Report No: CCISE160405103

# **FCC REPORT**

**Applicant:** AZUMI S.A

Avenida Aquilino de la Guardia con Calle 47, PH Ocean Plaza,

Address of Applicant: Piso 16 of. 16-01, Marbella, Ciudad de Panamá City, Rep.

Panamá

### **Equipment Under Test (EUT)**

Product Name: MobilePhone

Model No.: L3GA LITE II

Trade mark: Azumi

FCC ID: QRP-AZUMIL3GALII

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart B

Date of sample receipt: 28 Apr., 2016

**Date of Test:** 29 Apr., to 06 May, 2016

**Date of report issued:** 09 May, 2016

Test Result: Pass \*

#### Authorized Signature:



Bruce Zhang Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.





### **Version**

Version No.	Date	Description
00	09 May, 2016	Original

Viki zhul Test Engineer Tested by: Date: 09 May, 2016

Reviewed by: Date: 09 May, 2016

Bao'an District, Shenzhen, Guangdong, China Telephone: +86 (0) 755 2311 8282 Fax: +86 (0) 755 2311 6366





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## 4 Test Summary

Test Item	Section in CFR 47	Result		
Conducted Emission	Part 15.107	Pass		
Radiated Emission	Part 15.109	Pass		

Pass: The EUT complies with the essential requirements in the standard.



### 5 General Information

### **5.1 Client Information**

Applicant:	AZUMI S.A
Address of Applicant:	Avenida Aquilino de la Guardia con Calle 47, PH Ocean Plaza, Piso 16 of. 16-01, Marbella, Ciudad de Panamá City, Rep. Panamá
Manufacturer	AZUMI HK LTD
Address of Manufacturer:	FLAT/RM 18 BLK 1 14/F GOLDEN INDUSTRIAL BUILDING 16-26 KWAI TAK STREET KWAI CHUNG, HK
Factory:	RUIO Communication Technology Co., Ltd.
Address of Factory:	402, Tai'bang Tech High rise, South 8th Road, Science & Technology Park, NanShan District, ShenZhen, China.

### 5.2 General Description of E.U.T.

Product Name:	MobilePhone
Model No.:	L3GA LITE II
Power supply:	Rechargeable Li-ion Battery DC3.7V-800mAh
AC adapter :	Input: AC100-240V 50/60Hz 0.1A Output: DC 5.0V, 500mA

#### 5.3 Test Mode

Operating mode	Detail description
PC mode	Keep the EUT in Downloading mode(Worst case)
Charging+Recording mode	Keep the EUT in Charging+Recording mode
Charging+Playing mode	Keep the EUT in Charging+Playing mode
FM mode	Keep the EUT in FM receiver mode

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

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### 5.4 Description of Support Units

Manufacturer	Description	Model	Serial Number	FCC ID/DoC
DELL	PC	OPTIPLEX745	N/A	DoC
DELL	MONITOR	E178FPC	N/A	DoC
DELL	DELL KEYBOARD		N/A	DoC
DELL	MOUSE	MOC5UO	N/A	DoC
HP	HP Printer		05257893	DoC
MERCURY	MERCURY Wireless router		12922104015	FCC ID
NAKAMICHI	NAKAMICHI Bluetooth earphone		N/A	FCC ID

### 5.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### • FCC - Registration No.: 817957

Shenzhen Zhongjian Nanfang Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012.

#### • IC - Registration No.: 10106A-1

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

#### • CNAS - Registration No.: CNAS L6048

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

### 5.6 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,

Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755-23118282 Fax: +86-755-23116366





### 5.7 Test Instruments list

Radia	Radiated Emission:									
Item	Test Equipment	Equipment Manufacturer		Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)				
1	3m SAC	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	08-23-2014	08-22-2017				
2	BiConiLog Antenna	SCHWARZBECK	VULB9163	CCIS0005	03-25-2016	03-25-2017				
3	Horn Antenna	SCHWARZBECK	BBHA9120D	CCIS0006	03-25-2016	03-25-2017				
4	Pre-amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	04-01-2016	03-31-2017				
5	Pre-amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	04-01-2016	03-31-2017				
6	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP30	CCIS0023	03-28-2016	03-28-2017				
7	EMI Test Receiver	Rohde & Schwarz	ESRP7	CCIS0167	03-28-2016	03-28-2017				

Cond	Conducted Emission:										
Item	Test Equipment	Manufacturer	Model No.	Inventory	Cal.Date	Cal.Due date					
iteiii	rest Equipment	Wallulacturei	Wodel No.	No.	(mm-dd-yy)	(mm-dd-yy)					
1	Shielding Room	ZhongShuo Electron	11.0(L)x4.0(W)x3.0(H)	CCIS0061	08-23-2014	08-22-2017					
2	EMI Test Receiver Rohde & Schwarz		ESCI	CCIS0002	03-24-2016	03-24-2017					
3	LISN	CHASE	MN2050D	CCIS0074	03-26-2016	03-26-2017					
4	Coaxial Cable	CCIS	N/A	CCIS0086	04-01-2016	03-31-2017					



### 6 Test results and Measurement Data

### **6.1 Conducted Emission**

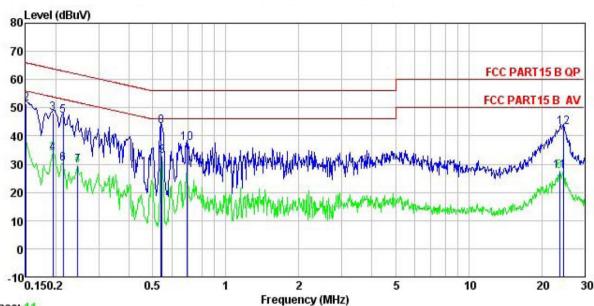
			1					
Test Requirement:	FCC Part 15 B Section 15.107							
Test Method:	ANSI C63.4:2009							
Test Frequency Range:	150kHz to 30MHz	150kHz to 30MHz						
Class / Severity:	Class B	Class B						
Receiver setup:	RBW=9kHz, VBW=30kHz	RBW=9kHz, VBW=30kHz						
Limit:	Frequency range (MHz)  Limit (dBµV)							
		Quasi-peak	Average					
	0.15-0.5	66 to 56*	56 to 46*					
	0.5-5 0.5-30	56 60	46 50					
	* Decreases with the logarith		50					
Test setup:	Reference Plan	· · · · · · · · · · · · · · · · · · ·						
	AUX Equipment E.U.T  Test table/Insulation plane  Remark E.U.T. Equipment Under Test LISN: Line Impedence Stabilization Network Test table height=0.8m	Filter — AC   EMI   Receiver	power					
Test procedure	<ol> <li>The E.U.T and simulators line impedance stabilization 500hm/50uH coupling impedances.</li> <li>The peripheral devices are a LISN that provides a 500 termination. (Please refers photographs).</li> <li>Both sides of A.C. line are interference. In order to fir positions of equipment an according to ANSI C63.4:</li> </ol>	on network(L.I.S.N.). To be dance for the measure also connected to the ohm/50uH coupling in a to the block diagrams of the maximum emist dall of the interface contents.	The provide a uring equipment. The main power through a pedance with 500hm and of the test setup and the conducted asion, the relative ables must be changed					
Test environment:	Temp.: 23 °C Hun	nid.: 56% P	ress.: 101kPa					
Measurement Record:		I	Jncertainty: ±3.28dB					
Test Instruments:	Refer to section 5.7 for detai		,					
Test mode:	Refer to section 5.3 for detail							
Test results:	Pass	-						
	1							





#### Measurement data:

Line:

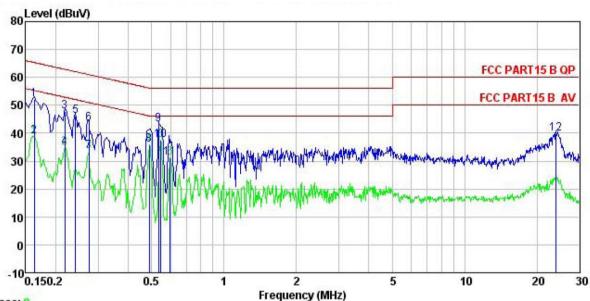


Frequence Site : CCIS Shielding Room Condition : FCC PART15 B QP LISN LINE EUT : Mobile phone Model : L3GA Lite II Test Mode : PC mode Power Rating : AC120/60Hz Environment : Temp: 23 °C Huni:56% Atmos:101KPa Test Engineer: Viki Remark :

Albmor.	Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
-	MHz	dBu∀	<u>dB</u>	dB	dBu₹	dBu∜	<u>dB</u>	
1	0.150	28.35	0.14	10.78	39.27	56.00	-16.73	Average
2	0.151	40.48	0.14	10.78	51.40	65.96	-14.56	QP
3	0.194	37.07	0.15	10.76	47.98	63.84	-15.86	QP
4	0.194	22.97	0.15	10.76	33.88	53.84	-19.96	Average
2 3 4 5	0.214	36.36	0.15	10.76	47.27	63.05	-15.78	QP
6 7 8 9	0.214	19.41	0.15	10.76	30.32	53.05	-22.73	Average
7	0.246	18.58	0.16	10.75	29.49	51.91	-22.42	Average
8	0.541	32.59	0.26	10.76	43.61		-12.39	
9	0.546	21.86	0.26	10.76	32.88	46.00	-13.12	Average
10	0.694	26.32	0.32	10.77	37.41	56.00	-18.59	QP
11	23.636	16.16	0.36	10.88	27.40	50.00	-22.60	Average
12	24.659	31.91	0.36	10.87	43.14	60.00	-16.86	QP



#### Neutral:



Trace: 9

Site

CCIS Shielding Room FCC PART15 B QP LISN NEUTRAL Condition

: Mobile phone : L3GA Lite II EUT Model Test Mode : PC mode Power Rating : AC120/60Hz

Environment : Temp: 23 °C Huni: 56% Atmos: 101KPa

Test Engineer: Viki

lemark	:							
		Read	LISN	Cable		Limit	Over	
	Freq	Level	Factor	Loss	Level	Line	Limit	Remark
	MHz	₫₿u₹	₫B	₫B	dBu₹	dBu₹	dB	
1	0.162	41.29	0.13	10.77	52.19	65.34	-13.15	QP
2	0.162	27.98	0.13	10.77	38.88	55.34	-16.46	Average
3 4 5 6 7 8 9	0.219	36.81	0.16	10.76	47.73	62.88	-15.15	QP
4	0.219	23.94	0.16	10.76	34.86	52.88	-18.02	Average
5	0.242	35.06	0.17	10.75	45.98	62.04	-16.06	QP
6	0.274	32.43	0.18	10.74	43.35	60.98	-17.63	QP
7	0.274	22.72	0.18	10.74	33.64	50.98	-17.34	Average
8	0.489	24.69	0.24	10.76	35.69	46.19	-10.50	Average
9	0.535	31.99	0.26	10.76	43.01	56.00	-12.99	QP
10	0.546	26.47	0.26	10.76	37.49	46.00	-8.51	Average
11	0.598	19.98	0.29	10.77	31.04	46.00	-14.96	Average
12	24.015	28.61	0.24	10.88	39.73	60.00	-20.27	QP

#### Notes:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT
- 2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.



### 6.2 Radiated Emission

0.2 Radiated Ellission									
Test Requirement:	FCC Part 15 B Section 15.109								
Test Method:	ANSI C63.4:2009								
Test Frequency Range:	30MHz to 6000MHz								
Test site:	Measurement Distance: 3m (Semi-Anechoic Chamber)								
Receiver setup:	Frequency	Dete	ctor	RBW	VB۱		Remark		
·	30MHz-1GHz	Quasi-			300kHz		Quasi-peak Value		
	Above 1GHz	Pea RM			3MHz 3MHz		Peak Value		
Limit:	Frequenc			1MHz (dBuV/m @		12	z Average Value Remark		
Lillit.	30MHz-88M		LIIIII	40.0	<i>(</i> 3111)	(	Quasi-peak Value		
	88MHz-216N			43.5			Quasi-peak Value		
	216MHz-960			46.0			Quasi-peak Value		
	960MHz-1G			54.0			Quasi-peak Value		
				54.0			Average Value		
	Above 1GI	∃z		74.0			Peak Value		
Test setup:	Below 1GHz				Antenna	_			
	Search Antenna  RF Test Receiver  Turn Table 0.8m Im								
	Above 1GHz								
	SOCM SOCM	E EUT	EUT Horn Antenna Tower						





Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.							
	2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.							
	3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.							
	4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.							
	5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.							
	6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.							
Test environment:	Temp.: 25 °C Humid.: 55% Press.: 1 01kPa							
Measurement Record:	Uncertainty: ±4.88dB							
Test Instruments:	Refer to section 5.7 for details							
Test mode:	Refer to section 5.3 for details							
Test results:	Passed							

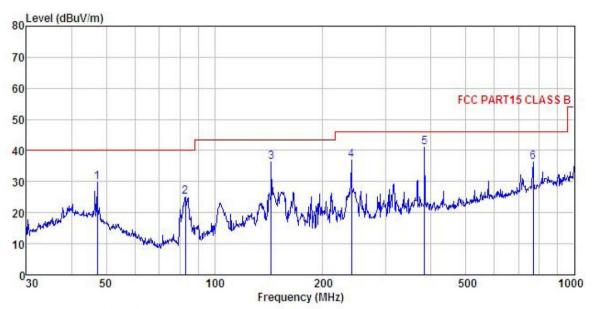




#### **Measurement Data:**

#### **Below 1GHz**

Horizontal:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M3G) HORIZONTAL Condition

EUT : Mobile phone

Model : L3GA Life 2

Test mode : PC Mode

Power Rating : AC 120V/60Hz

Environment : Temp: 25.5°C Huni: 55%

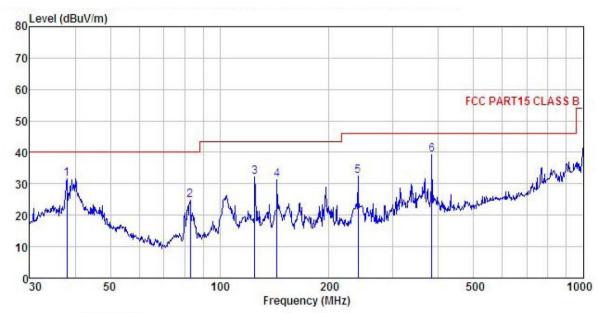
Test Engineer: Viki

		Read	Antenna	Cable	Preamp		Limit	Over	
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark
_	MHz	dBu∜		<u>dB</u>	<u>dB</u>	$\overline{dBuV/m}$	dBuV/m	dB	
1	47.160	41.85	16.59	1.27	29.84	29.87	40.00	-10.13	QP
2	82.938	45.74	7.12	1.76	29.62	25.00	40.00	-15.00	QP
2	143.830	51.64	11.34	2.44	29.25	36.17	43.50	-7.33	QP
4	239.987	50.73	11.80	2.82	28.59	36.76	46.00	-9.24	QP
5	383.932	51.30	15.40	3.09	28.71	41.08	46.00	-4.92	QP
5 6	768.748	39.97	20.47	4.36	28.37	36.43	46.00	-9.57	QP





#### Vertical:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M3G) VERTICAL

: FCC PART15 CLASS B 3m

EUT : Mobile phone

Model : L3GA Life 2

Test mode : PC Mode

Power Rating : AC 120V/60Hz

Environment : Temp:25.5°C Huni:55%

Test Engineer: Viki

REMARK :

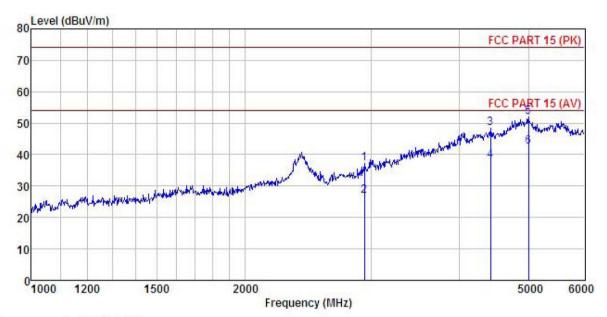
123456

AAA										
		Read	Antenna	Cable	Preamp		Limit	Over		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Remark	
_	MHz	dBu₹	<u>dB</u> /m	dB	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>		
	37.945	44.30	16.10	1.14	29.92	31.62	40.00	-8.38	QP	
	82.938	45.48	7.12	1.76	29.62	24.74	40.00	-15.26	QP	
	125.007	47.38	12.06	2.22	29.36	32.30	43.50	-11.20	QP	
	143.830	46.85	11.34	2.44	29.25	31.38	43.50	-12.12	QP	
	239.987	46.31	11.80	2.82	28.59	32.34	46.00	-13.66	QP	
	383.932	49.35	15.40	3.09	28.71	39.13	46.00	-6.87	QP	



#### **Above 1GHz**

Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : Mobile phone Condition EUT

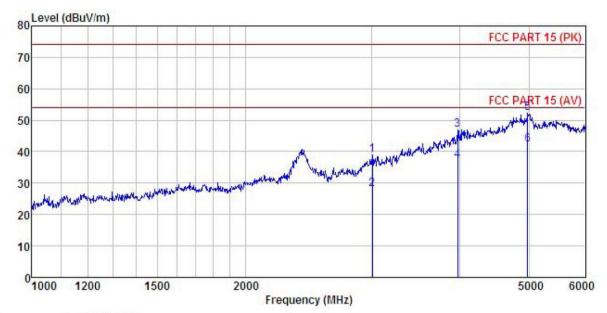
: L3GA Life 2
Test mode : PC Mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Viki
REMARK :

IIIOTO									
	Free		Antenna Factor				Limit	Over	Remark
	rred	rever	ractor	LUSS	ractor	rever	Line	TIME	Kemark
-	MHz	dBu∜	dB/m	₫B	<u>dB</u>	dBuV/m	dBuV/m	dB	
1	2940.675	44.58	25.39	7.72	40.56	37.13	74.00	-36.87	Peak
2	2940.675	34.33	25.39	7.72	40.56	26.88	54.00	-27.12	Average
2	4424.514	44.68	34.22	10.15	40.75	48.30	74.00	-25.70	Peak
4	4424.514	34.60	34.22	10.15	40.75	38.22	54.00	-15.78	Average
5	4997.811	44.27	36.90	10.78	39.98	51.97	74.00	-22.03	Peak
6	4997 811	34 86	36 90	10.78	30 08	42.56	54 00	-11 44	Amerage





#### Vertical:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : Mobile phone Condition

: Mobile phone

Model : L3GA Life 2

Test mode : PC Mode

Power Rating : AC 120V/60Hz

Environment : Temp:25.5°C Huni:55%

Test Engineer: Viki

REMARK :

ACHIVATA)									
	Freq		Antenna Factor				Limit Line	Over Limit	Remark
	MHz	dBu∇	<u>dB</u> /m	<u>d</u> B	<u>dB</u>	$\overline{dBuV/m}$	dBuV/m	<u>d</u> B	
1	3009.976	45.94	25.64	7.84	40.52	38.90	74.00	-35.10	Peak
2	3009.976	35.14	25.64	7.84	40.52	28.10	54.00	-25.90	Average
3	3966.417	46.48	32.01	9.57	41.05	47.01	74.00	-26.99	Peak
4	3966.417	36.56	32.01	9.57	41.05	37.09	54.00	-16.91	Average
5	4979.933	44.88	36.77	10.75	40.00	52.40	74.00	-21.60	Peak
6	4979.933	34.79	36.77	10.75	40.00	42.31	54.00	-11.69	Average