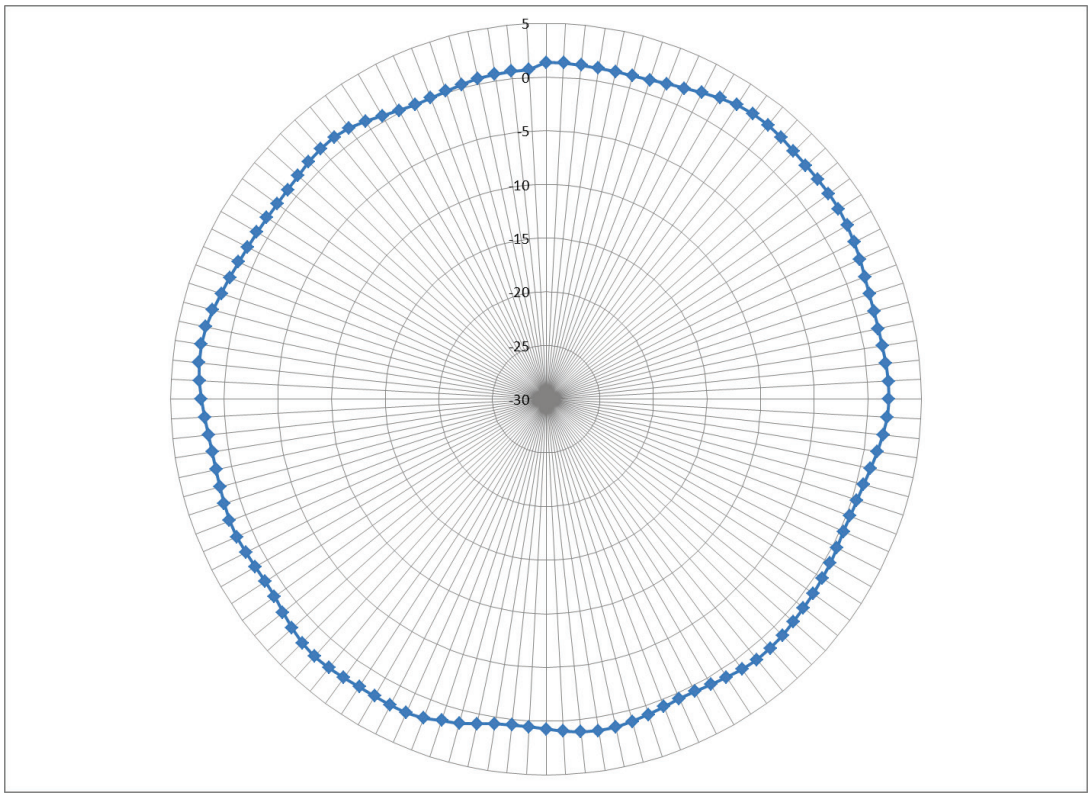
Corfu omni antenna patterns

Engineer	Manager
	
08/26/2012	**08/26/2012**

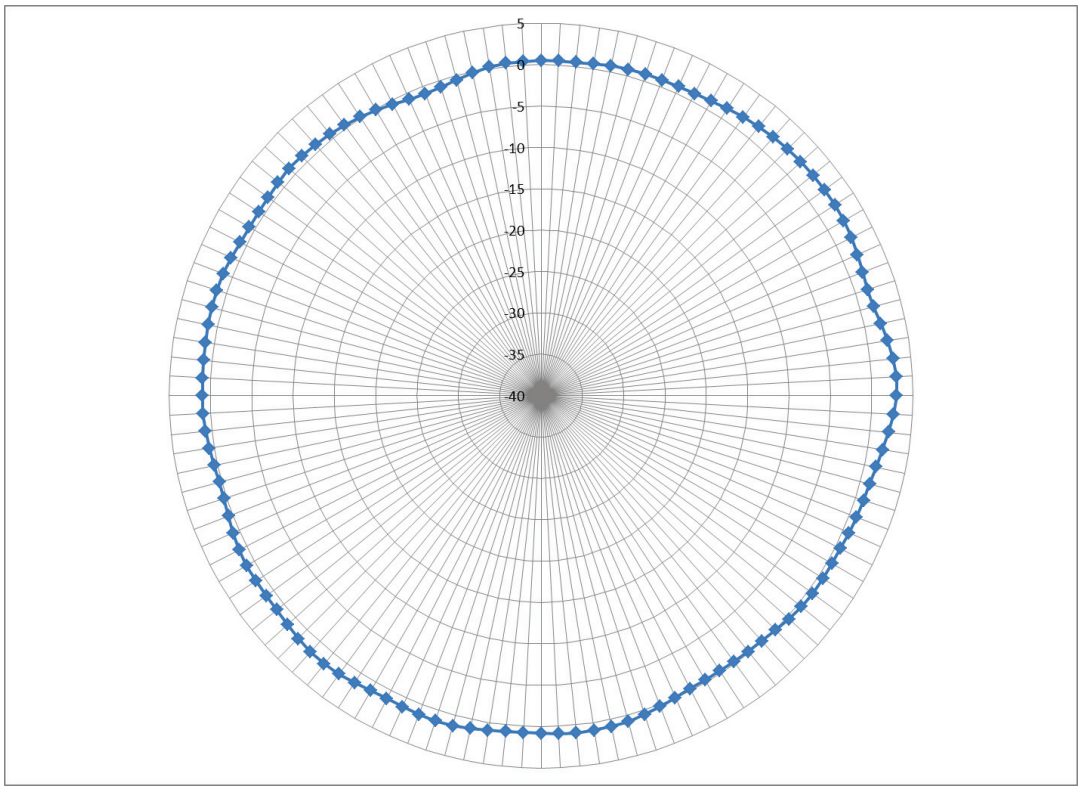
Ruckus Wireless Inc.

880 West Maude Ave.
Suite 101
Sunnyvale, CA 94085, USA
Tel: (650) 265-4200
Fax: (408) 738-2065

Patterns for 2.4GHz antenna:

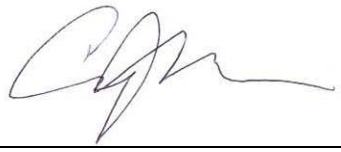


Patterns for 5GHz antenna:



Conclusion: Antenna patterns were measured in an anechoic chamber and it was determined that the highest gain for 2.4GHz antenna is 3dBi and 5GHz antenna is 3dBi.

TBolt2 Antenna Patterns

Engineer	Manager
	
04/06/2012	**04/06/2012**

Ruckus Wireless Inc.

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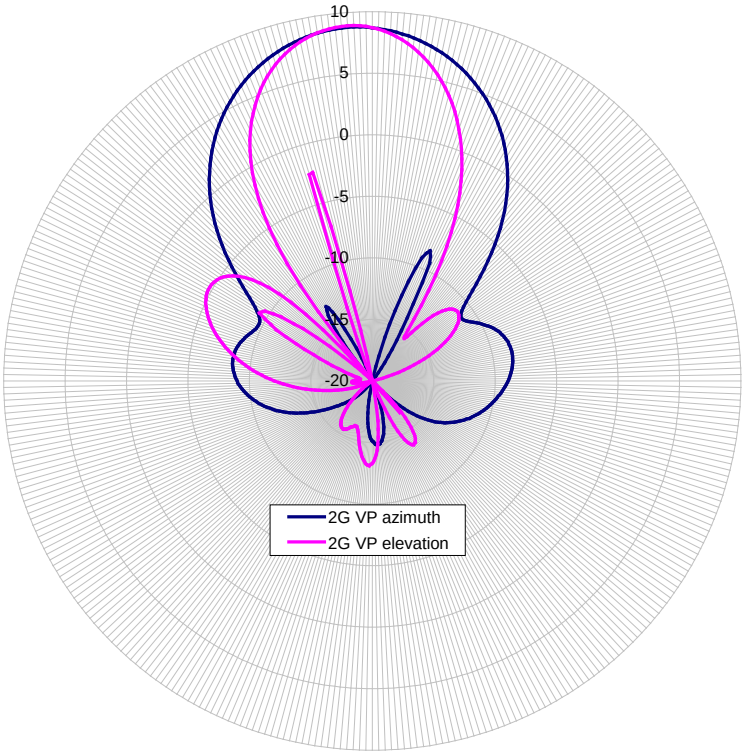
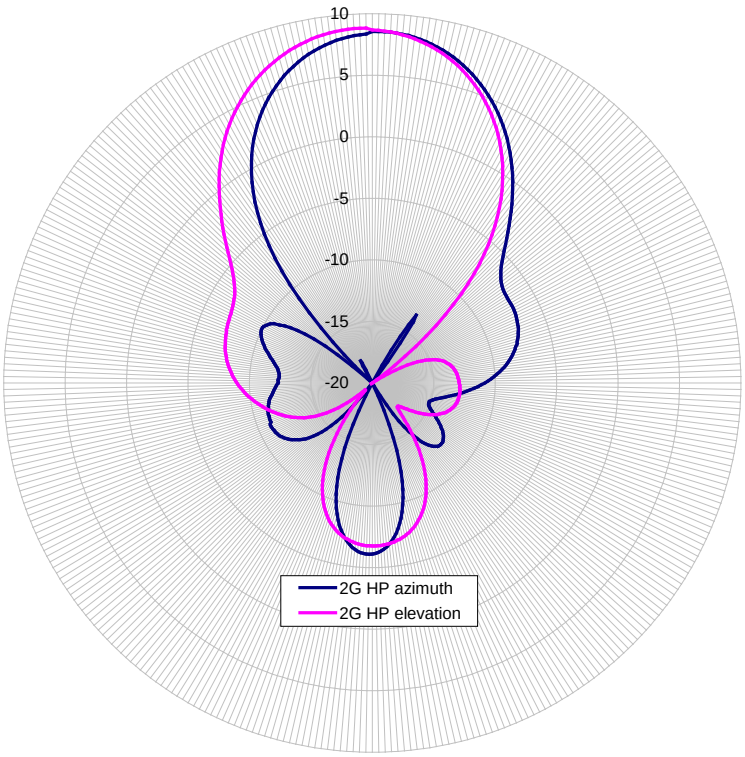
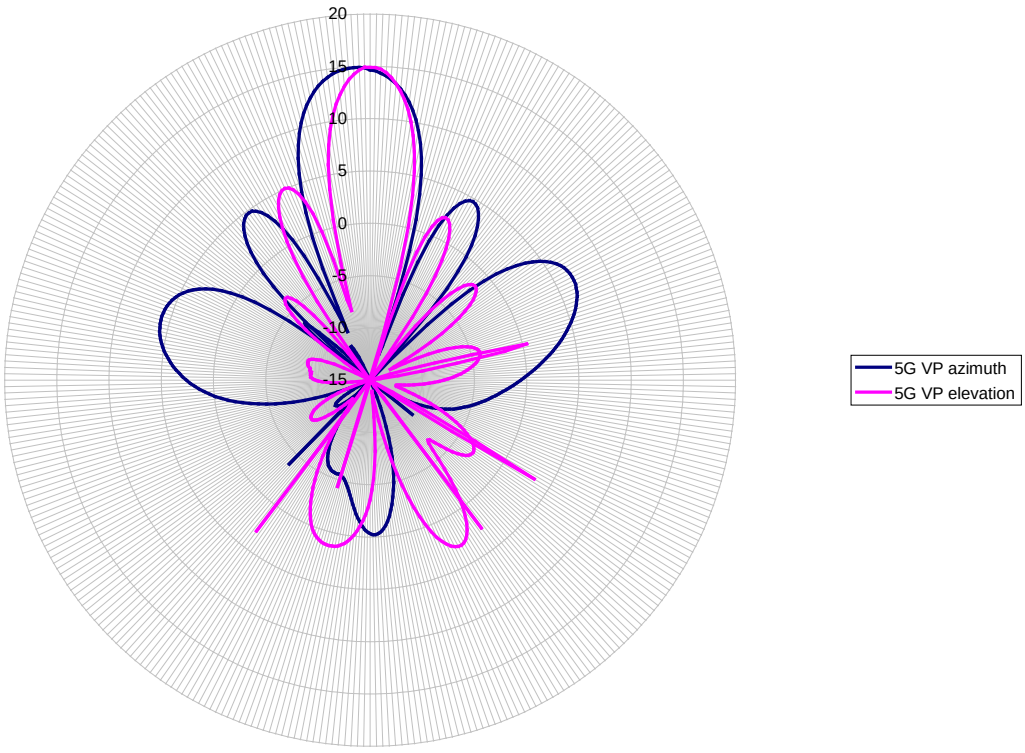
Suite 101
Sunnyvale, CA 94085, USA
Tel: (650) 265-4200
Fax: (408) 738-2065

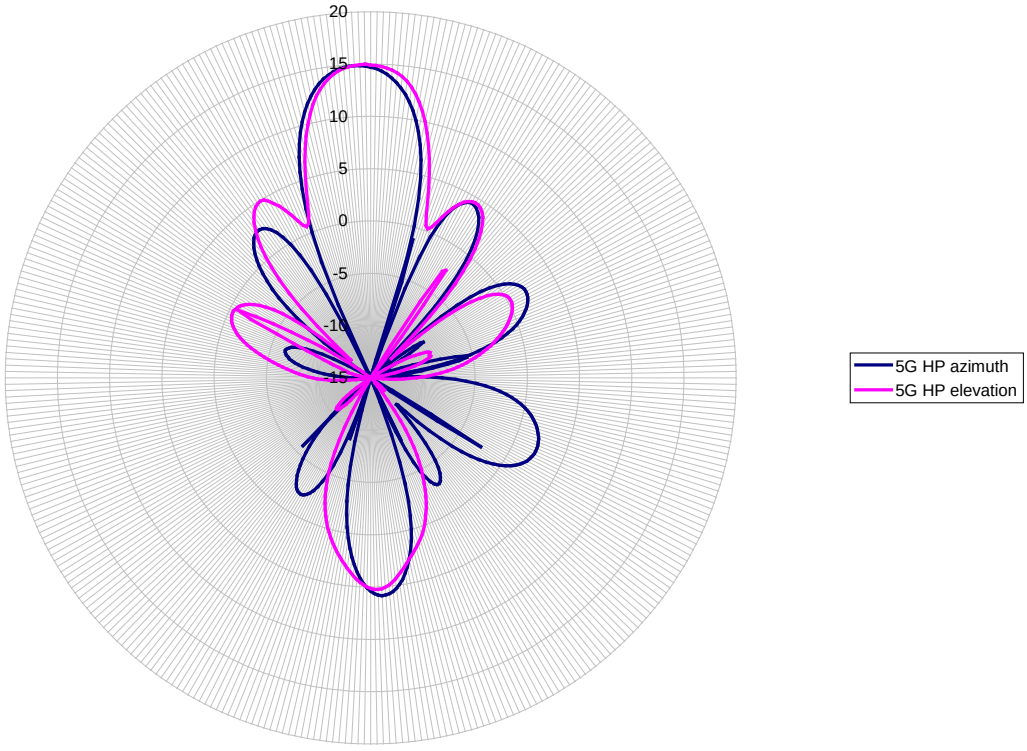
Patterns for 2.4GHz antenna:




10
5
0
-5
-10
-15
-20
2G HP azimuth
2G HP elevation

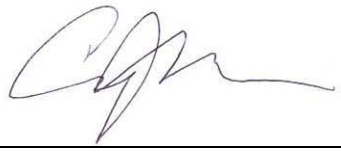
Patterns for 5GHz antenna:





Conclusion: Antenna patterns were measured in an anechoic chamber and it was determined that the highest gain for 2.4GHz antenna is 9dBi and 5GHz antenna is 15dBi.

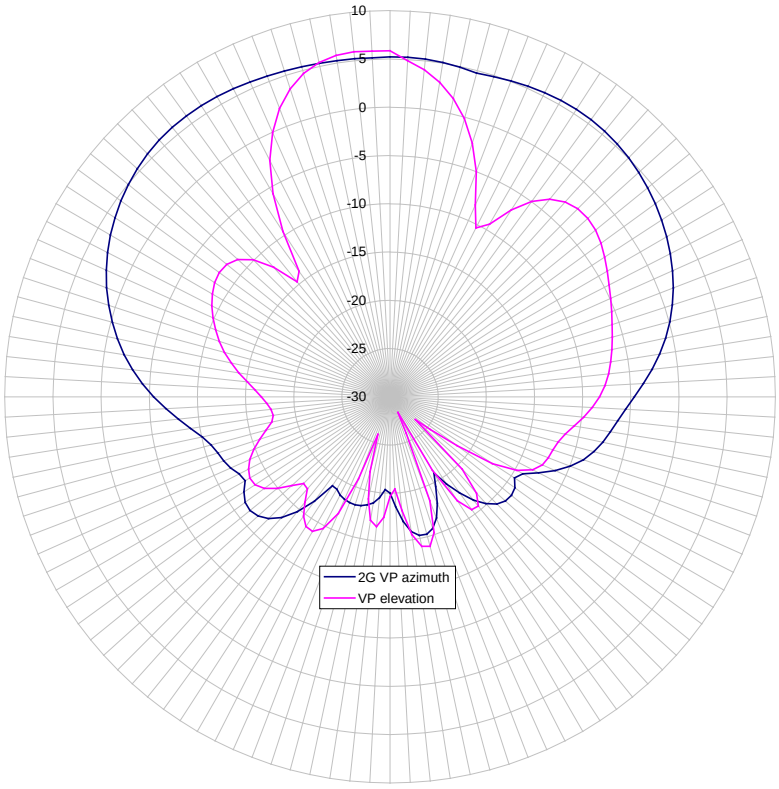
TBolt3 Antenna Patterns

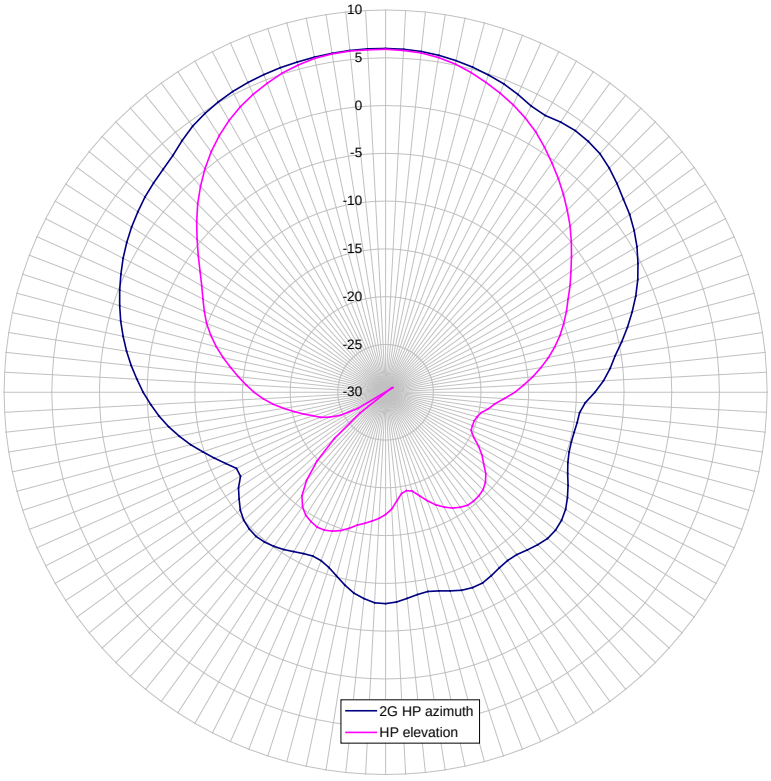
Engineer	Manager
	
04/06/2012	**04/06/2012**

Ruckus Wireless Inc.

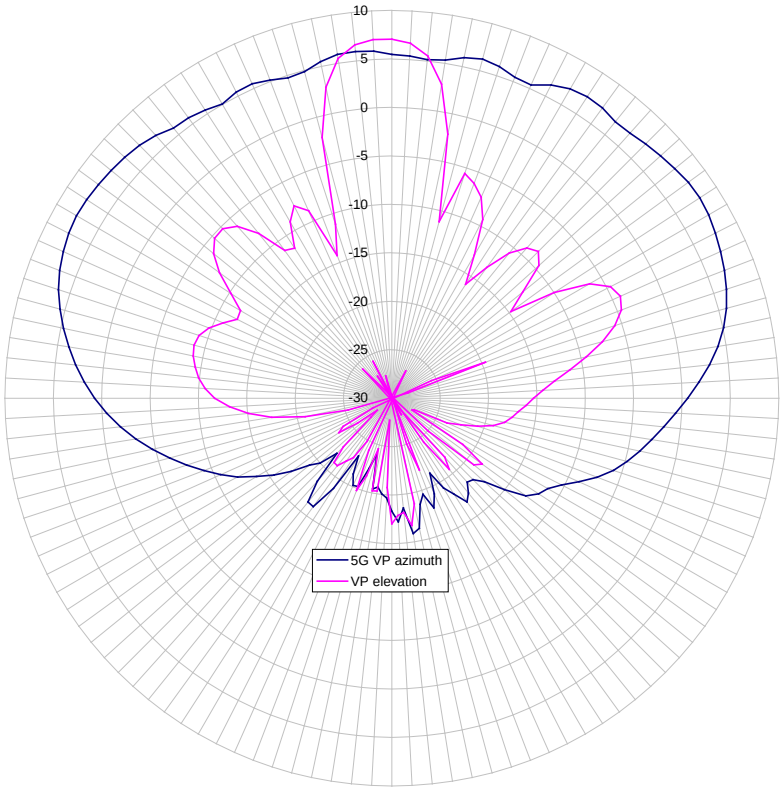
880 West Maude Ave.
Suite 101
Sunnyvale, CA 94085, USA
Tel: (650) 265-4200
Fax: (408) 738-2065

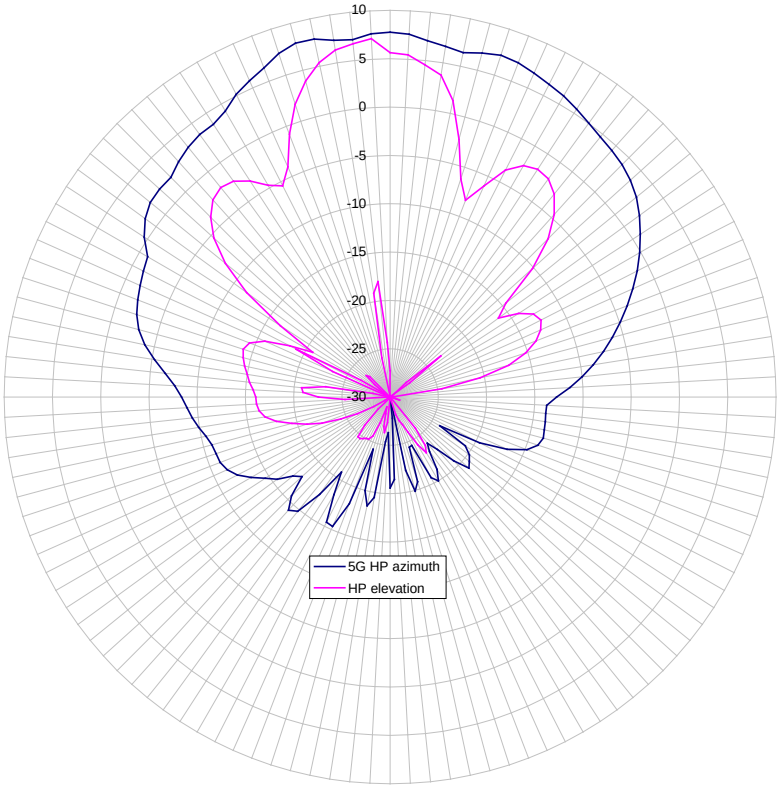
Patterns for 2.4GHz antenna:





Patterns for 5GHz antenna:





Conclusion: Antenna patterns were measured in an anechoic chamber and it was determined that the highest gain for 2.4GHz antennas is 6dBi and 5GHz antennas is 8dBi.

Laird TECHNOLOGIES

Innovative **Technology** for a **Connected** World

OC51505
Omni Antenna

DIRECT MOUNT 5 dBi VERTICALLY POLARIZED OMNI

The Laird Technologies' OC51505 is a 5150-5875 MHz omnidirectional, collinear, vertically polarized array especially designed to compliment interior or exterior mounted wireless network systems. An integrated RF connector is imbedded in the antenna base cap for direct AP mounting. Special venting permits either upright or inverted orientation in outdoor locations. The antenna may also be pole-mounted when separation from the AP is required for optimum positioning.

FEATURES RoHS

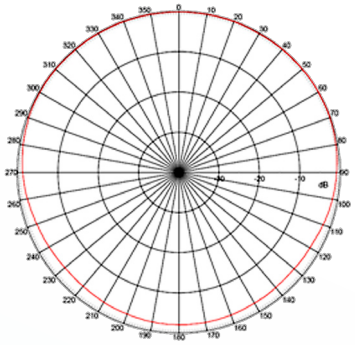
- Vertically polarized omnidirectional
- Rugged, lightweight and water resistant
- Full 802.11a wide band performance
- Direct to radio mounting
- 5 GHz broad band WLAN

MARKETS

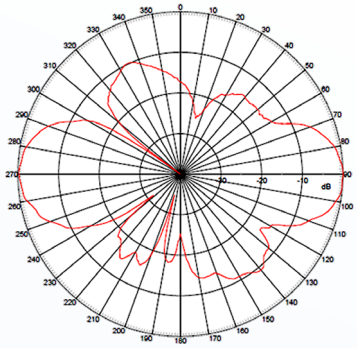
- College campuses
- Airports
- Hospitals
- Transportation centers

PARAMETER	SPECIFICATION
Antenna Part Number	OC51505
Frequency Range	5150 - 5875 MHz
Gain	5 dBi
Polarization	Linear, Vertical
VSWR	2.0:1
3 dB Beamwidth - E-plane	29°
3 dB Beamwidth - H-plane	Omnidirectional
RF Connector	Type N, Male or Female, Standard
Power	10 Watts
Weight	0.14 kg
Radome	Polycarbonate, UV, White
Operational Temperature	-30°C to +70°C
Storage Temperature	-40°C to +85°C
Mounting	Connector Fixed or Mast Mount Kit, Upright and Inverted Orientation

All antennas carry a 1-Year Warranty



H-plane 5.5 GHz



E-plane 5.5 GHz

global solutions: local support™

Americas: +1.847 839.6907
IAS-AmericasEastSales@lairdtech.com

Europe: +1.32.80.7866.12
IAS-EUSales@lairdtech.com

Asia: +1.65.6.243.8022
IAS-AsiaSales@lairdtech.com

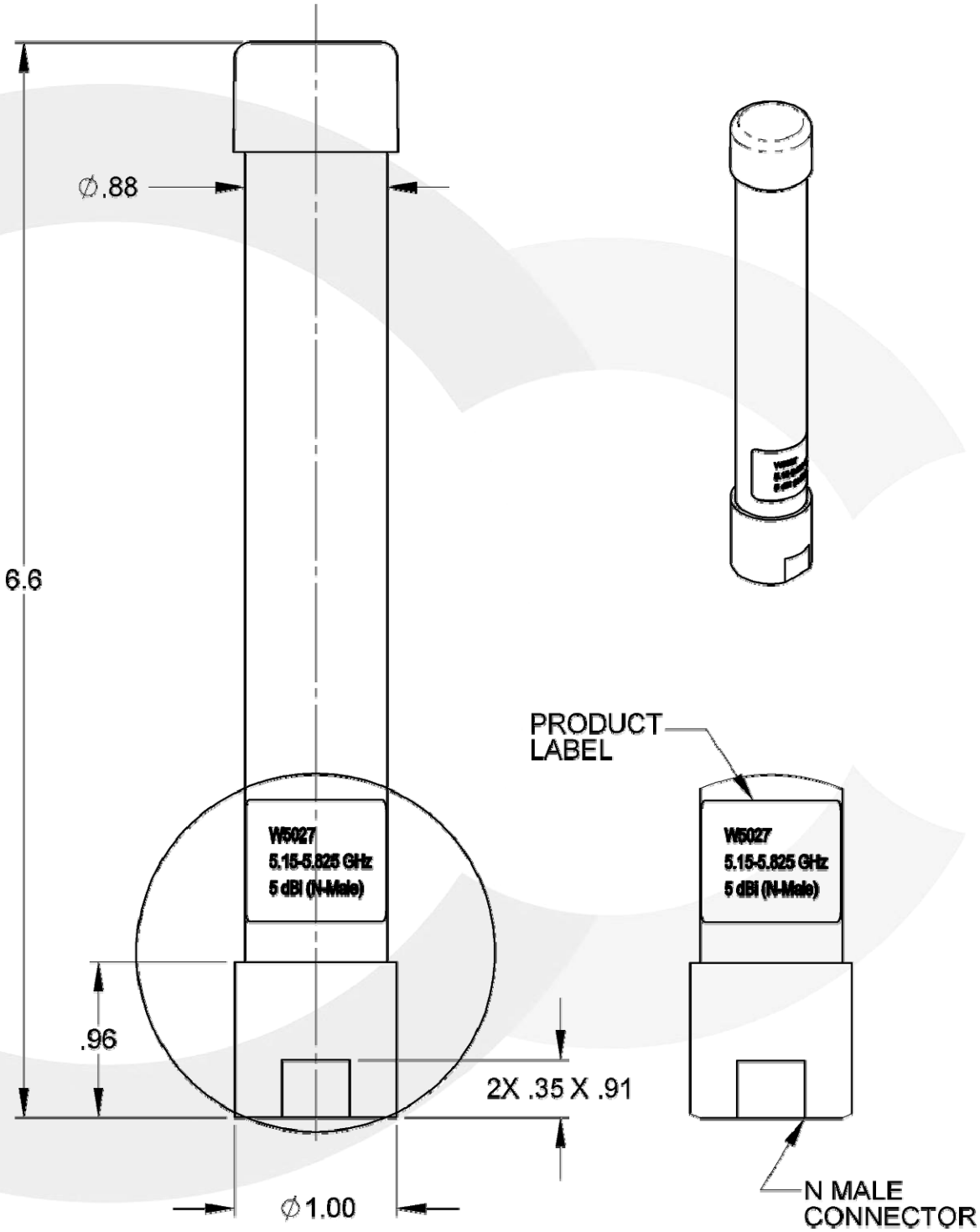
www.lairdtech.com

ANT-DS-OC51505 0910

5.15-5.825 MHz RADOME OMNI – 5 dBi OMNIDIRECTIONAL ANTENNA

W5027

Series : **ANTENNA**



All dimensions are in inches

Issue : 1102

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

5.15-5.825 MHz RADOME OMNI – 5 dBi

OMNIDIRECTIONAL ANTENNA

W5027

Series : **ANTENNA**

ELECTRICAL SPECIFICATIONS

Frequency :	**5.15-5.825**	MHz
Nominal Impedance :	**50**	Ω
VSWR :	**2:1**	Max
Gain :	**5**	dBi
Radiation Pattern		
-3 dB beamwidth		
Horizontal Plane :	**Omni**	
Vertical Plane :	**24°**	nominal
Cross Polarization level		
Horizontal Plane :	**>23**	dB
Vertical Plane :	**>23**	dB
Polarization :	**VERTICAL**	
Power withstanding :	**100**	W
Connector type :	**N Male**	

MECHANICAL SPECIFICATIONS

Radome :	**Pultruded Fiberglass, UV-Protected**
Plastic cap :	**Acrylonitrile Styrene Acrylate (ASA) UL File-N°. E41871 (UL 94 – HB)**
Adhesive :	**3M Scotch Weld™ DP-190 Gray**
Color :	**WHITE**
Ingress Protection :	**IP 67**
Weight :	**2.6** oz
Wind-loading :	**150** Mph
Side-loading @ 1ft :	**30** lbs
Vertical Pull :	**100** lbs
Overall length :	**6.6** INCHES

Issue : 1102

5.15-5.825 MHz RADOME OMNI – 5 dBi

OMNIDIRECTIONAL ANTENNA

W5027

Series : **ANTENNA**

ENVIRONMENTAL SPECIFICATIONS

Temperature:	**-40/+65** ° C
Ingress Protection :.....	**IP 67**
Temperature Cycling:.....	**-40°C dwell 6 hours/+65°C dwell 6 hours** 4 full cycles (no condensation)
Leak Test:.....	**Fully submerged 12”** 12 hours (no water intrusion)

OTHER SPECIFICATIONS

5.15-5.825 MHz RADOME OMNI – 5 dBi

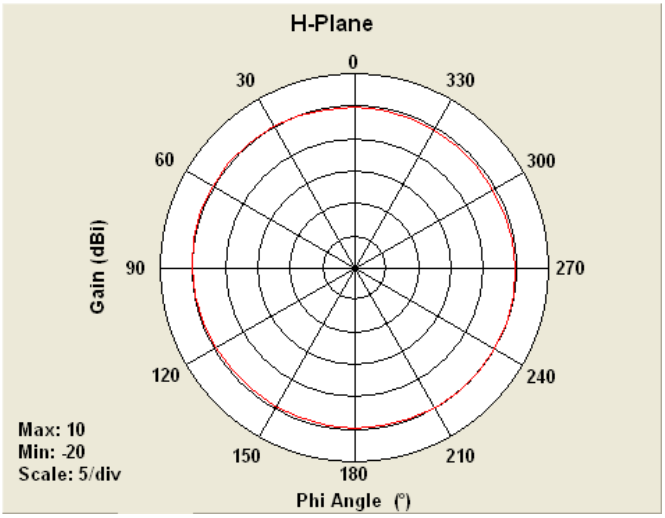
OMNIDIRECTIONAL ANTENNA

W5027

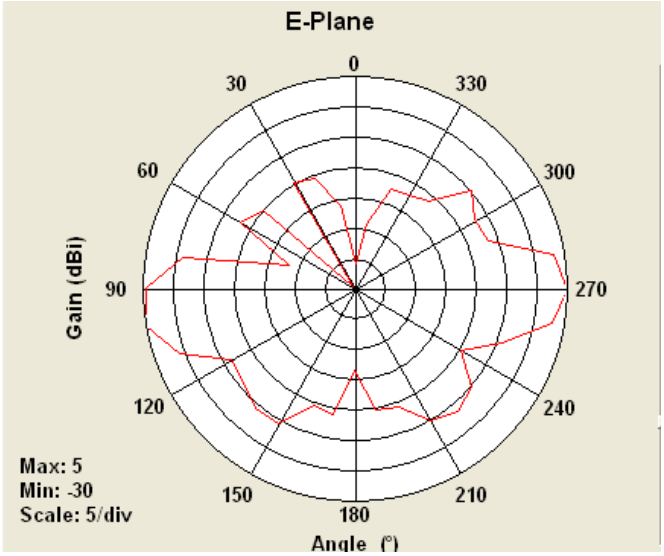
Series : **ANTENNA**

CURVES

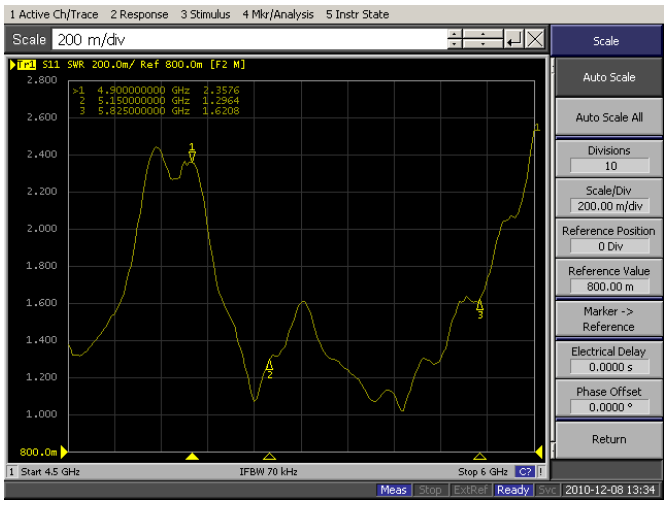
Horizontal plane



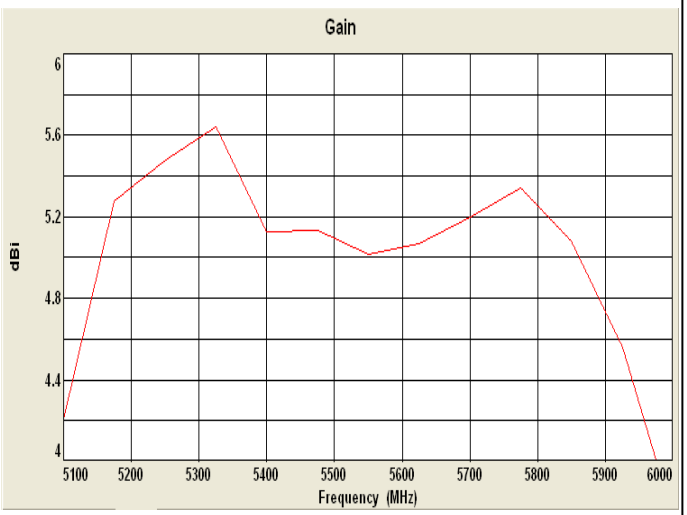
Vertical plane



VSWR



Gain



Issue : 1102

In the effort to improve our products, we reserve the right to make changes judged to be necessary.

MARS ANTENNAS & RF SYSTEMS LTD.

5.15-5.875 GHz Dual Polarized Base Station Antenna, 120°

MA-WE56-DP12RU

MARS 120° Broadband Dual Polarized Sector Antenna
Additional Features:

- **stable performance with 12 dBi of gain**
- **compact size allowing for easy blending with any environment**
- **tilt mount allowing for quick and easy installation**
- **UV protected radome suitable for harsh environment installations**

Specifications:

Electrical	
Frequency range	**5.15 – 5.875 GHz**
GAIN, typ.	**12 dBi**
VSWR, max.	**1.7 : 1**
Polarization	**Dual, Vertical & Horizontal**
3 dB Beam-Width, H-Plane, typ.	**120°**
3 dB Beam-Width, E-Plane, typ.	**15°**
Cross Polarization, typ.	**-15 dB**
Front to Back Ratio, min.	**-30 dB**
Port to Port Isolation, typ.	**-20 dB**
Input power, max	**10 Watt**
Input Impedance	**50 Ohm**
Lightning Protection	**DC Grounded**
Mechanical	
Dimensions (HxWxD)	**200 x 200 x 33 mm (7.9" x7.9" x 1.25")**
Weight	**1 kg**
Connector	**2 x N-Type, Female**
Back Plane	**Aluminum protected through chemical passivation**
Radome	**UV Protected, Plastic**
Mount	**MNT-23**
Environmental	
Operating Temperature Range	**- 55°C to + 65°C**
Vibration	**According to IEC 60721-3-4**
Wind Load	**200 km/h (survival)**
Flammability	**UL94**
Water Proofing	**IP-67**
Humidity	**ETS 300 019-1-4, EN 302 085 (annex A.1.1)**
Salt Fog	**According to IEC 68-2-11**
Ice and Snow	**25mm radial (survival)**
Service Life	**>10 years**

2.3-2.7 GHz & 4.9-6.1 GHz Dual Band MIMO Applications Sector Antenna,120°

MA-WE2458 -3H

MARS Dual Band Sector antenna provides coverage of 2.3 to 2.7 GHz & 4.9 to 6.1 GHz in a single antenna radome.
Additional Features:
- simultaneous coverage of 802.11 a,b,e,g,n,WiMAX & 4.9 GHz Public Safety Bands
- light weight and durable construction.
- UV protected radome made of plastic

Specifications:

Electrical		
Frequency range	2.3 - 2.7 GHz	4.9 - 6.1 GHz
Gain,typ.	5 dBi x3	5 dBi x3
VSWR, max.	2:1 (typ. 1.5:1)	2:1 (typ.1.5:1)
3 dB Beam-Width, H-Plane, typ.	120 °	120 °
3 dB Beam-Width, E-Plane, typ.	70 °	70 °
Polarization	Vertical and 2 x Dual Slant Â±45Âº	
Input power, max	20 Watt	
Input Impedance	50 Ohm	
Mechanical		
Dimensions	200 x 200 x 33 mm (7.9" x7.9" x 1.25")	
Weight	260 gr.	
Connector	3 x Coaxial Cable RG 316 with RPSMA	
Back Plane	Aluminum; protected through chemical passivation	
Radome	UV Protected Plastic	
Mount	Wall Mountable or See Ordering Options Below	
Environmental		
Operating Temperature Range	- 40°C to + 70°C	
Vibration	According to IEC 60721-3-4	
Flammability	UL94	
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)	
Service Life	>10 years	

Ordering Options	
Antenna 3xCoaxial Cable RG 316 with N-Type male	MA-WE2458 -3H 2
Antenna 3x Coaxial Cable RG 316 with RPSMA, wall mountable	MA-WE2458 -3H
Antenna 3x Coaxial Cable RG 316 with N-Type male with provision for Az/El adjustable mount MNT-22	MA-WE2458 -3H 2