

JianYan Testing Group Shenzhen Co., Ltd.

Report No.: JYTSZ-R12-2400406

FCC RF Test Report

Report No.: JYTSZ-R12-2400406

Applicant: INFINIX MOBILITY LIMITED

Address of Applicant: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE

19-25 SHAN MEI STREET FOTAN NT HONGKONG

Equipment Under Test (EUT)

Product Name: Mobile Phone

Model No.: X6838

Trade Mark: Infinix

FCC ID: 2AIZN-X6838

Applicable Standards: FCC CFR Title 47 Part 15C (§15.247)

Date of Sample Receipt: 11 Apr., 2024

Date of Test: 12 Apr., to 23 May, 2024

Date of Report Issued: 24 May, 2024

Test Result: PASS

Project by: Date: 24 May, 2024

Reviewed by: 24 May, 2024

Approved by: _____ Date: ____ 24 May, 2024 Manager

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

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1 Version

Version No.	Date	Description
00	24 May, 2024	Original



2 Contents

			Page
С	over Pa	age	1
1	Ver	sion	2
2	Cor	ntents	3
3	Ger	neral Information	4
	3.1	Client Information	4
	3.2	General Description of E.U.T.	
	3.3	Test Mode and Test Environment	
	3.4	Description of Test Auxiliary Equipment	
	3.5	Measurement Uncertainty	
	3.6	Additions to, Deviations, or Exclusions from the Method	5
	3.7	Laboratory Facility	
	3.8	Laboratory Location	6
	3.9	Test Instruments List	6
4	Mea	asurement Setup and Procedure	9
	4.1	Test Channel	9
	4.2	Test Setup	9
	4.3	Test Procedure	11
5	Tes	st Results	12
	5.1	Summary	12
	5.1.	•	
	5.1.	•	
	5.2	Antenna requirement	
	5.3	AC Power Line Conducted Emission	15
	5.4	Emissions in Restricted Frequency Bands	17
	5.5	Emissions in Non-restricted Frequency Bands	33





3 General Information

3.1 Client Information

Applicant:	INFINIX MOBILITY LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Manufacturer:	INFINIX MOBILITY LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Factory:	SHENZHEN TECNO TECHNOLOGY CO., LTD.
Address:	101, Building 24, Waijing Industrial Park, Fumin Community, Fucheng Street, Longhua District, Shenzhen City, P.R.China

3.2 General Description of E.U.T.

3.2 General Descrip	CHOIL OF E.O.T.				
Product Name:	Mobile Phone				
Model No.:	X6838				
Operation Frequency:	LE 1M PHY 2402 MHz - 2480 MHz				
	LE 2M PHY	2404MHz - 2478MHz			
	LE Coded PHY, S=8	2402 MHz - 2480 MHz			
	LE Coded PHY, S=2	2402 MHz - 2480 MHz			
Channel Numbers:	40				
Channel Separation:	2MHz				
Modulation Technology:	GFSK				
Data Speed:	1 Mbps (LE 1M PHY), 2 Mbps (LE 2M PHY), 125 kbps (LE Coded PHY, S=8), 500 kbps (LE Coded PHY, S=2)				
Antenna Type:	Internal Antenna				
Antenna Gain:	ANT6:1.49 dBi (declare by appli	cant)			
Antenna transmit mode:	SISO (1TX, 1RX)				
Power Supply:	Rechargeable Li-ion Polymer Battery DC3.85V, 4900mAh				
AC Adapter:	Model: U180XSA				
	Input: AC100-240V, 50/60Hz, 0.6A				
	Output: DC 5.0V, 2.4A or 7.5V, 2.4A 18.0W MAX				
Test Sample Condition:	The test samples were provided	in good working order with no visible defects.			





3.3 Test Mode and Test Environment

Test Mode:	
Transmitting mode	Keep the EUT in continuous transmitting with modulation
Remark:	

- 1. For AC power line conducted emission and radiated spurious emission (below 1GHz), pre-scan all data speed, found 1 Mbps (LE 1M PHY) was worse case mode. The report only reflects the test data of worst mode.
- 2. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report.

Operating Environment:	
Temperature:	15℃ ~ 35℃
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.85Vdc, Extreme: Low 3.00Vdc, High 4.40Vdc
Test Engineer:	Logan Li (Conducted measurement)
rest Engineer.	Kiran Zeng (Radiated measurement)

3.4 Description of Test Auxiliary Equipment

The EUT has been tested as an independent unit.

3.5 Measurement Uncertainty

Parameter	Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Conducted Emission for LISN (9kHz ~ 150kHz)	3.57 dB
Conducted Emission for LISN (150kHz ~ 30MHz)	3.14 dB
Radiated Emission (30MHz ~ 200MHz) (3m SAC)	4.6 dB
Radiated Emission (200MHz ~ 1000MHz) (3m SAC)	5.8 dB
Radiated Emission (1GHz ~ 6GHz) (3m FAR)	4.95 dB
Radiated Emission (6GHz ~ 18GHz) (3m FAR)	5.23 dB
Radiated Emission (18GHz ~ 40GHz) (3m FAR)	5.32 dB

Note: All the measurement uncertainty value were shown with a coverage k=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

3.6 Additions to, Deviations, or Exclusions from the Method

No

JianYan Testing Group Shenzhen Co., Ltd. Report Template No.: JYTSZ4b-148-C1 No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China. Tel: +86-755-23118282, Fax: +86-755-23116366

Report No.: JYTSZ-R12-2400406

3.7 Laboratory Facility

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

• FCC - Designation No.: CN1211

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

ISED – CAB identifier.: CN0021

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

CNAS - Registration No.: CNAS L15527

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

• A2LA - Registration No.: 4346.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

3.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: http://jyt.lets.com

3.9 Test Instruments List

Radiated Emission(3m SAC):						
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)	
3m SAC	ETS	9m*6m*6m	WXJ001-1	04-14-2021	04-13-2026	
Loop Antenna	Schwarzbeck	FMZB 1519 B	WXJ002-4	01-05-2024	01-04-2025	
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ002	01-09-2024	01-08-2025	
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-2	01-05-2024	01-04-2025	
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-5	12-28-2023	12-27-2024	
Pre-amplifier (30MHz ~ 1GHz)	Schwarzbeck	BBV9743B	WXJ001-2	12-27-2023	12-26-2024	
EMI Test Receiver	Rohde & Schwarz	ESRP7	WXJ003-1	12-27-2023	12-26-2024	
Spectrum Analyzer	Rohde & Schwarz	FSP 30	WXJ004	12-27-2023	12-26-2024	
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ004-2	09-25-2023	09-24-2024	
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-8M	WXG001-4	01-17-2024	01-16-2025	
Band Reject Filter Group	Tonscend	JS0806-F	WXJ089	N/A		
Test Software	Tonscend	TS+		Version: 3.0.0.1		

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Radiated Emission(3m FAR):						
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)	
3m FAR	YUNYI	9m*6m*6m	WXJ097	06-15-2023	06-14-2028	
BiConiLog Antenna	Schwarzbeck	VULB9163	WXJ097-2	07-13-2023	07-12-2024	
Biconical Antenna	Schwarzbeck	VUBA9117	WXJ002-1	07-02-2021	07-01-2024	
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ097-3	07-14-2023	07-13-2024	
Horn Antenna	Schwarzbeck	BBHA9120D	WXJ002-3	12-28-2023	12-27-2024	
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-5	12-28-2023	12-27-2024	
Horn Antenna	Schwarzbeck	BBHA9170	WXJ002-6	12-28-2023	12-27-2024	
Pre-amplifier	N/LININ/L	DAM GAON	M/X/1007 5	05-14-2023	05-13-2024	
(30MHz ~ 1GHz)	YUNYI	PAM-310N	WXJ097-5	04-24-2024	04-23-2025	
Pre-amplifier	24.12.24	DAM 440N	1407/1007-0	05-14-2023	05-13-2024	
(1GHz ~ 18GHz)	YUNYI	PAM-118N	WXJ097-6	04-24-2024	04-23-2025	
Pre-amplifier (18GHz ~ 40GHz)	RF System	TRLA-180400G45B	WXJ002-7	12-28-2023	12-27-2024	
EMI Test Receiver	Rohde & Schwarz	ESCI3	WXJ003	12-27-2023	12-26-2024	
Spectrum Analyzer	Rohde & Schwarz	FSP 30	WXJ004	12-27-2023	12-26-2024	
Spectrum Analyzer	KEYSIGHT	N9010B	WXJ081-1	06-13-2023	06-12-2024	
Coaxial Cable (30MHz ~ 1GHz)	JYTSZ	JYT3M-1G-NN-13M	WXG097-1	08-01-2023	07-31-2024	
Coaxial Cable (1GHz ~ 18GHz)	JYTSZ	JYT3M-18G-NN-8M	WXG097-2	08-01-2023	07-31-2024	
Coaxial Cable (18GHz ~ 40GHz)	JYTSZ	JYT3M-40G-SS-8M	WXG097-3	08-01-2023	07-31-2024	
High Band Reject Filter Group	Tonscend	JS0806-F	WXJ089	N/A		
Low Band Reject Filter Group	Tonscend	JS0806-F	WXJ097-4	N/A		
Test Software	Tonscend	TS+		Version: 5.0.0		





Conducted Emission:							
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)		
EMI Test Receiver	Rohde & Schwarz	ESR3	WXJ003-2	07-05-2023	07-04-2024		
LISN	Schwarzbeck	NSLK 8127	QCJ001-13	12-27-2023	12-26-2024		
LISN	Rohde & Schwarz	ESH3-Z5	WXJ005-1	12-27-2023	12-26-2024		
LISN Coaxial Cable (9kHz ~ 30MHz)	JYTSZ	JYTCE-1G-NN-2M	WXG003-1	01-17-2024	01-16-2025		
RF Switch	TOP PRECISION	RSU0301	WXG003	1	N/A		
Test Software	AUDIX	E3	\	Version: 6.110919b			

Conducted Method:							
Test Equipment	Manufacturer	Model No.	Manage No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)		
Spectrum Analyzer	Keysight	N9010B	WXJ004-3	11-01-2023	10-31-2024		
Temperature Humidity Chamber	ZHONG ZHI	CZ-A-80D	WXJ032-3	01-09-2023	01-08-2025		
Power Detector Box	MWRFTEST	MW100-PSB	WXJ007-4	09-25-2023	09-24-2024		
DC Power Supply	Keysight	E3642A	WXJ025-2	N	I/A		
RF Control Unit	MWRFTEST	MW100-RFCB	WXG006	N	I/A		
Test Software	MWRFTEST	MTS 8310		Version: 2.0.0.0			



4 Measurement Setup and Procedure

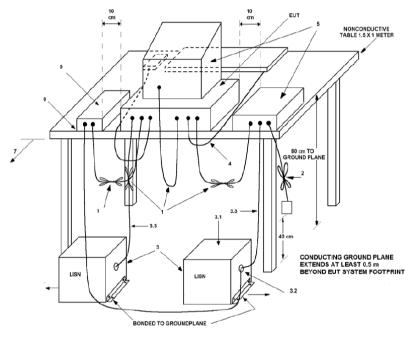
4.1 Test Channel

According to ANSI C63.10-2013 chapter 5.6.1 Table 4 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

Lowest channel		Middle channel		Highest channel	
Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)	Channel No.	Frequency (MHz)
0	2402	20	2442	39	2480

4.2 Test Setup

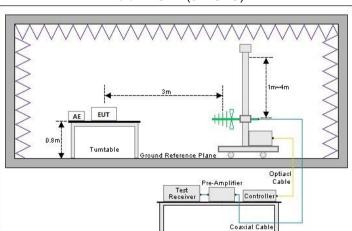
1) Conducted emission measurement:



Note: The detailed descriptions please refer to Figure 8 of ANSI C63.4:2014.

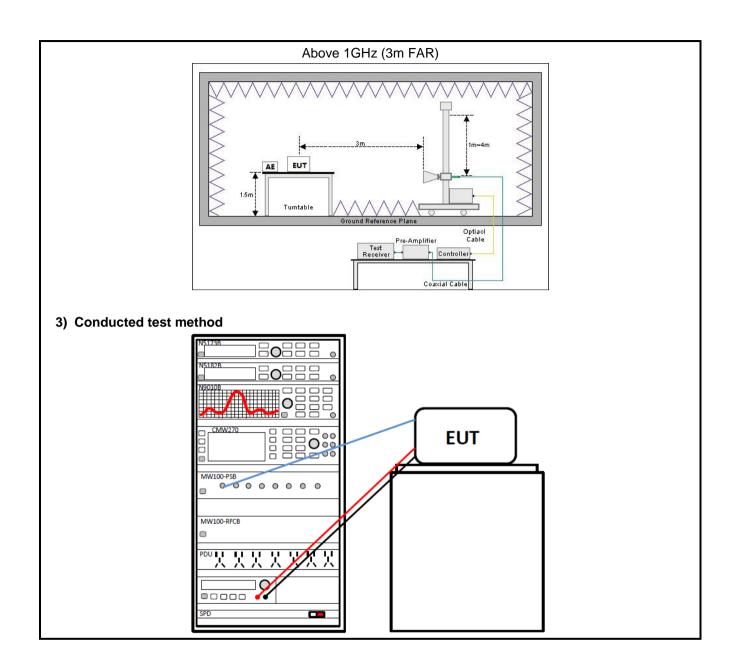
2) Radiated emission measurement:

Below 1GHz (3m SAC)



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4.3 Test Procedure

4.5 Test Flocedule	
Test method	Test step
Conducted emission	 The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on
	conducted measurement.
Radiated emission	For below 1GHz:
	The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.
	2. EUT works in each mode of operation that needs to be tested, and having
	the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.
	the test, save the test results, and export the test data.
	For above 1GHz:
	The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m.
	EUT works in each mode of operation that needs to be tested, and having
	the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.
Conducted test method	The BLE antenna port of EUT was connected to the test port of the test
	system through an RF cable.
	The EUT is keeping in continuous transmission mode and tested in all modulation modes.
	3. Open the test software, prepare a test plan, and control the system through the software. After the test is completed, the test report is exported through the test software.





5 Test Results

5.1 Summary

5.1.1 Clause and Data Summary

Test items	Standard clause	Test data	Result
Antenna Requirement	15.203 15.247 (b)(4)	See Section 5.2	Pass
AC Power Line Conducted Emission	15.207	See Section 5.3	Pass
Conducted Output Power	15.247 (b)(3)	Appendix A – BLE 1M PHY Appendix B – BLE 2M PHY Appendix C – BLE Coded PHY, S=2 Appendix D – BLE Coded PHY, S=8	Pass
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Appendix A – BLE 1M PHY Appendix B – BLE 2M PHY Appendix C – BLE Coded PHY, S=2 Appendix D – BLE Coded PHY, S=8	Pass
Power Spectral Density	15.247 (e)	Appendix A – BLE 1M PHY Appendix B – BLE 2M PHY Appendix C – BLE Coded PHY, S=2 Appendix D – BLE Coded PHY, S=8	Pass
Band-edge Emission Conduction Spurious Emission	15.247 (d)	Appendix A – BLE 1M PHY Appendix B – BLE 2M PHY Appendix C – BLE Coded PHY, S=2 Appendix D – BLE Coded PHY, S=8	Pass
Emissions in Restricted Frequency Bands	15.205 15.247 (d)	See Section 5.4	Pass
Emissions in Non-restricted Frequency Bands	15.209 15.247(d)	See Section 5.5	Pass

Remark:

- 1. Pass: The EUT complies with the essential requirements in the standard.
- 2. N/A: Not Applicable.
- 3. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB (provided by the customer).

Test Method: ANSI C63.10-2013

KDB 558074 D01 15.247 Meas Guidance v05r02



5.1.2 Test Limit

Test items			Limit	Limit						
		Frequency		Limit (dl	ΒμV)					
		(MHz)	Quasi-P	Peak	Average					
AC Power Line Conducted		0.15 – 0.5	66 to 56	Note 1	56 to 46 Note 1					
Emission		0.5 – 5	56		46					
		5 – 30	60		50					
		Note 1: The limit level in dBµV Note 2: The more stringent limit			n of frequency.					
Conducted Output Power		systems using digital m 5725-5850 MHz bands		e 902-928 N	MHz, 2400-2483.5 MH	łz,				
6dB Emission Bandwidth	The	e minimum 6 dB bandwid	dth shall be at I	least 500 kl	Hz.					
99% Occupied Bandwidth	N/A	1								
Power Spectral Density	inte	digitally modulated systemtional radiator to the areal during any time interval	ntenna shall no	t be greate	r than 8 dBm in any 3					
Band-edge Emission	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply									
Conduction Spurious Emission	per this limi whi	mitted under paragraph paragraph shall be 30 c ts specified in §15.209(a	se of RMS ave (b)(3) of this se IB instead of 20 a) is not require ands, as define	nsmitter con eraging ove ection, the a 0 dB. Atten ed. In addition	mplies with the conduration at time interval, as attenuation required uuation below the geneon, radiated emission 05(a), must also comp	icted nder eral s				
•	per this limi whi	mitted under paragraph paragraph shall be 30 centre in §15.209(a centre in the restricted be a the radiated emission limited paragraph.	se of RMS ave (b)(3) of this se (B) instead of 20 a) is not require ands, as define imits specified	nsmitter conservations, the action, the action, the action of dB. Attended. In additional action of \$15.20 (in \$15.209)	mplies with the conduration at time interval, as attenuation required uuation below the geneon, radiated emission 05(a), must also comp	icted nder eral s				
•	per this limi whi	mitted under paragraph paragraph shall be 30 cents specified in §15.209(and the radiated emission limited by (MHz)	se of RMS ave (b)(3) of this se (B) instead of 20 (a) is not require ands, as define imits specified Limit (dBµ @ 3m	nsmitter coleraging ove ection, the a 0 dB. Atten ed. In additied in §15.20 in §15.209(uV/m) @ 10m	mplies with the condurt at time interval, as attenuation required usuation below the general properties on, radiated emission 05(a), must also comparts (see §15.205(c)).	icted nder eral s				
Emission	per this limi whi	mitted under paragraph paragraph shall be 30 centre specified in §15.209(at specified in §15.209(at specified in the restricted be at the radiated emission limited (MHz) 30 – 88	se of RMS ave (b)(3) of this se (B) instead of 20 (a) is not require ands, as define imits specified Limit (dBµ @ 3m 40.0	eraging ove ection, the a 0 dB. Atten ed. In addition ed in §15.209 in §15.209 av/m) @ 10m 30.0	mplies with the conduration required used under the conduction required used under the general conference on the conduction of the conduct	icted nder eral s				
Emission Emissions in Restricted	per this limi whi	mitted under paragraph paragraph shall be 30 centre specified in §15.209(ach fall in the restricted beneficially the radiated emission limits and the radiated emission limits (MHz) 30 – 88 88 – 216	se of RMS ave (b)(3) of this se (B) instead of 20 (a) is not require ands, as define imits specified Limit (dBµ @ 3m 40.0 43.5	eraging ove ection, the a 0 dB. Atten ed. In additional ed in §15.209 in §15.209 av/m) @ 10m 30.0 33.5	mplies with the conduration required u uation below the generation, radiated emission (a) (see §15.205(c)). Detector Quasi-peak Quasi-peak	icted nder eral s				
Emission	per this limi whi	mitted under paragraph paragraph shall be 30 control in §15.209(a contro	se of RMS ave (b)(3) of this se (B) instead of 20 (a) is not require ands, as define imits specified Limit (dBµ @ 3m 40.0 43.5 46.0	nsmitter coreraging ove ection, the a 0 dB. Attened. In addition §15.209 (av/m) @ 10m 30.0 33.5 36.0	mplies with the condur a time interval, as attenuation required u uation below the general properties on, radiated emission 05(a), must also comparate (a) (see §15.205(c)). Detector Quasi-peak Quasi-peak Quasi-peak	icted nder eral s				
Emission Emissions in Restricted Frequency Bands	per this limi whi with	mitted under paragraph is paragraph shall be 30 ce its specified in §15.209(a ch fall in the restricted be in the radiated emission limited	se of RMS ave (b)(3) of this se (B) instead of 20 (a) is not require ands, as define imits specified Limit (dBµ @ 3m 40.0 43.5 46.0 54.0	nsmitter coreraging ove ection, the a 0 dB. Attened. In addition §15.209 (av/m) @ 10m 30.0 33.5 36.0 44.0	mplies with the conduration required u uation below the generation, radiated emission (a) (see §15.205(c)). Detector Quasi-peak Quasi-peak	icted nder eral s				
Emission Emissions in Restricted Frequency Bands Emissions in Non-restricted	per this limi whi with	mitted under paragraph is paragraph shall be 30 ce its specified in §15.209(a ch fall in the restricted be in the radiated emission limits) Frequency (MHz) 30 – 88 88 – 216 216 – 960 960 – 1000 Note: The more stringent limit a	se of RMS ave (b)(3) of this se (B) instead of 20 (a) is not require ands, as define imits specified Limit (dBµ @ 3m 40.0 43.5 46.0 54.0	nsmitter coreraging ove ection, the a 0 dB. Attened. In addition §15.209 (av/m) @ 10m 30.0 33.5 36.0 44.0	mplies with the conduration required use tenuation required use tenuation below the generation, radiated emission 05(a), must also compara (see §15.205(c)). Detector Quasi-peak Quasi-peak Quasi-peak Quasi-peak Quasi-peak	icted nder eral s				
Emission Emissions in Restricted Frequency Bands	per this limi whi with	mitted under paragraph is paragraph shall be 30 ce its specified in §15.209(a ch fall in the restricted be in the radiated emission limited	se of RMS ave (b)(3) of this se (B) instead of 20 (a) is not require ands, as define imits specified Limit (dBµ @ 3m 40.0 43.5 46.0 54.0	nsmitter conseraging over ection, the allowed of th	mplies with the conduration required use tenuation required use tenuation below the generation, radiated emission 05(a), must also compara (see §15.205(c)). Detector Quasi-peak Quasi-peak Quasi-peak Quasi-peak Quasi-peak	icted nder eral s				
Emission Emissions in Restricted Frequency Bands Emissions in Non-restricted	per this limi whi with	mitted under paragraph is paragraph shall be 30 ce its specified in §15.209(a ch fall in the restricted be in the radiated emission limits) Frequency (MHz) 30 – 88 88 – 216 216 – 960 960 – 1000 Note: The more stringent limit a	se of RMS ave (b)(3) of this se dB instead of 20 a) is not require ands, as define imits specified Limit (dBµ @ 3m 40.0 43.5 46.0 54.0 pplies at transition f	nsmitter conseraging overaging overaging over ection, the alloward of the conservation	mplies with the condurt at time interval, as attenuation required unuation below the generation, radiated emission (25(a), must also complete). Detector Quasi-peak Quasi-peak Quasi-peak Quasi-peak Quasi-peak	icted nder eral s				



Report No.: JYTSZ-R12-2400406

5.2 Antenna requirement

Standard requirement: FCC Part 15 C Section 15.203 /247(b)(4)

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

E.U.T Antenna:

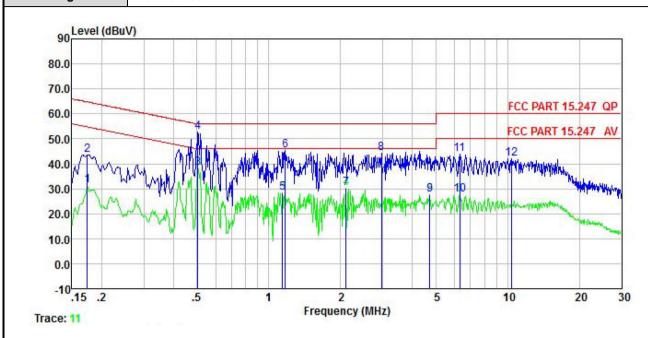
The BLE antenna is an Internal antenna which cannot replace by end-user, the best case gain of the antenna is 1.49 dBi. See product internal photos for details.





5.3 AC Power Line Conducted Emission

Product name:	Mobile Phone	Product model:	X6838
Test by:	Asher Zhang	Test mode:	BLE Tx (LE 1M PHY)
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz		



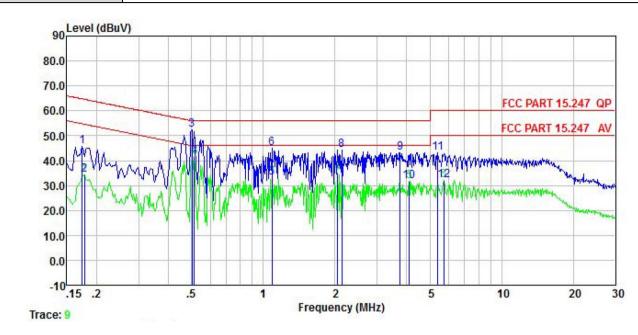
	Freq	Read Level		Aux Factor		Cable Loss	Level	Limit Line	Over Limit	Remark
-	MHz	dBu√	<u>dB</u>	<u>dB</u>	<u>dB</u>		dBu∇	—dBu⊽	B	
1 2 3 4 5 6 7 8 9 10 11 12	0. 174 0. 174 0. 505 0. 505 1. 141 1. 172 2. 110 2. 962 4. 721 6. 319 6. 319 10. 397	21. 07 33. 49 28. 26 42. 71 18. 40 35. 34 19. 79 34. 03 17. 55 17. 34 33. 54 31. 92	0. 20 0. 21	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	9.88 9.88 9.88 9.88 9.88 9.88 9.89 9.90	0.01 0.01 0.03 0.03 0.08 0.09 0.19 0.07 0.09 0.09 0.09	31. 16 43. 58 38. 37 52. 82 28. 56 45. 51 30. 06 44. 19 27. 73 27. 53 43. 73 42. 16	64.77 46.00 56.00 46.00 56.00 46.00 56.00 50.00	-21. 19 -7. 63 -3. 18 -17. 44 -10. 49 -15. 94 -11. 81 -18. 27	Average QP Average QP Average QP Average Average QP

Remark:

1. Level = Read level + LISN Factor + Cable Loss.



Product name:	Mobile Phone	Product model:	X6838
Test by:	Asher Zhang	Test mode:	BLE Tx (LE 1M PHY)
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz		



	Freq	Read Level	LISN Factor	Aux Factor		Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBu∜	<u>dB</u>	<u>ab</u>	<u>d</u> B		dBu∇	dBu∜	<u>dB</u>	
1	0.174	35.79	0.20	0.00	9.88	0.01	45.88	64.77	-18.89	QP
2	0.178	24.11	0.20	0.00	9.88	0.01	34.20	54.59	-20.39	Average
3	0.502	42.38	0.20	0.00	9.88	0.03	52.49	56.00	-3.51	QP
1 2 3 4 5 6 7 8	0.513	31.41	0.20	0.00	9.88	0.03	41.52	46.00	-4.48	Average
5	1.088	23.00	0.21	0.00	9.88	0.07	33.16	46.00		Average
6	1.088	34.68	0.21	0.00	9.88	0.07	44.84	56.00	-11.16	QP
7	2.055	24.79	0.30	0.00	9.88	0.20	35.17	46.00	-10.83	Average
8	2.133	33.98	0.30	0.00	9.88	0.19	44.35	56.00	-11.65	QP
9	3.759	33.01	0.30	0.00	9.89	0.08	43.28	56.00	-12.72	QP
10	4.092	21.33	0.30	0.00	9.89	0.08	31.60	46.00	-14.40	Average
11	5.390	32.79	0.30	0.00	9.90	0.09	43.08		-16.92	
12	5.713	21.72	0.30	0.00	9.90	0.09	32.01			Average

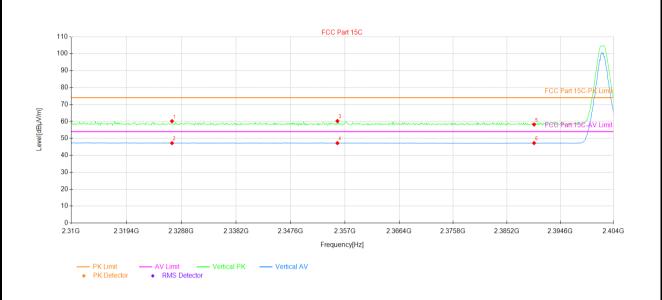
1. Level = Read level + LISN Factor + Cable Loss.





5.4 Emissions in Restricted Frequency Bands

Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		



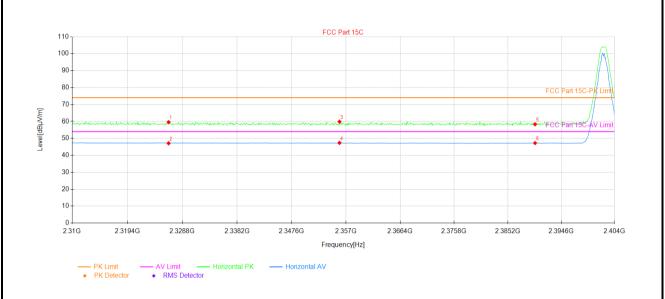
Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiet	Deleritu
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity
1	2327.20	24.07	36.12	60.19	74.00	13.81	332	PK	PASS	Vertical
2	2327.20	11.11	36.12	47.23	54.00	6.77	258	AV	PASS	Vertical
3	2355.68	23.95	36.30	60.25	74.00	13.75	108	PK	PASS	Vertical
4	2355.68	10.91	36.30	47.21	54.00	6.79	15	AV	PASS	Vertical
5	2390.00	21.74	36.47	58.21	74.00	15.79	140	PK	PASS	Vertical
6	2390.00	10.77	36.47	47.24	54.00	6.76	266	AV	PASS	Vertical

Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		

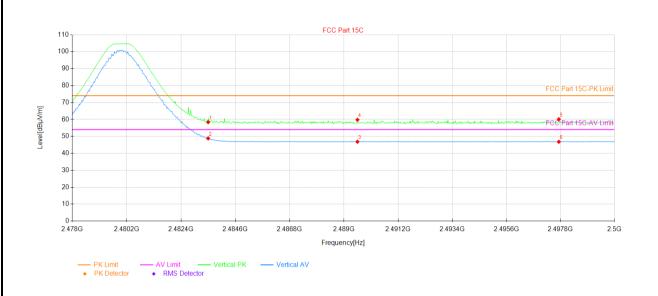


Suspected Data List										
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vandiat	Delevite
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity
1	2326.45	23.46	36.12	59.58	74.00	14.42	348	PK	PASS	Horizontal
2	2326.45	11.00	36.12	47.12	54.00	6.88	160	AV	PASS	Horizontal
3	2355.87	23.57	36.30	59.87	74.00	14.13	38	PK	PASS	Horizontal
4	2355.87	11.07	36.30	47.37	54.00	6.63	27	AV	PASS	Horizontal
5	2390.00	21.86	36.47	58.33	74.00	15.67	137	PK	PASS	Horizontal
6	2390.00	10.77	36.47	47.24	54.00	6.76	23	AV	PASS	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		

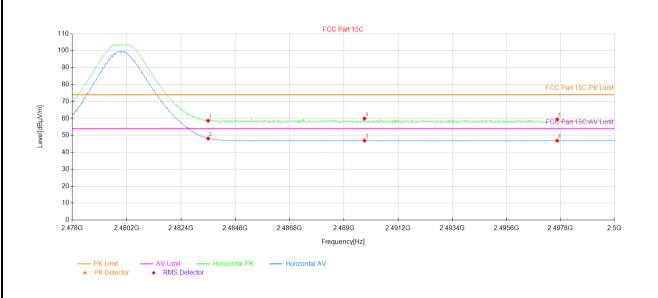


Suspe	Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Verdict Polarity	Dolority	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector		Polarity	
1	2483.50	22.29	36.11	58.40	74.00	15.60	72	PK	PASS	Vertical	
2	2483.50	12.72	36.11	48.83	54.00	5.17	72	AV	PASS	Vertical	
3	2489.55	10.71	36.13	46.84	54.00	7.16	311	AV	PASS	Vertical	
4	2489.55	23.69	36.13	59.82	74.00	14.18	244	PK	PASS	Vertical	
5	2497.73	23.95	36.17	60.12	74.00	13.88	102	PK	PASS	Vertical	
6	2497.73	10.65	36.17	46.82	54.00	7.18	150	AV	PASS	Vertical	

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE 1M PHY)
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		

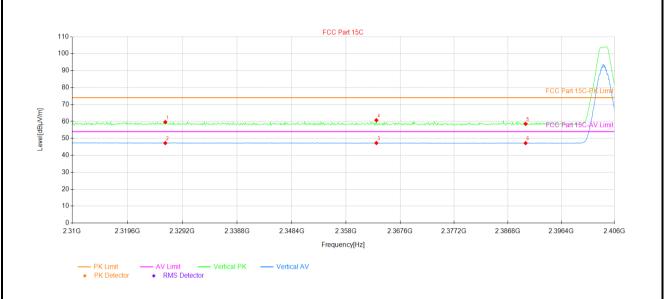


Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Datastas	\/===li=4	Polarity
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	
1	2483.50	22.53	36.11	58.64	74.00	15.36	139	PK	PASS	Horizontal
2	2483.50	12.02	36.11	48.13	54.00	5.87	147	AV	PASS	Horizontal
3	2489.84	10.78	36.14	46.92	54.00	7.08	95	AV	PASS	Horizontal
4	2489.84	23.81	36.14	59.95	74.00	14.05	30	PK	PASS	Horizontal
5	2497.67	23.25	36.17	59.42	74.00	14.58	4	PK	PASS	Horizontal
6	2497.67	10.69	36.17	46.86	54.00	7.14	323	AV	PASS	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		

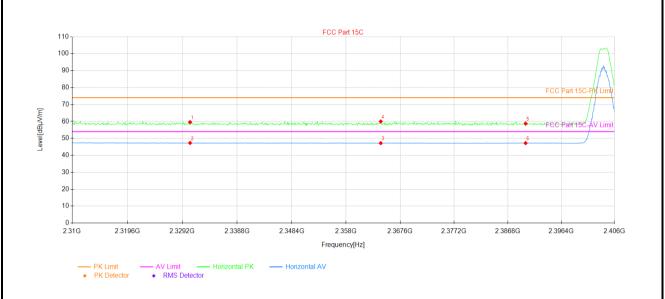


Suspe	Suspected Data List									
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Verdict	Polarity
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	verdict	
1	2326.22	23.50	36.11	59.61	74.00	14.39	273	PK	PASS	Vertical
2	2326.22	11.12	36.11	47.23	54.00	6.77	9	AV	PASS	Vertical
3	2363.38	10.95	36.34	47.29	54.00	6.71	141	AV	PASS	Vertical
4	2363.38	24.40	36.34	60.74	74.00	13.26	288	PK	PASS	Vertical
5	2390.00	22.09	36.47	58.56	74.00	15.44	247	PK	PASS	Vertical
6	2390.00	10.74	36.47	47.21	54.00	6.79	292	AV	PASS	Vertical

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		

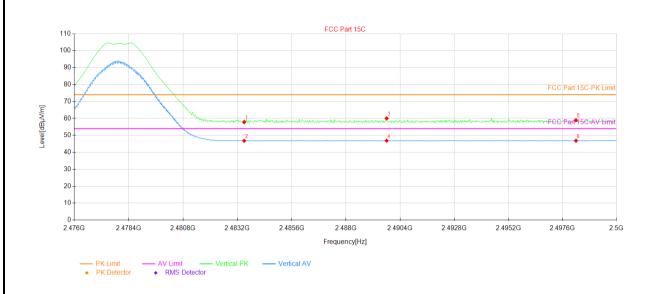


Suspected Data List										
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Verdict	Polarity
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	verdict	
1	2330.54	23.45	36.13	59.58	74.00	14.42	266	PK	PASS	Horizontal
2	2330.54	11.17	36.13	47.30	54.00	6.70	26	AV	PASS	Horizontal
3	2364.14	10.87	36.34	47.21	54.00	6.79	251	AV	PASS	Horizontal
4	2364.14	23.64	36.34	59.98	74.00	14.02	49	PK	PASS	Horizontal
5	2390.00	22.27	36.47	58.74	74.00	15.26	12	PK	PASS	Horizontal
6	2390.00	10.75	36.47	47.22	54.00	6.78	110	AV	PASS	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		

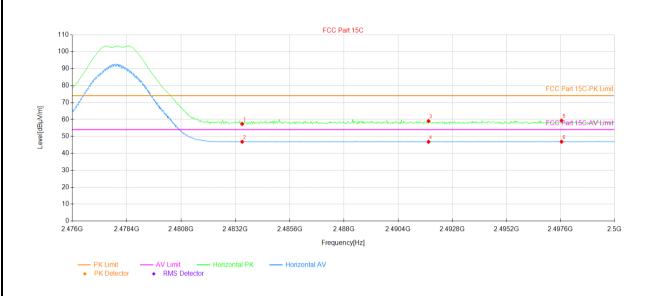


Suspe	Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiet	Delerity	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity	
1	2483.50	21.72	36.11	57.83	74.00	16.17	263	PK	PASS	Vertical	
2	2483.50	10.73	36.11	46.84	54.00	7.16	333	AV	PASS	Vertical	
3	2489.80	23.91	36.13	60.04	74.00	13.96	25	PK	PASS	Vertical	
4	2489.80	10.75	36.13	46.88	54.00	7.12	358	AV	PASS	Vertical	
5	2498.20	22.80	36.17	58.97	74.00	15.03	58	PK	PASS	Vertical	
6	2498.20	10.70	36.17	46.87	54.00	7.13	333	AV	PASS	Vertical	

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE 2M PHY)
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		

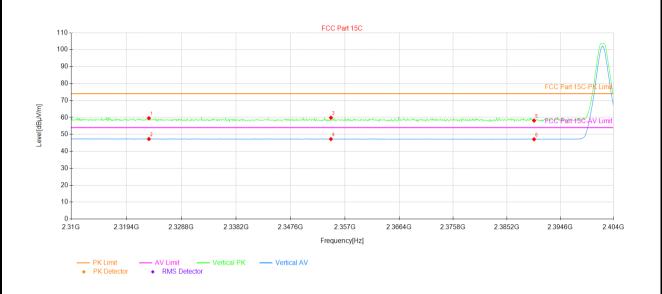


Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Polarity
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	
1	2483.50	21.24	36.11	57.35	74.00	16.65	185	PK	PASS	Horizontal
2	2483.50	10.72	36.11	46.83	54.00	7.17	8	AV	PASS	Horizontal
3	2491.74	22.90	36.14	59.04	74.00	14.96	226	PK	PASS	Horizontal
4	2491.74	10.68	36.14	46.82	54.00	7.18	305	AV	PASS	Horizontal
5	2497.65	23.16	36.17	59.33	74.00	14.67	133	PK	PASS	Horizontal
6	2497.65	10.70	36.17	46.87	54.00	7.13	110	AV	PASS	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE Coded PHY, S=2)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		

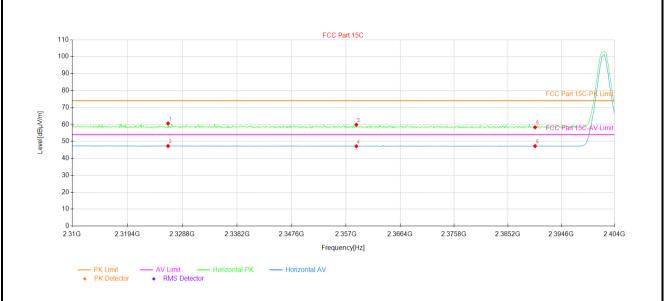


Suspe	Suspected Data List										
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Polarity	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Folanty	
1	2323.25	23.45	36.11	59.56	74.00	14.44	152	PK	PASS	Vertical	
2	2323.25	11.16	36.11	47.27	54.00	6.73	27	AV	PASS	Vertical	
3	2354.56	23.56	36.29	59.85	74.00	14.15	300	PK	PASS	Vertical	
4	2354.56	10.95	36.29	47.24	54.00	6.76	35	AV	PASS	Vertical	
5	2390.00	21.67	36.47	58.14	74.00	15.86	216	PK	PASS	Vertical	
6	2390.00	10.67	36.47	47.14	54.00	6.86	258	AV	PASS	Vertical	

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE Coded PHY, S=2)
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		

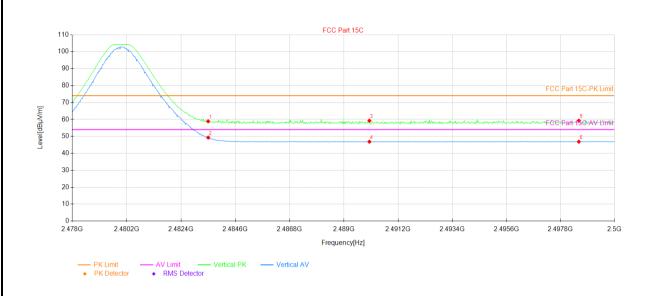


Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Polarity
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	
1	2326.36	24.46	36.12	60.58	74.00	13.42	346	PK	PASS	Horizontal
2	2326.36	11.13	36.12	47.25	54.00	6.75	72	AV	PASS	Horizontal
3	2358.79	23.49	36.32	59.81	74.00	14.19	233	PK	PASS	Horizontal
4	2358.79	10.83	36.32	47.15	54.00	6.85	312	AV	PASS	Horizontal
5	2390.00	21.84	36.47	58.31	74.00	15.69	8	PK	PASS	Horizontal
6	2390.00	10.76	36.47	47.23	54.00	6.77	226	AV	PASS	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE Coded PHY, S=2)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		

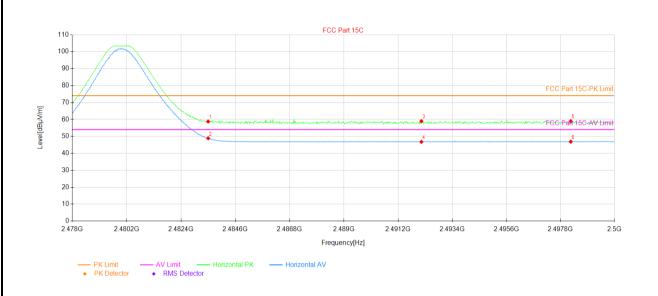


Suspe	Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiet	Dolority	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict	Polarity	
1	2483.50	22.79	36.11	58.90	74.00	15.10	9	PK	PASS	Vertical	
2	2483.50	13.21	36.11	49.32	54.00	4.68	84	AV	PASS	Vertical	
3	2490.03	23.12	36.14	59.26	74.00	14.74	35	PK	PASS	Vertical	
4	2490.03	10.73	36.14	46.87	54.00	7.13	117	AV	PASS	Vertical	
5	2498.55	23.12	36.17	59.29	74.00	14.71	242	PK	PASS	Vertical	
6	2498.55	10.70	36.17	46.87	54.00	7.13	35	AV	PASS	Vertical	

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE Coded PHY, S=2)
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3.85V		

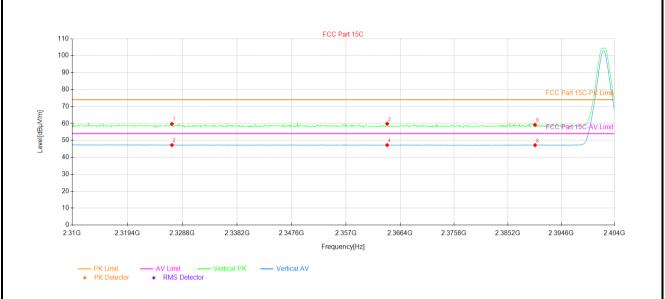


Suspe	Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Verdict	Polarity	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	verdict		
1	2483.50	22.66	36.11	58.77	74.00	15.23	268	PK	PASS	Horizontal	
2	2483.50	12.76	36.11	48.87	54.00	5.13	154	AV	PASS	Horizontal	
3	2492.15	22.84	36.14	58.98	74.00	15.02	309	PK	PASS	Horizontal	
4	2492.15	10.65	36.14	46.79	54.00	7.21	347	AV	PASS	Horizontal	
5	2498.22	22.81	36.17	58.98	74.00	15.02	166	PK	PASS	Horizontal	
6	2498.22	10.74	36.17	46.91	54.00	7.09	276	AV	PASS	Horizontal	

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE Coded PHY, S=8)
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		

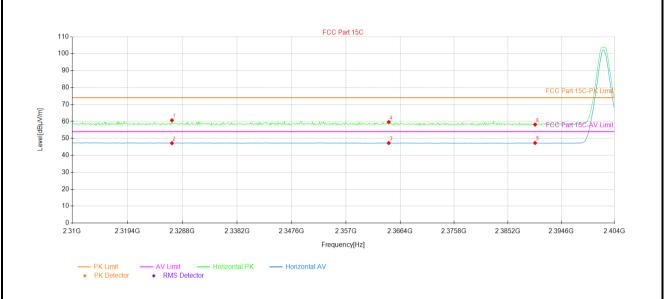


Suspe	Suspected Data List										
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Verdict	Polarity	
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]		verdict		
1	2327.01	23.59	36.12	59.71	74.00	14.29	161	PK	PASS	Vertical	
2	2327.01	11.11	36.12	47.23	54.00	6.77	191	AV	PASS	Vertical	
3	2364.14	23.49	36.34	59.83	74.00	14.17	28	PK	PASS	Vertical	
4	2364.14	10.90	36.34	47.24	54.00	6.76	142	AV	PASS	Vertical	
5	2390.00	22.69	36.47	59.16	74.00	14.84	214	PK	PASS	Vertical	
6	2390.00	10.72	36.47	47.19	54.00	6.81	104	AV	PASS	Vertical	

1. Level = Reading + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838		
Test By:	Kiran Zeng Test mode:		BLE Tx (LE Coded PHY, S=8)		
Test Channel:	Lowest channel	Polarization:	Horizontal		
Test Voltage:	DC 3.85V				

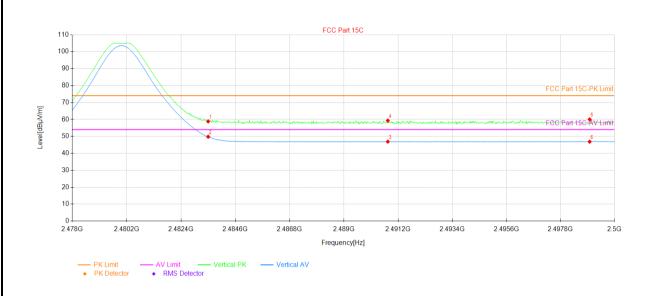


Suspected Data List										
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Verdict	Polarity
NO.	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	verdict	
1	2327.01	24.57	36.12	60.69	74.00	13.31	203	PK	PASS	Horizontal
2	2327.01	11.05	36.12	47.17	54.00	6.83	233	AV	PASS	Horizontal
3	2364.43	10.91	36.34	47.25	54.00	6.75	282	AV	PASS	Horizontal
4	2364.43	23.31	36.34	59.65	74.00	14.35	2	PK	PASS	Horizontal
5	2390.00	10.82	36.47	47.29	54.00	6.71	230	AV	PASS	Horizontal
6	2390.00	21.69	36.47	58.16	74.00	15.84	65	PK	PASS	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE Coded PHY, S=8)
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3.85V		

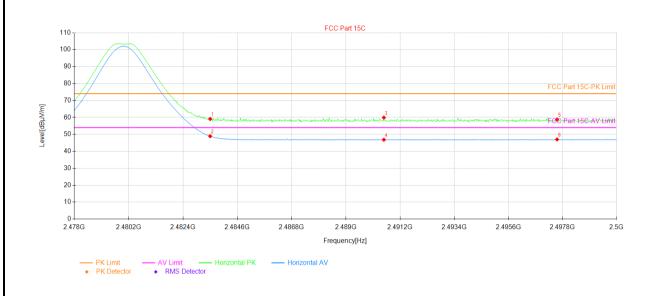


Suspected Data List												
NO	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Verdict	Polarity		
NO. [MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	verdict	Polarity			
1	2483.50	22.73	36.11	58.84	74.00	15.16	83	PK	PASS	Vertical		
2	2483.50	13.69	36.11	49.80	54.00	4.20	79	AV	PASS	Vertical		
3	2490.78	10.76	36.14	46.90	54.00	7.10	52	AV	PASS	Vertical		
4	2490.78	23.18	36.14	59.32	74.00	14.68	132	PK	PASS	Vertical		
5	2498.99	23.88	36.17	60.05	74.00	13.95	109	PK	PASS	Vertical		
6	2498.99	10.71	36.17	46.88	54.00	7.12	319	AV	PASS	Vertical		

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	oduct Name: Mobile Phone P		X6838	
Test By:	Kiran Zeng	Test mode:	BLE Tx (LE Coded PHY, S=8)	
Test Channel:	Highest channel	Polarization:	Horizontal	
Test Voltage:	DC 3.85V			



Suspe	Suspected Data List											
NO.	Freq.	Reading	Factor	Level	Limit	Margin	Angle	Detector	Vardiat	Polarity		
	[MHz]	[dBµV]	[dB/m]	[dBµV/m]	[dBµV/m]	[dB]	[°]	Detector	Verdict			
1	2483.50	23.01	36.11	59.12	74.00	14.88	152	PK	PASS	Horizontal		
2	2483.50	12.82	36.11	48.93	54.00	5.07	152	AV	PASS	Horizontal		
3	2490.54	23.78	36.14	59.92	74.00	14.08	2	PK	PASS	Horizontal		
4	2490.54	10.72	36.14	46.86	54.00	7.14	20	AV	PASS	Horizontal		
5	2497.58	22.57	36.17	58.74	74.00	15.26	106	PK	PASS	Horizontal		
6	2497.58	10.86	36.17	47.03	54.00	6.97	137	AV	PASS	Horizontal		

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



5.5 Emissions in Non-restricted Frequency Bands

Below 1GHz:

Product Name:	Mobile Phone	Product Model:	X6838
Test By:	Robin Gu	Test mode:	BLE Tx (LE 1M PHY)
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	DC 3.85V		



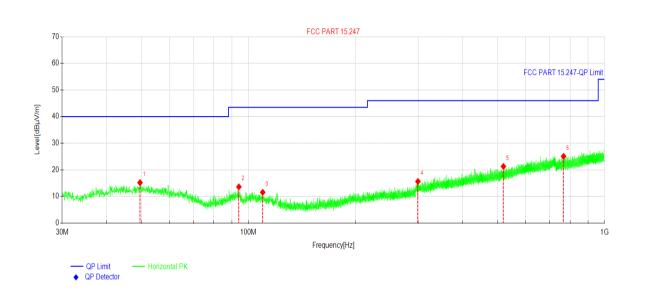
Suspe	Suspected Data List										
NO.	Freq. [MHz]	Reading[dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity			
1	44.3567	30.82	-12.84	17.98	40.00	22.02	PK	Vertical			
2	59.9745	28.50	-14.31	14.19	40.00	25.81	PK	Vertical			
3	107.9919	29.38	-14.62	14.76	43.50	28.74	PK	Vertical			
4	298.8489	28.41	-13.03	15.38	46.00	30.62	PK	Vertical			
5	540.6820	29.98	-8.21	21.77	46.00	24.23	PK	Vertical			
6	913.7627	30.21	-2.54	27.67	46.00	18.33	PK	Vertical			

Remark:

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Product Name:	Mobile Phone	Product Model:	X6838	
Test By:	Robin Gu	Test mode:	BLE Tx (LE 1M PHY)	
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal	
Test Voltage:	DC 3.85V			



Suspe	ected Data Li	ist						
NO.	Freq. [MHz]	Reading[dBµV/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Trace	Polarity
1	49.6435	27.92	-12.71	15.21	40.00	24.79	PK	Horizontal
2	94.0717	29.22	-15.59	13.63	43.50	29.87	PK	Horizontal
3	109.7380	26.37	-14.80	11.57	43.50	31.93	PK	Horizontal
4	299.2855	28.66	-13.02	15.64	46.00	30.36	PK	Horizontal
5	520.1655	29.86	-8.57	21.29	46.00	24.71	PK	Horizontal
6	767.4309	29.45	-4.36	25.09	46.00	20.91	PK	Horizontal

1. Level = Reading + Factor(Antenna Factor + Cable Loss - Preamplifier Factor).



Above 1GHz:

DOVE TOTIZ.									
		В	LE Tx (LE 1M PH	IY)					
		Test o	channel: Lowest c	hannel					
		D	etector: Peak Val	ue					
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4804.00	51.21	-8.00	43.21	74.00	30.79	Vertical			
4804.00	57.17	-8.00	49.17	74.00	24.83	Horizontal			
		Det	tector: Average Va	alue					
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4804.00	43.89	-8.00	35.89	54.00	18.11	Vertical			
4804.00	51.83	-8.00	43.83	54.00	10.17	Horizontal			
	Test channel: Middle channel								
		D	etector: Peak Val	ue					
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4884.00	51.18	-7.45	43.73	74.00	30.27	Vertical			

	= *************************************								
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4884.00	51.18	-7.45	43.73	74.00	30.27	Vertical			
4884.00	57.06	-7.45	49.61	74.00	24.39	Horizontal			
	Detector: Average Value								
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4884.00	44.31	-7.45	36.86	54.00	17.14	Vertical			
4884.00	51.50	-7.45	44.05	54.00	9.95	Horizontal			

	Test channel: Highest channel									
	Detector: Peak Value									
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization				
4960.00	51.50	-7.08	44.42	74.00	29.58	Vertical				
4960.00	57.23	-7.08	50.15	74.00	23.85	Horizontal				
		Det	tector: Average Va	alue						
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization				
4960.00	44.14	-7.08	37.06	54.00	16.94	Vertical				
4960.00	51.28	-7.08	44.20	54.00	9.80	Horizontal				

Remark:

^{1.} Level = Reading + Factor.

^{2.} Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.



		ВІ	LE Tx (LE 2M PH	Y)					
		Test c	hannel: Lowest cl	nannel					
	Detector: Peak Value								
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4804.00	51.66	-8.00	43.66	74.00	30.34	Vertical			
4804.00	57.34	-8.00	49.34	74.00	24.66	Horizontal			
Detector: Average Value									
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4804.00	43.83	-8.00	35.83	54.00	18.17	Vertical			
4804.00	52.10	-8.00	44.10	54.00	9.90	Horizontal			
	100 1100 01.00 110112011d.								
	Test channel: Middle channel								
Detector: Peak Value									
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4884.00	51.01	-7.45	43.56	74.00	30.44	Vertical			
4884.00	56.58	-7.45	49.13	74.00	24.87	Horizontal			
		Det	ector: Average Va	alue					
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4884.00	44.56	-7.45	37.11	54.00	16.89	Vertical			
4884.00	51.02	-7.45	43.57	54.00	10.43	Horizontal			
		Test c	hannel: Highest c	hannel					
		D	etector: Peak Val	ue					
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization			
4960.00	51.36	-7.08	44.28	74.00	29.72	Vertical			
4960.00	57.42	-7.08	50.34	74.00	23.66	Horizontal			
		Det	ector: Average Va	alue					
			·						

Frequency

(MHz)

4960.00

4960.00

Read Level

(dBµV)

44.07

51.29

Level

 $(dB\mu V/m)$

36.99

44.21

Limit

 $(dB\mu V/m)$

54.00

54.00

Margin

(dB)

17.01

9.79

Factor

(dB)

-7.08

-7.08

Project No.: JYTSZR2404008

Polarization

Vertical

Horizontal

^{1.} Level = Reading + Factor.

^{2.} Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.



	BEL Tx (LE Coded PHY, S=2)								
			hannel: Lowest c						
			etector: Peak Val						
Frequency	Read Level	Factor	Level	Limit	Margin				
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Polarization			
4804.00	51.60	-8.00	43.60	74.00	30.40	Vertical			
4804.00	57.05	-8.00	49.05	74.00	24.95	Horizontal			
		Det	ector: Average V	alue					
Frequency	Read Level	Factor	Level	Limit	Margin	Polarization			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Polanzation			
4804.00	44.24	-8.00	36.24	54.00	17.76	Vertical			
4804.00	52.25	-8.00	44.25	54.00	9.75	Horizontal			
		_							
	Test channel: Middle channel								
_	1		etector: Peak Val		T				
Frequency	Read Level	Factor	Level	Limit	Margin	Polarization			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)				
4884.00	50.93	-7.45	43.48	74.00	30.52	Vertical			
4884.00	56.91	-7.45	49.46	74.00	24.54	Horizontal			
Fraguenay	Read Level	Factor	ector: Average Va	Limit	Margin				
Frequency (MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	Margin (dB)	Polarization			
4884.00	44.08	-7.45	36.63	54.00	17.37	Vertical			
4884.00	50.96	-7. 4 5	43.51	54.00	10.49	Horizontal			
4004.00	30.90	-7.45	45.51	34.00	10.49	Honzontai			
		Test c	hannel: Highest c	hannel					
			etector: Peak Val						
Frequency	Read Level	Factor	Level	Limit	Margin	D. I. i. ii			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Polarization			
4960.00	51.37	-7.08	44.29	74.00	29.71	Vertical			
4960.00	57.54	-7.08	50.46	74.00	23.54	Horizontal			
		Det	ector: Average Va	alue					
Frequency	Read Level	Factor	Level	Limit	Margin	Deleviseties			
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Polarization			
4960.00	43.67	-7.08	36.59	54.00	17.41	Vertical			
4960.00	51.12	-7.08	44.04	54.00	9.96	Horizontal			

^{1.} Level = Reading + Factor.

^{2.} Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.



BEL Tx (LE Coded PHY, S=8)						
		Test o	channel: Lowest cl	hannel		
Detector: Peak Value						
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4804.00	51.54	-8.00	43.54	74.00	30.46	Vertical
4804.00	57.00	-8.00	49.00	74.00	25.00	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4804.00	44.48	-8.00	36.48	54.00	17.52	Vertical
4804.00	52.52	-8.00	44.52	54.00	9.48	Horizontal
Test channel: Middle channel						
Detector: Peak Value						
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4884.00	50.80	-7.45	43.35	74.00	30.65	Vertical
4884.00	57.19	-7.45	49.74	74.00	24.26	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4884.00	44.52	-7.45	37.07	54.00	16.93	Vertical
4884.00	50.98	-7.45	43.53	54.00	10.47	Horizontal
Test channel: Highest channel						
	Dood Lovel		etector: Peak Val	I	Manain	
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4960.00	51.72	-7.08	44.64	74.00	29.36	Vertical
4960.00	57.25	-7.08	50.17	74.00	23.83	Horizontal
Detector: Average Value						
Frequency (MHz)	Read Level (dBµV)	Factor (dB)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Polarization
4960.00	44.05	-7.08	36.97	54.00	17.03	Vertical
4960.00	50.87	-7.08	43.79	54.00	10.21	Horizontal

-----End of report-----

^{1.} Level = Reading + Factor.

Test Frequency up to 25GHz, and the emission levels of other frequencies are lower than the limit 20dB, not show in test report.