

SPECIFICATION

Shenzhen Daxian Technology Co., Ltd.



Unimax Q6513L MAIN+DIV+WGB antenna

Product specification

Guest households	Reliance Communications LLC	frequency band	GSM 850/1900 W2/4/5 LTE B2/4/5/12/17/66 BT/WIFI/GPS
FCC ID	2ABGH-RC656L	version	V2.0
Material No.	1Q-6513L-006 2Q-6513L-006 3Q-6513L-006	color	Black
R F design	YuanQing.Zhu	structure design	RuiBin.Zhou
Quality Manager	Jin.Yang	R & D director	Lei.Zhang
Date	2024-04-09		

client confirmation:

Whether the assembly meets your requirements: OK NG

Shenzhen Daxian Technology Co., Ltd.

Shangshuijing Village, No. 513, ihua Road, BujiTown, Longgang District, Shenzhen (opposite to theNational Defense Training Base)reached the 7thfloor of the Industrial Park Complex

TEL:0755-28576002

FAX:0755-84276383

Shanghai Branch: Room 201, Building 8 No, 3000Longdong Avenue, Integrated Circuit IndustrialZone, Zhangjiang Hi-tech Park, Shanghai

TEL:021-61630552

FAX:755-84276383

Change resume

version number	Change content	Reason for change	Initiate change Party	date	Modifier
V1.0	create			2024.4.9	

Index

I、 Project description.....	4
IV、 MAIN+DIV+WGB Antenna.....	4
1、 specifications.....	4
1.1 Electrical specification standard.....	5-7
1.2 Antenna matching.....	7-9
1.3 Antenna composition.....	9
2、 The Equipment of Active Test.....	9
3、 test.....	10
3.1 The Test of standing Wave (VSWR).....	10
3.1.1 test connection.....	10
3.2 Measurement of Efficiency, Power (TRP) and Sensitivity (TIS).....	10
3.2.1 Test site.....	10
3.2.2 Test instrument.....	10
3.2.3 test data	10-24
4、 Attachment chart.....	25
VSWR parameter diagram.....	25-29
5、 Passive field pattern diagram.....	29-53
6、 Conclusion.....	53
III、 schedule drawing.....	54-56

www.Topant.com.cn

Confidential requirement

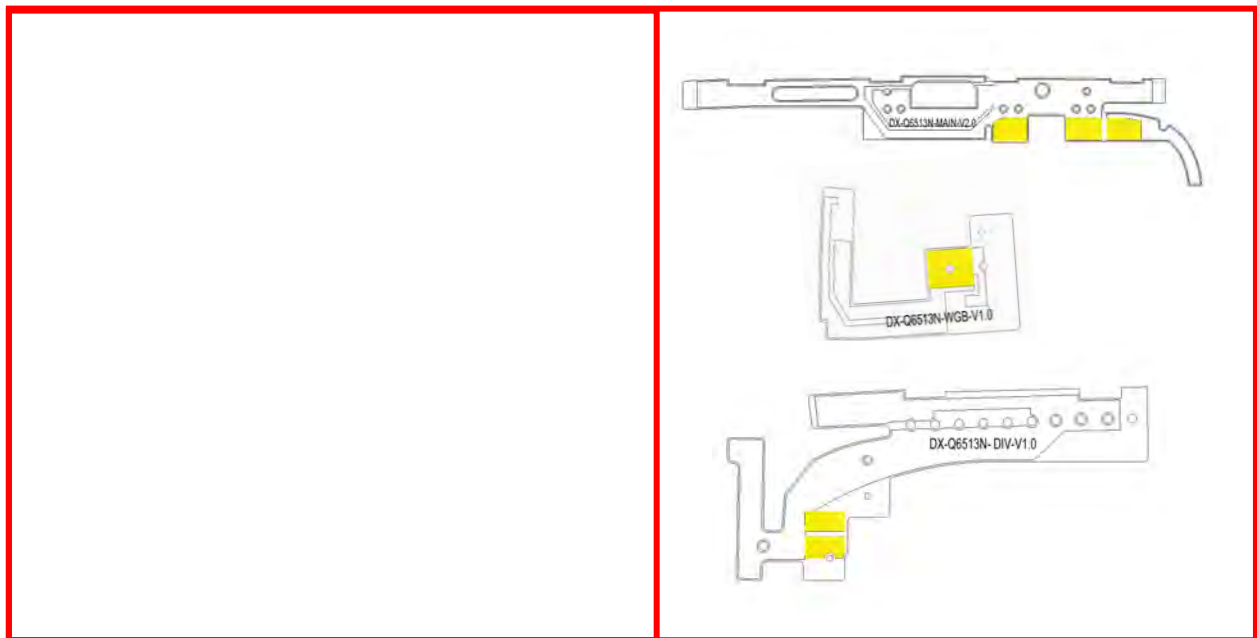
Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

I、 Project description

Customer name:	Unimax
Whole machine type:	mobile phone
Antenna band:	W2/4/5 LTE B2/4/5/12/13/14/17/25/26/41/66/71, BT/WIFI/GPS
Antenna form:	FPC
Feed form:	welding
Number of feed feet:	2 left and right ears
Hardware version:	motherboard:

IV、 Main+DIV+WGB

This report provides a variety of measurements of the electrical performance of the Q6513L antenna. Figure 1 shows the antenna designed by the display.



Whole machine appearance chart

antenna appearing diagram

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Figure 1

1.1 Electrical specification standard

The frequency range of the antenna is

1852MHz~1987MHz,1710MHz~1880MHz,826MHz~891MHz,1850MHz~1990MHz,1710MHz~2155MHz,824MHz~894MHz,699MHz~746MHz,777MHz~756MHz,788MHz~768MHz,704MHz~746MHz,1850MHz~1995MHz,814MHz~894MHz,2496MHz~2690MHz,1710MHz~2200MHz,663MHz~652MHz. The following table indicates the electrical performance specifications of the antenna. The antenna is designed and manufactured by a large display.

WCDMA-band 2				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
W-B2	1852~1907	≤4	1932~1987	≤4
WCDMA-band 4				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
W-B4	1710~1785	≤4	1805~1880	≤4
WCDMA-band 5				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
W-B5	826~846	≤4	871~891	≤4
LTE -band B2				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmit TX		The receiving end RX	
LTE -B 2	1850~1910	≤4	1930~1990	≤4
LTE -band B4				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmit TX		The receiving end RX	
LTE -B 4	1710~1755	≤4	2110~2155	≤4
LTE -band B5				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

LTE -B 5	824~849	≤4	869~894	≤4
LTE -band B12				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
LTE -B 12	699~716	≤4	729~746	≤4
LTE -band B13				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
LTE -B 13	777~787	≤4	746~756	≤4
LTE -band B14				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
LTE -B 14	788~798	≤4	758~768	≤4
LTE -band B17				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
LTE -B 17	704~716	≤4	734~746	≤4
LTE -band B25				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
LTE -B 25	1850~1915	≤4	1930~1995	≤4
LTE -band B26				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
LTE -B 26	814~849	≤4	859~894	≤4
LTE -band B41				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
LTE -B41	2496~2690	≤4	2496~2690	≤4
LTE -band B66				
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
LTE -B 66	1710~1780	≤4	2110~2200	≤4
LTE -band B71				

www.Topant.com.cn
Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

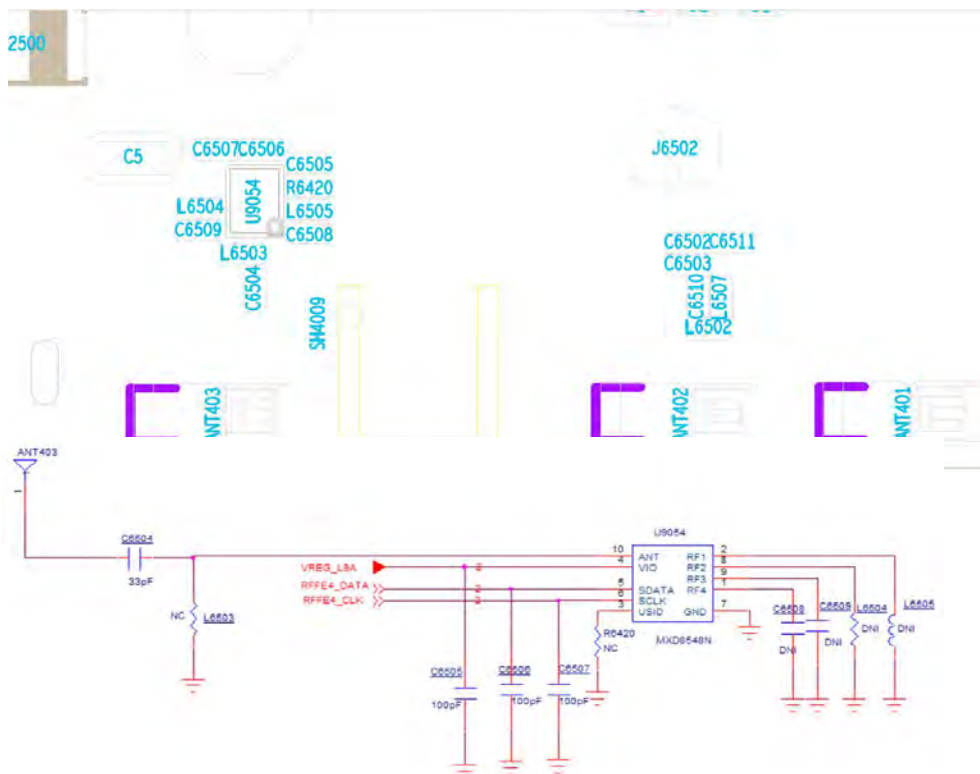
band	band (MHz)	VSWR	band (MHz)	VSWR
	The transmitter TX		The receiving end RX	
LTE -B71	663~698	≤4	617~652	≤4

Frequency Range	Frequency (MHz)	VSWR
BT	2400 ~ 2500	≤ 2
WIFI	2400 ~ 2500	≤ 2
GPS	1575MHz	≤ 2

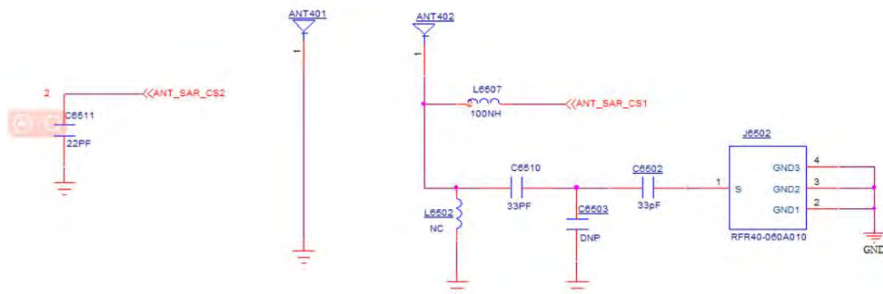
1.2 MIAN antenna matching:

Main Antenna Switching Logic	
RF1 on	LTE 71
RF2 on	LTE 12/17/28
RF3 on	LTE 13
RF4 on	GSM 2/3/5/8 WCDMA 1/2/4/5/8 LTE 1/2/3/4/5/7/18/25/26/34/38/40/41/66

Mains Matching		Switch Matching	
L6502	10NH	L6505	RF1 27NH
C6507	100NH	L6504	RF2 15NH
C6510	33PF	C6509	RF3 6.8NH
C6503	NC	C6508	RF4 0欧姆
C6502	33PF	C6504	33PF
C6511	22PF	L6503	NC



Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

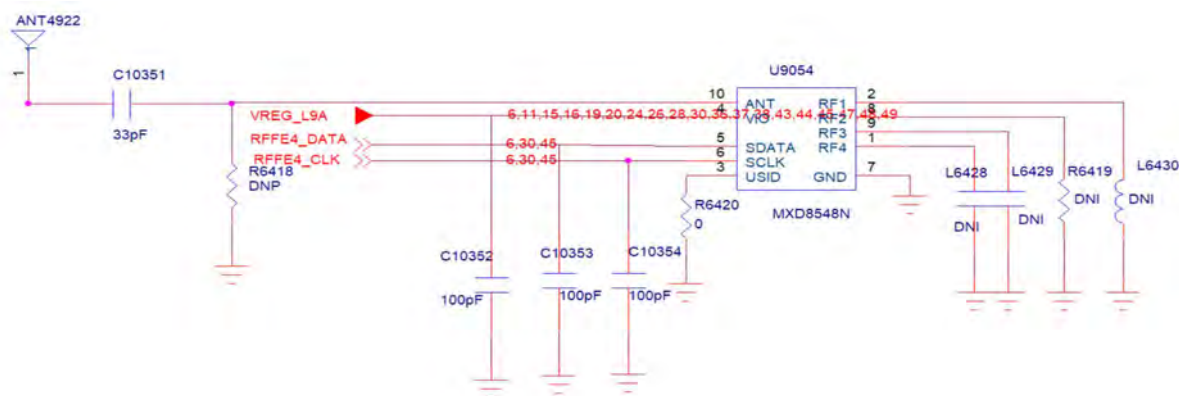
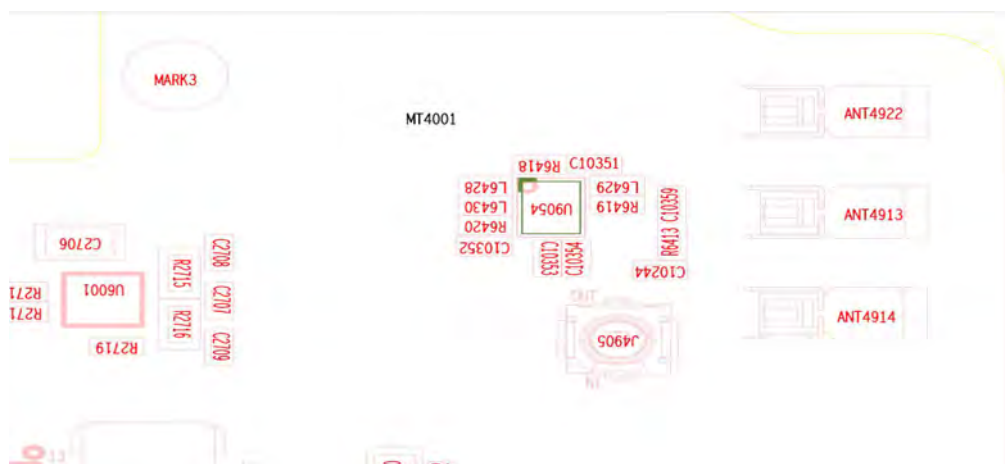


DIV antenna matching:

Antenna switching logic	
RF1 on	LTE 71
RF2 on	LTE 12/17/28
RF3 on	LTE 13
RF4 on	GSM 2/3/5/8 WCDMA 1/2/4/5/8 LTE 1/2/3/4/5/7/18/25/26/34/38/40/41/66

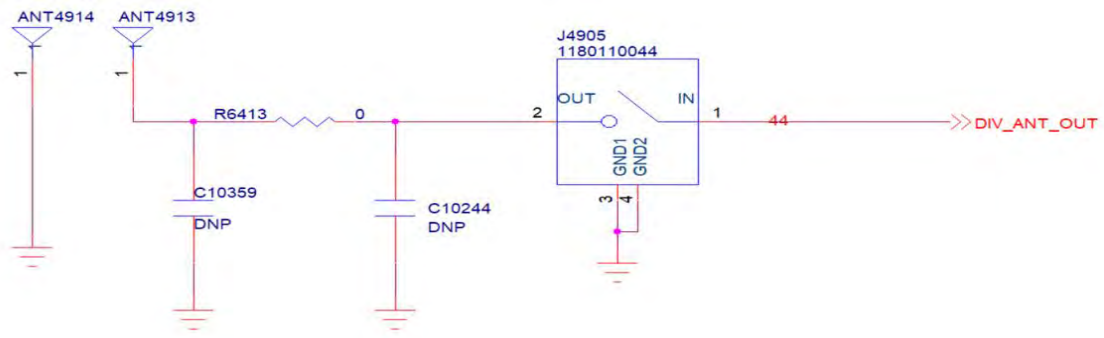
Mains Matching	
C10359	1PF
R6413	1.8NH
C10244	9.1NH

Switch Matching		
L6430	RF1	39NH
R6419	RF2	15NH
L6429	RF3	10NH
L6428	RF4	0 欧姆
C10351	33PF	
R6418	NC	



Shen str

kept io



1.3 Antenna composition

The antenna is mainly composed of FPC.

2、 The Equipment of Active Test

Satimo 3D Chamber 6×4×4(m)

Agilent 8960 E5515c

Network analyzer-R&S ZVL



www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Figure 2

3 test

3.1 The Test of standing Wave (VSWR)

3.1.1 The Test of standing Wave (VSWR): In turn, the connection of the VSWR testing device is as follows: RES ZVL Network Analyzer / testing Line / testing tool

Actual measurement (with diagram)

3.2 Measurement of Efficiency, Power (TRP) and Sensitivity (TIS)

3.2.1 Test site:

Large-scale microwave darkroom. The test frequency range is 400MHz / 6GHz, the static range is 50cm circumferential and the reflectivity is less than-50 dB..

3.2.2 Test instrument:

Rs ZVL Network Analyzer, Agilent8960 E5515C, Standard Horn Antenna, French SATIMO-SG24SYSTEM system, Printer, etc.

3.2.3 test data : In microwave anechoic chambers, the power and sensitivity values measured are shown in the following table:

OTA Active Test:

1# Main board conduction 1DB line loss						OTA test data					
FRE-Band	TRP	TIS	FRE-Band	TRP	TIS	FRE-Band	TRP	TIS	FRE-Band	TRP	TIS
2	22		25	21		2	17.97		25	18.03	
	21.61			20.58			17.96			17.82	
	21.27	-96		20.01	-96.5		17.85	-95.19		16.01	-94.25
4	20.94		26	21.25		4	17		26	17.21	
	21.9			21.38			17.62			17.76	
	21.9	-95.5		20.99	-99		17.93	-92.95		16.26	-95.71
5	21.25		41	20.29	-91	5	16.38		41	16.9	
	21.42			20.58	-92		17.06			16.95	
	21.58	-96.5		20.52	-90.5		16.54	-93.09		16.22	-88.32
12	21.54		66	20.89		12	16.77		66	17.25	
	21.42			20.8			16.76			17.79	
	21.44	-99.5		20.73	-95		17.1	-94.88		18.2	-93.13
13	21.14		71	21.09		13	17.61		71	14.75	
	21.09			21.18			17.45			14.91	
	21.18	-95.5		21.12	-96.5		17.52	-93.94		15.04	-93.23
17	21.66					17	17.15				
	21.54						16.92				
	21.53	-97.5					17.05	-95.06			

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

FRE-Band	TRP	TIS
WIFI B	12.27	
	12.36	
	12.18	-92.49
WIFA	12.14	
	12.22	
	12.28	-97.25

OTA Passive Efficiency&Gain Test:Main-B850

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
820	29.43	-6.3	-2.84	1910	48.98	-3.1	-0.05
830	31.13	-6	-2.56	1920	46.91	-3.29	0.16
840	34.04	-5.52	-2.04	1930	44.08	-3.56	-0.06
850	37.2	-5.06	-1.53	1940	42.1	-3.76	0.11
860	40.23	-4.66	-1.13	1950	41.19	-3.85	0.04
870	40.7	-4.6	-1.01	1960	39.94	-3.99	0.18
880	37.84	-4.97	-1.17	1970	38.31	-4.17	0.02
890	32.96	-5.69	-1.75	1980	43.76	-4.23	0.09
				1990	41.87	-4.45	-0.21
1700	26.13	-6.96	-1.4	2000	41.04	-4.55	-0.17
1710	28	-6.58	-1.27	2010	39.06	-4.81	-0.42
1720	28.97	-6.39	-0.95	2020	37.95	-4.96	-0.5
1730	32.36	-5.79	-0.58	2030	36.35	-5.18	-0.87
1740	33.57	-5.6	-0.35	2040	36.42	-5.17	-0.81
1750	36.16	-5.21	-0.39	2050	35.16	-5.35	-1.11
1760	38.13	-4.93	-0.08	2060	34.91	-5.39	-1.1
1770	40.7	-4.6	-0.16	2070	34.53	-5.45	-1.38
1780	37.21	-4.29	0.12	2080	35	-5.38	-1.23
1790	40.94	-3.88	0.17	2090	34.15	-5.51	-1.62
1800	43.82	-3.58	0.48	2100	35.25	-5.34	-1.34
1810	46.73	-3.3	0.23	2110	34.72	-5.42	-1.61
1820	49.15	-3.08	0.55	2120	35.29	-5.33	-1.48
1830	51.22	-2.91	0.21	2130	35.23	-5.34	-1.5
1840	52.6	-2.79	0.25	2140	36.26	-5.19	-1.41
1850	53.92	-2.68	0.14	2150	35.6	-5.29	-1.51
1860	54.42	-2.64	0.01	2160	35.27	-5.34	-1.64
1870	54.22	-2.66	0.03	2170	34.42	-5.46	-1.6

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

1880	55.18	-2.58	-0.05	2180	33.84	-5.55	-1.76
1890	52.79	-2.77	-0.26	2190	33.34	-5.63	-1.76
1900	51.23	-2.9	0.11	2200	33.33	-5.63	-1.5

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2210	33.63	-5.59	-1.36	2460	30.66	-6.08	0.01
2220	33.64	-5.58	-0.88	2470	33.73	-5.57	1.18
2230	33.87	-5.55	-0.73	2480	34.84	-5.4	0.81
2240	32.29	-5.8	-0.51	2490	38.47	-4.89	1.9
2250	31	-6.02	-0.66	2500	39.65	-4.73	1.59
2260	30.55	-6.1	-0.38	2510	42.21	-4.41	2.42
2270	29.86	-6.22	-0.54	2520	43.85	-4.22	2.19
2280	30.22	-6.16	-0.26	2530	45.64	-4.02	2.81
2290	28.88	-6.41	-0.58	2540	46.44	-3.93	2.55
2300	27.27	-6.72	-0.84	2550	47.16	-3.86	2.97
2310	26.16	-6.96	-1.09	2560	47.46	-3.82	2.7
2320	24.76	-7.27	-1.12	2570	46.87	-3.89	2.96
2330	24.7	-7.28	-1.34	2580	47.1	-3.86	2.8
2340	23.56	-7.55	-1.25	2590	45.79	-4	2.87
2350	23.48	-7.57	-1.55	2600	44.66	-4.13	2.58
2360	22.95	-7.71	-1.39	2610	43.9	-4.21	2.53
2370	23.6	-7.55	-1.39	2620	44	-4.2	2.59
2380	22.87	-7.73	-1.52	2630	42.17	-4.42	2.24
2390	23.82	-7.49	-1.28	2640	41.92	-4.45	2.39
2400	23.65	-7.53	-1.59	2650	40.31	-4.65	1.93
2410	25.05	-7.2	-0.92	2660	39.82	-4.71	2.25
2420	24.76	-7.27	-1.62	2670	37.22	-5.06	1.64
2430	26.71	-6.84	-0.29	2680	34.33	-5.48	1.64
2440	27.05	-6.77	-0.82	2690	31.71	-5.9	0.86
2450	29.71	-6.25	0.41	2700	30.31	-6.14	0.98

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

OTA Passive Efficiency&Gain Test:Main-B12/17

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
700	27.56	-6.47	-3.37	1910	33.72	-4.72	-0.54
710	29.58	-6.09	-2.91	1920	33.68	-4.73	-0.16
720	31.24	-5.81	-2.44	1930	34.22	-4.66	-0.25
730	33.44	-5.46	-2.2	1940	34.46	-4.63	0.1
740	34.03	-5.37	-2.12	1950	36.53	-4.37	0.12
750	34.49	-5.3	-1.81	1960	37.01	-4.32	0.35
760	34.52	-5.3	-1.77	1970	37.9	-4.21	0.28
770	34.1	-5.36	-1.81	1980	38.71	-4.12	0.47
780	34.12	-5.36	-2.02	1990	38.86	-4.1	0.32
				2000	38.84	-4.11	0.46
1700	27.9	-5.54	-2.36	2010	37.78	-4.23	0.25
1710	28.54	-5.45	-2.58	2020	37.08	-4.31	0.29
1720	27.58	-5.59	-2.76	2030	36.02	-4.43	0
1730	28.29	-5.48	-2.43	2040	35.66	-4.48	0
1740	27.9	-5.54	-2.51	2050	33.86	-4.7	-0.35
1750	28.65	-5.43	-2.23	2060	33.04	-4.81	-0.48
1760	27.78	-5.56	-2.42	2070	31.33	-5.04	-0.9
1770	28.1	-5.51	-2.23	2080	30.59	-5.14	-1.1
1780	28.35	-5.47	-2.35	2090	27.98	-5.53	-1.56
1790	28.83	-5.4	-2.18	2100	27.53	-5.6	-1.46
1800	28.45	-5.46	-2.31	2110	24.55	-6.1	-1.96
1810	29.58	-5.29	-1.97	2120	24.13	-6.17	-1.94
1820	29.06	-5.37	-2.21	2130	21.66	-6.64	-2.38
1830	29.29	-5.33	-2.11	2140	20.96	-6.79	-2.4
1840	29.37	-5.32	-2.15	2150	18.69	-7.28	-2.87
1850	30.37	-5.18	-1.84	2160	18.4	-7.35	-2.99
1860	29.88	-5.25	-1.69	2170	16.14	-7.92	-3.54
1870	30.95	-5.09	-1.55	2180	16.02	-7.95	-3.15
1880	31.95	-4.96	-0.93	2190	15.07	-8.22	-3.49
1890	32.27	-4.91	-1.02	2200	15.47	-8.1	-2.53
1900	32.5	-4.88	-0.52	2210	14.96	-8.25	-2.89

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2220	15.99	-7.96	-1.99	2460	39.86	-3.99	2.45
2230	15.88	-7.99	-2.35	2470	42	-3.77	3.19
2240	15.96	-7.97	-1.74	2480	42.33	-3.73	2.73
2250	15.73	-8.03	-2.03	2490	45.02	-3.47	3.52
2260	17.05	-7.68	-1.21	2500	44.36	-3.53	2.98
2270	16.9	-7.72	-1.49	2510	45.79	-3.39	3.59
2280	19.18	-7.17	-0.62	2520	46.52	-3.32	3.14
2290	19.33	-7.14	-0.7	2530	46.9	-3.29	3.64
2300	19.64	-7.07	-0.51	2540	46.92	-3.29	3.23
2310	19.94	-7	-0.45	2550	47.16	-3.26	3.64
2320	21.22	-6.73	-0.2	2560	46.88	-3.29	3.3
2330	22.6	-6.46	0.13	2570	45.9	-3.38	3.51
2340	23.4	-6.31	0.1	2580	46.21	-3.35	3.35
2350	25.25	-5.98	0.62	2590	44.67	-3.5	3.41
2360	26.69	-5.74	0.56	2600	43.16	-3.65	3.14
2370	28.57	-5.44	1.25	2610	42.57	-3.71	3.11
2380	29.31	-5.33	0.9	2620	42.89	-3.68	3.19
2390	31.76	-4.98	1.72	2630	40.94	-3.88	2.89
2400	32.01	-4.95	1.27	2640	40.79	-3.89	3.08
2410	34.75	-4.59	2.14	2650	39.19	-4.07	2.75
2420	34.91	-4.57	1.71	2660	38.58	-4.14	2.95
2430	37.14	-4.3	2.52	2670	35.69	-4.47	2.52
2440	36.92	-4.33	2.07	2680	32.31	-4.91	2.38
2450	40.09	-3.97	2.94	2690	29.35	-5.32	1.71

OTA Passive Efficiency&Gain Test:Main-B13

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
700	25.57	-6.87	-3.62	1910	35.56	-4.49	-0.32
710	28.01	-6.38	-3.05	1920	35.25	-4.53	0.03
720	30.18	-5.99	-2.49	1930	35.34	-4.52	-0.08
730	33.09	-5.51	-2.24	1940	35.32	-4.52	0.25
740	34.6	-5.29	-2.13	1950	36.94	-4.33	0.27
750	35.73	-5.12	-1.72	1960	37.19	-4.3	0.51
760	36.81	-4.97	-1.51	1970	37.67	-4.24	0.46
770	37.49	-4.88	-1.4	1980	38.31	-4.17	0.64
780	38.48	-4.75	-1.49	1990	38.09	-4.19	0.49
				2000	38.02	-4.2	0.63
1700	33.01	-4.81	-1.16	2010	36.76	-4.35	0.42
1710	34.04	-4.68	-1.4	2020	35.95	-4.44	0.35

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

1720	33.27	-4.78	-1.6	2030	34.81	-4.58	0.05
1730	34.43	-4.63	-1.72	2040	34.74	-4.59	0.01
1740	33.88	-4.7	-1.79	2050	33.06	-4.81	-0.29
1750	34.94	-4.57	-1.48	2060	32.65	-4.86	-0.38
1760	33.92	-4.7	-1.62	2070	31.39	-5.03	-0.77
1770	34.05	-4.68	-1.46	2080	31.22	-5.06	-0.71
1780	34.2	-4.66	-1.56	2090	29.13	-5.36	-1.11
1790	34.66	-4.6	-1.38	2100	29.37	-5.32	-0.89
1800	33.99	-4.69	-1.5	2110	26.95	-5.69	-1.41
1810	34.9	-4.57	-1.26	2120	26.9	-5.7	-1.25
1820	34.06	-4.68	-1.5	2130	24.86	-6.05	-1.76
1830	33.95	-4.69	-1.53	2140	24.42	-6.12	-1.73
1840	33.68	-4.73	-1.64	2150	22	-6.58	-2.2
1850	34.32	-4.64	-1.35	2160	21.49	-6.68	-2.33
1860	33.46	-4.75	-1.31	2170	19	-7.21	-2.91
1870	34.24	-4.65	-1.24	2180	18.39	-7.35	-3.08
1880	34.99	-4.56	-0.67	2190	17.16	-7.65	-3.33
1890	34.88	-4.57	-0.75	2200	17.19	-7.65	-3.41
1900	34.77	-4.59	-0.29	2210	16.39	-7.85	-3.47
Freq	Effi	Effi	Gain	Freq	Effi	Effi	Gain
(MHz)	(%)	(dB)	(dBi)	(MHz)	(%)	(dB)	(dBi)
2220	16.88	-7.73	-3.19	2470	40.36	-3.94	3.21
2230	16.54	-7.82	-3.19	2480	40.98	-3.87	2.76
2240	16.03	-7.95	-2.83	2490	44.09	-3.56	3.63
2250	15.49	-8.1	-3	2500	43.65	-3.6	3.15
2260	16.27	-7.89	-2.23	2510	45.24	-3.45	3.83
2270	16.05	-7.95	-2.39	2520	45.92	-3.38	3.46
2280	17.65	-7.53	-1.55	2530	46.16	-3.36	3.9
2290	17.79	-7.5	-1.64	2540	46.01	-3.37	3.57
2300	17.74	-7.51	-1.46	2550	45.78	-3.39	3.89
2310	17.98	-7.45	-1.39	2560	45.07	-3.46	3.57
2320	18.72	-7.28	-1.18	2570	43.43	-3.62	3.72
2330	20.04	-6.98	-0.84	2580	43.02	-3.66	3.52
2340	20.34	-6.92	-0.94	2590	40.69	-3.9	3.5
2350	21.91	-6.59	-0.45	2600	38.81	-4.11	3.2
2360	22.88	-6.41	-0.56	2610	37.56	-4.25	3.1
2370	24.62	-6.09	0.16	2620	37.24	-4.29	3.1
2380	25.06	-6.01	-0.26	2630	35.03	-4.56	2.66
2390	27.46	-5.61	0.73	2640	34.67	-4.6	2.76
2400	27.87	-5.55	0.28	2650	32.91	-4.83	2.24
2410	30.68	-5.13	1.44	2660	32.48	-4.88	2.52

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

2420	31.17	-5.06	1.06	2670	30.03	-5.22	1.78
2430	33.81	-4.71	2.13	2680	27.42	-5.62	1.82
2440	34.02	-4.68	1.66	2690	25.02	-6.02	0.79
2450	37.53	-4.26	2.78	2700	24.11	-6.18	1.18
2460	37.81	-4.22	2.31				

OTA Passive Efficiency&Gain Test:Main-B71

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
620	21.43	-7.89	-5.08	1910	28.59	-5.44	-1.06
630	21.93	-7.07	-3.72	1920	29.11	-5.36	-0.65
640	23.21	-6.86	-3.94	1930	30.24	-5.19	-0.62
650	24.51	-6.69	-3.6	1940	31.06	-5.08	-0.25
660	22.9	-6.59	-3.58	1950	33.74	-4.72	-0.14
670	21.55	-6.34	-3.23	1960	34.51	-4.62	0.21
680	22.84	-6.11	-2.49	1970	35.84	-4.46	0.19
				1980	36.61	-4.36	0.37
1700	18.97	-7.22	-4.3	1990	36.95	-4.32	0.2
1710	19.16	-7.18	-4.19	2000	36.15	-4.42	0.24
1720	18.45	-7.34	-4.25	2010	34.72	-4.59	-0.09
1730	18.94	-7.23	-4.05	2020	33.06	-4.81	-0.33
1740	18.99	-7.21	-4.06	2030	31.22	-5.06	-0.83
1750	19.45	-7.11	-3.75	2040	29.34	-5.32	-1.08
1760	18.97	-7.22	-3.87	2050	27.16	-5.66	-1.36
1770	19.38	-7.13	-3.64	2060	25.35	-5.96	-1.42
1780	19.67	-7.06	-3.69	2070	23.57	-6.28	-1.71
1790	20.1	-6.97	-3.46	2080	22.61	-6.46	-1.71
1800	20.08	-6.97	-3.49	2090	20.81	-6.82	-2.03
1810	21.19	-6.74	-3.11	2100	20.35	-6.91	-1.94
1820	20.99	-6.78	-3.27	2110	18.79	-7.26	-2.27
1830	21.47	-6.68	-3.11	2120	18.84	-7.25	-2.16
1840	21.88	-6.6	-3.12	2130	17.61	-7.54	-2.5
1850	22.97	-6.39	-2.73	2140	17.64	-7.54	-2.42
1860	22.92	-6.4	-2.58	2150	16.89	-7.72	-2.67
1870	24.26	-6.15	-2.36	2160	17.09	-7.67	-2.65
1880	25.44	-5.94	-1.75	2170	16.02	-7.95	-3.02
1890	26.22	-5.81	-1.71	2180	16.45	-7.84	-2.45
1900	26.9	-5.7	-1.19	2190	16.3	-7.88	-2.75

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2200	16.9	-7.72	-1.99	2460	41.29	-3.84	2.6
2210	17.09	-7.67	-2.32	2470	42.93	-3.67	3.33
2220	18.44	-7.34	-1.5	2480	43.08	-3.66	2.84
2230	18.82	-7.25	-1.86	2490	44.94	-3.47	3.61
2240	18.99	-7.21	-1.3	2500	43.8	-3.58	3.02
2250	19.15	-7.18	-1.63	2510	44.63	-3.5	3.64
2260	20.62	-6.86	-0.77	2520	44.69	-3.5	3.12
2270	20.71	-6.84	-1.1	2530	44.36	-3.53	3.63
2280	23.57	-6.28	-0.16	2540	43.98	-3.57	3.15
2290	23.75	-6.24	-0.37	2550	43.47	-3.62	3.58
2300	24	-6.2	-0.13	2560	42.54	-3.71	3.14
2310	24.42	-6.12	-0.16	2570	41.15	-3.86	3.38
2320	25.86	-5.87	0.12	2580	40.81	-3.89	3.1
2330	27.11	-5.67	0.31	2590	38.72	-4.12	3.14
2340	27.85	-5.55	0.31	2600	37.01	-4.32	2.79
2350	29.52	-5.3	0.69	2610	36.16	-4.42	2.79
2360	30.72	-5.13	0.62	2620	35.93	-4.45	2.74
2370	32.18	-4.92	1.2	2630	34.05	-4.68	2.41
2380	32.85	-4.83	0.91	2640	33.76	-4.72	2.49
2390	34.88	-4.57	1.65	2650	32.2	-4.92	2.05
2400	35.02	-4.56	1.39	2660	31.72	-4.99	2.3
2410	37.59	-4.25	2.17	2670	29.39	-5.32	1.63
2420	37.62	-4.25	1.87	2680	26.75	-5.73	1.63
2430	39.33	-4.05	2.61	2690	24.41	-6.12	0.69
2440	39.06	-4.08	2.24	2700	23.43	-6.3	0.97
2450	41.89	-3.78	3.08				

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

OTA Passive Efficiency & Gain Test: DIV-B850

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
820	15.38	-8.13	-4.52	1910	50.39	-2.98	0.36
830	18.01	-7.45	-3.91	1920	52.3	-2.82	0.32
840	25.13	-6	-3.05	1930	50.41	-2.97	0.34
850	33.55	-4.74	-1.76	1940	52.19	-2.82	0.26
860	38.35	-4.16	-0.75	1950	51.31	-2.9	0.28
870	39.97	-3.98	-0.47	1960	53.19	-2.74	0.22
880	38.92	-4.1	-0.49	1970	52.41	-2.81	0.27
890	35.38	-4.51	-0.97	1980	53.11	-2.75	0.19
900	30.94	-5.09	-1.35	1990	52.05	-2.84	0.13
910	26.62	-5.75	-2.11	2000	51.97	-2.84	-0.07
				2010	51.1	-2.92	0.07
1700	35	-4.56	-1.22	2020	49.68	-3.04	-0.34
1710	37.2	-4.29	-0.67	2030	50.16	-3	0.07
1720	36.94	-4.32	-0.87	2040	49.6	-3.05	-0.21
1730	40.28	-3.95	-0.31	2050	50.15	-3	0.25
1740	42.29	-3.74	-0.41	2060	48.35	-3.16	-0.04
1750	45.55	-3.42	0.03	2070	50.74	-2.95	0.57
1760	46.12	-3.36	-0.24	2080	48.8	-3.12	0.32
1770	47.18	-3.26	0.01	2090	50.2	-2.99	0.73
1780	48.39	-3.15	-0.06	2100	49.81	-3.03	0.63
1790	48.32	-3.16	0.13	2110	51.43	-2.89	1.01
1800	48.8	-3.12	-0.02	2120	49.63	-3.04	0.8
1810	48.24	-3.17	0.19	2130	51.85	-2.85	1.17
1820	48.04	-3.18	0.34	2140	51.13	-2.91	0.95
1830	46.64	-3.31	0.37	2150	52.79	-2.77	1.15
1840	48.43	-3.15	0.58	2160	50.58	-2.96	0.83
1850	47.4	-3.24	0.43	2170	51.47	-2.88	1.09
1860	49.71	-3.04	0.53	2180	49.33	-3.07	0.95
1870	48.66	-3.13	0.4	2190	50.54	-2.96	1.24
1880	52.22	-2.82	0.54	2200	50.32	-2.98	1.25
1890	49.42	-3.06	0.32	2210	52.6	-2.79	1.63
1900	52.77	-2.78	0.4	2220	53.22	-2.74	1.67
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2230	55.16	-2.58	2	2470	26.59	-5.75	-0.68
2240	53.75	-2.7	1.84	2480	28.43	-5.46	-0.57
2250	52.93	-2.76	1.87	2490	32.27	-4.91	0.47

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

2260	54.37	-2.65	1.84	2500	32.55	-4.87	0.42
2270	53.46	-2.72	1.81	2510	35.94	-4.44	1
2280	58.19	-2.35	2.05	2520	36.1	-4.43	1.06
2290	55.07	-2.59	1.87	2530	38.68	-4.13	1.27
2300	54.67	-2.62	1.75	2540	38.16	-4.18	1.31
2310	51.51	-2.88	1.51	2550	41.15	-3.86	1.35
2320	51.66	-2.87	1.45	2560	40.62	-3.91	1.49
2330	48.94	-3.1	1.18	2570	43.17	-3.65	1.58
2340	48.04	-3.18	1.16	2580	43	-3.67	1.75
2350	43.89	-3.58	0.57	2590	45.08	-3.46	1.86
2360	42.63	-3.7	0.8	2600	43.52	-3.61	1.79
2370	37.71	-4.23	-0.07	2610	45.29	-3.44	1.92
2380	35.71	-4.47	0.05	2620	44.41	-3.53	1.99
2390	30.77	-5.12	-1.04	2630	44.78	-3.49	2.02
2400	28.4	-5.47	-1.03	2640	42.82	-3.68	1.79
2410	25.01	-6.02	-2.02	2650	41.88	-3.78	1.67
2420	23.38	-6.31	-1.9	2660	40.47	-3.93	1.56
2430	21.53	-6.67	-2.18	2670	38.72	-4.12	1.4
2440	21.68	-6.64	-1.9	2680	34.01	-4.68	0.68
2450	22.82	-6.42	-1.65	2690	32.3	-4.91	0.37
2460	23.87	-6.22	-1.36	2700	30.79	-5.12	0.09

OTA Passive Efficiency&Gain Test:DIV-B12/17

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
700	25.83	-6.81	-3.32	1910	33.42	-4.76	-1.71
710	28.37	-6.31	-2.85	1920	35.84	-4.46	-1.45
720	29.19	-6.16	-2.5	1930	35.55	-4.49	-1.32
730	31.05	-5.84	-2.12	1940	38.37	-4.16	-1.07
740	30.96	-5.86	-2.08	1950	38.87	-4.1	-0.89
750	30.35	-5.96	-2.13	1960	42.28	-3.74	-0.54
760	28.91	-6.21	-2.35	1970	43.15	-3.65	-0.37
770	28.04	-6.38	-2.58	1980	46.1	-3.36	-0.12
780	26.75	-6.63	-2.73	1990	46.4	-3.33	-0.04
				2000	48.53	-3.14	0.14
1700	18.08	-7.43	-4.14	2010	48.45	-3.15	0.18
1710	18.14	-7.41	-3.87	2020	48.67	-3.13	0.17
1720	16.4	-7.85	-4.35	2030	48.65	-3.13	0.26
1730	17.9	-7.47	-3.94	2040	48.99	-3.1	0.3
1740	17.6	-7.55	-4.28	2050	48.33	-3.16	0.4
1750	18.95	-7.22	-4.02	2060	46.37	-3.34	0.25
1760	18.87	-7.24	-4.42	2070	45.7	-3.4	0.36

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

1770	20.07	-6.97	-4.06	2080	42.91	-3.67	0.02
1780	20.21	-6.95	-4.44	2090	40.46	-3.93	-0.1
1790	21.24	-6.73	-4.14	2100	37.05	-4.31	-0.62
1800	21.82	-6.61	-4.19	2110	34.11	-4.67	-0.8
1810	22.32	-6.51	-3.89	2120	29.73	-5.27	-1.61
1820	22.2	-6.54	-3.43	2130	26.64	-5.74	-1.89
1830	22.54	-6.47	-3.28	2140	22.64	-6.45	-2.69
1840	23.9	-6.22	-2.9	2150	20.54	-6.87	-2.87
1850	24.35	-6.14	-2.94	2160	16.72	-7.77	-3.85
1860	26.47	-5.77	-2.57	2170	15.64	-8.06	-3.87
1870	27.37	-5.63	-2.51	2180	13.55	-8.68	-4.74
1880	30.57	-5.15	-2.06	2190	14.43	-8.41	-4.24
1890	30.23	-5.2	-2.18	2200	13.91	-8.57	-4.43
1900	33.74	-4.72	-1.78	2210	16.53	-7.82	-3.6

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2220	17.43	-7.59	-3.07	2470	4.14	-13.83	-7.23
2230	20.12	-6.96	-2.61	2480	4.52	-13.45	-7.22
2240	19.31	-7.14	-2.46	2490	4.61	-13.36	-7.43
2250	20.12	-6.96	-2.5	2500	4.69	-13.29	-7.59
2260	18.65	-7.29	-2.66	2510	4.94	-13.06	-8.07
2270	17.8	-7.5	-2.76	2520	5.11	-12.92	-7.92
2280	16.81	-7.74	-2.89	2530	5.39	-12.68	-8.73
2290	15.05	-8.22	-3.18	2540	5.33	-12.73	-8.38
2300	12.53	-9.02	-3.86	2550	5.85	-12.33	-8.46
2310	11.24	-9.49	-4.21	2560	5.82	-12.35	-8.54
2320	9.97	-10.01	-4.81	2570	6.19	-12.08	-8.09
2330	8.84	-10.54	-5.52	2580	6.26	-12.04	-8.66
2340	7.97	-10.99	-6.13	2590	6.82	-11.66	-7.73
2350	7.15	-11.46	-6.77	2600	6.83	-11.66	-8.11
2360	6.78	-11.69	-7.42	2610	7.28	-11.38	-7.7
2370	5.74	-12.41	-6.72	2620	7.85	-11.05	-7.06
2380	5.84	-12.34	-7.39	2630	8.14	-10.89	-7.27
2390	5.01	-13.01	-6.7	2640	8.81	-10.55	-6.43
2400	5.2	-12.84	-7.39	2650	9.02	-10.45	-6.7
2410	4.53	-13.44	-6.74	2660	10.3	-9.87	-5.71
2420	4.92	-13.08	-7.19	2670	10.13	-9.95	-6.16
2430	4.16	-13.81	-6.95	2680	10.68	-9.71	-5.55
2440	4.43	-13.54	-7.34	2690	10.75	-9.69	-5.74
2450	4.1	-13.88	-7.04	2700	12.05	-9.19	-5.1
2460	4.29	-13.67	-7.21				

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

OTA Passive Efficiency&Gain Test:DIV-B13

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
700	14.66	-8.34	-5.09	1910	38.54	-4.14	-0.91
710	17.8	-7.5	-4.32	1920	40.73	-3.9	-0.75
720	19.94	-7	-3.75	1930	39.96	-3.98	-0.68
730	23.26	-6.33	-3.07	1940	42.55	-3.71	-0.51
740	25.17	-5.99	-2.66	1950	42.85	-3.68	-0.27
750	27.13	-5.67	-2.22	1960	45.89	-3.38	-0.15
760	27.65	-5.58	-2.14	1970	46.52	-3.32	0.07
770	29.15	-5.35	-1.9	1980	48.96	-3.1	0.06
780	30.16	-5.21	-1.67	1990	49.23	-3.08	0.24
				2000	50.66	-2.95	0.19
1700	26.12	-5.83	-2.23	2010	50.74	-2.95	0.28
1710	26.34	-5.79	-1.88	2020	50.57	-2.96	0.14
1720	24.1	-6.18	-2.41	2030	51.59	-2.87	0.38
1730	25.97	-5.86	-1.78	2040	52.22	-2.82	0.49
1740	25.78	-5.89	-2.07	2050	53.5	-2.72	0.73
1750	27.33	-5.63	-1.58	2060	52.75	-2.78	0.72
1760	26.99	-5.69	-1.99	2070	55.68	-2.54	1.09
1770	28.28	-5.48	-1.6	2080	54.87	-2.61	1.12
1780	28.46	-5.46	-1.94	2090	56.83	-2.45	1.39
1790	29.23	-5.34	-1.61	2100	57.1	-2.43	1.42
1800	29.61	-5.29	-1.96	2110	59.12	-2.28	1.68
1810	29.82	-5.25	-1.81	2120	57.99	-2.37	1.6
1820	29.41	-5.31	-1.89	2130	60.32	-2.2	1.84
1830	29.31	-5.33	-1.76	2140	59.37	-2.26	1.68
1840	30.72	-5.13	-1.5	2150	61.09	-2.14	2.02
1850	30.8	-5.11	-1.58	2160	58.13	-2.36	1.8
1860	32.94	-4.82	-1.37	2170	58.17	-2.35	2.05
1870	33.42	-4.76	-1.37	2180	54.73	-2.62	1.79
1880	36.76	-4.35	-1.08	2190	55.41	-2.56	2
1890	35.92	-4.45	-1.35	2200	52.54	-2.79	1.69
1900	39.43	-4.04	-0.92	2210	53.21	-2.74	1.91
Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	
51.26	-2.9	1.64	2470	12.43	-9.06	-4.77	
51.03	-2.92	1.72	2480	12.53	-9.02	-4.34	
45.99	-3.37	1.16	2490	11.59	-9.36	-4.78	
44.08	-3.56	1.07	2500	10.91	-9.62	-4.66	
42.06	-3.76	0.84	2510	10.14	-9.94	-5.34	

www.Topant.com.cn**Confidential requirement**

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

39.49	-4.04	0.62	2520	9.94	-10.03	-5.07
40.02	-3.98	0.7	2530	9.85	-10.07	-5.6
36.63	-4.36	0.37	2540	9.24	-10.34	-5.42
33.33	-4.77	-0.04	2550	9.65	-10.16	-5.65
30.12	-5.21	-0.47	2560	8.95	-10.48	-5.36
28.86	-5.4	-0.65	2570	9.28	-10.33	-5.64
26.07	-5.84	-1.19	2580	8.22	-10.85	-5.49
24.55	-6.1	-1.38	2590	8.92	-10.5	-5.54
21.93	-6.59	-2.1	2600	7.57	-11.21	-5.67
21.28	-6.72	-1.98	2610	8.33	-10.79	-5.59
18.18	-7.4	-3.1	2620	7.25	-11.4	-5.76
17.95	-7.46	-2.76	2630	8.09	-10.92	-5.57
15.21	-8.18	-4.09	2640	6.86	-11.64	-6.04
15.22	-8.18	-3.7	2650	7.62	-11.18	-5.72
13.17	-8.8	-4.52	2660	6.89	-11.62	-6.27
13.9	-8.57	-4.51	2670	7.36	-11.33	-5.94
12.71	-8.96	-5.13	2680	6.2	-12.08	-7.1
13.82	-8.59	-4.55	2690	6.63	-11.78	-6.47
13.13	-8.82	-4.93	2700	6.16	-12.1	-7.47
13.83	-8.59	-4.55				

OTA Passive Efficiency&Gain Test:DIV-B71

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
620	19.15	-7.18	-3.23	1910	16.44	-7.84	-5.11
630	22.74	-6.43	-2.75	1920	17.64	-7.54	-4.76
640	24.63	-6.08	-2.27	1930	17.33	-7.61	-4.76
650	24.52	-6.11	-2.22	1940	18.94	-7.23	-4.34
660	24.34	-6.14	-2.31	1950	18.76	-7.27	-4.37
670	25.24	-5.98	-2.14	1960	20.53	-6.88	-3.85
680	25.49	-5.94	-1.77	1970	20.16	-6.96	-3.96
690	23.12	-6.36	-2.02	1980	21.33	-6.71	-3.62
				1990	19.98	-6.99	-3.95
1700	8.43	-10.74	-7.74	2000	20.28	-6.93	-3.75
1710	8.56	-10.68	-7.48	2010	18.28	-7.38	-4.23
1720	7.69	-11.14	-7.91	2020	17.12	-7.67	-4.38
1730	8.65	-10.63	-7.35	2030	14.71	-8.32	-5.1
1740	8.36	-10.78	-7.77	2040	13.64	-8.65	-5.25
1750	9.27	-10.33	-7.28	2050	11.11	-9.54	-6.14
1760	9.15	-10.39	-7.61	2060	9.55	-10.2	-6.62

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

1770	10.02	-9.99	-7.22	2070	7.64	-11.17	-7.6
1780	9.93	-10.03	-7.57	2080	6.46	-11.9	-8.31
1790	10.76	-9.68	-7.27	2090	4.96	-13.05	-9.56
1800	10.87	-9.64	-7.03	2100	4.16	-13.81	-9.66
1810	11.29	-9.47	-6.71	2110	3.34	-14.76	-10.51
1820	11.04	-9.57	-6.4	2120	2.76	-15.59	-10.1
1830	11.47	-9.4	-6.21	2130	2.44	-16.13	-10.93
1840	11.98	-9.21	-5.95	2140	2.17	-16.63	-10.2
1850	12.33	-9.09	-5.99	2150	2.22	-16.54	-11.19
1860	13.32	-8.76	-5.64	2160	1.97	-17.05	-10.58
1870	13.89	-8.57	-5.6	2170	2.21	-16.55	-11.54
1880	15.38	-8.13	-5.16	2180	2.1	-16.77	-10.94
1890	15.14	-8.2	-5.39	2190	2.44	-16.12	-11.7
1900	16.84	-7.74	-4.95	2200	2.44	-16.13	-11.29

OTA Passive Efficiency&Gain Test:WGB

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
1540	42.4	-3.73	1.59	2400	41.23	-3.85	1.86
1550	45.15	-3.45	1.91	2410	43.75	-3.59	1.76
1560	45.45	-3.42	1.88	2420	42.82	-3.68	2.13
1570	47.9	-3.2	2.13	2430	42.19	-3.75	1.65
1580	47.21	-3.26	2.07	2440	40.76	-3.9	1.99
1590	45.99	-3.37	1.94	2450	39.51	-4.03	1.44
				2460	36.99	-4.32	1.59
				2470	35.32	-4.52	0.81
				2480	33.54	-4.74	0.97
				2490	31.01	-5.08	0.06
				2500	29.56	-5.29	0.19
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	37.96	-4.21	1.26	5390	46.2	-3.35	2.54
5160	36.22	-4.41	0.69	5400	48.69	-3.13	2.94
5170	36.66	-4.36	1.13	5410	47.68	-3.22	2.67
5180	35.9	-4.45	0.72	5420	47.71	-3.21	2.92
5190	36.88	-4.33	1.19	5430	46.98	-3.28	2.57
5200	36.82	-4.34	0.94	5440	46.75	-3.3	2.98
5210	36.97	-4.32	1.16	5450	47.68	-3.22	2.7
5220	38.03	-4.2	1.19	5460	47.95	-3.19	3.14
5230	37.87	-4.22	1.27	5470	48.01	-3.19	2.75

www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

5240	39.53	-4.03	1.54	5480	47.89	-3.2	3.18
5250	38.47	-4.15	1.32	5490	47.29	-3.25	2.72
5260	40.27	-3.95	1.69	5500	46.74	-3.3	3.06
5270	38.87	-4.1	1.48	5510	47.1	-3.27	2.68
5280	40.9	-3.88	1.83	5520	46.67	-3.31	3.02
5290	39.42	-4.04	1.64	5530	46.75	-3.3	2.72
5300	42.6	-3.71	2.07	5540	46.27	-3.35	2.92
5310	40.93	-3.88	1.91	5550	46.37	-3.34	2.79
5320	43.44	-3.62	2.22	5560	45.4	-3.43	2.8
5330	41.77	-3.79	2.06	5570	45.68	-3.4	2.96
5340	43.97	-3.57	2.28	5580	44.93	-3.47	2.82
5350	42.93	-3.67	2.2	5590	44.29	-3.54	3
5360	45.29	-3.44	2.45	5600	42.87	-3.68	2.59
5370	45.29	-3.44	2.46	5610	41.84	-3.78	2.91
5380	45.94	-3.38	2.59	5620	41.63	-3.81	2.38

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5630	40.72	-3.9	2.89	5750	31.17	-5.06	1.33
5640	40.58	-3.92	2.12	5760	31.09	-5.07	1.04
5650	39.55	-4.03	2.78	5770	29.2	-5.35	0.85
5660	40.05	-3.97	1.97	5780	28.67	-5.43	0.79
5670	37.7	-4.24	2.5	5790	27.79	-5.56	0.51
5680	38.35	-4.16	1.62	5800	27.24	-5.65	0.69
5690	36.21	-4.41	2.25	5810	27.14	-5.66	0.19
5700	36.58	-4.37	1.38	5820	26.07	-5.84	0.61
5710	34.38	-4.64	2.03	5830	27.2	-5.65	0.1
5720	35.76	-4.47	1.4	5840	25.15	-5.99	0.62
5730	32.37	-4.9	1.64	5850	26.23	-5.81	-0.03
5740	33.15	-4.8	1.15				

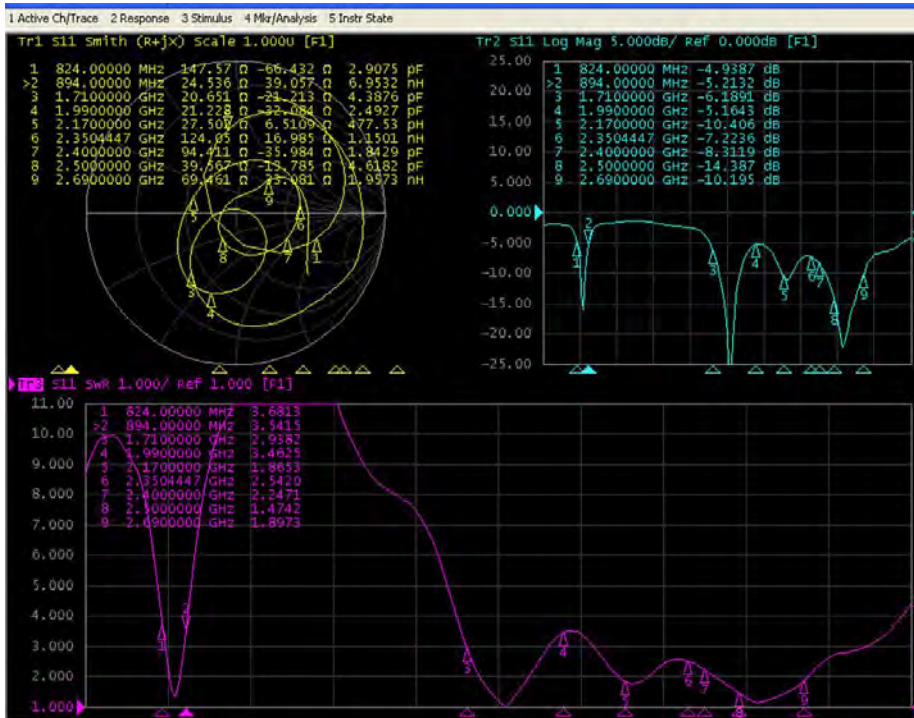
www.Topant.com.cn

Confidential requirement

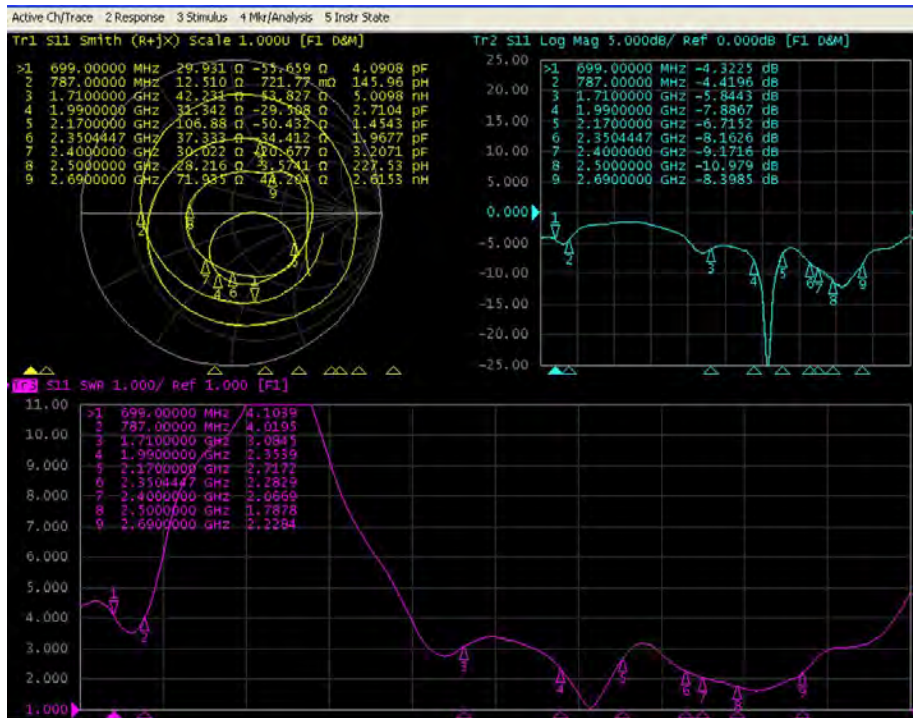
Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

4、 Attachment chart

VSWR parameter diagram:Main-B850



VSWR parameter diagram:Main-B12/17



www.Topant.com.cn

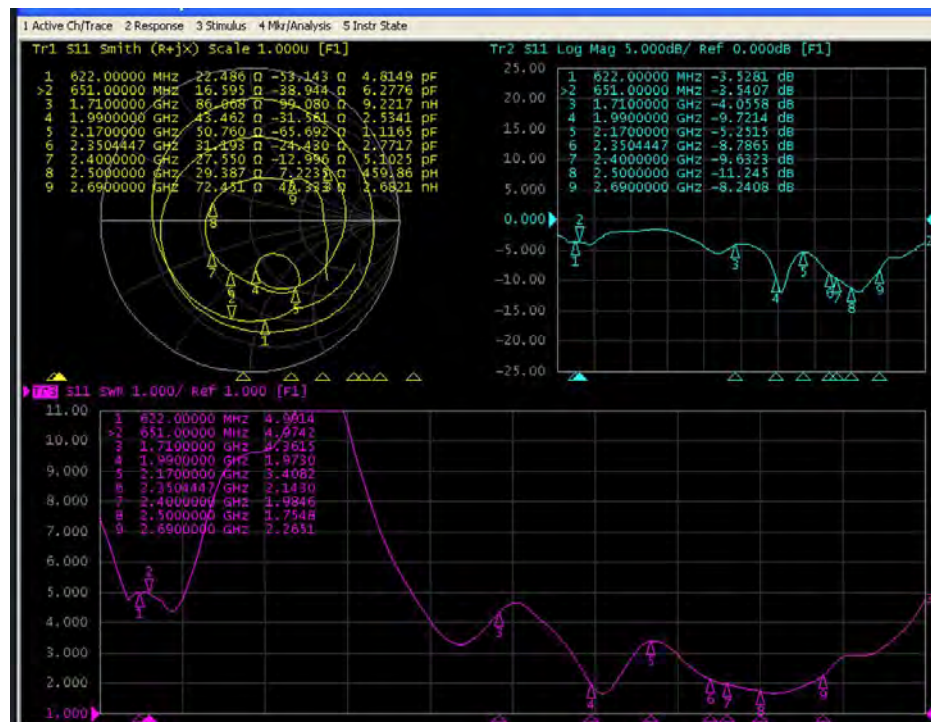
Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

VSWR parameter diagram:Main-B13



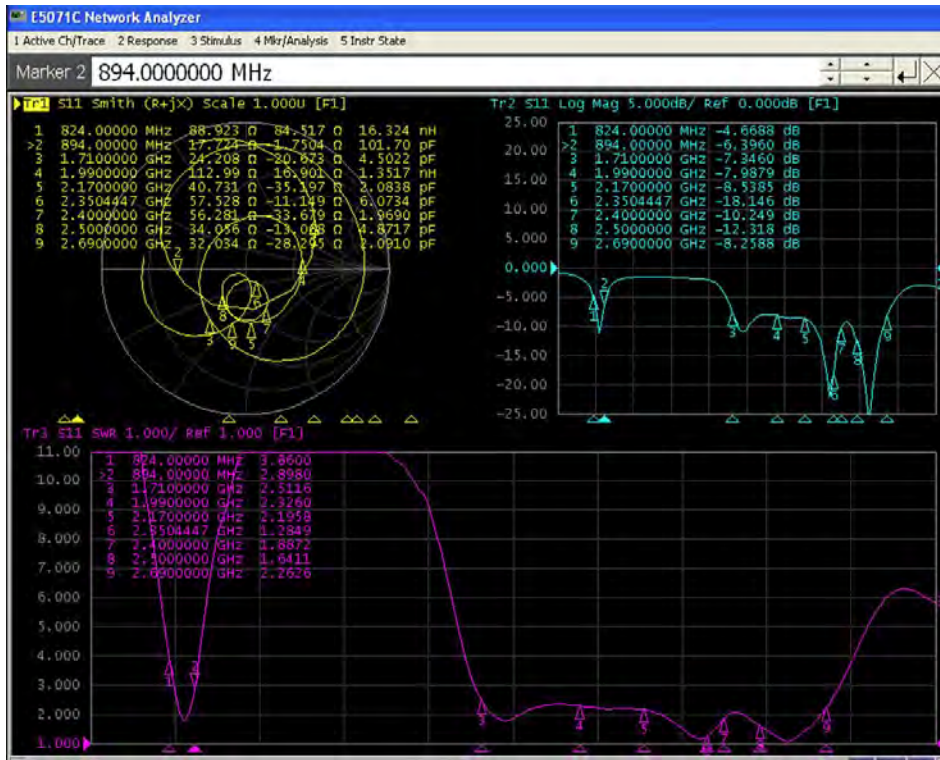
VSWR parameter diagram:Main-B71



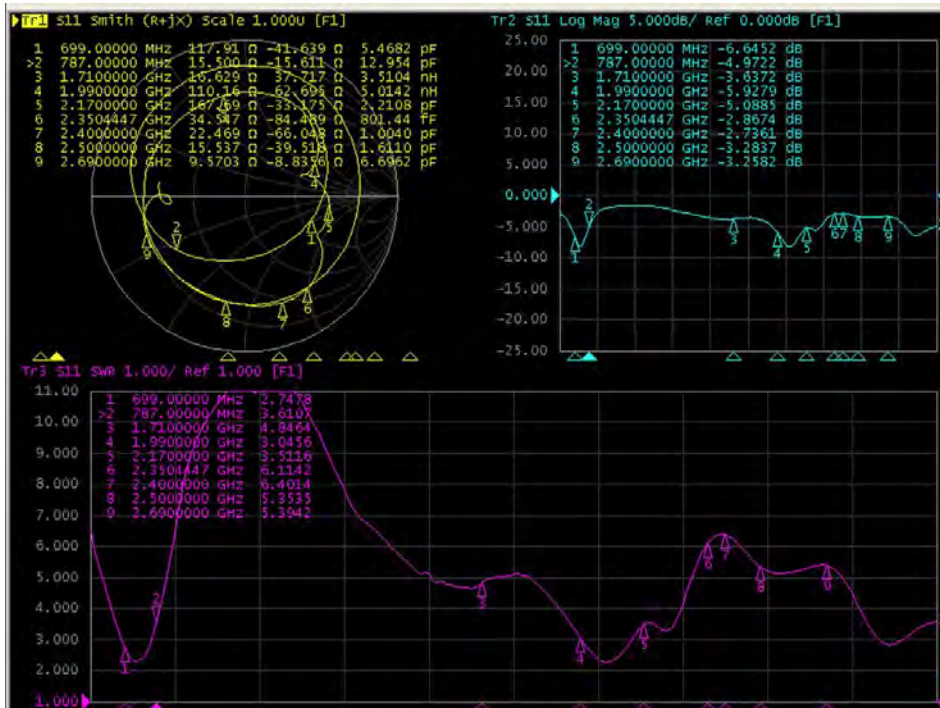
www.Topant.com.cn
Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

VSWR parameter diagram:DIV-B850



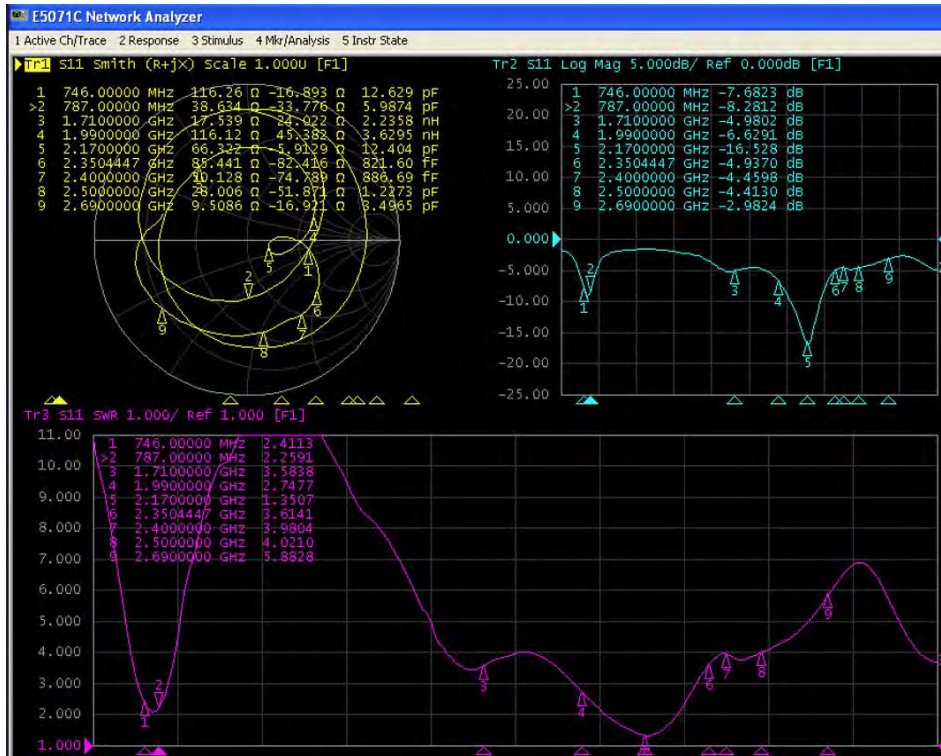
VSWR parameter diagram:DIV-B12/17



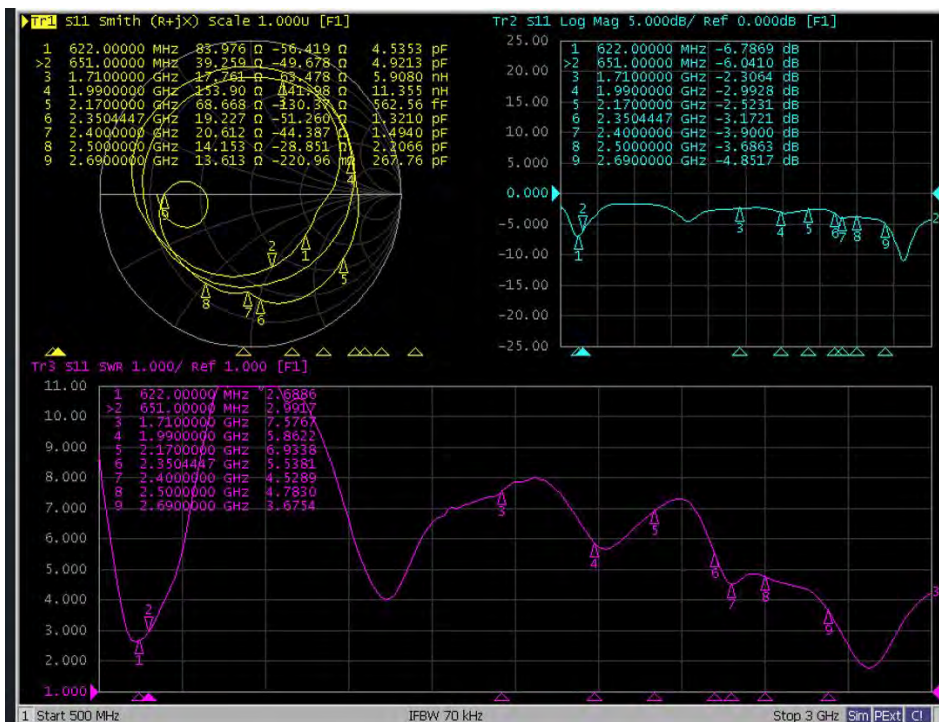
www.Topant.com.cn
Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

VSWR parameter diagram:DIV-B13



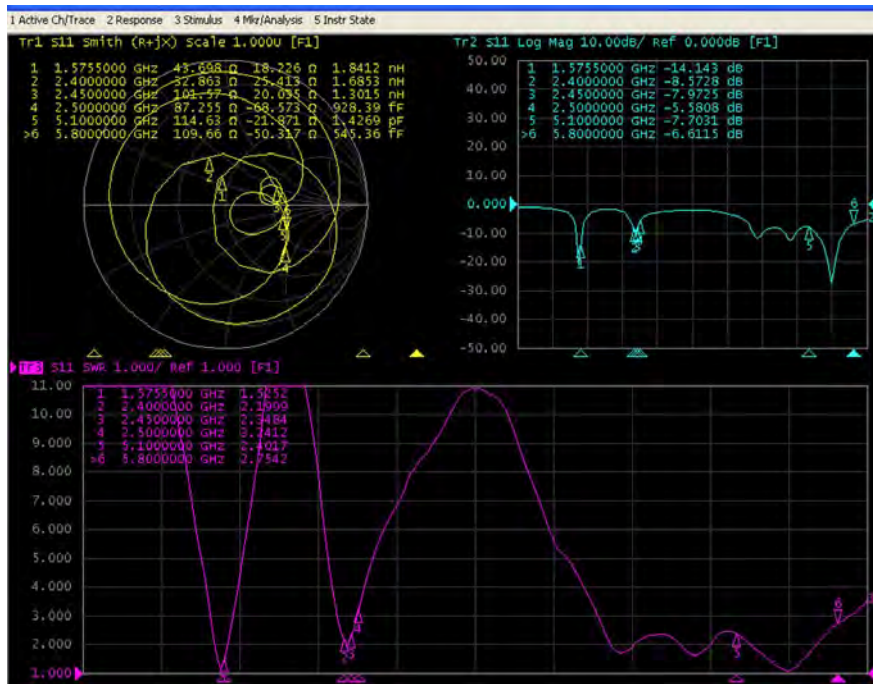
VSWR parameter diagram:DIV-B71



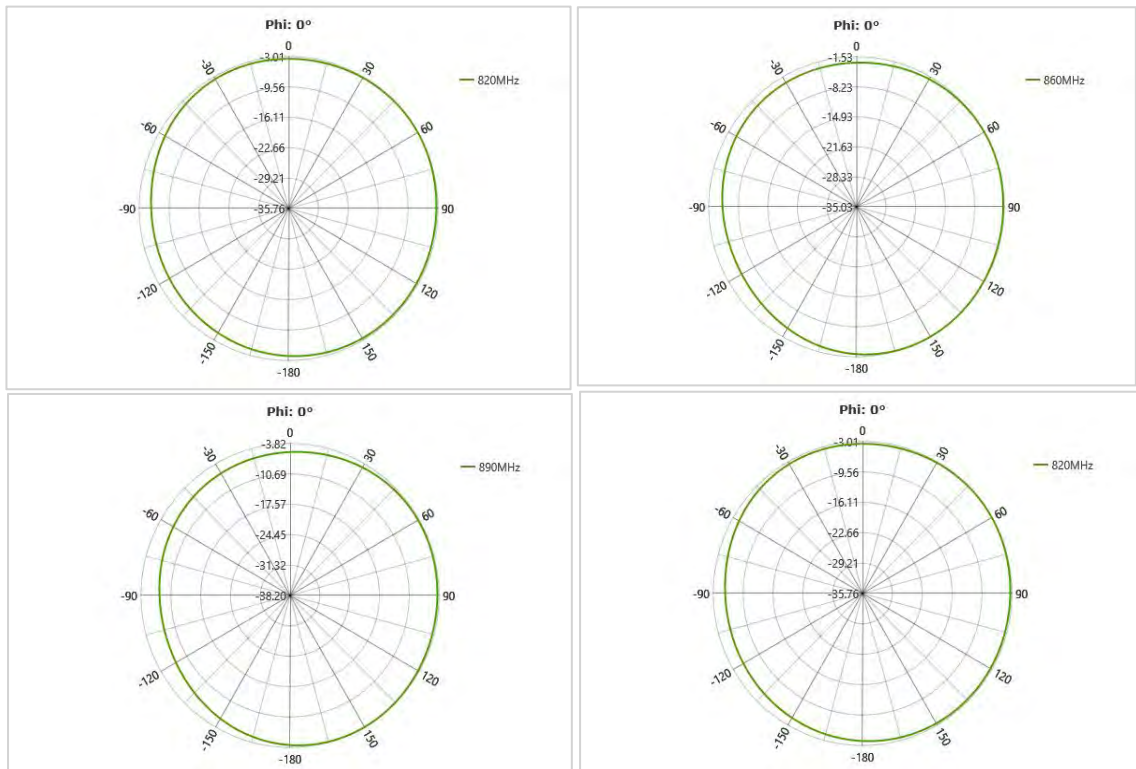
www.Topant.com.cn
Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

VSWR parameter diagram:WGB



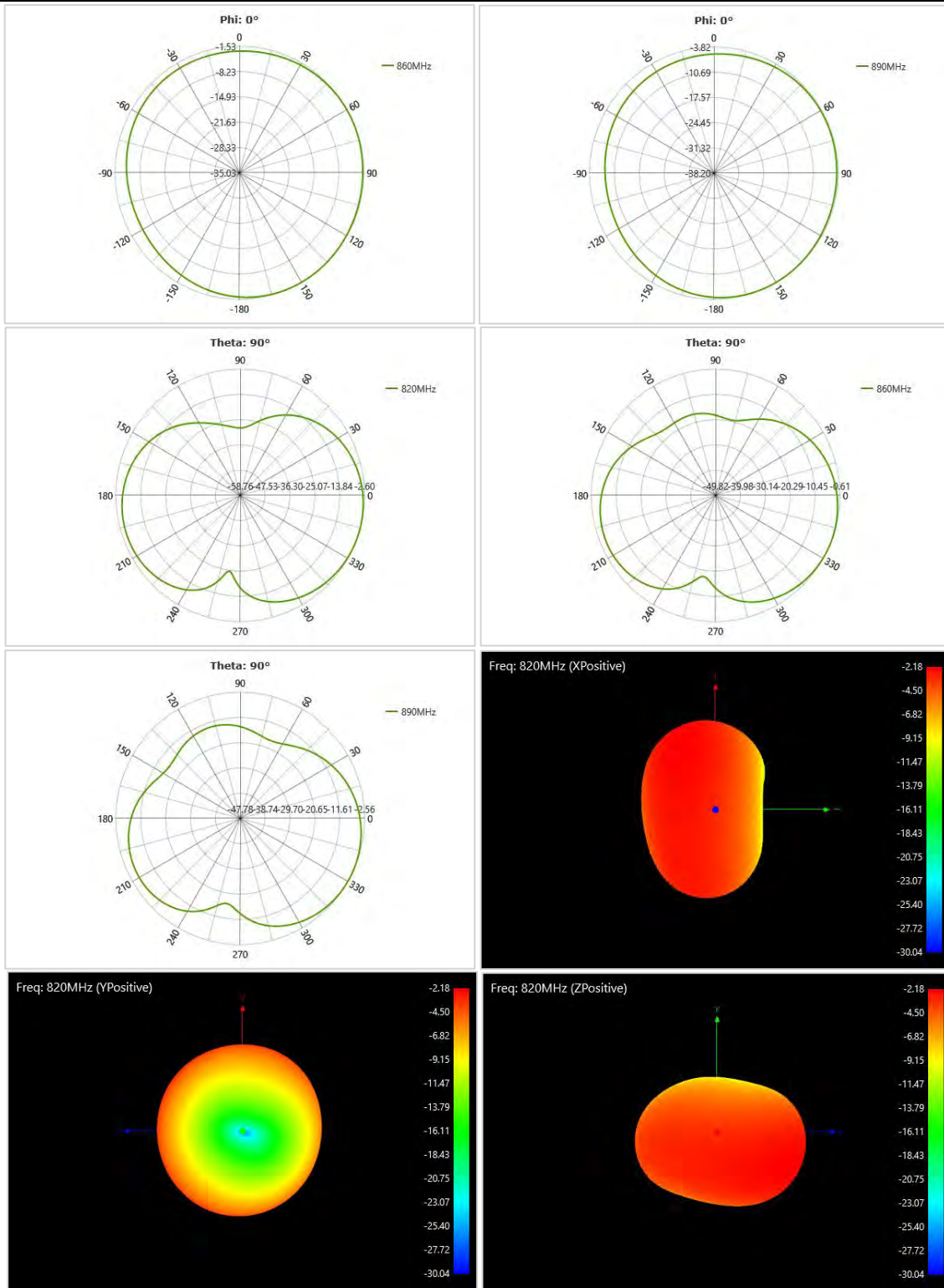
5、Passive field pattern diagram: Main-B5



www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

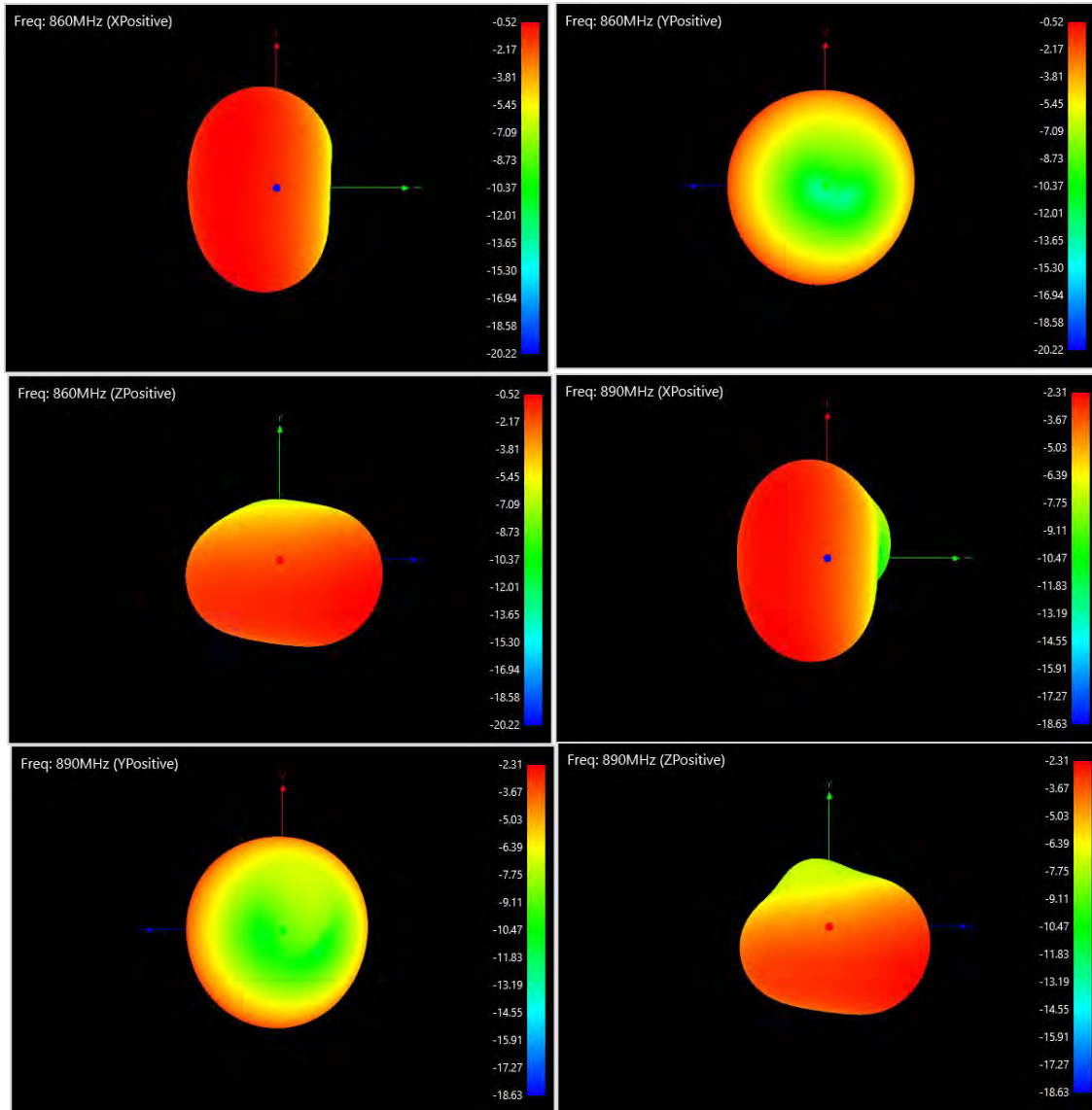


www.Topant.com.cn

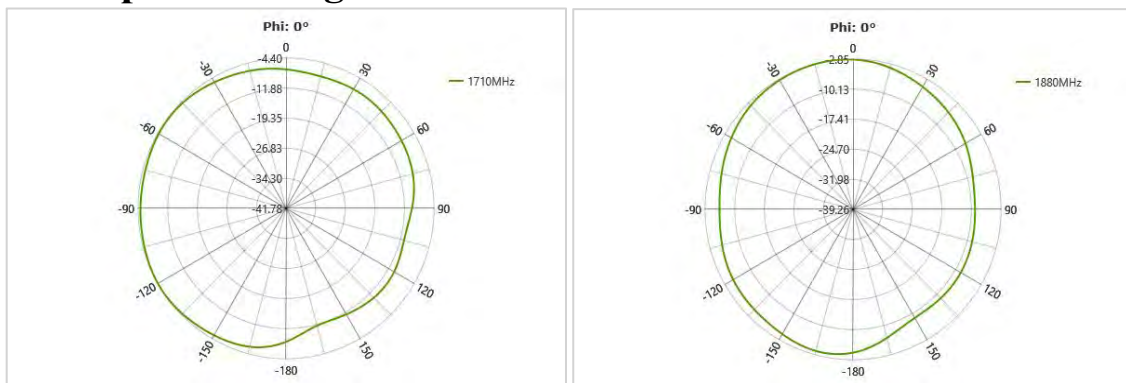
Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information



Passive field pattern diagram: Main-B4/B66

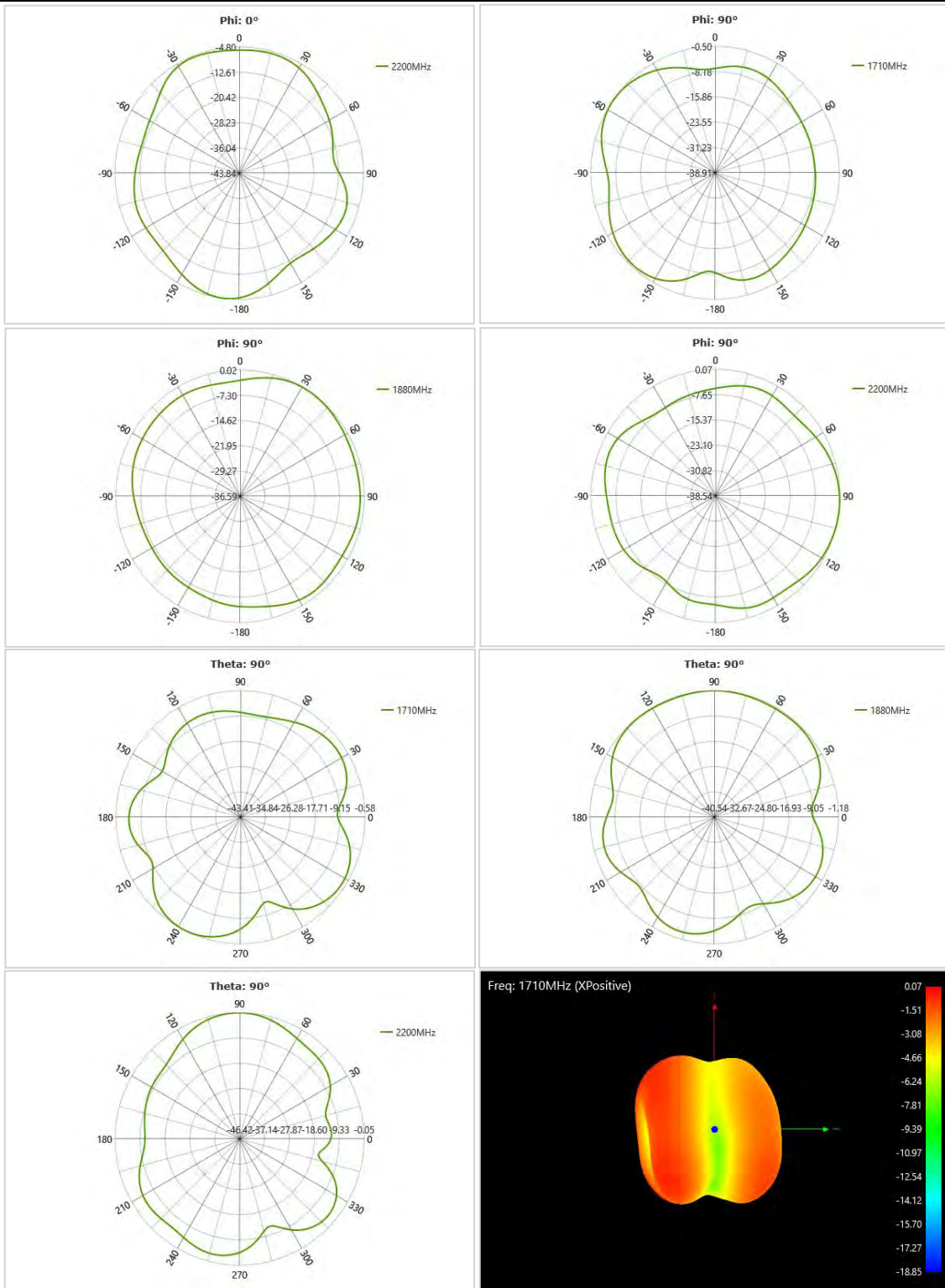


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

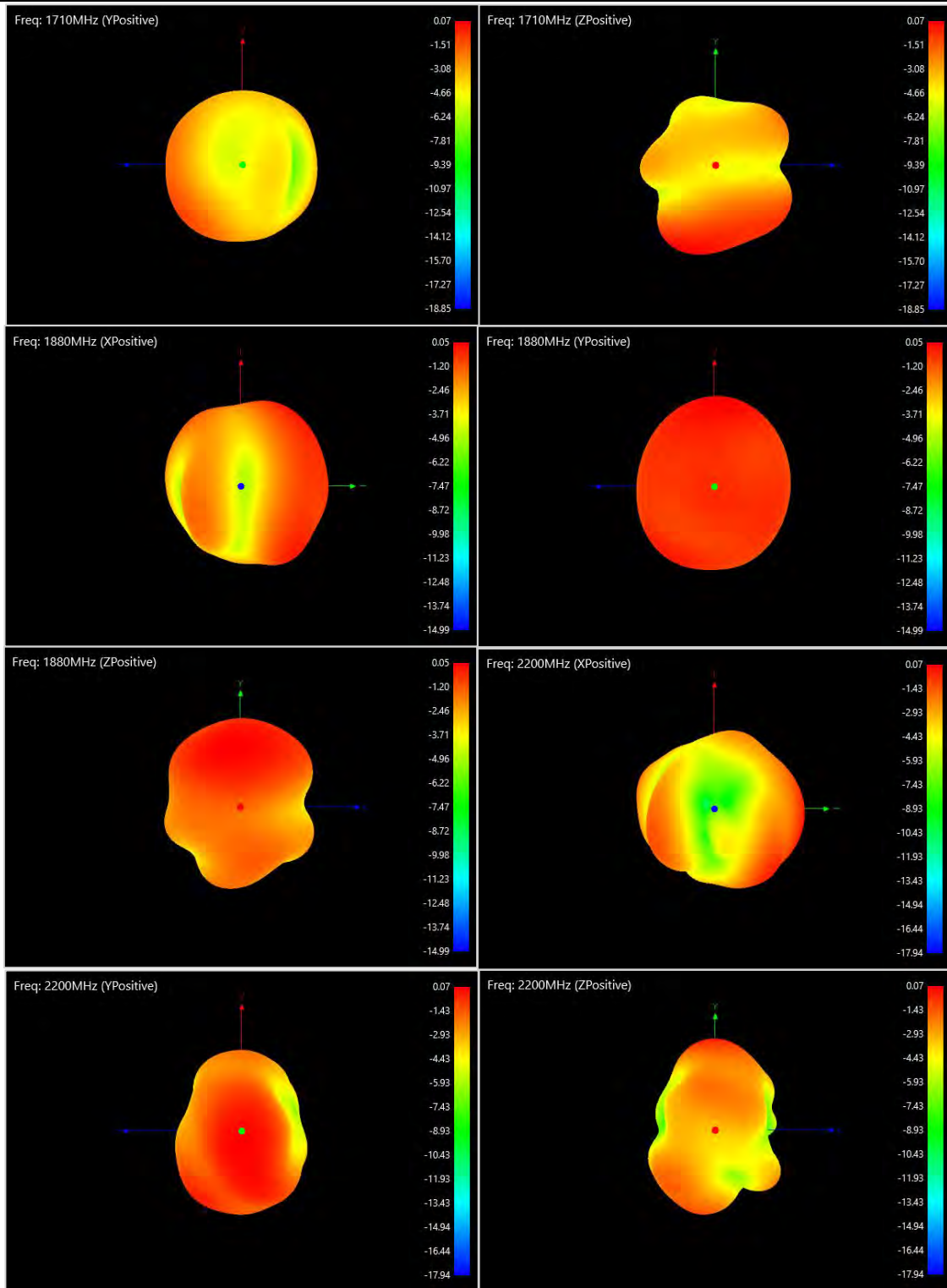


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

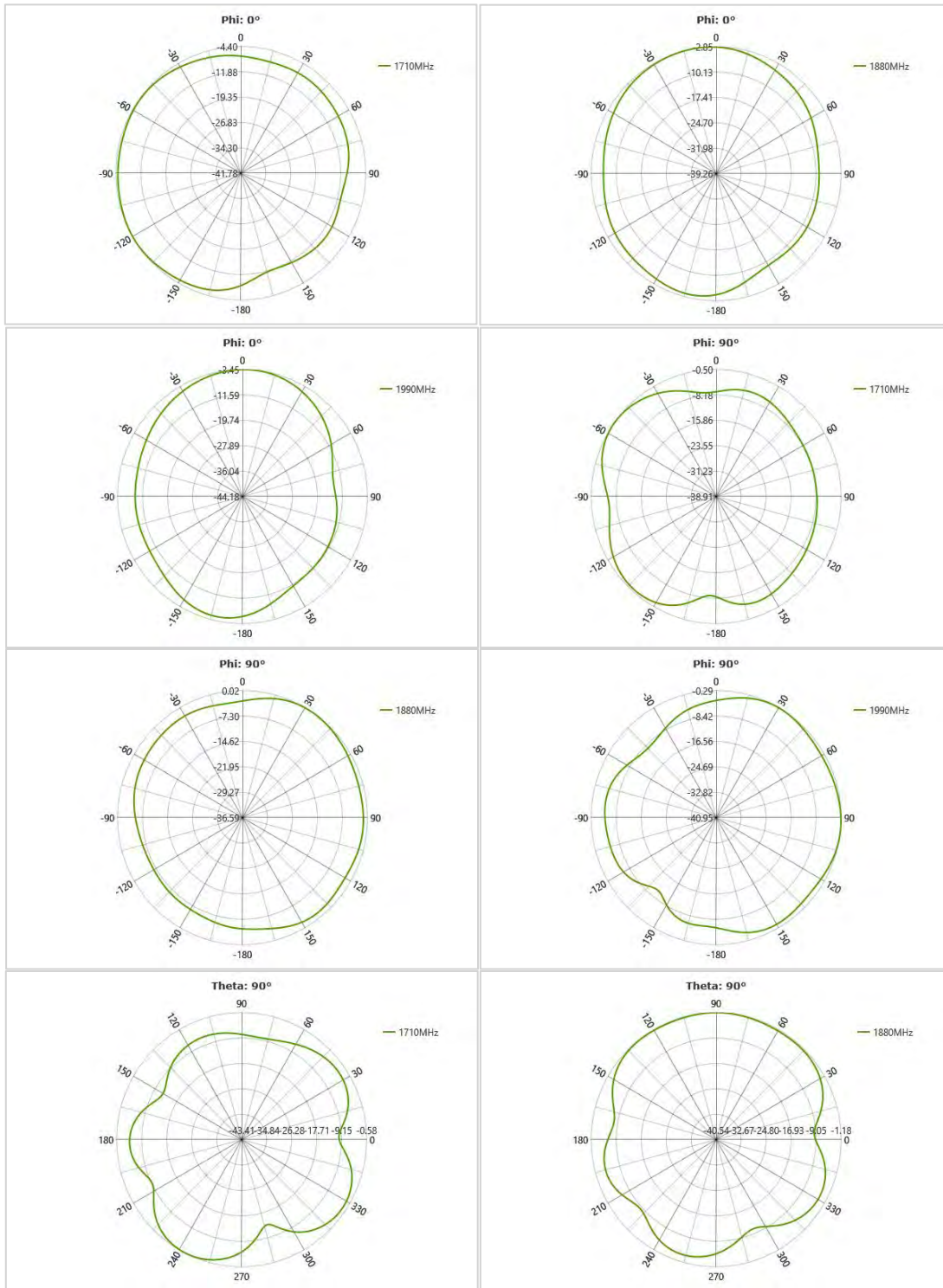


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Passive field pattern diagram: Main-B2

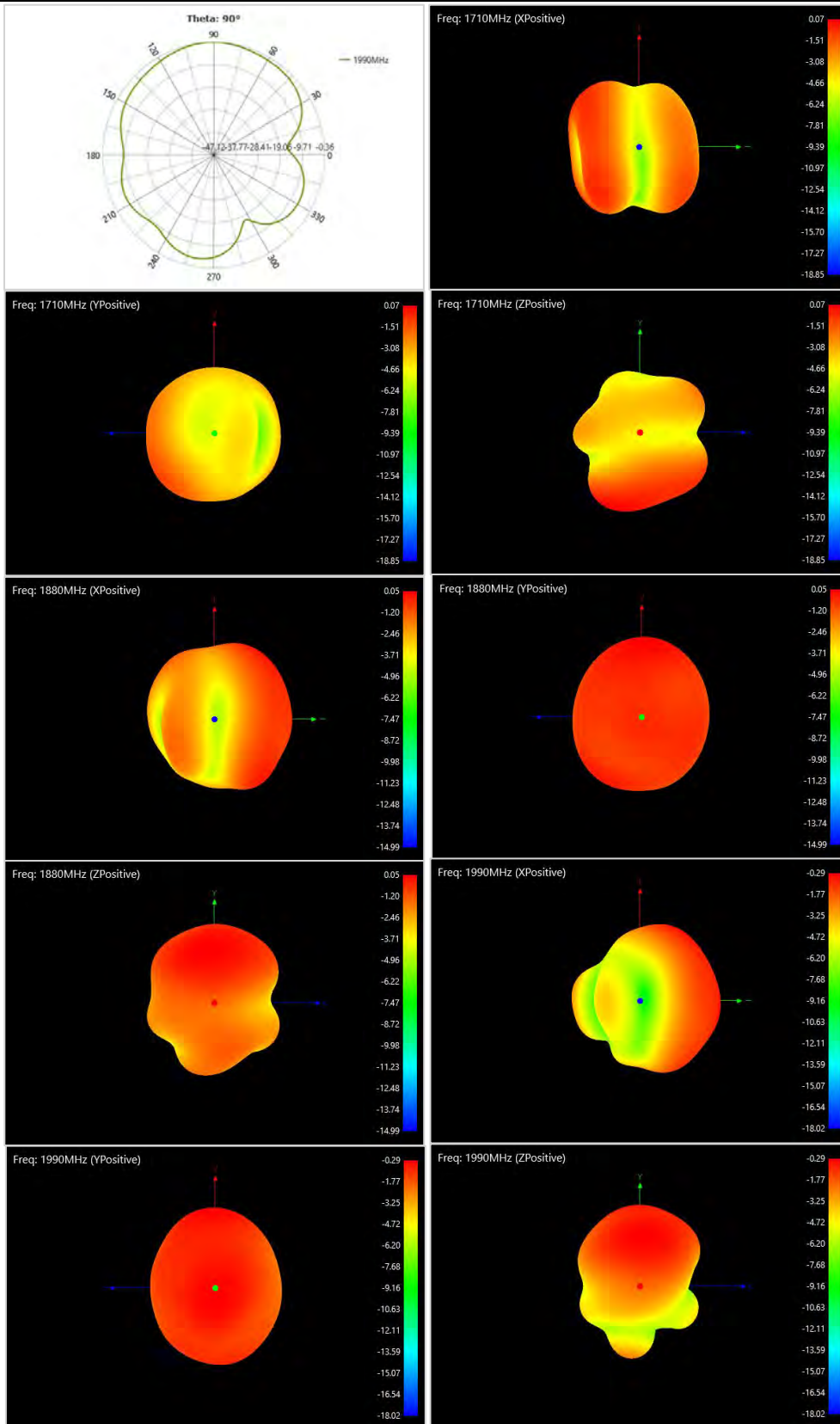


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

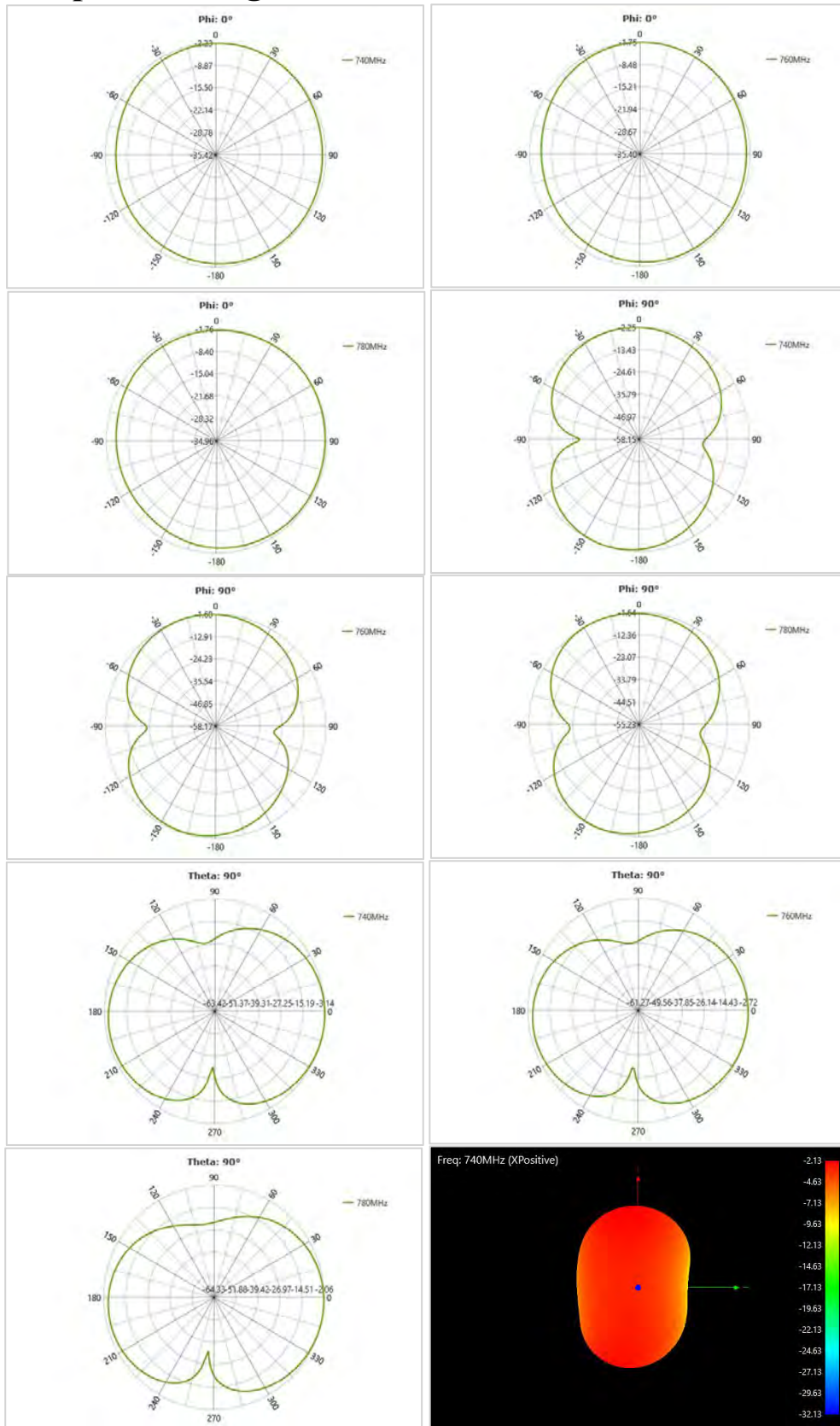


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Passive field pattern diagram: Main-B13

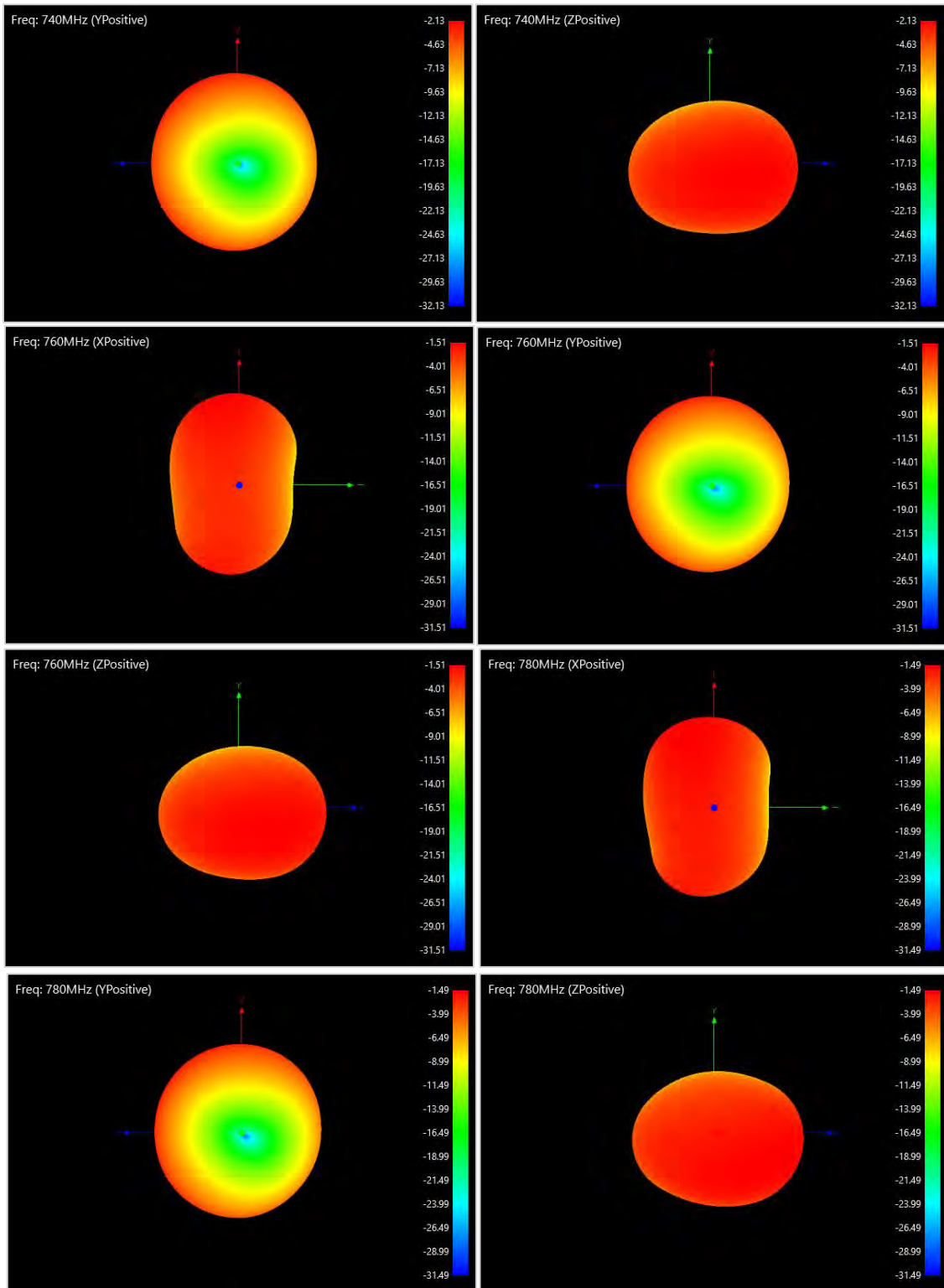


www.topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

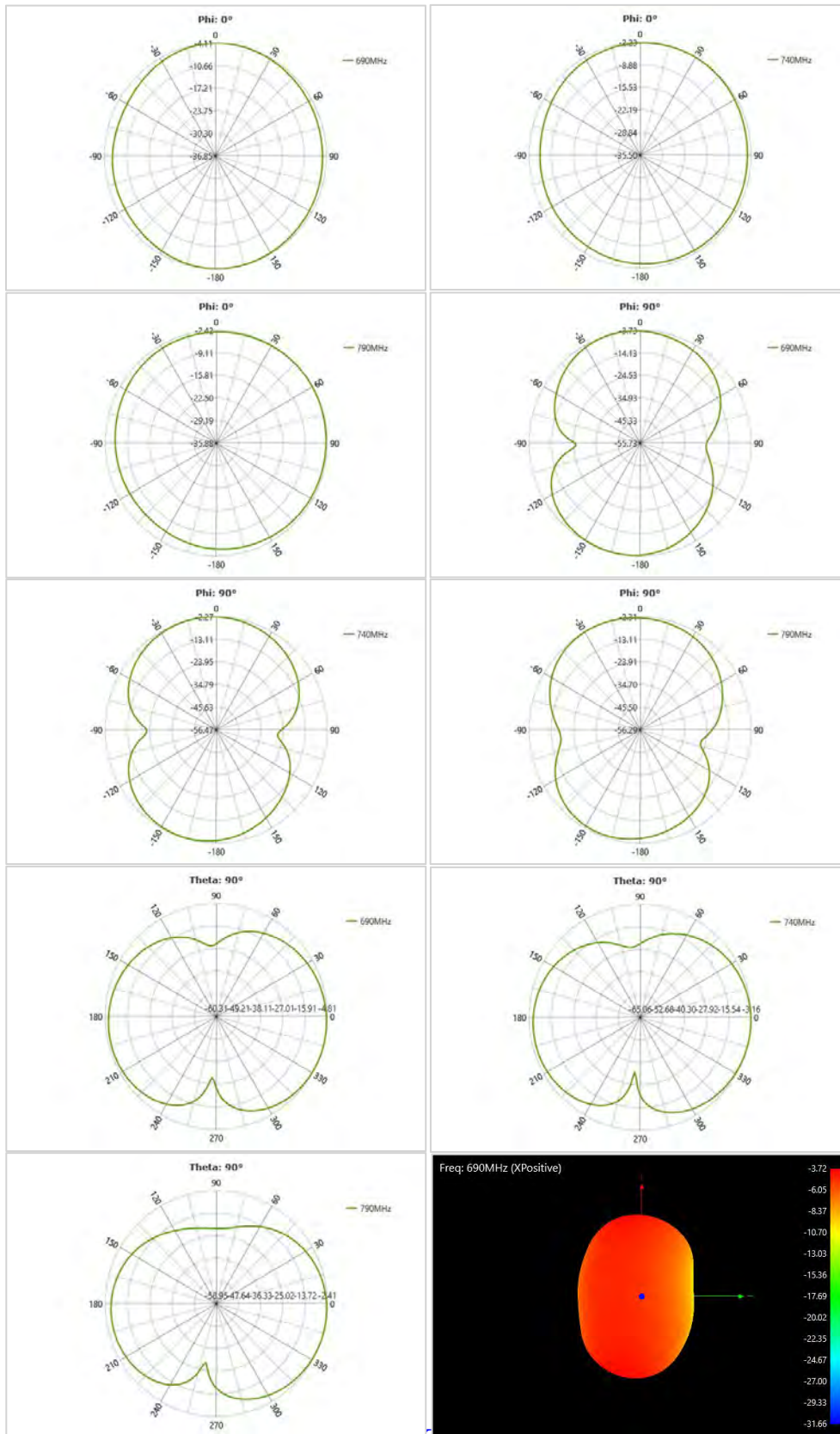


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Passive field pattern diagram: Main-B12/B17

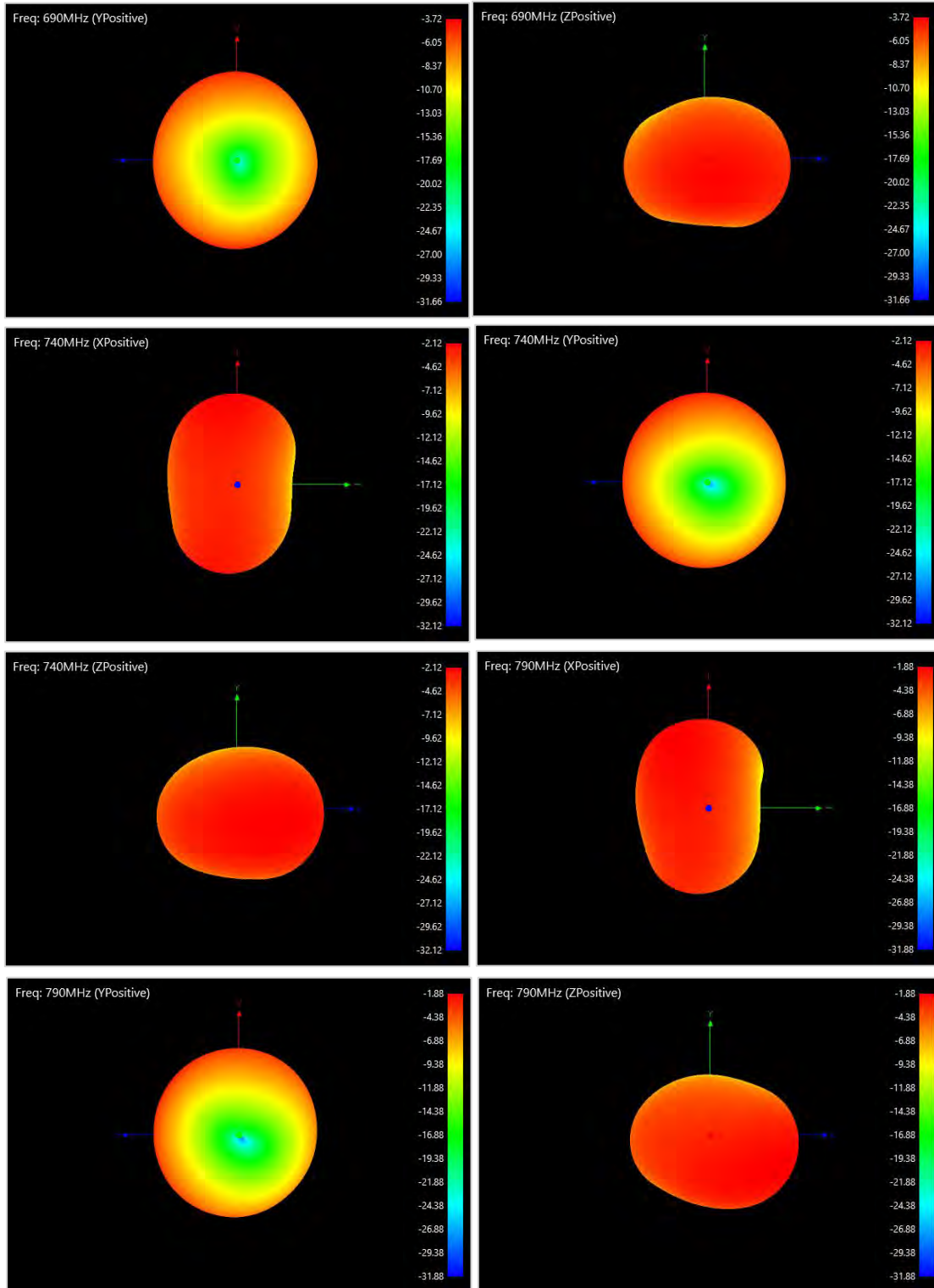


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

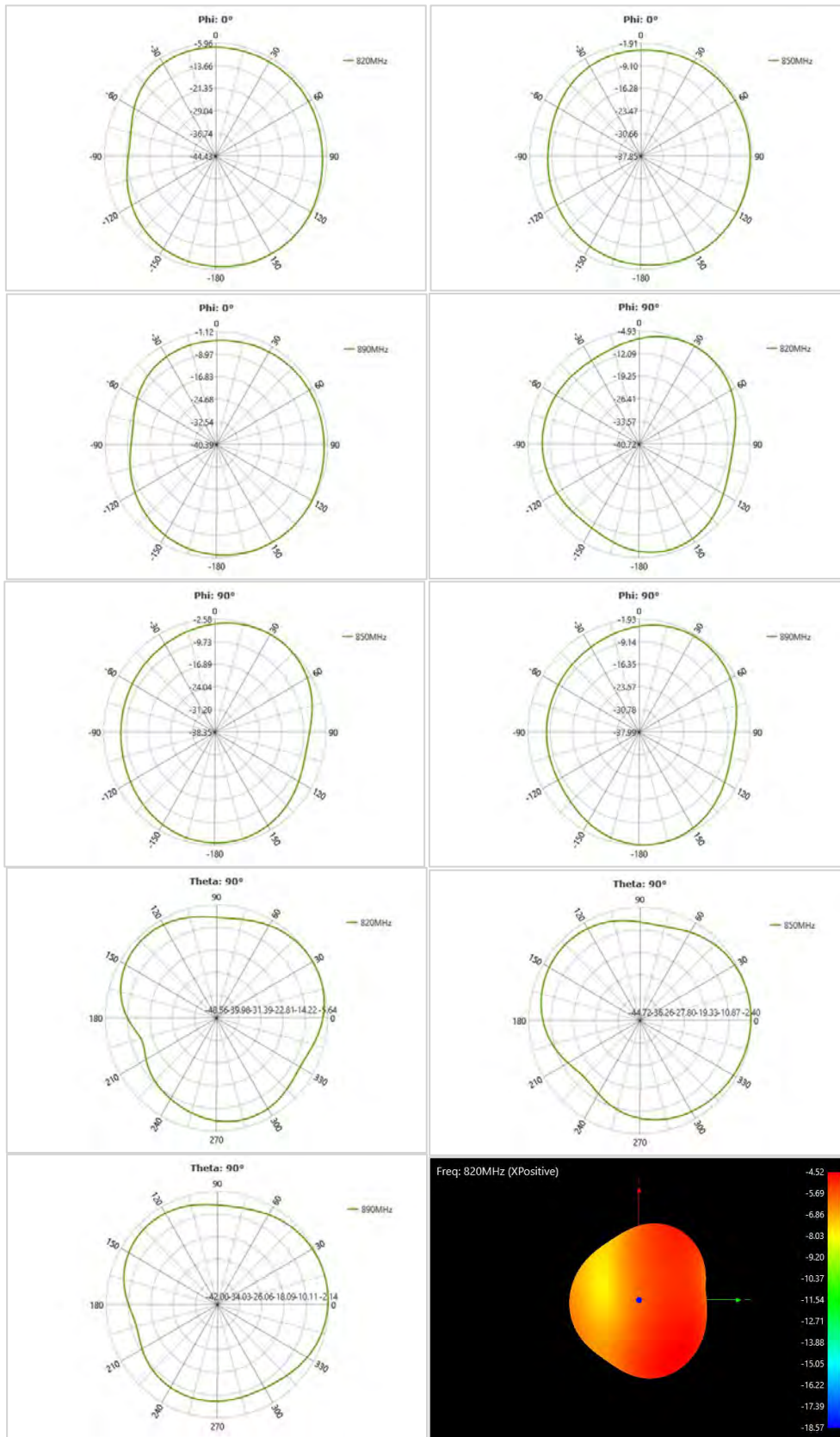


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Passive field pattern diagram: DIV-B5

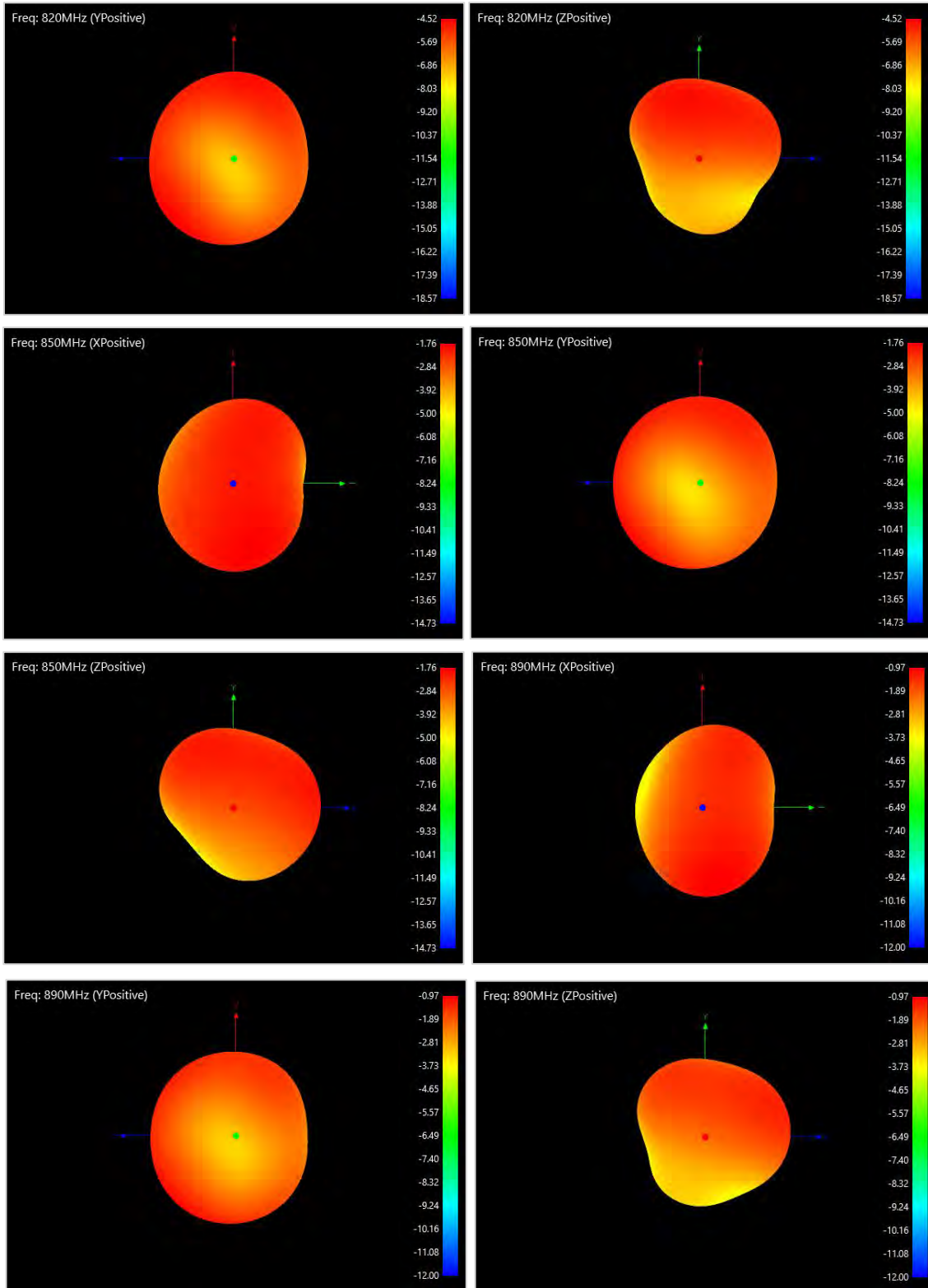


www.Topart.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

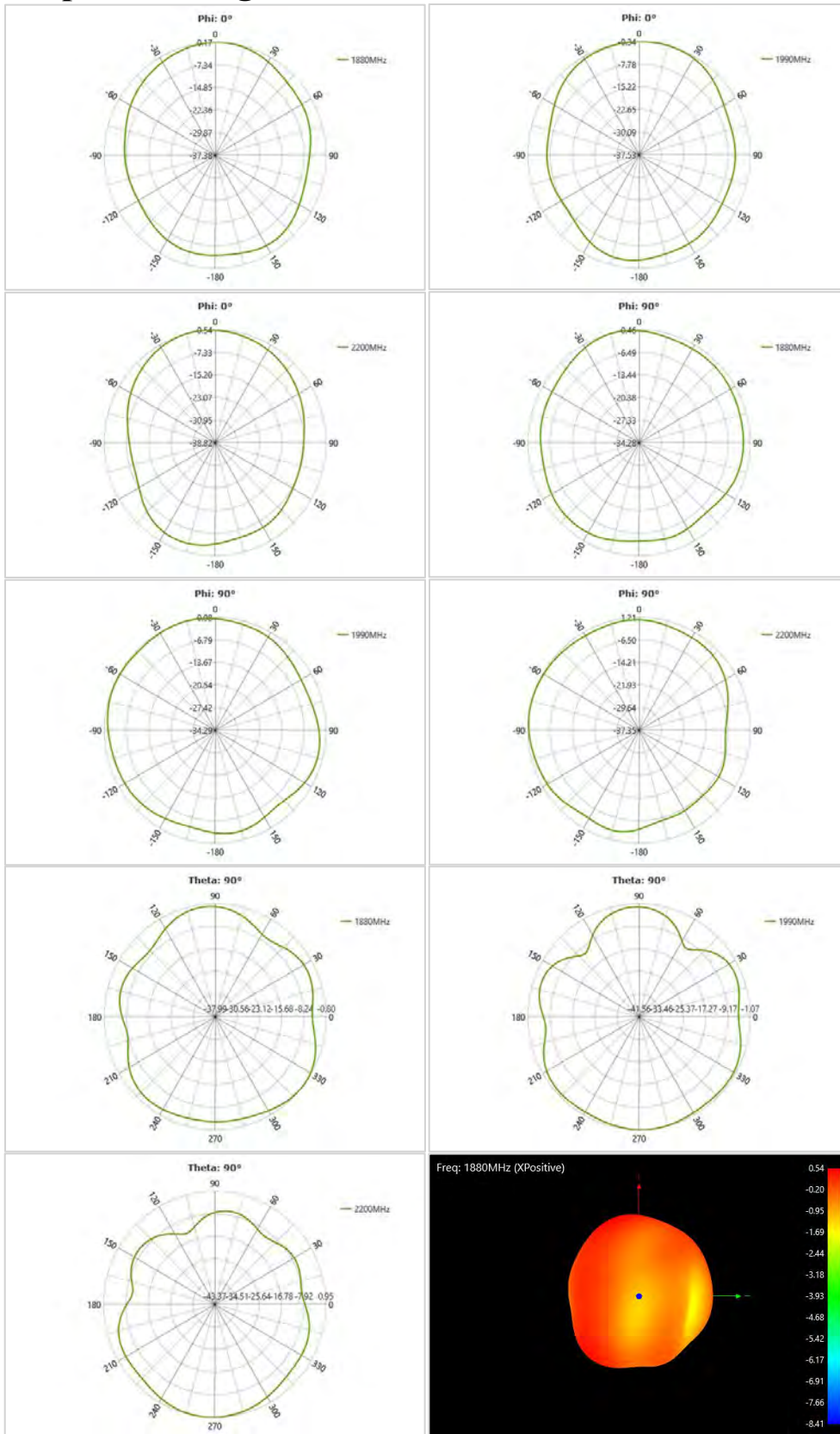


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Passive field pattern diagram: DIV-B4/B66

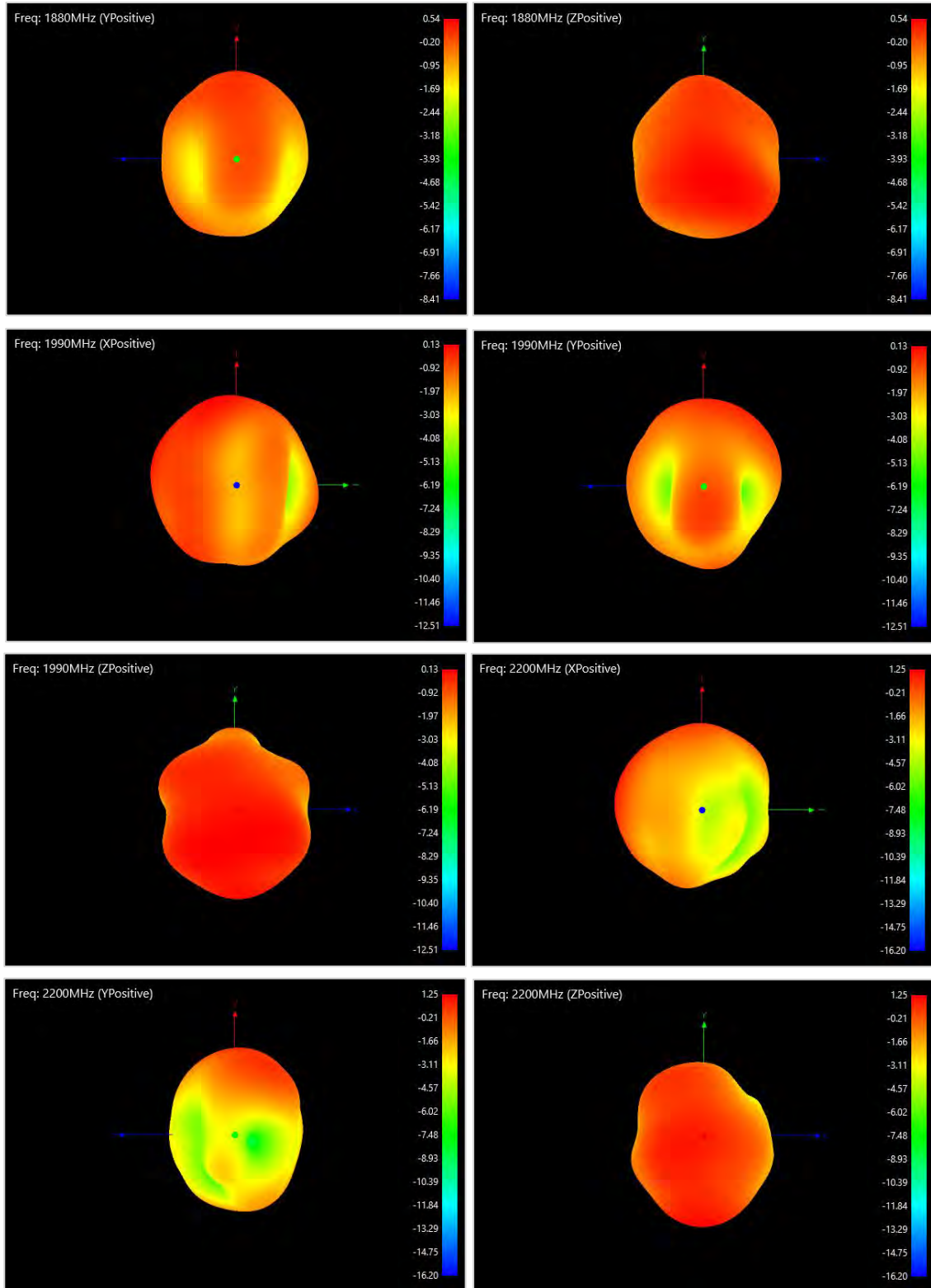


www.1opant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

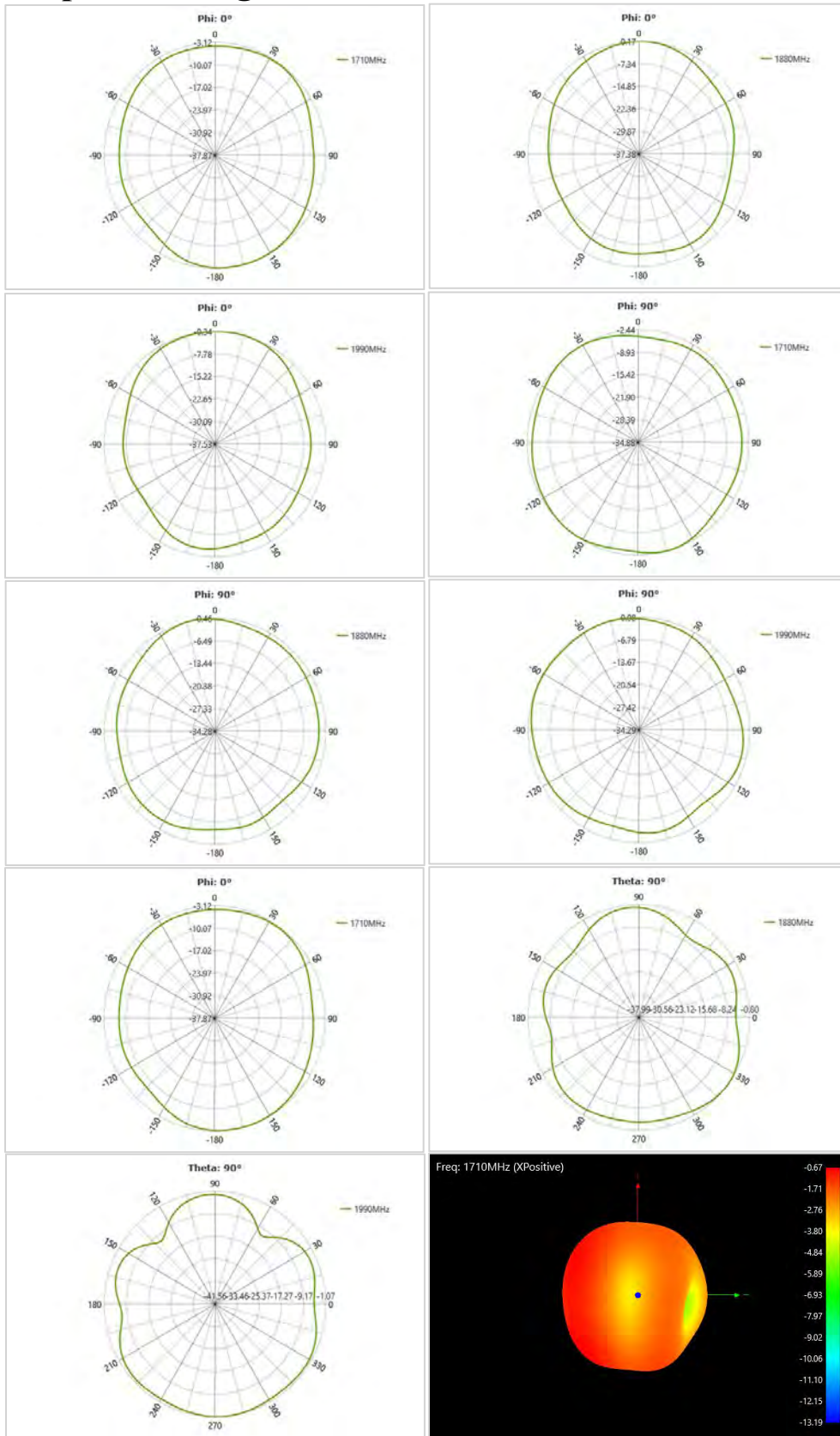


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Passive field pattern diagram: DIV-B2

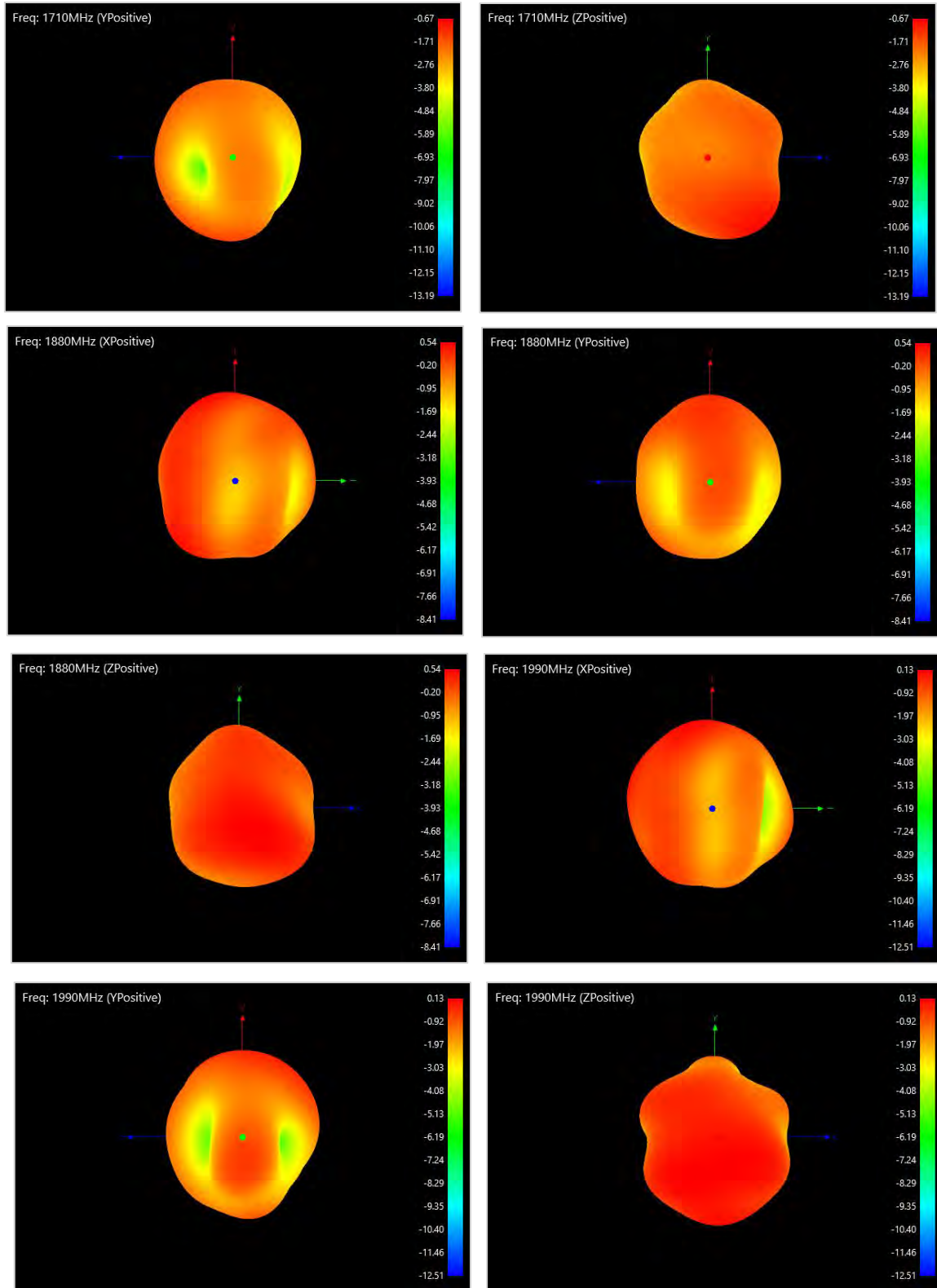


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

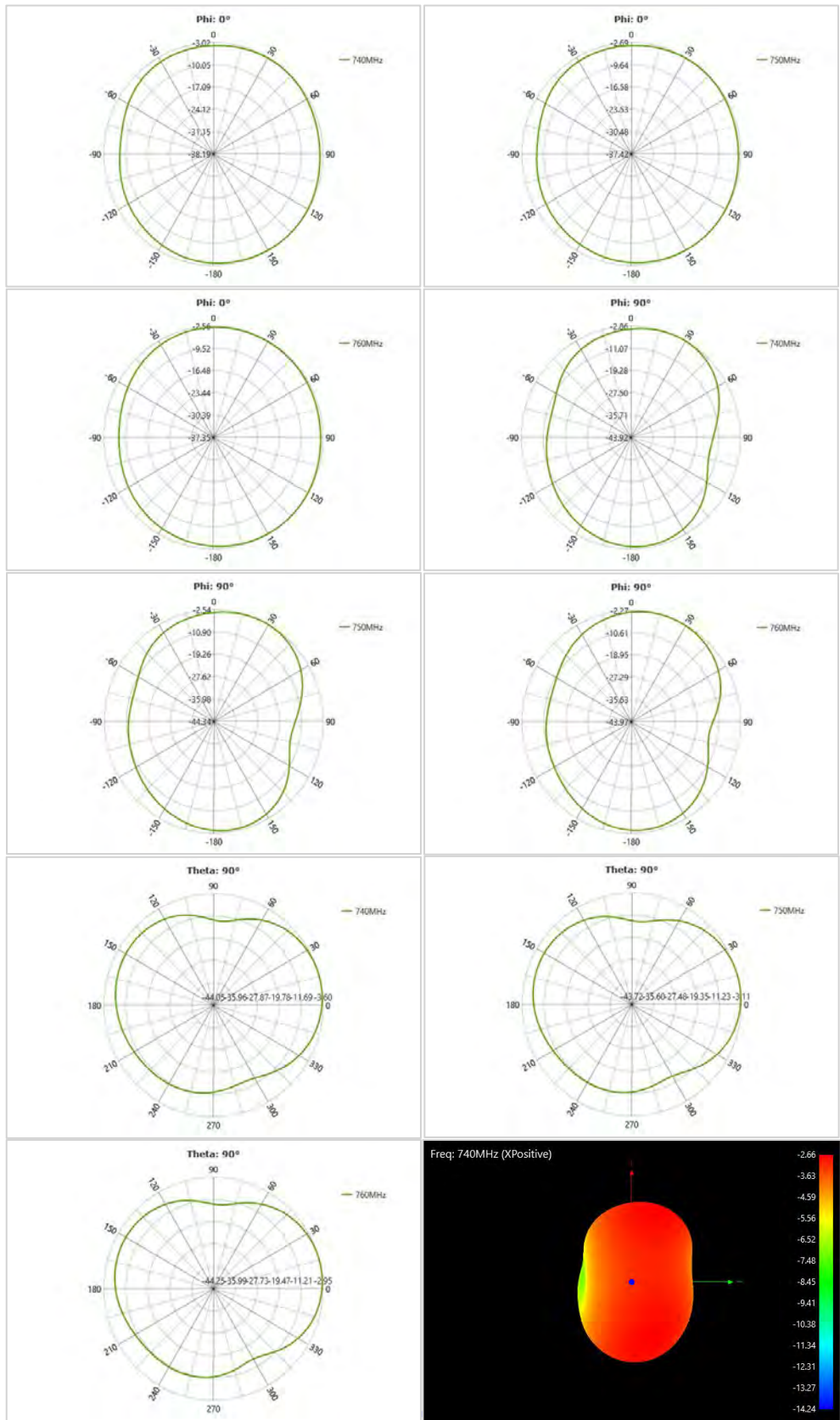


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Passive field pattern diagram: DIV-B13

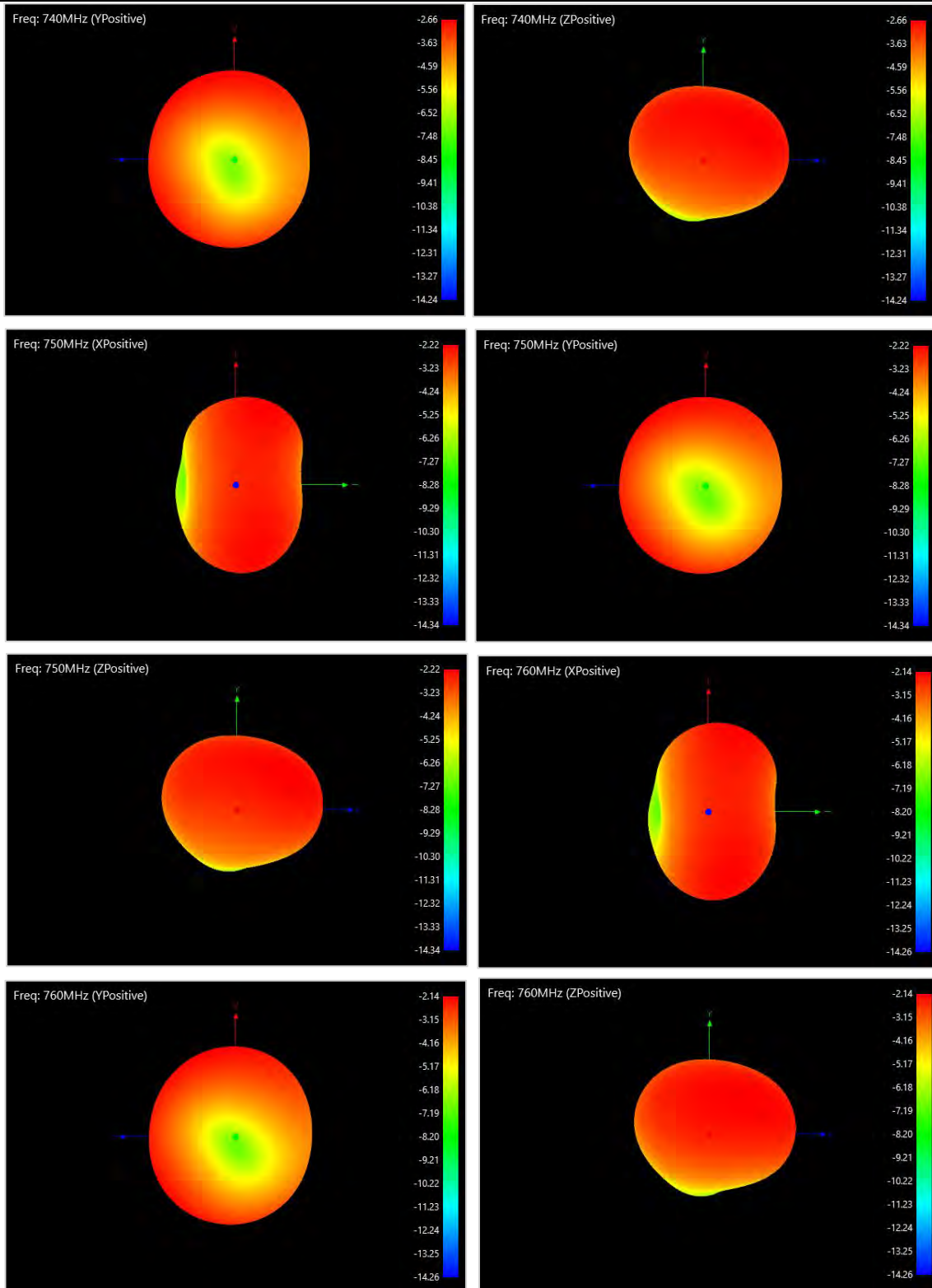


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

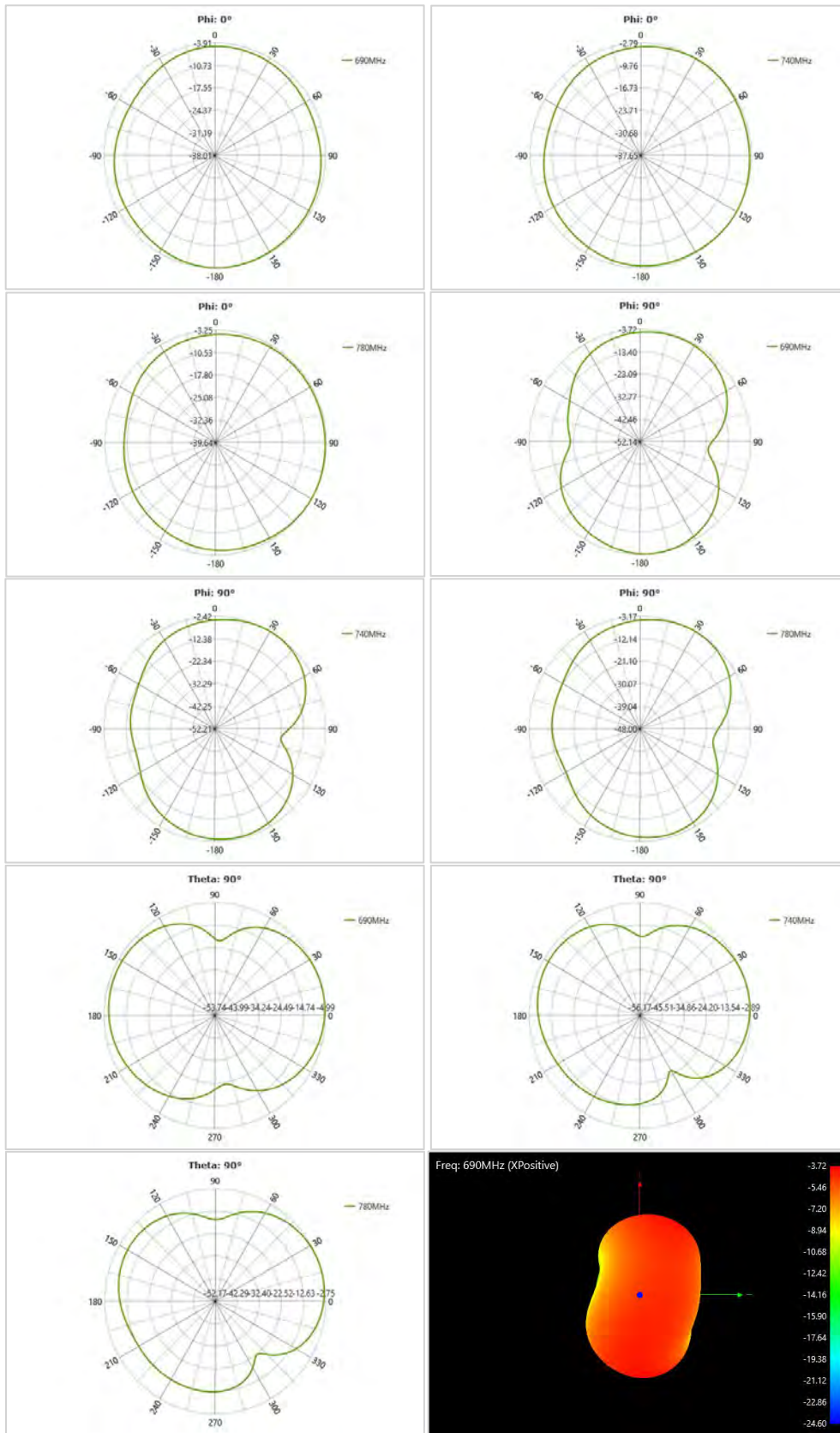


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

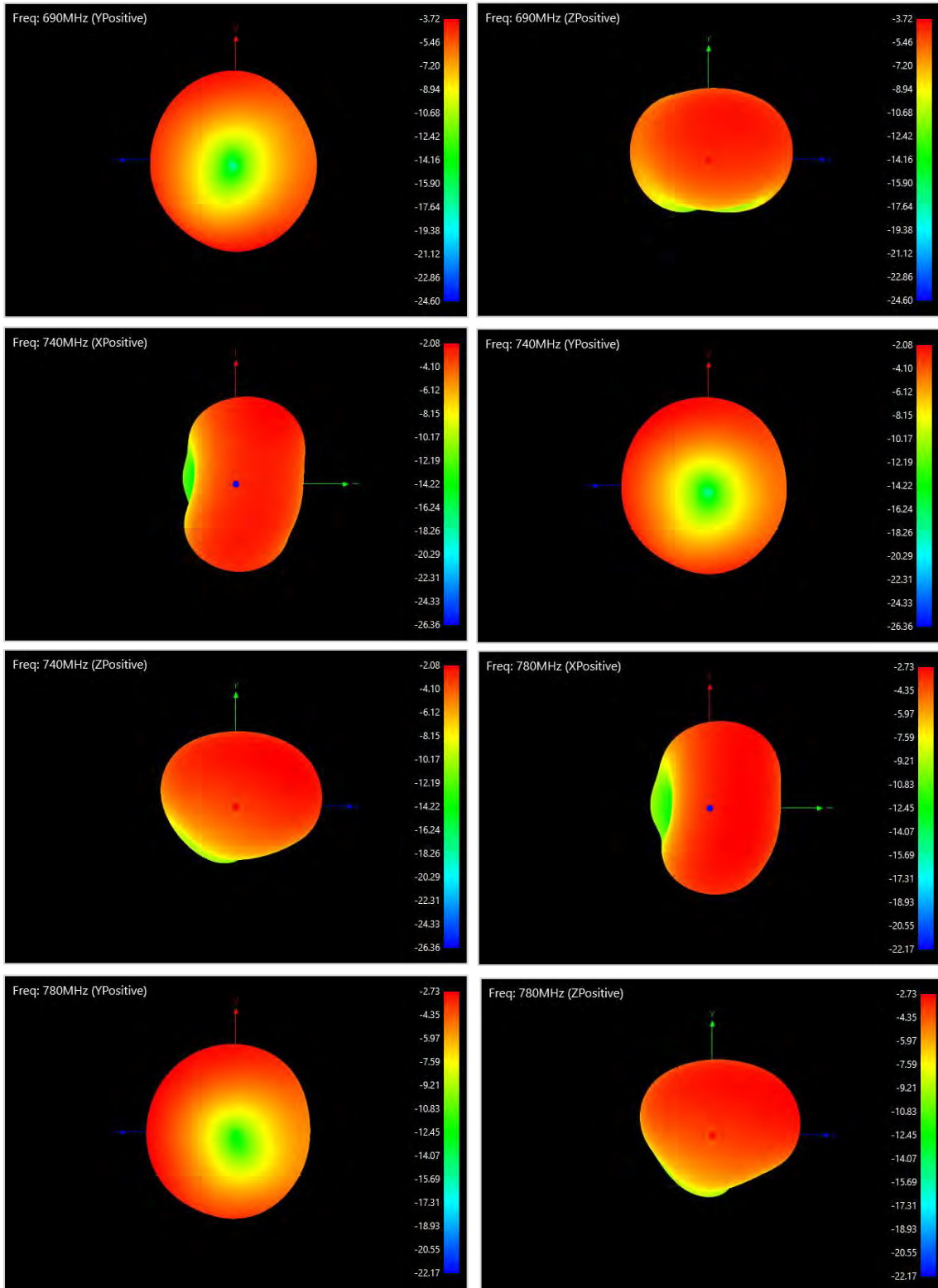
Passive field pattern diagram: DIV-B12/B17



www.1upair.com.cn
Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Confidential Information

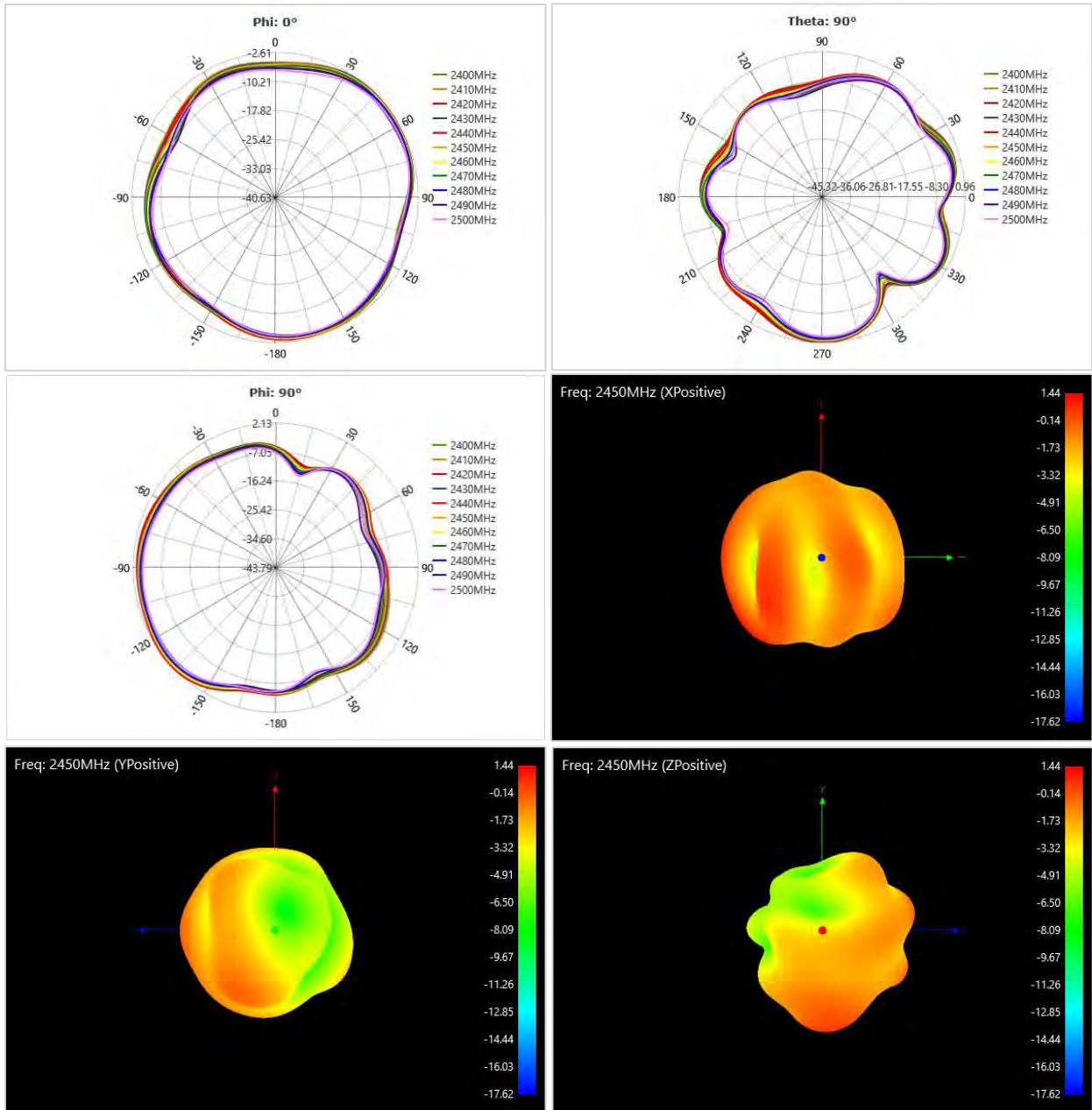


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

Passive field pattern diagram: 2.4G WIFI

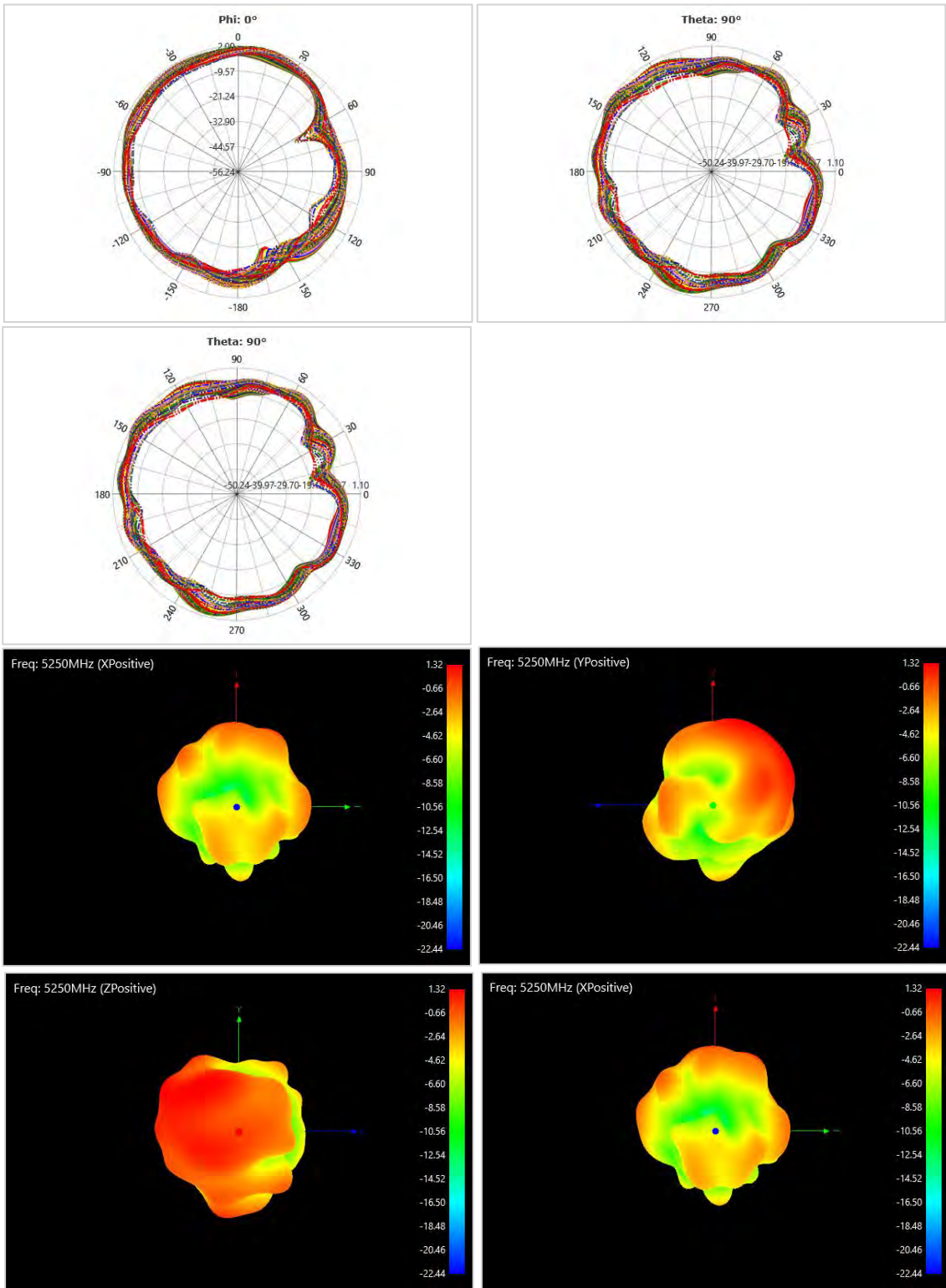


www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

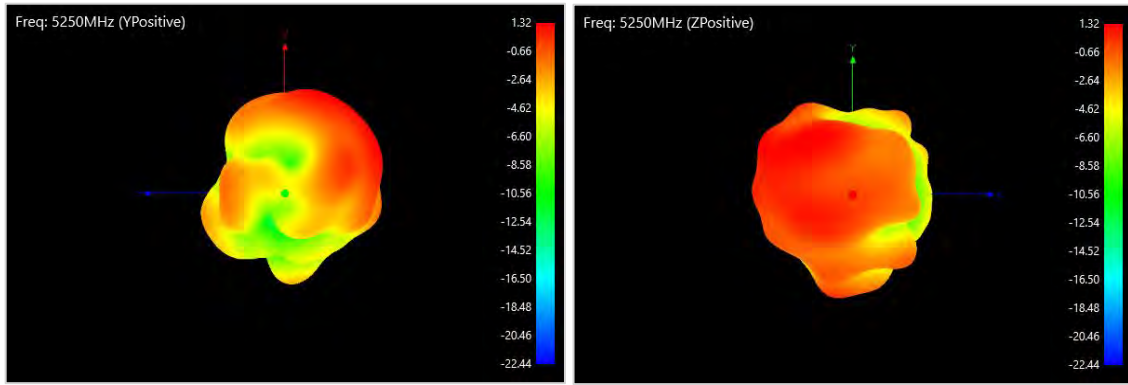
Passive field pattern diagram: 5G WIFI



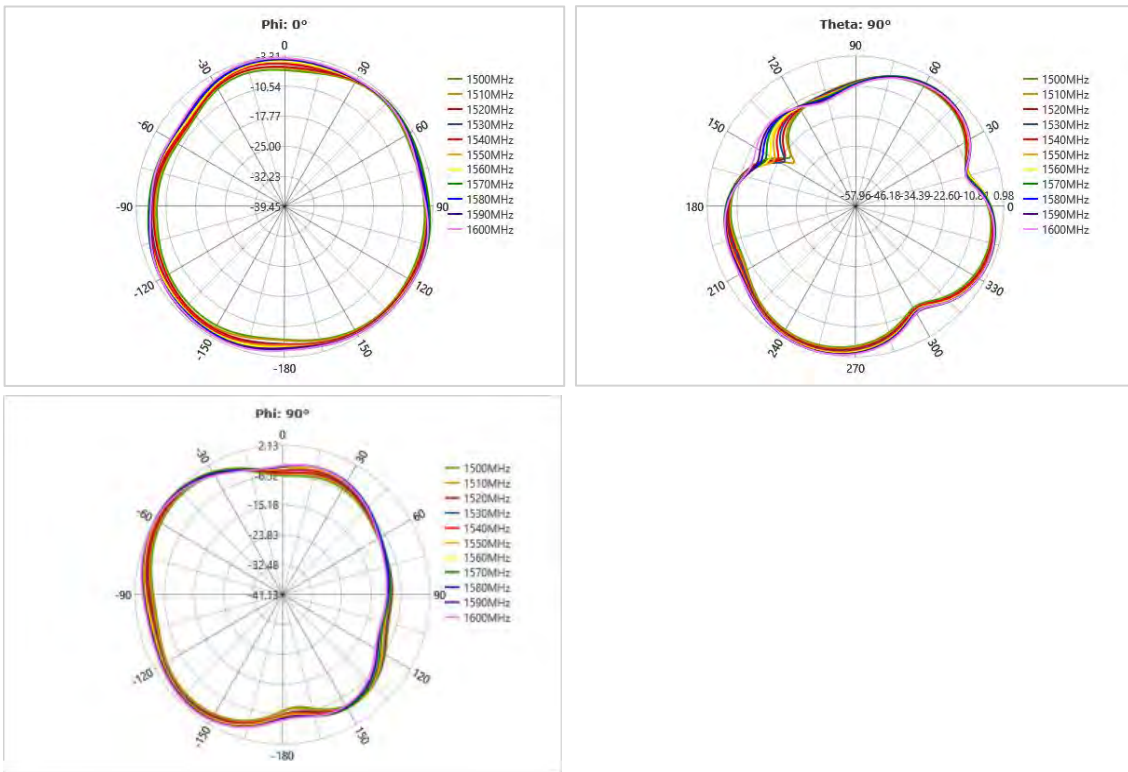
www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.



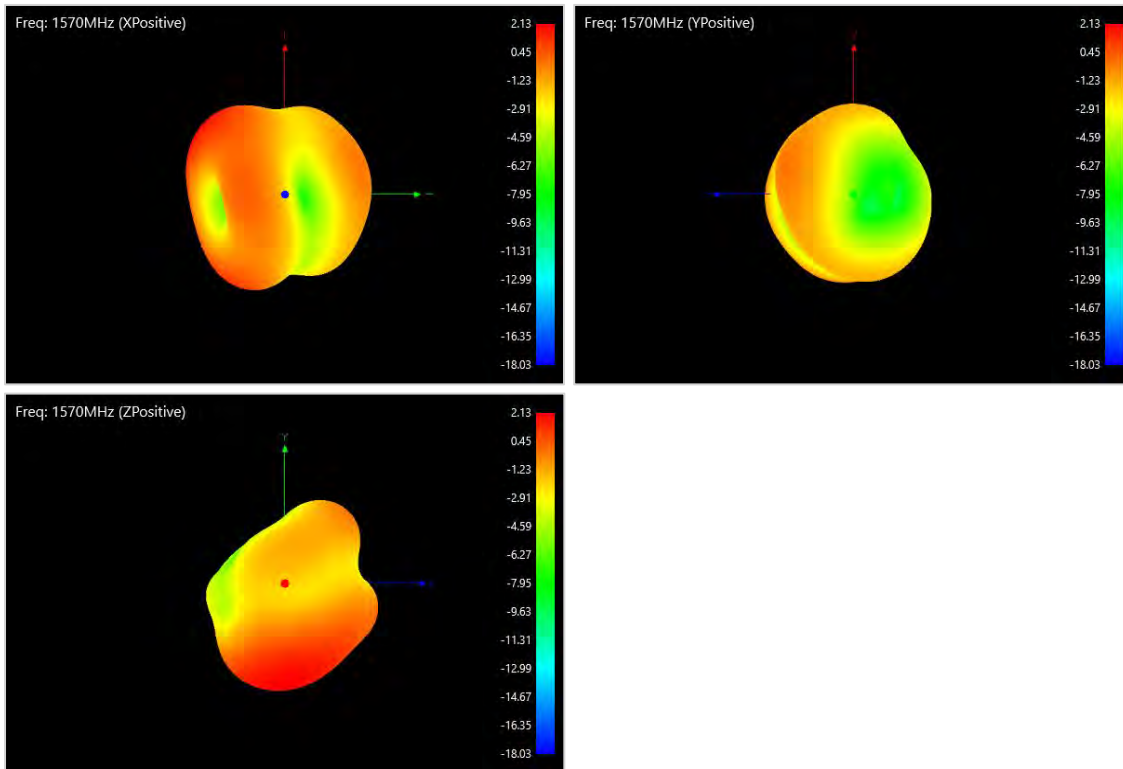
Passive field pattern diagram: GPS



www.Topant.com.cn

Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

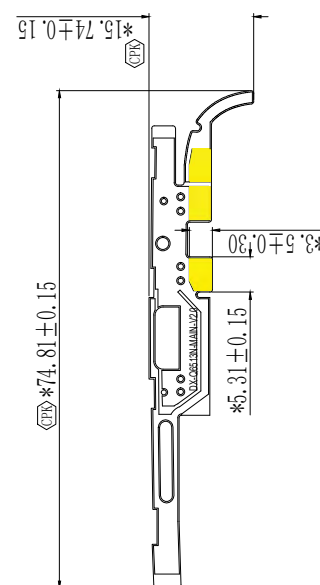


6、 conclusion:

This antenna is designed on the basis of the prototype provided by the customer, electrical parameters and structural performance have reached the technical requirements, please confirm!

www.Topant.com.cn
Confidential requirement

Shenzhen Daxian limited company of science and technology has proprietary technology to provide information, which should be kept strictly confidential and proprietary information, without the prior written consent of Shenzhen Daxian Co. Ltd. are not allowed to disclose to any person or company.

1	2	3	4	5	6
0~10	10~30	30~50	50~	角度	┴
0.05	0.10	0.15	0.20	1°	0.02
					0.03
					0.05
A	B	C	D	A	A
	 <p data-bbox="798 1366 861 1545">Black ink White characters</p> <p data-bbox="861 1456 909 1545">TOP</p>				
A	B	C	D	A	A

technical requirement:

1. "*" is the key dimension;
2. Please refer to the drawing for unspecified dimensions;
3. Meet RoHS requirements.



Shenzhen Daxian Technology Co., Ltd.

Machine model	Q6513L	Product Color	black	date	2024/04/09
Project Code	CQ-6513L-006	Weld surface treatment	NA	MD	RUBIN ZHOU
Part Name	MLV antenna	unit	mm	scale	1:1
Part Number	IQ-6513L-006-1	Third perspective		check	KANG ZHOU
material	Electrolytic copper PI			ratify	LEI ZHANG
Save Path				current version	A

edition

describe

date

Note

1

2

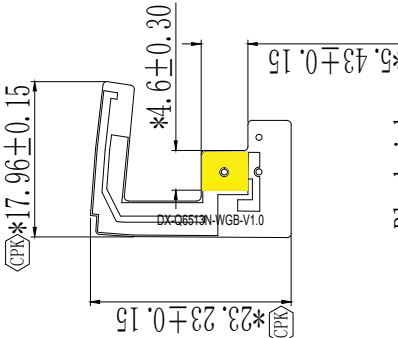
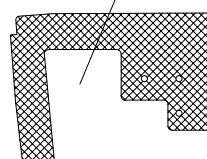

3

4

5

6

1	2		3		4		5		6																																					
	0~10	10~30	30~50	50~	角度	⊙	⊥																																							
	0.05	0.10	0.15	0.20	1°	0.02	0.03			0.05																																				
A	B				C				D																																					
<p>Black ink</p> <p>White characters</p> <p>TOP</p>																																														
<p>Micro mucosal delivery</p> <p>BOT</p>																																														
<p>technical requirement:</p> <ol style="list-style-type: none"> "*" is the key dimension; Please refer to the drawing for unspecified dimensions; Meet RoHS requirements. 																																														
<p>Shenzhen Daxian Technology Co., Ltd.</p>																																														
<table border="1"> <tr> <td>Machine model</td> <td>Q6513L</td> <td>Product Color</td> <td>black</td> <td>date</td> <td>2024/04/09</td> </tr> <tr> <td>Project Code</td> <td>CQ-6513L-006</td> <td>Weld surface treatment</td> <td>NA</td> <td>MD</td> <td>RUIBIN ZHOU</td> </tr> <tr> <td>Part Name</td> <td>DIY antenna</td> <td>unit</td> <td>mm</td> <td>scale</td> <td>1:1</td> </tr> <tr> <td>Part Number</td> <td>24-6513L-006-1</td> <td>Third perspective</td> <td>⊕</td> <td>check</td> <td>KANG ZHOU</td> </tr> <tr> <td>material</td> <td>Electrolytic copper PI</td> <td></td> <td></td> <td>ratify</td> <td>LEI ZHANG</td> </tr> <tr> <td>Save Path</td> <td></td> <td></td> <td></td> <td>current version</td> <td>A</td> </tr> </table>											Machine model	Q6513L	Product Color	black	date	2024/04/09	Project Code	CQ-6513L-006	Weld surface treatment	NA	MD	RUIBIN ZHOU	Part Name	DIY antenna	unit	mm	scale	1:1	Part Number	24-6513L-006-1	Third perspective	⊕	check	KANG ZHOU	material	Electrolytic copper PI			ratify	LEI ZHANG	Save Path				current version	A
Machine model	Q6513L	Product Color	black	date	2024/04/09																																									
Project Code	CQ-6513L-006	Weld surface treatment	NA	MD	RUIBIN ZHOU																																									
Part Name	DIY antenna	unit	mm	scale	1:1																																									
Part Number	24-6513L-006-1	Third perspective	⊕	check	KANG ZHOU																																									
material	Electrolytic copper PI			ratify	LEI ZHANG																																									
Save Path				current version	A																																									
1	2		3		4		5		6																																					
edition	describe		date		Note																																									

1	2	3	4	5	6																																				
0.10	10°~30	30°~50	50°	角度	⊥																																				
0.05	0.10	0.15	0.20	1°	0.02																																				
					0.03																																				
					0.05																																				
A	B	C	D	A	A																																				
			<p>Micro mucosal delivery</p> <p>BOT</p>	 <p>Shenzhen Daxian Technology Co., Ltd.</p>	<table border="1"> <tr> <td>Machine model</td> <td>Q6513L</td> <td>Product Color</td> <td>black</td> <td>date</td> <td>2024/04/09</td> </tr> <tr> <td>Project Code</td> <td>CQ-6513L-006</td> <td>Weld surface treatment</td> <td>NA</td> <td>MD</td> <td>RUIBIN ZHOU</td> </tr> <tr> <td>Part Name</td> <td>WiFi/GPS/BT antenna</td> <td>unit</td> <td>mm</td> <td>scale</td> <td>1:1</td> </tr> <tr> <td>Part Number</td> <td>34-6513L-006-1</td> <td>Third perspective</td> <td></td> <td>check</td> <td>YUANGJING ZHU</td> </tr> <tr> <td>material</td> <td>Electrolytic copper PI</td> <td></td> <td></td> <td>ratify</td> <td>KANG ZHOU</td> </tr> <tr> <td>Save Path</td> <td></td> <td></td> <td></td> <td>current version</td> <td>LEI ZHANG</td> </tr> </table>	Machine model	Q6513L	Product Color	black	date	2024/04/09	Project Code	CQ-6513L-006	Weld surface treatment	NA	MD	RUIBIN ZHOU	Part Name	WiFi/GPS/BT antenna	unit	mm	scale	1:1	Part Number	34-6513L-006-1	Third perspective		check	YUANGJING ZHU	material	Electrolytic copper PI			ratify	KANG ZHOU	Save Path				current version	LEI ZHANG
Machine model	Q6513L	Product Color	black	date	2024/04/09																																				
Project Code	CQ-6513L-006	Weld surface treatment	NA	MD	RUIBIN ZHOU																																				
Part Name	WiFi/GPS/BT antenna	unit	mm	scale	1:1																																				
Part Number	34-6513L-006-1	Third perspective		check	YUANGJING ZHU																																				
material	Electrolytic copper PI			ratify	KANG ZHOU																																				
Save Path				current version	LEI ZHANG																																				
A	B	C	D	5	6																																				
	<p>Black ink</p> <p>White characters</p> <p>TOP</p>	<p>technical requirement:</p> <p>1. "*" is the key dimension;</p> <p>2. Please refer to the drawing for unspecified dimensions;</p> <p>3. Meet RoHS requirements.</p>	<table border="1"> <tr> <td>edition</td> <td>describe</td> <td>date</td> <td>Note</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>	edition	describe	date	Note													4	5																				
edition	describe	date	Note																																						
1	2	3	4	5	6																																				
A	B	C	D	A	A																																				