LB-OSJ-0760-NF Open Boundary Quad-Ridged Dual Polarization Horn Antenna 0.7-6GHz 10dB Gain N Type Female

Open Boundary Quad-Ridged Dual Polarization Horn Antenna Operating From 0.7GHz to 6GHz With a Nominal 10dB Gain With N Type Female Connector

Product Information

SKU	LB-OSJ-0760-NF

Description

Open Boundary Quad-Ridged Dual Polarization Horn Antenna LB-OSJ-0760-NF, operating from 0.7 to 6GHz with a nominal 10dB gain and low VSWR 2.0:1 with N Type Female output connector. The model LB-OSJ-0760-NF has uniform gain through its frequency span, providing efficient performance characteristics and directionality. It can handle 50W continuously and 100W peak power. Constructed of lightweight corrosion-resistant aluminum, the antenna will provide years of trouble-free indoor and outdoor service. This horn antenna has dual linear polarization and ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications.

Technical Specification

Electrical Specification	
Frequency, Min (GHz)	0.7
Frequency, Max (GHz)	6
Gain, Typ (dBi)	10
Polarization	Dual Linear
3dB Beamwidth, E-Plane, Min (Deg.)	16
3dB Beamwidth, E-Plane, Max (Deg.)	127
3dB Beamwidth, H-Plane, Min (Deg.)	29
3dB Beamwidth, H-Plane, Max (Deg.)	155
Cross Pol. Isolation, Min (dB)	18
Cross Pol. Isolation, Typ (dB)	30
Port to Port Isolation, Min (dB)	20
Port to Port Isolation, Typ (dB)	35
VSWR, Typ	2.0:1
Impedance, (Ohm)	50
Power Handling, CW, (W)	50
Power Handling, Peak, (W)	100

Interface	
Output Type	Coaxial
Connector	N Type
Connector Gender	Female
Mechanical Specification	
Body Material	Al
Finish	Chemical Conversion Coating and Nickel Plated
Size, W (mm)	310
Size, H (mm)	310
Size, L (mm)	411
Weight, (kg)	5

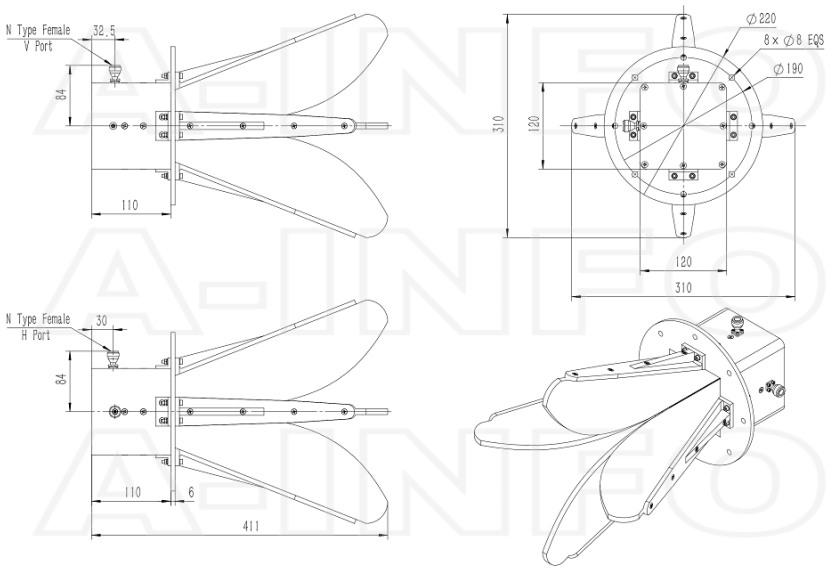
Additional Information

Application	General Purpose Indoor & Outdoor, Fixed

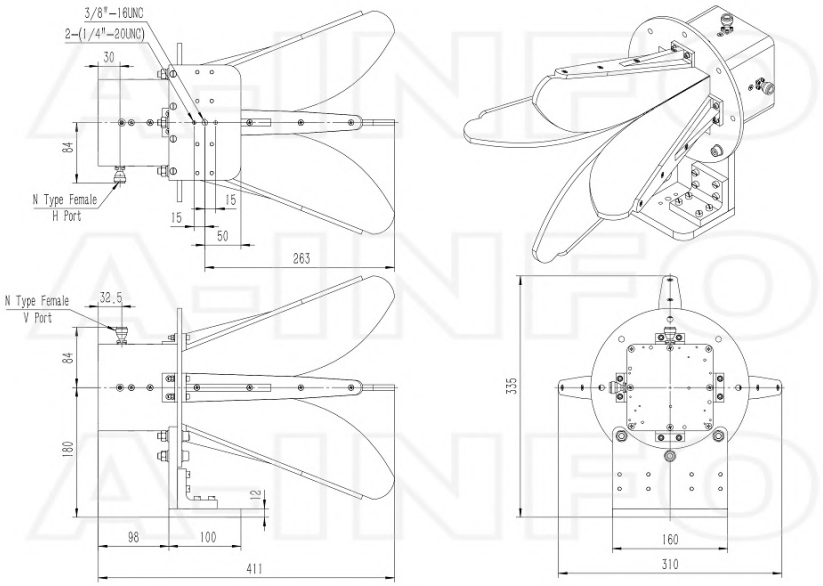
Solution for	Antenna Measurement Reflector Feed Far-field Measurement Planar Near-Field Measurement Cylinderical Near-Field Measurement Spherical Near-Field Measurement CATR System Intergration

Outline Drawing

N-Female Output (P/N: LB-OSJ-0760-NF)



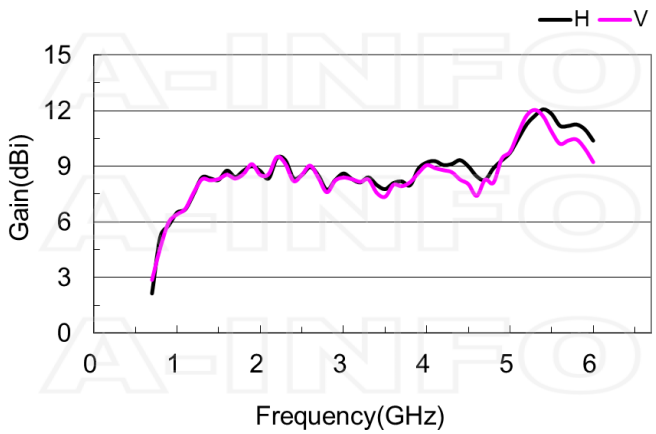
N-Female Output with L Type Mounting Bracket (Option, P/N: LB-OSJ-0760-L)



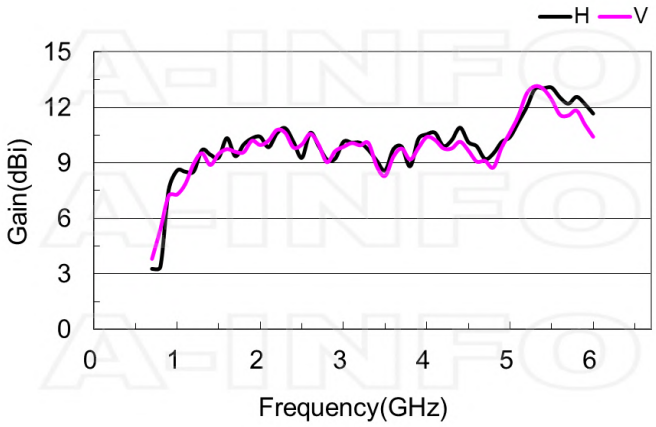
Typical Test Results

Gain

Gain at 1 m

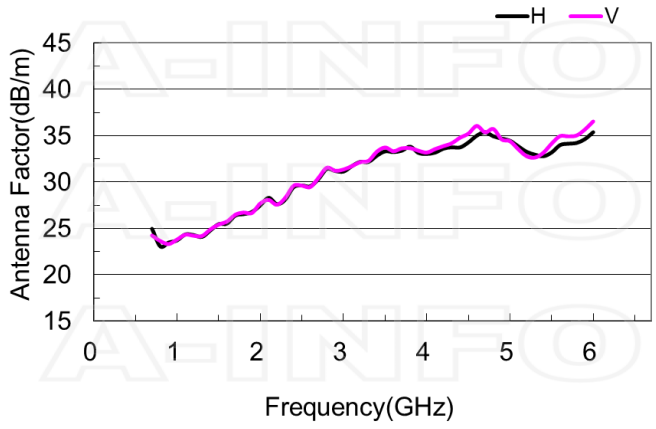


Gain at 3 m

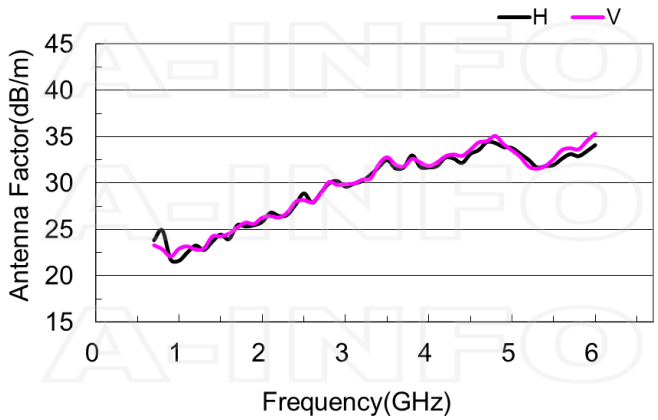


Antenna Factor

AF at 1 m



AF at 3 m



Antenna Factor (Table)

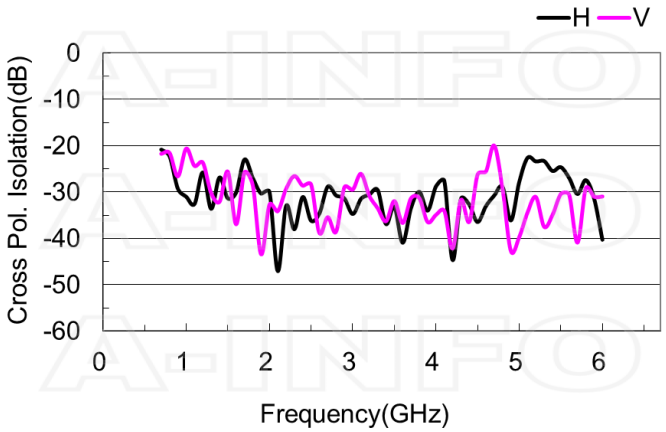
1m

Frequency(GHz)	Horizontal		Vertical	
	Gain(dBi)	AF(dB/m)	Gain(dBi)	AF(dB/m)
0.7	2.15	24.97	2.87	24.24
0.8	5.21	23.06	4.63	23.64
0.9	5.81	23.48	5.97	23.32
1.0	6.50	23.71	6.41	23.80
1.5	8.27	25.46	8.31	25.42
2.0	8.75	27.49	8.54	27.69
2.5	8.53	29.64	8.54	29.63
3.0	8.61	31.14	8.39	31.36
3.5	7.77	33.32	7.36	33.73
4.0	9.21	33.05	9.06	33.19
4.5	9.00	34.28	8.04	35.24
5.0	9.73	34.46	9.78	34.41
5.5	11.82	33.20	10.86	34.15
6.0	10.38	35.39	9.22	36.55

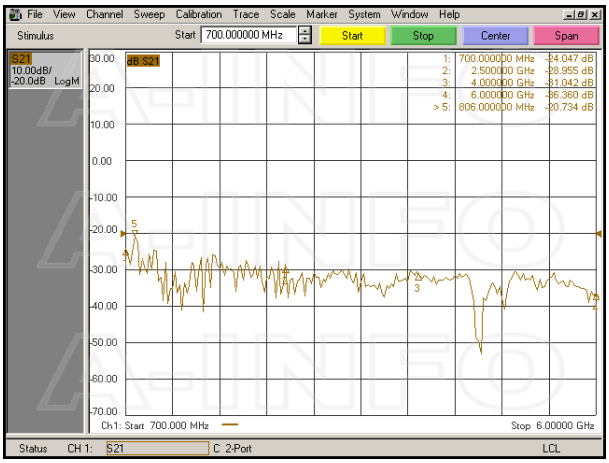
3m

Frequency(GHz)	Horizontal		Vertical	
	Gain(dBi)	AF(dB/m)	Gain(dBi)	AF(dB/m)
0.7	3.27	23.84	3.81	23.30
0.8	3.38	24.89	5.41	22.86
0.9	7.54	21.75	7.22	22.08
1.0	8.58	21.63	7.29	22.92
1.5	9.29	24.45	9.48	24.25
2.0	10.41	25.82	9.97	26.26
2.5	9.28	28.89	10.00	28.17
3.0	10.15	29.61	9.87	29.88
3.5	8.59	32.50	8.30	32.79
4.0	10.55	31.71	10.40	31.85
4.5	10.12	33.15	9.67	33.61
5.0	10.40	33.79	10.65	33.54
5.5	13.07	31.95	12.42	32.60
6.0	11.67	34.11	10.41	35.36

Cross Polarization Isolation

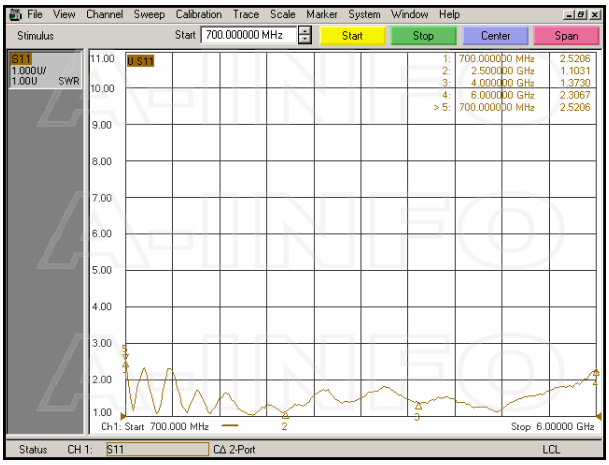


Port to Port Isolation

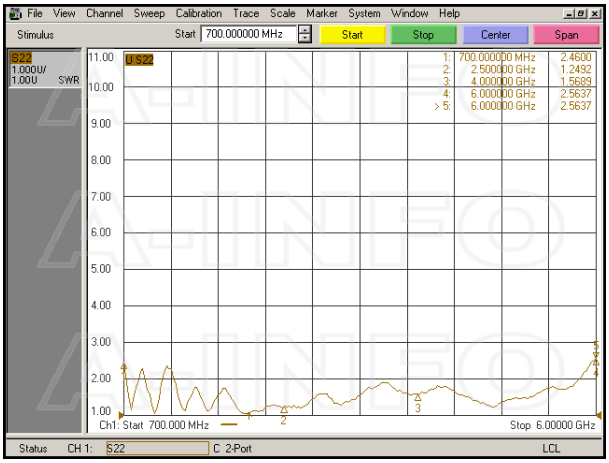


VSWR

Port-H

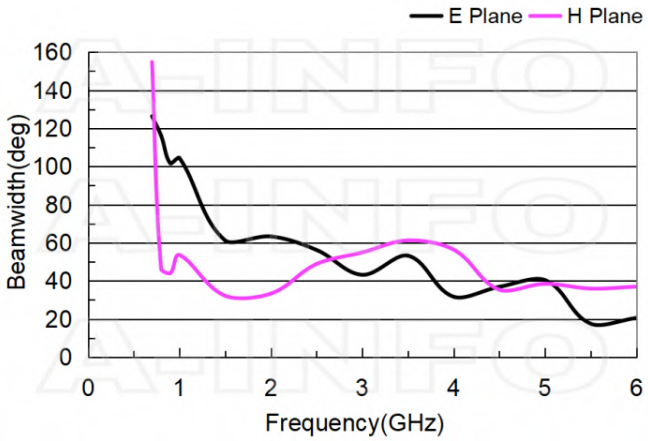


Port-V

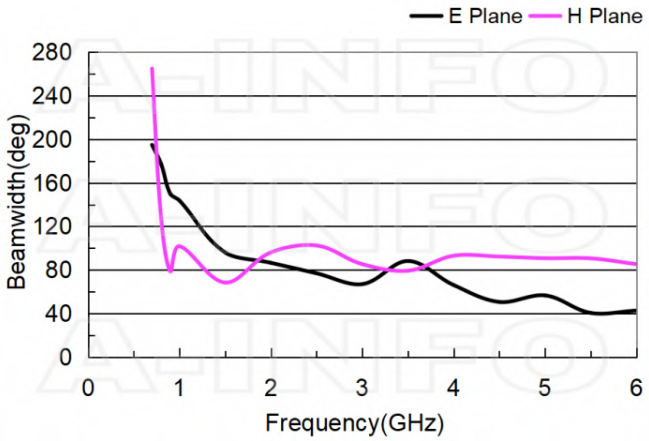


Beamwidth

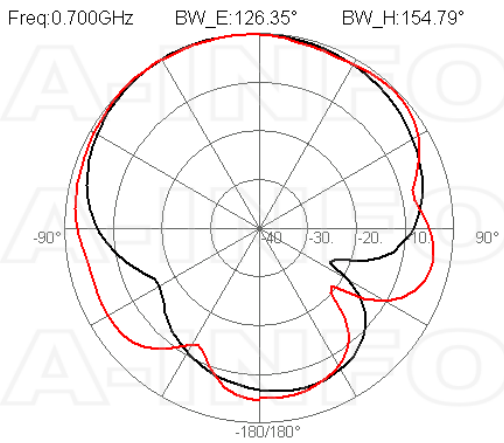
3dB Beamwidth

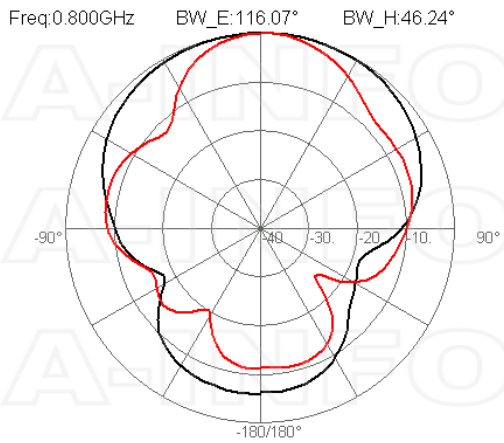


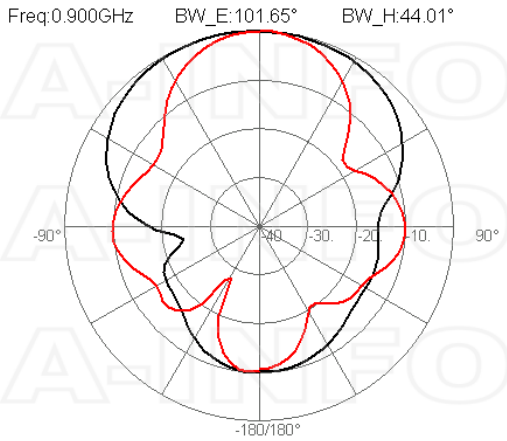
10dB Beamwidth

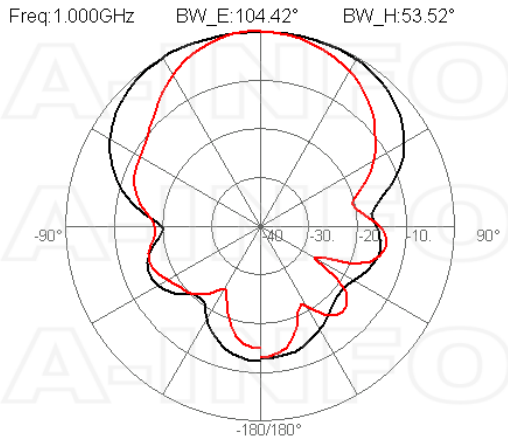


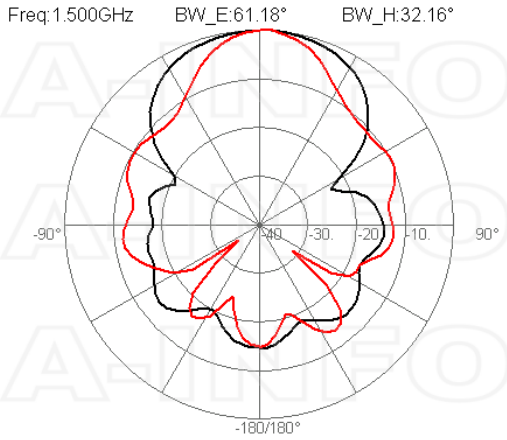
Pattern 1

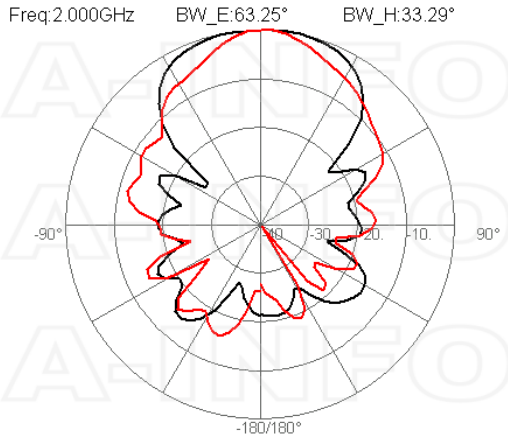


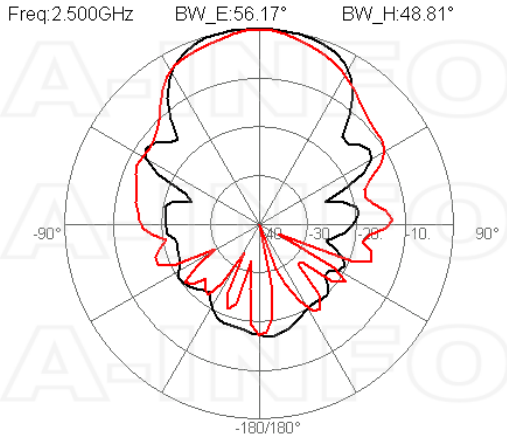


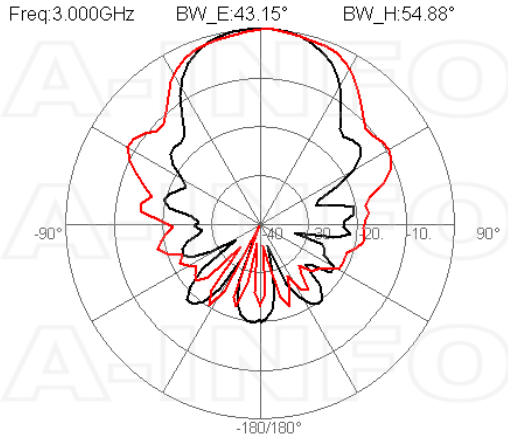

Freq:0.900GHz
BW_E:101.65°
BW_H:44.01°
-90°
90°
-40
-30.
-20
-10.
-180/180°

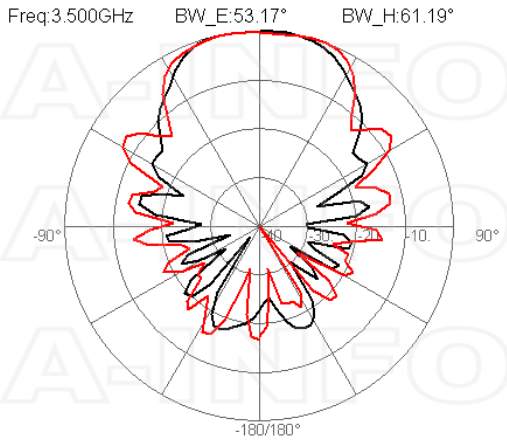

Freq:1.000GHz
BW_E:104.42°
BW_H:53.52°
-90°
90°
-40
-30.
-20
-10.
-180/180°

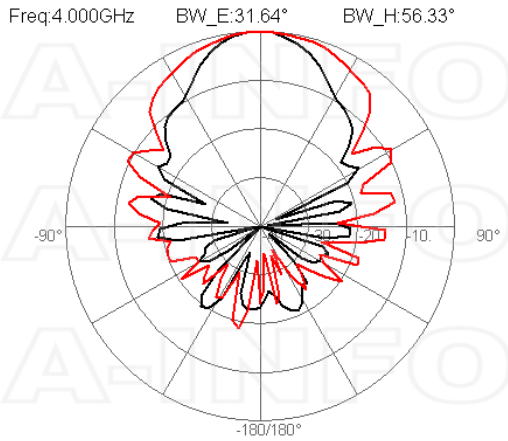

Freq:1.500GHz
BW_E:61.18°
BW_H:32.16°
-90°
90°
-40
-30.
-20
-10.
-180/180°

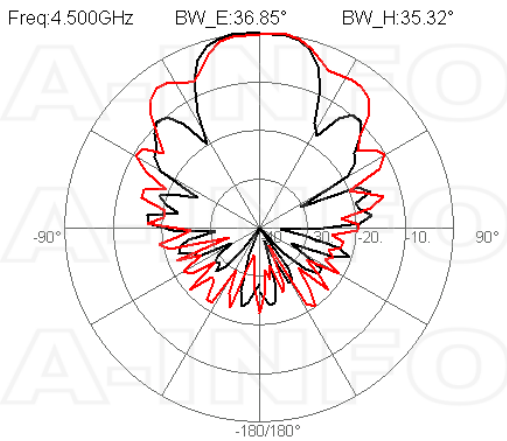

Freq:2.000GHz
BW_E:63.25°
BW_H:33.29°
-90°
90°
-40
-30.
-20
-10.
-180/180°

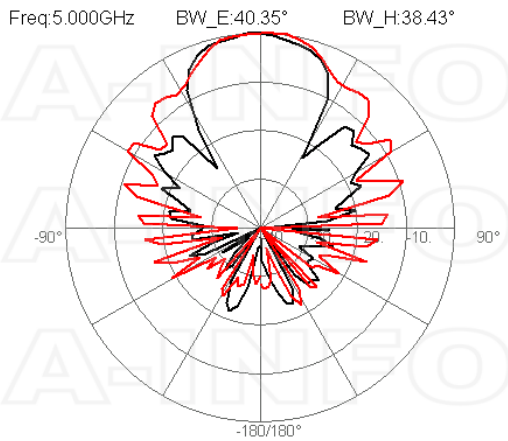

Freq:2.500GHz
BW_E:56.17°
BW_H:48.81°
-90°
90°
-40
-30.
-20
-10.
-180/180°

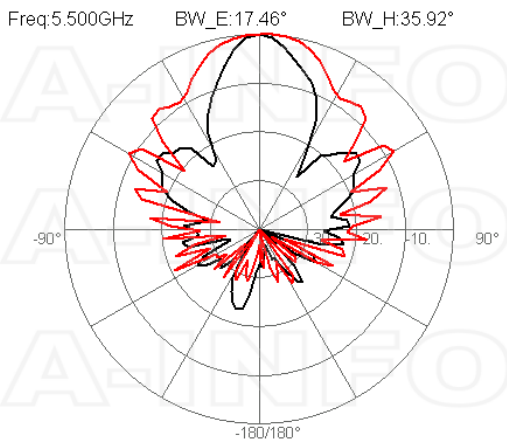

Freq:3.000GHz
BW_E:43.15°
BW_H:54.88°
-90°
90°
-40
-30.
-20
-10.
-180/180°

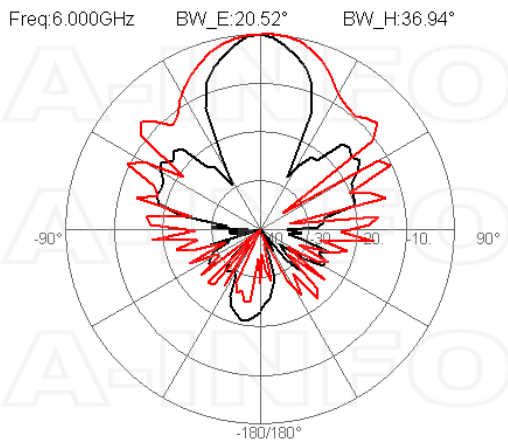

Freq:3.500GHz
BW_E:53.17°
BW_H:61.19°
-90°
90°
-180/180°


Freq:4.000GHz
BW_E:31.64°
BW_H:56.33°
-90°
90°
-180/180°


Freq:4.500GHz
BW_E:36.85°
BW_H:35.32°
-90°
90°
-180/180°


Freq:5.000GHz
BW_E:40.35°
BW_H:38.43°
-90°
90°
-180/180°


Freq:5.500GHz
BW_E:17.46°
BW_H:35.92°
-90°
90°
-180/180°


Freq:6.000GHz
BW_E:20.52°
BW_H:36.94°
-90°
90°
-180/180°

Related Products

LB-OSJ-0760-L L type mounting bracket

Carrying Case_LB-OSJ-0760 Al Alloy Carrying Case

Tripod_50Kg_FA Al Alloy Tripod

Tripod_50Kg+Pole Antenna_FA Al Alloy Tripod

NM-NM-A050-1000 Flexible Cable Assembly 1000mm DC-18GHz N Male to N Male

NM-NM-A050-1500 Flexible Cable Assembly 1500mm DC-18GHz N Male to N Male

NM-NM-A050-2000 Flexible Cable Assembly 2000mm DC-18GHz N Male to N Male

NM-NM-A050-3000 Flexible Cable Assembly 3000mm DC-18GHz N Male to N Male

NM-NM-A050-5000 Flexible Cable Assembly 5000mm DC-18GHz N Male to N Male

NM-NM-A050-10000 Flexible Cable Assembly 10000mm DC-18GHz N Male to N Male

NM-NM-A050-20000 Flexible Cable Assembly 20000mm DC-18GHz N Male to N Male

NM-NM-A100-1000 Flexible Cable Assembly 1000mm DC-18GHz N Male to N Male

NM-NM-A100-1500 Flexible Cable Assembly 1500mm DC-18GHz N Male to N Male

NM-NM-A100-2000 Flexible Cable Assembly 2000mm DC-18GHz N Male to N Male

NM-NM-A100-3000 Flexible Cable Assembly 3000mm DC-18GHz N Male to N Male

NM-NM-A100-5000 Flexible Cable Assembly 5000mm DC-18GHz N Male to N Male

NM-NM-A100-10000 Flexible Cable Assembly 10000mm DC-18GHz N Male to N Male

NM-NM-A100-20000 Flexible Cable Assembly 20000mm DC-18GHz N Male to N Male

Similar Products

LB-OSJ-0760-SF Open Boundary Quad-Ridged Dual Polarization Horn Antenna 0.7-6GHz 10dB Gain SMA Female

About this Datasheet

● Product Information Product Link: https://www.ainfoinc.com/lb-osj-0760-nf-open-boundary-quad-ridged-dual-polarization-horn-antenna-0-7-6-ghz-10db-gain-n-type-female Data subject to change without notice. 	● Contact Us Address: 60 Tesla, Irvine, CA 92618, USA Website: www.ainfoinc.com Email: sales@ainfoinc.com	● Phone & Fax Phone: +1-949-639-9688 +1-949-639-9608 Fax: +1-949-639-9670