

TEST REPORT

Report No.: BCTC2510142481-4E

Applicant: SHENZHEN YUNJI INTELLIGENT TECHNOLOGY
CO.,LTD

Product Name: Smart Phone

Test Model: C68

Tested Date: 2025-10-13 to 2025-11-27

Issued Date: 2025-11-27

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



FCC ID: 2ANMU-C68

Product Name: Smart Phone
Trademark: OUKITEL
Model/Type reference: C68
C68 S, C68 E, C68 Pro, C68 Plus, C68 Ultra, C68 MAX, C68 GT
Prepared For: SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address: A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE,
GUANLAN, LONGHUA SHENZHEN, China
Manufacturer: SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address: A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE,
GUANLAN, LONGHUA SHENZHEN, 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: 2025-10-13
Sample tested Date: 2025-10-13 to 2025-11-27
Issue Date: 2025-11-27
Report No.: BCTC2510142481-4E
Test Standards: FCC Part15 15.407
ANSI C63.10-2020
KDB 789033 D02 v02r01
Test Results: PASS

Tested by:



Brave Zeng/ Project Handler

Approved by:



Zero Zhou/Reviewer

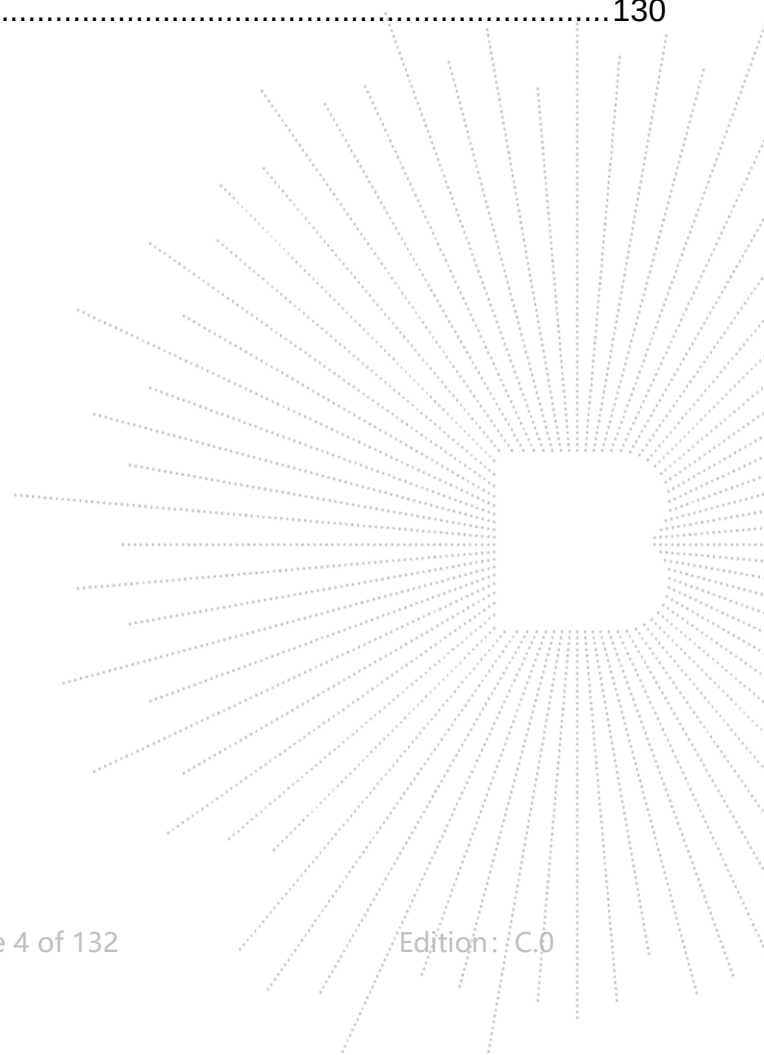
The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information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

Table Of Content

Test Report Declaration	Page
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	8
4.3 Support Equipment	9
4.4 Channel List	9
4.5 Test Mode	10
5. Test Facility And Test Instrument Used	11
5.1 Test Facility	11
5.2 Test Instrument Used	11
6. Conducted Emissions	13
6.1 Block Diagram Of Test Setup	13
6.2 Limit	13
6.3 Test Procedure	13
6.4 EUT Operating Conditions	13
6.5 Test Result	14
7. Radiated Emissions	16
7.1 Block Diagram Of Test Setup	16
7.2 Limit	17
7.3 Test Procedure	18
7.4 EUT Operating Conditions	19
7.5 Test Result	19
8. Power Spectral Density Test	34
8.1 Block Diagram Of Test Setup	34
8.2 Limit	34
8.3 Test Procedure	35
8.4 EUT Operating Conditions	35
8.5 Test Result	36
9. 26dB & 6dB & 99% Emission Bandwidth	51
9.1 Block Diagram Of Test Setup	51
9.2 Limit	51
9.3 Test Procedure	51
9.4 EUT Operating Conditions	52
9.5 Test Result	52
10. Maximum Conducted Output Power	82
10.1 Block Diagram Of Test Setup	82
10.2 Limit	82
10.3 Test Procedure	82
10.4 EUT Operating Conditions	83
10.5 Test Result	84
11. Out Of Band Emissions	85

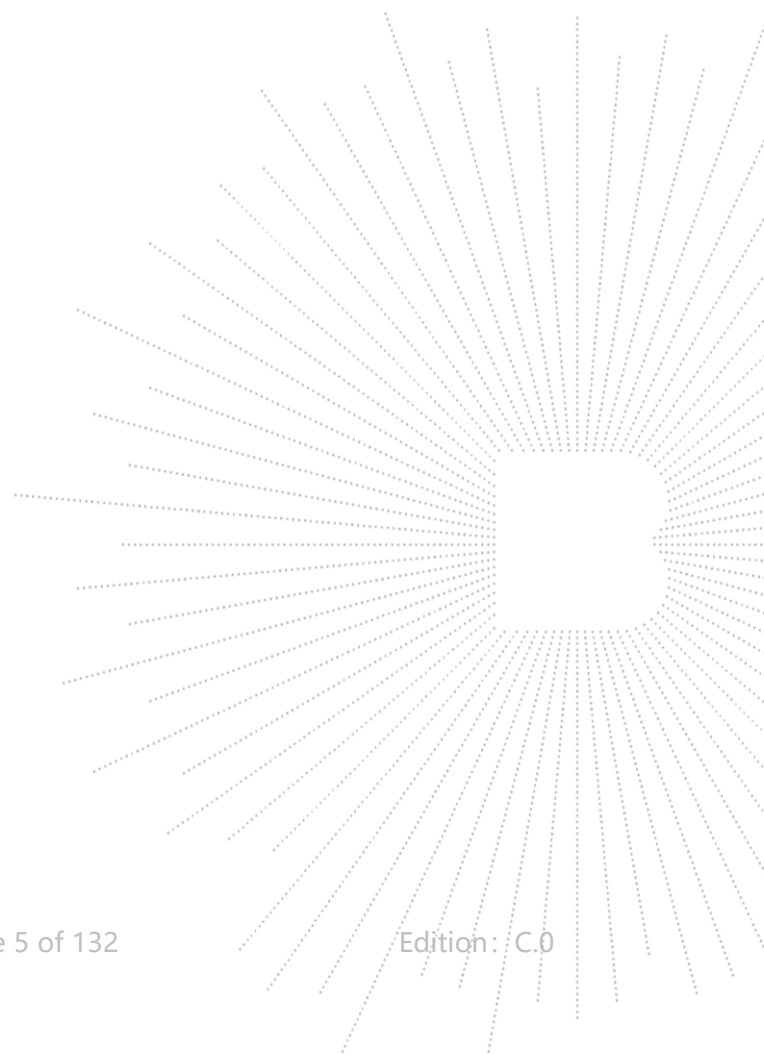
11.1	Block Diagram Of Test Setup.....	85
11.2	Limit	85
11.3	Test Procedure	85
11.4	EUT Operating Conditions	85
11.5	Test Result.....	86
12.	Spurious RF Conducted Emissions.....	98
12.1	Block Diagram Of Test Setup.....	98
12.2	Limit	98
12.3	Test Procedure	98
12.4	Test Result.....	98
13.	Frequency Stability Measurement.....	113
13.1	Block Diagram Of Test Setup.....	113
13.2	Limit	113
13.3	Test Procedure	113
13.4	Test Result.....	114
14.	Duty Cycle Of Test Signal	120
14.1	Standard Requirement	120
14.2	Formula.....	120
14.3	Test Procedure	120
14.4	Test Result.....	120
15.	Antenna Requirement	128
15.1	Limit	128
15.2	Test Result.....	128
16.	EUT Photographs.....	129
17.	EUT Test Setup Photographs.....	130

(Note: N/A Means Not Applicable)



1. Version

Report No.	Issue Date	Description	Approved
BCTC2510142481-4E	2025-11-27	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

Note: "N/A" means not applicable in this report.

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:	C68 C68 S, C68 E, C68 Pro, C68 Plus, C68 Ultra, C68 MAX, C68 GT
Model differences:	All the model are the same circuit and RF module, except model names. The test model is C68.
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported	802.11a/n/ac(20MHz channel bandwidth) 802.11n/ac(40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n(HT20)/ac(HT20); 5190-5230MHz for 802.11n(HT40)/ac(HT40); 5210MHz for 802.11 ac(HT80); 5745-5825 MHz for 802.11a/n(HT20)/ac(HT20); 5755-5795 MHz for 802.11n(HT40)/ac(HT40); 5775MHz for 802.11 ac(HT80);
Data Rate	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
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac; 4 channels for 802.11a/n20/ac20 in the 5180-5240MHz band ; 2 channels for 802.11 n40/ac40 in the 5190-5230MHz band ;
Number Of Channel	1 channels for 802.11 ac80 in the 5210MHz band ; 5 channels for 802.11a/n20/ac20 in the 5745-5825MHz band ; 2 channels for 802.11 n40/ac40 in the 5755-5795MHz band ; 1 channels for 802.11 ac80 in the 5775MHz band
Antenna installation:	Internal antenna 0.88 dBi
Antenna Gain:	Remark: ☒ The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. ☐ The antenna gain of the product is provided by the customer, and the test data is affected by the customer information.
Ratings:	DC 9V from adapter/DC 3.9V from battery
Adapter Information:	Model: HJ-PD18W-US Input: 100-240V~50/60Hz 0.6A Output: DC 5.0V 3.0A 15.0W OR DC 9.0V 2.0A 18.0W OR DC 12.0V 1.5A 18.0W MAX

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	C68	N/A	EUT
E-2	Adapter	/	HJ-PD18W-US	N/A	Auxiliary
E-3	TF card	SanDisk	32G	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	0M	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

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

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

802.11ac (80MHz) Carrier Frequency Channel	
Channel	Frequency (MHz)
42	5210

5.8G

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

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

802.11ac (80MHz) Carrier Frequency Channel	
Channel	Frequency (MHz)
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.

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	ESR	102075	May 08, 2025	May 07, 2026
LISN	R&S	ENV216	101375	May 14, 2025	May 13, 2026
LISN	Schwarzbeck	NSLK8127	8127739	Sep. 16, 2025	Sep. 15, 2026
Software	Frad	EZ-EMC	EMC-CON 3A1.1	\	\
Pulse limiter	Schwarzbeck	VTSD 9561-F	01323	May 14, 2025	May 13, 2026

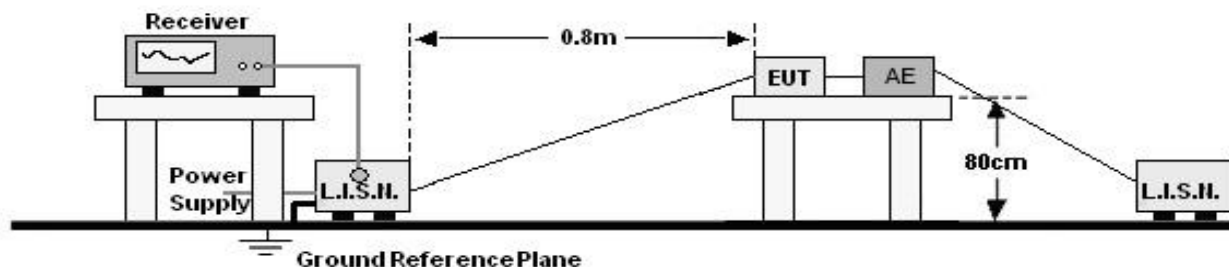
RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power meter	Keysight	E4419	\	May 14, 2025	May 13, 2026
Power Sensor (AV)	Keysight	E9300A	\	May 14, 2025	May 13, 2026
Signal Analyzer 20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 14, 2025	May 13, 2026
Spectrum Analyzer 9kHz-40GHz	R&S	FSP40	100363	May 14, 2025	May 13, 2026
Communication test set	R&S	CMW500	126173	May 14, 2025	May 13, 2026
Radio frequency control box	MAIWEI	MW200-RFC B	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

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 08, 2025	May 07, 2026
Receiver	R&S	ESR3P	101154	May 14, 2025	May 13, 2026
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 14, 2025	May 13, 2026
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 24, 2025	May 23, 2026
Loop Antenna(9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	May 24, 2025	May 23, 2026
Amplifier	SKET	LAPA_01G18 G-45dB	SK2021040901	May 14, 2025	May 13, 2026
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 24, 2025	May 23, 2026
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 14, 2025	May 13, 2026
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 14, 2025	May 13, 2026
Communication test set	R&S	CMW500	126173	Nov. 11, 2024	Nov. 10, 2025
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

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 08, 2025	May 07, 2026
Receiver	R&S	ESR17	100010	Oct. 31, 2025	Oct. 30, 2026
Amplifier	Schwarzbeck	BBV9745	9744-0370	Oct. 31, 2025	Oct. 30, 2026
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 24, 2025	May 23, 2026
Loop Antenna 9kHz-30MHz	Schwarzbeck	FMZB1519B	00014	May 24, 2025	May 23, 2026
Amplifier	SKET	LAPA_01G18 G-45dB	SK2021040901	May 14, 2025	May 13, 2026
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 24, 2025	May 23, 2026
Amplifier 18GHz-40GHz	MITEQ	TTA1840-35-HG	2034381	May 14, 2025	May 13, 2026
Horn Antenna 18GHz-40GHz	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer 9kHz-40GHz	R&S	FSP40	100363	May 14, 2025	May 13, 2026
Communication test set	R&S	CMW500	126173	Nov. 11. 2024	Nov. 10, 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:

- *Decreasing linearly with logarithm of frequency.
- 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

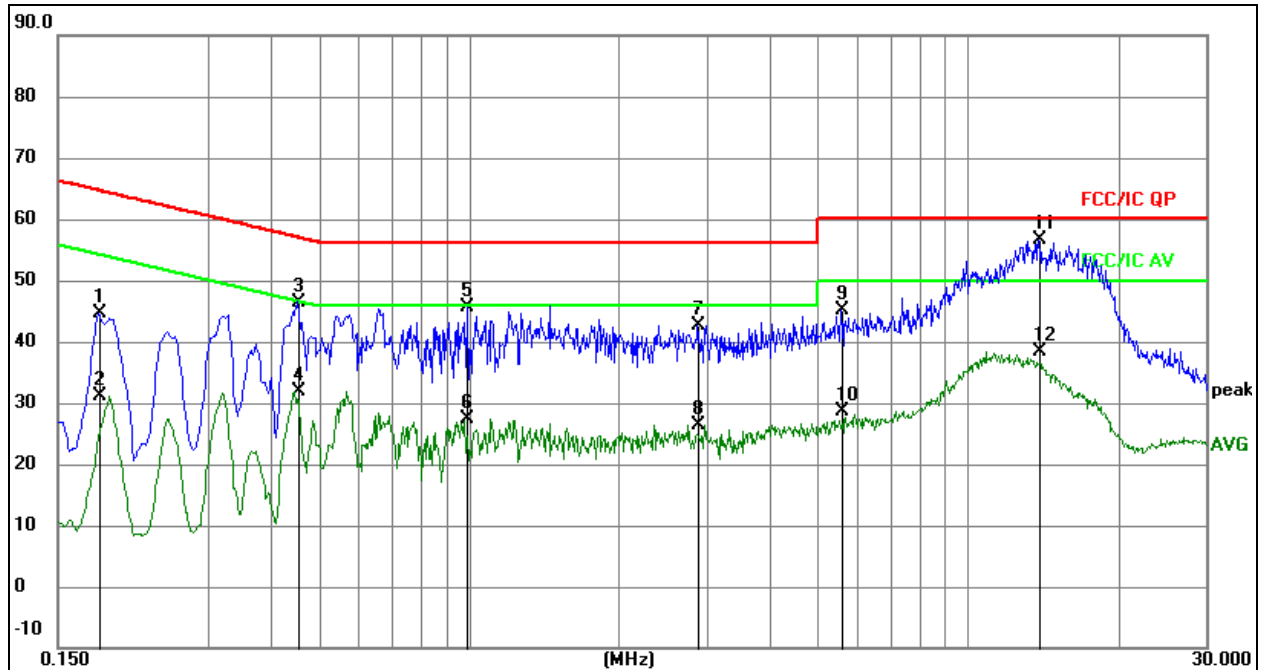
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.8 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak 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:	25.1 °C	Relative Humidity:	54 %
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4	Test Voltage :	AC 120V/60Hz

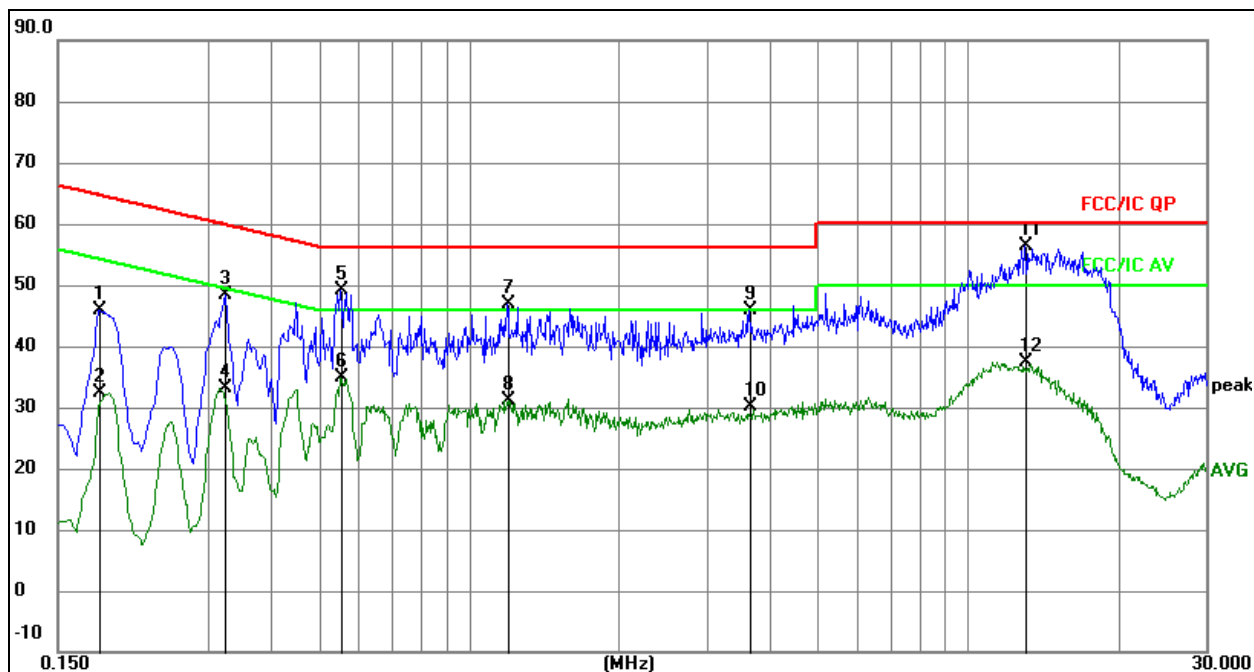


Remark:

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. MHz	Reading Level	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1815	24.59	20.04	44.63	64.42	-19.79	QP
2		0.1815	11.20	20.04	31.24	54.42	-23.18	AVG
3		0.4560	26.44	20.06	46.50	56.77	-10.27	QP
4		0.4560	11.92	20.06	31.98	46.77	-14.79	AVG
5		0.9915	25.33	20.27	45.60	56.00	-10.40	QP
6		0.9915	7.00	20.27	27.27	46.00	-18.73	AVG
7		2.8815	22.38	20.37	42.75	56.00	-13.25	QP
8		2.8815	5.95	20.37	26.32	46.00	-19.68	AVG
9		5.5725	24.40	20.78	45.18	60.00	-14.82	QP
10		5.5725	7.83	20.78	28.61	50.00	-21.39	AVG
11	*	13.8660	34.51	22.22	56.73	60.00	-3.27	QP
12		13.8660	16.14	22.22	38.36	50.00	-11.64	AVG

Temperature:	25.1 °C	Relative Humidity:	54 %
Pressure:	101KPa	Phase :	N
Test Mode:	Mode 4	Test Voltage :	AC 120V/60Hz


Remark:

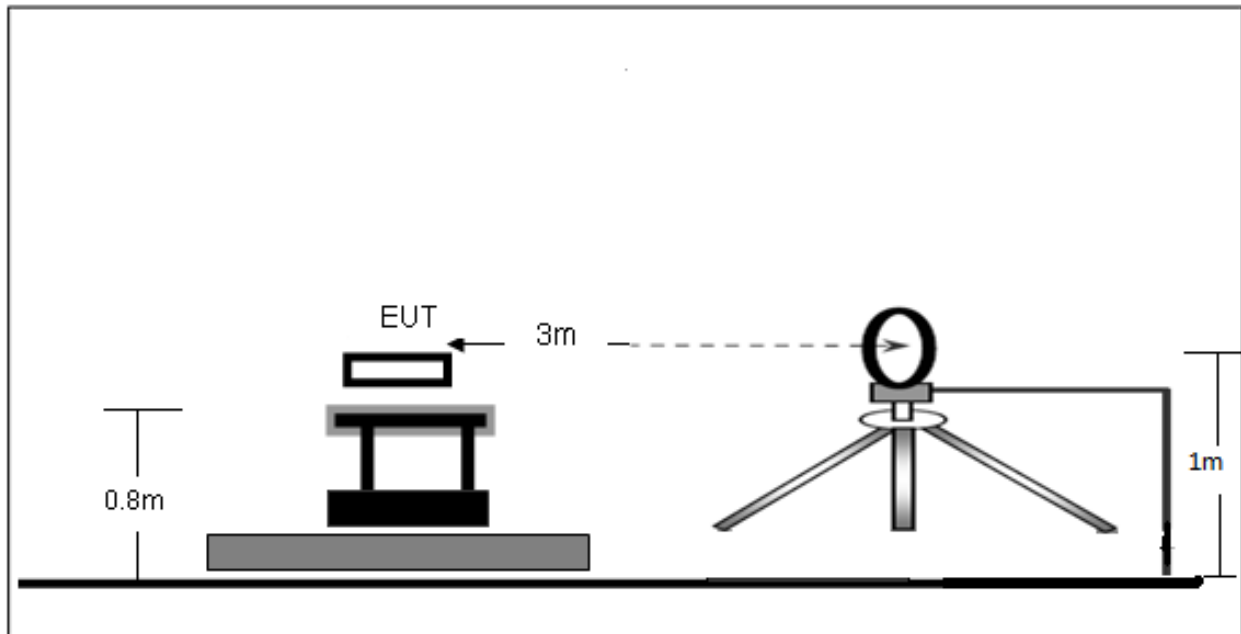
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1806	25.82	20.04	45.86	64.46	-18.60	QP
2		0.1806	12.30	20.04	32.34	54.46	-22.12	AVG
3		0.3251	28.32	20.05	48.37	59.58	-11.21	QP
4		0.3251	13.15	20.05	33.20	49.58	-16.38	AVG
5		0.5523	29.14	20.11	49.25	56.00	-6.75	QP
6		0.5523	14.65	20.11	34.76	46.00	-11.24	AVG
7		1.1907	26.51	20.25	46.76	56.00	-9.24	QP
8		1.1907	10.80	20.25	31.05	46.00	-14.95	AVG
9		3.6418	25.26	20.53	45.79	56.00	-10.21	QP
10		3.6418	9.61	20.53	30.14	46.00	-15.86	AVG
11	*	12.9885	34.27	22.03	56.30	60.00	-3.70	QP
12		12.9885	15.31	22.03	37.34	50.00	-12.66	AVG

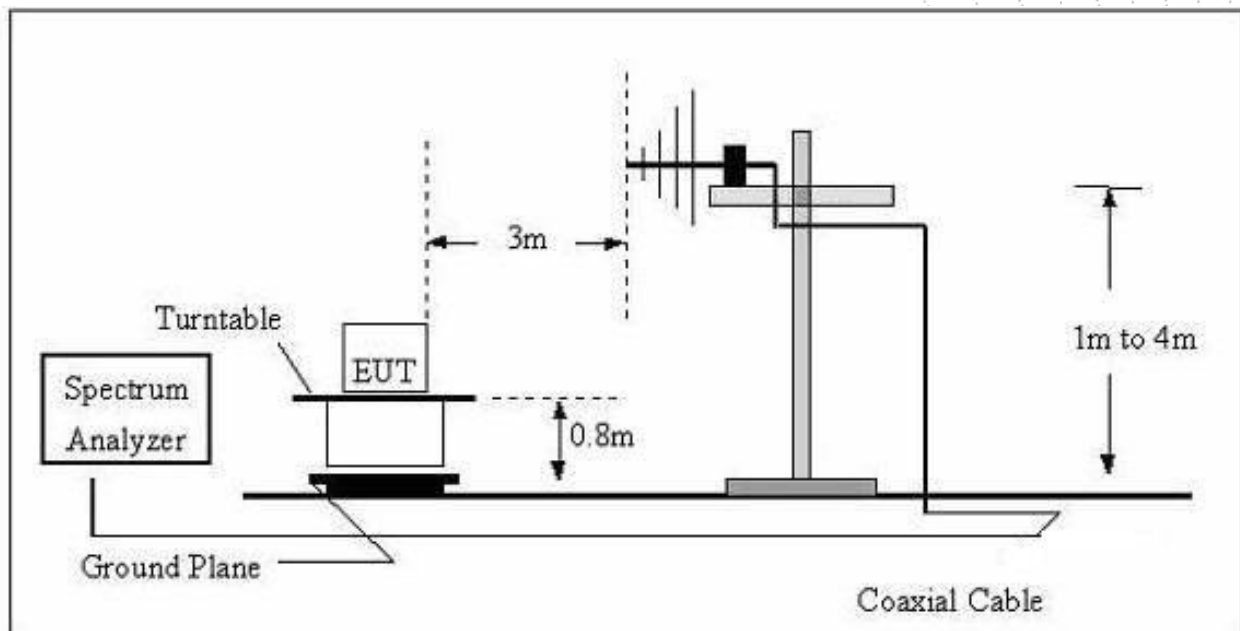
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

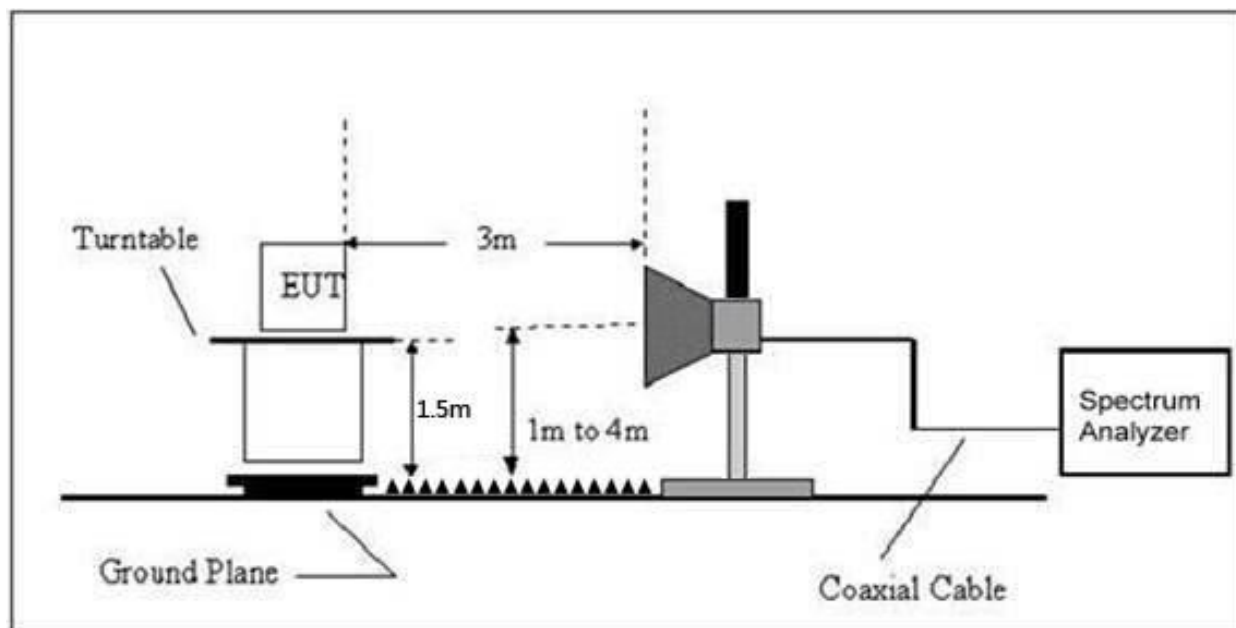
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log(2400/F(\text{kHz})) + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log(24000/F(\text{kHz})) + 40$
1.705 ~ 30	30	30	$100 * 30$	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

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 C63.10-2020. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2020 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

- 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.
- 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.
- 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.
- 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.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

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

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:	24.5 °C	Relative Humidity:	55 %
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization :	--

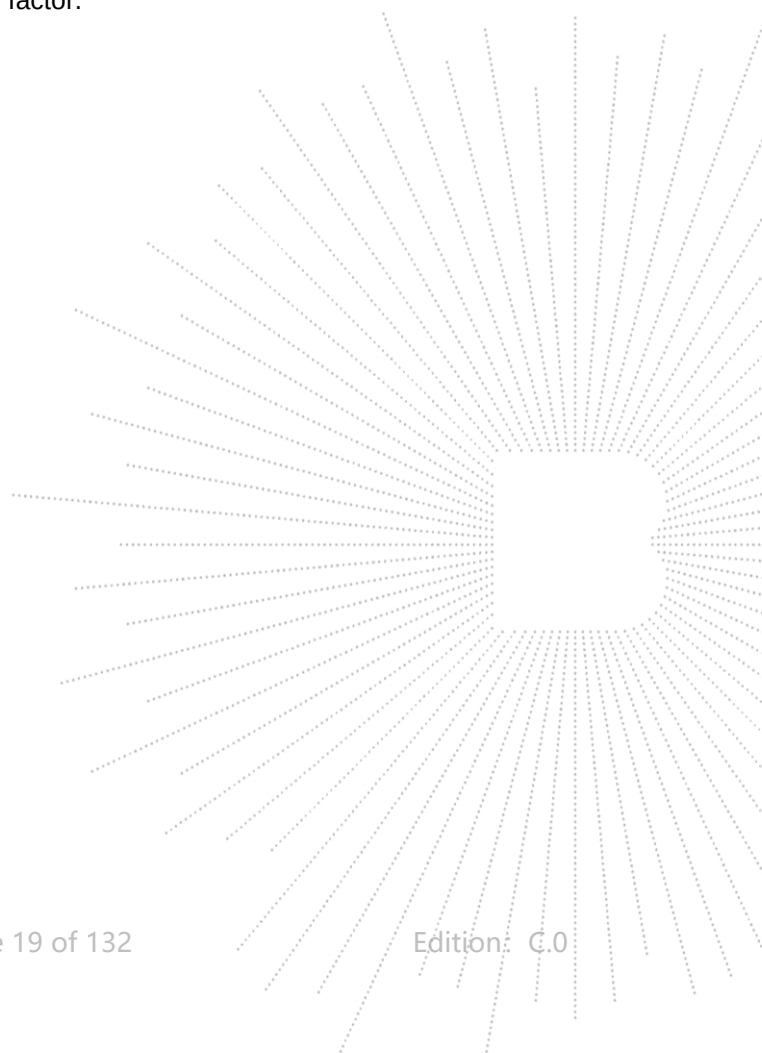
Freq. (MHz)	Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	State P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

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

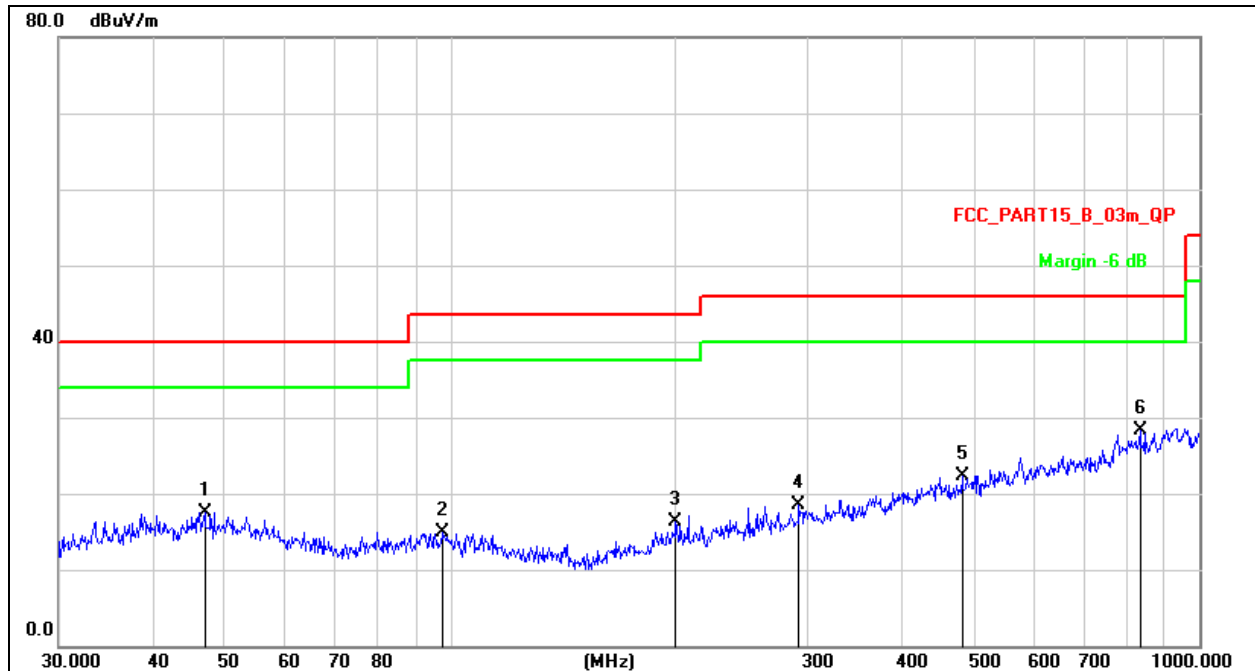
Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

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



Between 30MHz – 1GHz

Temperature:	24.5 °C	Relative Humidity:	55 %
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4	Test Voltage:	AC 120V/60Hz

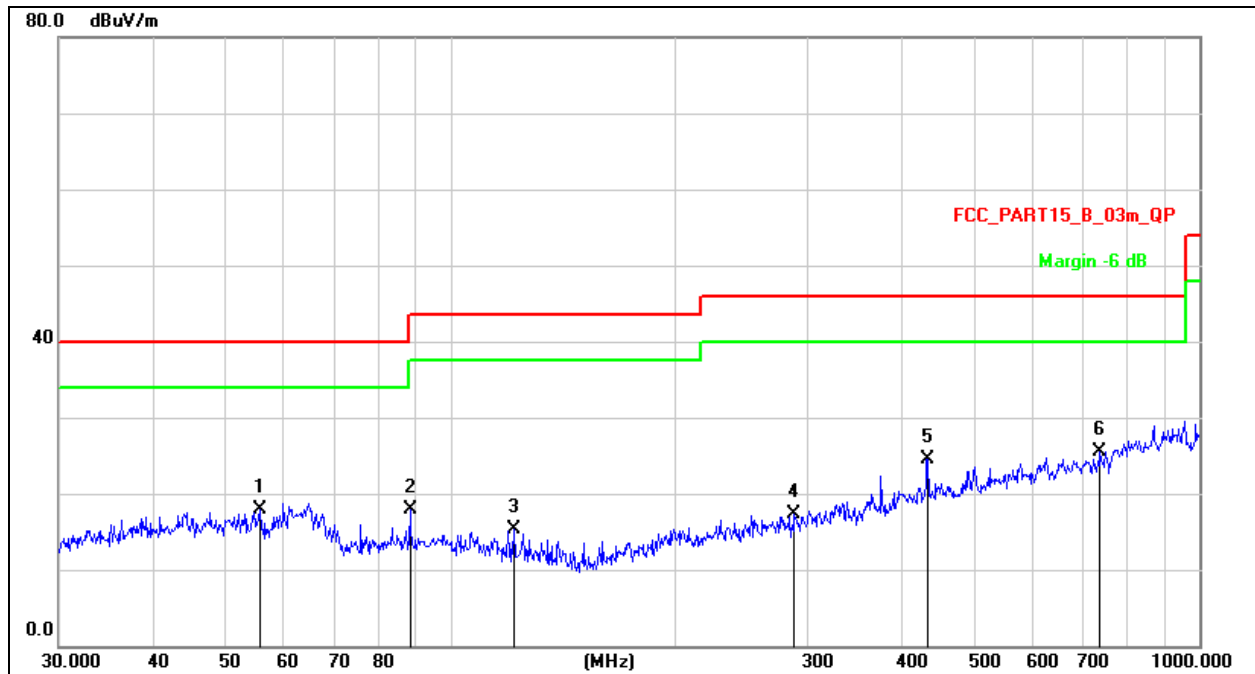


Remark:

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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		46.9948	24.58	-7.01	17.57	40.00	-22.43	QP
2		97.4560	23.44	-8.61	14.83	43.50	-28.67	QP
3		199.9856	24.44	-8.17	16.27	43.50	-27.23	QP
4		292.0583	24.38	-5.94	18.44	46.00	-27.56	QP
5		482.2156	23.79	-1.52	22.27	46.00	-23.73	QP
6	*	833.3171	24.30	4.08	28.38	46.00	-17.62	QP

Temperature:	24.5 °C	Relative Humidity:	55 %
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 4	Test Voltage:	AC 120V/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		55.6094	25.60	-7.67	17.93	40.00	-22.07	QP
2		88.3421	27.02	-9.16	17.86	43.50	-25.64	QP
3		121.5486	25.07	-9.75	15.32	43.50	-28.18	QP
4		287.9904	23.43	-6.04	17.39	46.00	-28.61	QP
5		434.0651	27.01	-2.48	24.53	46.00	-21.47	QP
6	*	737.0714	23.32	2.19	25.51	46.00	-20.49	QP

Between 1GHz – 40GHz

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.009	71.88	-20.73	51.15	68.20	-17.05	PK
Vertical	4434.009	59.72	-20.73	38.99	54.00	-15.01	AV
Vertical	10360.139	63.42	-9.36	54.06	68.20	-14.14	PK
Vertical	10360.139	49.63	-9.36	40.27	54.00	-13.73	AV
Vertical	15540.193	63.64	-7.84	55.80	74.00	-18.20	PK
Vertical	15540.193	49.49	-7.84	41.65	54.00	-12.35	AV
Horizontal	4434.027	74.13	-20.73	53.40	68.20	-14.80	PK
Horizontal	4434.027	59.46	-20.73	38.73	54.00	-15.27	AV
Horizontal	10360.152	61.75	-9.36	52.39	68.20	-15.81	PK
Horizontal	10360.152	49.80	-9.36	40.44	54.00	-13.56	AV
Horizontal	15540.090	64.97	-7.84	57.13	74.00	-16.87	PK
Horizontal	15540.090	49.52	-7.84	41.68	54.00	-12.32	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.156	74.46	-20.42	54.04	74.00	-19.96	PK
Vertical	4592.156	59.18	-20.42	38.76	54.00	-15.24	AV
Vertical	10400.059	62.91	-9.30	53.61	68.20	-14.59	PK
Vertical	10400.059	49.58	-9.30	40.28	54.00	-13.72	AV
Vertical	15600.112	60.99	-7.82	53.17	74.00	-20.83	PK
Vertical	15600.112	49.11	-7.82	41.29	54.00	-12.71	AV
Horizontal	4592.089	70.95	-20.42	50.53	74.00	-23.47	PK
Horizontal	4592.089	59.32	-20.42	38.90	54.00	-15.10	AV
Horizontal	10400.192	62.94	-9.30	53.64	68.20	-14.56	PK
Horizontal	10400.192	49.34	-9.30	40.04	54.00	-13.96	AV
Horizontal	15600.183	63.38	-7.82	55.56	74.00	-18.44	PK
Horizontal	15600.183	49.31	-7.82	41.49	54.00	-12.51	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.194	73.78	-20.12	53.65	74.00	-20.35	PK
Vertical	4739.194	59.49	-20.12	39.37	54.00	-14.63	AV
Vertical	10480.032	62.93	-9.18	53.75	68.20	-14.45	PK
Vertical	10480.032	49.66	-9.18	40.48	54.00	-13.52	AV
Vertical	15720.059	60.25	-7.78	52.47	74.00	-21.53	PK
Vertical	15720.059	49.04	-7.78	41.26	54.00	-12.74	AV
Horizontal	4739.112	71.90	-20.12	51.78	74.00	-22.22	PK
Horizontal	4739.112	59.98	-20.12	39.86	54.00	-14.14	AV
Horizontal	10480.042	64.09	-9.18	54.91	68.20	-13.29	PK
Horizontal	10480.042	49.26	-9.18	40.08	54.00	-13.92	AV
Horizontal	15720.181	64.24	-7.78	56.46	74.00	-17.54	PK
Horizontal	15720.181	49.39	-7.78	41.61	54.00	-12.39	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.053	71.03	-20.73	50.29	68.20	-17.91	PK
Vertical	4434.053	59.67	-20.73	38.93	54.00	-15.07	AV
Vertical	10360.032	64.96	-9.36	55.60	68.20	-12.60	PK
Vertical	10360.032	49.45	-9.36	40.09	54.00	-13.91	AV
Vertical	15540.129	64.43	-7.84	56.59	74.00	-17.41	PK
Vertical	15540.129	49.06	-7.84	41.22	54.00	-12.78	AV
Horizontal	4434.139	73.82	-20.73	53.08	68.20	-15.12	PK
Horizontal	4434.139	59.06	-20.73	38.32	54.00	-15.68	AV
Horizontal	10360.031	60.72	-9.36	51.36	68.20	-16.84	PK
Horizontal	10360.031	49.16	-9.36	39.80	54.00	-14.20	AV
Horizontal	15540.160	64.62	-7.84	56.78	74.00	-17.22	PK
Horizontal	15540.160	49.18	-7.84	41.34	54.00	-12.66	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.175	74.21	-20.42	53.79	74.00	-20.21	PK
Vertical	4592.175	59.01	-20.42	38.59	54.00	-15.41	AV
Vertical	10400.013	63.42	-9.30	54.12	68.20	-14.08	PK
Vertical	10400.013	49.86	-9.30	40.56	54.00	-13.44	AV
Vertical	15600.114	61.91	-7.82	54.09	74.00	-19.91	PK
Vertical	15600.114	49.80	-7.82	41.98	54.00	-12.02	AV
Horizontal	4592.089	71.37	-20.42	50.95	74.00	-23.05	PK
Horizontal	4592.089	59.72	-20.42	39.30	54.00	-14.70	AV
Horizontal	10400.162	62.32	-9.30	53.02	68.20	-15.18	PK
Horizontal	10400.162	49.51	-9.30	40.21	54.00	-13.79	AV
Horizontal	15600.186	60.41	-7.82	52.59	74.00	-21.41	PK
Horizontal	15600.186	49.67	-7.82	41.85	54.00	-12.15	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.031	73.69	-20.12	53.57	74.00	-20.43	PK
Vertical	4739.031	59.83	-20.12	39.71	54.00	-14.29	AV
Vertical	10480.027	62.50	-9.18	53.32	68.20	-14.88	PK
Vertical	10480.027	49.14	-9.18	39.96	54.00	-14.04	AV
Vertical	15720.092	64.34	-7.78	56.56	74.00	-17.44	PK
Vertical	15720.092	49.94	-7.78	42.16	54.00	-11.84	AV
Horizontal	4739.100	71.01	-20.12	50.89	74.00	-23.11	PK
Horizontal	4739.100	59.52	-20.12	39.40	54.00	-14.60	AV
Horizontal	10480.129	60.23	-9.18	51.05	68.20	-17.15	PK
Horizontal	10480.129	49.85	-9.18	40.67	54.00	-13.33	AV
Horizontal	15720.054	61.10	-7.78	53.32	74.00	-20.68	PK
Horizontal	15720.054	49.04	-7.78	41.26	54.00	-12.74	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(5.1G) - 802.11n-HT40
------------	-------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.053	70.53	-20.73	49.80	68.20	-18.40	PK
Vertical	4434.053	59.34	-20.73	38.61	54.00	-15.39	AV
Vertical	10380.024	63.96	-9.33	54.63	68.20	-13.57	PK
Vertical	10380.024	49.16	-9.33	39.83	54.00	-14.17	AV
Vertical	15570.166	62.58	-7.83	54.75	74.00	-19.25	PK
Vertical	15570.166	49.92	-7.83	42.09	54.00	-11.91	AV
Horizontal	4434.113	73.37	-20.73	52.64	74.00	-21.36	PK
Horizontal	4434.113	59.45	-20.73	38.72	54.00	-15.28	AV
Horizontal	10380.111	62.21	-9.33	52.88	68.20	-15.32	PK
Horizontal	10380.111	49.15	-9.33	39.82	54.00	-14.18	AV
Horizontal	15570.172	62.75	-7.83	54.92	74.00	-19.08	PK
Horizontal	15570.172	49.94	-7.83	42.11	54.00	-11.89	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.042	71.94	-20.12	51.82	68.20	-16.38	PK
Vertical	4739.042	59.54	-20.12	39.42	54.00	-14.58	AV
Vertical	10460.050	62.66	-9.21	53.45	68.20	-14.75	PK
Vertical	10460.050	49.10	-9.21	39.89	54.00	-14.11	AV
Vertical	15690.199	62.35	-7.79	54.56	74.00	-19.44	PK
Vertical	15690.199	49.76	-7.79	41.97	54.00	-12.03	AV
Horizontal	4739.045	71.99	-20.12	51.87	68.20	-16.33	PK
Horizontal	4739.045	59.49	-20.12	39.37	54.00	-14.63	AV
Horizontal	10460.032	63.54	-9.21	54.33	68.20	-13.87	PK
Horizontal	10460.032	49.30	-9.21	40.09	54.00	-13.91	AV
Horizontal	15690.121	64.71	-7.79	56.92	74.00	-17.08	PK
Horizontal	15690.121	49.58	-7.79	41.79	54.00	-12.21	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.063	74.91	-20.73	54.18	68.20	-14.02	PK
Vertical	4434.063	59.60	-20.73	38.86	54.00	-15.14	AV
Vertical	10360.182	60.53	-9.36	51.17	68.20	-17.03	PK
Vertical	10360.182	49.55	-9.36	40.19	54.00	-13.81	AV
Vertical	15540.010	64.11	-7.84	56.27	74.00	-17.73	PK
Vertical	15540.010	49.09	-7.84	41.25	54.00	-12.75	AV
Horizontal	4434.038	70.56	-20.73	49.83	68.20	-18.37	PK
Horizontal	4434.038	59.02	-20.73	38.29	54.00	-15.71	AV
Horizontal	10360.156	61.94	-9.36	52.58	68.20	-15.62	PK
Horizontal	10360.156	50.00	-9.36	40.64	54.00	-13.36	AV
Horizontal	15540.142	64.03	-7.84	56.19	74.00	-17.81	PK
Horizontal	15540.142	49.87	-7.84	42.03	54.00	-11.97	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.069	74.54	-20.42	54.12	74.00	-19.88	PK
Vertical	4592.069	59.38	-20.42	38.96	54.00	-15.04	AV
Vertical	10400.182	61.14	-9.30	51.84	68.20	-16.36	PK
Vertical	10400.182	49.10	-9.30	39.80	54.00	-14.20	AV
Vertical	15600.128	62.05	-7.82	54.23	74.00	-19.77	PK
Vertical	15600.128	49.78	-7.82	41.96	54.00	-12.04	AV
Horizontal	4592.105	74.72	-20.42	54.30	74.00	-19.70	PK
Horizontal	4592.105	59.61	-20.42	39.19	54.00	-14.81	AV
Horizontal	10400.046	64.04	-9.30	54.74	68.20	-13.46	PK
Horizontal	10400.046	49.65	-9.30	40.35	54.00	-13.65	AV
Horizontal	15600.164	61.28	-7.82	53.46	74.00	-20.54	PK
Horizontal	15600.164	49.92	-7.82	42.10	54.00	-11.90	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.101	73.06	-20.12	52.94	74.00	-21.06	PK
Vertical	4739.101	59.77	-20.12	39.64	54.00	-14.36	AV
Vertical	10480.019	61.14	-9.18	51.96	68.20	-16.24	PK
Vertical	10480.019	49.12	-9.18	39.94	54.00	-14.06	AV
Vertical	15720.089	64.45	-7.78	56.67	74.00	-17.33	PK
Vertical	15720.089	49.56	-7.78	41.78	54.00	-12.22	AV
Horizontal	4739.124	74.55	-20.12	54.43	74.00	-19.57	PK
Horizontal	4739.124	59.06	-20.12	38.94	54.00	-15.06	AV
Horizontal	10480.052	62.93	-9.18	53.75	68.20	-14.45	PK
Horizontal	10480.052	49.06	-9.18	39.88	54.00	-14.12	AV
Horizontal	15720.045	63.77	-7.78	55.99	74.00	-18.01	PK
Horizontal	15720.045	49.50	-7.78	41.72	54.00	-12.28	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.097	73.83	-20.73	53.10	68.20	-15.10	PK
Vertical	4434.097	59.38	-20.73	38.65	54.00	-15.35	AV
Vertical	10380.050	61.52	-9.33	52.19	68.20	-16.01	PK
Vertical	10380.050	49.86	-9.33	40.53	54.00	-13.47	AV
Vertical	15570.140	64.85	-7.83	57.02	74.00	-16.98	PK
Vertical	15570.140	49.89	-7.83	42.06	54.00	-11.94	AV
Horizontal	4434.157	70.91	-20.73	50.17	74.00	-23.83	PK
Horizontal	4434.157	59.05	-20.73	38.32	54.00	-15.68	AV
Horizontal	10380.032	62.30	-9.33	52.97	68.20	-15.23	PK
Horizontal	10380.032	49.09	-9.33	39.76	54.00	-14.24	AV
Horizontal	15570.148	63.05	-7.83	55.22	74.00	-18.78	PK
Horizontal	15570.148	49.12	-7.83	41.29	54.00	-12.71	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.143	72.98	-20.12	52.86	68.20	-15.34	PK
Vertical	4739.143	59.27	-20.12	39.15	54.00	-14.85	AV
Vertical	10460.107	62.87	-9.21	53.66	68.20	-14.54	PK
Vertical	10460.107	49.91	-9.21	40.70	54.00	-13.30	AV
Vertical	15690.022	61.80	-7.79	54.01	74.00	-19.99	PK
Vertical	15690.022	49.16	-7.79	41.37	54.00	-12.63	AV
Horizontal	4739.180	72.07	-20.12	51.94	68.20	-16.26	PK
Horizontal	4739.180	59.31	-20.12	39.19	54.00	-14.81	AV
Horizontal	10460.025	60.44	-9.21	51.23	68.20	-16.97	PK
Horizontal	10460.025	49.92	-9.21	40.71	54.00	-13.29	AV
Horizontal	15690.092	63.53	-7.79	55.74	74.00	-18.26	PK
Horizontal	15690.092	49.29	-7.79	41.50	54.00	-12.50	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5210 MHz)-Above 1G							
Vertical	4434.191	73.74	-20.73	53.01	68.20	-15.19	PK
Vertical	4434.191	59.21	-20.73	38.48	54.00	-15.52	AV
Vertical	10420.110	63.94	-9.27	54.67	68.20	-13.53	PK
Vertical	10420.110	49.77	-9.27	40.50	54.00	-13.50	AV
Vertical	15630.181	60.66	-7.81	52.85	74.00	-21.15	PK
Vertical	15630.181	49.66	-7.81	41.85	54.00	-12.15	AV
Horizontal	4434.111	70.26	-20.73	49.52	68.20	-18.68	PK
Horizontal	4434.111	59.53	-20.73	38.80	54.00	-15.20	AV
Horizontal	10420.057	40.85	9.27	50.12	68.20	-18.08	PK
Horizontal	10420.057	29.61	9.27	38.88	54.00	-15.12	AV
Horizontal	15630.094	61.69	-7.81	53.88	74.00	-20.12	PK
Horizontal	15630.094	49.85	-7.81	42.04	54.00	-11.96	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.126	73.42	-20.24	53.18	74.00	-20.82	PK
Vertical	4679.126	59.97	-20.24	39.73	54.00	-14.27	AV
Vertical	11490.029	63.09	-8.79	54.30	68.20	-13.90	PK
Vertical	11490.029	49.35	-8.79	40.56	54.00	-13.44	AV
Vertical	17235.119	58.57	-3.18	55.39	68.20	-12.81	PK
Vertical	17235.119	44.50	-3.18	41.32	54.00	-12.68	AV
Horizontal	4679.077	73.84	-20.73	53.11	74.00	-20.89	PK
Horizontal	4679.077	59.71	-20.73	38.98	54.00	-15.02	AV
Horizontal	11490.106	62.31	-8.79	53.52	68.20	-14.68	PK
Horizontal	11490.106	49.73	-8.79	40.94	54.00	-13.06	AV
Horizontal	17235.054	56.22	-3.18	53.04	68.20	-15.16	PK
Horizontal	17235.054	44.69	-3.18	41.51	54.00	-12.49	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.047	72.97	-20.42	52.56	74.00	-21.44	PK
Vertical	4592.047	59.69	-20.42	39.28	54.00	-14.72	AV
Vertical	11570.132	62.17	-8.86	53.31	68.20	-14.89	PK
Vertical	11570.132	49.16	-8.86	40.30	54.00	-13.70	AV
Vertical	17355.111	59.33	-2.52	56.81	68.20	-11.39	PK
Vertical	17355.111	44.42	-2.52	41.90	54.00	-12.10	AV
Horizontal	4592.037	74.41	-20.42	54.00	74.00	-20.00	PK
Horizontal	4592.037	59.56	-20.42	39.14	54.00	-14.86	AV
Horizontal	11570.077	62.38	-8.86	53.52	68.20	-14.68	PK
Horizontal	11570.077	49.81	-8.86	40.95	54.00	-13.05	AV
Horizontal	17355.001	55.09	-2.52	52.57	68.20	-15.63	PK
Horizontal	17355.001	44.29	-2.52	41.77	54.00	-12.23	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.019	73.13	-18.93	54.20	68.20	-14.00	PK
Vertical	6039.019	59.55	-18.93	40.61	54.00	-13.39	AV
Vertical	11650.150	62.56	-8.92	53.64	74.00	-20.36	PK
Vertical	11650.150	49.62	-8.92	40.70	54.00	-13.30	AV
Vertical	17475.177	58.58	-1.86	56.72	68.20	-11.48	PK
Vertical	17475.177	44.30	-1.86	42.44	54.00	-11.56	AV
Horizontal	6039.037	73.84	-18.93	54.91	68.20	-13.29	PK
Horizontal	6039.037	59.60	-18.93	40.67	54.00	-13.33	AV
Horizontal	11650.040	61.33	-8.92	52.41	74.00	-21.59	PK
Horizontal	11650.040	49.12	-8.92	40.20	54.00	-13.80	AV
Horizontal	17475.107	55.43	-1.86	53.57	68.20	-14.63	PK
Horizontal	17475.107	44.53	-1.86	42.67	54.00	-11.33	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.143	71.41	-20.24	51.17	74.00	-22.83	PK
Vertical	4679.143	59.21	-20.24	38.97	54.00	-15.03	AV
Vertical	11490.071	63.47	-8.79	54.68	68.20	-13.52	PK
Vertical	11490.071	49.75	-8.79	40.96	54.00	-13.04	AV
Vertical	17235.075	55.38	-3.18	52.20	68.20	-16.00	PK
Vertical	17235.075	44.10	-3.18	40.92	54.00	-13.08	AV
Horizontal	4679.119	70.02	-20.24	49.78	74.00	-24.22	PK
Horizontal	4679.119	59.06	-20.24	38.82	54.00	-15.18	AV
Horizontal	11490.114	64.39	-8.79	55.60	68.20	-12.60	PK
Horizontal	11490.114	49.02	-8.79	40.23	54.00	-13.77	AV
Horizontal	17235.176	55.39	-3.18	52.21	68.20	-15.99	PK
Horizontal	17235.176	44.46	-3.18	41.28	54.00	-12.72	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.051	73.30	-20.42	52.88	74.00	-21.12	PK
Vertical	4592.051	59.77	-20.42	39.35	54.00	-14.65	AV
Vertical	11570.071	62.66	-8.86	53.80	68.20	-14.40	PK
Vertical	11570.071	49.35	-8.86	40.49	54.00	-13.51	AV
Vertical	17355.028	56.25	-2.52	53.73	68.20	-14.47	PK
Vertical	17355.028	44.80	-2.52	42.28	54.00	-11.72	AV
Horizontal	4592.116	71.91	-20.42	51.49	74.00	-22.51	PK
Horizontal	4592.116	59.40	-20.42	38.98	54.00	-15.02	AV
Horizontal	11570.093	61.28	-8.86	52.42	68.20	-15.78	PK
Horizontal	11570.093	49.49	-8.86	40.63	54.00	-13.37	AV
Horizontal	17355.120	57.25	-2.52	54.73	68.20	-13.47	PK
Horizontal	17355.120	44.17	-2.52	41.65	54.00	-12.35	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.143	71.09	-18.93	52.16	68.20	-16.04	PK
Vertical	6039.143	59.00	-18.93	40.07	54.00	-13.93	AV
Vertical	11650.108	62.45	-8.92	53.53	74.00	-20.47	PK
Vertical	11650.108	49.84	-8.92	40.92	54.00	-13.08	AV
Vertical	17475.105	55.48	-1.86	53.62	68.20	-14.58	PK
Vertical	17475.105	44.68	-1.86	42.82	54.00	-11.18	AV
Horizontal	6039.141	71.58	-18.93	52.65	68.20	-15.55	PK
Horizontal	6039.141	59.60	-18.93	40.67	54.00	-13.33	AV
Horizontal	11650.064	64.64	-8.92	55.72	74.00	-18.28	PK
Horizontal	11650.064	49.99	-8.92	41.07	54.00	-12.93	AV
Horizontal	17475.150	58.32	-1.86	56.46	68.20	-11.74	PK
Horizontal	17475.150	44.49	-1.86	42.63	54.00	-11.37	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.076	74.00	-20.24	53.76	74.00	-20.24	PK
Vertical	4679.076	59.28	-20.24	39.04	54.00	-14.96	AV
Vertical	11510.191	61.66	-8.81	52.85	74.00	-21.15	PK
Vertical	11510.191	49.74	-8.81	40.93	54.00	-13.07	AV
Vertical	17265.179	59.95	-3.01	56.94	68.20	-11.26	PK
Vertical	17265.179	44.72	-3.01	41.71	54.00	-12.29	AV
Horizontal	4679.036	74.05	-20.24	53.81	74.00	-20.19	PK
Horizontal	4679.036	59.69	-20.24	39.45	54.00	-14.55	AV
Horizontal	11510.000	64.27	-8.81	55.46	74.00	-18.54	PK
Horizontal	11510.000	49.03	-8.81	40.22	54.00	-13.78	AV
Horizontal	17265.105	56.19	-3.01	53.18	68.20	-15.02	PK
Horizontal	17265.105	44.27	-3.01	41.26	54.00	-12.74	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.040	72.60	-18.93	53.67	68.20	-14.53	PK
Vertical	6039.040	59.38	-18.93	40.45	54.00	-13.55	AV
Vertical	11590.037	60.85	-8.87	51.98	74.00	-22.02	PK
Vertical	11590.037	49.23	-8.87	40.36	54.00	-13.64	AV
Vertical	17385.071	58.55	-2.35	56.20	68.20	-12.00	PK
Vertical	17385.071	44.55	-2.35	42.20	54.00	-11.80	AV
Horizontal	6039.063	72.01	-18.93	53.08	68.20	-15.12	PK
Horizontal	6039.063	59.03	-18.93	40.09	54.00	-13.91	AV
Horizontal	11590.189	64.56	-8.87	55.69	74.00	-18.31	PK
Horizontal	11590.189	49.33	-8.87	40.46	54.00	-13.54	AV
Horizontal	17385.138	57.13	-2.35	54.78	68.20	-13.42	PK
Horizontal	17385.138	44.21	-2.35	41.86	54.00	-12.14	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-HT20

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.000	74.19	-20.24	53.94	74.00	-20.06	PK
Vertical	4679.000	59.76	-20.24	39.52	54.00	-14.48	AV
Vertical	11490.010	63.61	-8.79	54.82	68.20	-13.38	PK
Vertical	11490.010	49.00	-8.79	40.21	54.00	-13.79	AV
Vertical	17235.151	58.99	-3.18	55.81	68.20	-12.39	PK
Vertical	17235.151	44.78	-3.18	41.60	54.00	-12.40	AV
Horizontal	4679.085	73.56	-20.24	53.32	74.00	-20.68	PK
Horizontal	4679.085	59.44	-20.24	39.19	54.00	-14.81	AV
Horizontal	11490.046	60.10	-8.79	51.31	68.20	-16.89	PK
Horizontal	11490.046	49.51	-8.79	40.72	54.00	-13.28	AV
Horizontal	17235.143	57.67	-3.18	54.49	68.20	-13.71	PK
Horizontal	17235.143	44.05	-3.18	40.87	54.00	-13.13	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.163	73.32	-20.42	52.91	74.00	-21.09	PK
Vertical	4592.163	59.05	-20.42	38.63	54.00	-15.37	AV
Vertical	11570.046	60.29	-8.86	51.43	68.20	-16.77	PK
Vertical	11570.046	49.42	-8.86	40.56	54.00	-13.44	AV
Vertical	17355.069	55.25	-2.52	52.73	68.20	-15.47	PK
Vertical	17355.069	44.56	-2.52	42.04	54.00	-11.96	AV
Horizontal	4592.045	71.98	-20.42	51.56	74.00	-22.44	PK
Horizontal	4592.045	59.00	-20.42	38.59	54.00	-15.41	AV
Horizontal	11570.141	60.27	-8.86	51.41	68.20	-16.79	PK
Horizontal	11570.141	49.78	-8.86	40.92	54.00	-13.08	AV
Horizontal	17355.195	59.20	-2.52	56.68	68.20	-11.52	PK
Horizontal	17355.195	44.86	-2.52	42.34	54.00	-11.66	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.103	70.72	-18.93	51.79	68.20	-16.41	PK
Vertical	6039.103	59.90	-18.93	40.97	54.00	-13.03	AV
Vertical	11650.043	60.39	-8.92	51.47	74.00	-22.53	PK
Vertical	11650.043	49.07	-8.92	40.15	54.00	-13.85	AV
Vertical	17475.177	58.96	-1.86	57.10	68.20	-11.10	PK
Vertical	17475.177	44.50	-1.86	42.64	54.00	-11.36	AV
Horizontal	6039.021	71.13	-18.93	52.20	68.20	-16.00	PK
Horizontal	6039.021	59.28	-18.93	40.35	54.00	-13.65	AV
Horizontal	11650.002	63.31	-8.92	54.39	74.00	-19.61	PK
Horizontal	11650.002	49.09	-8.92	40.17	54.00	-13.83	AV
Horizontal	17475.160	56.65	-1.86	54.79	68.20	-13.41	PK
Horizontal	17475.160	44.02	-1.86	42.16	54.00	-11.84	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.113	70.83	-20.24	50.59	74.00	-23.41	PK
Vertical	4679.113	59.39	-20.24	39.15	54.00	-14.85	AV
Vertical	11510.181	63.36	-8.81	54.55	74.00	-19.45	PK
Vertical	11510.181	50.00	-8.81	41.19	54.00	-12.81	AV
Vertical	17265.056	57.10	-3.01	54.09	68.20	-14.11	PK
Vertical	17265.056	44.89	-3.01	41.88	54.00	-12.12	AV
Horizontal	4679.112	74.89	-20.24	54.65	74.00	-19.35	PK
Horizontal	4679.112	59.86	-20.24	39.62	54.00	-14.38	AV
Horizontal	11510.059	62.61	-8.81	53.80	74.00	-20.20	PK
Horizontal	11510.059	49.70	-8.81	40.89	54.00	-13.11	AV
Horizontal	17265.169	57.60	-3.01	54.59	68.20	-13.61	PK
Horizontal	17265.169	44.40	-3.01	41.39	54.00	-12.61	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.049	72.86	-18.93	53.93	68.20	-14.27	PK
Vertical	6039.049	59.11	-18.93	40.18	54.00	-13.82	AV
Vertical	11590.042	64.42	-8.87	55.55	74.00	-18.45	PK
Vertical	11590.042	49.34	-8.87	40.47	54.00	-13.53	AV
Vertical	17385.112	56.65	-2.35	54.30	68.20	-13.90	PK
Vertical	17385.112	44.49	-2.35	42.14	54.00	-11.86	AV
Horizontal	6039.142	70.13	-18.93	51.19	68.20	-17.01	PK
Horizontal	6039.142	59.57	-18.93	40.64	54.00	-13.36	AV
Horizontal	11590.057	64.46	-8.87	55.59	74.00	-18.41	PK
Horizontal	11590.057	49.43	-8.87	40.56	54.00	-13.44	AV
Horizontal	17385.128	58.93	-2.35	56.58	68.20	-11.62	PK
Horizontal	17385.128	44.04	-2.35	41.69	54.00	-12.31	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5775 MHz)-Above 1G							
Vertical	4679.054	70.79	-20.24	50.55	74.00	-23.45	PK
Vertical	4679.054	59.05	-20.24	38.81	54.00	-15.19	AV
Vertical	11550.108	60.31	-8.84	51.47	74.00	-22.53	PK
Vertical	11550.108	49.57	-8.84	40.73	54.00	-13.27	AV
Vertical	17325.157	58.29	-2.68	55.61	68.20	-12.59	PK
Vertical	17325.157	44.94	-2.68	42.26	54.00	-11.74	AV
Horizontal	4679.133	70.59	-20.24	50.34	74.00	-23.66	PK
Horizontal	4679.133	59.49	-20.24	39.24	54.00	-14.76	AV
Horizontal	11550.058	61.36	-8.84	52.52	74.00	-21.48	PK
Horizontal	11550.058	49.33	-8.84	40.49	54.00	-13.51	AV
Horizontal	17325.122	55.54	-2.68	52.86	68.20	-15.34	PK
Horizontal	17325.122	44.23	-2.68	41.55	54.00	-12.45	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

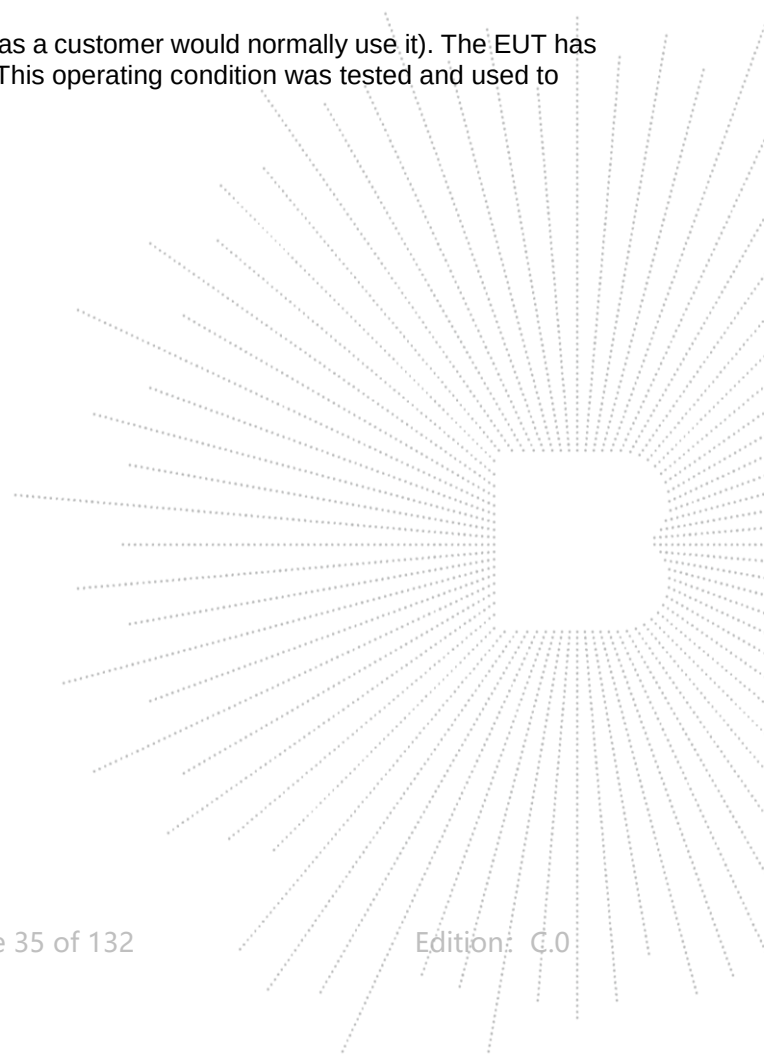
For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 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 $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ 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 $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ 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 $RBW=100 \text{ KHz}$ 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.



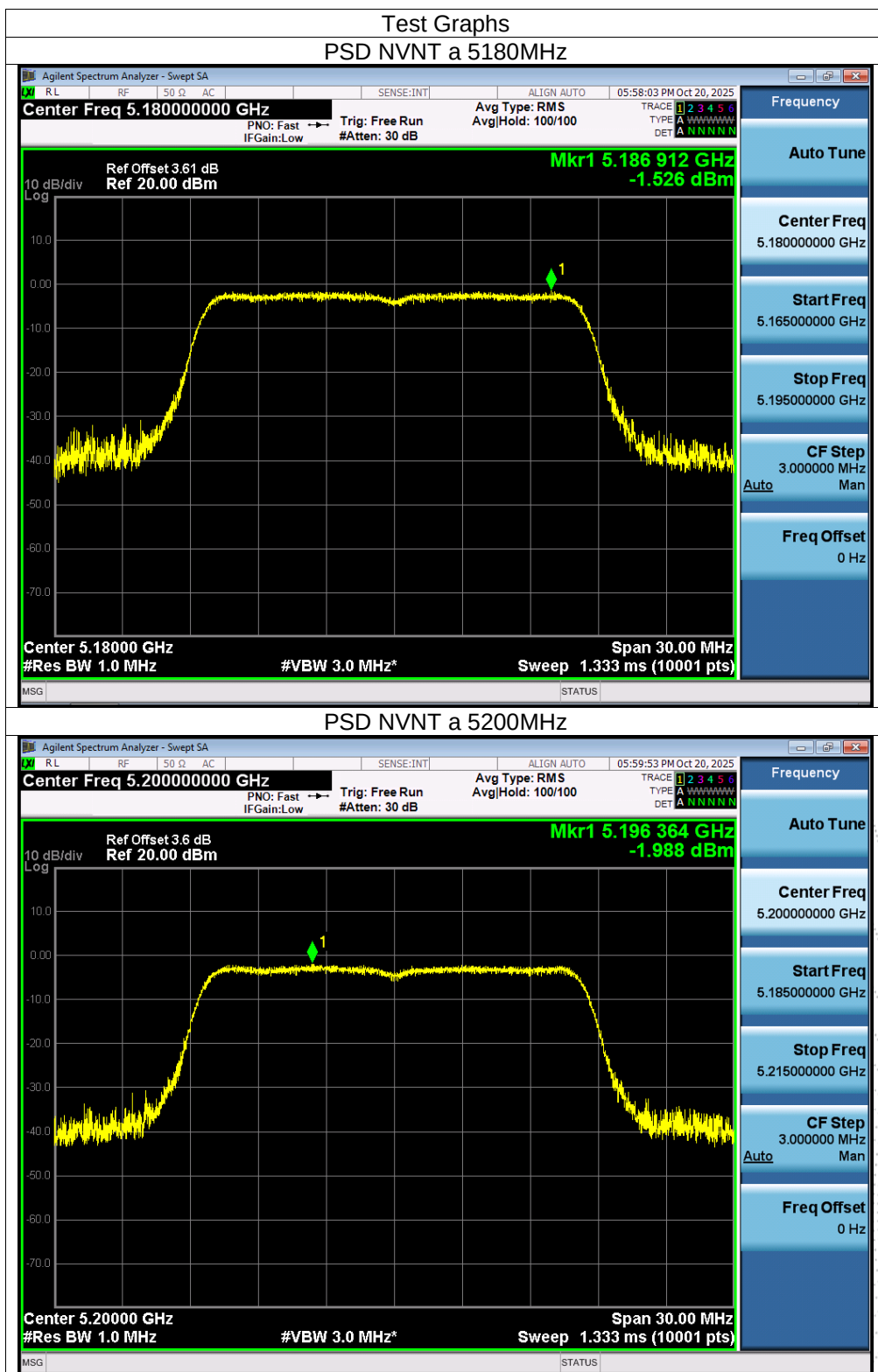
8.5 Test Result

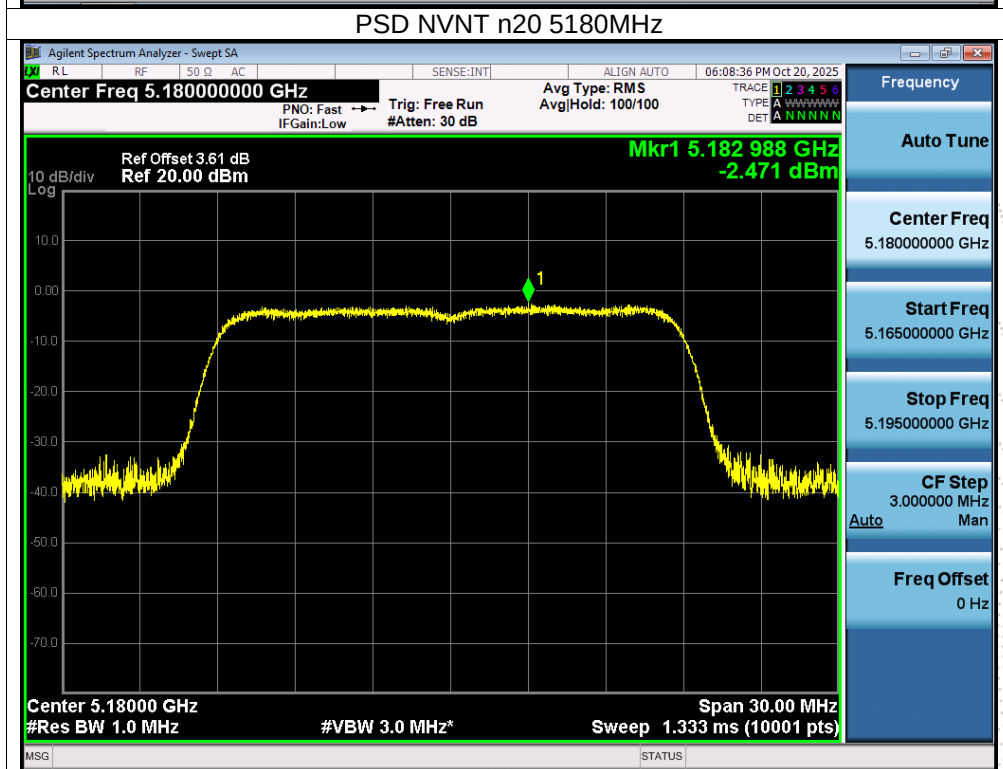
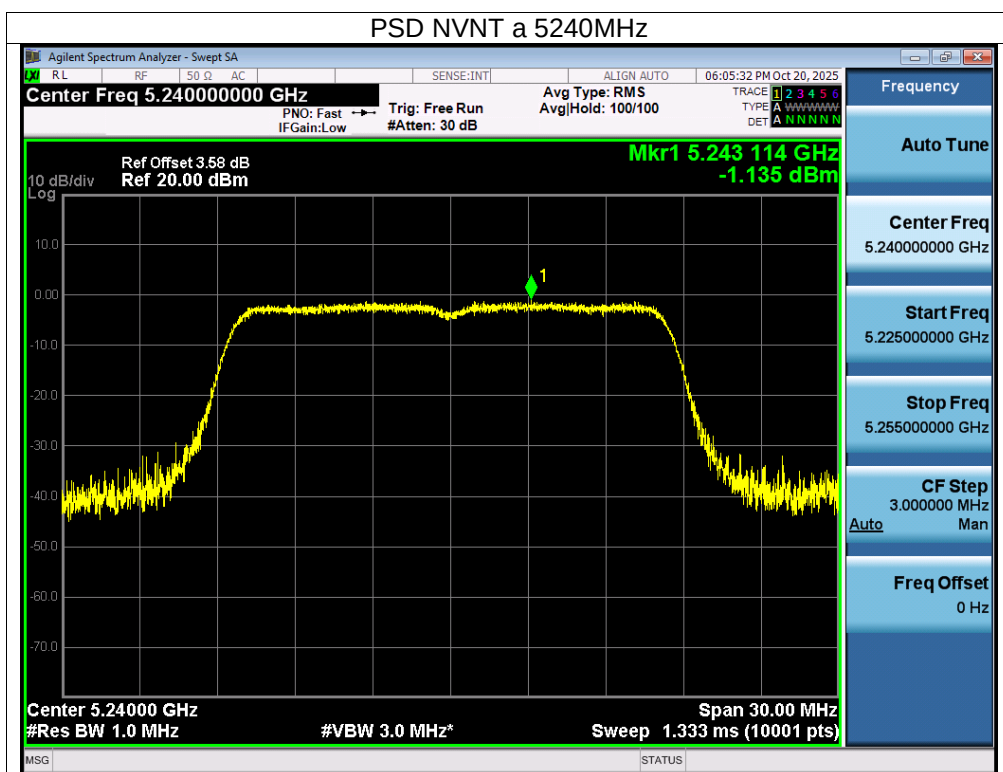
Temperature:	26 °C	Relative Humidity:	54 %
Pressure:	101kPa	Test Voltage:	DC 3.9V
Test Mode:	(U-NII-1) 5180MHz-5240MHz (U-NII-3) 5745MHz-5825MHz		

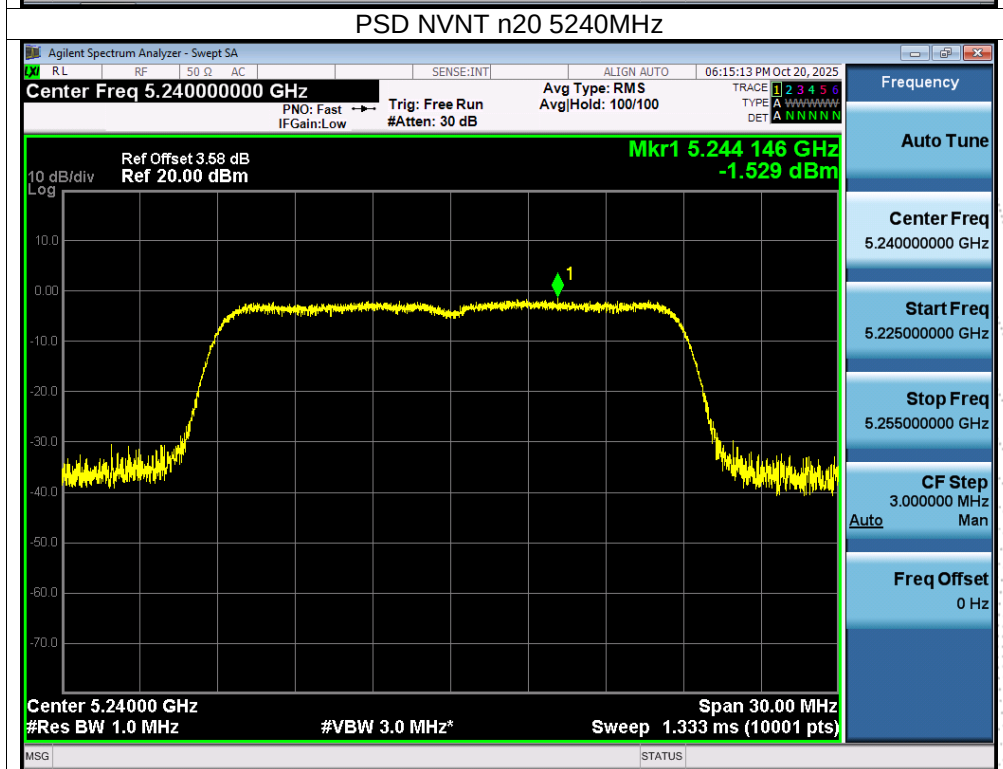
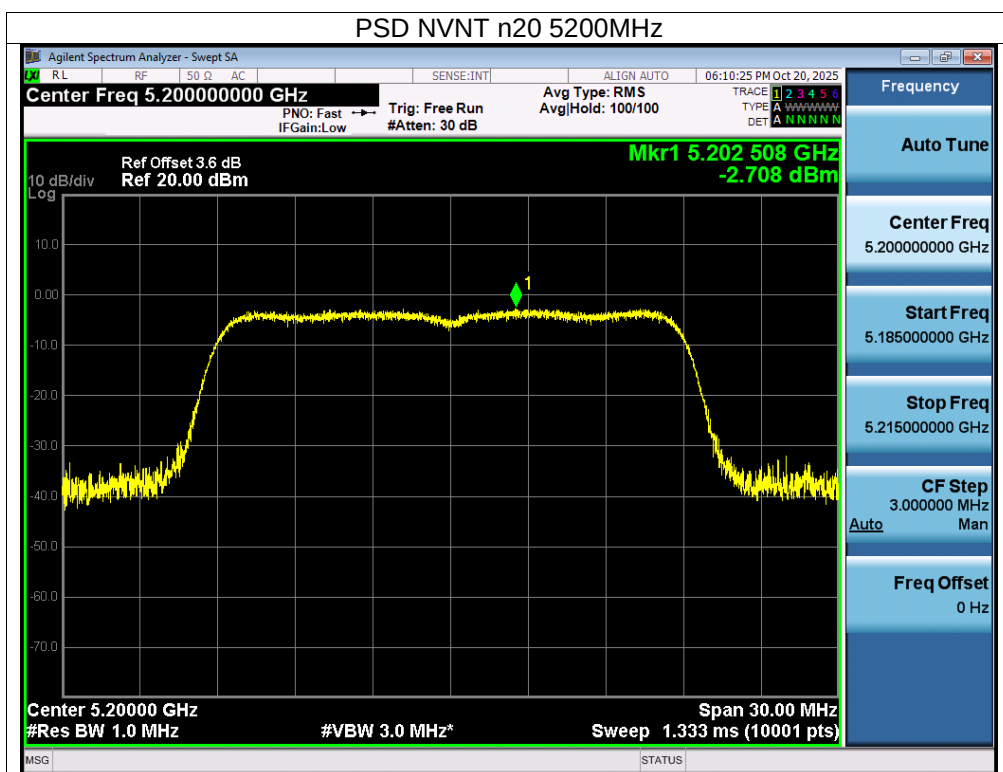
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5180	-1.53	11	Pass
NVNT	a	5200	-1.99	11	Pass
NVNT	a	5240	-1.14	11	Pass
NVNT	n20	5180	-2.47	11	Pass
NVNT	n20	5200	-2.71	11	Pass
NVNT	n20	5240	-1.53	11	Pass
NVNT	n40	5190	-6.61	11	Pass
NVNT	n40	5230	-5.53	11	Pass
NVNT	ac20	5180	-2.68	11	Pass
NVNT	ac20	5200	-3.13	11	Pass
NVNT	ac20	5240	-1.68	11	Pass
NVNT	ac40	5190	-6.45	11	Pass
NVNT	ac40	5230	-5.63	11	Pass
NVNT	ac80	5210	-10.37	11	Pass

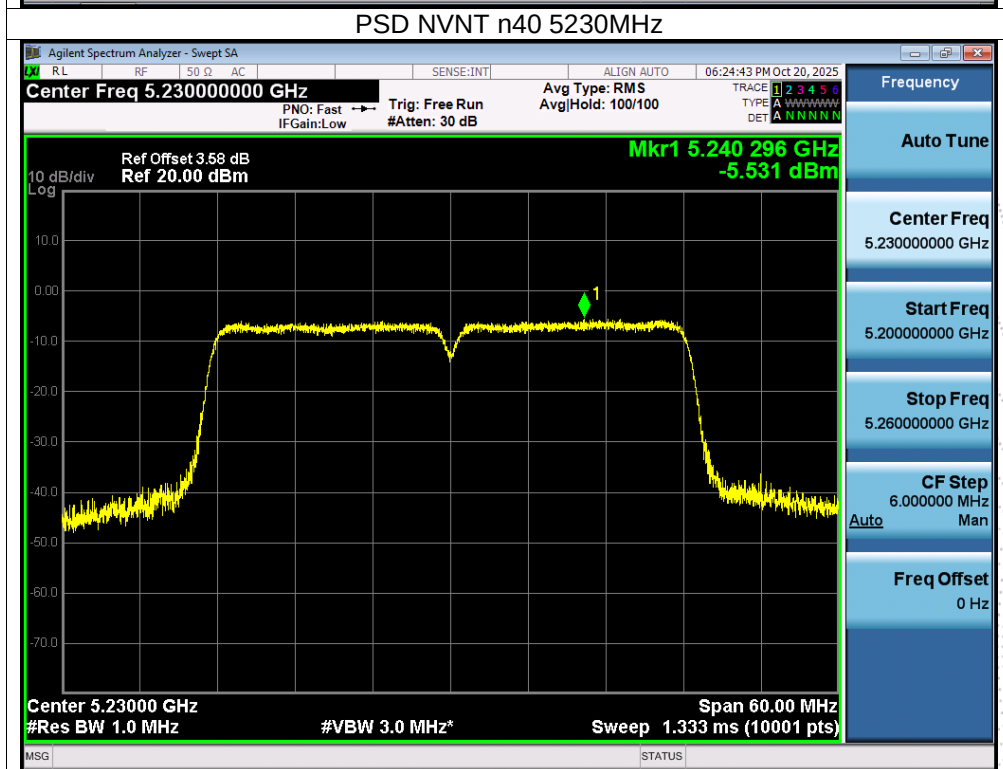
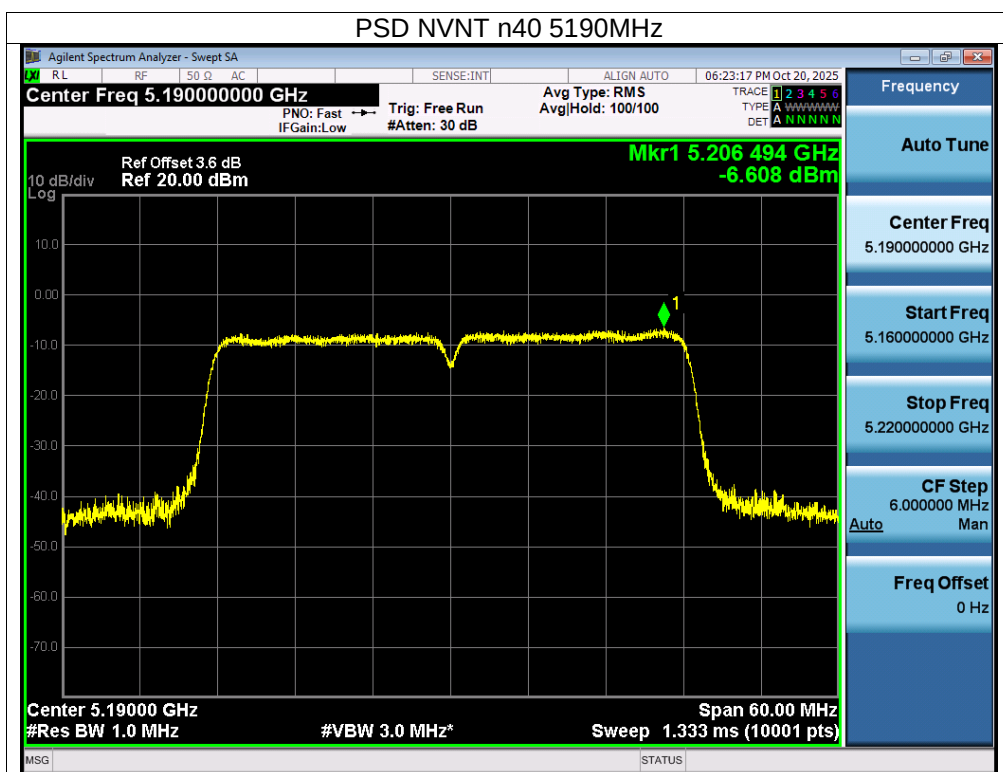
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/510KHz)	Conducted PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	a	5745	-4.42	-4.506	30	Pass
NVNT	a	5785	-4.67	-4.756	30	Pass
NVNT	a	5825	-5.24	-5.326	30	Pass
NVNT	n20	5745	-5.75	-5.836	30	Pass
NVNT	n20	5785	-5.99	-6.076	30	Pass
NVNT	n20	5825	-6.28	-6.366	30	Pass
NVNT	n40	5755	-9.35	-9.436	30	Pass
NVNT	n40	5795	-9.95	-10.036	30	Pass
NVNT	ac20	5745	-5.96	-6.046	30	Pass
NVNT	ac20	5785	-6.25	-6.336	30	Pass
NVNT	ac20	5825	-6.4	-6.486	30	Pass
NVNT	ac40	5755	-9.21	-9.296	30	Pass
NVNT	ac40	5795	-10.08	-10.166	30	Pass
NVNT	ac80	5775	-14.38	-14.466	30	Pass

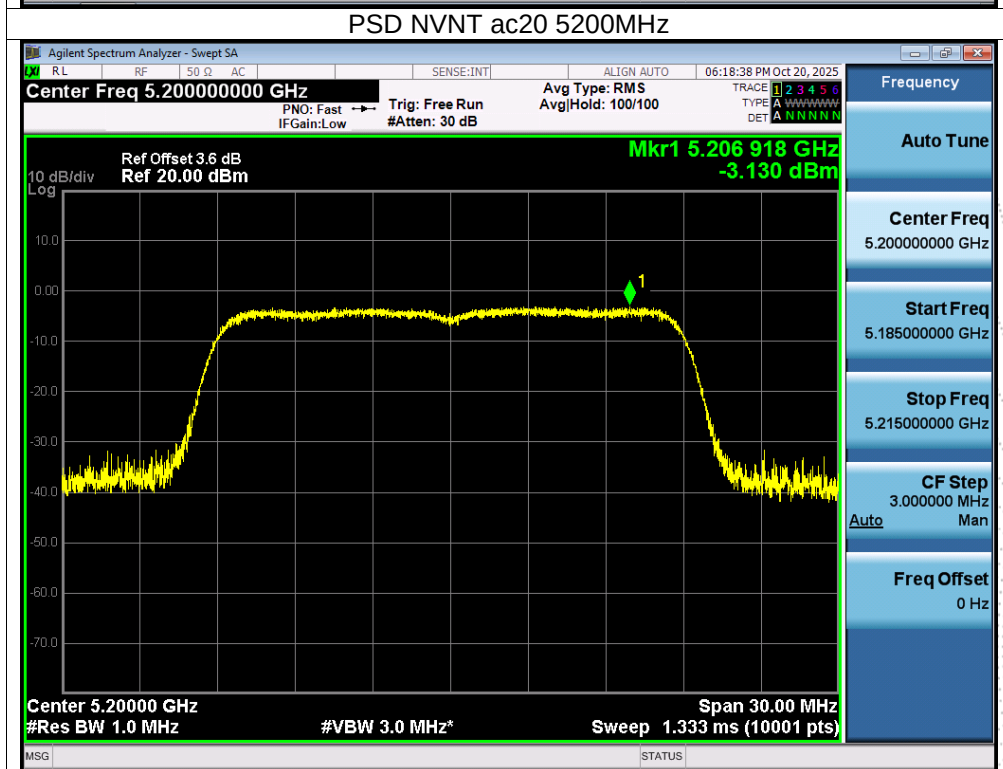
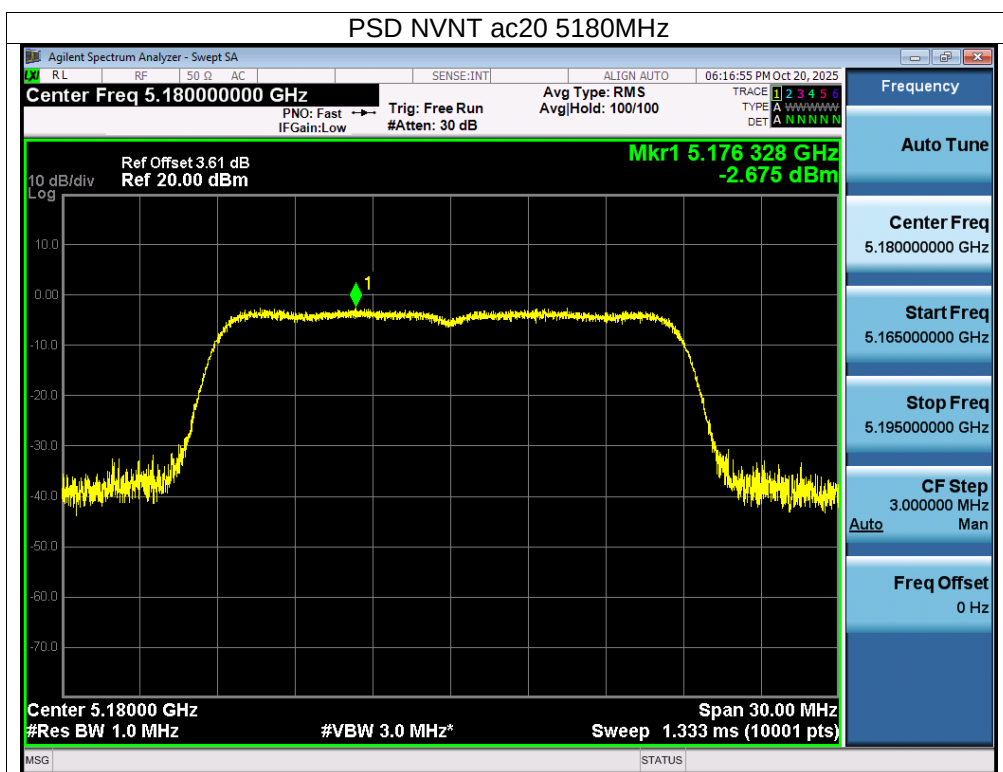
Note: Correction Factor = $10\log(500\text{KHz}/\text{RBW in measurement}) = -0.086$

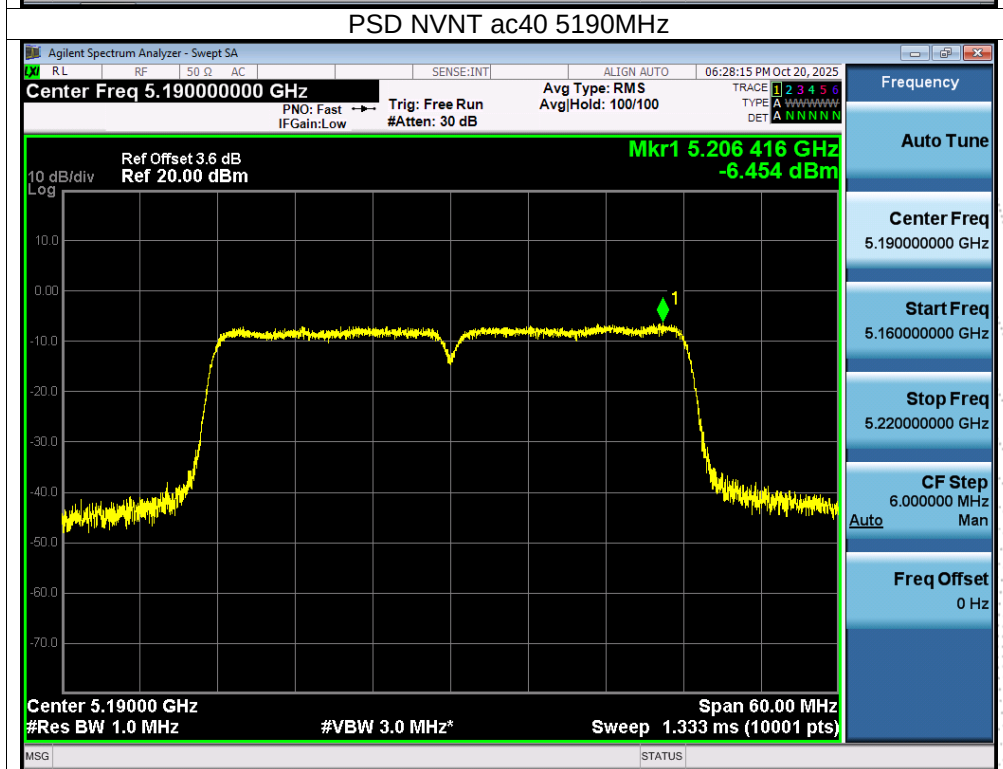
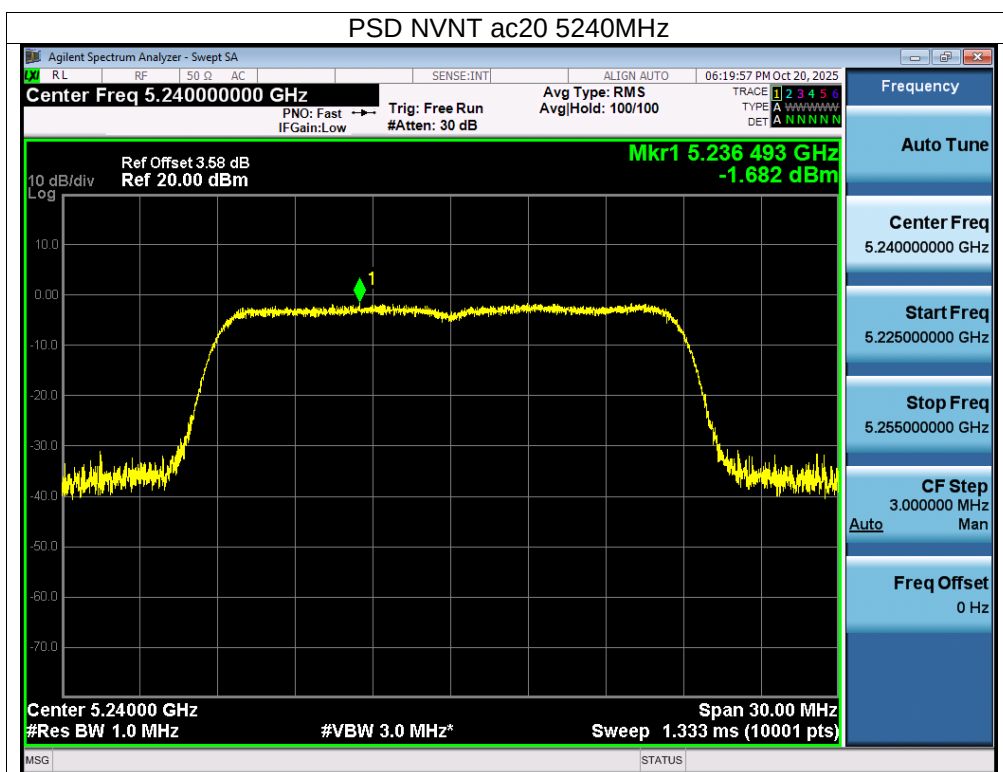


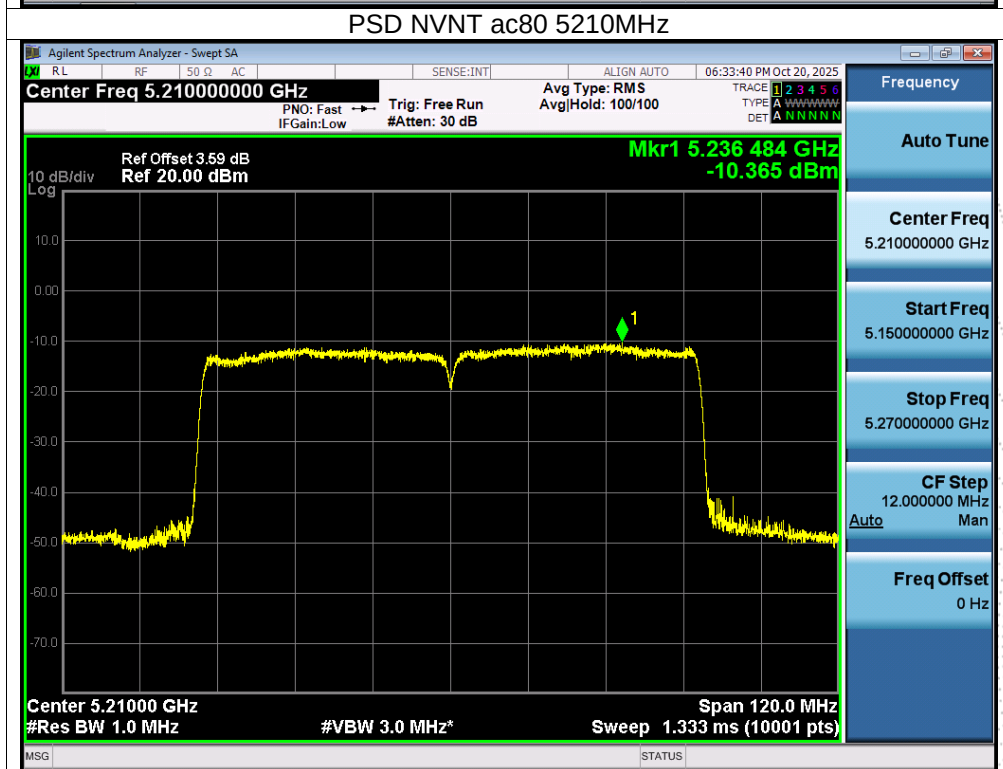
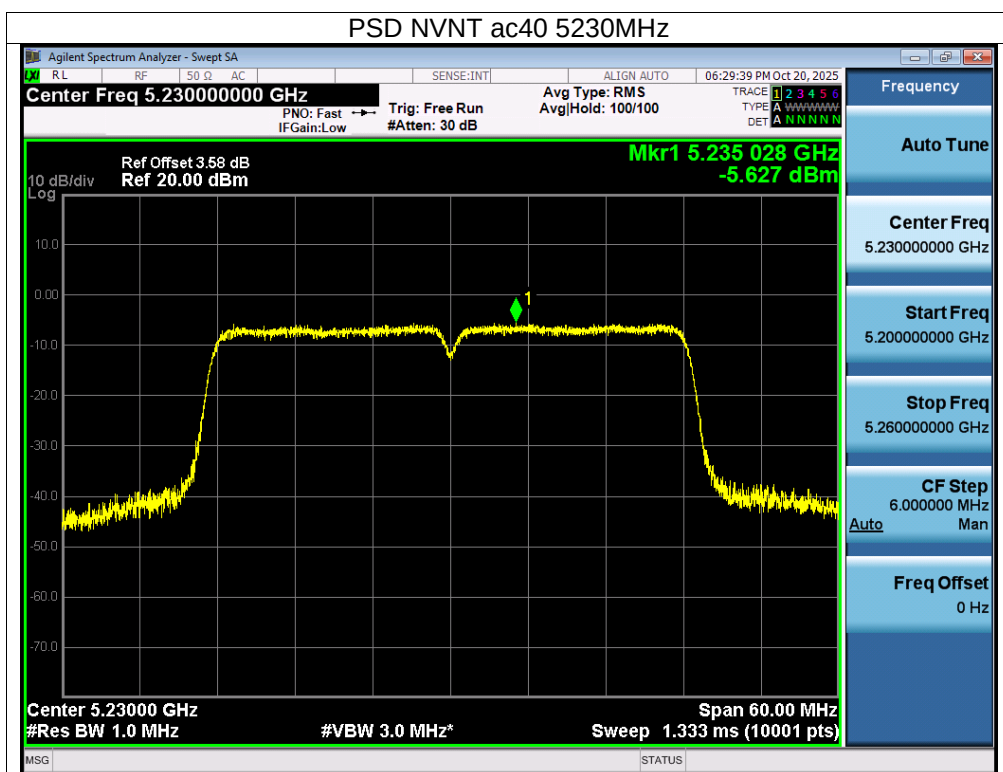


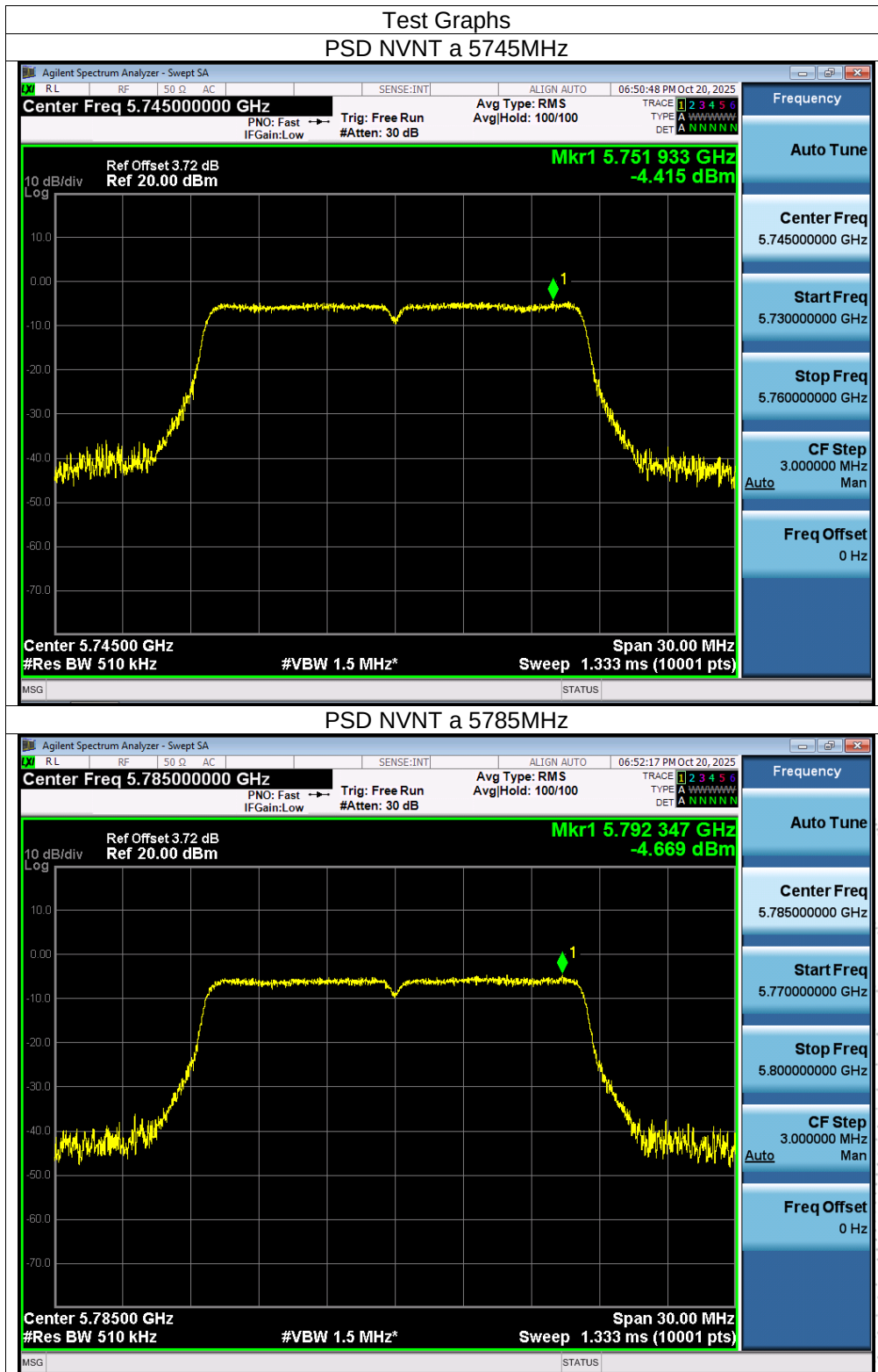


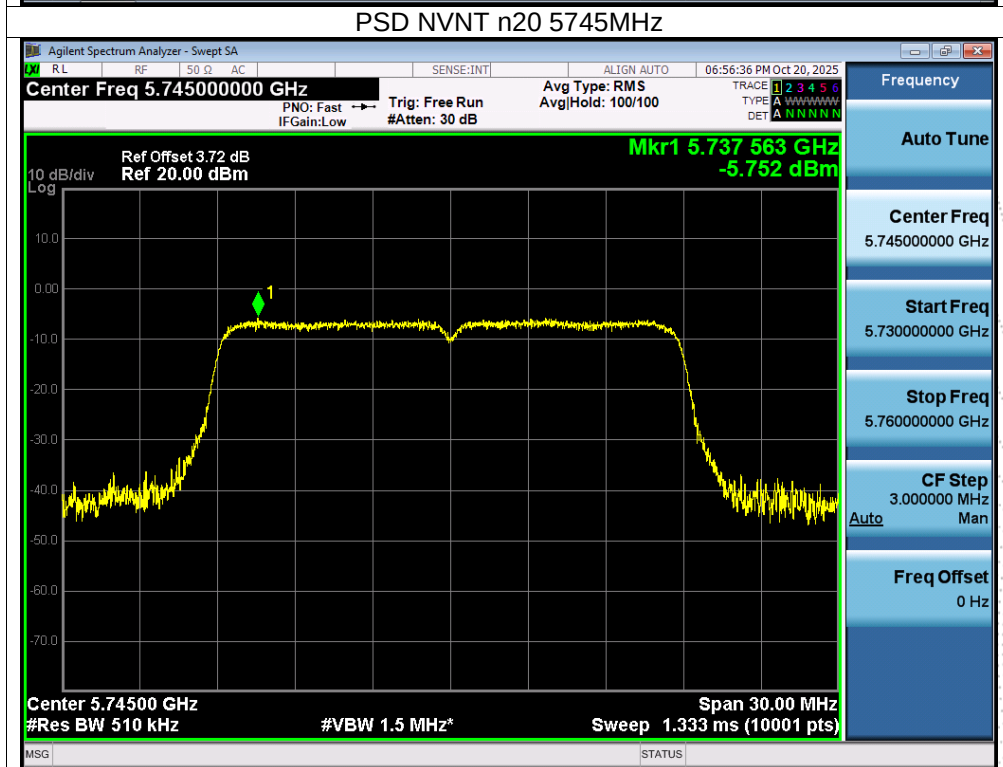
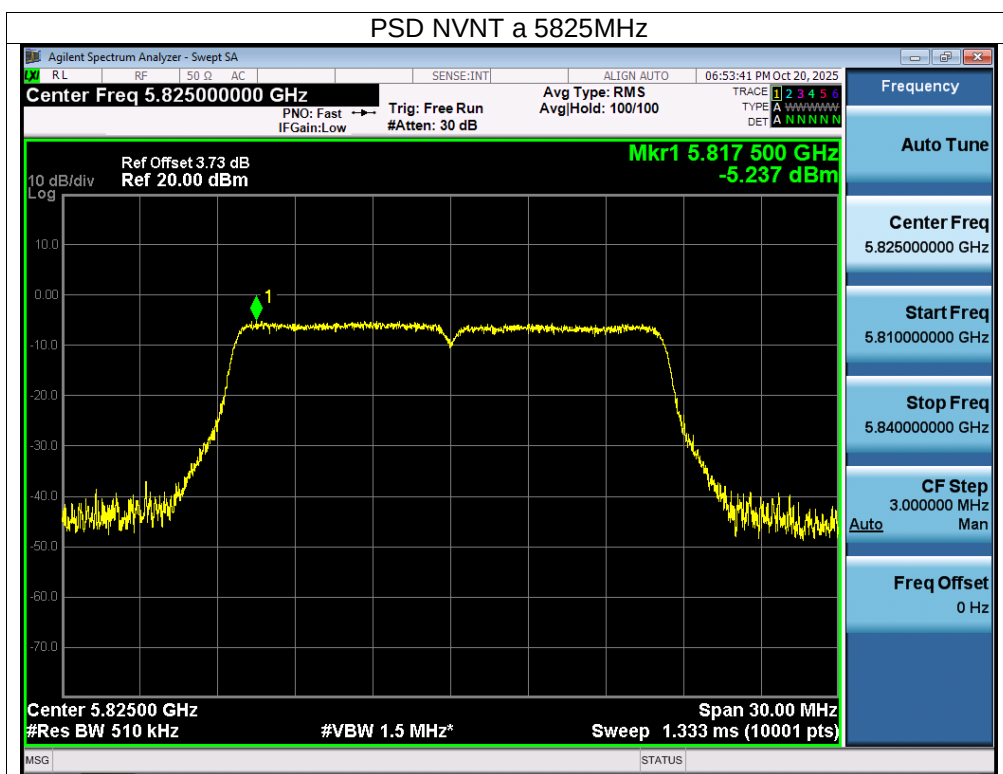


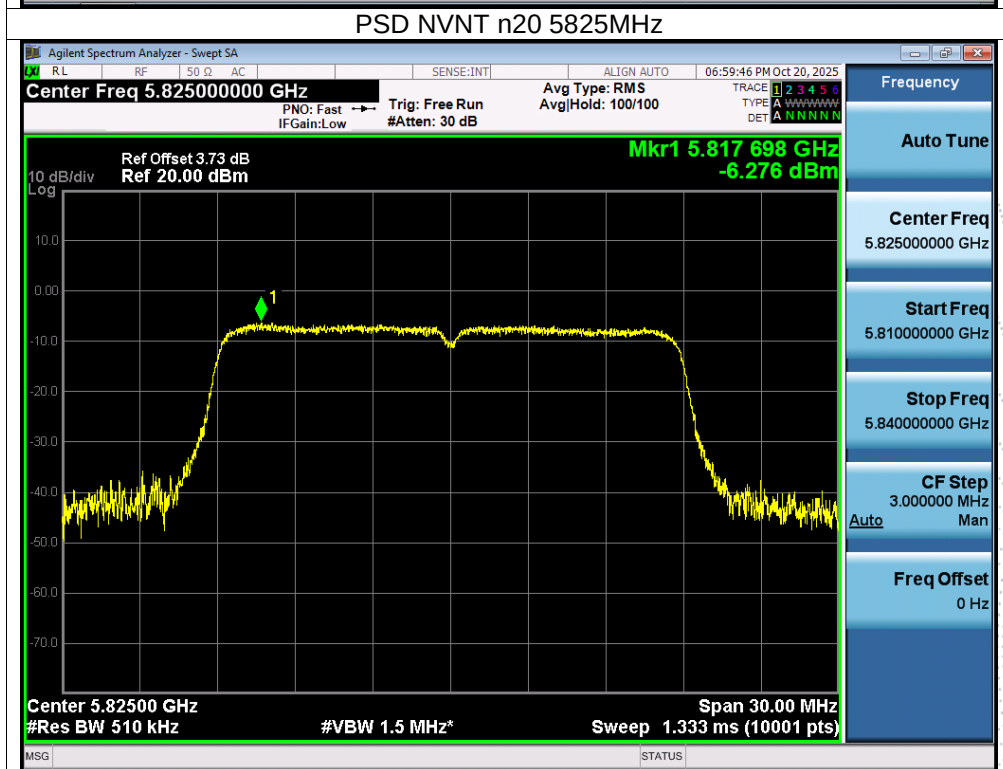
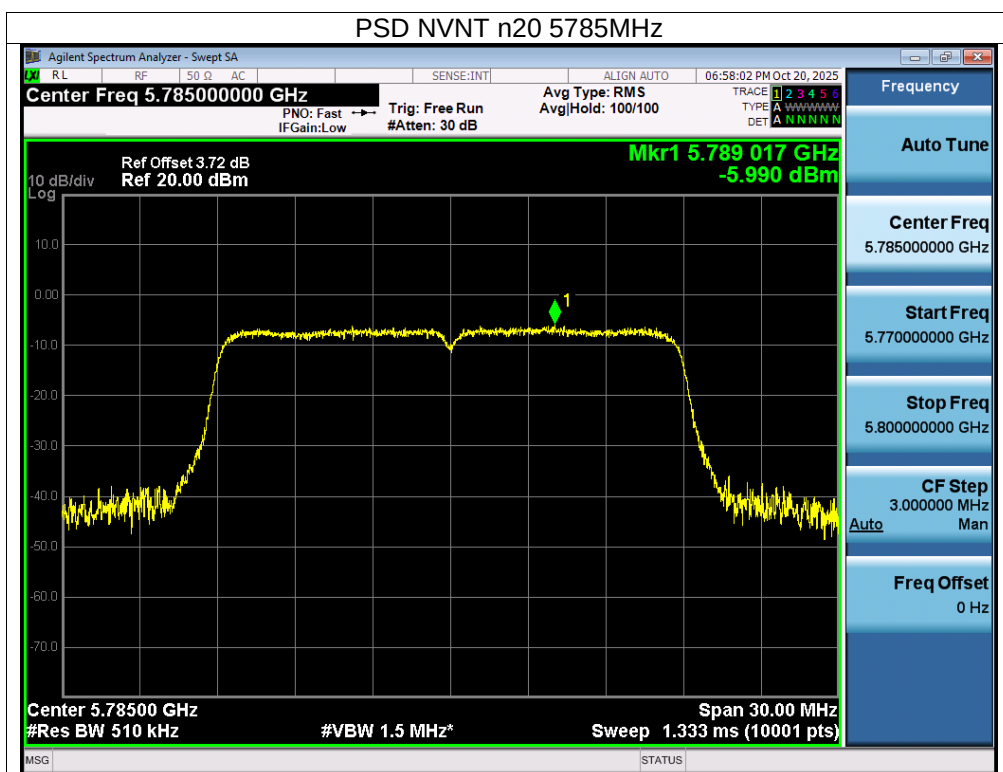


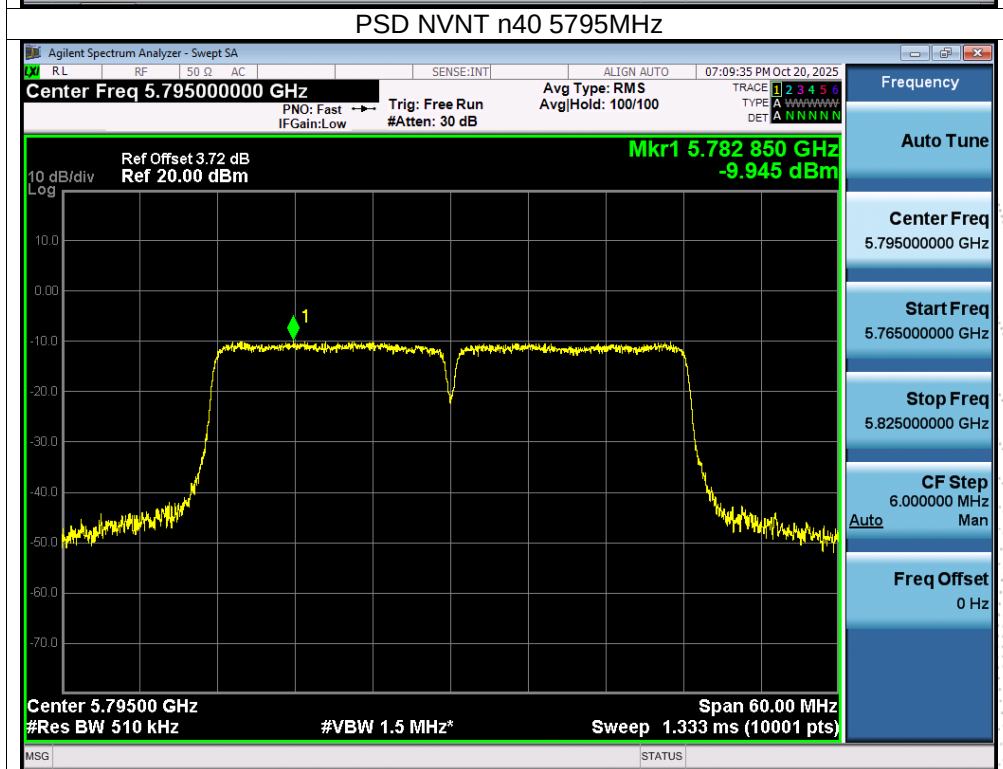
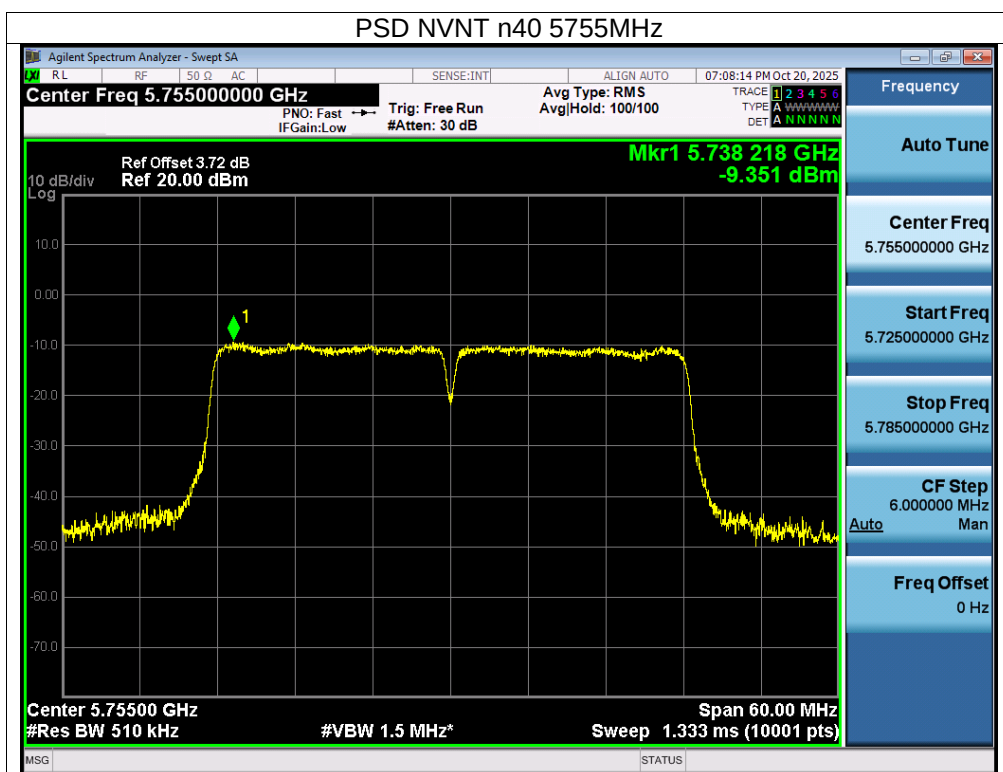


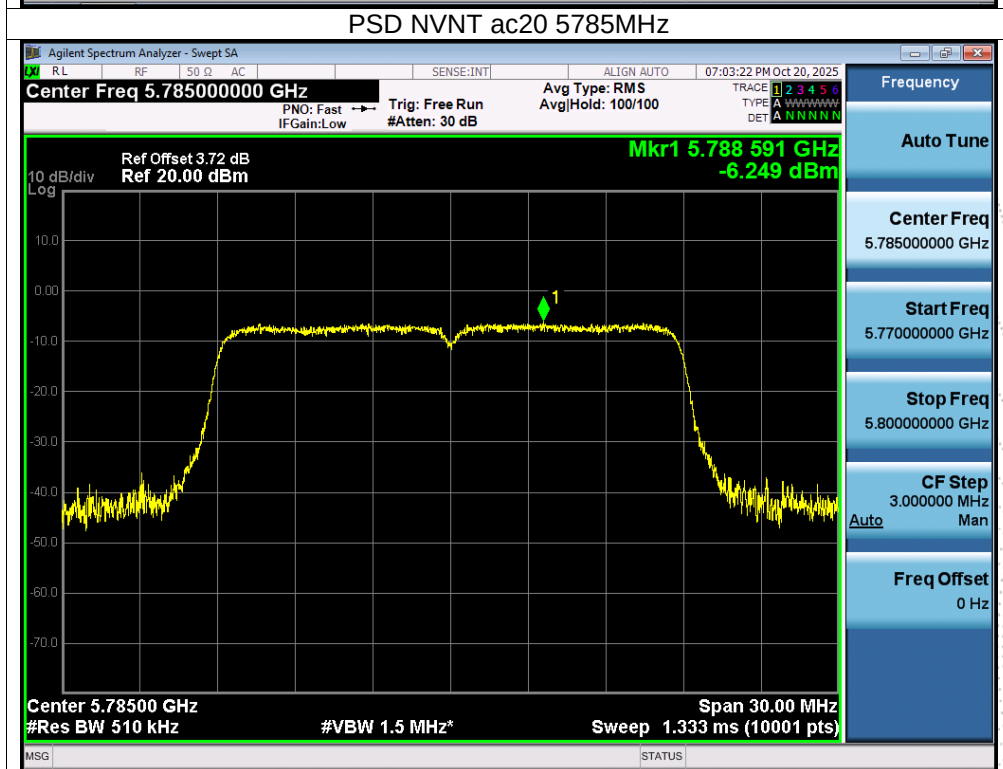
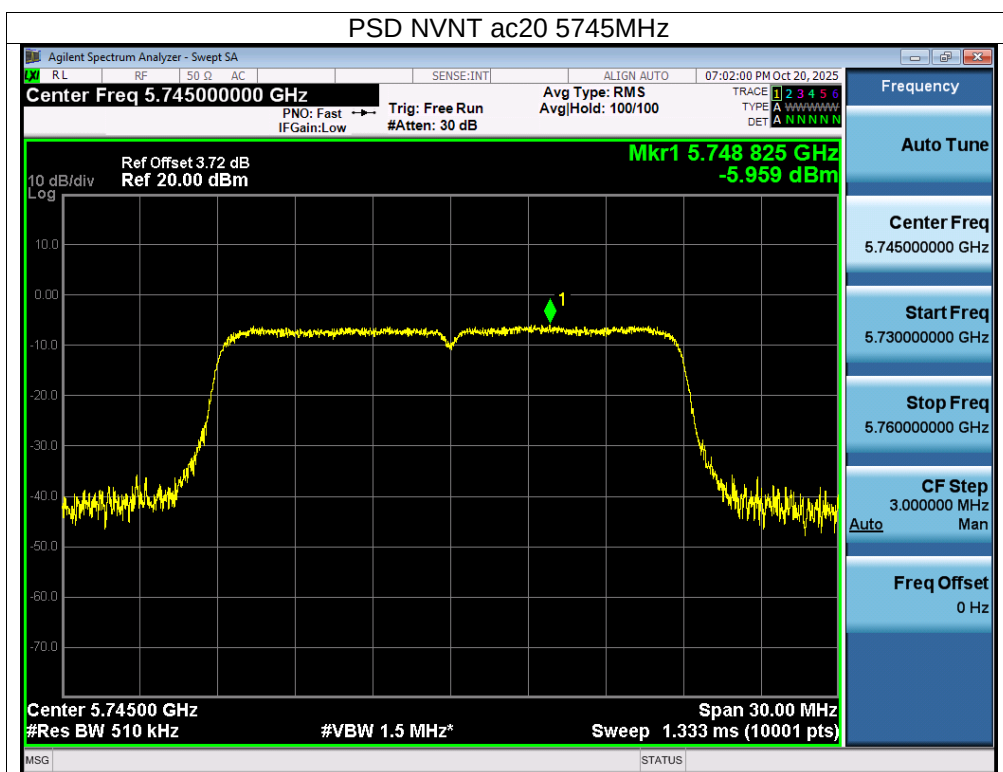


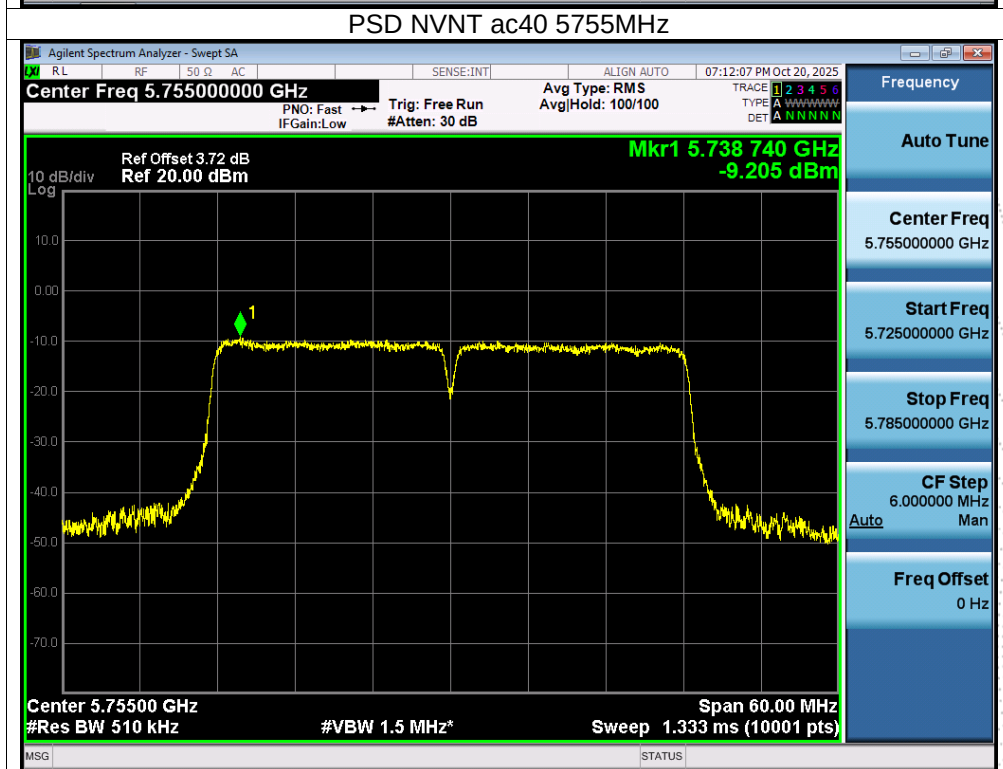
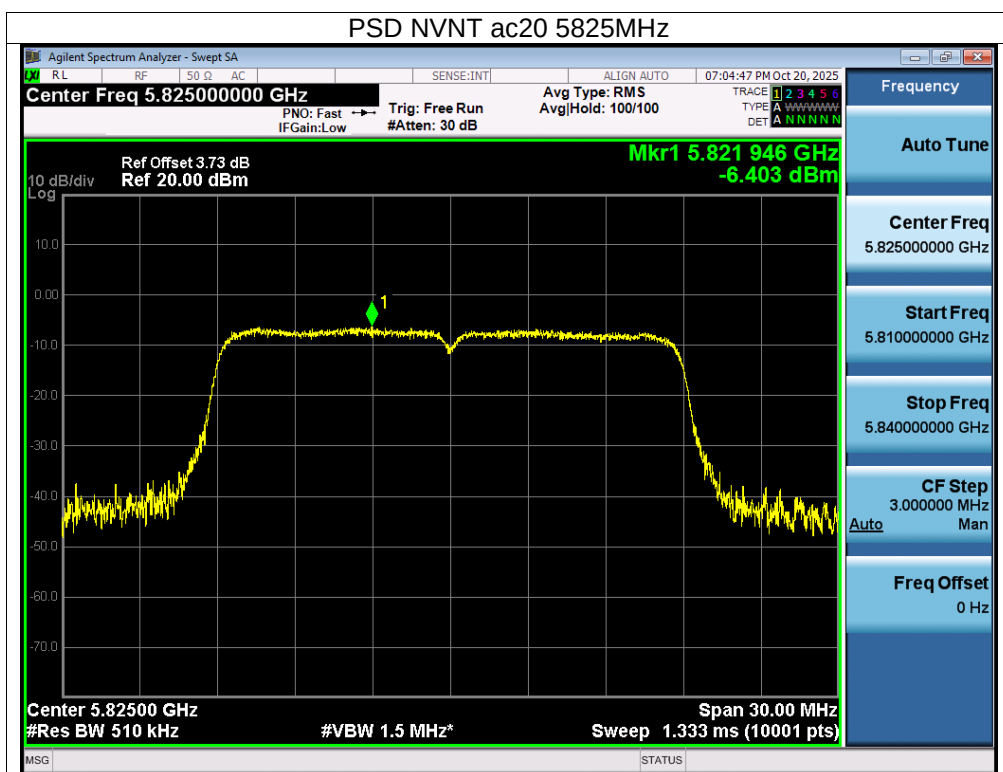


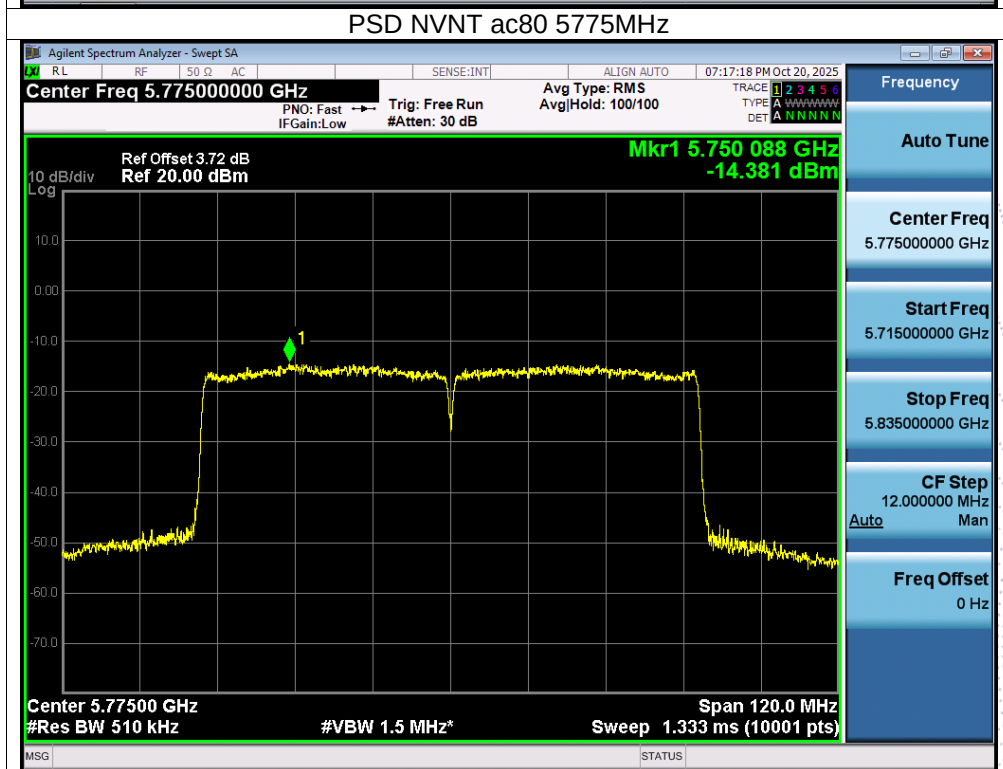
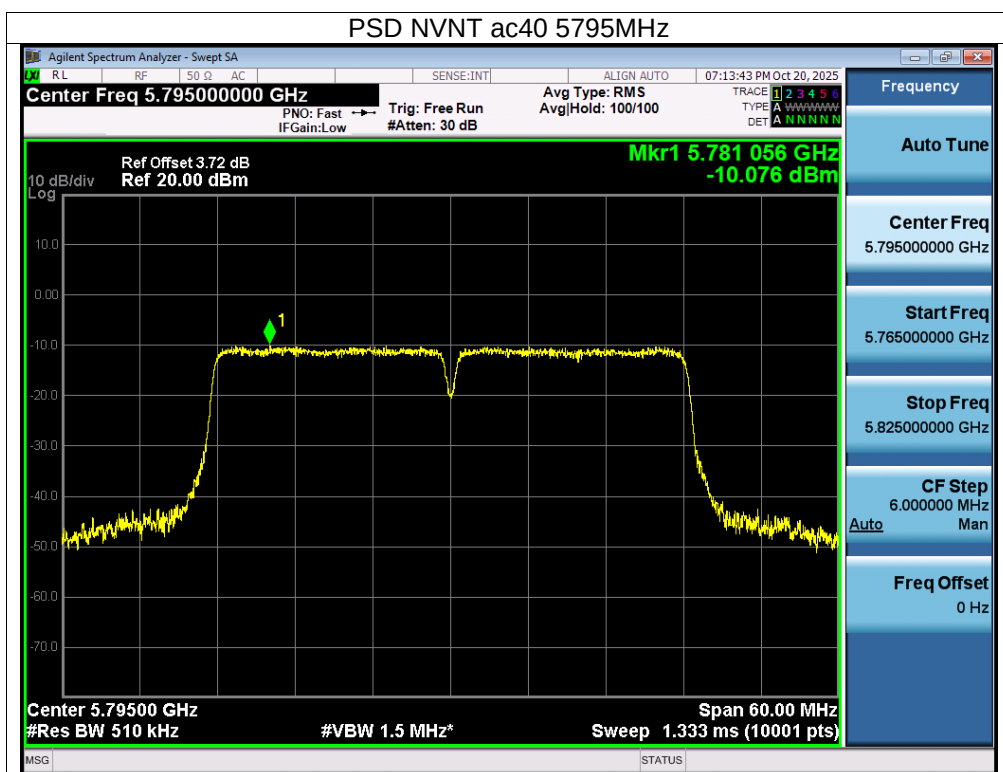






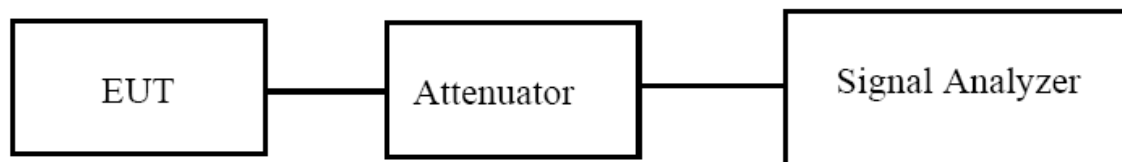






9. 26dB & 6dB & 99% Emission Bandwidth

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

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- 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:

- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.
- Set RBW = 1 % to 5 % of the OBW
- Set $VBW \geq 3 \cdot RBW$
- 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.
- Use the 99 % power bandwidth function of the instrument (if available).
- 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

- Set RBW = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times RBW$.
- Detector = Peak.
- Trace mode = max hold.
- 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 3.9V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

Condition	Mode	Frequency (MHz)	99% bandwidth (MHz)	-26dB bandwidth (MHz)	Result
NVNT	a	5180	16.527	24.703	Pass
NVNT	a	5200	16.555	25.865	Pass
NVNT	a	5240	16.529	22.655	Pass
NVNT	n20	5180	17.628	26.577	Pass
NVNT	n20	5200	17.612	26.832	Pass
NVNT	n20	5240	17.616	25.754	Pass
NVNT	n40	5190	36.226	42.884	Pass
NVNT	n40	5230	36.229	41.446	Pass
NVNT	ac20	5180	17.63	27.351	Pass
NVNT	ac20	5200	17.633	28.185	Pass
NVNT	ac20	5240	17.622	28.617	Pass
NVNT	ac40	5190	36.277	48.097	Pass
NVNT	ac40	5230	36.241	42.454	Pass
NVNT	ac80	5210	75.437	83.481	Pass

