

WA-F-LB-02-238 Specification

1. Explanation of part number :

WA - F - LB - 02 - 238
(1) (2) (3) (4) (5)

- (1) Product Type: Wireless Antenna
- (2) Material: FPC+Cable
- (3) Frequency: 2400MHz-2500MHz&5100MHz-5800MHz
- (4) Coaxial Cable Type : With ϕ 1.13 Black
- (5) Suffix : 238

2. Operating Condition:

Temperature -40 to +70°C
Humidity 20 to 65% RH

3. Storage Condition:

Temperature -40 to +70°C
Humidity 10 to 85% RH

4. Electrical Specification :

*Those specifications were specially defined for **GCS5** model, and all characteristics were measured under the model's handset testing.*

4-1. Frequency Band:

Frequency Band	MHz
WIFI	2400~2500&5100~5800

4-2. Impedance

50 ohm nominal

4-3. Matching circuit

None

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=± X.X=± X.XX=±
ANGLES=± HOLEDIA=±



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SCALE : / UNIT : mm

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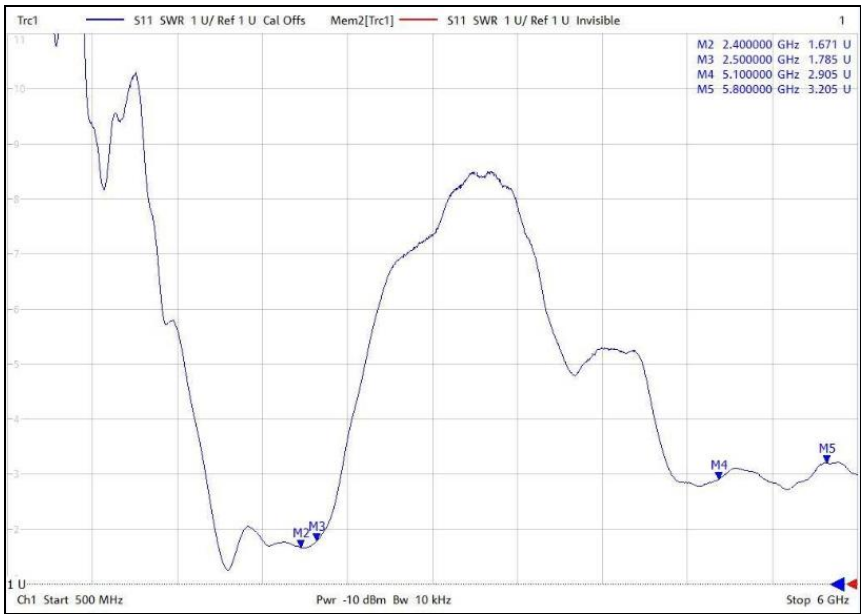
4-4. VSWR

4-4.1 Measuring Method

- 1. 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR
- 2.Keeping this jig away from metal at least 20cm

4-4.2 Measurement frequency points and VSWR value

Mark	Frequency	VSWR
1	2400MHz	≤3.0
2	2500 MHz	≤3.0
3	5100MHz	≤4.5
4	5800MHz	≤4.5




4-5. Efficiency and Gain

4-5.1 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

4-5.2 Chamber definition

- 1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to

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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)

4-5.3 Antenna Passive Test Result

Frequency (MHz)	Peak Gain(dBi)	Efficiency(dBi)	Efficiency(%)
2400	0.90	-4.62	34.48
2500	-0.29	-5.24	29.92
5100~5350	1.92	-2.28	59.15
5470~5900	0.15	-4.66	34.23

5. Mechanical Specification :

5-1 Mechanical Configuration (Unit: mm)



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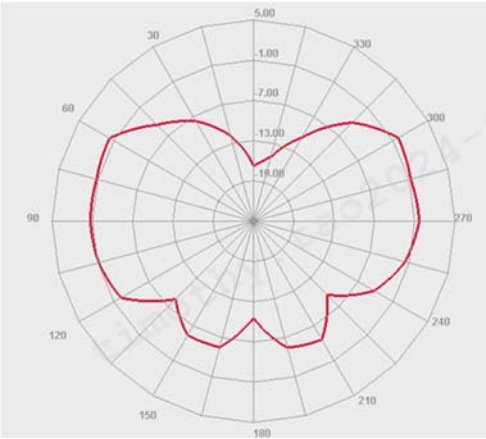
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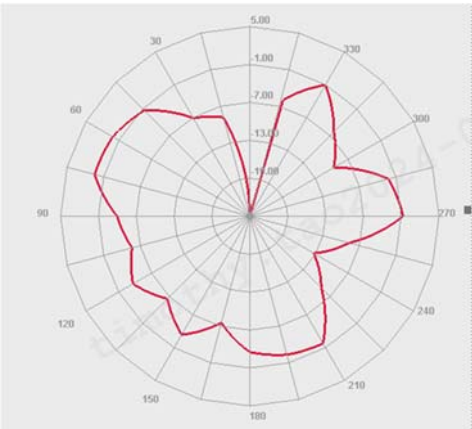
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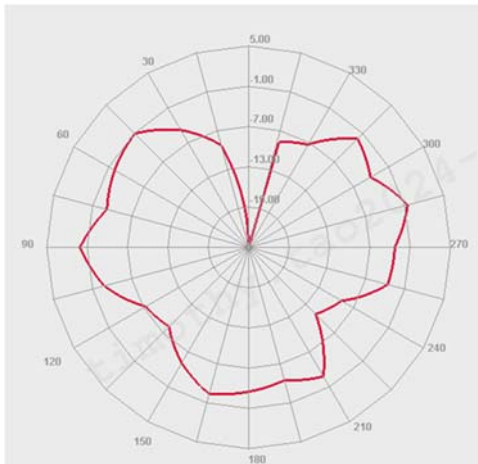
2.4G



5.2G



5.8G



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