EMC TEST REPORT



Report No.: 16071095-FCC-E Supersede Report No: N/A

Applicant	Jethro Trading LTD.			
Product Name	Jethro 3G Senior Flip Cell Phone			
Model No.	SC330			
Serial No.	N/A			
Test Standard	FCC Part 1	5 Subpart B 0	Class B:2015, Al	NSI C63.4: 2014
Test Date	November	November 01 to 15, 2016		
Issue Date	November 16, 2016			
Test Result	Pass Fail			
Equipment complied with the specification				
Equipment did not comply with the specification				
Loven	Tho	Dewiol	Huang	
Loren Luo Test Engineer			Huang ked 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

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South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108
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Laboratories Introduction

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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
- Country in togicin	Собра
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
16071095-FCC-E	NONE	Original	November 16, 2016

2. Customer information

Applicant Name	Jethro Trading LTD.	
Applicant Add	505 - 8840 210TH STREET, #231 Langley, Canada V1M2Y2	
Manufacturer	Shenzhen Bayuda Technologies,co.,ltd	
Manufacturer Add	Room A433 A Block,Shenzhen Industrial products exibition procurement center the	
	baoyuan road baoan distric	

3. Test site information

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.	718246	
IC Test Site No.	4842E-1	
Test Software	Radiated Emission Program-To Shenzhen v2.0	



Description of EUT:

Main Model:

Serial Model:

Antenna Gain:

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4. Equipment under Test (EUT) Information

SC330

N/A

GSM850: 0.5dBi PCS1900: 1.0dBi

Bluetooth: 0.5dBi

UMTS-FDD Band V:1.2dBi
UMTS-FDD Band II: 1.2dBi

Antenna Type:	GSM/PCS/UMTS-FDD: PIFA antenna BT: Monopole antenna
Port:	Power Port, Earphone Port, USB Port
Input Power:	Adapter: Model: HJ-050050-US Input: AC100-240V~50/60Hz,0.15A Output: DC 5.0V—500mA Charging Base: Model:SC330 Input: DC5.0V,500mA Output:DC5.0V,500mA Battery: Model: SC330 Spec: 3.7V 800mAh/2.96Wh Charging limited voltage:4.2V
Equipment Category :	JBP
Type of Modulation:	GSM / GPRS: GMSK EGPRS: GMSK, 8PSK

UMTS-FDD: QPSK

Bluetooth: GFSK, π /4DQPSK, 8DPSK

Jethro 3G Senior Flip Cell Phone



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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 II TX:1852.4 ~ 1907.6 MHz;

RX: 1932.4 ~ 1987.6 MHz

Bluetooth: 2402-2480 MHz

GSM 850: 124CH

PCS1900: 299CH

Number of Channels: UMTS-FDD Band V: 102CH

UMTS-FDD Band II: 277CH

Bluetooth: 79CH

Trade Name : Jethro

FCC ID: 2AAWJSC330

Date EUT received: October 31, 2016

Test Date(s): November 01 to 15, 2016



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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	
§15.107; ANSI C63.4: 2014	AC Power Line Conducted Emissions	Compliance	
§15.109; ANSI C63.4: 2014	Radiated Emissions	Compliance	

Measurement Uncertainty

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



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6. Measurements, Examination And Derived Results

6.1 AC Power Line Conducted Emissions

Temperature	25°C		
Relative Humidity	54%		
Atmospheric Pressure	1002mbar		
Test date :	November 02, 2016		
Tested By:	Loren Luo		

Requirement(s):

Spec	Item	Requirement	Applicable			
47CFR§15.	For Low-power radio-frequency devices that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 [mu] H/50 ohms line impedance stabilization network (LISN). The lower limit applies at the boundary between the frequencies ranges.				>	
107		Frequency ranges	Limit (
		(MHz)	QP	Average		
		0.15 ~ 0.5	66 – 56	56 – 46		
		0.5 ~ 5	56	46		
		5 ~ 30	60	50		
Test Setup			ical Ground Frence Plane	Test Receiver		
	Note: 1.Support units were connected to second LISN. 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 requirements of the 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 50Ω /50mH EUT LISN, connected to filtered mains. 					



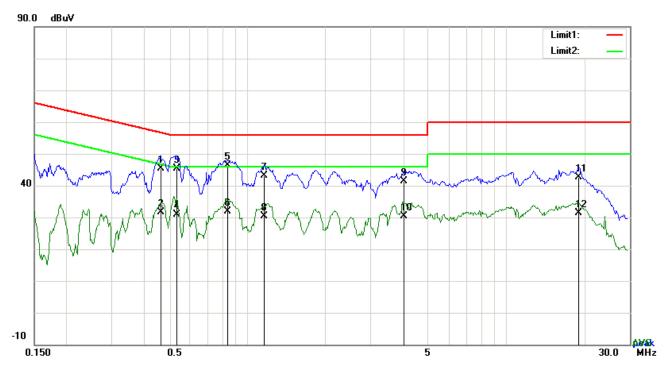
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	3. The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss
	coaxial cable.
	4. All other supporting equipment were powered separately from another main supply.
	5. The EUT was switched on and allowed to warm up to its normal 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	
Remark	
Result	Pass Fail
Test Data	Yes N/A
Test Plot	Yes (See below)



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Test Mode:



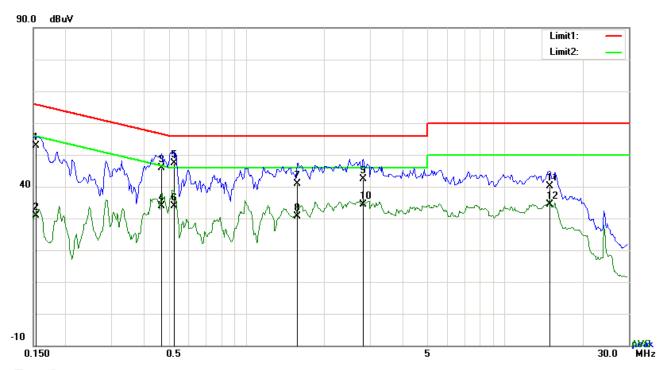
Phase Line Plot at 120Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB)	(dBuV)	(dBuV)	(dB)
1	L1	0.4620	35.41	QP	10.03	45.44	56.66	-11.22
2	L1	0.4620	21.69	AVG	10.03	31.72	46.66	-14.94
3	L1	0.5322	35.34	QP	10.03	45.37	56.00	-10.63
4	L1	0.5322	20.74	AVG	10.03	30.77	46.00	-15.23
5	L1	0.8364	36.41	QP	10.03	46.44	56.00	-9.56
6	L1	0.8364	21.90	AVG	10.03	31.93	46.00	-14.07
7	L1	1.1595	33.17	QP	10.03	43.20	56.00	-12.80
8	L1	1.1595	20.46	AVG	10.03	30.49	46.00	-15.51
9	L1	4.0257	31.20	QP	10.07	41.27	56.00	-14.73
10	L1	4.0257	20.23	AVG	10.07	30.30	46.00	-15.70
11	L1	19.0446	32.46	QP	10.29	42.75	60.00	-17.25
12	L1	19.0446	21.10	AVG	10.29	31.39	50.00	-18.61



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Test Mode:



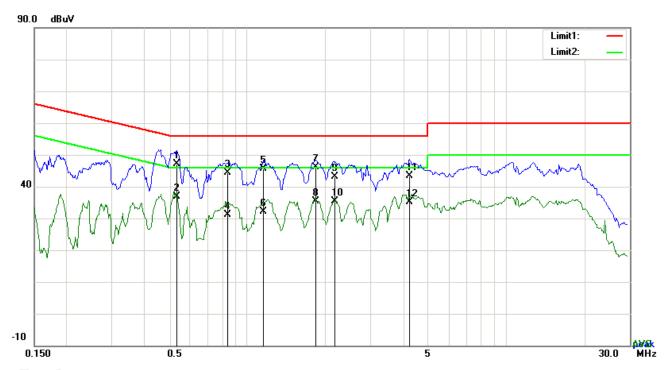
Phase Neutral Plot at 120Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB)	(dBuV)	(dBuV)	(dB)
1	N	0.1539	42.83	QP	10.02	52.85	65.79	-12.94
2	N	0.1539	20.85	AVG	10.02	30.87	55.79	-24.92
3	N	0.4698	35.79	QP	10.02	45.81	56.52	-10.71
4	N	0.4698	23.96	AVG	10.02	33.98	46.52	-12.54
5	N	0.5244	37.39	QP	10.02	47.41	56.00	-8.59
6	N	0.5244	23.91	AVG	10.02	33.93	46.00	-12.07
7	N	1.5735	30.86	QP	10.04	40.90	56.00	-15.10
8	N	1.5735	20.63	AVG	10.04	30.67	46.00	-15.33
9	N	2.8240	32.41	QP	10.05	42.46	56.00	-13.54
10	N	2.8240	24.43	AVG	10.05	34.48	46.00	-11.52
11	N	14.8599	29.95	QP	10.20	40.15	60.00	-19.85
12	N	14.8599	24.10	AVG	10.20	34.30	50.00	-15.70



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Test Mode:



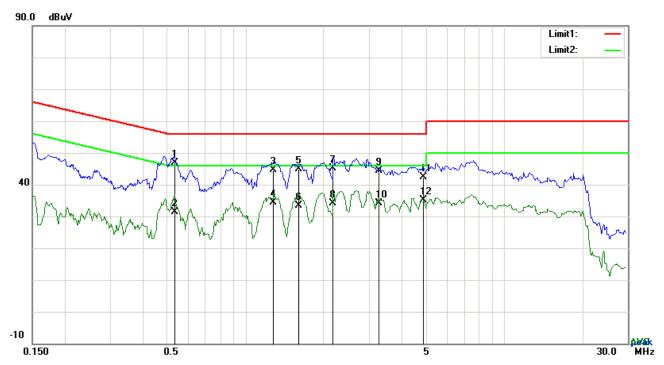
Phase Line Plot at 240Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB}	(dBuV)	(dBuV)	(dB)
1	L1	0.5322	37.08	QP	10.03	47.11	56.00	-8.89
2	L1	0.5322	26.79	AVG	10.03	36.82	46.00	-9.18
3	L1	0.8364	34.23	QP	10.03	44.26	56.00	-11.74
4	L1	0.8364	21.02	AVG	10.03	31.05	46.00	-14.95
5	L1	1.1562	35.65	QP	10.03	45.68	56.00	-10.32
6	L1	1.1562	22.07	AVG	10.03	32.10	46.00	-13.90
7	L1	1.8348	35.99	QP	10.04	46.03	56.00	-9.97
8	L1	1.8348	25.31	AVG	10.04	35.35	46.00	-10.65
9	L1	2.1702	33.16	QP	10.04	43.20	56.00	-12.80
10	L1	2.1702	25.24	AVG	10.04	35.28	46.00	-10.72
11	L1	4.2246	33.20	QP	10.07	43.27	56.00	-12.73
12	L1	4.2246	25.18	AVG	10.07	35.25	46.00	-10.75



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est Mode:



Phase Neutral Plot at 240Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB)	(dBuV)	(dBuV)	(dB)
1	N	0.5322	36.83	QP	10.02	46.85	56.00	-9.15
2	N	0.5322	21.40	AVG	10.02	31.42	46.00	-14.58
3	Ν	1.2824	34.56	QP	10.03	44.59	56.00	-11.41
4	N	1.2824	24.28	AVG	10.03	34.31	46.00	-11.69
5	N	1.6086	34.89	QP	10.04	44.93	56.00	-11.07
6	N	1.6086	23.39	AVG	10.04	33.43	46.00	-12.57
7	N	2.1897	35.09	QP	10.04	45.13	56.00	-10.87
8	Ν	2.1897	24.02	AVG	10.04	34.06	46.00	-11.94
9	Ν	3.2886	34.21	QP	10.05	44.26	56.00	-11.74
10	N	3.2886	24.17	AVG	10.05	34.22	46.00	-11.78
11	N	4.8915	32.43	QP	10.07	42.50	56.00	-13.50
12	N	4.8915	25.04	AVG	10.07	35.11	46.00	-10.89



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6.2 Radiated Emissions

Temperature	23°C
Relative Humidity	56%
Atmospheric Pressure	1014mbar
Test date :	November 14, 2016
Tested By :	Loren Luo

Requirement(s):

Spec	Item	Requirement Applic			
47CFR§15. 109(d)	a)	Except higher limit as specified else emissions from the low-power radio exceed the field strength levels spethe level of any unwanted emission the fundamental emission. The tight edges Frequency range (MHz) 30 - 88 88 - 216 216 960 Above 960	Ĭ.		
Test Setup	Above 960 Ant. Tower Variable Support Units Ground Plane Test Receiver				
Procedure	 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: Vertical or horizontal polarization (whichever gave the higher emission level over a full rotation of the EUT) was chosen. The EUT was then rotated to the direction that gave the maximum 				



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	emission.
	c. Finally, the antenna height was adjusted to the height that gave the maximum
	emission.
	3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is
	120 kHz for Quasiy Peak detection at frequency below 1GHz.
	4. 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.
	The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video
	bandwidth with Peak detection for Average Measurement as below at frequency
	above 1GHz.
	■ 1 kHz (Duty cycle < 98%) □ 10 Hz (Duty cycle > 98%)
	5. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency
	points were measured.
Demont	
Remark	
Result	Pass Fail

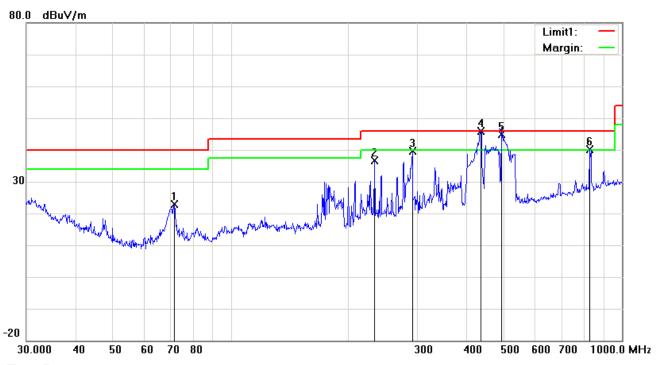
Test Data	Yes	□ _{N/A}
Test Plot	Yes (See below)	□ _{N/A}



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t Mode: USB Mode

Below 1GHz



Test Data

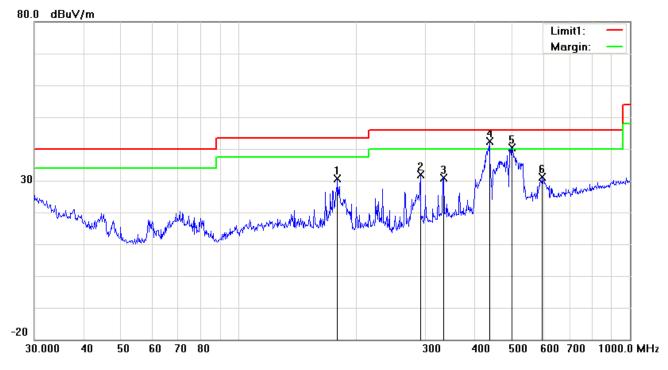
Horizontal Polarity Plot @3m

No.	P/L	Frequency	Readin g	Detector	Corrected	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/ m)		(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	Н	71.8320	36.60	peak	-13.66	22.94	40.00	-17.06	100	142
2	Н	233.3487	45.69	peak	-9.04	36.65	46.00	-9.35	100	51
3	Н	291.0360	46.94	QP	-7.31	39.63	46.00	-6.37	100	150
4	Н	435.5898	49.43	QP	-3.43	46.00	46.00	0.00	100	139
5	Н	492.4685	46.90	QP	-1.90	45.00	46.00	-1.00	100	84
6	Н	827.4934	36.48	QP	3.53	40.01	46.00	-5.99	100	72



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Below 1GHz



Test Data

Vertical Polarity Plot @3m

No.	P/L	Frequency	Readin g	Detector	Corrected	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/ m)		(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	>	178.7584	40.54	peak	-9.79	30.75	43.50	-12.75	100	34
2	٧	291.0360	39.18	peak	-7.31	31.87	46.00	-14.13	100	105
3	V	333.6867	36.86	peak	-5.93	30.93	46.00	-15.07	100	92
4	٧	437.1199	45.69	QP	-3.40	42.29	46.00	-3.71	100	134
5	٧	499.4247	41.99	QP	-1.70	40.29	46.00	-5.71	100	167
6	V	597.2234	31.12	peak	-0.04	31.08	46.00	-14.92	100	85



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Above 1GHz

Frequency (MHz)	Amplitude (dΒμV/m)	Azimuth	Height (cm)	Polarity (H/V)	Factors (dB)	Limit (dBµV/m)	Margin (dB)	Detector (PK/AV)
1188.52	51.36	74	155	V	-22.36	74	-22.64	PK
1634.18	53.47	108	136	V	-23.81	74	-20.53	PK
2465.44	52.85	82	177	V	-21.66	74	-21.15	PK
1766.37	53.19	67	208	Н	-20.73	74	-20.81	PK
2106.82	51.73	131	193	Н	-21.92	74	-22.27	PK
1967.95	54.11	124	167	Н	-22.75	74	-19.89	PK

Note1: The highest frequency of the EUT is 2480 MHz, so the testing has been conformed to 5*2480 MHz=12,400 MHz.

Note 2: The frequency that above 3GHz is mainly from the environment noise.

Note3: The AV measurement performed, more than 20dB below limit so AV test data was not presented.



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Annex A. TEST INSTRUMENT

Instrument	Model	Serial#	Cal Date	Cal Due	In use				
AC Line Conducted Emissions									
EMI test receiver	ESCS30	8471241027	09/16/2016	09/15/2017	>				
Line Impedance Stabilization Network	LI-125A	191106	09/24/2016	09/23/2017	\				
Line Impedance Stabilization Network	LI-125A	191107	09/24/2016	09/23/2017	\(\right\)				
LISN	ISN T800	34373	09/24/2016	09/23/2017	<				
Transient Limiter	LIT-153	531118	08/31/2016	08/30/2017	<				
Radiated Emissions									
EMI test receiver	ESL6	100262	09/16/2016	09/15/2017	>				
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	08/31/2016	08/30/2017	>				
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/24/2016	03/23/2017	\				
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/20/2016	09/19/2017	(
Double Ridge Horn Antenna	AH-118	71259	09/23/2016	09/22/2017	>				



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Annex B. EUT And Test Setup Photographs

Annex B.i. Photograph: EUT External Photo



Whole Package View



Adapter - Front View



Charger Base - Lable View



EUT - Front View



EUT - Rear View



EUT - Top View



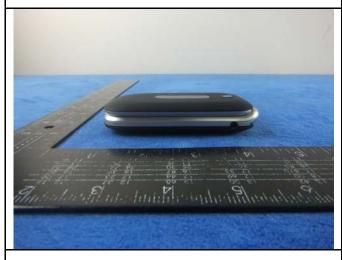
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EUT - Bottom View

EUT - Left View



EUT - Right View



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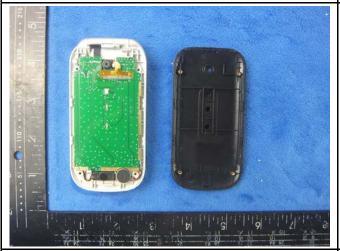
Annex B.ii. Photograph: EUT Internal Photo



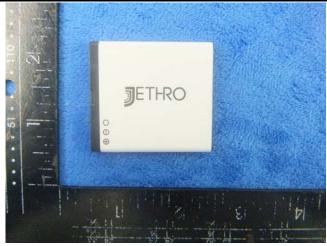
Cover Off - Top View 1



Cover Off - Top View 2



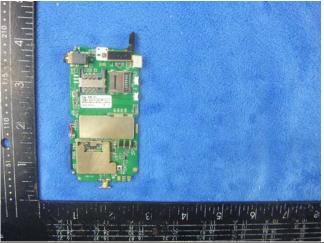
Cover Off - Top View 3



Battery - Front View



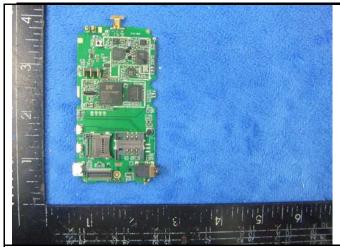
Battery - Rear View



Mainboard with Shielding - Front View



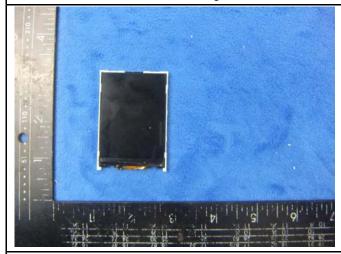
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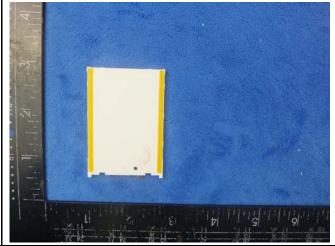




Mainboard without Shielding - Front View

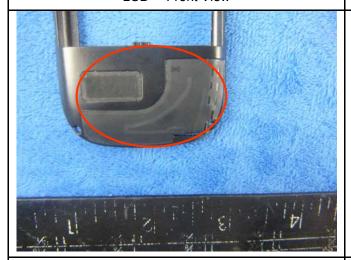
Mainboard - Rear View



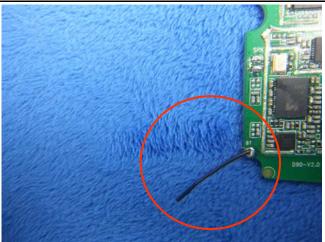


LCD - Front View

LCD - Rear View







BT - Antenna View



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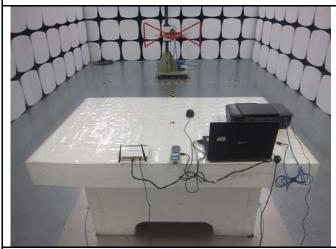
Annex B.iii. Photograph: Test Setup Photo



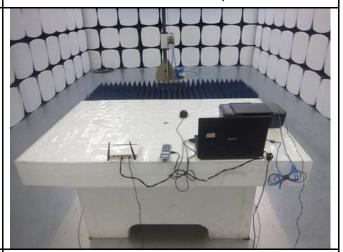
Conducted Emissions Test Setup - Front View



Conducted Emissions Test Setup - Side View



Radiated Emissions Test Setup Below 1GHz



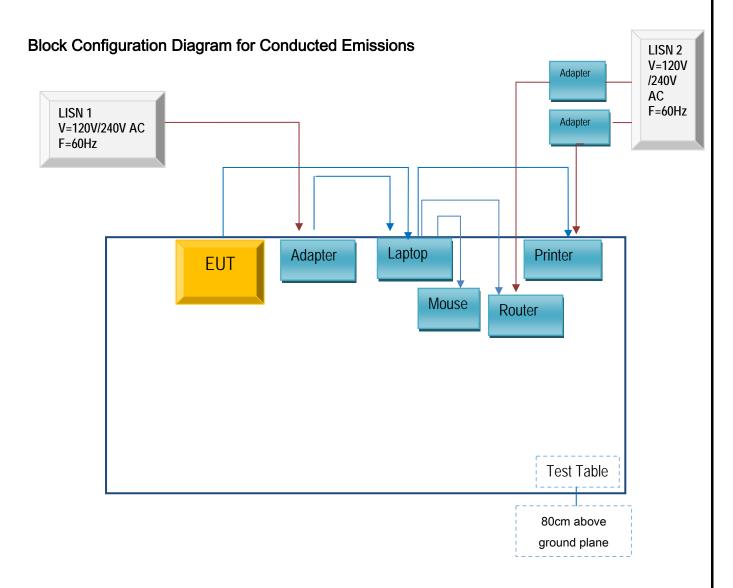
Radiated Emissions Test Setup Above 1GHz



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Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

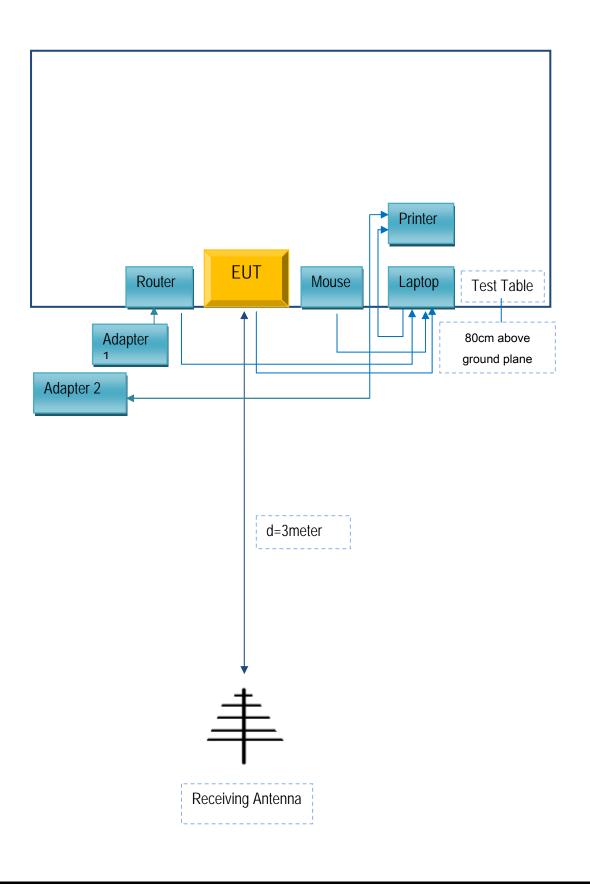
Annex C.ii. TEST SET UP BLOCK





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Block Configuration Diagram for Radiated Emissions





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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
Lenovo	Laptop	E40	LR-1EHRX
GOLDWEB	Router	R102	1202032094
SMT TELECOMM HK LIMITED	Adapter	PC488	D2156273
Lenovo	AC Adapter	42T4416	21D9JU
НР	Printer	VCVRA-1003	CN36M19JWX
DELL	Mouse	E100	912NMTUT41481
BULL	Socket	GN-403	GN201203

Supporting Cable:

Cable type	Shield Type	Ferrite Core	Length	Serial No
USB Cable	Un-shielding	No	2m	JX120051274
USB Cable	Un-shielding	No	2m	CBA3000AH0C1
RJ45 Cable	Un-shielding	No	2m	KX156327541
Router Power cable	Un-shielding	No	2m	13274630Z
Printer Power cable	Un-shielding	No	2m	127581031
Power Cable	Un-shielding	No	0.8m	GT211032



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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

N/A