A-INFO

LB-OSJ-20180

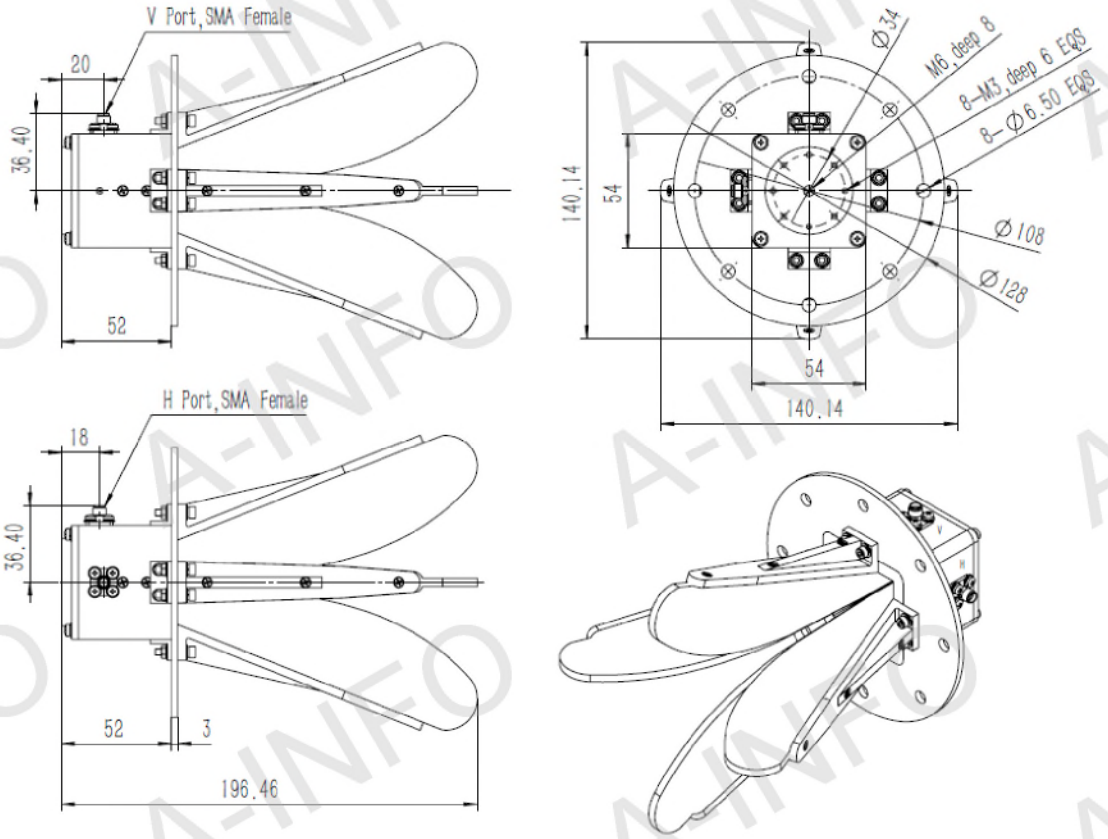
2 - 18GHz Open Boundary Quad-Ridged Horn Antenna

Technical Specification (Pattern tested by NSI - www.nearfield.com)

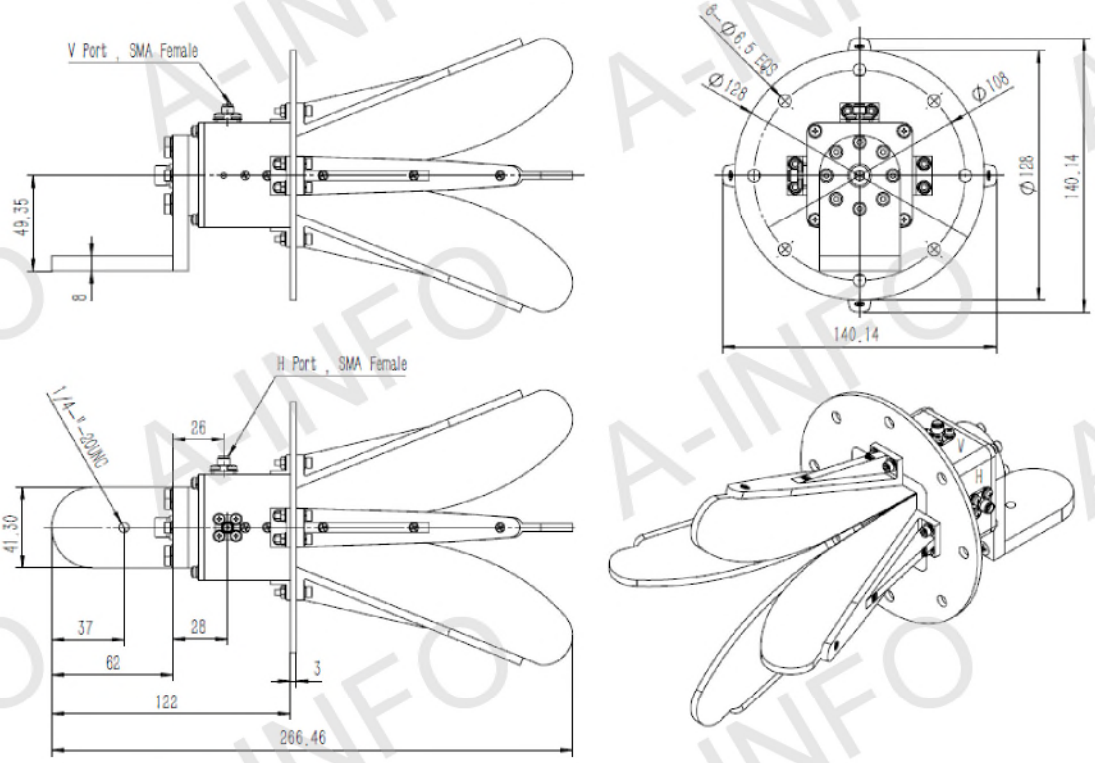
Frequency Range(GHz)	2 - 18
Gain(dBi)	13 Typ.
Polarization	Dual Pol.
3dB Beamwidth(deg)	81 - 10
Cross Pol. Isolation(dB)	20 Min.
Port to Port Isolation(dB)	20 Min.
VSWR	2.0:1 Typ.
	3.0:1 Max.
Output	SMA-Female
Power Handling(W)	50 Max. CW
Material	Al
Size(mm)	140.14 x 140.14 x 196.46
Net Weight(Kg)	0.7 Around

Outline Drawing (Size: mm)

With SMA-Female Output

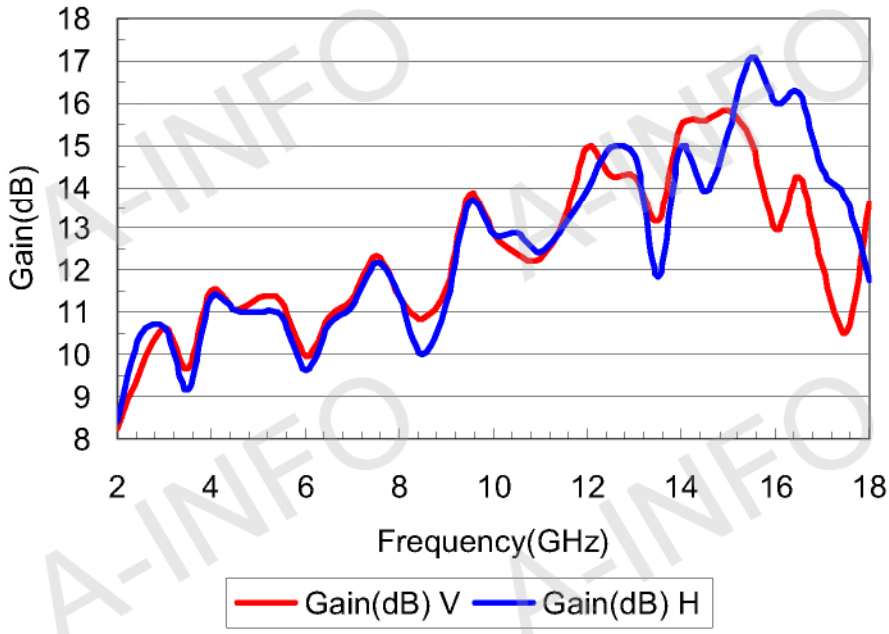


With SMA-Female Output & L Type Mounting Bracket



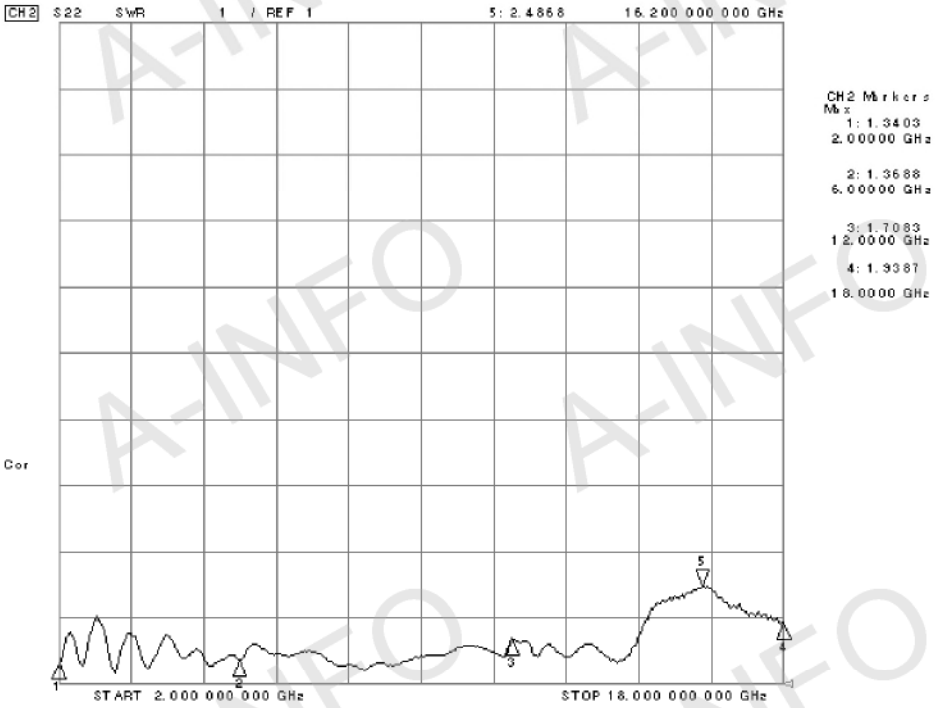
Test Results

1. Gain

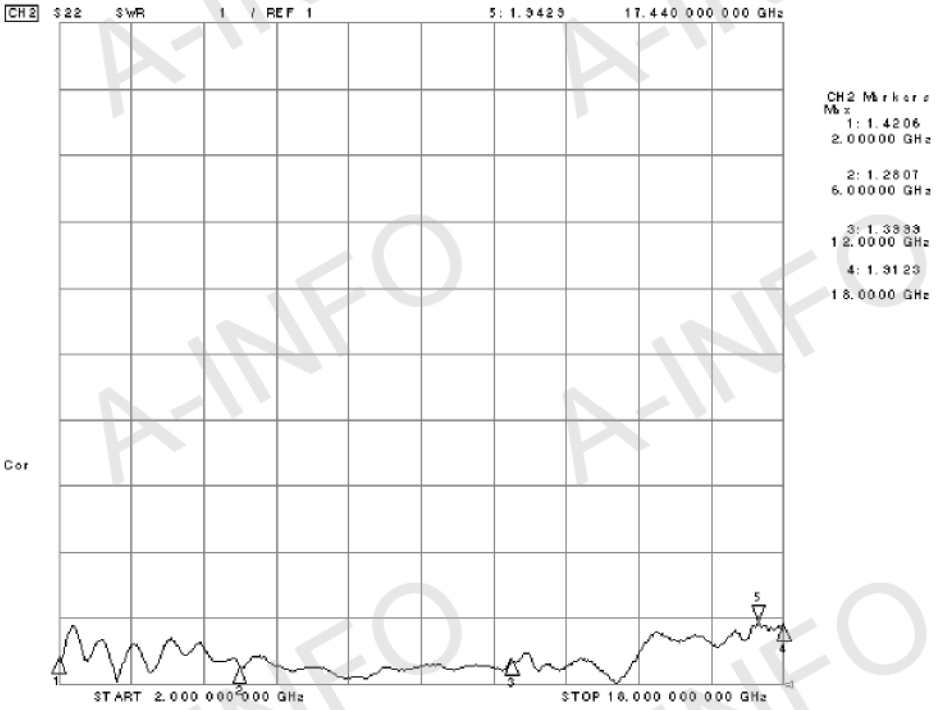


2. VSWR

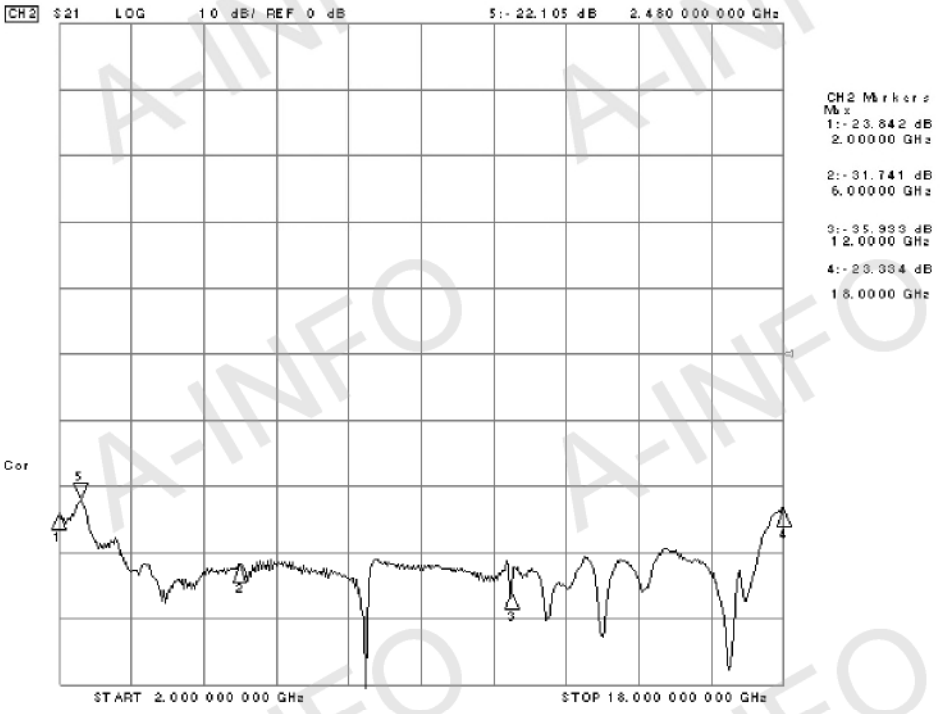
H Port



V Port

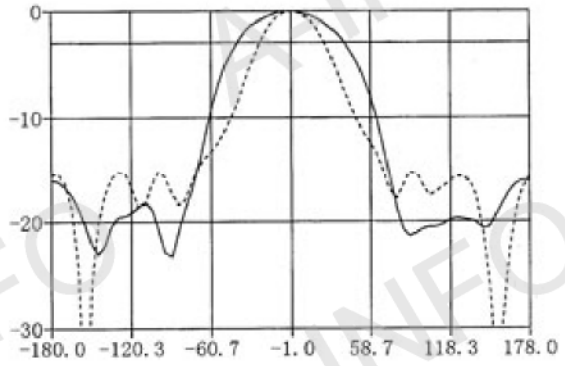


3. Isolation


CH2 S21 LOG 10 dB/ REF 0 dB
5:-22.105 dB 2.480 000 000 GHz
CH2 Marker
Max
1:-23.842 dB
2.00000 GHz
2:-31.741 dB
6.00000 GHz
3:-35.933 dB
12.0000 GHz
4:-23.334 dB
18.0000 GHz
Cor
START 2.000 000 000 GHz
STOP 18.000 000 000 GHz

4. Pattern

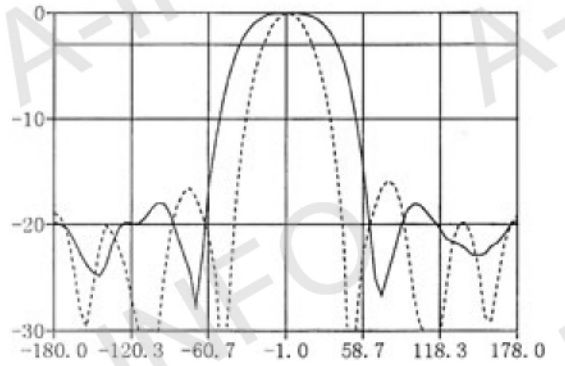
Frequency: 2GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 80.04 3dB Beamwidth (deg): 48.44

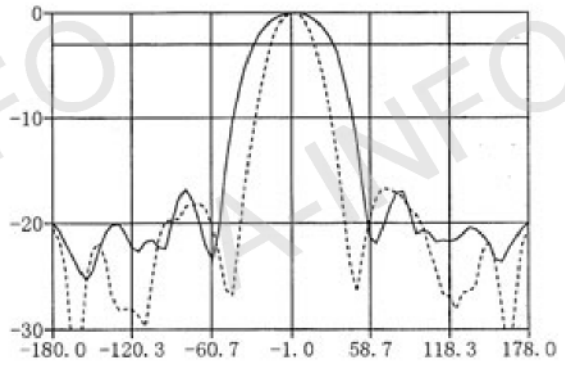
Frequency: 2.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 74.89 3dB Beamwidth (deg): 37.18

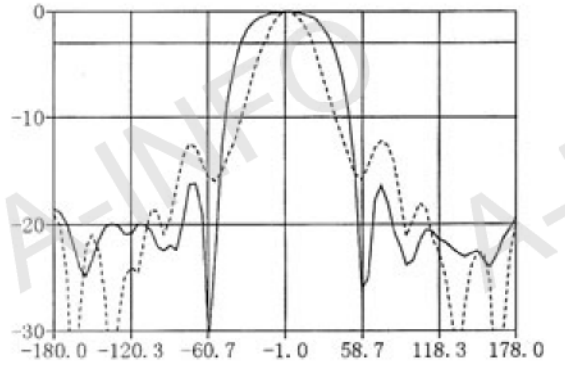
Frequency: 3GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 59.51 3dB Beamwidth (deg): 32.68

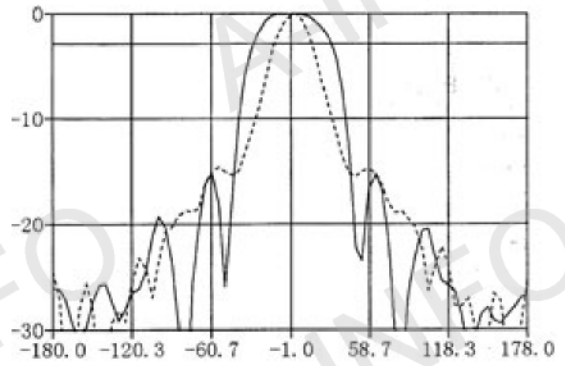
Frequency: 3.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 70.06 3dB Beamwidth (deg): 36.80

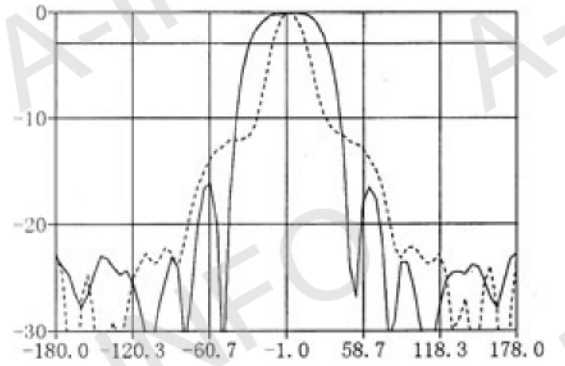
Frequency: 4GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 58.42 3dB Beamwidth (deg): 28.14

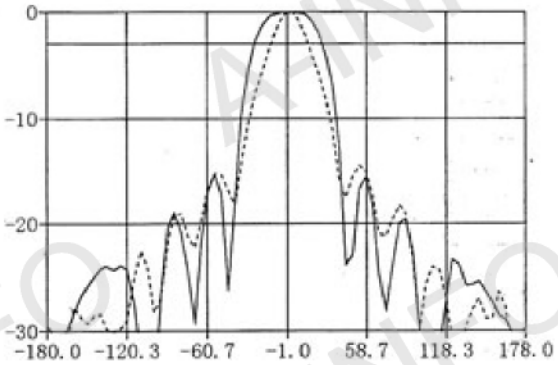
Frequency: 4.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 60.04 3dB Beamwidth (deg): 25.37

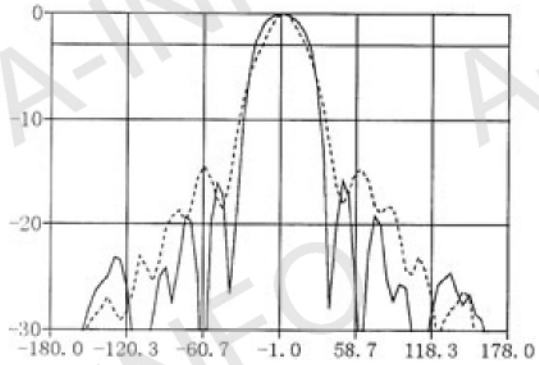
Frequency: 5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 50.90 3dB Beamwidth (deg): 27.41

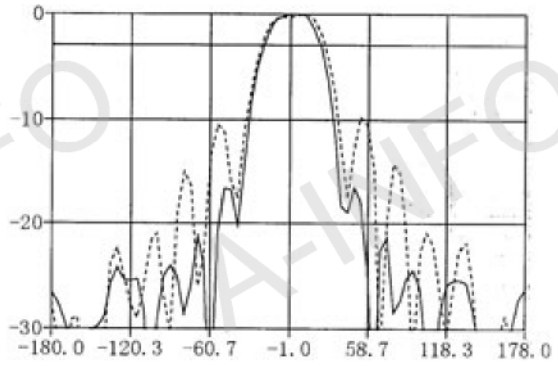
Frequency: 5.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 42.16 3dB Beamwidth (deg): 33.55

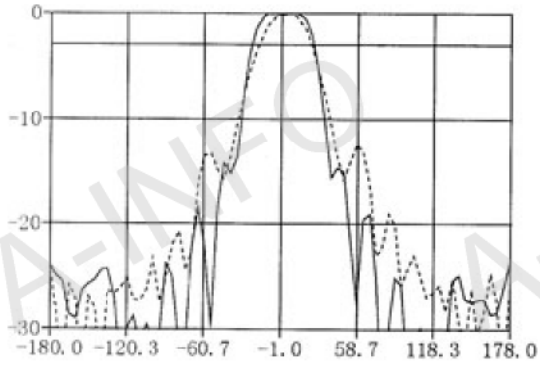
Frequency: 6GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 42.94 3dB Beamwidth (deg): 47.34

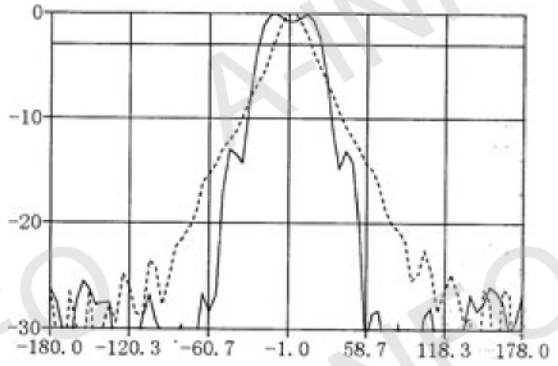
Frequency: 6.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 47.68 3dB Beamwidth (deg): 40.47

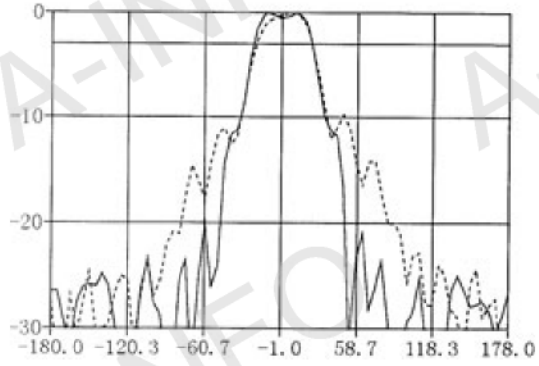
Frequency: 7GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 47.36 3dB Beamwidth (deg): 28.37

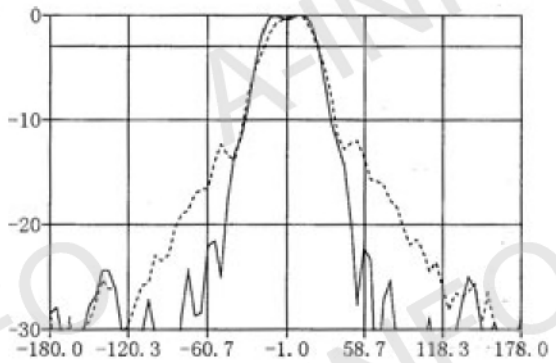
Frequency: 7.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 45.75 3dB Beamwidth (deg): 43.41

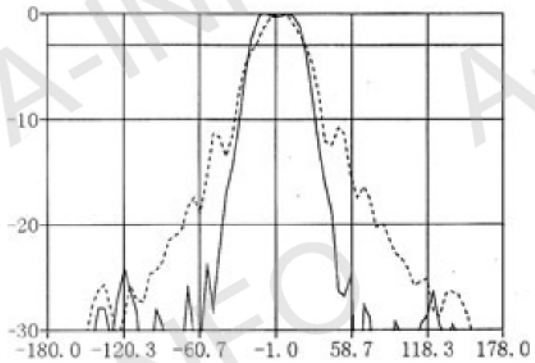
Frequency: 8GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 44.90 3dB Beamwidth (deg): 40.29

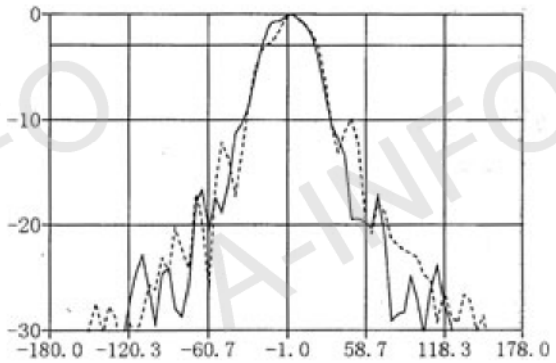
Frequency: 8.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 42.30 3dB Beamwidth (deg): 39.30

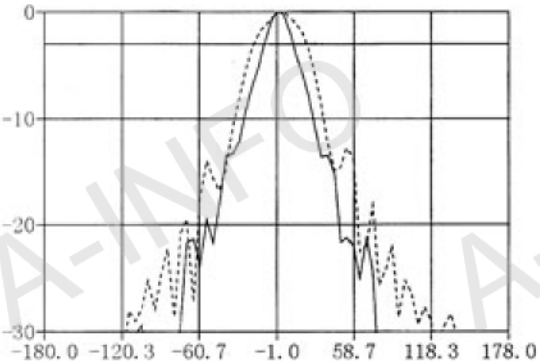
Frequency: 9GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 39.85 3dB Beamwidth (deg): 38.47

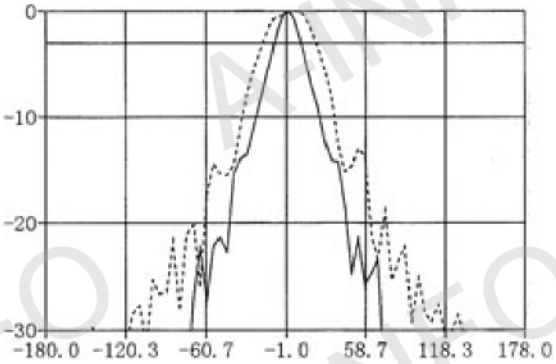
Frequency: 9.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 22.01 3dB Beamwidth (deg): 40.56

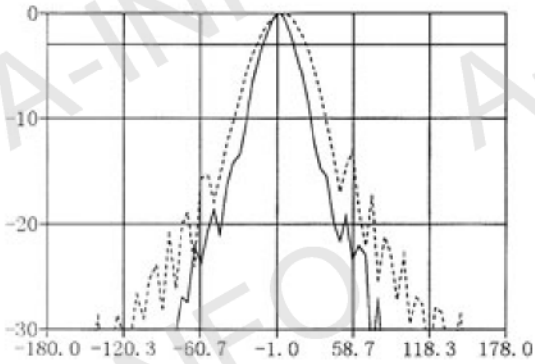
Frequency: 10GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 19.80 3dB Beamwidth (deg): 40.11

Frequency: 10.5GHz

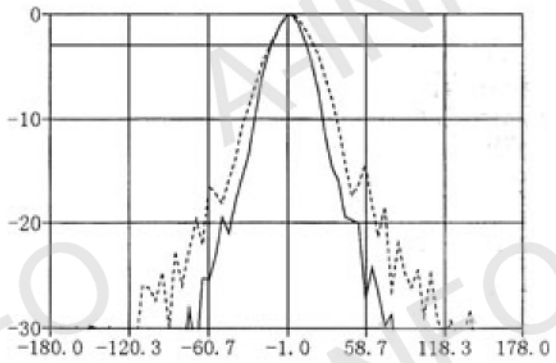


H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 23.65 3dB Beamwidth (deg): 38.16

Distributed by: Reliant EMC LLC, Tel. +408-320-9644/+408-916-5750, www.reliantemc.com

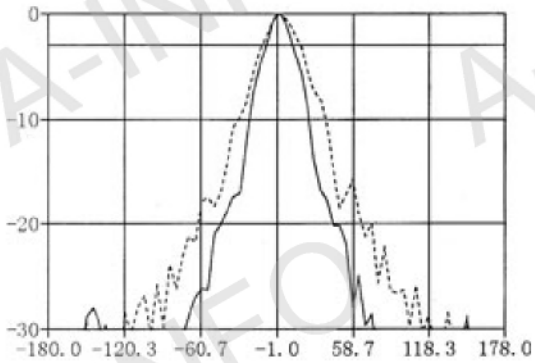
Frequency: 11GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 26.10 3dB Beamwidth (deg): 33.33

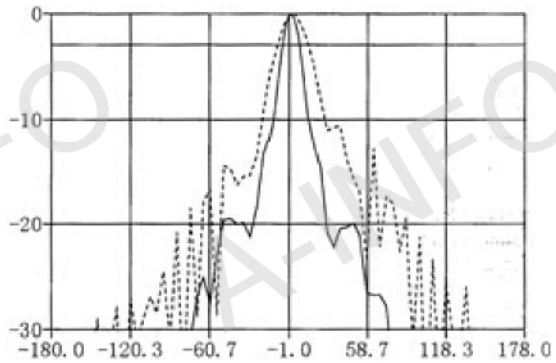
Frequency: 11.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 20.24 3dB Beamwidth (deg): 29.37

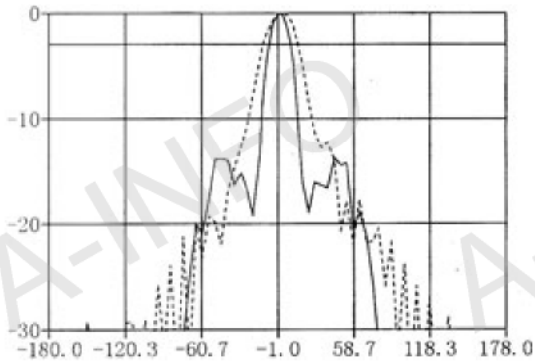
Frequency: 12GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 13.01 3dB Beamwidth (deg): 23.21

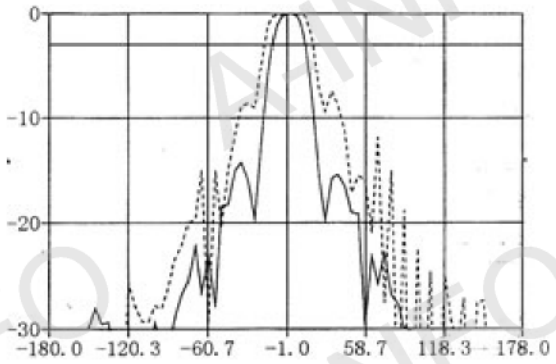
Frequency: 12.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 16.99 3dB Beamwidth (deg): 27.16

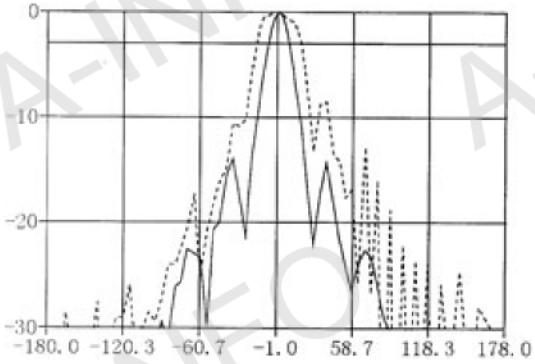
Frequency: 13GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 24.44 3dB Beamwidth (deg): 36.38

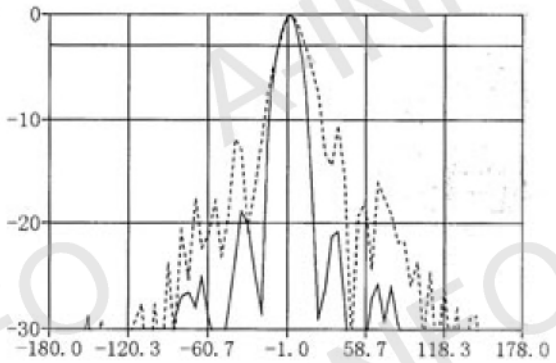
Frequency: 13.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 16.22 3dB Beamwidth (deg): 34.58

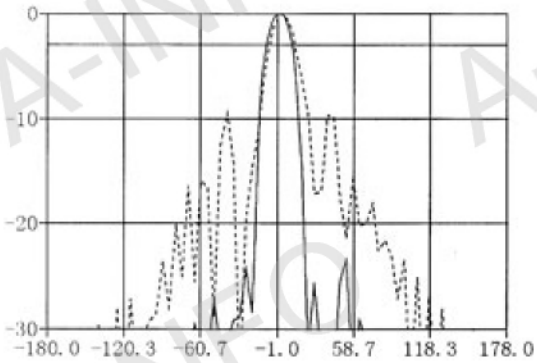
Frequency: 14GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 16.16 3dB Beamwidth (deg): 20.16

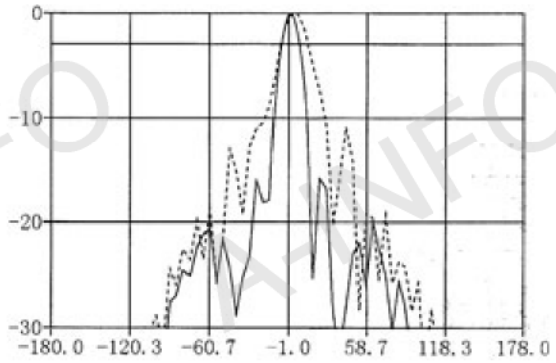
Frequency: 14.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 19.82 3dB Beamwidth (deg): 20.01

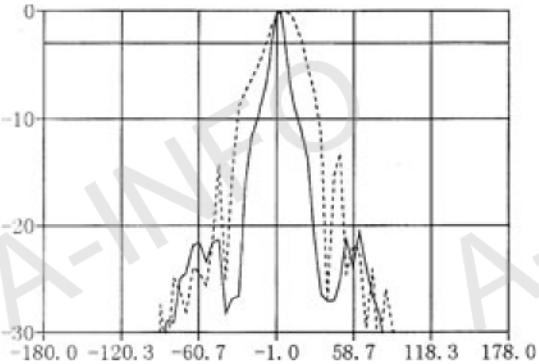
Frequency: 15GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 13.67 3dB Beamwidth (deg): 20.75

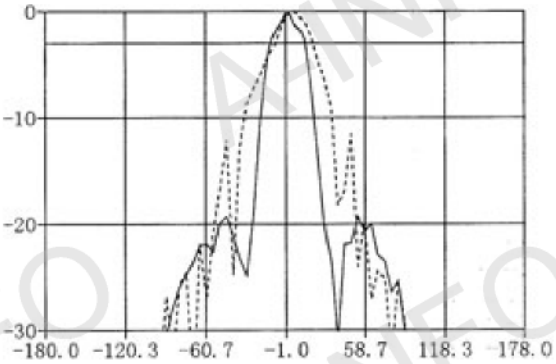
Frequency: 15.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 10.21 3dB Beamwidth (deg):27.44

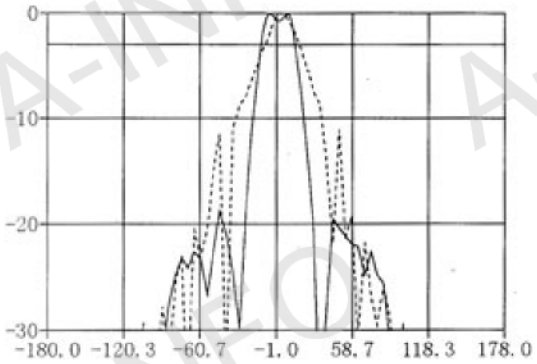
Frequency: 16GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 25.46 3dB Beamwidth (deg):28.33

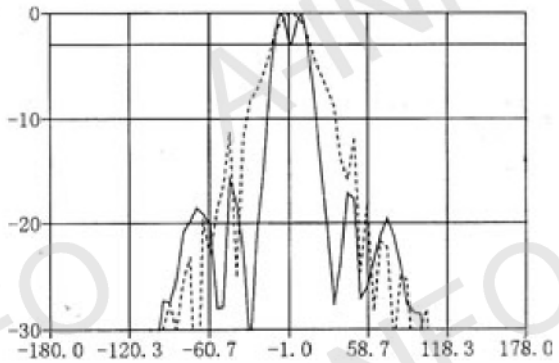
Frequency: 16.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 26.52 3dB Beamwidth (deg):26.42

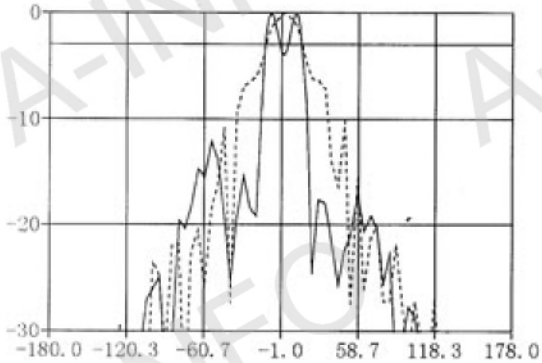
Frequency: 17GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 25.07 3dB Beamwidth (deg): 28.53

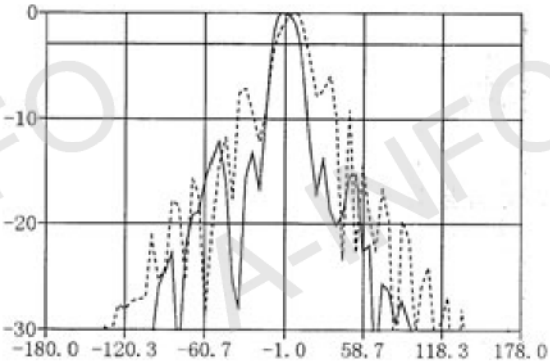
Frequency: 17.5GHz



H-Plane ——— E-Plane - - - - -

3dB Beamwidth (deg): 11.21 3dB Beamwidth (deg):27.54

Frequency: 18GHz

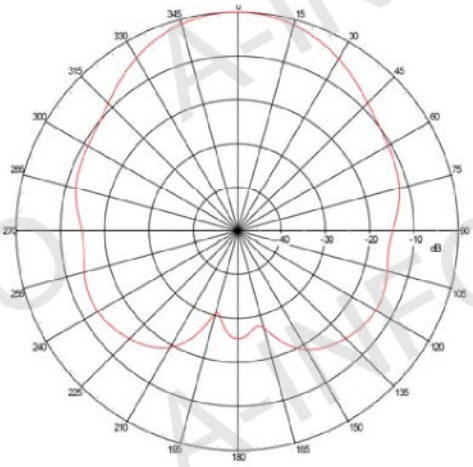


H-Plane ——— E-Plane - - - - -

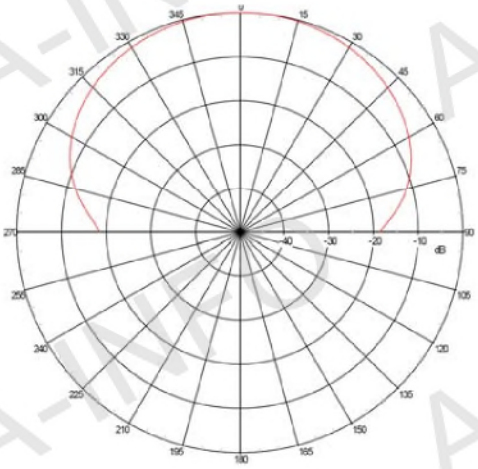
3dB Beamwidth (deg): 20.67 3dB Beamwidth (deg): 23.92

Pattern (Tested by NSI)

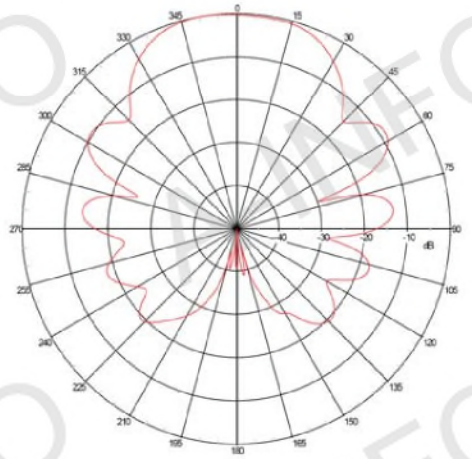
Frequency: 2GHz H-Plane



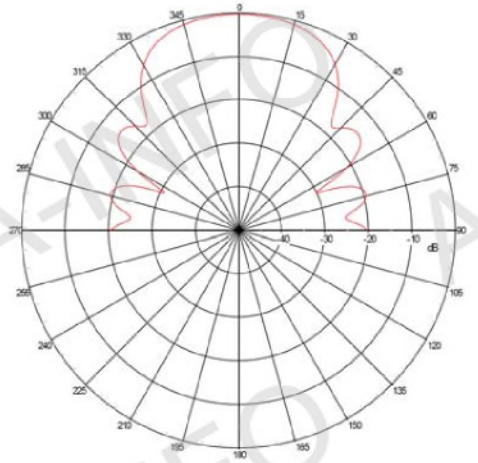
E-Plane



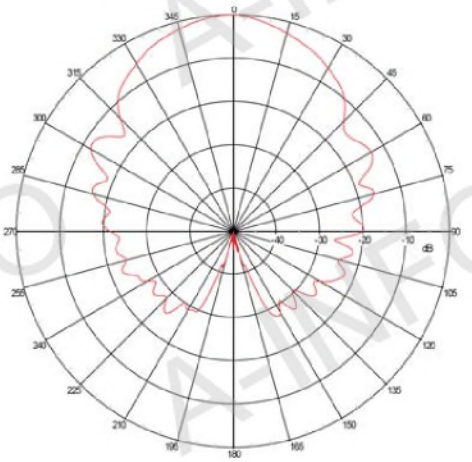
Frequency: 6GHz H-Plane



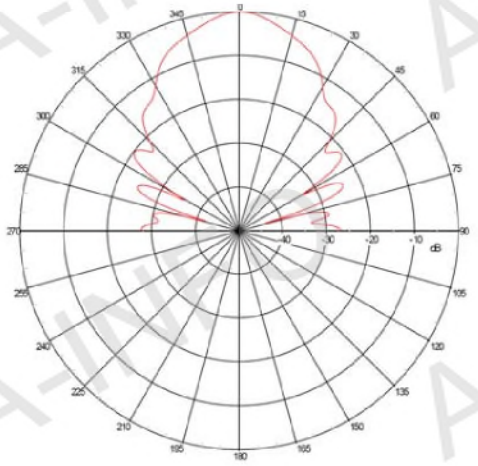
E-Plane



Frequency: 11GHz H-Plane



E-Plane



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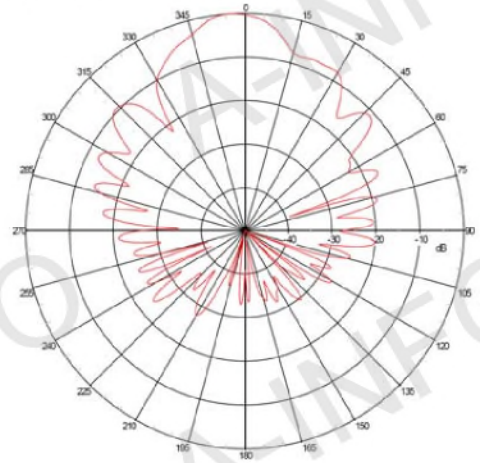
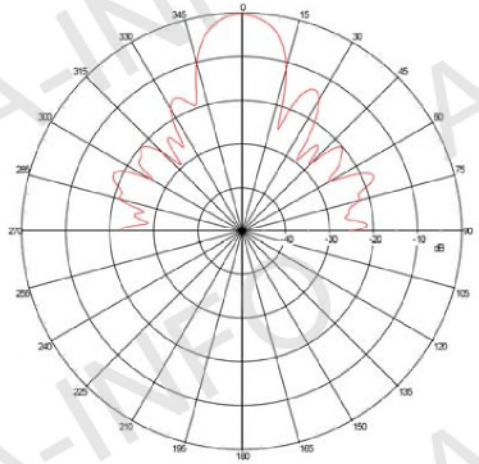
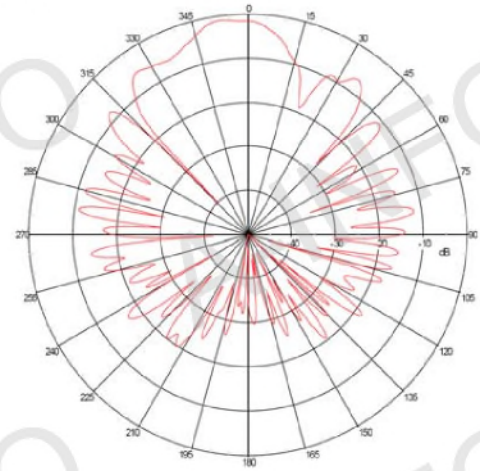
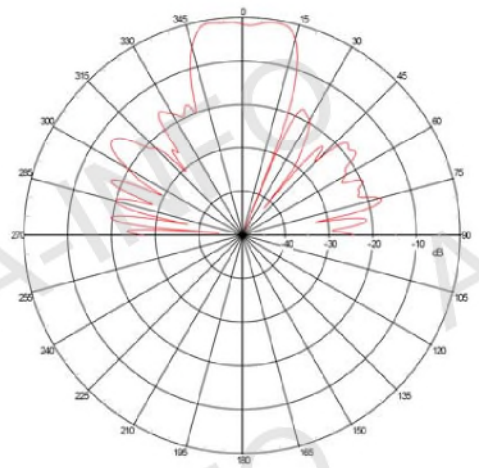
Frequency: 15GHz H-Plane



E-Plane



Frequency: 18GHz H-Plane



E-Plane