

FCC PART 15.247 TEST REPORT

For

Posh Mobile Limited

1011A, 10/F., Harbour Centre Tower 1, No. 1 Hok Cheung St., Hung Hom, Kowloon, Hong Kong

FCC ID: 2ABN6S900

Report Type: Product Type: Original Report Equal Max Allen Dious **Test Engineer:** Allen Qiao Report Number: RDG151008002-00A **Report Date:** 2015-10-23 Sola Hugof Sula Huang **Reviewed By:** RF Leader Bay Area Compliance Laboratories Corp. (Dongguan) **Test Laboratory:** No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 www.baclcorp.com.cn

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Dongguan). This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

TABLE OF CONTENTS

GENERAL INFORMATION	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
Objective	
RELATED SUBMITTAL(S)/GRANT(S)	
TEST METHODOLOGY	
TEST FACILITY	
SYSTEM TEST CONFIGURATION	
DESCRIPTION OF TEST CONFIGURATION	
EUT EXERCISE SOFTWARE	
EQUIPMENT MODIFICATIONS	
EXTERNAL CABLE	
BLOCK DIAGRAM OF TEST SETUP	
SUMMARY OF TEST RESULTS	
FCC §15.247 (i) & §1.1310 & §2.1093- RF EXPOSURE	
APPLICABLE STANDARD	
FCC §15.203 - ANTENNA REQUIREMENT	9
APPLICABLE STANDARD	
ANTENNA CONNECTOR CONSTRUCTION	9
FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS	10
APPLICABLE STANDARD	10
Measurement Uncertainty	
EUT SETUP	
EMI TEST RECEIVER SETUP	
TEST PROCEDURE	
CORRECTED AMPLITUDE & MARGIN CALCULATION TEST EQUIPMENT LIST AND DETAILS	
TEST RESULTS SUMMARY	
TEST DATA	
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS	
APPLICABLE STANDARD	
MEASUREMENT UNCERTAINTY	15
EUT SETUP	15
EMI TEST RECEIVER & SPECTRUM ANALYZER SETUP	
TEST PROCEDURE	
TEST EQUIPMENT LIST AND DETAILS	
TEST RESULTS SUMMARY	
TEST DATA	
FCC §15.247(a) (1) - CHANNEL SEPARATION TEST	
APPLICABLE STANDARD	
TEST EQUIPMENT LIST AND DETAILS.	
TEST PROCEDURE	
TEST DATA	26
FCC §15.247(a) (1) – 20 dB BANDWIDTH TESTING	32

APPLICABLE STANDARD	32
TEST PROCEDURE	
TEST EQUIPMENT LIST AND DETAILS	
TEST DATA	32
FCC §15.247(a) (1) (iii) - QUANTITY OF HOPPING CHANNEL TEST	38
APPLICABLE STANDARD	38
TEST PROCEDURE	
TEST EQUIPMENT LIST AND DETAILS	38
TEST DATA	38
FCC §15.247(a) (1) (iii) - TIME OF OCCUPANCY (DWELL TIME)	42
APPLICABLE STANDARD	42
TEST PROCEDURE	
TEST EQUIPMENT LIST AND DETAILS	42
TEST DATA	
FCC §15.247(b) (1) - PEAK OUTPUT POWER MEASUREMENT	58
APPLICABLE STANDARD	58
TEST PROCEDURE	
TEST EQUIPMENT LIST AND DETAILS	58
TEST DATA	58
FCC §15.247(d) - BAND EDGES TESTING	64
APPLICABLE STANDARD	64
TEST PROCEDURE	64
TEST EQUIPMENT LIST AND DETAILS	64
TEST DATA	64
DECLARATION LETTER	68

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *Posh Mobile Limited*. 's product, model number: *S900A (FCC ID: 2ABN6S900)* (the "EUT") in this report was a *Equal Max*, which was measured approximately: 23.9 cm (L) x13.6 cm (W) x 1.1 cm (H), rated input voltage: DC3.7V rechargeable Li-ion battery or DC5V charging from adapter.

Report No.: RDG151008002-00A

Adapter information: Part No.: C01-S900 MODEL:KZ0502000

INPUT: AC100-240V, 50/60Hz 0.5A

OUTPUT: DC5V, 2A

Note: The series product, model S900A,S900B are electrically identical, the difference between them is model name, we selected S900A for testing, the details was explained in the attached declaration letter.

All measurement and test data in this report was gathered from production sample serial number: 151008002 (Assigned by BACL, Dongguan). The EUT was received on 2015-10-10

Objective

This report is prepared on behalf of *Posh Mobile Limited*.in accordance with Part 2, Subpart J, Part 15, Subparts A, B and C of the Federal Communications Commission's rules

The tests were performed in order to determine the Bluetooth BDR and EDR mode of EUT compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Related Submittal(s)/Grant(s)

FCC Part 15B JBP submissions with FCC ID: 2ABN6S900 FCC Part 15C DTS submissions with FCC ID: 2ABN6S900 FCC Part 22H, 24E PCE submissions with FCC ID: 2ABN6S900

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Dongguan).

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industrial Zone, Tangxia, Dongguan, Guangdong, China

Test site at Bay Area Compliance Laboratories Corp. (Dongguan) has been fully described in reports submitted to the Federal Communications Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 06, 2015.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 273710. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

FCC Part 15.247 Page 4 of 68

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode.

EUT Exercise Software

Test Softv	vare Version	Enginnering Mode			
Test Frequency		2402MHz 2441MHz 2480MHz			
DI1	GFSK	N/A	N/A	N/A	
Power Level Setting	π/4-DQPSK	N/A	N/A	N/A	
Setting	8DPSK	N/A	N/A	N/A	

Report No.: RDG151008002-00A

Equipment Modifications

No modification was made to the EUT.

Support Equipment List and Details

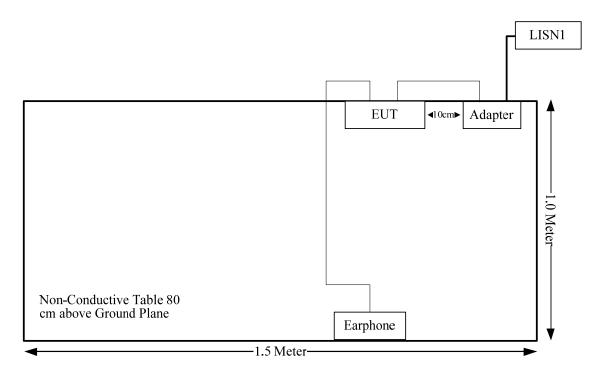
Manufacturer	Description	Model	Serial Number
/	/	/	/

External Cable

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	То
USB Cable	Yes	No	0.8	USB Port of Adapter	EUT
Earphone Cable	No	No	1.0	Audio Port of EUT	EUT

FCC Part 15.247 Page 5 of 68

Block Diagram of Test Setup



FCC Part 15.247 Page 6 of 68

SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.247 (i) & §1.1310 & §2.1093	RF Exposure	Compliance
§15.203	Antenna Requirement	Compliance
§15.207 (a)	Conducted Emissions	Compliance
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliance
§15.247 (a)(1)	20 dB Bandwidth	Compliance
§15.247(a)(1)	Channel Separation Test	Compliance
§15.247(a)(1)(iii)	Time of Occupancy (Dwell Time)	Compliance
§15.247(a)(1)(iii)	Quantity of hopping channel Test	Compliance
§15.247(b)(1)	Peak Output Power Measurement	Compliance
§15.247(d)	Band Edges	Compliance

Report No.: RDG151008002-00A

FCC Part 15.247 Page 7 of 68

FCC §15.247 (i) & §1.1310 & §2.1093- RF EXPOSURE

Applicable Standard

According to §15.247(i) and §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Report No.: RDG151008002-00A

According to KDB447498 D01 General RF Exposure Guidance v05r02:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,

mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is ≤ 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

Measurement Result

The maximum target output power = 1.60 dBm (1.45mW) at 2480 MHz [(max. power of channel, mW)/(min. test separation distance, mm)][$\sqrt{f(GHz)}$] = 1.45/5*($\sqrt{2.48}$) = 0.46 < 3.0

So the stand-alone SAR evaluation is not necessary.

FCC Part 15.247 Page 8 of 68

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to FCC § 15.203, 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 shall be considered sufficient to comply with the provisions of this Section. 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.

Report No.: RDG151008002-00A

Antenna Connector Construction

The EUT has one integral antenna arrangement for WiFi/BT, which was permanently attached and the antenna gain is 1.0 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliance.

FCC Part 15.247 Page 9 of 68

FCC §15.207 (a) - AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC§15.207

Measurement Uncertainty

Compliance or non- compliance with a disturbance limit shall be determined in the following manner:

If U_{lab} is less than or equal to U_{cispr} of Table 1, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit. If U_{lab} is greater than U_{cispr} of Table 1, then:
- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} U_{cispr})$, exceeds the disturbance limit;
- non compliance is deemed to occur if any measured disturbance level, increased by $(U_{\text{lab}} U_{\text{cispr}})$, exceeds the disturbance limit.

Based on CISPR 16-4-2: 2011, measurement uncertainty of conducted disturbance at mains port using AMN at Bay Area Compliance Laboratories Corp. (Dongguan) is 3.46 dB (150 kHz to 30 MHz).

Table 1 – Values of
$$U_{\rm cispr}$$

Measurement	$U_{ m cispr}$
Conducted disturbance at mains port using AMN (150 kHz to 30 MHz)	3.4 dB

EUT Setup



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

FCC Part 15.247 Page 10 of 68

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The adapter was connected to a 120 VAC/60 Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W	
150 kHz – 30 MHz	9 kHz	

Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the first LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

$$V_C = V_R + A_C + VDF$$

Herein,

 V_{C} : corrected voltage amplitude V_{R} : reading voltage amplitude A_{c} : attenuation caused by cable loss

VDF: voltage division factor of AMN or ISN

The "Margin" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the maximum limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

FCC Part 15.247 Page 11 of 68

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCS 30	830245/006	2014-10-20	2015-10-20
R&S	L.I.S.N	ESH2-Z5	892107/021	2015-07-16	2016-07-15
R&S	Two-line V-network	ENV 216	3560.6550.12	2014-12-11	2015-12-11
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A

Report No.: RDG151008002-00A

Test Results Summary

According to the recorded data in following table, the EUT complied with the <u>FCC Part 15.207</u>, with the worst margin reading of:

6.5 dB at 0.378019 MHz in the Line conducted mode

Test Data

Environmental Conditions

Temperature:	26.4°C
Relative Humidity:	53 %
ATM Pressure:	100.8 kPa

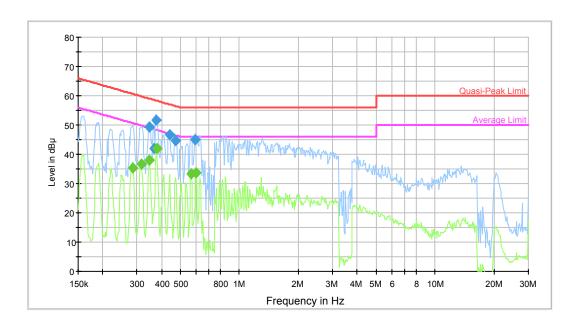
The testing was performed by Allen Qiao on 2015-10-15

FCC Part 15.247 Page 12 of 68

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Mode: Transmitting

AC120 V, 60 Hz, Line:



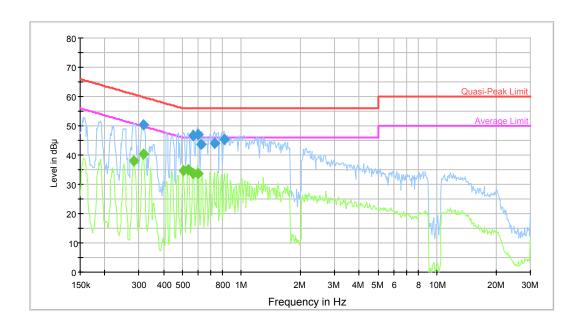
Report No.: RDG151008002-00A

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.346296	49.5	9.000	L1	9.8	9.6	59.1	Compliance
0.366160	41.9	9.000	L1	9.8	16.7	58.6	Compliance
0.375019	51.5	9.000	L1	9.8	6.9	58.4	Compliance
0.439808	46.8	9.000	L1	9.8	10.2	57.1	Compliance
0.472507	44.8	9.000	L1	9.8	11.7	56.5	Compliance
0.595338	44.9	9.000	L1	9.8	11.1	56.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.283749	35.2	9.000	L1	9.8	15.5	50.7	Compliance
0.314718	36.8	9.000	L1	9.8	13.0	49.8	Compliance
0.346296	37.9	9.000	L1	9.8	11.2	49.1	Compliance
0.378019	41.8	9.000	L1	9.8	6.5	48.3	Compliance
0.567545	33.4	9.000	L1	9.8	12.6	46.0	Compliance
0.600101	33.8	9.000	L1	9.8	12.2	46.0	Compliance

FCC Part 15.247 Page 13 of 68

AC120 V, 60 Hz, Neutral:



Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.317235	50.4	9.000	N	9.8	9.4	59.8	Compliance
0.567545	46.6	9.000	N	9.8	9.4	56.0	Compliance
0.600101	46.9	9.000	N	9.8	9.1	56.0	Compliance
0.624492	43.8	9.000	N	9.8	12.2	56.0	Compliance
0.732382	43.9	9.000	N	9.8	12.1	56.0	Compliance
0.818813	45.3	9.000	N	9.8	10.7	56.0	Compliance

Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.281497	38.1	9.000	N	9.8	12.7	50.8	Compliance
0.314718	40.2	9.000	N	9.8	9.6	49.8	Compliance
0.503608	34.5	9.000	N	9.8	11.5	46.0	Compliance
0.536756	34.9	9.000	N	9.8	11.1	46.0	Compliance
0.567545	33.8	9.000	N	9.8	12.2	46.0	Compliance
0.600101	33.6	9.000	N	9.8	12.4	46.0	Compliance

FCC Part 15.247 Page 14 of 68

Applicable Standard

FCC §15.247 (d); §15.209; §15.205;

Measurement Uncertainty

Compliance or non- compliance with a disturbance limit shall be determined in the following manner:

Report No.: RDG151008002-00A

If U_{lab} is less than or equal to U_{cispr} of Table 1, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit. If U_{lab} is greater than U_{cispr} of Table 1, then:
- compliance is deemed to occur if no measured disturbance level, increased by $(U_{lab} U_{cispr})$, exceeds the disturbance limit;
- non compliance is deemed to occur if any measured disturbance level, increased by $(U_{\text{lab}} U_{\text{cispr}})$, exceeds the disturbance limit.

Based on CISPR 16-4-2: 2011, measurement uncertainty of radiated emission at a distance of 3m at Bay Area Compliance Laboratories Corp. (Dongguan) is:

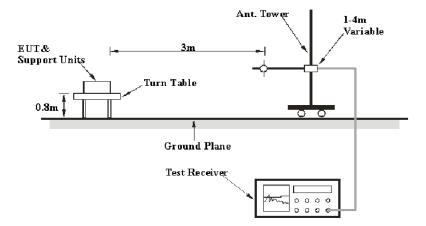
30M~200MHz: 5.0 dB 200M~1GHz: 6.2 dB 1G~6GHz: 4.45 dB 6G~18GHz: 5.23 dB

Table 1 – Values of U_{cispr}

Measurement					
Radiated disturbance (electric field strength at an OATS or in a SAC) (30 MHz to 1000 MHz)	6.3 dB				
Radiated disturbance (electric field strength in a FAR) (1 GHz to 6 GHz)	5.2 dB				
Radiated disturbance (electric field strength in a FAR) (6 GHz to 18 GHz)	5.5 dB				

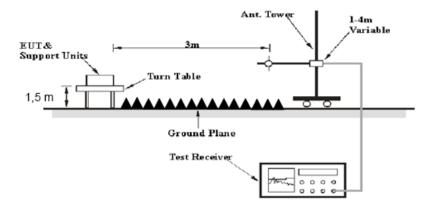
EUT Setup

Below 1GHz:



FCC Part 15.247 Page 15 of 68

Above 1GHz:



The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1 CHz	1MHz	3 MHz	/	PK
Above 1 GHz	1MHz	10 Hz	/	Ave.

Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz - 1 GHz, peak and average detection modes for frequencies above 1 GHz.

FCC Part 15.247 Page 16 of 68

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2015-08-03	2016-08-02
Sunol Sciences	Antenna	JB3	A060611-3	2014-11-06	2017-11-05
HP	Amplifier	8447E	2434A02181	2015-09-01	2016-09-01
Aligent	Spectrum Analyzer	E4440A	SG43360054	2014-12-04	2015-12-04
ETS LINDGREN	Horn Antenna	3115	000 527 35	2015-09-06	2018-09-06
Mini-Circuit	Amplifier	ZVA-213-S+	054201245	2015-02-19	2016-02-19
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09
Ducommun Technolagies	Horn Antenna	ARH-4223-02	1007726-01 1304	2014-06-16	2017-06-15
Quinstar	Amplifier	QLW- 18405536-JO	15964001001	2015-09-06	2016-09-06

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Factor + Cable Loss - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

Test Results Summary

According to the recorded data in following table, the EUT complied with the <u>FCC Title 47, Part 15, Subpart C, and section 15.205, 15.209 and 15.247</u>, with the worst margin reading of:

7.72 dB at 2483.5 MHz in the Vertical polarization

Test Data

Environmental Conditions

Temperature:	26.4 °C
Relative Humidity:	55 %
ATM Pressure:	101.1 kPa

^{*} The testing was performed by Allen Qiao on 2015-10-14

Test Mode: Transmitting

FCC Part 15.247 Page 17 of 68

Report No.: RDG151008002-00A

BDR Mode (GFSK):

Frequency	de (GFSK): Re	eceiver	Rx A	ntenna	Cable	Amplifier	Corrected	FCC 1	15.247		
(MHz)	Reading (dBµV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)	loss (dB)	Gain (dB)	Amplitude (dBµV/m)	Limit (dBµV/m)	Margin (dB)		
Low Channel: 2402 MHz											
2402	62.41	PK	Н	28.46	3.66	0.00	94.53	N/A	N/A		
2402	51.47	AV	Н	28.46	3.66	0.00	83.59	N/A	N/A		
2402	62.88	PK	V	28.46	3.66	0.00	95.00	N/A	N/A		
2402	51.97	AV	V	28.46	3.66	0.00	84.09	N/A	N/A		
2390	26.63	PK	V	28.44	3.63	0.00	58.70	74.00	15.30		
2390	13.25	AV	V	28.44	3.63	0.00	45.32	54.00	8.68		
4804	45.44	PK	V	33.13	5.06	27.41	56.22	74.00	17.78		
4804	34.21	AV	V	33.13	5.06	27.41	44.99	54.00	9.01		
7206	32.05	PK	V	36.37	6.61	25.91	49.12	74.00	24.88		
7206	18.36	AV	V	36.37	6.61	25.91	35.43	54.00	18.57		
9608	29.68	PK	V	38.38	8.53	27.55	49.04	74.00	24.96		
9608	16.65	AV	V	38.38	8.53	27.55	36.01	54.00	17.99		
3190	34.92	PK	V	31.52	6.26	27.38	45.32	74.00	28.68		
3190	22.39	AV	V	31.52	6.26	27.38	32.79	54.00	21.21		
242.43	43.68	QP	•	12.24	1.87	21.49	36.30	46.00	9.70		
2441	62.32	PK	Н	iddle Chan 28.56	3.76	0.00	94.64	N/A	N/A		
2441	51.42	AV	Н	28.56	3.76	0.00	83.74	N/A N/A	N/A N/A		
2441	62.51	PK	V	28.56	3.76	0.00	94.83	N/A N/A	N/A		
2441	51.64	AV	V	28.56	3.76	0.00	83.96	N/A N/A	N/A		
4882	45.31	PK	V	33.40	5.19	27.42	56.48	74.00	17.52		
4882	33.84	AV	V	33.40	5.19	27.42	45.01	54.00	8.99		
7323	31.73	PK	V	36.58	6.75	25.88	49.18	74.00	24.82		
7323	18.16	AV	V	36.58	6.75	25.88	35.61	54.00	18.39		
9764	29.74	PK	V	38.35	8.62	27.20	49.51	74.00	24.49		
9764	16.65	AV	V	38.35	8.62	27.20	36.42	54.00	17.58		
3190	34.56	PK	V	31.52	6.26	27.38	44.96	74.00	29.04		
3190	22.05	AV	V	31.52	6.26	27.38	32.45	54.00	21.55		
3085	34.62	PK	V	31.12	6.78	27.46	45.06	74.00	28.94		
3085	22.13	AV	V	31.12	6.78	27.46	32.57	54.00	21.43		
242.43	43.86	QP	V	12.24	1.87	21.49	36.48	46.00	9.52		
				High Chann							
2480	62.31	PK	Н	28.65	3.68	0.00	94.64	N/A	N/A		
2480	51.45	AV	Н	28.65	3.68	0.00	83.78	N/A	N/A		
2480	62.44	PK	V	28.65	3.68	0.00	94.77	N/A	N/A		
2480	51.71	AV	V	28.65	3.68	0.00	84.04	N/A	N/A		
2483.5	25.76	PK	V	28.66	3.67	0.00	58.09	74.00	15.91		
2483.5	13.9	AV	V	28.66	3.67	0.00	46.23	54.00	7.77		
4960	45.25	PK	V	33.66	5.34	27.43	56.82	74.00	17.18		
4960	33.69	AV	V	33.66	5.34	27.43	45.26	54.00	8.74		
7440	31.81	PK	V	36.79	6.89	25.97	49.52	74.00	24.48		
7440	18.21	AV	V	36.79	6.89	25.97	35.92	54.00	18.08		
9920	29.88	PK	V	38.32	8.71	26.66	50.25	74.00	23.75		
9920	16.72	AV	V	38.32	8.71	26.66	37.09	54.00	16.91		
3190	34.58	PK	V	31.52	6.26	27.38	44.98	74.00	29.02		
3190	22.01	AV		31.52	6.26	27.38	32.41	54.00	21.59		
242.43	43.42	QP	V	12.24	1.87	21.49	36.04	46.00	9.96		

FCC Part 15.247 Page 18 of 68

EDR Mode ($\pi/4$ -DQPSK):

EDR Mode (π/4-DQPSK):									
Frequency	Re	eceiver	Rx A	ntenna	Cable	Amplifier	Corrected	FCC 1	5.247
(MHz)	Reading (dBµV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)	loss (dB)	Gain (dB)	Amplitude (dBμV/m)	Limit (dBµV/m)	Margin (dB)
			I	Low Chann	el: 2402 N	MHz			
2402	62.18	PK	Н	28.46	3.66	0.00	94.30	N/A	N/A
2402	50.86	AV	Н	28.46	3.66	0.00	82.98	N/A	N/A
2402	62.31	PK	V	28.46	3.66	0.00	94.43	N/A	N/A
2402	51.17	AV	V	28.46	3.66	0.00	83.29	N/A	N/A
2390	26.39	PK	V	28.44	3.63	0.00	58.46	74.00	15.54
2390	13.27	AV	V	28.44	3.63	0.00	45.34	54.00	8.66
4804	44.83	PK	V	33.13	5.06	27.41	55.61	74.00	18.39
4804	32.45	AV	V	33.13	5.06	27.41	43.23	54.00	10.77
7206	31.95	PK	V	36.37	6.61	25.91	49.02	74.00	24.98
7206	18.2	AV	V	36.37	6.61	25.91	35.27	54.00	18.73
9608	30.13	PK	V	38.38	8.53	27.55	49.49	74.00	24.51
9608	16.68	AV	V	38.38	8.53	27.55	36.04	54.00	17.96
3190	34.83	PK	V	31.52	6.26	27.38	45.23	74.00	28.77
3190	22.17	AV	V	31.52	6.26	27.38	32.57	54.00	21.43
242.43	43.57	QP	V	12.24	1.87	21.49	36.19	46.00	9.81
Į.			M	iddle Chan					
2441	62.36	PK	Н	28.56	3.76	0.00	94.68	N/A	N/A
2441	50.89	AV	Н	28.56	3.76	0.00	83.21	N/A	N/A
2441	62.97	PK	V	28.56	3.76	0.00	95.29	N/A	N/A
2441	51.66	AV	V	28.56	3.76	0.00	83.98	N/A	N/A
4882	45.07	PK	V	33.40	5.19	27.42	56.24	74.00	17.76
4882	32.46	AV	V	33.40	5.19	27.42	43.63	54.00	10.37
7323	32.05	PK	V	36.58	6.75	25.88	49.50	74.00	24.50
7323	18.23	AV	V	36.58	6.75	25.88	35.68	54.00	18.32
9764	30.22	PK	V	38.35	8.62	27.20	49.99	74.00	24.01
9764	16.69	AV	V	38.35	8.62	27.20	36.46	54.00	17.54
3190	34.92	PK	V	31.52	6.26	27.38	45.32	74.00	28.68
3190	22.17	AV	V	31.52	6.26	27.38	32.57	54.00	21.43
3085	35.21	PK	V	31.12	6.78	27.46	45.65	74.00	28.35
3085	22.47	AV	V	31.12	6.78	27.46	32.91	54.00	21.09
242.43	44.05	OP	V	12.24	1.87	21.49	36.67	46.00	9.33
Į.			I	High Chann					
2480	61.09	PK	Н	28.65		0.00	93.42	N/A	N/A
2480	49.81	AV	Н	28.65	3.68	0.00	82.14	N/A	N/A
2480	61.32	PK	V	28.65	3.68	0.00	93.65	N/A	N/A
2480	50.03	AV	V	28.65	3.68	0.00	82.36	N/A	N/A
2483.5	25.04	PK	V	28.66	3.67	0.00	57.37	74.00	16.63
2483.5	13.95	AV	V	28.66	3.67	0.00	46.28	54.00	7.72
4960	44.65	PK	V	33.66	5.34	27.43	56.22	74.00	17.78
4960	32.1	AV	V	33.66	5.34	27.43	43.67	54.00	10.33
7440	31.68	PK	V	36.79	6.89	25.97	49.39	74.00	24.61
7440	17.87	AV	V	36.79	6.89	25.97	35.58	54.00	18.42
9920	29.76	PK	V	38.32	8.71	26.66	50.13	74.00	23.87
9920	16.62	AV	V	38.32	8.71	26.66	36.99	54.00	17.01
3190	34.44	PK	V	31.52	6.26	27.38	44.84	74.00	29.16
3190	21.79	AV	V	31.52	6.26	27.38	32.19	54.00	21.81
242.43	43.52	QP	V	12.24	1.87	21.49	36.14	46.00	9.86

FCC Part 15.247 Page 19 of 68

EDR Mode (8-DPSK):

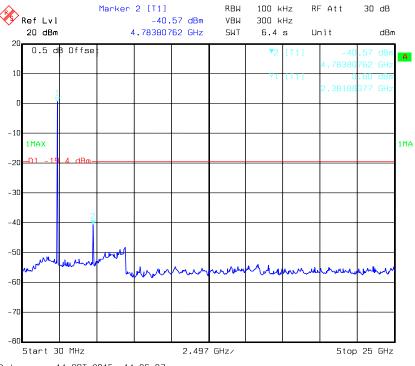
Frequency	Re): eceiver	Rx A	ntenna	Cable	Amplifier	Corrected	FCC 1	5.247		
(MHz)	Reading (dBµV)	Detector (PK/QP/AV)	Polar (H/V)	Factor (dB)	loss (dB)	Gain (dB)	Amplitude (dBμV/m)	Limit (dBµV/m)	Margin (dB)		
Low Channel: 2402 MHz											
2402	62.32	PK	Н	28.46	3.66	0.00	94.44	N/A	N/A		
2402	51.14	AV	Н	28.46	3.66	0.00	83.26	N/A	N/A		
2402	62.51	PK	V	28.46	3.66	0.00	94.63	N/A	N/A		
2402	51.3	AV	V	28.46	3.66	0.00	83.42	N/A	N/A		
2390	27.36	PK	V	28.44	3.63	0.00	59.43	74.00	14.57		
2390	13.31	AV	V	28.44	3.63	0.00	45.38	54.00	8.62		
4804	44.88	PK	V	33.13	5.06	27.41	55.66	74.00	18.34		
4804	32.56	AV	V	33.13	5.06	27.41	43.34	54.00	10.66		
7206	32.09	PK	V	36.37	6.61	25.91	49.16	74.00	24.84		
7206	18.21	AV	V	36.37	6.61	25.91	35.28	54.00	18.72		
9608	30.24	PK	V	38.38	8.53	27.55	49.60	74.00	24.40		
9608	16.63	AV	V	38.38	8.53	27.55	35.99	54.00	18.01		
3190	34.52	PK	V	31.52	6.26	27.38	44.92	74.00	29.08		
3190 242.43	21.98	AV	V	31.52 12.24	6.26 1.87	27.38	32.38	54.00	21.62		
242.43	43.65	QP	•	iddle Chan		21.49	36.27	46.00	9.73		
2441	62.09	PK	Н	28.56	3.76	0.00	94.41	N/A	N/A		
2441	50.83	AV	Н	28.56	3.76	0.00	83.15	N/A	N/A		
2441	62.2	PK	V	28.56	3.76	0.00	94.52	N/A	N/A		
2441	51.01	AV	V	28.56	3.76	0.00	83.33	N/A	N/A		
4882	44.79	PK	V	33.40	5.19	27.42	55.96	74.00	18.04		
4882	32.33	AV	V	33.40	5.19	27.42	43.50	54.00	10.50		
7323	31.88	PK	V	36.58	6.75	25.88	49.33	74.00	24.67		
7323	18.05	AV	V	36.58	6.75	25.88	35.50	54.00	18.50		
9764	29.92	PK	V	38.35	8.62	27.20	49.69	74.00	24.31		
9764	16.6	AV	V	38.35	8.62	27.20	36.37	54.00	17.63		
3190	34.22	PK	V	31.52	6.26	27.38	44.62	74.00	29.38		
3190	21.68	AV	V	31.52	6.26	27.38	32.08	54.00	21.92		
3085	35.29	PK	V	31.12	6.78	27.46	45.73	74.00	28.27		
3085	22.51	AV	V	31.12	6.78	27.46	32.95	54.00	21.05		
242.43	43.25	QP	V	12.24	1.87	21.49	35.87	46.00	10.13		
<u> </u>				High Chann			T				
2480	61.27	PK	Н	28.65	3.68	0.00	93.60	N/A	N/A		
2480	50.04	AV	Н	28.65	3.68	0.00	82.37	N/A	N/A		
2480	61.35	PK	V	28.65	3.68	0.00	93.68	N/A	N/A		
2480	50.09	AV	V	28.65	3.68	0.00	82.42	N/A	N/A		
2483.5	25.57	PK	V	28.66	3.67	0.00	57.90	74.00	16.10		
2483.5	13.95	AV	V	28.66	3.67	0.00	46.28	54.00	7.72		
4960	44.69	PK	V	33.66	5.34	27.43	56.26	74.00	17.74		
4960 7440	32.25 31.76	AV PK	V	33.66 36.79	5.34 6.89	27.43 25.97	43.82 49.47	54.00 74.00	10.18 24.53		
7440	18.01	AV	V	36.79	6.89	25.97	35.72	54.00	18.28		
9920	29.84	PK	V	38.32	8.71	26.66	50.21	74.00	23.79		
9920	16.61	AV	V	38.32	8.71	26.66	36.98	54.00	17.02		
3190	34.27	PK	V	31.52	6.26	27.38	44.67	74.00	29.33		
3190	21.77	AV	V	31.52	6.26	27.38	32.17	54.00	21.83		
242.43	43.37	QP	V	12.24	1.87	21.49	35.99	46.00	10.01		

FCC Part 15.247 Page 20 of 68

Conducted Spurious Emissions at Antenna Port

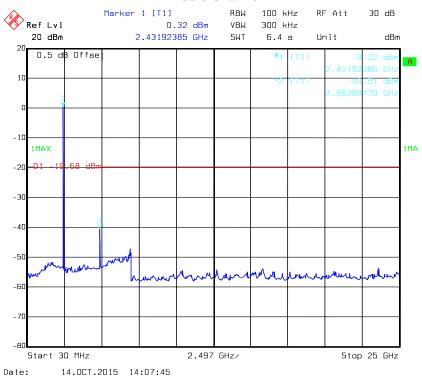
BDR Mode (GFSK):

Low Channel



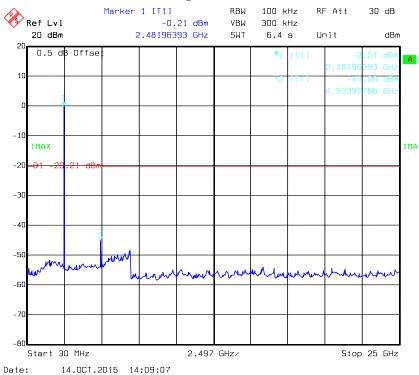
Date: 14.0CT.2015 14:06:07

Middle Channel



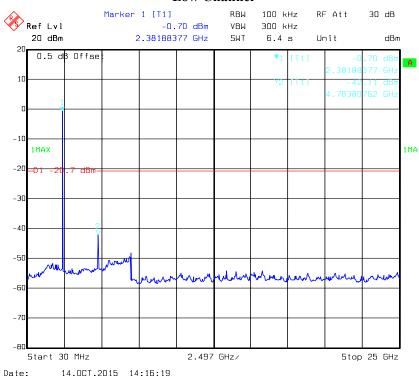
FCC Part 15.247 Page 21 of 68

High Channel



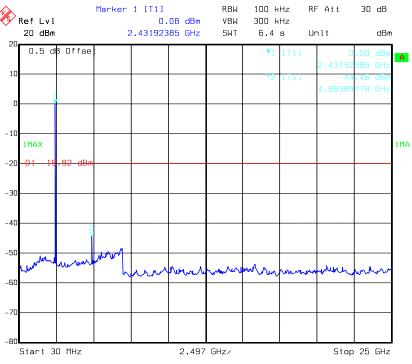
EDR Mode (\pi/4-DQPSK):

Low Channel



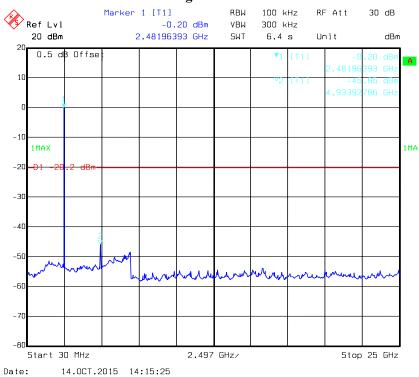
FCC Part 15.247 Page 22 of 68

Middle Channel



Date: 14.0CT.2015 14:14:11

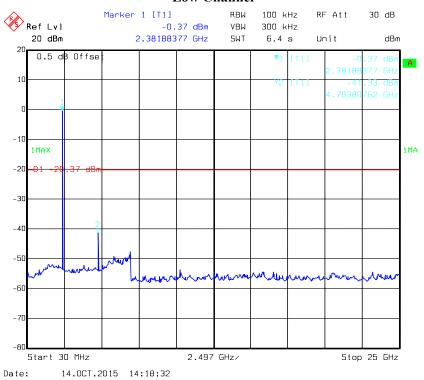
High Channel



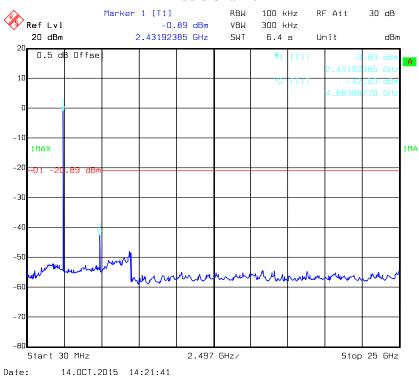
FCC Part 15.247 Page 23 of 68

Low Channel

Report No.: RDG151008002-00A

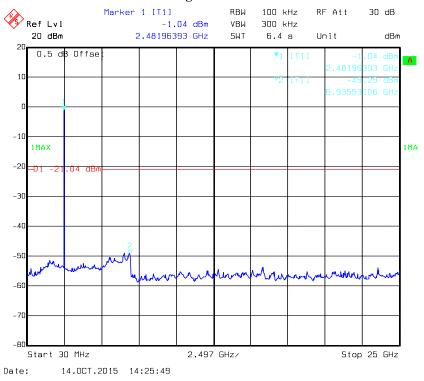


Middle Channel



FCC Part 15.247 Page 24 of 68

High Channel



FCC Part 15.247 Page 25 of 68

Applicable Standard

Frequency hopping systems shall have hoping channel carrier frequencies separated by a minimum of 25 kHz or the 20dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.50 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater provided the systems operate with an output power no greater than 125 mW.

Report No.: RDG151008002-00A

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Procedure

- 1. Set the EUT in transmitting mode, spectrum Bandwidth was set at 30 kHz, maxhold the channel.
- 2. Set the adjacent channel of the EUT maxhold another trace
- 3. Measure the channel separation.

Test Data

Environmental Conditions

Temperature:	26.2 °C
Relative Humidity:	54 %
ATM Pressure:	100.4 kPa

^{*} The testing was performed by Allen Qiao on 2015-10-10

Test Result: Compliance.

Please refer to following tables and plots

FCC Part 15.247 Page 26 of 68

Report No.: RDG151008002-00A

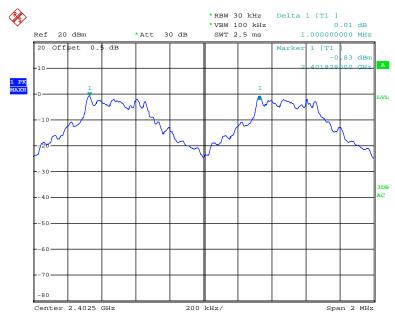
Test Mode: Transmitting

Mode	Channel	Frequency	Channel Seperation	Limit	Result	
		MHz	MHz	MHz		
	Low	2402	1.000			
	Adjacent	2403	1.000			
BDR	Middle	2441	1.004	0.624	Compliance	
(GFSK)	Adjacent	2442	1.004	0.024	Compliance	
	High	2480	1.004			
	Adjacent	2479	1.004			
	Low	2402	1.000			
	Adjacent	2403	1.000			
EDR	Middle	2441	1.000	0.837	Commliance	
$(\pi/4\text{-DQPSK})$	Adjacent	2442	1.000	0.837	Compliance	
	High	2480	1.004			
	Adjacent	2479	1.004			
	Low	2402	1.000			
	Adjacent	2403	1.000			
EDR	Middle	2441	1.000	0.942	Commliance	
(8DPSK)	Adjacent	2442	1.000	0.843	Compliance	
	High	2480	1.004			
	Adjacent	2479	1.004			

*Note: Limit= (2/3)*20dB bandwidth*

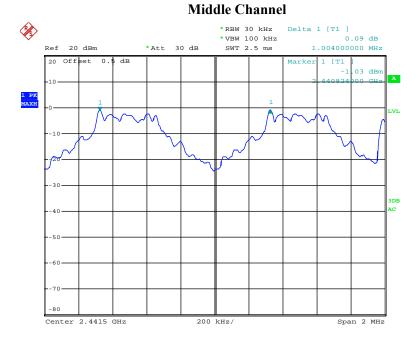
BDR Mode (GFSK):

Low Channel



Date: 10.OCT.2015 17:02:10

FCC Part 15.247 Page 27 of 68



Date: 10.OCT.2015 17:04:49

High Channel

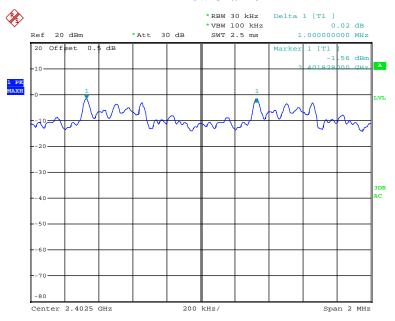


Date: 10.OCT.2015 17:05:51

FCC Part 15.247 Page 28 of 68

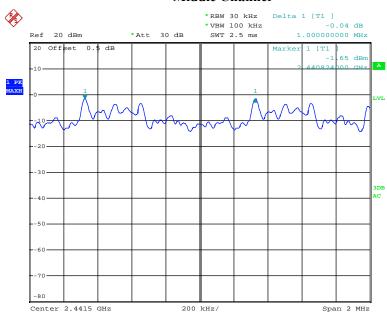
EDR Mode ($\pi/4$ -DQPSK):





Date: 10.OCT.2015 17:07:02

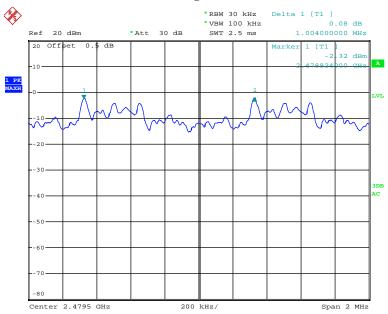
Middle Channel



Date: 10.OCT.2015 17:17:00

FCC Part 15.247 Page 29 of 68

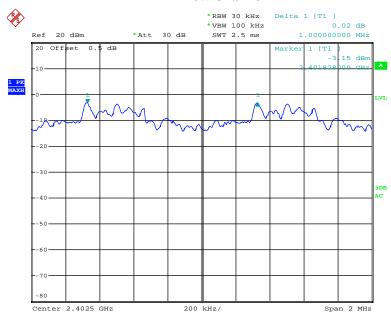
High Channel



Date: 10.OCT.2015 17:08:54

EDR Mode (8-DPSK):

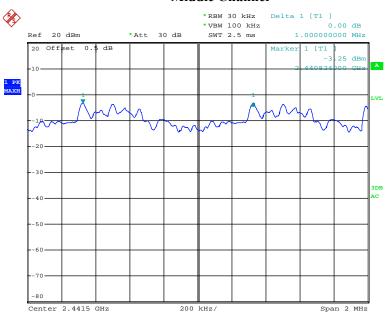
Low Channel



Date: 10.OCT.2015 17:09:51

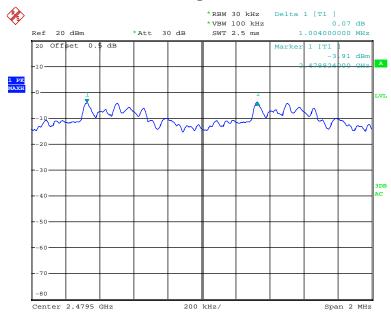
FCC Part 15.247 Page 30 of 68





Date: 10.OCT.2015 17:10:41

High Channel



Date: 10.OCT.2015 17:11:40

FCC Part 15.247 Page 31 of 68

FCC $\S15.247(a)$ (1) – 20 dB BANDWIDTH TESTING

Applicable Standard

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.

Report No.: RDG151008002-00A

Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT on the test table without connection to measurement instrument. Turn on the EUT. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- 3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
- 4. Repeat above procedures until all frequencies measured were complete.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.4 °C	
Relative Humidity:	55 %	
ATM Pressure:	101.1 kPa	

^{*} The testing was performed by Allen Qiao on 2015-10-14

Test Result: Compliance.

Please refer to following tables and plots

FCC Part 15.247 Page 32 of 68

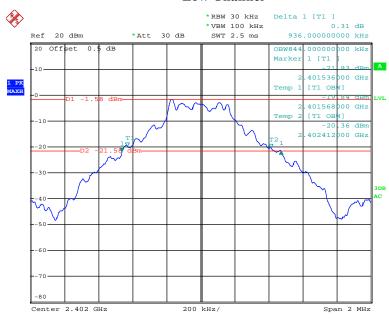
Test Mode: Transmitting

Mode	Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
BDR Mode (GFSK)	Low	2402	0.936
	Middle	2441	0.928
(Of Six)	High	2480	0.932
	Low	2402	1.252
EDR Mode (π/4-DQPSK):	Middle	2441	1.256
(M+DQI SK).	High	2480	1.256
	Low	2402	1.264
EDR Mode (8-DPSK):	Middle	2441	1.264
(0-D1 5K).	High	2480	1.264

Please refer to the following plots.

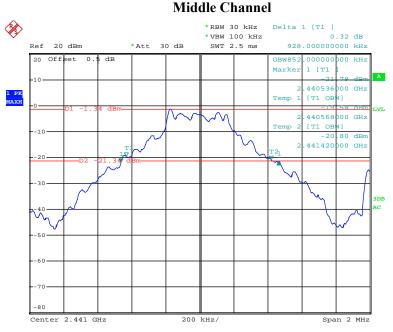
BDR Mode (GFSK):

Low Channel



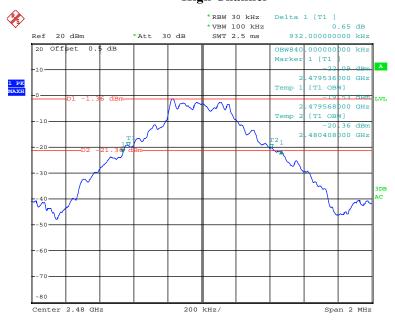
Date: 10.OCT.2015 11:14:50

FCC Part 15.247 Page 33 of 68



Date: 10.OCT.2015 11:16:38

High Channel

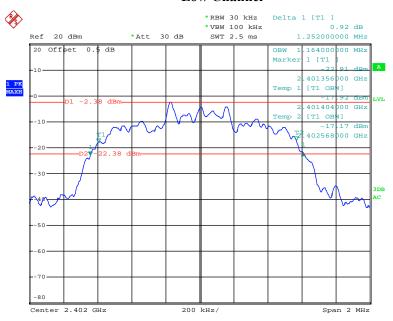


Date: 10.OCT.2015 11:17:53

Page 34 of 68 FCC Part 15.247

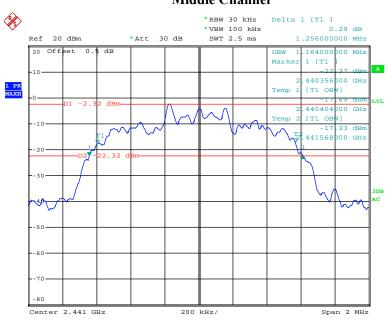
EDR Mode (\pi/4-DQPSK):





Date: 10.OCT.2015 11:18:54

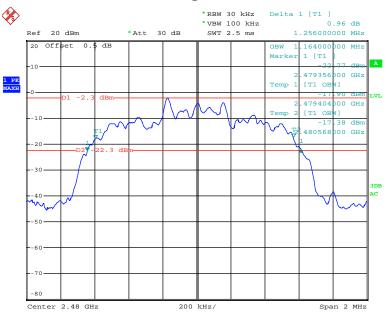
Middle Channel



Date: 10.OCT.2015 11:19:45

FCC Part 15.247 Page 35 of 68

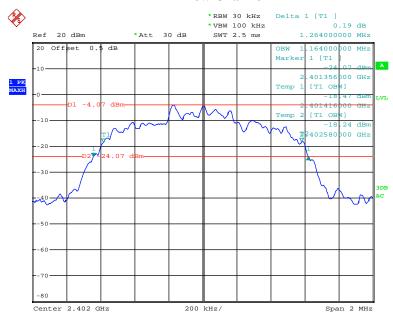
High Channel



Date: 10.OCT.2015 11:21:00

EDR Mode (8-DPSK):

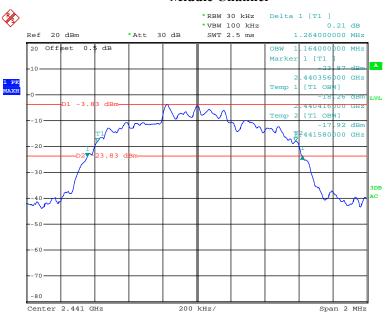
Low Channel



Date: 10.OCT.2015 11:25:29

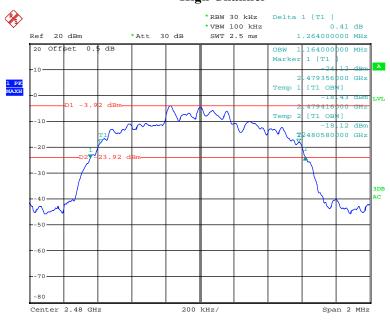
FCC Part 15.247 Page 36 of 68





Date: 10.OCT.2015 11:26:31

High Channel



Date: 10.OCT.2015 11:27:25

FCC Part 15.247 Page 37 of 68

FCC §15.247(a) (1) (iii) - QUANTITY OF HOPPING CHANNEL TEST

Report No.: RDG151008002-00A

Applicable Standard

Frequency hopping systems in the 2400–2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

Test Procedure

- 1. Check the calibration of the measuring instrument (SA) using either an internal calibrator or a known signal from an external generator.
- 2. Set the EUT in hopping mode from first channel to last.
- 3. By using the Max-Hold function record the Quantity of the channel.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	27.1 °C
Relative Humidity:	52 %
ATM Pressure:	101.3 kPa

^{*} The testing was performed by Allen Qiao on 2015-10-12

Test Result: Compliance.

Please refer to following tables and plots

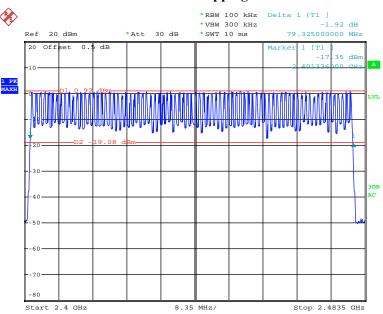
FCC Part 15.247 Page 38 of 68

Test Mode: Transmitting

BDR Mode (GFSK):

Frequency Range (MHz)	Number of Hopping Channel	Limit
2400-2483.5	79	≥15

Number of Hopping Channels



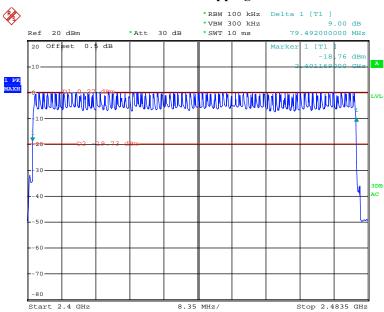
Date: 12.0CT.2015 11:01:03

FCC Part 15.247 Page 39 of 68

EDR Mode (\pi/4-DQPSK):

Frequency Range (MHz)	Number of Hopping Channel	Limit
2400-2483.5	79	≥15

Number of Hopping Channels



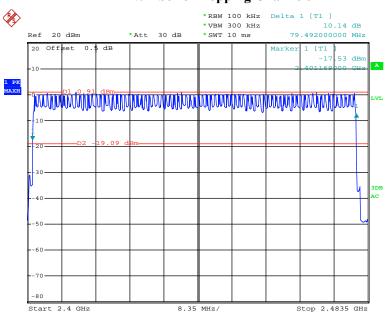
Date: 12.OCT.2015 10:58:27

FCC Part 15.247 Page 40 of 68

EDR Mode (8-DPSK):

Frequency Range (MHz)	Number of Hopping Channel	Limit
2400-2483.5	79	≥15

Number of Hopping Channels



Date: 12.0CT.2015 10:54:03

FCC Part 15.247 Page 41 of 68

Applicable Standard

Frequency hopping systems in the 2400-2483.5 MHz shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

Report No.: RDG151008002-00A

Test Procedure

The EUT was worked in channel hopping; Spectrum SPAN was set as 0. Sweep was set as 0.4 * channel no. (s), the quantity of pulse was get from single sweep. In addition, the time of single pulses was tested.

Dwell Time= time slot length * hope rate/ number of hopping channels * 31.6s Hop rate=1600/s

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.2~27.1 °C
Relative Humidity:	52~54 %
ATM Pressure:	100.4~101.3 kPa

^{*} The testing was performed by Allen Qiao from 2015-10-10 to 2015-10-12

Test Result: Compliance.

Please refer to following tables and plots

FCC Part 15.247 Page 42 of 68

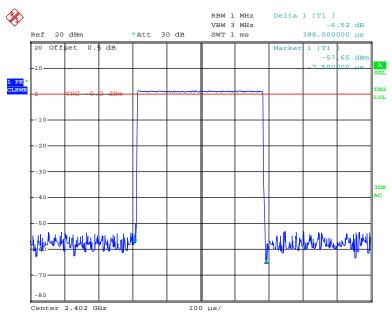
Test Mode: Transmitting

BDR Mode (GFSK):

Mode	Channel	Pulse Width (ms)	Dwell Time (s)	Limit (s)	Result	
	Low	0.386	0.124	0.4	Pass	
DH1	Middle	0.386	0.124	0.4	Pass	
DIII	High	0.386	0.124	0.4	Pass	
	Note: Dwell time=Pulse time (ms) \times (1600/2/79) \times 31.6 s					
	Low	1.662	0.266	0.4	Pass	
DH3	Middle	1.662	0.266	0.4	Pass	
DHS	High	1.662	0.266	0.4	Pass	
Note: Dwell time=Pulse time (ms) \times (1600/4/79) \times 3				⁷ 9) ×31.6 s		
	Low	2.920	0.311	0.4	Pass	
DH5	Middle	2.920	0.311	0.4	Pass	
DHS	High	2.920	0.311	0.4	Pass	
	Note: Dwell time=Pulse time (ms) \times (1600/6/79) \times 31.6 s					

Report No.: RDG151008002-00A

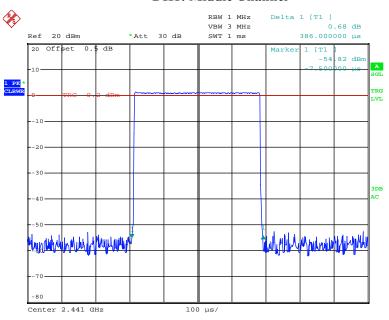
DH1: Low Channel



Date: 10.0CT.2015 17:37:13

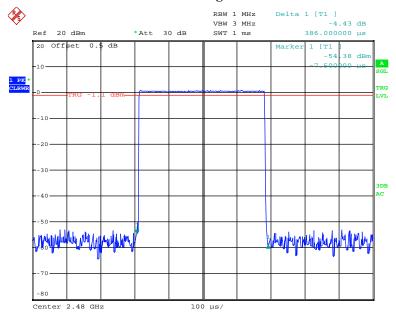
FCC Part 15.247 Page 43 of 68

DH1: Middle Channel



Date: 10.OCT.2015 17:37:44

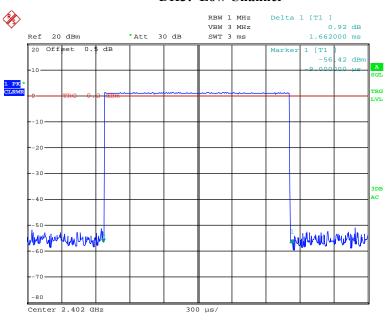
DH1: High Channel



Date: 10.OCT.2015 17:38:34

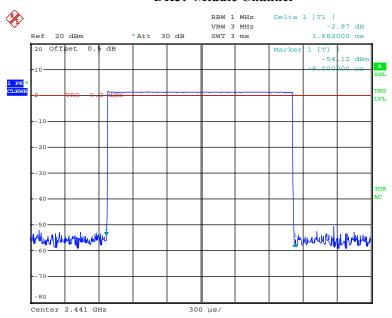
FCC Part 15.247 Page 44 of 68

DH3: Low Channel



Date: 12.OCT.2015 09:27:32

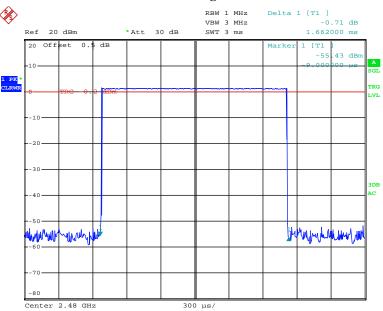
DH3: Middle Channel



Date: 12.OCT.2015 09:27:52

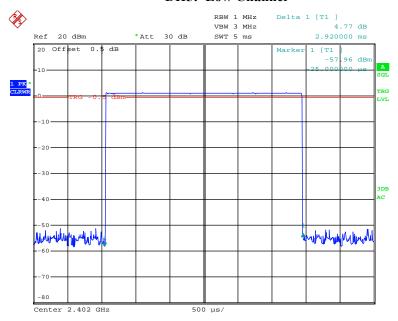
FCC Part 15.247 Page 45 of 68

DH3: High Channel



Date: 12.OCT.2015 09:28:06

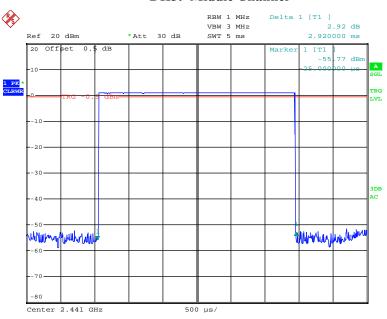
DH5: Low Channel



Date: 12.OCT.2015 09:30:02

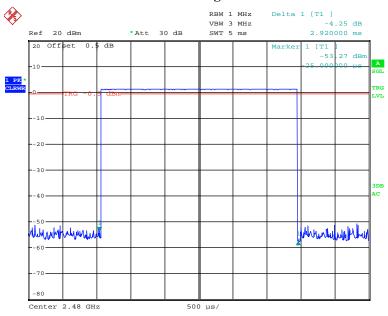
FCC Part 15.247 Page 46 of 68





Date: 12.OCT.2015 09:30:19

DH5: High Channel

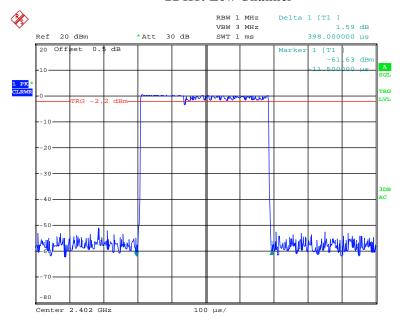


Date: 12.OCT.2015 09:30:35

FCC Part 15.247 Page 47 of 68

Mode	Channel	Pulse Width (ms)	Dwell Time (s)	Limit (s)	Result	
	Low	0.398	0.127	0.4	Pass	
2DH1	Middle	0.398	0.127	0.4	Pass	
2DHI	High	0.398	0.127	0.4	Pass	
	Note: Dwell time=Pulse time (ms) × (1600/2/79) ×31.6 s					
	Low	1.662	0.266	0.4	Pass	
2DH3	Middle	1.662	0.266	0.4	Pass	
2DH3	High	1.662	0.266	0.4	Pass	
Note: Dwell time=Pulse time (ms) \times (1600/4/79)				79) ×31.6 s		
	Low	2.910	0.310	0.4	Pass	
2DH5	Middle	2.910	0.310	0.4	Pass	
2DH3	High	2.910	0.310	0.4	Pass	
	Note: Dwell time=Pulse time (ms) \times (1600/6/79) \times 31.6 s					

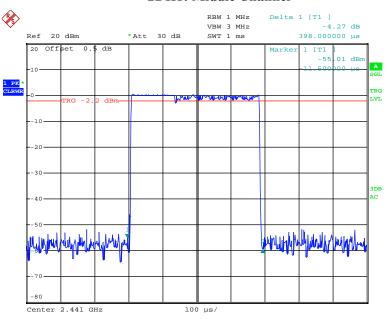
2DH1: Low Channel



Date: 12.OCT.2015 09:39:05

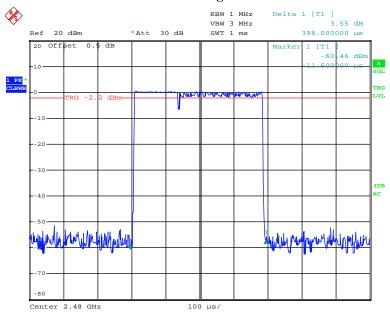
FCC Part 15.247 Page 48 of 68

2DH1: Middle Channel



Date: 12.OCT.2015 09:39:54

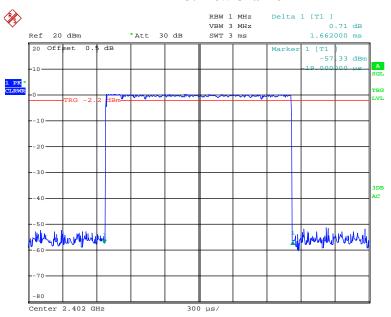
2DH1: High Channel



Date: 12.OCT.2015 09:40:08

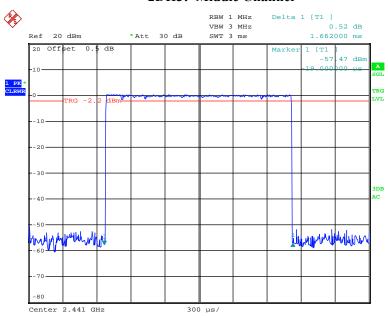
FCC Part 15.247 Page 49 of 68





Date: 12.OCT.2015 09:41:33

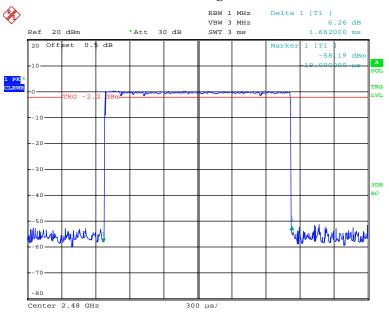
2DH3: Middle Channel



Date: 12.OCT.2015 09:42:13

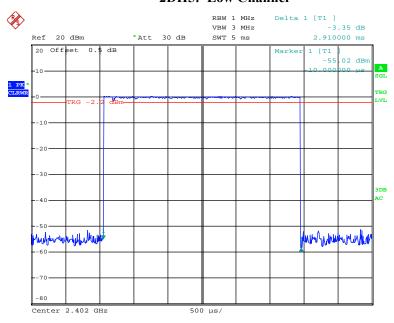
FCC Part 15.247 Page 50 of 68

2DH3: High Channel



Date: 12.OCT.2015 09:42:38

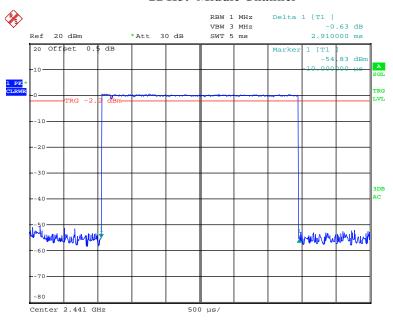
2DH5: Low Channel



Date: 12.OCT.2015 09:44:01

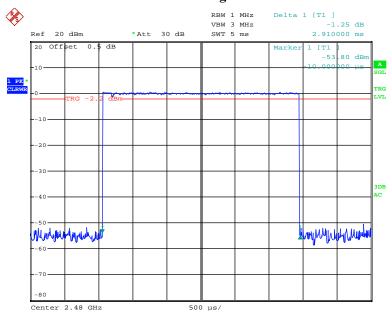
FCC Part 15.247 Page 51 of 68

2DH5: Middle Channel



Date: 12.OCT.2015 09:45:05

2DH5: High Channel



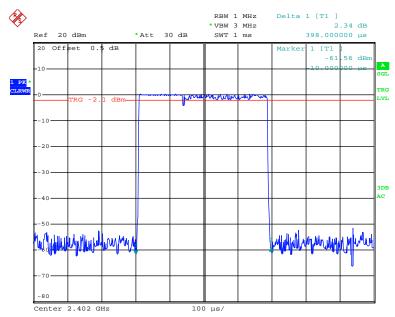
Date: 12.OCT.2015 09:45:23

FCC Part 15.247 Page 52 of 68

EDR Mode (8-DPSK):

Mode	Channel	Pulse Width (ms)	Dwell Time (s)	Limit (s)	Result	
	Low	0.398	0.127	0.4	Pass	
3DH1	Middle	0.398	0.127	0.4	Pass	
зипт	High	0.398	0.127	0.4	Pass	
	Note: Dwell time=Pulse time (ms) \times (1600/2/79) \times 31.6 s					
	Low	1.674	0.268	0.4	Pass	
3DH3	Middle	1.674	0.268	0.4	Pass	
3DH3	High	1.674	0.268	0.4	Pass	
Note: Dwell time=Pulse time (ms) \times (1600/4/79)				9) ×31.6 s		
	Low	2.930	0.313	0.4	Pass	
3DH5	Middle	2.930	0.313	0.4	Pass	
	High	2.930	0.313	0.4	Pass	
	Note: Dwell time=Pulse time (ms) \times (1600/6/79) \times 31.6 s					

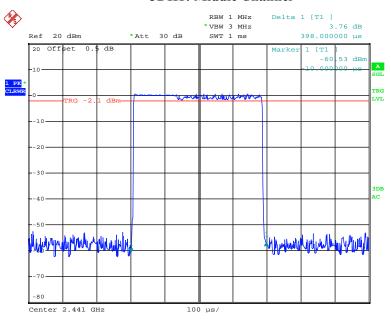
3DH1: Low Channel



Date: 12.OCT.2015 09:48:14

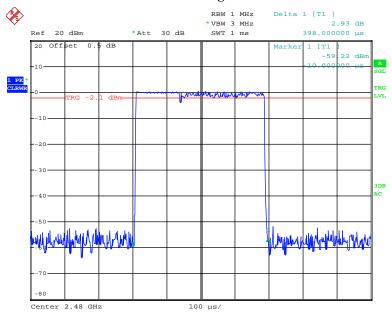
FCC Part 15.247 Page 53 of 68

3DH1: Middle Channel



Date: 12.OCT.2015 09:48:32

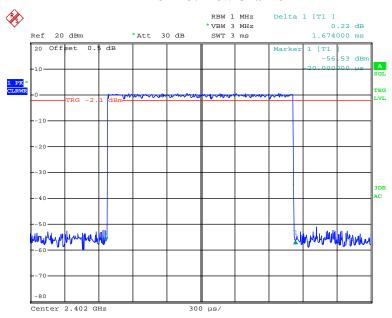
3DH1: High Channel



Date: 12.OCT.2015 09:48:52

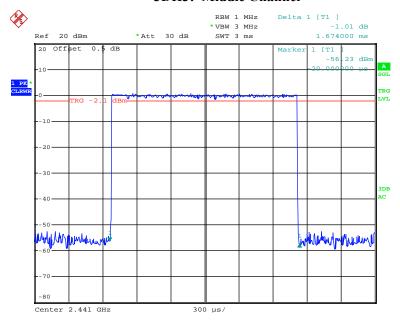
FCC Part 15.247 Page 54 of 68

3DH3: Low Channel



Date: 12.OCT.2015 09:50:22

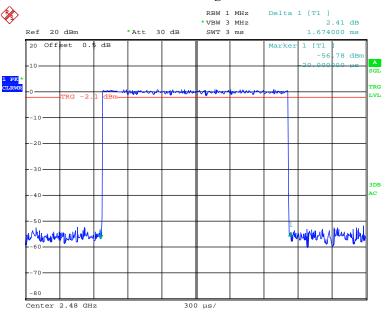
3DH3: Middle Channel



Date: 12.0CT.2015 09:50:37

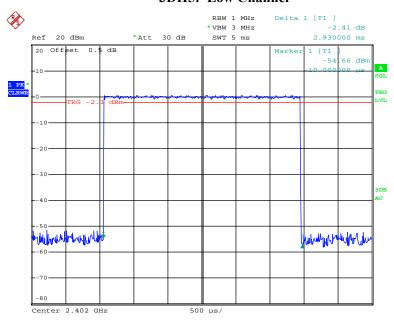
FCC Part 15.247 Page 55 of 68

3DH3: High Channel



Date: 12.OCT.2015 09:50:50

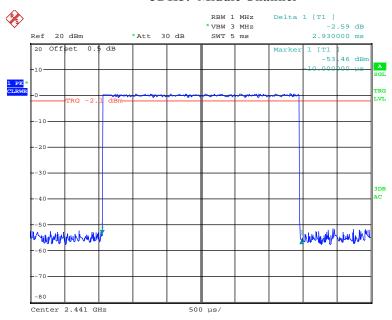
3DH5: Low Channel



Date: 12.OCT.2015 09:52:18

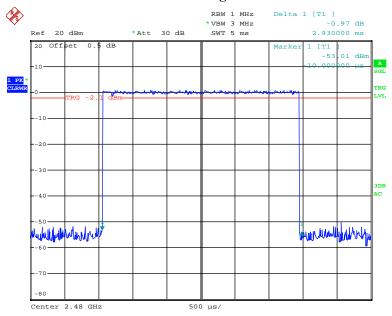
FCC Part 15.247 Page 56 of 68

3DH5: Middle Channel



Date: 12.OCT.2015 09:52:33

3DH5: High Channel



Date: 12.OCT.2015 09:52:52

FCC Part 15.247 Page 57 of 68

FCC §15.247(b) (1) - PEAK OUTPUT POWER MEASUREMENT

Applicable Standard

According to §15.247(b) (1), for frequency hopping systems operating in the 2400–2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400–2483.5 MHz band: 0.125 watts.

Report No.: RDG151008002-00A

Test Procedure

- 1. Place the EUT on a bench and set in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to an test equipment.
- 3. Add a correction factor to the display.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	26.2 °C
Relative Humidity:	54 %
ATM Pressure:	100.4 kPa

^{*} The testing was performed by Allen Qiao on 2015-10-10

Test Result: Compliance.

FCC Part 15.247 Page 58 of 68

Test Mode: Transmitting

Mada	Channel	Frequency	Output power	Limit
Mode		MHz	dBm	dBm
DDD	Low	2402	1.25	30
BDR (GFSK)	Middle	2441	1.17	30
	High	2480	0.69	30
EDD	Low	2402	1.32	30
EDR (π/4-DQPSK)	Middle	2441	1.46	30
(W4-DQF3K)	High	2480	0.21	30
EDR (8DPSK)	Low	2402	1.05	30
	Middle	2441	0.92	30
	High	2480	0.51	30

Note: The data above was tested in conducted mode.

BDR Mode (GFSK):

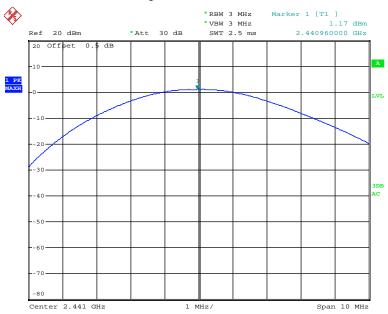
Output Power, Low Channel



Date: 10.0CT.2015 16:33:50

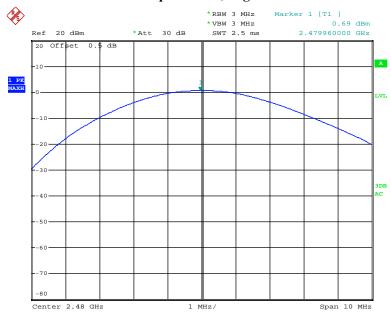
FCC Part 15.247 Page 59 of 68

Output Power, Middle Channel



Date: 10.OCT.2015 16:34:24

Output Power, High Channel



Date: 10.OCT.2015 16:35:55

FCC Part 15.247 Page 60 of 68

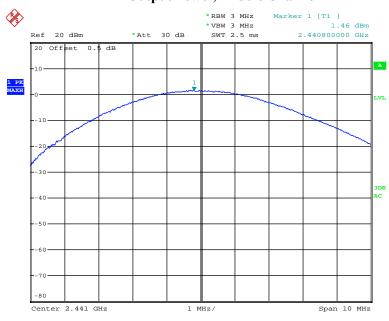
EDR Mode (\pi/4-DQPSK):

Output Power, Low Channel



Date: 10.0CT.2015 16:36:58

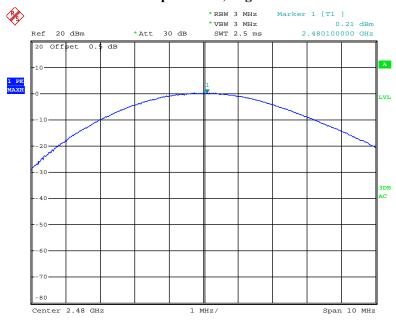
Output Power, Middle Channel



Date: 10.OCT.2015 16:36:43

FCC Part 15.247 Page 61 of 68

Output Power, High Channel



Date: 10.OCT.2015 16:36:26

EDR Mode (8-DPSK):

Output Power, Low Channel



Date: 10.0CT.2015 16:37:39

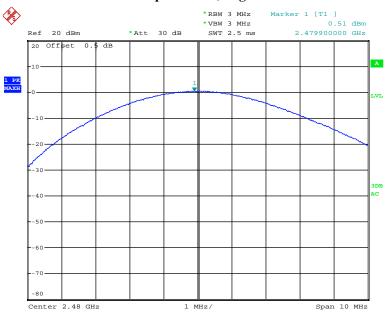
FCC Part 15.247 Page 62 of 68

Output Power, Middle Channel



Date: 10.OCT.2015 16:40:42

Output Power, High Channel



Date: 10.OCT.2015 16:43:06

FCC Part 15.247 Page 63 of 68

FCC §15.247(d) - BAND EDGES TESTING

Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Report No.: RDG151008002-00A

Test Procedure

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- 5. Repeat above procedures until all measured frequencies were complete.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSP 38	100478	2015-05-09	2016-05-09

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data

Environmental Conditions

Temperature:	27.1 °C	
Relative Humidity:	52 %	
ATM Pressure:	101.3 kPa	

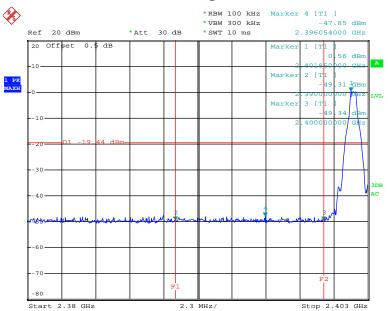
^{*} The testing was performed by Allen Qiao on 2015-10-12

FCC Part 15.247 Page 64 of 68

Test Result: Compliance

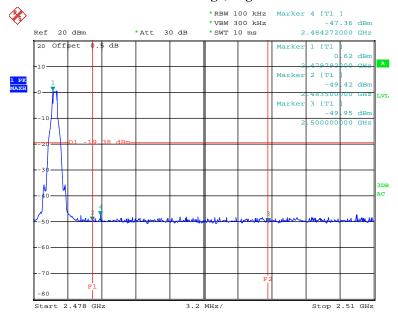
BDR Mode (GFSK):

Band Edge, Left Side



Date: 12.0CT.2015 11:03:25

Band Edge, Right Side



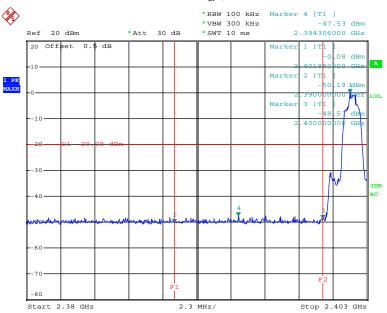
Date: 12.OCT.2015 11:10:34

FCC Part 15.247 Page 65 of 68

EDR Mode ($\pi/4$ -DQPSK):

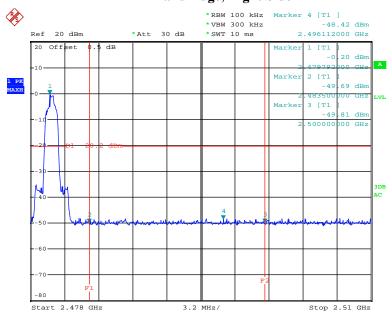
Band Edge, Left Side

Report No.: RDG151008002-00A



Date: 12.0CT.2015 11:04:29

Band Edge, Right Side



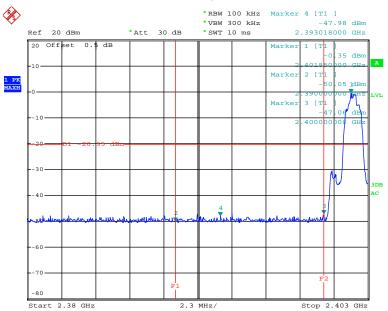
Date: 12.OCT.2015 11:08:45

FCC Part 15.247 Page 66 of 68

EDR Mode (8-DPSK):

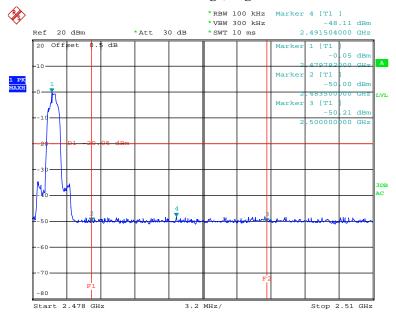
Band Edge, Left Side

Report No.: RDG151008002-00A



Date: 12.0CT.2015 11:06:15

Band Edge, Right Side



Date: 12.OCT.2015 11:07:41

FCC Part 15.247 Page 67 of 68

DECLARATION LETTER

Declaration of Alteration

Report No.: RDG151008002-00A

To Whom It May Concern,

We, Posh Mobile Limited, hereby declare that there are some differences between our Multiple Models and testing products. Details as below:

(This is for your reference only)

	Name		Equal Max				
Products	Brand		POSH				
Description	n Manufacturer		Shenzhen Po	osh Mobile Limited			
Project No.		RDG151008002, RDG151008002-20					
			Differen	ces Description			
Testing Products Multiple Models		Differences Items	Details				
S900A		S900B		Model name.	They are same motherboard, and just have the different model name.		

Notes: Testing products-the products tested by BACL

Multiple Model- have the same or similar appearance, structure, PCB, Material and function to the testing products, and only are different for little parameters.

Besides the differences in the table above, we declare the products are identical We guarantee all the information provided above is true, and notice that we'll bear all the consequences caused by any false information or concealing

Best Regards,

Signature:

Print Name: K.N. Chong

Title: Manager

ADD: 1011A, 10/F., Harbour Centre Tower 1, No.1 Hok Cheung St., Hung Hom, Kowloon, Hong Kong
31889834 Fax: (852) 39044979 Email:poshmobileltd@yahoo.com
OPDG004R32 Version1 0 (20140717)

**** END OF REPORT ****

FCC Part 15.247 Page 68 of 68