

context.



TEST REPORT					
Report Reference No:	TRE1702003102	R/C: 57776			
FCC ID:	2AK7ELIH01				
Applicant's name:	VuPoint Solutions Inc				
Address:	710 Nogales Street, City of In	dustry, CA91748, USA			
Manufacturer	VuPoint Solutions Inc				
Address	710 Nogales Street, City of In	dustry, CA91748, USA			
Test item description:	VU Cam				
Trade Mark	VuPoint				
Model/Type reference:	GC100KU				
Listed Model(s):	OC100KU				
Standard:	FCC CFR Title 47 Part 15 Su	ubpart E Section 15.407			
Date of receipt of test sample	Feb. 15, 2017				
Date of testing	Feb. 15, 2017 - Jul. 12, 2017				
Date of issue	Jul. 26, 2017				
Result:	PASS				
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Approved by (position+printedname+signature):	RF Manager Hans Hu	Homs ru			
Testing Laboratory Name: :	Shenzhen Huatongwei Inter	national Inspection Co., Ltd.			
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The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. TEST STANDARDS AND TEST DESCRIPTION

1.1. Test Standards

The tests were performed according to following standards: <u>FCC Rules Part 15.407</u>: General technical requirements.

ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices

KDB789033 D02 v01r04: GUIDELINES FOR COMPLIANCE TESTING OF UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE (U-NII) DEVICES PART 15, SUBPART E

1.2. Report Version

Version No.	Date of issue	Description
00	Jul. 26, 2017	Original

2. TEST DESCRIPTION

ReportSection	Test Item	FCC Rule	Result
4.1	Antenna Requirement	15.203	Pass
4.2	Line Conducted Emissions (AC Main)	15.207	Pass
4.3	Maximum Conducted Output Power	15.407(a.1)(a.2)(a.3)	Pass
4.4	Maximum Power Spectral Density	15.407(a.1)(a.2)(a.3)	Pass
4.5	6dB&26dB Bandwidth	15.407(a.5)(e)	Pass
4.6	Radiated Emissions & Band edge	15.407(b)	Pass
4.7	Frequency Stability	15.407(g)	Pass
4.8	TPC and DFS	15.407(h)	Pass

Remark: 1.The measurement uncertainty is not included in the test result.

2. The EUT is a client device without radar detection.a TPC mechanism is not required for systems with an e.i.r.p. of less than 500mW.

3. SUMMARY

3.1. Client Information

Applicant:	VuPoint Solutions Inc
Address:	710 Nogales Street, City of Industry, CA91748, USA
Manufacturer:	VuPoint Solutions Inc
Address:	710 Nogales Street, City of Industry, CA91748, USA

3.2. Product Description

Name of EUT:	VU Cam
Trade Mark:	VuPoint
Model No.:	GC100KU
Listed Model(s):	OC100KU
Power supply:	DC 5.0V from USB port
	Model:ASSA41w2-050250
Adapter information:	Input: 100-240Va.c., 50/60Hz, 0.5A
	Output: 5.0Vd.c., 2.5A
5G WIFI	
Supported type:	802.11a/802.11ac/802.11n
Modulation:	BPSK /QPSK /16QAM /64QAM
Operation frequency:	Band I: 5150MHz-5250MHz
	Band II: 5250MHz-5350MHz(Client device without detection)
	Band III: 5470MHz-5725MHz(Client device without detection)
	Band IV: 5725MHz-5850MHz
Channel Bandwidth	802.11a/n(HT20): 20MHz
	802.11ac/n(HT40): 40MHz
	802.11ac/n(HT80): 80MHz
Channel separation:	5MHz
Antenna type:	Integral antenna
Antenna gain:	2.0 dBi

3.3. Operation state

Frequency list

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channel which were tested. the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the above gray bottom.

20MHz			40MHz				
Band	Test Channel	Channel	Frequency (MHz)	Band	Test Channel	Channel	Frequency (MHz)
	Low	36	5180	D 11	Low	38	5190
David	Mid	40	5200	Band I	High	46	5230
Band I		44	5220	Devill	Low	54	5270
	High	48	5240	Band II	High	62	5310
	Low	52	5260		Low	102	5510
Band II	Mid	56	5280			110	5550
Danu II		60	5300	Band III	Mid	118	5590
	High	64	5320	Danu III	Mid	126	5630
	Low	100	5500		High	134	5670
		104	5520			142	5710
		108	5540		Low	151	5755
		112	5560	Band IV	High	159	5795
		116	5580				
Band III	Mid	120	5600				
Danu III		124	5620				
		128	5640				
		132	5660				
		136	5680				
	High	140	5700				
		144	5720				
	Low	149	5745				
		153	5765				
Band IV	Mid	157	5785				
		161	5805				
	High	165	5825				
80MHz							
Band I	Mid	42	5210				
Band II	Mid	58	5290				
	Low	106	5530				
Band III	Mid	122	5610				
	High	138	5690				
Band IV	Mid	155	5775				

Data Rated

Preliminary tests were performed in different data rate, and found which the below bit rate is worst case mode, so only show data which it is a worst case mode.

Mode	datarate (worst mode)
802.11a	54Mbps
802.11n(HT20)	MCS7
802.11n(HT40)	MCS8
802.11ac(HT80)	MCS9

• <u>Test mode</u>

For RF test items:

the engineering test program was provided and enabled to make EUT continuous transmit/receive. The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%. For AC power line conducted emissions:

the EUT was set to connect with the WLAN AP under large package sizes transmission.

3.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

- - supplied by the manufacturer
- $\ensuremath{\bigcirc}$ supplied by the lab

\bigcirc	Lamp	Manufacturer :	PHILIPS
		Model No. :	25W 230V>1F
\bigcirc	Person computer	Manufacturer :	TOSHIBA
		Model No. :	M800-T30B1

3.5. Modifications

No modifications were implemented to meet testing criteria.

4. TEST ENVIRONMENT

4.1. Address of the test laboratory

Laboratory:Shenzhen Huatongwei International Inspection Co., Ltd. Address: 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China Phone: 86-755-26748019 Fax: 86-755-26748089

4.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA-Lab Cert. No. 3902.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 762235

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 762235.

IC-Registration No.: 5377B-1

Two 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377B-1.

ACA

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

4.3. Equipments Used during the Test

Radia	ted Emissions				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal
1	Ultra-Broadband Antenna	ShwarzBeck	VULB9163	538	2016/11/13
2	EMI Test Receiver	Rohde&Schwarz	ESI 26	100009	2016/11/13
3	EMI Test Software	Audix	E3	N/A	N/A
4	Turntable	ETS	2088	2149	N/A
5	Antenna Mast	ETS	2075	2346	N/A
6	EMI Test Software	Rohde&Schwarz	ESK1	N/A	N/A
7	Horn Antenna	ShwarzBeck	9120D	1011	2016/11/13
8	Horn Antenna	ShwarzBeck	9120D	1012	2016/11/13
9	Amplifer	Sonoma	310N	E009-13	2016/11/13
10	JS amplifer	Rohde&Schwarz	JS4-00101800- 28-5A	F201504	2016/11/13
11	High pass filter	Compliance Direction systems	BSU-6	34202	2016/11/13
12	Amplifer	Compliance Direction systems	PAP1-4060	120	2016/11/13
13	Loop Antenna	Rohde&Schwarz	HFH2-Z2	100020	2016/11/13
14	Turntable	MATURO	TT2.0	/	N/A
15	Antenna Mast	MATURO	TAM-4.0-P	/	N/A
16	Horn Antenna	SCHWARZBECK	BBHA9170	25841	2016/11/13
17	Ultra-Broadband Antenna	Rohde&Schwarz	HL562	100015	2016/11/13
Cond	ucted test				
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal
1	Spectrum Analyzer	Rohde&Schwarz	FSV40	100048	2016/11/13
2	OSP	Rohde&Schwarz	OSP120	101317	2016/11/13
3	OSP	Rohde&Schwarz	OSP-B157	100890	2016/11/13
4	Signal generator	Rohde&Schwarz	SMB100A	177956	2016/11/13
5	Vector signal generator	Rohde&Schwarz	SMBV100A	260790	2016/11/13
6	EXA Signal Analyzer	Agilent	N9010A	184247	2016/11/13

The Cal.Interval was one year

4.4. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15~35°C
lative Humidity:	30~60 %
Air Pressure:	950~1050mba

4.5. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors in calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to TR-100028-01 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics;Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties radio equipment characteristics;Part 2" and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system according to ISO/IEC 17025. Further more, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Here after the best measurement capability for Shenzhen Huatongwei is reported:

Test Items	MeasurementUncertainty	Notes
Transmitter power conducted	0.57 dB	(1)
Transmitter power Radiated	2.20 dB	(1)
Conducted spurious emissions 9KHz-40 GHz	1.60 dB	(1)
Radiated spurious emissions 9KHz-40 GHz	2.20 dB	(1)
Conducted Emissions 9KHz-30MHz	3.39 dB	(1)
Radiated Emissions 30~1000MHz	4.24 dB	(1)
Radiated Emissions 1~18GHz	5.16 dB	(1)
Radiated Emissions 18-40GHz	5.54 dB	(1)
Occupied Bandwidth		(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

5. TEST CONDITIONS AND RESULTS

5.1. Antenna requirement

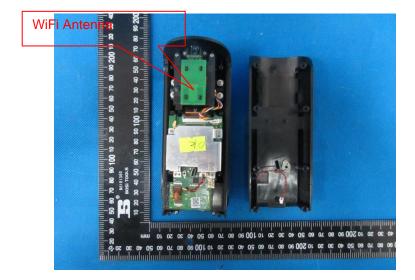
<u>Requirement</u>

FCC CFR Title 47 Part 15 Subpart C Section 15.203:

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

Test Result:

The directional gain of the antenna less than 6 dBi, please refer to the below antenna photo.



5.2. Conducted Emissions (AC Main)

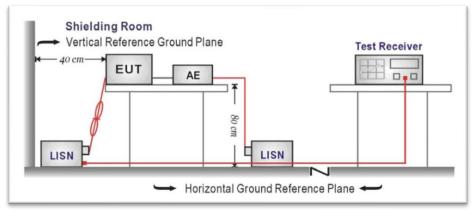
<u>LIMIT</u>

FCC CFR Title 47 Part 15 Subpart C Section 15.207

	Limit (dBuV)		
Frequency range (MHz)	Quasi-peak	Average	
0.15-0.5	66 to 56*	56 to 46*	
0.5-5	56	46	
5-30	60	50	

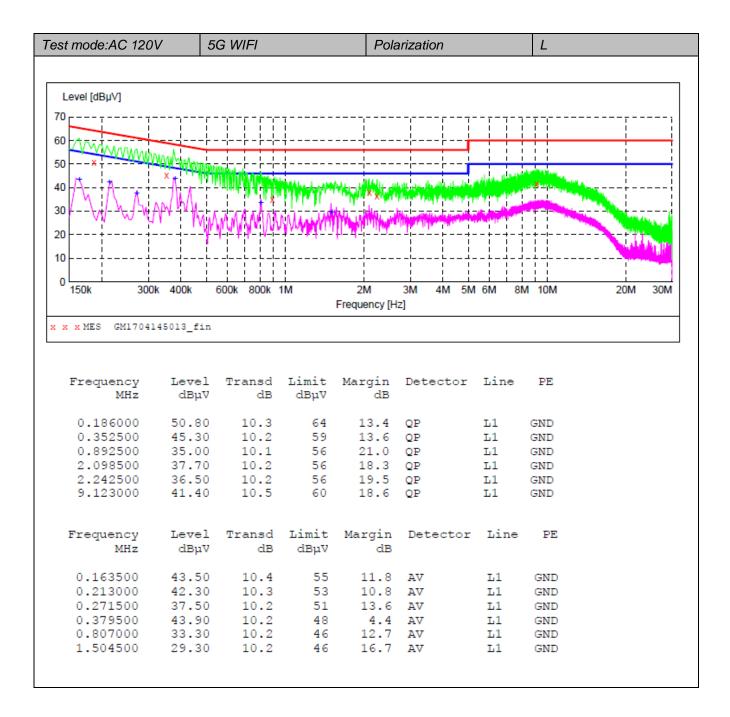
* Decreases with the logarithm of the frequency.

TEST CONFIGURATION

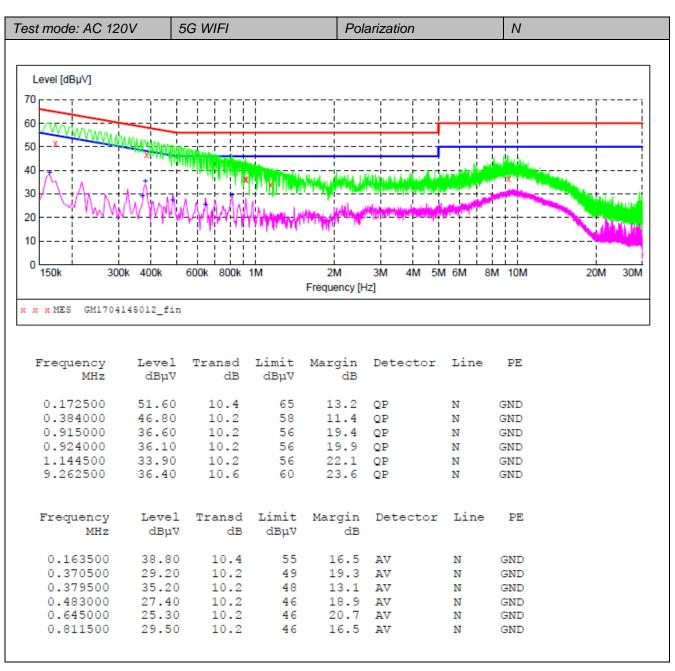


TEST PROCEDURE

- 1. The EUT was setup according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
- 2. The EUT was placed on a plat form of nominal size, 1 m by 1.5 m, raised 10 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 10 cm from any other grounded conducting surface.
- 3. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50ohm / 50uH coupling impedance for the measuring equipment.
- 4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
- 5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
- 6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
- 7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
- 8. During the above scans, the emissions were maximized by cable manipulation.







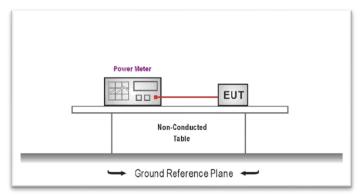
Remark:Transd=Cable lose+ PULSE LIMITER factor+ ARTIFICIAL MAINS factor; Margin= Limit -Level

5.3. Maximum Conducted Output Power

<u>LIMIT</u>

FCC CFR Title 47 Part 15 Subpart E Section 15.407: In the 5.15 - 5.25GHz band, the maximum permissible conducted output power is 250mW (23.98dBm) In the 5.25 - 5.35GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) and 11 dBm + 10log10(26dB BW) = 11 dBm + 10log10(18.87) = 23.76dBm. In the 5.725 - 5.850GHz band, the maximum permissible conducted output power is 1W (30dBm).

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was tested according to KDB789033 requirements.

2. The maximum conducted output power may be measured using a broadband AVG RF power meter.

3. Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power

4. Record the measurement data.

	Туре	Channel	Output power (dBm)	Limit (dBm)	Result
		Low	11.71		
	802.11a	Mid	11.78	24.00	Pass
		High	12.16		
Band I	802.11n(HT20)	Low	11.41	24.00	Pass
5150-5250MHz		Mid	11.67		
		High	11.88		
	902 11p(UT40)	Low	12.36	24.00	Pass
	802.11n(HT40)	High	12.36	24.00	Fa55
	802.11ac(HT80)	Mid	8.14	24.00	Pass

	Туре	Channel	Output power (dBm)	Limit (dBm)	Result
		Low	13.13		
	802.11a	Mid	13.48	24.00	Pass
		High	13.75		
Band II		Low	9.16	24.00	
5250-5350MHz	802.11n(HT20)	Mid	9.58		Pass
		High	9.79		
	802.11n(HT40)	Low	11.88	24.00	Pass
-	002.111(H140)	High	12.48	24.00	r a55
	802.11ac(HT80)	Mid	9.15	24.00	Pass

	Туре	Channel	Output power (dBm)	Limit (dBm)	Result
		Low	14.20		
	802.11a	Mid	13.69	24.00	Pass
		High	12.69		
		Low	13.65		Pass
Dend III	802.11n(HT20)	Mid	13.17	24.00	
Band III 5470-5725MHz		High	12.23		
5470-5725Wi12	802.11n(HT40)	Low	13.77	24.00	Pass
		Mid	13.29		
		High	12.81		
		Low	10.53		
	802.11ac(HT80)	Mid	10.09	24.00	Pass
		High	10.59		

	Туре	Channel	Output power (dBm)	Limit (dBm)	Result
		Low	11.72		
	802.11a	Mid	11.10	30.00	Pass
		High	10.50		
Band IV		Low	11.26	30.00	
5725-5850MHz	802.11n(HT20)	Mid	10.59		Pass
		High	10.29		
	902 11p(UT40)	Low	11.30	30.00	Pass
	802.11n(HT40)	High	10.73	30.00	Fass
	802.11ac(HT80)	Mid	7.61	30.00	Pass

5.4. Maximum Power Spectral Density

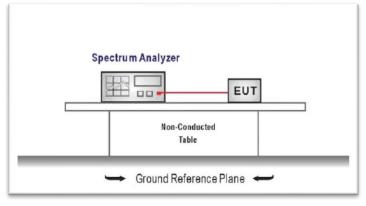
<u>LIMIT</u>

FCC CFR Title 47 Part 15 Subpart E Section 15.407:

In the 5.15 – 5.25GHz, 5.25 – 5.35GHz, 5.47 – 5.725GHz bands, the maximum permissible power spectral density is 11dBm/MHz.

In the 5.725 – 5.850GHz band, the maximum permissible power spectral density is 30dBm/500kHz.

TEST CONFIGURATION



TEST PROCEDURE

According KDB 789033 D02 v01r02 - Section F

- 1. Analyzer was set to the center frequency of the UNII channel under investigation
- 2. Span was set to encompass the entire emission bandwidth of the signal
- 3. RBW = 1MHz, 4. VBW = 3MHz
- 7. Number of sweep points > 2 x (span/RBW)
- 8. Sweep time = auto
- 6. Detector = power averaging (RMS)
- 7. Trigger was set to free run for all modes
- 8. Trace was averaged over 100 sweeps
- 9. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

Issued: 2017-07-26

	Туре	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Low	1.03		
	802.11a	Mid	1.21	11.00	Pass
.		High	1.08		
Band I 5150-5250MHz	802.11n(HT20)	Low	0.98	11.00	Pass
5150-5250IVIHZ		Mid	0.94		
		High	1.40		
	802.11n(HT40)	Low	-2.44	11.00	Pass
		High	-1.60	11.00	
	802.11ac(HT80)	Mid	-7.55	11.00	Pass

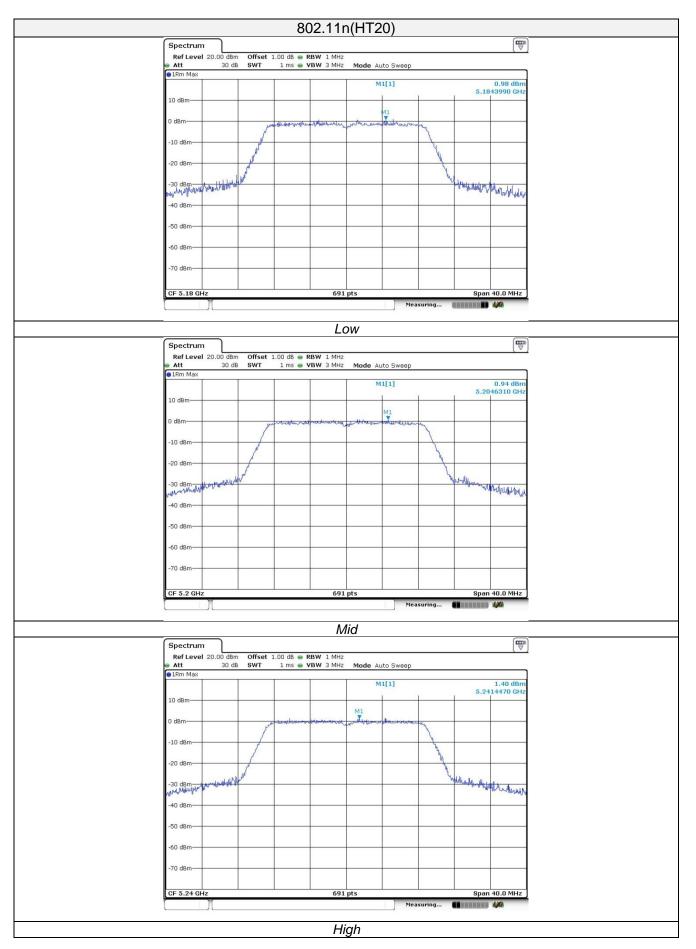
	Туре	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Low	2.19		
	802.11a	Mid	2.53	11.00	Pass
5		High	2.70		
Band II	802.11n(HT20)	Low	-1.42	11.00	Pass
5250-5350MHz		Mid	-1.00		
		High	-0.51		
	902 11p(UT40)	Low	-1.68	11.00	Pass
	802.11n(HT40)	High	-1.88	11.00	F 855
	802.11ac(HT80)	Mid	-7.43	11.00	Pass

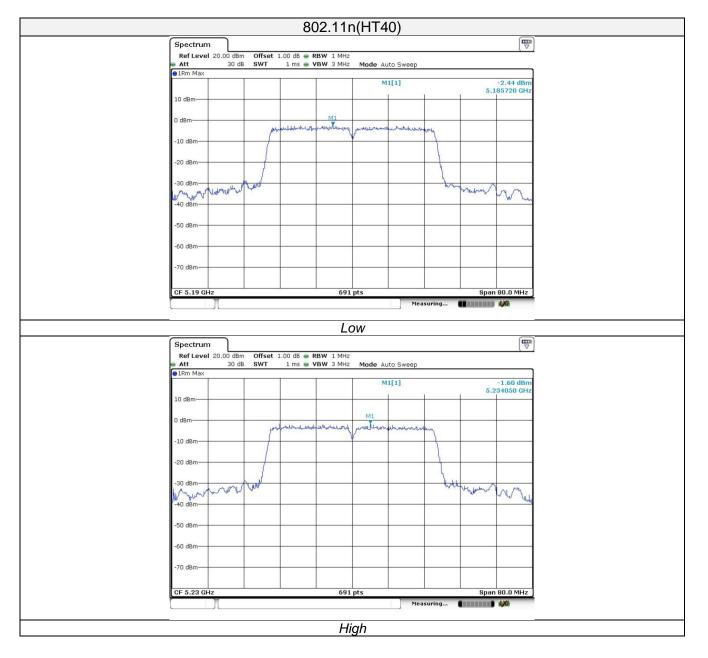
	Туре	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Low	3.56		
	802.11a	Mid	3.11	11.00	Pass
		High	2.12		
Band III	802.11n(HT20)	Low	3.09	11.00	Pass
5470-5725MHz		Mid	2.75		
		High	2.23		
		Low	-0.23		
	802.11n(HT40)	Mid	0.40	11.00	Pass
		High	-0.75		
	802.11ac(HT80)	Mid	-6.74	11.00	Pass

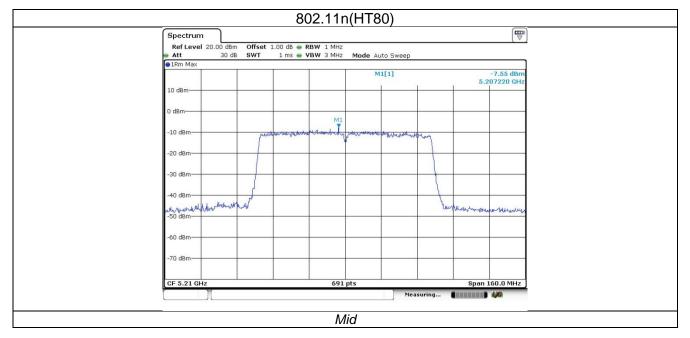
	Туре	Channel	PSD (dBm/MHz)	Limit (dBm/MHz)	Result
		Low	-0.20		
	802.11a	Mid	-1.07	30.00	Pass
5 1.07		High	-1.48		
Band IV	802.11n(HT20)	Low	-1.18	30.00	Pass
5725-5850MHz		Mid	-1.76		
		High	-2.62		
	000 44 c/UT 40)	Low	-3.39	20.00	Dooo
	802.11n(HT40)	High	-4.69	30.00	Pass
	802.11ac(HT80)	Mid	-10.03	30.00	Pass

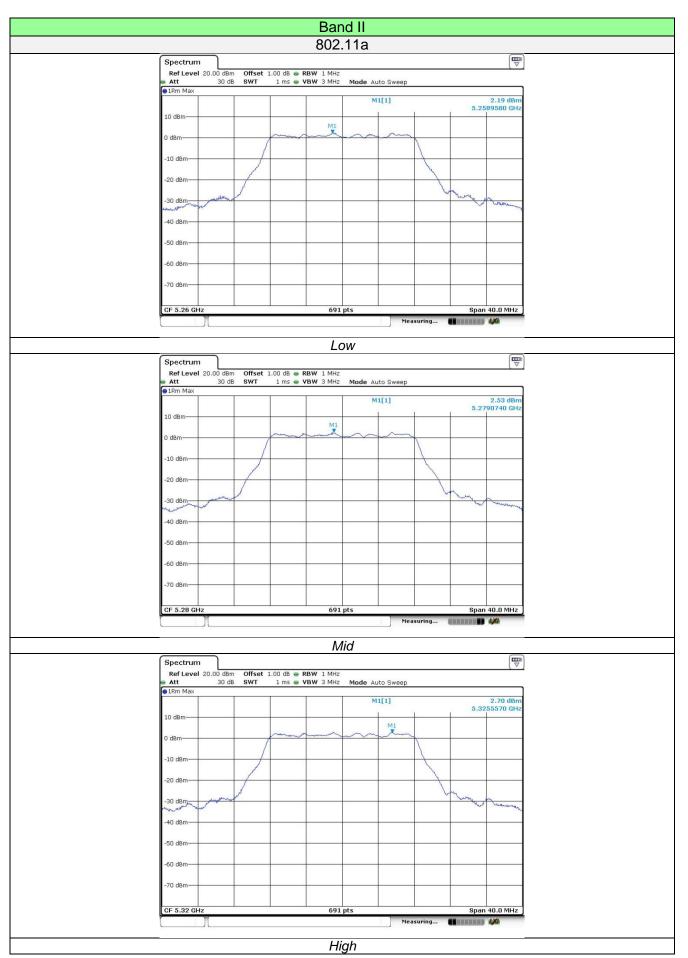
Test plot as follows:

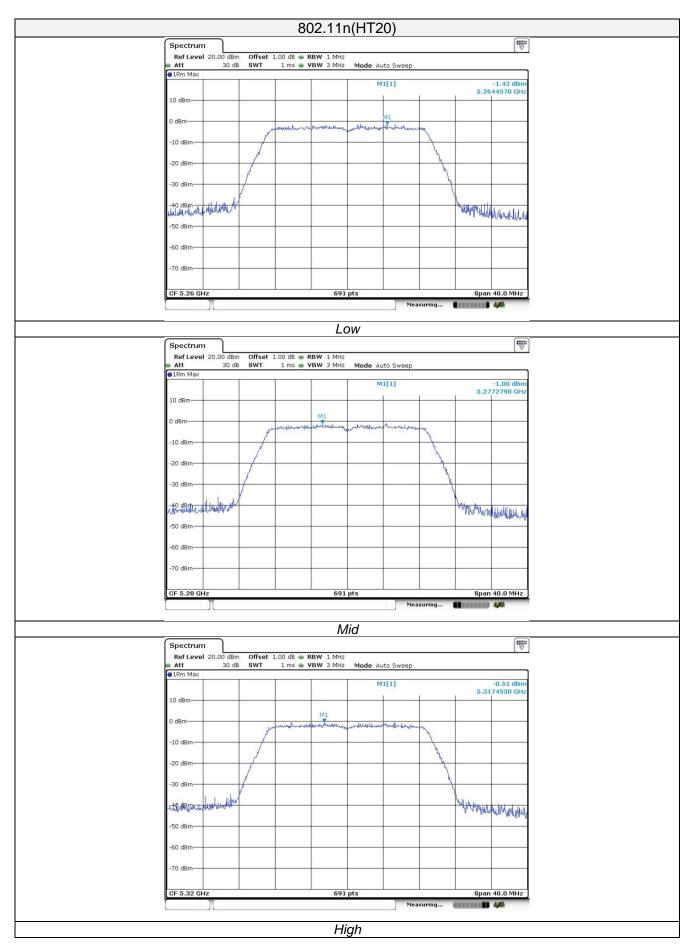
l est plot as follows:	Band I
	802.11a
	Spectrum 🕎
	Ref Level 00.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep
	●1Rm Max M1[1] 1.03 dBm
	10 dBm
	MI
	-10 dBm
	-20 dBm
	-30 dBm
	-40 dBm
	-50 dBm
	-60 dBm
	-70 dBm
	CF 5.18 GHz 691 pts Span 40.0 MHz
	Measuring
	Low
	Spectrum 🕎
	RefLevel 20.00 dBm Offset 1.00 dB RBW 1 MHz Att 30 dB SWT 1 ms VBW 3 MHz Mode Auto Sweep
	●1Rm Max M1[1] 1.21 dBm
	10 dBm
	-10 dBm
	-20 dBm
	-30 dBm
	-40 d8m
	-50 dBm
	-60 dBm
	-70 dBm
	CF 5.2 GHz 691 pts Span 40.0 MHz Measuring
-	
	Mid
	Spectrum Ref Level 20.00 dBm Offset 1.00 dB • RBW 1 MHz
	■ Att 30 dB SWT 1 ms ■ VBW 3 MHz Mode Auto Sweep ■ 1Rm Max
	M1[1] 1.08 dBm 5.2454990 GHz
	0 dBm
	-10 dBm
	-20 dBm
	-30 dBm
	-40 dBm
	-50 dBm
	-60 dBm
	-70 dBm
	CF 5.24 GHz 691 pts Span 40.0 MHz
	Measuring
	High
L	

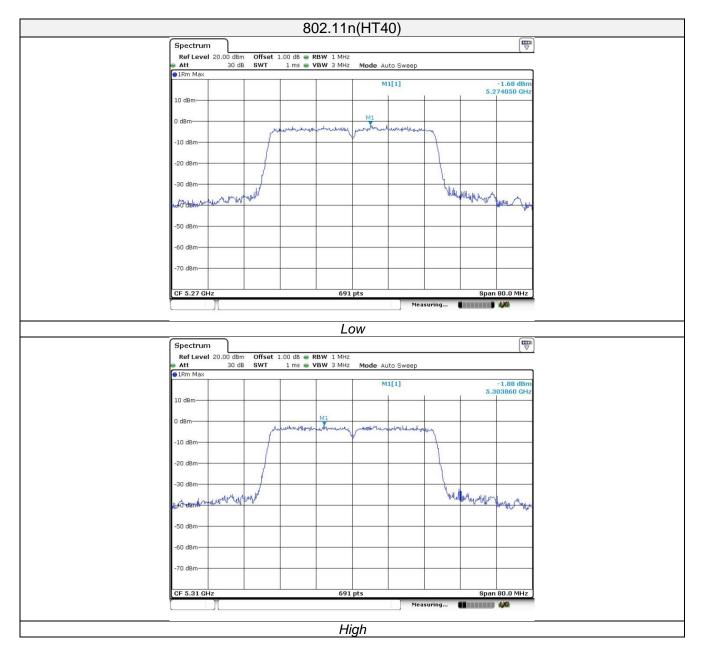


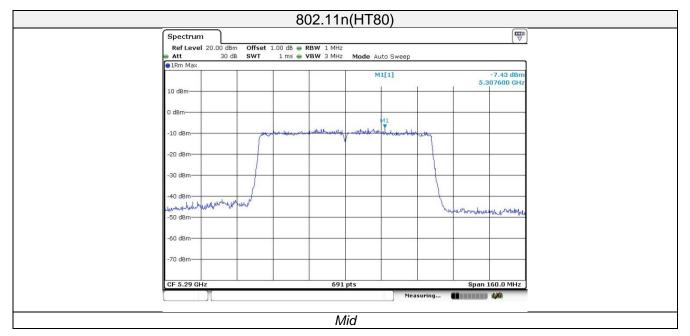


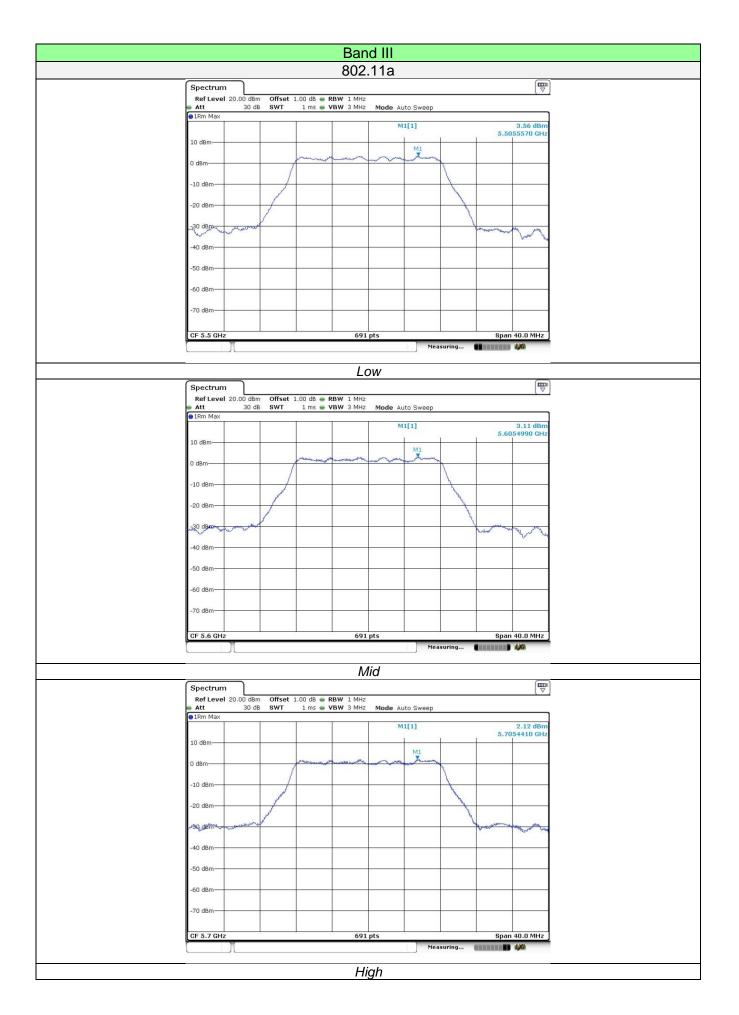


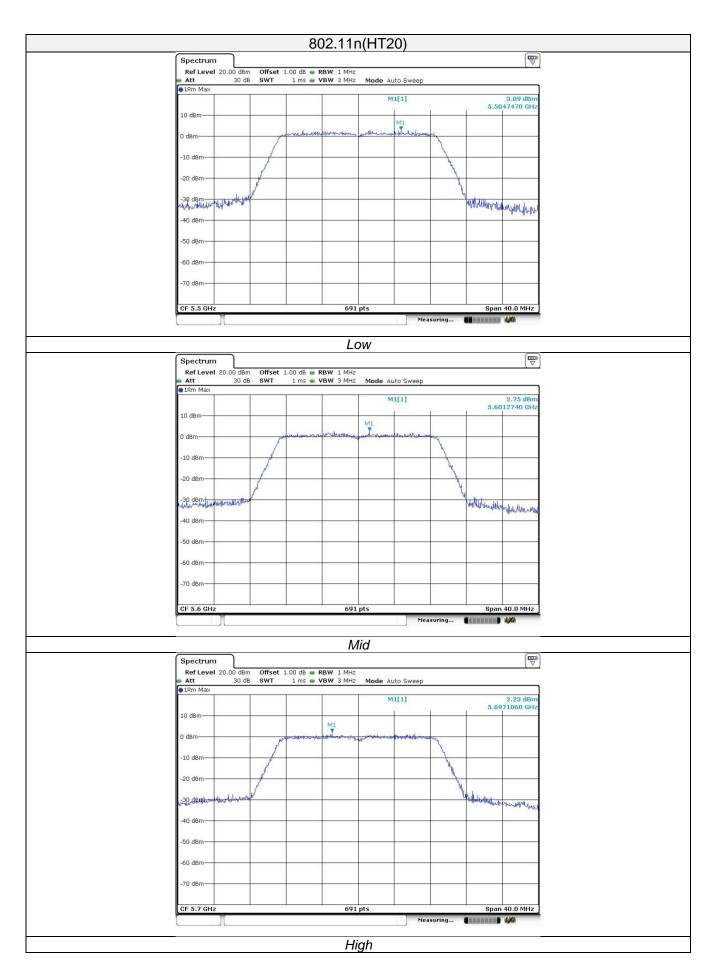


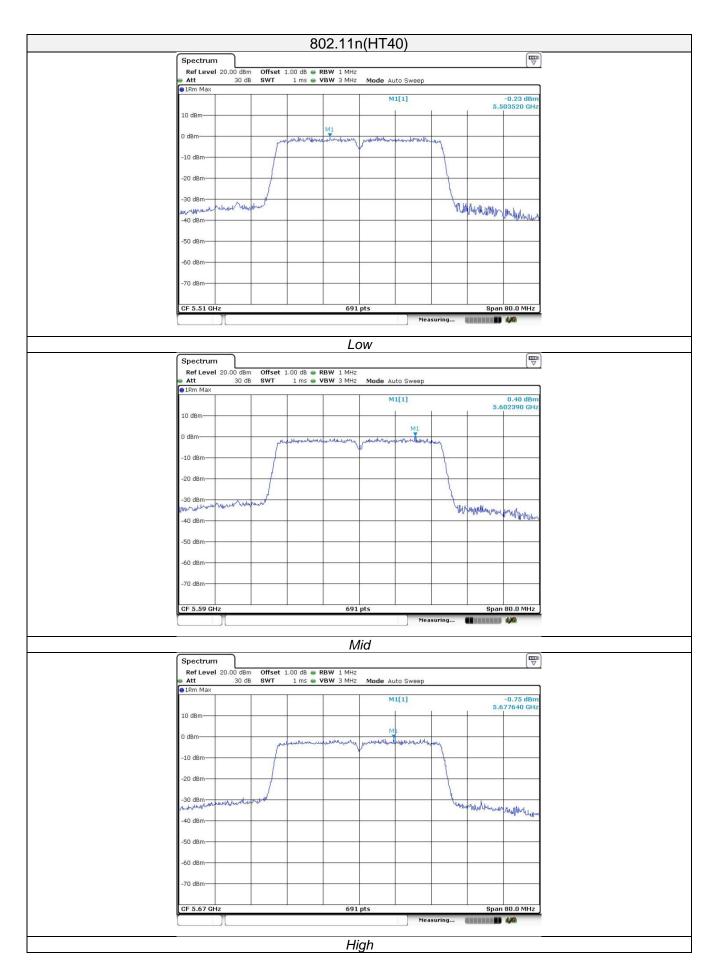


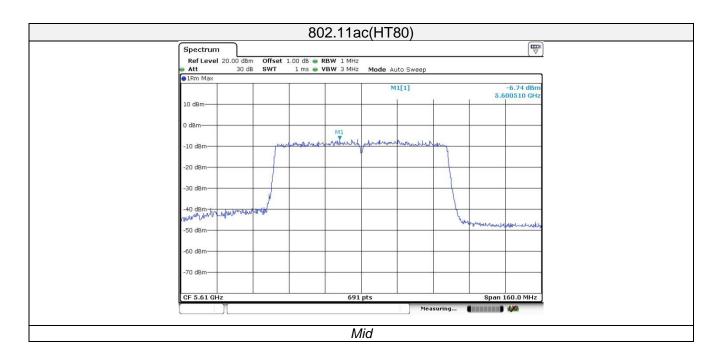


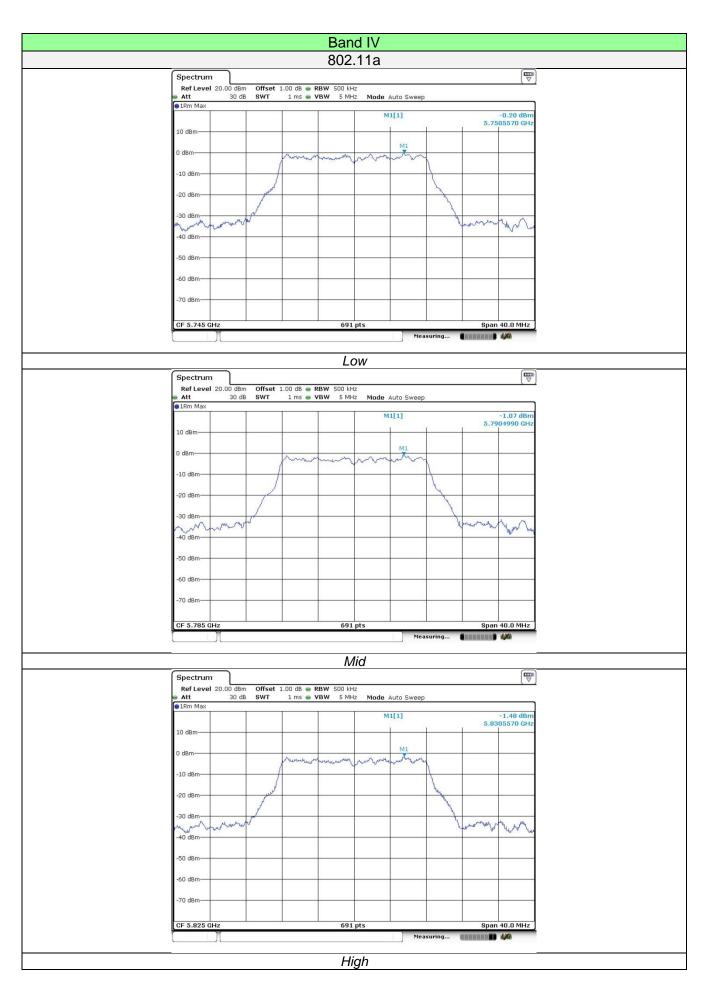


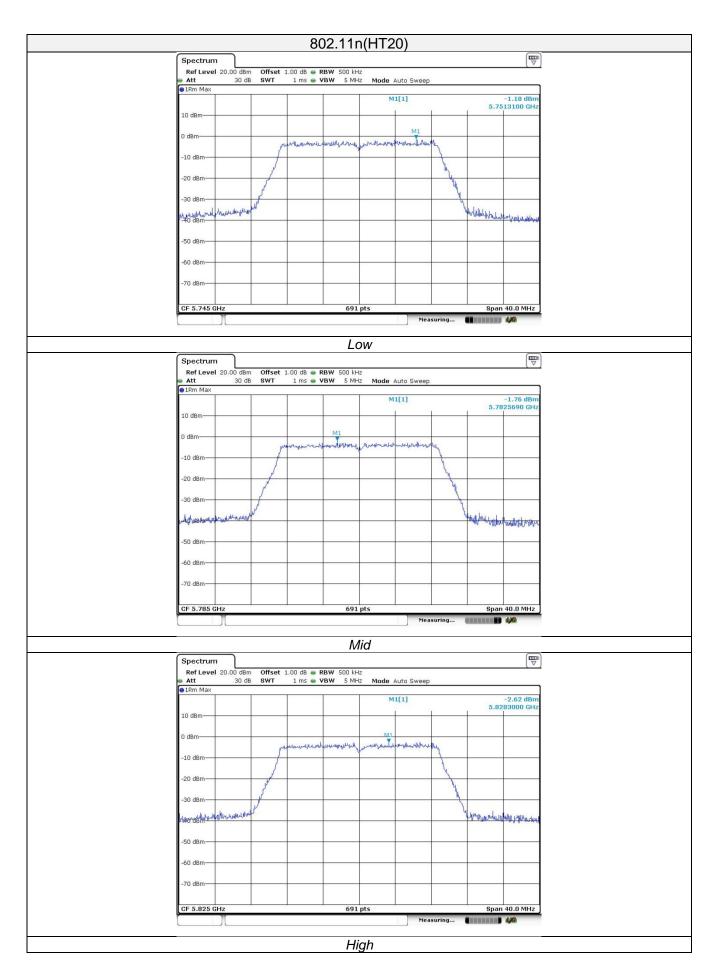


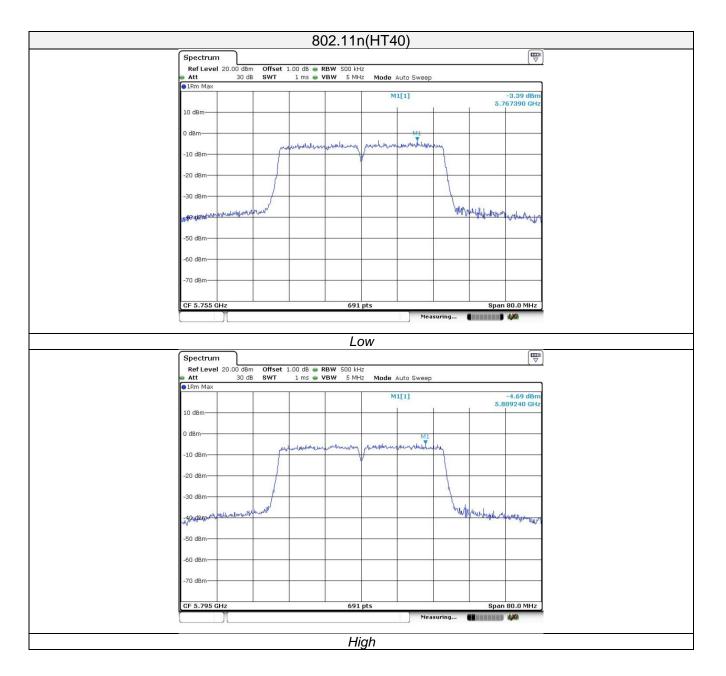


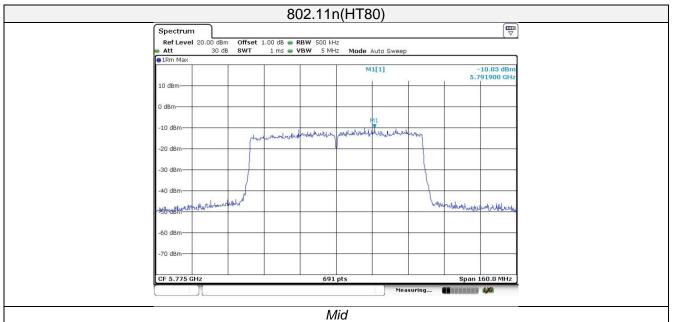










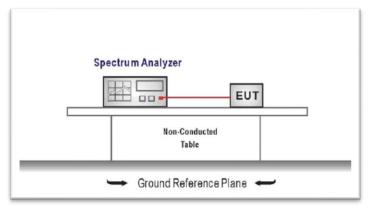


5.5. 6dB&26dB bandwidth

<u>LIMIT</u>

The bandwidth at 26dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in KDB 789033 D02 v01r02, and at the appropriate frequencies. The spectrum analyzer's bandwidth measurement function is configured to measure the 26dB bandwidth.

TEST CONFIGURATION



TEST PROCEDURE

According KDB 789033 D02 v01r02 - Section C

1. The signal analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to X = 26. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.

2. RBW = approximately 1% of the emission bandwidth

- 3. VBW > 3 x RBW
- 4. Detector = Peak
- 5. Trace mode = max hold

	Туре	Channel	26dB Bandwidth (MHz)	Limit (MHz)	Result
		Low	21.041		
	802.11a	Mid	20.996	-	Pass
		High	20.996		
Band I 5150-5250MHz	802.11n(HT20)	Low	21.669		Pass
5150-5250MHZ		Mid	21.534		
		High	21.534		
	$000.44 \times (117.40)$	Low	40.376		Pass
	802.11n(HT40)	High 40.014	40.014	-	F d 55
	802.11ac(HT80)	Mid	81.390	-	Pass

	Туре	Channel	26dB Bandwidth (MHz)	Limit (MHz)	Result
		Low	20.951		
	802.11a	Mid	20.861	-	Pass
D 111		High	20.951		
Band II 5250-5350MHz	802.11n(HT20)	Low	21.489	-	Pass
5250-55501VIFIZ		Mid	21.399		
		High	21.399		
	902 11p(UT40)	Low	40.087		Dooo
	802.11n(HT40)	High	40.087	-	Pass
	802.11ac(HT80)	Mid	81.780	-	Pass

Band III 5470-5725MHz	Туре	Channel	26dB Bandwidth (MHz)	Limit (MHz)	Result
	802.11a	Low	20.906		Pass
		Mid	20.906		
		High	21.220		
	802.11n(HT20)	Low	21.579	-	Pass
		Mid	21.713		
		High	21.624		
	802.11n(HT40)	Low	40.087	-	Pass
		Mid	40.159		
		High	40.232		
	802.11ac(HT80)	Mid	82.040	-	Pass

Band IV 5725-5850MHz	Туре	Channel	6dB Bandwidth (MHz)	Limit (MHz)	Result
	802.11a	Low	16.4544	0.5	Pass
		Mid	16.4978		
		High	16.4544		
	802.11n(HT20)	Low	17.8000	0.5	Pass
		Mid	17.8000		
		High	17.8003		
	802.11n(HT40)	Low	36.5412	0.5	Pass
		High	36.5410		
	802.11ac(HT80)	Mid	76.3700	0.5	Pass

Test plot as follows:

