



FCC PART 15 SUBPART E

FCC PART 15.407

TEST REPORT

FCC ID:2BUI3-YOUDU

Report No: CTSL2521220067ER03

Product Name: Vehicle navigation equipment

Main Test Model: YOUDU

Series Models: YOUDU5, YOUDU6, YOUDU7, YOUDU8, YOUDU9, YOUDU-X, YOUDU-Ultra, HPD5, HPD6, HPD7, HPD-8, HPD9, HPD-X, HPD-Ultra(The differences between models are limited to the front trim panel, housing color, knob and button colors, speaker color, and light ring configuration, No impact on electrical performance and RF circuits)

Applicant: HOPOD CO.,LIMILTD

EXECUTIVE SUMMARY

A sample of this product was tested and found to be in compliance with CFR 47 FCC Part15E section 15.407.

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CTSL Testing (Dongguan) Co., Ltd.

Main company address: Building1, Houjie Road Houjie Town,Guangdong Province,
Dongguan City P.R.C.

Test Report

FCC ID:2BUI3-YOUDU

Applicant Name	HOPOD CO.,LIMITD				
Applicant Address	Room 602, 6th Floor, Qiru Commercial Building, 2C Argyle Street, Mong Kok, Kowloon, Hong Kong, China				
Manufacturer Name	Dongguan Youdu Electronic Technology Co., Ltd.				
Manufacturer Address	Room 501, Building 8, No.330, Futong Road, Dalang Town, Dongguan City, Guangdong Province, China				
Trade Mark	--				
Product name	Vehicle navigation equipment				
Main Test Model	YOUDU				
Series Models	See the first page of the report				
Standard	CFR 47 FCC Part15E section 15.407				
Test Location	ISO/IEC 17025 by ILAC-MRA is A2LA 7556.01 CTSL Testing (Dongguan) Co., Ltd. Room 112, Building 1, No. 15, Jiaoyuansongshan Hetian Village, Houjie Town Dongguan City, Guangdong, People's Republic of China				
Receipt Date	2025.11.26	Test period	2025.11.28-2026.1.15	Issue Date	2026.1.15
Conclusion	The equipment under test was found to be compliance with the requirements of the standards applied.				
Performs Testing:	Ethan Zhao				
Test Report Reviewer:	Steve Qin				
Test Report Authorizer:	Alan Li				

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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	2026.1.15	CTSL2521220067ER03	ALL	Initial Issue

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

Test Item	Test Requirement	Result
Antenna Requirement	47 CFR Part 15 Subpart C Section 15.203	PASS
AC Power Line Conducted Emission	47 CFR Part 15 Subpart E Section 15.407 (b)(9)	N/A
Duty Cycle	47 CFR Part 15 Subpart E Section 15.407	PASS
Maximum Conducted Output Power	47 CFR Part 15 Subpart E Section 15.407(a)	PASS
26dB emission bandwidth	47 CFR Part 15 Subpart E Section 15.407(a)	PASS
99%Occupied bandwidth	\	PASS
6dB emission bandwidth	47 CFR Part 15 Subpart E Section 15.407(e)	N/A
Maximum Power Spectral Density	47 CFR Part 15 Subpart E Section 15.407(a)	PASS
Frequency stability	47 CFR Part 15 Subpart E Section 15.407(g)	PASS
Radiated Emissions	47 CFR Part 15 Subpart E Section 15.407(b)	PASS
Radiated Emissions which fall in the restricted bands	47 CFR Part 15 Subpart E Section 15.407(b)	PASS
Remark:		

1.1 TEST FACTORY**EMC Lab :**

A2LA Certificate Number: 7556.01;
CTSL Testing (Dongguan) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.
The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

FCC-Registration No.: 0037614732;
Test Firm Registration Number:750639;
CTSL Testing (Dongguan) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

Industry Canada Registration Number. Is: 34801;
CAB identifier: CN0192;
CTSL Testing (Dongguan) Co., Ltd. The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

Name of Firm : CTSL Testing (Dongguan) Co.,Ltd.**EMC test location/satellite location:**

Room 112, Building 1, No. 15, Jiaoyuansongshan Hetian Village, Houjie Town Dongguan City, Guangdong, People's Republic of China City, Guangdong, China



1.2 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	RF output power, conducted	± 0.71 dB
2	Unwanted Emissions, conducted	± 2.988 dB
3	Conducted Emission (9KHz-150KHz)	± 4.13 dB
4	Conducted Emission (150KHz-30MHz)	± 4.74 dB
5	All emissions,radiated(<1G) 9KHz-30MHz	± 5.2 dB
6	All emissions,radiated(<1G) 30MHz-1000MHz	± 5.2 dB
7	All emissions,radiated 1GHz -18GHz	± 4.66 dB
8	All emissions,radiated 18GHz -40GHz	± 4.31 dB
9	PSD	± 1.24 dB
10	Occupied bandwidth	± 0.3 dB

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Vehicle navigation equipment
Trade Name	N/A
Model Name	YOU DU
Series Model	See the first page of the report
Model Difference	The differences between models are limited to the front trim panel, housing color, knob and button colors, speaker color, and light ring configuration, No impact on electrical performance and RF circuits
Channel List	Please refer to the Note 2.
Operation frequency	IEEE 802.11a/n/ac(HT20),n/ac(HT40) U-NII-1 5150MHz ~5250MHZ
Number of channel	5150MHz ~5250MHZ (7CH)
Modulation:	BRSK/QPSK/16QAM/64QAM/256QAM
Power supply	DC 12V 5A
Battery	N/A
Hardware version number	V1.0
Software version number	V1.0
Sample type	mobile device
Connecting I/O Port(s)	Please refer to the User's Manual

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

U-NII-1 (5.15-5.25GHz)			
channel	Frequency(MHz)	channel	Frequency(MHz)
36	5180	38	5190
40	5200	42	5210
44	5220	46	5230
48	5240		

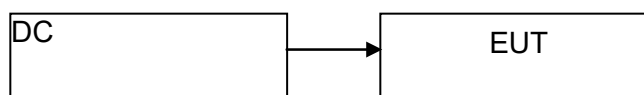
Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	N/A	N/A	Wire Antenna	N/A	4.66	Antenna

2.2 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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

Block diagram of EUT configuration for test



Test software: sscom5.13.1

The test software was used to control EUT work in continuous TX mode, and select test channel, Wireless mode as below table

For 802.11a/n/ac(HT20)

U-NII-1

channel	Frequency(MHz)	channel	Frequency(MHz)
36	5180	40	5200
48	5240		

For 802.11n/ac(HT40)

U-NII-1

channel	Frequency(MHz)	channel	Frequency(MHz)
38	5190	46	5230

2.3 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
1	Voltage source	ZHAOXIN	RXN-605D-II	N/A	Test use

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.

2.4 EQUIPMENTS LIST Radiation Test equipment

For Conducted Emission Test						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESCI 3	AT005	GUANGZHOU NEM	May 16,25	May 15,26
LISN	Rohde & Schwarz	ENV216	AT006	LISAI	July 31,25	July 30,26
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	AT007	CCIC (Shenzhen)	July 10,25	July 09,26
CE Cable	Times Microwave	LMR195UF-NMNM-1.50M	AT041	GUANGZHOU NEM	May 16,25	May 15,26
Test Software	FARAD	EZ-EMC Ver.3A1.1+	N/A	N/A	N/A	N/A

For Radiated Emission Test (9kHz-30MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI TestReceiver	Rohde& Schwarz	ESCI 7	AT001	Ti Group	July 31,24	July 30,26
Active Loop Antenna	ZHINAN	ZN30900C	AT063	LISAI	Aug 03,24	Aug 02,26
Test Software	FARAD	EZ-EMC Ver.3A1.1+	N/A	N/A	N/A	N/A
9kHz-30MHz Cable	Times Microwave	LMR195UF-NMNM-9M	AT045	GUANGZHOU NEM	May 16,25	May 15,26

For Radiated Emissions Test (30MHz-1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
EMI Test Receiver	Rohde& Schwarz	ESCI 7	AT001	Ti Group	Jun 12,25	Jun 11,26
Trilog-Broadband Antenna	SCHWARZBECK	VULB 9168	AT002	LISAI	Aug 03,24	Aug 02,26
Test Software	FARAD	EZ-EMC Ver.3A1.1+	N/A	N/A	May 16,25	May 15,26
30-1000MHz Cable	Times Microwave Systems	LMR195UF-NMRNMR-3.00M+ LMR400UF-NMNM-3.00M+ LMR400UF-NMNM-3.00M	AT042+AT043+AT044	GUANGZHOU NEM	May 16,25	May 15,26

For Radiated Emission test (Above 1000MHz)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
Horn Antenna 1-18G	SCHWARZBEC K	BBHA 9120 D	AT003	Shenzhen Academy of Metrology & Quality Inspection	Sep 23,24	Sep 22,26
Horn Antenna 18-40GHz	XIBAO	XB-WDB18-40K	AT064	LISAI	Feb 25,25	Feb 24,26
Broadband Preamplifier	SCHWARZBEC K	BBV 9718 D	AT004	CCIC (Shenzhen)	July 10,25	July 9,26
Low Noise Amplifier	MWRFTest	DLA8-18-40G-2078	AT065	GUANGZHOU NEM	July 10,25	July 9,26
Spectrum Analyzer 40G	Keysight	N9020B	AT066	GUANGZHOU NEM	May 13,25	May 12,26
Spectrum Analyzer 26.5G	Keysight	N9020A	AT050	GUANGZHOU NEM	Jun 12,25	Jun 11,26
Radio switching unit	TiGroup	SU319	AT055	N/A	N/A	N/A
Filtering unit	TiGroup	SU319F	AT056	N/A	N/A	N/A
Test Software	BL	BL410-E V25.5 en	N/A	N/A	N/A	N/A
Above 1GHz Cable	Times Microwave Systems	SFT205-NMNM-7.0M+ SFT205-NMNM-2.0M	AT057+ AT058	N/A	N/A	N/A

For Connect EUT Antenna Terminal Test (RF Test system)						
Equipment	Manufacturer	Model No.	Serial No.	Calibration Body	Last Cal.	Next Cal.
Spectrum analyzer	Keysight	N9020A	AT050	GUANGZHOU NEM	Jun 12,25	Jun 11,26
Analog signal source	Keysight	N5173B	AT051	GUANGZHOU NEM	Jun 12,25	Jun 11,26
WIDEBAND RADIO COMMUNICATION TESTER	Rohde&Schwarz	CMW500	AT052	GUANGZHOU NEM	Jun 12,25	Jun 11,26
Power probe unit	Ti Group	SU319P	AT053	GUANGZHOU NEM	Jun 12,25	Jun 11,26
Switch unit	Ti Group	SU319S	AT054	N/A	N/A	N/A
Test Software	BL	BL410R 3.5.2.621	N/A	N/A	N/A	N/A

Remark: The power sensor is integrated into the Power Probe unit

3. 26dB Bandwidth, 6dB Bandwidth and 99% Bandwidth

3.1 Limit

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Bandwidth	26 dB Bandwidth	5150-5250
	26 dB Bandwidth	5250-5350
	26 dB Bandwidth	For FCC:5470-5725 For IC:5470-5600 5650-5725
	Minimum 500kHz 6dB Bandwidth	5725-5850

3.2 Test Procedure

The procedure for this method is as follows:

- (a)Set RBW= shall be in the range of 1% to 5% of the emission bandwidth.a)
- (b)Set the VBW>RBW.
- (c)Detector = peak.
- (d)Trace mode= max-hold.
- (e)Measure the maximum width of the emission that is 26 dB down from the peak of the emission.Compare this with the RBW setting of the instrument, Readjust RBW and repeat measurement asneeded until the RBW/EBW ratio is in the range of 1% to 5%.

- (2) Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26dB and 6dB relative to the maximum level measured in the fundamental emission.

3.3 Test setup

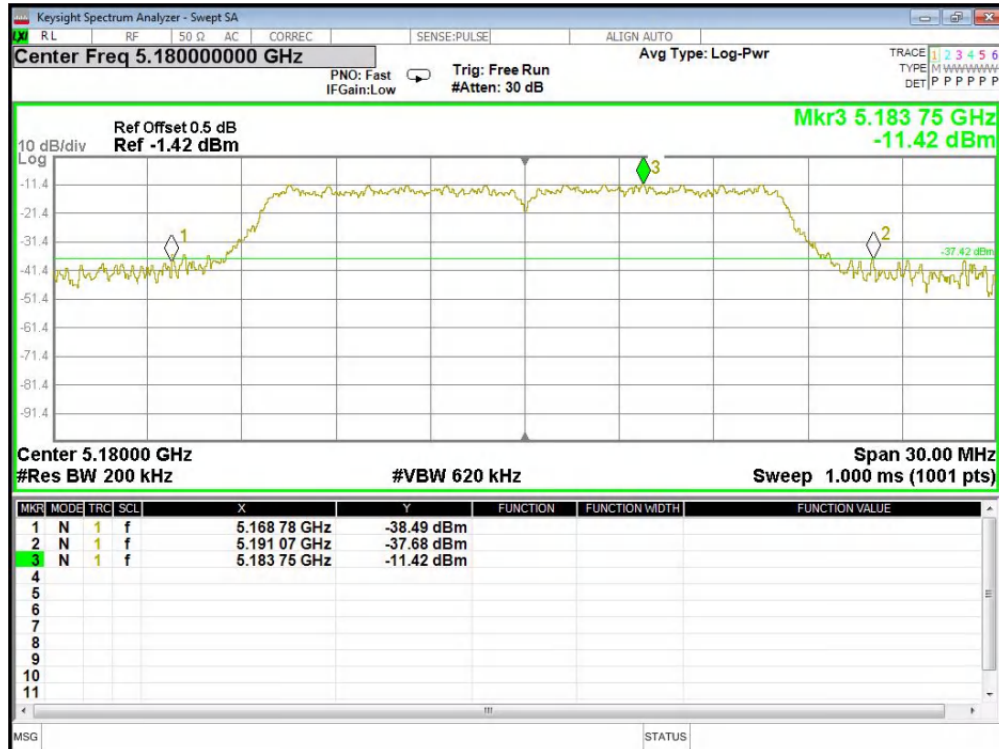


3.4 Test results

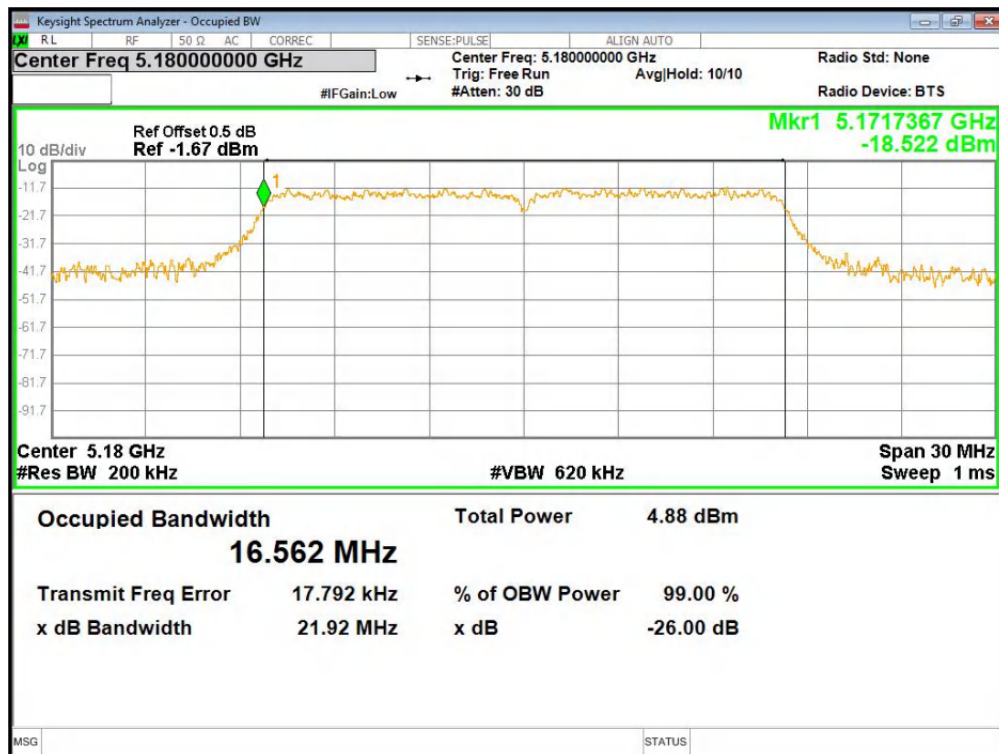
Band	Operation mode	26 dB Bandwidth (MHz)			99% Bandwidth (MHz)		
		Low	Middle	High	Low	Middle	High
U-NII-1	802.11a	22.290	25.140	23.910	16.562	16.583	16.520
	802.11n(HT20)	27.990	24.600	24.270	17.623	17.652	17.638
	802.11n(HT40)	43.020	/	42.840	36.265	/	36.148
	802.11ac(HT20)	25.110	25.320	25.110	17.609	17.580	17.542
	802.11ac(HT40)	45.360	/	43.740	36.163	/	36.143

3.3 Original Test Data

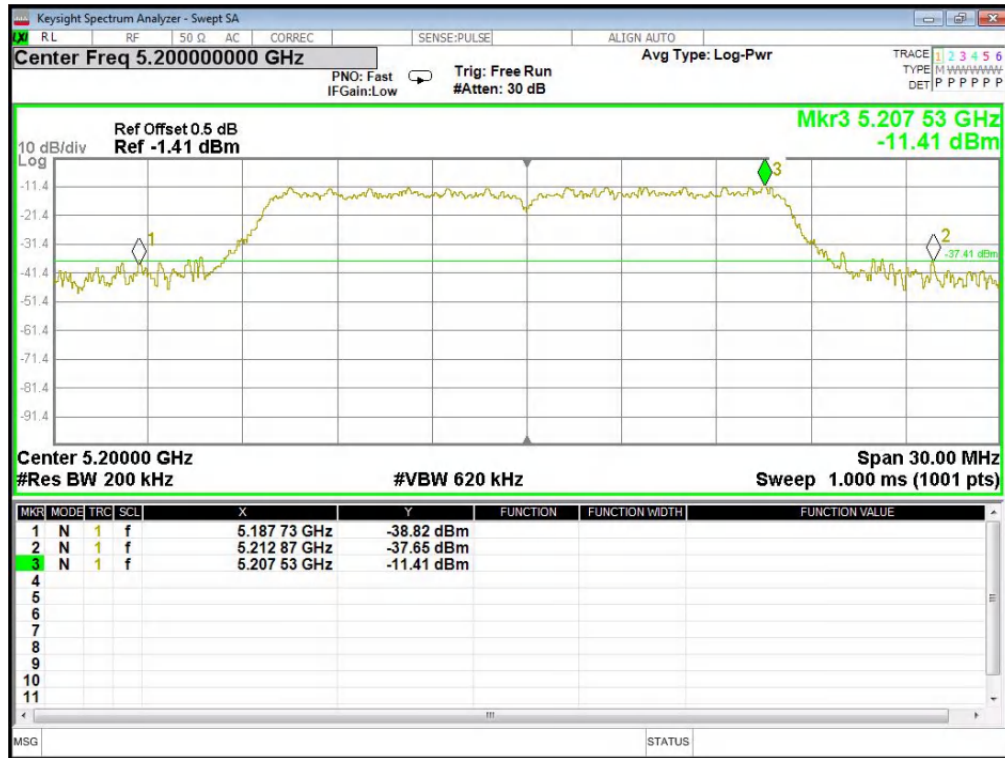
-26dB Bandwidth U-NII-1 11a Low CH 5180MHZ



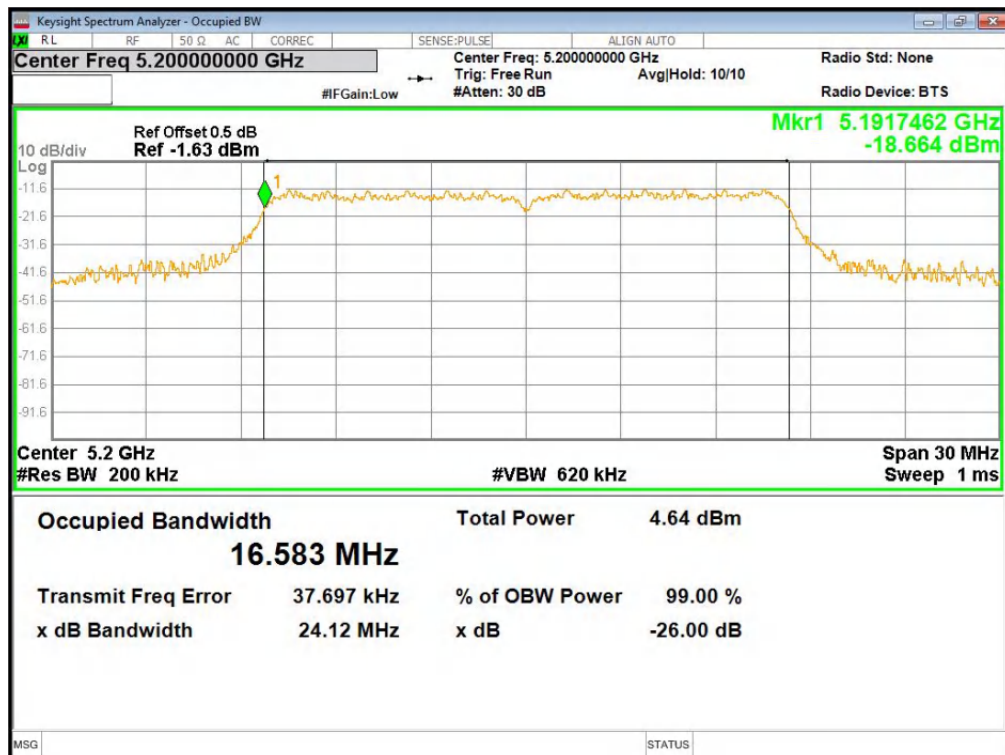
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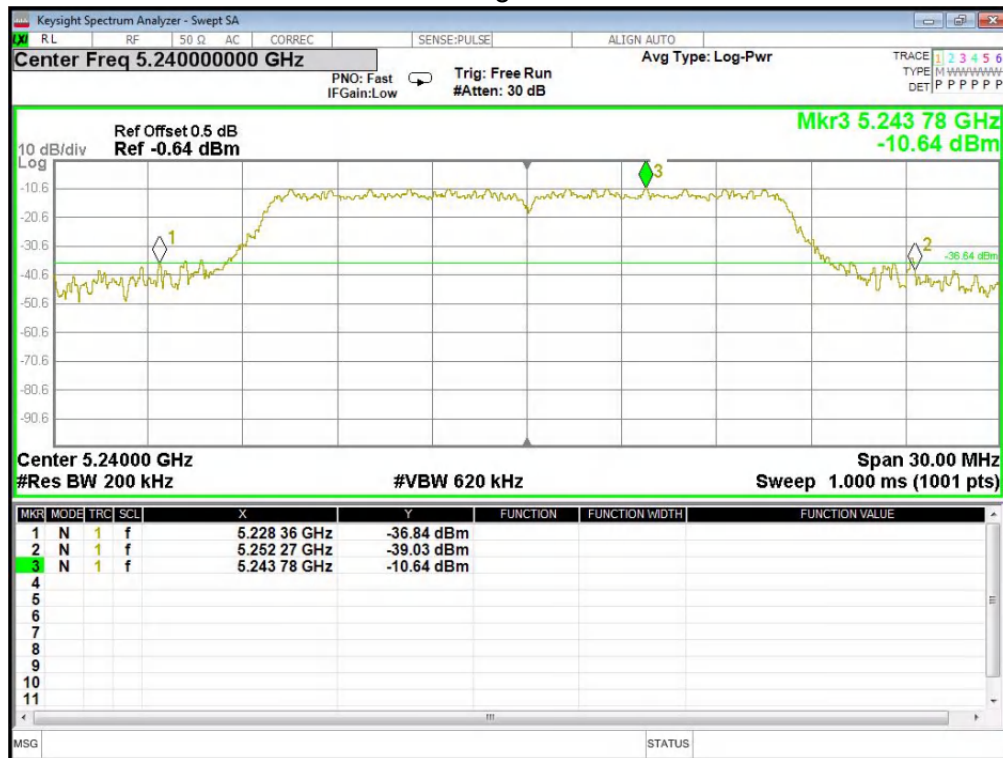
-26dB Bandwidth
U-NII-1 11a Middle CH 5200MHZ



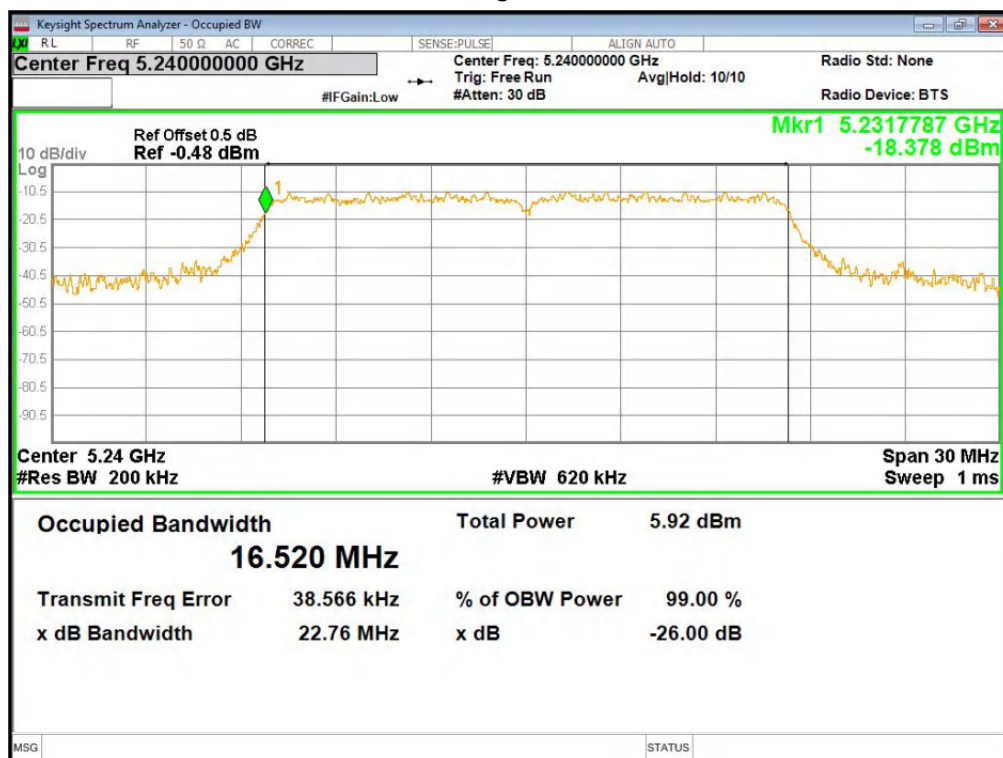
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U-NII-1 11a Middle CH 5200MHZ



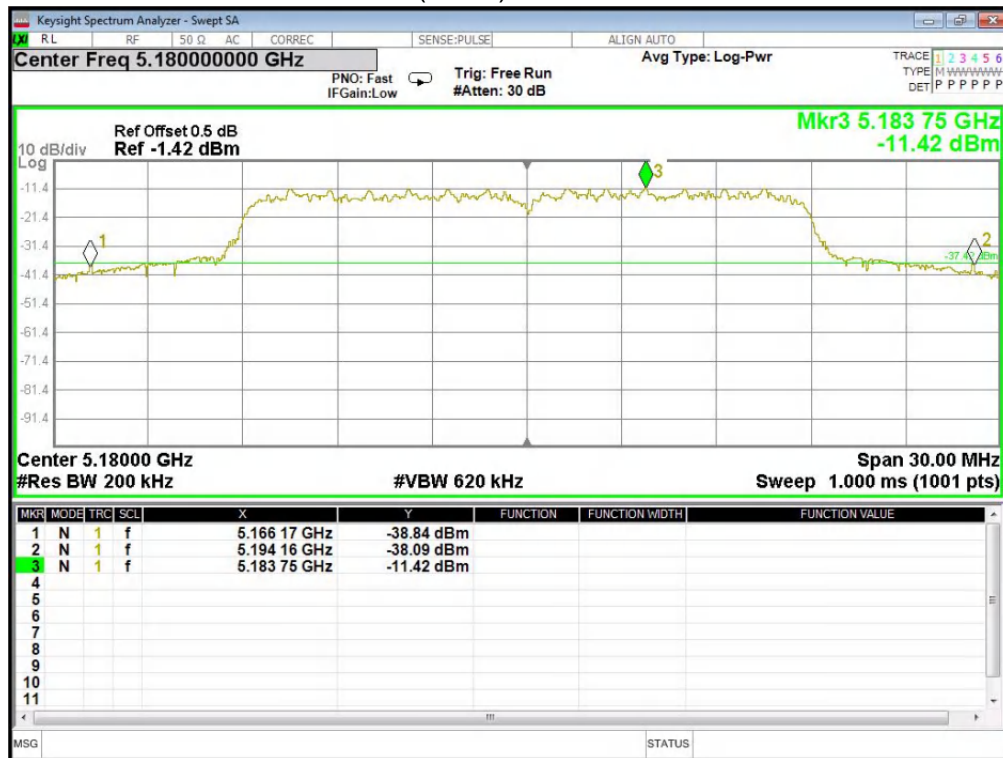
-26dB Bandwidth
U-NII-1 11a High CH 5240MHZ



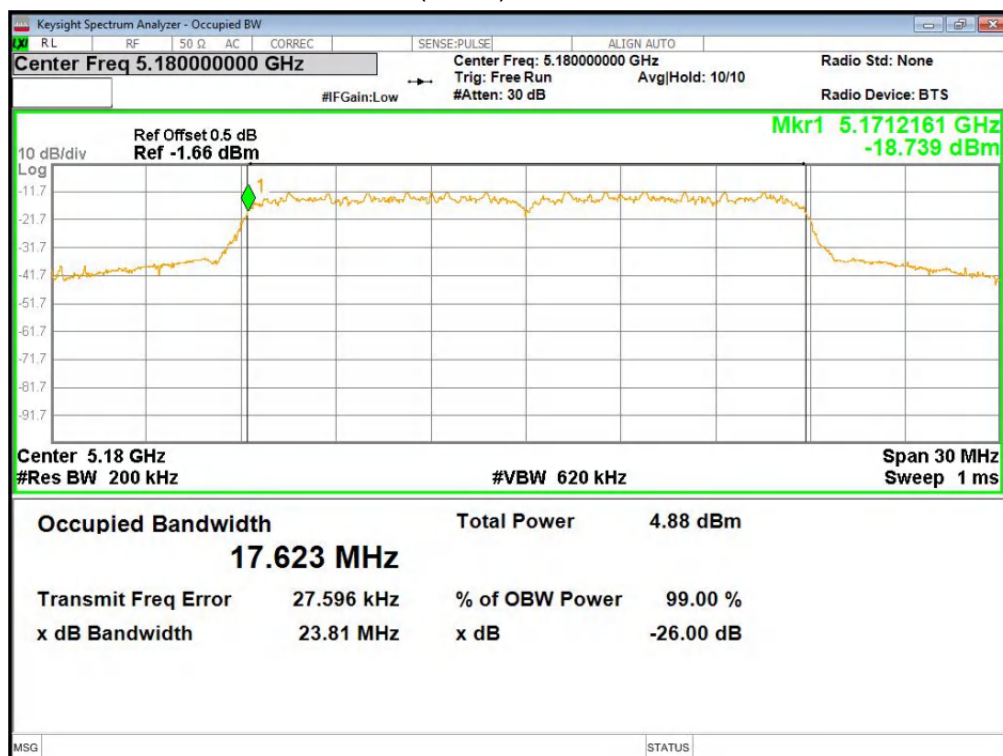
99%OBW Bandwidth
U-NII-1 11a High CH 5240MHZ



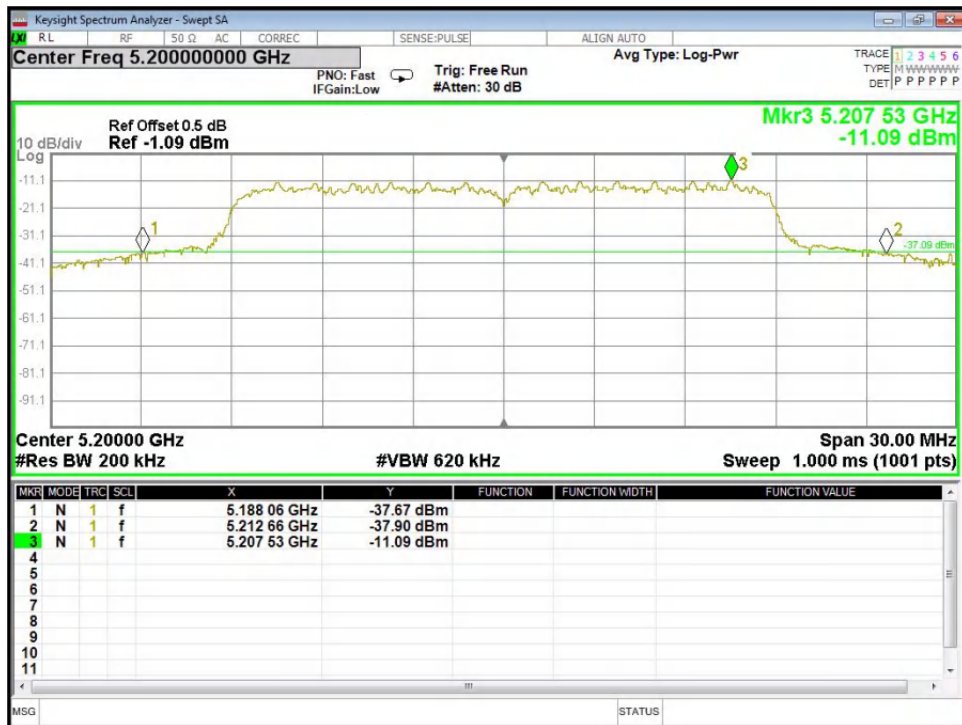
-26dB Bandwidth
U-NII-1 11n(HT20) Low CH 5180MHZ



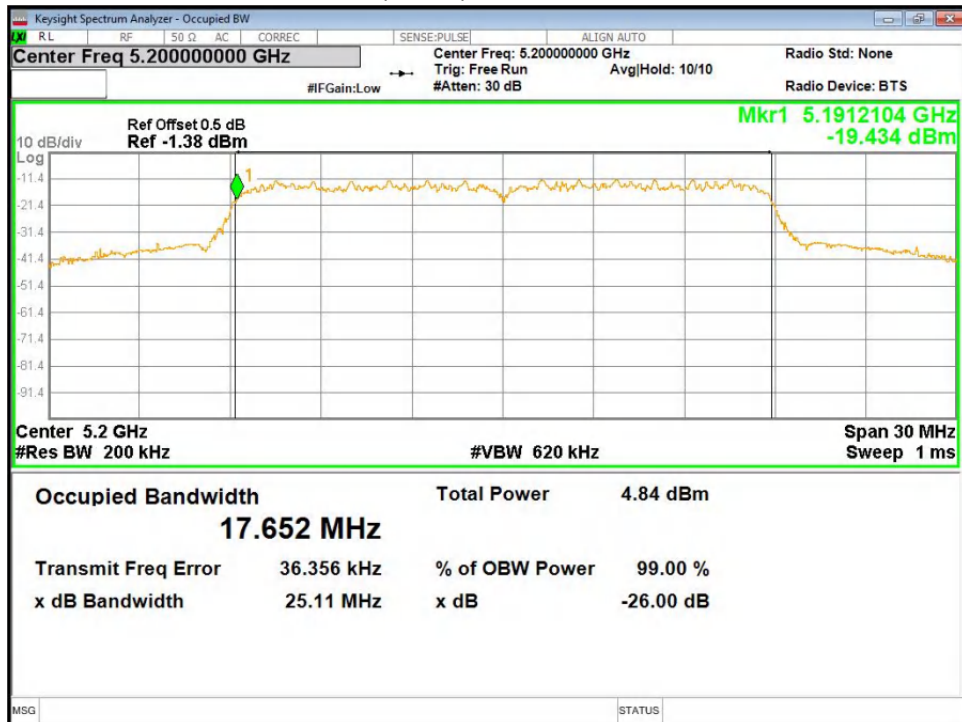
99%OBW Bandwidth
U-NII-1 11n(HT20) Low CH 5180MHZ



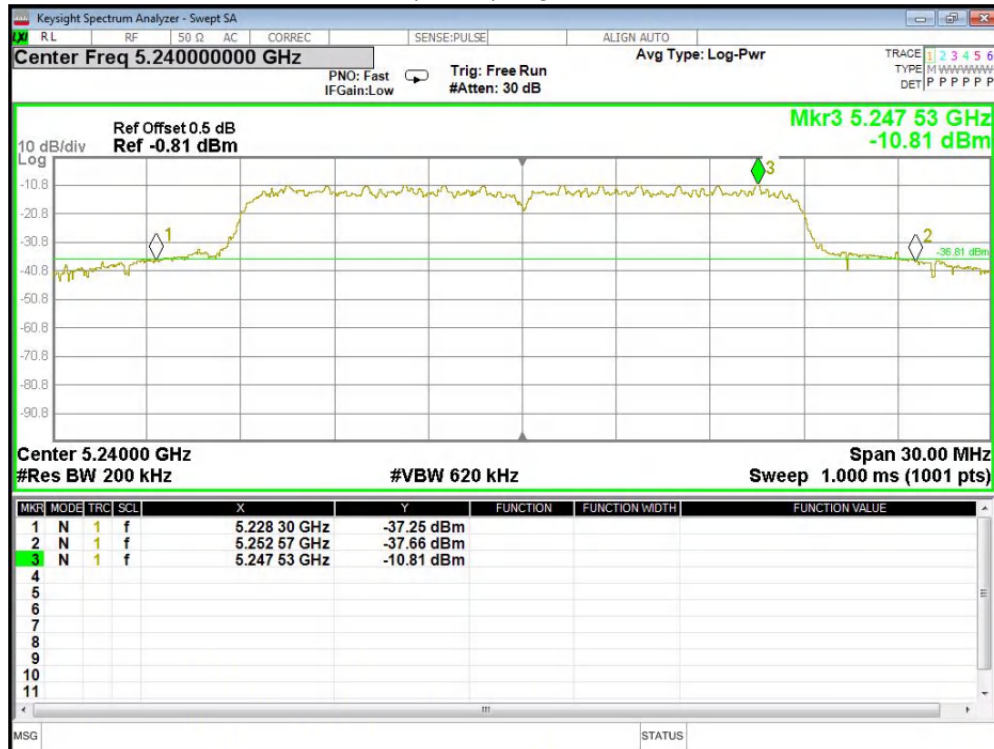
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U-NII-1 11n(HT20) Middle CH 5200MHZ



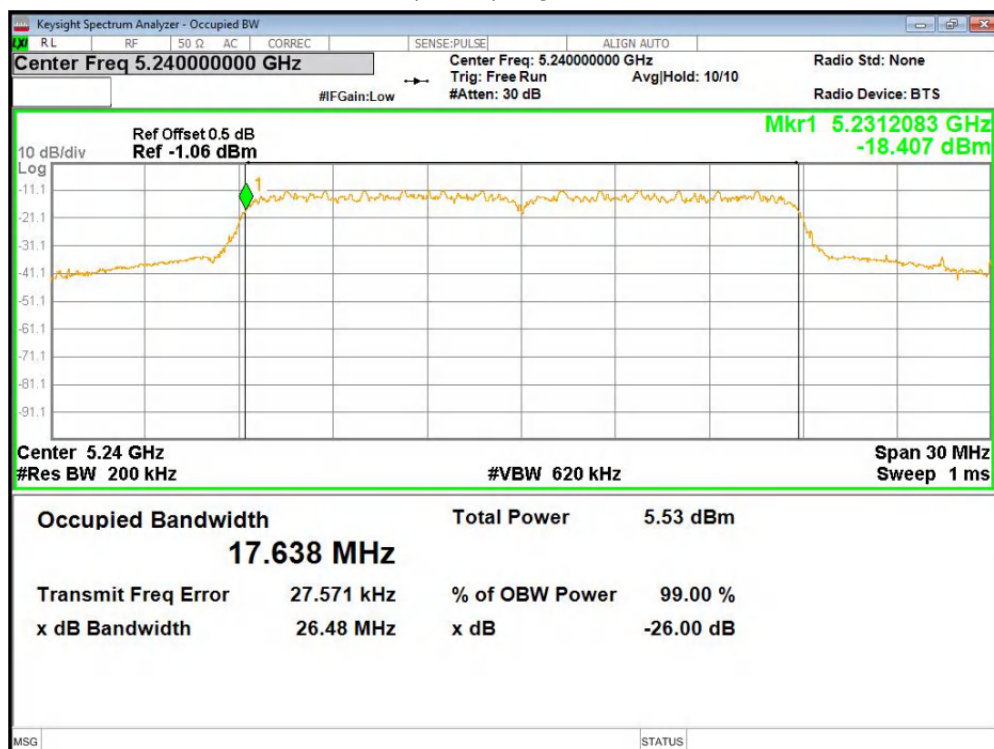
99%OBW Bandwidth
U-NII-1 11n(HT20) Middle CH 5200MHZ



-26dB Bandwidth
U-NII-1 11n(HT20) High CH 5240MHZ



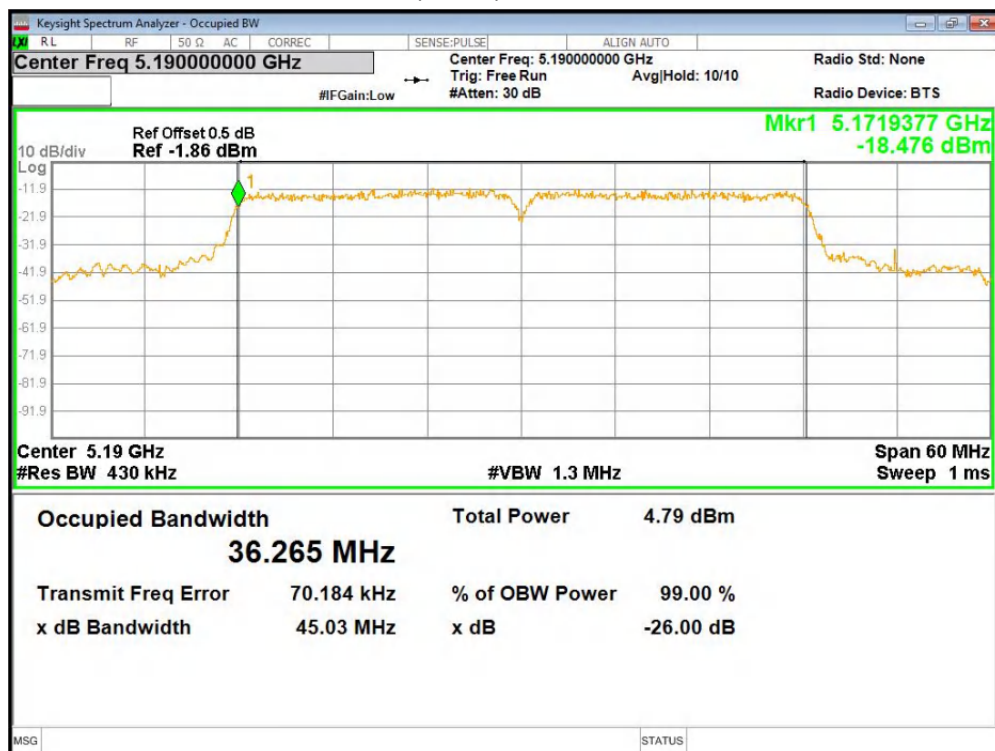
99%OBW Bandwidth
U-NII-1 11n(HT20) High CH 5240MHZ



-26dB Bandwidth
U-NII-1 11n(HT40) Low CH 5190MHZ



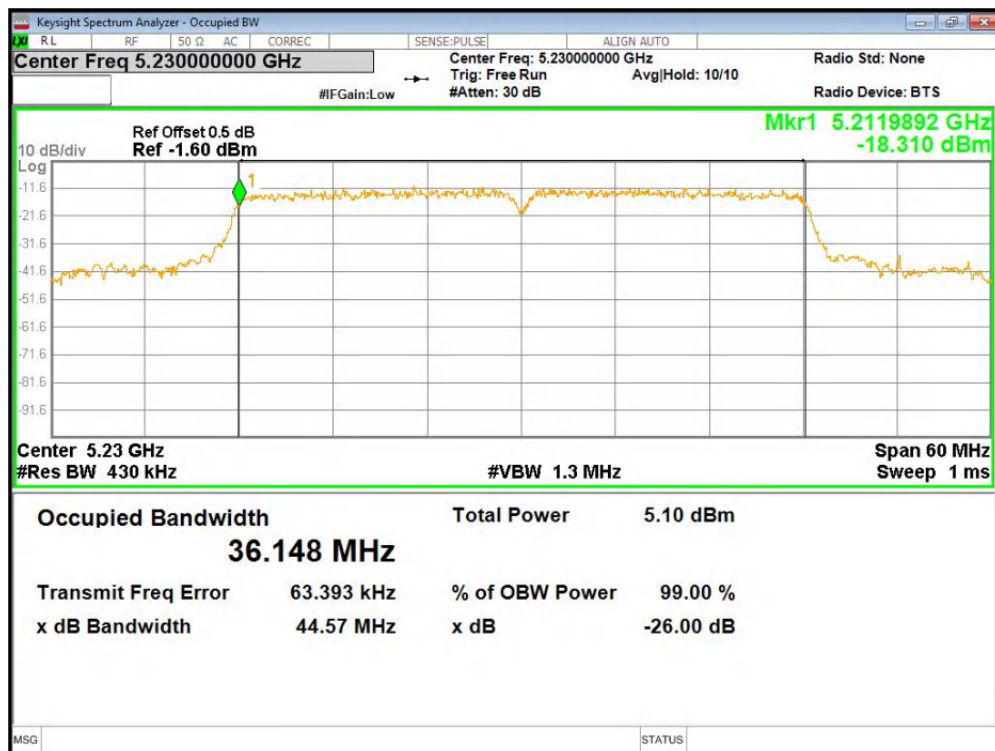
99%OBW Bandwidth
U-NII-1 11n(HT40) Low CH 5190MHZ



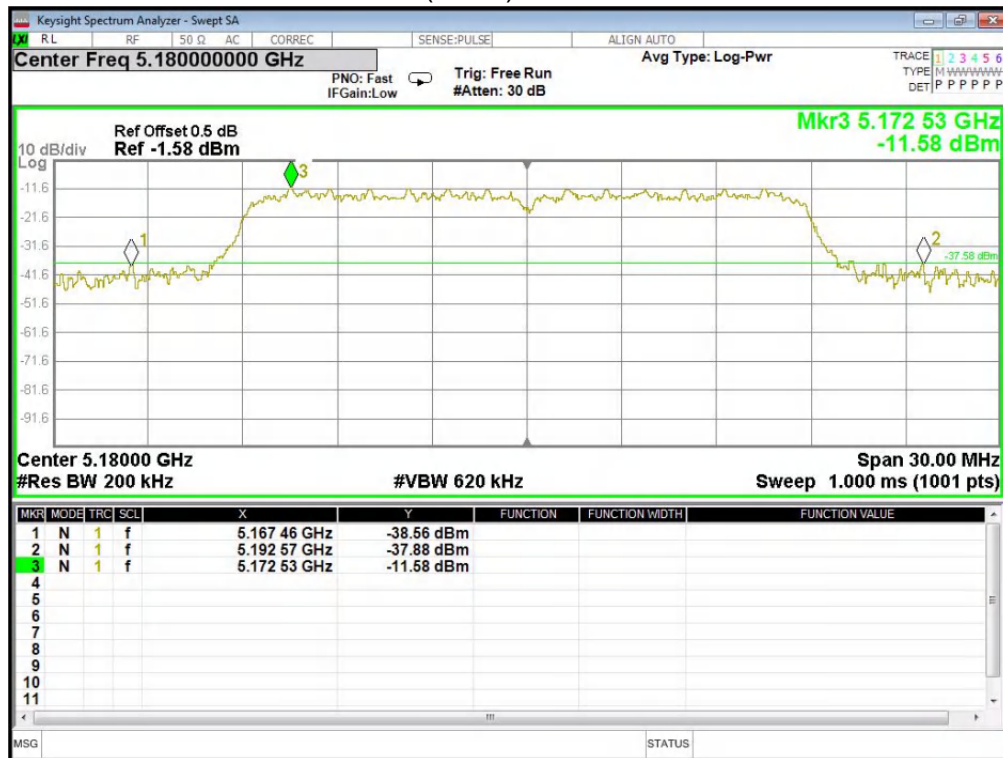
-26dB Bandwidth
U-NII-1 11n(HT40) High CH 5230MHZ



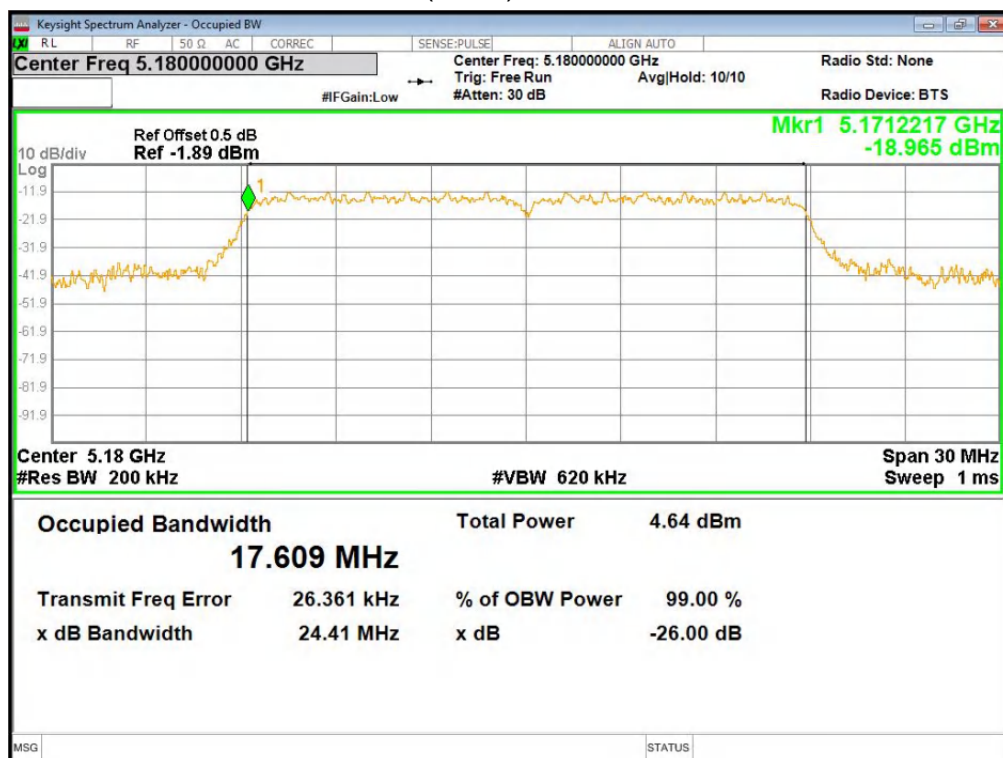
99%OBW Bandwidth
U-NII-1 11n(HT40) High CH 5230MHZ



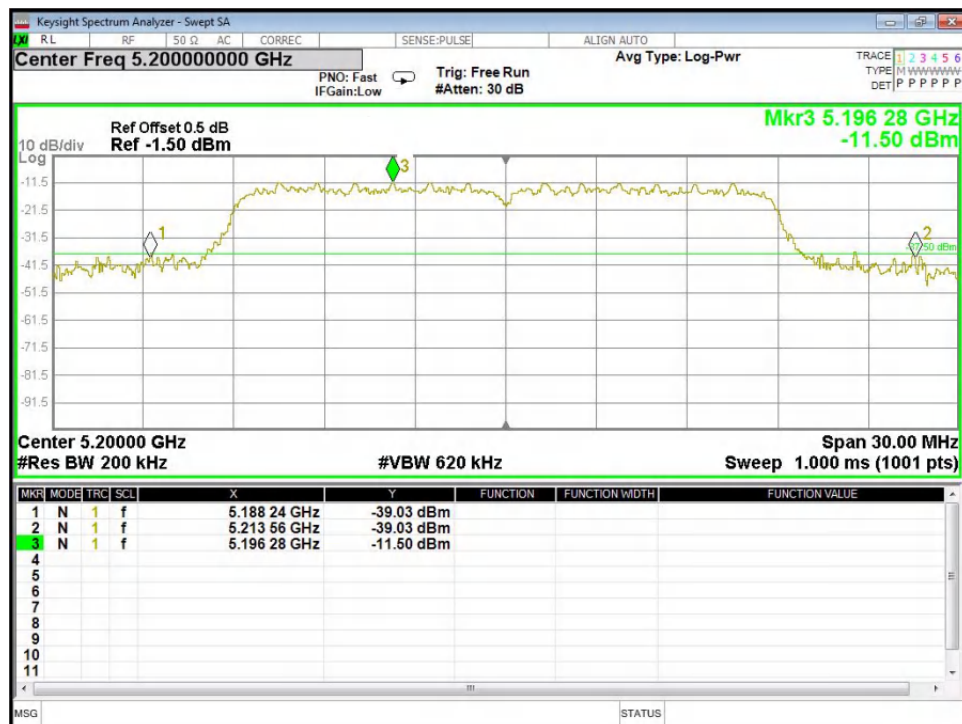
-26dB Bandwidth
U-NII-1 11ac(HT20) Low CH 5180MHz



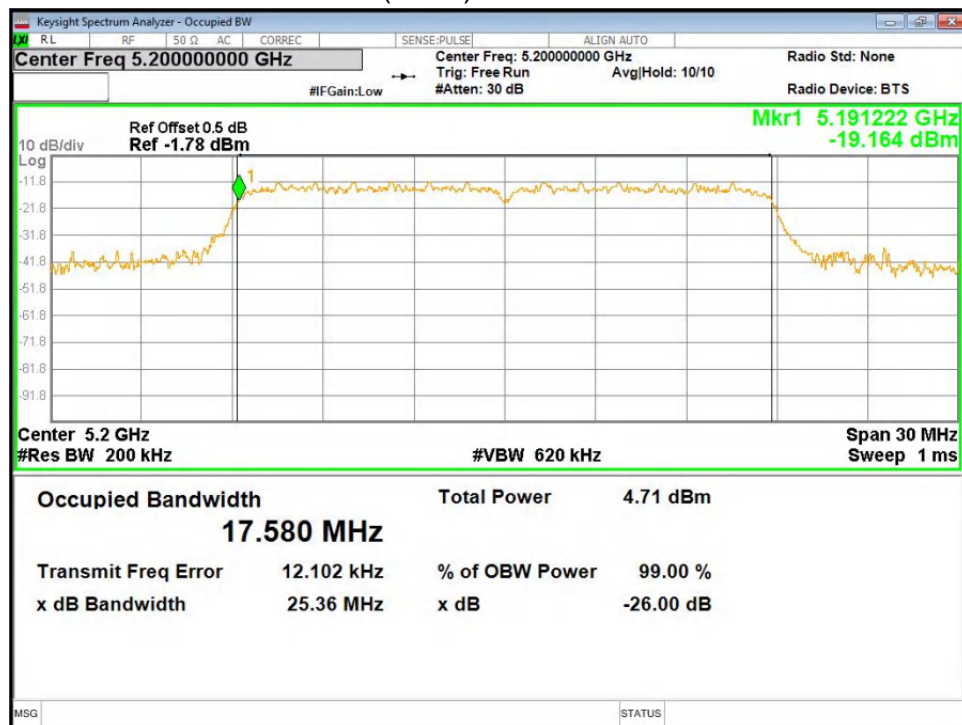
99%OBW Bandwidth
U-NII-1 11ac(HT20) Low CH 5180MHz



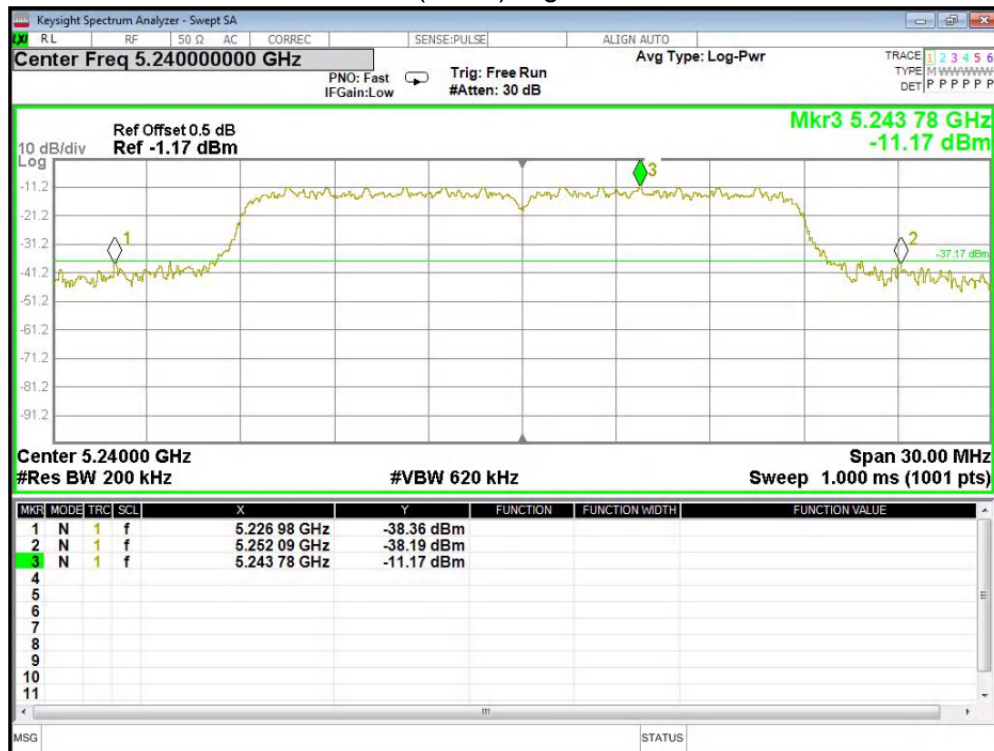
-26dB Bandwidth
U-NII-1 11ac(HT20) Middle CH 5200MHZ



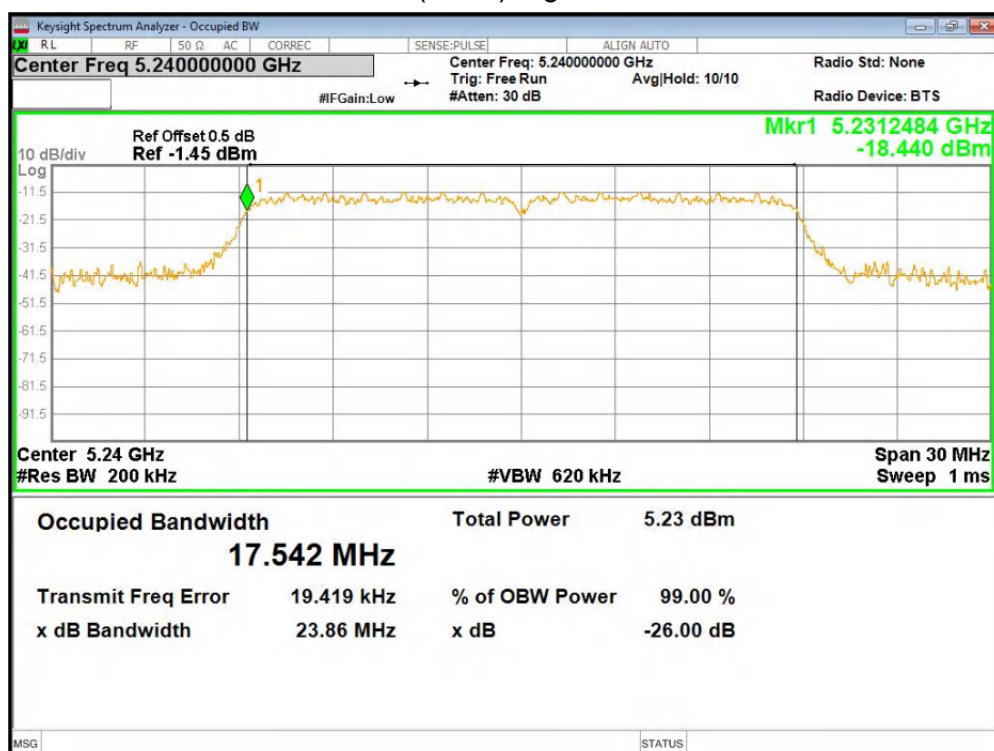
99%OBW Bandwidth
U-NII-1 11ac(HT20) Middle CH 5200MHZ



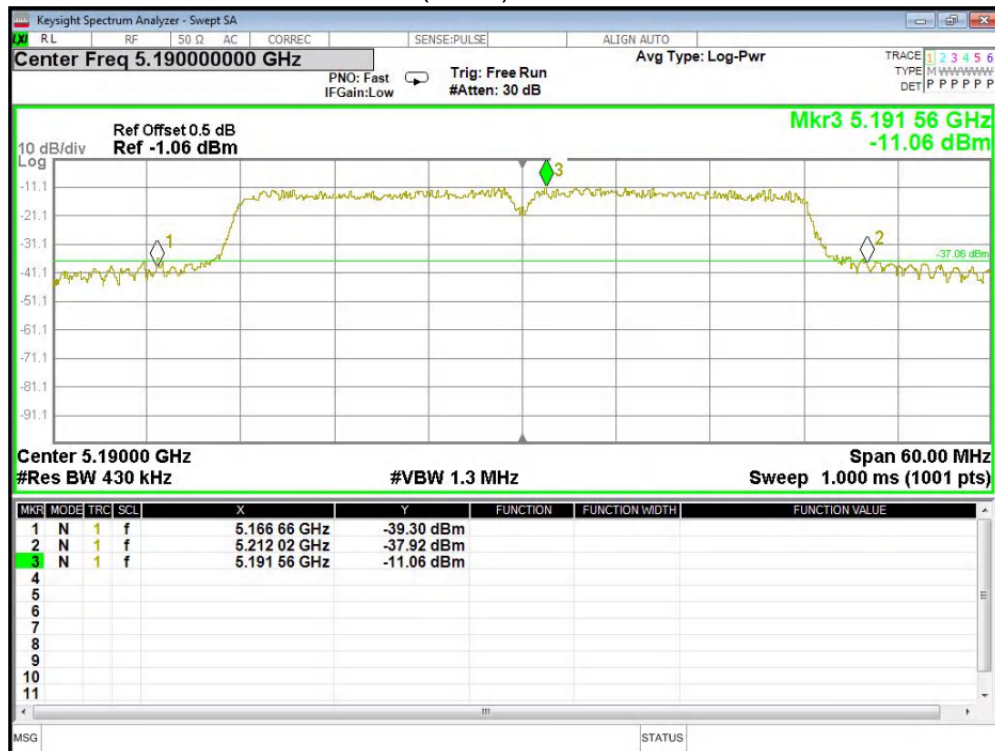
-26dB Bandwidth
U-NII-1 11ac(HT20) High CH 5240MHZ



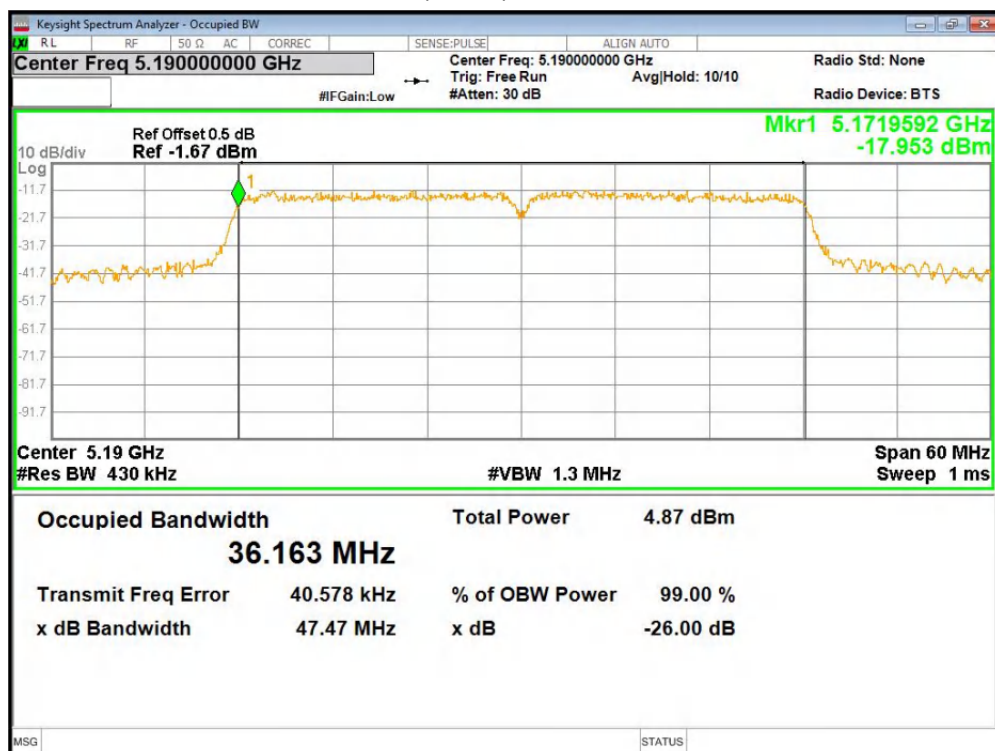
99%OBW Bandwidth
U-NII-1 11ac(HT20) High CH 5240MHZ



-26dB Bandwidth
U-NII-1 11ac(HT40) Low CH 5190MHz



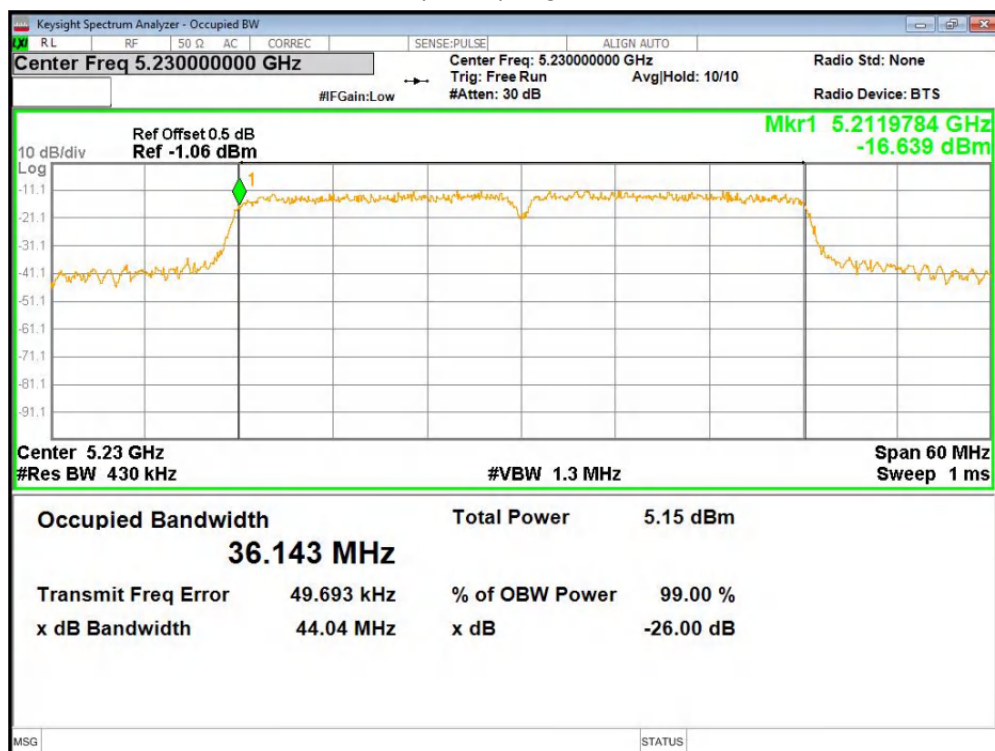
99%OBW Bandwidth
U-NII-1 11ac(HT40) Low CH 5190MHz



-26dB Bandwidth
U-NII-1 11ac(HT40) High CH 5230MHZ



99%OBW Bandwidth
U-NII-1 11ac(HT40) High CH 5230MHZ



4 CONDUCTED OUTPUT POWER

4.1 limit

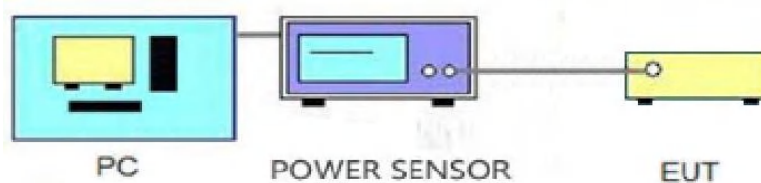
FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	For FCC client devices: 250mW (24dBm)	5150-5250
	For RSS: e.i.r.p. power: not exceed 200 mW(23dBm) or $10 + 10 \log_{10} B$	
	250mW (24dBm) or $11 + 10 \log_{10} B$	5250-5350
	250mW (24dBm) or $11 + 10 \log_{10} B$	For FCC:5470-5725 For IC:5470-5600 5650-5725
	1 Watt (30dBm)	5725-5850
Note: For ISSED: B=99% bandwidth.		

4.2 test procedure

Refer to ANSI C63.10:2020 12.4.3.1

- Connect each EUT's antenna output to power meter by RF cable and attenuator
- Get each antenna port's output power of EUT.

4.3 TEST SETUP



4.4 test results

ANT 1

Band	Operation mode	Coneucted Output Power(dBm)		
		Low	Middle	High
U-NII-1	802.11a	6.22	6.07	6.80
	802.11 n(HT20)	5.35	5.40	6.04
	802.11 n(HT40)	2.36	/	2.02
	802.11ac(HT20)	4.23	4.32	4.15
	802.11ac(HT40)	2.06	/	1.89



5. POWER SPECTRAL DENSITY

5.1 LIMIT

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	For FCC: Other than Mobile and portable:17dBm/MHz Mobile and portable:11dBm/MHz	5150-5250
	For RSS eirp:10dBm/MHz	
	11dBm/MHz	5250-5350
	11dBm/MHz	For FCC:5470-5725 For IC:5470-5600 5650-5725
	30dBm/500kHz	5725-5850

5.2 TEST PROCEDURE

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW.

Connect the UUT to the spectrum analyser and use the following settings:

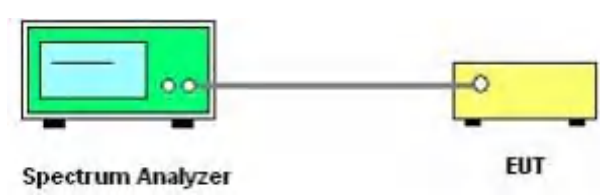
5150MHz-5250MHz

Note:

1. For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v01, section II.F.5., it is acceptable to set RBW at 1MHz and VBW at 3MHz if the spectrum analyzer does not have 500kHz RBW.
2. The value measured with RBW=1MHz is to be added with $10\log(500\text{kHz}/1\text{MHz})$ which is - 3dB. For example, if the measured value is +10dBm using RBW=1MHz (that is +10dBm/MHz), then the converted value will be +7dBm/500kHz.

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

5.3 TEST SETUP

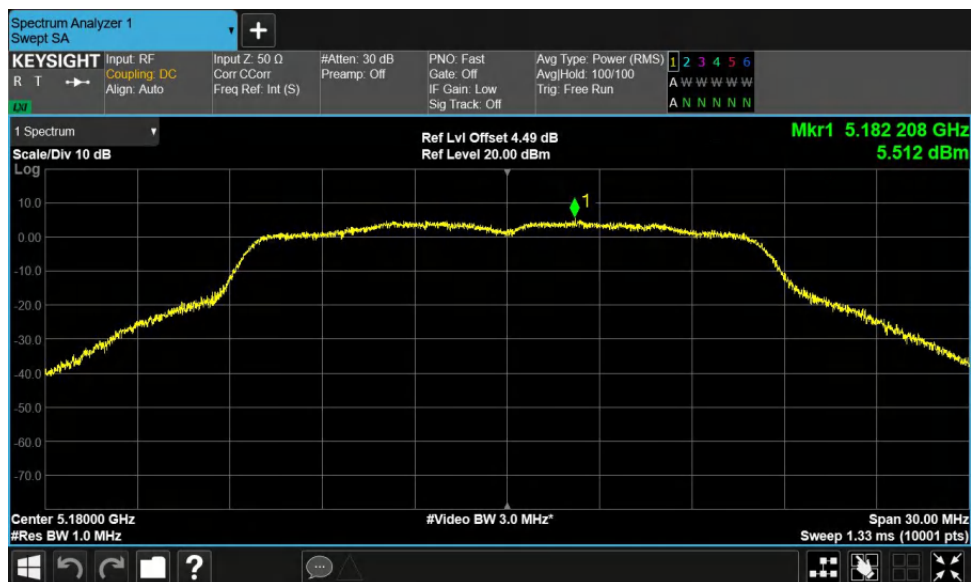


5.4 TEST RESULTS

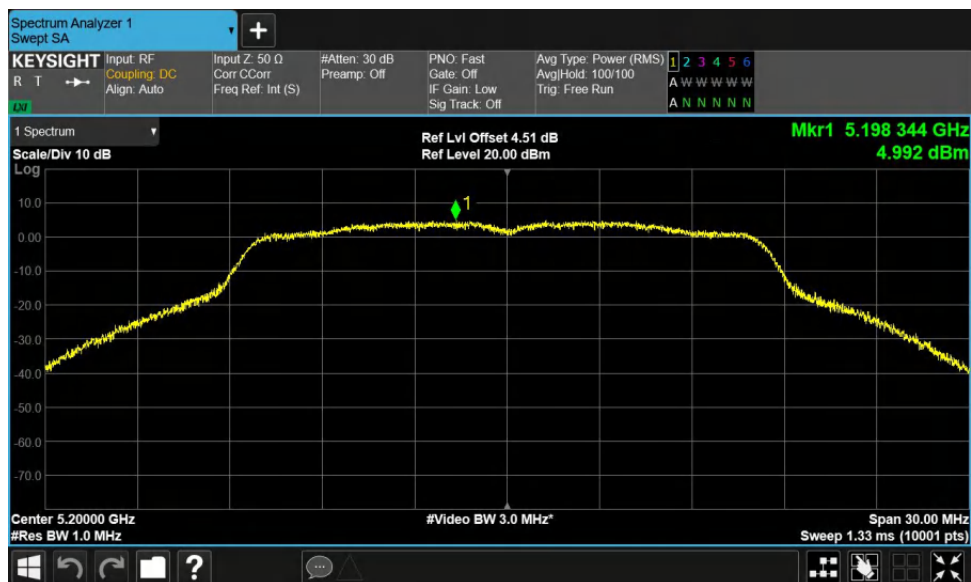
Band	Operation mode	Power Spectral Density(dBm/MHz)		
		Low	Middle	High
U-NII-1	802.11a	5.512	4.992	4.980
	802.11 n(HT20)	3.723	3.611	3.835
	802.11 n(HT40)	0.268	/	0.172
	802.11ac(HT20)	2.857	2.920	2.752
	802.11ac(HT40)	0.126	/	-0.017

5.5 original test data

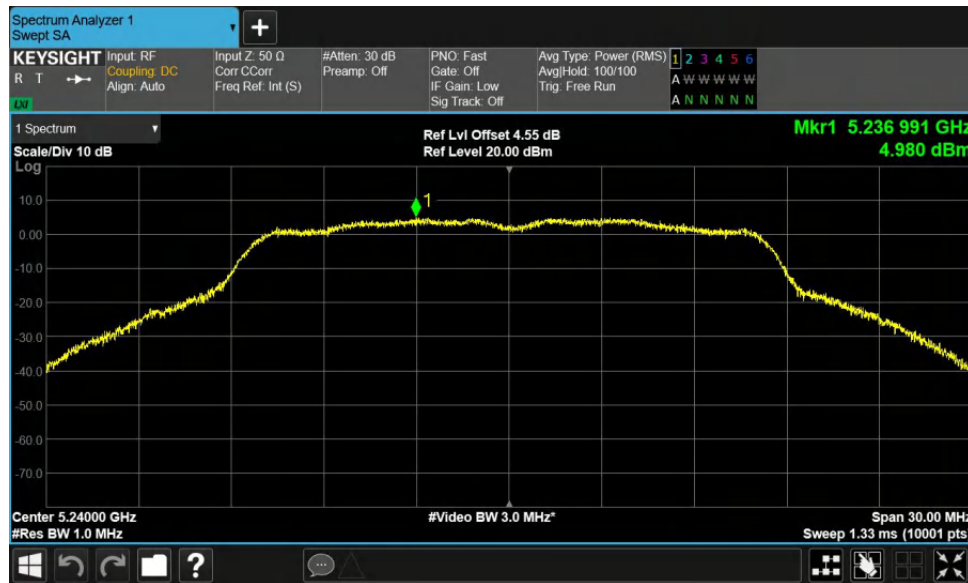
U-NII-1 802.11a Low CH



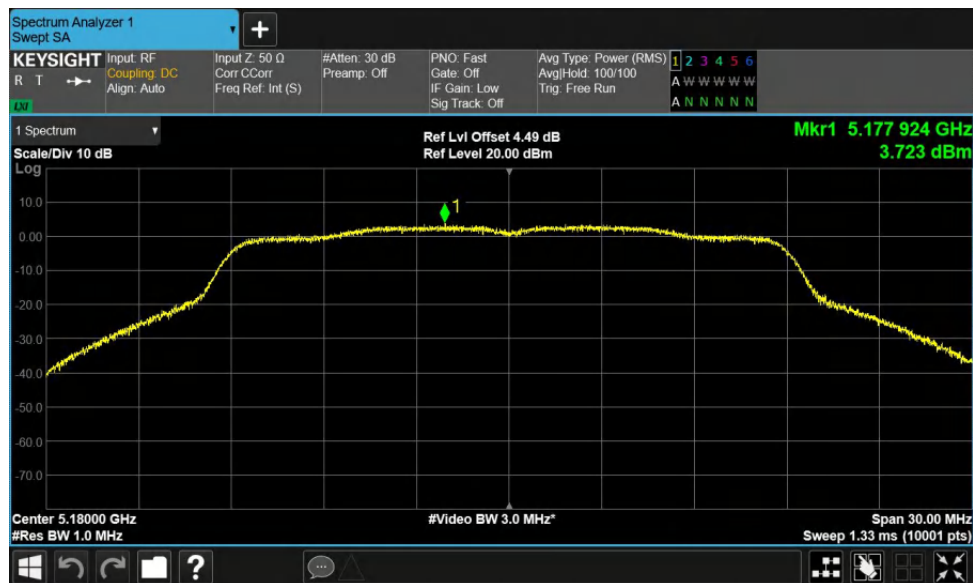
U-NII-1 802.11a Middle CH



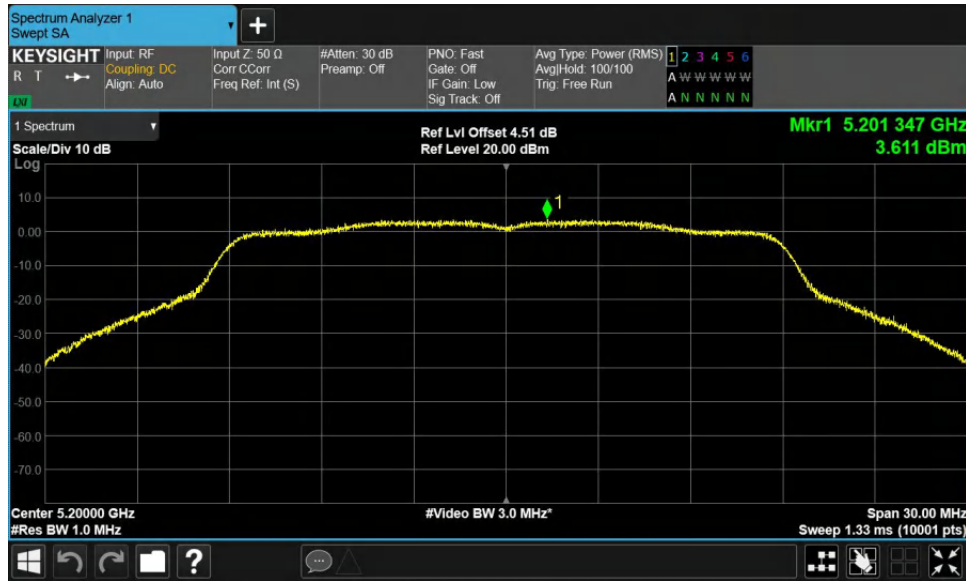
U-NII-1 802.11a High CH



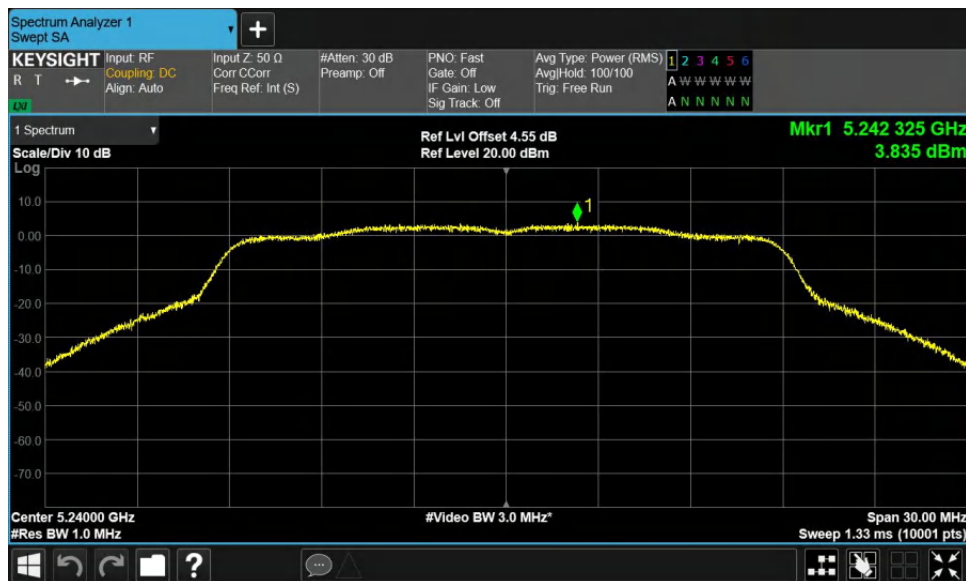
U-NII-1 802.11n(HT20) Low CH



U-NII-1 802.11n(HT20) Middle CH



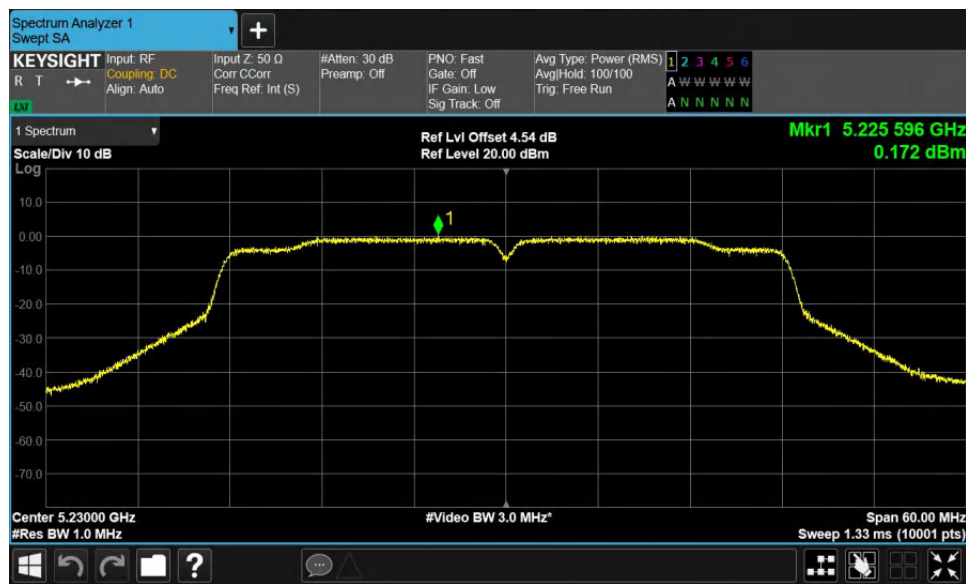
U-NII-1 802.11n(HT20) High CH



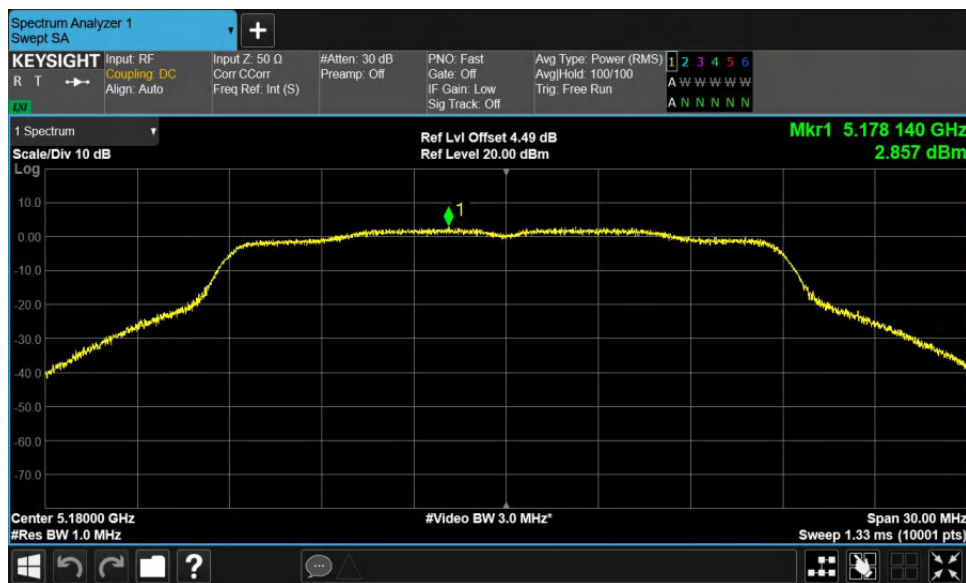
U-NII-1 802.11n(HT40) Low CH



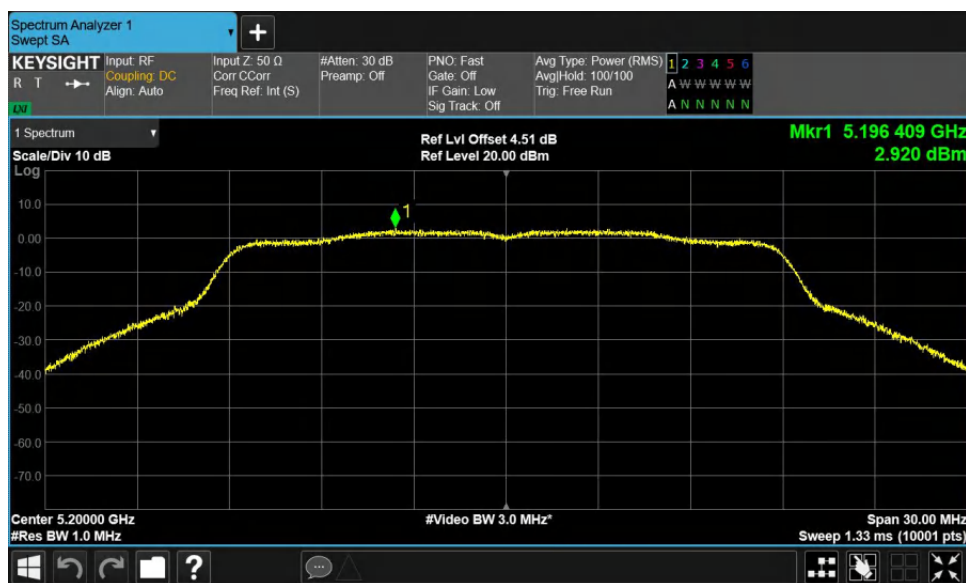
U-NII-1 802.11n(HT40) High CH



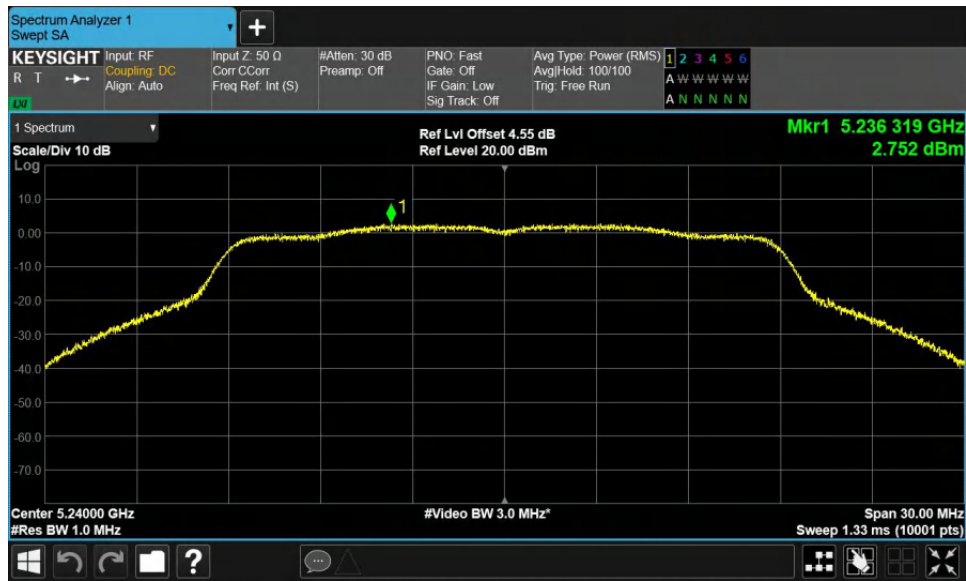
U-NII-1 802.11ac(HT20) Low CH



U-NII-1 802.11ac(HT20) Middle CH



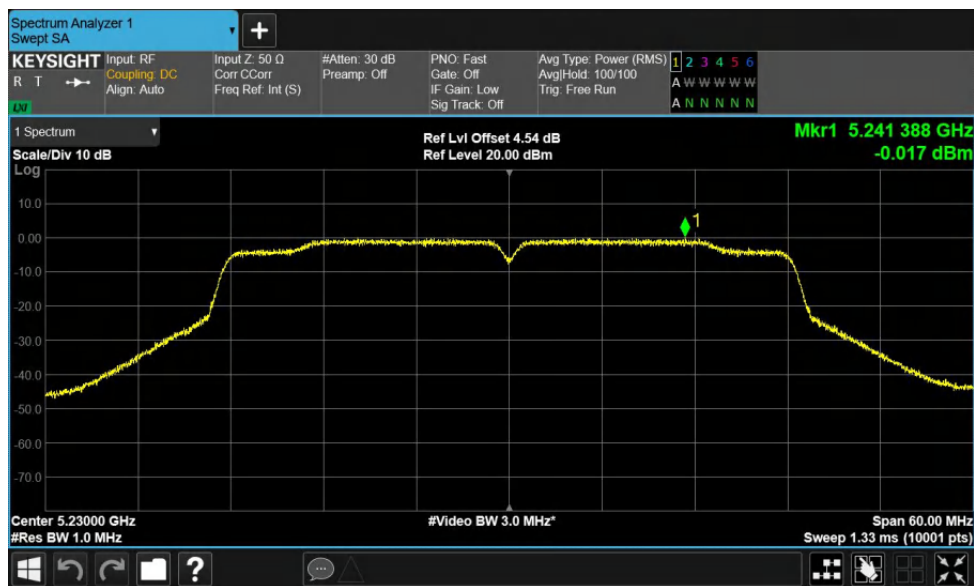
U-NII-1 802.11ac(HT20) High CH



U-NII-1 802.11ac(HT40) Low CH



U-NII-1 802.11ac(HT40) High CH



Confidential

6. FREQUENCY STABILITY MEASUREMENT

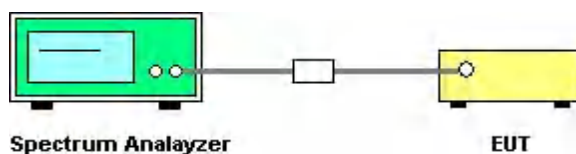
6.1 LIMIT

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual

6.2 TEST PROCEDURE

- (1) To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
- (2) The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
- (3) The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

6.3 TEST SETUP



6.4 TEST RESULTS

U-NII-1 Test Frequency:5180MHz				
Temperature (°C)	Power Supply (DC)	Frequency Error (Hz)	Frequency Error (ppm)	Limit (ppm)
50	5V	/	/	within the band of operation
45		1807	2.1599	
30		1800	2.1516	
20		1806	2.1587	
10		1800	2.1516	
0		1803	2.1552	
-10		1800	2.1516	
-15		1809	2.1623	
-30		/	/	
20	4.5V	1810	2.1635	
20	5.5V	1798	2.1492	

7. Duty Cycle

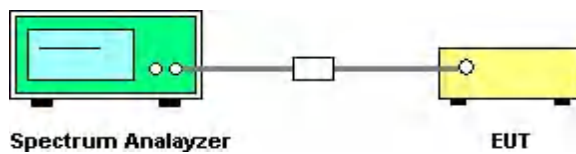
7.1 TEST REQUIREMENT

47 CFR Part 15C 15.407 and 789033 D02 General UNII Test
Procedures New Rules v02r01(December 14, 2017), Section (B)
ANSI C63.10: 2020

7.2 TEST PROCEDURE

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

7.3 TEST SETUP

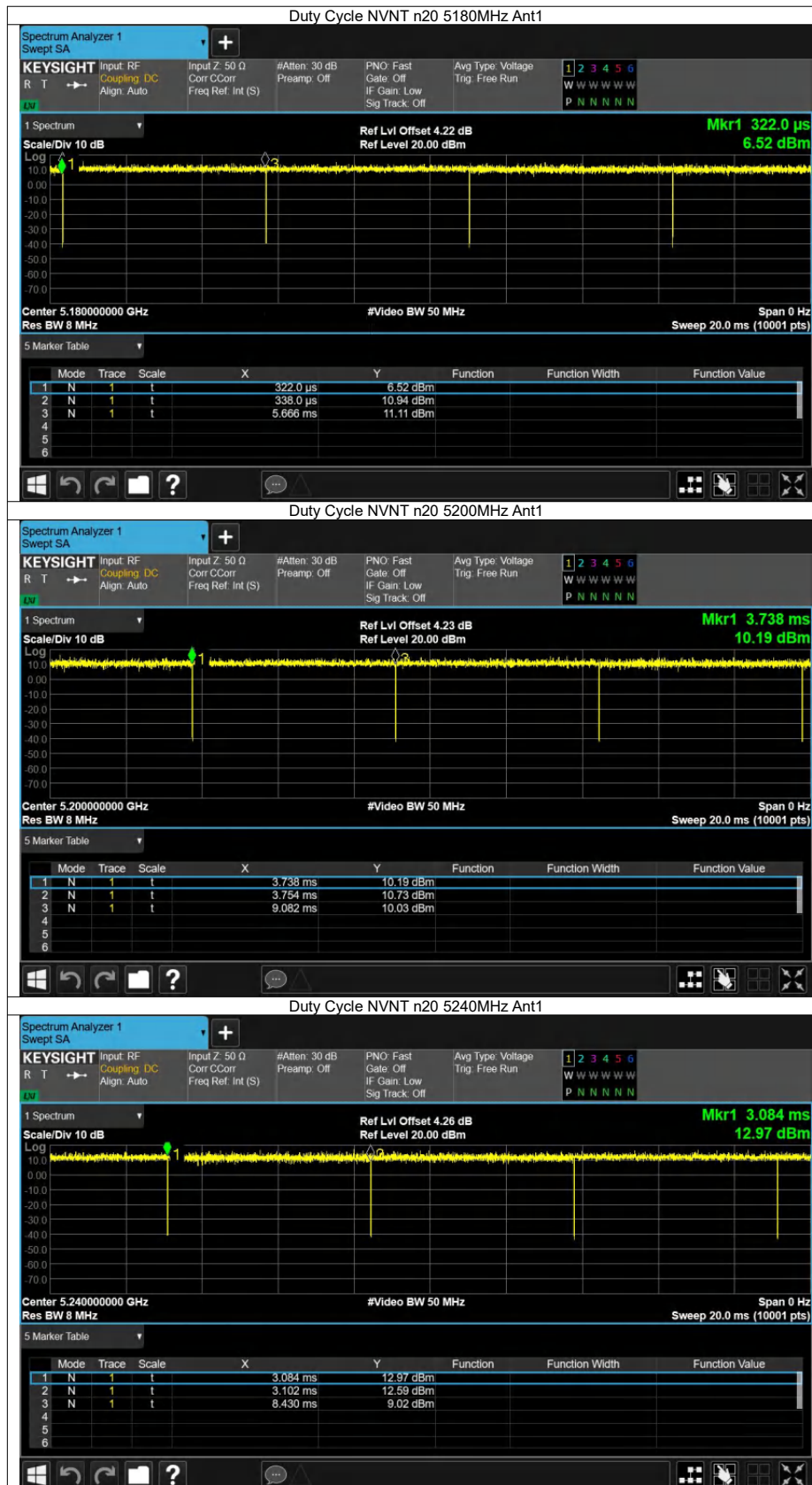


7.4 TEST RESULTS

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	99.2	0	0.48
NVNT	a	5200	Ant1	99.2	0	0.48
NVNT	a	5240	Ant1	99.2	0	0.48
NVNT	n20	5180	Ant1	99.7	0	0.19
NVNT	n20	5200	Ant1	99.7	0	0.19
NVNT	n20	5240	Ant1	99.66	0	0.19
NVNT	n40	5190	Ant1	99.67	0	0.18
NVNT	n40	5230	Ant1	99.67	0	0.18
NVNT	ac20	5180	Ant1	99.66	0	0.19
NVNT	ac20	5200	Ant1	99.7	0	0.19
NVNT	ac20	5240	Ant1	99.66	0	0.19
NVNT	ac40	5190	Ant1	99.71	0	0.18
NVNT	ac40	5230	Ant1	99.67	0	0.18









8 RADIATED EMISSION MEASUREMENT

8.1 RADIATED EMISSION LIMITS

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the Restricted band specified on Part15.205(a)&209(a) limit in the table and according to ANSI C63.10-2020 below has to be followed

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 1000MHz)

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

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 dBm/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 -27 dBm/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 -27 dBm/MHz.

(4) For transmitters operating solely in the 5.725-5.850 GHz band:

(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 band edge.

(ii) 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.

For Radiated Emission

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/AV
Start Frequency	1000 MHz(Peak/AV)
Stop Frequency	10th carrier hamonic(Peak/AV)
RB / VB (emission in restricted band)	PK=1MHz / 1MHz, AV=1 MHz /10 Hz

8.2 TEST PROCEDURE

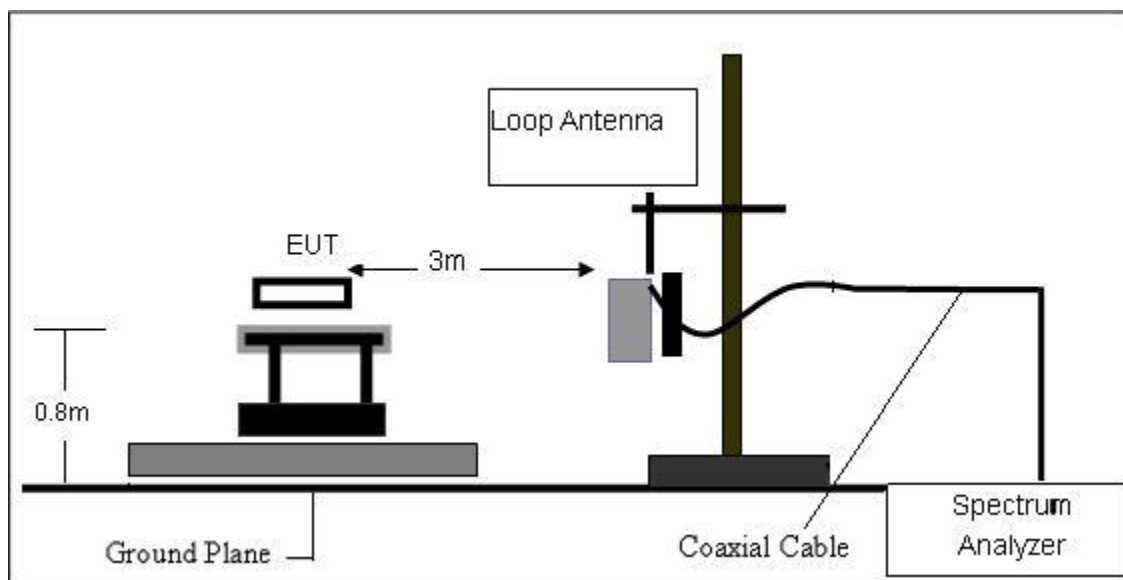
- The measuring distance of at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz,and above 1GHz.
- The EUT was placed on the top of a rotating table 0.8 meters (above 1GHz is 1.5 m) above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment shall be 0.8 m(above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. horizontal and vertical polarizations of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then QuasiPeak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

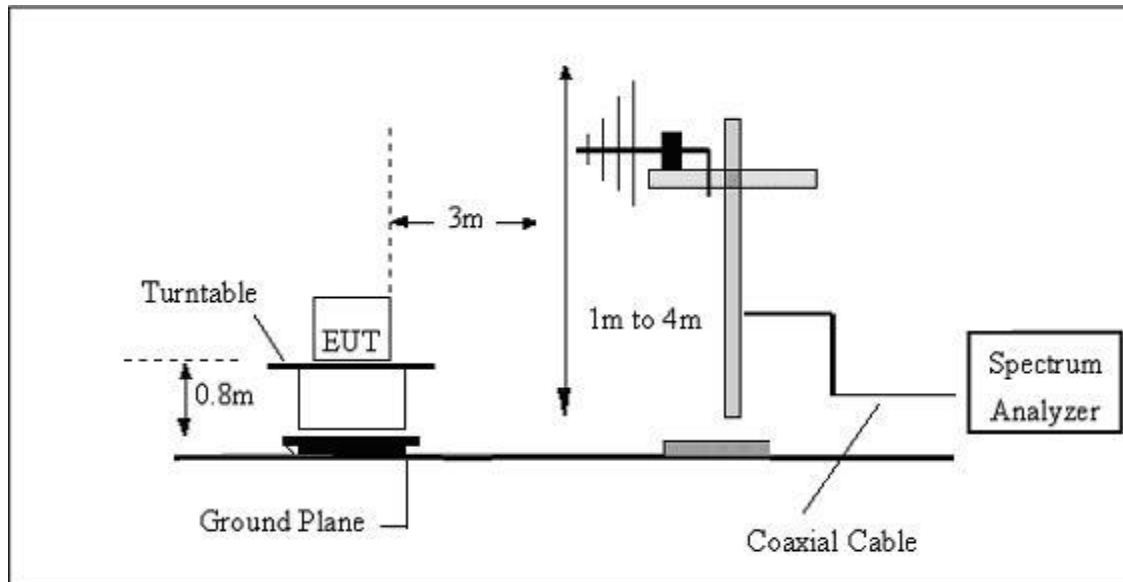
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

8.3 TESTSETUP

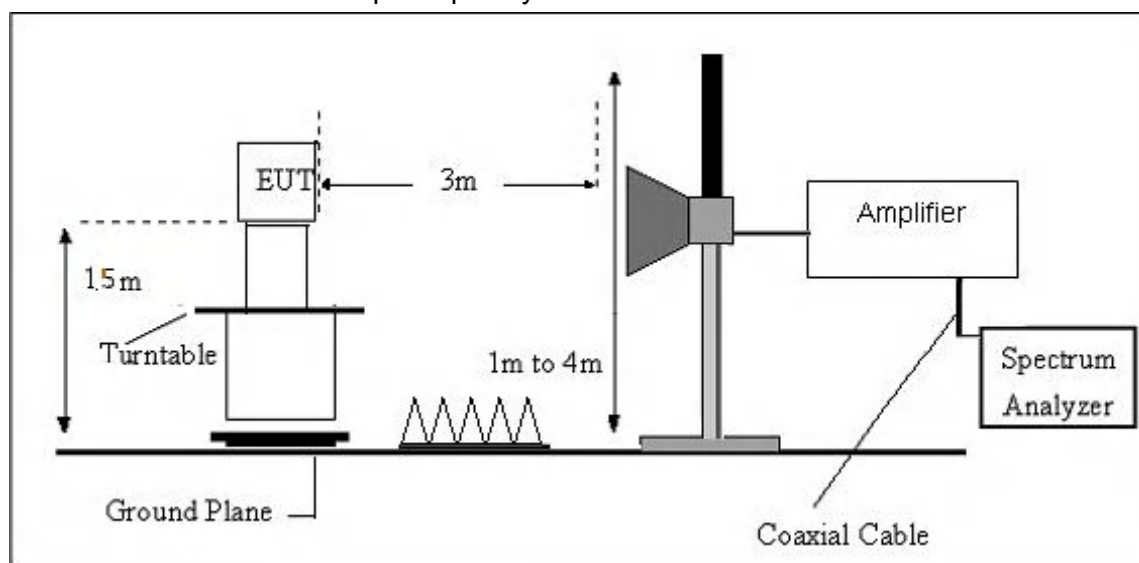
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



8.4. TEST RESULTS

(9KHz-30MHz)

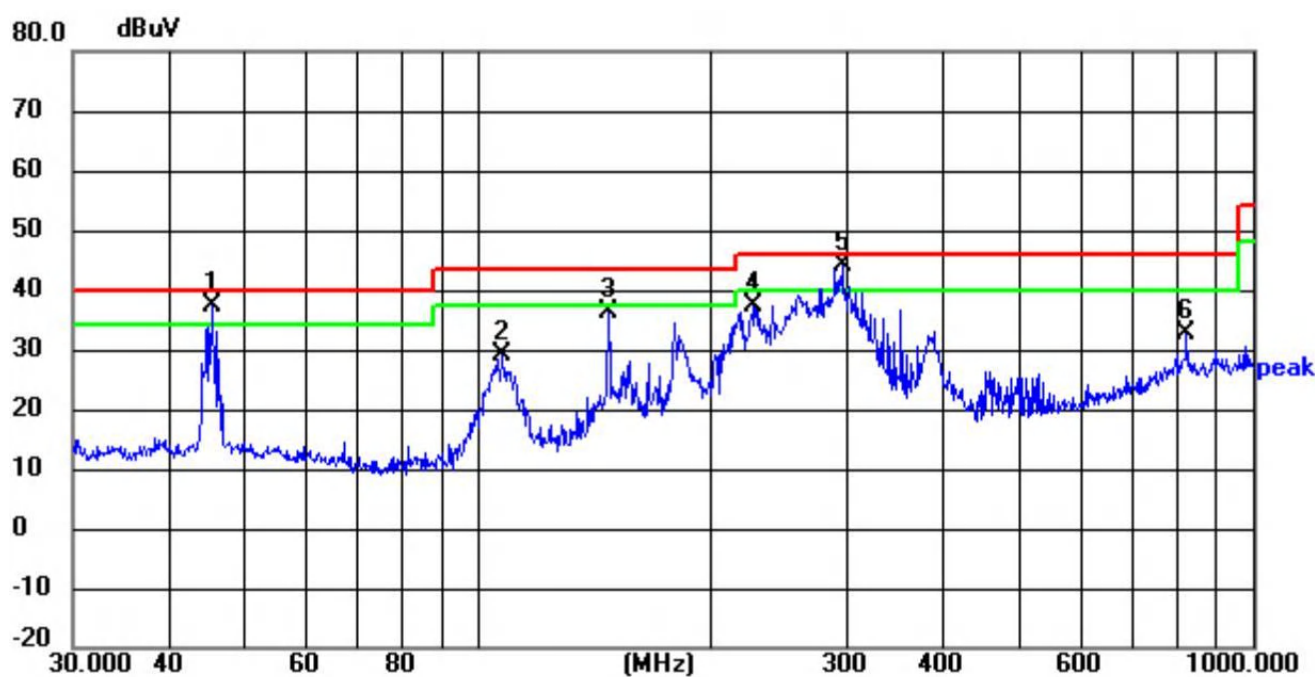
Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

(30MHz-1000MHz)

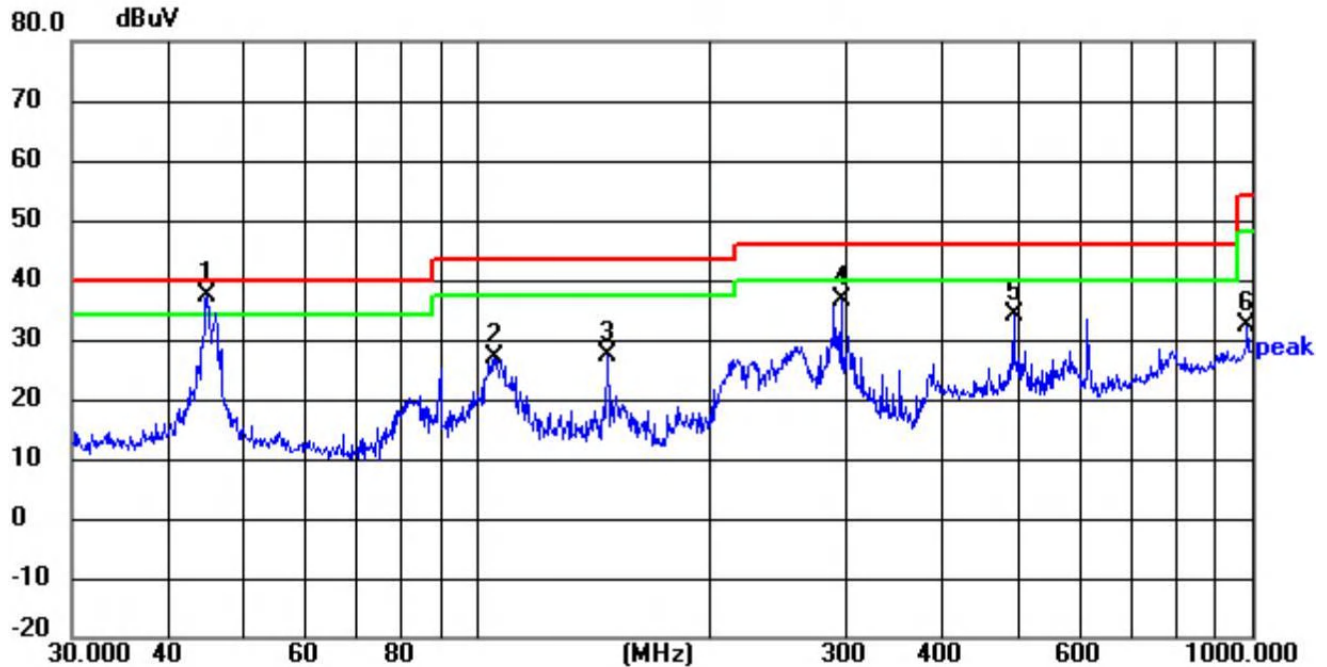
802.11a

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	45.5348	49.43	-12.13	37.30	40.00	-2.70	QP
2	107.5100	44.25	-15.04	29.21	43.50	-14.29	QP
3	147.4036	47.69	-11.58	36.11	43.50	-7.39	QP
4	226.8936	51.05	-13.71	37.34	46.00	-8.66	QP
5	295.1468	56.12	-11.86	44.26	46.00	-1.74	QP
6	821.7103	33.96	-1.21	32.75	46.00	-13.25	QP

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correction (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	44.9006	49.30	-12.06	37.24	40.00	-2.76	QP
2	105.6415	42.15	-15.20	26.95	43.50	-16.55	QP
3	147.4036	39.08	-11.58	27.50	43.50	-16.00	QP
4	295.1469	48.40	-11.86	36.54	46.00	-9.46	QP
5	492.4685	41.14	-7.07	34.07	46.00	-11.93	QP
6	986.0717	31.73	0.68	32.41	54.00	-21.59	QP

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit

2. All modes were tested, and mode 802.11a had the worst data. Only the worst mode is reflected in the report.

(1GHz~40GHz) Restricted band and Spurious emission Requirements

802.11a

Polar (H/V)		Frequency	Meter Reading	Pre- amplifier	Cable LosS	Antenna Factor	Emission Level	Limits	Margin	Detect or Type
		(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/ m)	(dB)	
Low Channel:5180MHz										
V	10360	45.76	32.7	7.72	38.59	59.37	68.2	-8.83	PK	
V	10360	24.44	32.7	7.72	38.59	38.05	54	-15.95	AV	
V	15540	43.17	31.74	9.44	39.29	60.16	74	-13.84	PK	
V	15540	18.34	31.74	9.44	39.29	35.33	54	-18.67	AV	
V	20720	42.69	26.93	6.64	37.94	60.34	74	-13.66	PK	
V	20720	19.15	26.93	6.64	37.94	36.8	54	-17.2	AV	
V	25900	36.95	27.1	7.9	39.32	57.07	68.2	-11.13	PK	
V	25900	22.75	27.1	7.9	39.32	42.87	54	-11.13	AV	
H	10360	38.59	32.7	7.72	38.59	52.2	68.2	-16	PK	
H	10360	23.14	32.7	7.72	38.59	36.75	54	-17.25	AV	
H	15540	38.81	31.74	9.44	39.29	55.8	74	-18.2	PK	
H	15540	23.16	31.74	9.44	39.29	40.15	54	-13.85	AV	
H	20720	42.22	26.93	6.64	37.94	59.87	74	-14.13	PK	
H	20720	17.51	26.93	6.64	37.94	35.16	54	-18.84	AV	
H	25900	40.13	27.1	7.9	39.32	60.25	68.2	-7.95	PK	
H	25900	20.75	27.1	7.9	39.32	40.87	54	-13.13	AV	

Polar (H/V)		Frequency	Meter Reading	Pre- amplifier	Cable LosS	Antenna Factor	Emission Level	Limits	Margin	Detect or Type
		(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/ m)	(dB)	
Middle Channel:5200MHz										
V	10400	44.72	32.69	7.73	38.62	58.38	68.2	-9.82	PK	
V	10400	25.7	32.69	7.73	38.62	39.36	54	-14.64	AV	
V	15600	40.51	31.72	9.45	39.28	57.52	74	-16.48	PK	
V	15600	21.08	31.72	9.45	39.28	38.09	54	-15.91	AV	
V	20800	38.14	26.93	6.73	37.96	55.9	74	-18.1	PK	
V	20800	21.46	26.93	6.73	37.96	39.22	54	-14.78	AV	
V	26000	38.28	27.1	7.94	39.3	58.42	68.2	-9.78	PK	
V	26000	17.21	27.1	7.94	39.3	37.35	54	-16.65	AV	
H	10400	42.85	32.69	7.73	38.62	56.51	68.2	-11.69	PK	
H	10400	21.33	32.69	7.73	38.62	34.99	54	-19.01	AV	
H	15600	39.74	31.72	9.45	39.28	56.75	74	-17.25	PK	
H	15600	21.36	31.72	9.45	39.28	38.37	54	-15.63	AV	
H	20800	40.07	26.93	6.73	37.96	57.83	74	16.17	PK	
H	20800	19.46	26.93	6.73	37.96	37.22	54	-16.78	AV	
H	26000	38.51	27.1	7.94	39.3	58.65	68.2	-9.55	PK	
H	26000	17.07	27.1	7.94	39.3	37.21	54	-16.79	AV	

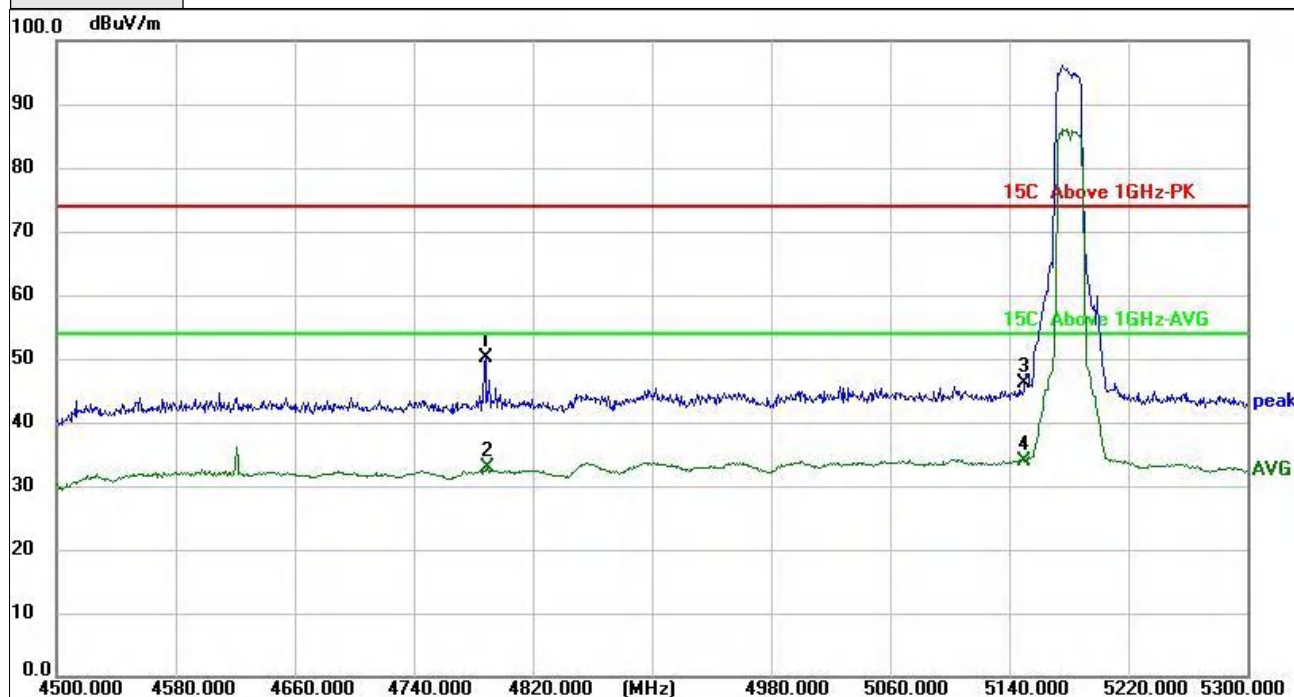
Polar (H/V)		Frequency	Meter Reading	Pre- amplifier	Cable LosS	Antenna Factor	Emission Level	Limits	Margin	Detect or Type
		(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/ m)	(dB)	
High Channel:5240MHz										
V	10480	40.9	32.66	7.74	38.68	54.66	68.2	-13.54	PK	
V	10480	25.55	32.66	7.74	38.68	39.31	54	-14.69	AV	
V	15720	37.59	31.68	9.48	39.26	54.65	74	-19.35	PK	
V	15720	18.59	31.68	9.48	39.26	35.65	54	-18.35	AV	
V	20960	38.05	26.94	6.91	37.99	56.01	74	-17.99	PK	
V	20960	20.77	26.94	6.91	37.99	38.73	54	-15.27	AV	
V	26200	39.22	27.1	7.89	39.5	59.51	68.2	-8.69	PK	
V	26200	16.02	27.1	7.89	39.5	36.31	54	-17.69	AV	
H	10480	45.75	32.66	7.74	38.68	59.51	68.2	-8.69	PK	
H	10480	24.58	32.66	7.74	38.68	38.34	54	-15.66	AV	
H	15720	41.07	31.68	9.48	39.26	58.13	74	-15.87	PK	
H	15720	21.09	31.68	9.48	39.26	38.15	54	-15.85	AV	
H	20960	39.61	26.94	6.91	37.99	57.57	74	-16.43	PK	
H	20960	21.14	26.94	6.91	37.99	39.1	54	-14.9	AV	
H	26200	35.69	27.1	7.89	39.5	55.98	68.2	-12.22	PK	
H	26200	18.91	27.1	7.89	39.5	39.2	54	-14.8	AV	

Remark:

1. Emission Level=Meter Reading+Antenna Factor+Cable Loss-Pre-amplifier,
Margin=Emission Level-Limit
- 2.If peak below the average limit,the average emission was no test.
- 3.The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
- 4.The worst mode is 802.11a,only the worst data is recorded.

Radiated Band Edge data

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11a 36 Horizontal		



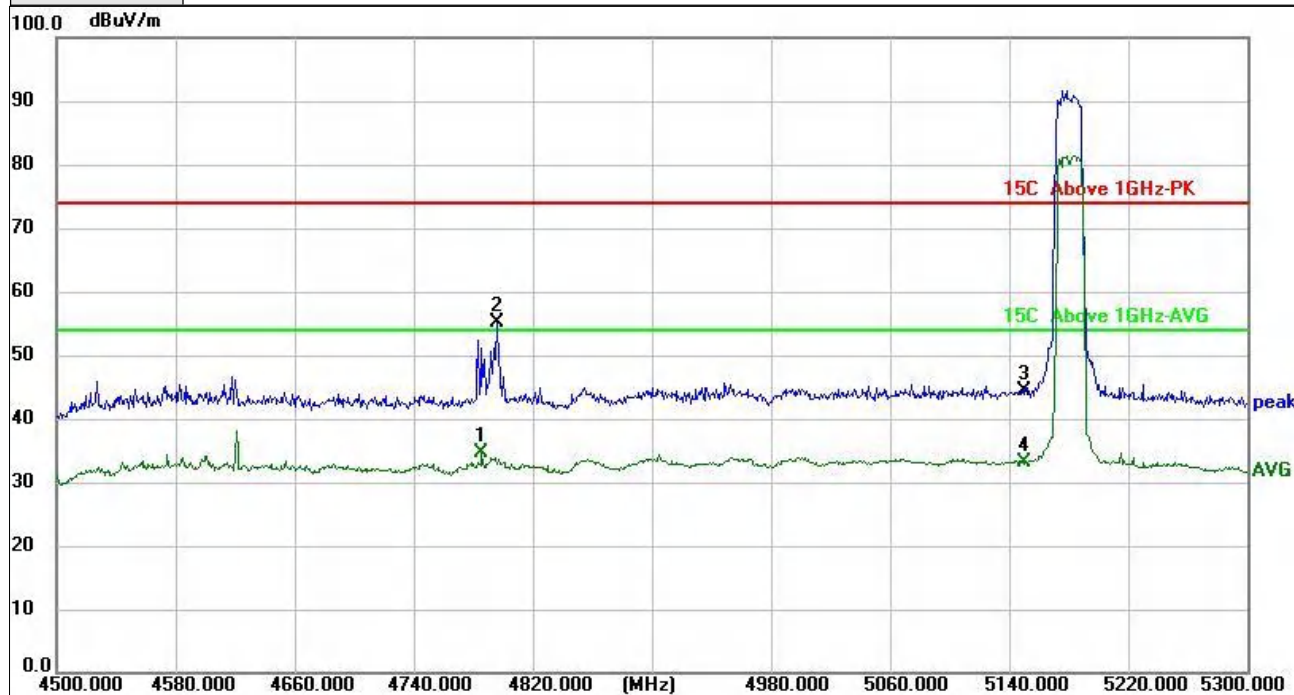
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4788.000	56.04	-5.98	50.06	74.00	-23.94	peak
2	4789.600	38.97	-5.97	33.00	54.00	-21.00	AVG
3	5150.000	50.92	-4.86	46.06	74.00	-27.94	peak
4 *	5150.000	38.71	-4.86	33.85	54.00	-20.15	AVG

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Note:(1)Emission Level=Antenna Factor+Cable Loss+Read Level-Preamplifier Factor.

(2)When PK value is lower than the Average value limit,average don't record.

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11a 36 Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4788.000	56.04	-5.98	50.06	74.00	-23.94	peak
2	4789.600	38.97	-5.97	33.00	54.00	-21.00	AVG
3	5150.000	50.92	-4.86	46.06	74.00	-27.94	peak
4 *	5150.000	38.71	-4.86	33.85	54.00	-20.15	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11a 48 Horizontal		



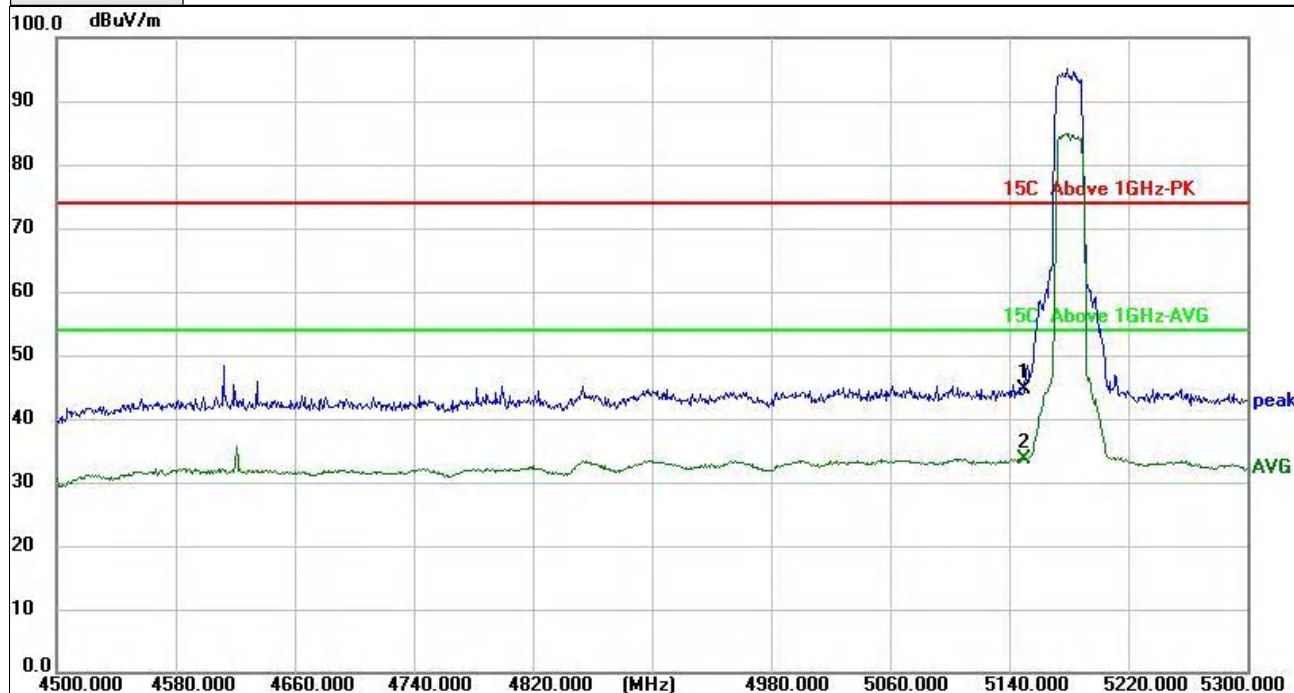
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	49.63	-4.46	45.17	74.00	-28.83	peak
2	5350.000	38.24	-4.46	33.78	54.00	-20.22	AVG
3	5388.640	54.78	-4.41	50.37	74.00	-23.63	peak
4 *	5395.040	41.76	-4.38	37.38	54.00	-16.62	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11a 48 Vertical		



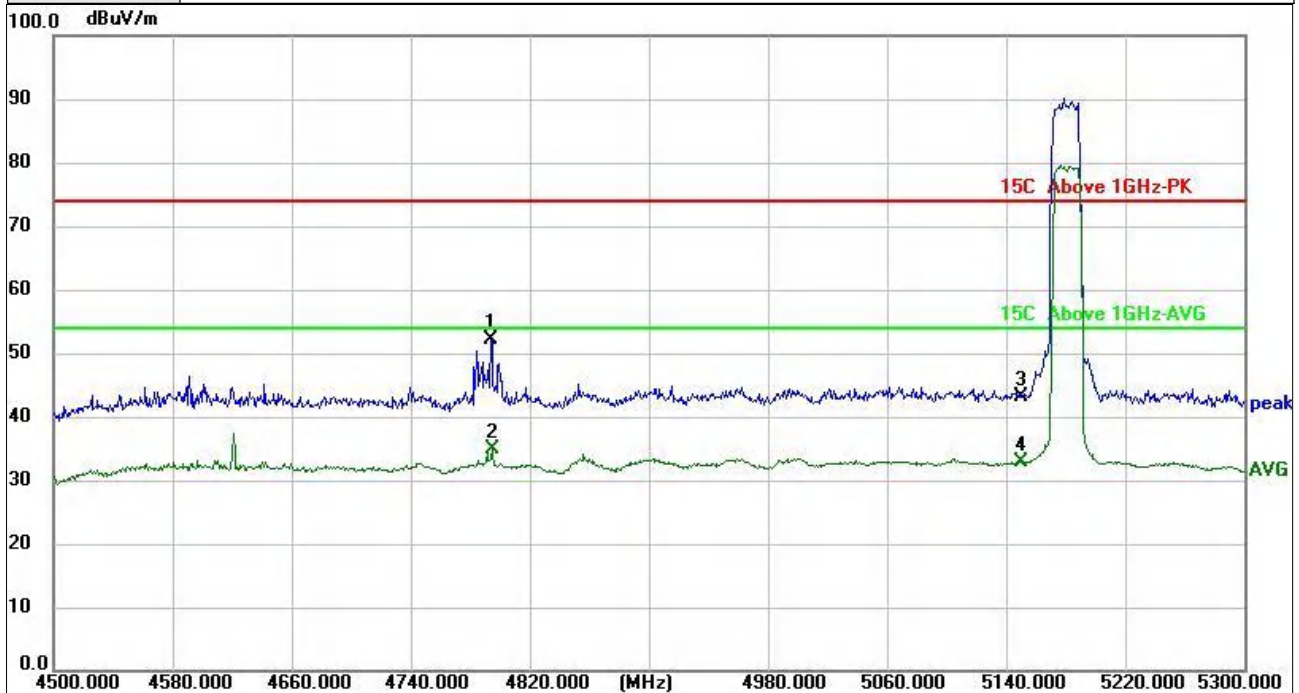
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	49.48	-4.46	45.02	74.00	-28.98	peak
2	5350.000	38.14	-4.46	33.68	54.00	-20.32	AVG
3	5393.120	54.92	-4.39	50.53	74.00	-23.47	peak
4 *	5396.960	41.99	-4.38	37.61	54.00	-16.39	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11N20 36 Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5150.000	49.44	-4.86	44.58	74.00	-29.42	peak
2 *	5150.000	38.45	-4.86	33.59	54.00	-20.41	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11N20 36 Vertical		



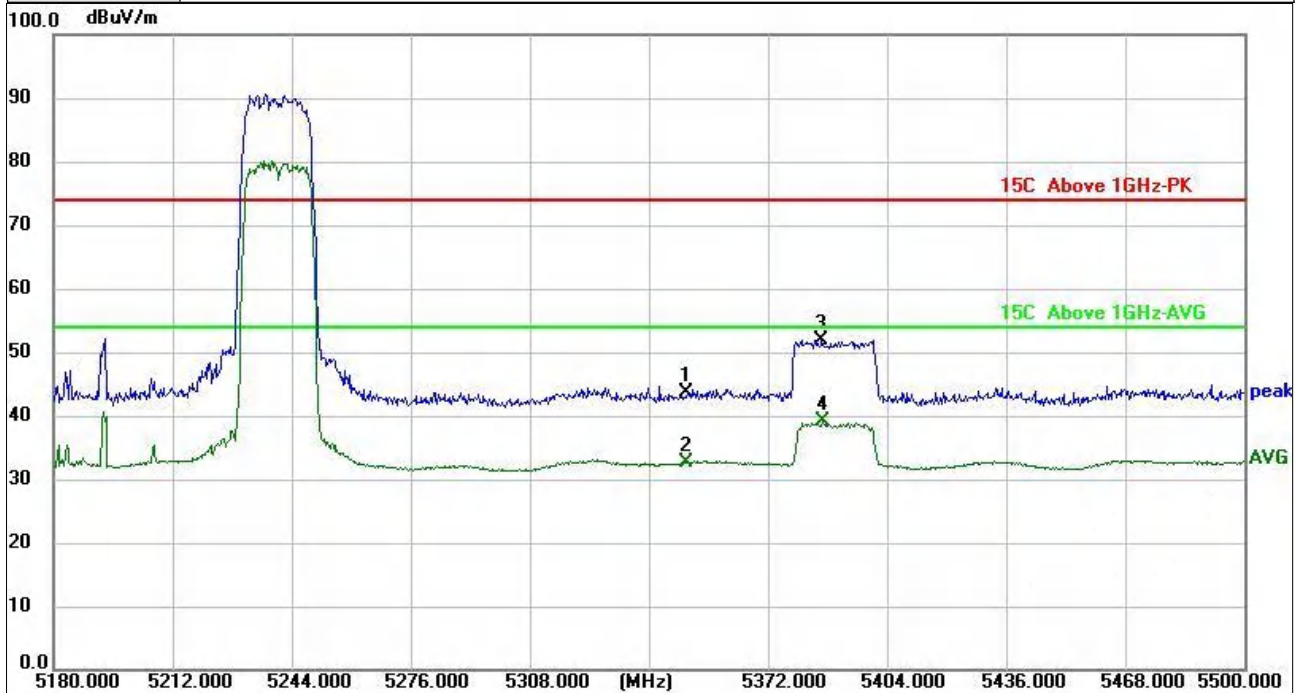
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4793.600	58.19	-5.94	52.25	74.00	-21.75	peak
2 *	4794.400	40.84	-5.94	34.90	54.00	-19.10	AVG
3	5150.000	48.11	-4.86	43.25	74.00	-30.75	peak
4	5150.000	37.63	-4.86	32.77	54.00	-21.23	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11N20 48 Horizontal		



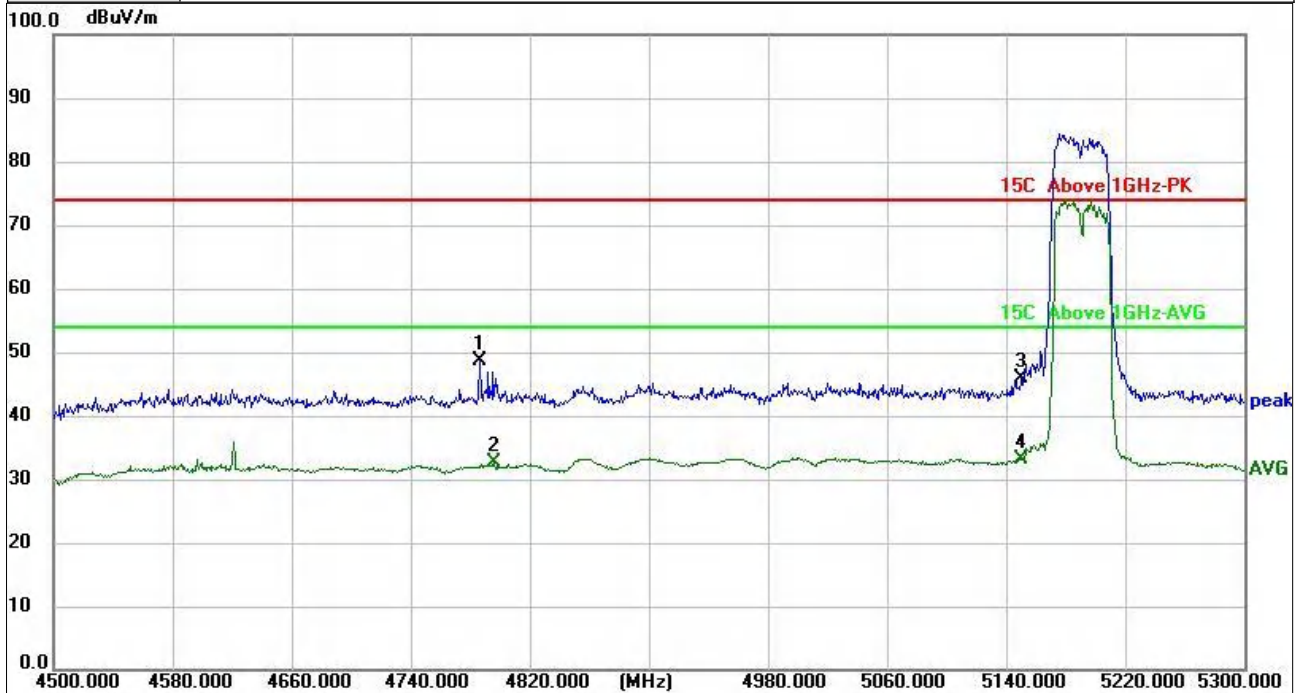
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	48.77	-4.46	44.31	74.00	-29.69	peak
2	5350.000	37.98	-4.46	33.52	54.00	-20.48	AVG
3 *	5396.000	41.57	-4.38	37.19	54.00	-16.81	AVG
4	5396.960	54.43	-4.38	50.05	74.00	-23.95	peak

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11N20 48 Vertical		



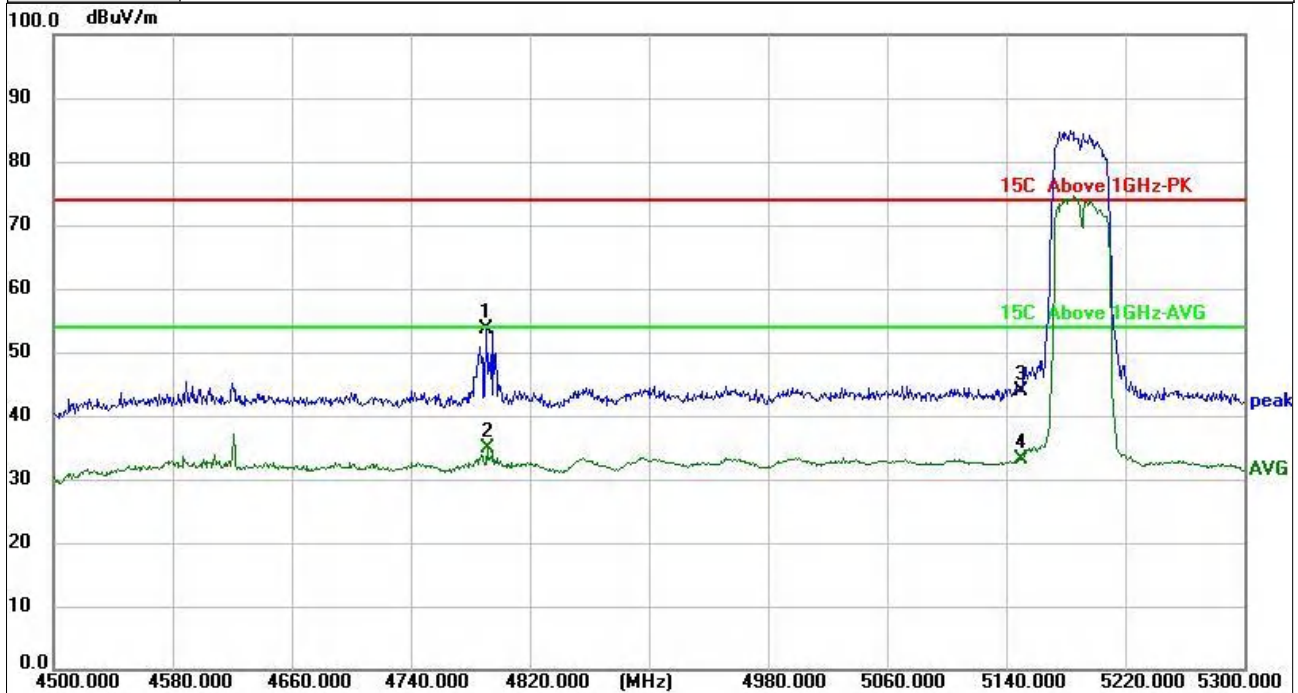
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	48.01	-4.46	43.55	74.00	-30.45	peak
2	5350.000	36.98	-4.46	32.52	54.00	-21.48	AVG
3	5386.400	56.41	-4.41	52.00	74.00	-22.00	peak
4 *	5386.720	43.42	-4.41	39.01	54.00	-14.99	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11N40 38 Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4786.400	54.69	-5.98	48.71	74.00	-25.29	peak
2	4796.000	38.45	-5.93	32.52	54.00	-21.48	AVG
3	5150.000	50.62	-4.86	45.76	74.00	-28.24	peak
4 *	5150.000	38.09	-4.86	33.23	54.00	-20.77	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11N40 38 Vertical		



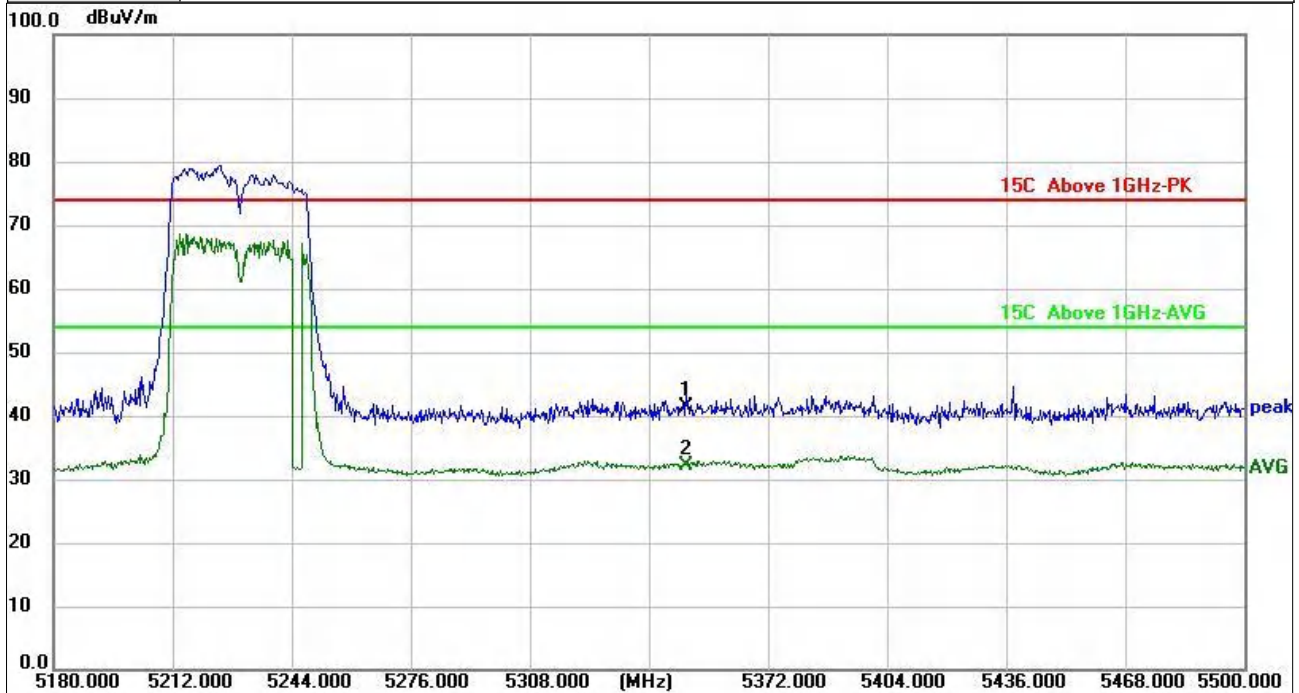
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4790.400	59.53	-5.95	53.58	74.00	-20.42	peak
2 *	4791.200	40.78	-5.95	34.83	54.00	-19.17	AVG
3	5150.000	48.83	-4.86	43.97	74.00	-30.03	peak
4	5150.000	37.96	-4.86	33.10	54.00	-20.90	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11N40 46 Horizontal		



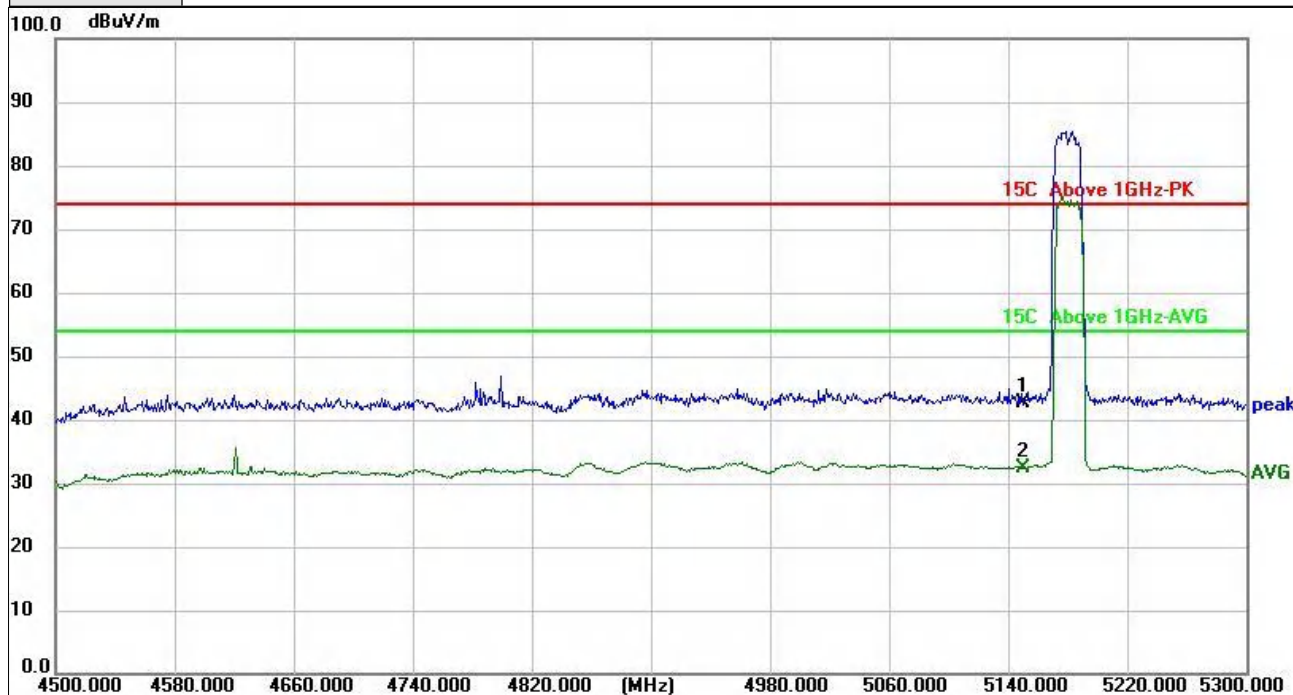
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	49.20	-4.46	44.74	74.00	-29.26	peak
2	5350.000	37.41	-4.46	32.95	54.00	-21.05	AVG
3 *	5396.320	42.08	-4.38	37.70	54.00	-16.30	AVG
4	5398.240	54.82	-4.38	50.44	74.00	-23.56	peak

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11N40 46 Vertical		



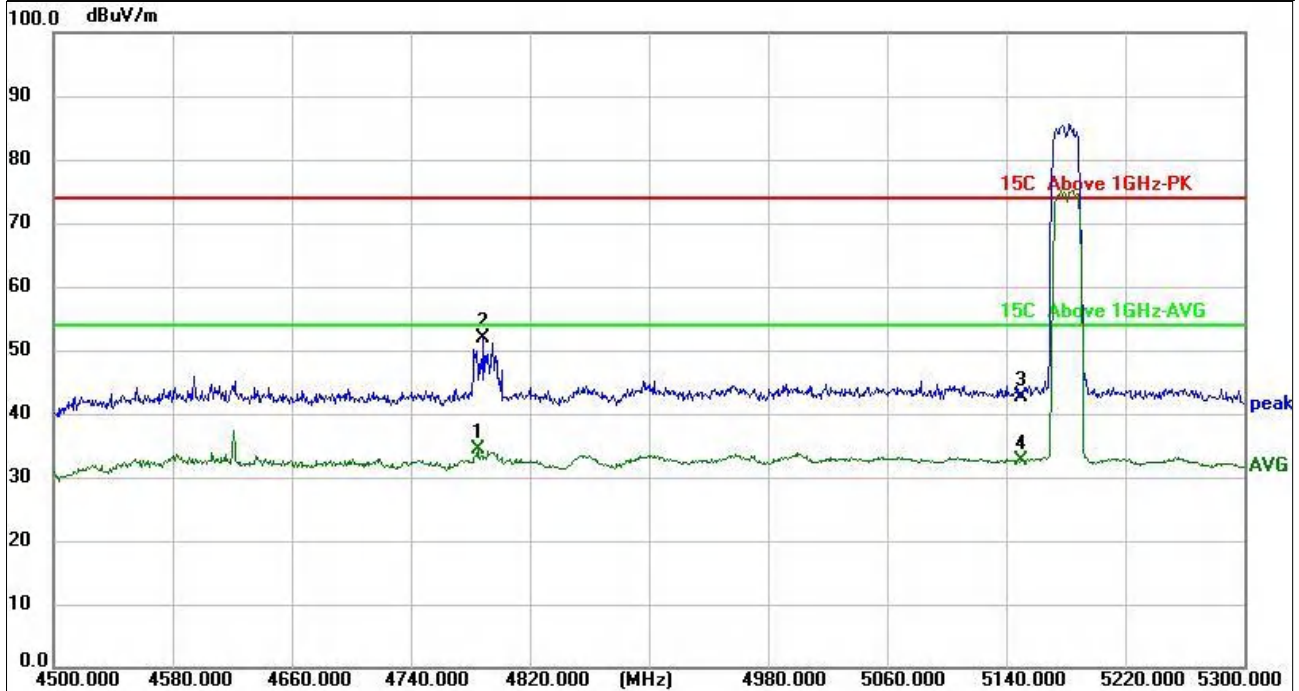
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	45.93	-4.46	41.47	74.00	-32.53	peak
2 *	5350.000	36.66	-4.46	32.20	54.00	-21.80	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11AC20 36 Horizontal		



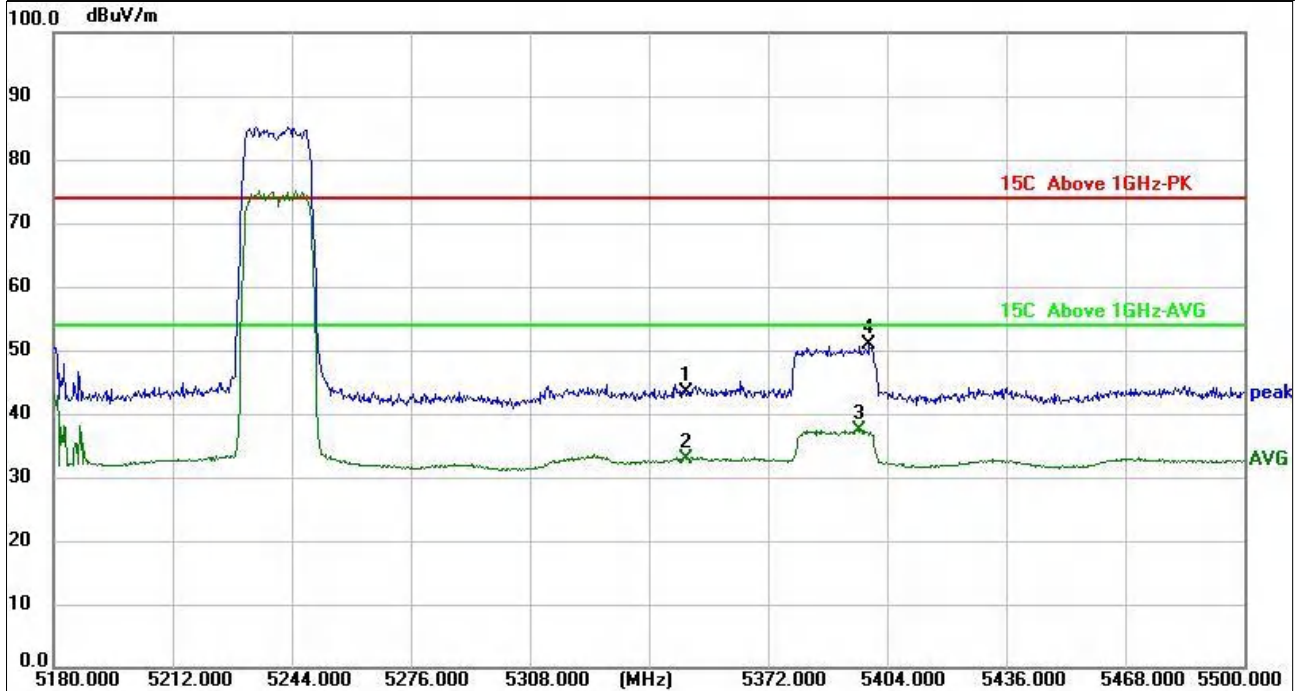
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5150.000	47.57	-4.86	42.71	74.00	-31.29	peak
2 *	5150.000	37.30	-4.86	32.44	54.00	-21.56	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11AC20 36 Vertical		



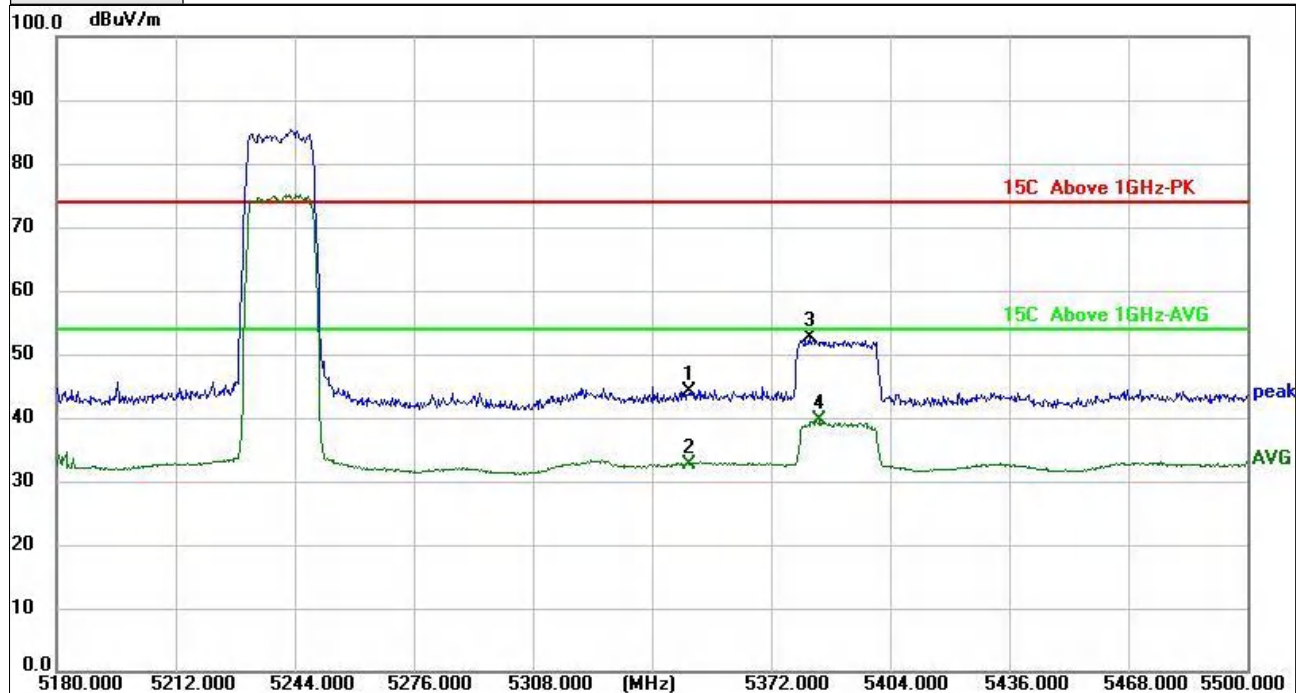
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4784.800	40.38	-5.99	34.39	54.00	-19.61	AVG
2	4788.800	57.77	-5.97	51.80	74.00	-22.20	peak
3	5150.000	47.60	-4.86	42.74	74.00	-31.26	peak
4	5150.000	37.61	-4.86	32.75	54.00	-21.25	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11AC20 48 Horizontal		



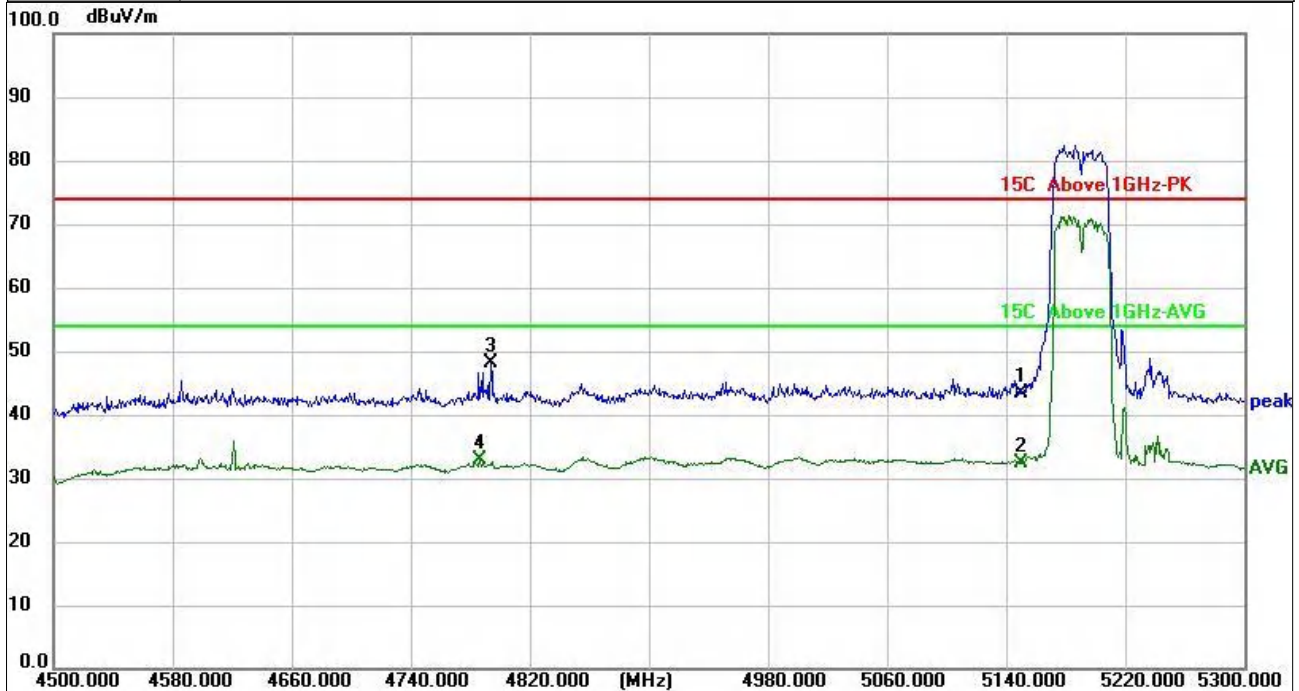
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	47.93	-4.46	43.47	74.00	-30.53	peak
2	5350.000	37.23	-4.46	32.77	54.00	-21.23	AVG
3 *	5396.320	41.81	-4.38	37.43	54.00	-16.57	AVG
4	5399.200	55.15	-4.38	50.77	74.00	-23.23	peak

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11AC20 48 Vertical		



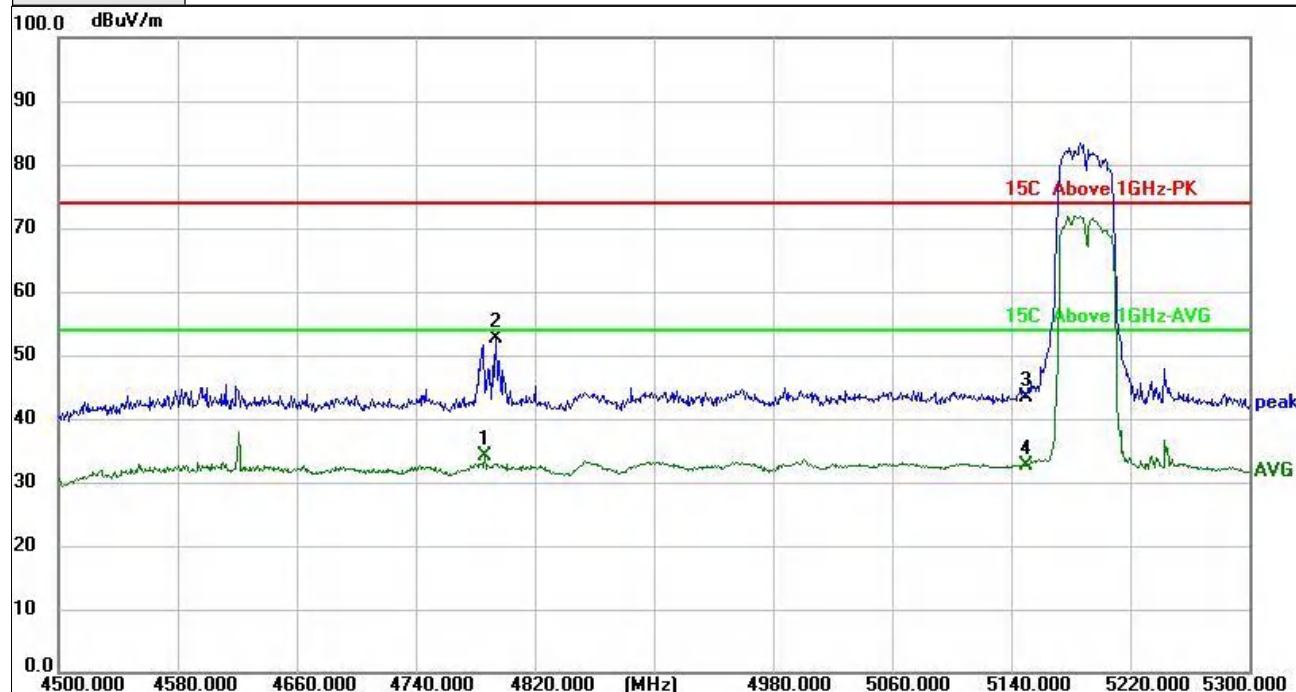
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	48.62	-4.46	44.16	74.00	-29.84	peak
2	5350.000	37.08	-4.46	32.62	54.00	-21.38	AVG
3	5382.240	56.99	-4.41	52.58	74.00	-21.42	peak
4 *	5385.120	43.97	-4.41	39.56	54.00	-14.44	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11AC40 38 Horizontal		



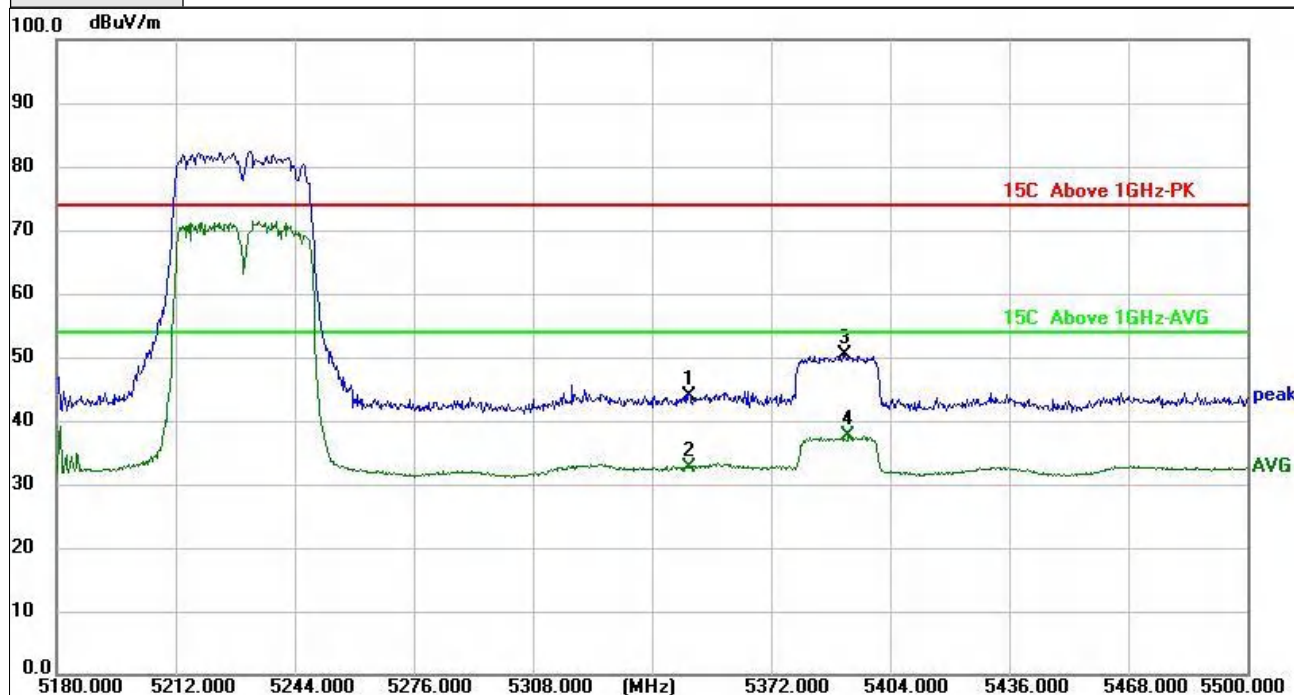
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5150.000	48.19	-4.86	43.33	74.00	-30.67	peak
2	5150.000	37.35	-4.86	32.49	54.00	-21.51	AVG
3	4793.600	54.06	-5.94	48.12	74.00	-25.88	peak
4 *	4786.400	38.74	-5.98	32.76	54.00	-21.24	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11AC40 38 Vertical		



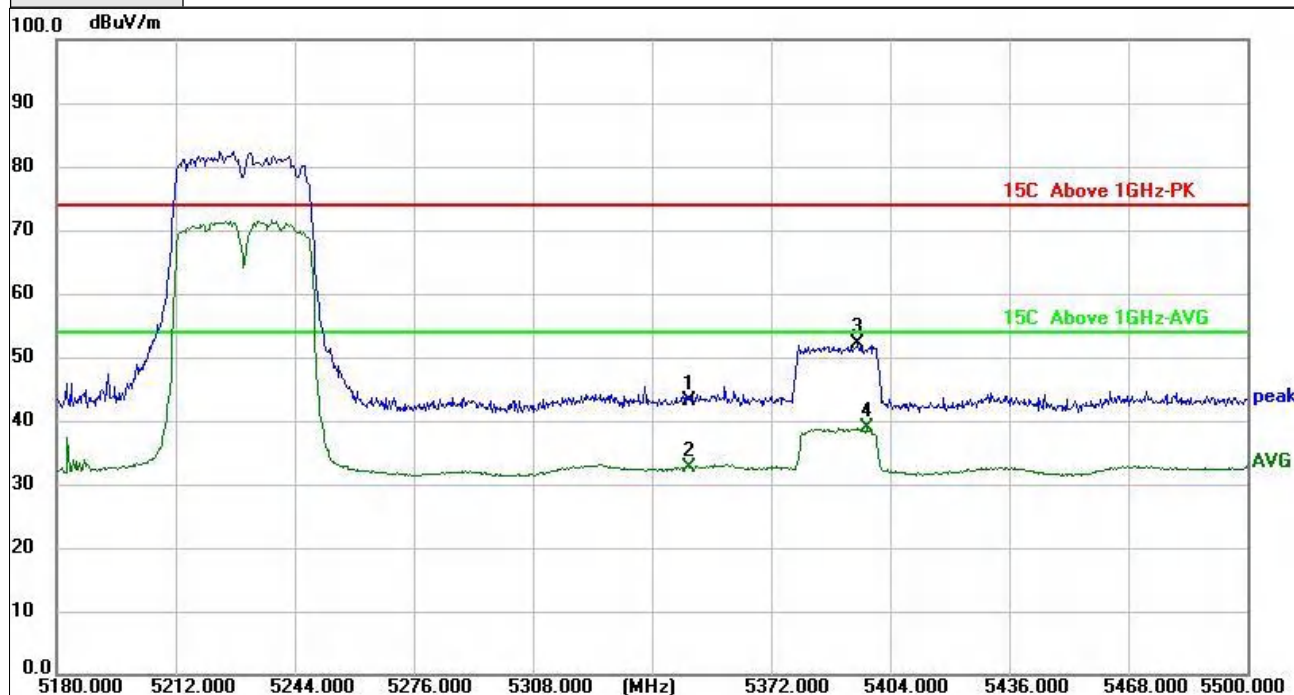
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4786.400	40.13	-5.98	34.15	54.00	-19.85	AVG
2	4793.600	58.60	-5.94	52.66	74.00	-21.34	peak
3	5150.000	48.17	-4.86	43.31	74.00	-30.69	peak
4	5150.000	37.57	-4.86	32.71	54.00	-21.29	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11AC40 46 Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	48.44	-4.46	43.98	74.00	-30.02	peak
2	5350.000	37.00	-4.46	32.54	54.00	-21.46	AVG
3	5391.840	54.88	-4.39	50.49	74.00	-23.51	peak
4 *	5392.800	41.95	-4.39	37.56	54.00	-16.44	AVG

EUT:	Vehicle navigation equipment	Model Name.:	SC240M PRO
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage:	DC 3.6V
Test Mode:	WIFI-802.11AC40 46 Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5350.000	47.60	-4.46	43.14	74.00	-30.86	peak
2	5350.000	36.98	-4.46	32.52	54.00	-21.48	AVG
3	5395.360	56.46	-4.38	52.08	74.00	-21.92	peak
4 *	5397.600	43.22	-4.38	38.84	54.00	-15.16	AVG

9 CONDUCTED EMISSION TEST

9.1 POWER LINE CONDUCTED EMISSION LIMITS

Operating frequency band. In case the emission fall within the restricted band specified on Part 207(a) limit in the table below has to be followed.

FREQUENCY (MHz)	Conducted Emission limit (dBuV)	
	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

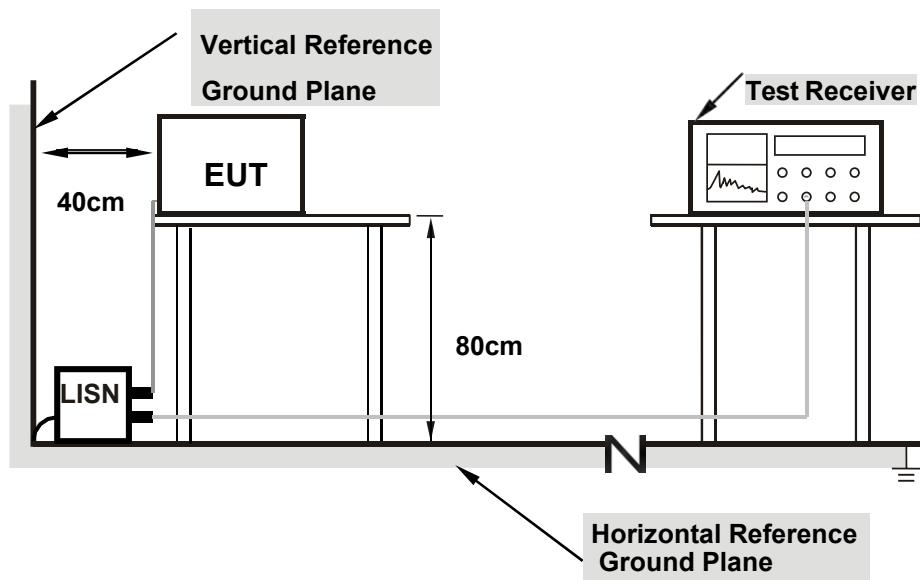
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

10.2 TEST PROCEDURE

- The EUT was 0.8 meters from the horizontal ground plane and 0.4 meters from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

10.3 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

9.4 TEST RESULT

Temperature:	25℃	Relative Humidity:	50%
Test Mode:	802.11a(worst)	Test Voltage:	N/A
Result:	L	Result:	Pass

Temperature:	25℃	Relative Humidity:	50%
Test Mode:	802.11a(worst)	Test Voltage:	N/A
Result:	N	Result:	Pass

Note: 1) Note: The EUT is powered by DC power supply and cannot be directly connected to the public AC power network. This test is not applicable.



10. ANTENNA REQUIREMENT

10.1 STANDARD REQUIREMENT

For intentional device, according to FCC 47 CFR 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. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

10.2 RESULT

The antennas used for this product are Wire antenna and other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 4.66 dBi.

*****END OF THE REPORT*****

