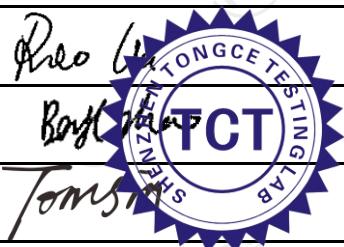


# TEST REPORT

<b>FCC ID.</b> .....	2BD6MX23PROTAB
<b>Test Report No.</b> .....	TCT231229E165
<b>Date of issue</b> .....	Jan. 22, 2024
<b>Testing laboratory</b> .....	SHENZHEN TONGCE TESTING LAB
<b>Testing location/ address:</b>	2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China
<b>Applicant's name</b> .....	GO MD USA LLC
<b>Address</b> .....	3385 Airways Blvd STE 201, Memphis, Tennessee 38116 United States
<b>Manufacturer's name</b> .....	LHPI Group Inc
<b>Address</b> .....	Piso 8 Torre Universal, Federico Boyd, Panama City, Panama
<b>Standard(s)</b> .....	FCC CFR Title 47 Part 15 Subpart E Section 15.407 KDB 662911 D01 Multiple Transmitter Output v02r01 KDB 789033 D02 General U-NII Test Procedures New Rules v02r01
<b>Product Name</b> .....	Tablet PC
<b>Trade Mark</b> .....	GO MD USA
<b>Model/Type reference</b> .....	X23Pro, X23Pro Tab, T39B
<b>Rating(s)</b> .....	Refer to EUT description of page 3
<b>Date of receipt of test item</b> .....	Dec. 29, 2023
<b>Date (s) of performance of test</b> .....	Dec. 29, 2023 ~ Jan. 22, 2024
<b>Tested by (+signature)</b> .....	Rleo LIU
<b>Check by (+signature)</b> .....	Beryl ZHAO
<b>Approved by (+signature)</b> :	Tomsin


**General disclaimer:**

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**Appendix A: Test Result of Conducted Test****Appendix B: Photographs of Test Setup****Appendix C: Photographs of EUT**

## 1. General Product Information

### 1.1. EUT description

<b>Product Name.....</b>	Tablet PC
<b>Model/Type reference.....</b>	X23Pro
<b>Sample Number.....</b>	TCT231229E012-0101
<b>Operation Frequency .....</b>	Band 1: 5180 MHz ~ 5240 MHz Band 3: 5745 MHz ~ 5825 MHz
<b>Channel Bandwidth.....</b>	802.11a: 20MHz 802.11n: 20MHz, 40MHz 802.11ac: 20MHz, 40MHz, 80MHz
<b>Modulation Technology .....</b>	Orthogonal Frequency Division Multiplexing(OFDM)
<b>Modulation Type .....</b>	256QAM, 64QAM, 16QAM, BPSK, QPSK
<b>Antenna Type.....</b>	PIFA Antenna
<b>Antenna Gain.....</b>	Band 1: 0.39dBi Band 3: 0.12dBi
<b>Rating(s).....</b>	Adapter Information: MODEL: B0S050200-01A INPUT: AC 100-240V, 50/60Hz, 0.45A OUTPUT: DC 5V, 2000mA Rechargeable Li-ion Battery DC 3.8V

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

### 1.2. Model(s) list

No.	Model No.	Tested with
1	X23Pro	<input checked="" type="checkbox"/>
Other models	X23Pro Tab, T39B	<input type="checkbox"/>

Note: X23Pro is tested model, other models are derivative models. The models are identical in circuit and PCB layout, only different on the model names and color. So the test data of X23Pro can represent the remaining models.

### 1.3. Test Frequency

#### Band 1

20MHz		40MHz		80MHz	
Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180	38	5190	42	5210
40	5200	46	5230		
48	5240				

#### Band 3

20MHz		40MHz		80MHz	
Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745	151	5755	155	5775
157	5785	159	5795		
165	5825				

#### Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

## 2. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Maximum Conducted Output Power	§15.407(a)	PASS
6dB Emission Bandwidth	§15.407(a)	PASS
26dB Emission Bandwidth& 99% Occupied Bandwidth	§15.407(a)	PASS
Power Spectral Density	§15.407(a)	PASS
Restricted Bands around fundamental frequency	§15.407(b)	PASS
Radiated Emission	§15.407(b)	PASS
Frequency Stability	§15.407(g)	PASS

**Note:**

1. PASS: Test item meets the requirement.
2. Fail: Test item does not meet the requirement.
3. N/A: Test case does not apply to the test object.
4. The test result judgment is decided by the limit of test standard.
5. For the band 5.15-5.25GHz, EUT meet the requirements of 15.407(a)(ii).

### 3. General Information

#### 3.1. Test environment and mode

Operating Environment:	
Temperature:	25.0 °C
Humidity:	56 % RH
Atmospheric Pressure:	1010 mbar
Test Software:	
Software Information:	Engineering Mode
Power Level:	20M:15; 40M/80M:13
Test Mode:	
Engineer mode:	Keep the EUT in continuous transmitting by select channel and modulations with max. duty cycle.
<p>The sample was placed 0.8m/1.5m for blow/above 1GHz above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y &amp; Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.</p>	

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:

**Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.**

Mode	Data rate
802.11a	6 Mbps
802.11n(HT20)	6.5 Mbps
802.11n(HT40)	13.5 Mbps
802.11ac(VHT20)	6.5 Mbps
802.11ac(VHT40)	13.5 Mbps
802.11ac(VHT80)	29.3 Mbps

### 3.2. Description of 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.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

**Note:**

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. For conducted measurements (Output Power, Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

## 4. Facilities and Accreditations

### 4.1. Facilities

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

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

### 4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

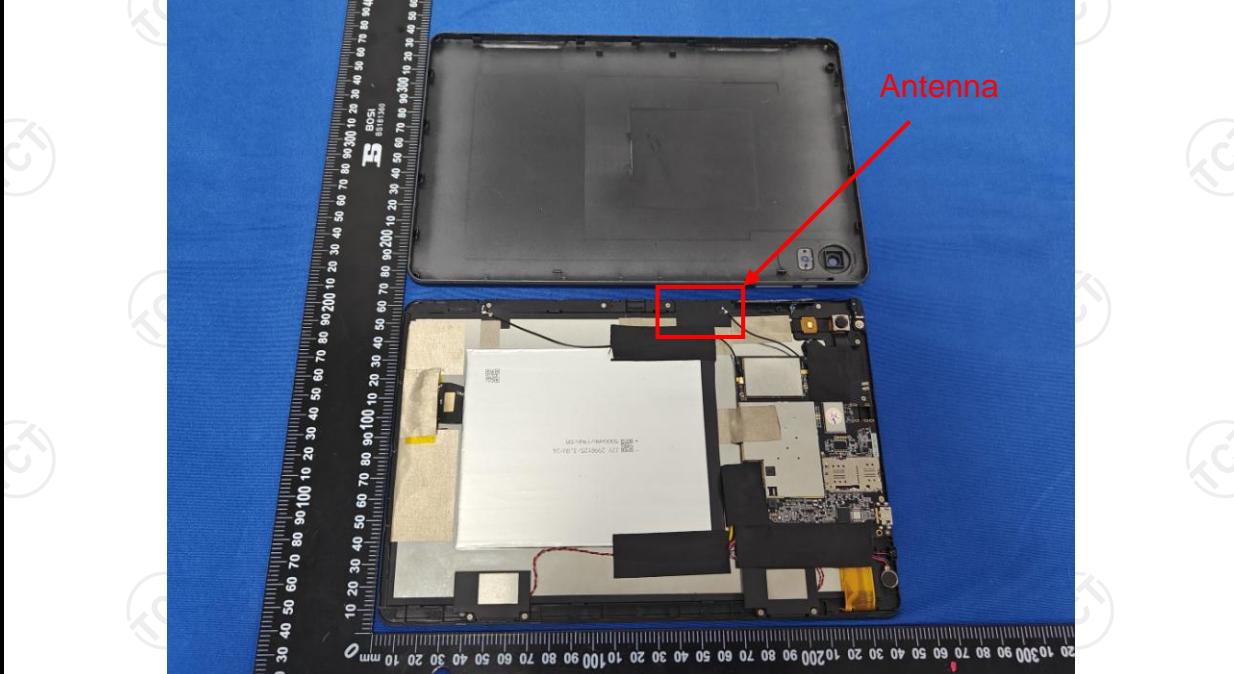
### 4.3. Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expended 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	MU
1	Conducted Emission	$\pm 3.10$ dB
2	RF power, conducted	$\pm 0.12$ dB
3	Spurious emissions, conducted	$\pm 0.11$ dB
4	All emissions, radiated(<1 GHz)	$\pm 4.56$ dB
5	All emissions, radiated(1 GHz - 18 GHz)	$\pm 4.22$ dB
6	All emissions, radiated(18 GHz- 40 GHz)	$\pm 4.36$ dB

## 5. Test Results and Measurement Data

### 5.1. Antenna requirement

<b>Standard requirement:</b>	FCC Part15 C Section 15.203 /247(c)
<p>15.203 requirement: 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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p>	
<p><b>E.U.T Antenna:</b></p>	
	The EUT antenna is PIFA antenna which permanently attached, and the maximum gain of the antenna is 0.39dBi at UNII-B1.
	

## 5.2. Conducted Emission

### 5.2.1. Test Specification

<b>Test Requirement:</b>	FCC Part15 C Section 15.207														
<b>Test Method:</b>	ANSI C63.10:2013														
<b>Frequency Range:</b>	150 kHz to 30 MHz														
<b>Receiver setup:</b>	RBW=9 kHz, VBW=30 kHz, Sweep time=auto														
<b>Limits:</b>	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBuV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
<b>Test Setup:</b>	<p>Reference Plane</p> <p>Remark E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m</p>														
<b>Test Mode:</b>	Charging + Transmitting Mode														
<b>Test Procedure:</b>	<ol style="list-style-type: none"> <li>1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.</li> </ol>														
<b>Test Result:</b>	PASS														

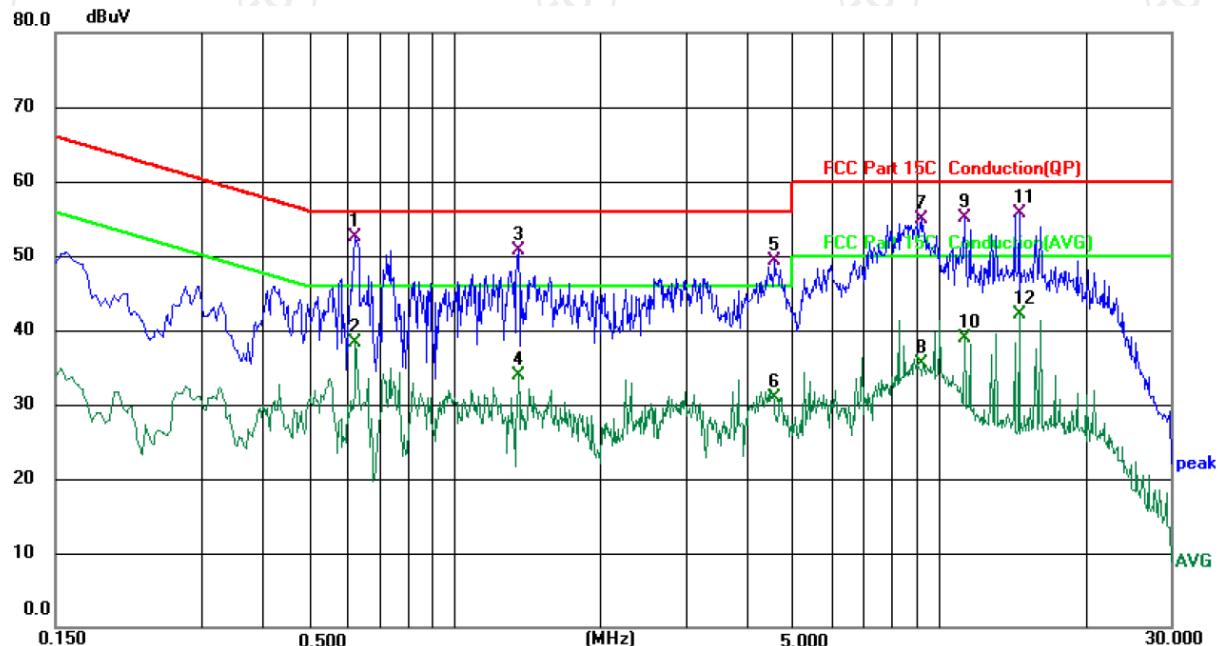
**5.2.2. Test Instruments**

Conducted Emission Shielding Room Test Site (843)				
Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESCI3	100898	Jun. 29, 2024
Line Impedance Stabilisation Newtork(LISN)	Schwarzbeck	NSLK 8126	8126453	Feb. 20, 2024
Line-5	TCT	CE-05	/	Jul. 03, 2024
EMI Test Software	Shurples Technology	EZ-EMC	/	/

### 5.2.3. Test data

Please refer to following diagram for individual

#### Conducted Emission on Line Terminal of the power line (150 kHz to 30MHz)



Site 844 Shielding Room

Phase: *L1*

Temperature: 23.5 (°C)

Humidity: 52 %

Limit: FCC Part 15C Conduction(QP)

Power: AC 120 V/60Hz

No.	Mk.	Freq. MHz	Reading Level dB $\mu$ V	Correct Factor dB	Measure- ment dB $\mu$ V	Limit dB $\mu$ V	Over	
							Detector	Comment
1	*	0.6260	43.22	9.33	52.55	56.00	-3.45	QP
2		0.6260	29.06	9.33	38.39	46.00	-7.61	AVG
3		1.3580	40.62	10.00	50.62	56.00	-5.38	QP
4		1.3580	23.89	10.00	33.89	46.00	-12.11	AVG
5		4.5939	39.14	10.10	49.24	56.00	-6.76	QP
6		4.5939	20.86	10.10	30.96	46.00	-15.04	AVG
7		9.2260	44.74	10.14	54.88	60.00	-5.12	QP
8		9.2260	25.46	10.14	35.60	50.00	-14.40	AVG
9		11.2820	44.98	10.17	55.15	60.00	-4.85	QP
10		11.2820	28.79	10.17	38.96	50.00	-11.04	AVG
11		14.6540	45.46	10.17	55.63	60.00	-4.37	QP
12		14.6540	31.86	10.17	42.03	50.00	-7.97	AVG

**Note:**

Freq. = Emission frequency in MHz

Reading level (dB $\mu$ V) = Receiver reading

Corr. Factor (dB) = LISN factor + Cable loss

Measurement (dB $\mu$ V) = Reading level (dB $\mu$ V) + Corr. Factor (dB)

Limit (dB $\mu$ V) = Limit stated in standard

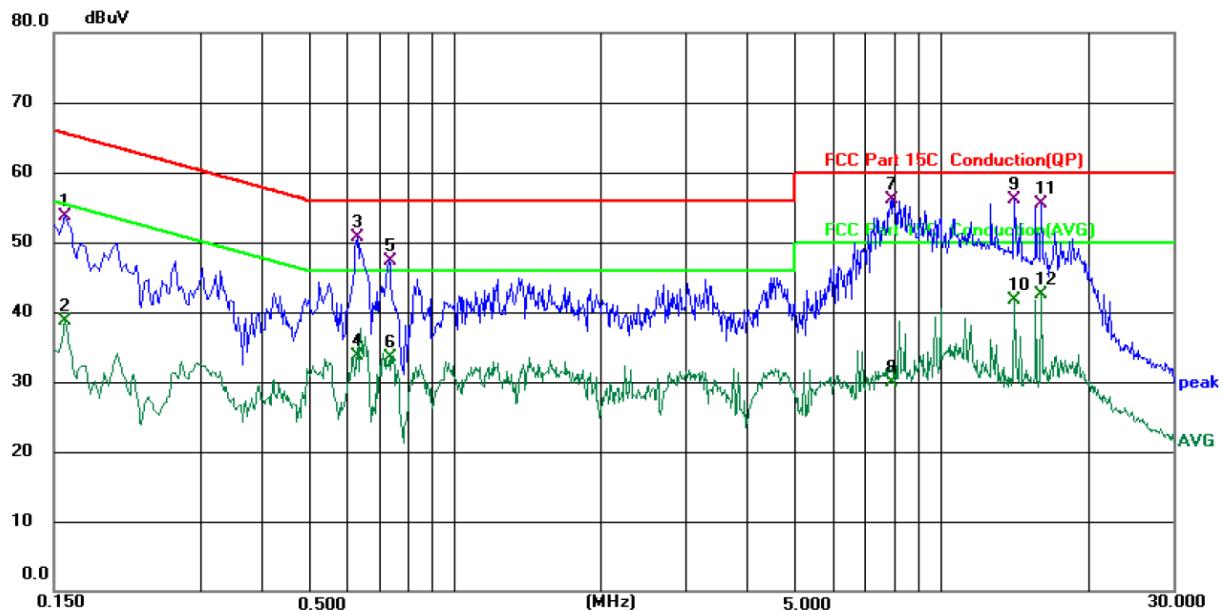
Margin (dB) = Measurement (dB $\mu$ V) - Limits (dB $\mu$ V)

Q.P. = Quasi-Peak

AVG = average

\* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

**Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)**



Site 844 Shielding Room

Phase: **N**

Temperature: 23.5 (°C)

Humidity: 52 %

Limit: FCC Part 15C Conduction(QP)

Power: AC 120 V/60Hz

No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over	Comment
			dBμV	dB	dBμV	dB	Detector	
1		0.1580	43.52	10.10	53.62	65.57	-11.95	QP
2		0.1580	28.67	10.10	38.77	55.57	-16.80	AVG
3		0.6300	41.28	9.34	50.62	56.00	-5.38	QP
4		0.6300	24.28	9.34	33.62	46.00	-12.38	AVG
5		0.7339	38.09	9.24	47.33	56.00	-8.67	QP
6		0.7339	24.22	9.24	33.46	46.00	-12.54	AVG
7	*	7.9580	46.00	10.16	56.16	60.00	-3.84	QP
8		7.9580	19.71	10.16	29.87	50.00	-20.13	AVG
9		14.2100	45.88	10.25	56.13	60.00	-3.87	QP
10		14.2100	31.42	10.25	41.67	50.00	-8.33	AVG
11		16.0940	45.29	10.28	55.57	60.00	-4.43	QP
12		16.0940	32.15	10.28	42.43	50.00	-7.57	AVG

**Note:**

Freq. = Emission frequency in MHz

Reading level (dBμV) = Receiver reading

Corr. Factor (dB) = LISN factor + Cable loss

Measurement (dBμV) = Reading level (dBμV) + Corr. Factor (dB)

Limit (dBμV) = Limit stated in standard

Margin (dB) = Measurement (dBμV) - Limits (dBμV)

Q.P. = Quasi-Peak

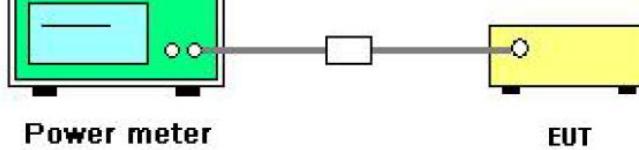
AVG = average

\* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz.

Measurements were conducted in all three channels (high, middle, low) and all modulation (802.11a, 802.11n(HT20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80) and the worst case Mode (Middle channel and 802.11a) was submitted only.

### 5.3. Maximum Conducted Output Power

### 5.3.1. Test Specification

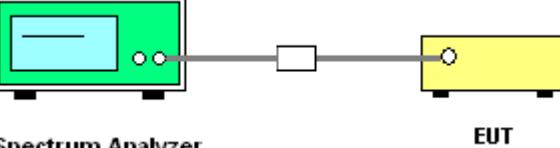
<b>Test Requirement:</b>	FCC Part15 E Section 15.407(a)& Part 2 J Section 2.1046										
<b>Test Method:</b>	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E										
<b>Limit:</b>	<table border="1"> <thead> <tr> <th>Frequency Band (MHz)</th> <th>Limit</th> </tr> </thead> <tbody> <tr> <td>5180 - 5240</td> <td>24dBm(250mW) for client device</td> </tr> <tr> <td>5260 - 5320</td> <td>24dBm(250mW) or <math>11 \text{ dBm} + 10 \log B</math>, B is the 26 dB emission bandwidth in megahertz</td> </tr> <tr> <td>5470 - 5725</td> <td>24dBm(250mW) or <math>11 \text{ dBm} + 10 \log B</math>, B is the 26 dB emission bandwidth in megahertz</td> </tr> <tr> <td>5745 - 5825</td> <td>30dBm(1W)</td> </tr> </tbody> </table>	Frequency Band (MHz)	Limit	5180 - 5240	24dBm(250mW) for client device	5260 - 5320	24dBm(250mW) or $11 \text{ dBm} + 10 \log B$ , B is the 26 dB emission bandwidth in megahertz	5470 - 5725	24dBm(250mW) or $11 \text{ dBm} + 10 \log B$ , B is the 26 dB emission bandwidth in megahertz	5745 - 5825	30dBm(1W)
Frequency Band (MHz)	Limit										
5180 - 5240	24dBm(250mW) for client device										
5260 - 5320	24dBm(250mW) or $11 \text{ dBm} + 10 \log B$ , B is the 26 dB emission bandwidth in megahertz										
5470 - 5725	24dBm(250mW) or $11 \text{ dBm} + 10 \log B$ , B is the 26 dB emission bandwidth in megahertz										
5745 - 5825	30dBm(1W)										
<b>Test Setup:</b>	 <p>The diagram illustrates the test setup. A green rectangular box labeled "Power meter" is connected to a yellow rectangular box labeled "EUT" (Equipment Under Test) via a black horizontal line representing an RF cable. A small white square box, representing an attenuator, is placed on the line between the power meter and the EUT.</p>										
<b>Test Mode:</b>	Transmitting mode with modulation										
<b>Test Procedure:</b>	<ol style="list-style-type: none"> <li>1. The testing follows the Measurement Procedure of KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section E, 3, a</li> <li>2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>3. Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>5. Measure the conducted output power and record the results in the test report.</li> </ol>										
<b>Test Result:</b>	PASS										
<b>Remark:</b>	Conducted output power= measurement power + $10\log(1/x)$ X is duty cycle=1, so $10\log(1/1)=0$ Conducted output power= measurement power										

**5.3.2. Test Instruments**

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 28, 2024
Power Meter	Agilent	E4418B	MY45100357	Jun. 27, 2024
Power Sensor	Agilent	8481A	MY41091497	Jun. 27, 2024
Combiner Box	Ascentest	AT890-RFB	/	/

## 5.4. 6dB Emission Bandwidth

### 5.4.1. Test Specification

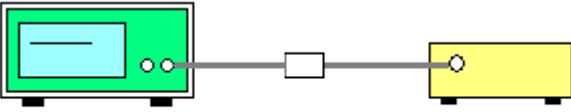
<b>Test Requirement:</b>	FCC CFR47 Part 15 Section 15.407(e)& Part 2 J Section 2.1049
<b>Test Method:</b>	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C
<b>Limit:</b>	>500kHz
<b>Test Setup:</b>	 <p style="text-align: center;"><b>Spectrum Analyzer</b>    <b>EUT</b></p>
<b>Test Mode:</b>	Transmitting mode with modulation
<b>Test Procedure:</b>	<ol style="list-style-type: none"> <li>1. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section C</li> <li>2. Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz.</li> <li>4. Measure and record the results in the test report.</li> </ol>
<b>Test Result:</b>	PASS

### 5.4.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 28, 2024
Combiner Box	Ascentest	AT890-RFB	/	/

## 5.5. 26dB Bandwidth and 99% Occupied Bandwidth

### 5.5.1. Test Specification

<b>Test Requirement:</b>	47 CFR Part 15C Section 15.407 (a)& Part 2 J Section 2.1049
<b>Test Method:</b>	KDB662911 D01 Multiple Transmitter Output v02r01 KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D
<b>Limit:</b>	No restriction limits
<b>Test Setup:</b>	 <p><b>Spectrum Analyzer</b>      <b>EUT</b></p>
<b>Test Mode:</b>	Transmitting mode with modulation
<b>Test Procedure:</b>	<ol style="list-style-type: none"> <li>1. KDB789033 D02 General UNII Test Procedures New Rules v02r01 Section D</li> <li>2. Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 1% to 5% of the OBW. Set the Video bandwidth (VBW) = 3 *RBW. In order to make an accurate measurement.</li> <li>4. Measure and record the results in the test report.</li> </ol>
<b>Test Result:</b>	PASS

### 5.5.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 28, 2024
Combiner Box	Ascentest	AT890-RFB	/	/

## 5.6. Power Spectral Density

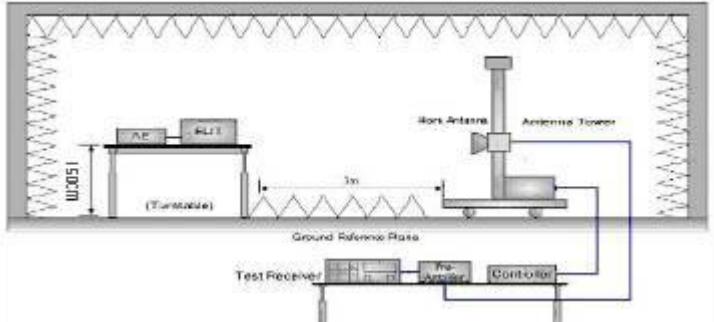
### 5.6.1. Test Specification

## 5.6.2. Test Instruments

Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	N9020A	MY49100619	Jun. 28, 2024
Combiner Box	Ascentest	AT890-RFB	/	/

## 5.7. Band edge

### 5.7.1. Test Specification

<b>Test Requirement:</b>	FCC CFR47 Part 15E Section 15.407																													
<b>Test Method:</b>	ANSI C63.10 2013																													
<b>Limit:</b>	In un-restricted band: For Band 1&2A&2C: -27dBm/MHz For Band 3: <table border="1"> <thead> <tr> <th>Frequency (MHz)</th> <th>Limit (dBm/MHz)</th> <th>Frequency (MHz)</th> <th>Limit (dBm/MHz)</th> </tr> </thead> <tbody> <tr> <td>&lt; 5650</td> <td>-27</td> <td>5850~5855</td> <td>27~15.6</td> </tr> <tr> <td>5650~5700</td> <td>-27~10</td> <td>5855~5875</td> <td>15.6~10</td> </tr> <tr> <td>5700~5720</td> <td>10~15.6</td> <td>5875~5925</td> <td>10~27</td> </tr> <tr> <td>5720~5725</td> <td>15.6~27</td> <td>&gt; 592</td> <td>-27</td> </tr> </tbody> </table> $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2 \text{ @3m}$ In restricted band: <table border="1"> <thead> <tr> <th>Dector</th> <th>Limit@3m</th> </tr> </thead> <tbody> <tr> <td>Peak</td> <td>74dB<math>\mu</math>V/m</td> </tr> <tr> <td>AVG</td> <td>54dB<math>\mu</math>V/m</td> </tr> </tbody> </table>				Frequency (MHz)	Limit (dBm/MHz)	Frequency (MHz)	Limit (dBm/MHz)	< 5650	-27	5850~5855	27~15.6	5650~5700	-27~10	5855~5875	15.6~10	5700~5720	10~15.6	5875~5925	10~27	5720~5725	15.6~27	> 592	-27	Dector	Limit@3m	Peak	74dB $\mu$ V/m	AVG	54dB $\mu$ V/m
Frequency (MHz)	Limit (dBm/MHz)	Frequency (MHz)	Limit (dBm/MHz)																											
< 5650	-27	5850~5855	27~15.6																											
5650~5700	-27~10	5855~5875	15.6~10																											
5700~5720	10~15.6	5875~5925	10~27																											
5720~5725	15.6~27	> 592	-27																											
Dector	Limit@3m																													
Peak	74dB $\mu$ V/m																													
AVG	54dB $\mu$ V/m																													
<b>Test Setup:</b>																														
<b>Test Mode:</b>	Transmitting mode with modulation																													
<b>Test Procedure:</b>	1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. 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 antenna height 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold																													

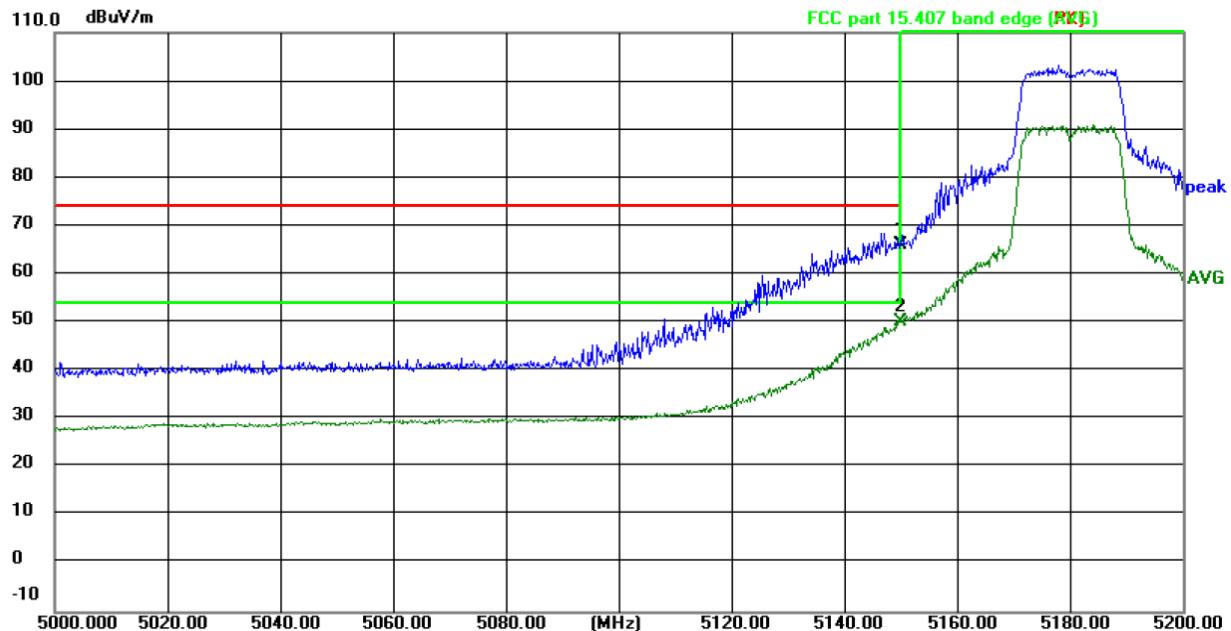
	<p>Mode.</p> <p>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasipeak or average method as specified and then reported in a data sheet.</p>
<b>Test Result:</b>	PASS

### 5.7.2. Test Instruments

Radiated Emission Test Site (966)				
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESIB7	100197	Jun. 29, 2024
Spectrum Analyzer	R&S	FSQ40	200061	Jun. 29, 2024
Spectrum Analyzer	Agilent	N9020A	MY49100619	Feb. 20, 2024
Pre-amplifier	SKET	LNPA_0118G-45	SK2021012102	Feb. 20, 2024
Pre-amplifier	SKET	LNPA_1840G-50	SK202109203500	Jun. 27, 2024
Pre-amplifier	HP	8447D	2727A05017	Jul. 02, 2024
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jul. 01, 2024
Broadband Antenna	Schwarzbeck	VULB9163	340	Jul. 01, 2024
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Feb. 24, 2024
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Jun. 29, 2024
Coaxial cable	SKET	RC-18G-N-M	/	Feb. 24, 2024
Coaxial cable	SKET	RC_40G-K-M	/	Feb. 24, 2024
Antenna Mast	Keleto	CC-A-4M	/	/
EMI Test Software	Shurples Technology	EZ-EMC	/	/

### 5.7.3. Test Data

AC20-5180



Site: #3 3m Anechoic Chamber

Polarization: **Horizontal**

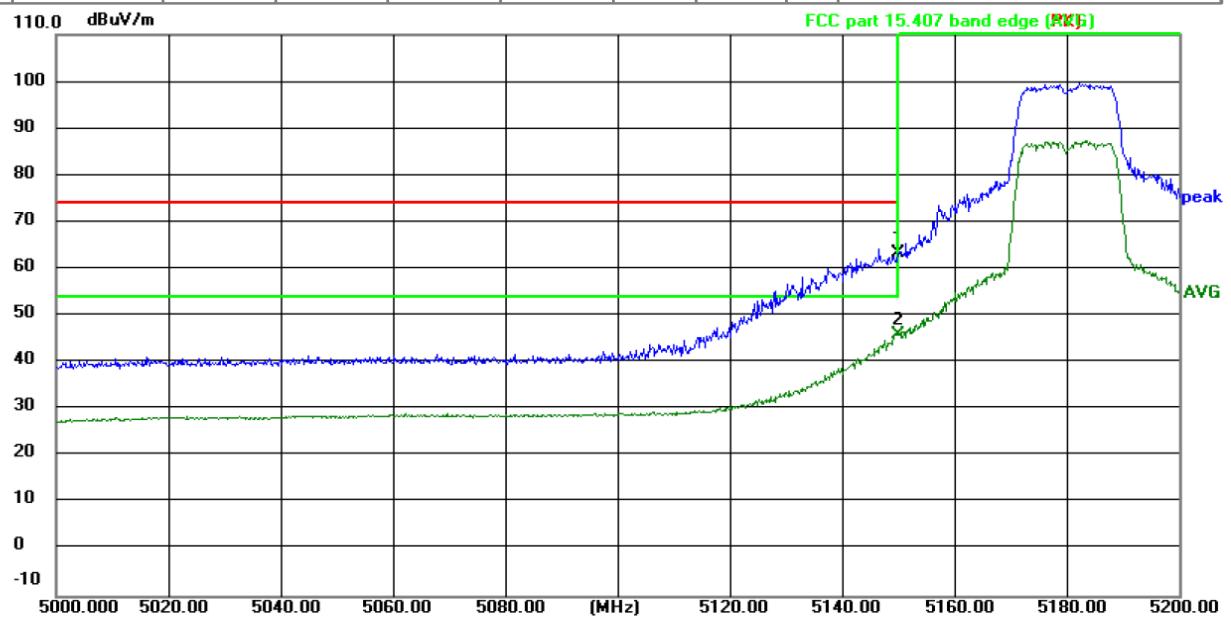
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5150.000	74.78	-8.63	66.15	74.00	-7.85	peak	P	
2 *	5150.000	58.77	-8.63	50.14	54.00	-3.86	AVG	P	



Site: #3 3m Anechoic Chamber

Polarization: **Vertical**

Temperature: 22.6(°C)

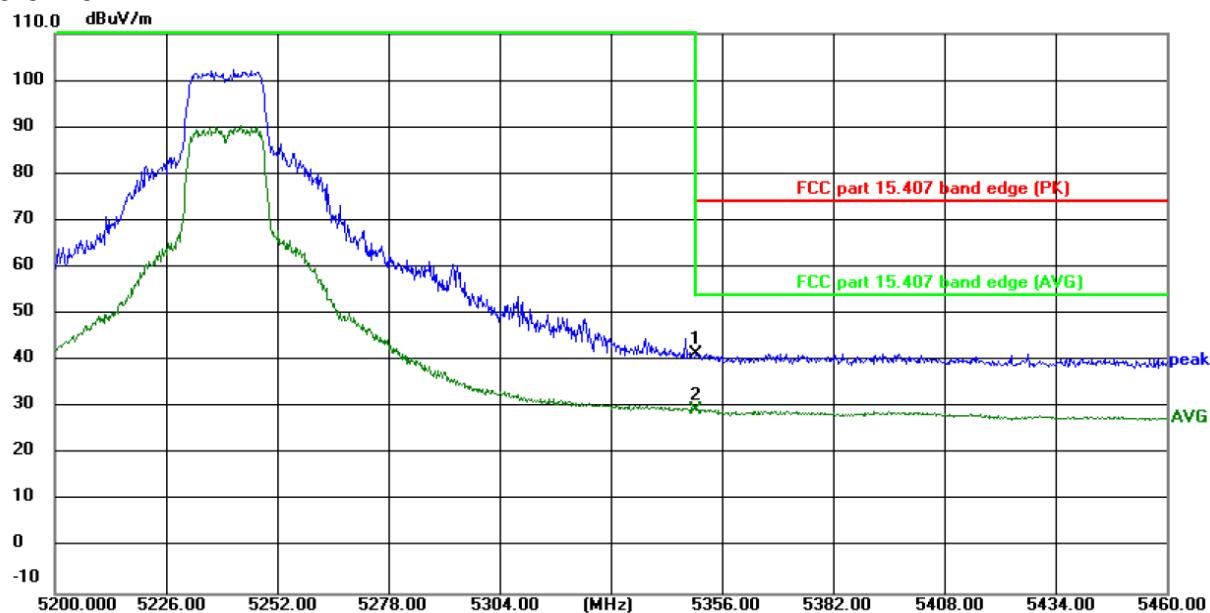
Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5150.000	71.93	-8.63	63.30	74.00	-10.70	peak	P	
2 *	5150.000	54.47	-8.63	45.84	54.00	-8.16	AVG	P	

## AC20-5240



Site: #3 3m Anechoic Chamber

 Polarization: **Horizontal**

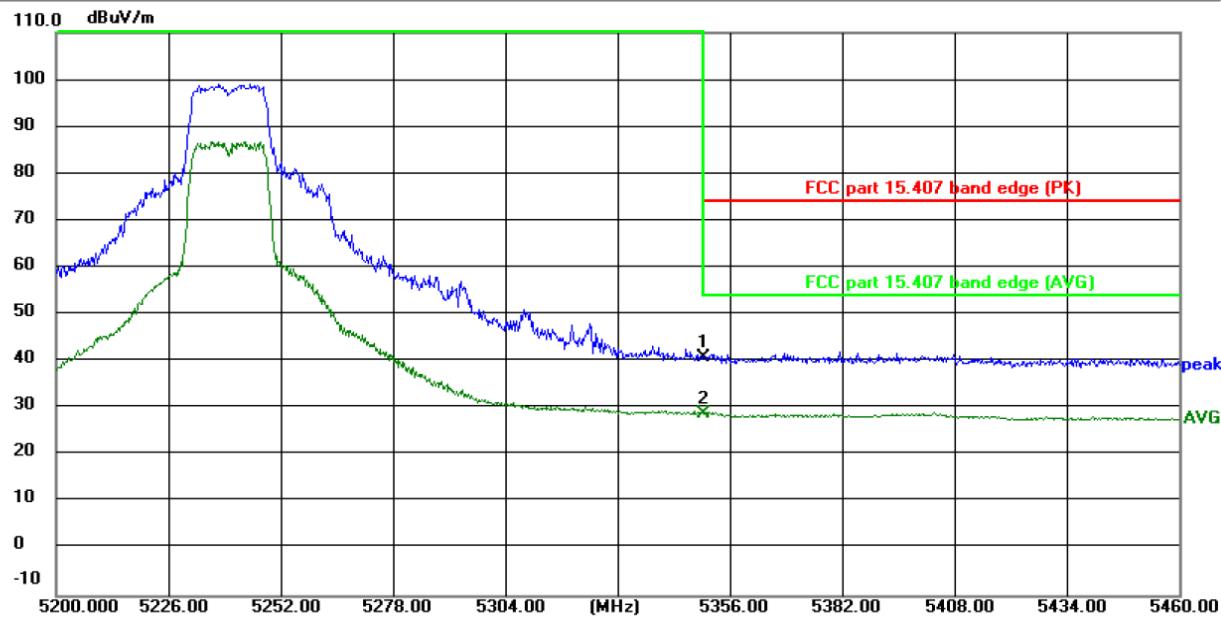
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5350.000	49.68	-8.22	41.46	74.00	-32.54	peak	P	
2 *	5350.000	37.70	-8.22	29.48	54.00	-24.52	AVG	P	



Site: #3 3m Anechoic Chamber

 Polarization: **Vertical**

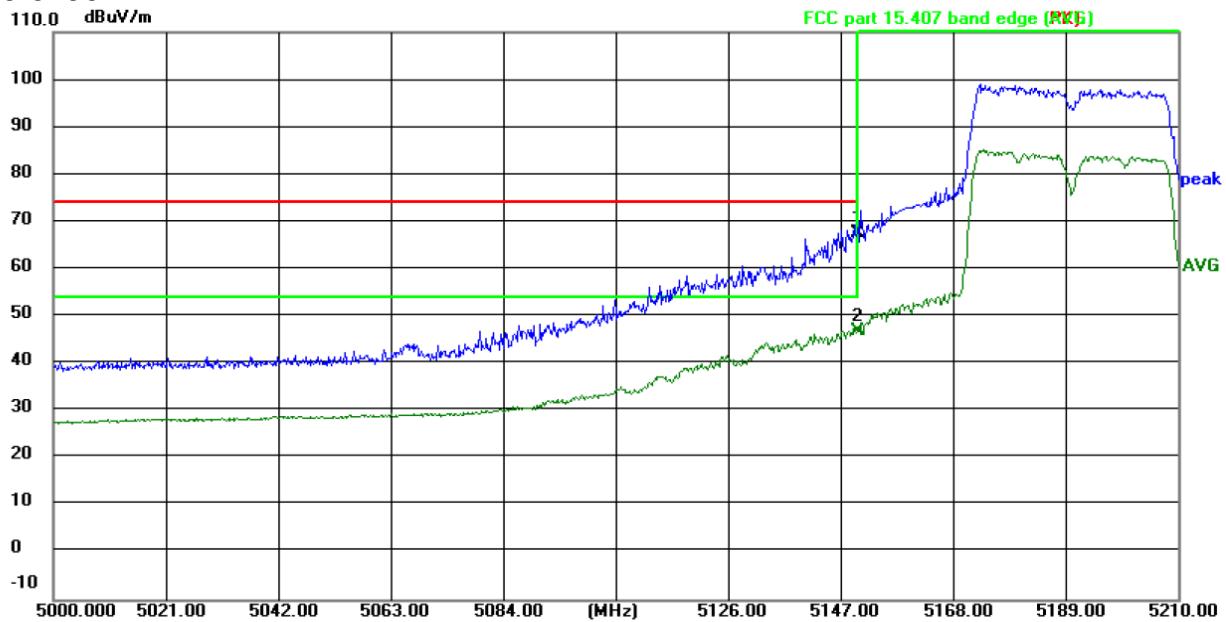
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5350.000	49.08	-8.22	40.86	74.00	-33.14	peak	P	
2 *	5350.000	37.11	-8.22	28.89	54.00	-25.11	AVG	P	

**AC40-5190**


Site: #3 3m Anechoic Chamber

 Polarization: **Horizontal**

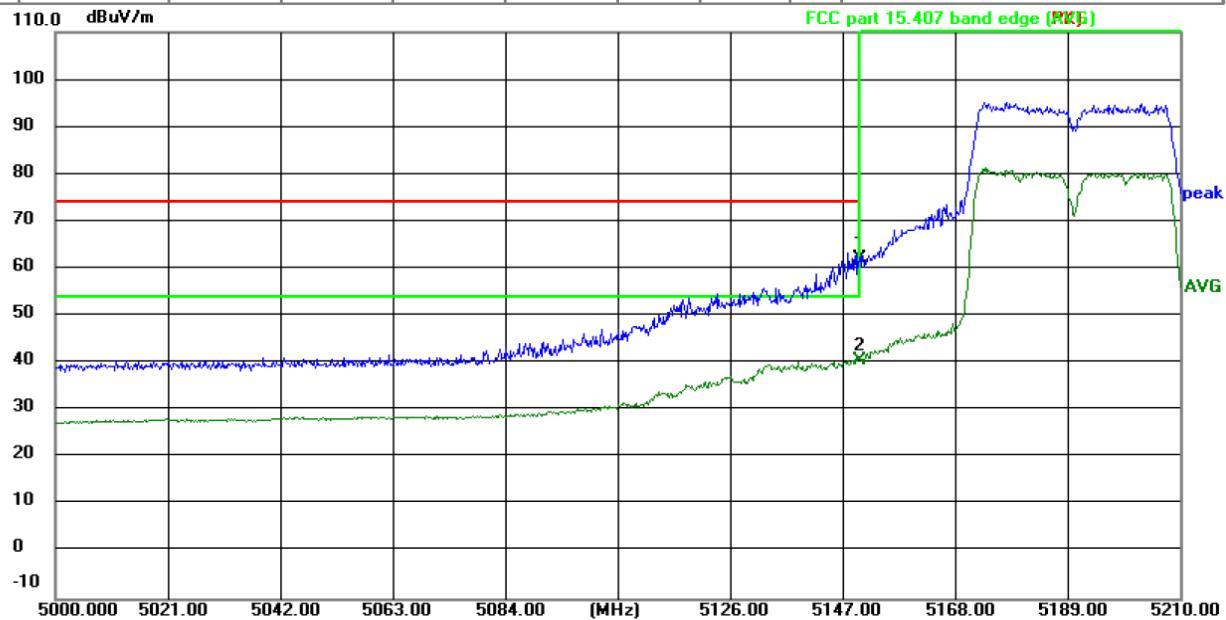
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power: AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5150.000	76.08	-8.63	67.45	74.00	-6.55	peak	P	
2	5150.000	55.62	-8.63	46.99	54.00	-7.01	AVG	P	



Site: #3 3m Anechoic Chamber

 Polarization: **Vertical**

Temperature: 22.6(°C)

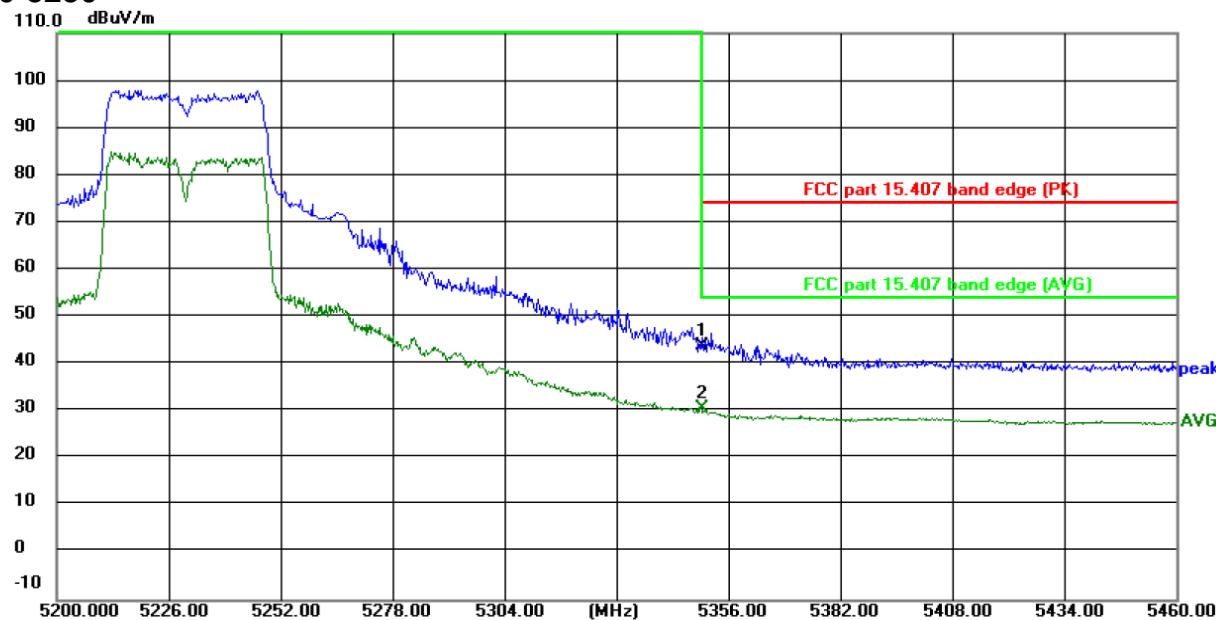
Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power: AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5150.000	70.71	-8.63	62.08	74.00	-11.92	peak	P	
2	5150.000	49.31	-8.63	40.68	54.00	-13.32	AVG	P	

## AC40-5230



Site: #3 3m Anechoic Chamber

 Polarization: **Horizontal**

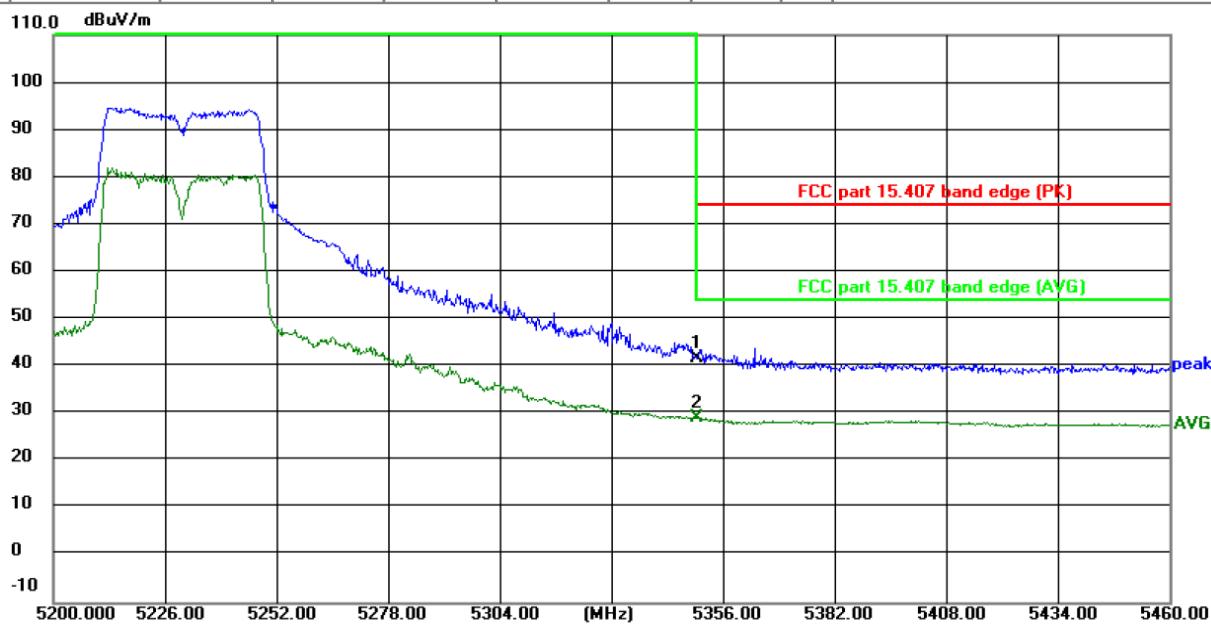
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5350.000	52.03	-8.22	43.81	74.00	-30.19	peak	P	
2 *	5350.000	38.83	-8.22	30.61	54.00	-23.39	AVG	P	



Site: #3 3m Anechoic Chamber

 Polarization: **Vertical**

Temperature: 22.6(°C)

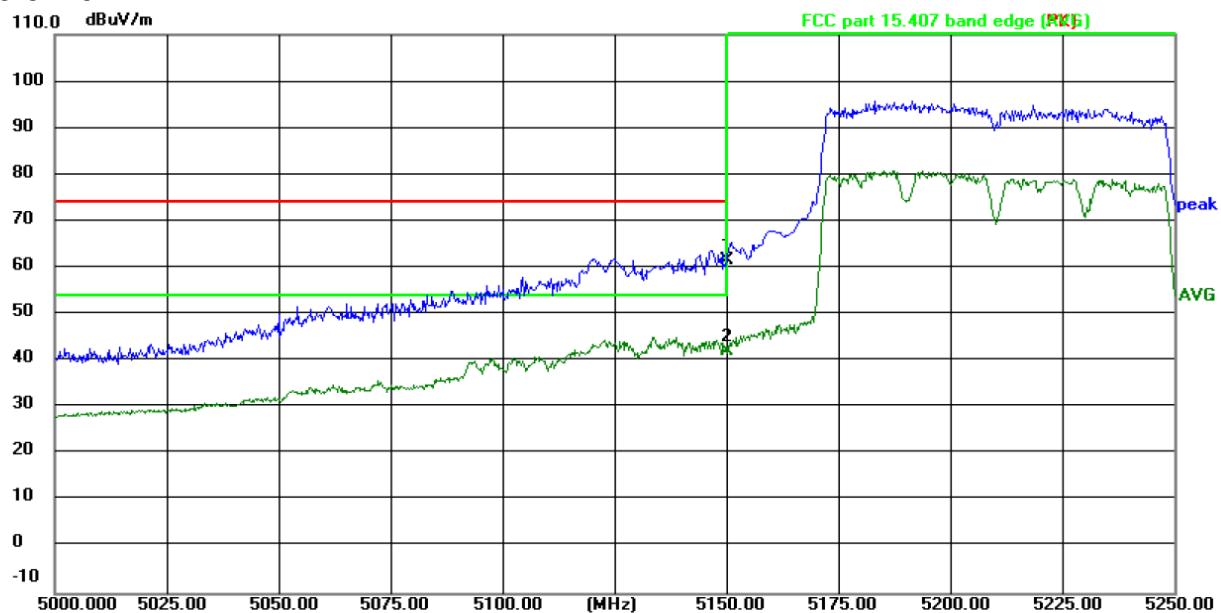
Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5350.000	49.97	-8.22	41.75	74.00	-32.25	peak	P	
2 *	5350.000	37.25	-8.22	29.03	54.00	-24.97	AVG	P	

## AC80-5210



Site: #3 3m Anechoic Chamber

 Polarization: **Horizontal**

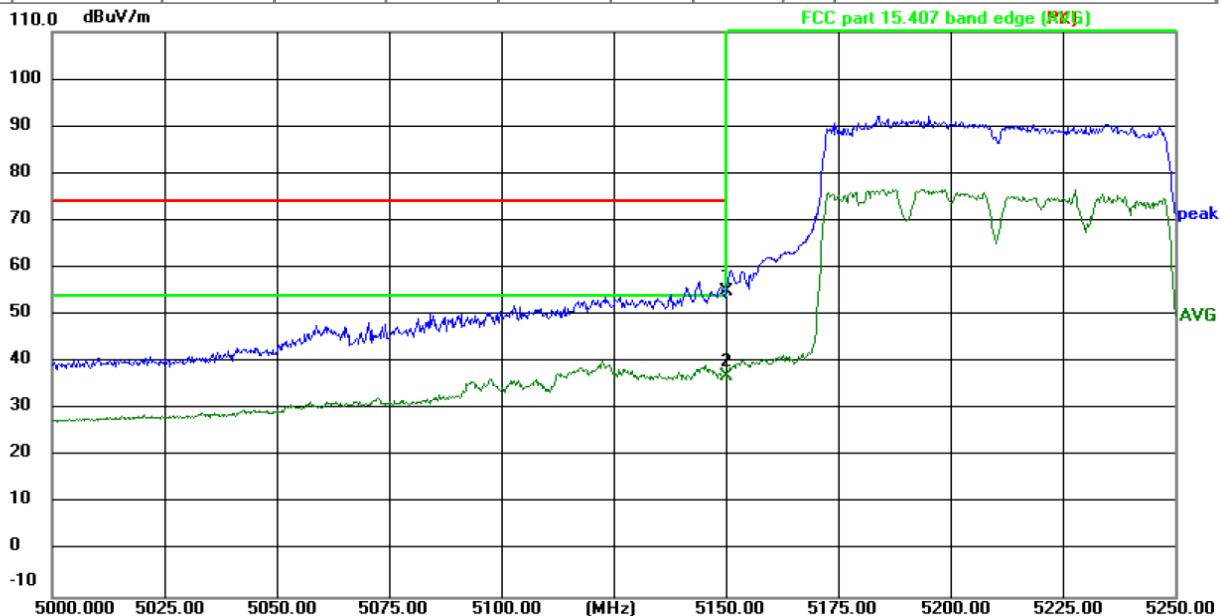
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5150.000	70.29	-8.63	61.66	74.00	-12.34	peak	P	
2 *	5150.000	50.60	-8.63	41.97	54.00	-12.03	AVG	P	



Site: #3 3m Anechoic Chamber

 Polarization: **Vertical**

Temperature: 22.6(°C)

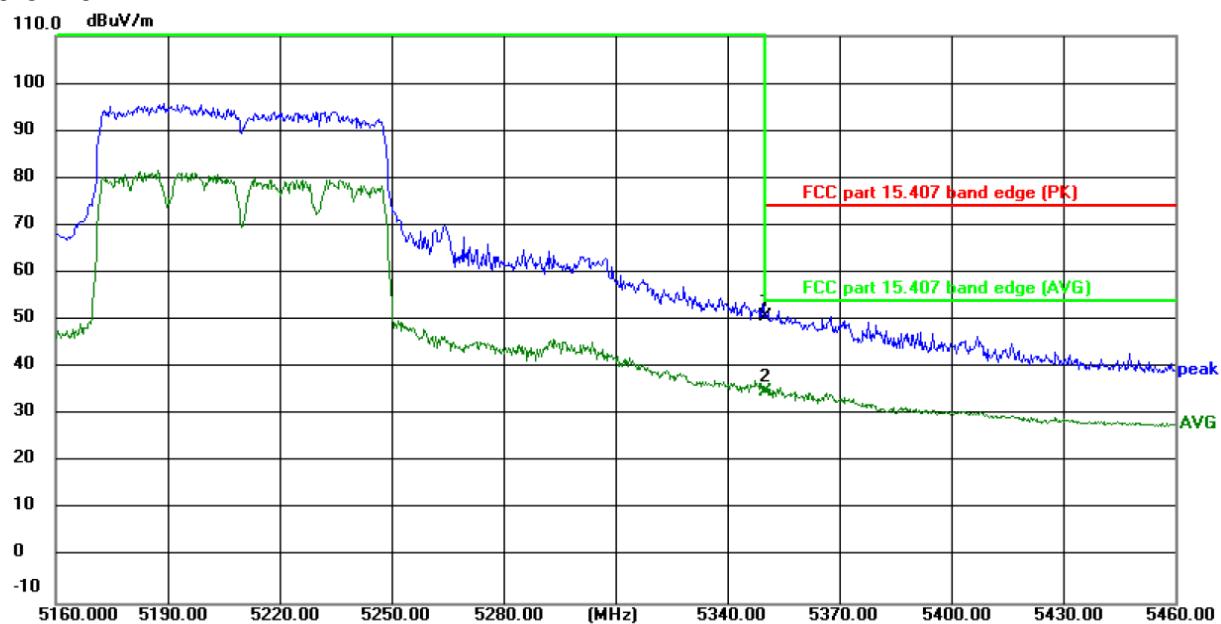
Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5150.000	63.66	-8.63	55.03	74.00	-18.97	peak	P	
2 *	5150.000	45.61	-8.63	36.98	54.00	-17.02	AVG	P	

## AC80-5210



Site: #3 3m Anechoic Chamber

 Polarization: **Horizontal**

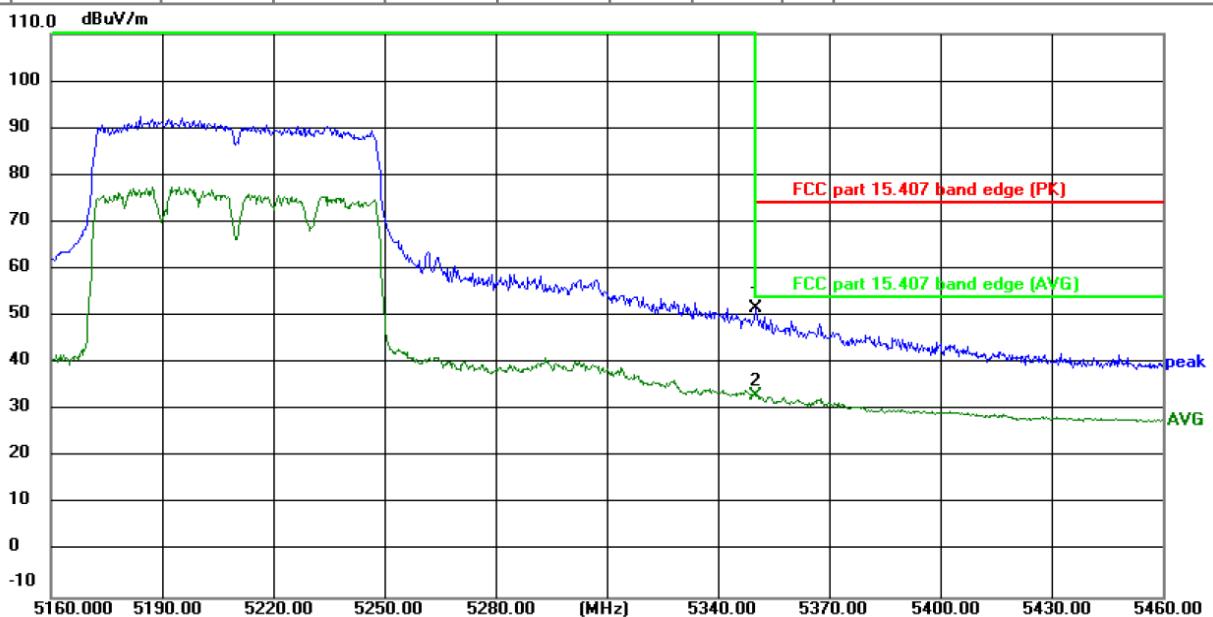
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power: AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5350.000	59.07	-8.22	50.85	74.00	-23.15	peak	P	
2 *	5350.000	43.06	-8.22	34.84	54.00	-19.16	AVG	P	



Site: #3 3m Anechoic Chamber

 Polarization: **Vertical**

Temperature: 22.6(°C)

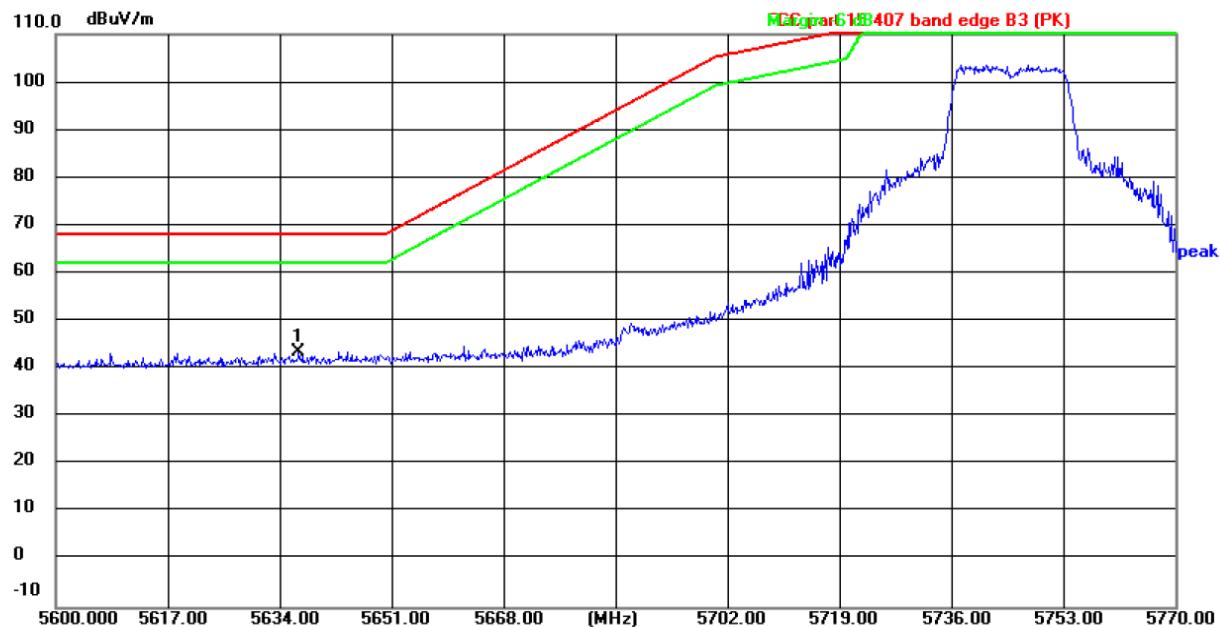
Humidity: 49 %

Limit: FCC part 15.407 band edge (PK)

Power: AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	5350.000	59.81	-8.22	51.59	74.00	-22.41	peak	P	
2 *	5350.000	41.25	-8.22	33.03	54.00	-20.97	AVG	P	

## AC20-5745



Site: #3 3m Anechoic Chamber

 Polarization: **Horizontal**

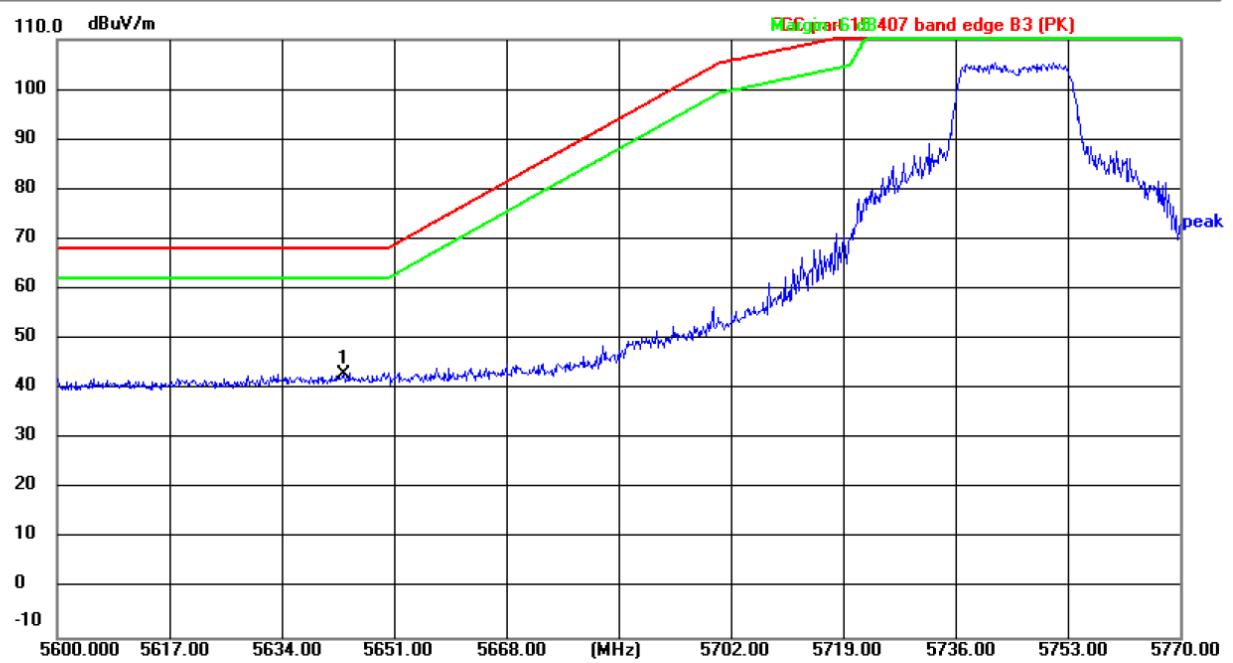
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5636.890	51.13	-7.58	43.55	68.20	-24.65	peak	P	



Site: #3 3m Anechoic Chamber

 Polarization: **Vertical**

Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5643.350	50.65	-7.57	43.08	68.20	-25.12	peak	P	

## AC20-5825



Site: #3 3m Anechoic Chamber

 Polarization: **Horizontal**

Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5942.050	49.60	-6.84	42.76	68.20	-25.44	peak	P	



Site: #3 3m Anechoic Chamber

 Polarization: **Vertical**

Temperature: 22.6(°C)

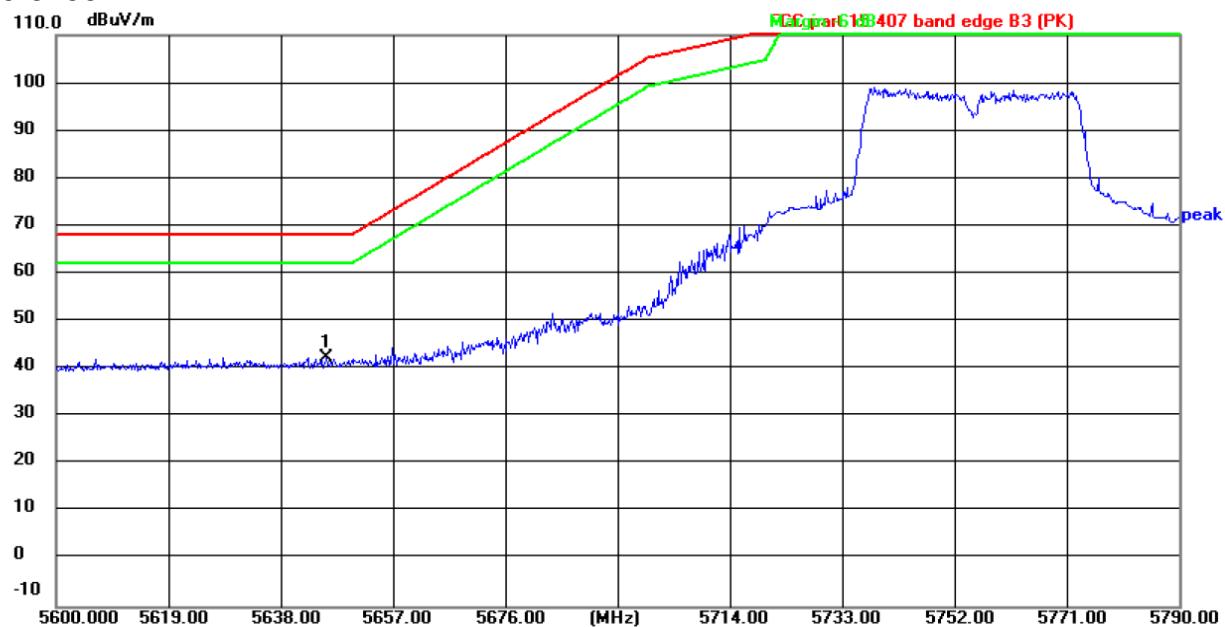
Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5926.150	50.78	-6.88	43.90	68.20	-24.30	peak	P	

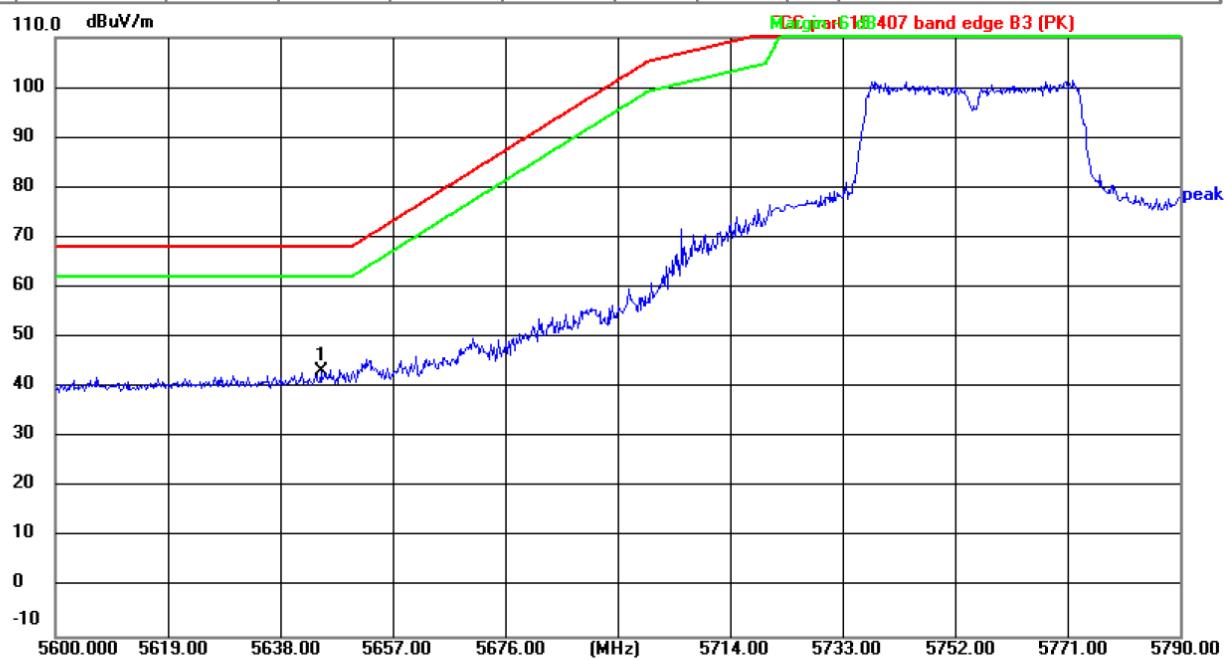
## AC40-5755



Site: #3 3m Anechoic Chamber      Polarization: **Horizontal**      Temperature: 22.6(°C)      Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)      Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5645.790	49.95	-7.57	42.38	68.20	-25.82	peak	P	

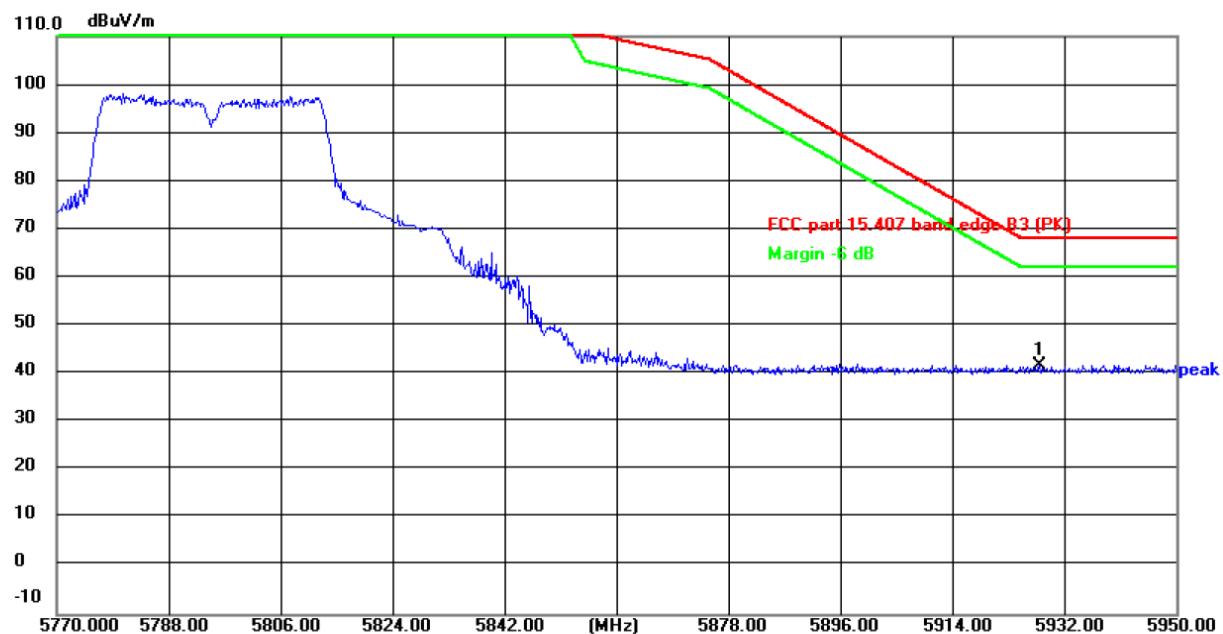


Site: #3 3m Anechoic Chamber      Polarization: **Vertical**      Temperature: 22.6(°C)      Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)      Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5644.840	50.73	-7.57	43.16	68.20	-25.04	peak	P	

## AC40-5795



Site: #3 3m Anechoic Chamber

 Polarization: **Horizontal**

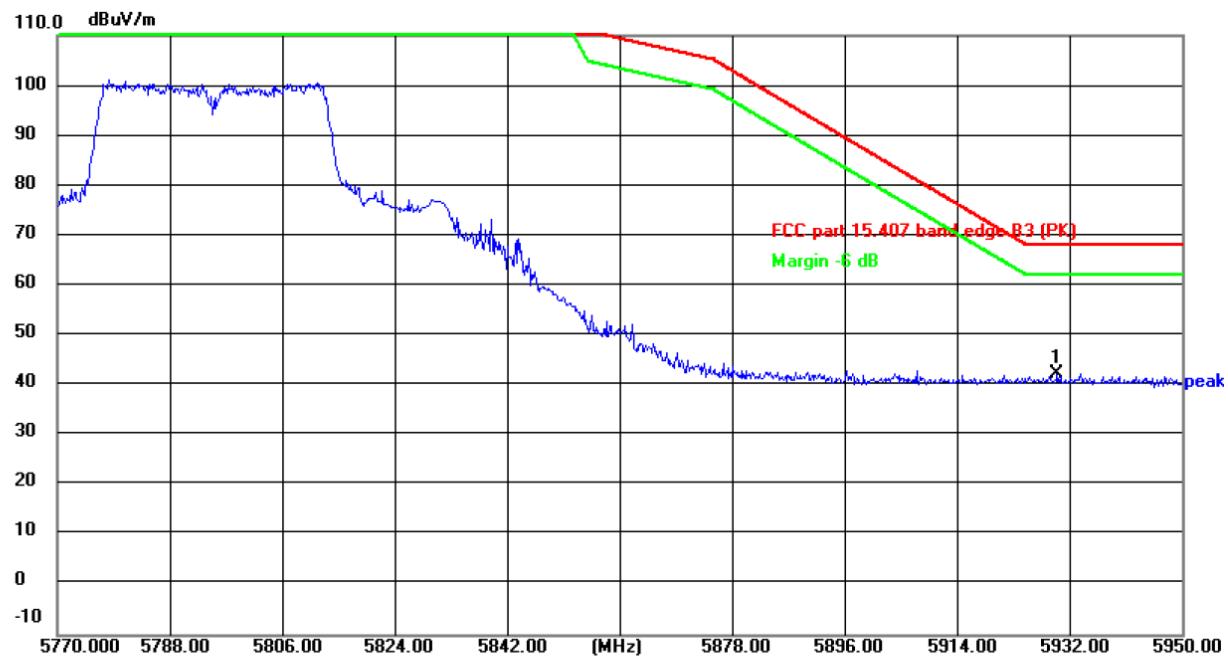
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5928.040	48.57	-6.87	41.70	68.20	-26.50	peak	P	



Site: #3 3m Anechoic Chamber

 Polarization: **Vertical**

Temperature: 22.6(°C)

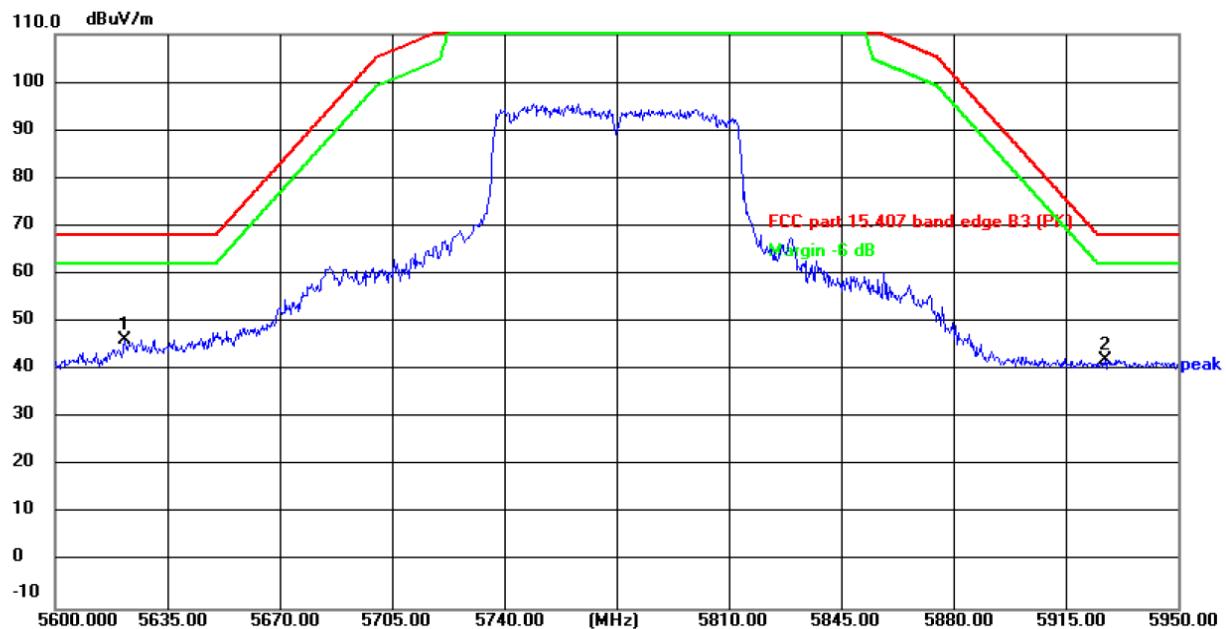
Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)

Power:AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5930.020	49.16	-6.87	42.29	68.20	-25.91	peak	P	

## AC80-5775



Site: #3 3m Anechoic Chamber

 Polarization: **Horizontal**

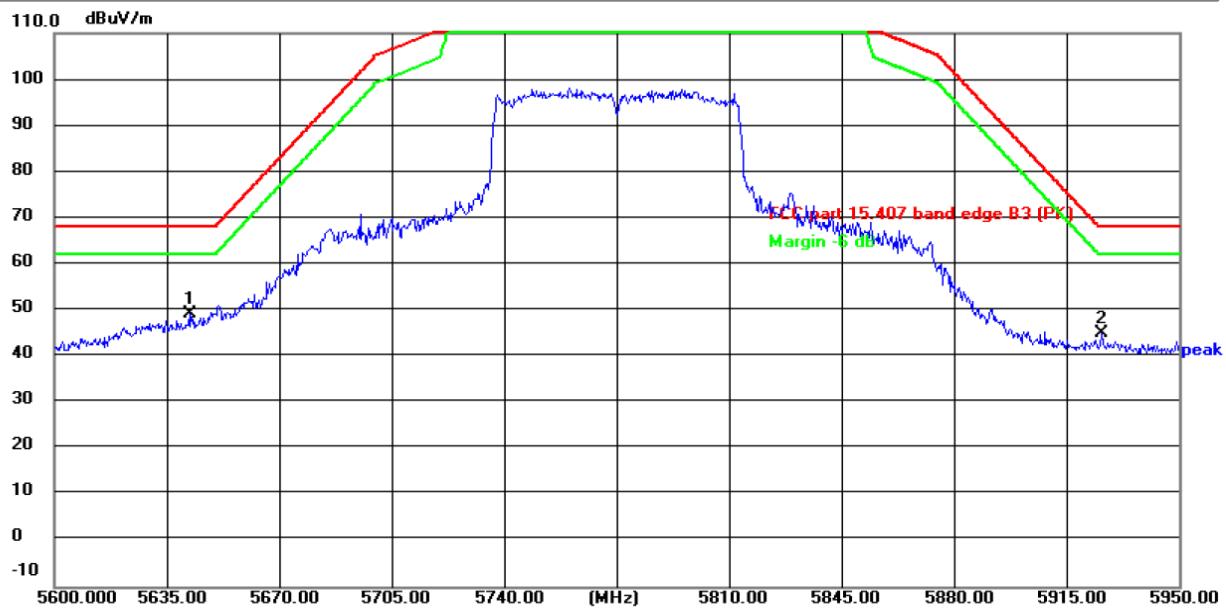
Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)

Power: AC DC3.8V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5621.700	53.99	-7.62	46.37	68.20	-21.83	peak	P	
2	5927.250	49.03	-6.87	42.16	68.20	-26.04	peak	P	



Site: #3 3m Anechoic Chamber

 Polarization: **Vertical**

Temperature: 22.6(°C)

Humidity: 49 %

Limit: FCC part 15.407 band edge B3 (PK)

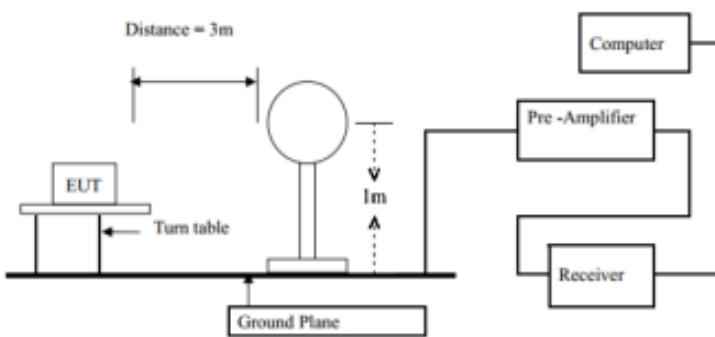
Power: AC DC3.8V

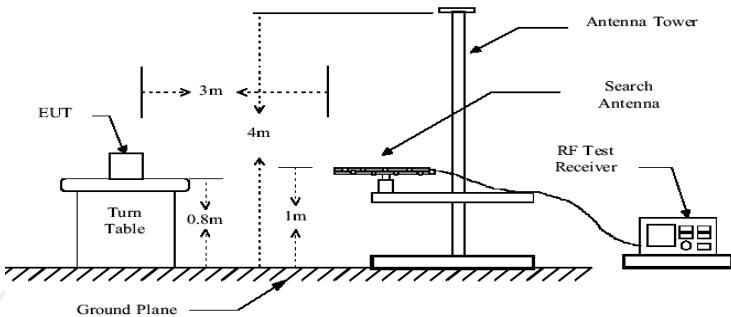
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	5642.000	56.77	-7.57	49.20	68.20	-19.00	peak	P	
2	5925.850	52.06	-6.88	45.18	68.20	-23.02	peak	P	

Note: All modulation (802.11a, 802.11n, 802.11ac) have been tested, only the worst case in 802.11a be reported.

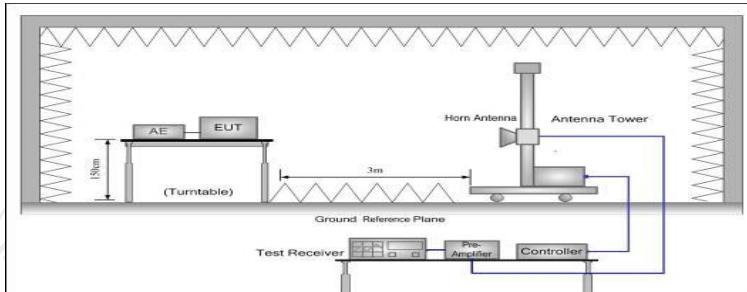
## 5.8. Unwanted Emissions

### 5.8.1. Test Specification

<b>Test Requirement:</b>	FCC CFR47 Part 15 Section 15.407 & 15.209 & 15.205							
<b>Test Method:</b>	KDB 789033 D02 v02r01							
<b>Frequency Range:</b>	9kHz to 40GHz							
<b>Measurement Distance:</b>	3 m							
<b>Antenna Polarization:</b>	Horizontal & Vertical							
<b>Operation mode:</b>	Transmitting mode with modulation							
<b>Receiver Setup:</b>	Frequency	Detector	RBW	VBW	Remark			
	9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value			
	150kHz- 30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value			
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value			
	Above 1GHz	Peak	1MHz	3MHz	Peak Value			
		Peak	1MHz	10Hz	Average Value			
<b>Limit:</b>	Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table, In restricted bands:							
	Frequency	Detector	Limit@3m					
	Above 1G	Peak	74dB $\mu$ V/m					
		AVG	54dB $\mu$ V/m					
	Frequency	Field Strength (microvolts/meter)	Measurement Distance (meters)					
	0.009-0.490	2400/F(KHz)	300					
	0.490- .705	24000/F(KHz)	3					
	1.705-30	30	30					
	30-88	100	3					
	88-216	150	3					
	216-960	200	3					
	Above 960	500	3					
	In un-restricted bands: 68.2dB $\mu$ V/m							
<b>Test setup:</b>	For radiated emissions below 30MHz							
	 <p>Distance = 3m</p> <p>EUT</p> <p>Turn table</p> <p>Ground Plane</p> <p>Computer</p> <p>Pre -Amplifier</p> <p>Receiver</p>							
	30MHz to 1GHz							



Above 1GHz



1. The EUT was placed on the top of a rotating table 0.8 meters below 1GHz or 1.5 meters above 1GHz above the ground at a 3 meter camber. 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 antenna height 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 was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limits specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

**Test Procedure:**

**Test results:** PASS

### 5.8.2. Test Data

Please refer to following diagram for individual

Below 1GHz

Horizontal:



Site: #1 3m Anechoic Chamber

Polarization: **Horizontal**

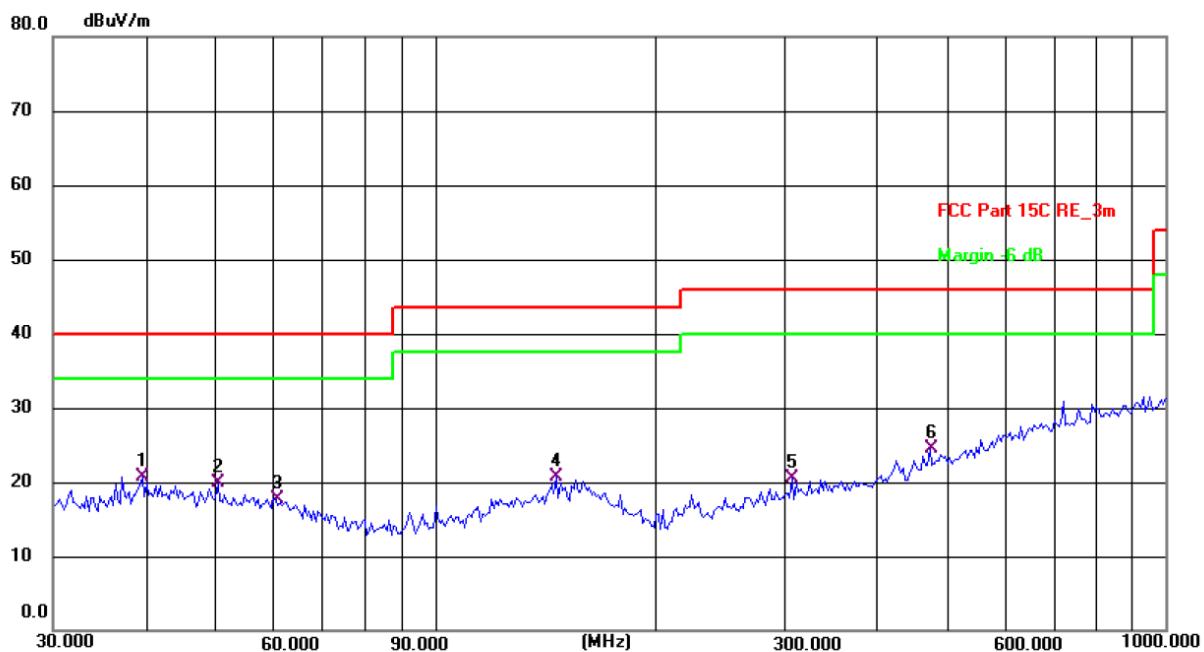
Temperature: 24.2(C) Humidity: 51 %

Limit: FCC Part 15C RE\_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	39.9942	5.89	14.23	20.12	40.00	-19.88	QP	P	
2	53.6932	6.00	13.30	19.30	40.00	-20.70	QP	P	
3	126.3286	6.00	13.09	19.09	43.50	-24.41	QP	P	
4	152.6641	6.51	14.57	21.08	43.50	-22.42	QP	P	
5	213.7634	6.40	10.98	17.38	43.50	-26.12	QP	P	
6	361.7139	4.77	15.43	20.20	46.00	-25.80	QP	P	

Vertical:



Site: #1 3m Anechoic Chamber

 Polarization: **Vertical**

Temperature: 24.2(C) Humidity: 51 %

Limit: FCC Part 15C RE\_3m

Power: AC 120 V/60 Hz

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1 *	39.7146	6.58	14.20	20.78	40.00	-19.22	QP	P	
2	50.4089	6.26	13.62	19.88	40.00	-20.12	QP	P	
3	60.4918	4.96	12.83	17.79	40.00	-22.21	QP	P	
4	146.3734	6.38	14.30	20.68	43.50	-22.82	QP	P	
5	307.8312	6.31	14.23	20.54	46.00	-25.46	QP	P	
6	475.4991	6.51	18.07	24.58	46.00	-21.42	QP	P	

- Note:**
1. The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported
  2. Measurements were conducted in all three channels (high, middle, low) and all modulation (802.11a, 802.11n(HT20), 802.11n(HT40), 802.11ac(VHT20), 802.11ac(VHT40), 802.11ac(VHT80) and the worst case Mode (Middle channel and 802.11a) was submitted only.  
Both AC mode and Internal battery mode have been tested, only the AC mode which is worse reported.
  3. Measurement (dB $\mu$ V) = Reading level + Correction Factor , correction Factor= Antenna Factor + Cable loss - Pre-amplifier.

Modulation Type: Band 1									
11a CH36: 5180MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10360	H	38.02	---	8.02	46.04	---	68.2	---	-22.16
15540	H	38.96	---	9.87	48.83	---	74	54	-5.17
---	H	---	---	---	---	---	---	---	---
10360	V	38.27	---	8.02	46.29	---	68.2	---	-21.91
15540	V	38.15	---	9.87	48.02	---	74	54	-5.98
---	V	---	---	---	---	---	---	---	---
11a CH40: 5200MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10400	H	39.08	---	7.97	47.05	---	68.2	---	-21.15
15600	H	38.11	---	9.83	47.94	---	74	54	-6.06
---	H	---	---	---	---	---	---	---	---
10400	V	40.89	---	7.97	48.86	---	68.2	---	-19.34
15600	V	38.51	---	9.83	48.34	---	74	54	-5.66
---	V	---	---	---	---	---	---	---	---
11a CH48: 5240MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10480	H	38.08	---	7.97	46.05	---	68.2	---	-22.15
15720	H	37.36	---	9.83	47.19	---	74	54	-6.81
---	H	---	---	---	---	---	---	---	---
10480	V	38.39	---	7.97	46.36	---	68.2	---	-21.84
15720	V	36.18	---	9.83	46.01	---	74	54	-7.99
---	V	---	---	---	---	---	---	---	---
11n(HT20) CH36: 5180MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10360	H	41.89	---	8.02	49.91	---	68.2	---	-18.29
15540	H	37.48	---	9.87	47.35	---	74	54	-6.65
---	H	---	---	---	---	---	---	---	---
10360	V	42.25	---	8.02	50.27	---	68.2	---	-17.93
15540	V	37.46	---	9.87	47.33	---	74	54	-6.67
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH40: 5200MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10400	H	40.85	---	7.97	48.82	---	68.2	---	-19.38
15600	H	38.92	---	9.83	48.75	---	74	54	-5.25
---	H	---	---	---	---	---	---	---	---
10400	V	40.37	---	7.97	48.34	---	68.2	---	-19.86
15600	V	37.19	---	9.83	47.02	---	74	54	-6.98
---	V	---	---	---	---	---	---	---	---
11n(HT20) CH48: 5240MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10480	H	41.85	---	7.97	49.82	---	68.2	---	-18.38
15720	H	39.73	---	9.83	49.56	---	74	54	-4.44
---	H	---	---	---	---	---	---	---	---
10480	V	40.19	---	7.97	48.16	---	68.2	---	-20.04
15720	V	39.66	---	9.83	49.49	---	74	54	-4.51
---	V	---	---	---	---	---	---	---	---
11n(HT40) CH38: 5190MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10380	H	39.78	---	7.75	47.53	---	68.2	---	-20.67
15570	H	37.12	---	9.87	46.99	---	74	54	-7.01
---	H	---	---	---	---	---	---	---	---
10380	V	40.95	---	7.75	48.7	---	68.2	---	-19.5
15570	V	37.33	---	9.87	47.2	---	74	54	-6.8
---	V	---	---	---	---	---	---	---	---
11n(HT40) CH46: 5230MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10460	H	41.52	---	7.97	49.49	---	68.2	---	-18.71
15690	H	38.88	---	9.83	48.71	---	74	54	-5.29
---	H	---	---	---	---	---	---	---	---
10460	V	41.04	---	7.97	49.01	---	68.2	---	-19.19
15690	V	38.79	---	9.83	48.62	---	74	54	-5.38
---	V	---	---	---	---	---	---	---	---

## 11ac(VHT20) CH36: 5180MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10360	H	40.88	---	8.02	48.9	---	68.2	---	-19.3
15540	H	37.6	---	9.87	47.47	---	74	54	-6.53
---	H	---	---	---	---	---	---	---	---

10360	V	38.97	---	8.02	46.99	---	68.2	---	-21.21
15540	V	39.56	---	9.87	49.43	---	74	54	-4.57
---	V	---	---	---	---	---	---	---	---

## 11ac(VHT20) CH40: 5200MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10400	H	39.88	---	7.97	47.85	---	68.2	---	-20.35
15600	H	38.43	---	9.83	48.26	---	74	54	-5.74
---	H	---	---	---	---	---	---	---	---

10400	V	39.11	---	7.97	47.08	---	68.2	---	-21.12
15600	V	38.65	---	9.83	48.48	---	74	54	-5.52
---	V	---	---	---	---	---	---	---	---

## 11ac(VHT20) CH48:5240

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10480	H	37.69	---	7.97	45.66	---	68.2	---	-22.54
15720	H	37.03	---	9.83	46.86	---	74	54	-7.14
---	H	---	---	---	---	---	---	---	---

10480	V	38.24	---	7.97	46.21	---	68.2	---	-21.99
15720	V	38.53	---	9.83	48.36	---	74	54	-5.64
---	V	---	---	---	---	---	---	---	---

## 11ac(VHT40) CH38:5190

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10380	H	40.88	---	7.75	48.63	---	68.2	---	-19.57
15570	H	39.75	---	9.87	49.62	---	74	54	-4.38
---	H	---	---	---	---	---	---	---	---
10380	V	38.13	---	7.75	45.88	---	68.2	---	-22.32
15570	V	38.02	---	9.87	47.89	---	74	54	-6.11
---	V	---	---	---	---	---	---	---	---

11ac(VHT40) CH46:5230									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10460	H	38.21	---	7.97	46.18	---	68.2	---	-22.02
15690	H	38.33	---	9.83	48.16	---	74	54	-5.84
---	H	---	---	---	---	---	---	---	---
10460	V	39.41	---	7.97	47.38	---	68.2	---	-20.82
15690	V	37.92	---	9.83	47.75	---	74	54	-6.25
---	V	---	---	---	---	---	---	---	---
11ac(VHT80) CH42:5210									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
10420	H	41.52	---	7.96	49.48	---	68.2	---	-18.72
15630	H	39.17	---	9.84	49.01	---	74	54	-4.99
---	H	---	---	---	---	---	---	---	---
10420	V	41.34	---	7.96	49.3	---	68.2	---	-18.9
15630	V	39.46	---	9.84	49.3	---	74	54	-4.7
---	V	---	---	---	---	---	---	---	---

**Note:**

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB $\mu$ V/m)-Average limit (dB $\mu$ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
5. Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

Modulation Type: Band 3									
11a CH149: 5745MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11490	H	37.14	---	8.09	45.23	---	74	54	-8.77
17235	H	37.25	---	9.67	46.92	---	68.2	---	-21.28
---	H	---	---	---	---	---	---	---	---
11490	V	40.39	---	8.09	48.48	---	74	54	-5.52
17235	V	38.06	---	9.67	47.73	---	68.2	---	-20.47
---	V	---	---	---	---	---	---	---	---
11a CH157: 5785MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11570	H	39.73	---	8.10	47.83	---	74	54	-6.17
17355	H	38.12	---	9.65	47.77	---	68.2	---	-20.43
---	H	---	---	---	---	---	---	---	---
11570	V	38.95	---	8.10	47.05	---	74	54	-6.95
17355	V	39.08	---	9.65	48.73	---	68.2	---	-19.47
---	V	---	---	---	---	---	---	---	---
11a CH165: 5825MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11650	H	37.68	---	8.12	45.8	---	74	54	-8.2
17475	H	36.13	---	9.62	45.75	---	68.2	---	-22.45
---	H	---	---	---	---	---	---	---	---
11650	V	38.72	---	8.12	46.84	---	74	54	-7.16
17475	V	38.43	---	9.62	48.05	---	68.2	---	-20.15
---	V	---	---	---	---	---	---	---	---
11n(HT20) CH149: 5745MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11490	H	38.97	---	8.09	47.06	---	74	54	-6.94
17235	H	38.54	---	9.67	48.21	---	68.2	---	-19.99
---	H	---	---	---	---	---	---	---	---
11490	V	39.81	---	8.09	47.9	---	74	54	-6.1
17235	V	37.01	---	9.67	46.68	---	68.2	---	-21.52
---	V	---	---	---	---	---	---	---	---

11n(HT20) CH157: 5785MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11570	H	38.12	---	8.10	46.22	---	74	54	-7.78
17355	H	39.75	---	9.65	49.4	---	68.2	---	-18.8
---	H	---	---	---	---	---	---	---	---
11570	V	38.18	---	8.10	46.28	---	74	54	-7.72
17355	V	39.66	---	9.65	49.31	---	68.2	---	-18.89
---	V	---	---	---	---	---	---	---	---
11n(HT20) CH165: 5825MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11650	H	38.61	---	8.12	46.73	---	74	54	-7.27
17475	H	37.19	---	9.62	46.81	---	68.2	---	-21.39
---	H	---	---	---	---	---	---	---	---
11650	V	38.97	---	8.12	47.09	---	74	54	-6.91
17475	V	39.44	---	9.62	49.06	---	68.2	---	-19.14
---	V	---	---	---	---	---	---	---	---
11n(HT40) CH151: 5755MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11510	H	40.08	---	8.09	48.17	---	74	54	-5.83
17265	H	37.78	---	9.67	47.45	---	68.2	---	-20.75
---	H	---	---	---	---	---	---	---	---
11510	V	41.22	---	8.09	49.31	---	74	54	-4.69
17265	V	38.44	---	9.67	48.11	---	68.2	---	-20.09
---	V	---	---	---	---	---	---	---	---
11n(HT40) CH159: 5795MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11590	H	38.18	---	8.10	46.28	---	74	54	-7.72
17385	H	38.75	---	9.65	48.4	---	68.2	---	-19.8
---	H	---	---	---	---	---	---	---	---
11590	V	38.13	---	8.10	46.23	---	74	54	-7.77
17385	V	37.24	---	9.65	46.89	---	68.2	---	-21.31
---	V	---	---	---	---	---	---	---	---

11ac(VHT20) CH149: 5745MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11490	H	40.55	---	8.09	48.64	---	74	54	-5.36
17235	H	37.49	---	9.67	47.16	---	68.2	---	-21.04
---	H	---	---	---	---	---	---	---	---
11490	V	40.09	---	8.09	48.18	---	74	54	-5.82
17235	V	38.41	---	9.67	48.08	---	68.2	---	-20.12
---	V	---	---	---	---	---	---	---	---
11ac(VHT20) CH157: 5785MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11570	H	38.31	---	8.10	46.41	---	74	54	-7.59
17355	H	36.86	---	9.65	46.51	---	68.2	---	-21.69
---	H	---	---	---	---	---	---	---	---
11570	V	37.07	---	8.10	45.17	---	74	54	-8.83
17355	V	38.31	---	9.65	47.96	---	68.2	---	-20.24
---	V	---	---	---	---	---	---	---	---
11ac(VHT20) CH165: 5825MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11650	H	40.34	---	8.12	48.46	---	74	54	-5.54
17475	H	38.13	---	9.62	47.75	---	68.2	---	-20.45
---	H	---	---	---	---	---	---	---	---
11650	V	38.92	---	8.12	47.04	---	74	54	-6.96
17475	V	40.46	---	9.62	50.08	---	68.2	---	-18.12
---	V	---	---	---	---	---	---	---	---
11ac(VHT40) CH151: 5755MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11510	H	39.82	---	8.09	47.91	---	74	54	-6.09
17265	H	37.15	---	9.67	46.82	---	68.2	---	-21.38
---	H	---	---	---	---	---	---	---	---
11510	V	40.73	---	8.09	48.82	---	74	54	-5.18
17265	V	36.18	---	9.67	45.85	---	68.2	---	-22.35
---	V	---	---	---	---	---	---	---	---

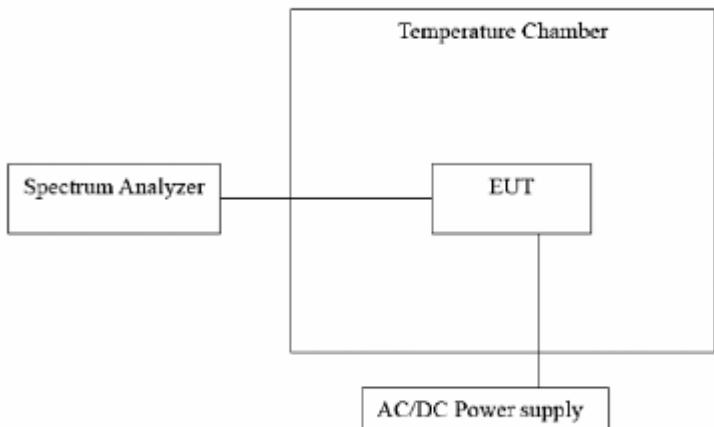
11ac(VHT40) CH159: 5795MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11590	H	40.02	---	8.10	48.12	---	74	54	-5.88
17385	H	37.65	---	9.65	47.3	---	68.2	---	-20.9
---	H	---	---	---	---	---	---	---	---
11590	V	39.42	---	8.10	47.52	---	74	54	-6.48
17385	V	38.99	---	9.65	48.64	---	68.2	---	-19.56
---	V	---	---	---	---	---	---	---	---
11ac(VHT80) CH155: 5775MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dB $\mu$ V)	AV reading (dB $\mu$ V)	Correction Factor (dB/m)	Emission Level		Peak limit (dB $\mu$ V/m)	AV limit (dB $\mu$ V/m)	Margin (dB)
					Peak (dB $\mu$ V/m)	AV (dB $\mu$ V/m)			
11550	H	40.81	---	8.09	48.9	---	74	54	-5.1
17325	H	38.9	---	9.66	48.56	---	68.2	---	-19.64
---	H	---	---	---	---	---	---	---	---
11550	V	41.07	---	8.09	49.16	---	74	54	-4.84
17325	V	38.52	---	9.66	48.18	---	68.2	---	-20.02
---	V	---	---	---	---	---	---	---	---

**Note:**

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dB $\mu$ V/m)-Average limit (dB $\mu$ V/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 40GHz.
5. Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

## 5.9. Frequency Stability Measurement

### 5.9.1. Test Specification

<b>Test Requirement:</b>	FCC Part15 Section 15.407(g) &Part2 J Section 2.1055
<b>Test Method:</b>	ANSI C63.10: 2013
<b>Limit:</b>	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 45 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
<b>Test Setup:</b>	 <pre> graph LR     SA[Spectrum Analyzer] --- EUT[EUT]     EUT --- ACDC[AC/DC Power supply]     EUT --- TC[Temperature Chamber]     </pre>
<b>Test Procedure:</b>	<p>The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage.</p> <ol style="list-style-type: none"> <li>Turn the EUT on and couple its output to a spectrum analyzer.</li> <li>Turn the EUT off and set the chamber to the highest temperature specified.</li> <li>Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize.</li> <li>Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.</li> <li>The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.</li> </ol>
<b>Test Result:</b>	PASS
<b>Remark:</b>	Pre-scan was performed at all models(11a,11n,11ac), the worst case (11ac) was found and test data was shown in this report.

Test plots as follows:

Test mode:		802.11ac(HT20)	Frequency(MHz):	5180
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.8V	5179.96	-40000	PASS
35		5179.96	-40000	PASS
25		5179.94	-60000	PASS
15		5179.96	-40000	PASS
5		5179.96	-40000	PASS
0		5179.96	-40000	PASS
25		5179.98	-20000	PASS
	3.5V	5179.96	-40000	PASS
	4.45V	5179.96	-40000	PASS

Test mode:		802.11ac(HT20)	Frequency(MHz):	5200
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.8V	5199.96	-40000	PASS
35		5199.96	-40000	PASS
25		5199.94	-60000	PASS
15		5199.96	-40000	PASS
5		5199.96	-40000	PASS
0		5199.96	-40000	PASS
25		5199.98	-20000	PASS
	3.5V	5199.96	-40000	PASS
	4.45V	5199.96	-40000	PASS

Test mode:		802.11ac(HT20)	Frequency(MHz):	5240
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.8V	5239.96	-40000	PASS
35		5239.98	-20000	PASS
25		5239.96	-40000	PASS
15		5239.96	-40000	PASS
5		5239.96	-40000	PASS
0		5239.98	-20000	PASS
25		5239.98	-20000	PASS
	3.5V	5239.96	-40000	PASS
	4.45V	5239.96	-40000	PASS

Test mode:		802.11ac(HT20)	Frequency(MHz):	5745
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.8V	5744.96	-40000	PASS
35		5744.96	-40000	PASS
25		5744.96	-40000	PASS
15		5744.96	-40000	PASS
5		5744.96	-40000	PASS
0		5744.96	-40000	PASS
25	3.5V	5744.96	-40000	PASS
	3.8V	5744.96	-40000	PASS
	4.45V	5744.96	-40000	PASS

Test mode:		802.11ac(HT20)	Frequency(MHz):	5785
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.8V	5784.96	-40000	PASS
35		5784.94	-60000	PASS
25		5784.96	-40000	PASS
15		5784.96	-40000	PASS
5		5784.98	-20000	PASS
0		5784.96	-40000	PASS
25	3.5V	5784.96	-40000	PASS
	3.8V	5784.96	-40000	PASS
	4.45V	5784.96	-40000	PASS

Test mode:		802.11ac(HT20)	Frequency(MHz):	5825
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.8V	5824.94	-60000	PASS
35		5824.96	-40000	PASS
25		5824.98	-20000	PASS
15		5824.96	-40000	PASS
5		5824.94	-60000	PASS
0		5824.96	-40000	PASS
25	3.5V	5824.96	-40000	PASS
	3.8V	5824.96	-40000	PASS
	4.45V	5824.96	-40000	PASS

Test mode:		802.11ac(HT40)	Frequency(MHz):	5190
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.8V	5190	0	PASS
35		5189.96	-40000	PASS
25		5190	0	PASS
15		5189.96	-40000	PASS
5		5190	0	PASS
0		5190	0	PASS
25		3.5V	5190	0
	3.8V	5189.96	-40000	PASS
	4.45V	5190	0	PASS

Test mode:		802.11ac(HT40)	Frequency(MHz):	5230
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.8V	5229.96	-40000	PASS
35		5229.96	-40000	PASS
25		5229.96	-40000	PASS
15		5229.96	-40000	PASS
5		5229.92	-80000	PASS
0		5229.96	-40000	PASS
25		3.5V	5229.96	-40000
	3.8V	5230	0	PASS
	4.45V	5230	0	PASS

Test mode:		802.11ac(HT40)	Frequency(MHz):	5755
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	3.8V	5754.92	-80000	PASS
35		5754.96	-40000	PASS
25		5754.96	-40000	PASS
15		5754.96	-40000	PASS
5		5754.96	-40000	PASS
0		5754.96	-40000	PASS
25		3.5V	5754.96	-40000
	3.8V	5754.96	-40000	PASS
	4.45V	5754.96	-40000	PASS

Test mode:		802.11ac(HT40)	Frequency(MHz):	5795	
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	3.8V	5794.96	-40000	PASS	
35		5794.96	-40000	PASS	
25		5794.96	-40000	PASS	
15		5794.96	-40000	PASS	
5		5794.96	-40000	PASS	
0		5794.96	-40000	PASS	
25		3.5V	5794.96	-40000	PASS
		3.8V	5794.96	-40000	PASS
		4.45V	5794.96	-40000	PASS

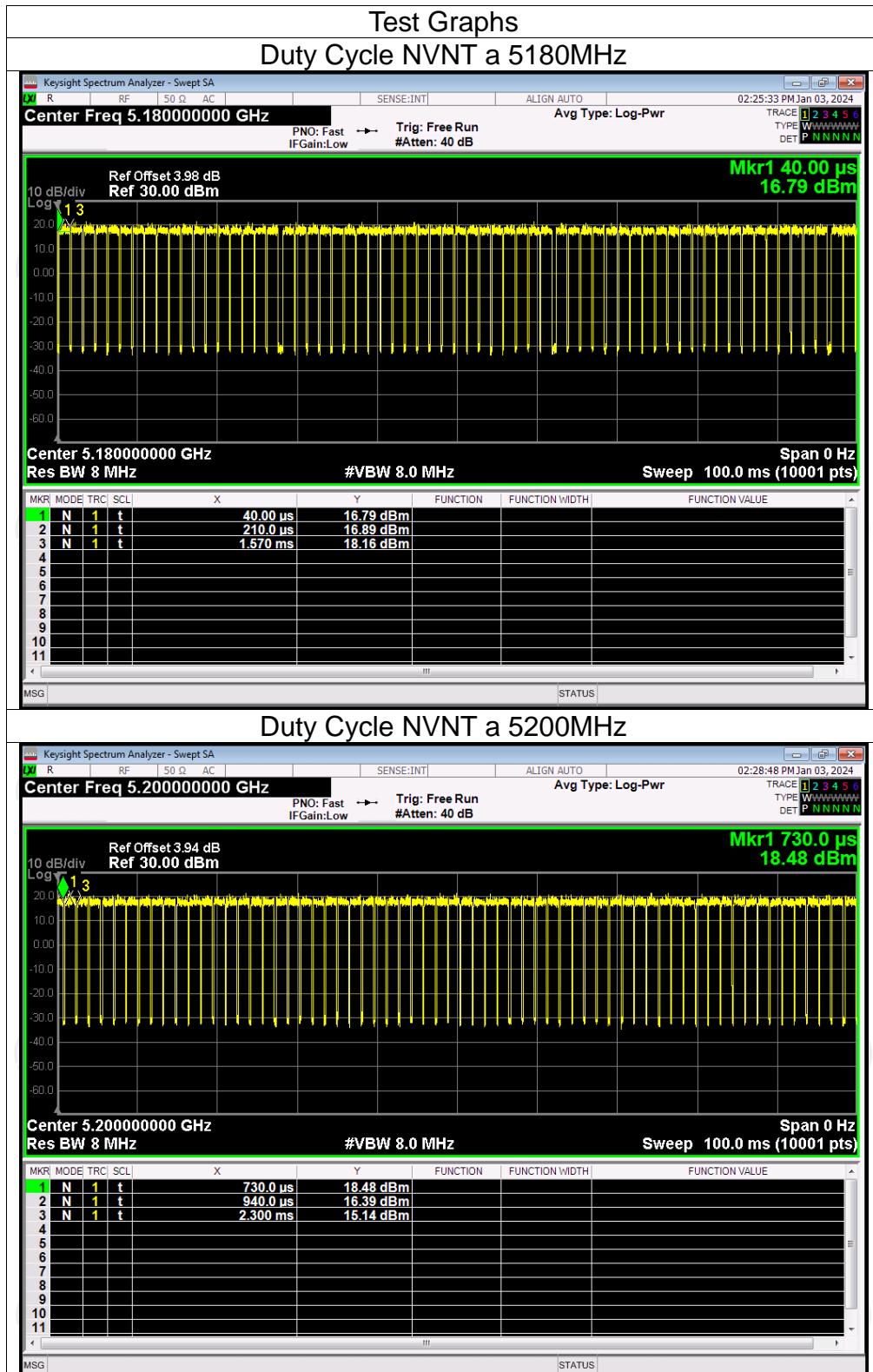
Test mode:		802.11ac(VHT80)	Frequency(MHz):	5210	
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	3.8V	5209.92	-80000	PASS	
35		5210	0	PASS	
25		5209.92	-80000	PASS	
15		5209.92	-80000	PASS	
5		5209.92	-80000	PASS	
0		5210	0	PASS	
25		3.5V	5210.08	80000	PASS
		3.8V	5210.08	80000	PASS
		4.45V	5210.08	80000	PASS

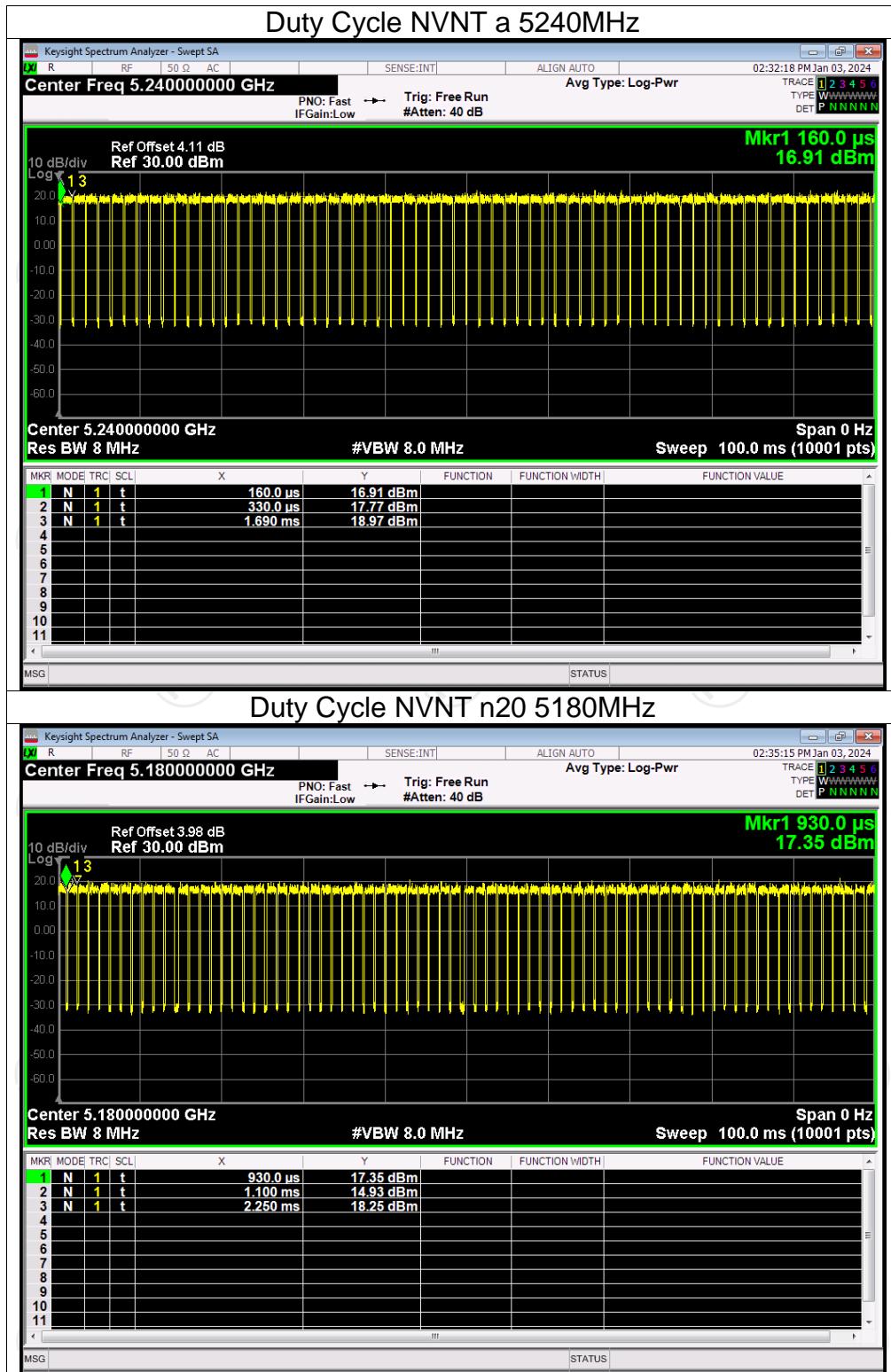
Test mode:		802.11ac(VHT80)	Frequency(MHz):	5775	
Temperature (°C)	Voltage(VDC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	3.8V	5775	0	PASS	
35		5775	0	PASS	
25		5775	0	PASS	
15		5775	0	PASS	
5		5775	0	PASS	
0		5775	0	PASS	
25		3.5V	5775	0	PASS
		3.8V	5774.92	-80000	PASS
		4.45V	5775	0	PASS

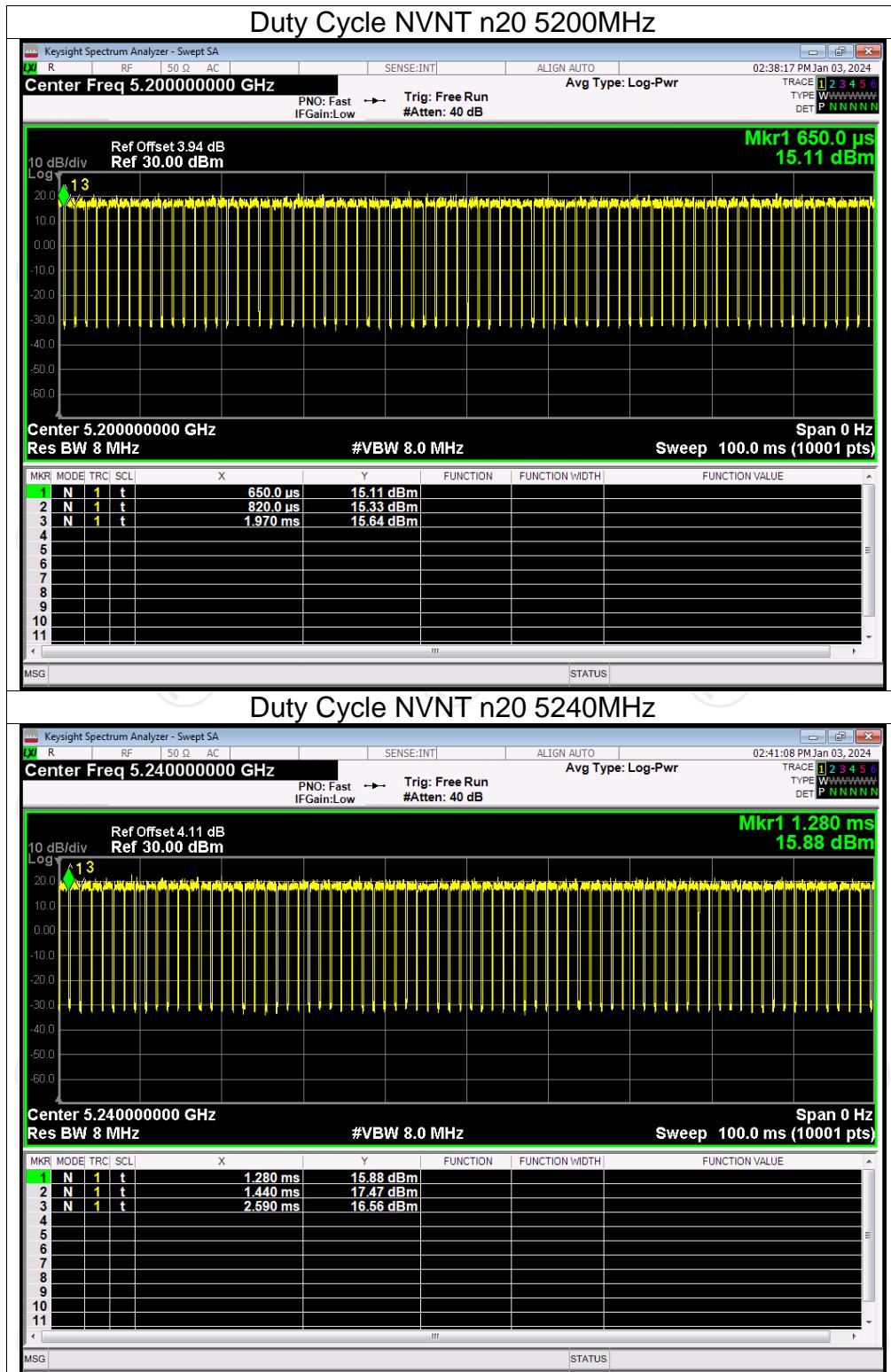
## Appendix A: Test Result of Conducted Test

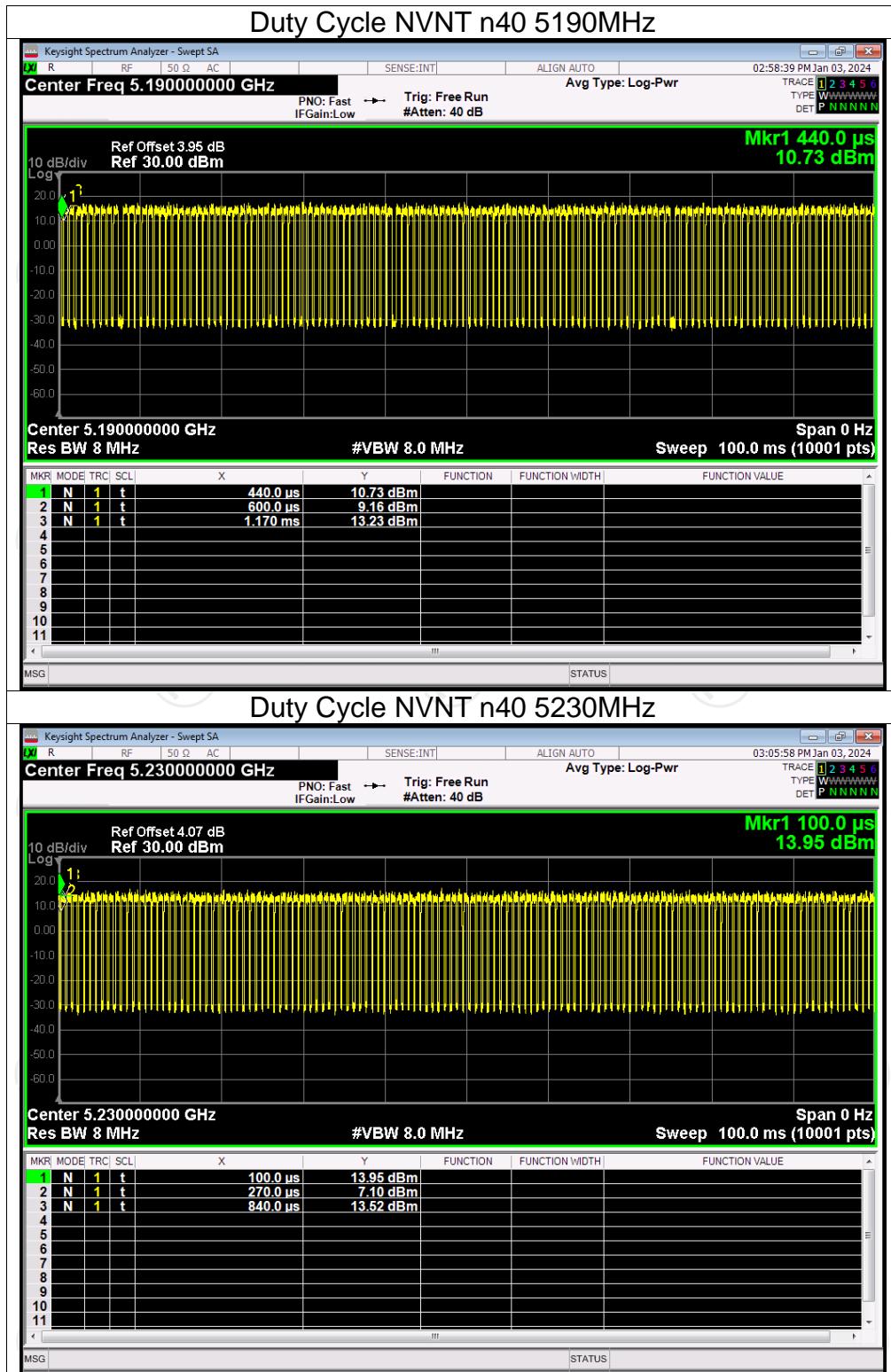
### Duty Cycle

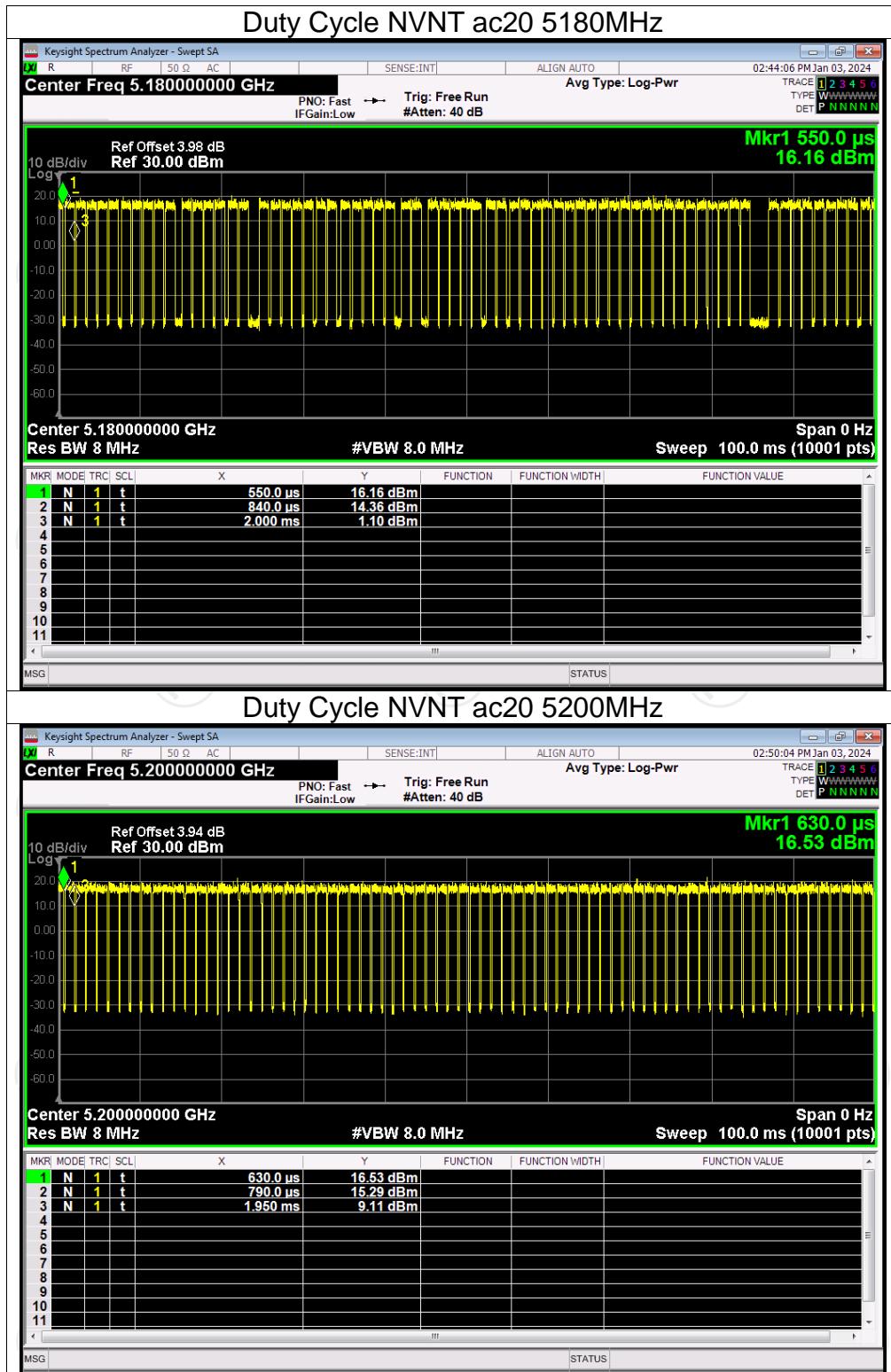
Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	87.95	0.56
NVNT	a	5200	88.48	0.53
NVNT	a	5240	88.31	0.54
NVNT	n20	5180	86.62	0.62
NVNT	n20	5200	87.07	0.60
NVNT	n20	5240	87.39	0.59
NVNT	n40	5190	76.60	1.16
NVNT	n40	5230	77.59	1.10
NVNT	ac20	5180	80.28	0.95
NVNT	ac20	5200	87.02	0.60
NVNT	ac20	5240	87.43	0.58
NVNT	ac40	5190	76.30	1.17
NVNT	ac40	5230	77.46	1.11
NVNT	ac80	5210	63.98	1.94
NVNT	a	5745	88.28	0.54
NVNT	a	5785	88.33	0.54
NVNT	a	5825	88.05	0.55
NVNT	n20	5745	86.91	0.61
NVNT	n20	5785	87.66	0.57
NVNT	n20	5825	87.55	0.58
NVNT	n40	5755	81.29	0.90
NVNT	n40	5795	81.18	0.91
NVNT	ac20	5745	87.14	0.60
NVNT	ac20	5785	87.29	0.59
NVNT	ac20	5825	87.24	0.59
NVNT	ac40	5755	81.46	0.89
NVNT	ac40	5795	81.65	0.88
NVNT	ac80	5775	67.93	1.68

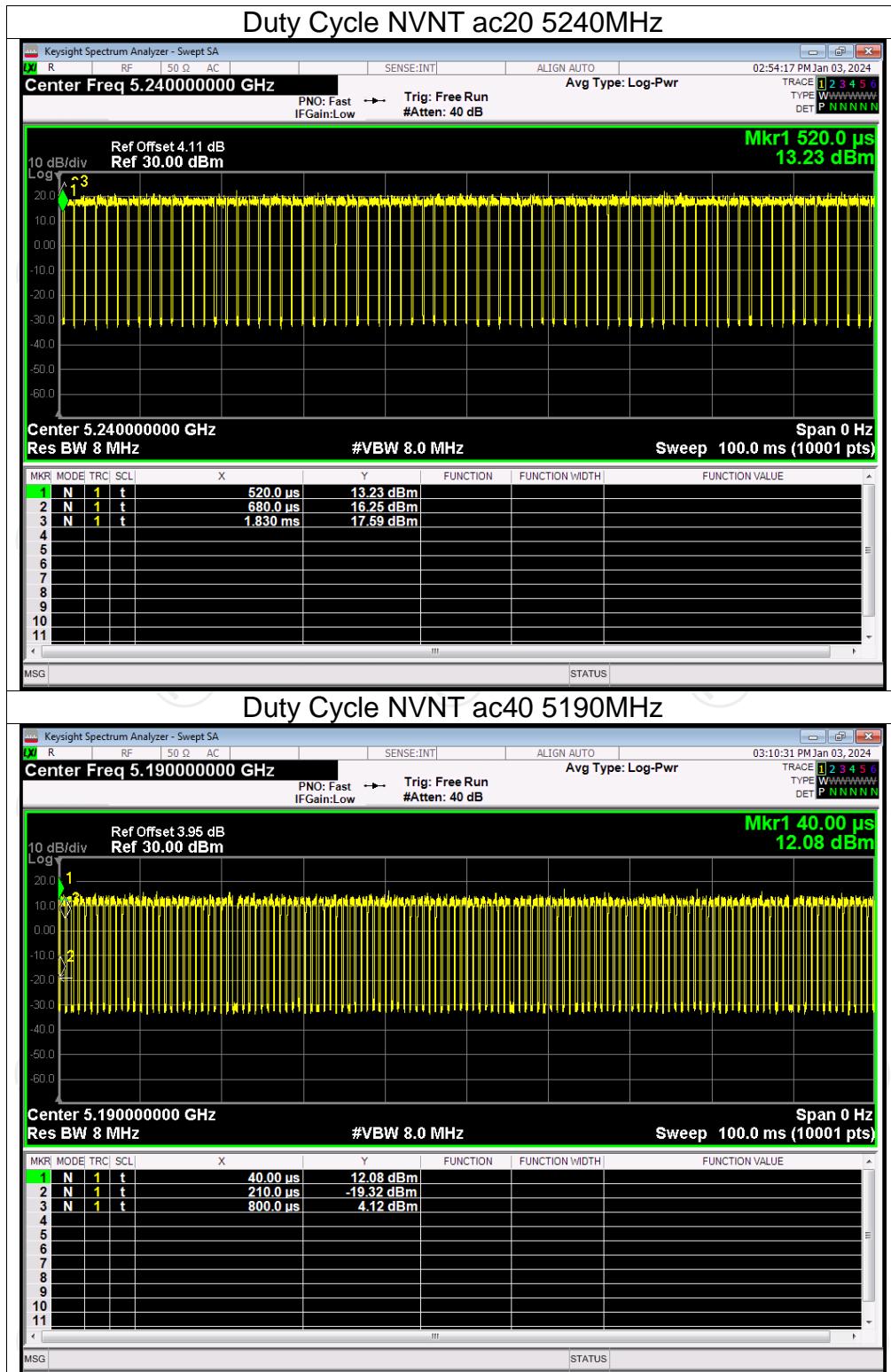


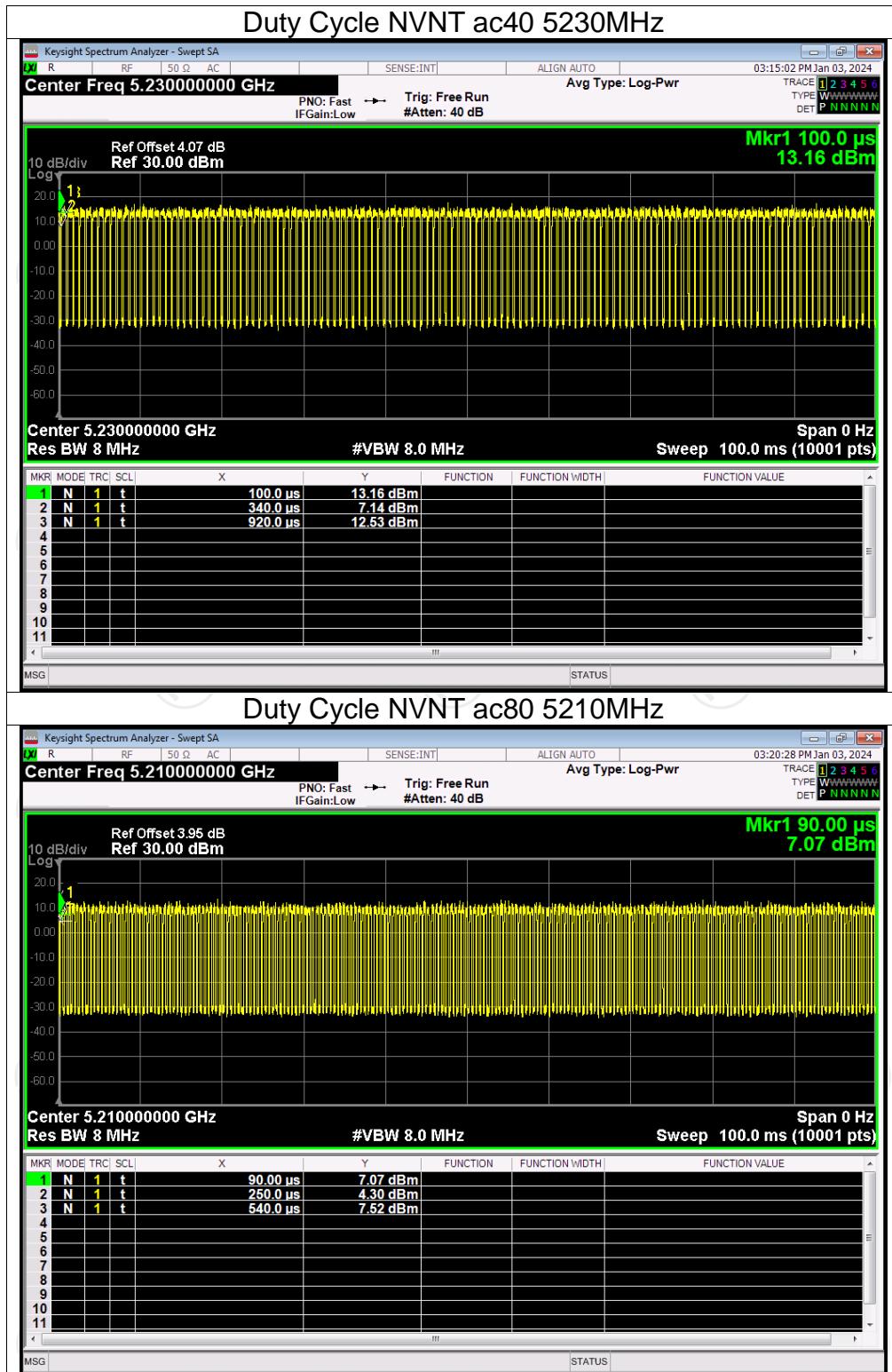


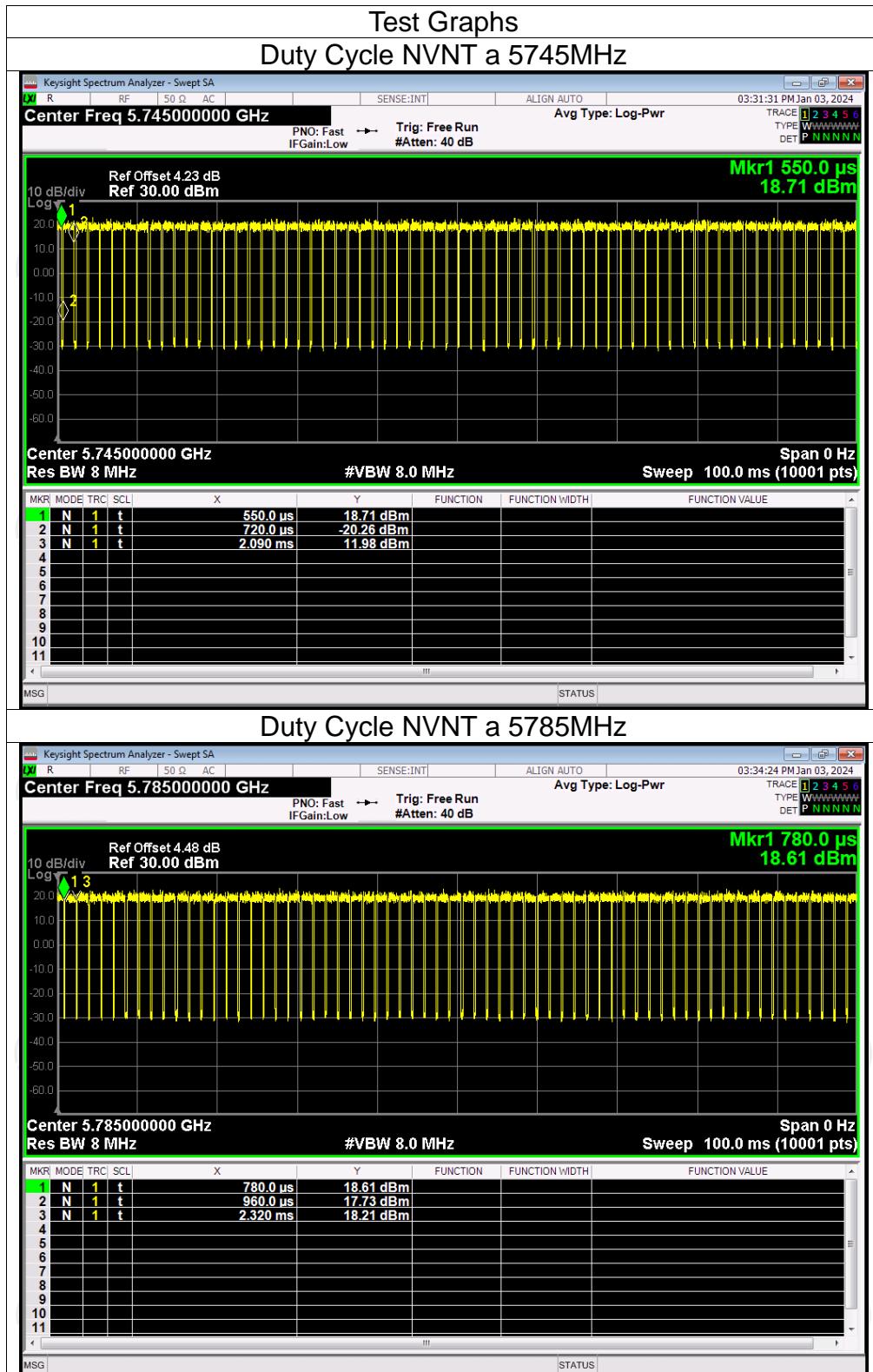


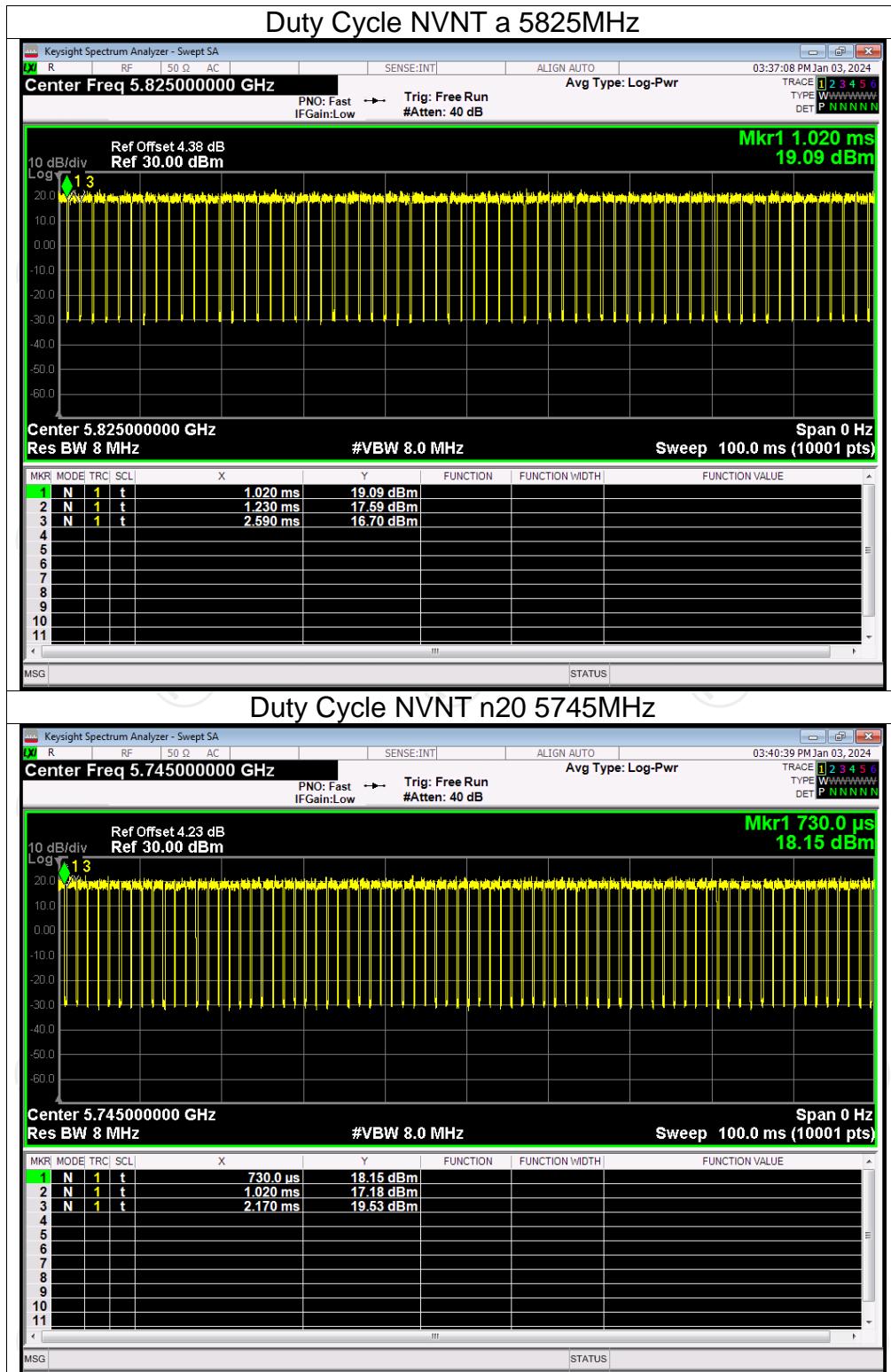


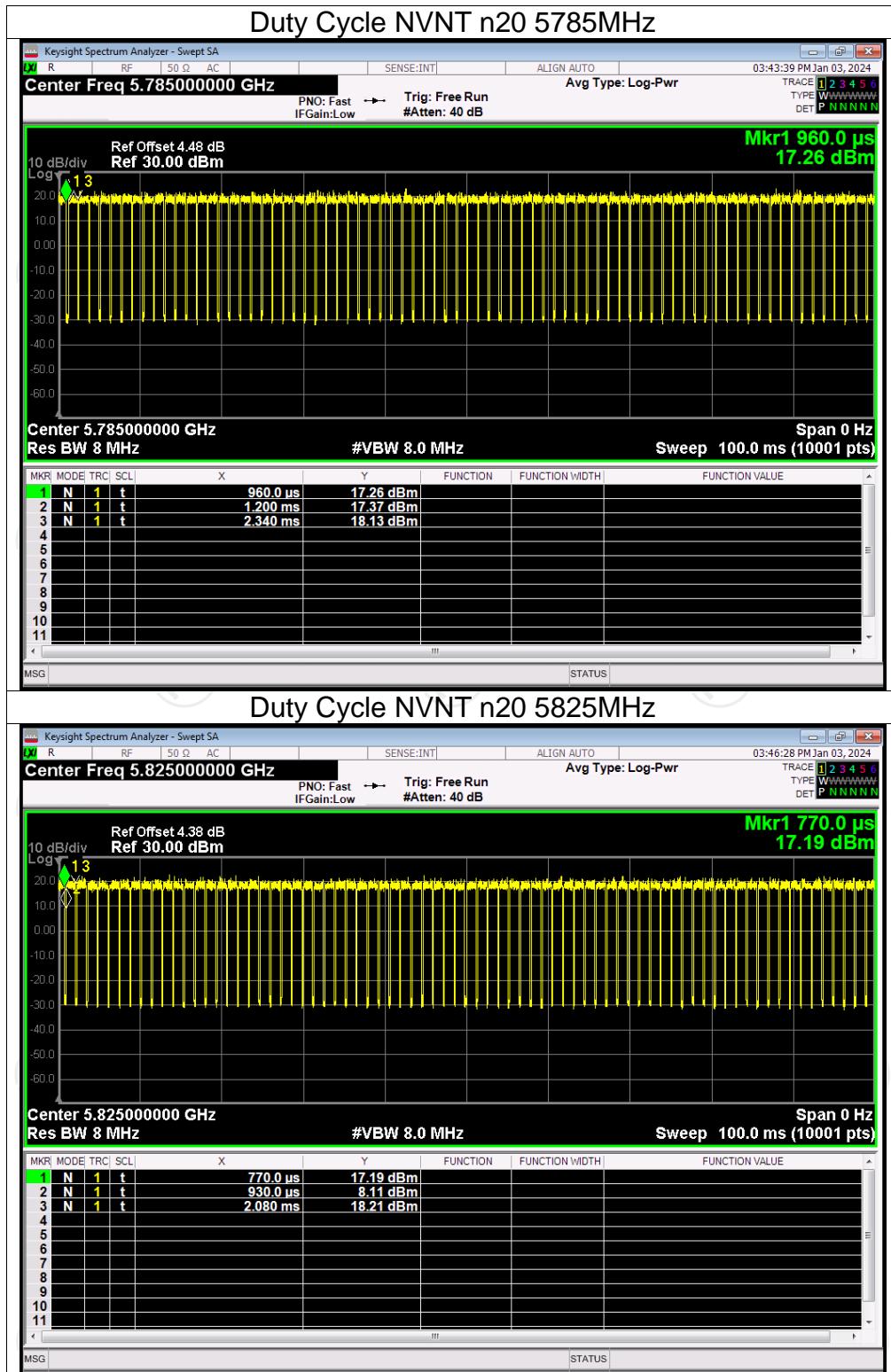


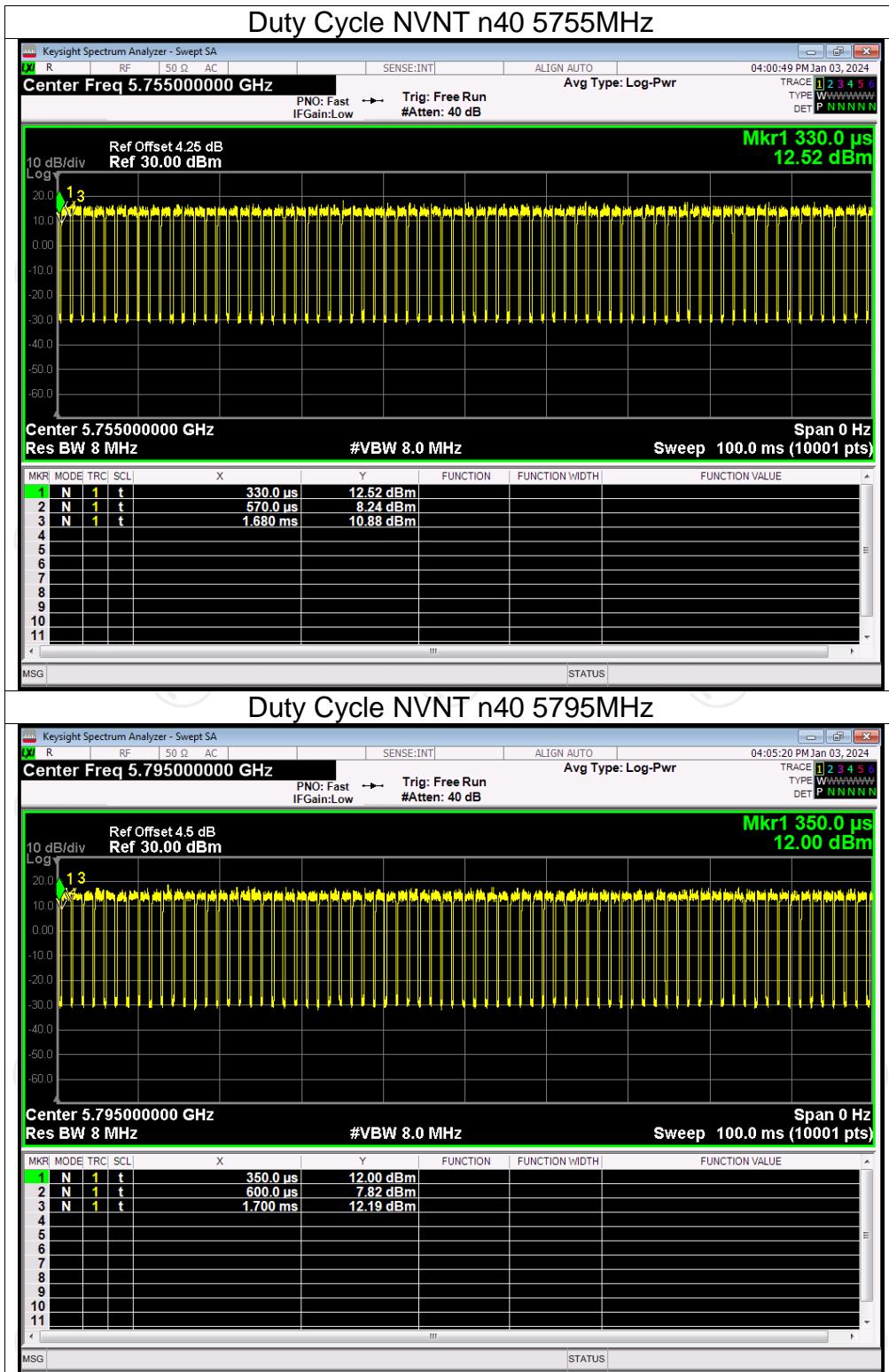


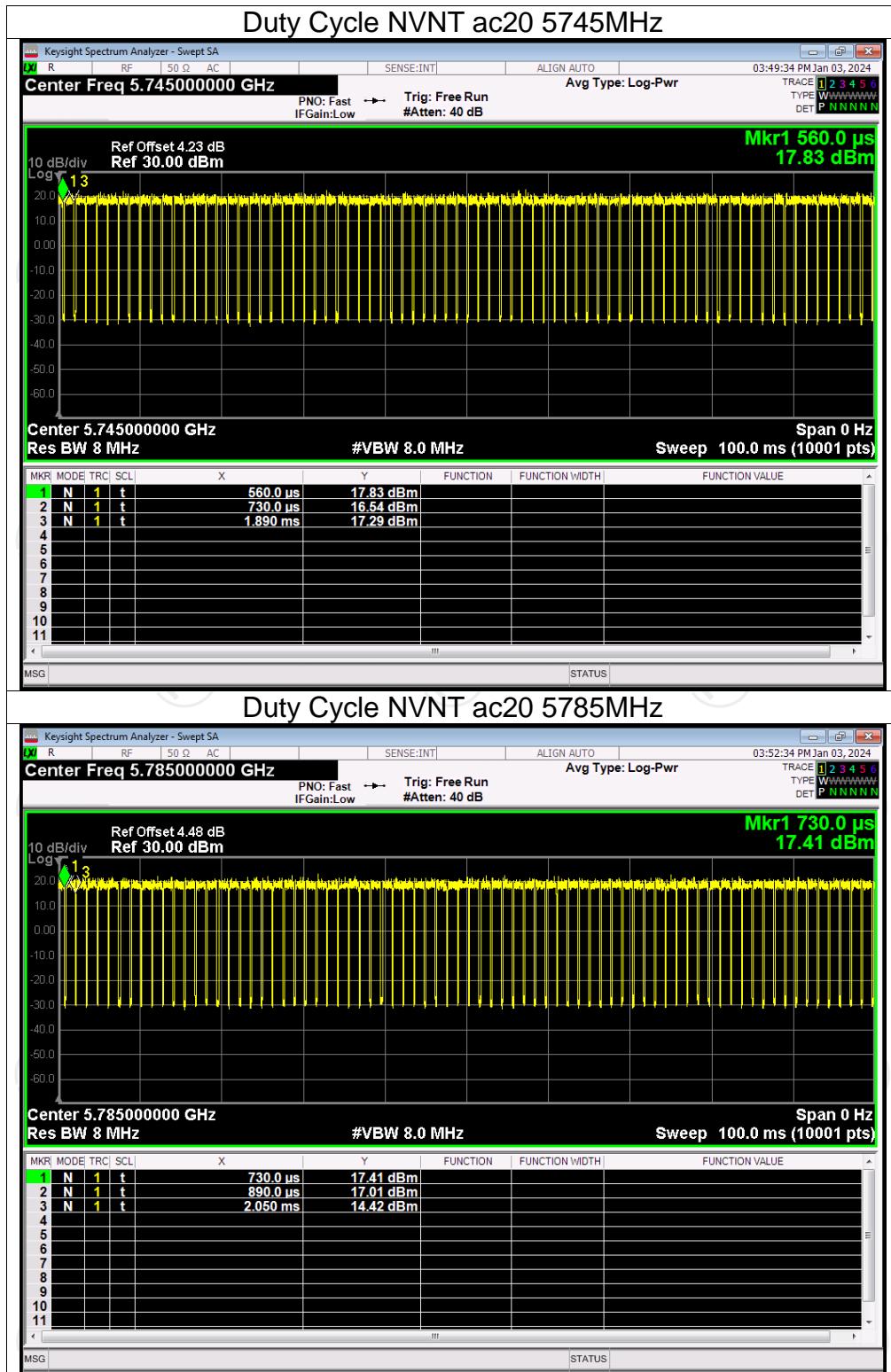


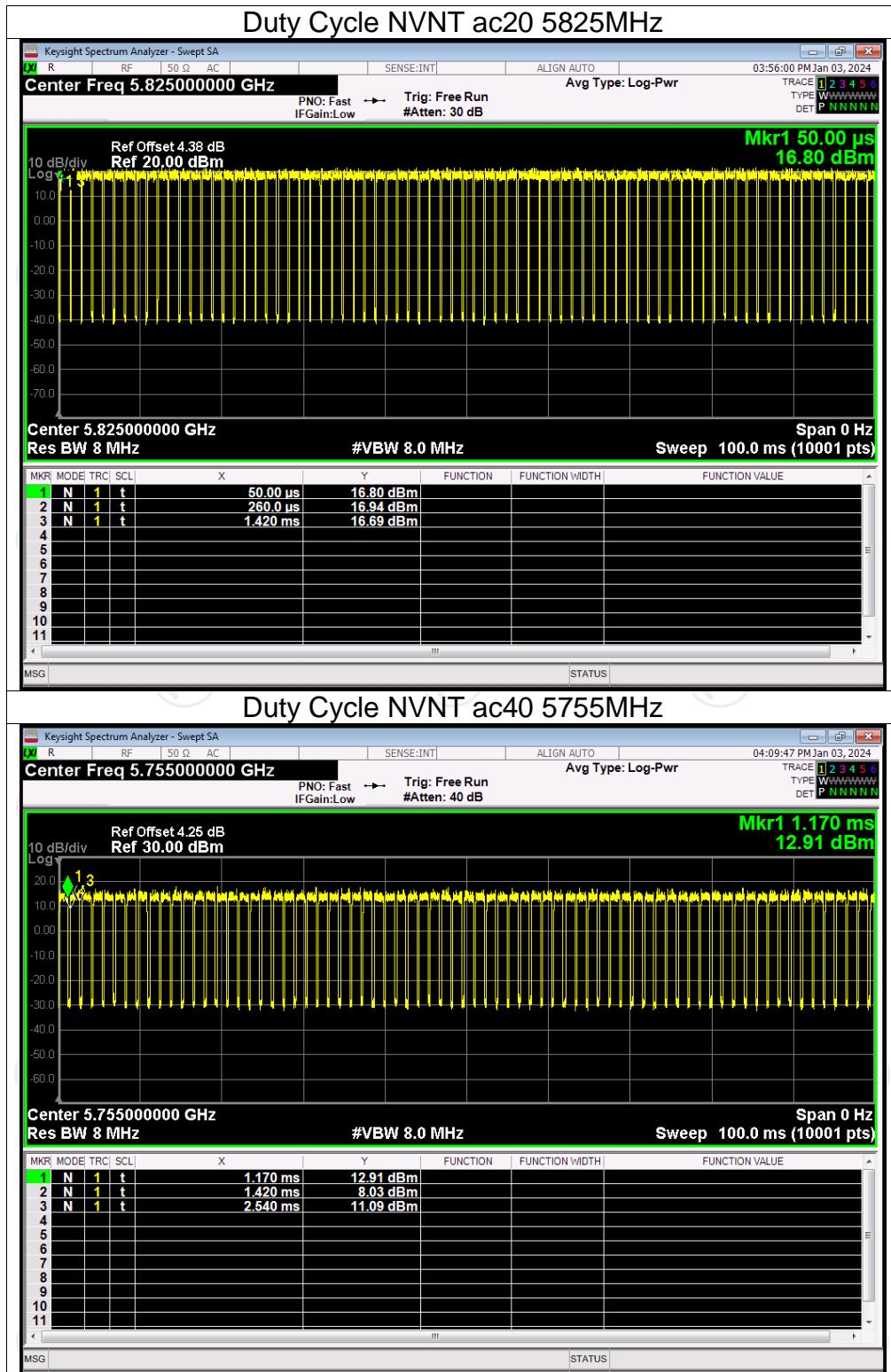


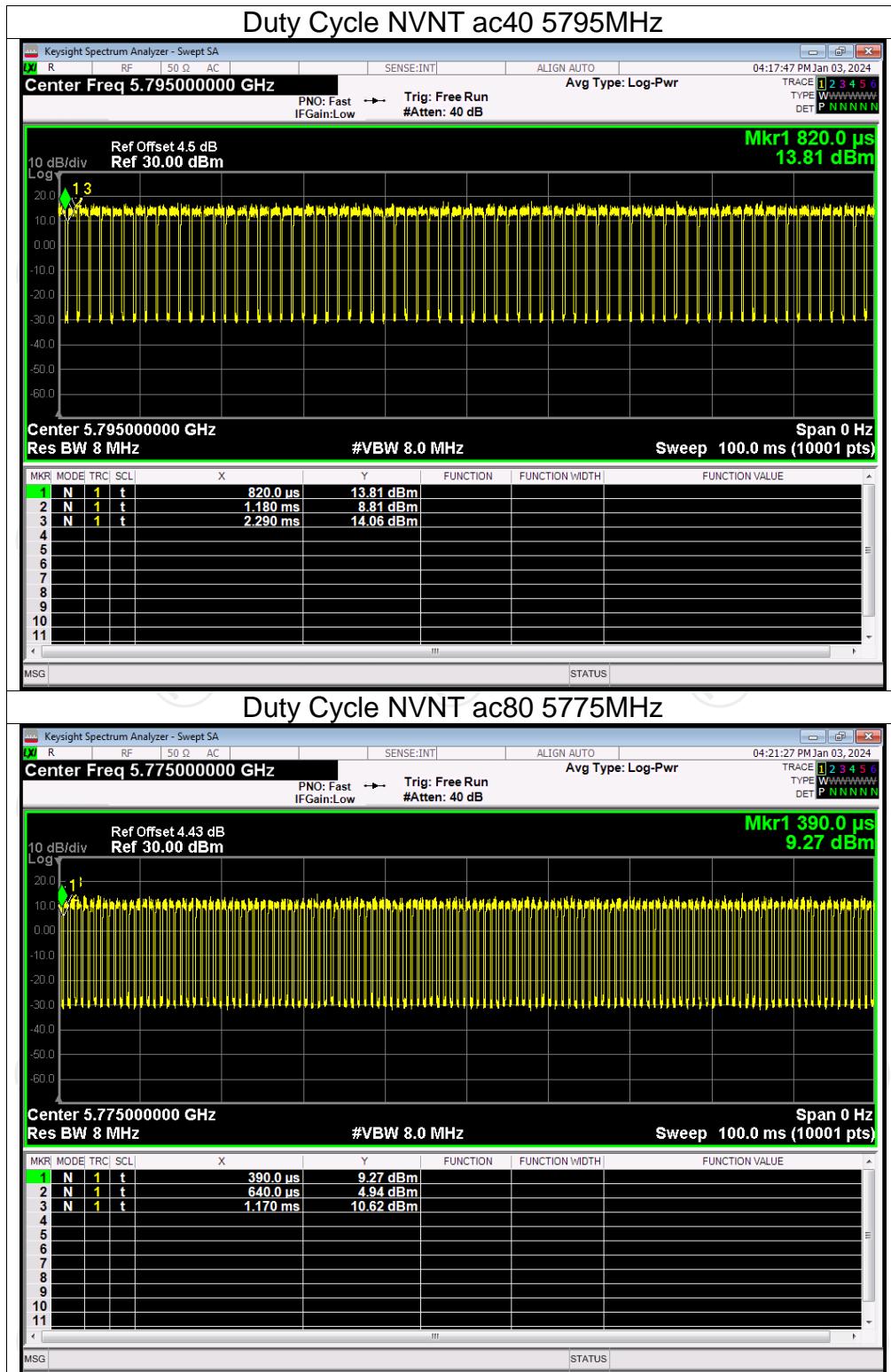












**Maximum Conducted Output Power**

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	13.88	0.56	14.44	24	Pass
NVNT	a	5200	14.16	0.53	14.69	24	Pass
NVNT	a	5240	15.09	0.54	15.63	24	Pass
NVNT	n20	5180	13.05	0.62	13.67	24	Pass
NVNT	n20	5200	13.54	0.60	14.14	24	Pass
NVNT	n20	5240	14.54	0.59	15.13	24	Pass
NVNT	n40	5190	11.62	1.16	12.78	24	Pass
NVNT	n40	5230	12.79	1.10	13.89	24	Pass
NVNT	ac20	5180	12.76	0.95	13.71	24	Pass
NVNT	ac20	5200	13.31	0.60	13.91	24	Pass
NVNT	ac20	5240	14.29	0.58	14.87	24	Pass
NVNT	ac40	5190	11.62	1.17	12.79	24	Pass
NVNT	ac40	5230	12.81	1.11	13.92	24	Pass
NVNT	ac80	5210	10.87	1.94	12.81	24	Pass
NVNT	a	5745	15.41	0.54	15.95	30	Pass
NVNT	a	5785	15.70	0.54	16.24	30	Pass
NVNT	a	5825	15.32	0.55	15.87	30	Pass
NVNT	n20	5745	14.77	0.61	15.38	30	Pass
NVNT	n20	5785	15.16	0.57	15.73	30	Pass
NVNT	n20	5825	14.79	0.58	15.37	30	Pass
NVNT	n40	5755	13.33	0.90	14.23	30	Pass
NVNT	n40	5795	13.71	0.91	14.62	30	Pass
NVNT	ac20	5745	14.52	0.60	15.12	30	Pass
NVNT	ac20	5785	14.90	0.59	15.49	30	Pass
NVNT	ac20	5825	14.58	0.59	15.17	30	Pass
NVNT	ac40	5755	13.37	0.89	14.26	30	Pass
NVNT	ac40	5795	13.68	0.88	14.56	30	Pass
NVNT	ac80	5775	12.29	1.68	13.97	30	Pass

