FCC REPORT

Applicant: SHENZHEN CHUANGXINQI COMMUNICATION CO., LTD

Rm 501B, Block A1, kexing Science Park, Keyuan North Rd.,

Address of Applicant: Science and Technology Park, Nanshan, Shenzhen,

Guangdong, China

Equipment Under Test (EUT)

Product Name: Smart Phone

Model No.: V8,V8C,V8Y,V8G,V8A,G551,G551A,G551C,G551Y,G551G

Trade mark: iNew

FCC ID: 2ACI4-V8

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

Date of sample receipt: 11 Jul., 2014

Date of Test: 11 Jul., to 6 Aug., 2014

Date of report issued: 7 Aug., 2014

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	7 Aug., 2014	Original

Sera Ximy
Report Clerk 7 Aug., 2014 Prepared by: Date:

Reviewed by: 7 Aug., 2014 Date:

Project Engineer



3 Contents

		F	Page
1		COVER PAGE	1
2		VERSION	2
3		CONTENTS	:
4		TEST SUMMARY	
5		GENERAL INFORMATION	5
	5.1	1 Client Information	c
	5.2		
	5.3	3 TEST MODE	
	5.4	4 Laboratory Facility	7
	5.5	5 LABORATORY LOCATION	7
	5.6	6 TEST INSTRUMENTS LIST	8
6		TEST RESULTS AND MEASUREMENT DATA	9
	6.1	1 Antenna requirement	(
	6.2	·	
	6.3		
	6.4		
	6.5	5 CARRIER FREQUENCIES SEPARATION	21
	6.6	6 HOPPING CHANNEL NUMBER	26
	6.7		
	6.8		
	6.9		
		6.9.1 Conducted Emission Method	
		6.9.2 Radiated Emission Method	
	6.1	10 Spurious Emission	
		6.10.2 Radiated Emission Method	
7		TEST SETUP PHOTO	61
8		EUT CONSTRUCTIONAL DETAILS	62



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:	SHENZHEN CHUANGXINQI COMMUNICATION CO., LTD
Address of Applicant:	Rm 501B, Block A1, kexing Science Park, Keyuan North Rd., Science and Technology Park, Nanshan, Shenzhen, Guangdong, China
Manufacturer:	SHENZHEN CHUANGXINQI COMMUNICATION CO., LTD
Address of Manufacturer:	Rm 501B, Block A1, kexing Science Park, Keyuan North Rd., Science and Technology Park, Nanshan, Shenzhen, Guangdong, China

5.2 General Description of E.U.T.

Product Name:	Smart Phone
Model No.:	V8,V8C,V8Y,V8G,V8A,G551,G551A,G551C,G551Y,G551G
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:	-1.1 dBi
Power supply:	Rechargeable Li-ion Battery DC3.8V-2400mAh
AC adapter:	Model: ASUC37a-055090 Input:100-240V AC,50/60Hz 0.3A Output:5.5V DC MAX900mA
Remark:	item No.: V8,V8A,V8C,V8Y,V8G,G551,G551A,G551C,G551Y,G551G were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being the appearance of different colors and the battery cover different mark



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.

The sample was placed 0.8m 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 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.

5.5 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



5.6 Test Instruments list

Radiated Emission:								
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)		
1	3m Semi- Anechoic Chamber	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	June 09 2014	June 08 2015		
2	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	May 25 2014	May 24 2015		
3	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	May 25 2014	May 24 2015		
4	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
5	Coaxial Cable	CCIS	N/A	CCIS0016	Apr. 01 2014	Mar. 31 2015		
6	Coaxial Cable	CCIS	N/A	CCIS0017	Apr. 01 2014	Mar. 31 2015		
7	Coaxial cable	CCIS	N/A	CCIS0018	Apr. 01 2014	Mar. 31 2015		
8	Coaxial Cable	CCIS	N/A	CCIS0019	Apr. 01 2014	Mar. 31 2015		
9	Coaxial Cable	CCIS	N/A	CCIS0087	Apr. 01 2014	Mar. 31 2015		
10	Amplifier(10kHz- 1.3GHz)	HP	8447D	CCIS0003	Apr. 01 2014	Mar. 31 2015		
11	Amplifier(1GHz- 18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	June 09 2014	June 08 2015		
12	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	Apr. 01 2014	Mar. 31 2015		
13	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2014	Mar. 29 2015		
14	Printer	HP	HP LaserJet P1007	N/A	N/A	N/A		
15	Positioning Controller	UC	UC3000	CCIS0015	N/A	N/A		
16	Spectrum analyzer 9k-30GHz Rohde & Schwarz		FSP	CCIS0023	May. 25 2014	May. 24 2015		
17	EMI Test Receiver	Rohde & Schwarz	ESPI	CCIS0022	Apr 01 2014	Mar. 31 2015		
18	Loop antenna	Laplace instrument	RF300	EMC0701	Aug. 12 2013	Aug. 11 2014		
19	Universal radio communication tester	Rhode & Schwarz	CMU200	CCIS0069	May. 25 2014	May. 24 2015		
20	Signal Analyzer	Rohde & Schwarz	FSIQ3	CCIS0088	May. 25 2014	May. 24 2015		

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	June 09 2014	June 08 2015				
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	May 25 2014	May 24 2015				
3	LISN	CHASE	MN2050D	CCIS0074	Apr 01 2014	Mar. 31 2015				
4	Coaxial Cable	CCIS	N/A	CCIS0086	Apr. 01 2014	Mar. 31 2015				
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 Part15 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 -1.1 dBi.





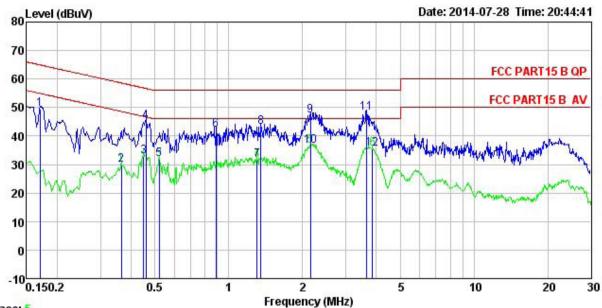
6.2 Conducted Emissions

 - Conductor Emissions							
Test Requirement:	FCC Part15 C Section 15.207						
Test Method:	ANSI C63.4:2003						
Test Frequency Range:	150 kHz to 30 MHz						
Class / Severity:	Class B						
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Swee	ep time=auto					
Limit:	Frequency range (MHz)	Limit (d	lBuV)				
		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 of the frequency.						
Test setup:	Reference Plane	•					
	AUX Filter AC power Equipment E.U.T Test table/Insulation plane 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: 2003 on conducted measurement. 						
Test Instruments:	Refer to section 5.7 for details						
Test mode:	Bluetooth (Continuous transmittin	g) mode					
Test results:	Pass						

Measurement Data



Line:



Trace: 5

Site

: CCIS Shielding Room : FCC PART15 B QP LISN LINE Condition

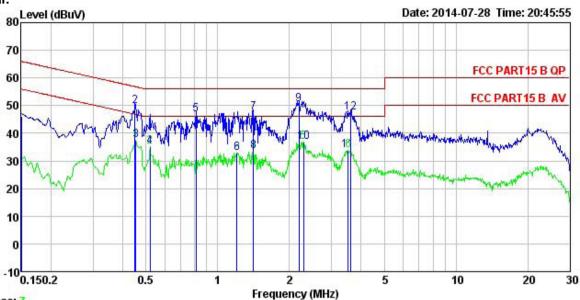
: 569RF Job. no : Smart Phone EUT Model : V8 Test Mode : BT mode
Power Rating : AC 120V/60Hz
Environment : Temp: 23 °C Huni:56% Atmos:101KPa
Test Engineer: Carey

Remark

Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
MHz	dBu∀	dB	₫B	dBu₹	dBu₹	dB	
0.170	38.50	0.27	10.77	49.54	64.94	-15.40	QP
0.365	18.73	0.27	10.73	29.73	48.61	-18.88	Average
0.449	21.83	0.29	10.74	32.86	46.89	-14.03	Average
0.459	34.13	0.29	10.75	45.17	56.71	-11.54	QP
0.521	20.94	0.28	10.76	31.98	46.00	-14.02	Average
0.885	31.08	0.24	10.84	42.16	56.00	-13.84	QP
1.303	20.48	0.25	10.90	31.63	46.00	-14.37	Average
1.352	32.08	0.25	10.91	43.24	56.00	-12.76	QP
2.155	36.00	0.26	10.95	47.21	56.00	-8.79	QP
2.155	25.16	0.26	10.95	36.37	46.00	-9.63	Average
3.642	36.90	0.28	10.90	48.08	56.00	-7.92	QP
3.860	24.21	0.28	10.89	35.38	46.00	-10.62	Average
	MHz 0. 170 0. 365 0. 449 0. 459 0. 521 1. 385 1. 362 2. 155 2. 155 3. 642	MHz dBuV 0.170 38.50 0.365 18.73 0.449 21.83 0.459 34.13 0.521 20.94 0.885 31.08 1.303 20.48 1.352 32.08 2.155 36.00 2.155 25.16 3.642 36.90	MHz dBuV dB 0.170 38.50 0.27 0.365 18.73 0.27 0.449 21.83 0.29 0.459 34.13 0.29 0.521 20.94 0.28 0.885 31.08 0.24 1.352 32.08 0.25 2.155 36.00 0.26 2.155 25.16 0.26 3.642 36.90 0.28	MHz dBuV dB dB 0.170 38.50 0.27 10.77 0.365 18.73 0.27 10.73 0.449 21.83 0.29 10.74 0.459 34.13 0.29 10.75 0.521 20.94 0.28 10.76 0.885 31.08 0.24 10.84 1.303 20.48 0.25 10.90 1.352 32.08 0.25 10.91 2.155 36.00 0.26 10.95 2.155 25.16 0.26 10.95 3.642 36.90 0.28 10.90	MHz dBuV dB dB dBuV 0.170 38.50 0.27 10.77 49.54 0.365 18.73 0.27 10.73 29.73 0.449 21.83 0.29 10.74 32.86 0.459 34.13 0.29 10.75 45.17 0.521 20.94 0.28 10.76 31.98 0.885 31.08 0.24 10.84 42.16 1.303 20.48 0.25 10.90 31.63 1.352 32.08 0.25 10.91 43.24 2.155 36.00 0.26 10.95 47.21 2.155 25.16 0.26 10.95 36.37 3.642 36.90 0.28 10.90 48.08	MHz dBuV dB dB dBuV dBuV 0.170 38.50 0.27 10.77 49.54 64.94 0.365 18.73 0.27 10.73 29.73 48.61 0.449 21.83 0.29 10.74 32.86 46.89 0.459 34.13 0.29 10.75 45.17 56.71 0.521 20.94 0.28 10.76 31.98 46.00 0.885 31.08 0.24 10.84 42.16 56.00 1.303 20.48 0.25 10.90 31.63 46.00 1.352 32.08 0.25 10.91 43.24 56.00 2.155 36.00 0.26 10.95 47.21 56.00 2.155 25.16 0.26 10.95 36.37 46.00 3.642 36.90 0.28 10.90 48.08 56.00	MHz dBuV dB dB dBuV dBuV dB dB



Neutral:



Trace: 7

Site

: CCIS Shielding Room : FCC PART15 B QP LISN NEUTRAL Condition

569RF Job. no Smart Phone EUT Model : V8 Test Mode : BI mode Power Rating : AC 120V/60Hz

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

Test Engineer: Carey

Remark

Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark
MHz	dBu∀		dВ	dBu₹	dBu∀	<u>dB</u>	
0.150	35.11	0.25	10.78	46.14	66.00	-19.86	QP
0.449	38.70	0.27	10.74	49.71	56.89	-7.18	QP
0.454	26.57	0.27	10.74	37.58	46.80	-9.22	Average
0.521	24.23	0.28	10.76	35.27	46.00	-10.73	Average
0.813	35.70	0.20	10.81	46.71	56.00	-9.29	QP
1.203	21.86	0.24	10.89	32.99	46.00	-13.01	Average
1.411	36.43	0.25	10.91	47.59	56.00	-8.41	QP
1.411	22.31	0.25	10.91	33.47	46.00	-12.53	Average
2.190	39.20	0.29	10.95	50.44	56.00	-5.56	QP
2.297	25.64	0.29	10.95	36.88	46.00	-9.12	Average
3.528	22.63	0.29	10.90	33.82	46.00	-12.18	Average
3.623	36.30	0.29	10.90	47.49	56.00	-8.51	QP
	MHz 0.150 0.449 0.454 0.521 0.813 1.203 1.411 1.411 2.190 2.297 3.528	Freq Level MHz dBuV 0.150 35.11 0.449 38.70 0.454 26.57 0.521 24.23 0.813 35.70 1.203 21.86 1.411 36.43 1.411 22.31 2.190 39.20 2.297 25.64 3.528 22.63	Freq Level Factor MHz dBuV dB 0.150 35.11 0.25 0.449 38.70 0.27 0.454 26.57 0.27 0.521 24.23 0.28 0.813 35.70 0.20 1.203 21.86 0.24 1.411 36.43 0.25 1.411 22.31 0.25 1.411 22.31 0.25 1.411 22.31 0.25 2.190 39.20 0.29 2.297 25.64 0.29 3.528 22.63 0.29	MHz dBuV dB dB 0.150 35.11 0.25 10.78 0.449 38.70 0.27 10.74 0.454 26.57 0.27 10.74 0.521 24.23 0.28 10.76 0.813 35.70 0.20 10.81 1.203 21.86 0.24 10.89 1.411 36.43 0.25 10.91 1.411 22.31 0.25 10.91 2.190 39.20 0.29 10.95 2.297 25.64 0.29 10.95 3.528 22.63 0.29 10.90	MHz dBuV dB dB dB dBuV 0.150 35.11 0.25 10.78 46.14 0.449 38.70 0.27 10.74 49.71 0.454 26.57 0.27 10.74 37.58 0.521 24.23 0.28 10.76 35.27 0.813 35.70 0.20 10.81 46.71 1.203 21.86 0.24 10.89 32.99 1.411 36.43 0.25 10.91 47.59 1.411 22.31 0.25 10.91 33.47 2.190 39.20 0.29 10.95 50.44 2.297 25.64 0.29 10.95 36.88 3.528 22.63 0.29 10.90 33.82	MHz dBuV dB dB dBuV dBuV 0.150 35.11 0.25 10.78 46.14 66.00 0.449 38.70 0.27 10.74 49.71 56.89 0.454 26.57 0.27 10.74 37.58 46.80 0.521 24.23 0.28 10.76 35.27 46.00 0.813 35.70 0.20 10.81 46.71 56.00 1.203 21.86 0.24 10.89 32.99 46.00 1.411 36.43 0.25 10.91 47.59 56.00 1.411 22.31 0.25 10.91 33.47 46.00 2.190 39.20 0.29 10.95 50.44 56.00 2.297 25.64 0.29 10.95 36.88 46.00 3.528 22.63 0.29 10.90 33.82 46.00	Freq Level Factor Loss Level Line Limit MHz dBuV dB dB dBuV dBuV dB

- 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 Part15 C Section 15.247 (b)(3)	
Test Method:	ANSI C63.4:2003 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	

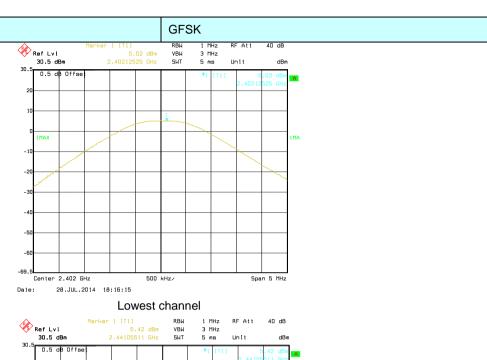
Measurement Data

- Mcasarcinent Bata	Measurement Data				
	GFSK mode				
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result		
Lowest	5.02	21.00	Pass		
Middle	5.42	21.00	Pass		
Highest	5.48	21.00	Pass		
	π/4-DQPSK ι	mode			
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result		
Lowest	4.47	21.00	Pass		
Middle	5.03	21.00	Pass		
Highest	5.03	21.00	Pass		
	8DPSK mode				
Test channel	Peak Output Power (dBm)	Limit (dBm)	Result		
Lowest	4.58	21.00	Pass		
Middle	5.03	21.00	Pass		
Highest	5.14 21.00 Pass		Pass		



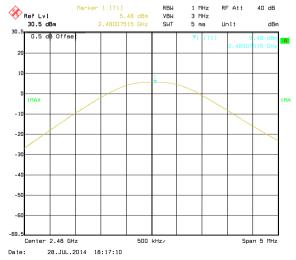
Test plot as follows:

Modulation mode:





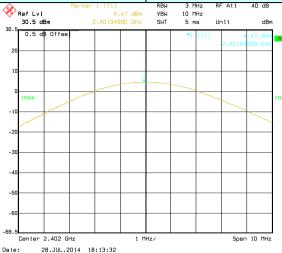
Middle channel



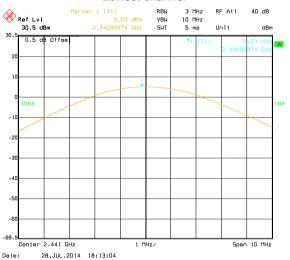
Highest channel



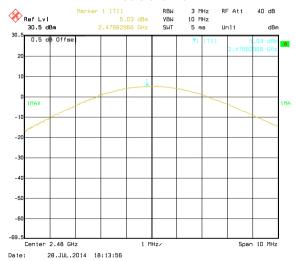
Modulation mode: π/4-DQPSK



Lowest channel



Middle channel



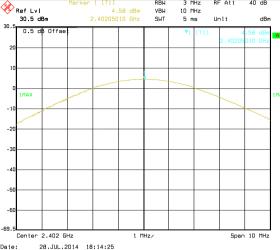
Highest channel



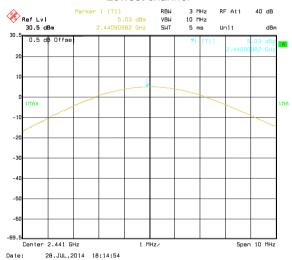
 Modulation mode:
 8DPSK

 Ref Lv1
 4.58 dBm
 RBJ
 3 Mtz
 RF Att
 4D dB

 30.5 dBm
 2.40205010 GHz
 SHT
 5 ms
 Unit
 dBm



Lowest channel



Middle channel



Highest channel



6.4 20dB Occupy Bandwidth

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)	
Test Method:	ANSI C63.4:2003 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	

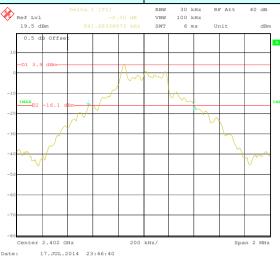
Measurement Data

Test showed	20dB Occupy Bandwidth (kHz)		
Test channel	GFSK	π/4-DQPSK	8DPSK
Lowest	841.68	1130.26	1178.36
Middle	841.68	1130.26	1174.35
Highest	841.68	1130.26	1174.35

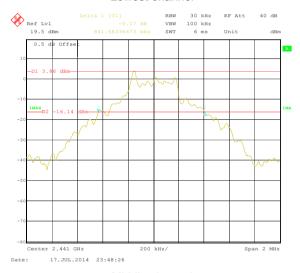
Test plot as follows:



Modulation mode: GFSK



Lowest channel



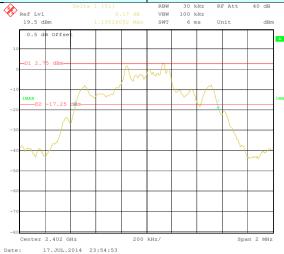
Middle channel



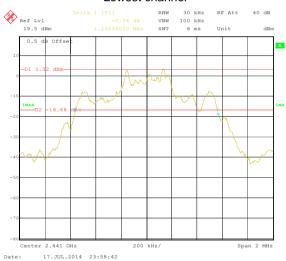
Highest channel



Modulation mode: π/4-DQPSK



Lowest channel



Middle channel



Highest channel





Lowest channel



Middle channel



Highest channel



6.5 Carrier Frequencies Separation

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)	
Test Method:	ANSI C63.4:2003 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



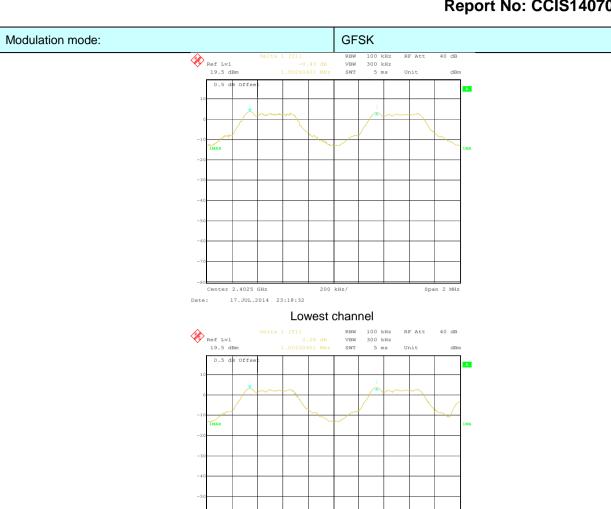
GFSK mode			
Test channel	Carrier Frequencies Separation (kHz)	Limit (kHz)	Result
Lowest	1002	561.12	Pass
Middle	1002	561.12	Pass
Highest	1002	561.12	Pass
	π/4-DQPSK mod	le	
Test channel	Carrier Frequencies Separation (kHz)	Limit (kHz)	Result
Lowest	1002	753.51	Pass
Middle	1002	753.51	Pass
Highest	1002	758.51	Pass
8DPSK mode			
Test channel	Carrier Frequencies Separation (kHz)	Limit (kHz)	Result
Lowest	1002	785.57	Pass
Middle	1002	785.57	Pass
Highest	1002 785.57		Pass

Note: According to section 6.4

Mode	20dB bandwidth (kHz) (worse case)	Limit (kHz) (Carrier Frequencies Separation)
GFSK	841.68	561.12
π/4-DQPSK	1130.26	753.51
8DPSK	1178.36	785.57

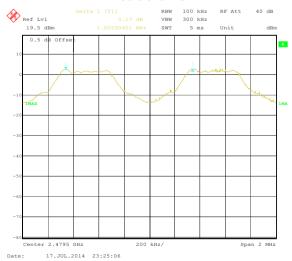
Test plot as follows:







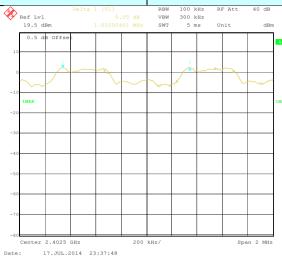
17.JUL.2014 23:22:10



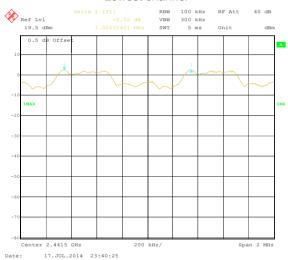
Highest channel



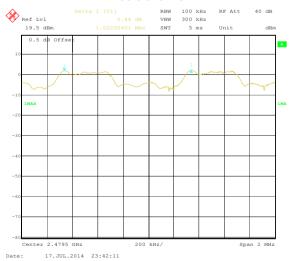
Modulation mode: π/4-DQPSK



Lowest channel



Middle channel



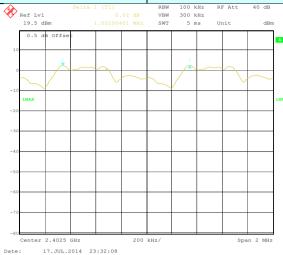
Highest channel



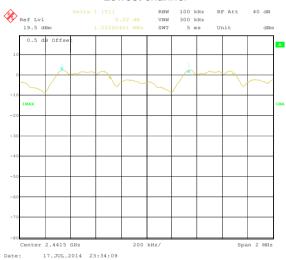
Modulation mode:

8DPSK

Delta 1 [T1] RBW 100 kHz RF Att 40 dB



Lowest channel



Middle channel



Highest channel



6.6 Hopping Channel Number

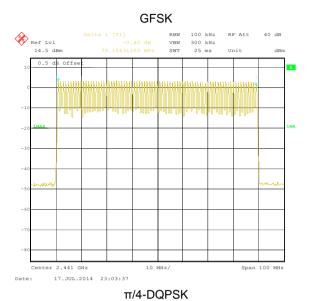
Test Requirement:	FCC Part15 C Section 15.247 (a)(1)	
Test Method:	ANSI C63.4:2003 and DA00-705	
Receiver setup:	RBW=100 kHz, VBW=300 kHz, Frequency range=2400MHz-2483.5MHz, Detector=Peak	
Limit:	15 channels	
Test setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane	
Test Instruments:	Refer to section 5.7 for details	
Test mode:	Hopping mode	
Test results:	Pass	

Measurement Data:

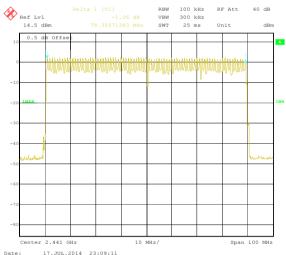
Mode	Hopping channel numbers	Limit	Result
GFSK, π/4-DQPSK, 8DPSK	79	15	Pass



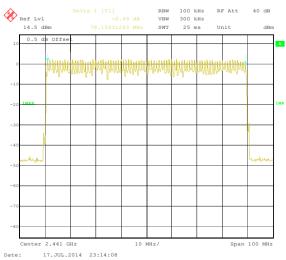








8DPSK





6.7 Dwell Time

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)	
Test Method:	ANSI C63.4:2003 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)

Mode	Packet	Dwell time (second)	Limit (second)	Result
	DH1	0.12320		
GFSK	DH3	0.26640	0.4	Pass
	DH5	0.31211		
	2-DH1	0.12768		
π /4-DQPSK	2-DH3	0.26544	0.4	Pass
	2-DH5	0.31381		
	3-DH1	0.12832		
8DPSK	3-DH3	0.26544	0.4	Pass
	3-DH5	0.31125		

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

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

DH1 time slot=0.385*(1600/(2*79))*31.6=123.20ms DH3 time slot=1.665*(1600/(4*79))*31.6=266.40ms DH5 time slot=2.926(1600/(6*79))*31.6=312.11ms

2-DH1 time slot=0.403*(1600/(2*79))*31.6=128.96ms

2-DH3 time slot=1.689*(1600/ (4*79))*31.6=270.24ms

2-DH5 time slot=2.942(1600/ (6*79))*31.6=313.81ms

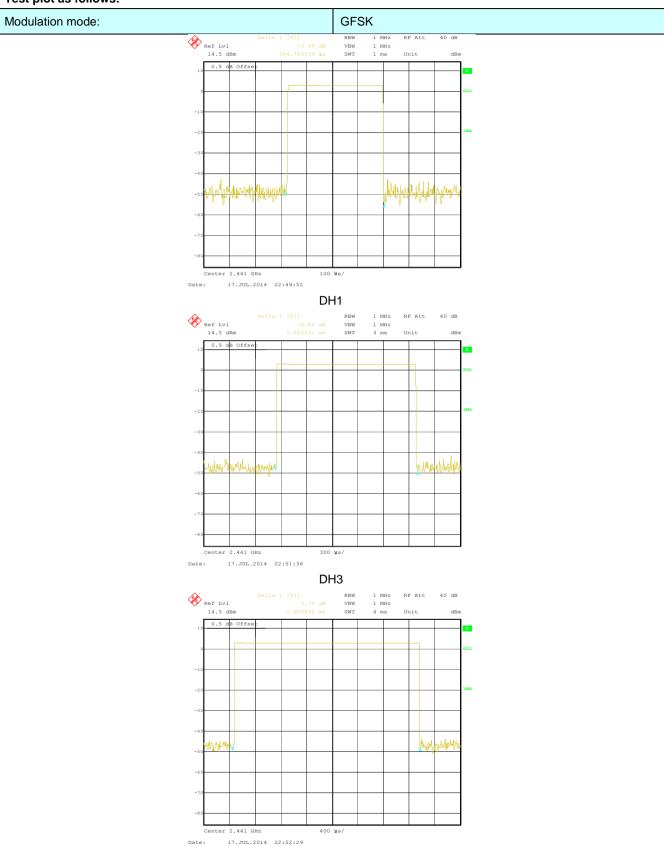
3-DH1 time slot=0.401*(1600/ (2*79))*31.6=128.32ms

3-DH3 time slot=1.659*(1600/ (4*79))*31.6=265.44ms

3-DH5 time slot=2.918(1600/ (6*79))*31.6=311.25ms

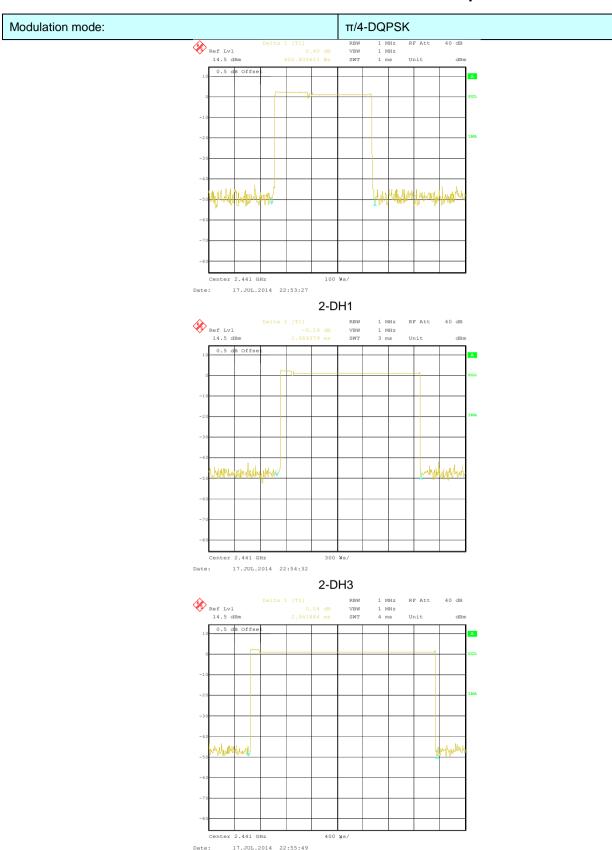


Test plot as follows:



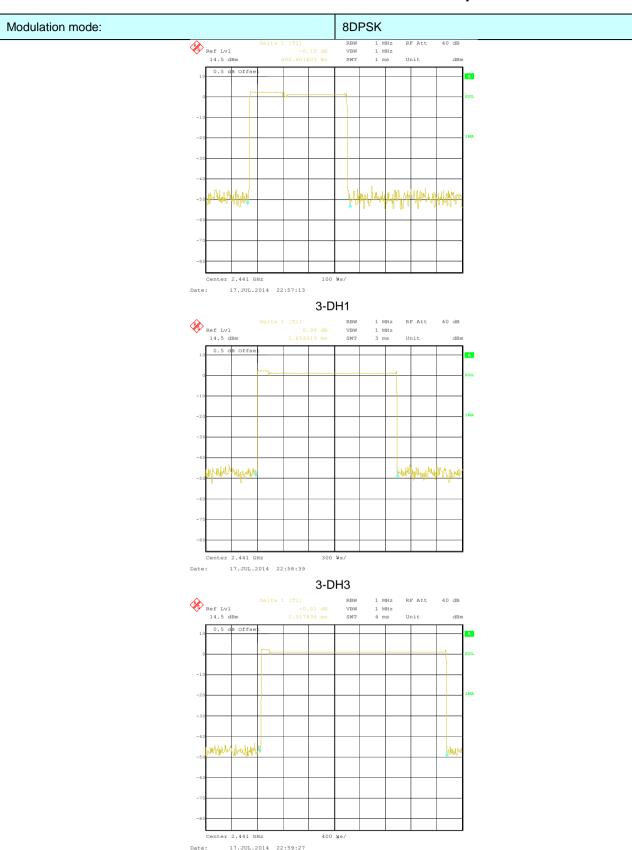
DH5





2-DH5





3-DH5



6.8 Pseudorandom Frequency Hopping Sequence

Test Requirement: FCC Part15 C Section 15.247 (a)(1) requirement:

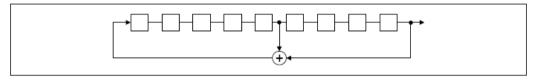
Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

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

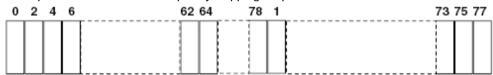
The pseudorandom sequence may be generated in a nine-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first ONE of 9 consecutive ONEs; i.e. the shift register is initialized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

- Number of shift register stages: 9
- Length of pseudo-random sequence: 29 -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

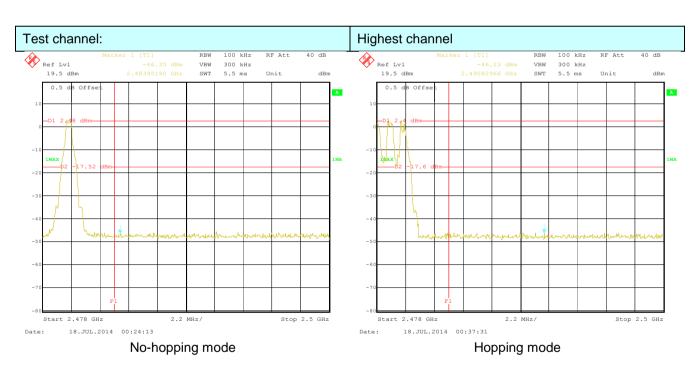
6.9.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)	
Test Method:	ANSI C63.4:2003 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:

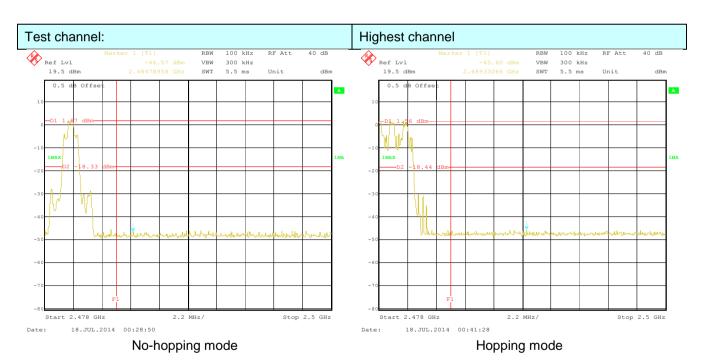




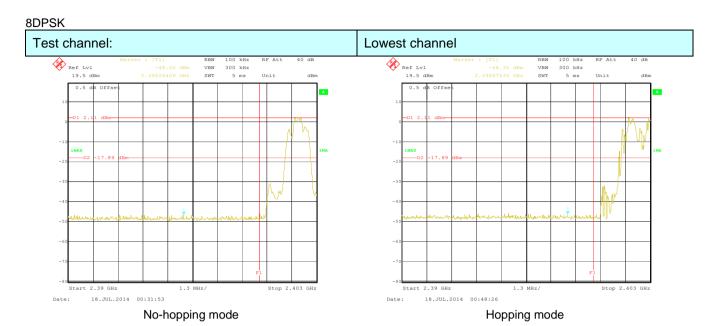


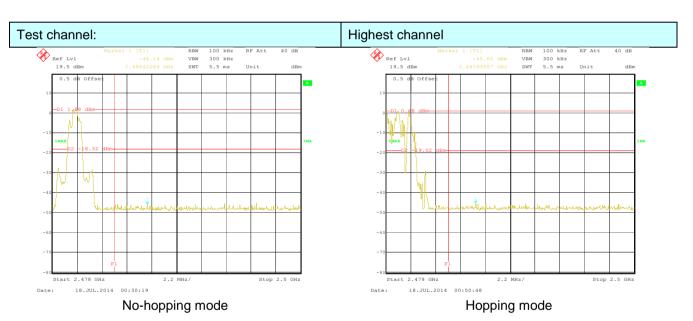














6.9.2 Radiated Emission Method

Test Requirement:	FCC Part15 C Se	ection 15.209 an	d 15.205								
Test Method:	ANSI C63.4: 200	3									
Test Frequency Range:	2.3GHz to 2.5GH	z									
Test site:	Measurement Dis	stance: 3m									
Receiver setup:	Frequency	Detector	RBW	VBW	Remark						
·	Above 1GHz	Peak	1MHz	3MHz	Peak Value						
	Above 1GHz	Peak 1MHz 10Hz Average Value									
Limit:	Frequency Limit (dBuV/m @3m) Remark 54.00 Average Value										
	Above 1GHz 54.00 Average Value 74.00 Peak Value										
Test setup:	74.00 Peak Value Antenna Tower Horn Antenna Spectrum Analyzer Turn Table Amplifier										
Test Procedure:	at a 3 meter of position of the position of the 2. The EUT was was mounted 3. The antenna hadetermine the polarizations of 4. For each suspitive antenna was turned from 5. The test-receil Bandwidth with 6. If the emission specified, therefore the ported of the position of the ported of the position of	amber. The table highest radiation set 3 meters awon the top of a value of the antenna are exted emission, was tuned to height of the antenna to extend emission, was tuned to heigh of the antenna was tuned to heigh of the emission of the EU of the EU of the EU of the testing could be otherwise the emission.	e was rotated and any from the invariable-height rom one meter of the field strees to make the EUT was gots from 1 me 360 degrees to Peak Ded Mode. T in peak mode stopped and hissions that diak, quasi-peak	terference-reantenna towar to four meterength. Both the measure arranged to find the materect Function was 10dB the peak valid not have 1	ers above the ground to horizontal and vertical ement. its worst case and then ers and the rota table eximum reading.						
Test Instruments:	Refer to section 5										
Test mode:	Non-hopping mod	de									
Test results:	Passed										
Pamark:	-										

Remark:

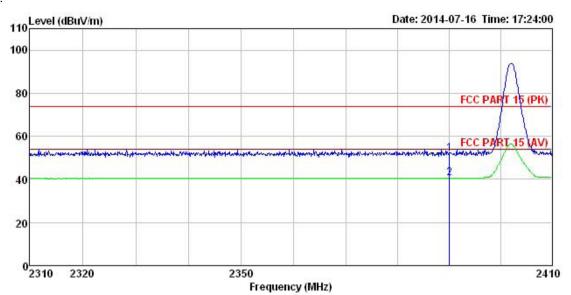
- 1. During the test, pre-scan the GFSK, $\pi/4$ -DQPSK, 8DPSK, and all data were shown in report.
- 2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.



GFSK mode

Test channel: Lowest

Horizontal:



Site Condition : 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : 569RF

Pro

EUT : Smart Phone
Model : V8
Test mode : BT-DH1-L
Power Rating : AC 120V/60Hz
Environment : Temp: 25.5°C Huni: 55%

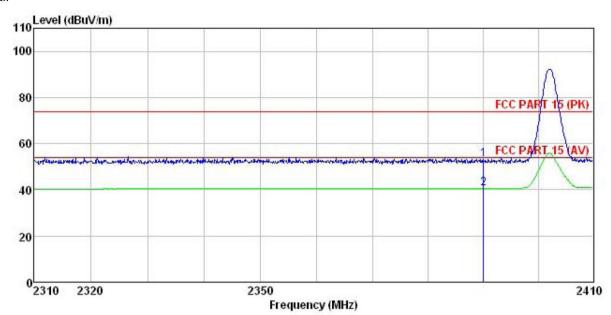
Test Engineer: A-bomb

REMARK

	§ (5)	ReadAntenna Freq Level Factor					Limit Line	Over Limit	Remark
5	MHz	dBu₹	<u>dB</u> /m	<u>dB</u>	<u>dB</u>	dBuV/m	dBuV/m	<u>d</u> B	
1 2	2390.000 2390.000								Peak Average



Vertical:



Site

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

: 569RF Pro : Smart Phone

Model : V8

Test mode : BT-DH1-L

Power Rating : AC 120V/60Hz

Environment : Temp:25.5°C Huni:55%

Test Engineer: A-bomb

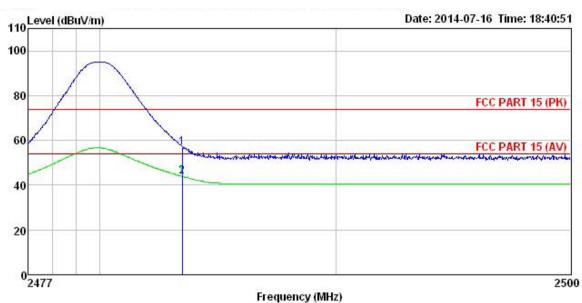
REMARK :

LINITA			ntenna Factor				Limit Line		
	MHz	dBu∀	-dB/m	<u>dB</u>	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2390.000 2390.000						74.00 54.00		Peak Average



Test channel: Highest

Horizontal:



Site

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

Pro 569RF

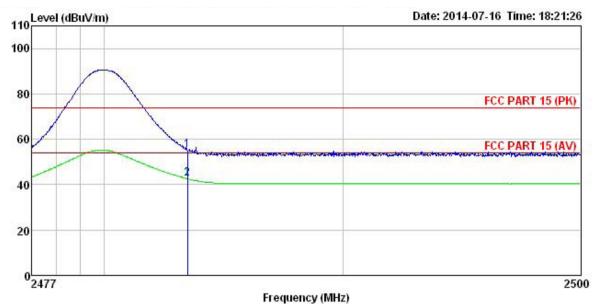
EUT Smart Phone Model : V8 Test mode : V8
Test mode : BT-DH1-H
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%

RE

est EMAL	Engineer:	A-bomb							
			Antenna Factor				Limit Line		Remark
	MHz	dBu∜	dB/m	₫B	dB	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2483.500 2483.500					56.87 43.81			Peak Average



Vertical:



Site

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

: 569RF

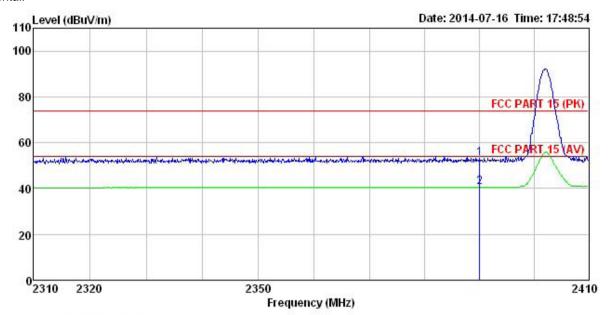
Pro EUT : Smart Phone : V8 : v8
Test mode : BT-DH1-H
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: A-bomb
REMARK :

LINEAL C	B		Antenna Factor				Limit Line		
	MHz	dBu∜	dB/m	<u>dB</u>	<u>d</u> B	dBuV/m	dBuV/m	dB	
1 2	2483.500 2483.500								Peak Average



π/4-DQPSK mode Test channel: Lowest

Horizontal:



Site

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

: 569RF

Pro EUT Smart Phone Model : V8

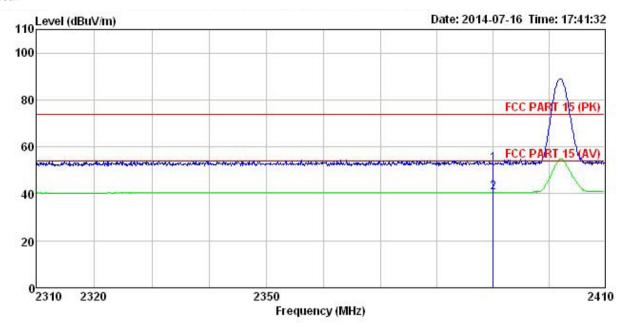
Test mode : BT-2DH1-L Power Rating : AC 120V/60Hz Environment : Temp:25.5°C Huni:55%

Test Engineer: A-bomb REMARK :

	Freq					Preamp Factor Level			Remark	
7	MHz	dBu∜	dB/m	<u>dB</u>	<u>dB</u>	dBuV/m	dBuV/m	dB		-
	2390.000 2390.000					53.03 40.68				



Vertical:



Site

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

569RF Pro

EUT : Smart Phone : V8 Model Test mode : BT-2DH1-L Power Rating : AC 120V/60Hz Environment : Temp:25.5°C Huni:55%

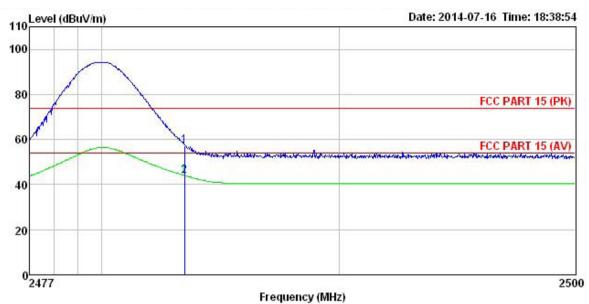
Test Engineer: A-bomb REMARK :

	5 (5)			. Cable Loss			Limit Line		Remark	
5	MHz	dBu∜	dB/m	ā	<u>d</u> B	dBuV/m	dBuV/m	ā		
1 2	2390.000 2390.000								Peak Average	



Test channel: Highest

Horizontal:



Site

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

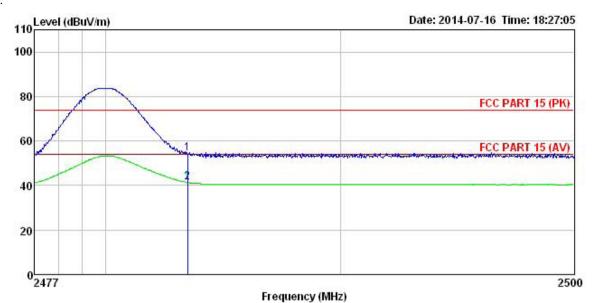
Pro 569RF

EUT Smart Phone EUT : Smart Phone
Model : V8
Test mode : BT-2DH1-H
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: A-bomb

بالمالاة	7 (3)		Antenna Factor				Limit Line	Remark
-	MHz	dBu∀	dB/m	dB	dB	dBu∜/m	dBu√/m	
	2483.500 2483.500							



Vertical:



Site

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

Pro EUT : 569RF

rro : 569RF
EUT : Smart Phone
Model : V8
Test mode : BT-2DH1-H
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: A-bomb
REMARK

REMARK

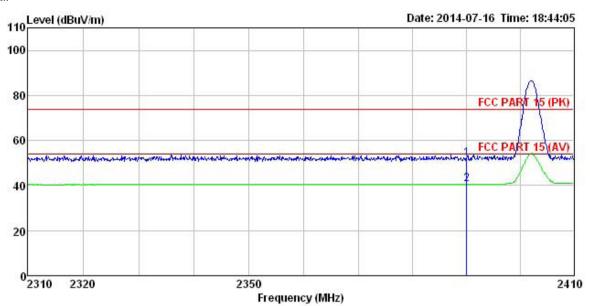
	Freq	ReadAntenna Level Factor					Limit Line	Over Limit	Remark		
7	MHz	dBu∀	dB/m	<u>dB</u>	<u>dB</u>	dBuV/m	dBuV/m	dB			
	2483.500 2483.500								Peak Average		



8DPSK mode

Test channel: Lowest

Horizontal:



Site Condition

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

Pro : 569RF

EUT Smart Phone

: V8 Model

Test mode : BT-3DH1-L Power Rating : AC 120V/60Hz Environment : Temp:25.5°C Huni:55%

Test Engineer: A-bomb REMARK :

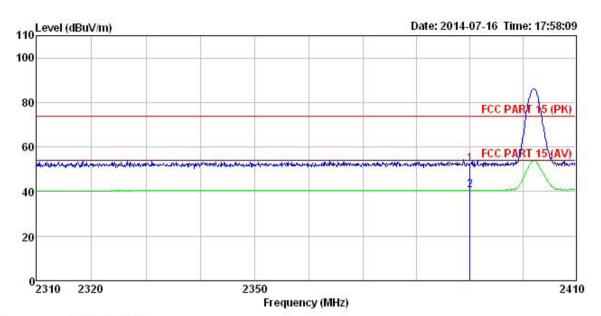
1 2

Аŀ	KK:								
	**************************************		Antenna				Limit		
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Kemark
	MHz	dBu₹	dB/m	₫B	dB	dBuV/m	dBuV/m	d₿	
	2390.000 2390.000	7:375.4753	70.00 0.0070 7.00		0.00		11007 - 17070		Peak Average
	2390.000	1.44	21.00	0.01	0.00	40.09	04.00	-1J. JI	Average





Vertical:



Site

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

Pro EUT : 569RF

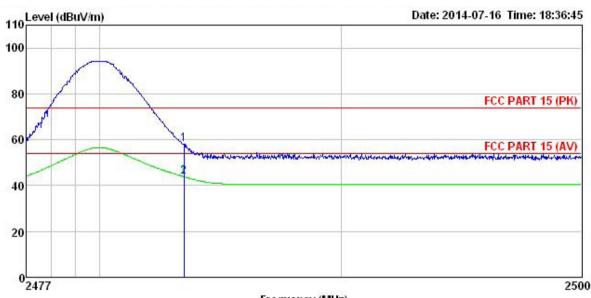
: Smart Phone : V8 Model Test mode : BT-3DH1-L
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: A-bomb
RFMARK

	65 (5)				Preamp Factor		Limit Level Line		Remark
,	MHz	dBu∜	dB/m	<u>dB</u>	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2390.000 2390.000					52.34 40.67			Peak Average



Test channel: Highest

Horizontal:



Frequency (MHz)

Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL : 569RF Condition Pro

EUT : Smart Phone Model : V8
Test mode : BT-3DH1-H
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%

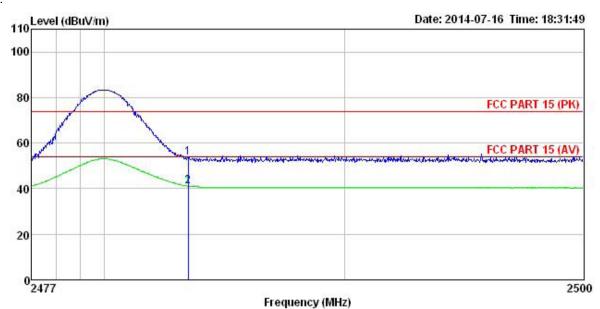
Test Engineer: A-bomb

REMARK

			Antenna Factor				Limit Line		Remark
	MHz	dBu∀	dBu∀ dB/m	<u>dB</u>	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2483.500 2483.500								Peak Average



Vertical:



Site

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

Pro EUT 569RF

: V8
Test mode : BT-3DH1-H
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: A-bomb
REMARK : Smart Phone

- January	8 8		Antenna Factor				Limit Line		Remark
=	MHz	dBu∇	dB/m	dB	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
1 2	2483.500 2483.500								



6.10 Spurious Emission

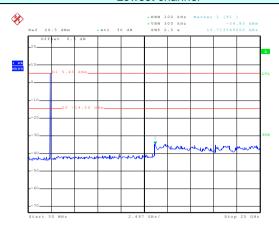
6.10.1 Conducted Emission Method

Test Requirement:	FCC Part15 C Section 15.247 (d)						
Test Method:	ANSI C63.4:2003 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						



GFSK

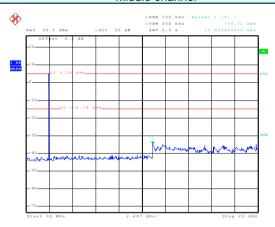
Lowest channel



Date: 29..TIII..2014 18:58:36

30MHz~25GHz

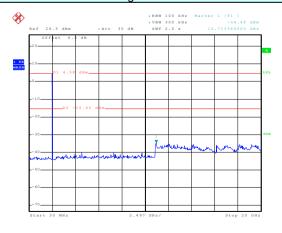
Middle channel



Date: 29.JUL.2014 18:59:09

30MHz~25GHz

Highest channel



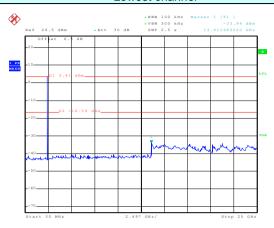
Date: 29.JUL.2014 18:59:43

30MHz~25GHz



$\pi/4$ -DQPSK

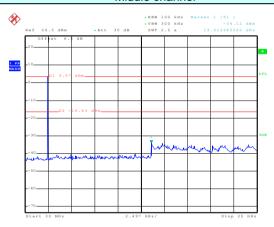
Lowest channel



Date: 29.JUL.2014 19:01:51

30MHz~25GHz

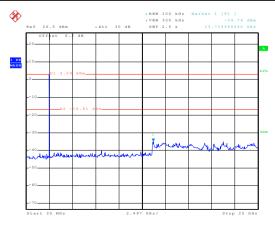
Middle channel



Date: 29.JIII..2014 19:03:00

30MHz~25GHz

Highest channel



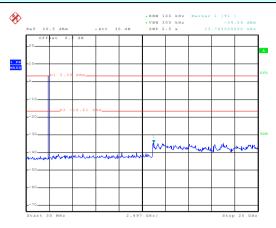
Date: 29.JUL.2014 19:03:22

30MHz~25GHz



8DPSK

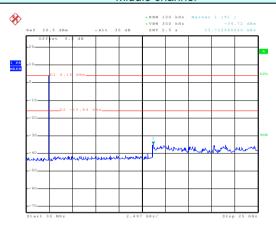




Date: 29..TIII..2014 19:04:18

30MHz~25GHz

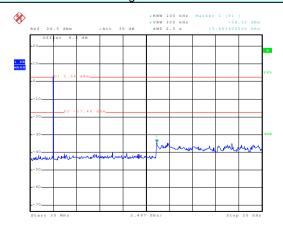
Middle channel



Date: 29.JUL.2014 19:04:52

30MHz~25GHz

Highest channel



Date: 29.JUL.2014 19:05:21

30MHz~25GHz





6.10.2 Radiated Emission Method

6.10.2 Radiated Emission Me	ī										
Test Requirement:	FCC Part15 C Se	FCC Part15 C Section 15.209									
Test Method:	ANSI C63.4: 2003	3									
Test Frequency Range:	9 kHz to 25 GHz										
Test site:	Measurement Dis	stance: 3m									
Receiver setup:	Frequency	Remark									
	30MHz-1GHz	Quasi-peak Value									
	Above 1GHz	3MHz	Peak Value								
	Above 10112	Above 1GHz Peak 1MHz 3MHz Peak Peak 1MHz 10Hz Averag Frequency Limit (dBuV/m @3m) Rer 30MHz-88MHz 40.0 Quasi-peak									
Limit:	Freque										
	30MHz-8										
	88MHz-216MHz 43.5 Quasi-peak Value 216MHz-960MHz 46.0 Quasi-peak Value										
	960MHz-	1GHz	54.0)	Quasi-peak Value						
	Above 1	CH ₇	54.0)	Average Value						
	Above 1	GHZ	74.0)	Peak Value						
	Turn Table Ground Plane Above 1GHz	3m 4m 4m 0.8m 1m 4m 4m 4m		Antenna Sear Anter RF Test Receiver Antenna Tower Horn Antenna Spectrum Analyzer							



Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
	2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
	3. 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:

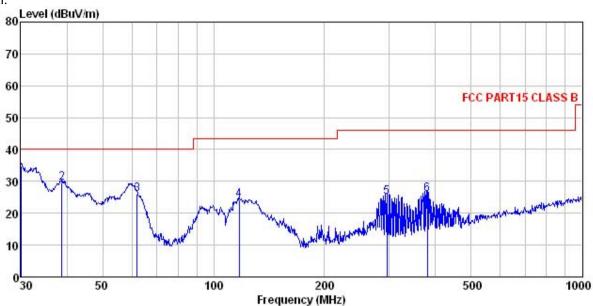
- 1. During the test, pre-scan the GFSK, $\pi/4$ -DQPSK, 8DPSK modulation, and found the GFSK modulation is the worst case.
- 2. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.
- 3. 9 kHz to 30 MHz is noise floor, so only shows the data of above 30MHz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

Measurement data:



Below 1GHz

Vertical:



Site Condition 3m chamber FCC PART15 CLASS B 3m VULB9163(30M1G) VERTICAL

569RF Pro EUT Smart Phone

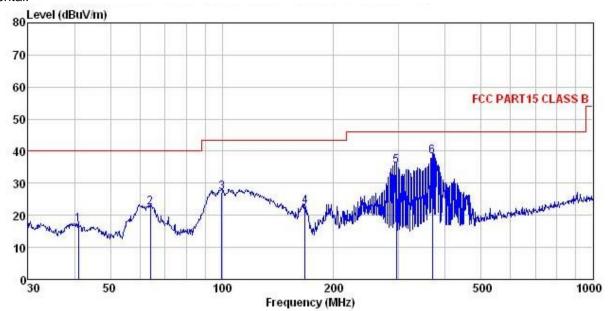
Test mode : BT mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer:
REMARK

EMAKK	:	123 32	1 68	20025	2		9244 BUS	92	
	Freq		Antenna Factor				Limit Line	Over Limit	
	MHz	dBu∀	<u>dB</u> /m	dB	dB	dBu∀/m	dBuV/m		
1	30.000	52.03	12.33	0.43	29.98	34.81	40.00	-5.19	OP
2	38.752	45.55	7.775.755	0.43		29.40	A7.5 - 5.5		39374
	61.995	43.05	11.90	0.71	29.77			-14.11	10.77
4	117.360	41.49	10.90	1.10	* (T.T.) (1) (T.T.)			-19.42	10 to
5	295.147	38.91	12.95	T T T T T T T T T T T T T T T T T T T		25.16			A Contra
6	379.914	37.91	14.59	2.05	28.69	25.86	46.00	-20.14	QP





Horizontal:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M1G) HORIZONTAL Condition

Pro EUT 569RF : Smart Phone

Model : V8
Test mode : BT mode
Power Rating : AC 120V/60Hz
Environment : Temp:25.5°C Huni:55%

Test Engineer: REMARK :

	Freq		ReadAntenna evel Factor				Limit Line	Over Limit	Remark
-	MHz	dBu∀	dB/m		<u>dB</u>	$\overline{dBuV/m}$	dBuV/m	<u>dB</u>	
1	40.988	32.89	13.57	0.53	29.89	17.10	40.00	-22.90	QP
2	63.983	40.25	11.11	0.74	29.76	22.34	40.00	-17.66	QP
3	99.878	42.70	13.16	0.96	29.53	27.29	43.50	-16.21	QP
4	167.237	41.58	8.87	1.34	29.07	22.72	43.50	-20.78	QP
5	295.147	49.16	12.95	1.76	28.46	35.41	46.00	-10.59	QP
6	369.405	50.59	14.51	2.01	28.65	38.46	46.00	-7.54	QP



Above 1GHz:

Test channel:			_owest		Level:		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	45.63	31.53	8.90	40.24	45.82	74.00	-28.18	Vertical
7206.00								Vertical
9608.00								Vertical
4804.00	46.28	31.53	8.90	40.24	46.47	74.00	-27.53	Horizontal
7206.00								Horizontal
9608.00								Horizontal

Test channel:			owest		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					
4804.00	35.96	31.53	8.90	40.24	36.15	54.00	-17.85	Vertical					
7206.00								Vertical					
9608.00								Vertical					
4804.00	36.34	31.53	8.90	40.24	36.53	54.00	-17.47	Horizontal					
7206.00								Horizontal					
9608.00								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.



Test channe	l:	N	1iddle		Level:		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	45.56	31.58	8.98	40.15	45.97	74.00	-28.03	Vertical
7323.00								Vertical
9764.00								Vertical
4882.00	46.32	31.58	8.98	40.15	46.73	74.00	-27.27	Horizontal
7323.00								Horizontal
9764.00								Horizontal

Test channel:			/liddle		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	35.29	31.58	8.98	40.15	35.70	54.00	-18.30	Vertical
7323.00	-							Vertical
9764.00								Vertical
4882.00	35.71	31.58	8.98	40.15	36.12	54.00	-17.88	Horizontal
7323.00								Horizontal
9764.00								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.



Test channe	l:		Highest		Level:		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	46.64	31.69	9.08	40.03	47.38	74.00	-26.62	Vertical
7440.00								Vertical
9920.00								Vertical
4960.00	45.74	31.69	9.08	40.03	46.48	74.00	-27.52	Horizontal
7440.00								Horizontal
9920.00								Horizontal

Test 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	36.42	31.69	9.08	40.03	37.16	54.00	-16.84	Vertical
7440.00								Vertical
9920.00								Vertical
4960.00	35.09	31.69	9.08	40.03	35.83	54.00	-18.17	Horizontal
7440.00								Horizontal

Remark:

9920.00

- 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.

Project No.: CCIS140700569RF

Horizontal