

FCC Test Report (Class II Permissive Change)

Product Name	Intel® Dual Band Wireless-AC 8265
Model No.	8265NGW
FCC ID.	PD98265NG

Applicant	Intel Mobile Communications	
Address	100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA	

Date of Receipt	May. 22, 2017
Issued Date	June. 20, 2017
Report No.	1750533R-RFUSP25V00-A
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.



Test Report

Issued Date: June. 20, 2017

Report No.: 1750533R-RFUSP25V00-A



Product Name	Intel® Dual Band Wireless-AC 8265		
Applicant	Intel Mobile Communications		
Address	100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA		
Manufacturer	Intel Mobile Communications		
Model No.	8265NGW		
FCC ID.	PD98265NG		
EUT Rated Voltage	DC 3.3V (via Mini-PCI Express slot)		
EUT Test Voltage	AC 120V/60Hz		
Trade Name	Intel		
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2016		
	ANSI C63.4: 2014, ANSI C63.10: 2013		
KDB 558074 D01 DTS Meas Guidance v04			
Test Result	Complied		

Documented By	:	Leven Huang
		(Senior Adm. Specialist / Leven Huang)
Tested By	:	Ken chen
		(Engineer / Ken Chen)
Approved By	:	Stands
		(Director / Vincent Lin)



TABLE OF CONTENTS

Des	scription	Page
1.	GENERAL INFORMATION	4
1.1.	EUT Description	4
1.2.	Operational Description	6
1.3.	Tested System Details	7
1.4.	Configuration of Tested System	7
1.5.	EUT Exercise Software	7
1.6.	Test Facility	8
1.7.	List of Test Item and Equipment	9
2.	PEAK POWER OUTPUT	10
2.1.	Test Setup	10
2.2.	Limit	10
2.3.	Test Procedure	10
2.4.	Uncertainty	10
2.5.	Test Result of Peak Power Output	11
3.	RADIATED EMISSION	12
3.1.	Test Setup	12
3.2.	Limits	13
3.3.	Test Procedure	14
3.4.	Uncertainty	14
3.5.	Test Result of Radiated Emission	15
4.	BAND EDGE	19
4.1.	Test Setup	19
4.2.	Limit	20
4.3.	Test Procedure	20
4.4.	Uncertainty	20
4.5.	Test Result of Band Edge	21
5.	EMI REDUCTION METHOD DURING COMPLIANCE TESTING	25

Attachment 1: EUT Test Photographs Attachment 2: EUT Detailed Photographs



1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Intel® Dual Band Wireless-AC 8265	
Trade Name	Intel	
Model No.	8265NGW	
FCC ID.	PD98265NG	
Frequency Range	2402 – 2480MHz	
Channel Number	V4.2: 40CH	
Type of Modulation	V4.2: GFSK	
Antenna Type	Slot Antenna	
Channel Control	Auto	
Antenna Gain	Refer to the table "Antenna List"	

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Compal Electronics, INC.	DC33001TU00 (Main)	Slot Antenna	3.18dBi for 2.4GHz
		DC33001TU10 (Aux)		

Note: The antenna of EUT is conform to FCC 15.203



Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 01:	2404 MHz	Channel 02:	2406 MHz	Channel 03:	2408 MHz
Channel 04:	2410 MHz	Channel 05:	2412 MHz	Channel 06:	2414 MHz	Channel 07:	2416 MHz
Channel 08:	2418 MHz	Channel 09:	2420 MHz	Channel 10:	2422 MHz	Channel 11:	2424 MHz
Channel 12:	2426 MHz	Channel 13:	2428 MHz	Channel 14:	2430 MHz	Channel 15:	2432 MHz
Channel 16:	2434 MHz	Channel 17:	2436 MHz	Channel 18:	2438 MHz	Channel 19:	2440 MHz
Channel 20:	2442 MHz	Channel 21:	2444 MHz	Channel 22:	2446 MHz	Channel 23:	2448 MHz
Channel 24:	2450 MHz	Channel 25:	2452 MHz	Channel 26:	2454 MHz	Channel 27:	2456 MHz
Channel 28:	2458 MHz	Channel 29:	2460 MHz	Channel 30:	2462 MHz	Channel 31:	2464 MHz
Channel 32:	2466 MHz	Channel 33:	2468 MHz	Channel 34:	2470 MHz	Channel 35:	2472 MHz
Channel 36:	2474 MHz	Channel 37:	2476 MHz	Channel 38:	2478 MHz	Channel 39:	2480 MHz

Note:

- 1. The EUT is an Intel® Dual Band Wireless-AC 8265 with a built-in WLAN Bluetooth transceiver, this report for Bluetooth V4.2.
- These tests were conducted on a sample for the purpose of demonstrating compliance of Bluetooth transmitter with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
- 3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
- 4. This is to request a Class II permissive change for FCC ID: PD98265NG, originally granted on 06/03/2016.

The major change filed under this application is:

Change #1: Addition an new antenna, antenna type is different with the original application.

(Antenna type: Slot antenna)

Test Mode	Mode 1: Transmit - BLE (GFSK)
1050 111000	Mode 1: Hunshitt BEE (GISH)



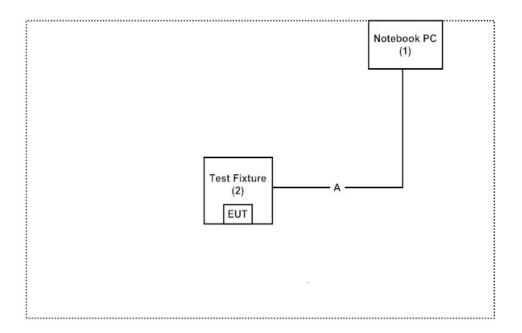
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Proc	luct	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	N/A	N/A	Non-Shielded, 1.8m
2	Test Fixture	Intel	N/A	N/A	N/A

Sign	nal Cable Type	Signal cable Description
		Non-Shielded, 1.0m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown on 1.4
- (2) Execute software "DRTU (Ver 1.8.7-02915)" on the Notebook PC.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Start the continuous transmission.
- (5) Verify that the EUT works properly.



1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:

http://www.dekra.com.tw/chinese/about/certificates.aspx?bval=5

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: http://www.dekra.com.tw

Site Description: Accredited by TAF

Accredited Number: 3023

Site Name: DEKRA Testing and Certification Co., Ltd

Site Address: No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451,

Taiwan, R.O.C.

TEL: 886-2-8601-3788 / FAX: 886-2-8601-3789

E-Mail: info.tw@dekra.com

FCC Accreditation Number: TW1014



1.7. List of Test Item and Equipment

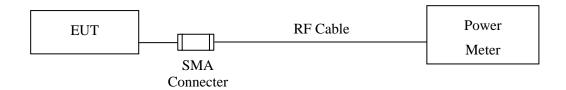
	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Power Meter	Keysight	8990B	MY51000410	2016/8/16	2018/8/15
X	Spectrum Analyzer	R&S	FSP40	100170	2017/1/5	2018/1/3
	Loop Antenna	TESEQ	HLA6121	37133	2017/3/18	2018/3/17
X	Bi-Log Antenna	Schaffner Chase	CBL6112B	2707	2017/6/11	2018/6/10
X	Horn Antenna	ETS-Lindgren	3117	00203761	2016/10/15	2017/10/13
	Horn Antenna	Schwarzbeck	ВВНА9170	209	2017/4/14	2018/4/13
X	Pre-Amplifier	QuieTek	QTK-LK-E-I-AMP4	N/A	2017/6/16	2018/6/15
X	Pre-Amplifier	EMCI	EMC012630SE	980210	2017/1/26	2018/1/24
	Pre-Amplifier	NARDA WE	DBL-1840N506	013	2016/8/6	2017/8/4
X	Filter	MicroTRON	BRM50701	019	2016/10/20	2017/10/18
	Filter	Microwave Circuits	N0257881	36681	2016/12/7	2017/12/5
X	Coaxial Cable	QTK(Arnist)	SUCOFLEX 106	L1606-015C	2016/6/23	2017/6/22
X	EMI Test Receiver	R&S	ESCS 30	838251/001	2016/7/21	2017/7/20
X	Coaxial Cable	QTK(Arnist)	RG 214	LC003-RG	2017/6/16	2018/6/15
X	Coaxial signal switch	Anritsu	MP59B	6201415889	2017/6/16	2018/6/15

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked with "X" are used to measure the final test results.
- 3. Test Software version :QuieTek EMI 2.0 V2.1.113.



2. Peak Power Output

2.1. Test Setup



2.2. Limit

The maximum peak power shall be less 1Watt.

2.3. Test Procedure

Tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The maximum peak conducted output power using KDB 558074 section 9.1.3 PKPM1 Peak power meter method.

2.4. Uncertainty

 \pm 1.27 dB



2.5. Test Result of Peak Power Output

Product : Intel® Dual Band Wireless-AC 8265

Test Item : Peak Power Output

Test Site : No.3 OATS Test date : 2017/06/12

Test Mode : Mode 1: Transmit - BLE (GFSK)

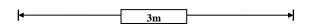
Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402.00	8.45	1 Watt= 30 dBm	Pass
Channel 19	2440.00	8.73	1 Watt= 30 dBm	Pass
Channel 39	2480.00	8.92	1 Watt= 30 dBm	Pass

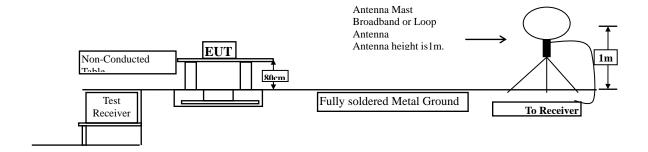


3. Radiated Emission

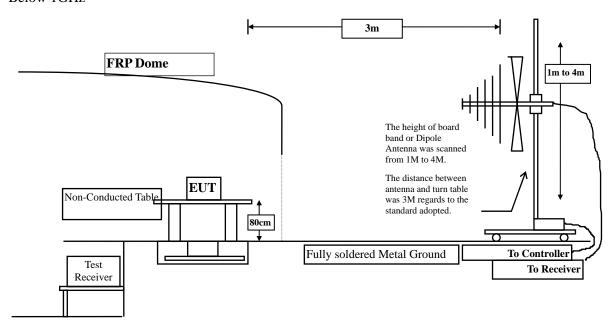
3.1. Test Setup

Under 30MHz



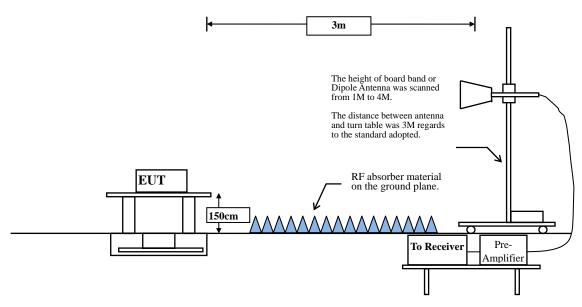


Below 1GHz





Above 1GHz



3.2. Limits

➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits									
Frequency MHz	Field strength	Measurement distance							
IVIII	(microvolts/meter)	(meter)							
0.009-0.490	2400/F(kHz)	300							
0.490-1.705	24000/F(kHz)	30							
1.705-30	30	30							
30-88	100	3							
88-216	150	3							
216-960	200	3							
Above 960	500	3							

Remarks:

- 1. RF Voltage $(dBuV) = 20 \log RF \text{ Voltage } (uV)$
- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.



3.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

The measurement frequency range form 9kHz - 10th Harmonic of fundamental was investigated.

3.4. Uncertainty

- ± 4.08 dB above 1GHz
- ± 4.22 dB below 1GHz



3.5. Test Result of Radiated Emission

Product : Intel® Dual Band Wireless-AC 8265

Test Item : Harmonic Radiated Emission

Test Site : No.3 OATS Test date : 2017/06/12

Test Mode : Mode 1: Transmit - BLE (GFSK)(2402MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4804.000	-9.896	52.850	42.954	-31.046	74.000
7206.000	-5.013	52.910	47.897	-26.103	74.000
9608.000	-1.472	51.430	49.959	-24.041	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4804.000	-6.585	52.470	45.885	-28.115	74.000
7206.000	-4.144	51.688	47.544	-26.456	74.000
9608.000	-1.075	49.922	48.848	-25.152	74.000
Average					
Detector:					
					54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission

Test Site : No.3 OATS Test date : 2017/06/12

Test Mode : Mode 1: Transmit - BLE (GFSK) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4880.000	-10.307	52.740	42.433	-31.567	74.000
7320.000	-3.857	48.275	44.418	-29.582	74.000
9760.000	-2.579	51.430	48.852	-25.148	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4880.000	-7.579	48.850	41.271	-32.729	74.000
7320.000	-2.987	50.410	47.423	-26.577	74.000
9760.000	-2.107	50.633	48.526	-25.474	74.000
Average					
Detector:					
					54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission

Test Site : No.3 OATS Test date : 2017/06/12

Test Mode : Mode 1: Transmit - BLE (GFSK) (2480MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4960.000	-10.666	52.580	41.915	-32.085	74.000
7440.000	-3.631	51.430	47.799	-26.201	74.000
9920.000	-2.397	51.120	48.723	-25.277	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4960.000	-7.869	54.420	46.552	-27.448	74.000
7440.000	-2.772	51.490	48.718	-25.282	74.000
9920.000	-1.895	52.130	50.235	-23.765	74.000
Average					
Detector:					
					54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : General Radiated Emission

Test Site : No.3 OATS Test date : 2017/06/06

Test Mode : Mode 1: Transmit - BLE (GFSK) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
141.058	-19.810	50.624	30.814	-12.686	43.500
236.652	-17.512	37.719	20.208	-25.792	46.000
418.000	-12.834	35.687	22.853	-23.147	46.000
559.986	-8.215	31.317	23.102	-22.898	46.000
739.928	-6.908	33.347	26.439	-19.561	46.000
936.739	-3.585	32.101	28.516	-17.484	46.000
Vertical					
149.493	-15.571	45.206	29.635	-13.865	43.500
318.188	-16.381	36.941	20.560	-25.440	46.000
471.420	-14.332	40.668	26.336	-19.664	46.000
647.145	-14.883	37.068	22.185	-23.815	46.000
822.870	-6.688	33.777	27.089	-18.911	46.000
953.609	-3.353	34.052	30.699	-15.301	46.000

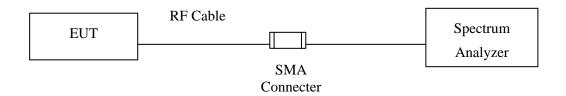
- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



4. Band Edge

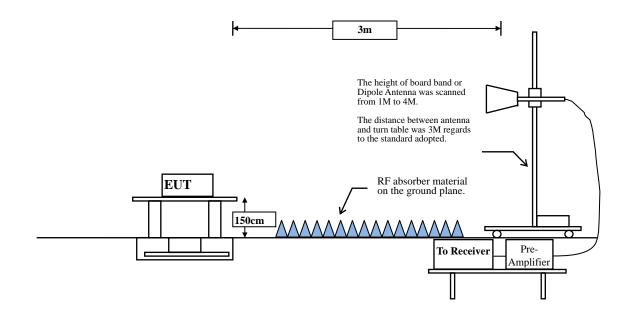
4.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:

Above 1GHz





4.2. 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. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

4.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

4.4. Uncertainty

- ± 4.08 dB above 1GHz
- ± 4.22 dB below 1GHz



4.5. Test Result of Band Edge

Product : Intel® Dual Band Wireless-AC 8265

Test Item : Band Edge
Test Site : No.3 OATS
Test date : 2017/06/03

Test Mode : Mode 1: Transmit - BLE (GFSK) (2402MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
00 (Peak)	2390.000	6.474	42.957	49.432	74.000	54.000	Pass
00 (Peak)	2400.000	6.528	49.886	56.414			
00 (Peak)	2402.174	6.541	78.712	85.253			
00 (Average)	2390.000	6.474	26.648	33.123	74.000	54.000	Pass
00 (Average)	2400.000	6.528	31.555	38.083			
00 (Average)	2402.029	6.540	60.348	66.888			

Figure Channel 00:

Horizontal (Peak)

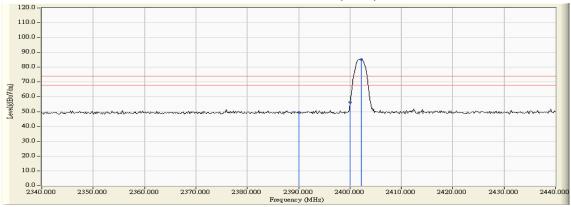
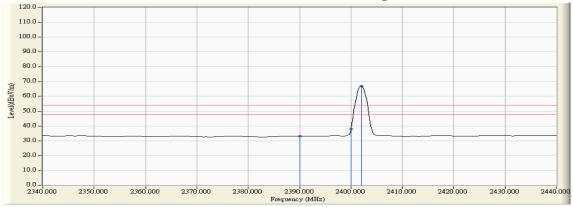


Figure Channel 00:

Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Test Item : Band Edge
Test Site : No.3 OATS
Test date : 2017/06/03

Test Mode : Mode 1: Transmit - BLE (GFSK) (2402MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
00 (Peak)	2390.000	5.880	42.721	48.602	74.000	54.000	Pass
00 (Peak)	2400.000	5.879	58.110	63.989			
00 (Peak)	2402.029	5.884	89.357	95.241			
00 (Average)	2390.000	5.880	26.706	32.587	74.000	54.000	Pass
00 (Average)	2400.000	5.879	37.392	43.271			
00 (Average)	2402.029	5.884	68.071	73.955			

Figure Channel 00:

Vertical (Peak)

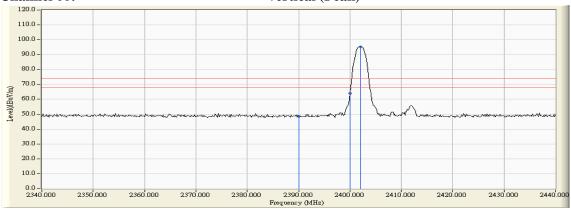
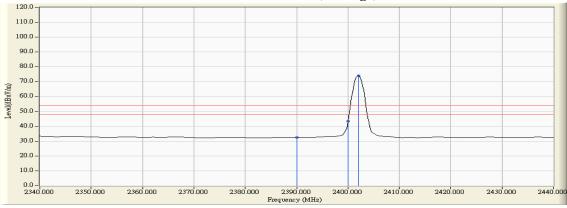


Figure Channel 00:

Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Test Item : Band Edge
Test Site : No.3 OATS
Test date : 2017/06/03

Test Mode : Mode 1: Transmit - BLE (GFSK) (2480MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Result
39 (Peak)	2479.732	7.084	80.054	87.137			
39 (Peak)	2483.500	7.110	43.647	50.757	74.000	54.000	Pass
39 (Average)	2480.022	7.086	60.888	67.973			
39 (Average)	2483.500	7.110	26.587	33.697	74.000	54.000	Pass

Figure Channel 39:

Horizontal (Peak)

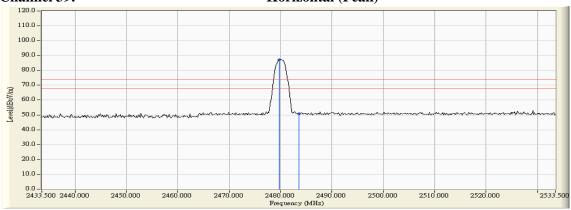
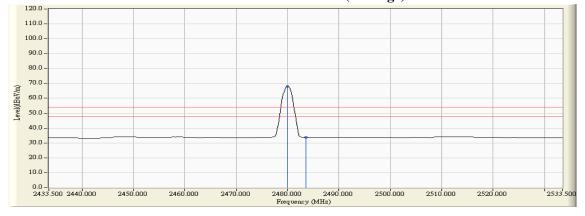


Figure Channel 39:

Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



Test Item : Band Edge
Test Site : No.3 OATS
Test date : 2017/06/03

Test Mode : Mode 1: Transmit - BLE (GFSK) (2480MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	Kesuit
39 (Peak)	2479.732	6.340	91.304	97.644			
39 (Peak)	2483.500	6.363	45.187	51.550	74.000	54.000	Pass
39 (Peak)	2490.167	6.405	49.400	55.805	74.000	54.000	Pass
39 (Average)	2480.022	6.342	69.318	75.660			
39 (Average)	2483.500	6.363	28.315	34.678	74.000	54.000	Pass

Figure Channel 39:



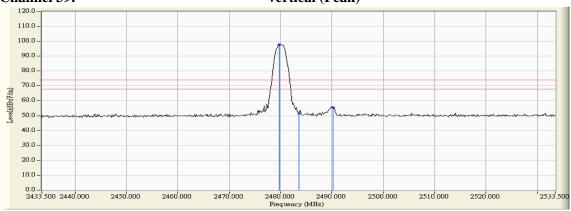
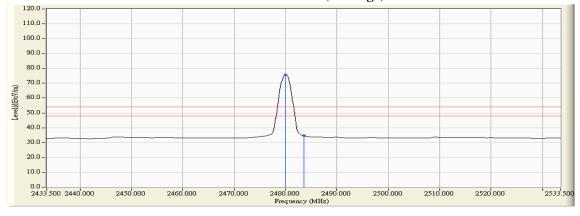


Figure Channel 39:

Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.



5. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Page: 25 of 27