



Shenzhen Dosking Technology Co., Ltd

# DOSKING Antenna Test Report

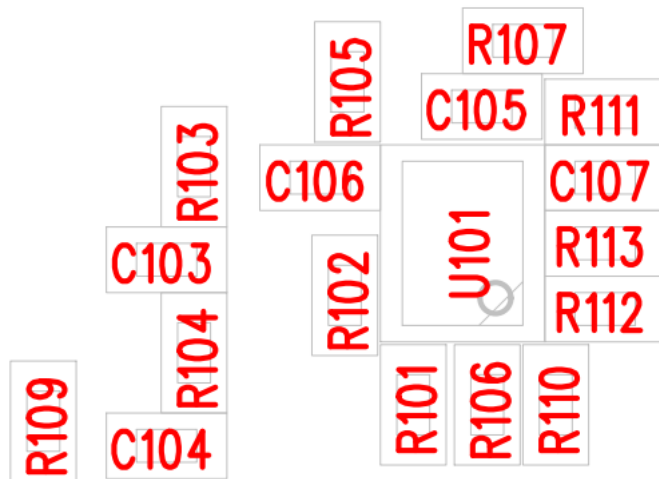
Client Name	Telo Communication (Shenzhen) Co., Ltd
Project Name	TE620G
Frequency Bands	GSM:2.5 WCDMA:2.4.5 LTE : 2.4.5.7.12.13.17.26.41.66
Secondary Antenna	GWB
Version	V1.0
RF Engineer	Engineer Peng: 18565640925

## 1. The Equipment of Active Test

1. ETS Chamber 7×4×3(m)/3\*3\*3 ( m ) (3D dark room)
2. Vector Network Analyzer (Passive Tester)
3. Network analyzer-5071E/B/Comprehensive measuring instrument-8960/LTE-RS-CMW500/MT8820C

Support 2G、 3G、 4G/BT、 WIFI、 NB

## 2. Matching Circuit Main Antenna ( match no change )



Element	Match Value
E1	
E2	
E3	



### 3 : Antenna Test

OTA Test Data :

Model : T400H-USA Version				Antenna implementation : FPC						Unit : dBm		
Channel	GSM850			GSM900			DCS1800			PCS1900		
	CH128	CH192	CH251	CH1	CH62	CH124	CH512	CH698	CH885	CH512	CH661	CH810
TRP	27.53	28.07	28.11							25.02	25.27	25.-8
TIS			-102.83									-104.17
Channel	WCDMA-1900			WCDMA-1700			WCDMA-850			WCDMA-900		
	CH9663	CH9800	CH9938	CH1537	CH1638	CH1738	CH4357	CH4408	CH4458	CH2937	CH3013	CH3083
TRP	17.77	17.39	17.32	18.09	18.72	18.14	19.23	19.62	19.19			
TIS			-105.09			-105.73			-104.10			



Channel	LTE-FDD-B2			LTE-FDD-B4			LTE-FDD-B5			LTE-FDD-B7		
	CH18650	CH18900	CH19150	CH20000	CH20175	CH20350	CH20450	CH20525	CH20600	CH20800	CH21100	CH21400
TRP	19.19	19.64	19.51	19.29	19.89	19.27	20.34	20.32	19.63	20.81	20.50	20.15
TIS			-93.06			-93.57			-90.71			-92.75
Channel	LTE-FDD-B12			LTE-FDD-B13			LTE-FDD-B17			LTE-FDD-B26		
	CH23050	CH23090	CH23130		CH23230		CH23780	CH23790	CH23800	CH26740	CH26865	CH26990
TRP	18.93	18.77	18.32		19.64		19.03	18.91	18.49	19.71	19.40	18.85
TIS			-90.66		-90.80				-89.70			-90.02
Channel	LTE-TDD-B41			LTE-FDD-B66								
	CH40340	CH40620	CH41140	CH132022	CH13232 2	CH132622						
TRP	20.08	19.31	18.48	18.73	19.00	18.84						
TIS			-90.19			-91.57						



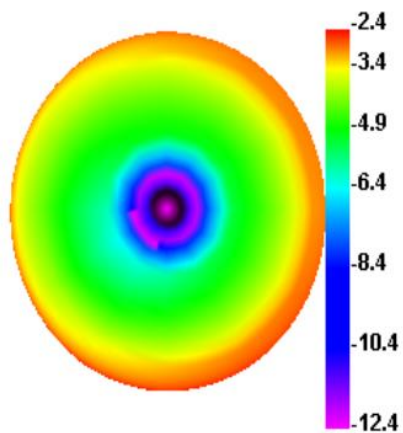
#### 4 : Main Antenna Passive Efficiency and Apple Diagram

Passive Test For 700-880				Passive Test For 1700-2700			
Freq	Effi	Effi	Gain	Freq	Effi	Effi	Gain
(MHz)	(%)	(dB)	(dBi)	(MHz)	(%)	(dB)	(dBi)
700	32.66	-4.86	-2.37	1700	31.6	-5	-3.38
718	48.42	-3.15	-0.79	1730	30.89	-5.1	-3.39
736	57.03	-2.44	-0.06	1760	38.82	-4.11	-2.16
754	48.36	-3.15	-0.93	1790	40.5	-3.93	-2.06
772	41.25	-3.85	-1.62	1820	36.77	-4.35	-2.53
790	43.82	-3.58	-1.13	1850	39.91	-3.99	-1.96
820	32.41	-4.89	-2.1	1880	45.42	-3.43	-1.36
830	36.85	-4.34	-1.59	1910	31.72	-4.99	-1.65
840	36.95	-4.32	-1.25	1940	37.69	-4.24	-0.76
850	35.83	-4.46	-1.35	1970	34.42	-4.63	-1.52
860	37.8	-4.22	-0.85	2000	34.62	-4.61	-1.42
870	39.2	-4.07	-0.62	2030	37.96	-4.21	-0.86
880	43.41	-3.62	-0.04	2060	39.47	-4.04	-0.12
890	30.92	-5.1	-1.66	2090	43.38	-3.63	0.59
900	35.9	-4.45	-1.03	2120	40.94	-3.88	0.73
910	39.69	-4.01	-0.66	2150	39.46	-4.04	0.88
920	42.37	-3.73	-0.41	2180	41.49	-3.82	0.86
930	41.99	-3.77	-0.4	2210	44.63	-3.5	0.88
940	41.55	-3.81	-0.4	2240	49.1	-3.09	1.09
950	41.02	-3.87	-0.37	2270	41.88	-3.78	0.32

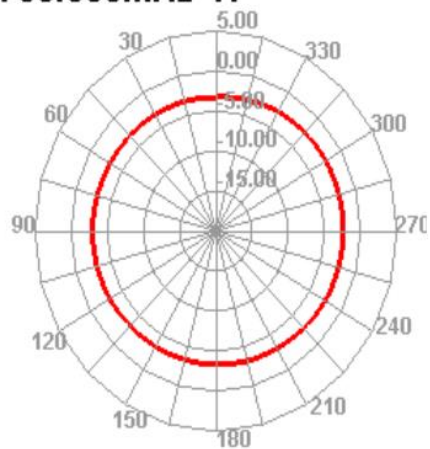


960	38.17	-4.18	-0.56	2300	44.27	-3.54	0.45
				2330	44.52	-3.51	0.83
				2360	38.83	-4.11	0.54
				2390	35.44	-4.5	0.31
				2420	36.54	-4.37	0.24
				2450	41.32	-3.84	0.66
				2480	45.84	-3.39	1.29
				2510	48.06	-3.18	1.33
				2540	44.95	-3.47	1.16
				2570	43.59	-3.61	0.87
				2600	41.57	-3.81	0.64
				2630	34.65	-4.6	-0.09
				2660	35.17	-4.54	-0.12
				2690	28.59	-5.44	-1.01
				2700	25.39	-5.95	-1.36

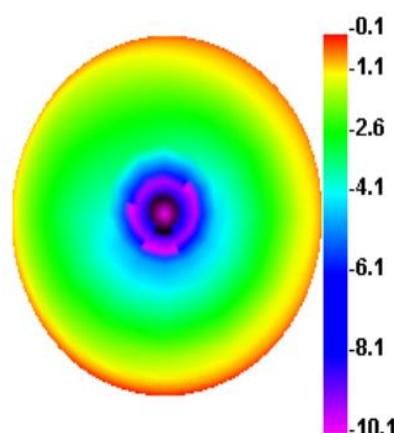
700.000MHz



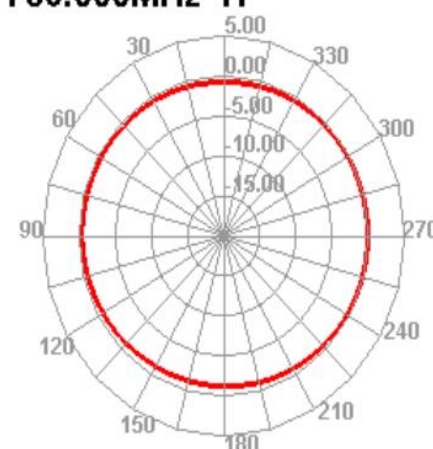
700.000MHz H



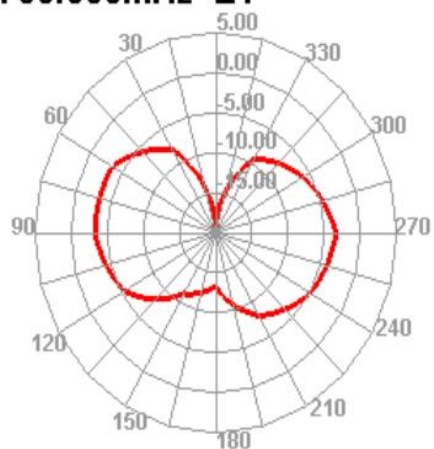
736.000MHz



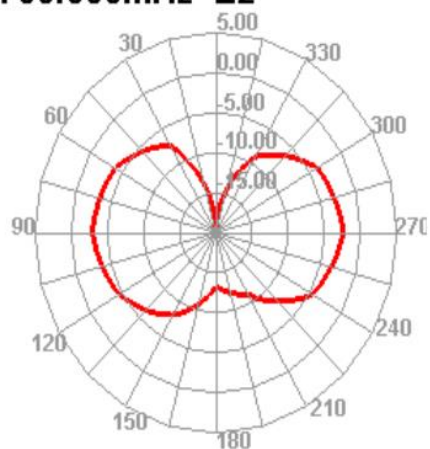
736.000MHz H



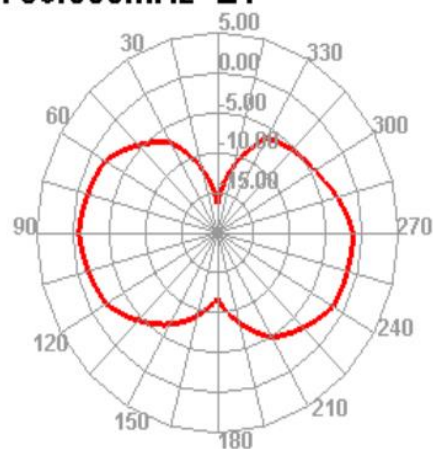
700.000MHz E1



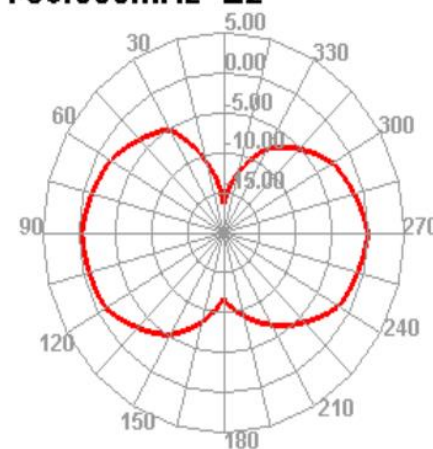
700.000MHz E2



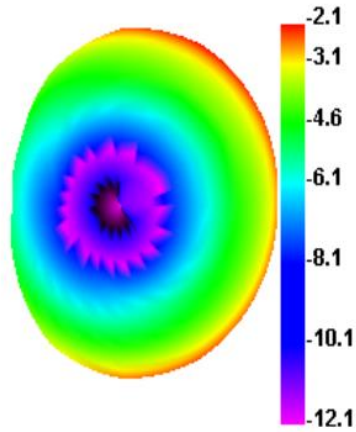
736.000MHz E1



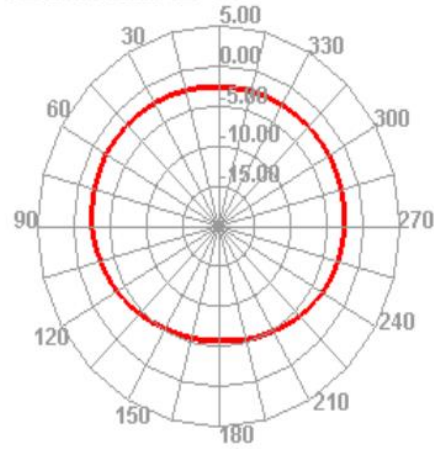
736.000MHz E2



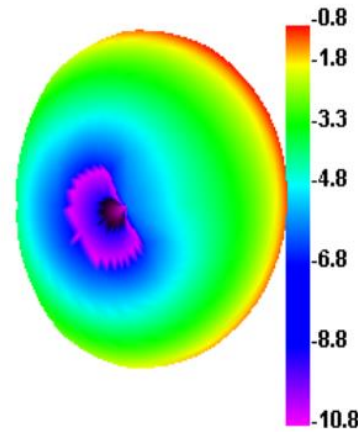
820.000MHz



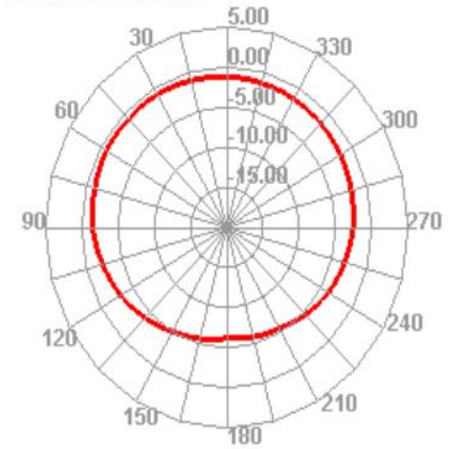
820.000MHz H



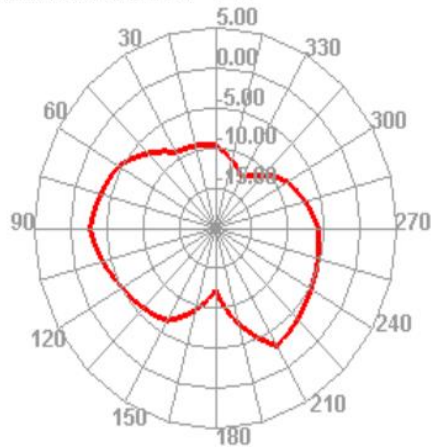
860.000MHz



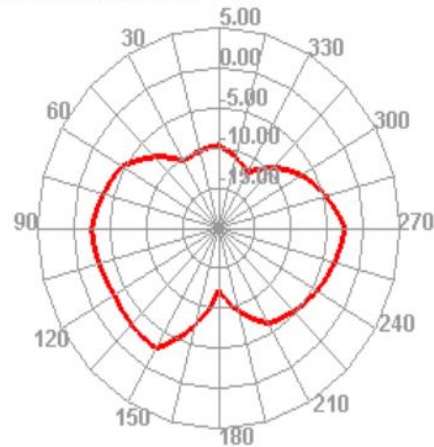
860.000MHz H



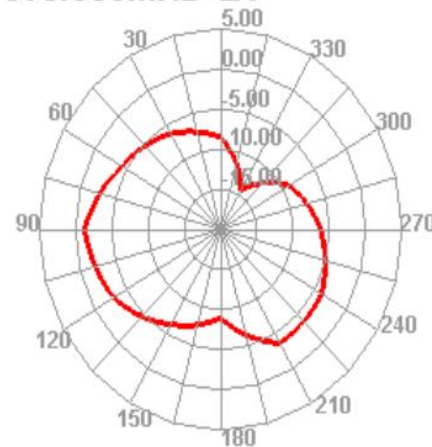
820.000MHz E1



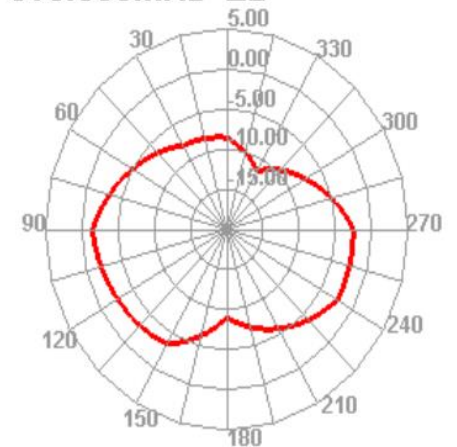
820.000MHz E2



860.000MHz E1

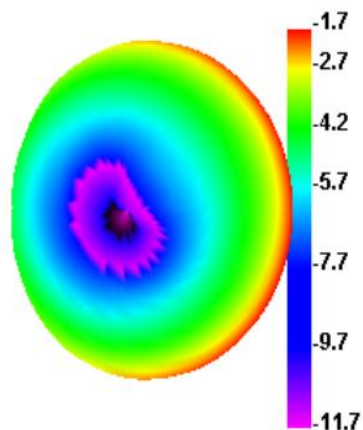


860.000MHz E2

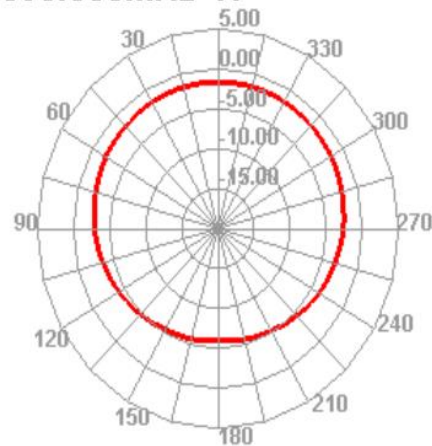




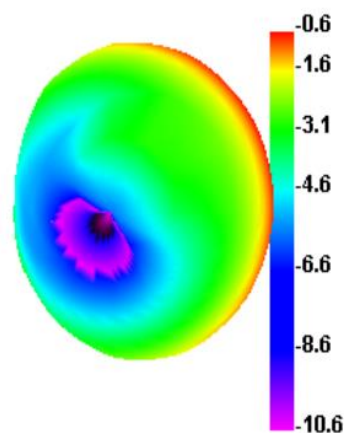
890.000MHz



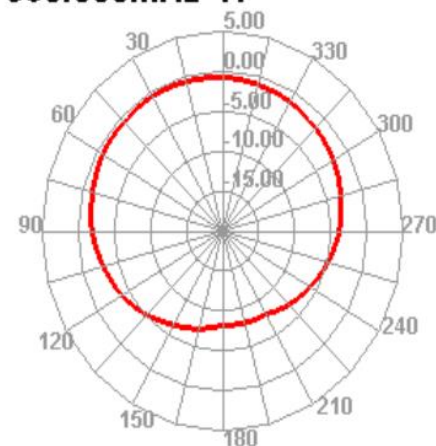
890.000MHz H



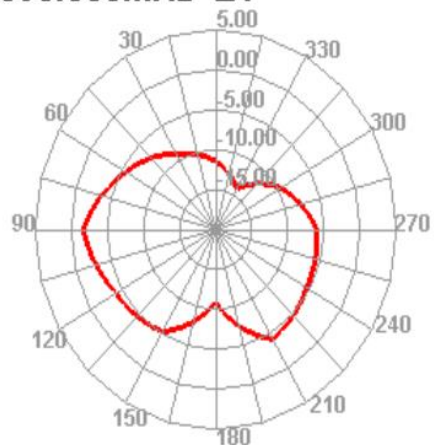
960.000MHz



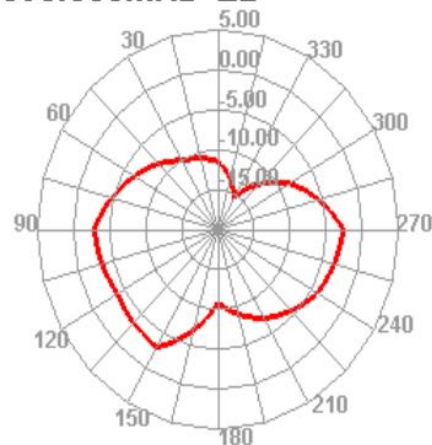
960.000MHz H



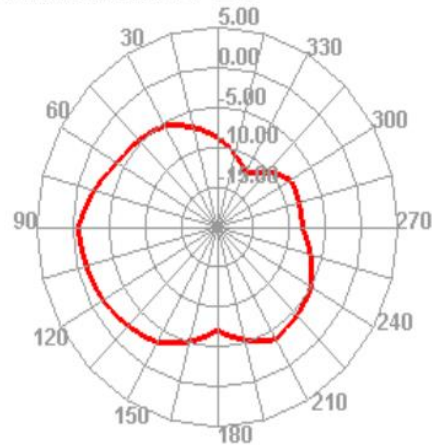
890.000MHz E1



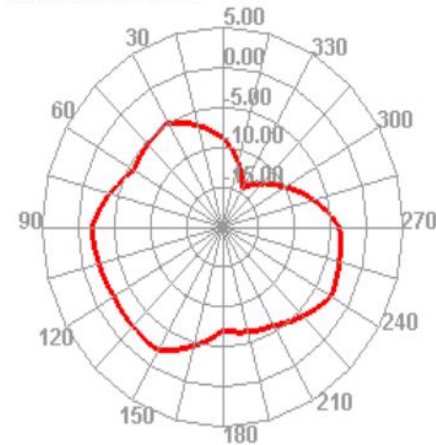
890.000MHz E2



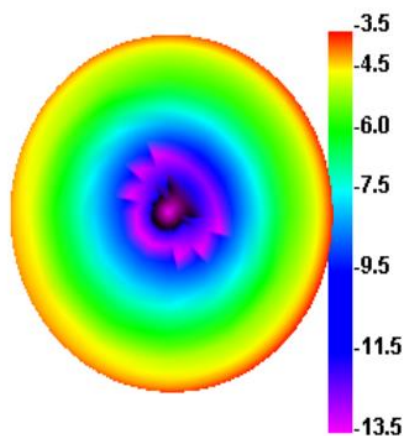
960.000MHz E1



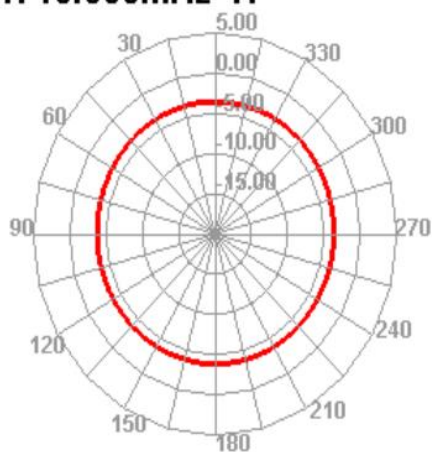
960.000MHz E2



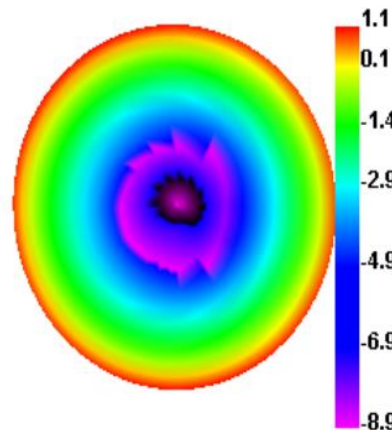
1710.000MHz



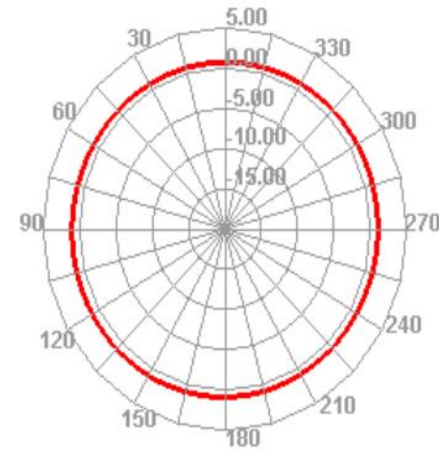
1710.000MHz H



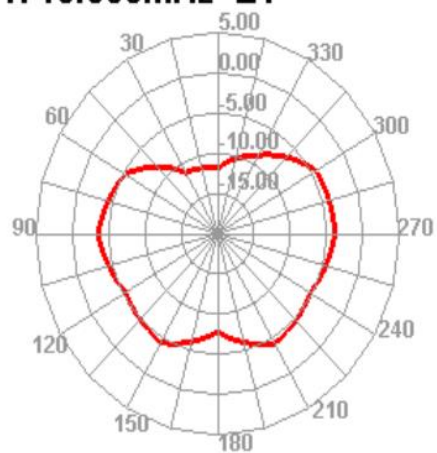
1990.000MHz



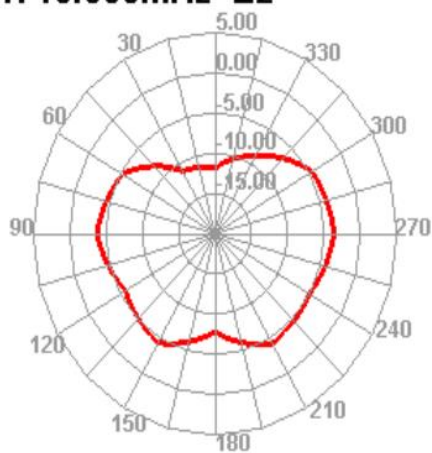
1990.000MHz H



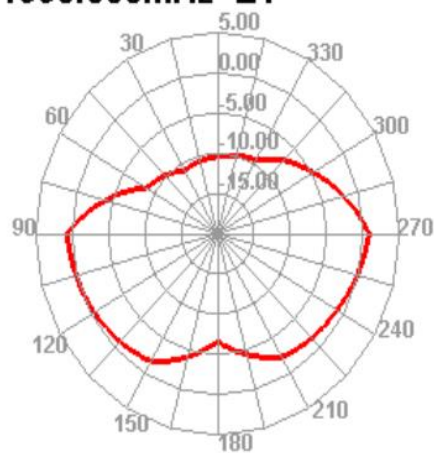
1710.000MHz E1



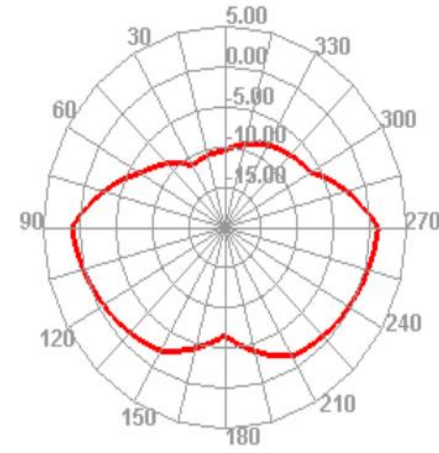
1710.000MHz E2



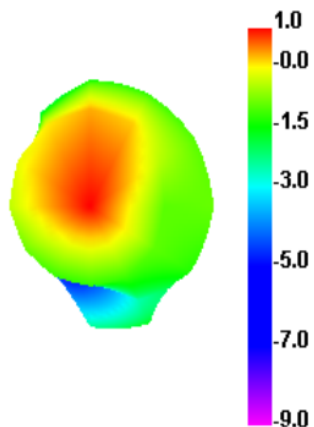
1990.000MHz E1



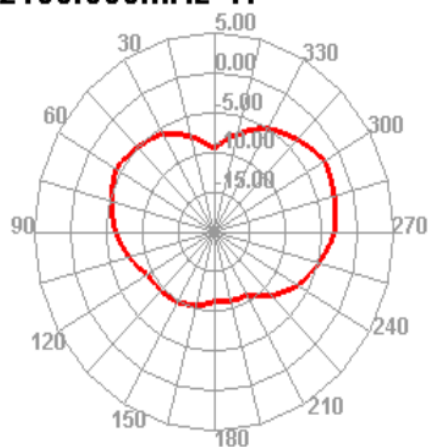
1990.000MHz E2



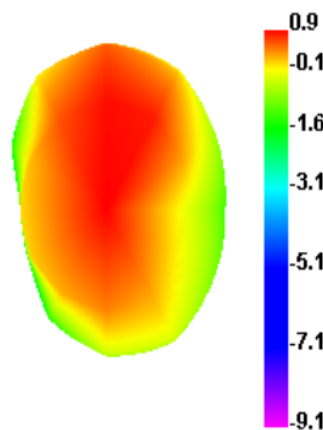
2100.000MHz



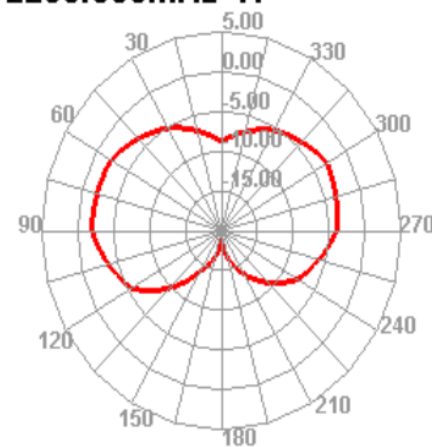
2100.000MHz H



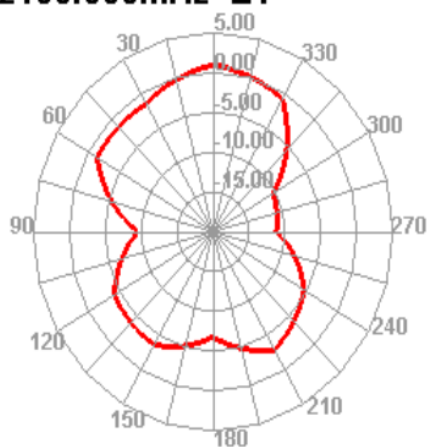
2200.000MHz



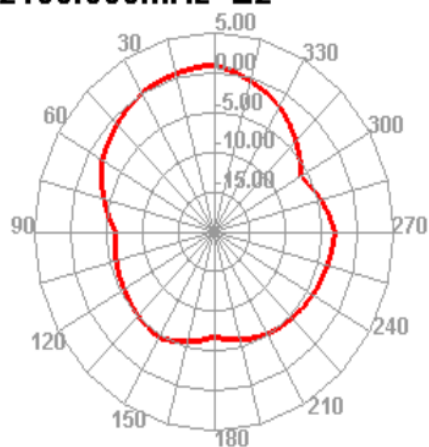
2200.000MHz H



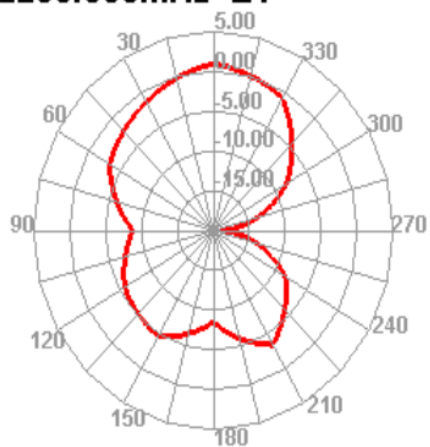
2100.000MHz E1



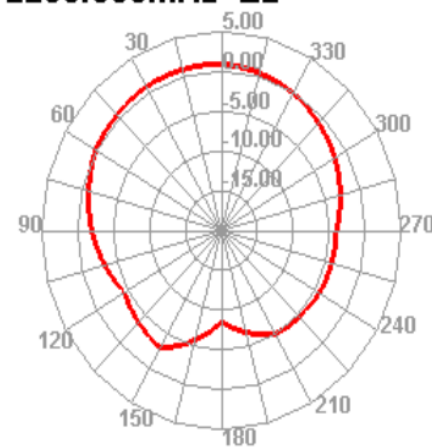
2100.000MHz E2



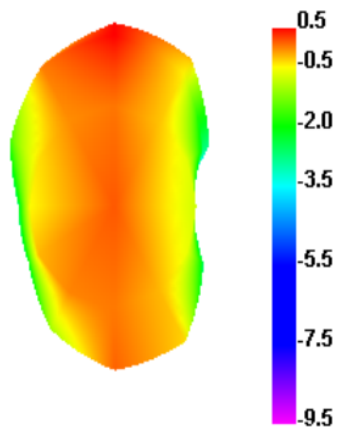
2200.000MHz E1



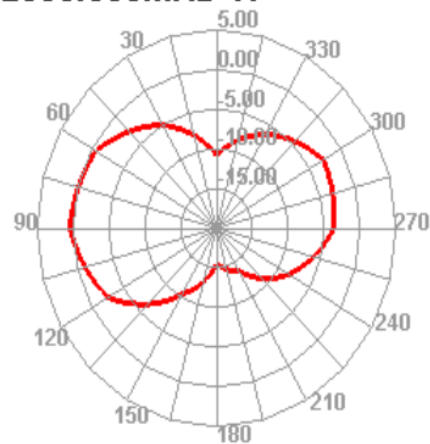
2200.000MHz E2



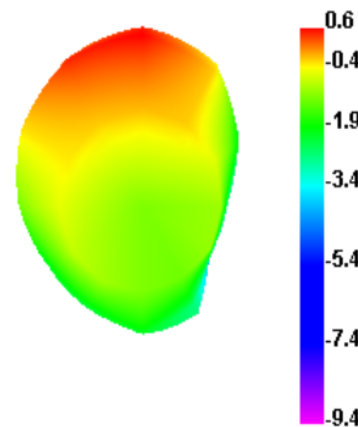
2300.000MHz



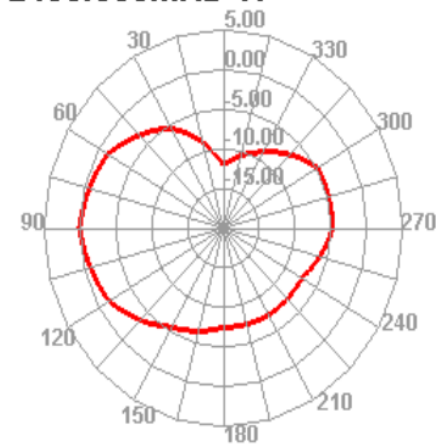
2300.000MHz H



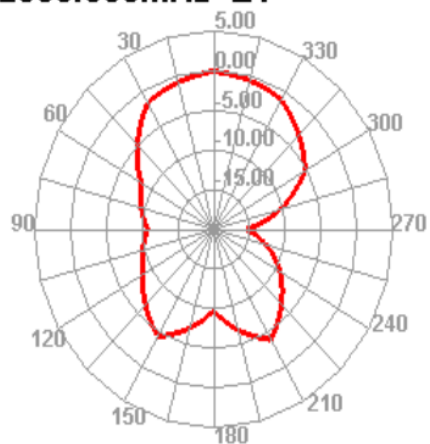
2400.000MHz



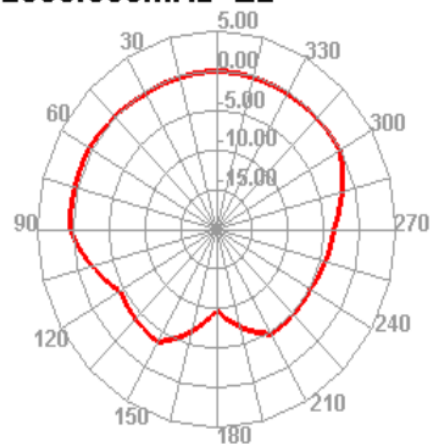
2400.000MHz H



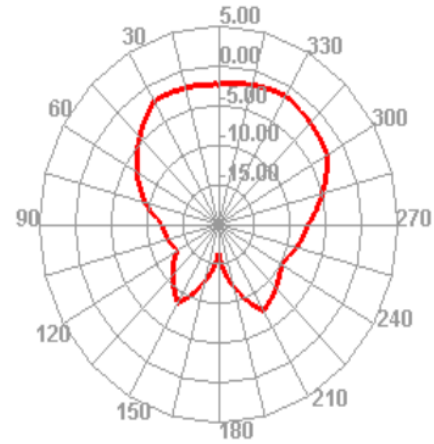
2300.000MHz E1



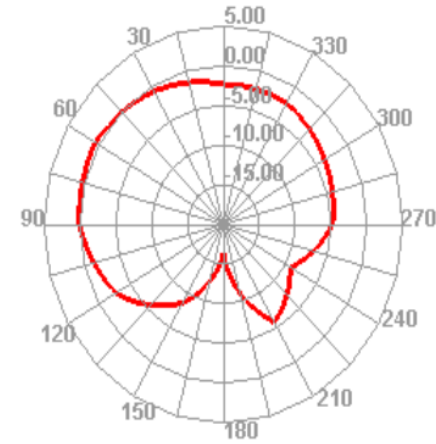
2300.000MHz E2



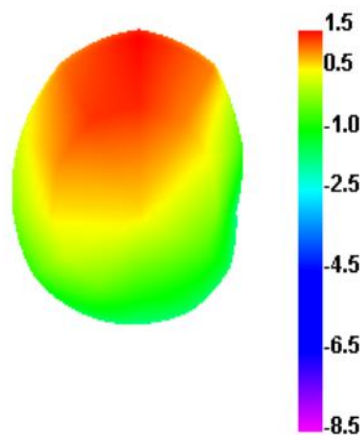
2400.000MHz E1



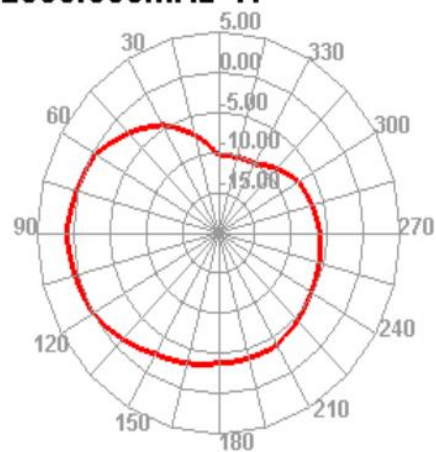
2400.000MHz E2



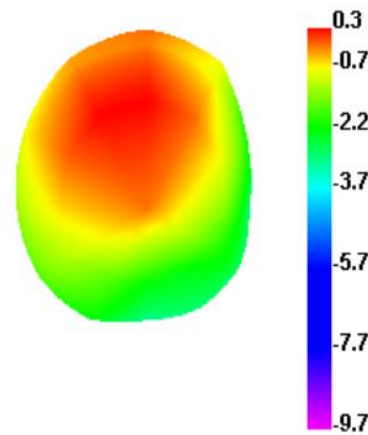
2500.000MHz



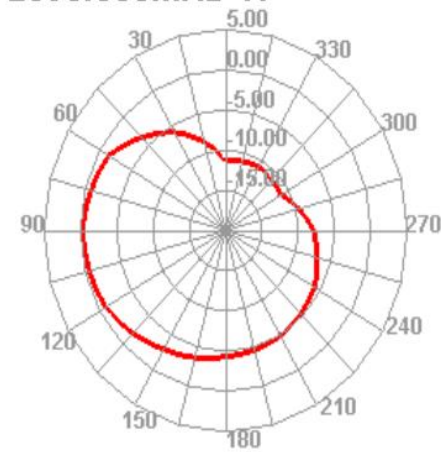
2500.000MHz H



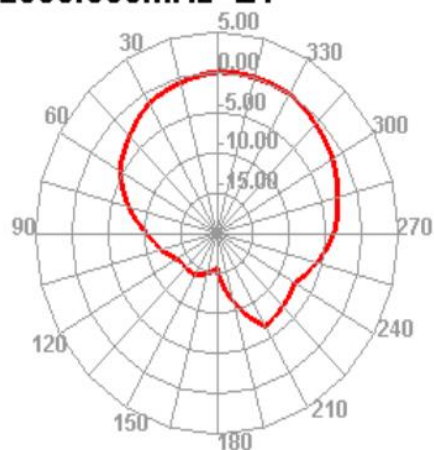
2590.000MHz



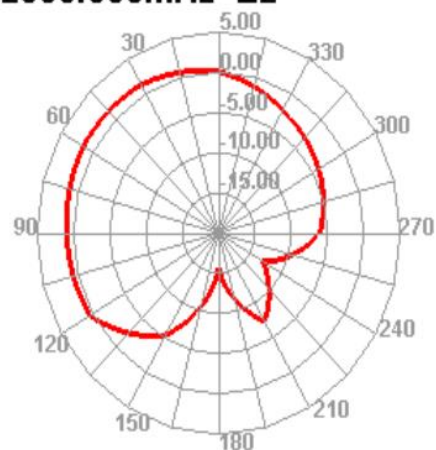
2590.000MHz H



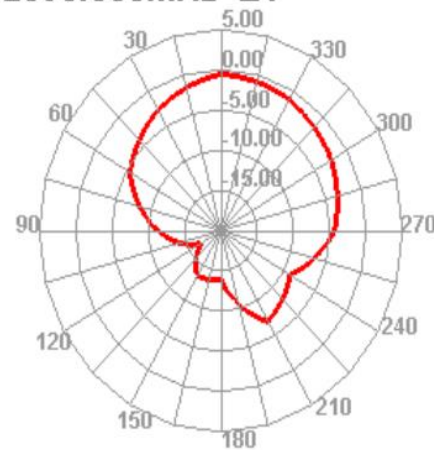
2500.000MHz E1



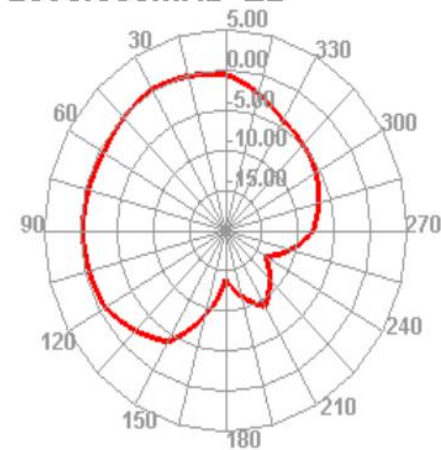
2500.000MHz E2



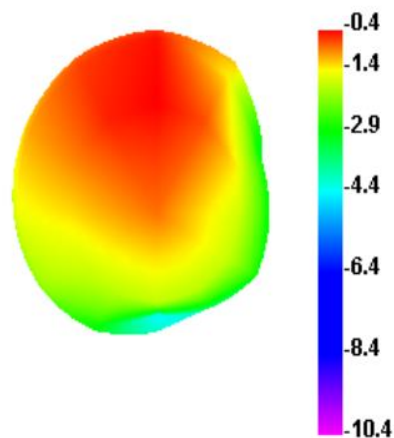
2590.000MHz E1



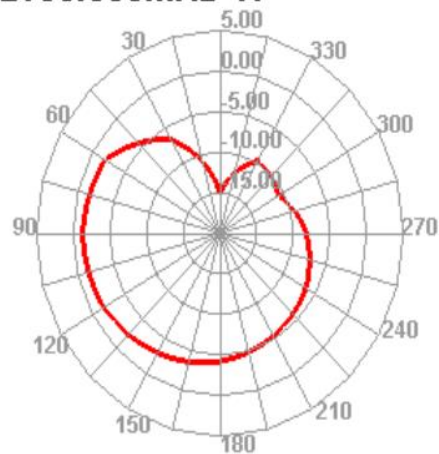
2590.000MHz E2



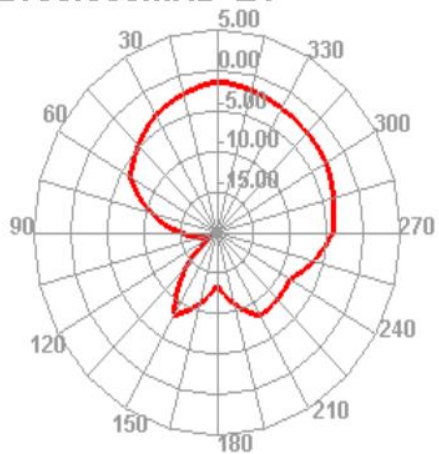
2680.000MHz



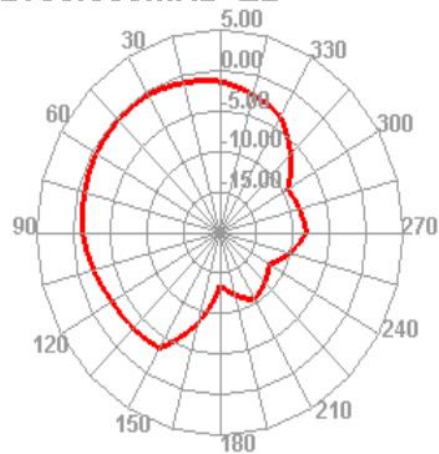
2680.000MHz H



2680.000MHz E1



2680.000MHz E2





## 5 : GPS/WIFI/BT

GPS/WIFI/BT Remark:	GPS	Maximum signal strength	Receive Quantity	Average positioning time ( s )	Weather
		42	18	60-90	Sunny Day
	WIFI	Normal Internet distance ( m )		Browse smooth distance online ( m )	
		12-15		10-12	
	BT	Clear call distance ( m )			
		10-12			



---

2.4G WiFi				5G WiFi			
Frequency band	Channel	TRP (dBm)	TIS (dBm)	Frequency band	Channel	TRP (dBm)	TIS (dBm)
11B	1	10.15	-82.39	11A	36	10.41	-71.03
	7	11.27	-82.86		60	9.77	-70.68
	13	10.35	-82.06		165	7.41	-68.39

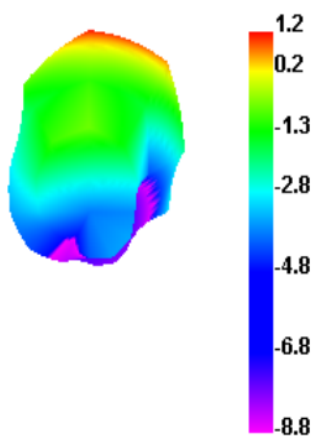




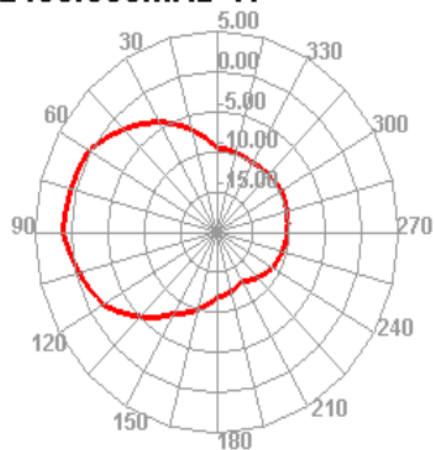
## 6 : Secondary Antenna Passive Efficiency Parameters and Apple Diagram

Passive Test For 2400-2500				Passive Test For WIFI5.8			
Freq	Effi	Effi	Gain	Freq	Effi	Effi	Gain
(MHz)	(%)	(dB)	(dBi)	(MHz)	(%)	(dB)	(dBi)
2400	30.07	-5.22	1.18	5150	33.41	-4.39	1.31
2410	26.71	-5.73	1.04	5200	29.46	-5.31	0.88
2420	27.39	-5.62	1.16	5250	28.32	-5.48	0.55
2430	25.4	-5.95	0.74	5300	28.57	-5.44	0.26
2440	29.2	-5.35	1.64	5350	32.2	-4.92	0.24
2450	28.81	-5.4	1.88	5400	34.04	-4.68	0.05
2460	26.92	-5.7	1.75	5450	24.4	-6.13	-2.02
2470	27.9	-5.54	1.92	5500	23.88	-6.22	-1.86
2480	28.92	-5.39	2.2	5550	26.94	-5.7	-1.29
2490	32.63	-4.86	2.75	5600	30.1	-5.21	-0.87
2500	29.15	-5.35	2.23	5650	31.94	-4.96	-0.78
				5700	26.22	-5.81	-1.78
				5750	22.46	-6.49	-2.94
				5800	20.74	-6.83	-3.8
				5850	21.2	-6.74	-2.99

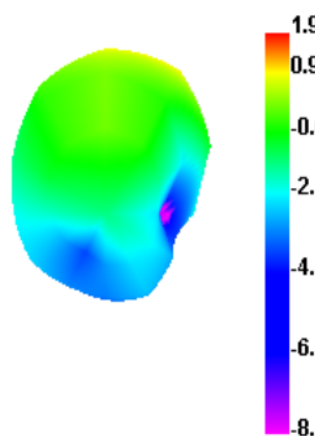
2400.000MHz



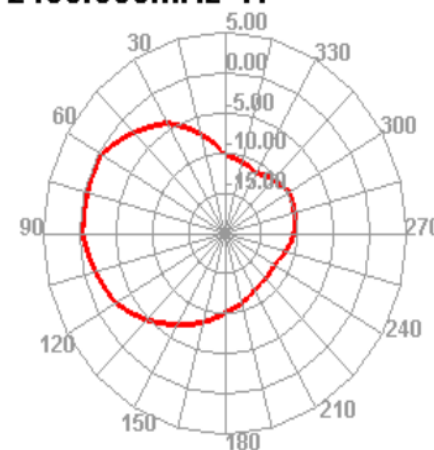
2400.000MHz H



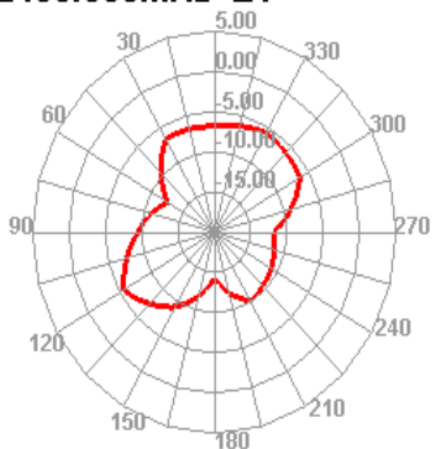
2450.000MHz



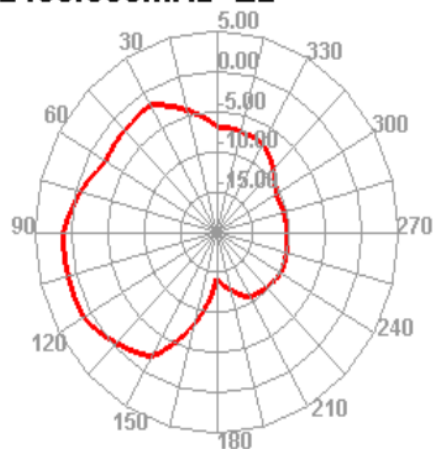
2450.000MHz H



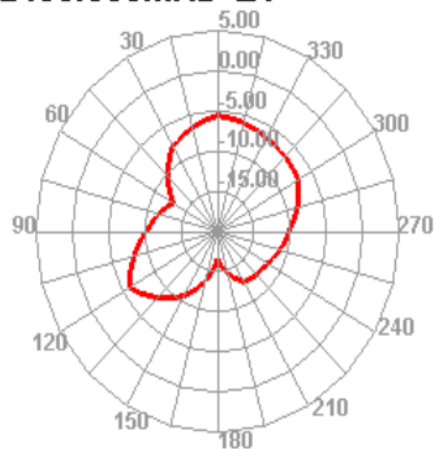
2400.000MHz E1



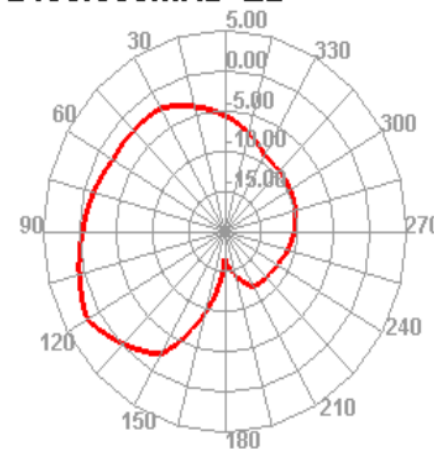
2400.000MHz E2



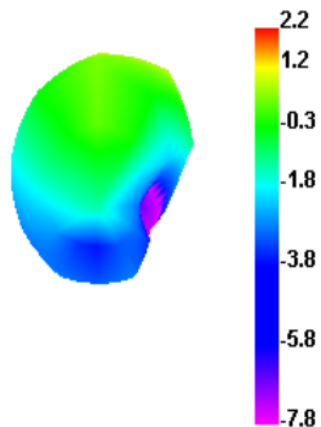
2450.000MHz E1



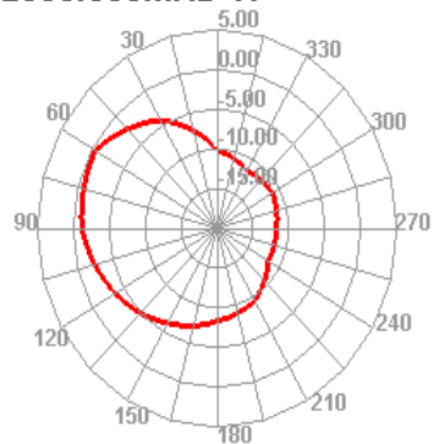
2450.000MHz E2



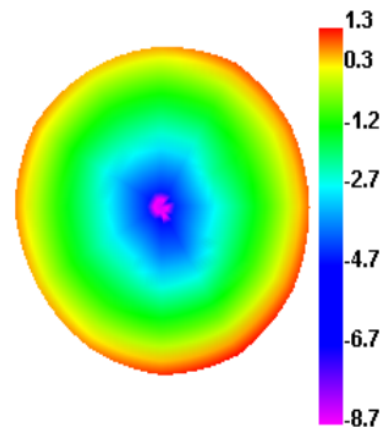
2500.000MHz



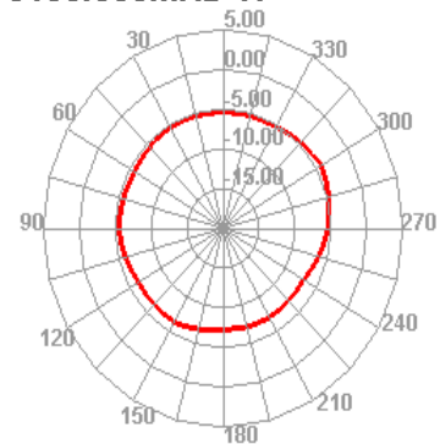
2500.000MHz H



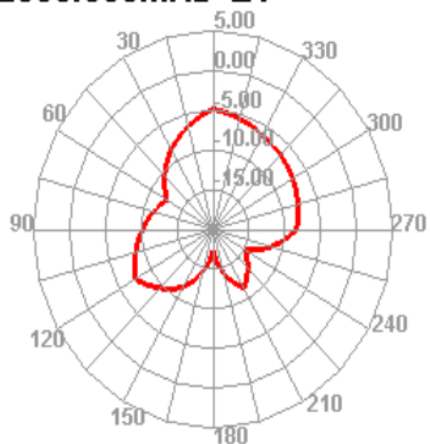
5150.000MHz



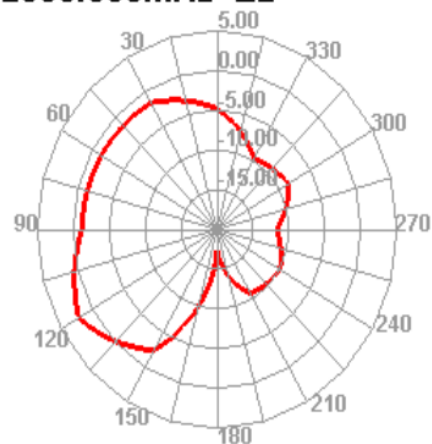
5150.000MHz H



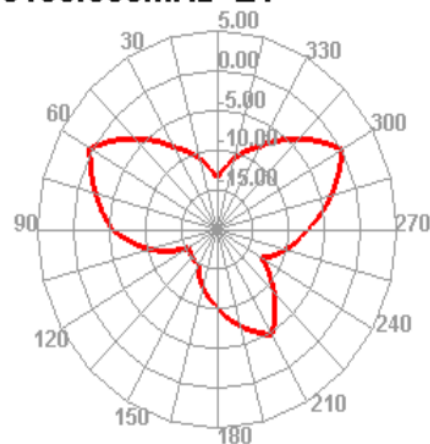
2500.000MHz E1



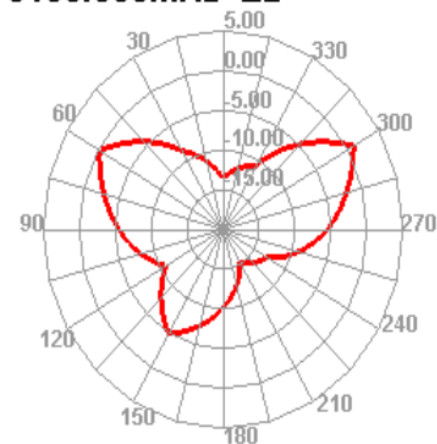
2500.000MHz E2



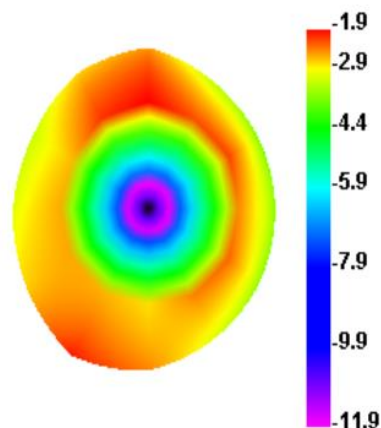
5150.000MHz E1



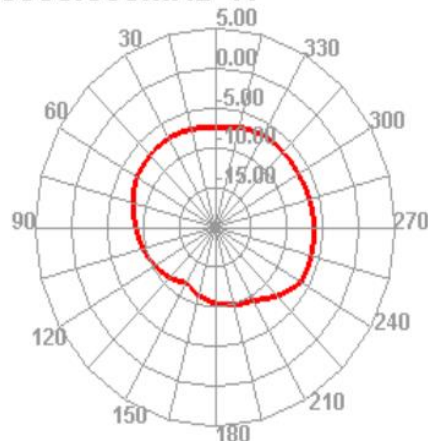
5150.000MHz E2



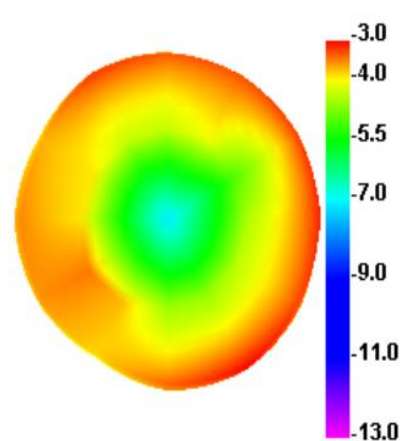
5500.000MHz



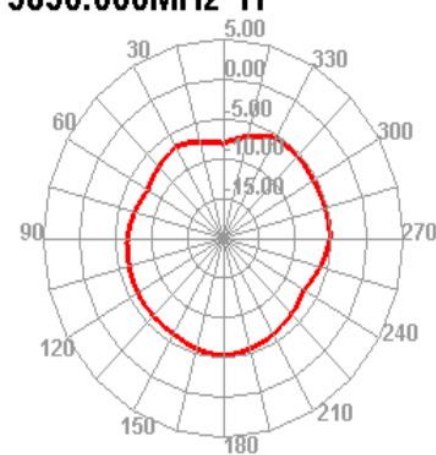
5500.000MHz H



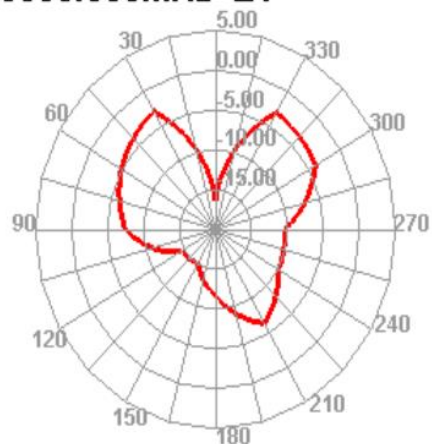
5850.000MHz



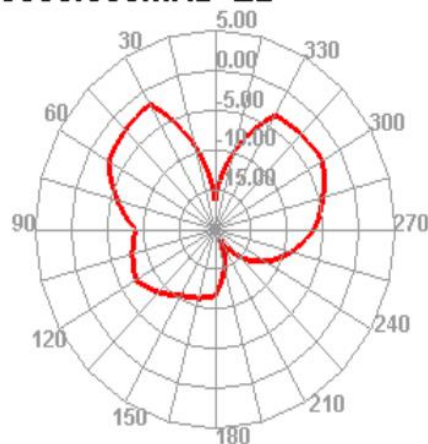
5850.000MHz H



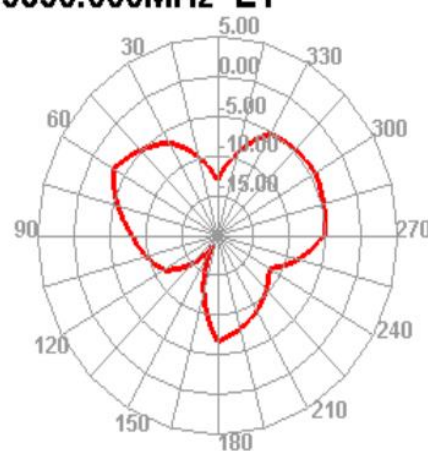
5500.000MHz E1



5500.000MHz E2



5850.000MHz E1



5850.000MHz E2

