

## HyperLink Wireless Low PIM DAS Ceiling Antenna Model: HG75805CUPR-NF

### Applications

- DAS (Distributed Antenna Systems)
- 700 MHz and cellular applications
- AWS (Advanced wireless services) and PCS (Personal communications service) band applications
- In-building wireless networks and LTE networks
- IEEE 802.11a/b/g/n and 802.11ac applications

### Features

- Frequency coverage for 700 MHz, 850 MHz, AWS and PCS bands
- Low Passive Inter-Modulation (PIM) rated
- Attractive unobtrusive radome design
- Easily mounts to ceiling tiles
- Full WiFi coverage from 2.4 GHz to 5 GHz



### Description

The HyperLink HG75805CUPR-NF is a low PIM high performance ceiling mount antenna specifically designed for in-building wireless networks such as DAS (Distributed Antenna Systems) which are used to distribute Cellular and WiFi signals throughout a building or area. The Ultra-Wide Band design of this antenna eliminates the need to purchase different antennas for each frequency. This simplifies installations since the same antenna can be used for a wide array of in-building wireless applications where wide coverage is desired.

### Complete WiFi Coverage

The HG75805CUPR-NF is designed to provide complete WiFi coverage from 2400 MHz to 6000 MHz and is compatible with IEEE 802.11a/b/g/n and 802.11ac networks. This adds an additional level of wireless coverage rather than using just the 2.4 GHz 802.11b/g bands. In addition, this antenna can operate in the 4.9 GHz band which is typically used with public safety services such as police and first responders. This along with the HG75805CUPR-NF coverage of the cellular/LTE bands makes this antenna ideal for in-building DAS applications.



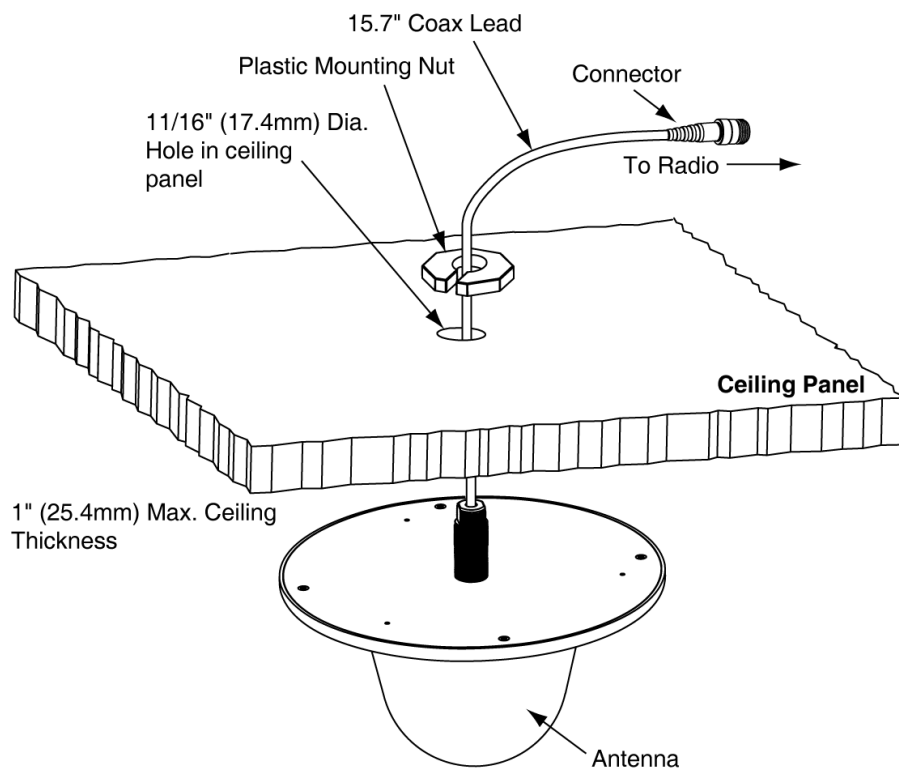
### Low PIM Rated

The key to providing the best performance in a DAS application is to ensure the components used are low PIM rated. This helps meet the increasing demand for higher data rates and the ability to provide streaming video for mobile devices. With a low PIM rating of <-153 dBc, the HG75805CU-PR helps meet the most demanding PIM requirements for LTE/4G bands.

The aesthetically pleasing design of this antenna makes it ideal for use in almost any indoor environment. It can be easily mounted through a single 11/16" hole in a solid or suspended ceiling up to 1" thick. This antenna features a 13.7 inch coax lead terminated with an N-Female connector. Special order connectors are also available.



### Mounting Details



## Specifications

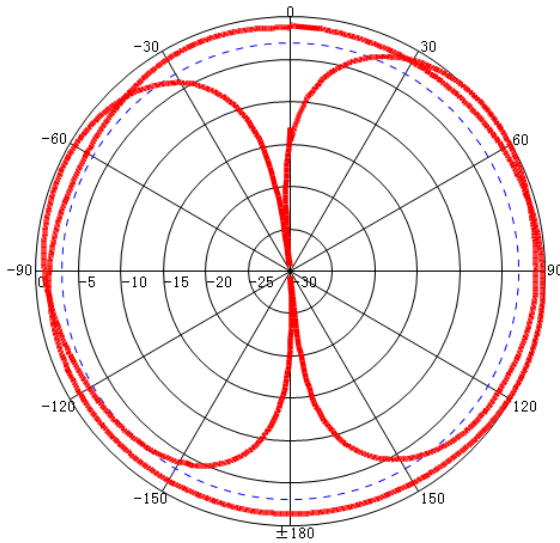
### Electrical Specifications

<b>Frequency Range</b>	698-960 MHz
	1710-2700 MHz
	4900-6000 MHz
<b>Gain (Typ)</b>	2 dBi @ 698-960 MHz
	5 dBi @ 1710-2700 MHz
	5 dBi @ 4900-6000 MHz
<b>Polarization</b>	Vertical
<b>Horizontal Beamwidth</b>	360°
<b>Vertical Beam Width</b>	80° @ 698-960 MHz
	50° @ 1710-2700 MHz
	30° @ 4900-6000 MHz
<b>Impedance</b>	50 Ohm
<b>Max. Input Power</b>	50 Watts
<b>VSWR (Typ)</b>	< 1.6 @ 698-960 MHz
	< 1.5 @ 1710-2700 MHz
	< 1.7 @ 4900-6000 MHz
<b>PIM, 3rd Order, 2 x 20 W (Max)</b>	<-153 dBc

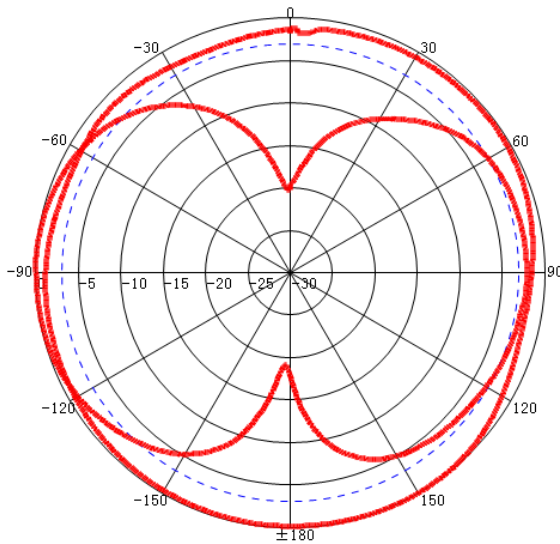
### Mechanical Specifications

<b>Cable Length</b>	13.7 in. (35 cm) – Blue RG402 Series
<b>Connector</b>	N-Female
<b>Weight</b>	0.66 lbs. (0.3 Kg)
<b>Dimensions</b>	8.0 Dia. x 4.9 in. (204 Dia. x 125 mm)
<b>Radome Material</b>	UV Resistant ABS
<b>Radome Color</b>	White
<b>Operating Temperature</b>	-40° C to +60° C (-40° F to 140° F)
<b>Mounting</b>	.687" (17.4 mm) diameter hole
<b>RoHS Compliant</b>	Yes

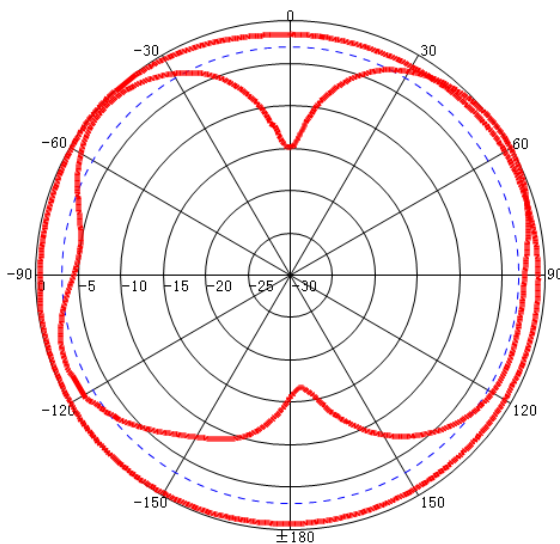
**Antenna Gain Patterns**



Freq:698MHz  
 Date:2015-03-24  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:Vertical  
 Max:-11.05dB  
 HPBW(3dB):360.00°  
 FBR:1.18dB  
 Circularity:1.23



Freq:827MHz  
 Date:2015-03-24  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:Vertical  
 Max:-12.73dB  
 HPBW(3dB):88.93°  
 FBR:0.00dB  
 Circularity:1.87  
 Obliquity:1.70°



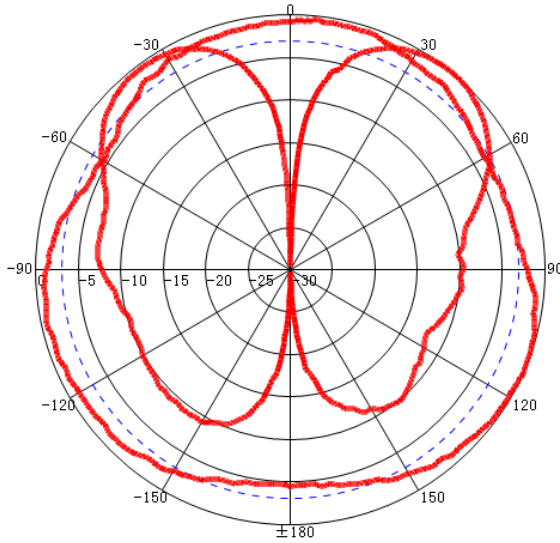
Freq:960MHz  
 Date:2015-03-24  
 Elevation:H-plane  
 Polar-Across:Main  
 Polarization:Vertical  
 Max:-17.11dB  
 HPBW(3dB):360.00°  
 FBR:0.30dB  
 Circularity:0.91

Freq:960MHz  
 Date:2015-03-24  
 Elevation:V-plane  
 Polar-Across:Main  
 Polarization:Vertical  
 Max:-17.11dB  
 HPBW(3dB):99.98°  
 FBR:1.51dB  
 Circularity:10.66  
 Obliquity:4.35°

Gain:2.42dBi

Gain:3.23dBi

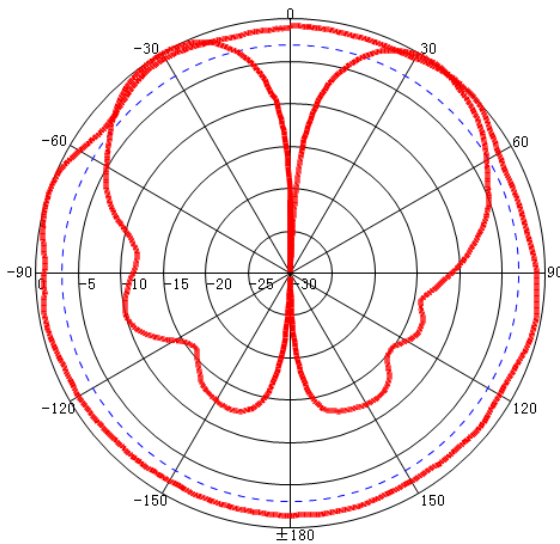
Gain:2.60dBi



Freq:1710MHz  
Date:2015-03-24  
Elevation:H-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-45.63dB  
HPBW(3dB):72.31°  
FBR:2.29dB  
Circularity:2.80

Freq:1710MHz  
Date:2015-03-24  
Elevation:V-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-37.30dB  
HPBW(3dB):41.86°  
FBR:4.40dB  
Circularity:31.20  
Obliquity:50.72°

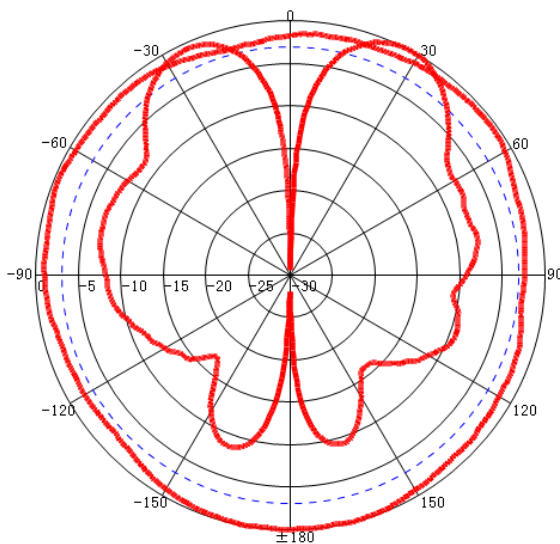
Gain:4.53dBi



Freq:2200MHz  
Date:2015-03-24  
Elevation:H-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-33.44dB  
HPBW(3dB):360.00°  
FBR:1.37dB  
Circularity:1.18

Freq:2200MHz  
Date:2015-03-24  
Elevation:V-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-24.55dB  
HPBW(3dB):39.77°  
FBR:5.05dB  
Circularity:20.80  
Obliquity:54.83°

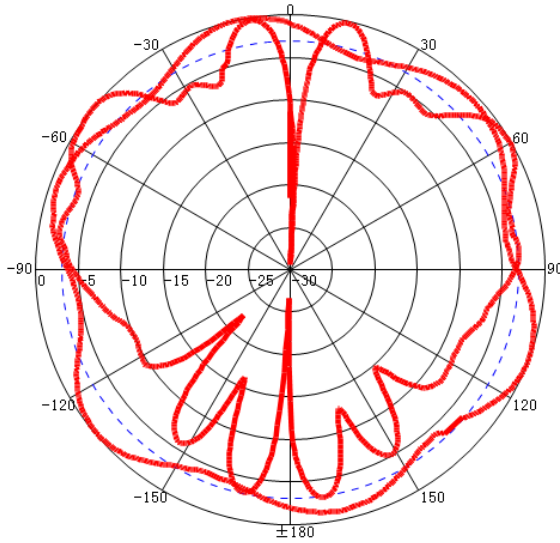
Gain:4.67dBi



Freq:2700MHz  
Date:2015-03-24  
Elevation:H-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-35.69dB  
HPBW(3dB):360.00°  
FBR:0.00dB  
Circularity:1.34

Freq:2700MHz  
Date:2015-03-24  
Elevation:V-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-29.17dB  
HPBW(3dB):29.42°  
FBR:7.11dB  
Circularity:25.57  
Obliquity:62.46°

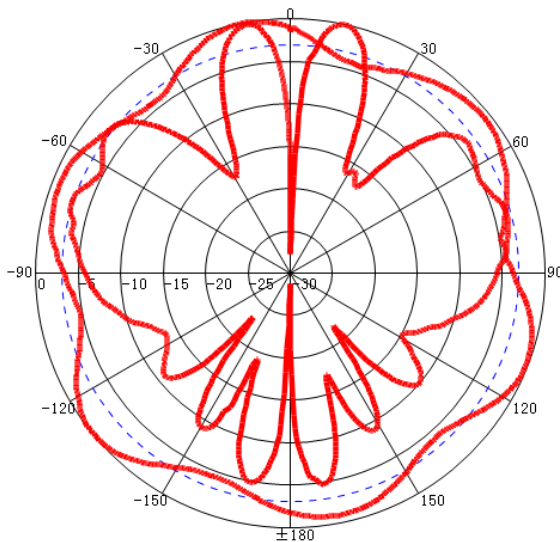
Gain:4.51dBi



Freq:4900MHz  
Date:2015-10-09  
Elevation:H-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-31.62dB  
HPBW(3dB):41.79°  
FBR:1.00dB  
Circularity:2.77

Freq:4900MHz  
Date:2015-10-09  
Elevation:V-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-33.22dB  
HPBW(3dB):27.62°  
FBR:0.40dB  
Circularity:33.61  
Obliquity:20.85°

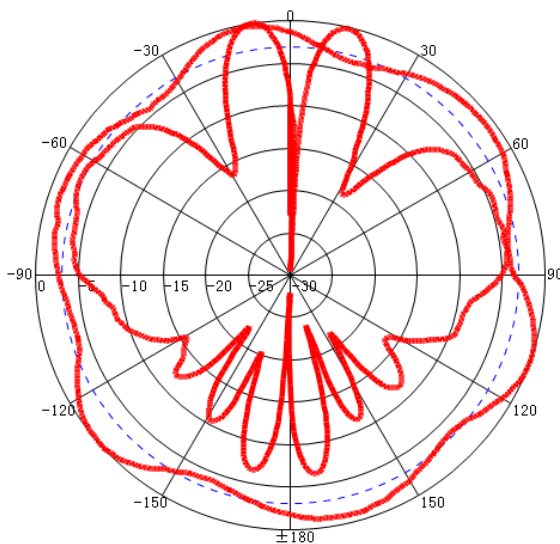
Gain:3.61dBi



Freq:5200MHz  
Date:2015-10-09  
Elevation:V-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-34.53dB  
HPBW(3dB):11.82°  
FBR:2.96dB  
Circularity:19.65  
Obliquity:10.61°

Freq:5200MHz  
Date:2015-10-09  
Elevation:H-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-34.88dB  
HPBW(3dB):38.30°  
FBR:0.86dB  
Circularity:2.67

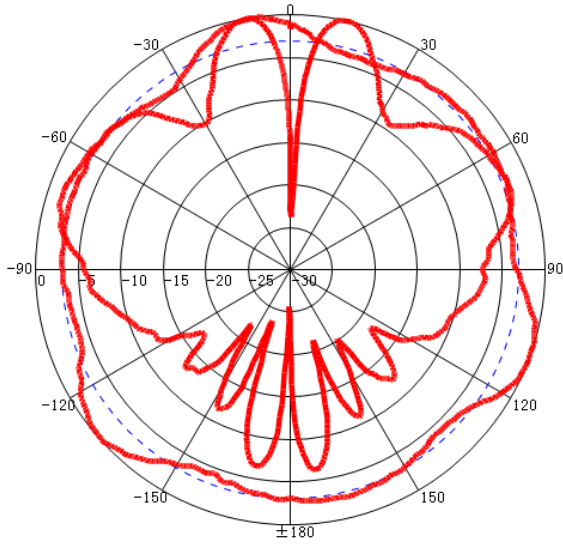
Gain:4.75dBi



Freq:5500MHz  
Date:2015-10-09  
Elevation:H-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-35.52dB  
HPBW(3dB):37.08°  
FBR:0.90dB  
Circularity:2.32

Freq:5500MHz  
Date:2015-10-09  
Elevation:V-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-34.23dB  
HPBW(3dB):12.82°  
FBR:2.85dB  
Circularity:23.81  
Obliquity:98.25°

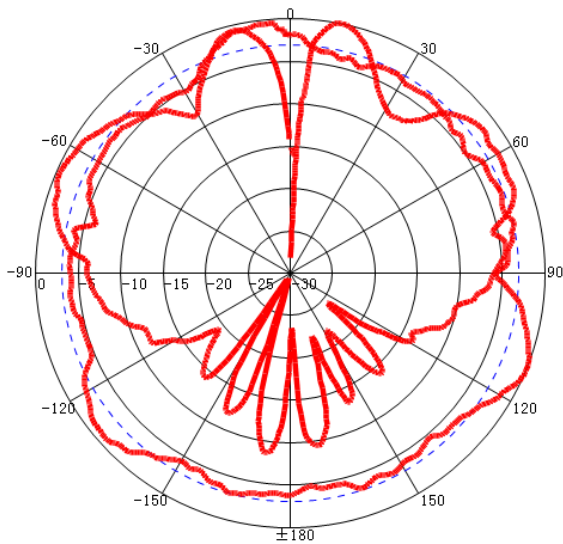
Gain:5.07dBi



Freq:5800MHz  
Date:2015-10-09  
Elevation:H-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-41.37dB  
HPBW(3dB):34.60°  
FBR:2.43dB  
Circularity:2.65

Freq:5800MHz  
Date:2015-10-09  
Elevation:V-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-40.17dB  
HPBW(3dB):14.42°  
FBR:1.72dB  
Circularity:17.02  
Obliquity:99.64°

Gain:5.13dBi



Freq:6000MHz  
Date:2015-10-09  
Elevation:H-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-44.73dB  
HPBW(3dB):29.84°  
FBR:3.10dB  
Circularity:3.28

Freq:6000MHz  
Date:2015-10-09  
Elevation:V-plane  
Polar-Across:Main  
Polarization:Vertical  
Max:-43.68dB  
HPBW(3dB):14.92°  
FBR:0.41dB  
Circularity:34.77  
Obliquity:78.22°

Gain:5.86dBi