

品名：WAG-F-LTE12-00-053 工规

History List

[illegible]

WAG-F-LTE12-00-053 Specification

1. Explanation of part number :

WAG – F – LTE12 – 00 – 053
(1) (2) (3) (4) (5)

(1) Product Type : Wireless Antenna

(2) Material : FPC

(3) Frequency : 791-960Mhz, 1805-2170, 2500-2690 Mhz

(4) Coaxial Cable Type : 00

(5) Suffix : 053

2. Electrical Specification :

2-1. Frequency Band:

Frequency Band	MHz
LTE	791-960Mhz, 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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INPAQ TECHNOLOGY CO., LTD.

SCALE:

UNIT: mm

DRAWN BY: 尹猛

CHECKED BY: 张涛

DESIGNED BY: 余超

APPROVED BY: 范东亚

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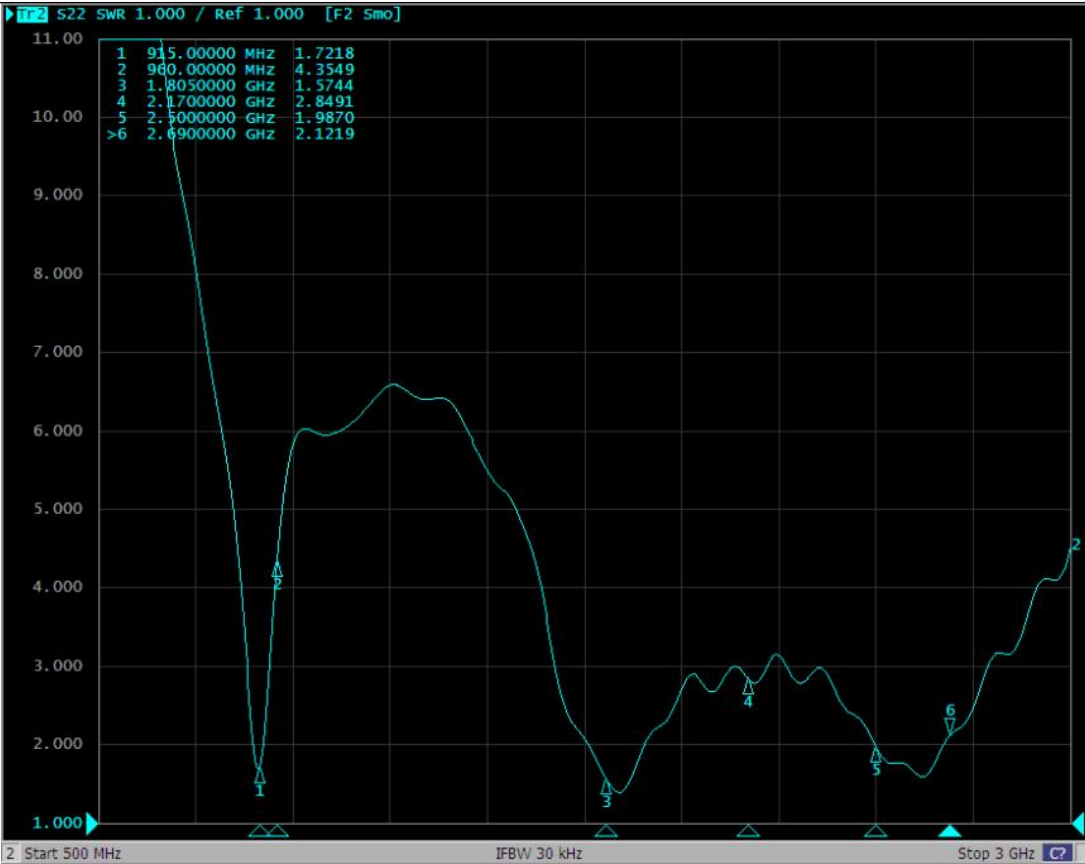
TITLE: WAG-F-LTE12-00-053 Specification

DOCUMENT
NO.

PAGE REV.
A0

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

2-3.1 VSWR:

Frequency Band	915	960	1805	2170	2500	2690
2-3-1. Typical Value:	≤ 2	≤ 5	≤ 2	≤ 3.5	≤ 2.5	≤ 3
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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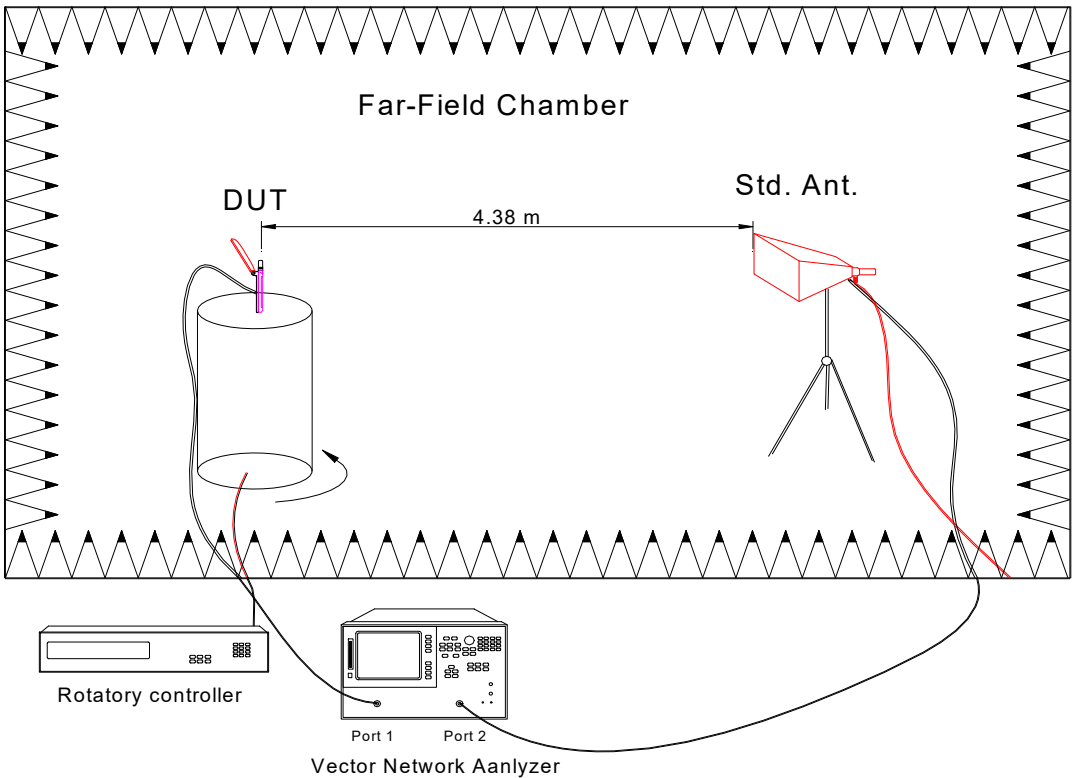
PAGE REV.
A0

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 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 (MHz)	Peak Gain (dB)	Average Gain (dB)	Efficiency (%)
915	-5.39	-11.46	7.15
925	-5.29	-10.45	9.02
942	-7.45	-11.15	7.67
960	-8.80	-12.35	5.82
1805	-2.00	-5.15	30.54
1842	-1.70	-4.68	34.05
1850	-1.97	-4.75	33.47
1880	-2.20	-4.72	33.73
1900	-2.49	-5.02	31.45
1910	-2.75	-5.29	29.61
1920	-2.88	-5.30	29.53
1930	-3.09	-5.39	28.92
1940	-3.00	-5.25	29.85
1950	-3.09	-5.46	28.47
1960	-3.24	-5.78	26.43
1980	-2.97	-5.79	26.37
1990	-3.24	-5.50	28.17
2010	-2.87	-5.49	28.23
2040	-3.30	-6.01	25.09
2070	-3.04	-6.03	24.94
2110	-3.68	-6.39	22.98
2132	-3.62	-6.51	22.32
2140	-3.64	-6.61	21.80
2155	-3.16	-6.59	21.91
2170	-2.68	-6.52	22.26

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PAGE REV.
A0

Frequency (MHz)	Peak Gain (dB)	Average Gain (dB)	Efficiency (%)
2300	-0.99	-5.20	30.23
2350	-0.20	-4.29	37.27
2400	0.13	-4.64	34.36
2500	0.95	-5.11	30.81
2535	1.51	-5.02	31.47
2570	0.57	-5.60	27.54
2593	0.37	-5.89	25.77
2595	0.43	-5.81	26.24
2620	0.08	-6.15	24.29
2655	-0.33	-6.45	22.65
2690	-0.99	-6.90	20.43

Frequency (MHz)	Peak Gain (dB)	Average Gain (dB)	Efficiency (%)
791	-6.94	-10.68	8.55
806	-6.69	-10.52	8.88
815	-6.38	-10.28	9.37
821	-6.25	-10.11	9.75
824	-5.96	-9.84	10.38
832	-5.80	-9.63	10.89
836	-5.72	-9.52	11.16
847	-5.58	-9.36	11.58
849	-5.53	-9.30	11.75
862	-5.30	-9.02	12.53
869	-5.17	-8.74	13.36
880	-5.69	-9.04	12.47
881	-6.19	-9.32	11.70
894	-6.58	-10.02	9.94

Frequency (MHz)	Peak Gain (dB)	Average Gain (dB)	Efficiency (%)
756	-7.02	-9.95	10.13
777	-6.75	-9.71	10.69
782	-6.12	-9.17	12.10
787	-6.33	-9.27	11.83
791	-6.40	-9.43	11.40
806	-6.47	-9.72	10.67

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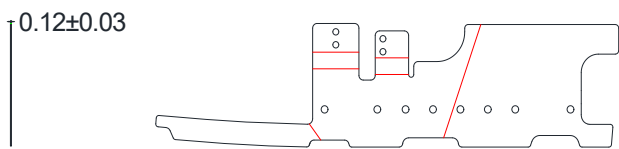
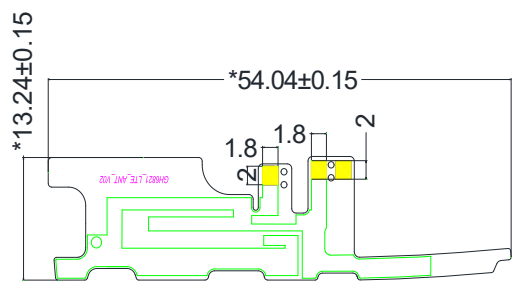
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PAGE REV.
A0

3. Antenna Dimensions:



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