HyperLink Wireless 2.4/4.9-5.8 GHz Four Element Dual Polarized Flat Panel Antenna Model: HG2458-14DP-4NF

Features

- Four independent antennas
- MIMO – Multiple-Input and Multiple-Output
- Dual polarity feed system in single enclosure
- Dual band, high gain operation
- Two vertical and two horizontal elements
- UV-resistant radome for all-weather operation

Applications

- 2.4/4.9-5.8 GHz Indoor/Outdoor Wireless LAN systems
- MIMO wireless access points and routers
- Supports IEEE 802.11 a/b/g/n and 802.11ac applications
- Homeland Security and Public Safety Band
- Hospitality, Industrial, Municipality

Description

Superior Performance

The HyperLink HG2458-14DP-4NF Flat Panel Antenna combines four dual band antennas in a single housing. The unit consists of two vertically and two horizontally polarized multi-patch antennas. It is a professional quality antenna designed primarily for MIMO point-to-multipoint and point-to-point applications in the 2.4 GHz and the 4.9-5.8 GHz frequency bands. The unit can be used with APs and Routers with one to four antenna ports.

This antenna incorporates advanced dual polarization technology that allows for the interoperability of two radios to transmit and receive paths. This technology allows for the attenuation of unwanted signals from adjacent channels and/or co-located equipment.

Rugged and Weatherproof

This aesthetically pleasing antenna features a heavy-duty UV-resistant plastic radome ideal for all-weather indoor and outdoor operation. The HG2458-14DP-4NF antenna is supplied with a tilt and swivel mast mount kit. This allows quick installation at various degrees of up/down tilt for easy alignment.

L-com, Inc. 50 High St., West Mill, 3rd Floor, Suite #30 North Andover, MA 01845
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Specifications

Mechanical Specifications

Connector Interface	N-Female (4x)
Radome Material	Gray ASA
Rated Wind Velocity	130mph (210km/h)
Operating Temperature	-40° C to 85° C (-40° F to 185° F)
Dimensions	12.40” x12.40”x0.98” (315x315x25mm)
Weight	3.3 lbs (1.5 kg including the bracket)
Mounting Mast Size (Dia.)	0.75–2.00 in. (19-50 mm)
RoHS Compliant	Yes

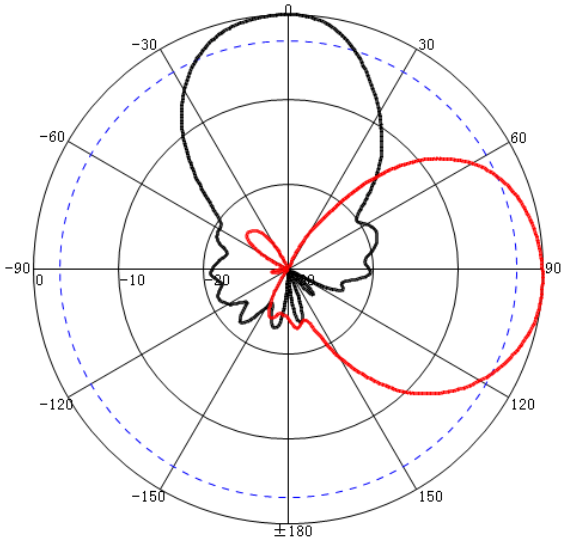
Electrical Specifications

Frequency Range	2400-2500 / 4900-5850 MHz
Gain	13 dBi (2.4 GHz) / 14 dBi (5 GHz)
Polarization	Vertical (2x) and Horizontal (2x)
VSWR	≤ 2.0
Horizontal Beamwidth	40° (2.4 GHz) / 32° (5 GHz)
Vertical Beamwidth	45° (2.4 GHz) / 22° (5 GHz)
F/B Ratio	23 dB (2.4 GHz) / 26 dB (5 GHz)
Cross-pol Isolation	< -28dB
Max. Input Power	25 watts
Lightning Protection	DC Ground
Input Impedance	50 Ohm

Wind Loading Data

Wind Speed (MPH)	Loading
100	54 lbs.
125	85 lbs.

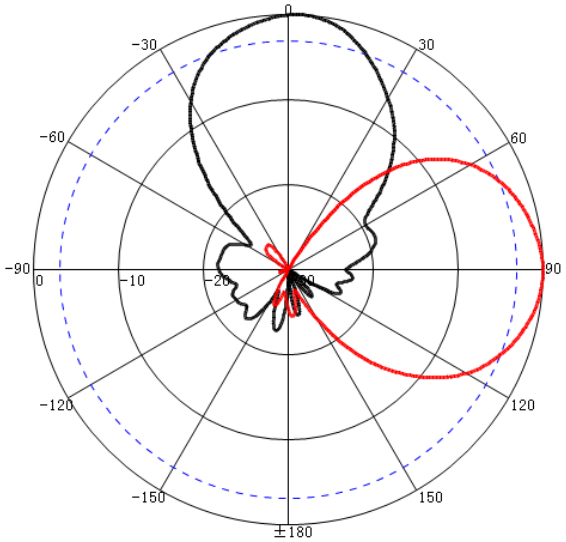
RF Antenna Patterns – H-Pol



Freq:2400MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-16.99dB
HPBW(3dB):40.28°
FBR:22.88dB

Freq:2400MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-17.95dB
HPBW(3dB):50.46°
FBR:24.70dB

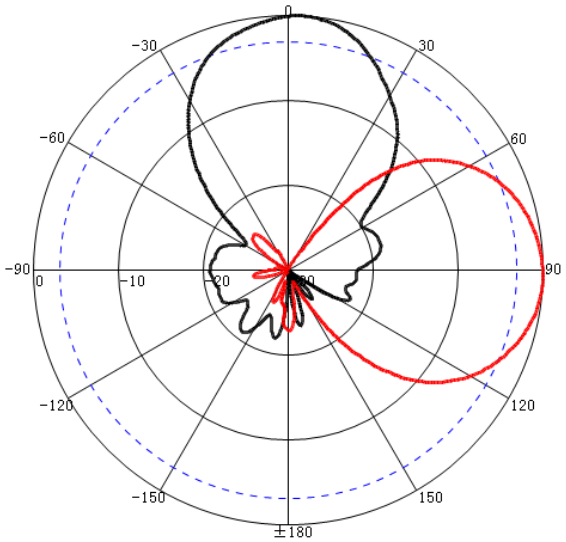
Gain:12.66dBi



Freq:2450MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-15.82dB
HPBW(3dB):39.37°
FBR:22.68dB

Freq:2450MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-17.21dB
HPBW(3dB):44.03°
FBR:28.81dB

Gain:13.15dBi



Freq:2500MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-17.10dB
HPBW(3dB):40.70°
FBR:21.26dB

Freq:2500MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-18.61dB
HPBW(3dB):45.35°
FBR:25.89dB

Gain:12.91dBi

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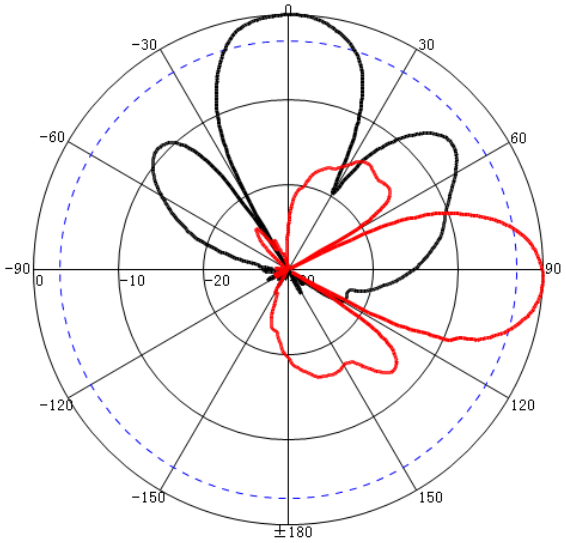
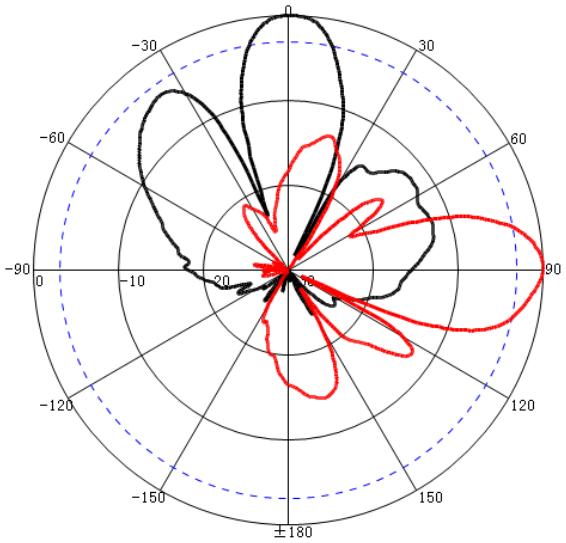


Freq:4900MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-19.55dB
HPBW(3dB):32.72°
FBR:26.79dB

Freq:4900MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-19.13dB
HPBW(3dB):25.31°
FBR:28.17dB

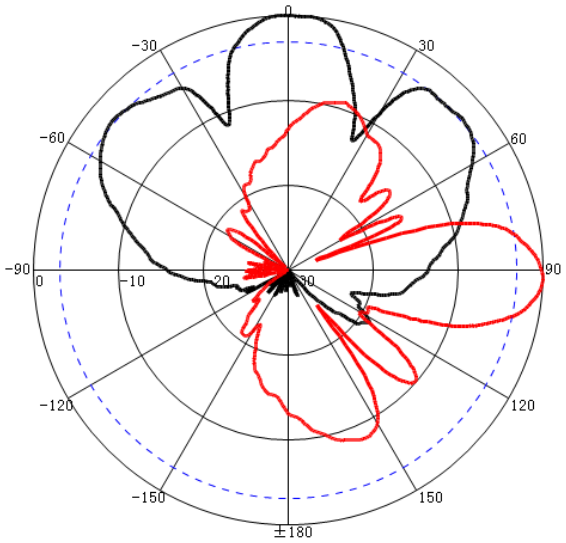
Gain:14.14dBi



Freq:5400MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-24.12dB
HPBW(3dB):20.56°
FBR:23.99dB

Freq:5400MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-23.75dB
HPBW(3dB):22.77°
FBR:25.90dB

Gain:14.54dBi

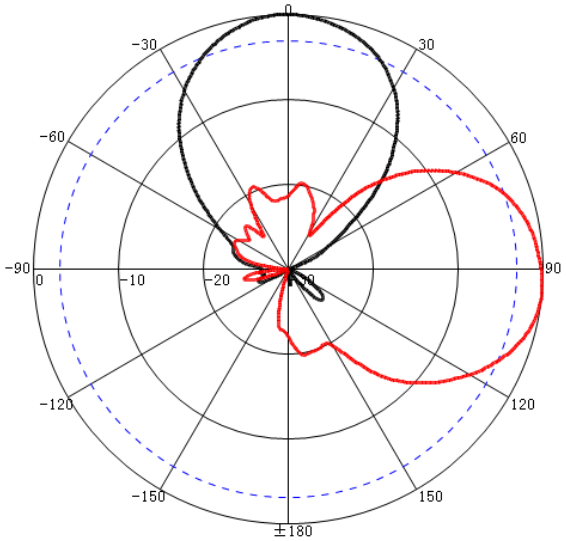


Freq:5850MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Horizontal
Max:-29.04dB
HPBW(3dB):27.45°
FBR:26.59dB

Freq:5850MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Horizontal
Max:-28.69dB
HPBW(3dB):20.49°
FBR:21.75dB

Gain:10.82dBi

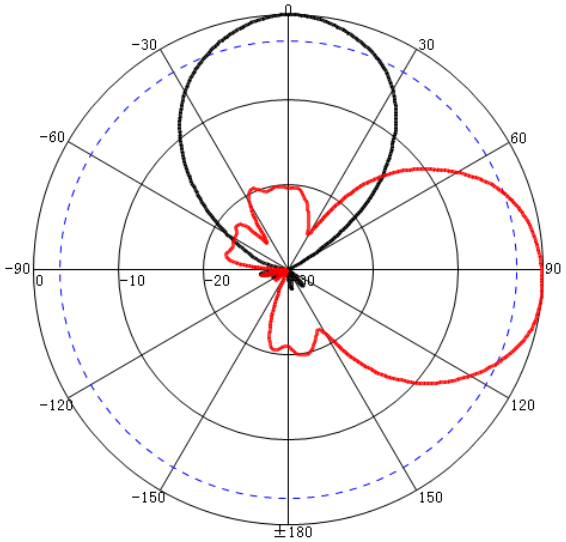
RF Antenna Patterns – V-Pol



Freq:2450MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-16.35dB
HPBW(3dB):45.18°
FBR:27.98dB

Freq:2450MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-15.80dB
HPBW(3dB):42.56°
FBR:22.94dB

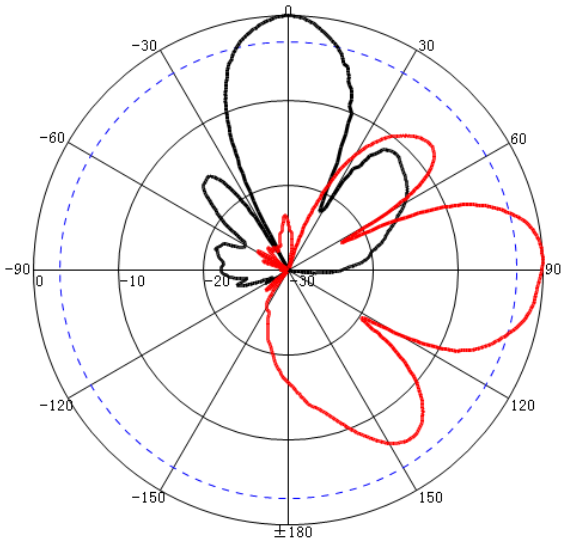
Gain:12.82dBi



Freq:2500MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-16.68dB
HPBW(3dB):43.80°
FBR:27.59dB

Freq:2500MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-17.36dB
HPBW(3dB):43.23°
FBR:22.45dB

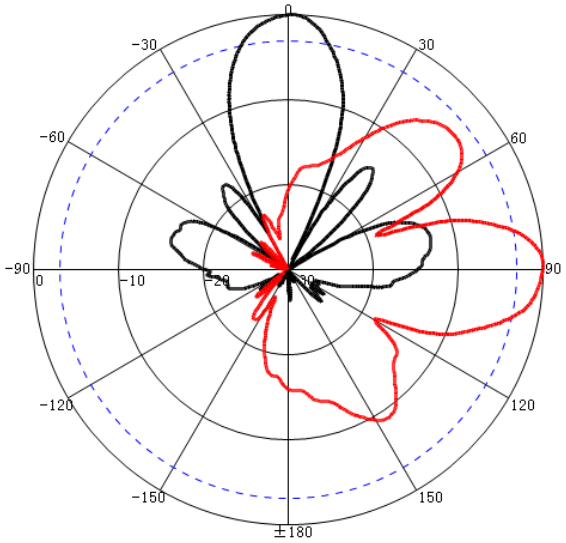
Gain:12.86dBi



Freq:4900MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-18.82dB
HPBW(3dB):25.10°
FBR:35.10dB

Freq:4900MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-18.95dB
HPBW(3dB):30.38°
FBR:26.80dB

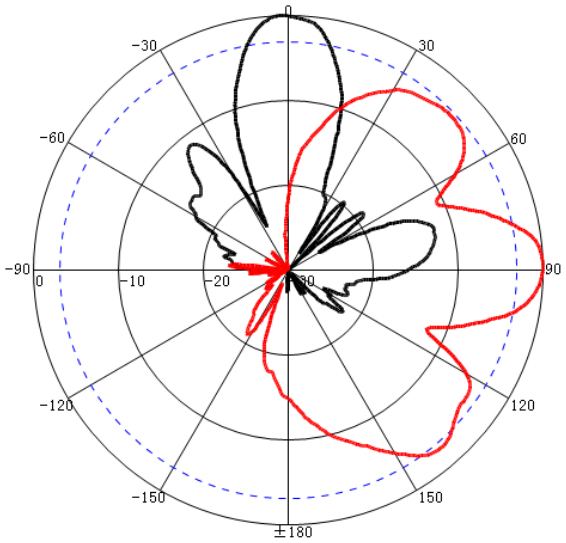
Gain:14.30dBi



Freq:5400MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-23.98dB
HPBW(3dB):21.89°
FBR:26.37dB

Freq:5400MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-23.55dB
HPBW(3dB):21.52°
FBR:25.33dB

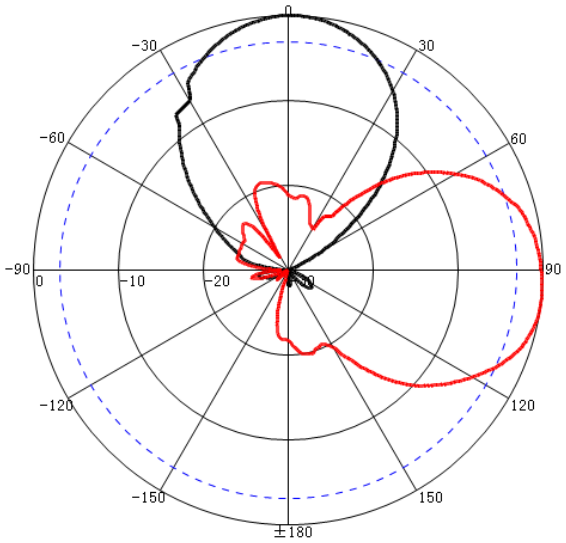
Gain:14.57dBi



Freq:5850MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-27.61dB
HPBW(3dB):20.54°
FBR:26.75dB

Freq:5850MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-28.12dB
HPBW(3dB):21.91°
FBR:22.97dB

Gain:12.89dBi



Freq:2400MHz
Date:2014-03-10
Elevation:H-plane
Polar-Across:Main
Polarization:Vertical
Max:-16.19dB
HPBW(3dB):43.94°
FBR:28.09dB

Freq:2400MHz
Date:2014-03-10
Elevation:V-plane
Polar-Across:Main
Polarization:Vertical
Max:-16.29dB
HPBW(3dB):43.63°
FBR:23.45dB

Gain:12.81dBi

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