



SAMPLE & SPECIFICATION FOR APPROVAL

Customer: T2 Mobile (Shanghai) Limited

Model NO: BLADE

Customer P/N: BLADE_TOP_ANT_S02-0081(BQA6CF0A11C0)

BLADE_BOTTOM_ANT_S02-0081(BQA6CF0A16C0)

Version: A

Specification Describe: BLADE TOP Antenna (Carrier + LDS) ;BLADE

BOTTOM Antenna (Carrier + LDS)

Vendor P/N: S02-0081

Date: 2025/2/10

Sample and datasheet must be approved for 5 PCS .

No Customer appointed Material				Assign Part
	R&D		QE	Sales
Department	MD	HW	Quality and Eng.Dep.	Sale& Marketing
Checked By	WangJie	WangJie	WangJie	WangJie
Approved By	YeChengGuo	YeChengGuo	YeChengGuo	YeChengGuo
Final Judgment	LuXiaoHua	LuXiaoHua	LuXiaoHua	LuXiaoHua
Remark				

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	



Shanghai Welletronics Future Communication Technology Co.,Ltd

Antenna Approval Sheet

Customer	T2 Mobile (Shanghai) Limited		
Customer P/N	BLADE_TOP_ANT_S02-0081(BQA6CF0A11C0) BLADE_BOTTOM_ANT_S02-0081(BQA6CF0A16C0)		
Model	BLADE		
P/N	S02-0081		
Description	BLADE TOP Antenna (Carrier + LDS) ;BLADE BOTTOM Antenna (Carrier + LDS)		
Frequency	2G:GSM850/GSM900/DCS/PCS 3G:WB1/B2/B4/B5/B8; 4G:LTEB1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B20/B28/B38/B40/B41/B48/B66/B71 DC_12A_n2A /DC_66A_n5A /DC_12A_n66A /DC_12A_n77A		
Initial Date	2025/02/10		
Revision	A		
Author	RF Engineer	ME	Confirm
	YeChengGuo 叶成国	ZhuWenRui 朱文瑞	WangJie 王杰
Tel.			
Approval	R&D	PM	QE

Customer Signature



Catalog

1.Summary	4
2.Antenna Structure	4
3.Device Conditions	4
4. Test Environment	5
5. Antenna Test Results	5
5.1 Antenna Photos	5
5.2 Matching Network	7
5.3 VSWR (S11)	10
5.4 Efficiency &Peak Gain	14
5.5 Radiation Pattern	18
6. Mechanical Drawings	22
7. Dimension Report	24
8. Reliability Test Report	25
9. Packing Method	26
10.RoHS	27
11.Shipping inspection criterion	28
12.QC Process Chart	29
13.Storage Management Method	30

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	

1.Summary

This is the T2M-BLADE antenna approval sheet.

Working band ::

2G:GSM850/GSM900/DCS/PCS;

3G:WB1/B2/B4/B5/B8;

4G:LTEB1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B20/B28/B38/B40/B41/B48/B66/B71;

DC_12A_n2A /DC_66A_n5A /DC_12A_n66A /DC_12A_n77A

2.Antenna Structure

Carrier + LDS

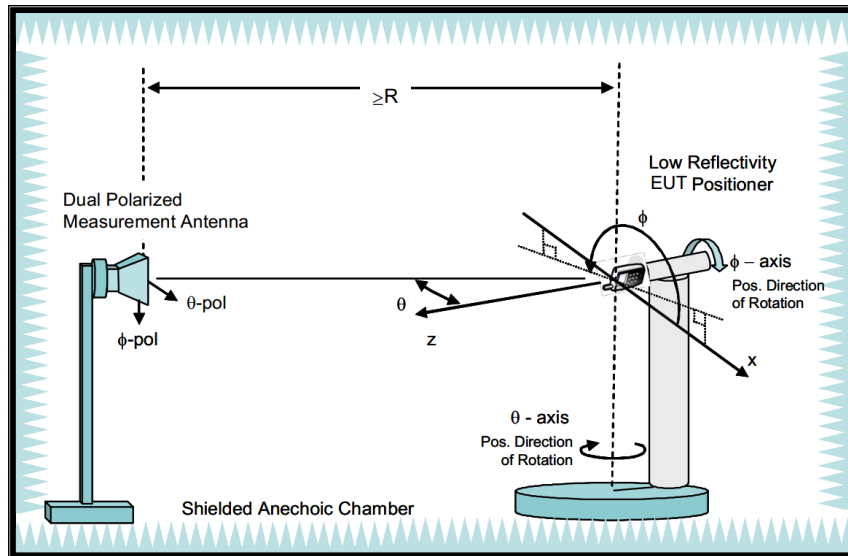
3.Device Conditions



Picture 1 BLADE photo

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	

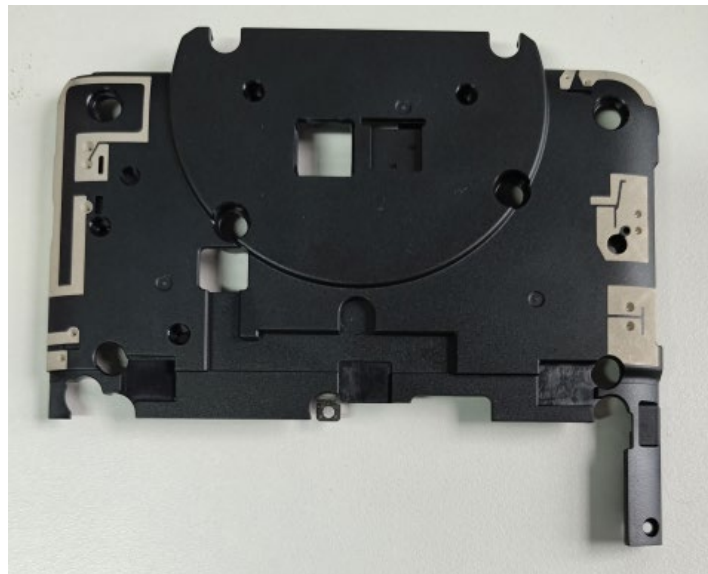
4. Test Environment



Picture 2 Test Environment photo

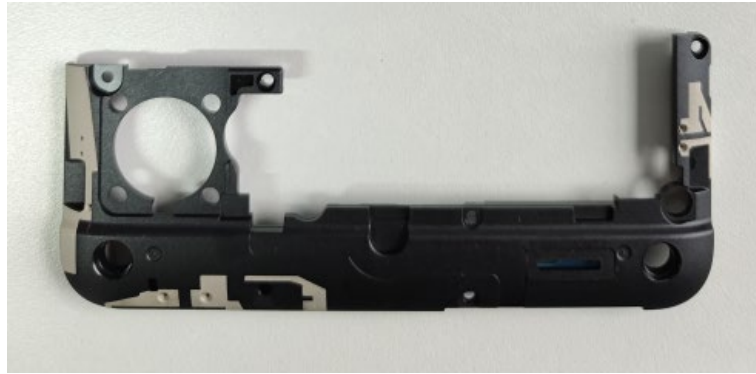
5. Antenna Test Results

5.1 Antenna Photos



Picture 3 BLADE TOP antenna photo

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	



Picture 4 BLADE BOTTOM antenna photo

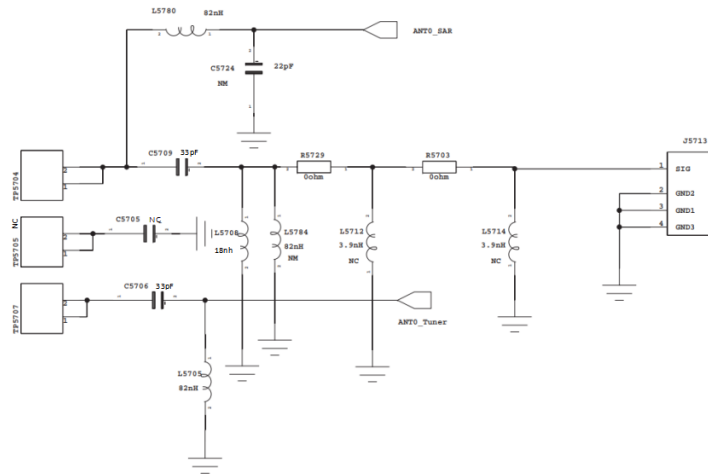
Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	

5.2 Matching Network

5.2.1 matching network for antenna0

RF1	15nH
RF2	8.2nH
RF3	0Ω
RF4	12nH

ANT0

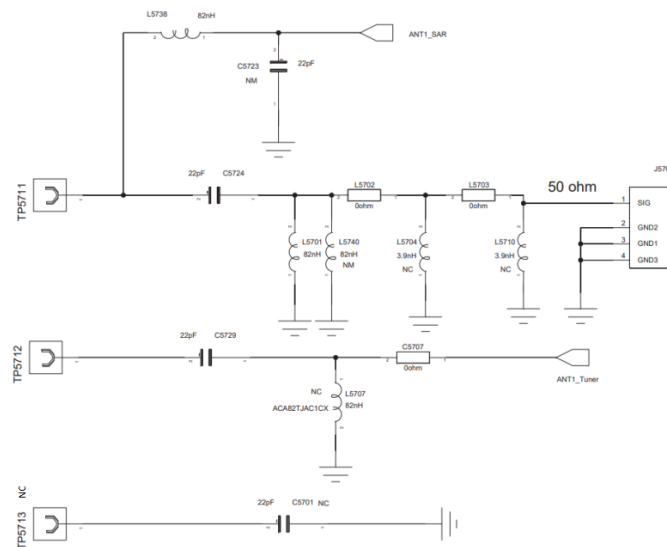


Picture 5 Matching network for antenna0

5.2.2 matching network for antenna1

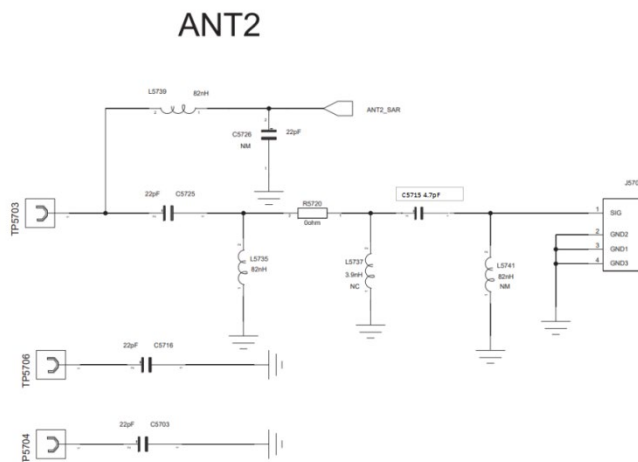
RF1	0Ω
RF2	5.1nH
RF3	15nH
RF4	39nH

ANT1



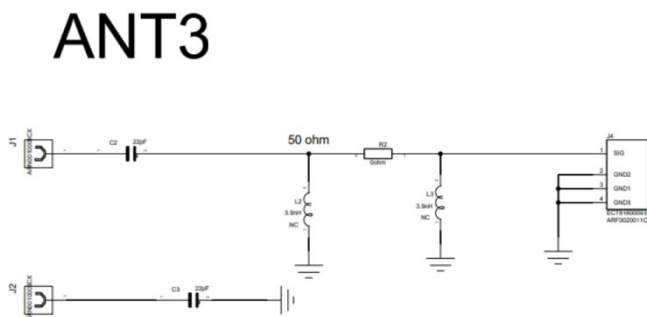
Picture 6 Matching network for antenna1

5.2.3 matching network for antenna2



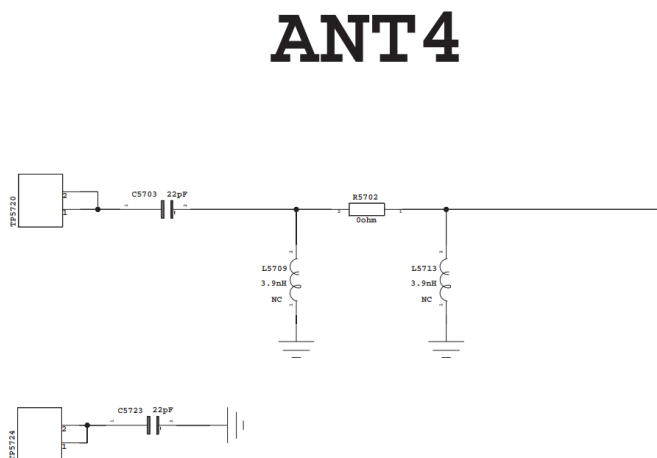
Picture 7 Matching network for antenna2

5.2.4 matching network for antenna3



Picture 8 Matching network for antenna3

5.2.5 matching network for antenna4

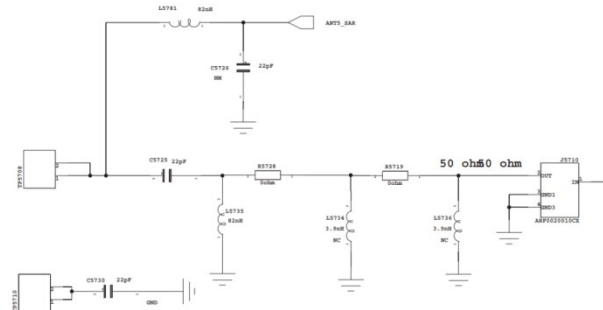


Picture 9 Matching network for antenna4

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	

5.2.6 matching network for antenna5

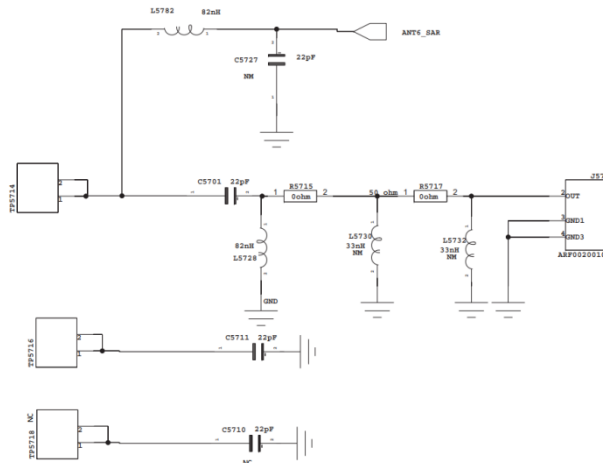
ANT5



Picture 10 Matching network for antenna5

5.2.7 matching network for antenna6

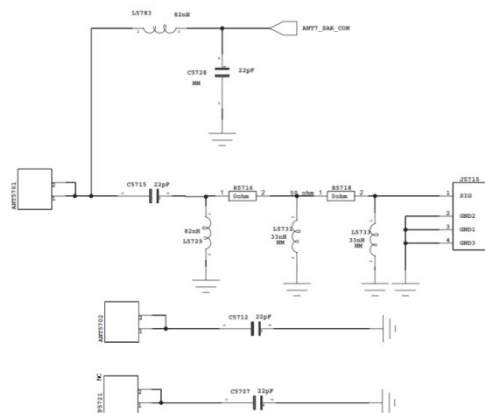
ANT6



Picture 11 Matching network for antenna6

5.2.8 matching network for antenna7

ANT7

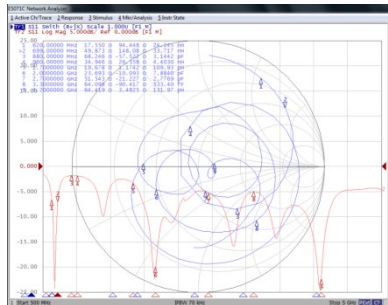
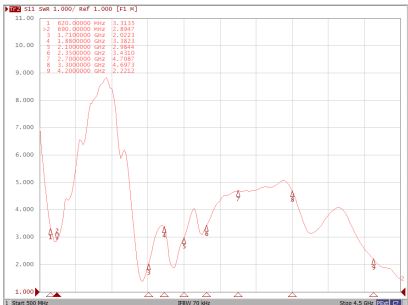
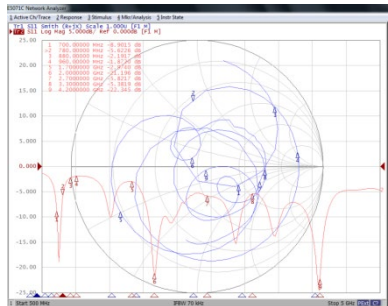
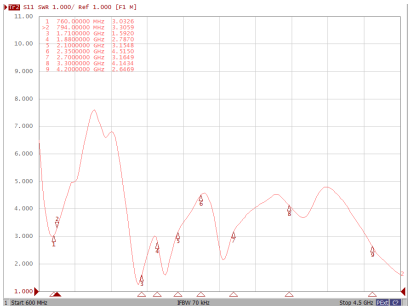
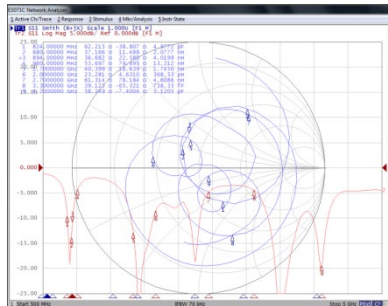
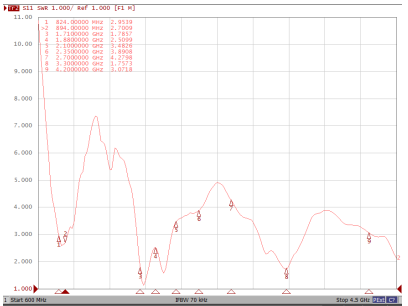
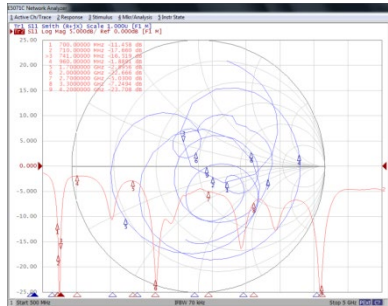
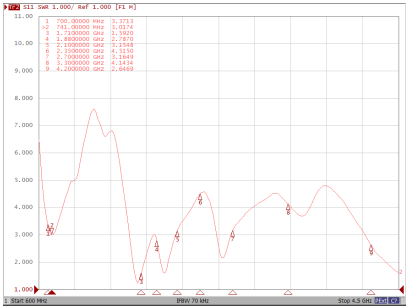


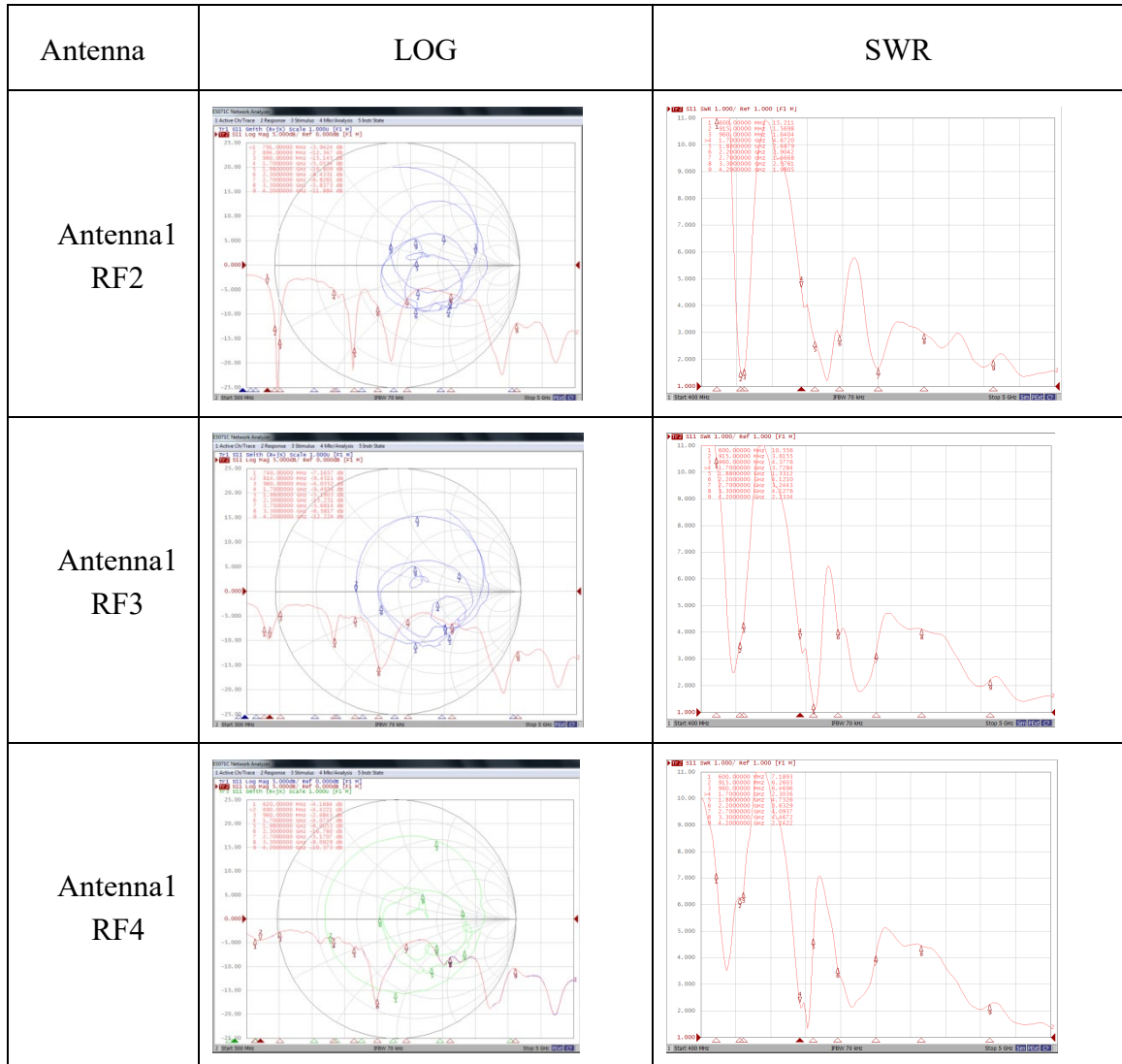
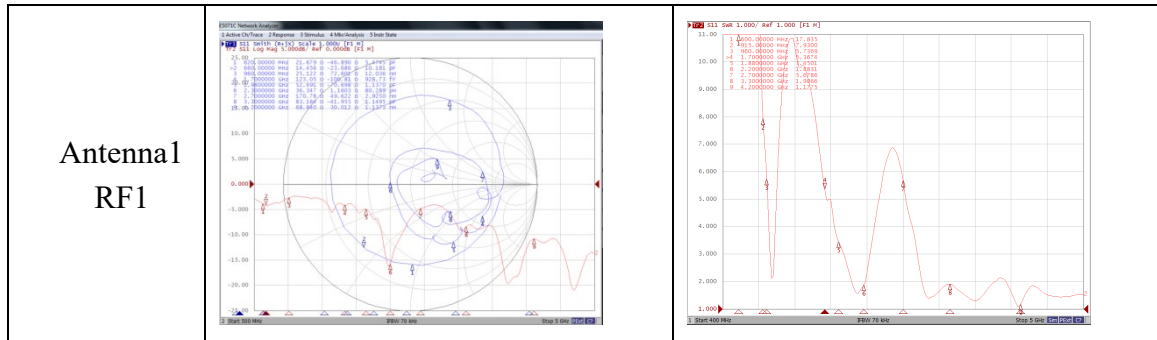
Picture 12 Matching network for antenna7

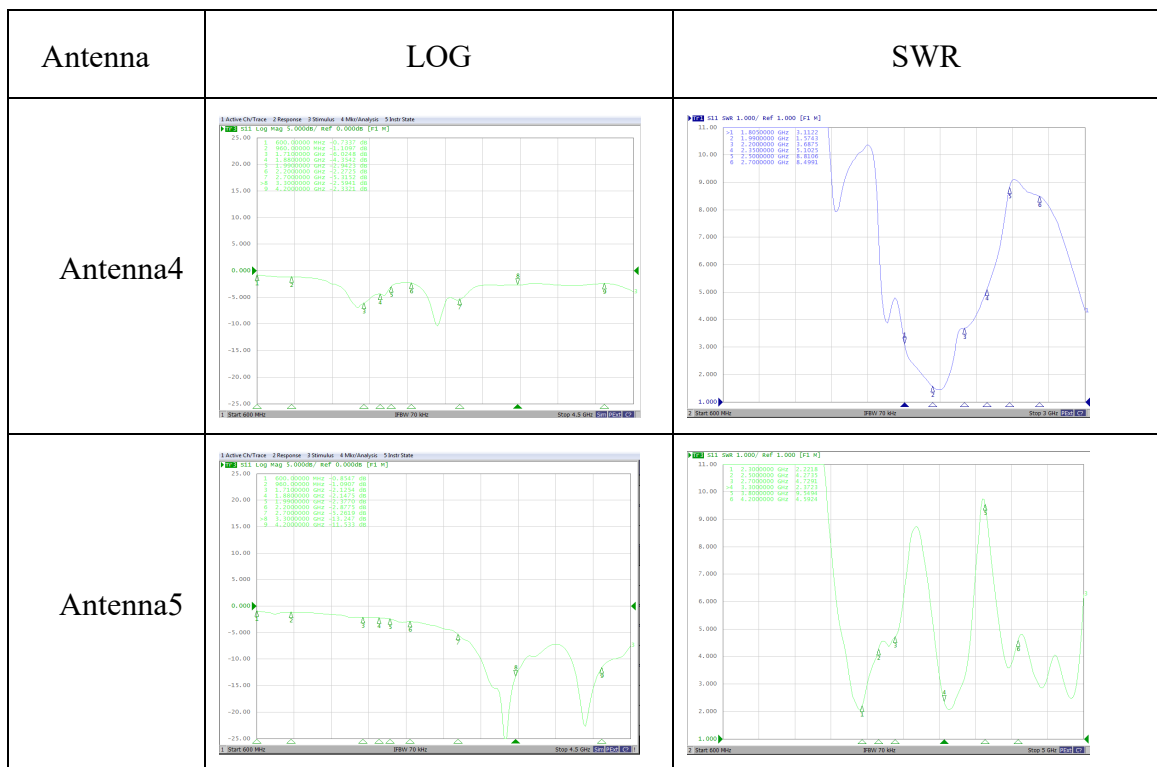
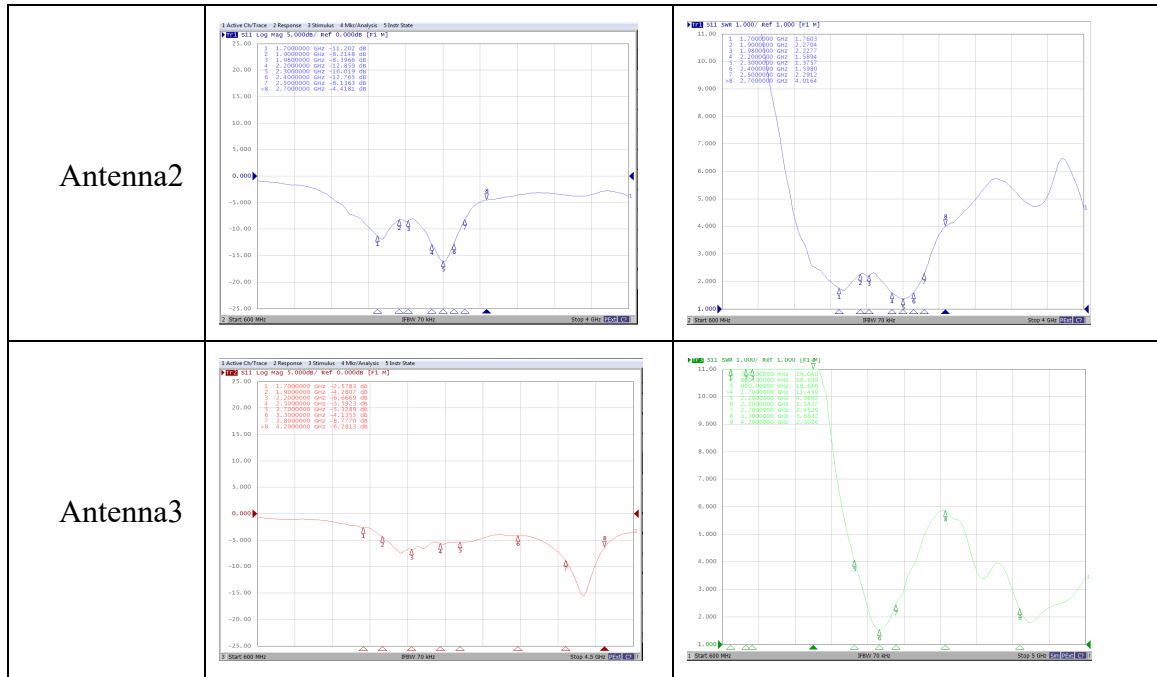
Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	

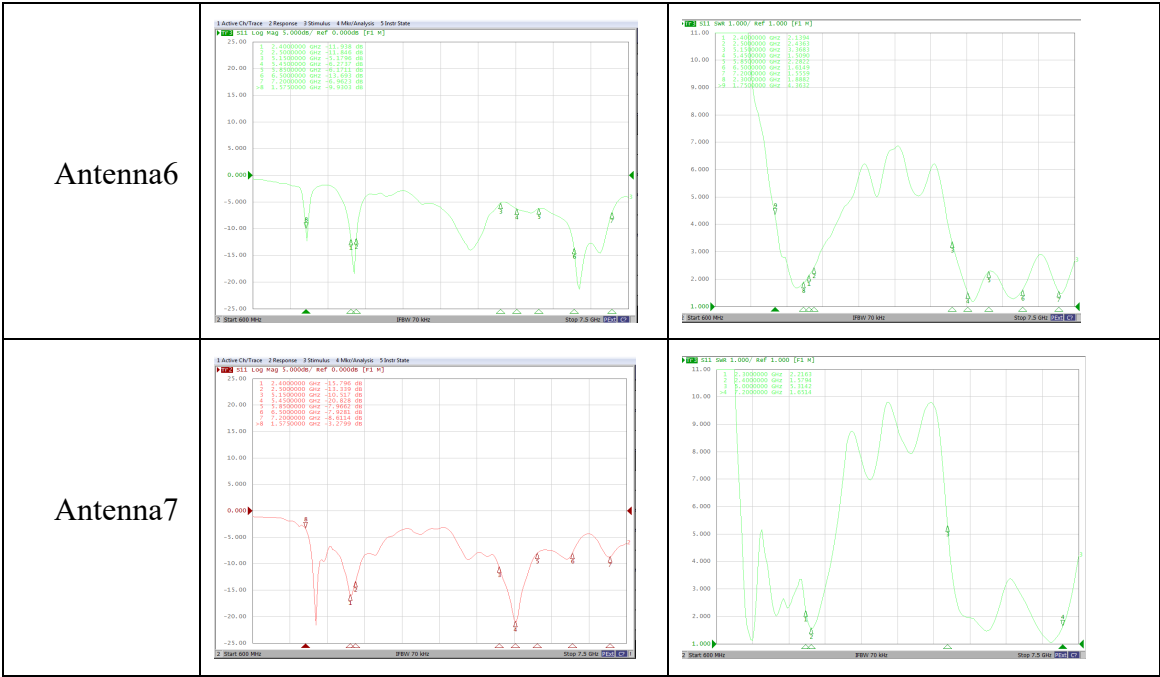
5.3 VSWR (S11)

5.3.1 VSWR for DIV antenna

Antenna	LOG	SWR
Antenna0 RF1		
Antenna0 RF2		
Antenna0 RF3		
Antenna0 RF4		









5.4 Efficiency & Peak Gain

5.4.1 Efficiency & Peak Gain for antenna0

RF1			RF2			RF3			RF4		
frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)
620	-6.11	7.96	2180	0.32	43.97	700	-3.43	16.14	790	-3.59	14.45
630	-5.38	9.24	2200	0	41.74	710	-3.03	18.39	800	-2.68	17.54
640	-4.72	10.77	2220	0.1	41.36	720	-2.35	21.64	810	-2.08	21.11
650	-4.11	12.46	2240	0.23	41.53	730	-2.15	21.7	820	-1.9	24.02
660	-4.06	13.3	2260	0.37	42.3	740	-2.22	21.68	830	-1.19	27.54
670	-3.96	14.69	2280	0.27	41.56	750	-2.05	23	840	-1.28	30.04
680	-3.89	15.35	2300	0.19	40.09	760	-2.15	20.48	850	-1.08	33.26
690	-3.8	15.2	2320	0.12	39.76	770	-2.9	18.98	860	-0.78	34.98
1800	0.86	24.61	2340	0.16	42.94	780	-3.39	17.33	870	-0.86	34.95
1820	0.87	27.44	2360	0.09	44.19	790	-4.29	15.78	880	-1.71	33.21
1840	1.35	30.79	2380	-0.78	40.73	800	-4.75	14.07	890	-1.15	34.91
1860	1.47	32.86	2400	-0.9	37.75				900	-1.12	35.32
1880	1.47	34.77	2420	-0.85	35.47				910	-1.21	32.39
1900	1.34	37.22	2440	-0.99	35.79				920	-1.71	30.45
1920	1.22	39.81	2460	-1.1	33.94				930	-1.67	27.9
1940	1.37	38.96	2480	-1.28	36				940	-2.07	25.28
1960	1.43	39.87	2500	-0.91	37.23				950	-2.19	23.1
1980	1.67	40.33	2520	-1.12	38.5				960	-2.65	20.25
2000	1.27	41.16	2540	-1.28	35.43				2060	-1.12	35
2020	0.99	41.71	2560	-1.23	32.36				2080	-1.11	34.31
2040	1.33	44.25	2580	-1.01	30.48				2100	-1.49	33.25
2060	1.58	45.52	2600	-1.29	28.25				2120	-1.72	32.33
2080	1.36	45.23	2620	-1.4	26.93				2140	-2.04	31.93
2100	1.03	44.13	2640	-1.56	25.58				2160	-2.57	30.41
2120	0.99	44.63	2660	-1.61	25.38				2180	-2.75	29.3
2140	0.94	45.98	2680	-1.67	25.05				2200	-2.7	27.28
2160	0.73	44.67	2700	-1.78	24.74						

5.4.2 Efficiency & Peak Gain for antenna1

RF1			RF2			RF3			RF4		
frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)
1800	-6.35	8.8	880	-4.43	12.82	700	-10.02	4.22	3300	-1.18	22.67
1810	-6.99	8.42	890	-4.09	14.74	710	-9.3	4.9	3330	-1.08	22.55
1820	-6.98	9.6	900	-3.66	16.88	720	-8.91	5.54	3360	-1.05	22.39
1830	-7.22	9.03	910	-3.25	18.93	730	-8.71	5.94	3390	-1.19	22.44
1840	-7.29	10.4	920	-2.94	21.03	740	-8.49	6.45	3420	-1.23	22.21
1850	-6.4	12.03	930	-2.84	22.66	750	-8.02	7.33	3450	-0.52	22.65
1860	-6.49	11.52	940	-2.62	23.42	760	-7.66	7.94	3480	-0.54	23.03
1870	-5.77	13.97	950	-2.47	24.06	770	-7.21	8.56	3510	-0.46	23.52
1880	-5.68	13.54	960	-2.41	23.26	780	-6.48	9.82	3540	-0.39	22.49
1890	-5.18	16.15	2500	-3.39	18.69	790	-6.52	10.41	3570	-0.54	23.3
1900	-4.89	14.23	2510	-3.33	18.84	800	-6.04	11.49	3600	-0.49	23.08
1910	-4.92	15.46	2520	-3.19	19.02	810	-6.01	12.3	3630	-0.16	22.34
1920	-5.4	14.82	2530	-3.26	18.87	820	-6.44	12.3	3660	-0.11	20.86
1930	-5.54	14.85	2540	-3.25	19.11	830	-6.18	12.77	3690	-0.11	21.56
1940	-6.62	13.09	2550	-3.24	18.86	840	-5.88	12.57	3720	-0.37	22.65
1950	-6.38	13.34	2560	-3.32	18.63	850	-5.06	13.24	3750	-0.73	21.94
1960	-6.14	13.76	2570	-3.27	18.94	860	-4.34	13.6	3780	-0.65	21.65
1970	-6.19	12.71	2580	-3.3	18.64	870	-3.97	12.78	3810	-0.47	23.49
1980	-5.73	14.39	2590	-3.46	18.54	880	-3.82	13.09	3840	-0.25	26.31
1990	-5.11	14.35	2600	-3.73	18.21	890	-4.02	13.21	3870	-0.43	25.8
2000	-4.83	15.53	2610	-3.74	17.97	900	-4.17	12.95	3900	0.19	24.52
2020	-4.1	19.04	2620	-3.71	18.14	910	-4.29	13	3930	0.2	23.51
2040	-3.18	20.91	2630	-3.69	18.08	920	-4.45	12.88	3960	0.84	24.23
2060	-2.63	18.15	2640	-3.75	17.56	930	-4.45	13.14	3990	0.66	23.94
2080	-2.88	19.26	2650	-3.71	17.82	940	-4.52	12.46	4020	0.67	21.93
2100	-3.83	17.48	2660	-3.62	16.95	950	-4.22	12.37	4050	0.56	20.05
2120	-4.29	15.17	2670	-3.44	16.63	960	-4.45	11.63	4080	0.78	19.39
2140	-5.53	14.8	2680	-3.56	15.83	2300	-4.75	14.94	4110	0.7	19.08
2160	-3.8	17.65	2690	-3.89	15.04	2320	-4.19	16.3	4140	0.42	18.9
2180	-4.28	18.01	2700	-4.09	14.43	2340	-3.39	18.24	4170	0.15	18.81
2200	-4.11	16.93				2360	-2.78	19.79	4200	-0.23	19.17
						2380	-2.61	20.38			
						2400	-2.54	20.16			

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	

5.4.3 Efficiency & Peak Gain for antenna2

frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)
1700	-1.41	34.34	1960	-1.39	31.83	2220	-1.73	24.86	2480	0.83	41.86
1710	-1.53	33.62	1970	-1.41	31.67	2230	-1.87	24.25	2490	0.47	41.53
1720	-1.58	32.97	1980	-1.31	32.07	2240	-2.03	23.61	2500	1.22	42.04
1730	-1.45	34.02	1990	-1.04	33.95	2250	-1.99	23.67	2510	1.06	41.93
1740	-1.49	33.93	2000	-1.1	34.1	2260	-1.97	23.34	2520	0.98	41.58
1750	-1.33	35.08	2010	-1.12	34.6	2270	-1.96	23.3	2530	0.89	40.14
1760	-1.22	34.79	2020	-1.08	34.6	2280	-1.99	22.99	2540	0.52	39.38
1770	-1.17	35.75	2030	-0.87	35.96	2290	-1.83	22.75	2550	0.31	37.38
1780	-1.09	37.08	2040	-0.68	36.35	2300	-1.66	23.09	2560	0.29	36.1
1790	-1.2	36.19	2050	-0.55	37.49	2310	-1.68	23.75	2570	-0.48	35.77
1800	-1	36.72	2060	-0.46	38.15	2320	-1.4	24.06	2580	-0.47	34.86
1810	-1.13	36.59	2070	-0.34	38.33	2330	-1.08	25.32	2590	-0.2	33.96
1820	-1.24	35.93	2080	-0.4	37	2340	-1.06	26.96	2600	-0.42	32.43
1830	-1.24	35.11	2090	-0.38	36.79	2350	-1.15	28.14	2610	-0.54	31.13
1840	-1.15	35.66	2100	-0.29	36.67	2360	-1.12	30.47	2620	-0.57	30.95
1850	-1.21	34.77	2110	-0.25	35.95	2370	-1.02	32.5	2630	-0.73	30.24
1860	-1.24	34.04	2120	-0.15	36.18	2380	-0.83	34.17	2640	-0.67	28.87
1870	-1.35	33.32	2130	-0.12	35.15	2390	-0.82	35.67	2650	-0.43	29.12
1880	-1.28	33.23	2140	-0.1	34.94	2400	-0.17	36.66	2660	-0.45	27.52
1890	-1.18	32.69	2150	-0.19	33.86	2410	-0.15	37.35	2670	-0.64	26.64
1900	-1.13	32.7	2160	-0.26	33.46	2420	-0.2	38.19	2680	-0.84	25.14
1910	-1.01	33.86	2170	-0.47	32.15	2430	0.05	38.97	2690	-0.98	23.88
1920	-1.15	33.4	2180	-0.67	30.98	2440	0.19	39.99	2700	-1.21	22.65
1930	-1.38	32.25	2190	-1.09	28.92	2450	0.15	40.43			
1940	-1.36	32.39	2200	-1.23	27.4	2460	0.18	40.92			
1950	-1.34	32.19	2210	-1.51	26.01	2470	-1	41.95			

5.4.4 Efficiency & Peak Gain for antenna3

frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)
2300	-1.21	27.19	2520	-1.16	25.51	3360	-4.52	10.41	3800	-0.82	26.85
2310	-1.41	26.9	2530	-1.45	24.64	3380	-3.8	11.22	3820	-0.54	28.53
2320	-1.34	26.89	2540	-1.71	23.84	3400	-3.33	11.26	3840	-0.46	29.18
2330	-1.3	27.63	2550	-2.09	22.72	3420	-2.98	11.76	3860	-0.12	30.31
2340	-1.08	28.29	2560	-2.21	21.77	3440	-2.87	11.92	3880	0.07	31.29
2350	-0.87	28.31	2570	-2.07	21.74	3460	-2.85	13.26	3900	-0.15	30.32
2360	-0.72	28.8	2580	-2.21	20.81	3480	-3.23	13.8	3920	-0.26	30.23
2370	-0.63	28.86	2590	-2.32	20.22	3500	-3.63	14.24	3940	-0.19	30.99
2380	-0.87	27.87	2600	-2.42	19.2	3520	-3.8	14.78	3960	-0.05	32.14
2390	-0.97	26.97	2610	-2.53	18.33	3540	-3.27	16.32	3980	-0.1	32.68
2400	-1.21	25.97	2620	-2.37	18.23	3560	-2.97	16.66	4000	-0.39	31.35
2410	-1.28	24.8	2630	-2.39	17.97	3580	-2.76	17.66	4020	-0.42	31.65
2420	-1.35	24.13	2640	-2.26	17.87	3600	-3.08	18.6	4040	-0.67	30.12
2430	-1.43	23.51	2650	-1.86	18.66	3620	-3.62	18.77	4060	-0.6	30.38
2440	-1.22	23.91	2660	-1.96	18.38	3640	-3.2	20.06	4080	-0.63	30.57
2450	-1.12	23.91	2670	-1.9	18.5	3660	-2.82	20.58	4100	-0.78	30.28
2460	-1.01	24.12	2680	-1.97	18.15	3680	-2.47	22.74	4120	-1.01	29.08
2470	-1.05	24.25	2690	-2.04	17.98	3700	-2.32	23.3	4140	-1.15	28.17
2480	-1.02	24.53	2700	-2.15	17.81	3720	-1.79	24.51	4160	-1.27	27.27
2490	-0.84	24.7	3300	-5.6	9.19	3740	-1.32	25.39	4180	-1.4	25.84
2500	-0.97	25.2	3320	-5.62	9.79	3760	-1.3	25.51	4200	-1.36	26.92
2510	-1.08	25.45	3340	-5.24	10.19	3780	-1.24	24.91			

5.4.5 Efficiency & Peak Gain for antenna4

frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)
1800	-0.12	21.31	2030	-5.3	9.92	2260	-5.48	11.91	2490	-0.11	16.47
1810	-0.32	20.4	2040	-5.68	9.59	2270	-4.74	13.11	2500	-0.3	15.9
1820	-0.44	19.95	2050	-5.83	9.48	2280	-3.9	14.94	2510	-0.62	14.79
1830	-0.58	19.3	2060	-5.92	9.5	2290	-2.85	16.74	2520	-1.13	13.68
1840	-0.75	19.07	2070	-6.06	9.39	2300	-1.64	19.06	2530	-1.69	12.53
1850	-1.1	18.26	2080	-6.25	8.89	2310	-0.81	21.07	2540	-1.85	11.92
1860	-1.21	17.66	2090	-6.26	8.59	2320	0.15	23.17	2550	-2.12	11.4
1870	-1.41	16.79	2100	-6.33	8.36	2330	0.92	25.21	2560	-2.45	11.07
1880	-1.79	16.11	2110	-6.51	8.19	2340	1.52	27.27	2570	-2.64	11.16
1890	-2.19	15.11	2120	-6.57	8.03	2350	2.05	28.53	2580	-2.61	10.72
1900	-2.24	14.63	2130	-6.67	7.66	2360	2.45	29.81	2590	-2.49	10.72
1910	-2.18	14.56	2140	-6.6	7.6	2370	2.73	30.53	2600	-2.4	10.74
1920	-2.54	14.13	2150	-6.82	7.17	2380	2.79	30.06	2610	-2.43	10.81
1930	-2.98	13.46	2160	-6.87	7.09	2390	2.85	29.48	2620	-2.3	11.44
1940	-2.85	13.66	2170	-7.02	7.17	2400	2.67	27.91	2630	-2.52	11.62
1950	-2.91	13.75	2180	-7.04	7.43	2410	2.49	26.65	2640	-2.64	11.81
1960	-3.32	13.35	2190	-7.06	7.58	2420	2.2	25.61	2650	-2.62	12.47
1970	-3.6	12.85	2200	-6.79	7.82	2430	2.04	24.32	2660	-2.94	12.46
1980	-3.79	12.46	2210	-6.31	8.49	2440	1.79	23.34	2670	-3.1	12.65
1990	-3.87	12.5	2220	-6.09	8.97	2450	1.49	21.58	2680	-3.36	12.45
2000	-4.34	11.67	2230	-5.96	9.55	2460	1.07	19.82	2690	-3.69	12.17
2010	-4.74	10.96	2240	-5.81	10.34	2470	0.63	18.38	2700	-4.06	11.82
2020	-5.06	10.2	2250	-5.72	11.21	2480	0.42	17.46			

5.4.6 Efficiency & Peak Gain for antenna5

frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)
2300	-1.77	22.83	2520	0.44	30.7	3360	0.06	31.43	3800	1.21	41.29
2310	-1.55	23.04	2530	0.34	30.32	3380	0.49	31.46	3820	1.65	46.15
2320	-1.11	23.68	2540	0.24	30.25	3400	0.17	29.48	3840	1.71	46.99
2330	-0.44	24.83	2550	0.1	29.62	3420	0.14	29.73	3860	1.43	46.35
2340	-0.02	25.74	2560	-0.03	29.42	3440	-0.55	28.74	3880	1.33	46.41
2350	0.21	26.21	2570	-0.06	30.3	3460	-0.4	31.01	3900	1.27	44.52
2360	0.74	27.93	2580	-0.34	29.91	3480	-0.27	31.63	3920	1.26	43.32
2370	1.14	29.21	2590	-0.73	29.71	3500	-0.29	31.59	3940	1.25	42.96
2380	1.2	29.08	2600	-1.06	29.18	3520	-0.19	30.78	3960	1.17	42.9
2390	0.89	28.48	2610	-1.38	28.52	3540	0.17	32.92	3980	1.02	41.74
2400	0.53	27.34	2620	-1.43	29.15	3560	0.28	32.89	4000	0.72	38.56
2410	0.21	26.34	2630	-1.64	29.08	3580	0.4	33.56	4020	0.7	37.38
2420	-0.08	25.92	2640	-1.38	28.96	3600	0.65	34.07	4040	0.6	34.81
2430	-0.29	25.41	2650	-0.87	30.14	3620	0.59	33.34	4060	0.7	34.79
2440	-0.2	26.03	2660	-0.69	29.93	3640	0.58	34.21	4080	0.67	35.02
2450	-0.15	26.27	2670	-0.26	30.93	3660	0.6	33.08	4100	0.59	35.1
2460	-0.05	26.84	2680	0.13	31.61	3680	1.05	35.51	4120	0.32	34.25
2470	-0.1	27.02	2690	0.43	32.29	3700	1.26	35.69	4140	0.21	34.27
2480	-0.09	27.4	2700	0.7	33.05	3720	1.3	35.95	4160	0.26	34.75
2490	0.17	28.04	3300	0.15	34.23	3740	0.53	33.41	4180	0.16	33.9
2500	0.23	29	3320	-0.15	33.66	3760	0.32	34.6	4200	0.54	35.52
2510	0.35	30.06	3340	0.01	32.77	3780	0.56	36.86			

5.4.7 Efficiency & Peak Gain for antenna6

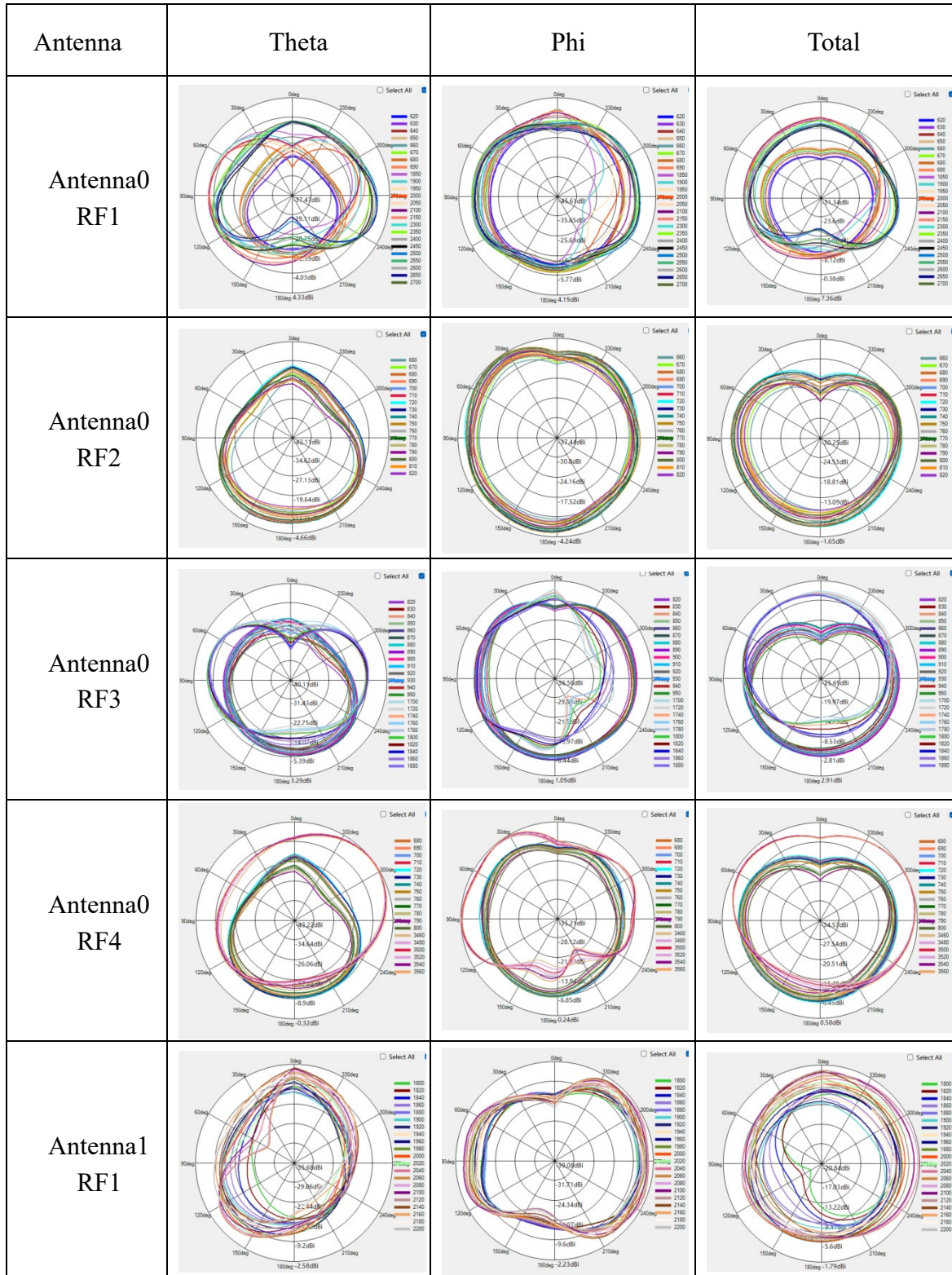
frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)
1525	-3.6	14.26	5130	0.38	36.68	5850	-1.89	20.7	6570	1.46	34.91
1535	-3.28	16.75	5160	0.51	35.33	5880	-0.91	19.52	6600	2.1	38.79
1545	-3.04	20.74	5190	0.5	34.61	5910	-1.53	18.78	6630	1.23	37.66
1555	-2.68	25.65	5220	0.73	37.87	5940	-2.2	17.32	6660	1.33	36.77
1565	-1.99	29.96	5250	0.89	37.05	5970	-2.27	17	6690	1.7	38.45
1575	-1.55	32.03	5280	0.73	35.37	6000	-2.42	16.47	6720	1.78	38.15
1585	-1.38	33.92	5310	1.05	35.96	6030	-2.3	17.1	6750	1.6	35.97
1595	-1.04	35.78	5340	0.79	32.87	6060	-2.47	16.03	6780	1.36	33.43
1605	-0.68	36.45	5370	0.67	32.49	6090	-2.51	15.57	6810	1.56	34.52
1615	-0.62	35.03	5400	1.04	32.99	6120	-1.93	16.34	6840	1.29	31.97
1625	-0.5	33.96	5430	1.59	32.49	6150	-1.9	16.24	6870	0.67	30.51
2400	-1.1	32.32	5460	-0.66	29.74	6180	-1.6	17.46	6900	0.12	25.15
2410	-1.07	32.82	5490	-0.74	29.07	6210	-1.75	17.67	6930	-0.27	21.77
2420	-0.99	33.84	5520	-0.95	27.97	6240	-1.7	19.74	6960	-0.53	22.03
2430	-0.9	34.53	5550	-0.52	27.15	6270	-1.85	18.44	6990	-0.23	20.21
2440	-0.95	35.27	5580	-0.82	26.12	6300	-1.88	18.6	7020	0.19	19.68
2450	-1.03	35.12	5610	-0.9	25.31	6330	-1.67	20.52	7050	-0.23	20.1
2460	-0.89	35.02	5640	-1.23	24.39	6360	-1.67	23.62	7080	-0.75	18.05
2470	-0.78	35.52	5670	-1.48	23.19	6390	-1.42	23.53	7110	-1.12	17.35
2480	-0.87	35.67	5700	-1.54	24.48	6420	-1.36	25.09	7140	-1.69	15.91
2490	-0.81	35.37	5730	-1.25	24.47	6450	-1.57	25.15	7170	-1.77	15.53
2500	0.01	35.34	5760	-1.34	23.81	6480	0.06	28.49	7200	-2.74	13.34
			5790	-1.82	22.97	6510	0.34	31.58			
			5820	-1.99	21.5	6540	0.22	32.08			

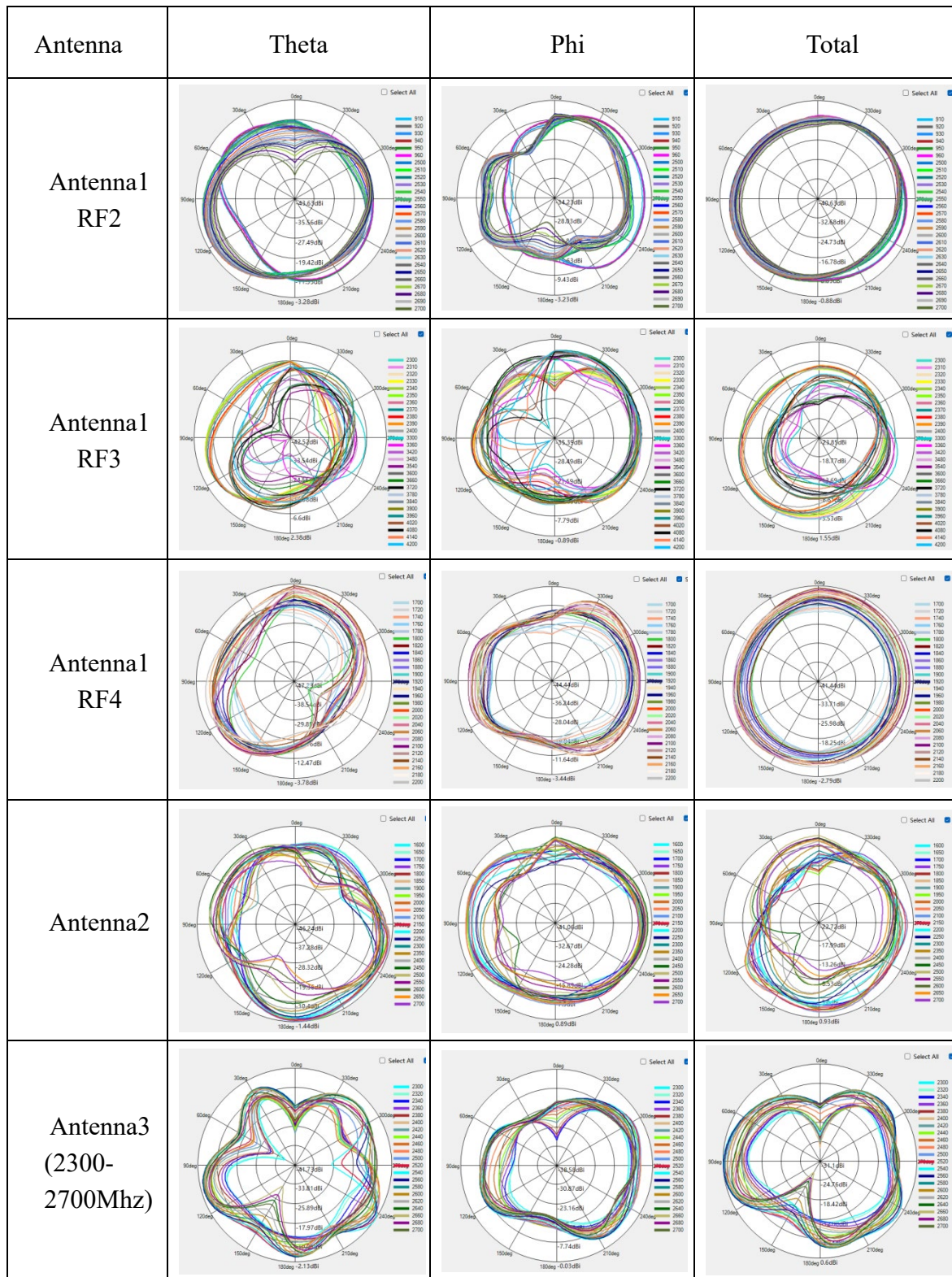
5.4.8 Efficiency & Peak Gain for antenna7

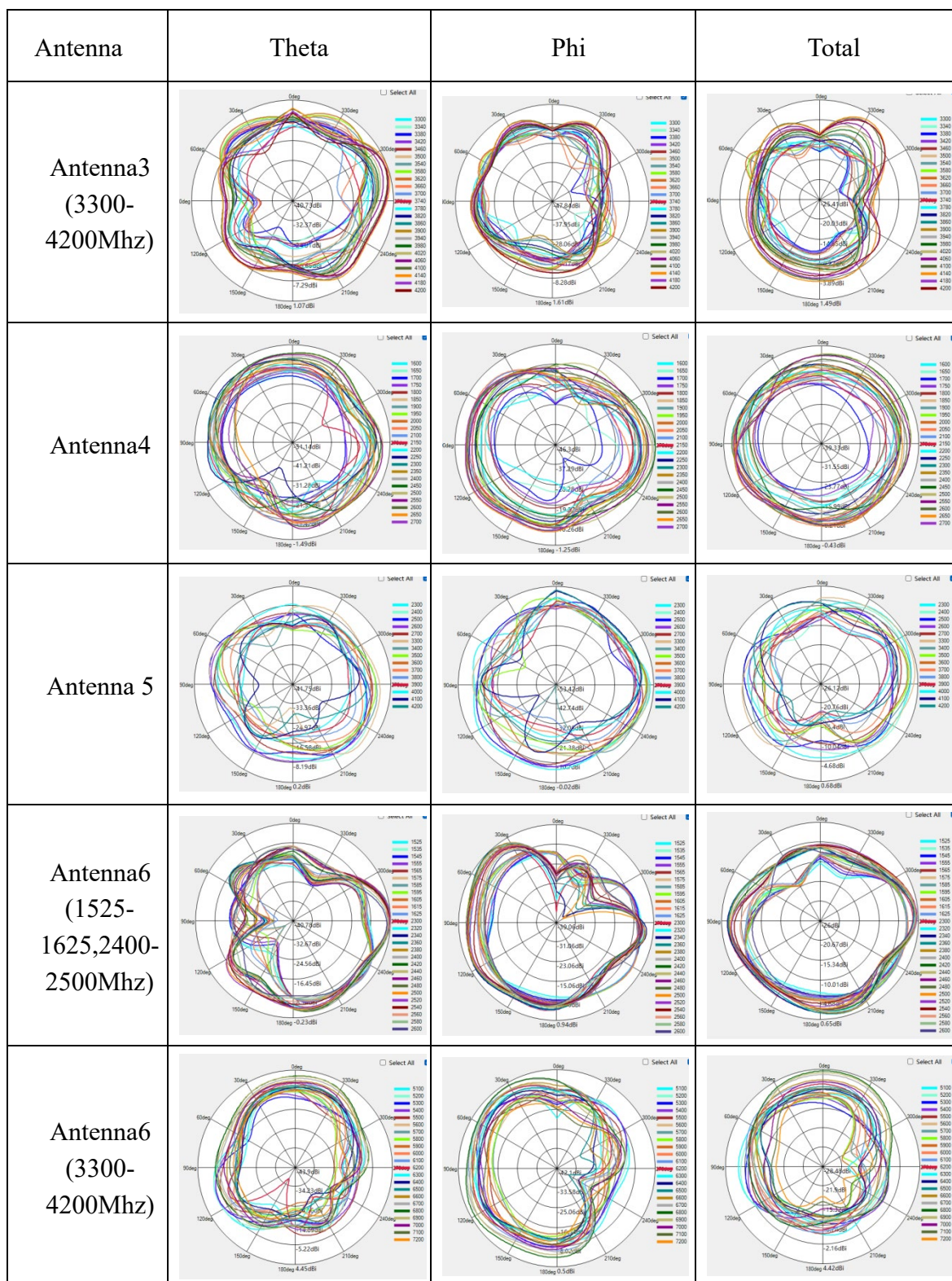
frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)	frequency (MHz)	Gain (dB)	efficiency (%)
2400	0.38	38.73	5450	-0.29	41.96	6080	-1.34	18.53	6710	0.3	22.11
2410	0.32	37.5	5480	-0.03	41.53	6110	-1.43	18.61	6740	0.2	22.11
2420	0.13	37.1	5510	-0.13	40.98	6140	-1.5	18.3	6770	0.05	21.63
2430	0.51	36.25	5540	-0.27	39.97	6170	-1.54	19.11	6800	0.24	21.68
2440	0.35	35.7	5570	0.16	39.89	6200	-1.33	19.38	6830	0.21	20.92
2450	0.29	34.69	5600	0.03	38.11	6230	-1.53	20.55	6860	0.11	20.06
2460	0.15	34.11	5630	-0.09	38.41	6260	-1.29	20.69	6890	-0.45	22.1
2470	0.26	34.72	5660	-0.14	36.77	6290	-1.29	19.5	6920	-0.94	16.64
2480	0.27	34.92	5690	-0.53	37.13	6320	-1.16	21.27	6950	-0.34	20.64
2490	0.3	34.73	5720	-0.92	36.52	6350	-0.96	21.4	6980	-0.86	18.84
2500	0.46	34.52	5750	-0.83	31.21	6380	-0.71	22.63	7010	-0.76	18.1
5150	-1.8	25.61	5780	-0.68	29.91	6410	-0.86	21.34	7040	0.09	22.27
5180	-1.48	27.52	5810	-0.82	29.47	6440	-0.97	21.65	7070	0.11	22.5
5210	-1.45	32.47	5840	-0.8	28.31	6470	1.2	23.8	7100	0.17	23.36
5240	-1.2	34.36	5870	-1.41	23.81	6500	0.55	23.94	7130	-0.01	23.4
5270	-1.54	33.86	5900	-1.49	23.1	6530	0.53	24.9	7160	0.04	23.85
5300	-0.47	37.32	5930	-1.99	21.86	6560	0.46	23.82	7190	0.35	24.85
5330	-0.24	39.1	5960	-2.01	21.67	6590	0.59	24.66	7200	0.19	23.66
5360	-0.36	39.28	5990	-1.48	20.23	6620	0.43	24.67			
5390	0.41	42.72	6020	-0.97	19.49	6650	0.32	23.07			
5420	0.76	43.05	6050	-0.99	19.55	6680	0.21	22.5			

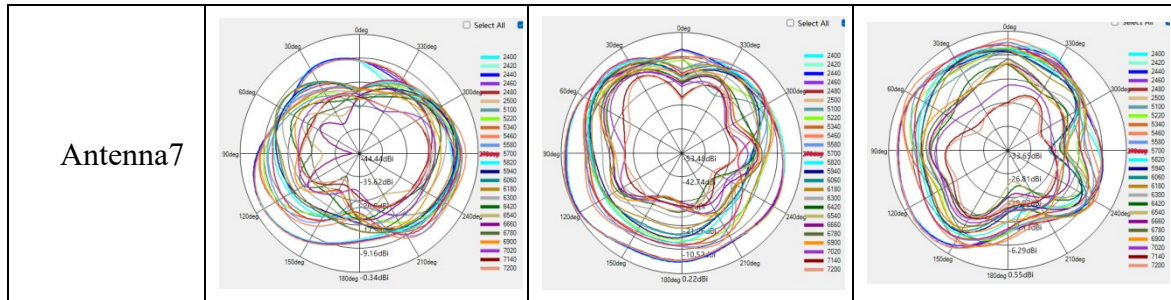
5.5 Radiation Pattern

5.5.1 Radiation Pattern for antenna



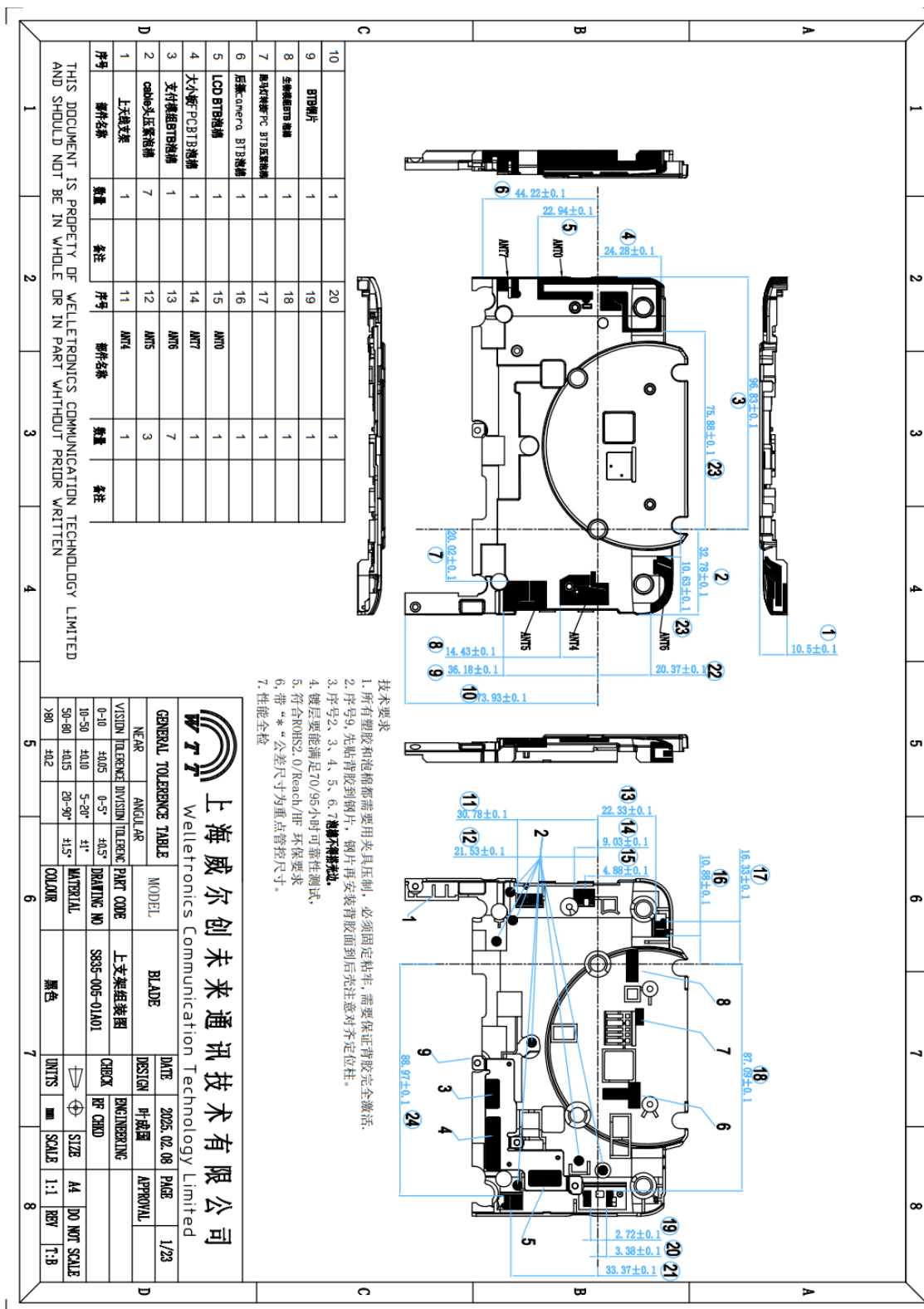




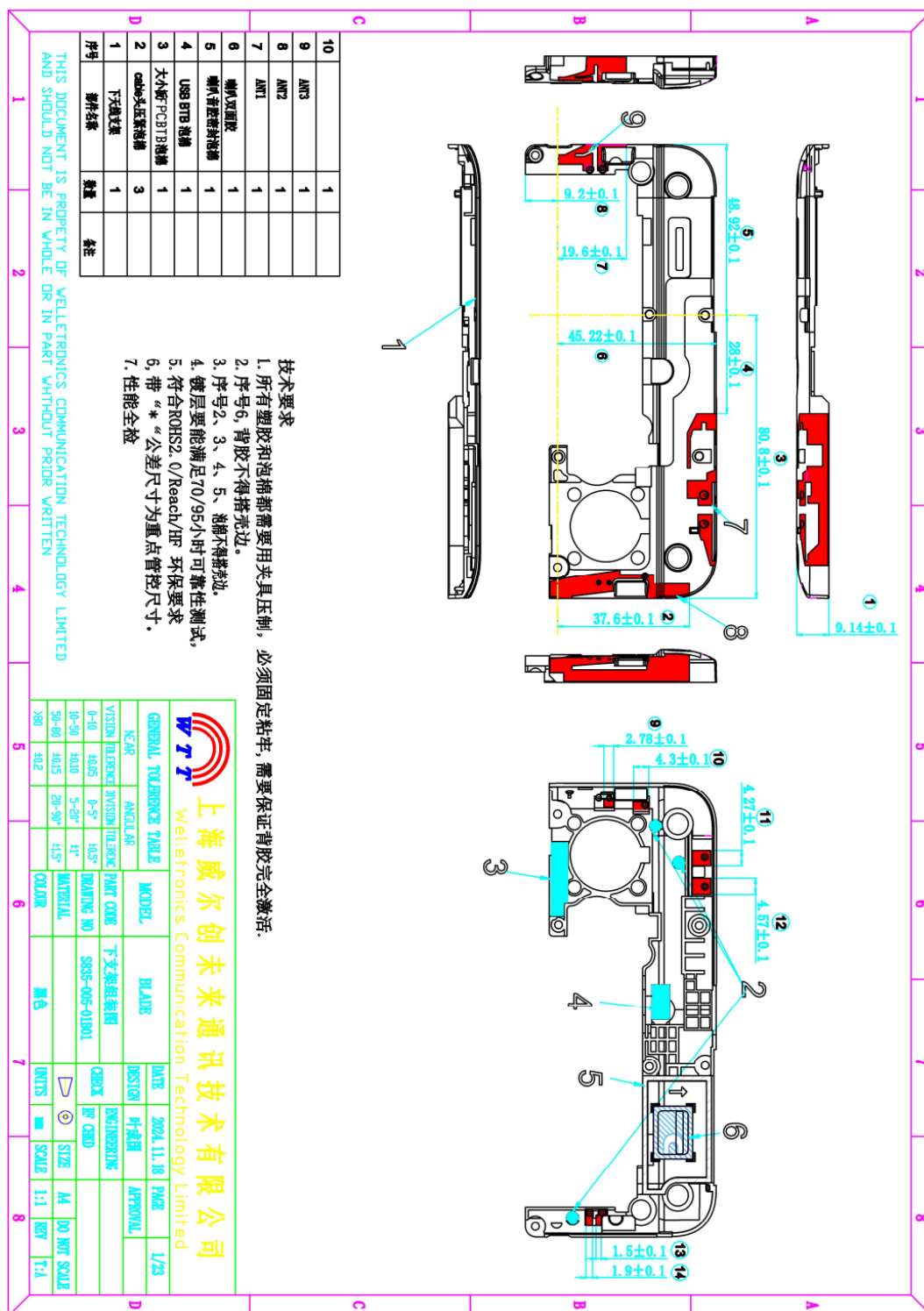


Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	

6. Mechanical Drawings



Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	



Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	



7. Dimension Report

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	



8. Reliability Test Report

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	



9. Packing Method

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	



10. RoHS
(See Attachment)

零部件名称:	支架	型号:	PC	检测报告	有
限用物质含量 PPM					
铅	镉	汞	六价铬	PBB	PBDE
ND	ND	ND	ND	ND	ND
检测报告编号:		生效日期:		截止日期:	

零部件名称:	LDS	型号:	LDS	检测报告	
限用物质含量 PPM					
铅	镉	汞	六价铬	PBB	PBDE
ND	ND	ND	ND	ND	ND
检测报告编号:		生效日期:		截止日期:	



11.Shipping inspection criterion

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	



12.QC Process Chart

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	



13.Storage Management Method

Storage condition	
Storage period	

BLADE is ROHS certified including this material.

Project Name Blade antenna		Document: BLADE antenna Approval Sheet_A
Date :2025-2-10	Version: A	