

# Clarity Series™ Translucent & White DAS Antenna Family Ultra-Thin, Ceiling-Mount Omni Antenna

Featuring PIMinator® Low PIM Performance



DASUTCCxxx

Installed: PROFILE VIEW and DIRECT VIEW FROM BELOW

Industry leading -155 dBc PIM compliant in-building Ultra-Thin ceiling mount DAS omni antenna family including six different antenna products and one Energy Directive Reflector. The Pulse Electronics PIMinator® line of DAS in-building low PIM omni antenna meets the most demanding PIM requirements for 2G, 3G, 4G (LTE) and WiFi bands. DASUTCC / DASUTWC product family includes a 500mm pigtail with N, Mini-DIN and 4.3-10 female connector.

### Features

- Ultra-Thin
- Translucent (Clear) and White
- Industry leading -155 dBc at 2 x 20 watts (2 x 43dBm) PIM rating
- Covers cellular bands and WiFi from 608 through 2700 MHz
- Available with N, Mini-DIN and 4.3-10 female connector
- RoHS Compliant
- Patent Pending design

### Applications

- Ultra-Thin structure of products allow installation in places where Aesthetics is important
- Clear (Translucent) structure of antenna make this product nearly-invisible
- In-building DAS systems requiring best PIM



DASUTCCxxx  
TRANSLUCENT



DASUTWCxxx  
WHITE

Antennas and accessory products covered in this documents are as follows:

Pulse P/N : TRANSLUCENT	Pulse P/N: WHITE	Connector Type	Reflector
DASUTCCR500NF	DASUTWCR500NF	N Female	Included
DASUTCCR500MD	DASUTWCR500MD	4.1-9.5 Mini-DIN Female	Included
DASUTCCR5004310	DASUTWCR5004310	4.3-10 DIN Female	Included
DASUTCC500NF	DASUTWC500NF	N Female	Not Included
DASUTCC500MD	DASUTWC500MD	4.1-9.5 Mini-DIN Female	Not Included
DASUTCC5004310	DASUTWC5004310	4.3-10 DIN Female	Not Included

Accessory Part Number	Description
DASUTCCACC1	Reflector only (not antenna)
DASACABSORBER	PIM-Blocker Absorber
DASACHOLDER	Above-Ceiling Antenna Holder
DASCLINSERT	Clarity Installation Adapter



REFLECTOR

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### Electrical Specifications (Both Clear & White configuration)

Frequency [MHz]		608-960/1695-2200/ 2300-2700	
Nominal Impedance [ $\Omega$ ]		50	
VSWR	608-960 MHz	<2:1	
	1695-2200 MHz	<2:1	
	2300-2700 MHz	<2:1	
		Without Reflector	With Reflector
Gain	608-960 MHz [dBi typ]	4	7
	1695-2200 MHz [dBi typ]	6	7
	2300-2700 MHz [dBi typ]	6	5
Radiation Pattern	HPBW Horizontal Plane at 45° [°]	360	
	HPBW Vertical Plane (608-960) [° typ]	100	90
	HPBW Vertical Plane (1695-2700) [° typ]	130	25
Polarization		Vertical	
Power Rating [W]		40	
PIM at 2x20 Watts [dBc]		-155	
Connector		(NF), (4.1-9.5 Mini DIN F), (4.3-10 DIN F)	
Cable Type		Plenum Rated, CM-Rated, NFPA262 compliant	

### Mechanical Specifications

Radome Material	UV Protected, UL94 V-0
Weight [oz/g]	1.65 / 750
Dimensions [Inches/mm]	9.41 / 239 diameter
Height [Inches/mm]	Full height 6.78 / 172 Extension from ceiling only 0.33 / 8.4

### Environmental Specifications

Operating Temperature [°C]	-40 to +70
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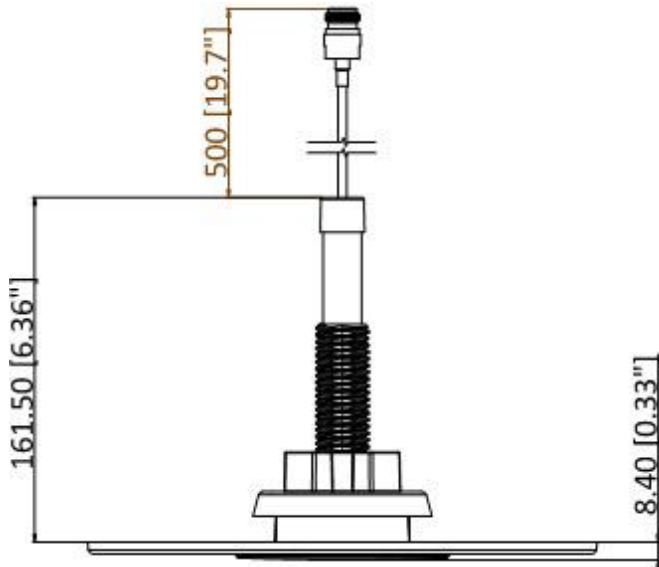
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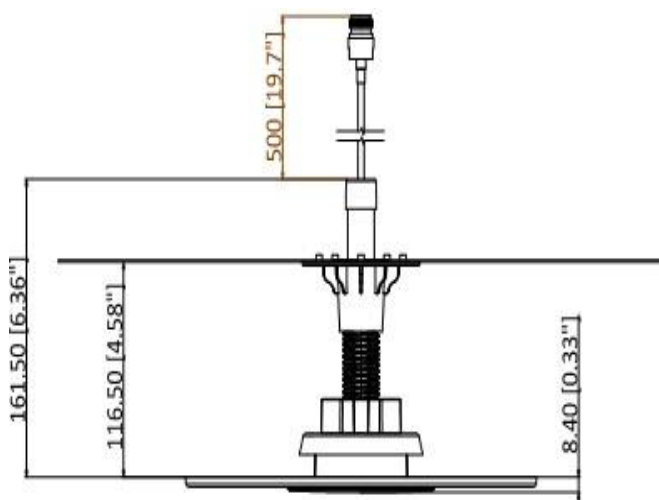
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## Mechanical Drawings without Reflector



## Mechanical Drawings with Reflector



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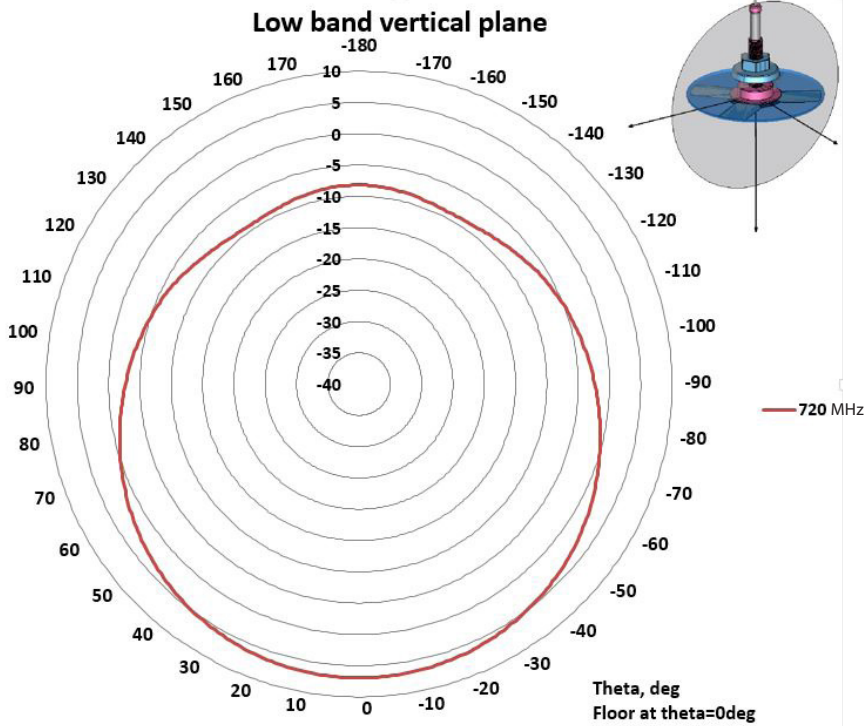
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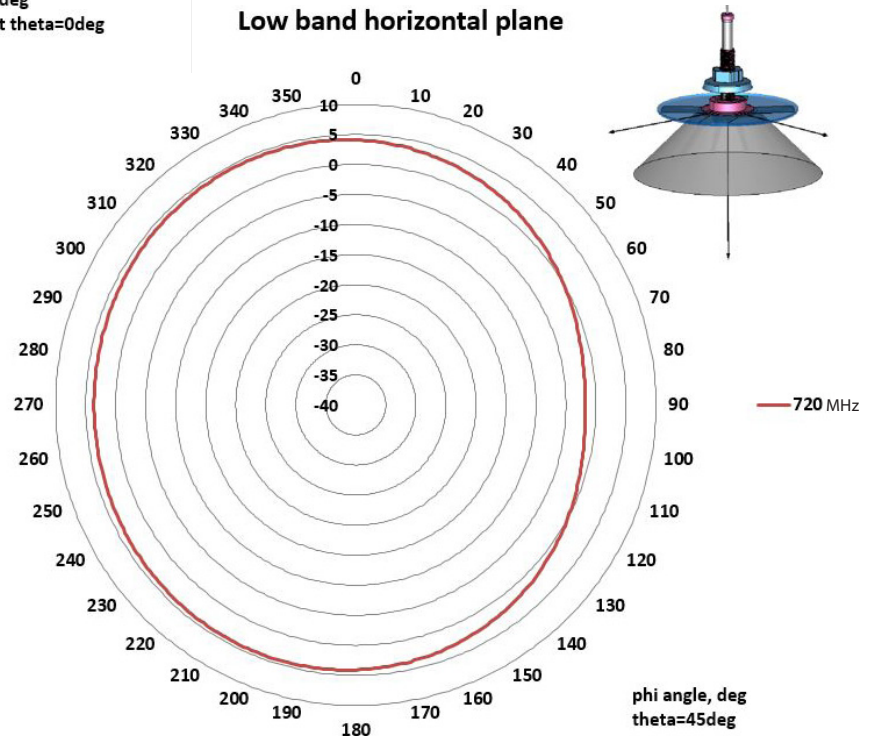
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Translucent & White DAS Antenna Family  
Ultra-Thin, Ceiling-Mount Omni Antenna

Featuring PIMinator® Low PIM Performance



Radiation Patterns for  
DASUTCCR500NF, DASUTWCR500NF,  
DASUTCCR500MD, DASUTWCR500MD  
and DASUTCCR5004310,  
DASUTWCR5004310  
i.e. antennas WITH  
Reflector DASUTCCACC1



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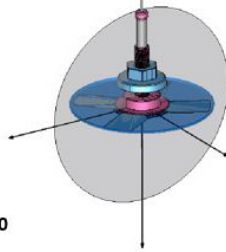
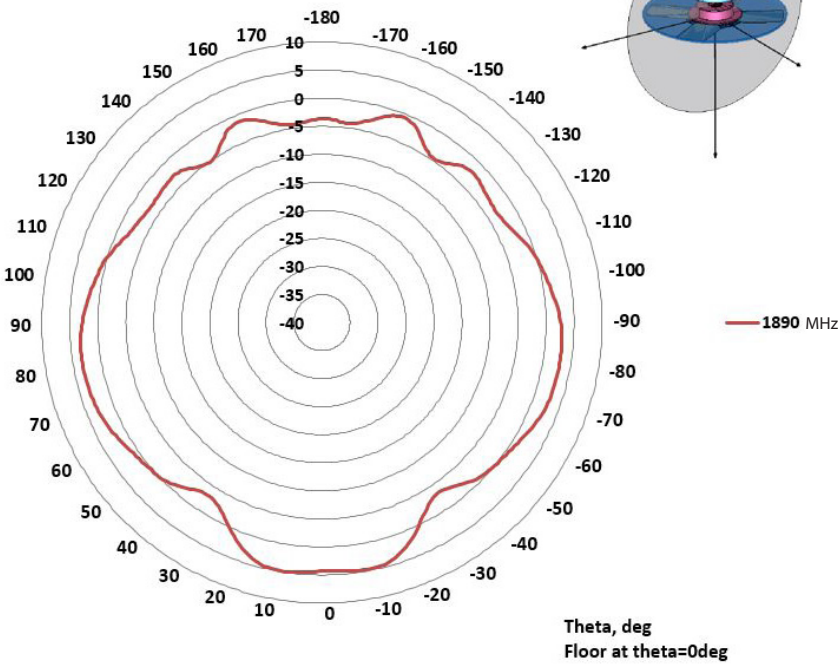
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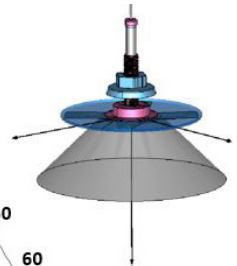
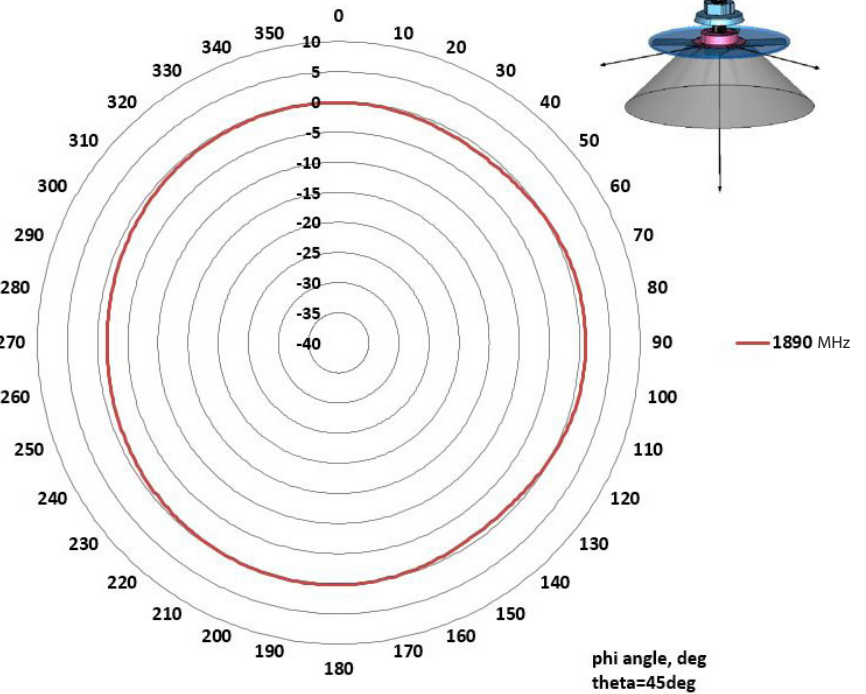
Featuring PIMinator® Low PIM Performance

Mid band vertical plane



Radiation Patterns for  
DASUTCCR500NF, DASUTWCR500NF,  
DASUTCCR500MD, DASUTWC4500MD  
and DASUTCCR5004310,  
DASUTWCR5004310  
i.e. antennas WITH  
Reflector DASUTCCACC1

Mid band horizontal plane



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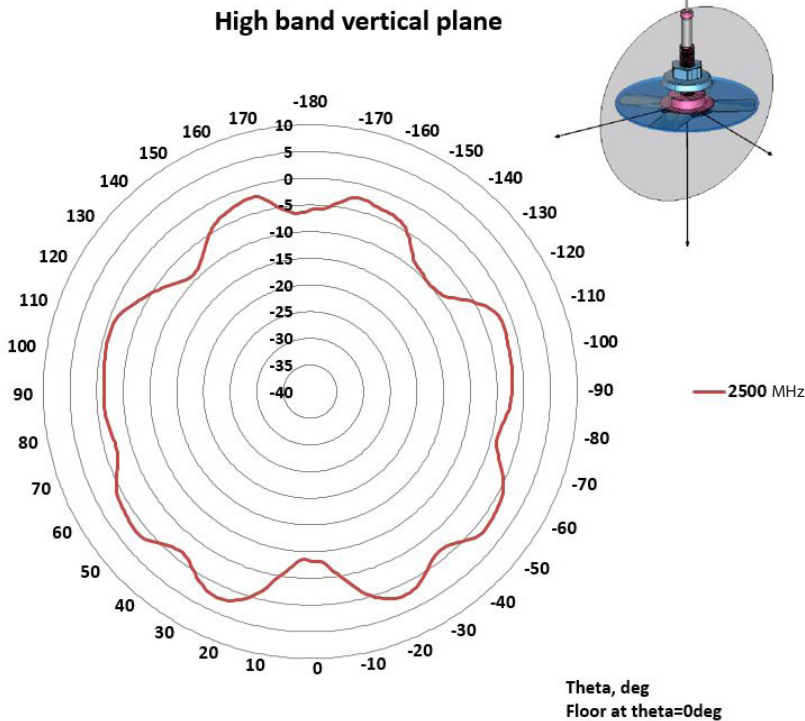
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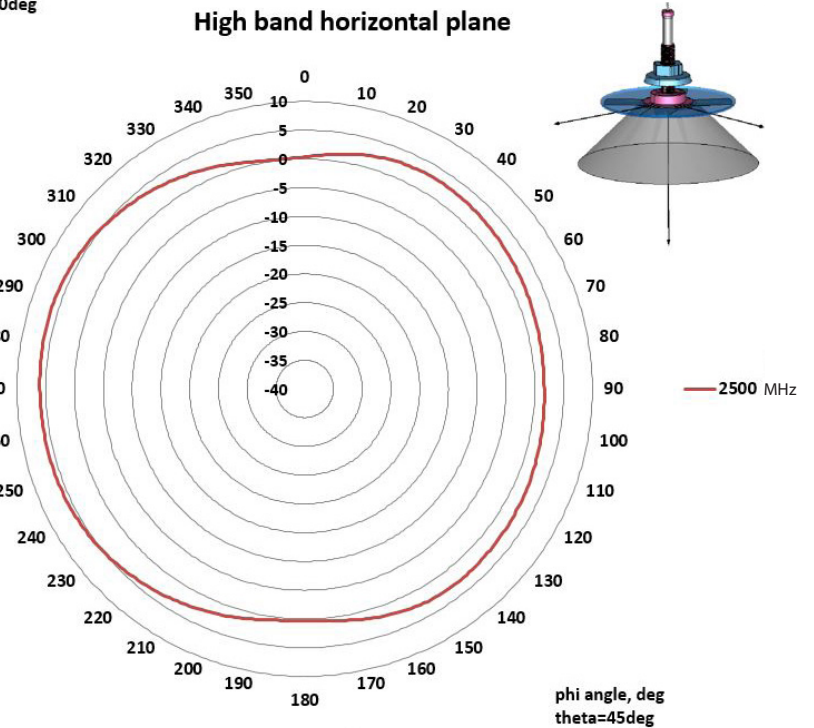
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Translucent & White DAS Antenna Family  
Ultra-Thin, Ceiling-Mount Omni Antenna

Featuring PIMinator® Low PIM Performance



Radiation Patterns for  
DASUTCCR500NF, DASUTWCR500NF,  
DASUTCCR500MD, DASUTWCR500MD,  
and DASUTCCR5004310,  
DASUTWCR5004310  
i.e. antennas WITH  
Reflector DASUTCCACC1



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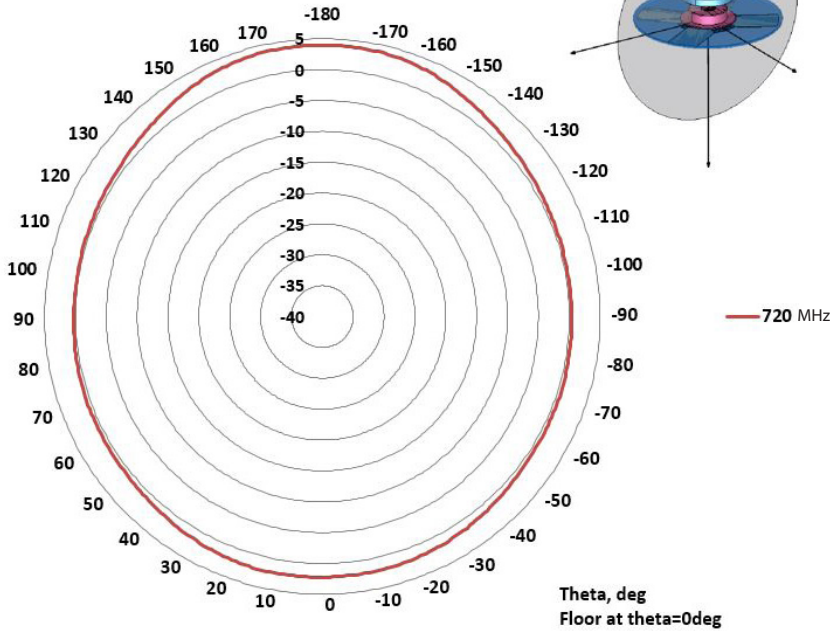
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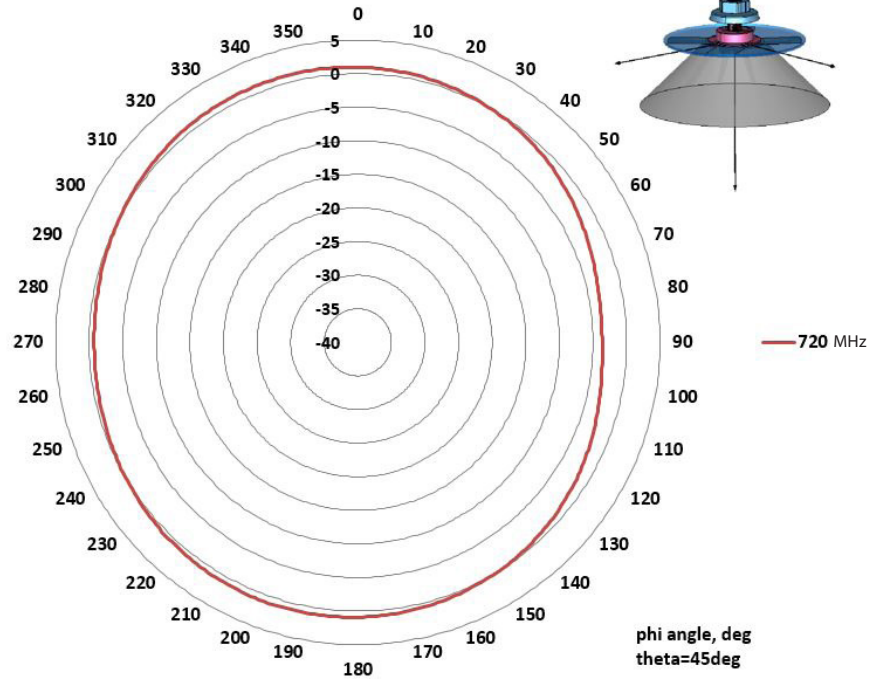
Featuring PIMinator® Low PIM Performance

Low band vertical plane



Radiation Patterns for  
DASUTCC500NF, DASUTWC500NF,  
DASUTCC500MD, DASUTWC500MD,  
and DASUTCC5004310,  
DASUTWC5004310  
i.e. antennas WITHOUT  
Reflector DASUTCCACC1

Low band horizontal plane



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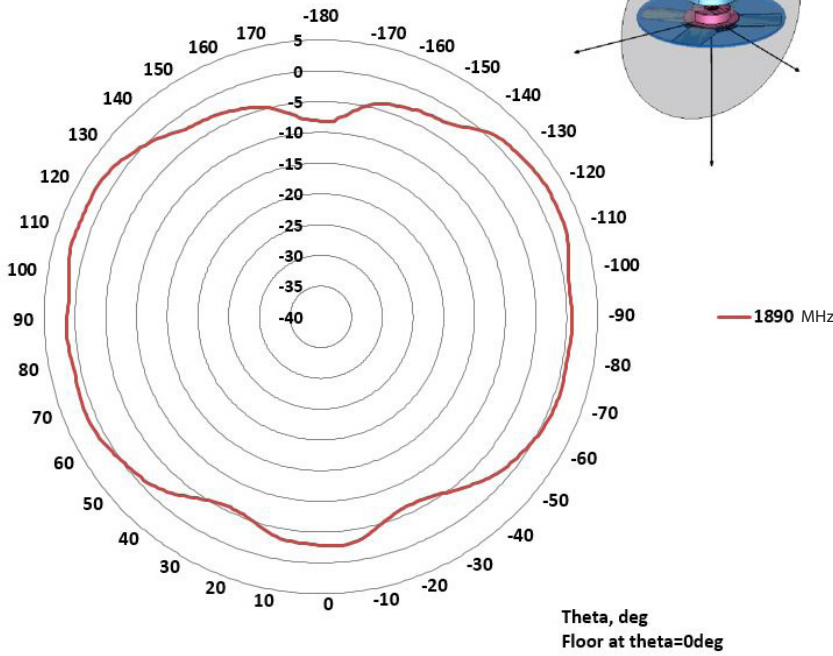
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Translucent & White DAS Antenna Family  
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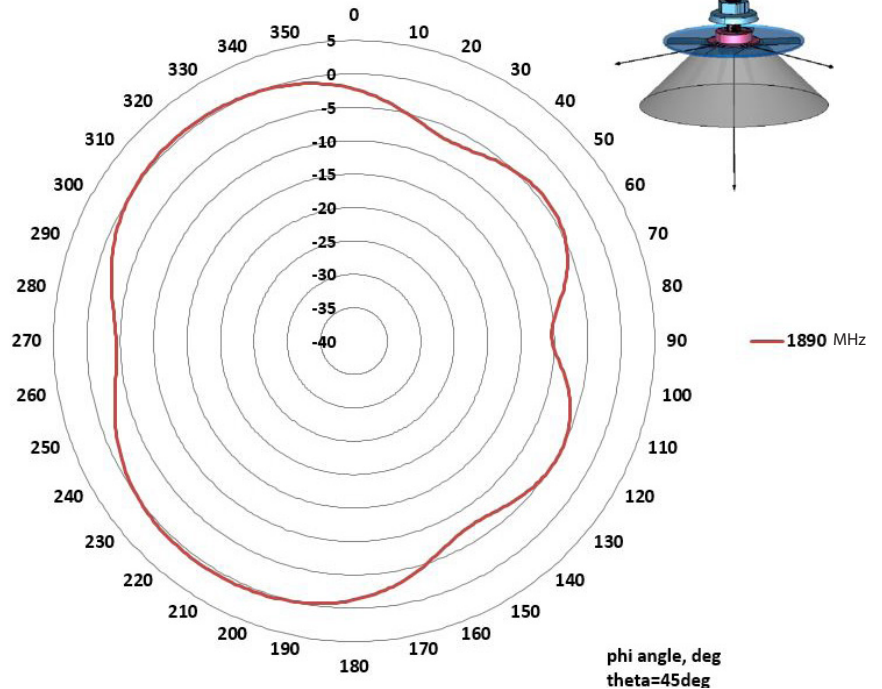
Featuring PIMinator® Low PIM Performance

Mid band vertical plane



Radiation Patterns for  
DASUTCC500NF, DASUTWC500NF,  
DASUTCC500MD, DASUTWC500MD,  
DASUTCC5004310,  
DASUTWC5004310  
i.e. antennas WITHOUT  
Reflector DASUTCCACC1

Mid band horizontal plane



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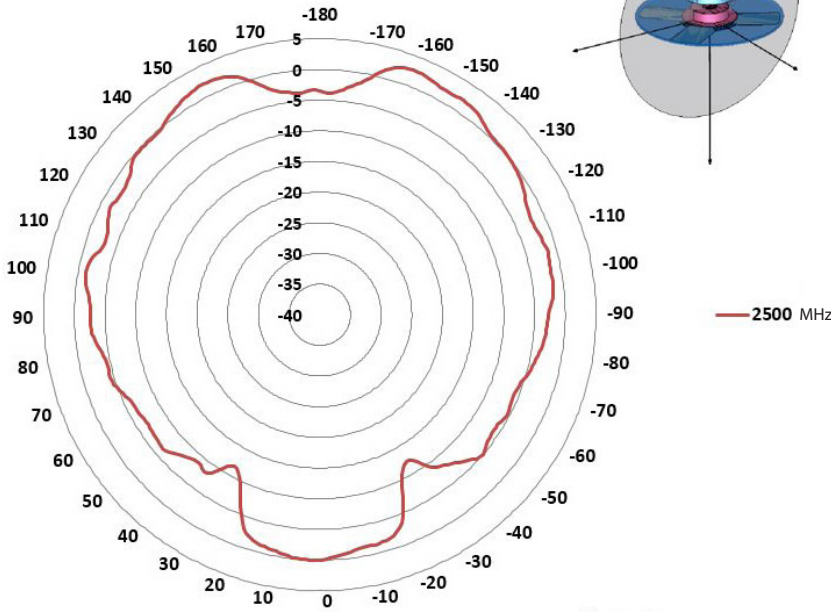


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Translucent & White DAS Antenna Family  
Ultra-Thin, Ceiling-Mount Omni Antenna

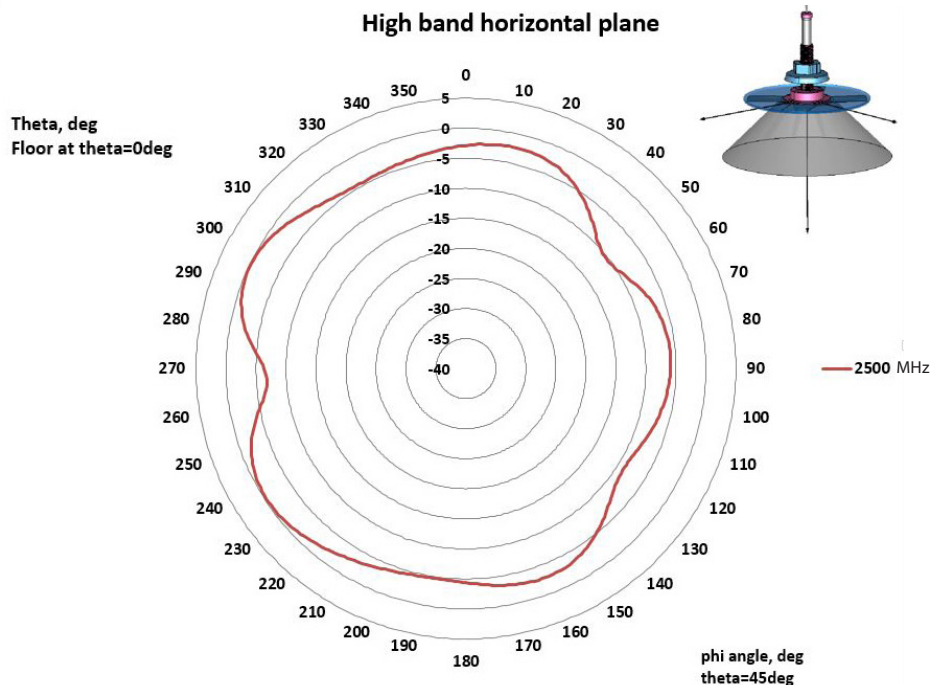
Featuring PIMinator® Low PIM Performance

High band vertical plane



Radiation Patterns for  
DASUTCC500NF, DASUTWC500NF,  
DASUTCC500MD, DASUTWC500MD,  
and DASUTCC5004310,  
DASUTWC5004310  
i.e. antennas WITHOUT  
Reflector DASUTCCACC1

High band horizontal plane



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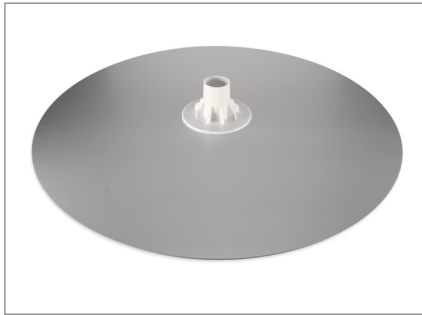
# Clarity Series™

## Translucent & White DAS Antenna Family

### Ultra-Thin, Ceiling-Mount Omni Antenna

Items	Pulse Part Number	Function	Material, Size	Comments
Above-Ceiling Antenna Reflector	DASUTCCACC1	Energy directive reflector	Aluminum 411.8x38.6mm (16.2x52 Inch)	Enhances Gain
Above-Ceiling Antenna Holder	DASACHOLDER	Support antennas above ceiling tile rails.	Polycarbonate; 618x192x122 mm (24.4x7.6x4.4 inch)	Low PIM; Rigid Construction
Clarity Solid-Ceiling Adapter	DASCLINSERT	Blind-hole installation of Clarity Antennas.	94 mm dia (3.7 inch dia)	Low PIM Installation
PIM-Blocker Absorber	DASACABSORBER	System PIM Reduction	500x500x50mm (19.7x12.7x1.97 inch)	Up to 30dB PIM Improvement

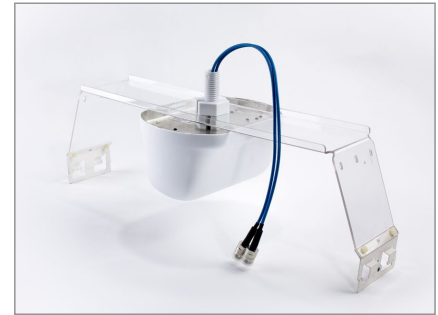
Above-Ceiling Reflector



Above-Ceiling Antenna Holder



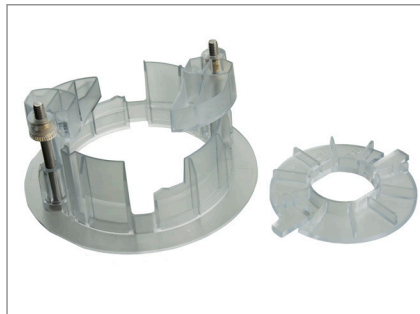
Above-Ceiling Antenna Holder  
(Shown with Antenna Installed)



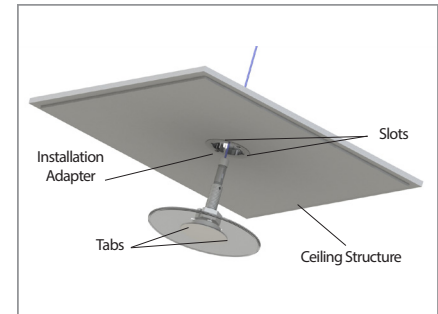
DAS PIM-Blocker Absorber



Clarity Solid-Ceiling Adapter

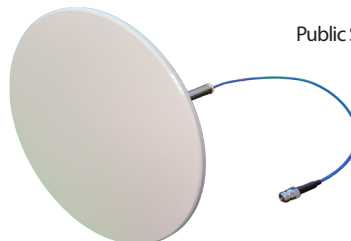


Typical Assembly using the  
Clarity Installation Adapter



Clarity-Pearl Series	Pulse Part Number	FREQ MHz	PIM Rating dBc	Connector	Color
Public Safety DAS Antenna	PSUTWCNF	380-570; 698-960	N/A	N-Female	White

Public Safety DAS Antenna



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