

# TEST REPORT

Report No.: **BCTC2502904596-4E**

---

Applicant: **SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD**

---

Product Name: **Smart Phone**

---

Test Model: **C1**

---

Tested Date: **2025-02-21 to 2025-03-21**

---

Issued Date: **2025-03-24**

---

**Shenzhen BCTC Testing Co., Ltd.**



# FCC ID: 2ANMU-25001

Product Name: Smart Phone  
Trademark: OUKITEL  
Model/Type reference: C1  
C1 S, C1 Pro, C1 Ultra, C1 E, C1 Plus, C1 MAX  
Prepared For: SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD  
Address: A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE,  
GUANLAN, LONGHUA SHENZHEN, 518XXX China  
Manufacturer: SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD  
Address: A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE,  
GUANLAN, LONGHUA SHENZHEN, 518XXX China  
Prepared By: Shenzhen BCTC Testing Co., Ltd.  
Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng,  
Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China  
Sample Received Date: 2025-02-21  
Sample tested Date: 2025-02-21 to 2025-03-21  
Issue Date: 2025-03-24  
Report No.: BCTC2502904596-4E  
Test Standards: FCC Part15 15.407  
ANSI C63.10-2013  
KDB 789033 D02 v02r01  
Test Results: PASS

Tested by:



Brave Zeng/ Project Handler

Approved by:



Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

## Table Of Content

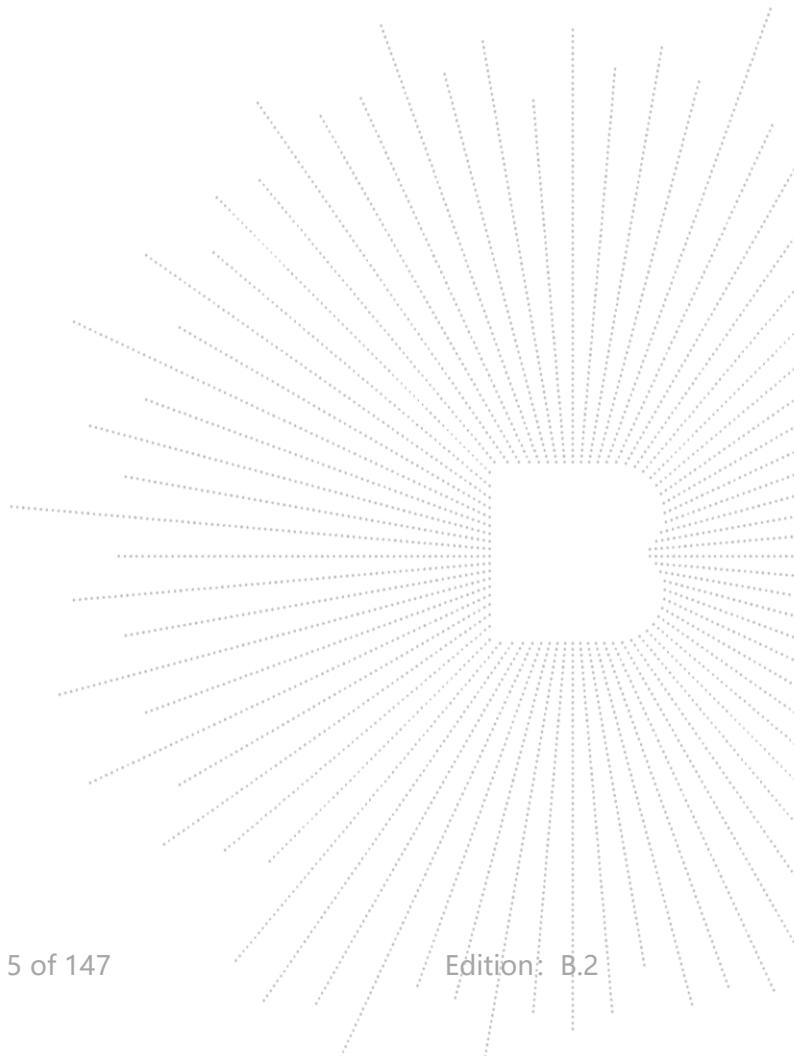
	Page
<b>Test Report Declaration</b>	<b>Page</b>
1. Version .....	5
2. Test Summary .....	6
3. Measurement Uncertainty .....	7
4. Product Information And Test Setup .....	8
4.1 Product Information.....	8
4.2 Test Setup Configuration .....	9
4.3 Support Equipment .....	9
4.4 Channel List .....	10
4.5 Test Mode .....	11
5. Test Facility And Test Instrument Used.....	12
5.1 Test Facility.....	12
5.2 Test Instrument Used.....	12
6. Conducted Emissions.....	14
6.1 Block Diagram Of Test Setup.....	14
6.2 Limit .....	14
6.3 Test Procedure .....	14
6.4 EUT Operating Conditions .....	14
6.5 Test Result.....	15
7. Radiated Emissions.....	17
7.1 Block Diagram Of Test Setup.....	17
7.2 Limit .....	18
7.3 Test Procedure .....	19
7.4 EUT Operating Conditions .....	20
7.5 Test Result.....	20
8. Power Spectral Density Test .....	35
8.1 Block Diagram Of Test Setup.....	35
8.2 Limit .....	35
8.3 Test Procedure .....	36
8.4 EUT Operating Conditions .....	36
8.5 Test Result.....	37
9. 26dB & 6dB & 99% Emission Bandwidth .....	52
9.1 Block Diagram Of Test Setup.....	52
9.2 Limit .....	52
9.3 Test Procedure .....	52
9.4 EUT Operating Conditions .....	53
9.5 Test Result.....	53
10. Maximum Conducted Output Power.....	83
10.1 Block Diagram Of Test Setup.....	83
10.2 Limit .....	83
10.3 Test Procedure .....	83
10.4 EUT Operating Conditions .....	84
10.5 Test Result.....	85
11. Out Of Band Emissions .....	100

11.1	Block Diagram Of Test Setup.....	100
11.2	Limit .....	100
11.3	Test Procedure .....	100
11.4	EUT Operating Conditions .....	100
11.5	Test Result.....	101
12.	Spurious RF Conducted Emissions.....	113
12.1	Block Diagram Of Test Setup.....	113
12.2	Limit .....	113
12.3	Test Procedure .....	113
12.4	Test Result.....	113
13.	Frequency Stability Measurement.....	128
13.1	Block Diagram Of Test Setup.....	128
13.2	Limit .....	128
13.3	Test Procedure .....	128
13.4	Test Result.....	129
14.	Duty Cycle Of Test Signal .....	135
14.1	Standard Requirement.....	135
14.2	Formula.....	135
14.3	Test Procedure .....	135
14.4	Test Result.....	135
15.	Antenna Requirement .....	143
15.1	Limit .....	143
15.2	Test Result.....	143
16.	EUT Photographs.....	144
17.	EUT Test Setup Photographs.....	145

(Note: N/A Means Not Applicable)

## 1. Version

Report No.	Issue Date	Description	Approved
BCTC2502904596-4E	2025-03-24	Original	Valid



## 2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No.	Results
1	Spurious Radiated Emissions	15.209(a), 15.407 (b)(1) 15.407 (b)(4) 15.407 (b)(8)	PASS
2	Conducted Emission	15.207	PASS
3	26 dB and 99% Emission Bandwidth	15.407 (a)(12) 15.1049	PASS
4	Minimum 6 dB bandwidth	15.407(e)	PASS
5	Maximum Conducted Output Power	15.407 (a)(1) 15.407 (a)(3)	PASS
6	Band Edge	2.1051, 15.407(b)(1) 15.407(b)(4)	PASS
7	Power Spectral Density	15.407 (a)(1) 15.407 (a)(3)	PASS
8	Spurious Emissions at Antenna Terminals	2.1051, 15.407(b)	PASS
9	Antenna Requirement	15.203	PASS

### 3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(9kHz-30MHz)	U=3.7dB
2	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
5	Conducted Emission(150kHz-30MHz)	U=3.20dB
6	Conducted Adjacent channel power	U=1.38dB
7	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59°C

## 4. Product Information And Test Setup

### 4.1 Product Information

Model/Type reference:	C1 C1 S, C1 Pro, C1 Ultra, C1 E, C1 Plus, C1 MAX
Model differences:	All the model are the same circuit and RF module, except model names.
Hardware Version:	FS311-MB-V1.0
Software Version:	OUKITEL_C1_EEA_A15_V03
IEEE 802.11 WLAN Mode Supported	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth) 5180-5240MHz for 802.11a/n(HT20); 5190-5230MHz for 802.11n(HT40); 5210MHz for 802.11 ac80; 5745-5825 MHz for 802.11a/n(HT20); 5755-5795 MHz for 802.11n(HT40); 5775MHz for 802.11 ac80; 802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40/VHT80):NSS1, MCS0-MCS
Operation Frequency:	5745-5825 MHz for 802.11a/n(HT20); 5755-5795 MHz for 802.11n(HT40); 5775MHz for 802.11 ac80; 802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40/VHT80):NSS1, MCS0-MCS
Data Rate	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac; 4 channels for 802.11a/n20 in the 5180-5240MHz band ; 2 channels for 802.11 n40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20 in the 5745-5825MHz band ; 2 channels for 802.11 n40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac; 4 channels for 802.11a/n20 in the 5180-5240MHz band ; 2 channels for 802.11 n40 in the 5190-5230MHz band ; 1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20 in the 5745-5825MHz band ; 2 channels for 802.11 n40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band
Number Of Channel	1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20 in the 5745-5825MHz band ; 2 channels for 802.11 n40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band
Antenna installation:	Internal antenna
Antenna Gain:	0.35 dBi
Ratings:	DC 5V from adapter/DC 3.87V from battery
Adapter Information:	Model: HJ-0502000N2-US Input: 100-240V~ 50/60Hz 0.3A Output: 5.0V = 2.0A 10.0W

#### 4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

#### 4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	Smart Phone	OUKITEL	C1	N/A	EUT
E-2	Adapter	N/A	HJ-0502000N2-US	N/A	Auxiliary
E-3	TF card	SanDisk	32G	---	---

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	1M	DC cable unshielded

**Notes:**

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.

#### 4.4 Channel List

5.1G

<b>802.11a/n/ac ( 20MHz) Carrier Frequency Channel</b>							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220	-	-	-	-
40	5200	48	5240	-	-	-	-

<b>802.11n /ac(40MHz) Carrier Frequency Channel</b>							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	-	-	-	-	-	-
46	5230	-	-	-	-	-	-

<b>802.11ac (80MHz) Carrier Frequency Channel</b>							
Channel	<b>Frequency (MHz)</b>						
42	5210						

5.8G

<b>802.11a/n/ac( 20 MHz) Carrier Frequency Channel</b>							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	153	5765	157	5785	161	5805
165	5825	-	-	-	-	-	-

<b>802.11n/ac 40MHz Carrier Frequency Channel</b>					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795	-	-

<b>802.11ac 80MHz Carrier Frequency Channel</b>					
Channel	<b>Frequency (MHz)</b>				
155	5775				

#### 4.5 Test Mode

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 mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11a / n/ ac 20 CH36/ CH40/ CH 48 802.11a /n/ ac 20 CH149/ CH157/ CH 165
Mode 2	802.11n/ ac40 CH38/ CH 46 802.11n/ ac40 CH 151 / CH 159
Mode 3	802.11 ac80 CH 42/CH 155
Mode 4	WIFI Link

Note:

1. The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
2. We're testing antenna A data.

#### 4.6 Table Of Parameters Of Text Software Setting

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

Test software Version	CMD		
Parameters	DEF	DEF	DEF

## 5. Test Facility And Test Instrument Used

### 5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

FCC Test Firm Registration Number: 712850

A2LA certificate registration number is: CN1212

ISED Registered No.: 23583

ISED CAB identifier: CN0017

### 5.2 Test Instrument Used

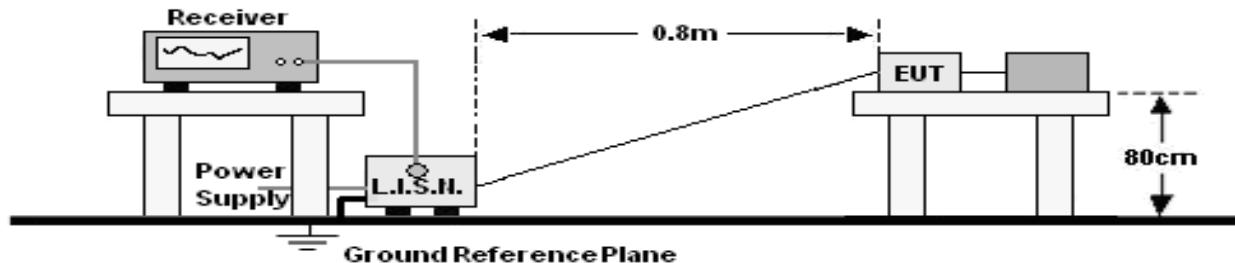
Conducted Emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
LISN	R&S	ENV216	101375	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 16, 2024	May 15, 2025

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power meter	Keysight	E4419	\	May 16, 2024	May 15, 2025
Power Sensor (AV)	Keysight	E9300A	\	May 16, 2024	May 15, 2025
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 16, 2024	May 15, 2025
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Communication test set	R&S	CMW500	126173	Nov 11, 2024	Nov 10, 2025
Radio frequency control box	MAIWEI	MW200-RFC B	\	\	\
Software	MAIWEI	MTS 8200	\	\	\

Radiated Emissions Test (966 Chamber01)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
Receiver	R&S	ESRP	101154	May 16, 2024	May 15, 2025
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 16, 2024	May 15, 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 21, 2024	May 20, 2025
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_01G18 G-45dB	SK202104090 1	May 16, 2024	May 15, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35- HG	2034381	May 16, 2024	May 15, 2025
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer9kHz- 40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Communication test set	R&S	CMW500	126173	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

## 6. Conducted Emissions

### 6.1 Block Diagram Of Test Setup



### 6.2 Limit

Frequency (MHz)	Limit (dBuV)	
	Quas-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Notes:

1. \*Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

### 6.3 Test Procedure

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

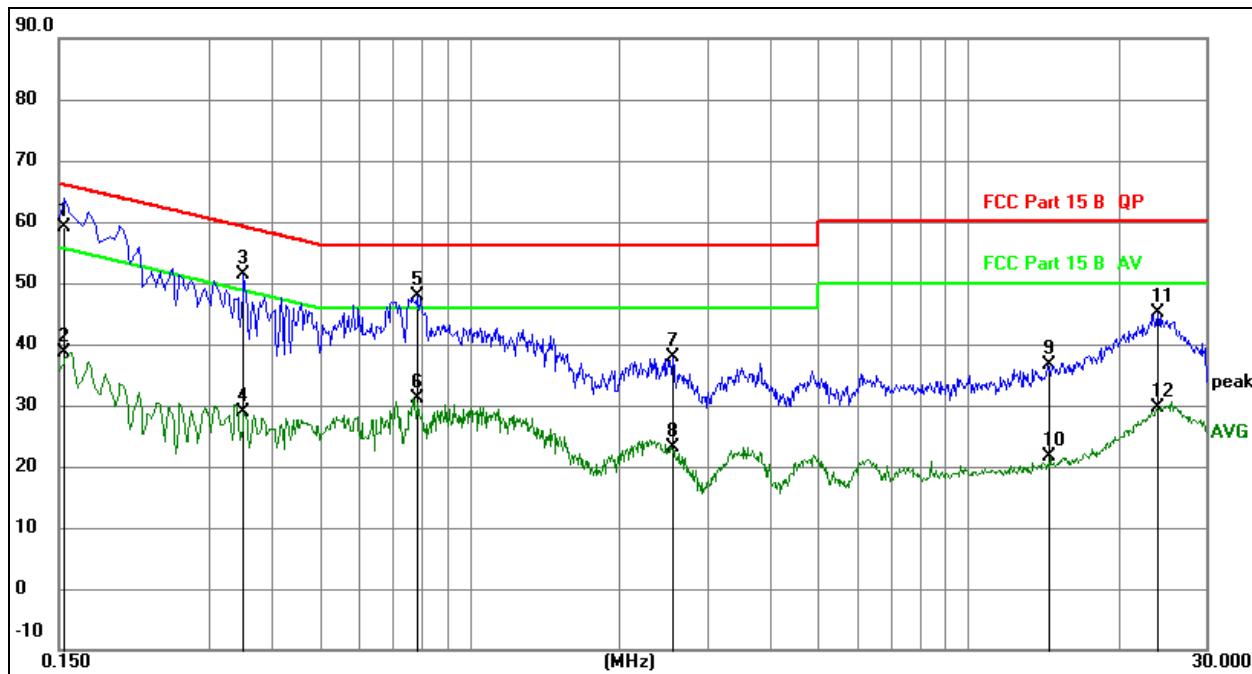
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N.).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
- For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

### 6.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

## 6.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz

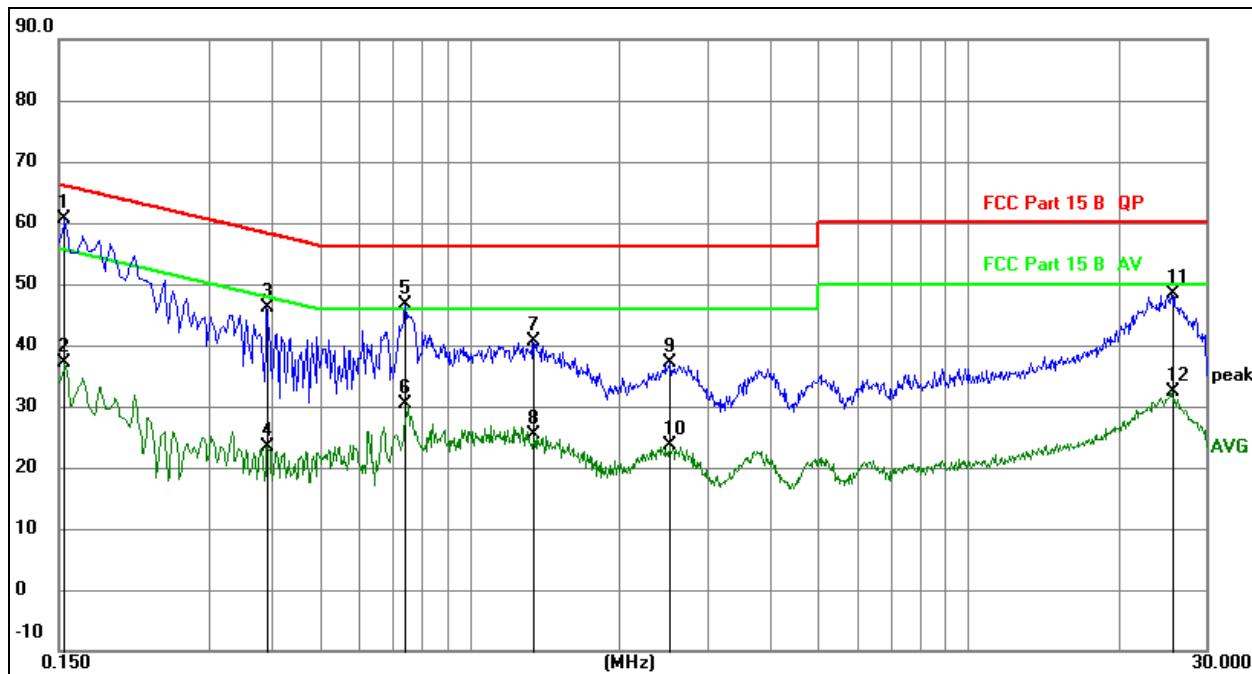


### Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over= Measurement-Limit

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector
			Level	Factor	ment			
		MHz		dB	dBuV	dBuV	dB	
1	*	0.1539	39.16	20.07	59.23	65.79	-6.56	QP
2		0.1539	18.61	20.07	38.68	55.79	-17.11	AVG
3		0.3520	31.21	20.08	51.29	58.92	-7.63	QP
4		0.3520	8.71	20.08	28.79	48.92	-20.13	AVG
5		0.7835	27.76	20.09	47.85	56.00	-8.15	QP
6		0.7835	11.01	20.09	31.10	46.00	-14.90	AVG
7		2.5535	17.65	20.11	37.76	56.00	-18.24	QP
8		2.5535	3.02	20.11	23.13	46.00	-22.87	AVG
9		14.4404	16.29	20.29	36.58	60.00	-23.42	QP
10		14.4404	1.43	20.29	21.72	50.00	-28.28	AVG
11		24.0147	24.78	20.31	45.09	60.00	-14.91	QP
12		24.0147	9.27	20.31	29.58	50.00	-20.42	AVG

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	N
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz

**Remark:**

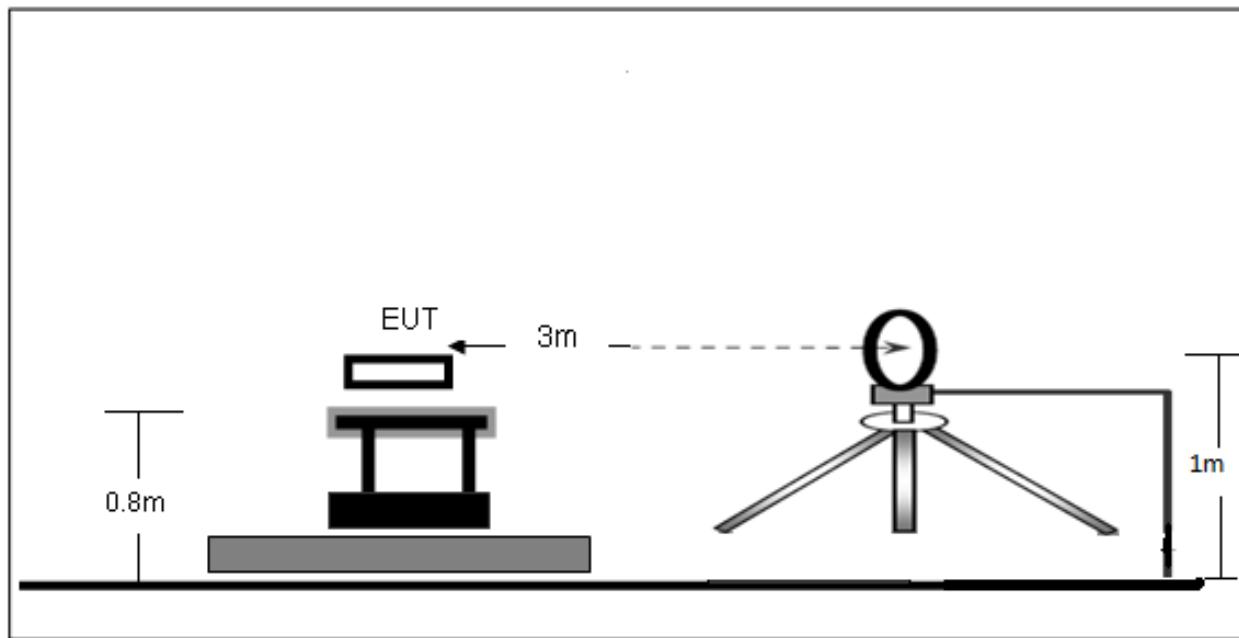
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over1 Measurement-Limit

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over
			Level	Factor	ment		
		MHz		dB	dBuV	dBuV	dB
1	*	0.1539	40.53	20.07	60.60	65.79	-5.19
2		0.1539	17.15	20.07	37.22	55.79	-18.57
3		0.3914	26.05	20.08	46.13	58.03	-11.90
4		0.3914	3.37	20.08	23.45	48.03	-24.58
5		0.7430	26.59	20.09	46.68	56.00	-9.32
6		0.7430	10.30	20.09	30.39	46.00	-15.61
7		1.3379	20.61	20.09	40.70	56.00	-15.30
8		1.3379	5.38	20.09	25.47	46.00	-20.53
9		2.5266	16.97	20.11	37.08	56.00	-18.92
10		2.5266	3.61	20.11	23.72	46.00	-22.28
11		25.5912	28.16	20.30	48.46	60.00	-11.54
12		25.5912	12.14	20.30	32.44	50.00	-17.56

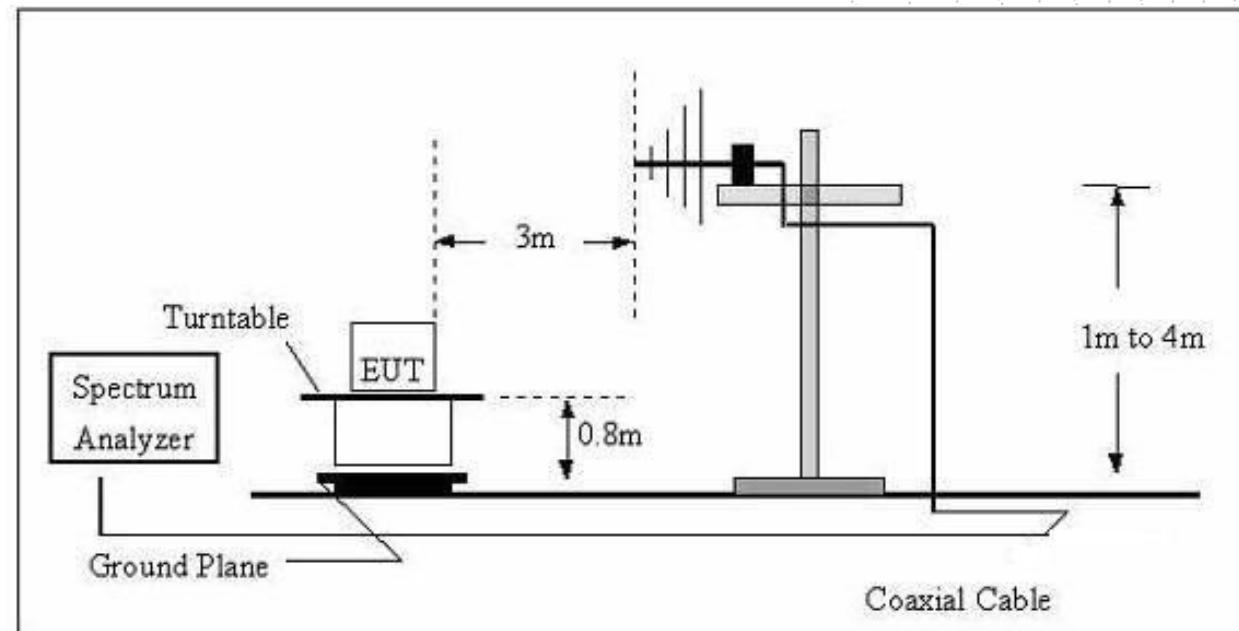
## 7. Radiated Emissions

### 7.1 Block Diagram Of Test Setup

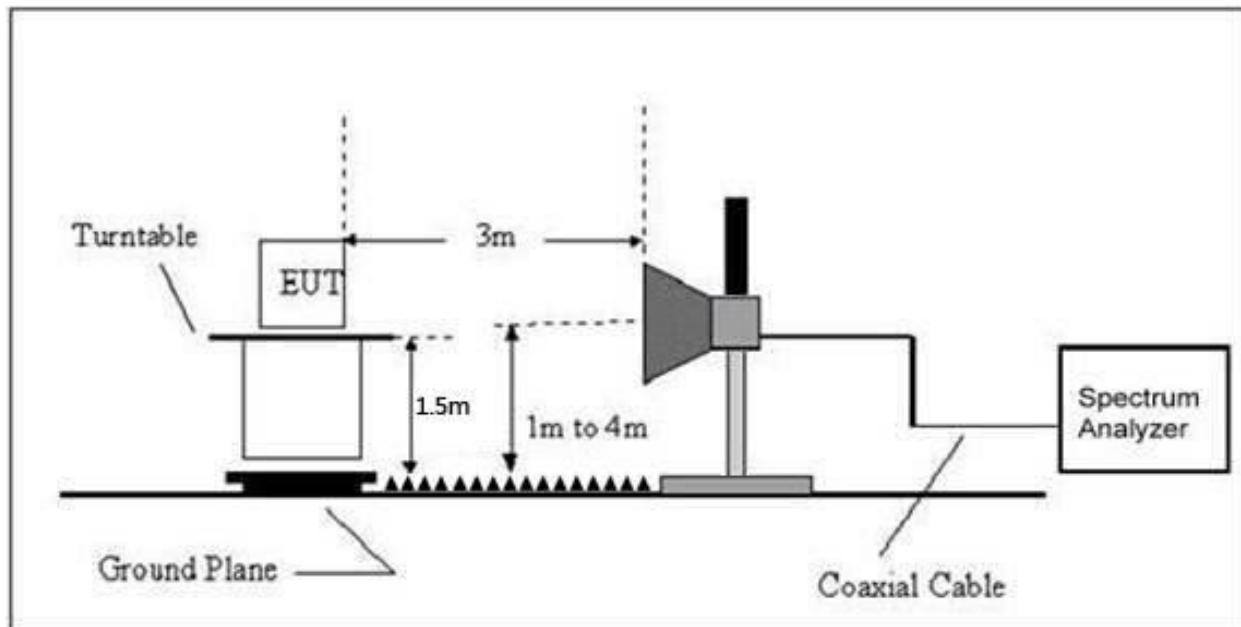
(A) Radiated Emission Test-Up Frequency Below 30MHz



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



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



## 7.2 Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency (MHz)	Field Strength uV/m	Distance (m)	Field Strength Limit at 3m Distance	
			uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	20log <sup>(2400/F(kHz))</sup> + 80
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	20log <sup>(24000/F(kHz))</sup> + 40
1.705 ~ 30	30	30	100 * 30	20log <sup>(30)</sup> + 40
30 ~ 88	100	3	100	20log <sup>(100)</sup>
88 ~ 216	150	3	150	20log <sup>(150)</sup>
216 ~ 960	200	3	200	20log <sup>(200)</sup>
Above 960	500	3	500	20log <sup>(500)</sup>

### Limits Of Radiated Emission Measurement (Above 1000MHz)

Frequency (MHz)	Limit (dBuV/m) (at 3M)	
	Peak	Average
Above 1000	74	54

#### Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

### 7.3 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT.

Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

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

Note:

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

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	10 Hz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where  $RBWCF [dB] = 10 \cdot \lg(100 [kHz]/\text{narrower RBW} [kHz])$ . , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

## 7.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

## 7.5 Test Result

Below 30MHz

Temperature:	26°C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	--

Freq. (MHz)	Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

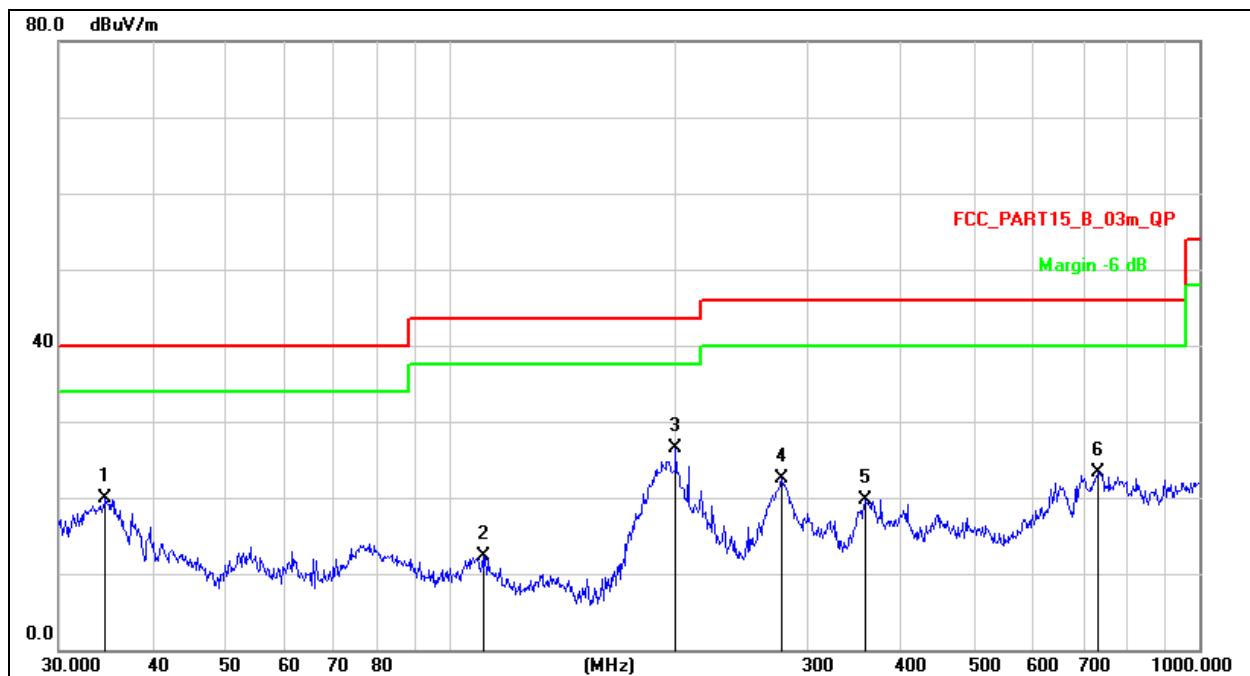
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =  $40 \log(\text{specific distance}/\text{test distance})$  (dB);

Limit line = specific limits(dBuV) + distance extrapolation factor.

Between 30MHz – 1GHz

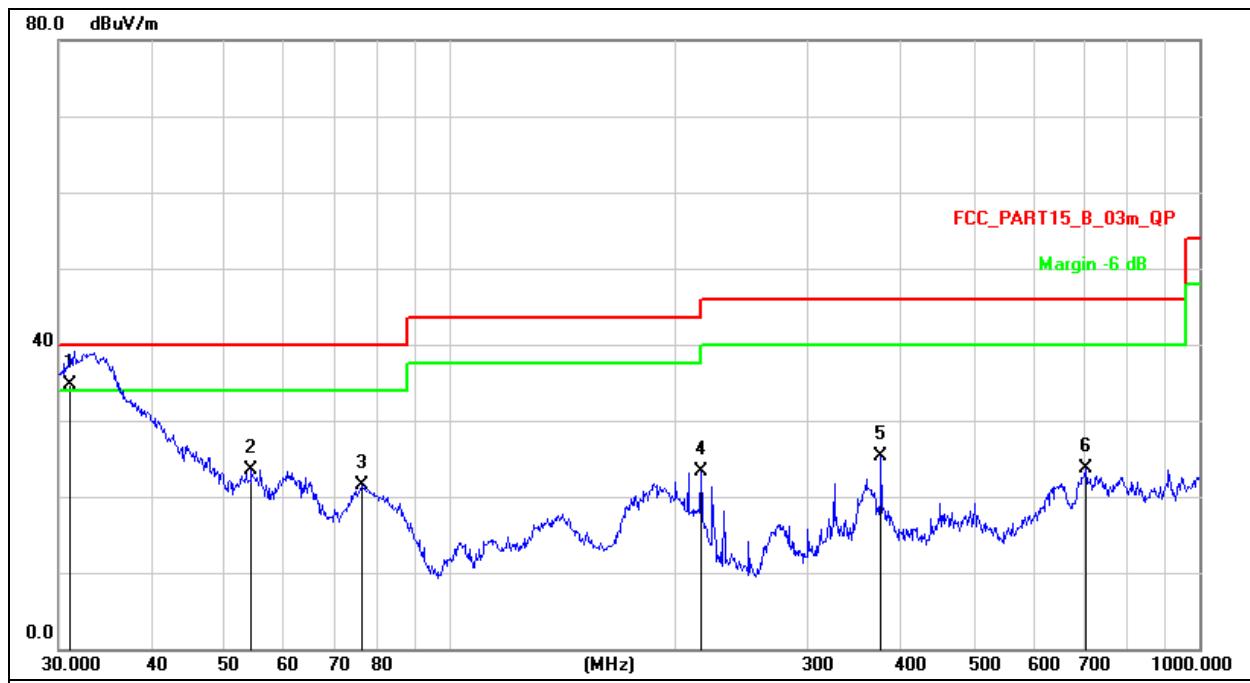
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz

**Remark:**

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement=Reading Level+ Correct Factor
3. Over=Measurement-Limit

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		34.6385	35.72	-15.75	19.97	40.00	-20.03	QP
2		110.5687	28.98	-16.67	12.31	43.50	-31.19	QP
3	*	199.9856	42.24	-15.72	26.52	43.50	-16.98	QP
4		277.0935	36.29	-13.72	22.57	46.00	-23.43	QP
5		357.9287	31.11	-11.38	19.73	46.00	-26.27	QP
6		731.9203	28.60	-5.25	23.35	46.00	-22.65	QP

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz

**Remark:**

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement=Reading Level+ Correct Factor
3. Over= Measurement-Limit

No.	Mk.	Freq. MHz	Reading Level	Correct Factor	Measure- ment	Limit	Over
			dBuV	dB	dBuV/m	dB/m	dB
1	*	31.1670	51.10	-16.42	34.68	40.00	-5.32 QP
2		54.2610	38.04	-14.48	23.56	40.00	-16.44 QP
3		76.2442	40.60	-19.09	21.51	40.00	-18.49 QP
4		216.0240	38.64	-15.26	23.38	46.00	-22.62 QP
5		375.9385	36.55	-11.15	25.40	46.00	-20.60 QP
6		704.2261	29.45	-5.65	23.80	46.00	-22.20 QP

Between 1GHz – 40GHz

Test Mode:	TX(5.1G) - 802.11a						
------------	--------------------	--	--	--	--	--	--

Polar (H/V)	Frequency (MHz)	Reading Level (dBuV/m)	Correct Factor (dB)	Measure- ment (dBuV/m)	Limits (dBuV/m)	Over (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.026	70.41	-20.73	49.68	68.2	-18.52	PK
Vertical	4434.026	59.20	-20.73	38.47	54	-15.53	AV
Vertical	10360.111	63.43	-9.36	54.07	68.2	-14.13	PK
Vertical	10360.111	49.99	-9.36	40.63	54	-13.37	AV
Vertical	15540.032	64.07	-7.84	56.23	74	-17.77	PK
Vertical	15540.032	49.23	-7.84	41.39	54	-12.61	AV
Horizontal	4434.003	73.76	-20.73	53.03	68.2	-15.17	PK
Horizontal	4434.003	59.48	-20.73	38.75	54	-15.25	AV
Horizontal	10360.162	63.99	-9.36	54.63	68.2	-13.57	PK
Horizontal	10360.162	49.51	-9.36	40.15	54	-13.87	AV
Horizontal	15540.101	61.41	-7.84	53.57	74	-20.43	PK
Horizontal	15540.101	49.84	-7.84	42.00	54	-12.00	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.082	72.20	-20.42	51.78	74	-22.22	PK
Vertical	4592.082	59.64	-20.42	39.23	54	-14.77	AV
Vertical	10400.036	64.44	-9.30	55.14	68.2	-13.06	PK
Vertical	10400.036	49.39	-9.30	40.09	54	-13.91	AV
Vertical	15600.192	63.09	-7.82	55.27	74	-18.73	PK
Vertical	15600.192	49.41	-7.82	41.59	54	-12.41	AV
Horizontal	4592.062	74.28	-20.42	53.87	74	-20.13	PK
Horizontal	4592.062	59.44	-20.42	39.03	54	-14.97	AV
Horizontal	10400.065	62.97	-9.30	53.67	68.2	-14.53	PK
Horizontal	10400.065	49.75	-9.30	40.45	54	-13.55	AV
Horizontal	15600.119	63.17	-7.82	55.35	74	-18.65	PK
Horizontal	15600.119	49.28	-7.82	41.46	54	-12.54	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.149	72.58	-20.12	52.46	74	-21.54	PK
Vertical	4739.149	59.58	-20.12	39.46	54	-14.54	AV
Vertical	10480.010	64.74	-9.18	55.56	68.2	-12.64	PK
Vertical	10480.010	49.40	-9.18	40.22	54	-13.78	AV
Vertical	15720.019	62.17	-7.78	54.39	74	-19.61	PK
Vertical	15720.019	49.92	-7.78	42.14	54	-11.86	AV
Horizontal	4739.008	74.01	-20.12	53.89	74	-20.11	PK
Horizontal	4739.008	59.29	-20.12	39.16	54	-14.84	AV
Horizontal	10480.060	60.24	-9.18	51.06	68.2	-17.14	PK
Horizontal	10480.060	49.09	-9.18	39.91	54	-14.09	AV
Horizontal	15720.156	64.91	-7.78	57.13	74	-16.87	PK
Horizontal	15720.156	49.89	-7.78	42.11	54	-11.89	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11n-HT20
------------	-------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.086	74.75	-20.73	54.02	68.2	-14.18	PK
Vertical	4434.086	59.21	-20.73	38.48	54	-15.52	AV
Vertical	10360.068	61.16	-9.36	51.80	68.2	-16.40	PK
Vertical	10360.068	49.30	-9.36	39.94	54	-14.06	AV
Vertical	15540.115	62.72	-7.84	54.88	74	-19.12	PK
Vertical	15540.115	49.03	-7.84	41.19	54	-12.81	AV
Horizontal	4434.056	73.16	-20.73	52.43	68.2	-15.77	PK
Horizontal	4434.056	59.99	-20.73	39.26	54	-14.74	AV
Horizontal	10360.009	62.10	-9.36	52.74	68.2	-15.46	PK
Horizontal	10360.009	49.41	-9.36	40.05	54	-13.95	AV
Horizontal	15540.085	62.86	-7.84	55.02	74	-18.98	PK
Horizontal	15540.085	49.87	-7.84	42.03	54	-11.97	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.068	70.18	-20.42	49.77	74	-24.23	PK
Vertical	4592.068	59.20	-20.42	38.78	54	-15.22	AV
Vertical	10400.112	61.20	-9.30	51.90	68.2	-16.30	PK
Vertical	10400.112	49.70	-9.30	40.40	54	-13.60	AV
Vertical	15600.138	63.53	-7.82	55.71	74	-18.29	PK
Vertical	15600.138	49.20	-7.82	41.38	54	-12.62	AV
Horizontal	4592.173	72.64	-20.42	52.22	74	-21.78	PK
Horizontal	4592.173	59.25	-20.42	38.83	54	-15.17	AV
Horizontal	10400.101	62.47	-9.30	53.17	68.2	-15.03	PK
Horizontal	10400.101	49.95	-9.30	40.65	54	-13.35	AV
Horizontal	15600.088	63.17	-7.82	55.35	74	-18.65	PK
Horizontal	15600.088	49.43	-7.82	41.61	54	-12.39	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.020	73.72	-20.12	53.60	74	-20.40	PK
Vertical	4739.020	59.41	-20.12	39.29	54	-14.71	AV
Vertical	10480.112	60.02	-9.18	50.84	68.2	-17.36	PK
Vertical	10480.112	49.68	-9.18	40.50	54	-13.50	AV
Vertical	15720.069	64.23	-7.78	56.45	74	-17.55	PK
Vertical	15720.069	49.46	-7.78	41.68	54	-12.32	AV
Horizontal	4739.076	71.23	-20.12	51.11	74	-22.89	PK
Horizontal	4739.076	59.37	-20.12	39.25	54	-14.75	AV
Horizontal	10480.173	61.03	-9.18	51.85	68.2	-16.35	PK
Horizontal	10480.173	49.51	-9.18	40.33	54	-13.67	AV
Horizontal	15720.010	62.14	-7.78	54.36	74	-19.64	PK
Horizontal	15720.010	49.59	-7.78	41.81	54	-12.19	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11n-HT40
------------	-------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.179	70.47	-20.73	49.74	68.2	-18.46	PK
Vertical	4434.179	59.98	-20.73	39.25	54	-14.75	AV
Vertical	10380.141	63.21	-9.33	53.88	68.2	-14.32	PK
Vertical	10380.141	49.12	-9.33	39.79	54	-14.21	AV
Vertical	15570.038	60.99	-7.83	53.16	74	-20.84	PK
Vertical	15570.038	49.94	-7.83	42.11	54	-11.89	AV
Horizontal	4434.166	72.58	-20.73	51.85	74	-22.15	PK
Horizontal	4434.166	59.76	-20.73	39.03	54	-14.97	AV
Horizontal	10380.004	62.57	-9.33	53.24	68.2	-14.96	PK
Horizontal	10380.004	49.73	-9.33	40.40	54	-13.60	AV
Horizontal	15570.123	60.07	-7.83	52.24	74	-21.76	PK
Horizontal	15570.123	49.34	-7.83	41.51	54	-12.49	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.134	71.35	-20.12	51.23	68.2	-16.97	PK
Vertical	4739.134	59.34	-20.12	39.22	54	-14.78	AV
Vertical	10460.135	62.66	-9.21	53.45	68.2	-14.75	PK
Vertical	10460.135	49.96	-9.21	40.75	54	-13.25	AV
Vertical	15690.024	64.42	-7.79	56.63	74	-17.37	PK
Vertical	15690.024	49.97	-7.79	42.18	54	-11.82	AV
Horizontal	4739.139	73.77	-20.12	53.65	68.2	-14.55	PK
Horizontal	4739.139	59.47	-20.12	39.35	54	-14.65	AV
Horizontal	10460.187	62.25	-9.21	53.04	68.2	-15.16	PK
Horizontal	10460.187	49.83	-9.21	40.62	54	-13.38	AV
Horizontal	15690.060	64.04	-7.79	56.25	74	-17.75	PK
Horizontal	15690.060	49.31	-7.79	41.52	54	-12.48	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11ac-HT20
------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.030	70.11	-20.73	49.38	68.2	-18.82	PK
Vertical	4434.030	59.17	-20.73	38.44	54	-15.56	AV
Vertical	10360.059	60.87	-9.36	51.51	68.2	-16.69	PK
Vertical	10360.059	49.46	-9.36	40.10	54	-13.90	AV
Vertical	15540.085	61.42	-7.84	53.58	74	-20.42	PK
Vertical	15540.085	49.49	-7.84	41.65	54	-12.35	AV
Horizontal	4434.059	71.69	-20.73	50.96	68.2	-17.24	PK
Horizontal	4434.059	59.41	-20.73	38.68	54	-15.32	AV
Horizontal	10360.073	60.67	-9.36	51.31	68.2	-16.89	PK
Horizontal	10360.073	49.13	-9.36	39.77	54	-14.23	AV
Horizontal	15540.188	63.33	-7.84	55.49	74	-18.51	PK
Horizontal	15540.188	49.18	-7.84	41.34	54	-12.66	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.159	74.68	-20.42	54.26	74	-19.74	PK
Vertical	4592.159	59.35	-20.42	38.94	54	-15.06	AV
Vertical	10400.119	61.71	-9.30	52.41	68.2	-15.79	PK
Vertical	10400.119	49.52	-9.30	40.22	54	-13.78	AV
Vertical	15600.006	62.62	-7.82	54.80	74	-19.20	PK
Vertical	15600.006	49.65	-7.82	41.83	54	-12.17	AV
Horizontal	4592.032	72.16	-20.42	51.75	74	-22.25	PK
Horizontal	4592.032	59.64	-20.42	39.22	54	-14.78	AV
Horizontal	10400.169	62.10	-9.30	52.80	68.2	-15.40	PK
Horizontal	10400.169	49.28	-9.30	39.98	54	-14.02	AV
Horizontal	15600.004	62.09	-7.82	54.27	74	-19.73	PK
Horizontal	15600.004	49.22	-7.82	41.40	54	-12.60	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.009	73.64	-20.12	53.52	74	-20.48	PK
Vertical	4739.009	59.04	-20.12	38.92	54	-15.08	AV
Vertical	10480.059	63.71	-9.18	54.53	68.2	-13.67	PK
Vertical	10480.059	49.54	-9.18	40.36	54	-13.64	AV
Vertical	15720.121	62.24	-7.78	54.46	74	-19.54	PK
Vertical	15720.121	49.93	-7.78	42.15	54	-11.85	AV
Horizontal	4739.169	71.73	-20.12	51.61	74	-22.39	PK
Horizontal	4739.169	59.31	-20.12	39.18	54	-14.82	AV
Horizontal	10480.089	62.69	-9.18	53.51	68.2	-14.69	PK
Horizontal	10480.089	49.51	-9.18	40.33	54	-13.67	AV
Horizontal	15720.163	62.52	-7.78	54.74	74	-19.26	PK
Horizontal	15720.163	49.08	-7.78	41.30	54	-12.70	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11ac-HT40
------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.045	71.15	-20.73	50.42	68.2	-17.78	PK
Vertical	4434.045	59.47	-20.73	38.74	54	-15.26	AV
Vertical	10380.065	60.80	-9.33	51.47	68.2	-16.73	PK
Vertical	10380.065	49.37	-9.33	40.04	54	-13.96	AV
Vertical	15570.055	62.02	-7.83	54.19	74	-19.81	PK
Vertical	15570.055	49.59	-7.83	41.76	54	-12.24	AV
Horizontal	4434.034	72.31	-20.73	51.57	74	-22.43	PK
Horizontal	4434.034	59.43	-20.73	38.70	54	-15.30	AV
Horizontal	10380.185	60.57	-9.33	51.24	68.2	-16.96	PK
Horizontal	10380.185	49.53	-9.33	40.20	54	-13.80	AV
Horizontal	15570.105	63.63	-7.83	55.80	74	-18.20	PK
Horizontal	15570.105	49.71	-7.83	41.88	54	-12.12	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.023	70.94	-20.12	50.82	68.2	-17.38	PK
Vertical	4739.023	59.51	-20.12	39.39	54	-14.61	AV
Vertical	10460.089	63.33	-9.21	54.12	68.2	-14.08	PK
Vertical	10460.089	49.79	-9.21	40.58	54	-13.42	AV
Vertical	15690.083	64.11	-7.79	56.32	74	-17.68	PK
Vertical	15690.083	49.26	-7.79	41.47	54	-12.53	AV
Horizontal	4739.180	71.25	-20.12	51.13	68.2	-17.07	PK
Horizontal	4739.180	59.42	-20.12	39.29	54	-14.71	AV
Horizontal	10460.096	61.91	-9.21	52.70	68.2	-15.50	PK
Horizontal	10460.096	49.64	-9.21	40.43	54	-13.57	AV
Horizontal	15690.126	62.74	-7.79	54.95	74	-19.05	PK
Horizontal	15690.126	49.89	-7.79	42.10	54	-11.90	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX(5.1G) - 802.11ac 80
------------	------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5210 MHz)-Above 1G							
Vertical	4434.075	70.73	-20.73	50.00	68.2	-18.20	PK
Vertical	4434.075	59.35	-20.73	38.61	54	-15.39	AV
Vertical	10420.056	60.98	-9.27	51.71	68.2	-16.49	PK
Vertical	10420.056	49.72	-9.27	40.45	54	-13.55	AV
Vertical	15630.168	64.71	-7.81	56.90	74	-17.10	PK
Vertical	15630.168	49.15	-7.81	41.34	54	-12.66	AV
Horizontal	4434.198	73.55	-20.73	52.82	68.2	-15.38	PK
Horizontal	4434.198	59.37	-20.73	38.64	54	-15.36	AV
Horizontal	10420.138	43.71	9.27	52.98	68.2	-15.22	PK
Horizontal	10420.138	29.58	9.27	38.85	54	-15.15	AV
Horizontal	15630.077	63.52	-7.81	55.71	74	-18.29	PK
Horizontal	15630.077	49.68	-7.81	41.87	54	-12.13	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX (5.8G) -- 802.11a
------------	----------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.076	74.51	-20.24	54.26	74	-19.74	PK
Vertical	4679.076	59.29	-20.24	39.04	54	-14.96	AV
Vertical	11490.038	60.07	-8.79	51.28	68.2	-16.92	PK
Vertical	11490.038	49.74	-8.79	40.95	54	-13.05	AV
Vertical	17235.105	55.40	-3.18	52.22	68.2	-15.98	PK
Vertical	17235.105	44.28	-3.18	41.10	54	-12.90	AV
Horizontal	4679.131	73.28	-20.73	52.55	74	-21.45	PK
Horizontal	4679.131	59.68	-20.73	38.95	54	-15.05	AV
Horizontal	11490.109	64.74	-8.79	55.95	68.2	-12.25	PK
Horizontal	11490.109	49.13	-8.79	40.34	54	-13.66	AV
Horizontal	17235.058	56.27	-3.18	53.09	68.2	-15.11	PK
Horizontal	17235.058	44.88	-3.18	41.70	54	-12.30	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.164	73.73	-20.42	53.32	74	-20.68	PK
Vertical	4592.164	59.50	-20.42	39.09	54	-14.91	AV
Vertical	11570.033	61.10	-8.86	52.24	68.2	-15.96	PK
Vertical	11570.033	49.40	-8.86	40.54	54	-13.46	AV
Vertical	17355.109	55.49	-2.52	52.97	68.2	-15.23	PK
Vertical	17355.109	44.37	-2.52	41.85	54	-12.15	AV
Horizontal	4592.189	70.06	-20.42	49.65	74	-24.35	PK
Horizontal	4592.189	59.38	-20.42	38.96	54	-15.04	AV
Horizontal	11570.132	62.53	-8.86	53.67	68.2	-14.53	PK
Horizontal	11570.132	49.36	-8.86	40.50	54	-13.50	AV
Horizontal	17355.097	56.92	-2.52	54.40	68.2	-13.80	PK
Horizontal	17355.097	44.95	-2.52	42.43	54	-11.57	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.110	74.58	-18.93	55.65	68.2	-12.55	PK
Vertical	6039.110	59.26	-18.93	40.33	54	-13.67	AV
Vertical	11650.034	62.83	-8.92	53.91	74	-20.09	PK
Vertical	11650.034	49.85	-8.92	40.93	54	-13.07	AV
Vertical	17475.046	57.79	-1.86	55.93	68.2	-12.27	PK
Vertical	17475.046	44.48	-1.86	42.62	54	-11.38	AV
Horizontal	6039.157	70.65	-18.93	51.72	68.2	-16.48	PK
Horizontal	6039.157	59.54	-18.93	40.61	54	-13.39	AV
Horizontal	11650.112	64.38	-8.92	55.46	74	-18.54	PK
Horizontal	11650.112	49.25	-8.92	40.33	54	-13.67	AV
Horizontal	17475.198	59.30	-1.86	57.44	68.2	-10.76	PK
Horizontal	17475.198	44.12	-1.86	42.26	54	-11.74	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX (5.8G) --802.11n-HT20
------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.196	71.96	-20.24	51.72	74	-22.28	PK
Vertical	4679.196	59.86	-20.24	39.62	54	-14.38	AV
Vertical	11490.091	60.22	-8.79	51.43	68.2	-16.77	PK
Vertical	11490.091	49.61	-8.79	40.82	54	-13.18	AV
Vertical	17235.131	58.49	-3.18	55.31	68.2	-12.89	PK
Vertical	17235.131	44.78	-3.18	41.60	54	-12.40	AV
Horizontal	4679.180	73.42	-20.24	53.18	74	-20.82	PK
Horizontal	4679.180	59.23	-20.24	38.99	54	-15.01	AV
Horizontal	11490.151	64.46	-8.79	55.67	68.2	-12.53	PK
Horizontal	11490.151	49.95	-8.79	41.16	54	-12.84	AV
Horizontal	17235.142	55.62	-3.18	52.44	68.2	-15.76	PK
Horizontal	17235.142	44.42	-3.18	41.24	54	-12.76	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.155	71.21	-20.42	50.79	74	-23.21	PK
Vertical	4592.155	59.14	-20.42	38.73	54	-15.27	AV
Vertical	11570.116	62.59	-8.86	53.73	68.2	-14.47	PK
Vertical	11570.116	49.46	-8.86	40.60	54	-13.40	AV
Vertical	17355.053	55.38	-2.52	52.86	68.2	-15.34	PK
Vertical	17355.053	44.91	-2.52	42.39	54	-11.61	AV
Horizontal	4592.192	71.47	-20.42	51.05	74	-22.95	PK
Horizontal	4592.192	59.46	-20.42	39.04	54	-14.96	AV
Horizontal	11570.089	61.63	-8.86	52.77	68.2	-15.43	PK
Horizontal	11570.089	49.35	-8.86	40.49	54	-13.51	AV
Horizontal	17355.182	57.85	-2.52	55.33	68.2	-12.87	PK
Horizontal	17355.182	44.39	-2.52	41.87	54	-12.13	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.124	71.38	-18.93	52.45	68.2	-15.75	PK
Vertical	6039.124	59.34	-18.93	40.41	54	-13.59	AV
Vertical	11650.140	62.41	-8.92	53.49	74	-20.51	PK
Vertical	11650.140	49.63	-8.92	40.71	54	-13.29	AV
Vertical	17475.056	57.83	-1.86	55.97	68.2	-12.23	PK
Vertical	17475.056	44.52	-1.86	42.66	54	-11.34	AV
Horizontal	6039.192	74.22	-18.93	55.29	68.2	-12.91	PK
Horizontal	6039.192	59.80	-18.93	40.87	54	-13.13	AV
Horizontal	11650.017	61.31	-8.92	52.39	74	-21.61	PK
Horizontal	11650.017	49.32	-8.92	40.40	54	-13.60	AV
Horizontal	17475.044	56.84	-1.86	54.98	68.2	-13.22	PK
Horizontal	17475.044	44.33	-1.86	42.47	54	-11.53	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX (5.8G) -- 802.11n-HT40
------------	---------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.188	74.95	-20.24	54.71	74	-19.29	PK
Vertical	4679.188	59.06	-20.24	38.82	54	-15.18	AV
Vertical	11510.014	60.30	-8.81	51.49	74	-22.51	PK
Vertical	11510.014	49.70	-8.81	40.89	54	-13.11	AV
Vertical	17265.116	55.30	-3.01	52.29	68.2	-15.91	PK
Vertical	17265.116	44.83	-3.01	41.82	54	-12.18	AV
Horizontal	4679.115	70.71	-20.24	50.47	74	-23.53	PK
Horizontal	4679.115	59.72	-20.24	39.48	54	-14.52	AV
Horizontal	11510.186	64.97	-8.81	56.16	74	-17.84	PK
Horizontal	11510.186	49.82	-8.81	41.01	54	-12.99	AV
Horizontal	17265.177	57.52	-3.01	54.51	68.2	-13.69	PK
Horizontal	17265.177	44.31	-3.01	41.30	54	-12.70	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.093	74.49	-18.93	55.56	68.2	-12.64	PK
Vertical	6039.093	59.57	-18.93	40.64	54	-13.36	AV
Vertical	11590.123	64.02	-8.87	55.15	74	-18.85	PK
Vertical	11590.123	49.40	-8.87	40.53	54	-13.47	AV
Vertical	17385.069	58.95	-2.35	56.60	68.2	-11.60	PK
Vertical	17385.069	44.29	-2.35	41.94	54	-12.06	AV
Horizontal	6039.025	72.95	-18.93	54.02	68.2	-14.18	PK
Horizontal	6039.025	59.55	-18.93	40.61	54	-13.39	AV
Horizontal	11590.016	60.90	-8.87	52.03	74	-21.97	PK
Horizontal	11590.016	49.13	-8.87	40.26	54	-13.74	AV
Horizontal	17385.129	58.09	-2.35	55.74	68.2	-12.46	PK
Horizontal	17385.129	44.54	-2.35	42.19	54	-11.81	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode:	TX (5.8G) --802.11ac-HT20
------------	---------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.136	71.93	-20.24	51.69	74	-22.31	PK
Vertical	4679.136	59.94	-20.24	39.70	54	-14.30	AV
Vertical	11490.182	63.83	-8.79	55.04	68.2	-13.16	PK
Vertical	11490.182	49.03	-8.79	40.24	54	-13.76	AV
Vertical	17235.191	58.11	-3.18	54.93	68.2	-13.27	PK
Vertical	17235.191	44.89	-3.18	41.71	54	-12.29	AV
Horizontal	4679.119	71.83	-20.24	51.59	74	-22.41	PK
Horizontal	4679.119	59.92	-20.24	39.67	54	-14.33	AV
Horizontal	11490.120	63.30	-8.79	54.51	68.2	-13.69	PK
Horizontal	11490.120	49.39	-8.79	40.60	54	-13.40	AV
Horizontal	17235.193	59.79	-3.18	56.61	68.2	-11.59	PK
Horizontal	17235.193	44.32	-3.18	41.14	54	-12.86	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.052	72.85	-20.42	52.43	74	-21.57	PK
Vertical	4592.052	59.89	-20.42	39.47	54	-14.53	AV
Vertical	11570.026	61.35	-8.86	52.49	68.2	-15.71	PK
Vertical	11570.026	49.93	-8.86	41.07	54	-12.93	AV
Vertical	17355.123	59.63	-2.52	57.11	68.2	-11.09	PK
Vertical	17355.123	44.70	-2.52	42.18	54	-11.82	AV
Horizontal	4592.116	74.75	-20.42	54.33	74	-19.67	PK
Horizontal	4592.116	59.42	-20.42	39.00	54	-15.00	AV
Horizontal	11570.183	63.29	-8.86	54.43	68.2	-13.77	PK
Horizontal	11570.183	49.95	-8.86	41.09	54	-12.91	AV
Horizontal	17355.146	55.55	-2.52	53.03	68.2	-15.17	PK
Horizontal	17355.146	44.97	-2.52	42.45	54	-11.55	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.150	74.37	-18.93	55.44	68.2	-12.76	PK
Vertical	6039.150	59.23	-18.93	40.30	54	-13.70	AV
Vertical	11650.120	64.43	-8.92	55.51	74	-18.49	PK
Vertical	11650.120	50.00	-8.92	41.08	54	-12.92	AV
Vertical	17475.141	56.02	-1.86	54.16	68.2	-14.04	PK
Vertical	17475.141	44.24	-1.86	42.38	54	-11.62	AV
Horizontal	6039.187	73.66	-18.93	54.73	68.2	-13.47	PK
Horizontal	6039.187	59.79	-18.93	40.86	54	-13.14	AV
Horizontal	11650.043	60.34	-8.92	51.42	74	-22.58	PK
Horizontal	11650.043	49.26	-8.92	40.34	54	-13.66	AV
Horizontal	17475.177	55.61	-1.86	53.75	68.2	-14.45	PK
Horizontal	17475.177	44.72	-1.86	42.86	54	-11.14	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode :	TX (5.8G) -- 802.11ac-HT40
-------------	----------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.170	74.35	-20.24	54.11	74	-19.89	PK
Vertical	4679.170	59.45	-20.24	39.21	54	-14.79	AV
Vertical	11510.039	60.18	-8.81	51.37	74	-22.63	PK
Vertical	11510.039	49.03	-8.81	40.22	54	-13.78	AV
Vertical	17265.159	58.37	-3.01	55.36	68.2	-12.84	PK
Vertical	17265.159	44.94	-3.01	41.93	54	-12.07	AV
Horizontal	4679.019	71.81	-20.24	51.57	74	-22.43	PK
Horizontal	4679.019	59.48	-20.24	39.24	54	-14.76	AV
Horizontal	11510.142	61.90	-8.81	53.09	74	-20.91	PK
Horizontal	11510.142	49.63	-8.81	40.82	54	-13.18	AV
Horizontal	17265.030	58.74	-3.01	55.73	68.2	-12.47	PK
Horizontal	17265.030	44.03	-3.01	41.02	54	-12.98	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.069	74.75	-18.93	55.82	68.2	-12.38	PK
Vertical	6039.069	59.43	-18.93	40.50	54	-13.50	AV
Vertical	11590.037	60.47	-8.87	51.60	74	-22.40	PK
Vertical	11590.037	49.25	-8.87	40.38	54	-13.62	AV
Vertical	17385.017	59.82	-2.35	57.47	68.2	-10.73	PK
Vertical	17385.017	44.78	-2.35	42.43	54	-11.57	AV
Horizontal	6039.064	75.00	-18.93	56.06	68.2	-12.14	PK
Horizontal	6039.064	59.76	-18.93	40.83	54	-13.17	AV
Horizontal	11590.190	60.19	-8.87	51.32	74	-22.68	PK
Horizontal	11590.190	49.37	-8.87	40.50	54	-13.50	AV
Horizontal	17385.026	59.23	-2.35	56.88	68.2	-11.32	PK
Horizontal	17385.026	44.45	-2.35	42.10	54	-11.90	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode :	TX (5.8G) -- 802.11ac 80
-------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5775 MHz)-Above 1G							
Vertical	4679.154	74.16	-20.24	53.92	74	-20.08	PK
Vertical	4679.154	59.52	-20.24	39.28	54	-14.72	AV
Vertical	11550.106	63.17	-8.84	54.33	74	-19.67	PK
Vertical	11550.106	49.90	-8.84	41.06	54	-12.94	AV
Vertical	17325.133	55.11	-2.68	52.43	68.2	-15.77	PK
Vertical	17325.133	44.39	-2.68	41.71	54	-12.29	AV
Horizontal	4679.142	74.79	-20.24	54.55	74	-19.45	PK
Horizontal	4679.142	59.17	-20.24	38.92	54	-15.08	AV
Horizontal	11550.001	63.60	-8.84	54.76	74	-19.24	PK
Horizontal	11550.001	49.24	-8.84	40.40	54	-13.60	AV
Horizontal	17325.056	59.46	-2.68	56.78	68.2	-11.42	PK
Horizontal	17325.056	44.36	-2.68	41.68	54	-12.32	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

## 8. Power Spectral Density Test

### 8.1 Block Diagram Of Test Setup



### 8.2 Limit

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz

(3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### 8.3 Test Procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set RBW  $\geq 1/T$ , where T is defined in section II.B.I.a).
- b) Set VBW  $\geq 3$  RBW.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10\log(500\text{kHz}/\text{RBW})$  to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add  $10\log(1\text{MHz}/\text{RBW})$  to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections 5.c) and 5.d) above, since RBW=100 KHZ is available on nearly all spectrum analyzers.

### 8.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

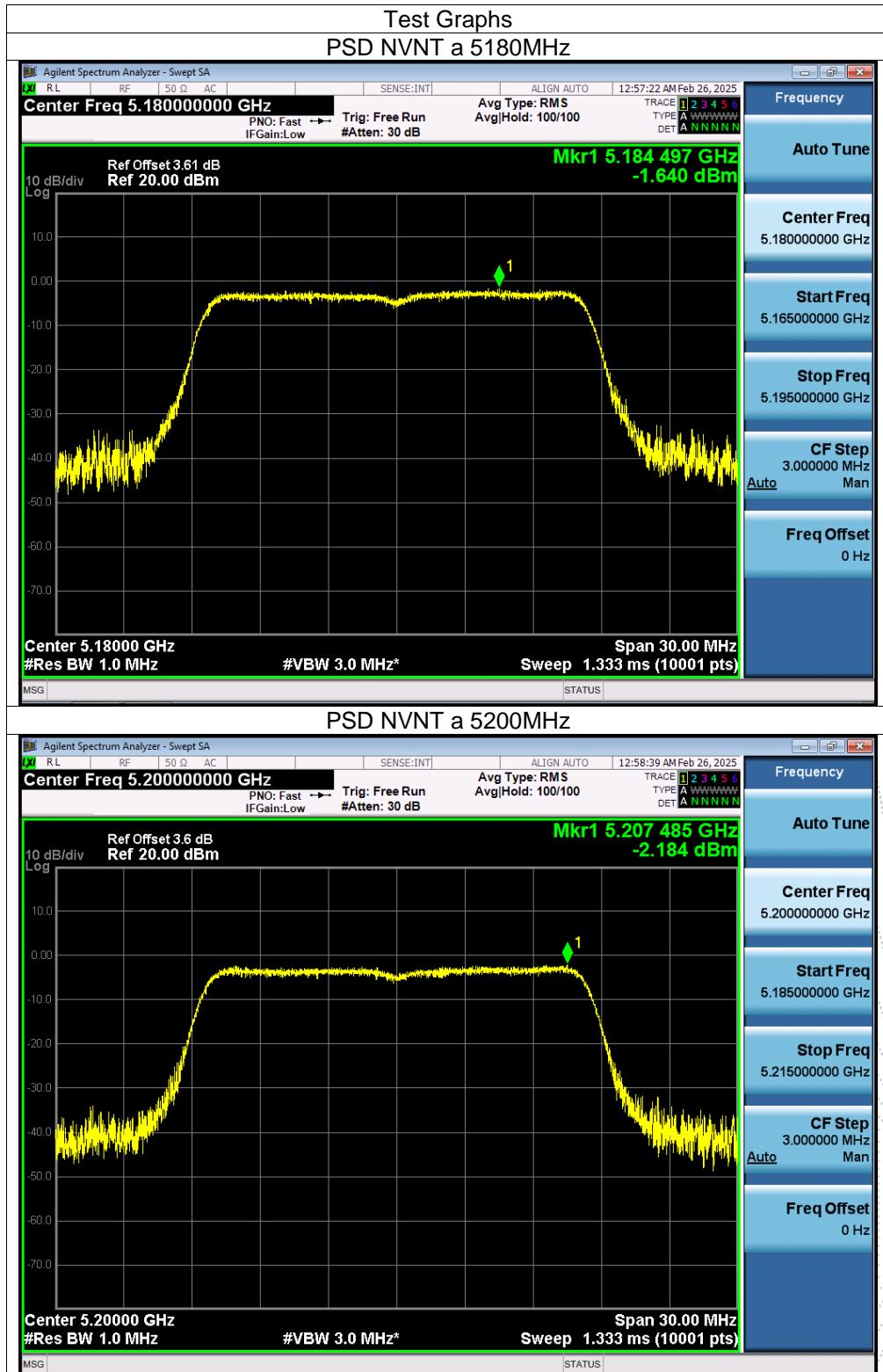
## 8.5 Test Result

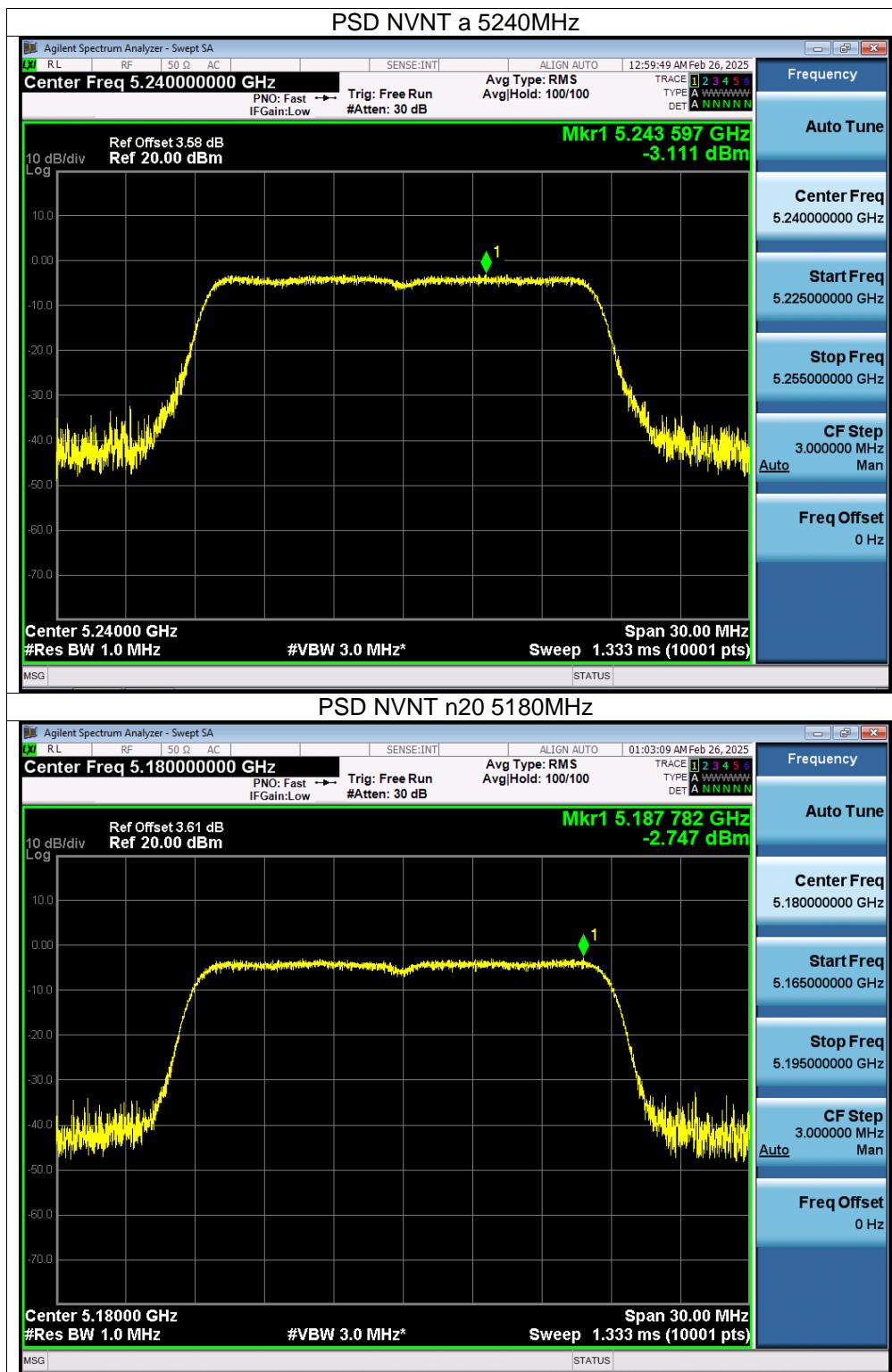
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.87V
Test Mode:	(5180-5240MHz); (5745-5825MHz)		

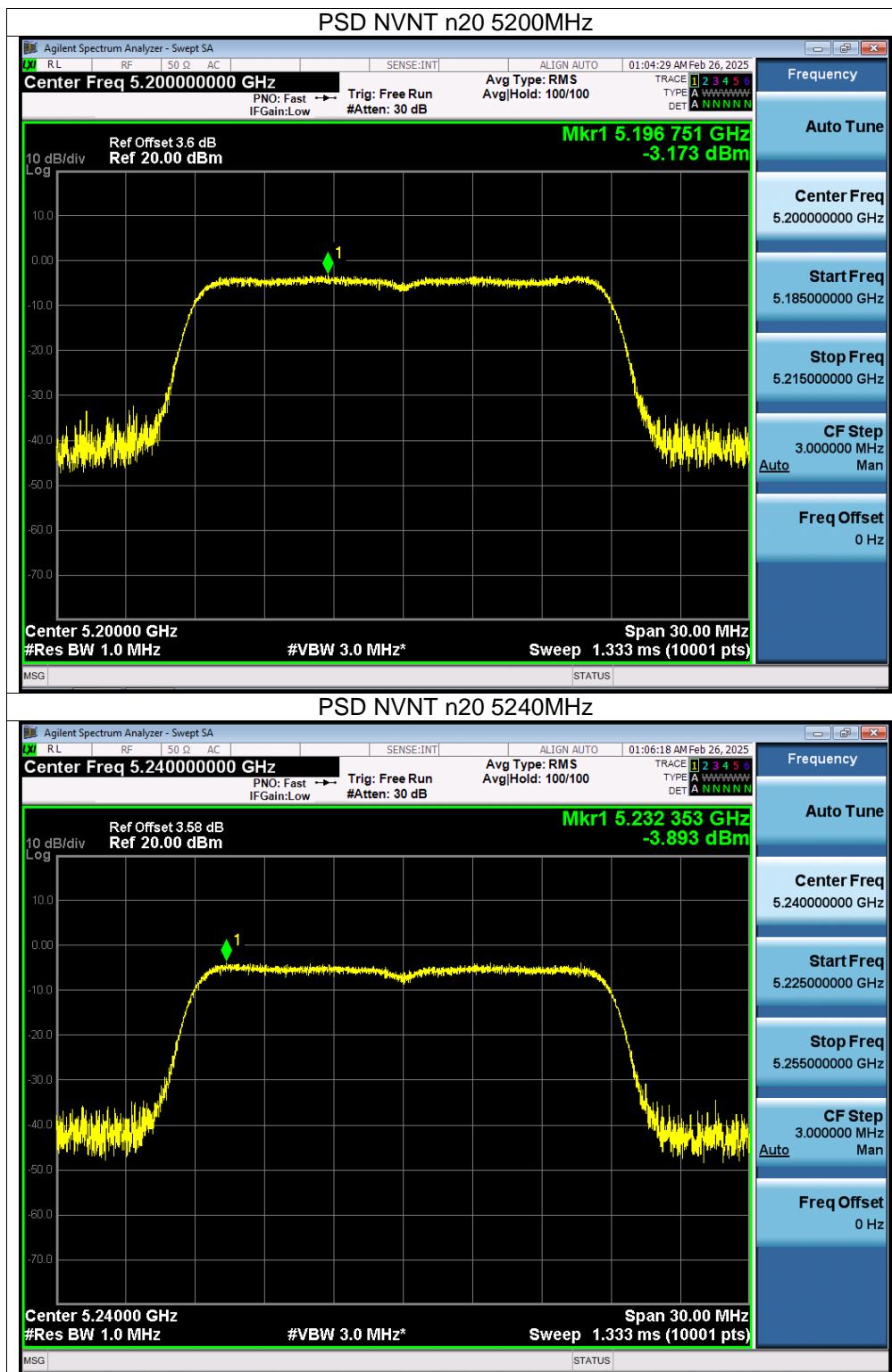
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5180	-1.64	11	Pass
NVNT	a	5200	-2.18	11	Pass
NVNT	a	5240	-3.11	11	Pass
NVNT	n20	5180	-2.75	11	Pass
NVNT	n20	5200	-3.17	11	Pass
NVNT	n20	5240	-3.89	11	Pass
NVNT	n40	5190	-7.44	11	Pass
NVNT	n40	5230	-8.04	11	Pass
NVNT	ac20	5180	-2.93	11	Pass
NVNT	ac20	5200	-3.41	11	Pass
NVNT	ac20	5240	-4.19	11	Pass
NVNT	ac40	5190	-7.67	11	Pass
NVNT	ac40	5230	-8.39	11	Pass
NVNT	ac80	5210	-13.63	11	Pass

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/510KHz)	Conducted PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	a	5745	-5.22	-5.306	30	Pass
NVNT	a	5785	-4.97	-5.056	30	Pass
NVNT	a	5825	-5.01	-5.096	30	Pass
NVNT	n20	5745	-6.27	-6.356	30	Pass
NVNT	n20	5785	-5.99	-6.076	30	Pass
NVNT	n20	5825	-5.88	-5.966	30	Pass
NVNT	n40	5755	-10.09	-10.176	30	Pass
NVNT	n40	5795	-10.79	-10.876	30	Pass
NVNT	ac20	5745	-6.32	-6.406	30	Pass
NVNT	ac20	5785	-5.91	-5.996	30	Pass
NVNT	ac20	5825	-5.76	-5.846	30	Pass
NVNT	ac40	5755	-10.07	-10.156	30	Pass
NVNT	ac40	5795	-10.2	-10.286	30	Pass
NVNT	ac80	5775	-16.22	-16.306	30	Pass

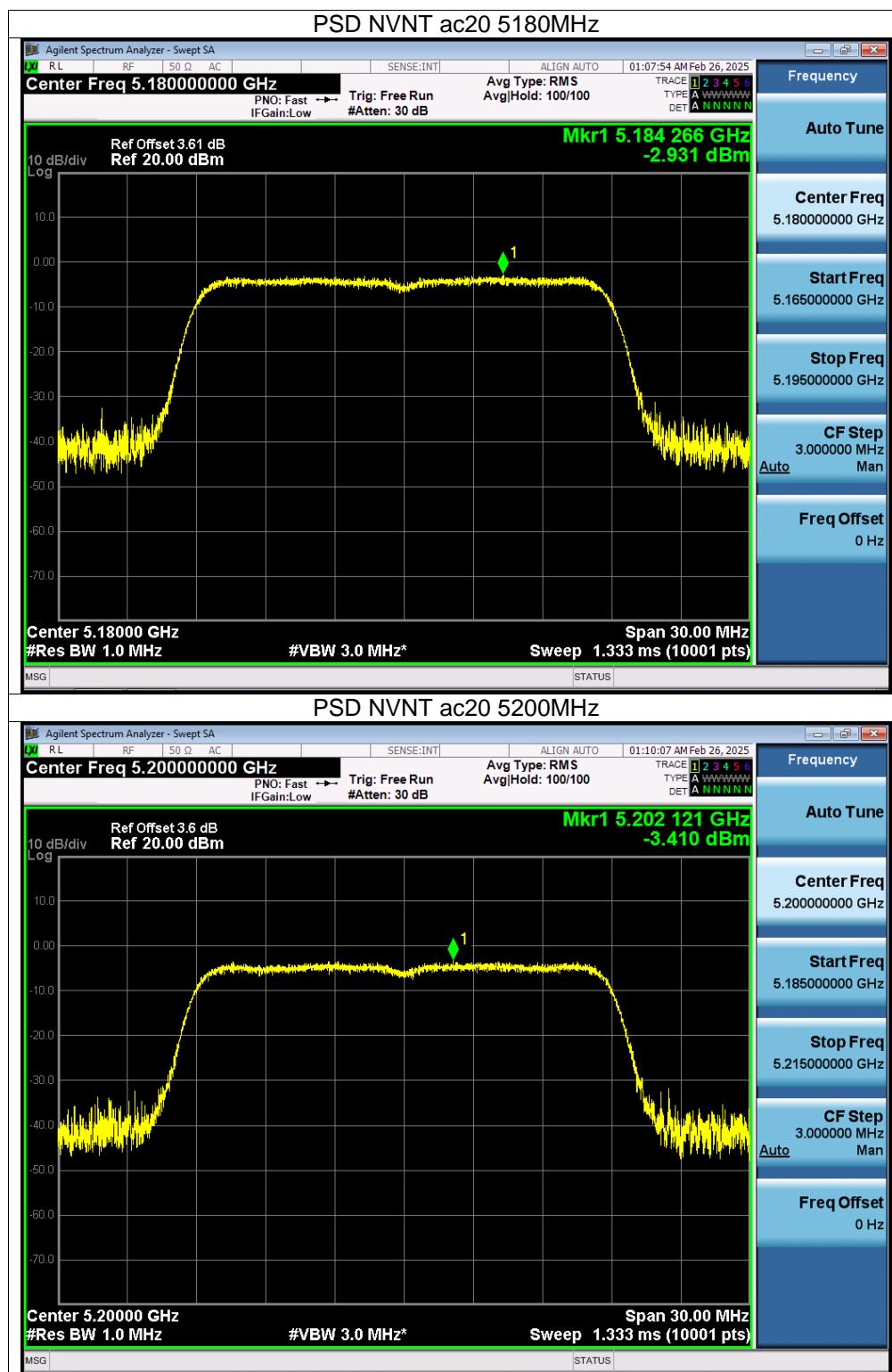
Note: Correction Factor =  $10\log(500\text{kHz}/\text{RBW in measurement}) = -0.086$

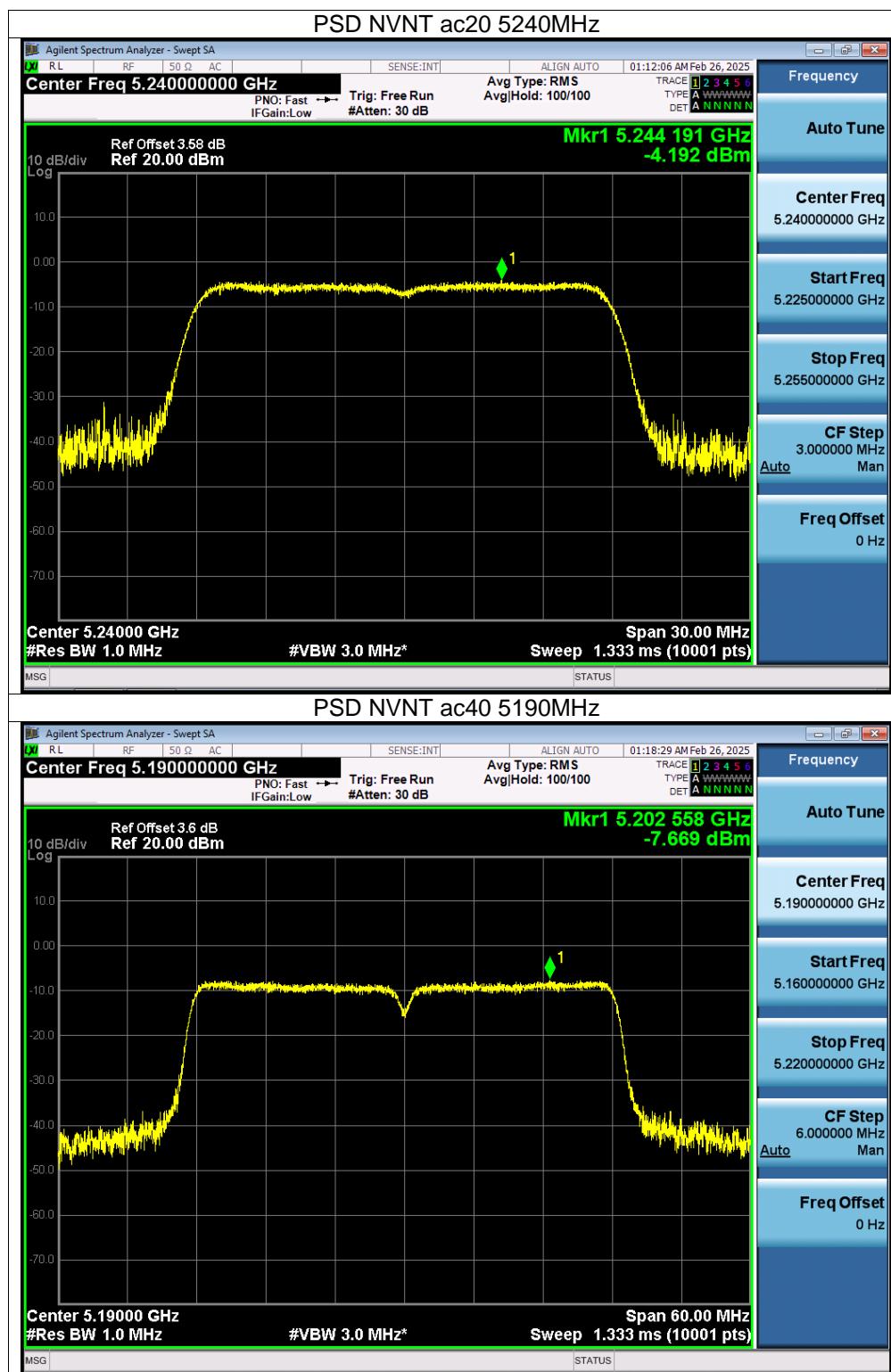


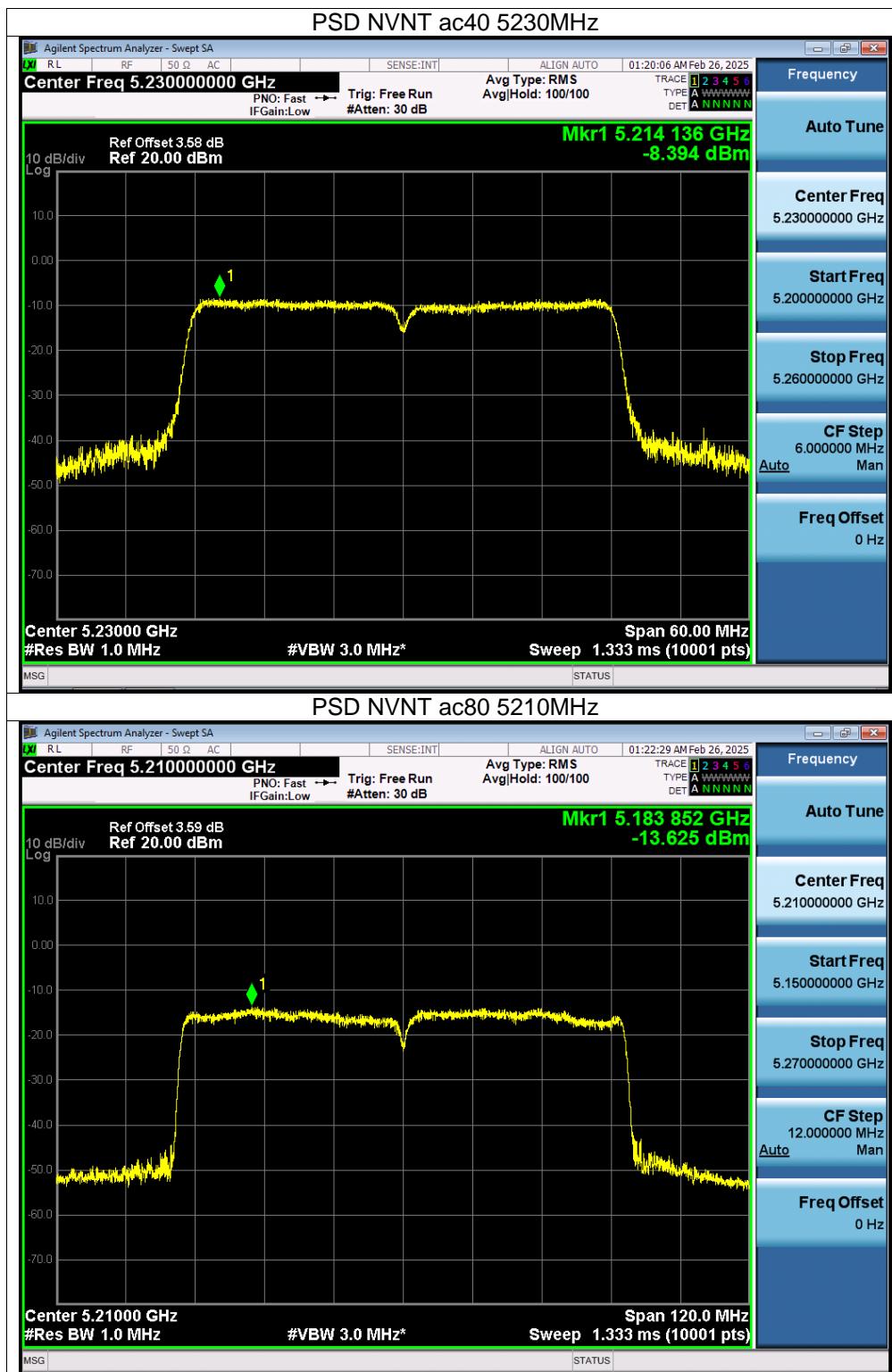


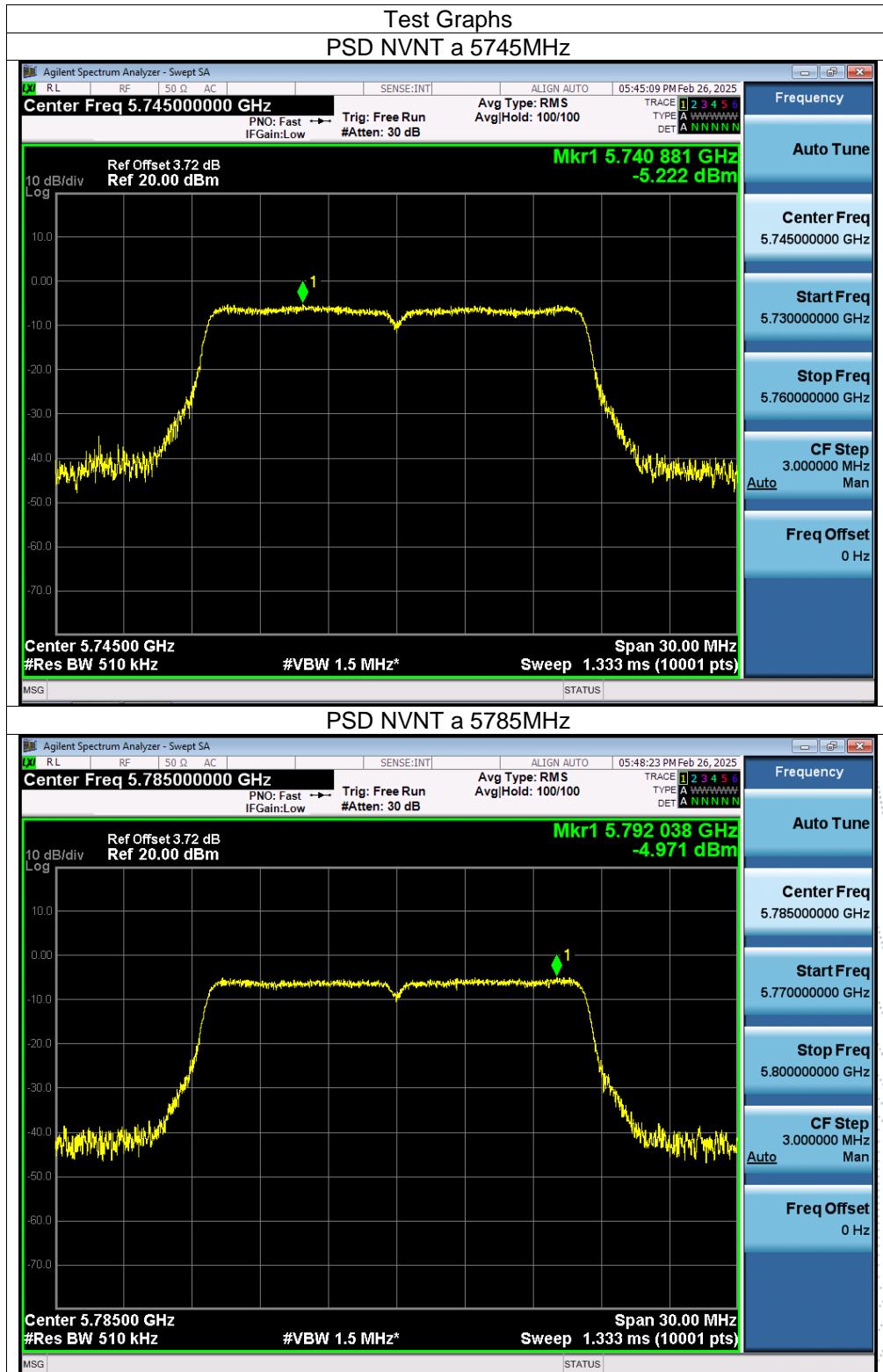








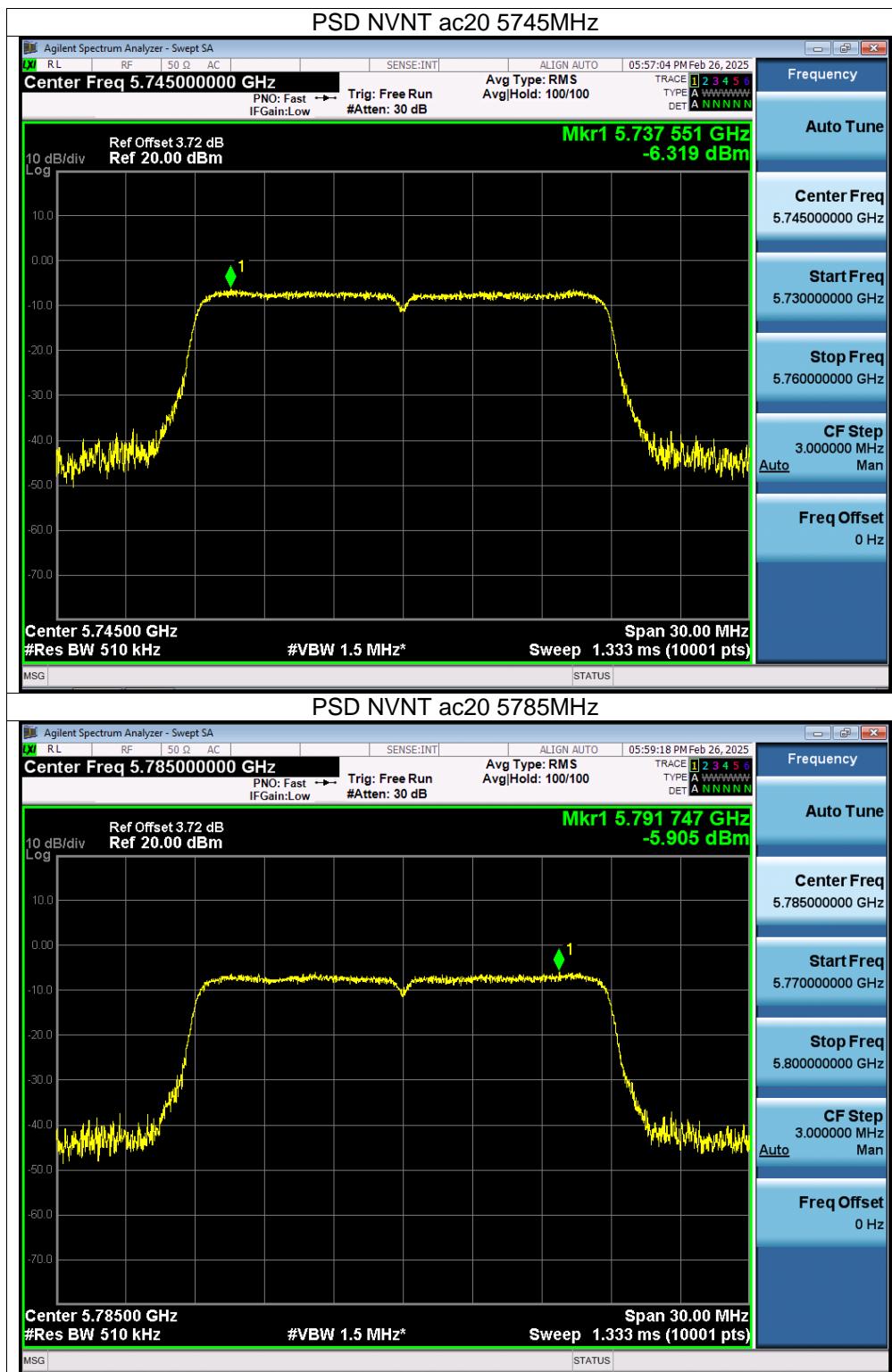


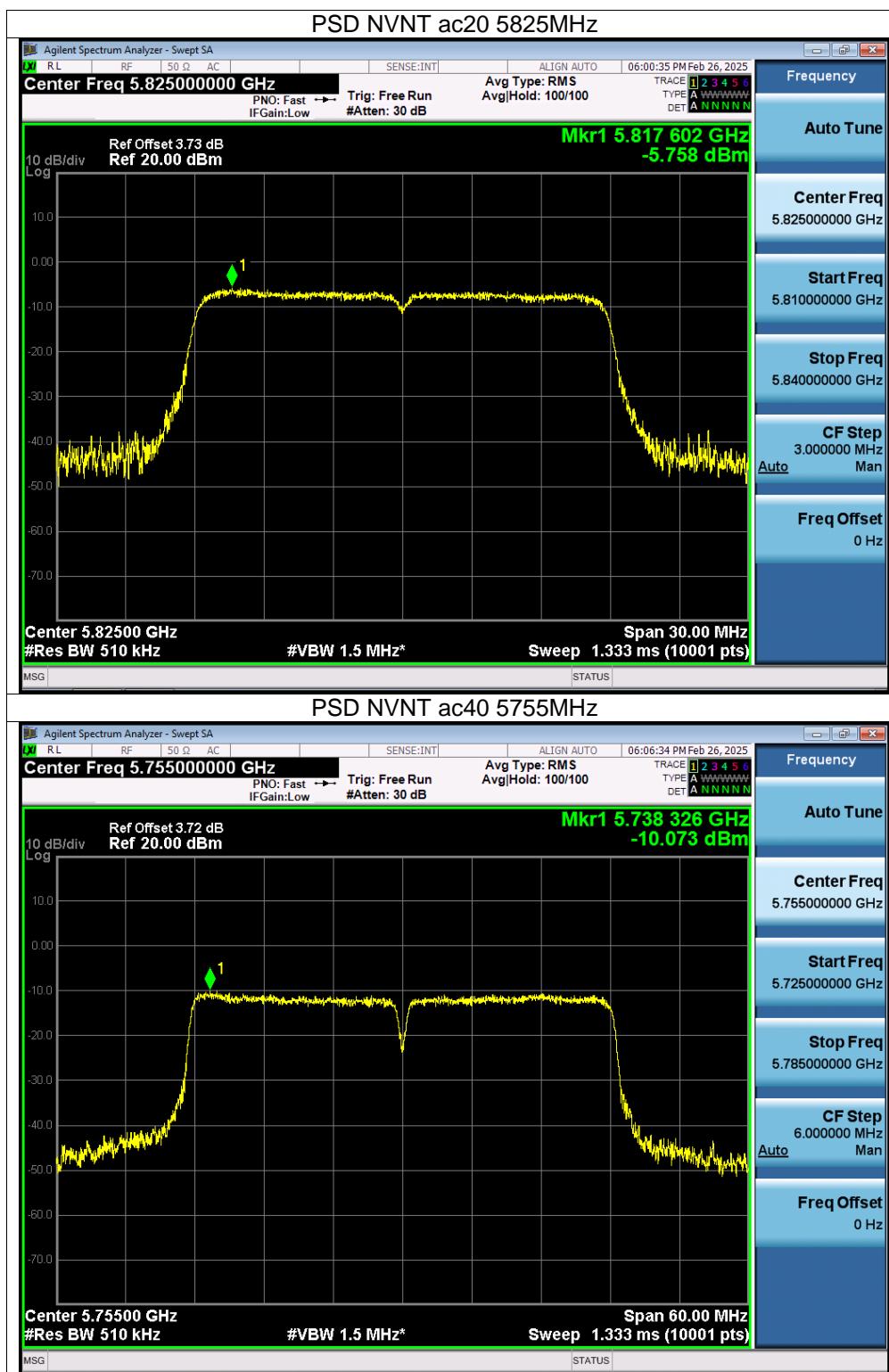


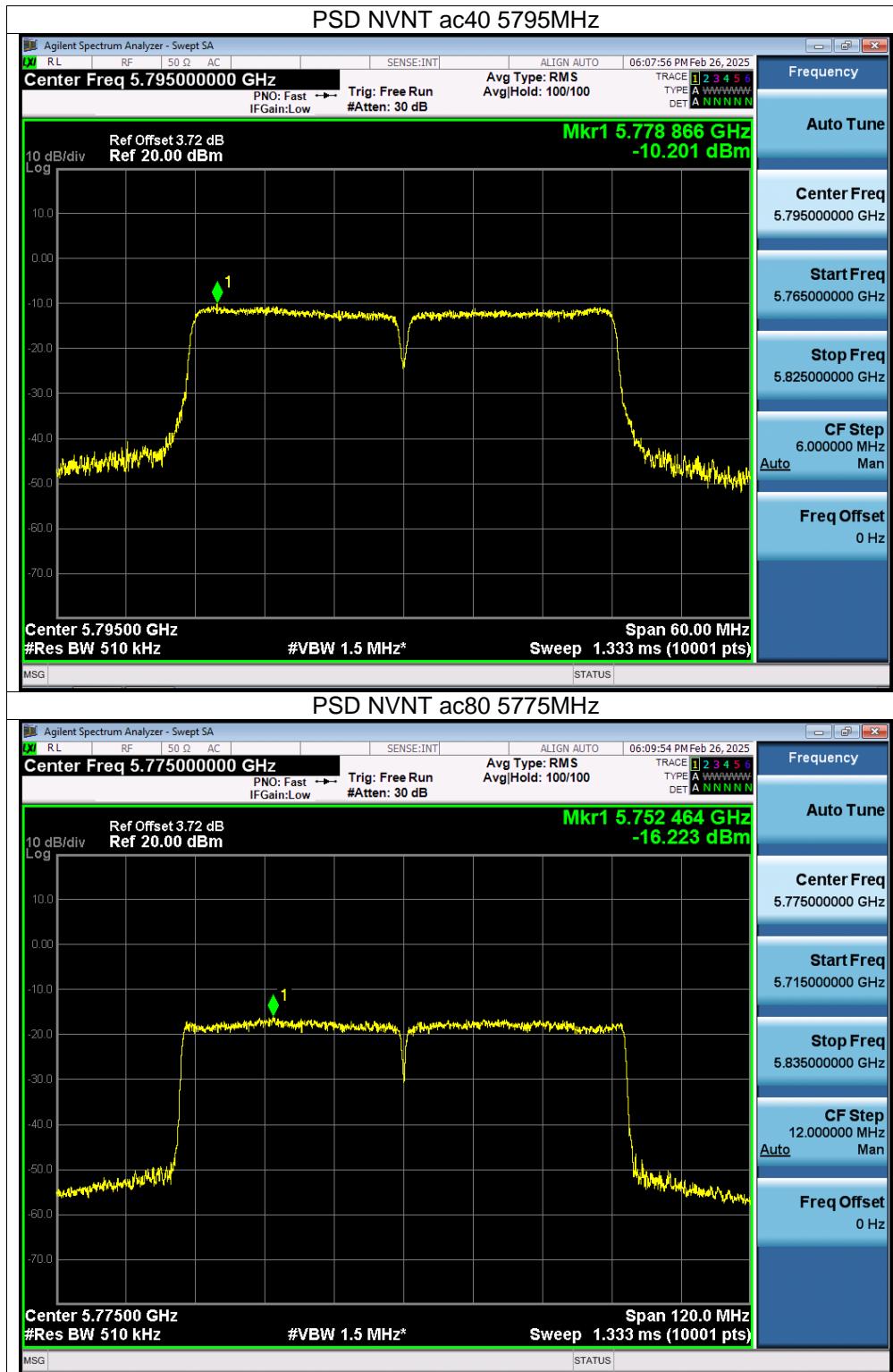






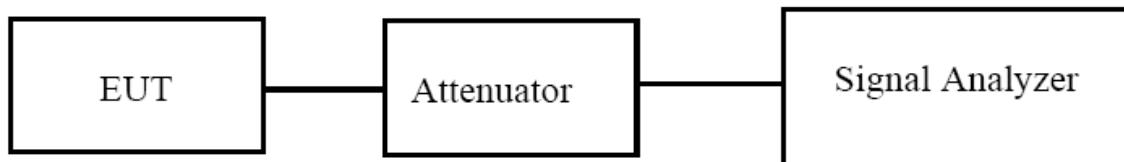






## 9. 26dB & 6dB & 99% Emission Bandwidth

### 9.1 Block Diagram Of Test Setup



### 9.2 Limit

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

(6dB bandwidth)>500kHz

### 9.3 Test Procedure

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW  $\geq 3 \cdot$  RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

6dB

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.

6. Allow the trace to stabilize.

7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

## 9.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

## 9.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.87V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	-26dB bandwidth (MHz)	Result
NVNT	a	5180	16.588	24.807	Pass
NVNT	a	5200	16.551	20.015	Pass
NVNT	a	5240	16.59	24.04	Pass
NVNT	n20	5180	17.63	26.145	Pass
NVNT	n20	5200	17.635	26.242	Pass
NVNT	n20	5240	17.647	24.991	Pass
NVNT	n40	5190	36.341	51.004	Pass
NVNT	n40	5230	36.295	55.649	Pass
NVNT	ac20	5180	17.62	26.337	Pass
NVNT	ac20	5200	17.629	22.216	Pass
NVNT	ac20	5240	17.634	26.004	Pass
NVNT	ac40	5190	36.326	54.27	Pass
NVNT	ac40	5230	36.363	47.962	Pass
NVNT	ac80	5210	75.516	82.16	Pass

