
SN331CC project antenna Report

1 Overview

This document is the SN331CC project antenna acknowledgement;

The antenna operates in the frequency band

1575MHz;2400MHz~2500MHz;5150MHz~5850MHz;

600MHz~960MHz;1700MHz~2700MHz;3300MHz~4200MHZ

2 Manufacturere and its address

Company name: Demen Technology Co.,LTD

Address Address: Room D406, ZTE Industrial Park, No. 10 Tangyan South Road,
High-tech Zone, Xi'an

3 The model and type of antenna

Antenna model: LDS antenna

Antenna type: IFA

4 Antenna test environment

4.1 Antenna test lab, test instrument, and calibration date

Antenna input characteristics are tested using the Agilent E5071C vector network analyzer.

The antenna radiation characteristics test uses the GTS RayZone 2800 3D near-field anechoic chamber. The test coordinate system is shown in Figure 4.1.1.

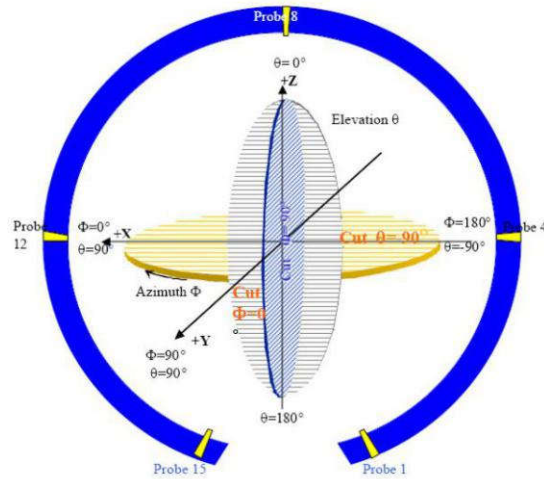


图 4.1.1 3D 微波暗室测试坐标系 (back view)

Figure 4.1.1 3D anechoic chamber test coordinate system (back view)

4.2 Antenna test lab, test instrument, and calibration date

The tester uses the RS CMW500(WLAN&2G&3G&4G)& Agilent E4438C(GPS).
The antenna radiation characteristics test uses the GTS RayZone 2800 3D near-field anechoic chamber. The test coordinate system is shown in Figure 4.2.1.

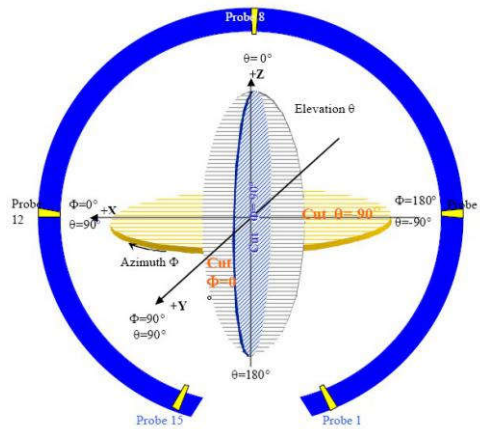


Figure 4.2.1 3D anechoic chamber test coordinate system (back view)

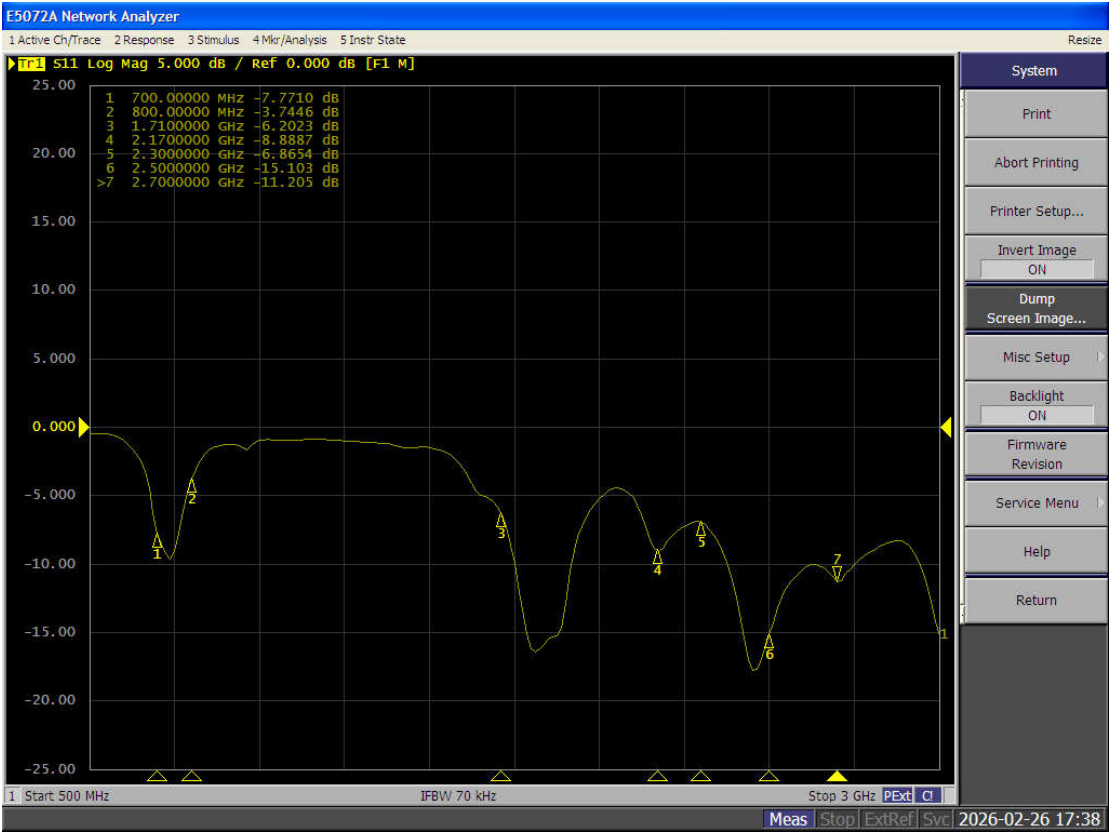
4.3 Antenna test lab, test instrument, and calibration date.

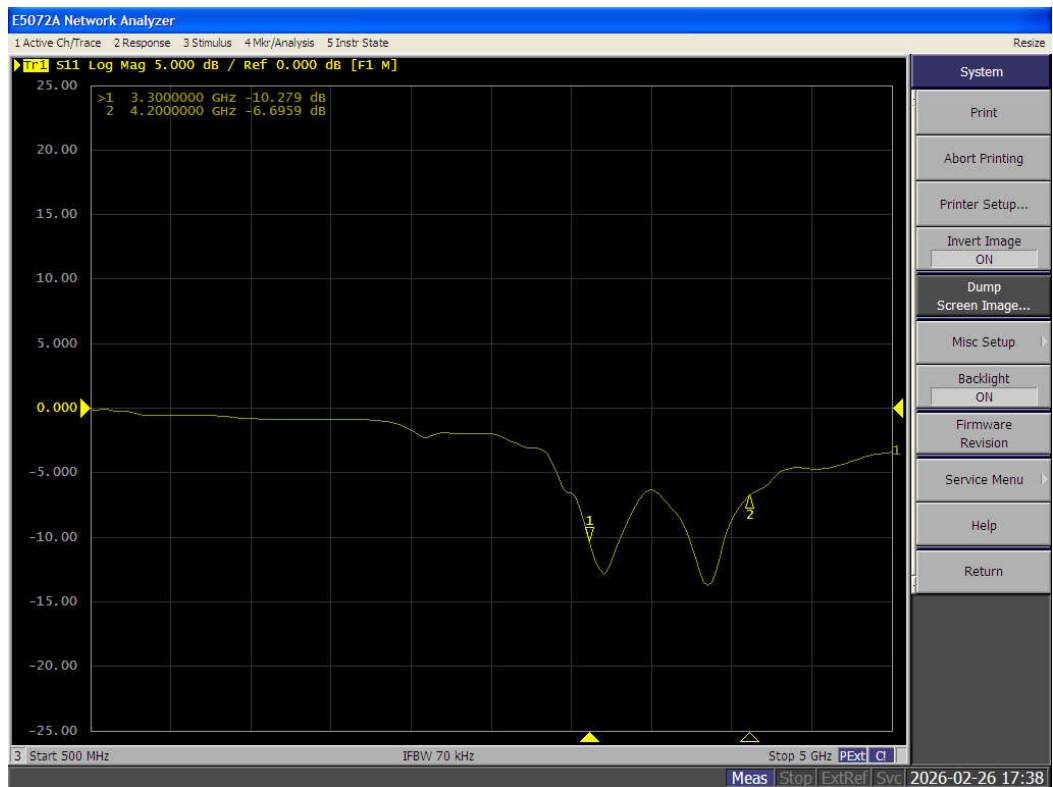
4.3 Anritsu SP9500E&RS CMW500& Agilent E4438C calibration date

Calibration date
2026.2.05

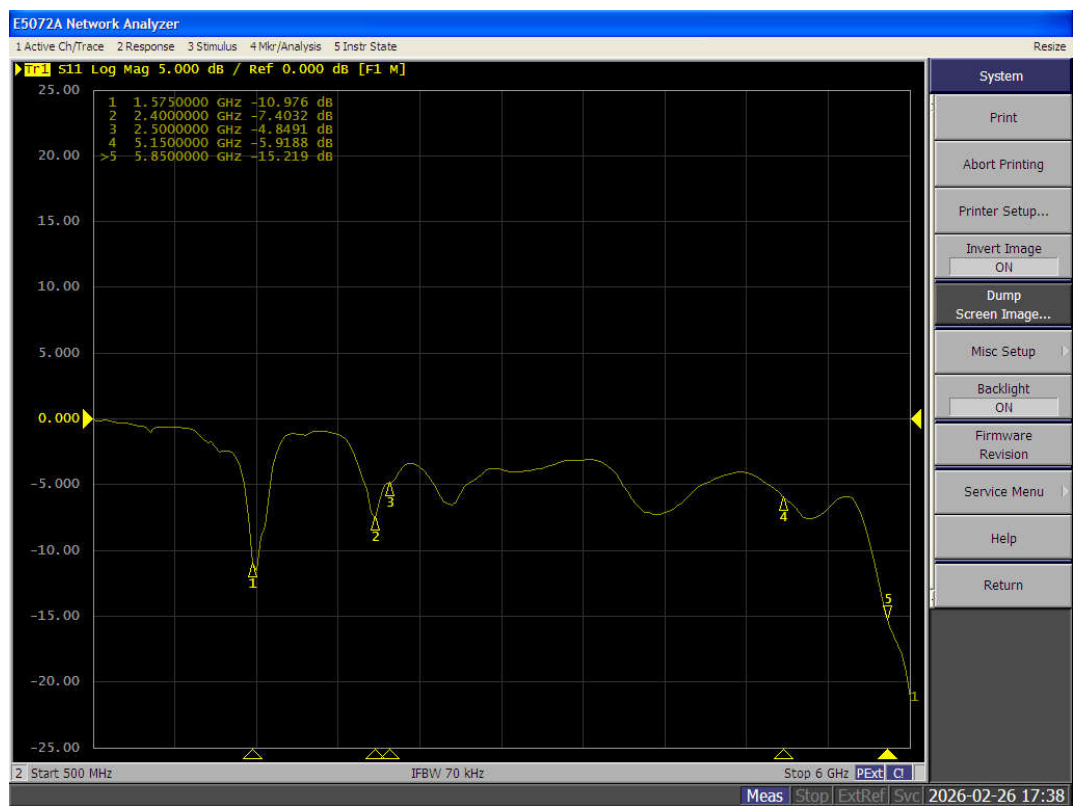
Due date
2027.2.05

5 Reflection loss





cellular S11

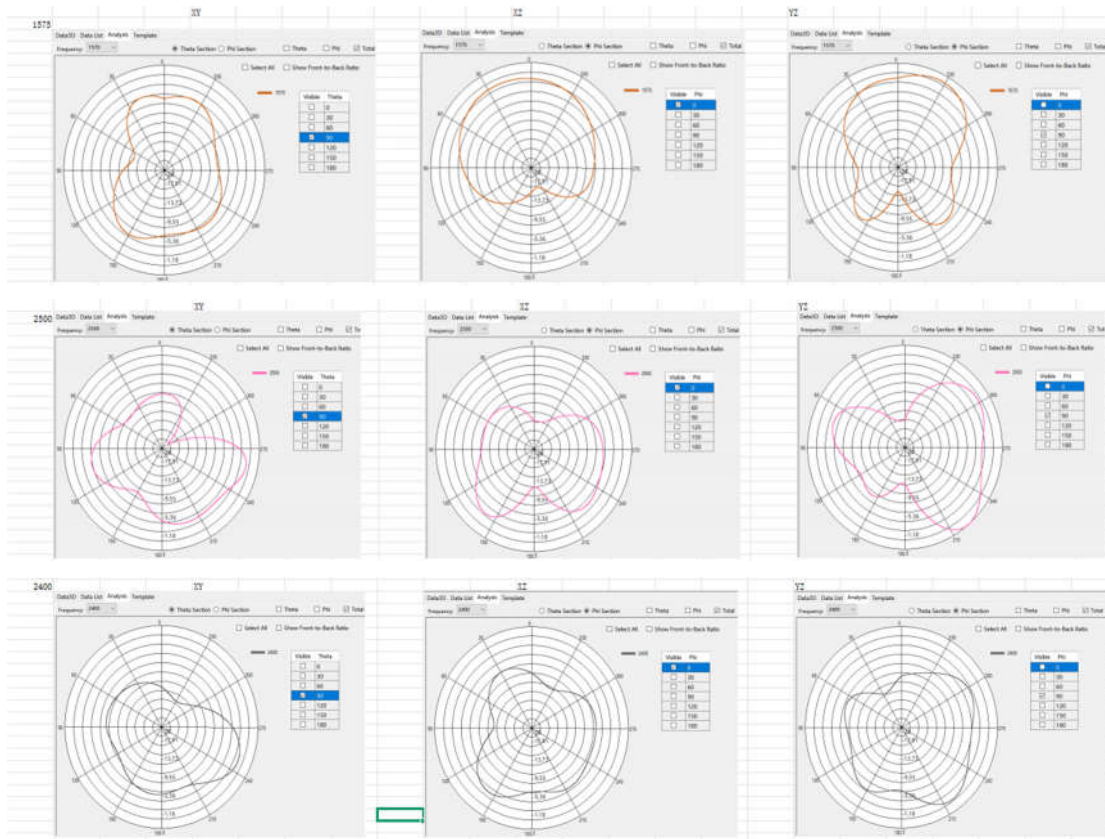


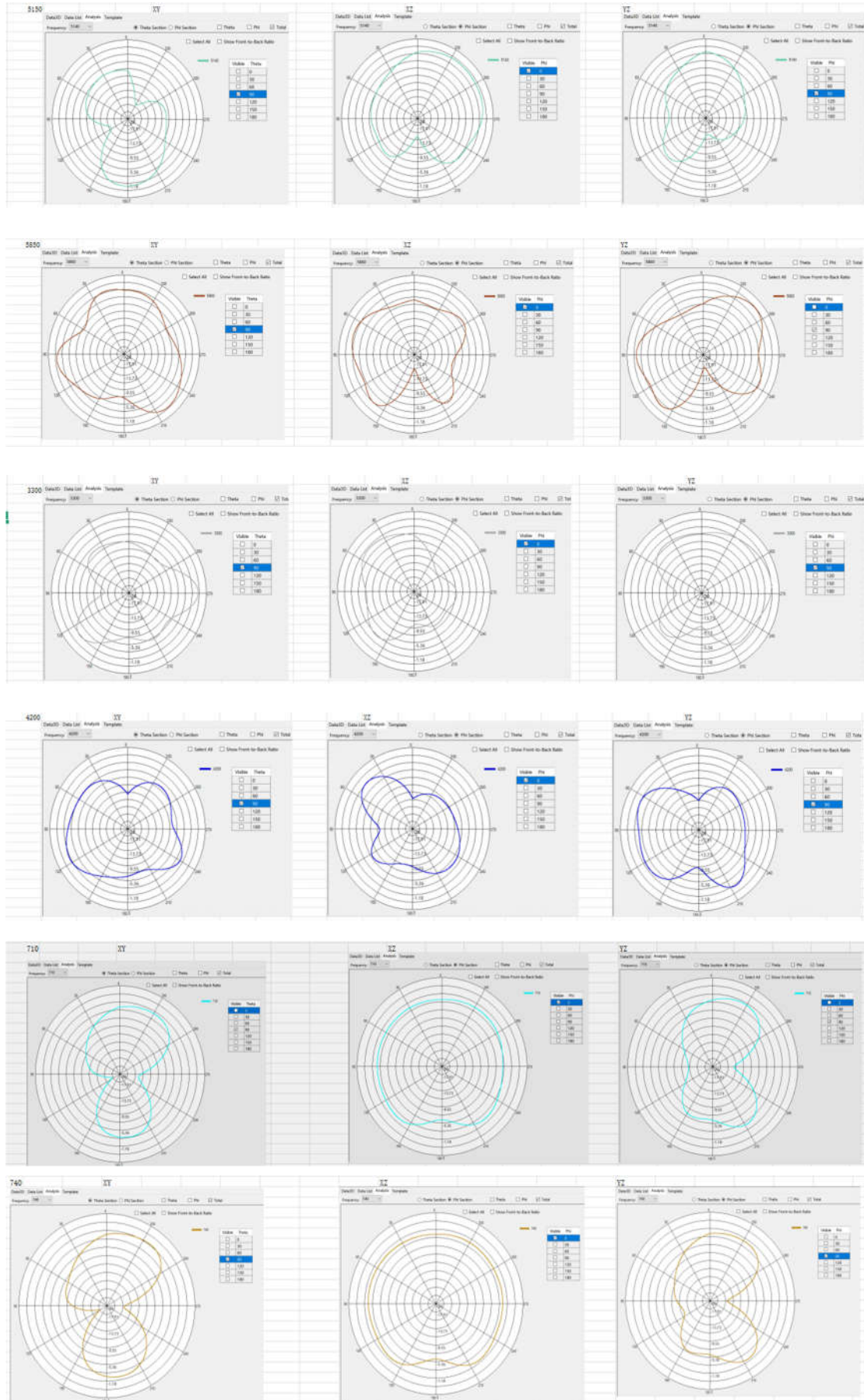
WBG S11

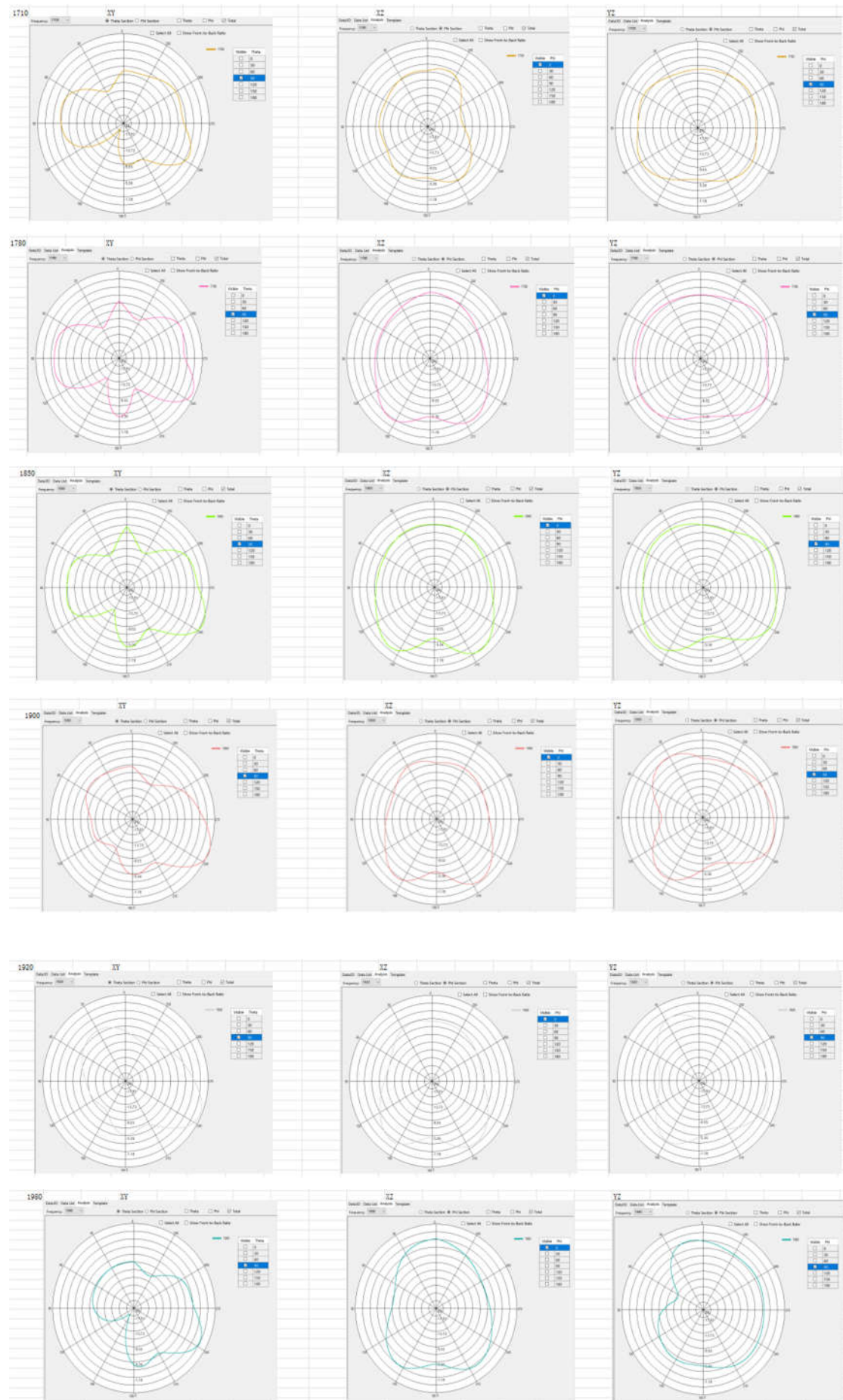
6 Antenna gain and 2D or 3D Pattern diagram:

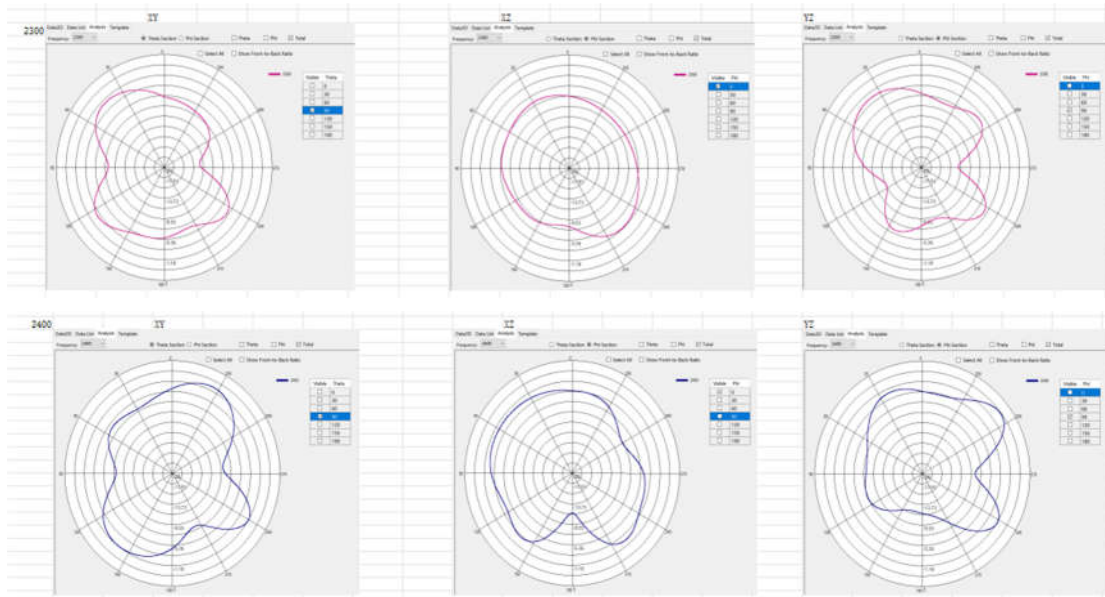
frequency	EFF	GAIN	frequency	EFF	GAIN	frequency	EFF	GAIN
1550	-3.97	1.18	690	-6.08	-2.92	3300	-3.7	-5.89
1560	-3.83	1.3	700	-5.21	-2.13	3320	-3.33	-5.95
1570	-3.79	1.25	710	-4.4	-1.4	3340	-2.96	-5.04
1580	-3.65	1.38	720	-4.67	-1.33	3360	-2.61	-5.24
1590	-3.89	1.11	730	-4.95	-1.16	3380	-2.33	-6.36
2400	-3.5	0.39	740	-4.51	-0.48	3400	-2.51	-6.43
2410	-3.67	0.16	750	-4.93	-1.01	3420	-2.88	-6.49
2420	-4.03	-0.32	760	-5.52	-1.5	3440	-3	-6.79
2430	-4.34	-0.7	770	-4.64	-0.46	3460	-2.88	-5.8
2440	-4.47	-0.89	780	-4.9	-0.52	3480	-2.76	-5.84
2450	-4.64	-1	790	-4.6	0.1	3500	-2.78	-6.03
2460	-4.51	-0.66	800	-4.9	-0.31	3520	-3.1	-5.92
2470	-4.49	-0.67	820	-4.79	-0.56	3540	-3.81	-6.03
2480	-4.43	-0.7	830	-4.84	-0.43	3560	-4.29	-6.02
2490	-4.32	-0.63	840	-4.76	-0.46	3580	-4.5	-6.19
2500	-4.37	-0.59	850	-4.99	-0.5	3600	-4.52	-6.24
5140	-4.26	0.77	860	-5.8	-0.56	3620	-4.58	-6.38
5160	-4.26	0.6	870	-5.79	-0.48	3640	-4.6	-6.12
5180	-4.2	0.56	880	-6.55	-1.24	3660	-4.5	-6.34
5200	-4.04	0.58	1700	-4.95	-0.84	3680	-4.41	-6.31
5220	-3.84	0.52	1720	-4.39	-0.31	3700	-4.19	-6.23
5240	-3.7	0.5	1740	-3.94	0.22	3720	-3.91	-6.34
5260	-3.75	0.45	1760	-3.48	1.5	3740	-3.7	-6.25
5280	-3.73	0.38	1780	-3.09	1.7	3760	-3.46	-6.57
5300	-3.5	0.47	1800	-2.71	2.21	3780	-3.2	-6.53
5320	-3.47	0.41	1820	-2.43	2.5	3800	-3.16	-5.86
5340	-3.24	0.46	1840	-2.31	0.73	3820	-3.24	-5.83
5360	-3.1	0.53	1860	-2.46	-0.12	3840	-3.29	-5.9
5380	-3.2	0.31	1880	-2.9	-0.82	3860	-3.23	-6.29
5400	-3.24	0.38	1900	-3.24	-0.69	3880	-3.1	-6.12
5420	-3.2	0.52	1920	-3.54	-0.17	3900	-3.05	-6.12
5440	-2.92	0.95	1940	-3.82	1.35	3920	-3.01	-5
5460	-2.67	1.29	1960	-3.93	0.89	3940	-2.94	-5.8

5480	-2.53	1.52	1980	-4.18	0.62	3960	-3.08	-5.26
5500	-2.63	1.5	2000	-4.38	0.69	3980	-3.24	-5.23
5520	-2.81	1.42	2020	-4.42	0.8	4000	-3.26	-5.17
5540	-2.95	1.34	2040	-4.5	0.82	4020	-3.34	-5.18
5560	-2.74	1.59	2060	-4.38	1.17	4040	-3.34	-5.16
5580	-2.4	2.14	2080	-3.93	1.84	4060	-3.41	-5.48
5600	-2.14	2.63	2100	-3.61	2.23	4080	-3.64	-4.5
5620	-2.12	2.75	2120	-3.53	2.34	4100	-3.72	-4.82
5640	-2.32	2.62	2140	-3.59	2.42	4120	-3.99	-4.94
5660	-2.53	2.49	2160	-3.87	2.3	4140	-4.05	-5.27
5680	-2.53	2.72	2180	-4.33	1.77	4160	-4.06	-5.3
5700	-2.3	3.13	2200	-4.45	0.99	4180	-3.95	-5.07
5720	-2.13	3.5	2320	-4.92	-0.5	4200	-3.9	-5.14
5740	-2.25	3.3	2340	-4.41	-0.69			
5760	-2.28	3.3	2360	-3.7	-0.88			
5780	-2.48	3.14	2380	-3.33	-0.58			
5800	-2.64	3.08						
5820	-2.63	3.02						
5840	-2.62	2.92						
5860	-2.67	2.65						









7. Test software GTS MaxSign-RayZone2800C_Z

8. Signature:

LONG WANG