

KH-GX1961-LTE-F Specification

1. Explanation of part number :

KH - GX1961 - LTE - F
(1) (2) (3) (4)

(1) Supplier: KH

(2) Model Name: GX1961

(3) Frequency : 699-960Mhz, 1710-2170Mhz, 2300-2690 Mhz

(4) Material :FPC

2. Electrical Specification :

2-1. Frequency Band:

Frequency Band	MHz
LTE	699-960Mhz, 1710-2170Mhz, 2300-2690 Mhz

2-2. Impedance

50 ohm nominal

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

2-3.1 VSWR:

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=±

HOLEDIA=±



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SHENZHEN CITY KEXIN HUACHENG COMMUNICATION TECHNOLOGY CO.,LTD

SCALE :

UNIT : mm

DRAWN BY : 黄土勇

CHECKED BY : 肖坤雄

DESIGNED BY : 徐俊

APPROVED BY : 王伟

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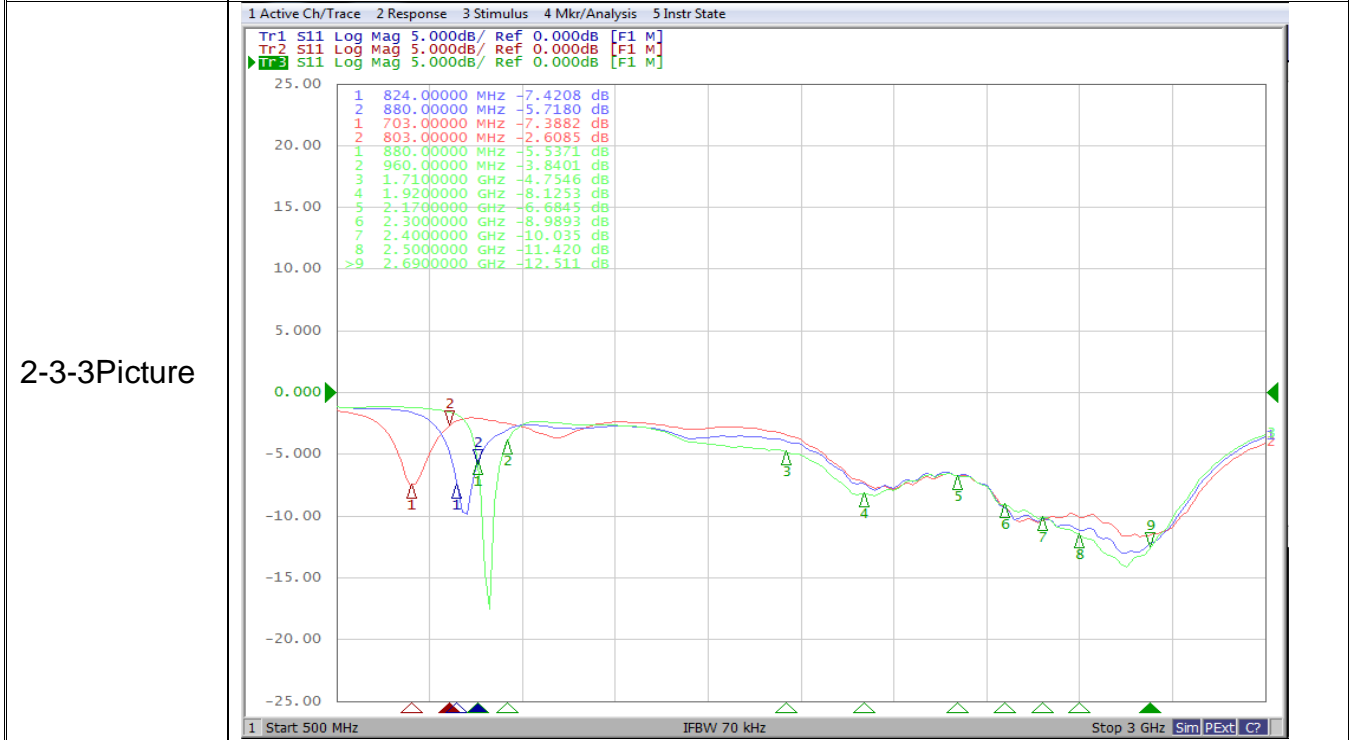
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Frequency Band	704	960	1710	2170	2500	2690
2-3-1. Typical Value:	-7.8	-3.8	-4.7	-6.6	--11.42	-12.5

2-3-2 Measuring Method

1. A 50Ω coaxial cable is connected to the pcb 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.



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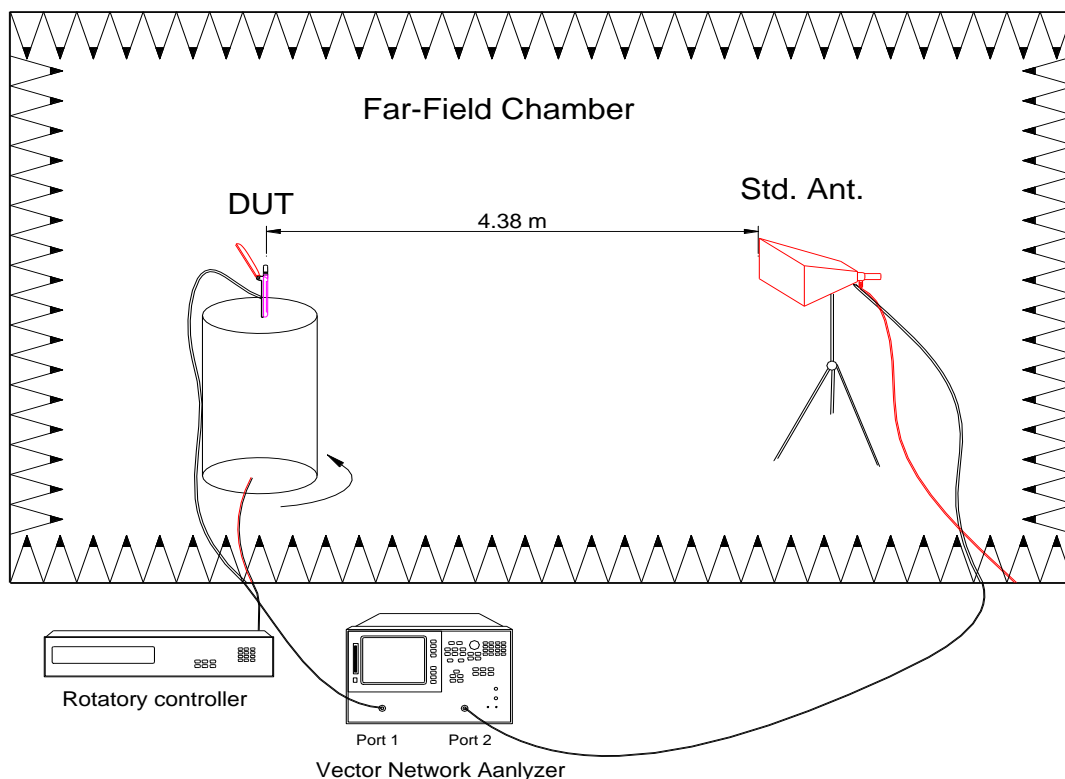
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2-4. Measure and Chamber

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

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 quiet 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 DIV Antenna Efficiency

Frequency (MHz)	Peak Gain (dB)	Average Gain (dB)	Efficiency (%)
700	-6.86	-11.22	0.08
710	-6.45	-10.62	0.09
720	-6.12	-10.06	0.10
730	-5.55	-9.49	0.11
740	-5.03	-9.14	0.12
750	-4.56	-8.86	0.13
760	-4.43	-8.71	0.13
770	-4.90	-8.70	0.13
780	-5.21	-8.58	0.14
790	-5.10	-8.48	0.14
800	-5.01	-8.35	0.15
820	-1.86	-6.9	20.43
830	-1.05	-5.99	25.17
840	-0.55	-5.37	29.02
850	-0.21	-5.14	30.6
860	-0.12	-5.15	30.55
870	-0.20	-5.49	28.27
880	-0.11	-6.23	23.85
890	-0.54	-7.25	18.86
900	-0.40	-7.62	17.29
880	-1.23	-4.88	0.32
890	-0.54	-4.41	0.36
900	-0.40	-4.37	0.37
910	-0.74	-4.63	0.34
920	-1.08	-5.64	0.27
930	-2.32	-7.63	0.17
940	-3.93	-9.24	0.12
950	-5.36	-10.06	0.10
960	-6.29	-10.61	0.09
1710	-0.30	-5.9	25.69
1720	-0.46	-5.52	28.06
1730	-0.43	-5.47	28.37
1740	-0.31	-5.37	29.01

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1750	-0.46	-5.49	28.24
1760	-0.27	-5.39	28.87
1770	0.37	-5.17	30.44
1780	0.55	-4.92	32.2
1790	0.62	-4.72	33.76
1800	0.86	-4.7	33.86
1810	0.88	-4.83	32.85
1820	0.60	-5.07	31.1
1830	0.67	-5.26	29.81
1840	1.07	-5.12	30.74
1850	1.22	-4.99	31.67
1860	1.13	-5.03	31.42
1870	1.23	-5.23	30
1880	1.31	-5.51	28.09
1890	1.24	-5.79	26.37
1900	1.31	-4.95	31.95
1910	1.34	-4.55	35.05
1920	1.27	-4.23	37.73
1930	0.97	-4.43	36.05
1940	0.95	-4.72	33.75
1950	1.10	-4.9	32.33
1960	1.18	-5.09	31
1970	1.23	-5.28	29.65
1980	1.50	-5.41	28.76
1990	1.45	-5.53	27.96
2000	1.48	-5.65	27.25
2010	1.92	-5.69	26.99
2020	2.11	-5.78	26.45
2030	1.99	-5.81	26.23
2040	2.06	-5.83	26.12
2050	2.01	-5.83	26.09
2060	1.68	-5.93	25.52
2070	1.73	-5.99	25.16
2080	2.01	-6.04	24.87
2090	2.06	-6.07	24.71
2100	2.12	-6.06	24.78
2110	2.37	-6.12	24.46
2120	2.20	-6.12	24.43
2130	2.04	-6.07	24.69
2140	2.13	-6.17	24.16

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2150	2.24	-6.18	24.08
2160	2.25	-6.08	24.65
2170	2.45	-5.99	25.19
2300	2.19	-4.92	32.22
2310	2.04	-4.86	32.67
2320	2.36	-4.8	33.14
2330	2.06	-4.69	33.93
2340	1.73	-4.66	34.18
2350	2.08	-4.68	34.07
2360	1.86	-4.61	34.59
2370	1.42	-4.5	35.46
2380	1.79	-4.47	35.72
2390	2.04	-4.43	36.03
2400	1.44	-4.32	36.99
2410	1.64	-4.24	37.68
2420	2.07	-4.23	37.73
2430	1.47	-4.15	38.44
2440	1.44	-4.07	39.14
2450	2.04	-4.07	39.18
2460	1.91	-4.09	38.95
2470	1.79	-4.1	38.87
2480	2.43	-4.09	39.02
2490	2.33	-4.07	39.17
2500	2.23	-4.06	39.23
2510	2.33	-4.09	38.96
2520	2.62	-4.12	38.73
2530	2.55	-4.17	38.27
2540	2.47	-4.22	37.8
2550	2.56	-4.29	37.22
2560	2.40	-4.38	36.5
2570	2.38	-4.47	35.7
2580	2.49	-4.58	34.82
2590	2.31	-4.71	33.83
2600	2.19	-4.75	33.47
2610	2.13	-4.78	33.3
2620	2.03	-4.8	33.15
2630	1.89	-4.83	32.91
2640	1.80	-4.85	32.7
2650	1.77	-4.91	32.29

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HOLEDIA=±



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SCALE :

UNIT : mm

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2660	2.37	-4.92	32.23
2670	2.42	-3.25	0.47
2680	2.15	-3.40	0.46
2690	2.74	-3.12	0.49

2-4-4 PCB BT Antenna Efficiency

Frequency (MHz)	Peak Gain (dB)	Average Gain (dB)	Efficiency (%)
2400	-1.01	-5.14	31%
2410	-1.25	-5.19	30%
2420	-1.32	-5.14	31%
2430	-1.54	-5.08	31%
2440	-1.33	-5.06	31%
2450	-1.29	-5.04	31%
2460	-1.21	-4.97	32%
2470	-1.32	-5.08	31%
2480	-1.25	-5.19	30%
2490	-1.17	-5.40	29%
2500	-1.48	-5.65	27%

3-1 DIV Antenna Dimensions (mm) :

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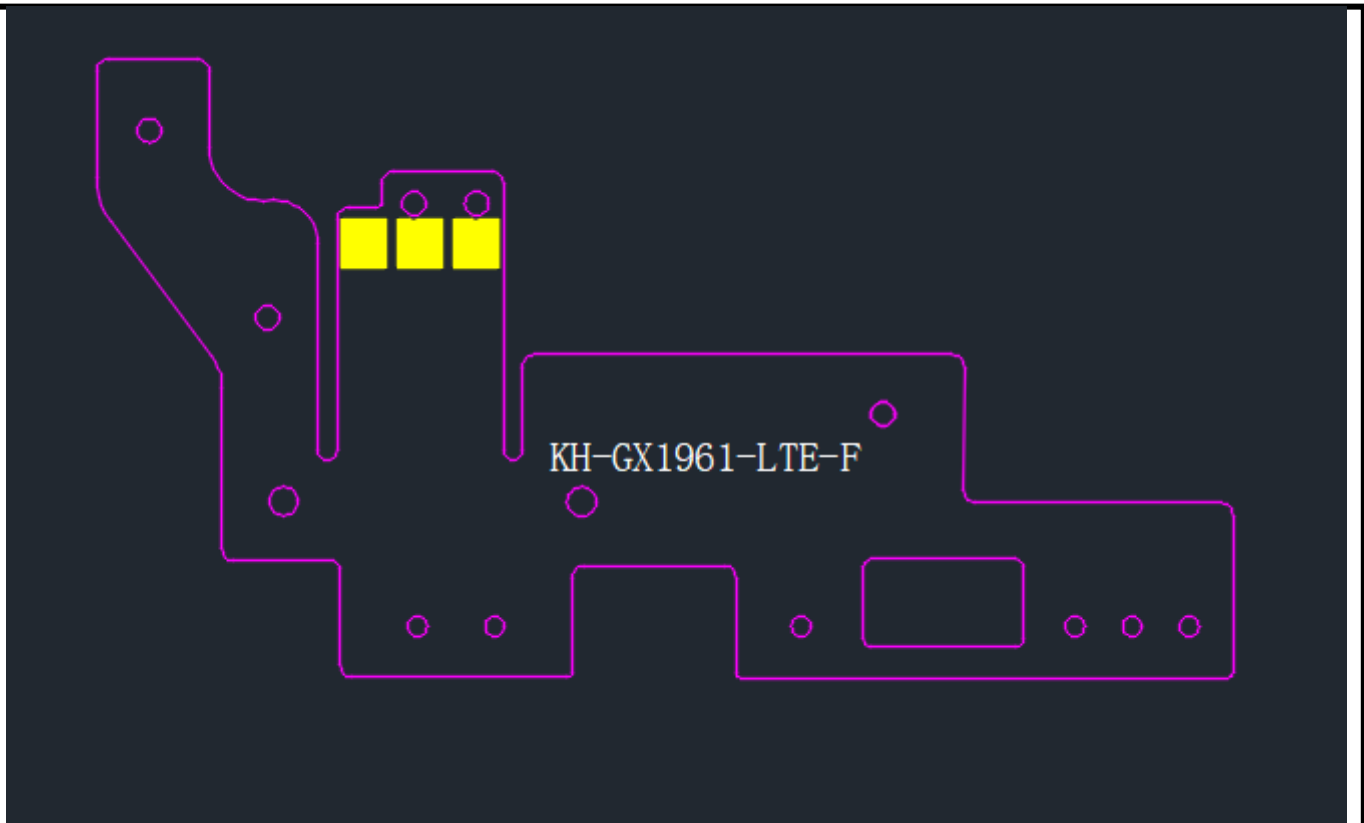


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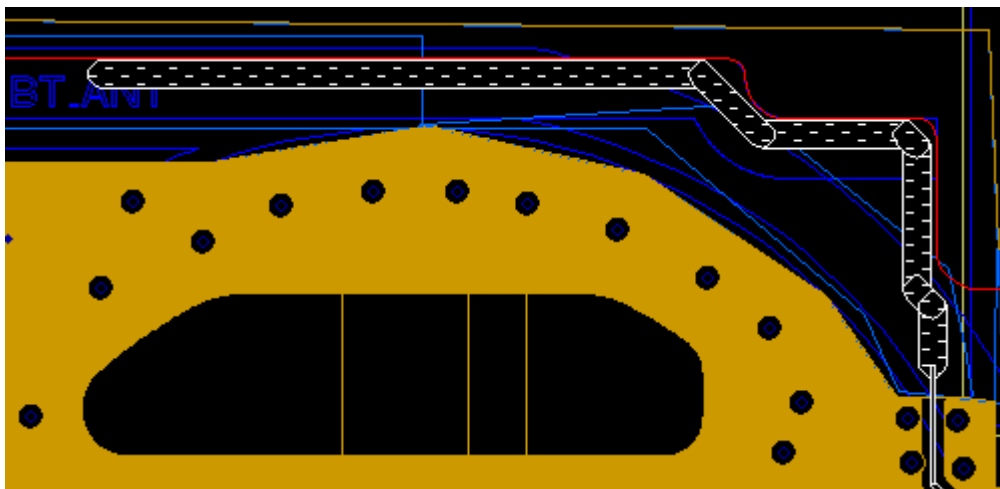
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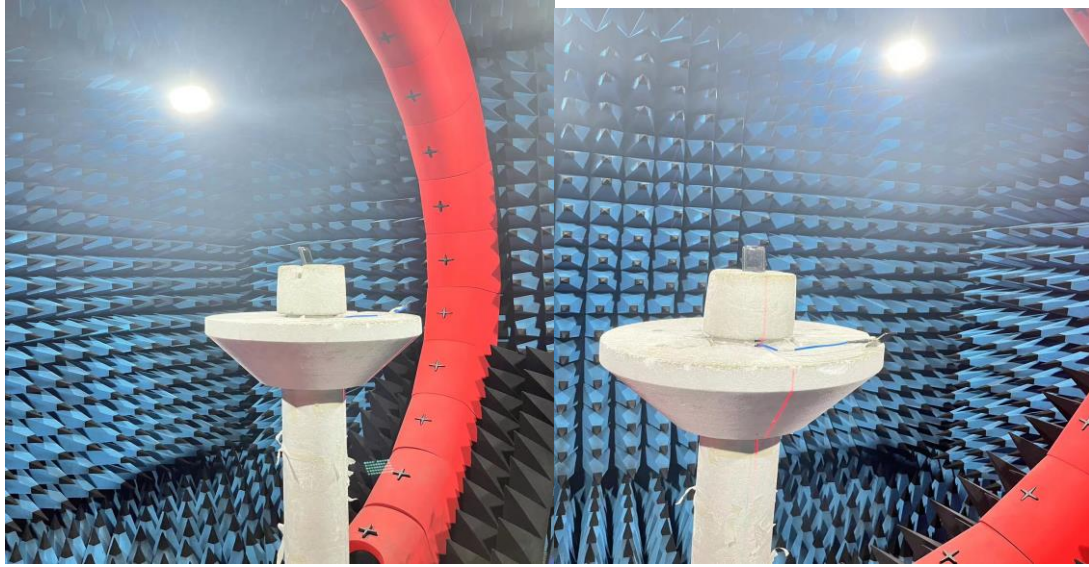
3-3 PCB BT Antenna Dimensions (mm)



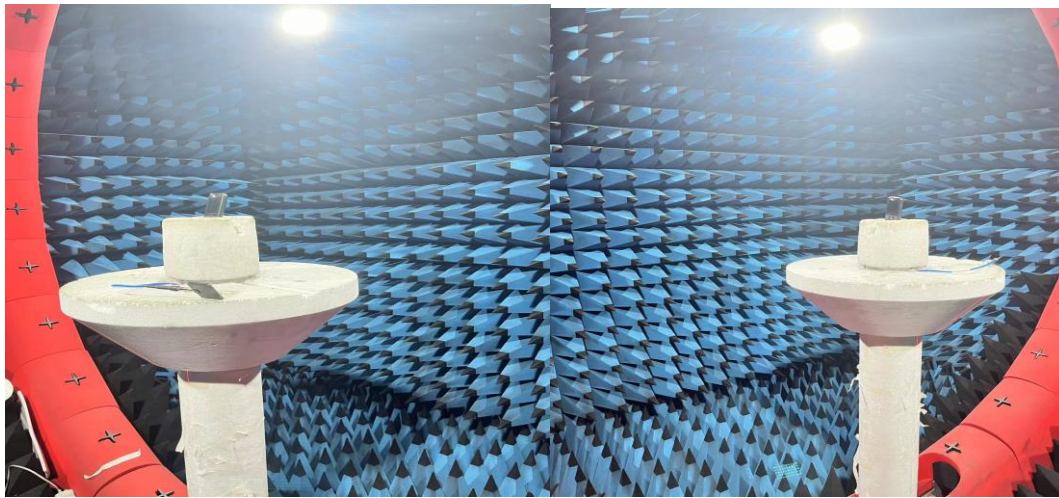
3-3 Testing Environment

Passive Test

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Active Test



4.3D Radiation Pattern

- LTE B28

[703MHz]

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ANGLES=± HOLEDIA=±

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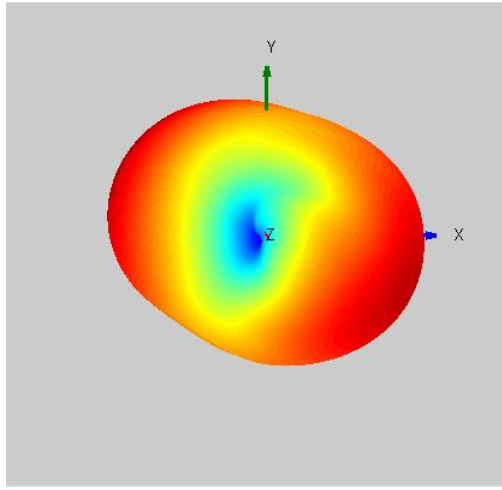
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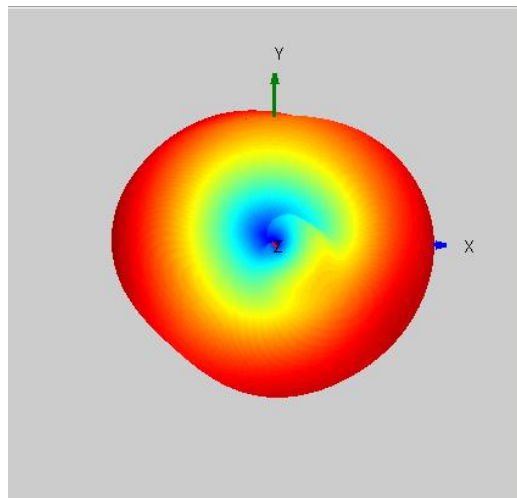
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[803MHz]



5.

- WCDMA B5 LTE B5/20

[791MHz]

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ANGLES=±

HOLEDIA=±

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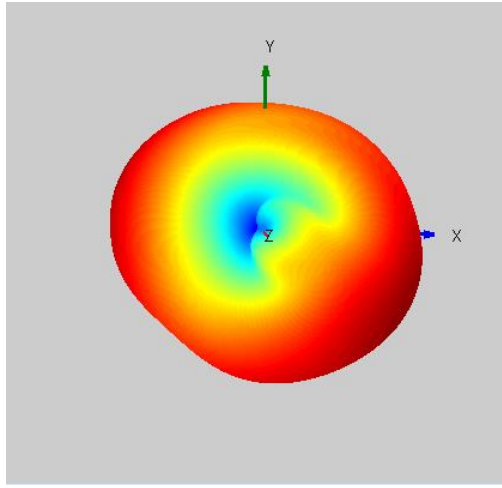
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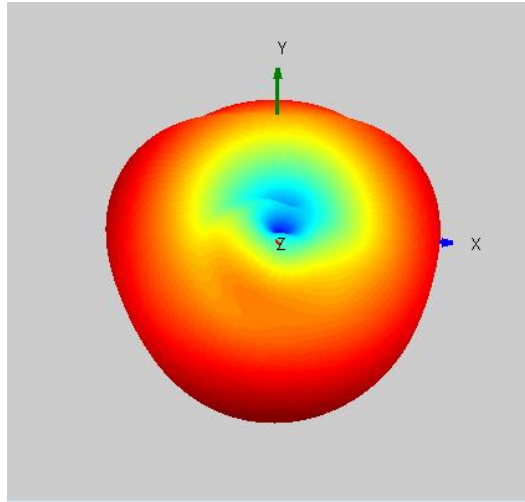
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[894MHz]



-GSM 900 WCDMA B8 LTE B8

[880MHz]

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HOLEDIA=±

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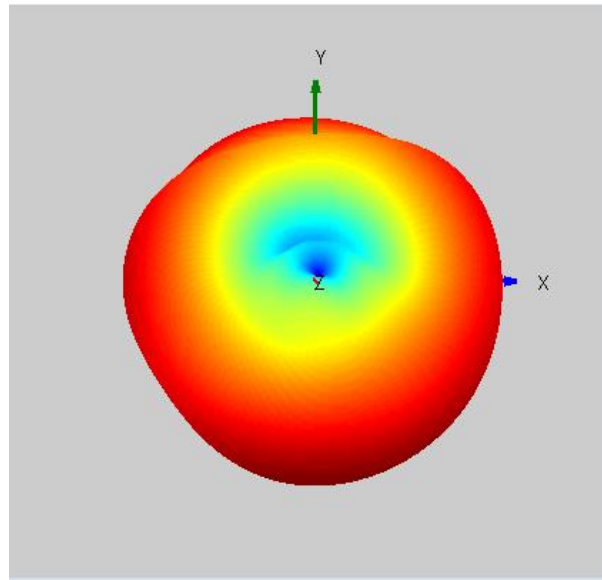
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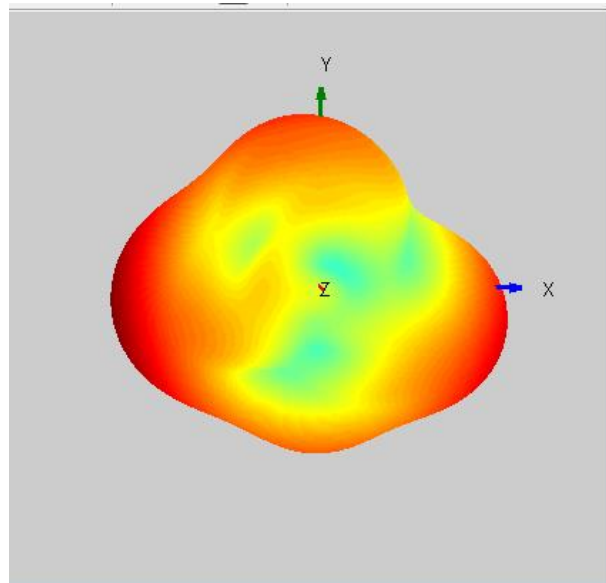
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[960MHz]



-GSM1800 LTE B3

[1710MHz]

UNLESS OTHER SPECIFIED TOLERANCES ON :

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ANGLES=±

HOLEDIA=±

SCALE :

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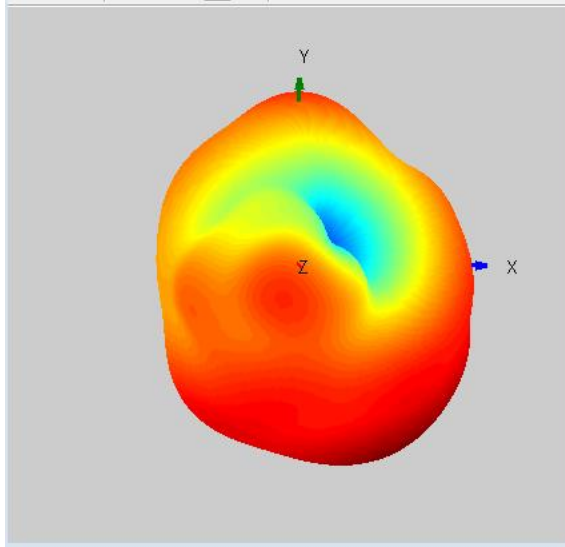
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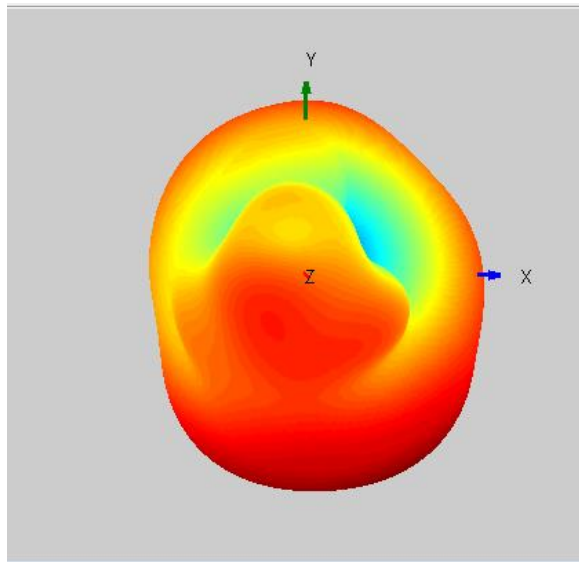
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[1880MHz]



-WCDMA B1 LTE B1

[1920MHz]

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ANGLES=± HOLEDIA=±

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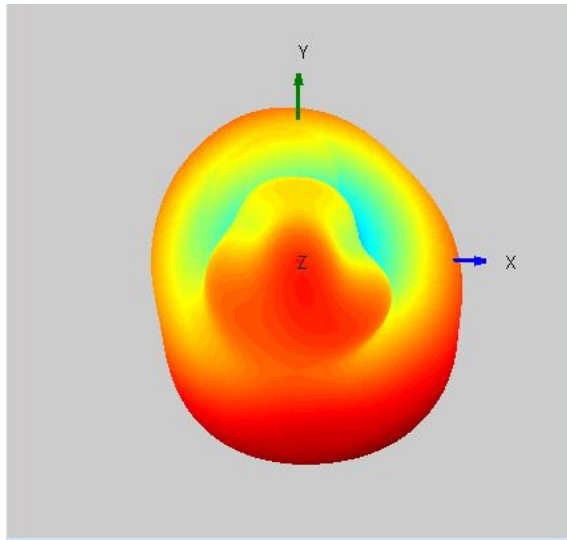
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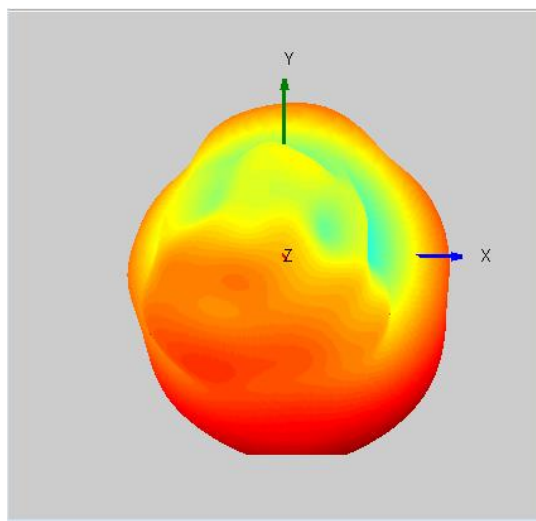
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[2170MHz]



- LTE B40

[2300MHz]

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ANGLES=±

HOLEDIA=±

SCALE :

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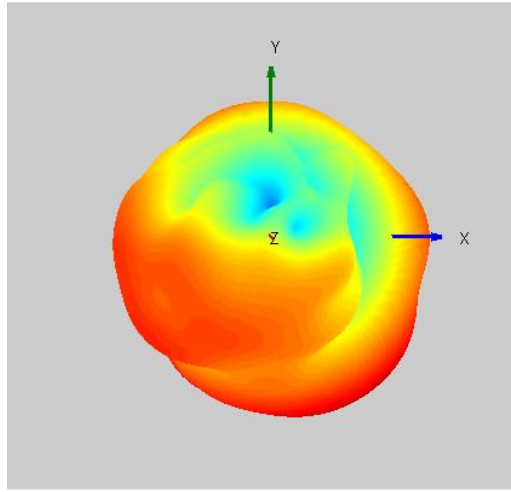
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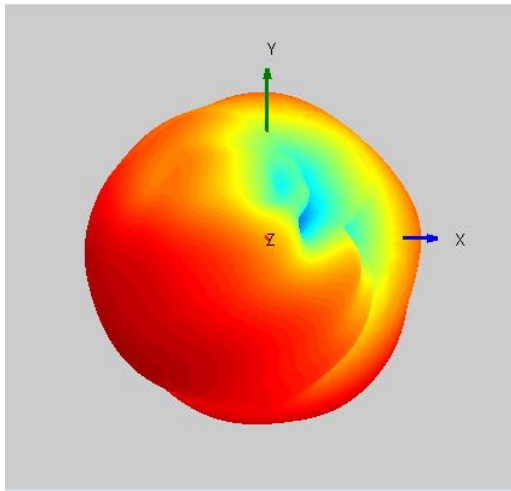
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[2400MHz]



- LTE B7/38/41

[2496MHz]

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=±

HOLEDIA=±

SCALE :

UNIT : mm

DRAWN BY : 黄土勇

CHECKED BY : 肖坤雄

DESIGNED BY : 徐俊

APPROVED BY : 王伟

TITLE : KX-GX1961-LTE-FSpecification



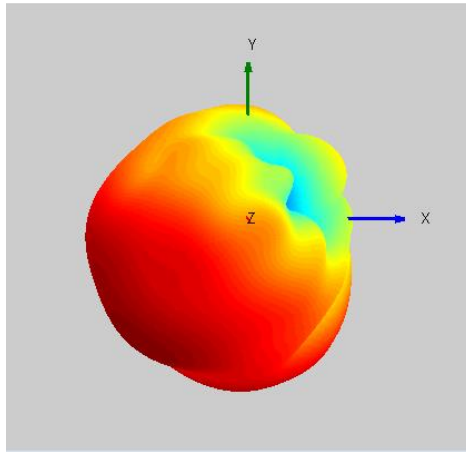
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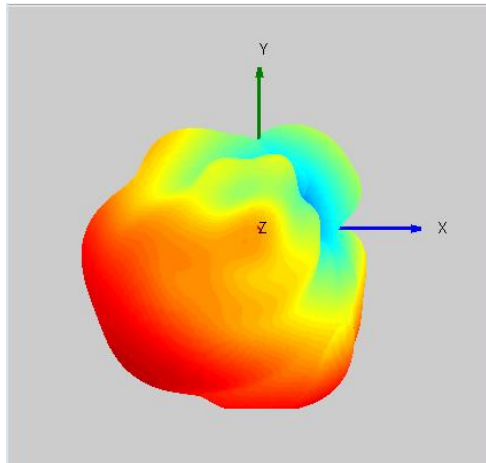
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[2690MHz]



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

SCALE : UNIT : mm

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