# FCC Part 15 Subpart E §15.407 Test Report

<b>Equipment Under Test</b>	Car Infotainment
Model Name	DGU-8745-Y400SA
Variant Model Name	DGU-8745-Y400SA-1, DGU-8745-Q200SA, DGU-8745-Q200SA-1
FCC ID	2AE77DGU8745Y400SA
Applicant	DIGEN CO., LTD.
Manufacturer	DIGEN CO., LTD.
Date of Test(s)	2017. 01. 23 ~ 2017. 02. 17
Date of Issue	2017. 02. 20

In the configuration tested, the EUT complied with the standards specified above.

Issue to	Issue by
<b>DIGEN</b> 89, Seongseo4chacheomdan-ro, Dalseo-gu, Daegu, 704-801, Korea	MOVON CORPORATION 498-2, Geumeo-ro, Pogok-eup, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea, 449-812
Tel.: +82-70-4850-3322 Fax: +82-2-532-8811	Tel.: +82-31-338-8837 Fax: +82-31-338-8847

# **Revision history**

Revision	Date of issue	Description	Revised by
	Feb 15, 2017	Initial	
1	Feb 20,2017	Antenna Requirement added	

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#### 1. Attestation of test result

#### 1.1. Details of applicant and manufacturer

Applicant : DIGEN CO., LTD.

Address : 89, Seongseo4chacheomdan-ro, Dalseo-gu, Daegu, 704-801,

Korea

Contact Person : Jong-Sun Park

Telephone : +82-70-4850-3311

Fax : +82-2-532-8811

#### 1.2. Summary of test results

The EUT has been tested according to the following specifications;

Section in FCC part 15	Description	Result
§15.205(a) §15.209(a)	Transmitter radiated spurious emissions	С
§15.407(a)(1)	26 dB and 99% Occupied Bandwidth	С
§15.407(a)(1)	Maximum conducted Output power	С
§15.407(a)(1)	Power spectral density	С
§15.407(g)	frequency stability	С
§15.407(e)	6 dB bandwidth	С
1.1307(b)(1)	RF exposure evaluation	С

The sample was tested according to the following specification: ANSI C63.10:2013, FCC Public Notice KDB789033 D02 v01r03 TEST SITE REGISTRATION NUMBER: FCC(KR0151)

#### **X** Abbreviation

C Complied

N/A Not applicable

F Fail

**Approval Signatories** 

Test and Report Completed by :	Report Approval by :
/ ooner tr	
Nanju Yoo	Issac Jin
Test Engineer	Technical Manager
MOVON CORPORATION	MOVON CORPORATION

# 2. EUT Description

Kind of product	Car Infotainment
Model Name	DGU-8745-Y400SA
Variant Model Name	DGU-8745-Y400SA-1, DGU-8745-Q200SA, DGU-8745-Q200SA-1
FCC ID	2AE77DGU8745Y400SA
Serial Number	N/A
Power supply	DC 13.5V
Frequency range	UNII-1 5 180 Mb ~ 5 240 Mb (802.11a/n_HT20) 5 190 Mb ~ 5 230 Mb (802.11an_HT40) 5 210 Mb (802.11ac_VHT80) UNII-2A 5 260 Mb ~ 5 320 Mb (802.11a/n_HT20) 5 270 Mb ~ 5 310 Mb (802.11an_HT40) 5 290 Mb (802.11ac_VHT80) UNII-2C 5 500 Mb ~ 5 620 Mb (802.11a/n_HT20) 5 510 Mb ~ 5 590 Mb (802.11an_HT40) 5 530 Mb ~ 5 610 Mb (802.11ac_VHT80) UNII-3 5 745 Mb ~ 5 805 Mb (802.11a/n_HT20) 5 755 Mb ~ 5 795 Mb (802.11an_HT40) 5 775 Mb (802.11ac_VHT80)
Modulation technique	OFDM
Number of channels	UNII-1 5 180 Mtz ~ 5 240 Mtz (4ch) 5 190 Mtz ~ 5 230 Mtz (2ch) 5 210 Mtz (1ch) UNII-2A 5 260 Mtz ~ 5 320 Mtz (4ch) 5 270 Mtz ~ 5 310 Mtz (2ch) 5 290 Mtz (1ch) UNII-2C 5 500 Mtz ~ 5 620 Mtz (7ch) 5 510 Mtz ~ 5 590 Mtz (3ch) 5 530 Mtz ~ 5 610 Mtz (2ch) UNII-3 5 745 Mtz ~ 5 805 Mtz (4ch) 5 755 Mtz ~ 5 795 Mtz (2ch) 5 775 Mtz (1ch)
Antenna gain	0.00 dB i (Max.)
Test Site Registration Number	FCC(KR0151)

# 2.1. Declarations by the manufacturer

None

#### 2.2. Details of modification

None

#### 2.3 Test Mode

UNII-1		
CH.	Frequency(Mbz)	
36	5 180	
44	5 220	
48	5 240	

UNII-2A		
CH.	Frequency(Mbz)	
52	5 260	
60	5 300	
64	5 320	

UNII-2C		
CH.	Frequency(Mbz)	
100	5 500	
112	5 560	
124	5 620	

UNII-3		
CH.	Frequency(Mb)	
149	5 745	
157	5 785	
161	5 805	

# (802.11a/n\_HT20)

UNII-1	
CH.	Frequency(MHz)
38	5 190
46	5 230

UNII-2A				
CH. Frequency(MHz				
54	5 270			
62	5 310			

	UNII-2C				
CH. Frequency(Mt					
	102	5 510			
	110	5 550			
	118	5 590			

	UNII-3				
CH. Frequency(MHz)					
151	5 755				
159	5 795				

#### (802.11an\_HT40)

UNII-1					
CH. Frequency(MHz)					
42	5 210				

UNII-2A				
CH. Frequency(MH				
58	5 290			

UNII-2C				
CH. Frequency(MHz)				
106 5 530				
122	5 610			

UNII-3				
CH. Frequency(MHz)				
155	5 775			

(802.11an\_VHT80)

#### 2.4. Table for Test Modes

Preliminary tests were performed in different data rate to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Mode	Data rate (Worst case)
802.11a	6 Mbps
802.11an_HT20 802.11an_HT40 802.11ac_VHT80	MCS0

3. Measurement Equipment

Equipment Manufacturer		Model	Serial number	Calibration Interval	Calibration due.
Test Receiver	st Receiver R&S ESVS30		829673/015	1 year	2017-12-09
Signal R&S		SMA100A	102188	1 year	2017-12-09
Spectrum Analyzer	R&S	FSV-40	100832	1 year	2017-11-09
Power Meter	Agilent	E4416A	GB41290645	1 year	2017-06-28
Power Sensor	Agilent	9327A	US40441490	1 year	2017-06-28
Horn Antenna	R&S	HF906	100236	2 year	2017-07-24
Horn Antenna	R&S	HF906	100235	2 year	2017-04-23
Horn Antenna	AH Systems	SAS-573	164	2 year	2018-05-03
TRILOG Supper Broadband test Antenna	Supper SCHWARZBECK SAS-521-7		9161-4159	2 year	2018-06-14
Power Amplifier	MITEQ	AM-1431	1497315	1 year	2017-06-28
Power Amplifier	rer Amplifier MITEQ AFS43-01002600		1374382	1 year	2017-11-03
High Pass Filter			508	1 year	2017-06-29
Controller	Controller INNCO CO2000		co200/064/6961003/L	N/A	N/A
Antenna Master	ININ(.()   MAA(IOO		MA4000/038/6961003/L	N/A	N/A
Loop Antenna	o Antenna ETS LINDGREN 6502		00118166	2 year	2018-02-23
TWO LINE-V- NETWORK			100296	1 year	2017-12-09
Power Amplifier MITEQ AFS43-01002600		AFS43-01002600	1374382	1 year	2017-11-03

# \*\*Remark; Support equipment

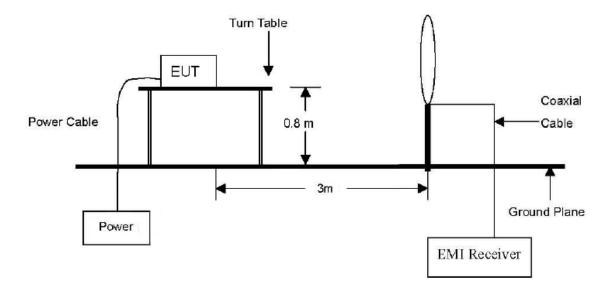
Description	Manufacturer	Model	Serial number		
-	-	-	-		

#### 4. Transmitter radiated spurious emissions and conducted spurious emissions

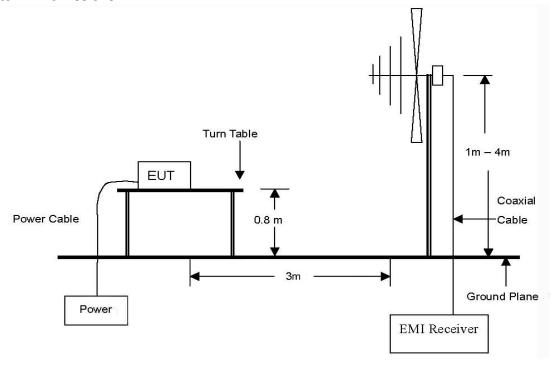
#### 4.1. Test setup

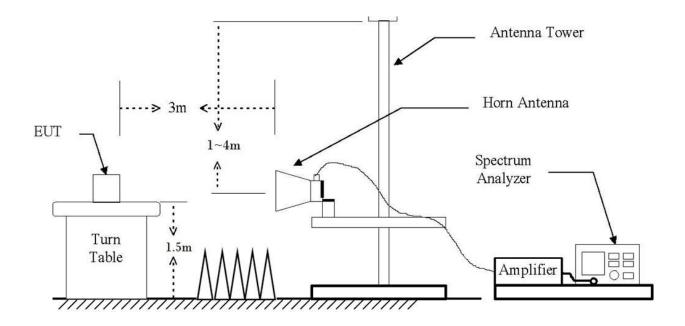
#### 4.1.1. Transmitter radiated spurious emissions

The diagram below shows the test setup that is utilized to make the measurements for emission from 9kHz to 30MHz Emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 Mb to 1 Gb emissions.





#### 4.2. Limit

According to 15.209(a), for an intentional radiator devices, the general required of field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance (Meters)	Radiated (µV/m)
0.009 ~ 0.490	300	2 400 / F(kllz)
0.490 ~ 1.705	30	24 000 / F(kHz)
1.705 ~ 30.0	30	30
30 ~ 88	3	100**
88 ~ 216	3	150**
216 ~ 960	3	200**
Above 960	3	500

<sup>\*\*</sup>Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54 ~ 72 Mb, 76 ~ 88 Mb, 174 ~ 216 Mb or 470 ~ 806 Mb. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

According to 15.407(b), (b) Undesirable emission limits: Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p of –27 dB m/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHzband:
- i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the bandedge.
- Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in §15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2,2020.
  - (5) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz.

A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 Mb.

- 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in § 15.207.
  - (7) The provisions of §15.205 apply to intentional radiators operating under this section.
  - (8) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipmentpermits.

#### 4.3. Test procedures

Radiated emissions from the EUT were measured according to the dictates of ANSI C63.10:2013 In case of the air temperature of the test site is out of the range is 10 to 40°C before the testing proceeds the warm-up time of EUT maintain adequately

#### 4.3.1. Test procedures for radiated spurious emissions

- 1. The EUT is placed on a turntable, which is 0.8 m (Below 1 础.)/ 1.5 m (Above 1 础) above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.

#### **\*** Remark;

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 10 kHz for Peak detection (PK) at frequency below 30 MHz
- 2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Peak detection (PK) or Quasi-peak detection (QP) at frequency below 1 GHz.
- 3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 Mb for Peak detection and frequency above 1 Gbz.
- 4. The resolution bandwidth of test receiver/spectrum analyzer is 1 Mb z and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1 Gb.

#### 4.4. Test result

Ambient temperature:  $20^{\circ}$ C Relative humidity: 45% R.H.

#### 4.4.1. Spurious radiated emission

The frequency spectrum from 9kl to 30 was investigated. Emission levels are not reported much lower than the limits by over 20 dB. All reading values are peak values.

To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

#### Operation mode: UNII-1 A. Low channel (5 180 Mb)

Radiated emissions			Ant.	Correctio	n factors	Total	Lir	nit
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

#### B. Middle channel (5 220 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 240 Nb)

Radi	ated emission	ns	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### **\*** Remark

- 1. Actual = Reading + Ant. factor + CL (Cable loss)
- 2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. 15.31 Measurement standards.

# Operation mode: UNII-1(n\_HT20)

#### A. Low channel (5 180 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 220 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	mit		
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 240 脏)

Radi	ated emissio	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (M地)	Reading (dBμV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

#### **\*** Remark

- 1. Actual = Reading + Ant. factor + CL (Cable loss)
- 2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. 15.31 Measurement standards.

# Operation mode: UNII-1(n\_HT40)

#### 

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### B. High channel (5 230 账)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### Operation mode: UNII-1(ac\_VHT80)

#### A. Low channel (5 210 脏)

Radi	ated emission	ons	Ant.	Correction	n factors	Total	Lir	nit		
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit Margin (dBµV/m) (dB)			
	No other emissions were detected at a level greater than 20dB below limit.									

#### **\* Remark**

- 1. Actual = Reading + Ant. factor + CL (Cable loss)
- 2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. 15.31 Measurement standards.

# Operation mode: UNII-2A A. Low channel (5 260 贮)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (Mb)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 300 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 320 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμN/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

# Operation mode: UNII-2A(n\_HT20)

#### A. Low channel (5 260 11位)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit			
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)			
	No other emissions were detected at a level greater than 20dB below limit.										

#### B. Middle channel (5 300 贮)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit		
Frequency (M地)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 320 脏)

Radi	ated emissic	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2A(n\_HT40)

A. Low channel (5 270 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### B. High channel (5 310 Mb)

Radi	ated emission	ons	Ant.	Correction	n factors	Total	Lir	nit	
Frequency (M地)	Reading (dBμV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### Operation mode: UNII-2A(ac\_VHT80)

#### A. Low channel (5 290 脏)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### **\* Remark**

- 1. Actual = Reading + Ant. factor + CL (Cable loss)
- 2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. 15.31 Measurement standards.

# Operation mode: UNII-2C A. Low channel (5 500 贮)

Radi	ated emission	ons	Ant.	Correction	n factors	Total	Lir	nit	
Frequency (MHz)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit Margin (dBµV/m) (dB)		
No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 560 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 620 ₩b)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµN/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### Operation mode: UNII-2C(n\_HT20)

#### A. Low channel (5 500 Mb)

Radi	ated emissic	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 560 脏)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	mit		
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 620 账)

Radi	ated emissio	ons	Ant.	Correction	n factors	Total	Lir	nit	
Frequency (M地)	Reading (dBμV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

#### Operation mode: UNII-2C(n\_HT40)

#### A. Low channel (5 510 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 550 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 590 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### Operation mode: UNII-2C(ac\_VHT80)

#### A. Low channel (5 530 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 610 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμN/m)	Limit (dΒμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### **\* Remark**

- 1. Actual = Reading + Ant. factor + CL (Cable loss)
- 2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. 15.31 Measurement standards.

# Operation mode: UNII-3 A. Low channel (5 745 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 785 Mb)

Radi	Radiated emissions		Ant.	Correction	n factors	Total	Lir	nit	
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 805 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit		
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
No other emissions were detected at a level greater than 20dB below limit.										

# Operation mode: UNII-3(n\_HT20)

#### A. Low channel (5 745 N地)

Radi	Radiated emissions		Ant.	Correction factors		Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 785 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit		
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
No other emissions were detected at a level greater than 20dB below limit.										

#### C. High channel (5 805 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit		
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)		
No other emissions were detected at a level greater than 20dB below limit.										

# Operation mode: UNII-3(n\_HT40)

#### A. Low channel (5 745 11位)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit		
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµN/m)	Margin (dB)		
No other emissions were detected at a level greater than 20dB below limit.										

#### B. High channel (5 795 账)

Radi	Radiated emissions			Correction	n factors	Total	Lir	nit	
Frequency (M地)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### Operation mode: UNII-3(n VHT80)

#### A. Low channel (5 775 N地)

Radi	ated emissio	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

#### **\*** Remark

- 1. Actual = Reading + Ant. factor + CL (Cable loss)
- 2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. 15.31 Measurement standards.

#### 4.4.2. Spurious radiated emission

The frequency spectrum from 30 Mb to 1 000 Mb was investigated. Emission levels are not reported much lower than the limits by over 20 dB. All reading values are peak values.

To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

#### Operation mode: UNII-1 A. Low channel (5 180 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (MHz)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
166.27	10.76	PK	V	19.5	2.7	32.2	43.5	7.80
433.94	18.68	PK	Н	13.3	3.7	35.7	46.0	7.82
500.73	14.55	PK	Н	15.7	4.2	35.5	46.0	10.52
600.57	18.74	PK	V	16.6	4.5	41.5	46.0	4.52
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. Middle channel (5 220 贮)

Radi	ated emission	ons	Ant.	Correctio	n factors	CL Actual (dB $\mu N/m$ )		Limit	
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)			Limit (dBµN/m)	Margin (dB)	
165.82	10.46	PK	V	19.5	2.7	31.9	43.5	8.10	
432.62	17.48	PK	Н	13.3	3.7	34.5	46.0	9.02	
501.61	15.25	PK	Н	15.7	4.2	36.2	46.0	9.82	
602.84	18.04	PK	V	16.6	4.5	40.8	46.0	5.22	
Above 700.00	Not detected	-	-	-	-	-	-	-	

#### C. High channel (5 240 Mb)

Radi	ated emissic	ons	Ant.	Correctio	n factors	Total	Limit	
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
165.98	9.36	PK	V	19.5	2.7	30.8	43.5	9.20
432.87	18.58	PK	Н	13.3	3.7	35.6	46.0	7.92
501.45	15.85	PK	Н	15.7	4.2	36.8	46.0	9.22
602.31	18.94	PK	V	16.6	4.5	41.7	46.0	4.32
Above 700.00	Not detected	-	-	-	-	-	-	-

#### **\*** Remark

- 1. Actual = Reading + Ant. factor + CL (Cable loss)
- 2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. 15.31 Measurement standards.

Operation mode: UNII-1(n\_HT20) A. Low channel (5 180 ₩z)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	mit
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
165.82	10.46	PK	V	19.5	2.7	31.9	43.5	8.10
432.65	18.68	PK	Н	13.3	3.7	35.7	46.0	7.82
501.34	14.65	PK	Н	15.7	4.2	35.6	46.0	10.42
603.18	19.34	PK	V	16.6	4.5	42.1	46.0	3.92
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. Middle channel (5 220 贮)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµV/m)	Margin (dB)
165.89	11.06	PK	V	19.5	2.7	32.5	43.5	7.50
432.75	14.58	PK	Н	13.3	3.7	31.6	46.0	11.92
501.22	16.65	PK	Н	15.7	4.2	37.6	46.0	8.42
603.36	18.64	PK	V	16.6	4.5	41.4	46.0	4.62
Above 700.00	Not detected	-	-	-	-	-	-	-

#### C. High channel (5 240 账)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
165.71	11.46	PK	V	19.5	2.7	32.9	43.5	7.10
432.62	15.78	PK	Н	13.3	3.7	32.8	46.0	10.72
501.14	17.15	PK	Н	15.7	4.2	38.1	46.0	7.92
603.20	19.14	PK	V	16.6	4.5	41.9	46.0	4.12
Above 700.00	Not detected	-	-	-	-	-	-	-

#### **\* Remark**

- 1. Actual = Reading + Ant. factor + CL (Cable loss)
- 2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. 15.31 Measurement standards.

Operation mode: UNII-1(n\_HT40) A. Low channel (5 190 1190)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	mit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
164.18	10.76	PK	V	19.5	2.7	32.2	43.5	7.80
432.31	14.48	PK	Н	13.3	3.7	31.5	46.0	12.02
500.25	17.65	PK	Н	15.7	4.2	38.6	46.0	7.42
603.11	16.74	PK	V	16.6	4.5	39.5	46.0	6.52
Above 700.00	Not detected	-	-	-	-	-	-	-

## B. High channel (5 230 账)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
165.84	10.16	PK	V	19.5	2.7	31.6	43.5	8.40
431.52	16.78	PK	Н	13.3	3.7	33.8	46.0	9.72
499.89	16.65	PK	Н	15.7	4.2	37.6	46.0	8.42
601.25	17.44	PK	V	16.6	4.5	40.2	46.0	5.82
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-1(ac\_VHT80)

A. Low channel (5 210 Mb)

Radi	ated emissic	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
165.96	10.26	PK	V	19.5	2.7	31.7	43.5	8.30
431.46	15.48	PK	Н	13.3	3.7	32.5	46.0	11.02
500.94	15.35	PK	Н	15.7	4.2	36.3	46.0	9.72
600.16	16.34	PK	V	16.6	4.5	39.1	46.0	6.92
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2A A. Low channel (5 260 Mb)

Radi	ated emission	ons	Ant.	Correction	n factors	Total	Lir	mit
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
165.84	10.46	PK	٧	19.5	2.7	31.9	43.5	8.10
431.34	14.18	PK	Н	13.3	3.7	31.2	46.0	12.32
500.85	14.25	PK	Н	15.7	4.2	35.2	46.0	10.82
600.62	16.54	PK	٧	16.6	4.5	39.3	46.0	6.72
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. Middle channel (5 300 账)

Radi	ated emissic	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (Mb)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
165.71	9.66	PK	V	19.5	2.7	31.1	43.5	8.90
431.26	13.18	PK	Н	13.3	3.7	30.2	46.0	13.32
500.71	13.35	PK	Н	15.7	4.2	34.3	46.0	11.72
600.52	15.24	PK	V	16.6	4.5	38.0	46.0	8.02
Above 700.00	Not detected	-	-	-	-	-	-	-

#### C. High channel (5 320 Mb)

Radi	ated emission	ns	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
165.51	9.06	PK	V	19.5	2.7	30.5	43.5	9.50
431.17	12.38	PK	Н	13.3	3.7	29.4	46.0	14.12
502.26	10.55	PK	Н	15.7	4.2	31.5	46.0	14.52
603.26	12.94	PK	V	16.6	4.5	35.7	46.0	10.32
Above 700.00	Not detected	-	-	-	-	-	-	-

# Operation mode: UNII-2A(n\_HT20)

#### A. Low channel (5 260 11位)

Radi	ated emissic	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (ME)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµN/m)	Margin (dB)
165.42	8.66	PK	V	19.5	2.7	30.1	43.5	9.90
433.62	12.18	PK	Н	13.3	3.7	29.2	46.0	14.32
503.11	9.85	PK	Н	15.7	4.2	30.8	46.0	15.22
602.82	11.84	PK	V	16.6	4.5	34.6	46.0	11.42
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. Middle channel (5 300 11位)

	ated emission	,	Ant.	Correction	n factors	Total	Lir	mit
Frequency (Mb)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµN/m)	Margin (dB)
164.12	8.76	PK	٧	19.5	2.7	30.2	43.5	9.80
432.82	12.48	PK	Н	13.3	3.7	29.5	46.0	14.02
501.71	9.65	PK	Н	15.7	4.2	30.6	46.0	15.42
601.76	10.94	PK	V	16.6	4.5	33.7	46.0	12.32
Above 700.00	Not detected	-	-	-	-	-	-	-

#### C. High channel (5 320 账)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)
163.52	11.16	PK	V	19.5	2.7	32.6	43.5	7.40
432.49	12.78	PK	Н	13.3	3.7	29.8	46.0	13.72
600.26	14.15	PK	٧	16.6	4.5	35.1	46.0	10.92
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2(n\_HT40) A. Low channel (5 270 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμN/m)	Limit (dBµN/m)	Margin (dB)
163.85	9.76	PK	V	19.5	2.7	31.2	43.5	8.80
432.16	15.48	PK	Н	13.3	3.7	32.5	46.0	11.02
500.25	13.65	PK	Н	15.7	4.2	34.6	46.0	11.42
603.93	9.04	PK	V	16.6	4.5	31.8	46.0	14.22
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. High channel (5 310 账)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
165.98	9.46	PK	V	19.5	2.7	30.9	43.5	9.10
432.13	13.08	PK	Н	13.3	3.7	30.1	46.0	13.42
502.66	11.45	PK	Н	15.7	4.2	32.4	46.0	13.62
603.45	11.14	PK	V	16.6	4.5	33.9	46.0	12.12
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2A(ac\_VHT80)

A. Low channel (5 290 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	mit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
166.12	11.16	PK	V	19.5	2.7	32.6	43.5	7.40
431.82	14.08	PK	Н	13.3	3.7	31.1	46.0	12.42
500.52	11.85	PK	Н	15.7	4.2	32.8	46.0	13.22
601.46	10.14	PK	V	16.6	4.5	32.9	46.0	13.12
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2C A. Low channel (5 500 触)

Radi	ated emissic	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (ME)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
165.89	11.46	PK	V	19.5	2.7	32.9	43.5	7.10
434.79	17.18	PK	Н	13.3	3.7	34.2	46.0	9.32
600.52	15.85	PK	٧	16.6	4.5	36.8	46.0	9.22
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. Middle channel (5 560 账)

Radi	ated emissio	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
166.45	11.66	PK	V	19.5	2.7	33.1	43.5	6.90
433.52	19.78	PK	Н	13.3	3.7	36.8	46.0	6.72
601.96	16.45	PK	V	16.6	4.5	37.4	46.0	8.62
Above 700.00	Not detected	-	-	-	-	-	-	-

# C. High channel (5 620 账)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµN/m)	Margin (dB)
166.67	11.36	PK	٧	19.5	2.7	32.8	43.5	7.20
434.63	18.68	PK	Н	13.3	3.7	35.7	46.0	7.82
600.84	15.25	PK	٧	16.6	4.5	36.2	46.0	9.82
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2C(n\_HT20)

A. Low channel (5 500 11/b)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (胚)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
165.49	11.96	PK	٧	19.5	2.7	33.4	43.5	6.60
432.28	19.78	PK	Н	13.3	3.7	36.8	46.0	6.72
603.74	16.15	PK	٧	16.6	4.5	37.1	46.0	8.92
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. Middle channel (5 560 11位)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	mit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
163.78	10.26	PK	٧	19.5	2.7	31.7	43.5	8.30
432.62	16.58	PK	Н	13.3	3.7	33.6	46.0	9.92
603.74	14.85	PK	٧	16.6	4.5	35.8	46.0	10.22
Above 700.00	Not detected	-	-	-	-	-	-	-

#### C. High channel (5 620 账)

Radi	ated emissio	ed emissions		Correction factors		Total	Limit	
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
163.64	11.26	PK	V	19.5	2.7	32.7	43.5	7.30
433.85	17.48	PK	Н	13.3	3.7	34.5	46.0	9.02
601.55	15.15	PK	V	16.6	4.5	36.1	46.0	9.92
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-2C(n\_HT40)

# A. Low channel (5 510 脏)

Radiated emissions		Ant.	Correction factors		Total	Limit		
Frequency (脏)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
163.82	10.36	PK	٧	19.5	2.7	31.8	43.5	8.20
431.61	16.18	PK	Н	13.3	3.7	33.2	46.0	10.32
600.85	14.75	PK	٧	16.6	4.5	35.7	46.0	10.32
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. Middle channel (5 550 Mb)

Radi	Radiated emissions		Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµV/m)	Margin (dB)
163.17	11.06	PK	٧	19.5	2.7	32.5	43.5	7.50
431.21	16.38	PK	Н	13.3	3.7	33.4	46.0	10.12
601.85	14.85	PK	٧	16.6	4.5	35.8	46.0	10.22
Above 700.00	Not detected	-	-	-	-	-	-	-

#### C. High channel (5 590 账)

Radiated emissions		Ant.	Correction factors		Total	Limit		
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
162.82	10.36	PK	V	19.5	2.7	31.8	43.5	8.20
435.91	17.58	PK	Н	13.3	3.7	34.6	46.0	8.92
600.14	14.05	PK	٧	16.6	4.5	35.0	46.0	11.02
Above 700.00	Not detected	-	-	-	-	-	-	-

# Operation mode: UNII-2C(ac\_VHT80)

#### A. Low channel (5 530 Mb)

Radi	Radiated emissions		Ant.	Correction factors		Total	Limit	
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
164.25	10.36	PK	V	19.5	2.7	31.8	43.5	8.20
435.11	15.98	PK	Н	13.3	3.7	33.0	46.0	10.52
600.74	13.15	PK	V	16.6	4.5	34.1	46.0	11.92
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. Low channel (5 610 11位)

Radiated emissions		Ant.	Correction factors		Total	Limit		
Frequency (胚)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
164.18	10.36	PK	V	19.5	2.7	31.8	43.5	8.20
432.52	19.48	PK	Н	13.3	3.7	36.5	46.0	7.02
599.42	16.45	PK	٧	16.6	4.5	37.4	46.0	8.62
Above 700.00	Not detected	-	-	-	-	-	-	-

# Operation mode: UNII-3 A. Low channel (5 745 ) 地

Radiated emissions		Ant.	Correction factors		Total	Limit		
Frequency (Mb)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμN/m)	Limit (dBµN/m)	Margin (dB)
164.18	10.36	PK	٧	19.5	2.7	31.8	43.5	8.20
432.52	19.48	PK	Н	13.3	3.7	36.5	46.0	7.02
599.42	16.45	PK	٧	16.6	4.5	37.4	46.0	8.62
Above 700.00	Not detected	-	-	-	-	-	-	-

# B. Middle channel (5 785 Mb)

Radiated emissions		Ant.	Correction factors		Total	Limit		
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
164.82	9.36	PK	٧	19.5	2.7	30.8	43.5	9.20
432.41	18.38	PK	Н	13.3	3.7	35.4	46.0	8.12
600.16	16.25	PK	٧	16.6	4.5	37.2	46.0	8.82
Above 700.00	Not detected	-	-	-	-	-	-	-

#### C. High channel (5 805 Mb)

Radiated emissions			Ant.	Correction factors		Total	Limit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
163.71	9.96	PK	٧	19.5	2.7	31.4	43.5	8.60
430.85	19.88	PK	Н	13.3	3.7	36.9	46.0	6.62
598.46	17.15	PK	٧	16.6	4.5	38.1	46.0	7.92
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-3(n\_HT20) A. Low channel (5 745 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	mit
Frequency (胚)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
163.68	9.66	PK	٧	19.5	2.7	31.1	43.5	8.90
431.84	18.18	PK	Н	13.3	3.7	35.2	46.0	8.32
600.13	16.45	PK	٧	16.6	4.5	37.4	46.0	8.62
Above 700.00	Not detected	-	-	-	-	-	-	-

#### B. Middle channel (5 785 ) Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	mit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
164.15	9.56	PK	٧	19.5	2.7	31.0	43.5	9.00
433.12	19.78	PK	Н	13.3	3.7	36.8	46.0	6.72
601.82	15.45	PK	٧	16.6	4.5	36.4	46.0	9.62
Above 700.00	Not detected	-	-	-	-	-	-	-

## C. High channel (5 805 ) 版

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit
Frequency (M址)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµV/m)	Margin (dB)
164.35	10.66	PK	٧	19.5	2.7	32.1	43.5	7.90
434.25	18.78	PK	Н	13.3	3.7	35.8	46.0	7.72
602.94	15.95	PK	٧	16.6	4.5	36.9	46.0	9.12
Above 700.00	Not detected	-	-	-	-	-	-	-

Operation mode: UNII-3(n\_HT40) A. Low channel (5 755 Mb)

Radi	ated emissic	ons	Ant.	Correctio	n factors	Total	Lir	mit
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµN/m)	Margin (dB)
164.48	9.96	PK	٧	19.5	2.7	31.4	43.5	8.60
435.26	19.88	PK	Н	13.3	3.7	36.9	46.0	6.62
600.84	14.75	PK	٧	16.6	4.5	35.7	46.0	10.32
Above 700.00	Not detected	-	-	-	-	-	-	-

## B. Middle channel (5 795 赋b)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	mit
Frequency (M址)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµN/m)	Limit (dBµN/m)	Margin (dB)
163.11	9.46	PK	٧	19.5	2.7	30.9	43.5	9.10
433.85	20.38	PK	Н	13.3	3.7	37.4	46.0	6.12
603.13	15.15	PK	٧	16.6	4.5	36.1	46.0	9.92
Above 700.00	Not detected	-	-	-	-	-	-	-

# Operation mode: UNII-3(ac\_VHT80)

# A. Low channel (5 775 吨)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµN/m)	Margin (dB)
164.23	8.96	PK	V	19.5	2.7	30.4	43.5	9.60
431.81	18.98	PK	Н	13.3	3.7	36.0	46.0	7.52
601.44	14.65	PK	٧	16.6	4.5	35.6	46.0	10.42
Above 700.00	Not detected	-	-	-	-	-	-	-

#### 4.4.3. Spurious radiated emission

The frequency spectrum above 1 000 Mbwas investigated. Emission levels are not reported much lower thanthe limits by over 20 dB.

To get a maximum emission levels from the EUT, the EUT was moved throughout the XY, XZ, and YZ planes.

# Operation mode: UNII-1 A. Low channel (5 180 Mb)

Radi	ated emissic	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

#### B. Middle channel (5 220 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 240 Mb)

Radi	ated emission	ns	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

## Operation mode: UNII-1\_(n\_HT20)

#### A. Low channel (5 180 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

#### B. Middle channel (5 220 11位)

Radi	ated emissio	ns	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (M址)	Reading (dBμV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

## C. High channel (5 240 账)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

# Operation mode: UNII-1\_(n\_HT40)

A. Low channel (5 190 Mb)

Radi	ated emission	ons	Ant.	Correction	n factors	Total	Lir	nit	
Frequency (MHz)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

## B. High channel (5 230 账)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (M地)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

# Operation mode: UNII-1\_(VHT80)

#### A. Low channel (5 210 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	mit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

# Operation mode: UNII-2A A. Low channel (5 260 贮)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

#### B. Middle channel (5 300 11位)

Radi	ated emission	ons	Ant.	Correction	n factors	Total	Lir	nit	
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Pol. Ant. factor CL (dB/m) (dB)		Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

## C. High channel (5 320 账)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµN/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### Operation mode: UNII-2A\_(n\_HT20)

## A. Low channel (5 260 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 300 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	mit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

## C. High channel (5 320 账)

Radi	ated emission	ns	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

Operation mode: UNII-2A\_(n\_HT40)

A. Low channel (5 270 11/b)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

## B. High channel (5 310 账)

Radi	ated emission	ons	Ant.	Correction	n factors	Total	Lir	nit	
Frequency (M地)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

Operation mode: UNII-2A\_(VHT80)

A. Low channel (5 290 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	mit
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Pol. Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

# Operation mode: UNII-2C A. Low channel (5 500 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 560 11位)

Radiated emissions			Ant.	Correctio	n factors	Total	Lir	nit
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

# C. High channel (5 620 账)

Radi	Radiated emissions			Correction	n factors	Total	Lir	nit	
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

# Operation mode: UNII-2C\_(n\_HT20)

A. Low channel (5 500 脏)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Pol. Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 560 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (ME)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 620 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµN/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

## Operation mode: UNII-2C\_(n\_HT40)

A. Low channel (5 510 Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	mit	
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 550 账)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (M地)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

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# C. High channel (5 590 账)

Radi	Radiated emissions			Correctio	n factors	Total	Lir	nit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dΒμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

# Operation mode: UNII-2C\_(VHT80)

## A. Low channel (5 530 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

#### A. Low channel (5 610 脏)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

## Operation mode: UNII-3 A. Low channel (5 745 Mb)

Radi	ated emission	ons	Ant.	Correction	n factors	Total	Lir	nit		
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### B. Middle channel (5 785 账)

Radi	ated emissio	ns	Ant.	Correctio	n factors	Total	Lir	nit
uency 比)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
No other emissions were detected at a level greater than 20dB below limit.								

## C. High channel (5 805 账)

Radi	ated emission	ns	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBµN/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

# Operation mode: UNII-3(n\_HT20)

## A. Low channel (5 745 ) 他)

Radi	ated emission	ons	Ant.	Correction factors		Total	Lir	nit	
Frequency (MHz)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)	
No other emissions were detected at a level greater than 20dB below limit.									

## B. Middle channel (5 785 账)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### C. High channel (5 805 账)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor CL (dB/m) (dB)		Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

Operation mode: UNII-3\_(n\_HT40)

A. Low channel (5 755 ) Mb)

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit		
Frequency (MHz)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### B. High channel (5 795 账)

Radi	ated emission	ons	Ant.	Correction	n factors	Total	Lir	nit		
Frequency (M地)	Reading (dBμV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)		
	No other emissions were detected at a level greater than 20dB below limit.									

#### Operation mode: UNII-3\_(VHT80)

#### 

Radi	ated emission	ons	Ant.	Correctio	n factors	Total	Lir	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	CL (dB)	Actual (dBμV/m)	Limit (dΒμV/m)	Margin (dB)	
	No other emissions were detected at a level greater than 20dB below limit.								

#### **\*** Remark

- 1. Actual = Reading + Ant. factor + CL (Cable loss)
- 2. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 4. 15.31 Measurement standards.

The amplitude of spurious emissions from intentional radiators and emissions from unintentional radiators which are attenuated more than 20 dB below the permissible value need not be reported unless specifically required elsewhere in this part.

#### 4.4.4. Restricted Band

Operation mode: UNII-1 \* channel(5 180 Mb)

Radi	ated emissi	ons	Ant.	Correctio	n factors	Total	Lim	nit
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 125.60	44.80	Peak	Н	32.89	33.72	43.97	74.00	30.03
5 086.60	45.36	Peak	V	32.89	33.72	44.53	74.00	29.47

## Operation mode: UNII-1(n\_HT20)

\* channel(5 180 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lin	nit
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 358.08	39.14	Peak	Н	33.86	32.90	40.10	74.00	33.90
5 389.12	40.20	Peak	V	33.86	32.90	41.16	74.00	32.84

# Operation mode: UNII-1(n\_HT40)

\* channel(5 190 Mb)

Radi	iated emissi	ons	Ant.	Correctio	n factors	Total	Lin	nit
Frequency (MHz)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
4 822.00	39.61	Peak	Н	32.89	33.72	38.78	74.00	35.22
4 799.10	40.45	Peak	V	32.89	33.72	39.62	74.00	34.38

## **Operation mode: UNII-1(VHT80)**

\* channel(5 210 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lin	nit
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5 013.60	40.80	Peak	Н	32.89	33.72	39.97	74.00	34.03
4 848.60	42.06	Peak	V	32.89	33.72	41.23	74.00	32.77

# Operation mode: UNII-2A

\* channel(5 320 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lin	nit
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5 443.18	40.10	Peak	Н	33.86	32.90	41.06	74.00	32.94
5 416.26	39.71	Peak	V	33.86	32.90	40.67	74.00	33.33

# Operation mode: UNII-2A(n\_HT20)

\* channel(5 320 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lim	nit
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBμV/m)	Margin (dB)
5 388.09	40.43	Peak	Н	33.86	32.90	41.39	74.00	32.61
5 372.58	39.23	Peak	V	33.86	32.90	40.19	74.00	33.81

#### Operation mode: UNII-2A(n\_HT40)

\* channel(5 310 Mb)

Radi	Radiated emissions		Radiated emissions Ant. Correction factors		Total	Lim	nit	
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 363.79	40.26	Peak	Н	33.86	32.90	41.22	74.00	32.78
5 382.08	40.09	Peak	V	33.86	32.90	41.05	74.00	32.95

## Operation mode: UNII-2A(VHT80)

\* channel(5 290 Mb)

Radi	Radiated emissions		Ant.	Correction factors		Total	Limit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 366.61	39.90	Peak	Н	33.86	32.90	40.86	74.00	33.14
5 403.60	39.96	Peak	V	33.86	32.90	40.92	74.00	33.08

Operation mode: UNII-2C

\* channel(5 500 Mb)

Radi	Radiated emissions		Ant.	Correction factors		Total	Limit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 414.12	41.77	Peak	Н	33.86	32.90	42.73	74.00	31.27
5 385.41	40.45	Peak	V	33.86	32.90	41.41	74.00	32.59

## Operation mode: UNII-2C(n\_HT20)

\* channel(5 500 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lim	nit
Frequency (脈)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dΒμN/m)	Margin (dB)
5 464.03	40.59	Peak	Н	33.86	32.90	41.55	74.00	32.45
5 539.86	38.23	Peak	V	33.86	32.90	39.19	74.00	34.81

#### Operation mode: UNII-2C(n\_HT40)

\* channel(5 510 **版**)

Radi	Radiated emissions			Correction factors		Total	Limit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 448.29	39.46	Peak	Н	33.86	32.90	40.42	74.00	33.58
5 389.98	39.99	Peak	V	33.86	32.90	40.95	74.00	33.05

## Operation mode: UNII-2C(VHT80)

\* channel(5 530 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lin	nit
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 421.35	39.88	Peak	Н	33.86	32.90	40.84	74.00	33.16
5 409.80	40.18	Peak	V	33.86	32.90	41.14	74.00	32.86

# Operation mode: UNII-3 \* Low channel(5 745 Mb)

Radi	Radiated emissions			Correction factors		Total	Limit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 462.83	38.98	Peak	Н	33.86	32.90	39.94	74.00	34.06
5 418.87	40.18	Peak	V	33.86	32.90	41.14	74.00	32.86

## \* High channel(5 805 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lin	nit
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 863.74	38.88	Peak	Н	34.53	32.11	41.30	74.00	32.70
5 858.10	39.06	Peak	V	34.53	32.11	41.48	74.00	32.52

# Operation mode: UNII-3(n\_HT20)

\* Low channel(5 745 Nb)

Radiated emissions			Ant.	Correctio	n factors	Total	Lin	nit
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5 464.03	40.59	Peak	Н	33.86	32.90	41.55	74.00	32.45
5 539.86	38.23	Peak	V	33.86	32.90	39.19	74.00	34.81

# \* High channel(5 805 Mb)

Radi	Radiated emissions			Correctio	n factors	Total	Lim	nit
Frequency (胚)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dΒμN/m)	Margin (dB)
5 879.08	40.30	Peak	Н	34.53	32.11	42.72	74.00	31.28
5 886.41	39.56	Peak	V	34.53	32.11	41.98	74.00	32.02

# Operation mode: UNII-3(n\_HT40)

# \* Low channel(5 755 Mb)

Radiated emissions		Ant.	Correction factors		Total Lim		nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5 561.87	39.13	Peak	Н	33.86	32.90	40.09	74.00	33.91
5 623.99	38.34	Peak	V	33.86	32.90	39.30	74.00	34.70

#### \* High channel(5 795 Mb)

Radiated emissions		Ant.	Correction factors		Total	Limit		
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 866.30	39.30	Peak	Н	34.53	32.11	41.72	74.00	32.28
5 933.50	38.69	Peak	V	34.53	32.11	41.11	74.00	32.89

## Operation mode: UNII-3(VHT80)

# \* channel(5 775 **M**b)

Radiated emissions		Ant.	Correctio	n factors	Total	Lim	nit	
Frequency (Mb)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBμV/m)	Limit (dBµV/m)	Margin (dB)
5 667.20	39.88	Peak	Н	33.86	32.90	40.84	74.00	33.16
5 465.40	40.35	Peak	V	33.86	32.90	41.31	74.00	32.69

## \* channel(5 775 Mb)

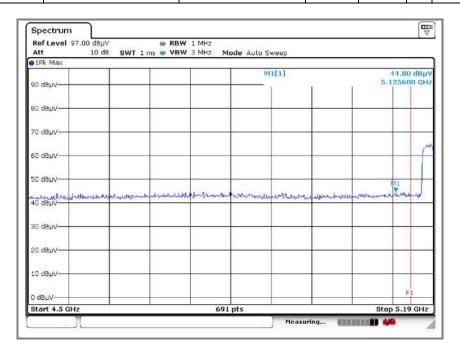
Radiated emissions		Ant.	Correction factors		Total Limi		nit	
Frequency (MHz)	Reading (dBµV)	Detector mode	Pol.	Ant. factor (dB/m)	Amp+CL (dB)	Actual (dBµV/m)	Limit (dBµV/m)	Margin (dB)
5 867.85	40.19	Peak	Н	34.53	32.11	42.61	74.00	31.39
5 863.81	39.95	Peak	V	34.53	32.11	42.37	74.00	31.63

# 4.4.5. Spurious RF emissions: Plot of spurious RF emission

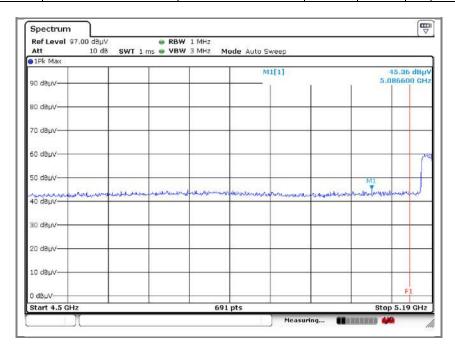
#### Band-edge data

802.11a

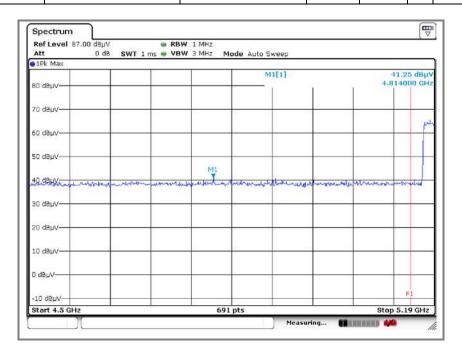
Operation mode: U-NII-1 Frequency(Mb): 5 180 ANT: H Detector: Peak



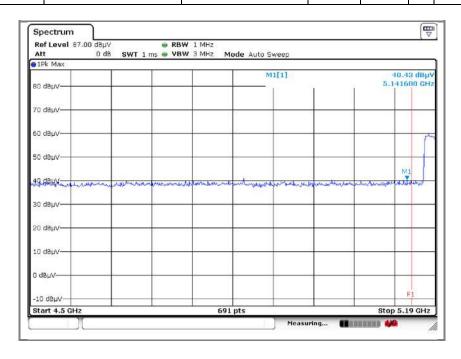




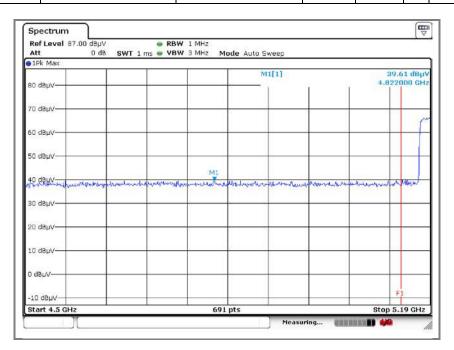
Operation mode: U-NII-1\_nHT20 Frequency() 5 180 ANT: H Detector: Peak



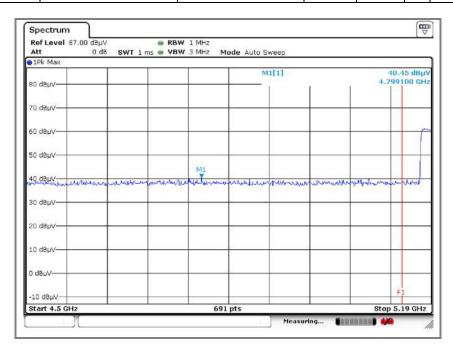
Operation mode: U-NII-1\_nHT20 Frequency() 5 180 ANT: V Detector: Peak



Operation mode: U-NII-1\_nHT40 Frequency(Mb): 5 190 ANT: H Detector: Peak

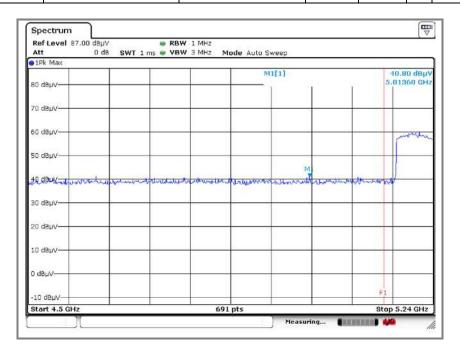


Operation mode: U-NII-1\_nHT40 Frequency(Mb): 5 190 ANT: V Detector: Peak

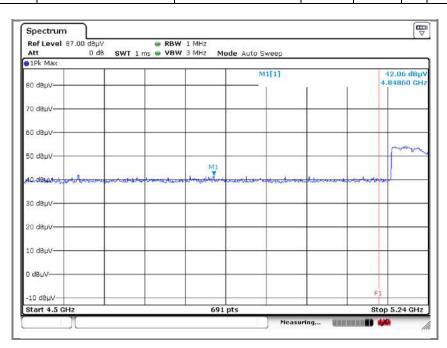


#### 802.11ac80

Operation mode: U-NII-1\_VHT80 Frequency(账): 5 210 ANT: H Detector: Peak

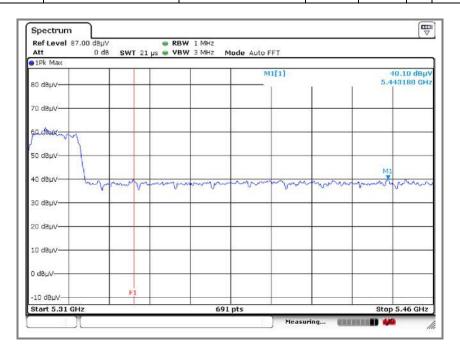


Operation mode: U-NII-1\_VHT80 Frequency(Nb): 5 210 ANT: V Detector: Peak

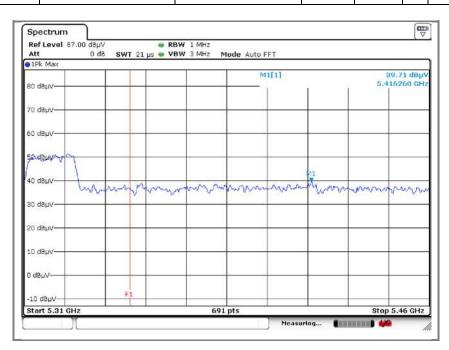


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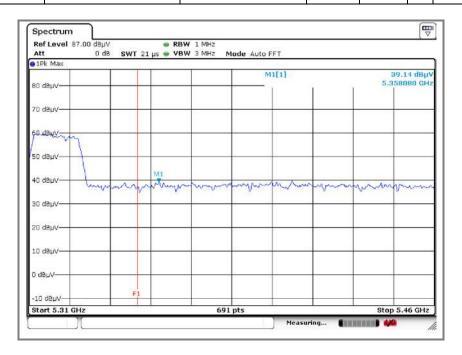
Operation mode: U-NII-2A Frequency() 5 320 ANT: H Detector: Peak



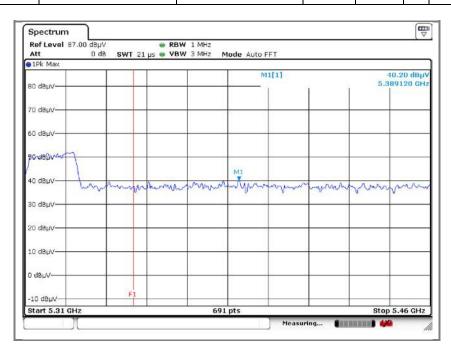
Operation mode: U-NII-2A Frequency(Mb): 5 320 ANT: V Detector: Peak



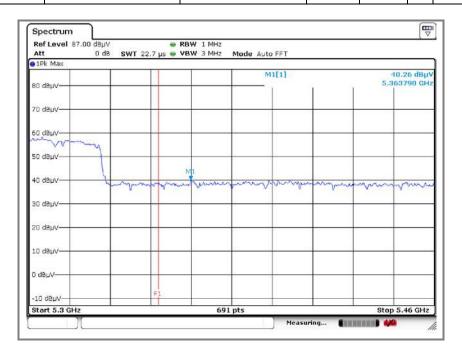
Operation mode: U-NII-2A\_nHT20 Frequency() 5 320 ANT: H Detector: Peak



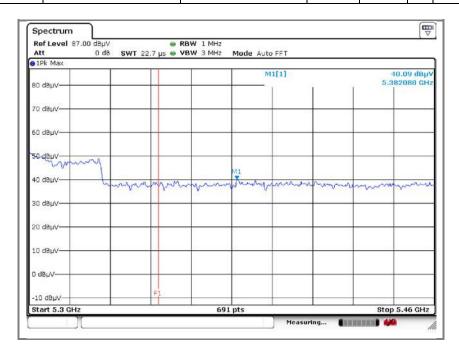
Operation mode: U-NII-2A\_nHT20 Frequency(Mb): 5 320 ANT: V Detector: Peak



Operation mode: U-NII-2A\_nHT40 Frequency(账): 5 310 ANT: H Detector: Peak

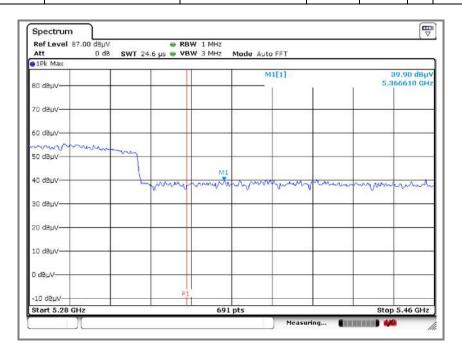


Operation mode: U-NII-2A\_nHT40 Frequency(Nb): 5 310 ANT: V Detector: Peak

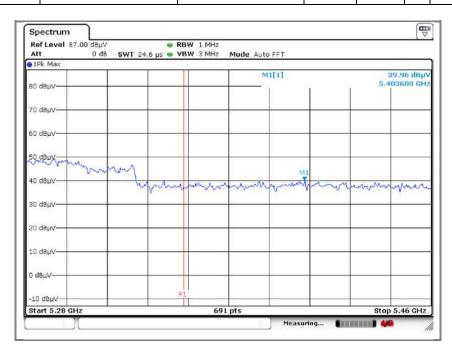


#### 802.11ac80

Operation mode: U-NII-2A\_VHT80 Frequency() 5 290 ANT: H Detector: Peak

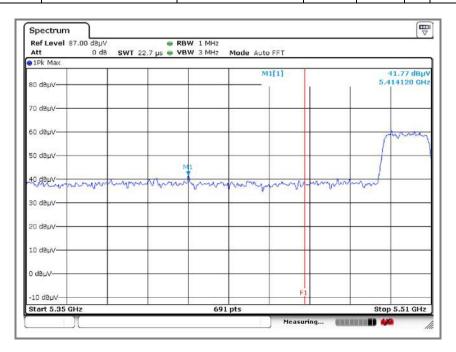


Operation mode: U-NII-2A\_VHT80 Frequency() 5 290 ANT: V Detector: Peak

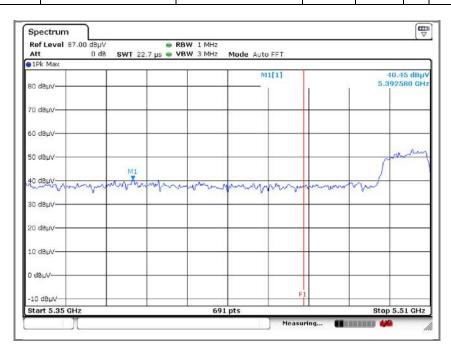


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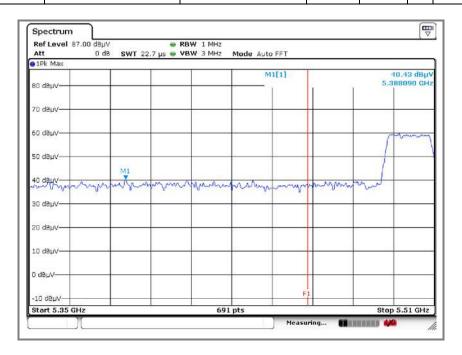
Operation mode: U-NII-2C Frequency(账): 5 500 ANT: H Detector: Peak



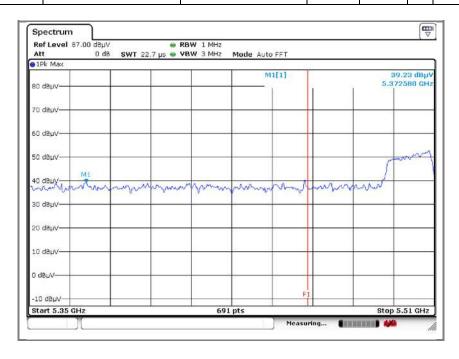
Operation mode: U-NII-2C Frequency(Mb): 5 500 ANT: V Detector: Peak



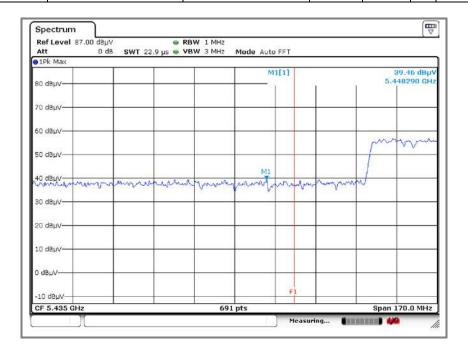
Operation mode: U-NII-2C\_nHT20 Frequency() 5 500 ANT: H Detector: Peak



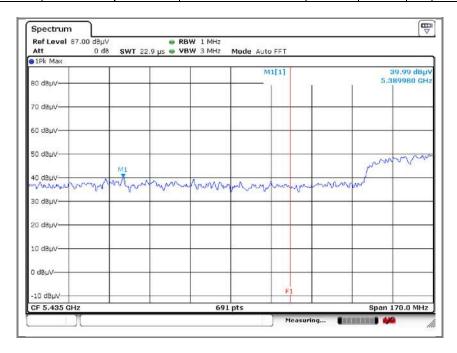
Operation mode: U-NII-2C\_nHT20 Frequency() 5 500 ANT: V Detector: Peak



Operation mode: U-NII-2C\_nHT40 Frequency() 5 510 ANT: H Detector: Peak

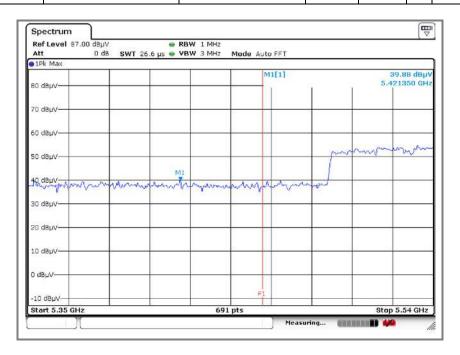


Operation mode:	U-NII-2C, which is not consistent with the corresponding test plot	Frequency(쌘):	5 510	ANT:	v	Detector:	Peak	
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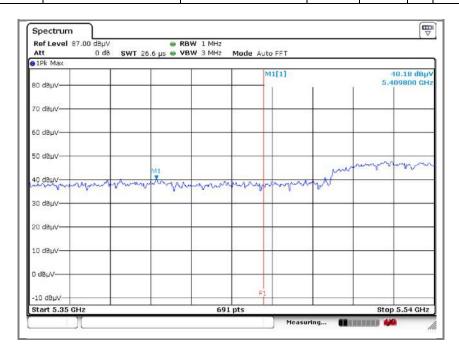


#### 802.11ac80

Operation mode: U-NII-2C\_VHT80 Frequency() 5 530 ANT: H Detector: Peak

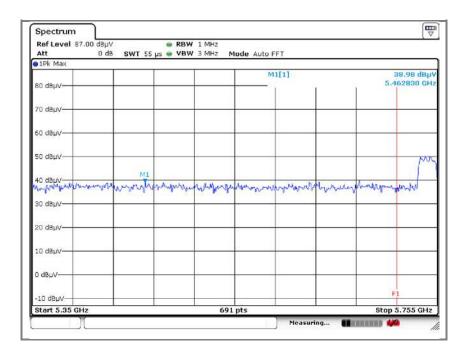


Operation mode: U-NII-2C\_VHT80 Frequency() 5 530 ANT: V Detector: Peak

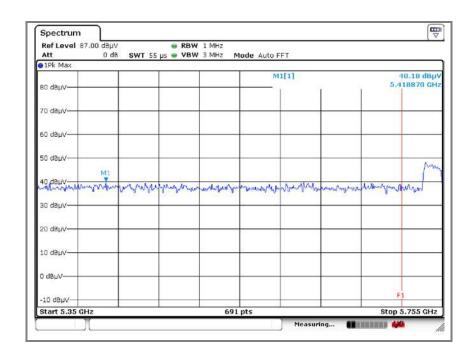


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Operation mode: U-NII-3 Frequency(贮): 5 745 ANT: H Detector: Peak

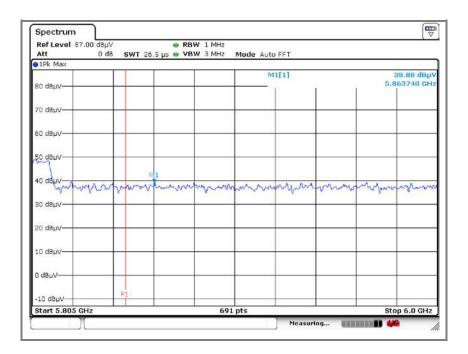


Operation mode: U-NII-3 Frequency(Mb): 5 745 ANT: V Detector: Peak

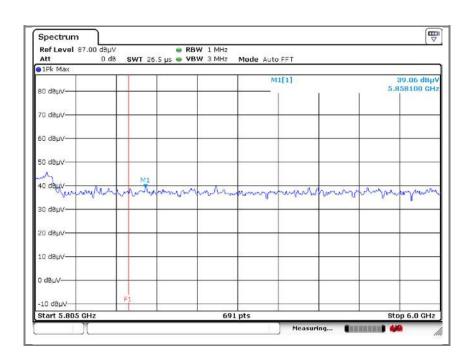


802.11a

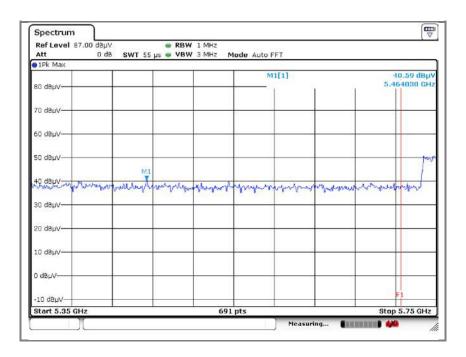
Operation mode: U-NII-3	Frequency(Mb): 5 805	ANT: H	Detector:	Peak
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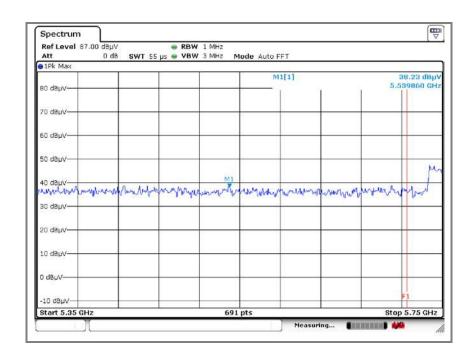
Operation mode: U-NII-3 Frequency() 5 805 ANT: V Detector: Peak



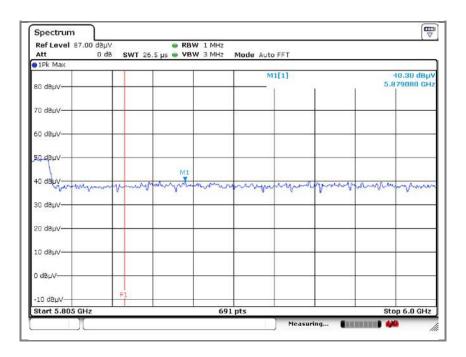
Operation mode: U-NII-3\_nHT20 Frequency() 5 745 ANT: H Detector: Peak



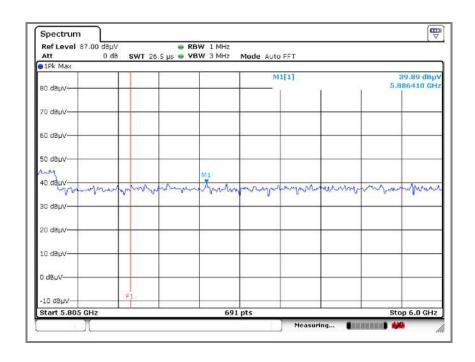
Operation mode: U-NII-3\_nHT20 Frequency(Mb): 5 745 ANT: V Detector: Peak



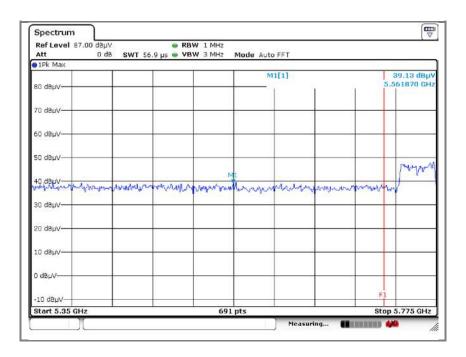
Operation mode: U-NII-3\_nHT20 Frequency() 5 805 ANT: H Detector: Peak



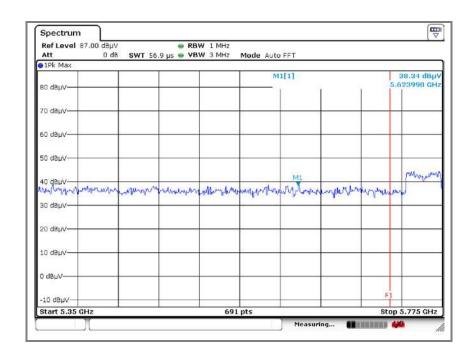
Operation mode: U-NII-3\_nHT20 Frequency(Mb): 5 805 ANT: V Detector: Peak



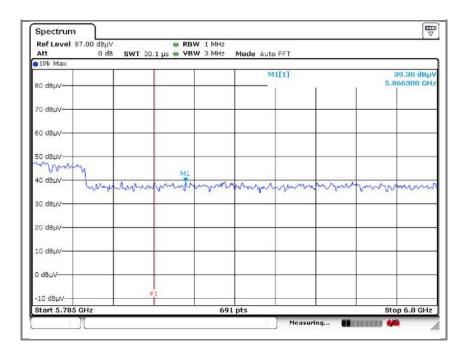
Operation mode: U-NII-3\_nHT40 Frequency() 5 795 ANT: H Detector: Peak



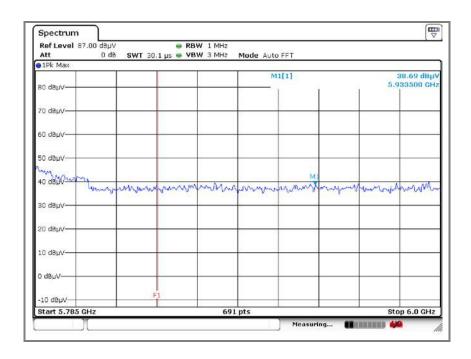
Operation mode: U-NII-3\_nHT40 Frequency(Mb): 5 795 ANT: V Detector: Peak



Operation mode: U-NII-3\_nHT40 Frequency() 5 795 ANT: H Detector: Peak

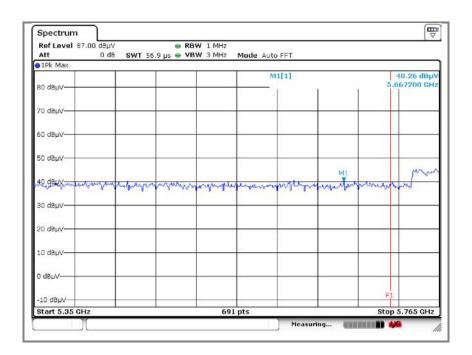


Operation mode: U-NII-3\_nHT40 Frequency(Mb): 5 795 ANT: V Detector: Peak

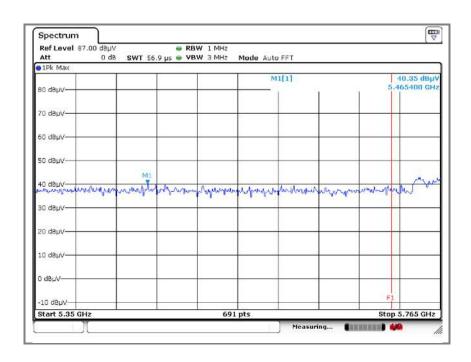


#### 802.11ac80

Operation mode: U-NII-3\_VHT80 Frequency(账): 5 775 ANT: H Detector: Peak

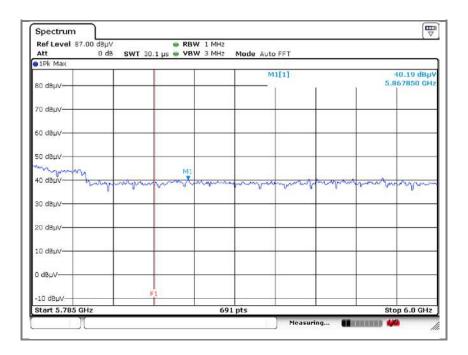


Operation mode: U-NII-3\_VHT80 Frequency(Mb): 5 775 ANT: V Detector: Peak

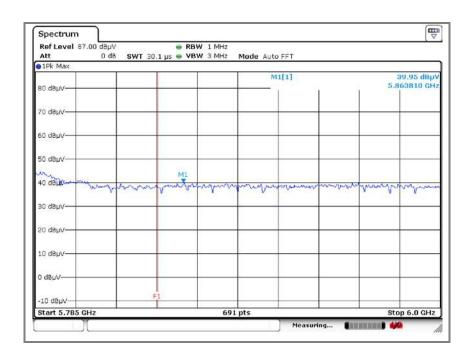


802.11ac80

Operation mode: U-NII-3\_VHT80 Frequency() 5 775 ANT: H Detector: Peak



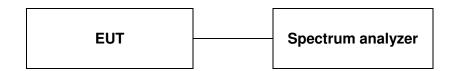
Operation mode: U-NII-3\_VHT80 Frequency(Mb): 5 775 ANT: V Detector: Peak





#### 5. 26 dB and 99% bandwidth

#### 5.1. Test setup



#### 5.2. Limit

Not applicable

#### **5.3. Test procedure (KDB 789033)**

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

2. Set the spectrum analyzer as,

RBW = approximately 1% of the emission bandwidth

VBW > RBW

Detector = Peak

Trace mode = max hold

3. Repeat until all the rest channels are investigated.

#### 5.4. Test results

Ambient temperature: <u>22°C</u> Relative humidity: <u>45% R.H.</u>

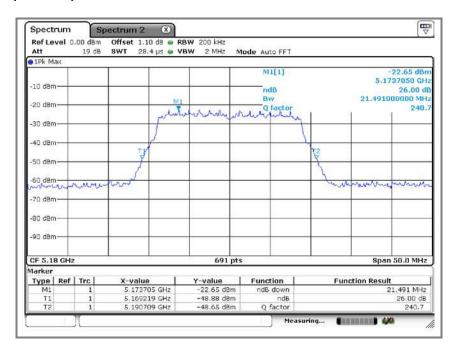
-Next Page

Mode	Frequency(Mb)	26 dB bandwidth(Mb)	99% bandwidth(Mb)
U-NII-1	5 180	21.49	17.87
	5 220	21.85	17.95
	5 240	21.64	17.87
U-NII-1(n_HT20)	5 180	21.85	17.87
	5 220	21.49	17.95
	5 240	21.78	18.02
U-NII-1(n_HT40)	5 190	39.59	36.12
	5 230	39.59	36.24
U-NII-1(VHT80)	5 210	82.89	75.95
U-NII-2A	5 260	21.64	17.95
	5 300	21.56	17.95
	5 320	21.64	18.02
	5 260	21.78	17.87
U-NII-2A(n_HT20)	5 300	21.56	17.73
	5 320	21.78	17.95
LI NIII OA/o, LIT40)	5 270	39.83	36.12
U-NII-2A(n_HT40)	5 310	39.59	36.12
U-NII-2A(VHT80)	5 290	81.74	75.72
U-NII-2C	5 500	21.85	17.95
	5 560	21.78	17.87
	5 620	21.49	18.02
U-NII-2C(n_HT20)	5 500	21.71	17.80
	5 560	21.42	18.02
	5 620	21.71	17.95
U-NII-2C(n_HT40)	5 510	39.59	36.24
	5 550	39.71	36.24
	5 590	39.36	36.12
U-NII-2C(VHT80)	5 530	81.27	75.72
	5 610	82.66	75.95

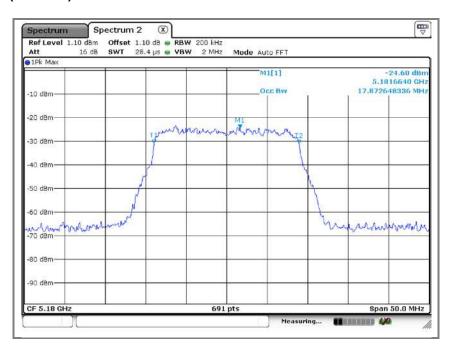
Mode	Frequency( <b>M</b> b)	26 dB bandwidth(Mb)	99% bandwidth(脈)
U-NII-3	5 745	21.42	17.87
	5 785	21.71	17.73
	5 805	22.07	18.02
U-NII-3(n_HT20)	5 745	21.56	18.02
	5 785	21.35	17.80
	5 805	21.56	18.02
U-NII-3(n_HT40)	5 755	39.71	36.24
	5 795	39.71	36.24
U-NII-3(VHT80)	5 775	82.43	75.95

**Operation mode: U-NII-1** 

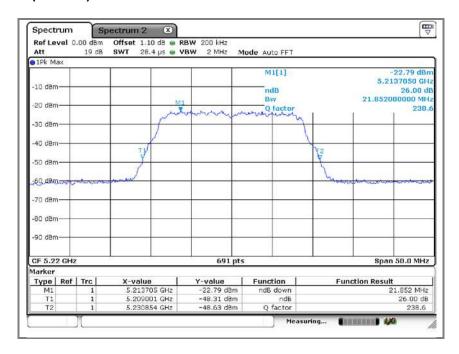
#### A. Low channel(5180 Mb)- 26 dB bandwidth



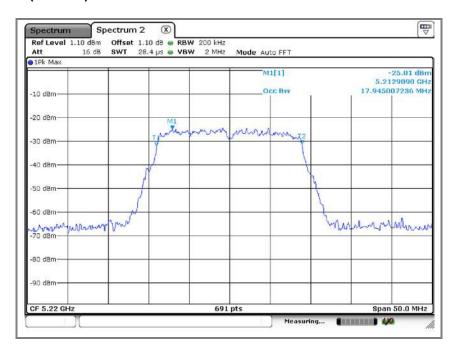
# A. Low channel(5180 Mb)- 99% bandwidth



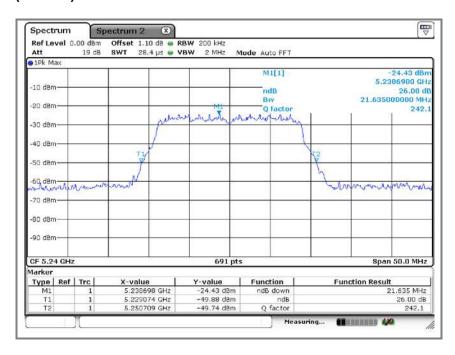
# B. Middle channel(5220 Mb)- 26 dB bandwidth



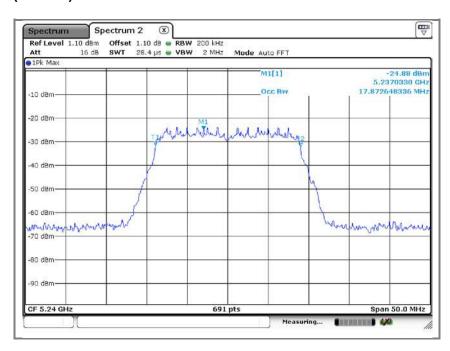
# B. Middle channel(5220 Mb)- 99% bandwidth



# C. High channel(5240 Mb)- 26 dB bandwidth

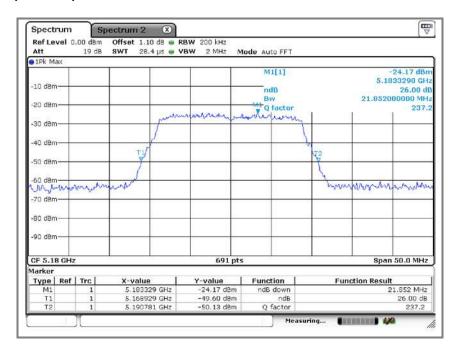


# 

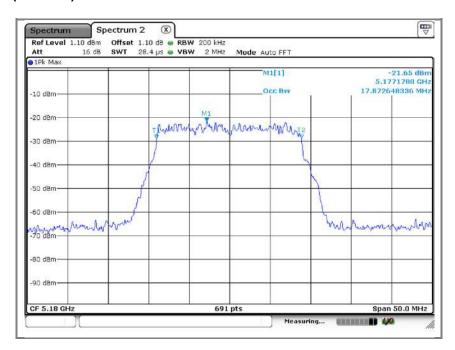


Operation mode: U-NII-1(n\_HT20)

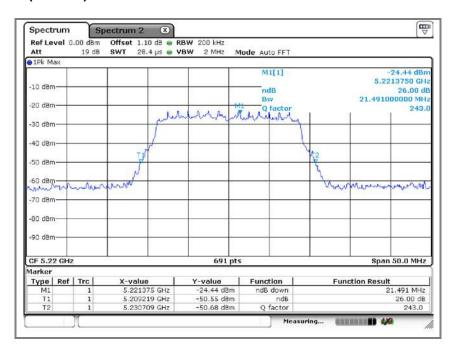
#### A. Low channel(5180 Mb)- 26 dB bandwidth



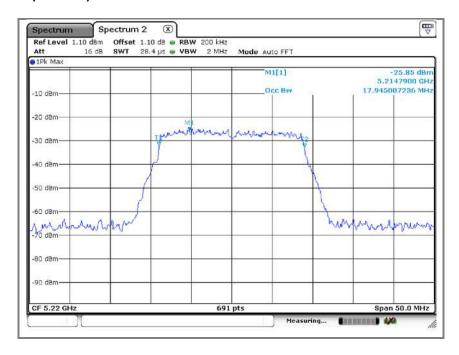
# A. Low channel(5180 账)- 99% bandwidth



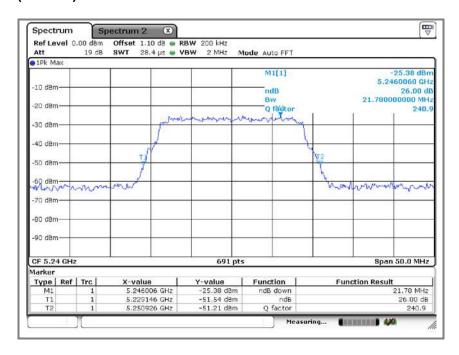
# B. Middle channel(5220 吨)- 26 dB bandwidth



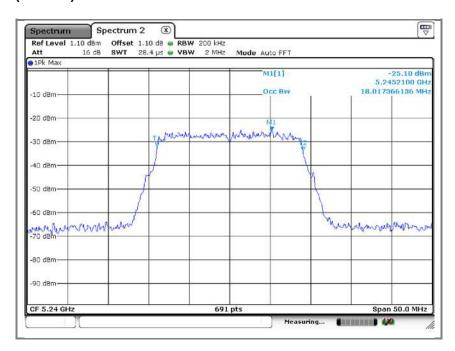
#### B. Middle channel(5220 Mb)-99% bandwidth



# C. High channel(5240 Mb)- 26 dB bandwidth

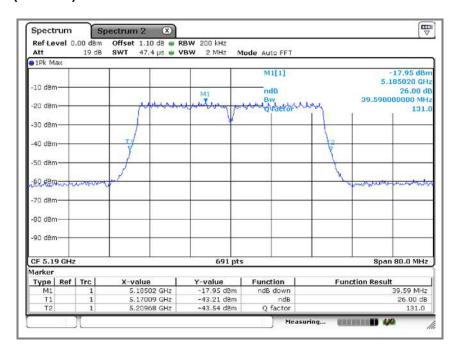


# 

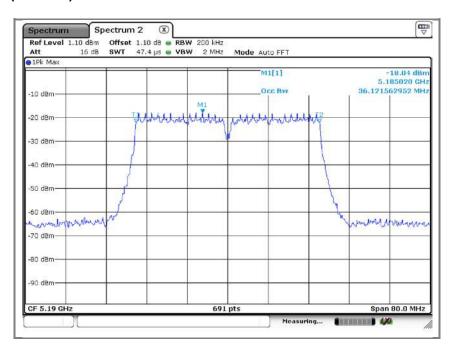


Operation mode: U-NII-1(n\_HT40)

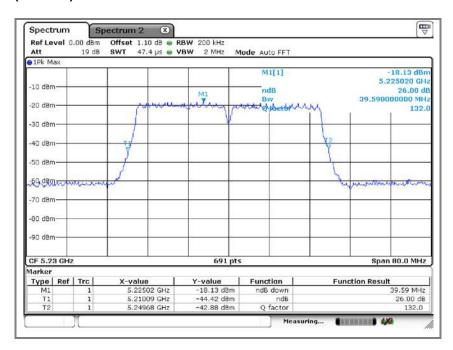
#### A. Low channel(5190 Mb)- 26 dB bandwidth



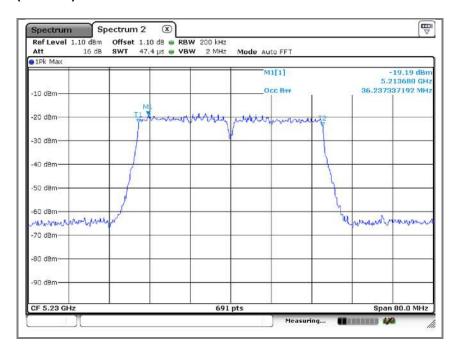
# A. Low channel(5190 账)- 99% bandwidth



# B. High channel(5230 Mb)- 26 dB bandwidth

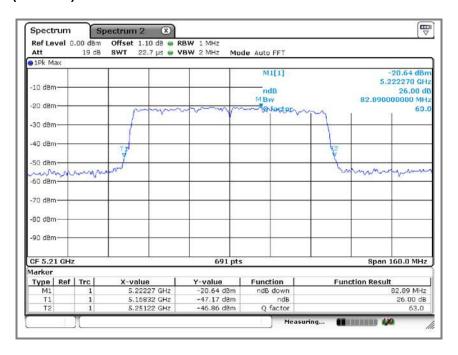


# B. High channel(5230 Mb)- 99% bandwidth



Operation mode: U-NII-1(VHT80)

# A. Low channel (5210 Mb) - 26 dB bandwidth



# A. Low channel(5210 账)- 99% bandwidth

