



**SGS-CSTC Standards Technical Services Co., Ltd.  
Shenzhen Branch**

No. 1 Workshop, M-10, Middle section, Science & Technology Park,  
Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053  
Fax: +86 (0) 755 2671 0594  
Email: ee.shenzhen@sgs.com

Report No.: ZR/2018/9002706  
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## **TEST REPORT**

**Application No.:** ZR/2018/90027  
**Applicant:** Sony Mobile Communications INC  
**Address of Applicant:** 4-12-3 Higashi-shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan  
**Manufacturer:** Sony Mobile Communications Inc.  
**Address of Manufacturer:** 4-12-3 Higashi-shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan  
**Factory:** Dong Guan Huabel Electronic Technology Co., Ltd  
**Address of Factory:** No.9 Industrial Northern Road, National High-Tech Industrial Development Zone, SongShan Lake, Dong Guan City

**Equipment Under Test (EUT):**  
**EUT Description:** Mobile Phone  
**FCC ID:** PY7-50241M  
**Trade mark:** Sony  
**Standard(s) :** 47 CFR Part 15, Subpart B  
**Date of Receipt:** 2018-10-17  
**Date of Test:** 2018-10-19 to 2018-10-24  
**Date of Issue:** 2018-12-14

<b>Test Result:</b>	<b>Pass*</b>
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\* In the configuration tested, the EUT complied with the standards specified above.



Keny Xu  
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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<i>Revision Record</i>				
<i>Version</i>	<i>Chapter</i>	<i>Date</i>	<i>Modifier</i>	<i>Remark</i>
<i>Rev.00</i>		<i>2018-11-15</i>		<i>Original</i>
<i>Rev.01</i>		<i>2018-12-14</i>		<i>1<sup>st</sup> revised</i>

<b>Authorized for issue by:</b>				
				
		<hr/>		
		<b>Leo Lai /Project Engineer</b>		
				
		<hr/>		
		<b>Eric Fu /Reviewer</b>		



## 2 Test Summary

Emission Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at Mains Terminals (150kHz-30MHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (30MHz-1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass
Radiated Emissions (above 1GHz)	47 CFR Part 15, Subpart B	ANSI C63.4:2014	Class B	Pass

Internal Source	Upper Frequency
Below 1.705MHz	30MHz
1.705MHz to 108MHz	1GHz
108MHz to 500MHz	2GHz
500MHz to 1GHz	5GHz
Above 1GHz	5th harmonic of the highest frequency or 40GHz, whichever is lower



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## 4 General Information

### 4.1 Details of E.U.T.

Power supply:	DC 3.85V from internal battery or AC/DC adapter 1. AC Adaptor: UCH20 2. Car Charger: AN430
Cable:	Type C USB cable: Sony, AI-0162, 100cm shielded Earphone cable: Sony, 110cm unshielded.

### 4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Laptop	Lenovo	T430u	REF. No.SEA1800
Mouse	Lenovo	M-U0025-O	REF. No.:SEA2400
Router	NETGEAR	DGN2200	REF. No.SEA2200

### 4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Conduction Emission	± 3.0dB (150kHz to 30MHz)
2	Radiated Emission	± 4.5dB (30MHz-1GHz)
		± 4.8dB (1GHz-6GHz)
3	Temperature test	± 1 °C
4	Humidity test	± 3%

#### **4.4 Test Location**

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China.  
518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

#### **4.5 Test Facility**

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

#### **4.6 Deviation from Standards**

None

#### **4.7 Abnormalities from Standard Conditions**

None



## 5 Equipment List

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Shielding Room	ChangZhou ZhongYu	GB-88	SEM001-06	2017-05-10	2020-05-09
Measurement Software	AUDIX	e3 V5.4.1221d	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM024-01	2018-07-12	2019-07-11
LISN	Rohde & Schwarz	ENV216	SEM007-01	2018-09-25	2019-09-24
LISN	ETS-LINDGREN	3816/2	SEM007-02	2018-04-02	2019-04-01
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2018-04-02	2019-04-01

Radiated Emissions (30MHz-1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
10m Semi-Anechoic Chamber	SAEMC	FSAC1018	SEM001-03	2018-03-31	2021-03-30
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM029-01	2018-07-12	2019-07-11
EMI Test Receiver (9kHz-7GHz)	Rohde & Schwarz	ESR	SEM004-03	2018-04-02	2019-04-01
Trilog-Broadband Antenna(30MHz-1GHz)	Schwarzbeck	VULB9168	SEM003-18	2016-06-29	2019-06-28
Pre-amplifier	Sonoma Instrument Co	310N	SEM005-04	2018-04-13	2019-04-12

Radiated Emissions (above 1GHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2018-07-12	2019-07-11
EXA Spectrum Analyzer	AgilentTechnologies Inc	N9010A	SEM004-09	2018-04-13	2019-04-12
Horn Antenna(1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Pre-Amplifier(0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEM004-11	2018-09-27	2019-09-26



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<b>General used equipment</b>					
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Inventory No</b>	<b>Cal Date</b>	<b>Cal Due Date</b>
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2018-09-27	2019-09-26
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2018-09-27	2019-09-26
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2018-09-27	2019-09-26
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2018-04-08	2019-04-07



## 6 Emission Test Results

### 6.1 Conducted Emissions at Mains Terminals (150kHz-30MHz)

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	150kHz to 30MHz
Limit:	
0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 20.4 °C      Humidity: 51.6 % RH      Atmospheric Pressure: 1010 mbar

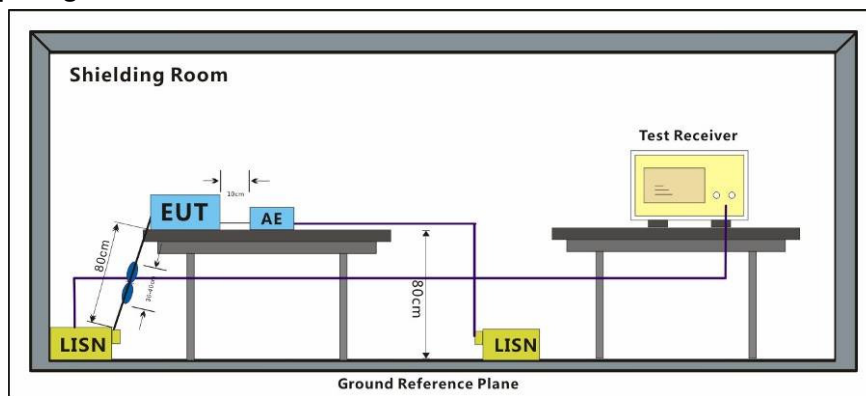
Pretest these modes to find the worst case:

- j: Transfer data between the EUT and the PC
- k: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+playing MP4+earphone+adapter
- l: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+camera(Front)+earphone+adapter
- m: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+camera(Back)+earphone+adapter
- n: GSM 850+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- p: WCDMA Band II+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- r: LTE band 2+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter

The worst case for final test:

- j: Transfer data between the EUT and the PC
- k: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+playing MP4+earphone+adapter

#### 6.1.2 Test Setup Diagram

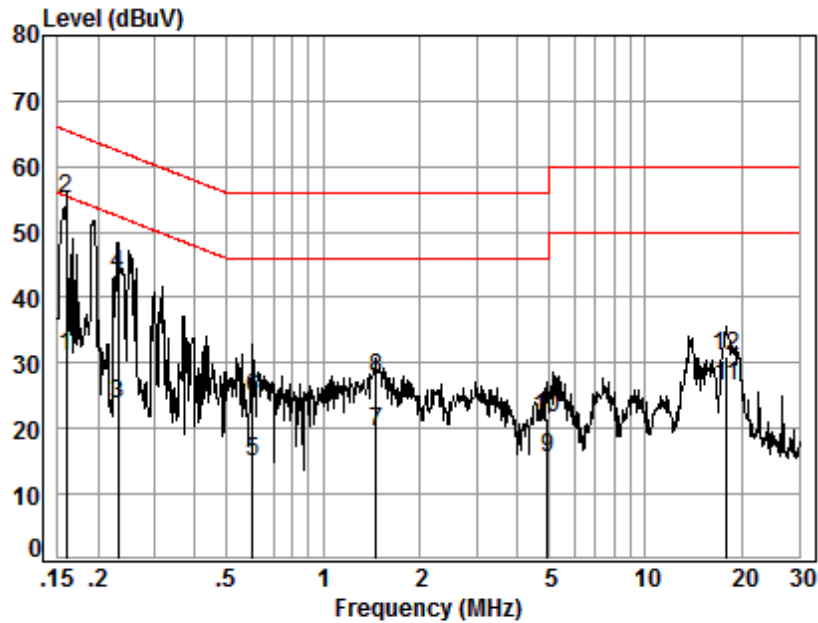


#### 6.1.3 Measurement Data

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.



Mode:j; Line:Live Line

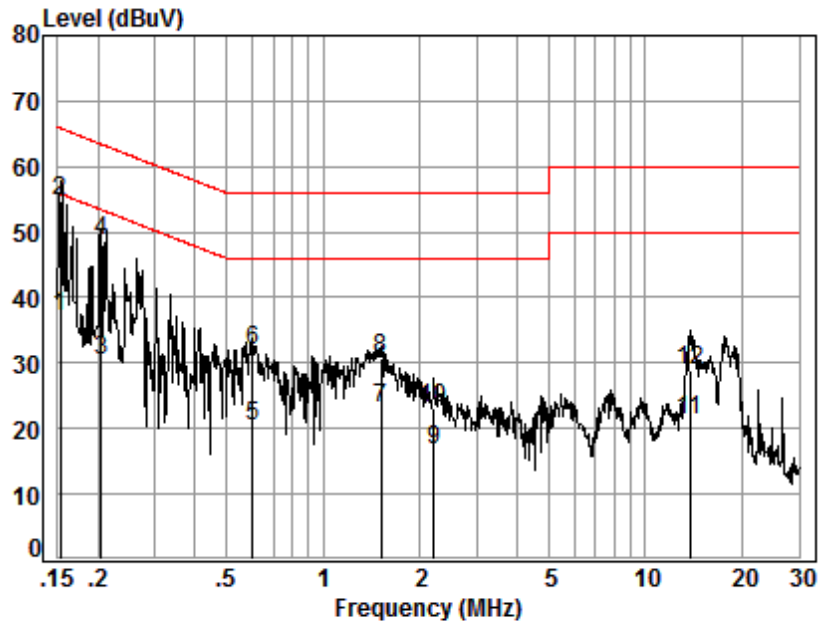


Site : Shielding Room  
Condition: Line  
Job No. : 90027  
Test mode: j

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.16	0.01	9.66	21.32	30.99	55.52	-24.53	Average
2	0.16	0.01	9.66	45.28	54.95	65.52	-10.57	QP
3	0.23	0.03	9.67	14.02	23.72	52.44	-28.72	Average
4	0.23	0.03	9.67	33.69	43.39	62.44	-19.05	QP
5	0.60	0.07	9.67	5.27	15.01	46.00	-30.99	Average
6	0.60	0.07	9.67	14.80	24.54	56.00	-31.46	QP
7	1.46	0.13	9.73	9.64	19.50	46.00	-26.50	Average
8	1.46	0.13	9.73	17.70	27.56	56.00	-28.44	QP
9	4.95	0.17	9.74	5.71	15.62	46.00	-30.38	Average
10	4.95	0.17	9.74	11.75	21.66	56.00	-34.34	QP
11	17.85	0.23	10.17	16.08	26.48	50.00	-23.52	Average
12	17.85	0.23	10.17	20.75	31.15	60.00	-28.85	QP



Mode:j; Line:Neutral Line

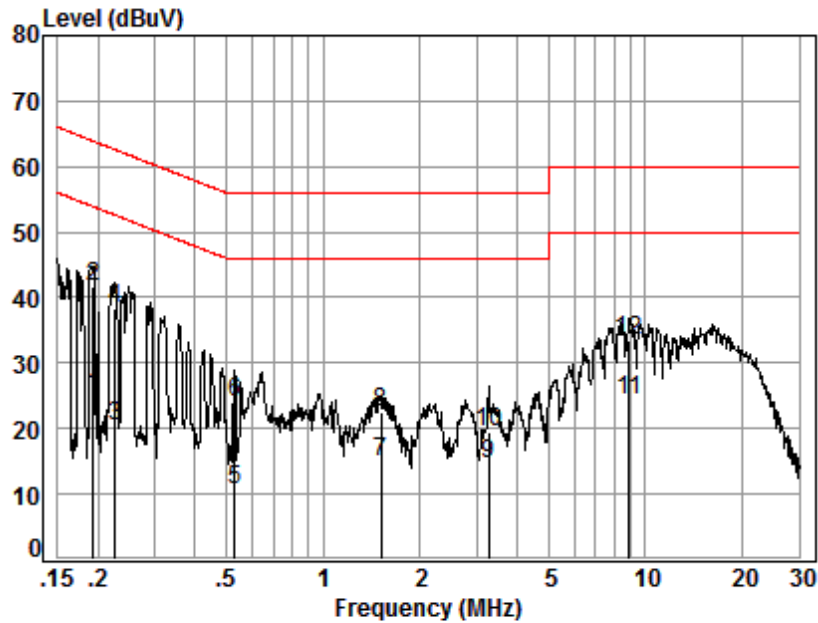


Site : Shielding Room  
Condition: Neutral  
Job No. : 90027  
Test mode: j

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15	0.01	9.63	27.58	37.22	55.82	-18.60	Average
2	0.15	0.01	9.63	45.18	54.82	65.82	-11.00	QP
3	0.21	0.02	9.64	20.63	30.29	53.40	-23.11	Average
4	0.21	0.02	9.64	39.13	48.79	63.40	-14.61	QP
5	0.60	0.07	9.64	10.82	20.53	46.00	-25.47	Average
6	0.60	0.07	9.64	22.11	31.82	56.00	-24.18	QP
7	1.51	0.13	9.70	13.26	23.09	46.00	-22.91	Average
8	1.51	0.13	9.70	20.75	30.58	56.00	-25.42	QP
9	2.20	0.16	9.69	6.89	16.74	46.00	-29.26	Average
10	2.20	0.16	9.69	13.25	23.10	56.00	-32.90	QP
11	13.77	0.20	10.27	10.89	21.36	50.00	-28.64	Average
12	13.77	0.20	10.27	18.29	28.76	60.00	-31.24	QP



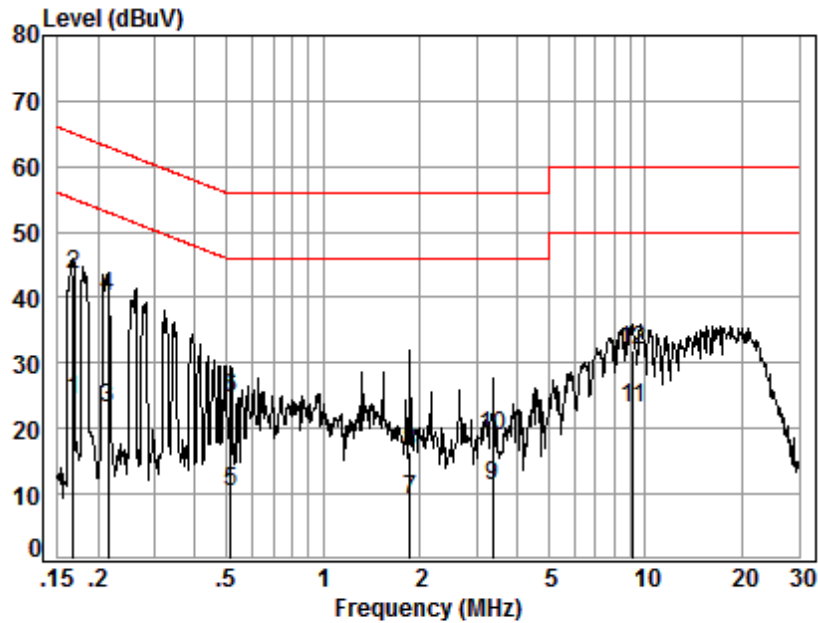
Mode:k; Line:Live Line



Site : Shielding Room  
Condition: Line  
Job No. : 90027  
Test mode: k

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.19	0.02	9.66	15.14	24.82	53.89	-29.07	Average
2	0.19	0.02	9.66	32.06	41.74	63.89	-22.15	QP
3	0.23	0.03	9.67	10.67	20.37	52.61	-32.24	Average
4	0.23	0.03	9.67	28.74	38.44	62.61	-24.17	QP
5	0.53	0.06	9.67	0.84	10.57	46.00	-35.43	Average
6	0.53	0.06	9.67	14.45	24.18	56.00	-31.82	QP
7	1.51	0.13	9.73	5.15	15.01	46.00	-30.99	Average
8	1.51	0.13	9.73	12.62	22.48	56.00	-33.52	QP
9	3.26	0.16	9.71	4.67	14.54	46.00	-31.46	Average
10	3.26	0.16	9.71	9.54	19.41	56.00	-36.59	QP
11	8.92	0.17	9.83	14.19	24.19	50.00	-25.81	Average
12	8.92	0.17	9.83	23.52	33.52	60.00	-26.48	QP

Mode:k; Line:Neutral Line



Site : Shielding Room  
 Condition: Neutral  
 Job No. : 90027  
 Test mode: k

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.17	0.01	9.64	14.78	24.43	55.08	-30.65	Average
2	0.17	0.01	9.64	33.82	43.47	65.08	-21.61	QP
3	0.22	0.03	9.64	13.38	23.05	53.01	-29.96	Average
4	0.22	0.03	9.64	30.34	40.01	63.01	-23.00	QP
5	0.52	0.06	9.64	0.70	10.40	46.00	-35.60	Average
6	0.52	0.06	9.64	15.00	24.70	56.00	-31.30	QP
7	1.86	0.15	9.69	-0.63	9.21	46.00	-36.79	Average
8	1.86	0.15	9.69	6.70	16.54	56.00	-39.46	QP
9	3.36	0.16	9.68	1.43	11.27	46.00	-34.73	Average
10	3.36	0.16	9.68	8.89	18.73	56.00	-37.27	QP
11	9.16	0.17	9.82	13.01	23.00	50.00	-27.00	Average
12	9.16	0.17	9.82	21.84	31.83	60.00	-28.17	QP



## **6.2 Radiated Emissions (30MHz-1GHz)**

Test Requirement:	47 CFR Part 15, Subpart B
Test Method:	ANSI C63.4:2014
Frequency Range:	30MHz to 1GHz
Measurement Distance:	10m
Limit of 3m:	
30MHz -88MHz	40(dB $\mu$ V/m) quasi-peak
88MHz-216MHz	43.5(dB $\mu$ V/m) quasi-peak
216MHz-960MHz	46(dB $\mu$ V/m) quasi-peak
960MHz-1000MHz	54(dB $\mu$ V/m) quasi-peak
Detector:	Peak for pre-scan (120kHz resolution bandwidth) 30M to1000MHz

### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25 °C Humidity: 51 % RH Atmospheric Pressure: 1010 mbar

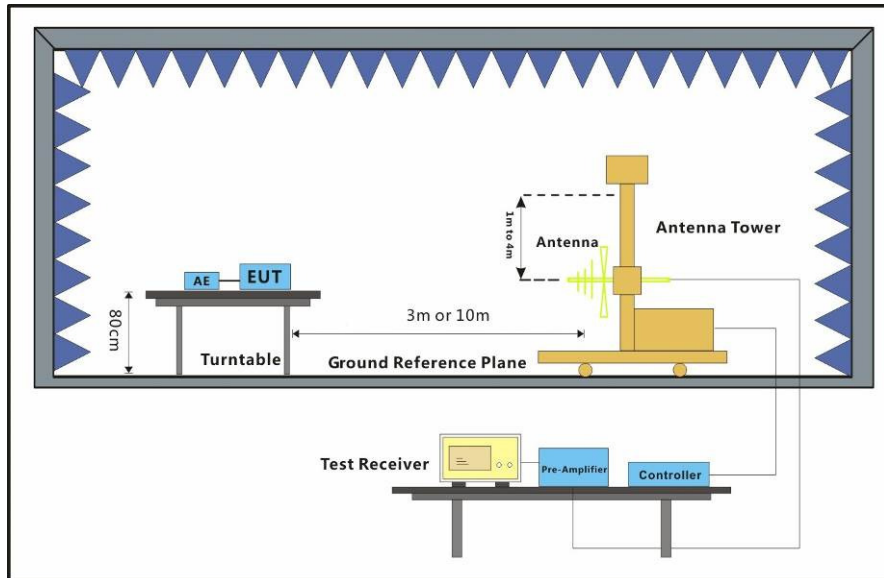
Pretest these modes to find the worst case:

- j: Transfer data between the EUT and the PC
- k: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+playing MP4+earphone+adapter
- l: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+camera(Front)+earphone+adapter
- m: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+camera(Back)+earphone+adapter
- n: GSM 850+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- o: GSM 1900+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- p: WCDMA Band II+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- q: WCDMA Band V+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- r: LTE band 2+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- s: LTE band 5+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- t: LTE band 7+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter

The worst case for final test:

- j: Transfer data between the EUT and the PC
- l: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+camera(Front)+earphone+adapter

### 6.2.2 Test Setup Diagram



### 6.2.3 Measurement Data

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



Mode:j;

**Radiated Emissions**

Polarization	Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Pre-Amp Gain (dB)	Reading at 10m (dBμV)	Net at 3m (dBμV/m)	Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	51.481	6.93	12.66	32.45	30.33	27.93	40.00	-12.07
Horizontal	93.768	7.19	8.96	32.47	34.76	28.90	43.50	-14.60
Horizontal	135.982	7.38	12.47	32.44	32.38	30.25	43.50	-13.25
Horizontal	216.024	7.69	9.91	32.39	34.07	29.74	46.00	-16.26
Horizontal	399.030	8.31	14.84	32.34	32.25	33.52	46.00	-12.48
Horizontal	699.305	9.08	20.10	32.31	26.73	34.06	46.00	-11.94
Vertical	58.819	7.01	12.09	32.45	35.08	32.19	40.00	-7.81
Vertical	86.200	7.16	8.64	32.47	34.82	28.61	40.00	-11.39
Vertical	128.113	7.34	11.93	32.44	32.56	29.85	43.50	-13.65
Vertical	216.024	7.69	9.91	32.39	32.22	27.89	46.00	-18.11
Vertical	298.268	8.00	12.62	32.36	32.88	31.60	46.00	-14.40
Vertical	399.030	8.31	14.84	32.34	29.90	31.17	46.00	-14.83

**NOTES:**

1. Quasi-Peak detector is used except for others stated.
2. All measurements were made at 10 meters.
3. Negative value in the margin column shows emission below limit.
4. Final Test Level (Net at 3m) = Receiver Reading + Antenna Factor + Cable Factor + F1 – Preamplifier Factor

The calculation of field strength between 10m and 3m test distance.

$$FS_{\text{limit}} = FS_{\text{max}} - 20 \log \left( \frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

F1: is the factor of distance 10m to 3m = 20log(10/3) =10.458



Mode:I;

**Radiated Emissions**

Polarization	Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB)	Pre-Amp Gain (dB)	Reading at 10m (dBμV)	Net at 3m (dBμV/m)	Limit at 3m (dBμV/m)	Margin (dB)
Horizontal	40.702	6.83	13.26	32.46	25.94	24.03	40.00	-15.97
Horizontal	154.821	7.46	13.40	32.43	26.79	25.68	43.50	-17.82
Horizontal	283.979	7.96	12.26	32.37	26.27	24.58	46.00	-21.42
Horizontal	413.271	8.35	15.23	32.34	26.15	27.85	46.00	-18.15
Horizontal	605.659	8.89	18.83	32.37	26.28	32.09	46.00	-13.91
Horizontal	766.057	9.22	20.96	32.21	27.41	35.84	46.00	-10.16
Vertical	43.812	6.86	13.00	32.46	27.21	25.07	40.00	-14.93
Vertical	72.084	6.95	9.73	32.46	30.02	24.70	40.00	-15.30
Vertical	166.068	7.50	12.79	32.42	26.78	25.11	43.50	-18.39
Vertical	309.998	8.04	12.95	32.36	27.42	26.51	46.00	-19.49
Vertical	638.369	8.96	19.39	32.35	27.61	34.07	46.00	-11.93
Vertical	912.862	9.50	22.40	31.48	25.97	36.85	46.00	-9.15

**NOTES:**

1. Quasi-Peak detector is used except for others stated.
2. All measurements were made at 10 meters.
3. Negative value in the margin column shows emission below limit.
4. Final Test Level (Net at 3m) = Receiver Reading + Antenna Factor + Cable Factor + F1 – Pre-amplifier Factor

The calculation of field strength between 10m and 3m test distance.

$$FS_{\text{limit}} = FS_{\text{max}} - 20 \log \left( \frac{d_{\text{limit}}}{d_{\text{measure}}} \right)$$

F1: is the factor of distance 10m to 3m = 20log(10/3) =10.458



### **6.3 Radiated Emissions (above 1GHz)**

Test Requirement: 47 CFR Part 15, Subpart B

Test Method: ANSI C63.4:2014

Frequency Range: Above 1GHz

Measurement Distance: 3m

Limit:

Above 1GHz 74(dB $\mu$ V/m) peak, 54(dB $\mu$ V/m) average

Detector: Peak for pre-scan (1000kHz resolution bandwidth) 1000M to18000MHz

### 6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 21.9 °C Humidity: 60.3 % RH Atmospheric Pressure: 1010 mbar

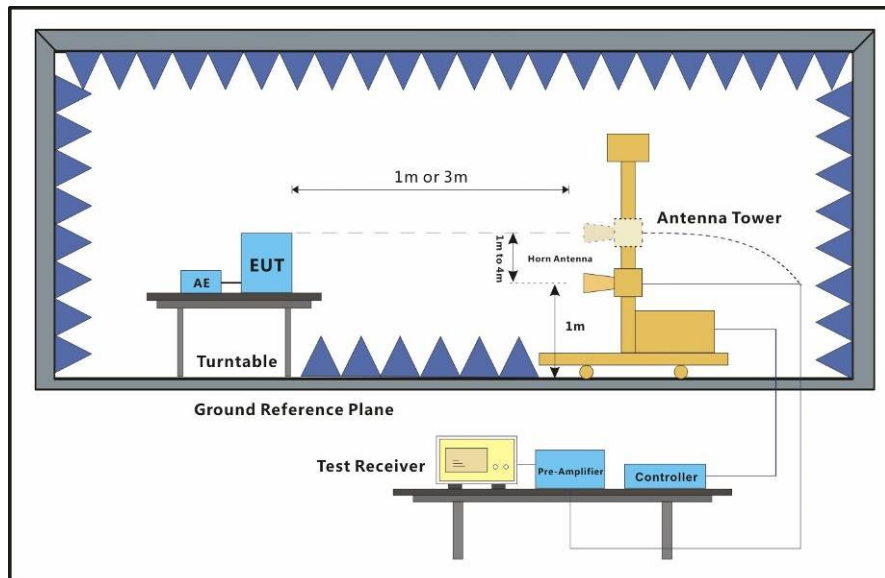
Pretest these modes to find the worst case:

- j: Transfer data between the EUT and the PC
- k: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+playing MP4+earphone+adapter
- l: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+camera(Front)+earphone+adapter
- m: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+camera(Back)+earphone+adapter
- n: GSM 850+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- o: GSM 1900+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- p: WCDMA Band II+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- q: WCDMA Band V+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- r: LTE band 2+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- s: LTE band 5+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter
- t: LTE band 7+BT+FM+NFC+WLAN+GPS Rx+earphone+adapter

The worst case for final test:

- j: Transfer data between the EUT and the PC
- k: Telecom Idle+BT+FM+NFC+WLAN+GPS Rx+playing MP4+earphone+adapter

### 6.3.2 Test Setup Diagram



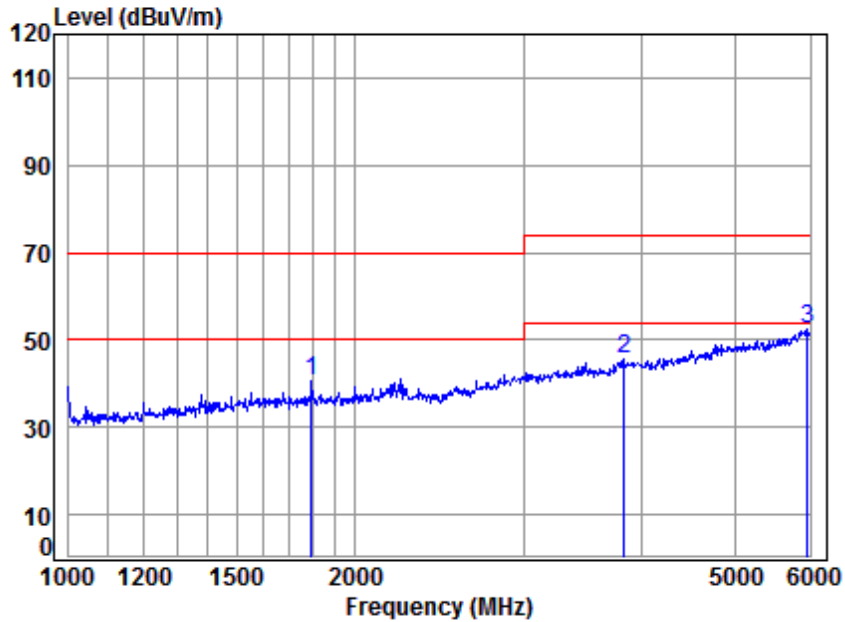
### 6.3.3 Measurement Data

An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. The EUT was measured by Horn antenna with 2 orthogonal polarities.

Scan from 1GHz to 29.125GHz, the disturbance above 6GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed.



Mode:j; Polarization:Horizontal

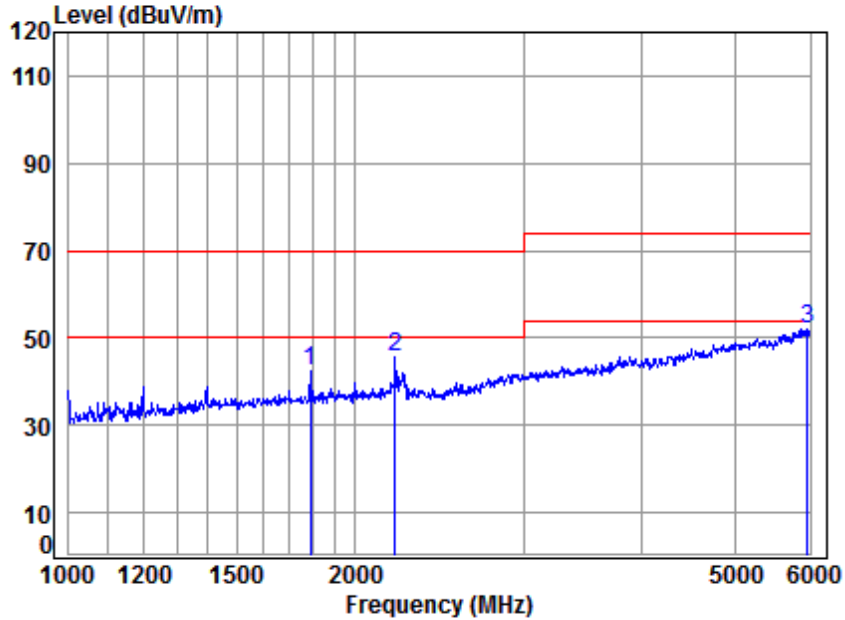


Site : chamber  
Condition: 3m HORIZONTAL  
Job No : 09072CR  
Mode : j

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1799.839	5.11	27.07	41.59	49.94	40.53	70.00	-29.47	Peak
2	3826.796	6.81	32.37	42.29	48.92	45.81	74.00	-28.19	Peak
3	5967.835	10.46	35.07	41.63	48.50	52.40	74.00	-21.60	Peak



Mode:j; Polarization:Vertical

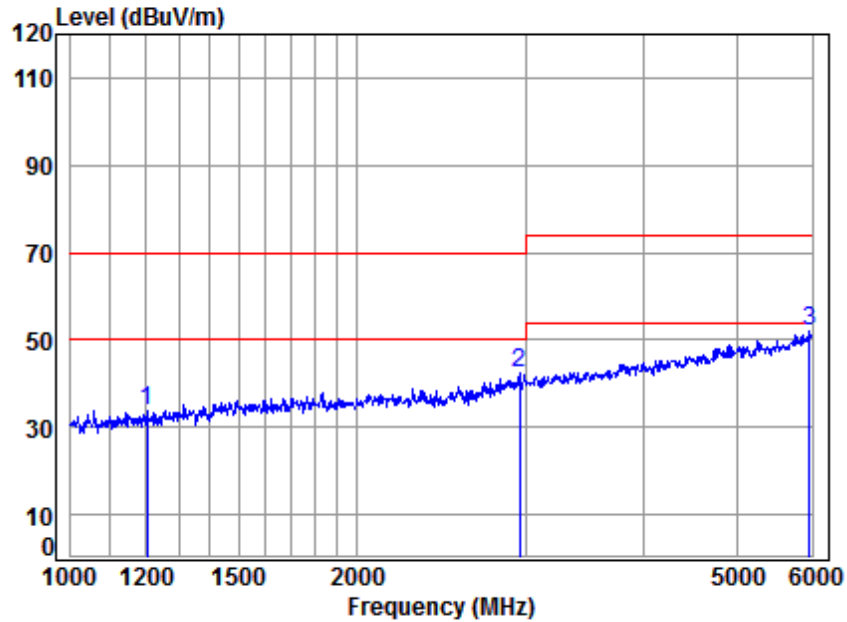


Site : chamber  
Condition: 3m VERTICAL  
Job No : 09072CR  
Mode : j

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1793.401	5.12	27.04	41.58	51.83	42.41	70.00	-27.59	Peak
2	2199.817	5.21	28.18	41.79	53.94	45.54	70.00	-24.46	Peak
3	5957.151	10.43	35.06	41.64	48.19	52.04	74.00	-21.96	Peak



Mode:k; Polarization:Horizontal

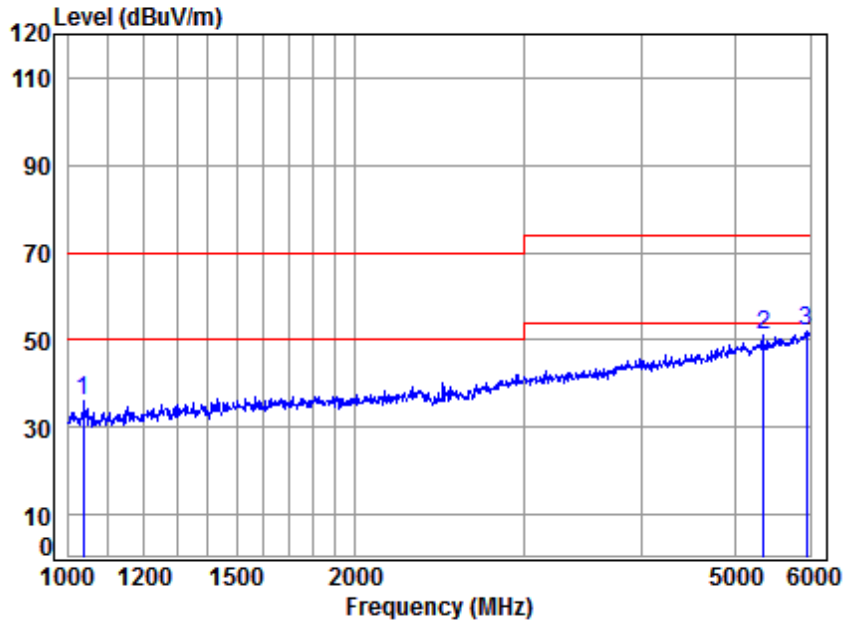


Site : chamber  
Condition: 3m HORIZONTAL  
Job No : 09072CR  
Mode : k

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1202.679	4.43	24.60	41.18	46.13	33.98	70.00	-36.02	Peak
2	2956.525	5.95	30.72	42.09	47.95	42.53	70.00	-27.47	Peak
3	5967.835	10.46	35.07	41.63	48.08	51.98	74.00	-22.02	Peak



Mode:k; Polarization:Vertical



Site : chamber  
Condition: 3m VERTICAL  
Job No : 09072CR  
Mode : k

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Over Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1036.485	3.72	23.79	41.04	49.72	36.19	70.00	-33.81	Peak
2	5359.542	8.64	34.49	42.16	50.20	51.17	74.00	-22.83	Peak
3	5946.487	10.39	35.05	41.65	48.03	51.82	74.00	-22.18	Peak



## **7 Photographs**

### **7.1 Test Setup**

Please refer to setup photos.

### **7.2 EUT Constructional Details (EUT Photos)**

Please refer to external and internal photos for details.

- End of the Report -