4.9 - 6.1 GHz Subscriber Antenna

MA-WA55-27

MARS Broadband Antenna designed to provide high gain coverage of the UNII frequency band.
Additional Features:
- efficient and stable performance
- aesthetic and unobtrusive
- thin UV protected radome allowing for harsh weather installations
- easy mounting allowing for Az/El adjustment

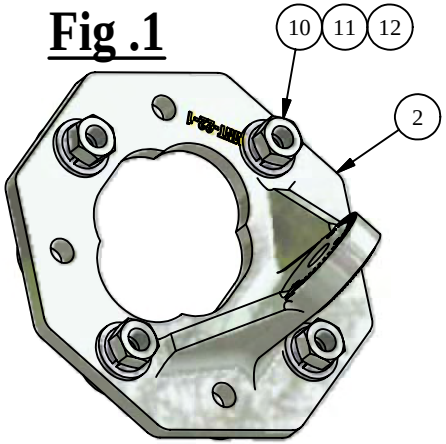
Specifications:

Electrical	
Frequency range	4.9 - 6.1 GHz
Gain,typ.	26 dBi
VSWR, max.	4.9 - 5.875 @ 1.7 : 1 5.875 - 6.1 @ 2 : 1
3 dB Beam-Width, H-Plane, typ.	7.5 °
3 dB Beam-Width, E-Plane, typ.	7.5 °
Side Lobes, min.	ETSI TS3, TS4, TS5
Polarization	Linear,Vertical or Horizontal
Cross Polarization, min.	ETSI TS3, TS4, TS5
Front to Back Ratio, min.	ETSI TS3, TS4, TS5
Input power, max	50 Watt
Input Impedance	50 Ohm
Lightning Protection	DC Grounded
Mechanical	
Dimensions (HxWxD)	370 x 370 x 30 mm (14.6"x14.6"x1.2")
Weight	3 kg
Connector	N-Type, Female
Back Plane	Aluminum; protected through chemical passivation
Radome	UV Protected, Plastic
Mount	MNT-22
Environmemtal	
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
Service Life	> 10 years

Specifications subject to change without notice

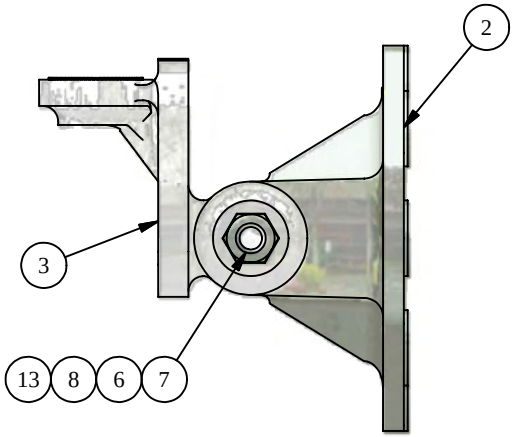
Mounting instructions - Azimuth and Elevation Adjustable Mount MNT-22

Fig .1



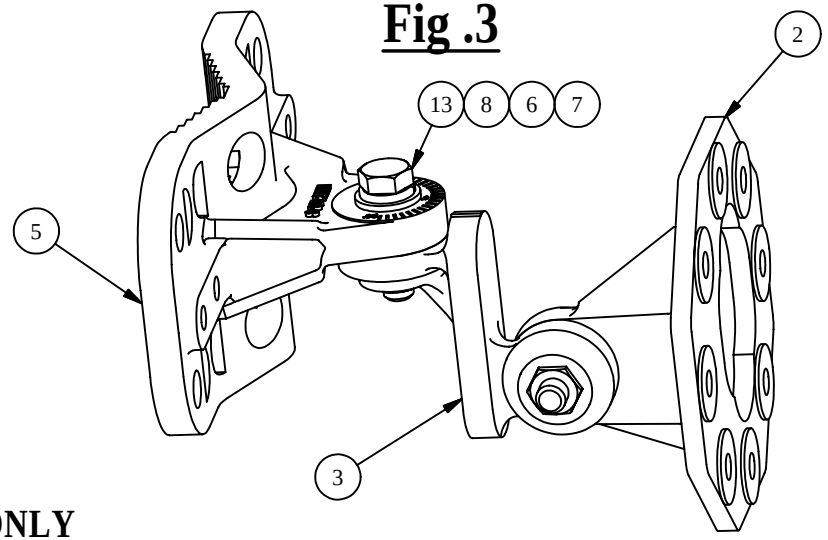
1. Place item No.2 on the antenna, as illustrated in the drawing. Align with the screw holes.
2. Connect item No. 2 to the antenna with spring washers (11), flat washer (10) and nuts (12).
3. Tighten the nuts at a torque of 30 In*Lbs.

Fig .2



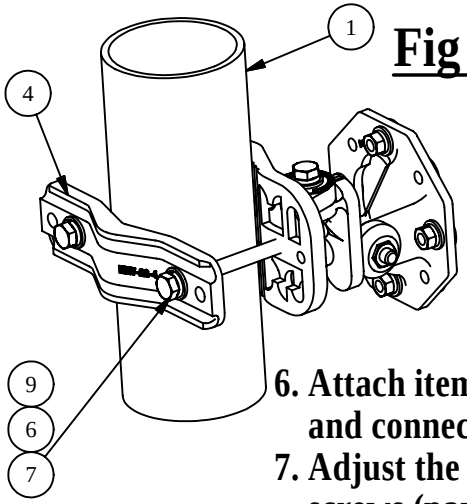
4. Connect item No. 3 to item No. 2 ONLY as illustrated in Fig.2, with items 6,7,8,13. Leave screw slightly loose.

Fig .3



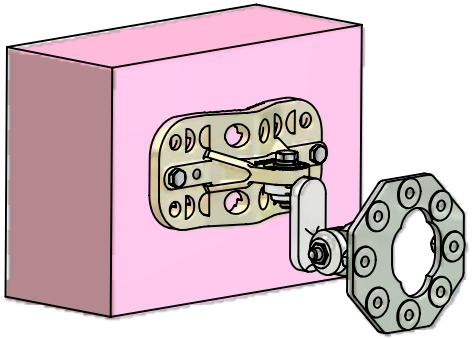
5. Connect item No. 3 to item No. 5 as illustrated, with items 6,7,8,13. Leave screw slightly loose.

Fig .4



6. Attach items No. 4 and 5 to the pole as illustraed, and connect them using items No. 6,7,9.
7. Adjust the desired angle, and fully tighten the loose screws (paragraph 4,5).
8. Tighten the nuts at a torque of 30 In*Lbs.

Fig .5
Wall Mounting



NOTE :

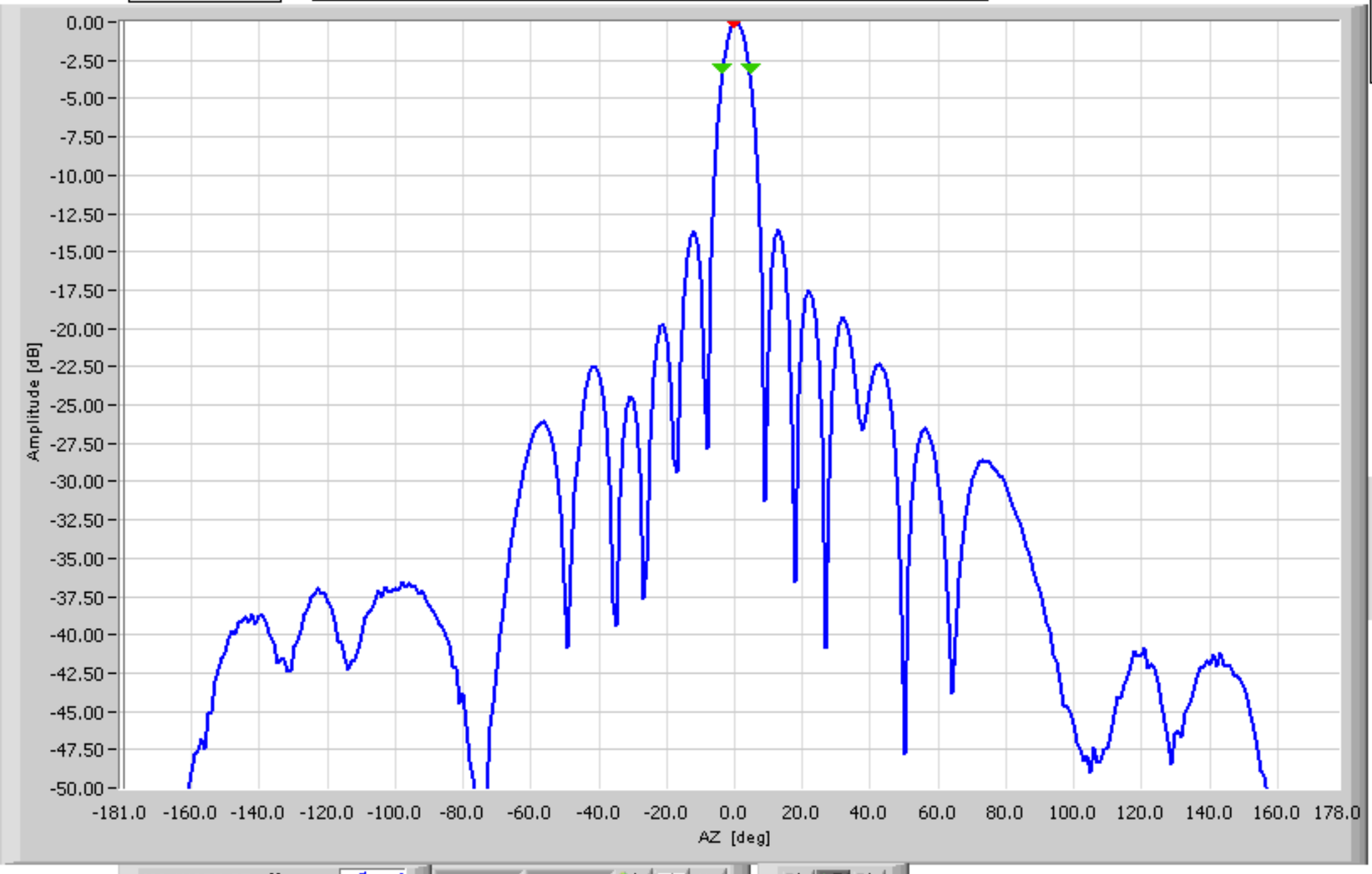
1. MOUNT MNT-22 SUITABLE FOR POLES Ø1"-4".

Parts List		
ITEM	QTY	DESCRIPTION
1	1	POLE 1"-4" (NOT SUPPLIED)
2	1	MNT-22-1
3	1	MNT-22-2
4	1	MNT-22-4
5	1	MNT-22-3
6	4	Helical Spring Lock Washer St. St. #5/16
7	4	Plain Washer St. St. #5/16
8	2	Hex Cap Screw St. St. NC 5/16-18 x 1.25"
9	2	Hex Cap Screw St. St. NC 5/16-18 x 5"
10	4	Plain Washer St. St. #1/4
11	2	Helical Spring Lock Washer St. St.#1/4
12	4	Hex Nut St. St. NC 1/4-20
13	2	Hex Nut St. St. NC 5/16-18

Operator: MARS

MA-WA55-27 E-plane

MARS ANTENNAS & RF SYSTEMS
MARS ANTENNAS RANGE



Side lobes | Database | Ax.Ratio

No.	Ampl	Deg

AZ [deg]
Amplitude [dB]
Phase [deg]

Amplitude [dB]
Phase [deg]
Not Aligned
Normalized
Phase wrapped
Log Display
No Skirt

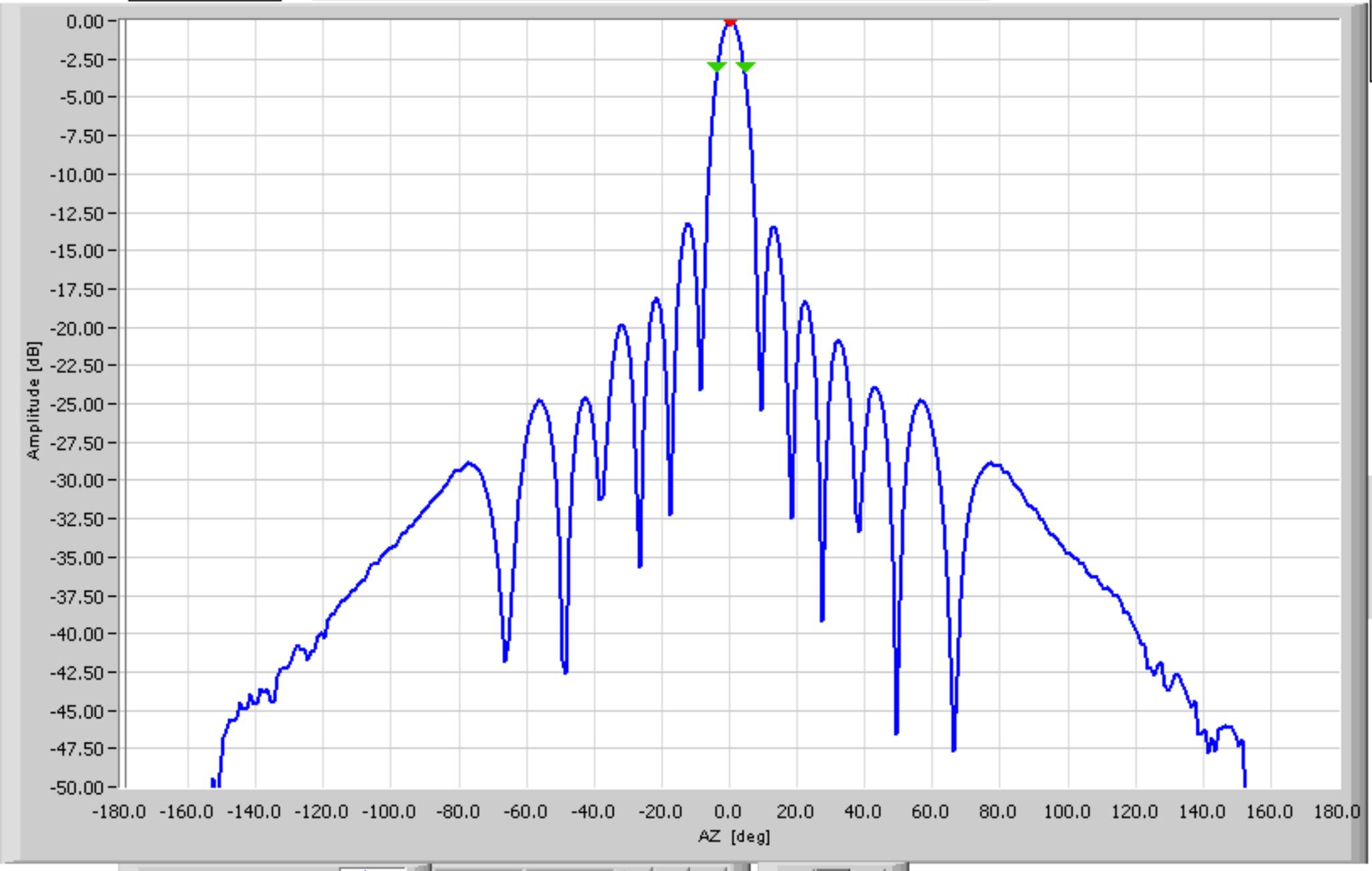
MA-WA55-27.nff -180.00 -53.09

A	P	File Name		ROLL [deg]	Freq. [GHz]	POL [deg]	Ch.	Beam	Switch	Beam Peak [dB] Value	[deg]		Beam Width [deg] Value	At dB		Null Depth [dB] Value	[deg]	GainA dBi
		MA-WA55-27.nff		0.00	5.500 G	90.00	CH1			26.09	0.00	P	7.64	3.00	P			26.09

Operator: MARS

MA-WA55-27 H-plane

MARS ANTENNAS & RF SYSTEMS
MARS ANTENNAS RANGE



Side lobes | Database | Ax.Ratio

No.	Ampl	Deg

AZ [deg]
Amplitude [dB]
Phase [deg]

- [x] Amplitude [dB]
- [ ] Phase [deg]

Not Aligned
Normalized
Phase wrapped
Log Display
No Skirt

MA-WA55-27.nff -178.50 -55.29

A	P	File Name		ROLL [deg]	Freq. [GHz]	POL [deg]	Ch.	Beam	Switch	Beam Peak [dB] Value	[deg]		Beam Width [deg] Value	At dB		Null Depth [dB] Value	[deg]	GainA dBi
		MA-WA55-27.nff		90.00	5.500 G	0.00	CH1			25.96	0.50	P	7.77	3.00	P			26.09