

FCC

EMC

TEST REPORT

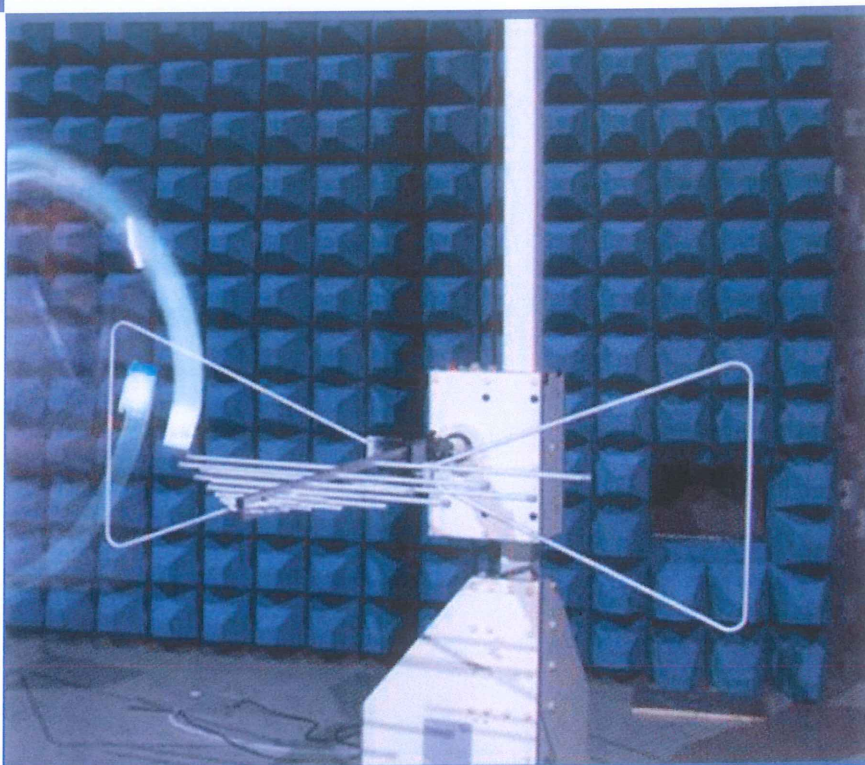
ISSUED BY  
Shenzhen BALUN Technology Co., Ltd.



FOR  
**Mobile Phone**

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



Tested by: Xia Long  
Xia Long  
(Engineer)

Date: Jun. 20, 2017

Approved by: Liao Jianming  
Liao Jianming  
(Technical Director)

Date: Jun. 20, 2017

Report No.: BL-SZ1750208-401  
EUT Name: Mobile Phone  
Model Name: Philips S327  
Brand Name: PHILIPS  
Test Standard: 47 CFR Part 15 Subpart B  
FCC ID: VQRCTS327

Test Conclusion: Pass  
Test Date: May 28, 2017 ~ Jun. 02, 2017  
Date of Issue: Jun. 20, 2017

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**Revision History**

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Jun. 20, 2017</u>	<u>Initial Issue</u>

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## 1 GENERAL INFORMATION

### 1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi 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 Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	<p>The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1.</p> <p>The laboratory has been listed by US Federal Communications Commission to perform electromagnetic emission measurements. The recognition numbers of test site are 832625.</p> <p>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.</p>
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe 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 v6.4.
- (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.
Address	11, Science And Technology Road, Shenzhen Hi-tech Industrial Park, Nanshan District, Shenzhen City, Guangdong province, 518057, China

### 2.2 Manufacturer Information

Manufacturer	Shenzhen Sang Fei Consumer Communications Co., Ltd.
Address	11, Science And Technology Road, Shenzhen Hi-tech Industrial Park, Nanshan District, Shenzhen City, Guangdong province, 518057, China

### 2.3 Factory Information

Factory	N/A
Address	N/A

### 2.4 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	Philips S327
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A
Network and Wireless connectivity	2G Network GSM GPRS/EDGE 850/900/1800/1900 MHz 3G Network WCDMA HSDPA/HSUPA Band 2/5 4G Network FDD Band 2/4/7/28 Bluetooth 3.0, Bluetooth 4.0 Low Energy (BLE), WIFI 802.11b, 802.11g and 802.11n (HT20/40), GPS



## 2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	PHILIPS
	Model No.	AB3000KWMT
	Serial No.	N/A
	Capacitance	3000 mAh
	Rated Voltage	3.8 V
	Limit Charge Voltage	4.35 V
Ancillary Equipment 2	Adapter	
	Brand Name	PHILIPS
	Model Name	A88A-0501000U-AR1
	Rated Input	100-240 V ~, 50/60 Hz, 0.2 A
	Rated Output	5 V $\overline{\text{---}}$ , 1.0 A
Ancillary Equipment 3	USB Cable	
	Length	65 cm

## 2.6 Technical Information

Note: Not applicable.

### 3 SUMMARY OF TEST RESULTS

#### 3.1 Test Standards

No.	Identity	Document Title
1	FCC 47 CFR Part 15 Subpart B (10-1-16 Edition)	Unintentional Radiators
2	ANSI C63.4-2014	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low- 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)	4.30 dB
Radiated emissions (1 GHz-18 GHz)	4.81 dB
Radiated emissions (18 GHz-40 GHz)	5.71 dB

## 4 GENERAL TEST CONFIGURATIONS

### 4.1 Test Environments

Environment Parameter	Selected Values During Tests			
	Temperature	Voltage	Relative Humidity	Ambient Pressure
Normal Temperature, Normal Voltage (NTNV)	23°C~26°C	AC 120 V/60 Hz or DC 3.8 V from Battery	50%-55%	100 to 102 kPa

### 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&SCHWARZ	ESRP	101036	2016.07.05	2017.07.04	<input checked="" type="checkbox"/>
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	9163-977	2016.07.19	2018.07.18	<input checked="" type="checkbox"/>
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	9120D-1600	2016.07.12	2018.07.11	<input type="checkbox"/>
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60 *7.35m	N/A	2016.08.09	2018.08.08	<input checked="" type="checkbox"/>

Radiated Emission Test For Frequency Above 1 GHz						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	KEYSIGHT	N9038A	MY53220118	2016.09.09	2017.09.08	<input checked="" type="checkbox"/>
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	9163-624	2015.07.22	2017.07.21	<input type="checkbox"/>
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	9120D-1148	2015.07.22	2017.07.21	<input checked="" type="checkbox"/>
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2017.02.21	2019.02.20	<input checked="" type="checkbox"/>

Conducted Emission Test						
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due	Use
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2016.07.05	2017.07.04	<input checked="" type="checkbox"/>
LISN	SCHWARZBECK	NSLK 8127	8127-687	2016.07.05	2017.07.04	<input checked="" type="checkbox"/>
LISN	SCHWARZBECK	NNLK 8129	8129-462	2016.09.14	2017.09.13	<input type="checkbox"/>
AMN	SCHWARZBECK	NNBM8124	8124-509	2016.07.05	2017.07.04	<input type="checkbox"/>
AMN	SCHWARZBECK	NNBM8124	8124-510	2016.07.05	2017.07.04	<input type="checkbox"/>
ISN	TESEQ	ISN T800	34449	2016.07.05	2017.07.04	<input type="checkbox"/>
Shielded Enclosure	ChangNing	CN-130701	130703	N/A	N/A	<input checked="" type="checkbox"/>



### 4.3 Test Enclosure list

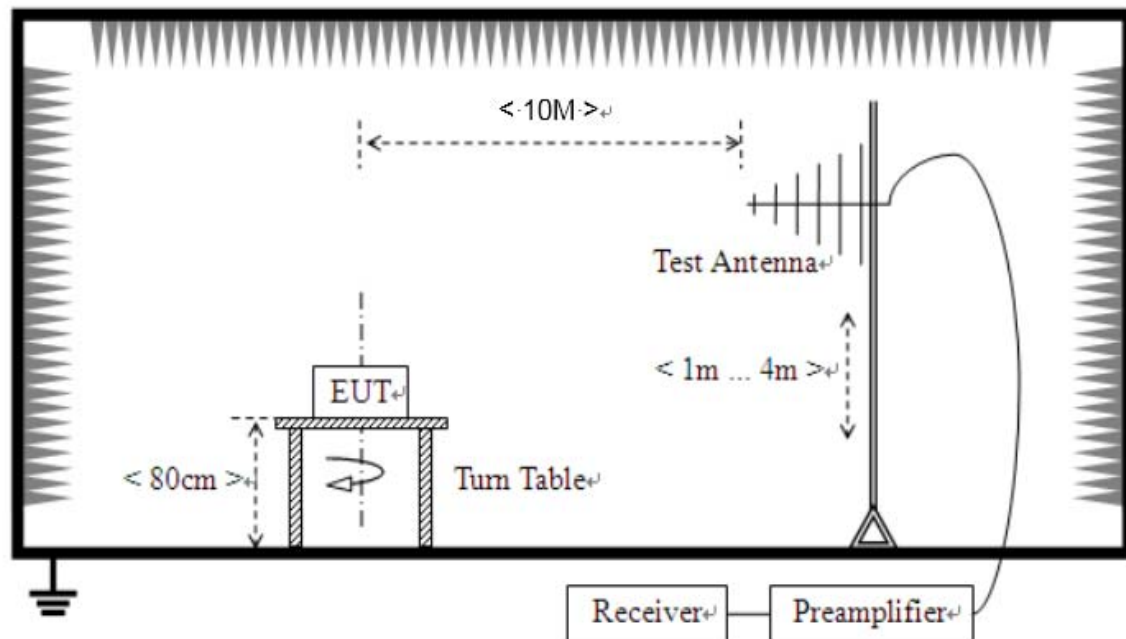
Description	Manufacturer	Model	Serial No.	Length	Description	Use
PC	Dell	015K3N	N/A	N/A	Special Handled	<input type="checkbox"/>
Laptop	Apple	A1465	N/A	N/A	N/A	<input checked="" type="checkbox"/>
Printer	HP	DESKJET 1000	N/A	N/A	N/A	<input type="checkbox"/>
Keyboard	Logitech	Y-BP62a	N/A	N/A	N/A	<input type="checkbox"/>
Mouse	Logitech	M100	N/A	N/A	N/A	<input type="checkbox"/>
USB disk	Kingston	N/A	N/A	N/A	N/A	<input type="checkbox"/>
TF Card	Kingston	N/A	N/A	N/A	N/A	<input checked="" type="checkbox"/>
VGA Cable	N/A	N/A	N/A	1.5 m	Shielded with core	<input type="checkbox"/>
HDMI Cable	N/A	N/A	N/A	1.5 m	Shielded with core	<input type="checkbox"/>
DVI Cable	N/A	N/A	N/A	1.5 m	Shielded with core	<input type="checkbox"/>
Coaxial video cable	N/A	N/A	N/A	2.0 m	Shielded with core	<input type="checkbox"/>
iPhone	Apple	A1586	N/A	N/A	N/A	<input type="checkbox"/>
Phone	MI	M4	N/A	N/A	N/A	<input type="checkbox"/>
Bluetooth Earphone	SAMSUNG	Gear Circle	N/A	N/A	N/A	<input checked="" type="checkbox"/>
GPS/GLONASS Vector signal generator	R&S	N5172B EXG	N/A	N/A	N/A	<input checked="" type="checkbox"/>
WIFI Router	TP-LINK	TL-WDR7500	N/A	N/A	N/A	<input checked="" type="checkbox"/>
Earphone	N/A	OPPO	N/A	1.1 m	N/A	<input type="checkbox"/>
Car Battery	Camel	55530	N/A	N/A	12 V/55 Ah	<input type="checkbox"/>
Artificial load	N/A	N/A	N/A	N/A	2.5 $\Omega$ /100 W	<input type="checkbox"/>
Artificial load	N/A	N/A	N/A	N/A	5 $\Omega$ /100 W	<input type="checkbox"/>
Electronic Load	ITECH	IT8511	N/A	N/A	N/A	<input type="checkbox"/>
USB Cable	N/A	N/A	N/A	1.5 m	Shielded with core	<input type="checkbox"/>
DC Power Supply	ITECH	IT6863A	60001401068 7210006	N/A	N/A	<input type="checkbox"/>
LCD Monitor	SAMSUNG	UA32C4000P	N/A	N/A	N/A	<input type="checkbox"/>
LCD Monitor	Dell	U241HB	N/A	N/A	N/A	<input type="checkbox"/>
RJ45 Cable	N/A	N/A	N/A	1.5 m	Shielded with core	<input type="checkbox"/>

## 4.4 Test Configurations

Test Configurations (TC) No.	Description
Traffic Test Mode	
TC01	<u>The GSM 850 MHz Test Mode</u> GSM 850 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
TC02	<u>The EDGE 850 MHz Test Mode</u> EDGE 850 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
TC03	<u>The GSM 1900 Test Mode</u> GSM 1900 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
TC04	<u>The EDGE 1900 MHz Test Mode</u> EDGE 1900 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
TC05	<u>The WCDMA 850 MHz Test Mode</u> WCDMA 850 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
TC06	<u>The WCDMA 1900 MHz test mode</u> WCDMA 1900 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
TC07	<u>The FDD LTE Band 2 Test Mode</u> LTE Band 2 Link + Adapter + USB Cable + Battery + Earphone + BT Link+ WIFI Link + GPS RX + TF Card
TC08	<u>The FDD LTE Band 4 Test Mode</u> LTE Band 4 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
TC09	<u>The FDD LTE Band 7 Test Mode</u> LTE Band 7 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
TC10	<u>The FDD LTE Band 28 Test Mode</u> LTE Band 20 Link + Adapter + USB Cable + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
TC11	<u>The Idle Test Mode</u> GSM 850(Idle) + Battery + Earphone + BT Link + WIFI Link + GPS RX + TF Card
Amusement Test Mode	
TC12	<u>The USB Test Mode</u> EUT + USB Cable + Battery + Earphone + Laptop + TF Card
TC13	<u>The Video Record Test Mode</u> EUT + Adapter + USB Cable + Battery + Earphone + TF Card
TC14	<u>The Video Play Test Mode</u> EUT + Adapter + USB Cable + Battery + Earphone + TF Card

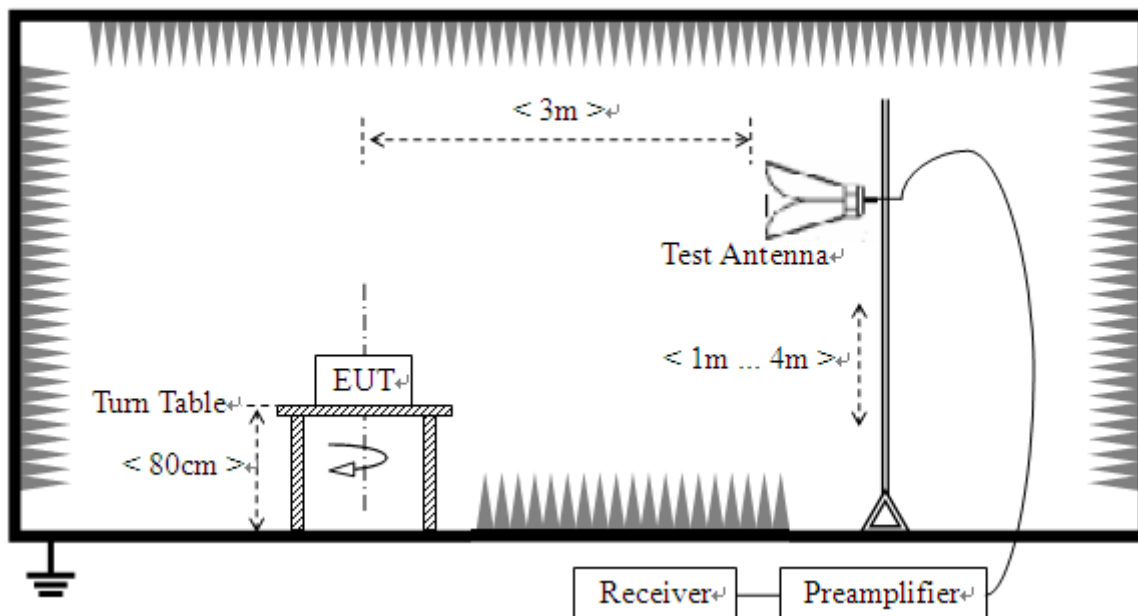
## 4.5 Test Setups

### Test Setup 1



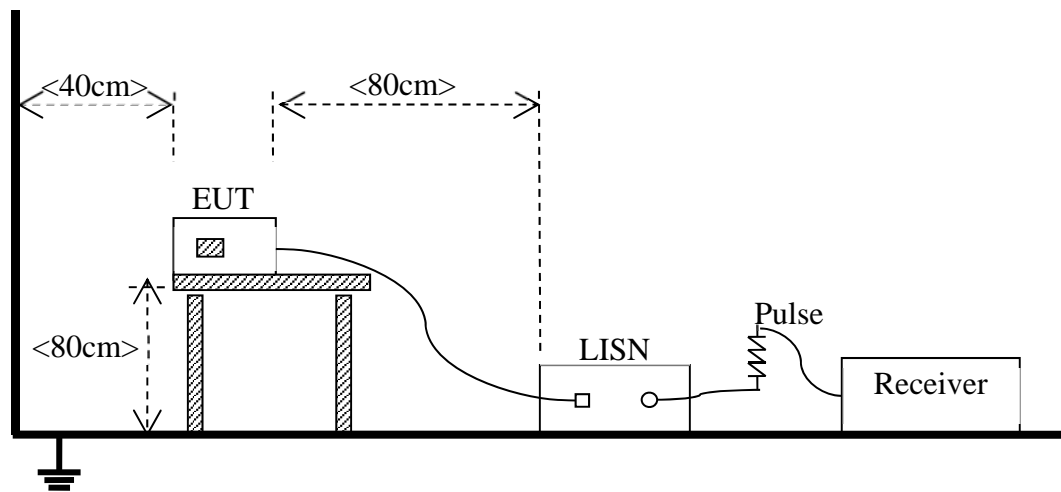
(For Radiated Emission Test (30 MHz-1 GHz))

### 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	
Radiated Emission	Test Env.	NTNV
	Test Setup	Test Setup 1&2
	Test Configuration	TC01~TC14 <sup>Note</sup>
Conducted Emission, AC Ports	Test Env.	NTNV
	Test Setup	Test Setup 3
	Test Configuration	TC01~TC14 <sup>Note</sup>
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 GSM 850 MHz 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 range (MHz)	Class B (at 10 m)		Class A (at 10 m)	
	Field Strength ( $\mu\text{V/m}$ )	Field Strength (dB $\mu\text{V/m}$ )	Field Strength ( $\mu\text{V/m}$ )	Field Strength (dB $\mu\text{V/m}$ )
30 - 88	100	30	90	39
88 - 216	150	33.5	150	43.5
216 - 960	200	36	210	46.4
Above 960	500	44	300	49.5

NOTE:

- 1) Field Strength (dB $\mu\text{V/m}$ ) =  $20 \cdot \log [\text{Field Strength } (\mu\text{V/m})]$ .
- 2) In the emission tables above, the tighter limit applies at the band edges.

##### 5.1.1.2 Test Setup

Refer to 4.5 section (test setup 1 to test setup 2) 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 (MHz)	Class A	
	Quasi-peak (dB $\mu$ V)	Average (dB $\mu$ V)
0.15 - 0.50	79	66
0.50 - 30	73	60

Frequency range (MHz)	Class B	
	Quasi-peak (dB $\mu$ V)	Average (dB $\mu$ V)
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

#### NOTE:

- 1) The lower limit shall apply at the band edges.
- 2) 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.

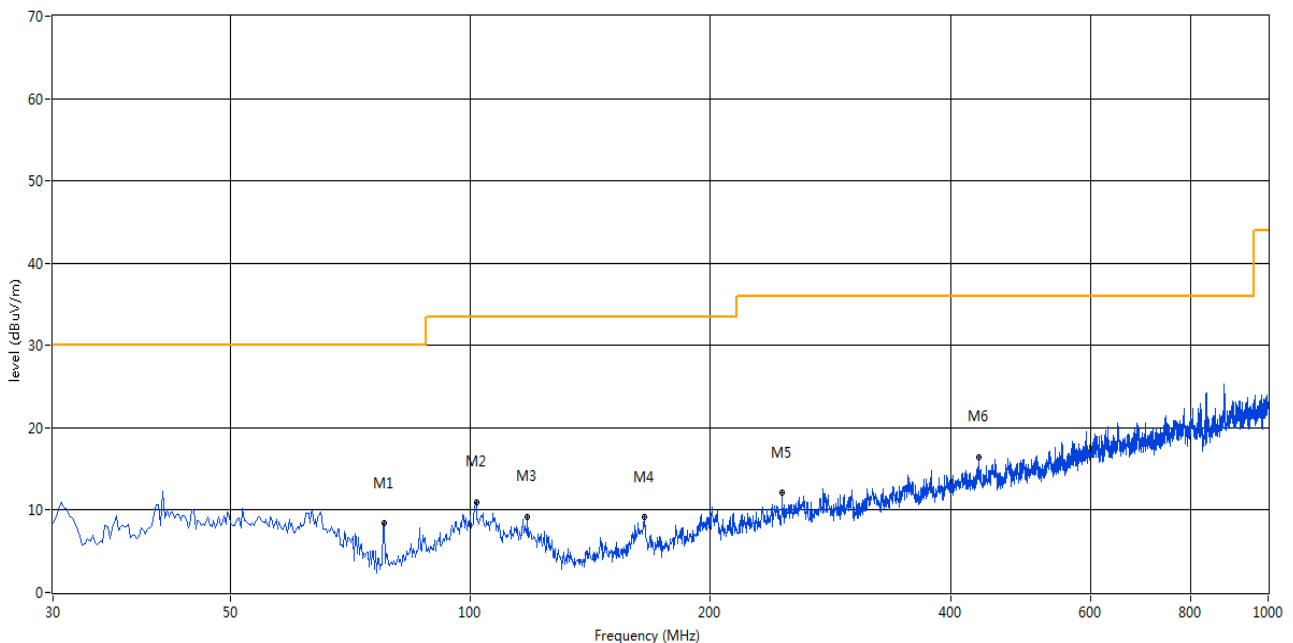
Note 2: For the test data above 1 GHz, according the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 3: This frequency which near 850 MHz with circle should be ignored because they are MS and SS carrier frequency, the marked spikes near 2400 MHz with circle should be ignored because they are Bluetooth or WIFI carrier frequency.

#### Test Data and Plots

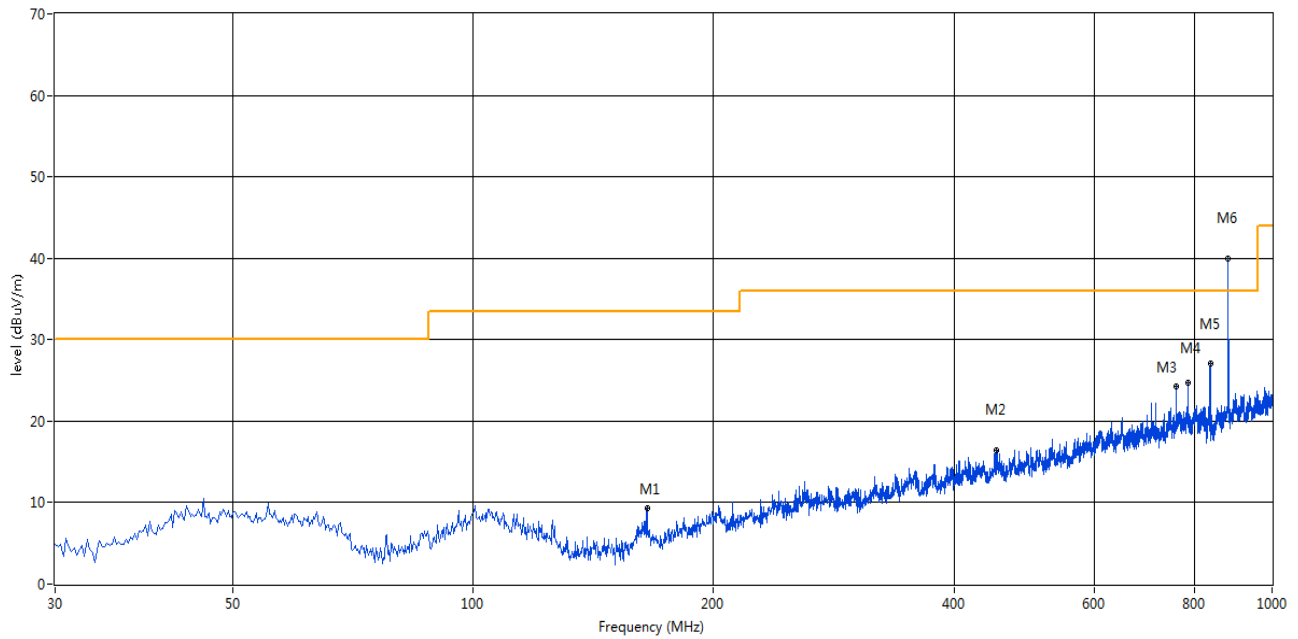
##### The GSB 850 MHz Test Mode

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



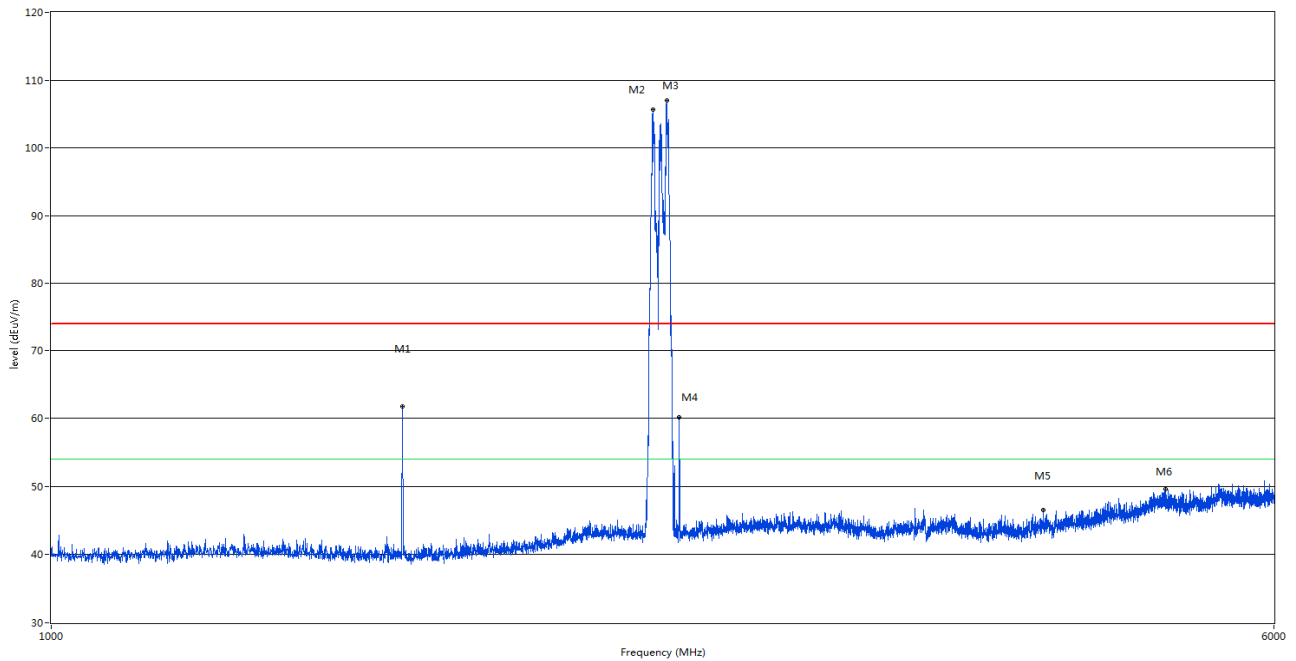
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	78.003	8.38	-19.42	30.0	21.62	Peak	192.00	200	Vertical	Pass
2	101.762	10.99	-15.18	33.5	22.51	Peak	145.00	200	Vertical	Pass
3	118.005	9.14	-16.64	33.5	24.36	Peak	360.00	200	Vertical	Pass
4	165.281	9.13	-17.73	33.5	24.37	Peak	360.00	200	Vertical	Pass
5	246.013	12.07	-13.59	36.0	23.93	Peak	8.00	100	Vertical	Pass
6	433.419	16.40	-8.95	36.0	19.60	Peak	127.00	200	Vertical	Pass

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



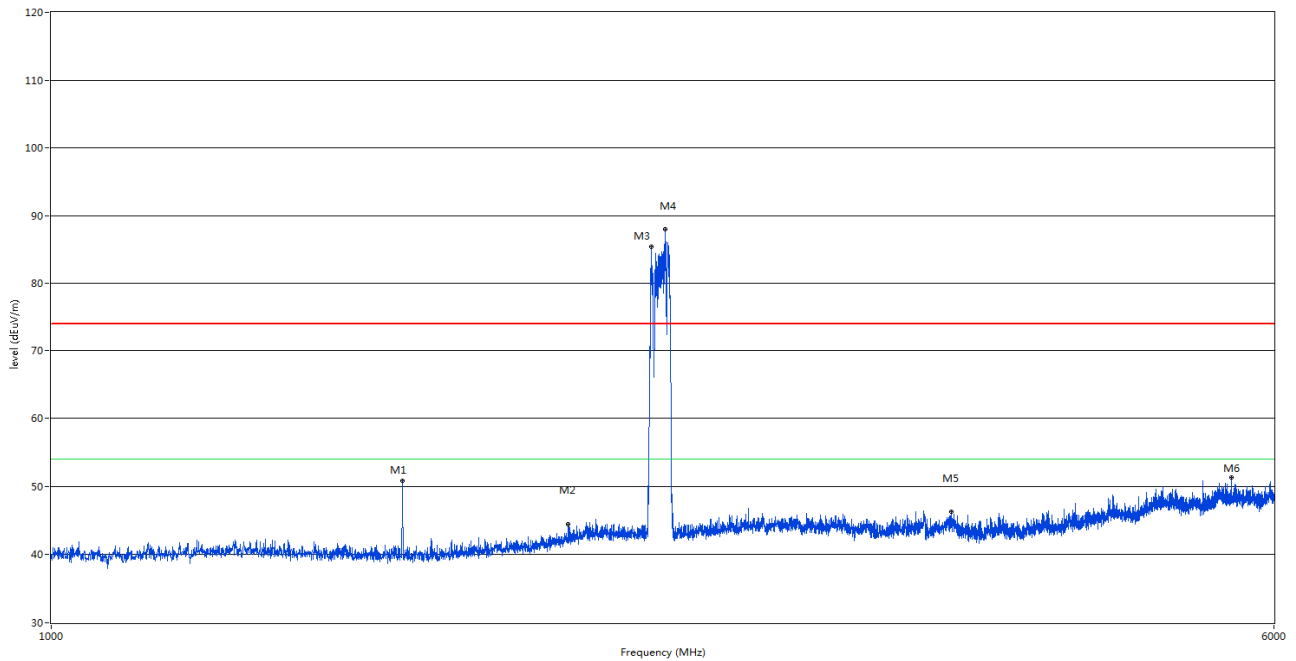
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	165.281	9.35	-17.73	33.5	24.15	Peak	246.00	200	Horizontal	Pass
2	452.329	16.49	-8.84	36.0	19.51	Peak	5.00	100	Horizontal	Pass
3	758.530	24.34	-2.94	36.0	11.66	Peak	215.00	100	Horizontal	Pass
4	784.471	24.66	-2.80	36.0	11.34	Peak	245.00	100	Horizontal	Pass
5	836.596	27.04	-2.38	36.0	8.96	Peak	221.00	100	Horizontal	Pass
6	881.447	40.00	-1.28	36.0	-4.00	Peak	221.00	100	Horizontal	N/A

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



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1673.000	61.76	-5.89	74.0	12.24	Peak	0.40	100	Vertical	Pass
2	2414.000	105.70	-2.53	74.0	-31.70	Peak	1.70	100	Vertical	N/A
3	2464.000	107.05	-2.71	74.0	-33.05	Peak	3.00	100	Vertical	N/A
4	2510.000	60.13	-2.40	74.0	13.87	Peak	0.40	100	Vertical	Pass
5	4279.500	46.53	9.00	74.0	27.47	Peak	231.20	100	Vertical	Pass
6	5116.500	49.68	11.19	74.0	24.32	Peak	68.60	100	Vertical	Pass

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

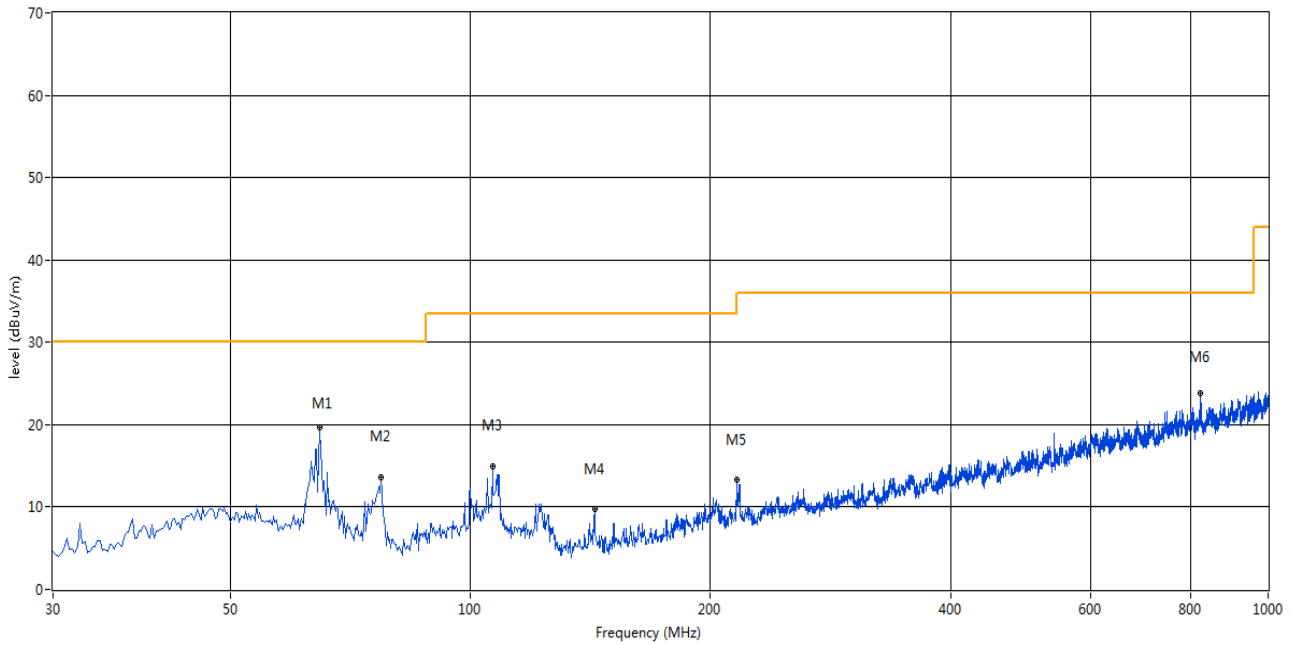


No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1673.000	50.82	-5.89	74.0	23.18	Peak	68.60	100	Horizontal	Pass
2	2133.000	44.47	-3.15	74.0	29.53	Peak	161.80	100	Horizontal	Pass
3	2409.000	85.45	-2.40	74.0	-11.45	Peak	201.30	100	Horizontal	N/A
4	2458.000	88.05	-2.75	74.0	-14.05	Peak	8.10	100	Horizontal	N/A
5	3738.750	46.25	8.28	74.0	27.75	Peak	328.50	100	Horizontal	Pass
6	5639.250	51.30	11.40	74.0	22.70	Peak	319.00	100	Horizontal	Pass

## Test Data and Plots

### The USB Test Mode

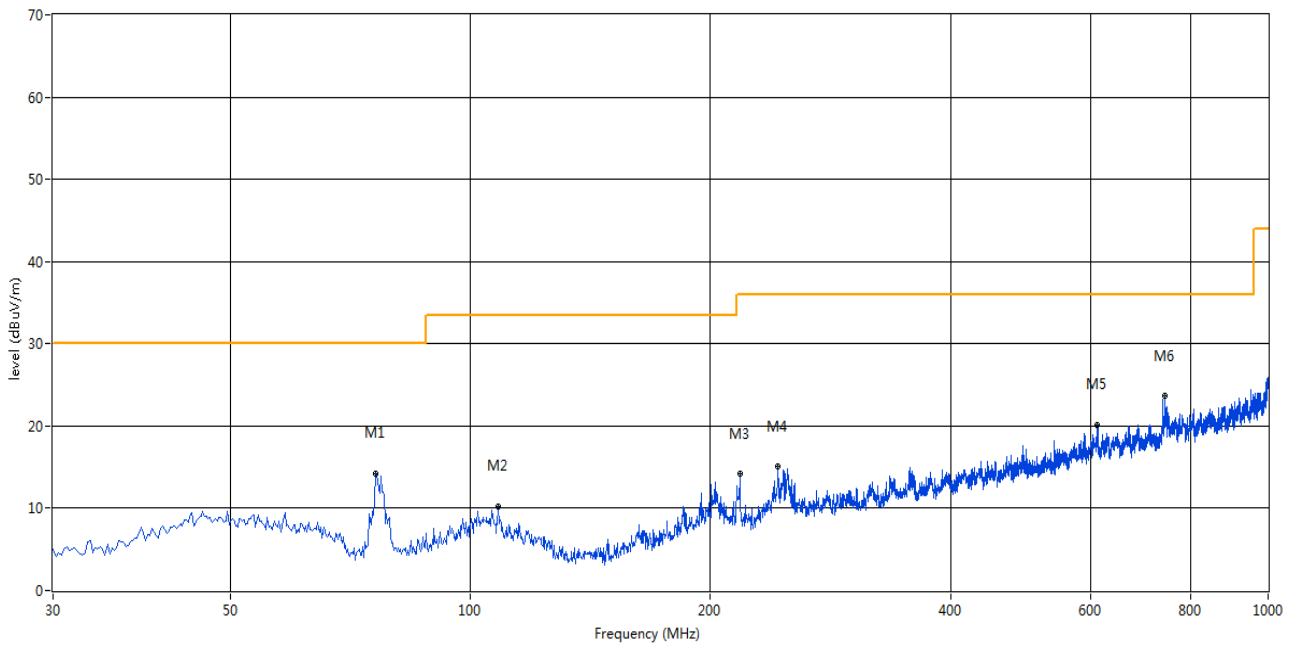
#### A.1.5 Test Antenna Vertical, 30 MHz – 1 GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	64.669	19.69	-15.69	30.0	10.31	Peak	360.00	400	Vertical	Pass
2	77.276	13.66	-19.41	30.0	16.34	Peak	246.00	200	Vertical	Pass
3	106.611	14.96	-15.14	33.5	18.54	Peak	360.00	400	Vertical	Pass
4	143.219	9.72	-18.98	33.5	23.78	Peak	360.00	400	Vertical	Pass
5	215.709	13.27	-15.04	33.5	20.23	Peak	150.00	100	Vertical	Pass
6	823.262	23.90	-2.07	36.0	12.10	Peak	174.00	100	Vertical	Pass

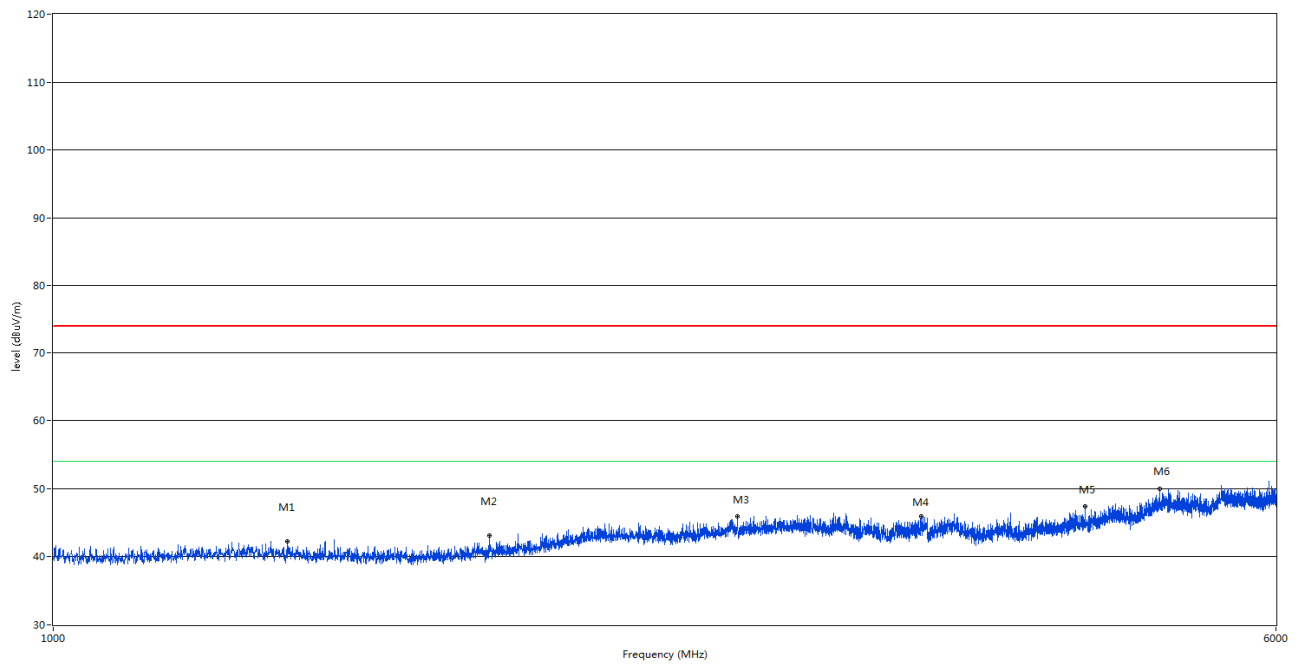


### A.1.6 Test Antenna Horizontal, 30 MHz – 1 GHz



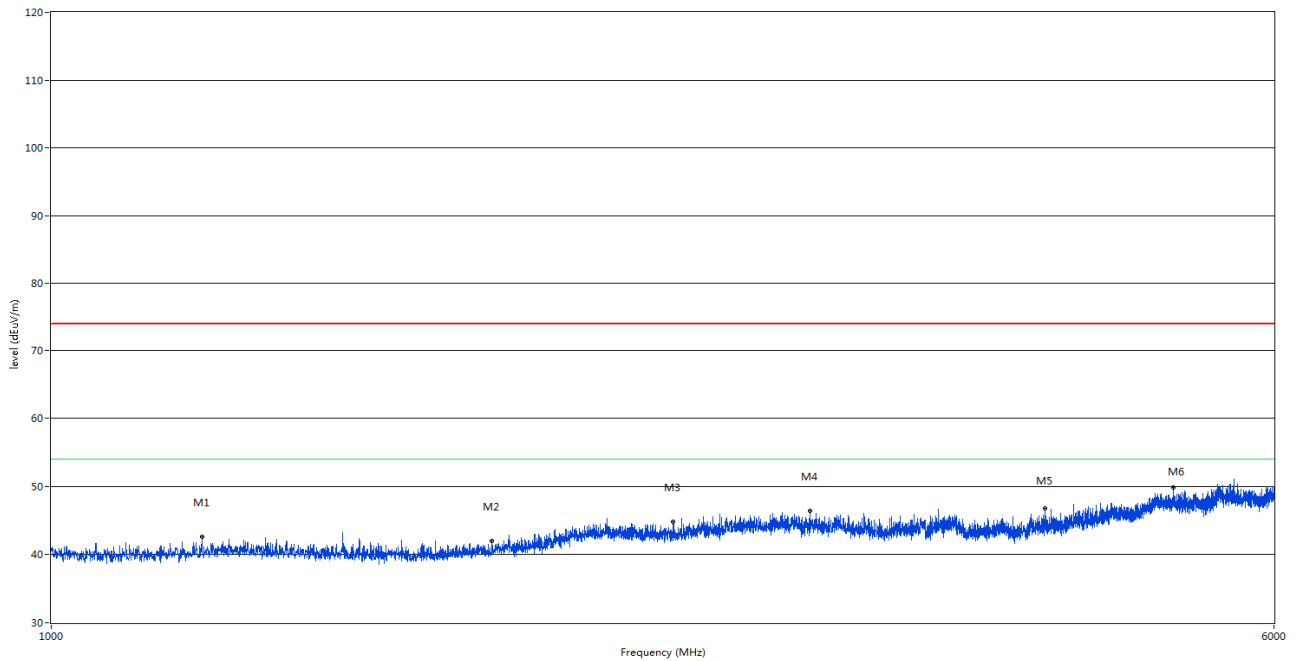
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	76.063	14.25	-19.38	30.0	15.75	Peak	360.00	200	Horizontal	Pass
2	108.550	10.26	-15.27	33.5	23.24	Peak	360.00	200	Horizontal	Pass
3	217.891	14.13	-14.97	36.0	21.87	Peak	275.00	300	Horizontal	Pass
4	243.104	15.04	-13.54	36.0	20.96	Peak	1.00	300	Horizontal	Pass
5	611.370	20.19	-5.21	36.0	15.81	Peak	145.00	200	Horizontal	Pass
6	742.287	23.61	-3.15	36.0	12.39	Peak	360.00	200	Horizontal	Pass

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



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1410.000	42.27	-6.08	74.0	31.73	Peak	241.10	100	Vertical	Pass
2	1895.500	43.13	-5.02	74.0	30.87	Peak	73.60	100	Vertical	Pass
3	2725.500	45.93	-0.66	74.0	28.07	Peak	359.60	100	Vertical	Pass
4	3569.250	45.92	6.74	74.0	28.08	Peak	300.80	100	Vertical	Pass
5	4538.250	47.40	9.32	74.0	26.60	Peak	142.20	100	Vertical	Pass
6	5062.500	50.01	10.94	74.0	23.99	Peak	51.80	100	Vertical	Pass

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



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	1247.000	42.61	-6.62	74.0	31.39	Peak	134.50	100	Horizontal	Pass
2	1907.000	42.07	-4.76	74.0	31.93	Peak	194.50	100	Horizontal	Pass
3	2488.500	44.82	-2.61	74.0	29.18	Peak	149.20	100	Horizontal	Pass
4	3038.250	46.47	6.27	74.0	27.53	Peak	262.90	100	Horizontal	Pass
5	4290.000	46.83	9.05	74.0	27.17	Peak	211.00	100	Horizontal	Pass
6	5179.500	49.81	10.99	74.0	24.19	Peak	225.40	100	Horizontal	Pass

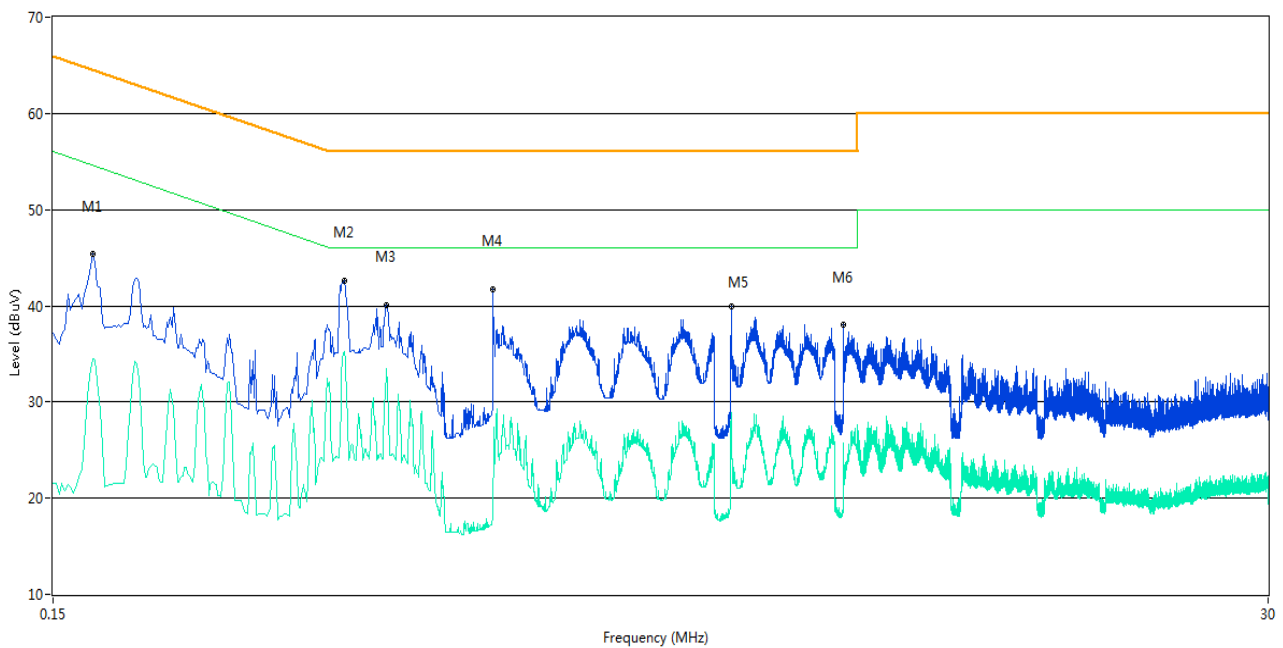
## A.2 Conducted Emission

### Test Data and Plots

#### The GSM 850 MHz Test Mode

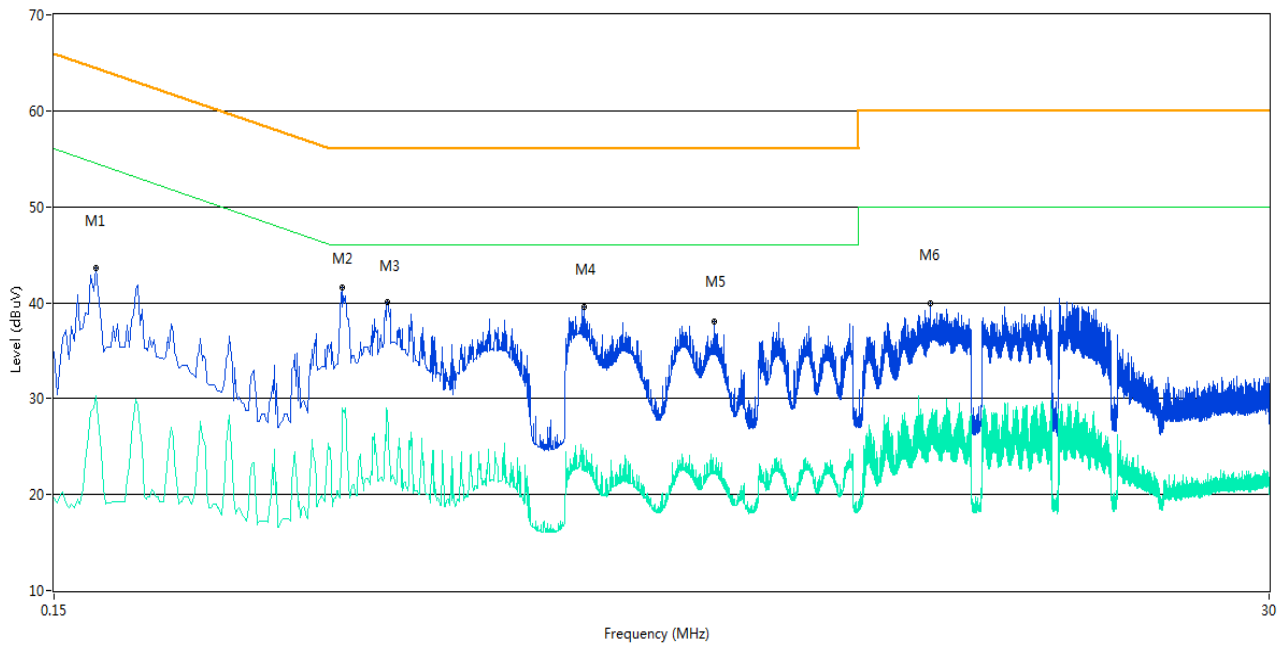
Note: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst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

#### A.2.1 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.178	45.4	10.16	64.6	19.20	Peak	L Line	Pass
1**	0.178	34.5	10.16	54.6	20.10	AV	L Line	Pass
2	0.534	42.5	9.39	56.0	13.50	Peak	L Line	Pass
2**	0.534	35.3	9.39	46.0	10.70	AV	L Line	Pass
3	0.642	40.1	10.74	56.0	15.90	Peak	L Line	Pass
3**	0.642	33.4	10.74	46.0	12.60	AV	L Line	Pass
4	1.022	41.7	9.96	56.0	14.30	Peak	L Line	Pass
4**	1.022	19.5	9.96	46.0	26.50	AV	L Line	Pass
5	2.888	39.9	10.89	56.0	16.10	Peak	L Line	Pass
5**	2.888	26.8	10.89	46.0	19.20	AV	L Line	Pass
6	4.718	38.1	9.99	56.0	17.90	Peak	L Line	Pass
6**	4.718	25.7	9.99	46.0	20.30	AV	L Line	Pass

## A.2.2 N Phase

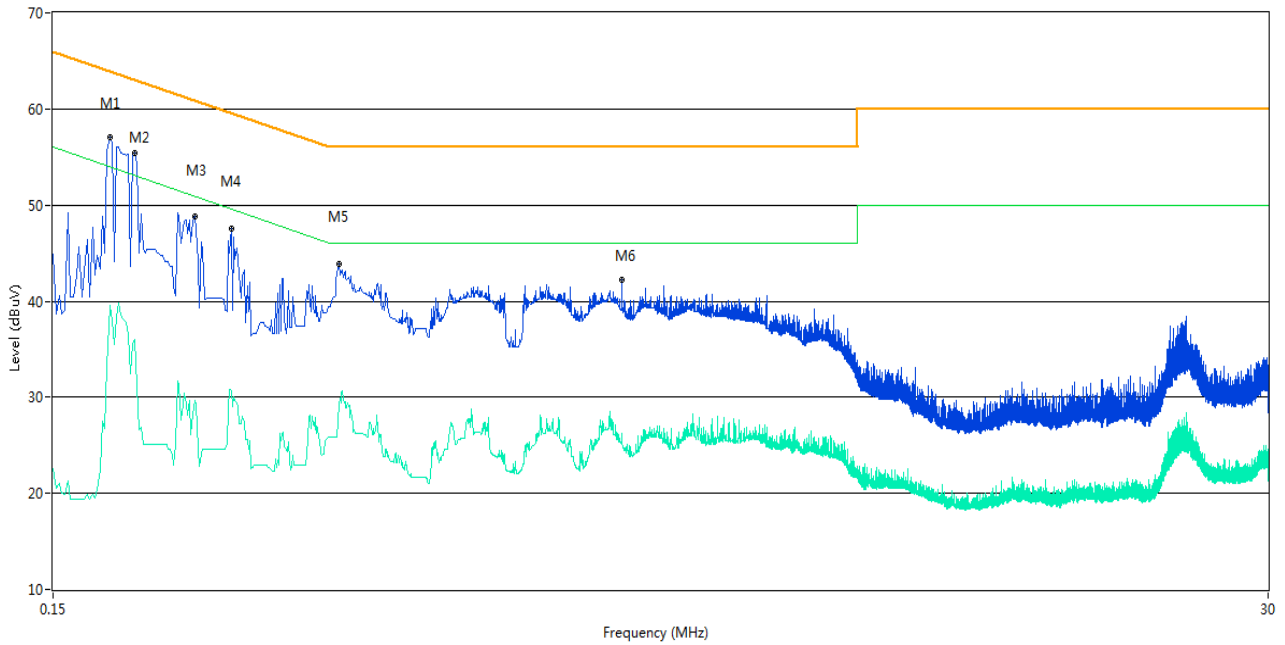


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.180	43.6	10.47	64.5	20.90	Peak	N Line	Pass
1**	0.180	30.3	10.47	54.5	24.20	AV	N Line	Pass
2	0.528	41.6	9.68	56.0	14.40	Peak	N Line	Pass
2**	0.528	29.1	9.68	46.0	16.90	AV	N Line	Pass
3	0.642	40.0	10.74	56.0	16.00	Peak	N Line	Pass
3**	0.642	28.6	10.74	46.0	17.40	AV	N Line	Pass
4	1.514	39.6	10.33	56.0	16.40	Peak	N Line	Pass
4**	1.514	24.0	10.33	46.0	22.00	AV	N Line	Pass
5	2.664	38.0	10.29	56.0	18.00	Peak	N Line	Pass
5**	2.664	22.4	10.29	46.0	23.60	AV	N Line	Pass
6	6.848	39.9	10.24	60.0	20.10	Peak	N Line	Pass
6**	6.848	25.6	10.24	50.0	24.40	AV	N Line	Pass

## Test Data and Plots

### The USB Test Mode

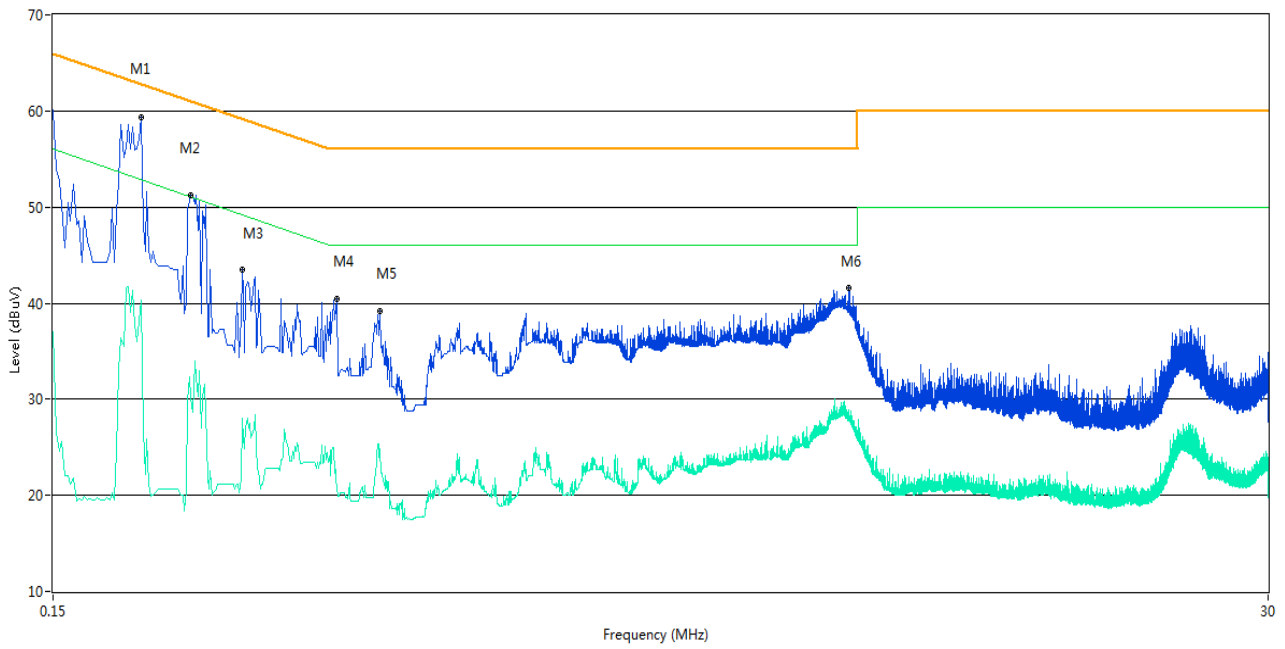
#### A.2.3 L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.192	57.1	9.39	63.9	6.80	Peak	L Line	Pass
1**	0.192	39.6	9.39	53.9	14.30	AV	L Line	Pass
2	0.214	55.4	10.30	63.0	7.60	Peak	L Line	Pass
2**	0.214	36.0	10.30	53.0	17.00	AV	L Line	Pass
3	0.278	48.8	10.72	60.9	12.10	Peak	L Line	Pass
3**	0.278	29.7	10.72	50.9	21.20	AV	L Line	Pass
4	0.326	47.5	11.16	59.6	12.10	Peak	L Line	Pass
4**	0.326	30.7	11.16	49.6	18.90	AV	L Line	Pass
5	0.522	43.8	9.97	56.0	12.20	Peak	L Line	Pass
5**	0.522	29.3	9.97	46.0	16.70	AV	L Line	Pass
6	1.792	42.3	10.58	56.0	13.70	Peak	L Line	Pass
6**	1.792	26.2	10.58	46.0	19.80	AV	L Line	Pass



## A.2.4 N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.220	59.4	11.35	62.8	3.40	Peak	N Line	Pass
1**	0.220	40.3	11.35	52.8	12.50	AV	N Line	Pass
2	0.274	51.2	10.62	61.0	9.80	Peak	N Line	Pass
2**	0.274	30.1	10.62	51.0	20.90	AV	N Line	Pass
3	0.342	43.5	9.50	59.2	15.70	Peak	N Line	Pass
3**	0.342	28.0	9.50	49.2	21.20	AV	N Line	Pass
4	0.518	40.5	10.11	56.0	15.50	Peak	N Line	Pass
4**	0.518	20.9	10.11	46.0	25.10	AV	N Line	Pass
5	0.624	39.1	10.70	56.0	16.90	Peak	N Line	Pass
5**	0.624	24.8	10.70	46.0	21.20	AV	N Line	Pass
6	4.814	41.6	10.38	56.0	14.40	Peak	N Line	Pass
6**	4.814	28.6	10.38	46.0	17.40	AV	N Line	Pass

## **ANNEX B TEST SETUP PHOTOS**

Please refer the document “BL-SZ1750208-AE.PDF”.

## **ANNEX C EUT EXTERNAL PHOTOS**

Please refer the document “BL-SZ1750208-AW.PDF”.

## **ANNEX D EUT INTERNAL PHOTOS**

Please refer the document “BL-SZ1750208-AI.PDF”.

--END OF REPORT--