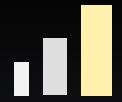


PSP

Antenna Test Report



Basic Specifications

Specification	Descriptions
Frequency	2.4~2.4835GHz
Connector Type	I-PEX
Gain	0.89dBi@2.4~2.4835GHz

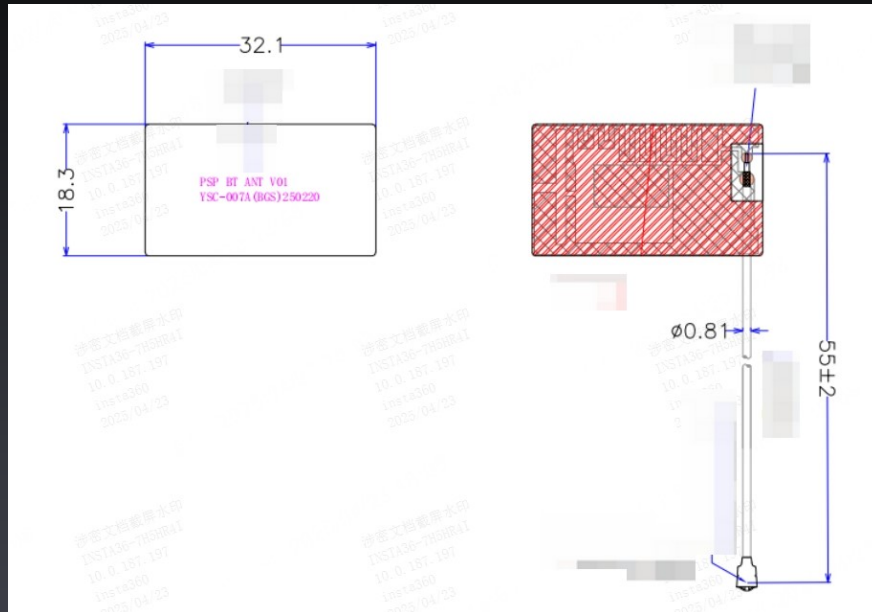
BT Antenna

Basic Specifications

Specification	Descriptions
Frequency	2.4~2.4835GHz & 5.15~5.875GHz
Connector Type	I-PEX
Gain	-2.18dBi@2.4~2.4835GHz -0.45dBi@5.15~5.25GHz -1.18dBi@5.725~5.85GHz

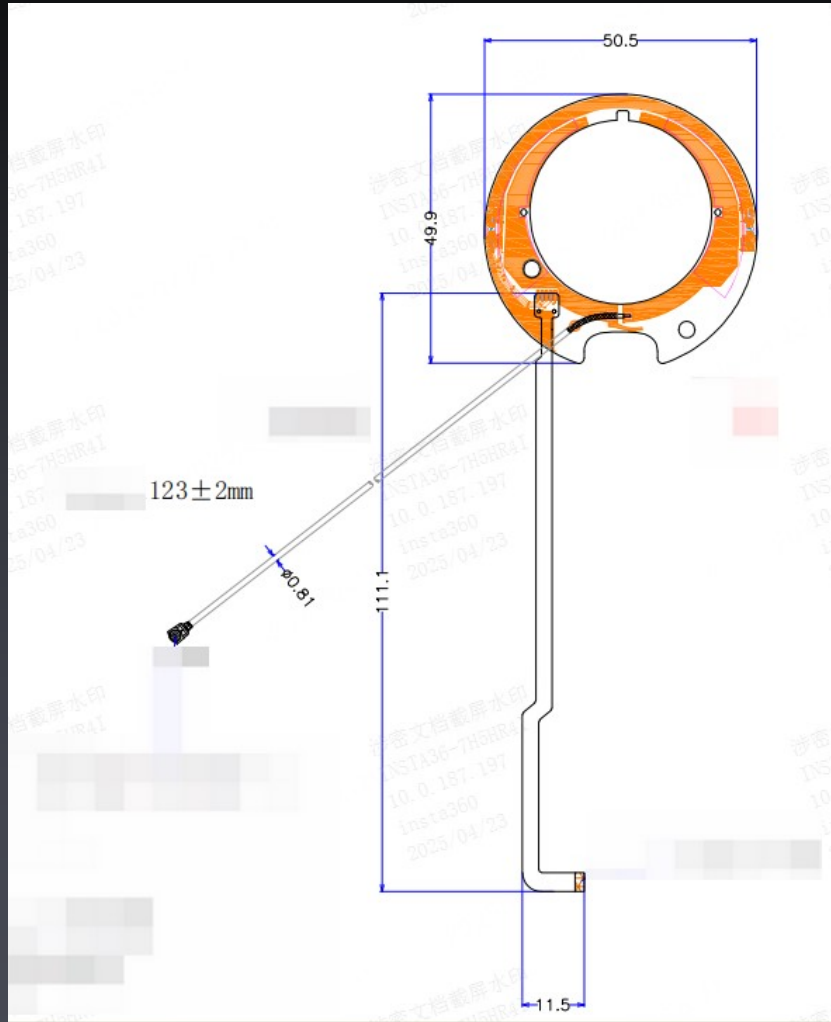
WiFi Antenna

Structure drawing

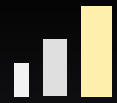


BT Antenna size: 32.1mm*18.3mm

Structure drawing

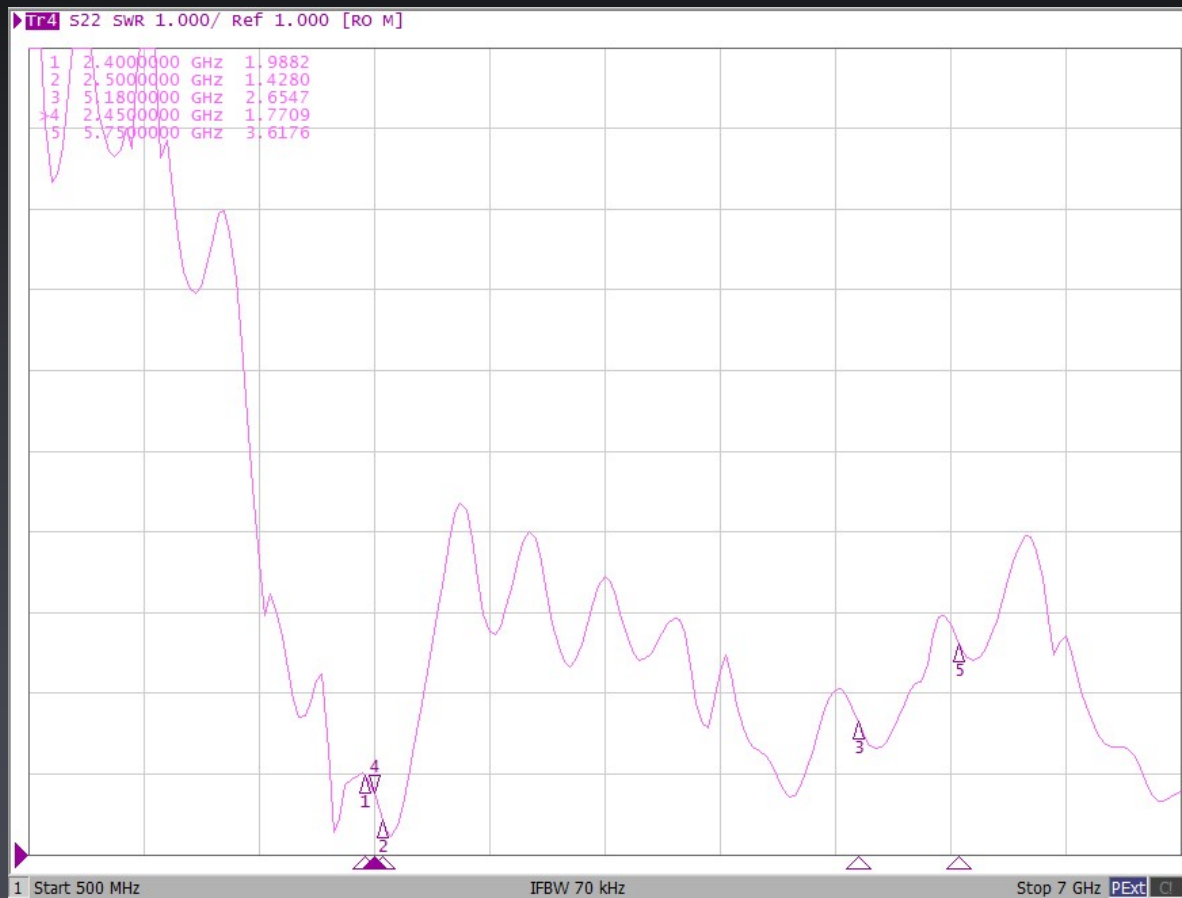


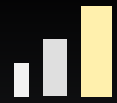
WiFi Antenna size: 50.5mm*49.9mm



VSWR/S11

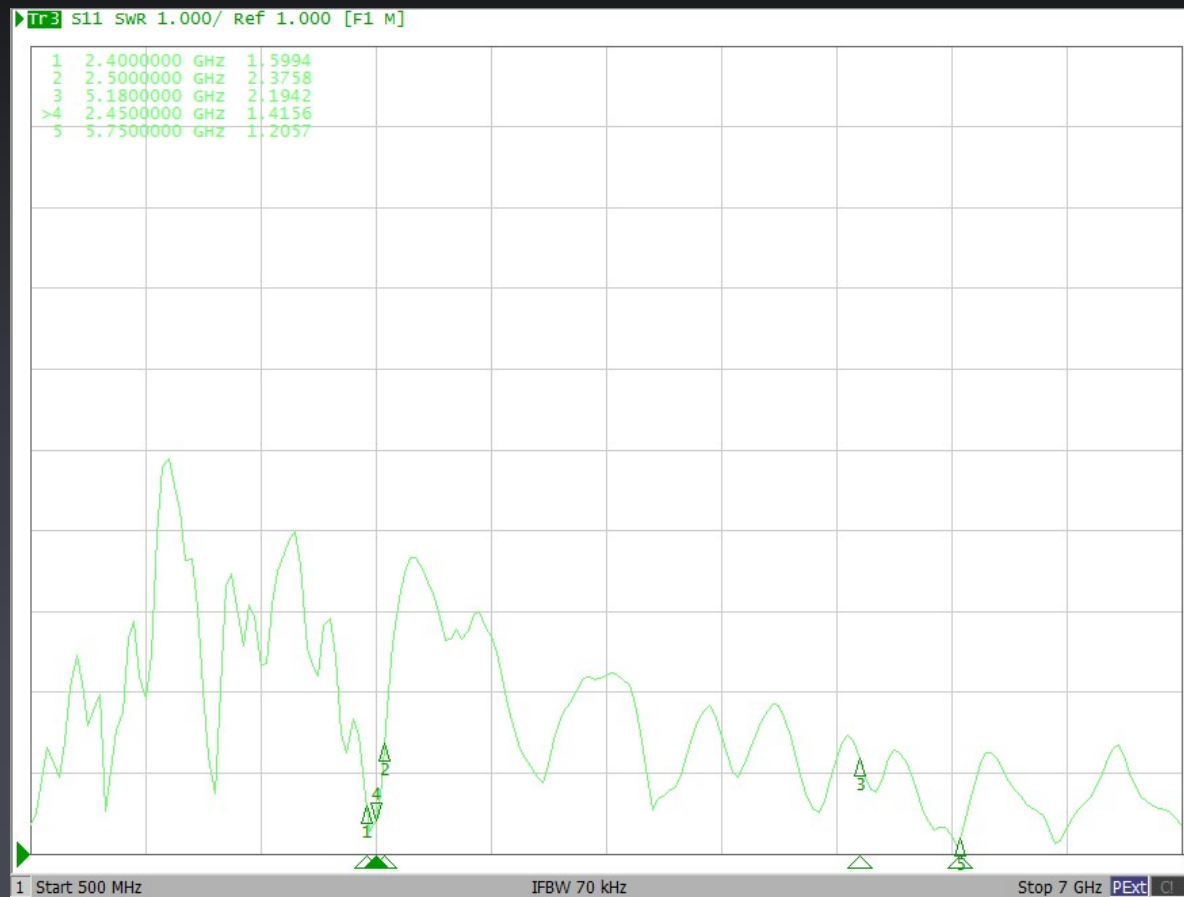
BT





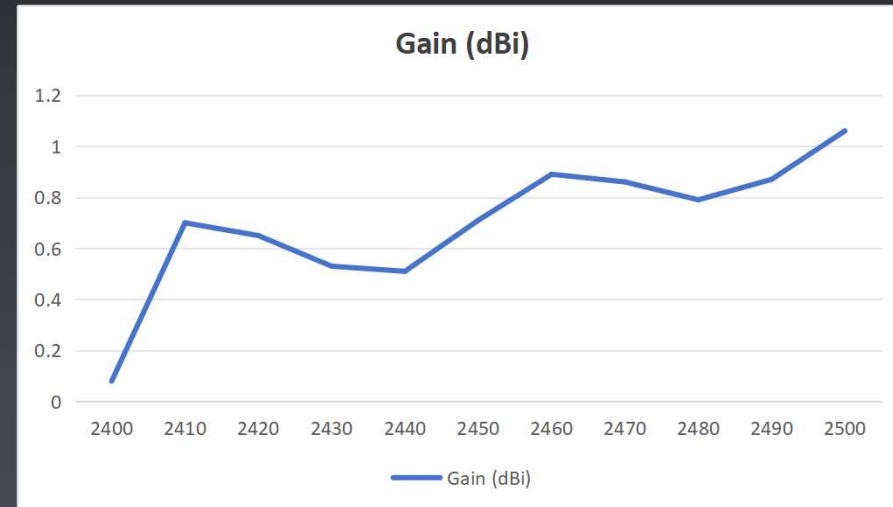
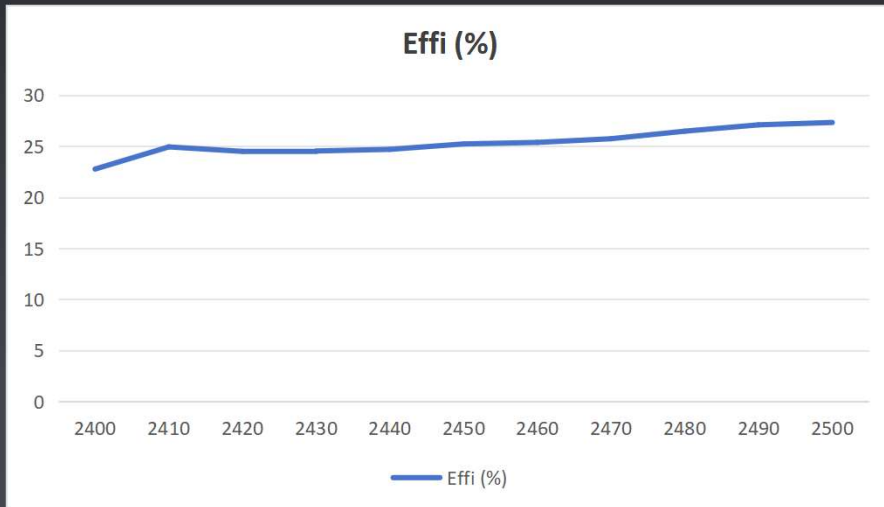
VSWR/S11

WiFi



2.4G Gain & Efficiency

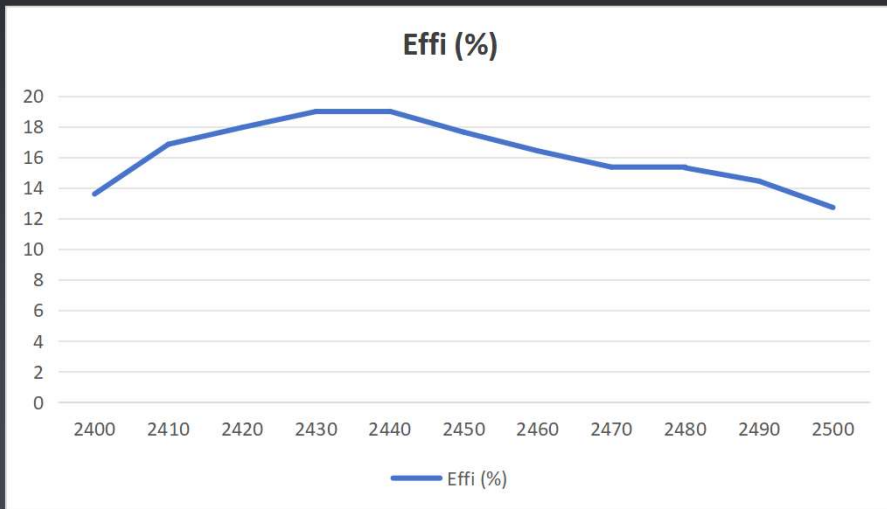
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (%)	22.76	24.93	24.49	24.53	24.69	25.22	25.37	25.73	26.47	27.09	27.32
Efficiency (dB)	-6.43	-6.03	-6.11	-6.1	-6.07	-5.98	-5.96	-5.9	-5.77	-5.67	-5.64
Gain (dBi)	0.08	0.7	0.65	0.53	0.51	0.71	0.89	0.86	0.79	0.87	1.06



BT

2.4G Gain & Efficiency

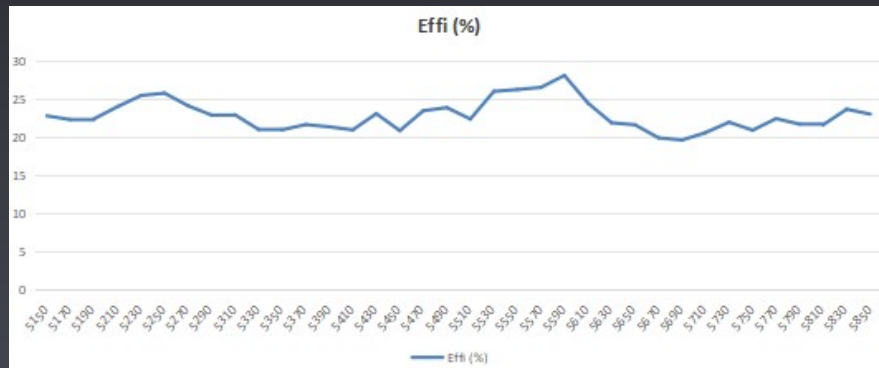
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (%)	13.59	16.84	17.94	18.98	18.99	17.63	16.41	15.35	15.3	14.43	12.71
Efficiency (dB)	-8.67	-7.74	-7.46	-7.22	-7.21	-7.54	-7.85	-8.14	-8.15	-8.41	-8.96
Gain (dBi)	-3.45	-2.47	-2.28	-2.18	-2.44	-3.03	-3.55	-3.91	-3.75	-3.57	-4.03



WiFi

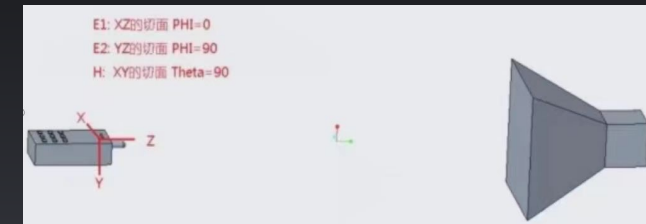
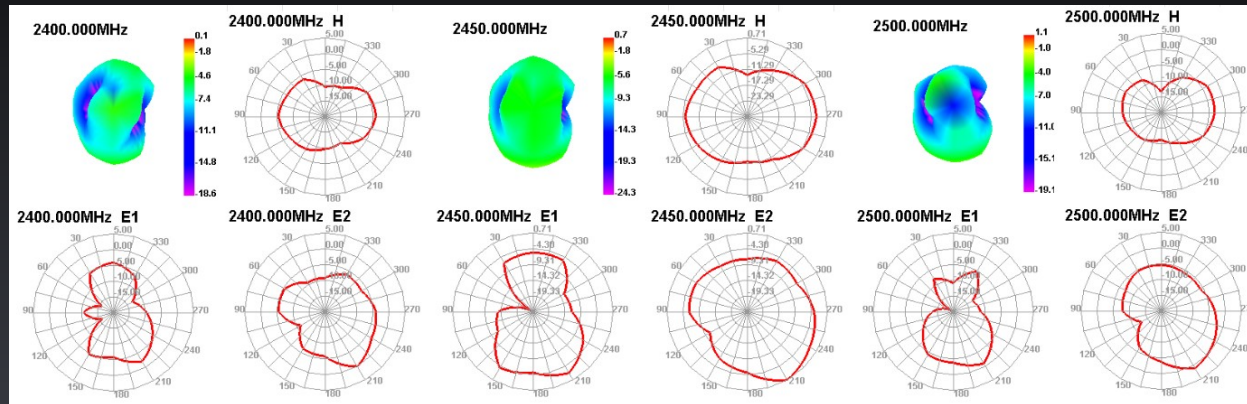
5G Gain & Efficiency

Frequency (MHz)	5150	5170	5190	5210	5230	5250	5300	5400	5500	5600	5700	5730	5750	5770	5790	5810	5830	5850
Efficiency	22.75	22.26	22.36	23.95	25.41	25.72	24.07	22.85	22.88	20.97	20.93	21.61	21.32	20.92	23.04	20.82	23.42	23.83
Efficiency (dB)	-6.43	-6.53	-6.5	-6.21	-5.95	-5.9	-6.18	-6.41	-6.41	-6.78	-6.79	-6.65	-6.71	-6.8	-6.38	-6.81	-6.3	-6.23
Gain (dBi)	-1.22	-1.27	-1.12	-0.79	-0.55	-0.45	-0.71	-0.97	-0.91	-1.43	-1.51	-1.18	-1.43	-1.89	-1.46	-1.94	-1.29	-1.42



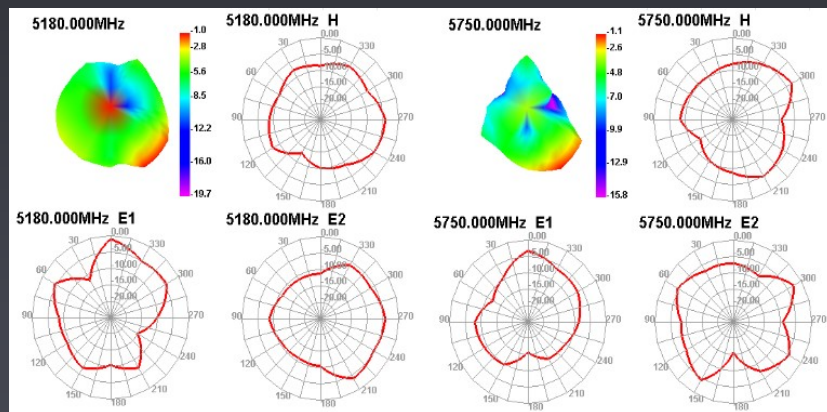
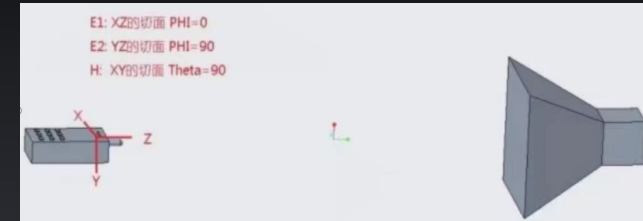
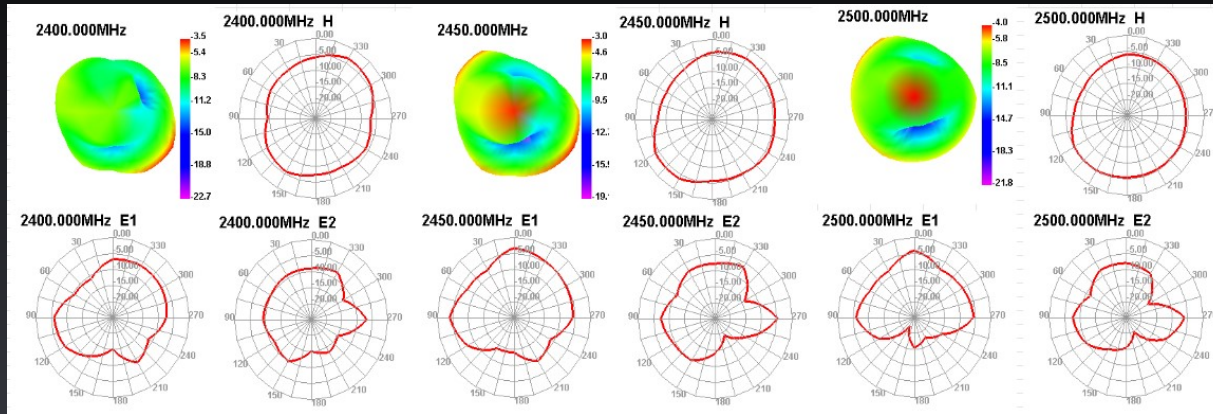
WiFi

2.4G Radiation pattern



BT

2.4G and 5G Radiation pattern



WiFi

Thank You