FCC REPORT

Report No: CCISE161100703

(Bluetooth)

Applicant: i-Mobile Technology corporation

Address of Applicant: 3F #8 Alley 15 Lane 120 Sec. 1 Neihu Road, Neihu District,

Taipei City 114, Taiwan

Equipment Under Test (EUT)

Product Name: Tablet PC

Model No.: IMT-10PLUS

Trade mark: @mobile

FCC ID: XZO-IMT-10PLUS

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

Date of sample receipt: 02 Nov., 2016

Date of Test: 02 Nov., to 14 Dec., 2016

Date of report issued: 14 Dec., 2016

Test Result: PASS *

* In the configuration tested, the EUT complied with the standards specified above.

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 CCIS 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.

This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.





2 Version

Version No.	Date	Description
00	14 Nov., 2016	Original

Tested by:

Test Engineer

Date: 14 Nov., 2016

Reviewed by: Date: 14 Nov., 2016

Project Engineer



3 Contents

			Page
1	С	OVER PAGE	1
2	V	ERSION	2
3	C	ONTENTS	2
3			
4	T	EST SUMMARY	4
5	G	ENERAL INFORMATION	5
	5.1	CLIENT INFORMATION	5
	5.2	GENERAL DESCRIPTION OF E.U.T.	_
	5.3	TEST MODE	
	5.4	Measurement Uncertainty	7
	5.5	LABORATORY FACILITY	7
	5.6	LABORATORY LOCATION	7
	5.7	TEST INSTRUMENTS LIST	8
6	T	EST RESULTS AND MEASUREMENT DATA	9
	6.1	ANTENNA REQUIREMENT	9
	6.2	CONDUCTED EMISSIONS	10
	6.3	CONDUCTED OUTPUT POWER	13
	6.4	20dB Occupy Bandwidth	17
	6.5	Carrier Frequencies Separation.	
	6.6	Hopping Channel Number	
	6.7	DWELL TIME	
	6.8	PSEUDORANDOM FREQUENCY HOPPING SEQUENCE	_
	6.9	BAND EDGE	
	٠.	.9.1 Conducted Emission Method	
	_	.9.2 Radiated Emission Method	
	6.10		
		.10.1 Conducted Emission Method	
	_		
7	TI	EST SETUP PHOTO	62
8	E	UT CONSTRUCTIONAL DETAILS	63





4 Test Summary

Test Item	Section in CFR 47	Result
Antenna Requirement	15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	15.207	Pass
Conducted Peak Output Power	15.247 (b)(1)	Pass
20dB Occupied Bandwidth	15.247 (a)(1)	Pass
Carrier Frequencies Separation	15.247 (a)(1)	Pass
Hopping Channel Number	15.247 (a)(1)	Pass
Dwell Time	15.247 (a)(1)	Pass
Radiated Emission	15.205/15.209	Pass
Band Edge	15.247(d)	Pass

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





5 General Information

5.1 Client Information

Applicant:	i-Mobile Technology corporation			
Address of Applicant:	3F #8 Alley 15 Lane 120 Sec. 1 Neihu Road , Neihu District ,Taipei City 114 ,Taiwan			
Manufacturer and Factory:	i-Mobile Technology corporation			
Address of Manufacturer and Factory:	3F #8 Alley 15 Lane 120 Sec. 1 Neihu Road , Neihu District ,Taipei City 114 ,Taiwan			

5.2 General Description of E.U.T.

Product Name:	Tablet PC
Model No.:	IMT-10PLUS
Operation Frequency:	2402MHz~2480MHz
Transfer rate:	1/2/3 Mbits/s
Number of channel:	79
Modulation type:	GFSK, π/4-DQPSK, 8DPSK
Modulation technology:	FHSS
Antenna Type:	Internal Antenna
Antenna gain:	2.04 dBi
Power supply:	Rechargeable Li-ion Battery DC10.8Vx2, 3400mAh/pcs
AC adapter:	Model: ATS065S-P160 LPS Input: AC100-240V 50/60Hz 1.4A Output: DC 16V, 4.07A





Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	20	2422MHz	40	2442MHz	60	2462MHz
1	2403MHz	21	2423MHz	41	2443MHz	61	2463MHz
2	2404MHz	22	2424MHz	42	2444MHz	62	2464MHz
3	2405MHz	23	2425MHz	43	2445MHz	63	2465MHz
4	2406MHz	24	2426MHz	44	2446MHz	64	2466MHz
5	2407MHz	25	2427MHz	45	2447MHz	65	2467MHz
6	2408MHz	26	2428MHz	46	2448MHz	66	2468MHz
7	2409MHz	27	2429MHz	47	2449MHz	67	2469MHz
8	2410MHz	28	2430MHz	48	2450MHz	68	2470MHz
9	2411MHz	29	2431MHz	49	2451MHz	69	2471MHz
10	2412MHz	30	2432MHz	50	2452MHz	70	2472MHz
11	2413MHz	31	2433MHz	51	2453MHz	71	2473MHz
12	2414MHz	32	2434MHz	52	2454MHz	72	2474MHz
13	2415MHz	33	2435MHz	53	2455MHz	73	2475MHz
14	2416MHz	34	2436MHz	54	2456MHz	74	2476MHz
15	2417MHz	35	2437MHz	55	2457MHz	75	2477MHz
16	2418MHz	36	2438MHz	56	2458MHz	76	2478MHz
17	2419MHz	37	2439MHz	57	2459MHz	77	2479MHz
18	2420MHz	38	2440MHz	58	2460MHz	78	2480MHz
19	2421MHz	39	2441MHz	59	2461MHz		



5.3 Test mode

Transmitting mode:	Keep the EUT in transmitting mode with worst case data rate.
Remark	GFSK (1 Mbps) is the worst case mode.

Report No: CCISE161100703

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 with a fresh battery, 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.

5.4 Measurement Uncertainty

Items	Expanded Uncertainty (Confidence of 95%)
Conducted Emission (9kHz ~ 30MHz)	2.14 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	4.24 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	4.35 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	4.44 dB (k=2)
Radiated Emission (18GHz ~ 26.5GHz)	4.56 dB (k=2)

5.5 Laboratory Facility

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

● FCC - Registration No.: 817957

Shenzhen Zhongjian Nanfang Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012.

● IC - Registration No.: 10106A-1

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing 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 L6048

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

5.6 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,

Bao'an District, Shenzhen, Guangdong, China

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



Report No: CCISE161100703

5.7 Test Instruments list

Radia	Radiated Emission:									
Item	Test Equipment	Manufacturer	Manufacturer Model No. Inven		Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)				
1	3m SAC	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	08-23-2014	08-22-2017				
2	BiConiLog Antenna	SCHWARZBECK	VULB9163	CCIS0005	03-25-2016	03-25-2017				
3	Horn Antenna	SCHWARZBECK	BBHA9120D	CCIS0006	03-25-2016	03-25-2017				
4	Pre-amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	04-01-2016	03-31-2017				
5	Pre-amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	04-01-2016	03-31-2017				
6	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	04-01-2016	03-31-2017				
7	Horn Antenna	ETS-LINDGREN	3160	GTS217	04-01-2016	03-31-2017				
8	Spectrum analyzer 9k-30GHz Rohde & Schwarz		FSP30	CCIS0023	03-28-2016	03-28-2017				
9	EMI Test Receiver	Rohde & Schwarz	ESRP7	CCIS0167	03-28-2016	03-28-2017				
10	Loop antenna	Laplace instrument	RF300	EMC0701	04-01-2016	03-31-2017				
11	EMI Test Software	AUDIX	E3	N/A	N/A	N/A				
12	Coaxial Cable	N/A	N/A	CCIS0018	04-01-2016	03-31-2017				
13	Coaxial Cable	N/A	N/A	CCIS0020	04-01-2016	03-31-2017				

Cond	Conducted Emission:									
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)				
1	Shielding Room	ZhongShuo Electron	11.0(L)x4.0(W)x3.0(H)	CCIS0061	08-23-2014	08-22-2017				
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	03-24-2016	03-24-2017				
3	LISN	CHASE	MN2050D	CCIS0074	03-26-2016	03-26-2017				
4	Coaxial Cable	CCIS	N/A	CCIS0086	04-01-2016	03-31-2017				
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A				



6 Test results and Measurement Data

6.1 Antenna requirement

Standard requirement:

FCC Part 15 C Section 15.203 /247(c)

15.203 requirement:

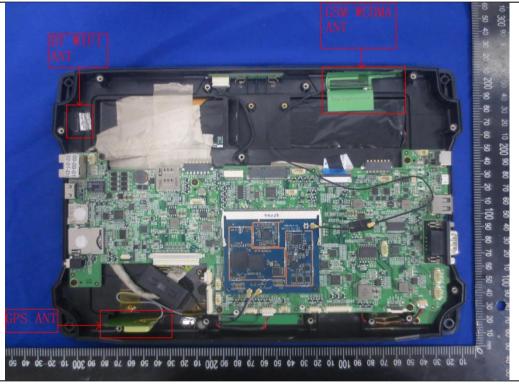
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

E.U.T Antenna:

The Bluetooth antenna is an integral antenna which permanently attached, and the best case gain of the antenna is 2.04 dBi.







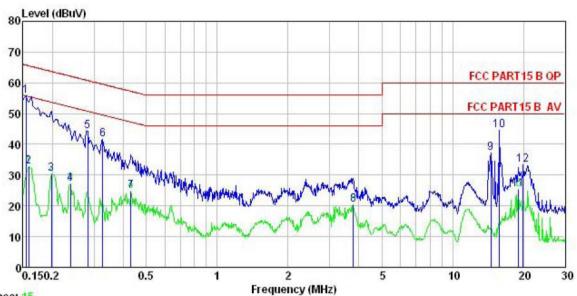
6.2 Conducted Emissions

Test Requirement:	FCC Part 15 C Section 1	5.207					
Test Method:	ANSI C63.4:2014						
Test Frequency Range:	150 kHz to 30 MHz						
Class / Severity:	Class B						
Receiver setup:	RBW=9 kHz, VBW=30 k	Hz, Sweep time=auto					
Limit:	Frequency range	Limit (dBuV)				
-	(MHz) Quasi-peak Average						
	0.15-0.5	66 to 56*	56 to 46*				
	0.5-5	46					
	5-30	60	50				
	* Decreases with the log	arithm of the frequency.					
Test setup:	Reference	e Plane					
	AUX Equipment Test table/Insulation plane Remark E.U.T. EMI Receiver Remark E.U.T. Equipment Under Test LISN. Line Impedence Stabilization Network Test table height=0.8m						
Test procedure:	 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 C63.4: 2014 on conducted measurement. 						
Test Instruments:	Refer to section 5.7 for details						
Test mode:	Bluetooth (Continuous transmitting) mode						
Test results:	Pass						



Measurement Data:

Line:



Trace: 15

Site

: CCIS Shielding Room : FCC PART15 B QP LISN LINE : Tablet PC : IMT-10 Plus Condition

EUT Model Test Mode : BT mode Power Rating : AC120/60Hz

Environment : Temp: 23 °C Huni:56% Atmos:101KPa

Test Engineer: MT Remark

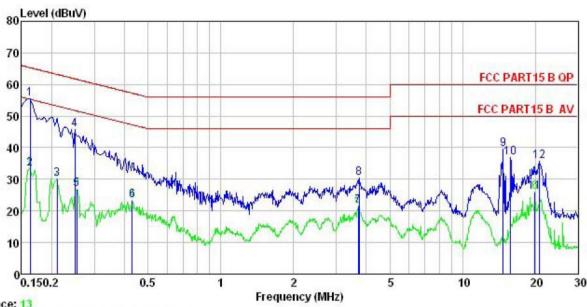
emark	: Freq	Read Level	LISN Factor	Cable Loss		Limit Line	Over Limit	Remark
-	MHz	dBu∜	dB	dB	dBu∜	dBu∜	dB	
1	0.154	44.74	0.14	10.78	55.66	65.78	-10.12	QP
2	0.158	21.91	0.14	10.78	32.83	55.56	-22.73	Average
1 2 3 4 5 6 7 8	0.198	19.48	0.15	10.76	30.39	53.71	-23.32	Average
4	0.238	16.31	0.15	10.75	27.21	52.17	-24.96	Average
5	0.282	33.44	0.16	10.74	44.34	60.76	-16.42	QP
6	0.327	30.77	0.18	10.73	41.68	59.53	-17.85	QP
7	0.431	13.70	0.24	10.73	24.67	47.24	-22.57	Average
8	3.779	9.22	0.34	10.90	20.46	46.00	-25.54	Average
	14.517	26.13		10.90	37.28	60.00	-22.72	QP
10	15.718	33.44	0.26	10.91	44.61	60.00	-15.39	QP
11	19.021	14.01	0.32	10.92	25.25	50.00	-24.75	Average
12	19.950	22.00	0.34	10.93	33.27	60.00	-26.73	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 + Cable Loss.



Neutral:



Trace: 13

Site

Condition

: CCIS Shielding Room : FCC PART15 B QP LISN NEUTRAL : Tablet PC : IMT-10 Plus EUT Model

Test Mode : BT mode

Power Rating: AC120/60Hz Environment: Temp: 23 C Huni:56% Atmos:101KPa

Test Engineer: MT

Re

Remark	:	_						
	1000	Read	LISN	Cable	2	Limit	Over	10285
	Freq	Level	Factor	Loss	Level	Line	Limit	Remark
	MHz	dBu∀	dB	₫B	dBu∜	dBu√	<u>dB</u>	
1	0.162	44.55	0.13	10.77	55.45	65.34	-9.89	QP
2	0.162	22.53	0.13	10.77	33.43	55.34	-21.91	Average
3	0.211	19.29	0.16	10.76	30.21	53.18	-22.97	Average
2 3 4 5 6 7 8 9	0.249	34.72	0.17	10.75	45.64	61.78	-16.14	QP
5	0.253	16.08	0.17	10.75	27.00	51.64	-24.64	Average
6	0.431	12.32	0.23	10.73	23.28			Average
7	3.700	10.25	0.33	10.90	21.48	46.00	-24.52	Average
8	3.740	19.17	0.33	10.90	30.40	56.00	-25.60	QP
9	14.750	28.41	0.26	10.90	39.57	60.00	-20.43	QP
10	15.801	25.85	0.26	10.91	37.02	60.00	-22.98	QP
11	19.950	14.81	0.28	10.93	26.02	50.00	-23.98	Average
12	20.814	24.46	0.27	10.92	35.65	60.00	-24.35	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 + Cable Loss.



6.3 Conducted Output Power

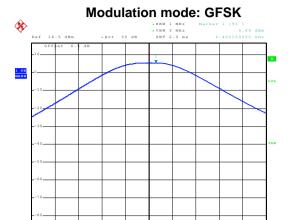
Test Requirement:	FCC Part 15 C Section 15.247 (b)(1)		
Test Method:	ANSI C63.10:2013 and DA00-705		
Receiver setup:	RBW=1MHz, VBW=3MHz, Detector=Peak (If 20dB BW ≤1 MHz) RBW=3MHz, VBW=10MHz, Detector=Peak (If 20dB BW > 1 MHz and < 3MHz)		
Limit:	125 mW(21 dBm)		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.7 for details		
Test mode:	Non-hopping mode		
Test results:	Pass		

Measurement Data:

GFSK mode						
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result			
Lowest	5.49	21.00	Pass			
Middle	5.81	21.00	Pass			
Highest	5.72	21.00	Pass			
	π/4-DQPSK ι	mode				
Test channel	Test channel Peak Output Power (dBm)		Result			
Lowest	Lowest 4.85		Pass			
Middle	Middle 5.28		Pass			
Highest 5.06		21.00	Pass			
	8DPSK mo	ode				
Test channel	Test channel Peak Output Power (dBm)		Result			
Lowest	4.94	21.00	Pass			
Middle	5.31	21.00	Pass			
Highest	Highest 5.25 21.00 Pass					

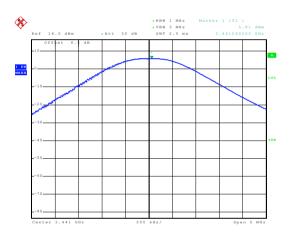


Test plot as follows:



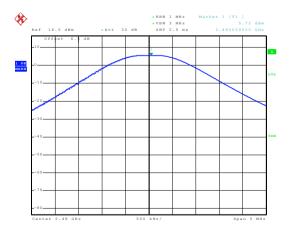
Date: 7.NOV.2016 10:33:46

Lowest channel



Date: 7.NOV.2016 10:34:07

Middle channel

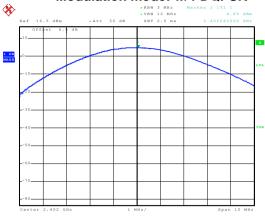


Date: 7.NOV.2016 10:34:25

Highest channel

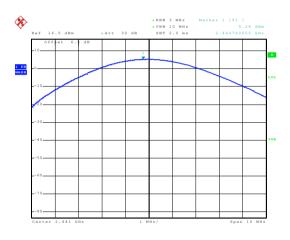






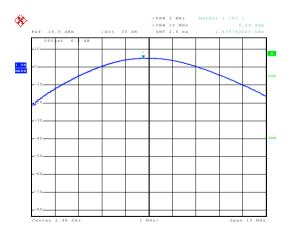
Date: 7.NOV.2016 10:35:53

Lowest channel



Date: 7.NOV.2016 10:35:28

Middle channel

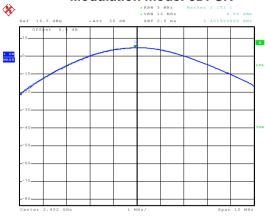


Date: 7.NOV.2016 10:36:38

Highest channel

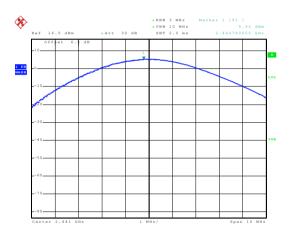






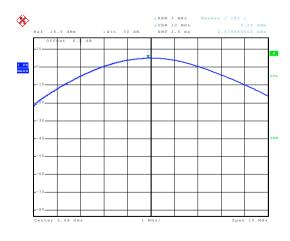
Date: 7.NOV.2016 10:37:51

Lowest channel



Date: 7.NOV.2016 10:37:27

Middle channel



Date: 7.NOV.2016 10:37:09

Highest channel



6.4 20dB Occupy Bandwidth

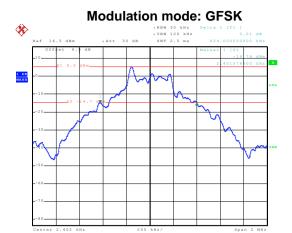
Test Requirement:	FCC Part 15 C Section 15.247 (a)(1)		
Test Method:	ANSI C63.10:2013 and DA00-705		
Receiver setup:	RBW=30 kHz, VBW=100 kHz, detector=Peak		
Limit:	NA		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.7 for details		
Test mode:	Non-hopping mode		
Test results:	Pass		

Measurement Data:

Test channel	20dB Occupy Bandwidth (kHz)			
rest channel	GFSK	π/4-DQPSK	8DPSK	
Lowest	824	1120	1168	
Middle	828	1124	1168	
Highest	832	1120	1168	

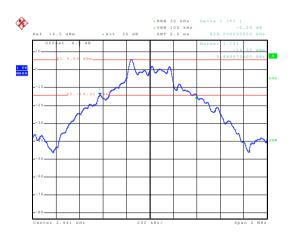


Test plot as follows:



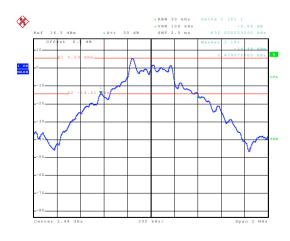
Date: 7.NOV.2016 10:56:03

Lowest channel



Date: 7.NOV.2016 10:57:13

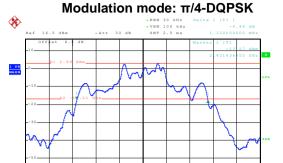
Middle channel



Date: 7.NOV.2016 10:58:33

Highest channel





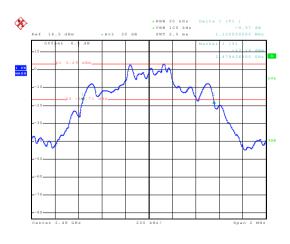
Date: 7.NOV.2016 10:53:47

Lowest channel



Date: 7.NOV.2016 10:52:21

Middle channel

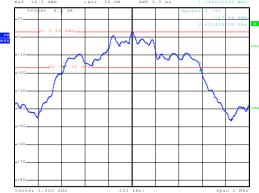


Date: 7.NOV.2016 10:51:07

Highest channel



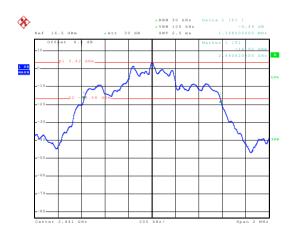




Date: 7.NOV.2016 10:45:46

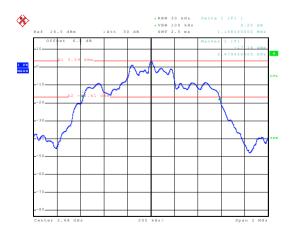
*

Lowest channel



Date: 7.NOV.2016 10:47:46

Middle channel



Date: 7.NOV.2016 10:49:02

Highest channel





6.5 Carrier Frequencies Separation

•					
Test Requirement:	FCC Part 15 C Section 15.247 (a)(1)				
Test Method:	ANSI C63.10:2013 and DA00-705				
Receiver setup:	RBW=100 kHz, VBW=300 kHz, detector=Peak				
Limit:	0.025MHz or 2/3 of the 20dB bandwidth (whichever is greater)				
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane				
Test Instruments:	Refer to section 5.7 for details				
Test mode:	Hopping mode				
Test results:	Pass				





Measurement Data:

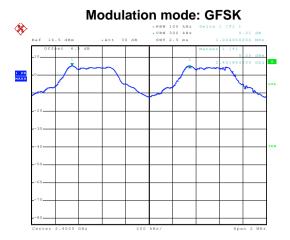
GFSK mode					
Test channel	Test channel Carrier Frequencies Separation (kHz)		Result		
Lowest	1004	554.67	Pass		
Middle	1004	554.67	Pass		
Highest	1000	554.67	Pass		
	π/4-DQPSK mo	de			
Test channel	Test channel Carrier Frequencies Separation (kHz)		Result		
Lowest	1004	749.33	Pass		
Middle	1004	749.33	Pass		
Highest	1004	749.33	Pass		
	8DPSK mode				
Test channel	Test channel Carrier Frequencies Separation (kHz)		Result		
Lowest	Lowest 1000		Pass		
Middle	1000	778.67	Pass		
Highest 1008 778.67 Pass			Pass		

Note: According to section 6.4

Mode	20dB bandwidth (kHz)	Limit (kHz)
Wode	(worse case)	(Carrier Frequencies Separation)
GFSK	832	554.67
π/4-DQPSK	1124	749.33
8DPSK	1168	778.67

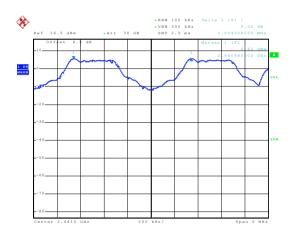


Test plot as follows:



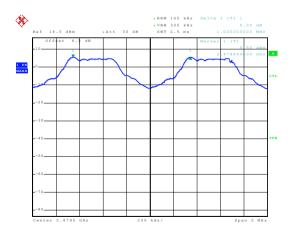
Date: 7.NOV.2016 11:35:00

Lowest channel



Date: 7.NOV.2016 11:35:50

Middle channel

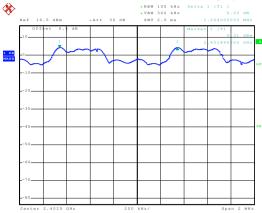


Date: 7.NOV.2016 11:39:28

Highest channel

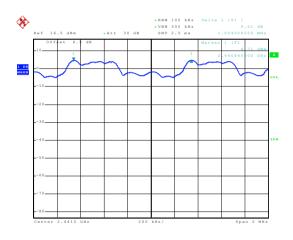






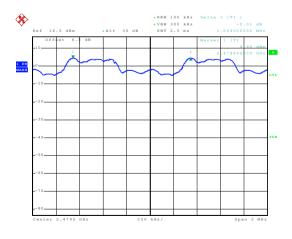
Date: 7.NOV.2016 11:54:38

Lowest channel



Date: 7.NOV.2016 11:53:22

Middle channel

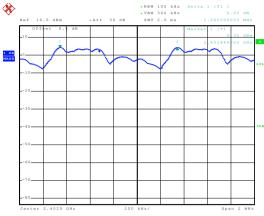


Date: 7.NOV.2016 11:52:01

Highest channel

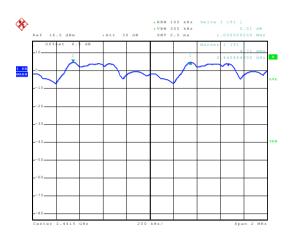






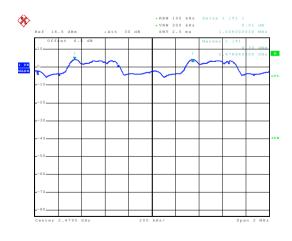
Date: 7.NOV.2016 11:56:30

Lowest channel



Date: 7.NOV.2016 11:57:36

Middle channel



Date: 7.NOV.2016 13:42:59

Highest channel



6.6 Hopping Channel Number

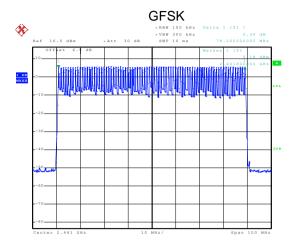
Test Requirement:	FCC Part 15 C Section 15.247 (a)(1)		
Test Method:	ANSI C63.10:2013 and DA00-705		
Receiver setup:	RBW=100 kHz, VBW=300 kHz, Frequency range=2400MHz-2483.5MHz, Detector=Peak		
Limit:	15 channels		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.7 for details		
Test mode:	Hopping mode		
Test results:	Pass		

Measurement Data:

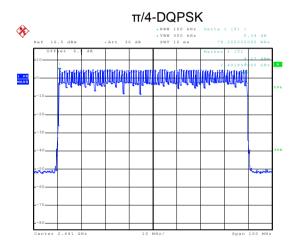
Mode	Hopping channel numbers	Limit	Result
GFSK, π/4-DQPSK, 8DPSK	79	15	Pass



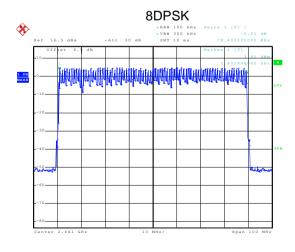
Test plot as follows:



Date: 7.NOV.2016 11:02:12



Date: 7.NOV.2016 11:07:23



Date: 7.NOV.2016 11:11:40



6.7 Dwell Time

Test Requirement:	FCC Part 15 C Section 15.247 (a)(1)		
Test Method:	ANSI C63.10:2013 and KDB DA00-705		
Receiver setup:	RBW=1 MHz, VBW=1 MHz, Span=0 Hz, Detector=Peak		
Limit:	0.4 Second		
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane		
Test Instruments:	Refer to section 5.7 for details		
Test mode:	Hopping mode		
Test results:	Pass		

Measurement Data (Worse case):

· · · · · · · · · · · · · · · · · · ·	<u> </u>			
Mode	Packet	Dwell time (second)	Limit (second)	Result
	DH1	0.12608		
GFSK	DH3	0.26976	0.4	Pass
	DH5	0.31317		
	2-DH1	0.12992		
π/4-DQPSK	2-DH3	0.26688	0.4	Pass
	2-DH5	0.31317		
	3-DH1	0.12736		
8DPSK	3-DH3	0.26880	0.4	Pass
	3-DH5	0.31147		

For GFSK, $\pi/4$ -DQPSK and 8DPSK:

The test period: T= 0.4 Second/Channel x 79 Channel = 31.6 s

DH1 time slot=0.394*(1600/(2*79))*31.6=126.08ms DH3 time slot=1.686*(1600/(4*79))*31.6=269.76ms DH5 time slot=2.936*(1600/(6*79))*31.6=313.17ms

2-DH1 time slot=0.406*(1600/(2*79))*31.6=129.92ms

2-DH3 time slot=1.668*(1600/ (4*79))*31.6=266.88ms

2-DH5 time slot=2.936*(1600/ (6*79))*31.6=313.17ms

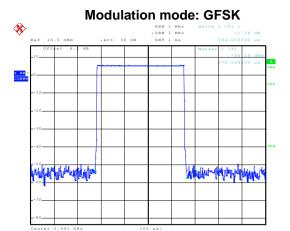
3-DH1 time slot=0.398*(1600/ (2*79))*31.6=127.36ms

3-DH3 time slot=1.680*(1600/ (4*79))*31.6=268.80ms

3-DH5 time slot=2.920*(1600/ (6*79))*31.6=311.47ms

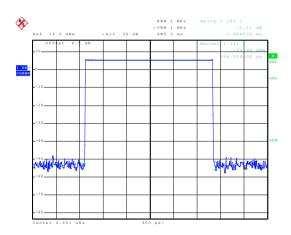


Test plot as follows:



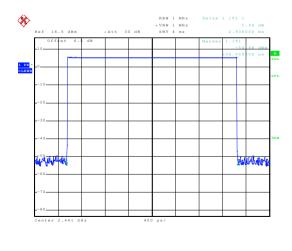
Date: 7.NOV.2016 11:17:20

DH1



Date: 7.NOV.2016 11:19:10

DH3

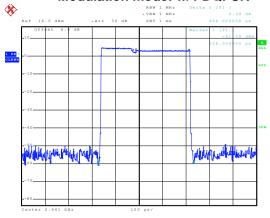


DH5

Date: 7.NOV.2016 11:19:59

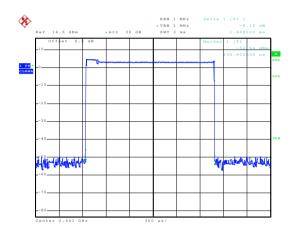






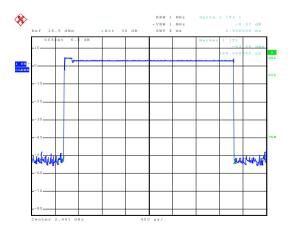
Date: 7.NOV.2016 11:20:35

2-DH1



Date: 7.NOV.2016 11:21:36

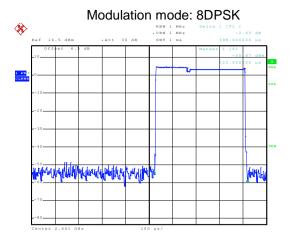
2-DH3



Date: 7.NOV.2016 11:27:07

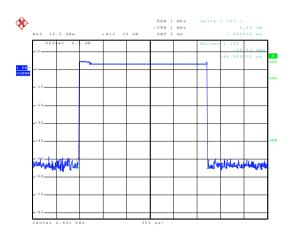
2-DH5





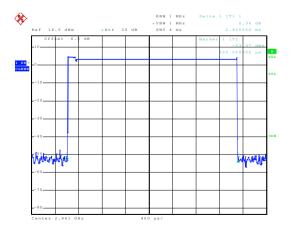
Date: 7.NOV.2016 11:28:56

3-DH1



Date: 7.NOV.2016 11:30:24

3-DH3



Date: 7.NOV.2016 11:31:19

3-DH5

Report No: CCISE161100703

6.8 Pseudorandom Frequency Hopping Sequence

Test Requirement: FCC Part 15 C Section 15.247 (a)(1) requirement:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

Alternatively. Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a Pseudorandom ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

EUT Pseudorandom Frequency Hopping Sequence

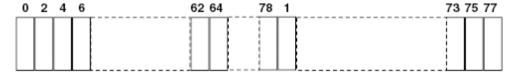
The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence: $2^9 1 = 511$ bits
- Longest sequence of zeros: 8 (non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An example of Pseudorandom Frequency Hopping Sequence as follow:



Each frequency used equally on the average by each transmitter.

The system receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals.



6.9 Band Edge

6.9.1 Conducted Emission Method

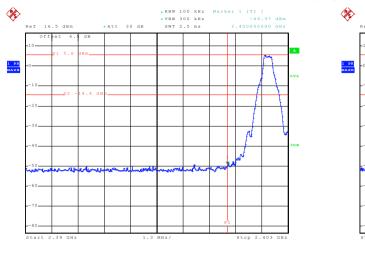
Test Requirement:	FCC Part 15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2013 and DA00-705
Receiver setup:	RBW=100 kHz, VBW=300 kHz, Detector=Peak
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that 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:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instruments:	Refer to section 5.7 for details
Test mode:	Non-hopping mode and hopping mode
Test results:	Pass

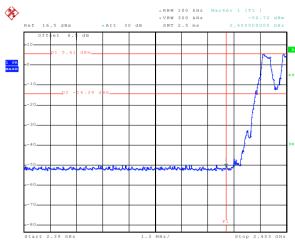


Test plot as follows:

GFSK

Lowest Channel

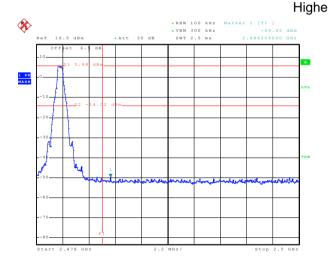


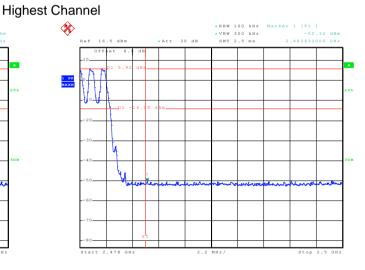


Date: 7.NOV.2016 16:28:46

No-hopping mode

Hopping mode





Date: 7.NOV.2016 16:43:09

Date: 7.NOV.2016 16:40:09

Date: 7.NOV.2016 16:32:57

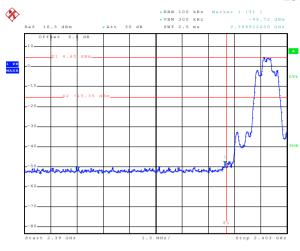
No-hopping mode

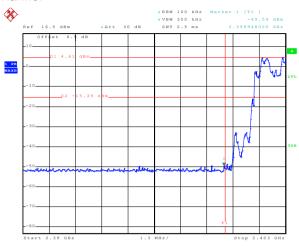
Hopping mode



$\pi/4$ -DQPSK

Lowest Channel



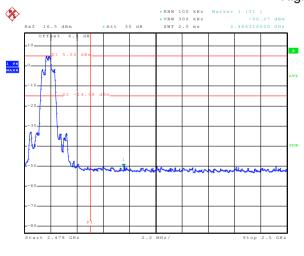


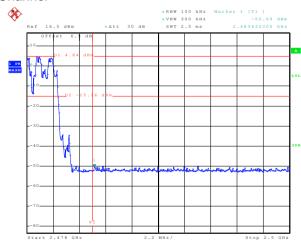
Date: 7.NOV.2016 16:26:33

No-hopping mode

Hopping mode

Highest Channel





Date: 7.NOV.2016 16:46:47

Date: 7.NOV.2016 16:49:46

Date: 7.NOV.2016 16:25:16

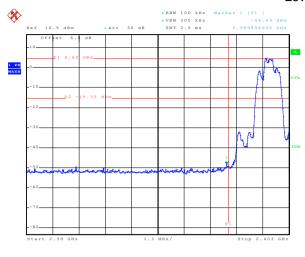
No-hopping mode

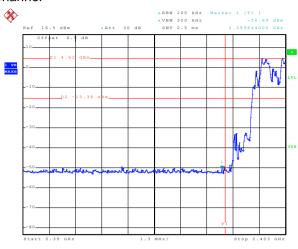
Hopping mode



8DPSK

Lowest Channel



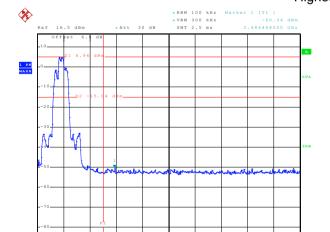


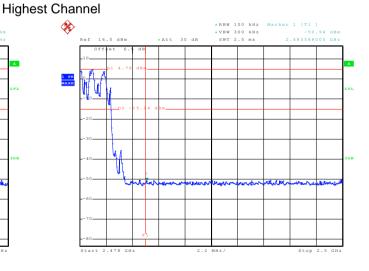
Date: 7.NOV.2016 16:17:48

Date: 7.NOV.2016 16:21:14

No-hopping mode

Hopping mode





Date: 7.NOV.2016 16:54:02

Date: 7.NOV.2016 16:52:55

No-hopping mode

Hopping mode



6.9.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C	Section 15.20	9 and 15.205		
Test Method:	ANSI C63.10:	2013			
Test Frequency Range:	2.3GHz to 2.50	GHz			
Test site:	Measurement	Distance: 3m			
Receiver setup:	Frequency	Detector	RBW	VBW	Remark
·	Al 4011	Peak	1MHz	3MHz	Peak Value
	Above 1GHz	RMS	1MHz	3MHz	Average Value
Limit:	Frequen		nit (dBuV/m @:		Remark
		-	54.00		Verage Value
	Above 10	SHZ	74.00		Peak Value
	MWWWW istance in the control of the	(Turntable)	Ground Reference Plane	n Antenna To	ower
Test Procedure:	ground at a determine the second at a determine the second antenna, whetower. 3. The antennating ground to dea horizontal at measureme 4. For each surand then the second and the rotal maximum results. The test-recults Specified Bases. If the emission limit specified EUT would a 10dB marginist.	3 meter camber of the position	er. The table wane highest radia away from the ed on the top of the ed from one meaximum value of the ed from 0 degrees set to Peak Maximum Hold EUT in peak measted one by one herwise the enested one by one highest radiations of the edested one by one highest radiations of the edested one by one highest radiations of the edested one by one way from the edested one wa	as rotated 36 ation. interference of a variable-leter to four most the field stantenna are as arranged as from 1 met ees to 360 d Detect Function Mode. Indeed and the phissions that the using pear	e-receiving height antenna eters above the rength. Both e set to make the to its worst case er to 4 meters egrees to find the etion and dB lower than the beak values of the did not have ak, quasi-peak or
Test Instruments:	Refer to sectio				
Test mode:	Non-hopping m				
Test results:	Passed				
Pomork:	•				

Remark:

- 1. During the test, pre-scan the GFSK, $\pi/4$ -DQPSK, 8DPSK, and all data were shown in report.
- 2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.

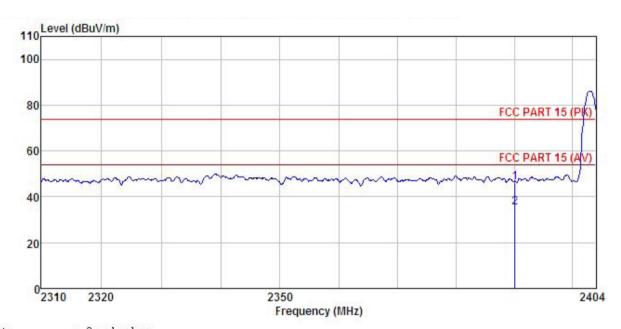




GFSK mode

Test channel: Lowest

Horizontal:



: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : Tablet PC : INT-10 Plus Site Condition

EUT Model Test mode : DH1-L Mode Power Rating : AC120V/60Hz Environment : Temp:25.5°C

Huni:55%

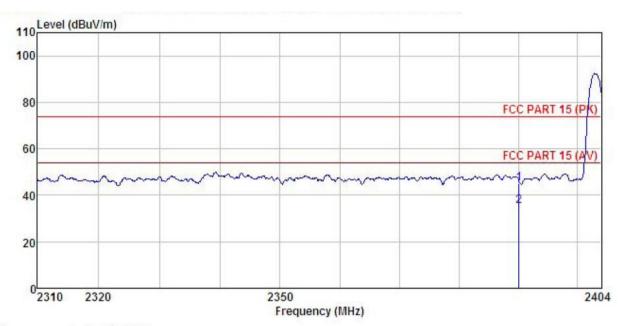
Test Engineer: MT

REMARK

	Freq	ReadAntenna Cable P Freq Level Factor Loss F								
	MHz	dBu₹	dB/m	<u>d</u> B	<u>ab</u>	dBuV/m	dBuV/m	<u>dB</u>		
	2390.000									
2	2390.000	7.04	23.68	4.69	0.00	35.41	54.00	-18.59	Average	







Site : 3m chamber

: FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : Tablet PC : IMT-10 Plus Condition

EUT Model Test mode : DH1-L Mode Power Rating: AC120V/60Hz Environment: Temp:25.5°C Huni:55% Test Engineer: MT REMARK:

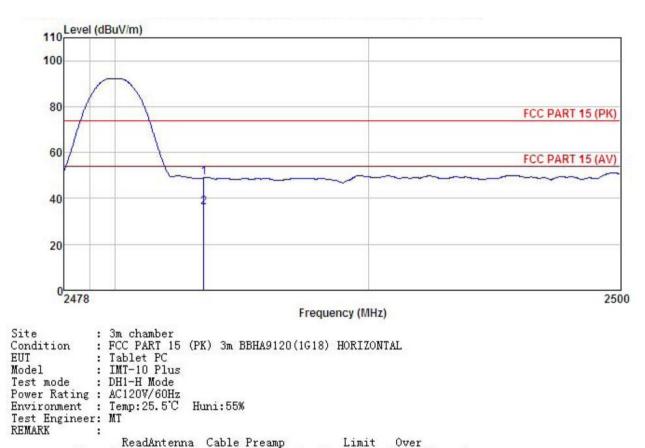
	Freq		Antenna Factor						Remark	
-	MHz	dBu₹	$-\overline{dB}/\overline{m}$	dB	<u>dB</u>	dBuV/m	dBuV/m	dB		_
	2390.000 2390.000									





Test channel: Highest

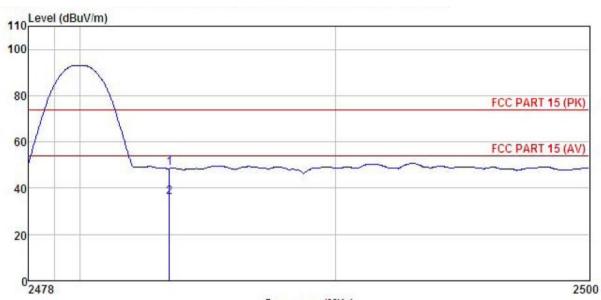
Horizontal:



EMAK	K :	Read	Antenna	Cable	Preamn		Limit	Over	
	Freq		Factor						
	MHz	dBu₹	dB/m	<u>dB</u>	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1	2483.500								
2	2483.500	7.77	23.70	4.81	0.00	36.28	54.00	-17.72	Average







Frequency (MHz)

Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : Tablet PC : IMT-10 Plus Condition

EUT Model Test mode : DH1-H Mode Power Rating: AC120V/60Hz Environment: Temp:25.5°C Test Engineer: MT

Huni:55%

REMARK

	Freq		Antenna Factor					
	MHz	dBu₹		 <u>dB</u>	$\overline{dBuV/m}$	dBuV/m	<u>dB</u>	
1 2	2483.500 2483.500							

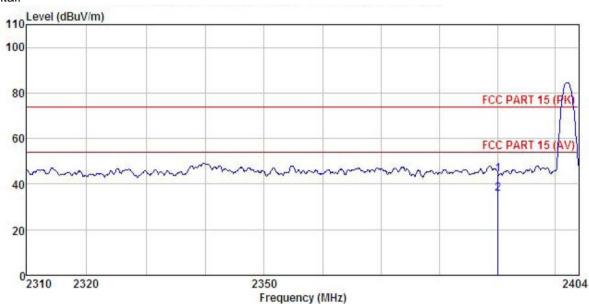




π/4-DQPSK mode

Test channel: Lowest

Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : Tablet PC Condition

EUT Model : IMT-10 Plus Test mode : 2DH1-L Mode Power Rating : AC120V/60Hz Environment : Temp:25.5°C

Huni:55%

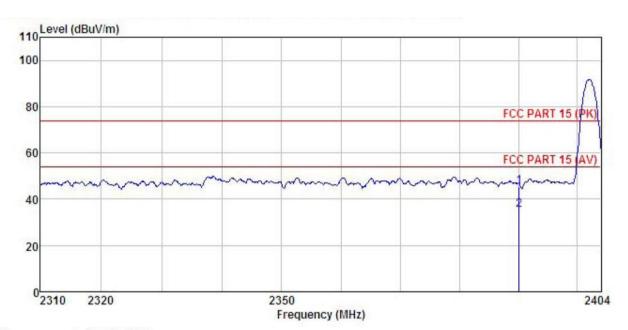
Test Engineer: MT REMARK :

1 2

9.1	KK :								
		Read	Ant enna	Cable	Preamp		Limit	Over	
	Free	l Level	Factor	Loss	Factor	Level	Line	Limit	Remark
	MH	dBuV	dB/m	dB	<u>d</u> B	dBuV/m	dBu√/m	<u>dB</u>	
	2390.000	15.79	23.68	4.69	0.00	44.16	74.00	-29.84	Peak
	2390.000	7.25	23.68	4.69	0.00	35.62	54.00	-18.38	Average







Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : Tablet PC : IMT-10 Plus Condition

EUT Model Test mode : 2DH1-L Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%

Test Engineer: MT REMARK :

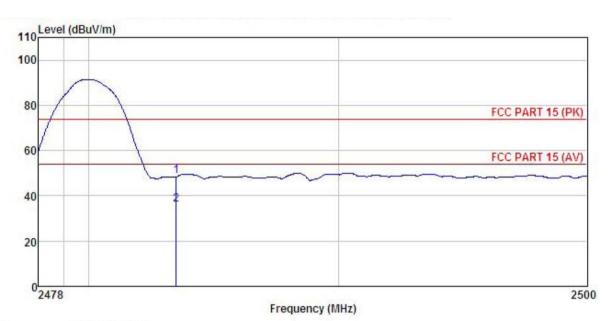
	Freq		Antenna Factor					Remark
	MHz	dBu₹	<u>dB</u> /m	 <u>dB</u>	dBu√/m	$\overline{dBuV/m}$	<u>dB</u>	
1 2	2390.000 2390.000							





Test channel: Highest

Horizontal:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Condition

EUT : Tablet PC
Model : IMT-10 Plus
Test mode : 2DH1-H Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C

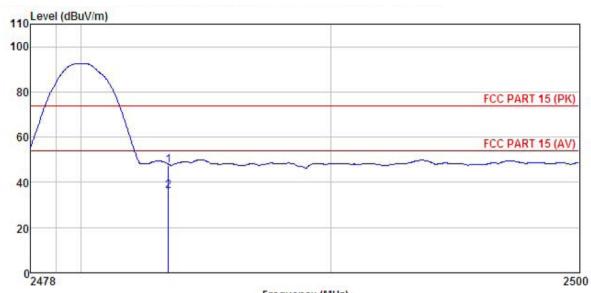
Huni:55%

Test Engineer: MT REMARK :

nirar.	T		Antenna							
	rreq	rever	Factor	LOSS	ractor	rever	Line	Limit	Kemark	
19	MHz	dBu∜	─dB/m	dB	dB	dBuV/m	$\overline{dBuV/m}$	<u>dB</u>		
1	2483.500	20.23	23.70	4.81	0.00	48.74	74.00	-25.26	Peak	
2	2483.500	7.63	23.70	4.81	0.00	36.14	54.00	-17.86	Average	







Frequency (MHz)

Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
EUT : Tablet PC
Model : IMT-10 Plus
Test mode : 2DH1-H Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: MT

Test Engineer: MT REMARK :

المالاد			Antenna Factor						Remark
	MHz	dBu₹	dB/m	āB	<u>d</u> B	dBuV/m	dBuV/m	āB	
1 2	2483.500 2483.500	19.09 7.59	23.70 23.70	4.81 4.81	0.00 0.00	47.60 36.10	74.00 54.00	-26.40 -17.90	Peak Average

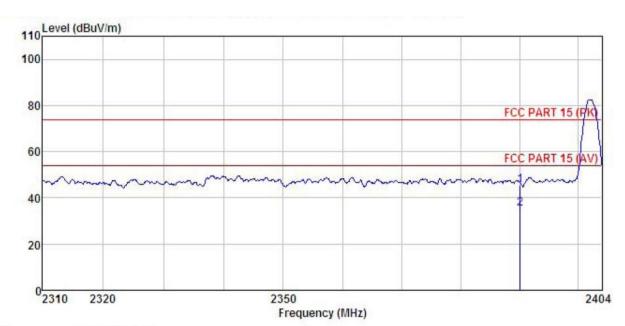




8DPSK mode

Test channel: Lowest

Horizontal:



: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : Tablet PC Site Condition

EUT Model : IMT-10 Plus
Test mode : 3DH1-L Mode
Power Rating : AC120V/60Hz

Huni:55% Environment : Temp: 25.5°C

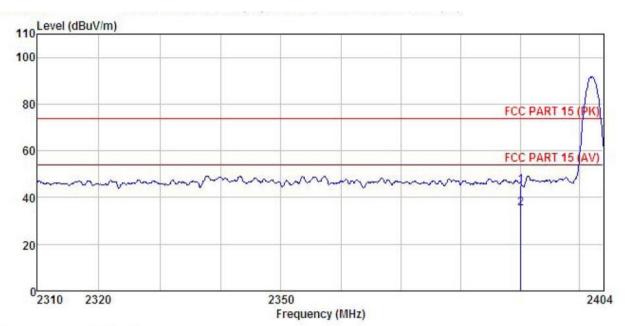
Test Engineer: MT

REMARK

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Antenna Factor						
,	MHz	dBu∜	<u>dB</u> /m	<u>d</u> B	<u>d</u> B	dBuV/m	dBuV/m	dB	 -
1 2	2390.000 2390.000								







: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : Tablet PC Site Condition

EUT : IMT-10 Plus lest mode : 3DH1-L Mode Power Rating : AC120V/60Hz Environment : Temp:25.5°C Test Engineer: MT REMARK : : IMT-10 Plus

Huni:55%

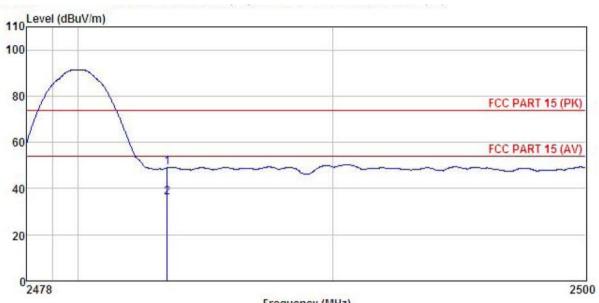
	Freq	ReadAntenna Freq Level Factor					Limit Line		Remark
	MHz	dBu∜	$\overline{dB/m}$	dB	<u>dB</u>	dBuV/m	dBuV/m	dB	
1 2	2390.000 2390.000								





Test channel: Highest

Horizontal:



Frequency (MHz)

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : Tablet PC : IMT-10 Plus Condition

EUT Model Test mode : 3DH1-H Mode

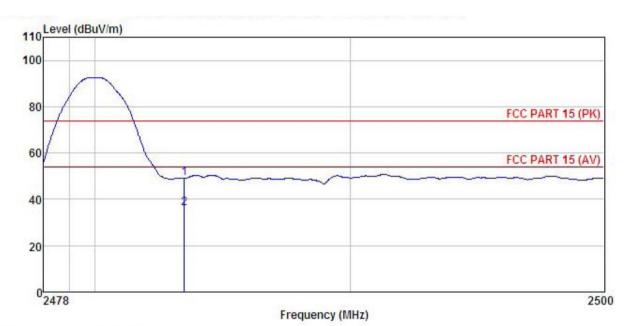
Power Rating : AC120V/60Hz Environment : Temp:25.5°C Huni:55%

Test Engineer: MT REMARK :

	Freq		Antenna Factor						
	MHz	dBu₹	dB/m	<u>dB</u>	dB	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2483.500 2483.500								







Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : Tablet PC Condition

: Tablet PC

Model : IMT-10 Plus
Test mode : 3DH1-H Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C
Test Engineer: MT
REMARK

Huni:55%

ונטונט		Read	Ant enna	Cable	Preamo		Limit	Over	
	Freq		Factor						Remark
	MHz	dBu₹	<u>dB</u> /m	dB	<u>dB</u>	dBuV/m	dBu√/m	<u>dB</u>	
1	2483.500	20.59	23.70	4.81	0.00	49.10	74.00	-24.90	Peak
2	2483.500	7.56	23.70	4.81	0.00	36.07	54.00	-17.93	Average



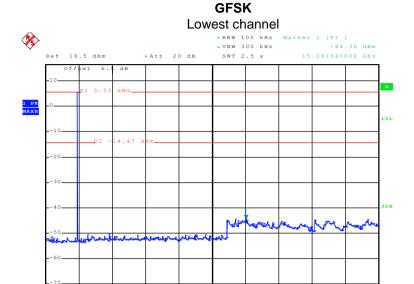
6.10 Spurious Emission

6.10.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)						
Test Method:	ANSI C63.10:2013 and DA00-705						
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:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane						
Test Instruments:	Refer to section 5.7 for details						
Test mode:	Non-hopping mode						
Test results:	Pass						

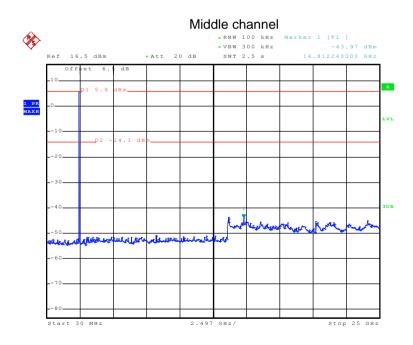


Test plot as follows:



Date: 7.NOV.2016 17:15:02

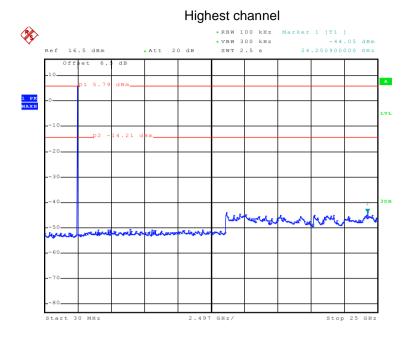
30MHz~25GHz



Date: 7.NOV.2016 17:13:12

30MHz~25GHz





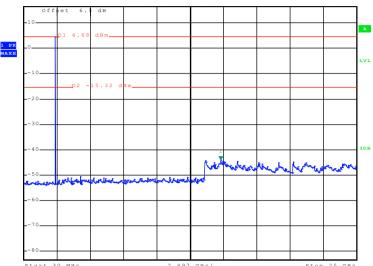
Date: 7.NOV.2016 17:12:34

30MHz~25GHz



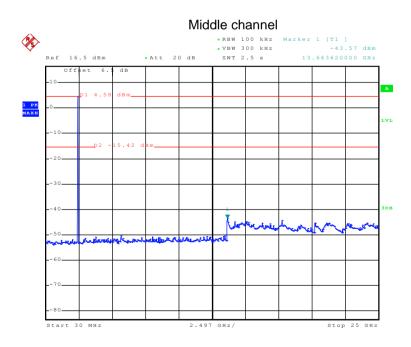
π/4-DQPSK





Date: 7.NOV.2016 17:05:34

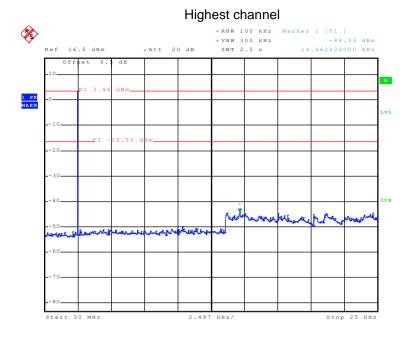
30MHz~25GHz



Date: 7.NOV.2016 17:09:15

30MHz~25GHz

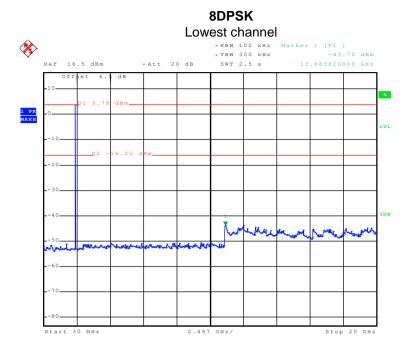




Date: 7.NOV.2016 17:10:47

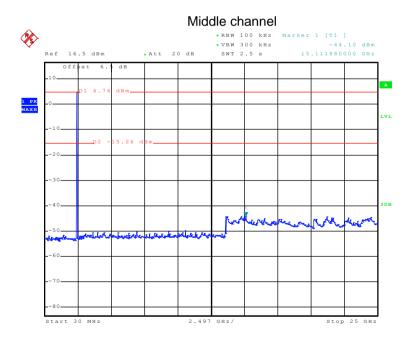
30MHz~25GHz





Date: 7.NOV.2016 17:04:06

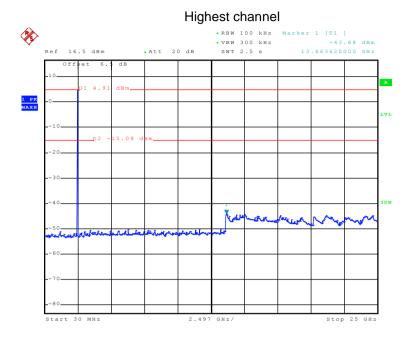
30MHz~25GHz



Date: 7.NOV.2016 17:01:19

30MHz~25GHz





Date: 7.NOV.2016 16:58:32

30MHz~25GHz





6.10.2 Radiated Emission Method

6.10.2 Radiated Emission M	etnoa									
Test Requirement:	FCC Part 15 C Section 15.209									
Test Method:	ANSI C63.10: 2013									
Test Frequency Range:	9 kHz to 25 GHz									
Test site:	Measurement Distance: 3m									
Receiver setup:	Frequency Detector RBW VBW Remark									
	30MHz-1GHz	Quasi-pe	eak	120kHz	300kF	Ηz	Quasi-peak Value			
	Above 1GHz	Peak		1MHz	3MH	z	Peak Value			
	Above Toriz	RMS		1MHz	3MH	z	Average Value			
Limit:	Frequenc	y .	Lim	it (dBuV/m @	@3m)		Remark			
	30MHz-88N	ИHz		40.0		C	Quasi-peak Value			
	88MHz-216	MHz		43.5		C	Quasi-peak Value			
	216MHz-960	MHz		46.0		C	Quasi-peak Value			
	960MHz-10	GHz		54.0		C	Quasi-peak Value			
	Above 1GI	Hz –		54.0			Average Value			
	7,5070 101	12		74.0			Peak Value			
Test setup:	Above 1GHz 54.0 Average Value						Search Antenna Test eiver			



Report No: CCISE161100703

Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz) /1.5m(above 1GHz) above the ground at a 3 meter chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
	The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
	 The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
	4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
	The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 5.7 for details
Test mode:	Non-hopping mode
Test results:	Pass

Remark:

- 1. During the test, pre-scan the GFSK, $\pi/4$ -DQPSK, 8DPSK modulation, and found the GFSK modulation is the worst case.
- 2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.
- 3. 9 kHz to 30 MHz is noise floor, so only shows the data of above 30MHz in this report.

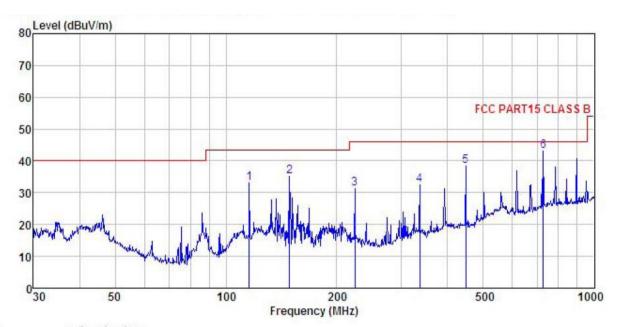




Measurement data:

Below 1GHz

Vertical:



: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M3G) VERTICAL Site Condition

EUT : Tablet PC
Model : IMT-10 Plus
Test mode : BT Mode
Power Rating : AC120V/60Hz

Environment : Temp: 25.5°C Huni: 55%

Test Engineer: MT

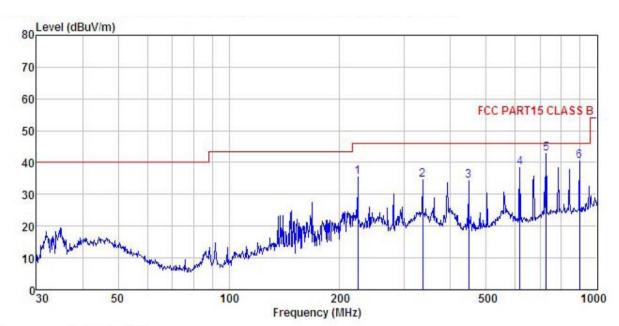
REMARK

	Freq	ReadAnte Freq Level Fac		LAntenna Cable Factor Loss			Limit Line	Over Limit	Remark
-	MHz	dBu∜	dB/m	<u>d</u> B	<u>ab</u>	$\overline{dBuV/m}$	dBu√/m	<u>dB</u>	
1	115.726	49.22	11.17	2.12	29.42	33.09	43.50	-10.41	QP
2	148.963	51.18	10.77	2.51	29.23	35.23	43.50	-8.27	QP
3	223.733	45.72	11.53	2.84	28.69	31.40	46.00	-14.60	QP
2 3 4	336.035	44.06	13.76	3.05	28.53	32.34	46.00	-13.66	QP
5	447.982	47.92	16.19	3.20	28.87	38.44	46.00	-7.56	QP
6	726.805	47.45	19.84	4.28	28.57	43.00	46.00	-3.00	QP





Horizontal:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M3G) HORIZONTAL Condition

: Tablet PC : IMT-10 Plus : BT Mode EUT Model Test mode Power Rating : AC120V/60Hz Environment : Temp:25.5C

Huni: 55%

Test Engineer: MT REMARK :

	Freq			Cable Preamp Loss Factor Le				Over Limit	Remark
-	MHz	dBu∜	<u>dB</u> /m	<u>dB</u>	dB	dBuV/m	dBuV/m	dB	
1	223.733	49.87	11.53	2.84	28.69	35.55	46.00	-10.45	QP
2	336.035	46.32	13.76	3.05	28.53	34.60	46.00	-11.40	QP
2	447.982	43.72	16.19	3.20	28.87	34.24	46.00	-11.76	QP
4	616.372	44.75	18.59	3.91	28.88	38.37	46.00	-7.63	QP
5	726.805	47.36	19.84	4.28	28.57	42.91	46.00	-3.09	QP
6	896.997	42.98	21.55	3.74	27.89	40.38	46.00	-5.62	QP



Above 1GHz:

Te	st channel:		Lowest		Lev	vel:	Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
4804.00	48.42	35.99	6.80	41.81	49.40	74.00	-24.60	Vertical	
4804.00	47.98	35.99	6.80	41.81	48.96	74.00	-25.04	Horizontal	
Te	st channel:	•	Low	/est	Lev	vel:	Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
4804.00	39.25	35.99	6.80	41.81	40.23	54.00	-13.77	Vertical	
4804.00	38.36	35.99	6.80	41.81	39.34	54.00	-14.66	Horizontal	

Te	st channel:		Middle		Le	vel:	Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
4882.00	48.51	36.38	6.86	41.84	49.91	74.00	-24.09	Vertical	
4882.00	48.26	36.38	6.86	41.84	49.66	74.00	-24.34	Horizontal	
Te	st channel:	•	Middle		Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
4882.00	39.14	36.38	6.86	41.84	40.54	54.00	-13.46	Vertical	
4882.00	39.67	36.38	6.86	41.84	41.07	54.00	-12.93	Horizontal	

Te	st channel:		Highest		Le	vel:	Peak		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
4960.00	49.02	36.71	6.91	41.87	50.77	74.00	-23.23	Vertical	
4960.00	48.71	36.71	6.91	41.87	50.46	74.00	-23.54	Horizontal	
Te	st channel:		Highest		Level:		Average		
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
4960.00	39.15	36.71	6.91	41.87	40.90	54.00	-13.10	Vertical	
4960.00	38.62	36.71	6.91	41.87	40.37	54.00	-13.63	Horizontal	

Remark

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