FCC RADIO TEST REPORT FCC 47 CFR PART 15 SUBPART C

Test Standard	FCC Part 15.247 and RSS-247 Issue 2
FCC ID	M82-AIM8I
ISED No.	9404A-AIM8I
Brand name	Computer
Product name	ADVANTECH
FCC Model Name	AIM8I, AIM8Ixxxxxxxxxxxxx, AIM-x5ATxxxxxxxxxx (where "x" may be any alphanumeric character, "-" or blank for marketing purpose and no impact safety related critical components and constructions)
IC Model Name	AIM8I, AIM-25AT, AIM-35AT, AIM-55AT, AIM-65AT, AIM-75AT
Test Result	Pass

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10: 2013 and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report.

The test Report of full or partial shall not copy. Without written approval of CCS. Inc.





Approved by:

Sam Cleany

Sam Chuang Manager Tested by:

ED. Chiang

Ed Chiang Engineer



Revision History

Rev.	Issue Date	Revisions	Revised By
00	May 28, 2017	Initial Issue	Angel Cheng
01	July 24, 2017	1. Revised limit in page 26.	Angel Cheng

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	Advantech Co.Ltd. No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei 114, Taiwan, R.O.C.				
Equipment	Computer				
FCC Model No.	AIM8I, AIM8Ixxxxxxxxxxxxx, AIM-x5ATxxxxxxxxxx (where "x" may be any alphanumeric character, "-" or blank for marketing purpose and no impact safety related critical components and constructions)				
IC Model No.	AIM8I, AIM-25AT, AIM-35AT, AIM-55AT, AIM-65AT, AIM-75AT				
Model Discrepancy	All models are electrically identical, different model names are for marketing purpose				
Received Date	March 17, 2017				
Date of Test	April 11 ~ 12, 2017				
Output Power(W)	IEEE 802.11b mode: 0.0632 (EIRP : 0.0776) IEEE 802.11g mode: 0.1400(EIRP : 0.1718) IEEE 802.11n HT 20 MHz mode: 0.1138 (EIRP : 0.1396) IEEE 802.11n HT 40 MHz mode: 0.1300 (EIRP : 0.1696)				
Power Supply	 VDC from Power Adapter Chicony / A16-018N1A I/P: 100-240Vac, 1A, 50-60Hz O/P: 5.15Vdc, 3A, 9.1Vdc, 2A, 18W Battery ADVANTECH / AIM-BAT-8 Rating: 3.8V, 4900, 18.62Wh 				

1.2 EUT CHANNEL INFORMATION

Frequency Range	2412MHz-2462MHz
Modulation Type	 IEEE 802.11b mode: CCK IEEE 802.11g mode: OFDM IEEE 802.11n HT 20 MHz mode: OFDM IEEE 802.11n HT 40 MHz mode: OFDM
Bandwidth	 IEEE 802.11b mode: 11 Channels IEEE 802.11g mode: 11 Channels IEEE 802.11n HT 20 MHz mode: 11 Channels IEEE 802.11n HT 40 MHz mode: 9 Channels

Remark:

Refer as ANSI 63.10:2013 clause 5.6.1 Table 4 and RSS-GEN Table A1 for test channels

Number of frequencies to be tested					
Frequency range inNumber ofLocation in frequencywhich device operatesfrequenciesrange of operation					
☐ 1 MHz or less	1	Middle			
1 MHz to 10 MHz	2	1 near top and 1 near bottom			
🛛 More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom			

1.3 ANTENNA INFORMATION

Antenna Type	☑ PIFA □ PCB □ Dipole □ Coils
Antenna Gain	Gain: 0.89dBi

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 30 to 1000 MHz	+/- 3.97
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 1 to 18GHz	+/- 3.58
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 18 to 26 GHz	+/- 3.59
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 26 to 40 GHz	+/- 3.81
Conducted Emission (Mains Terminals), 9kHz to 30MHz	+/- 2.48

Remark:

1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2

2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan. (R.O.C.)

Test site	Test Engineer	Remark
AC Conduction Room	Eric Lee	
Radiation	Ed Chiang	
RF Conducted	Eric Lee	

Remark: The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

1.6 INSTRUMENT CALIBRATION

RF Conducted Test Site						
Equipment Manufacturer Model S/N Cal Date Cal Due						
Power Meter	Anritsu	ML2495A	1012009	07/04/2016	07/03/2017	
Power Sensor	Anritsu	MA2411B	917072	07/04/2016	07/03/2017	
Spectrum Analyzer	R&S	FSV 40	101073	10/05/2016	10/04/2017	

3M 966 Chamber Test Site						
Equipment Manufacturer Model S/N					Cal Due	
Bilog Antenna	Sunol Sciences	JB3	A030105	07/03/2016	07/02/2017	
Horn Antenna	EMCO	3117	00055165	02/20/2017	02/19/2018	
Pre-Amplifier	EMCI	EMC 012635	980151	06/23/2016	06/22/2017	
Pre-Amplifier	EMEC	EM330	060609	06/08/2016	06/07/2017	
Spectrum Analyzer	Agilent	E4446A	US42510252	12/05/2016	12/04/2017	
Loop Ant	COM-POWER	AL-130	121051	03/02/2017	03/01/2018	
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R	
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R	
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R	

AC Conducted Emissions Test Site							
Equipment	Manufacturer	Manufacturer Model S/N Cal Date Cal Due					
EMI Test Receiver	R&S	ESCI	101201	08/20/2016	08/19/2017		
LISN	Schwarzbeck	NNLK 8129	8129-286	08/19/2016	08/18/2017		
LISN(EUT)	Schwarzbeck	NSLK 8127	8127-527	08/19/2016	08/18/2017		
Pulse Limiter	R&S	ESH3Z2	C3010026-2	08/21/2016	08/22/2017		
Software	EZ-EMC						

Remark: Each piece of equipment is scheduled for calibration once a year.

1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

EUT Accessories Equipment							
No.	. Equipment Brand Model Series No. FCC ID						
	N/A						

	Support Equipment						
No. Equipment Brand Model Series No. FCC ID							
	N/A						

1.8 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10:2013, FCC Part 2, FCC Part 15.247, KDB 558074 D01 v03r05, RSS-247 Issue 2 and RSS-GEN Issue 4.

1.9 TABLE OF ACCREDITATIONS AND LISTINGS

Country	Agency	Scope of Accreditation	Logo	
USA	FCC	3M Semi Anechoic Chamber (FCC MRA: TW1039) to perform FCC Part 15 measurements	FCC MRA: TW1039	
Canada	Industry Canada	3M Semi Anechoic Chamber (IC 2324G-1 / IC 2324G-2) to perform	Canada IC 2324G-1 IC 2324G-2	

2. TEST SUMMERY

FCC Standard Section	IC Standard Section	Report Section	Test Item	Result
15.203	-	1.2	Antenna Requirement	Pass
15.207(a)	RSS-GEN 8.8	4.1	AC Conducted Emission	Pass
15.247(a)(2)	RSS-247(5.2)(a)	4.2	6 dB Bandwidth	Pass
-	RSS-GEN 6.6	4.2	Occupied Bandwidth (99%)	Pass
15.247(b)	7(b) RSS-247(5.4)(d)		Output Power Measurement	Pass
15.247(e)	RSS-247(5.2)(b)	4.4	Power Spectral Density	Pass
15.247(d)	RSS-247(5.5)	4.5	Conducted Band Edge	Pass
15.247(d)	RSS-247(5.5)	4.5	Conducted Emission	Pass
15.247(d)	RSS-GEN 8.9, 8.10	4.6	Radiation Band Edge	Pass
15.247(d)	RSS-GEN 8.9, 8.10	4.6	Radiation Spurious Emission	Pass

3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	IEEE 802.11b mode :1Mbps IEEE 802.11g mode :6Mbps IEEE 802.11n HT20 mode :MCS8 IEEE 802.11n HT40 mode :MCS8
Test Channel Frequencies	IEEE 802.11b mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11g mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11n HT20 mode : 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz IEEE 802.11n HT40 mode : 1. Lowest Channel : 2422MHz 2. Middle Channel : 2422MHz 3. Highest Channel : 2437MHz 3. Highest Channel : 2437MHz 3. Highest Channel : 2437MHz 3. Highest Channel : 2437MHz 3. Highest Channel : 2452MHz
Operation Transmitter	IEEE 802.11b mode :1T1R IEEE 802.11g mode :1T1R IEEE 802.11n HT20 mode :1T1R IEEE 802.11n HT40 mode :1T1R

Remark:

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.

3.2 THE WORST MODE OF MEASUREMENT

AC Power Line Conducted Emission			
Test Condition AC Power line conducted emission for line and neutral			
Voltage/Hz	120V/60Hz		
	Mode 1:EUT power by AC adapter via power cable. Mode 2:EUT power by Battery.		
Worst Mode Mode 1 Mode 2 Mode 3 Mode 4			

	Radiated Emission Measurement Above 1G				
Test Condition	Band edge, Emission for Unwanted and Fundamental				
Voltage/Hz	120V/60Hz				
Test ModeMode 1:EUT power by AC adapter via power cable. Mode 2:EUT power by Battery.					
Worst Mode	🛛 Mode 1 🗌 Mode 2 🗌 Mode 3 🗌 Mode 4				
Worst Position	 Placed in fixed position. Placed in fixed position at X-Plane (E2-Plane) Placed in fixed position at Y-Plane (E1-Plane) Placed in fixed position at Z-Plane (H-Plane) 				
Worst Polarity	Horizontal Vertical				

Radiated Emission Measurement Below 1G				
Test Condition	Test Condition Radiated Emission Below 1G			
Voltage/Hz	120V/60Hz			
Test Mode	Mode 1:EUT power by AC adapter via power cable. Mode 2:EUT power by Battery.			
Worst Mode				

Remark:

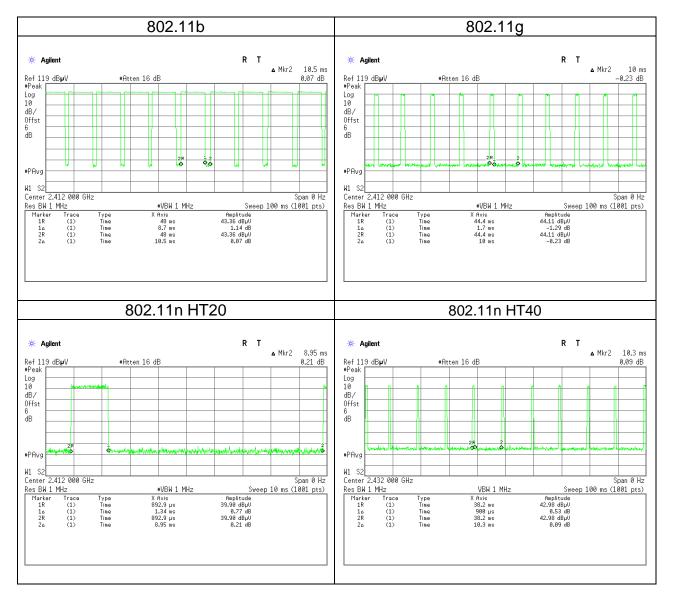
1. The worst mode was record in this test report.

2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, Horizontal and Vertical for radiated measurement. The worst case(X-Plane and Horizontal) were recorded in this report

3. AC power line conducted emission and for below 1G radiation emission were performed the EUT transmit at the highest output power channel as worse case.

3.3 EUT DUTY CYCLE

Duty Cycle						
Configuration	TX ON (ms)	TX ALL (ms)	Duty Cycle (%)	Duty Factor(dB)		
802.11b	8.7000	10.5000	82.86%	0.82		
802.11g	1.7000	10.0000	17.00%	7.70		
802.11n HT20	1.3400	8.9500	14.97%	8.25		
802.11n HT40	0.9000	10.3000	8.74%	10.59		



4. TEST RESULT

AC POWER LINE CONDUCTED EMISSION 4.1

4.1.1 Test Limit

According to §15.207(a)(2) and RSS-GEN section 8.8,

Frequency Range	Limits(dBµV)		
(MHz)	Quasi-peak	Average	
0.15 to 0.50	66 to 56*	56 to 46*	
0.50 to 5	56	46	
5 to 30	60	50	

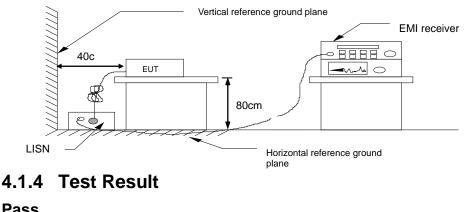
* Decreases with the logarithm of the frequency.

4.1.2 Test Procedure

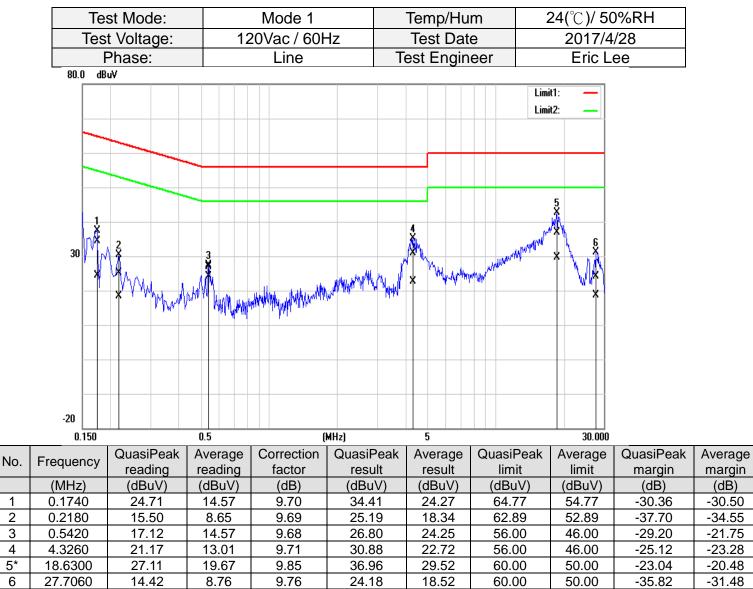
Test method Refer as ANSI 63.10:2013 clause 6.2,

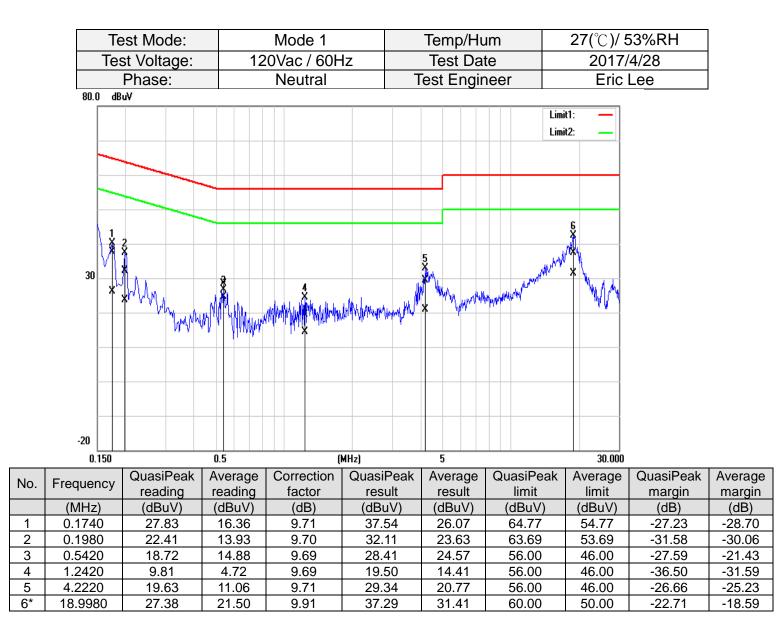
- 1. The EUT was placed on a non-conducted table, which is 0.8m above horizontal ground plane and 0.4m above vertical ground plane.
- 2. EUT connected to the line impedance stabilization network (LISN)
- 3. Receiver set RBW of 9kHz and Detector Peak, and note as quasi-peak and average.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. Recorded Line for Neutral and Line.

4.1.3 Test Setup



Test Data





4.2 6DB BANDWIDTH AND OCCUPIED BANDWIDTH(99%)

4.2.1 Test Limit

According to §15.247(a)(2) and RSS-247 section 5.2(a),

6 dB Bandwidth :

Limit	Shall be at least 500kHz
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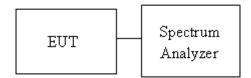
Occupied Bandwidth(99%) : For reporting purposes only.

4.2.2 Test Procedure

Test method Refer as KDB 558074 D01 v03r05, Section 8.1 and ANSI 63.10:2013 clause 6.9.2,

- 1. The EUT RF output connected to the spectrum analyzer by RF cable.
- 2. Setting maximum power transmit of EUT
- 3. SA set RBW = 100kHz, VBW = 300kHz and Detector = Peak, to measurement 6 dB Bandwidth and 99% Bandwidth.
- 4. Measure and record the result of 6 dB Bandwidth and 99% Bandwidth. in the test report.

4.2.3 Test Setup



4.2.4 Test Result

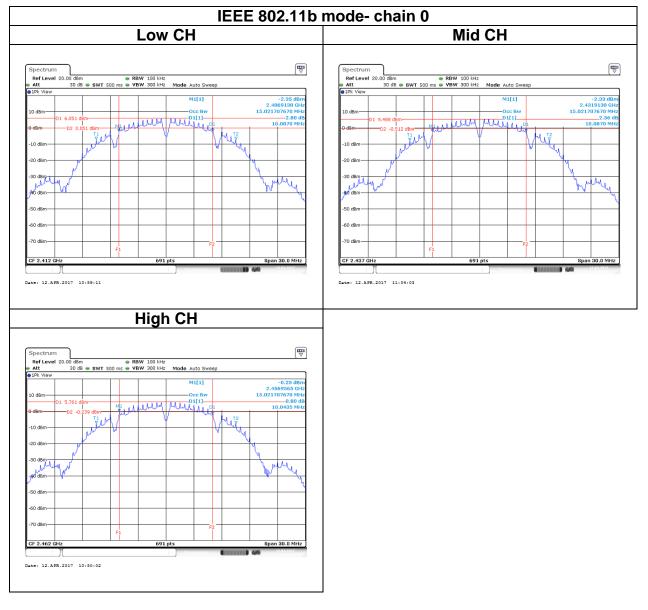
Test mode: IEEE 802.11b mode / 2412-2462 MHz							
					6dB limit (kHz)		
Low	2412	15.0217	-	10.0870	-		
Mid	2437	15.0217	-	10.0870	-	≥500	
High	2462	15.0217	-	10.0435	-		

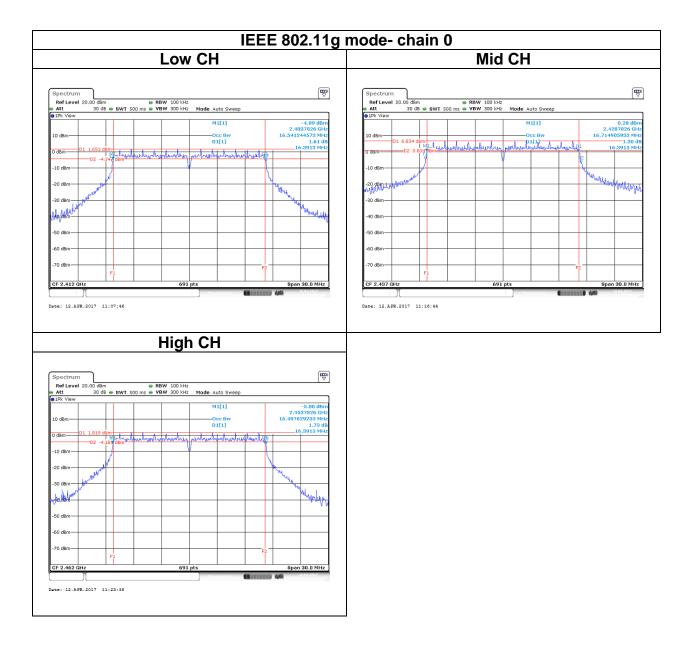
	Test mode: IEEE 802.11g mode / 2412-2462 MHz									
Channel	Frequency (MHz)	Frequency OBW(99%) OBW(99%) 6		Chain 0 6dB BW (MHz)	Chain 1 6dB BW (MHz)	6dB limit (kHz)				
Low	2412	16.5412	-	16.3913	-					
Mid	2437	16.7149	-	16.3913	-	≥500				
High	2462	16.4978	-	16.3913	-					

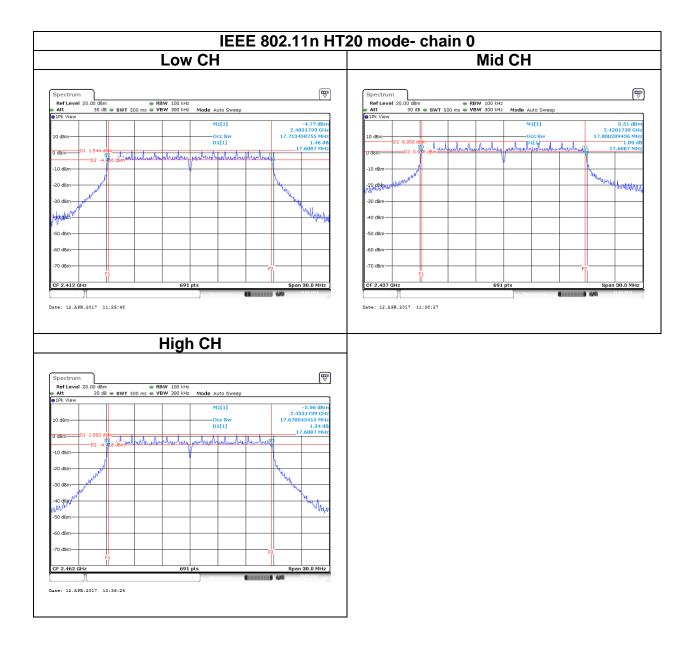
	Test mode: IEEE 802.11n HT 20 MHz mode / 2412-2462 MHz									
Channel	Frequency (MHz)	Chain 0 OBW(99%) (MHz)	Chain 1 OBW(99%) (MHz)	Chain 0 6dB BW (MHz)	Chain 1 6dB BW (MHz)	6dB limit (kHz)				
Low	2412	17.1345	-	17.6087	-					
Mid	2437	17.8002	-	17.6087	-	≥500				
High	2462	17.6700	-	17.6087	-					

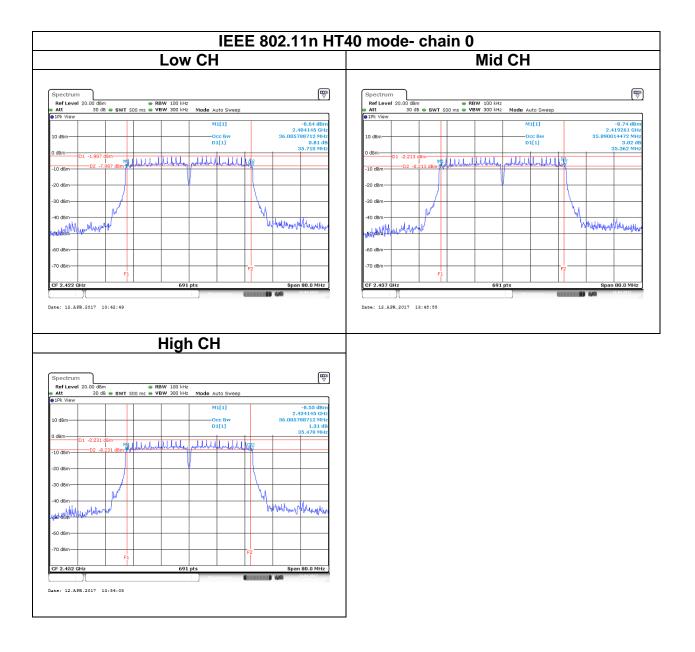
	Test mode: IEEE 802.11n HT 40 MHz mode / 2422-2452 MHz									
Channel	Frequency (MHz)	Chain 0 OBW(99%) (MHz)	Chain 1 OBW(99%) (MHz)	Chain 0 Chain 1 6dB BW 6dB BW (MHz) (MHz)		6dB limit (kHz)				
Low	2422	36.0057	-	35.710	-					
Mid	2437	35.8900	-	35.362	-	>500				
High	2452	36.0057	-	35.478	-					

Test Data









4.3 OUTPUT POWER MEASUREMENT

4.3.1 Test Limit

According to §15.247(b) and RSS-247 section 5.4(d),

Peak output power :

For systems using digital modulation in the 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt(30 dBm) and the e.i.r.p. shall not exceed 4Watt(36 dBm), base on the use of antennas with directional gain not exceed 6 dBi If transmitting antennas of directional gain greater than 6dBi are used the peak output power the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

	Antenna not exceed 6 dBi : 30dBm
Limit	Antenna with DG greater than 6 dBi :
	[Limit = 30 - (DG - 6)]
	Point-to-point operation :

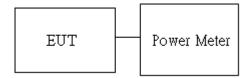
Average output power : For reporting purposes only.

4.3.2 Test Procedure

Test method Refer as KDB 558074 D01 v03r05, Section 9.1.2.

- 1. The EUT RF output connected to the power meter by RF cable.
- 2. Setting maximum power transmit of EUT.
- 3. The path loss was compensated to the results for each measurement.
- 4. Measure and record the result of Peak output power and Average output power. in the test report.

4.3.3 Test Setup



4.3.4 Test Result

Peak output power :

	Wifi 2.4G												
Config C	СН	Freq.	power set		PK Pow	PKPower(dBm)		PK Total Power	ERP PK Total	EIRP PK Total	DG	Limit	EIRP Limit
Coning	011	(MHz)	chain0	chain1	chain0	chain1	Power (dBm)	(W)	Power (dBm)	Power (W)	(dBi)	(dBm)	(dBm)
IEEE	Low	2412	63	-	17.79	-	17.79	0.0601	18.68	0.0738			
802.11b Data rate:	Mid	2437	63	-	17.71	-	17.71	0.0590	18.60	0.0724			
1Mbps	High	2462	63	-	18.01	-	18.01	0.0632	18.90	0.0776			
IEEE	Low	2412	63	-	21.46	-	21.46	0.1400	22.35	0.1718			
802.11g Data rate:	Mid	2437	63	-	21.08	-	21.08	0.1282	21.97	0.1574			
6Mbps	High	2462	63	-	21.46	-	21.46	0.1400	22.35	0.1718	0.89	30	36
IEEE 802.11n	Low	2412	63	-	20.23	-	20.23	0.1054	21.12	0.1294	0.09	30	30
HT20	Mid	2437	63	-	20.51	-	20.51	0.1125	21.40	0.1380			
Data rate: MCS8	High	2462	63	-	20.56	-	20.56	0.1138	21.45	0.1396			
IEEE 802.11n	Low	2422	63	-	21.14	-	21.14	0.1300	22.03	0.1596			
HT40	Mid	2437	63	-	20.77	-	20.77	0.1194	21.66	0.1466			
Data rate: MCS8	High	2452	63	-	21.12	-	21.12	0.1294	22.01	0.1589			

Average output power :

	Wifi 2.4G									
Config	СН	Freq.	AV Pow	AV Total Power						
coning	СП	(MHz)	chain0	chain1	(dBm)					
IEEE	Low	2412	15.73	-	15.73					
802.11b Data rate:	Mid	2437	15.74	-	15.74					
1Mbps	High	2462	15.92	-	15.92					
IEEE	Low	2412	13.64	-	13.64					
802.11g Data rate:	Mid	2437	13.11	-	13.11					
6Mbps	High	2462	13.68	-	13.68					
IEEE 802.11n	Low	2412	12.23	-	12.23					
HT20	Mid	2437	12.76	-	12.76					
Data rate: MCS8	High	2462	12.69	-	12.69					
IEEE 802.11n	Low	2422	12.74	-	12.74					
HT40	Mid	2437	12.54	-	12.54					
Data rate: MCS8	High	2452	12.56	-	12.56					

4.4 POWER SPECTRAL DENSITY

4.4.1 Test Limit

According to §15.247(e) and RSS-247 section 5.2(2),

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

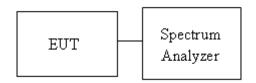
1 : :4	 Antenna not exceed 6 dBi : 8dBm Antenna with DG greater than 6 dBi :
Limit	[Limit = 8 − (DG − 6)] □ Point-to-point operation :

4.4.2 Test Procedure

Test method Refer as KDB 558074 D01 v03r05, Section 10.2

- 1. The EUT RF output connected to the spectrum analyzer by RF cable.
- 2. Setting maximum power transmit of EUT
- 3. SA set RBW = 3kHz, VBW = 30kHz, Span = 1.5 times DTS Bandwidth (6 dB BW), Detector = Peak, Sweep Time = Auto and Trace = Max hold.
- 4. The path loss and Duty Factor were compensated to the results for each measurement by SA.
- 5. Mark the maximum level.
- 6. Measure and record the result of power spectral density. in the test report.

4.4.3 Test Setup



4.4.4 Test Result

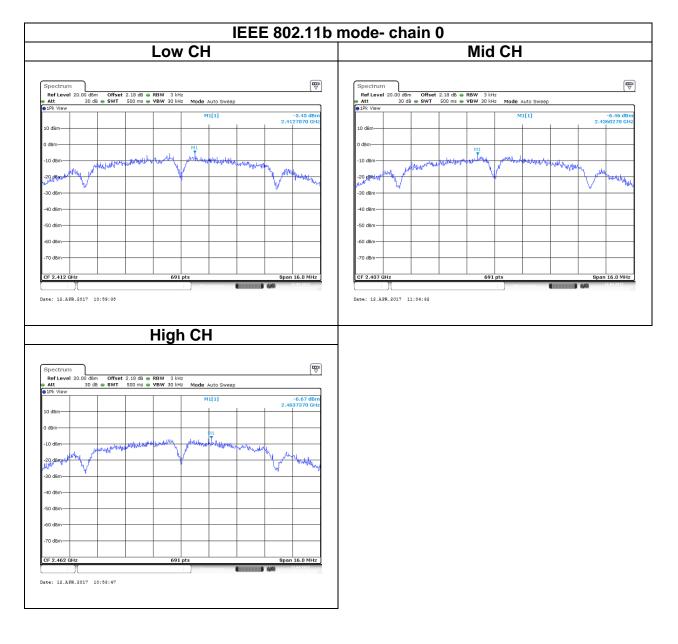
Test mode: IEEE 802.11b mode / 2412-2462 MHz								
Channel	ChannelFrequency (MHz)Chain 0 PPSDChain 1 PPSDTotal PPSDLimit (dBm)Channel(MHz)(dBm)(dBm)(dBm)Limit (dBm)							
Low	2412	-5.34	-	-5.34				
Mid	2437	-5.46	-	-5.46	8			
High	2462	-6.67	-	-6.67				

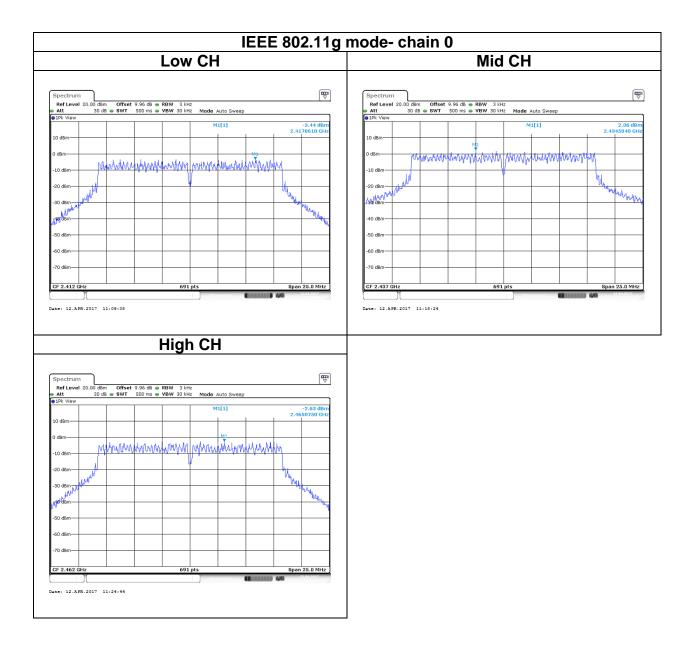
Test mode: IEEE 802.11g mode / 2412-2462 MHz								
Channel	Frequency (MHz)	Chain 0 PPSD (dBm)	Chain 1 PPSD (dBm)	Total PSSD (dBm)	Limit (dBm)			
Low	2412	-3.44	-	-3.44				
Mid	2437	2.36	-	2.36	8			
High	2462	-2.63	-	-2.63				

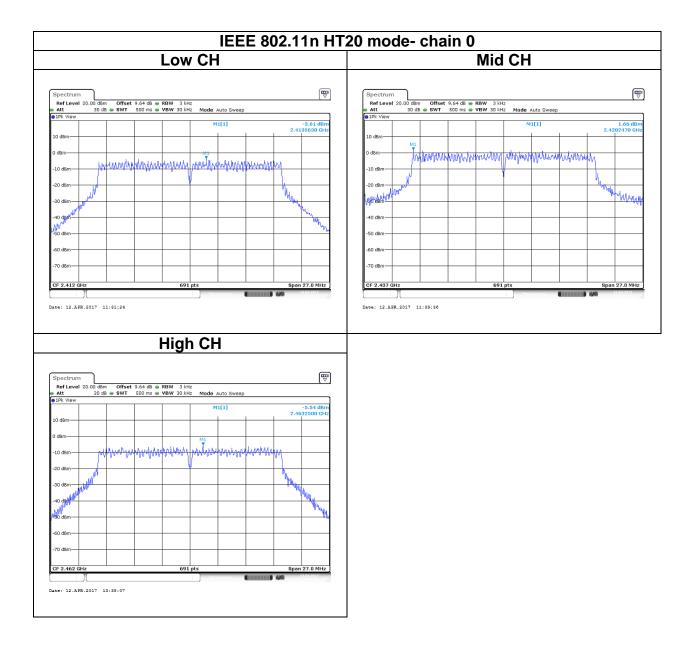
Test mode: IEEE 802.11n HT 20 MHz mode / 2412-2462 MHz								
Channel	Frequency (MHz)	Chain 0 PPSD (dBm)	Chain 1 PPSD (dBm)	Total PSSD (dBm)	Limit (dBm)			
Low	2412	-3.61	-	-3.61				
Mid	2437	1.66	-	1.66	8			
High	2462	-5.54	-	-5.54				

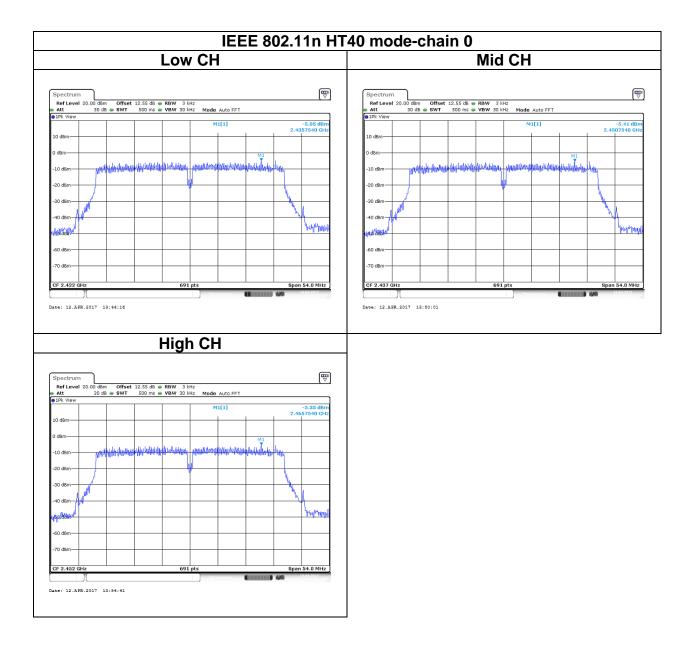
	Test mode: IEEE 802.11n HT 40 MHz mode / 2422-2452 MHz								
Channel	Frequency (MHz)	Chain 0 PPSD (dBm)	Chain 1 PPSD (dBm)	Total PSSD (dBm)	Limit (dBm)				
Low	2422	-5.05	-	-5.05					
Mid	2437	-5.41	-	-5.41	8				
High	2452	-5.35	-	-5.35					

Test Data









4.5 CONDUCTED BANDEDGE AND SPURIOUS EMISSION

4.5.1 Test Limit

According to §15.247(d) and RSS-247 section 5.5,

In any 100 kHz bandwidth outside the authorized frequency band,

Non-restricted bands shall be attenuated at least 20 dB/30 dB relative to the maximum PSD level in 100 kHz by RF conducted or a radiated measurement which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

4.5.2 Test Procedure

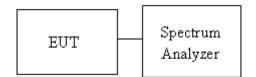
Test method Refer as KDB 558074 D01 v03r05, Section 11.

1. EUT RF output port connected to the SA by RF cable, and the path loss was compensated to result.

2. SA setting, RBW=100kHz, VBW=300kHz, Detector=Peak, Trace mode = max hold, SWT = Auto.

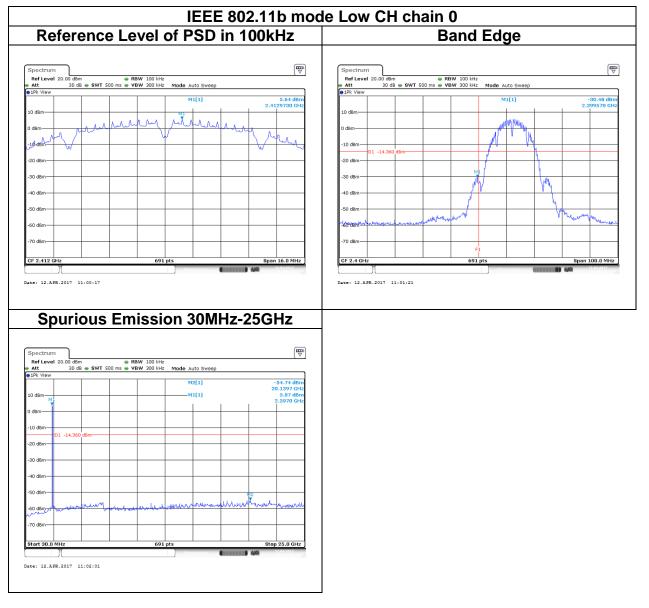
3. In any 100 kHz bandwidth outside the authorized frequency band, shall be attenuated at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when conducted power procedure is used. f the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

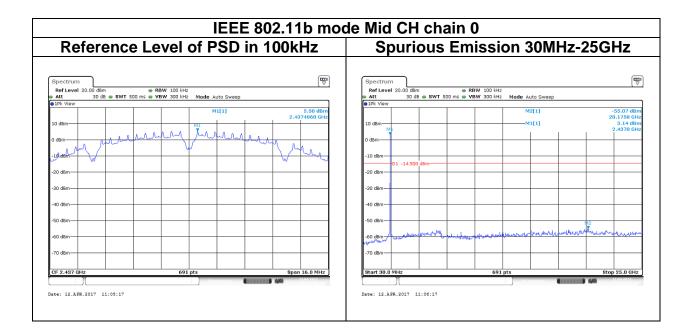
4.5.3 Test Setup

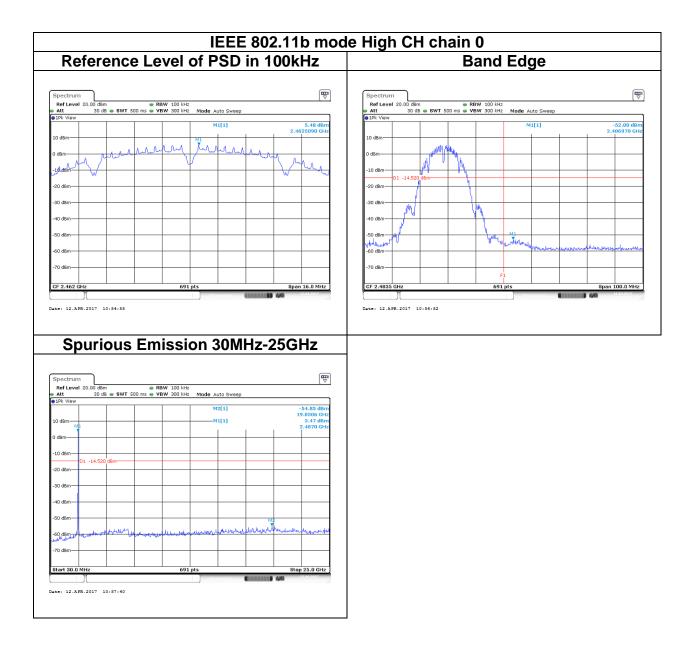


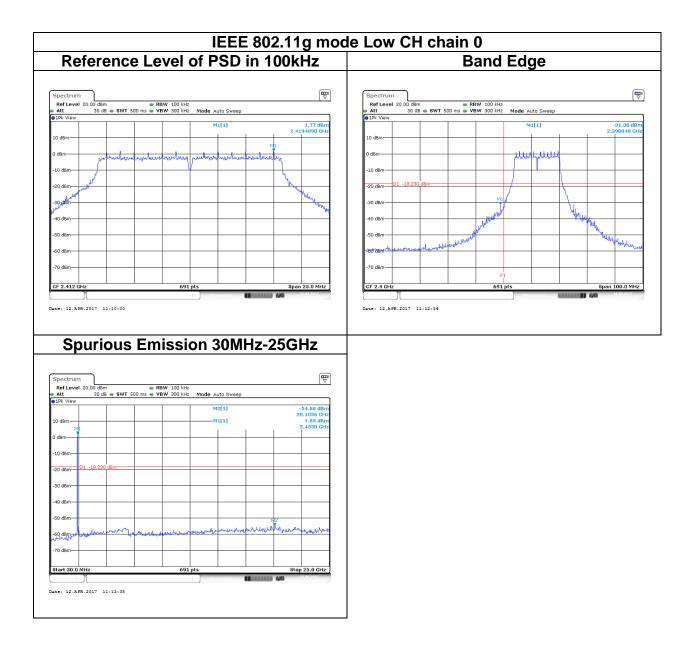
4.5.4 Test Result

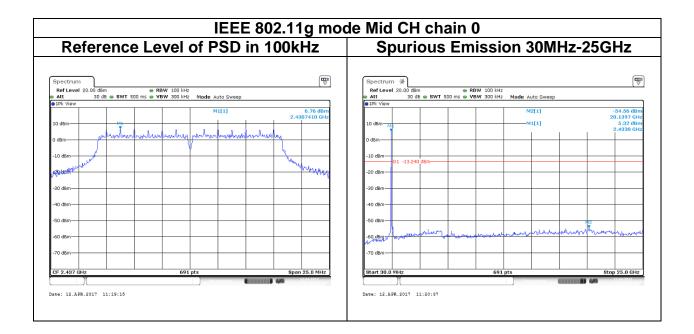
Test Data

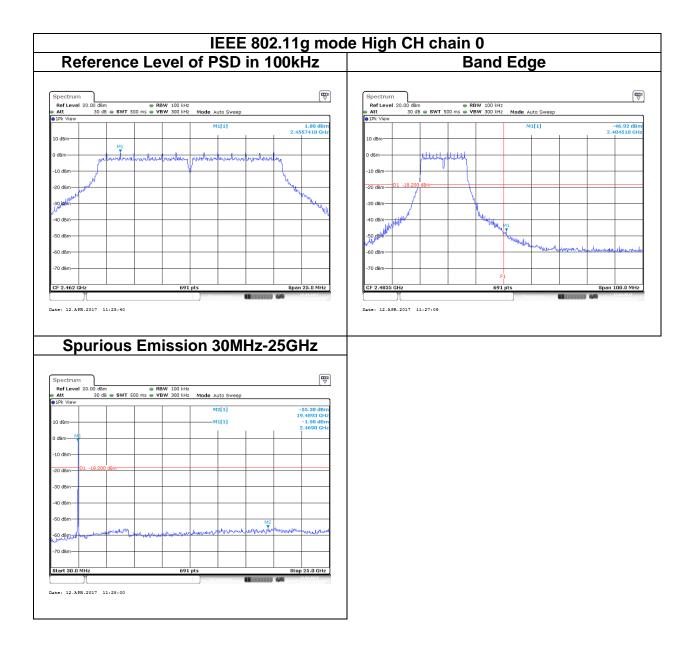


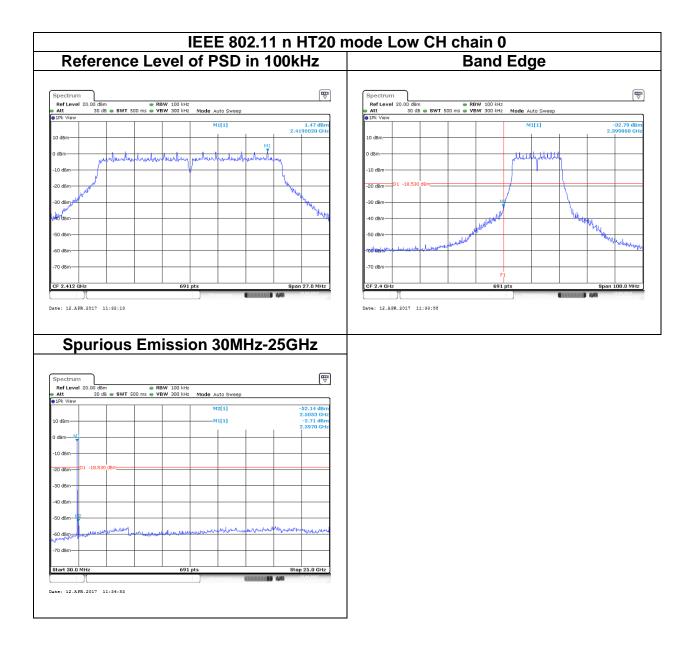


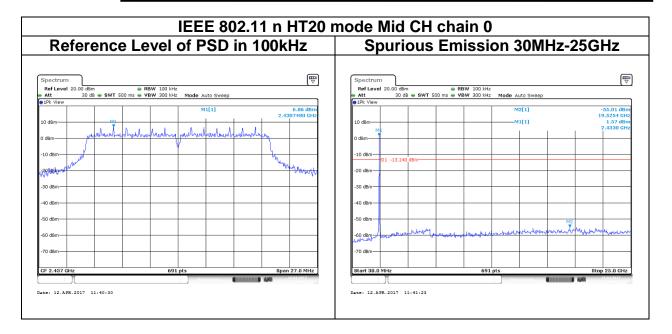


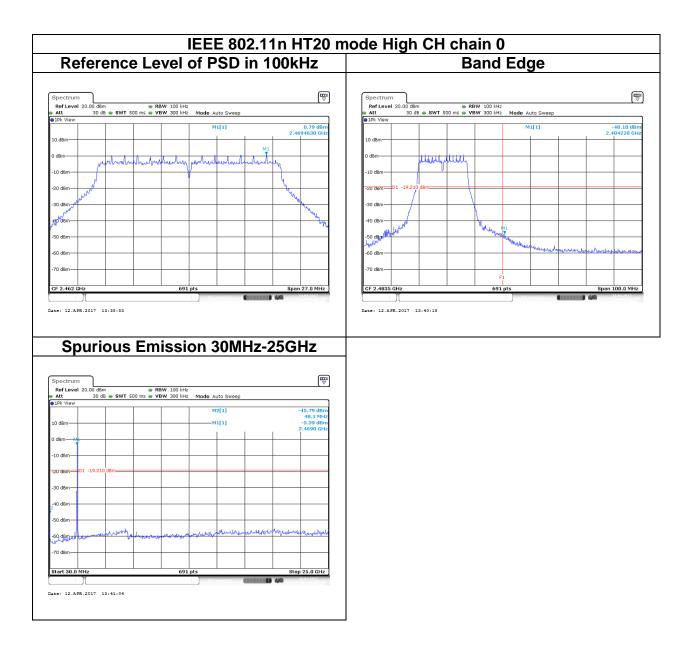


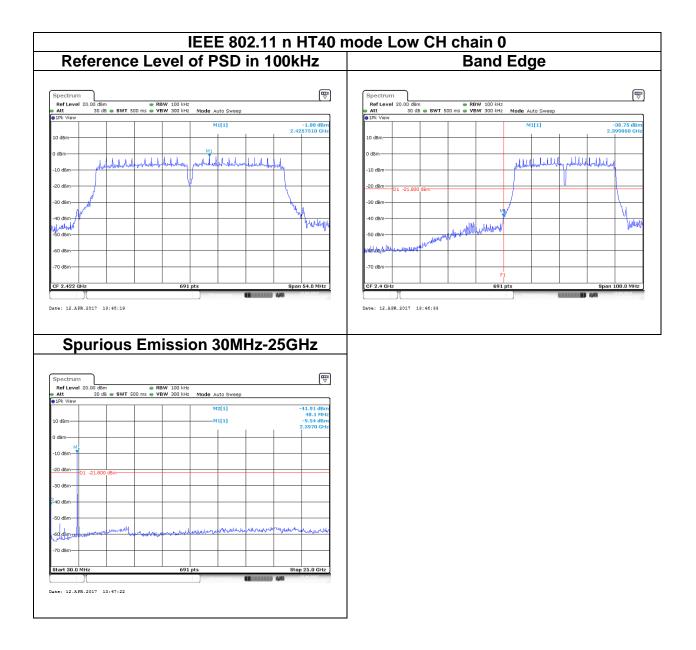


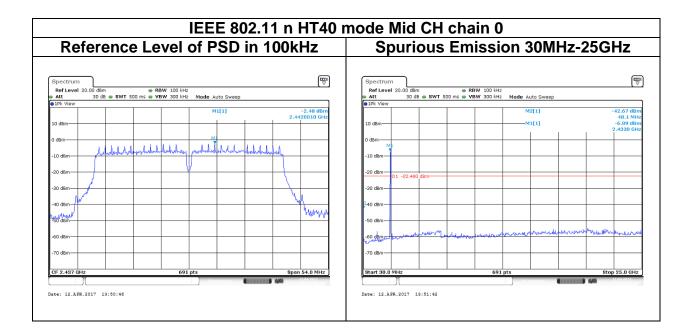


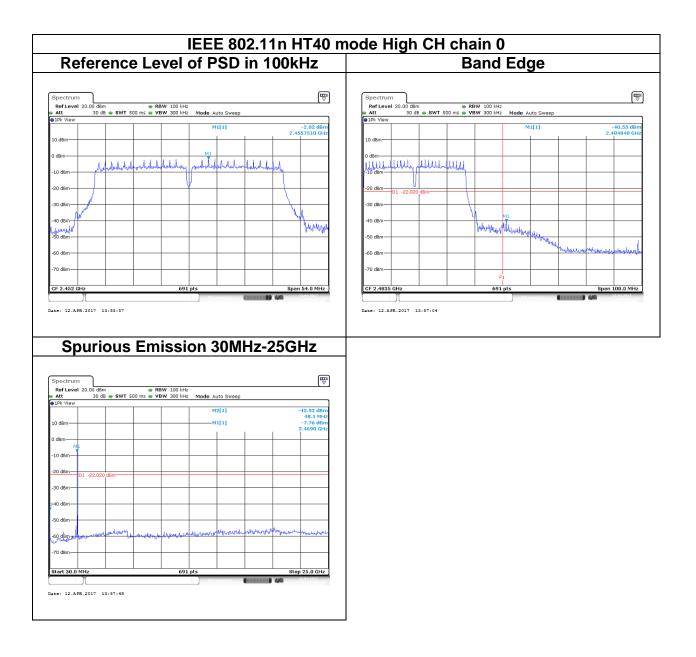












4.6 RADIATION BANDEDGE AND SPURIOUS EMISSION

4.6.1 Test Limit

FCC according to §15.247(d), §15.209 and §15.205,

IC according to RSS-247 section 5.5, RSS-Gen, Section 8.9 and 8.10

In any 100 kHz bandwidth outside the authorized frequency band, all harmonic and spurious must be least 20 dB below the highest emission level with the authorized frequency band. Radiation emission which fall in the restricted bands must also follow the FCC section 15.209 as below limit in table.

Below 30 MHz

Frequency	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	24,000/F (F in kHz)	30
1.705-30 MHz	30	N/A	30

Above 30 MHz

Frequency	Field Strength (microvolts/m)	Measurement Distance (metres)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

4.6.2 Test Procedure

Test method Refer as KDB 558074 D01 v03r05, Section 12.1.

1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10, and the EUT set in a continuous mode.

2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT is set 3m away from the receiving antenna, which is scanned from 1m to 4m above the ground plane to find out the highest emissions. Measurement are made polarized in both the vertical and the horizontal positions with antenna.

3. Span shall wide enough to full capture the emission measured. The SA from 30MHz to 26.5GHz set to the low, Mid and High channels with the EUT transmit.

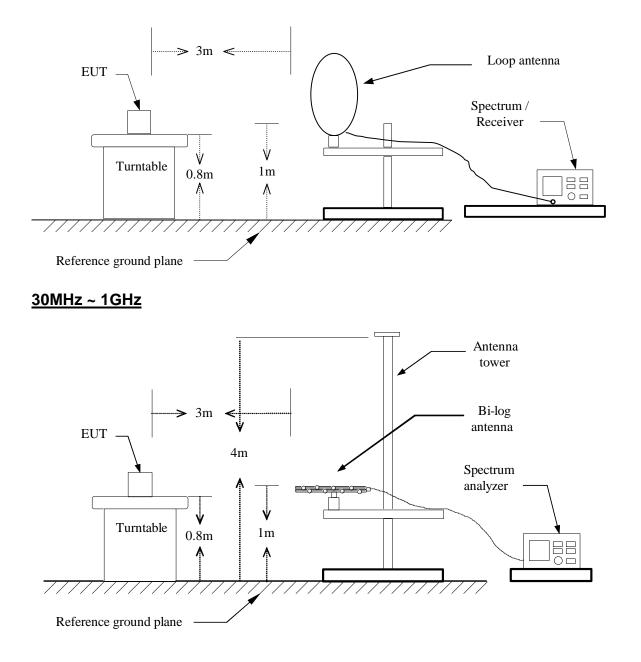
- 5. The SA setting following :
 - (1) Below 1G : RBW = 100kHz, VBW ≥ 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
 - (2) Above 1G:
 - (2.1) For Peak measurement : RBW = 1MHz, VBW ≥ 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
 - (2.2) For Average measurement : RBW = 1MHz, VBW

If Duty Cycle \geq 98%, VBW=10Hz.

If Duty Cycle < 98%, VBW=1/T.

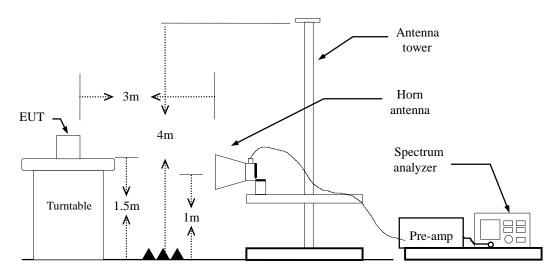
Configuration	Duty Cycle (%)	T(ms)	1/T (kHz)	VBW Setting
802.11b	83%	8.7000	0.115	115Hz
802.11g	17%	1.7000	0.588	620Hz
802.11n HT20	15%	1.3400	0.746	750Hz
802.11n HT40	9%	0.9000	1.111	1.2KHz

4.6.3 Test Setup <u>9kHz ~ 30MHz</u>



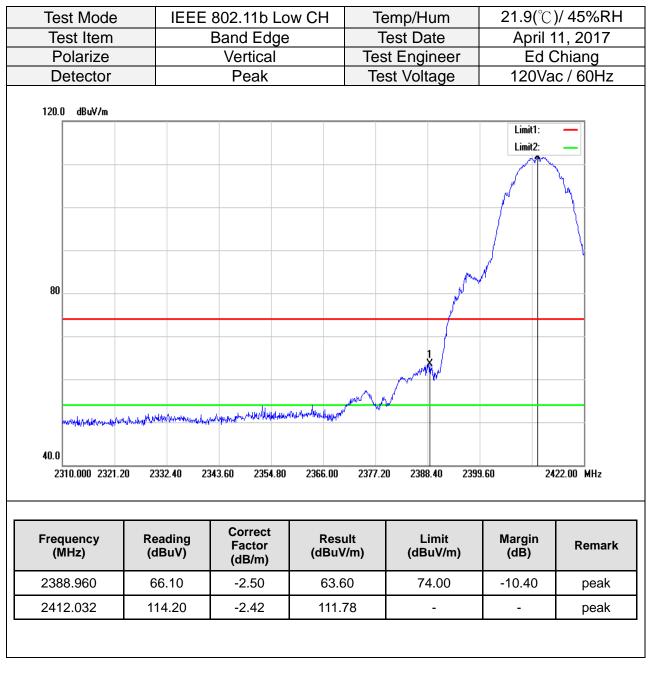
CELERE Compliance Certification Services Inc.

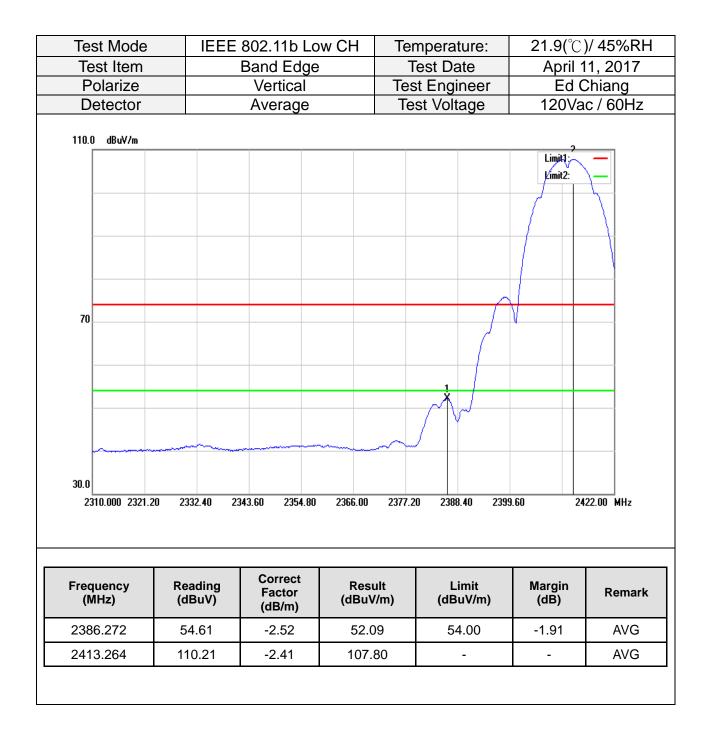
Above 1 GHz

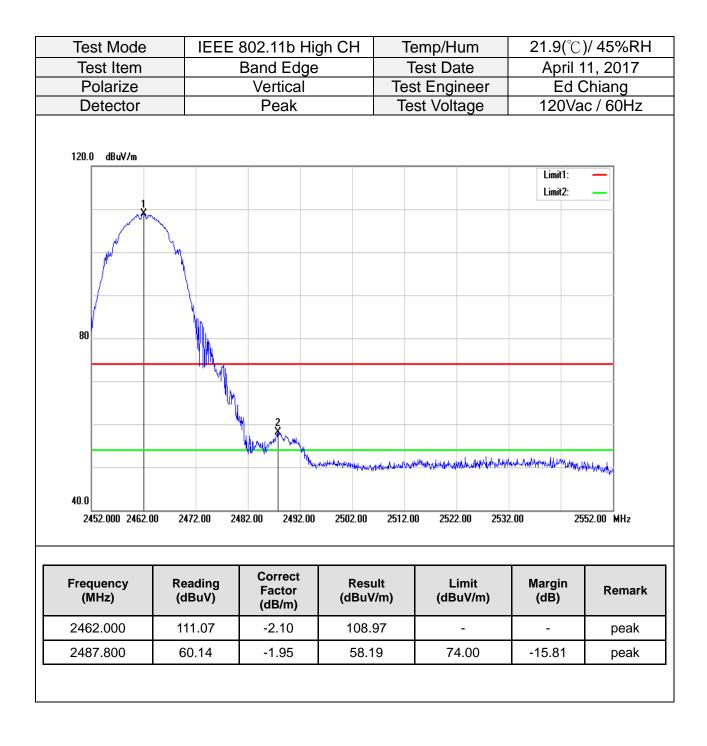


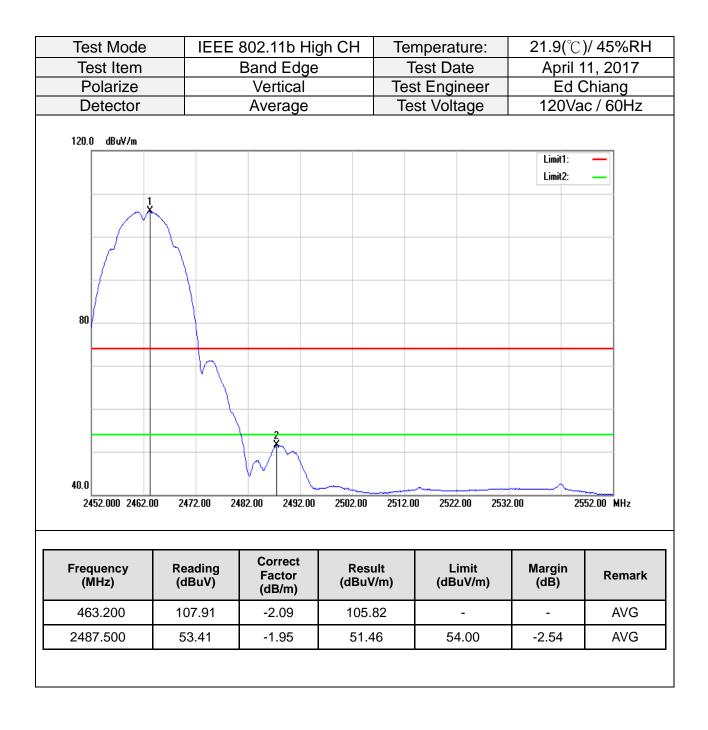
4.6.4 Test Result

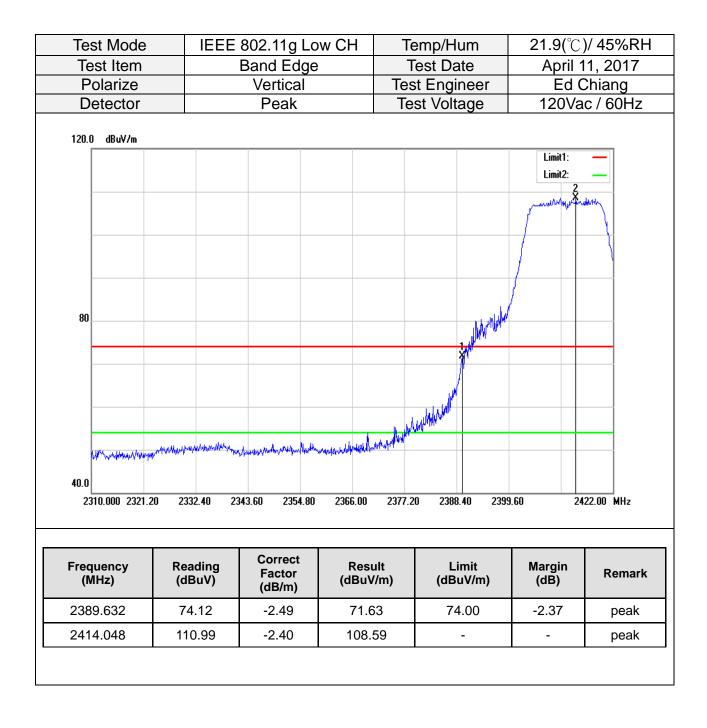
Band Edge Test Data



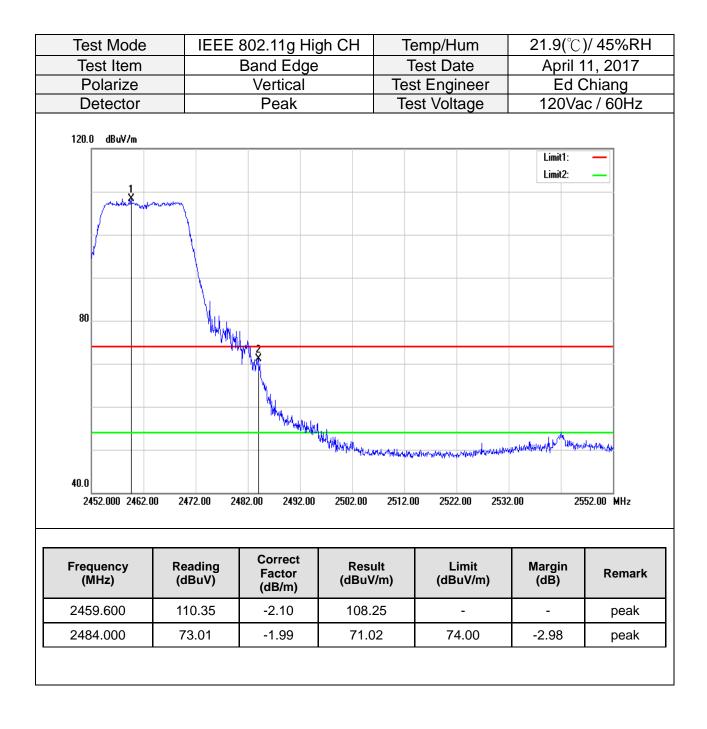








Test Mode	IEEE	802.11g Lo	w CH Te	emperature:	21.9(°C))/ 45%RF
Test Item		Band Edge		Test Date	April 11, 2017	
Polarize		Vertical		st Engineer		Chiang
Detector		Average	Т	est Voltage	120Va	c / 60Hz
110.0 dBuV/m						
					Limit1:	
					Limit2:	
					, emer or our	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
70						
				X		
			·····			
30.0						
2310.000 2321.3	20 2332.40 2	343.60 2354.80	2366.00 2377.	.20 2388.40 239	9.60 24	22.00 MHz
	Reading	Correct Factor	Result	Limit	Margin	Remark
(MHz)	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	
390.000	54.24	-2.49	51.75	54.00	-2.25	AVG
2419.200	100.74	-2.36	98.38	-	-	AVG
2110.200						



Test Mode	IEEE	802.11g Hig	gh CH 🛛 Te	emperature:	21.9(°C))/ 45%RH
Test Item		Band Edge	•	Test Date		1, 2017
Polarize		Vertical		est Engineer		Chiang
Detector		Average	Т	est Voltage	120Va	c / 60Hz
110.0 dBuV/m					Limit1: Limit2:	
		2				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
30.0						
2452.000 2462.0	00 2472.00 2 Reading (dBuV)	2482.00 2492.00 Correct Factor (dB/m)	2502.00 2512 Result (dBuV/m)	.00 2522.00 253 Limit (dBuV/m)	2.00 25 Margin (dB)	52.00 MHz Remark
		-	00.74	_	-	AVG
468.200	101.81	-2.07	99.74	-	-	/

Test Mode	IEEE 802.1	1n HT20 L	ow CH	Те	mp/Hum	21.9(°C)/ 45%RH	
Test Item	Ba	and Edge		Te	est Date	April	April 11, 2017	
Polarize		Vertical			Engineer		Chiang	
Detector		Peak		Tes	t Voltage	120Va	ac / 60Hz	
120.0 dBuV/m								
80						Limit1: Limit2:	Anophalan	
	haltsangeneralterproduktionsange	ht a man to the third to the the	cocumental	which which and a start of the	Superior And			
40.0		43.60 2354.80		2377.20		99.60 2	422.00 MHz	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Resı (dBuV		Limit (dBuV/m)	Margin (dB)	Remark	
2389.856	73.19	-2.49	70.7	0	74.00	-3.30	peak	
2412.816	108.61	-2.41	106.2	20	-	-	peak	

Test Item			ow CH Te	emperature:	Z1.9(U,)/ 45%RH
10001110111		and Edge		Test Date	April 11, 2017	
Polarize		Vertical		st Engineer		Chiang
Detector	/	Average	Т	est Voltage	120Va	c / 60Hz
110.0 dBuV/m					Limit1: Limit2:	
30.0 2310.000 2321.20 Frequency (MHz)	0 2332.40 23 Reading (dBuV)	343.60 2354.80 Correct Factor (dB/m)	2366.00 2377 Result (dBuV/m)	.20 2388.40 239 Limit (dBuV/m)	9.60 24 Margin (dB)	22.00 MHz Remark
390.000	54.34	-2.49	51.85	54.00	-2.15	AVG
2410.576	100.10	-2.43	97.67	-	-	AVG

Band Edge Vertical Peak		Test Da Test Engi Test Volt	ineer	Ed C	1, 2017 Chiang c / 60Hz
				120Vac	
Peak		Test Volt		Limit1:	<u>c / 60Hz</u>
	Manager .				
2.00 2482.00 249	32.00 2502.00	2512.00 2522	1, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1944, 1 2.00 2532.0	ин, му лини ^П и Глин 10 255	тублуу 52.00 MHz
Factor	Resu			Margin (dB)	Remark
7.89 -2.12	105.7	77	-	-	peak
3.37 -1.99	71.3	8 74	4.00	-2.62	peak
3	2.00 2482.00 249 ding Factor BuV) (dB/m 7.89 -2.12	2.00 2482.00 2492.00 2502.00 ding BuV) Correct Factor (dB/m) Resu (dBuV 7.89 -2.12 105.1	2.00 2482.00 2492.00 2502.00 2512.00 2522 ding BuV) Correct Factor (dB/m) Result (dBuV/m) L (dB 7.89 -2.12 105.77	2.00 2482.00 2492.00 2502.00 2512.00 2522.00 2532.00 ding BuV) Correct Factor (dB/m) Result (dBuV/m) Limit (dBuV/m) 7.89 -2.12 105.77 -	ding BuV)Correct Factor (dB/m)Result (dBuV/m)Limit (dBuV/m)Margin (dB)7.89-2.12105.77

Toot Itom	IEEE 802.1		gii Oli	Temperature:	21.3(0))/ 45%RH
Test Item		and Edge		Test Date		1, 2017
Polarize		Vertical		Test Engineer		Chiang
Detector		Average		Test Voltage	120Va	c / 60Hz
110.0 dBuV/m						
		- And				
30.0 2452.000 246		2482.00 2492.00		j12.00 2522.00		52.00 MHz
	2.00 2472.00 2 Reading (dBuV)	Correct Factor (dB/m)	2502.00 25 Result (dBuV/m)	j12.00 2522.00 Limit (dBuV/m)	Margin	52.00 MHz Remark
2452.000 246	Reading	Correct Factor	Result	Limit	Margin	
		The second secon				

Test Mode	IEEE 802.1	1n HT40 Lo	ow CH	Te	emp/Hum	21.9(°C)/ 45%RH
Test Item	Ba	nd Edge		Test Date		April 11, 2017	
Polarize	V	ertical		Test Engineer		Ed (Chiang
Detector		Peak			st Voltage		ic / 60Hz
120.0 dBu∀/m							
						Limit1: Limit2:	_
					- Au-britte	an water from the second	2 X
80					Answer		
			John Markey Mark	WW IN			
40.0 2310.000 2323	1/2000-00-00-00-00-00-00-00-00-00-00-00-00	49.60 2362.80		2389.20	D 2402.40 24	15.60 24	142.00 MHz
							1
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Resu (dBuV		Limit (dBuV/m)	Margin (dB)	Remark
2389.200	74.75	-2.50	72.2	5	74.00	-1.75	peak
2437.248	106.27	-2.23	104.0	04	-	-	peak

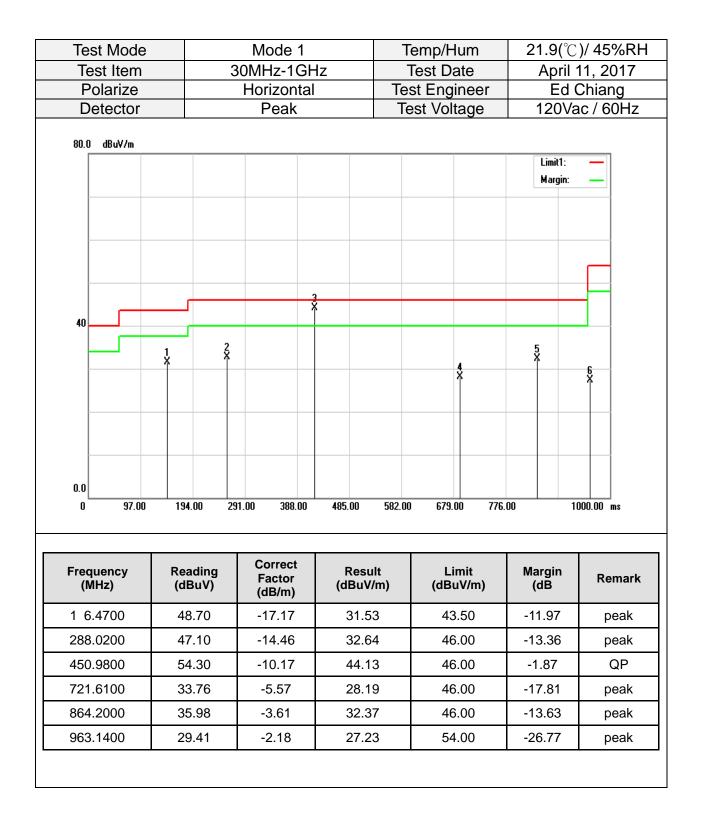
Test Mode	IEEE 802.	11n HT40 L	ow CH Te	emperature:	21.9(° ℃))/ 45%RH
Test Item		and Edge		Test Date	April 11, 2017	
Polarize		Vertical		est Engineer		Chiang
Detector		Average	Т	est Voltage	120Va	c / 60Hz
70					Limit1: Limit2:	
30.0 2323.2	0 2336.40 23	349.60 2362.80	2376.00 2385	.20 2402.40 241	5.60 24	42.00 MHz
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
	53.08	-2.49	50.59	54.00	-3.41	AVG
389.596				-		

Test Mode	IEEE 802.1	1n HT40 Hi	gh CH	Tem	p/Hum	21.9(° ℃))/ 45%RH
Test Item		nd Edge		Tes	t Date		1, 2017
Polarize	١	/ertical		Test Engineer			Chiang
Detector		Peak		Test	Voltage	120Va	c / 60Hz
120.0 dBuV/m	*					Limit1: Limit2:	
		Why	The All And All All All All All All All All All Al				
40.0				Whyhad .	transforden des toppendes	hand an and the second s	Oltanyan ^k
2432.000 2444.0	00 2456.00 24	168.00 2480.00	2492.00	2504.00	2516.00 252	8.00 25	52.00 MHz
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Resul (dBuV/		Limit (dBuV/m)	Margin (dB)	Remark
	106.67	-2.11	104.5	6	-	-	peak
2457.320			71.18		74.00	-2.82	

Test Mode	IEEE 802.12	1n HT40 Hi	gh CH	Tem	perature:	21.9(℃))/ 45%RH
Test Item		nd Edge			st Date		1, 2017
Polarize		/ertical			Engineer		Chiang
Detector	A	verage		Tes	t Voltage	120Va	c / 60Hz
110.0 dBu¥/m						Limit1: Limit2:	
		2	and the second sec				
30.0 2432.000 2444	.00 2456.00 24	68.00 2480.00	2492.00	2504.00	2516.00 252	3.00 25	52.00 MHz
		Correct					
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Resu (dBuV/		Limit (dBuV/m)	Margin (dB)	Remark
443.760	97.49	-2.19	95.30	0	-	-	AVG
2483.600	54.95	-1.99	52.96	6	54.00	-1.04	AVG

Below 1G Test Data

Test Mode		Mode 1			mp/Hum	21.9(℃)/ 45%RH		
Test Item		30MHz-1GH	z		est Date	April 11, 2017		
Polarize		Vertical			Engineer		Chiang	
Detector		Peak		Tes	t Voltage	120Va	c / 60Hz	
80.0 dBuV/m						Limit1: Margin:	_	
40		3X	4×	5%			БХ СХ	
0.0 30.000 127.00	224.00 3	121.00 418.00	515.00	612.00	709.00 806.	00 10	000.00 MHz	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Resu (dBuV/		Limit (dBuV/m)	Margin (dB)	Remark	
		Factor		m)			Remark peak	
(MHz)	(dBuV)	Factor (dB/m)	(dBuV/	m)	(dBuV/m)	(dB)		
(MHz) 111.4800	(dBuV) 48.41	Factor (dB/m) -17.00	(dBuV/ 31.4	m) I Ə	(dBuV/m) 43.50	(dB) -12.09	peak	
(MHz) 111.4800 167.7400	(dBuV) 48.41 51.33	Factor (dB/m) -17.00 -16.74	(dBuV/ 31.4 34.59	m) I D D	(dBuV/m) 43.50 43.50	(dB) -12.09 -8.91	peak peak	
(MHz) 111.4800 167.7400 396.6600	(dBuV) 48.41 51.33 46.43	Factor (dB/m) -17.00 -16.74 -11.78	(dBuV/ 31.4 34.5 34.6	m) I D D D D D D D	(dBuV/m) 43.50 43.50 46.00	(dB) -12.09 -8.91 -11.35	peak peak peak	



Above 1G Test Data

Test Mode	IEEE	802.11b Lo	w CH	Temp/Hum	21.9(° ℃)	
Test Item		Harmonic		Test Date		1, 2017
Polarize		Vertical		Test Engineer		hiang
Detector	Pe	ak and Aver	age	Test Voltage	120Vac	c / 60Hz
110.0 dBu¥/m						
					Limit1: Limit2:	_
70						
	× 3	5				
30.0	2 X X					
1000.000 3550.0	DO 6100.00 8	650.00 11200.00) 13750.00 10	6300.00 18850.00 214	00.00 265	i00.00 MHz
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	emark
4827.000	45.99	5.11	51.10	74.00	-22.90	peak
4827.000	35.73	5.11	40.84	54.00	-13.16	AVG
	34.08	12.71	46.79	74.00	-27.21	peak
7236.000		1		E4.00	-18.36	AVG
	22.93	12.71	35.64	54.00	-10.30	/
7236.000	22.93 32.04	12.71 17.60	35.64 49.64	74.00	-18.36	peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEER	E 802.11b Lo	w CH	Temp/Hum)/ 45%RH		
Test Item		Harmonic		Test Date		April 11, 2017 Ed Chiang		
Polarize Detector	D/	Horizontal eak and Aver	200	Test Engineer Test Voltage		Chiang ic / 60Hz		
110.0 dBuV/m								
					Limit1: Limit2:	_		
70								
		5						
30.0 1000.000 3550.	00 6100.00	8650.00 11200.00	D 13750.00 1	6300.00 18850.00 2	21400.00 26	500.00 MHz		
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (BuV/m) Limit (dBuV/m)	Margin (dB)	Remark		
4827.000	45.84	5.11	50.95	74.00	-23.05	peak		
	35.04	5.11	40.15	54.00	-13.85	AVG		
4827.000						1		
4827.000 7236.000	33.31	12.71	46.02	74.00	-27.98	peak		
		12.71 12.71	46.02 35.61	74.00 54.00	-27.98 -18.39	peak AVG		
7236.000	33.31					-		

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE	802.11b M	id CH	Temp/Hum	. ,)/ 45%Rł
Test Item		Harmonic		Test Date		1, 2017
Polarize		Vertical		Test Engineer		hiang
Detector	Pea	ak and Aver	age	Test Voltage	120Va	c / 60Hz
110.0 dBuV/m						
					Limit1:	—
					Limit2:	_
70						
	1 3 X X	5 X				
	Î					
	2 4	6 X				
30.0						
1000.000 3550	.00 6100.00 8	650.00 11200.00	0 13750.00 1	6300.00 18850.00 21	1400.00 26	500.00 MHz
Frequency	Reading	Correct	Result	Limit	Margin	
(MHz)	(dBu)	Factor (dB/m)	(dBuV/m)		(dB)	Remark
4876.000	41.22	5.24	46.46	74.00	-27.54	peak
4876.000	30.55	5.24	35.79	54.00	-18.21	AVG
	34.54	12.94	47.48	74.00	-26.52	peak
7311.000		10.01	26.51	54.00	-17.49	AVG
7311.000 7311.000	23.57	12.94	36.51			
	23.57 31.13	12.94 17.60	48.73	74.00	-25.27	peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode		IEEE	802.11b	Mid CH	Temp/Hum			21.9(°	°C)/ 45%RI	
Test Item			Harmon		Test Date			April 11, 2017		
Polarize			Horizont		Test Engineer Test Voltage		Ed Chiang			
Detector		Pea	k and Av	erage	Te	st Volt	age	120\	/ac / 60Hz	
110.0 dBu∀/m								1:-34		
								Limit1: Limit2:		
70										
	×	3 X	5 X							
	*	*	6 X							
30.0 1000.000 3550.	.00 610	10.00 86	50.00 1120	0.00 13750.00	16300.	00 188	50.00 214	DO. OO	26500.00 MHz	
			Correct							
Frequency (MHz)		ading BuV)	Factor (dB/m)	Resi (dBuV			imit uV/m)	Margin (dB)	Remark	
4876.000	45	5.80	5.24	51.0)4	74	4.00	-22.96	peak	
4876.000	35	5.41	5.24	40.6	5	54	4.00	-13.35	AVG	
7311.000	35	5.69	12.94	48.6	3	74	4.00	-25.37	peak	
7311.000	24	.90	12.94	37.8	34	54	4.00	-16.16	AVG	
9748.000	31	.91	17.60	49.5	51	74	4.00	-24.49	peak	
	1	.01	17.60	38.6		1	4.00	-15.39	AVG	

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode		IEEE 8	302.11b H	-	Temp/Hum			21.9(°∁)/ 45%RI		
Test Item			Harmoni	С	Test Date			April 11, 2017		
Polarize		Dee	Vertical	rogo		st Eng			Ed Chiai DVac / 6	
Detector		Pea	k and Ave	erage	Te	st Vol	age	120	Jvac/6	UHZ
110.0 dBuV/m										_
	Ì							Limi		
								Limi	t2: —	
70										
		3 X	5 X							
	1 X	Ĩ								
		4	6 *							
30.0	2	Ť								
1000.000 3550.	<u>*</u> 00 6100	.00 86!	50.00 11200	.00 13750.00	16300.	.00 188	50.00 214	00.00	26500.00	 MHz
Frequency (MHz)	Read (dBi		Correct Factor (dB/m)	Resi (dBuV			imit uV/m)	Margi (dB)		emarl
	20	53	5.37	41.9	0	7.	4.00	-32.1	0	peak
4924.000	36.									
4924.000 4924.000	25.	32	5.37	30.6	69	5	4.00	-23.3	1	AVG
			5.37 13.17	30.6 47.0			4.00 4.00	-23.3 -26.9		AVG peak
4924.000	25.	85)2	7			8	
4924.000 7386.000	25. 33.	85 01	13.17	47.0)2 8	7- 5-	4.00	-26.9	8 2 .	peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEE	IEEE 802.11b High CH			np/Hum)/ 45%Rł
Test Item		Harmonic			st Date		<u>11, 2017</u>
Polarize		Horizontal			Engineer		Chiang
Detector		eak and Ave	age	Test	t Voltage	12008	ac / 60Hz
110.0 dBuV/m							
						Limit1:	-
						Limit2:	
70							
	. 3	5 X					
	4	6 ¥					
30.0	¥ î						
1000.000 3550.0	0 6100.00	8650.00 11200.0	0 13750.00	16300.00	18850.00 2	1400.00 20	6500.00 MHz
-		Correct			1.1		
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Resul (dBuV/i		Limit (dBuV/m)	Margin (dB	Remark
4925.000	39.56	5.37	44.93	3	74.00	-29.07	peak
	28.25	5.37	33.62	2	54.00	-20.38	AVG
4925.000		13.17	47.53	3	74.00	-26.47	peak
4925.000 7386.000	34.36	10.17					
	34.36 23.54	13.17	36.71		54.00	-17.29	AVG
7386.000					54.00 74.00	-17.29 -24.75	AVG peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mo		IEEE	802.11g Lo	w CH		emp/H			°C)/ 45%F
Test Ite			Harmonic		Test Date			April 11, 2017	
Polariz			Vertical			st Engi			d Chiang
Detect	tor	Pea	ak and Aver	age	le	st Volt	age	120	Vac / 60H
110.0 dBuV	//m								
								Limit1	
								Limit2	<u> </u>
70									
		3 X	5 X						
	1	X	e l						
	×		×						
30.0		ž							
1000.000	<u>*</u> 3550.00 6	100.00 86	50.00 11200.00	0 13750.00	16300.	00 188	50.00 21 4	DO. 00	26500.00 MHz
			-						
Frequency (MHz)		eading IBuV)	Correct Factor (dB/m)	Resເ (dBuV			imit uV/m)	Margir (dB)	Rema
		35.59	5.10	40.6	69	74	4.00	-33.31	peal
4824.000) 3	.0.00							
4824.000 4824.000		25.26	5.10	30.3	6	54	4.00	-23.64	AVG
) 2		5.10 12.71				4.00 4.00	-23.64 -27.38	
4824.000) 2	25.26		30.3	62	74		-	peal
4824.000 7236.000) 2	25.26 33.91	12.71	30.3 46.6	52 7	74 54	4.00	-27.38	peal AVC

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test I			802.11g Lo			mp/Hum			(°C)/ 45'	
Test			Harmonic			st Date			ril 11, 20	
Pola			Horizontal			Engine			d Chian	
Dete	ector	Pe	ak and Avei	rage	Tes	t Voltage	e	120	Vac / 60	0Hz
110.0 d	lBu¥/m									
								Limit1		
								Limit2	<u> </u>	
70										
			5 X							
	1	ЗX								
	– ×									
30.0	2	, Å								
	100 3550.00	: 6100.00 8	3650.00 11200.0	0 13750.00	10000.0	10050.00	21400	.00	26500.00 N	Hz
				10 13730.00	16300.00) 18850.00			20000.00 P	
				10 13730.00	16300.0	J 1885U.UU			20300.00 P	
					16300.0	J 18850.00			20300.00 #	
Frequer (MHz		Reading (dBuV)	Correct Factor (dB/m)	Resu (dBuV	ılt	Limit (dBuV/i		Margin (dB)		emarl
	:)		Factor	Resu	ult '/m)	Limit	n)		ר Re	emarl beak
(MHz	000	(dBuV)	Factor (dB/m)	Resu (dBuV	ult //m) 39	Limit (dBuV/ı	n)	(dB)	n Re	emarl beak
(MHz 4824.0		(dBuV) 35.79	Factor (dB/m) 5.10	Resu (dBuV 40.8	ult //m) 39 34	Limit (dBuV/r 74.00	n))	(dĒ) -33.11	n Re p b A	beak
(MHz 4824.0 4824.0		(dBuV) 35.79 25.54	Factor (dB/m) 5.10 5.10	Resu (dBuV 40.8 30.6	ult //m) 39 34 22	Limit (dBuV/r 74.00 54.00	m)))	(dB) -33.11 -23.36	п Re р 5 <i>А</i> 3 р	eak AVG
(MHz 4824.0 4824.0 7236.0		(dBuV) 35.79 25.54 32.51	Factor (dB/m) 5.10 5.10 12.71	Resu (dBuV 40.8 30.6 45.2	ult //m) 39 34 22 34	Limit (dBuV/r 74.00 54.00 74.00	m))))	(dĒ) -33.11 -23.36 -28.78	р Re р 5 <i>А</i> 3 р 5 <i>А</i>	oeak AVG oeak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode		IEEE	802.11g M	id CH		mp/Hum	· ·)/ 45%RI		
Test Item			Harmonic			est Date		11, 2017		
Polarize Detector		Por	Vertical ak and Aver	200		t Engineer st Voltage		Ed Chiang 120Vac / 60Hz		
110.0 dBu¥/m					100					
							Limit1: Limit2:			
70										
	1 X	3	5. 							
30.0 1000.000 3550.	2 00 61	00.00 86	50.00 11200.00	0 13750.00	16300.0	18850.00 2	21400.00 2	6500.00 MHz		
Frequency (MHz)		ading BuV)	Correct Factor (dB/m)	Resu (dBuV/		Limit (dBuV/m)	Margin (dB	Remark		
4874.000	3	7.07	5.23	42.3	0	74.00	-31.70	peak		
4874.000	2	6.45	5.23	31.6	8	54.00	-22.32	AVG		
			12.94	46.3	7	74.00	-27.63	peak		
7311.000	Ŭ			1				1		
	-	2.80	12.94	35.7	4	54.00	-18.26	AVG		
7311.000	2	2.80 2.36	12.94 17.60	35.7 49.9		54.00 74.00	-18.26	AVG peak		

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode		IEEE	802.11g N			emp/H			(°C)/ 45	
Test Item			Harmonic			est Da			<u>ril 11, 2</u>	
Polarize		Dee	Horizonta			st Engi		Ed Chiang 120Vac / 60Hz		
Detector		Pea	k and Ave	rage	Ie	st Volt	age	120	Jvac / 6	OHZ
110.0 dBuV/m										
								Limit		
								Limit	i2: —	
70										
			5							
		X								
	×									
		*	1 î							
30.0 1000.000 3550.	<u>*</u> 10 61	00.00 86	50.00 11200.0	0 13750.00	16300.	00 199	50.00 2140	DO. 00	26500.00	
1000.000 3330.	00 01	00.00 00	50.00 11200.0	10 13730.00	10500.	00 100.	0.00 2140	50.00	20300.00	MIIZ
	1		-							
Frequency (MHz)		ading BuV)	Correct Factor (dB/m)	Resu (dBuV			imit uV/m)	Margi (B)		emark
4074 000	3	5.82	5.23	41.0)5	74	4.00	-32.9	5 I	beak
4874.000									-	~~~~
4874.000	2	5.32	5.23	30.5	5	54	4.00	-23.4	5	AVG
	-	5.32 3.83	5.23 12.94	30.5 46.7			4.00 4.00	-23.4		avG beak
4874.000	3				7	74		+	3	
4874.000 7311.000	3	3.83	12.94	46.7	7 9	74 54	4.00	-27.2	3 1 /	oeak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mo			802.11g Hi	gh Ch		emp/Hu			(°C)/ 45	
Test Iter Polariz			Harmonic Vertical			est Da			ril 11, 2	
Detecto		Pea	k and Aver	ade		t Engir st Volta			d Chia)Vac / 6	
110.0 dBuV/		1.00		ugo	10		, go	120		/0112
								Limit Limit]
70		3	5							
	1 X	4	6 X							
30.0	2	4 100.00 86	50.00 11200.0	0 13750.00	16300.	00 18850	0.00 214	00.00	26500.00	MHz
1000.000 3	2 3550.00 6	100.00 86 eading JBuV)	Correct Factor	0 13750.00 Resu (dBuV	ılt	Lii	1.00 2140 nit	00.00 Margi (dB)	n R	
1000.000 3	2550.00 6	eading	Correct	Resu	ult //m)	Liı (dBu	nit	Margi	n R	MHz emar
1000.000 3 Frequency (MHz)	2550.00 6	eading dBuV)	Correct Factor (dB/m)	Resu (dBuV	ult //m) 29	Liı (dBu 74	nit IV/m)	Margi (dB)	n R	emar
1000.000 3 Frequency (MHz) 4924.000	2550.00 6	eading JBuV) 36.92	Correct Factor (dB/m) 5.37	Resu (dBuV 42.2	ult 7/m) 29 02	Lii (dBu 74 54	mit IV/m) .00	Margi (dB) -31.7	n R 1	emar peak
1000.000 3 Frequency (MHz) 4924.000 4924.000	2550.00 6 Re (c 2 2 3	eading JBuV) 36.92 26.55	Correct Factor (dB/m) 5.37 5.37	Rest (dBuV 42.2 31.9	ult //m) 29 02 33	Liı (dBu 74 54 74	mit IV/m) .00	Margi (dB) -31.7 -22.08	n R 1	emar peak AVG
1000.000 3 Frequency (MHz) 4924.000 4924.000 7386.000	2550.00 6 Re (0 3 2 3 2 3 2	eading JBuV) 36.92 26.55 34.16	Correct Factor (dB/m) 5.37 5.37 13.17	Rest (dBuV 42.2 31.9 47.3	ult //m) 29 02 03 57	Lii (dBu 74 54 74 54	mit IV/m) .00 .00	Margi (dB) -31.7 -22.00 -26.6	n R 1	emar peak AVG peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

	ode	ICCC	802.11g Hi			np/Hum		21.9(°C)/ 45%RI		
Test It			Harmonic			st Date		<u>il 11, 2017</u>		
Polari Detec		Boc	Horizontal k and Ave			Engineer t Voltage		d Chiang Vac / 60Hz		
110.0 dBu	X/m						Limit1 Limit2			
70		3	5							
30.0	1 2 3550.00 6	100.00 86	50.00 11200.0	0 13750.00	16300.00	18850.00	21400.00	26500.00 MHz		
					10000.00	10000.00				
			Correct	_			_			
Frequenc (MHz)		eading 1BuV)	Correct Factor (dB/m)	Resu (dBuV	ult	Limit (dBuV/m)	Margin (dB			
	(0		Factor		ult //m)	Limit		Remark		
(MHz)	0 3	dBuV)	Factor (dB/m)	(dBuV	ult //m) 32	Limit (dBuV/m)	(dB	Remark		
(MHz) 4924.000	0 3 0 2	3 BuV) 35.95	Factor (dB/m) 5.37	(dBuV) 41.3	ult //m) 32 28	Limit (dBuV/m) 74.00	(dB -32.68	Remark peak AVG		
(MHz) 4924.000 4924.000	0 3 0 2 0 3	3 BuV) 35.95 24.91	Factor (dB/m) 5.37 5.37	(dBuV) 41.3 30.2	ult 7/m) 32 28 77	Limit (dBuV/m) 74.00 54.00	(dB -32.68 -23.72	Remark peak AVG peak		
(MHz) 4924.000 4924.000 7386.000	(e 0 3 0 2 0 3 0 2 0 3 0 3 0 3 0 3 0 3	3 BuV) 35.95 24.91 33.60	Factor (dB/m) 5.37 5.37 13.17	(dBuV) 41.3 30.2 46.7	ult //m) 32 28 77 31	Limit (dBuV/m) 74.00 54.00 74.00	(dĒ -32.68 -23.72 -27.23	Remark peak AVG peak AVG		

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

est Mode		11n HT20 Lc	w CH	Temp/Hum)/ 45%Rł
Test Item	ŀ	larmonic		Test Date		1, 2017
Polarize		Vertical		est Engineer		Chiang
Detector	Peak	and Average	3	Test Voltage	120Va	c / 60Hz
110.0 dBuV/m						
					Limit1:	-
					Limit2:	_
70						
		Б				
	3	5 X				
	1. 3 X	6				
	X	Ť				
30.0	2 *					
1000.000 35	50.00 6100.00	8650.00 11200.00	13750.00 163	800.00 18850.00 21	400.00 26	500.00 MHz
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	R mark
4824.000	35.85	5.10	40.95	74.00	-33.05	peak
4924 000	25.34	5.10	30.44	54.00	-23.56	AVG
4824.000				74.00	-28.59	peak
4824.000 7236.000	32.70	12.71	45.41	74.00	20.00	-
	32.70 21.91	12.71 12.71	45.41 34.62	54.00	-19.38	AVG
7236.000						AVG peak
7236.000 7236.000	21.91	12.71	34.62	54.00	-19.38	

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Fest Mode		11n HT20 L	ow CH		mp/H			(°C)/ 45	
Test Item		larmonic			st Da			ril 11, 2	
Polarize		lorizontal			Engi			d Chia	
Detector	Peak	and Averag	le	les	t Volt	age	120	Vac / 6	OHZ
110.0 dBuV/m									
							Limit		
							Limit	2: —	
70									
		5							
	3	×.							
	1 X	6							
	4	1							
30.0	2								
1000.000 3550.0	0 6100.00 80	650.00 11200.00	13750.00	16300.00) 1885	0.00 2140	0.00	26500.00	MHz
		Correct	_						
Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Resul (dBuV/			mit uV/m)	Margiı (dB)	ר R	emark
4824.000	37.34	5.10	42.44	4	74	.00	-31.56	6	beak
4824.000	26.28	5.10	31.38	3	54	.00	-22.62	2	AVG
7236.000	33.72	12.71	46.43	3	74	.00	-27.57	7	beak
7236.000	23.28	12.71	35.99	3	54	.00	-18.01	I .	AVG
9648.000	32.48	17.60	50.08	3	74	.00	-23.92	2	beak
	00.01	17.60	40.51	1	54	.00	-13.49	3	AVG
9648.000	22.91	17.00	40.5	I J	07	.00			

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
 - 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.	11n HT20 N	/lid CH		np/Hum)/ 45%RF
Test Item		larmonic			st Date		1, 2017
Polarize		Vertical			Engineer		Chiang
Detector	Peak	and Averag	je	Test	Voltage	120Va	c / 60Hz
110.0 dBuV/m							
						Limit1:	-
						Limit2:	_
70							
		5 X					
	3 X						
	1 X	6					
	4 ×						
30.0	2 X C100.00	CF0 00 11200 00	10750.00	1000.00	10050.00 210	00.00	500.00 MIL
1000.000 3550.00	D 6100.00 80	650.00 11200.00) 13750.00	16300.00	18850.00 214	00.00 26	500.00 MHz
						_	
Frequency	Reading	Correct Factor	Resul		Limit	Margin	R mark
(MHz)	(dBuV)	(dB/m)	(dBuV/r	n)	(dBuV/m)	(dB)	
4874.000	35.84	5.23	41.07	,	74.00	-32.93	peak
4874.000	25.34	5.23	30.57	,	54.00	-23.43	AVG
		10.04	46.17	,	74.00	-27.83	peak
7311.000	33.23	12.94	-				
	33.23 23.00	12.94	35.94	•	54.00	-18.06	AVG
7311.000					54.00 74.00	-18.06 -24.52	AVG peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.1	1n HT20 M	lid CH	Te	emp/Hur	n	21.9(°	C)/ 45%RH	
Test Item		armonic			est Date			l 11, 2017	
Polarize		orizontal			t Engine		Ed Chiang		
Detector	Peak	and Average	e	Te	st Voltaç	ge	120\	/ac / 60Hz	
110.0 dBuV/m									
							Limit1:	-	
							Limit2:		
70									
		5							
	3	Î							
		6							
	4	×							
30.0	l I I I I I I I I I I I I I I I I I I I								
1000.000 355	0.00 6100.00 86	50.00 11200.00) 13750.00	16300.	00 18850.0	0 214	00.00	26500.00 MHz	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Resul (dBuV/i	-	Lim (dBuV		Margin (dB	Remark	
4874.000	37.33	5.23	42.56	5	74.0	0	-31.44	peak	
4874.000	26.39	5.23	31.62	2	54.0	00	-22.38	AVG	
7311.000	33.03	12.94	45.97	,	74.0	0	-28.03	peak	
7311.000	21.77	12.94	34.71		54.0	00	-19.29	AVG	
9748.000	32.10	17.60	49.70)	74.0	00	-24.30	peak	
9748.000	21.02	17.60	38.62)	54.0		-15.38	AVG	

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

est Mode	IEEE 802.11n HT20 High CH				Temp/Hum			21.9(℃)/ 45%RI		
Test Item		Harmonic			est Da			l 11, 2017		
Polarize		Vertical			st Engi		Ed Chiang			
Detector	Peak	and Averag	ge	Те	st Volt	age	120\	/ac / 60Hz		
110.0 dBuV/m							Limit1: Limit2:			
70										
	1 X X X	6								
30.0	3									
30.0 1000.000 35	2 50.00 6100.00	8650.00 11200	.00 13750.00	16300.	00 1885	0.00 214	00.00	26500.00 MHz		
	50.00 6100.00		0.00 13750.00	16300.	00 1885	0.00 214	00.00	26500.00 MHz		
	2 50.00 6100.00 Reading (dBuV)	8650.00 11200	13750.00 Rest (dBuV	ult	Li	0.00 214 mit uV/m)	00.00 Margin (dB)	26500.00 MHz Remark		
1000.000 35	Reading	Correct Factor	Resu	ult //m)	Li (dBi	mit	Margin			
1000.000 35 Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Resu (dBuV	ult 1/m) 07	Li (dBı 74	mit uV/m)	Margin (dB)	Remark		
1000.000 35 Frequency (MHz) 4924.000	Reading (dBuV) 36.60	Correct Factor (dB/m) 5.37	Resu (dBuV 41.9	ult //m) 97 88	Li (dBi 74 54	mit JV/m)	Margin (dB) -32.03	Remark		
1000.000 35 Frequency (MHz) 4924.000 4924.000	Reading (dBuV) 36.60 25.51	Correct Factor (dB/m) 5.37 5.37	Resu (dBuV 41.9 30.8	ult //m) 97 88 4	Li (dB) 74 54 74	mit J V/m) 1.00	Margin (dB) -32.03 -23.12	Remark peak AVG		
1000.000 35 Frequency (MHz) 4924.000 4924.000 7386.000	Reading (dBuV) 36.60 25.51 33.97	Correct Factor (dB/m) 5.37 5.37 5.37 13.17	Resu (dBuV 41.9 30.8 47.1	ult //m))7 38 4 11	Li (dBi 74 54 74 54	mit J V/m) 1.00 1.00	Margin (dB) -32.03 -23.12 -26.86	Remark peak AVG peak		

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.1	1n HT20 Hi	gh CH	Ter	np/Hum	21.9(℃)	/ 45%R⊦
Test Item		armonic			st Date		1, 2017
Polarize		orizontal			Engineer		hiang
Detector	Peak	and Average	e	Test	t Voltage	120Va	c / 60Hz
110.0 dBu¥/m							
						Limit1: Limit2:	_
70							
	3 1 1	5					
30.0							
1000.000 355		650.00 11200.00) 13750.00	16300.00	18850.00 214	00.00 26	500.00 MHz
Frequency (MHz	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/n		Limit (dBuV/m)	Margin (dB)	Remark
4924.000	35.66	5.37	41.03		74.00	-32.97	peak
4924.000	25.32	5.37	30.69		54.00	-23.31	AVG
7386.000	36.65	13.17	49.82		74.00	-24.18	peak
7386.000	25.25	13.17	38.42		54.00	-15.58	AVG
9848.000	31.83	17.60	49.43		74.00	-24.57	peak
		1	38.64			-15.36	AVG

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

				armonic			Test Da	ate	Apri	11 2017	
Detect	ze	Vertical Test Enginee							April 11, 2017 Ed Chiang		
	Detector								Ed Chiang		
110.0	tor		Peak	and Ave	rage		est Volt	age	120\	/ac / 60Hz	
	dBuV/m								Limit1: Limit2:	_	
70			3X	5 5 8							
30.0 1000.1	.000 3550.0	2 X 00 6100	.00 86	50.00 112	200.00 137	50.00 16300	D.00 188	io.oo 2140	0.00	26500.00 MHz	
Freque	ency	Read	ding	Correc	-	Result		imit	Margin	Dama	
(MH	z)	(dB	uV)	Factor (dB/m)		BuV/m)	(dB	uV/m)	(dB)	Remar	
4844.(000	36.	34	5.15		41.49	74	4.00	-32.51	peak	
4844.(000	26.	67	5.15	;	31.82	54	4.00	-22.18	AVG	
7266.0	000	34.	29	12.80		47.09	74	4.00	-26.91	peak	
7266.0	000	23.	67	12.80		36.47	54	4.00	-17.53	AVG	
9688.0	000	31.	85	17.60		49.45	74	4.00	-24.55	peak	
5500.0	000		23	17.60		38.83	54	4.00	-15.17	AVG	

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Fest Mode		1n HT40 Lo	w CH	Temp/Hum	21.9(°C)/ 45%RI	
Test Item	Harmonic			Test Date	April 11, 2017	
Polarize		orizontal		est Engineer		Chiang
Detector	Peak	and Average	3	Test Voltage	120Va	c / 60Hz
110.0 dBuV/m						
					Limit1: Limit2:	_
70						
	3 X	5				
	1 X 4					
30.0	2 *					
1000.000 3550.	00 6100.00 8	650.00 11200.00	13750.00 163	300.00 18850.00 214	400.00 26	500.00 MHz
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4844.000	36.15	5.15	41.30	74.00	-32.70	peak
4844.000	26.45	5.15	31.60	54.00	-22.40	AVG
7266.000	33.47	12.80	46.27	74.00	-27.73	peak
	22.67	12.80	35.47	54.00	-18.53	AVG
7266.000						
7266.000 9688.000	31.71	17.60	49.31	74.00	-24.69	peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Fest Mode	IEEE 802.1	1n HT40 M	id CH	Temp/Hum	21.9(°C)/ 45%RI	
Test Item		armonic		Test Date		1, 2017
Polarize		/ertical		Test Engineer		hiang
Detector	Peak	and Average	Э	Test Voltage	120Va	c / 60Hz
110.0 dBuV/m						
					Limit1:	—
					Limit2:	_
70						
	3	5				
	1					
	× 4	6 X				
30.0	2 *					
1000.000 3550	<u> </u>	550.00 11200.00) 13750.00 1	6300.00 18850.00 21	400.00 26	500.00 MHz
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4874.000	35.35	5.23	40.58	74.00	-33.42	peak
4874.000	25.18	5.23	30.41	54.00	-23.59	AVG
7311.000	33.12	12.94	46.06	74.00	-27.94	peak
	22.77	12.94	35.71	54.00	-18.29	AVG
7311.000						
7311.000 9748.000	32.10	17.60	49.70	74.00	-24.30	peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.	IEEE 802.11n HT40 Mid CH			Temp/Hum		21.9(°C)/ 45%R	
Test Item	Harmonic			Test Date		April 11, 2017		
Polarize		Horizontal			Engineer		Chiang	
Detector	Peak	and Averag	je	Test	Voltage	120Va	c / 60Hz	
110.0 dBu∀/m						Limit1:	—	
						Limit2:		
70								
		5 X						
	3 X							
	1 *	6						
	x							
30.0	2	CE0.00 11200.00	10750.00	1000.00	10050.00 01.0	0.00 20	E00.00 MIL	
1000.000 3550	00 6100.00 8	650.00 11200.00) 13750.00	16300.00	18850.00 2140)0.00 26	500.00 MHz	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)		Limit (dBuV/m)	Margin (dB	Remark	
4874.000	34.78	5.23 40.0			74.00	-33.99	peak	
4874.000	24.94	5.23	30.17		54.00	-23.83	AVG	
7311.000	33.22	12.94	46.16		74.00	-27.84	peak	
7311.000	22.74	12.94	35.68		54.00	-18.32	AVG	
9748.000	32.30	17.60	49.90		74.00	-24.10	peak	

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

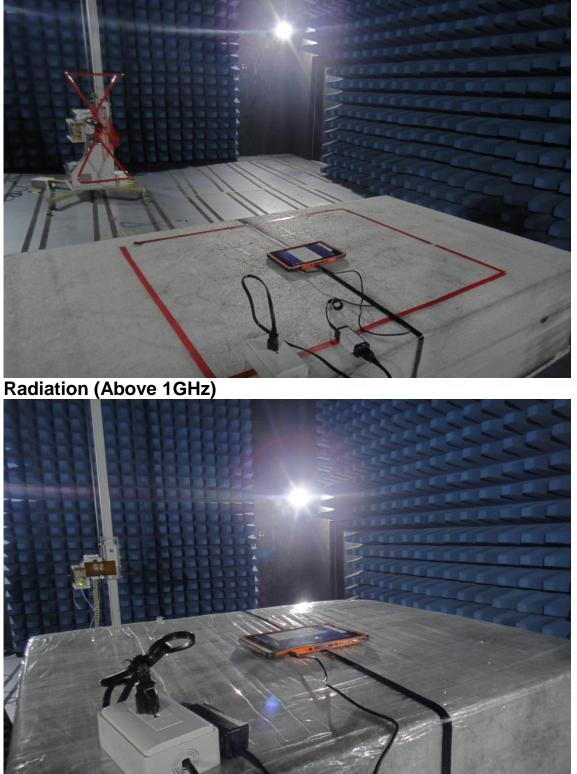
est Mode	IEEE 802.11n HT40 High CH			Temp/Hum		21.9(°∁)/ 45%RH	
Test Item	Harmonic			Test Date		1, 2017	
Polarize		Vertical		Test Enginee		Chiang	
Detector	Peak	and Average	3	Test Voltage	120Va	c / 60Hz	
110.0 dBuV/m							
					Limit1:	—	
					Limit2:		
70							
		Б					
	3	5 X					
		6					
	× 4	× · · · ·					
30.0	3						
1000.000 3550.	00 6100.00 8	650.00 11200.00	13750.00 10	6300.00 18850.00	21400.00 26	500.00 MHz	
		Correct					
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m	Margin n) (dB)	Remark	
4904.000	35.88	5.31	41.19	74.00	-32.81	peak	
		5.04	30.41	54.00	-23.59	AVG	
4904.000	25.10	5.31	30.41	0.100			
4904.000 7356.000	25.10 33.14	5.31 13.08	46.22	74.00	-27.78	peak	
					-27.78 -18.37		
7356.000	33.14	13.08	46.22	74.00		peak	

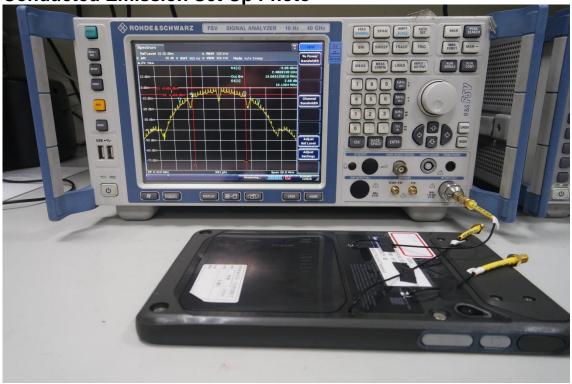
- Remark:
 - 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
 - 2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT40 High CH			Temp/Hum		21.9(°∁)/ 45%RI	
Test Item	Harmonic			Test Date		April 11, 2017	
Polarize	Horizontal				Engineer		Chiang
Detector	Peak	and Average	e	Test	Voltage	120Va	c / 60Hz
110.0 dBu¥/m						1:-31.	
						Limit1: Limit2:	
70							
	3	5					
30.0		×					
1000.000 355	<u>*</u> 0.00 6100.00 8	650.00 11200.00) 13750.00	16300.00	18850.00 214	00.00 26	500.00 MHz
Frequency (MHz	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Remark
4904.000	35.05	5.31	40.36		74.00	-33.64	peak
4904.000	25.16	5.31	30.47		54.00	-23.53	AVG
7356.000	35.22	13.08	48.30		74.00	-25.70	peak
7356.000	24.54	13.08	37.62		54.00	-16.38	AVG
9808.000	32.64	17.60	50.24		74.00	-23.76	peak

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. For above 1GHz, the EUT peak value was under average limit, therefore the Average value compliance with the average limit

APPENDIX-A Test Photo Radiation (Below 1GHz)





Conducted Emission Set Up Photo



Conduction

