



## Product Acknowledgment

Custmer : \_\_\_\_\_

Description : 2.4G 2DB FPC Antenna RF1.13+IPEX,L=80mm  
\_\_\_\_\_

Part No. : \_\_\_\_\_

Customer P/N : \_\_\_\_\_

Date : 2022-1-17  
\_\_\_\_\_

Engineering Department	QC Department	Sales Department
Zhou Min	Zhuang Jiawen	Zhang Fuli

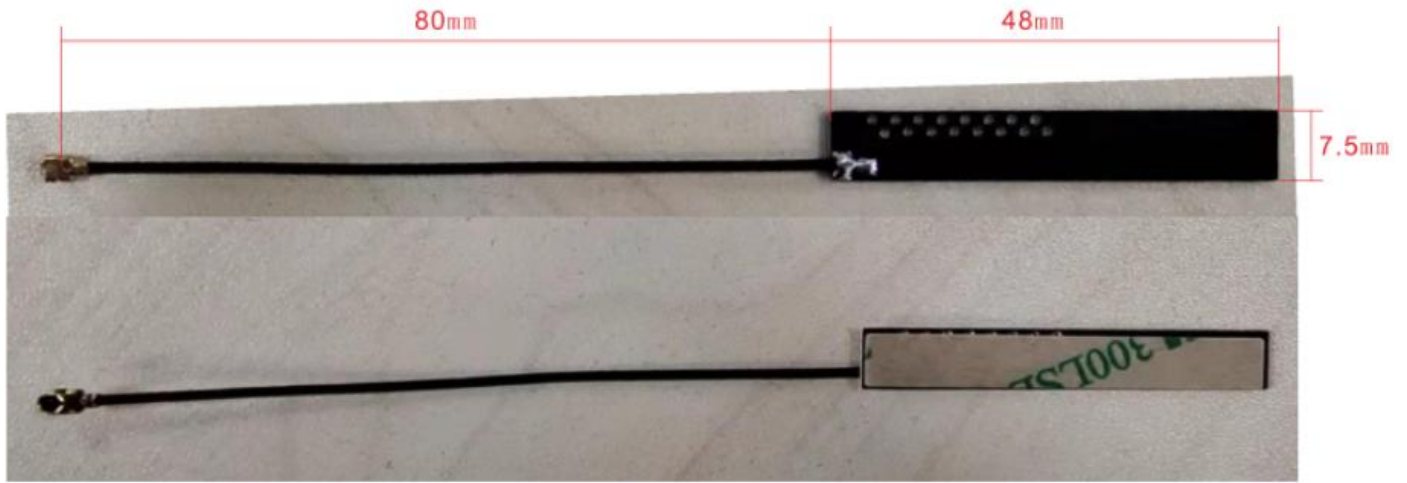
### Signature and seal of the customer

Engineering Department	QC Department	Purchasing Department

\* Attachment column of samples confirmed by customers



## 1. Product Structure Diagram



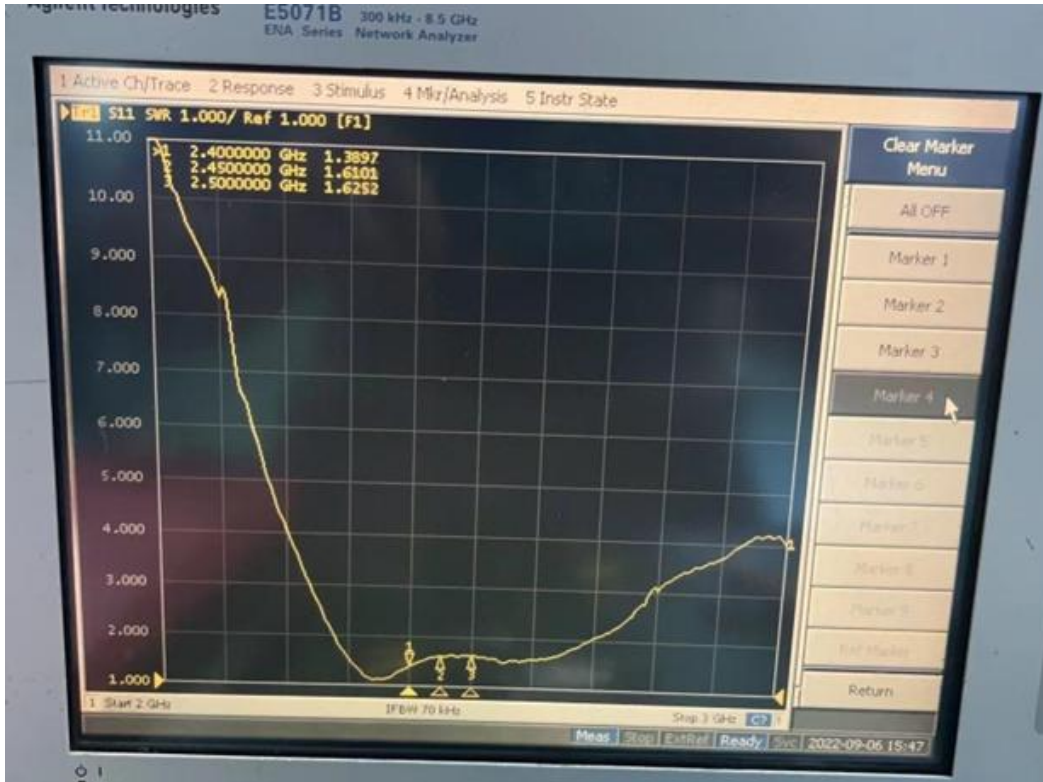
## 2. Electrical technical parameters

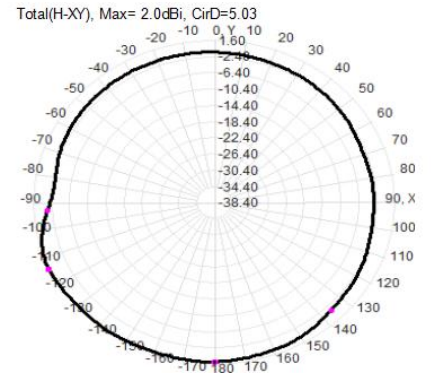
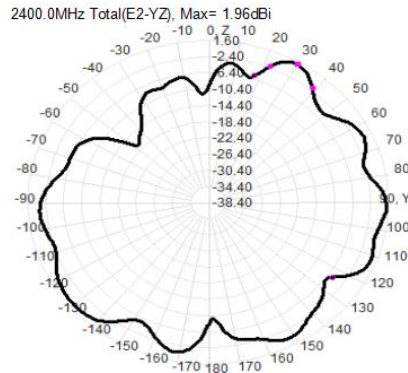
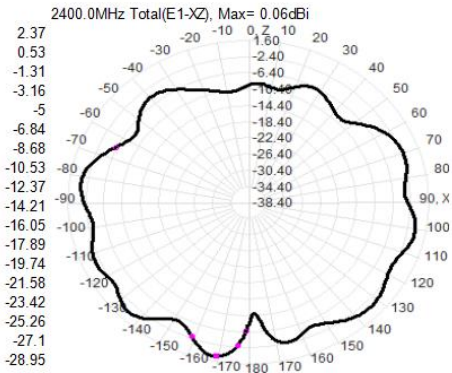
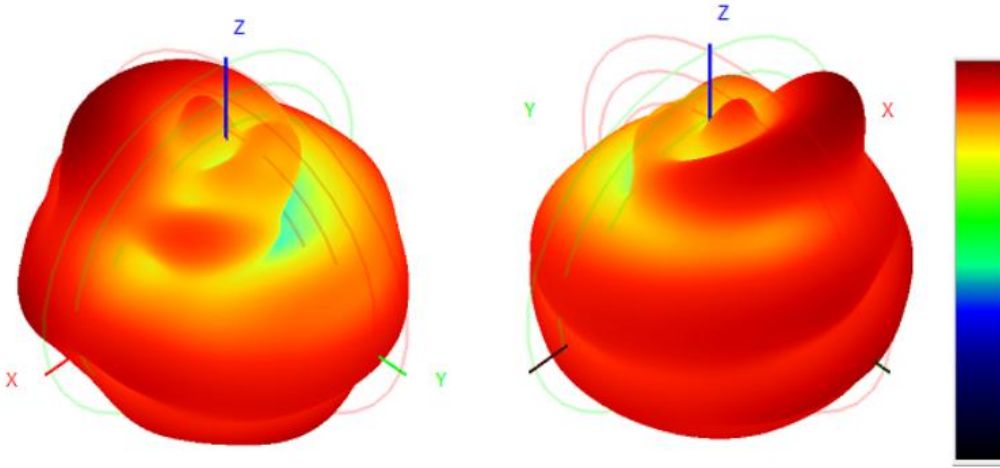
Electrical Specifications	
Frequency Range	2400-2500Mhz
VSWR	≤1.5
Input Impedance	50 Ω
Mechanical Specifications	
Antenna Color	Black
Cable length	80mm
Working Temperature	-40°C~+ 85°C
Working Humidity	20~ 80%



### 3. 2400.0MHz H+V, View

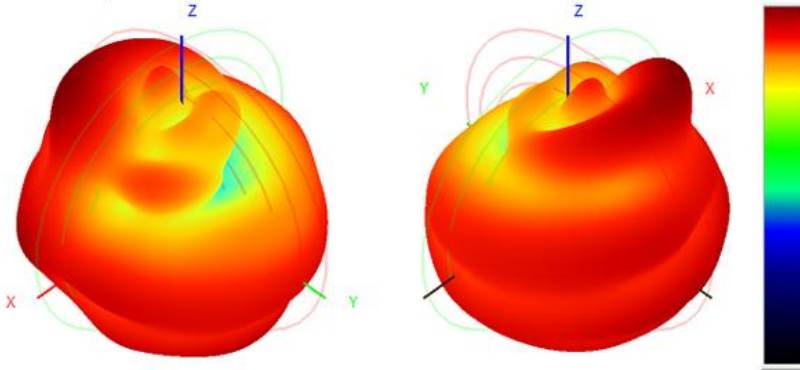
Network distribution test diagram:

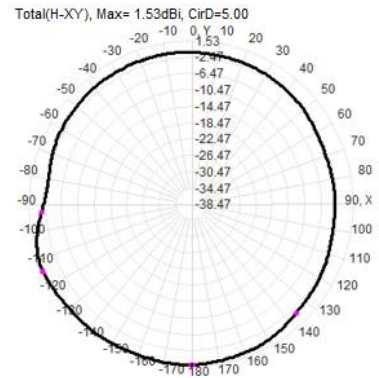
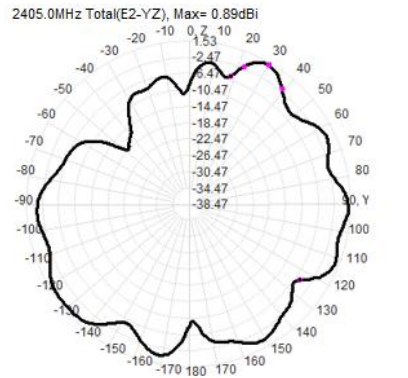
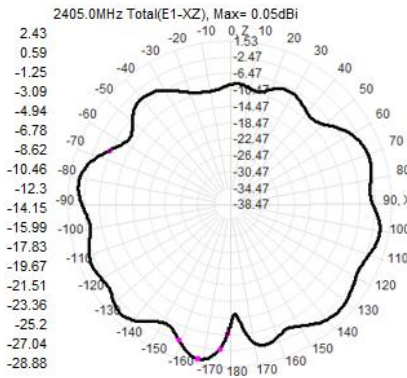




2405.0MHz H+V, Eff: 57.4%

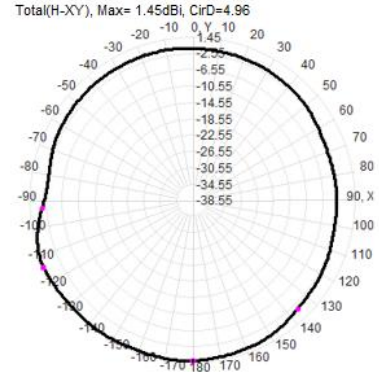
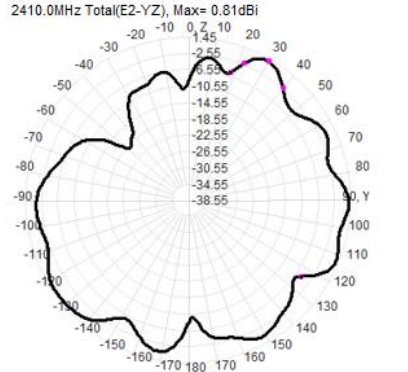
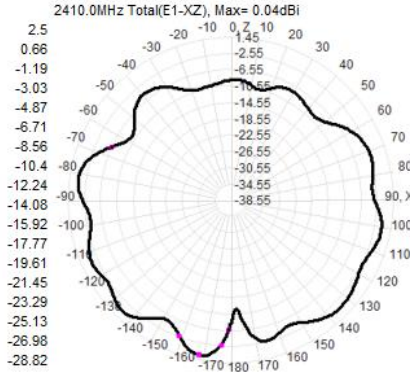
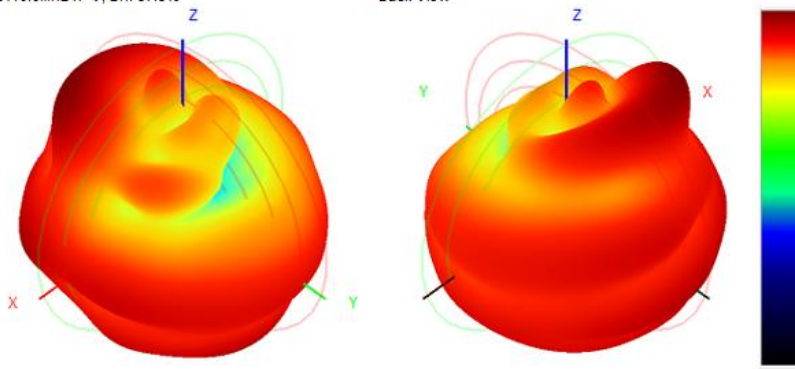
Back View





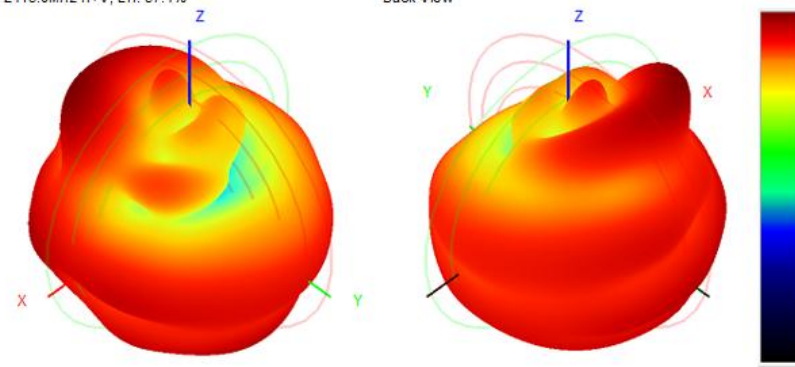
2410.0MHz H+V, Eff: 57.5%

Back View

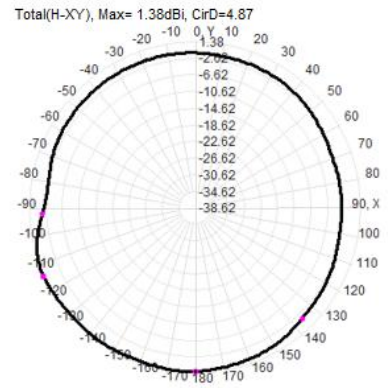
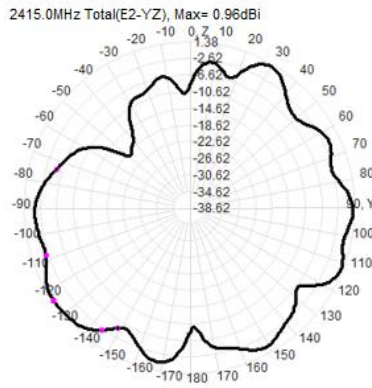
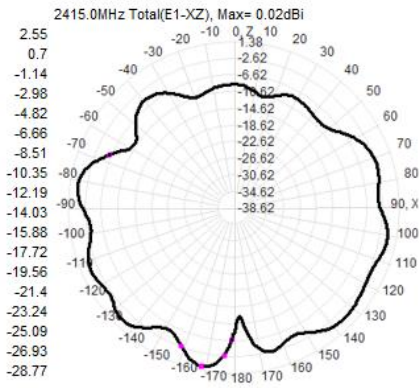


2415.0MHz H+V, Eff: 57.4%

Back View

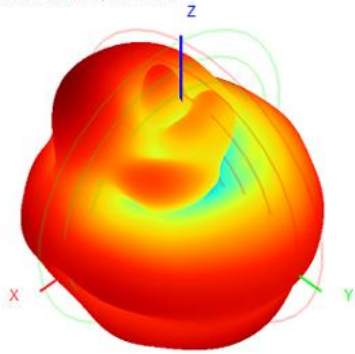




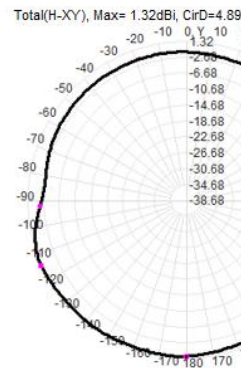
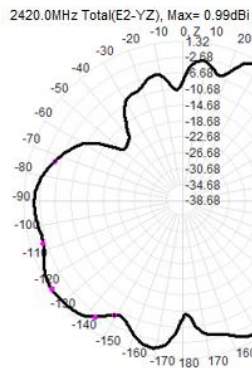
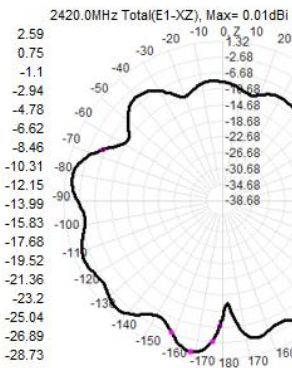
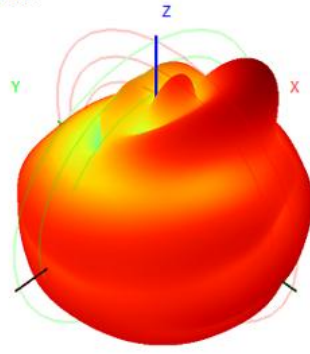




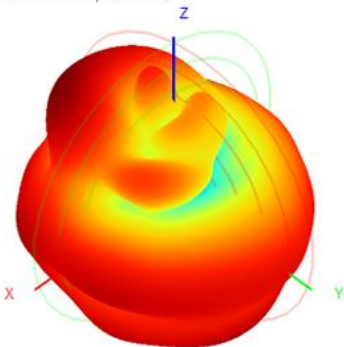
2420.0MHz H+V, Eff: 57.3%



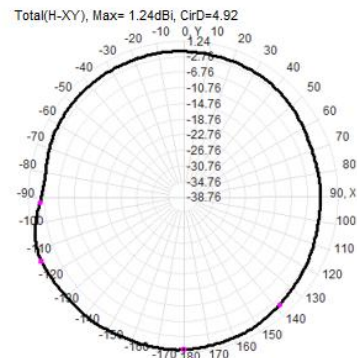
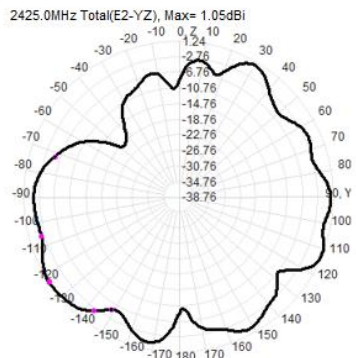
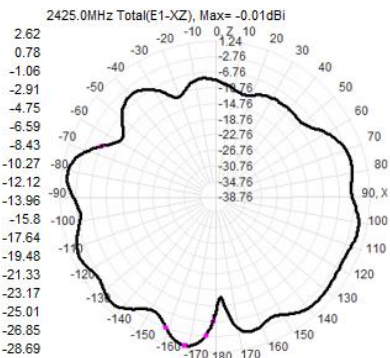
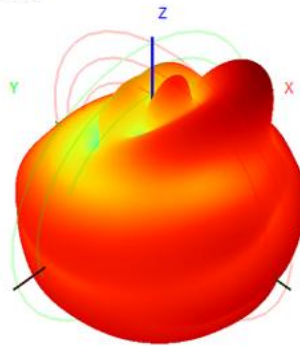
Back View



2425.0MHz H+V, Eff: 57.2%

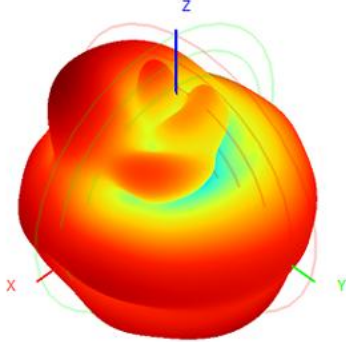


Back View

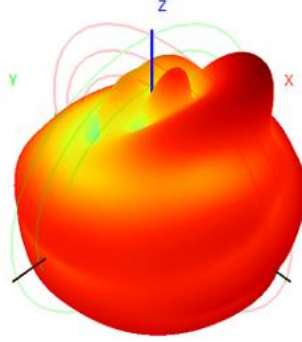




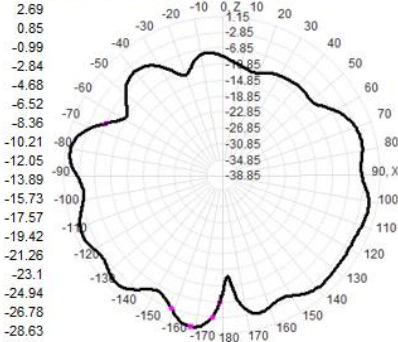
2430.0MHz H+V, Eff: 57.2%



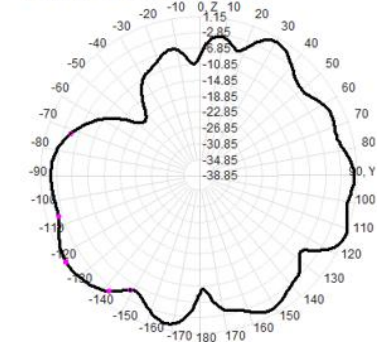
Back View



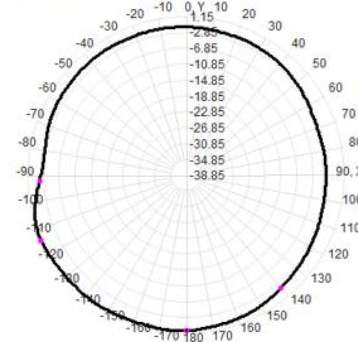
2430.0MHz Total(E1-XZ), Max= -0.01dBi



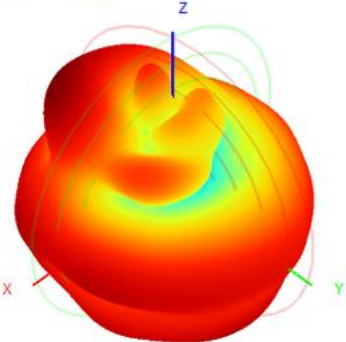
2430.0MHz Total(E2-YZ), Max= 1.10dBi



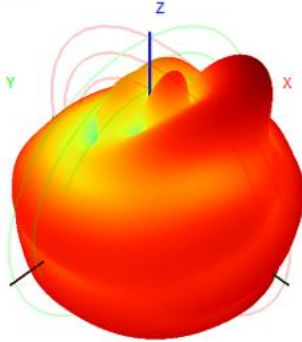
Total(H-XY), Max= 1.15dBi, CirD=5.00



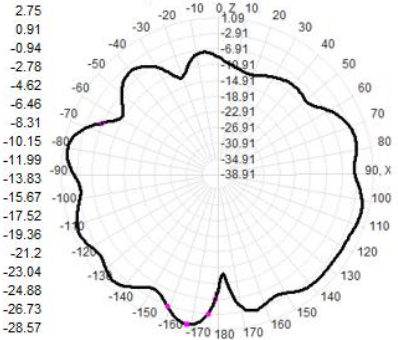
2435.0MHz H+V, Eff: 57.3%



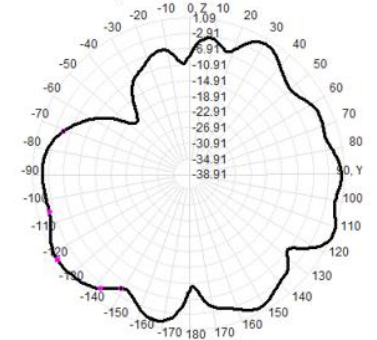
Back View



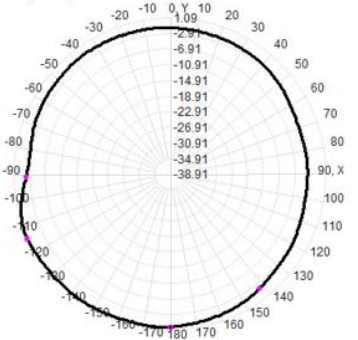
2435.0MHz Total(E1-XZ), Max= 0.04dBi



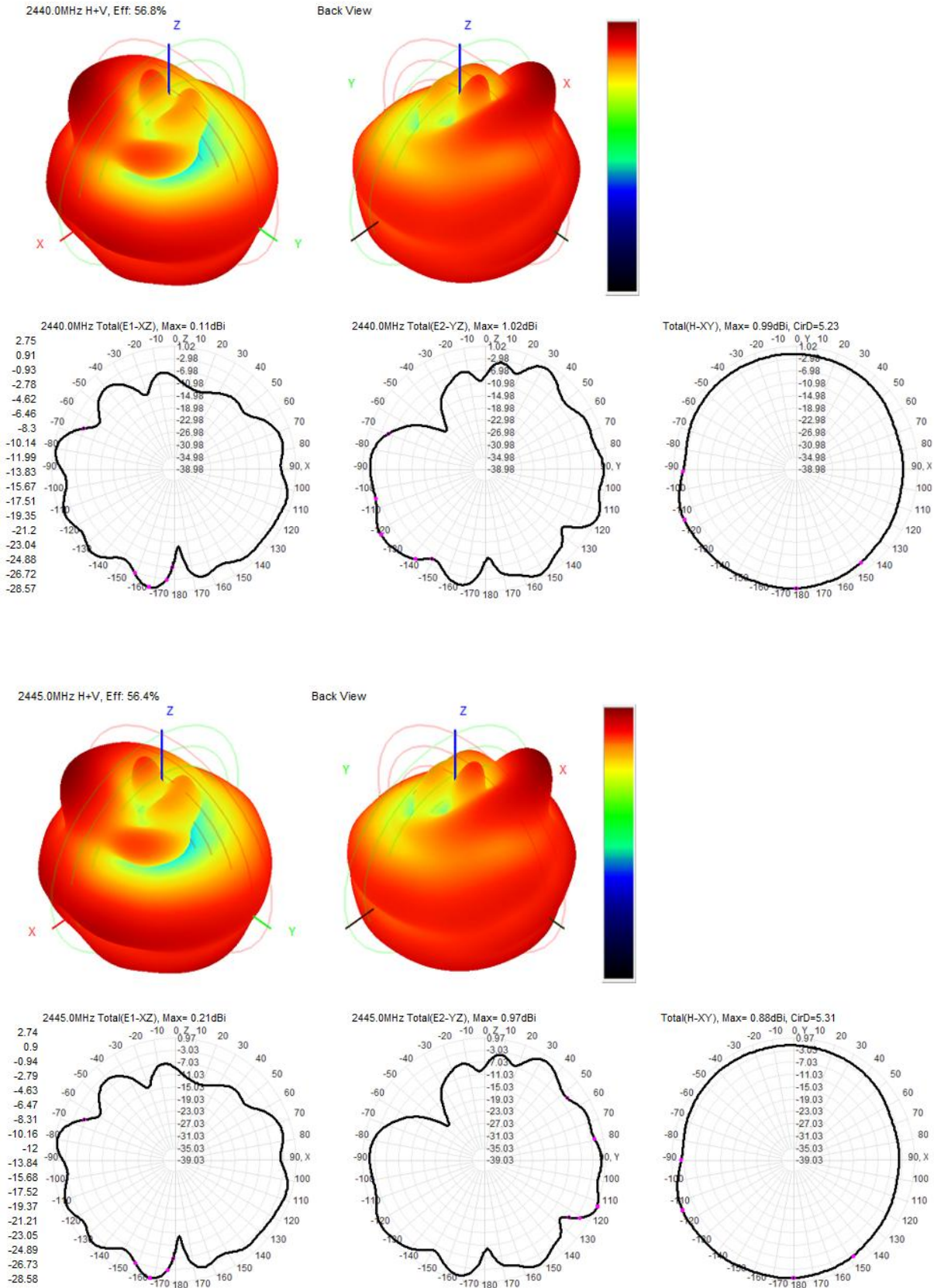
2435.0MHz Total(E2-YZ), Max= 1.09dBi



Total(H-XY), Max= 1.07dBi, CirD=5.09

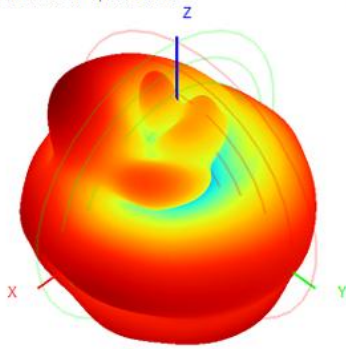




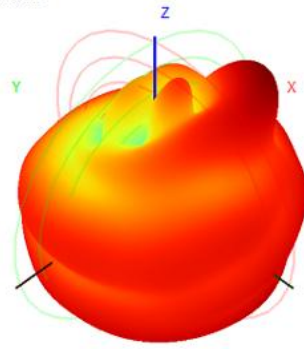




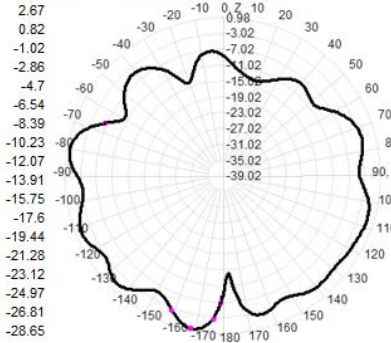
2450.0MHz H+V, Eff: 55.9%



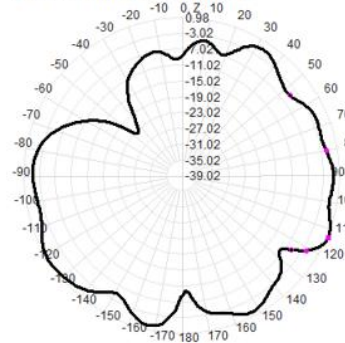
Back View



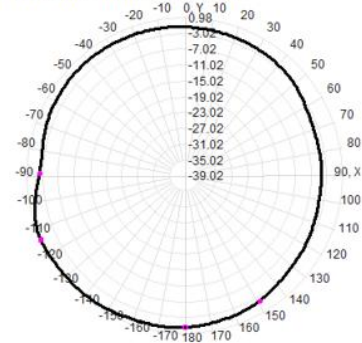
2450.0MHz Total(E1-XZ), Max= 0.31dBi



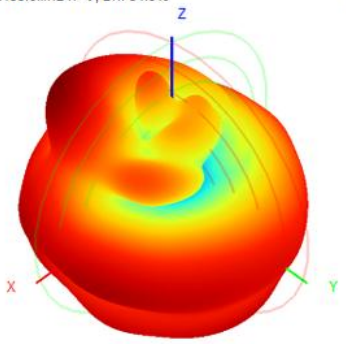
2450.0MHz Total(E2-YZ), Max= 0.98dBi



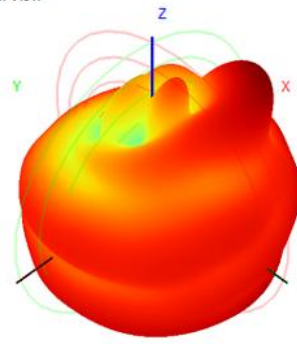
Total(H-XY), Max= 0.75dBi, CirD=5.43



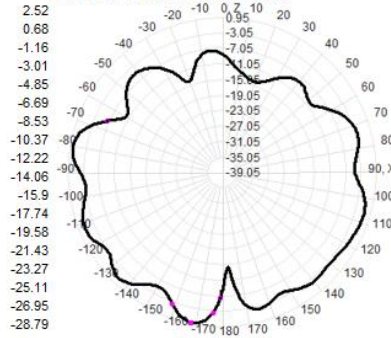
2455.0MHz H+V, Eff: 54.9%



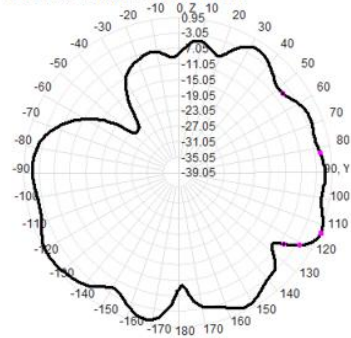
Back View



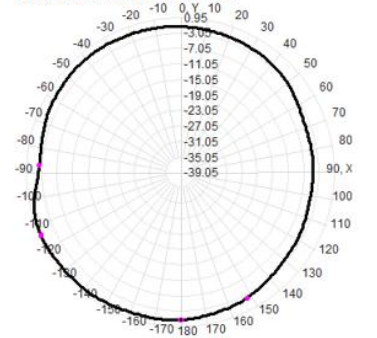
2455.0MHz Total(E1-XZ), Max= 0.37dBi



2455.0MHz Total(E2-YZ), Max= 0.95dBi



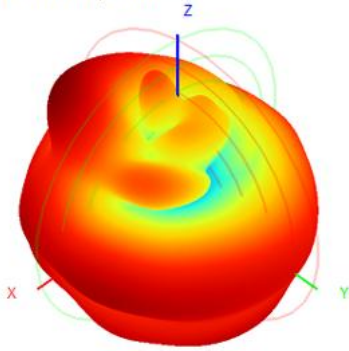
Total(H-XY), Max= 0.58dBi, CirD=5.57



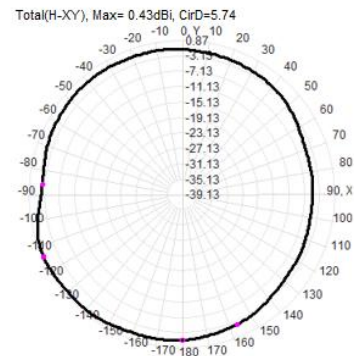
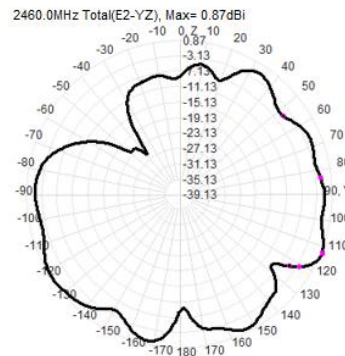
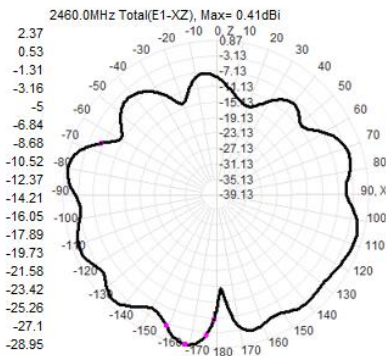
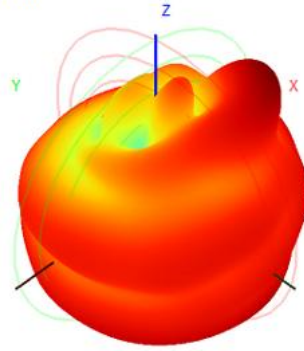




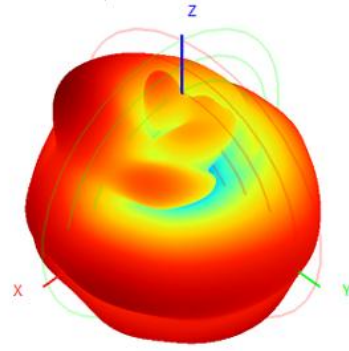
2460.0MHz H+V, Eff: 53.6%



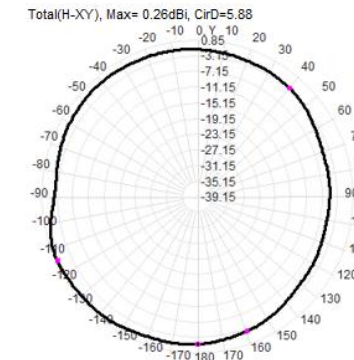
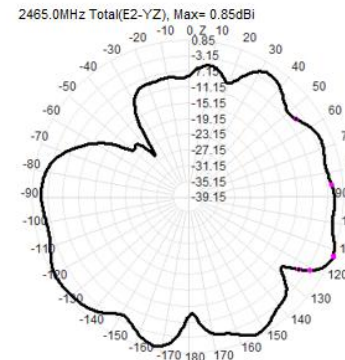
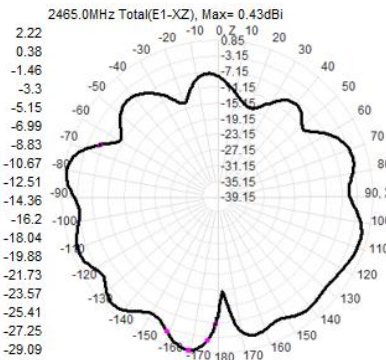
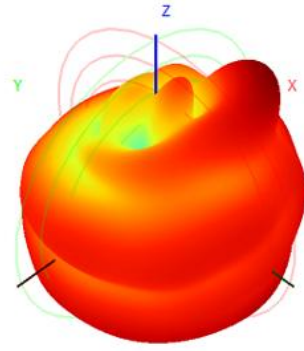
Back View



2465.0MHz H+V, Eff: 52.6%

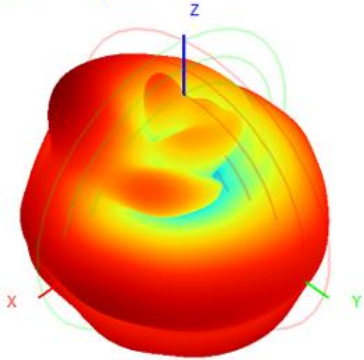


Back View

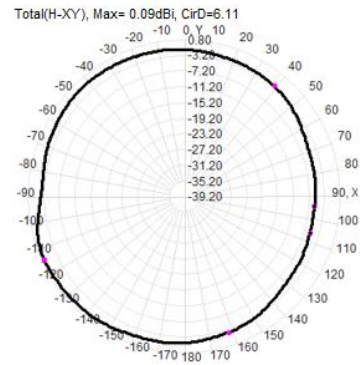
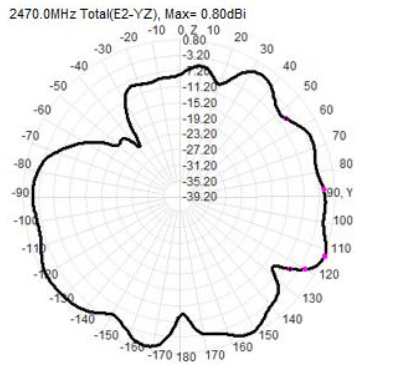
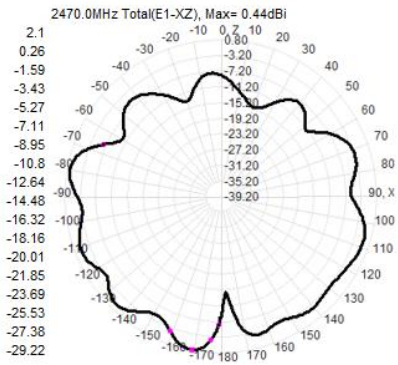
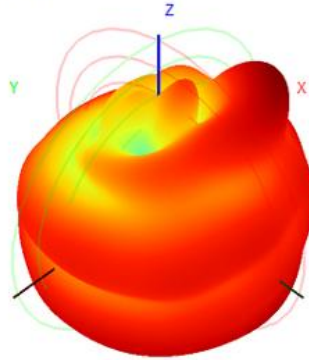




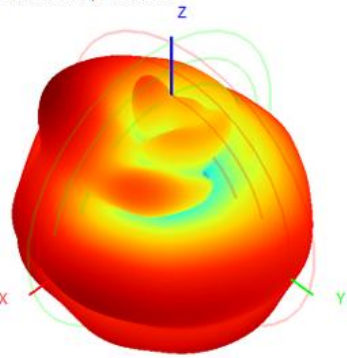
2470.0MHz H+V, Eff: 51.7%



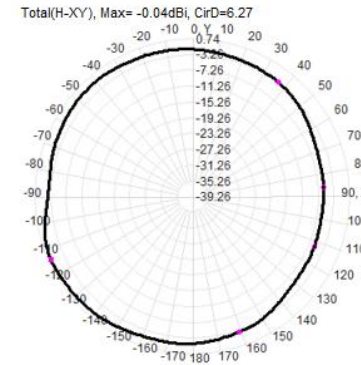
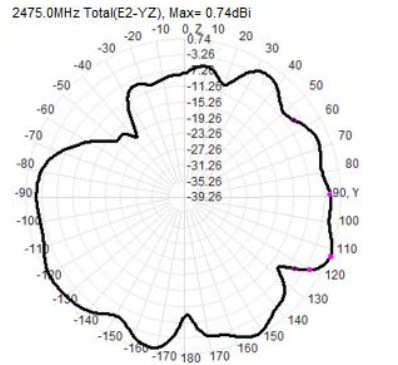
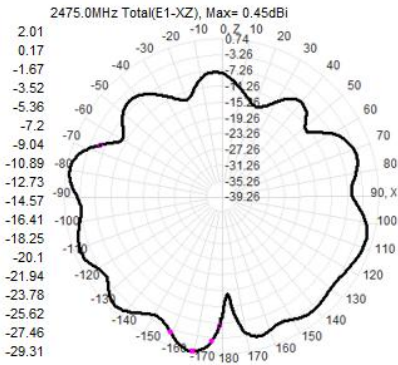
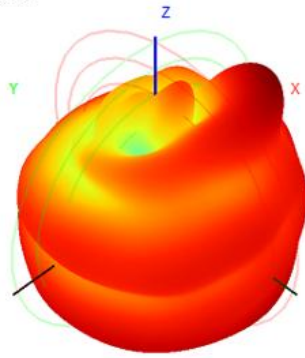
Back View



2475.0MHz H+V, Eff: 50.9%



Back View

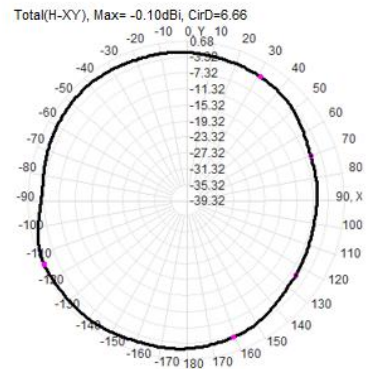
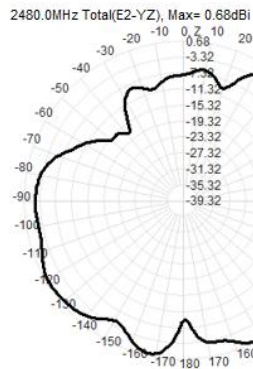
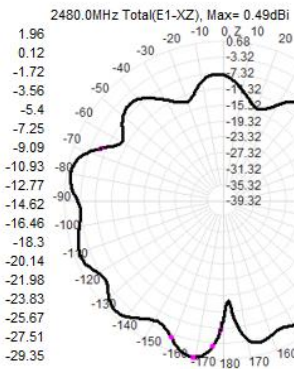
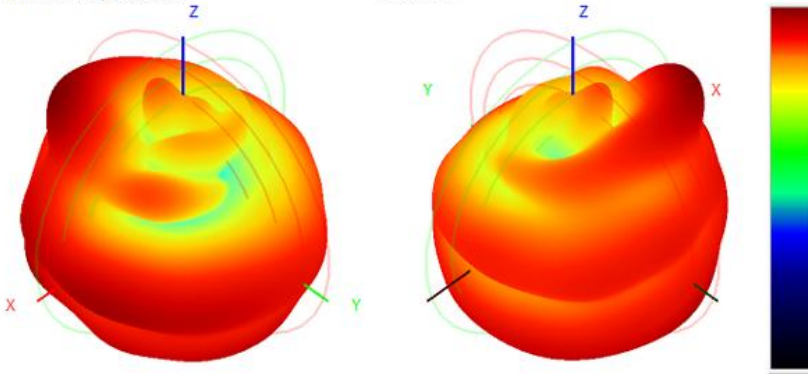






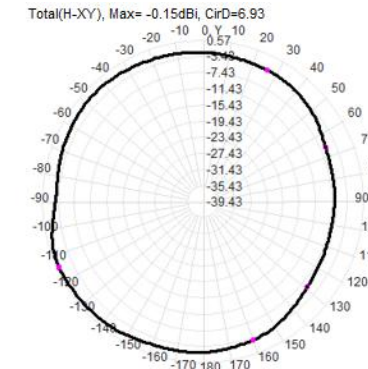
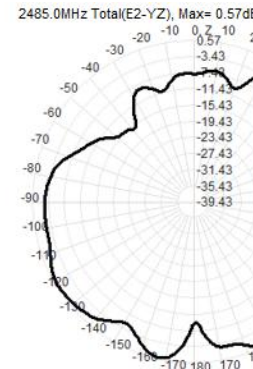
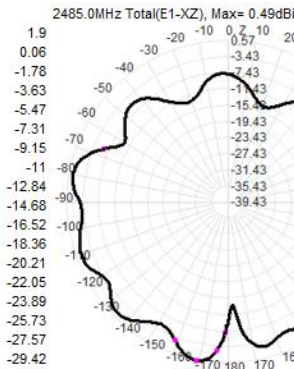
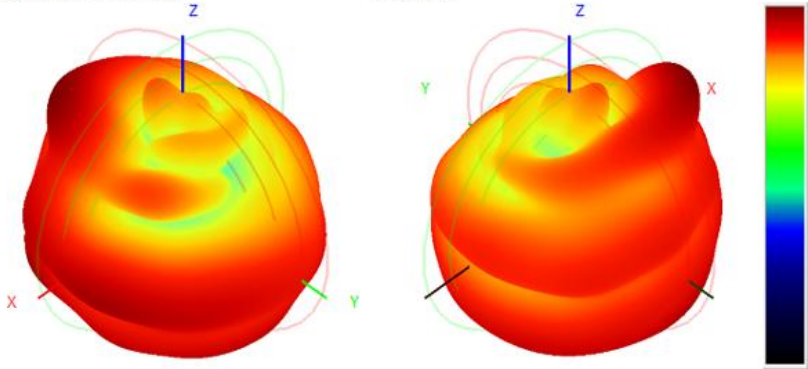
2480.0MHz H+V, Eff: 50.2%

Back View



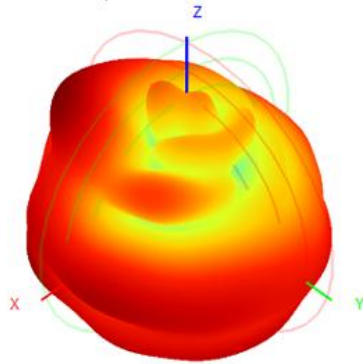
2485.0MHz H+V, Eff: 49.3%

Back View

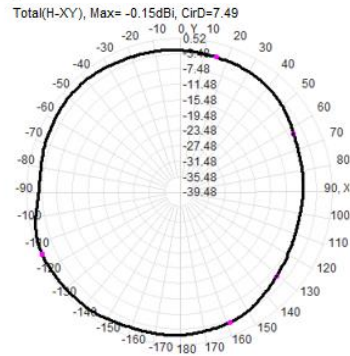
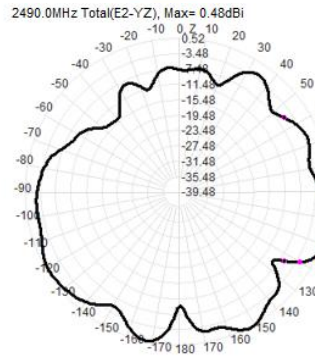
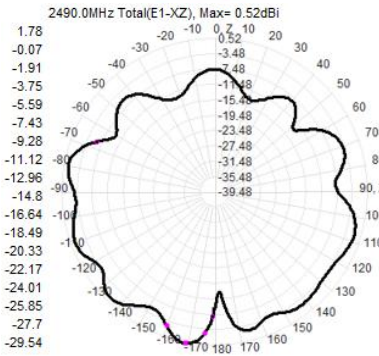
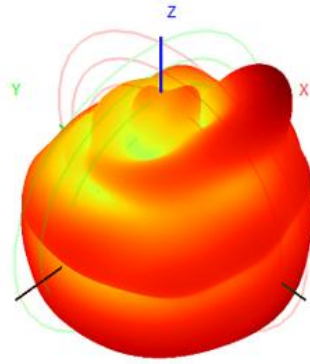




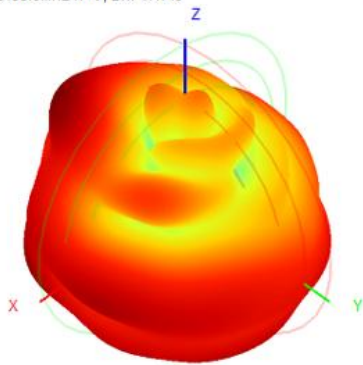
2490.0MHz H+V, Eff: 48.3%



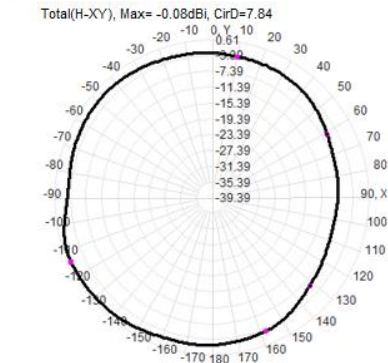
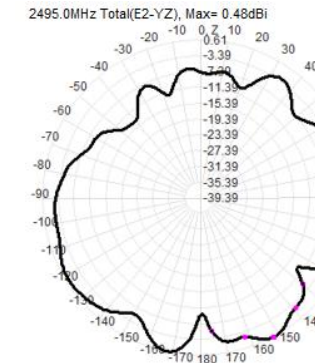
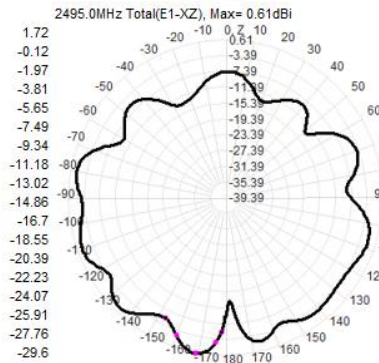
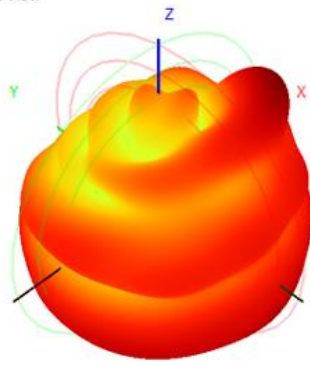
Back View

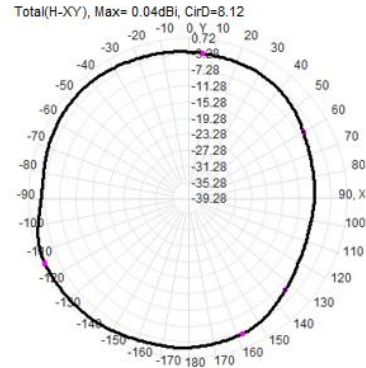
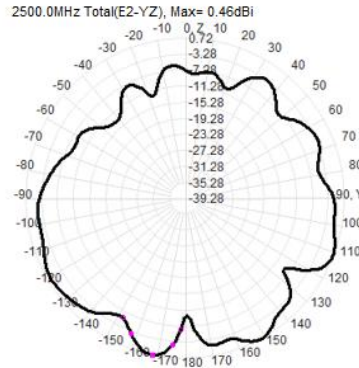
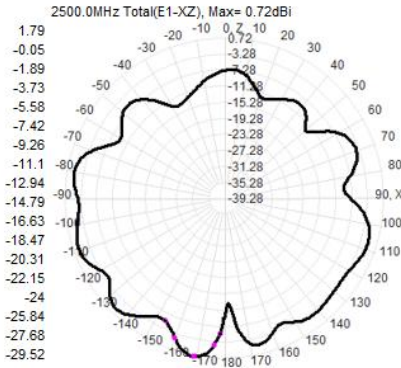


2495.0MHz H+V, Eff: 47.7%



Back View





#### 4. Antenna test data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Frequency (MHz)	2400.0	2405.0	2410.0	2415.0	2420.0	2425.0	2430.0	2435.0	2440.0	2445.0	2450.0	2455.0	2460.0	2465.0	2470.0	2475.0	2480.0	2485.0	2490.0	2495.0	2500.0	
Efficiency (dBi)	-2.40	-2.41	-2.41	-2.41	-2.42	-2.42	-2.42	-2.42	-2.45	-2.49	-2.53	-2.61	-2.71	-2.79	-2.87	-2.93	-2.99	-3.07	-3.16	-3.22	-3.26	
Gain (dBi)	1.90	2.10	2.01	2.01	1.90	2.10	1.90	2.01	1.90	1.96	1.98	1.96	1.98	3.00	1.96	2.01	1.96	1.90	1.98	2.01	2.13	
Efficiency (%)	57.56	57.42	57.48	57.39	57.25	57.24	57.23	57.26	56.82	56.41	55.85	54.89	53.58	52.62	51.68	50.91	50.23	49.26	48.32	47.67	47.18	
Directivity (dB)	4.77	4.84	4.90	4.96	5.01	5.04	5.11	5.17	5.21	5.23	5.20	5.13	5.08	5.01	4.97	4.94	4.95	4.97	4.94	4.94	5.05	
Peak Gain Position (Theta)	34.00	34.00	35.00	35.00	35.00	36.00	36.00	36.00	37.00	37.00	37.00	37.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	102.00	101.00
Peak Gain Position (Phi)	320.00	319.00	321.00	321.00	321.00	322.00	322.00	322.00	323.00	323.00	323.00	322.00	322.00	322.00	322.00	321.00	322.00	322.00	322.00	322.00	334.00	334.00
Efficiency ThetaPol (%)	46.17	45.87	45.79	45.58	45.36	45.33	45.24	45.31	45.04	44.86	44.59	43.99	43.14	42.54	41.92	41.41	41.00	40.42	39.86	39.52	39.35	
Efficiency PhiPol (%)	11.38	11.55	11.68	11.81	11.90	11.91	11.98	11.94	11.78	11.56	11.26	10.90	10.44	10.08	9.76	9.50	9.23	8.84	8.46	8.15	7.83	
Upper Hem. Efficiency (%)	23.29	22.68	22.21	21.81	21.58	21.55	21.60	21.69	21.61	21.49	21.22	20.72	20.09	19.49	18.82	18.14	17.54	16.84	16.11	15.56	15.18	
Lower Hem. Efficiency (%)	34.27	34.74	35.26	35.58	35.67	35.69	35.62	35.57	35.21	34.92	34.63	34.17	33.49	33.13	32.86	32.77	32.70	32.43	32.21	32.12	32.01	