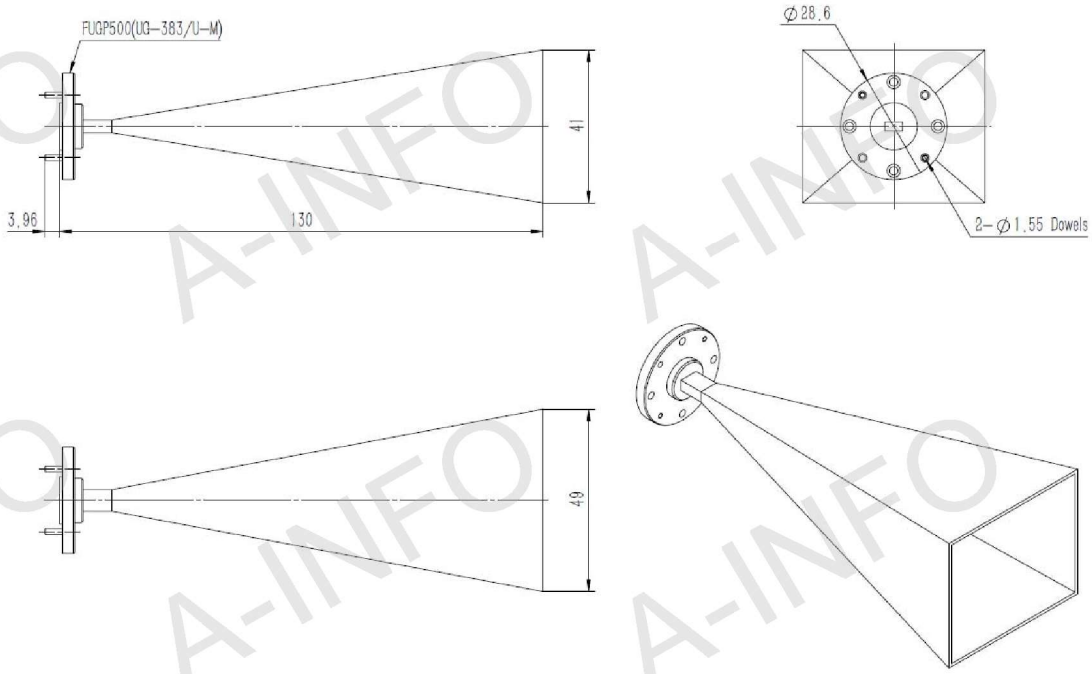
Technical Specification

Frequency Range(GHz)	A Type, WG output:	40.0 - 60.0
	C Type, 2.4mm-F:	40.0 - 50.0
	C Type, 1.85mm-F:	40.0 - 60.0
Waveguide	WR19	
Gain(dBi)	25 Typ.	
Polarization	Linear	
3dB Beamwidth(deg)	10 Typ.	
Cross Pol. Isolation(dB)	45 Typ.	
VSWR	A Type:	1.15:1 Typ.
	C Type:	1.25:1 Typ.
Output	A Type:	FUGP500(UG-383/U-M)
	C Type:	1.85mm-Female or 2.4mm-Female
Material	Cu	
Size(mm)	A Type:	49 x 41 x 130
	C Type:	49 x 41 x 156
Net Weight(Kg)	A Type:	0.15 Around
	C Type:	0.20 Around

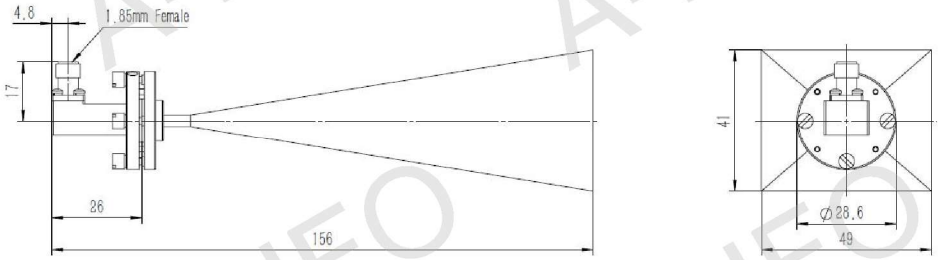
Outline Drawing (Size: mm)

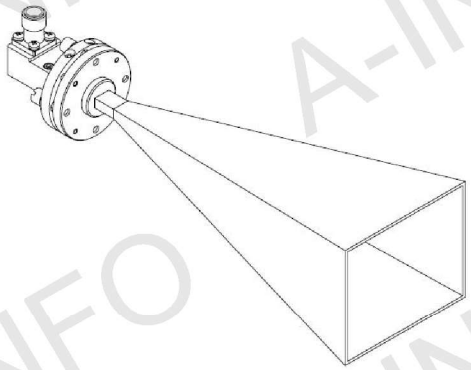
A Type (With FUGP500 Output)



C Type (With 1.85mm-Female Output)

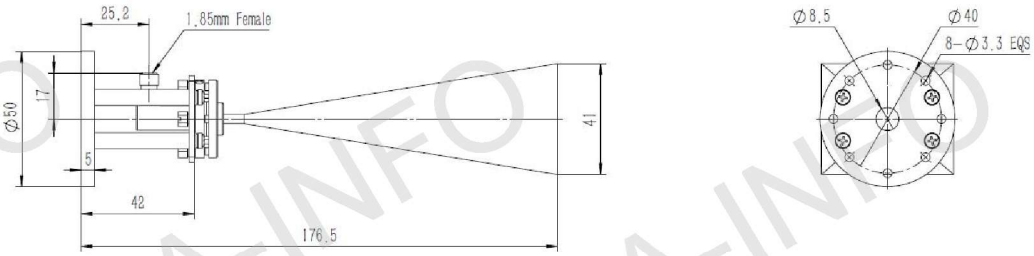
For 2.4mm-Female output outline drawing, please contact A-INFO.

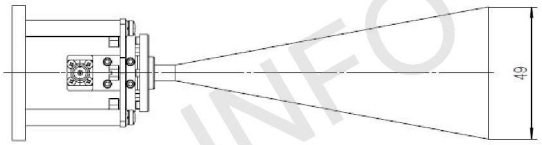


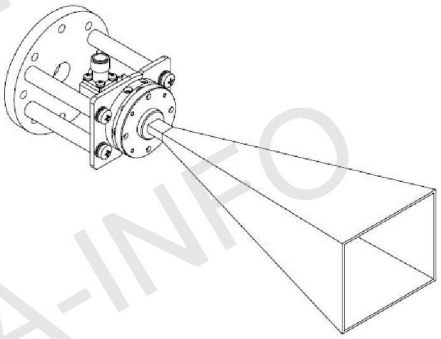


C Type (With 1.85mm-Female Output & Round Mounting Bracket)

For 2.4mm-Female output outline drawing, please contact A-INFO.

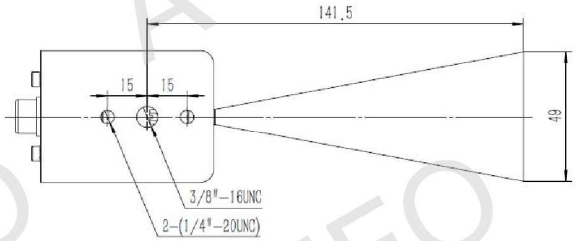


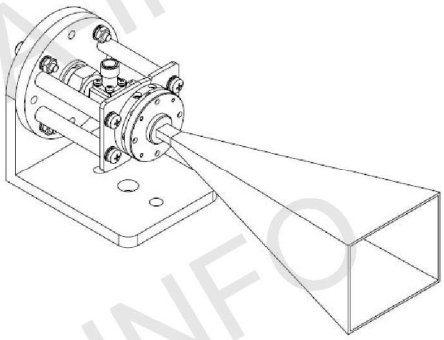


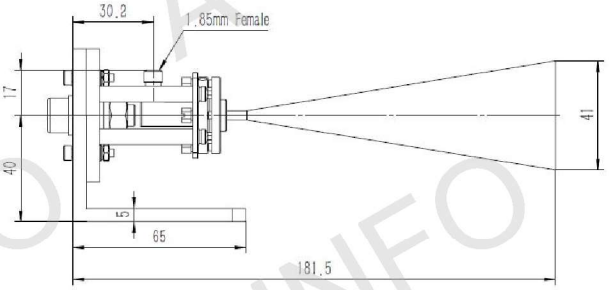


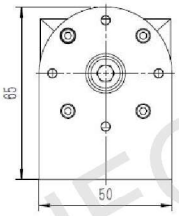
C Type (With 1.85mm-Female Output & L Type Mounting Bracket)

For 2.4mm-Female output outline drawing, please contact A-INFO.

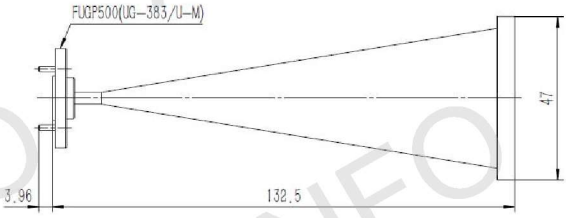


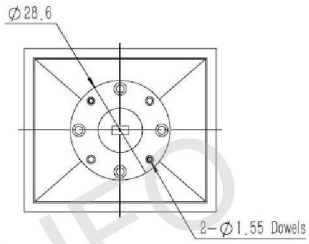


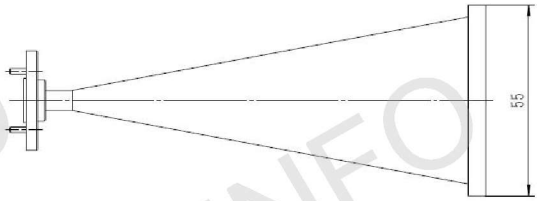


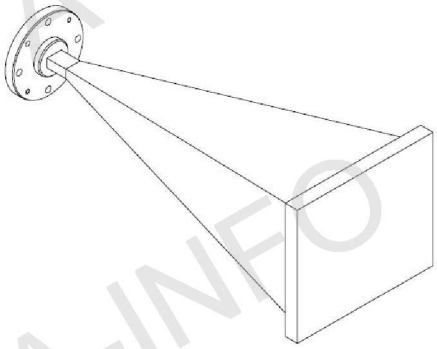


A Type (With Radome)



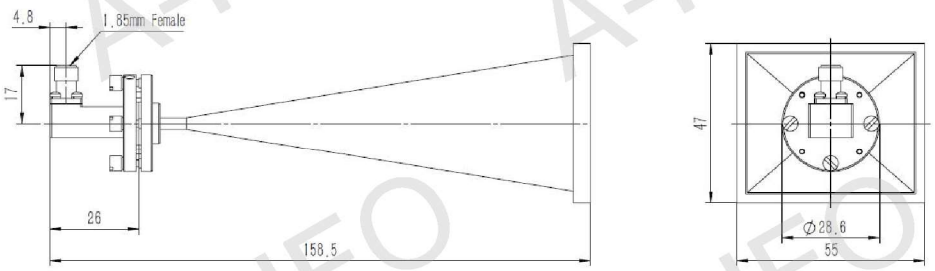


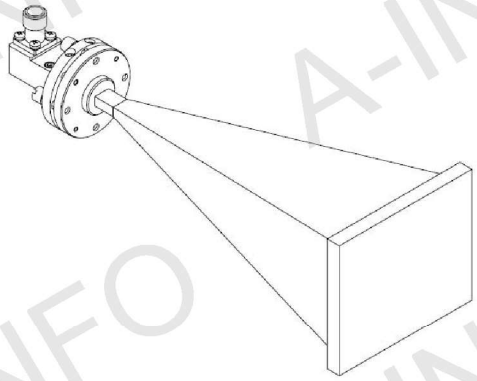




C Type (With 1.85mm-Female Output & Radome)

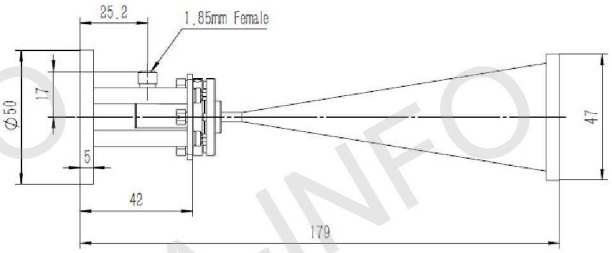
For 2.4mm-Female output outline drawing, please contact A-INFO.

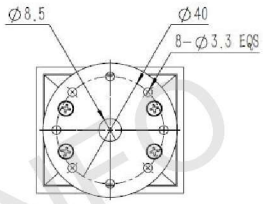


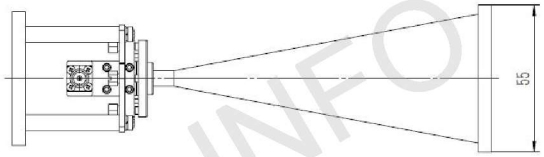


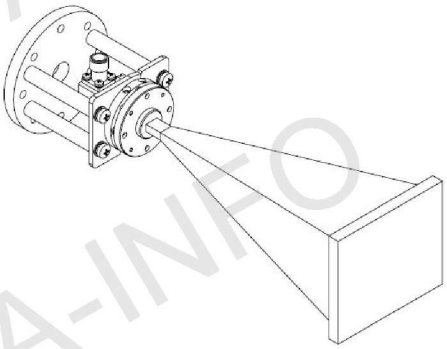
C Type (With 1.85mm-Female Output & Round Mounting Bracket & Radome)

For 2.4mm-Female output outline drawing, please contact A-INFO.



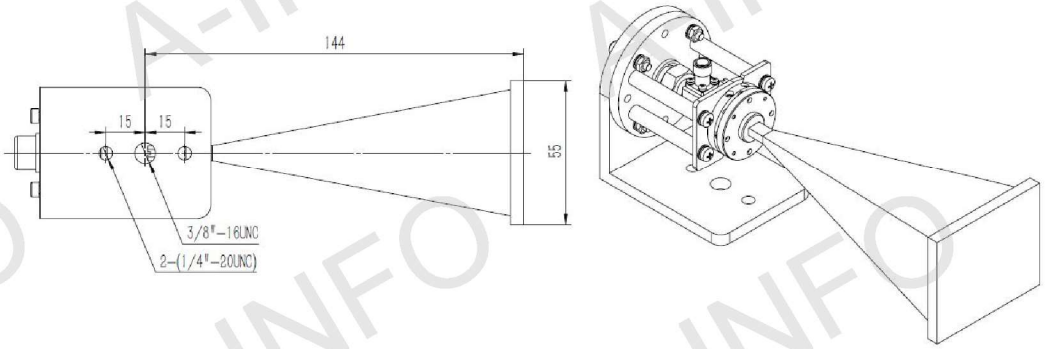


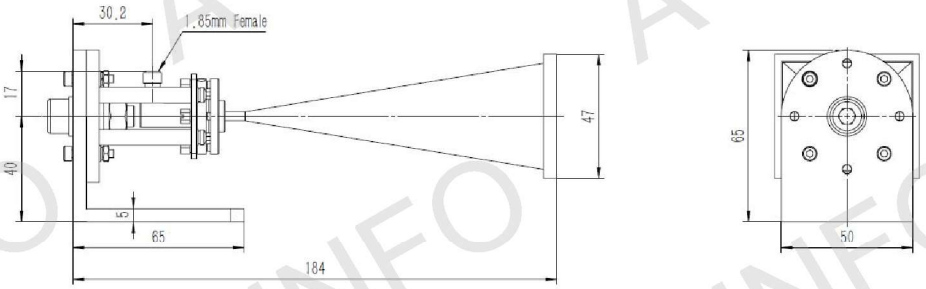




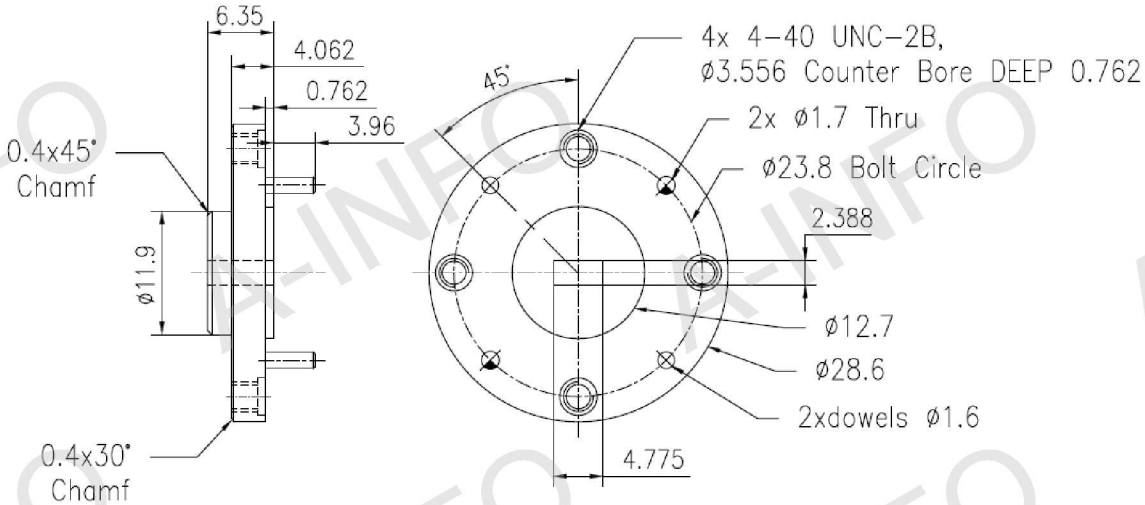
C Type (With 1.85mm-Female Output & L Type Mounting Bracket & Radome)

For 2.4mm-Female output outline drawing, please contact A-INFO.





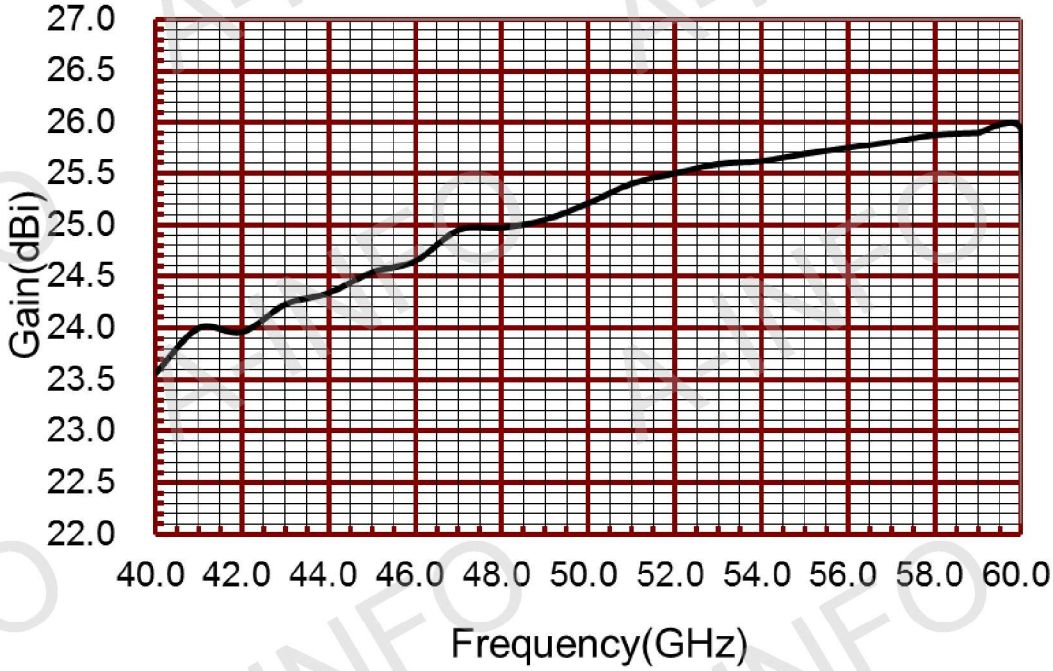
Flange Drawing (Size: mm)

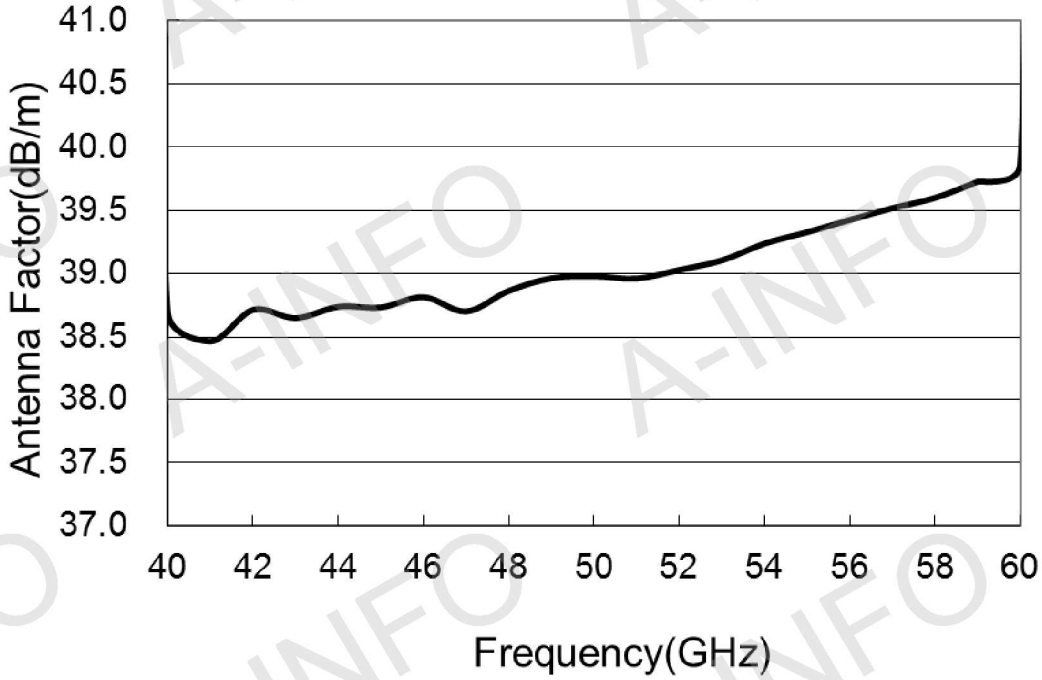


FUGP500
(equivalent to UG-383/U-M)

Test Results

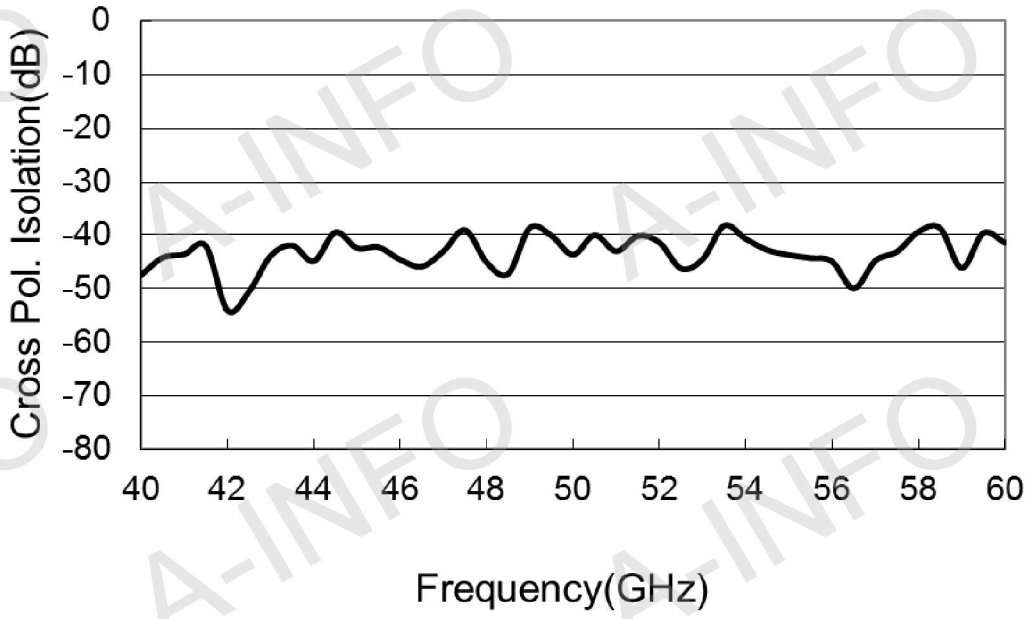
1. Gain and Antenna Factor



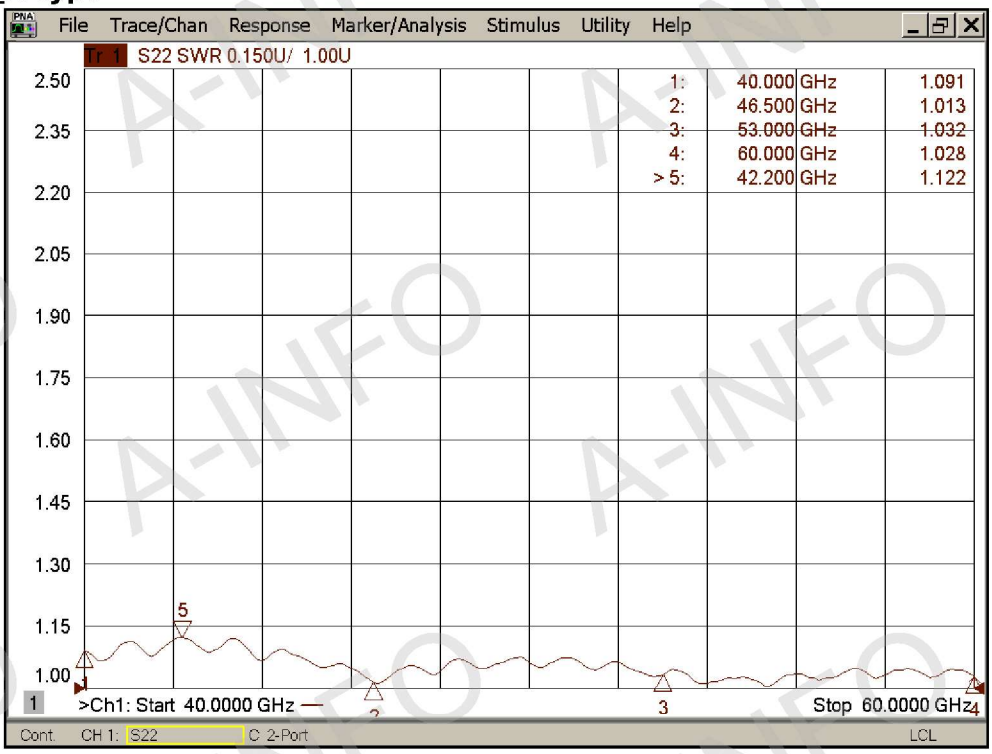


Frequency(GHz)	Gain(dBi)	Antenna Factor(dB/m)
40.0	23.56	38.69
41.0	24.00	38.47
42.0	23.96	38.71
43.0	24.23	38.65
44.0	24.34	38.74
45.0	24.54	38.73
46.0	24.65	38.82
47.0	24.95	38.70
48.0	24.97	38.86
49.0	25.05	38.96
50.0	25.21	38.98
51.0	25.40	38.96
52.0	25.50	39.03
53.0	25.59	39.11
54.0	25.62	39.24
55.0	25.69	39.33
56.0	25.75	39.42
57.0	25.81	39.52
58.0	25.88	39.60
59.0	25.90	39.73
60.0	25.91	39.86

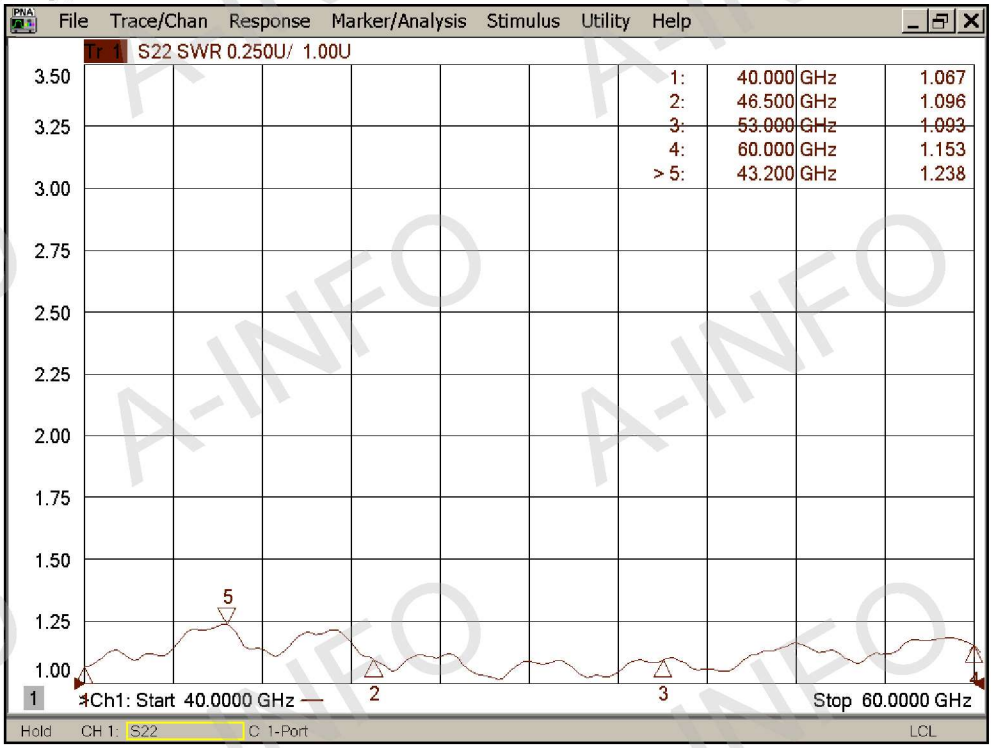
2. Cross Polarization Isolation



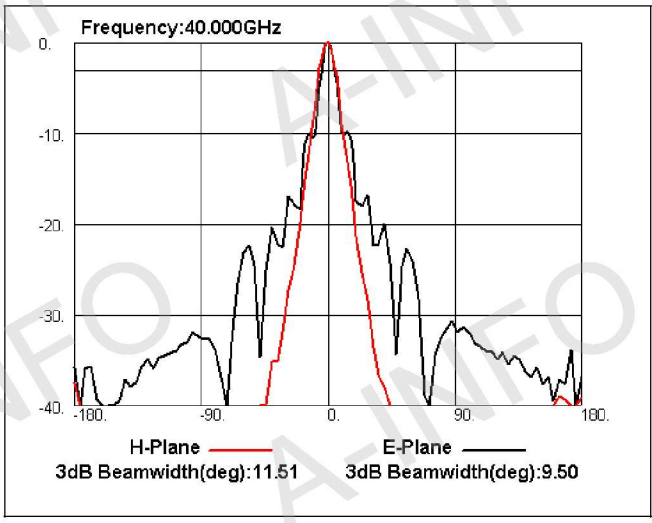
3. VSWR_A Type

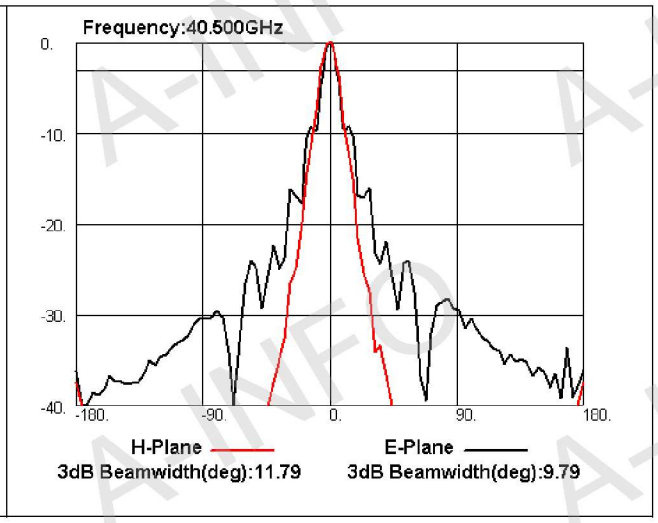


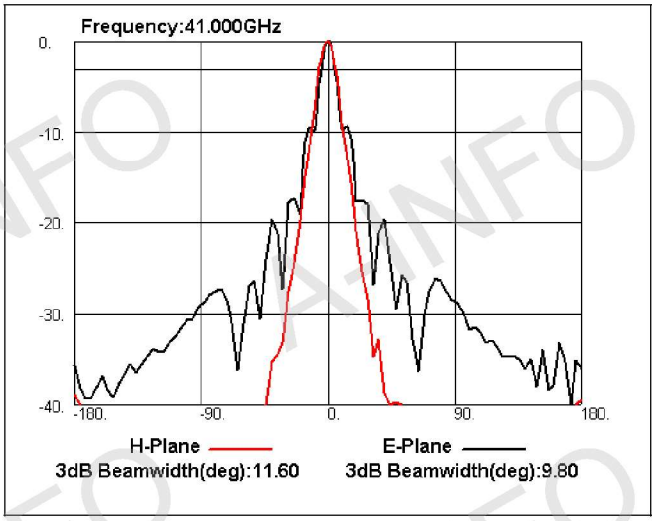
VSWR_C Type

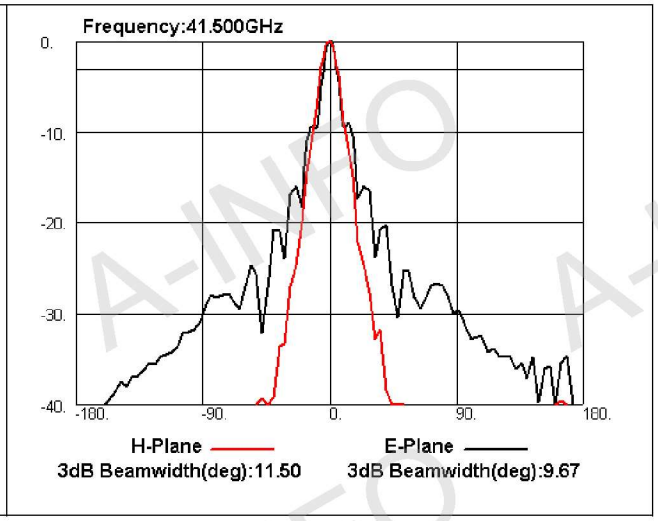


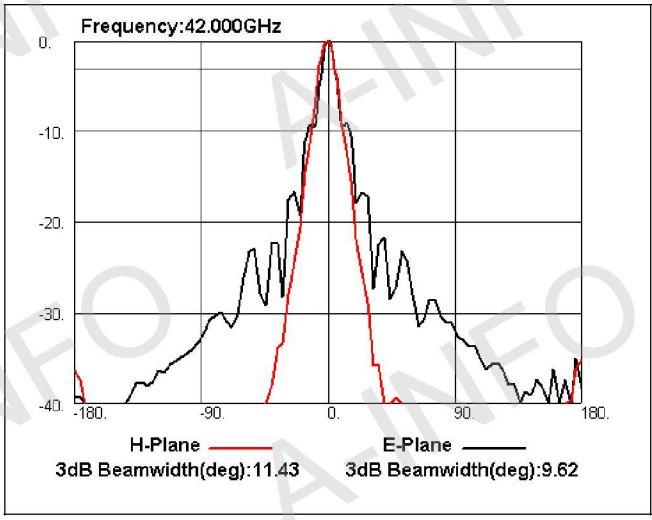
4. Pattern

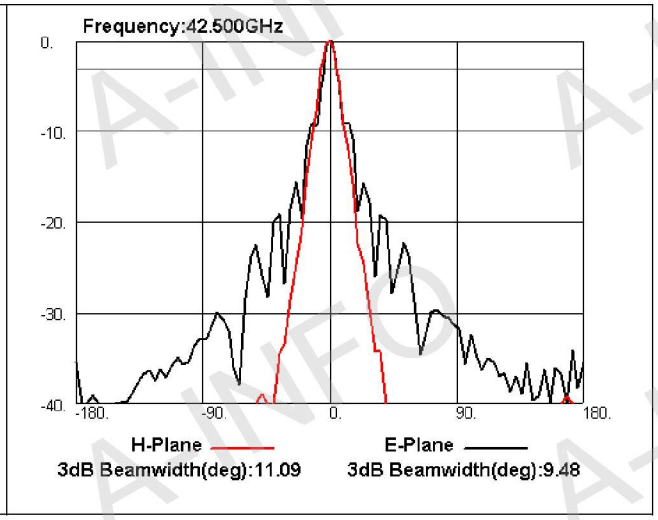

Frequency:40.000GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):11.51
3dB Beamwidth(deg):9.50

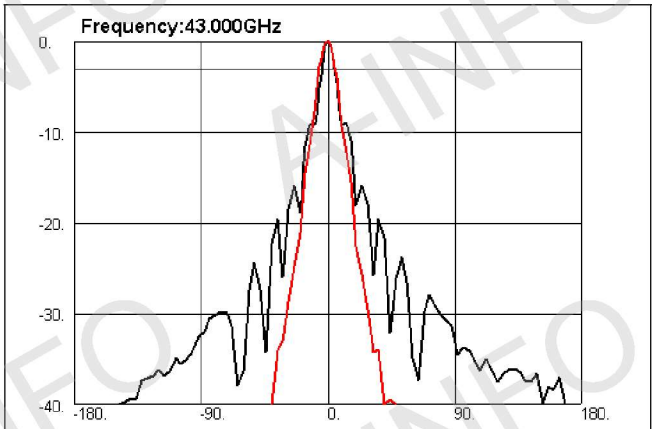

Frequency:40.500GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):11.79
3dB Beamwidth(deg):9.79


Frequency:41.000GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):11.60
3dB Beamwidth(deg):9.80

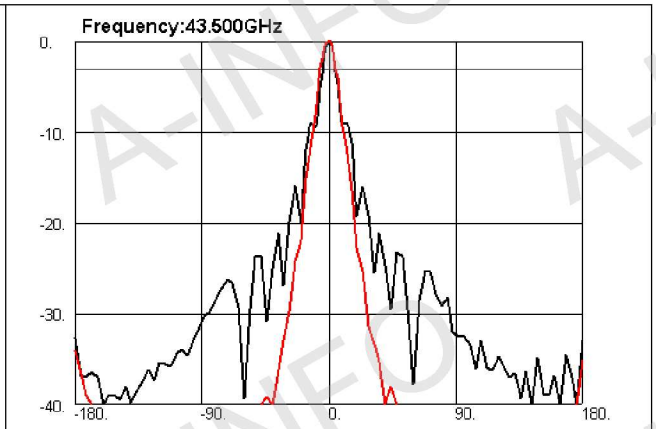

Frequency:41.500GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):11.50
3dB Beamwidth(deg):9.67


Frequency:42.000GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):11.43
3dB Beamwidth(deg):9.62

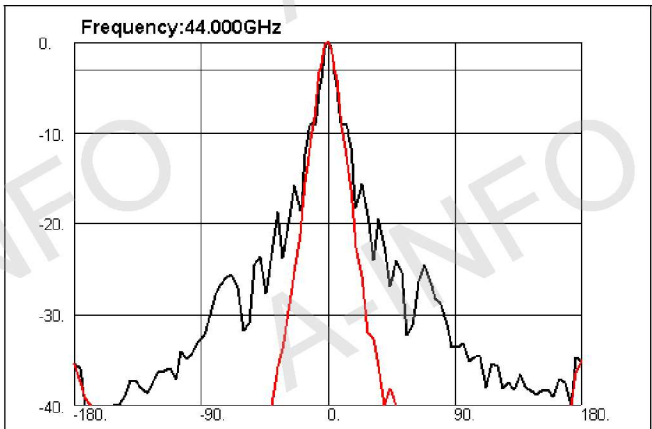

Frequency:42.500GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):11.09
3dB Beamwidth(deg):9.48



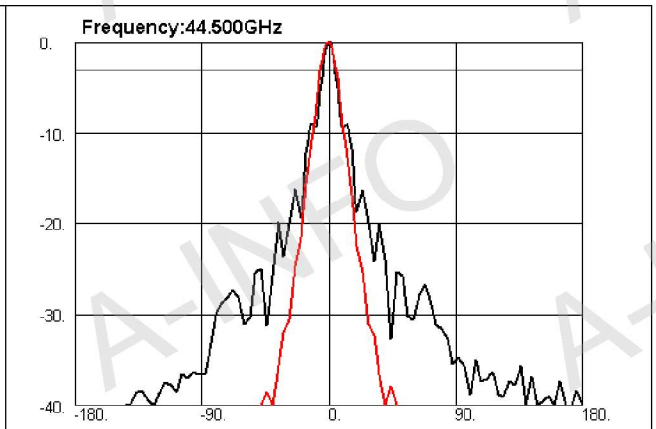
H-Plane 3dB Beamwidth(deg):11.32
E-Plane 3dB Beamwidth(deg):9.33



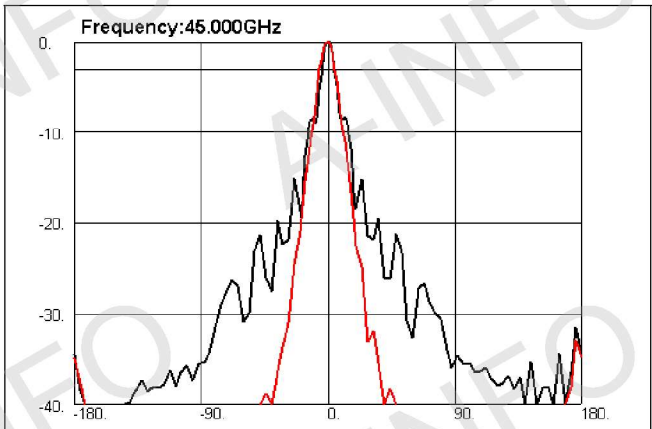
H-Plane 3dB Beamwidth(deg):11.16
E-Plane 3dB Beamwidth(deg):9.26



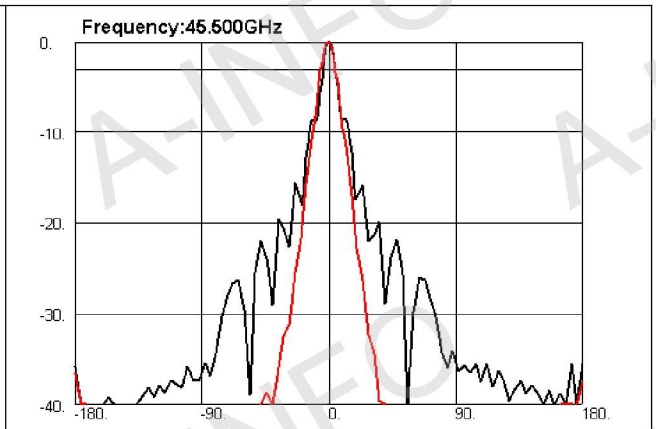
H-Plane 3dB Beamwidth(deg):10.71
E-Plane 3dB Beamwidth(deg):8.88



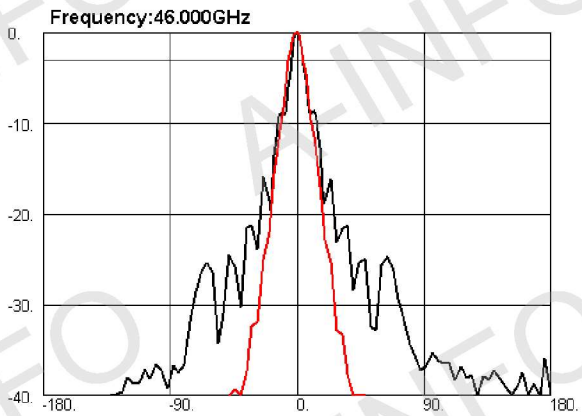
H-Plane 3dB Beamwidth(deg):11.16
E-Plane 3dB Beamwidth(deg):8.98



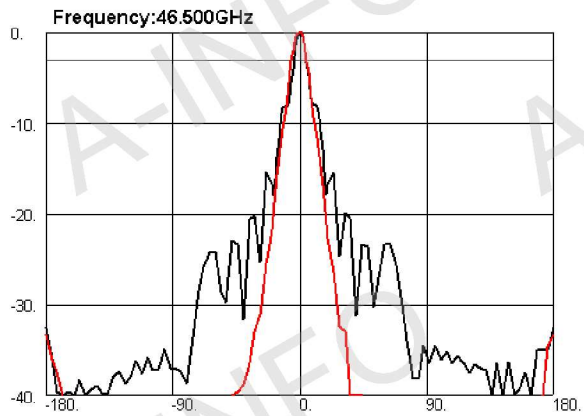
H-Plane 3dB Beamwidth(deg):10.91
E-Plane 3dB Beamwidth(deg):9.30



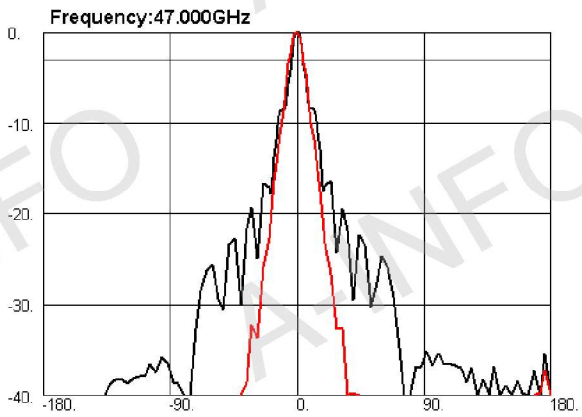
H-Plane 3dB Beamwidth(deg):10.51
E-Plane 3dB Beamwidth(deg):8.94



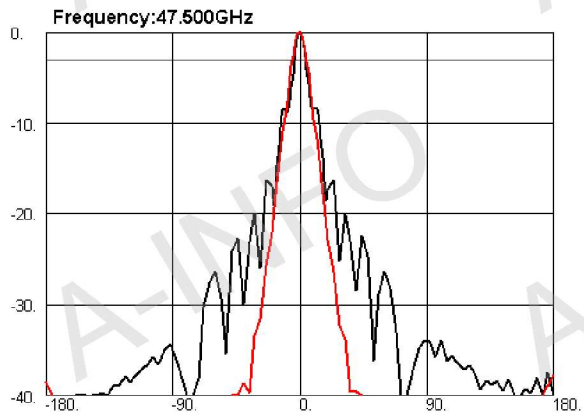
H-Plane 3dB Beamwidth(deg):10.61
E-Plane 3dB Beamwidth(deg):8.62



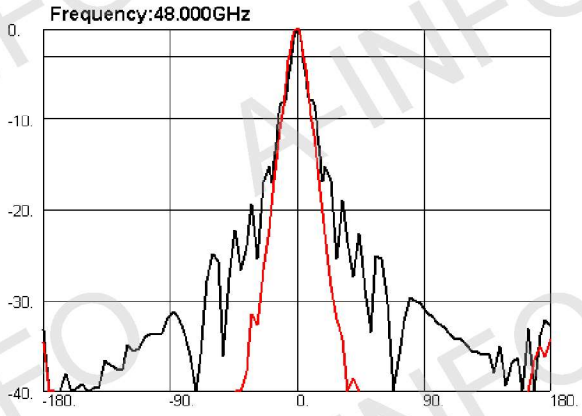
H-Plane 3dB Beamwidth(deg):10.86
E-Plane 3dB Beamwidth(deg):9.01



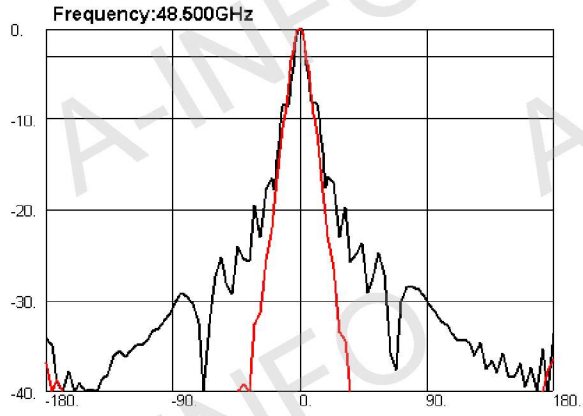
H-Plane 3dB Beamwidth(deg):10.35
E-Plane 3dB Beamwidth(deg):8.68



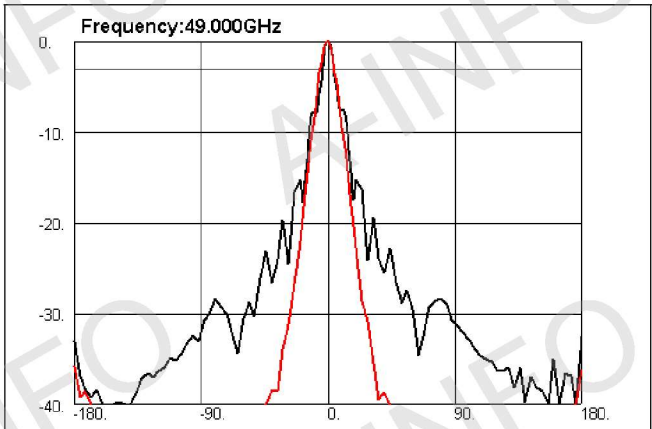
H-Plane 3dB Beamwidth(deg):10.22
E-Plane 3dB Beamwidth(deg):8.15



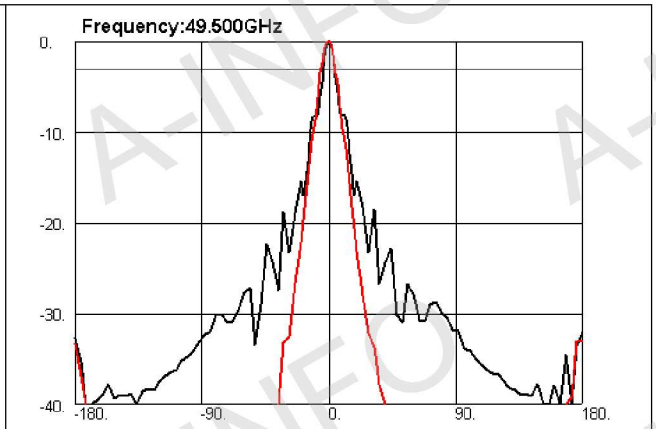
H-Plane 3dB Beamwidth(deg):10.53
E-Plane 3dB Beamwidth(deg):8.68



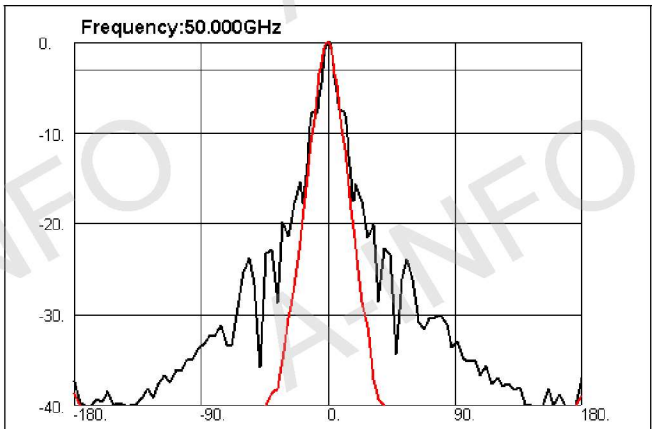
H-Plane 3dB Beamwidth(deg):10.28
E-Plane 3dB Beamwidth(deg):8.54



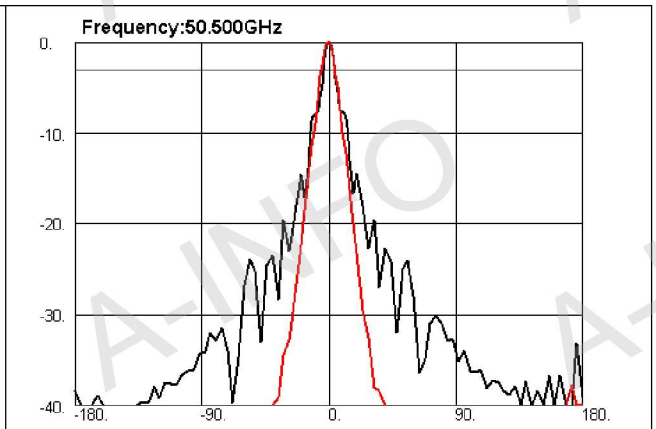
H-Plane 3dB Beamwidth(deg):10.15
E-Plane 3dB Beamwidth(deg):8.48



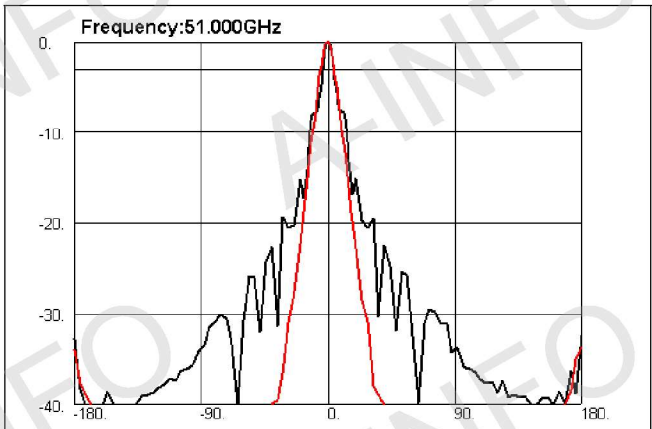
H-Plane 3dB Beamwidth(deg):10.20
E-Plane 3dB Beamwidth(deg):8.37



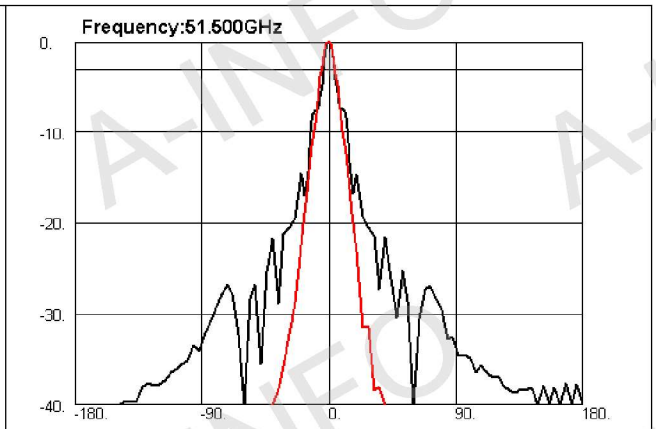
H-Plane 3dB Beamwidth(deg):10.27
E-Plane 3dB Beamwidth(deg):8.42



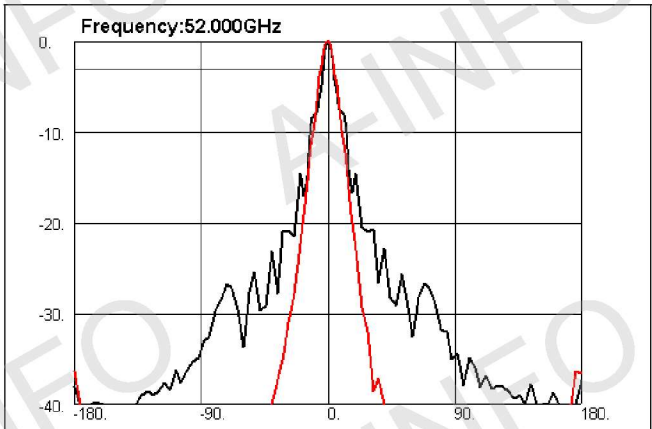
H-Plane 3dB Beamwidth(deg):9.90
E-Plane 3dB Beamwidth(deg):8.26

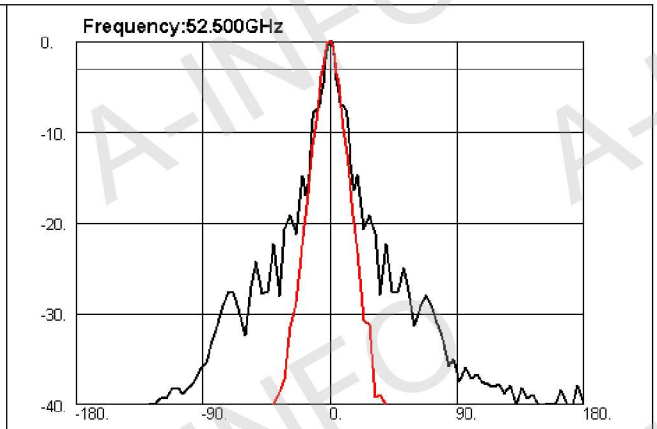


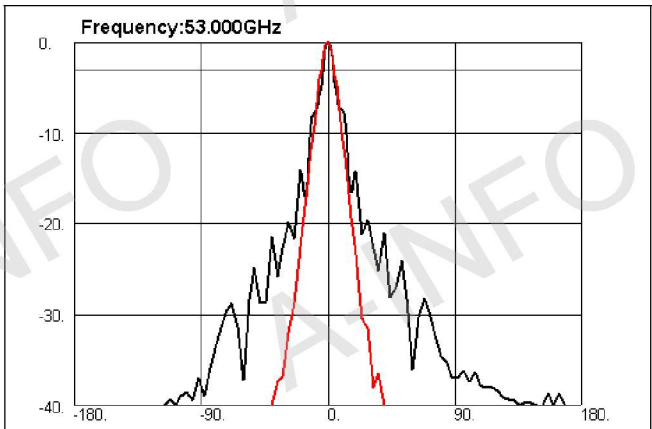
H-Plane 3dB Beamwidth(deg):9.80
E-Plane 3dB Beamwidth(deg):8.07

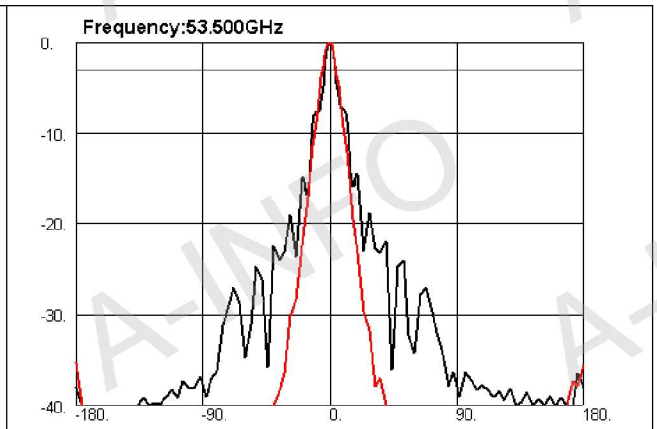


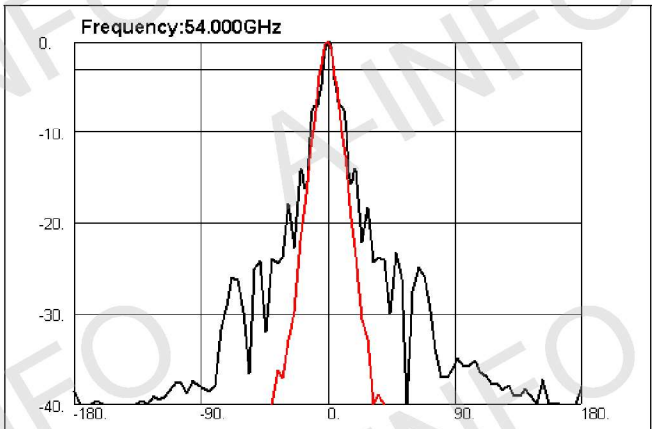
H-Plane 3dB Beamwidth(deg):9.79
E-Plane 3dB Beamwidth(deg):8.04

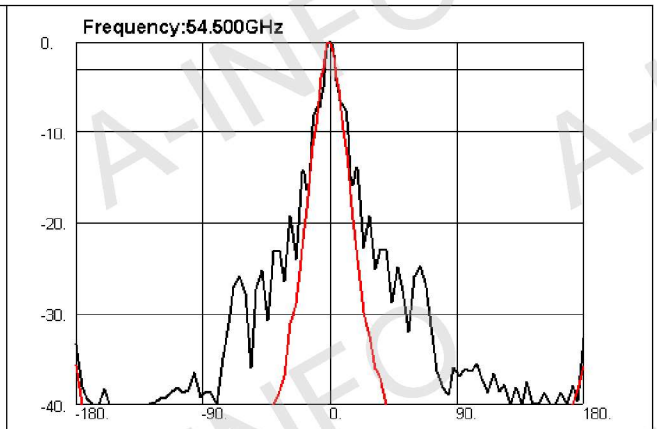

Frequency:52.000GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.78
3dB Beamwidth(deg):7.85

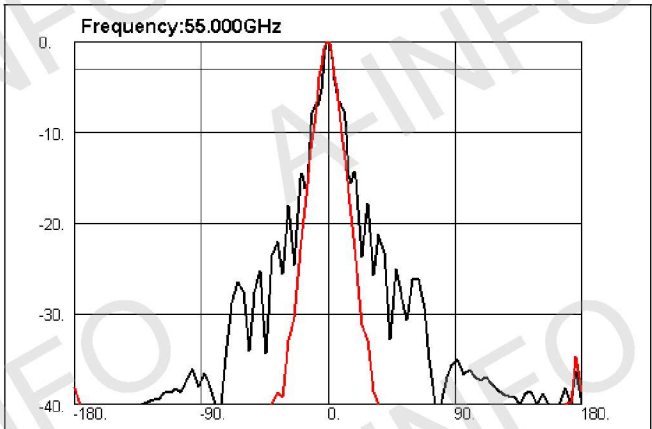

Frequency:52.500GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.93
3dB Beamwidth(deg):7.97


Frequency:53.000GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.55
3dB Beamwidth(deg):7.84

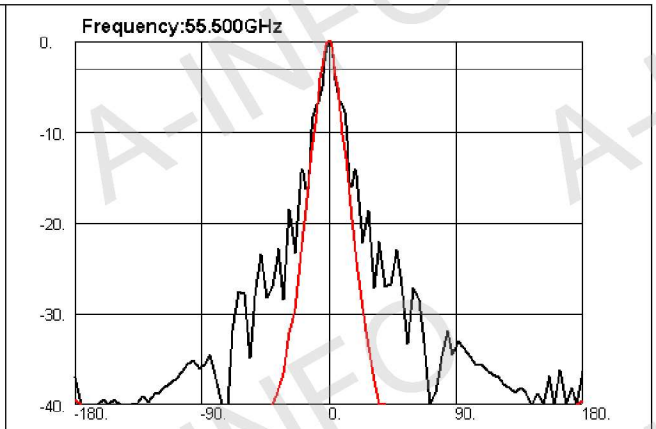

Frequency:53.500GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.75
3dB Beamwidth(deg):7.88


Frequency:54.000GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.79
3dB Beamwidth(deg):8.01

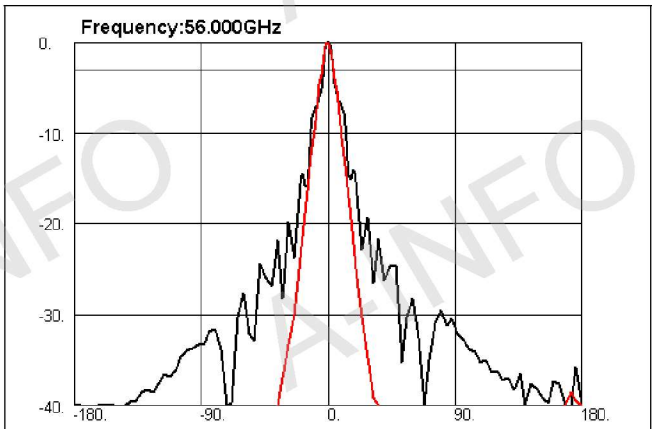

Frequency:54.500GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.38
3dB Beamwidth(deg):7.92



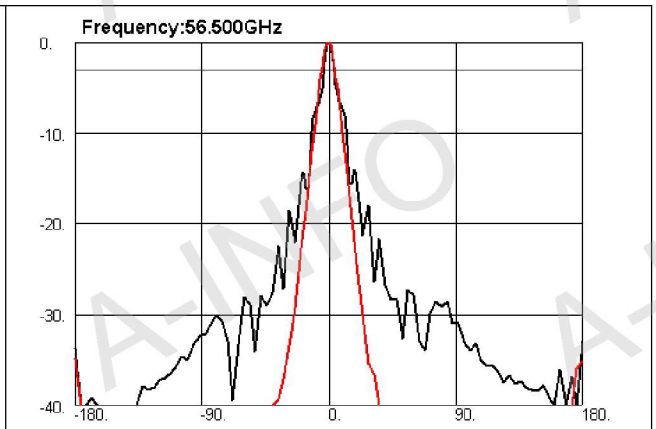
H-Plane 3dB Beamwidth(deg):9.48
E-Plane 3dB Beamwidth(deg):7.69



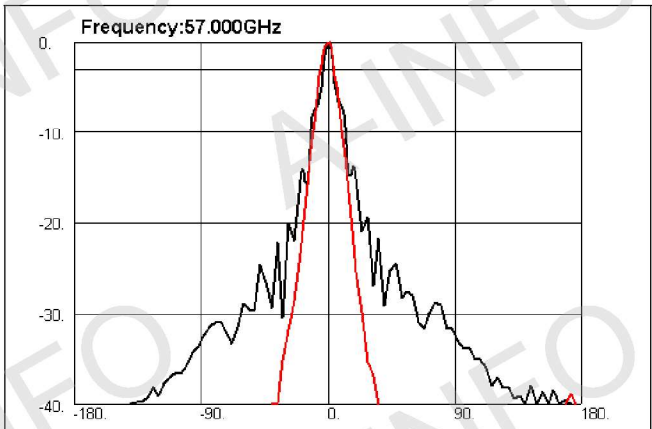
H-Plane 3dB Beamwidth(deg):9.48
E-Plane 3dB Beamwidth(deg):7.53



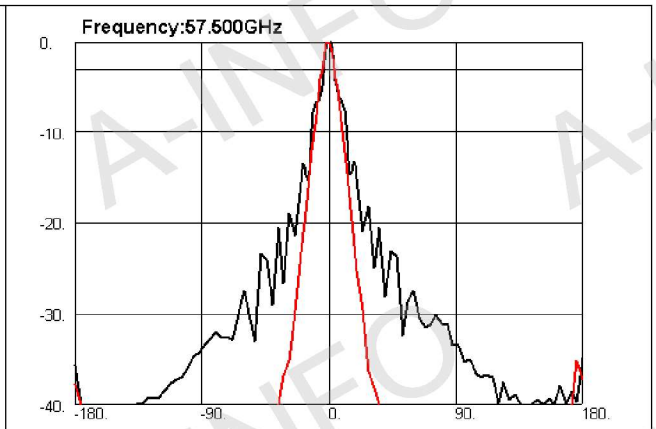
H-Plane 3dB Beamwidth(deg):8.63
E-Plane 3dB Beamwidth(deg):7.34



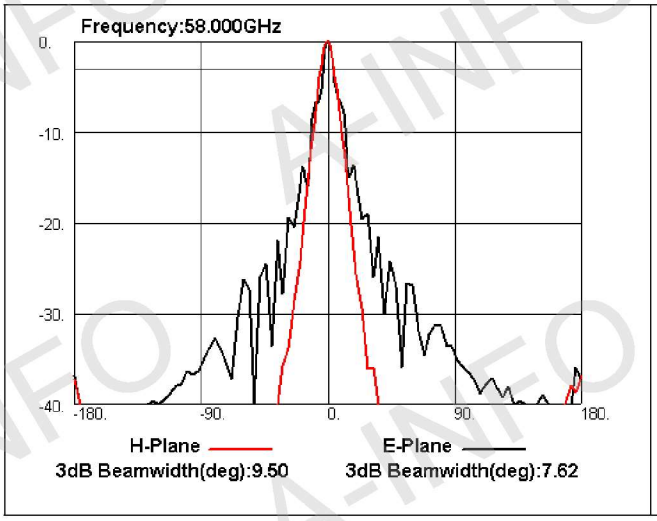
H-Plane 3dB Beamwidth(deg):9.41
E-Plane 3dB Beamwidth(deg):7.44

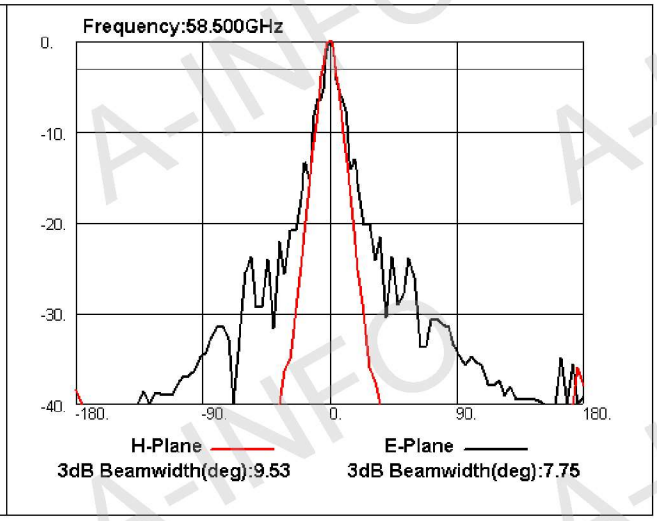


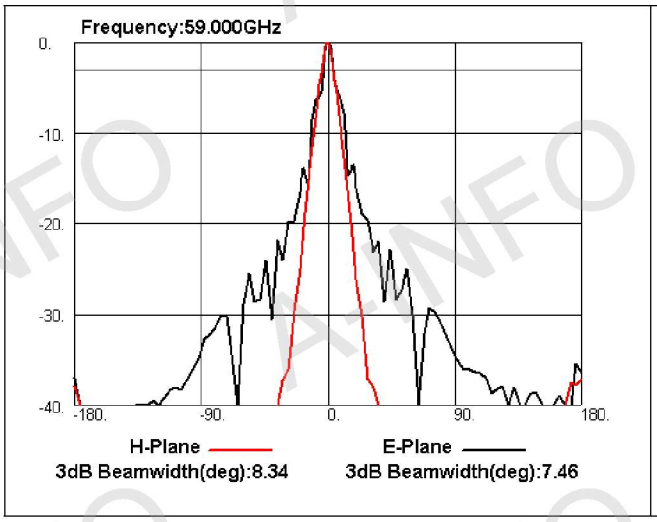
H-Plane 3dB Beamwidth(deg):9.80
E-Plane 3dB Beamwidth(deg):7.63

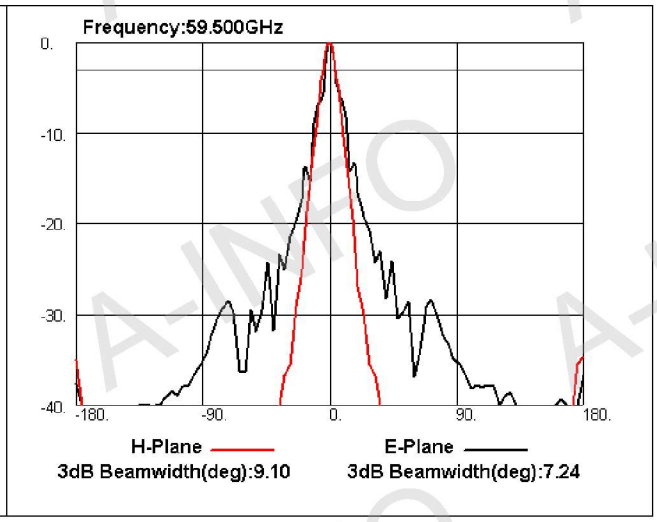


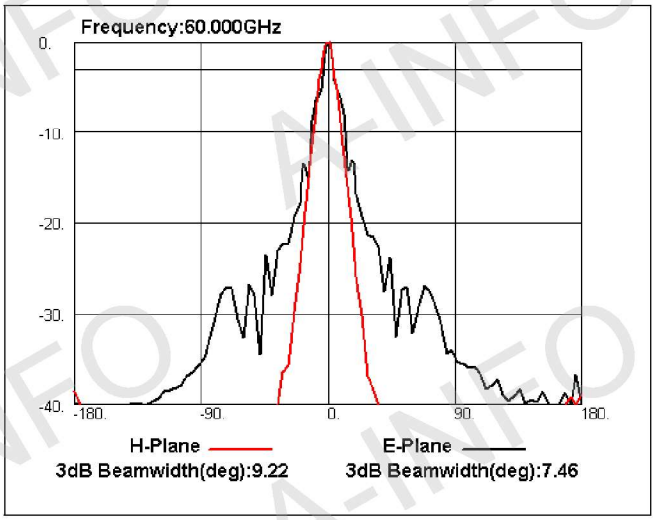
H-Plane 3dB Beamwidth(deg):9.15
E-Plane 3dB Beamwidth(deg):7.79


Frequency:58.000GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.50
3dB Beamwidth(deg):7.62


Frequency:58.500GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.53
3dB Beamwidth(deg):7.75


Frequency:59.000GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):8.34
3dB Beamwidth(deg):7.46


Frequency:59.500GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.10
3dB Beamwidth(deg):7.24


Frequency:60.000GHz
0.
-10.
-20.
-30.
-40.
-180.
-90.
0.
90.
180.
H-Plane
E-Plane
3dB Beamwidth(deg):9.22
3dB Beamwidth(deg):7.46