



# CFSA69594P / CFSA69594P1

## 5G Ceiling Mount DAS Antennas Datasheet

CFSA69594P and CFSA69594P1 are low-PIM, indoor, wideband, omnidirectional low-profile ceiling mount DAS antennas. Designed to provide pattern coverage that is optimized for indoor coverage requirements at 698-960 MHz and 1690-5925 MHz for 5G, 4G/LTE and older cellular networks. Applicable for environments where wide-angle coverage is necessary for a successful wireless deployment, while maintaining desired in-building aesthetics.

### FEATURES AND BENEFITS

- 5G sub-6 GHz networks including C-Band, CBRS, LAA
- Ultra-low profile
- Ultra-low and optimized PIM rating less than -163 dBc
- Mounts directly and easily to ceiling tile or hard ceilings
- Radome is paintable using commonly available spray paints (must not contain metal)
- UL94-V0 flammability rating
- Plenum rated cable

### ELECTRICAL SPECIFICATION

Operating Frequency (MHz)	698-824	824-894	880-960	1350-1550	1690-1880	1850-1990	1910-2200	2300-2700	3300-4000	4000-4200	5150-5925
VSWR - Avg	<1.3:1	<1.2:1	<1.4:1	<1.3:1	<1.2:1	<1.2:1	<1.2:1	<1.3:1	<1.4:1	<1.4:1	<1.4:1
VSWR - Max	<1.7:1	<1.7:1	<1.7:1	<2.0:1	<1.7:1	<1.7:1	<1.7:1	<1.7:1	<1.7:1	<2.5:1	<2.0:1
Peak Gain - Average (dBi)	3.2	3.0	2.6	3.8	5.2	5.4	5.3	5.2	3.7	3.8	4.4
Peak Gain (dBi)	3.7	3.4	3.2	4.5	5.4	5.6	5.6	5.6	4.3	4.1	4.9
PIM - 2x20W - Ave (dBc)	<-166							<-163	<-164		-
PIM - 2x20W - Max (dBc)	<-150										-
Nominal Impedance (Ohms)	-50										
Max Power - Ambient 25°C (W)	50										
Polarization	Linear - Horizontal										
Azimuth Beamwidth	360°, Omnidirectional										

### MECHANICAL SPECIFICATION

Dimensions - height x diameter - mm (in.)	7.6 x 180 (0.30 x 7.09)
Weight - g (oz.)	240 (8.47)
Ports	1
Cable Length / Connector (cm)	Standard 30 cm, available Type N (female) and 4.3-10 (female)
Radome	PC, UL94-V0 (White)
Mounting	Ceiling mount (flush mount with screws or anchors)

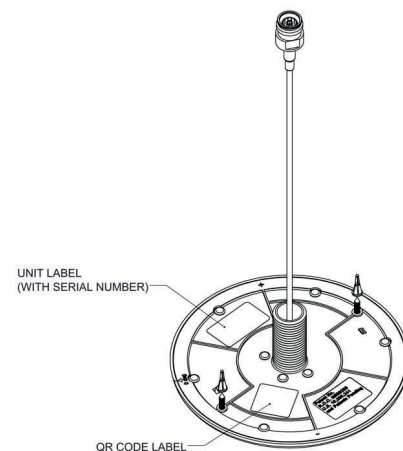
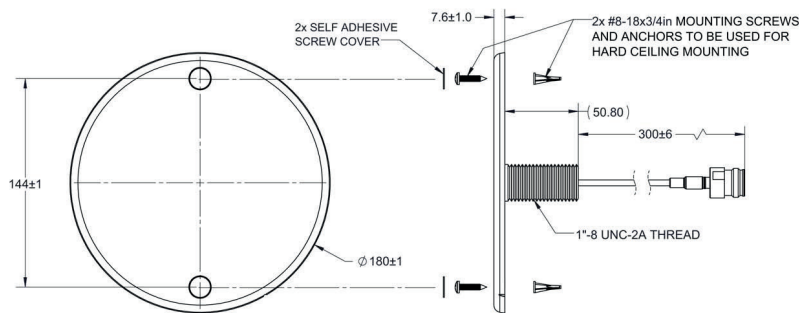
## ENVIRONMENTAL SPECIFICATION

Operating Temperature - °C (°F)	-30 to +70°C (-22 to +158°F)
Storage Temperature - °C (°F)	-40 to +85°C (-40 to +185°F)
Flammability Rating	UL94-V0
Material Substance Compliance	RoHS Compliant
Standard for Safety: Fire and Smoke (Plenum)	Plenum UL 444

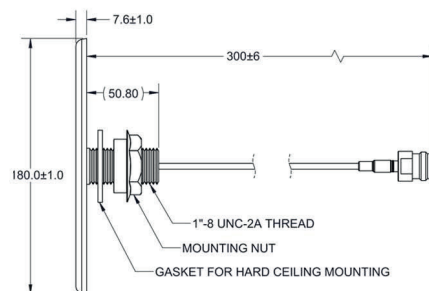
PART NUMBER	CABLE LENGTH	CONNECTOR	MOUNTING	PACKAGING
CFSA69594P-30NF	30 cm (12 in.)	Type N-Female	Ceiling Tile	Unit
CFSA69594P-30D43F	30 cm (12 in.)	4.3-10 Female	Ceiling Tile	Unit
CFSA69594P-B30NF	30 cm (12 in.)	Type N-Female	Ceiling Tile	Bulk (16 Pack)
CFSA69594P-B30D43F	30 cm (12 in.)	4.3-10 Female	Ceiling Tile	Bulk (16 Pack)
CFSA69594P1-30NF	30 cm (12 in.)	Type N-Female	Hard Ceiling	Unit
CFSA69594P1-30D43F	30 cm (12 in.)	4.3-10 Female	Hard Ceiling	Unit
CFSA69594P1-B30NF	30 cm (12 in.)	Type N-Female	Hard Ceiling	Bulk (16 Pack)
CFSA69594P1-B30D3F	30 cm (12 in.)	4.3-10 Female	Hard Ceiling	Bulk (16 Pack)

## MECHANICAL DRAWINGS

### HARD CEILING MOUNT



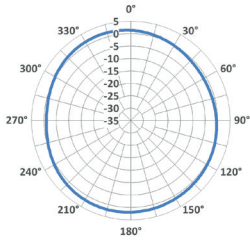
### CEILING TILE MOUNT



# RADIATION PATTERNS

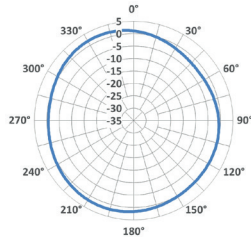
## 725 MHz

Horizontal - 725 MHz



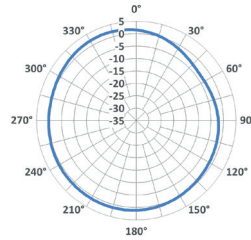
## 850 MHz

Horizontal - 850 MHz



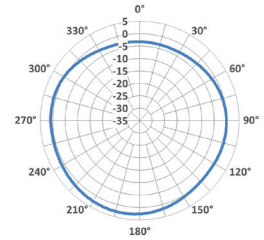
## 925 MHz

Horizontal - 925 MHz

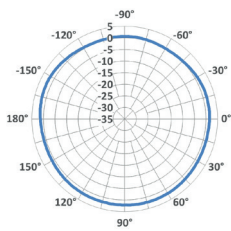


## 1448 MHz

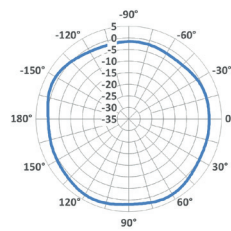
Horizontal - 1448 MHz



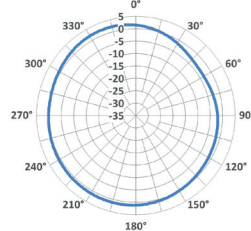
Vertical - 725 MHz



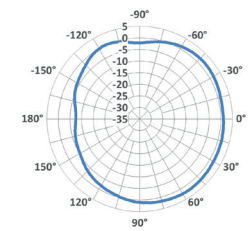
Vertical - 850 MHz



Vertical - 925 MHz

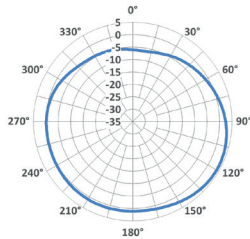


Vertical - 1448 MHz



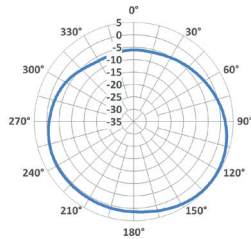
## 1730 MHz

Horizontal - 1730 MHz



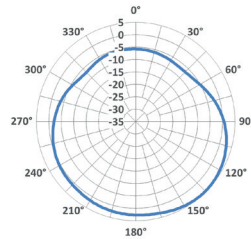
## 1930 MHz

Horizontal - 1930 MHz



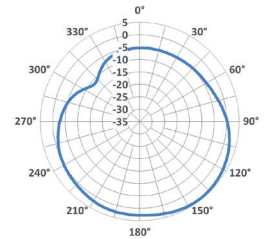
## 2130 MHz

Horizontal - 2130 MHz

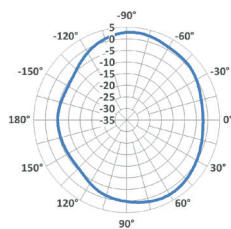


## 2310 MHz

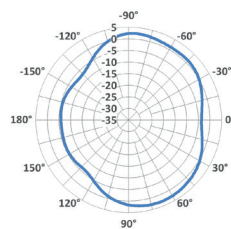
Horizontal - 2310 MHz



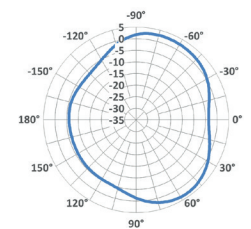
Vertical - 1730 MHz



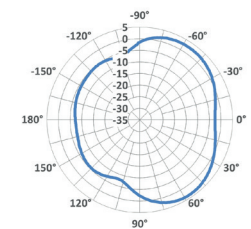
Vertical - 1930 MHz



Vertical - 2130 MHz

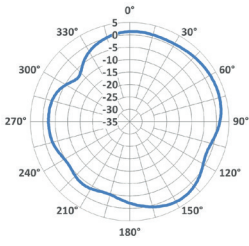


Vertical - 2310 MHz



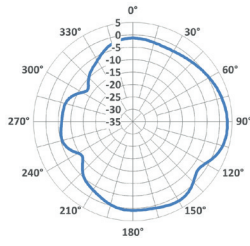
# 3500 MHz

Horizontal - 3500 MHz



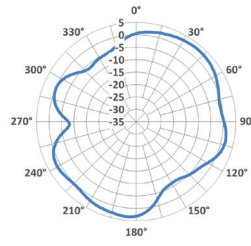
# 4000 MHz

Horizontal - 4000 MHz

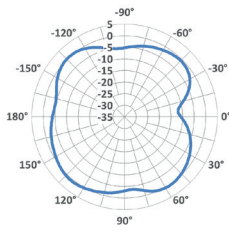


# 5500 MHz

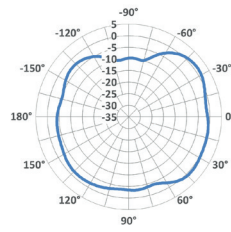
Horizontal - 5500 MHz



Vertical - 3500 MHz



Vertical - 4000 MHz



Vertical - 5500 MHz

