

2.3 - 2.7 GHz MIMO Omni – Directional Base Station Antenna AO-024-MIMO-8



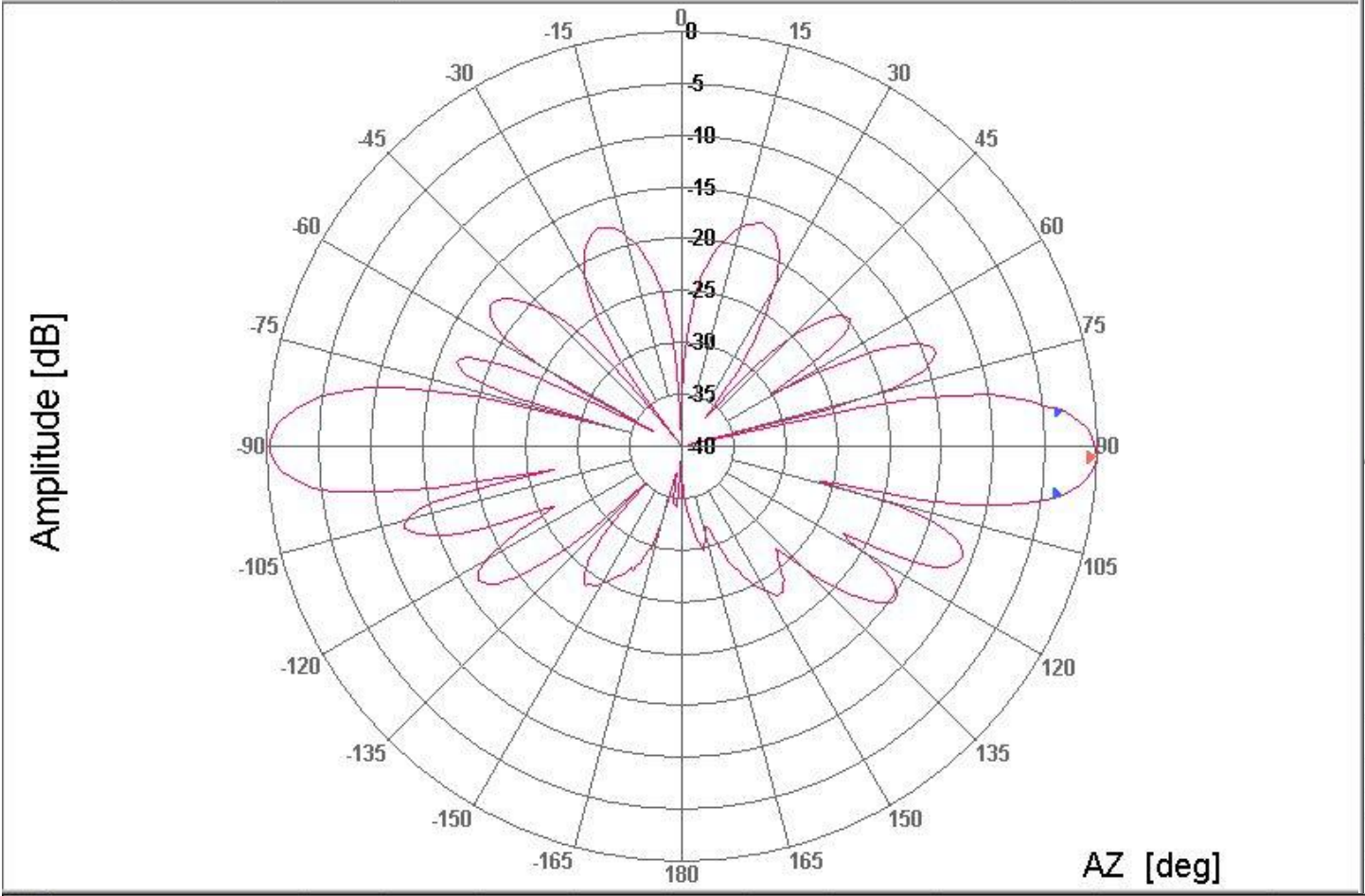
Specifications:

Electrical	
Frequency range	2.3 - 2.7 GHz
GAIN, typ.	3 x 8 dBi
VSWR, max.	2 : 1
Polarization	Linear, Vertical
3 dB Beam-Width, H-Plane, typ.	Omni - Directional
3 dB Beam-Width, E-Plane, typ.	10°
Input power, max	10 Watt
Input Impedance	50 Ohm
Mechanical	
Dimensions (H x W x D)	640 x 390 x 90 mm
Weight	1.5 Kg
Connector	3 x N-Type, Female
Radome	UV Protected , Plastic
Mount	Pole Mount with Brackets
Environmental	
Operating Temperature Range	- 40°C to + 65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 km/h (survival)
Flammability	UL94
Water Proofing	IP-65
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)

Specifications subject to change without notice

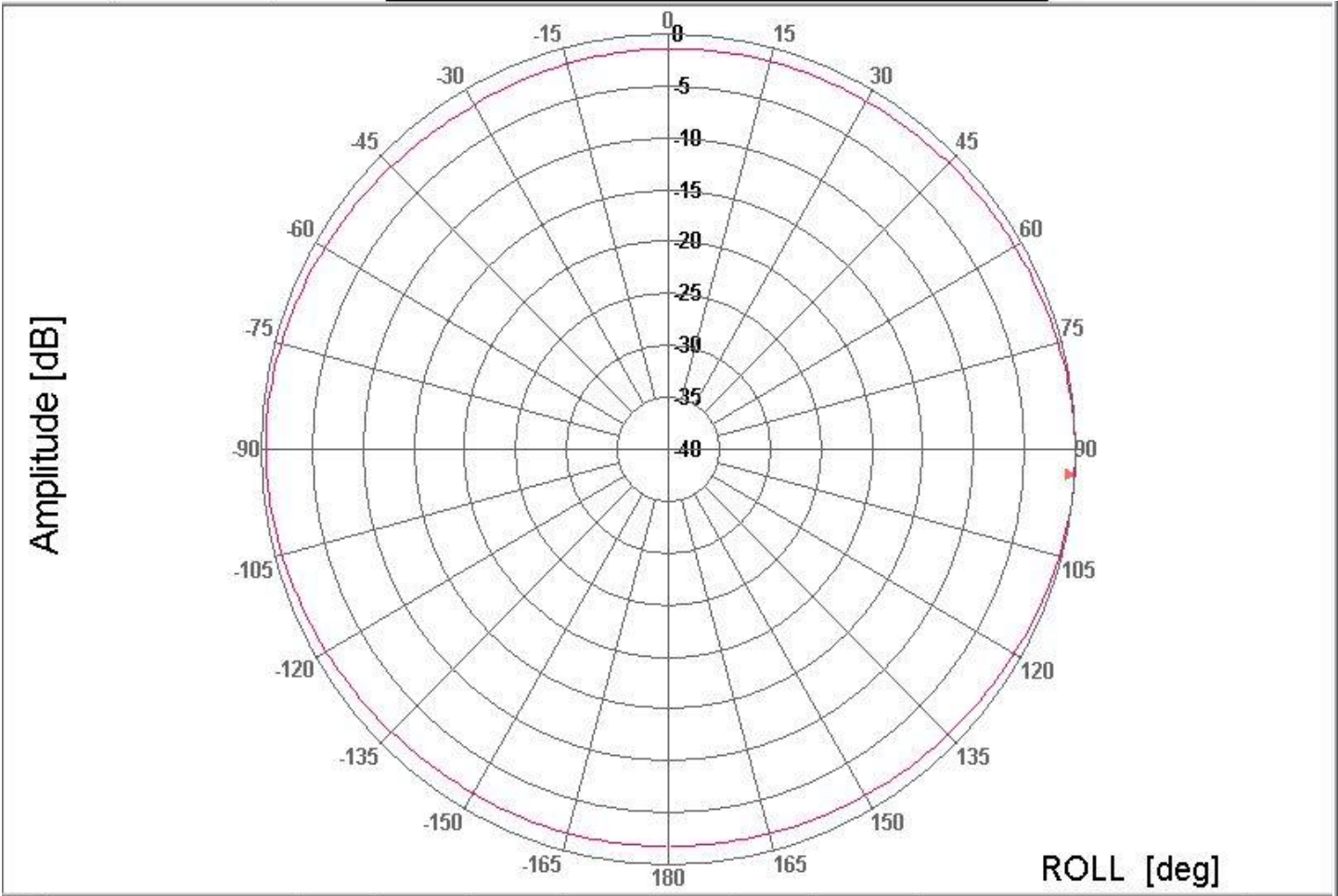
AO-024-MIMO-8 E-plane

Operator: FIRETIDE



AO-024-MIMO-8 H-plane

Operator: FIRETIDE



2.3-2.7 GHz MIMO Base Station Antenna, 90° AS90-024-MIMO-13



Specifications:

Electrical	
Frequency range	2.3 – 2.7 GHz
GAIN, typ.	3 x 13 dBi
VSWR, max.	1.7 : 1
Polarization	Linear, Vertical
3 dB Beam-Width, H-Plane, typ.	90°
3 dB Beam-Width, E-Plane, typ.	15°
Side Lobes, min.	-12 dB
Cross Polarization, min.	-20 dB
Front to Back Ratio, min.	-24 dB
Input power, max	50 Watt
Input Impedance	50 Ohm
Lightning Protection	DC Grounded
Mechanical	
Dimensions (HxWxD)	380 x 225 x 80 mm
Weight	2 Kg.
Connector	3 x N-Type, Female
Back Plane	Aluminum protected through chemical passivation
Radome	UV Protected, Plastic
Mount	MNT-22 (Not Included)
Environmental	
Operating Temperature Range	- 40°C to + 65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 km/h (survival)
Flammability	UL94
Water Proofing	IP-65
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)

Specifications subject to change without notice

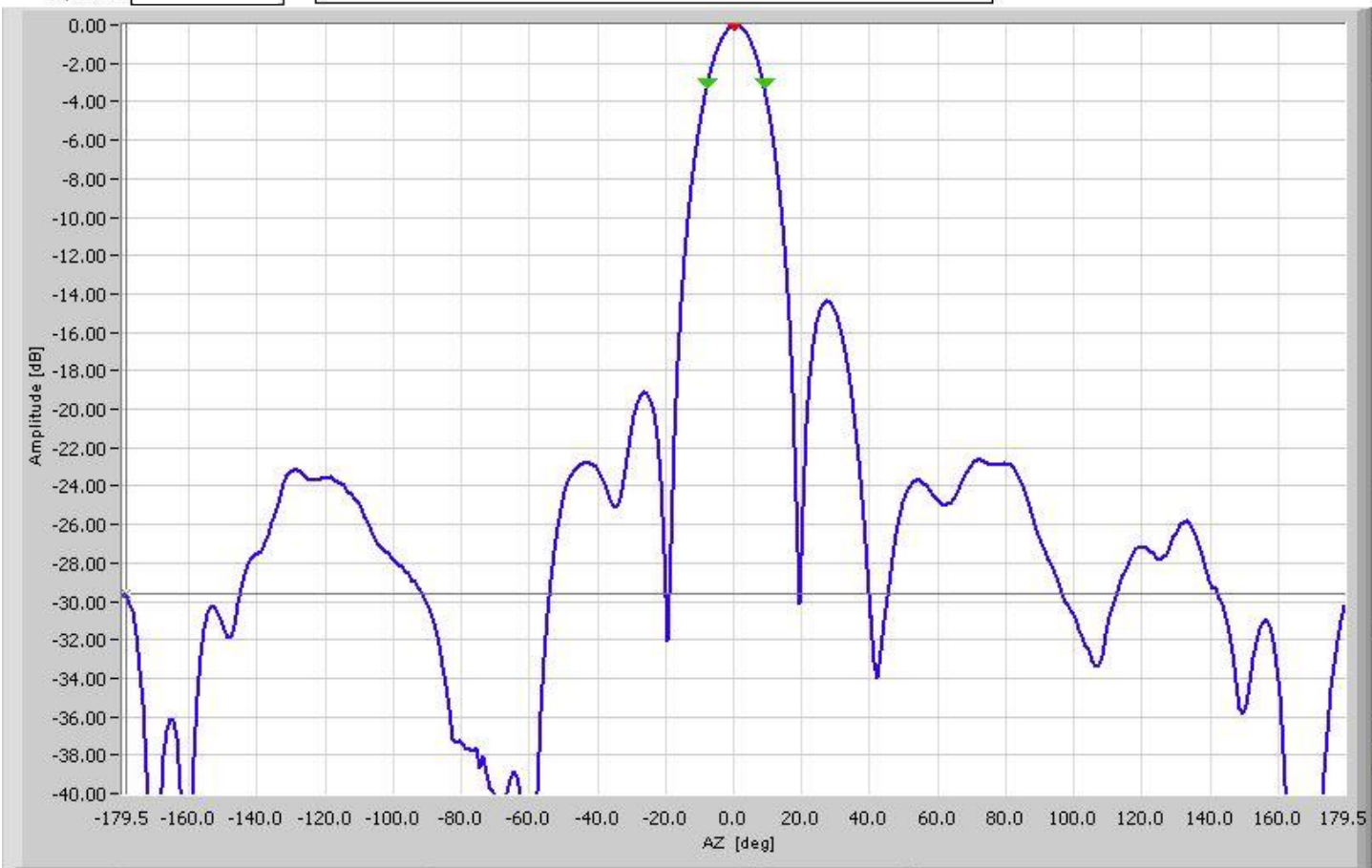
Operator: FIRETIDE

AS90-024-MIMO-13 H-plane



Operator: FIRETIDE

AS90-024-MIMO-13 E-plane



2.3 - 2.7 GHz MIMO Omni – Directional Base Station Antenna AO-024-MIMO-8



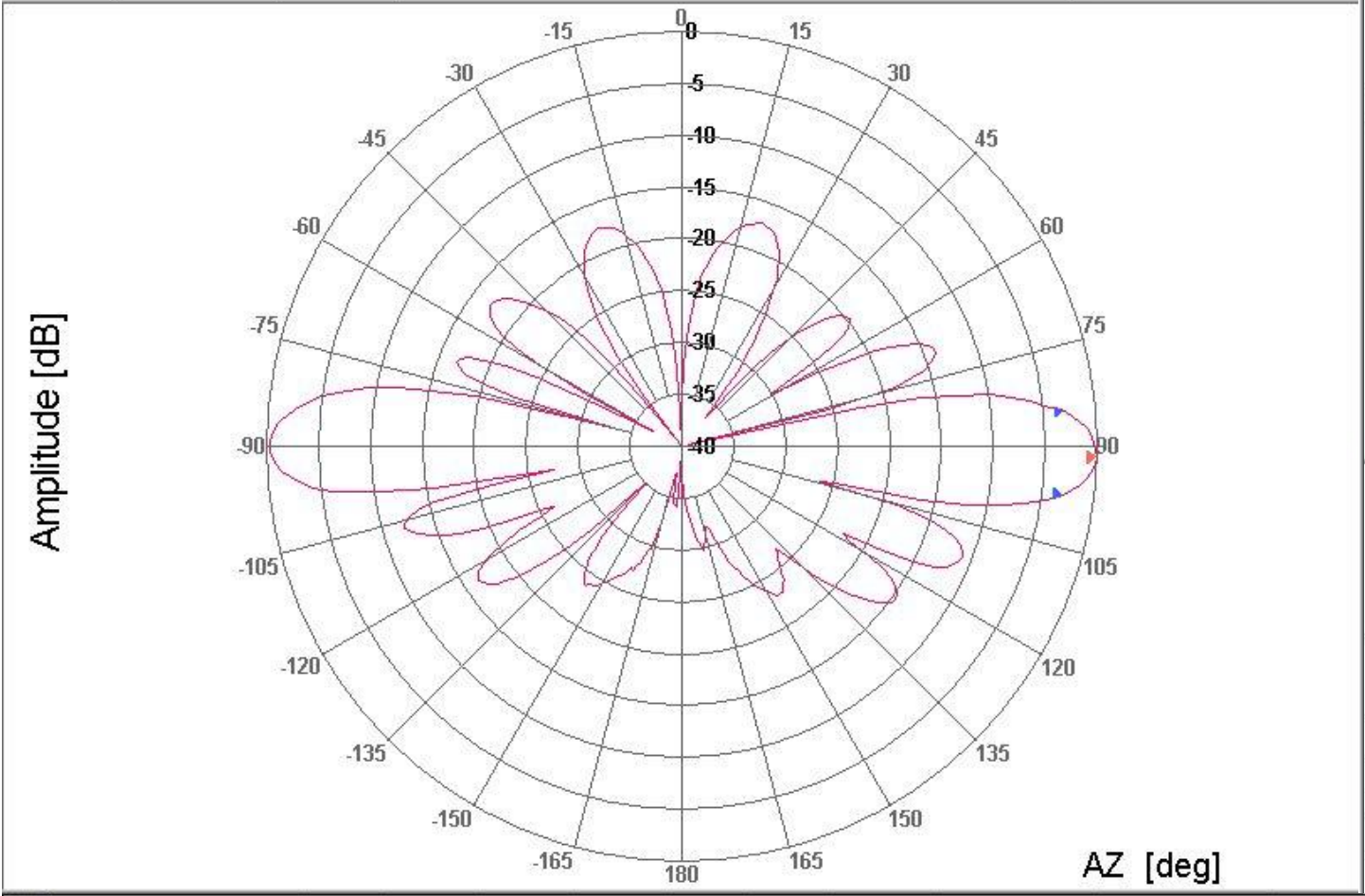
Specifications:

Electrical	
Frequency range	2.3 - 2.7 GHz
GAIN, typ.	3 x 8 dBi
VSWR, max.	2 : 1
Polarization	Linear, Vertical
3 dB Beam-Width, H-Plane, typ.	Omni - Directional
3 dB Beam-Width, E-Plane, typ.	10°
Input power, max	10 Watt
Input Impedance	50 Ohm
Mechanical	
Dimensions (H x W x D)	640 x 390 x 90 mm
Weight	1.5 Kg
Connector	3 x N-Type, Female
Radome	UV Protected , Plastic
Mount	Pole Mount with Brackets
Environmental	
Operating Temperature Range	- 40°C to + 65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 km/h (survival)
Flammability	UL94
Water Proofing	IP-65
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)

Specifications subject to change without notice

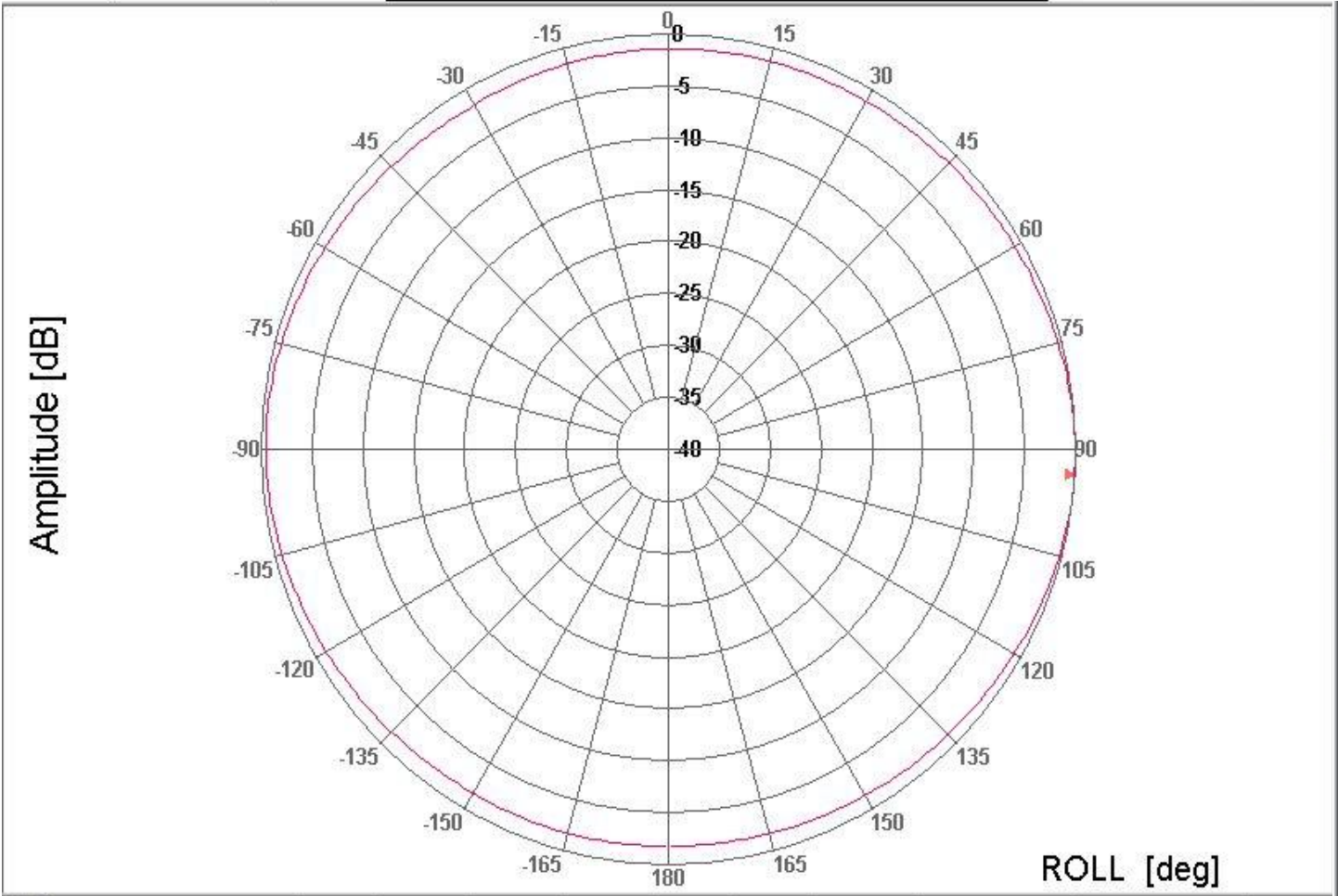
AO-024-MIMO-8 E-plane

Operator: FIRETIDE



AO-024-MIMO-8 H-plane

Operator: FIRETIDE



**2.3-2.7 GHz MIMO Base Station Antenna, 90°
AS90-024-MIMO-13**



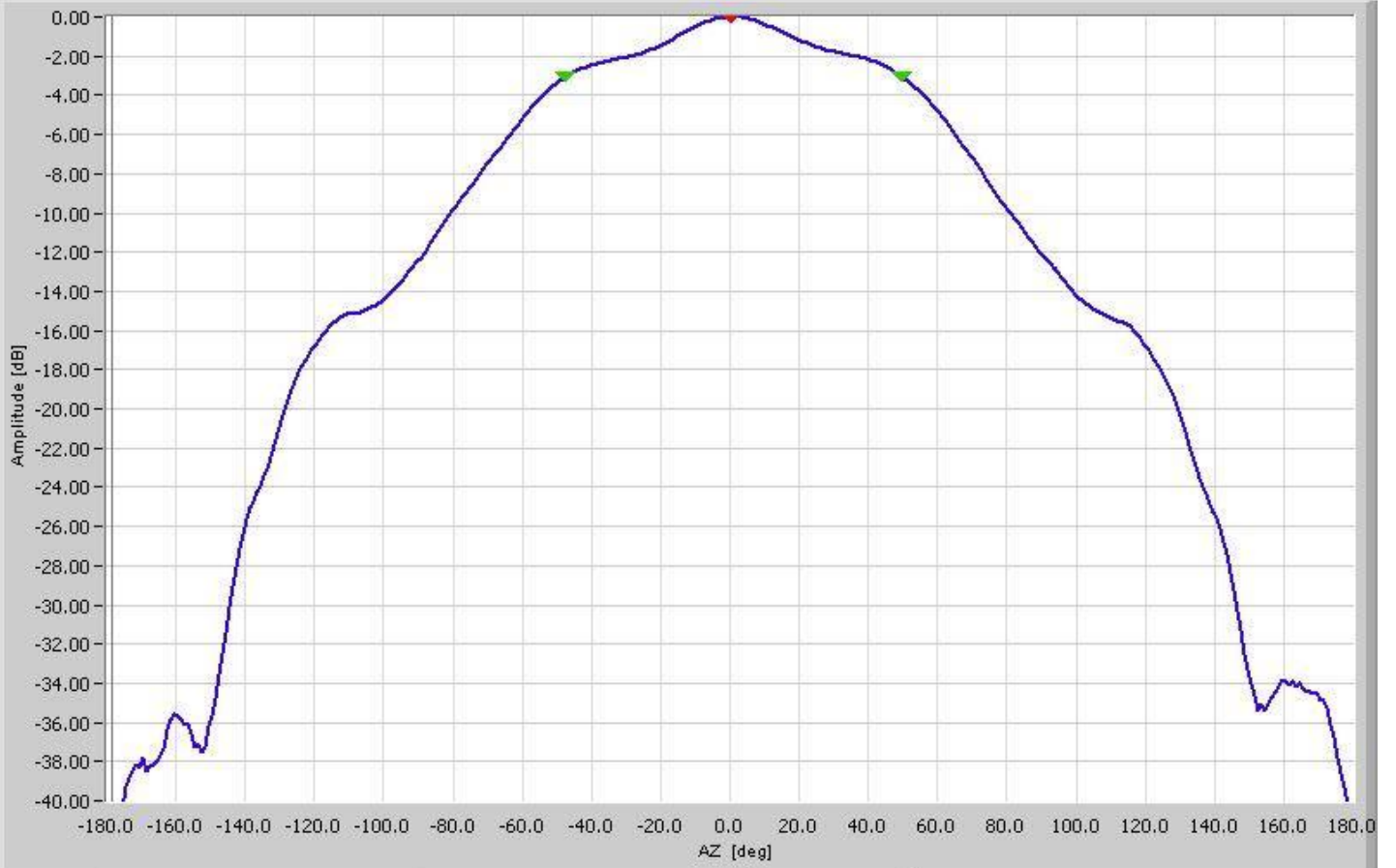
Specifications:

Electrical	
Frequency range	2.3 – 2.7 GHz
GAIN, typ.	3 x 13 dBi
VSWR, max.	1.7 : 1
Polarization	Linear, Vertical
3 dB Beam-Width, H-Plane, typ.	90°
3 dB Beam-Width, E-Plane, typ.	15°
Side Lobes, min.	-12 dB
Cross Polarization, min.	-20 dB
Front to Back Ratio, min.	-24 dB
Input power, max	50 Watt
Input Impedance	50 Ohm
Lightning Protection	DC Grounded
Mechanical	
Dimensions (HxWxD)	380 x 225 x 80 mm
Weight	2 Kg.
Connector	3 x N-Type, Female
Back Plane	Aluminum protected through chemical passivation
Radome	UV Protected, Plastic
Mount	MNT-22 (Not Included)
Environmental	
Operating Temperature Range	- 40°C to + 65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 km/h (survival)
Flammability	UL94
Water Proofing	IP-65
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)

Specifications subject to change without notice

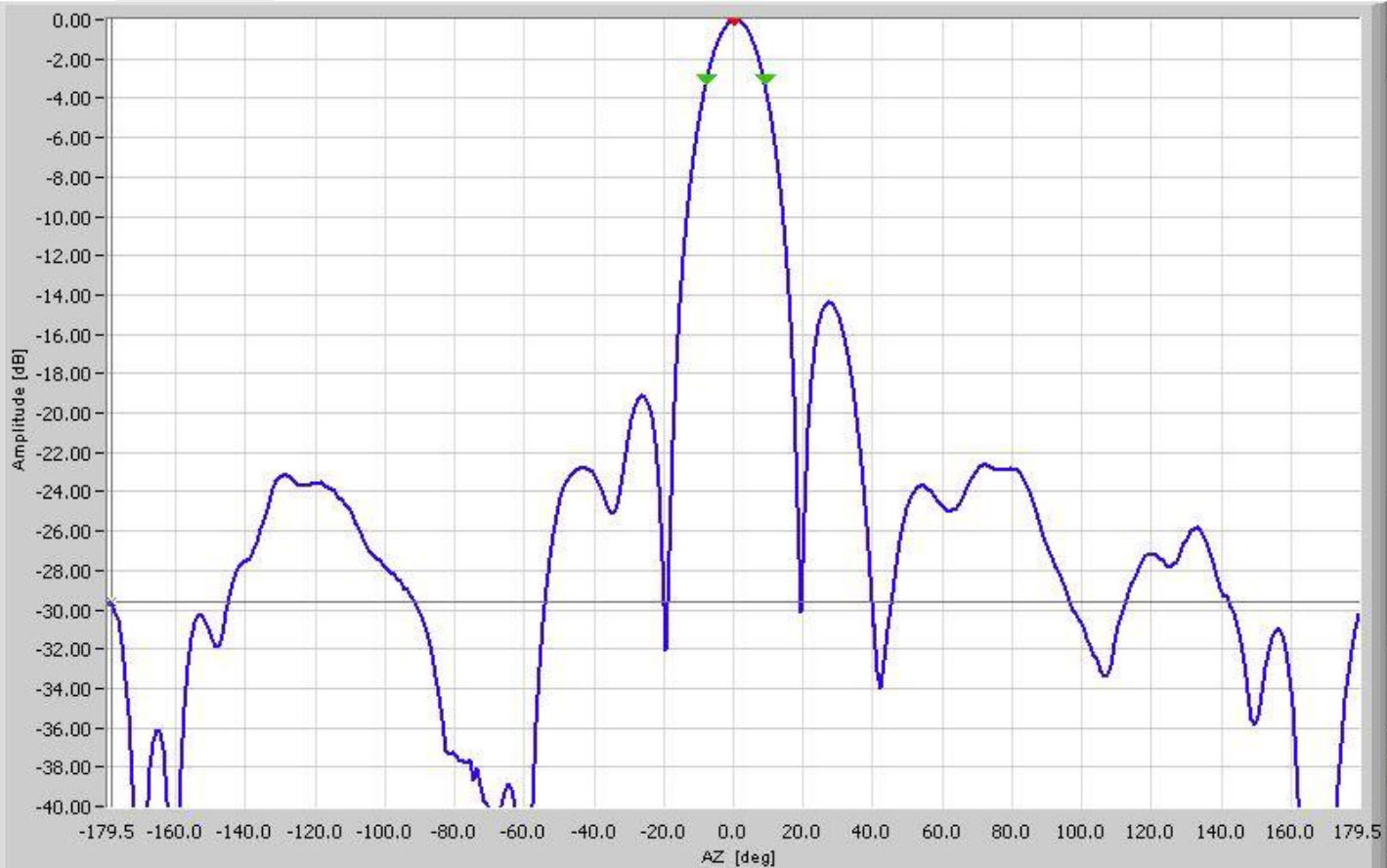
Operator: FIRETIDE

AS90-024-MIMO-13 H-plane



Operator: FIRETIDE

AS90-024-MIMO-13 E-plane



4.9 - 5.875 GHz MIMO Omni – Directional Base Station Antenna
AO-050-MIMO-9



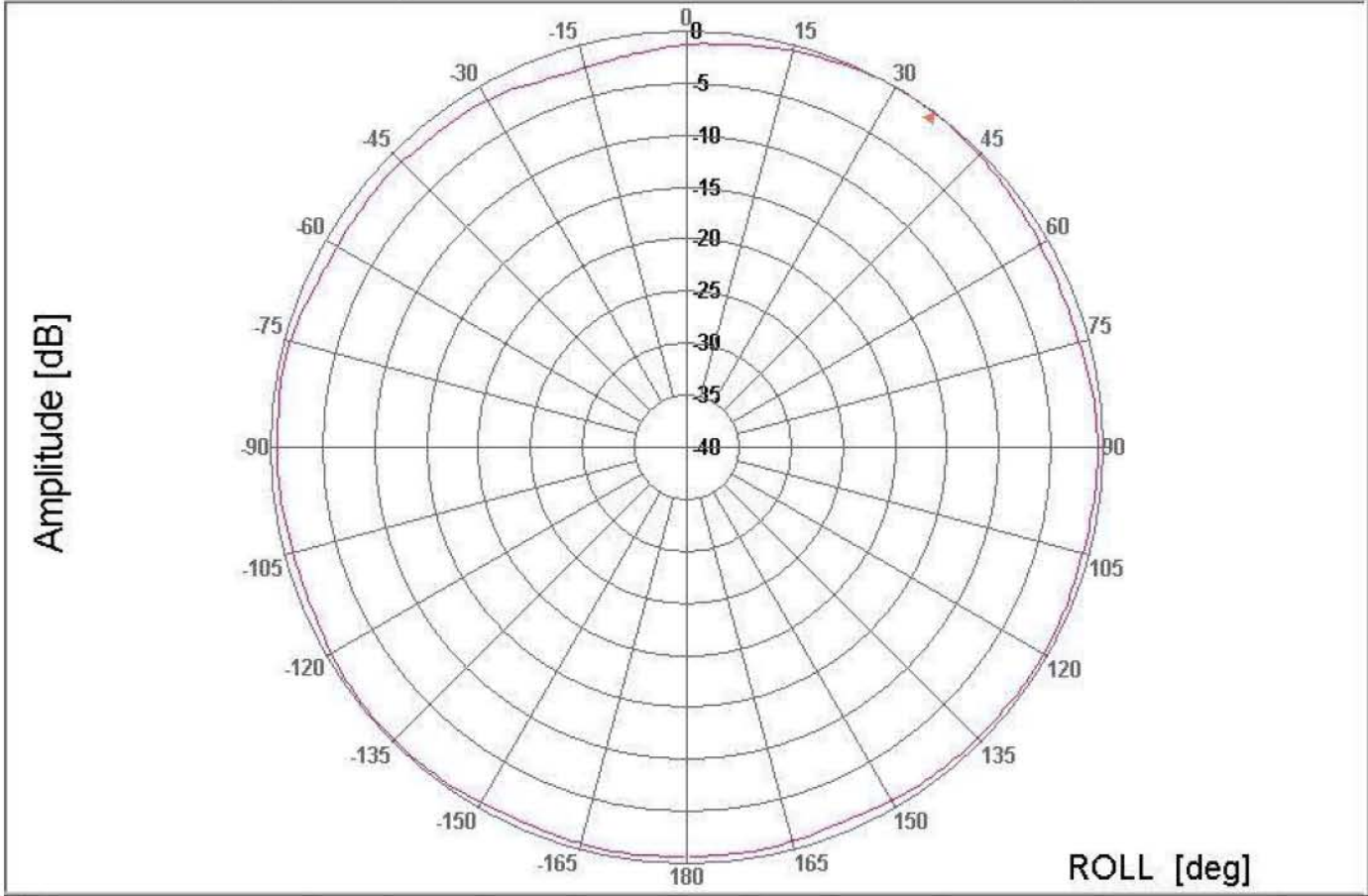
Specifications:

Electrical	
Frequency range	4.9 - 5.875 GHz
GAIN, typ.	3 x 9 dBi
VSWR, max.	2 : 1
Polarization	Linear, Vertical
3 dB Beam-Width, H-Plane, typ.	Omni - Directional
3 dB Beam-Width, E-Plane, typ.	10°
Input power, max	50 Watt
Input Impedance	50 Ohm
Mechanical	
Dimensions (HxDia.)	330 x 200 mm
Weight	600 gr
Connector	3 x N-Type, Female
Radome	UV Protected , Plastic
Mount	Provision for Fire Tide MIMO
Environmental	
Operating Temperature Range	- 40°C to + 65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 km/h (survival)
Flammability	UL94
Water Proofing	IP-65
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)

Specifications subject to change without notice

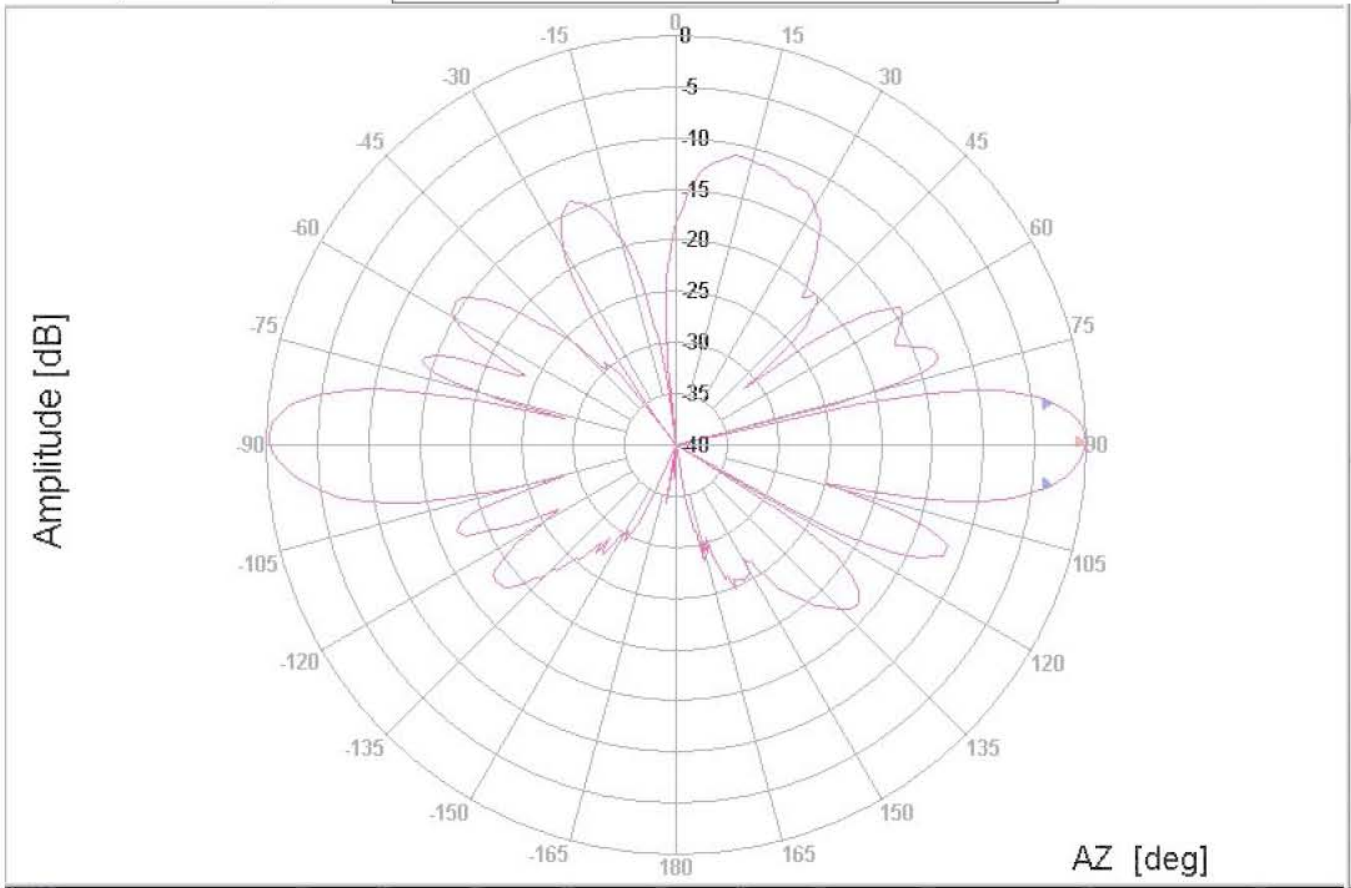
Operator: FIRETIDE

AO-050-MIMO-9 H-plane



AO-050-MIMO-9 E-plane

Operator: FIRETIDE



5 GHz MIMO Base Station Antenna, 120° AS120-050-MIMO-15



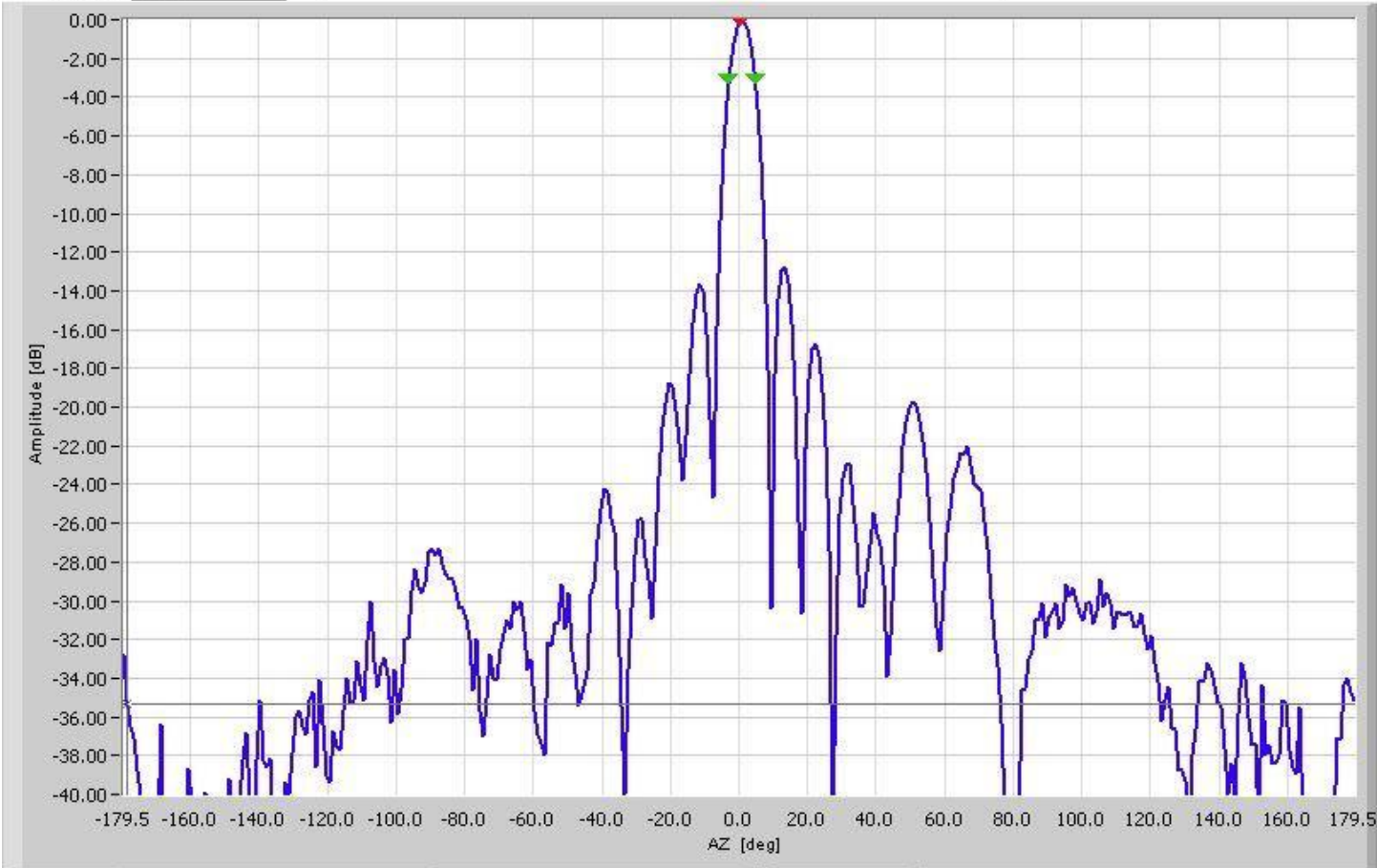
Specifications:

Electrical	
Frequency range	4.9 – 6.1 GHz
GAIN, typ.	3 x 15 dBi
VSWR, max.	1.8 : 1
Polarization	Linear, Vertical
3 dB Beam-Width, H-Plane, typ.	120°
3 dB Beam-Width, E-Plane, typ.	8°
Side Lobes, min.	ETSI EN 302 085 V1.2.3 – CS1
Cross Polarization, min.	ETSI EN 302 085 V1.2.3 – CS1
Front to Back Ratio, min.	ETSI EN 302 085 V1.2.3 – CS1
Input power, max	50 Watt
Input Impedance	50 Ohm
Lightning Protection	DC Grounded
Mechanical	
Dimensions (HxWxD)	400 x 300 x 50 mm
Weight	2.5 Kg.
Connector	3 x N-Type, Female
Back Plane	Aluminum protected through chemical passivation
Radome	UV Protected, Plastic
Mount	MNT-22 (Not included)
Environmental	
Operating Temperature Range	- 40°C to + 65°C
Vibration	According to IEC 60721-3-4
Wind Load	200 km/h (survival)
Flammability	UL94
Water Proofing	IP-65
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)
Standard Compliance	
ETSI EN 302 085 V1.2.3 – CS1	

Specifications subject to change without notice

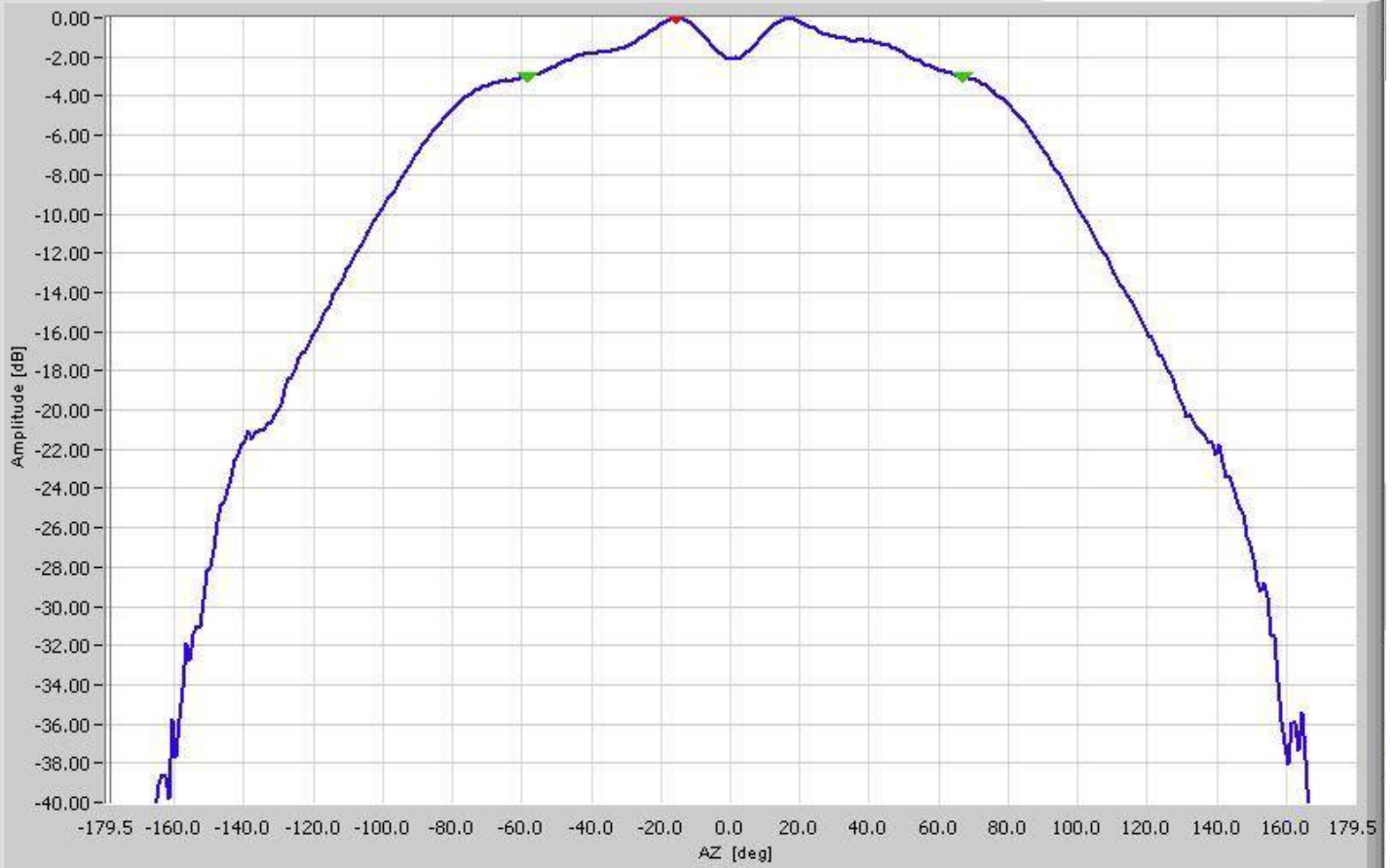
Operator: FIRETIDE

AS120-050-MIMO-15 E-plane



Operator: FIRETIDE

AS120-050-MIMO-15 H-plane



AS90-050-MIMO-16-T 4.9-6.1 GHz Triple Polarizations MIMO Base Station Antenna, 90



The Triple Polarization Sector antenna provides coverage of 4.9-6.1 GHz frequency band in a single antenna radome.

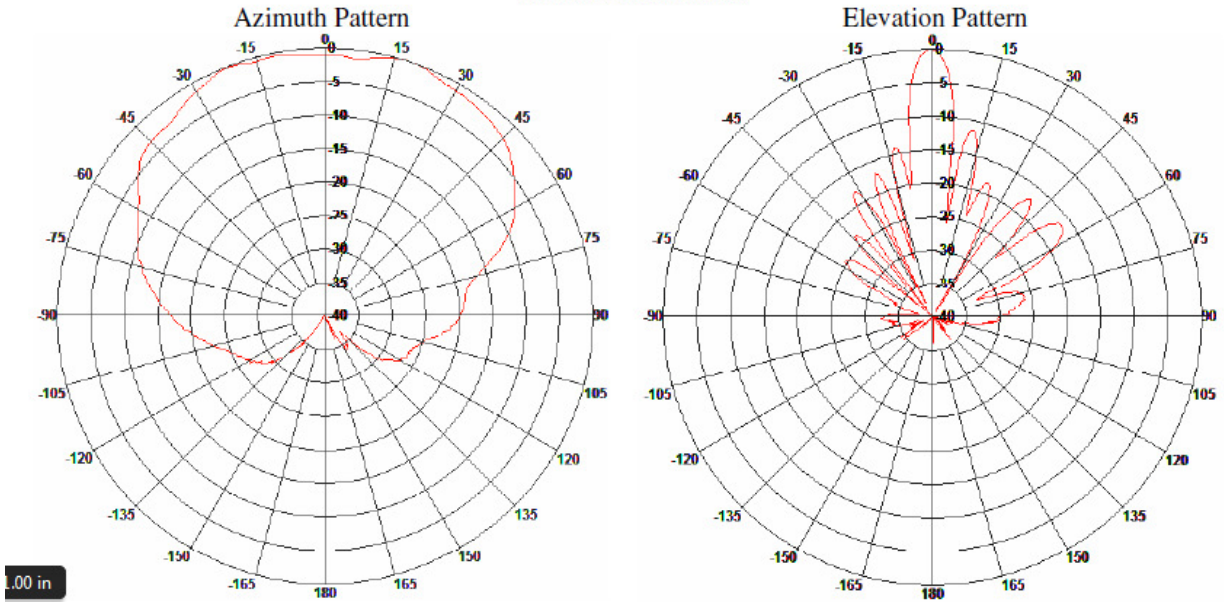
- light weight and durable construction
- 3 Ports: Dual Slant ($\pm 45^\circ$) and Vertical Polarization
- UV protected radome made of plastic
- specially designed for MIMO applications for optimal decorrelation

Specifications:	
<i>Electrical</i>	
Frequency range	4.9- 6.1 GHz
GAIN : Vertical Pol.	16 dBi
Dual Slant Pol.	16 dBi
VSWR, max.	1.7 : 1
Polarization	Dual Slant $\pm 45^\circ$ and Vertical
3 dB Beam-Width-Azimuth, typ.	Dual Slant : 90° ; V- Pol 90°
3 dB Beam-Width-Elevation, typ.	Dual Slant : 8° ; V- Pol 8°
Front to Back Ratio, min.	-30 dB
Port to Port Isolation, min.	-30 dB
Input power, max	10 Watt
Input Impedance	50 Ohm
Lightning Protection	DC Grounded
<i>Mechanical</i>	
Dimensions (HxWxD)	370 x 370 x 40 mm (14.5" x14.5" x1.6")
Connector	3 x N-Type Female
Weight	2.1 Kg
Mounting	MNT-22
Radome	UV Protected Polycarbonate
Back Plane	Aluminum protected through chemical passivation
<i>Environmental</i>	
Operating Temperature Range	- 40°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

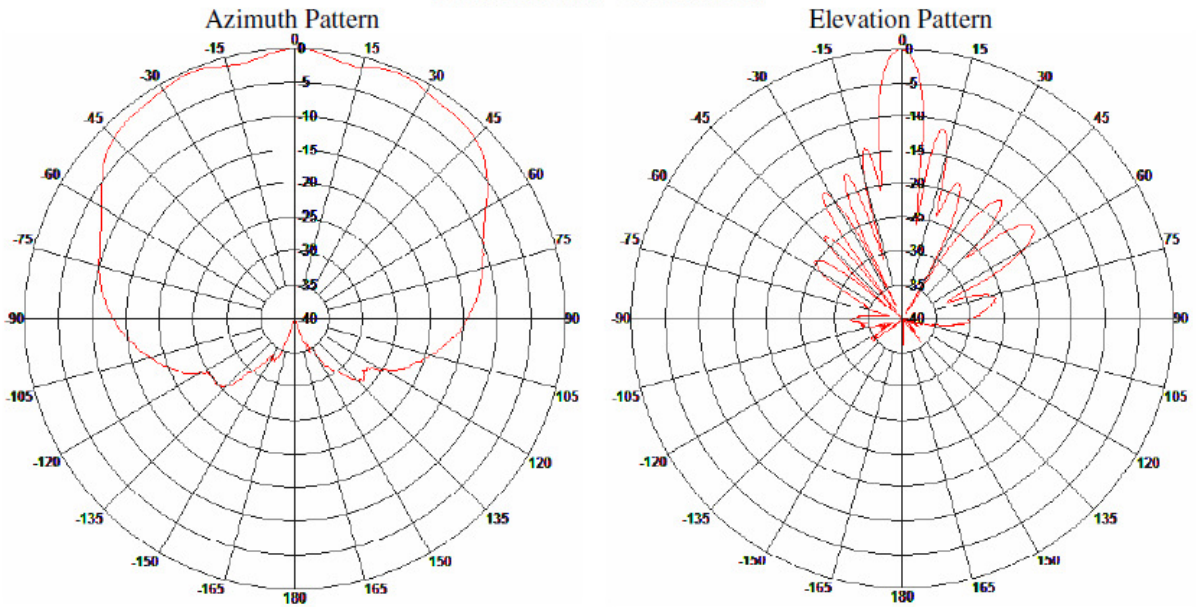
AS90-050-MIMO-16-T 4.9–6.1 GHz Triple Polarizations MIMO Base Station Antenna, 90

Radiations Patterns	
Frequency	5500 MHz
Gain, typ.	16 dBi

Vertical Polarization



Dual Slant $\pm 45^\circ$ Polarization



5.125–6.1 GHz Triple Polarizations MIMO Subscriber Antenna AP20-050-MIMO-19



Specifications:

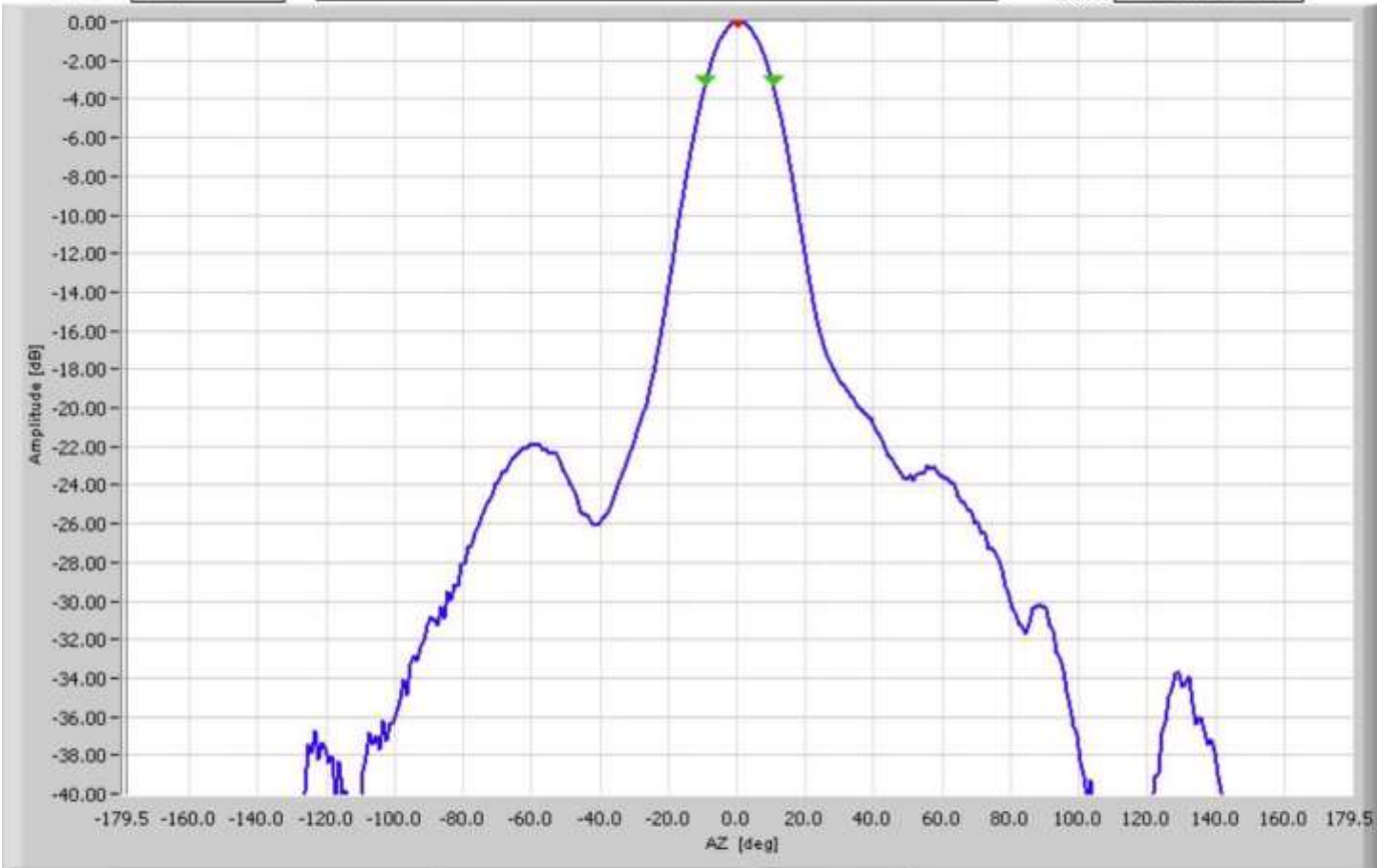
Electrical	
Frequency range	5.125 - 6.1 GHz
GAIN : Vertical Pol.	19 dBi
Dual Slant Pol	17.5 dBi
VSWR, max.	1.7 : 1
Polarization	Dual Slant $\pm 45^\circ$ and Vertical
3 dB Beam-Width-Azimuth, typ.	Dual Slant : 20° ; V- Pol 22°
3 dB Beam-Width-Elevation, typ.	Dual Slant : 19° ; V- Pol 14°
Side Lobes, min.	-12 dB
Front to Back Ratio, min.	-35 dB
Input power, max	10 Watt
Input Impedance	50 Ohm
Lightning Protection	DC Grounded
Mechanical	
Dimensions (HxWxD)	305 x 305 x 15 mm
Connector	3 x N-Type
Weight	1.5 Kg
Mounting	MNT-22
Radome	UV Protected Polycarbonate
Back Plane	Aluminum protected through chemical passivation.
Environmental	
Operating Temperature Range	- 55°C to + 65°C
Vibration Wind	According to IEC 60721-3-4
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

Specifications subject to change without notice

Operator: FIRETIDE

AP40-050-MIMO-19 E-plane Dual Slant

Date: 17/02/2009 14:23



Operator: FIRETIDE

AP40-050-MIMO-19 H-plane Vertical pol.

Date: 02/03/2009 16:21

