

**Customer : LG**

Approval No.

ISSUE

1.0

## Specifications for Approval

Product Name : 17Z90Q ANTENNA , ASSY

Vendor Model Name : LUXSHARE-ICT

Customer Part No. : EAA65977001

Vendor P/N : L1LRF009-CS-H

Condition : 1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_

The product above is approved.

<b>LG MC Approval</b>	Category	Checked	Reviewed	Agreed	Approved
	Name				
	Signature				
<b>Vendor Approval</b>	Category	Designed	Checked	Agreed	Approved
	Name	郭林	陈宝球	蒋志坚	李坤松
	Signature				

Vendor Name :LUXSHARE-ICT

Address :BaiYun Road, Industrial Park West Area, Ji An City, JiangXi Province, 343100, China  
XianMao Road, Economic Development Zone, Bo zhou City, Anhui Province, 236800, China  
Building A, West Sanyo New Industrial Zone, oyster I, Shajing Street, Baoan District, S henzhen, China

P/N: L1LRF009-CS-H	SPECIFICATION MODEL NAME: 17Z90Q ANT ASS'Y	REV.NO:1.0
--------------------	---	------------

**SPECIFICATION**

**Test items**

1) Appearance and structure check

Check item	Judgement
Visual Inspection	The shape, structure, and color should be consistent with the limit sample and related specifications
Standard	These defects should not be allowed such as damage, corrosion, sink, scratches, etc.

2) Dimension Check : Measuring important dimensions

Dimensions should meet the requirements of the acknowledgment

3) Mate / Unmating Force : mate connector with a suitable gauge at rate of 25±3 mm/min.  
measure force when gauge reaches surface of connector.

mating Force	unmating Force
30N (or 3000g) Max	5 ~ 20 N (or 500g ~ 2000g) 3 ~ 20 N (or 300g ~ 2000g) Final 30 Cycles

4) Disintegration : Parts are allowed to be chiseled, not inserted, dirty etc.

soldering state of PCB like cold welding, less welding, over welding are not allowed. The length of the parts should be suitable.  
and parts can not be touched each other.

5) Tape adhesion : Double Sided tape should be not slipped  
should be satisfied standard specification.

6) VSWR

Test equipment : Network Analyzer equipment

Frequency(unit MHz)	MAIN	AUX
VSWR	1. 800-2. 1000MHz > 5 1. 800-2. 1000MHz > 5 5. 100-6. 000MHz < 6	1. 700-1. 950MHz > 5 2. 200-2. 500MHz < 5. 5 5. 000-6. 000MHz < 5. 5

P/N: L1LRF009-CS-H	<b>SPECIFICATION</b> MODEL NAME: 17Z90Q ANT ASS'Y	REV.NO:1.0
--------------------	--	------------

**SPECIFICATION**

**Test items**

7) Gain

Test equipment : Network Analyzer equipment

Frquency(MHZ)	Efficiency(%)
2400	>30
2450	>30
2500	>30
5150	>30

8) Thermal Shock

Condition	Temperature : 85°C (30min), -40°C (30min) 10 Cycles. Being Placed 2 Hours
Judgement	Product's mechanism and VSWR should be OK.

9) High Temperature

Condition	Temperature : 80°C, 96H, Being Placed 2 Hours.
Judgement	Product's mechanism and VSWR should be OK.

10) Low Temperature

Condition	Temperature : -20°C, 96H, Being Placed 2 Hours.
Judgement	Product's mechanism and VSWR should be OK.

P/N: L1LRF009-CS-H	SPECIFICATION MODEL NAME: 17Z90Q ANT ASS'Y	REV.NO:1.0
--------------------	---	------------

**SPECIFICATION**

**Test items**

12) High Temperature and humidity test

Condition	Temperature : 40°C, Humidity : 90 – 95% 96H, Being Placed 2 Hours.
Judgement	Product's mechanism and VSWR should be OK.

13) Virbration Test

Condition	Class V3 [0.27 Grms, 10-500Hz, 50min, Per 3 axes (X,Y,Z)]
Judgement	Product's mechanism and VSWR should be OK.

14) Drop Test

Condition	Height : 100cm to Iron Plate (Thickness : 5mm or more) one edge/Three corners/six faces are once total : 10 times
Judgement	there should be no crack and or damage parts.

Frequency (MHz)	Main			Aux		
	Peak gain (dBi)	Efficiency (dB)	Efficiency (%)	Peak gain (dBi)	Efficiency (dB)	Efficiency (%)
2400	-1.454	-8.1496	15.3122	2.8858	-4.5067	35.4266
2450	0.2648	-6.8193	20.8004	-0.0666	-7.8183	16.5263
2500	2.1471	-5.1853	30.302	-6.9052	-16.1423	2.4309
5150	5.2356	-4.867	32.6064	3.638	-6.4283	22.7598
5400	0.547	-8.5478	13.9706	1.1104	-7.7508	16.7848
5850	4.9603	-5.1711	30.4014	2.8823	-6.2437	23.748
5925	5.8548	-4.4653	35.7659	2.4808	-5.8828	25.8062
6525	1.193	-7.0825	19.577	1.3805	-7.2145	18.9909
7125	3.9882	-4.2065	37.9619	1.8928	-5.6131	27.4591