

FCC Test Report (Class II Permissive Change)

Product Name	Intel® Dual Band Wireless-AC 8265		
Model No.	8265NGW		
FCC ID.	2ANPM8265NG		

Applicant	Nexstgo Company Limited	
Address FLAT/RM 1602 16/F ENTERPRISE SQUARE TOWER		
	SHEUNG YUET ROAD KOWLOON BAY	

Date of Receipt	Sep. 18, 2017
Issued Date	Nov. 14, 2017
Report No.	1790242R-RFUSP12V00-D
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: Nov. 14, 2017

Report No.: 1790242R-RFUSP12V00-D



Product Name	Intel® Dual Band Wireless-AC 8265
Applicant	Nexstgo Company Limited
Address	FLAT/RM 1602 16/F ENTERPRISE SQUARE TOWER II NO.9 SHEUNG
	YUET ROAD KOWLOON BAY
Manufacturer	Intel Mobile Communications France SAS
Model No.	8265NGW
FCC ID.	2ANPM8265NG
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	April Chen
	(Adm. Specialist / April Chen)
Tested By	Xiao Chen
	(Engineer / Xiao Chen)
Approved By	Hand S
	(Director / Vincent Lin)



TABLE OF CONTENTS

Des	scription	Page
1.	GENERAL INFORMATION	4
1.1.	EUT Description	4
1.2.	Operational Description	
1.3.	Tested System Details	
1.4.	Configuration of Tested System	
1.5.	EUT Exercise Software	
1.6.	Test Facility	
1.7.	List of Test Item and Equipment	10
2.	PEAK POWER OUTPUT	11
2.1.	Test Setup	11
2.2.	Limit	
2.3.	Test Procedure	11
2.4.	Uncertainty	
2.5.	Test Result of Peak Power Output	
3.	RADIATED EMISSION	13
3.1.	Test Setup	13
3.2.	Limits	14
3.3.	Test Procedure	15
3.4.	Uncertainty	15
3.5.	Test Result of Radiated Emission	
4.	BAND EDGE	20
4.1.	Test Setup	20
4.2.	Limit	21
4.3.	Test Procedure	
4.4.	Uncertainty	
4.5.	Test Result of Band Edge	
5.	EMI REDUCTION METHOD DURING COMPLIANCE TESTING	26

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.	2ANPM8265NG
Frequency Range	2402 – 2480MHz
Channel Number	V4.2: 40CH
Type of Modulation	V4.2: GFSK
Antenna Type	Slot Antenna/ PIFA Antenna
Channel Control	Auto
Antenna Gain	Refer to the table "Antenna List"

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain	
1	HUA CHENG TECHNOLOGY	0ACAEX17001N (Main)	Slot Antenna	1.89dBi for 2.4GHz	
	CO., LTD.	0ACAEX17002N (Aux)			
2	Joinsoon Electronics Manufacturing	1510-0157-0001 (Main)	Slot Antenna	1.68dBi for 2.4GHz	
	CO., LTD.	1510-0157-0002 (Aux)			
3	HUA CHENG TECHNOLOGY	0ACAEX17003N(Main)	PIFA	-0.36dBi for 2.4 GHz	
	CO., LTD.	0ACAEX17004N(Aux)			
4	Joinsoon Electronics Manufacturing	1510-0157-0003 (Main)	PIFA	-1.05dBi for 2.4 GHz	
	CO., LTD. TD.	1510-0157-0004 (Aux)			

Note: (1)The antenna of EUT is conform to FCC 15.203

⁽²⁾ HUA CHENG antenna(No1) was tested and recorded in this report since it represents worst case gain.



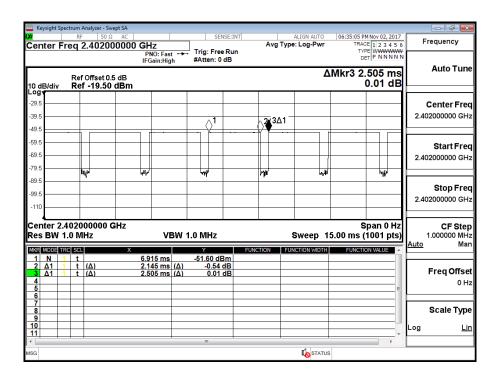
Center Frequency of Each Channel:

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

Duty Cycle:

BLE	0.856
222	0.000

^{*}Duty cycle = Ton / (Ton + Toff)





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.
- 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: 2ANPM8265NG, originally granted on 10/04/2017.

The major change filed under this application is:

Change #1: Add four new antennas, the antenna types of Antenna List (No. 1 & No. 2) is different than the original application (Slot antenna), the types of Antenna List (No. 3 & No. 4) are the same as the original application (PIFA antenna). And the gains of all antennas are lower than the original application.

Change #2: Reduce the Output Power through firmware(only reduce Slot Antenna (Antenna List (No. 1 & No. 2)), PIFA Antenna (Antenna List (No. 3 & No. 4)) Output Power haven't changes) and all other hardware is identical with original granted.

	he did not	
Test Mode	Mode 1: Transmit - BLE (GFSK)	



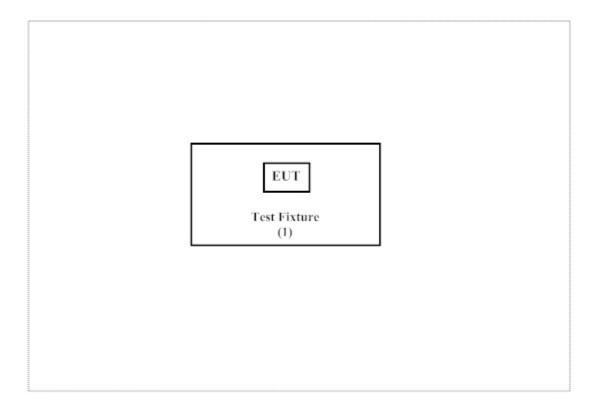
1.3. Tested System Details

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	Test Fixture	NEXSTGO	NP14NX	N/A	N/A

Signal Cable Type	Signal cable Description
N	//A

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 10.1720.0-05195)" 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: TW3023



1.7. List of Test Item and Equipment

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Power Meter	Keysight	8990B	MY51000410	2017/8/16	2018/8/15
X	Wideband power sensor	Keysight	N1923A	MY5608003	2017/8/16	2018/8/15
X	Spectrum Analyzer	R&S	FSP40	100170	2017/1/5	2018/1/3
X	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	2017/10/15	2018/10/13
X	Horn Antenna	Schwarzbeck	BBHA9170	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
X	Pre-Amplifier	NARDA WE	DBL-1840N506	013	2017/8/6	2018/8/4
X	Filter	MicroTRON	BRM50701	019	2017/10/20	2018/10/18
X	Filter	Microwave Circuits	N0257881	36681	2016/12/7	2017/12/5
X	Coaxial Cable	QTK(Arnist)	SUCOFLEX 106	L1606-015C	2017/6/23	2018/6/22
X	EMI Test Receiver	R&S	ESCS 30	838251/001	2017/7/21	2018/7/20
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 : 2017/10/12

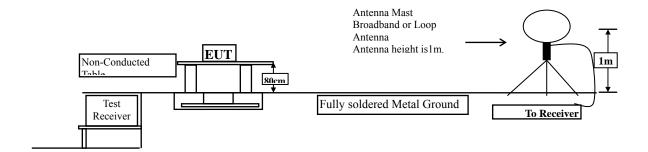
Test Mode : Mode 1: Transmit - BLE (GFSK)

Channel No.	Frequency	Measurement	Required Limit	Result
	(MHz)	(dBm)		
Channel 00	2402.00	7.90	1 Watt= 30 dBm	Pass
Channel 19	2440.00	7.93	1 Watt= 30 dBm	Pass
Channel 39	2480.00	7.73	1 Watt= 30 dBm	Pass

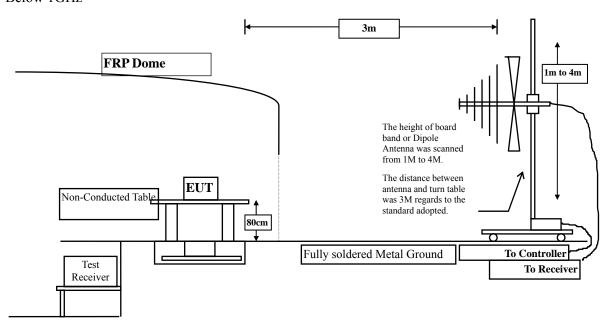


3. Radiated Emission

3.1. Test Setup

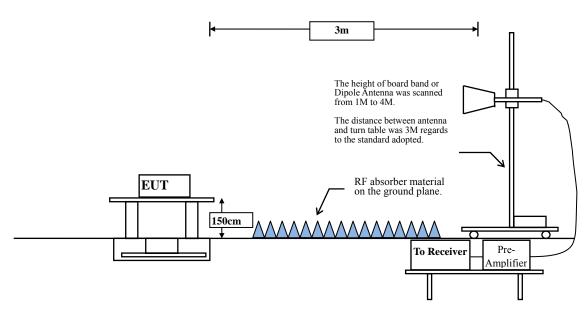


Below 1GHz





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		
WIIIZ	(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 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.

The average measurement tested according to KDB 558074 section 12.2.5.3. Reduced VBW averaging across on- and off-times of the EUT transmissions with max hold.

 $VBW \ge 1/T$:

Duty Cycle	T	1/T	VBW Setting
0.856	2.145 ms	466.200 Hz	1 KHz

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.8 CB Test date : 2017/10/19

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	2.511	38.757	41.267	-32.733	74.000
7206.000	9.511	38.510	48.021	-25.979	74.000
9608.000	10.394	37.186	47.580	-26.420	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4804.000	2.923	38.695	41.617	-32.383	74.000
7206.000	9.988	38.049	48.038	-25.962	74.000
9608.000	10.847	38.079	48.926	-25.074	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 = 1 KHz, 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.8 CB Test date : 2017/10/19

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	2.038	38.070	40.108	-33.892	74.000
7320.000	9.699	37.092	46.791	-27.209	74.000
9760.000	9.665	37.726	47.391	-26.609	74.000
Average					
Detector:					
					54.000
Vertical					
Peak Detector:					
4880.000	2.499	38.017	40.516	-33.484	74.000
7320.000	10.303	37.748	48.051	-25.949	74.000
9760.000	10.299	37.604	47.904	-26.096	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 = 1 KHz, 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.8 CB Test date : 2017/10/19

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	2.582	39.365	41.947	-32.053	74.000
7440.000	10.555	38.603	49.158	-24.842	74.000
9920.000	10.206	38.012	48.218	-25.782	74.000
Average					
Detector:					
Vertical					
Peak Detector:					
4960.000	3.398	38.800	42.199	-31.801	74.000
7440.000	11.214	37.252	48.466	-25.534	74.000
9920.000	11.245	37.881	49.126	-24.874	74.000
Average					
Detector:					

- 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 = 1 KHz, 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 : 2017/10/26

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					
150.280	-7.870	38.951	31.081	-12.419	43.500
250.190	-6.134	49.229	43.096	-2.904	46.000
359.800	-0.226	44.114	43.888	-2.112	46.000
455.830	2.028	35.263	37.291	-8.709	46.000
576.110	3.127	33.998	37.125	-8.875	46.000
647.890	1.609	34.810	36.420	-9.580	46.000
Vertical					
157.070	-5.195	39.860	34.665	-8.835	43.500
239.520	-6.138	44.600	38.462	-7.538	46.000
359.800	-1.316	34.792	33.476	-12.524	46.000
504.330	-0.055	36.486	36.431	-9.569	46.000
600.360	1.302	32.293	33.595	-12.405	46.000
926.280	3.342	24.161	27.503	-18.497	46.000

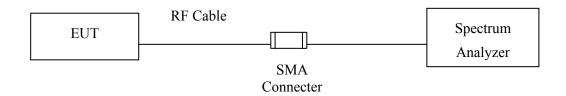
- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 1 KHz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 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

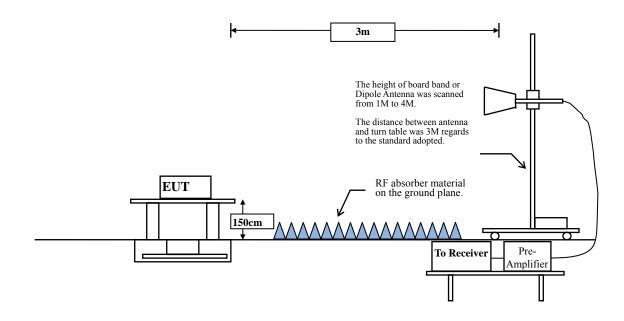
4.1. Test Setup

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.

The average measurement tested according to KDB 558074 section 12.2.5.3. Reduced VBW averaging across on- and off-times of the EUT transmissions with max hold.

 $VBW \ge 1/T$:

Duty Cycle	T	1/T	VBW Setting
0.856	2.145 ms	466.200 Hz	1 KHz

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.8 CB
Test date : 2017/10/04

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	47.038	53.513	74.000	54.000	Pass
00 (Peak)	2400.000	6.528	58.537	65.065	74.000	54.000	Pass
00 (Peak)	2402.000	6.540	91.982	98.522			
00 (Average)	2390.000	6.474	33.772	40.247	74.000	54.000	Pass
00 (Average)	2400.000	6.528	42.441	48.969			
00 (Average)	2402.000	6.540	71.641	78.181			

Figure Channel 00:

Horizontal (Peak)

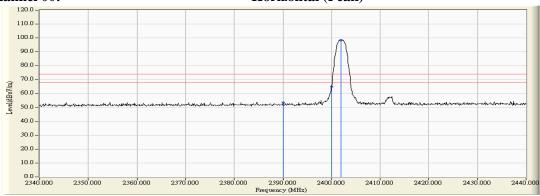
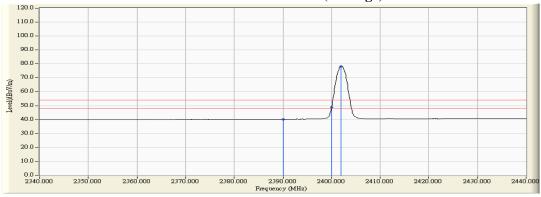


Figure Channel 00:

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 = 1 KHz, 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.8 CB
Test date : 2017/10/04

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

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)	
00 (Peak)	2383.800	5.907	46.928	52.834	74.000	54.000	Pass
00 (Peak)	2390.000	5.880	45.732	51.613	74.000	54.000	Pass
00 (Peak)	2400.000	5.879	58.217	64.096			
00 (Peak)	2402.000	5.884	92.030	97.914			
00 (Average)	2390.000	5.880	34.025	39.906	74.000	54.000	Pass
00 (Average)	2400.000	5.879	42.563	48.442			
00 (Average)	2402.000	5.884	71.724	77.608			

Figure Channel 00:

Vertical (Peak)

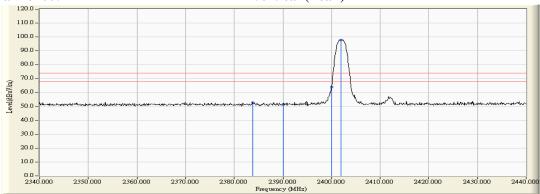
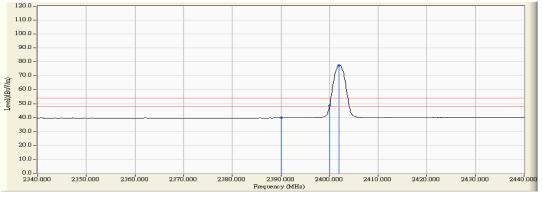


Figure Channel 00:

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 = 1 KHz, 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.8 CB
Test date : 2017/10/04

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

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
39 (Peak)	2480.200	7.087	93.007	100.094			
39 (Peak)	2483.500	7.110	49.818	56.928	74.000	54.000	Pass
39 (Peak)	2490.000	7.156	52.613	59.769	74.000	54.000	Pass
39 (Average)	2480.000	7.085	72.214	79.299			
39 (Average)	2483.500	7.110	34.164	41.274	74.000	54.000	Pass

Figure Channel 39:

Horizontal (Peak)

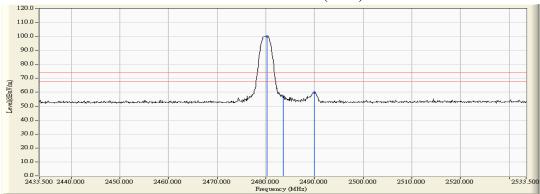
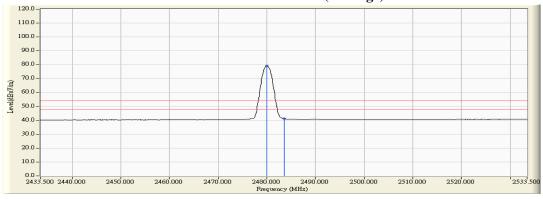


Figure Channel 39:

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 = 1 KHz, 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.8 CB
Test date : 2017/10/04

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

RF Radiated Measurement (Vertical):

Channel No.	1		_	Emission Level		_	Result
	(MHz)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
39 (Peak)	2480.000	6.342	93.010	99.351	-		
39 (Peak)	2483.500	6.363	47.382	53.745	74.000	54.000	Pass
39 (Peak)	2490.000	6.404	51.474	57.878	74.000	54.000	Pass
39 (Average)	2480.000	6.342	72.269	78.610	-		
39 (Average)	2483.500	6.363	34.121	40.484	74.000	54.000	Pass

Figure Channel 39:

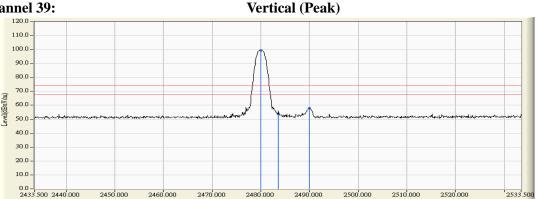
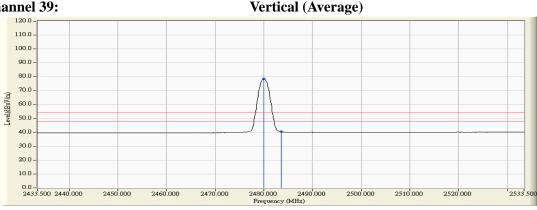


Figure Channel 39:



- 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 = 1 KHz, 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: 26 of 26