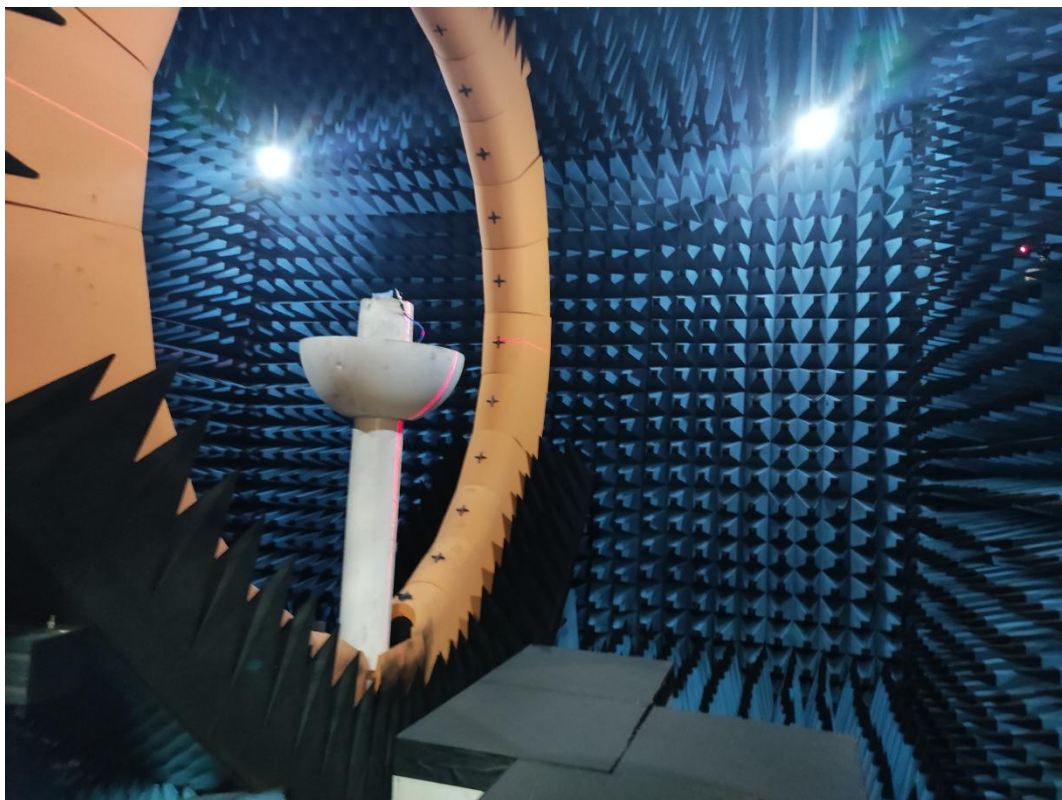




Brand Name	Shenzhen Anwei Wireless Technology Co., Ltd	Address	2nd Floor, East Block, Building 5, Yifenghua Industrial Zone, Huaning Road, Dalang Street, Longhua New District, Shenzhen
Customer	Shenzhen Langdao Technology Co., Ltd	Specs	X69A
Part Number	AW006-X69A-020-A0	Frequency Band	GSM:2/3/5/8 WCDM:1/2/4/5/8 TDD :34/38/39/40/41 FDD:1/2/3/4/5/7/8/12/17/19/20/25/28AB
Color	black	Edition	REV:A1
Salesperson	Mr.JIANG	Design	ZZH
Structure	QIN YUN LIN	Confirm	
Date	2025.06.05	Signing Date	
Customer confirmation:			
Join hands to create the future			

Test site:



X69A mobile phone 4G antenna active test results:

2G	Channel	TRP (dBm)	TIS (dBm)		3G	Channel	TRP (dBm)	TIS (dBm)		4G	Channel	TRP (dBm)	TIS (dBm)
GSM850	CH 128	25.52			W2100	CH 9612	18.37			FDD B1 (10M)	CH 18050	18.62	
	CH 190	26.12				CH 9750	18.47				CH 18300	19.24	
	CH 251	26.76	-105.03			CH 9888	19.39	-106.08			CH 18550	19.34	-94.26
GSM900	CH 1	26.30			W1900	CH 9262	17.36			FDD B2 (10M)	CH 18650	17.44	
	CH 62	26.26				CH 9400	17.45				CH 18900	18.15	
	CH 124	26.35	-104.93			CH 9538	17.90	-106.12			CH 19150	18.45	-94.20
DCS1800	CH 512	24.57			W1700	CH 1312	18.33			FDD B3 (10M)	CH 19250	19.41	
	CH 698	25.19				CH 1413	18.27				CH 19575	18.33	
	CH 885	25.22	-104.59			CH 1513	18.08	-105.09			CH 19900	18.28	-94.46
PCS1900	CH 512	24.09			W850	CH 4132	16.27			FDD B4 (10M)	CH 20000	19.52	
	CH 661	24.35				CH 4183	16.19				CH 20175	18.48	
	CH 810	25.09	-103.68			CH 4233	16.12	-104.48			CH 20350	18.51	-93.92
					W900	CH 2712	18.15			FDD B5 (10M)	CH 20450	16.95	
						CH 2787	17.59				CH 20525	16.40	
						CH 2863	17.45	-105.50			CH 20600	16.20	-90.62
										FDD B7 (10M)	CH 20800	15.32	
											CH 21100	16.29	
											CH 21400	16.10	-94.13
										FDD B8 (10M)	CH 21500	17.21	
											CH 21625	17.34	
											CH 21750	17.45	-91.14

4G	Channel	TRP (dBm)	TIS (dBm)	4G	Channel	TRP (dBm)	TIS (dBm)	4G	Channel	TRP (dBm)	TIS (dBm)
FDD B12 (10M)	CH 23060	15.03		FDD B34 (10M)	CH 36250	19.86		LTE B38 (20M)	CH 37850	15.65	
	CH 23095	15.67			CH 36275	19.92			CH 38000	15.44	
	CH 23130	15.07	-89.72		CH 36300	19.87	-93.45		CH 38150	15.16	-91.52
FDD B17 (10M)	CH 23780	16.75						LTE B39 (20M)	CH 38350	17.72	
	CH 23790	16.53							CH 38450	17.82	
	CH 23800	16.02	-88.26						CH 38550	17.99	-91.62
FDD B19 (10M)	CH 24050	17.17						LTE B40 (20M)	CH 38750	17.68	
	CH 24075	17.18							CH 39150	17.03	
	CH 24100	17.13	-90.81						CH 39550	15.11	-91.32
FDD B20 (10M)	CH 24200	16.62						LTE B41 (20M)	CH 40490	15.57	
	CH 24300	16.68							CH 40620	15.02	-91.36
	CH 24400	16.52	-90.06						CH 40940	15.24	
FDD B25 (10M)	CH 26090	16.51									
	CH 26365	17.19									
	CH 26640	17.86	-94.28								
FDD B28A (10M)	CH 27260	16.29									
	CH 27370	15.64									
	CH 27469	15.47	-90.75								
FDD B28B (10M)	CH 27410	16.06									
	CH 27510	16.02									
	CH 27600	16.21	-91.18								

Three in one test results:

Actual GPS test results:

5

SAT EL LITES CNR	SAT EL LITES LOC	INFO RMAT ION	NMEA LOG	GPS TEST	MPE STAT US	SAT EL LITES CNR	SAT EL LITES LOC	INFO RMAT ION	NMEA LOG	GPS TEST	MPE STAT US
G:GPS R:GLN B:BD E:GAL Q:QZS L:L1S I:IRNSS S:SBAS						G:GPS R:GLN B:BD E:GAL Q:QZS L:L1S I:IRNSS S:SBAS					
Average CNR						Average CNR					
G:29.0/-/-/- R:27.1/-/-/-						G:26.1/-/-/- R:27.9/-/-/-					
B:28.3/-/-/- E:30.5/-/-/-						B:28.9/-/-/- E:34.6/-/-/-					
Q:26.3/-/-/- L:-/-/-/- I:-/-/-/-						Q:29.7/-/-/- L:-/-/-/- I:-/-/-/-					
S:33.0/-/-/-						S:38.0/-/-/-					
SVID	Fq	CNR	Elevation	Azimuth		SVID	Fq	CNR	Elevation	Azimuth	
6	L1	20.6	53.00	312.00		2	L1	0.0	45.00	232.00	
9	L1	25.4	0.00	0.00		7	L1	24.2	70.00	8.00	
11	L1	41.8	32.00	269.00		10	L1	33.6	62.00	339.00	
14	L1	13.2	53.00	172.00		11	L1	32.4	37.00	315.00	
17	L1	41.1	53.00	48.00		12	L1	25.8	44.00	28.00	
19	L1	39.1	51.00	358.00		16	L1	18.2	13.00	194.00	
20	L1	20.7	19.00	214.00		21	L1	34.8	44.00	112.00	
22	L1	30.2	73.00	195.00		22	L1	25.6	21.00	55.00	
68	L1	23.9	16.00	47.00		23	L1	0.0	9.00	314.00	
69	L1	41.2	33.00	98.00		24	L1	0.0	33.00	199.00	
70	L1	0.0	14.00	165.00		25	L1	24.4	37.00	270.00	
73	L1	20.4	31.00	195.00		26	L1	0.0	1.00	163.00	
74	L1	33.8	53.00	256.00		34	L1	41.0	48.00	346.00	
75	L1	28.2	25.00	318.00		13	L1	0.0	1.00	243.00	

Test conclusion: OK

●Antenna efficiency and gain

Frequency (MHz)	700	710	720	730	740	750	760	770	780	790
Gain (dBi)	-3.95	-4.60	-4.03	-4.38	-3.30	-3.02	-2.04	-2.98	-1.29	-1.48
Efficiency (dB)	-9.94	-10.23	-9.64	-10.02	-8.85	-8.71	-7.83	-8.34	-6.56	-6.49
Efficiency (%)	10.14	9.48	10.87	9.95	13.03	13.45	16.49	14.66	22.07	22.43

Frequency (MHz)	800	810	820	830	840	850	860	870
Gain (dBi)	0.00	0.51	0.18	0.15	0.24	0.78	0.41	-0.04
Efficiency (dB)	-5.43	-5.19	-5.40	-5.21	-5.07	-4.79	-5.15	-5.25
Efficiency (%)	28.63	30.28	28.83	30.15	31.11	33.19	30.57	29.87

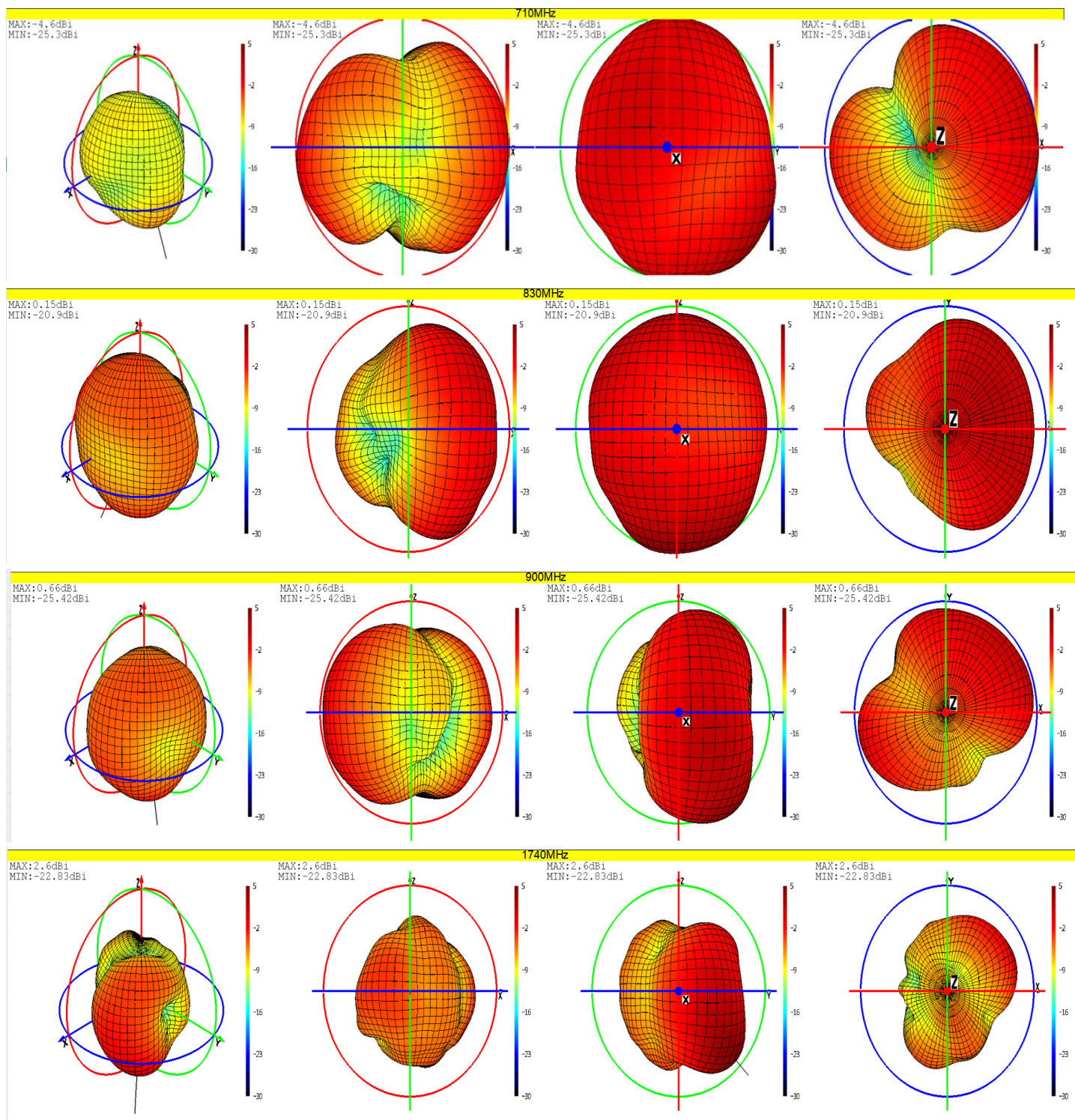
Frequency (MHz)	880	900	920	940	960
Gain (dBi)	1.24	0.66	0.87	0.59	0.32
Efficiency (dB)	-4.35	-4.65	-4.49	-4.76	-4.55
Efficiency (%)	36.73	34.29	35.59	33.41	35.06

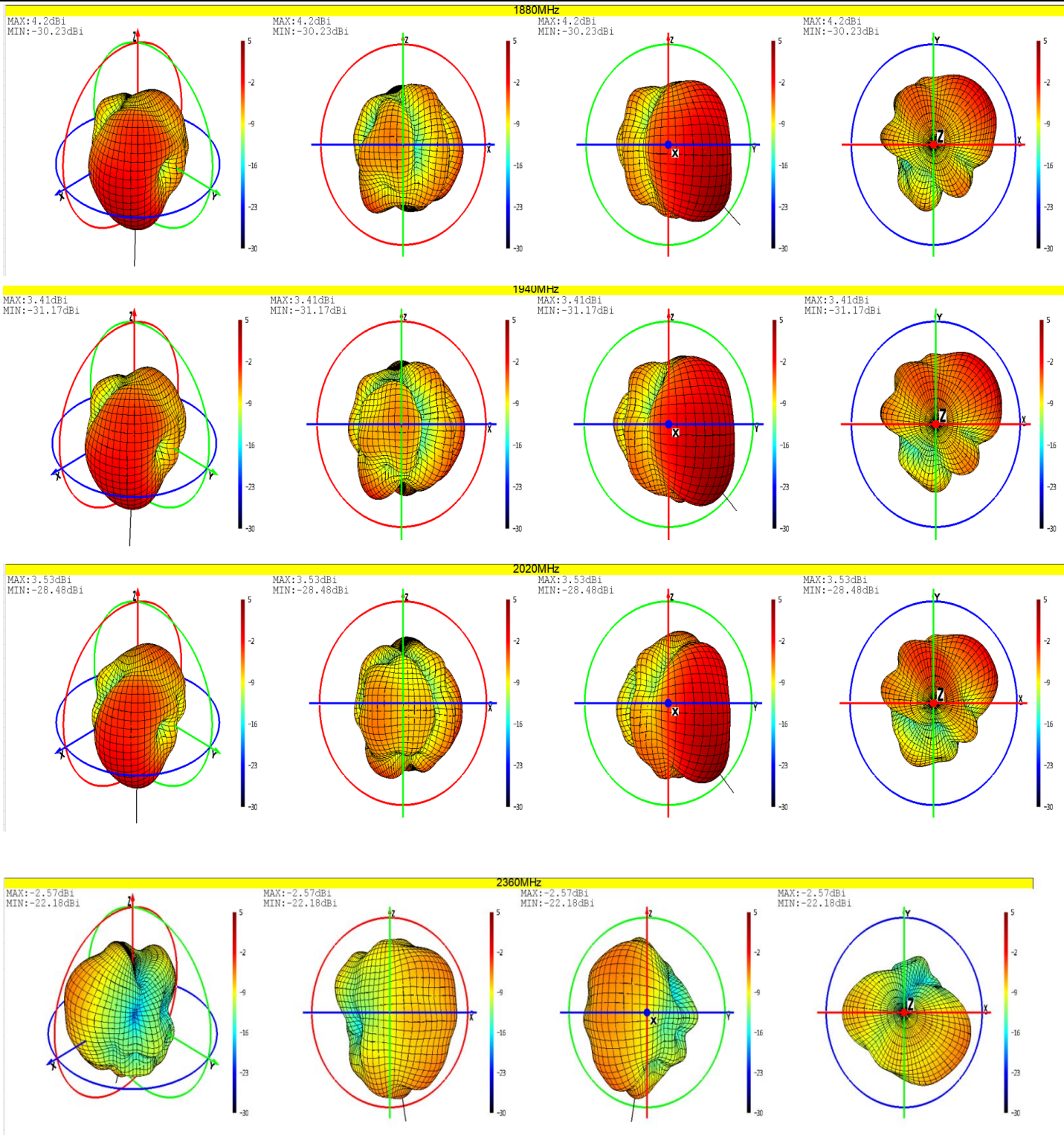
1700	1720	1740	1760	1780	1800	1820	1840	1860	1880	1900	1920	1940	1960	1980	2000
2.10	2.09	2.60	3.57	2.84	2.93	3.96	3.78	4.02	4.20	3.74	3.38	3.41	3.36	3.84	4.12
-5.00	-5.32	-5.45	-4.84	-5.59	-5.40	-4.48	-4.81	-4.62	-4.51	-4.74	-4.83	-4.70	-4.91	-4.56	-4.26
31.63	29.40	28.53	32.83	27.61	28.81	35.63	33.01	34.48	35.44	33.57	32.88	33.85	32.31	35.00	37.50

2020	2040	2060	2080	2100	2120	2140	2160	2180	2200	2220	2240	2260
3.53	4.10	3.75	3.67	3.46	3.75	2.99	2.60	2.43	1.39	1.01	1.28	0.38
-4.90	-4.17	-4.28	-4.47	-4.26	-3.87	-4.75	-4.72	-4.92	-5.71	-6.13	-6.09	-6.93
32.34	38.29	37.31	35.69	37.47	41.04	33.53	33.74	32.18	26.88	24.40	24.58	20.27

2280	2300	2320	2340	2360	2380	2400	2420	2440	2460	2480	2500	2520	2540	2560	2580	2600	2620	2640	2660	2680	2700
-3.27	-3.05	-3.01	-2.81	-2.57	-2.60	-2.05	-2.52	-1.90	-1.36	-0.68	0.33	2.03	1.75	1.87	2.34	1.72	1.98	1.50	1.90	1.31	1.51
-7.97	-7.99	-7.86	-8.01	-8.66	-8.55	-8.05	-8.39	-7.30	-6.97	-6.26	-5.46	-4.36	-4.29	-4.09	-4.11	-4.27	-4.04	-4.77	-4.45	-5.20	-4.89
15.96	15.89	16.35	15.81	13.62	13.97	15.68	14.50	18.61	20.09	23.66	28.43	36.63	37.22	39.04	38.78	37.40	39.42	33.38	35.87	30.17	32.43

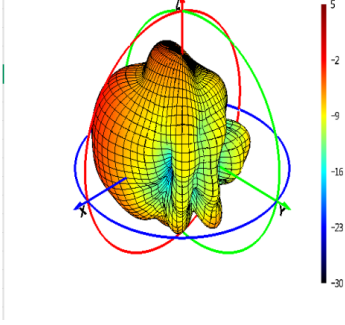
● Direction diagram



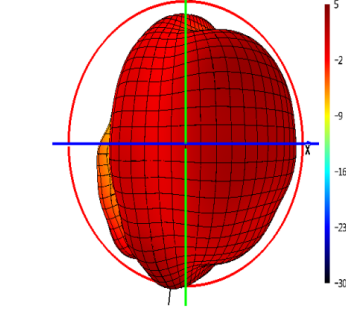


2520MHz

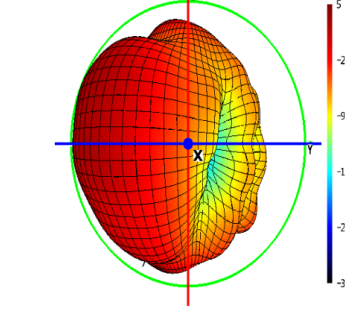
MAX:2.03dB1
MIN:-33.49dB1



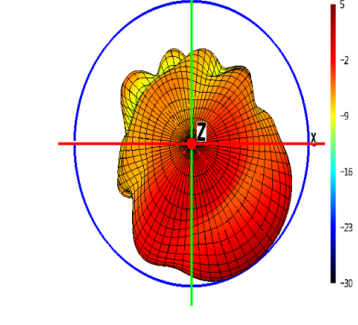
MAX:2.03dB1
MIN:-33.49dB1



MAX:2.03dB1
MIN:-33.49dB1

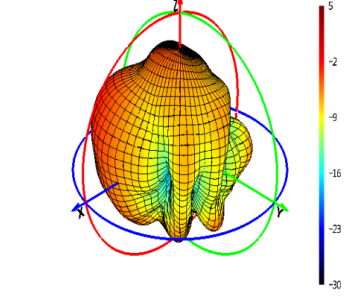


MAX:2.03dB1
MIN:-33.49dB1

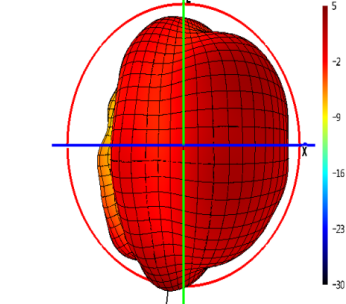


2580MHz

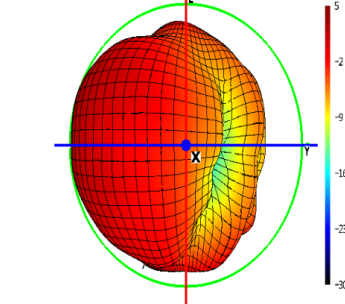
MAX:2.34dB1
MIN:-25.61dB1



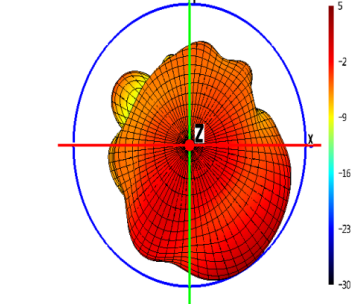
MAX:2.34dB1
MIN:-25.61dB1



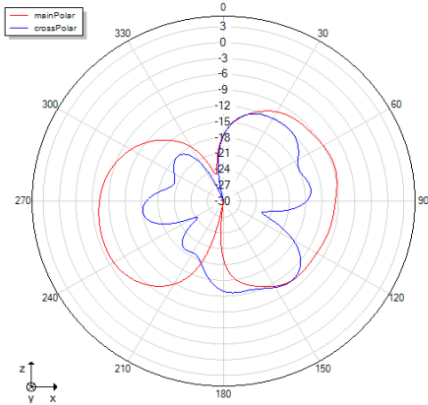
MAX:2.34dB1
MIN:-25.61dB1



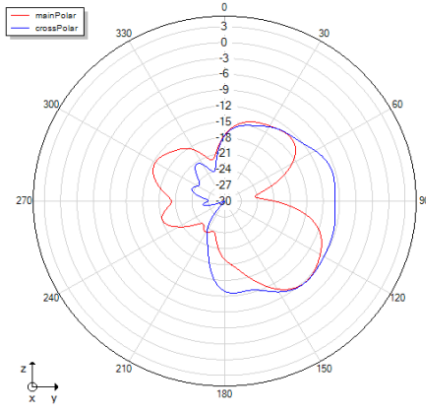
MAX:2.34dB1
MIN:-25.61dB1



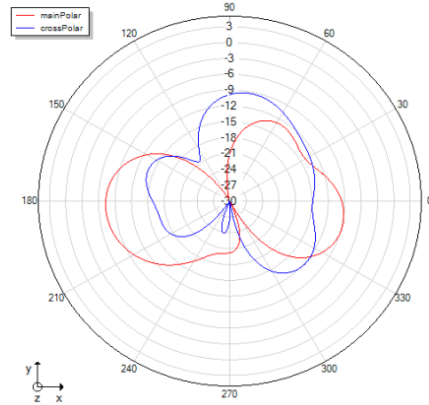
Phi=0 freq=710MHz

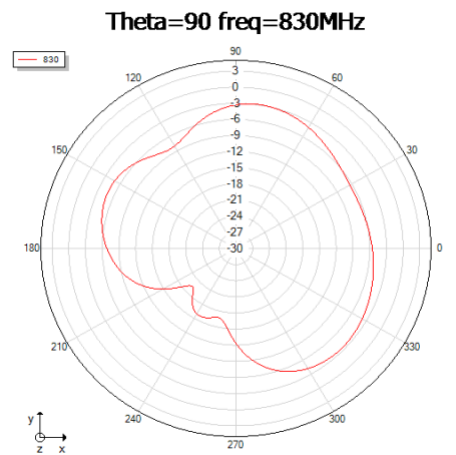
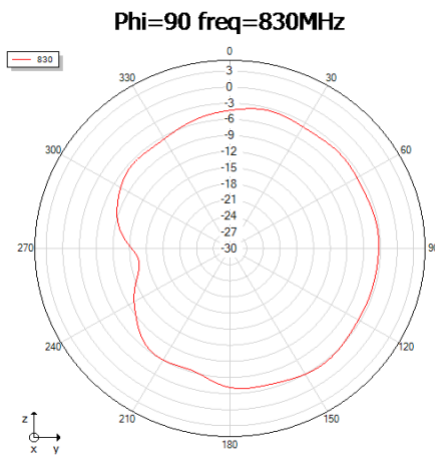
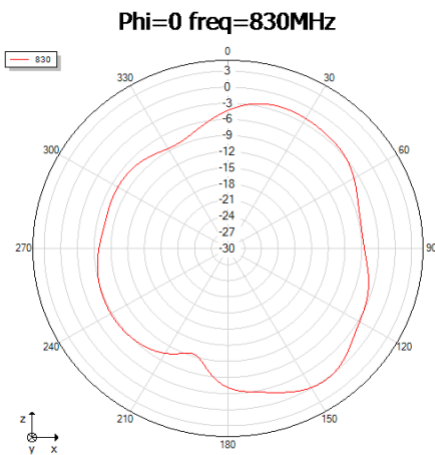
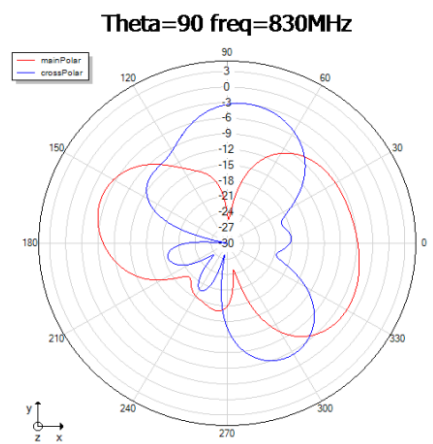
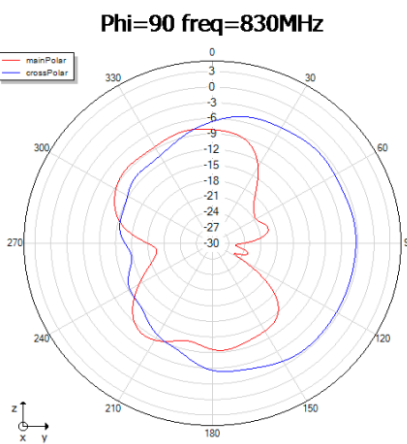
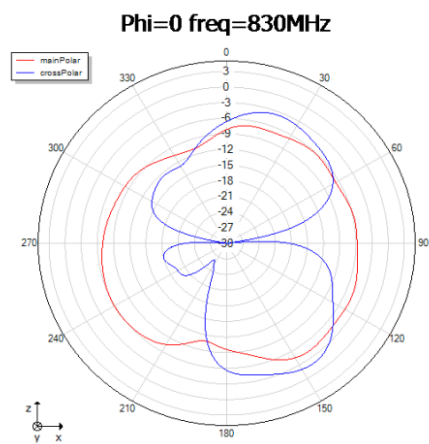
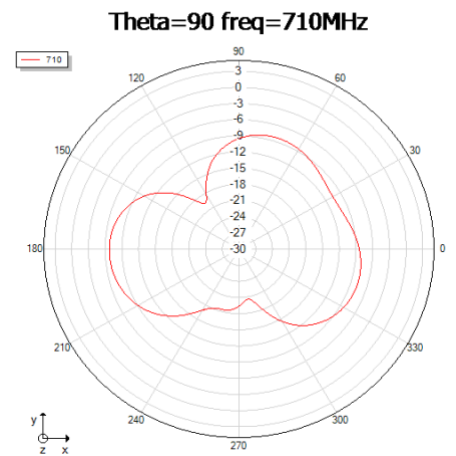
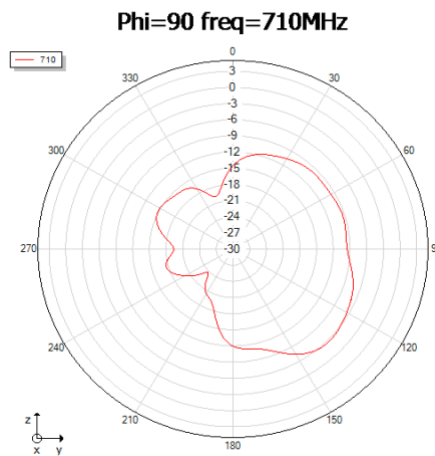
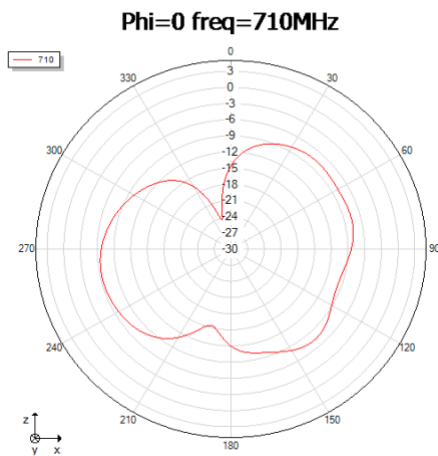


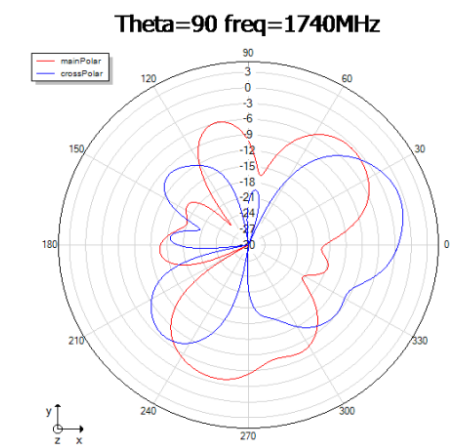
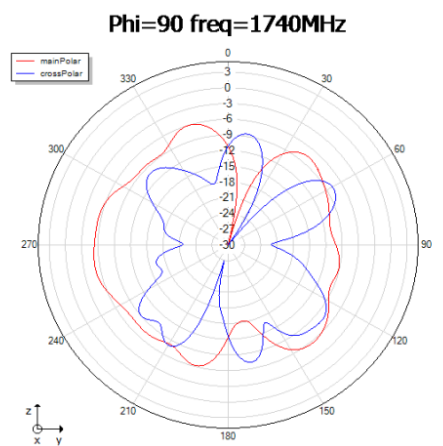
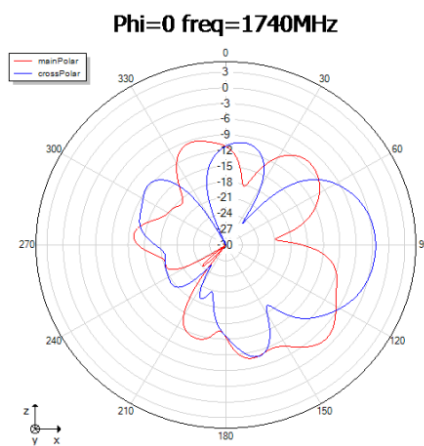
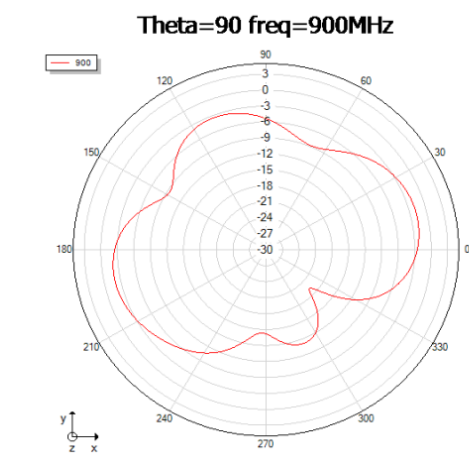
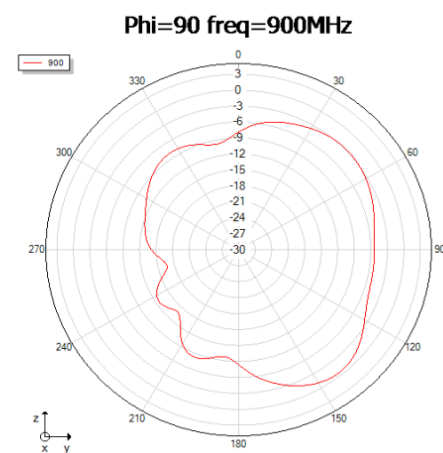
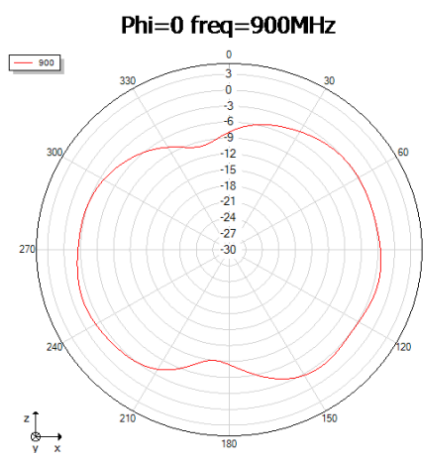
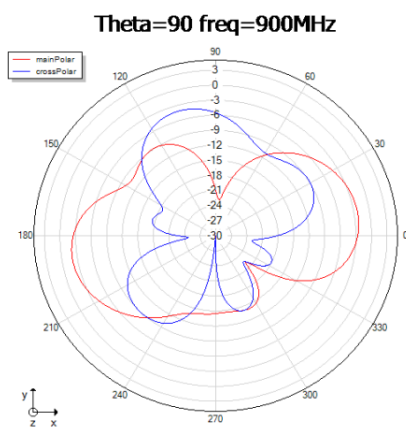
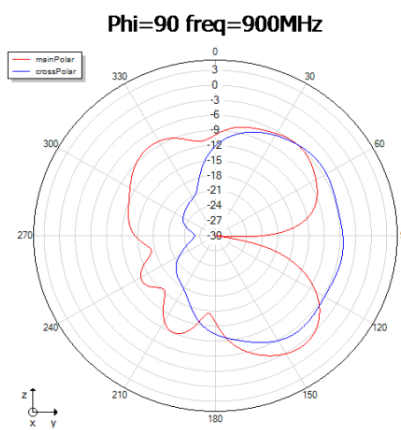
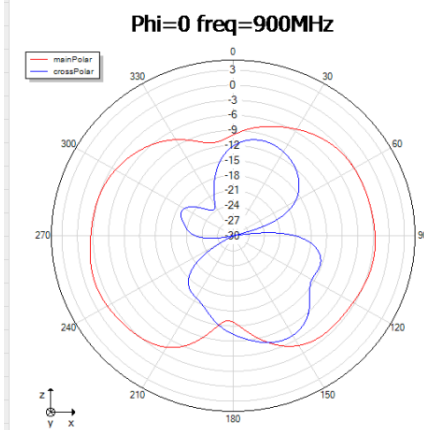
Phi=90 freq=710MHz



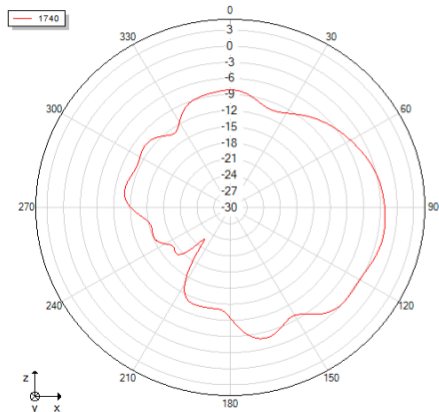
Theta=90 freq=710MHz



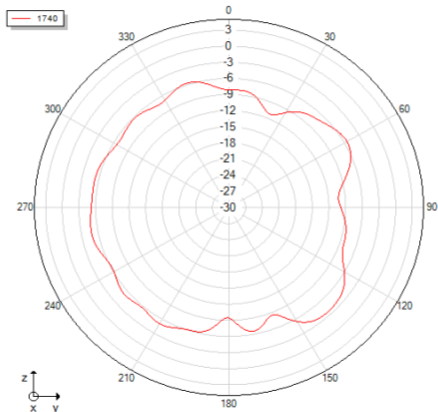




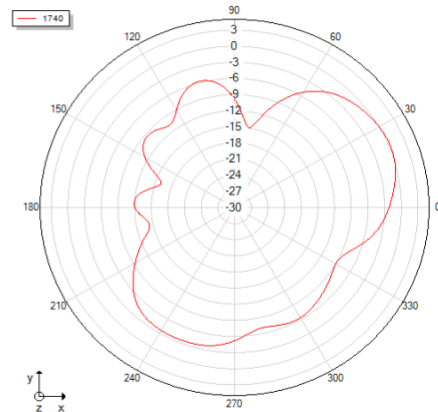
Phi=0 freq=1740MHz



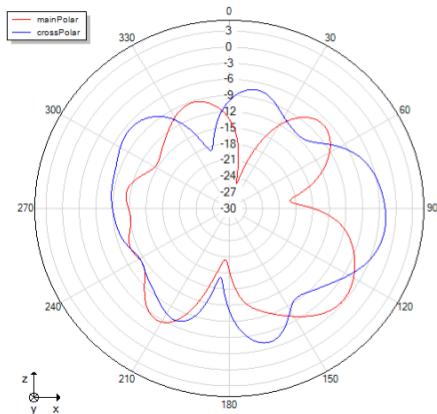
Phi=90 freq=1740MHz



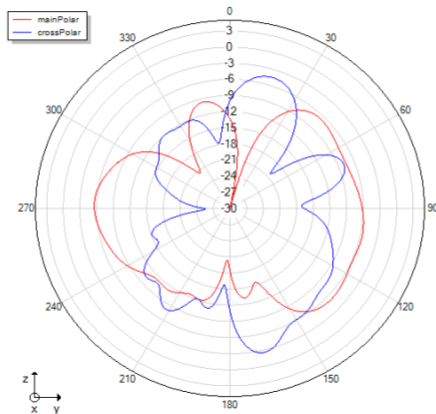
Theta=90 freq=1740MHz



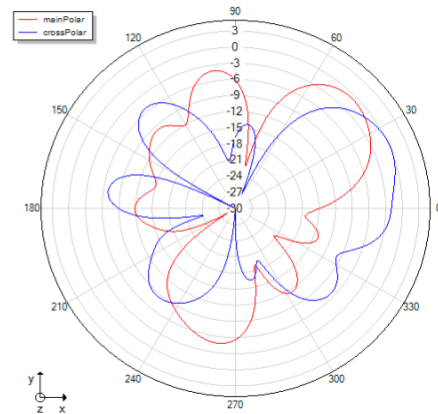
Phi=0 freq=1880MHz



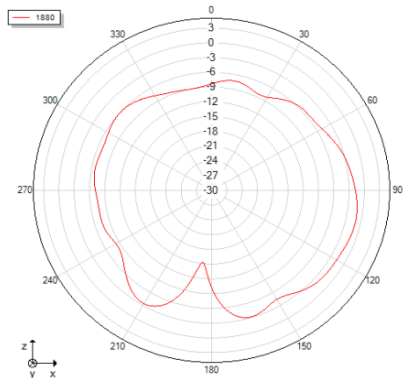
Phi=90 freq=1880MHz



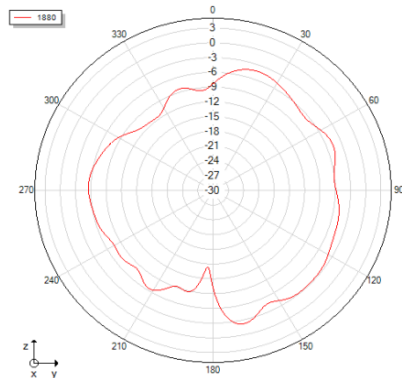
Theta=90 freq=1880MHz



Phi=0 freq=1880MHz



Phi=90 freq=1880MHz



Theta=90 freq=1880MHz

