

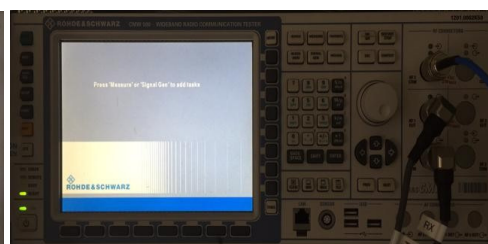
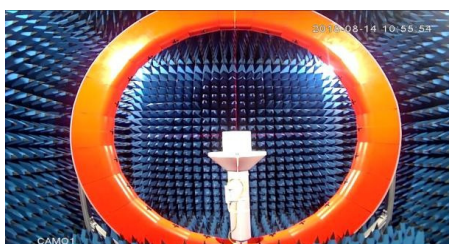
Antenna Specification

1. Electrical Specification

Characteristics	Specifications	Unit
Outline Dimensions	15x8	mm
Frequency	2400-2500	MHz
Impedance	50	Ω
VSWR	≤ 2	
Polarization	Linear Polarization	
Gain	2.26	dBi
Efficiency	>50	%
Connector Type	MHF-3-Plug	
Operating temperature	-20℃~+85℃	
Storage Temp	-20℃~+50℃	

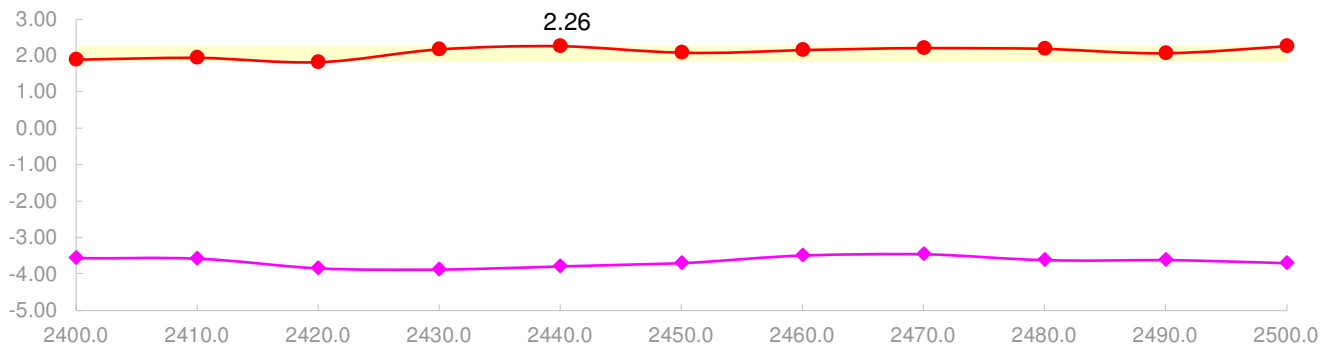
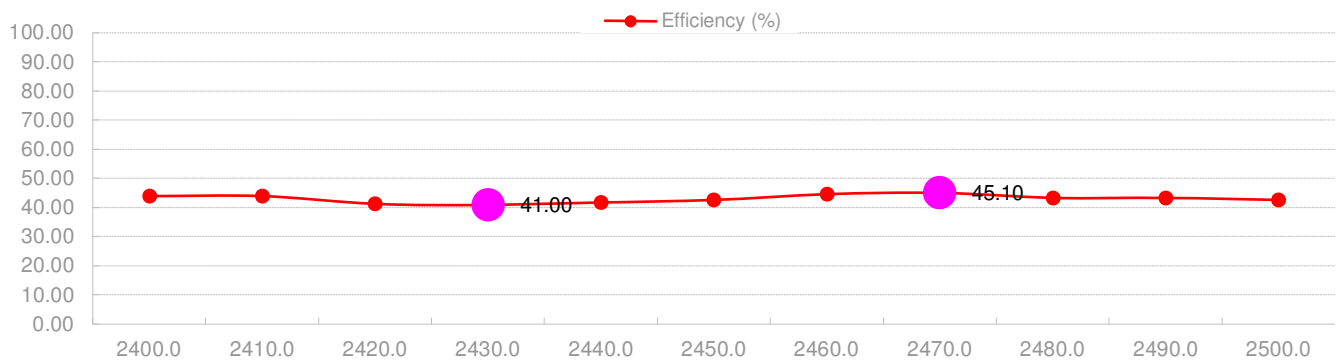
2. Test Items and Equipment

	Test items	Test equipment
S Parameter	1.Return Loss 2.VSWR	Network analyzer (Agilent E5071B)
The whole machine of Passive parameters	1.Frequency 2.Gain 3.Radiation Pattern	1.3D microwave darkroom (5m*5m*5m) 2.Network analyzer (Agilent E5071B)
The whole machine of Active parameters	1.TRP 2.TIS	1.3D microwave darkroom (5m*5m*5m) 2.Comprehensive test instrument (CMW500)



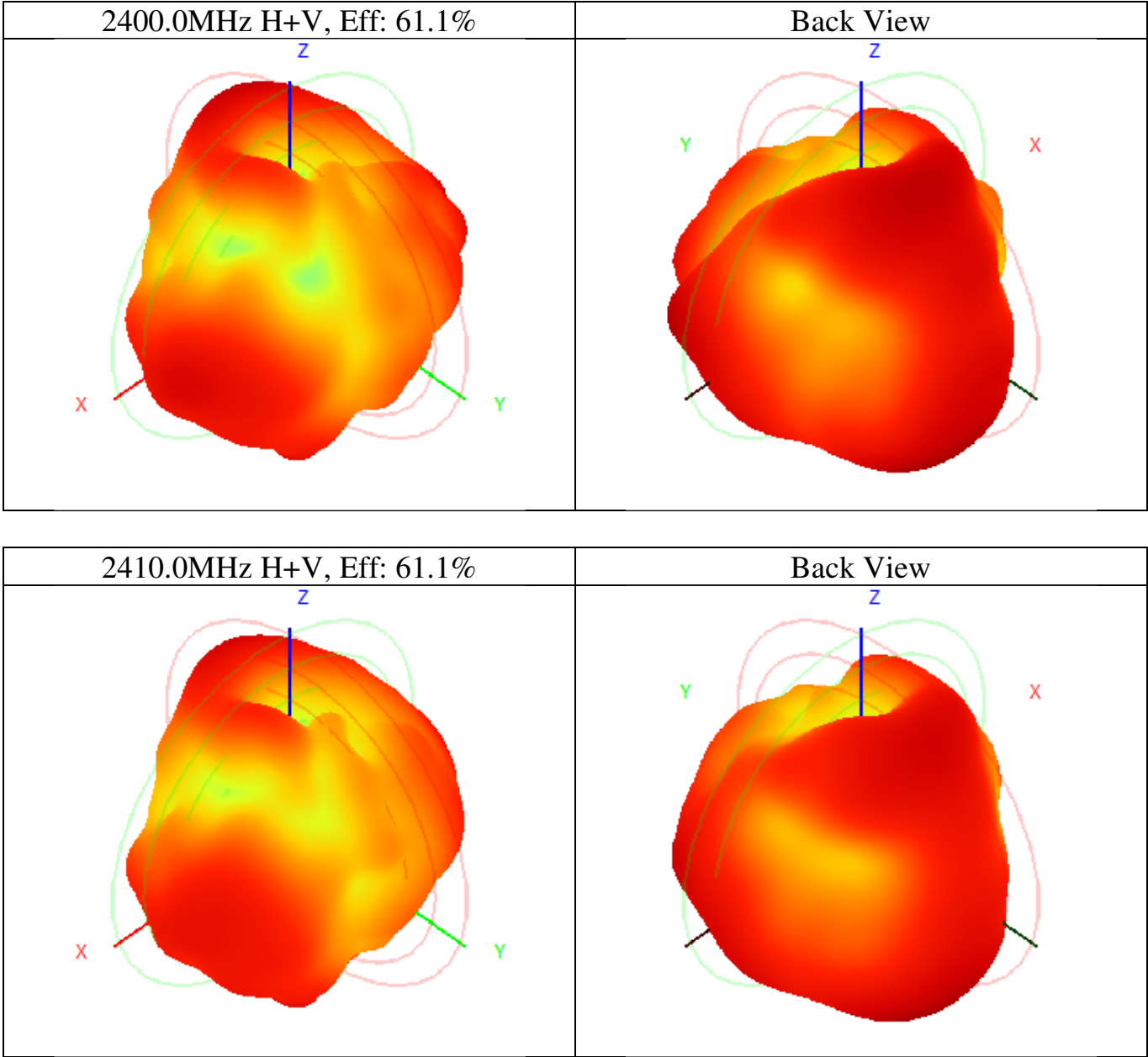
3.Efficiency and Gain

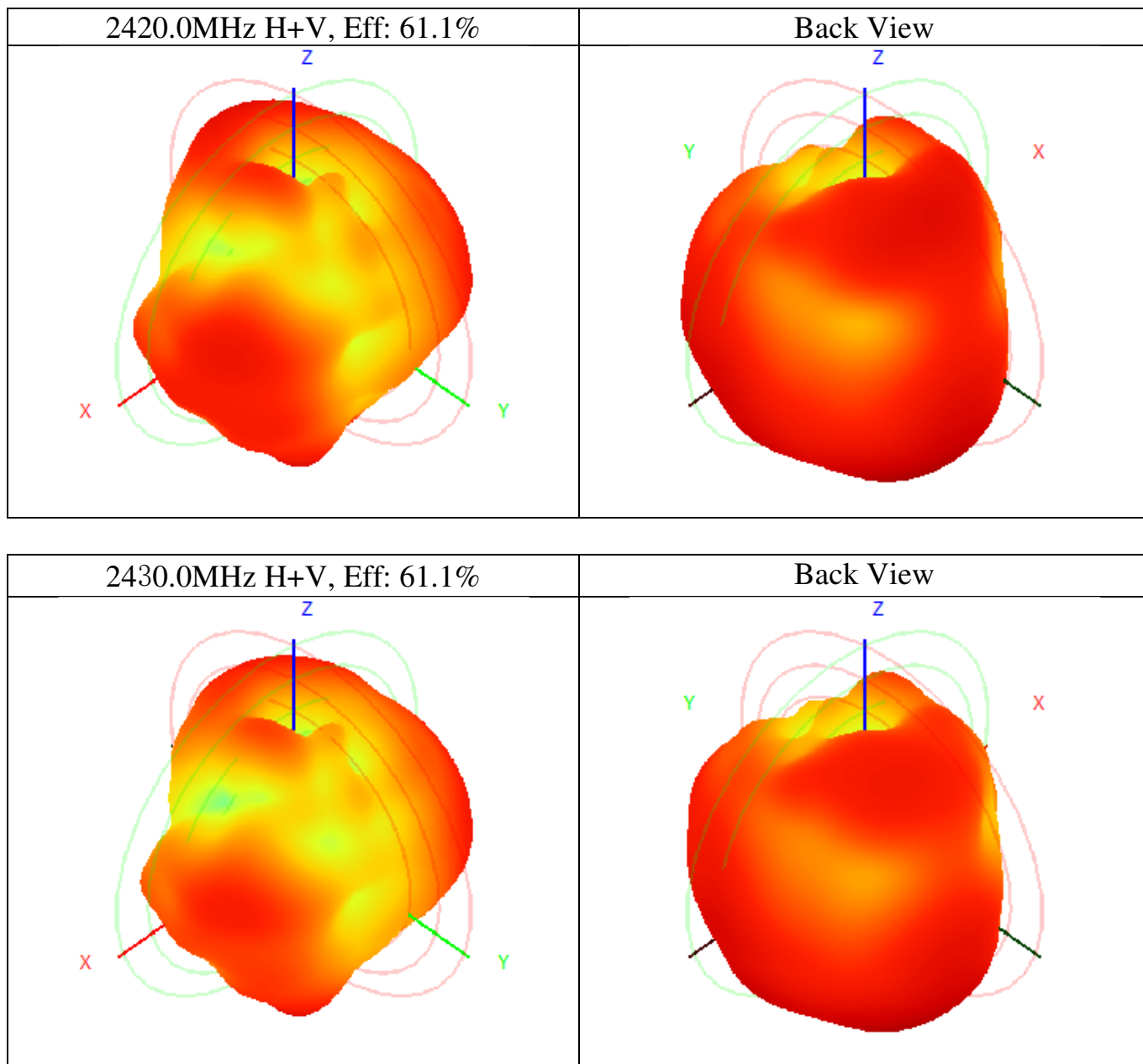
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-3.57	-3.57	-3.84	-3.87	-3.79	-3.69	-3.50	-3.46	-3.62	-3.62	-3.70
Gain (dBi)	1.88	1.93	1.82	2.17	2.26	2.07	2.14	2.20	2.18	2.06	2.25
Efficiency (%)	43.96	43.93	41.28	41.00	41.79	42.71	44.71	45.10	43.44	43.44	42.69
Directivity (dB)	5.45	5.51	5.66	6.04	6.05	5.77	5.64	5.66	5.80	5.68	5.95
Peak Gain Position (Theta)	145.00	144.00	143.00	143.00	143.00	144.00	146.00	145.00	147.00	153.00	149.00
Peak Gain Position (Phi)	249.00	245.00	241.00	238.00	237.00	232.00	227.00	222.00	221.00	184.00	171.00
Efficiency ThetaPol (%)	27.67	28.05	26.58	26.35	26.64	26.45	26.80	25.92	23.83	22.29	20.43
Efficiency PhiPol (%)	16.29	15.87	14.71	14.65	15.15	16.26	17.91	19.18	19.61	21.15	22.26
Upper Hem. Efficiency (%)	17.54	16.95	15.68	14.87	14.95	15.22	15.41	14.96	13.84	13.19	12.93
Lower Hem. Efficiency (%)	26.42	26.98	25.61	26.13	26.84	27.50	29.30	30.15	29.61	30.25	29.76

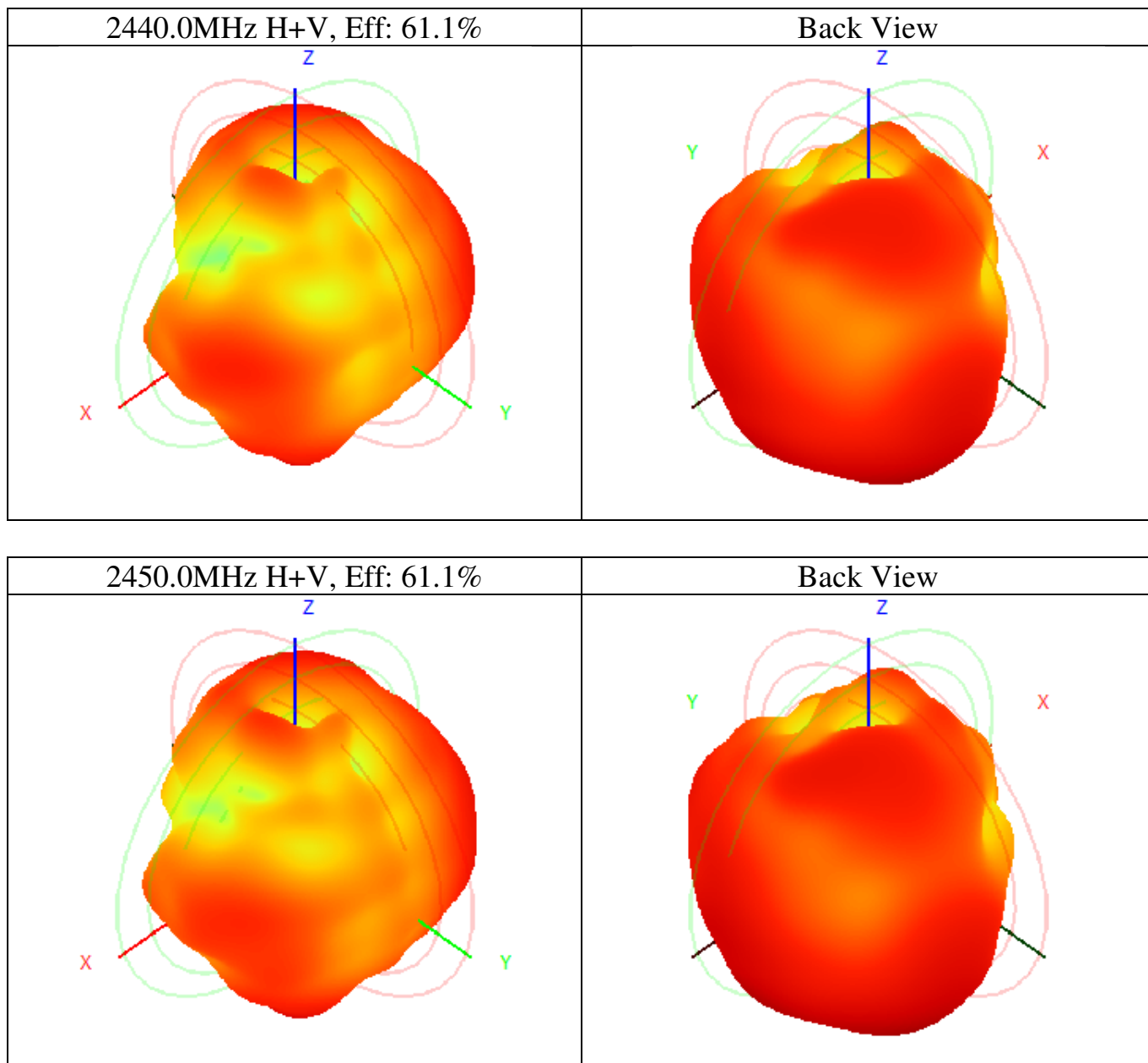


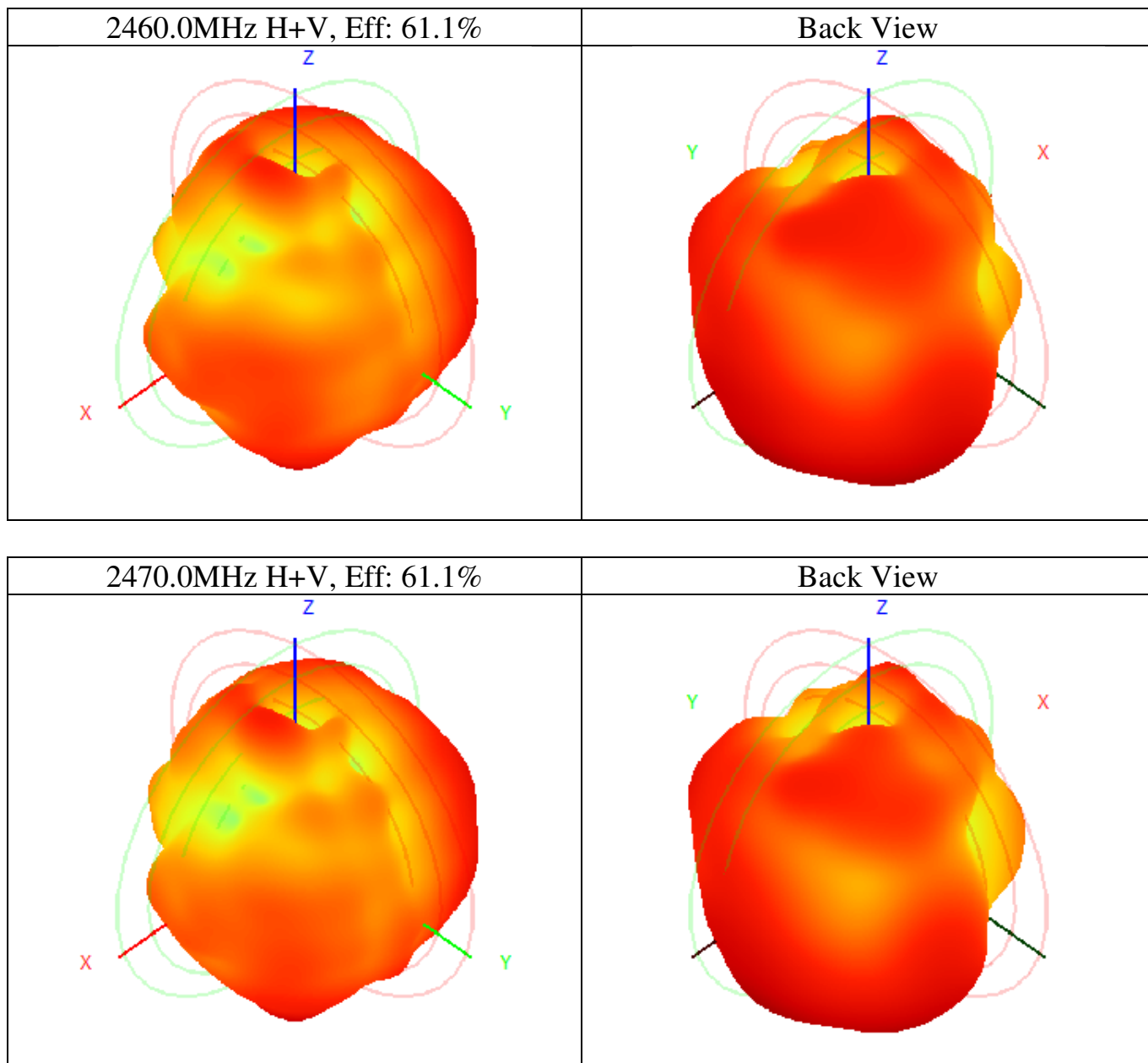
4. Radiation Pattern

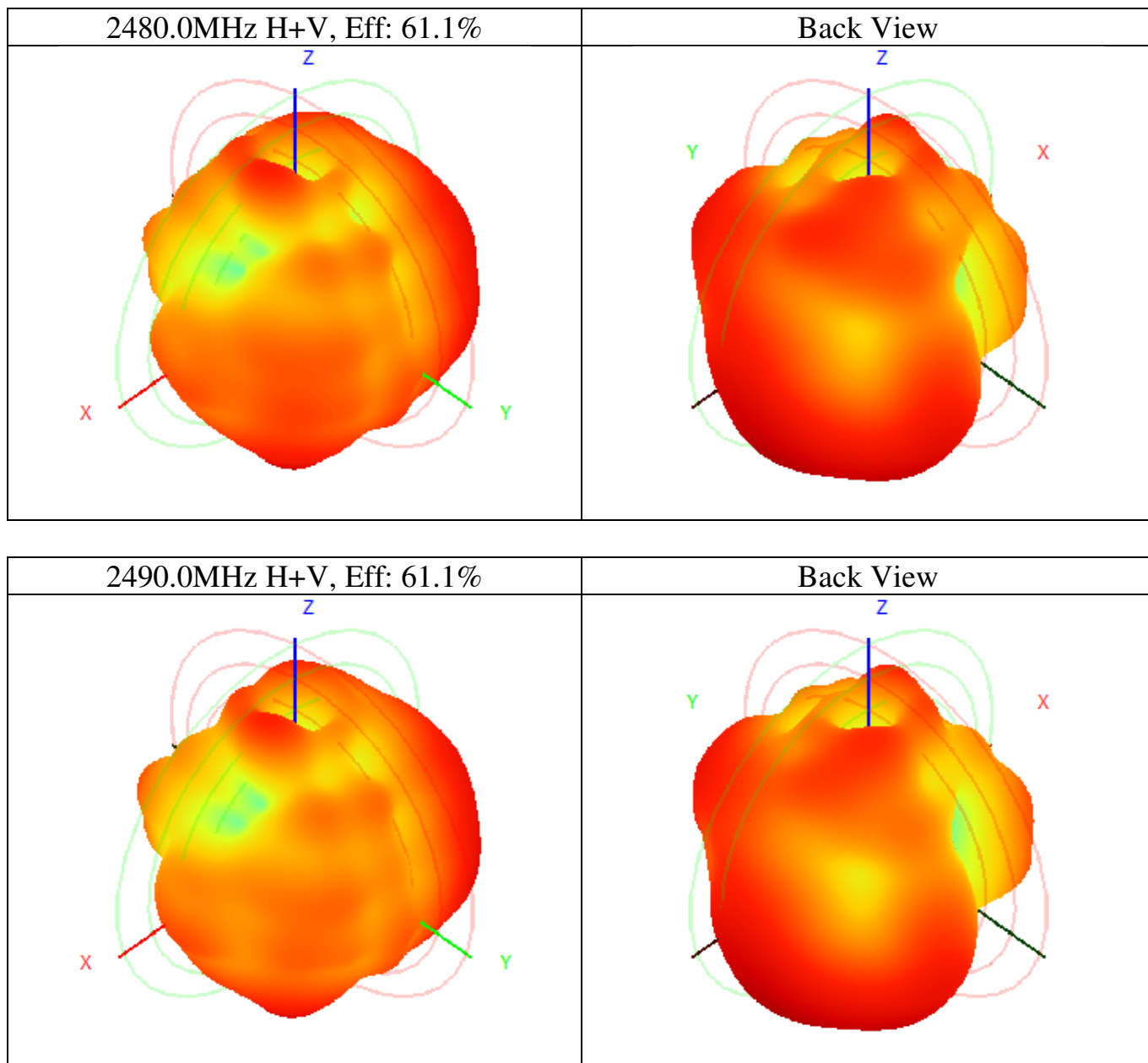
4-1 Antenna 3D Radiation Pattern

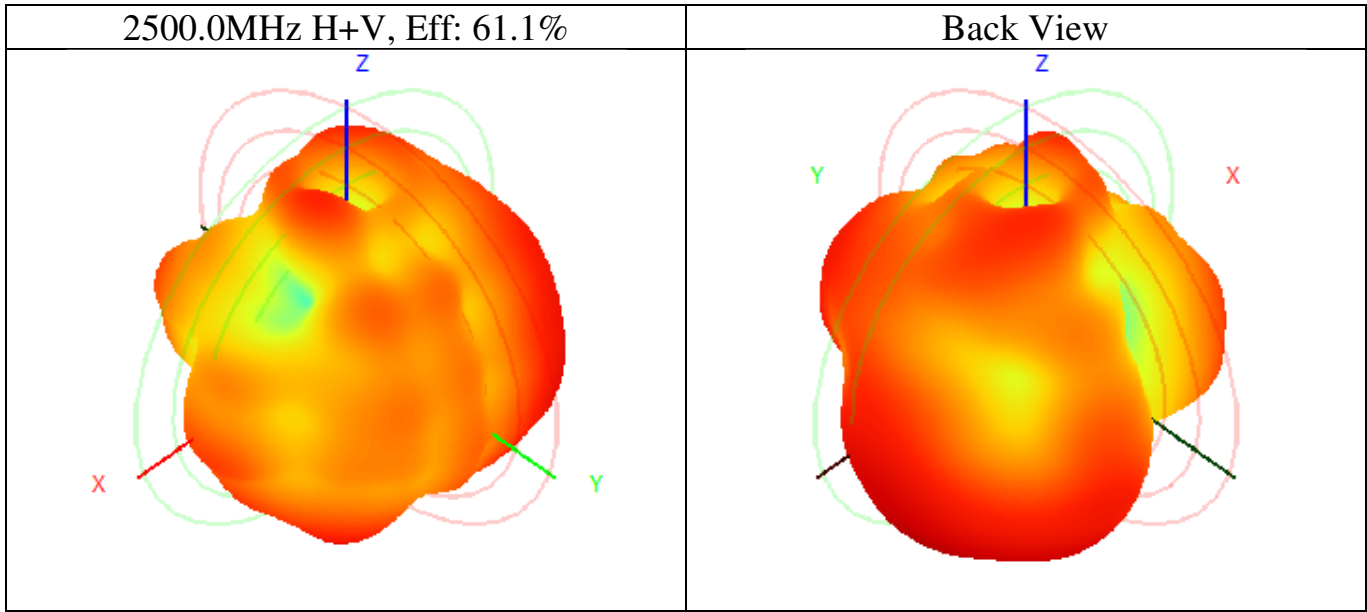






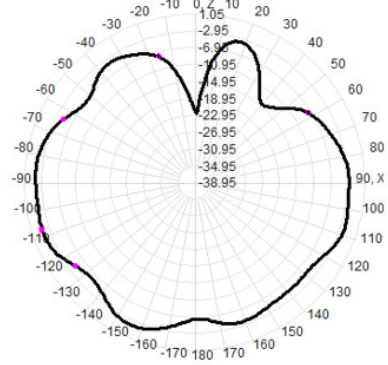




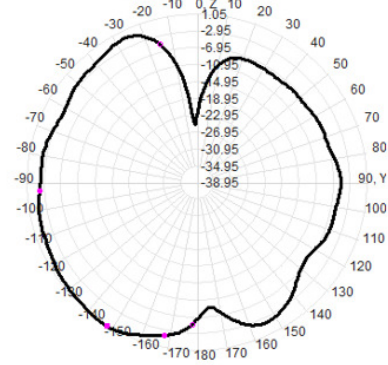


4-2 Antenna 2D Radiation Pattern

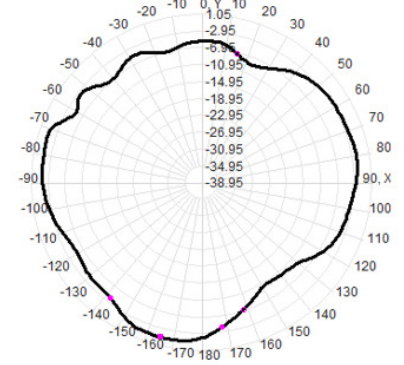
2400.0MHz Total(E1-XZ), Max=-1.52dBi



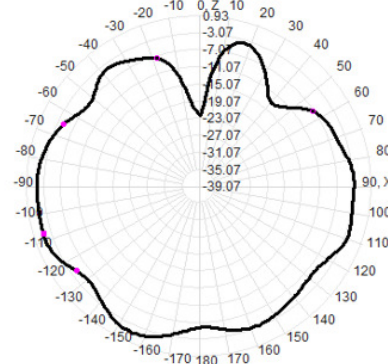
2400.0MHz Total(E2-YZ), Max=1.05dBi



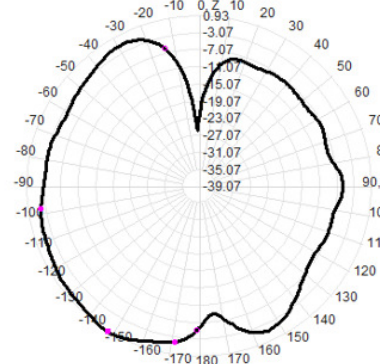
Total(H-XY), Max=-1.16dBi, CirD=9.49



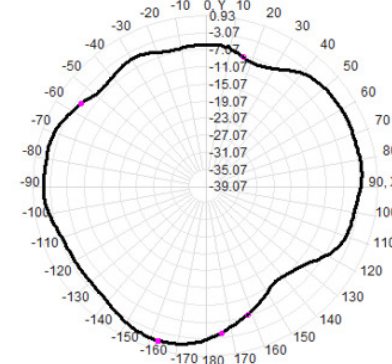
2410.0MHz Total(E1-XZ), Max=-1.42dBi



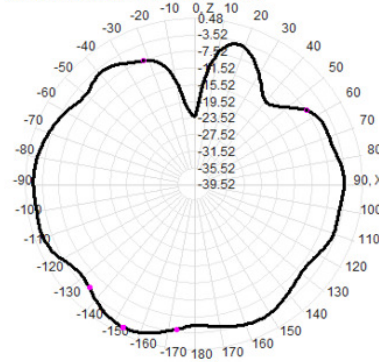
2410.0MHz Total(E2-YZ), Max=0.93dBi



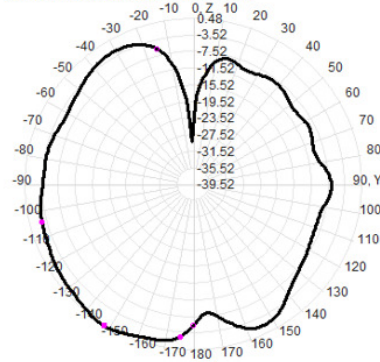
Total(H-XY), Max=-1.40dBi, CirD=10.19



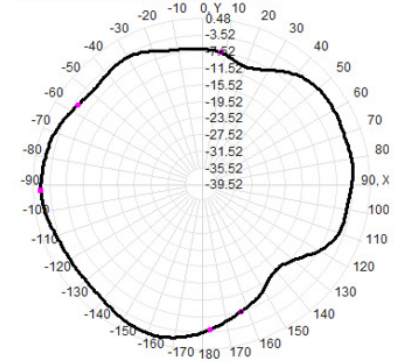
2420.0MHz Total(E1-XZ), Max=-1.31dBi



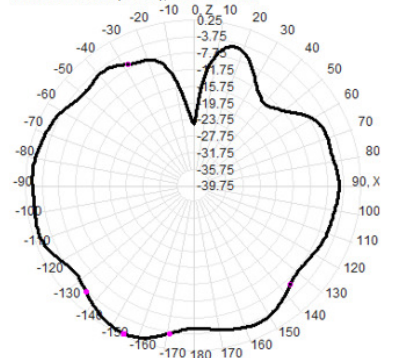
2420.0MHz Total(E2-YZ), Max=0.48dBi



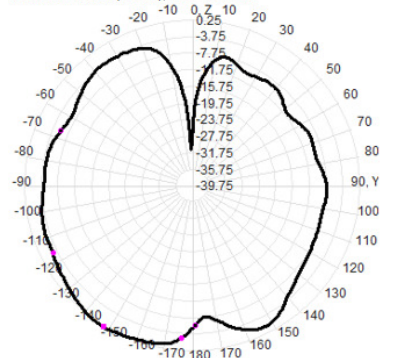
Total(H-XY), Max=-1.43dBi, CirD=11.11



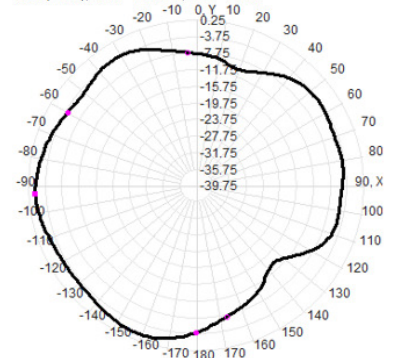
2430.0MHz Total(E1-XZ), Max=-0.53dBi



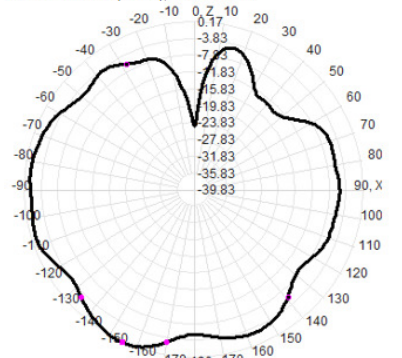
2430.0MHz Total(E2-YZ), Max= 0.25dBi



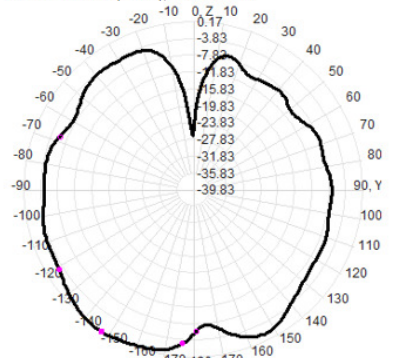
Total(H-XY), Max=-1.40dBi, CirD=12.30



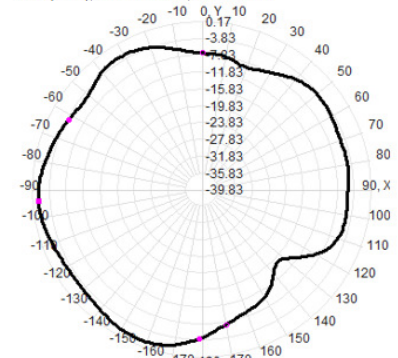
2440.0MHz Total(E1-XZ), Max= 0.13dBi



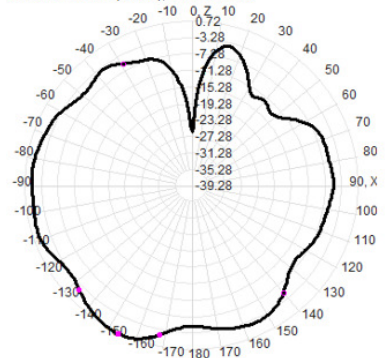
2440.0MHz Total(E2-YZ), Max= 0.17dBi



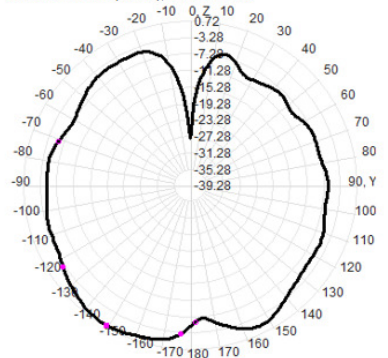
Total(H-XY), Max=-1.26dBi, CirD=13.88



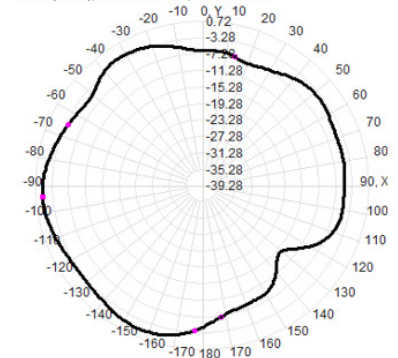
2450.0MHz Total(E1-XZ), Max= 0.72dBi



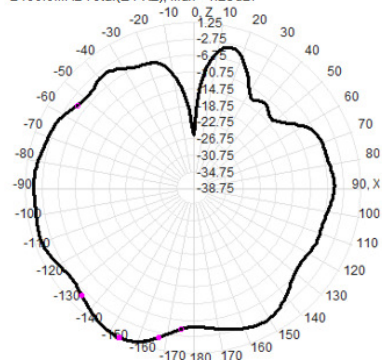
2450.0MHz Total(E2-YZ), Max= 0.09dBi



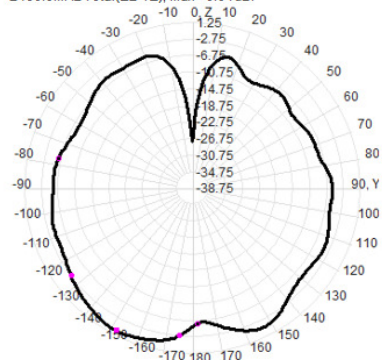
Total(H-XY), Max=-0.94dBi, CirD=13.78



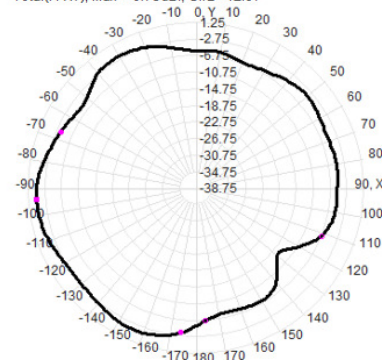
2460.0MHz Total(E1-XZ), Max= 1.25dBi



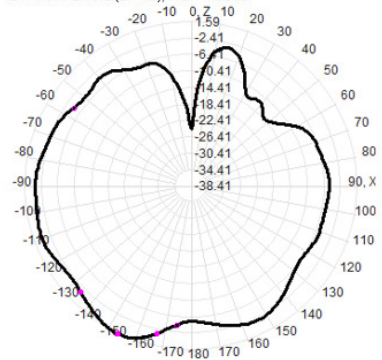
2460.0MHz Total(E2-YZ), Max= 0.01dBi



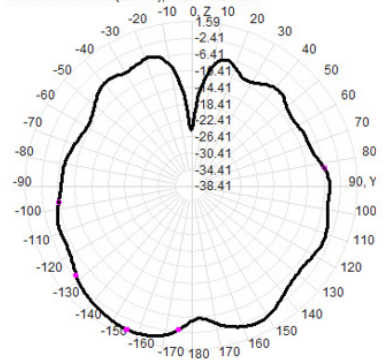
Total(H-XY), Max= -0.75dBi, CirD=12.97



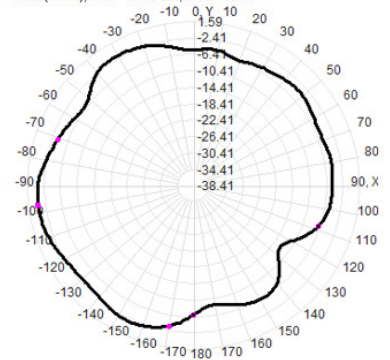
2470.0MHz Total(E1-XZ), Max= 1.59dBi



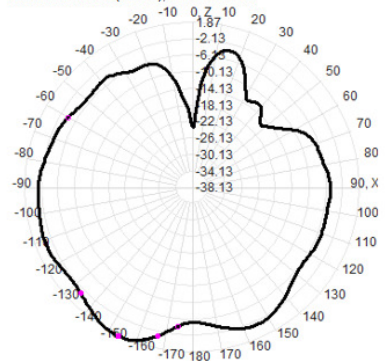
2470.0MHz Total(E2-YZ), Max= -0.21dBi



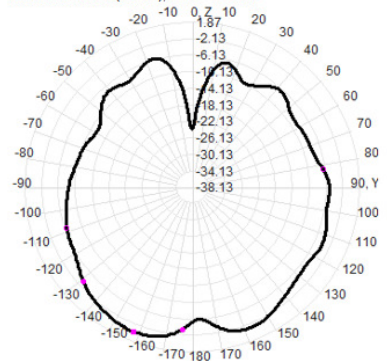
Total(H-XY), Max= -0.85dBi, CirD=12.17



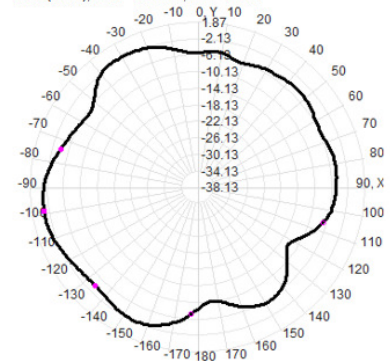
2480.0MHz Total(E1-XZ), Max= 1.87dBi



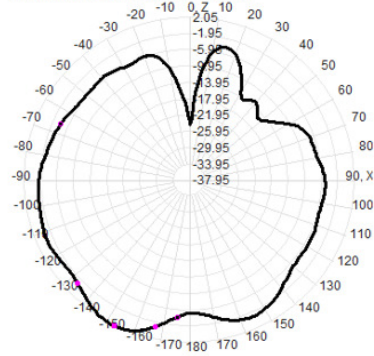
2480.0MHz Total(E2-YZ), Max= -0.61dBi



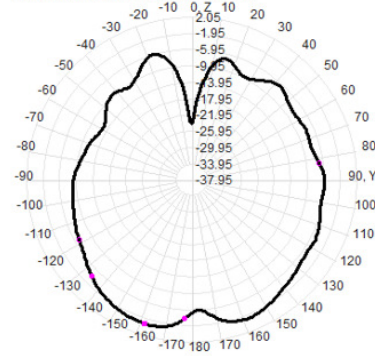
Total(H-XY), Max= -1.10dBi, CirD=11.42



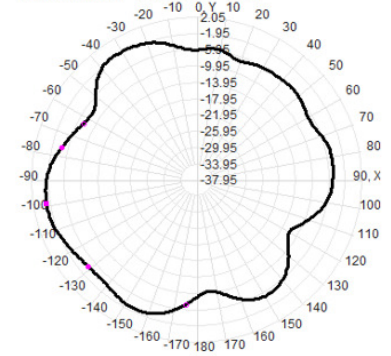
2490.0MHz Total(E1-XZ), Max= 2.05dBi



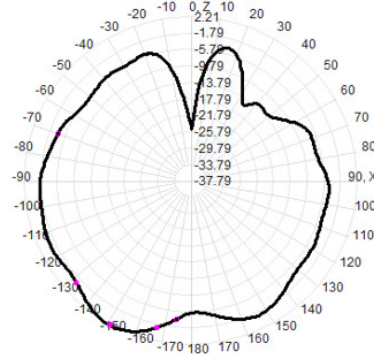
2490.0MHz Total(E2-YZ), Max= -0.97dBi



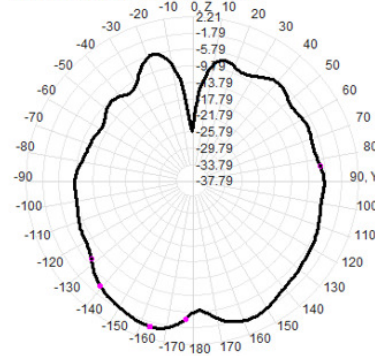
Total(H-XY), Max= -1.23dBi, CirD=11.09



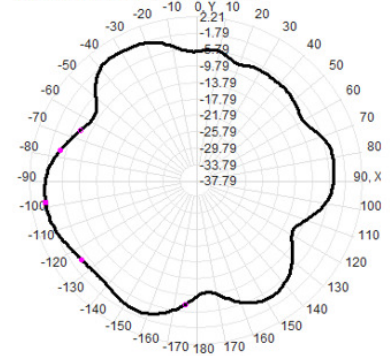
2500.0MHz Total(E1-XZ), Max= 2.21dBi



2500.0MHz Total(E2-YZ), Max= -0.96dBi



Total(H-XY), Max= -1.30dBi, CirD=10.38



5. Antenna dimension

