# **FCC** EMC TEST REPORT

**ISSUED BY** Shenzhen BALUN Technology Co., Ltd.

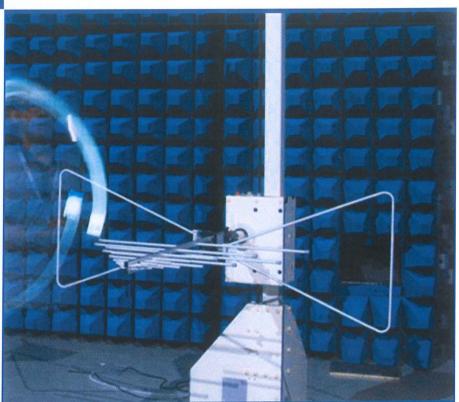


**FOR** 

# **Smartphone**

**ISSUED TO** Shenzhen Sang Fei Consumer Communications Co., Ltd

11 Science and Technology Road, Shenzhen Hi-tech Industrial Park Nanshan District, Shenzhen city, GuangDong province, 518057, China



Approved by Wei Yanquan (Chief Engineer) Date Dec. f. wo 6

Report No.:

BL-SZ16B0295-401

EUT Type:

Smartphone

Model Name:

07

**Brand Name:** 

AOC

Test Standard:

47 CFR Part 15 Subpart B

FCC ID:

**VQRCTO7** 

Test Conclusion:

**Pass** 

Test Date:

Nov. 24, 2016 ~ Dec. 19, 2016

Date of Issue:

Dec. 19, 2016

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Email: info@baluntek.com



# **Revision History**

VersionIssue DateRevisions ContentRev. 01Dec. 13, 2016Initial Issue

Rev. 02 Dec. 19, 2016 Increase Test Configurations in page 10

# **TABLE OF CONTENTS**

1	GE	NERAL INFORMATION	4
	1.1	Identification of the Testing Laboratory	4
	1.2	Identification of the Responsible Testing Location	4
	1.3	Laboratory Condition	4
	1.4	Announce	4
2	PR	ODUCT INFORMATION	5
	2.1	Applicant Information	5
	2.2	Manufacturer Information	5
	2.3	Factory Information	5
	2.4	General Description for Equipment under Test (EUT)	5
	2.5	Ancillary Equipment	6
	2.6	Technical Information	6
3	SU	MMARY OF TEST RESULTS	7
	3.1	Test Standards	7
	3.2	Verdict	7
	3.3	Test Uncertainty	7
4	GE	NERAL TEST CONFIGURATIONS	8
	4.1	Test Environments	8
	4.2	Test Equipment List	8
	4.3	Test Enclosure list	9
	4.4	Test Configurations	. 10
	4.5	Test Setups	. 11
	4.6	Test Conditions	. 13
5	TES	ST ITEMS	. 14
	5.1	Emission Tests	. 14
Α	NNEX	A TEST RESULTS	. 16





A.1	Radiated Emission	16
A.2	Conducted Emission	24
ANNEX	B TEST SETUP PHOTOS	28
ANNEX	C EUT EXTERNAL PHOTOS	28
ANNEX	D EUT INTERNAL PHOTOS	28



### 1 GENERAL INFORMATION

# 1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Addross	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi
Address	Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

# 1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.		
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi		
Audiess	Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China		
	The laboratory has been listed by Industry Canada to perform		
	electromagnetic emission measurements. The recognition numbers		
	of test site are 11524A-1.		
A ditation	The laboratory has been listed by US Federal Communications		
Accreditation	Commission to perform electromagnetic emission measurements.		
Certificate	The recognition numbers of test site are 832625.		
	The laboratory is a testing organization accredited by China National		
	Accreditation Service for Conformity Assessment (CNAS) according		
	to ISO/IEC 17025. The accreditation certificate number is L6791.		
	All measurement facilities used to collect the measurement data are		
Distriction	located at Block B, FL 1, Baisha Science and Technology Park, Shahe		
Description	Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R.		
	China 518055		

# 1.3 Laboratory Condition

Ambient Temperature	20°C~25°C
Ambient Relative Humidity	45% - 55%
Ambient Pressure	100 kPa - 102 kPa

#### 1.4 Announce

- (1) The test report reference to the report template version v4.3.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.



# **2 PRODUCT INFORMATION**

# 2.1 Applicant Information

Applicant	Shenzhen Sang Fei Consumer Communications Co., Ltd
	11 Science and Technology Road, Shenzhen Hi-tech Industrial
Address	Park Nanshan District, Shenzhen city, GuangDong province,
	518057, China

# 2.2 Manufacturer Information

	Manufacturer	Wuhan Admiral Technology Ltd
	Address	No. 11, Zhuankou District, Wuhan economic and Technology
	Address	Development Zone, Hubei, China

# 2.3 Factory Information

Factory	Huizhou Qiaoxing Electronics Technology Co., LTD		
A daluaca	Qiaoxing Tech Industrial Park, Tangquan, Huizhou, Guangdong,		
Address	China		

# 2.4 General Description for Equipment under Test (EUT)

EUT Type	Smartphone		
Model Name Under Test	07		
Series Model Name	N/A		
Description of Model name differentiation	N/A		
Hardware Version	M7_V1.03		
Software Version	AOC_O7_1646_V01_CP		
Dimensions (Approx.)	N/A		
Weight (Approx.)	N/A		
The Highest Speed of Processor	N/A		
Network and Wireless	2G Network GSM/GPRS/EDGE 850/1900 MHz		
connectivity	3G Network WCDMA/HSDPA/HSUPA/HSPA+ Band II/V		
	4G Network FDD LTE Band2/4/7		
	Bluetooth, WIFI, GPS		



# 2.5 Ancillary Equipment

	Battery		
	Brand Name	AOC	
	Model No.	O7	
Ancillary Equipment 1	Serial No.	N/A	
	Capacitance	4000 mAh	
	Rated Voltage	3.8 V	
	Limit Charge Voltage	4.35 V	
	Adapter 1		
	Brand Name	AOC	
Ancillary Equipment 2	Model Name	TPA-59050150VU (EU) Note	
	Rated Input	100-240 V ~, 50/60 Hz, 300 mA	
	Rated Output	5 V =, 1500 mA	
	Adapter 2		
	Brand Name	AOC	
Ancillary Equipment 3	Model Name	TPA-46050150UU (US Plug) Note	
	Rated Input	100-240 V ~, 50/60 Hz, 300 mA	
	Rated Output	5 V =, 1500 mA	
Ancillary Equipment 4	USB Cable		
Anomary Equipment 4	Length(Approx.)	100 cm	

Note: The adapter are same with electrical parameters and internal circuit structure, only differ in model name and adapter plug, TPA-46050150UU as the main for tested in this report.

# 2.6 Technical Information

N/A



# 3 SUMMARY OF TEST RESULTS

# 3.1 Test Standards

No.	Identity	Document Title	
1	FCC 47 CFR Part 15	Unintentional Radiators	
	Subpart B (10-1-15 Edition)		
	ANSI C63.4-2014	American National Standard for Methods of	
2		Measurement of Radio-Noise Emissions from Low-	
2		Voltage Electrical and Electronic Equipment in the	
		Range of 9 kHz to 40 GHz	

# 3.2 Verdict

No.	Description	FCC Rule	Test Verdict	Result
1	Radiated Emission	15.109	Pass	Annex A .1
2	Conducted Emission, AC Ports	15.107	Pass	Annex A .2

# 3.3 Test Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement	Value
Conducted emissions (9 kHz-30 MHz)	3.23 dB
Radiated emissions (30 MHz-1 GHz)	3.97 dB
Radiated emissions (1 GHz-18 GHz)	4.30 dB
Radiated emissions (18 GHz-40 GHz)	4.81 dB



# **4 GENERAL TEST CONFIGURATIONS**

# 4.1 Test Environments

Environment	Selected Values During Tests					
Parameter	Temperature	Voltage	Relative Humidity	Ambient Pressure		
Normal Temperature,						
Normal Voltage	23°C~26°C	AC 120 V/60 Hz	50%-55%	100 to 102 kPa		
(NTNV)						

# 4.2 Test Equipment List

	Radiated Emission Test For Frequency Below 1 GHz									
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use				
EMI Receiver	ROHDE&SCHWA RZ	ESRP	101036	2016.07.05	2017.07.04	$\boxtimes$				
Test Antenna- Bi-Log	SCHWARZBECK	VULB 9163	9163-977	2016.07.19	2018.07.18	$\boxtimes$				
Test Antenna- Horn	SCHWARZBECK	BBHA 9120D	9120D-1148	2015.07.22	2017.07.21					
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60 *7.35m	N/A	2016.08.09	2018.08.08	$\boxtimes$				

	Radiated Emission Test For Frequency Above 1 GHz									
Description	Manufacturer	Manufacturer Model Serial No.		Cal. Date	Cal. Due	Use				
EMI Receiver	KEYSIGHT	N9038A	MY5322011 8	2016.09.09	2017.09.08	$\boxtimes$				
Test Antenna- Bi-Log	SCHWARZBECK	VULB 9163	VULB 9163 9163-624		2017.07.21					
Test Antenna- Horn	SCHWARZBECK	BBHA 9120D	9120D-1148	2015.07.22	2017.07.21	$\boxtimes$				
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2015.02.28	2017.02.27	$\boxtimes$				

Conducted disturbance Test									
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use			
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2016.07.05	2017.07.04	$\boxtimes$			
LISN	SCHWARZBECK	NSLK 8127	8127-687	2016.07.05	2017.07.04	$\boxtimes$			
Shielded Enclosure	ChangNing	CN-130701	130703	N/A	N/A	$\boxtimes$			



# 4.3 Test Enclosure list

Description	Manufacturer	Model	Serial No.	Length	Description	Use
PC	N/A	N/A	N/A	N/A	Special Handled	
Laptop	Apple	A1465	N/A	N/A	N/A	$\boxtimes$
Printer	HP	DESKJET 1000	N/A	N/A	N/A	
Keyboard	Logitech	Y-BP62a	N/A	N/A	N/A	
Mouse	Logitech	M100	N/A	N/A	N/A	
USB disk	Kingston	N/A	N/A	N/A	N/A	
TF Card	Kingston	N/A	N/A	N/A	N/A	$\boxtimes$
VGA Cable	N/A	N/A	N/A	1.5 m	Shielded with core	
HDMI Cable	N/A	N/A	N/A	1.5 m	Shielded with core	
DVI Cable	N/A	N/A	N/A	1.5 m	Shielded with core	
Coaxial video cable	N/A	N/A	N/A	2.0 m	Shielded with core	
iPhone	Apple	A1586	N/A	N/A	N/A	
Phone	MI	M4	N/A	N/A	N/A	
Laptop	LENOVO	K29	N/A	N/A	N/A	
Bluetooth Earphone	SAMSUNG	Gear Circle	N/A	N/A	N/A	$\boxtimes$
GPS/GLONASS  Vector signal  generator	R&S	N5172B EXG	N/A	N/A	N/A	$\boxtimes$
WIFI Router	TP-LINK	TL- WDR7500	N/A	N/A	N/A	$\boxtimes$
Earphone	N/A	N/A	N/A	1.1 m	N/A	$\boxtimes$
Car Battery	Camel	55530	N/A	N/A	12 V/55 Ah	
Artificial load	N/A	N/A	N/A	N/A	2.5 Ω/100 W	
Artificial load	N/A	N/A	N/A	N/A	5 Ω/100 W	
Electronic Load	ITECH	IT8511	N/A	N/A	N/A	
USB Cable	N/A	N/A	N/A	1.5 m	Shielded with core	
DC Power Supply	ROHDE&SCHW ARZ	HMP2020	18141664	N/A	N/A	



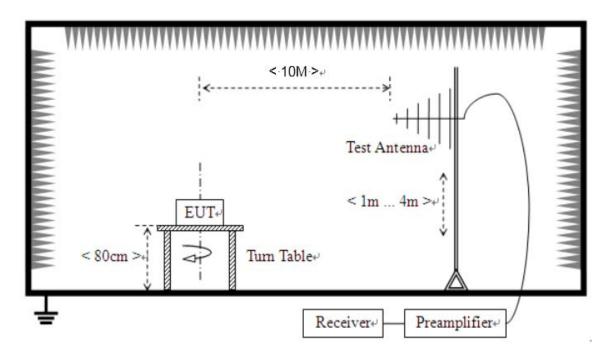
# 4.4 Test Configurations

Test					
Configurations	Description				
(TC) No.					
Traffic Test Mode					
	The GSM 850 MHz Test Mode				
TC01	GSM 850 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link +				
	GPS RX				
	The EDGE 850 MHz Test Mode				
TC02	EDGE 850 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link +				
	GPS RX				
	The GSM 1900 Test Mode				
TC03	GSM 1900 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link +				
	GPS RX				
	The EDGE 1900 MHz Test Mode				
TC04	EDGE 1900 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link +				
	GPS RX				
	The WCDMA 850 MHz Test Mode				
TC05	WCDMA 850 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link +				
	GPS RX				
	The WCDMA 1900 MHz test mode				
TC06	WCDMA 1900 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link +				
	GPS RX				
	The FDD LTE Band 2 Test Mode				
TC07	LTE Band 2 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link +				
	GPS RX				
T000	The FDD LTE Band 4 Test Mode				
TC08	LTE Band 4 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link +				
	GPS RX				
TCOO	The FDD LTE Band 7 Test Mode				
TC09	LTE Band 7 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link+ GPS RX				
	The Idle Test Mode				
TC10	GSM 850(Idle) + Battery + Earphone				
Amusement Tes					
	The USB Test Mode				
TC11	EUT + USB Cable + Battery + Earphone + Laptop				
	The Camera Test Mode				
TC12	EUT + Adapter + USB Cable + Battery + Earphone				
T040	The Video Play Test Mode				
TC13	EUT + Adapter + USB Cable + Battery + Earphone				
L	• •				



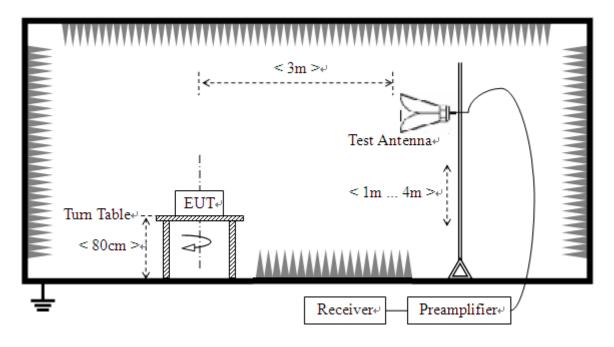
# 4.5 Test Setups

# Test Setup 1



(For Radiated Emission Test (30 MHz-1 GHz))

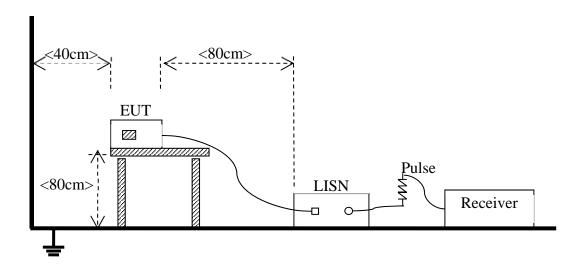
# Test Setup 2



(For Radiated Emission Test (above 1 GHz))



# Test Setup 3



(For Conducted Emission, AC Ports Test)



# 4.6 Test Conditions

Test Case	Test Conditions				
	Test Env.	NTNV			
Radiated Emission	Test Setup	Test Setup 1&2			
	Test Configuration	TC01~TC13 Note			
Conducted Emission AC	Test Env.	NTNV			
Conducted Emission, AC	Test Setup	Test Setup 3			
Ports	Test Configuration	TC01~TC13 Note			

Note: Based on client request, all normal using modes of the normal function were tested but only the worst test data of the worst mode is reported by this report. The Video Play test mode is the worst mode in this report.



#### 5 TEST ITEMS

#### 5.1 Emission Tests

#### 5.1.1 Radiated Emission

#### 5.1.1.1 Limit

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

#### NOTE:

- 1) Field Strength ( $dB\mu V/m$ ) = 20\*log [Field Strength ( $\mu V/m$ )].
- 2) In the emission tables above, the tighter limit applies at the band edges.
- 3) For above 1000 MHz, limit field strength of harmonics: 54 dBuV/m@3 m (AV) and 74 dBuV/m@3 m (PK)

#### 5.1.1.2 Test Setup

Refer to 4.5 section (test setups1 to test setups2) for radiated emission test, the photo of test setup please refer to ANNEX B.

#### 5.1.1.3 Test Procedure

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

An initial pre-scan was performed in the chamber using the EMI Receiver in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by Bi-Log antenna with 2 orthogonal polarities.

#### 5.1.1.4 Test Result

Please refer to ANNEX A.1.



#### 5.1.2 Conducted Emission

#### 5.1.2.1 Test Limit

Frequency range	Conducted Limit (dBµV)				
(MHz)	Quasi-peak	Average			
0.15 - 0.50	66 to 56	56 to 46			
0.50 - 5	56	46			
5 - 30	60	50			

#### NOTE:

- 1) The limit is applicable to Class B ITE.
- 2) The lower limit shall apply at the band edges.
- 3) The limit decreases linearly with the logarithm of the frequency in the range 0.15 0.50 MHz.

#### 5.1.2.2 Test Setup

Refer to 4.5 section test (test setup 3) for conducted emission, the photo of test setup please refer to ANNEX B.

#### 5.1.2.3 Test Procedure

The EUT is connected to the power mains through a LISN which provides  $50 \Omega/50 \mu H$  of coupling impedance for the measuring instrument. The test frequency range is from 150 kHz to 30 MHz. The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels that are more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed.

Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

#### 5.1.2.4 Test Result

Please refer to ANNEX A.2.



# ANNEX A TEST RESULTS

#### A.1 Radiated Emission

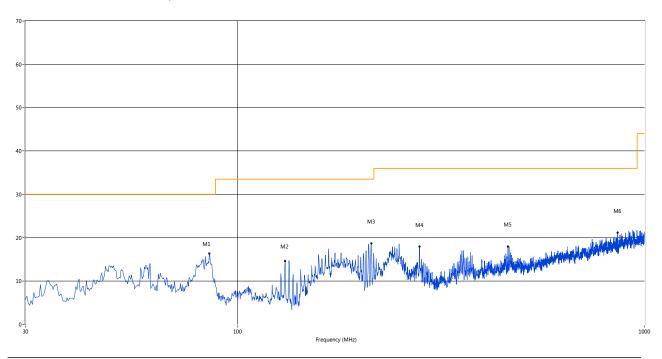
Note 1: The symbol of "--" in the table which means not application.

Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

#### Test Data and Plots

#### Video Play test mode

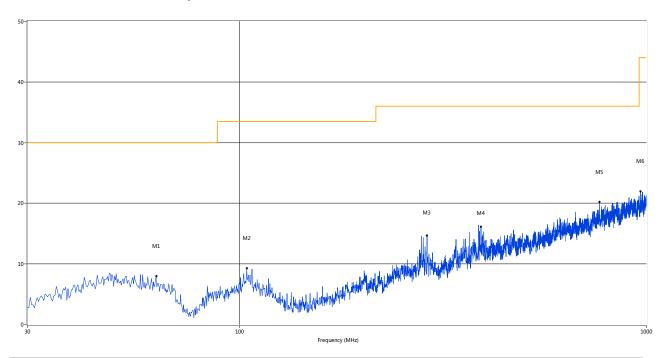
#### A.1.1 Test Antenna Vertical, 30 MHz – 1 GHz



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(0)	(cm)		
1	85.034	16.36	-18.95	30.0	13.64	Peak	360.00	100	Vertical	Pass
2	130.612	14.65	-19.35	33.5	18.85	Peak	358.00	200	Vertical	Pass
3	212.799	18.69	-16.23	33.5	14.81	Peak	360.00	100	Vertical	Pass
4	279.713	17.94	-13.93	36.0	18.06	Peak	167.00	300	Vertical	Pass
5	461.785	17.99	-9.83	36.0	18.01	Peak	345.00	200	Vertical	Pass
6	858.900	21.19	-3.47	36.0	14.81	Peak	219.00	100	Vertical	Pass



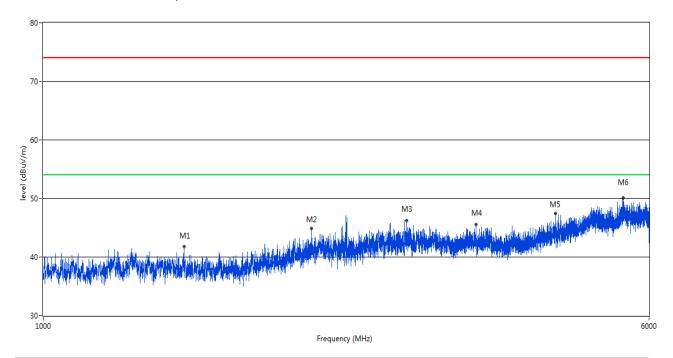
# A.1.2 Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(0)	(cm)		
1	62.244	7.96	-16.12	30.0	22.04	Peak	35.00	100	Horizontal	Pass
2	103.944	9.26	-15.77	33.5	24.24	Peak	15.00	100	Horizontal	Pass
3	288.683	14.71	-13.66	36.0	21.29	Peak	97.00	200	Horizontal	Pass
4	391.720	16.13	-11.15	36.0	19.87	Peak	80.00	200	Horizontal	Pass
5	766.288	20.25	-4.58	36.0	15.75	Peak	97.00	100	Horizontal	Pass
6	966.543	22.00	-2.25	44.0	22.00	Peak	206.00	300	Horizontal	Pass



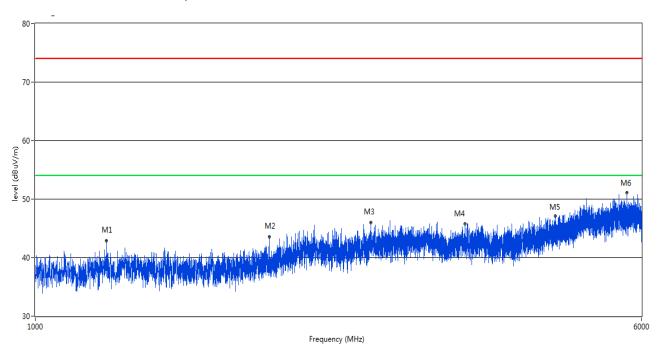
# A.1.3 Test Antenna Vertical, 1 GHz – 6 GHz



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(0)	(cm)		
1	1517.00	41.83	-2.52	74.0	32.17	Peak	261.00	100	Vertical	Pass
2	2212.00	44.89	1.36	74.0	29.11	Peak	229.00	100	Vertical	Pass
3	2932.00	46.24	3.62	74.0	27.76	Peak	290.00	100	Vertical	Pass
4	3599.25	45.59	7.38	74.0	28.41	Peak	41.00	100	Vertical	Pass
5	4551.00	47.46	9.89	74.0	26.54	Peak	40.00	100	Vertical	Pass
6	5556.75	50.15	12.03	74.0	23.85	Peak	205.00	100	Vertical	Pass



# A.1.4 Test Antenna Horizontal, 1 GHz – 6 GHz



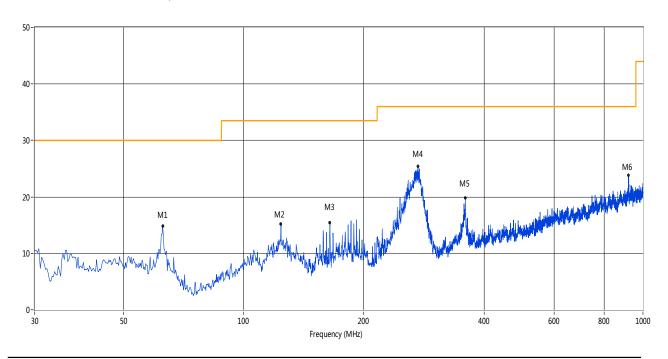
No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(0)	(cm)		
1	1234.50	42.84	-1.88	74.0	31.16	Peak	339.70	100	Horizontal	Pass
2	1997.50	43.56	-0.26	74.0	30.44	Peak	294.70	100	Horizontal	Pass
3	2694.50	46.00	3.85	74.0	28.00	Peak	121.90	100	Horizontal	Pass
4	3560.25	45.77	7.75	74.0	28.23	Peak	165.10	100	Horizontal	Pass
5	4649.25	47.16	10.01	74.0	26.84	Peak	335.50	100	Horizontal	Pass
6	5745.00	51.08	11.87	74.0	22.92	Peak	278.90	100	Horizontal	Pass



# Test Data and Plots

# USB test mode

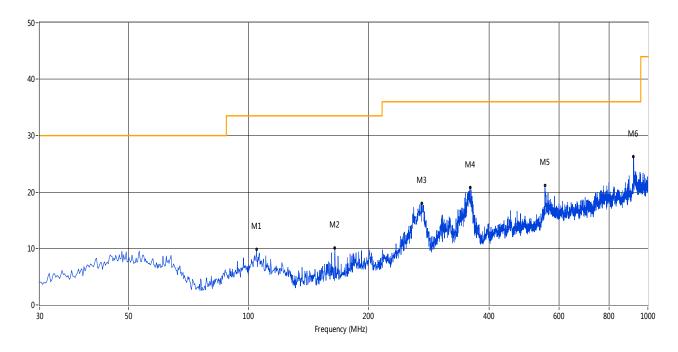
#### A.1.5 Test Antenna Vertical, 30 MHz – 1 GHz



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(0)	(cm)		
1	62.729	14.85	-16.14	30.0	15.15	Peak	4.00	200	Vertical	Pass
2	124.066	15.25	-18.85	33.5	18.25	Peak	3.00	100	Vertical	Pass
3	164.554	15.39	-18.66	33.5	18.11	Peak	122.00	100	Vertical	Pass
4	273.409	25.41	-13.93	36.0	10.59	Peak	4.00	100	Vertical	Pass
5	358.990	19.84	-11.58	36.0	16.16	Peak	4.00	100	Vertical	Pass
6	920.965	23.88	-2.58	36.0	12.12	Peak	285.00	200	Vertical	Pass



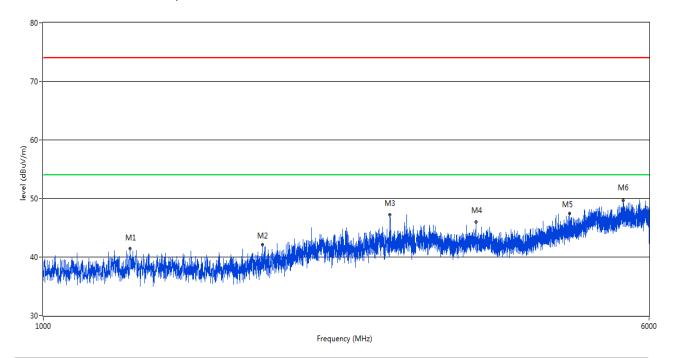
# A.1.6 Test Antenna Horizontal, 30 MHz – 1 GHz



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(0)	(cm)		
1	104.671	9.80	-15.68	33.5	23.70	Peak	263.00	200	Horizontal	Pass
2	164.554	10.07	-18.66	33.5	23.43	Peak	2.00	200	Horizontal	Pass
3	271.712	18.05	-14.20	36.0	17.95	Peak	4.00	200	Horizontal	Pass
4	359.233	20.82	-11.61	36.0	15.18	Peak	2.00	200	Horizontal	Pass
5	552.214	21.16	-8.17	36.0	14.84	Peak	4.00	200	Horizontal	Pass
6	920.237	26.42	-2.60	36.0	9.58	Peak	4.00	100	Horizontal	Pass



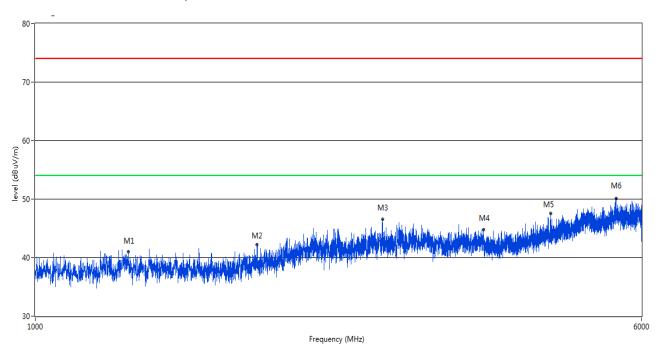
# A.1.7 Test Antenna Vertical, 1 GHz – 6 GHz



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(0)	(cm)		
1	1293.50	41.44	-2.41	74.0	32.56	Peak	43.00	100	Vertical	Pass
2	1912.00	42.10	-0.79	74.0	31.90	Peak	18.00	100	Vertical	Pass
3	2789.50	47.21	3.13	74.0	26.79	Peak	85.00	100	Vertical	Pass
4	3599.25	45.99	7.38	74.0	28.01	Peak	295.00	100	Vertical	Pass
5	4740.00	47.45	10.76	74.0	26.55	Peak	91.00	100	Vertical	Pass
6	5556.75	49.65	12.03	74.0	24.35	Peak	176.00	100	Vertical	Pass



# A.1.8 Test Antenna Horizontal, 1 GHz – 6 GHz



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Table	Height	ANT	Verdict
	(MHz)	(dBuV/m)		(dBuV/m)	(dB)		(0)	(cm)		
1	1315.50	40.95	-2.42	74.0	33.05	Peak	137.00	100	Horizontal	Pass
2	1925.50	42.27	-0.54	74.0	31.73	Peak	56.00	100	Horizontal	Pass
3	2790.00	46.53	3.12	74.0	27.47	Peak	172.00	100	Horizontal	Pass
4	3760.50	44.75	8.02	74.0	29.25	Peak	12.00	100	Horizontal	Pass
5	4591.50	47.51	9.85	74.0	26.49	Peak	37.00	100	Horizontal	Pass
6	5565.75	50.10	11.95	74.0	23.90	Peak	121.00	100	Horizontal	Pass



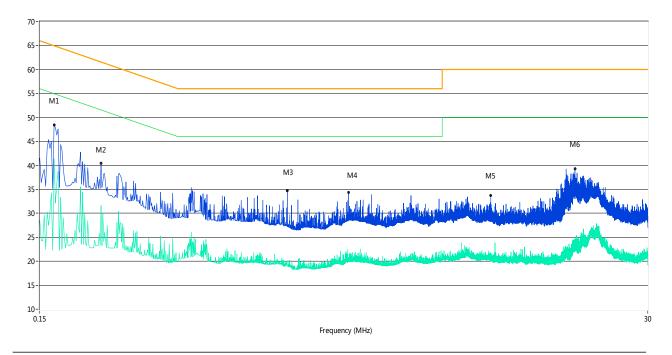
# A.2 Conducted Emission

#### Test Data and Plots

#### Video Play test mode

Note: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

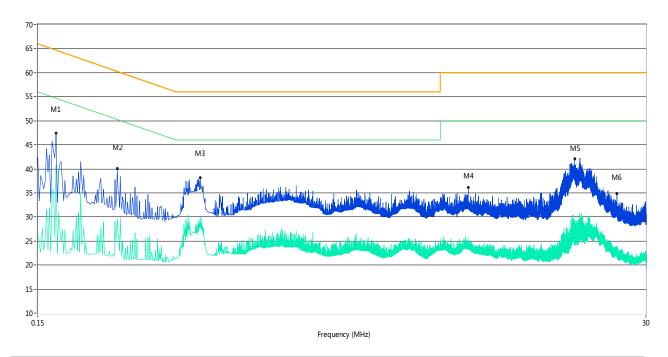
#### A.2.1 L Phase



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Line	Verdict
	(MHz)	(dBuV)		(dBuV)	(dB)			
1	0.170	48.5	11.00	65.0	16.50	Peak	L Line	Pass
1**	0.170	41.3	11.00	55.0	13.70	AV	L Line	Pass
2	0.256	40.4	11.00	61.6	21.20	Peak	L Line	Pass
2**	0.256	31.6	11.00	51.6	20.00	AV	L Line	Pass
3	1.298	34.7	11.00	56.0	21.30	Peak	L Line	Pass
3**	1.298	19.0	11.00	46.0	27.00	AV	L Line	Pass
4	2.214	34.3	11.00	56.0	21.70	Peak	L Line	Pass
4**	2.214	20.8	11.00	46.0	25.20	AV	L Line	Pass
5	7.640	33.7	11.00	60.0	26.30	Peak	L Line	Pass
5**	7.640	21.3	11.00	50.0	28.70	AV	L Line	Pass
6	15.894	39.3	11.00	60.0	20.70	Peak	L Line	Pass
6**	15.894	24.4	11.00	50.0	25.60	AV	L Line	Pass



# A.2.2 N Phase



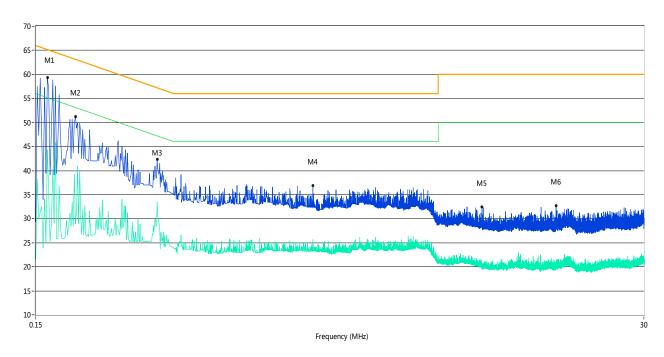
No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Line	Verdict
	(MHz)	(dBuV)		(dBuV)	(dB)			
1	0.176	47.4	11.00	64.7	17.30	Peak	N Line	Pass
1**	0.176	40.9	11.00	54.7	13.80	AV	N Line	Pass
2	0.300	40.0	11.00	60.2	20.20	Peak	N Line	Pass
2**	0.300	29.5	11.00	50.2	20.70	AV	N Line	Pass
3	0.618	38.2	11.00	56.0	17.80	Peak	N Line	Pass
3**	0.618	29.9	11.00	46.0	16.10	AV	N Line	Pass
4	6.382	36.2	11.00	60.0	23.80	Peak	N Line	Pass
4**	6.382	24.7	11.00	50.0	25.30	AV	N Line	Pass
5	16.128	42.1	11.00	60.0	17.90	Peak	N Line	Pass
5**	16.128	25.0	11.00	50.0	25.00	AV	N Line	Pass
6	23.302	34.9	11.00	60.0	25.10	Peak	N Line	Pass
6**	23.302	23.5	11.00	50.0	26.50	AV	N Line	Pass



# Test Data and Plots

# USB test mode

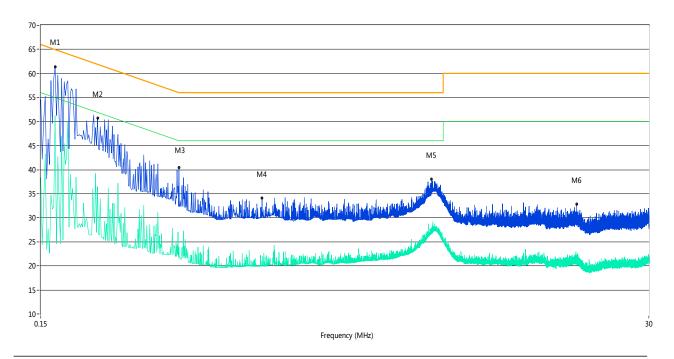
# A.2.3 L Phase



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Line	Verdict
	(MHz)	(dBuV)		(dBuV)	(dB)			
1	0.166	59.4	11.00	65.2	5.80	Peak	L Line	Pass
1**	0.166	44.3	11.00	55.2	10.90	AV	L Line	Pass
2	0.212	51.2	11.00	63.1	11.90	Peak	L Line	Pass
2**	0.212	28.9	11.00	53.1	24.20	AV	L Line	Pass
3	0.432	42.4	11.00	57.2	14.80	Peak	L Line	Pass
3**	0.432	33.4	11.00	47.2	13.80	AV	L Line	Pass
4	1.678	36.8	11.00	56.0	19.20	Peak	L Line	Pass
4**	1.678	25.7	11.00	46.0	20.30	AV	L Line	Pass
5	7.330	32.5	11.00	60.0	27.50	Peak	L Line	Pass
5**	7.330	20.2	11.00	50.0	29.80	AV	L Line	Pass
6	13.964	32.7	11.00	60.0	27.30	Peak	L Line	Pass
6**	13.964	20.7	11.00	50.0	29.30	AV	L Line	Pass



# A.2.4 N Phase



No.	Frequency	Results	Factor (dB)	Limit	Margin	Detector	Line	Verdict
	(MHz)	(dBuV)		(dBuV)	(dB)			
1	0.170	61.4	11.00	65.0	3.60	Peak	N Line	Pass
1**	0.170	51.2	11.00	55.0	3.80	AV	N Line	Pass
2	0.246	50.7	11.00	61.9	11.20	Peak	N Line	Pass
2**	0.246	36.5	11.00	51.9	15.40	AV	N Line	Pass
3	0.500	40.4	11.00	56.0	15.60	Peak	N Line	Pass
3**	0.500	23.9	11.00	46.0	22.10	AV	N Line	Pass
4	1.032	34.2	11.00	56.0	21.80	Peak	N Line	Pass
4**	1.032	20.1	11.00	46.0	25.90	AV	N Line	Pass
5	4.508	38.0	11.00	56.0	18.00	Peak	N Line	Pass
5**	4.508	26.9	11.00	46.0	19.10	AV	N Line	Pass
6	15.998	32.8	11.00	60.0	27.20	Peak	N Line	Pass
6**	15.998	22.0	11.00	50.0	28.00	AV	N Line	Pass



# ANNEX B TEST SETUP PHOTOS

Please refer the document "BL-SZ16B0295-AE.PDF".

# ANNEX C EUT EXTERNAL PHOTOS

Please refer the document "BL-SZ16B0295-AW.PDF".

# ANNEX D EUT INTERNAL PHOTOS

Please refer the document "BL-SZ16B0295-AI.PDF".

--END OF REPORT--