

# JianYan Testing Group Shenzhen Co., Ltd.

Report No: JYTSZB-R12-2102566

# FCC REPORT (BLE)

Applicant: TECNO MOBILE LIMITED

Address of Applicant: FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-

35 SHAN MEI STREET FOTAN NT

**Equipment Under Test (EUT)** 

Product Name: Mobile Phone

Model No.: KG5h

Trade mark: TECNO

FCC ID: 2ADYY-KG5H

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: 19 Nov., 2021

**Date of Test:** 20 Nov., to 08 Dec., 2021

Date of report issued: 13 Dec., 2021

Test Result: PASS \*

#### Authorized Signature:



Bruce Zhang Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. 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.

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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.





2 Version

Version No.	Date	Description
00	13 Dec., 2021	Original

Tested by:	Mike ou	Date:	13 Dec., 2021	
	Test Engineer			

Reviewed by: Date: 13 Dec., 2021

**Project Engineer** 





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# 4 Test Summary

Test Items	Section in CFR 47	Test Data	Result
Antenna requirement	15.203 & 15.247 (b)	See Section 6.1	Pass
AC Power Line Conducted Emission	15.207	See Section 6.2	Pass
Conducted Peak Output Power	15.247 (b)(3)	Appendix A - BLE	Pass
6dB Emission Bandwidth 99% Occupied Bandwidth	15.247 (a)(2)	Appendix A - BLE	Pass
Power Spectral Density	15.247 (e)	Appendix A - BLE	Pass
Conducted Band Edge	45.047.(-1)	Appendix A - BLE	Pass
Radiated Band Edge	15.247 (d)	See Section 6.6.2	Pass
Conducted Spurious Emission	45.005.8.45.000	Appendix A - BLE	Pass
Radiated Spurious Emission	15.205 & 15.209	See Section 6.7.2	Pass

#### Remark:

- 1. Pass: The EUT complies with the essential requirements in the standard.
- 2. 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

Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366





# 5 General Information

# 5.1 Client Information

Applicant:	TECNO MOBILE LIMITED
Address:	FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35 SHAN MEI STREET FOTAN NT
Manufacturer:	TECNO MOBILE LIMITED
Address:	FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35 SHAN MEI STREET FOTAN NT
Factory:	SHENZHEN TECNO TECHNOLOGY CO., LTD.
Address:	101, Building 24, Waijing Industrial Park, Fumin Community, Fucheng Street, Longhua District, Shenzhen City, P.R.China

# 5.2 General Description of E.U.T.

Product Name:	Mobile Phone
Model No.:	KG5h
Operation Frequency:	2402-2480 MHz
Channel numbers:	40
Channel separation:	2 MHz
Modulation technology:	GFSK
Data speed :	1Mbps & 2Mbps
Antenna Type:	Internal Antenna
Antenna gain:	1.2 dBi
Power supply:	Rechargeable Li-ion Polymer Battery DC3.85V, 4900mAh
AC adapter:	Model: U100TSA
	Input: AC100-240V, 50/60Hz, 0.3A
	Output: DC 5.0V, 2.0A
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

Operation	Operation Frequency each of channel						
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	10	2422MHz	20	2442MHz	30	2462MHz
1	2404MHz	11	2424MHz	21	2444MHz	31	2464MHz
2	2406MHz	12	2426MHz	22	2446MHz	32	2466MHz
3	2408MHz	13	2428MHz	23	2448MHz	33	2468MHz
4	2410MHz	14	2430MHz	24	2450MHz	34	2470MHz
5	2412MHz	15	2432MHz	25	2452MHz	35	2472MHz
6	2414MHz	16	2434MHz	26	2454MHz	36	2474MHz
7	2416MHz	17	2436MHz	27	2456MHz	37	2476MHz
8	2418MHz	18	2438MHz	28	2458MHz	38	2478MHz
9	2420MHz	19	2440MHz	29	2460MHz	39	2480MHz

#### Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test. Channel No. 0, 20 & 39 were selected as Lowest, Middle and Highest channel.

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# 5.3 Test environment and mode, and test samples plans

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test mode:	
Transmitting mode	Keep the EUT in continuous transmitting with modulation
Test Samples Plans:	
Samples Number	Used for Test Items
1#	Conducted measurements test method
2#	Radiated measurements test method
5#	EUT constructional details

Radiated Emission: The sample was placed 0.8m (below 1GHz)/1.5m (above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.

# 5.4 Description of Support Units

The EUT has been tested as an independent unit.

**5.5 Measurement Uncertainty** 

Parameter	Expanded Uncertainty (Confidence of 95%)
Conducted Emission (9kHz ~ 150KHz) for V-AMN	3.11 dB
Conducted Emission (150kHz ~ 30MHz) for V-AMN	2.62 dB
Conducted Emission (150kHz ~ 30MHz) for AAN	3.54 dB
Radiated Emission (9kHz ~ 30MHz electric field) for 3m SAC	3.13 dB
Radiated Emission (9kHz ~ 30MHz magnetic field) for 3m SAC	3.13 dB
Radiated Emission (30MHz ~ 1GHz) for 3m SAC	4.45 dB
Radiated Emission (1GHz ~ 18GHz) for 3m SAC	5.34 dB
Radiated Emission (18GHz ~ 40GHz) for 3m SAC	5.34 dB

# 5.6 Additions to, deviations, or exclusions from the method

No

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# 5.7 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

# 5.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xingiao 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://www.ccis-cb.com

Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366





# 5.9 Test Instruments list

Radiated Emission:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal.Date (mm-dd-yy)	Cal.Due date (mm-dd-yy)
3m SAC	ETS	RFD-100	Q1984	04-14-2021	04-13-2024
BiConiLog Antenna	SCHWARZBECK	VULB9163	9163-1246	03-07-2021	03-06-2022
Biconical Antenna	SCHWARZBECK	VUBA 9117	9117#359	06-17-2021	06-17-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	912D-916	03-07-2021	03-06-2022
Broad-Band Horn Antenna	SCHWARZBECK	BBHA9170	1067	04-02-2021	04-01-2022
Broad-Band Horn Antenna	SCHWARZBECK	BBHA9170	1068	04-02-2021	04-01-2022
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-03-2021	03-02-2022
Spectrum analyzer	Keysight	N9010B	MY60240202	10-27-2021	10-26-2022
Low Pre-amplifier	SCHWARZBECK	BBV9743B	00305	03-07-2021	03-06-2022
High Pre-amplifier	SKET	LNPA_0118G-50	MF280208233	03-07-2021	03-06-2022
Cable	Qualwave	JYT3M-1G-NN-8M	JYT3M-1	03-07-2021	03-06-2022
Cable	Qualwave	JYT3M-18G-NN-8M	JYT3M-2	03-07-2021	03-06-2022
Cable	Qualwave	JYT3M-1G-BB-5M	JYT3M-3	03-07-2021	03-06-2022
Cable	Bost	JYT3M-40G-SS-8M	JYT3M-4	04-02-2021	04-01-2022
EMI Test Software	Tonscend	TS+	Version:3.0.0.1		

Conducted Emission:						
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)	
EMI Test Receiver	Rohde & Schwarz	ESCI 3	101189	03-03-2021	03-02-2022	
LISN	Rohde & Schwarz	ENV432	101602	04-06-2021	04-05-2022	
LISN	Rohde & Schwarz	ESH3-Z5	843862/010	06-18-2020	06-17-2022	
RF Switch	TOP PRECISION	RSU0301	N/A	03-03-2021	03-02-2022	
Cable	Bost	JYTCE-1G-NN-2M	JYTCE-1	03-03-2021	03-02-2022	
Cable	Bost	JYTCE-1G-BN-3M	JYTCE-2	03-03-2021	03-02-2022	
EMI Test Software	AUDIX	E3	V	ersion: 6.110919	b	

Conducted method:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Spectrum Analyzer	Keysight	N9010B	MY60240202	10-27-2021	10-26-2022
Vector Signal Generator	Keysight	N5182B	MY59101009	10-27-2021	10-26-2022
Analog Signal Generator	Keysight	N5173B	MY59100765	10-27-2021	10-26-2022
Power Detector Box	MWRF-test	MW100-PSB	MW201020JYT	11-19-2021	11-18-2022
Simulated Station	Rohde & Schwarz	CMW270	102335	10-27-2021	10-26-2022
RF Control Box	MWRF-test	MW100-RFCB	MW200927JYT	N/A	N/A
PDU	MWRF-test	XY-G10	N/A	N/A	N/A
DC Power Supply	Keysight	E3642A	MY60296194	11-27-2020	11-26-2023
Temperature Humidity Chamber	Deli	8840	N/A	03-08-2021	03-07-2022
Test Software	MWRF-tes	MTS 8310	,	Version: 2.0.0.0	·

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# 6 Test results and Measurement Data

# 6.1 Antenna requirement:

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

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 1.2dBi.

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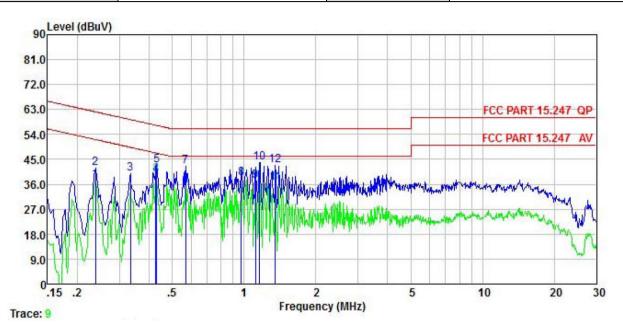
# 6.2 Conducted Emission

T / D /	ECC Dark 45 C Caption 45 003	7		
Test Requirement:	FCC Part 15 C Section 15.207			
Test Frequency Range:	150 kHz to 30 MHz			
Class / Severity:	Class B			
Receiver setup:	RBW=9kHz, VBW=30kHz			
Limit:	Fraguenov rango (MHz)	Limit (	dBuV)	
	Frequency range (MHz)	Quasi-peak	Average	
	0.15-0.5	66 to 56*	56 to 46*	
	0.5-5	56	46	
	5-30	60	50	
	* Decreases with the logarithm			
Test procedure:	<ol> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.), which provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>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).</li> <li>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(latest version) on conducted measurement.</li> </ol>			
Test setup:	Reference	Plane		
	AUX Equipment E.U.T  Test table/Insulation plane  Remark: E.U.T. Equipment Under Test LISN: Line Impedence Stabilization Ne	EMI Receiver	– AC power	
Total	Test table height=0.8m			
Test Instruments:	Refer to section 5.9 for details			
Test mode:	Refer to section 5.3 for details			
Test results:	Passed			



#### **Measurement Data:**

Product name:	Mobile Phone	Product model:	KG5h
Test by:	Mike	Test mode:	BLE Tx mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Line
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5℃ Huni: 55%



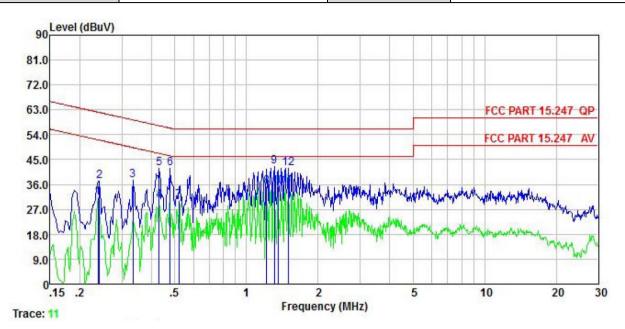
	Freq	Read Level	LISN Factor	Aux Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
720	MHz	dBu∜	dB	dB	dB	dBu∀	dBu₹	dB	
1	0.238	27.33	10.24	-0.20	0.02	37.39			Average
2	0.238	31.83	10.24	-0.20	0.02	41.89	62.17	-20.28	QP
3	0.334	29.52	10.27	-0.01	0.02	39.80	59.35	-19.55	QP
4	0.426	28.90	10.28	0.19	0.03	39.40	47.33	-7.93	Average
5	0.431	32.41	10.28	0.16	0.03	42.88	57.24	-14.36	QP
6	0.570	25.33	10.29	-0.37	0.02	35.27	46.00	-10.73	Average
7	0.570	32.59	10.29	-0.37	0.02	42.53	56.00	-13.47	QP
1 2 3 4 5 6 7 8	0.974	27.32	10.32	0.38	0.05	38.07	46.00	-7.93	Average
9	1.117	26.35	10.32	0.34	0.07	37.08	46.00	-8.92	Average
10	1.160	33.06	10.32	0.29	0.08	43.75	56.00	-12.25	QP
11	1.352	26.05	10.32	0.12	0.12	36.61	46.00		Average
12	1.352	32.20	10.32	0.12	0.12	42.76	56.00	-13.24	QP

#### Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level =Receiver Read level + LISN Factor + Aux Factor + Cable Loss.



Product name:	Mobile Phone	Product model:	KG5h
Test by:	Mike	Test mode:	BLE Tx mode
Test frequency:	150 kHz ~ 30 MHz	Phase:	Neutral
Test voltage:	AC 120 V/60 Hz	Environment:	Temp: 22.5℃ Huni: 55%



	Freq	Read Level	LISN Factor	Aux Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dBu∀	₫B	₫₿	₫B	dBu₹	dBu₹	₫B	
1	0.238	20.89	10.23	0.00	0.02	31.14	52.17	-21.03	Average
2	0.242	27.12	10.23	0.00	0.01	37.36	62.04	-24.68	QP
2	0.334	27.42	10.26	-0.02	0.02	37.68	59.35	-21.67	QP
4	0.431	20.07	10.27	-0.03	0.03	30.34	47.24	-16.90	Average
4 5 6 7 8 9	0.431	31.50	10.27	-0.03	0.03	41.77	57.24	-15.47	QP
6	0.479	31.61	10.28	0.01	0.03	41.93	56.36	-14.43	QP
7	0.521	19.84	10.28	0.03	0.03	30.18	46.00	-15.82	Average
8	1.216	24.55	10.31	0.11	0.10	35.07	46.00	-10.93	Average
9	1.310	32.06	10.31	0.11	0.11	42.59	56.00	-13.41	QP
10	1.359	24.54	10.31	0.12	0.12	35.09	46.00	-10.91	Average
11	1.495	24.86	10.32	0.13	0.14	35.45	46.00	-10.55	Average
12	1.503	31.22	10.32	0.13	0.14	41.81	56.00	-14.19	QP

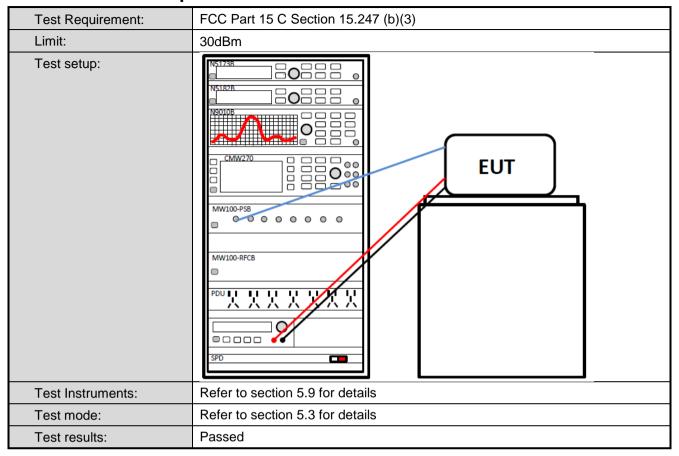
#### Notes:

- 1. An initial pre-scan was performed on the line and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Receiver Read level + LISN Factor + Aux Factor + Cable Loss.





# **6.3 Conducted Output Power**



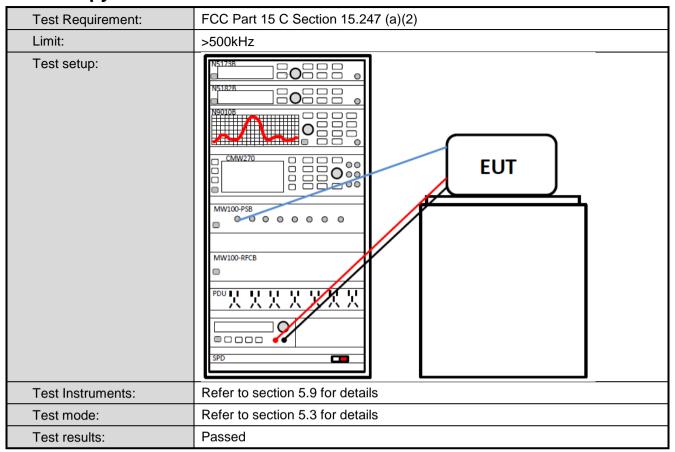
Measurement Data: Refer to Appendix A - BLE

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# 6.4 Occupy Bandwidth



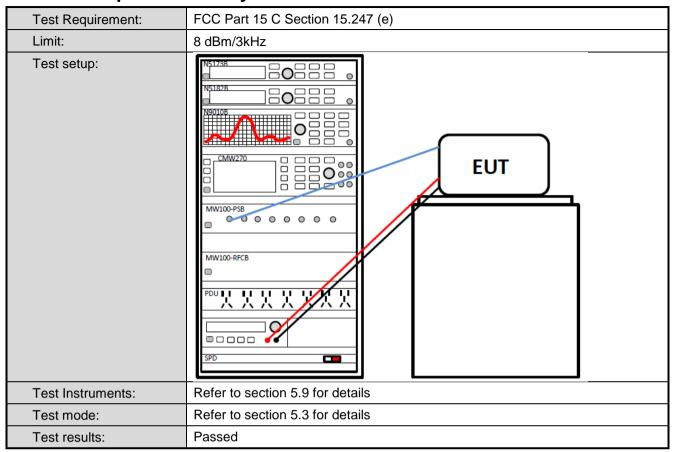
Measurement Data: Refer to Appendix A - BLE

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# 6.5 Power Spectral Density



Measurement Data: Refer to Appendix A - BLE



# 6.6 Band Edge

## 6.6.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)			
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.			
Test setup:	NS11738. NS1182R NS1182R NS1182R NS100PSB NMW100-PSB NMW100-PSB NMW100-PSB NMW100-PSB NMW100-PSB NMW100-PSB			
Test Instruments:	Refer to section 5.9 for details			
Test mode:	Refer to section 5.3 for details			
Test results:	Passed			

Measurement Data: Refer to Appendix A - BLE

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#### **Radiated Emission Method** 6.6.2

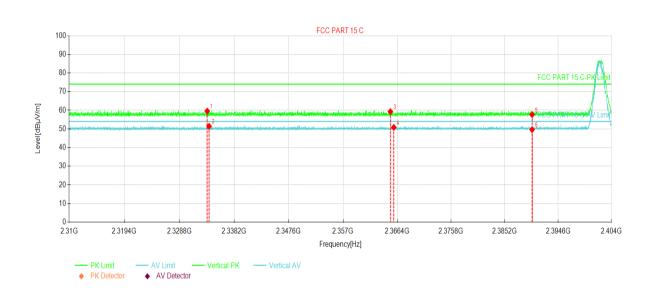
Test Requirement:		Section 15.2	05 and 15.209				
Test Frequency Range:	2310 MHz to 2	2310 MHz to 2390 MHz and 2483.5MHz to 2500 MHz					
Test Distance:	3m						
Receiver setup:	Frequency	Detector	RBW	VBW	Remark		
	Above 1GHz	Peak	1MHz	3MHz	Peak Value		
		RMS	1MHz	3MHz	Average Value		
Limit:	Frequer	ncy L	imit (dBuV/m @3		Remark		
	Above 10	GHz —	54.00 74.00		verage Value Peak Value		
Test Procedure:	the groun to determ  2. The EUT antenna, tower.  3. The anter the groun Both horismake the  4. For each case and meters are to find the Specified  6. If the emite the limits of the EU have 10 ce	ad at a 3 meterine the position was set 3 meterine which was meterine and to determine zontal and vertical and vertical then the anterine and the rota takes maximum represented the properties of the properties	n the top of a rot r camber. The ta on of the highest ters away from the bunted on the top varied from one rethe maximum varied polarization t.  Inission, the EUT nna was tuned from was tuned from the was turned from the EUT in peak testing could be ported. Otherwis	ating table 1. ble was rotat radiation. he interference of a variable meter to four value of the fis of the ante was arrange to heights from 0 degrees ak Detect Fuld Mode.  mode was 1 stopped and the emissione by one u	ted 360 degrees ce-receiving e-height antenna meters above ield strength. nna are set to d to its worst m 1 meter to 4 s to 360 degrees nction and 0 dB lower than d the peak values ons that did not sing peak, quasi-		
Test setup:	AE (T	urntable)  Grou  Test Receiver	Horn Antenna 3m  d Reference Plane  Pre- Amptifer Cont	Antenna Tower			
Test Instruments:	Refer to section	Refer to section 5.9 for details					
Test mode:	Refer to section	on 5.3 for deta	ils				
Test results:	Passed						

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#### PHY: 1MHz

Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



NO.₽	Freq.⊌ [MHz]₽	Reading√ [dBµV/m]∞	Level. [dBµV/m].	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]∂	Margin⊬ [dB]⊬	Trace₽	Polarity₽
1₽	2333.58	24.12₽	59.56₽	35.44₽	74.00₽	14.44₽	PK₽	Vertical₽
2₽	2333.89	15.99₽	51.43₽	35.44₽	54.00₽	2.57₽	AV₽	Vertical₽
3₽	2365.22	23.60₽	59.26₽	35.66₽	74.00₽	14.74₽	PK₽	Vertical₽
4.₽	2365.82	15.16₽	50.83₽	35.67₽	54.00₽	3.17₽	AV₽	Vertical₽
5₽	2390.00	21.84₽	57.68₽	35.84₽	74.00₽	16.32₽	PK₽	Vertical₽
6₽	2390.00	13.79₽	49.63₽	35.84₽	54.00₽	4.37₽	AV₽	Vertical₽⊸

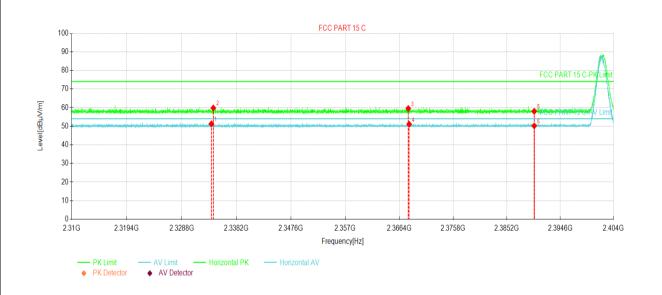
#### Remark:

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

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Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



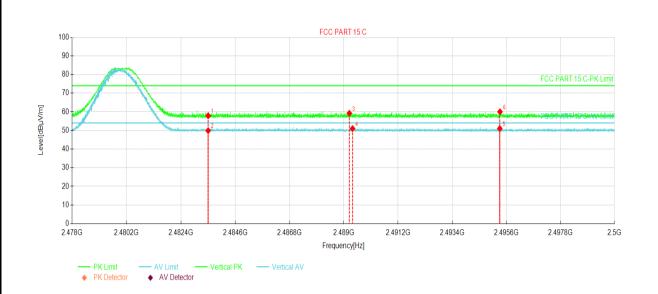
NO.	Freq.↓ [MHz]↓	Reading√ [dBµV/m]∞	Level. [dBµV/m].	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊬	Margin⊬ [dB]⊬	Trace₽	Polarity
1₽	2333.89	15.85₽	51.29₽	35.44₽	54.00₽	2.71₽	AV₽	Horizontal.
2₽	2334.22	24.34₽	59.78₽	35.44₽	74.00₽	14.22₽	PK₽	Horizontal.
3₽	2367.96	23.82₽	59.50₽	35.68₽	74.00₽	14.50₽	PK₽	Horizontal.
4₽	2368.10	15.40₽	51.08₽	35.68₽	54.00₽	2.92₽	AV₽	Horizontal.
5₽	2390.00	22.16₽	58.00₽	35.84₽	74.00₽	16.00₽	PK₽	Horizontal₽
6₽	2390.00	14.33₽	50.17₽	35.84₽	54.00₽	3.83₽	AV₽	Horizontal₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

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Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



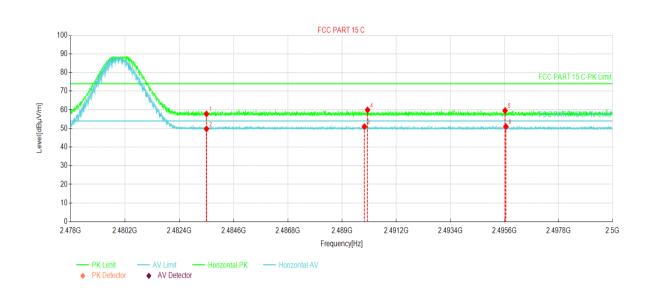
NO.₽	Freq.⊬ [MHz]∂	Reading√ [dBµV/m]∞	Level. [dBµV/m].	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊬	Margin⊬ [dB]⊬	Trace₽	Polarity
1₽	2483.50	22.15₽	57.87₽	35.72₽	74.00₽	16.13₽	PK₽	Vertical₽
2₽	2483.50	14.17₽	49.89₽	35.72₽	54.00₽	4.11₽	AV₽	Vertical₽
3₽	2489.22	23.50₽	59.20₽	35.70₽	74.00₽	14.80₽	PK₽	Vertical₽
4₽	2489.35	15.28₽	50.98₽	35.70₽	54.00₽	3.02₽	AV₽	Vertical₽
5₽	2495.33	15.33₽	51.02₽	35.69₽	54.00₽	2.98₽	AV₽	Vertical₽
6₽	2495.33	24.32₽	60.01₽	35.69₽	74.00₽	13.99₽	PK₽	Vertical₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366 Page 20 of 44



Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



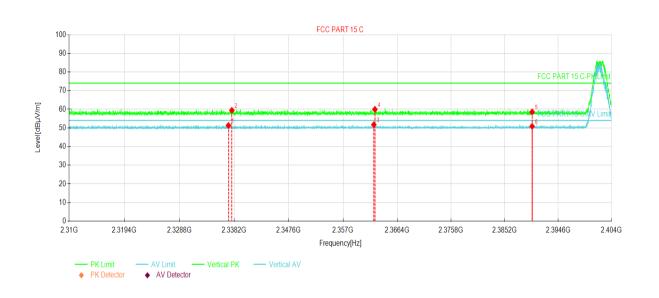
	NO.₽	Freq.⊌	Reading	Level⊬	Factor	Limit⊬	Margin∉	Trace∂	Polarity <i></i>
	NO.₽	[MHz]∂	[dBµV/m]₽	[dBµV/m]₽	[dB]∂	[dBµV/m]₽	[dB]∂	Hace⊬	1 Glarity
	1₽	2483.50	22.05₽	57.77₽	35.72₽	74.00₽	16.23₽	PK₽	Horizontal₽
L	2₽	2483.50	14.03₽	49.75₽	35.72₽	54.00₽	4.25₽	AV₽	Horizontal₽
	3₽	2489.90	15.26₽	50.96₽	35.70₽	54.00₽	3.04₽	AV₽	Horizontal₽
	4₽	2490.03	24.20₽	59.90₽	35.70₽	74.00₽	14.10₽	PK₽	Horizontal₽
	5₽	2495.62	23.87₽	59.56₽	35.69₽	74.00₽	14.44₽	PK₽	Horizontal₽
	6₽	2495.65	15.24₽	50.93₽	35.69₽	54.00₽	3.07₽	AV₽	Horizontal₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



#### PHY: 2MHz

Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



NO.₽	Freq.⊬ [MHz]∂	Reading√ [dBµV/m]∞	Level⊬ [dBµV/m]₽	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊬	Margin⊬ [dB]⊬	Trace₽	Polarity∂
1₽	2337.22	15.84₽	51.30₽	35.46₽	54.00₽	2.70₽	AV₽	Vertical₽
2↩	2337.81	23.98₽	59.45₽	35.47₽	74.00₽	14.55₽	PK₽	Vertical₽
3₽	2362.34	16.10₽	51.74₽	35.64₽	54.00₽	2.26₽	AV₽	Vertical₽
4₽	2362.53	24.31₽	59.95₽	35.64₽	74.00₽	14.05₽	PK₽	Vertical₽
5₽	2390.00	22.73₽	58.57₽	35.84₽	74.00₽	15.43₽	PK₽	Vertical₽
6₽	2390.00	15.02₽	50.86₽	35.84₽	54.00₽	3.14₽	AV₽	Vertical₽

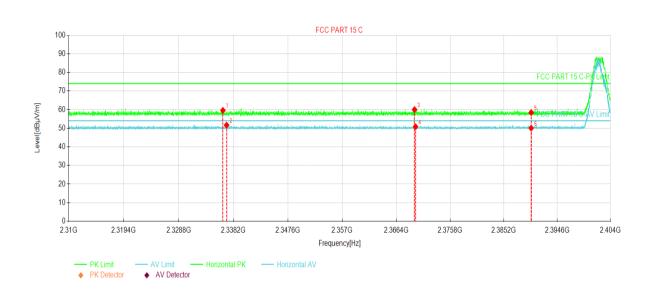
#### Remark:

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

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Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

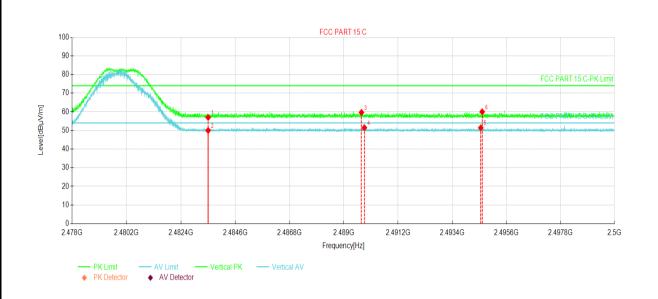


NO.₽	Freq.⊬ [MHz]∂	Reading√ [dBµV/m]∞	Level⊬ [dBµV/m]₄	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊲	Margin⊬ [dB]⊬	Trace₽	Polarity∉
1₽	2336.39	24.12₽	59.58₽	35.46₽	74.00₽	14.42₽	PK₽	Horizontal₽
2↩	2337.02	16.19₽	51.65₽	35.46₽	54.00₽	2.35₽	AV₽	Horizontal₽
3₽	2369.57	24.31₽	60.00₽	35.69₽	74.00₽	14.00₽	PK₽	Horizontal₽
4₽	2369.74	15.11₽	50.81₽	35.70₽	54.00₽	3.19₽	AV₽	Horizontal₽
5₽	2390.00	22.56₽	58.40₽	35.84₽	74.00₽	15.60₽	PK₽	Horizontal₽
6₽	2390.00	14.21₽	50.05₽	35.84₽	54.00₽	3.95₽	AV₽	Horizontal₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%

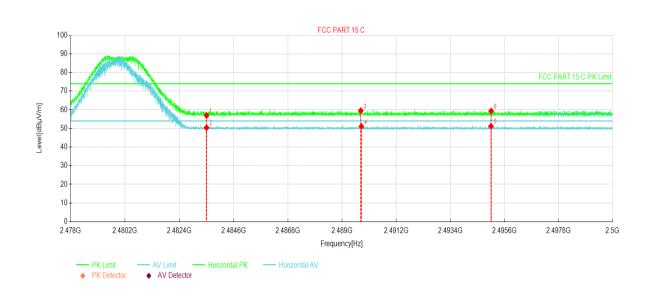


NO.	Freq.⊬ [MHz]∂	Reading√ [dBµV/m]∞	Level⊬ [dBµV/m]₄	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊬	Margin⊬ [dB]⊬	Trace₽	Polarity∉
1₽	2483.50	21.26₽	56.98₽	35.72₽	74.00₽	17.02₽	PK₽	Vertical₽
2₽	2483.50	14.26₽	49.98₽	35.72₽	54.00₽	4.02₽	AV₽	Vertical₽
3₽	2489.71	23.95₽	59.65₽	35.70₽	74.00₽	14.35₽	PK₽	Vertical₽
4₽	2489.83	15.75₽	51.45₽	35.70₽	54.00₽	2.55₽	AV₽	Vertical₽
5₽	2494.55	15.72₽	51.41₽	35.69₽	54.00₽	2.59₽	AV₽	Vertical₽
6₽	2494.61	24.31₽	60.00₽	35.69₽	74.00₽	14.00₽	PK₽	Vertical₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



NO.₽	Freq.⊬ [MHz]∂	Reading⊮ [dBµV/m]⊭	Level⊬ [dBµV/m]⊬	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊬	Margin⊮ [dB]⊮	Trace₽	Polarity∉
1₽	2483.50	21.20₽	56.92₽	35.72₽	74.00₽	17.08₽	PK₽	Horizontal₽
2↩	2483.50	14.67₽	50.39₽	35.72₽	54.00₽	3.61₽	AV₽	Horizontal₽
3₽	2489.75	23.81₽	59.51₽	35.70₽	74.00₽	14.49₽	PK₽	Horizontal₽
4₽	2489.78	15.34₽	51.04₽	35.70₽	54.00₽	2.96₽	AV₽	Horizontal₽
5₽	2495.05	15.51₽	51.20₽	35.69₽	54.00₽	2.80₽	AV₽	Horizontal₽
6₽	2495.05	23.67₽	59.36₽	35.69₽	74.00₽	14.64₽	PK₽	Horizontal₽

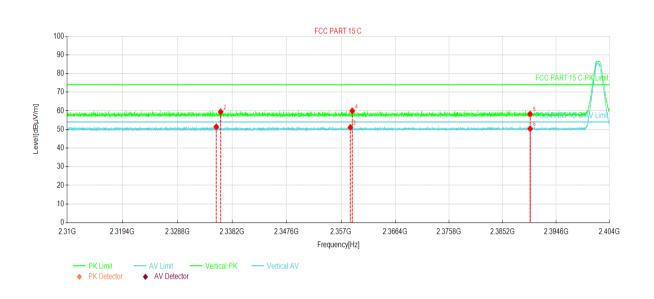
- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

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#### Coded PHY, S=2

Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



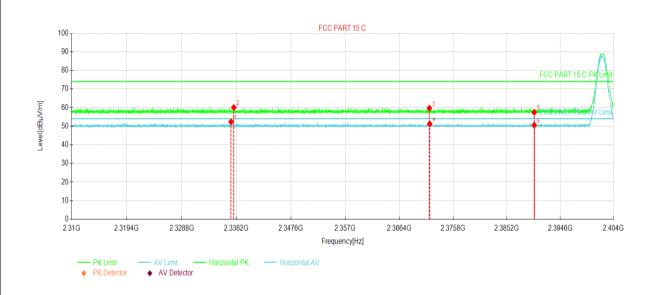
NO.₽	Freq.⊬ [MHz]∂	Reading√ [dBµV/m]∞	Level√ [dBµV/m]∘	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊲	Margin⊬ [dB]⊬	Trace₽	Polarity₽
1₽	2335.47	15.92₽	51.37₽	35.45₽	54.00₽	2.63₽	AV₽	Vertical₽
2₽	2336.23	23.93₽	59.39₽	35.46₽	74.00₽	14.61₽	PK₽	Vertical₽
3₽	2358.62	15.48₽	51.10₽	35.62₽	54.00₽	2.90₽	AV₽	Vertical₽
4.₽	2358.95	24.32₽	59.94₽	35.62₽	74.00₽	14.06₽	PK₽	Vertical₽
5₽	2390.00	22.41₽	58.25₽	35.84₽	74.00₽	15.75₽	PK₽	Vertical₽
6₽	2390.00	14.56₽	50.40₽	35.84₽	54.00₽	3.60₽	AV₽	Vertical₽

#### Remark:

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

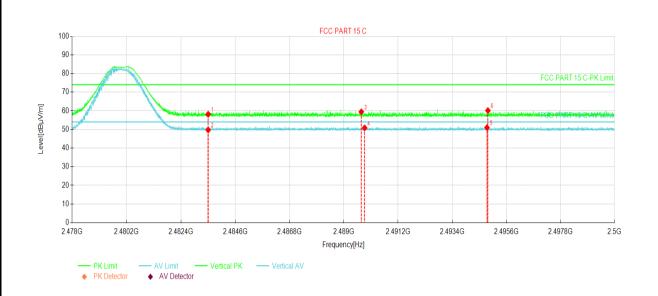


NO.₽	Freq.⊬ [MHz]∂	Reading√ [dBµV/m]∞	Level⊬ [dBµV/m]₄	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊬	Margin⊬ [dB]⊬	Trace₽	Polarity
1₽	2337.27	16.89₽	52.35₽	35.46₽	54.00₽	1.65₽	AV₽	Horizontal.
243	2337.75	24.58₽	60.05₽	35.47₽	74.00₽	13.95₽	PK₽	Horizontal.
3₽	2371.64	23.99₽	59.70₽	35.71₽	74.00₽	14.30₽	PK₽	Horizontal.
4.₽	2371.69	15.51₽	51.22₽	35.71₽	54.00₽	2.78₽	AV₽	Horizontal₽
5₽	2390.00	21.62₽	57.46₽	35.84₽	74.00₽	16.54₽	PK₽	Horizontal@
6₽	2390.00	14.74₽	50.58₽	35.84₽	54.00₽	3.42₽	AV₽	Horizontal₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



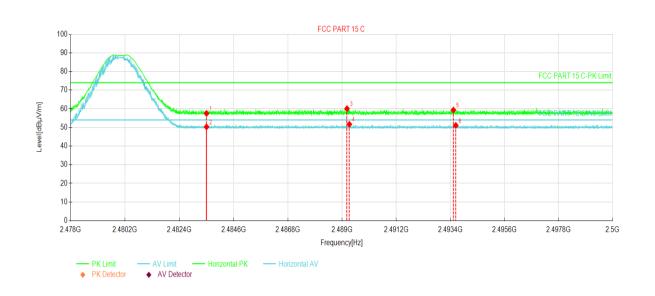
NO.	Freq.⊬ [MHz]∂	Reading√ [dBµV/m]∞	Level√ [dBµV/m]	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊲	Margin⊬ [dB]⊬	Trace₽	Polarity∂
1₽	2483.50	22.42₽	58.14₽	35.72₽	74.00₽	15.86₽	PK₽	Vertical₽
2↩	2483.50	14.01₽	49.73₽	35.72₽	54.00₽	4.27₽	AV₽	Vertical₽
3₽	2489.70	23.74	59.44₽	35.70₽	74.00₽	14.56₽	PK₽	Vertical₽
4.₽	2489.84	15.11₽	50.81₽	35.70₽	54.00₽	3.19₽	AV₽	Vertical₽
5₽	2494.81	15.28₽	50.97₽	35.69₽	54.00₽	3.03₽	AV₽	Vertical₽
6₽	2494.84	24.44	60.13₽	35.69₽	74.00₽	13.87₽	PK₽	Vertical₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

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Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



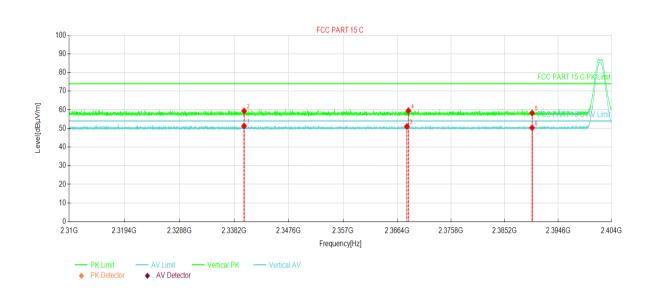
NO.	Freq.⊬ [MHz]∂	Reading⊮ [dBµV/m]⊮	Level⊬ [dBµV/m]₄	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]∂	Margin⊬ [dB]∉	Trace₽	Polarity∉
1₽	2483.50	21.79₽	57.51₽	35.72₽	74.00₽	16.49₽	PK₽	Horizontal₽
2↔	2483.50	14.56₽	50.28₽	35.72₽	54.00₽	3.72₽	AV₽	Horizontal₽
3₽	2489.19	24.37₽	60.07₽	35.70₽	74.00₽	13.93₽	PK₽	Horizontal₽
4₽	2489.29	15.99₽	51.69₽	35.70₽	54.00₽	2.31₽	AV₽	Horizontal₽
5₽	2493.52	23.61₽	59.30₽	35.69₽	74.00₽	14.70₽	PK₽	Horizontal₽
6₽	2493.61	15.37₽	51.06₽	35.69₽	54.00₽	2.94₽	AV₽	Horizontal₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



#### Coded PHY, S=8

Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%



NO.₽	Freq.	Reading	Level	Factor	Limit⊬	Margin⊌	Trace∉	Polarity∂
	[MHz]∂	[dBµV/m]₽	[dBµV/m]∂	[dB]₽	[dBµV/m]∂	[dB]₽		
1₽	2339.90	15.79₽	51.27₽	35.48₽	54.00₽	2.73₽	AV₽	Vertical₽
2₽	2339.91	23.87₽	59.35₽	35.48₽	74.00₽	14.65₽	PK₽	Vertical₽
3₽	2368.10	15.36₽	51.04₽	35.68₽	54.00₽	2.96₽	AV₽	Vertical₽
4₽	2368.36	23.81₽	59.50₽	35.69₽	74.00₽	14.50₽	PK₽	Vertical₽
5₽	2390.00	22.38₽	58.22₽	35.84₽	74.00₽	15.78₽	PK₽	Vertical₽
6₽	2390.00	14.51₽	50.35₽	35.84₽	54.00₽	3.65₽	AV₽	Vertical₽

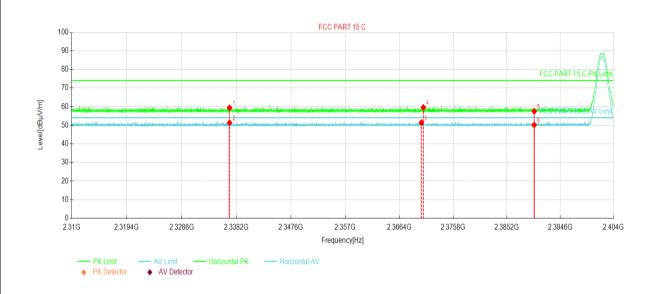
#### Remark:

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

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Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



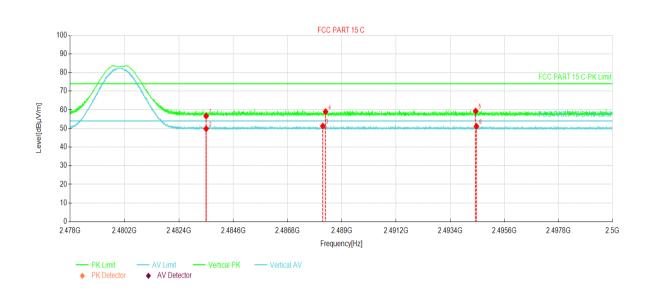
NO.₽	Freq.∉ [MHz]∉	Reading√ [dBµV/m]∞	Level⊬ [dBµV/m]₽	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊲	Margin⊬ [dB]⊬	Trace₽	Polarity∉
1₽	2337.01	23.89₽	59.35₽	35.46₽	74.00₽	14.65₽	PK₽	Horizontal₽
2↩	2337.01	15.87₽	51.33₽	35.46₽	54.00₽	2.67₽	AV₽	Horizontal₽
3₽	2370.24	15.68₽	51.38₽	35.70₽	54.00₽	2.62₽	AV₽	Horizontal₽
4₽	2370.59	23.83₽	59.53₽	35.70₽	74.00₽	14.47₽	PK₽	Horizontal₽
5₽	2390.00	21.66₽	57.50₽	35.84₽	74.00₽	16.50₽	PK₽	Horizontal₽
6₽	2390.00	14.30₽	50.14₽	35.84₽	54.00₽	3.86₽	AV₽	Horizontal₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

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Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%

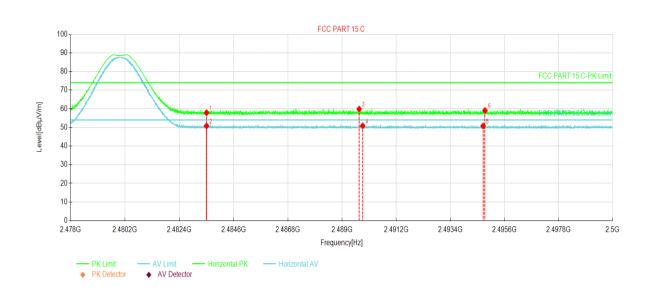


NO.₽	Freq.⊬ [MHz]∂	Reading√ [dBµV/m]∞	Level⊬ [dBµV/m]₄	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]∂	Margin⊬ [dB]∉	Trace₽	Polarity₽
1₽	2483.50	20.92₽	56.64₽	35.72₽	74.00₽	17.36₽	PK₽	Vertical₽
2₄□	2483.50	14.11₽	49.83₽	35.72₽	54.00₽	4.17₽	AV₽	Vertical₽
3₽	2488.22	15.55₽	51.26₽	35.71₽	54.00₽	2.74₽	AV₽	Vertical₽
4₽	2488.33	23.27₽	58.98₽	35.71₽	74.00₽	15.02₽	PK₽	Vertical₽
5₽	2494.43	23.62₽	59.31₽	35.69₽	74.00₽	14.69₽	PK₽	Vertical₽
6₽	2494.46	15.45₽	51.14₽	35.69₽	54.00₽	2.86₽	AV₽	Vertical₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



NO.	Freq.⊬ [MHz]∂	Reading√ [dBµV/m]∞	Level⊬ [dBµV/m]₄	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊲	Margin⊬ [dB]∉	Trace₽	Polarity∂
1₽	2483.50	22.13₽	57.85₽	35.72₽	74.00₽	16.15₽	PK₽	Horizontal₽
2₄೨	2483.50	15.08₽	50.80₽	35.72₽	54.00₽	3.20₽	AV₽	Horizontal₽
3₽	2489.68	24.15₽	59.85₽	35.70₽	74.00₽	14.15₽	PK₽	Horizontal₽
<b>4</b> ₽	2489.83	15.15₽	50.85₽	35.70₽	54.00₽	3.15₽	AV₽	Horizontal₽
5₽	2494.72	15.07₽	50.76₽	35.69₽	54.00₽	3.24₽	AV₽	Horizontal₽
6↩	2494.80	23.40₽	59.09₽	35.69₽	74.00₽	14.91₽	PK₽	Horizontal₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

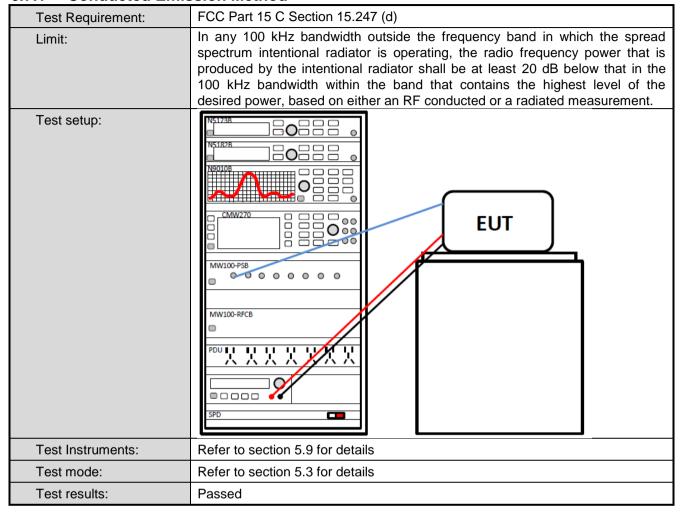
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# 6.7 Spurious Emission

## 6.7.1 Conducted Emission Method



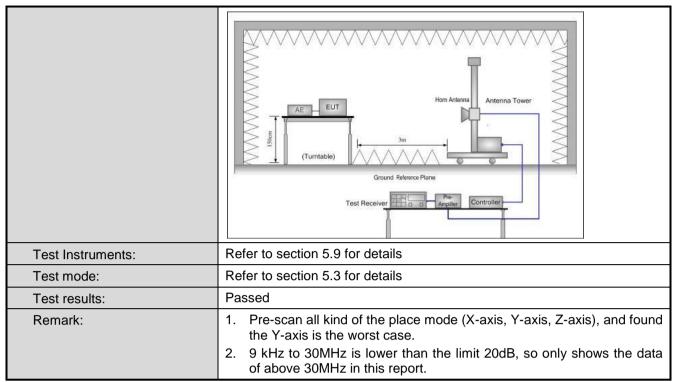
Measurement Data: Refer to Appendix A - BLE



#### 6.7.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C	Section 15.	.205	and 15.209			
Test Frequency Range:	9kHz to 25GHz						
Test Distance:	3m or 10m						
Receiver setup:	Frequency	Detector	r	RBW	VBW		Remark
·	30MHz-1GHz Quasi-p		ak	120KHz	300	KHz	Quasi-peak Value
	Above 1GHz	Peak		1MHz	3M	Hz	Peak Value
	RMS			1MHz	3M	Hz Average Value	
Limit:	Frequency	/	Lim	it (dBuV/m @	10m)		Remark
	30MHz-88M	Hz		30.0		C	Quasi-peak Value
	88MHz-216M	ИHz		33.5		C	Quasi-peak Value
	216MHz-960MHz			36.0			Quasi-peak Value
	960MHz-1G	Hz		44.0		C	Quasi-peak Value
	Frequency	/	Lin	nit (dBuV/m @	3m)		Remark
	Above 1GH	17		54.0			Average Value
				74.0			Peak Value table 0.8m(below
	chamber(all determine to determine to the EUT was receiving at height anter the ground Both horizon make the make the meters and to find the most of the EUT have 10 dE	bove 1GH. the position yas set 3 m antenna, w antenna, w antenna tower. ha height is to determ ontal and v neasuremen suspected hen the an the rota ta maximum re eceiver sys sandwidth w sion level o ecified, the would be margin wo	Iz).  n of neter which is various verticent. eminable read sten with pof the repould	The table the highest restabove 1Gh was mound aried from or the maximulation that the maximulation was turned ling.  In was set of maximum Hard aried from the maximum Hard aried from the EUT in peresting could be orted. Other the be re-tested to the set of the set	was readiation Hz) aw inted or met um valuitions of to Pea old Mooak moode stop wise the done by the metal was to the stop wise the done by the stop wise with the stop wi	otated n. ay from the	at a 3 meter 360 degrees to method the interference-top of a variable-four meters above the field strength, antenna are set to anged to its worst from 1 meter to 4 tes to 360 degrees tect Function and as 10 dB lower than and the peak values assions that did not using peak, quasi-reported in a data
Test setup:	Below 1GHz  Turn Table  Ground Plane  Above 1GHz	10m 4m			S A RF	Antenna To learch Intenna Test Ceiver	ower



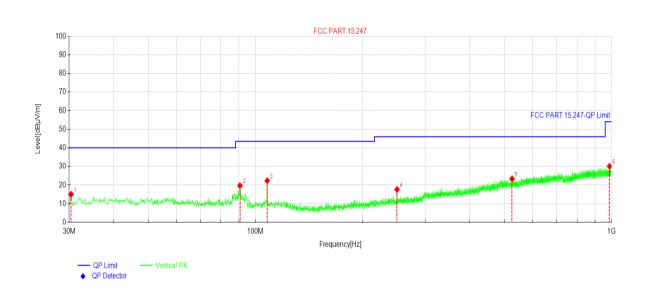




#### Measurement Data (worst case):

#### **Below 1GHz:**

Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



NO.₽	Freq.⊬ [MHz]⊬	Reading[d BµV/m]₄	Level⊬ [dBµV/m]∂	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]∂	Margin⊬ [dB]⊭	Trace∂	Polarity₽
1₽	30.3880₽	31.11₽	15.04₽	-16.07₽	40.00₽	24.96₽	PK₽	Vertical₽
2₽	90.5341₽	37.14₽	19.67₽	-17.47₽	43.50₽	23.83₽	PK₽	Vertical₽
3₽	107.995	38.29₽	22.35₽	-15.94₽	43.50₽	21.15₽	PK₽	Vertical₽
<b>4</b> 0	250.018	31.41₽	17.62₽	-13.79₽	46.00₽	28.38₽	PK₽	Vertical₽
5₽	525.816	30.23₽	23.34	-6.89₽	46.00₽	22.66₽	PK₽	Vertical₽
6₽	987.388	30.81₽	30.07₽	-0.74₽	54.00₽	23.93₽	PK₽	Vertical₽

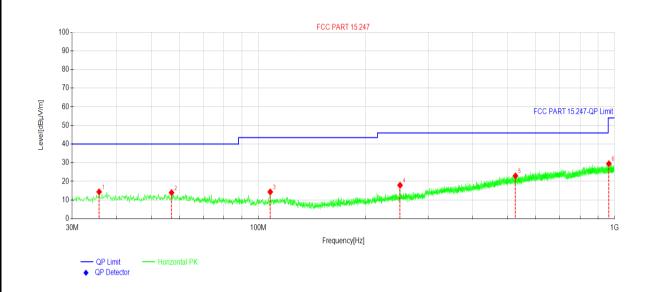
#### Remark

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

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Product Name:	Mobile Phone	Product Model:	KG5h
Test By:	Mike	Test mode:	BLE Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24°C Huni: 57%



NO.₽	Freq.⊬ [MHz]⊬	Reading[d BµV/m]⊲	Level⊬ [dBµV/m]∂	Factor⊬ [dB]⊬	Limit⊬ [dBµV/m]⊬	Margin⊬ [dB]⊭	Trace∂	Polarity∂
1₽	35.7236₽	29.29₽	14.36₽	-14.93₽	40.00₽	25.64₽	PK₽	Horizontal₽
2↩	57.0657₽	28.73₽	13.95₽	-14.78₽	40.00₽	26.05₽	PK₽	Horizontal₽
3₽	107.995	30.28₽	14.34₽	-15.94₽	43.50₽	29.16₽	PK₽	Horizontal₽
<b>4</b> 0	250.018	31.72₽	17.93₽	-13.79₽	46.00₽	28.07₽	PK₽	Horizontal₽
5↔	527.174	29.82₽	22.94₽	-6.88₽	46.00₽	23.06₽	PK₽	Horizontal₽
6₽	964.300	30.34₽	29.46₽	-0.88₽	54.00₽	24.54₽	PK₽	Horizontal₽

- 1. Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss Preamplifier Factor).
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.

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#### **Above 1GHz**

PHY: 1MHz

FIII. IIVIIIZ								
		Test ch	annel: Lowest ch	nannel				
		De	tector: Peak Valu	ıe				
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4804.00	56.32	-9.60	46.72	74.00	27.28	Vertical		
4804.00	55.89	-9.60	46.29	74.00	27.71	Horizontal		
		Dete	ctor: Average Va	alue				
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4804.00	48.21	-9.60	38.61	54.00	15.39	Vertical		
4804.00	47.53	-9.60	37.93	54.00	16.07	Horizontal		
			annel: Middle ch					
		De	tector: Peak Valu		T			
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4884.00	56.51	-9.04	47.47	74.00	26.53	Vertical		
4884.00	56.01	-9.04	46.97	74.00	27.03	Horizontal		
		Dete	ctor: Average Va	alue				
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4884.00	48.11	-9.04	39.07	54.00	14.93	Vertical		
4884.00	47.04	-9.04	38.00	54.00	16.00	Horizontal		
			annel: Highest cl					
		De	tector: Peak Valu	ie				
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4960.00	56.74	-8.45	48.29	74.00	25.71	Vertical		
4960.00	56.07	-8.45	47.62	74.00	26.38	Horizontal		
		Dete	ctor: Average Va	alue				
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4960.00	47.71	-8.45	39.26	54.00	14.74	Vertical		
4960.00	46.58	-8.45	38.13	54.00	15.87	Horizontal		

#### Remark:

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<sup>1.</sup> Final Level =Receiver Read level + Factor.

<sup>2.</sup> The emission levels of other frequencies are lower than the limit 20dB and not show in test report.





PHY: 2MHz

Test channel: Lowest channel								
		De	tector: Peak Valu	ie				
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4804.00	55.05	-9.60	45.45	74.00	28.55	Vertical		
4804.00	54.66	-9.60	45.06	74.00	28.94	Horizontal		
Detector: Average Value								
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4804.00	47.60	-9.60	38.00	54.00	16.00	Vertical		
4804.00	47.92	-9.60	38.32	54.00	15.68	Horizontal		
Test channel: Middle channel								
		De	tector: Peak Valu	ie		_		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4884.00	55.12	-9.04	46.08	74.00	27.92	Vertical		
4884.00	54.66	-9.04	45.62	74.00	28.38	Horizontal		
		Dete	ctor: Average Va	alue				
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4884.00	47.38	-9.04	38.34	54.00	15.66	Vertical		
4884.00	47.92	-9.04	38.88	54.00	15.12	Horizontal		
		Test cha	annel: Highest cl	hannel				
Detector: Peak Value								
Frequency	Read Level		l evel	Limit Line	Margin			

	Test channel: Highest channel									
	Detector: Peak Value									
Frequency (MHz)	· · ·   Facionos)									
4960.00	54.61	-8.45	46.16	74.00	27.84	Vertical				
4960.00	54.30	-8.45	45.85	74.00	28.15	Horizontal				
		Dete	ctor: Average Va	alue						
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization				
4960.00	47.26	-8.45	38.81	54.00	15.19	Vertical				
4960.00	47.77	-8.45	39.32	54.00	14.68	Horizontal				

#### Remark:

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<sup>1.</sup> Final Level =Receiver Read level + Factor.

<sup>2.</sup> The emission levels of other frequencies are lower than the limit 20dB and not show in test report.





## Coded PHY, S=2

	Test channel: Lowest channel								
Detector: Peak Value									
Frequency (MHz) Read Level Factor(dB) Level Limit Line Margin (dBuV/m) (dBuV/m) (dB) Polariza						Polarization			
4804.00	54.60	-9.60	45.00	74.00	29.00	Vertical			
4804.00	54.66	-9.60	45.06	74.00	28.94	Horizontal			
		Dete	ctor: Average Va	alue					
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization			
4804.00	47.57	-9.60	37.97	54.00	16.03	Vertical			
4804.00	48.20	-9.60	38.60	54.00	15.40	Horizontal			

Test channel: Middle channel								
Detector: Peak Value								
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4884.00	54.46	-9.04	45.42	74.00	28.58	Vertical		
4884.00	54.27	-9.04	45.23	74.00	28.77	Horizontal		
Detector: Average Value								
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4884.00	47.16	-9.04	38.12	54.00	15.88	Vertical		
4884.00	48.67	-9.04	39.63	54.00	14.37	Horizontal		

Test channel: Highest channel							
Detector: Peak Value							
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization	
4960.00	54.24	-8.45	45.79	74.00	28.21	Vertical	
4960.00	54.96	-8.45	46.51	74.00	27.49	Horizontal	
Detector: Average Value							
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization	
4960.00	47.88	-8.45	39.43	54.00	14.57	Vertical	
4960.00	48.26	-8.45	39.81	54.00	14.19	Horizontal	

#### Remark:

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<sup>1.</sup> Final Level =Receiver Read level + Factor.

<sup>2.</sup> The emission levels of other frequencies are lower than the limit 20dB and not show in test report.





#### Coded PHY, S=8

Test channel: Lowest channel								
Detector: Peak Value								
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4804.00	55.27	-9.60	45.67	74.00	28.33	Vertical		
4804.00	55.55	-9.60	45.95	74.00	28.05	Horizontal		
	Detector: Average Value							
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4804.00	48.57	-9.60	38.97	54.00	15.03	Vertical		
4804.00	48.10	-9.60	38.50	54.00	15.50	Horizontal		

Test channel: Middle channel								
Detector: Peak Value								
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4884.00	54.83	-9.04	45.79	74.00	28.21	Vertical		
4884.00	55.71	-9.04	46.67	74.00	27.33	Horizontal		
	Detector: Average Value							
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4884.00	48.82	-9.04	39.78	54.00	14.22	Vertical		
4884.00	47.91	-9.04	38.87	54.00	15.13	Horizontal		

Test channel: Highest channel								
Detector: Peak Value								
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4960.00	54.95	-8.45	46.50	74.00	27.50	Vertical		
4960.00	55.16	-8.45	46.71	74.00	27.29	Horizontal		
	Detector: Average Value							
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarization		
4960.00	48.86	-8.45	40.41	54.00	13.59	Vertical		
4960.00	48.39	-8.45	39.94	54.00	14.06	Horizontal		

#### Remark:

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<sup>1.</sup> Final Level =Receiver Read level + Factor.

<sup>2.</sup> The emission levels of other frequencies are lower than the limit 20dB and not show in test report.