

# SPECIFICATION

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## UNIMAX

### RC608L Antenna

#### Product approval sheet

Customer	Orbic	Band	LTE Band 2/4/5/12/13/25/26/66 WCDMA B1/2/4/5 GSM 850/900/1800/1900
Project	RC608L	Colour	Black

Customer check:

Reach requirement of customer: OK    NG

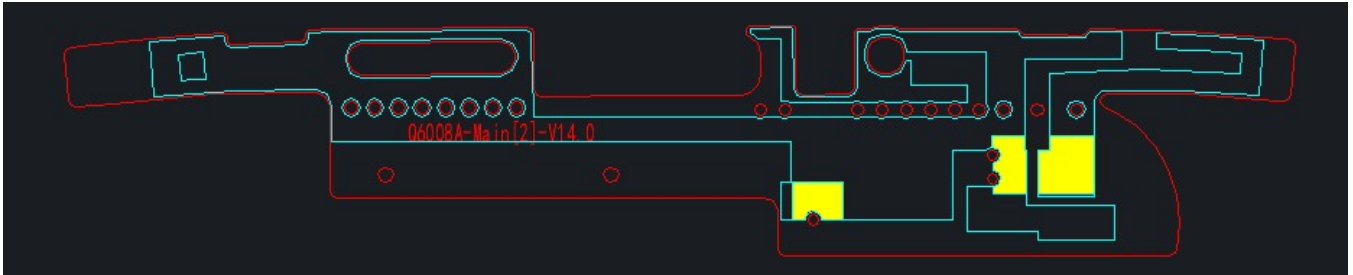
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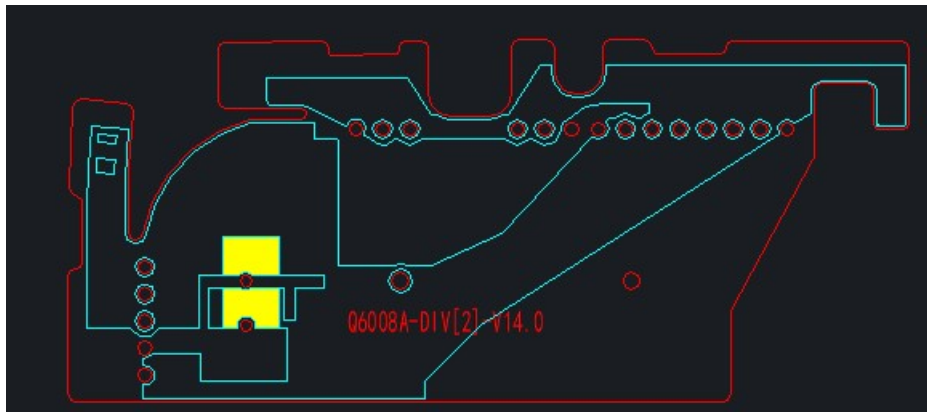
# 1 General description

## 1.1 Antenna appearing diagram

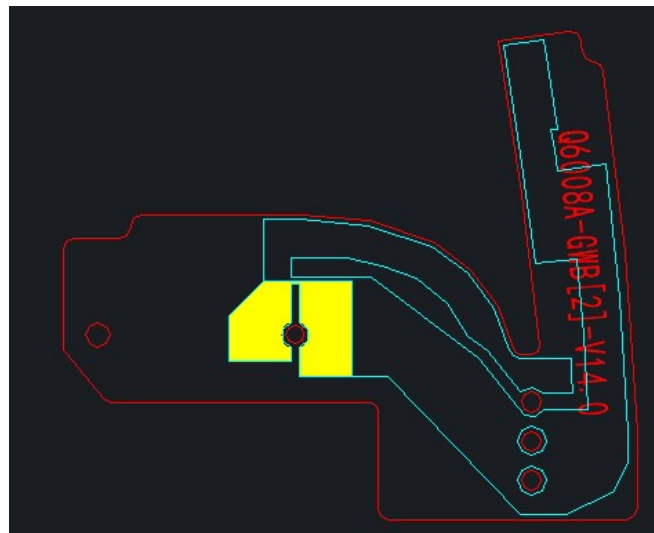
ANT0



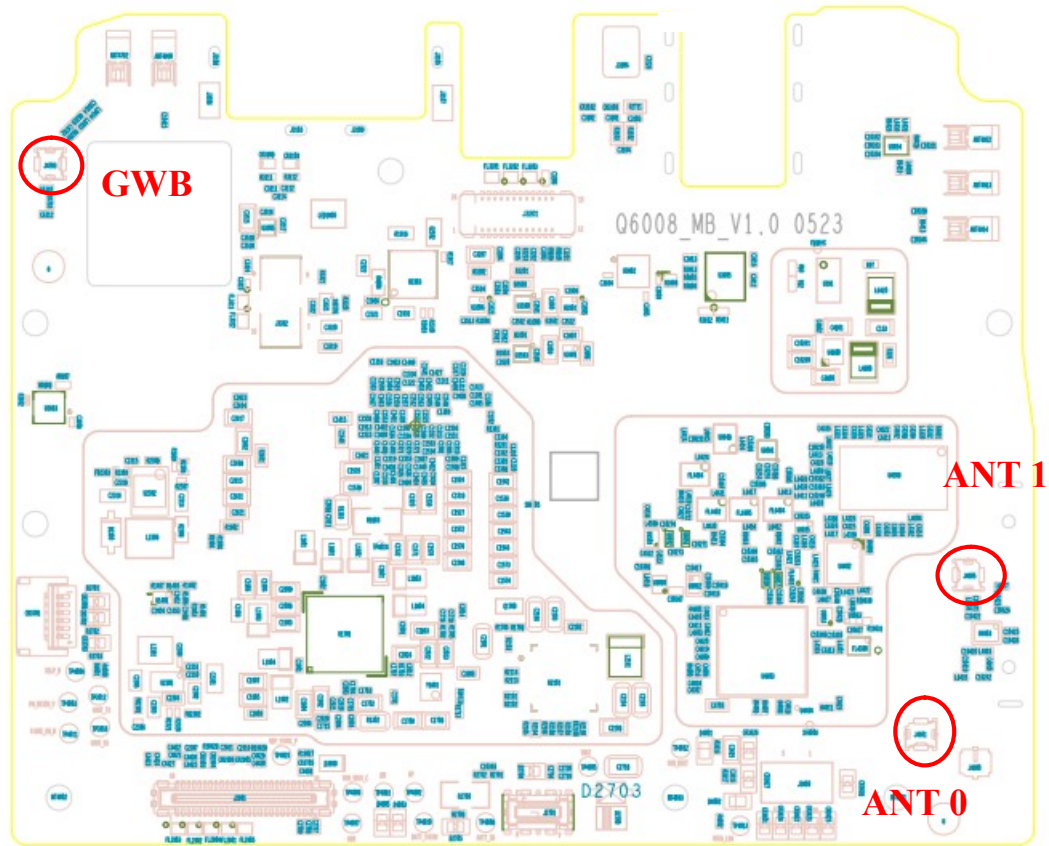
ANT1



GWB

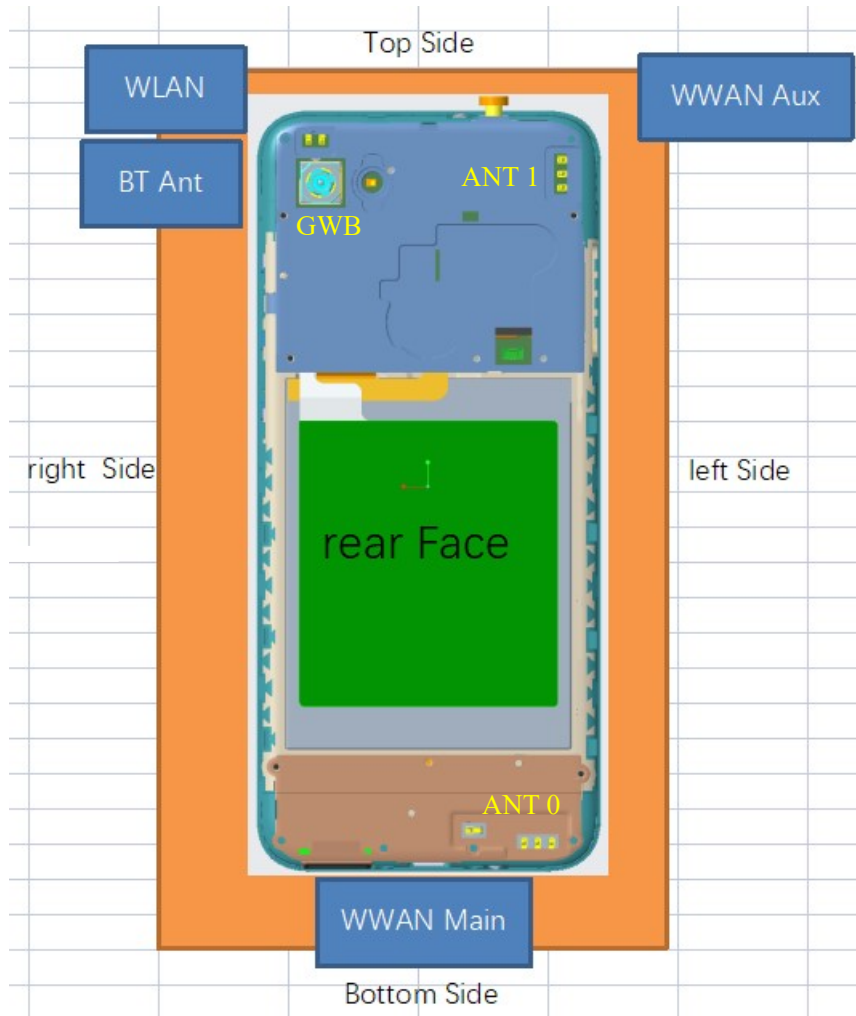


## 1.2 Antenna PORT



	LTE	WCDMA	GSM	GPS	WiFi	BT
ANT 0	Band 2/4/5/12/13/25/26/ 66 TRX	Band 1/2/4/5	GSM850 /900/1800/1 900			
ANT 1	Band 2/4/5/12/13/25/26/ 66 DRX					
GWB				L1	2.4G WiFi 5G WiFi	BT

### 1.3 Antenna location

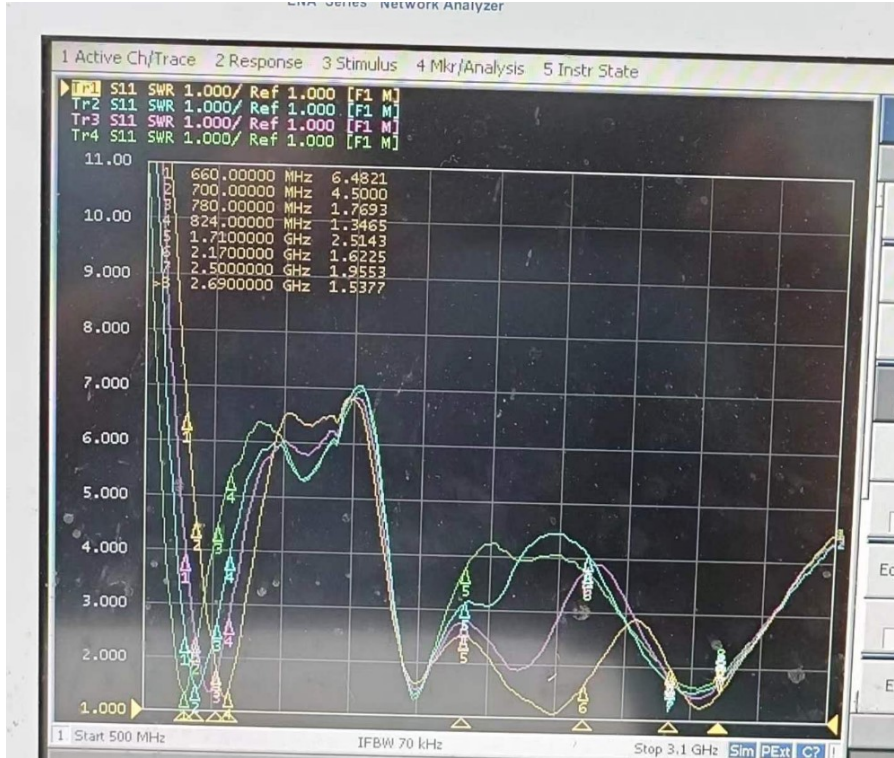


Antenna Location	Support Function	Top Side(mm)	Bottom Side(mm)	Left Side(mm)	Right Side(mm)
WWAN Main Antenna	TX/RX	147.3	1.1	1.1	1.1
WWAN Aux Antenna	DRX	1.1	141.2	1.1	38.3
WLAN Main Antenna	TX/RX	1.1	140.7	47.6	1.1
BT Antenna	follow WLAN Main ANT				

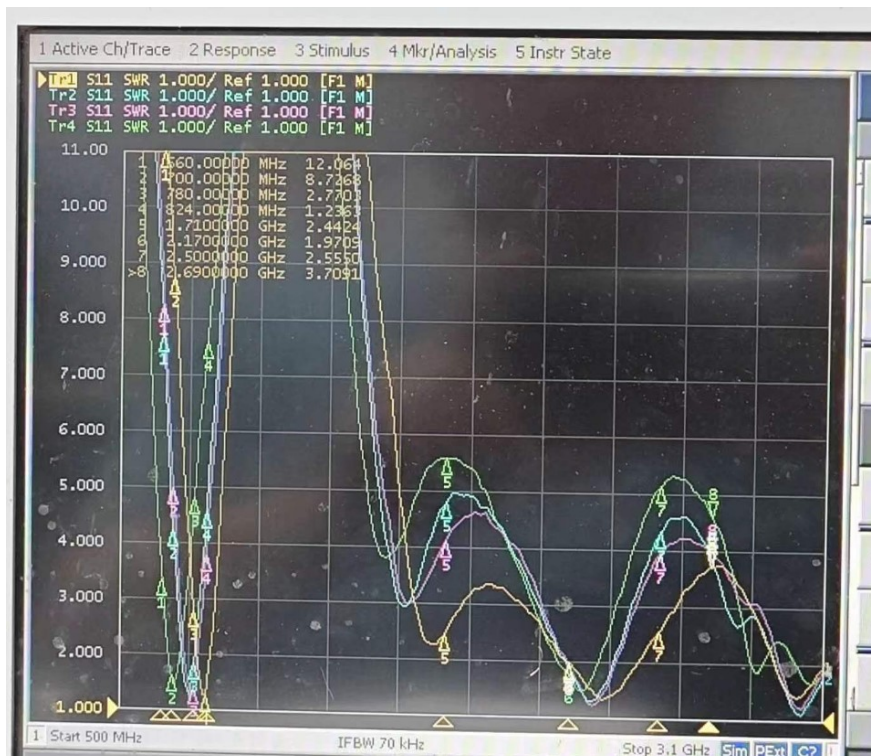
## 2 Electrical performance

### 2.1 VSWR

#### ANT0

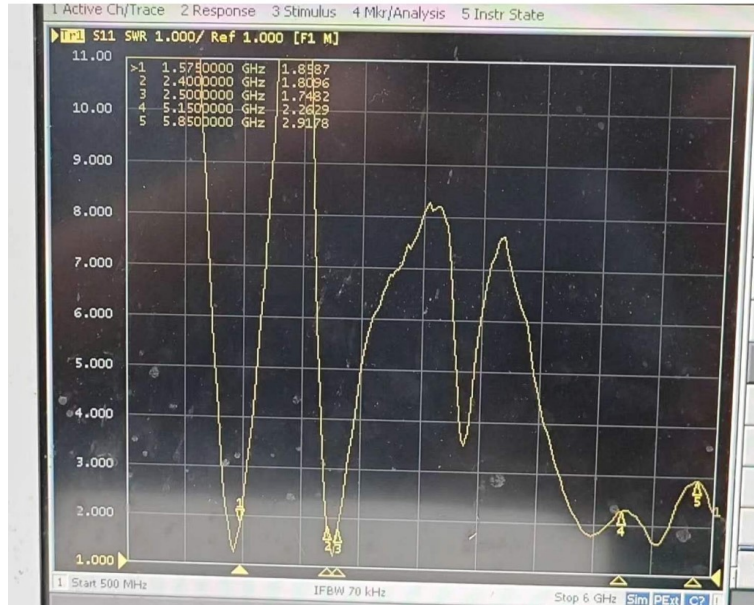


#### ANT1





# GWB



## 2.2 Efficiency &amp; Gain

## ANTO

Main Antenna RF1 (B5/8+MHB)								Main Antenna RF3(B12)			
frequency 频率(MHz)	gain 增益 (dBi)	efficiency 效率(dB)	efficiency 效率(%)	frequency 频率(MHz)	gain 增益 (dBi)	efficiency 效率(dB)	efficiency 效率(%)	frequency 频率(MHz)	gain 增益 (dBi)	efficiency 效率(dB)	efficiency 效率(%)
800	-4.39	-7.35	18.4	1700	1.15	-3.55	44.15	700	-3.24	-6.58	21.98
810	-4.05	-6.57	22.03	1720	1.67	-3.17	48.16	710	-2.53	-5.77	26.48
820	-3.26	-6.36	23.11	1740	0.9	-3.59	43.71	720	-2.33	-5.78	26.42
830	-3.42	-6.52	22.29	1760	1.21	-3.44	45.34	730	-1.69	-5.39	28.88
840	-2.23	-5.18	30.37	1780	1.18	-3.48	44.87	740	-1.71	-5.72	26.78
850	-2.14	-5.07	31.11	1800	1.25	-3.52	44.47	750	-1.64	-5.91	25.63
860	-2.19	-5.65	27.21	1820	1.06	-3.63	43.35	760	-2.45	-6.70	21.39
870	-3.91	-5.53	27.99	1840	0.99	-3.46	45.04				
880	-3.67	-5.69	26.99	1860	1.04	-3.33	46.46				
890	-4.08	-6.13	24.36	1880	0.85	-3.64	43.3				
900	-3.95	-6.03	24.97	1900	1.08	-3.3	46.81				
910	-3.99	-6.36	23.11	1920	0.72	-3.38	45.88				
920	-3.76	-6.16	24.23	1940	0.57	-3.49	44.74				
				1960	0.72	-3.43	45.39				
				1980	0.9	-3.12	48.7				
				2000	0.55	-3.38	45.89				
				2020	0.22	-3.48	44.84				
				2040	1.17	-3.03	49.82				
				2060	0.89	-3.09	49.14				
				2080	1.38	-3.24	47.41				
				2100	1.61	-3.54	44.28				
				2120	1	-3.96	40.2				
				2140	1.73	-3.84	41.26				
				2160	0.99	-4.7	33.88				
				2180	0.18	-5.69	27				
				2200	-0.13	-6.16	24.23				

主天线 RF2通路 (B13)			
frequency 频率(MHz)	gain 增益 (dBi)	efficiency 效率 (dB)	efficiency 效率 (%)
730	-1.76	-6.35	23.19
740	-1.16	-5.98	25.25
750	-1.24	-6.2	23.99
760	-0.48	-5.57	27.76
770	-0.92	-6.14	24.32
780	-0.9	-6.1	24.55
790	-0.94	-6.03	24.97



ANT1

Div Antenna RF1(LMH)							
frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)	frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
800	-5.95	-10.14	9.69	1700	1.46	-4.22	37.88
810	-5.06	-9.42	11.43	1720	0.51	-5	31.65
820	-3.99	-8.17	15.24	1740	0.38	-4.95	31.99
830	-3.08	-6.88	20.49	1760	0.9	-4.44	35.96
840	-2.55	-5.6	27.55	1780	-0.07	-5.01	31.56
850	-2.4	-5.8	26.32	1800	0.23	-5.06	31.18
860	-2.6	-6.13	24.35	1820	0.44	-5.1	30.87
870	-2.82	-6.71	21.33	1840	0.45	-5.17	30.4
880	-2.84	-7.67	17.11	1860	0.79	-5.18	30.32
890	-3.82	-8.39	14.49	1880	0.22	-5.82	26.17
900	-4.06	-8.63	13.69	1900	1.2	-5.4	28.85
				1920	0.98	-5.09	30.94
				1940	0.78	-5.22	30.08
				1960	0.51	-5.19	30.25
				1980	0.34	-4.48	35.67
				2000	-0.47	-4.61	34.56
				2020	0.05	-4.59	34.78
				2040	0.77	-3.98	39.96
				2060	0.91	-3.97	40.1
				2080	0.99	-4.16	38.35
				2100	1.23	-4.34	36.85
				2120	1.42	-4.62	34.51
				2140	1.94	-4.31	37.05
				2160	1.63	-4.48	35.63

Div Antenna RF3(B12)			
frequency 频率(MHz)	gain 增益(dBi)	efficiency 效率(dB)	efficiency 效率(%)
700	-4.08	-6.98	20.07
710	-3.72	-6.84	20.73
720	-3.13	-6.35	23.19
730	-3.65	-6.94	20.22
740	-2.85	-6.28	23.53
750	-2.92	-6.43	22.73
760	-4.18	-7.69	17.01

## GWB

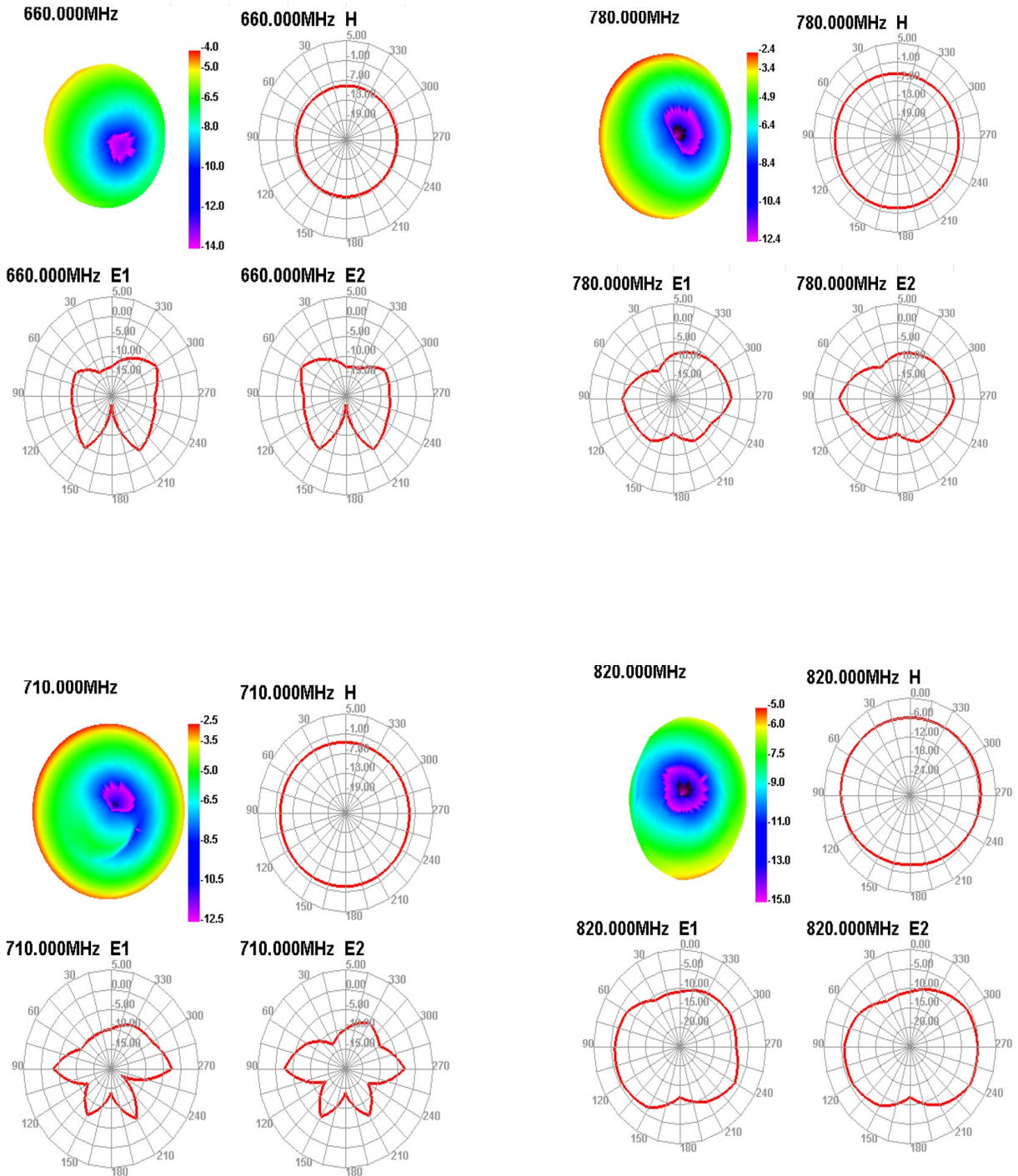
GPS无源效率			
frequency 频率 (MHz)	gain 增益 (dBi)	efficiency 效率 (dB)	efficiency 效率 (%)
1515	-0.48	-4.27	37.37
1525	-0.15	-4	39.79
1535	-0.6	-4.14	38.57
1545	-0.33	-3.87	41
1555	-0.17	-4.01	39.75
1565	0.18	-4.14	38.56
1575	-0.04	-4.42	36.14
1585	-0.01	-4.47	35.73
1595	-0.29	-4.73	33.63
1605	-1.06	-5.22	30.04
1615	-0.96	-5.17	30.44

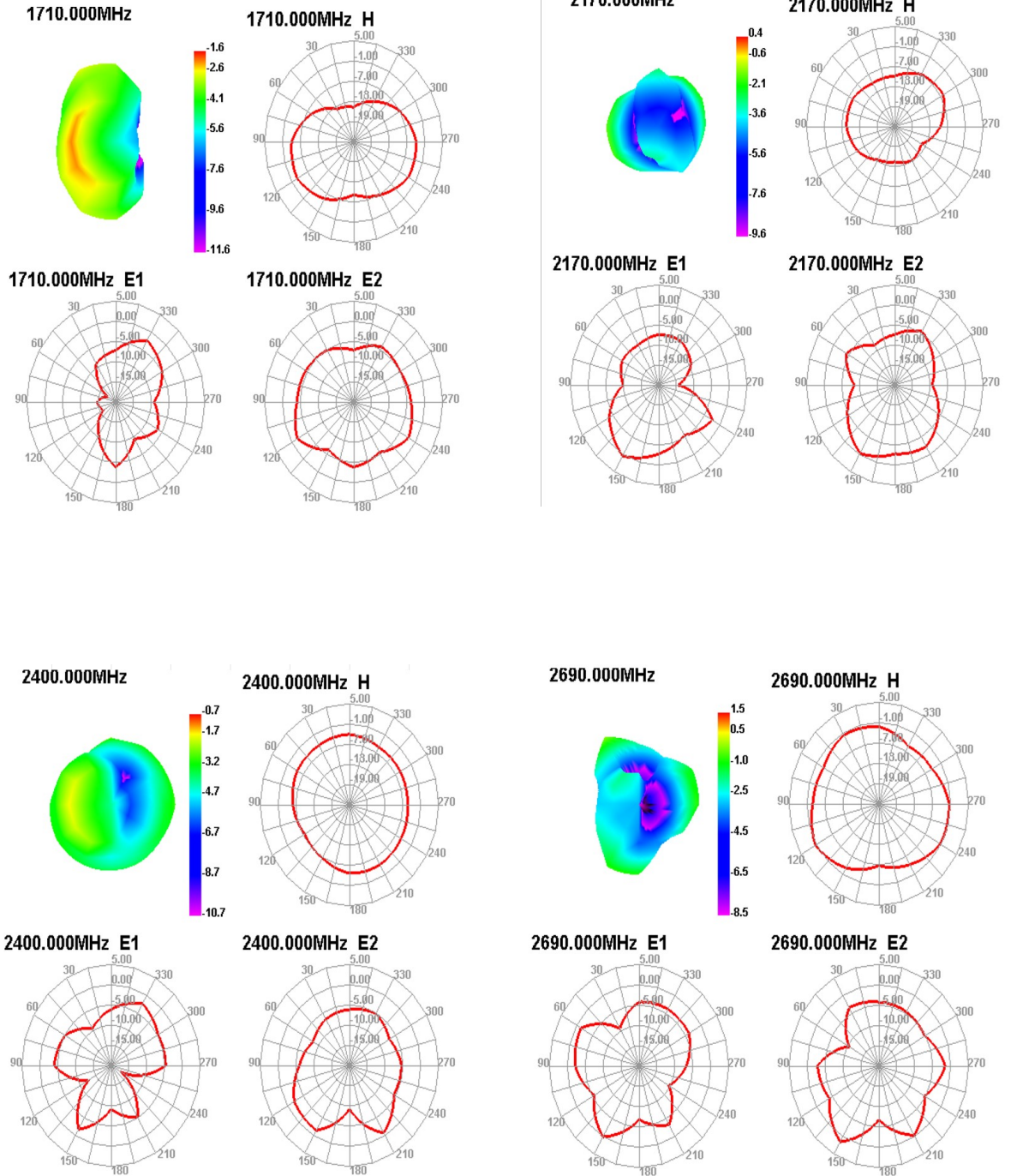
2.4G WIFI无源效率			
frequency 频率 (MHz)	gain 增益 (dBi)	efficiency 效率 (dB)	efficiency 效率 (%)
2400	4.43	-3.45	45.21
2410	3.97	-3.91	40.6
2420	4.6	-3.5	44.69
2430	3.81	-4.21	37.92
2440	3.73	-4	39.82
2450	4.25	-3.65	43.17
2460	3.85	-4.05	39.37
2470	4.18	-3.76	42.11
2480	4.34	-3.68	42.9
2490	4.06	-4	39.84
2500	4.38	-3.59	43.78

frequency 频率 (MHz)	gain 增益 (dBi)	efficiency 效率 (dB)	efficiency 效率 (%)	frequency 频率 (MHz)	gain 增益 (dBi)	efficiency 效率 (dB)	efficiency 效率 (%)
5140	-0.9	-5.81	26.25	5500	0.1	-5.47	28.38
5160	-1.22	-5.89	25.78	5520	0.12	-5.83	26.13
5180	-2.13	-6.24	23.75	5540	0.06	-5.86	25.96
5200	-1.82	-6.54	22.18	5560	0.22	-5.81	26.24
5220	-0.72	-5.79	26.34	5580	1.25	-5.37	29.04
5240	-1.67	-5.71	26.88	5600	1.04	-5.49	28.25
5260	-2.19	-5.99	25.2	5620	0.7	-5.52	28.04
5280	-3.26	-6.25	23.72	5640	0.35	-5.95	25.43
5300	-2.6	-5.55	27.85	5660	0.93	-5.75	26.62
5320	-2.59	-5.35	29.18	5680	0.86	-6.07	24.7
5340	-2.14	-5.46	28.44	5700	0.56	-6.46	22.57
5360	-2.19	-5.69	26.96	5720	1.32	-5.72	26.82
5380	-1.62	-5.67	27.08	5740	1.2	-5.93	25.5
5400	-1.91	-5.86	25.92	5760	0.74	-5.97	25.3
5420	-0.49	-5.14	30.62	5780	0.77	-6.11	24.47
5440	0.11	-4.94	32.03	5800	1.36	-6.15	24.26
5460	-0.36	-5.34	29.25	5820	1.05	-6.37	23.05
5480	-0.29	-5.49	28.28	5840	-0.11	-7.25	20.84
				5860	0.02	-7.2	20.05

## 2.3 3D Pattern

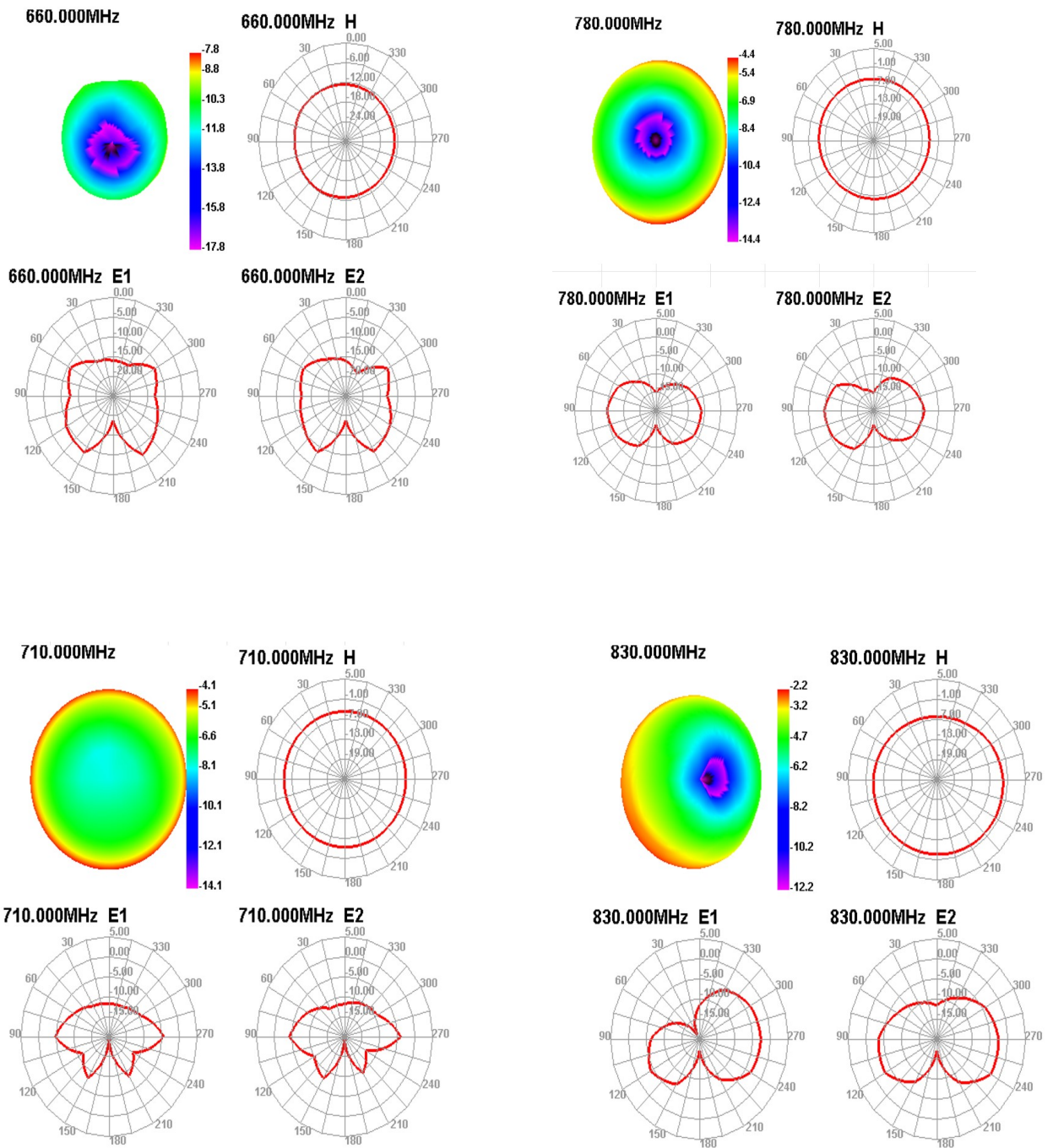
### ANTO

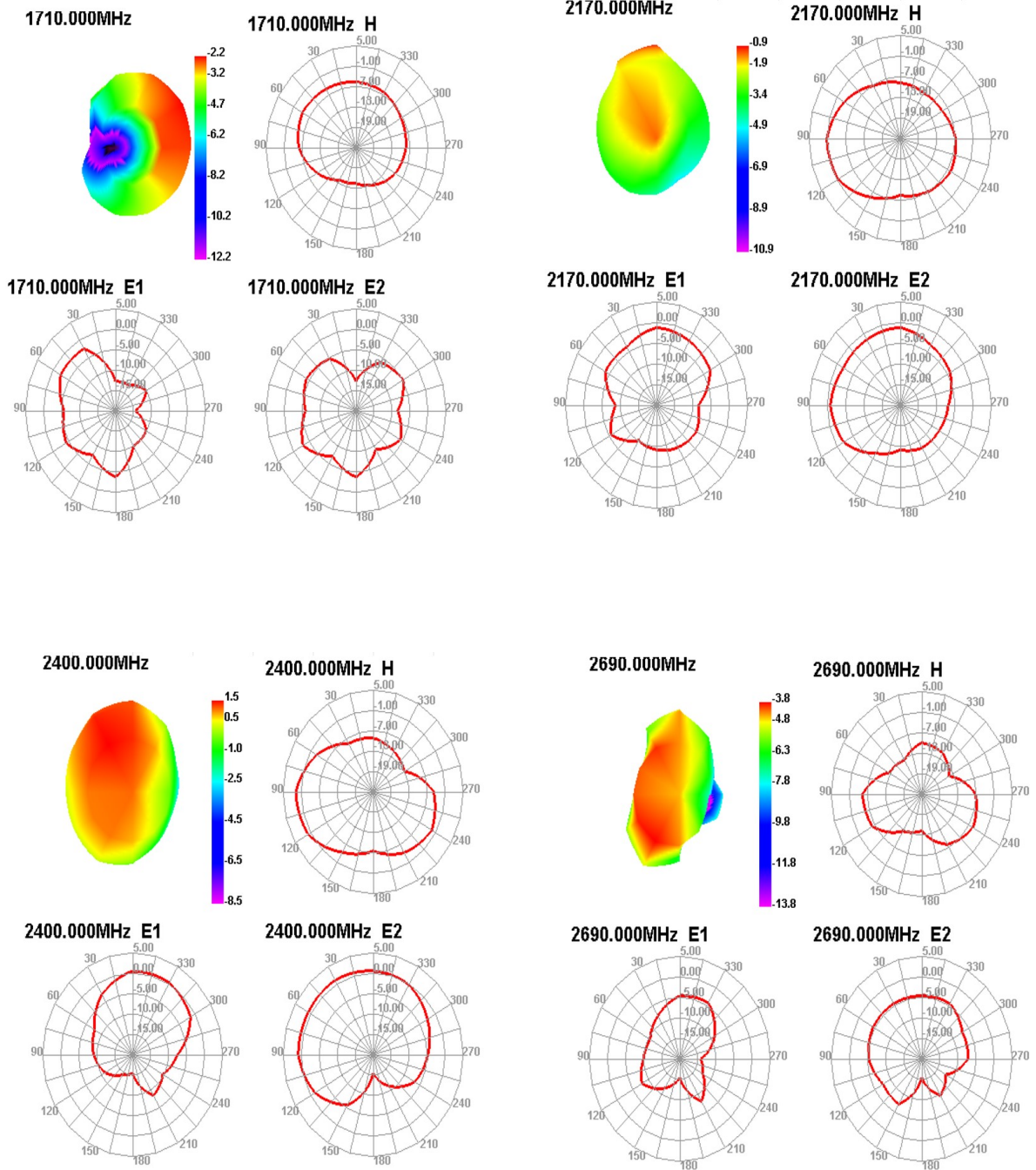






ANT1







GWB

