



好天线 · 优比造

东莞市优比电子有限公司

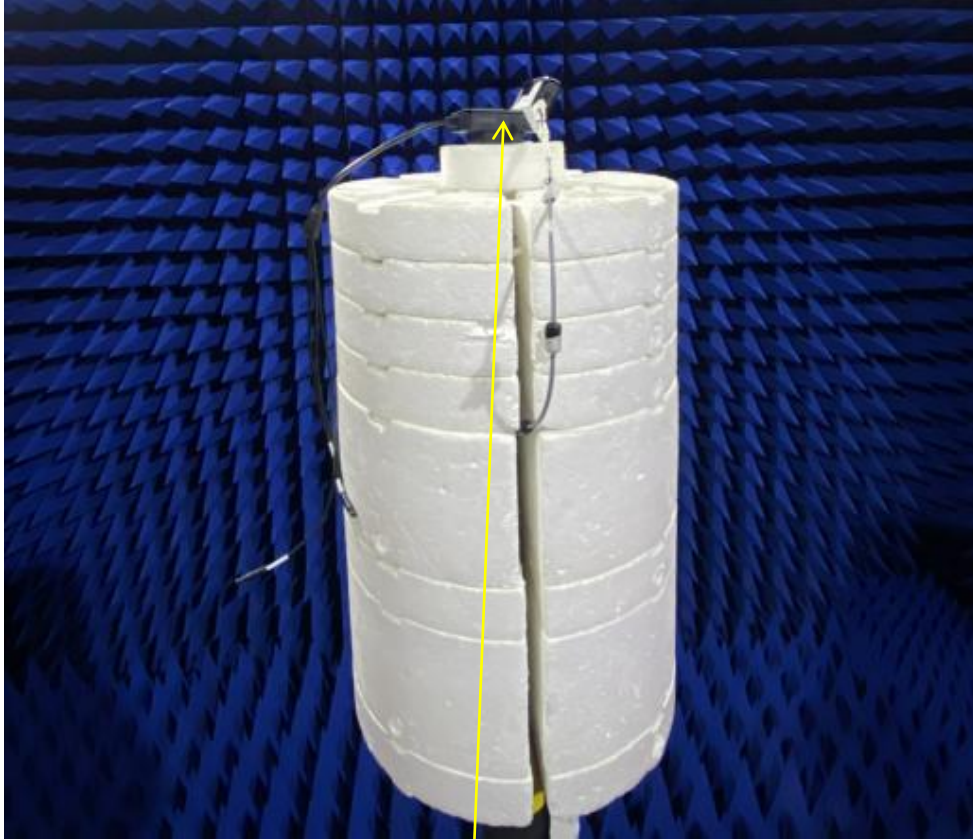
Dongguan UB Electronics Co., Ltd

Antenna Study

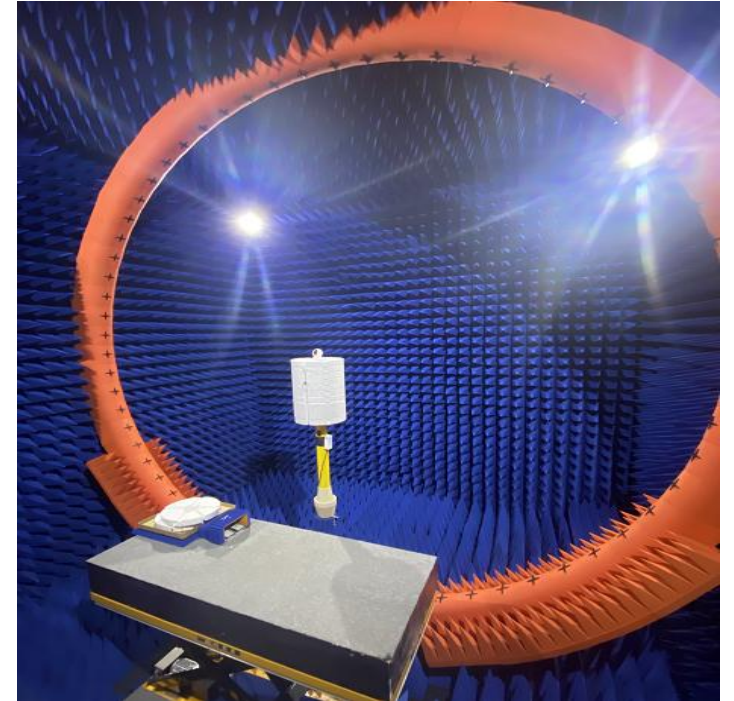
- **Client Name:Key (Shenzhen) Technology Co., Ltd.**
- **Project Name:KY-6120**
- **Debugging frequency band: 2400-2500MHz**
- **Valuation date: 2023.06.14**

FPC Antenna

Dongguan UB Electronics Co., Ltd



Testing environment



Testing 3D microwave darkroom(6m*6m*6m)

FPC Antenna

Dongguan UB Electronics Co., Ltd



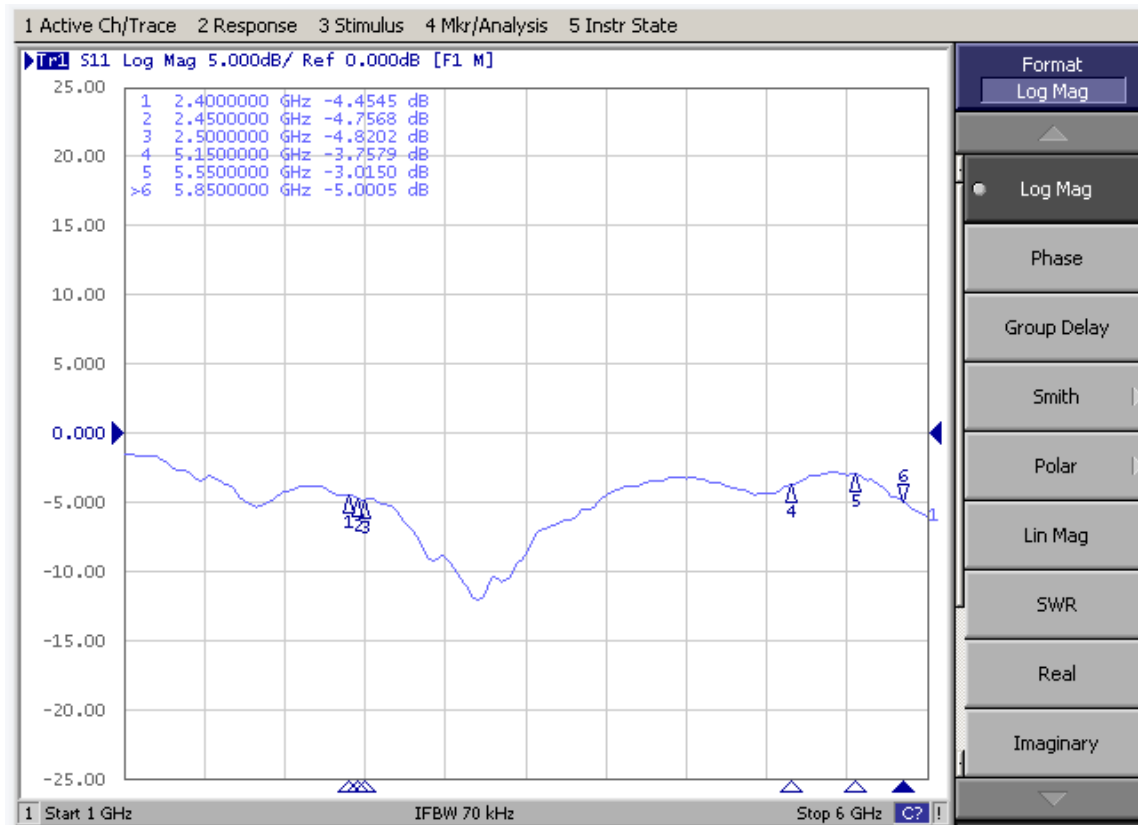
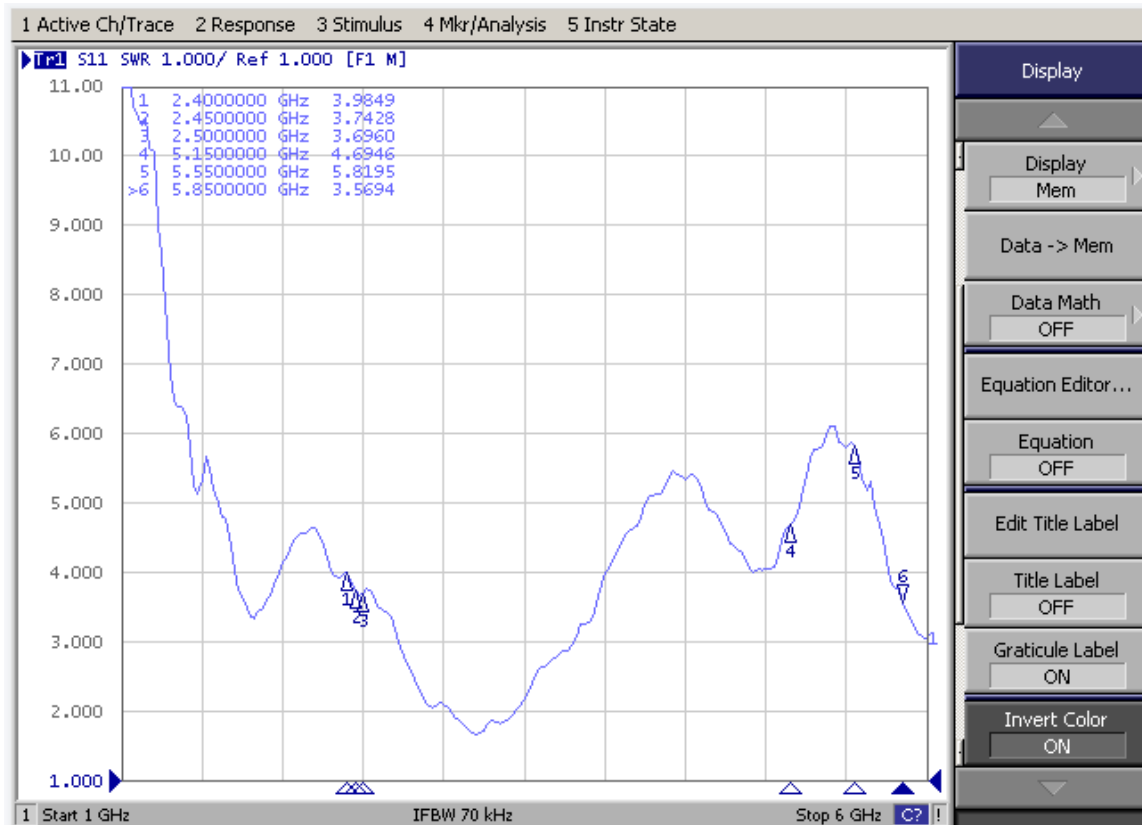
Antenna



- Antenna name: 2.4G
- Antenna Type: FPC
- Covers :
2400-2500MHz

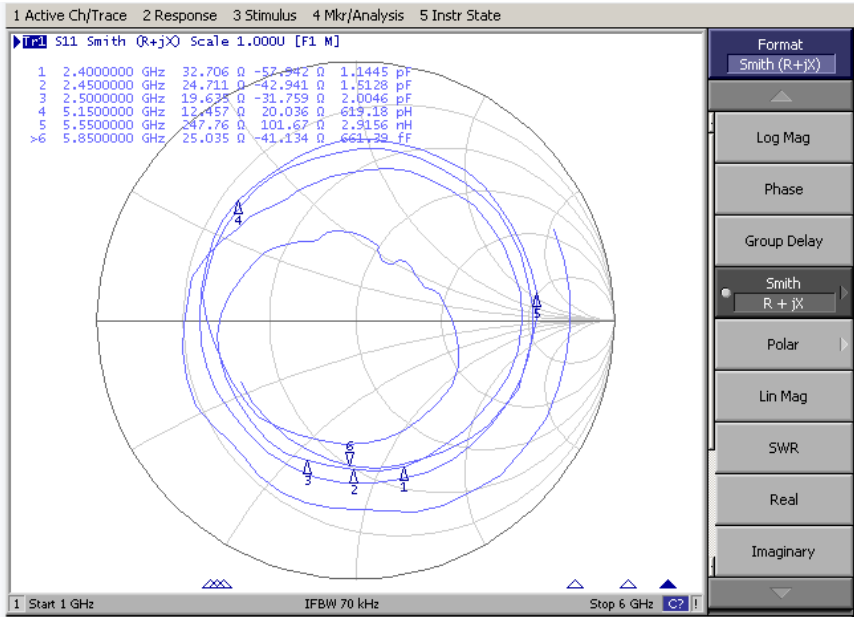
S Parameter_Return Loss&VSWR

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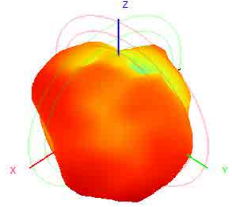
Efficiency and Gain-Smith

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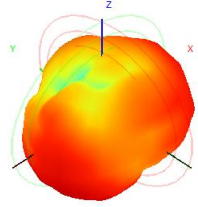


Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	2.07	2.12	2.15	2.02	1.82	2.13	2.34	2.31	2.27	2.11	2.40
Efficiency (%)	39.86	39.01	39.79	39.03	38.44	40.19	40.88	41.51	41.91	40.88	42.55

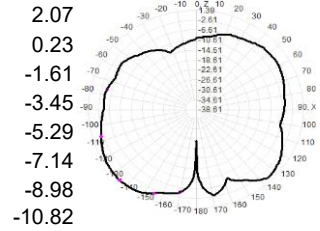
2400.0MHz H+V, Eff: 39.9%



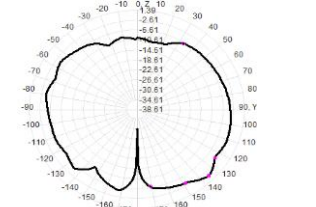
Back View



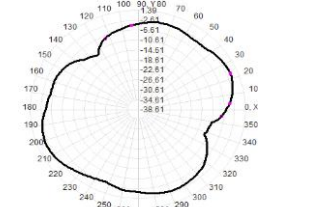
2400.0MHz Total(E1-XZ), Max= 1.39dBi



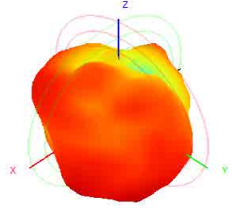
2400.0MHz Total(E2-YZ), Max= -0.96dBi



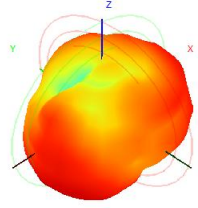
Total(H-XY), Max= -1.49dBi, CirD=10.77



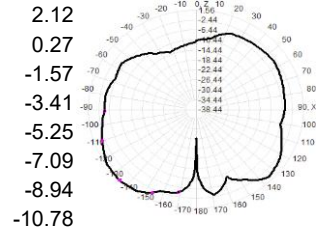
2410.0MHz H+V, Eff: 39.0%



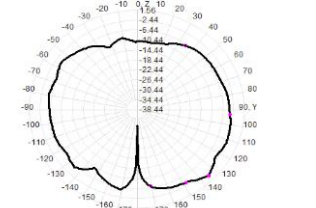
Back View



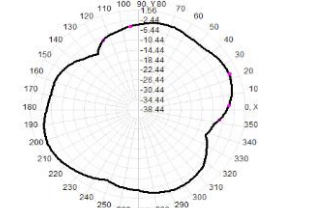
2410.0MHz Total(E1-XZ), Max= 1.56dBi



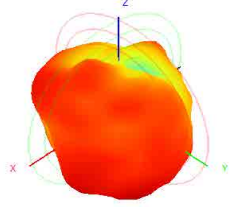
2410.0MHz Total(E2-YZ), Max= -1.00dBi



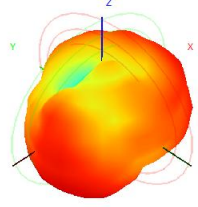
Total(H-XY), Max= -1.79dBi, CirD=9.93



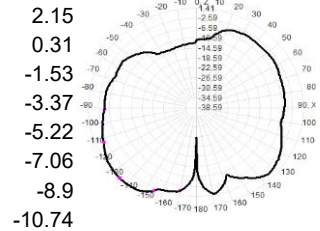
2420.0MHz H+V, Eff: 39.8%



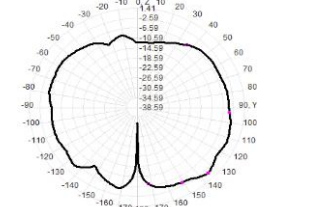
Back View



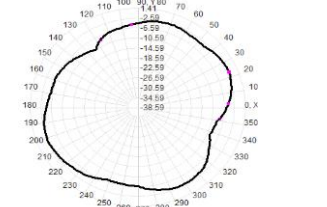
2420.0MHz Total(E1-XZ), Max= 1.41dBi



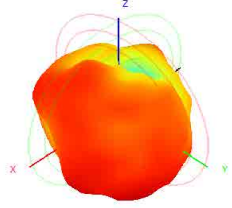
2420.0MHz Total(E2-YZ), Max= -1.31dBi



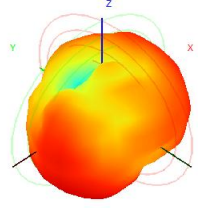
Total(H-XY), Max= -2.01dBi, CirD=8.55



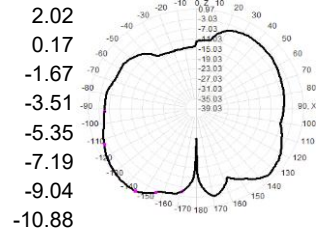
2430.0MHz H+V, Eff: 39.0%



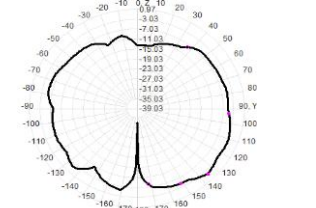
Back View



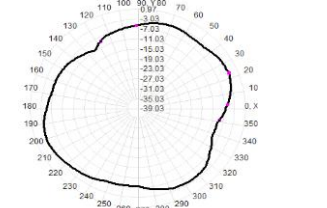
2430.0MHz Total(E1-XZ), Max= 0.97dBi



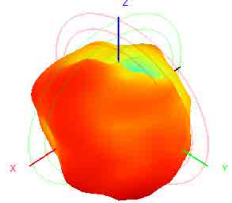
2430.0MHz Total(E2-YZ), Max= -1.96dBi



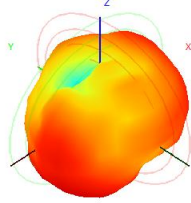
Total(H-XY), Max= -2.60dBi, CirD=8.18



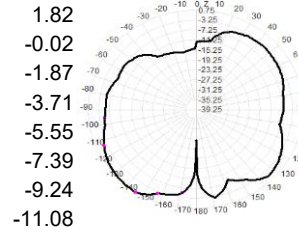
2440.0MHz H+V, Eff: 38.4%



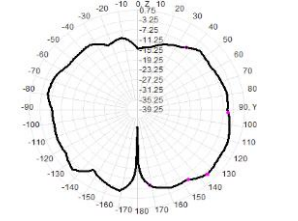
Back View



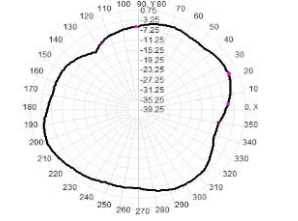
2440.0MHz Total(E1-XZ), Max= 0.75dBi



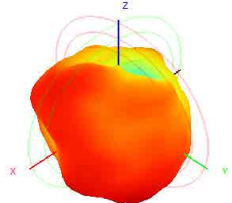
2440.0MHz Total(E2-YZ), Max= -2.43dBi



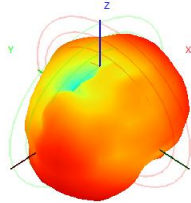
Total(H-XY), Max= -2.85dBi, CirD=8.62



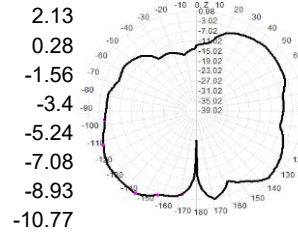
2450.0MHz H+V, Eff: 40.2%



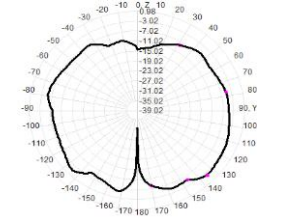
Back View



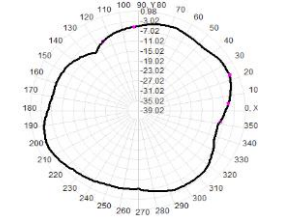
2450.0MHz Total(E1-XZ), Max= 0.98dBi



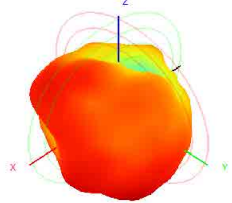
2450.0MHz Total(E2-YZ), Max= -2.32dBi



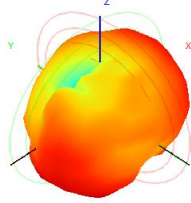
Total(H-XY), Max= -2.36dBi, CirD=8.58



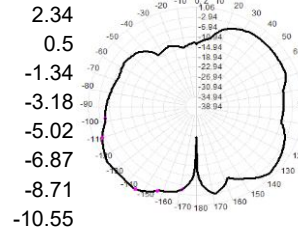
2460.0MHz H+V, Eff: 40.9%



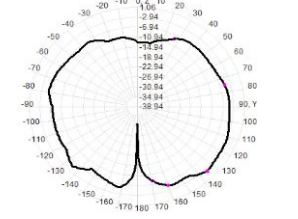
Back View



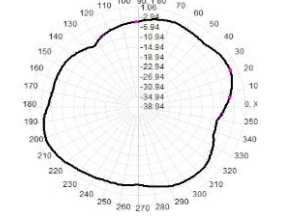
2460.0MHz Total(E1-XZ), Max= 1.06dBi



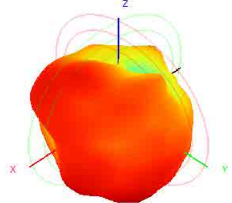
2460.0MHz Total(E2-YZ), Max= -2.34dBi



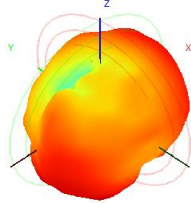
Total(H-XY), Max= -1.83dBi, CirD=7.97



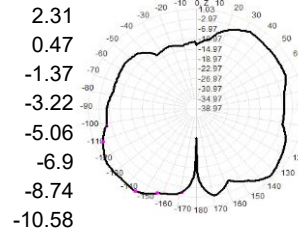
2470.0MHz H+V, Eff: 41.5%



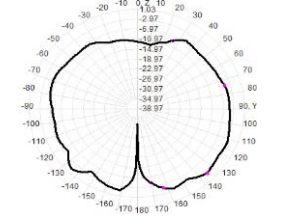
Back View



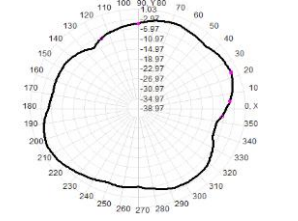
2470.0MHz Total(E1-XZ), Max= 1.03dBi



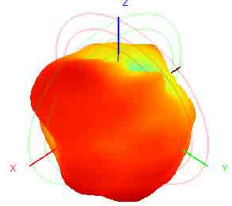
2470.0MHz Total(E2-YZ), Max= -2.36dBi



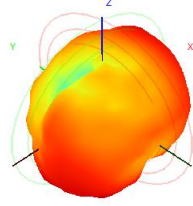
Total(H-XY), Max= -1.68dBi, CirD=7.98



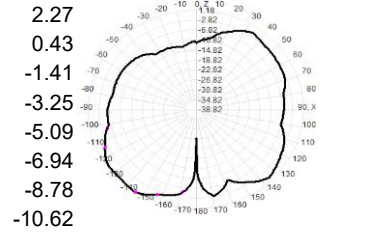
2480.0MHz H+V, Eff: 41.9%



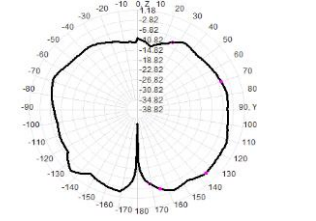
Back View



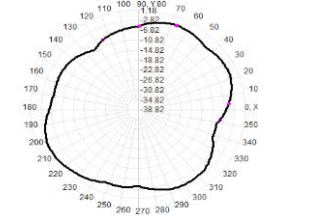
2480.0MHz Total(E1-XZ), Max= 1.18dBi



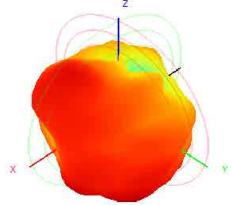
2480.0MHz Total(E2-YZ), Max= -2.69dBi



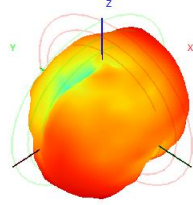
Total(H-XY), Max= -2.00dBi, CirD=8.04



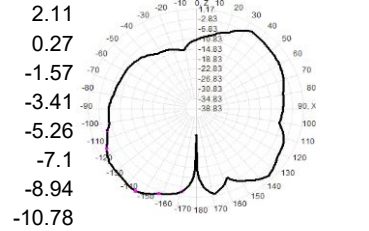
2490.0MHz H+V, Eff: 40.9%



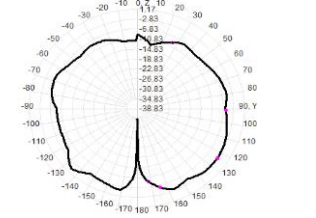
Back View



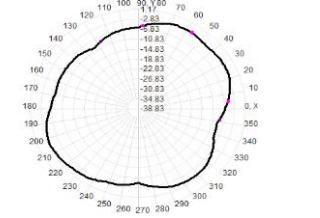
2490.0MHz Total(E1-XZ), Max= 1.17dBi



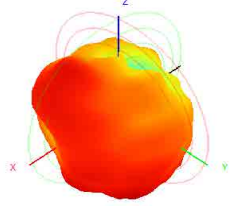
2490.0MHz Total(E2-YZ), Max= -3.03dBi



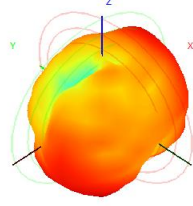
Total(H-XY), Max= -2.43dBi, CirD=7.34



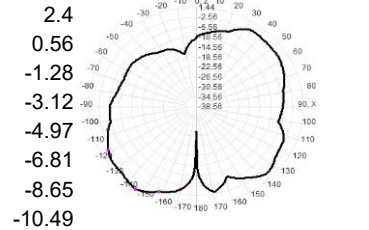
2500.0MHz H+V, Eff: 42.5%



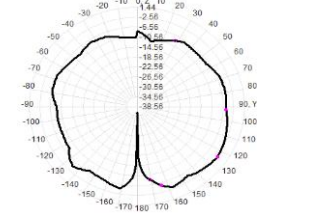
Back View



2500.0MHz Total(E1-XZ), Max= 1.44dBi



2500.0MHz Total(E2-YZ), Max= -2.57dBi



Total(H-XY), Max= -1.84dBi, CirD=7.01

