# FCC Part 15C

# Measurement And Test Report

# QINGDAO WINTEC SYSTEM CO., LTD

NO.3 Building, NO.151, Zhuzhou Road, Laoshan District, Qingdao, China

FCC ID: ZUNIDT800

Aug. 14, 2015

This Report Concerns: **Equipment Type:** Original Report pos terminal **Report Number:** MTI150630001RF-1 David Chen Tim zhung Test Engineer: David Chen Tim Zhang Reviewed By: Approved & Authorized Lee By: Hebe Hebe Lee Test Date: Aug. 01, 2015 - Aug. 14, 2015 Shenzhen Microtest Technology Co.,Ltd Prepared By: 6F, Zhongbao Building, Gushu, Bao an District, Shenzhen, P.R.China Tel: +86-755-8885 0135 Fax: +86-755-8885 0136

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# 1. General Information about EUT

# 1.1 Client Information

Applicant	:	QINGDAO WINTEC SYSTEM CO., LTD
Address	:	NO.3 Building, NO.151, Zhuzhou Road, Laoshan District, Qingdao,
		China
Manufacturer	:	QINGDAO WINTEC SYSTEM CO., LTD
Address	:	Wintec Park, Xinye Road, High-Tech Zone, Qingdao, China
Trade	:	WINTEC
EUT Name	:	pos terminal
Model No. : IDT800		IDT800
Serial No.	:	N/A
Model	Model : N/A	
Difference		
Standards	:	FCC Part 15, Subpart C (15.247:2014)
Test Method : ANSI C63.10: 2013		ANSI C63.10: 2013
Conclusions : PASS		PASS
		In the configuration tested, the EUT complied with the standards specified above,
		The EUT technically complies with the FCC and IC requirements

# 1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	pos terminal			
Models No.	:	IDT800			
		Operation Frequency	:		
		802.11b/g/n(HT20): 2412MHz~2462MHz			
		802.11n(HT40): 2422	MHz~2452MHz		
Product		Number of Channel:	802.11b/g/n(HT20):11 channels see note(3)		
Description	:		802.11n(HT40): 7 channels see note(3)		
Description		RF Output Power:	802.11b: 9.18 dBm		
			802.11g: 9.11 dBm		
			802.11n (HT20): 9.06dBm		
			802.11n (HT40): 9.07dBm		

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		Antenna Gain:	2 dBi (Integral Antenna)	
	Modulation Type:		802.11b: DSSS (CCK, DQPSK, DBPSK)	
			802.11g: OFDM	
			802.11n: OFDM	
		Bit Rate of	802.11b:11/5.5/2/1 Mbps	
		Transmitter:	802.11g:54/48/36/24/18/12/9/6 Mbps	
			802.11n:up to 150Mbps	
Power Supply	:	DC power supplied by AC/DC Adapter		
		DC power by Li-ion Battery		
Power Rating	:	MODEL: WT1203000		
		INPUT: 100V-240V~ 5	50/60Hz 1.6A.	
		Output: 12V===3.0A		
		DC 7.4V 2000mAh Li-ion Battery.		
Connecting	:	Please refer to the User's Manual		
I/O Port(S)				

#### Note:

- (1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v03r02.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447		

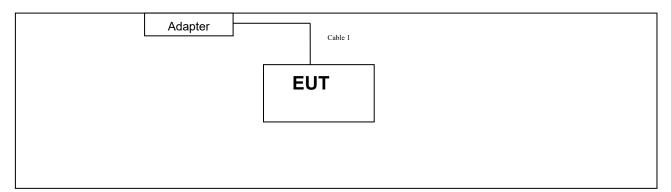
Note:CH 01~CH 11 for 802.11b/g/n(HT20)

CH 03~CH 09 for 802.11n(HT40)

(4) The Antenna information about the equipment is provided by the applicant.

# 1.3 Block Diagram Showing the Configuration of System Tested

# **TX Mode**



## 1.4 Description of Support Units

Equipment Information							
Name	Name Model S/N Manufacturer Used "√"						
1	1	1	/	1			
	Cable Information						
Number	Number Shielded Type Ferrite Core Length Note						
Cable 1	YES	YES	0.8M				

## 1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Test				
Final Test Mode Description				
Mode 1	AC Charging with TX B Mode			

For Radiated Test			
Final Test Mode Description			
Mode 2	TX Mode B Mode Channel 01/06/11		
Mode 3	TX Mode G Mode Channel 01/06/11		
Mode 4	TX Mode N(HT20) Mode Channel 01/06/11		
Mode 5	TX Mode N(HT40) Mode Channel 03/06/09		

#### Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

802.11b Mode: CCK (1 Mbps) 802.11g Mode: OFDM (6 Mbps)

802.11n (HT20) Mode: MCS 0 (6.5 Mbps) 802.11n (HT40) Mode: MCS 0 (13 Mbps)

(2) During the testing procedure, the continuously transmitting with the maximum power

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mode was programmed by the customer.

(3) The EUT is considered a mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

## 1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN.

Test Software Version		AccessPort	
Channel	CH 01	CH 06	CH 11
IEEE 802.11b DSSS	28	26	24
IEEE 802.11g OFDM	34	33	32
IEEE 802.11n (HT20)	33	33	32
	CH 03	CH 06	CH 09
IEEE 802.11n (HT40)	35	35	33

# 1.7 Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U <sub>Lab</sub> )	
	Level Accuracy:		
Conducted Emission	9kHz~150kHz	±3.42 dB	
	150kHz to 30MHz	±3.42 dB	
Radiated Emission	Level Accuracy:	±4.60 dB	
Radiated Emission	9kHz to 30 MHz	±4.00 QB	
Dedicted Engineers	Level Accuracy:	14 40 dD	
Radiated Emission	30MHz to 1000 MHz	±4.40 dB	
Dedicted Engineers	Level Accuracy:	14 00 dD	
Radiated Emission	Above 1000MHz	±4.20 dB	

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# 1.7 Test Facility

Shenzhen Toby Technology Co., Ltd.

Add.: 1 A/F., Bldg.6, Yusheng Industrial Zone The National Road No.107 Xixiang Section 467, Nanshan District, Shenzhen, Guangdong China

FCC Registration No.:811562

# 2. Test Summary

FCC Part 15 Subpart C(15.247)					
Standard Section	Test Item	Judgment	Remark		
FCC	rest item	Judgillelit	Nemark		
15.203	Antenna Requirement	PASS	N/A		
15.207	Conducted Emission	PASS	N/A		
15.205	Restricted Bands	PASS	N/A		
15.247(a)(2)	6dB Bandwidth	PASS	N/A		
15.247(b)	Peak Output Power	PASS	N/A		
15.247(e)	Power Spectral Density	PASS	N/A		
15.247(d)	Transmitter Radiated Spurious	PASS	N/A		
15.247 (u)	Emission	PASS	IN/A		
15.247(d)	Antenna Conducted	PASS	N/A		
13.247 (u)	Spurious Emission	FAGG	IN/ <i>F</i> A		

Note: "/" for no requirement for this test item.

N/A is an abbreviation for Not Applicable.

# 3. Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	ROHDE& SCHWARZ	ESCI	100321	Aug. 02, 2015	Aug.01, 2016
50ΩCoaxial Switch	Anritsu	MP59B	X10321	Aug. 02, 2015	Aug.01, 2016
L.I.S.N	Rohde & Schwarz	ENV216	101131	Aug. 02, 2015	Aug.01, 2016
L.I.S.N	SCHWARZBECK	NNBL 8226-2	8226-2/164	Aug. 02, 2015	Aug.01, 2016
Spectrum Analyzer	Agilent	E4407B	MY45106456	Aug. 02, 2015	Aug.01, 2016
Spectrum Analyzer	Rohde & Schwarz	FSP30	DE25181	Aug. 02, 2015	Aug.01, 2016
EMI Test Receiver	Rohde & Schwarz	ESCI	101165	Aug. 02, 2015	Aug.01, 2016
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 06, 2015	Mar.05, 2016
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 06, 2015	Mar.05, 2016
Horn Antenna	Schwarzbeck	BBHA 9170	373	Mar. 06, 2015	Mar.05, 2016
Pre-amplifier	HP	11909A	185903	Mar. 06, 2015	Mar.05, 2016
Pre-amplifier	HP	8447B	3008A00849	Mar. 06, 2015	Mar.05, 2016
Power meter	Anritsu	ML2495A	1005002	Dec. 11, 2014	Dec. 10, 2014
Power Senor	Anritsu	MA2411B	0917070	Dec. 11, 2014	Dec. 10, 2014
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar. 06, 2015	Mar.05, 2016

# 4. Conducted Emission Test

#### 4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

#### 4.1.2 Test Limit

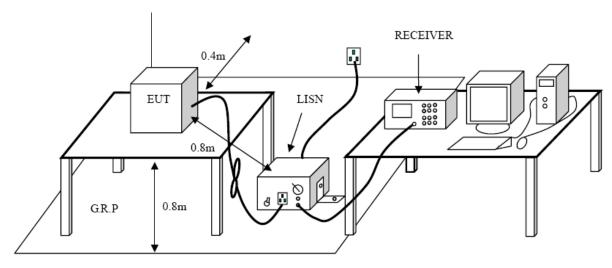
#### **Conducted Emission Test Limit**

Francis	Maximum RF Lir	ne Voltage (dBμV)
Frequency	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

#### Notes:

- (1) \*Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

### 4.2 Test Setup



#### 4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.

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Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

## 4.4 EUT Operating Mode

Please refer to the description of test mode.

#### 4.5 Test Data

Please see the next page.

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EUT:	Po	s terminal		Mode	el Name	<b>)</b> :	IDT8	00
Temperature	: 25	$^{\circ}$ C		Relat	tive Hu	midity:	55%	
Test Voltage	: AC	120V/60H	Нz	1				
Terminal:	Lin	Line						
Test Mode:	AC	AC Charging with TX B Mode						
Remark:		ly worse o						
110.0 dBuV	01	11y 110100 C	, doc 10 10p	ortou				
50	**************************************	MMMMM www.man			V/V/V	<b>***</b> *********************************		AVE
-10 0.150		0.5	,//. A	V V	5		W/V	30,000
-10 0.150		0.5		(Hz)	5		MANA	30.000
	Freq.	Reading		Measure-		Over	Mylan	30.000
0.150			Correct			Over dB	Detector	30.000 Comment
0.150	Freq.	Reading Level	Correct Factor	Measure- ment	Limit		Detector QP	
0.150 No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit dBuV	dB -4.10		
No. Mk.	Freq. MHz 0.1620	Reading Level dBuV 51.14	Correct Factor dB 10.12	Measure- ment dBuV 61.26	Limit dBuV 65.36	dB -4.10	QP	
0.150  No. Mk.	Freq. MHz 0.1620 0.1620	Reading Level dBuV 51.14 34.08	Correct Factor dB 10.12 10.12	Measure- ment dBuV 61.26 44.20	Limit  dBuV  65.36  55.36	dB -4.10 -11.16 -4.24	QP AVG	
0.150  No. Mk.  1 * 2 3	Freq. MHz 0.1620 0.1620 0.2020	Reading Level dBuV 51.14 34.08 49.16	Correct Factor dB 10.12 10.12 10.12 10.12 10.09	Measure- ment  dBuV  61.26  44.20  59.28	Limit  dBuV  65.36  55.36  63.52	dB -4.10 -11.16 -4.24 -13.79	QP AVG QP	
0.150  No. Mk.  1 * 2 3 4	Freq. MHz 0.1620 0.1620 0.2020 0.2020	Reading Level dBuV 51.14 34.08 49.16 29.61	Correct Factor dB 10.12 10.12 10.12	Measure- ment  dBuV  61.26  44.20  59.28  39.73	Limit  dBuV  65.36  55.36  63.52  53.52	dB -4.10 -11.16 -4.24 -13.79 -5.54	QP AVG QP AVG	
No. Mk.  1 * 2 3 4 5	Freq. MHz 0.1620 0.1620 0.2020 0.2020 0.2832	Reading Level dBuV 51.14 34.08 49.16 29.61 45.09	Correct Factor dB 10.12 10.12 10.12 10.12 10.09	Measure- ment  dBuV  61.26  44.20  59.28  39.73  55.18	Limit dBuV 65.36 55.36 63.52 53.52 60.72	dB -4.10 -11.16 -4.24 -13.79 -5.54 -11.81	QP AVG QP AVG QP	
0.150  No. Mk.  1 * 2 3 4 5 6	Freq. MHz 0.1620 0.1620 0.2020 0.2020 0.2832 0.2832	Reading Level dBuV 51.14 34.08 49.16 29.61 45.09 28.82	Correct Factor  dB  10.12  10.12  10.12  10.12  10.09	Measure- ment  dBuV  61.26  44.20  59.28  39.73  55.18  38.91	Limit  dBuV  65.36  55.36  63.52  53.52  60.72  50.72	dB -4.10 -11.16 -4.24 -13.79 -5.54 -11.81 -9.11	QP AVG QP AVG QP AVG	
0.150  No. Mk.  1 * 2 3 4 5 6 7	Freq. MHz 0.1620 0.1620 0.2020 0.2020 0.2832 0.2832 0.5620	Reading Level dBuV 51.14 34.08 49.16 29.61 45.09 28.82 36.87	Correct Factor dB 10.12 10.12 10.12 10.12 10.09 10.09	Measure- ment  dBuV  61.26  44.20  59.28  39.73  55.18  38.91  46.89	Limit dBuV 65.36 55.36 63.52 53.52 60.72 50.72 56.00	dB -4.10 -11.16 -4.24 -13.79 -5.54 -11.81 -9.11 -11.41	QP AVG QP AVG QP AVG QP	
No. Mk.  1 * 2 3 4 5 6 7 8	Freq. MHz 0.1620 0.1620 0.2020 0.2020 0.2832 0.2832 0.5620 0.5620	Reading Level dBuV 51.14 34.08 49.16 29.61 45.09 28.82 36.87 24.57	Correct Factor  dB  10.12  10.12  10.12  10.12  10.09  10.09  10.02  10.02	Measurement  dBuV  61.26  44.20  59.28  39.73  55.18  38.91  46.89  34.59	Limit  dBuV  65.36  55.36  63.52  53.52  60.72  50.72  56.00  46.00	dB -4.10 -11.16 -4.24 -13.79 -5.54 -11.81 -9.11 -11.41 -20.54	QP AVG QP AVG QP AVG AVG QP AVG	
No. Mk.  1 * 2 3 4 5 6 7 8 9	Freq. MHz 0.1620 0.1620 0.2020 0.2020 0.2832 0.2832 0.5620 0.5620 2.0140	Reading Level  dBuV  51.14  34.08  49.16  29.61  45.09  28.82  36.87  24.57  25.40	Correct Factor  dB  10.12  10.12  10.12  10.12  10.09  10.09  10.02  10.02  10.06	Measure- ment  dBuV  61.26  44.20  59.28  39.73  55.18  38.91  46.89  34.59  35.46	Limit  dBuV  65.36  55.36  63.52  53.52  60.72  50.72  56.00  46.00  56.00	dB -4.10 -11.16 -4.24 -13.79 -5.54 -11.81 -9.11 -11.41 -20.54 -22.45	QP AVG QP AVG QP AVG QP AVG QP AVG	

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EUT:		Pos	terminal		Mode	el Name	<b>:</b>	IDT80	00
Temperat	ture:	25	$^{\circ}$ C		Relat	tive Hu	midity:	55%	
Test Volta	age:	AC	120V/60	Hz					
Terminal:	•	Neu	Neutral						
Test Mod	e:	AC	AC Charging with TX B Mode						
Remark:		Onl	y worse o	case is rep	orted				
110.0 dBu	v			<u> </u>					
50	M	Ť V pr	isa, milinairian	The Why	~~~			QI	P:
-10 0.150		0.	.5	(M	Hz)	5	)	Mary Mary Mary Mary Mary Mary Mary Mary	30.000
0.150	Mk		Reading	Correct	Measure-	•	Over	Manage and Market of the Control of	
	Mk.	Freq.		Correct Factor	Measure- ment	Limit	Over	Detector	30.000
0.150			Reading Level	Correct	Measure-	•	Over dB -4.99	Detector	
0.150 No.	* C	Freq.	Reading Level	Correct Factor	Measure- ment	Limit  dBuV  65.36	dB		30.000
0.150 No.	* 0	Freq. MHz 0.1620	Reading Level dBuV 50.43	Correct Factor dB	Measure- ment dBuV 60.37	Limit  dBuV  65.36	dB -4.99	QP	30.000
No.	* C	Freq. MHz 0.1620	Reading Level dBuV 50.43 30.48	Correct Factor dB 9.94 9.94	Measure- ment dBuV 60.37 40.42	Limit  dBuV  65.36  55.36  63.63	dB -4.99 -14.94	QP AVG	30.000
0.150 No.	* 0 0	Freq. MHz 0.1620 0.1620 0.1995	Reading Level dBuV 50.43 30.48 47.90	Correct Factor dB 9.94 9.94 10.02	Measurement  dBuV  60.37  40.42  57.92	Limit  dBuV  65.36  55.36  63.63	dB -4.99 -14.94 -5.71 -16.02	QP AVG QP	30.000
No.  1 2 3 4	* C	Freq. MHz 0.1620 0.1620 0.1995	Reading Level  dBuV  50.43  30.48  47.90  27.59	Correct Factor  dB  9.94  9.94  10.02	Measurement  dBuV  60.37  40.42  57.92  37.61	Limit  dBuV  65.36  55.36  63.63  53.63  59.35	dB -4.99 -14.94 -5.71 -16.02	QP AVG QP AVG	30.000
No.  1 2 3 4 5	* CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Freq. MHz 0.1620 0.1620 0.1995 0.1995 0.3339	Reading Level dBuV 50.43 30.48 47.90 27.59 41.96	Correct Factor dB 9.94 9.94 10.02 10.02	Measurement  dBuV  60.37  40.42  57.92  37.61  51.98	Limit  dBuV  65.36  55.36  63.63  53.63  59.35  49.35	dB -4.99 -14.94 -5.71 -16.02 -7.37	QP AVG QP AVG QP	30.000
No.  1 2 3 4 5	* CC CC CC CC CC	Freq. MHz 0.1620 0.1620 0.1995 0.1995 0.3339 0.3339	Reading Level  dBuV  50.43  30.48  47.90  27.59  41.96  25.59	Correct Factor  dB  9.94  9.94  10.02  10.02  10.02	Measurement  dBuV  60.37  40.42  57.92  37.61  51.98  35.61	Limit  dBuV  65.36  55.36  63.63  53.63  59.35  49.35  56.00	dB -4.99 -14.94 -5.71 -16.02 -7.37 -13.74	QP AVG QP AVG QP AVG	30.000
No.  1 2 3 4 5 6 7	* CC CC CC CC CC	Freq. MHz 0.1620 0.1620 0.1995 0.1995 0.3339 0.3339 0.5340	Reading Level  dBuV  50.43  30.48  47.90  27.59  41.96  25.59  34.34	Correct Factor  dB  9.94  9.94  10.02  10.02  10.02  10.02  10.04	Measurement  dBuV  60.37  40.42  57.92  37.61  51.98  35.61  44.38	Limit  dBuV  65.36  55.36  63.63  59.35  49.35  56.00  46.00	dB -4.99 -14.94 -5.71 -16.02 -7.37 -13.74 -11.62	QP AVG QP AVG QP AVG QP AVG	30.000
0.150  No.  1 2 3 4 5 6 7 8	* CC	Freq. MHz 0.1620 0.1620 0.1995 0.1995 0.3339 0.3339 0.5340	Reading Level  dBuV  50.43  30.48  47.90  27.59  41.96  25.59  34.34  22.19	Correct Factor  dB  9.94  9.94  10.02  10.02  10.02  10.02  10.04  10.04	Measurement  dBuV  60.37  40.42  57.92  37.61  51.98  35.61  44.38  32.23	Limit  dBuV  65.36  55.36  63.63  53.63  59.35  49.35  56.00  46.00  56.00	dB -4.99 -14.94 -5.71 -16.02 -7.37 -13.74 -11.62 -13.77	QP AVG QP AVG QP AVG AVG QP AVG	30.000
No.  No.  1 2 3 4 5 6 7 8 9	* CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Freq. MHz 0.1620 0.1620 0.1995 0.1995 0.3339 0.5340 0.5340 1.4380	Reading Level  dBuV  50.43  30.48  47.90  27.59  41.96  25.59  34.34  22.19  25.44	Correct Factor  dB 9.94 9.94 10.02 10.02 10.02 10.02 10.04 10.04 10.06	Measurement  dBuV  60.37  40.42  57.92  37.61  51.98  35.61  44.38  32.23  35.50	Limit  dBuV  65.36  55.36  63.63  59.35  49.35  56.00  46.00  46.00	dB -4.99 -14.94 -5.71 -16.02 -7.37 -13.74 -11.62 -13.77 -20.50	QP AVG QP AVG QP AVG QP AVG QP AVG	30.000

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# 5. Radiated Emission Test

#### 5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

#### Radiated Emission Limits (9kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

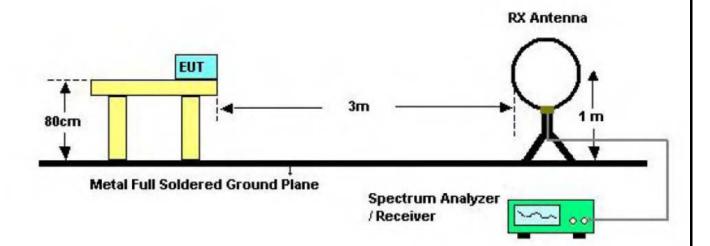
# Radiated Emission Limit (Above 1000MHz)

Frequency	Class A (dBuV	/m)(at 3 M)	Class B (dBuV	//m)(at 3 M)
(MHz)	Peak Average		Peak	Average
Above 1000	80	60	74	54

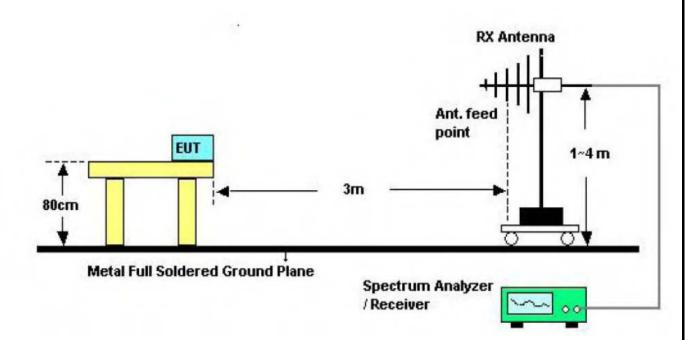
#### Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

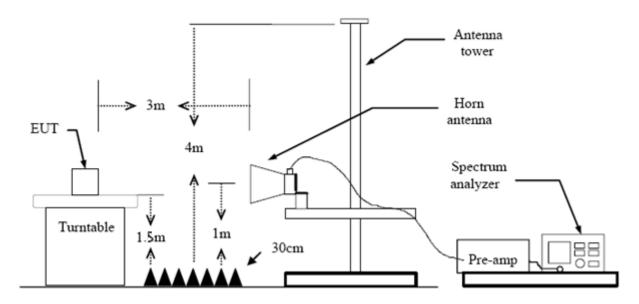
# 5.2 Test Setup



Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

#### 5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz

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with Peak Detector for Average Values.

(8) For the actual test configuration, please see the test setup photo.

# 5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

#### 5.5 Test Data

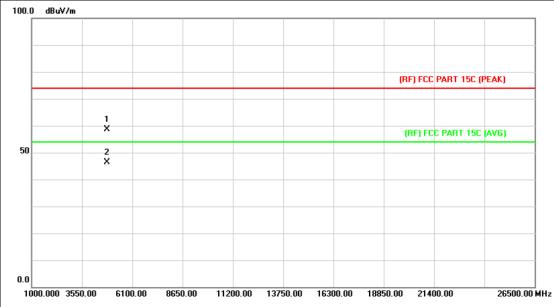
Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Test data please refer the following pages.

EUT:	Pos terminal		Model:		IDT80	00		
Temperature:	25 ℃	25 ℃ Relative Humidity: 55%						
Test Voltage:	AC 120V/60Hz				•			
Ant. Pol.	Horizontal							
Test Mode:	TX B Mode 24	12MHz						
Remark:	Only worse cas	se is reporte	ed					
80.0 dBuV/m		-						
-20	FCC 15B 3M Radiation Margin -6 dB  3  X  X  X  X  X  X  X  X  X  X  X  X						-	
30.000 40 50	60 70 80	(MHz)	3	00 400		500 700 Table	1000.000	
No. Mk. Freq.	Reading Correct Level Factor	Measure- ment L	imit Over			Table Degree		
MHz	dBu√ dB/m	dBuV/m c	IBuV/m dB	Detector	cm	degree	Comment	
1 77.5927	55.65 -23.36		40.00 -7.71	peak				
2 159.7844	54.76 -20.52	34.24	43.50 -9.26	peak				
3 233.3487	58.24 -18.91		46.00 -6.67	peak				
4 * 307.8312	60.45 -16.79	43.66	46.00 -2.34	peak				
5 ! 381.2485	57.70 -14.05		46.00 -2.35	peak				
6 ! 701.7609	49.99 -6.88	43.11	46.00 -2.89	peak				
*:Maximum data x:O  Emission Level=	ver limit !:over marg		or					

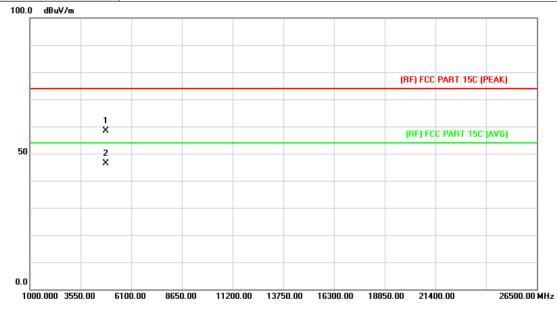
EUT:	Pos terminal	Pos terminal Model: IDT800							
Temperature:	<b>25</b> ℃	25 ℃ Relative Humidity: 55%							
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz							
Ant. Pol.	Vertical								
Test Mode:	TX B Mode 2412MHz								
Remark:	Only worse case is repo	orted							
80.0 dBuV/m									
30		5 × × × × × × × × × × × × × × × × × × ×	FCC 15B 3M Radiation Margin -6 dB						
30.000 40 50	60 70 80 (M	Hz) 300 400	500 600 700 1000.000						
No. Mk. Freq.	Reading Correct Measure- Level Factor ment	1: 0	ntenna Table Height Degree						
MHz	dBuV dB/m dBuV/m	dBuV/m dB Detector	cm degree Comment						
1 ! 36.3813	52.54 -17.91 34.63	40.00 -5.37 peak							
2 * 49.7068	60.82 -24.27 36.55	40.00 -3.45 peak							
3 ! 77.0504	59.20 -23.38 35.82	40.00 -4.18 peak							
4 135.0319	55.46 -22.08 33.38 43.50 -10.12 peak								
5 233.3487	56.86 -18.91 37.95	·							
	Over limit !:over margin	46.00 -4.37 peak							

EUT:	Pos terminal	Model:	IDT800		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	AC 120V/60Hz				
Ant. Pol.	Horizontal				
Test Mode:	TX B Mode 2412MHz				
Remark:	No report for the emission which more than 10 dB below the				
	prescribed limit.				



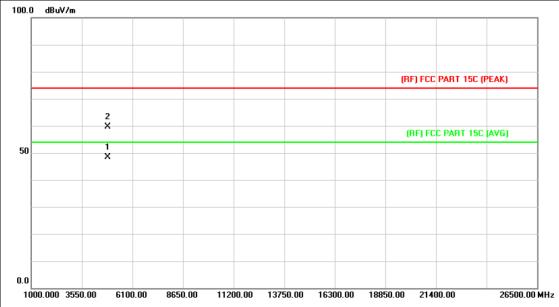
	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1			4823.844	44.99	13.56	58.55	74.00	-15.45	peak
2		*	4823.922	32.86	13.56	46.42	54.00	-7.58	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz						
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.	·					



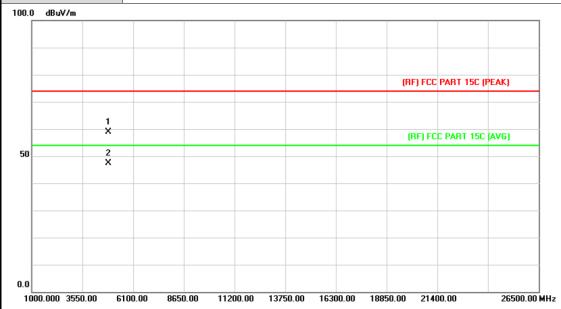
No	o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.997	44.78	13.56	58.34	74.00	-15.66	peak
2	*	4824.048	32.79	13.56	46.35	54.00	-7.65	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2437MHz						
Remark:	No report for the emissio	n which more than 10 o	dB below the				
	prescribed limit.						



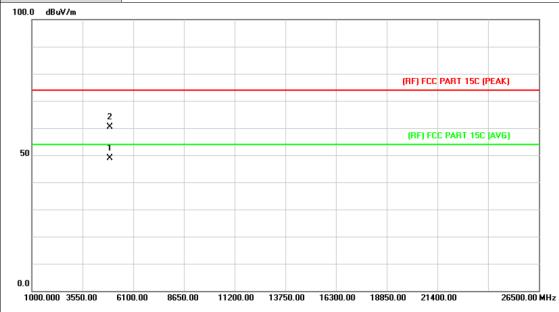
N	o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4873.931	34.60	13.86	48.46	54.00	-5.54	AVG
2		4874.384	45.84	13.86	59.70	74.00	-14.30	peak

EUT:	EUT: Pos terminal		IDT800			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	oltage: AC 120V/60Hz					
Ant. Pol.	Vertical					
Test Mode:	TX B Mode 2437MHz					
Remark:	No report for the emissio	n which more than 10 o	dB below the			
	prescribed limit.					



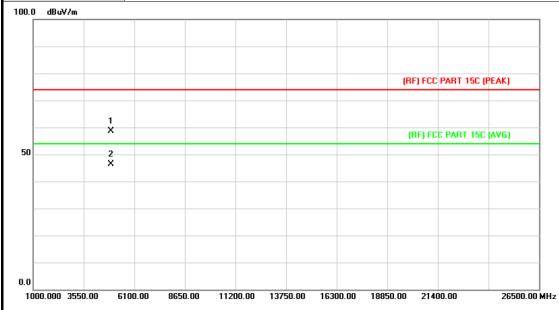
No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.700	44.95	13.86	58.81	74.00	-15.19	peak
2	*	4873.949	33.56	13.86	47.42	54.00	-6.58	AVG

EUT:	UT: Pos terminal		IDT800			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz					
Ant. Pol.	Horizontal					
Test Mode:	TX B Mode 2462MHz					
Remark:	No report for the emissio	n which more than 10 c	dB below the			
	prescribed limit.					



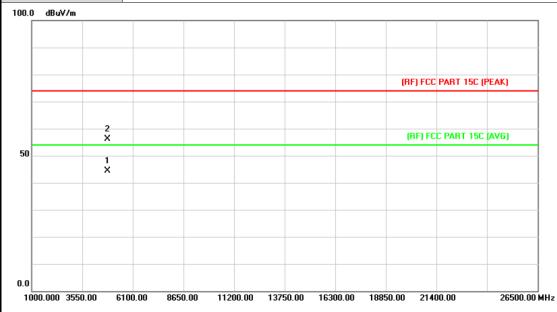
_	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
_			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
_	1	*	4923.970	34.67	14.15	48.82	54.00	-5.18	AVG
_	2		4924.057	46.12	14.15	60.27	74.00	-13.73	peak

EUT:	Pos terminal	Model:	IDT800			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	ge: AC 120V/60Hz					
Ant. Pol.	Vertical					
Test Mode:	TX B Mode 2462MHz					
Remark:	No report for the emissio	n which more than 10 c	dB below the			
	prescribed limit.					



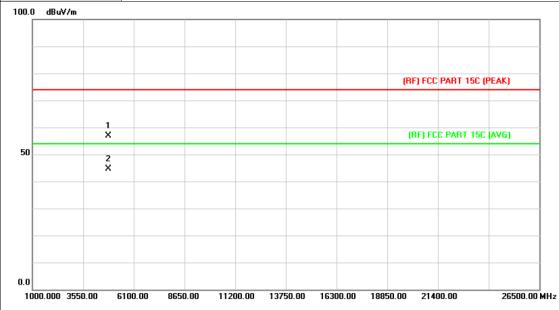
	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1			4923.877	44.36	14.15	58.51	74.00	-15.49	peak
2	2	*	4923.970	32.21	14.15	46.36	54.00	-7.64	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2412MHz						
Remark:	No report for the emissio	n which more than 10 c	dB below the				
	prescribed limit.						



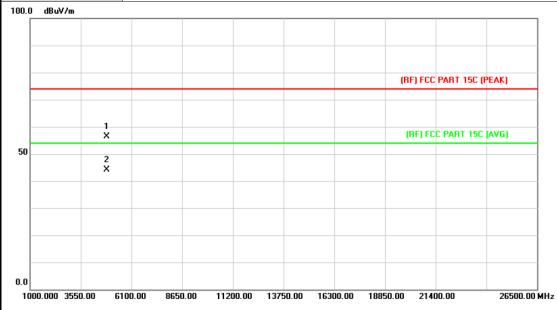
N	0.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4823.287	30.78	13.56	44.34	54.00	-9.66	AVG
2			4823.735	42.64	13.56	56.20	74.00	-17.80	peak

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2412MHz						
Remark:	No report for the emissio	n which more than 10 o	dB below the				
	prescribed limit.						



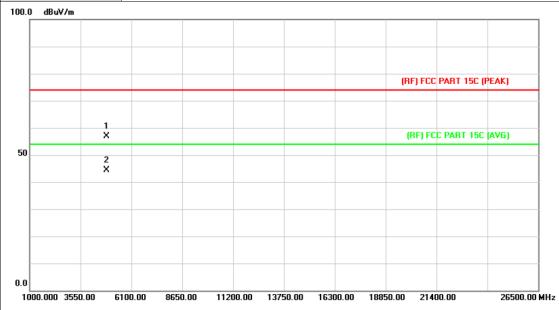
N	lo. N	Иk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1			4823.657	43.33	13.56	56.89	74.00	-17.11	peak
2	*	•	4823.657	31.09	13.56	44.65	54.00	-9.35	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



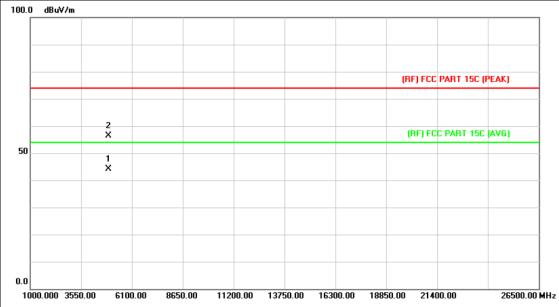
No	. Mk	. Freq.	_		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.257	42.45	13.86	56.31	74.00	-17.69	peak
2	*	4873.951	30.29	13.86	44.15	54.00	-9.85	AVG

EUT:	Pos terminal	Model:	IDT800			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz				
Ant. Pol.	Vertical					
Test Mode:	TX G Mode 2437MHz					
Remark:	No report for the emission which more than 10 dB below the					
	prescribed limit.					



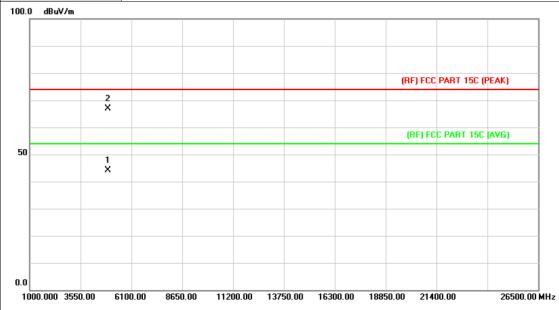
	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1			4873.542	42.91	13.86	56.77	74.00	-17.23	peak
2		*	4873.921	30.43	13.86	44.29	54.00	-9.71	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



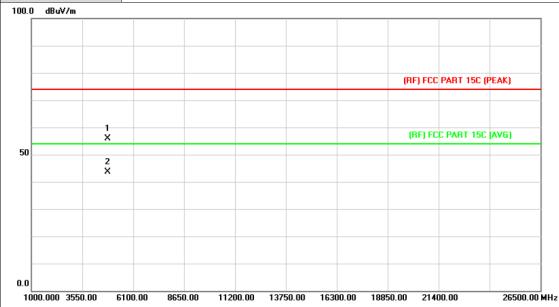
N	О.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4923.540	30.09	14.15	44.24	54.00	-9.76	AVG
2			4923.870	42.22	14.15	56.37	74.00	-17.63	peak

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2462MHz						
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



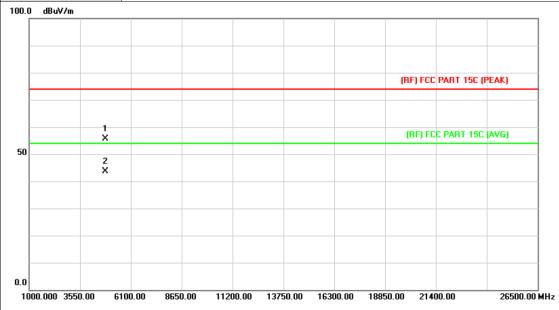
N	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1			4923.120	30.09	14.15	44.24	54.00	-9.76	AVG
2		*	4923.630	52.82	14.15	66.97	74.00	-7.03	peak

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX N(HT20) Mode 2412N	MHz					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.180	42.26	13.56	55.82	74.00	-18.18	peak
2	*	4823.270	30.08	13.56	43.64	54.00	-10.36	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Vertical						
Test Mode:	TX N(HT20) Mode 2412	MHz					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



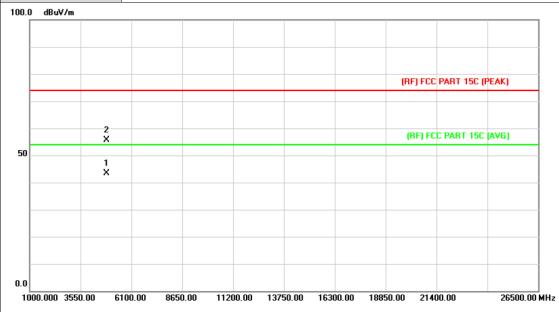
No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.390	42.16	13.56	55.72	74.00	-18.28	peak
2	*	4823.480	29.96	13.56	43.52	54.00	-10.48	AVG

EUT:	Pos terminal Model:		IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz						
Ant. Pol.	Horizontal						
Test Mode:	TX N(HT20) Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



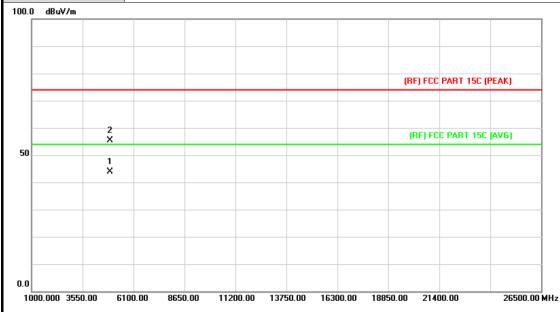
N	lo. I	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		•	4874.346	42.52	13.86	56.38	74.00	-17.62	peak
2	*	•	4874.807	30.61	13.86	44.47	54.00	-9.53	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Vertical						
Test Mode:	TX N(HT20) Mode 2437	ИНz					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



N	10.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4874.259	29.45	13.86	43.31	54.00	-10.69	AVG
2			4874.697	41.88	13.86	55.74	74.00	-18.26	peak

Pos terminal	Model:	IDT800			
<b>25</b> ℃	Relative Humidity:	55%			
AC 120V/60Hz					
Horizontal	Horizontal				
TX N(HT20) Mode 2462N	ИHz				
No report for the emission which more than 10 dB below the					
prescribed limit.					
	25 ℃ AC 120V/60Hz Horizontal TX N(HT20) Mode 2462N No report for the emission	25 °C Relative Humidity:  AC 120V/60Hz  Horizontal  TX N(HT20) Mode 2462MHz  No report for the emission which more than 10 or			



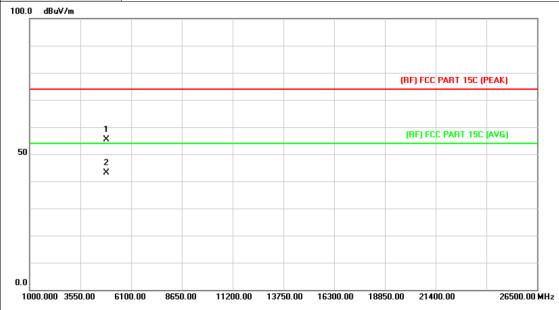
N	۱o.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4923.412	29.63	14.15	43.78	54.00	-10.22	AVG
2			4923.663	41.20	14.15	55.35	74.00	-18.65	peak

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Vertical						
Test Mode:	TX N(HT20) Mode 2462	MHz					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



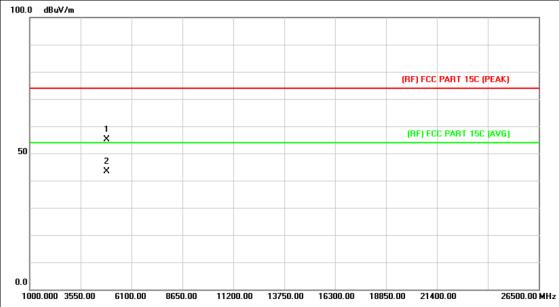
No	o. MI	k. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.660	41.57	14.15	55.72	74.00	-18.28	peak
2	*	4923.750	29.66	14.15	43.81	54.00	-10.19	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Horizontal						
Test Mode:	TX N(HT40) Mode 2422	ИНz					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



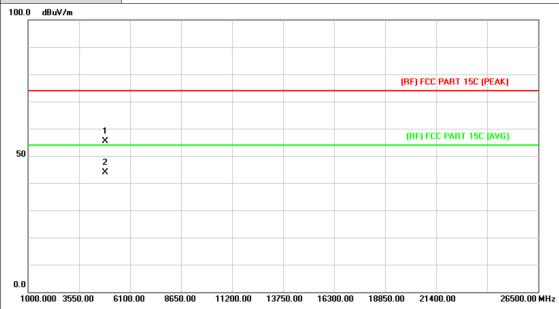
No	o. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4843.790	41.77	13.68	55.45	74.00	-18.55	peak
2	*	4843.960	29.54	13.68	43.22	54.00	-10.78	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Vertical						
Test Mode:	TX N(HT40) Mode 2422	ИНz					
Remark:	No report for the emission which more than 10 dB below the						
	prescribed limit.						



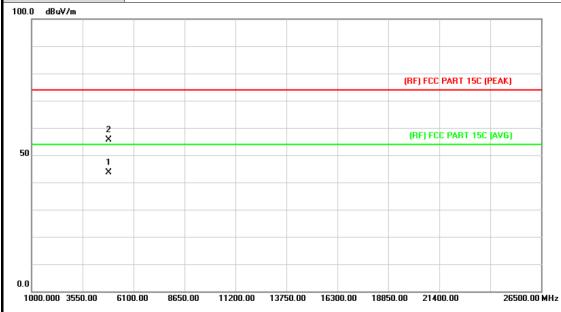
No.	Mk.	Freq.	•	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4843.130	41.46	13.68	55.14	74.00	-18.86	peak
2	*	4843.530	29.59	13.68	43.27	54.00	-10.73	AVG

Pos terminal	Model:	IDT800				
<b>25</b> ℃	Relative Humidity:	55%				
AC 120V/60Hz	AC 120V/60Hz					
Horizontal	Horizontal					
TX N(HT40) Mode 2437N	ИHz					
No report for the emission which more than 10 dB below the						
prescribed limit.						
	25 °C  AC 120V/60Hz  Horizontal  TX N(HT40) Mode 2437N  No report for the emission	25 °C Relative Humidity:  AC 120V/60Hz  Horizontal  TX N(HT40) Mode 2437MHz  No report for the emission which more than 10 or				



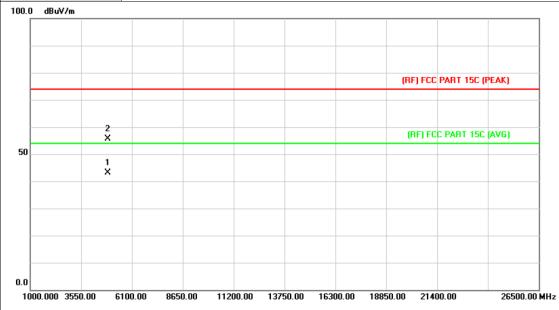
No.	Mk.	Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.540	41.43	13.86	55.29	74.00	-18.71	peak
2	*	4874.630	29.98	13.86	43.84	54.00	-10.16	AVG

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 °C Relative Humidity: 55%						
Test Voltage:	AC 120V/60Hz						
Ant. Pol.	Vertical						
Test Mode:	TX N(HT40) Mode 2437N	ИHz					
Remark:	No report for the emissio	n which more than 10 o	dB below the				
	prescribed limit.						
100 0 dBul/m							



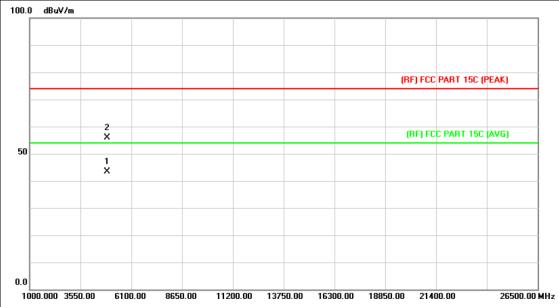
No. Mk.		Иk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*		4874.160	29.68	13.86	43.54	54.00	-10.46	AVG
2			4874.940	41.73	13.86	55.59	74.00	-18.41	peak

EUT:	Pos terminal	Model:	IDT800					
Temperature:	25 ℃	55%						
Test Voltage:	AC 120V/60Hz							
Ant. Pol.	Horizontal							
Test Mode:	TX N(HT40) Mode 2452	ИНz						
Remark:	No report for the emissio	n which more than 10 c	dB below the					
	prescribed limit.							



	No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	l	*	4903.830	29.08	14.03	43.11	54.00	-10.89	AVG
2	2		4903.970	41.60	14.03	55.63	74.00	-18.37	peak

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz						
Ant. Pol.	Vertical						
Test Mode:	TX N(HT40) Mode 2452	ИНz					
Remark:	No report for the emissio	n which more than 10 o	dB below the				
	prescribed limit.						



1	No.	o. Mk. Freq.		Reading Correct Measure- lk. Freq. Level Factor ment		Limit	Over		
			MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1			4903.310	29.31	14.03	43.34	74.00	-30.66	peak
2	,	k	4903.420	41.75	14.03	55.78	74.00	-18.22	peak

# 6. Restricted Bands Requirement

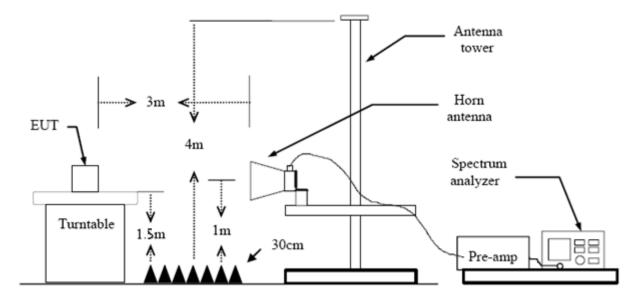
# 6.1 Test Standard and Limit

6.1.1 Test Standard FCC Part 15.209 FCC Part 15.205

#### 6.1.2 Test Limit

Restricted Frequency	Class B (dBuV/m)(at 3 M)					
Band	Peak	Average				
(MHz)						
2310 ~2390	74	54				
2483.5 ~2500	74	54				

# 6.2 Test Setup



# 6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.

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Hotline: 400-666-1678 Tel: 86-755-8885 0135 Fax: 86-755-8885 0136 http://www.mtitest.com

- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.
- 6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

Please see the next page.

# (1) Radiation Test

EUT:	Pos terminal	os terminal Model: IDT800						
Temperature:	<b>25</b> ℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60Hz							
Ant. Pol.	Horizontal							
Test Mode:	TX B Mode 2412MHz							
Remark:	N/A							
100.0 dBuV/m			4					
50			FCC PART (5C (PEAK)					
0.0								
2334.000 2344.00 No. Mk.	Reading Corre	ect Measure-	2434.00 MHz					
	Freq. Level Fact	ID M						

No	o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	45.76	0.77	46.53	— Fundament	al Frequency	peak
2		2390.000	31.50	0.77	32.27	— Fundament	al Frequency	AVG
3	*	2412.800	88.85	0.86	89.71	54.00	35.71	AVG
4	Χ	2413.100	93.45	0.86	94.31	74.00	20.31	peak

EU1	Γ:		Pos t	os terminal Model: IDT800											
Ten	perature	:	<b>25</b> °C	2				Re	elativ	e Hum	idity:	55	%		
Tes	t Voltage		AC 1	20V	/60Hz										
Ant	. Pol.		Vertic	cal											
Tes	t Mode:		ТХ В	Мо	de 24	12N	ИHz								
Ren	nark:		N/A												
100.0	0 dBuV/m														,
												4 ₹			
											مسمم	Ž~	١.		
											√(RF) F	CC PA	RT 15C (PE	AK)	
											/		$\rightarrow$		
											(BF)	FCC P	ART 15C (A	VG)	
50									1						
									×	1				\	
									2 X	~/				~	
0.0															
0.0 23	334.000 2344.0	00 23	354.00	2364	.00 2	374.0	00 238	4.00	239	4.00 24	04.00 2	414.00	)	2434.00	] MHz
١	No. Mk.	Fre	eq.		ading evel	j	Corre Facto			asure- ent	Limit		Over		
		MH	łz	C	lBuV		dB/m		dB	uV/m	dBuV/	m	dB	Detec	tor
1	2	2390.	000	4	1.99		0.77		42	2.76	74.0	0	-31.24	- pea	ak

29.96

88.42

93.13

0.77

0.86

0.86

2390.000

2412.800

2413.100

2

3

4

Χ

AVG

AVG

peak

-23.27

30.73

89.28

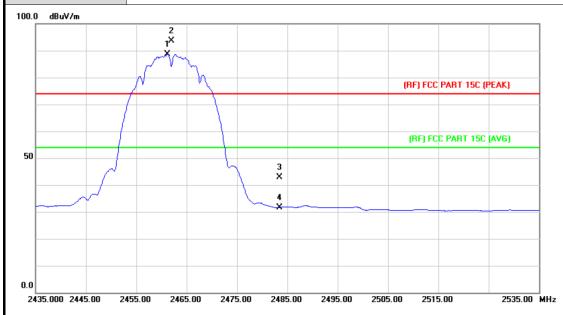
93.99

54.00

Fundamental Frequency

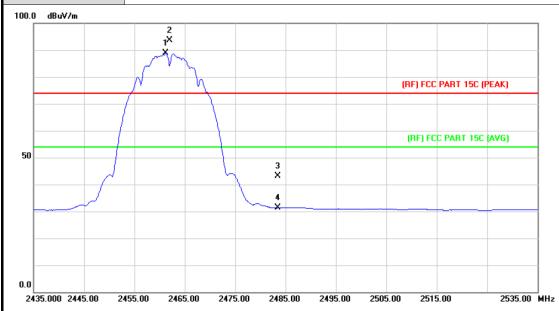
Fundamental Frequency イ4.UU I リー・リング

EUT:	Pos terminal	Model:	IDT800				
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60Hz						
Ant. Pol.	Horizontal						
Test Mode:	TX B Mode 2462MHz						
Remark:	N/A						



No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2461.200	87.61	1.07	88.68	Fundamental ⊃4.∪∪	34.00	AVG
2	Χ	2462.000	92.44	1.08	93.52	Fundamental	Frequency	peak
3		2483.500	41.72	1.17	42.89	74.00	-31.11	peak
4		2483.500	30.55	1.17	31.72	54.00	-22.28	AVG

EUT:	Pos terminal	Model:	IDT800
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	N/A		



No.	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2461.200	87.77	1.07	88.84	Fundamental	Frequency	AVG
2	Χ	2462.000	92.53	1.08	93.61	Fundamental / ↔.∪∪	Frequency	peak
3		2483.500	41.99	1.17	43.16	74.00	-30.84	peak
4		2483.500	30.11	1.17	31.28	54.00	-22.72	AVG

EUT	Γ:	F	os term	ninal		Model:			IDT800		
Tem	perature:	2	.5 ℃			Relativ	e Humi	dity:	55%		
Test	t Voltage:	A	C 120V	//60Hz				·			
Ant.	. Pol.	F	lorizont	al							
Test	t Mode:	Т	X G Mo	de 2412	MHz						
Ren	nark:	١	I/A								
100.0	) dBuV/m										
									4 ×		
								3 X			
								(RF) FC	C PART 5C (	PEAK)	
								(RF) F	CC PART 150	(AVG)	
50						1 X					
									\		
						2 X					
0.0											
	35.000 2345.00	2355	.00 236	5.00 2375	5.00 2385	5.00 239	5.00 2405	5.00 24	15.00	2435.00 MH	z
N	lo. Mk.	Freq		eading evel	Correc		asure-	Limit	Ove	er	_
		MHz	(	dBuV	dB/m	dB	BuV/m	dBuV/ı	m dB	Detecto	r
											—

45.87

32.61

82.86

93.49

0.77

0.77

0.86

0.89

46.64

33.38

83.72

94.38

74.00

54.00

Fundamental Frequency

Fundamental Frequency

-27.36

-20.62

peak

AVG

AVG

peak

2390.000

2390.000

2412.100

2418.600

1

2

3

4

Χ

EUT	:	Po	s termi	inal		Model			IDT800		
Tem	perature	: 25	$^{\circ}\!\mathbb{C}$			Relativ	ve Humi	idity:	55%		
Test	Voltage:	AC	120V	/60Hz							
Ant.	Pol.	Ve	rtical								
Test	Mode:	TX	G Mo	de 2412	MHz						
Rem	nark:	N/A	4								
100.0	) dBuV/m										
									4 ×		
								3 X			
									C PART 15C (F	PEAKI	-
								()	Je FAIT 130 (I	LAK	-
								(RF) F	CC PART 15C	(AVG)	
50						1					
						×					
						2 X					-
											-
0.0											
23	335.000 2345.0	0 2355.00	2365	.00 2379	5.00 238	5.00 239	95.00 240	05.00 24	15.00	2435.00	MHz
		_		ading	Corre		asure-	1 ::4	0		
N	lo. Mk.	Freq.	Le	evel	Facto	or m	nent	Limit	Over		
		MHz	d	BuV	dB/m	dE	BuV/m	dBuV/r	m dB	Detec	tor

0.77

0.77

0.86

0.89

43.98

31.75

84.30

93.87

74.00

54.00

54.00

74.00

Emission Level= Read Level+ Correct Factor

43.21

30.98

83.44

92.98

2390.000

2390.000

2412.100

2418.600

1

2

3

4

Χ

-30.02 peak

AVG

AVG

peak

-22.25

30.30

19.87

EUT:	Pos terminal	Model:	IDT800						
Temperature:	25 ℃	Relative Humidity:	55%						
Test Voltage:	AC 120V/60Hz								
Ant. Pol.	Horizontal	zontal							
Test Mode:	Mode: TX G Mode 2462MHz								
Remark:	N/A								
100.0 dBuV/m									
	1 X								
		(RF) F	CC PART 15C (PEAK)						
		(RF)	FCC PART 15C (AVG)						

X

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Χ	2468.600	92.63	1.11	93.74	74.00	19.74	peak
2	*	2469.100	83.64	1.11	84.75	54.00	30.75	AVG
3		2483.500	47.83	1.17	49.00	74.00	-25.00	peak
4		2483.500	32.84	1.17	34.01	54.00	-19.99	AVG

2485.00

2495.00

2505.00

2515.00

2535.00 MHz

**Emission Level= Read Level+ Correct Factor** 

0.0

2435.000 2445.00

2455.00

2465.00

2475.00

EUT:		Pos te	erminal	N	lodel:		IDT800	
Tempera	ture:	25 ℃		R	elative Hum	idity:	55%	
Test Volt	age:	AC 12	20V/60Hz					
Ant. Pol.		Vertica	al					
Test Mod	le:	TX G	Mode 2462	2MHz				
Remark:		N/A						
100.0 dBuV	'/m							
		1 X						
			2 X					
						(RF) F	CC PART 15C (PEA	g
						(RF)	FCC PART 15C (AV	G)
50				3 X				
	$+ \mathcal{L}$		\	4				
				×				
0.0								
2435.000	2445.00 2	455.00	2465.00 247	5.00 2485.00	2495.00 25	505.00 2	515.00	2535.00 MHz
			Reading	Correct	Measure-	Linai	- Over	
No. N		eq.	Level	Factor	ment	Limit		
	MH		dBuV	dB/m	dBuV/m	dBuV		Detecto
1 X	2455	.800	91.73	1.05	92.78	rundame / 4.	ntal Frequency	peak
2 *	2469	.100	81.74	1.11	82.85	Fundame	ntal Frequency	AVG
3	2483.	.500	45.84	1.17	47.01	74.0	0 -26.99	peak
4	2483	.500	31.62	1.17	32.79	54.0	0 -21.21	AVG
			31.62 .evel+ Cor			54.0	00 -21.21	-

EUT:	Pos terminal		Model:		IDT80	00	
Temperature:	<b>25</b> ℃		Relative	e Humidity:	55%		
Test Voltage:	AC 120V/60H	Z			•		
Ant. Pol.	Horizontal						
Test Mode:	TX N(HT20) N	/lode 2412M	Hz				
Remark:	N/A						
100.0 dBuV/m							
					4 ×		
					3 X		
				(RF)	FCC PART	ISC (PEAK	()
			1	(RI	) FCC PART	5C (AV	i)
50			×			+	
			2				
			2				
0.0							
2336.000 2346.00 23	356.00 2366.00	2376.00 2386.	00 2396.	00 2406.00	2416.00	2	436.00 MHz
	Readin	-		sure-	:4 0		
No. Mk. Fre	<u> </u>	Facto				ver	
MH		dB/m	dBu	ıV/m dBu		dB	Detector
1 2390.	000 48.92	0.77	49	.69 74.	00 -2	24.31	peak
2 2390.	000 31.28	0.77	32	.05 54.	00 -2	21.95	AVG
3 * 2417.	300 81.39	0.89	82	.28 Funda	mental Fre	quency ∪.∠∪	AVG
4 X 2418.	000 92.24	0.89	93	.13 Funda	mental Fre	quency ラ. 1つ	peak
Emission Level=	Read Level+ C	orrect Fact	or				

EUT:			Pos ter	minal		Model	:		IDT800	
Temp	perature	:	25 ℃			Relativ	/e Humi	dity:	55%	
Test	Voltage:		AC 120	V/60Hz						
Ant.	Pol.	,	Vertical							
Test	Mode:		TX N(H	T20) Mod	de 2412N	ИHz				
Rem	ark:		N/A							
100.0	dBuV/m					_				
								X 3		
									4 × _	
								(RF) FC	C PART 15C (PI	EAK)
						1		(RF) F	CC PART \5C (	AVG)
50						1 X				
						2				
						2				
0.0										
233	6.000 2346.0	0 235	6.00 23	66.00 2370	6.00 2386	6.00 239	6.00 240	6.00 24	16.00	2436.00 MHz
No	o. Mk.	Fred		leading Level	Corre Facto		asure- nent	Limit	Ove	r
		MHz	<u>'</u>	dBuV	dB/m	dE	BuV/m	dBuV/	m dB	Detector
1	2	300 0	00	50.67	0.77		1 11	74.0	0 22 5	6 poak

1		2390.000	50.67	0.77	51.44	74.00	-22.56	peak
2		2390.000	32.47	0.77	33.24		-20.76	AVG
3	Χ	2408.800	92.21	0.85	93.06	Fundamental /4.UU		peak
4	*	2415.200	81.32	0.88	82.20	Fundamental	Frequency	AVG

EUT:	Pos terminal		Model:		IDT800	
Temperature:	25 ℃		Relative Hum	idity:	55%	
Test Voltage:	AC 120V/60Hz					
Ant. Pol.	Horizontal					
Test Mode:	TX N(HT20) Mod	de 2462N	ЛНz			
Remark:	N/A					
100.0 dBuV/m	1					
	×					
	2 X					
				(RF) F	CC PART 15C (PEA	K)
				(RF)	FCC PART 15C (AV	G)
50			3 X			
	,					
re an indicate and in the second			*			
0.0						
	2453.00 2463.00 247	73.00 248	3.00 2493.00 25	03.00 2	513.00	2533.00 MHz
	Reading	Correc	ct Measure-			
No. Mk. Fre	eq. Level	Facto		Limit	Over	
MI	Hz dBuV	dB/m	dBuV/m	dBuV/	m dB	Detector
1 X 2458.	.600 93.91	1.06	94.97	Fundamo	ental Frequency	peak
2 * 2458.	.700 82.68	1.06	83.74	Fundame	ental Frequency	AVG
3 2483	.500 46.43	1.17	47.60	74.0	0 -26.40	peak
4 2483.	.500 31.56	1.17	32.73	54.0	0 -21.27	AVG
Emission Level=	Read Level+ Cor	rect Fac	tor			

UT:			Pos	terminal			Model:			IDT800			
empe	eratu	re:	25 °C	2			Relativ	e Hum	idity:	559	%		
est V	oltag	e:	AC 1	20V/60H	lz								
nt. P	ol.		Verti	cal									
est N	lode:		TXN	I(HT20) I	Mode :	2462N	lHz						
Rema	rk:		N/A										
00.0	dBuV/m												7
				2 X									
				1 X									
									(RF) F	CC PAF	RT 15C (PEAK	g	
			1										
			H		-				(RF)	FCC PA	ART 15C (AVC	i)	
50					$\overline{}$	3 X							
					-	4							-
<u> </u>						*				-			
0.0													
	000 244	3.00 24	<b>1</b> 53.00	2463.00	2473.00	2483.	00 249	3.00 25	03.00 25	13.00	2	2533.00	_ MHz
				Readir	na (	Correc	t Me	asure-					
No.	. Mk	. Fre	eq.	Leve	_	Facto		ent	Limit	:	Over		
		MH	Ηz	dBuV		dB/m	dE	BuV/m	dBuV	/m	dB	Dete	ector
1	*	2465.	100	81.27	7	1.09	8	2.36	Fundame		Frequency ∠o.ఎ∪	A۱	/G
2	Χ	2465.	200	91.67	7	1.09	9	2.76	Fundame	ental I	Frequency	pe	ak
3		2483.	500	46.71	1	1.17	4	7.88	74.0	0	-26.12	pe	ak
4		2483.	500	32.07	7	1.17	3	3.24	54.0	0	-20.76	A۱	/G

EU	Г:		Pos	Pos terminal Model: IDT800										
Ten	nperatur	e:	25 °	25 ℃ Relative Humidity: 55%										
Tes	t Voltage	e:	AC 1	120V	/60Hz									
Ant	. Pol.		Horiz	zonta	al									
Tes	t Mode:		TXN	1(HT	40) Mod	le 2422	ИНz							
Ren	nark:		N/A											
100.0	) dBuV/m													1
										4 ×				
									3 X					
						,				(RF) FC	C PART 1	5C (PEA	K)	
										(RF) F	CC PART	5C (AV	G)	
50					1 X									
					2	M						~ \		
					_ ×									
0.0														
23	355.000 2365	.00 23	375.00	2385	5.00 239	5.00 240	5.00	241	5.00 242	25.00 24	35.00		2455.00	MHz
				Re	ading	Corre	ct	Mea	asure-					
1	No. Mk.	Fre	eq.		evel	Facto			ent	Limit	0	ver		
		MH	łz	C	dBu∀	dB/m		dB	uV/m	dBuV/ı	m ·	dB	Detec	tor
1		2390.	000	4	5.44	0.77		46	6.21	74.00	) -2	7.79	pea	ak
2		2390.	000	3	2.57	0.77		33	3.34	54.00	) -2	0.66	AV	G
3	*	2422.	000	8	0.99	0.90		8	1.89	Fundam	ental Fre	quency 1.03	AV	G

peak

Fundamental Frequency

0.95

90.66

4

Χ

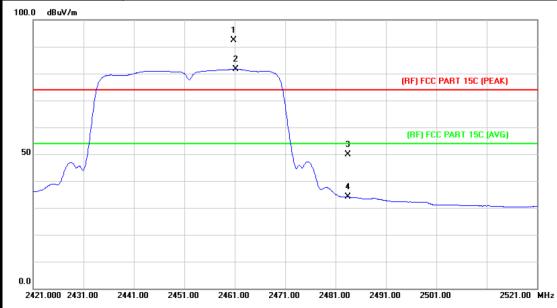
2431.000

**Emission Level= Read Level+ Correct Factor** 

89.71

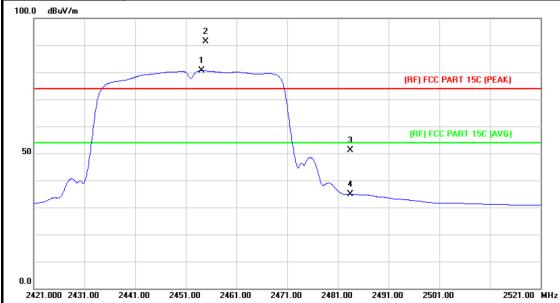
UT	<b>:</b>		Pos t	erminal		Model:			IDT80	00	
em	peratu	re:	25 °C		,	Relative Humidity: 55%					
est	Voltage: AC 120V/60Hz										
۱nt.	Pol.		Vertic	cal							
est	Mode:		TX N	(HT40) Mod	de 2422MI	Hz					
Rem	nark:		N/A								
00.0	dBuV/m										
								4 ×			
							3 X				
								(RF) FCC	PART\1	ISC (PEAK	.]
								(RF) FC	C PART	5C (AVG	i)
50				1.						M	
-				X 2	$\sim$					+	$\prec$
-				×	7						
0.0											
235	55.000 236	5.00 23	75.00	2385.00 2395	5.00 2405.0	0 2415.00	242	5.00 243	5.00	2	455.00 M
N	lo. Mk	. Fre	eq.	Reading Level	Correct Factor			Limit	0	)ver	
N	lo. Mk	. Fre					nt	Limit dBuV/n		)ver	Detecto
N 1	lo. Mk		łz	Level	Factor	mei	nt //m		n		
	lo. Mk	MH	lz 000	Level dBuV	Factor dB/m	mei dBu\	nt //m 05	dBuV/n	n ) -3	dB	peal
1	lo. Mk	MH 2390.	000 000	dBuV 42.28	dB/m 0.77	dBu\	nt //m 05 85	dBuV/n	) -3 ) -2 ental Fre	dB 30.95 22.15	peak AVC

EUT:	Pos terminal	Model:	IDT800		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	AC 120V/60Hz				
Ant. Pol.	Horizontal				
Test Mode:	TX N(HT40) Mode 2452MHz				
Remark:	N/A				



No	o. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Χ	2460.800	91.42	1.06	92.48	Fundamental		peak
2	*	2461.200	80.61	1.07	81.68	Fundamental	Frequency	AVG
3		2483.500	48.83	1.17	50.00	74.00	-24.00	peak
4		2483.500	32.87	1.17	34.04	54.00	-19.96	AVG

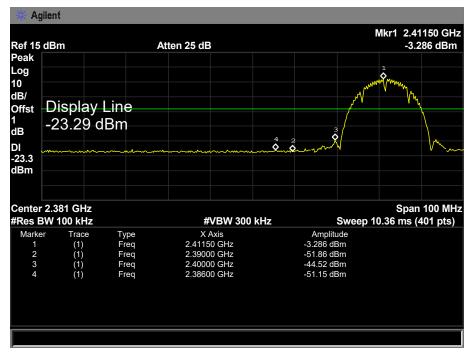
EUT:	Pos terminal	Model:	IDT800		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	Test Voltage: AC 120V/60Hz				
Ant. Pol.	Vertical				
Test Mode:	TX N(HT40) Mode 2452	ИНz			
Remark:	N/A				
100.0 dBuV/m					
	2 X				

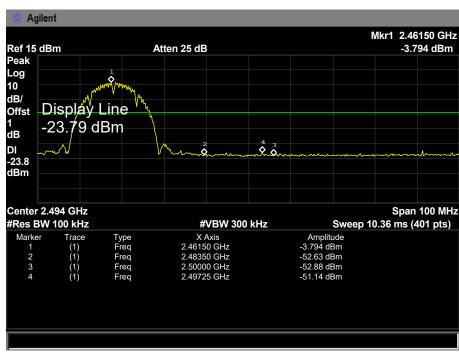


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2454.200	79.51	1.04	80.55	Fundamental		AVG
2	Χ	2454.900	90.33	1.05	91.38	Fundamental	Frequency	peak
3		2483.500	50.04	1.17	51.21	74.00	-22.79	peak
4		2483.500	33.60	1.17	34.77	54.00	-19.23	AVG

# (2) Conducted Test

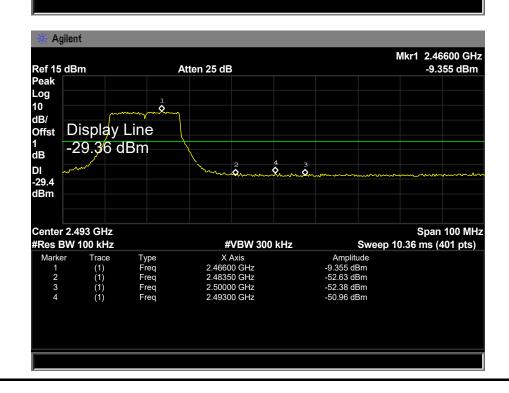
EUT:	Pos terminal	Model:	IDT800			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz				
Test Mode:	TX B Mode 2412MHz / T	TX B Mode 2412MHz / TX B Mode 2462MHz				
Remark:	The EUT is programed in	continuously transmitt	ing mode			



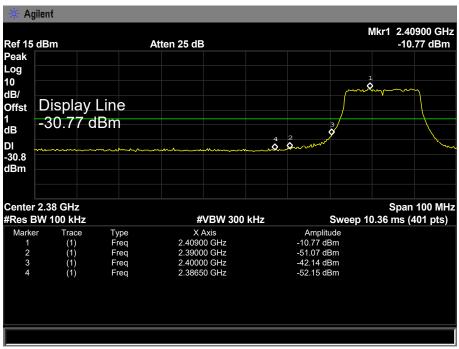


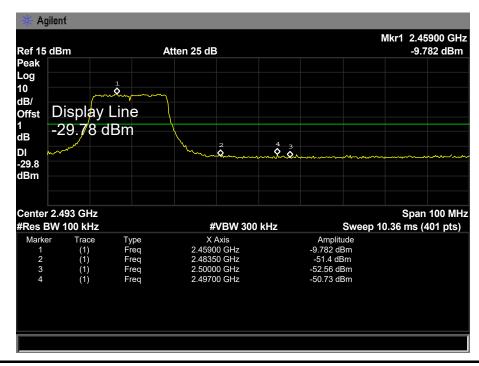
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			I
EUT:	Pos terminal	Model:	IDT800
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX G Mode 2412MHz / T	X G Mode 2462MHz	
Remark:	The EUT is programed in	continuously transmitt	ing mode
* Agilent			
	Atten 25 dB blay Line 15 dBm		Mkr1 2.41200 GHz -7.151 dBm
1 (	kHz         #VBW :           race         Type         X Axis           (1)         Freq         2.41200 GHz	Amplitude -7.151 dBm	Span 100 MHz 0.36 ms (401 pts)
3 (	(1)         Freq         2.39000 GHz           (1)         Freq         2.40000 GHz           (1)         Freq         2.38600 GHz	-51.6 dBm -41.53 dBm -51.31 dBm	

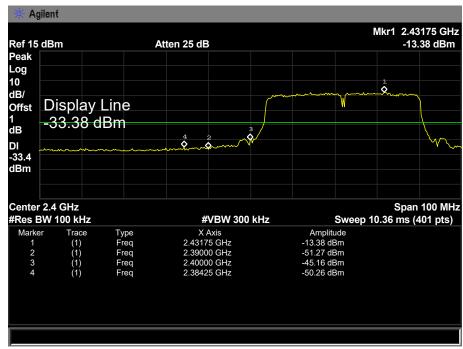


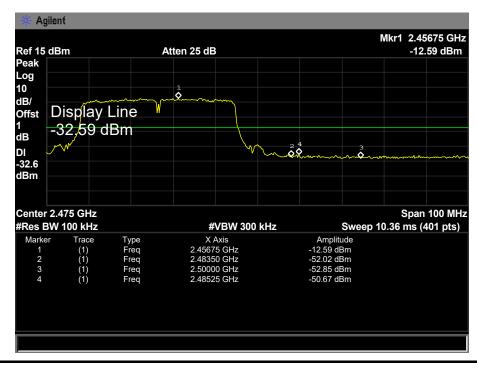
EUT:	Pos terminal	Model:	IDT800			
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz				
Test Mode:	TX N(HT20) Mode 2412M	TX N(HT20) Mode 2412MHz / TX N(HT20) Mode 2462MHz				
Remark:	The EUT is programed in	continuously transmittir	ng mode			





EUT:	Pos terminal	Model:	IDT800		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	AC 120V/60Hz				
Test Mode:	TX N(HT40) Mode 2422M	TX N(HT40) Mode 2422MHz / TX N(HT40) Mode 2452MHz			
Remark:	The EUT is programed in continuously transmitting mode				





Report No.: MTI150630001RF-1

# 7. Bandwidth Test

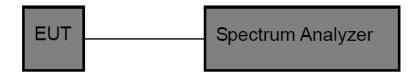
### 7.1 Test Standard and Limit

7.1.1 Test Standard FCC Part 15.247 (a)(2)

#### 7.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210						
Test Item	Test Item Limit Frequency Range(MHz)					
Bandwidth	>=500 KHz	2400~2483.5				
Dandwidth	(6dB bandwidth)	2400 2400.0				

# 7.2 Test Setup



### 7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
- (3)Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

# 7.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

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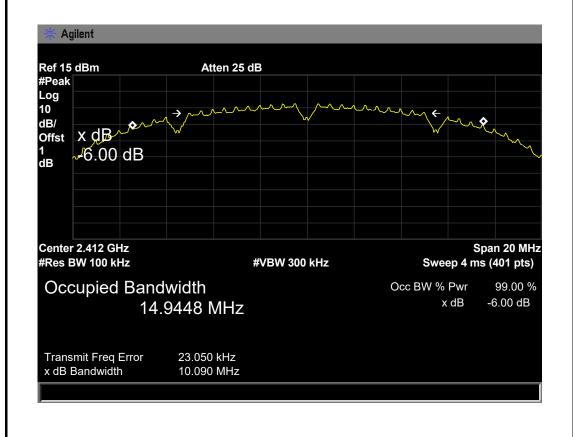
Hotline: 400-666-1678 Tel: 86-755-8885 0135 Fax: 86-755-8885 0136 http://www.mtitest.com

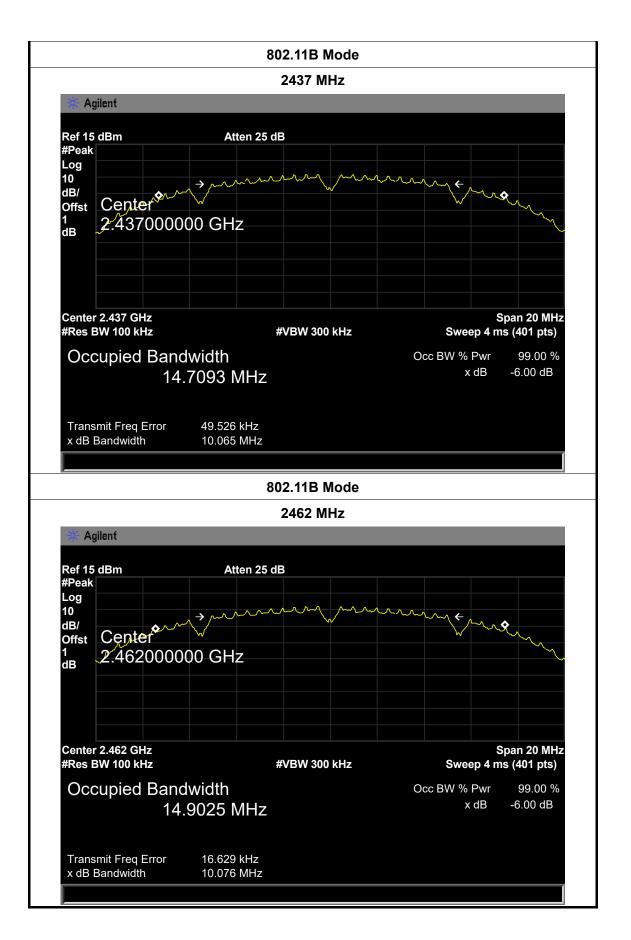
### 7.5 Test Data

EUT:	Pos terminal	Model:	IDT800	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	AC 120V/60Hz			
Test Mode:	TX 802.11B Mode			
Channel frequence	cy 6dB Bandwidth	99% Bandwidth	Limit	
(MHz)	(MHz)	(MHz)	(MHz)	
2412	10.090	14.9448		
2437	10.065	14.7093	>=0.5	
2462	10.076	14.9025		

### 802.11B Mode

#### 2412 MHz



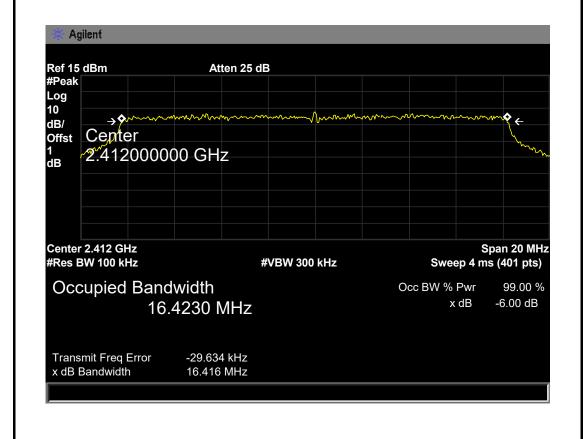


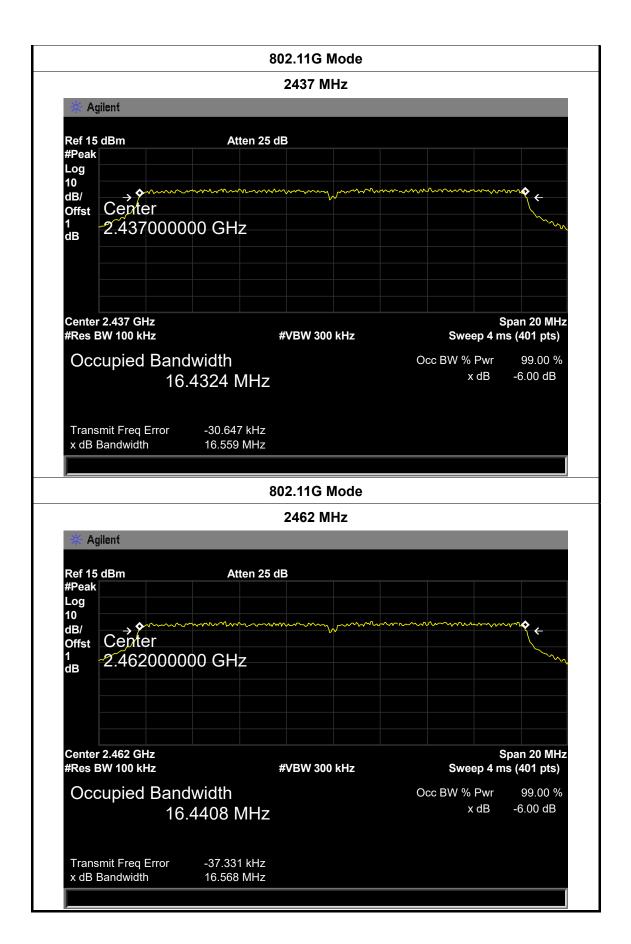
EUT:	Pos terminal	Model:	IDT800
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11G Mode		

Channel frequency	6dB Bandwidth	99% Bandwidth	Limit
(MHz)	(MHz)	(MHz)	(MHz)
(141112)	(1911 12)	(1911 12)	(1011 12)
2412	16.416	16.4230	
2437	16.559	16.4324	>=0.5
2462	16.568	16.4408	

#### 802.11G Mode

#### 2412 MHz

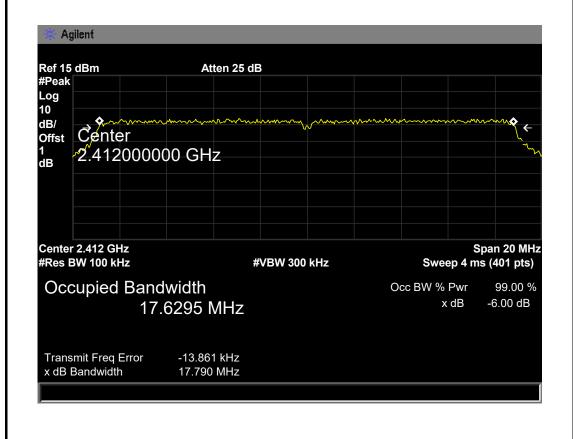


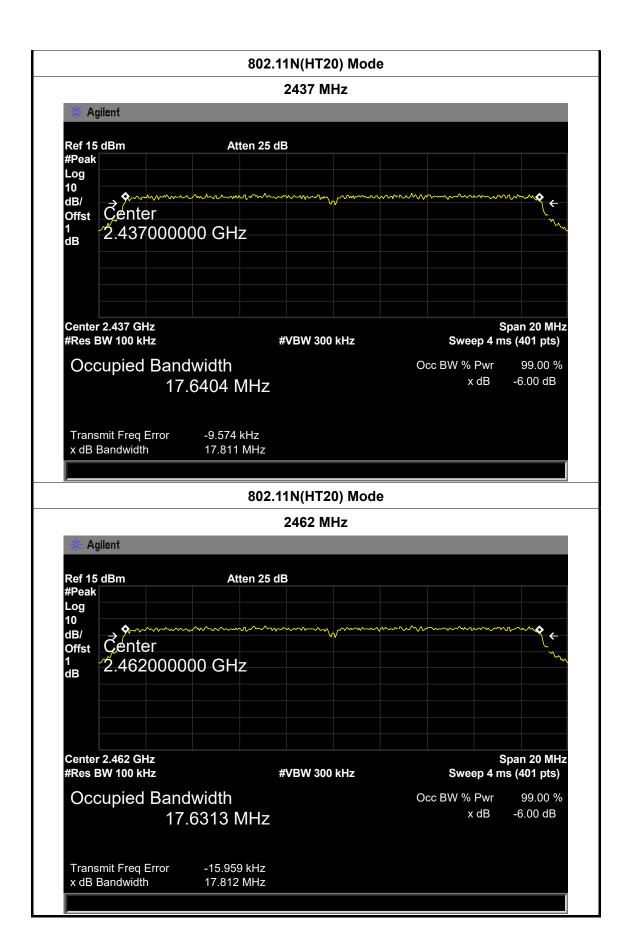


EUT:	Pos terminal	Model:	IDT800	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	AC 120V/60Hz			
Test Mode:	TX 802.11N(HT20) Mode			

Channel frequency	6dB Bandwidth	99% Bandwidth	Limit
(MHz)	(MHz)	(MHz)	(MHz)
2412	17.790	17.6295	
2437	17.811	17.6404	>=0.5
2462	17.812	17.6313	

## 802.11N(HT20) Mode

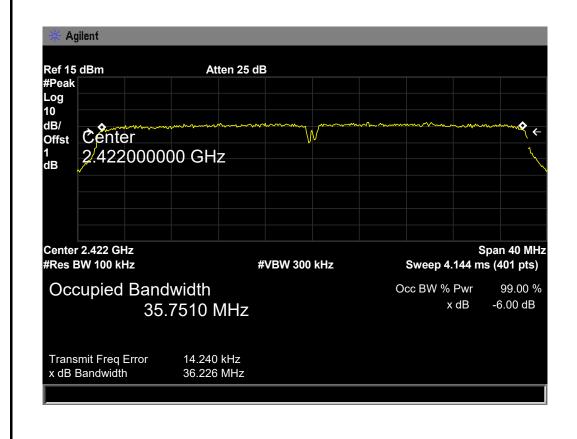


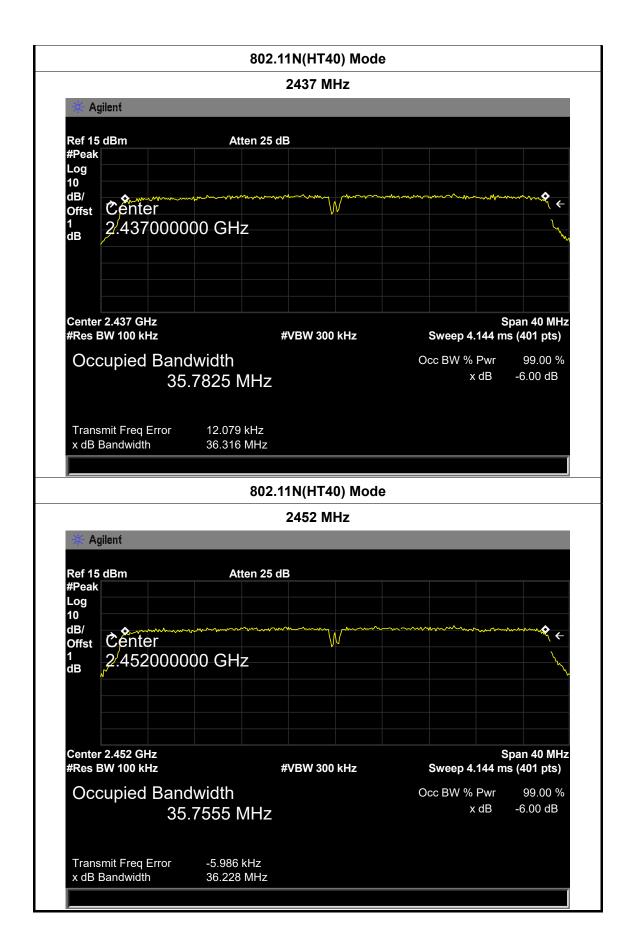


EUT:	Pos terminal Model:		IDT800
Temperature:	25 ℃ Relative Humidity:		55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11N(HT40) Mode		
Channel frequency 6dB Bandwidth		99% Bandwidth	Limit

Channel frequency	6dB Bandwidth	6dB Bandwidth 99% Bandwidth	
(MHz)	(MHz)	(MHz)	(MHz)
2412	36.226	35.7510	
2437	36.316	35.7825	>=0.5
2462	36.228	35.7555	

## 802.11N(HT40) Mode





# 8. Peak Output Power Test

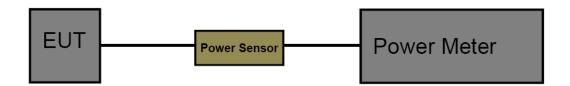
## 8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (b)

8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210			
Test Item Limit Frequency Range(MHz)			
Peak Output Power 1 Watt or 30 dBm 2400~2483.5			

# 8.2 Test Setup



## 8.3 Test Procedure

The measurement is according to section 9.1.2 of KDB 558074 D01 DTS Meas Guidance v03r02.

The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

# 8.4 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.

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# 8.5 Test Data

EUT:	Pos terminal Model Name :		IDT800		
Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	AC 120V/60Hz				
Mode	Channel frequency (MHz)	Test Result (dBm)	Limit (dBm)		
	2412	9.13			
802.11b	2437	9.18			
	2462	9.15			
	2412	9.08			
802.11g	2437	9.06			
	2462	9.11	30		
802.11n	2412	9.06	30		
	2437	9.02			
(HT20)	2462	9.03			
802.11n	2422	9.01			
	2437	9.07			
(HT40)	2452	9.05			
	Result: PASS				

# 9. Power Spectral Density Test

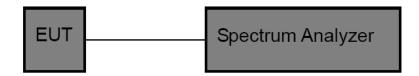
## 9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247 (e)

9 1 2 Test Limit

FCC Part 15 Subpart C(15.247)			
Test Item Limit Frequency Range(MHz)			
Power Spectral Density	2400~2483.5		

# 9.2 Test Setup



#### 9.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v03r02.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyser center frequency to DTS channel center frequency.
- (3) Set the span to 1.5 times the DTS bandwidth.

(4) Set the RBW to: 3 kHz(5) Set the VBW to: 10 kHz

(6) Detector: peak(7) Sweep time: auto

(8) Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

# 9.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

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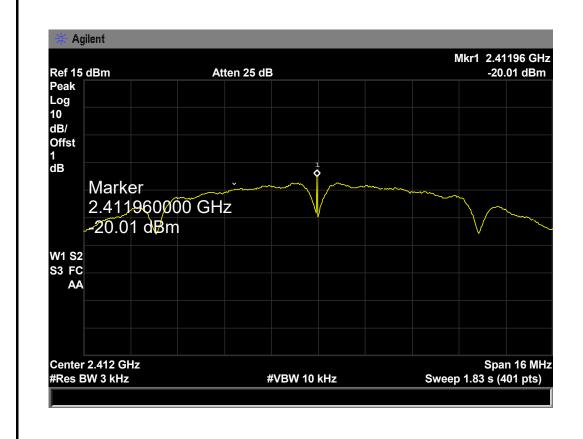
Hotline: 400-666-1678 Tel: 86-755-8885 0135 Fax: 86-755-8885 0136 http://www.mtitest.com

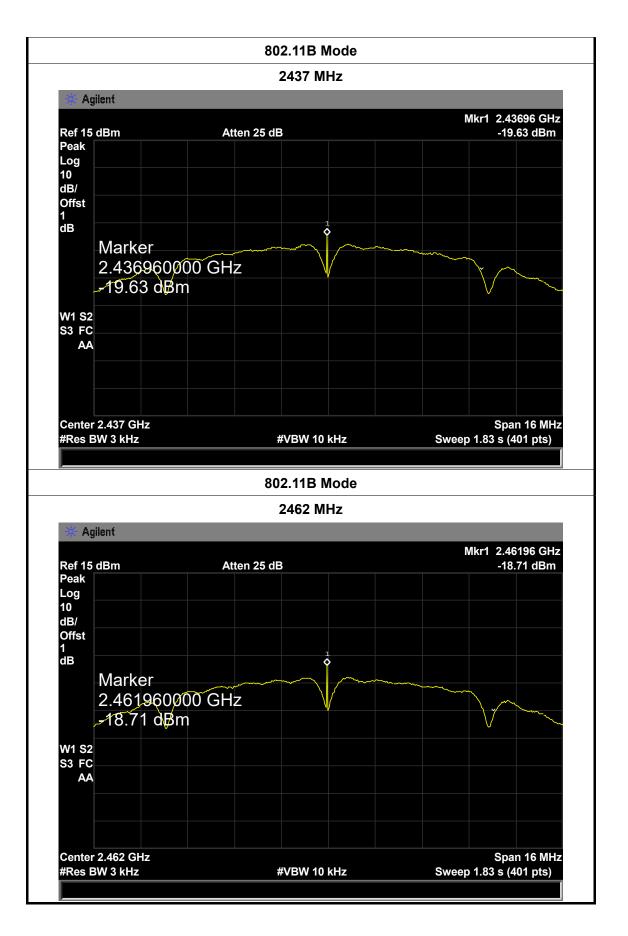
# 9.5 Test Data

EUT:	Pos terminal	Model:	IDT800	
Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	AC 120V/60Hz			
Test Mode:	TX 802.11B Mode			

Channel Frequency	Power Density	Limit (dBm)
(MHz)	(3 kHz/dBm)	
2412	-20.01	
2437	-19.63	8
2462	-18.71	

#### 802.11B Mode



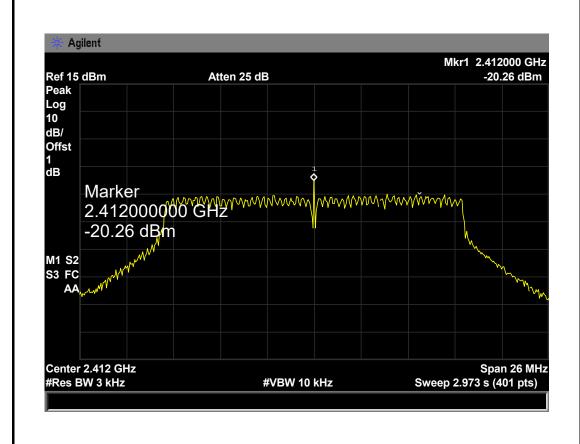


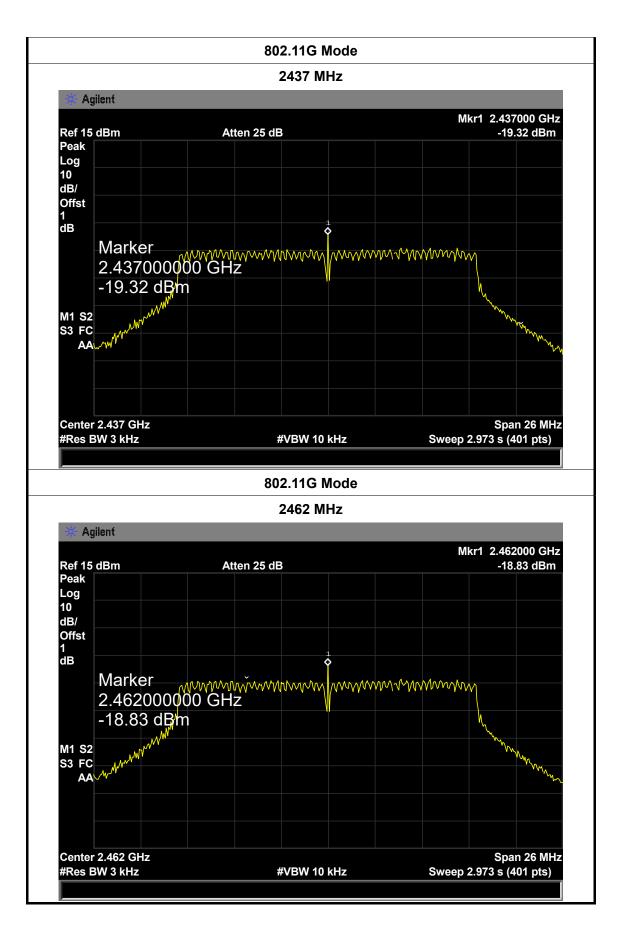
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EUT:	Pos terminal	Model:	IDT800	
Temperature:	25 ℃	Temperature:	<b>25</b> ℃	
Test Voltage:	AC 120V/60Hz			
Test Mode:	TX 802.11G Mode			

				•
Channel Frequency		uency	Power Density	Limit (dBm)
	(MHz)		(3 kHz/dBm)	
	2412		-20.26	
	2437		-19.32	8
	2462		-18.83	

#### 802.11G Mode



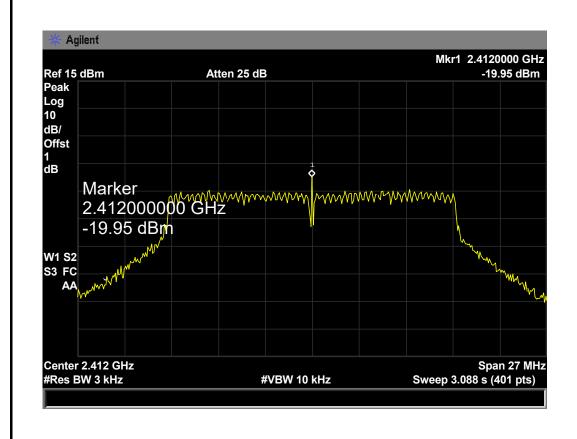


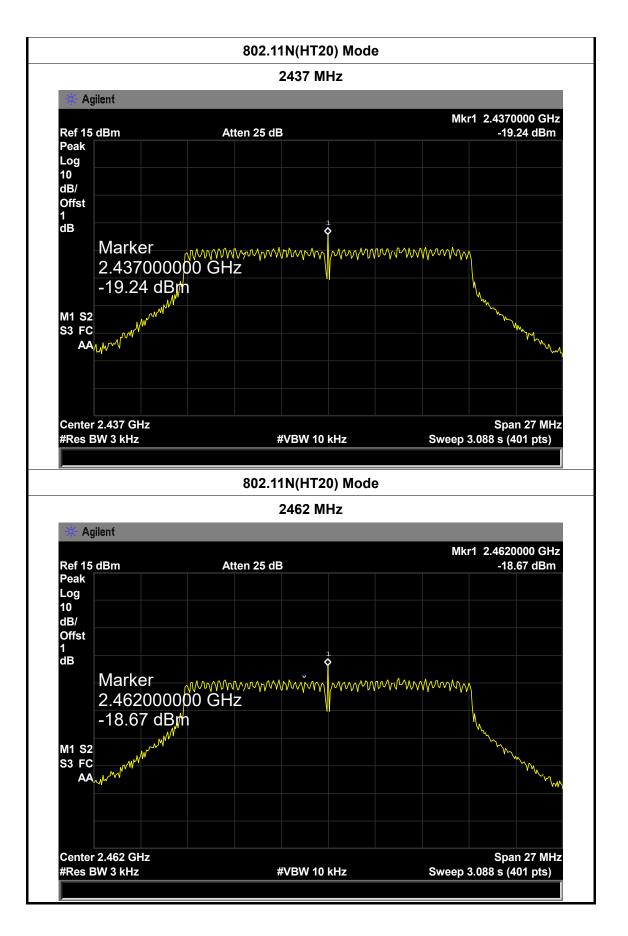
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EUT:	Pos terminal	Model:		IDT800
Temperature:	25 ℃	Temperature:		<b>25</b> ℃
Test Voltage:	AC 120V/60Hz			
Test Mode:	TX 802.11N(HT20) Mode			

· ,				
Channel Frequency	Power Density	Limit (dBm)		
(MHz)	(3 kHz/dBm)			
2412	-19.95			
2437	-19.24	8		
2462	-18.67			

## 802.11N(HT20) Mode



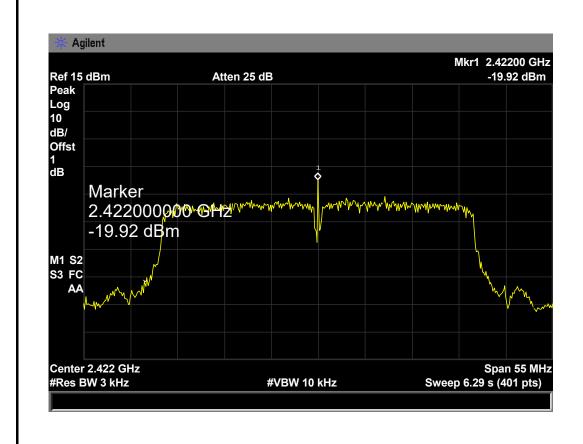


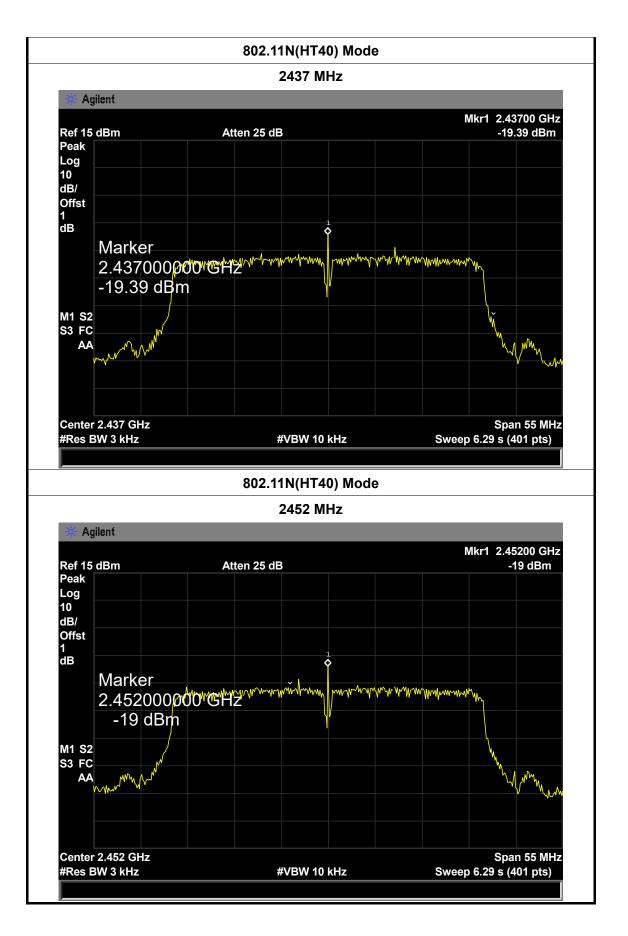
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EUT:	Pos terminal	Model:		IDT800
Temperature:	25 ℃	Temperature:		25 ℃
Test Voltage:	est Voltage: AC 120V/60Hz			
Test Mode: TX 802.11N(HT40) Mode				

Channel Frequency	Power Density	Limit (dBm)		
(MHz)	(3 kHz/dBm)			
2412	-19.92			
2437	-19.39	8		
2462	-19.00			

## 802.11N(HT40) Mode





# 10. Antenna Requirement

# 10.1 Standard Requirement

#### 10.1.1 Standard

FCC Part 15.203

## 10.1.2 Requirement

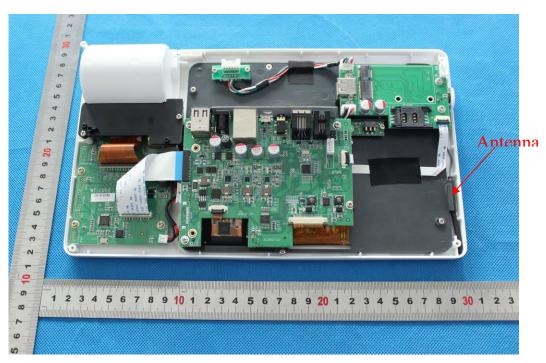
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply 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.

#### 10.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 2 dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

### 10.3 Result

The EUT antenna is an internal antenna, the peak gain is 2dBi. It complies with the standard requirement.



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