

好天线 · 优比造

Dongguan UB Electronics Co., Ltd

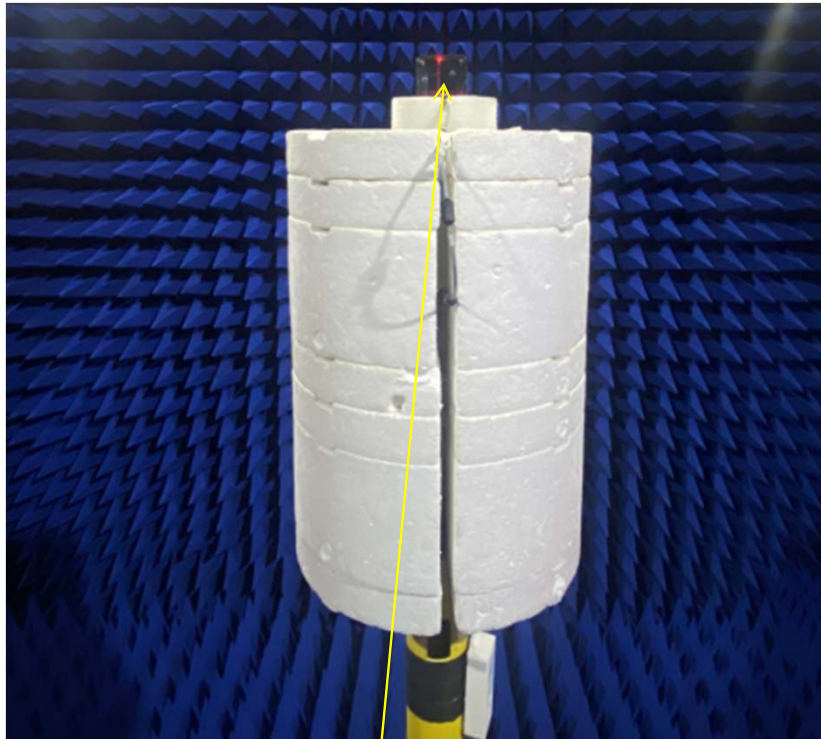
Room 101, Building 2, No. 9 Xinfu Road, Lincun, Tangxia Town, Dongguan City,
Guangdong Province, China

Antenna Study

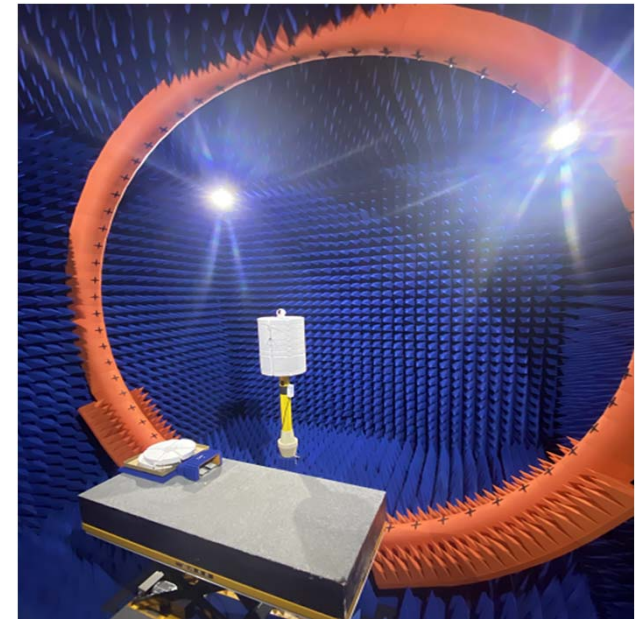
- **Client Name:Neximatic Inc.**
- **Project Name : Nexi-7**
- **Debugging frequency band: 2400-2500HMz**
- **Valuation date: 2023.12.06**

FPC Antenna

Dongguan UB Electronics Co., Ltd



Testing environment



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

FPC Antenna

Dongguan UB Electronics Co., Ltd

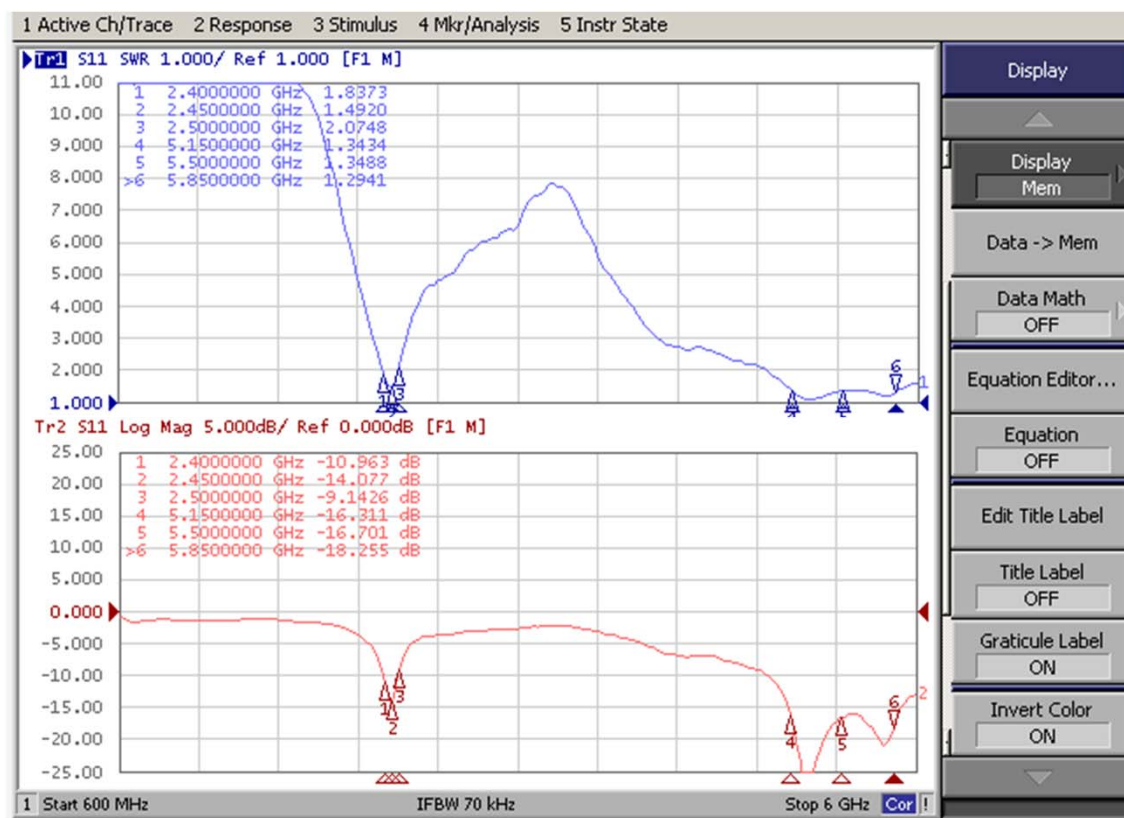


Antenna

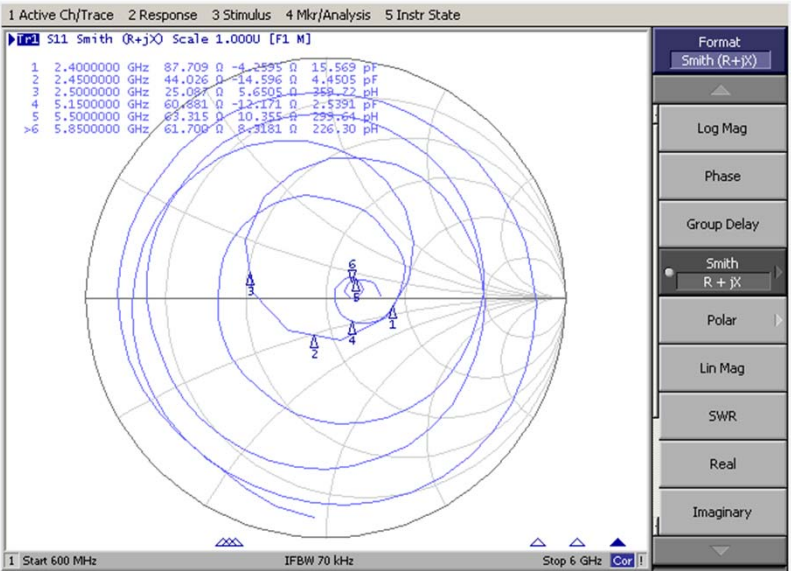
- Antenna name: 2.4G
- Antenna Type: FPC
- Covers : 2.4G

S Parameter_Return Loss&VSWR

Dongguan UB Electronics Co., Ltd



Efficiency and Gain-Smith



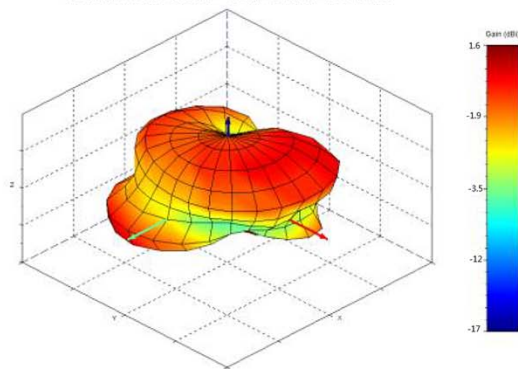
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	0.89	0.80	0.98	1.54	1.27	0.89	1.15	1.41	1.40	1.28	1.13
Efficiency (%)	39.97	40.92	43.00	44.11	42.12	39.70	38.90	38.48	36.69	36.26	35.10

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	4900	5000	5100	5200	5300	5400	5500	5600	5700	5800	5900
Gain (dBi)	1.56	-0.13	-1.76	0.72	-0.79	1.57	-1.24	-1.37	-1.36	-1.28	1.06
Efficiency (%)	65.36	63.67	60.94	60.04	58.43	55.86	54.89	54.67	52.52	49.83	46.84

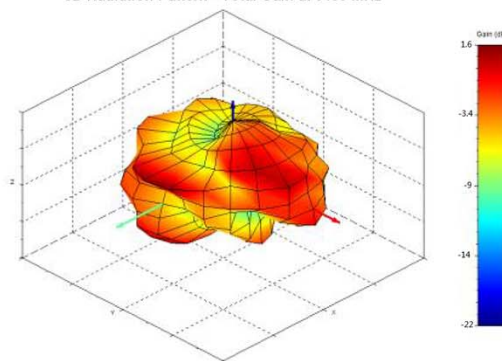
Freespace Environment Performance – WIFI

Dongguan UB Electronics Co., Ltd

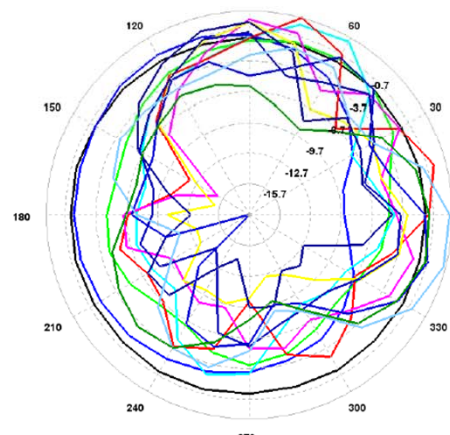
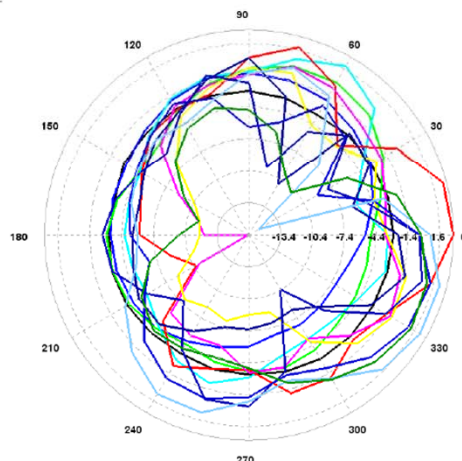
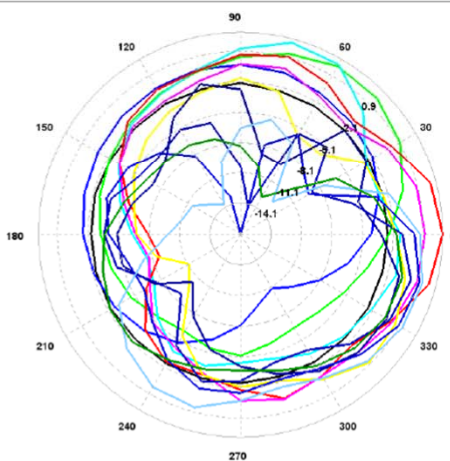
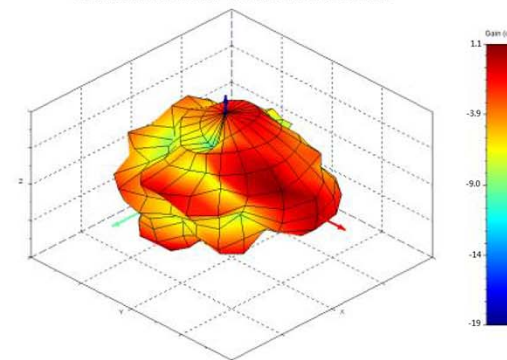
3D Radiation Pattern - Total Gain at 4900 MHz



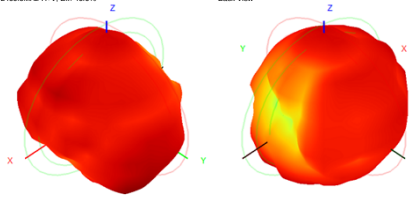
3D Radiation Pattern - Total Gain at 5400 MHz



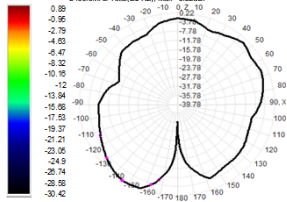
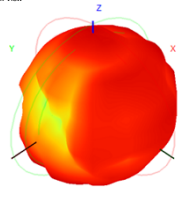
3D Radiation Pattern - Total Gain at 5900 MHz



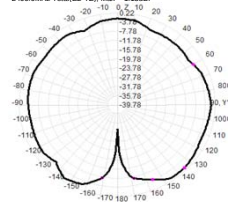
2400.0MHz H+V, E# 40.0%



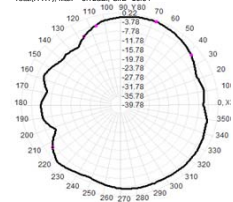
Back View



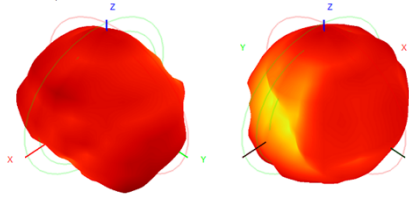
2400.0MHz Total(E2-YZ), Max=-1.13dB



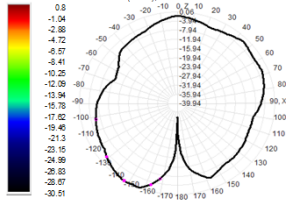
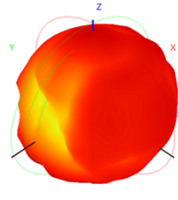
Total(H+V), Max=-0.72dB, C/D=10.94



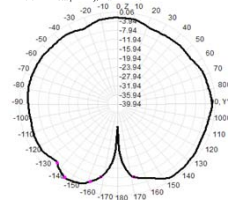
2410.0MHz H+V, E# 40.9%



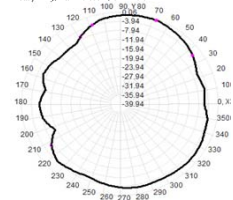
Back View



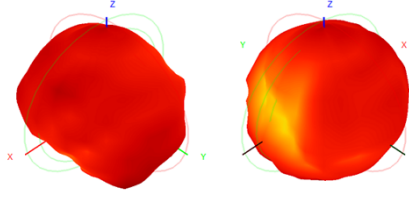
2410.0MHz Total(E2-YZ), Max=-1.42dB



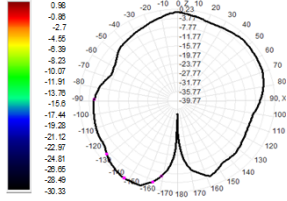
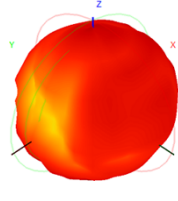
Total(H+V), Max=-0.69dB, C/D=10.67



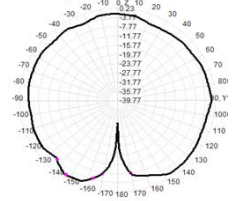
2420.0MHz H+V, E# 43.0%



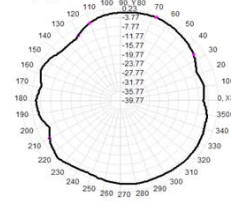
Back View



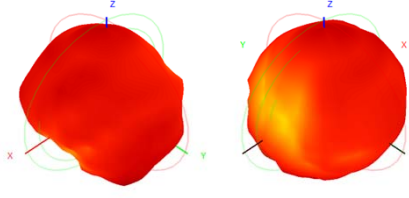
2420.0MHz Total(E2-YZ), Max=-1.40dB



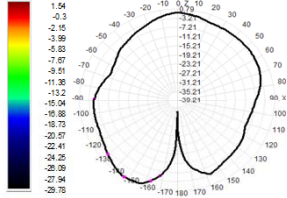
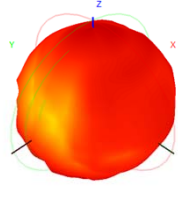
Total(H+V), Max=-0.84dB, C/D=8.07



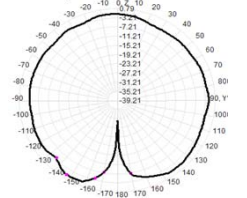
2430.0MHz H+V, E# 44.1%



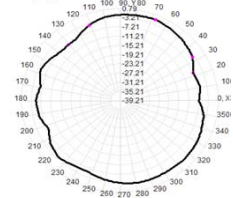
Back View



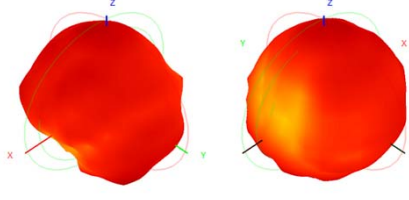
2430.0MHz Total(E2-YZ), Max=-1.08dB



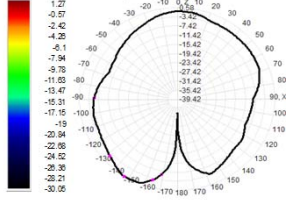
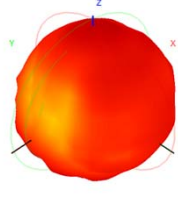
Total(H+V), Max=-1.26dB, C/D=6.52



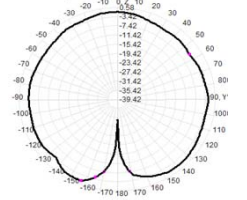
2440.0MHz H+V, E# 42.1%



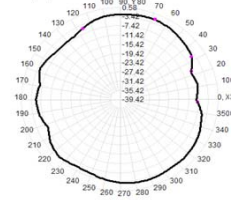
Back View



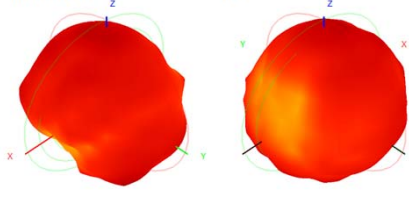
2440.0MHz Total(E2-YZ), Max=-1.17dB



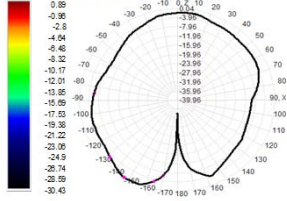
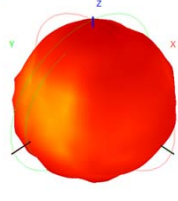
Total(H+V), Max=-1.93dB, C/D=6.63



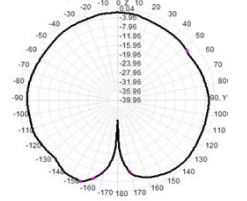
2450.0MHz H+V, E# 39.7%



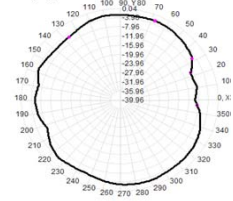
Back View



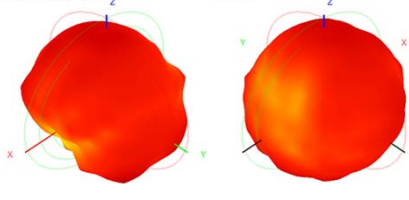
2450.0MHz Total(E2-YZ), Max=-1.53dB



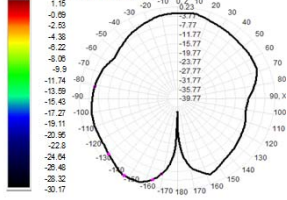
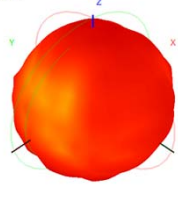
Total(H+V), Max=-2.56dB, C/D=7.14



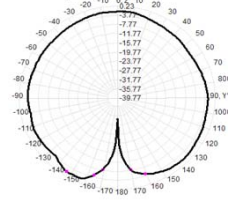
2460.0MHz H+V, E# 38.9%



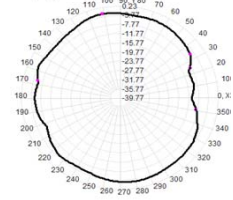
Back View



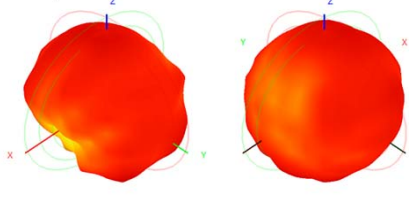
2460.0MHz Total(E2-YZ), Max=-1.85dB



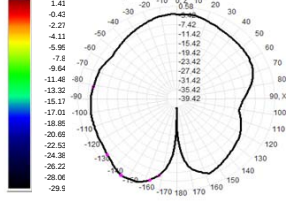
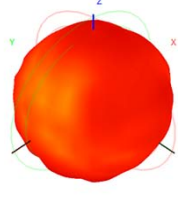
Total(H+V), Max=-2.46dB, C/D=8.35



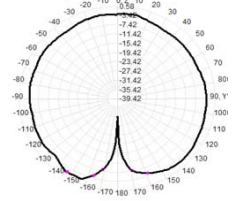
2470.0MHz H+V, E# 38.9%



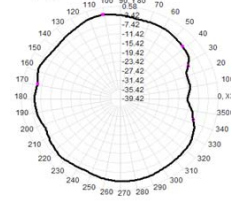
Back View



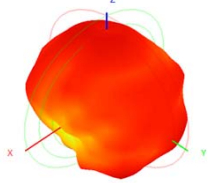
2470.0MHz Total(E2-YZ), Max=-1.72dB



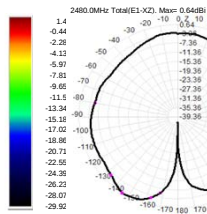
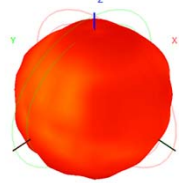
Total(H+V), Max=-2.46dB, C/D=8.81



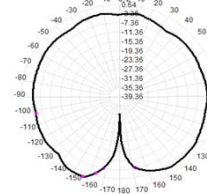
2480.0MHz H+V, Ef: 35.7%



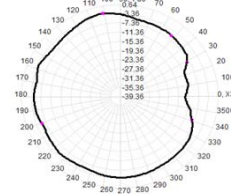
Back View



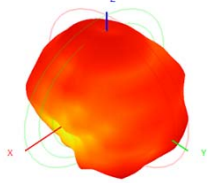
2480.0MHz Total(E2-YZ), Max=-1.65dB



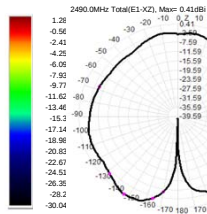
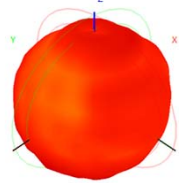
Total(H+V), Max=-2.56dB, Crd=10.54



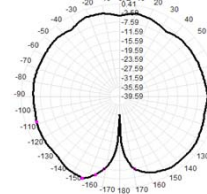
2490.0MHz H+V, Ef: 35.3%



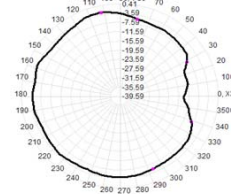
Back View



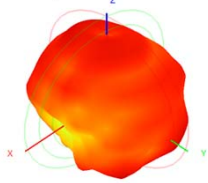
2490.0MHz Total(E2-YZ), Max=-1.22dB



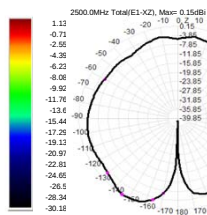
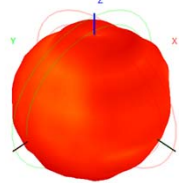
Total(H+V), Max=-2.51dB, Crd=11.31



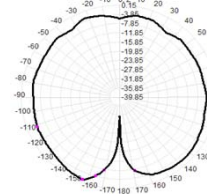
2500.0MHz H+V, Ef: 35.1%



Back View



2500.0MHz Total(E2-YZ), Max=-1.08dB



Total(H+V), Max=-2.79dB, Crd=12.68

