

EMC TEST REPORT



Report No.: 16070174-FCC-E

Supersede Report No.:N/A

Applicant	SWAGTEK	
Product Name	4.5 inch Smart Phone	
Model No.	X4.5 LITE	
Serial No.	SPARK , UM450	
Test Standard	FCC Part 15 Subpart B Class B:2015, ANSI C63.4: 2014	
Test Date	Feb 25 to March 27 , 2016	
Issue Date	April 08, 2016	
Test Result	☒ Pass ☐ Fail	
Equipment complied with the specification ☒		
Equipment did not comply with the specification ☐		
<i>Winnie Zhang</i>	<i>David Huang</i>	
Winnie Zhang Test Engineer	David Huang Checked By	
This test report may be reproduced in full only 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

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

Test Report	16070174-FCC-E
Page	3 of 31

This page has been left blank intentionally.

CONTENTS

1. REPORT REVISION HISTORY	5
2. CUSTOMER INFORMATION	5
3. TEST SITE INFORMATION	5
4. EQUIPMENT UNDER TEST (EUT) INFORMATION	6
5. TEST SUMMARY	8
6. MEASUREMENTS, EXAMINATION AND DERIVED RESULTS	9
6.1 AC POWER LINE CONDUCTED EMISSIONS.....	9
6.2 RADIATED EMISSIONS.....	15
ANNEX A. TEST INSTRUMENT.....	21
ANNEX B. EUT AND TEST SETUP PHOTOGRAPHS.....	22
ANNEX C. TEST SETUP AND SUPPORTING EQUIPMENT.....	27
ANNEX D. USER MANUAL / BLOCK DIAGRAM / SCHEMATICS / PARTLIST	30
ANNEX E. DECLARATION OF SIMILARITY	31

1. Report Revision History

Report No.	Report Version	Description	Issue Date
16070174-FCC-E	NONE	Original	March 28, 2016
16070174-FCC-E	V1	Change product name	April 08, 2016

2. Customer information

Applicant Name	SWAGTEK
Applicant Add	10205 NW19th Street,STE101,Miami, Florida, 33172, United States
Manufacturer	SWAGTEK
Manufacturer Add	10205 NW19th Street,STE101,Miami, Florida, 33172, United States

3. Test site information

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES
Lab Address	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park 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

4. Equipment under Test (EUT) Information

Description of EUT:	4.5 inch Smart Phone
Main Model:	X4.5 LITE
Serial Model:	SPARK , UM450
Antenna Gain:	GSM850: -1.5 dBi PCS1900: 1.2dBi UMTS-FDD Band V:-1.2dBi UMTS-FDD Band IV:1.8 dBi UMTS-FDD Band II: 1.9dBi Bluetooth/BLE: 2.1dBi WIFI:2.5dBi GPS:1.5dBi
Input Power:	Adapter: Model: N/A Input: AC 100-240V; 50/60Hz;0.2A Output: DC 5.0V,700mA Battery: Model: N/A Capacity: 1700mAh Related Voltage:3.7V
Equipment Category :	JBP
Type of Modulation:	GSM / GPRS: GMSK UMTS-FDD: QPSK, 16QAM 802.11b/g/n: DSSS, OFDM Bluetooth: GFSK, π /4DQPSK, 8DPSK BLE: GFSK GPS:BPSK

Test Report	16070174-FCC-E
Page	7 of 31

	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
	UMTS-FDD Band IV TX:1712.4 ~ 1752.6 MHz;
	RX : 2112.4 ~ 2152.6 MHz
RF Operating Frequency (ies):	UMTS-FDD Band II TX:1852.4 ~ 1907.6 MHz;
	RX: 1932.4 ~ 1987.6 MHz
	WIFI:802.11b/g/n(20M): 2412-2462 MHz
	WIFI:802.11n(40M): 2422-2452 MHz
	Bluetooth& BLE: 2402-2480 MHz
	GPS RX:1575.42 MHz
	GSM 850: 124CH
	PCS1900: 299CH
	UMTS-FDD Band V : 102CH
	UMTS-FDD Band IV: 202CH
	UMTS-FDD Band II : 277CH
Number of Channels:	WIFI :802.11b/g/n(20M): 11CH
	WIFI :802.11n(40M): 7CH
	Bluetooth: 79CH
	BLE: 40CH
	GPS:1CH
Port:	Power Port, Earphone Port, USB Port
Trade Name :	LOGIC , ISWAG , UNONU
FCC ID:	O55-45012
Date EUT received:	Feb 24 , 2016
Test Date(s):	Feb 25 to March 27 , 2016

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
-	-	-

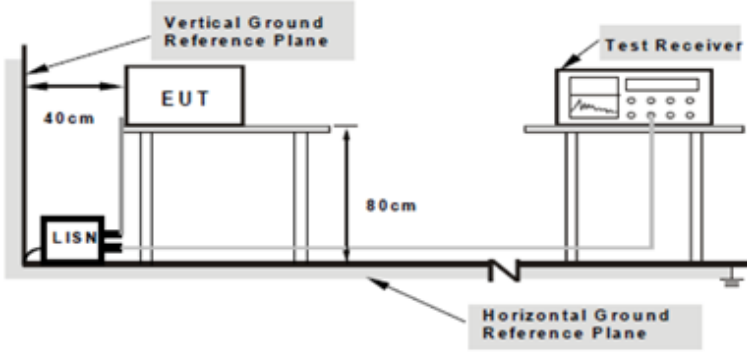
6. Measurements, Examination And Derived Results

6.1 AC Power Line Conducted Emissions

Temperature	23°C
Relative Humidity	52%
Atmospheric Pressure	1010mbar
Test date :	March 10, 2016
Tested By :	Winnie Zhang

Requirement(s):

Spec	Item	Requirement	Applicable														
47CFR§15.107	a)	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.															
		<table><tr><th rowspan="2">Frequency ranges (MHz)</th><th colspan="2">Limit (dBµV)</th></tr><tr><th>QP</th><th>Average</th></tr><tr><td>0.15 ~ 0.5</td><td>66 – 56</td><td>56 – 46</td></tr><tr><td>0.5 ~ 5</td><td>56</td><td>46</td></tr><tr><td>5 ~ 30</td><td>60</td><td>50</td></tr></table>	Frequency ranges (MHz)	Limit (dBµV)		QP	Average	0.15 ~ 0.5	66 – 56	56 – 46	0.5 ~ 5	56	46	5 ~ 30	60	50	
Frequency ranges (MHz)	Limit (dBµV)																
	QP	Average															
0.15 ~ 0.5	66 – 56	56 – 46															
0.5 ~ 5	56	46															
5 ~ 30	60	50															

Test Setup	 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.
-----------	--

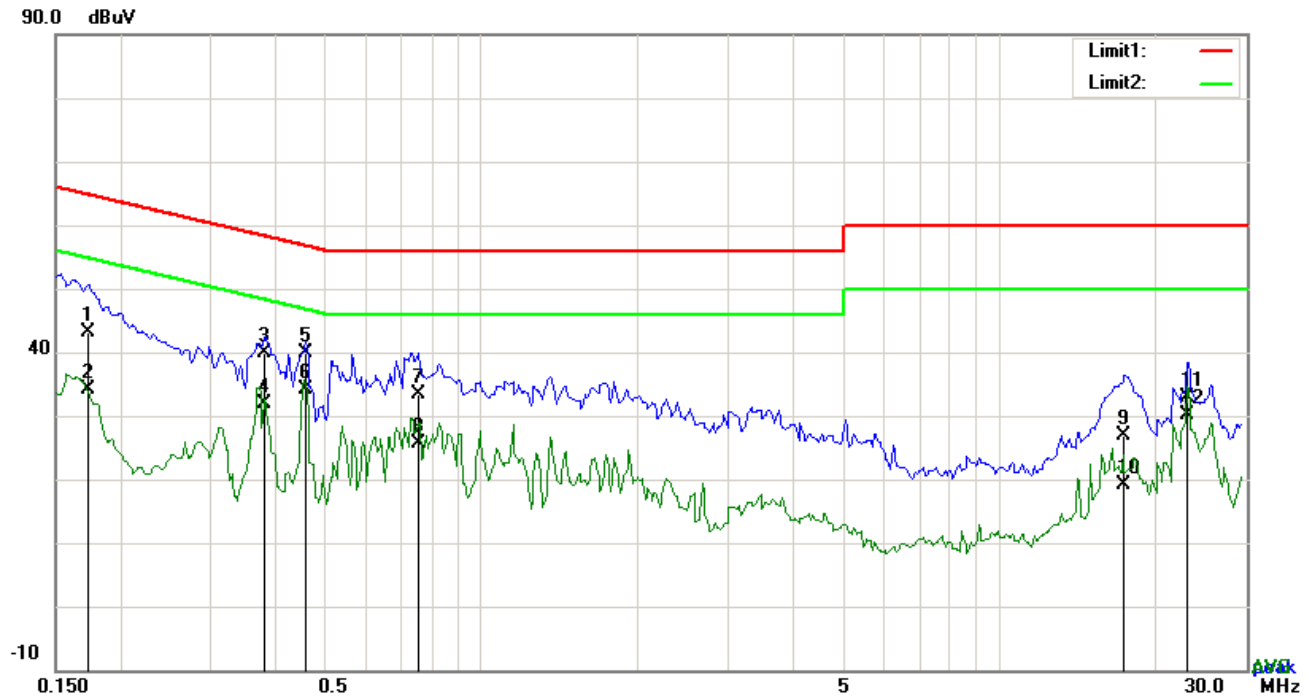
Test Report	16070174-FCC-E
Page	10 of 31

	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	
Result	☒ Pass ☐ Fail

Test Data ☒ Yes ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

Test Mode : USB Mode

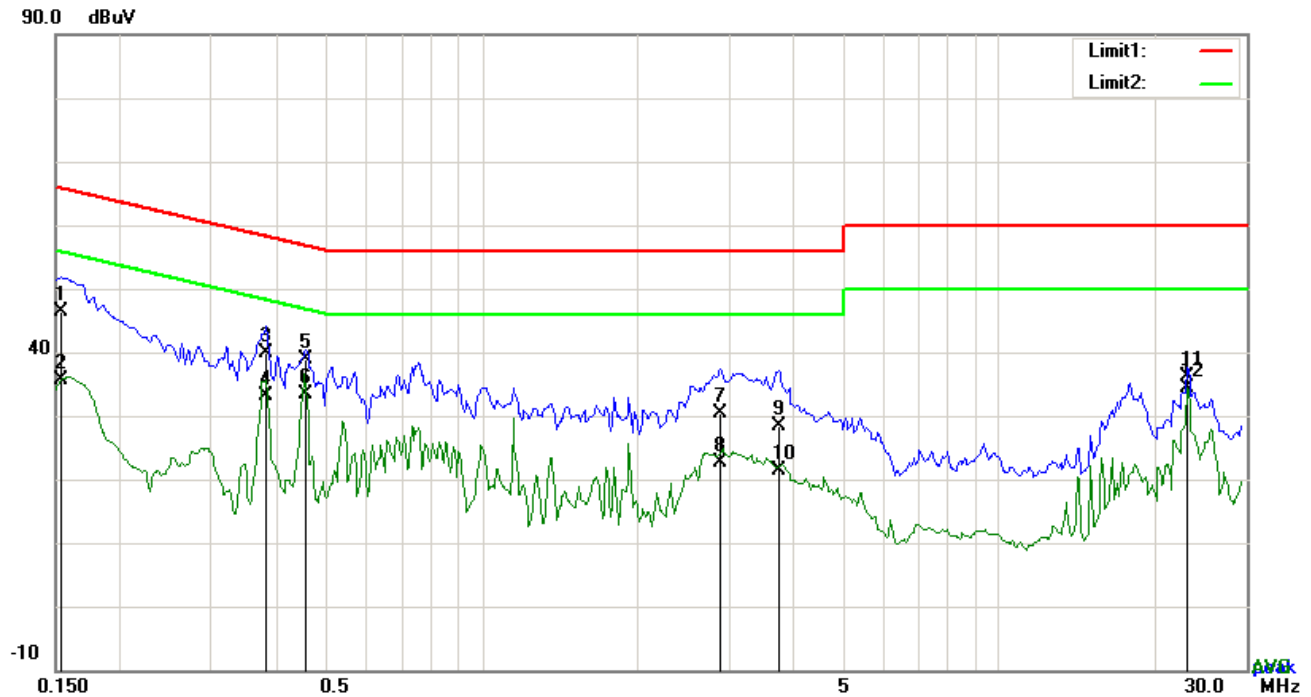


Test Data

Phase Line Plot at 120Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB)	(dBuV)	(dBuV)	(dB)
1	L1	0.1734	30.02	QP	13.11	43.13	64.80	-21.67
2	L1	0.1734	21.07	AVG	13.11	34.18	54.80	-20.62
3	L1	0.3801	27.58	QP	12.35	39.93	58.28	-18.35
4	L1	0.3801	19.57	AVG	12.35	31.92	48.28	-16.36
5	L1	0.4581	27.70	QP	12.06	39.76	56.73	-16.97
6	L1	0.4581	22.04	AVG	12.06	34.10	46.73	-12.63
7	L1	0.7545	21.80	QP	11.65	33.45	56.00	-22.55
8	L1	0.7545	13.86	AVG	11.65	25.51	46.00	-20.49
9	L1	17.4534	12.37	QP	14.62	26.99	60.00	-33.01
10	L1	17.4534	4.49	AVG	14.62	19.11	50.00	-30.89
11	L1	23.1279	18.16	QP	14.69	32.85	60.00	-27.15
12	L1	23.1279	15.53	AVG	14.69	30.22	50.00	-19.78

Test Mode : USB Mode

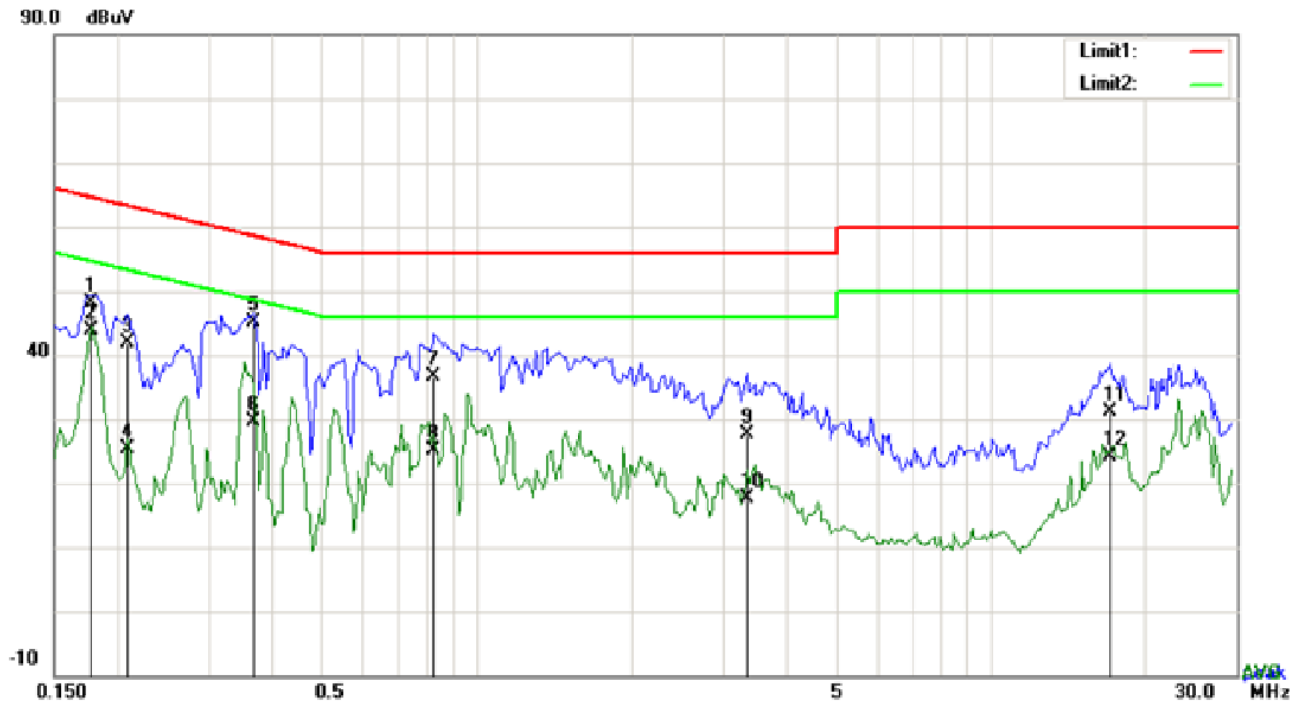


Test Data

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	33.14	QP	13.19	46.33	65.79	-19.46
2	N	0.1539	22.46	AVG	13.19	35.65	55.79	-20.14
3	N	0.3840	27.56	QP	12.33	39.89	58.19	-18.30
4	N	0.3840	20.89	AVG	12.33	33.22	48.19	-14.97
5	N	0.4581	26.76	QP	12.06	38.82	56.73	-17.91
6	N	0.4581	21.21	AVG	12.06	33.27	46.73	-13.46
7	N	2.8917	18.85	QP	11.64	30.49	56.00	-25.51
8	N	2.8917	11.00	AVG	11.64	22.64	46.00	-23.36
9	N	3.7566	16.66	QP	11.74	28.40	56.00	-27.60
10	N	3.7566	9.61	AVG	11.74	21.35	46.00	-24.65
11	N	23.1279	19.72	QP	16.29	36.01	60.00	-23.99
12	N	23.1279	18.04	AVG	16.29	34.33	50.00	-15.67

Test Mode : USB Mode

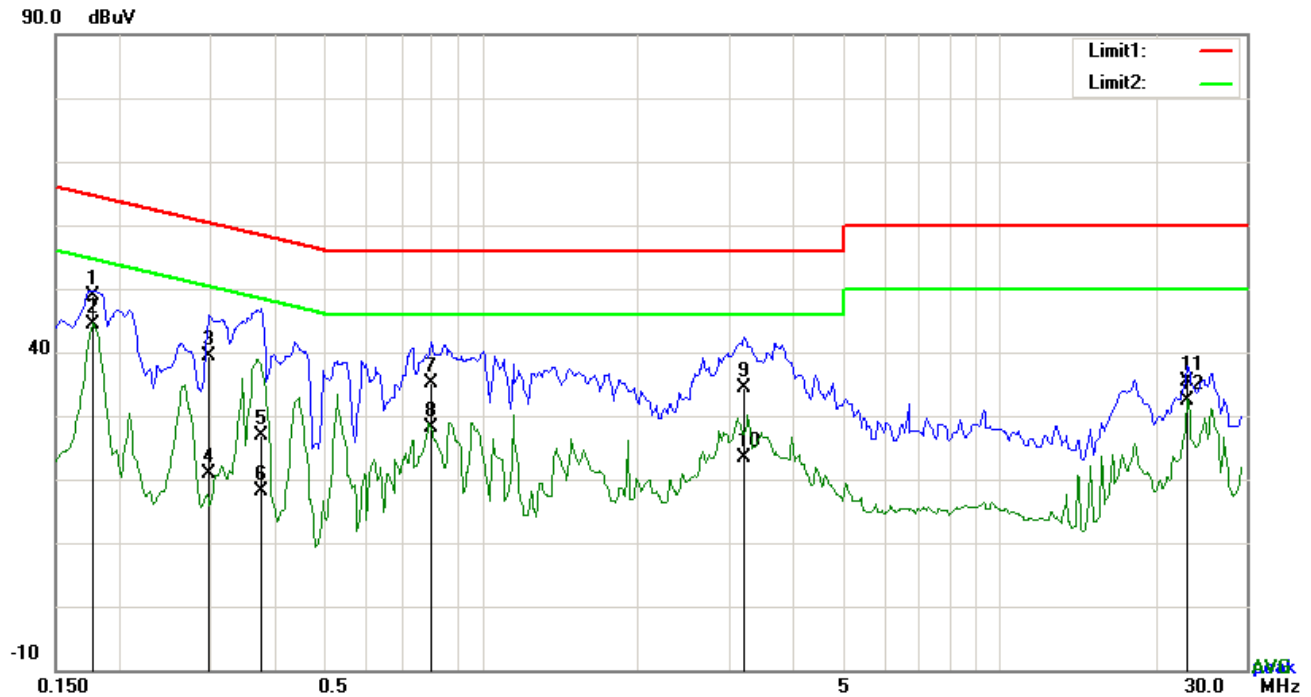


Test Data

Phase Line Plot at 240Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB}	(dBuV)	(dBuV)	(dB)
1	L1	0.1773	34.96	QP	13.10	48.06	64.61	-16.55
2	L1	0.1773	30.82	AVG	13.10	43.92	54.61	-10.69
3	L1	0.2085	29.02	QP	12.98	42.00	63.26	-21.26
4	L1	0.2085	12.36	AVG	12.98	25.34	53.26	-27.92
5	L1	0.3684	32.71	QP	12.39	45.10	58.54	-13.44
6	L1	0.3684	17.34	AVG	12.39	29.73	48.54	-18.81
7	L1	0.8247	25.09	QP	11.58	36.67	56.00	-19.33
8	L1	0.8247	13.49	AVG	11.58	25.07	46.00	-20.93
9	L1	3.3510	16.19	QP	11.40	27.59	56.00	-28.41
10	L1	3.3510	6.21	AVG	11.40	17.61	46.00	-28.39
11	L1	17.0088	16.64	QP	14.53	31.17	60.00	-28.83
12	L1	17.0088	9.54	AVG	14.53	24.07	50.00	-25.93

Test Mode : USB Mode



Test Data

Phase Neutral Plot at 240Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB)	(dBuV)	(dBuV)	(dB)
1	N	0.1773	35.78	QP	13.10	48.88	64.61	-15.73
2	N	0.1773	31.19	AVG	13.10	44.29	54.61	-10.32
3	N	0.2982	26.62	QP	12.65	39.27	60.29	-21.02
4	N	0.2982	8.20	AVG	12.65	20.85	50.29	-29.44
5	N	0.3762	14.57	QP	12.36	26.93	58.36	-31.43
6	N	0.3762	5.81	AVG	12.36	18.17	48.36	-30.19
7	N	0.7974	23.62	QP	11.60	35.22	56.00	-20.78
8	N	0.7974	16.63	AVG	11.60	28.23	46.00	-17.77
9	N	3.2184	22.73	QP	11.68	34.41	56.00	-21.59
10	N	3.2184	11.77	AVG	11.68	23.45	46.00	-22.55
11	N	23.1279	19.03	QP	16.29	35.32	60.00	-24.68
12	N	23.1279	16.08	AVG	16.29	32.37	50.00	-17.63

6.2 Radiated Emissions

Temperature	24°C
Relative Humidity	53%
Atmospheric Pressure	1011mbar
Test date :	March 11, 2016
Tested By :	Winnie Zhang

Requirement(s):

Spec	Item	Requirement	Applicable	
47CFR§15.109(d)	a)	Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges		
		Frequency range (MHz)		Field Strength (µV/m)
		30 – 88		100
		88 – 216		150
		216 960		200
		Above 960		500

Test Setup	
------------	--

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
-----------	--

Test Report	16070174-FCC-E
Page	16 of 31

	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. 3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi 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.
Remark	
Result	☒ Pass ☐ Fail

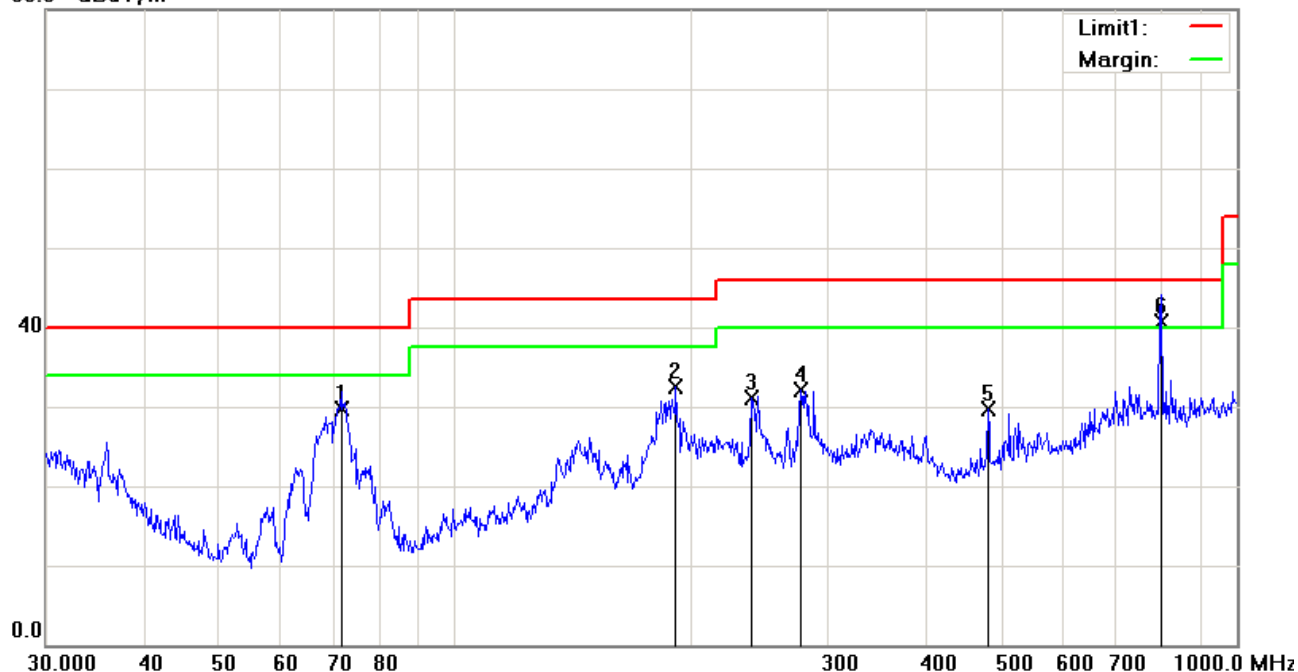
Test Data ☒ Yes ☐ N/A

Test Plot ☒ Yes (See below) ☐ N/A

Test Mode : USB Mode

Below 1GHz

80.0 dBuV/m

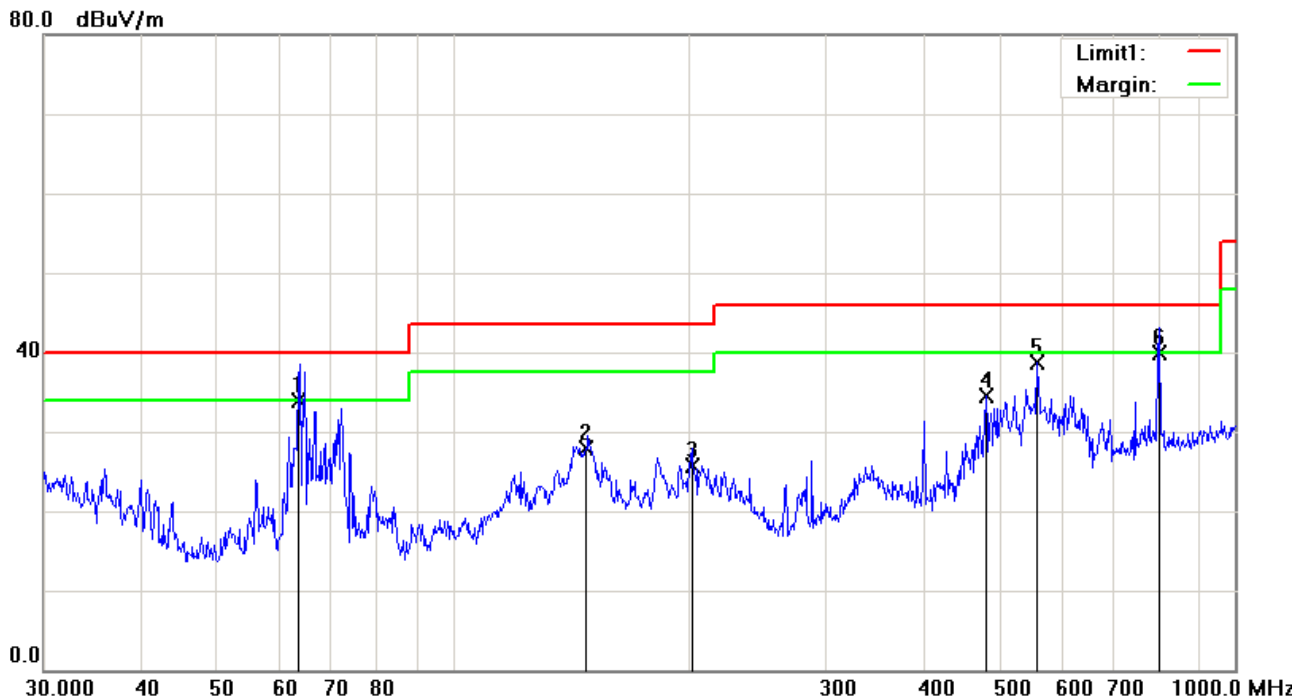


Test Data

Horizontal Polarity Plot @3m

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/m)		(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	H	71.8320	43.37	peak	-13.66	29.71	40.00	-10.29	100	184
2	H	191.7450	41.64	peak	-9.14	32.50	43.50	-11.00	100	225
3	H	239.9873	40.16	peak	-9.10	31.06	46.00	-14.94	100	207
4	H	277.0935	40.11	peak	-7.95	32.16	46.00	-13.84	100	225
5	H	480.5276	31.85	peak	-2.23	29.62	46.00	-16.38	100	57
6	H	801.7863	37.45	QP	3.23	40.68	46.00	-5.32	100	165

Below 1GHz



Test Data

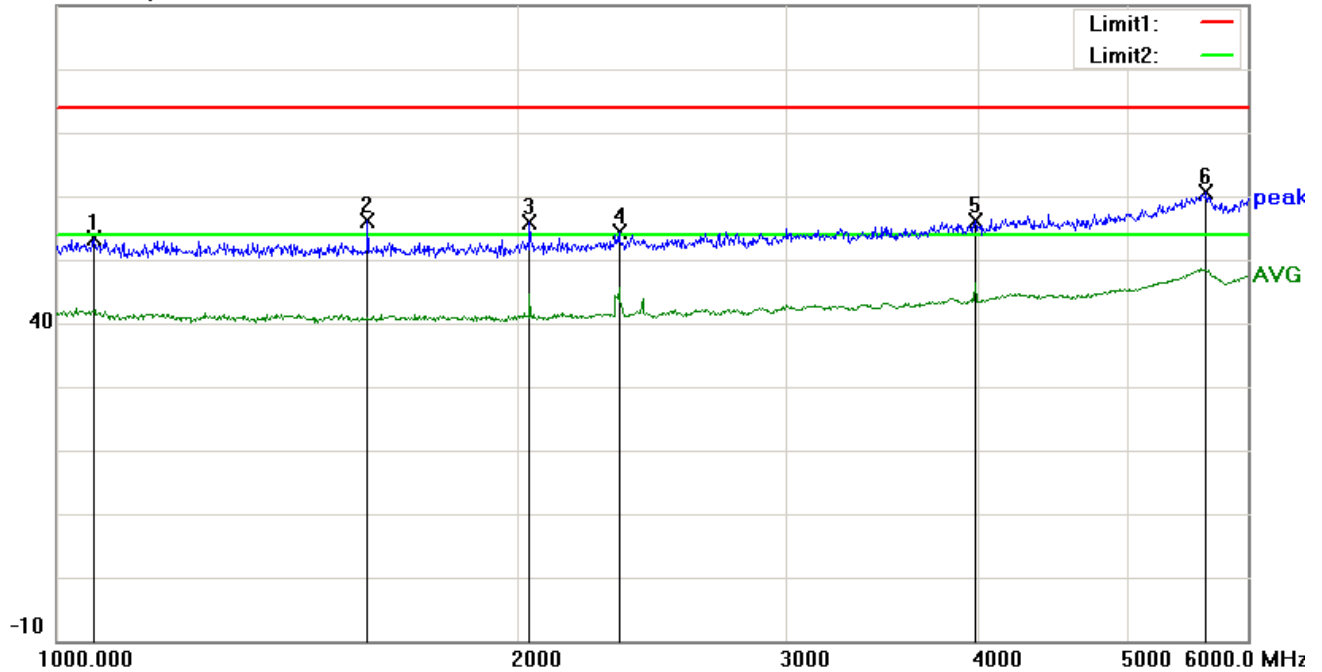
Vertical Polarity Plot @3m

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/m)		(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	V	63.5356	47.94	QP	-14.08	33.86	40.00	-6.14	100	108
2	V	147.9214	36.42	peak	-8.42	28.00	43.50	-15.50	100	273
3	V	202.8104	34.38	peak	-8.76	25.62	43.50	-17.88	100	186
4	V	480.5276	36.75	peak	-2.23	34.52	46.00	-11.48	100	358
5	V	558.7302	39.46	peak	-0.67	38.79	46.00	-7.21	100	175
6	V	801.7863	36.60	QP	3.23	39.83	46.00	-6.17	100	0

Test Mode : USB Mode

Above 1GHz

90.0 dBuV/m

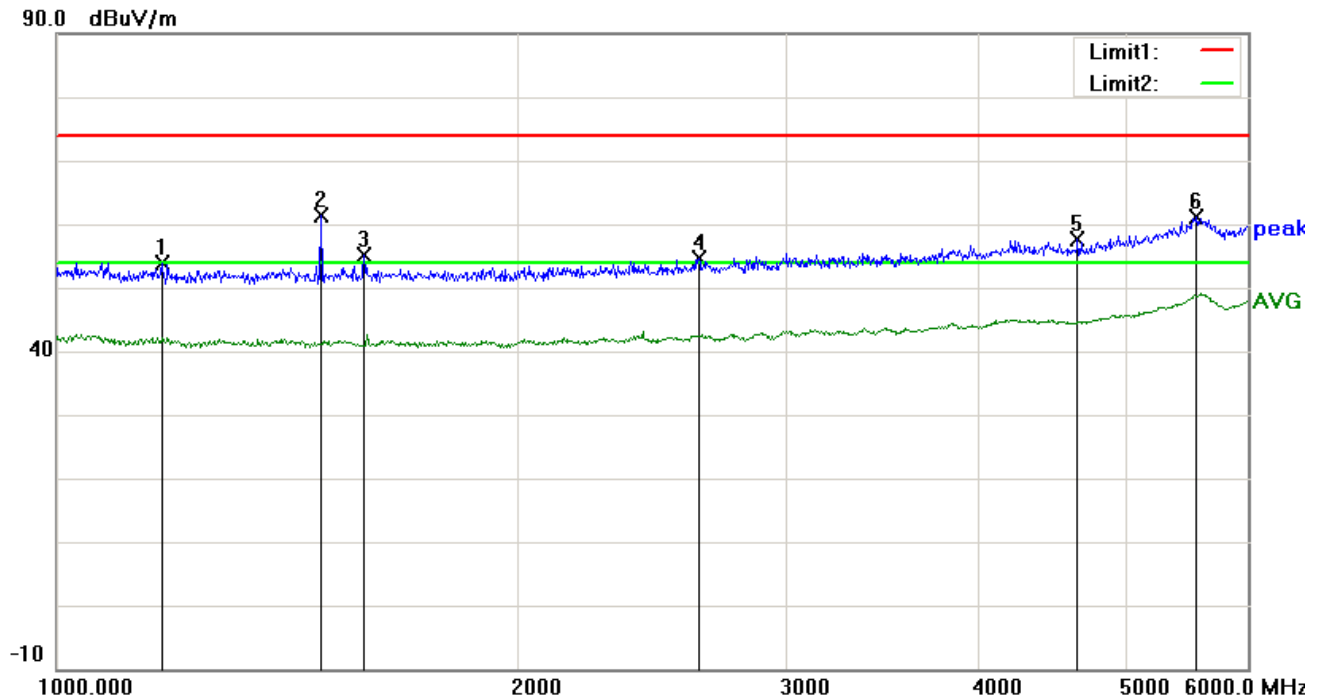


Test Data

Horizontal Polarity Plot @3m

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/m)		(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	H	1057.116	49.87	peak	3.42	53.29	74.00	-20.71	100	49
2	H	1596.237	51.86	peak	4.39	56.25	74.00	-17.75	100	35
3	H	2036.695	50.65	peak	5.19	55.84	74.00	-18.16	100	109
4	H	2329.632	48.59	peak	5.71	54.30	74.00	-19.70	100	172
5	H	3980.656	47.40	peak	8.69	56.09	74.00	-17.91	100	188
6	H	5635.286	49.05	peak	11.66	60.71	74.00	-13.29	100	213

Above 1GHz



Test Data

Vertical Polarity Plot @3m

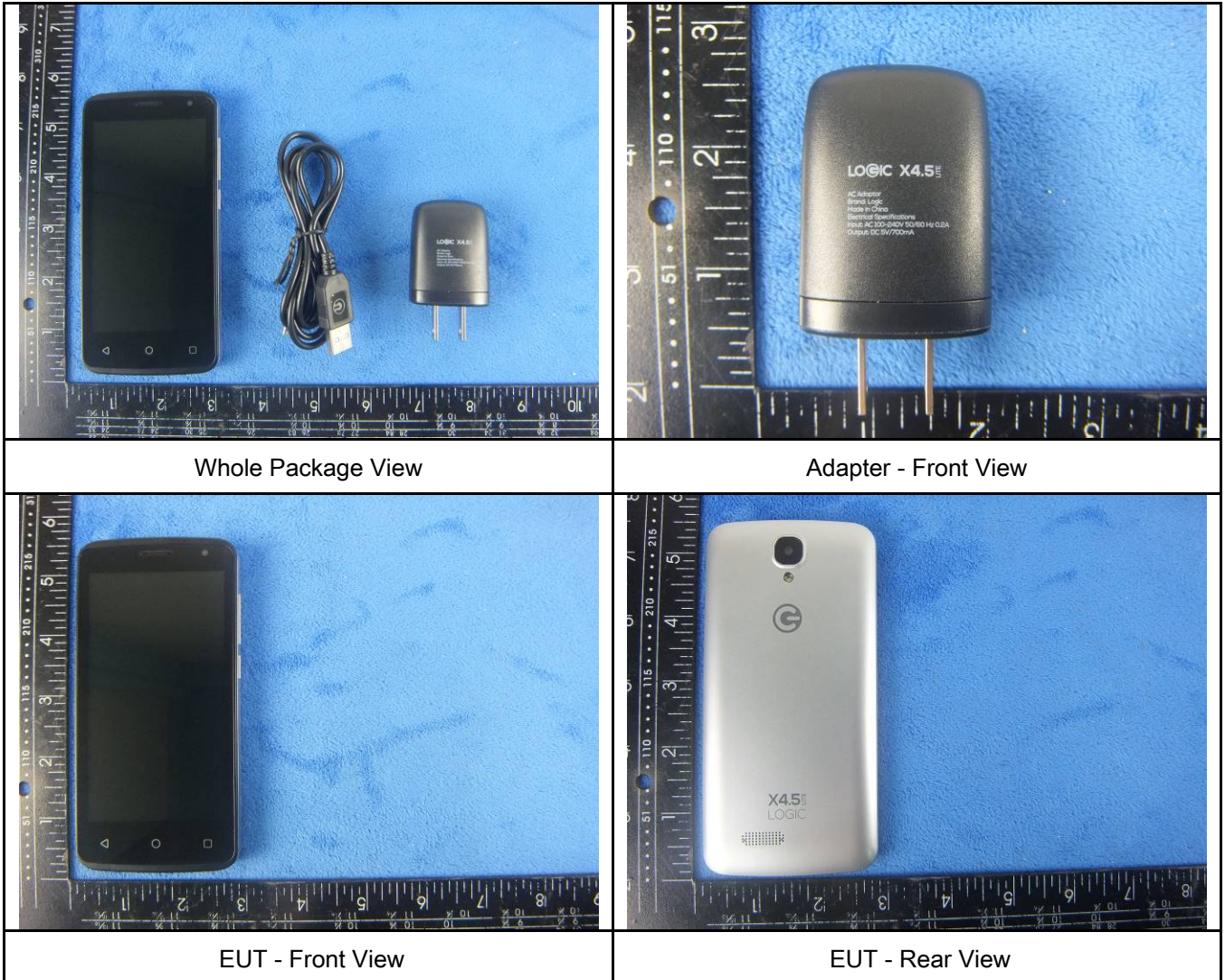
No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/m)		(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)
1	V	1170.785	50.29	peak	3.63	53.92	74.00	-20.08	100	4
2	V	1488.503	57.29	peak	4.20	61.49	74.00	-12.51	100	185
3	V	1587.680	50.82	peak	4.38	55.20	74.00	-18.80	100	178
4	V	2626.779	48.40	peak	6.25	54.65	74.00	-19.35	100	15
5	V	4643.823	47.63	peak	9.88	57.51	74.00	-16.49	100	119
6	V	5555.086	49.72	peak	11.52	61.24	74.00	-12.76	100	108

Annex A. TEST INSTRUMENT

Instrument	Model	Serial #	Cal Date	Cal Due	In use
AC Line Conducted Emissions					
EMI test receiver	ESCS30	8471241027	09/17/2015	09/16/2016	☒
Line Impedance Stabilization Network	LI-125A	191106	09/25/2015	09/24/2016	☒
Line Impedance Stabilization Network	LI-125A	191107	09/25/2015	09/24/2016	☒
LISN	ISN T800	34373	09/25/2015	09/24/2016	☒
Transient Limiter	LIT-153	531118	09/01/2015	08/31/2016	☒
Radiated Emissions					
EMI test receiver	ESL6	100262	09/17/2015	09/16/2016	☒
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	09/01/2015	08/31/2016	☒
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/25/2015	03/24/2016	☒
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/21/2015	09/20/2016	☒
Double Ridge Horn Antenna	AH-118	71259	09/24/2015	09/23/2016	☒

Annex B. EUT And Test Setup Photographs

Annex B.i. Photograph: EUT External Photo



Test Report	16070174-FCC-E
Page	23 of 31



EUT - Top View



EUT - Bottom View



EUT - Left View



EUT - Right View

Annex B.ii. Photograph: EUT Internal Photo



Cover Off - Top View 1



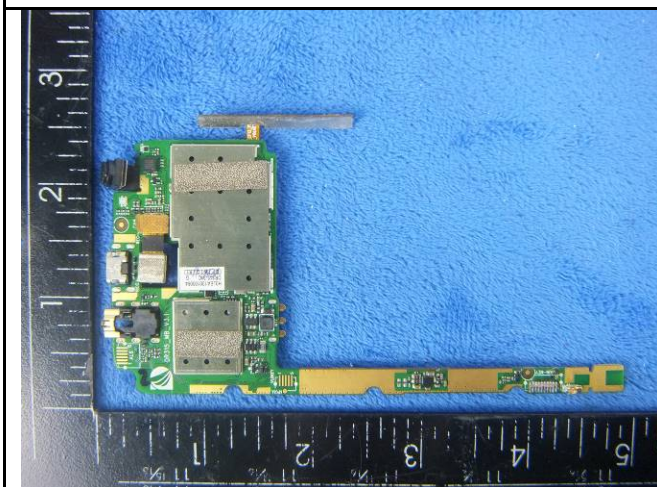
Cover Off - Top View 2



Battery - Front View



Battery - Rear View

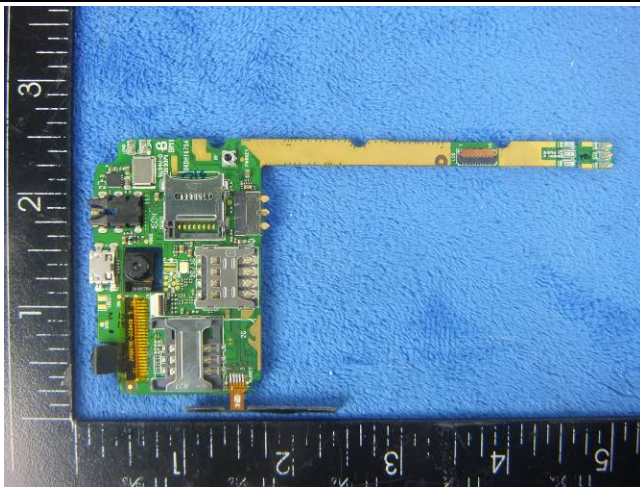


Mainboard with Shielding - Front View



Mainboard without Shielding- Front View

Test Report	16070174-FCC-E
Page	25 of 31



Mainboard without Shielding - Rear View



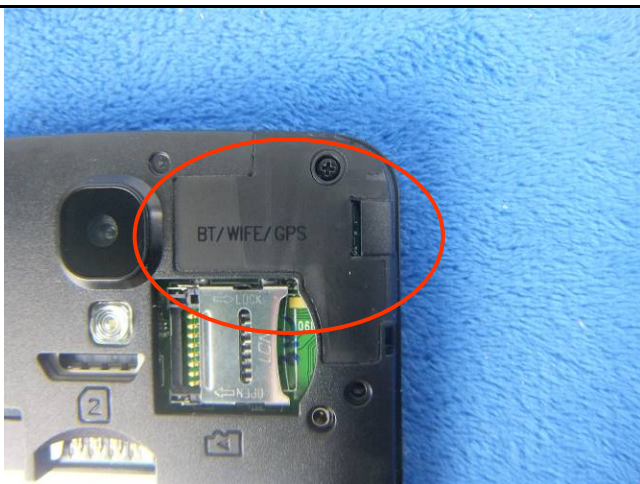
LCD - Front View



LCD - Rear View



GSM/PCS/UMTS-FDD Antenna View



BT/BLE/WIFI/GPS - Antenna View

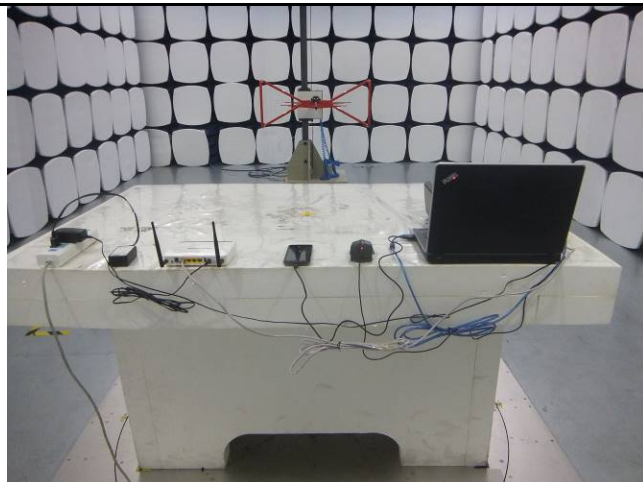
Annex B.iii. Photograph: Test Setup Photo



Conducted Emissions Test Setup – Front View



Conducted Emissions Test Setup – Side View



Radiated Emissions Test Setup Below 1GHz

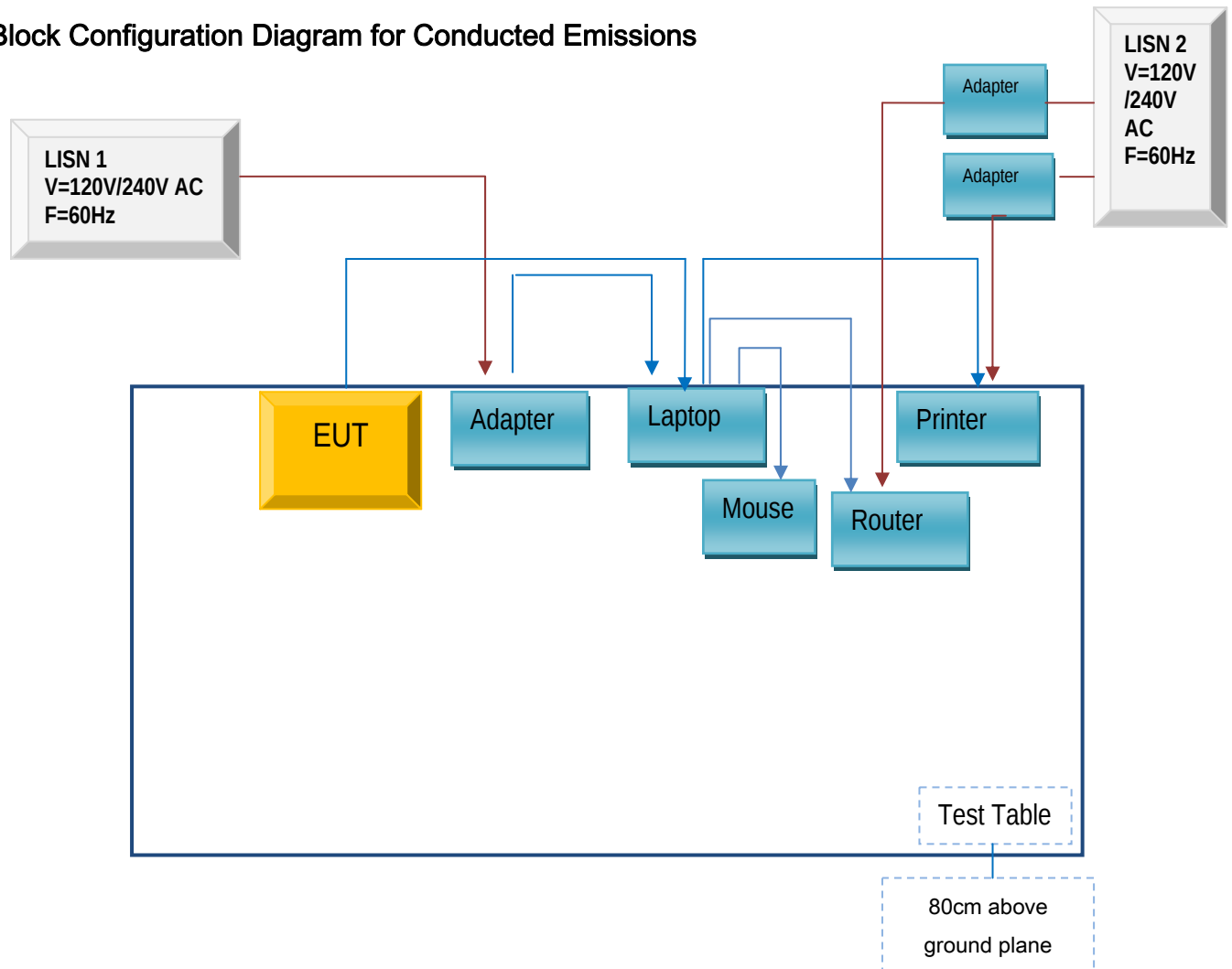


Radiated Emissions Test Setup Above 1GHz

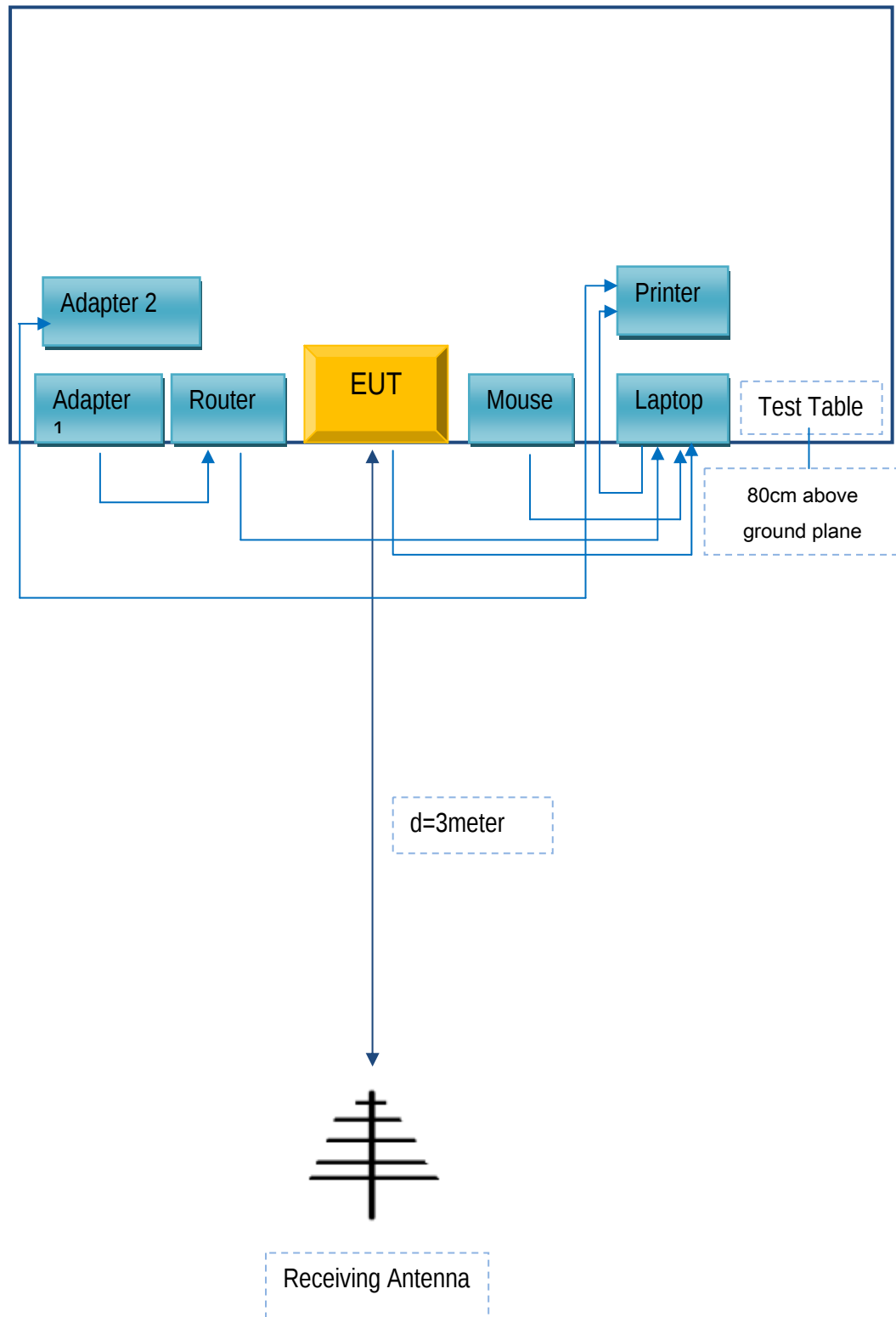
Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

Annex C.ii. TEST SET UP BLOCK

Block Configuration Diagram for Conducted Emissions



Block Configuration Diagram for Radiated Emissions



Annex C. ii. 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
HP	Printer	VCVRA-1003	CN36M19JWX
SWAGTEK	Adapter	N/A	N/A
DELL	Mouse	E100	912NMTUT41481

Supporting Cable:

Cable type	Shield Type	Ferrite Core	Length	Serial No
USB Cable	Un-shielding	No	0.8m	JX1502736
USB Cable	Un-shielding	No	2m	JX110725002
RJ45 Cable	Un-shielding	No	2m	KX156327541
Router Power cable	Un-shielding	No	2m	13274630Z
Printer Power cable	Un-shielding	No	2m	127581031

Test Report	16070174-FCC-E
Page	30 of 31

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

N/A

Annex E. DECLARATION OF SIMILARITY

Swagtek

ADD: 10205 NW 19th Street, STE101, Miami, FL, 33172, USA

Tel: 305 421 9938

Fax: 305 471 9011

DECLARATION OF SIMILARITY

Date: 2016-2-26

Dear Sir or Madam:

We, Swagtek, hereby declare that product: 4.5" Smart Phone, model X4.5 LITE is electrically identical with the models: Spark and UM450, which was tested by Siemic with the same electromagnetic emissions and electromagnetic compatibility characteristics. The results of which are featured in Siemic projects: 16070174.

A description of the difference between the three models and those that are declared similar are as follows:

They are the same product, and just have the different model name, the rest are the same.

Please contact me should there be need for any additional clarification or information.

Best Regards,



Charles Cheng
Manager