

**Customer : LG**

Approval No.

ISSUE

1.0

## Specifications for Approval

Product Name : 16Z90Q ANTENNA , ASSY

Vendor Model Name : LUXSHARE-ICT

Customer Part No. : EAA65976801

Vendor P/N : L1LRF008-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
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Vendor Name :LUXSHARE-ICT

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<b>P/N: L1LRF008-CS-H</b>	<b>SPECIFICATION MODEL NAME: 16Z90Q ANT ASS'Y</b>	<b>REV.NO:1.0</b>
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**SPECIFICATION**

**Test items**

1) Apperance 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, correosion, sink, scratches, etc.

2) Dimension Check : Measuring improtant 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 sliped  
should be satisfied standard specification.

6) VSWR

Test equipment : Network Analyzer equipment

Frequency(unit MHz)	MAIN	AUX
VSWR	2. 000-2. 300GHz >4	1. 500-1. 800GHz >6
	2. 600-3. 400GHz <6	2. 350-2. 800GHz <6
	5. 800-6. 000GHz <5	5. 100-6. 000GHz <6

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**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.

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**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	6.3298	-2.9922	50.2088	0.9119	-9.1282	12.2229
2450	5.7031	-4.1167	38.7552	1.5722	-7.1289	19.3689
2500	2.7066	-6.6312	21.7211	3.4903	-5.1072	30.852
5150	-1.4674	-9.222	11.9618	2.2777	-6.1498	24.267
5400	3.4326	-5.9354	25.4954	4.4876	-5.0209	31.4707
5850	3.3018	-6.6153	21.8009	5.7593	-4.0076	39.7408
5925	2.8908	-7.4796	17.8666	4.7433	-4.8034	33.0871
6525	3.4086	-5.0845	31.0134	1.3063	-7.5834	17.4447
7125	-4.9461	-12.5375	5.5751	-1.6495	-10.2889	9.3564