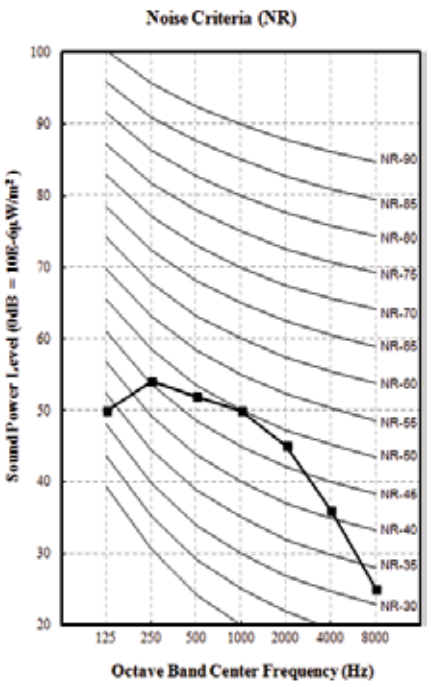


Figure 57: ARNU363TMA4 Sound Power Level Diagram.

ARNU363TMA4

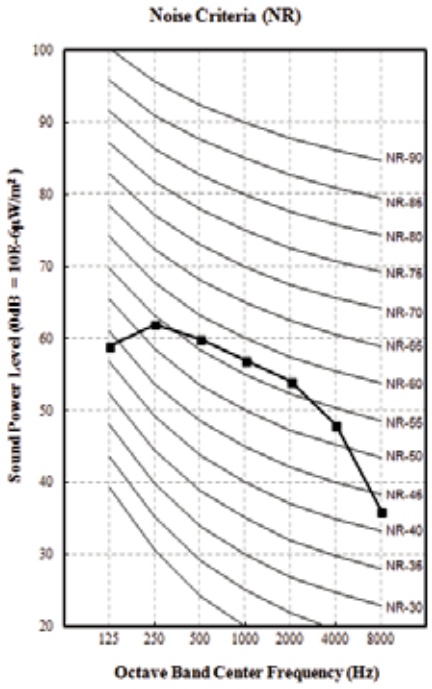
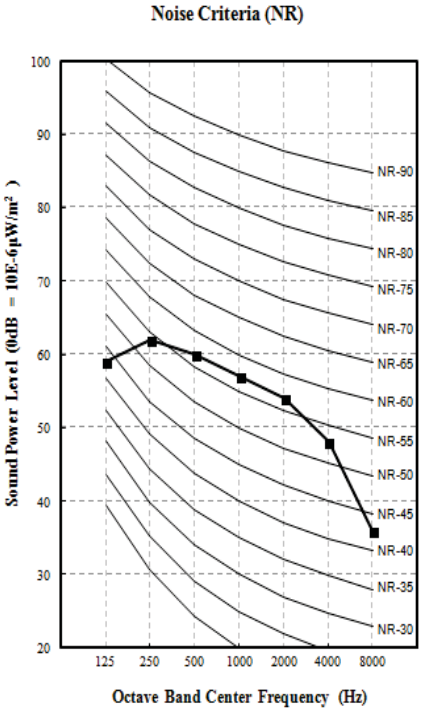


Figure 58: ARNU423TMC4 and ARNU483TMC4 Sound Power Level Diagrams.

ARNU423TMC4



ARNU483TMC4

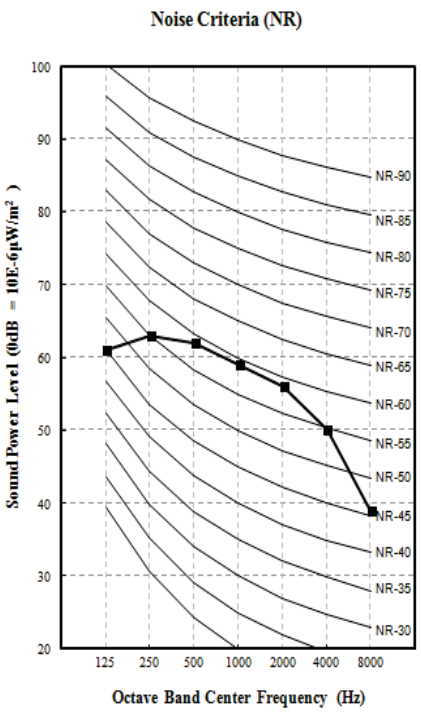
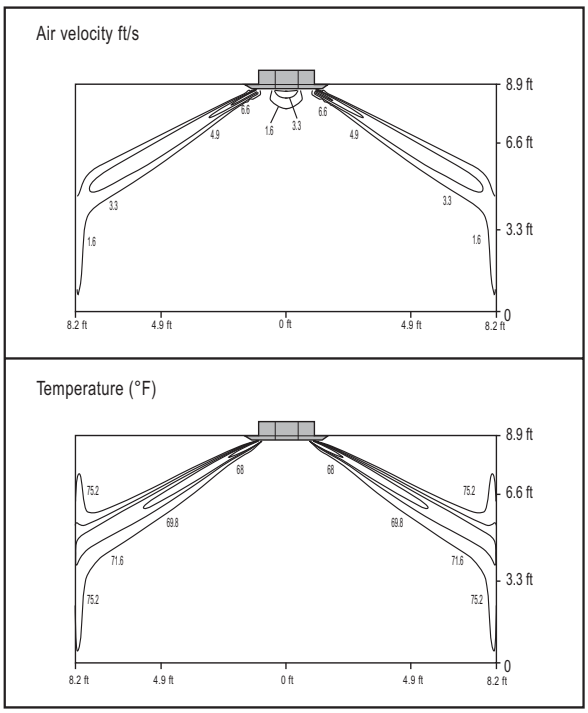


Figure 59: ARNU053TRC4.

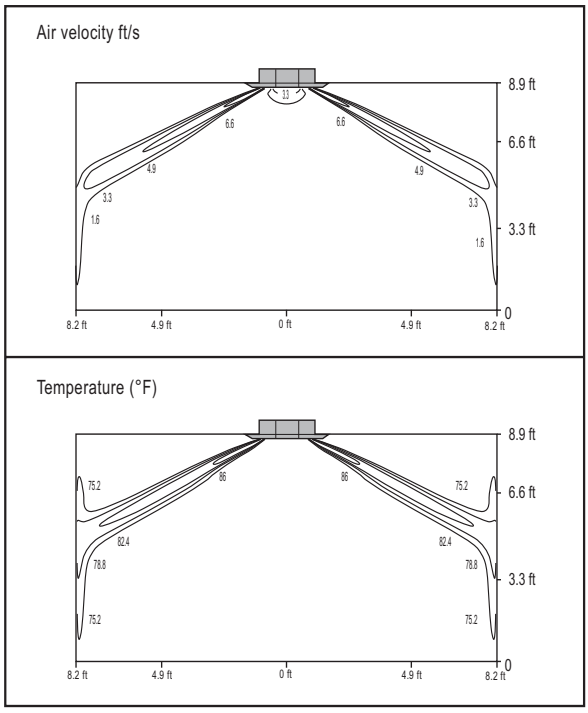
Cooling

Discharge angle: 20°



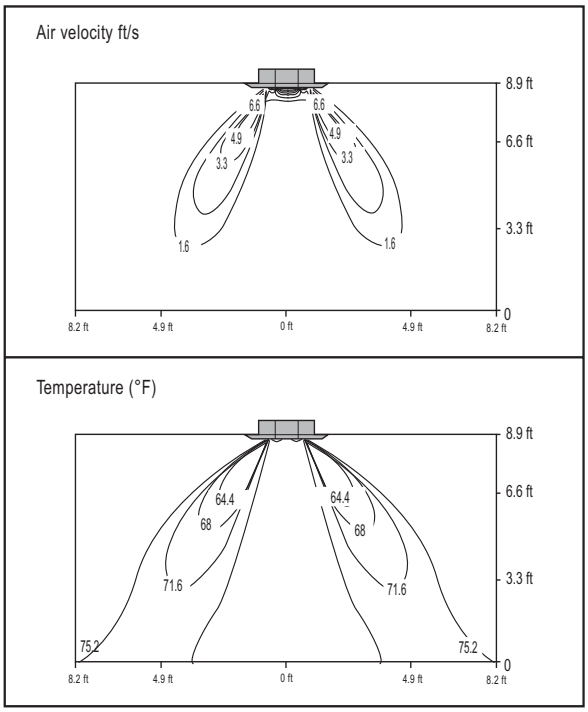
Heating

Discharge angle: 20°



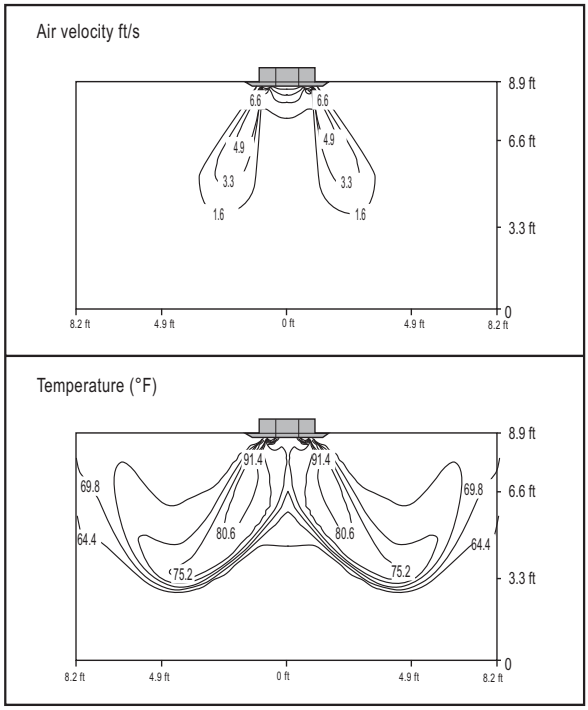
Cooling

Discharge angle: 40°



Heating

Discharge angle: 50°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

Air Velocity / Temperature Distribution

ARNU053TRC4, ARNU073TRC4

Figure 60: ARNU053TRC4, continued.

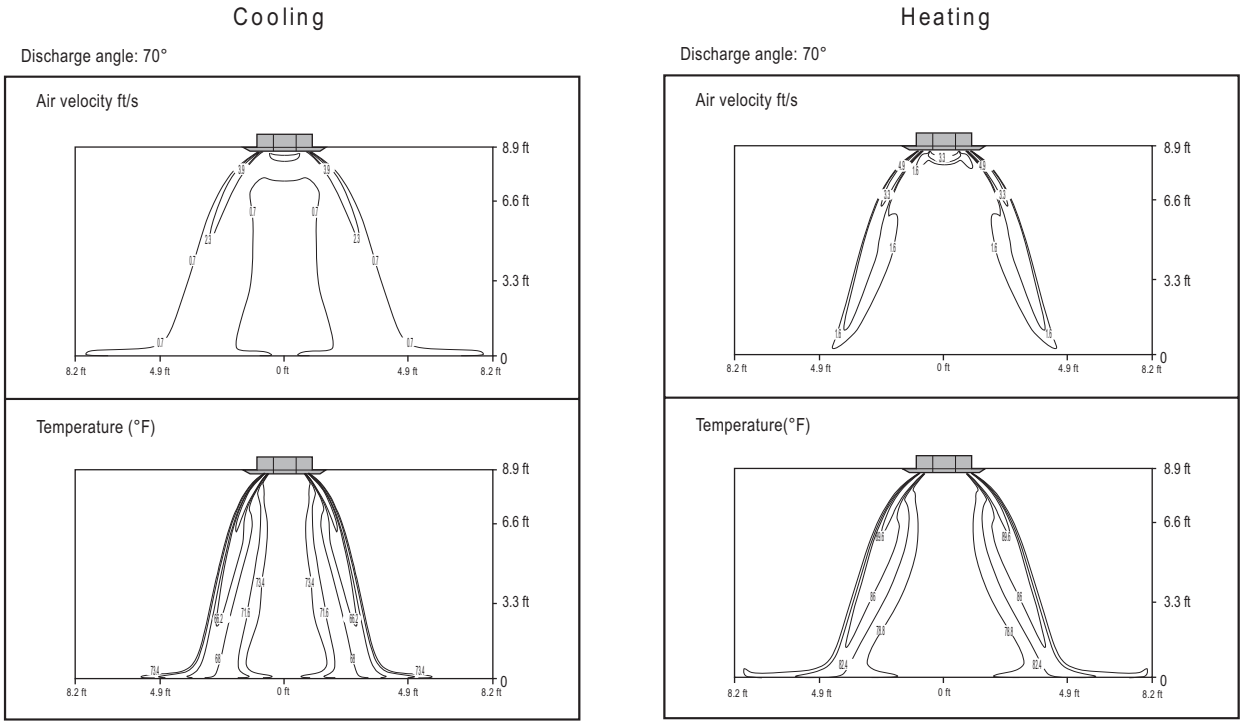
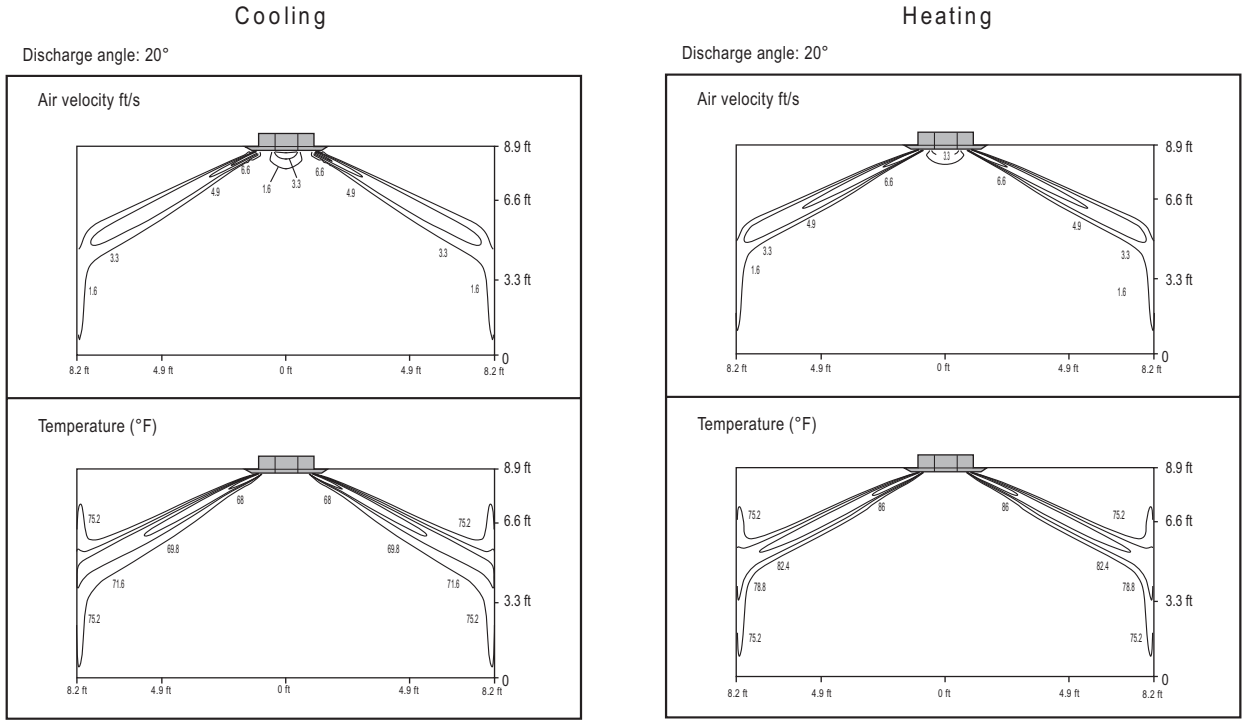


Figure 61: ARNU073TRC4.

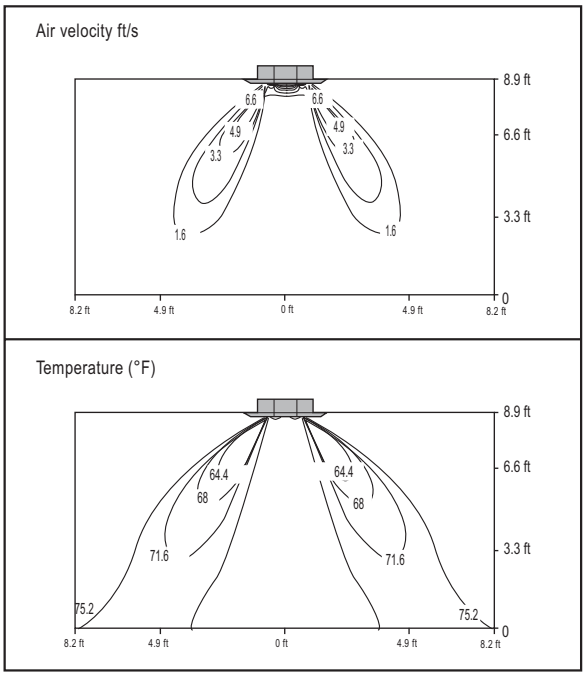


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 62: ARNU073TRC4, continued.

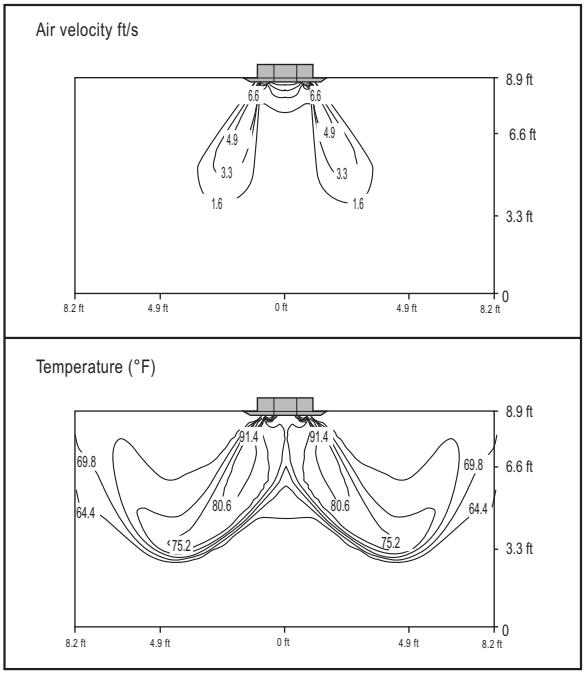
Cooling

Discharge angle: 40°



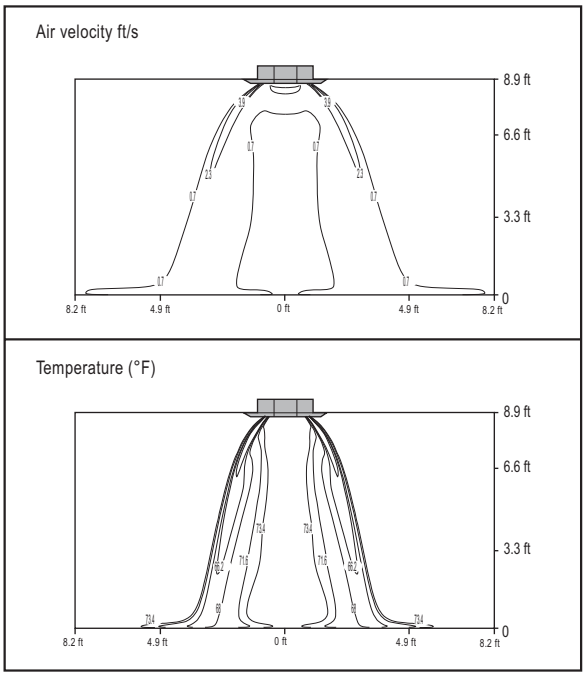
Heating

Discharge angle: 50°



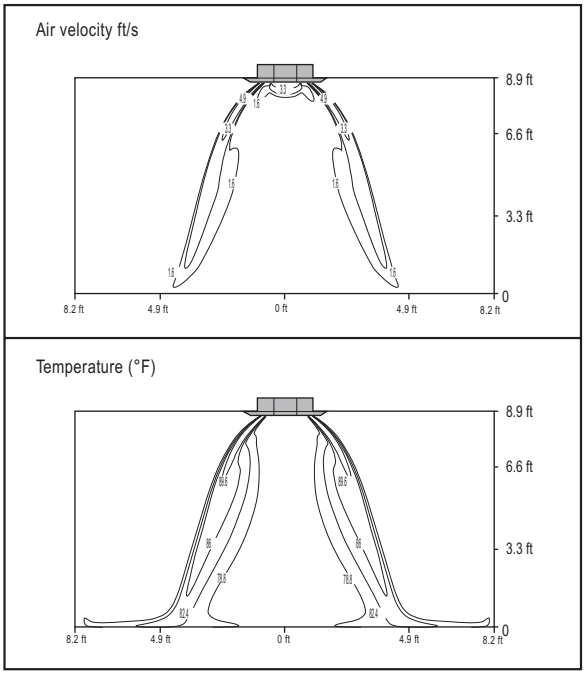
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

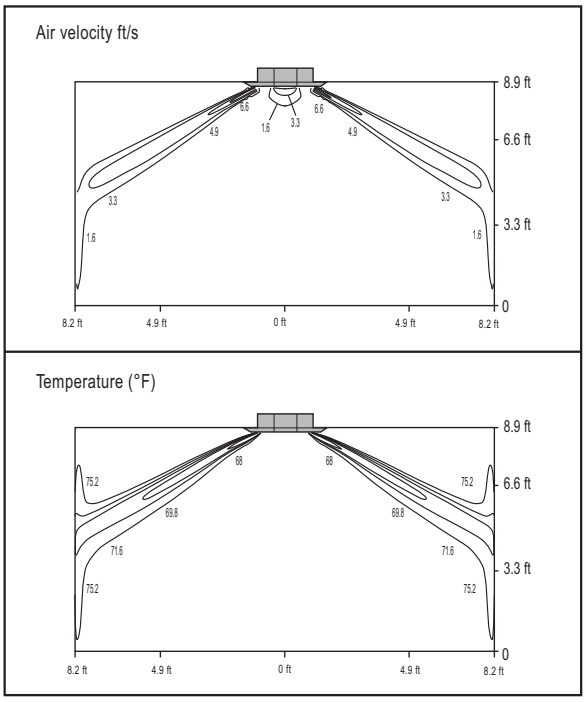
Air Velocity / Temperature Distribution

ARNU093TRC4

Figure 63: ARNU093TRC4.

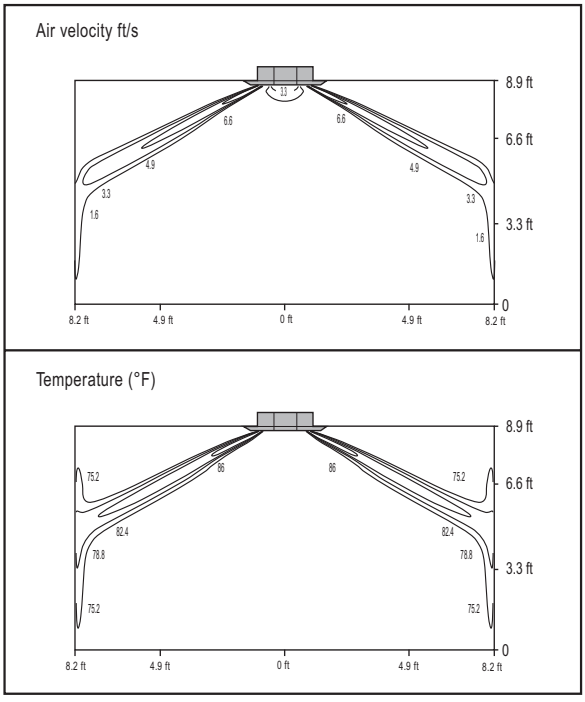
Cooling

Discharge angle: 20°



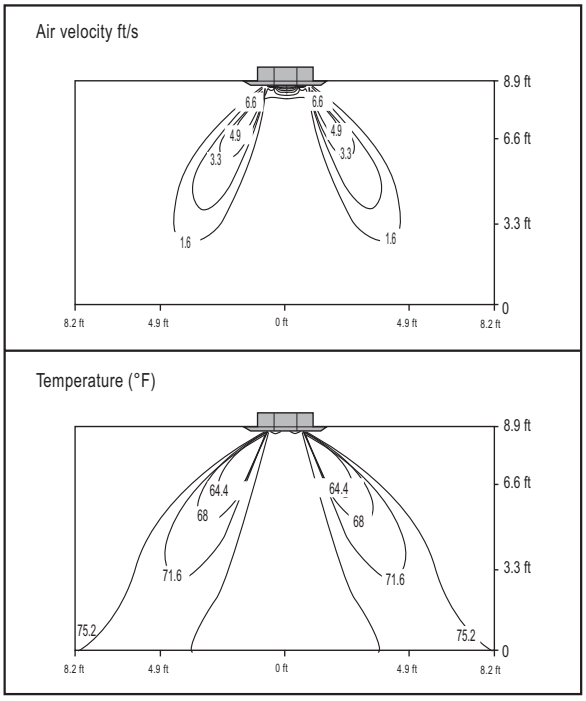
Heating

Discharge angle: 20°



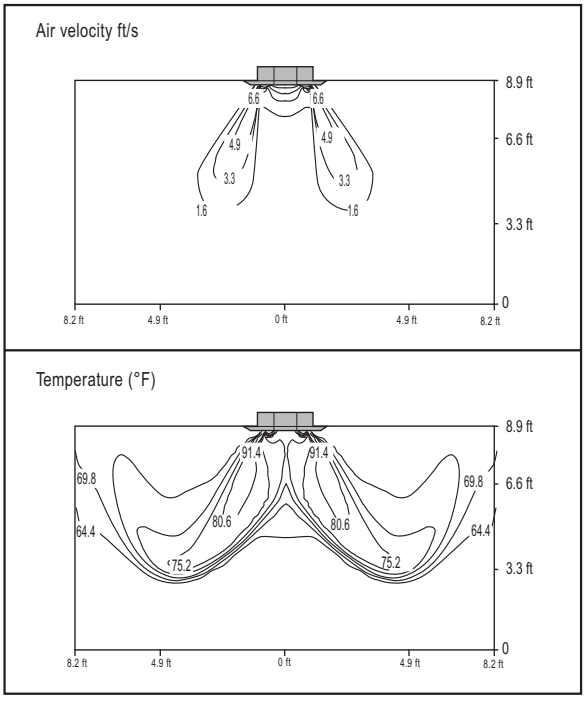
Cooling

Discharge angle: 40°



Heating

Discharge angle: 50°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 64: ARNU093TRC4, continued.

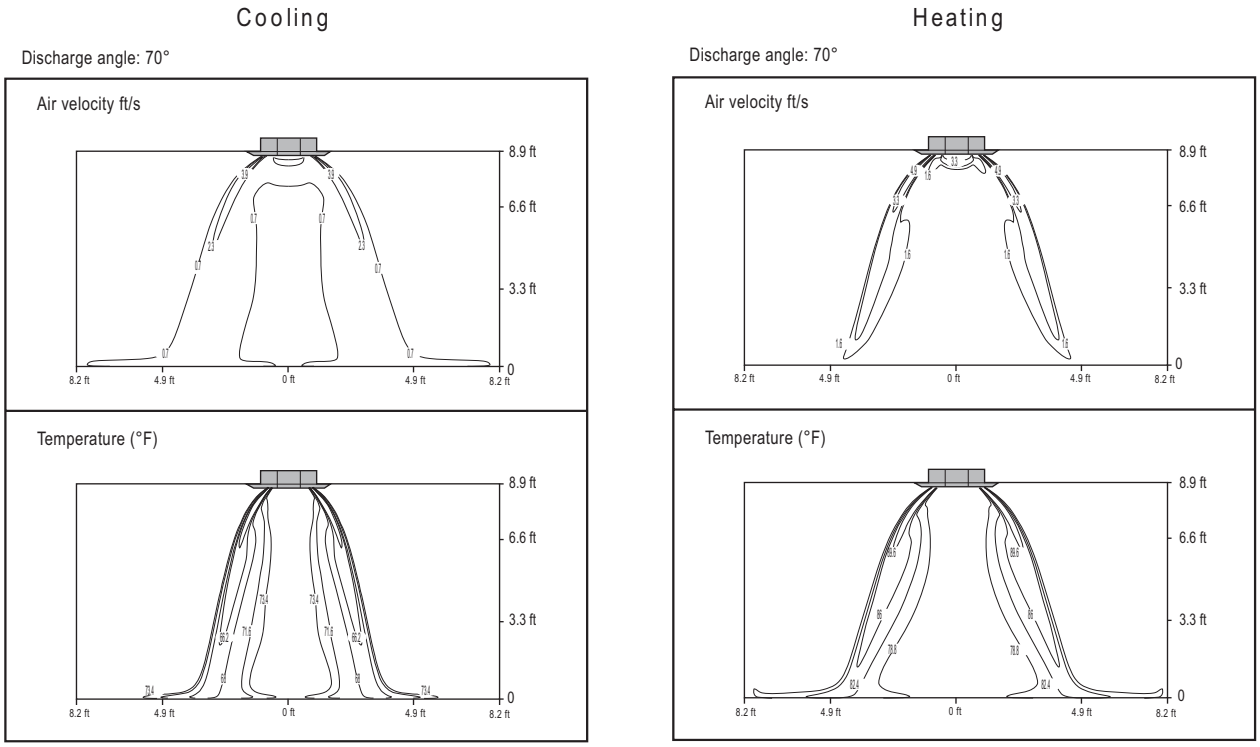
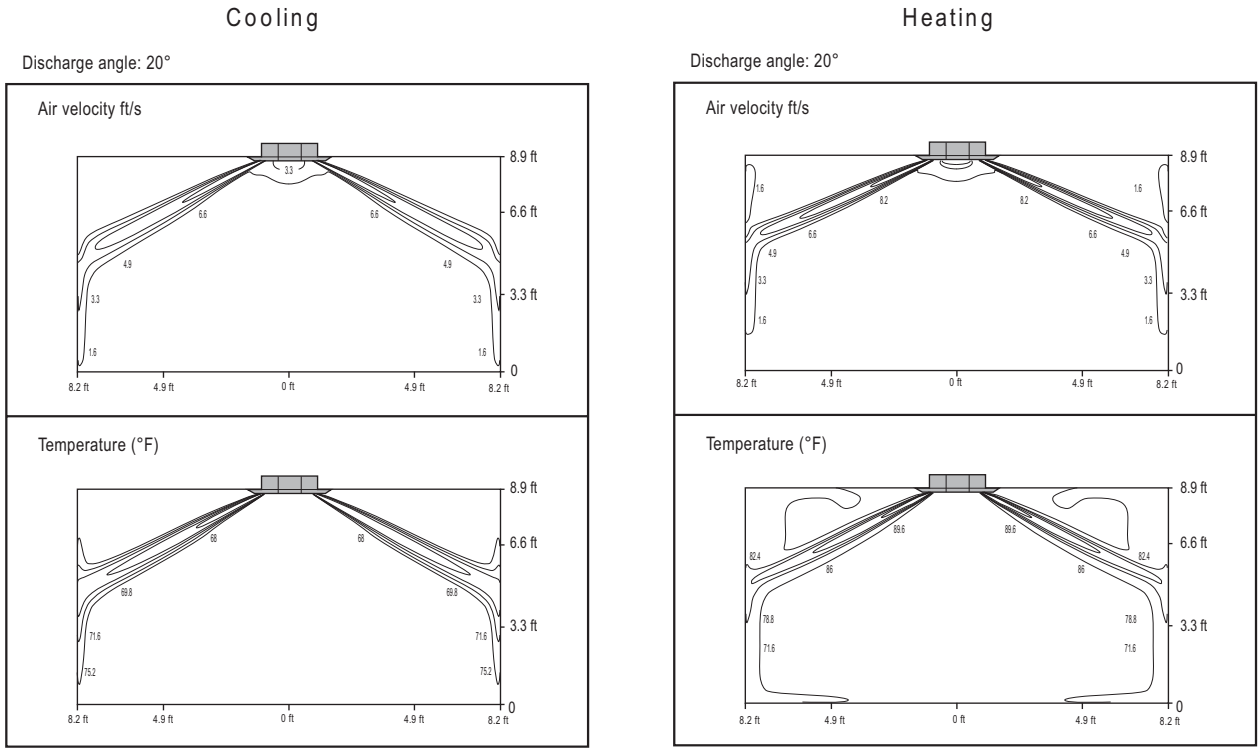


Figure 65: ARNU123TRC4.



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

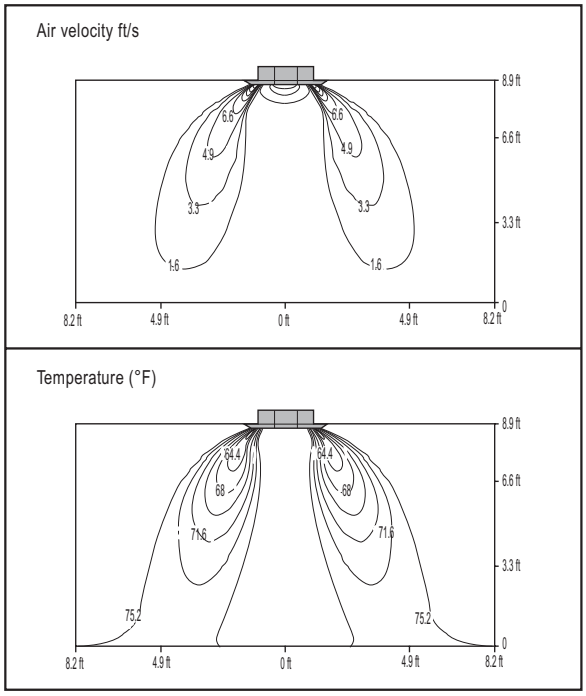
Air Velocity / Temperature Distribution

ARNU123TRC4

Figure 66: ARNU123TRC4, continued.

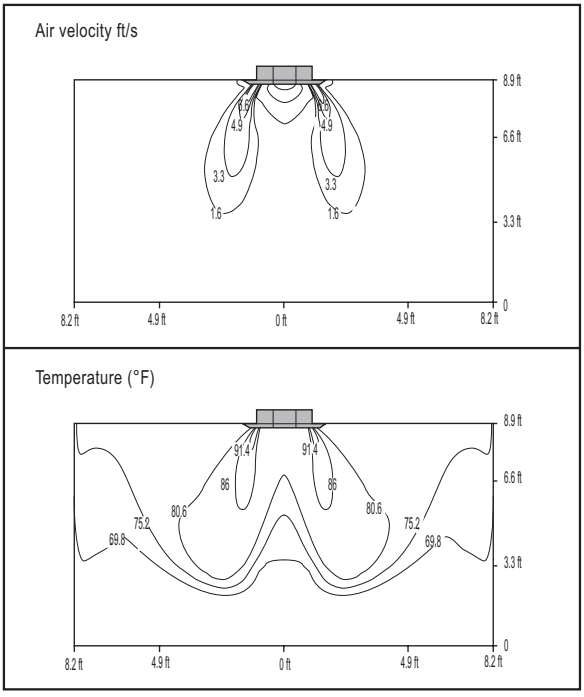
Cooling

Discharge angle: 40°



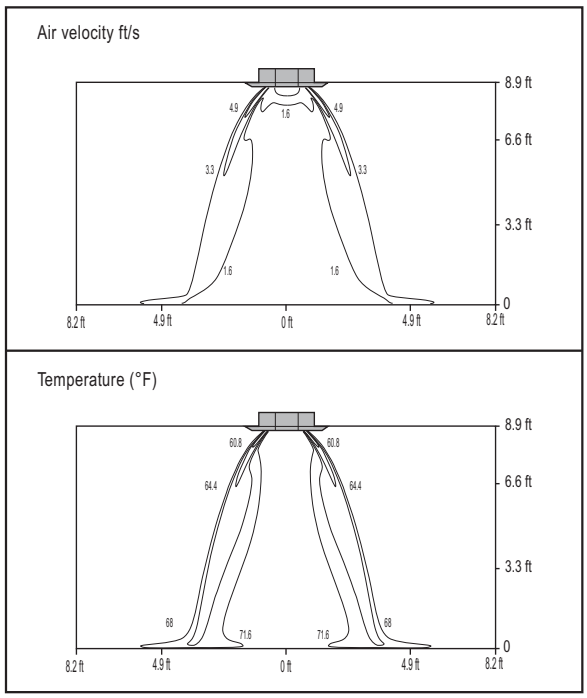
Heating

Discharge angle: 50°



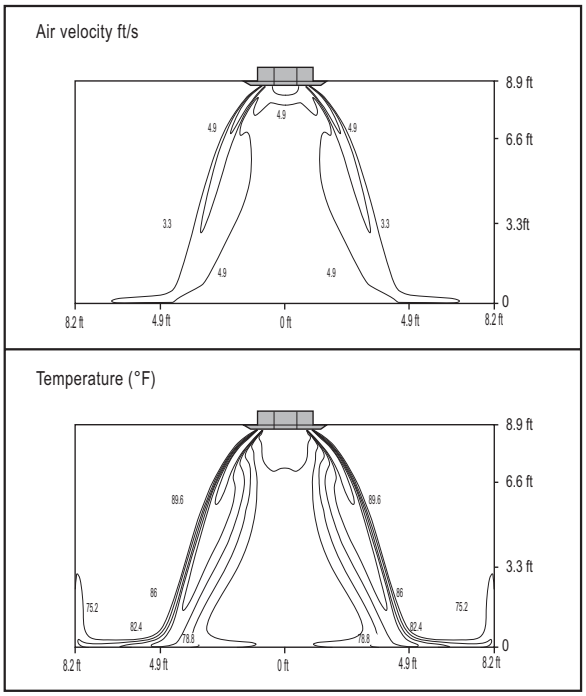
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

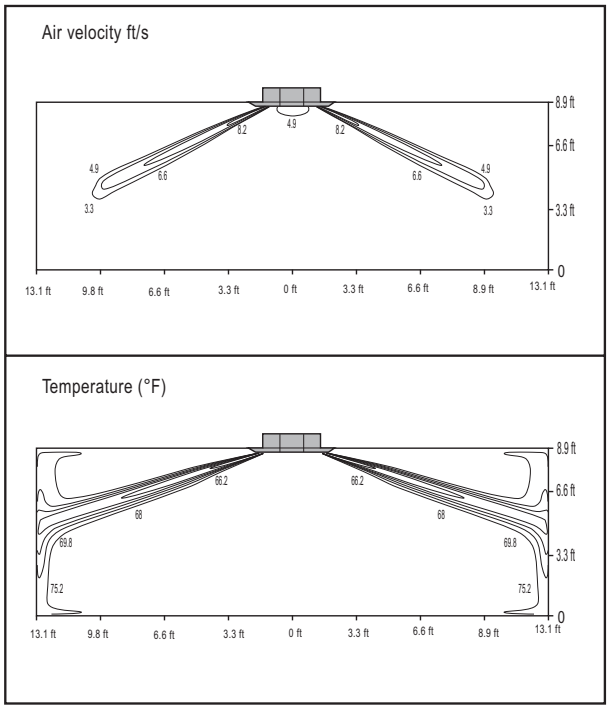


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 67: ARNU153TQC4.

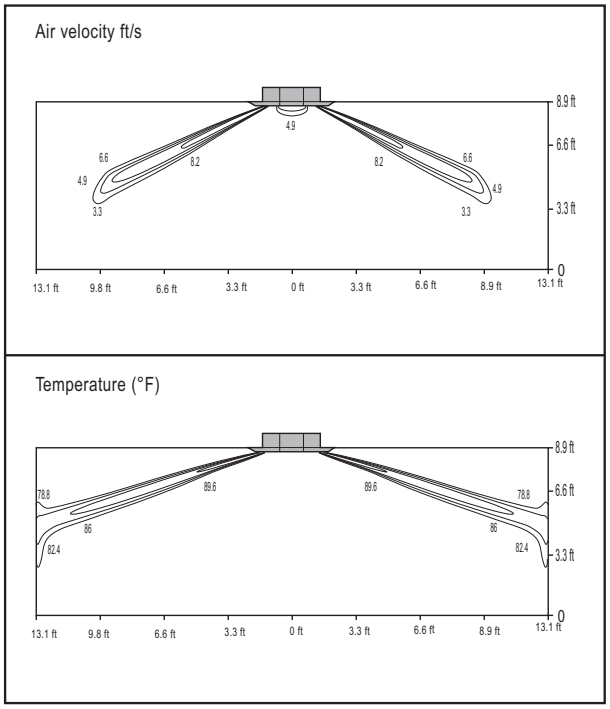
Cooling

Discharge angle: 20°



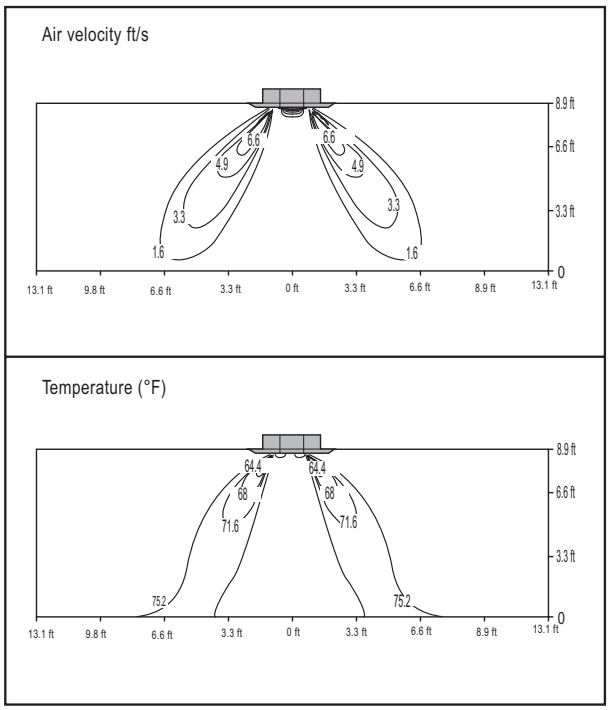
Heating

Discharge angle: 20°



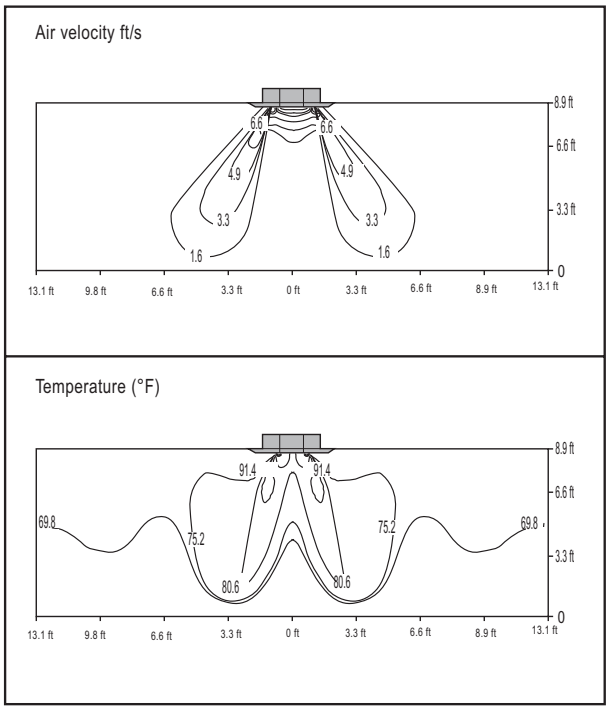
Cooling

Discharge angle: 40°



Heating

Discharge angle: 50°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

Air Velocity / Temperature Distribution

ARNU153TQC4, ARNU183TQC4

Figure 68: ARNU153TQC4, continued.

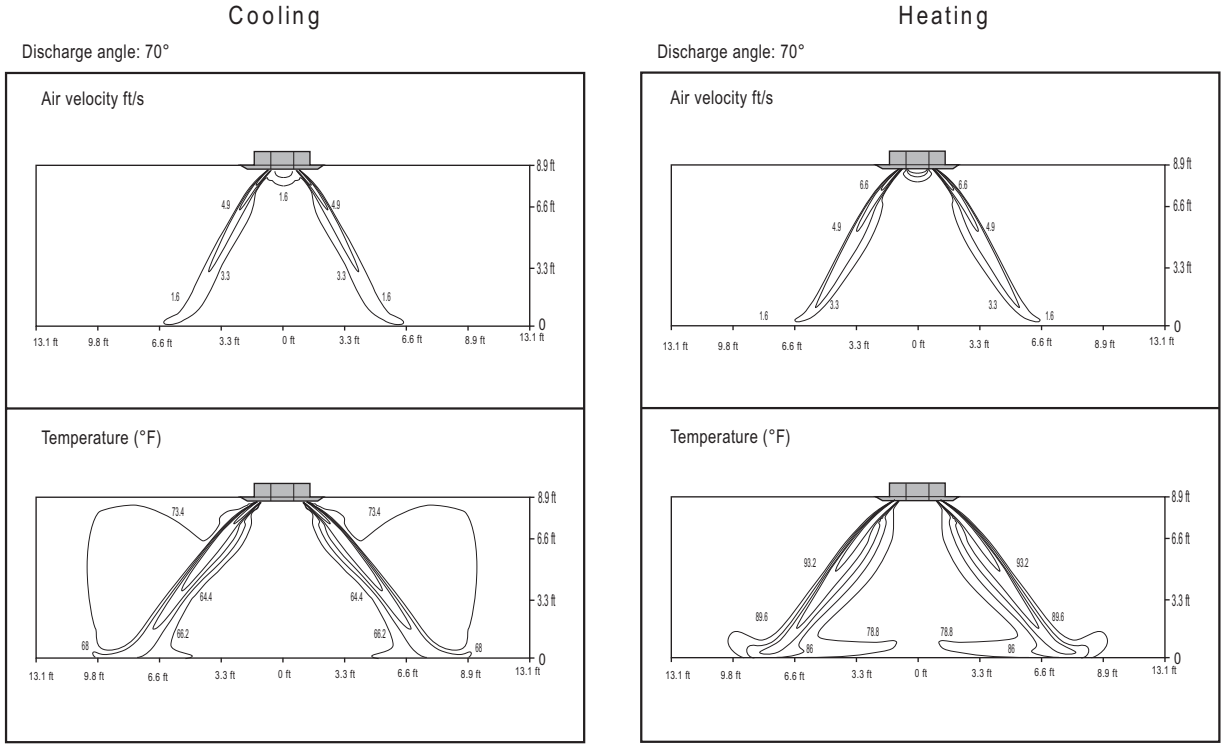
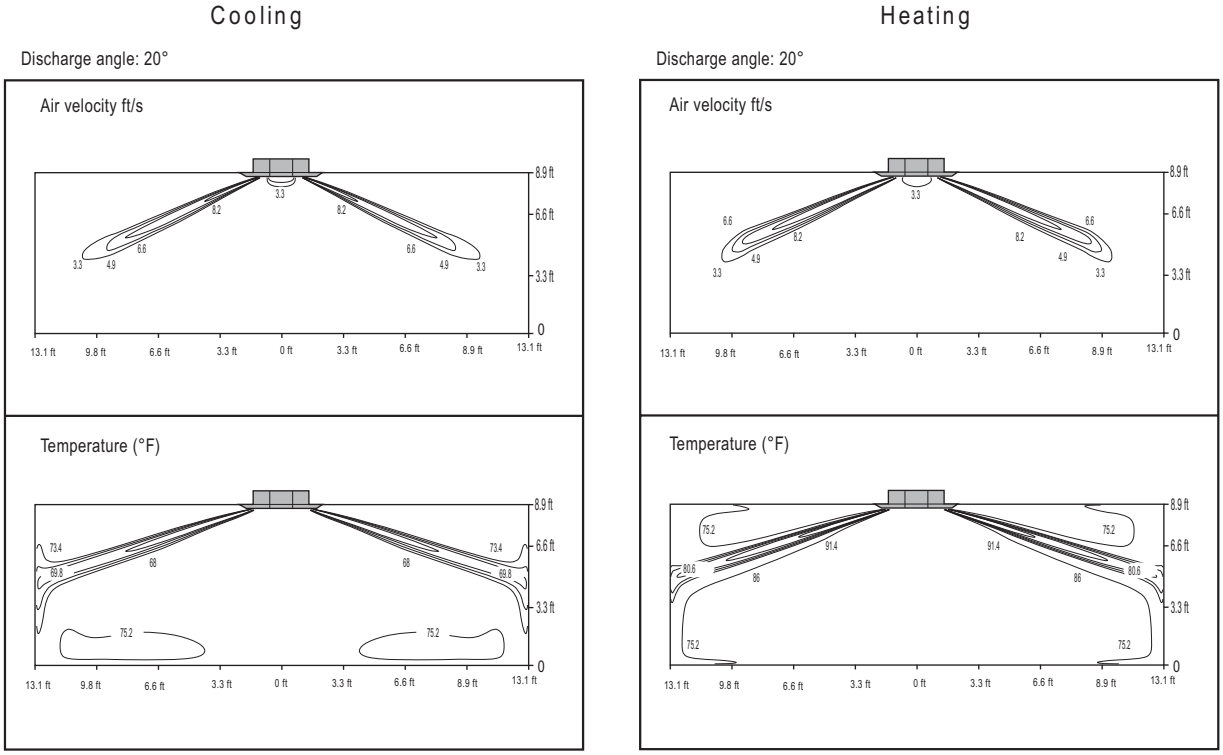


Figure 69: ARNU183TQC4.

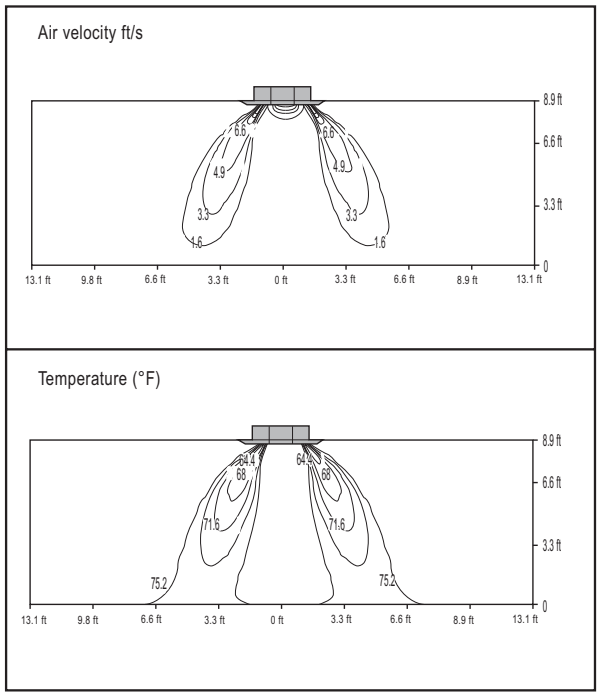


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 70: ARNU183TQC4, continued.

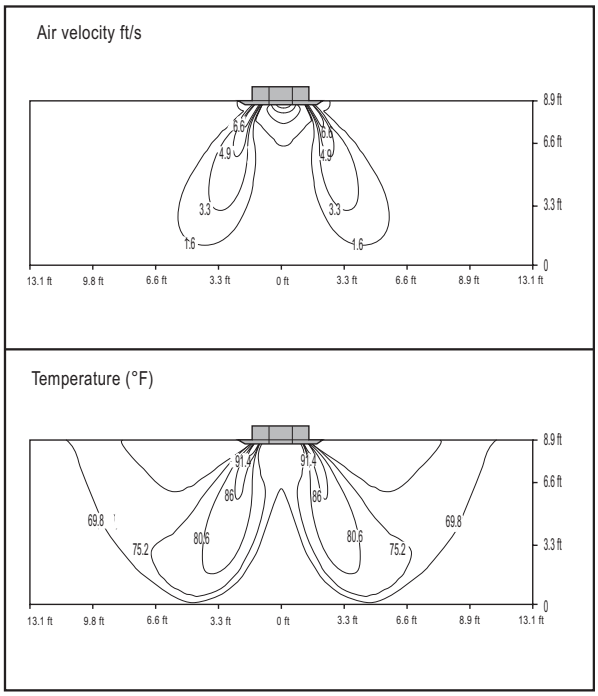
Cooling

Discharge angle: 40°



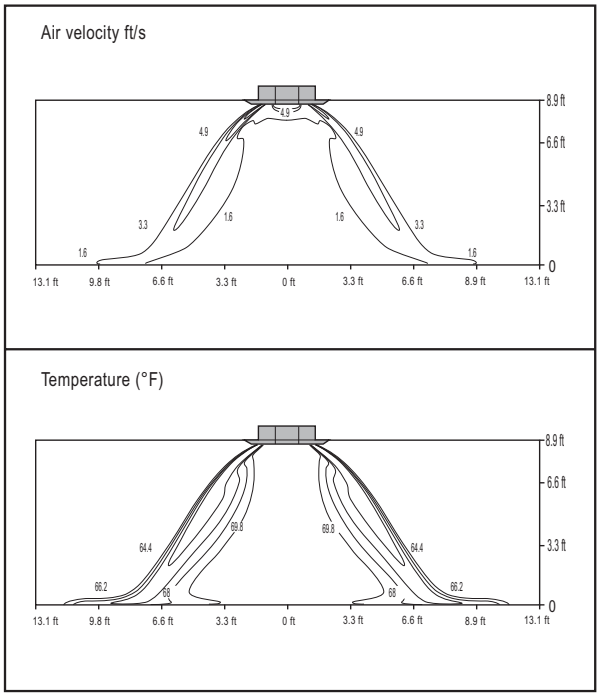
Heating

Discharge angle: 50°



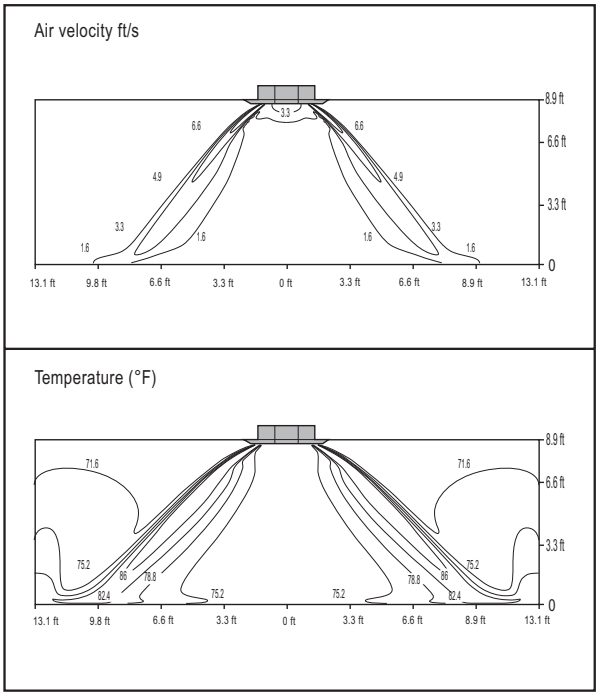
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

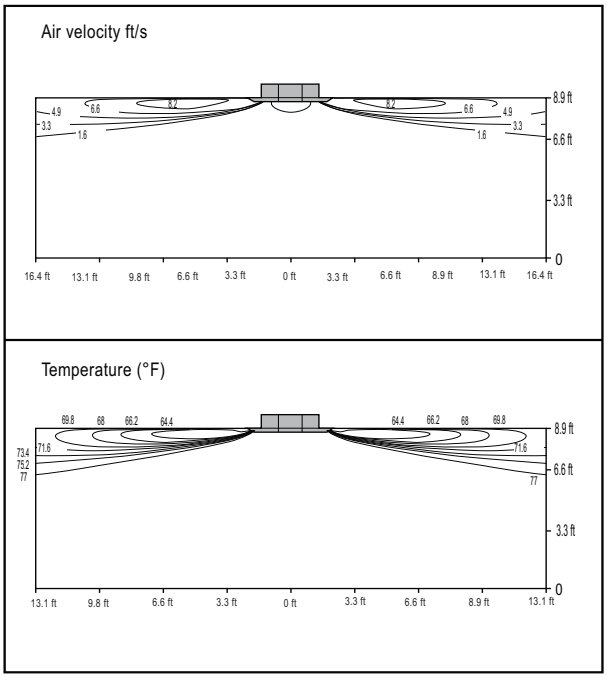
Air Velocity / Temperature Distribution

ARNU243TPC4

Figure 71: ARNU243TPC4.

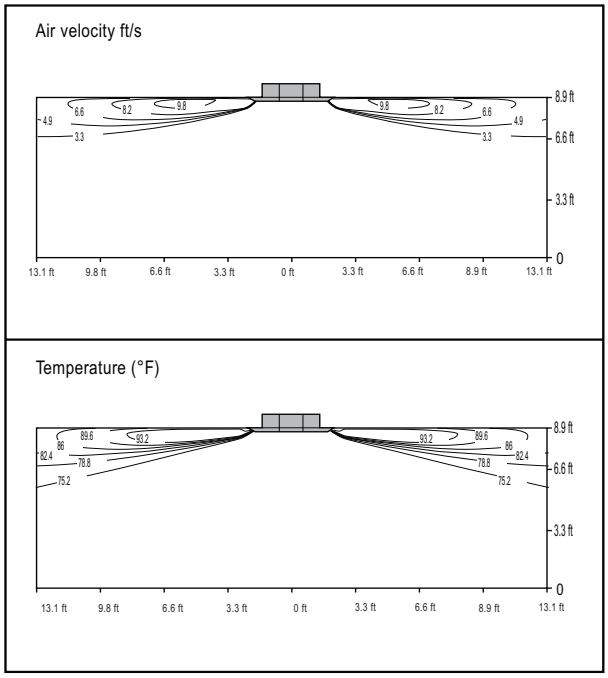
Cooling

Discharge angle: 20°



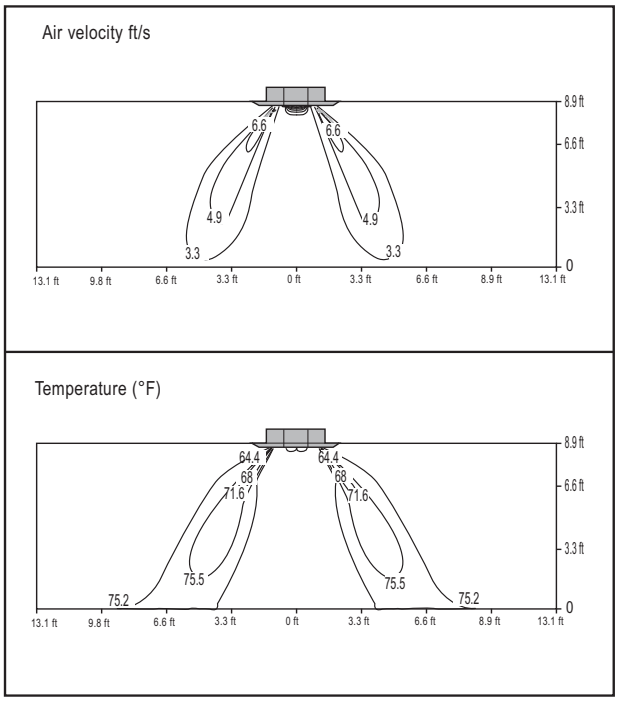
Heating

Discharge angle: 20°



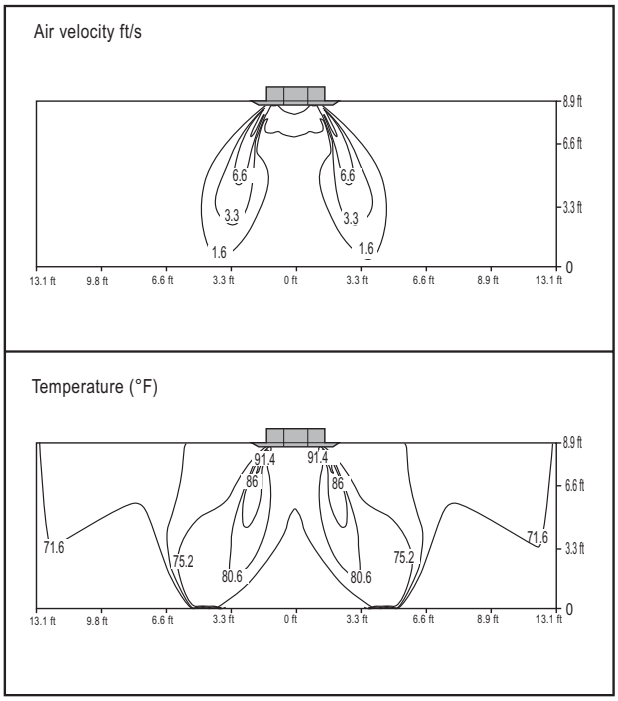
Cooling

Discharge angle: 40°



Heating

Discharge angle: 50°

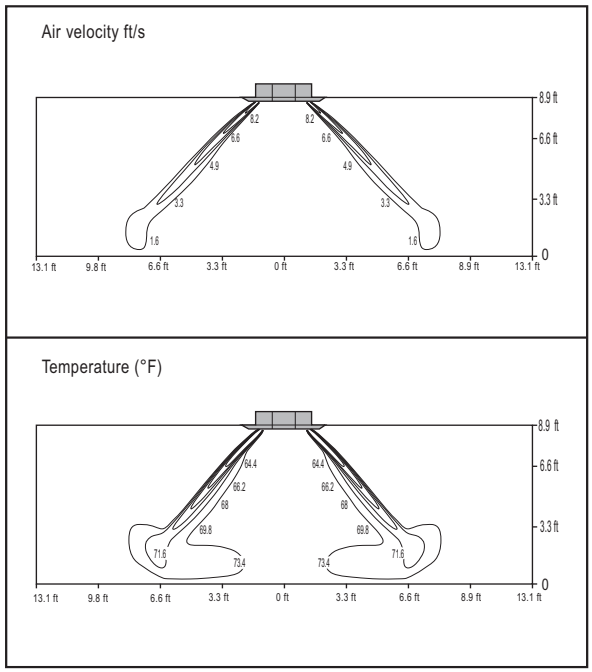


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 72: ARNU243TPC4, continued.

Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

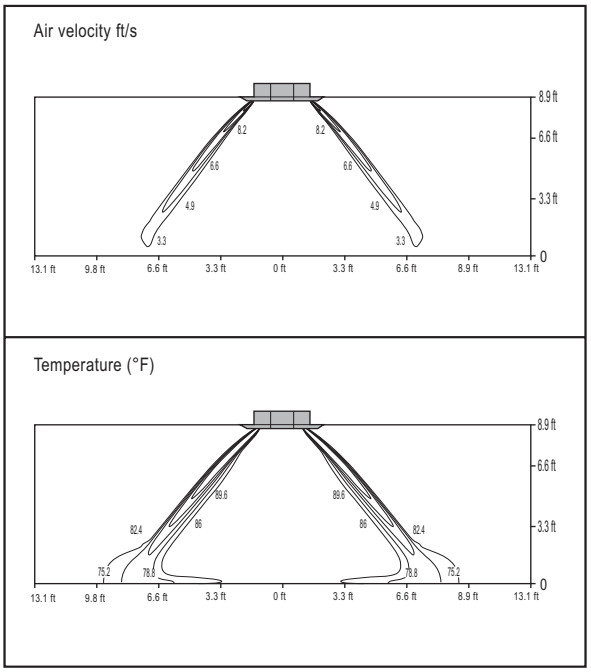
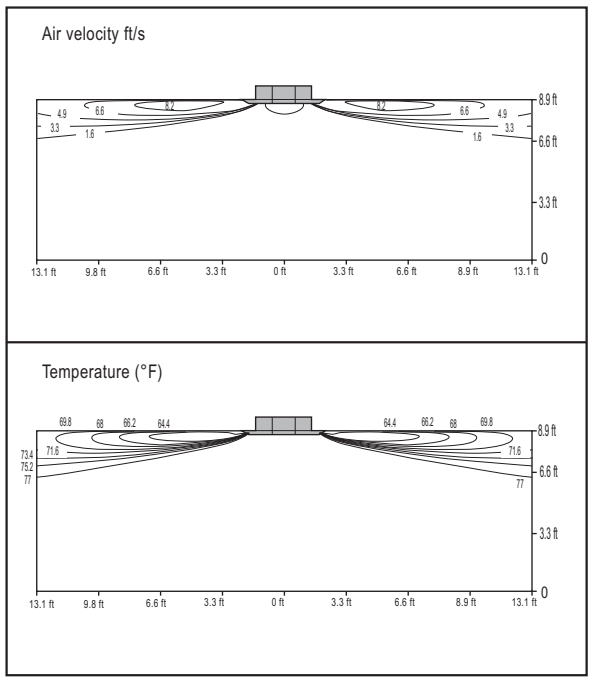


Figure 73: ARNU283TPC4.

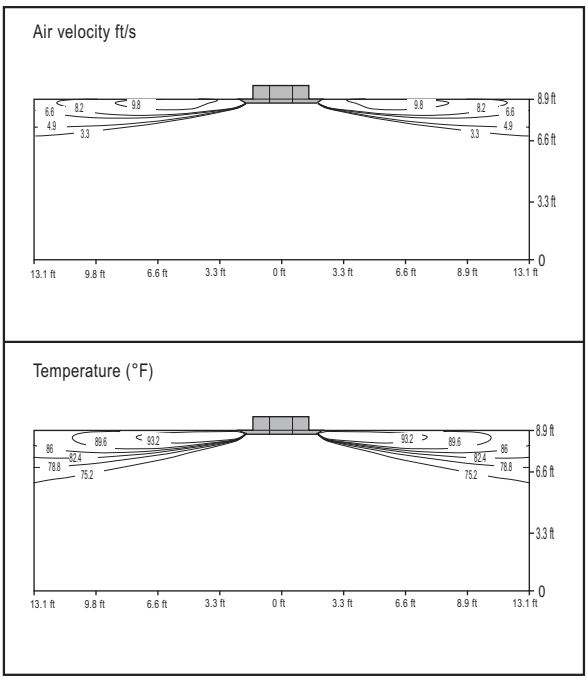
Cooling

Discharge angle: 20°



Heating

Discharge angle: 20°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

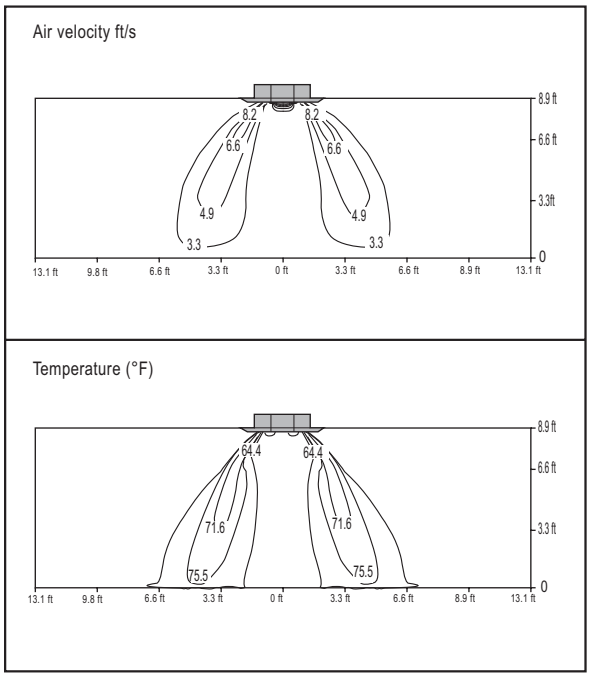
Air Velocity / Temperature Distribution

ARNU283TPC4

Figure 74: ARNU283TPC4, continued.

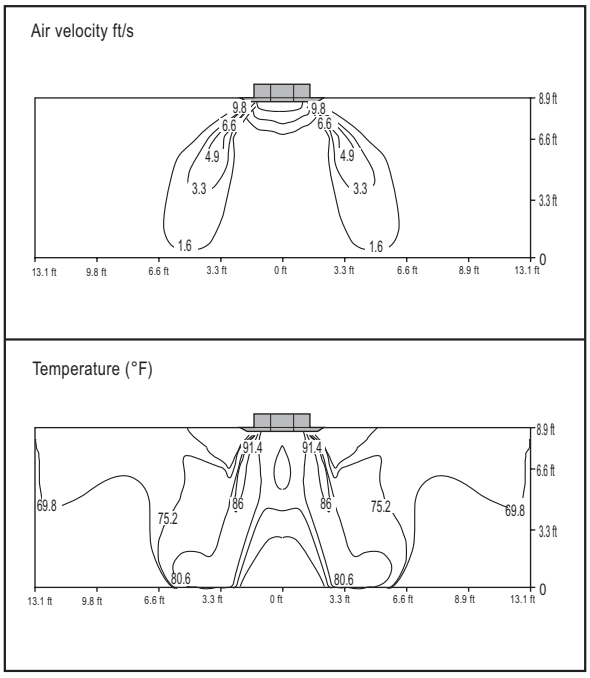
Cooling

Discharge angle: 40°



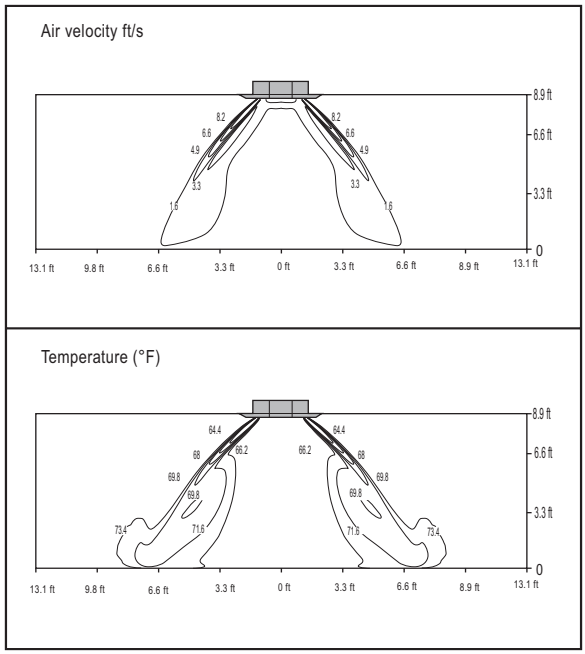
Heating

Discharge angle: 50°



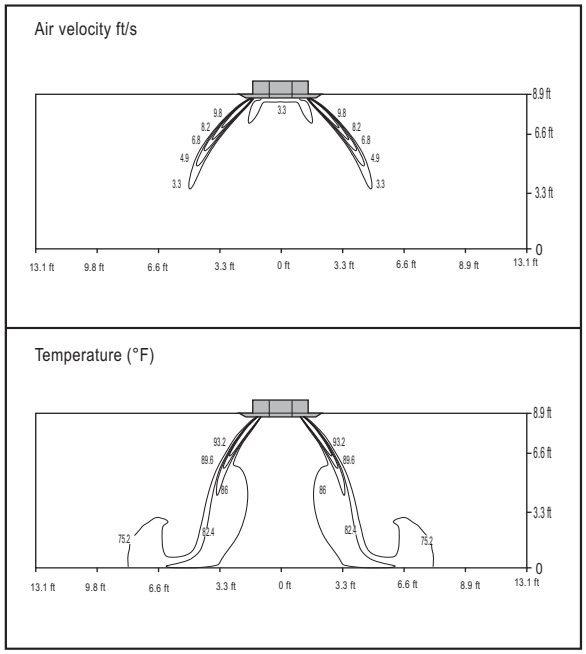
Cooling

Discharge angle: 70°



Heating

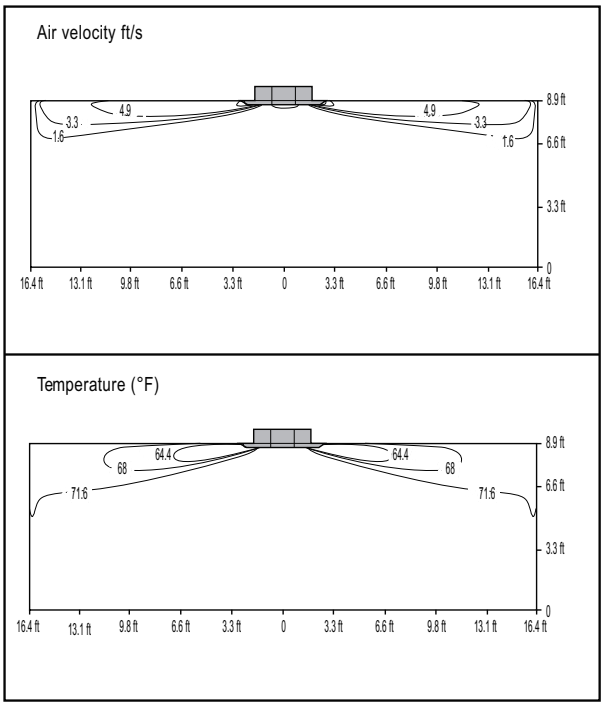
Discharge angle: 70°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

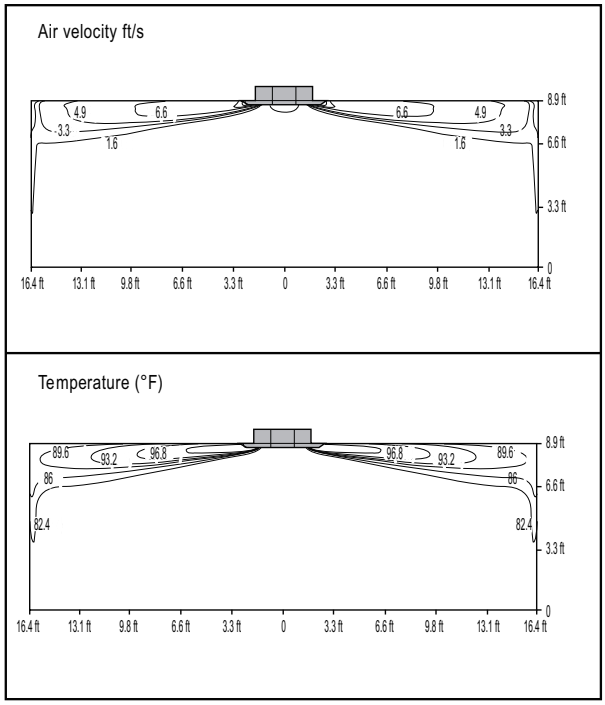
Figure 75: ARNU073TNA4 and ARNU093TNA4.

Discharge angle: 20°



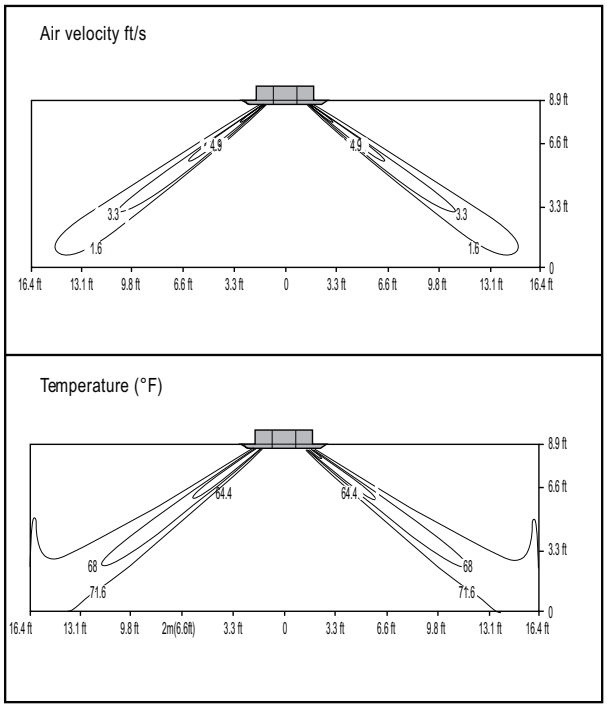
Cooling

Discharge angle: 20°

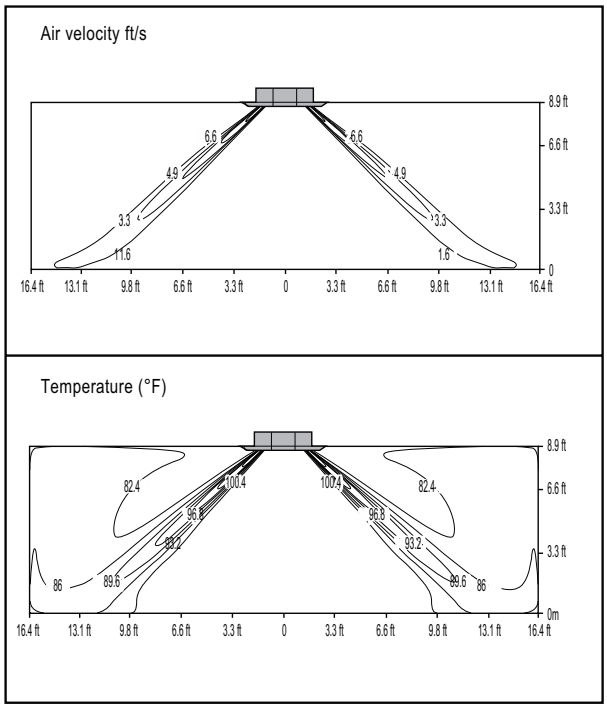


Heating

Discharge angle: 40°



Discharge angle: 50°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

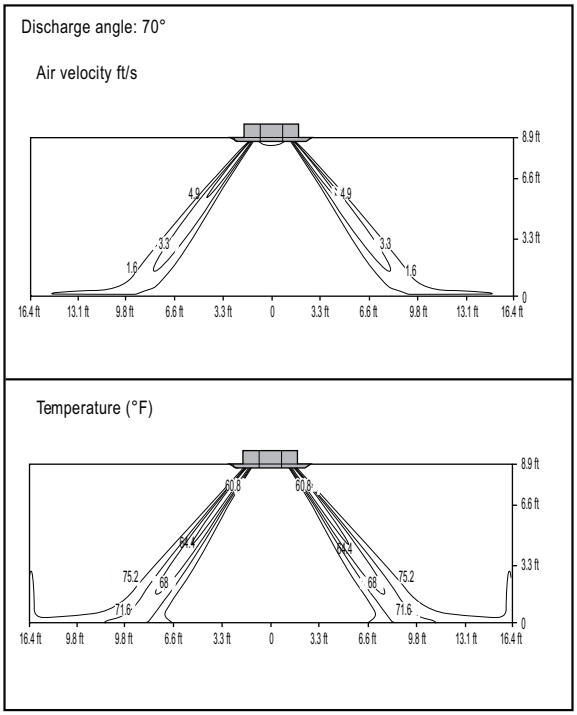
FOUR-WAY CEILING CASSETTE

Air Velocity / Temperature Distribution

ARNU073TNA4, ARNU093TNA4, ARNU123TNA4, ARNU153TNA4

Figure 76: ARNU073TNA4 and ARNU093TNA4, continued.

Cooling



Heating

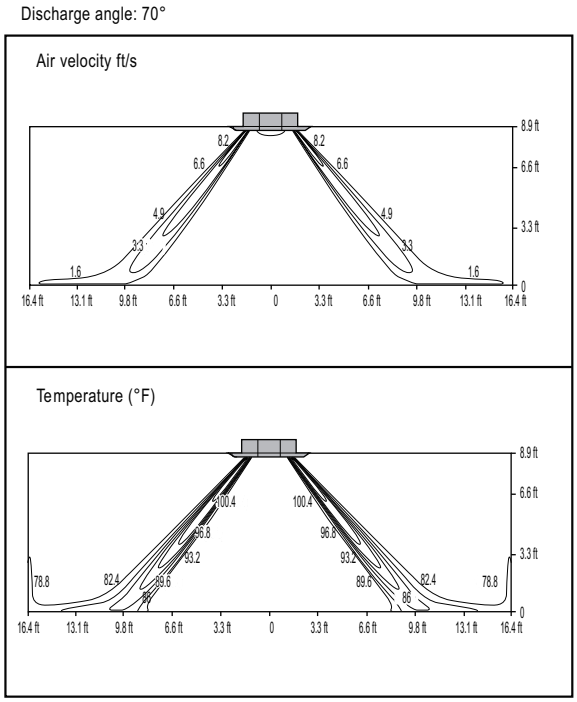
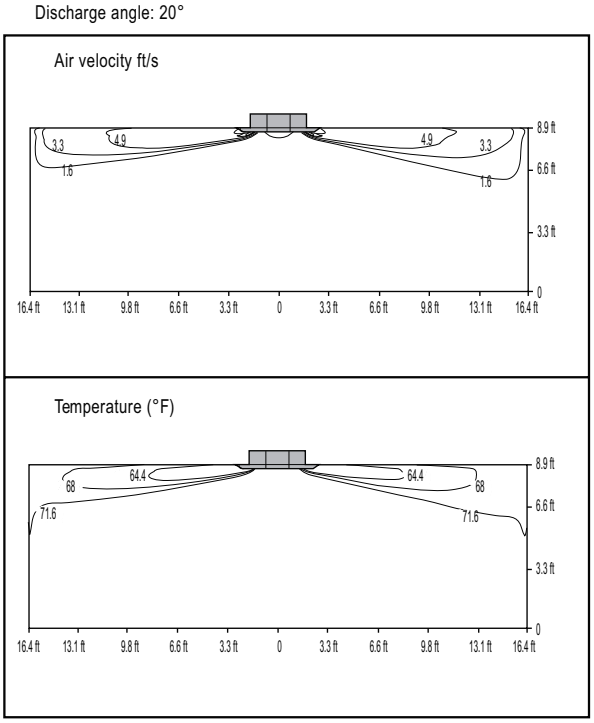
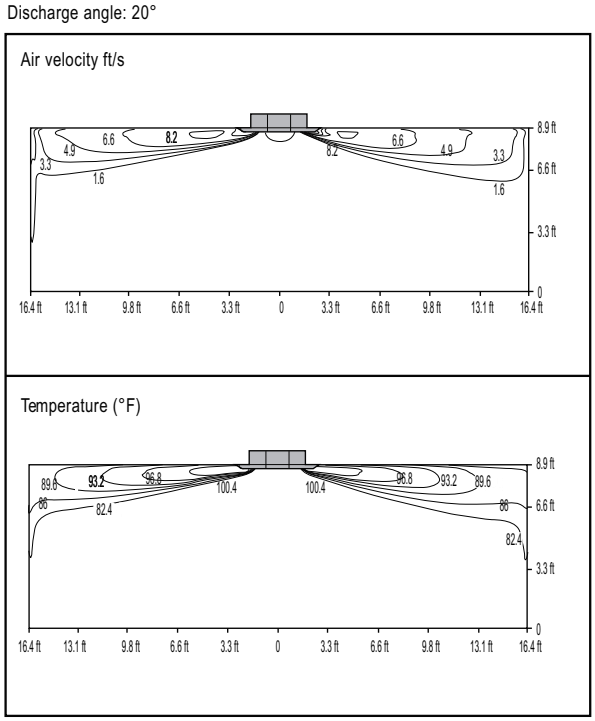


Figure 77: ARNU123TNA4 and ARNU153TNA4.

Cooling



Heating

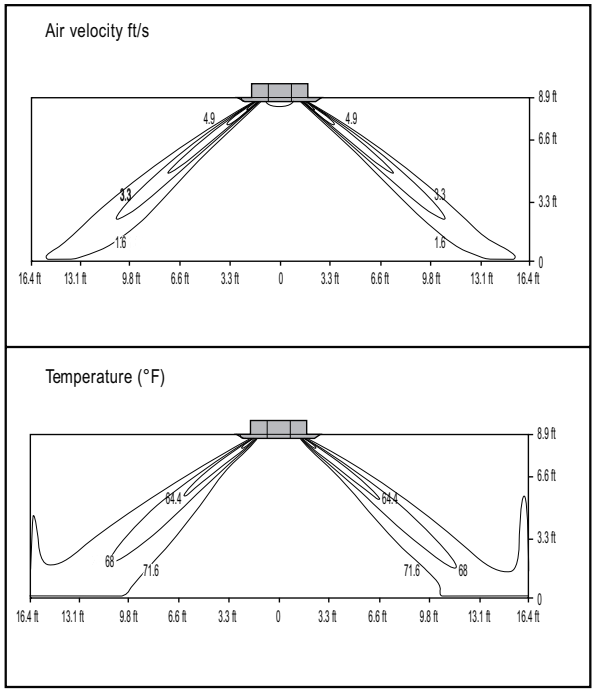


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 78: ARNU123TNA4 and ARNU153TNA4, continued.

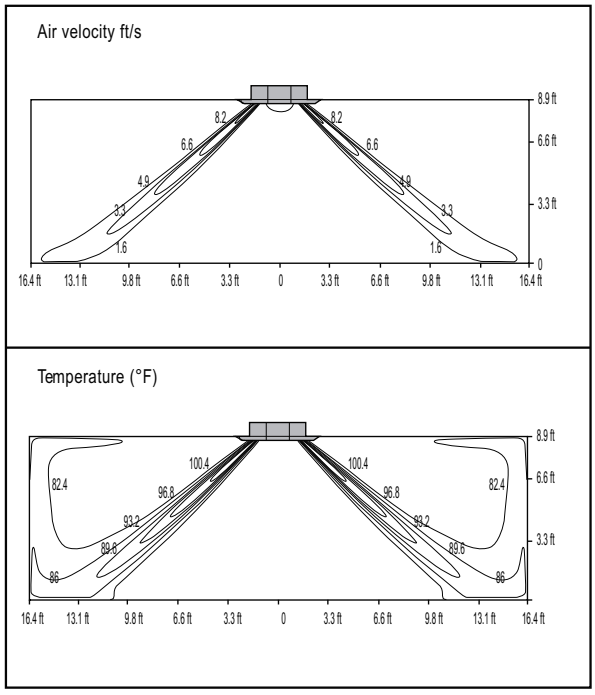
Cooling

Discharge angle: 40°



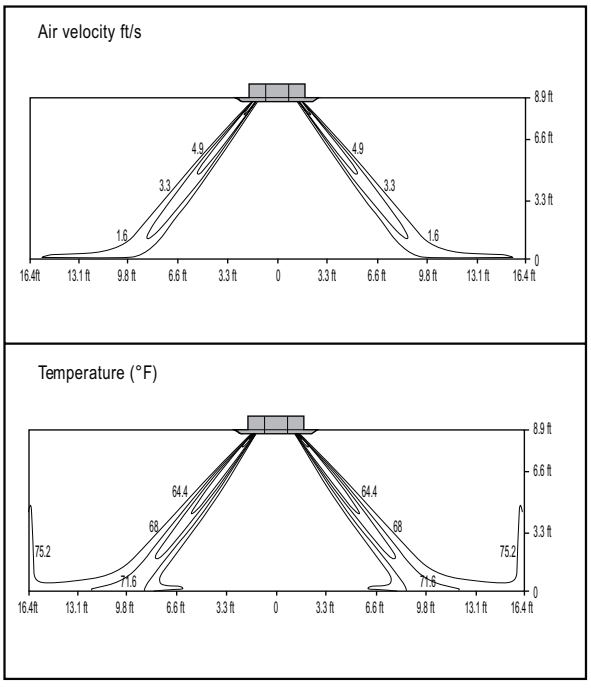
Heating

Discharge angle: 50°



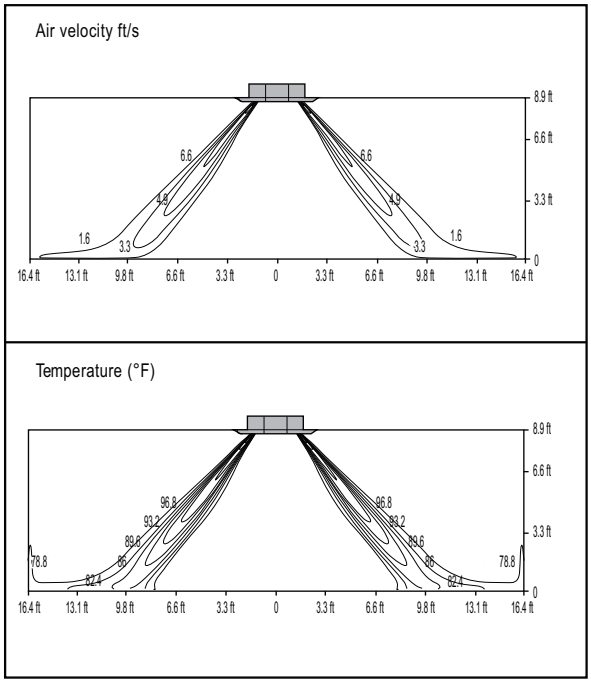
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

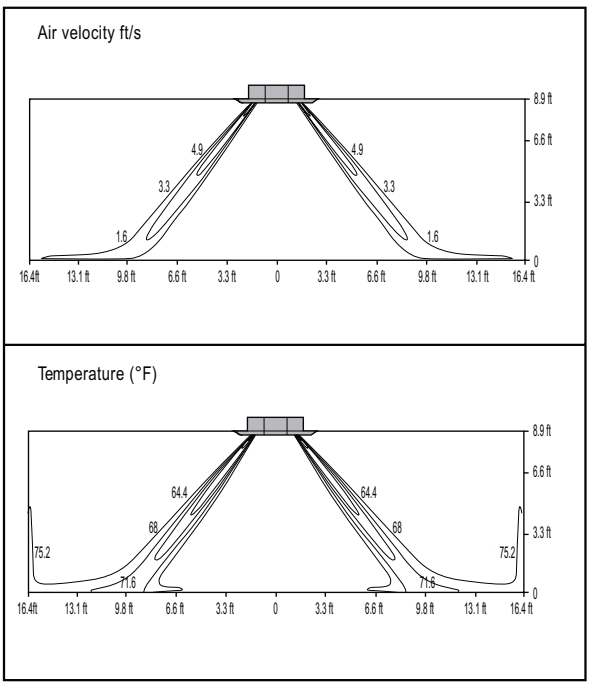
Air Velocity / Temperature Distribution

ARNU183TNA4

Figure 79: ARNU183TNA4.

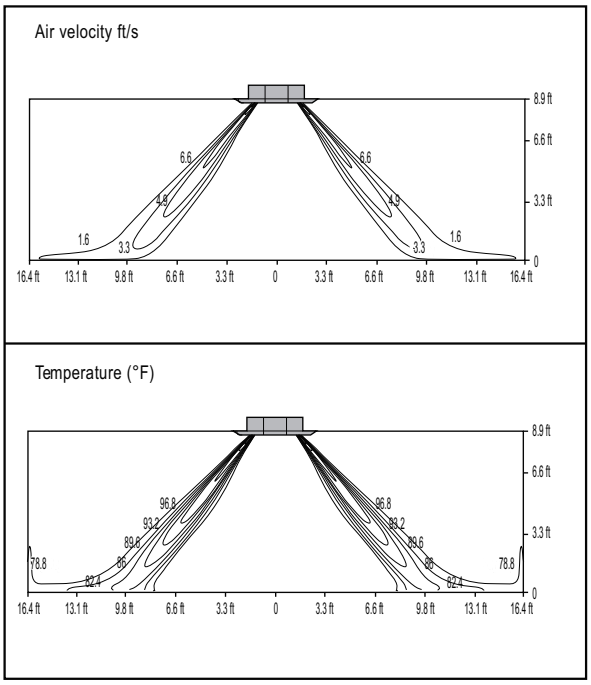
Cooling

Discharge angle: 70°



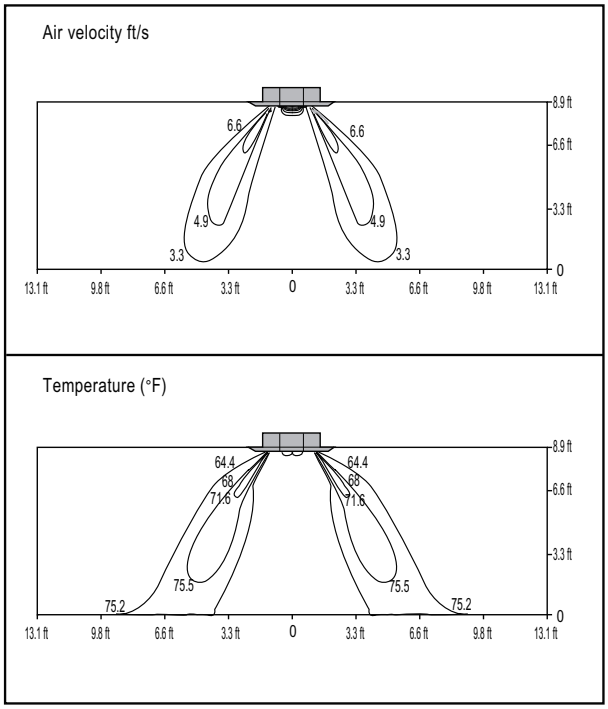
Heating

Discharge angle: 70°



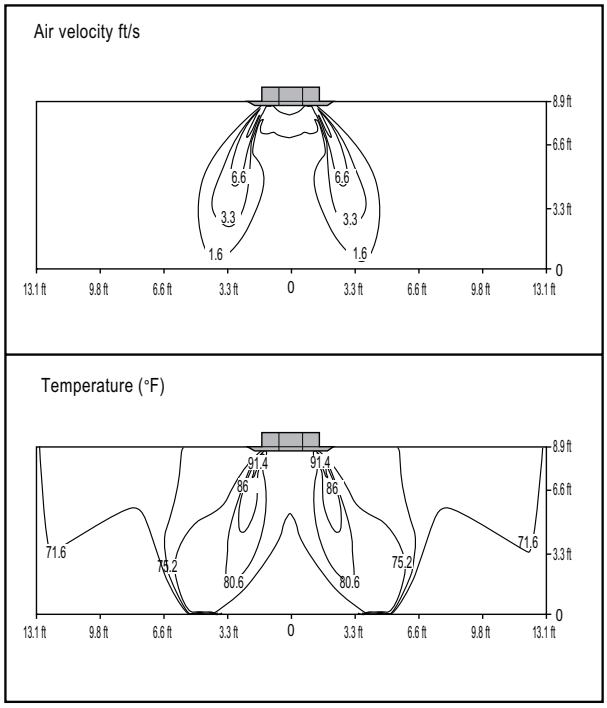
Cooling

Discharge angle: 40°



Heating

Discharge angle: 50°

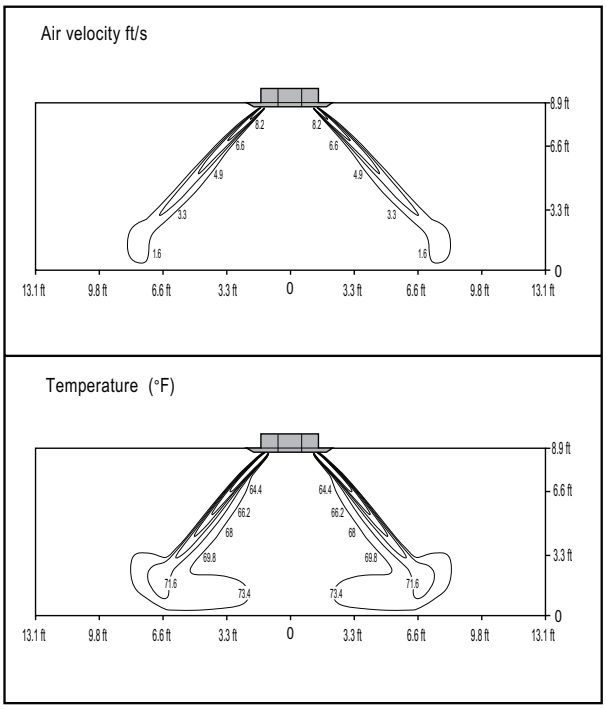


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 80: ARNU183TNA4, continued.

Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

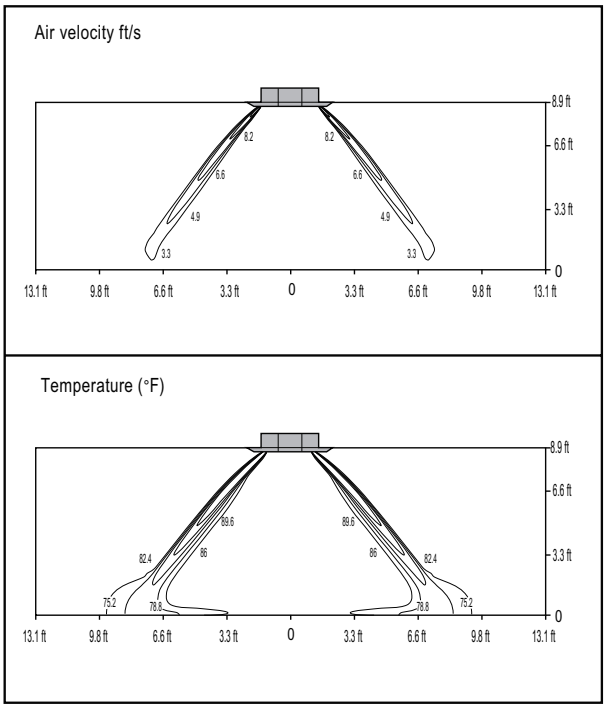
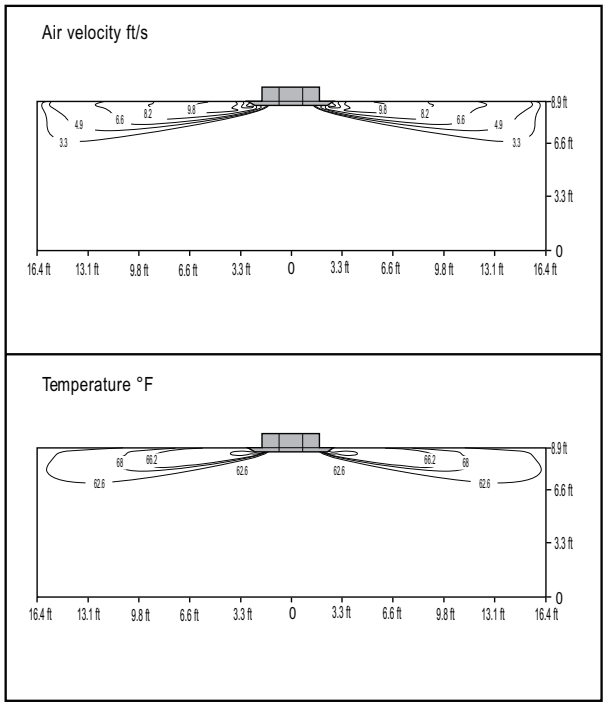


Figure 81: ARNU243TNA4.

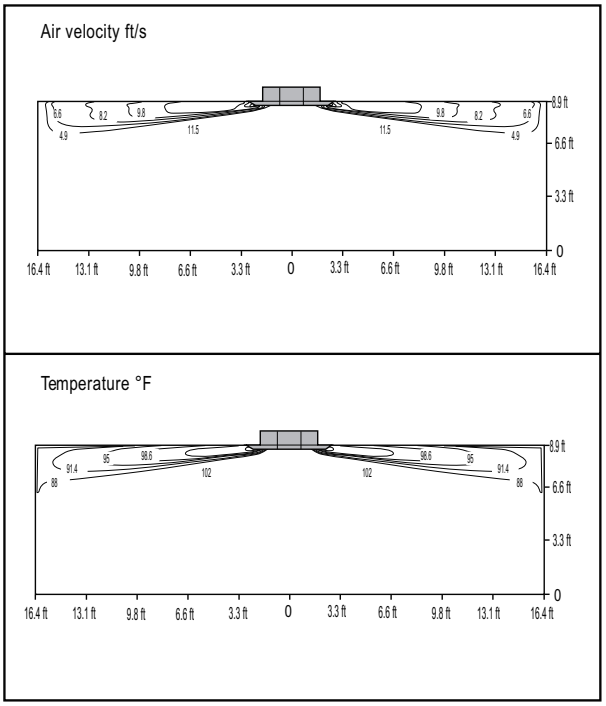
Cooling

Discharge angle: 20°



Heating

Discharge angle: 20°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

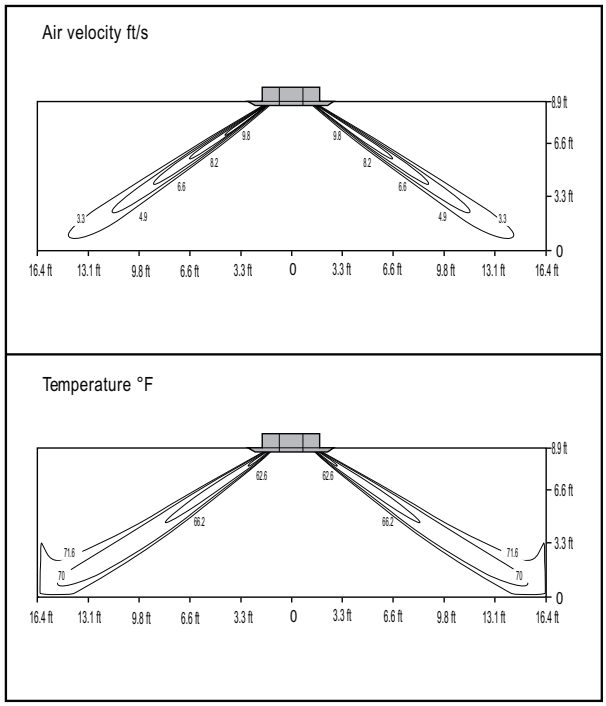
Air Velocity / Temperature Distribution

ARNU243TNA4

Figure 82: ARNU243TNA4, continued.

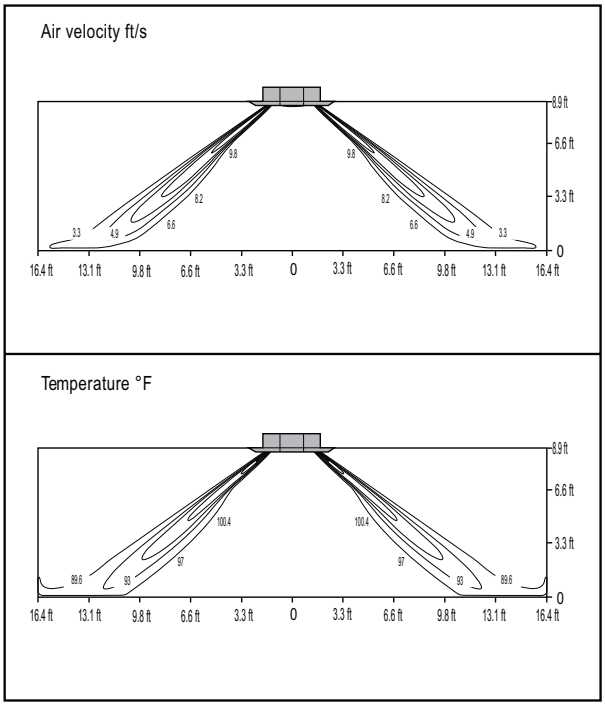
Cooling

Discharge angle: 40°



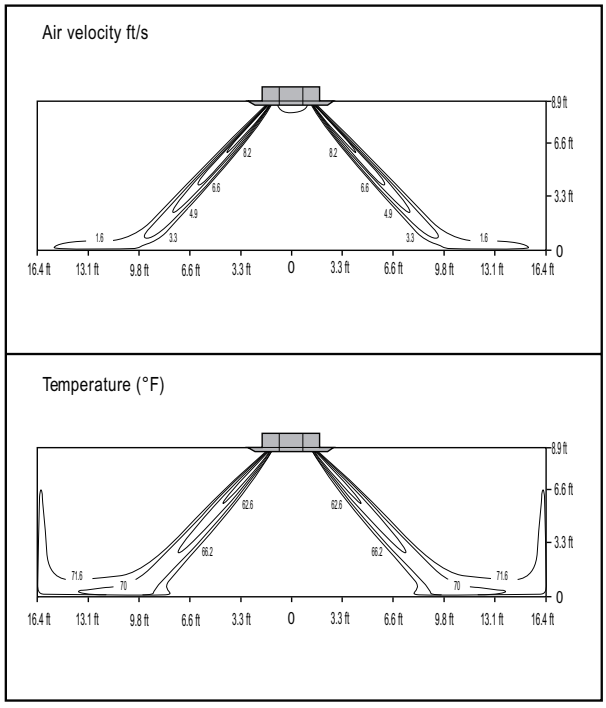
Heating

Discharge angle: 50°



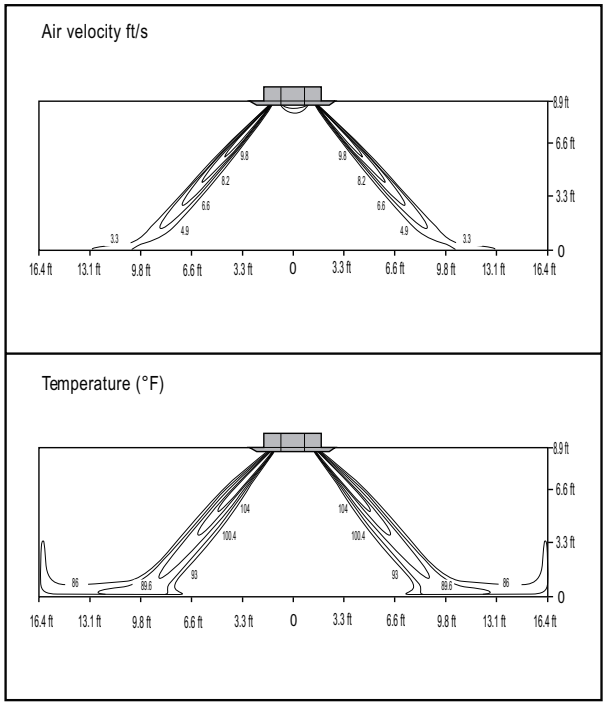
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

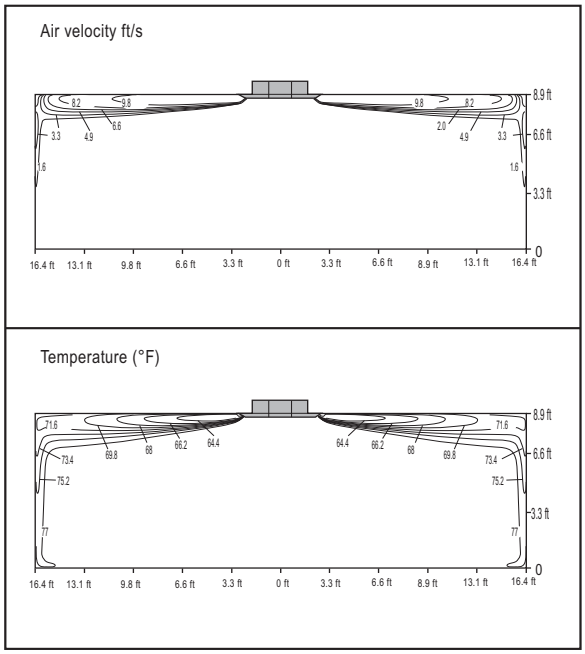


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 83: ARNU363TNC4.

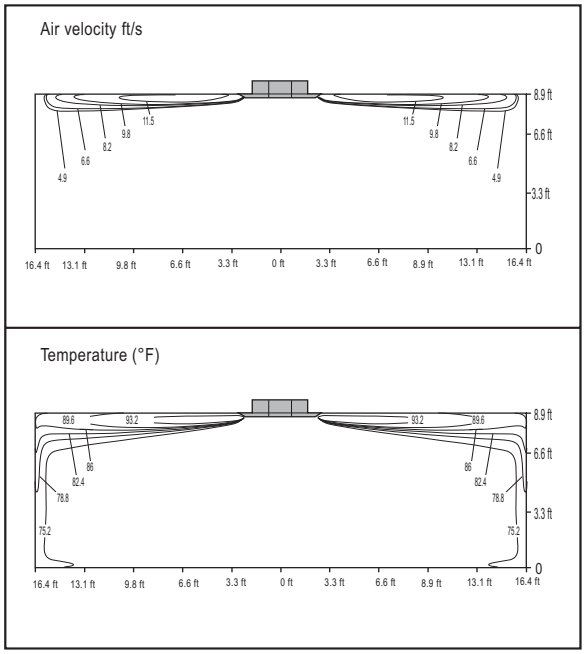
Cooling

Discharge angle: 20°



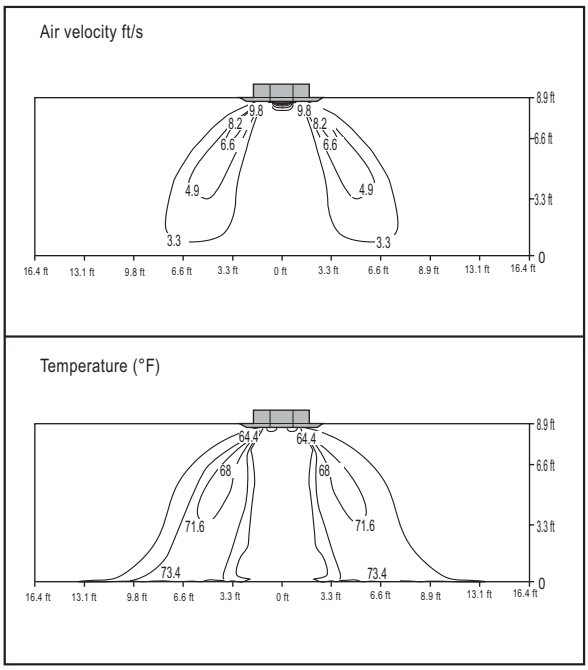
Heating

Discharge angle: 20°



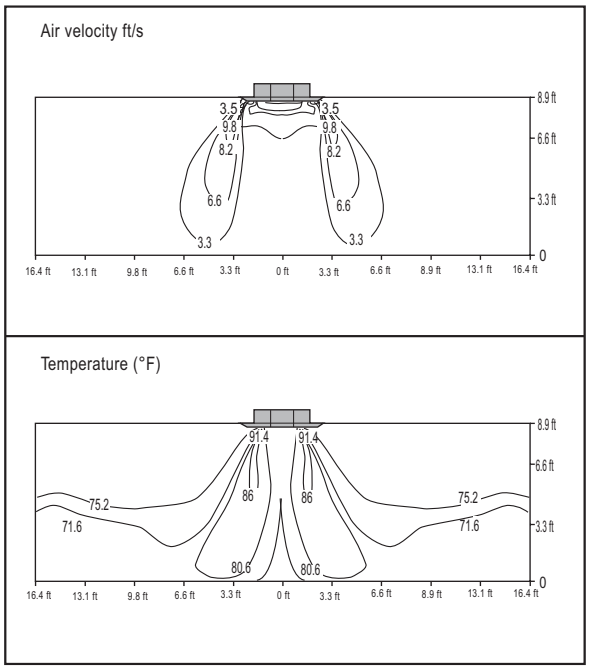
Cooling

Discharge angle: 40°



Heating

Discharge angle: 50°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

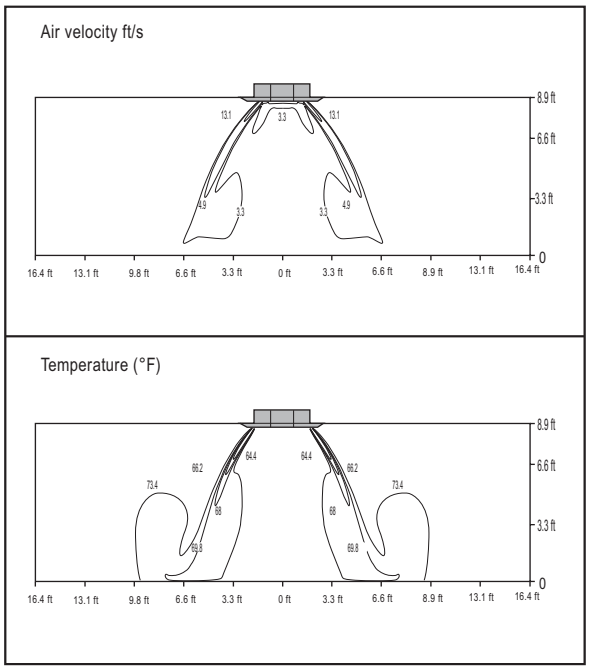
Air Velocity / Temperature Distribution

ARNU363TNC4

Figure 84: ARNU363TNC4, continued.

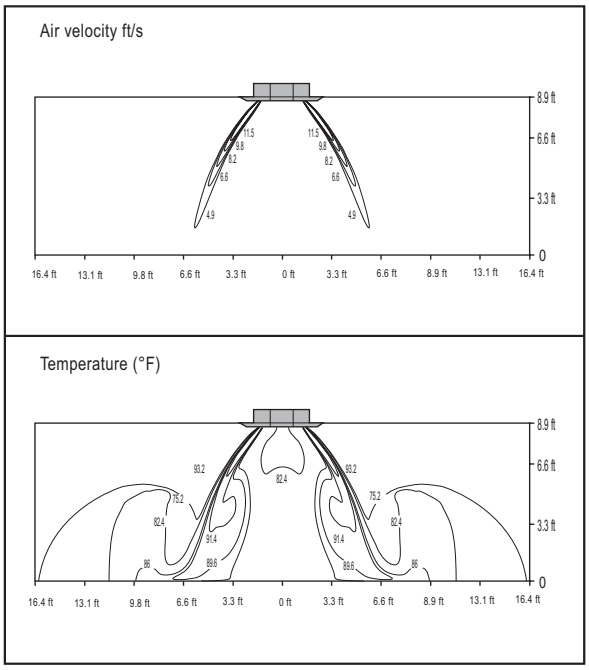
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

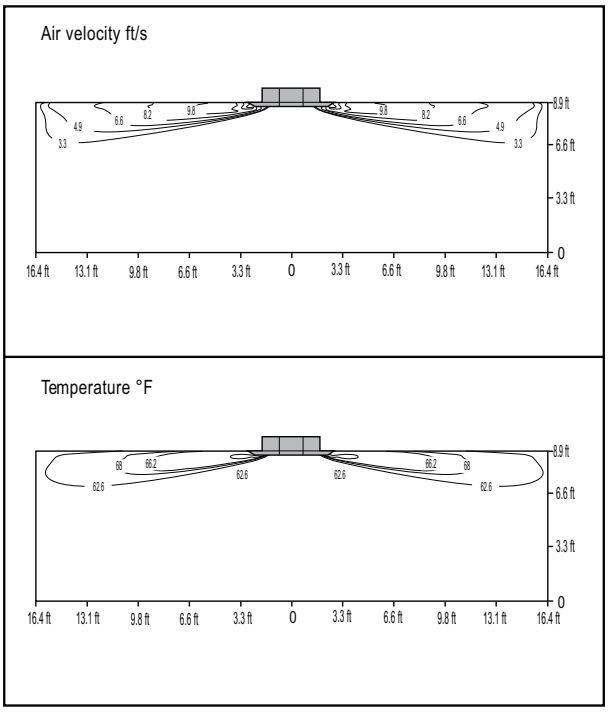


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 85: ARNU243TMA4.

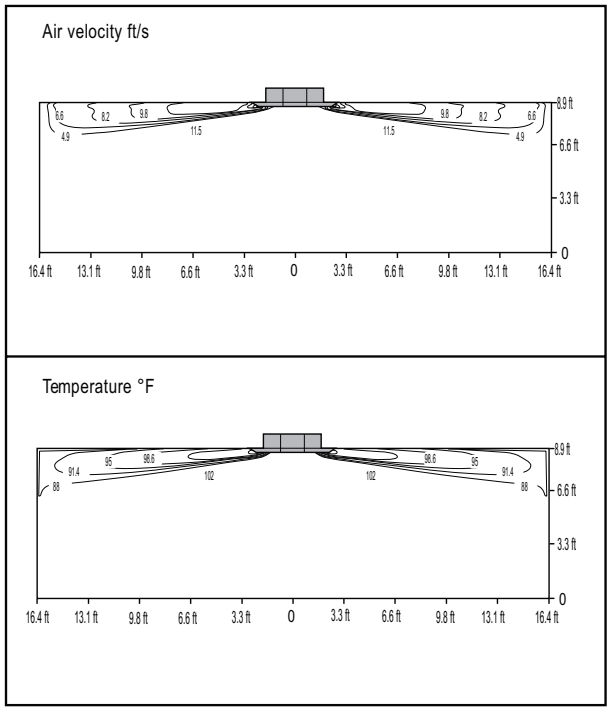
Cooling

Discharge angle: 20°



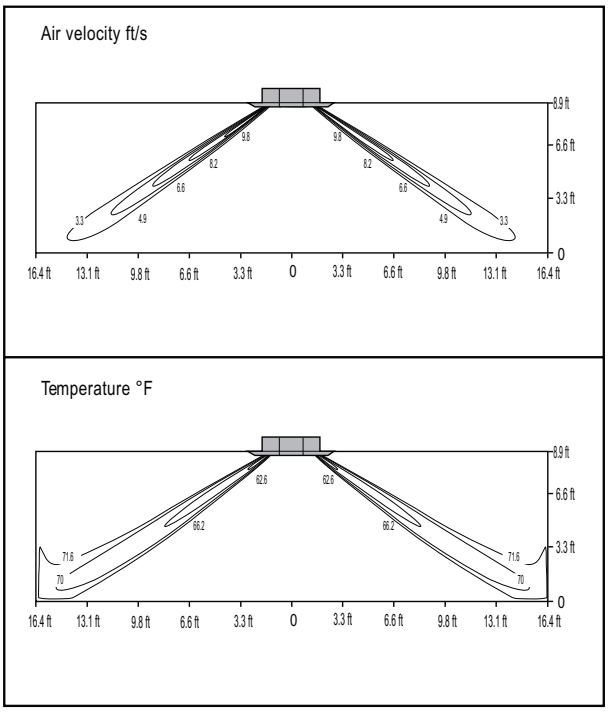
Heating

Discharge angle: 20°



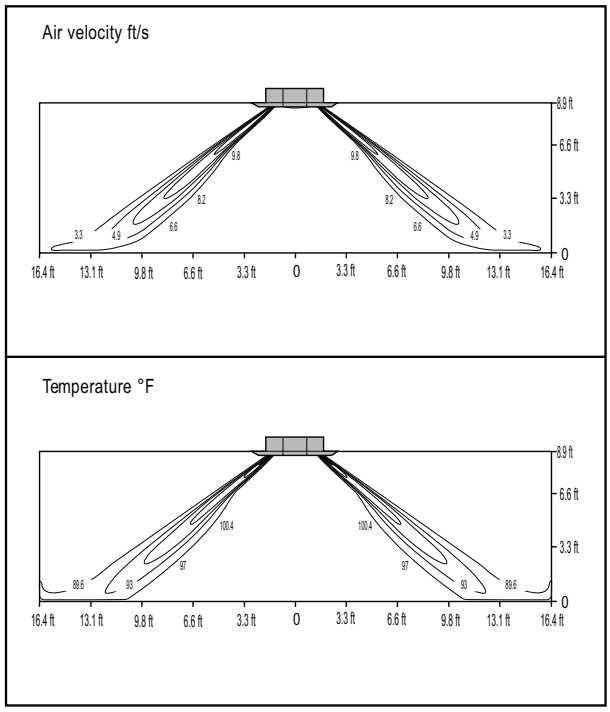
Cooling

Discharge angle: 40°



Heating

Discharge angle: 50°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

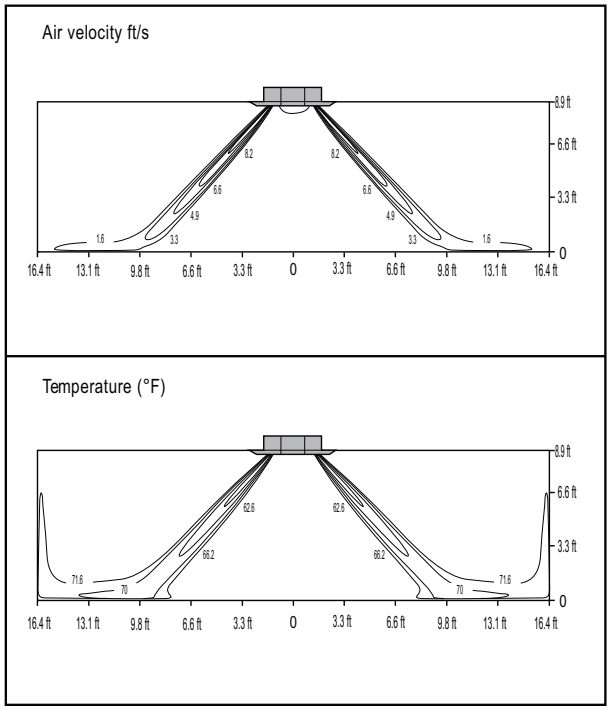
Air Velocity / Temperature Distribution

ARNU243TMA4, ARNU283TMA4

Figure 86: ARNU243TMA4, continued.

Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

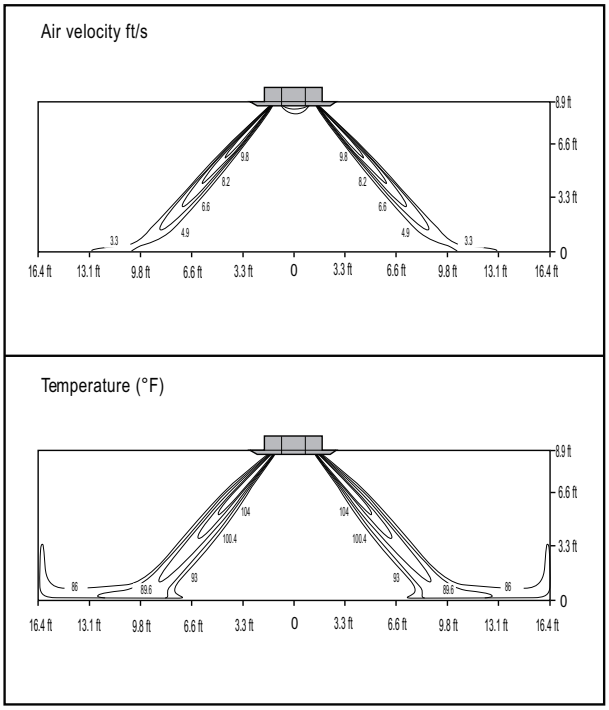
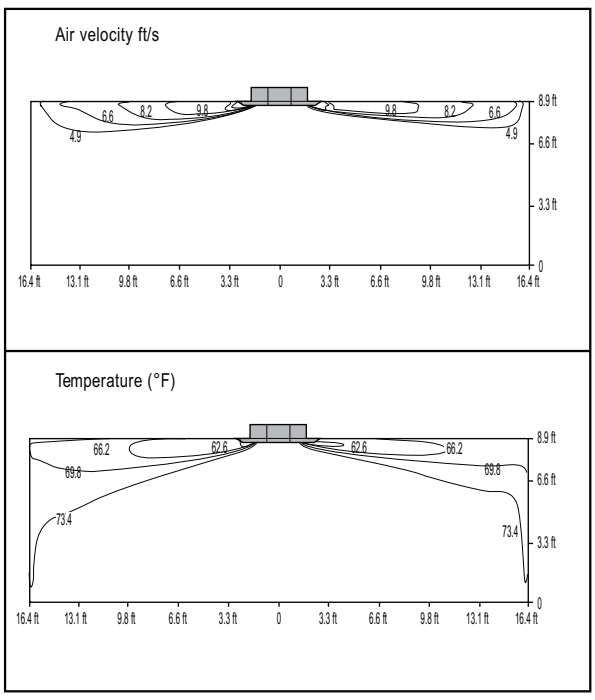


Figure 87: ARNU283TMA4.

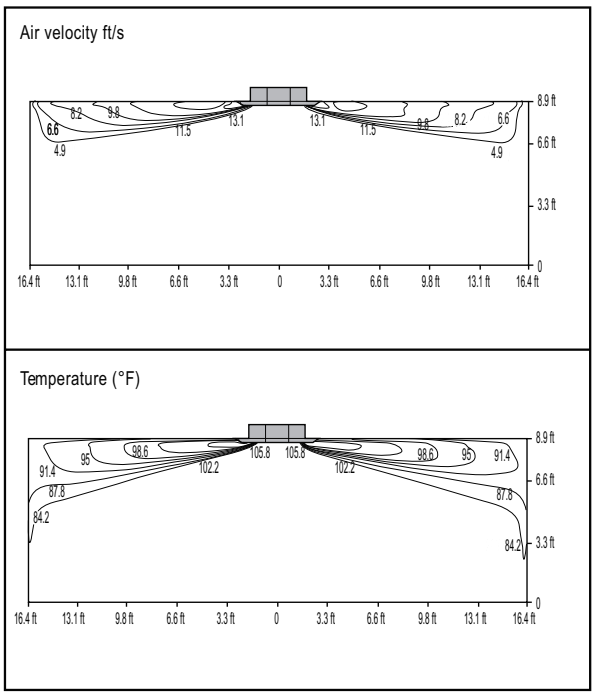
Cooling

Discharge angle: 20°



Heating

Discharge angle: 20°

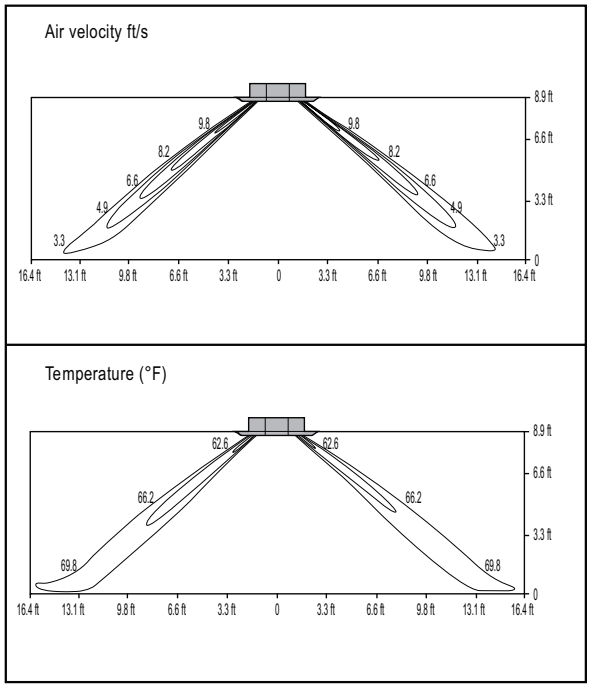


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 88: ARNU283TMA4, continued.

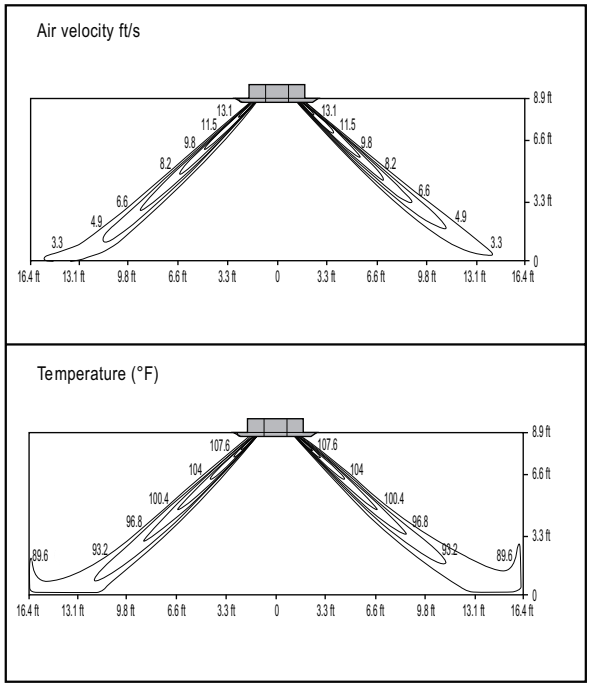
Cooling

Discharge angle: 40°



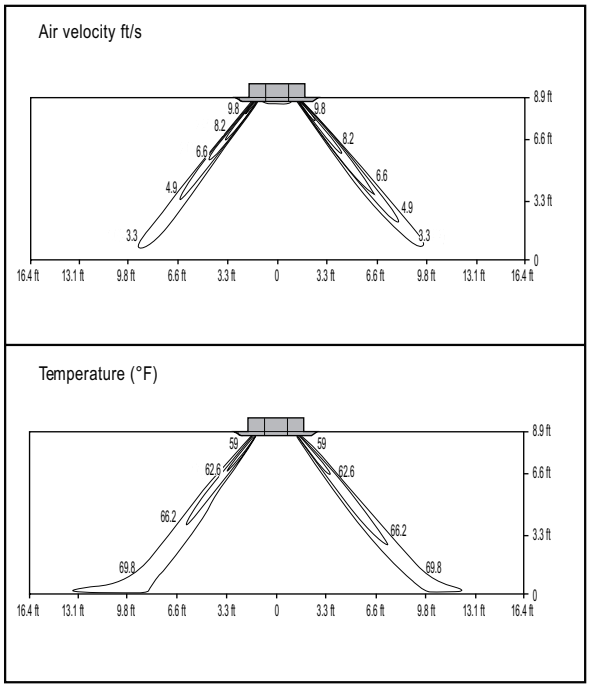
Heating

Discharge angle: 50°



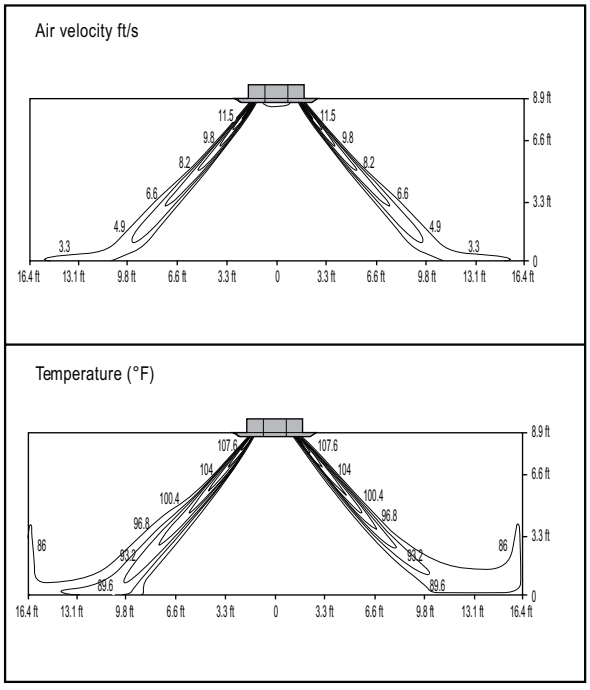
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

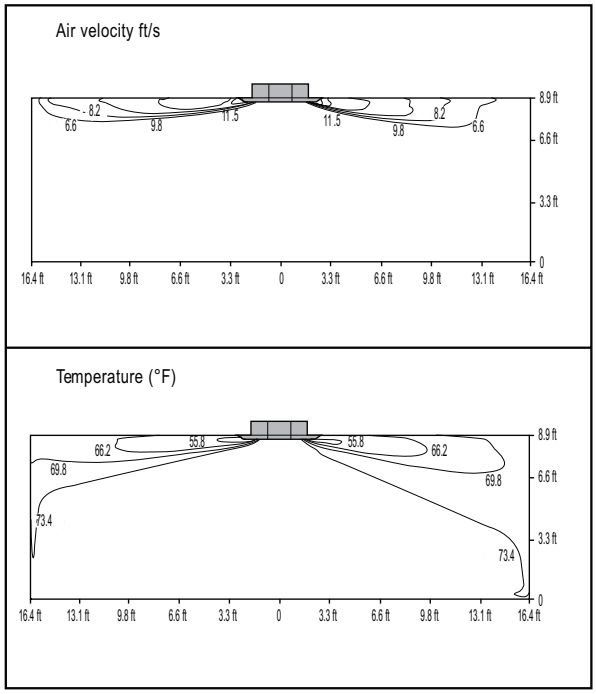
Air Velocity / Temperature Distribution

ARNU363TMA4

Figure 89: ARNU363TMA4.

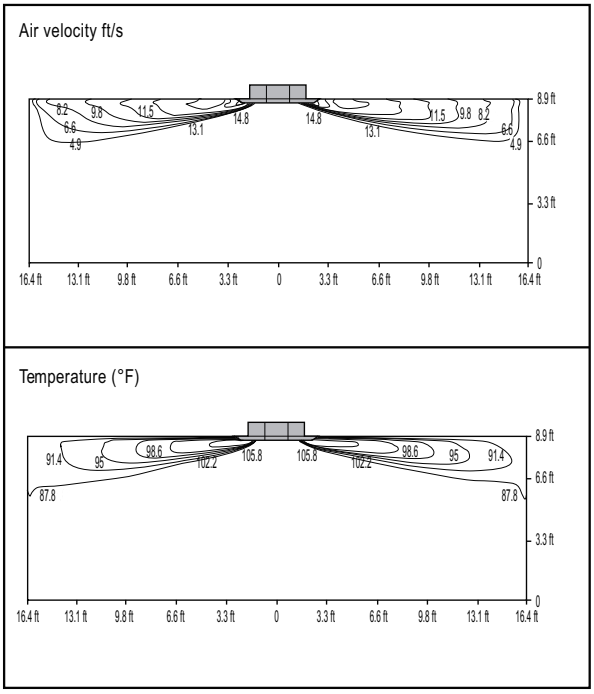
Cooling

Discharge angle: 20°



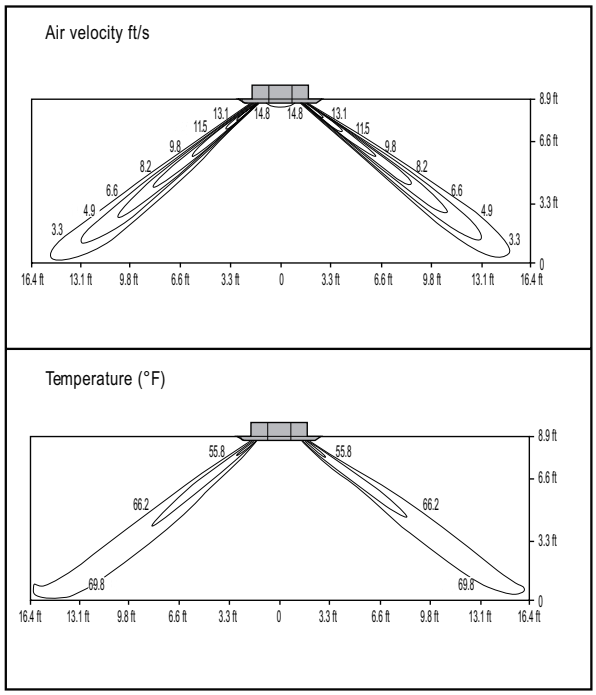
Heating

Discharge angle: 20°



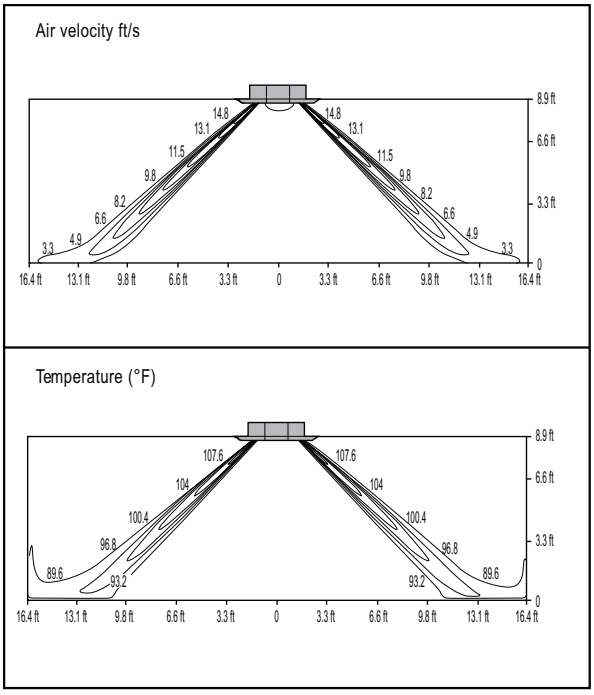
Cooling

Discharge angle: 40°



Heating

Discharge angle: 50°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 91: ARNU363TMA4, continued.

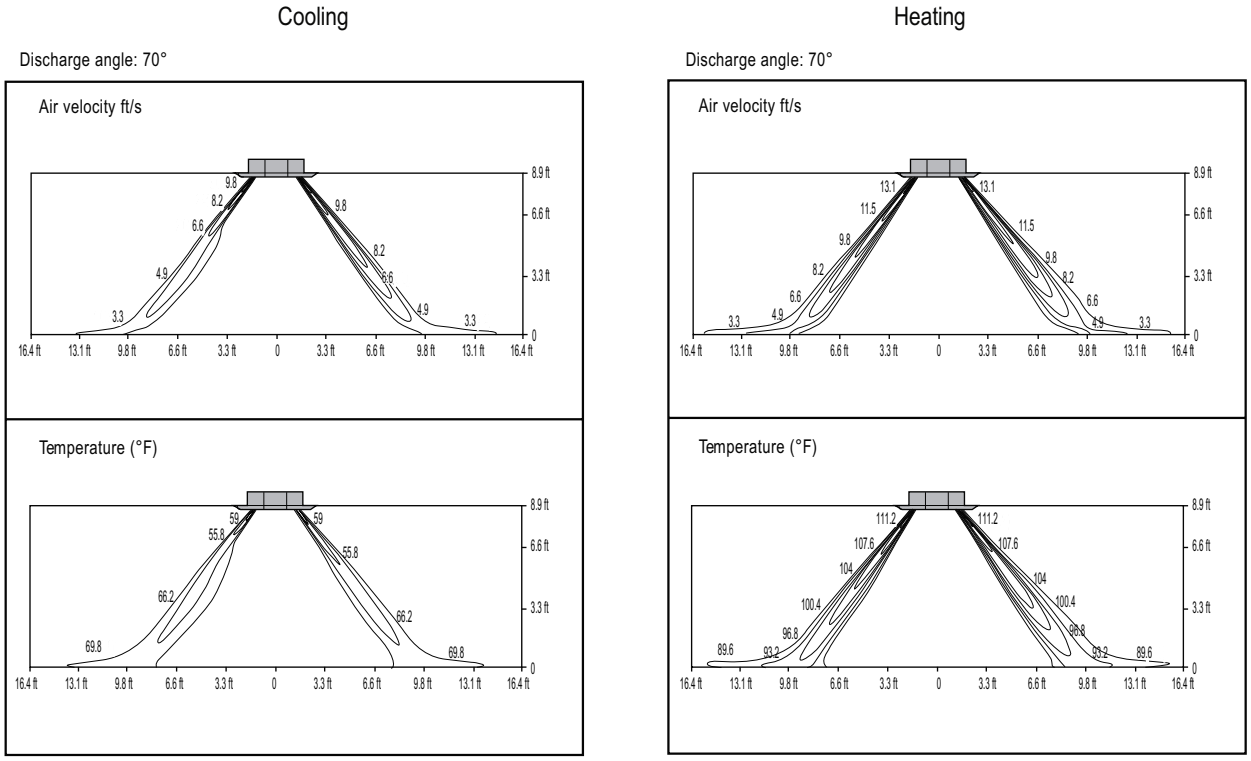
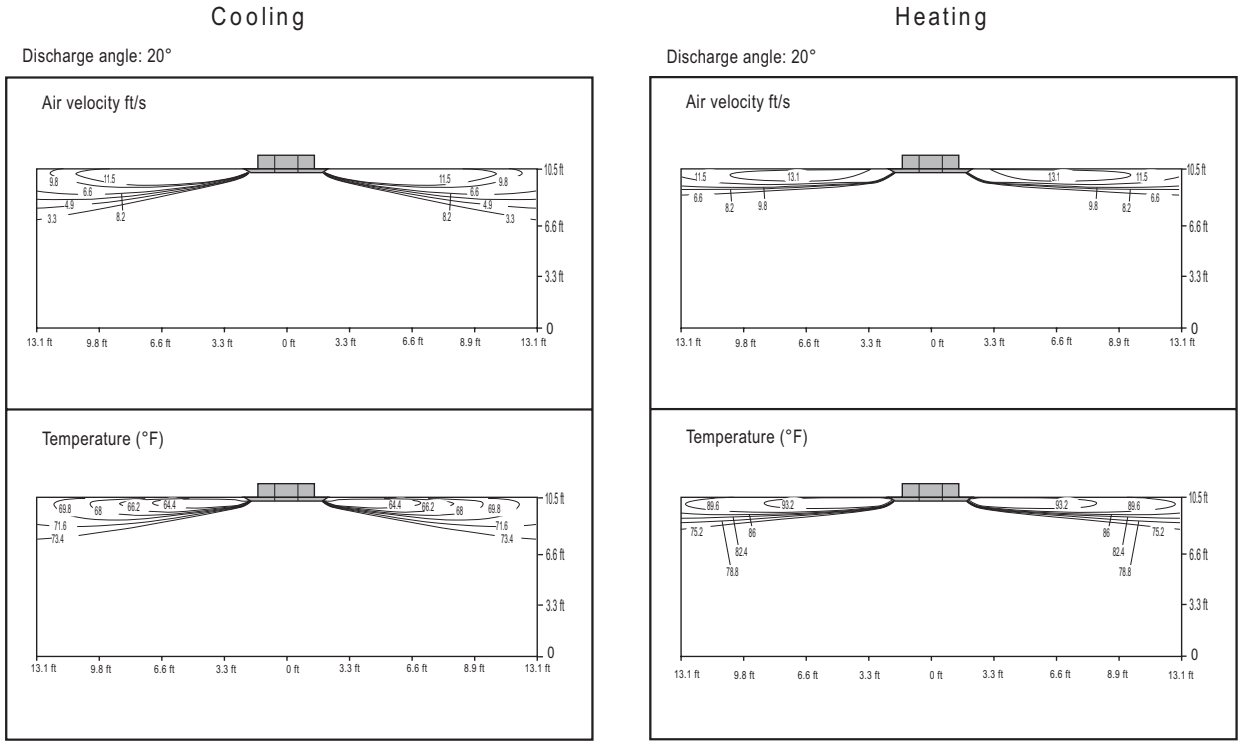


Figure 90: ARNU423TMC4.



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

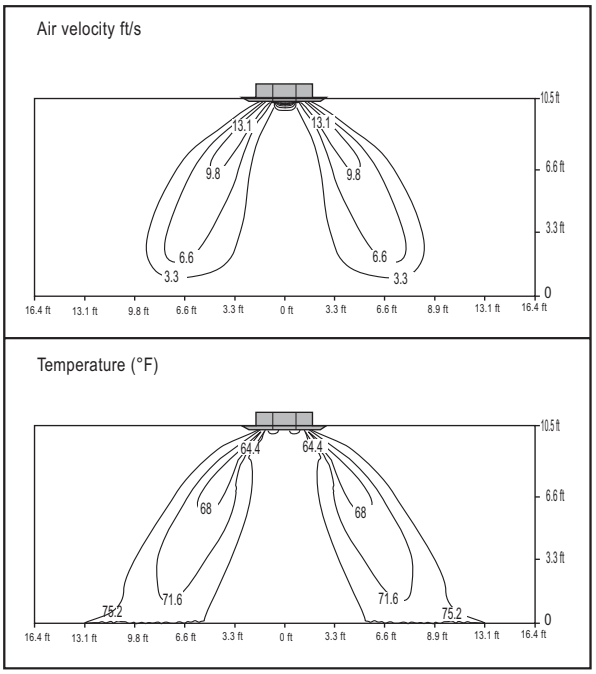
Air Velocity / Temperature Distribution

ARNU423TMC4

Figure 92: ARNU423TMC4, continued.

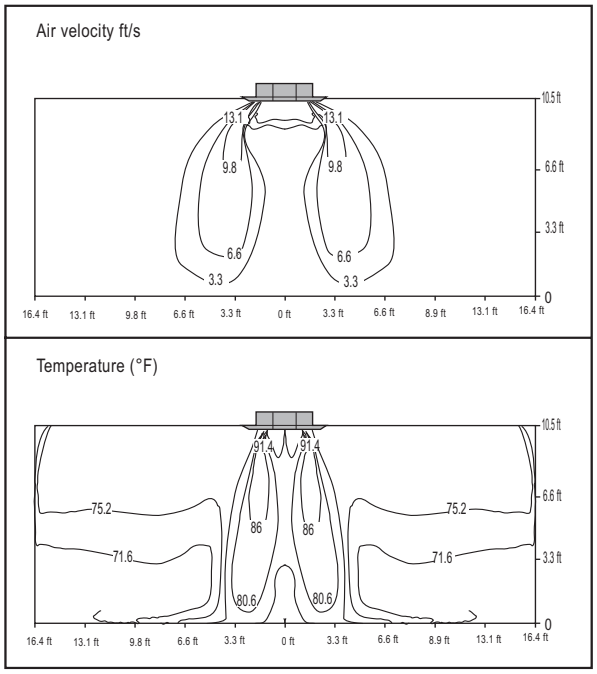
Cooling

Discharge angle: 40



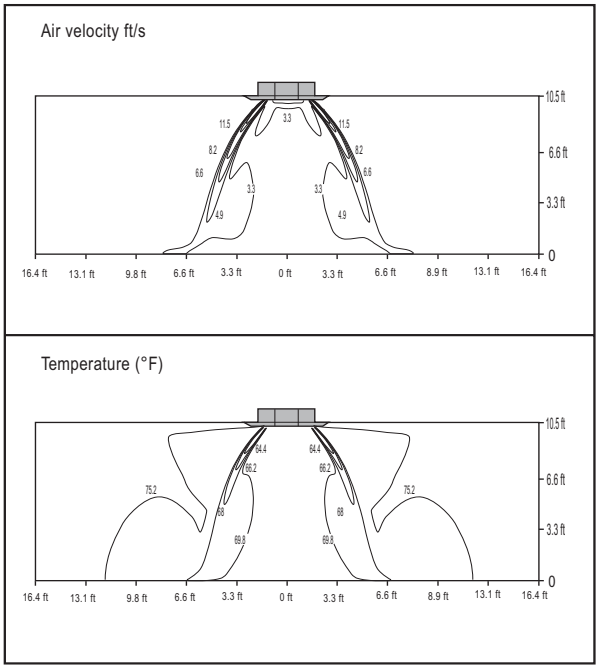
Heating

Discharge angle: 50°°



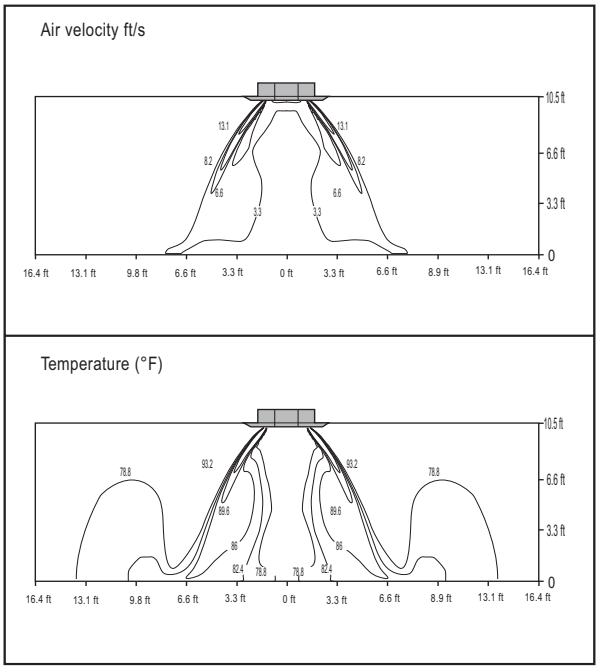
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°

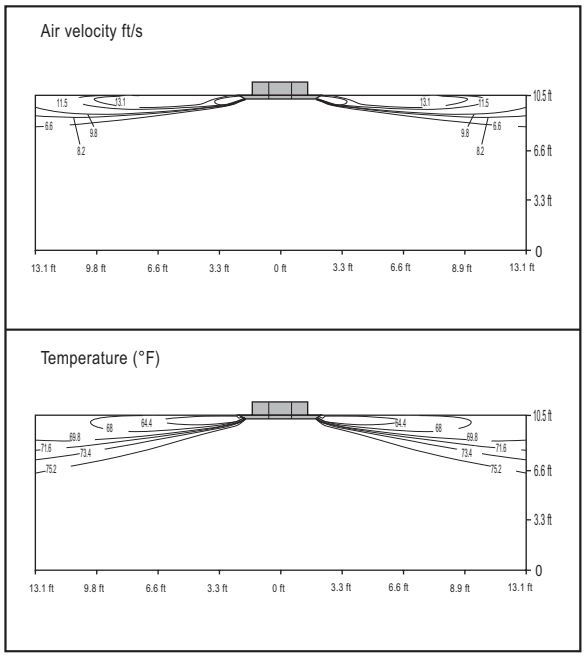


The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 93: ARNU483TMC4.

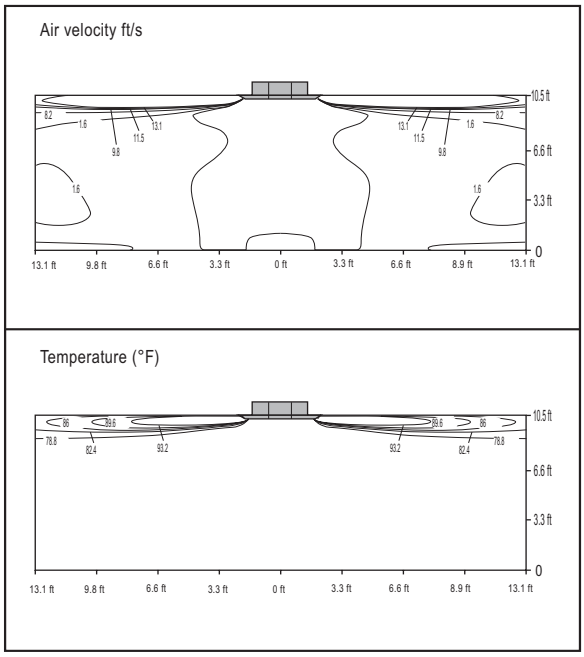
Cooling

Discharge angle: 20°



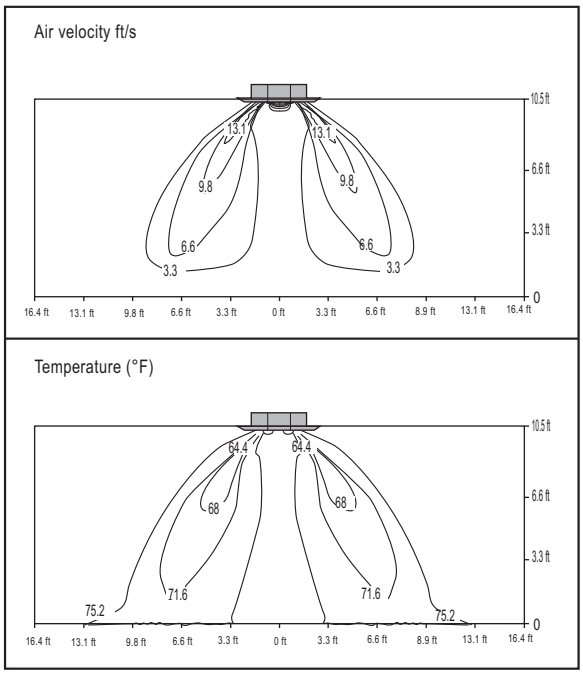
Heating

Discharge angle: 20°



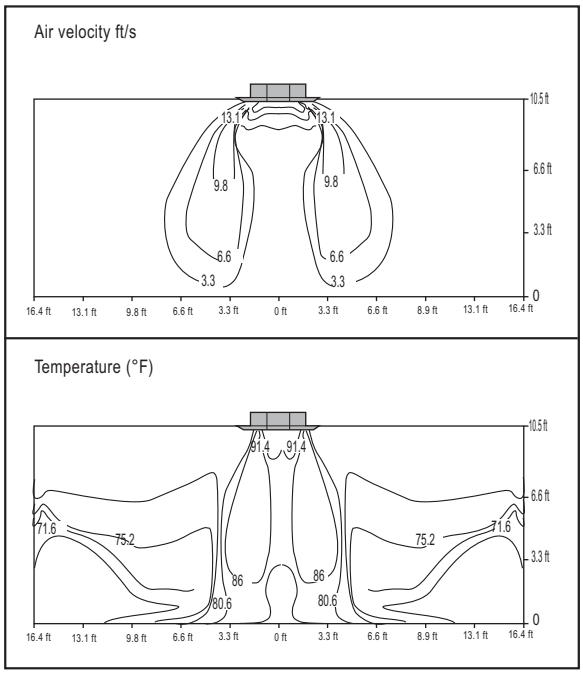
Cooling

Discharge angle: 40°



Heating

Discharge angle: 50°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

FOUR-WAY CEILING CASSETTE

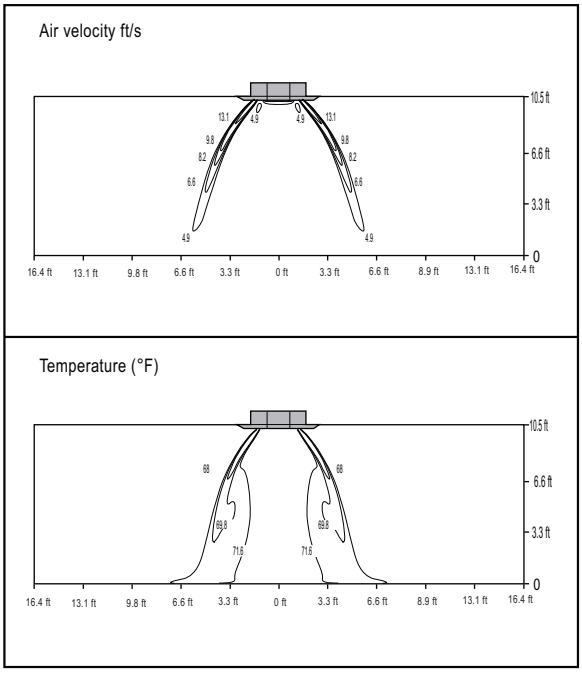
Air Velocity / Temperature Distribution

ARNU483TMC4

Figure 94: ARNU483TMC4, continued.

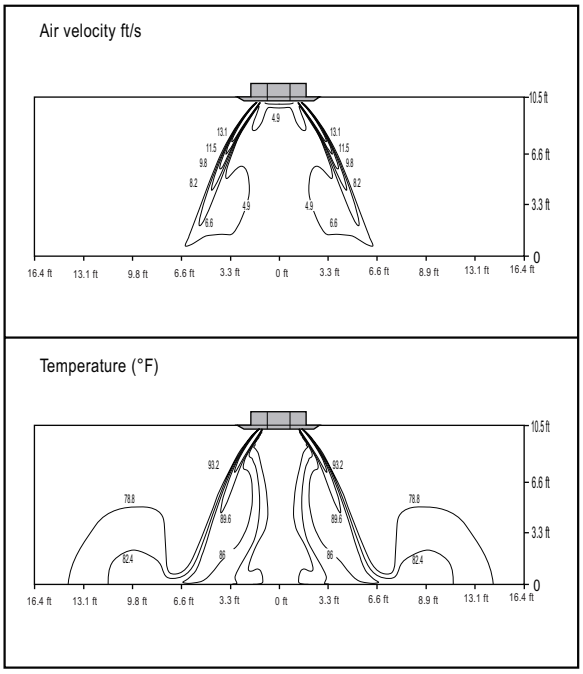
Cooling

Discharge angle: 70°



Heating

Discharge angle: 70°



The standard setup height is 8.9 ft. The charts above show the measurement distribution at the ceiling height of 8.9 ft with a high fan operating mode.

Figure 95: TR Frame Fresh Air Ventilation.

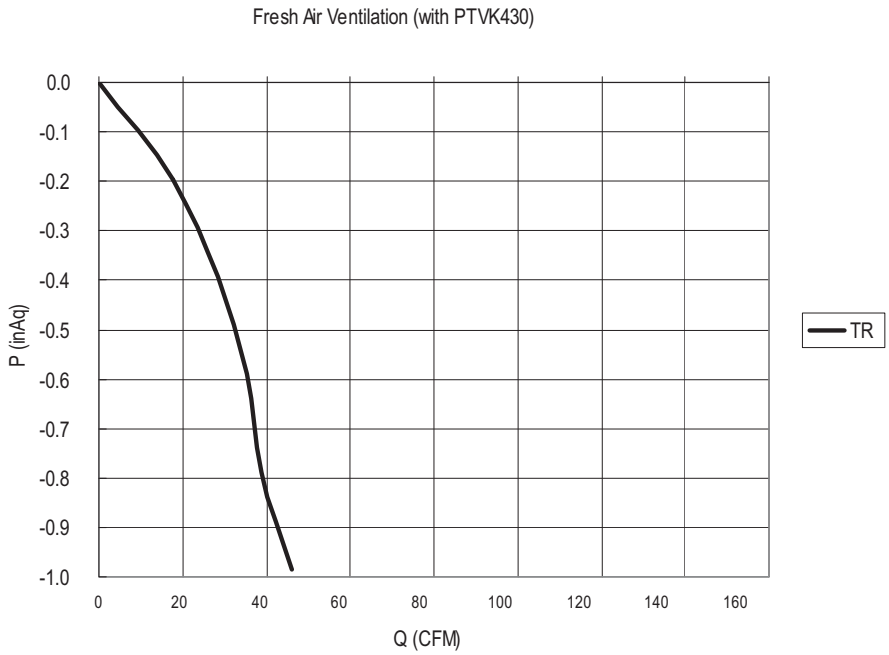


Figure 96: TQ Frame Fresh Air Ventilation.

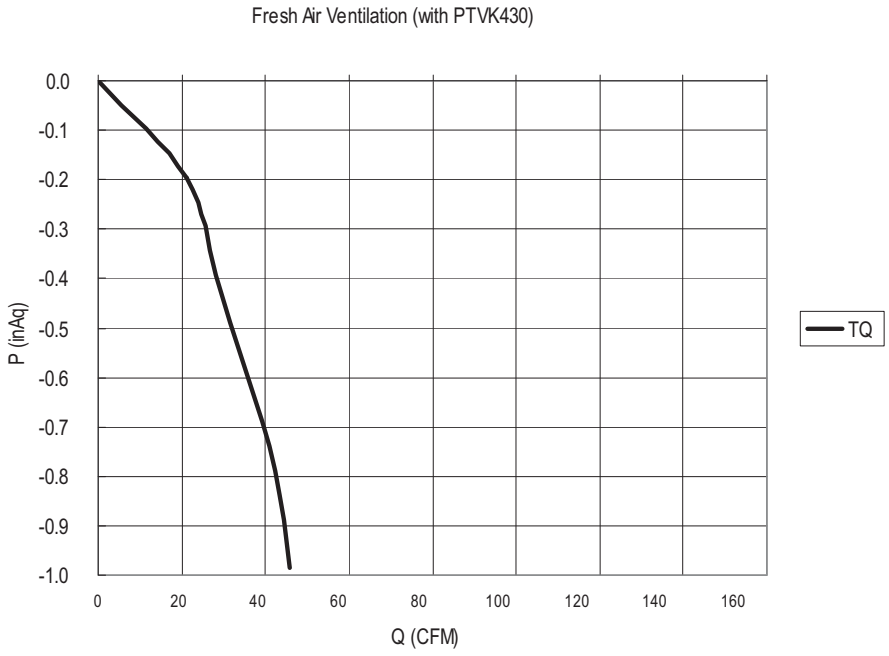


Figure 97: TP, TN and TM Frame Fresh Air Ventilation with PTVK430 Accessory.

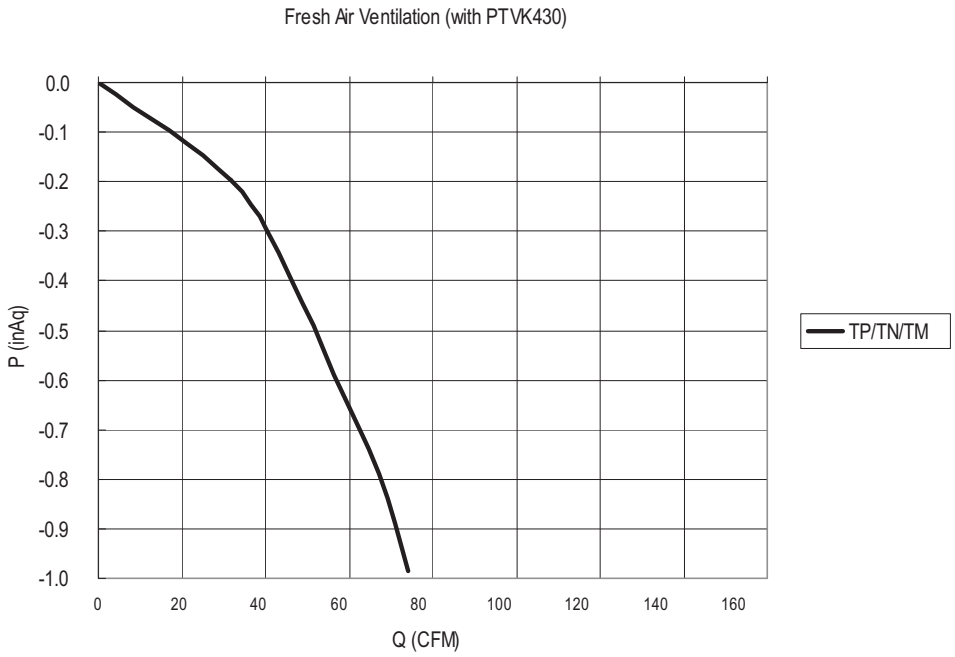
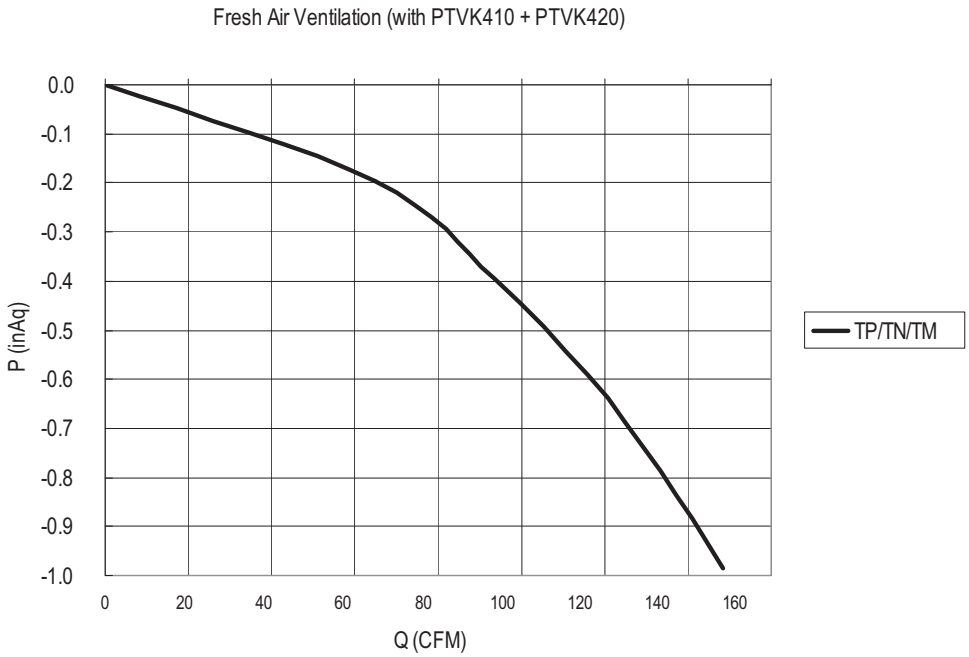


Figure 98: TP, TN and TM Frame Fresh Air Ventilation with PTVK410 + PTVK420 Accessories.



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FOUR-WAY CEILING CASSETTE

Cooling Capacity Tables

ARNU053TRC4, ARNU073TRC4, ARNU093TRC4

Table 40: ARNU053TRC4, ARNU073TRC4, ARNU093TRC4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU053TRC4 / 5.5	23	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	7.1	4.1
	25	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	7.1	4.1
	30	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	7.1	4.1
	35	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	7.1	4.1
	40	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	7.1	4.1
	45	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	7.1	4.1
	50	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	7.1	4.1
	55	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	7.1	4.1
	60	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	7.0	4.1
	65	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	6.9	4.0
	70	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	6.8	3.9
	75	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.5	4.1	6.7	3.9
	80	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.2	4.1	6.4	4.1	6.5	3.8
	85	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.1	4.1	6.2	3.9	6.3	3.7
	90	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	6.0	4.0	6.1	3.8	6.2	3.6
	95	3.6	3.0	4.4	3.4	5.0	3.6	**5.5**	**3.9**	5.9	4.0	6.0	3.8	6.1	3.6
	100	3.6	3.0	4.4	3.4	5.0	3.6	5.5	3.9	5.8	3.9	5.9	3.8	6.0	3.6
	105	3.6	3.0	4.2	3.2	4.7	3.5	5.3	3.7	5.4	3.7	5.7	3.6	5.8	3.5
	110	3.5	2.9	4.0	3.1	4.4	3.2	5.0	3.5	5.1	3.5	5.4	3.5	5.6	3.4
ARNU073TRC4 / 7.5	23	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.7	5.7
	25	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.7	5.7
	30	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.7	5.7
	35	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.7	5.7
	40	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.7	5.7
	45	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.7	5.7
	50	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.7	5.7
	55	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.7	5.7
	60	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.6	5.7
	65	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.5	5.6
	70	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.3	5.5
	75	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.9	5.8	9.1	5.4
	80	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.4	5.8	8.7	5.7	8.9	5.4
	85	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.3	5.7	8.4	5.5	8.6	5.2
	90	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	8.2	5.6	8.3	5.4	8.4	5.1
	95	5.0	4.1	6.0	4.8	6.8	5.1	**7.5**	**5.4**	8.0	5.6	8.2	5.3	8.3	5.1
	100	5.0	4.1	6.0	4.8	6.8	5.1	7.5	5.4	7.9	5.5	8.0	5.3	8.2	5.0
	105	5.0	4.1	5.7	4.5	6.5	4.9	7.2	5.2	7.4	5.2	7.7	5.1	7.9	4.9
	110	4.8	4.0	5.4	4.3	6.0	4.5	6.8	4.9	6.9	4.9	7.4	4.9	7.7	4.8
ARNU093TRC4 / 9.6	23	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.4	7.3
	25	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.4	7.3
	30	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.4	7.3
	35	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.4	7.3
	40	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.4	7.3
	45	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.4	7.3
	50	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.4	7.3
	55	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.4	7.4
	60	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.3	7.3
	65	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	12.1	7.2
	70	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	11.9	7.1
	75	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.4	7.4	11.6	6.9
	80	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.8	7.4	11.1	7.3	11.3	6.9
	85	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.7	7.4	10.8	7.0	10.9	6.6
	90	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.5	7.2	10.6	6.9	10.8	6.5
	95	6.3	5.3	7.7	6.1	8.6	6.5	**9.6**	**6.9**	10.3	7.2	10.5	6.8	10.7	6.5
	100	6.3	5.3	7.7	6.1	8.6	6.5	9.6	6.9	10.1	7.1	10.3	6.8	10.5	6.4
	105	6.3	5.3	7.3	5.8	8.3	6.2	9.2	6.6	9.4	6.6	9.9	6.5	10.1	6.3
	110	6.1	5.1	6.9	5.5	7.7	5.8	8.6	6.2	8.8	6.2	9.4	6.2	9.8	6.1

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

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Cooling Capacity Tables

ARNU123TRC4, ARNU153TQC4, ARNU183TQC4

Table 41: ARNU123TRC4, ARNU153TQC4, ARNU183TQC4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
		MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh	MBh
ARNU123TRC4 / 12.3	23	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.9	9.4
	25	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.9	9.4
	30	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.9	9.4
	35	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.9	9.4
	40	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.9	9.4
	45	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.9	9.4
	50	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.9	9.4
	55	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.9	9.4
	60	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.7	9.4
	65	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.5	9.2
	70	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	15.3	9.1
	75	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.6	9.4	14.9	8.9
	80	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.8	9.5	14.3	9.4	14.5	8.8
	85	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.7	9.4	13.8	9.0	14.0	8.5
	90	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	13.4	9.3	13.5	8.8	13.8	8.4
	95	8.1	6.8	9.8	7.8	11.1	8.3	**12.3**	**8.9**	13.2	9.2	13.4	8.8	13.7	8.3
	100	8.1	6.8	9.8	7.8	11.1	8.3	12.3	8.9	12.9	9.1	13.2	8.7	13.4	8.2
	105	8.1	6.8	9.3	7.4	10.6	8.0	11.8	8.5	12.1	8.5	12.7	8.4	12.9	8.0
	110	7.9	6.6	8.9	7.0	9.8	7.4	11.1	8.0	11.3	8.0	12.1	8.0	12.5	7.8
ARNU153TQC4 / 15.4	23	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.9	11.8
	25	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.9	11.8
	30	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.9	11.8
	35	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.9	11.8
	40	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.9	11.8
	45	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.9	11.8
	50	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.9	11.8
	55	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.9	11.8
	60	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.7	11.7
	65	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.4	11.5
	70	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	19.1	11.4
	75	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	18.3	11.8	18.6	11.1
	80	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.2	11.9	17.9	11.7	18.2	11.1
	85	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	17.1	11.8	17.2	11.2	17.6	10.6
	90	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	16.8	11.6	16.9	11.0	17.2	10.5
	95	10.2	8.5	12.3	9.8	13.9	10.4	**15.4**	**11.1**	16.5	11.5	16.8	11.0	17.1	10.4
	100	10.2	8.5	12.3	9.8	13.9	10.4	15.4	11.1	16.2	11.4	16.5	10.9	16.8	10.3
	105	10.2	8.5	11.7	9.3	13.2	10.0	14.8	10.6	15.1	10.6	15.9	10.5	16.2	10.0
	110	9.9	8.3	11.1	8.8	12.3	9.3	13.9	10.0	14.2	10.0	15.1	10.0	15.7	9.8
ARNU183TQC4 / 19.1	23	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.6	14.6
	25	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.6	14.6
	30	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.6	14.6
	35	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.6	14.6
	40	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.6	14.6
	45	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.6	14.6
	50	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.6	14.6
	55	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.6	14.6
	60	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.4	14.5
	65	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	24.1	14.3
	70	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	23.7	14.1
	75	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.7	14.6	23.1	13.8
	80	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.4	14.8	22.2	14.6	22.5	13.7
	85	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	21.2	14.6	21.4	13.9	21.8	13.2
	90	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	20.8	14.4	21.0	13.7	21.4	13.0
	95	12.6	10.6	15.3	12.1	17.2	13.0	**19.1**	**13.8**	20.4	14.3	20.8	13.6	21.2	12.9
	100	12.6	10.6	15.3	12.1	17.2	13.0	19.1	13.8	20.1	14.1	20.4	13.5	20.8	12.8
	105	12.6	10.6	14.5	11.5	16.4	12.4	18.3	13.2	18.7	13.2	19.7	13.0	20.1	12.5
	110	12.2	10.2	13.8	10.9	15.3	11.5	17.2	12.4	17.6	12.4	18.7	12.4	19.5	12.1

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Table 42: ARNU243TPC4, ARNU283TPC4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU243TPC4 / 24.2	23	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	31.2	18.5
	25	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	31.2	18.5
	30	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	31.2	18.5
	35	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	31.2	18.5
	40	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	31.2	18.5
	45	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	31.2	18.5
	50	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	31.2	18.5
	55	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	31.2	18.5
	60	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	31.0	18.4
	65	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	30.5	18.1
	70	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	30.0	17.9
	75	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.8	18.6	29.3	17.5
	80	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	27.1	18.7	28.1	18.4	28.6	17.4
	85	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	26.9	18.5	27.1	17.6	27.6	16.7
	90	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	26.4	18.2	26.6	17.4	27.1	16.4
	95	16.0	13.4	19.4	15.4	21.8	16.4	**24.2**	**17.4**	25.9	18.1	26.4	17.2	26.9	16.3
	100	16.0	13.4	19.4	15.4	21.8	16.4	24.2	17.4	25.4	17.8	25.9	17.1	26.4	16.2
	105	16.0	13.4	18.4	14.6	20.8	15.7	23.2	16.7	23.7	16.7	24.9	16.5	25.4	15.8
	110	15.5	13.0	17.4	13.8	19.4	14.6	21.8	15.7	22.3	15.7	23.7	15.7	24.7	15.3
ARNU283TPC4 / 28.0	23	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	36.1	21.4
	25	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	36.1	21.4
	30	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	36.1	21.4
	35	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	36.1	21.4
	40	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	36.1	21.4
	45	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	36.1	21.4
	50	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	36.1	21.4
	55	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	36.1	21.5
	60	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	35.8	21.3
	65	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	35.3	21.0
	70	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	34.7	20.7
	75	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	33.3	21.5	33.9	20.2
	80	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.4	21.6	32.5	21.3	33.0	20.1
	85	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	31.1	21.5	31.4	20.4	31.9	19.3
	90	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	30.5	21.1	30.8	20.1	31.4	19.0
	95	18.5	15.5	22.4	17.8	25.2	19.0	**28.0**	**20.2**	30.0	21.0	30.5	20.0	31.1	18.9
	100	18.5	15.5	22.4	17.8	25.2	19.0	28.0	20.2	29.4	20.6	30.0	19.8	30.5	18.7
	105	18.5	15.5	21.3	16.9	24.1	18.2	26.9	19.4	27.4	19.3	28.8	19.1	29.4	18.3
	110	17.9	15.0	20.2	16.0	22.4	16.9	25.2	18.1	25.8	18.2	27.4	18.2	28.6	17.7

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

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Cooling Capacity Tables

ARNU073TNA4, ARNU093TNA4, ARNU123TNA4

Table 43: ARNU073TNA4, ARNU093TNA4, ARNU123TNA4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU073TNA4 / 7.5	23	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.7	5.9
	25	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.7	5.9
	30	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.7	5.9
	35	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.7	5.9
	40	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.7	5.9
	45	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.7	5.9
	50	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.7	5.9
	55	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.7	5.9
	60	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.6	5.9
	65	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.4	5.8
	70	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.3	5.7
	75	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.9	5.9	9.1	5.6
	80	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.4	6.0	8.7	5.9	8.8	5.5
	85	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.3	5.9	8.4	5.6	8.6	5.3
	90	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	8.2	5.8	8.3	5.5	8.4	5.2
	95	4.9	4.2	6.0	4.9	6.8	5.2	**7.5**	**5.6**	8.0	5.8	8.2	5.5	8.3	5.2
	100	4.9	4.2	6.0	4.9	6.8	5.2	7.5	5.6	7.9	5.7	8.0	5.4	8.2	5.1
	105	4.9	4.2	5.7	4.6	6.4	5.0	7.2	5.3	7.3	5.3	7.7	5.2	7.9	5.0
	110	4.8	4.1	5.4	4.4	6.0	4.6	6.8	5.0	6.9	5.0	7.3	5.0	7.7	4.9
ARNU093TNA4 / 9.6	23	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.4	7.5
	25	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.4	7.5
	30	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.4	7.5
	35	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.4	7.5
	40	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.4	7.5
	45	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.4	7.5
	50	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.4	7.5
	55	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.4	7.5
	60	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.3	7.5
	65	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	12.1	7.4
	70	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	11.9	7.3
	75	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.4	7.5	11.6	7.1
	80	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.8	7.6	11.1	7.5	11.3	7.1
	85	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.6	7.5	10.8	7.2	11.0	6.8
	90	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.5	7.4	10.6	7.1	10.8	6.7
	95	6.3	5.4	7.7	6.3	8.6	6.7	**9.6**	**7.1**	10.3	7.4	10.5	7.0	10.6	6.6
	100	6.3	5.4	7.7	6.3	8.6	6.7	9.6	7.1	10.1	7.3	10.3	6.9	10.5	6.6
	105	6.3	5.4	7.3	5.9	8.2	6.4	9.2	6.8	9.4	6.8	9.9	6.7	10.1	6.4
	110	6.2	5.3	6.9	5.6	7.7	5.9	8.6	6.4	8.8	6.4	9.4	6.4	9.8	6.2
ARNU123TNA4 / 12.3	23	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.9	9.7
	25	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.9	9.7
	30	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.9	9.7
	35	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.9	9.7
	40	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.9	9.7
	45	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.9	9.7
	50	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.9	9.7
	55	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.9	9.7
	60	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.7	9.6
	65	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.5	9.5
	70	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	15.3	9.3
	75	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.7	9.7	14.9	9.1
	80	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.8	9.8	14.2	9.6	14.5	9.1
	85	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.6	9.7	13.8	9.2	14.0	8.7
	90	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	13.4	9.5	13.5	9.1	13.8	8.6
	95	8.1	7.0	9.8	8.0	11.1	8.5	**12.3**	**9.1**	13.2	9.5	13.4	9.0	13.6	8.5
	100	8.1	7.0	9.8	8.0	11.1	8.5	12.3	9.1	12.9	9.3	13.2	8.9	13.4	8.4
	105	8.1	7.0	9.3	7.6	10.6	8.2	11.8	8.7	12.0	8.7	12.7	8.6	12.9	8.2
	110	7.9	6.7	8.9	7.2	9.8	7.6	11.1	8.2	11.3	8.2	12.0	8.2	12.6	8.0

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Table 44: ARNU153TNA4, ARNU183TNA4, ARNU243TNA4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU153TNA4 / 15.4	23	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.9	12.1
	25	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.9	12.1
	30	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.9	12.1
	35	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.9	12.1
	40	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.9	12.1
	45	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.9	12.1
	50	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.9	12.1
	55	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.9	12.1
	60	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.7	12.0
	65	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.4	11.8
	70	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	19.1	11.7
	75	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	18.4	12.1	18.6	11.4
	80	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.3	12.2	17.8	12.0	18.2	11.3
	85	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	17.1	12.1	17.3	11.5	17.6	10.9
	90	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	16.8	11.9	16.9	11.3	17.3	10.8
	95	10.1	8.7	12.3	10.1	13.9	10.7	**15.4**	**11.4**	16.5	11.8	16.8	11.3	17.1	10.6
	100	10.1	8.7	12.3	10.1	13.9	10.7	15.4	11.4	16.2	11.7	16.5	11.1	16.8	10.6
	105	10.1	8.7	11.7	9.5	13.2	10.2	14.8	10.9	15.1	10.9	15.8	10.8	16.2	10.3
	110	9.9	8.5	11.1	9.0	12.3	9.5	13.9	10.2	14.2	10.2	15.1	10.2	15.7	10.0
ARNU183TNA4 / 19.1	23	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.7	16.2
	25	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.7	16.2
	30	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.7	16.2
	35	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.7	16.2
	40	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.7	16.2
	45	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.7	16.2
	50	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.7	16.2
	55	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.7	16.2
	60	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.4	16.1
	65	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	24.0	15.9
	70	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	23.7	15.6
	75	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.8	16.2	23.1	15.3
	80	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.4	16.4	22.1	16.1	22.5	15.2
	85	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	21.2	16.2	21.4	15.5	21.8	14.6
	90	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	20.9	16.0	21.0	15.2	21.4	14.4
	95	12.6	11.7	15.3	13.5	17.2	14.3	**19.1**	**15.3**	20.5	15.9	20.9	15.1	21.2	14.2
	100	12.6	11.7	15.3	13.5	17.2	14.3	19.1	15.3	20.1	15.6	20.5	14.9	20.9	14.2
	105	12.6	11.7	14.5	12.8	16.4	13.7	18.3	14.6	18.7	14.6	19.7	14.4	20.1	13.8
	110	12.3	11.3	13.8	12.1	15.3	12.8	17.2	13.7	17.6	13.7	18.7	13.7	19.5	13.4
ARNU243TNA4 / 24.2	23	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	25	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	30	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	35	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	40	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	45	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	50	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	55	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	60	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.0	20.7
	65	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	30.5	20.4
	70	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	30.0	20.0
	75	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	29.2	19.6
	80	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.0	20.7	28.5	19.5
	85	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	26.8	20.8	27.1	19.8	27.6	18.7
	90	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	26.4	20.5	26.6	19.5	27.1	18.5
	95	15.9	15.0	19.4	17.3	21.8	18.4	**24.2**	**19.6**	25.9	20.4	26.4	19.4	26.8	18.3
	100	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	25.4	20.0	25.9	19.2	26.4	18.2
	105	15.9	15.0	18.4	16.4	20.8	17.6	23.2	18.7	23.7	18.7	24.9	18.5	25.4	17.7
	110	15.5	14.5	17.4	15.5	19.4	16.4	21.8	17.6	22.3	17.6	23.7	17.6	24.7	17.2

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

FOUR-WAY CEILING CASSETTE

Cooling Capacity Tables

ARNU363TNC4

Table 45: ARNU363TNC4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU363TNC4 / 36.2	23	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	46.7	27.7
	25	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	46.7	27.7
	30	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	46.7	27.7
	35	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	46.7	27.7
	40	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	46.7	27.7
	45	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	46.7	27.7
	50	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	46.7	27.7
	55	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	46.7	27.7
	60	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	46.3	27.5
	65	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	45.6	27.1
	70	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	44.9	26.7
	75	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	43.1	27.8	43.8	26.1
	80	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.5	28.0	42.0	27.6	42.7	26.0
	85	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	40.2	27.7	40.5	26.4	41.3	25.0
	90	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	39.5	27.2	39.8	26.0	40.5	24.6
	95	23.9	20.0	29.0	23.0	32.6	24.6	**36.2**	**26.1**	38.7	27.1	39.5	25.8	40.2	24.4
	100	23.9	20.0	29.0	23.0	32.6	24.6	36.2	26.1	38.0	26.7	38.7	25.6	39.5	24.2
	105	23.9	20.0	27.5	21.8	31.1	23.5	34.8	25.0	35.5	25.0	37.3	24.7	38.0	23.6
	110	23.2	19.4	26.1	20.7	29.0	21.8	32.6	23.5	33.3	23.5	35.5	23.5	36.9	22.9

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Table 46: ARNU243TMA4, ARNU283TMA4, ARNU363TMA4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU243TMA4 / 24.2	23	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	25	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	30	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	35	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	40	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	45	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	50	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	55	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.3	20.8
	60	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	31.0	20.7
	65	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	30.5	20.4
	70	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	30.0	20.0
	75	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.8	20.8	29.2	19.6
	80	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	27.1	21.0	28.0	20.7	28.5	19.5
	85	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	26.8	20.8	27.1	19.8	27.6	18.7
	90	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	26.4	20.5	26.6	19.5	27.1	18.5
	95	15.9	15.0	19.4	17.3	21.8	18.4	**24.2**	**19.6**	25.9	20.4	26.4	19.4	26.8	18.3
	100	15.9	15.0	19.4	17.3	21.8	18.4	24.2	19.6	25.4	20.0	25.9	19.2	26.4	18.2
	105	15.9	15.0	18.4	16.4	20.8	17.6	23.2	18.7	23.7	18.7	24.9	18.5	25.4	17.7
	110	15.5	14.5	17.4	15.5	19.4	16.4	21.8	17.6	22.3	17.6	23.7	17.6	24.7	17.2
ARNU283TMA4 / 28.0	23	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	36.2	22.6
	25	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	36.2	22.6
	30	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	36.2	22.6
	35	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	36.2	22.6
	40	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	36.2	22.6
	45	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	36.2	22.6
	50	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	36.2	22.6
	55	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	36.2	22.6
	60	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	35.8	22.5
	65	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	35.2	22.1
	70	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	34.8	21.8
	75	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	33.4	22.6	33.8	21.3
	80	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.4	22.8	32.4	22.5	33.0	21.2
	85	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	31.0	22.6	31.4	21.5	32.0	20.3
	90	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	30.6	22.2	30.8	21.2	31.4	20.1
	95	18.4	16.3	22.4	18.8	25.2	20.0	**28.0**	**21.3**	30.0	22.1	30.6	21.0	31.0	19.8
	100	18.4	16.3	22.4	18.8	25.2	20.0	28.0	21.3	29.4	21.8	30.0	20.8	30.6	19.7
	105	18.4	16.3	21.2	17.8	24.0	19.1	26.8	20.3	27.4	20.3	28.8	20.1	29.4	19.2
	110	18.0	15.8	20.2	16.9	22.4	17.8	25.2	19.1	25.8	19.1	27.4	19.1	28.6	18.6
ARNU363TMA4 / 36.2	23	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	46.8	28.4
	25	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	46.8	28.4
	30	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	46.8	28.4
	35	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	46.8	28.4
	40	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	46.8	28.4
	45	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	46.8	28.4
	50	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	46.8	28.4
	55	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	46.8	28.4
	60	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	46.3	28.3
	65	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	45.6	27.8
	70	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	44.9	27.4
	75	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	43.1	28.4	43.7	26.8
	80	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.6	28.7	41.9	28.3	42.7	26.6
	85	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	40.1	28.4	40.6	27.1	41.3	25.6
	90	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	39.5	28.0	39.8	26.6	40.6	25.3
	95	23.8	20.5	29.0	23.6	32.6	25.1	**36.2**	**26.8**	38.8	27.8	39.5	26.5	40.1	25.0
	100	23.8	20.5	29.0	23.6	32.6	25.1	36.2	26.8	38.0	27.4	38.8	26.2	39.5	24.8
	105	23.8	20.5	27.5	22.4	31.1	24.1	34.7	25.6	35.4	25.6	37.3	25.3	38.0	24.2
	110	23.2	19.9	26.1	21.2	29.0	22.4	32.6	24.1	33.3	24.1	35.4	24.1	37.0	23.5

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

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Cooling Capacity Tables

ARNU423TMC4, ARNU483TMC4

Table 47: ARNU423TMC4, ARNU483TMC4 Cooling Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp. (°F DB)	Indoor Air Temperature (°F DB / WB)													
		68 / 57		73 / 61		79 / 64		80 / 67		85 / 70		88 / 73		91 / 76	
		TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh	TC MBh	SHC MBh
ARNU423TMC4 / 42.0	23	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	54.2	32.1
	25	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	54.2	32.1
	30	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	54.2	32.1
	35	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	54.2	32.1
	40	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	54.2	32.1
	45	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	54.2	32.1
	50	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	54.2	32.1
	55	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	54.2	32.2
	60	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	53.8	32.0
	65	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	52.9	31.5
	70	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	52.1	31.0
	75	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	50.0	32.2	50.8	30.3
	80	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	47.0	32.5	48.7	32.0	49.6	30.2
	85	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	46.6	32.2	47.0	30.6	47.9	29.0
	90	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	45.8	31.6	46.2	30.1	47.0	28.5
	95	27.7	23.2	33.6	26.7	37.8	28.5	**42.0**	**30.2**	44.9	31.4	45.8	29.9	46.6	28.3
	100	27.7	23.2	33.6	26.7	37.8	28.5	42.0	30.2	44.1	31.0	44.9	29.7	45.8	28.1
	105	27.7	23.2	31.9	25.3	36.1	27.2	40.3	29.0	41.2	29.0	43.3	28.6	44.1	27.4
	110	26.9	22.5	30.2	24.0	33.6	25.3	37.8	27.2	38.6	27.2	41.2	27.3	42.8	26.6
ARNU483TMC4 / 48.1	23	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	62.0	36.8
	25	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	62.0	36.8
	30	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	62.0	36.8
	35	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	62.0	36.8
	40	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	62.0	36.8
	45	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	62.0	36.8
	50	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	62.0	36.8
	55	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	62.0	36.8
	60	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	61.6	36.6
	65	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	60.6	36.1
	70	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	59.6	35.5
	75	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	57.2	36.9	58.2	34.7
	80	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.9	37.2	55.8	36.7	56.8	34.5
	85	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	53.4	36.9	53.9	35.0	54.8	33.2
	90	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	52.4	36.2	52.9	34.5	53.9	32.7
	95	31.7	26.6	38.5	30.6	43.3	32.6	**48.1**	**34.6**	51.5	36.0	52.4	34.3	53.4	32.5
	100	31.7	26.6	38.5	30.6	43.3	32.6	48.1	34.6	50.5	35.5	51.5	34.0	52.4	32.1
	105	31.7	26.6	36.6	29.0	41.4	31.2	46.2	33.2	47.1	33.2	49.5	32.8	50.5	31.4
	110	30.8	25.8	34.6	27.5	38.5	29.0	43.3	31.2	44.3	31.2	47.1	31.2	49.1	30.5

TC: Total Capacity (MBh); SHC: Sensible Heat Capacity (MBh).

Table 48: ARNU053TRC4, ARNU073TRC4, ARNU093TRC4, ARNU123TRC4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh
ARNU053TRC4 / 5.5	-4	-4.4	4.1	4.1	4.1	4.1	4.0	4.0	4.0	4.0
	0	-0.4	4.2	4.2	4.2	4.2	4.2	4.1	4.1	4.1
	5.0	4.5	4.8	4.7	4.6	4.6	4.6	4.6	4.6	4.6
	10.0	9.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	15.0	14.0	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1
	20.0	19.0	5.6	5.6	5.6	5.6	5.4	5.4	5.3	5.3
	25.0	23.0	5.8	5.8	5.8	5.8	5.8	5.7	5.6	5.6
	30.0	28.0	5.9	5.9	5.9	5.9	5.9	5.8	5.6	5.4
	35.0	32.0	6.1	6.1	6.1	6.1	6.0	5.9	5.6	5.3
	40.0	36.0	6.3	6.3	6.3	6.3	6.1	5.9	5.6	5.3
	45.0	41.0	6.6	6.6	6.6	6.4	6.1	5.9	5.6	5.3
	47.0	43.0	6.8	6.8	6.7	6.4	**6.1**	5.9	5.6	5.3
	50.0	46.0	7.3	7.0	6.7	6.4	6.1	5.9	5.6	5.3
	55.0	51.0	7.5	7.1	6.7	6.4	6.1	5.9	5.6	5.3
	60.0	56.0	7.5	7.1	6.7	6.4	6.1	5.9	5.6	5.3
ARNU073TRC4 / 7.5	-4	-4.4	5.7	5.7	5.7	5.7	5.6	5.6	5.6	5.6
	0	-0.4	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8
	5.0	4.5	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	10.0	9.0	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8
	15.0	14.0	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1
	20.0	19.0	7.7	7.7	7.7	7.7	7.5	7.5	7.4	7.3
	25.0	23.0	8.1	8.1	8.1	8.1	8.1	7.9	7.8	7.7
	30.0	28.0	8.2	8.2	8.2	8.2	8.2	8.1	7.8	7.6
	35.0	32.0	8.5	8.5	8.5	8.5	8.4	8.2	7.8	7.4
	40.0	36.0	8.8	8.8	8.8	8.8	8.5	8.2	7.8	7.4
	45.0	41.0	9.2	9.2	9.2	8.9	8.5	8.2	7.8	7.4
	47.0	43.0	9.5	9.4	9.4	8.9	**8.5**	8.2	7.8	7.4
	50.0	46.0	10.2	9.8	9.4	8.9	8.5	8.2	7.8	7.4
	55.0	51.0	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
	60.0	56.0	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
ARNU093TRC4 / 9.6	-4	-4.4	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.2
	0	-0.4	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.4
	5.0	4.5	8.5	8.4	8.3	8.3	8.3	8.3	8.3	8.3
	10.0	9.0	8.8	8.8	8.8	8.7	8.7	8.7	8.7	8.7
	15.0	14.0	9.4	9.4	9.4	9.4	9.4	9.4	9.3	9.2
	20.0	19.0	9.9	9.9	9.9	9.9	9.7	9.7	9.5	9.4
	25.0	23.0	10.4	10.4	10.4	10.4	10.4	10.1	10.0	9.9
	30.0	28.0	10.6	10.6	10.6	10.6	10.6	10.4	10.0	9.7
	35.0	32.0	10.9	10.9	10.9	10.9	10.8	10.6	10.0	9.5
	40.0	36.0	11.3	11.3	11.3	11.3	10.9	10.6	10.0	9.5
	45.0	41.0	11.8	11.8	11.8	11.4	10.9	10.6	10.0	9.5
	47.0	43.0	12.2	12.1	12.0	11.4	**10.9**	10.6	10.0	9.5
	50.0	46.0	13.1	12.5	12.0	11.4	10.9	10.6	10.0	9.5
	55.0	51.0	13.3	12.6	12.0	11.4	10.9	10.6	10.0	9.5
	60.0	56.0	13.3	12.6	12.0	11.4	10.9	10.6	10.0	9.5
ARNU123TRC4 / 12.3	-4	-4.4	9.1	9.1	9.1	9.1	9.0	9.0	9.0	9.0
	0	-0.4	9.4	9.4	9.4	9.4	9.4	9.2	9.2	9.2
	5.0	4.5	10.6	10.5	10.3	10.3	10.3	10.3	10.3	10.3
	10.0	9.0	11.0	11.0	11.0	10.9	10.9	10.9	10.9	10.9
	15.0	14.0	11.7	11.7	11.7	11.7	11.7	11.7	11.6	11.4
	20.0	19.0	12.4	12.4	12.4	12.4	12.1	12.1	11.9	11.7
	25.0	23.0	12.9	12.9	12.9	12.9	12.9	12.6	12.5	12.4
	30.0	28.0	13.2	13.2	13.2	13.2	13.2	12.9	12.5	12.1
	35.0	32.0	13.6	13.6	13.6	13.6	13.5	13.2	12.5	11.9
	40.0	36.0	14.1	14.1	14.1	14.1	13.6	13.2	12.5	11.9
	45.0	41.0	14.7	14.7	14.7	14.3	13.6	13.2	12.5	11.9
	47.0	43.0	15.2	15.1	15.0	14.3	**13.6**	13.2	12.5	11.9
	50.0	46.0	16.4	15.6	15.0	14.3	13.6	13.2	12.5	11.9
	55.0	51.0	16.6	15.8	15.0	14.3	13.6	13.2	12.5	11.9
	60.0	56.0	16.6	15.8	15.0	14.3	13.6	13.2	12.5	11.9

TC: Total Capacity (MBh).

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Heating Capacity Tables

ARNU153TQC4, ARNU183TQC4

Table 49: ARNU153TQC4, ARNU183TQC4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh
ARNU153TQC4 / 15.4	-4	-4.4	11.5	11.5	11.5	11.5	11.3	11.3	11.3	11.3
	0	-0.4	11.8	11.8	11.8	11.8	11.8	11.6	11.6	11.6
	5.0	4.5	13.3	13.2	13.0	13.0	13.0	13.0	13.0	13.0
	10.0	9.0	13.9	13.9	13.9	13.7	13.7	13.7	13.7	13.7
	15.0	14.0	14.7	14.7	14.7	14.7	14.7	14.7	14.5	14.4
	20.0	19.0	15.6	15.6	15.6	15.6	15.2	15.2	15.0	14.8
	25.0	23.0	16.2	16.2	16.2	16.2	16.2	15.9	15.7	15.6
	30.0	28.0	16.6	16.6	16.6	16.6	16.6	16.2	15.7	15.2
	35.0	32.0	17.1	17.1	17.1	17.1	16.9	16.6	15.7	14.9
	40.0	36.0	17.8	17.8	17.8	17.8	17.1	16.6	15.7	14.9
	45.0	41.0	18.5	18.5	18.5	18.0	17.1	16.6	15.7	14.9
	47.0	43.0	19.2	19.0	18.8	18.0	**17.1**	16.6	15.7	14.9
	50.0	46.0	20.6	19.7	18.8	18.0	17.1	16.6	15.7	14.9
	55.0	51.0	20.9	19.8	18.8	18.0	17.1	16.6	15.7	14.9
	60.0	56.0	20.9	19.8	18.8	18.0	17.1	16.6	15.7	14.9
ARNU183TQC4 / 19.1	-4	-4.4	14.4	14.4	14.4	14.4	14.2	14.2	14.2	14.2
	0	-0.4	14.8	14.8	14.8	14.8	14.8	14.6	14.6	14.6
	5.0	4.5	16.8	16.6	16.3	16.3	16.3	16.3	16.3	16.3
	10.0	9.0	17.4	17.4	17.4	17.2	17.2	17.2	17.2	17.2
	15.0	14.0	18.5	18.5	18.5	18.5	18.5	18.5	18.3	18.1
	20.0	19.0	19.6	19.6	19.6	19.6	19.1	19.1	18.8	18.5
	25.0	23.0	20.4	20.4	20.4	20.4	20.4	20.0	19.8	19.6
	30.0	28.0	20.9	20.9	20.9	20.9	20.9	20.4	19.8	19.2
	35.0	32.0	21.5	21.5	21.5	21.5	21.3	20.9	19.8	18.8
	40.0	36.0	22.4	22.4	22.4	22.4	21.5	20.9	19.8	18.8
	45.0	41.0	23.2	23.2	23.2	22.6	21.5	20.9	19.8	18.8
	47.0	43.0	24.1	23.9	23.7	22.6	**21.5**	20.9	19.8	18.8
	50.0	46.0	25.8	24.7	23.7	22.6	21.5	20.9	19.8	18.8
	55.0	51.0	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8
	60.0	56.0	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8

TC: Total Capacity (MBh).

Table 50: ARNU243TPC4, ARNU283TPC4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh
ARNU243TPC4 / 24.2	-4	-4.4	18.3	18.3	18.3	18.3	18.0	18.0	18.0	18.0
	0	-0.4	18.8	18.8	18.8	18.8	18.8	18.6	18.6	18.6
	5.0	4.5	21.3	21.0	20.7	20.7	20.7	20.7	20.7	20.7
	10.0	9.0	22.1	22.1	22.1	21.8	21.8	21.8	21.8	21.8
	15.0	14.0	23.5	23.5	23.5	23.5	23.5	23.5	23.2	22.9
	20.0	19.0	24.8	24.8	24.8	24.8	24.2	24.2	23.9	23.6
	25.0	23.0	25.9	25.9	25.9	25.9	25.9	25.4	25.1	24.8
	30.0	28.0	26.5	26.5	26.5	26.5	26.5	25.9	25.1	24.3
	35.0	32.0	27.3	27.3	27.3	27.3	27.0	26.5	25.1	23.8
	40.0	36.0	28.4	28.4	28.4	28.4	27.3	26.5	25.1	23.8
	45.0	41.0	29.5	29.5	29.5	28.7	27.3	26.5	25.1	23.8
	47.0	43.0	30.6	30.3	30.0	28.7	**27.3**	26.5	25.1	23.8
	50.0	46.0	32.8	31.4	30.0	28.7	27.3	26.5	25.1	23.8
	55.0	51.0	33.4	31.7	30.0	28.7	27.3	26.5	25.1	23.8
	60.0	56.0	33.4	31.7	30.0	28.7	27.3	26.5	25.1	23.8
ARNU283TPC4 / 28.0	-4	-4.4	21.1	21.1	21.1	21.1	20.8	20.8	20.8	20.8
	0	-0.4	21.7	21.7	21.7	21.7	21.7	21.4	21.4	21.4
	5.0	4.5	24.6	24.3	23.9	23.9	23.9	23.9	23.9	23.9
	10.0	9.0	25.5	25.5	25.5	25.2	25.2	25.2	25.2	25.2
	15.0	14.0	27.1	27.1	27.1	27.1	27.1	27.1	26.8	26.5
	20.0	19.0	28.7	28.7	28.7	28.7	28.0	28.0	27.6	27.2
	25.0	23.0	29.9	29.9	29.9	29.9	29.9	29.3	29.0	28.7
	30.0	28.0	30.6	30.6	30.6	30.6	30.6	29.9	29.0	28.1
	35.0	32.0	31.5	31.5	31.5	31.5	31.2	30.6	29.0	27.5
	40.0	36.0	32.8	32.8	32.8	32.8	31.5	30.6	29.0	27.5
	45.0	41.0	34.0	34.0	34.0	33.1	31.5	30.6	29.0	27.5
	47.0	43.0	35.3	35.0	34.7	33.1	**31.5**	30.6	29.0	27.5
	50.0	46.0	37.9	36.2	34.7	33.1	31.5	30.6	29.0	27.5
	55.0	51.0	38.5	36.5	34.7	33.1	31.5	30.6	29.0	27.5
	60.0	56.0	38.5	36.5	34.7	33.1	31.5	30.6	29.0	27.5

TC: Total Capacity (MBh).

FOUR-WAY CEILING CASSETTE

MULTI V

Heating Capacity Tables

ARNU073TNA4, ARNU093TNA4, ARNU123TNA4, ARNU153TNA4

Table 51: ARNU073TNA4, ARNU093TNA4, ARNU123TNA4, ARNU153TNA4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh
ARNU073TNA4 / 7.5	-4	-4.4	5.7	5.7	5.7	5.7	5.6	5.6	5.6	5.6
	0	-0.4	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8
	5.0	4.5	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	10.0	9.0	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8
	15.0	14.0	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1
	20.0	19.0	7.7	7.7	7.7	7.7	7.5	7.5	7.4	7.3
	25.0	23.0	8.1	8.1	8.1	8.1	8.1	7.9	7.8	7.7
	30.0	28.0	8.2	8.2	8.2	8.2	8.2	8.1	7.8	7.6
	35.0	32.0	8.5	8.5	8.5	8.5	8.4	8.2	7.8	7.4
	40.0	36.0	8.8	8.8	8.8	8.8	8.5	8.2	7.8	7.4
	45.0	41.0	9.2	9.2	9.2	8.9	8.5	8.2	7.8	7.4
	47.0	43.0	9.5	9.4	9.4	8.9	**8.5**	8.2	7.8	7.4
	50.0	46.0	10.2	9.8	9.4	8.9	8.5	8.2	7.8	7.4
	55.0	51.0	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
	60.0	56.0	10.4	9.9	9.4	8.9	8.5	8.2	7.8	7.4
ARNU093TNA4 / 9.6	-4	-4.4	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.2
	0	-0.4	7.5	7.5	7.5	7.5	7.5	7.4	7.4	7.4
	5.0	4.5	8.5	8.4	8.3	8.3	8.3	8.3	8.3	8.3
	10.0	9.0	8.8	8.8	8.8	8.7	8.7	8.7	8.7	8.7
	15.0	14.0	9.4	9.4	9.4	9.4	9.4	9.4	9.3	9.2
	20.0	19.0	9.9	9.9	9.9	9.9	9.7	9.7	9.5	9.4
	25.0	23.0	10.4	10.4	10.4	10.4	10.4	10.1	10.0	9.9
	30.0	28.0	10.6	10.6	10.6	10.6	10.6	10.4	10.0	9.7
	35.0	32.0	10.9	10.9	10.9	10.9	10.8	10.6	10.0	9.5
	40.0	36.0	11.3	11.3	11.3	11.3	10.9	10.6	10.0	9.5
	45.0	41.0	11.8	11.8	11.8	11.4	10.9	10.6	10.0	9.5
	47.0	43.0	12.2	12.1	12.0	11.4	**10.9**	10.6	10.0	9.5
	50.0	46.0	13.1	12.5	12.0	11.4	10.9	10.6	10.0	9.5
	55.0	51.0	13.3	12.6	12.0	11.4	10.9	10.6	10.0	9.5
	60.0	56.0	13.3	12.6	12.0	11.4	10.9	10.6	10.0	9.5
ARNU123TNA4 / 12.3	-4	-4.4	9.1	9.1	9.1	9.1	9.0	9.0	9.0	9.0
	0	-0.4	9.4	9.4	9.4	9.4	9.4	9.2	9.2	9.2
	5.0	4.5	10.6	10.5	10.3	10.3	10.3	10.3	10.3	10.3
	10.0	9.0	11.0	11.0	11.0	10.9	10.9	10.9	10.9	10.9
	15.0	14.0	11.7	11.7	11.7	11.7	11.7	11.7	11.6	11.4
	20.0	19.0	12.4	12.4	12.4	12.4	12.1	12.1	11.9	11.7
	25.0	23.0	12.9	12.9	12.9	12.9	12.9	12.6	12.5	12.4
	30.0	28.0	13.2	13.2	13.2	13.2	13.2	12.9	12.5	12.1
	35.0	32.0	13.6	13.6	13.6	13.6	13.5	13.2	12.5	11.9
	40.0	36.0	14.1	14.1	14.1	14.1	13.6	13.2	12.5	11.9
	45.0	41.0	14.7	14.7	14.7	14.3	13.6	13.2	12.5	11.9
	47.0	43.0	15.2	15.1	15.0	14.3	**13.6**	13.2	12.5	11.9
	50.0	46.0	16.4	15.6	15.0	14.3	13.6	13.2	12.5	11.9
	55.0	51.0	16.6	15.8	15.0	14.3	13.6	13.2	12.5	11.9
	60.0	56.0	16.6	15.8	15.0	14.3	13.6	13.2	12.5	11.9
ARNU153TNA4 / 15.4	-4	-4.4	11.5	11.5	11.5	11.5	11.3	11.3	11.3	11.3
	0	-0.4	11.8	11.8	11.8	11.8	11.8	11.6	11.6	11.6
	5.0	4.5	13.3	13.2	13.0	13.0	13.0	13.0	13.0	13.0
	10.0	9.0	13.9	13.9	13.9	13.7	13.7	13.7	13.7	13.7
	15.0	14.0	14.7	14.7	14.7	14.7	14.7	14.7	14.5	14.4
	20.0	19.0	15.6	15.6	15.6	15.6	15.2	15.2	15.0	14.8
	25.0	23.0	16.2	16.2	16.2	16.2	16.2	15.9	15.7	15.6
	30.0	28.0	16.6	16.6	16.6	16.6	16.6	16.2	15.7	15.2
	35.0	32.0	17.1	17.1	17.1	17.1	16.9	16.6	15.7	14.9
	40.0	36.0	17.8	17.8	17.8	17.8	17.1	16.6	15.7	14.9
	45.0	41.0	18.5	18.5	18.5	18.0	17.1	16.6	15.7	14.9
	47.0	43.0	19.2	19.0	18.8	18.0	**17.1**	16.6	15.7	14.9
	50.0	46.0	20.6	19.7	18.8	18.0	17.1	16.6	15.7	14.9
	55.0	51.0	20.9	19.8	18.8	18.0	17.1	16.6	15.7	14.9
	60.0	56.0	20.9	19.8	18.8	18.0	17.1	16.6	15.7	14.9

TC: Total Capacity (MBh).

LG

Table 52: ARNU183TNA4, ARNU243TNA4, ARNU363TNC4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh
ARNU183TNA4 / 19.1	-4	-4.4	14.4	14.4	14.4	14.4	14.2	14.2	14.2	14.2
	0	-0.4	14.8	14.8	14.8	14.8	14.8	14.6	14.6	14.6
	5.0	4.5	16.8	16.6	16.3	16.3	16.3	16.3	16.3	16.3
	10.0	9.0	17.4	17.4	17.4	17.2	17.2	17.2	17.2	17.2
	15.0	14.0	18.5	18.5	18.5	18.5	18.5	18.5	18.3	18.1
	20.0	19.0	19.6	19.6	19.6	19.6	19.1	19.1	18.8	18.5
	25.0	23.0	20.4	20.4	20.4	20.4	20.4	20.0	19.8	19.6
	30.0	28.0	20.9	20.9	20.9	20.9	20.9	20.4	19.8	19.2
	35.0	32.0	21.5	21.5	21.5	21.5	21.3	20.9	19.8	18.8
	40.0	36.0	22.4	22.4	22.4	22.4	21.5	20.9	19.8	18.8
	45.0	41.0	23.2	23.2	23.2	22.6	21.5	20.9	19.8	18.8
	47.0	43.0	24.1	23.9	23.7	22.6	**21.5**	20.9	19.8	18.8
	50.0	46.0	25.8	24.7	23.7	22.6	21.5	20.9	19.8	18.8
	55.0	51.0	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8
	60.0	56.0	26.3	24.9	23.7	22.6	21.5	20.9	19.8	18.8
ARNU243TNA4 / 24.2	-4	-4.4	18.3	18.3	18.3	18.3	18.0	18.0	18.0	18.0
	0	-0.4	18.8	18.8	18.8	18.8	18.8	18.6	18.6	18.6
	5.0	4.5	21.3	21.0	20.7	20.7	20.7	20.7	20.7	20.7
	10.0	9.0	22.1	22.1	22.1	21.8	21.8	21.8	21.8	21.8
	15.0	14.0	23.5	23.5	23.5	23.5	23.5	23.5	23.2	22.9
	20.0	19.0	24.8	24.8	24.8	24.8	24.2	24.2	23.9	23.6
	25.0	23.0	25.9	25.9	25.9	25.9	25.9	25.4	25.1	24.8
	30.0	28.0	26.5	26.5	26.5	26.5	26.5	25.9	25.1	24.3
	35.0	32.0	27.3	27.3	27.3	27.3	27.0	26.5	25.1	23.8
	40.0	36.0	28.4	28.4	28.4	28.4	27.3	26.5	25.1	23.8
	45.0	41.0	29.5	29.5	29.5	28.7	27.3	26.5	25.1	23.8
	47.0	43.0	30.6	30.3	30.0	28.7	**27.3**	26.5	25.1	23.8
	50.0	46.0	32.8	31.4	30.0	28.7	27.3	26.5	25.1	23.8
	55.0	51.0	33.4	31.7	30.0	28.7	27.3	26.5	25.1	23.8
	60.0	56.0	33.4	31.7	30.0	28.7	27.3	26.5	25.1	23.8
ARNU363TNC4 / 36.2	-4	-4.4	27.2	27.2	27.2	27.2	26.8	26.8	26.8	26.8
	0	-0.4	28.0	28.0	28.0	28.0	28.0	27.6	27.6	27.6
	5.0	4.5	31.7	31.3	30.9	30.9	30.9	30.9	30.9	30.9
	10.0	9.0	32.9	32.9	32.9	32.5	32.5	32.5	32.5	32.5
	15.0	14.0	34.9	34.9	34.9	34.9	34.9	34.9	34.5	34.1
	20.0	19.0	36.9	36.9	36.9	36.9	36.0	36.0	35.5	35.0
	25.0	23.0	38.6	38.6	38.6	38.6	38.6	37.8	37.4	37.0
	30.0	28.0	39.4	39.4	39.4	39.4	39.4	38.6	37.4	36.2
	35.0	32.0	40.6	40.6	40.6	40.6	40.2	39.4	37.4	35.4
	40.0	36.0	42.2	42.2	42.2	42.2	40.6	39.4	37.4	35.4
	45.0	41.0	43.8	43.8	43.8	42.6	40.6	39.4	37.4	35.4
	47.0	43.0	45.5	45.1	44.7	42.6	**40.6**	39.4	37.4	35.4
	50.0	46.0	48.8	46.7	44.7	42.6	40.6	39.4	37.4	35.4
	55.0	51.0	49.7	47.1	44.7	42.6	40.6	39.4	37.4	35.4
	60.0	56.0	49.7	47.1	44.7	42.6	40.6	39.4	37.4	35.4

TC: Total Capacity (MBh).

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Heating Capacity Tables

ARNU243TMA4, ARNU283TMA4, ARNU363TMA4, ARNU423TMC4

Table 53: ARNU243TMA4, ARNU283TMA4, ARNU363TMA4, ARNU423TMC4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh
ARNU243TMA4 / 24.2	-4	-4.4	18.3	18.3	18.3	18.3	18.0	18.0	18.0	18.0
	0	-0.4	18.8	18.8	18.8	18.8	18.8	18.6	18.6	18.6
	5.0	4.5	21.3	21.0	20.7	20.7	20.7	20.7	20.7	20.7
	10.0	9.0	22.1	22.1	22.1	21.8	21.8	21.8	21.8	21.8
	15.0	14.0	23.5	23.5	23.5	23.5	23.5	23.5	23.2	22.9
	20.0	19.0	24.8	24.8	24.8	24.8	24.2	24.2	23.9	23.6
	25.0	23.0	25.9	25.9	25.9	25.9	25.9	25.4	25.1	24.8
	30.0	28.0	26.5	26.5	26.5	26.5	26.5	25.9	25.1	24.3
	35.0	32.0	27.3	27.3	27.3	27.3	27.0	26.5	25.1	23.8
	40.0	36.0	28.4	28.4	28.4	28.4	27.3	26.5	25.1	23.8
	45.0	41.0	29.5	29.5	29.5	28.7	27.3	26.5	25.1	23.8
	47.0	43.0	30.6	30.3	30.0	28.7	**27.3**	26.5	25.1	23.8
	50.0	46.0	32.8	31.4	30.0	28.7	27.3	26.5	25.1	23.8
	55.0	51.0	33.4	31.7	30.0	28.7	27.3	26.5	25.1	23.8
	60.0	56.0	33.4	31.7	30.0	28.7	27.3	26.5	25.1	23.8
ARNU283TMA4 / 28.0	-4	-4.4	21.1	21.1	21.1	21.1	20.8	20.8	20.8	20.8
	0	-0.4	21.7	21.7	21.7	21.7	21.7	21.4	21.4	21.4
	5.0	4.5	24.6	24.3	23.9	23.9	23.9	23.9	23.9	23.9
	10.0	9.0	25.5	25.5	25.5	25.2	25.2	25.2	25.2	25.2
	15.0	14.0	27.1	27.1	27.1	27.1	27.1	27.1	26.8	26.5
	20.0	19.0	28.7	28.7	28.7	28.7	28.0	28.0	27.6	27.2
	25.0	23.0	29.9	29.9	29.9	29.9	29.9	29.3	29.0	28.7
	30.0	28.0	30.6	30.6	30.6	30.6	30.6	29.9	29.0	28.1
	35.0	32.0	31.5	31.5	31.5	31.5	31.2	30.6	29.0	27.5
	40.0	36.0	32.8	32.8	32.8	32.8	31.5	30.6	29.0	27.5
	45.0	41.0	34.0	34.0	34.0	33.1	31.5	30.6	29.0	27.5
	47.0	43.0	35.3	35.0	34.7	33.1	**31.5**	30.6	29.0	27.5
	50.0	46.0	37.9	36.2	34.7	33.1	31.5	30.6	29.0	27.5
	55.0	51.0	38.5	36.5	34.7	33.1	31.5	30.6	29.0	27.5
	60.0	56.0	38.5	36.5	34.7	33.1	31.5	30.6	29.0	27.5
ARNU363TMA4 / 36.2	-4	-4.4	27.2	27.2	27.2	27.2	26.8	26.8	26.8	26.8
	0	-0.4	28.0	28.0	28.0	28.0	28.0	27.6	27.6	27.6
	5.0	4.5	31.7	31.3	30.9	30.9	30.9	30.9	30.9	30.9
	10.0	9.0	32.9	32.9	32.9	32.5	32.5	32.5	32.5	32.5
	15.0	14.0	34.9	34.9	34.9	34.9	34.9	34.9	34.5	34.1
	20.0	19.0	36.9	36.9	36.9	36.9	36.0	36.0	35.5	35.0
	25.0	23.0	38.6	38.6	38.6	38.6	38.6	37.8	37.4	37.0
	30.0	28.0	39.4	39.4	39.4	39.4	39.4	38.6	37.4	36.2
	35.0	32.0	40.6	40.6	40.6	40.6	40.2	39.4	37.4	35.4
	40.0	36.0	42.2	42.2	42.2	42.2	40.6	39.4	37.4	35.4
	45.0	41.0	43.8	43.8	43.8	42.6	40.6	39.4	37.4	35.4
	47.0	43.0	45.5	45.1	44.7	42.6	**40.6**	39.4	37.4	35.4
	50.0	46.0	48.8	46.7	44.7	42.6	40.6	39.4	37.4	35.4
	55.0	51.0	49.7	47.1	44.7	42.6	40.6	39.4	37.4	35.4
	60.0	56.0	49.7	47.1	44.7	42.6	40.6	39.4	37.4	35.4
ARNU423TMC4 / 42.0	-4	-4.4	29.3	29.3	29.3	29.3	28.9	28.9	28.9	28.9
	0	-0.4	30.2	30.2	30.2	30.2	30.2	29.8	29.8	29.8
	5.0	4.5	34.2	33.7	33.3	33.3	33.3	33.3	33.3	33.3
	10.0	9.0	35.5	35.5	35.5	35.0	35.0	35.0	35.0	35.0
	15.0	14.0	37.7	37.7	37.7	37.7	37.7	37.7	37.2	36.8
	20.0	19.0	39.9	39.9	39.9	39.9	38.9	38.9	38.3	37.8
	25.0	23.0	41.6	41.6	41.6	41.6	41.6	40.7	40.3	39.9
	30.0	28.0	42.5	42.5	42.5	42.5	42.5	41.6	40.3	39.0
	35.0	32.0	43.8	43.8	43.8	43.8	43.4	42.5	40.3	38.2
	40.0	36.0	45.6	45.6	45.6	45.6	43.8	42.5	40.3	38.2
	45.0	41.0	47.3	47.3	47.3	46.0	43.8	42.5	40.3	38.2
	47.0	43.0	49.1	48.6	48.2	46.0	**43.8**	42.5	40.3	38.2
	50.0	46.0	52.7	50.4	48.2	46.0	43.8	42.5	40.3	38.2
	55.0	51.0	53.6	50.8	48.2	46.0	43.8	42.5	40.3	38.2
	60.0	56.0	53.6	50.8	48.2	46.0	43.8	42.5	40.3	38.2

TC: Total Capacity (MBh).

Table 54: ARNU483TMC4 Heating Capacity Table.

Model No. / Capacity Index	Outdoor Air Temp.		Indoor Air Temperature (°F DB)							
			59	61	64	67	70	73	76	80
	°F DB	°F WB	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh	TC MBh
ARNU483TMC4 / 48.1	-4	-4.4	34.3	34.3	34.3	34.3	33.8	33.8	33.8	33.8
	0	-0.4	35.3	35.3	35.3	35.3	35.3	34.8	34.8	34.8
	5.0	4.5	39.9	39.4	38.9	38.9	38.9	38.9	38.9	38.9
	10.0	9.0	41.5	41.5	41.5	41.0	41.0	41.0	41.0	41.0
	15.0	14.0	44.0	44.0	44.0	44.0	44.0	44.0	43.5	43.0
	20.0	19.0	46.6	46.6	46.6	46.6	45.4	45.4	44.8	44.2
	25.0	23.0	48.6	48.6	48.6	48.6	48.6	47.6	47.1	46.6
	30.0	28.0	49.7	49.7	49.7	49.7	49.7	48.6	47.1	45.6
	35.0	32.0	51.2	51.2	51.2	51.2	50.7	49.7	47.1	44.7
	40.0	36.0	53.2	53.2	53.2	53.2	51.2	49.7	47.1	44.7
	45.0	41.0	55.3	55.3	55.3	53.8	51.2	49.7	47.1	44.7
	47.0	43.0	57.3	56.8	56.3	53.8	**51.2**	49.7	47.1	44.7
	50.0	46.0	61.6	58.9	56.3	53.8	51.2	49.7	47.1	44.7
	55.0	51.0	62.6	59.4	56.3	53.8	51.2	49.7	47.1	44.7
	60.0	56.0	62.6	59.4	56.3	53.8	51.2	49.7	47.1	44.7

TC: Total Capacity (MBh).

FOUR-WAY CEILING CASSETTE

Optional Accessories

Table 55: Optional Accessories for Four-Way Ceiling Cassette Indoor Units.

Accessory	Model Number
27-9/16" x 27-9/16" Four-Way Ceiling Cassette Grille Kit — White (One Required)	PT-UQC (For 5~19MBh TR and TQ Frame Indoor Units)
24-7/16" x 24-7/16" (2' x 2') Four-Way Ceiling Cassette Grille Kit — White (One Required)	PT-QCHW0 (For 5~19MBh TR and TQ Frame Indoor Units)
3' x 3' Four-Way Ceiling Cassette Grille Kit — White (One Required)	PT-UMC1 (For 7~48MBh TP, TN, TM Frame Indoor Units)
3' x 3' Four-Way Ceiling Cassette Grille Kit — Black (One Required)	PT-UQC1B (For 7~48MBh TP, TN, TM Frame Indoor Units)
Ventilation Kit[1]	PTVK410 + PTVK420
Ventilation Kit[2]	PTVK430
Auto Elevation Kit[1]	PTEGM0
Cassette Decorative Cover[2]	PTDCQ (For 5~19MBh TR and TQ Frame Indoor Units) PTDCM (For 7~48MBh TP, TN, TM Frame Indoor Units)
Plasma Filter Kit (One)[2]	PTPKQ0 (For 5~19MBh TR and TQ Frame Indoor Units) PTPKM0 (For 7~48MBh TP, TN, and TM Frame Indoor Units)

[1]For use with TP, TN and TM frame four-way ceiling-cassette indoor units.

[2]For use with all four-way ceiling-cassette indoor units.

All accessories are sold separately.

APPLICATION GUIDELINES

Selecting the Best Location

Do's

- Place the unit where air circulation will not be blocked.
- Place the unit where drainage can be obtained easily and to minimize the length of the condensate drain piping.
- Place the unit where noise prevention is taken into consideration.
- Ensure there is sufficient space from the ceiling and floor.
- Ensure there is sufficient maintenance space.
- Locate the indoor unit in a location where it can be easily connected to the outdoor unit / heat recovery unit.

Don'ts

- *Avoid installing the unit near high-frequency generators.*
- *Do not install the unit near a doorway.*
- *The unit should not be installed near a heat or steam source, or where considerable amounts of oil, iron powder, or flour are used. (These materials may generate condensate, cause a reduction in heat exchanger efficiency, or the drain pump to malfunction. If this is a potential problem, install a ventilation fan large enough to vent out these materials.)*

WARNING

The unit should not be installed where sulfuric acid and flammable or corrosive gases are generated, vented into, or stored. There is risk of fire, explosion, and physical injury or death.

Figure 99: Selecting the Best Location / Minimum Clearance Requirements — One-, Two-, and Four-Way Ceiling-Cassette Indoor Units.

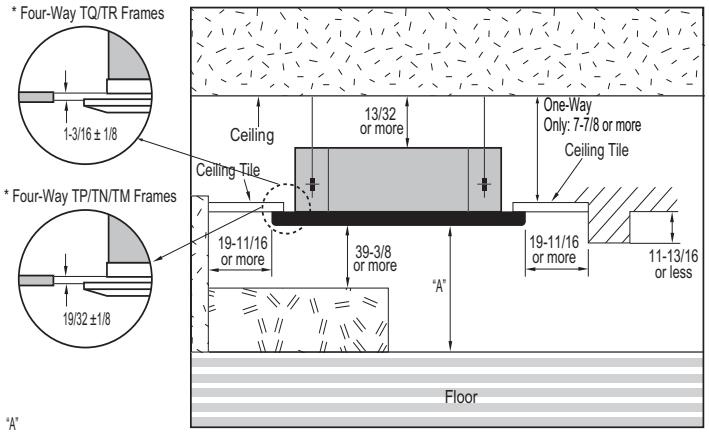
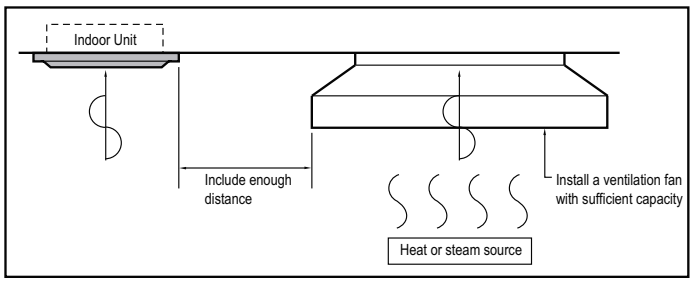


Figure 100: Installing Near a Heat or Steam Source.



The unit may be damaged, may malfunction, and / or will not operate as designed if installed in any of the conditions listed.

Note:

If the unit is installed near a body of water, the installation parts are at risk of corroding. Appropriate anti-corrosion methods should be taken for the unit and all installation parts.

Installing in an Area Exposed to Unconditioned Air

In some installation applications, areas (floors, walls) in some rooms may be exposed to unconditioned air (room may be above or next to an unheated garage or storeroom). To countermeasure:

- Verify that carpet is or will be installed (carpet may increase the temperature by three [3] degrees).
- Add insulation between the floor joists.
- Install radiant heat or another type of heating system to the floor.

General Mounting

The ceiling should be strong and solid enough to protect the unit from vibration. All ceiling-cassette indoor units include a pattern to help determine the size necessary for the opening in the false ceiling (paper pattern dimensions match those for the ceiling opening dimensions), and where the hanging bolts and refrigerant / drain piping should be placed.

Figure 101: Ceiling Opening / Hanging Bolt Locations for One-Way Ceiling Cassette Indoor Units.

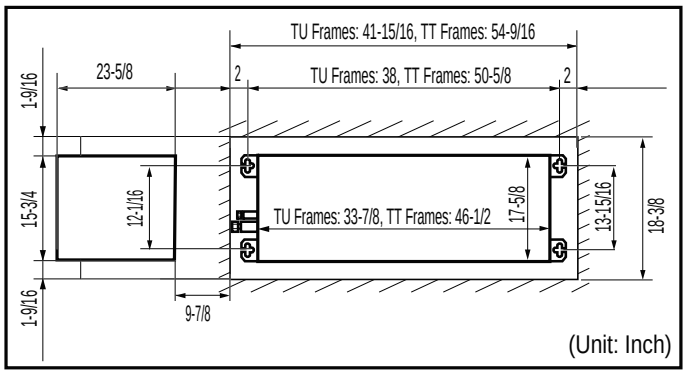


Figure 102: Ceiling Opening / Hanging Bolt Locations for Two-Way Ceiling Cassette Indoor Units.

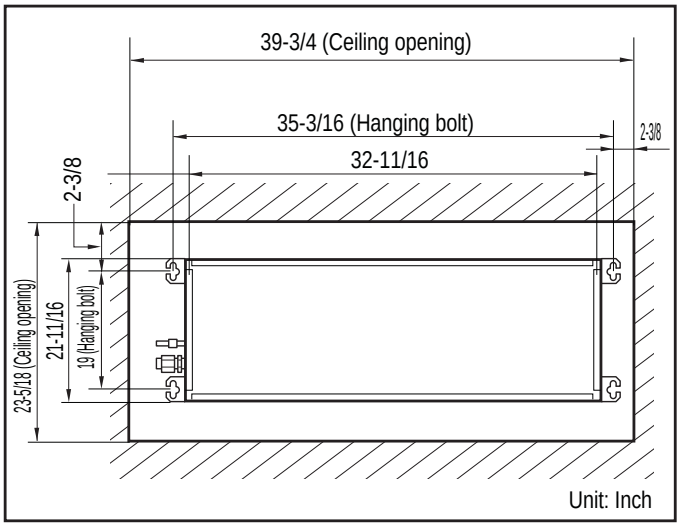
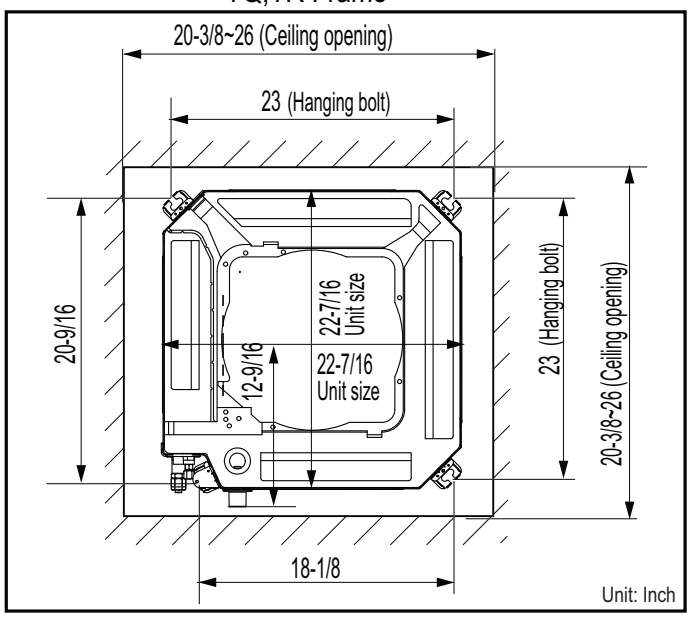
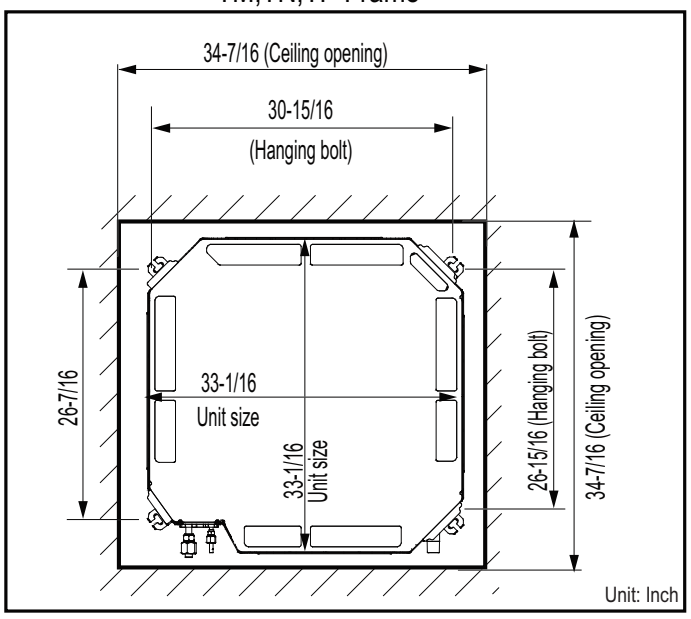


Figure 103: Ceiling Opening / Hanging Bolt Locations for Four-Way Ceiling Cassette Indoor Units.

TQ,TR Frame



TM,TN,TP Frame



APPLICATION GUIDELINES

MULTI V

General Mounting / General Drain Piping Information

General Mounting Procedure

1. Using the included paper pattern, select and mark the area where the hanging bolts, refrigerant and condensate piping should be placed. The hanging bolts should be slightly tilted to the direction of the drain hose.
2. Drill the holes.
3. Install the unit horizontally using a level gauge.

⚠ WARNING

Do not damage power wiring during installation. There is risk of electric shock, which may result in physical injury or death.

Note:

Do not damage power wiring during installation. There is a risk of equipment malfunction, which may result in property damage.

Figure 104: Using the Paper Pattern / Drilling Holes for the Bolts, Refrigerant and Condensate Piping.

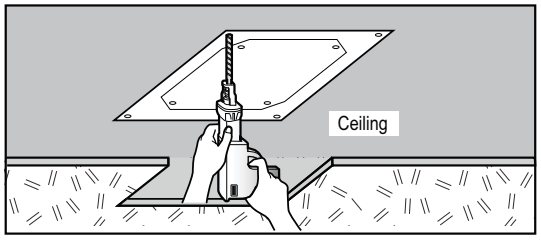
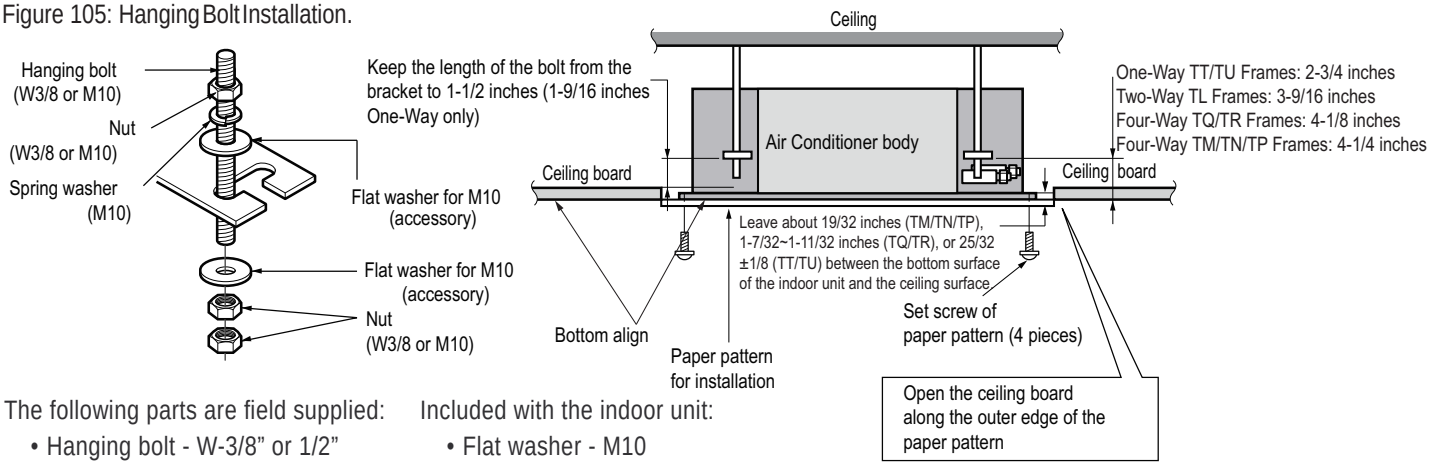


Figure 105: Hanging Bolt Installation.



The following parts are field supplied:

- Hanging bolt - W-3/8" or 1/2"
- Nut - W-3/8" or M10
- Spring washer - M10

Included with the indoor unit:

- Flat washer - M10

⚠ WARNING

The threaded rod hangers (bolts) and hardware must be securely tightened to prevent the unit from falling from its installation location. There is a risk of personal injury from falling equipment.

General Drain Piping Information

All ceiling-cassette indoor units generate water during cooling operation, therefore, properly handling this condensation must be considered.

Ceiling-cassette indoor units include factory-installed drain pumps. Depending on the location of the indoor unit, condensation can be drained directly to the outside of the building, or a common indoor unit drainage piping system can be installed.

Flexible Drain Hose

Ceiling-cassette indoor units include a factory-provided flexible drain hose (with two clamps) to connect the indoor unit to the drain piping / drain piping system.

If necessary, the drain hose can be extended. When the bottom surface of the indoor unit is at an elevation below the receiving building drain line connection, install an inverted trap at the top of the condensate pump discharge riser before connection to the building drain pipe.

Figure 107: Flexible Drain Hose Connection.

Figure 106: Ceiling-Cassette Indoor Unit Drain Pump to Drain Piping System.

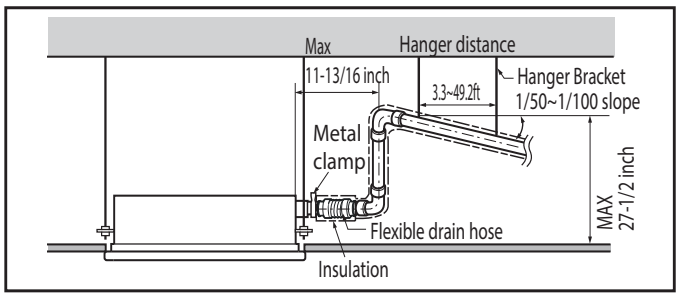


Table 56: Ceiling-Cassette Indoor Unit Drainage Specifications.

Indoor Unit	Drain Type	Drain Pipe Dia. (OD / ID, in.)
One-Way Ceiling Cassette	27-1/2 in. Lift Drain Pump, Factory Installed	Ø1-1/4 / Ø1
Two-Way Ceiling Cassette		
Four-Way Ceiling Cassette		

LG

Flexible Drain Hose, continued.

When the receiving drain line is mounted horizontal, connect the inverted trap to the top half of the pipe. The connection point of the inverted trap to the building drain pipe should always be to the top half of the pipe and should never be over 45° either side of the upper most point of the horizontal building drain line.

If connecting to a vertical drain line or plumbing system vent line, connect the IDU condensate pump discharge line using a Y-45 fitting with the double end of the Y-45 fitting facing up. When connecting to a vertical drain line include an inverted trap at the top of the IDU condensate pump discharge riser before connection to the Y-45 fitting.

Drain Piping

- Drain piping must have down slope (1/50 to 1/100).
- Any holes through the ceilings, walls, etc., must be large enough to accommodate the drain piping and insulation.
- The outside diameter of the drain connection on the indoor unit is 1-1/4 inches.
- Drain piping material is polyvinyl chloride pipe (1 inch).

⃠ *To prevent reversal flow, do not provide up and down slope.*

Drain Leak Test

A leak test should be performed 24 hours after the drainage system has been installed.

Drain Pipe Insulation

To prevent condensate from forming on the drain piping, field-supplied 5/16 inch thick polyethylene insulation should be properly installed.

Note:

Ensure the indoor unit, refrigerant piping, drain piping, and power wiring / communication cables are properly supported with anchor bolts and clamp hangers positioned at 3.3 to 4.9 foot intervals.

Figure 108: Drain Piping Slope.

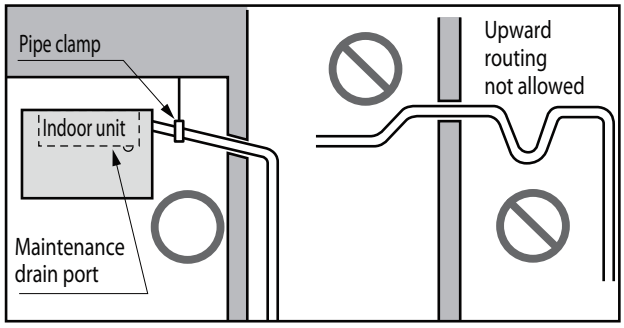
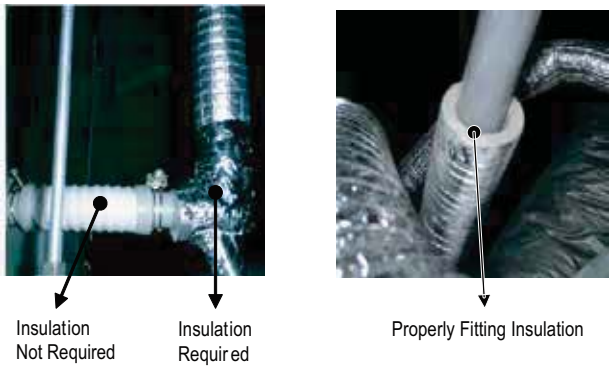


Figure 109: Properly Insulating the Drainage Piping.



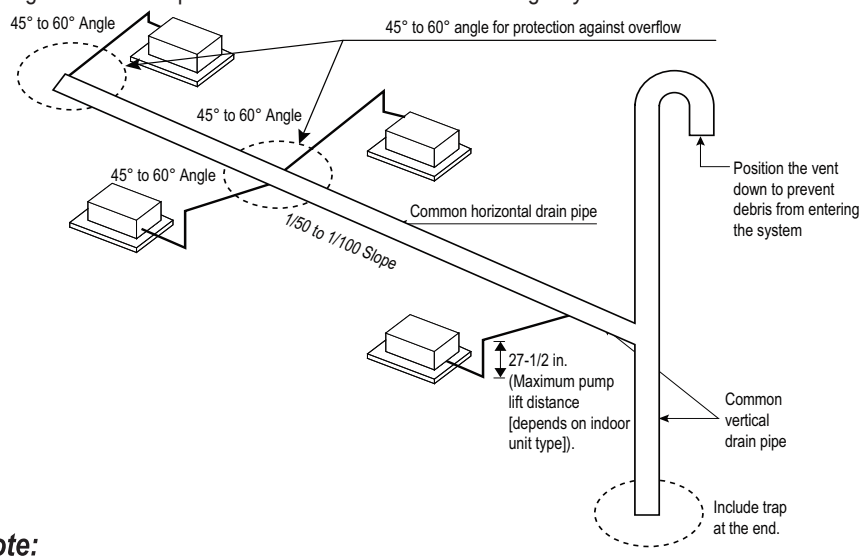
Common Indoor Unit Drainage System

It is usual work practice to connect individual indoor unit drain pipes to one common indoor unit drainage system.

The diameter of the common vertical drain pipe should be as large as necessary. The diameter of the horizontal pipe should be the same or larger than the vertical drain pipe. To avoid property damage in the event of the primary drain becoming clogged, and to optimize drain system performance, it may be prudent to install a secondary drain line.

Design the drain system to plan for winter operation (condensate line may freeze up if condensate does not properly drain away). Drain all generated condensate from the external condensate pan to an appropriate area. Install a trap in the condensate lines as near to the indoor unit coil as possible. To prevent overflow, the outlet of each trap should be positioned below its connection to the condensate pan. All traps should be primed, insulated, and leak tested.

Figure 110: Example of a Common Indoor Unit Drainage System.



Note:

- *It is recommended that a dedicated drain pipe be installed for the air conditioning system. If the indoor unit drainage system is shared with a rainwater drain, waste water, or any other type of building drain system, back flow, leaks, ice may form, or noxious odors may infiltrate the air conditioning system.*
- *Install a trap if the drain access to the outside faces an undesirable location (i.e., sewer), otherwise, noxious odors may infiltrate the air conditioning system.*

APPLICATION GUIDELINES

Wiring Guidelines

General Power Wiring / Communications Cable Guidelines

- Follow manufacturer's circuit diagrams displayed on the inside of the control box cover.
- Have a separate power supply for the indoor units.
- Provide a circuit breaker switch between the power source and the indoor unit.
- Confirm power source specifications.
- Confirm that the electrical capacity is sufficient.
- Starting current must be maintained ±10 percent of the rated current marked on the name plate.
- Confirm wiring / cable thickness specifications:
  - Power wiring is field supplied. Wire size is selected based on the larger MCA value, and must comply with the applicable local and national codes.
  - Communication cable must be a minimum of 18 AWG, two-conductor, stranded, shielded, and must comply with the applicable local and national codes. Ensure the communication cable is properly grounded at the master outdoor unit only. Do not ground the ODU-IDU communications cable at any other point.
- It is recommended that a circuit breaker is installed, especially if conditions could become wet or moist.
- Include a disconnect in the power wiring system, add an air gap contact separation of at least 1/8 inch in each active (phase) conductor.
- Any openings where the field wiring enters the cabinet must be completely sealed.

⚠ WARNING

- *Terminal screws may loosen during transport. Properly tighten the terminal connections during installation or risk electric shock, physical injury or death.*
- *Loose wiring may cause the wires to burnout or the terminal to overheat and catch fire. There is a risk of electric shock, physical injury or death.*

Note:

- *Terminal screws may loosen during transport. Properly tighten the terminal connections during installation or risk equipment malfunction or property damage.*
- *Loose wiring may cause unit malfunction, the wires to burnout or the terminal to overheat and catch fire. There is a risk of equipment malfunction or property damage.*

A voltage drop may cause the following problems:

- *Magnetic switch vibration, fuse breaks, or disturbance to the normal function of an overload protection device.*
- *Compressor will not receive the proper starting current.*

Power Wiring and Communications Cable Connections

1. Insert the power wiring / communications cable from the outdoor unit or heat recovery unit (Heat Recovery systems only) using the designated path in the indoor unit.
2. Connect each wire to its appropriate terminal on the indoor unit control board. Verify that the color and terminal numbers from the outdoor unit or heat recovery unit (Heat Recovery systems only) wiring match the color and terminal numbers on the indoor unit.
3. Secure the power wiring / communications cable.

Figure 111: Location of Power Wiring / Communications Cable Terminals in the One-Way Ceiling-Cassette Indoor Unit.

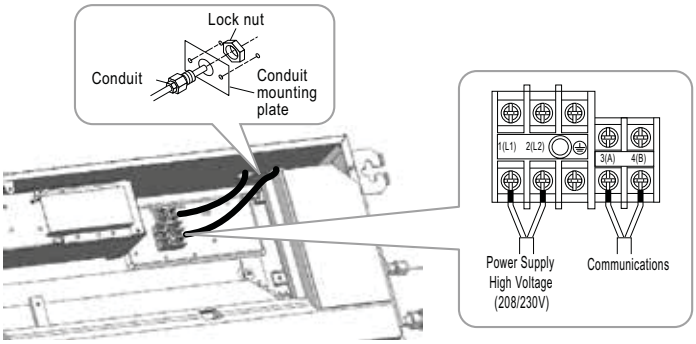


Figure 112: Location of Power Wiring / Communications Cable Terminals in the Two-Way Ceiling-Cassette Indoor Unit.

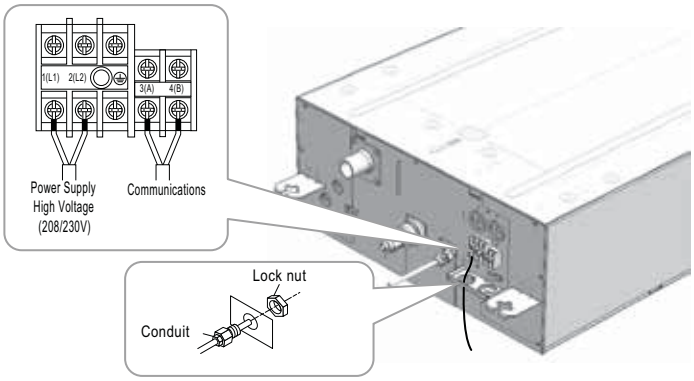


Figure 113: Location of Power Wiring / Communications Cable Terminals in the Four-Way Ceiling-Cassette Indoor Unit.

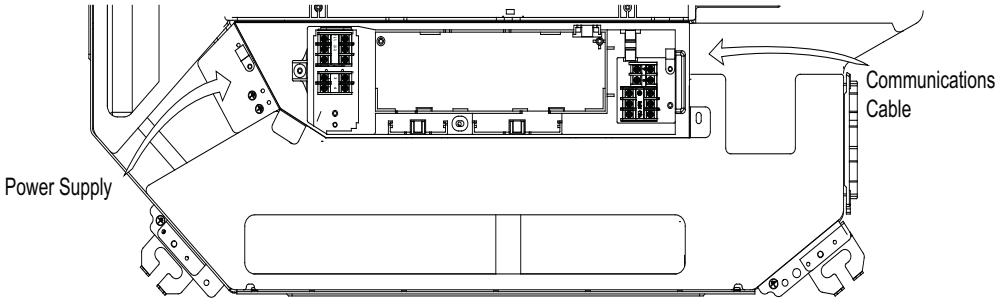


Figure 114: Terminal Block in the One-Way Ceiling-Cassette Indoor Unit.

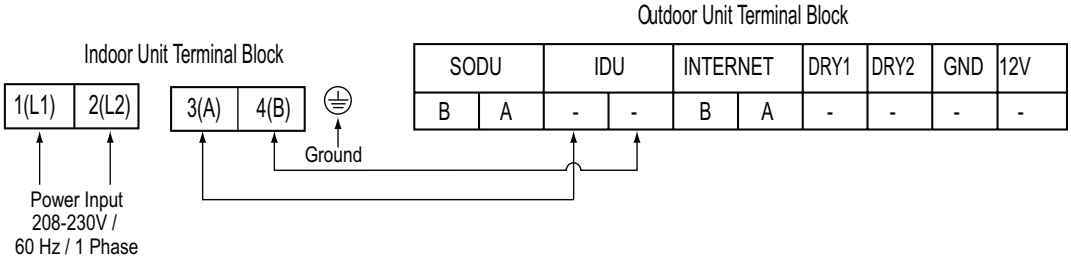


Figure 115: Terminal Block in the Two-Way Ceiling-Cassette Indoor Unit.

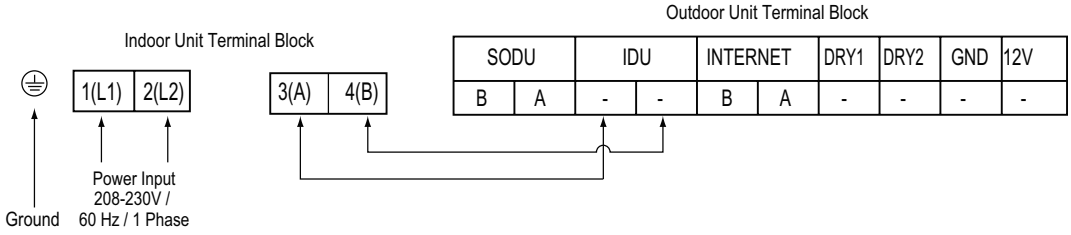
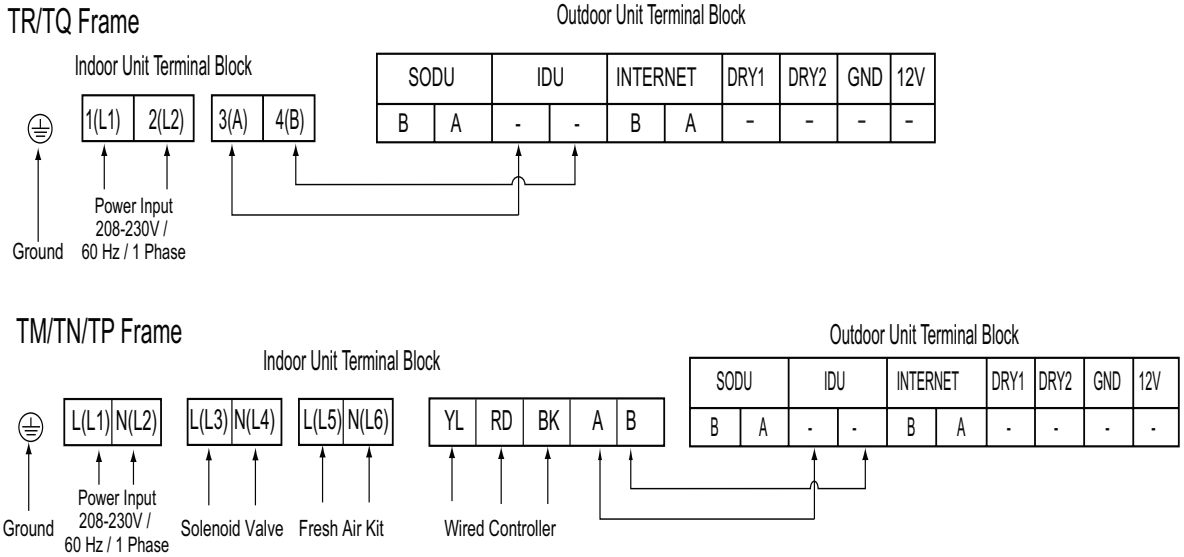


Figure 116: Terminal Block in the Four-Way Ceiling-Cassette Indoor Units.



Wired Controller Placement

Wired controllers include a sensor to detect room temperature. To maintain comfort levels in the conditioned space, the wired controller must be installed in a location away from direct sunlight, high humidity, and where it could be directly exposed to cold air. Controller must be installed four (4) to five (5) feet above the floor where its LED display can be read easily, in an area with good air circulation, and where it can detect an average room temperature.

Do not install the wired controller near or in:

- *Drafts or dead spots behind doors and in corners*
- *Hot or cold air from ducts*
- *Radiant heat from the sun or appliances*
- *Concealed pipes and chimneys*
- *An area where temperatures are uncontrolled, such as an outside wall*

Figure 117: Proper Location for the Wired Controller.

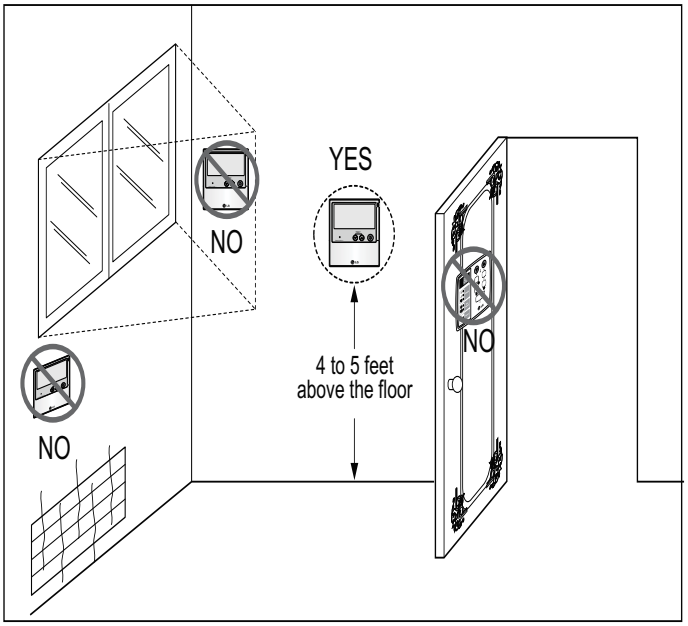


Table 57: Acronym Table.

ABS	Acrylonitrile Butadiene Styrene	IDU	Indoor Unit
AC	Air Conditioner/Alternate Current	kW	Kilowatts
ACP	Advanced Control Platform	in Aq	inches water
AHU	Air Handling Unit	ISO	International Standards Organization
ASHRAE	American Society of Heating, Refrigeration, and Air Conditioning	LATS	LG Air Conditioning Technical Solution software
ASTM	American Society for Testing and Materials	LED	Light Emitting Diode
AWG	American Wire Gauge	LEED	Leadership in Energy and Environmental Design
AWHP	Air-to-Air Water Heat Pump	MBh	Thousands BTUs per hour
BLDC	Brushless Digitally-Controlled	MCA	Minimum Circuit Ampacity
BTL	BACnet® Testing Laboratories	mm	Millimeter
Btu/h	British Thermal Unit per Hour	MOP	Maximum Overcurrent Protection
CAA	Clean Air Act	OD	Outside Diameter
CFM	Cubic Feet per Minute	ODU	Outdoor Unit
CFR	Code of Federal Regulations	PI	Power Input
DB	Dry Bulb	PTAC	Packaged Terminal Air Conditioner
dB(A)	Decibels with “A” frequency weighting	SHC	Sensible Heat Capacity
DPST	Double-Pole Single Throw	SMACNA	Sheet Metal & Air Conditioning Contractors’ National Association
DX	Direct expansion	RPM	Revolutions per Minute
EEV	Electric Expansion valve	TC	Total Capacity
EPDM	Ethylene Propylene Diene M-Class Rubber	USD	United States Dollar
EMF	Electromagnetic Field	UL	Underwriters Laboratories
ESP	External Static Pressure	V	Voltage
ETL	Electric Testing Laboratories	VAV	Variable Air Volume
GND	Ground	VRF	Variable Refrigerant Flow
H/M/L	High/Medium/Low	W	Watts
HVAC	Heating, Ventilating and Air Conditioning	WB	Wet Bulb
Hz	Hertz	wg	Water Gauge
ID	Inside Diameter		

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