



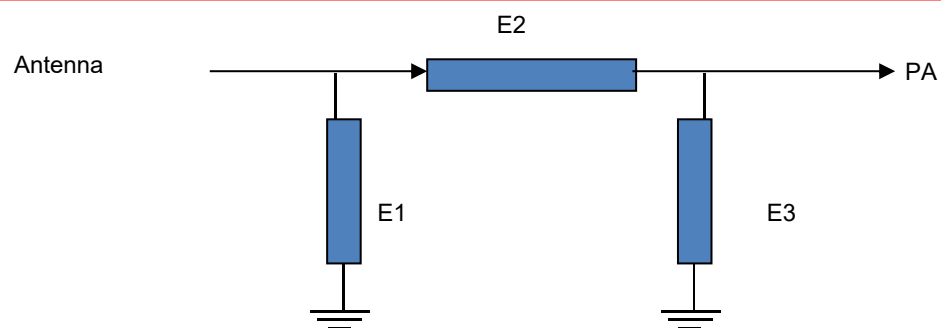
远德电子（深圳）有限公司

Yuan de Electronics (Shenzhen) Co. LTD

MCP004 Antenna test report V1

time: 2022/3/30

Modification of the antenna matching circuit



TX

Element	Value
E1(0402)	N/A
E2(0402)	原匹配
E3(0402)	N/A

Antenna impedance parameters test

TX

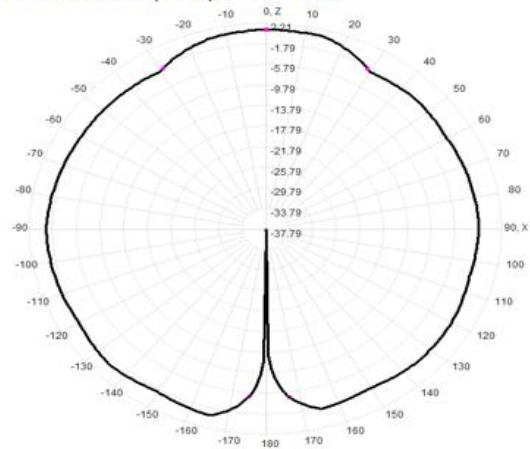


Antenna efficiency parameter test

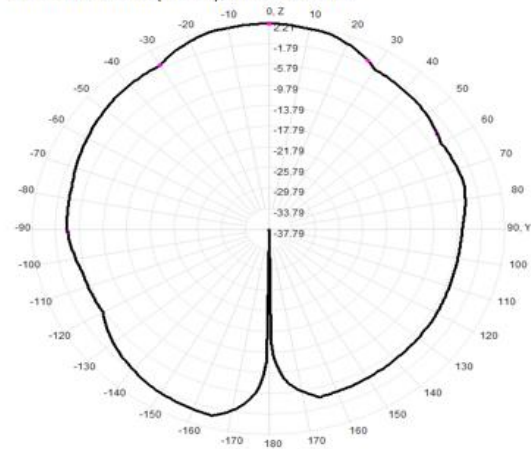
TX			
Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400.0	-2.28	2.21	49.10
2410.0	-2.23	2.11	49.87
2420.0	-2.20	1.83	50.29
2430.0	-2.16	1.74	50.87
2440.0	-2.16	1.64	50.87
2450.0	-2.18	1.51	50.50
2460.0	-2.28	1.11	49.20
2470.0	-2.44	0.56	46.97
2480.0	-2.58	0.41	45.25
2490.0	-2.58	0.44	45.16
2500.0	-2.55	0.41	45.58

Antenna 2D pattern

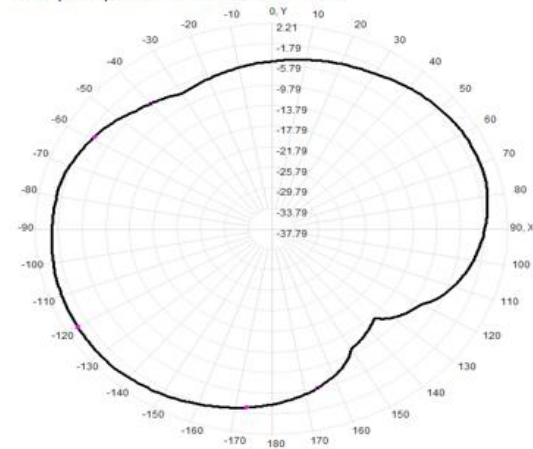
2400.0MHz Total(E1-XZ), Max= 1.01dBi



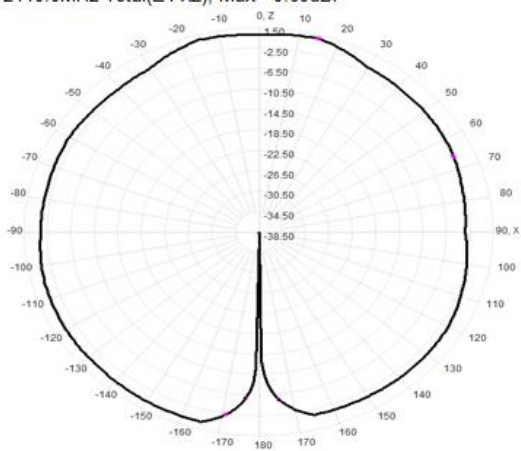
2400.0MHz Total(E2-YZ), Max= 2.21dBi



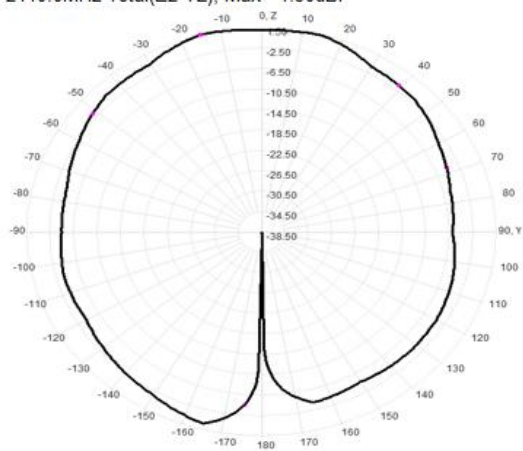
Total(H-XY), Max= 0.11dBi, CirD=13.39



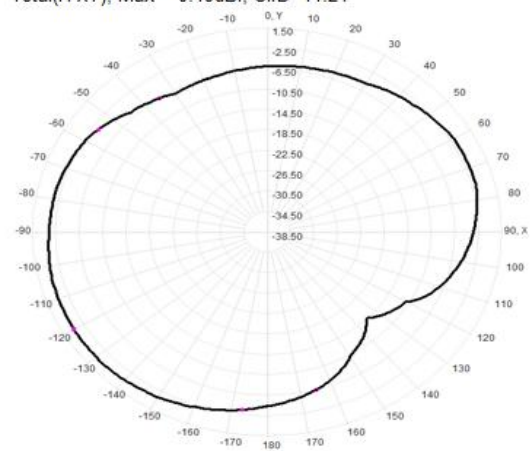
2440.0MHz Total(E1-XZ), Max= 0.69dBi



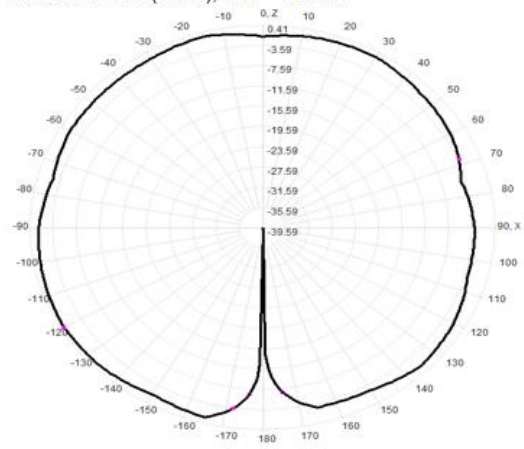
2440.0MHz Total(E2-YZ), Max= 1.50dBi



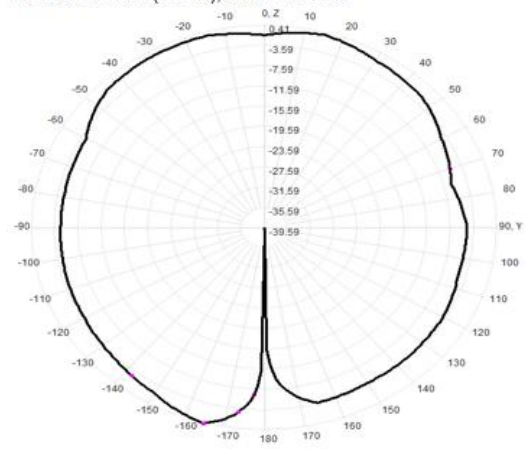
Total(H-XY), Max= -0.49dBi, CirD=14.21



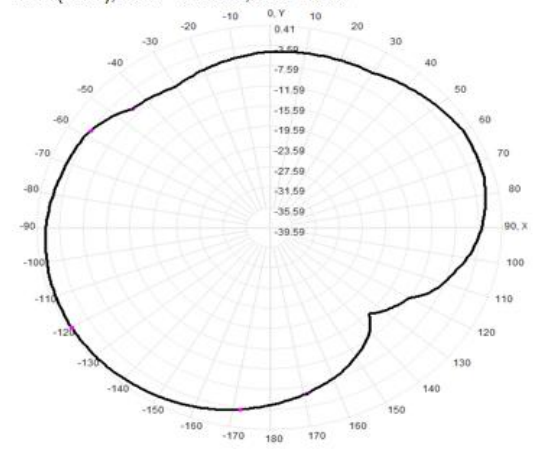
2480.0MHz Total(E1-XZ), Max= -0.29dBi



2480.0MHz Total(E2-YZ), Max= 0.41dBi

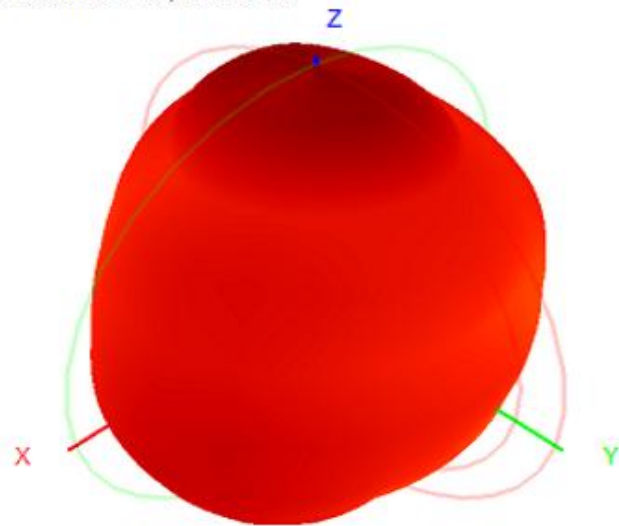


Total(H-XY), Max= -0.30dBi, CirD=15.31

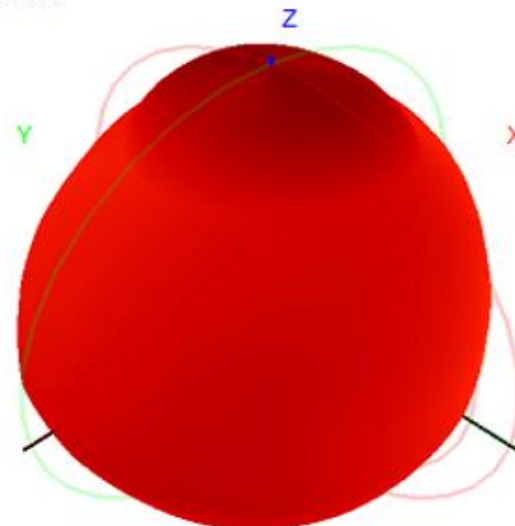


Antenna 3D pattern

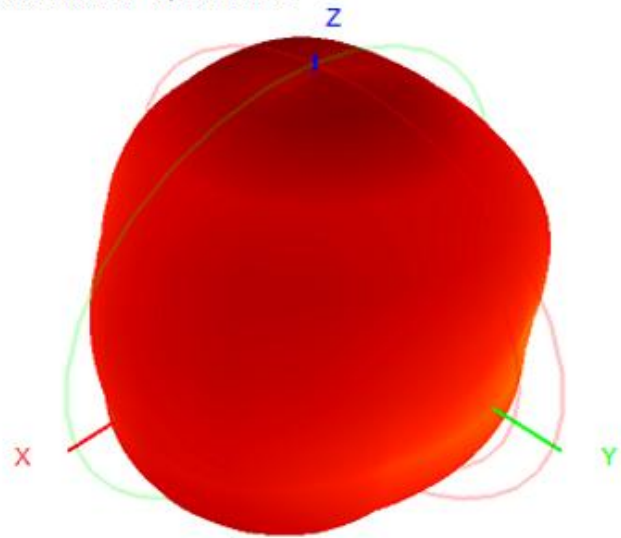
2400.0MHz H+V, Eff. 49.1%



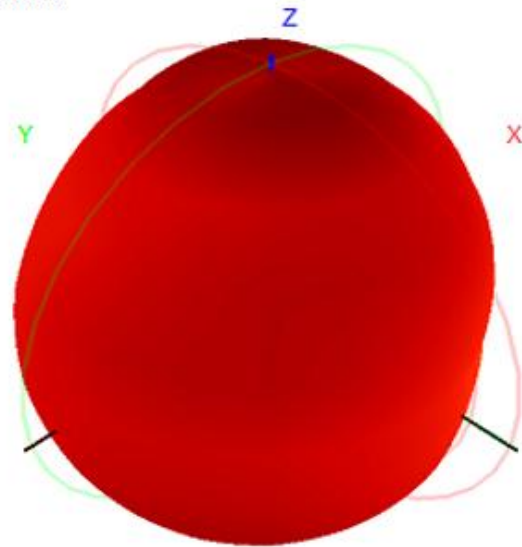
Back View



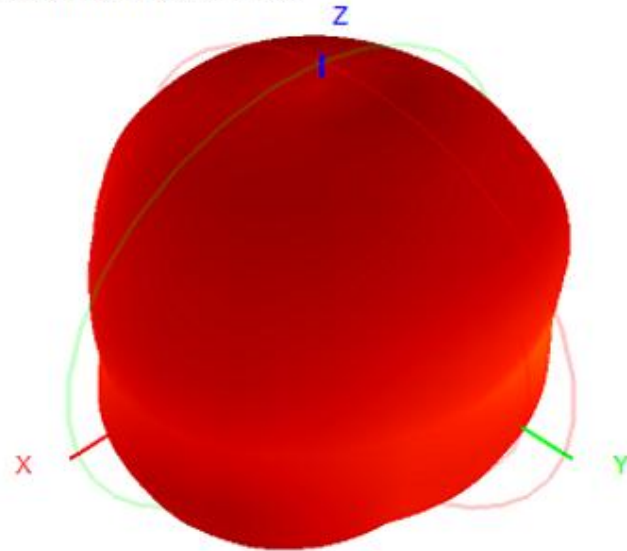
2440.0MHz H+V, Eff: 50.9%



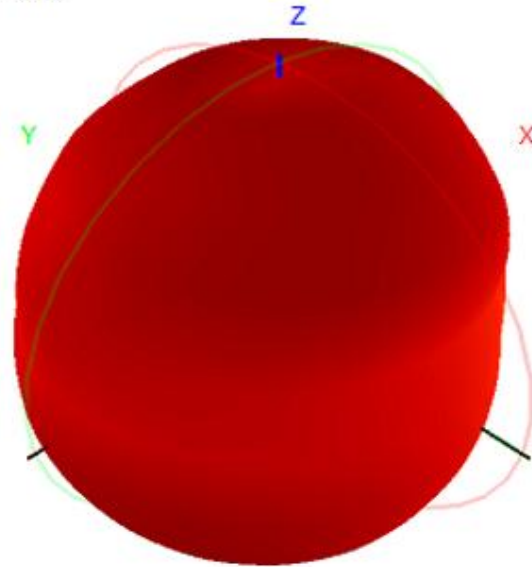
Back View



2480.0MHz H+V, Eff: 45.2%



Back View



Antenna position

