品名： **WAG-P-LTE8-00-003 工规**

History List

版本 REV.	修訂者 EDITOR	修訂頁次 PAGE	修訂內容 ITEMS OF CHANGE	申請日期 DATE	生效日期 VALID DATE	ECN 编号 ECN NO
P0	张涛	ALL	正式发行	2018-07-24	2018-07-24	NA

WAG-P-LTE8-00-003 Specification

1. Explanation of part number :

WAG	_	P	_	LTE8	_	00	_	003
(1)		(2)		(3)		(4)		(5)

(1) Product Type：Wireless Antenna

(2) FPCB : PCB

(3) Frequency :GSM850/900/1800/1900,W850/900/1900/2100,

LTE B1/3/5/7/8/20/28/38/39/40/41

(4) Coaxial Cable Type : 00

(5) Suffix : 003

2. Electrical Specification :

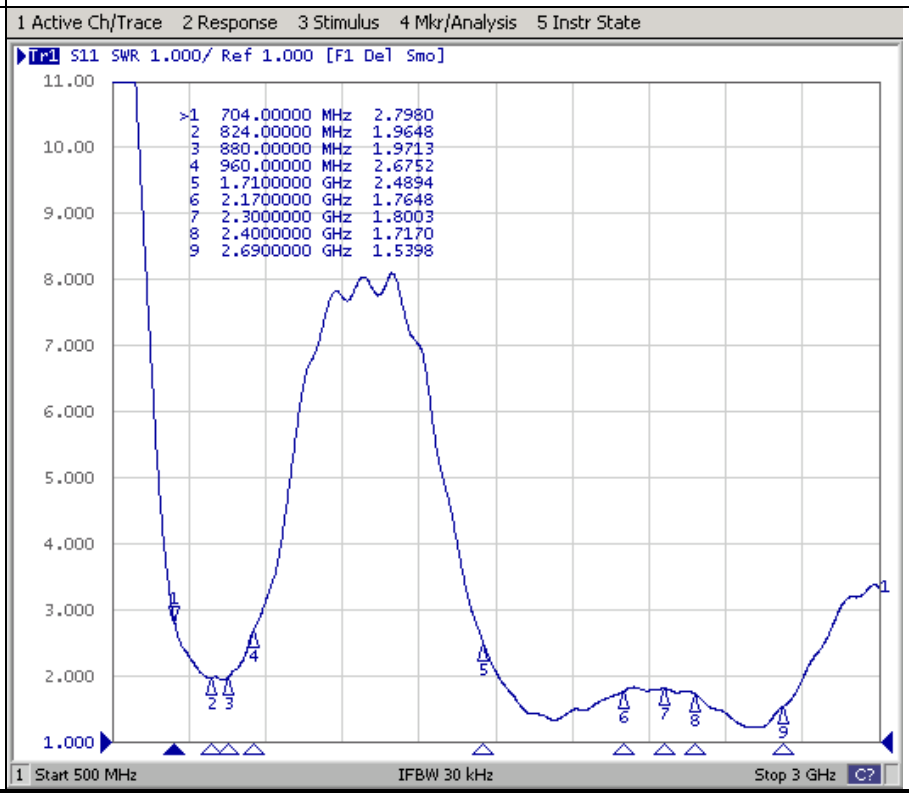
2-1. Frequency Band:

Frequency Band	MHz
GSM850/900/1800/1900 W850/900/1900/2100 LTE B1/3/5/7/8/20/28/38/39/40/41	703~ 960/1710~2690

2-2. Impedance

50 ohm nominal

2-3. VSWR:

Frequency Band	704	960	1710	2170	2690
2-3-1. Typical Value:	≦3.4	≦3.3	≦3.0	≦2.5	≦2.2
2-3-2Measuring Method	1. A 50Ω coaxial cable is connected to the PCB. 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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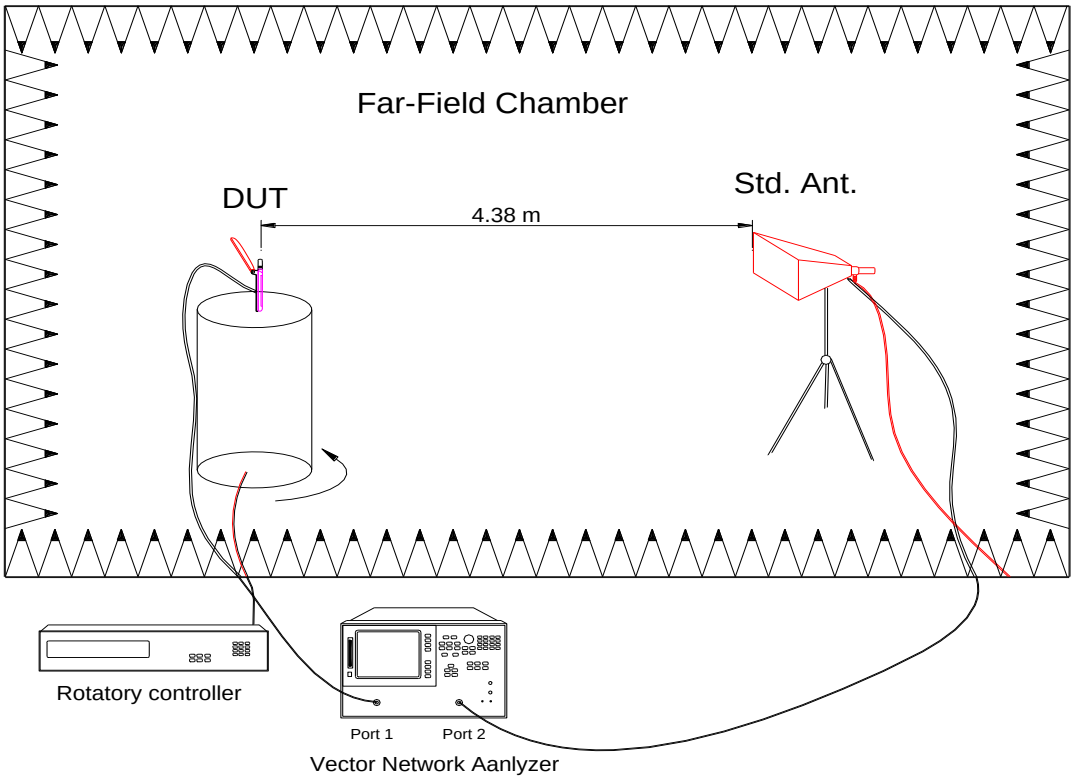
2-4. OTA Test Data

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

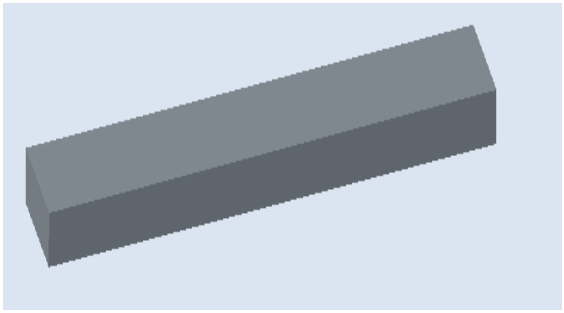


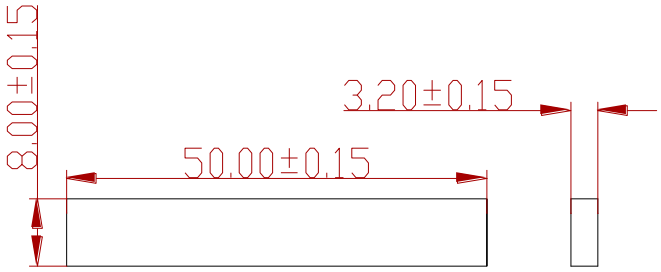
1. An anechoic chamber (8mx4mx3.5m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quite room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn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

2-4.3 OTA Passtive Test Data

Fre (MHz)	Gain (dBm)	Effi(%)
704	-2.90	51.24
716	-2.53	55.84
734	-2.16	60.80
751	-2.11	61.56
791	-1.97	63.48
806	-1.69	67.70
824	-1.92	64.33
847	-2.19	60.41
880	-2.58	55.16
894	-2.76	52.92
915	-3.03	49.72
960	-3.09	49.06
1710	-2.45	56.90
1805	-2.03	62.70
1850	-1.31	73.96
1880	-1.25	75.00
1900	-1.37	73.01
1920	-1.29	74.23
1990	-1.20	75.79
2010	-1.20	75.89
2110	-2.04	62.56
2170	-2.10	61.65
2300	-1.70	67.55
2400	-1.62	68.82
2496	-1.05	78.49
2500	-0.92	80.90
2570	-0.96	80.19
2595	-1.31	73.90
2620	-1.45	71.63
2690	-2.05	62.44

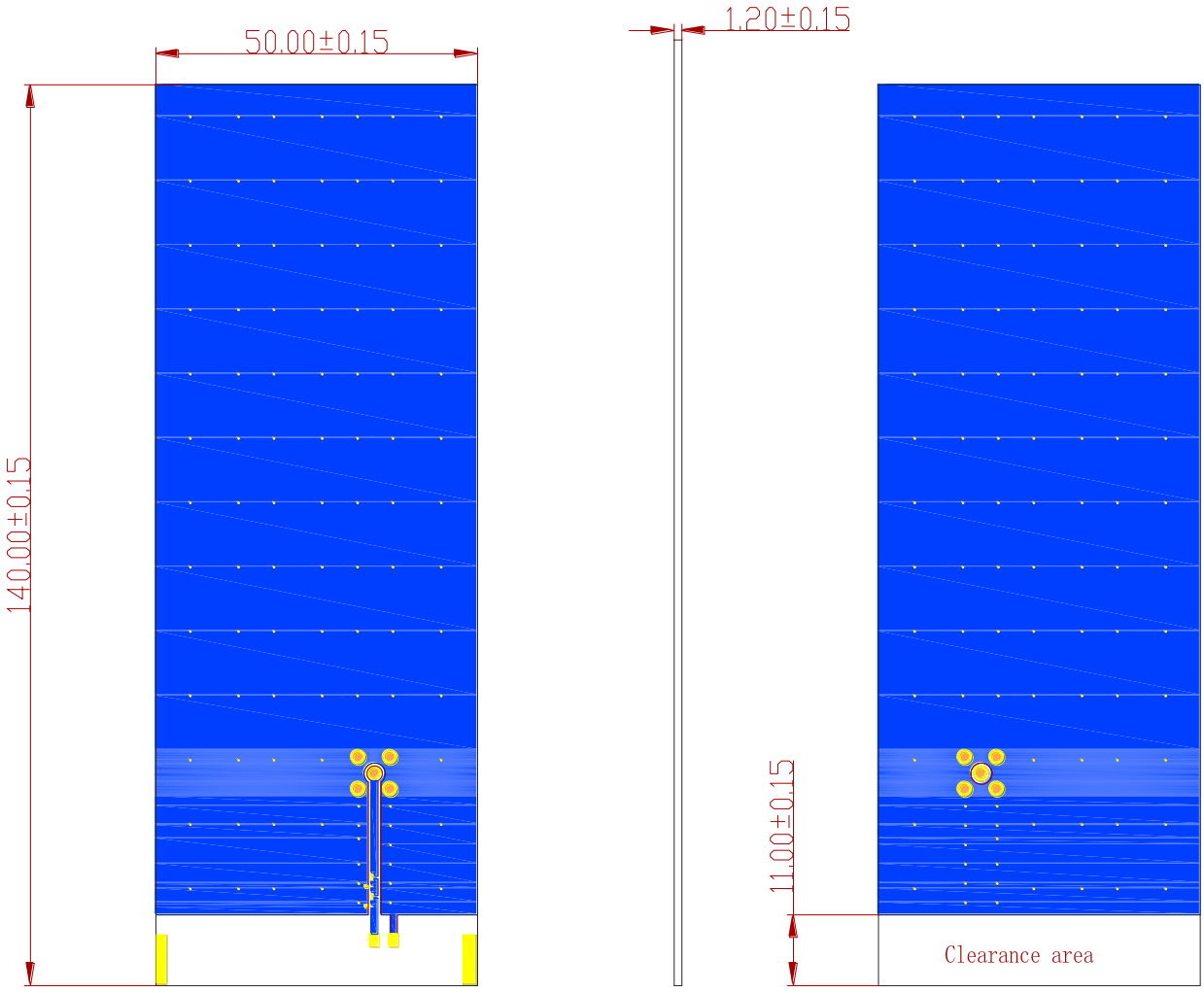
3.Antenna Dimensions:(unit:mm)





Antenna

4.PCB Layout:



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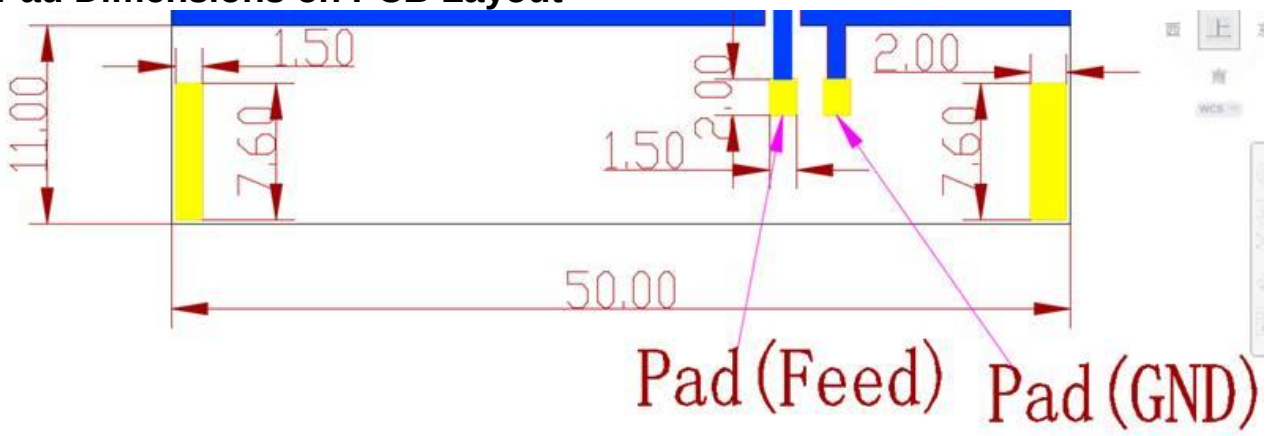
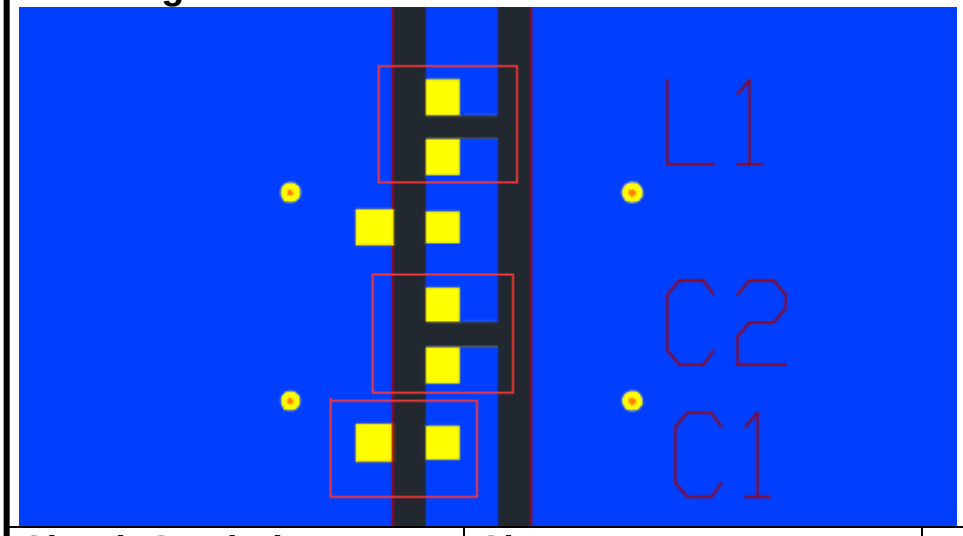
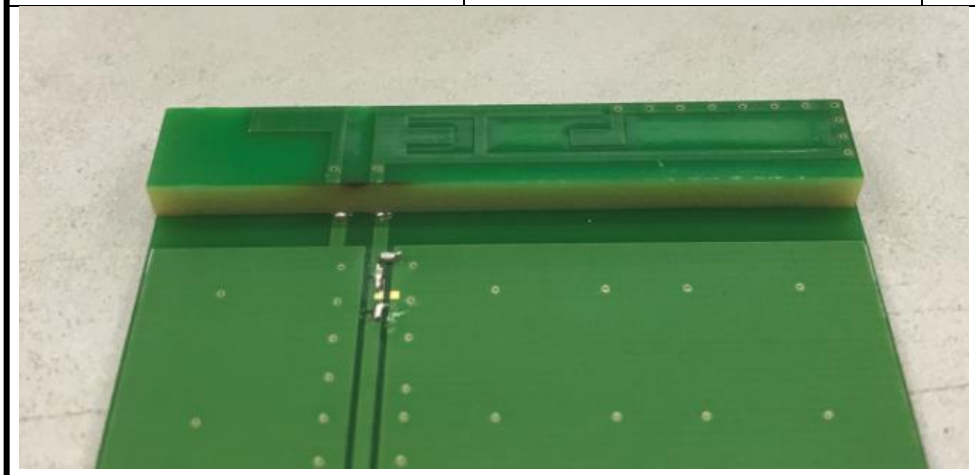
Pad Dimensions on PCB Layout



Matching Circuit on Demoboard



Circuit Symbol	Size	Description
C1	0402	0.5pF
C2	0402	2.0pF
L1	0402	0 Ω



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