

KH-GX1961-GSM-F Specification

1. Explanation of part number :

KH - GX1961 - GSM - 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=±

SCALE :

UNIT : mm

DRAWN BY : 黄土勇

CHECKED BY : 肖坤雄

DESIGNED BY : 徐俊

APPROVED BY : 王伟

TITLE : KH-GX1961-GSM-FSpecification



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SHENZHEN CITY KEXIN HUACHENG COMMUNICATION TECHNOLOGY CO.,LTD

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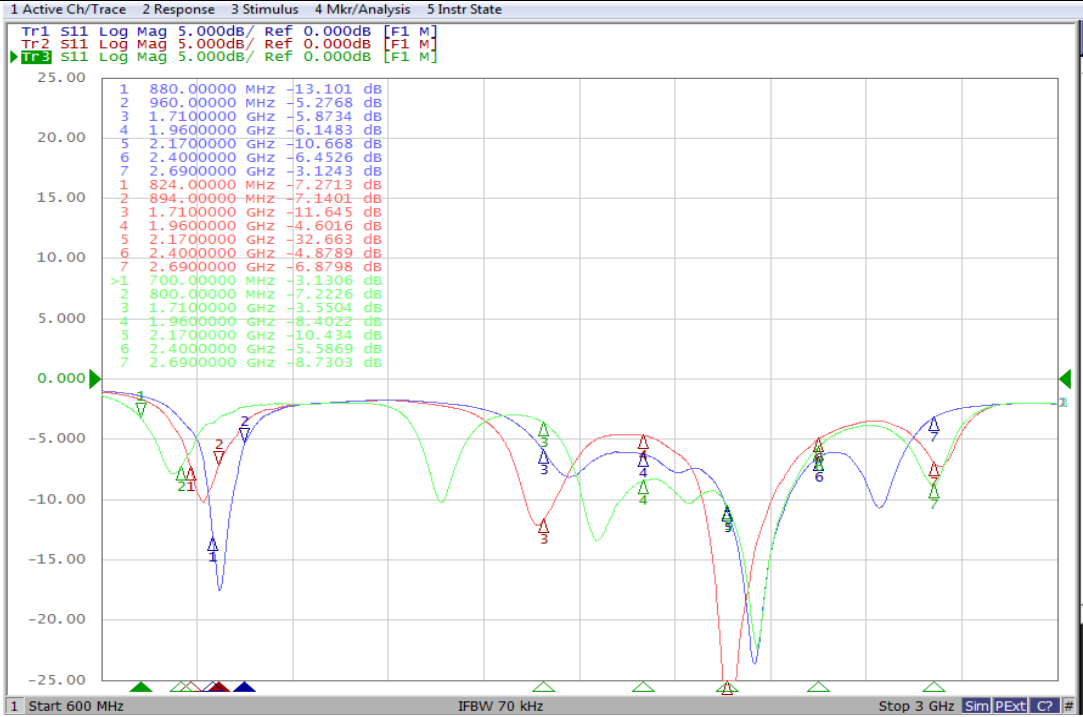
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Frequency Band	700	960	1710	2170	2400	2690
2-3-1. Typical Value:	-3.1	-5.2	-5.8	-10.6	-4.8	-18.7

2-3-2 Measuring Method

1. A 50Ω 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.

2-3-3 Picture



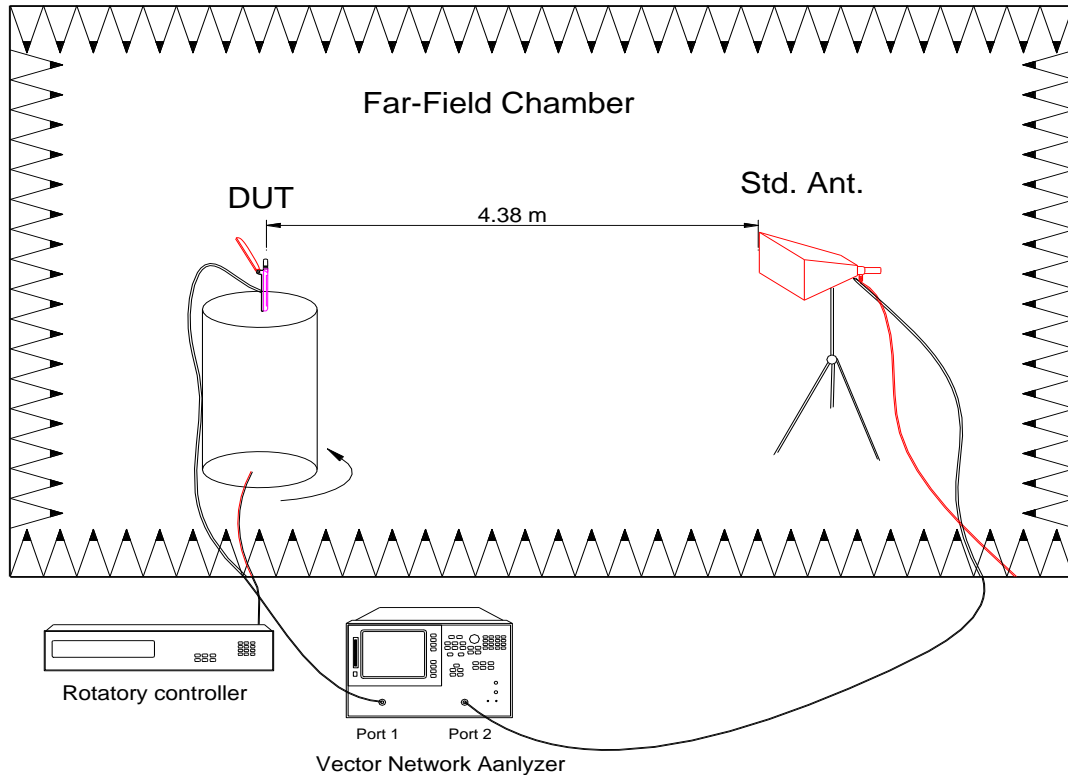
2-4. Measure and Chamber

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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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ANGLES=± HOLEDIA=±

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2-4-3 Antenna Efficiency

Frequency (MHz)	Peak Gain (dB)	Average Gain (dB)	Efficiency (%)
700	-6.41	-11.04	0.08
710	-7.43	-10.55	0.09
720	-6.37	-9.73	0.11
730	-5.22	-8.54	0.14
740	-4.52	-7.65	0.17
750	-3.93	-6.87	0.21
760	-3.29	-6.26	0.24
770	-2.81	-5.92	0.26
780	-2.43	-5.70	0.27
790	-2.15	-5.47	0.28
800	-2.01	-5.33	0.29
820	-1.38	-5.35	0.29
830	-1.30	-4.79	0.33
840	-0.78	-4.24	0.38
850	-0.49	-3.83	0.41
860	-0.29	-3.71	0.43
870	-0.24	-3.64	0.43
880	-0.28	-3.54	0.44
890	-0.48	-3.69	0.43
900	-0.64	-3.90	0.41
880	-0.39	-3.62	0.43
890	-0.09	-3.21	0.48
900	0.40	-2.82	0.52
910	0.74	-2.51	0.56
920	0.71	-2.45	0.57
930	0.56	-2.69	0.54
940	0.38	-2.86	0.52
950	0.10	-3.15	0.48
960	-0.20	-3.69	0.43
1710	-1.44	-5.59	0.28
1720	-1.50	-5.53	0.28
1730	-0.95	-5.22	0.30
1740	-0.62	-5.12	0.31

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ANGLES=±

HOLEDIA=±



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1750	-0.71	-5.08	0.31
1760	-0.47	-4.76	0.33
1770	0.04	-4.41	0.36
1780	-0.18	-4.45	0.36
1790	-0.27	-4.43	0.36
1800	0.34	-4.16	0.38
1810	0.32	-4.29	0.37
1820	-0.06	-4.49	0.36
1830	0.20	-4.36	0.37
1840	0.16	-4.35	0.37
1850	-0.16	-3.74	0.42
1860	0.07	-3.45	0.45
1870	0.45	-3.24	0.47
1880	0.17	-3.35	0.46
1890	0.06	-3.36	0.46
1900	0.17	-3.25	0.47
1910	0.02	-3.39	0.46
1920	-0.12	-3.51	0.45
1930	-0.15	-3.51	0.45
1940	-0.13	-3.54	0.44
1950	-0.24	-3.65	0.43
1960	-0.30	-3.73	0.42
1970	-0.32	-3.82	0.41
1980	-0.38	-3.89	0.41
1990	-0.33	-4.06	0.39
2000	-0.20	-4.12	0.39
2010	-0.22	-4.01	0.40
2020	-0.13	-4.00	0.40
2030	0.11	-4.05	0.39
2040	0.26	-3.94	0.40
2050	0.28	-4.02	0.40
2060	0.40	-4.14	0.39
2070	0.40	-3.99	0.40
2080	0.23	-3.98	0.40
2090	0.30	-4.09	0.39
2100	0.40	-4.06	0.39
2110	0.66	-3.99	0.40
2120	0.96	-4.06	0.39
2130	1.29	-3.92	0.41
2140	1.52	-3.63	0.43

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ANGLES=±

HOLEDIA=±



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2150	1.61	-3.48	0.45
2160	1.75	-3.32	0.47
2170	1.72	-3.07	0.49
2300	0.92	-2.99	0.50
2310	0.61	-3.24	0.47
2320	0.61	-3.22	0.48
2330	0.45	-3.45	0.45
2340	0.02	-3.83	0.41
2350	0.07	-3.82	0.42
2360	0.08	-3.90	0.41
2370	-0.21	-4.22	0.38
2380	-0.22	-4.14	0.39
2390	0.11	-4.03	0.40
2400	-0.51	-4.40	0.36
2410	-0.11	-4.45	0.36
2410	-0.11	-4.45	0.36
2420	0.67	-4.24	0.38
2430	0.35	-4.41	0.36
2440	0.26	-4.50	0.35
2450	0.78	-4.25	0.38
2460	0.57	-4.41	0.36
2470	0.32	-4.72	0.34
2480	0.80	-4.51	0.35
2490	0.75	-4.55	0.35
2500	0.47	-4.82	0.33
2510	-0.02	-5.22	0.30
2520	0.33	-5.15	0.31
2530	0.53	-5.09	0.31
2540	0.38	-5.29	0.30
2550	0.48	-5.32	0.29
2560	0.52	-5.19	0.30
2570	0.24	-5.36	0.29
2580	0.42	-5.31	0.29
2590	0.72	-5.08	0.31
2600	0.88	-5.11	0.31
2610	1.07	-5.18	0.30
2620	1.24	-4.99	0.32
2630	1.34	-4.84	0.33
2640	1.46	-4.72	0.34

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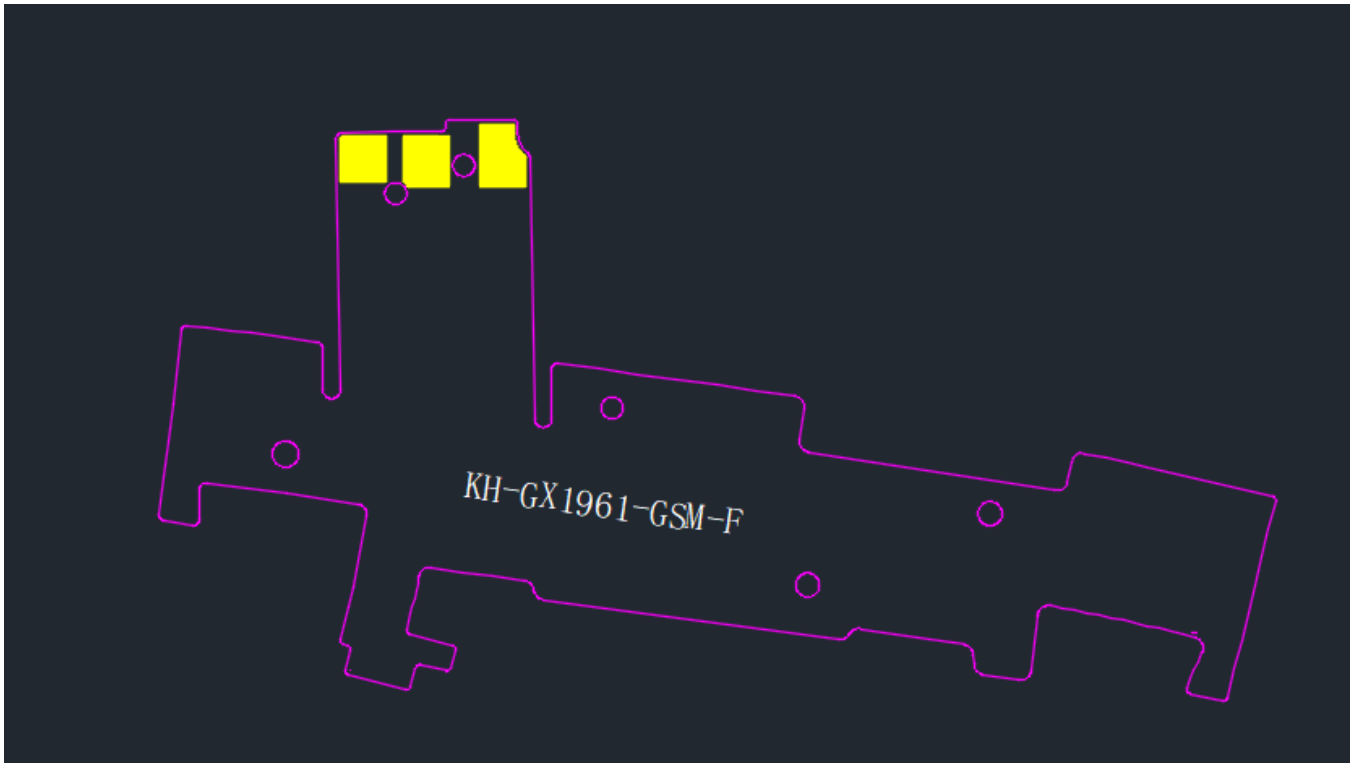
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2650	1.46	-4.52	0.35
2660	1.44	-4.43	0.36
2670	2.01	-4.17	0.38
2680	2.15	-3.97	0.40
2690	2.00	-3.86	0.41

3. Antenna Dimensions (mm) :



4. Testing Environment

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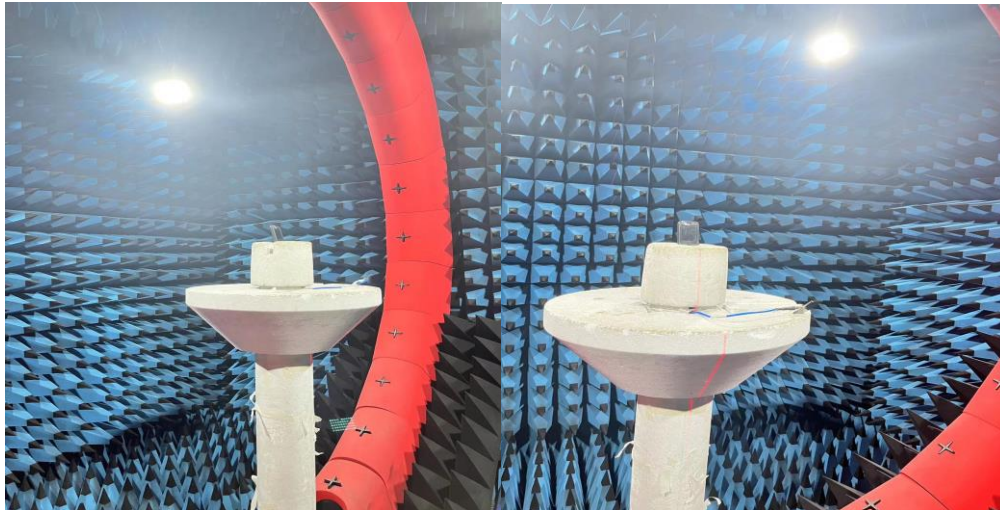


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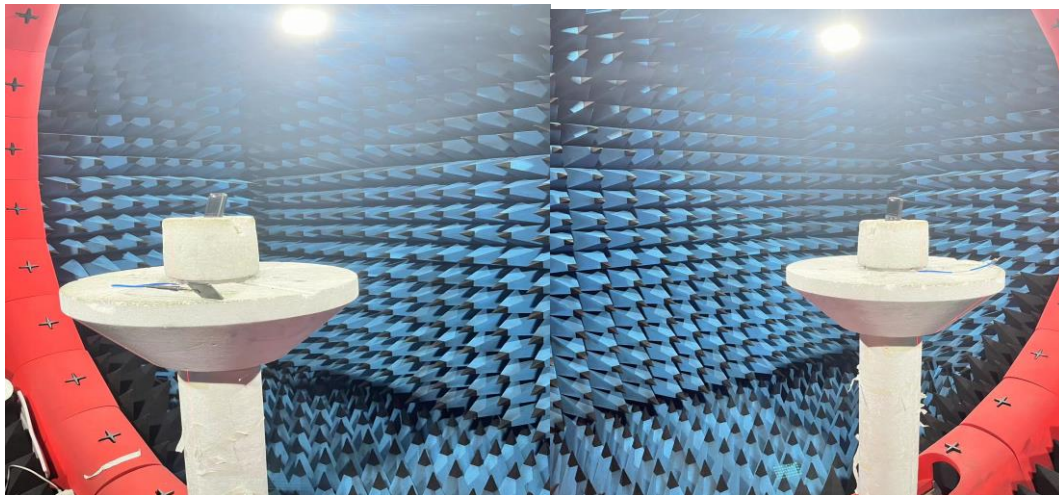
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Passive Test



Active Test

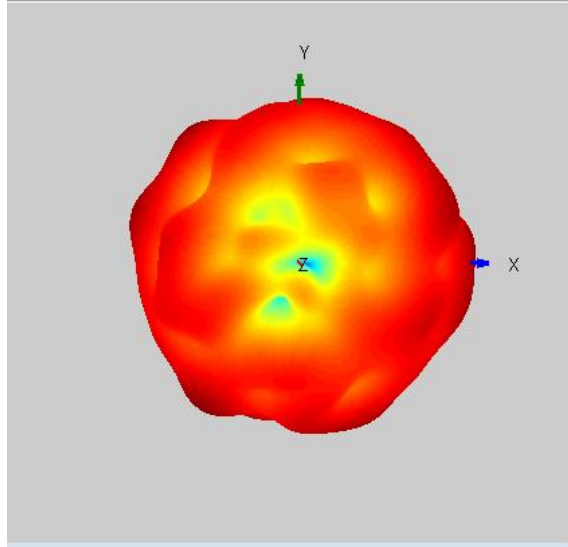


5. 3D Radiation Pattern

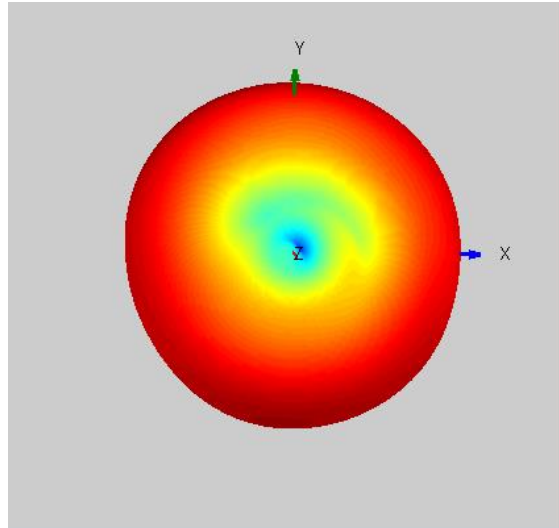
- LTE B28

[703MHz]

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[803MHz]



- WCDMA B5 LTE B5/20
[791MHz]

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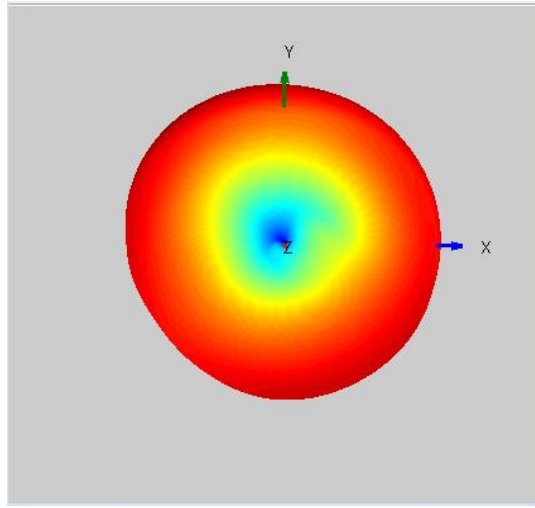
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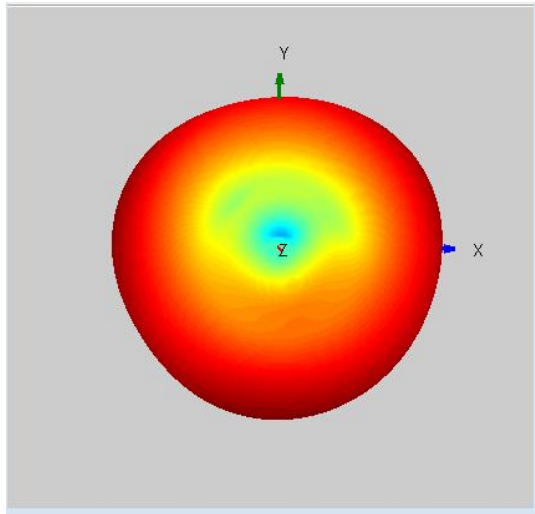
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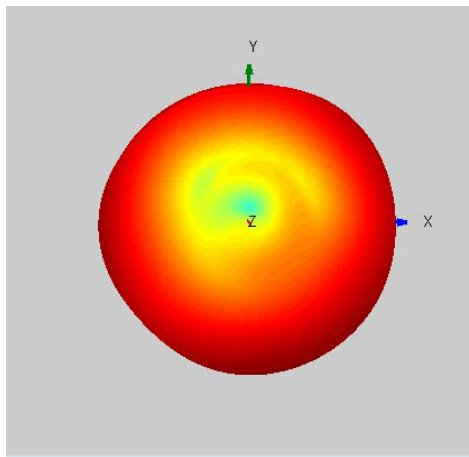


[894MHz]



-GSM 900 WCDMA B8 LTE B8

[880MHz]



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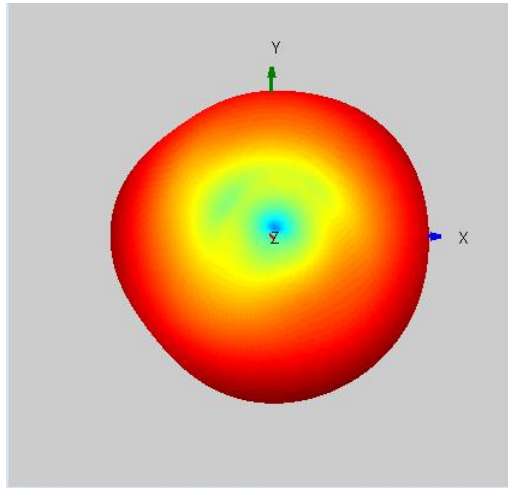
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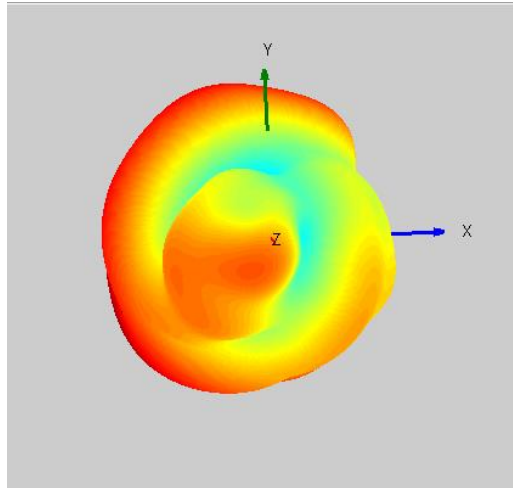
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[960MHz]



-GSM1800 LTE B3

[1710MHz]



[1880MHz]

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X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

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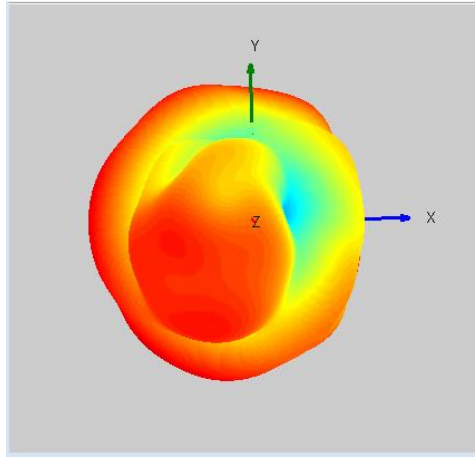
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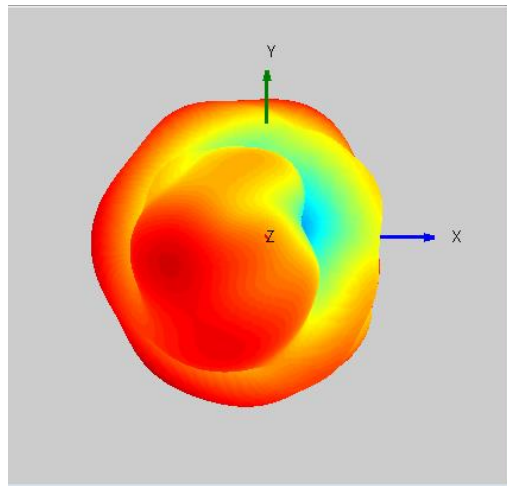
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-WCDMA B1 LTE B1

[1920MHz]



[2170MHz]

UNLESS OTHER SPECIFIED TOLERANCES ON :

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ANGLES=± HOLEDIA=±

SCALE : UNIT : mm

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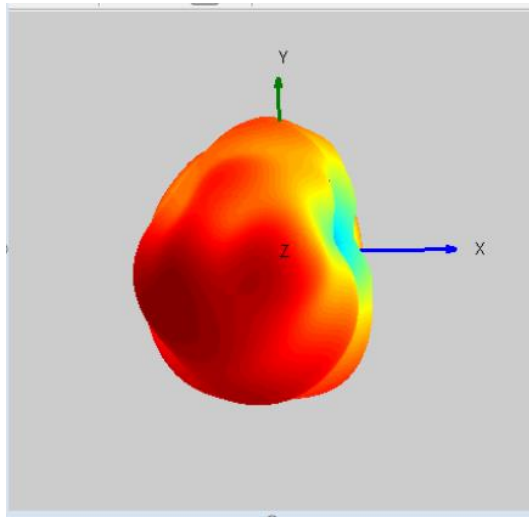
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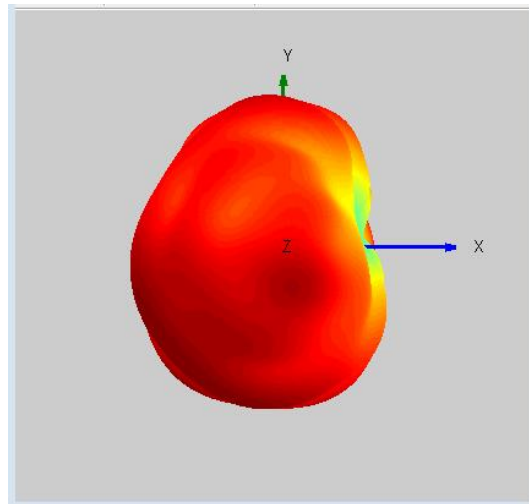
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- LTE B40

[2300MHz]



[2400MHz]

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

SCALE : UNIT : mm

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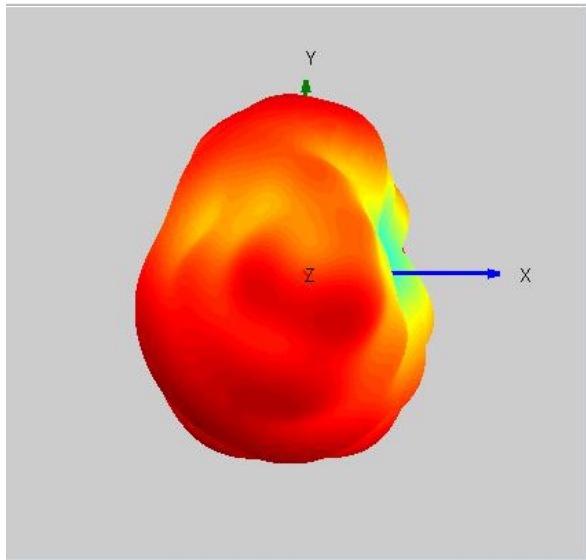
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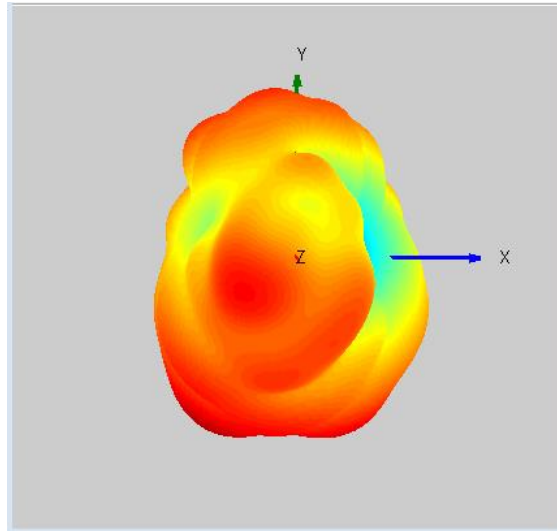
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- LTE B7/38/41

[2496MHz]



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X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

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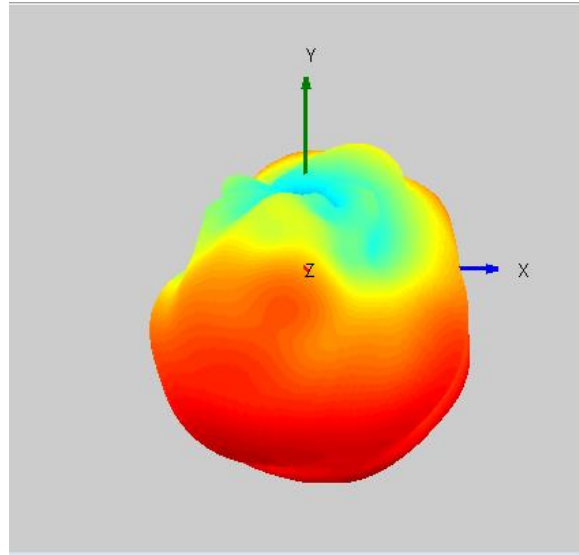
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[2690MHz]



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±2 X.X=±0.1 X.XX=±0.05

ANGLES=± HOLEDIA=±

SCALE : UNIT : mm

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TITLE : KH-GX1961-GSM-FSpecification



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