

# Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCIS15060050903

# FCC REPORT (BLE)

Applicant: Nexus Telecom Inc

Address of Applicant: PO Box 873, Venterpool Plaza 873 Road Town, Tortola Virgin

Islands (British)

**Equipment Under Test (EUT)** 

Product Name: smart phone

Model No.: GOW10

Trade mark: GOMOBILE

FCC ID: YSEGOW10

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

Date of sample receipt: 29 Jun., 2015

**Date of Test:** 29 Jun., to 24 Jul., 2015

Date of report issued: 24 Jul., 2015

Test Result: PASS \*

#### Authorized Signature:



Bruce Zhang Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the 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.

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





# 2 Version

Version No.	Date	Description
00	24 Jul., 2015	Original

Prepared by: Date: 24 Jul., 2015

Report Clerk

**Reviewed by:** 24 Jul., 2015

**Project Engineer** 



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# 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)(3)	Pass
6dB Emission Bandwidth	15.247 (a)(2)	Pass
Power Spectral Density	15.247 (e)	Pass
Band Edge	15.247(d)	Pass
Spurious Emission	15.205/15.209	Pass

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





# **5** General Information

### 5.1 Client Information

	_ <del>_</del>					
Applicant:	Nexus Telecom Inc					
Address of Applicant:	PO Box 873, Venterpool Plaza 873 Road Town, Tortola Virgin Islands (British)					
Manufacturer:	Shenzhen JSR Technology Co.,Ltd.					
Address of Manufacturer:	2F-3#, Lianjian Science&Industry Park, Huarong Road, Dalang, Longhua New District, Shenzhen City, Guangdong, Province, P.R China					
Factory:	Shenzhen JSR Technology Co.,Ltd. Guangming Branch					
Address of Factory:	Block B, 4F-B16#, NO.1 Street, Baihuadong First Industrial Park, Guangming Road, Guangming New District, Shenzhen City, Guangdong Province, P.R.China(Branch Address)					

# 5.2 General Description of E.U.T.

Product Name:	smart phone
Model No.:	GOW10
Operation Frequency:	2402-2480 MHz
Channel numbers:	40
Channel separation:	2 MHz
Modulation technology:	GFSK
Data speed :	1Mbps
Antenna Type:	Internal Antenna
Antenna gain:	-1.0 dBi
Power supply:	Rechargeable Li-ion Battery DC3.7V-1420mAh
AC adapter:	Model: ASUC37a-050100
	Input:100-240V AC,50/60Hz 0.3A
	Output:5V DC MAX 1A



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

#### Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency
The lowest channel	2402MHz
The middle channel	2442MHz
The Highest channel	2480MHz



5.3 Test environment and mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test mode:	
Operation mode	Keep the EUT in continuous transmitting with modulation

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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, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.

### 5.4 Description of Support Units

N/A

## 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

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road, Bao'an District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366





# 5.7 Test Instruments list

Rad	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	08-23-2014	08-22-2017			
2	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	03-28-2015	03-28-2016			
3	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	03-28-2015	03-28-2016			
4	EMI Test Software	AUDIX	E3	N/A	N/A	N/A			
5	Amplifier (10kHz-1.3GHz)	HP	8447D	CCIS0003	04-01-2015	03-31-2016			
6	Amplifier (1GHz-18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	04-01-2015	03-31-2016			
7	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	04-01-2015	03-31-2016			
8	Horn Antenna	ETS-LINDGREN	3160	GTS217	04-01-2015	03-31-2016			
9	Printer	HP	HP LaserJet P1007	N/A	N/A	N/A			
10	Positioning Controller	UC	UC3000	CCIS0015	N/A	N/A			
11	Spectrum analyzer 9k-30GHz	Rohde & Schwarz	FSP	CCIS0023	03-28-2015	03-28-2016			
12	EMI Test Receiver	Rohde & Schwarz	ESPI	CCIS0022	03-28-2015	03-28-2016			
13	Loop antenna	Laplace instrument	RF300	EMC0701	04-01-2015	03-31-2016			
14	Universal radio communication tester	Rhode & Schwarz	CMU200	CCIS0069	03-28-2015	03-28-2016			
15	Signal Analyzer	Rohde & Schwarz	FSIQ3	CCIS0088	04-08-2015	04-08-2016			

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	11-10-2012	11-09-2015			
2	EMI Test Receiver	Rohde & Schwarz	ESCI	CCIS0002	03-28-2015	03-28-2016			
3	LISN	CHASE	MN2050D	CCIS0074	03-28-2015	03-28-2016			
4	Coaxial Cable	CCIS	N/A	CCIS0086	04-01-2015	03-31-2016			
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

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 BLE antenna is an internal antenna which cannot replace by end-user, the best case gain of the antenna is -1.0 dBi.





# 6.2 Conducted Emission

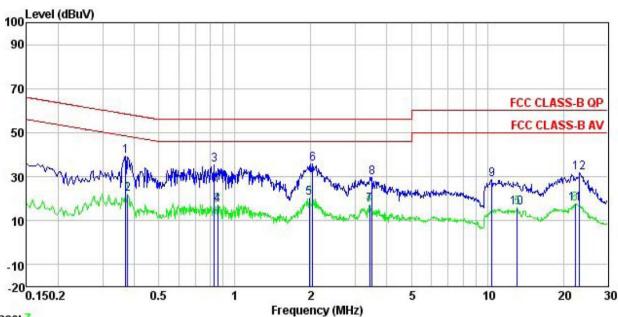
Toot Doguiroment	FCC Part 15 C Section 15.207	7					
Test Requirement:							
Test Method:	ANSI C63.4: 2014						
Test Frequency Range:	150 kHz to 30 MHz						
Class / Severity:	Class B						
Receiver setup:	RBW=9kHz, VBW=30kHz						
Limit:	Frequency range (MHz)  Limit (dBuV)  Quasi-peak  Average						
	0.15-0.5 66 to 56* 56 to 46*						
	0.5-5	56	46				
	5-30	60	50				
	* Decreases with the logarithm	n of the frequency.					
Test procedure	<ol> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.), which provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2009 on conducted measurement.</li> </ol>						
Test setup:	Refere	nce Plane					
	AUX Equipment E.U  Test table/Insulation pla  Remarkc E.U.T: Equipment Under Test LISN: Line Impedence Stabilization Test table height=0.8m		er — AC power				
Test Instruments:	Refer to section 5.7 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Passed						

#### **Measurement Data**





#### Neutral:



Trace: 7

Site

: CCIS Shielding Room : FCC CLASS-B QP LISN NEUTRAL Condition

EUT : Smart Phone : GOW10 Model

Test Mode : BLE mode Power Rating : AC120/60Hz

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

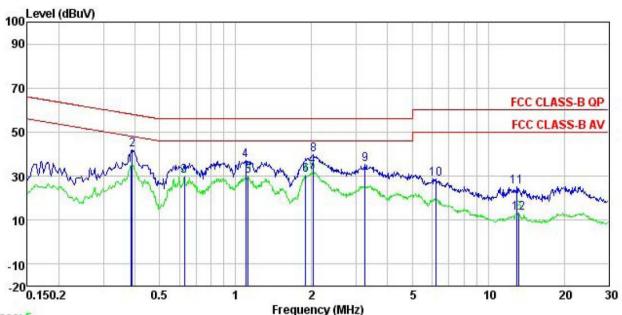
Test Engineer: Colin Remark :

nemark								
		Read		Cable		Limit	Over	
	Freq	Level	Factor	Loss	Level	Line	Limit	Remark
	MHz	dBu∇	<u>d</u> B	dB	dBu₹	dBu∜	<u>ab</u>	
1	0.369	28.55	0.25	10.73	39.53	58.52	-18.99	QP
1 2 3 4 5 6 7 8 9	0.377	11.11	0.25	10.72	22.08	48.34	-26.26	Average
3	0.830	24.51	0.20	10.82	35.53	56.00	-20.47	QP
4	0.857	6.24	0.20	10.83	17.27	46.00	-28.73	Average
5	1.970	8.93	0.29	10.96	20.18	46.00	-25.82	Average
6	2.033	24.57	0.29	10.96	35.82	56.00	-20.18	QP
7	3.417	6.09	0.29	10.91	17.29	46.00	-28.71	Average
8	3.491	18.48	0.29	10.90	29.67	56.00	-26.33	QP
9	10.397	17.31	0.25	10.94	28.50	60.00	-31.50	QP
10	13.127	4.76	0.25	10.91	15.92	50.00	-34.08	Average
11	22.298	6.43	0.36	10.90	17.69	50.00	-32.31	Average
12	23.140	20.72	0.42	10.89	32.03	60.00	-27.97	QP

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#### Line:



Trace: 5

: CCIS Shielding Room : FCC CLASS-B QP LISN LINE Site Condition

Phone EUT : Smart Model : GOW10 Test Mode : BLE mode

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

Test Engineer: Colin

Remark

Freq	Read Level	LISN Factor	Cable Loss	Level	Limit Line	Over Limit	Remark	
MHz	dBu⊽	<u>dB</u>	₫B	dBu₹	dBu₹	dB		
0.385	24.05	0.28	10.72	35.05	48.17	-13.12	Average	
0.389	30.85	0.28	10.72	41.85	58.08	-16.23	QP	
0.627	18.87	0.24	10.77	29.88	46.00	-16.12	Average	
1.100	26.13	0.25	10.88	37.26	56.00	-18.74	QP	
1.123	18.93	0.25	10.88	30.06	46.00	-15.94	Average	
1.898	19.12	0.26	10.95	30.33	46.00	-15.67	Average	
2.023	20.63	0.26	10.96	31.85	46.00	-14.15	Average	
2.033	28.36	0.26	10.96	39.58	56.00	-16.42	QP	
3.258	24.01	0.27	10.91	35.19	56.00	-20.81	QP	
6.186	17.75	0.31	10.82	28.88	60.00	-31.12	QP	
12.988	13.89	0.32	10.91	25.12	60.00	-34.88	QP	
13.267	2.04	0.32	10.91	13.27	50.00	-36.73	Average	
	Freq  0.385 0.389 0.627 1.100 1.123 1.898 2.023 2.033 3.258 6.186 12.988	Read Level  MHz dBuV  0.385 24.05 0.389 30.85 0.627 18.87 1.100 26.13 1.123 18.93 1.898 19.12 2.023 20.63 2.033 28.36 3.258 24.01 6.186 17.75 12.988 13.89	Read LISN Freq Level Factor  MHz dBuV dB  0.385 24.05 0.28 0.389 30.85 0.28 0.627 18.87 0.24 1.100 26.13 0.25 1.123 18.93 0.25 1.898 19.12 0.26 2.023 20.63 0.26 2.033 28.36 0.26 2.033 28.36 0.26 3.258 24.01 0.27 6.186 17.75 0.31 12.988 13.89 0.32	Read LISN Cable Level Factor Loss    MHz   dBuV   dB   dB	Read LISN Cable Freq Level Factor Loss Level  MHz dBuV dB dB dB dBuV  0.385 24.05 0.28 10.72 35.05 0.389 30.85 0.28 10.72 41.85 0.627 18.87 0.24 10.77 29.88 1.100 26.13 0.25 10.88 37.26 1.123 18.93 0.25 10.88 30.06 1.898 19.12 0.26 10.95 30.33 2.023 20.63 0.26 10.96 31.85 2.033 28.36 0.26 10.96 39.58 3.258 24.01 0.27 10.91 35.19 6.186 17.75 0.31 10.82 28.88 12.988 13.89 0.32 10.91 25.12	Read   LISN   Cable   Limit	Read LISN Cable Freq         Limit Limit Limit           MHz         dBuV         dB         dB         dBuV         dBuV         dB           0.385         24.05         0.28         10.72         35.05         48.17         -13.12           0.389         30.85         0.28         10.72         41.85         58.08         -16.23           0.627         18.87         0.24         10.77         29.88         46.00         -16.12           1.100         26.13         0.25         10.88         37.26         56.00         -18.74           1.123         18.93         0.25         10.88         30.06         46.00         -15.94           1.898         19.12         0.26         10.95         30.33         46.00         -15.67           2.023         20.63         0.26         10.95         30.33         46.00         -15.67           2.033         28.36         0.26         10.96         31.85         46.00         -14.15           2.033         28.36         0.26         10.96         39.58         56.00         -20.81           6.186         17.75         0.31         10.82         28.88         60.00         -31.12 </td <td>  Read   LISN   Cable   Limit   Over   Level   Factor   Loss   Level   Line   Limit   Remark    </td>	Read   LISN   Cable   Limit   Over   Level   Factor   Loss   Level   Line   Limit   Remark

#### Notes:

- 1. An initial pre-scan was performed on the live 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**

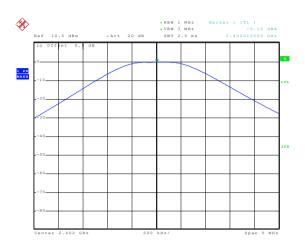
Test Requirement:	FCC Part 15 C Section 15.247 (b)(3)
Test Method:	ANSI C63.10:2013 and KDB558074v03r03 section 9.1.1
Limit:	30dBm
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane
Test Instruments:	Refer to section 5.7 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

#### Measurement Data

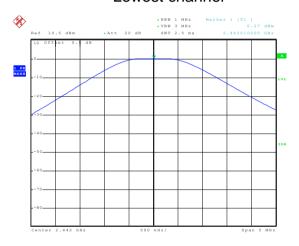
Test CH	Maximum Conducted Output Power (dBm)	Limit(dBm)	Result
Lowest	-0.15		
Middle	0.27	30.00	Pass
Highest	-0.25		

Test plot as follows:

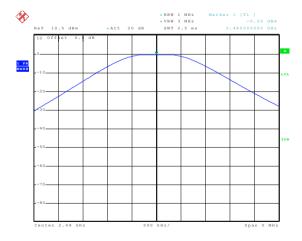




# Date: 17.JUL.2015 17:30:24 Lowest channel



# Date: 17.JUL.2015 17:30:47 Middle channel



Highest channel



# 6.4 Occupy Bandwidth

Test Requirement:	FCC Part 15 C Section 15.247 (a)(2)				
Test Method:	ANSI C63.10:2013 and KDB558074v03r03 section 8.1				
Limit:	>500kHz				
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane				
Test Instruments:	Refer to section 5.7 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Passed				

#### Measurement Data

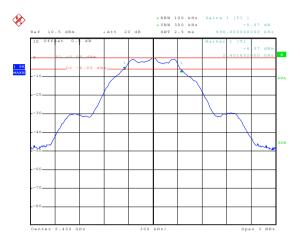
Test CH	6dB Emission Bandwidth (MHz)	Limit(kHz)	Result
Lowest	0.696		
Middle	0.678	>500	Pass
Highest	0.690		

Test CH	99% Occupy Bandwidth (MHz)	Limit(kHz)	Result	
Lowest	1.086			
Middle	1.086	N/A	N/A	
Highest	1.086			

Test plot as follows:

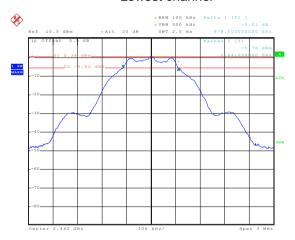


#### 6dB EBW



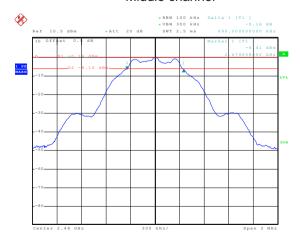
Date: 17.JUL.2015 17:35:22

#### Lowest channel



Date: 17.JUL.2015 17:34:12

### Middle channel

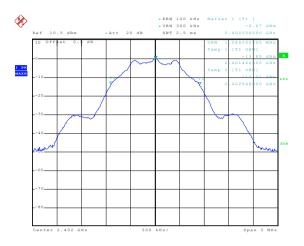


Date: 17.JUT..2015 17:32:20

Highest channel

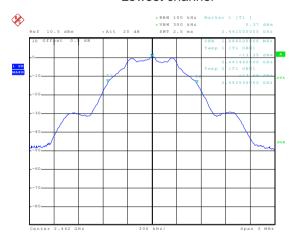


#### 99% OBW



Date: 17.JUL.2015 17:35:51

#### Lowest channel



Date: 17.JUL.2015 17:37:22

### Middle channel



Date: 17..TUT..2015 17:38:13

Highest channel



# 6.5 Power Spectral Density

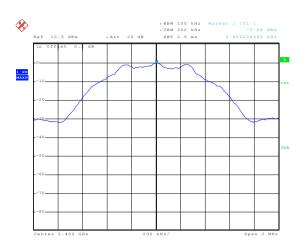
Test Requirement:	FCC Part 15 C Section 15.247 (e)				
Test Method:	ANSI C63.10:2013 and KDB558074v03r03 section 10.2				
Limit:	8 dBm				
Test setup:	Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane				
Test Instruments:	Refer to section 5.7 for details				
Test mode:	Refer to section 5.3 for details				
Test results:	Passed				

#### Measurement Data

Test CH	Power Spectral Density (dBm)	Limit(dBm)	Result
Lowest	-0.08		
Middle	0.35	8.00	Pass
Highest	-0.21		

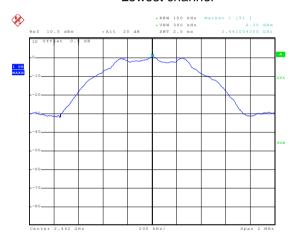
Test plots as follow:





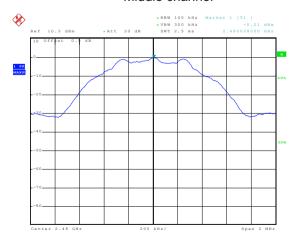
Date: 17.JUL.2015 17:42:48

#### Lowest channel



Date: 17..TUT..2015 17:43:13

#### Middle channel



Date: 17..TUT..2015 17:43:38

Highest channel



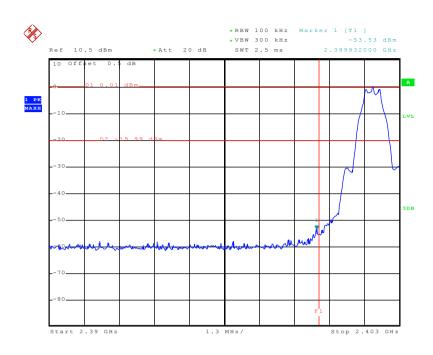
# 6.6 Band Edge

### 6.6.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)				
Test Method:	ANSI C63.10:2013 and KDB558074v03r03 section 13				
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:	Refer to section 5.3 for details				
Test results:	Passed				

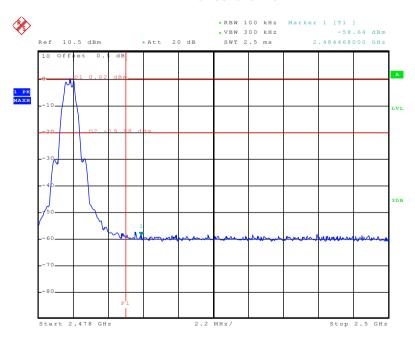
Test plots as follow:





Date: 17.JUL.2015 17:41:54

#### Lowest channel



Date: 17.JUL.2015 17:40:10

Highest channel



### 6.6.2 Radiated Emission Method

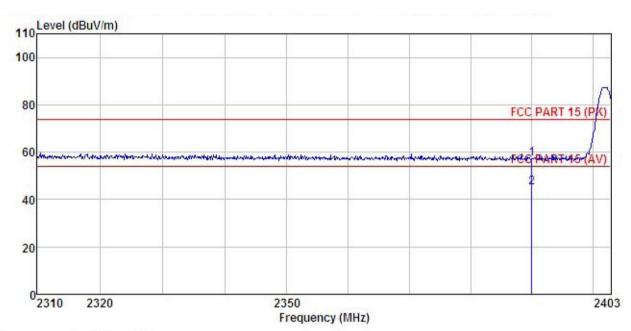
Test Requirement:	FCC Part 15 C	Section 15.209	and 15.205		
Test Method:	ANSI C63.10: 2	013 and KDB 5	58074v03r	03 section	12.1
Test Frequency Range:	2.3GHz to 2.5G	Hz			
Test site:	Measurement D	Distance: 3m			
Receiver setup:					
·	Frequency	Detector	RBW	VBW	Remark
	Above 1GHz	Peak	1MHz	3MHz	Peak Value
119		Average Value	1MHz	10Hz	Average Value
Limit:	Freque	ency	.imit (dBuV	/m @3m)	Remark
		-	54.0		Average Value
	Above 1		74.0		Peak Value
Test Procedure:	the ground to determin 2. The EUT wantenna, watower. 3. The antenrathe ground Both horizon make the make the make the make the form to find the solution of the EUT have 10 defined to determine the solution of the EUT have 10 defined to determine the solution of the EUT have 10 defined to determine the solution of the EUT have 10 defined to determine the solution of the EUT have 10 defined to determine the solution of the EUT have 10 defined to determine the solution of the EUT have 10 defined to determine the solution of the EUT have 10 defined to determine the solution of the EUT have 10 defined to define the solution of the EUT have 10 defined to determine the solution of the EUT have 10 defined to define the solution of the EUT have 10 defined the solut	at a 3 meter cane the position of vas set 3 meters which was mount in a height is varied to determine the ontal and vertical neasurement. Suspected emissionen the antennal of the rota table of maximum reading ceiver system with a sion level of the ecified, then tes would be reported to the position of the sion level of the ecified, then tes would be reported to the position of the sion level of the ecified, then tes would be reported to the position of the p	mber. The fifthe highes away from ed on the to ed from one e maximum I polarization, the EU was turned fing. Fas set to Palaximum HEUT in peating could be ed. Otherwood resteed.	table was rost radiation. The interfer op of a variate meter to for a value of the ons of the air to heights of from 0 degreeak Detect old Mode. The was arranged and was estopped arise the emit one by one	rence-receiving able-height antenna our meters above the field strength. Intenna are set to a
Test setup:	SOCM SOCM	Ground i	Horn Anta	Antenna Tor	wer
Test Instruments:	Refer to section	5.7 for details			
Test mode:	Refer to section	5.3 for details			
Test results:	Passed				





Test channel: Lowest

Horizontal:



Site

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

EUT : Smart Phone Test mode : BLE -L mode Power Rating : AC120V/60Hz Environment : Temp:25.5°C Test Engineer: Colin REMARK : Model : GOW10

Huni:55%

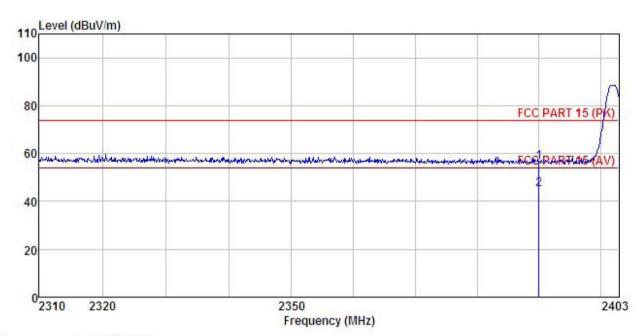
ILVIO	n :								
	Freq		Antenna Factor				Limit Line		
	MHz	<u>d</u> Bu∇	<u>dB</u> /m	<u>d</u> B	<u>d</u> B	dBuV/m	dBuV/m	<u>d</u> B	
1	2390.000			6.63		1.75 Y 11.3 S.7 S. F. S.		-16.66	The state of the s
/	2390, 000	111. 91	21.58	n. n.i	11, 1111	45.12	54.1111	-X- XX	Average





Test channel: Lowest

Vertical:



Site

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

EUT : Smart Phone : GOW10

Test mode : BLE -L mode

Power Rating : AC120V/60Hz

Environment : Temp:25.5°C

Test Engineer: Colin

REMARK :

Huni:55%

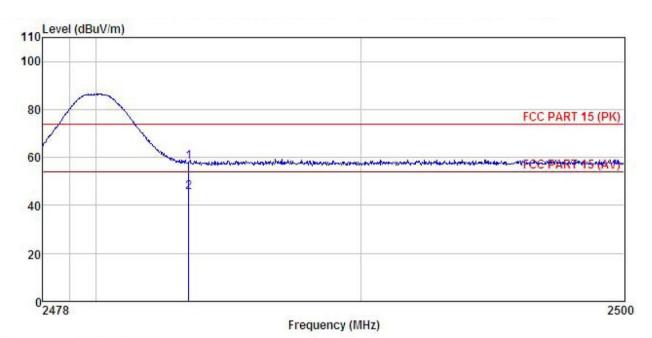
	Freq		Antenna Factor					
-	MHz	dBu₹	dB/m	 <u>dB</u>	$\overline{dBuV/m}$	$\overline{dBuV/m}$	<u>dB</u>	 -
	2390.000 2390.000							





Test channel: Highest

Horizontal:



Site

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

EUT : Smart Phone : GOW10 Model Test mode : BLE -H mode Power Rating : AC120V/60Hz Environment : Temp:25.5°C Test Engineer: Colin

Huni:55%

REMARK

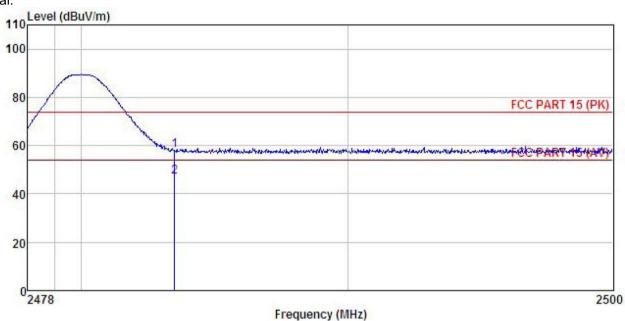
	Freq		Antenna Factor							
-	MHz	dBu₹	<u>dB</u> /m	<u>d</u> B	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>		
	2483,500 2483,500								THE RESERVE OF THE PARTY OF THE	





Test channel: Highest

Vertical:



Site : 3m chamber

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

EUT : Smart Phone

Model : GOW10

: BLE -H mode Test mode Power Rating: AC120V/60Hz Environment: Temp:25.5°C Huni:55%

Test Engineer: Colin REMARK :

			Antenna Factor							
-	MHz	−−dBuV		<u>dB</u>	<u>d</u> B	$\overline{dBuV/m}$	$\overline{dBuV/m}$	<u>ab</u>		
1 2	2483.500 2483.500	23.77 12.60	27.52 27.52	6.85 6.85	0.00 0.00	58.14 46.97	74.00 54.00	-15.86 -7.03	Peak Average	



# 6.7 Spurious Emission

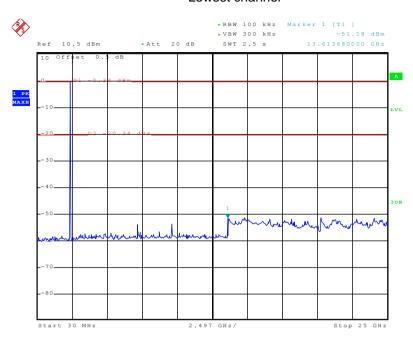
### 6.7.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)						
Test Method:	ANSI C63.10:2013 and KDB558074 section 11						
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						
Test Instruments:	Ground Reference Plane						
	Refer to section 5.7 for details						
Test mode:	Refer to section 5.3 for details						
Test results:	Passed						

Test plot as follows:



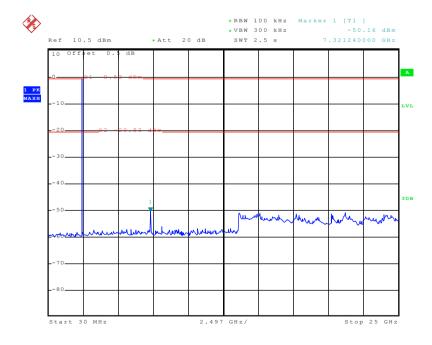
#### Lowest channel



Date: 17.JUL.2015 17:49:05

#### 30MHz~25GHz

### Middle channel

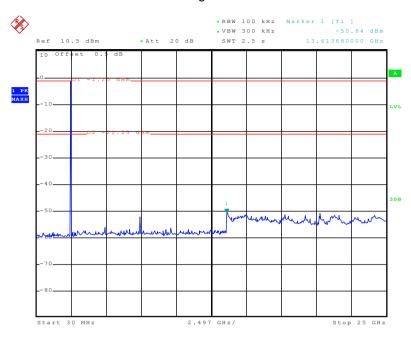


Date: 17.JUL.2015 17:47:52

30MHz~25GHz



#### Highest channel



Date: 17.JUL.2015 17:46:01

30MHz~25GHz



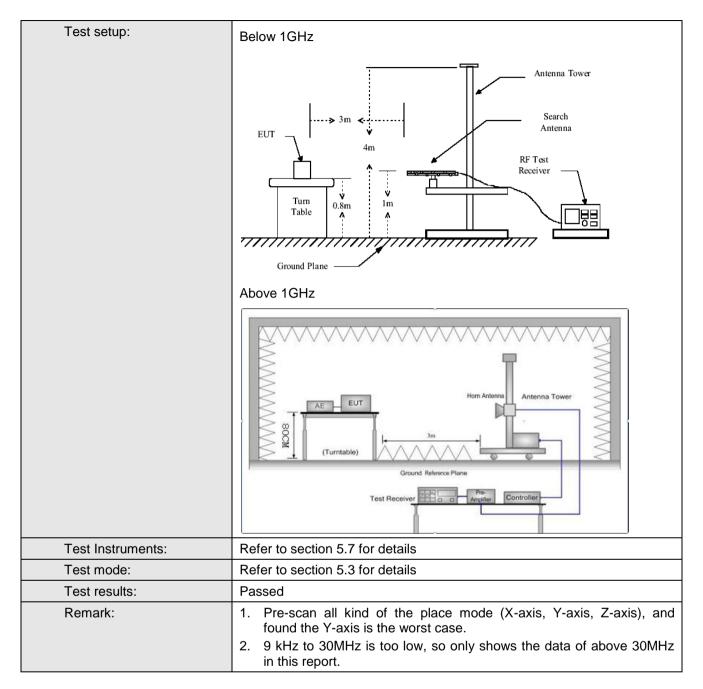


### 6.7.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C Section 15.209 and 15.205									
Test Method:	ANSI C63.10:2013									
Test Frequency Range:	9KHz to 25GHz									
Test site:	Measurement D	Distance: 3m								
Receiver setup:										
·	Frequency Detector RBW VBW Remark									
	30MHz-1GHz Quasi-peak 120KHz 300KHz Quasi-peak Value									
	Above 1GHz	Peak	1MHz	3MHz	Peak Value					
	Above 10112	Average Value	1MHz	10Hz	Average Value					
Limit:										
	Frequency		<u>_imit (dBuV/m</u>	@3m)	Remark					
	30MHz-88MHz		10.0		Quasi-peak Value					
	88MHz-216MHz		13.5		Quasi-peak Value					
	216MHz-960MH		16.0		Quasi-peak Value					
	960MHz-1GHz		54.0		Quasi-peak Value					
	Above 1GHz	<del></del>	54.0 74.0		Average Value					
Test Procedure:	1. The EUT v			rotating tah	Peak Value le 0.8 meters above					
	the ground to determin 2. The EUT antenna, we tower.  3. The antenna Both horized make the make the make the make the meters and to find the limit spof the EUT have 10 determined.	at a 3 meter of the position was set 3 methich was mountained to determine ontal and vertineasurement. Suspected emether the antend the rota table maximum readeceiver systems and width with sion level of the cified, then test would be reparagin would.	camber. The of the highes eters away for the highes eters away for the maximum cal polarizate assion, the Ena was turned ling.  In was set of Maximum Here EUT in peresting could be orted. Other libe re-tested.	table was st radiation. From the in op of a variance meter to um value of ions of the EUT was and to height from 0 deg to Peak Dold Mode. The stopped wise the end one by on	rotated 360 degrees					





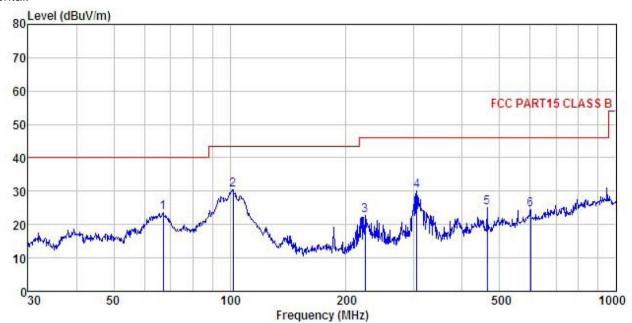






#### **Below 1GHz**

Horizontal:



Site

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

: Smart Phone EUT : GOW10 Model Test mode : BLE mode Power Rating : AC120V/60Hz

Environment : Temp: 25.5°C Huni:55%

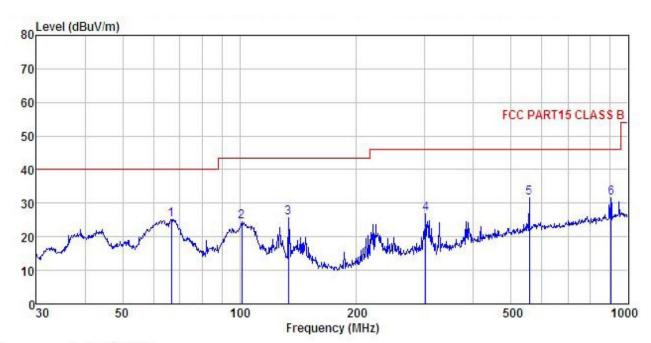
Test Engineer: Colin REMARK

	Freq		Antenna Factor					Over Limit	Remark
_	MHz	dBu∜	dB/m	d <u>B</u>	<u>d</u> B	$\overline{dBuV/m}$	dBu√/m	<u>dB</u>	
1	67.202	42.75	9.75	0.77	29.74	23.53	40.00	-16.47	QP
2	102.001	46.00	12.97	0.98	29.51	30.44	43.50	-13.06	QP
3	223.733	38.53	11.36	1.50	28.69	22.70	46.00	-23.30	QP
3 4	304.610	43.71	13.13	1.79	28.46	30.17	46.00	-15.83	QP
5	463.970	35.85	15.71	2.30	28.89	24.97	46.00	-21.03	QP
6	601.427	32.23	18.46	2.63	28.93	24.39	46.00	-21.61	QP





#### Vertical:



Site

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

EUT : Smart Phone Model GOW10 Test mode : BLE mode Power Rating : AC120V/60Hz

Environment : Temp: 25.5°C Huni: 55%

Test Engineer: Colin REMARK :

Freq								Remark
MHz	dBu∜	<u>dB</u> /π	d <u>B</u>	<u>dB</u>	dBuV/m	dBuV/m	<u>dB</u>	
66.733	44.05	10.02	0.76	29.75	25.08	40.00	-14.92	QP
101.289	39.96	13.02	0.97	29.52	24.43	43.50	-19.07	QP
133.619	44.98	8.67	1.22	29.31	25.56	43.50	-17.94	QP
301.422	40.36	13.08	1.77	28.45	26.76	46.00	-19.24	QP
556.774	40.32	17.67	2.55	29.08	31.46	46.00	-14.54	QP
903.309	35.08	21.12	3.36	27.87	31.69	46.00	-14.31	QP
	MHz 66.733 101.289 133.619 301.422 556.774	Freq Level  MHz dBuV  66.733 44.05 101.289 39.96 133.619 44.98 301.422 40.36 556.774 40.32	Freq Level Factor  MHz dBuV dB/m  66.733 44.05 10.02 101.289 39.96 13.02 133.619 44.98 8.67 301.422 40.36 13.08	Freq Level Factor Loss  MHz dBuV dB/m dB  66.733 44.05 10.02 0.76 101.289 39.96 13.02 0.97 133.619 44.98 8.67 1.22 301.422 40.36 13.08 1.77 556.774 40.32 17.67 2.55	Freq         Level         Factor         Loss         Factor           MHz         dBuV         dB/m         dB         dB           66.733         44.05         10.02         0.76         29.75           101.289         39.96         13.02         0.97         29.52           133.619         44.98         8.67         1.22         29.31           301.422         40.36         13.08         1.77         28.45           556.774         40.32         17.67         2.55         29.08	MHz         dBuV         dB/m         dB         dB         dB dBuV/m           66.733         44.05         10.02         0.76         29.75         25.08           101.289         39.96         13.02         0.97         29.52         24.43           133.619         44.98         8.67         1.22         29.31         25.56           301.422         40.36         13.08         1.77         28.45         26.76           556.774         40.32         17.67         2.55         29.08         31.46	Freq         Level         Factor         Loss         Factor         Level         Line           MHz         dBuV         dB/m         dB         dB         dB uV/m         dBuV/m         dBuV/m           66.733         44.05         10.02         0.76         29.75         25.08         40.00           101.289         39.96         13.02         0.97         29.52         24.43         43.50           133.619         44.98         8.67         1.22         29.31         25.56         43.50           301.422         40.36         13.08         1.77         28.45         26.76         46.00           556.774         40.32         17.67         2.55         29.08         31.46         46.00	Freq         Level         Factor         Level         Line         Limit           MHz         dBuV         dB/m         dB         dB         dBuV/m         dBuV/m         dBuV/m         dB           66.733         44.05         10.02         0.76         29.75         25.08         40.00         -14.92           101.289         39.96         13.02         0.97         29.52         24.43         43.50         -19.07           133.619         44.98         8.67         1.22         29.31         25.56         43.50         -17.94           301.422         40.36         13.08         1.77         28.45         26.76         46.00         -19.24           556.774         40.32         17.67         2.55         29.08         31.46         46.00         -14.54



#### **Above 1GHz**

Т	Test channel:			Lowest		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	43.24	31.53	8.90	40.24	43.43	74.00	-30.57	Vertical
4804.00	44.08	31.53	8.90	40.24	44.27	74.00	-29.73	Horizontal

Т	Test channel:			Lowest		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	35.48	31.53	8.90	40.24	35.67	54.00	-18.33	Vertical
4804.00	36.25	31.53	8.90	40.24	36.44	54.00	-17.56	Horizontal

Т	est 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	43.65	31.58	8.98	40.15	44.06	74.00	-29.94	Vertical
4882.00	43.56	31.58	8.98	40.15	43.97	74.00	-30.03	Horizontal

Т	Test channel:			Middle		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
4882.00	35.96	31.58	8.98	40.15	36.37	54.00	-17.63	Vertical
4882.00	37.12	31.58	8.98	40.15	37.53	54.00	-16.47	Horizontal

Т	Test channel:			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	43.85	31.69	9.08	40.03	44.59	74.00	-29.41	Vertical	
4960.00	45.19	31.69	9.08	40.03	45.93	74.00	-28.07	Horizontal	

Т	Test channel:			Highest		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
4960.00	39.32	31.69	9.08	40.03	40.06	54.00	-13.94	Vertical
4960.00	38.30	31.69	9.08	40.03	39.04	54.00	-14.96	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.

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