



The OBH series broadband waveguide horn antennas are linearly polarized and provide an efficient low cost means of making broadband measurements. OMC's horn antennas can cover from 200MHz to 40GHz frequency range. These horns are ideally suited for EMI testing, direction finding, surveillance, antenna gain and pattern measurements and other applications. The OBH series horn antennas have high gain, over octave bandwidths, low VSWR and advantages of small size and light weight.

Also we provide specific gain horn antennas according to customers' requirement.

Model	Freq.(GHz)	Pol.	Gain(dBi) Typ.	VSWR Typ.	Connector	Size(mm)
OBH-220	0.2-2.0	Linear	8.5	2:1	N-Female	1000 x 970 x 690
OBH -530	0.5-3.0	Linear	8.5	2:1	N-Female	380 x 500 x 470
OBH -975	0.9-7.5	Linear	8.5	2:1	N-Female	205 x 300 x 255
OBH -1014	1.0-1.4	Linear	10 min	1.5:1	N-Female	-
OBH -1025	1.0-2.5	Linear	14.5-19	2:1	N-Female	800 x 650 x 480
OBH -1080	1.0-8.0	Linear	6-10	2:1	N-Female	255 x 300 x 170
OBH -10125	1.0-12.5	Linear	8.5	2:1	N-Female	230 x 250 x 175
OBH -10180	1.0-18.0	Linear	11	2:1	N-Female	160 x 241 x 204
OBH -2040	2.0-4.0	Linear	11-17	2:1	N-Female	-
OBH -2080	2.0-8.0	Linear	10-16	2:1	N-Female	255 x 211 x 122
OBH -20180	2.0-18.0	Linear	8.5	2:1	N-Female	120 x 130 x 105
OBH -2575	2.5-7.5	Linear	19-21.5	2:1	N-Female	750 x 500 x 415
OBH -3035	3.0-3.5	Linear	10 min	1.5:1	N-Female	-
OBH -4080	4.0-8.0	Linear	11-17	2:1	N-Female	-
OBH -5259	5.2-5.9	Linear	10 min	1.5:1	N-Female	-
OBH -75180	7.5-18.0	Linear	11-17	2:1	N-Female	330 x 150 x 100
OBH -80100	8.0-10.0	Linear	15 min	1.5:1	N-Female	-
OBH -180400	18-40	Linear	10	2:1	2.92 Female	140 x 110 x 60
OBH -DP-20180	2.0-18.0	Dual Pol.	2-13	3:1	SMA-Female	Φ140 x 320



Broadband Horn Antenna

0.2~2GHz

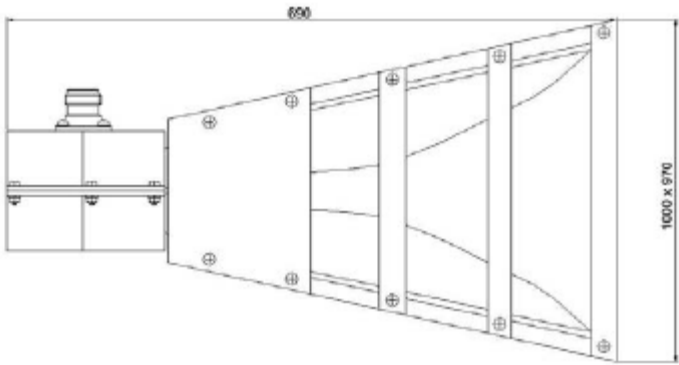
P/N: OBH-220



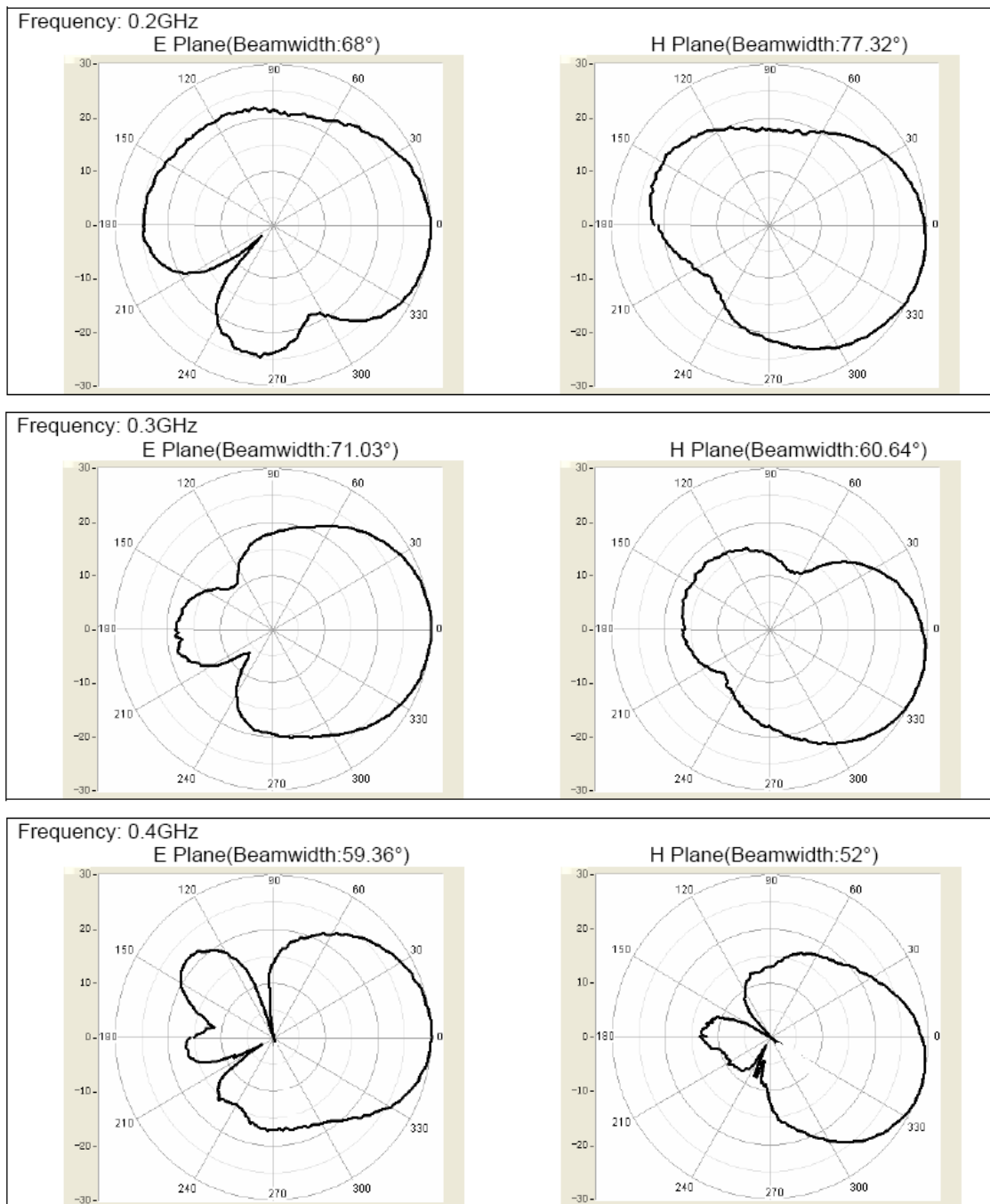
Technical Specification

Frequency (GHz)	0.2-2
Gain(dBi)(Typ.)@GHz	7.0@0.2
	9.1@0.4
	10.0@0.8
	10.6@1.2
	10.2@2.0
Pol.	linear
VSWR(Typ.)	2.0
Connetor	N-Female

Outline Drawing

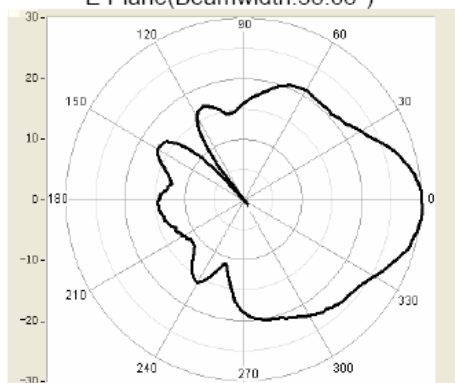


pattern

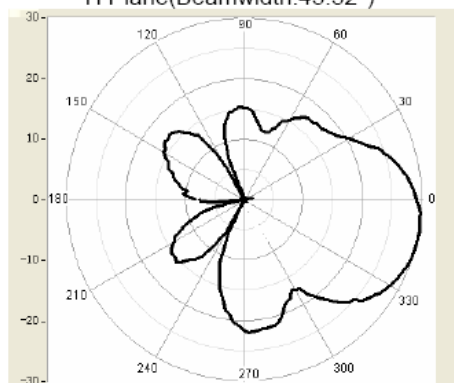


Frequency: 0.6GHz

E Plane(Beamwidth:38.68°)

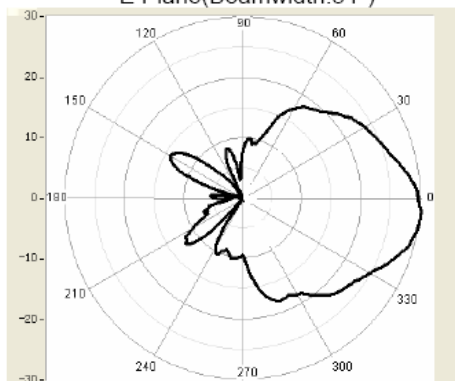


H Plane(Beamwidth:45.52°)

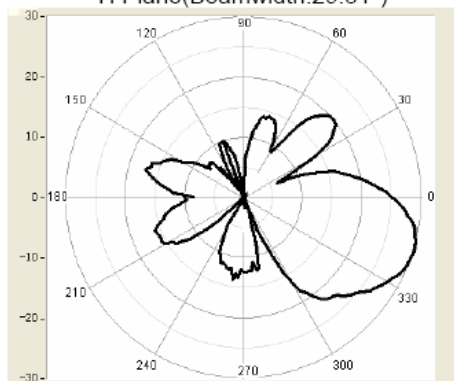


Frequency: 0.8GHz

E Plane(Beamwidth:34°)

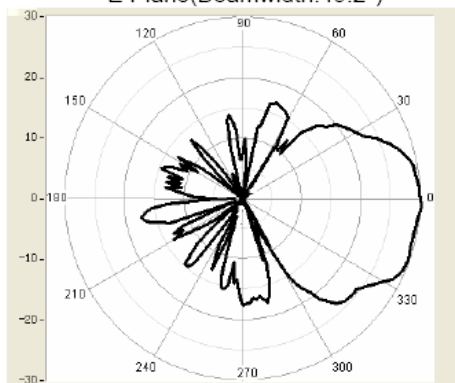


H Plane(Beamwidth:29.31°)

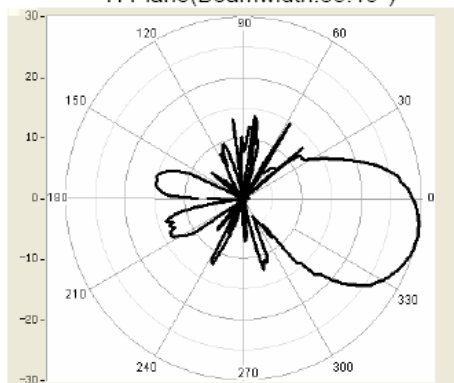


Frequency: 1.4GHz

E Plane(Beamwidth:49.2°)

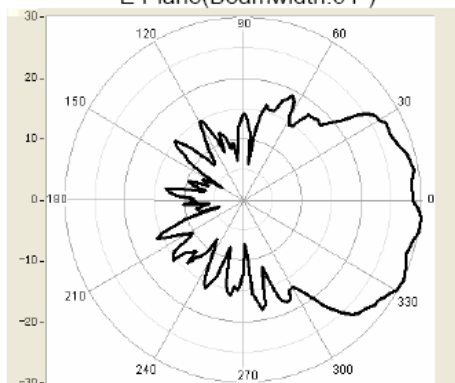


H Plane(Beamwidth:35.19°)

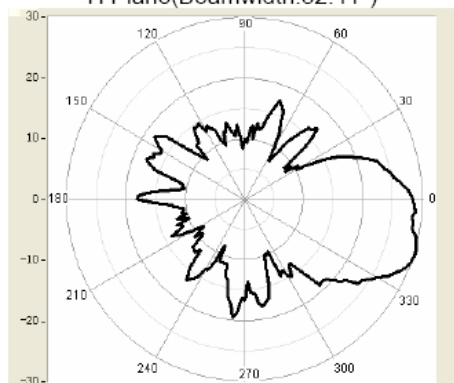


Frequency: 2.0GHz

E Plane(Beamwidth:64°)



H Plane(Beamwidth:32.41°)





Broadband Horn Antenna

0.5~3.0GHz

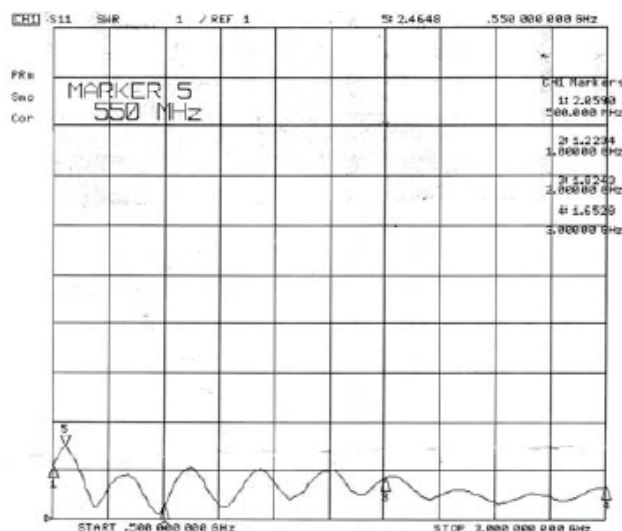
P/N: OBH-530

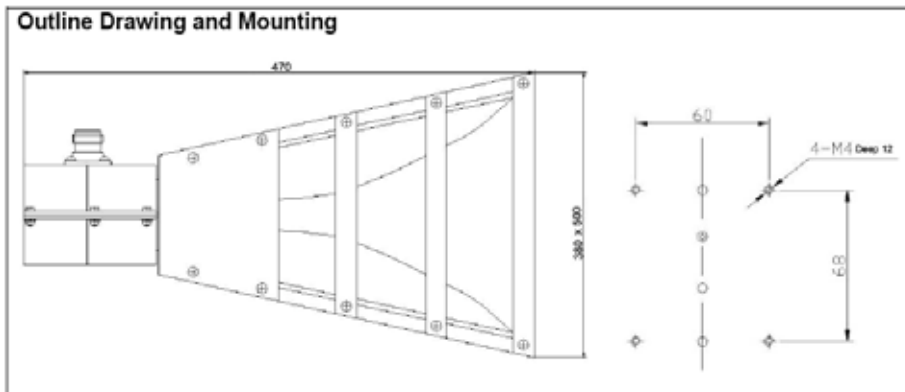


Technical Specification

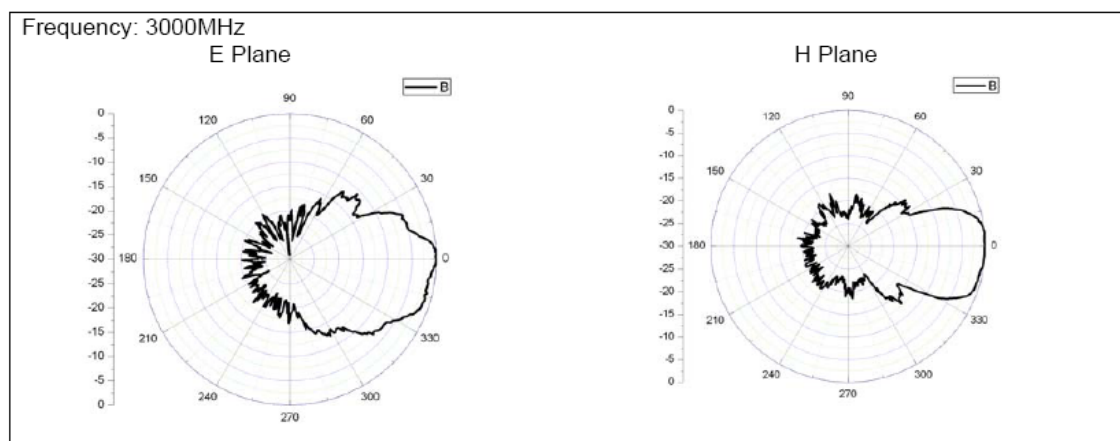
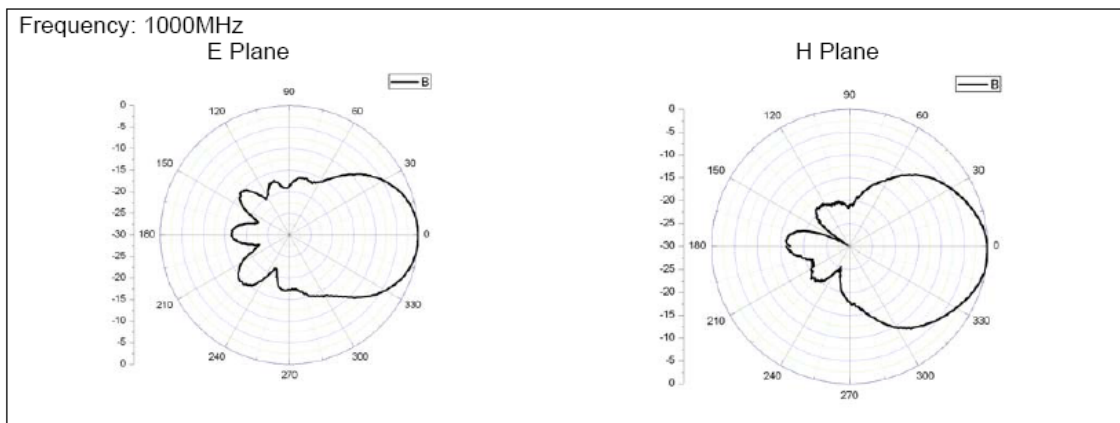
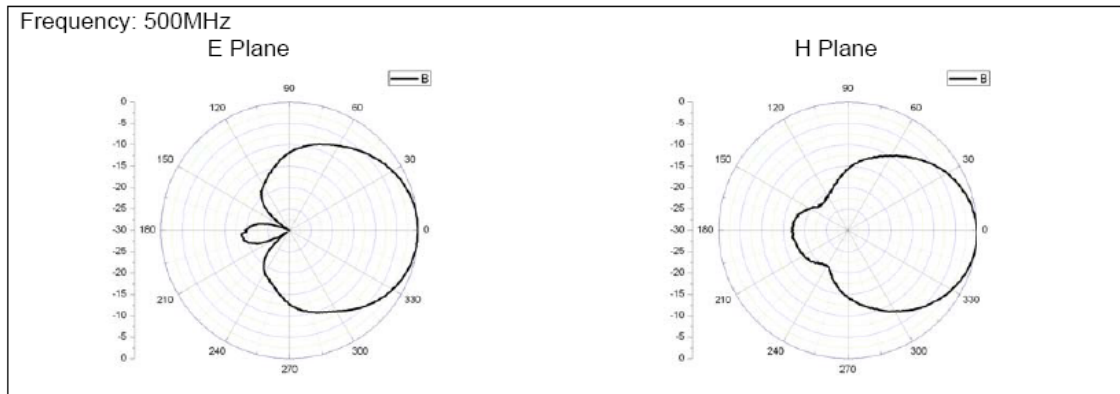
Frequency (GHz)	0.5-3.0	
Gain(dBi)(Typ.)@MHz	6.98@500	9.06@1800
	7.56@600	10.00@1900
	8.61@700	10.53@2000
	8.82@800	10.65@2100
	9.70@900	11.47@2200
	9.51@1000	11.68@2300
	9.97@1100	12.59@2400
	8.23@1200	12.50@2500
	8.69@1300	12.17@2600
	8.95@1400	12.64@2700
	8.96@1500	12.11@2800
	10.76@1600	12.80@2900
	8.96@1700	12.00@3000
Pol.	linear	
VSWR(Typ.)	2.0	
Connetor	N-Female	

VSWR





pattern





Broadband Horn Antenna

0.9~7.5GHz

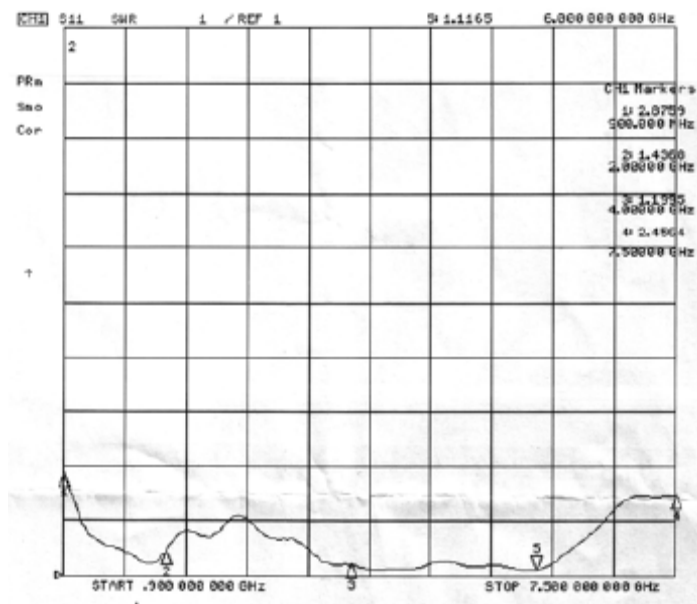
P/N: OBH-975



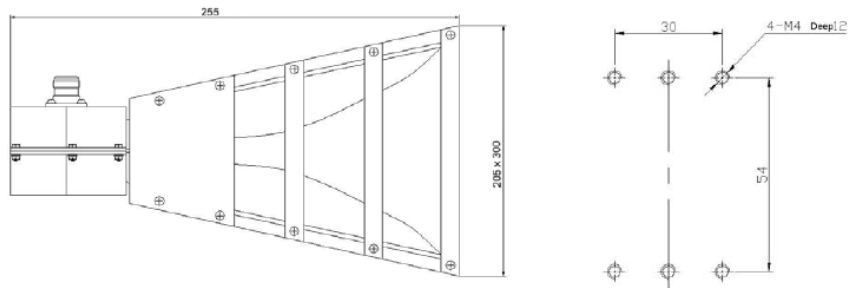
Technical Specification

Frequency (GHz)	0.9-7.5	
Gain(dBi)(Typ.)@GHz	8.2@0.9	13.13@3.5
	8.61@1.0	13.42@4.0
	9.03@1.2	14.34@4.5
	9.96@1.5	12.92@5.0
	10.26@1.8	13.07@5.5
	11.33@2.0	12.13@6.0
	11.97@2.2	9.90@6.5
	11.40@2.5	9.40@7.0
	12.51@2.8	9.00@7.5
	12.70@3.0	
Pol.	linear	
VSWR(Typ.)	2.0	
Connetor	N-Female	

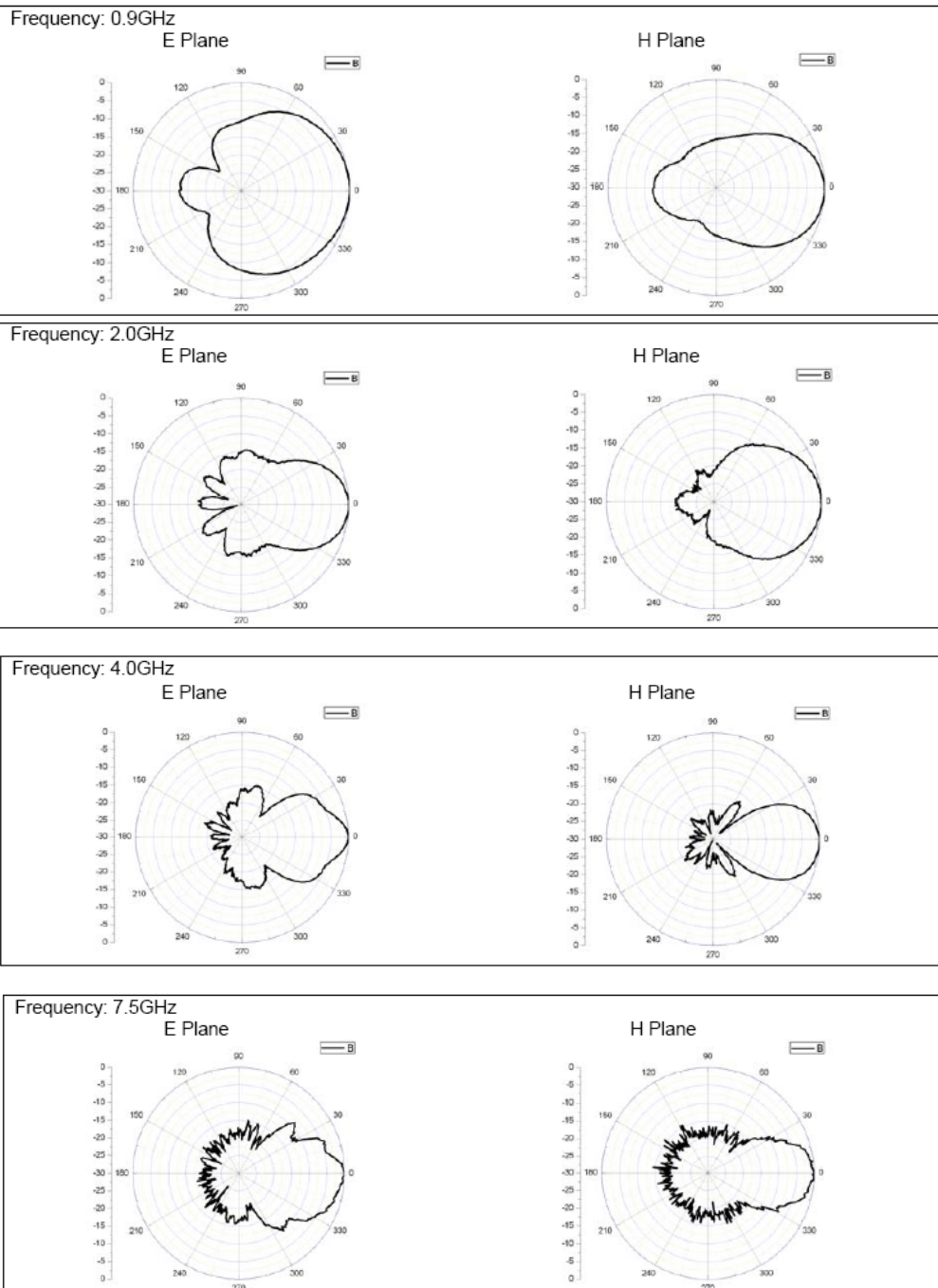
VSWR



Outline Drawing and Mounting



pattern





Broadband Horn Antenna

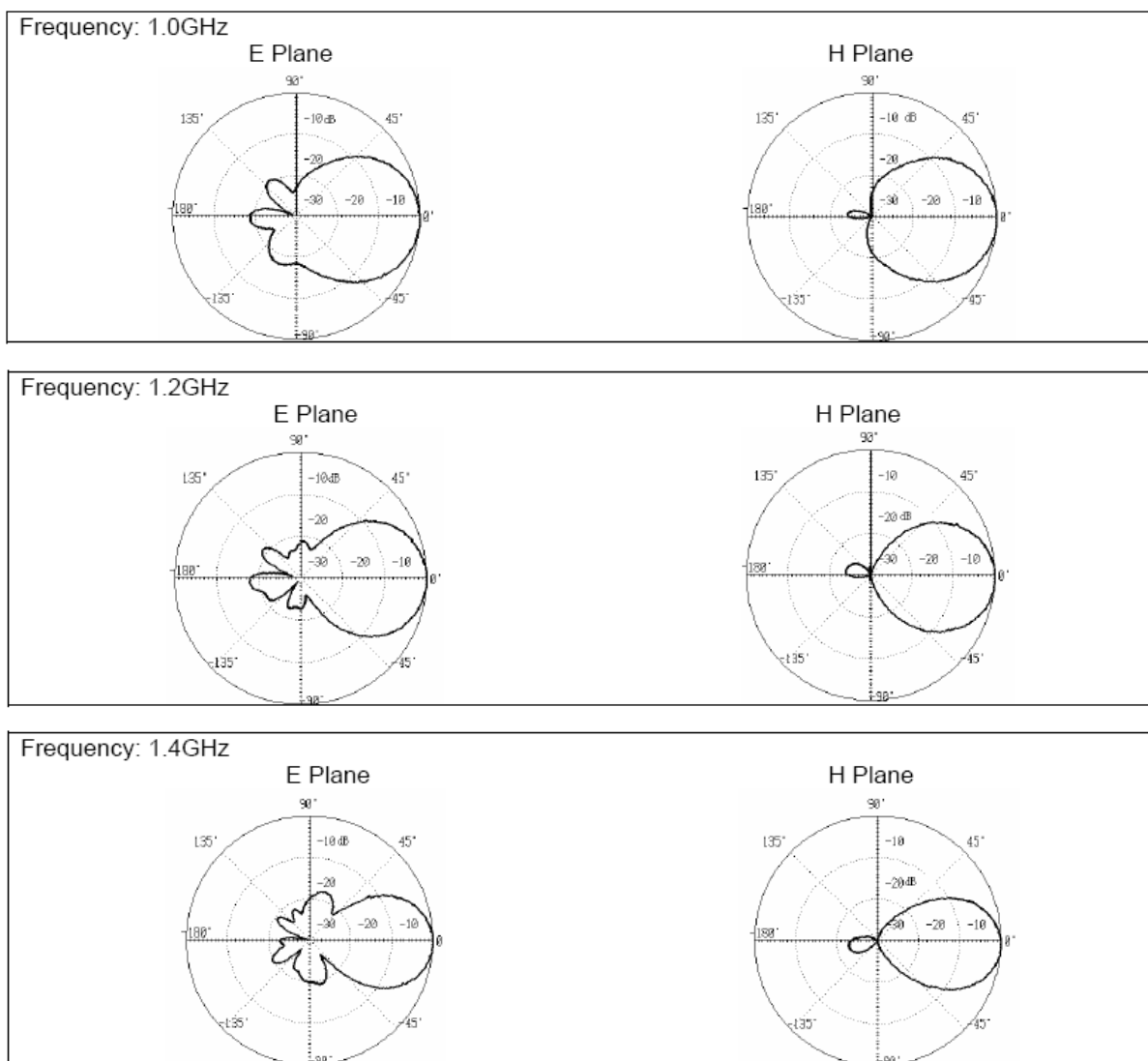
1.0~1.4GHz

P/N: OBH-1014

Technical Specification

Frequency (GHz)	1.0-1.4
Gain(dBi)(Typ.)@GHz	10.2@1.0
	11.8@1.2
	12.9@1.4
Pol.	linear
VSWR(Typ.)	1.5
Connetor	N-Female

pattern





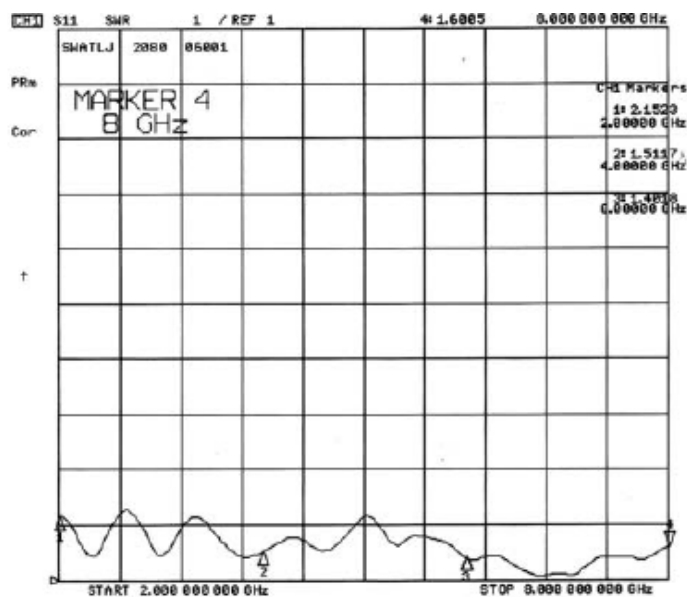
2.0~8.0GHz

P/N: OBH-2080

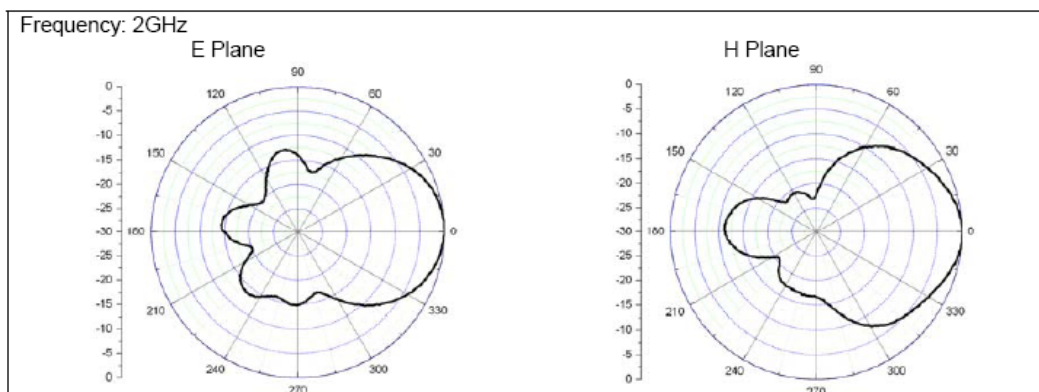
Technical Specification

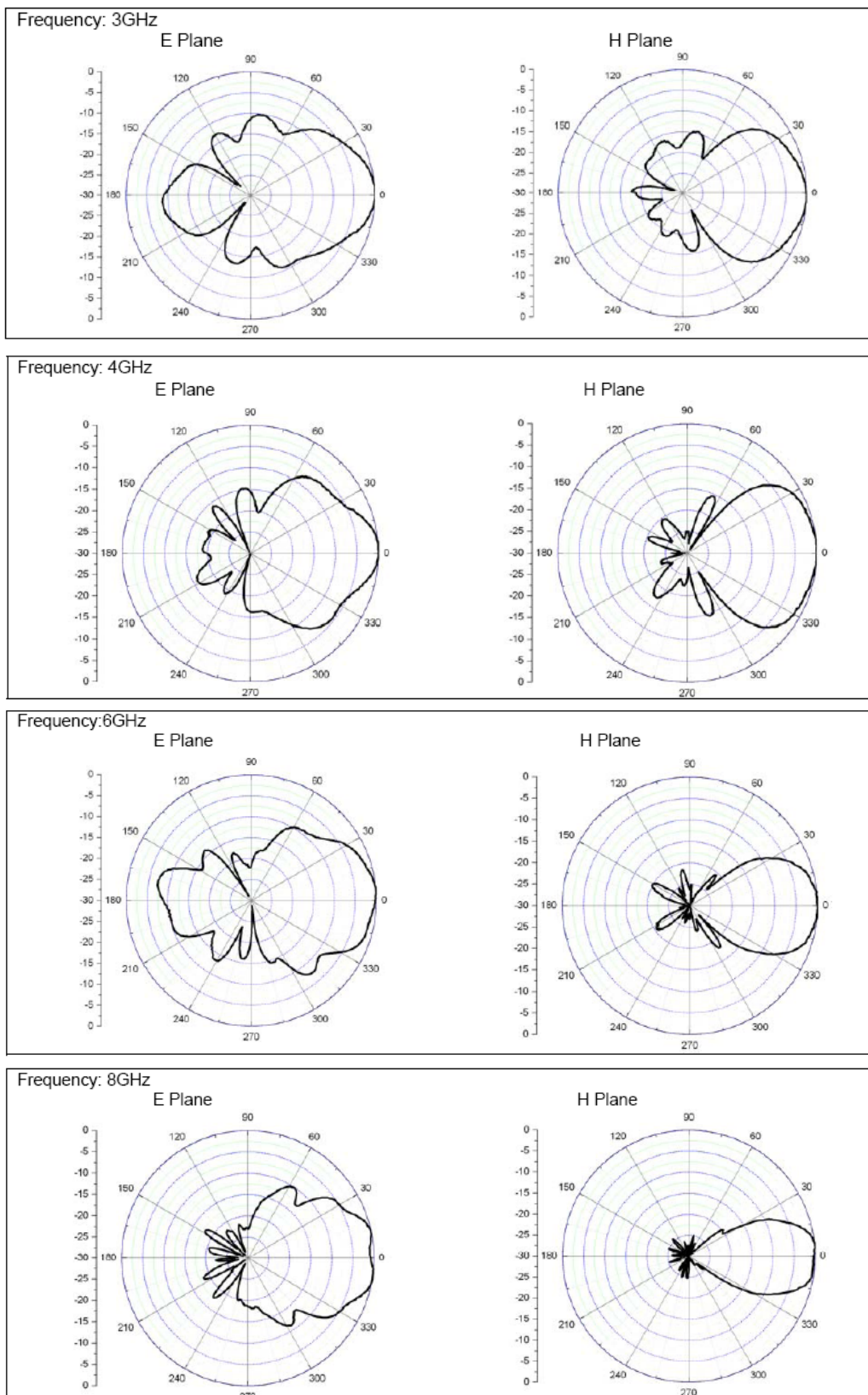
Frequency (GHz)	2.0-8.0
Gain(dBi)(Typ.)@GHz	7.4@2
	11.4@3
	10.1@4
	12.1@6
	12.2@8
Pol.	linear
VSWR(Typ.)	1.5
Connetor	N-Female

VSWR



pattern







Broadband Horn Antenna

1.0~12.5GHz

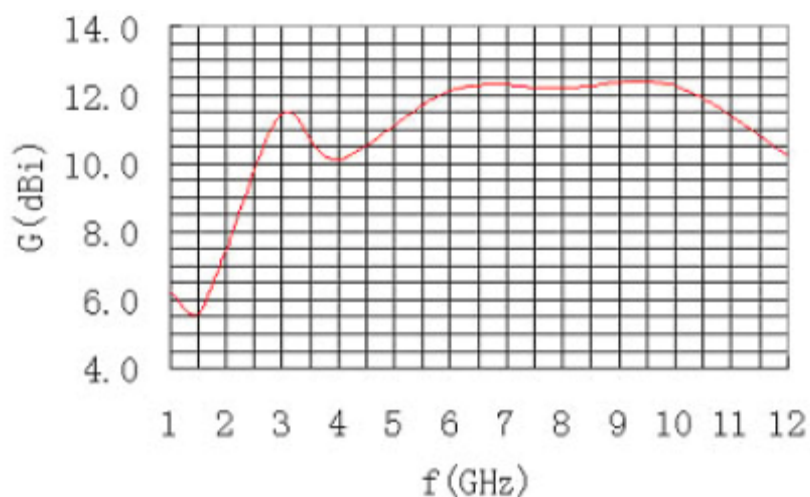
P/N: OBH-10125

Technical Specification

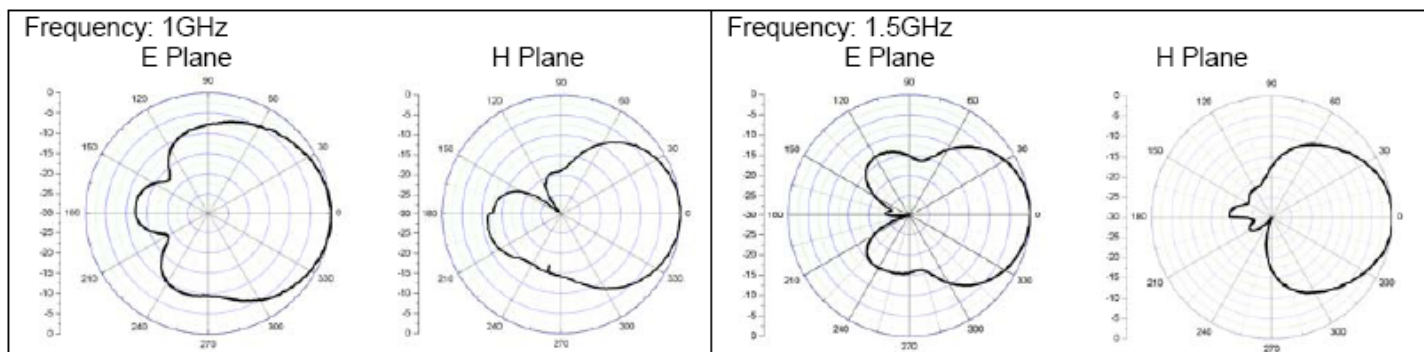
Frequency (GHz)	2.0-8.0
Gain(dBi)(Typ.)	8.5
Pol.	linear
VSWR(Typ.)	1.5
Connetor	N-Female



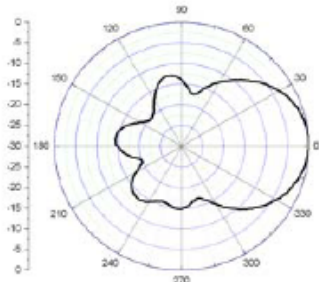
Gain



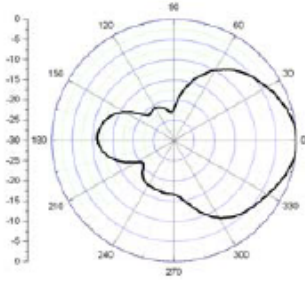
pattern



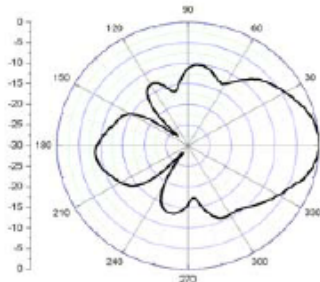
Frequency: 2GHz
E Plane



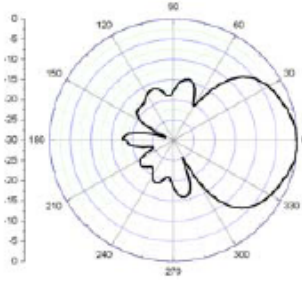
H Plane



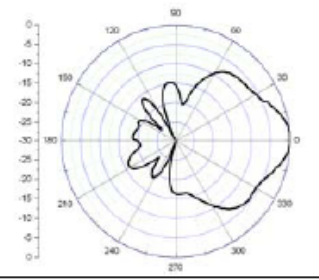
Frequency: 3GHz
E Plane



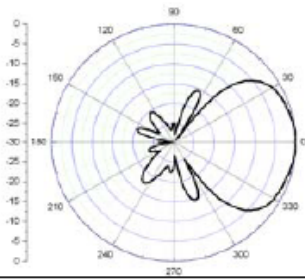
H Plane



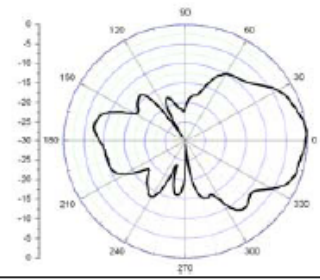
Frequency: 4GHz
E Plane



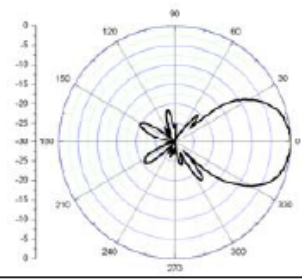
H Plane



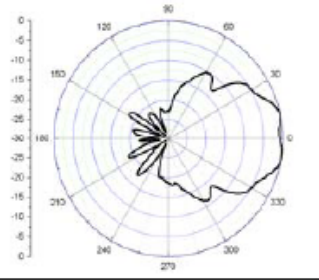
Frequency: 6GHz
E Plane



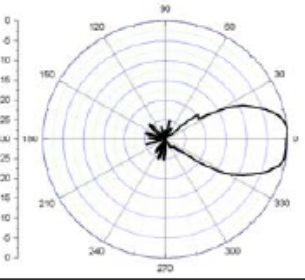
H Plane



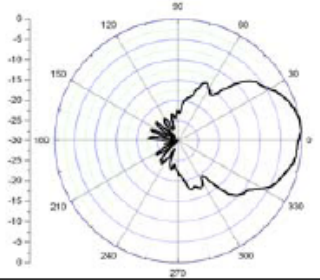
Frequency: 8GHz
E Plane



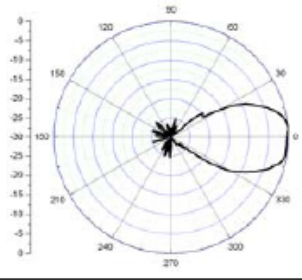
H Plane



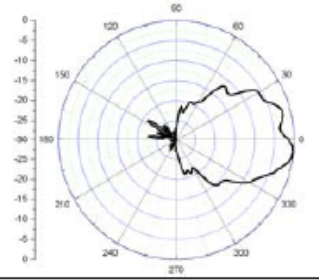
Frequency: 10GHz
E Plane



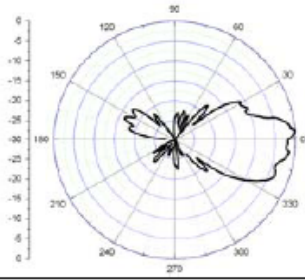
H Plane



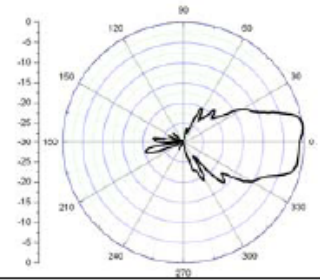
Frequency: 12 GHz
E Plane



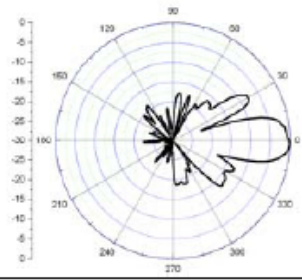
H Plane



Frequency: 12.5GHz
E Plane



H Plane





Broadband Horn Antenna

1.0~18.0GHz

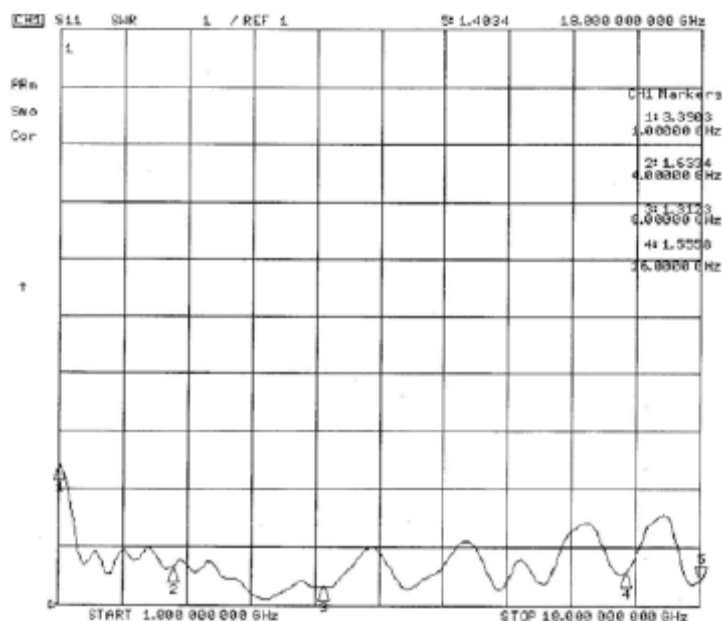
P/N: OBH-10180

Technical Specification

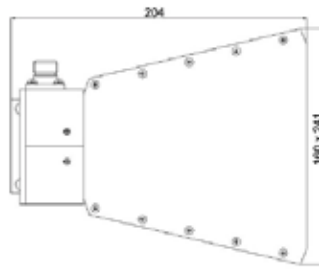
Frequency (GHz)		1.0-18.0
Freq.(GHz)	Antenna Factor(dBm ⁻¹)	Gain(dBi)
1	23.628	6.63
1.5	24.179	9.60
2	26.028	10.25
3	29.82	9.98
4	31.599	10.70
6	33.971	11.85
8	34.959	13.36
10	35.668	14.59
12	37.501	14.34
15	42.299	11.48
18	44.603	10.76
Pol.		linear
VSWR(Typ.)		1.5
Connetor		N-Female



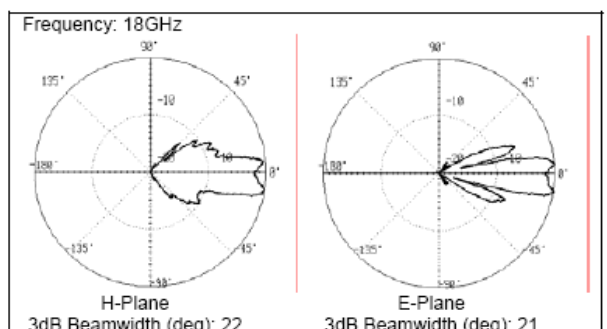
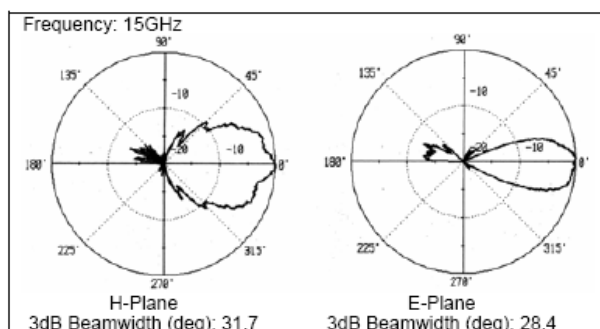
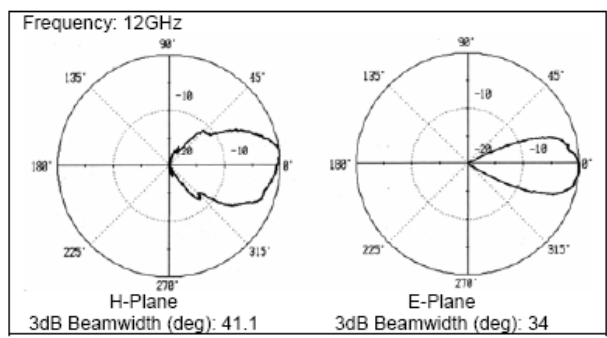
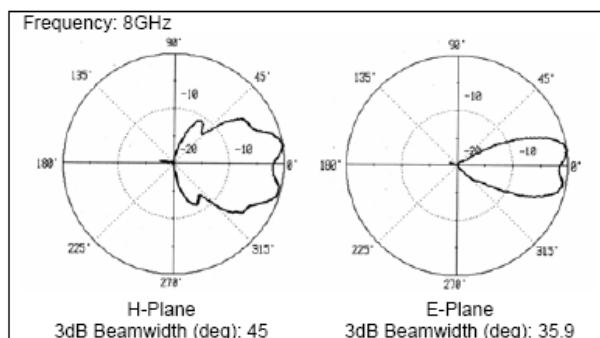
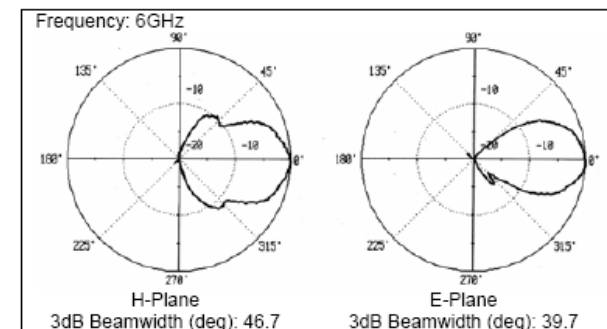
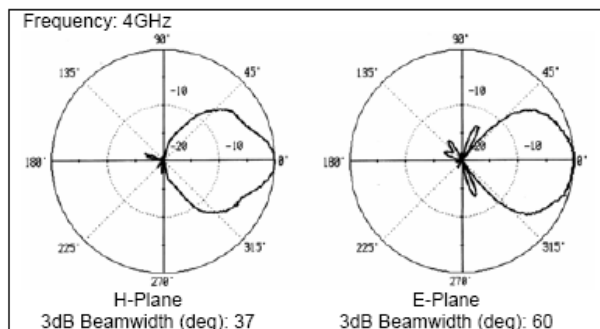
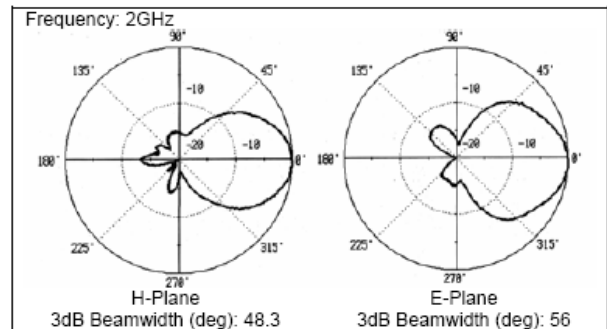
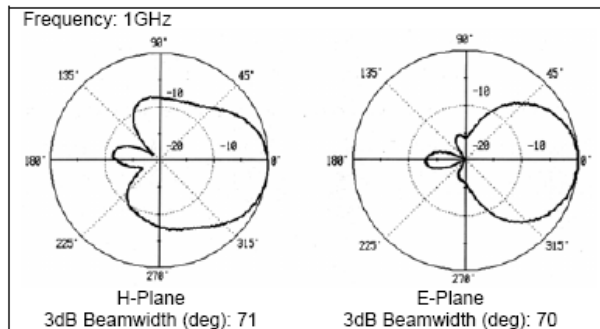
VSWR



Outline Drawing



pattern





Broadband Horn Antenna

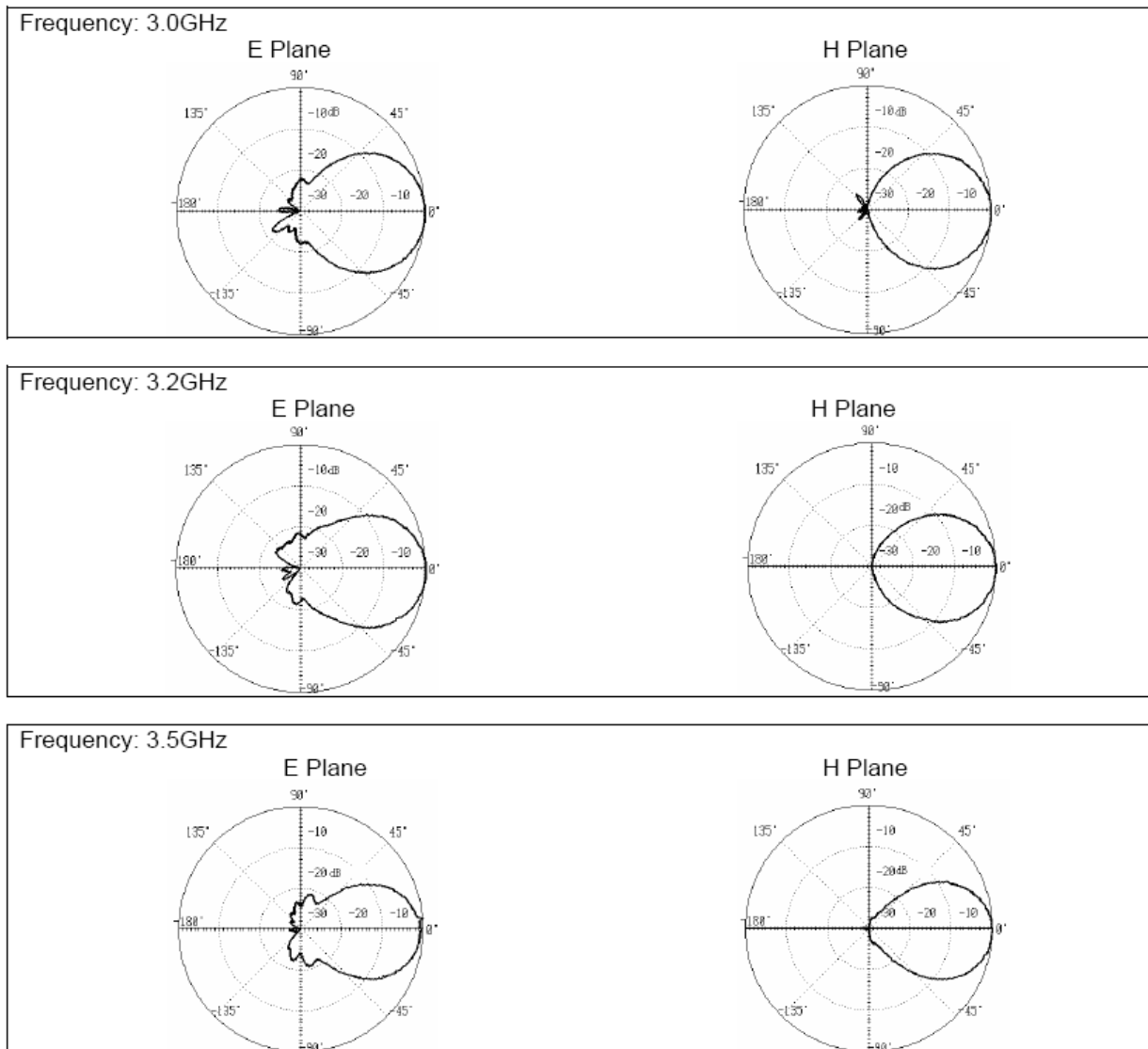
3.0~3.5GHz

P/N: OBH-3035

Technical Specification

Frequency (GHz)	3.0-3.5
Gain(dBi)(Typ.)@GHz	11.0@3.0
	11.8@3.2
	12.5@3.5
Pol.	linear
VSWR(Typ.)	1.5
Connetor	N-Female

pattern





Broadband Horn Antenna

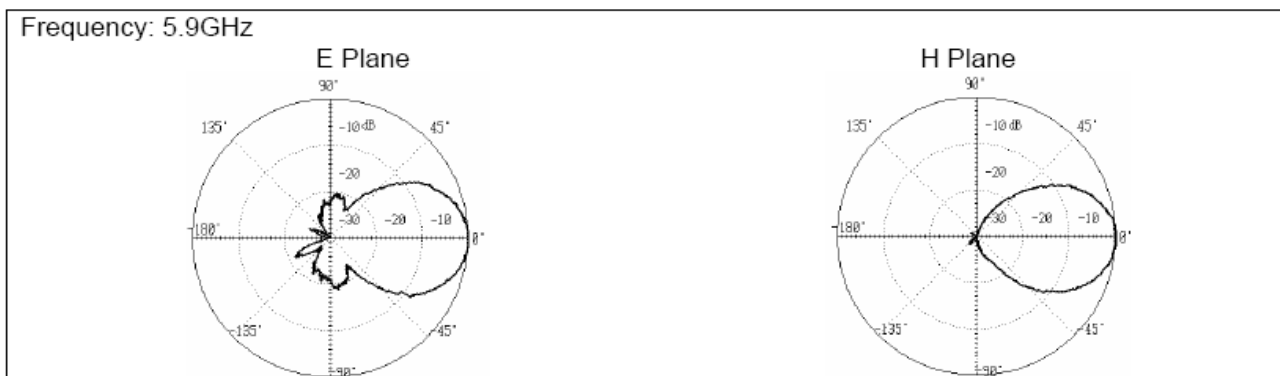
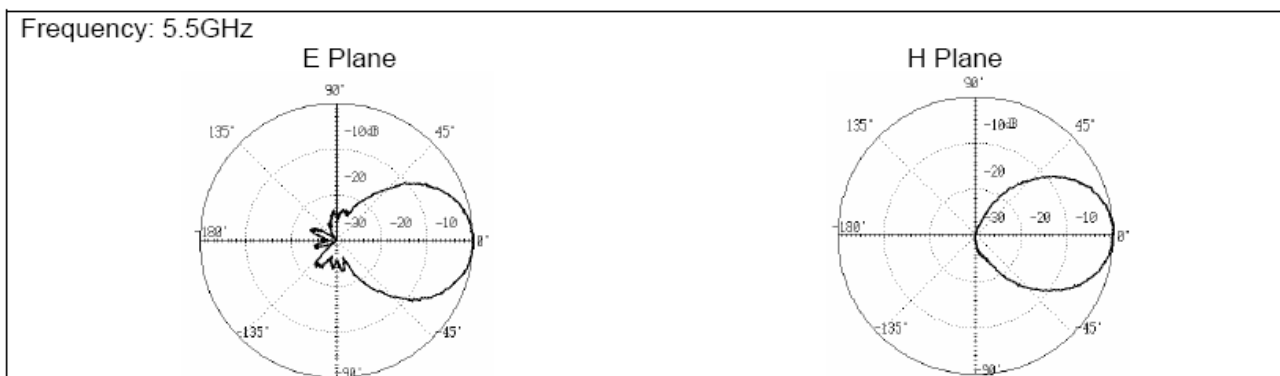
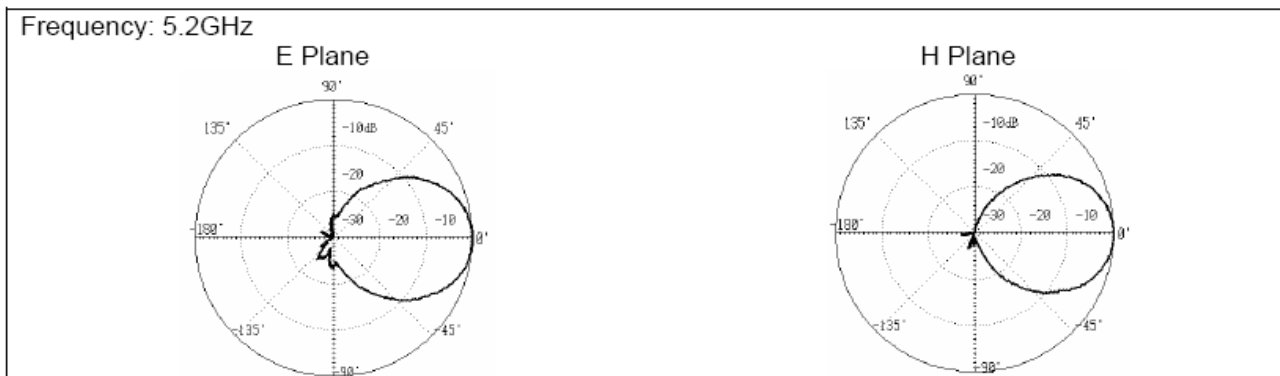
5.2~5.9GHz

P/N: OBH-5259

Technical Specification

Frequency (GHz)	5.2-5.9
Gain(dBi)(Typ.)@GHz	11.4@5.2
	12.0@5.5
	12.5@5.9
Pol.	linear
VSWR(Typ.)	1.5
Connetor	N-Female

pattern





Broadband Horn Antenna

8.0~10.0GHz

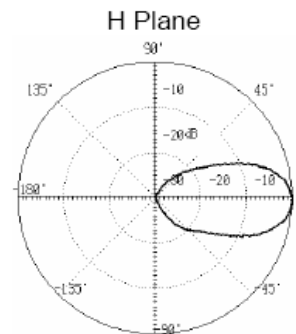
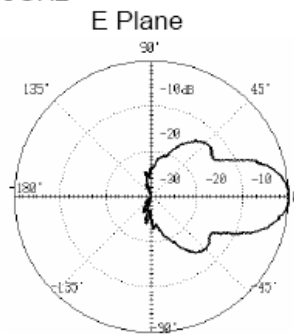
P/N: OBH-80100

Technical Specification

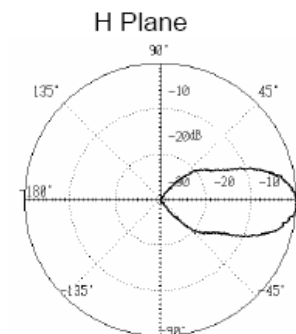
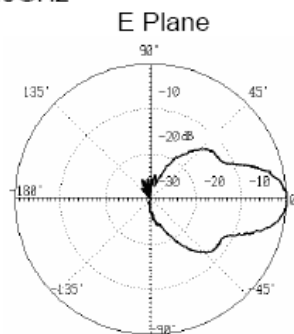
Frequency (GHz)	8.0-10.0
Gain(dBi)(Typ.)@GHz	16.2@8.0
	17.5@9.0
	18.4@10.0
Pol.	linear
VSWR(Typ.)	1.5
Connetor	N-Female

pattern

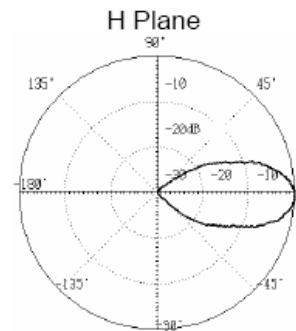
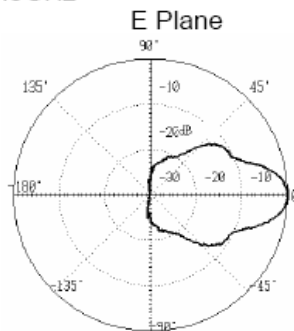
Frequency: 8.0GHz



Frequency: 9.0GHz



Frequency: 10.0GHz





Broadband Horn Antenna

2.0~18.0GHz

P/N: OBH-DR-20180

Technical Specification

Frequency (GHz)	2.0-18.0	
Gain(dBi)(Typ.)@GHz	18.66@0.34	19.65@7.00
	17.94@0.71	13.41@7.64
	16.73@2.00	8.58@8.15
	16.73@2.30	11.81@8.47
	19.13@3.71	20.57@8.50
	18.80@3.90	10.20@8.60
	18.02@4.29	8.43@9.20
	16.24@4.33	21.20@10.00
	16.62@4.58	22.31@12.50
	20.28@4.90	22.84@15.00
	14.64@5.01	18.65@17.00
	21.05@5.90	19.00@18.00
Pol.	Dual Polarization	
VSWR(Typ.)	3.0	
Vertical/Horizontal 3dB Bandwidth (°)	80-30	
Power(W)	200(CW)	
Connetor	SMA-Female	
Size(mm)	Φ 140×320	





Broadband Horn Antenna

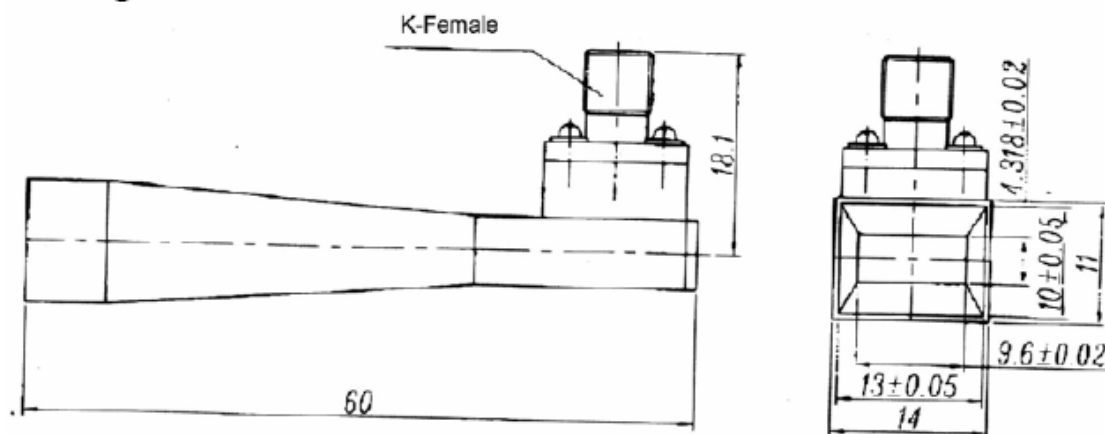
18.0~40.0GHz

P/N: OBH-180400

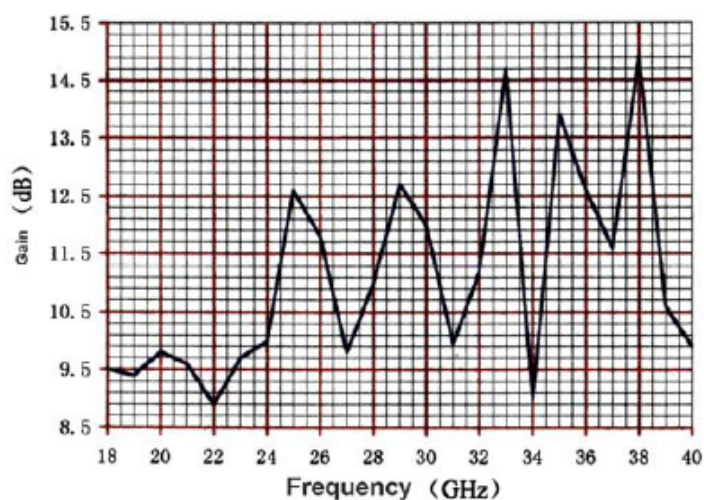
Technical Specification

Frequency (GHz)	18.0-40.0
Gain(dBi)(Typ.)	10
Pol.	Linear
VSWR(Typ.)	2.0
Vertical/Horizontal 3dB Bandwidth(°)	80-30
Power(W)	200(CW)
Connetor	2.92/2.4-Female
Size(mm)	Φ140×320

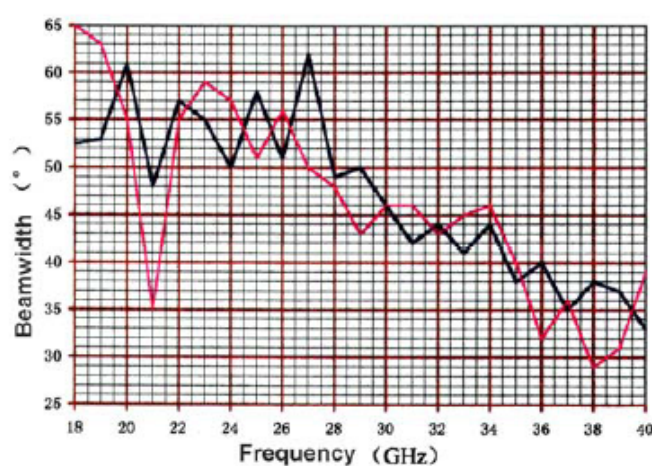
Outline Drawing



Gain



Beamwidth



pattern

