



ARY121-0348-008-00

Engineer : Emily

Report date : 2022/08/03



Antenna specification

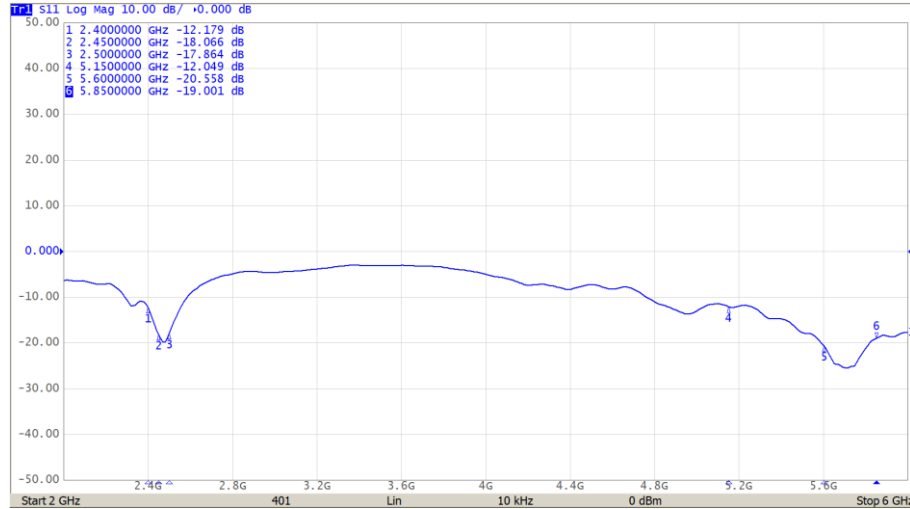
Item	Specification	Specification
Operating Frequency(GHz)	2.4-2.5	5.15-5.85
Bandwidth	100MHz (Min.)	700MHz (Min.)
Return Loss	10dB (Min.)	10dB (Min.)
Polarization	Linear	Linear
Azimuth Bandwidth	Omni-directional	Omni-directional
Antenna Type	Dipole	Dipole
Peak Gain	1.75dBi (Max)	1.9dBi (Max)
Impedance	50Ω	50Ω
Material	PCB	PCB
Maximum Power	1W	1W
V.S.W.R	2: 1	2 : 1
Radiation	Omni directional	Omni directional
Efficiency	53%(MAX)	67%(MAX)
Connector	SMA	SMA
Cable type	OD:1.37	OD:1.37
Operating Temperature	-10~60℃	-10~60℃
Storage temp	-10~70℃	-10~70℃

Antenna photo



Antenna Measurement Vector Network Analyzer

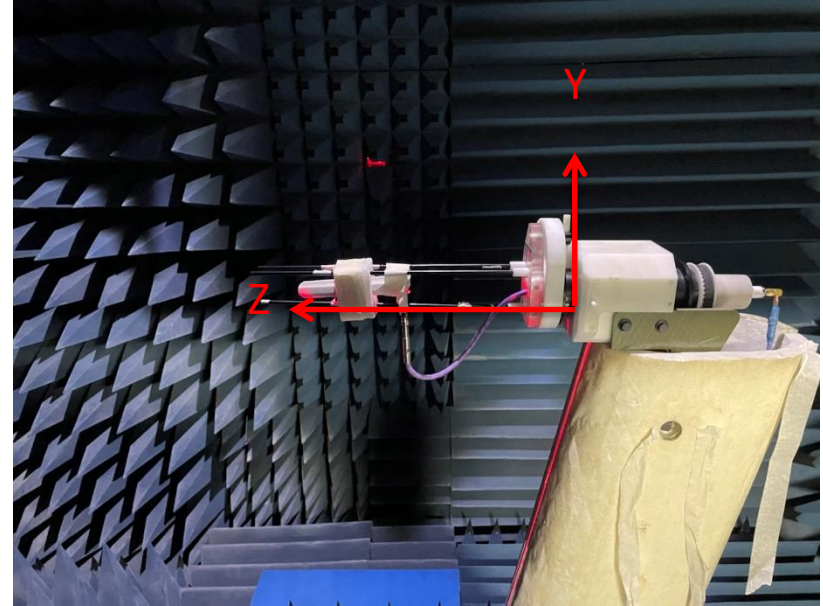
S-parameter



Freq(MHz)	2400	2450	2500	5150	5600	5850
S11(dB)	-12.1	-18.0	-17.8	-12.0	-20.5	-19.0

The antenna anechoic chamber measurement

Chamber measurement photo



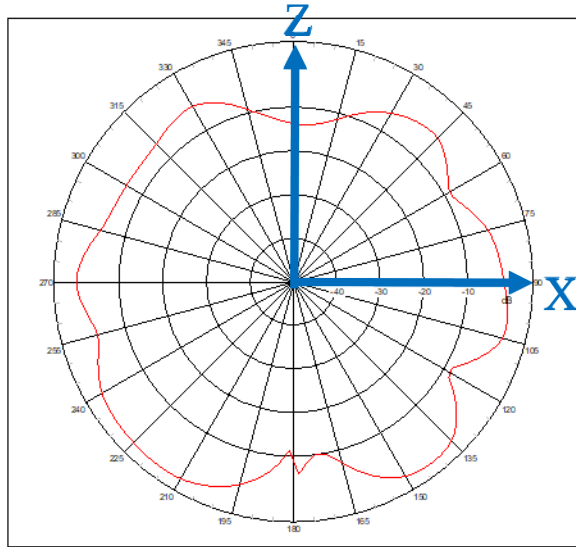
3D Gain Total

Freq(MHz)	Peak Gain(dBi)	3D-avg Gain(dBi)	Efficiency(%)
2400	1.75	-2.29	59
2450	1.09	-2.44	57
2500	1.67	-2.72	53
5150	1.66	-2.22	60
5250	1.85	-2.23	60
5350	1.39	-2.15	61
5470	1.53	-2.08	62
5600	1.9	-1.99	63
5725	1.44	-1.93	64
5785	1.7	-1.75	67
5850	1.6	-2.11	62

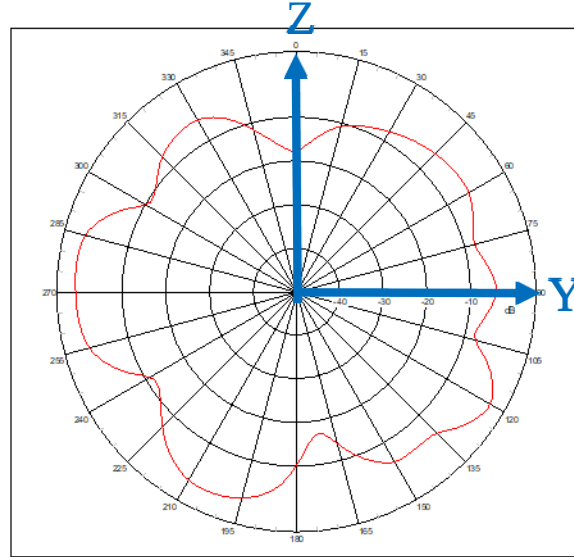
Antenna Pattern

Frequency : 2400MHz

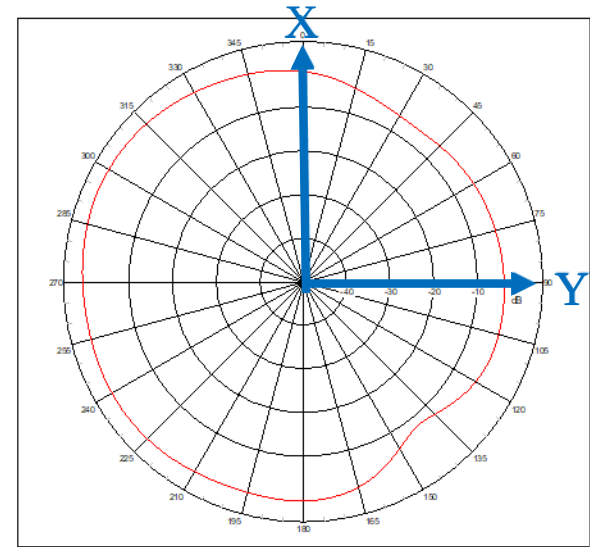
ZX-plane



YZ-plane



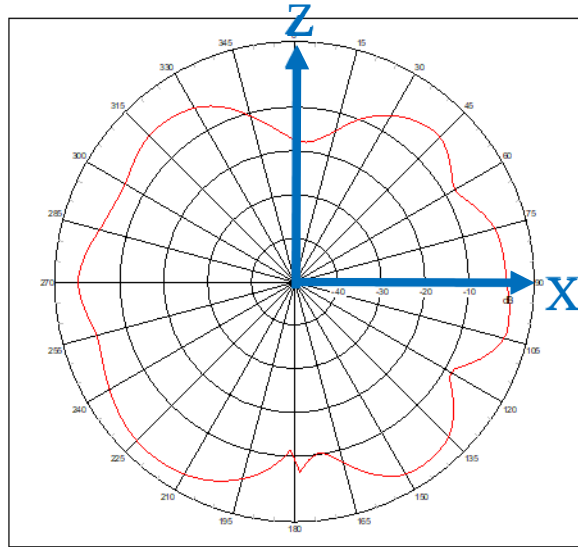
XY-plane



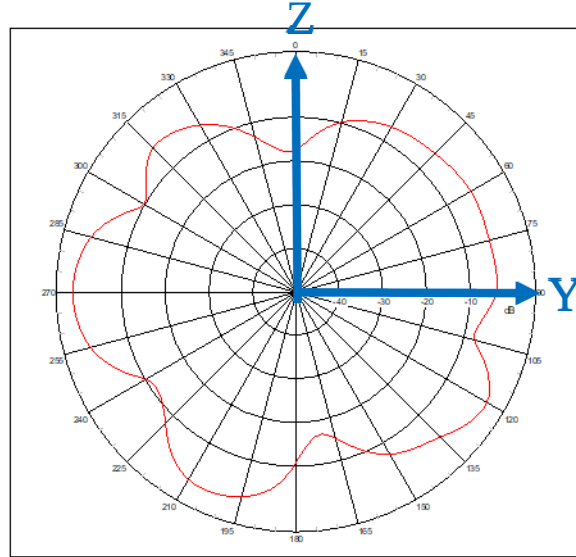
Antenna Pattern

Frequency : 2450MHz

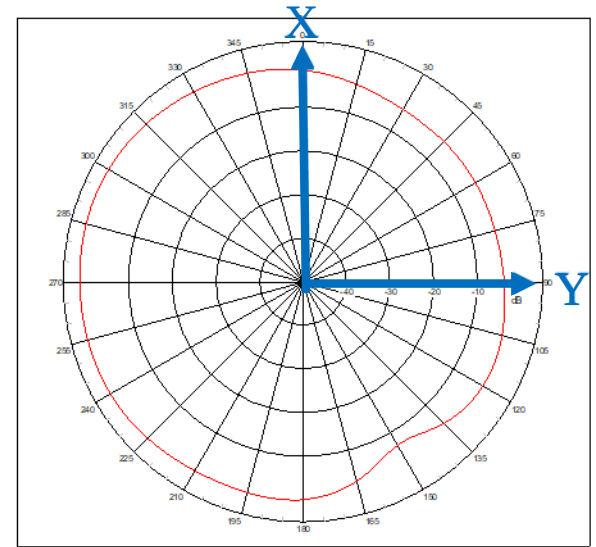
ZX-plane



YZ-plane



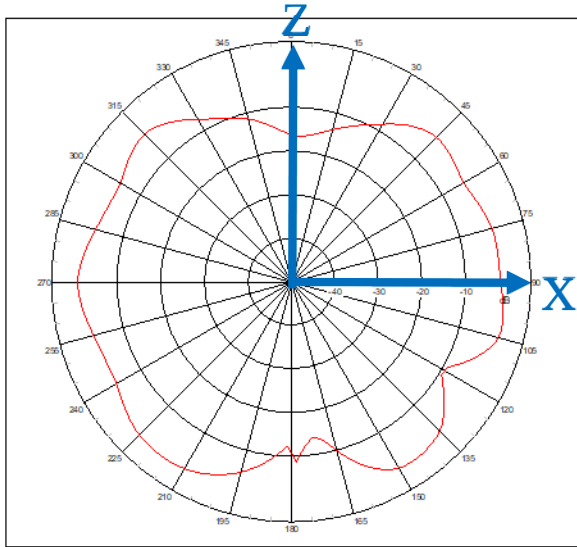
XY-plane



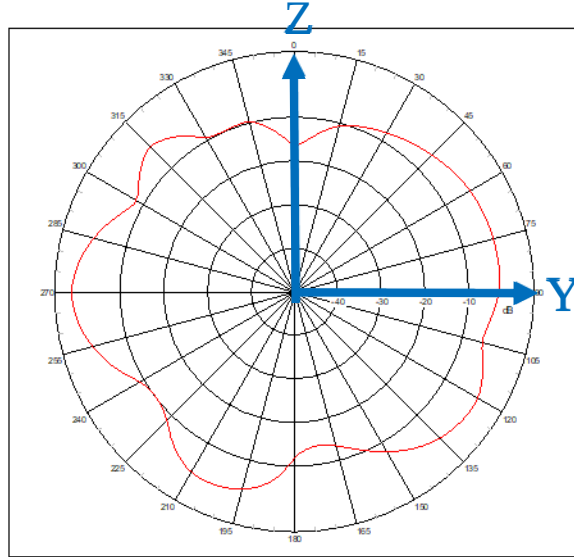
Antenna Pattern

Frequency : 2500MHz

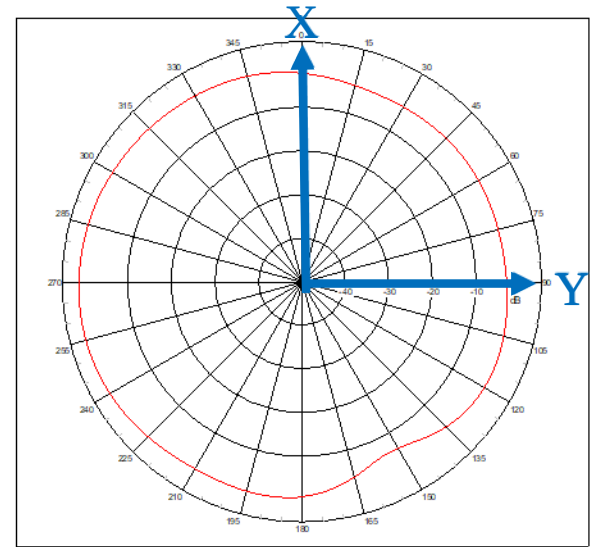
ZX-plane



YZ-plane



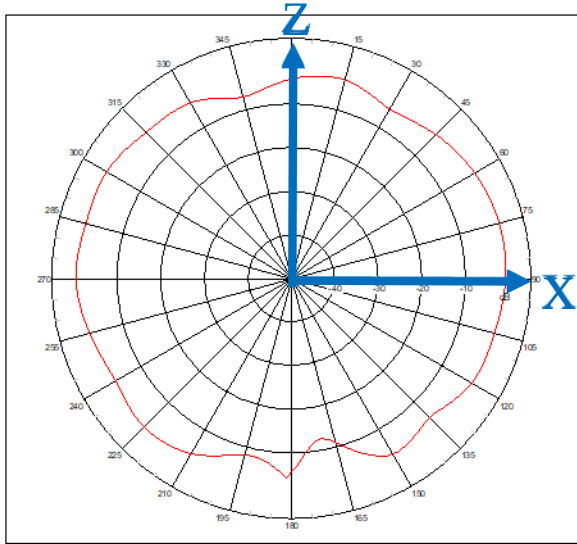
XY-plane



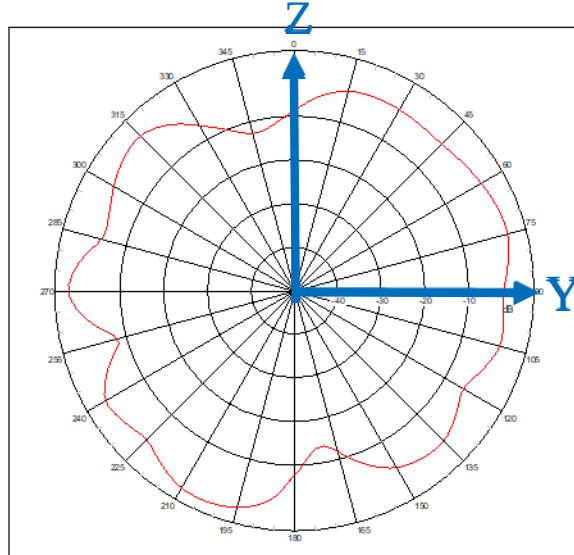
Antenna Pattern

Frequency : 5150MHz

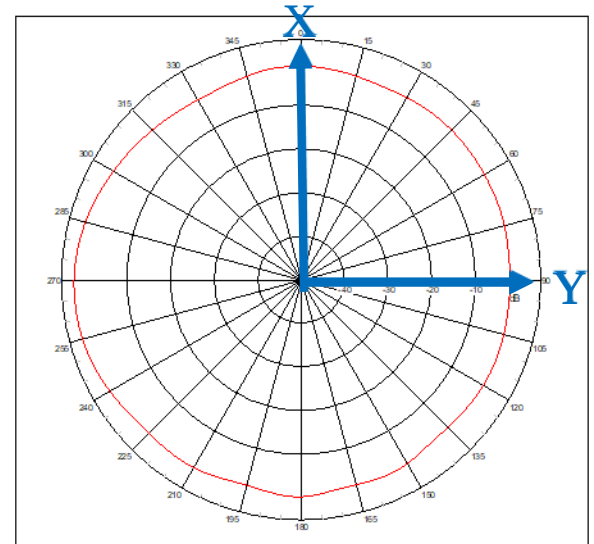
ZX-plane



YZ-plane



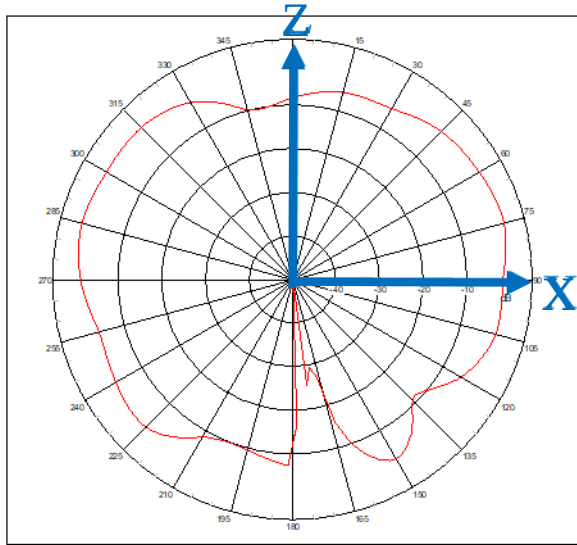
XY-plane



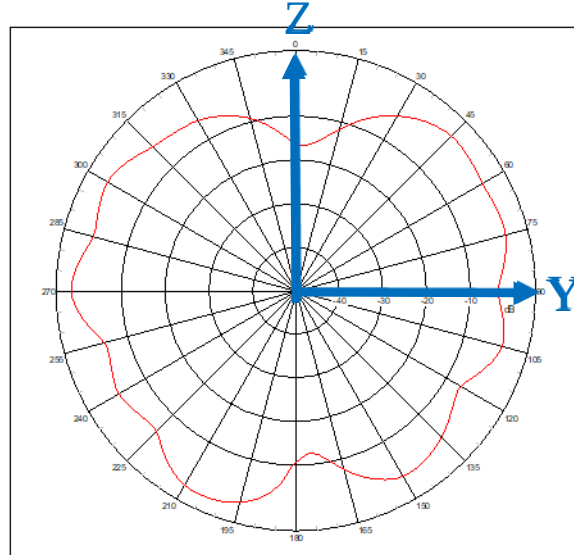
Antenna Pattern

Frequency : 5600MHz

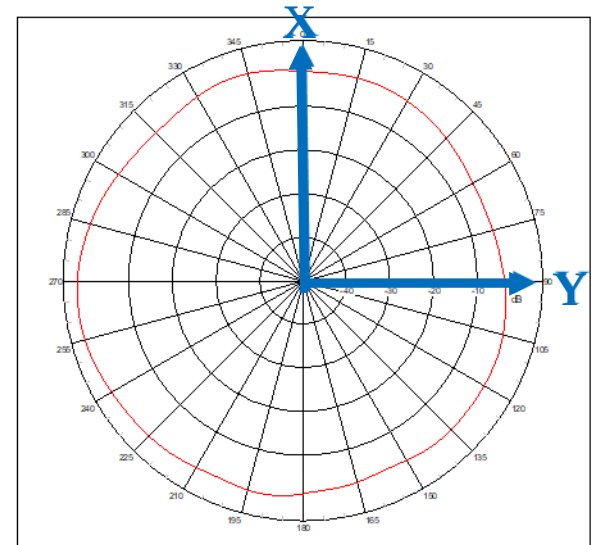
ZX-plane



YZ-plane



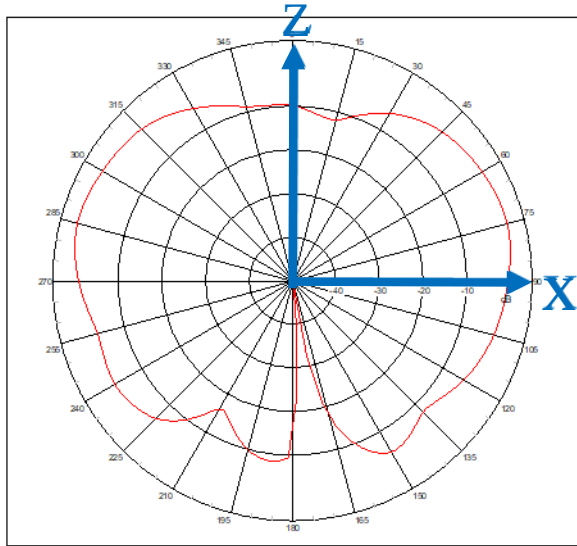
XY-plane



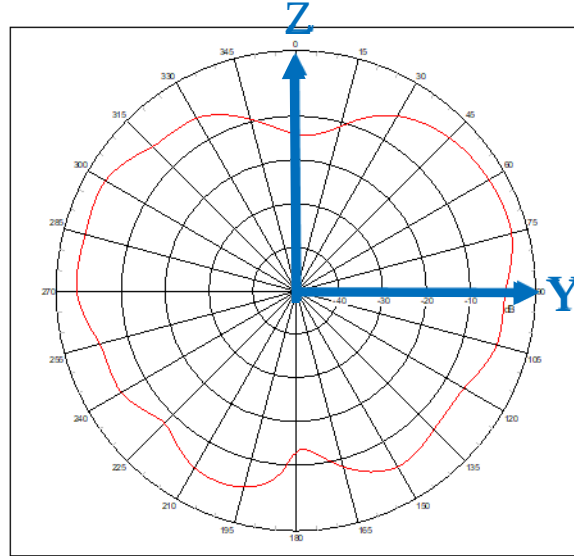
Antenna Pattern

Frequency : 5850MHz

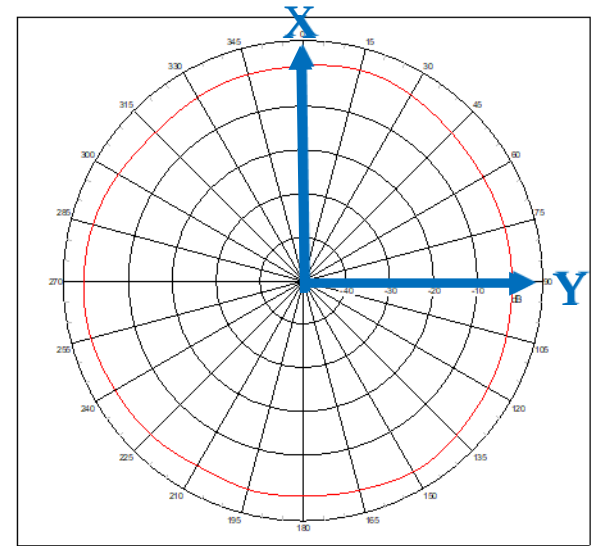
ZX-plane



YZ-plane



XY-plane





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