

Antenna Specification

Engineer : PAUL

Report date : 2023/07/05 REV.16

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- ◆ **The antenna Vector network analyzer measurement**
 - **Antenna S Parameter measurement**
- ◆ **The antenna anechoic chamber measurement**
 - **Antenna Gain Value**

Antenna specification



Company: Wieson

Address : HuanGang Ind. Area, Houjie Town, Dong Guan City, GuangDong
Province 523946, China

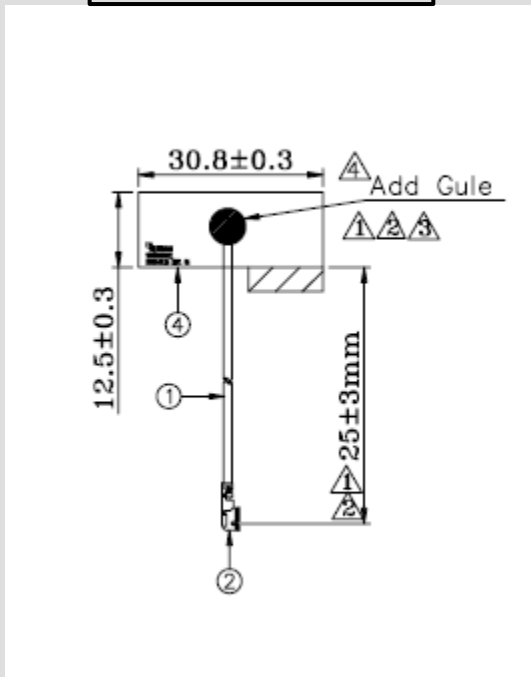
Item	Ant1	GY196HT337-027	Ant2	GY196HT337-028
application	Wi-Fi & BT		Wi-Fi	
Operating Frequency(MHz)	2400-2500	5150-5850	2400-2500	5150-5850
Bandwidth	100MHz (Min.)	700MHz (Min.)	100MHz (Min.)	700MHz (Min.)
Return Loss	10dB Typical	10dB Typical	10dB Typical	10dB Typical
Polarization	Linear	Linear	Linear	Linear
Azimuth Bandwidth	Omni-directional	Omni-directional	Omni-directional	Omni-directional
Peak Gain	0.86dBi (Max)	1.81dBi (Max)	1.76dBi (Max)	1.6dBi (Max)
Impedance	50Ω	50Ω	50Ω	50Ω
Material	FPC	FPC	FPC	FPC
Maximum Power	1W	1W	1W	1W
V.S.W.R	2 : 1	2 : 1	2 : 1	2 : 1
Efficiency	53%(Max)	57%(Max)	54%(Max)	54%(Max)
Connector	MHF I	MHF I	MHF I	MHF I
Cable type	OD: 1.13	OD: 1.13	OD: 1.13	OD: 1.13

Antenna photo



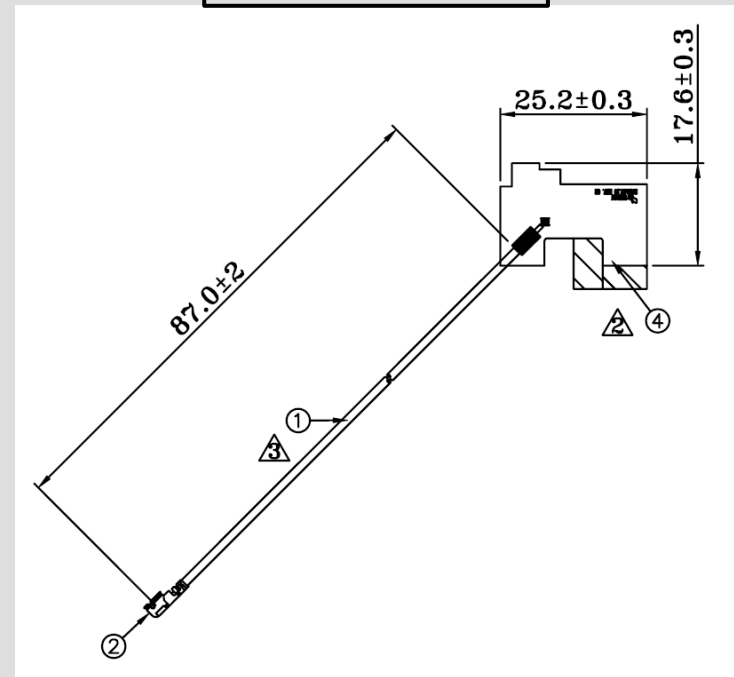
Antenna 1

GY196HT337-027



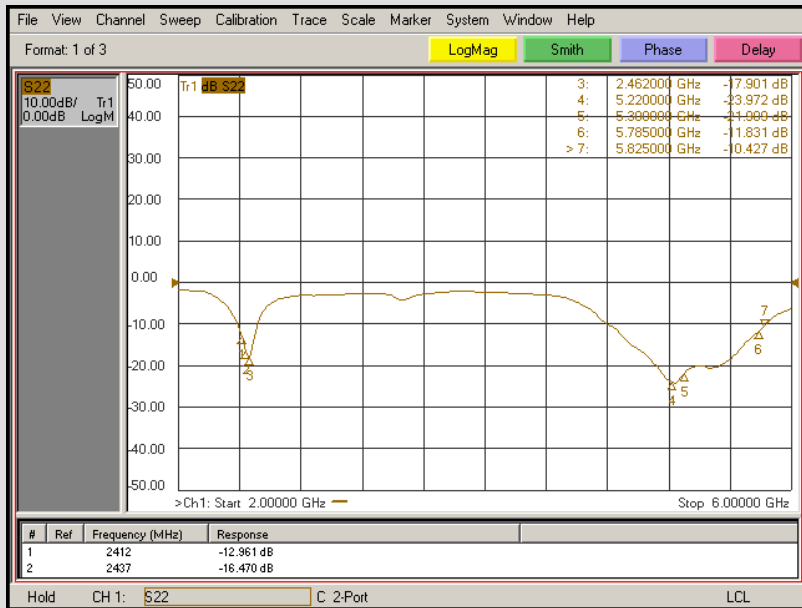
Antenna 2

GY196HT337-028

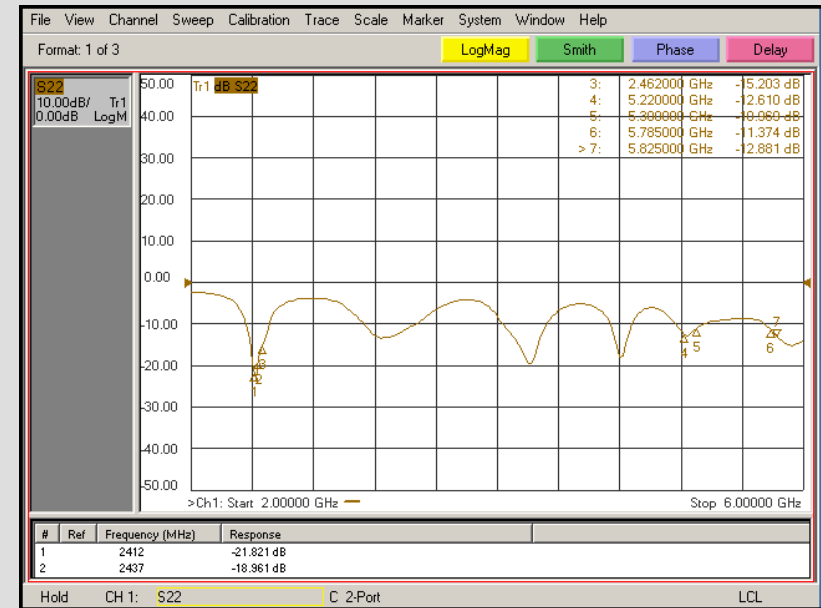


Return Loss – S11 Result

Antenna1



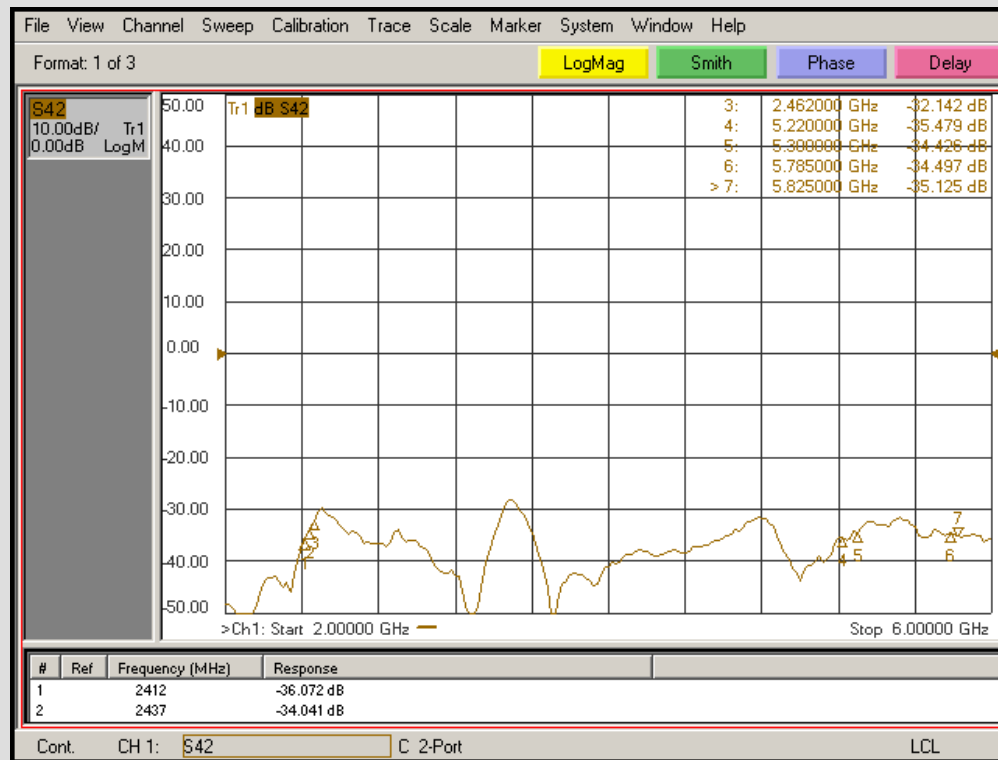
Antenna2



Freq(MHz)	2412	2437	2462	5220	5300	5785	5825
dB	-12.96	-16.47	-17.90	-23.97	-21.00	-11.18	-10.42

Freq(MHz)	2412	2437	2462	5220	5300	5785	5825
dB	-21.82	-18.96	-15.20	-12.61	-10.06	-11.37	-12.88

Isolation



Freq(MHz)	2412	2437	2462	5220	5300	5785	5825
dB	-36.07	-34.04	-32.14	-35.47	-34.42	-34.49	-35.12

3D Gain Total



Antenna1

Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
2.4	0.24	-2.79	52.60
2.45	0.44	-2.76	52.97
2.5	0.86	-2.75	53.02
5.15	1.8	-2.8	52.48
5.25	1.7	-2.65	54.33
5.35	1.8	-2.73	53.33
5.47	1.7	-2.56	55.46
5.6	1.81	-2.63	54.58
5.725	1.35	-2.7	53.70
5.785	1.58	-2.43	57.15
5.85	1.32	-2.89	51.40

Antenna2

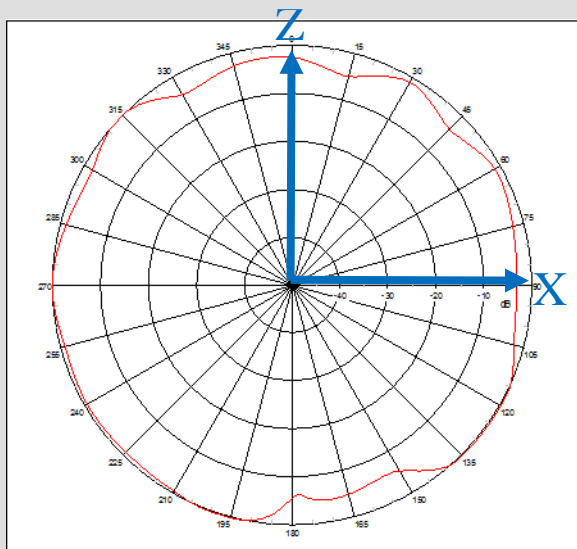
Freq(GHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
2.4	1.76	-2.99	50.23
2.45	1.6	-2.67	54.08
2.5	1.76	-2.92	51.05
5.15	0.91	-2.7	53.70
5.25	1.48	-2.89	51.40
5.35	0.97	-2.75	53.09
5.47	0.88	-2.81	52.36
5.6	1.22	-2.64	54.45
5.725	0.77	-2.95	50.70
5.785	1.37	-2.66	54.20
5.85	1.6	-2.62	54.70

Antenna 2D pattern

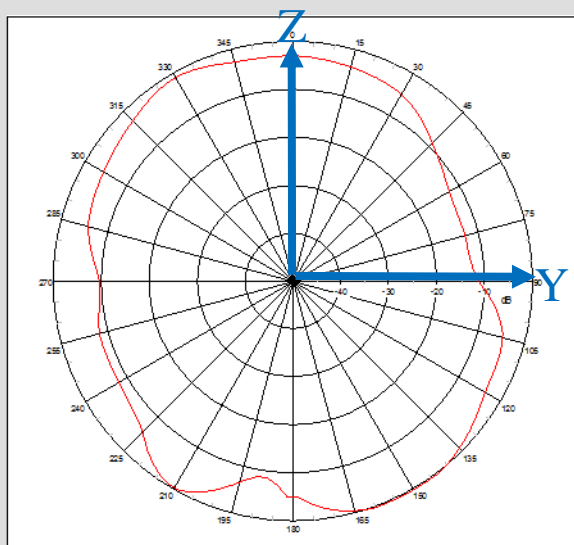


Antenna 1 2.45 GHz

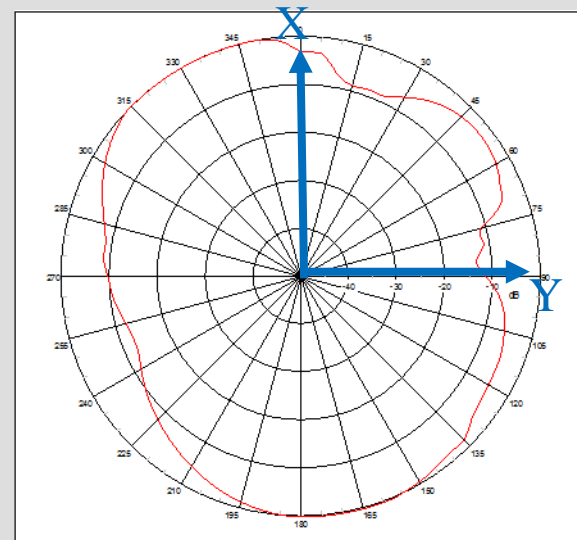
ZX-plane



YZ-plane



XY-plane

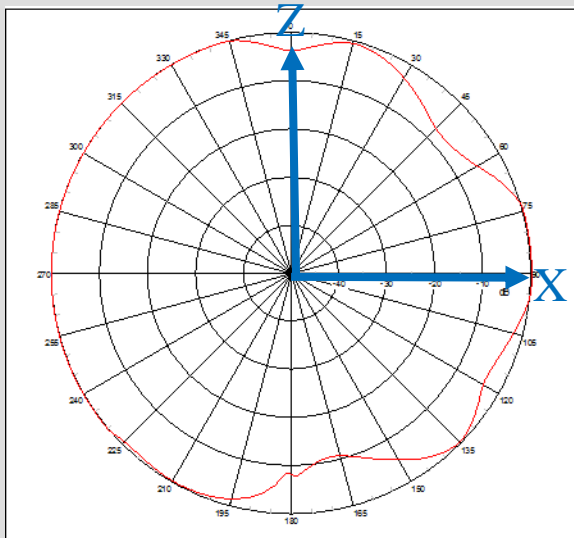


Antenna 2D pattern

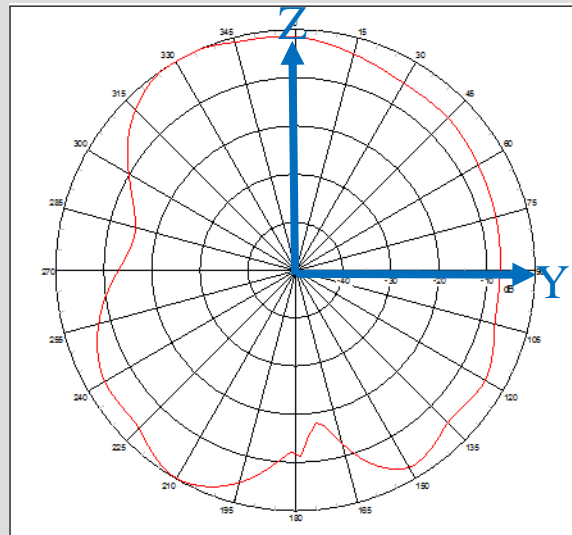


Antenna1 5.2 GHz

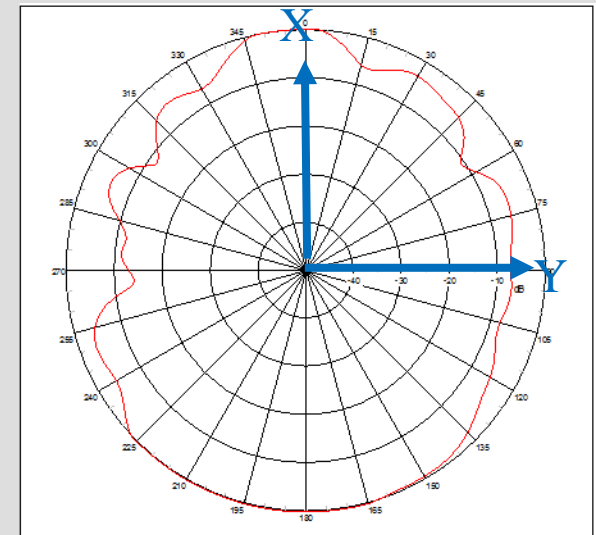
ZX-plane



YZ-plane



XY-plane

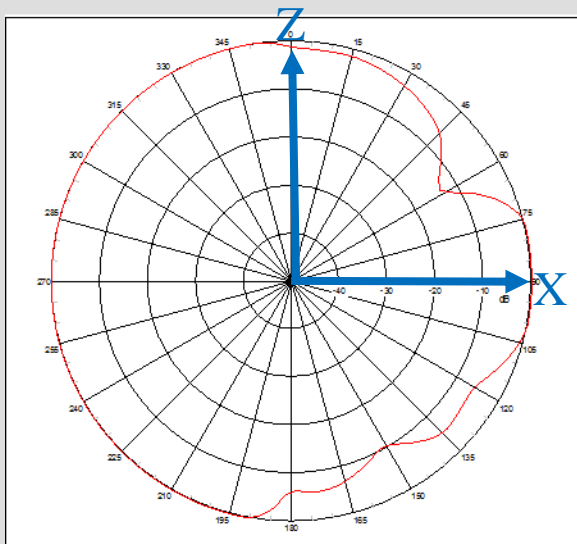


Antenna 2D pattern

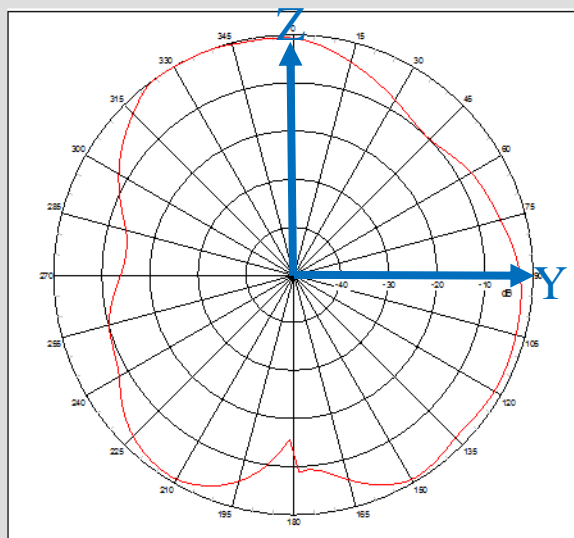


Antenna1 5.6 GHz

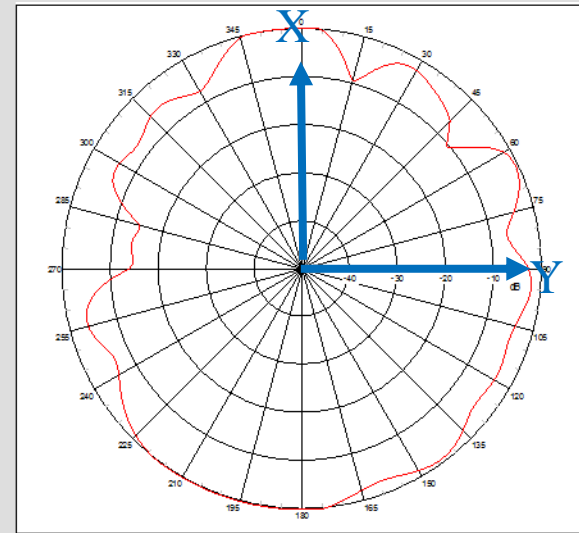
ZX-plane



YZ-plane



XY-plane

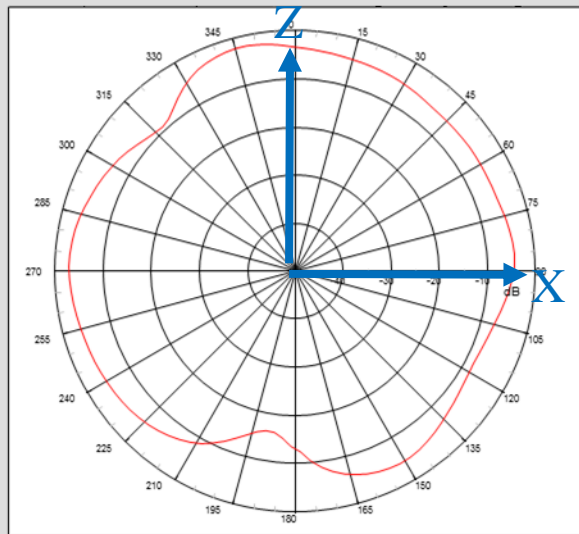


Antenna 2D pattern

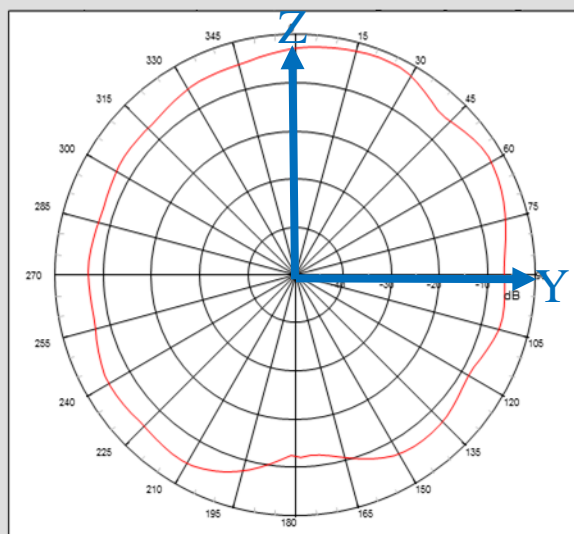


Antenna 2 2.45 GHz

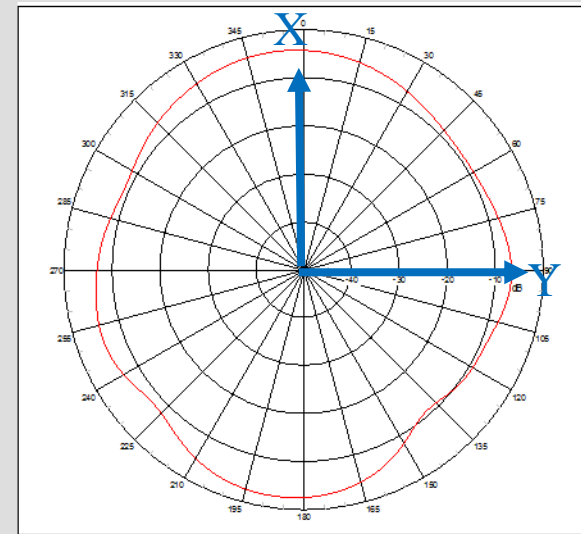
ZX-plane



YZ-plane



XY-plane

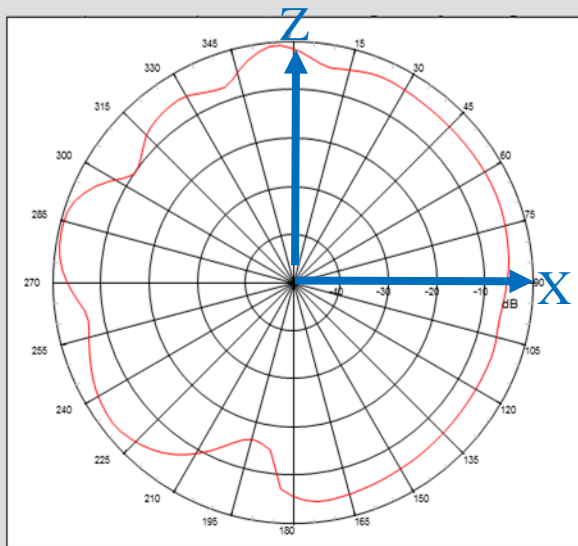


Antenna 2D pattern

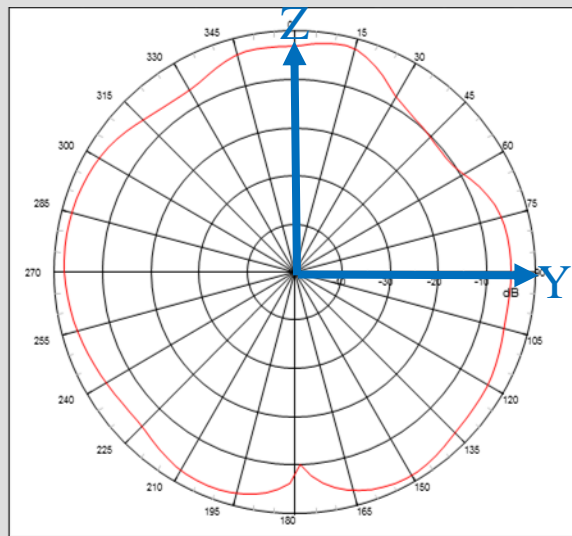


Antenna2 5.2 GHz

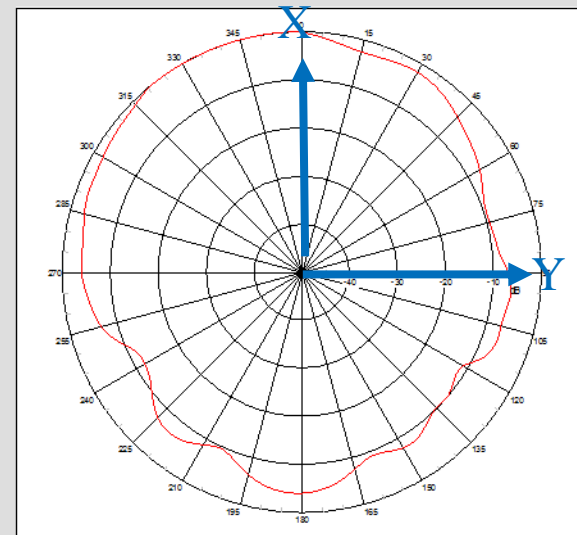
ZX-plane



YZ-plane



XY-plane

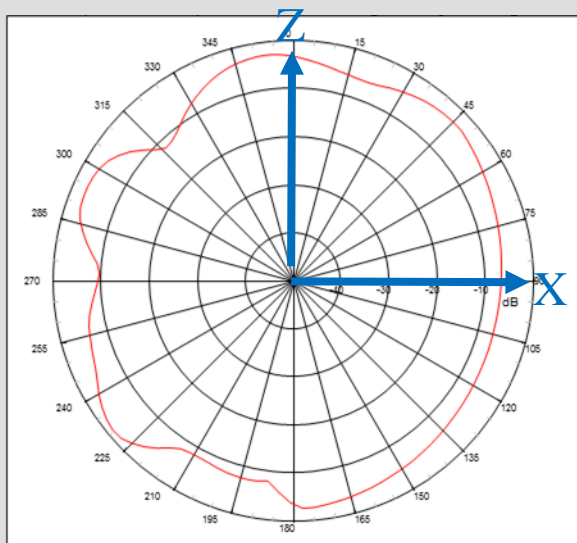


Antenna 2D pattern

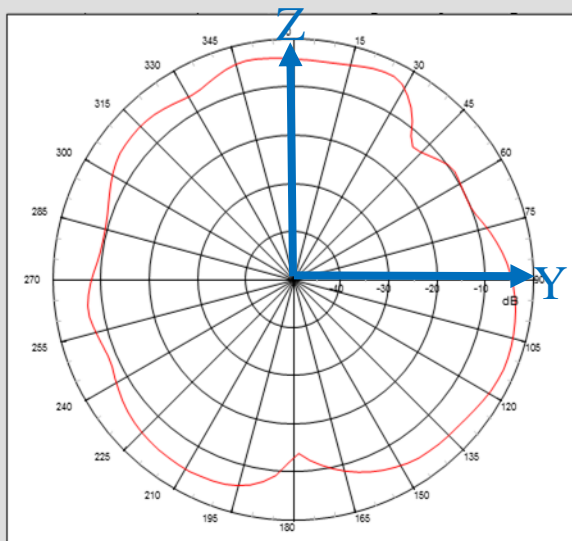


Antenna2 5.6 GHz

ZX-plane



YZ-plane



XY-plane

