

# Engineering Data

## 4-Way Blow Ceiling-Suspended Type FXUQ-PAVJU

60 Hz

**R-410A**





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# 1. Features and Benefits

## Slim, Stylish, Flexible

The unique 4-way ceiling-suspended cassette is an ideal solution for rooms without a false ceiling, or minimal space above a false ceiling, where adaptive comfort control is preferred.

The optional Sensor Kit (occupancy and surface temperature) together with air temperature sensor and advanced control functions enables the unit to provide an exceptional comfort level, energy efficiency, and flexibility.

## Features and Benefits

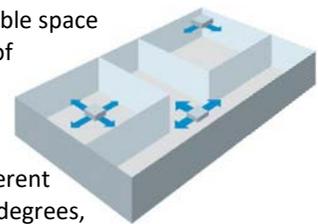
- Very low unit height of under 8" makes it an ideal solution for school, shops, restaurants and offices with no or low false ceilings
- Optional Sensor Kit enables input from three room sensors to provide optimized occupant comfort and efficiency
- Stylish unit blends easily with any interior, as the air louvers close entirely when not in operation
- Energy efficient fan motor
- Individual air louver control — one or more louvers can be easily closed via the remote controller when required
- Ideal for both new and existing buildings
- Can also be mounted partially recessed in a false ceiling
- Same appearance and size for all capacity models
- Standard drain pump with 19.5" lift



## Flexible Airflow Pattern

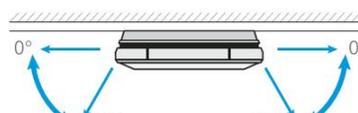
The four individually controlled air louvers in the unit enables comfortable space environment in a variety of different room layouts.

Air from each louver can be set to exhaust in 5 different angles between 0 and 60 degrees, or set to auto-swing.

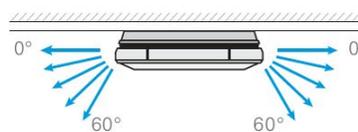


## Airflow Angles

**Auto Swing:** Wide discharge angle: 0° to 60°



**Fixed angles:** 5 levels



## 2. Specifications

### 4-way blow ceiling-suspended type

Model		FXUQ18PAVJU	FXUQ24PAVJU
Power supply		1 phase, 60 Hz, 208/230 V	1 phase, 60 Hz, 208/230 V
★1, ★3 Cooling capacity	Btu/h (kW)	18,000 (5.3)	24,000 (7.0)
★2, ★3 Heating capacity	Btu/h (kW)	20,000 (5.9)	27,000 (7.9)
Casing/Color		Resin/Fresh white	Resin/Fresh white
Dimensions: (H × W × D)		in. (mm) 7-13/16 × 37-3/8 × 37-3/8 (198 × 950 × 950)	7-13/16 × 37-3/8 × 37-3/8 (198 × 950 × 950)
Coil (cross fin coil)	Rows × Stages × FPI	3 × 10 × 21	3 × 10 × 21
	Face area	ft <sup>2</sup> (m <sup>2</sup> ) 3.55 (0.330)	3.55 (0.330)
Fan	Model	QTS48D11M	QTS48D11M
	Type	Turbo fan	Turbo fan
	Motor output	W 46	46
	Airflow rate (H/M/L)	cfm (m <sup>3</sup> /min) 795/689/565 (22.5/19.5/16.0)	795/689/565 (22.5/19.5/16.0)
	Drive	Direct drive	Direct drive
Temperature control		Microprocessor thermostat for cooling and heating	Microprocessor thermostat for cooling and heating
Sound absorbing thermal insulation material		Polyethylene foam	Polyethylene foam
★4 Sound pressure level (reference data) (H/M/L)	dBA	40/38/36	40/38/36
★4 Sound power level (reference data) (H/M/L)	dB	58/56/54	58/56/54
Weight	lbs (kg)	58 (26)	58 (26)
Piping connections	Liquid pipes	in. (mm) $\phi$ 1/4 ( $\phi$ 6.4) (flare connection)	$\phi$ 3/8 ( $\phi$ 9.5) (flare connection)
	Gas pipes	in. (mm) $\phi$ 1/2 ( $\phi$ 12.7) (flare connection)	$\phi$ 5/8 ( $\phi$ 15.9) (flare connection)
	Drain pipe	in. (mm) VP20 (external dia. 1 (26), internal dia. 13/16 (20))	VP20 (external dia. 1 (26), internal dia. 13/16 (20))
Safety devices		Fuse	Fuse
Refrigerant control		Electronic expansion valve	Electronic expansion valve
Connectable outdoor unit		R410A <b>VRV</b> series	R410A <b>VRV</b> series
Standard accessories		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal, Conduit mounting plate	Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal, Conduit mounting plate

#### Note:

- ★1. Nominal cooling capacities are based on the following conditions:  
Return air temperature: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB)  
Outdoor temperature: 95°FDB (35.0°CDB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★2. Nominal heating capacities are based on the following conditions:  
Return air temperature: 70°FDB (21.1°CDB).  
Outdoor temperature: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4. Anechoic chamber conversion value, measured under JIS conditions. During actual operation, these values may be higher as a result of installation conditions.

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## 4-way blow ceiling-suspended type

Model		FXUQ30PAVJU	FXUQ36PAVJU
Power supply		1 phase, 60 Hz, 208/230 V	1 phase, 60 Hz, 208/230 V
★1, ★3 Cooling capacity	Btu/h (kW)	30,000 (8.8)	36,000 (10.6)
★2, ★3 Heating capacity	Btu/h (kW)	34,000 (10.0)	40,000 (11.7)
Casing/Color		Resin/Fresh white	Resin/Fresh white
Dimensions: (H × W × D)		in. (mm) 7-13/16 × 37-3/8 × 37-3/8 (198 × 950 × 950)	7-13/16 × 37-3/8 × 37-3/8 (198 × 950 × 950)
Coil (cross fin coil)	Rows × Stages × FPI	3 × 10 × 21	3 × 10 × 21
	Face area	ft <sup>2</sup> (m <sup>2</sup> ) 3.55 (0.330)	3.55 (0.330)
Fan	Model	QTS48D11M	QTS48D11M
	Type	Turbo fan	Turbo fan
	Motor output	W 106	106
	Airflow rate (H/M/L)	cfm (m <sup>3</sup> /min) 1,095/918/742 (31.0/26.0/21.0)	1,095/918/742 (31.0/26.0/21.0)
	Drive	Direct drive	Direct drive
Temperature control		Microprocessor thermostat for cooling and heating	Microprocessor thermostat for cooling and heating
Sound absorbing thermal insulation material		Polyethylene foam	Polyethylene foam
★4 Sound pressure level (reference data) (H/M/L)	dBA	47/44/40	47/44/40
★4 Sound power level (reference data) (H/M/L)	dB	65/62/58	65/62/58
Weight	lbs (kg)	60 (27)	60 (27)
Piping connections	Liquid pipes	in. (mm) $\phi$ 3/8 ( $\phi$ 9.5) (flare connection)	$\phi$ 3/8 ( $\phi$ 9.5) (flare connection)
	Gas pipes	in. (mm) $\phi$ 5/8 ( $\phi$ 15.9) (flare connection)	$\phi$ 5/8 ( $\phi$ 15.9) (flare connection)
	Drain pipe	in. (mm) VP20 (external dia. 1 (26), internal dia. 13/16 (20))	VP20 (external dia. 1 (26), internal dia. 13/16 (20))
Safety devices		Fuse	Fuse
Refrigerant control		Electronic expansion valve	Electronic expansion valve
Connectable outdoor unit		R410A <b>VRV</b> series	R410A <b>VRV</b> series
Standard accessories		Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal, Conduit mounting plate	Operation manual, Installation manual, Paper pattern for installation, Drain hose, Sealing pads, Clamps, Washers, Screws, Insulation for fitting, Clamp metal, Conduit mounting plate

**Note:**

- ★1. Nominal cooling capacities are based on the following conditions:  
Return air temperature: 80°FDB (26.7°CDB), 67°FWB (19.4°CWB)  
Outdoor temperature: 95°FDB (35.0°CDB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★2. Nominal heating capacities are based on the following conditions:  
Return air temperature: 70°FDB (21.1°CDB).  
Outdoor temperature: 47°FDB (8.3°CDB), 43°FWB (6.1°CWB)  
Equivalent refrigerant piping length: 25 ft (7.6 m) (horizontal)
- ★3. Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- ★4. Anechoic chamber conversion value, measured under JIS conditions. During actual operation, these values may be higher as a result of installation conditions.

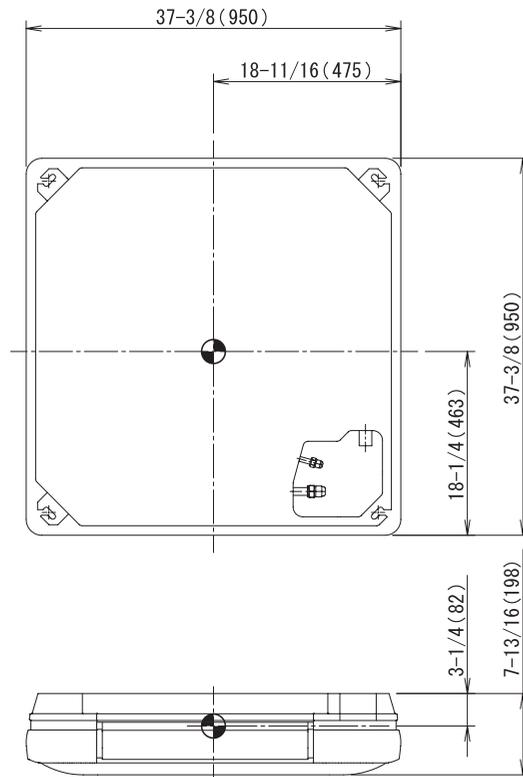
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# 4. Center of Gravity

FXUQ18-36PAVJU

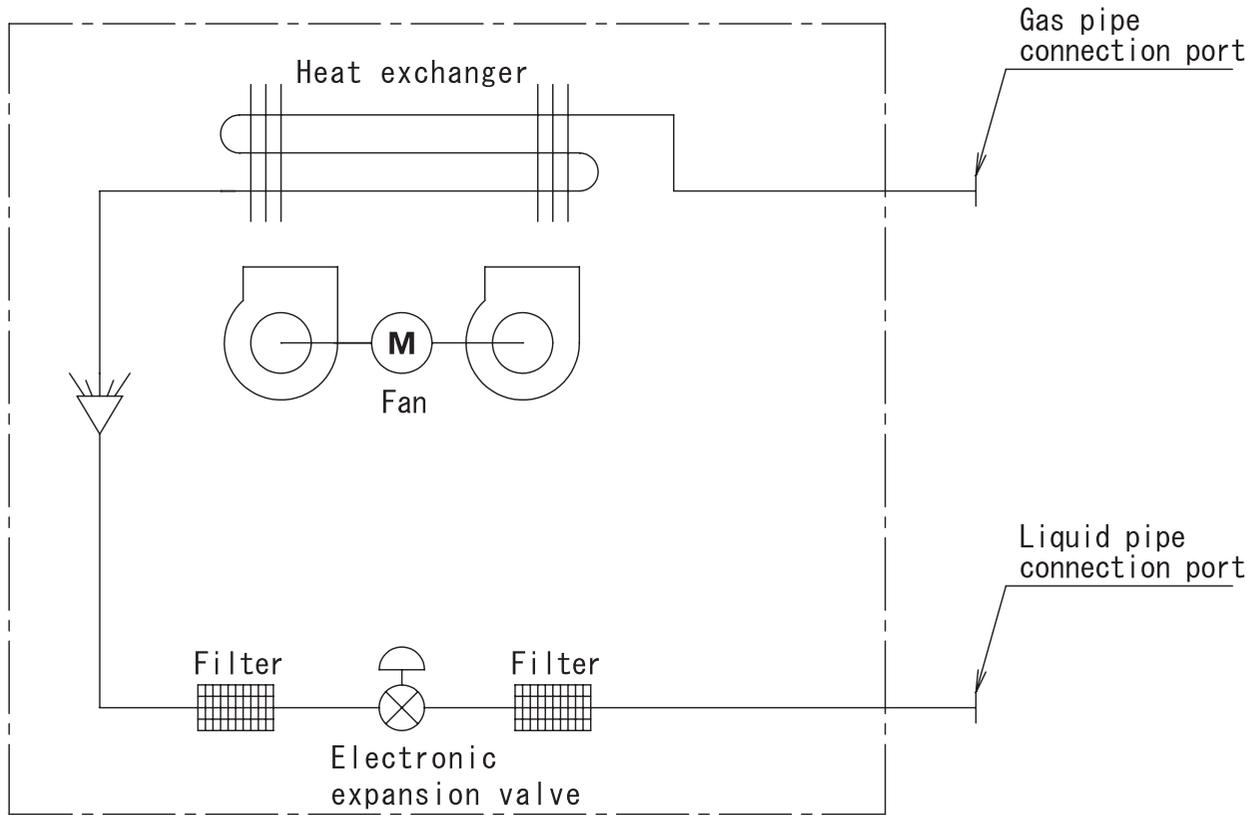
Unit: in. (mm)



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# 5. Piping Diagrams

## FXUQ18-36PAVJU



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Unit: in. (mm)

Model	Gas	Liquid
FXUQ18PAVJU	$\phi 1/2$ ( $\phi 12.7$ )	$\phi 1/4$ ( $\phi 6.4$ )
FXUQ24PAVJU FXUQ30PAVJU FXUQ36PAVJU	$\phi 5/8$ ( $\phi 15.9$ )	$\phi 3/8$ ( $\phi 9.5$ )



**FXUQ18-36PAVJU**

INDOOR UNIT	
A1P	PRINTED CIRCUIT BOARD
C105	CAPACITOR
F1U	FUSE
F2U	FUSE
HAP	FLASHING LAMP (SERVICE MONITOR-GREEN)
M1F	MOTOR (INDOOR FAN)
M1P	MOTOR (DRAIN PUMP)
M1S·M2S M3S·M4S	MOTOR (HORIZONTAL BLADE)
PS	SWITCHING POWER SUPPLY
R1T	THERMISTOR (AIR)
R2T·R3T	THERMISTOR (COIL)
S1L	FLOAT SWITCH
V1R	DIODE BRIDGE
X1M	TERMINAL BLOCK (CONTROL)
X2M	TERMINAL BLOCK (POWER SUPPLY)
Y1E	ELECTRONIC EXPANSION VALVE
Z1C	FERRITE CORE
ZF	NOISE FILTER
SENSOR KIT	
A3P	PRINTED CIRCUIT BOARD
A4P	PRINTED CIRCUIT BOARD
CONNECTOR FOR OPTIONAL ACCESSORIES	
X35A	CONNECTOR (POWER SUPPLY FOR ADAPTOR)
X81A	CONNECTOR (SENSOR KIT)

C: 3D130645A

## 7. Electric Characteristics

### FXUQ18-36PAVJU

Model	Power supply					IFM		Input (W)		SCCR
	Hz	Volts	Voltage range	MCA	MOP	KW	FLA	Cooling	Heating	
FXUQ18PAVJU	60	208/230 V	Max. 253 V Min. 187 V	0.6	15	0.046	0.5	90	73	SCCR kA rms, Symmetrical @600V MAX:5
FXUQ24PAVJU				0.6	15	0.046	0.5	90	73	
FXUQ30PAVJU				1.4	15	0.106	1.1	200	179	
FXUQ36PAVJU				1.4	15	0.106	1.1	200	179	

**Symbol:**

- MCA: Min. Circuit Amps (A)
- MOP: Max. Overcurrent Protective Device (A)
- KW: Fan Motor Rated Output (kW)
- FLA: Full Load Amps (A)
- IFM: Indoor Fan Motor
- SCCR: Short-Circuit Current Rating

**Note:**

1. Voltage range  
Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
2. Maximum allowable voltage unbalance between phase is 2%.
3. MCA/MOP  
MCA = 1.25 × FLA  
MOP ≤ 4 × FLA  
(Next lower standard fuse rating. Min. 15 A)
4. Select wiring size based on the MCA.

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Model	FXUQ18PAVJU		FXUQ24PAVJU		FXUQ30PAVJU		FXUQ36PAVJU		
Operation mode	Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
Input power (W)	H	90	73	90	73	200	179	200	179
	M	66	58	66	58	150	135	150	135
	L	48	42	48	42	107	96	107	96

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## 8. Safety Devices Setting

Model		FXUQ18PAVJU	FXUQ24PAVJU	FXUQ30PAVJU	FXUQ36PAVJU
Printed circuit board fuse		250 V, 3.15 A			
Drain pump thermal fuse	°F (°C)	–	–	–	–
Fan motor thermal protector	°F (°C)	–	–	–	–
Fan motor thermal fuse	°F (°C)	–	–	–	–

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## 9. Capacity Tables

### 9.1 Cooling Capacity at Te: 43°F (6°C)

Model	Indoor air temp. °FWB (°CWB) (Te: 43°F (6°C))											
	61 (16.1)		64 (17.8)		67 (19.4)		70 (21.1)		72 (22.2)		75 (23.9)	
	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH
FXUQ18PAVJU	14.2	11.8	16.1	12.9	18.0	13.7	18.4	13.6	18.6	13.0	18.9	12.8
FXUQ24PAVJU	19.0	15.4	21.5	16.9	24.0	18.0	24.5	17.8	24.8	17.0	25.3	16.6
FXUQ30PAVJU	23.7	18.8	26.8	20.7	30.0	22.1	30.6	21.8	31.0	20.9	31.6	20.2
FXUQ36PAVJU	28.4	22.1	32.2	24.2	36.0	26.0	36.7	25.7	37.2	24.7	37.9	23.6

TC: Total capacity: MBH

SHC: Sensible heat capacity: MBH

**Note:**

- These capacity tables can be used when selecting a **VRV** indoor unit. The actual capacity of the **VRV** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the **VRV** system satisfies the required heat load.
- shows rated condition.

### 9.2 Heating Capacity

Model	Indoor air temp. °FDB (°CDB) (Tc: 115°F (46°C))											
	62 (16.7)		65 (18.3)		68 (20.0)		70 (21.1)		72 (22.2)		75 (23.9)	
	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	
	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	MBH	
FXUQ18PAVJU	23.3	21.9	20.7	20.0	19.3	18.1						
FXUQ24PAVJU	31.5	29.5	28.0	27.0	26.0	24.5						
FXUQ30PAVJU	39.7	37.1	35.3	34.0	32.7	30.9						
FXUQ36PAVJU	46.7	43.7	41.5	40.0	38.5	36.3						

TC: Total capacity: MBH

**Note:**

- These capacity tables can be used when selecting a **VRV** indoor unit. The actual capacity of the **VRV** system depends on factors such as the selected model of outdoor units, outdoor air temperature and piping length. Please confirm that the corrected capacity of the **VRV** system satisfies the required heat load.
- shows rated condition.

### 9.3 Correction Factor for Cooling Capacity at Te: 48°F (9°C)

Refer to the correction factor table below when a mini-split indoor unit is connected to a **VRV** Heat Pump system using a Branch Port box.

Model	Indoor air temp. °FWB (°CWB) (Te: 48°F (9°C))											
	61 (16.1)		64 (17.8)		67 (19.4)		70 (21.1)		72 (22.2)		75 (23.9)	
	TC	SHF	TC	SHF	TC	SHF	TC	SHF	TC	SHF	TC	SHF
	TC	SHF	TC	SHF	TC	SHF	TC	SHF	TC	SHF	TC	SHF
FXUQ18PAVJU	0.706	1.162	0.765	1.108	0.786	1.090	0.806	1.073	0.841	1.045	0.865	1.028
FXUQ24PAVJU	0.706	1.162	0.765	1.108	0.786	1.090	0.806	1.073	0.841	1.045	0.865	1.028
FXUQ30PAVJU	0.707	1.161	0.773	1.103	0.795	1.087	0.811	1.077	0.842	1.053	0.865	1.035
FXUQ36PAVJU	0.707	1.161	0.773	1.103	0.795	1.087	0.811	1.077	0.842	1.053	0.865	1.035

TC: Total capacity

SHF: Sensible heat factor

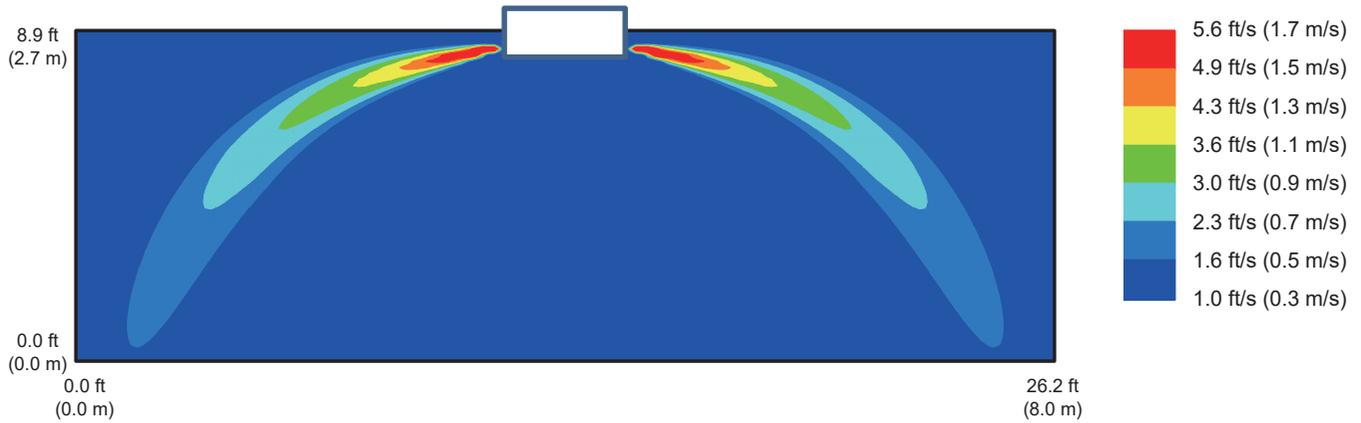
# 10. Air Velocity and Temperature Distributions (Reference Data)

## 10.1 Cooling Operation

FXUQ18PAVJU

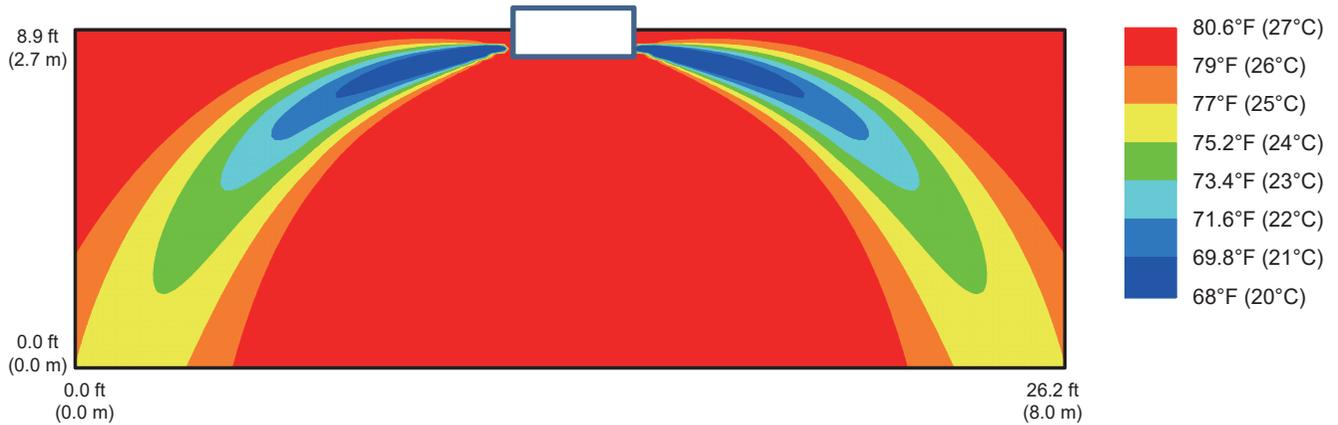
### Air velocity distribution of FXUQ18PAVJU (Cooling operation)

Air flow direction : Horizontal



### Air temperature distribution of FXUQ18PAVJU (Cooling operation)

Air flow direction : Horizontal

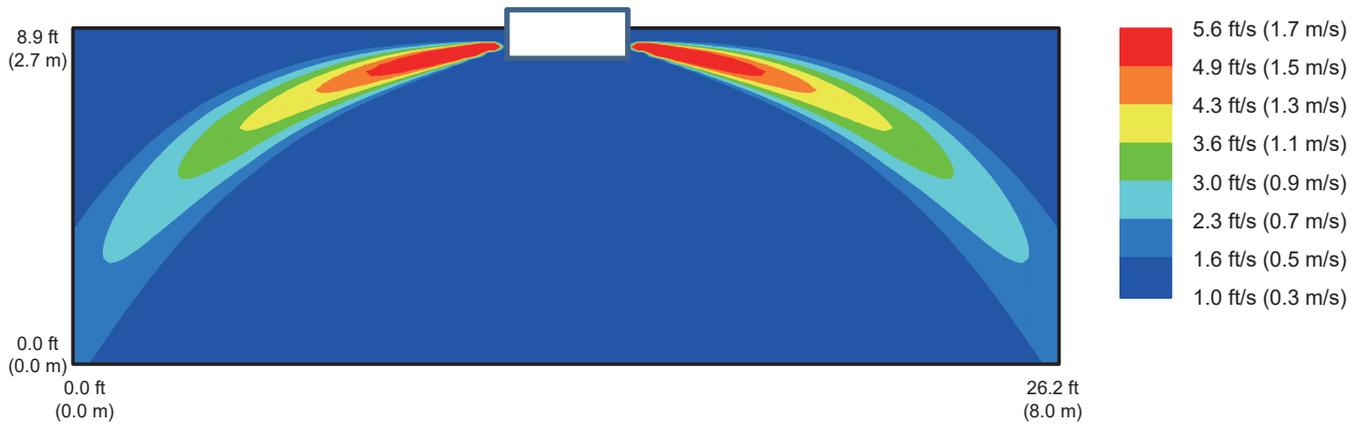


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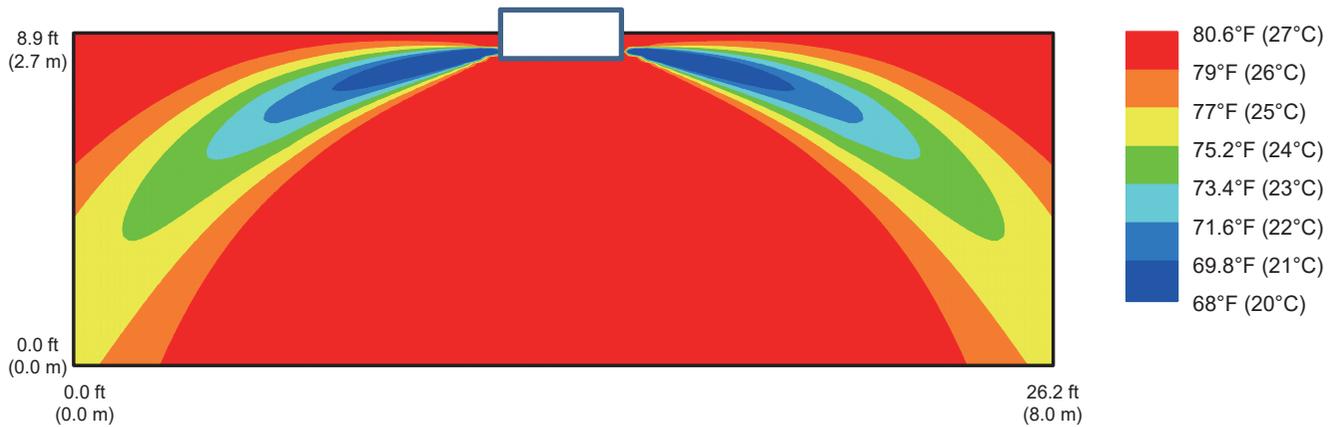
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXUQ24PAVJU**

**Air velocity distribution of FXUQ24PAVJU (Cooling operation)**  
**Air flow direction : Horizontal**



**Air temperature distribution of FXUQ24PAVJU (Cooling operation)**  
**Air flow direction : Horizontal**

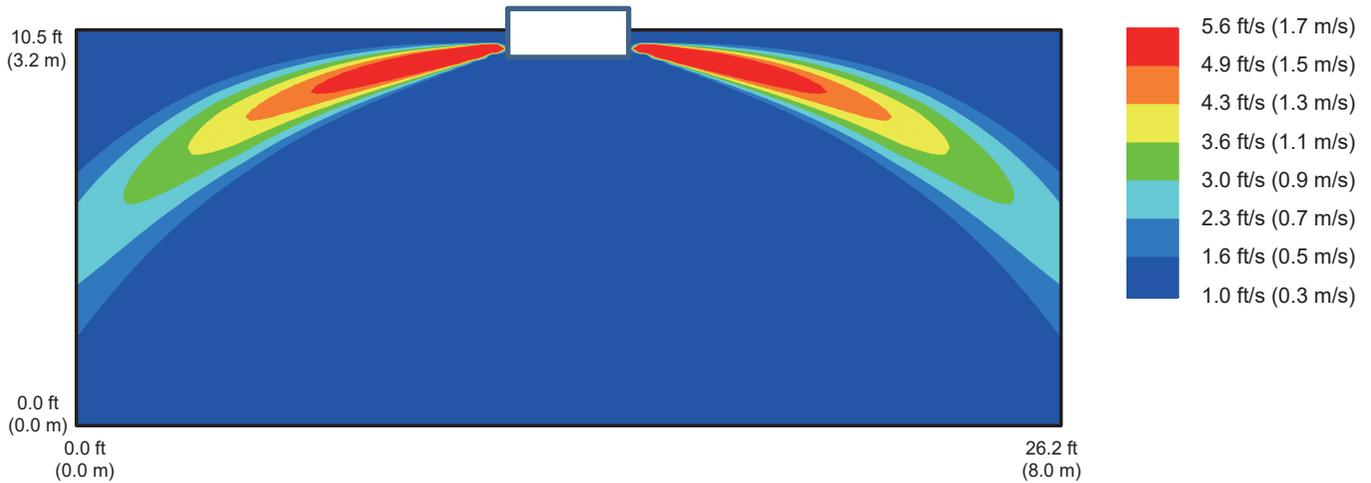


**Note:**

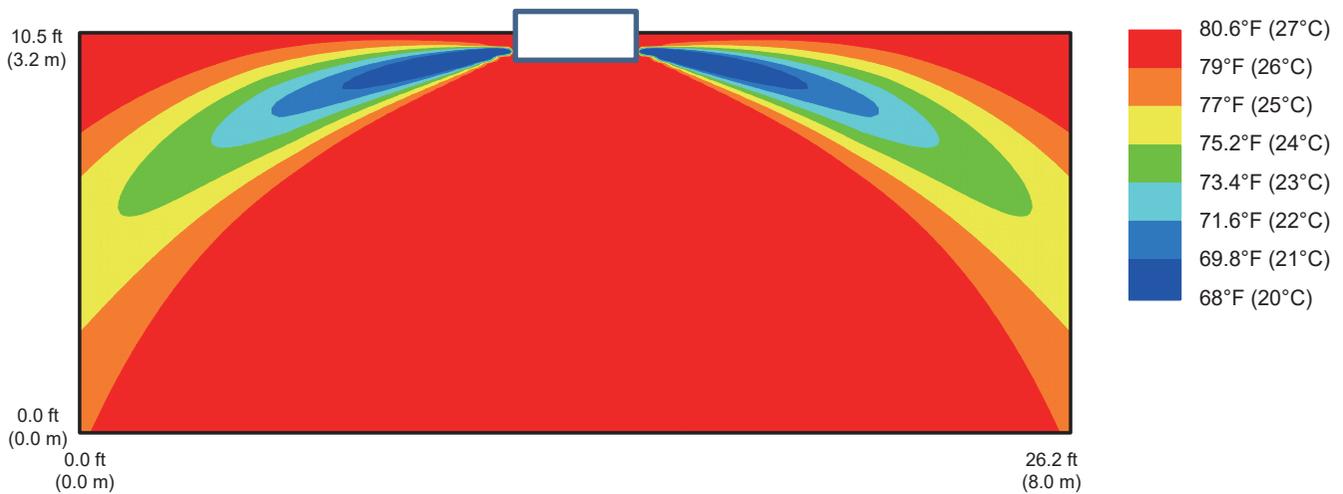
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXUQ30PAVJU**

**Air velocity distribution of FXUQ30PAVJU (Cooling operation)**  
**Air flow direction : Horizontal**



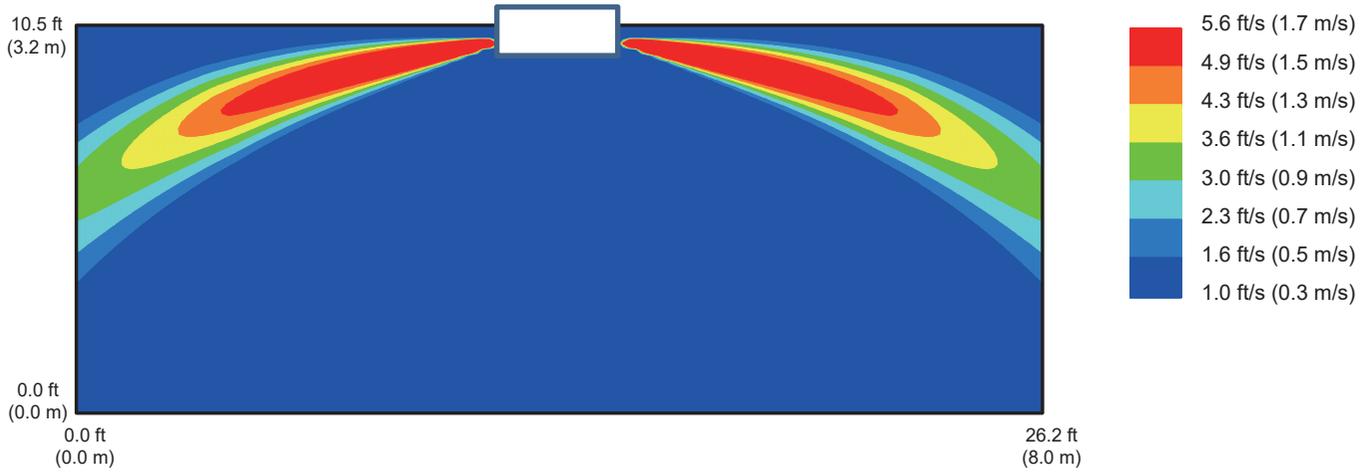
**Air temperature distribution of FXUQ30PAVJU (Cooling operation)**  
**Air flow direction : Horizontal**



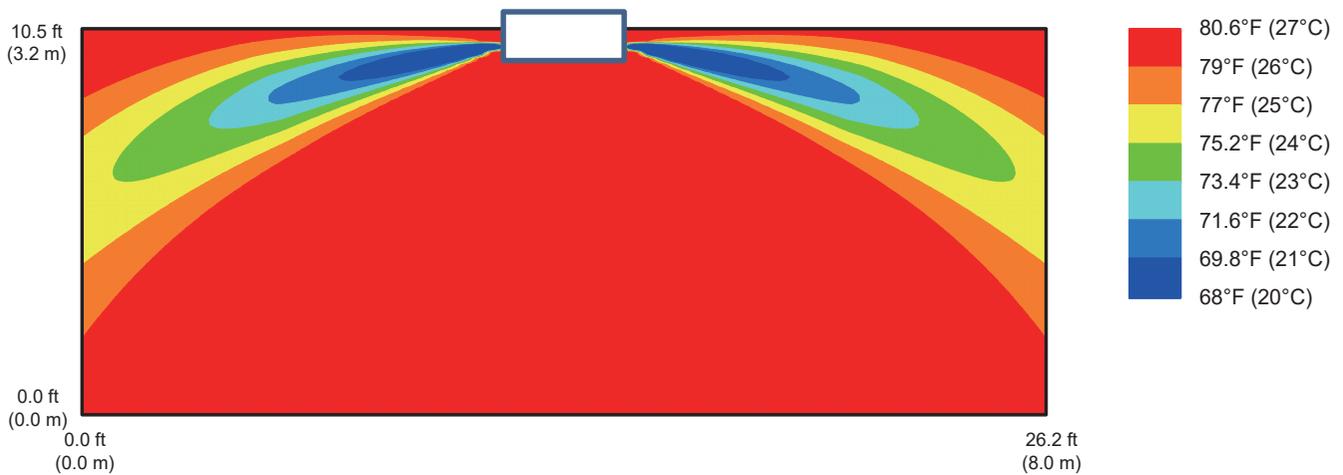
*Note:*  
 Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.

**FXUQ36PAVJU**

**Air velocity distribution of FXUQ36PAVJU (Cooling operation)**  
**Air flow direction : Horizontal**



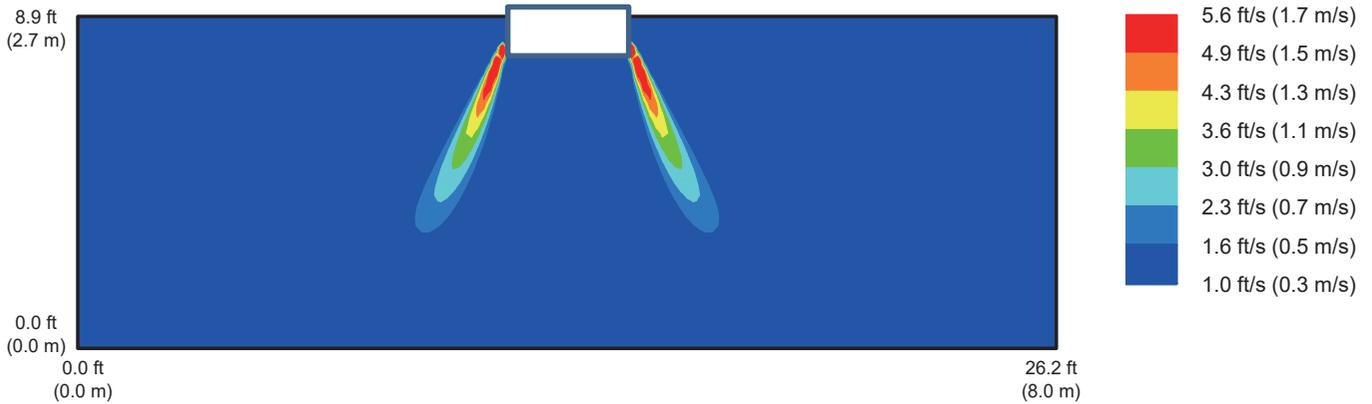
**Air temperature distribution of FXUQ36PAVJU (Cooling operation)**  
**Air flow direction : Horizontal**



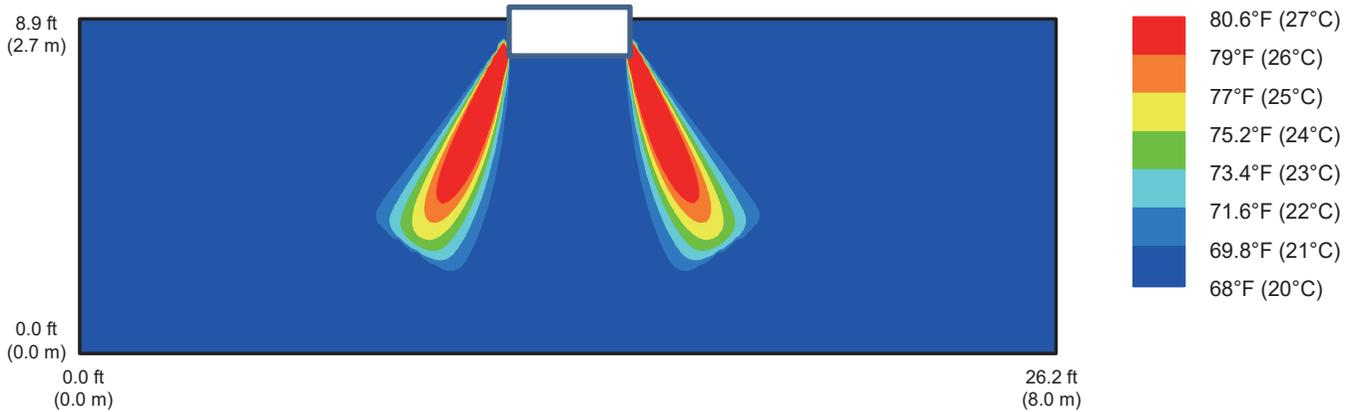
*Note:*  
 Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.

## 10.2 Heating Operation FXUQ18PAVJU

**Air velocity distribution of FXUQ18PAVJU (Heating operation)**  
Air flow direction : Down



**Air temperature distribution of FXUQ18PAVJU (Heating operation)**  
Air flow direction : Down

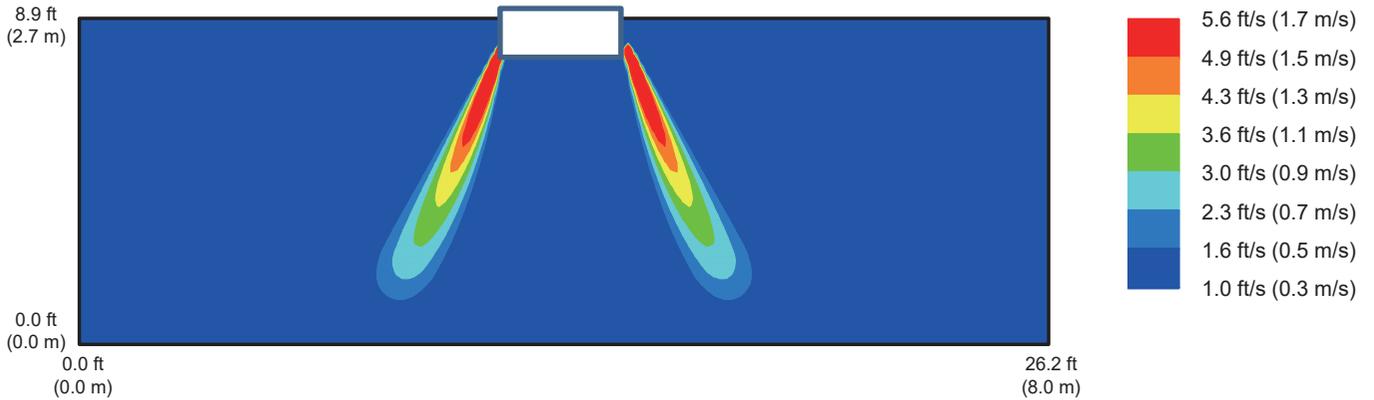


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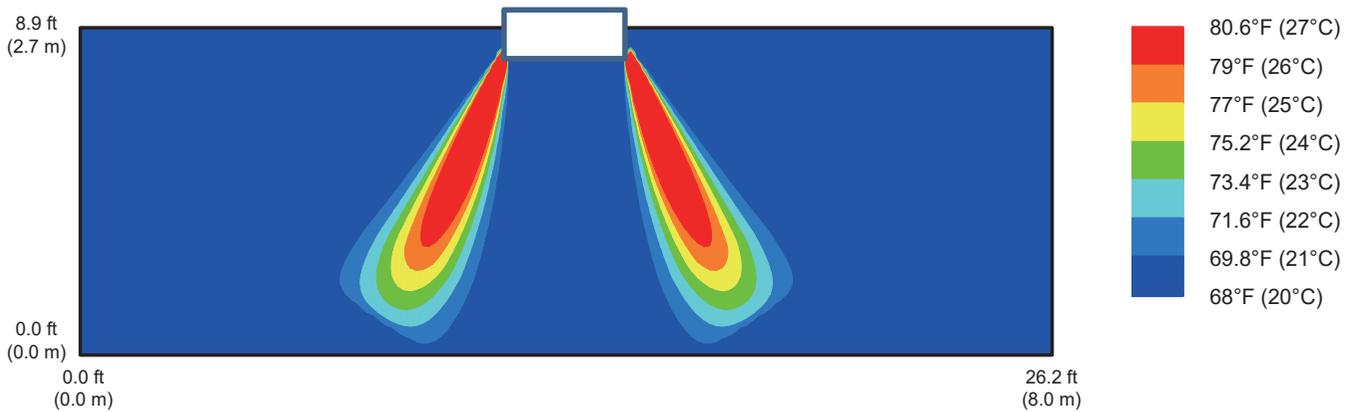
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXUQ24PAVJU**

**Air velocity distribution of FXUQ24PAVJU (Heating operation)**  
**Air flow direction : Down**



**Air temperature distribution of FXUQ24PAVJU (Heating operation)**  
**Air flow direction : Down**

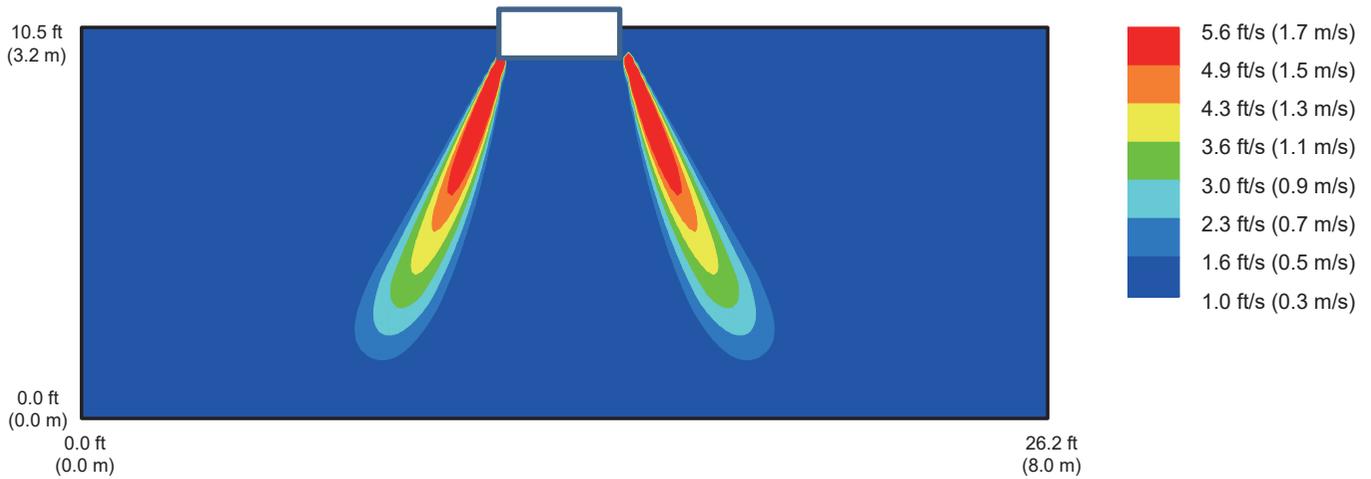


**Note:**

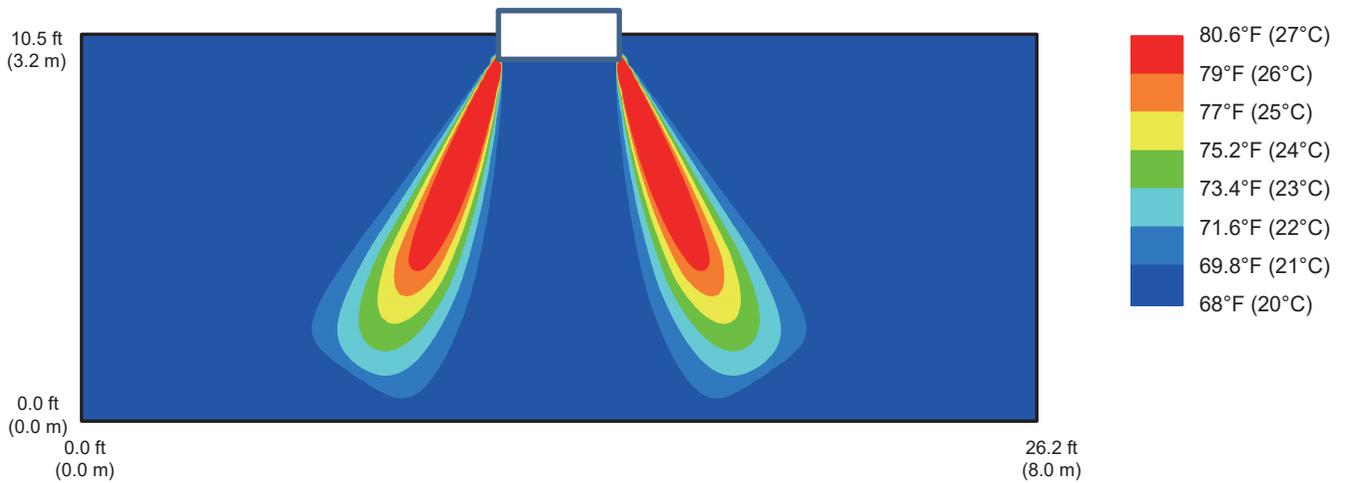
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXUQ30PAVJU**

**Air velocity distribution of FXUQ30PAVJU (Heating operation)**  
**Air flow direction : Down**



**Air temperature distribution of FXUQ30PAVJU (Heating operation)**  
**Air flow direction : Down**

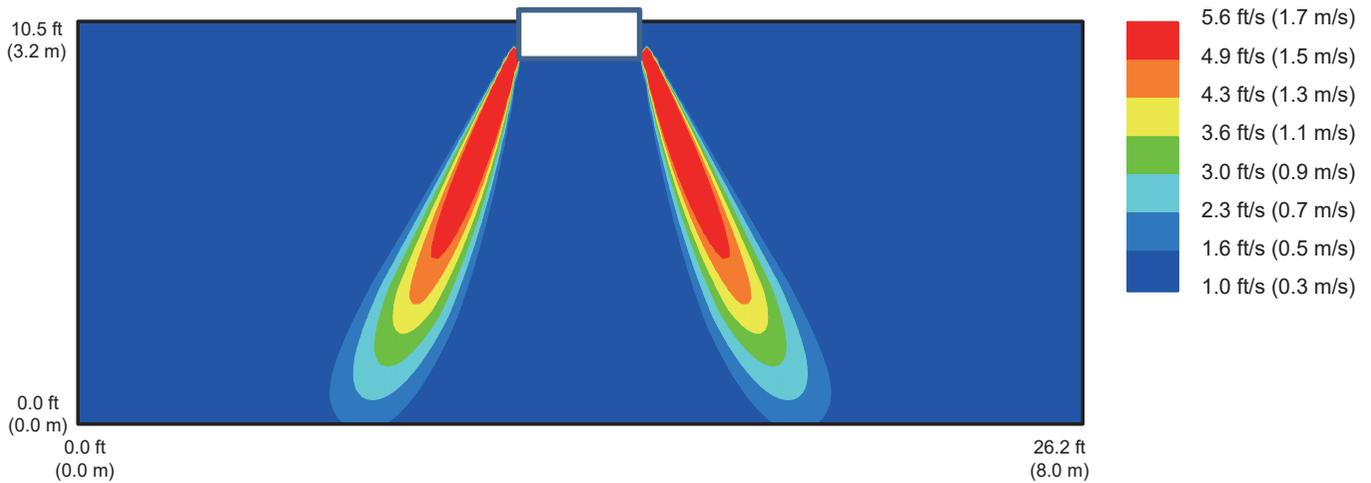


**Note:**

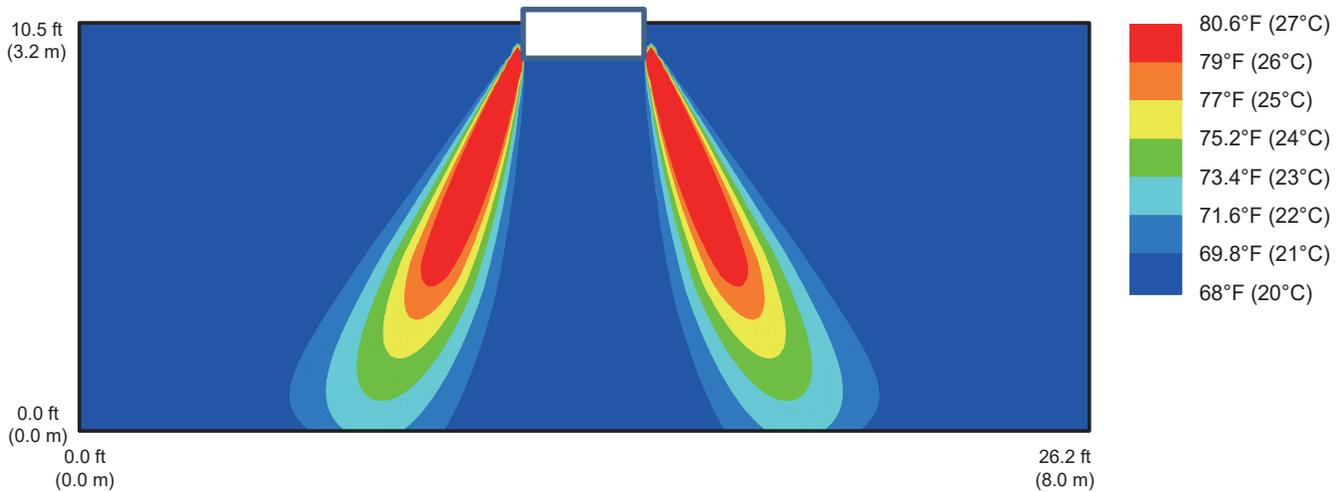
*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

**FXUQ36PAVJU**

**Air velocity distribution of FXUQ36PAVJU (Heating operation)**  
**Air flow direction : Down**



**Air temperature distribution of FXUQ36PAVJU (Heating operation)**  
**Air flow direction : Down**

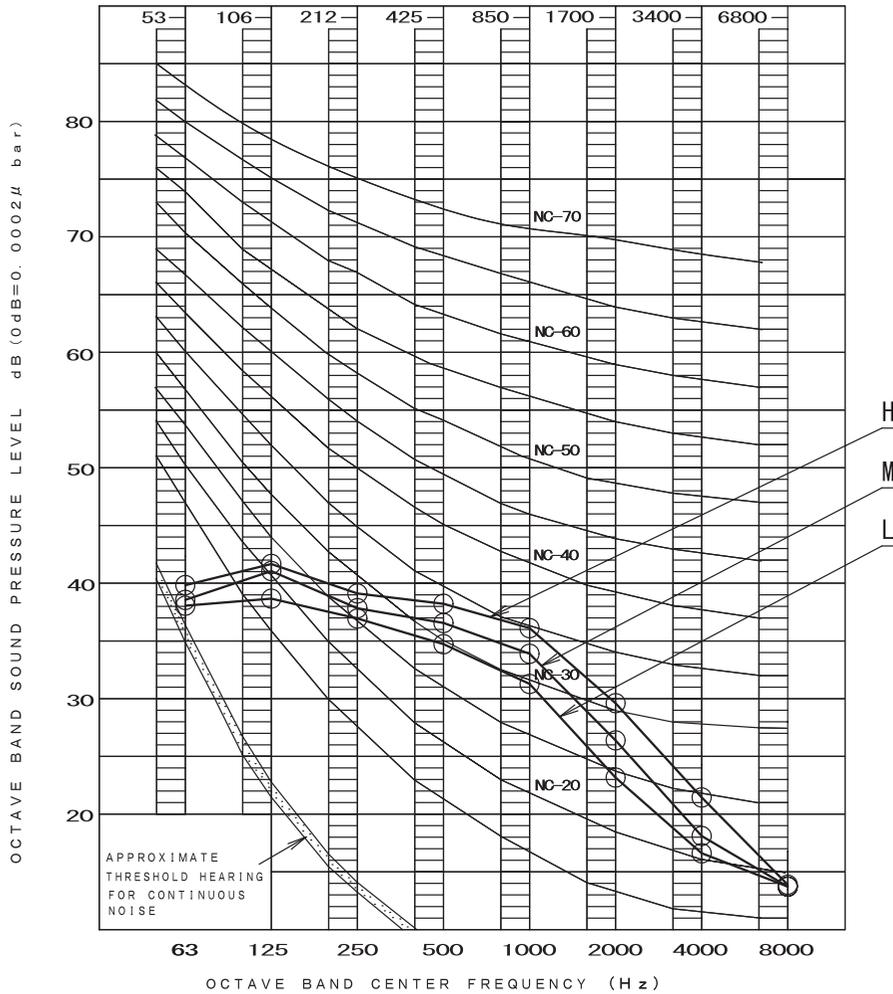


**Note:**

*Please understand that the analysis results may differ with actual installation conditions, or furniture arrangement.*

# 11. Sound Levels (Reference Data)

FXUQ18-24PAVJU



OVER ALL (dB)

SCALE	MODE		
	H	M	L
A	40.0	38.0	36.0

(B. G. N IS ALREADY RECTIFIED)

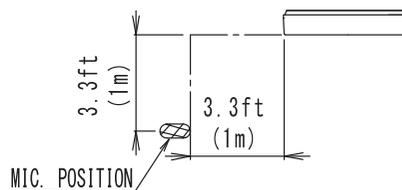
**OPERATING CONDITIONS**

POWER SOURCE	208/230V 60Hz
COOLING	RETURN AIR TEMPERATURE: 80.0°F (26.7°C) DB, 67.0°F (19.4°C) WB OUTDOOR TEMPERATURE: 95.0°F (35.0°C) DB, 75.0°F (23.9°C) WB
HEATING	RETURN AIR TEMPERATURE: 70.0°F (21.1°C) DB, 60.0°F (15.6°C) WB OUTDOOR TEMPERATURE: 47.0°F (8.3°C) DB, 43.0°F (6.1°C) WB

**MEASURING PLACE**

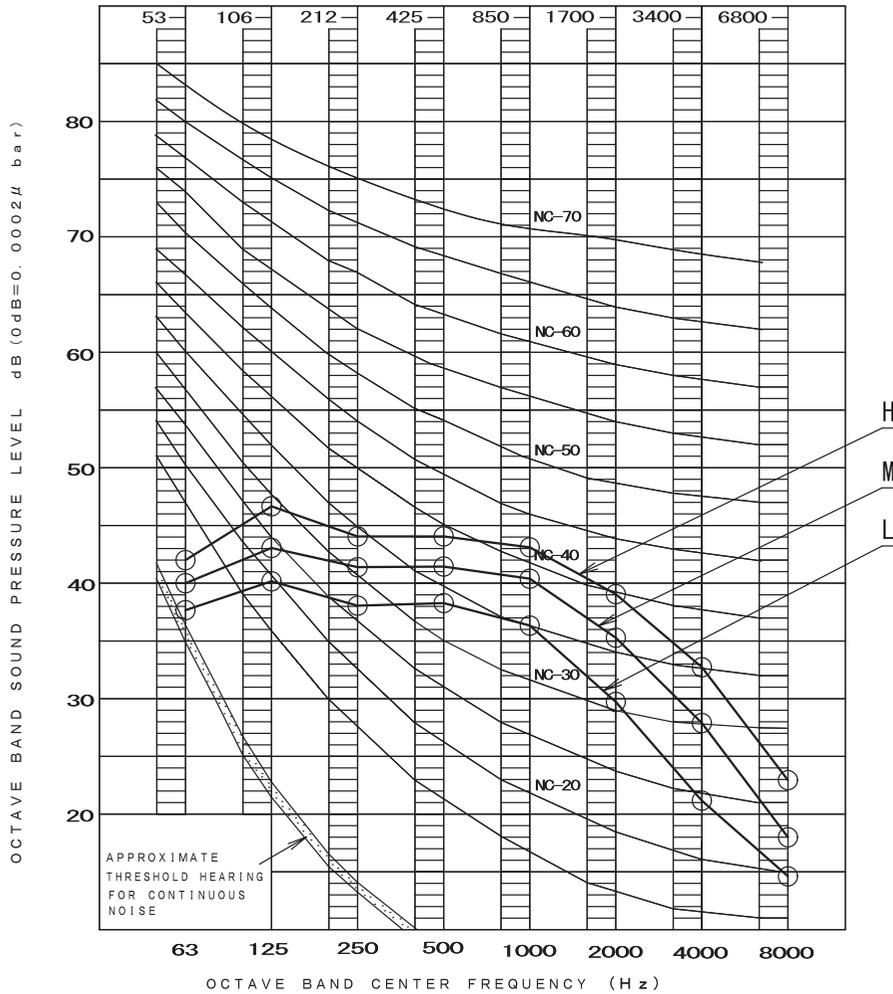
ANECHOIC CHAMBER

**LOCATION OF MICROPHONE**



NOTE: Operation noise differs with operation and ambient conditions.

FXUQ30-36PAVJU



OVER ALL (dB)

SCALE	MODE		
	H	M	L
A	47.0	44.0	40.0

(B. G. N IS ALREADY RECTIFIED)

MEASURING PLACE

ANECHOIC CHAMBER

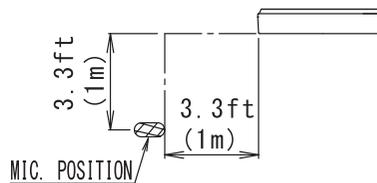
OPERATING CONDITIONS

POWER SOURCE 208/230V 60Hz

COOLING RETURN AIR TEMPERATURE: 80.0°F (26.7°C) DB, 67.0°F (19.4°C) WB  
 OUTDOOR TEMPERATURE: 95.0°F (35.0°C) DB, 75.0°F (23.9°C) WB

HEATING RETURN AIR TEMPERATURE: 70.0°F (21.1°C) DB, 60.0°F (15.6°C) WB  
 OUTDOOR TEMPERATURE: 47.0°F (8.3°C) DB, 43.0°F (6.1°C) WB

LOCATION OF MICROPHONE



NOTE: Operation noise differs with operation and ambient conditions.

## 12. Accessories

### 12.1 Optional Accessories (for Unit)

Option	Note	FXUQ18PAVJU	FXUQ24PAVJU	FXUQ30PAVJU	FXUQ36PAVJU
Blocking material kit for 2-way discharge				KDBHP49B140	
Air outlet blocking decoration panel				KDBTP49B140	
Replacement long life filter				KAF5511D160	

C: 3D133251

### 12.2 Optional Accessories (for Controls)

**Refer to latest Controls Engineering Manual.**

The latest controls engineering manual is available in Daikin City and can be downloaded using the path below.

Document Library → Product Category → VRV → VRV → Engineering Data Manual → “EM-Controls Optional Accessories”







**Warning** ● Ask a qualified installer or contractor to install this product. Do not try to install the product yourself.



Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.

- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorised parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor and/or retailer.

### **Cautions on product corrosion**

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.