品名： WAG-B1.01.L.0806 工規

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
A0	于超群	ALL	发行正式	2022/09/06	2022/09/06	N/A

WAG-B.01.L.0806 Specification

1. Explanation of part number :

WAG	_	B	_	01	_	L	_	0806
(1)		(2)		(3)		(4)		(5)

(1) Product Type：Wireless Antenna

(2) Material : FPC

(3) Frequency : 699-960Mhz, 1710-2170, 2500-2690 Mhz

(4) Coaxial Cable Type : 00

(5) Suffix : 088

2. Electrical Specification :

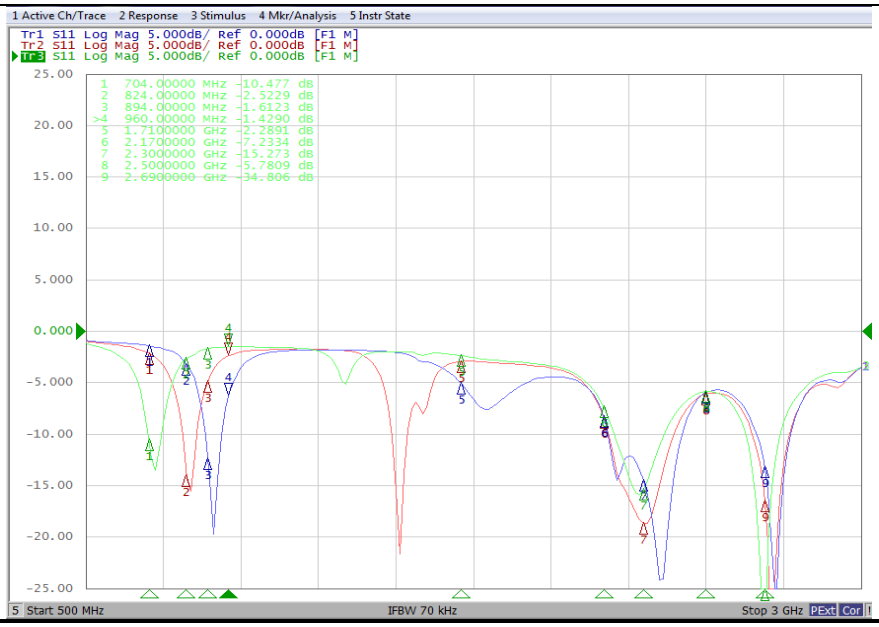
2-1. Frequency Band:

Frequency Band	MHz
GSM	**699-960Mhz, 1710-2170, 2500-2690 Mhz**

2-2. Impedance

50 ohm nominal

2-3 VSWR:

Frequency Band	704	960	1710	2170	2500	2690
2-3-1. Typical Value:	-10.4	-5.6	-5	-7.8	-5.9	-16.8
2-3-2Measuring 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.					
2-3-3Picture						

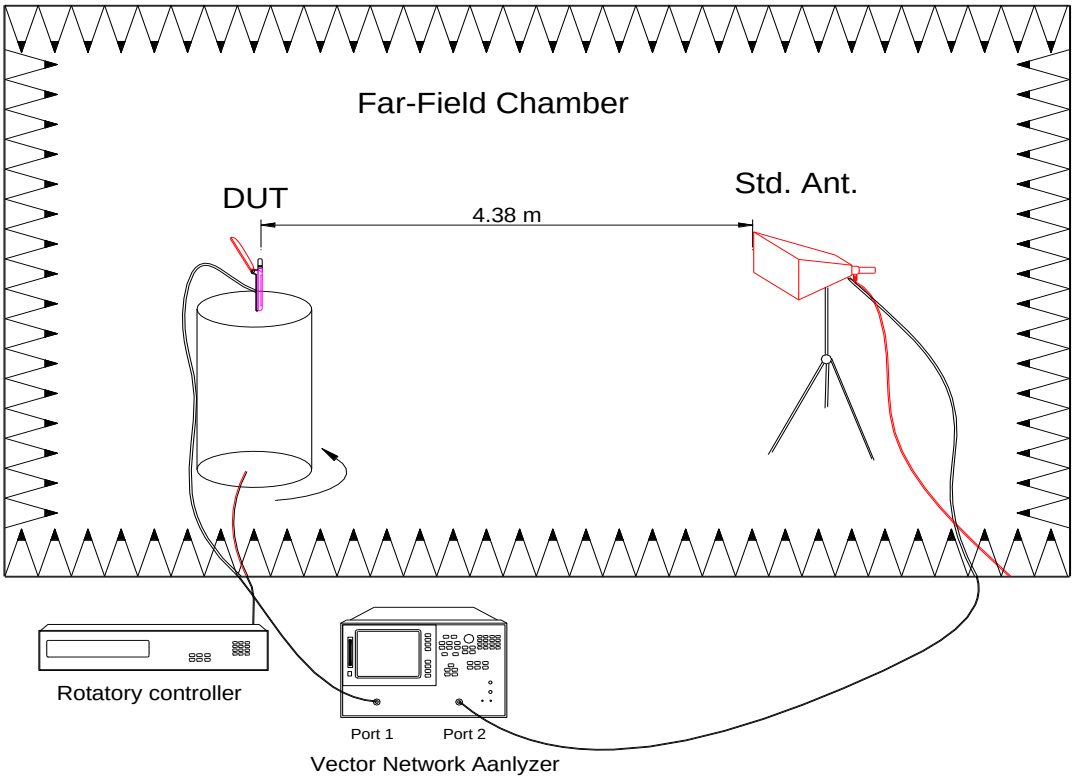
2-4. *Measure and Chamber*

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)

2-4-3 Antenna OTA

B1	19.25	
	19.01	
	19.2	-94.1
B2	19.1	
	18.93	
	18.41	-94.64
B3	19.71	
	19.65	
	20.27	-94.81
B4	19.51	
	19.49	
	19.58	-94.41
B5	17.53	
	18.62	
	17.53	-92.49
B7	18.73	
	18.93	
	19.27	-95.83
B8	17.81	
	18.29	
	18	-93.97
B12	17.85	
	18.73	
	17.9	-95.39
B13	18.8	
	18.89	
	18.3	-93.99
B17	18.65	
	18.45	
	18.08	-93.33
B26	17.66	
	17.54	
	16.67	-94.75
B28	18.62	
	19.42	
	18.03	-92.99
B38（10M）	18.7	
	19.83	
	19.49	-95.59

B40（10M）	18.47	
	18.97	
	18.16	-91.5

850	25.71	
	26.65	
	27.33	-102.14
900	25.79	
	27.14	
	27.6	-103.49
1800	25.86	
	26.29	
	26.73	-104.43
1900	26.85	
	27.33	
	26.8	-105.62
W1	19.56	
	19.06	
	19.47	-105.89
W2	20.49	
	20.47	
	19.75	-107.47
W4	20.09	
	20.07	
	20.17	-107.34
W5	17.48	
	17.98	
	17.15	-105.48
W8	17.15	
	17.88	
	17.82	-106.93

2-4- Antenna Efficiency

Frequency	Efficiency	Efficiency . dB	Gain . dBi
870000000	22%	-6.55	-3.71
880000000	22%	-6.53	-3.48
890000000	21%	-6.71	-3.56
900000000	20%	-6.99	-3.83
910000000	18%	-7.37	-3.53
920000000	16%	-7.85	-3.68
930000000	15%	-8.36	-3.91
940000000	13%	-8.80	-4.05
950000000	13%	-9.02	-4.19
960000000	13%	-9.02	-4.41
1800000000	14%	-8.50	-4.51
1810000000	14%	-8.64	-3.97
1820000000	14%	-8.68	-4.09
1830000000	13%	-8.74	-4.29
1840000000	14%	-8.64	-5.11
1850000000	14%	-8.64	-5.07
1860000000	14%	-8.67	-4.65
1870000000	13%	-8.76	-4.38
1880000000	13%	-8.87	-4.58
1890000000	13%	-8.82	-4.40
1900000000	13%	-8.78	-4.42
1910000000	14%	-8.68	-4.34
1920000000	13%	-8.82	-4.41
1930000000	13%	-8.96	-4.80
1940000000	12%	-9.13	-4.79
1950000000	12%	-9.25	-4.84
1960000000	11%	-9.63	-4.97
1970000000	10%	-9.96	-5.18
1980000000	9%	-10.33	-5.61
1990000000	9%	-10.51	-6.07
2000000000	9%	-10.56	-6.59
2010000000	9%	-10.51	-6.75
2020000000	9%	-10.25	-6.86
2030000000	10%	-10.05	-6.60
2040000000	10%	-9.95	-6.55
2050000000	10%	-9.82	-6.30

2060000000	11%	-9.57	-5.86
2070000000	12%	-9.33	-5.45
2080000000	12%	-9.27	-5.54
2090000000	12%	-9.27	-5.72
2100000000	12%	-9.22	-5.65
2110000000	12%	-9.05	-5.59
2120000000	13%	-8.91	-5.57
2130000000	13%	-8.81	-5.58
2140000000	13%	-8.85	-5.63
2150000000	13%	-9.02	-5.64
2160000000	12%	-9.18	-5.69
2170000000	12%	-9.31	-5.64
2180000000	12%	-9.27	-5.32
2190000000	12%	-9.25	-4.89
2200000000	12%	-9.19	-5.10
2300000000	16%	-7.85	-3.53
2310000000	17%	-7.71	-3.16
2320000000	17%	-7.63	-3.41
2330000000	18%	-7.56	-3.44
2340000000	18%	-7.47	-3.37
2350000000	18%	-7.34	-3.38
2360000000	20%	-7.01	-3.09
2370000000	21%	-6.70	-2.96
2380000000	22%	-6.59	-2.95
2390000000	22%	-6.52	-2.93
2400000000	23%	-6.46	-2.98
2500000000	28%	-5.58	-1.54
2510000000	28%	-5.48	-1.35
2520000000	30%	-5.21	-1.28
2530000000	31%	-5.09	-1.18
2540000000	31%	-5.05	-1.14
2550000000	31%	-5.04	-1.10
2560000000	31%	-5.11	-1.05
2570000000	31%	-5.02	-1.03
2580000000	32%	-4.96	-1.16
2590000000	32%	-4.96	-1.27
2600000000	33%	-4.86	-1.09
2610000000	33%	-4.75	-1.12
2620000000	35%	-4.61	-1.05
2630000000	35%	-4.55	-1.70
2640000000	35%	-4.57	-1.72
2650000000	35%	-4.58	-1.79

UNLESS OTHER SPECIFIED TOLERANCES ON：
X＝±2　　X.X＝±0.1　　X.XX＝±0.05
ANGLES＝±　　HOLEDIA＝±

浙江海通通讯电子股份有限公司

SCALE：　　UNIT：mm

DRAWN BY：程国富　　CHECKED BY：　于超群

DESIGNED BY：于超群　　APPROVED BY：　夏彪

TITLE：WAG-F-LTE12-00-052 Specification

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2660000000	33%	-4.77	-1.25
2670000000	32%	-4.97	-1.51
2680000000	32%	-5.00	-1.30
2690000000	32%	-5.01	-1.33

Frequency	Efficiency	Efficiency . dB	Gain . dBi
780000000	22%	-6.49	-4.02
790000000	24%	-6.22	-3.54
800000000	24%	-6.17	-3.47
810000000	24%	-6.23	-3.38
820000000	22%	-6.59	-3.58
830000000	19%	-7.11	-3.63
840000000	17%	-7.75	-3.67
850000000	14%	-8.39	-4.88
860000000	12%	-9.13	-4.74
870000000	10%	-9.82	-4.70
880000000	10%	-10.20	-6.03
890000000	10%	-10.12	-6.40

Frequency	Efficiency	Efficiency . dB	Gain . dBi
750000000	20%	-6.92	-4.02
760000000	21%	-6.74	-5.72
770000000	22%	-6.61	-6.43
780000000	21%	-6.73	-4.02
790000000	20%	-6.89	-5.96
800000000	19%	-7.13	-4.05
810000000	21%	-6.84	-3.78
Frequency	Efficiency	Efficiency . dB	Gain . dBi
700000000	26%	-5.88	-4.25
710000000	25%	-6.08	-4.26
720000000	23%	-6.30	-4.31
730000000	22%	-6.61	-4.11
740000000	20%	-6.98	-4.12
750000000	18%	-7.47	-4.02
760000000	15%	-8.14	-5.72
770000000	13%	-8.90	-6.43
780000000	10%	-9.85	-4.02
790000000	9%	-10.68	-5.96

UNLESS OTHER SPECIFIED TOLERANCES ON：
X＝±2　　X.X＝±0.1　　X.XX＝±0.05
ANGLES＝±　　HOLEDIA＝±

浙江海通通讯电子股份有限公司

SCALE：　　UNIT：mm

DRAWN BY：程国富　　CHECKED BY：　于超群

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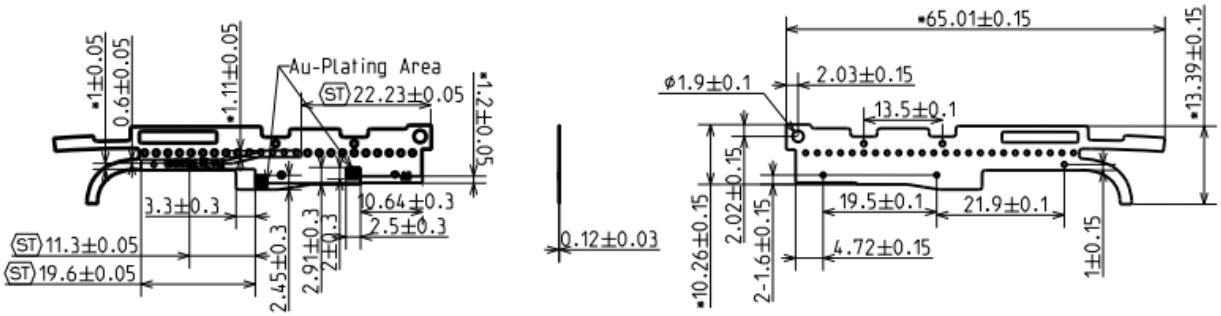
3. Antenna Dimensions（mm）：



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