RF TEST REPORT



Report No.: 18070843-FCC-R3
Supersede Report No.: N/A

Applicant	BLU Products, Inc.			
Product Name	Mobile Pho	Mobile Phone		
Model No.	C6			
Serial No.	STUDIO J7	•		
Test Standard	FCC Part 1	5.247, ANSI	C63.10: 2013	
Test Date	November :	24 to Decem	ber 13, 2017	
Issue Date	August 01,	2018		
Test Result	Pass	Fail		
Equipment compl	ied with the	specification	~	
Equipment did no	t comply with	n the specific	ation 🔲	
form Liong		David	Huang	
Aaron Liang Test Engineer			d Huang cked By	

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Test result presented in this test report is applicable to the tested sample only

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

Zone A, Floor 1, Building 2 Wan Ye Long Technology Park
South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108
Phone: +86 0755 2601 4629801 Email: China@siemic.com.cn



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Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety



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1. Report Revision History

Report No.	Report Version	Description	Issue Date
17071301-FCC-R3	NONE	Original	December 14, 2017
18070843-FCC-R3	V1	Added Serial Model and change the report No.	August 01, 2018

2. Customer information

Applicant Name	BLU Products, Inc.
Applicant Add	10814 NW 33rd St # 100 Doral, FL 33172
Manufacturer	BLU Products, Inc.
Manufacturer Add	10814 NW 33rd St # 100 Doral, FL 33172

3. Test site information

Test Lab A:

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES	
	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park	
Lab Address	South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China	
	518108	
FCC Test Site No.	535293	
IC Test Site No.	4842E-1	
Test Software	Radiated Emission Program-To Shenzhen v2.0	

Test Lab B:

Lab performing tests	SIEMIC (Nanjing-China) Laboratories	
Lab Address	2-1 Longcang Avenue Yuhua Economic and	
	Technology Development Park, Nanjing, China	
FCC Test Site No.	694825	
IC Test Site No.	4842B-1	
Test Software	EZ_EMC(ver.lcp-03A1)	

Note: We just perform Radiated Spurious Emission above 18GHz in the test Lab. B



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4. Equipment under Test (EUT) Information

Description of EUT: Mobile Phone

Main Model: C6

Serial Model: STUDIO J7

Date EUT received: November 23, 2017

Test Date(s): November 24 to December 13, 2017

Equipment Category: DTS

Antenna Gain:

GSM850: -0.9dBi PCS1900: -1.6dBi

UMTS-FDD Band V: -0.9dBi

UMTS-FDD Band IV: -1.3dBi

UMTS-FDD Band II: -1.6dBi

WIFI: -1.6dBi

Bluetooth/BLE: -1.7dBi

GPS: -1.7dBi

Antenna Type: PIFA antenna

GSM / GPRS: GMSK

EGPRS: GMSK

UMTS-FDD: QPSK

Type of Modulation: 802.11b/g/n: DSSS, OFDM

Bluetooth: GFSK, π /4DQPSK, 8DPSK

BLE: GFSK GPS:BPSK

GSM850 TX: 824.2 ~ 848.8 MHz; RX: 869.2 ~ 893.8 MHz

PCS1900 TX: 1850.2 ~ 1909.8 MHz; RX: 1930.2 ~ 1989.8 MHz

UMTS-FDD Band V TX: 826.4 ~ 846.6 MHz; RX: 871.4 ~ 891.6 MHz

RF Operating Frequency (ies): UMTS-FDD Band IV TX:1712.4 ~ 1752.6 MHz;

RX: 2112.4 ~ 2152.6 MHz

UMTS-FDD Band II TX:1852.4 ~ 1907.6 MHz;

RX: 1932.4 ~ 1987.6 MHz



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WIFI: 802.11b/g/n(20M): 2412-2462 MHz WIFI: 802.11n(40M): 2422-2452 MHz Bluetooth& BLE: 2402-2480 MHz

GPS: 1575.42 MHz

Max. Output Power: -1.993dBm

GSM 850: 124CH PCS1900: 299CH

UMTS-FDD Band V: 102CH UMTS-FDD Band IV: 202CH UMTS-FDD Band II: 277CH

WIFI:802.11b/g/n(20M): 11CH

WIFI:802.11n(40M): 7CH

Bluetooth: 79CH

BLE: 40CH GPS:1CH

Port: USB Port, Earphone Port

Trade Name : BLU

Number of Channels:

Adapter:

Model: TPA-46050150UU

Input: AC100-240V~50/60Hz,0.3A

Input Power: Output: DC 5.0V,1.5A

Battery:

Model: C916040250L

Spec: 3.8V, 2500mAh, 9.50Wh

GPRS/ EGPRS Multi-slot class 8/10/11/12

FCC ID: YHLBLUC6



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5. Test Summary

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliance
§15.247 (a)(2)	DTS (6 dB) CHANNEL BANDWIDTH	Compliance
§15.247(b)(3)	Conducted Maximum Output Power	Compliance
§15.247(e)	Power Spectral Density	Compliance
S4E 047(4)	Band-Edge & Unwanted Emissions into Restricted	Compliance
§15.247(d)	Frequency Bands	Compliance
§15.207 (a),	AC Power Line Conducted Emissions Compliance	
§15.205, §15.209,	Radiated Emissions & Unwanted Emissions	Compliance
§15.247(d)	into Restricted Frequency Bands	

Measurement Uncertainty

Emissions		
Test Item	Description	Uncertainty
Band-Edge & Unwanted		
Emissions into Restricted		
Frequency Bands and	Confidence level of approximately 95% (in the case	
Radiated Emissions &	where distributions are normal), with a coverage	+5.6dB/-4.5dB
Unwanted Emissions	factor of 2 (for EUTs < 0.5m X 0.5m X 0.5m)	
into Restricted Frequency		
Bands		
-	- -	-



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6. Measurements, Examination And Derived Results

6.1 Antenna Requirement

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has 2 antennas:

A permanently attached PIFA antenna for GSM/PCS/ UMTS-FDD Band V/ IV /II, the gain is -0.9dBi for GSM850/UMTS-FDD Band V, the gain is -1.6dBi for PCS1900/ UMTS-FDD Band II, the gain is -1.3dBi for UMTS-FDD Band IV.

A permanently attached PIFA antenna for Bluetooth/BLE/WIFI/GPS, the gain is -1.7dBi for Bluetooth/BLE/GPS, the gain is -1.6dBi for WIFI.

The antenna meets up with the ANTENNA REQUIREMENT.

Result: Compliance.



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6.2 DTS (6 dB) Channel Bandwidth

Temperature	25 °C	
Relative Humidity	50%	
Atmospheric Pressure	1008mbar	
Test date :	December 08, 2017	
Tested By :	Aaron Liang	

Spec	Item	tem Requirement Applica			
§ 15.247(a)(2)	a)	a) 6dB BW≥ 500kHz;			
RSS Gen(4.6.1)	b)	·			
Test Setup	Spectrum Analyzer EUT				
Test Procedure	558074 D01 DTS MEAS Guidance v03r03, 8.1 DTS bandwidth 6dB Emission bandwidth measurement procedure - Set RBW = 100 kHz. - Set the video bandwidth (VBW) ≥ 3 RBW. - Detector = Peak. - Trace mode = max hold. - Sweep = auto couple. - Allow the trace to stabilize. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.				
Remark					
Result	Pas	ss Fail			

Test Data	Yes	□ _{N/A}
Test Plot	Yes (See below)	□ _{N/A}



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6dB Bandwidth measurement result

Test Data

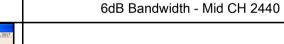
СН	Frequency (MHz)	6dB Bandwidth (kHz)	99% Occupied Bandwidth (MHz)
Low	2402	710.0	1.0644
Mid	2440	714.2	1.0649
High	2480	711.1	1.0647

Test Plots





6dB Bandwidth - Low CH 2402





6dB Bandwidth - High CH 2480



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6.3 Maximum Output Power

Temperature	25 °C
Relative Humidity	50%
Atmospheric Pressure	1008mbar
Test date :	December 08, 2017
Tested By :	Aaron Liang

Requirement(s):

Spec	Item	Requirement	Applicable			
	a)	FHSS in 2400-2483.5MHz with ≥ 75 channels: ≤ 1 Watt				
	b)	FHSS in 5725-5850MHz: ≤ 1 Watt				
§15.247(b) (3),RSS210	c)	For all other FHSS in the 2400-2483.5MHz band: ≤ 0.125 Watt.				
(A8.4)	d)	FHSS in 902-928MHz with ≥ 50 channels: ≤ 1 Watt				
(, (3. 1)	e)	FHSS in 902-928MHz with ≥ 25 & <50 channels: ≤ 0.25 Watt				
	f)	DTS in 902-928MHz, 2400-2483.5MHz: ≤ 1 Watt	V			
Test Setup	Spectrum Analyzer EUT					
	558074 D01 DTS MEAS Guidance v03r03, 9.1.2 Integrated band power method					
	Maximu	Maximum output power measurement procedure				
	a) Set the RBW ≥ DTS bandwidth.					
Test	b) Set VBW ≥ 3 × RBW.					
	c) Set span ≥ 3 x RBW					
Procedure	d) Sweep time = auto couple.					
	e) Detector = peak. f) Trace mode = max hold.					
	g) Allow trace to fully stabilize.					
	h) Use peak marker function to determine the peak amplitude level.					
Remark						
Result	Pas	s 📮 Fail				



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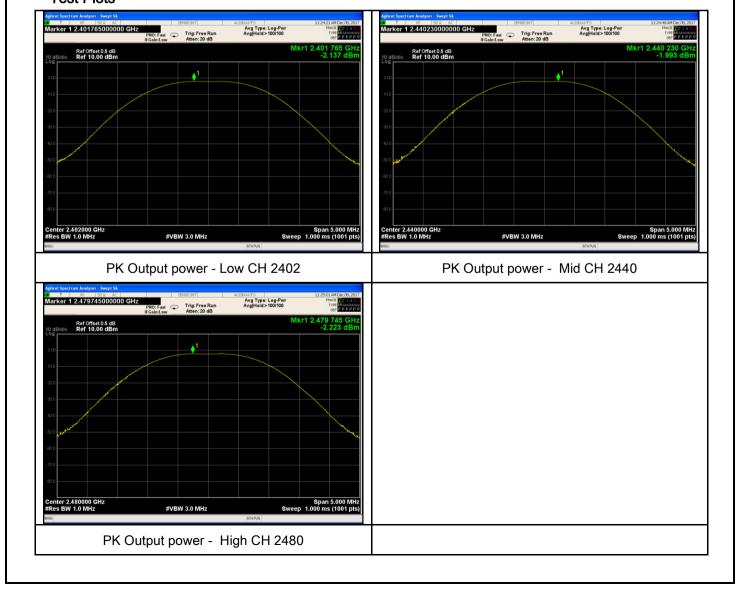
Test Data	Yes	□ _{N/A}
Test Plot	Yes (See below)	□ _{N/A}

Output Power measurement result

Test Data

Туре	СН	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Result
Output	Low	2402	-2.137	30	Pass
Output	Mid	2440	-1.993	30	Pass
power	High	2480	-2.223	30	Pass

Test Plots





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6.4 Power Spectral Density

Temperature	25 °C
Relative Humidity	50%
Atmospheric Pressure	1008mbar
Test date :	December 08, 2017
Tested By :	Aaron Liang

Spec	Item	Requirement	Applicable	
§15.247(e)	a)	The power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.	K	
Test Setup		Spectrum Analyzer EUT		
Test Procedure	Spectrum Analyzer 558074 D01 DTS MEAS Guidance v03r03, 10.2 power spectral density method power spectral density measurement procedure - a) Set analyzer center frequency to DTS channel center frequency. - b) Set the span to 1.5 times the DTS bandwidth. - c) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz. - d) Set the VBW ≥ 3 × RBW. - e) Detector = peak. - f) Sweep time = auto couple. - g) Trace mode = max hold. - h) Allow trace to fully stabilize. - i) Use the peak marker function to determine the maximum amplitude level within the RBW. - j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.			
Remark				
Result	Pas	ss Fail		

Test Data	Yes	□ _{N/A}
Test Plot	Yes (See below)	□ _{N/A}



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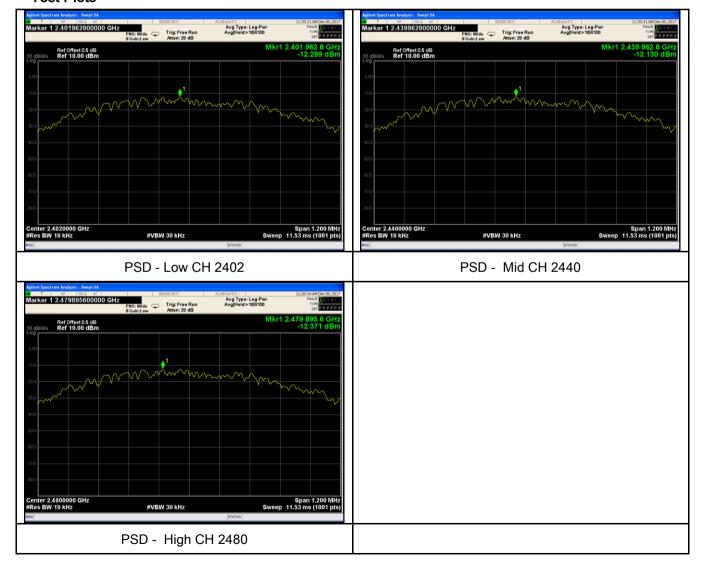
Power Spectral Density measurement result

Test Data

Туре	СН	Freq (MHz)	Reading (dBm)	Factor (dB)	Result (dBm)	Limit (dBm)	Result
	Low	2402	-12.299	-5.23	-17.529	8	Pass
PSD	Mid	2440	-12.130	-5.23	-17.360	8	Pass
	High	2480	-12.371	-5.23	-17.601	8	Pass

Note: factor=10log(3/10)=-5.23

Test Plots





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6.5 Band-Edge & Unwanted Emissions into Restricted Frequency Bands

Temperature	22 °C		
Relative Humidity	53%		
Atmospheric Pressure	1008mbar		
Test date :	December 02, 2017		
Tested By :	Aaron Liang		

Requirement(s):

Spec	Item	Item Requirement			
§15.247(d)	a)	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.	V		
Test Setup	Ant. Tower Support Units Ground Plane Test Receiver				
Test Procedure	Radiated Method Only 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator. 2. Position the EUT without connection to measurement instrument. Put it on the Rotated table and turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.				



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	- 3. First, set both RBW and VBW of spectrum analyzer to 100 kHz with a
	convenient frequency span including 100kHz bandwidth from band edge, check
	the emission of EUT, if pass then set Spectrum Analyzer as below:
	a. The resolution bandwidth and video bandwidth of test receiver/spectrum
	analyzer is 120 kHz for Quasiy Peak detection at frequency below 1GHz.
	b. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video
	bandwidth is 3MHz with Peak detection for Peak measurement at frequency above
	1GHz.
	c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the
	video bandwidth is 10Hz with Peak detection for Average Measurement as below
	at frequency above 1GHz.
	- 4. Measure the highest amplitude appearing on spectral display and set it as a
	reference level. Plot the graph with marking the highest point and edge frequency.
	- 5. Repeat above procedures until all measured frequencies were complete.
Remark	
Result	Pass Fail
	·
F	
Test Data	Yes N/A
Test Plot	Yes (See below)



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Test Plots Band Edge measurement result



Note: Both Horizontal and vertical polarities were investigated.



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6.6 AC Power Line Conducted Emissions

Temperature	23 °C		
Relative Humidity	55%		
Atmospheric Pressure	1012mbar		
Test date :	December 04, 2017		
Tested By :	Aaron Liang		

Requirement(s):

Spec	Item	Requirement	Applicable			
47CFR§15.		For Low-power radio-fr connected to the public voltage that is conducte frequency or frequencie not exceed the limits in				
207, RSS210	a)	[mu] H/50 ohms line im		, ,	V	
		Frequency ranges	Limit (
(A8.1)		(MHz)	QP	Average		
		0.15 ~ 0.5	66 – 56	56 – 46		
		0.5 ~ 5	56	46		
		5~30 60 50				
Test Setup						
	2.Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.					
Procedure	 The EUT and supporting equipment were set up in accordance with the rethe standard on top of a 1.5m x 1m x 0.8m high, non-metallic table. The power supply for the EUT was fed through a 50W/50mH EUT LISN, of filtered mains. 				onnected to	
	3. The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss					

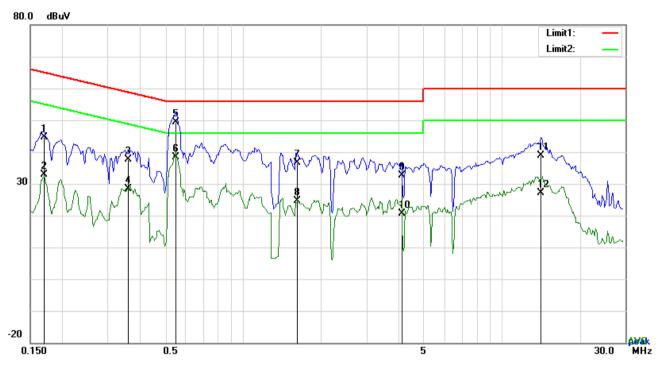


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	coaxial cable.				
	4. All other supporting equipment were powered separately from another main supply.				
	5. The EUT was switched on and allowed to warm up to its normal operating condition.				
	6. A scan was made on the NEUTRAL line (for AC mains) or Earth line (for DC power)				
	over the required frequency range using an EMI test receiver.				
	7. High peaks, relative to the limit line, The EMI test receiver was then tuned to the				
	selected frequencies and the necessary measurements made with a receiver bandwidth				
	setting of 10 kHz.				
	8. Step 7 was then repeated for the LIVE line (for AC mains) or DC line (for DC power).				
Remark					
Result	Pass Fail				
Test Data	Yes N/A				
Test Plot	Yes (See below)				



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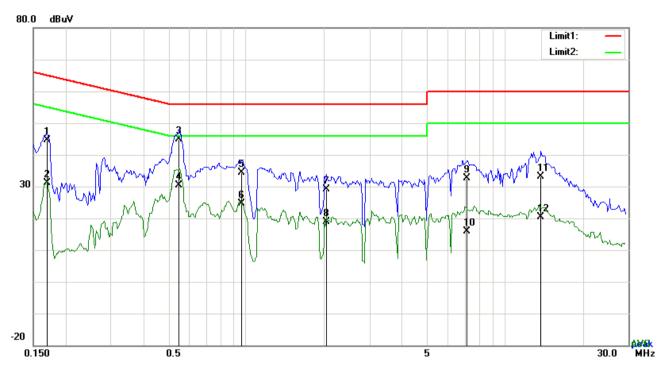
Test Data

Phase Line Plot at 120Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBµV)	Detector	Corrected (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)
1	L1	0.1695	34.72	QP	10.03	44.75	64.98	-20.23
2	L1	0.1695	22.76	AVG	10.03	32.79	54.98	-22.19
3	L1	0.3606	27.69	QP	10.03	37.72	58.71	-20.99
4	L1	0.3606	18.34	AVG	10.03	28.37	48.71	-20.34
5	L1	0.5478	39.27	QP	10.03	49.30	56.00	-6.70
6	L1	0.5478	28.23	AVG	10.03	38.26	46.00	-7.74
7	L1	1.6242	26.49	QP	10.04	36.53	56.00	-19.47
8	L1	1.6242	14.64	AVG	10.04	24.68	46.00	-21.32
9	L1	4.0920	22.48	QP	10.07	32.55	56.00	-23.45
10	L1	4.0920	10.58	AVG	10.07	20.65	46.00	-25.35
11	L1	14.1852	28.67	QP	10.21	38.88	60.00	-21.12
12	L1	14.1852	16.85	AVG	10.21	27.06	50.00	-22.94



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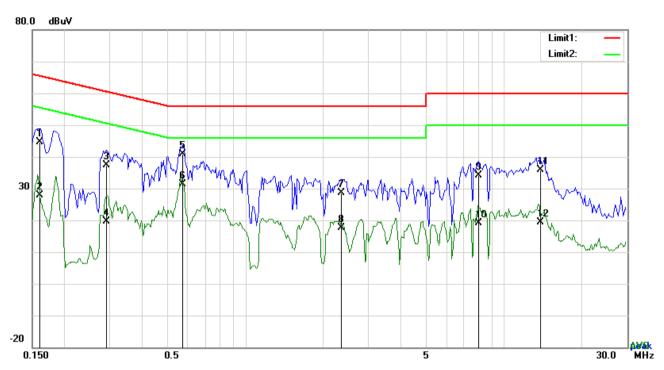
Test Data

Phase Neutral Plot at 120Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBµV)	Detector	Corrected (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)
1	N	0.1695	34.57	QP	10.02	44.59	64.98	-20.39
2	N	0.1695	21.00	AVG	10.02	31.02	54.98	-23.96
3	N	0.5517	34.78	QP	10.02	44.80	56.00	-11.20
4	N	0.5517	20.39	AVG	10.02	30.41	46.00	-15.59
5	N	0.9612	24.32	QP	10.03	34.35	56.00	-21.65
6	N	0.9612	14.55	AVG	10.03	24.58	46.00	-21.42
7	N	2.0376	19.00	QP	10.04	29.04	56.00	-26.96
8	N	2.0376	8.93	AVG	10.04	18.97	46.00	-27.03
9	N	7.1574	22.53	QP	10.10	32.63	60.00	-27.37
10	N	7.1574	5.79	AVG	10.10	15.89	50.00	-34.11
11	N	13.8186	22.99	QP	10.19	33.18	60.00	-26.82
12	N	13.8186	10.19	AVG	10.19	20.38	50.00	-29.62



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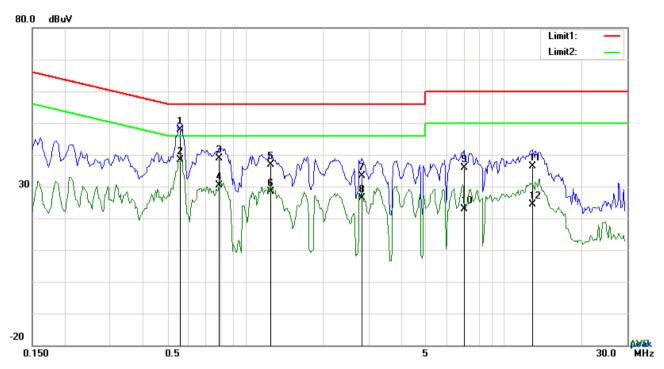
Test Data

Phase Line Plot at 240Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBµV)	Detector	Corrected (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)
1	L1	0.1607	34.58	QP	10.03	44.61	65.43	-20.82
2	L1	0.1607	17.88	AVG	10.03	27.91	55.43	-27.52
3	L1	0.2904	27.30	QP	10.03	37.33	60.51	-23.18
4	L1	0.2904	9.64	AVG	10.03	19.67	50.51	-30.84
5	L1	0.5712	30.77	QP	10.03	40.80	56.00	-15.20
6	L1	0.5712	21.43	AVG	10.03	31.46	46.00	-14.54
7	L1	2.3574	18.61	QP	10.05	28.66	56.00	-27.34
8	L1	2.3574	7.53	AVG	10.05	17.58	46.00	-28.42
9	L1	7.9842	24.02	QP	10.12	34.14	60.00	-25.86
10	L1	7.9842	9.07	AVG	10.12	19.19	50.00	-30.81
11	L1	13.8927	25.55	QP	10.21	35.76	60.00	-24.24
12	L1	13.8927	9.17	AVG	10.21	19.38	50.00	-30.62



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Test Data

Phase Neutral Plot at 240Vac, 60Hz

No.	P/L	Frequency (MHz)	Reading (dBµV)	Detector	Corrected (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)
1	N	0.5595	37.86	QP	10.02	47.88	56.00	-8.12
2	N	0.5595	28.41	AVG	10.02	38.43	46.00	-7.57
3	Ν	0.7935	28.76	QP	10.03	38.79	56.00	-17.21
4	N	0.7935	20.31	AVG	10.03	30.34	46.00	-15.66
5	Ν	1.2576	26.80	QP	10.03	36.83	56.00	-19.17
6	N	1.2576	18.32	AVG	10.03	28.35	46.00	-17.65
7	N	2.8371	23.36	QP	10.05	33.41	56.00	-22.59
8	N	2.8371	16.40	AVG	10.05	26.45	46.00	-19.55
9	Ν	7.0287	25.81	QP	10.10	35.91	60.00	-24.09
10	N	7.0287	12.73	AVG	10.10	22.83	50.00	-27.17
11	N	12.8631	26.25	QP	10.17	36.42	60.00	-23.58
12	N	12.8631	14.15	AVG	10.17	24.32	50.00	-25.68



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6.7 Radiated Emissions & Restricted Band

Temperature	25 °C
Relative Humidity	57%
Atmospheric Pressure	1015mbar
Test date :	December 07, 2017
Tested By :	Aaron Liang

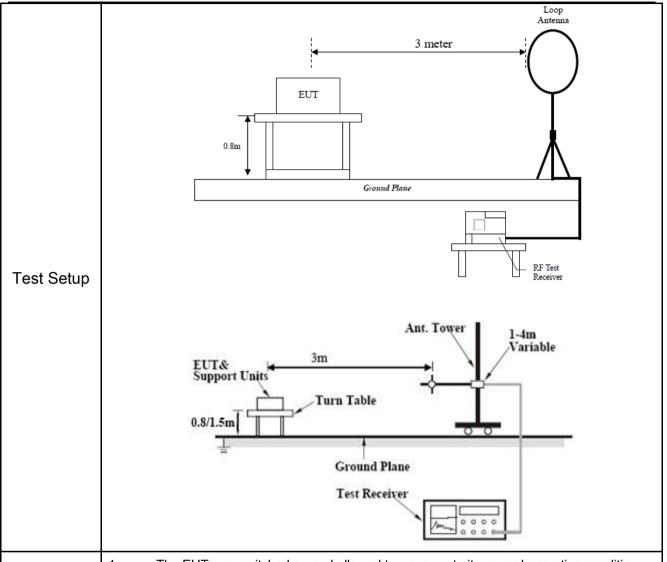
Requirement(s):

Spec	Item	Requirement		Applicable
		Except higher limit as specified else emissions from the low-power radio exceed the field strength levels specified the level of any unwanted emission the fundamental emission. The tight edges		
	- \	Frequency range (MHz)	Field Strength (μV/m)	
	a)	0.009~0.490	2400/F(KHz)	V
		0.490~1.705	24000/F(KHz)	
		1.705~30.0	30	
		30 – 88	100	
47CFR§15.		88 – 216	150	
247(d),		216 960	200	
RSS210		Above 960	500	
(A8.5)	b)	For non-restricted band, In any 100 frequency band in which the spread modulated intentional radiator is oppower that is produced by the intentional radiator is oppower that is produced by the intentional radiator is oppower that is produced by the intention band that contains the highest level determined by the measurement mused. Attenuation below the general is not required 20 dB down 30	d spectrum or digitally perating, the radio frequency ational radiator shall be at least 0 kHz bandwidth within the desired power, sethod on output power to be	\
	c)	or restricted band, emission must a emission limits specified in 15.209	also comply with the radiated	V



Procedure

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- 1. The EUT was switched on and allowed to warm up to its normal operating condition.
- The test was carried out at the selected frequency points obtained from the EUT characterization. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:
 - a. Vertical or horizontal polarization (whichever gave the higher emission level over a full rotation of the EUT) was chosen.
 - b. The EUT was then rotated to the direction that gave the maximum emission.
 - c. Finally, the antenna height was adjusted to the height that gave the maximum emission.
- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is
 120 kHz for Quasiy Peak detection at frequency below 1GHz.
- The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz with Peak detection for Peak measurement at frequency above 1GHz.



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	The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video				
	bandwidth is 10Hz with Peak detection for Average Measurement as below at				
	frequency above 1GHz.				
	5. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency				
	points were measured.				
Damani	Different RF configuration has been evaluated but not much difference was found. The data				
Remark	presented here is the worst case data with EUT under 802.11n - HT20-2437MHz mode.				
Result	Pass Fail				
Test Data	Yes N/A				
Test Plot	Yes (See below) N/A				

Test Result:

Test Mode:

Frequency range: 9KHz - 30MHz

Freq.	Detection	etection Factor Reading Resi		Result	Limit@3m	Margin
(MHz)	value	(dB/m)	(dB/m) (dBuV/m)		(dBuV/m)	(dB)
						>20
						>20

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

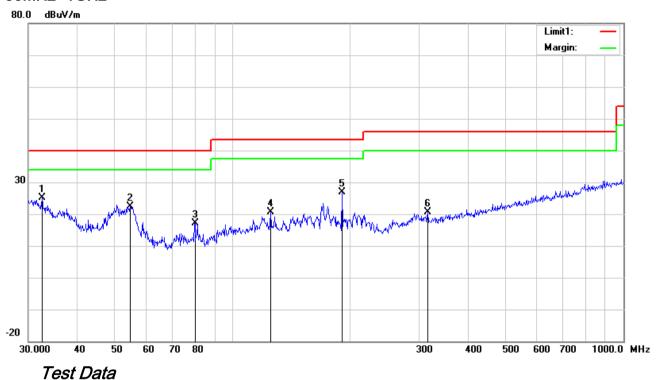
Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.



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30MHz -1GHz



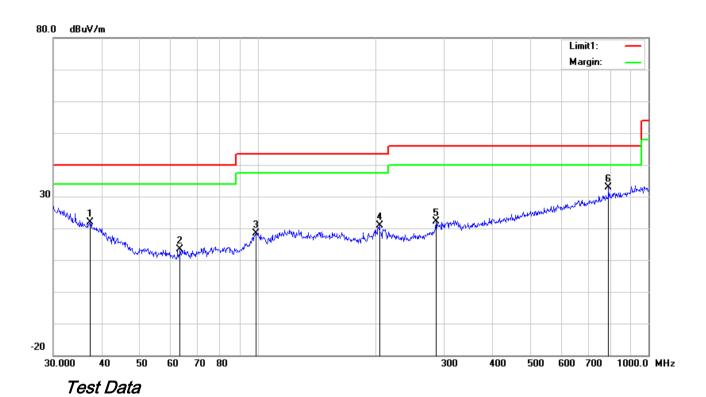
Vertical Polarity Plot @3m

No.	P/L	Frequency	Reading	Detect	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degr
		(MHz)	(dBuV/m)	or	(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	ee ()
		(**** 12)	(4547))		(42,)	(42)	(45)	(aza v,,	(azav,)	(42)	(611.)	()
1	V	32.5198	27.12	peak	19.46	22.26	0.69	25.01	40.00	-14.99	100	53
2	V	54.6429	36.22	peak	7.89	22.39	0.78	22.50	40.00	-17.50	200	113
3	V	80.0806	30.98	peak	7.60	22.42	1.05	17.21	40.00	-22.79	100	6
4	V	125.0066	28.25	peak	13.57	22.37	1.18	20.63	43.50	-22.87	100	339
5	V	190.4050	36.06	peak	11.57	22.32	1.54	26.85	43.50	-16.65	100	185
6	V	315.4808	27.07	peak	13.93	22.25	1.87	20.62	46.00	-25.38	100	79



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30MHz -1GHz



Horizontal Polarity Plot @3m

N	P/	Frequency	Reading	Detect	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degr
о.	L			or								ее
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	()
1	Н	37.2855	27.38	peak	15.88	22.26	0.77	21.77	40.00	-18.23	100	314
2	Η	63.3132	27.58	peak	7.47	22.40	0.84	13.49	40.00	-26.51	100	79
3	Н	98.8326	29.59	peak	10.12	22.32	1.09	18.48	43.50	-25.02	100	274
4	I	204.9551	29.62	peak	12.03	22.37	1.56	20.84	43.50	-22.66	100	274
5	Н	285.9778	29.74	peak	12.98	22.29	1.76	22.19	46.00	-23.81	100	203
6	Н	790.6188	29.81	peak	21.29	21.17	2.94	32.87	46.00	-13.13	100	121



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Above 1GHz

Test Mode:

Low Channel (2402 MHz)

Frequency (MHz)	S.A. Reading (dBµV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre- Amp. Gain (dB)	Cord. Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4804	42.77	AV	V	33.39	7.22	48.46	34.92	54	-19.08
4804	46.42	AV	Н	33.39	7.22	48.46	38.57	54	-15.43
4804	70.31	PK	V	33.39	7.22	48.46	62.46	74	-11.54
4804	66.32	PK	Н	33.39	7.22	48.46	58.47	74	-15.53
7937	35.29	AV	V	37.17	6.94	47.5	31.9	54	-22.1
7937	34.18	AV	Н	37.17	6.94	47.5	30.79	54	-23.21
7937	56.28	PK	V	37.17	6.94	47.5	52.89	74	-21.11
7937	53.62	PK	Н	37.17	6.94	47.5	50.23	74	-23.77

Middle Channel (2440 MHz)

Frequency (MHz)	S.A. Reading (dBµV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre- Amp. Gain (dB)	Cord. Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4880	42.34	AV	V	33.62	7.53	48.36	35.13	54	-18.87
4880	42.78	AV	Н	33.62	7.53	48.36	35.57	54	-18.43
4880	67.08	PK	V	33.62	7.53	48.36	59.87	74	-14.13
4880	63.58	PK	Н	33.62	7.53	48.36	56.37	74	-17.63
8786	39.58	AV	V	37.03	8.82	49.52	35.91	54	-18.09
8786	38.56	AV	Н	37.03	8.82	49.52	34.89	54	-19.11
8786	58.65	PK	V	37.03	8.82	49.52	54.98	74	-19.02
8786	54.75	PK	Н	37.03	8.82	49.52	51.08	74	-22.92



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High Channel (2480 MHz)

Frequency (MHz)	S.A. Reading (dBµV)	Detector (PK/AV)	Polarity (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	Pre- Amp. Gain (dB)	Cord. Amp. (dBµV/m)	Limit (dBµV/m)	Margin (dB)
4960	45.49	AV	V	33.89	7.86	48.31	38.93	54	-15.07
4960	48.63	AV	Н	33.89	7.86	48.31	42.07	54	-11.93
4960	68.93	PK	V	33.89	7.86	48.31	62.37	74	-11.63
4960	65.77	PK	Н	33.89	7.86	48.31	59.21	74	-14.79
17835	18.37	AV	V	43.93	19.92	43.7	38.52	54	-15.48
17835	18.66	AV	Н	43.93	19.92	43.7	38.81	54	-15.19
17835	39.12	PK	V	43.93	19.92	43.7	59.27	74	-14.73
17835	42.16	PK	Н	43.93	19.92	43.7	62.31	74	-11.69

Note:

- 1, The testing has been conformed to 10*2480MHz=24,800MHz
- 2, All other emissions more than 30 dB below the limit
- 3, X-Axis, Y-Axis and Z-Axis were investigated. The results above show only the worst case.
- 4, The radiated spurious test above 18GHz is subcontracted to SIEMIC (Nanjing-China) Laboratories. and found 30dB below the limit at least.



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Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Due	In use
AC Line Conducted					
EMI test receiver	ESCS30	8471241027	09/15/2017	09/14/2018	>
Line Impedance	LI-125A	191106	09/23/2017	09/22/2018	•
Line Impedance	LI-125A	191107	09/23/2017	09/22/2018	•
ISN	ISN T800	34373	09/23/2017	09/22/2018	
Transient Limiter	LIT-153	531118	08/30/2017	08/29/2018	V
RF conducted test					
Agilent ESA-E SERIES	E4407B	MY45108319	09/15/2017	09/14/2018	>
Power Splitter	1#	1#	08/30/2017	08/29/2018	>
DC Power Supply	E3640A	MY40004013	09/15/2017	09/14/2018	>
Radiated Emissions					
EMI test receiver	ESL6	100262	09/15/2017	09/14/2018	~
Positioning Controller	UC3000	MF780208282	11/17/2017	11/16/2018	~
OPT 010 AMPLIFIER	04475	0707400400	00/00/0047	00/00/0040	_
(0.1-1300MHz)	8447E	2727A02430	08/30/2017	08/29/2018	•
Horn Antenna	BBHA9170	3145226D1	09/27/2017	09/26/2018	\
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/23/2017	03/22/2018	<u><</u>
Active Antenna (9kHz-30MHz)	AL-130	121031	10/12/2017	10/11/2018	
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/19/2017	09/18/2018	(
Double Ridge Horn Antenna (1 ~18GHz)	AH-118	71283	09/22/2017	09/21/2018	<u><</u>
Universal Radio Communication Tester	CMU200	121393	09/23/2017	09/22/2018	Y



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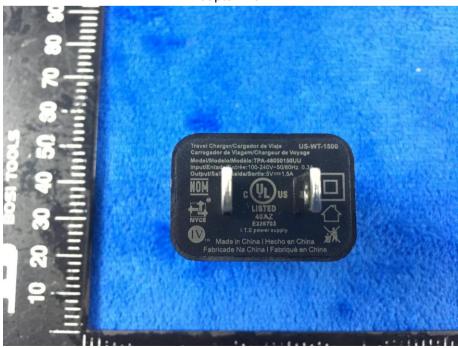
Annex B. EUT And Test Setup Photographs

Annex B.i. Photograph: EUT External Photo





Adapter View





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EUT - Front View



EUT - Rear View



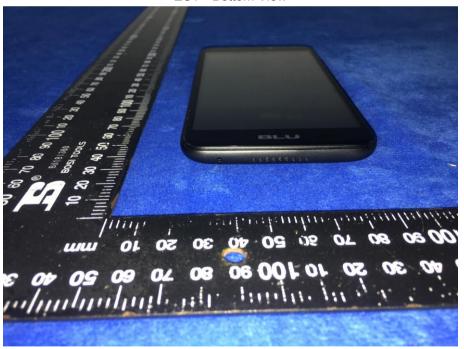


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EUT - Top View



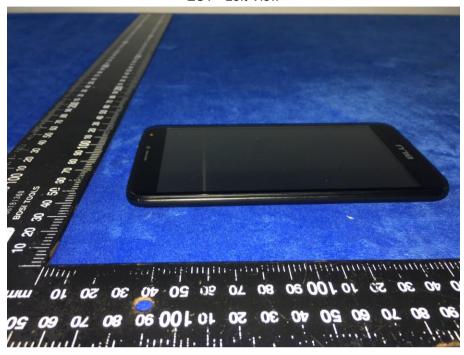
EUT - Bottom View



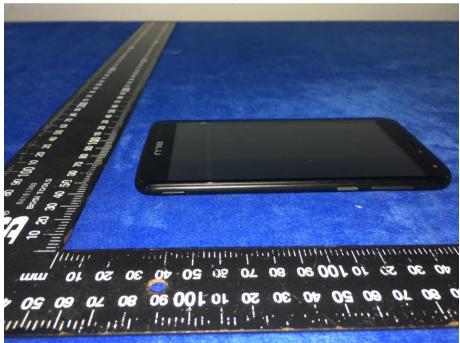


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EUT - Left View



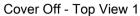
EUT - Right View





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Annex B.ii. Photograph: EUT Internal Photo





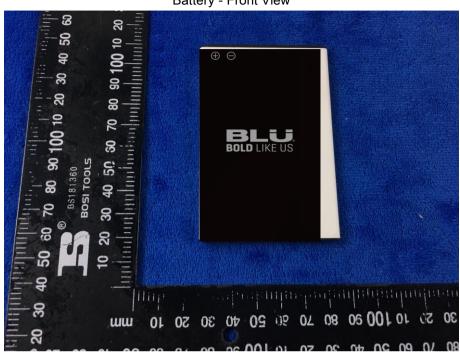
Cover Off - Top View 2





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Battery - Front View



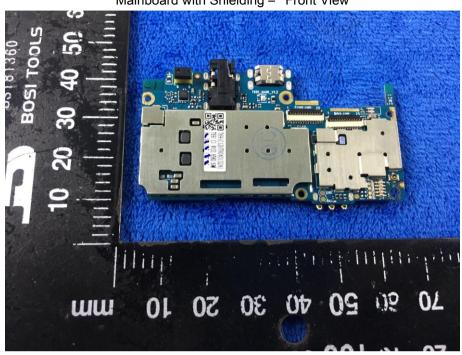
Battery - Rear View



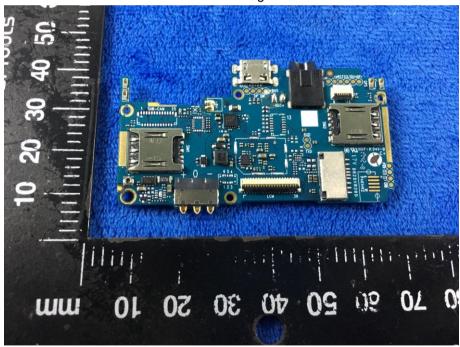


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Mainboard with Shielding - Front View



Mainboard with Shielding - Rear View



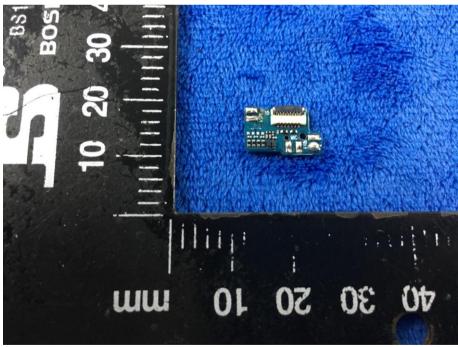


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Mainboard without Shielding - Rear View



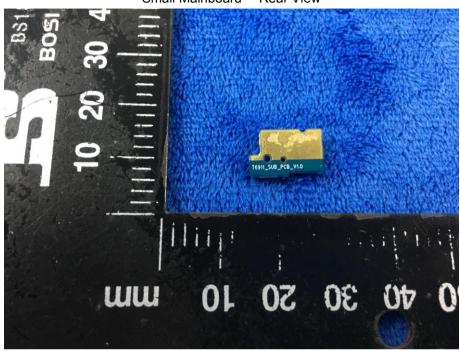
Small Mainboard - Front View





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Small Mainboard - Rear View



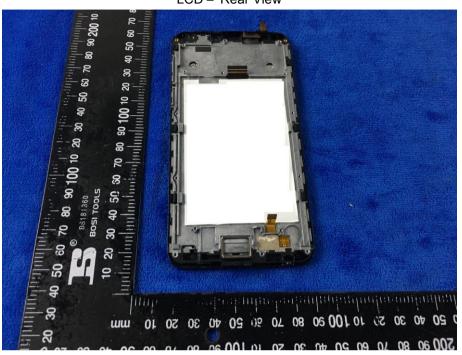
LCD - Front View





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LCD - Rear View



GSM/PCS/UMTS-FDD - Antenna View





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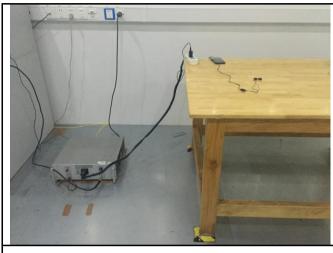
WIFI/BT/BLE/GPS - Antenna View





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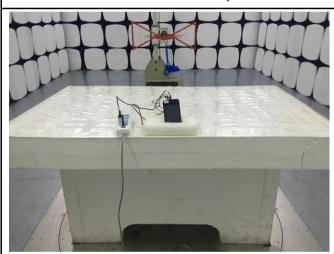
Annex B.iii. Photograph: Test Setup Photo



Conducted Emissions Test Setup Front View



Conducted Emissions Test Setup Side View



Radiated Spurious Emissions Test Setup Below 1GHz



Radiated Spurious Emissions Test Setup Above 1GHz

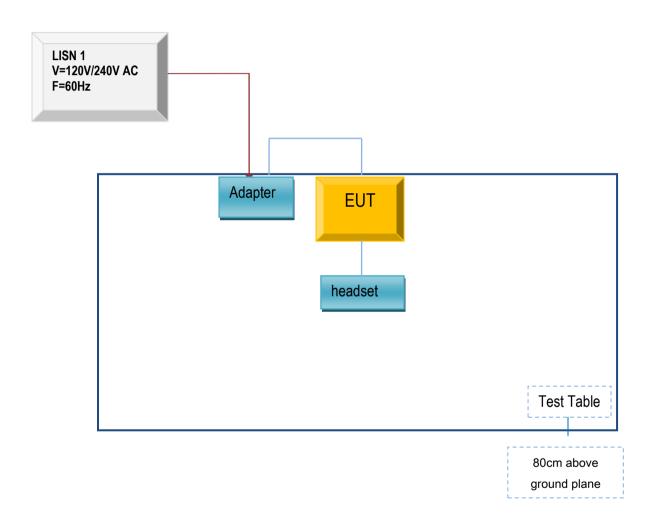


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Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

Annex C.ii. TEST SET UP BLOCK

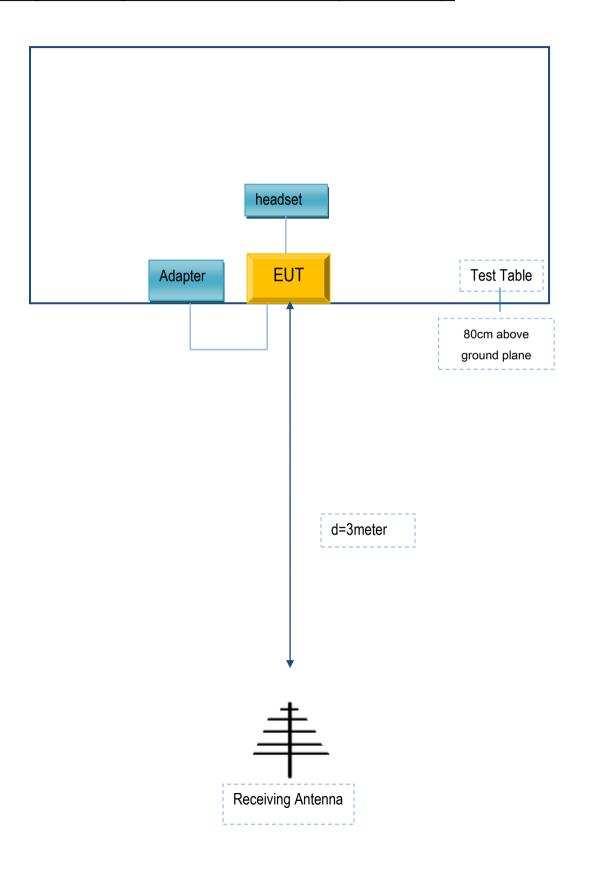
Block Configuration Diagram for AC Line Conducted Emissions





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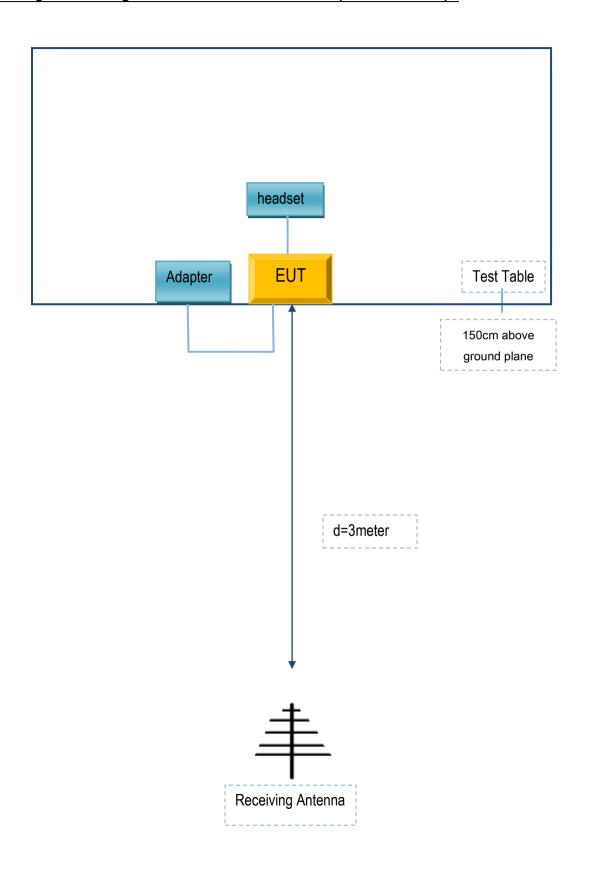
Block Configuration Diagram for Radiated Emissions (Below 1GHz).





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Block Configuration Diagram for Radiated Emissions (Above 1GHz) .





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Annex C. il. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Supporting Equipment:

Manufacturer	Equipment Description	Model	Serial No
BLU Products, Inc.	Adapter	TPA-46050150UU	N/A
BLU Products, Inc.	headset	HORIZON R2	N/A

Supporting Cable:

Cable type	Shield Type	Ferrite Core	Length	Serial No
USB Cable	Un-shielding	No	0.8m	N/A



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Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see the attachment



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Annex E. DECLARATION OF SIMILARITY

BLU Products, Inc.

To: SIEMIC, 775 Montague Expressway, Milpitas, CA95035, USA

Declaration Letter

Dear Sir.

For our business issue and marketing requirement, we'd like to shift the main and serial model numbers in the reports, No.17071301, as following:

Main Model No.: C6

Serial Model No.: STUDIO J7

And we'd like to use all the former data in the reports of 17071301.

We declare that each of the model's PCB, antenna and appearance shape, accessories are the same. The difference between the two is model name only.

Thank you!

Signature:

Printed name/title: Zeng wei

Address: Address: 10814 NW 33rd St # 100 Doral, FL 33172

Zerg Wei