



品名：WAG-B1.01.L.0806 Specification

History List

[illegible]

WAG-B.01.L.0806 Specification

1. Explanation of part number :

WAG B 01 L 0806
(1) (2) (3) (4) (5)

(1) Product Type : Wireless Antenna

(2) Material : FPC

(3) Frequency : 620-960Mhz, 1805-2170, 2500-2690 Mhz

(4) Coaxial Cable Type : 00

(5) Suffix : 053

2. Electrical Specification :

2-1. Frequency Band:

Frequency Band	MHz
LTE	620-960Mhz, 1805-2170, 2500-2690 Mhz

2-2. Impedance

50 ohm nominal

UNLESS OTHER SPECIFIED TOLERANCES ON:

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=±

HOLEDIA=±

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SCALE:

UNIT: mm

DRAWN BY: 张有远

CHECKED BY: 马希勤

DESIGNED BY: 马希勤

APPROVED BY: 张晓丽

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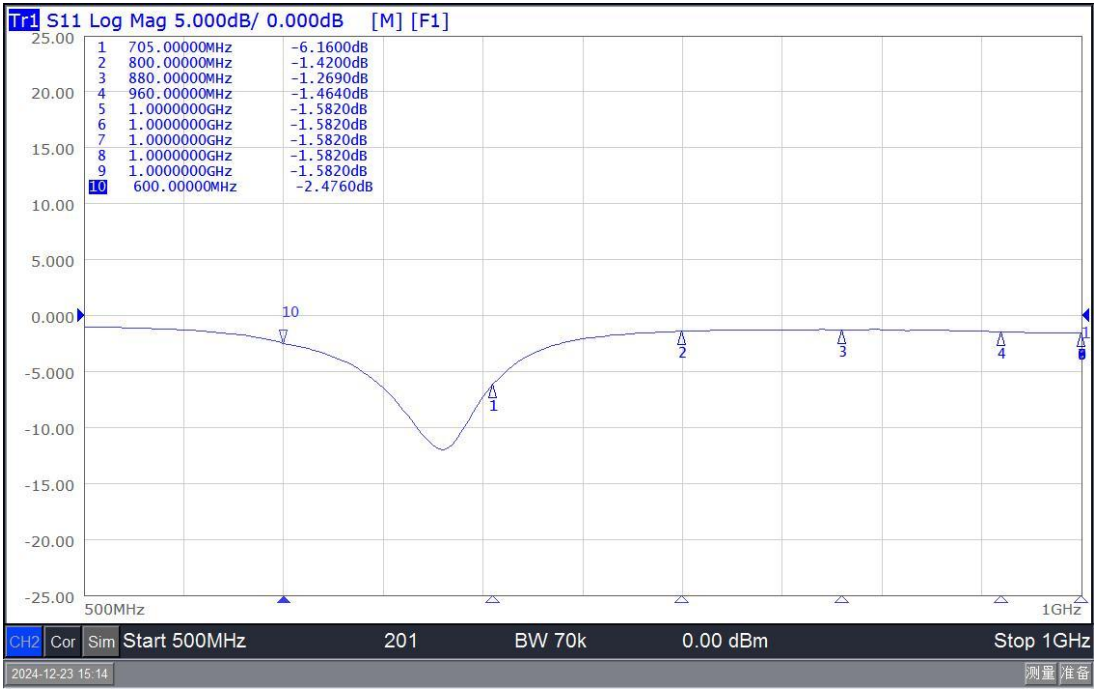
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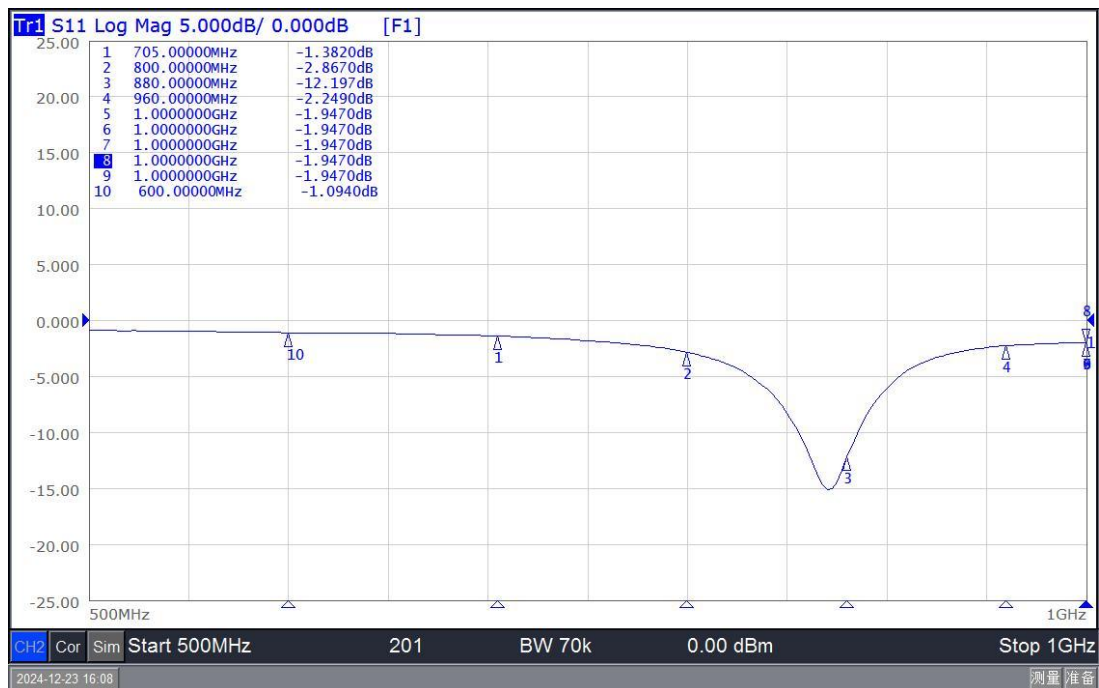
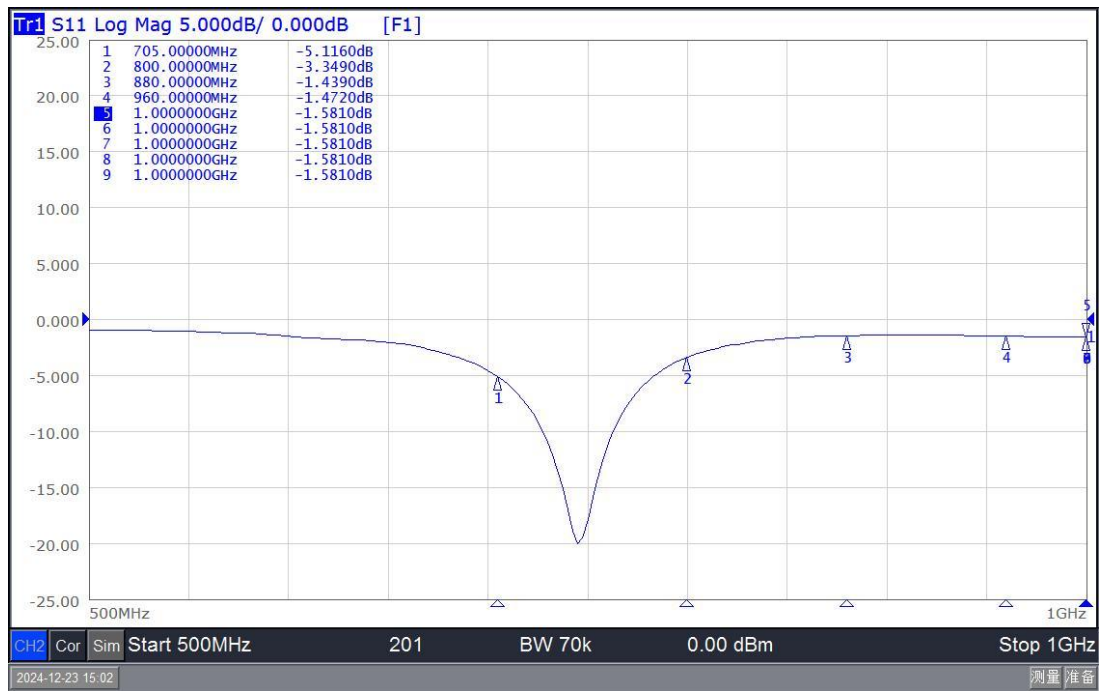
2-3. VSWR ,Efficiency ,Matching and Active Data :

2-3.1 VSWR:

Frequency Band	620	960	1710	2170	2500	2690
2-3-1. Typical Value:	-2.6	-7.1	-21.3	-10	-23.4	-18.7
2-3-2Measuring Method	1. A 50 Ω coaxial cable is connected to the fpcb antenna. Then this cable is connected to a network analyzer to measure the VSWR. 2. Keeping this jig away from metal at least 20 cm.					
2-3-3Picture						



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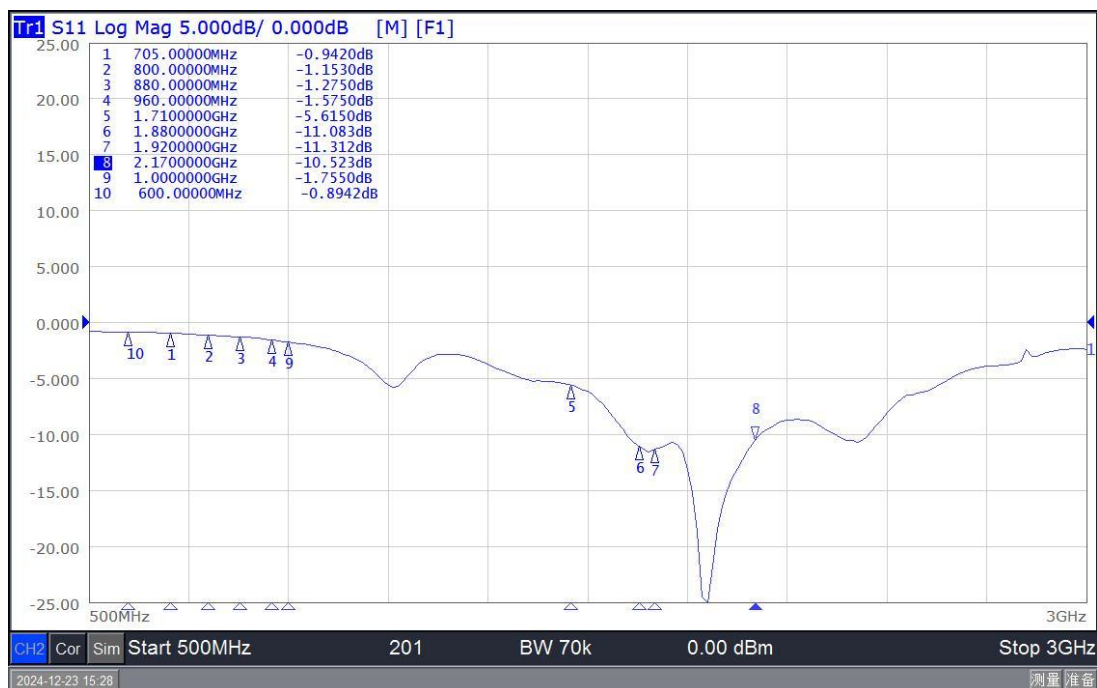
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2-4. Measure and Chamber

2-4-1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

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ANGLES=± HOLEDIA=±

SCALE: UNIT: mm

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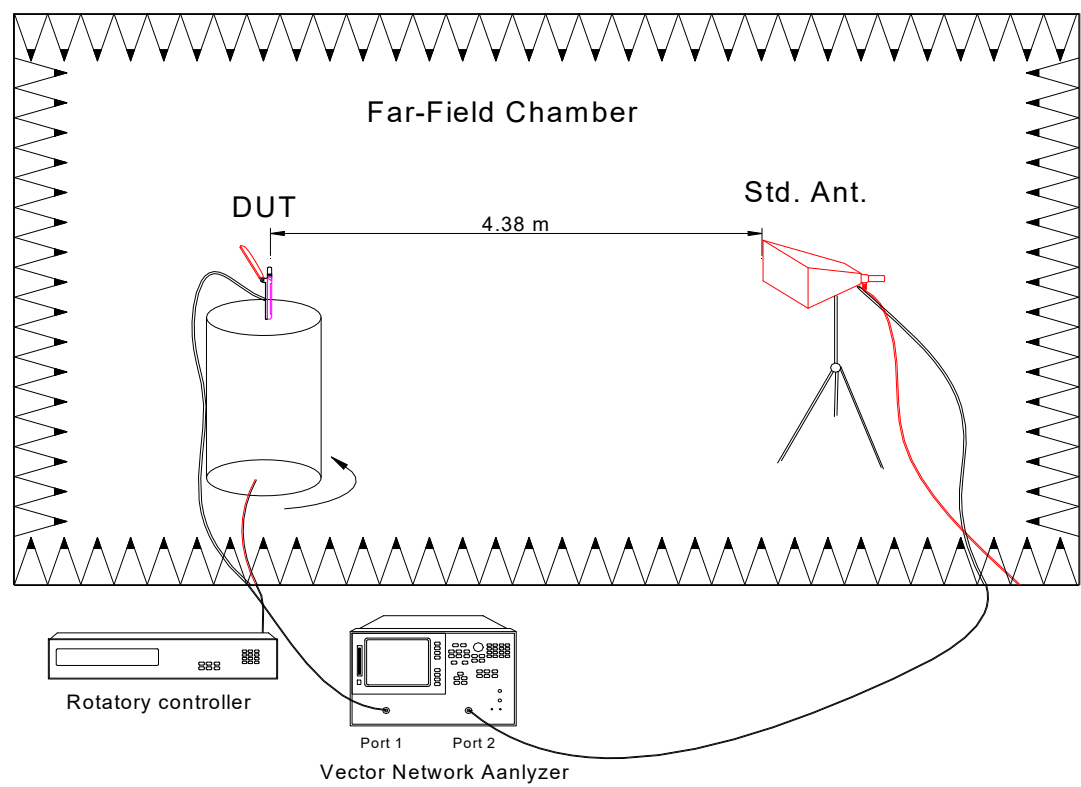
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2-4-2 Chamber definition



1. An anechoic chamber (8mx4mx3.5m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quite room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

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2-4-3 Antenna Efficiency

Frequency	Efficiency	Efficiency . dB	Gain . dBi
620	18%	-7.45	-6.58
630	20%	-6.99	-4.51
640	23%	-6.38	-3.92
650	25%	-6.02	-3.47
660	30%	-5.23	-2.93
670	32%	-4.95	-2.62
680	36%	-4.44	-2.51
690	30%	-5.23	-3.05
700	24%	-6.20	-3.34

Frequency	Efficiency	Efficiency . dB	Gain . dBi
680	21%	-6.78	-3.29
690	23%	-6.38	-2.78
700	29%	-5.38	-2.02
710	33%	-4.81	-1.52
720	32%	-4.95	-1.82
730	28%	-5.53	-1.63
740	26%	-5.85	-1.41
750	27%	-5.69	-1.65
760	28%	-5.53	-1.36
770	28%	-5.53	-1.27
780	29%	-5.38	-1.01
790	28%	-5.53	-1.72

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Frequency	Efficiency	Efficiency . dB	Gain . dBi
820	21%	-6.78	-2.47
830	24%	-6.20	-2.27
840	27%	-5.69	-1.01
850	28%	-5.53	0.01
860	29%	-5.38	0.19
870	30%	-5.23	0.51
880	27%	-5.69	-1.38
890	24%	-6.20	-2.02
900	23%	-6.38	-2.96
910	22%	-6.58	-3.28
920	21%	-6.78	-3.41
930	20%	-6.99	-3.65
940	18%	-7.45	-3.91
950	16%	-7.96	-4.18
960	15%	-8.24	-4.54

Frequency	Efficiency	Efficiency . dB	Gain . dBi
1710	34%	-4.69	-1.12
1720	35%	-4.56	-0.84
1730	36%	-4.44	-0.46
1740	37%	-4.32	0.01
1750	36%	-4.44	-0.31
1760	35%	-4.56	-0.64
1770	35%	-4.56	-0.73
1780	34%	-4.69	-0.82
1790	34%	-4.69	-0.79
1800	34%	-4.69	-0.81
1810	34%	-4.69	-0.76
1820	33%	-4.81	-1.03
1830	33%	-4.81	-1.26
1840	33%	-4.81	-1.17
1850	33%	-4.81	-1.01
1860	33%	-4.81	-1.21

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ANGLES=± HOLEDIA=±

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1870	32%	-4.95	-1.38
1880	32%	-4.95	-1.53
1890	32%	-4.95	-1.76
1900	31%	-5.09	-1.83
1910	31%	-5.09	-1.92
1920	30%	-5.23	-2.03
1930	30%	-5.23	-2.16
1940	30%	-5.23	-2.33
1950	31%	-5.09	-1.78
1960	32%	-4.95	-1.62
1970	33%	-4.81	-1.24
1980	30%	-5.23	-1.97
1990	29%	-5.38	-2.42
2000	29%	-5.38	-2.57
2010	28%	-5.53	-2.88
2020	29%	-5.38	-2.43
2030	30%	-5.23	-1.87
2040	30%	-5.23	-1.66
2050	31%	-5.09	-1.38
2060	32%	-4.95	-1.26
2070	33%	-4.81	-1.34
2080	33%	-4.81	-1.42
2090	34%	-4.69	-0.92
2100	34%	-4.69	-0.78
2110	35%	-4.56	-0.56
2120	35%	-4.56	-0.55
2130	36%	-4.44	-0.43
2140	36%	-4.44	-0.12
2150	37%	-4.32	-0.01
2160	37%	-4.32	0.46
2170	36%	-4.44	0.36
2180	35%	-4.56	0.27
2190	33%	-4.81	-0.83
2200	31%	-5.09	-1.45

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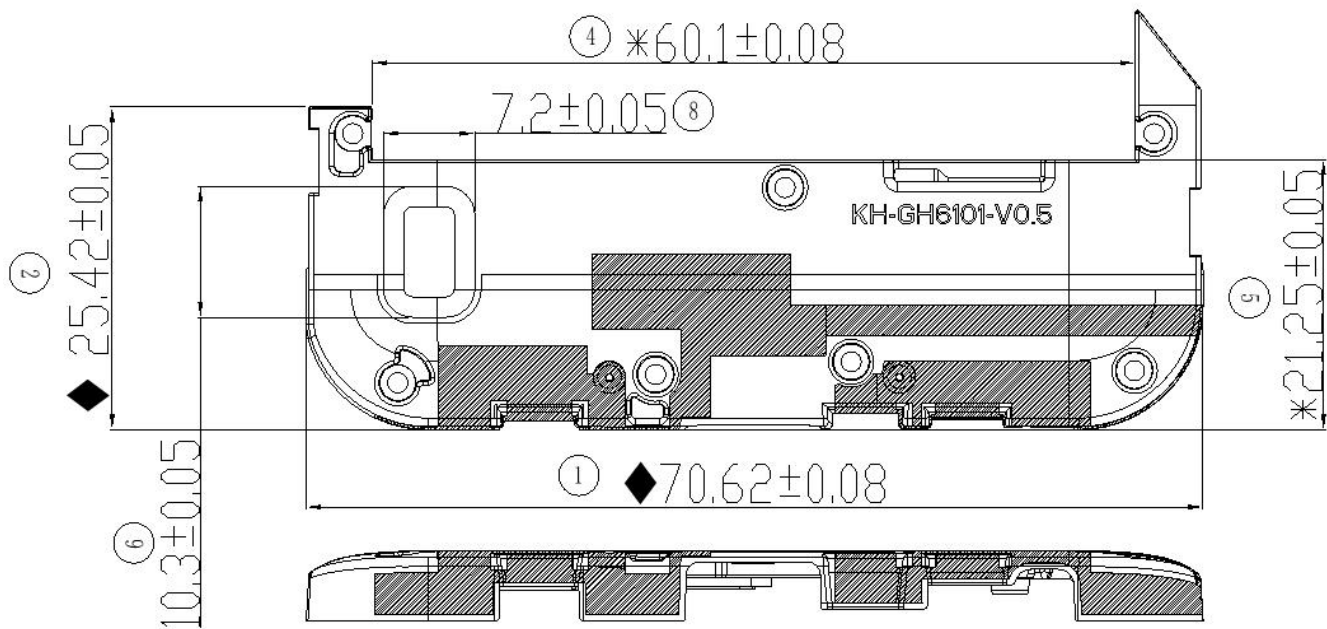
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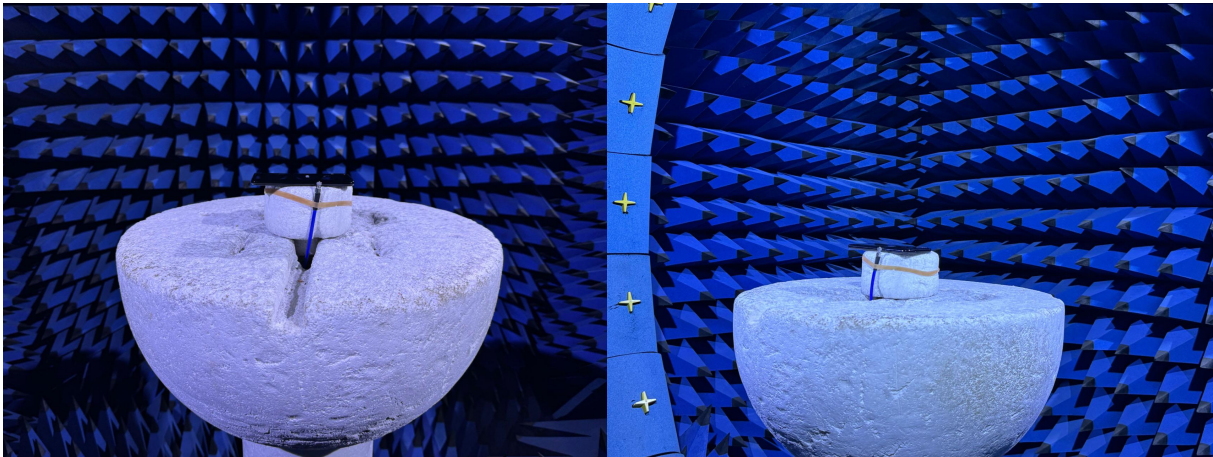
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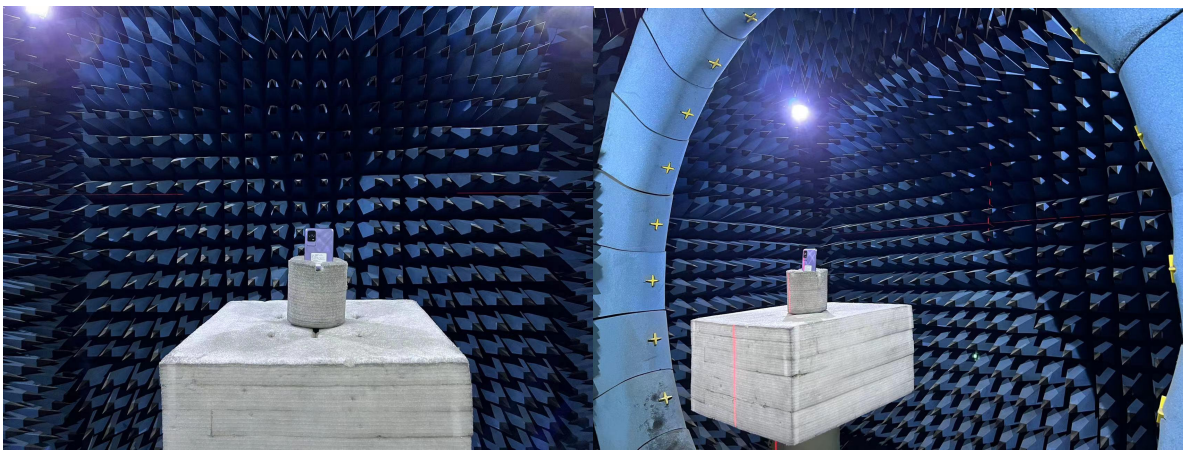
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4.Testing Environment

Passive Test



Active Test

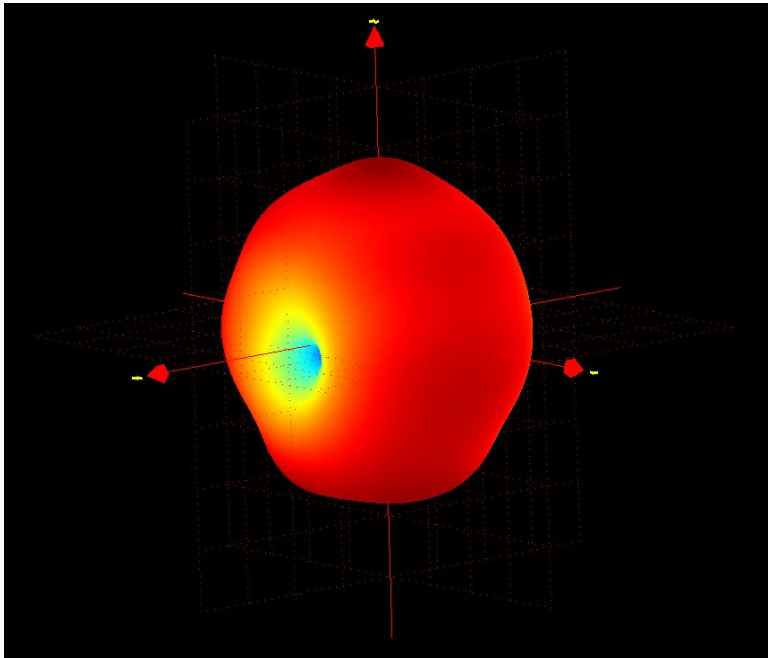


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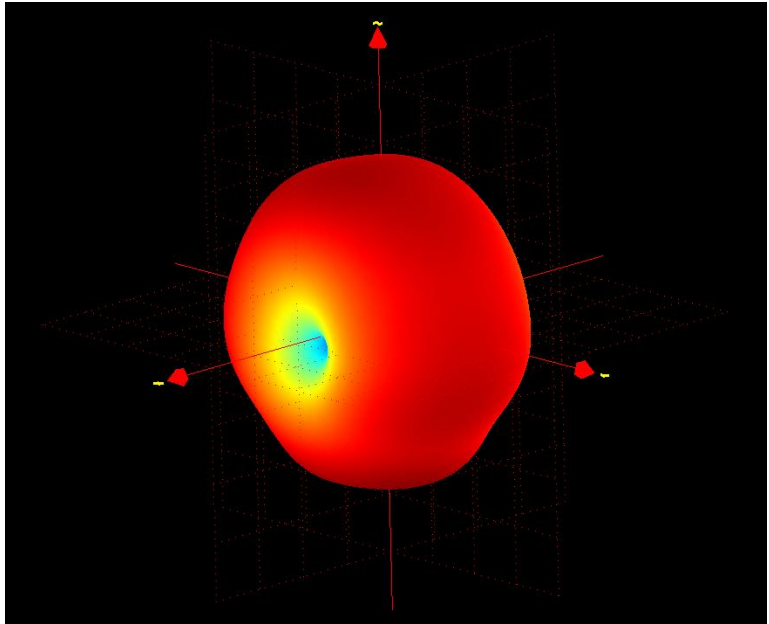
5.3D Radiation Pattern

LTE B12

[699MHz]

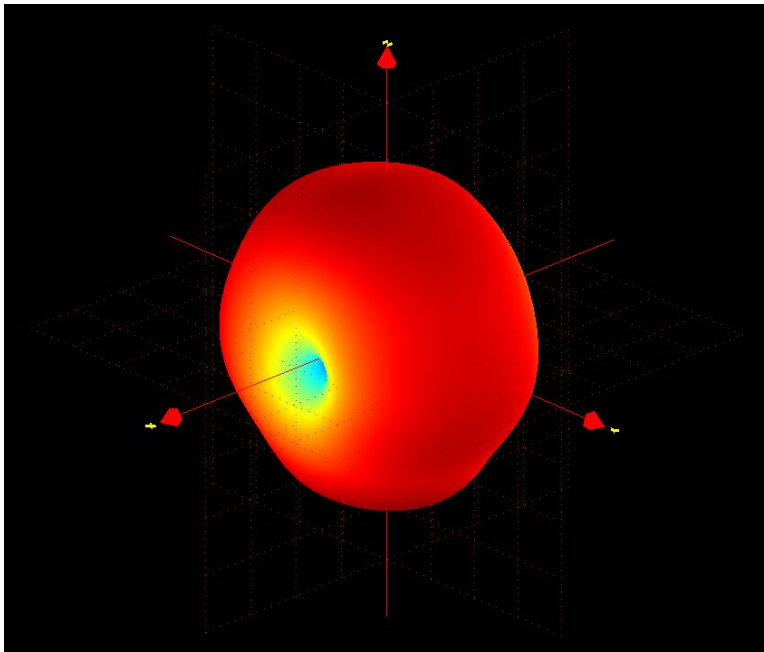


[746MHz]

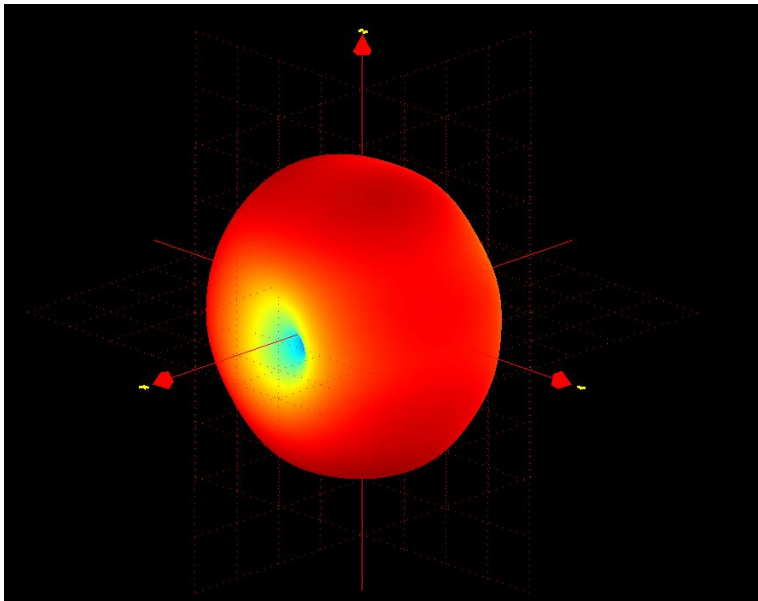


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LTE B13
[746MHz]

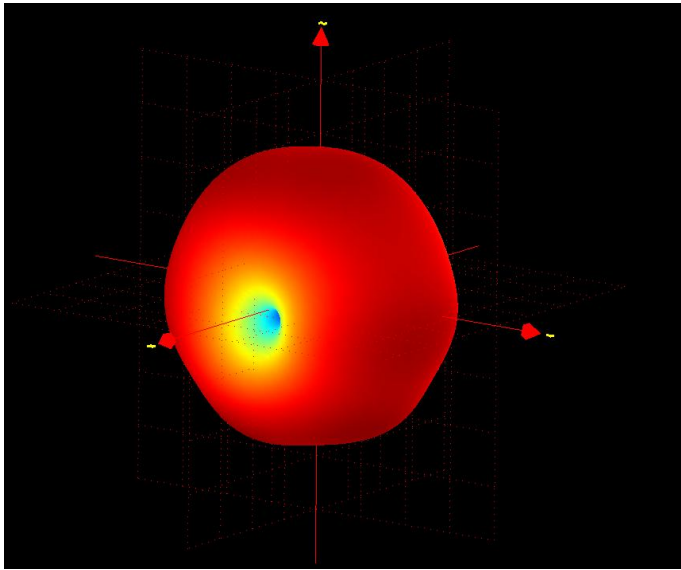


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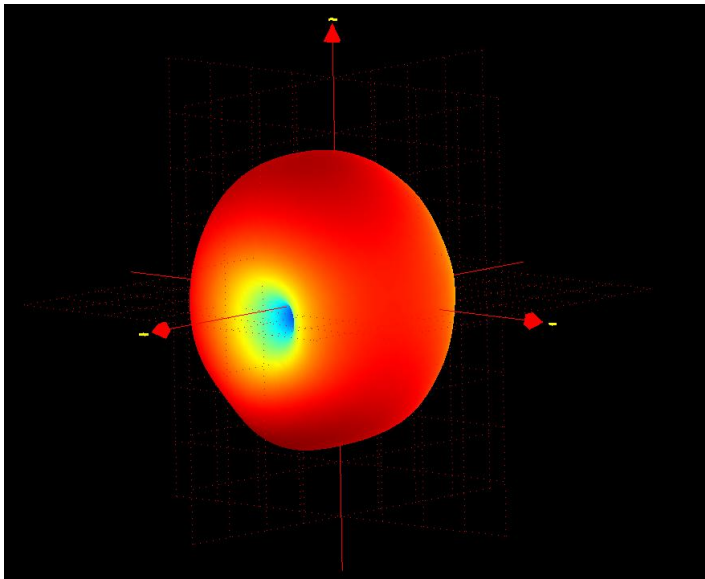


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LTE B5, WCDMA B5
[824MHz]

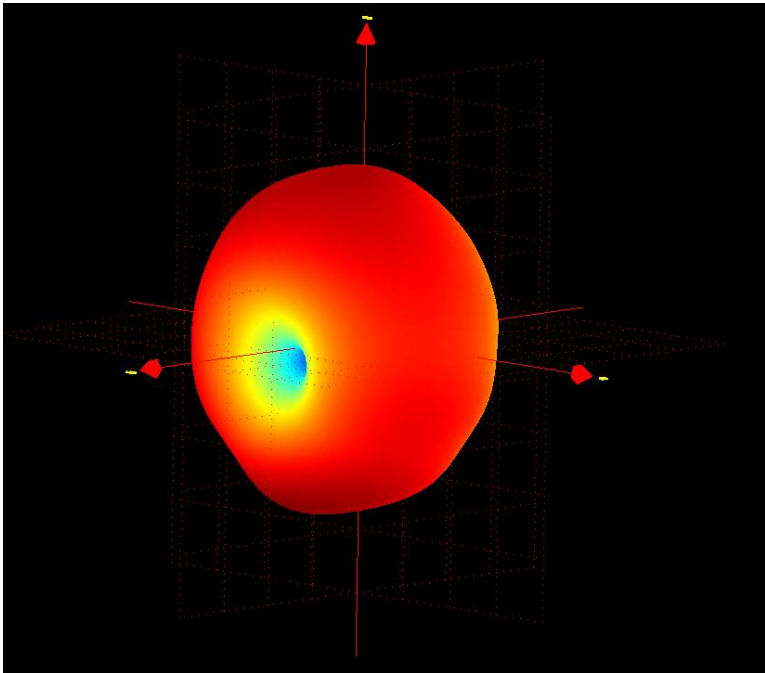


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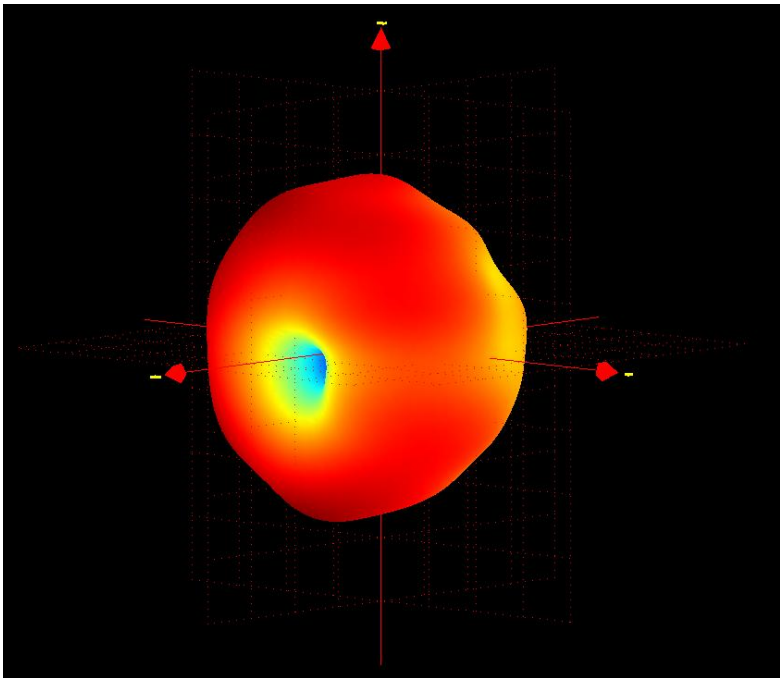


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GSM900
[880MHz]



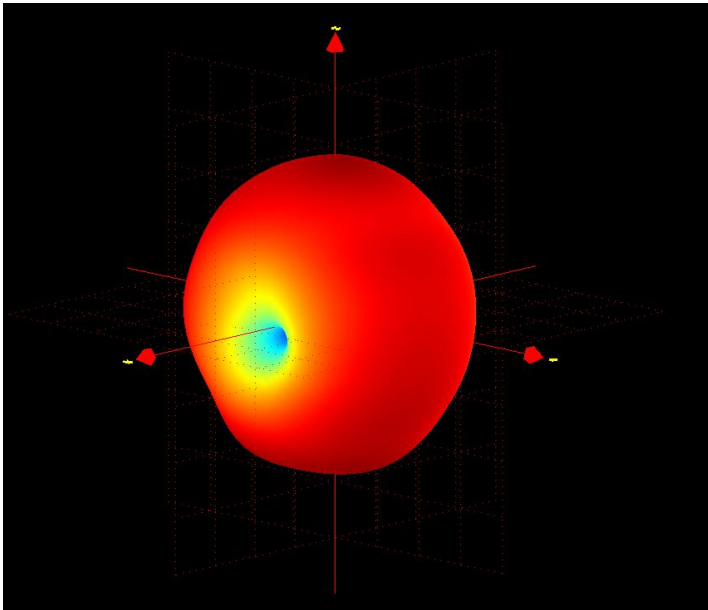
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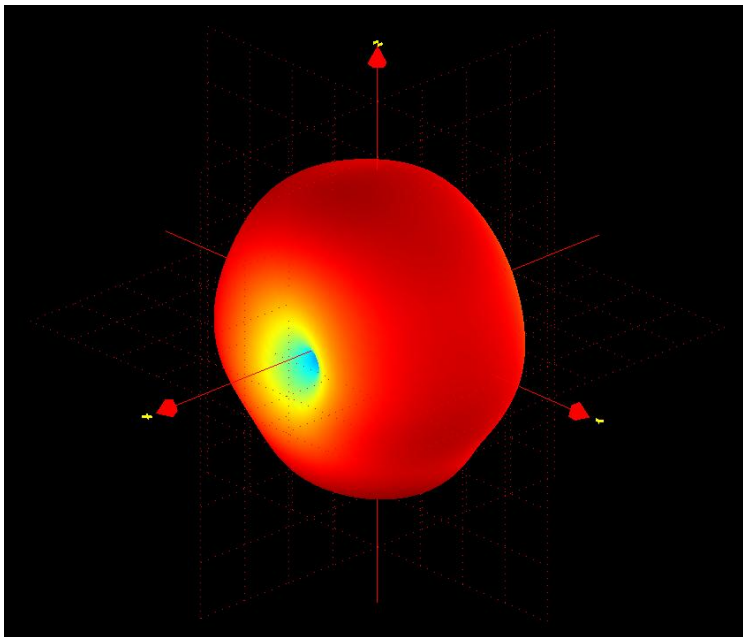
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LTE B17

[705MHz]

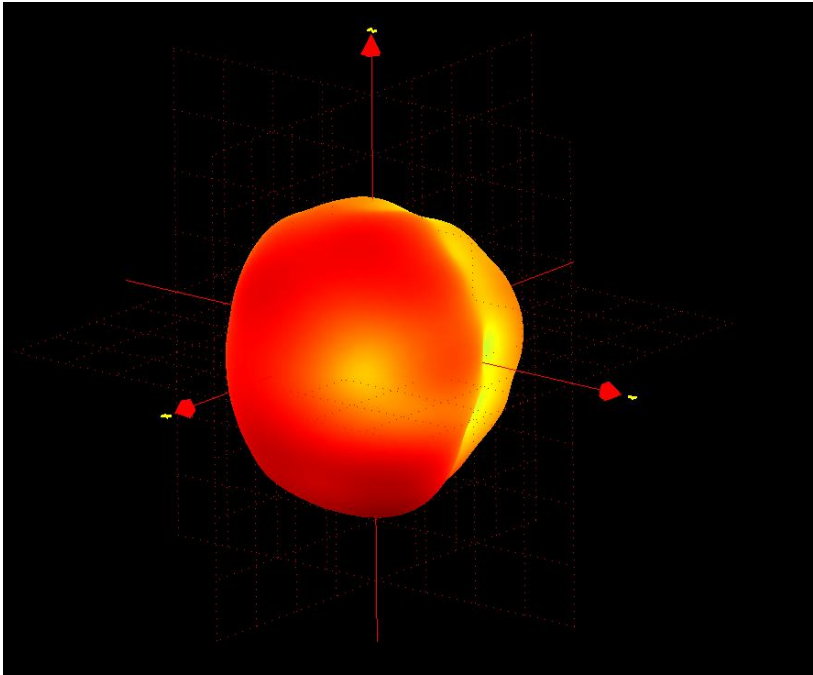


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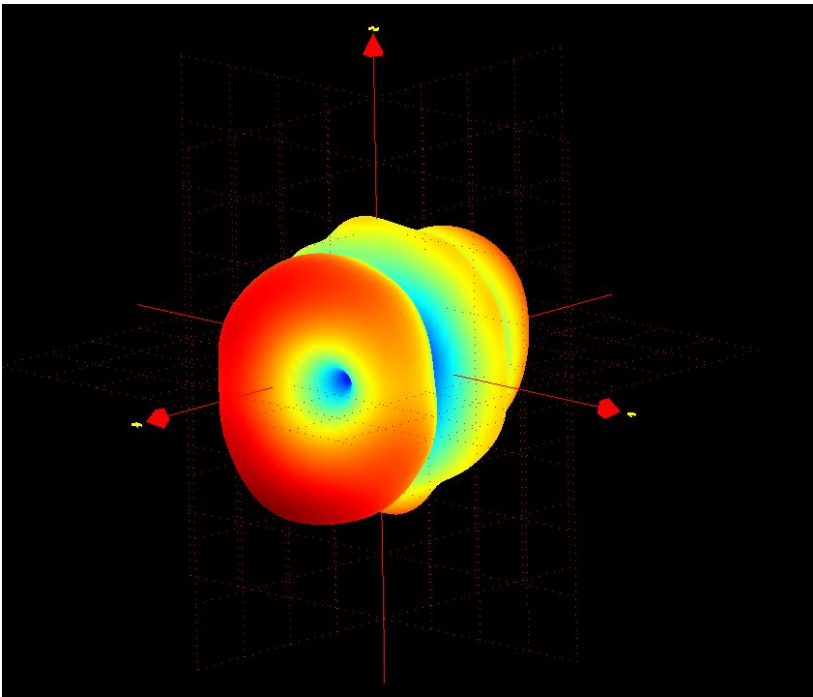


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LTE B66
[1710MHz]



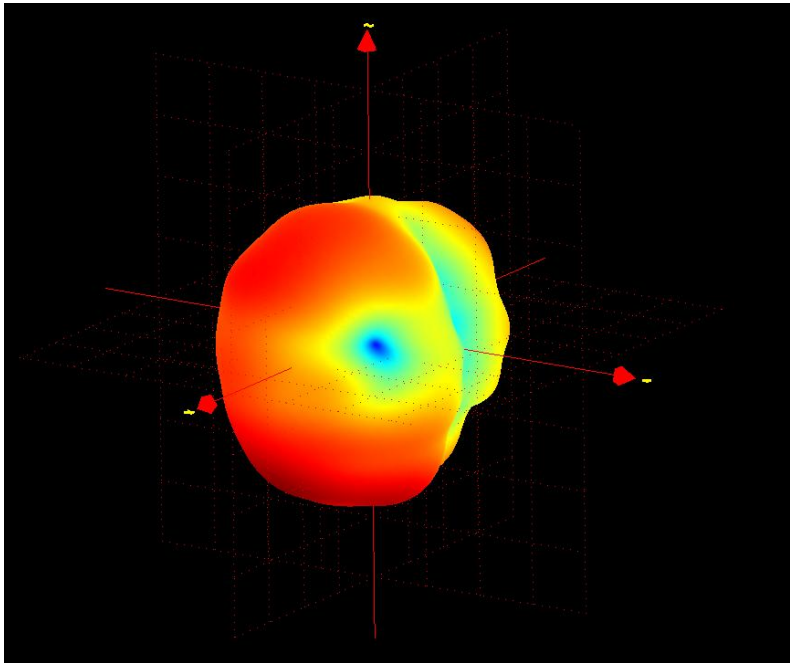
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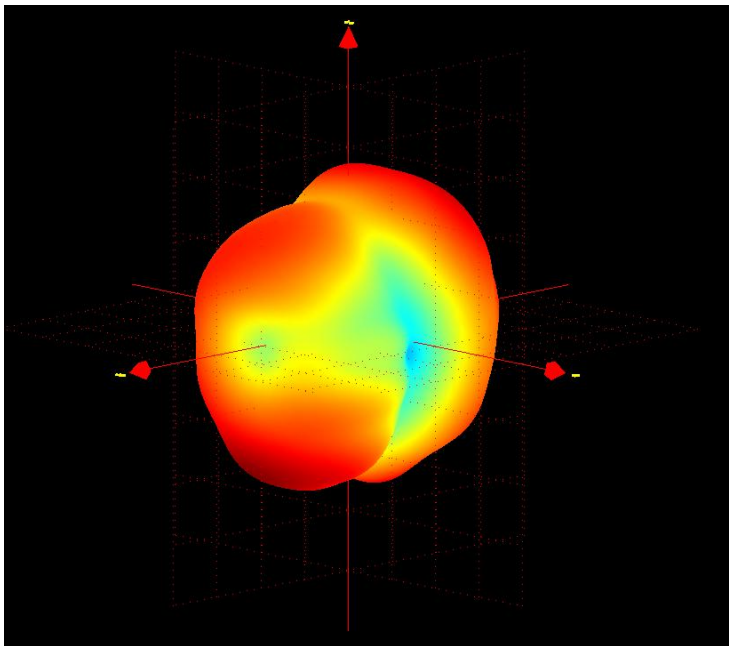
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LTE B2, WCDMA B2

[1850MHz]



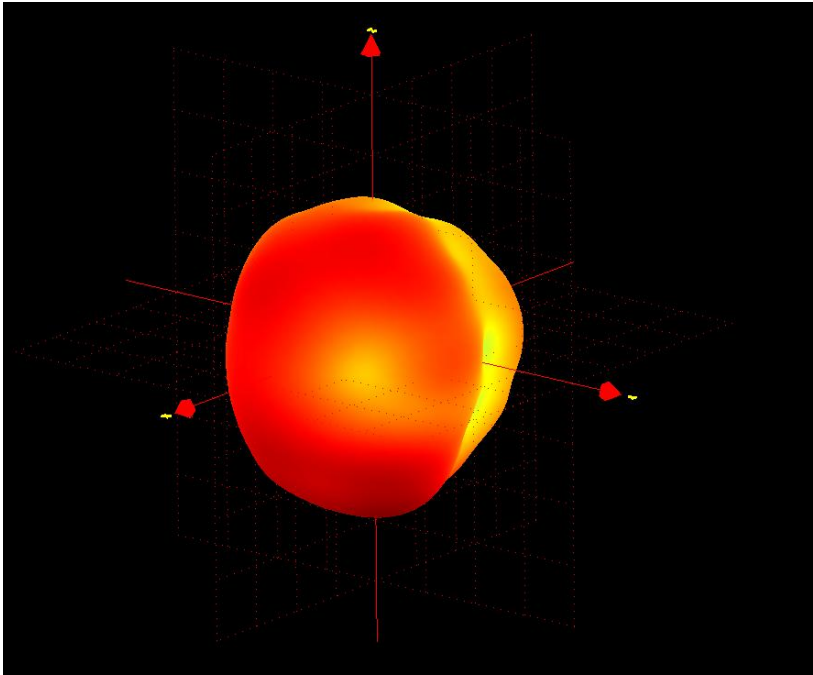
[1990MHz]



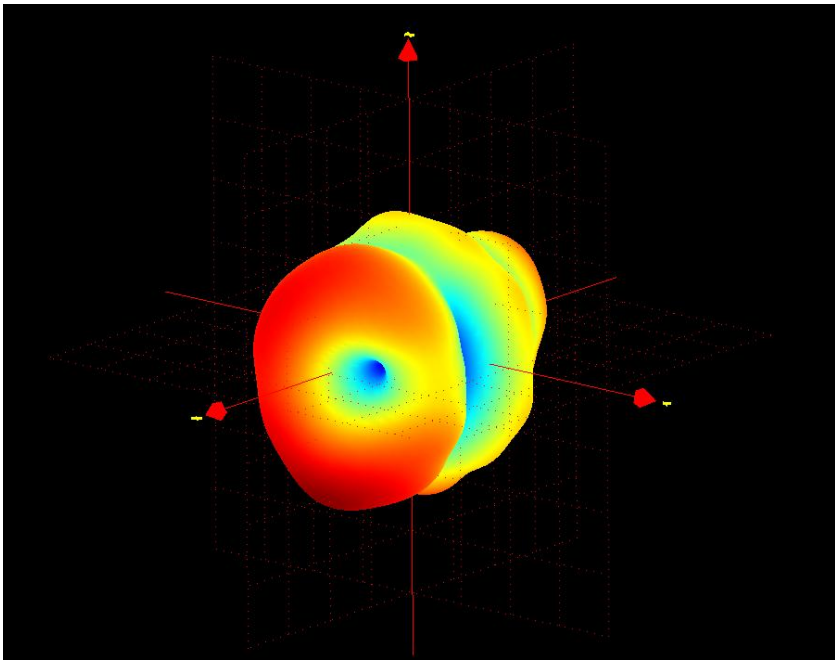
UNLESS OTHER SPECIFIED TOLERANCES ON: X=±2 X.X=±0.1 X.XX=±0.05 ANGLES=± HOLEDIA=±		 浙江海通通讯电子股份有限公司	
SCALE:	UNIT: mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY: 张有远	CHECKED BY: 马希勤		
DESIGNED BY: 马希勤	APPROVED BY: 张晓丽		
TITLE: <u>WAG-F-LTE12-00-053</u> Specification		DOCUMENT NO.	PAGE REV. A0

LTE B4, WCDMA B4

[1710MHz]

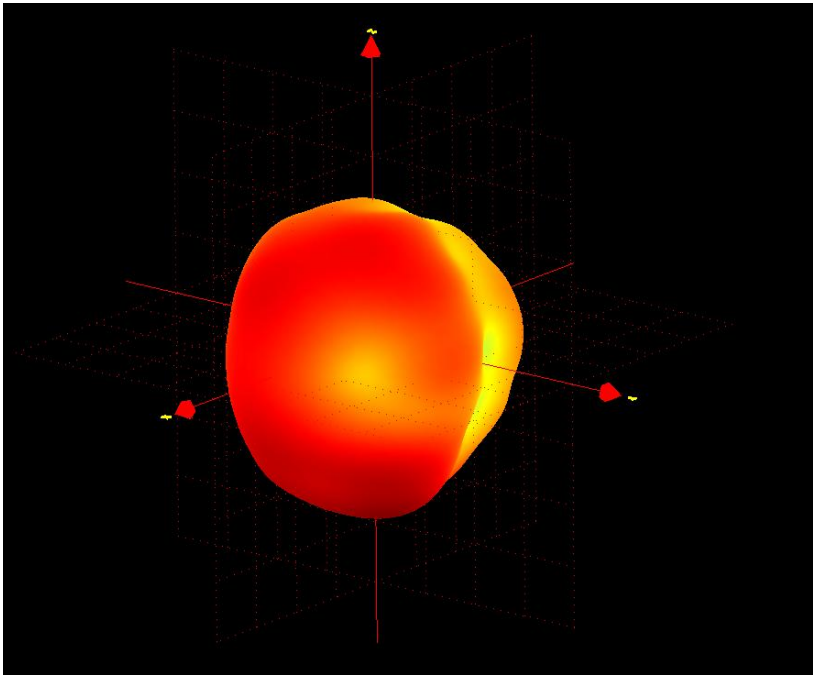


[2155MHz]

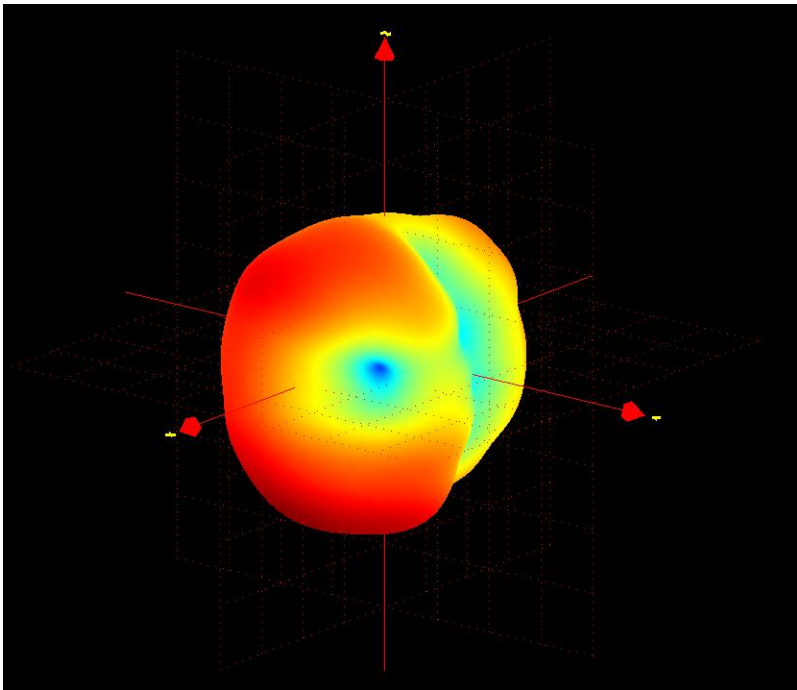


UNLESS OTHER SPECIFIED TOLERANCES ON: X=±2 X.X=±0.1 X.XX=±0.05 ANGLES=± HOLEDIA=±		 浙江海通通讯电子股份有限公司	
SCALE:	UNIT: mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY: 张有远	CHECKED BY: 马希勤		
DESIGNED BY: 马希勤	APPROVED BY: 张晓丽		
TITLE: <u>WAG-F-LTE12-00-053</u> Specification		DOCUMENT NO.	PAGE REV. A0

GSM1800
[1710MHz]

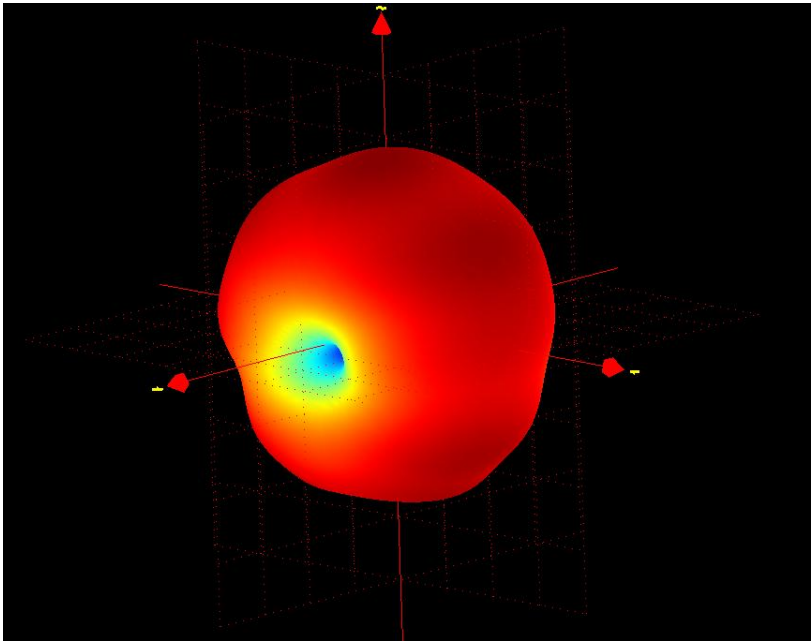


[1880MHz]

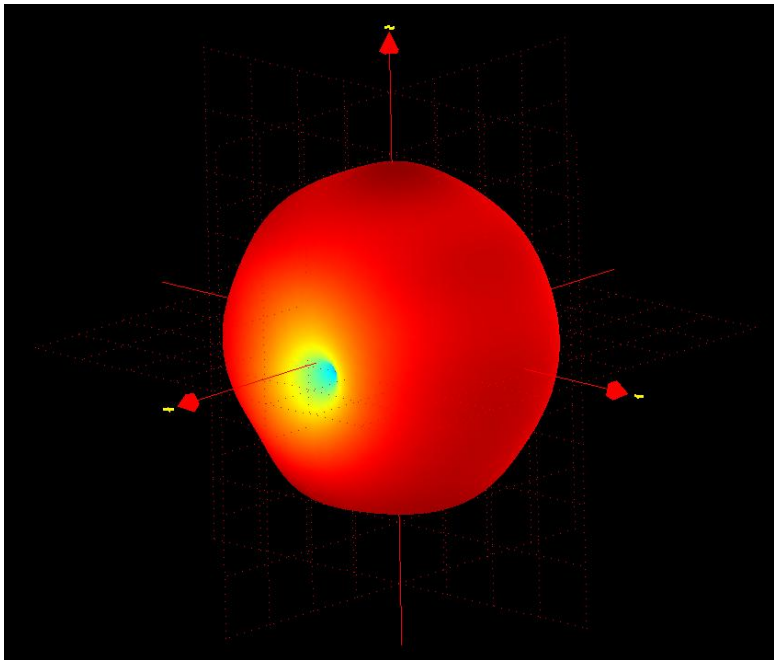


UNLESS OTHER SPECIFIED TOLERANCES ON: X=±2 X.X=±0.1 X.XX=±0.05 ANGLES=± HOLEDIA=±		 浙江海通通讯电子股份有限公司	
SCALE:	UNIT: mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY: 张有远	CHECKED BY: 马希勤		
DESIGNED BY: 马希勤	APPROVED BY: 张晓丽		
TITLE: <u>WAG-F-LTE12-00-053</u> Specification		DOCUMENT NO.	PAGE REV. A0

LTE B71
[610MHz]



[700MHz]



UNLESS OTHER SPECIFIED TOLERANCES ON: X=±2 X.X=±0.1 X.XX=±0.05 ANGLES=± HOLEDIA=±		 浙江海通通讯电子股份有限公司	
SCALE:	UNIT: mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY: 张有远	CHECKED BY: 马希勤		
DESIGNED BY: 马希勤	APPROVED BY: 张晓丽		
TITLE: <u>WAG-F-LTE12-00-053</u> Specification		DOCUMENT NO.	PAGE REV. A0