



RF TEST REPORT

Report No.: SET2021-11492

Product Name: RDS AV RECEIVER

IC: 775E-K118

FCC ID: AJDK118

Model No. : DMH-W2700NEX

Serial Model: DMH-W2770NEX

Applicant: PIONEER CORPORATION

Address: 28-8, Honkomagome 2-Chome, Bunkyo-ku, Tokyo 113-0021, Japan.

Dates of Testing: 08/30/2021 —09/03/2021

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.

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Test Report

Product Name : RDS AV RECEIVER

Brand Name : Pioneer

Trade Name : Pioneer

Applicant : PIONEER CORPORATION.


Applicant Address : 28-8, Honkomagome 2-Chome, Bunkyo-ku, Tokyo
113-0021, Japan

Manufacturer : PIONEER CORPORATION.

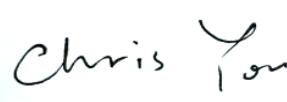
Manufacturer Address : 28-8, Honkomagome 2-Chome, Bunkyo-ku, Tokyo
113-0021, Japan

Test Standards : 47 CFR Part 15 Subpart E 15.407
IC RSS-Gen(Issue 5, March 2019)
IC RSS-247(Issue 2, Feb. 2017)


Test Result : PASS

Tested by :  2021.09.15

Sun, Test Engineer

Reviewed by :  2021.09.15

Chris You, Senior Engineer

Approved by :  2021.09.15

Shuangwen Zhang, Manager

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Change History		
Issue	Date	Reason for change
1.0	2021.09.15	First edition
2.0	2021.09.15	Correct the Model Name and SW version

1. General Information

1.1. EUT Description

Product Name	RDS AV RECEIVER
EUT Type	OEM devices installed in vehicles
Hardware Version	1.0.0
Software Version	PIO_WS01_0.1.10
EUT supports Radios application	WLAN5.0GHz 802.11a/n (HT20/40)/ac(VHT20/40/80)
Modulation Type	CCK, DQPSK, DBPSK for DSSS 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode only
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n : up to 150 Mbps 802.11ac: up to 433.3Mbps
Frequency Range	Band UNII-3: 5735~5815MHz
Channel Bandwidth	802.11a: 20MHz, 802.11n: 20MHz/40MHz 802.11ac: 20MHz/40MHz/80MHz
Antenna Type	PIFA
Antenna Gain	-7.5dBi
Output Power (Max.)	Band UNII-3: 13.13dBm

Note1: The EUT is a RDS AV RECEIVER, it contains 2 models, they are DMH-W2700NEX; DMH-W2770NEX. They have the same size, appearance and internal structure, and the only difference is the model number. and DMH-W2770NEX contain an extra remote control.

Note2: The antenna gain and RF adapter/cable insert loss provided by manufacture.

1.2. Test Standards and Results

The objective of the report is to perform testing according to below standards for the EUT FCC ID/IC Certification:

No.	Identity	Document Title
1	47 CFR Part 15 Subpart E § 15.407	Radio Frequency Devices
2	789033 D02 General UNII Test Procedures New Rules v02r01	Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E
3	IC RSS-Gen (Issue 5, March. 2019)	General Requirements for Compliance of Radio Apparatus
4	IC RSS-247 (Issue 2, Feb. 2017)	Digital Transmission Systems (DTSS), Frequency Hopping Systems(FHSS) and Licence-Exemp Local Area Network (LE-LAN) Devices
5	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices

Test detailed items/section required by FCC /IC rules and results are as below:

No.	FCC Rule	IC Rule	Description	Result
1	15.203	RSS GEN, 6.8	Antenna Requirement	PASS
2	15.407(a)	RSS-247, 6.2	Maximum Conducted Output Power	PASS
3	15.407(a)	-	Emission Bandwidth(26 dB Bandwidth)	N/A
	15.407(e)	RSS-247, 6.2	Emission Bandwidth(6 dB Bandwidth)	PASS
	-	RSS GEN (6.7)	Emission Bandwidth(99%)	PASS
4	15.407(a)	RSS-247, 6.2	Power spectral density (PSD)	PASS
5	15.207	RSS-Gen, 8.8	Power Line Conducted Emission	PASS
6	15.209 15.407(b)	RSS-247, 6.2	Radiated Band Edges and Spurious Emission	PASS
7	15.407(g)	-	Frequency Stability	PASS
8	15.407(c)	RSS-247, 6.4	Automatically discontinue transmission	PASS

1.3. Channel List

Operated band in 5735 MHz ~ 5815MHz

1 channels are provided for 802.11a

Channel	Frequency	Channel	Frequency
149	5745 MHz		

1 channels are provided for 802.11n-HT40 and 802.11ac-VHT40

Channel	Frequency		
151	5755 MHz		

1 channel are provided for 802.11ac-VHT80

Channel	Frequency	Channel	Frequency
155	5775 MHz	/	/

1.4. Test environment and mode

Operating Environment	
Temperature	24°C
Humidity	57 % RH
Atmospheric Pressure	1010 mbar
Test mode:	
Continuously transmitting mode	For RF test items, an engineering test program was provided and enable to make EUT transmitting. Keeps the EUT in 100% duty cycle transmitting with modulation in SISO, duty cycle factor is not required.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

For Frequency band 5735 ~ 5815 MHz			
Mode	Modulation scheme / bandwidth		
	5745 MHz		
802.11a	6 Mbps		
802.11n/ac – HT20	MCS 0		
Frequency	5755 MHz		
802.11n/ac – HT40	MCS 0		
Frequency	5775 MHz		
802.11ac – VHT80	MCS 0		

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



Test Mode	Description
Mode 1	TX A Mode / CH149
Mode 2	TX N20 Mode / CH149
Mode 3	TX N40 Mode / CH151
Mode 4	TX AC20 Mode / CH149
Mode 5	TX AC40 Mode / CH151
Mode 6	TX AC80 Mode / CH155
Mode 7	TX Mode

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 7	TX Mode
For Radiated Test	
Final Test Mode	Description
Mode 1	TX A Mode / CH149
Mode 2	TX N20 Mode / CH149
Mode 3	TX N40 Mode / CH151
Mode 4	TX AC20 Mode / CH149
Mode 5	TX AC40 Mode / CH151
Mode 6	TX AC80 Mode / CH155

1.5. Power level setup in software

Power level setup in software for 5G wifi			
5735-5815MHz			
Frequency (MHz)	5745		
A mode	55		
Frequency (MHz)	5745		
N20 mode	55		
Frequency (MHz)	5755		
N40 mode	55		
Frequency (MHz)	5745		
AC20 mode	55		
Frequency (MHz)	5755		
AC40 mode	55		
Frequency (MHz)	5775		
AC80 mode	55		



1.6. Laboratory Facilities

CNAS-Lab Code: L1659

CCIC-SET is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

FCC-Registration No.: 406086

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration No.: 406086, valid time is until April 19th, 2023.

ISED Registration: 11185A-1

CAB identifier: CN0064

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until Jun. 30th, 2023.

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

2. Test Requirements

2.1. Antenna requirement

2.1.1. Applicable Standard

According to FCC 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

And according to FCC 47 CFR Section 15.407(E), 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.

According to RSSGEN 6.8, The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

2.1.2. Antenna Information

Antenna Type	PIFA
EUT	RDS AV RECEIVER
Operating frequency range	5735-5815 MHz
Antenna Gain	-7.5dBi(Maximum)

2.1.3. Result: comply

The EUT has a permanently and irreplaceable attached antenna. Please refer to the EUT internal photos.

2.2. Output Power

2.2.1. Limit of Output Power

FCC 15.407(a)

The maximum conducted output power should not exceed:

Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/> Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p. \leq 125mW(21dBm) at any elevation angle above 30 degrees as measured from the horizon)
	<input type="checkbox"/> Fixed point-to-point Access device	1 Watt (30 dBm)
	<input type="checkbox"/> Indoor Access Point	1 Watt (30 dBm)
	<input type="checkbox"/> Mobile and portable client device	250mW (24 dBm)
U-NII-2A	<input type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-2C	<input type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-3	<input checked="" type="checkbox"/>	1 Watt (30 dBm)

Note: B* is the 26 dB emission bandwidth in MHz.

RSS-247, 6.2

The maximum conducted output power shall not exceed:

Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/> OEM devices installed in vehicles	30 mW or $1.76 + 10 \log_{10} B$, dBm, whichever is less
U-NII-2A	<input type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-2C	<input type="checkbox"/>	250mW (24 dBm) or 11dBm+10logB* Whichever is less.
U-NII-3	<input checked="" type="checkbox"/>	1 Watt (30 dBm)

Note: B* is the 99% emission bandwidth in MHz.

The maximum e.i.r.p. shall not exceed:

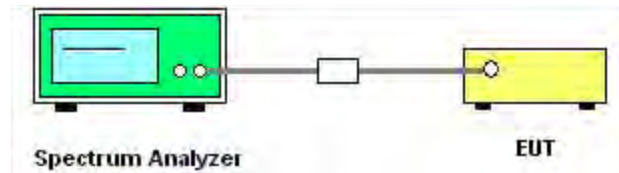
Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/>	200mW(23dBm) or 10dBm+10log B* Whichever is less.
U-NII-2A	<input type="checkbox"/>	1W (30 dBm) or 17dBm+10logB* Whichever is less.
U-NII-2C	<input type="checkbox"/>	1W (30 dBm) or 17dBm+10logB* Whichever is less.
U-NII-3	<input checked="" type="checkbox"/>	N/A

Note: B* is the 99% emission bandwidth in MHz.

2.2.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.2.3. Test Setup



2.2.4. Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-1
2. The RF output of EUT was connected to spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW=1MHz, VBW=3MHz, Sweep time=Auto, Detector=average (RMS), Compute power by integrating the spectrum across the 99%OBW.
5. Measure the conducted output power and record the results in the test report.



2.2.5. Test Result

Please refer to APPENDIX A for detail

2.3. Emission Bandwidth

2.3.1. Limit of Bandwidth

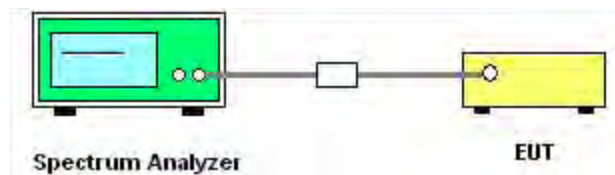
There is no limit bandwidth for band U-NII-1, U-NII-2A and U-NII-2C.

The minimum of 6dB bandwidth measurement is 0.5 MHz for U-NII-3.

2.3.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.3.3. Test Setup



2.3.4. Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

3. Set to the maximum power setting and enable the EUT transmit continuously.

4. For 26dB bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = approximately 1%EBW, VBW \geq 3RBW, Detector = Peak, Trace mode = max hold

Span > 26 dB bandwidth and Sweep time = auto

5. Use the spectrum analyzer N dB down function to find the 26dB bandwidth.

6. For 6 Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 100kHz
VBW = 300 kHz, Detector = Peak, Trace mode = max hold

7. Use the spectrum analyzer N dB down function to find the 6dB bandwidth

8. Measure and record the worst results in the test report.



2.3.5. Test Results Bandwidth

Please refer to APPENDIX A for detail

2.4. Power spectral density (PSD)

2.4.1. Limit of Power Spectral Density

FCC 15.407(a)

The maximum power spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/> Access Point (Master device)	17 dBm/MHz
	<input type="checkbox"/> Fixed point-to-point Access device	
	<input type="checkbox"/> Mobile and portable client device	11 dBm/MHz
U-NII-2A	<input type="checkbox"/>	11 dBm/MHz
U-NII-2C	<input type="checkbox"/>	11 dBm/MHz
U-NII-3	<input checked="" type="checkbox"/>	30dBm/500kHz

RSS-247, 6.2

The maximum power spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/>	N/A
U-NII-2A	<input type="checkbox"/>	11 dBm/MHz
U-NII-2C	<input type="checkbox"/>	11 dBm/MHz
U-NII-3	<input checked="" type="checkbox"/>	30 dBm/500kHz

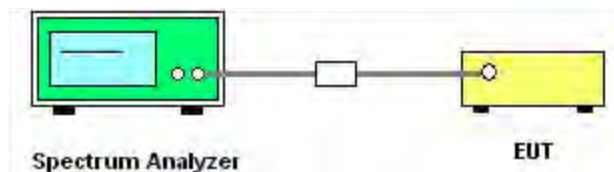
The e.i.r.p. spectral density should not exceed:

Band	EUT Category	Limit
U-NII-1	<input type="checkbox"/>	10 dBm/MHz
U-NII-2A	<input type="checkbox"/>	N/A
U-NII-2C	<input type="checkbox"/>	N/A
U-NII-3	<input checked="" type="checkbox"/>	N/A

2.4.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.4.3. Test Setup



2.4.4. Test Procedures

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.

4. For U-NII-1, U-NII-2A, U-NII-2C Band:

Using method SA-1

Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto, detector = sample, traces 100 sweeps of averaging mode.

For U-NII-3 Band:

Set RBW=500 kHz, $VBW \geq 3RBW$, where span is enough to capture the entire bandwidth, Sweep time = Auto, detector = sample, traces 100 sweeps of averaging mode.

5. Use peak search function on the instrument to find the peak of the spectrum and record its value
6. Repeat above procedures until all default test channel (low, middle, and high) was complete.

2.4.5. Test Results of Power spectral density

Please refer to APPENDIX A for detail

2.5. Frequency Stability

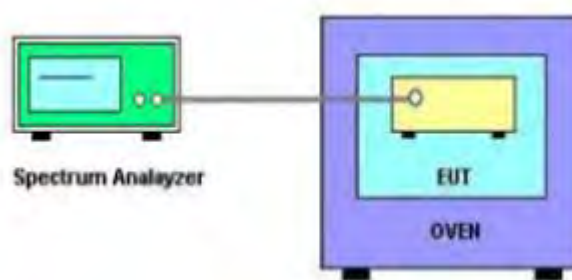
2.5.1. Limit

FCC 15.407(b) Frequency Stability	
Frequency Band(MHz)	Limit
5150~5250	Specified in the user's manual
5250~5350	
5470~5725	
5725~5850	

2.5.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.5.3. Test Setup



2.5.4. Test Procedures

1. The EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. The EUT is installed in an environment test chamber with external power source.
4. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
5. A sufficient stabilization period at each temperatures in used prior to each frequency measurement.
6. The test shall be performed under -10 to 55 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.
7. Measure and record the worst results in the test report.



2.5.5. Test Results of Frequency Stability

Please refer to APPENDIX A for detail

2.6. Automatically Discontinue Transmission

2.6.1. Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

2.6.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Results of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

2.7. Radiated Band Edge and Spurious Emission

2.7.1. Limit of Radiated Band Edges and Spurious Emission

Radiated emission which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequency (MHz)	Field Strength ($\mu\text{V}/\text{m}$)	Measurement Distance (m)
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

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dB $\mu\text{V}/\text{m}$) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Applicable To	Limit	
789033 D02 General UNII Test Procedures New Rules V02r01	Field Strength at 3m	
	PK:74(dB $\mu\text{V}/\text{m}$)	AV:54 (dB $\mu\text{V}/\text{m}$)

Frequency Band (MHz)	Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength (3m) (dB $\mu\text{V}/\text{m}$)
5150 - 5250	Outside of the 5.15~5.35 GHz	-27	68.2
5250 - 5350	Outside of the 5.15~5.35 GHz		
5470 -5725	Outside of the 5.47~5.725 GHz		

FCC 15.407			
Frequency Band (MHz)	Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength (3m) (dBμV/m)
5725 - 5850	<5650	-27	68.2
	5650~5700	-27~10	68.2~105.2
	5700~5720	10~15.6	105.2~110.8
	5720~5725	15.6~27	110.8~122.2
	5850~5855	27~15.6	122.2~110.8
	5855~5875	15.6~10	110.8~105.2
	5875~5925	10~-27	105.2~68.2
	>5925	-27	68.2

Note: 1. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000 \sqrt{30P}}{3} \mu\text{V/m, where } P \text{ is the eirp (Watts).}$$

For IC:

For transmitters with operating frequencies in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. Any unwanted emissions that fall into the band 5250-5350 MHz shall be attenuated below the channel power by at least 26 dB, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth (i.e. 99% bandwidth), above 5250 MHz. The 26 dB bandwidth may fall into the 5250-5350 MHz band; however, if the occupied bandwidth also falls within the 5250-5350 MHz band, the transmission is considered as intentional and the devices shall comply with all requirements in the band 5250-5350 MHz including implementing dynamic frequency selection (DFS) and TPC, on the portion of the emission that resides in the 5250-5350 MHz band.

Devices operating in the band 5725-5850 MHz shall have e.i.r.p. of unwanted emissions comply with the following:

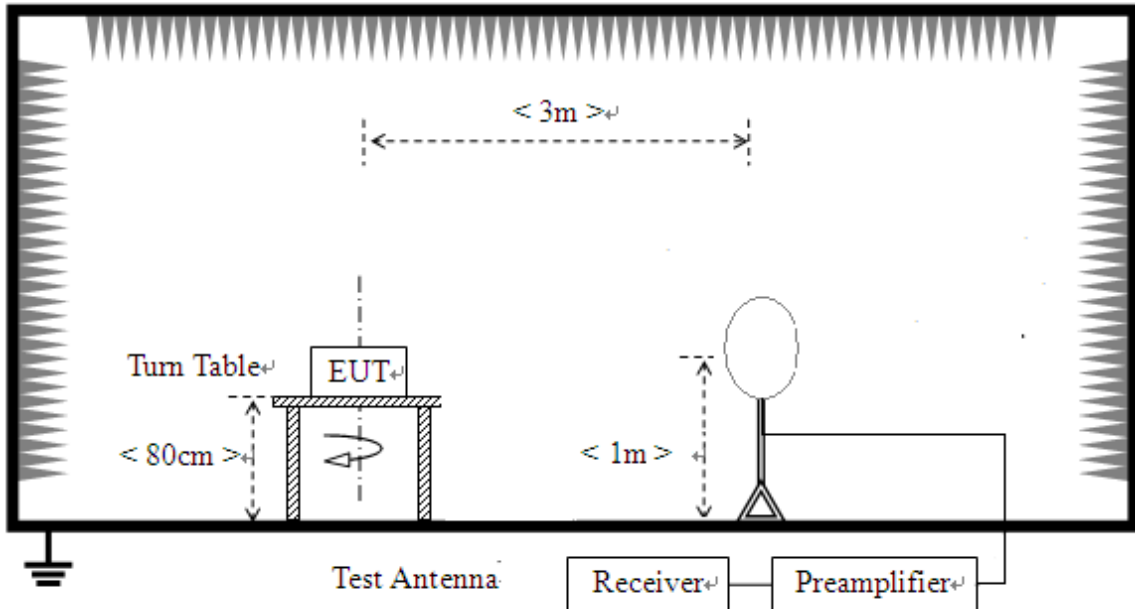
- a) 27 dBm/MHz at frequencies from the band edges decreasing linearly to 15.6 dBm/MHz at 5 MHz above or below the band edges;
- b) 15.6 dBm/MHz at 5 MHz above or below the band edges decreasing linearly to 10 dBm/MHz at 25 MHz above or below the band edges;
- c) 10 dBm/MHz at 25 MHz above or below the band edges decreasing linearly to -27 dBm/MHz at 75 MHz above or below the band edges; and
- d) -27 dBm/MHz at frequencies more than 75 MHz above or below the band edges.

2.7.2. Measuring Instruments

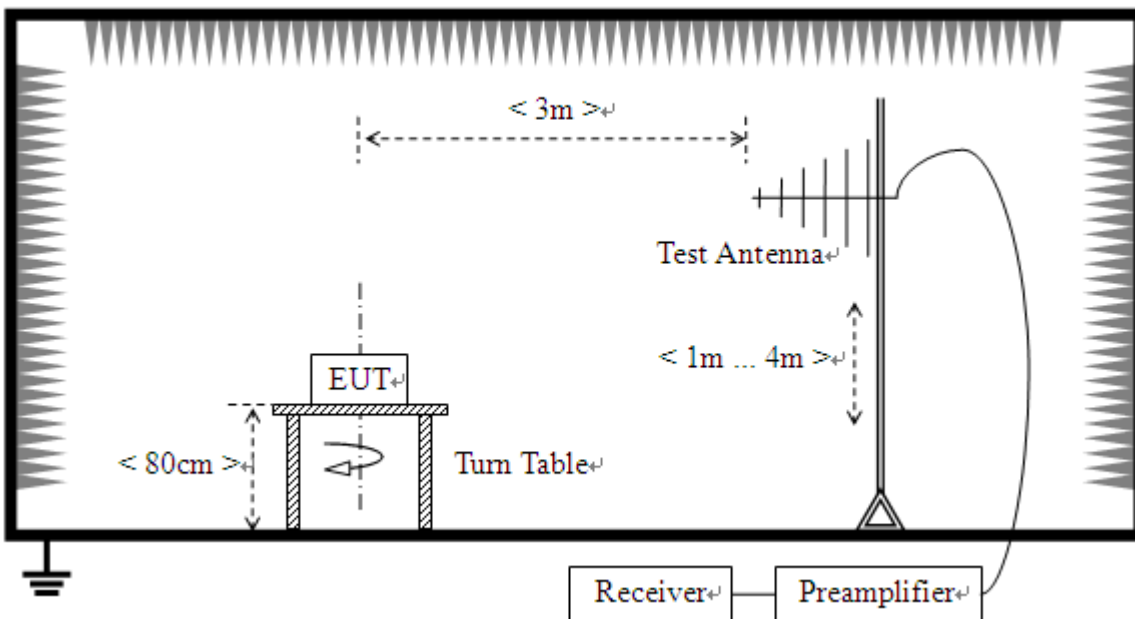
The measuring equipment is listed in the section 3 of this test report.

2.7.3. Test Setup

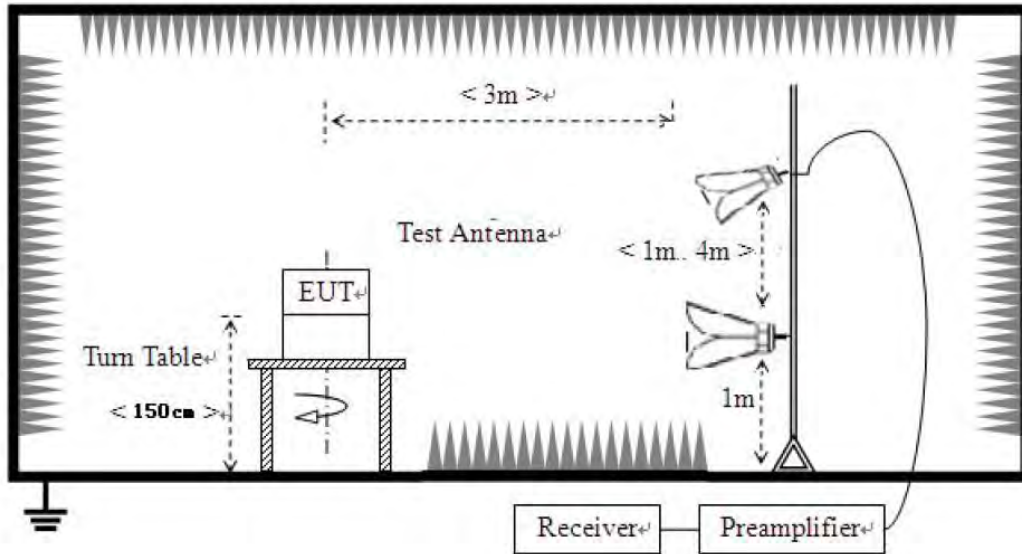
For radiated emissions from 9 KHz to 30 MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.7.4. Test Procedures

1. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
6. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:



1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ($10 \log(1/\text{duty cycle})$).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

The worst mode as below:

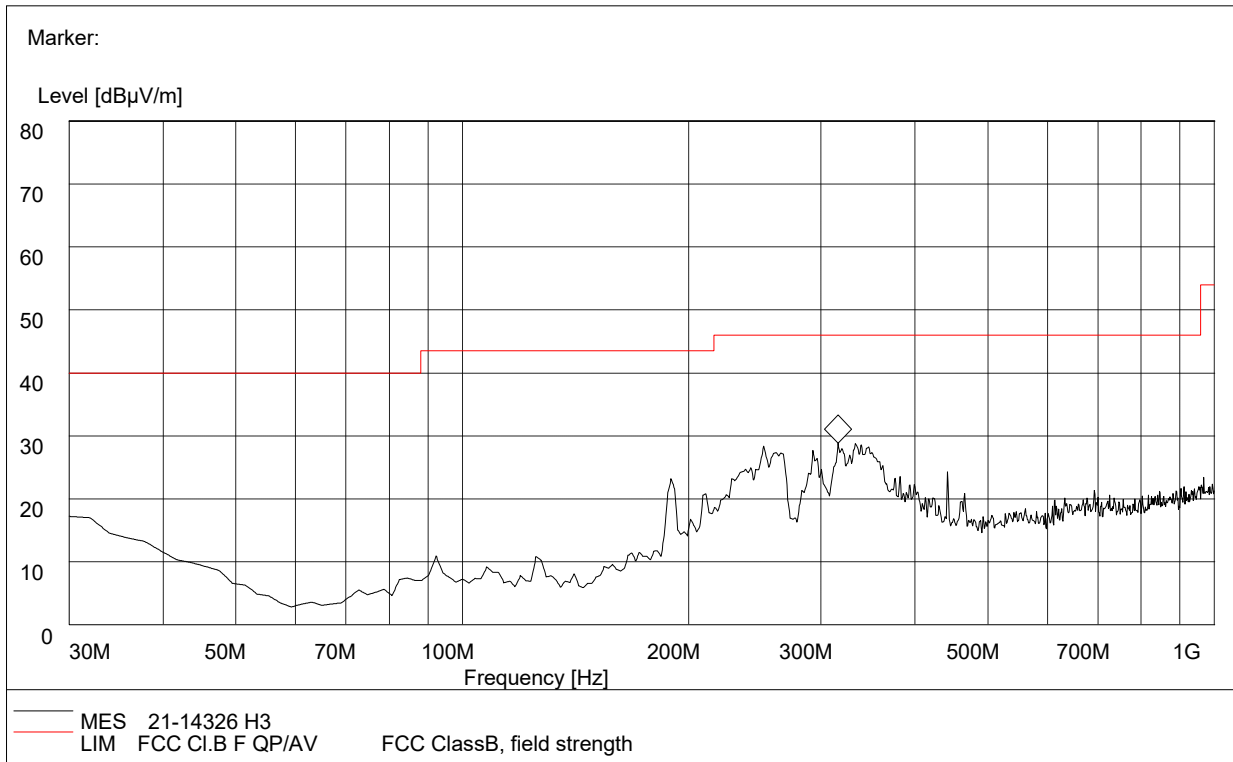
802.11n (40MHz) 5755MHz TX for below 1GHz due to maximum conducted power

2.7.5. Test Results of Radiated Band Edge and Spurious Emission

For 9 KHz to 30MHz

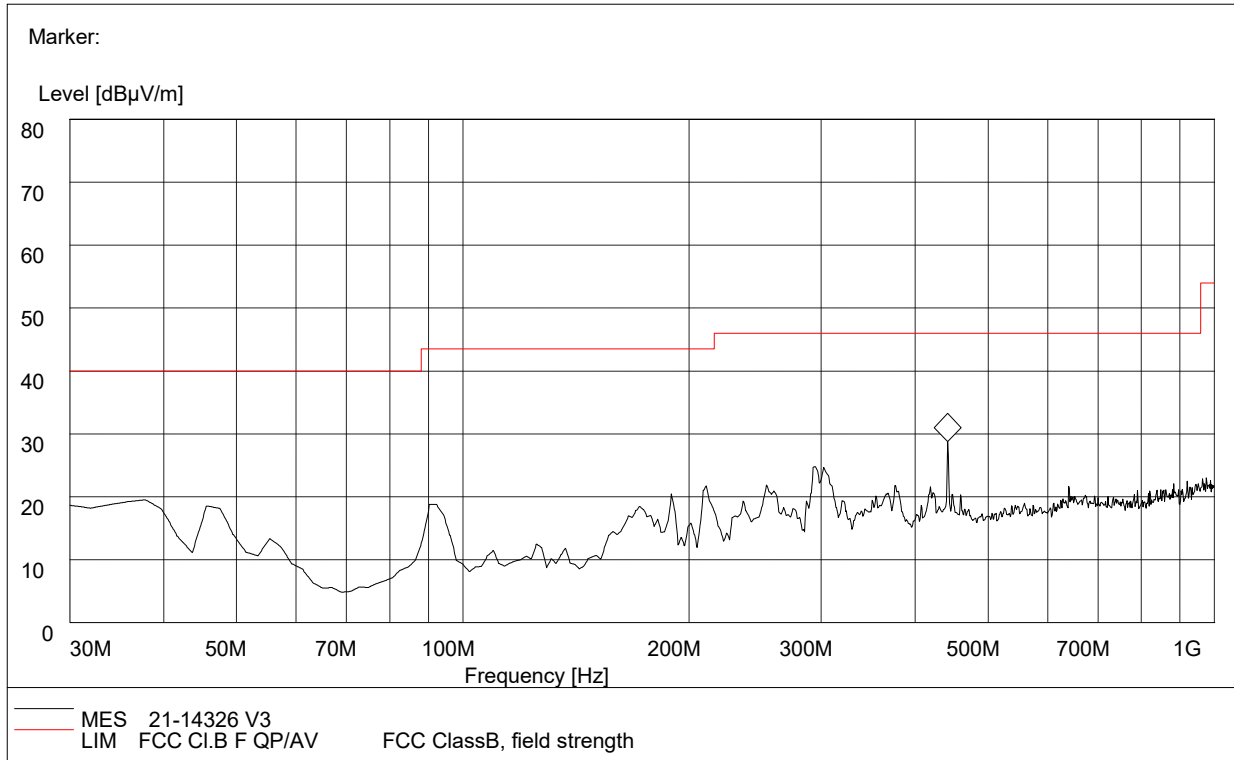
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

For 30MHz to 1000 MHz



30MHz to 1GHz, Antenna Horizontal

Frequency (MHz)	QuasiPeak (dBµV/m)	Bandwidth (kHz)	Corr. Factor (dB/m)	Antenna height (cm)	Limit (dBµV/m)	Margin	Antenna	Verdict
30.000000	17.50	120.000	17.9	100.0	40.0	22.5	Horizontal	Pass
189.380000	22.01	120.000	13.7	100.0	43.5	21.49	Horizontal	Pass
237.890000	23.54	120.000	10.6	100.0	46.0	22.46	Horizontal	Pass
251.530000	27.82	120.000	17.5	100.0	46.0	18.18	Horizontal	Pass
292.420000	27.50	120.000	17.5	100.0	46.0	18.5	Horizontal	Pass
315.750000	27.82	120.000	24.8	100.0	46.0	18.18	Horizontal	Pass



30MHz to 1GHz, Antenna Vertical

Frequency (MHz)	QuasiPeak (dB μ V/m)	Bandwidth (kHz)	Corr. Factor (dB μ V/m)	Antenna height (cm)	Limit (dB μ V/m)	Margin	Antenna	Verdict
36.820000	18.50	120.000	17.9	100.0	40.0	21.5	Vertical	Pass
45.020000	17.95	120.000	13.7	100.0	40.0	22.05	Vertical	Pass
92.820000	17.58	120.000	10.3	100.0	43.5	25.92	Vertical	Pass
189.520000	20.00	120.000	17.5	100.0	43.5	23.5	Vertical	Pass
210.820000	21.08	120.000	17.5	100.0	43.5	22.42	Vertical	Pass
442.080000	27.82	120.000	19.3	100.0	46.0	18.18	Vertical	Pass

**For 1GHz to 40 GHz****ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11a_5745MHz)**

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	55.25	PK	68.20	-12.95	1.50	300	45.60	9.65
2	11490.00	56.24	PK	68.20	-11.96	1.50	300	34.54	21.70
3	11490.00	43.55	AV	54.00	-10.45	1.50	300	21.85	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11a_5745MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	56.12	PK	68.20	-12.08	1.60	180	46.47	9.65
2	11490.00	57.95	PK	68.20	-10.25	1.60	180	36.25	21.70
3	11490.00	45.10	AV	54.00	-8.9	1.60	180	23.40	21.70

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n20_5745MHz)**

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	56.02	PK	68.20	-12.18	1.50	300	46.37	9.65
2	11490.00	56.38	PK	68.20	-11.82	1.50	300	34.68	21.70
3	11490.00	43.81	AV	54.00	-10.19	1.50	300	22.11	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n20_5745MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	56.32	PK	68.20	-11.88	1.60	180	46.67	9.65
2	11490.00	57.25	PK	68.20	-10.95	1.60	180	35.55	21.70
3	11490.00	44.44	AV	54.00	-9.56	1.60	180	22.74	21.70

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac20_5745MHz)**

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	55.98	PK	68.20	-12.22	1.50	300	46.33	9.65
2	11490.00	56.74	PK	68.20	-11.46	1.50	300	35.04	21.70
3	11490.00	44.25	AV	54.00	-9.75	1.50	300	22.55	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac20_5745MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	57.65	PK	68.20	-10.55	1.60	180	48.00	9.65
2	11490.00	56.82	PK	68.20	-11.38	1.60	180	35.12	21.70
3	11490.00	44.08	AV	54.00	-9.92	1.60	180	22.38	21.70

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11n40_5755MHz)**

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	54.59	PK	68.20	-13.61	1.50	300.00	44.94	9.65
2	11510.00	56.74	PK	68.20	-11.46	1.50	300.00	35.04	21.70
3	11510.00	44.17	AV	54.00	-9.83	1.50	300.00	22.47	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11n40_5755MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	55.25	PK	68.20	-12.95	1.60	300.00	45.60	9.65
2	11510.00	56.02	PK	68.20	-12.18	1.60	300.00	34.32	21.70
3	11510.00	43.87	AV	54.00	-10.13	1.60	300.00	22.17	21.70

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac40_5755MHz)**

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	55.02	PK	68.20	-13.18	1.50	300.00	45.37	9.65
2	11510.00	56.02	PK	68.20	-12.18	1.50	300.00	34.32	21.70
3	11510.00	43.28	AV	54.00	-10.72	1.50	300.00	21.58	21.70

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac40_5755MHz)

No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5725.00	54.06	PK	68.20	-14.14	1.60	300.00	44.41	9.65
2	11510.00	55.28	PK	68.20	-12.92	1.60	300.00	33.58	21.70
3	11510.00	42.93	AV	54.00	-11.07	1.60	300.00	21.23	21.70



ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M (802.11ac-VHT80_5775MHz)									
No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5460.00	56.25	PK	68.20	-11.95	1.80	280.00	46.47	9.78
2	5460.00	44.28	AV	54.00	-9.72	1.80	280.00	34.50	9.78
3	11220.00	57.25	PK	68.20	-10.95	1.80	280.00	35.45	21.80
4	11220.00	45.20	AV	54.00	-8.80	1.80	280.00	23.40	21.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M (802.11ac-VHT80_5775MHz)									
No.	Frequency (MHz)	Emission Level (dBuV/m)		Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV/m)	Correction Factor (dB/m)
1	5460.00	55.98	PK	68.20	-12.22	1.70	300.00	46.20	9.78
2	5460.00	44.01	AV	54.00	-9.99	1.70	300.00	34.23	9.78
3	11220.00	56.94	PK	68.20	-11.26	1.70	300.00	35.14	21.80
4	11220.00	45.45	AV	54.00	-8.55	1.70	300.00	23.65	21.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

2.8. Conducted Emission

2.8.1. Limit of Conducted Emission

FCC 15.207,

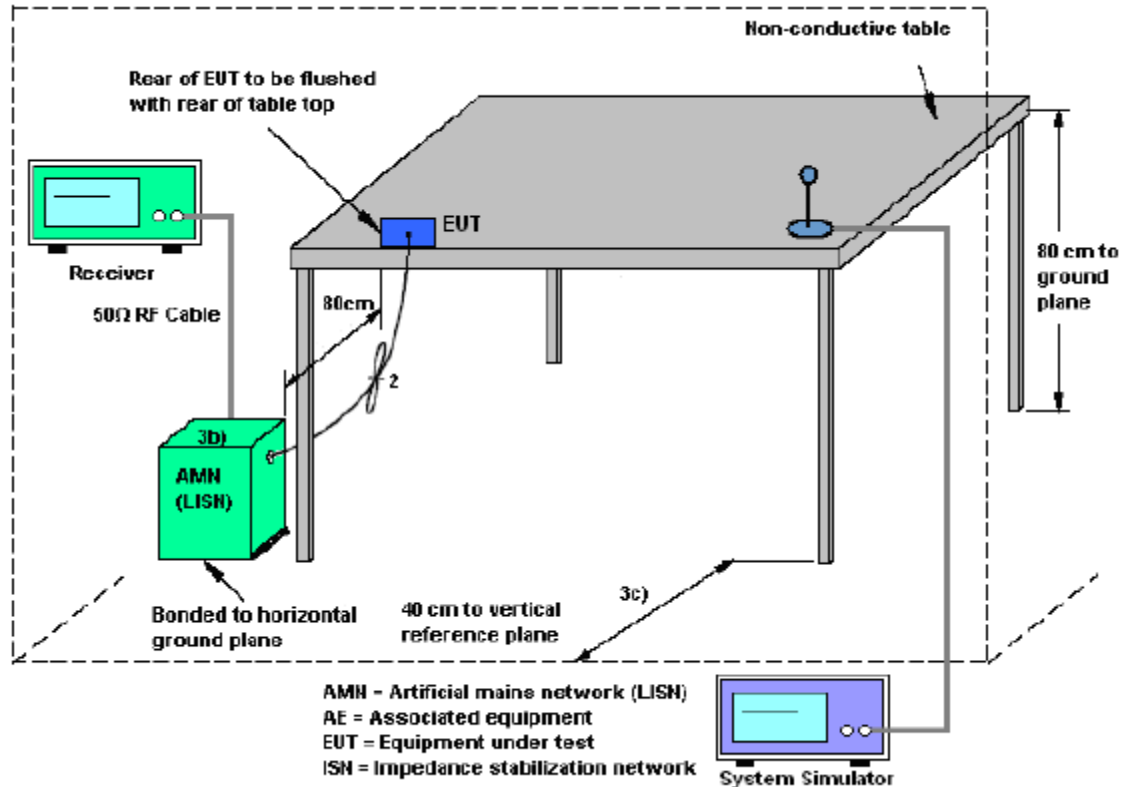
For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

2.8.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.8.3. Test Setup

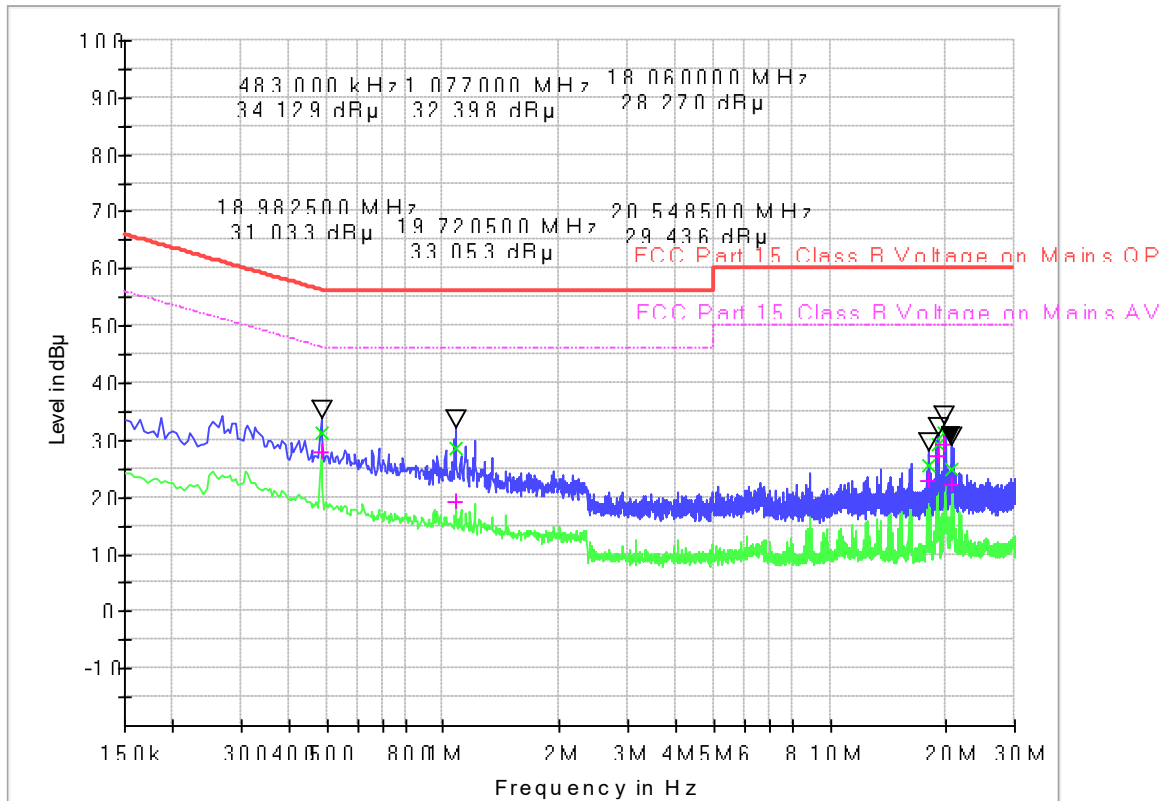


2.8.4. Test Procedures

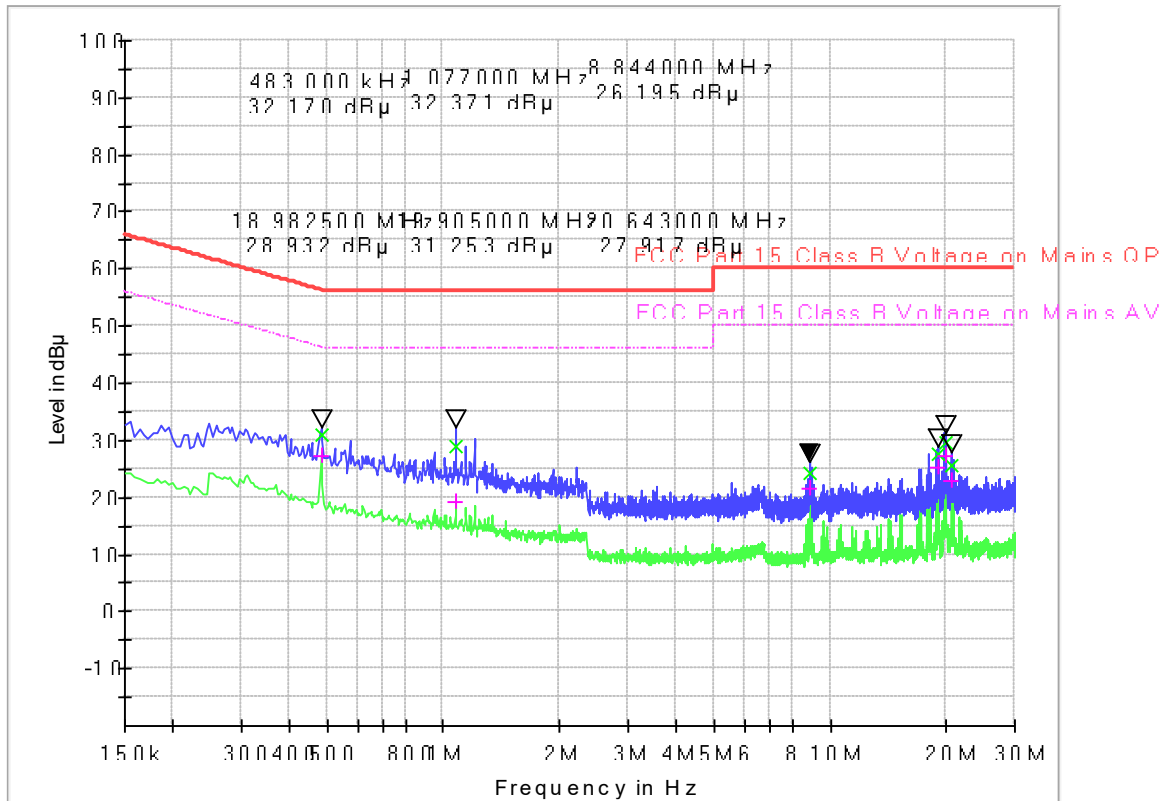
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

2.8.5. Test Results of Conducted Emission

The EUT configuration of the emission tests is 5G WLAN Link + DC Power on



Frequency (MHz)	QuasiPeak (dB μ V)	Average (dB μ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB μ V)
0.483000	31.19	27.86	0.1	10.1	25.10	56.3	18.43	46.3
1.077000	28.68	19.30	0.1	10.1	27.32	56.0	26.70	46.0
18.060000	25.52	22.94	0.1	10.1	34.48	60.0	27.06	50.0
18.982500	29.44	27.26	0.1	10.1	30.56	60.0	22.74	50.0
19.720500	31.44	29.36	0.2	10.2	28.56	60.0	20.64	50.0
20.548500	25.02	22.13	0.2	10.2	34.98	60.0	27.87	50.0



Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Cabel Loss (dB)	Corr. (dB)	Margin - QPK	Limit - QPK	Margin - AV	Limit - AV (dB μ V)
0.483000	30.92	27.41	0.1	10.1	25.37	56.3	18.88	46.3
1.077000	28.79	19.16	0.1	10.1	27.21	56.0	26.84	46.0
8.844000	24.20	21.42	0.1	10.1	35.80	60.0	28.58	50.0
18.982500	27.63	25.31	0.1	10.1	32.37	60.0	24.69	50.0
19.905000	29.48	27.21	0.2	10.2	30.52	60.0	22.79	50.0
20.643000	25.73	22.92	0.2	10.2	34.27	60.0	27.08	50.0

Test Result: PASS

**Note: Correction factor=Cabel loss+ attenuation factor
attenuation factor=10dB**

3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI TEST RECEIVER	KEYSIGHT	N9038A	A141202036	2020.09.21	2021.09.20
2	Power Meter	R&S	NRP-Z31	102872	2021.04.26	2022.04.25
3	TURNTABLE	ETS	2088	2149	N/A	N/A
4	ANTENNA MAST	ETS	2075	2346	N/A	N/A
5	EMI TEST Software	R&S	ESK1	N/A	N/A	N/A
6	Horn antenna (18GHz~26.5GHz)	AR	AT4003A	325306	2020.09.16	2022.09.15
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-10004	A140101634	2021.01.26	2022.01.25
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2021.01.26	2022.01.25
9	High pass filter	Compliance Direction systems	BSU-6	34202	2020.11.10	2021.11.09
10	Horn Antenna	R&S	HF906	A0304225	2019.04.17	2022.04.16
11	Horn Antenna	R&S	ESIB7	A0501375	2020.06.24	2022.06.22
12	ULTRA-BROADBAND ANTENNA	SCHWARZBECK	VULB9160	A0805560	2019.05.24	2022.05.23
13	Passive Loop Antenna	R&S	HFH2-Z2	100047	2019.04.26	2022.04.25
14	Temperature chamber	TABAI	PS-232	A8708054	2020.10.30	2021.10.29
15	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2021.04.26	2022.04.25
16	Power Supply	R&S	ESIB26	A0304218	2021.01.04	2022.01.03
17	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2020.09.22	2021.09.21
18	Test software	ECIT	Eagle	V2.0	N/A	N/A
19	Horn antenna (26.5GHz~40GHz)	R&S	Oct-60	A0902600	2020.09.27	2023.09.26
20	Pre-Amplifier (26.5GHz~40GHz)	R&S	Oct-60 S/N1360-2715	A0902600	2020.09.27	2023.09.26
21	Pre-Amplifier (18GHz~26.5GHz)	R&S	Sep-60 S/N1299056	A0902599	2020.09.27	2023.09.26

4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150KHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	2.8dB
---	-------

Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	3.91dB
---	--------

Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	4.5dB
---	-------

Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%($U=2U_c(y)$)	4.9dB
---	-------

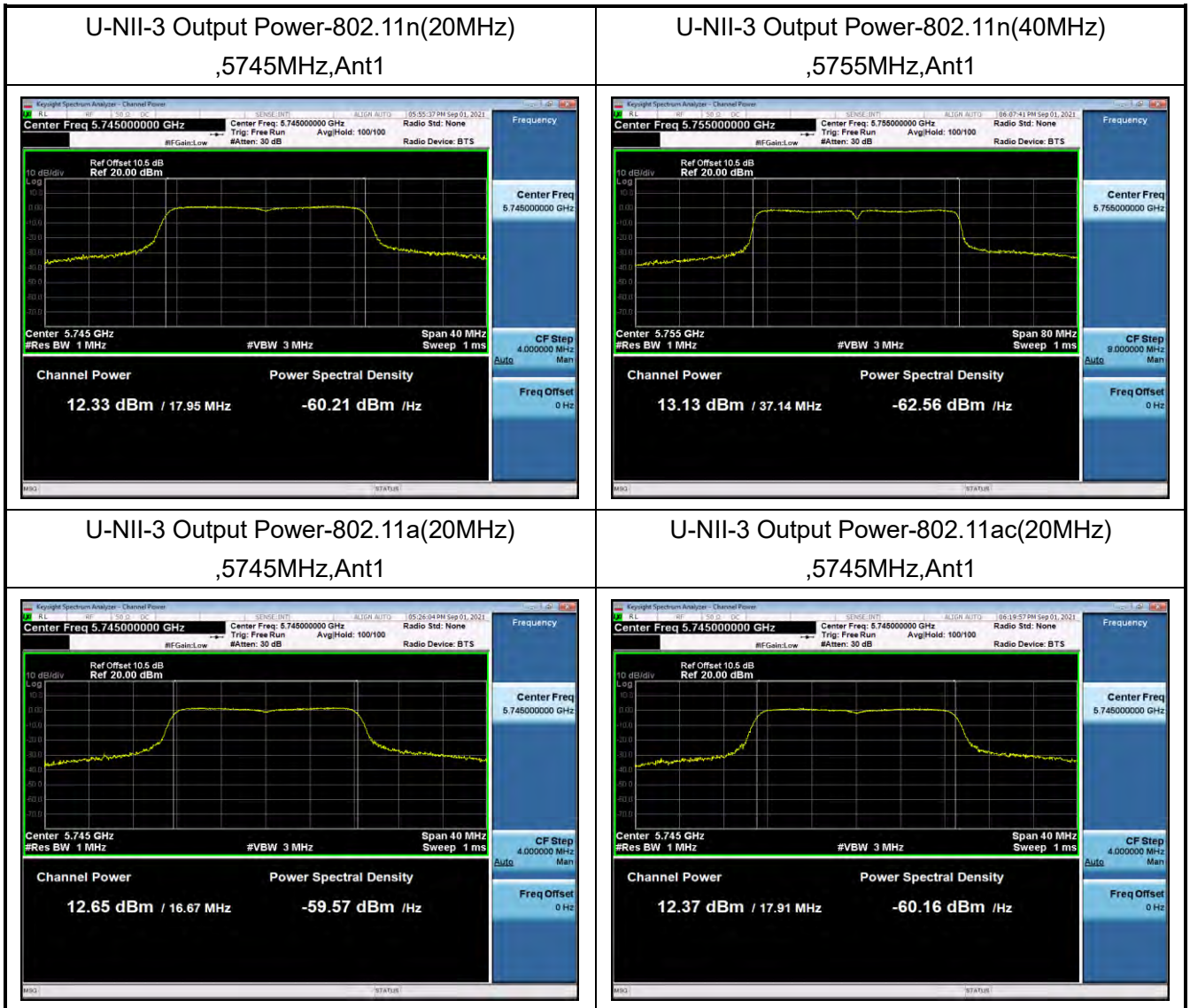


Appendix A

Conducted output power

U-NII-3 AVGSA Output Power					
Mode	Test Frequency (MHz)	Max Power (dBm)	FCC Limit (dBm)	IC Limit (dBm)	Result
802.11n (20MHz)	5745	12.33	30	30	Pass
802.11n (40MHz)	5755	13.13			Pass
802.11ac (20MHz)	5745	12.37			Pass
802.11ac (40MHz)	5755	12.92			Pass
802.11ac (80MHz)	5775	12.72			Pass
802.11a (20MHz)	5745	12.65			Pass

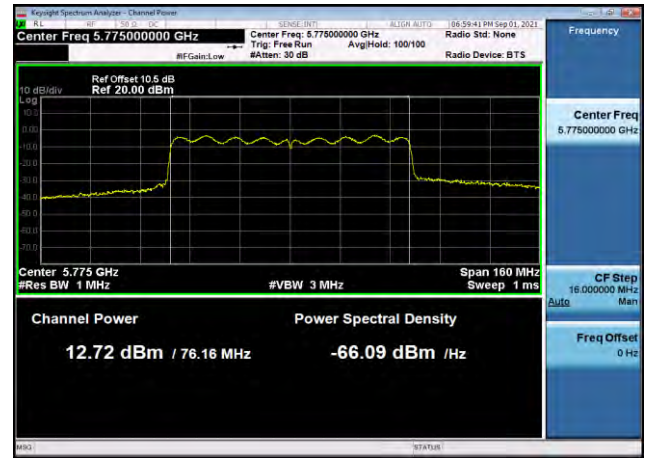
Test Plots



U-NII-3 Output Power-802.11ac(40MHz) ,5755MHz,Ant1



U-NII-3 Output Power-802.11ac(80MHz) ,5775MHz,Ant1



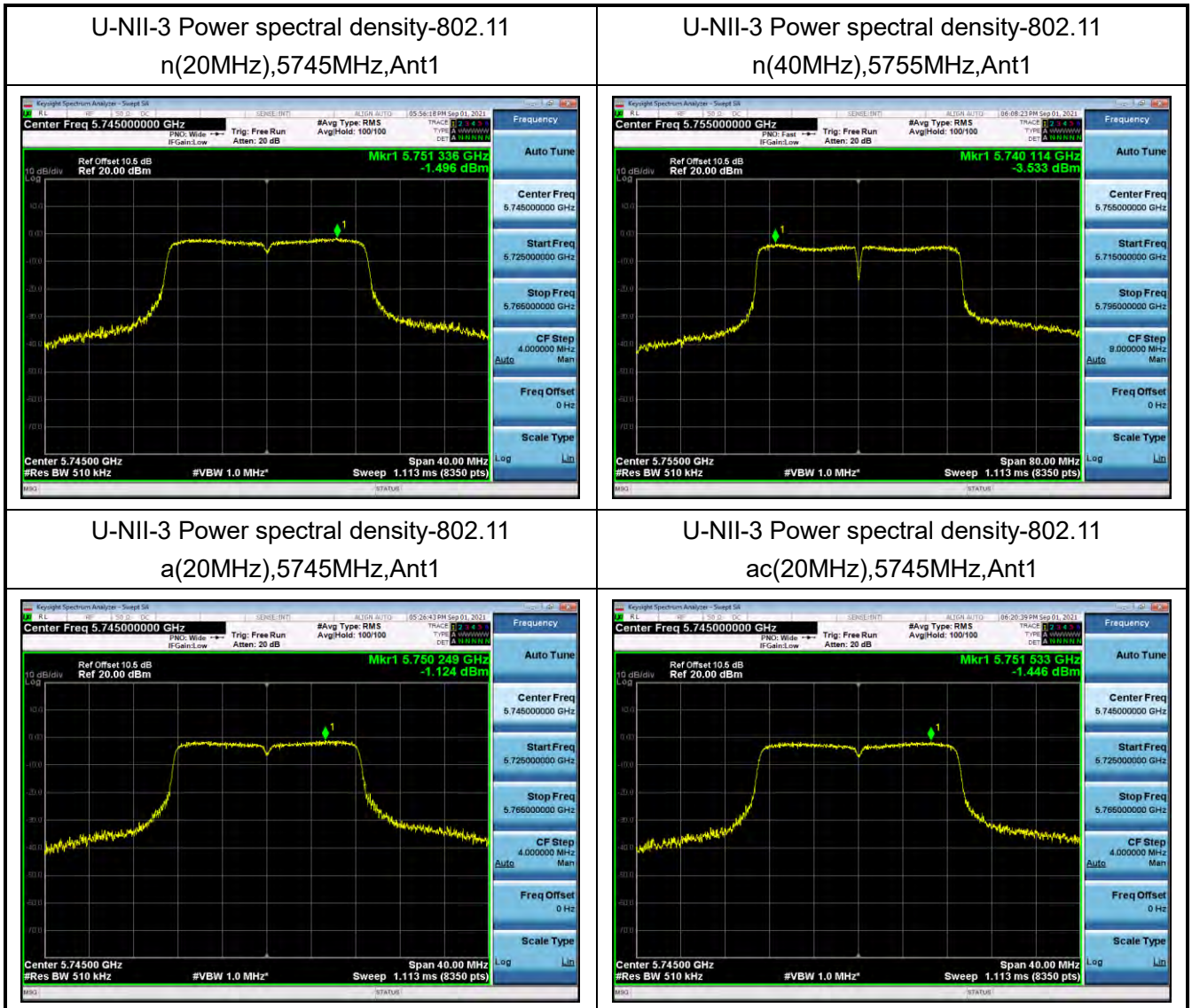


AVGSA Power Spectral Density

Test Result and Data

U-NII-3 AVGSA Power Spectral Density				
Mode	Test Frequency (MHz)	PSD (dBm/510KHz)	Limit (dBm/500KHz)	Result
802.11n (20MHz)	5745	-1.496	30	Pass
802.11n (40MHz)	5755	-3.533	30	Pass
802.11ac (20MHz)	5745	-1.446	30	Pass
802.11ac (40MHz)	5755	-3.599	30	Pass
802.11ac (80MHz)	5775	-5.700	30	Pass
802.11a (20MHz)	5745	-1.124	30	Pass

Test Plots





U-NII-3 Power spectral density-802.11
ac(40MHz),5755MHz,Ant1



U-NII-3 Power spectral density-802.11
ac(80MHz),5775MHz,Ant1



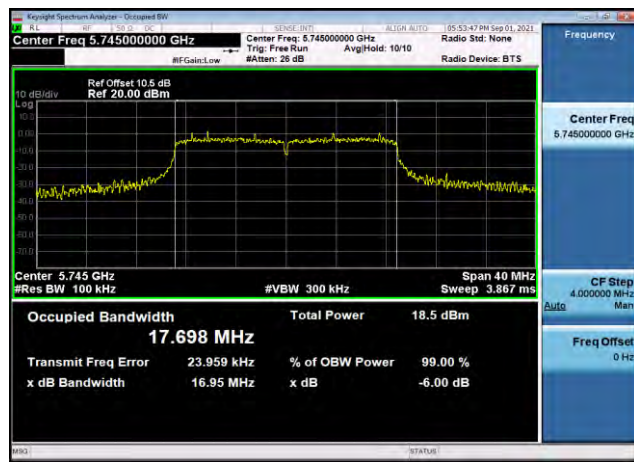


**6dB and 26dB Down Bandwidth
Test Result and Data**

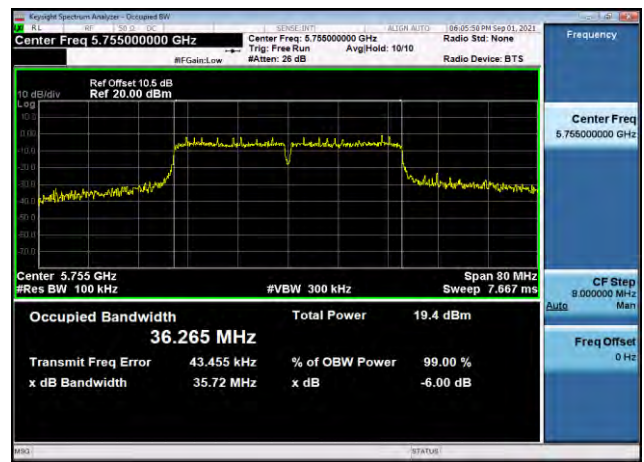
U-NII-3 Occupied 6dB Bandwidth				
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Limit (KHz)	Result
802.11n (20MHz)	5745	16.95	500	Pass
802.11n (40MHz)	5755	35.72	500	Pass
802.11ac (20MHz)	5745	17.30	500	Pass
802.11ac (40MHz)	5755	35.81	500	Pass
802.11ac (80MHz)	5775	75.27	500	Pass
802.11a (20MHz)	5745	16.36	500	Pass
U-NII-3 99% Occupied Bandwidth				
Mode	Test Frequency (MHz)	Occupied Bandwidth (MHz)	Result	
802.11n (20MHz)	5745	17.954	Report only	
802.11n (40MHz)	5755	37.140		
802.11ac (20MHz)	5745	17.913		
802.11ac (40MHz)	5755	36.965		
802.11ac (80MHz)	5775	76.162		
802.11a (20MHz)	5745	16.671		

Test Plots

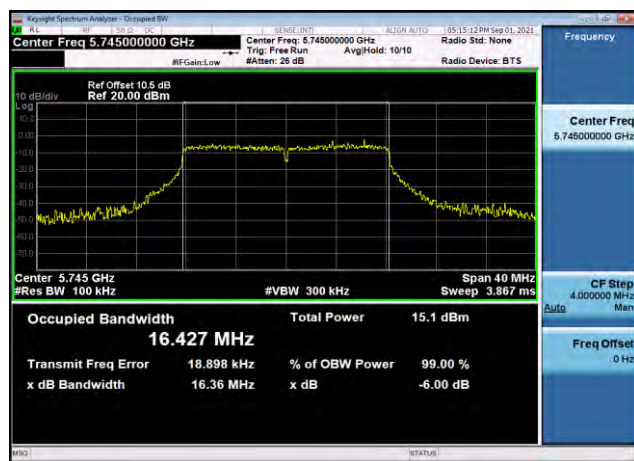
U-NII-3 6dB Bandwidth-802.11n(20MHz)
,5745MHz,Ant1



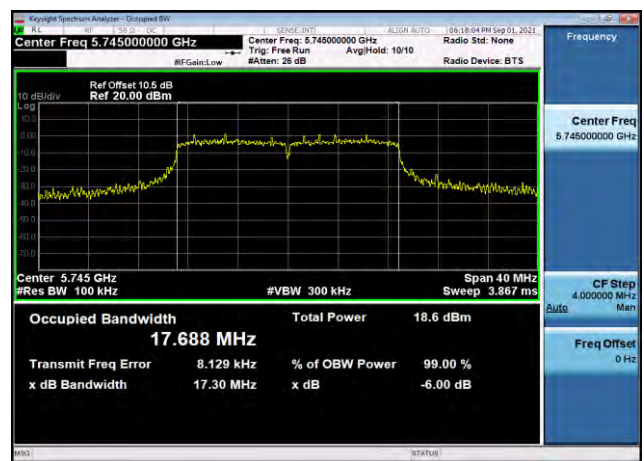
U-NII-3 6dB Bandwidth-802.11n(40MHz)
,5755MHz,Ant1



U-NII-3 6dB Bandwidth-802.11a(20MHz)
,5745MHz,Ant1



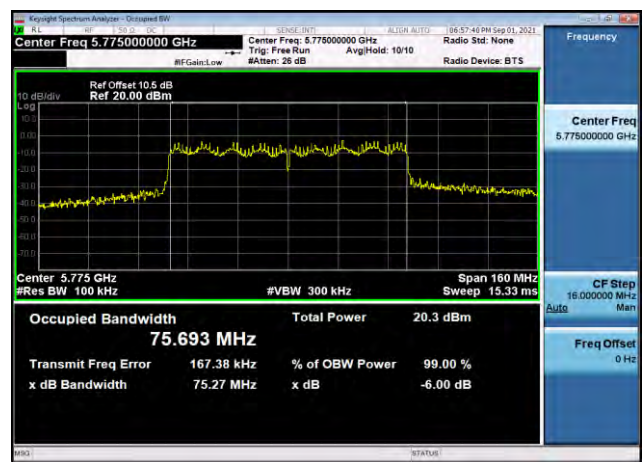
U-NII-3 6dB Bandwidth-802.11ac(20MHz)
,5745MHz,Ant1



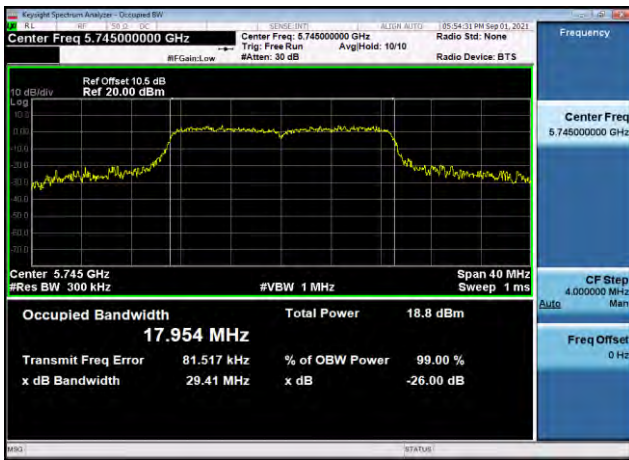
U-NII-3 6dB Bandwidth-802.11ac(40MHz)
,5755MHz,Ant1



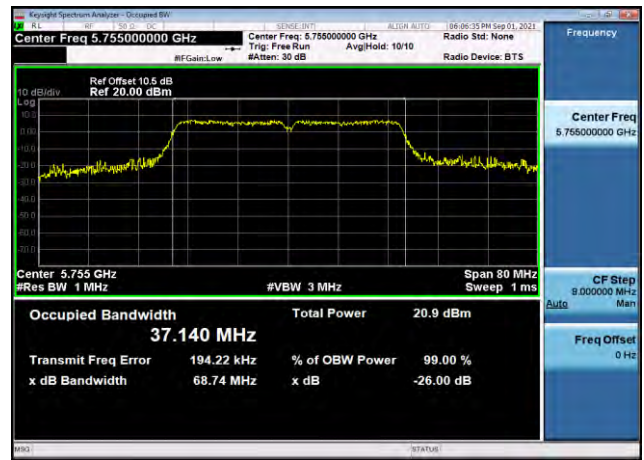
U-NII-3 6dB Bandwidth-802.11ac(80MHz)
,5775MHz,Ant1



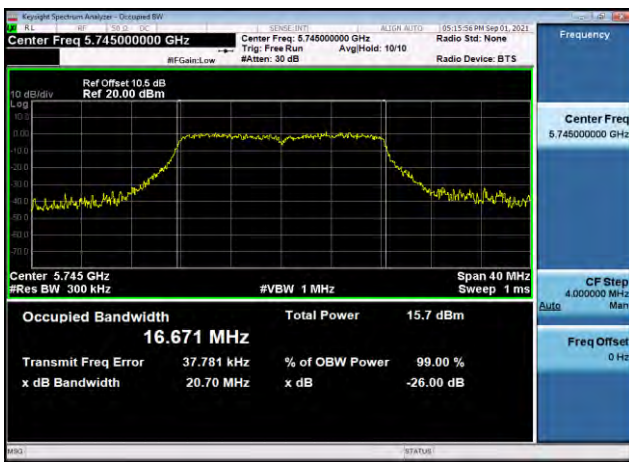
U-NII-3 99% Bandwidth-802.11n(20MHz)
,5745MHz,Ant1



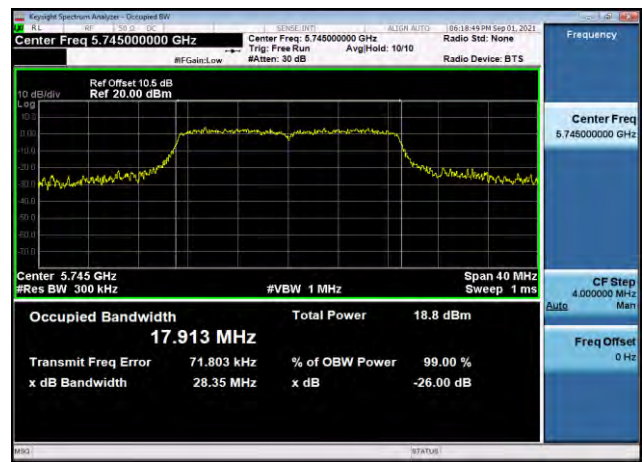
U-NII-3 99% Bandwidth-802.11n(40MHz)
,5755MHz,Ant1



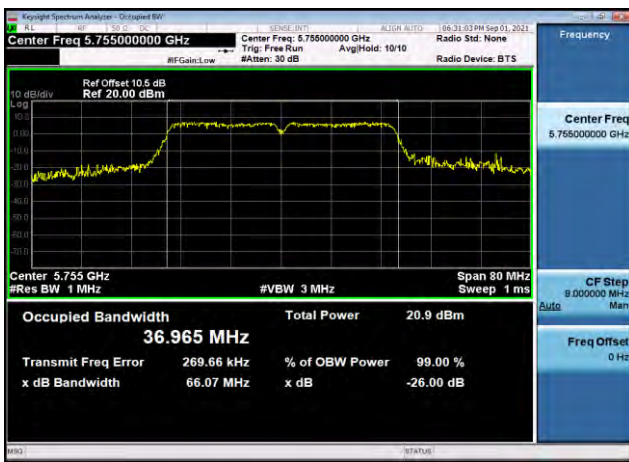
U-NII-3 99% Bandwidth-802.11a(20MHz)
,5745MHz,Ant1



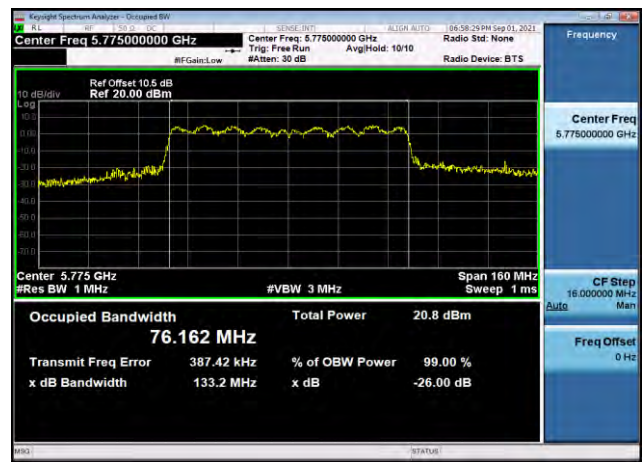
U-NII-3 99% Bandwidth-802.11ac(20MHz)
,5745MHz,Ant1



U-NII-3 99% Bandwidth-802.11ac(40MHz)
,5755MHz,Ant1



U-NII-3 99% Bandwidth-802.11ac(80MHz)
,5775MHz,Ant1



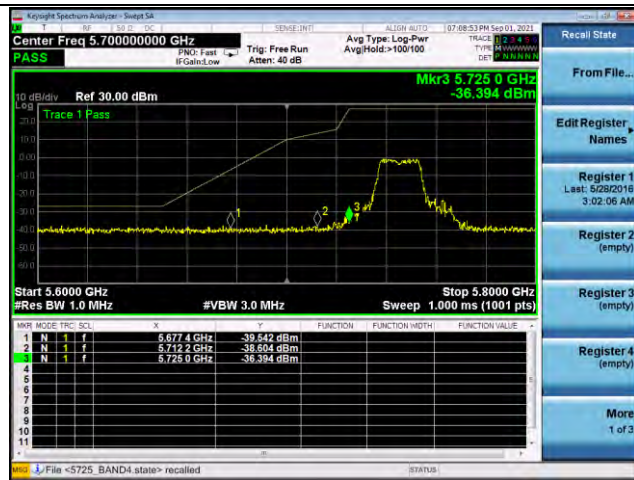
**Frequency Stability**

U-NII-3 Centre Frequency							
Mode	Test Frequency (MHz)	Ant	LF (MHz)	HF (MHz)	CF (MHz)	Freq Stability (ppm)	Test Result
802.11n (20MHz)	5745	Ant1	5736.134	5753.906	5745.020	3.480	Pass
802.11n (40MHz)	5755	Ant1	5736.832	5773.300	5755.066	11.470	Pass
802.11ac (20MHz)	5745	Ant1	5736.177	5753.896	5745.036	6.310	Pass
802.11ac (40MHz)	5755	Ant1	5736.823	5773.266	5755.044	7.690	Pass
802.11ac (80MHz)	5775	Ant1	5736.923	5813.207	5775.065	11.260	Pass
802.11a (20MHz)	5745	Ant1	5736.741	5753.298	5745.020	3.410	Pass

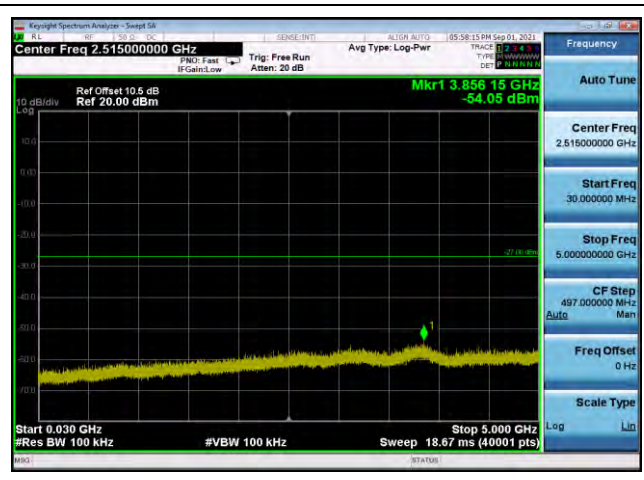
Note: All the extreme conditions have been tested, The worst data reported only.

Bandedge and spurious Emission

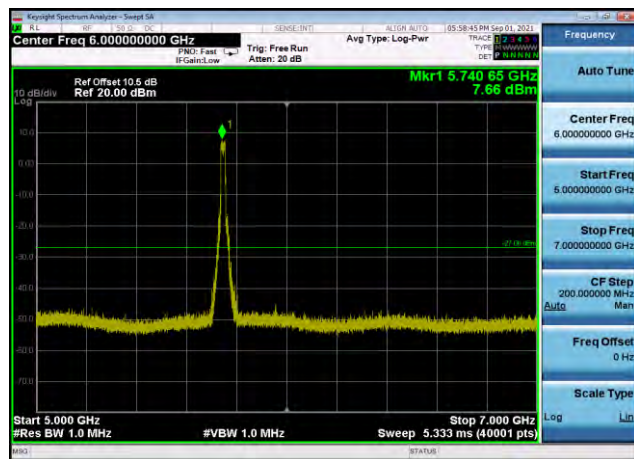
U-NII-3 ,Plot 1,Band Edge-802.11n(20M Hz),5745MHz,Ant1



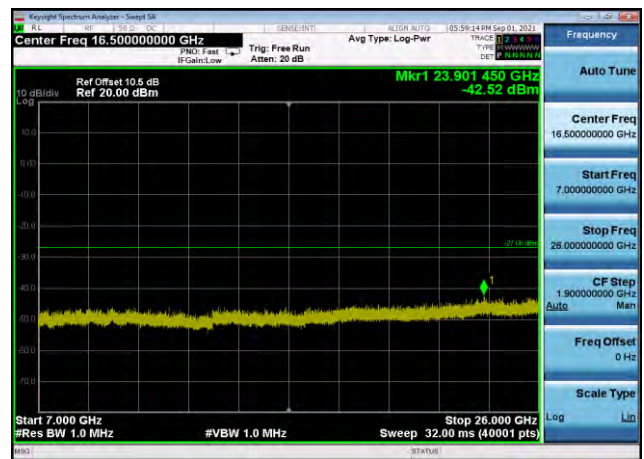
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11n (20MHz),5745MHz,Ant1



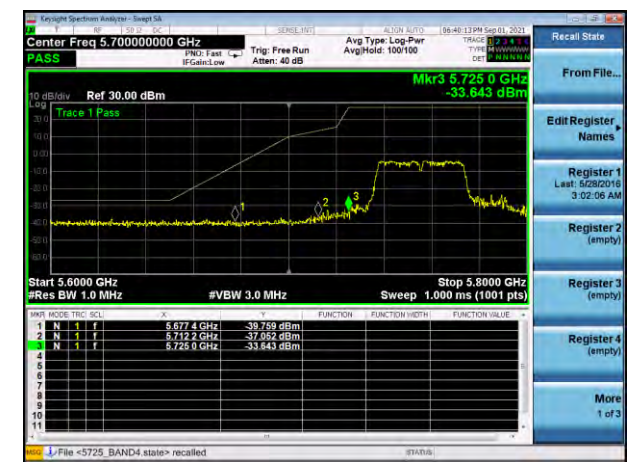
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.11n(20MHz),5745MHz,Ant1



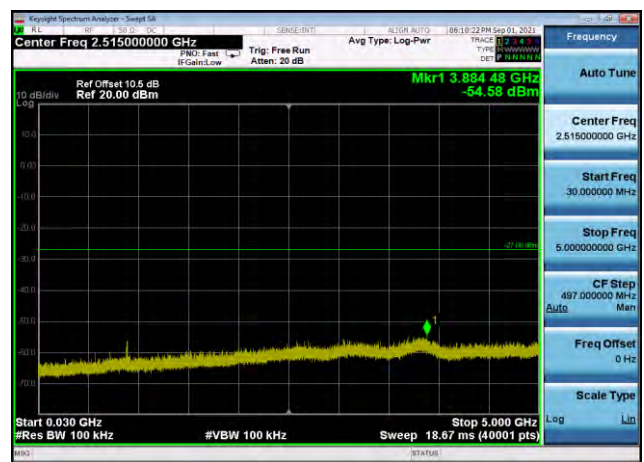
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.11n(20MHz),5745MHz,Ant1



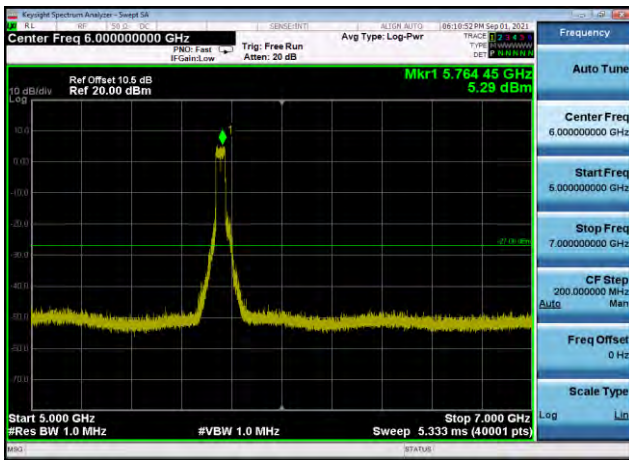
U-NII-3 ,Plot 1,Band Edge-802.11n(40M Hz),5755MHz,Ant1



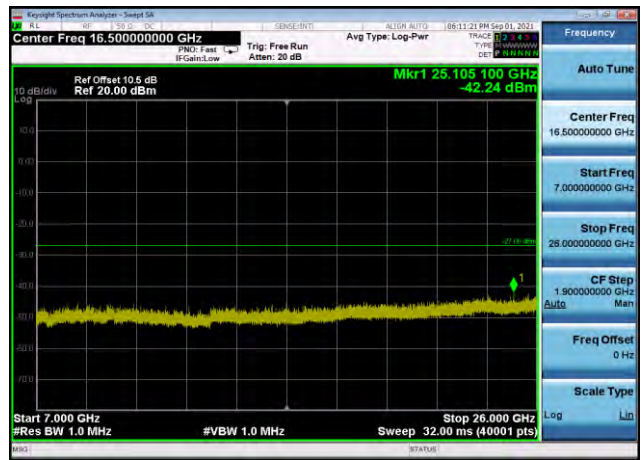
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11n (40MHz),5755MHz,Ant1



U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1
1n(40MHz),5755MHz,Ant1



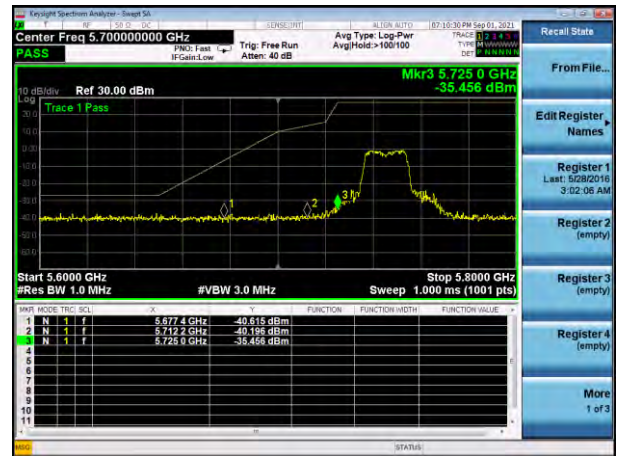
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.
11n(40MHz),5755MHz,Ant1



U-NII-3 ,Plot 1,Band Edge-802.11a(20M
Hz),5745MHz,Ant1



U-NII-3 ,Plot 1,Band Edge-802.11ac(20
MHz),5745MHz,Ant1



U-NII-3 ,Plot 1,Band Edge-802.11ac(40
MHz),5755MHz,Ant1





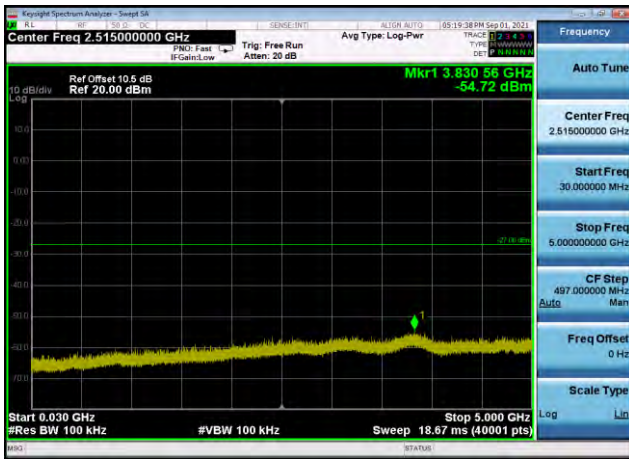
U-NII-3 ,Plot 1,Band Edge-802.11ac(80 MHz),5775MHz,Ant1 Left Bandedge



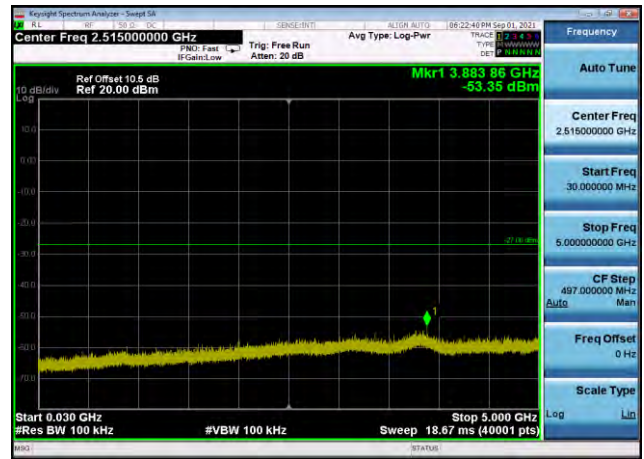
U-NII-3 ,Plot 1,Band Edge-802.11ac(80 MHz),5775MHz,Ant1 Right Bandedge



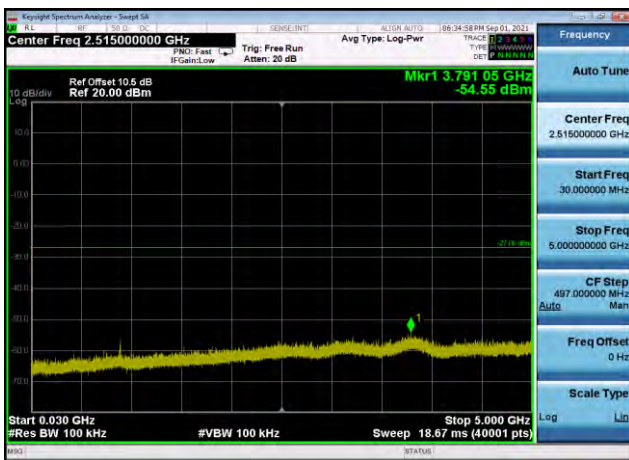
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a (20MHz),5745MHz,Ant1



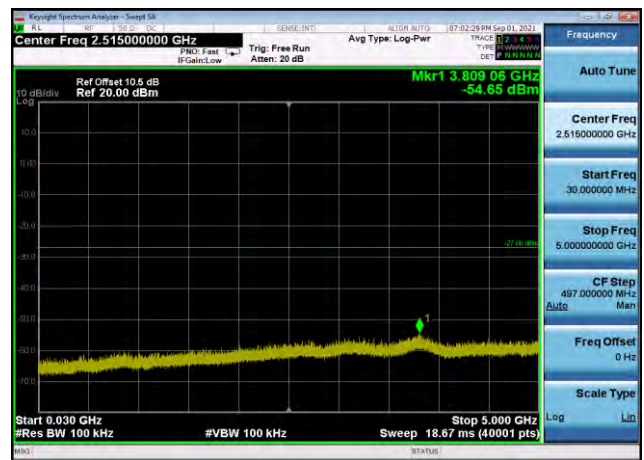
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a c(20MHz),5745MHz,Ant1



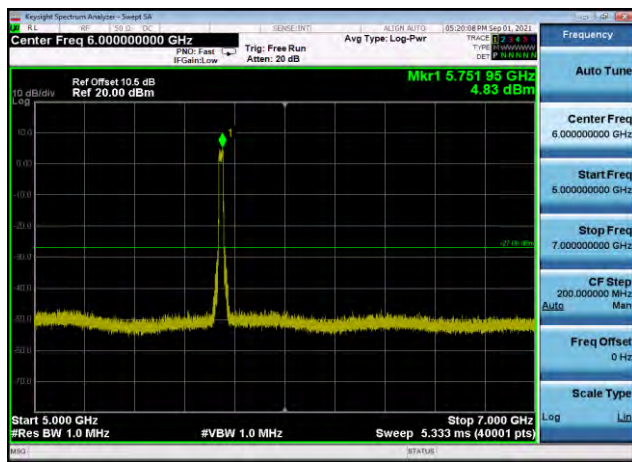
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a c(40MHz),5755MHz,Ant1



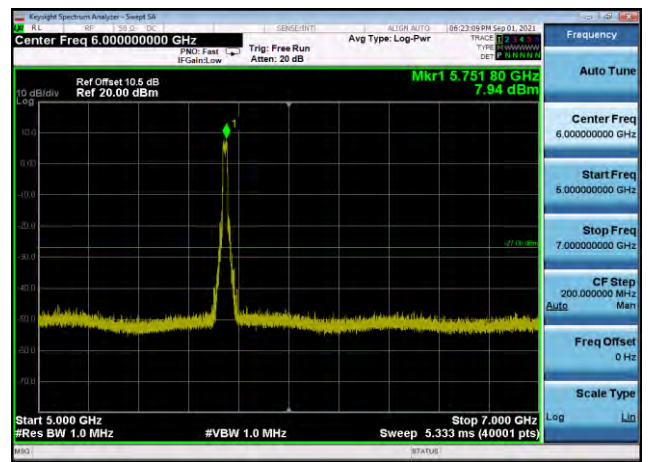
U-NII-3 ,Plot 2,30MHz~5000MHz-802.11a c(80MHz),5775MHz,Ant1



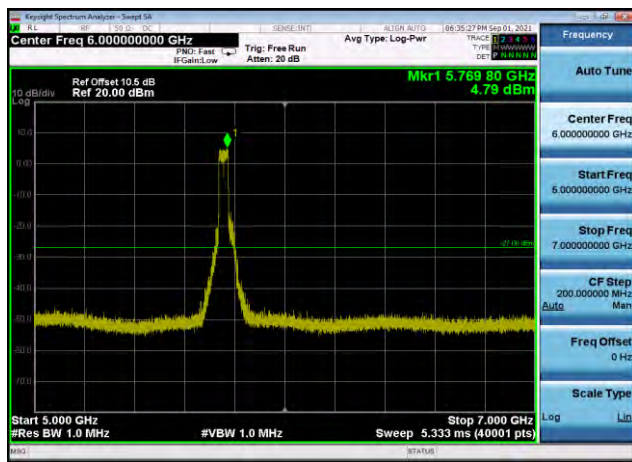
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1
1a(20MHz),5745MHz,Ant1



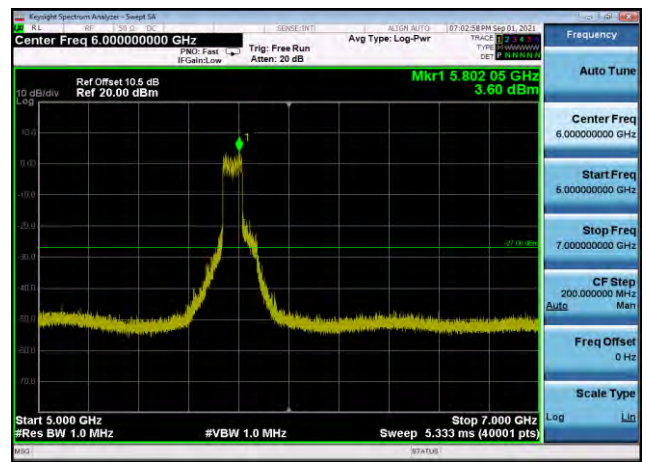
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1
1ac(20MHz),5745MHz,Ant1



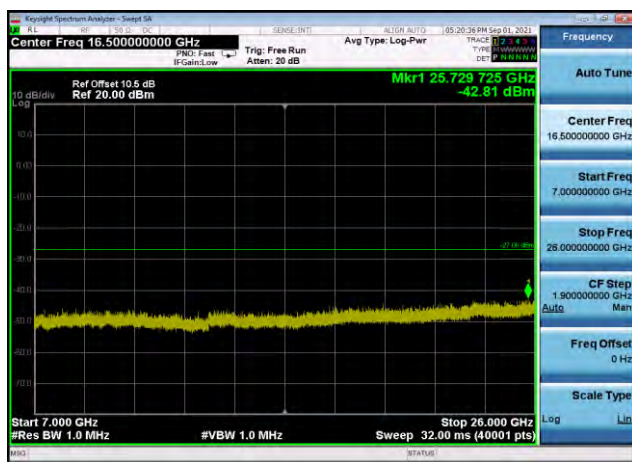
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1
1ac(40MHz),5755MHz,Ant1



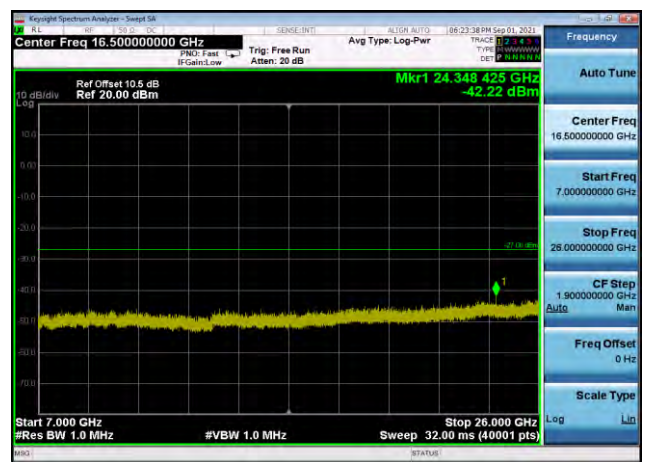
U-NII-3 ,Plot 3,5000MHz~7000MHz-802.1
1ac(80MHz),5775MHz,Ant1



U-NII-3 ,Plot 4,7000MHz~26000MHz-802.
11a(20MHz),5745MHz,Ant1



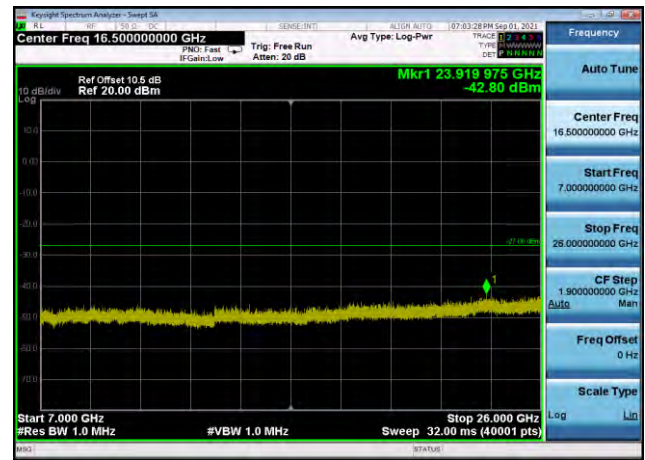
U-NII-3 ,Plot 4,7000MHz~26000MHz-802.
11ac(20MHz),5745MHz,Ant1





U-NII-3 ,Plot 4,7000MHz~26000MHz-802.
11ac(40MHz),5755MHz,Ant1

U-NII-3 ,Plot 4,7000MHz~26000MHz-802.
11ac(80MHz),5775MHz,Ant1



** END OF REPORT **