

# WA-P-LBLB-04-108 Specification

## 1. Explanation of part number :

WA    -    P    -    LBLB    -    04    -    108  
 (1)        (2)        (3)        (4)        (5)

- (1) Product Type : Wireless Antenna
- (2) P: PCB+Cable
- (3) Frequency : 2400~2500MHz&5100~5800MHz&5925~7125MHz
- (4) Coaxial Cable Type : With  $\phi$  0.81 Main Black / AUX Gray
- (5) Suffix : 108

## 2. Storage Condition:

Temperature                      -40 to +70℃  
 Humidity                            20 to 65 %RH

## 3. Operating Condition:

Temperature                      -40 to +70℃  
 Humidity                            10 to 85 %RH

## 4. Electrical Specification :

*Those specifications were specially defined for LG 17Z90R WIFI model, and all characteristics were measured under the model's handset testing jig .*

### 4-1. Frequency Band:

Frequency Band	MHz
WIFI\BT	2400~2500 & 5100~5800 & 5925~7125

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±            X.X=±    X.XX=±

ANGLES=±    HOLEDIA=±

SCALE :                      UNIT : mm

DRAWN BY: 毕岩                      CHECKED BY: 张涛

DESIGNED BY : 周振兴                      APPROVED BY : 徐克文

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## 4-2. Impedance

50 ohm nominal

## 4-3. Matching circuit

None

## 4-4. VSWR

### 4-4.1 Measuring Method

1.A 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

VSWR	Frequency (Unit MHz)	Spec	2
Main Antenna	2400	≤3.5	2.3
	2500	≤3.5	2.6
	5150	≤4.0	2.0
	7125	≤4.0	2.7
	Judgement		
Aux Antenna	2400	≤3.5	1.7
	2500	≤3.5	1.8
	5150	≤4.5	1.4
	7125	≤4.5	2.9
	Judgement		

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## 4-5. Efficiency and Gain

### 4-5.1 Measuring equipment

#### Measuring instrument:

Microwave chamber, Network analyzer, and standard antenna.

#### Instructions for microwave chamber:

This is a microwave chamber set up by our company in Suzhou, This microwave chamber belongs to a set of near-field measurement system. The size of the chamber is 2.95M \* 3M \* 3M.

### 4-5.2 Efficiency and Gain

Antenna gain is marked (dBi) and is based on STANDARD HORN antenna. The data shows Peak Gain and Average Gain.

#### 4-5.2-1 Electrical specification

Frequency (MHz)	Average Efficiency (%)
2400~2500	>30
5100~5825	>30
5925~7125	>30

#### 4-5.2-2 Efficiency and Gain Test Data

Frequency (MHz)	Aux (dBi)	Main (dBi)
2400-2500	2.90	3.10
5150-5350	2.80	-2.10
5470-5725	5.70	2.50
5725-5850	5.30	5.20
5925-6425	3.70	4.80
6425-6525	-1.00	1.00
6525-6875	2.80	1.60
6875-7125	-1.40	2.90

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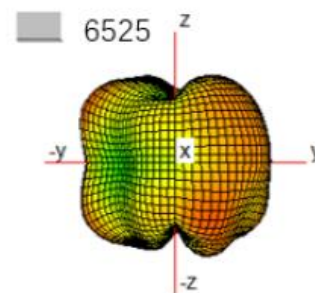
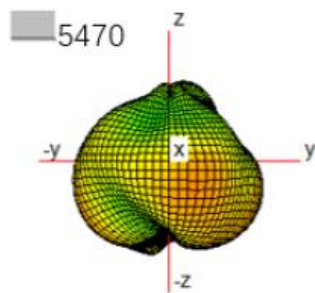
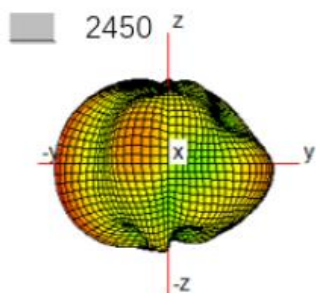
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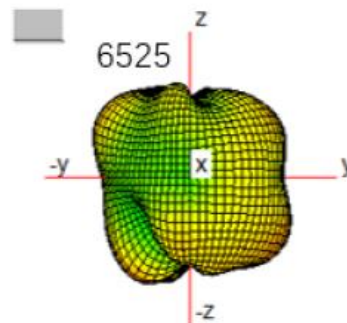
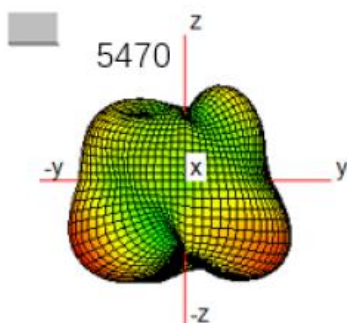
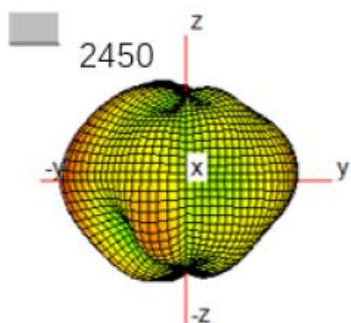
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### 4-5.3-3 Antenna 3D Radiation Pattern

Main Antenna-2



AUX Antenna-2



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**Product Picture:**



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