

Name : WAG-F-LTE12-00-090

History List

[illegible]

WAG-F-LTE12-00-090 Specification

1. Explanation of part number :

WAG - F - LTE12 - 00 - 090
(1) (2) (3) (4) (5)

(1) Product Type : Wireless Antenna

(2) Material : FPC

(3) Frequency : 700-960Mhz,1805-2690Mhz

(4) Coaxial Cable Type : 00

(5) Suffix : 090

2. Electrical Specification :

2-1. Frequency Band:

Frequency Band	MHz
DIV	700-960Mhz,1805-2690Mhz

2-2. Impedance

50 ohm nominal

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± 2 X.X = ± 0.1 X.XX = ± 0.05

ANGLES = $\pm$ HOLEDIA = $\pm$

SCALE : UNIT : mm

DRAWN BY : 王婷 CHECKED BY : 张涛

DESIGNED BY : 余超 APPROVED BY : 徐克文

TITLE : WAG-F-LTE12-00-090 Specification



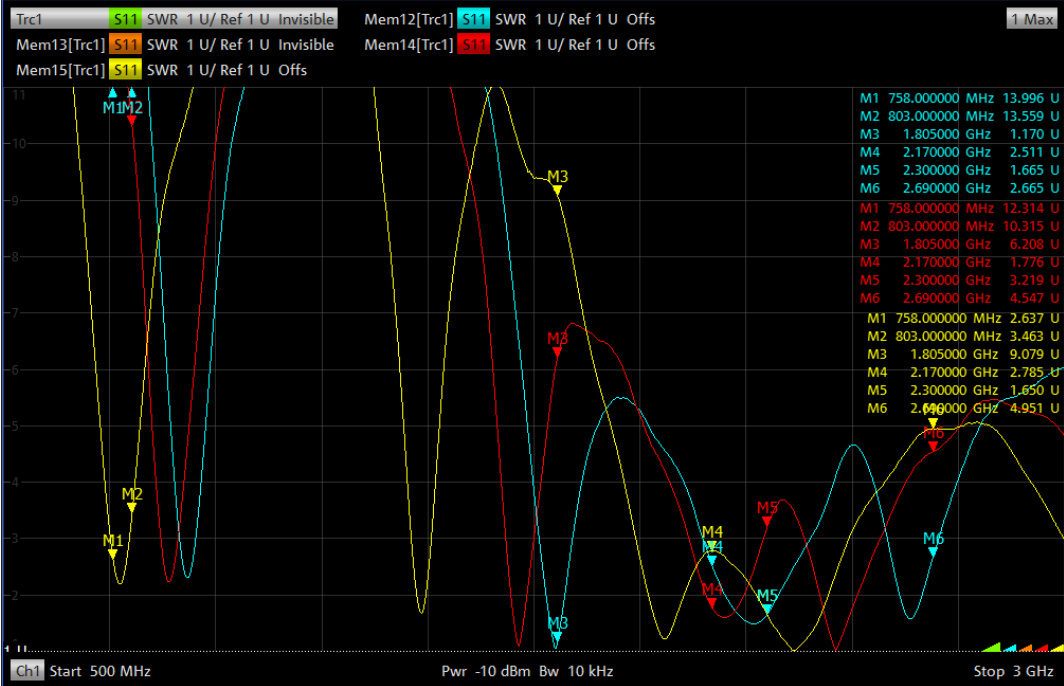
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2-3 VSWR:

Frequency Band	791	821	1805	2690
2-3-1. Typical Value:	≤ 5	≤ 5	≤ 5	≤ 5
2-3-2Measuring Method	1. A 50Ωcoaxial 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				

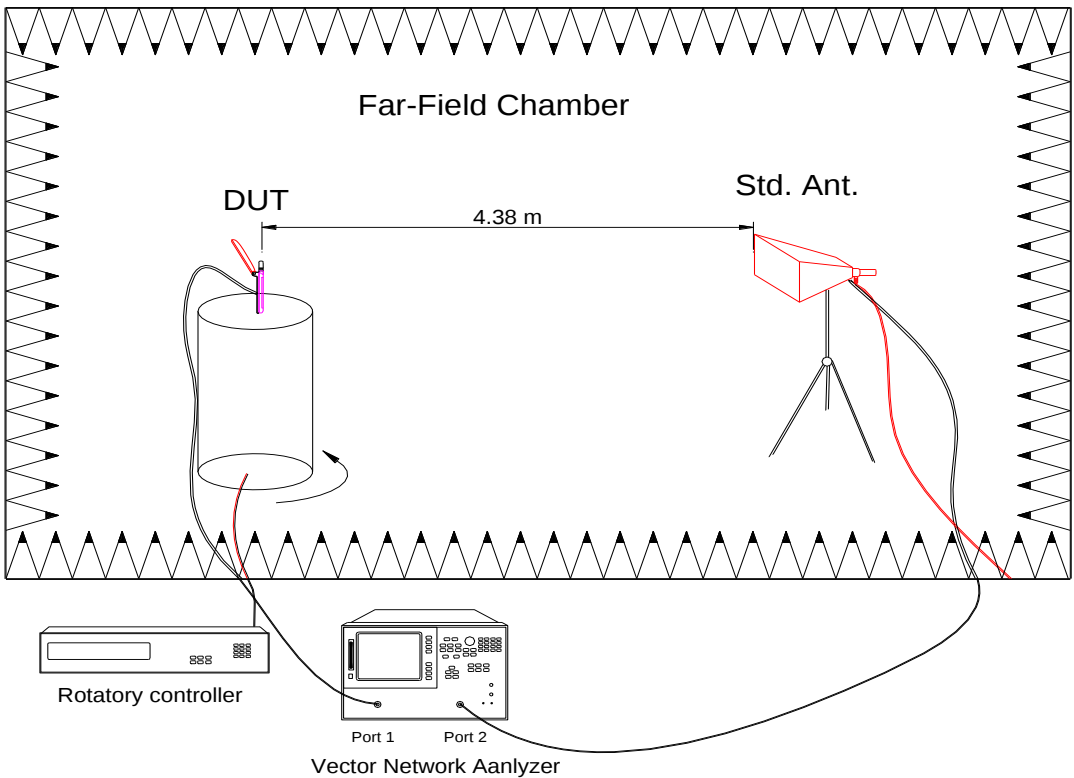
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2-4. Measure and Chamber

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 Efficiency

	RF1			RF2			RF3			RF4		
Frequency (MHz)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)
699	-18.34	1.47	-15.73	-17.58	1.75	-14.92	-16.02	2.50	-13.11	-17.13	1.93	-14.43
704	-18.07	1.56	-15.34	-17.28	1.87	-14.49	-15.83	2.61	-12.89	-16.87	2.05	-14.18
707	-18.00	1.58	-15.36	-17.25	1.88	-14.53	-16.08	2.46	-13.05	-16.87	2.06	-14.22
710	-17.85	1.64	-15.35	-17.08	1.96	-14.43	-16.00	2.51	-12.85	-16.69	2.14	-14.13
716	-17.72	1.69	-14.95	-16.96	2.02	-14.05	-16.28	2.36	-13.07	-16.58	2.20	-13.81
729	-17.27	1.88	-14.28	-16.51	2.24	-13.46	-15.78	2.64	-12.30	-16.11	2.45	-13.14
734	-17.07	1.96	-14.12	-16.34	2.32	-13.02	-15.41	2.88	-11.80	-15.94	2.54	-13.03
737	-16.99	2.00	-13.97	-16.27	2.36	-12.95	-15.06	3.12	-11.48	-15.85	2.60	-12.91
740	-16.81	2.08	-13.63	-16.11	2.45	-12.82	-14.68	3.41	-11.17	-15.67	2.71	-12.60
746	-17.04	1.98	-13.95	-16.37	2.30	-12.86	-14.56	3.50	-10.87	-15.93	2.55	-12.89
751	-16.85	2.07	-13.60	-16.20	2.40	-12.69	-14.00	3.98	-10.43	-15.72	2.68	-12.65
756	-16.73	2.12	-13.50	-16.17	2.42	-12.56	-13.93	4.05	-10.18	-15.70	2.69	-12.55
777	-16.50	2.24	-12.86	-16.21	2.39	-11.48	-13.03	4.98	-8.48	-15.72	2.68	-12.23
782	-16.52	2.23	-12.79	-16.36	2.31	-11.40	-13.29	4.68	-8.77	-15.92	2.56	-12.22
787	-16.45	2.27	-12.63	-16.28	2.35	-11.17	-13.16	4.83	-8.60	-15.87	2.59	-11.89
791	-16.08	2.47	-12.12	-15.95	2.54	-10.64	-12.88	5.15	-8.27	-15.58	2.77	-11.36
806	-16.08	2.47	-11.79	-15.47	2.84	-10.18	-13.51	4.46	-9.07	-15.35	2.91	-10.85
815	-16.14	2.43	-11.69	-14.96	3.19	-10.03	-13.68	4.29	-9.39	-14.84	3.28	-10.62
821	-16.19	2.40	-11.62	-14.63	3.45	-9.96	-14.15	3.85	-9.97	-14.46	3.58	-10.52
824	-16.19	2.40	-11.54	-14.34	3.68	-9.81	-13.84	4.13	-9.72	-14.09	3.90	-10.29
832	-16.27	2.36	-11.56	-13.91	4.06	-9.71	-14.32	3.70	-10.35	-13.57	4.39	-10.13
836	-16.08	2.46	-11.33	-13.59	4.38	-9.54	-15.13	3.07	-11.20	-13.23	4.76	-9.76
847	-15.51	2.81	-10.77	-13.05	4.95	-9.27	-15.92	2.56	-12.07	-12.74	5.32	-9.36
849	-15.50	2.82	-10.77	-13.04	4.96	-9.26	-16.01	2.51	-12.15	-12.70	5.37	-9.33
862	-14.64	3.43	-10.15	-12.79	5.26	-9.09	-16.96	2.01	-13.07	-12.52	5.59	-9.14
869	-14.22	3.78	-9.83	-12.63	5.46	-8.85	-17.58	1.75	-13.57	-12.38	5.78	-8.96
880	-13.46	4.51	-9.10	-12.32	5.86	-8.44	-18.68	1.36	-14.53	-12.20	6.03	-8.74
881	-13.38	4.59	-9.04	-12.26	5.95	-8.35	-18.84	1.31	-14.68	-12.15	6.09	-8.69
894	-13.01	5.01	-8.57	-12.59	5.50	-8.51	-20.20	0.95	-15.88	-12.76	5.29	-9.27
897	-13.05	4.96	-8.55	-12.52	5.60	-8.39	-20.25	0.94	-15.85	-12.64	5.45	-9.06
915	-12.31	5.87	-7.68	-12.41	5.75	-8.13	-22.01	0.63	-17.49	-12.87	5.16	-9.19
925	-11.94	6.40	-7.36	-12.54	5.57	-8.35	-22.79	0.53	-18.44	-13.21	4.77	-9.58

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942	-12.17	6.06	-7.75	-13.40	4.57	-9.41	-24.73	0.34	-20.77	-14.35	3.67	-10.81
960	-12.18	6.05	-7.86	-14.27	3.74	-10.42	-26.65	0.22	-22.65	-15.46	2.84	-11.77
980	-12.23	5.99	-7.38	-15.08	3.10	-10.74	-28.44	0.14	-23.66	-16.48	2.25	-12.52
1428	-23.76	0.42	-20.39	-21.32	0.74	-17.96	-11.06	7.84	-7.56	-19.90	1.02	-16.47
1448	-23.50	0.45	-20.12	-21.29	0.74	-17.91	-12.09	6.18	-8.62	-19.78	1.05	-16.29
1463	-22.14	0.61	-18.24	-20.04	0.99	-16.44	-13.01	5.00	-9.55	-18.49	1.41	-14.83
1476	-22.40	0.58	-18.30	-20.44	0.90	-16.59	-15.05	3.12	-11.69	-18.83	1.31	-14.92
1496	-21.34	0.73	-17.18	-19.55	1.11	-15.49	-18.38	1.45	-14.41	-17.94	1.61	-13.95
1500	-21.42	0.72	-17.25	-19.68	1.08	-15.59	-19.38	1.15	-15.39	-18.08	1.56	-13.97
1510	-20.74	0.84	-16.50	-19.13	1.22	-14.91	-21.25	0.75	-17.02	-17.56	1.75	-13.51
1510.9	-20.53	0.88	-16.24	-18.91	1.29	-14.67	-21.27	0.75	-17.01	-17.36	1.84	-13.26
1520	-20.11	0.98	-15.79	-18.54	1.40	-14.13	-22.94	0.51	-18.46	-17.01	1.99	-12.93
1530	-19.73	1.06	-15.36	-18.21	1.51	-13.85	-24.44	0.36	-20.27	-16.66	2.16	-12.49
1540	-19.91	1.02	-15.64	-18.41	1.44	-14.09	-26.02	0.25	-22.05	-16.87	2.06	-12.62
1550	-19.45	1.14	-14.96	-17.98	1.59	-13.48	-26.51	0.22	-22.26	-16.37	2.31	-12.08
1560	-18.83	1.31	-14.27	-17.38	1.83	-12.76	-26.18	0.24	-21.23	-15.75	2.66	-11.50
1570	-18.56	1.39	-13.98	-17.14	1.93	-12.46	-25.69	0.27	-20.36	-15.56	2.78	-11.26
1575	-18.40	1.45	-13.84	-16.99	2.00	-12.27	-25.45	0.29	-19.98	-15.40	2.89	-10.98
1580	-18.68	1.35	-14.12	-17.32	1.85	-12.62	-25.41	0.29	-19.86	-15.74	2.67	-11.31
1590	-18.73	1.34	-14.05	-17.42	1.81	-12.61	-25.14	0.31	-19.43	-15.76	2.66	-11.12
1600	-18.32	1.47	-13.49	-16.99	2.00	-12.05	-24.48	0.36	-18.45	-15.26	2.98	-10.53
1610	-17.61	1.73	-12.58	-16.30	2.34	-11.20	-23.57	0.44	-17.52	-14.49	3.56	-9.68
1620	-17.23	1.89	-12.24	-15.95	2.54	-10.80	-22.74	0.53	-16.65	-14.14	3.85	-9.09
1630	-17.59	1.74	-12.65	-16.35	2.32	-11.25	-22.69	0.54	-16.61	-14.46	3.58	-9.19
1640	-17.58	1.74	-12.66	-16.26	2.36	-11.15	-22.39	0.58	-16.41	-14.30	3.71	-9.01
1650	-17.19	1.91	-12.32	-15.80	2.63	-10.78	-21.80	0.66	-15.96	-13.90	4.08	-8.58
1690	-14.92	3.22	-9.94	-13.36	4.61	-8.32	-18.85	1.30	-13.55	-13.29	4.69	-7.82
1710	-14.87	3.26	-9.73	-13.45	4.52	-8.44	-18.27	1.49	-12.91	-15.05	3.13	-9.71
1732	-14.58	3.48	-9.17	-13.15	4.85	-8.10	-17.83	1.65	-12.24	-17.30	1.86	-11.92
1747	-14.12	3.87	-8.75	-12.92	5.10	-8.04	-17.23	1.89	-11.69	-18.23	1.50	-12.42
1755	-14.11	3.88	-8.83	-12.98	5.03	-8.06	-17.22	1.90	-11.71	-18.65	1.36	-12.62
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1842	-11.38	7.29	-7.28	-16.03	2.50	-11.58	-14.64	3.44	-9.28	-15.83	2.61	-10.50
1850	-10.97	7.99	-7.10	-15.98	2.52	-11.52	-14.22	3.79	-8.88	-15.38	2.90	-10.19
1880	-10.19	9.56	-5.65	-15.05	3.12	-10.56	-13.41	4.56	-8.20	-14.27	3.74	-9.41
1900	-9.59	11.00	-4.51	-14.49	3.55	-10.03	-12.65	5.43	-7.86	-13.60	4.37	-9.16
1910	-9.62	10.92	-4.28	-14.03	3.95	-9.62	-12.36	5.80	-7.80	-13.31	4.67	-8.99
1920	-9.36	11.59	-3.79	-13.71	4.26	-9.64	-12.31	5.87	-7.91	-13.15	4.84	-9.16
1930	-9.20	12.02	-3.42	-13.60	4.36	-10.02	-12.22	6.00	-7.91	-13.11	4.89	-9.50
1940	-8.83	13.09	-3.02	-12.98	5.03	-9.34	-11.48	7.11	-7.36	-12.56	5.54	-8.82
1950	-8.74	13.37	-3.04	-12.57	5.54	-8.91	-11.05	7.86	-7.14	-12.24	5.97	-8.66
1960	-8.87	12.97	-3.37	-12.38	5.78	-8.66	-10.84	8.25	-7.02	-12.14	6.12	-8.75

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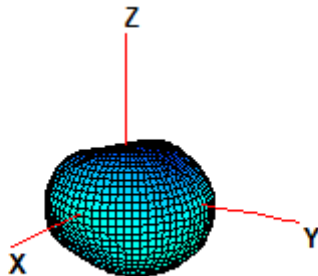
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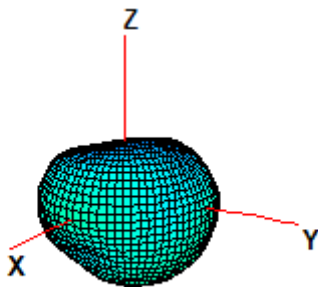
3. 3D Radiation Pattern

-LTE B12

[699MHz]



[746MHz]



- LTE B13

[746MHz]

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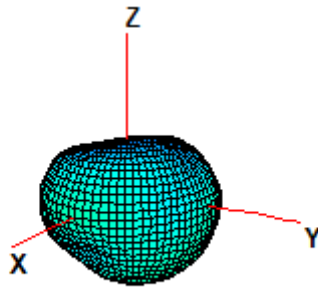
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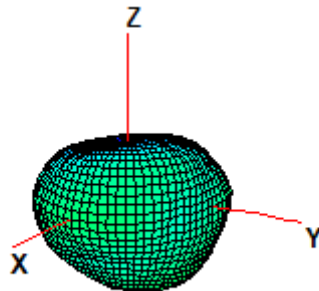
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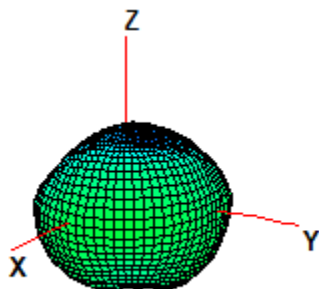


[787MHz]



- LTE B5, WCDMA B5

[869MHz]



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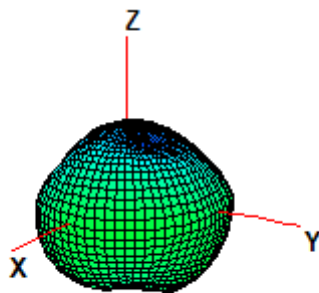
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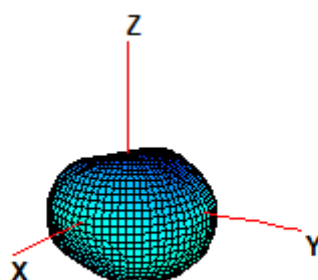
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[894MHz]

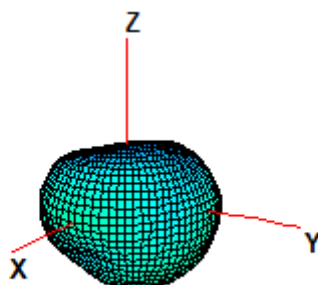


- LTE B17

[705MHz]



[746MHz]



- LTE B7

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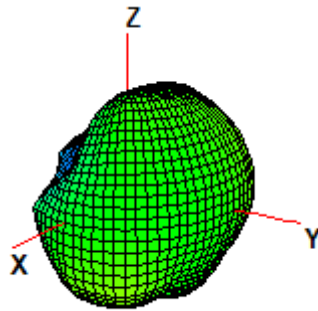
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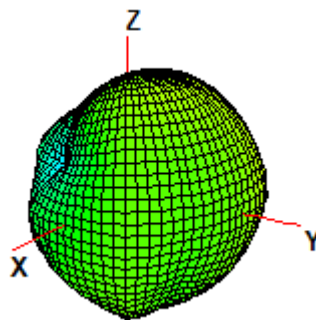
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P0

[2620MHz]

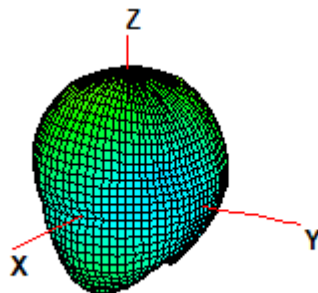


[2690MHz]



- LTE B2, WCDMA B2

[1930MHz]



UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± 2 X.X = ± 0.1 X.XX = ± 0.05

ANGLES = $\pm$

HOLEDIA = $\pm$

SCALE :

UNIT : mm

DRAWN BY : 王婷

CHECKED BY : 张涛

DESIGNED BY : 余超

APPROVED BY : 徐克文

TITLE : WAG-F-LTE12-00-090 Specification



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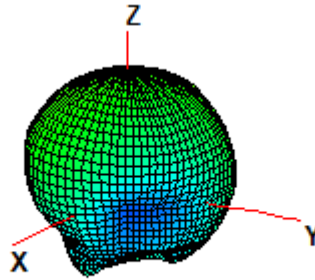
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DOCUMENT
NO.

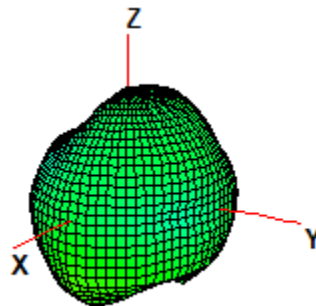
PAGE REV.
P0

[1990MHz]

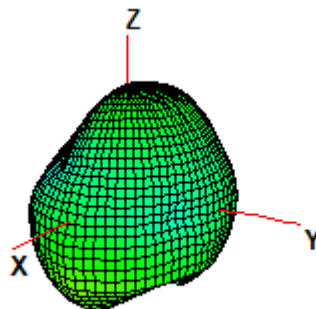


- LTE B4, WCDMA B4

[2110MHz]



[2155MHz]



UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± 2 X.X = ± 0.1 X.XX = ± 0.05

ANGLES = $\pm$

HOLEDIA = $\pm$

SCALE :

UNIT : mm

DRAWN BY : 王婷

CHECKED BY : 张涛

DESIGNED BY : 余超

APPROVED BY : 徐克文

TITLE : WAG-F-LTE12-00-090 Specification



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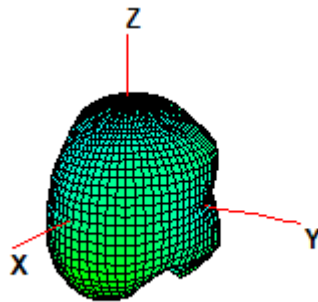
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DOCUMENT
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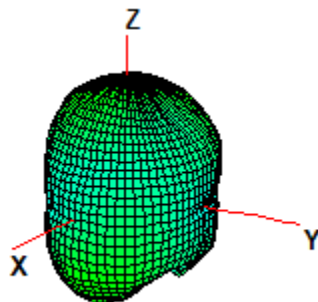
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- LTE B3

[1805MHz]

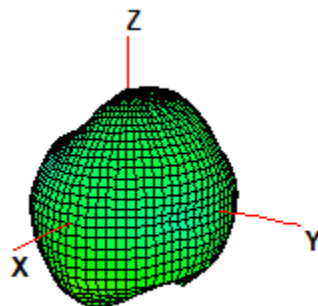


[1880MHz]



-LTE B1, WCDMA B1

[2110MHz]



UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± 2 X.X = ± 0.1 X.XX = ± 0.05

ANGLES = $\pm$

HOLEDIA = $\pm$

SCALE :

UNIT : mm

DRAWN BY : 王婷

CHECKED BY : 张涛

DESIGNED BY : 余超

APPROVED BY : 徐克文

TITLE : WAG-F-LTE12-00-090 Specification



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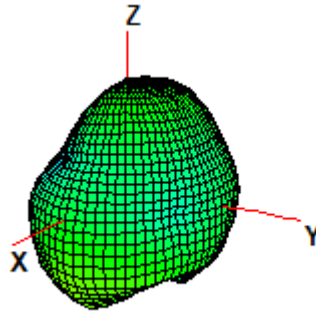
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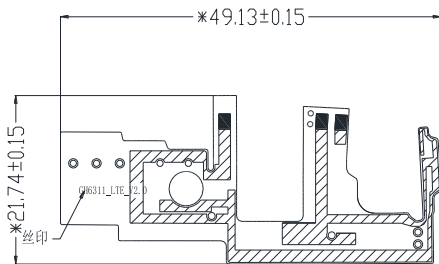
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P0

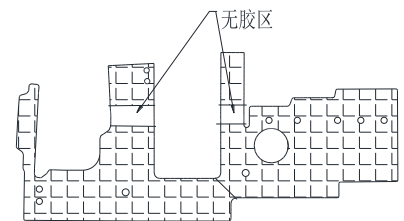
[2170MHz]



4. Antenna Dimensions:



正面



反面

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ±2 X.X = ±0.1 X.XX = ±0.05

ANGLES = ± HOLEDIA = ±

SCALE :

UNIT : mm

DRAWN BY : 王婷

CHECKED BY : 张涛

DESIGNED BY : 余超

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