TEST REPORT

Report No.:	BCTC2309297643-4E
Applicant:	SHENZHEN NST INDUSTRY AND TRADE CO.,LTD
Product Name:	15.6 inch laptop
Model/Type reference:	M15S
Tested Date:	2023-09-18 to 2023-10-11
Issued Date:	2023-10-11

Shenzhen BCTC Testing Co., Ltd.

FCC ID: 2AAMS-M15S

Product Name:	15.6 inch laptop
Trademark:	N/A
Model/Type reference:	M15S M156NN
Prepared For:	SHENZHEN NST INDUSTRY AND TRADE CO.,LTD
Address:	3-4/F, Bldg 1, Hongbang Intelligent Technology Park,No.30 Cuibao Road, Baolong Street, Longgang District,Shenzhen
Manufacturer:	SHENZHEN NST INDUSTRY AND TRADE CO.,LTD
Address:	3-4/F, Bldg 1, Hongbang Intelligent Technology Park,No.30 Cuibao Road, Baolong Street, Longgang District,Shenzhen
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:	2023-09-18
Sample tested Date:	2023-09-18 to 2023-10-11
Issue Date:	2023-10-11
Report No.:	BCTC2309297643-4E
Test Standards:	FCC Part15 15.407 ANSI C63.10-2013 KDB 662911 D01 v02r01 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

(Note: N/A Means Not Applicable)

1. Version

Report No.	Issue Date	Description	Approved
BCTC2309297643-4E	2023-10-11	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
10	Automatically discontinue transmission	15.407(c)	PASS(Note 1)

Note 1: The product is a client device, and the data transmission is limited by the AP.When the information to be sent is missing or the operation fails,the device will automatically stop sending and directly connect to the AP correctly again.

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℃

4. Product Information And Test Setup

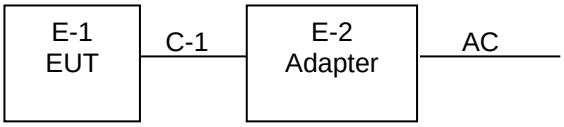
4.1 Product Information

Model/Type reference:	M15S M156NN
Model differences:	All the model are the same circuit and RF module, except model names and appearance of the color.
Hardware Version:	XU133UR810
Software Version:	windows11
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); 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;
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;
Number Of Channel	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
Antenna installation:	Internal antenna
Antenna Gain:	5.1G: Antenna A: 2.05 dBi Antenna B: 2.12 dBi 5.8G: Antenna A: 2.33 dBi Antenna B: 2.30 dBi
Ratings:	DC 12V from adapter/DC 7.6V from battery
Adapter Information:	Model: JHD-AP036U-120300BA-A Input: 100-240V~50/60Hz 1.2A Output: DC 12V 3000mA

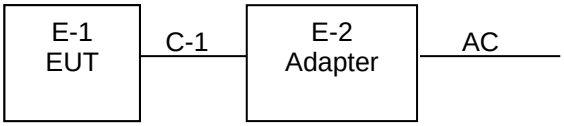
4.2 Test Setup Configuration

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

Conducted Emission:



Radiated Spurious Emission



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	15.6 inch laptop	N/A	M15S	N/A	EUT
E-2	Adapter	N/A	JHD-AP036U-120300BA-A	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	N/A	N/A	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

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	Link Mode

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

4.7 Antenna

5.1G

1)For power spectral density(PSD) measurements,
Array Gain=10log(NANT/NSS)dB=10log(2/1)=3.01dB,
So the directional gain for PSD is 5.13 dBi
2)For power measurements,
The Array gain=0 dB for NANT≤4,
So the directional gain for Power measurements is 2.12 dBi

Antenna	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	Internal antenna	2.05	
B	N/A	N/A	Internal antenna	2.12	

5.1G & 5.8G

1)For power spectral density(PSD) measurements,
Array Gain=10log(NANT/NSS)dB=10log(2/1)=3.01dB,
So the directional gain for PSD is 5.34 dBi
2)For power measurements,
The Array gain=0 dB for NANT≤4,
So the directional gain for Power measurements is 2.33 dBi

Antenna	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	Internal antenna	2.33	
B	N/A	N/A	Internal antenna	2.30	

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

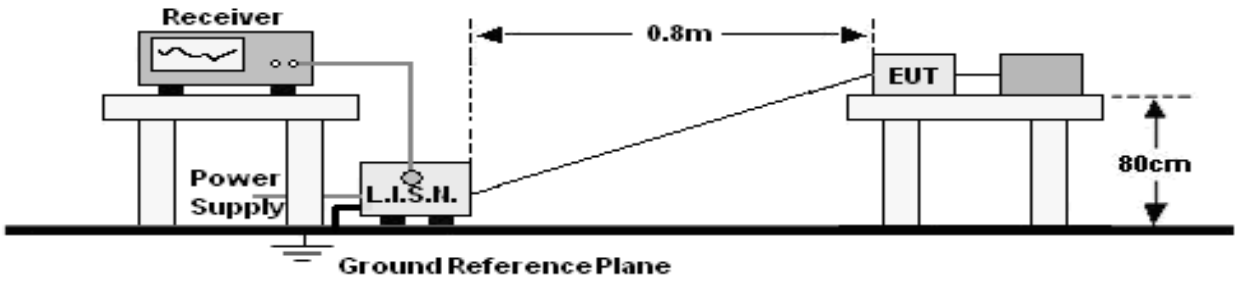
Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
LISN	R&S	ENV216	101375	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Attenuator	\	10dB DC-6GHz	1650	May 15, 2023	May 14, 2024

RF Conducted Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Power Meter	Keysight	E4419	\	May 15, 2023	May 14, 2024
Power Sensor (AV)	Keysight	E9300A	\	May 15, 2023	May 14, 2024
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 15, 2023	May 14, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024
Radio frequency control box	MAIWEI	MW100-RFCB	\	\	\
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 15, 2023	May 14, 2024
Receiver	R&S	ESRP	101154	May 15, 2023	May 14, 2024
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 15, 2023	May 14, 2024
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 29, 2023	May 28, 2024
Loop Antenna(9KHz -30MHz)	Schwarzbeck	FMZB1519B	00014	May 31, 2023	May 30, 2024
Amplifier	SKET	LAPA_01G18 G-45dB	\	May 15, 2023	May 14, 2024
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 31, 2023	May 30, 2024
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 15, 2023	May 14, 2024
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 31, 2023	May 30, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 15, 2023	May 14, 2024
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

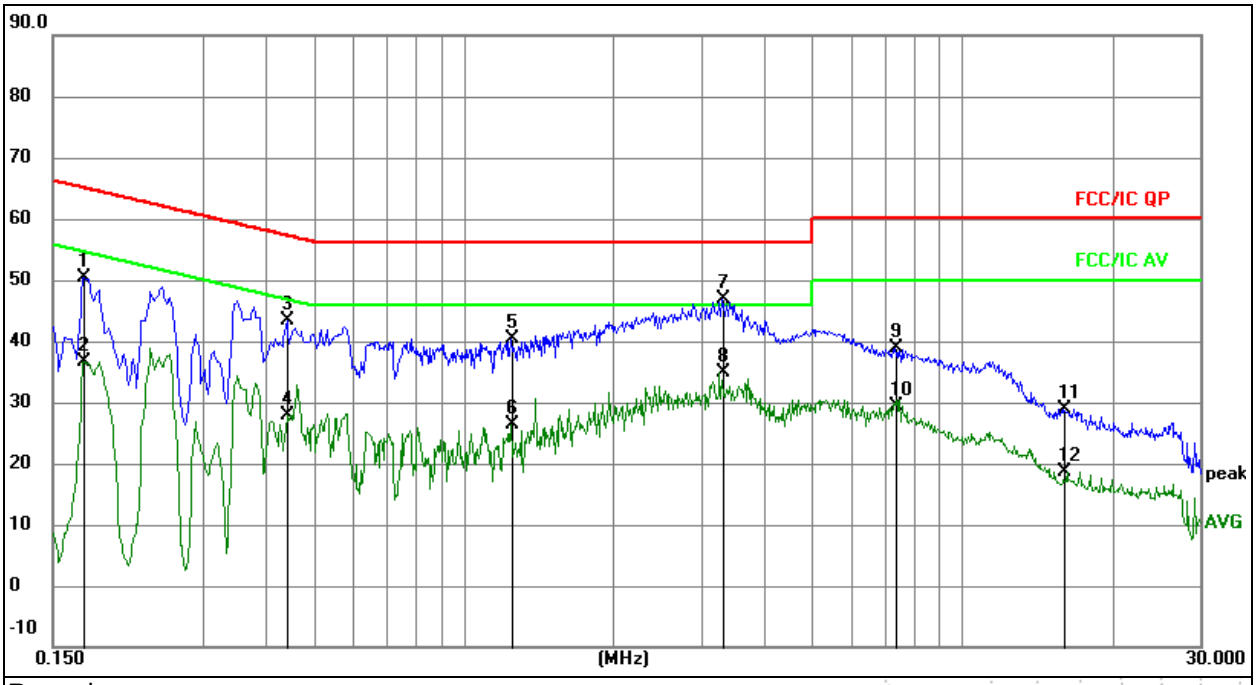
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak 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.
c. 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

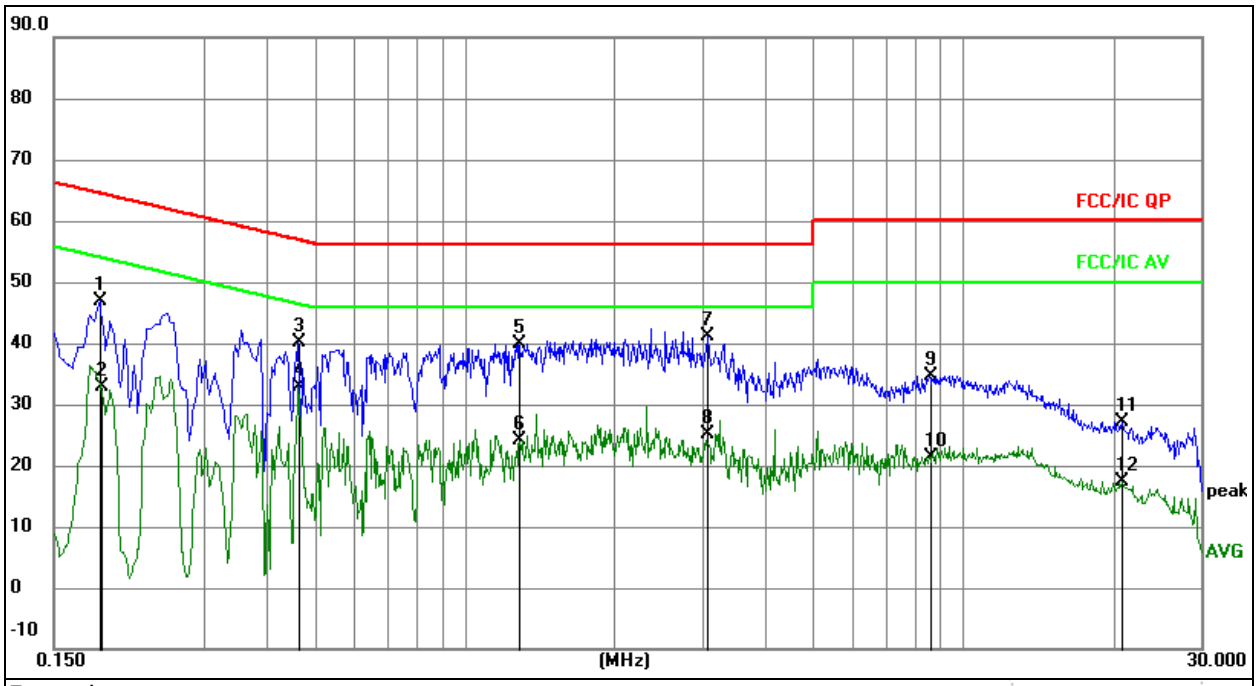
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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 Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1725	40.72	9.56	50.28	64.84	-14.56	QP
2		0.1725	27.03	9.56	36.59	54.84	-18.25	AVG
3		0.4425	33.85	9.62	43.47	57.01	-13.54	QP
4		0.4425	18.34	9.62	27.96	47.01	-19.05	AVG
5		1.2435	30.76	9.73	40.49	56.00	-15.51	QP
6		1.2435	16.66	9.73	26.39	46.00	-19.61	AVG
7	*	3.3045	37.06	9.80	46.86	56.00	-9.14	QP
8		3.3045	25.04	9.80	34.84	46.00	-11.16	AVG
9		7.3410	29.08	9.73	38.81	60.00	-21.19	QP
10		7.3410	19.75	9.73	29.48	50.00	-20.52	AVG
11		16.0170	19.30	9.68	28.98	60.00	-31.02	QP
12		16.0170	8.91	9.68	18.59	50.00	-31.41	AVG

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



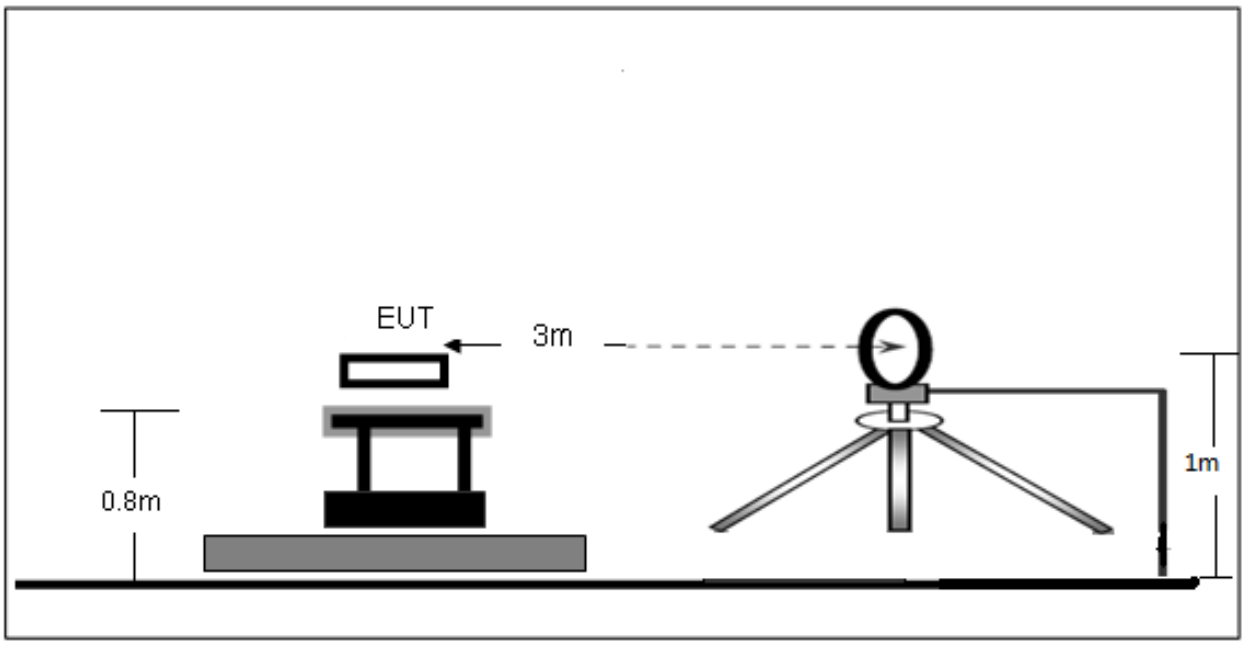
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over= Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1853	37.35	9.58	46.93	64.24	-17.31	QP
2		0.1864	23.26	9.58	32.84	54.20	-21.36	AVG
3		0.4637	30.54	9.62	40.16	56.63	-16.47	QP
4	*	0.4637	23.20	9.62	32.82	46.63	-13.81	AVG
5		1.2824	30.19	9.73	39.92	56.00	-16.08	QP
6		1.2824	14.30	9.73	24.03	46.00	-21.97	AVG
7		3.0738	31.34	9.79	41.13	56.00	-14.87	QP
8		3.0738	15.35	9.79	25.14	46.00	-20.86	AVG
9		8.5463	24.97	9.70	34.67	60.00	-25.33	QP
10		8.5463	11.74	9.70	21.44	50.00	-28.56	AVG
11		20.8137	17.46	9.77	27.23	60.00	-32.77	QP
12		20.8137	7.71	9.77	17.48	50.00	-32.52	AVG

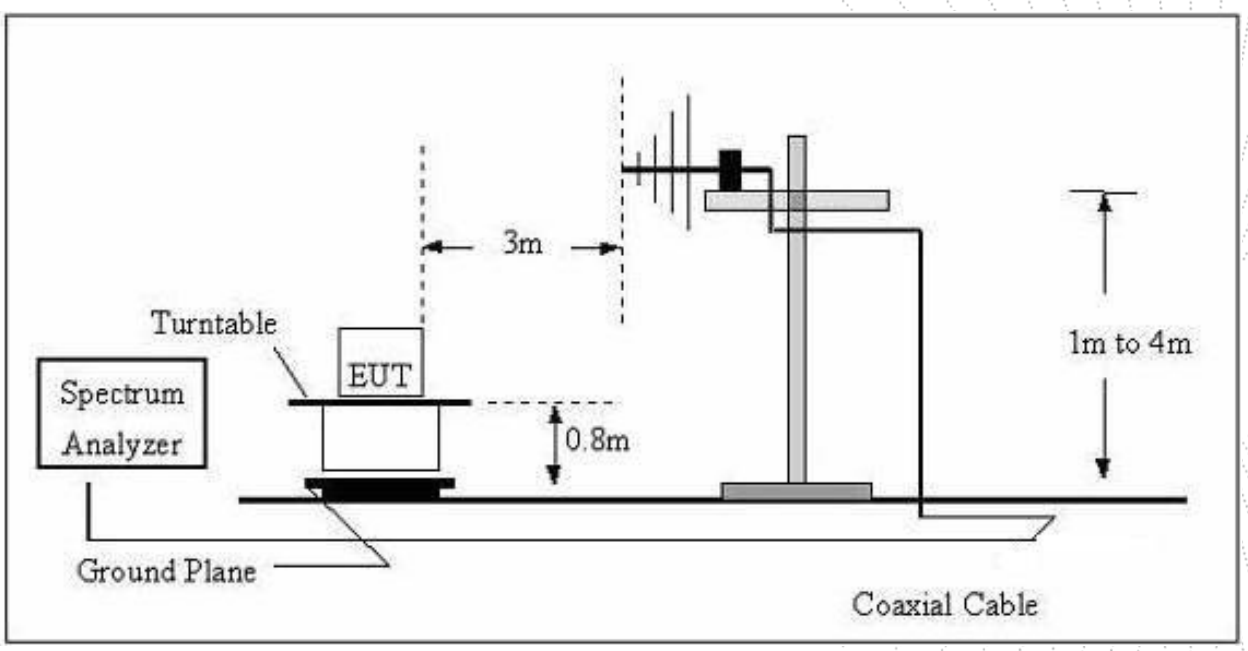
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

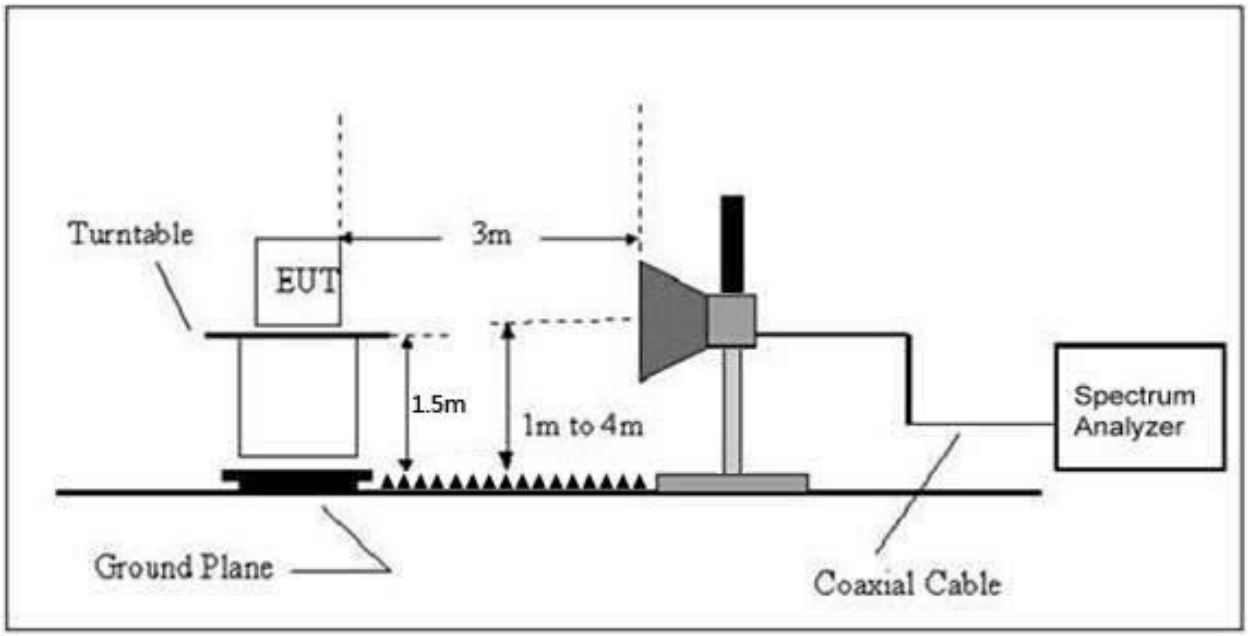
（A）Radiated Emission Test-Up Frequency Below 30MHz



（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	Field Strength	Distance	Field Strength Limit at 3m Distance	
(MHz)	uV/m	(m)	uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))}$ + 80
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))}$ + 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 C63.10-2013. 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*lg(100 [kHz]/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

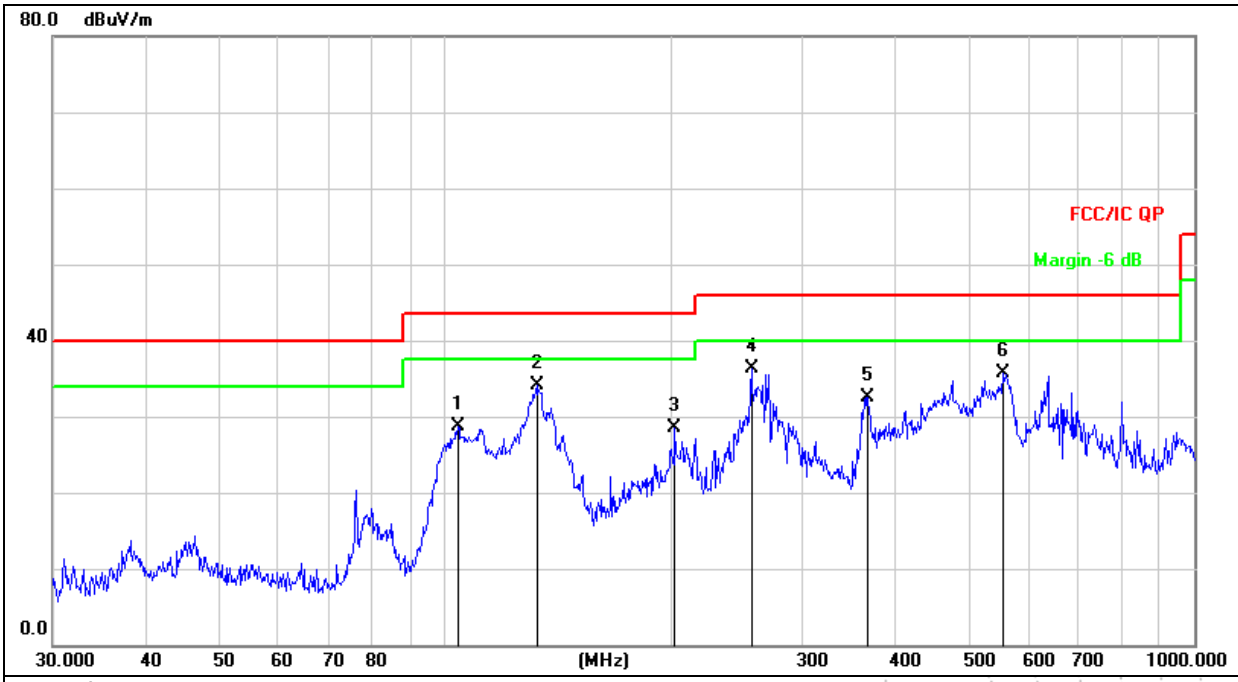
Temperature:	26℃	Relative Humidity:	24%
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 4	Polarization:	--

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 (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

Between 30MHz – 1GHz

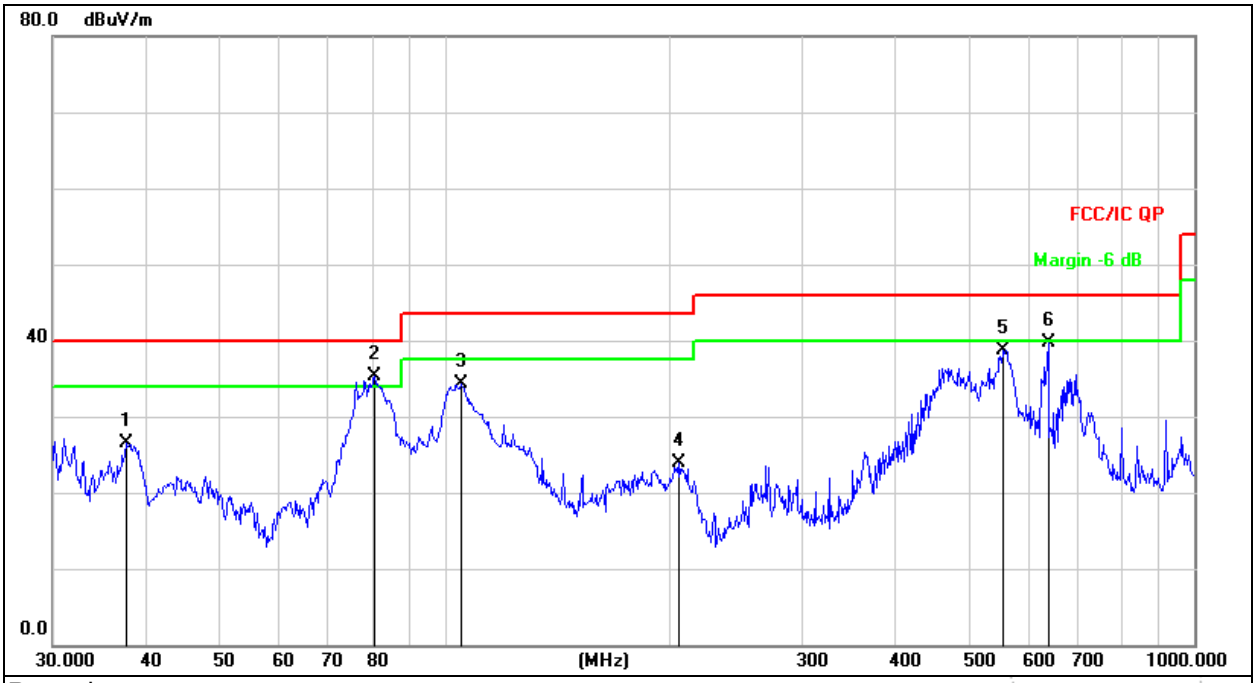
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 4	Test Voltage :	AC120V/60Hz



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

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		104.1701	46.67	-18.03	28.64	43.50	-14.86	QP
2	*	132.6850	54.05	-19.91	34.14	43.50	-9.36	QP
3		202.8104	45.88	-17.28	28.60	43.50	-14.90	QP
4		256.5211	51.93	-15.67	36.26	46.00	-9.74	QP
5		366.8231	45.19	-12.59	32.60	46.00	-13.40	QP
6		554.8254	45.19	-9.41	35.78	46.00	-10.22	QP

Temperature:	26 ℃	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.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		37.5479	43.60	-17.13	26.47	40.00	-13.53	QP
2	*	80.6442	56.69	-21.41	35.28	40.00	-4.72	QP
3		105.2718	52.49	-18.11	34.38	43.50	-9.12	QP
4		205.6751	41.02	-17.20	23.82	43.50	-19.68	QP
5		556.7744	48.13	-9.37	38.76	46.00	-7.24	QP
6		638.3686	47.47	-7.86	39.61	46.00	-6.39	QP

Between 1GHz – 40GHz

Test Mode:	TX(5.1G) - 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 (5180 MHz)-Above 1G							
Vertical	4434.037	72.17	-20.73	51.44	68.2	-16.76	Pk
Vertical	4434.037	59.03	-20.73	38.30	54	-15.70	AV
Vertical	10360.092	62.97	-9.36	53.61	68.2	-14.59	Pk
Vertical	10360.092	49.38	-9.36	40.02	54	-13.98	AV
Vertical	15540.115	64.94	-7.84	57.10	74	-16.90	Pk
Vertical	15540.115	49.39	-7.84	41.55	54	-12.45	AV
Horizontal	4434.007	72.83	-20.73	52.10	68.2	-16.10	Pk
Horizontal	4434.007	59.96	-20.73	39.23	54	-14.77	AV
Horizontal	10360.153	62.83	-9.36	53.47	68.2	-14.73	Pk
Horizontal	10360.153	49.23	-9.36	39.87	54	-14.13	AV
Horizontal	15540.015	62.67	-7.84	54.83	74	-19.17	Pk
Horizontal	15540.015	49.94	-7.84	42.10	54	-11.90	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.062	70.24	-20.42	49.83	74	-24.17	Pk
Vertical	4592.062	59.48	-20.42	39.07	54	-14.93	AV
Vertical	10400.057	60.03	-9.30	50.73	68.2	-17.47	Pk
Vertical	10400.057	49.72	-9.30	40.42	54	-13.58	AV
Vertical	15600.050	63.64	-7.82	55.82	74	-18.18	Pk
Vertical	15600.050	49.81	-7.82	41.99	54	-12.01	AV
Horizontal	4592.183	73.13	-20.42	52.71	74	-21.29	Pk
Horizontal	4592.183	59.23	-20.42	38.81	54	-15.19	AV
Horizontal	10400.081	61.95	-9.30	52.65	68.2	-15.55	Pk
Horizontal	10400.081	49.56	-9.30	40.26	54	-13.74	AV
Horizontal	15600.177	62.98	-7.82	55.16	74	-18.84	Pk
Horizontal	15600.177	49.50	-7.82	41.68	54	-12.32	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.041	70.32	-20.12	50.19	74	-23.81	Pk
Vertical	4739.041	59.55	-20.12	39.43	54	-14.57	AV
Vertical	10480.151	61.04	-9.18	51.86	68.2	-16.34	Pk
Vertical	10480.151	49.65	-9.18	40.47	54	-13.53	AV
Vertical	15720.117	62.74	-7.78	54.96	74	-19.04	Pk
Vertical	15720.117	49.03	-7.78	41.25	54	-12.75	AV
Horizontal	4739.002	74.03	-20.12	53.91	74	-20.09	Pk
Horizontal	4739.002	59.58	-20.12	39.46	54	-14.54	AV
Horizontal	10480.173	63.59	-9.18	54.41	68.2	-13.79	Pk
Horizontal	10480.173	49.56	-9.18	40.38	54	-13.62	AV
Horizontal	15720.173	62.15	-7.78	54.37	74	-19.63	Pk
Horizontal	15720.173	49.52	-7.78	41.74	54	-12.26	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.
The worst case is Antenna A

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	4434.087	71.70	-20.73	50.96	68.2	-17.24	Pk
Vertical	4434.087	59.82	-20.73	39.09	54	-14.91	AV
Vertical	10360.030	63.36	-9.36	54.00	68.2	-14.20	Pk
Vertical	10360.030	49.74	-9.36	40.38	54	-13.62	AV
Vertical	15540.187	61.01	-7.84	53.17	74	-20.83	Pk
Vertical	15540.187	49.71	-7.84	41.87	54	-12.13	AV
Horizontal	4434.139	71.02	-20.73	50.29	68.2	-17.91	Pk
Horizontal	4434.139	59.45	-20.73	38.71	54	-15.29	AV
Horizontal	10360.154	60.06	-9.36	50.70	68.2	-17.50	Pk
Horizontal	10360.154	49.16	-9.36	39.80	54	-14.20	AV
Horizontal	15540.093	62.64	-7.84	54.80	74	-19.20	Pk
Horizontal	15540.093	49.60	-7.84	41.76	54	-12.24	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.054	70.24	-20.42	49.82	74	-24.18	Pk
Vertical	4592.054	59.43	-20.42	39.01	54	-14.99	AV
Vertical	10400.077	61.85	-9.30	52.55	68.2	-15.65	Pk
Vertical	10400.077	49.06	-9.30	39.76	54	-14.24	AV
Vertical	15600.079	60.18	-7.82	52.36	74	-21.64	Pk
Vertical	15600.079	49.22	-7.82	41.40	54	-12.60	AV
Horizontal	4592.159	70.30	-20.42	49.88	74	-24.12	Pk
Horizontal	4592.159	59.89	-20.42	39.48	54	-14.52	AV
Horizontal	10400.096	62.63	-9.30	53.33	68.2	-14.87	Pk
Horizontal	10400.096	49.04	-9.30	39.74	54	-14.26	AV
Horizontal	15600.186	61.18	-7.82	53.36	74	-20.64	Pk
Horizontal	15600.186	49.69	-7.82	41.87	54	-12.13	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.166	73.81	-20.12	53.69	74	-20.31	Pk
Vertical	4739.166	59.80	-20.12	39.68	54	-14.32	AV
Vertical	10480.110	64.37	-9.18	55.19	68.2	-13.01	Pk
Vertical	10480.110	49.37	-9.18	40.19	54	-13.81	AV
Vertical	15720.196	62.46	-7.78	54.68	74	-19.32	Pk
Vertical	15720.196	49.34	-7.78	41.56	54	-12.44	AV
Horizontal	4739.102	74.77	-20.12	54.64	74	-19.36	Pk
Horizontal	4739.102	59.95	-20.12	39.82	54	-14.18	AV
Horizontal	10480.154	61.56	-9.18	52.38	68.2	-15.82	Pk
Horizontal	10480.154	49.43	-9.18	40.25	54	-13.75	AV
Horizontal	15720.036	63.79	-7.78	56.01	74	-17.99	Pk
Horizontal	15720.036	49.93	-7.78	42.15	54	-11.85	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 is MIMO Mode.

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	4434.122	70.71	-20.73	49.98	68.2	-18.22	Pk
Vertical	4434.122	59.38	-20.73	38.65	54	-15.35	AV
Vertical	10380.079	61.02	-9.33	51.69	68.2	-16.51	Pk
Vertical	10380.079	49.31	-9.33	39.98	54	-14.02	AV
Vertical	15570.081	60.99	-7.83	53.16	74	-20.84	Pk
Vertical	15570.081	49.78	-7.83	41.95	54	-12.05	AV
Horizontal	4434.101	73.93	-20.73	53.20	74	-20.80	Pk
Horizontal	4434.101	59.71	-20.73	38.98	54	-15.02	AV
Horizontal	10380.171	63.83	-9.33	54.50	68.2	-13.70	Pk
Horizontal	10380.171	49.42	-9.33	40.09	54	-13.91	AV
Horizontal	15570.079	60.60	-7.83	52.77	74	-21.23	Pk
Horizontal	15570.079	49.53	-7.83	41.70	54	-12.30	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.181	73.67	-20.12	53.54	68.2	-14.66	Pk
Vertical	4739.181	59.22	-20.12	39.09	54	-14.91	AV
Vertical	10460.189	62.38	-9.21	53.17	68.2	-15.03	Pk
Vertical	10460.189	49.75	-9.21	40.54	54	-13.46	AV
Vertical	15690.087	64.97	-7.79	57.18	74	-16.82	Pk
Vertical	15690.087	49.96	-7.79	42.17	54	-11.83	AV
Horizontal	4739.162	71.42	-20.12	51.30	68.2	-16.90	Pk
Horizontal	4739.162	59.24	-20.12	39.11	54	-14.89	AV
Horizontal	10460.148	61.03	-9.21	51.82	68.2	-16.38	Pk
Horizontal	10460.148	49.43	-9.21	40.22	54	-13.78	AV
Horizontal	15690.091	63.01	-7.79	55.22	74	-18.78	Pk
Horizontal	15690.091	49.73	-7.79	41.94	54	-12.06	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 is MIMO Mode.

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	4434.125	72.26	-20.73	51.52	68.2	-16.68	Pk
Vertical	4434.125	59.91	-20.73	39.18	54	-14.82	AV
Vertical	10360.138	62.29	-9.36	52.93	68.2	-15.27	Pk
Vertical	10360.138	49.42	-9.36	40.06	54	-13.94	AV
Vertical	15540.172	63.91	-7.84	56.07	74	-17.93	Pk
Vertical	15540.172	49.26	-7.84	41.42	54	-12.58	AV
Horizontal	4434.127	73.95	-20.73	53.22	68.2	-14.98	Pk
Horizontal	4434.127	59.81	-20.73	39.08	54	-14.92	AV
Horizontal	10360.159	62.73	-9.36	53.37	68.2	-14.83	Pk
Horizontal	10360.159	49.52	-9.36	40.16	54	-13.84	AV
Horizontal	15540.191	60.80	-7.84	52.96	74	-21.04	Pk
Horizontal	15540.191	49.05	-7.84	41.21	54	-12.79	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.027	74.34	-20.42	53.93	74	-20.07	Pk
Vertical	4592.027	59.53	-20.42	39.12	54	-14.88	AV
Vertical	10400.121	61.69	-9.30	52.39	68.2	-15.81	Pk
Vertical	10400.121	49.22	-9.30	39.92	54	-14.08	AV
Vertical	15600.140	62.99	-7.82	55.17	74	-18.83	Pk
Vertical	15600.140	49.97	-7.82	42.15	54	-11.85	AV
Horizontal	4592.122	74.61	-20.42	54.19	74	-19.81	Pk
Horizontal	4592.122	59.79	-20.42	39.38	54	-14.62	AV
Horizontal	10400.084	61.80	-9.30	52.50	68.2	-15.70	Pk
Horizontal	10400.084	49.46	-9.30	40.16	54	-13.84	AV
Horizontal	15600.084	60.15	-7.82	52.33	74	-21.67	Pk
Horizontal	15600.084	49.09	-7.82	41.27	54	-12.73	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.088	74.51	-20.12	54.38	74	-19.62	Pk
Vertical	4739.088	59.44	-20.12	39.32	54	-14.68	AV
Vertical	10480.126	61.94	-9.18	52.76	68.2	-15.44	Pk
Vertical	10480.126	49.95	-9.18	40.77	54	-13.23	AV
Vertical	15720.132	62.51	-7.78	54.73	74	-19.27	Pk
Vertical	15720.132	49.21	-7.78	41.43	54	-12.57	AV
Horizontal	4739.023	74.05	-20.12	53.93	74	-20.07	Pk
Horizontal	4739.023	59.33	-20.12	39.20	54	-14.80	AV
Horizontal	10480.199	64.73	-9.18	55.55	68.2	-12.65	Pk
Horizontal	10480.199	49.39	-9.18	40.21	54	-13.79	AV
Horizontal	15720.124	62.61	-7.78	54.83	74	-19.17	Pk
Horizontal	15720.124	49.97	-7.78	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 is MIMO Mode.

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	4434.172	70.37	-20.73	49.64	68.2	-18.56	Pk
Vertical	4434.172	59.92	-20.73	39.19	54	-14.81	AV
Vertical	10380.190	62.76	-9.33	53.43	68.2	-14.77	Pk
Vertical	10380.190	49.50	-9.33	40.17	54	-13.83	AV
Vertical	15570.179	60.23	-7.83	52.40	74	-21.60	Pk
Vertical	15570.179	49.13	-7.83	41.30	54	-12.70	AV
Horizontal	4434.069	72.05	-20.73	51.32	74	-22.68	Pk
Horizontal	4434.069	59.13	-20.73	38.40	54	-15.60	AV
Horizontal	10380.028	61.85	-9.33	52.52	68.2	-15.68	Pk
Horizontal	10380.028	49.04	-9.33	39.71	54	-14.29	AV
Horizontal	15570.091	61.99	-7.83	54.16	74	-19.84	Pk
Horizontal	15570.091	49.78	-7.83	41.95	54	-12.05	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.191	71.55	-20.12	51.43	68.2	-16.77	Pk
Vertical	4739.191	59.99	-20.12	39.87	54	-14.13	AV
Vertical	10460.126	61.88	-9.21	52.67	68.2	-15.53	Pk
Vertical	10460.126	49.25	-9.21	40.04	54	-13.96	AV
Vertical	15690.167	63.56	-7.79	55.77	74	-18.23	Pk
Vertical	15690.167	49.11	-7.79	41.32	54	-12.68	AV
Horizontal	4739.016	73.41	-20.12	53.29	68.2	-14.91	Pk
Horizontal	4739.016	59.49	-20.12	39.37	54	-14.63	AV
Horizontal	10460.038	64.34	-9.21	55.13	68.2	-13.07	Pk
Horizontal	10460.038	49.07	-9.21	39.86	54	-14.14	AV
Horizontal	15690.006	61.56	-7.79	53.77	74	-20.23	Pk
Horizontal	15690.006	49.30	-7.79	41.51	54	-12.49	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 is MIMO Mode.

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	4434.124	72.83	-20.73	52.10	68.2	-16.10	Pk
Vertical	4434.124	59.45	-20.73	38.72	54	-15.28	AV
Vertical	10420.120	60.51	-9.27	51.24	68.2	-16.96	Pk
Vertical	10420.120	49.30	-9.27	40.03	54	-13.97	AV
Vertical	15630.104	62.58	-7.81	54.77	74	-19.23	Pk
Vertical	15630.104	49.05	-7.81	41.24	54	-12.76	AV
Horizontal	4434.060	73.96	-20.73	53.22	68.2	-14.98	Pk
Horizontal	4434.060	49.39	-20.73	28.66	54	-25.34	AV
Horizontal	10420.127	43.69	9.27	52.96	68.2	-15.24	Pk
Horizontal	10420.127	29.99	9.27	39.26	54	-14.74	AV
Horizontal	15630.137	63.35	-7.81	55.54	74	-18.46	Pk
Horizontal	15630.137	49.63	-7.81	41.82	54	-12.18	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 is MIMO Mode.

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	4679.139	72.77	-20.24	52.53	74	-21.47	Pk
Vertical	4679.139	59.01	-20.24	38.77	54	-15.23	AV
Vertical	11490.126	63.57	-8.79	54.78	68.2	-13.42	Pk
Vertical	11490.126	49.12	-8.79	40.33	54	-13.67	AV
Vertical	17235.052	56.86	-3.18	53.68	68.2	-14.52	Pk
Vertical	17235.052	44.66	-3.18	41.48	54	-12.52	AV
Horizontal	4679.062	71.88	-20.73	51.15	74	-22.85	Pk
Horizontal	4679.062	59.93	-20.73	39.20	54	-14.80	AV
Horizontal	11490.011	62.95	-8.79	54.16	68.2	-14.04	Pk
Horizontal	11490.011	49.15	-8.79	40.36	54	-13.64	AV
Horizontal	17235.079	57.62	-3.18	54.44	68.2	-13.76	Pk
Horizontal	17235.079	44.83	-3.18	41.65	54	-12.35	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.189	74.73	-20.42	54.32	74	-19.68	Pk
Vertical	4592.189	59.42	-20.42	39.00	54	-15.00	AV
Vertical	11570.069	60.02	-8.86	51.16	68.2	-17.04	Pk
Vertical	11570.069	49.98	-8.86	41.12	54	-12.88	AV
Vertical	17355.086	55.23	-2.52	52.71	68.2	-15.49	Pk
Vertical	17355.086	44.33	-2.52	41.81	54	-12.19	AV
Horizontal	4592.182	73.04	-20.42	52.62	74	-21.38	Pk
Horizontal	4592.182	59.17	-20.42	38.75	54	-15.25	AV
Horizontal	11570.188	61.79	-8.86	52.93	68.2	-15.27	Pk
Horizontal	11570.188	49.93	-8.86	41.07	54	-12.93	AV
Horizontal	17355.032	59.44	-2.52	56.92	68.2	-11.28	Pk
Horizontal	17355.032	44.35	-2.52	41.83	54	-12.17	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.117	72.13	-18.93	53.19	68.2	-15.01	Pk
Vertical	6039.117	59.29	-18.93	40.36	54	-13.64	AV
Vertical	11650.199	60.38	-8.92	51.46	74	-22.54	Pk
Vertical	11650.199	49.82	-8.92	40.90	54	-13.10	AV
Vertical	17475.183	59.87	-1.86	58.01	68.2	-10.19	Pk
Vertical	17475.183	44.02	-1.86	42.16	54	-11.84	AV
Horizontal	6039.186	71.75	-18.93	52.82	68.2	-15.38	Pk
Horizontal	6039.186	59.32	-18.93	40.38	54	-13.62	AV
Horizontal	11650.081	64.61	-8.92	55.69	74	-18.31	Pk
Horizontal	11650.081	49.49	-8.92	40.57	54	-13.43	AV
Horizontal	17475.153	57.36	-1.86	55.50	68.2	-12.70	Pk
Horizontal	17475.153	44.28	-1.86	42.42	54	-11.58	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.
The worst case is Antenna A

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	4679.021	70.08	-20.24	49.84	74	-24.16	Pk
Vertical	4679.021	59.02	-20.24	38.77	54	-15.23	AV
Vertical	11490.058	62.08	-8.79	53.29	68.2	-14.91	Pk
Vertical	11490.058	49.01	-8.79	40.22	54	-13.78	AV
Vertical	17235.178	57.75	-3.18	54.57	68.2	-13.63	Pk
Vertical	17235.178	44.82	-3.18	41.64	54	-12.36	AV
Horizontal	4679.017	72.21	-20.24	51.97	74	-22.03	Pk
Horizontal	4679.017	59.81	-20.24	39.57	54	-14.43	AV
Horizontal	11490.144	64.81	-8.79	56.02	68.2	-12.18	Pk
Horizontal	11490.144	49.51	-8.79	40.72	54	-13.28	AV
Horizontal	17235.051	59.50	-3.18	56.32	68.2	-11.88	Pk
Horizontal	17235.051	44.35	-3.18	41.17	54	-12.83	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.187	73.32	-20.42	52.91	74	-21.09	Pk
Vertical	4592.187	59.19	-20.42	38.77	54	-15.23	AV
Vertical	11570.173	60.69	-8.86	51.83	68.2	-16.37	Pk
Vertical	11570.173	49.49	-8.86	40.63	54	-13.37	AV
Vertical	17355.076	56.96	-2.52	54.44	68.2	-13.76	Pk
Vertical	17355.076	44.35	-2.52	41.83	54	-12.17	AV
Horizontal	4592.197	72.76	-20.42	52.34	74	-21.66	Pk
Horizontal	4592.197	59.07	-20.42	38.65	54	-15.35	AV
Horizontal	11570.040	63.16	-8.86	54.30	68.2	-13.90	Pk
Horizontal	11570.040	49.26	-8.86	40.40	54	-13.60	AV
Horizontal	17355.019	58.59	-2.52	56.07	68.2	-12.13	Pk
Horizontal	17355.019	44.38	-2.52	41.86	54	-12.14	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.041	70.97	-18.93	52.04	68.2	-16.16	Pk
Vertical	6039.041	59.92	-18.93	40.98	54	-13.02	AV
Vertical	11650.145	64.50	-8.92	55.58	74	-18.42	Pk
Vertical	11650.145	49.59	-8.92	40.67	54	-13.33	AV
Vertical	17475.149	56.36	-1.86	54.50	68.2	-13.70	Pk
Vertical	17475.149	44.08	-1.86	42.22	54	-11.78	AV
Horizontal	6039.015	74.66	-18.93	55.73	68.2	-12.47	Pk
Horizontal	6039.015	59.03	-18.93	40.10	54	-13.90	AV
Horizontal	11650.162	64.78	-8.92	55.86	74	-18.14	Pk
Horizontal	11650.162	49.60	-8.92	40.68	54	-13.32	AV
Horizontal	17475.198	56.10	-1.86	54.24	68.2	-13.96	Pk
Horizontal	17475.198	44.85	-1.86	42.99	54	-11.01	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 is MIMO Mode.

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	4679.072	73.50	-20.24	53.26	74	-20.74	Pk
Vertical	4679.072	59.34	-20.24	39.10	54	-14.90	AV
Vertical	11510.156	64.34	-8.81	55.53	74	-18.47	Pk
Vertical	11510.156	49.19	-8.81	40.38	54	-13.62	AV
Vertical	17265.046	56.65	-3.01	53.64	68.2	-14.56	Pk
Vertical	17265.046	44.97	-3.01	41.96	54	-12.04	AV
Horizontal	4679.070	71.70	-20.24	51.46	74	-22.54	Pk
Horizontal	4679.070	59.92	-20.24	39.68	54	-14.32	AV
Horizontal	11510.011	61.29	-8.81	52.48	74	-21.52	Pk
Horizontal	11510.011	49.08	-8.81	40.27	54	-13.73	AV
Horizontal	17265.018	57.39	-3.01	54.38	68.2	-13.82	Pk
Horizontal	17265.018	44.73	-3.01	41.72	54	-12.28	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.035	72.08	-18.93	53.15	68.2	-15.05	Pk
Vertical	6039.035	59.74	-18.93	40.80	54	-13.20	AV
Vertical	11590.166	61.91	-8.87	53.04	74	-20.96	Pk
Vertical	11590.166	49.65	-8.87	40.78	54	-13.22	AV
Vertical	17385.031	58.43	-2.35	56.08	68.2	-12.12	Pk
Vertical	17385.031	44.31	-2.35	41.96	54	-12.04	AV
Horizontal	6039.008	70.27	-18.93	51.34	68.2	-16.86	Pk
Horizontal	6039.008	59.31	-18.93	40.38	54	-13.62	AV
Horizontal	11590.070	64.65	-8.87	55.78	74	-18.22	Pk
Horizontal	11590.070	49.00	-8.87	40.13	54	-13.87	AV
Horizontal	17385.091	59.37	-2.35	57.02	68.2	-11.18	Pk
Horizontal	17385.091	44.47	-2.35	42.12	54	-11.88	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 is MIMO Mode.

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	4679.139	71.98	-20.24	51.73	74	-22.27	Pk
Vertical	4679.139	59.21	-20.24	38.97	54	-15.03	AV
Vertical	11490.099	63.61	-8.79	54.82	68.2	-13.38	Pk
Vertical	11490.099	49.09	-8.79	40.30	54	-13.70	AV
Vertical	17235.125	55.73	-3.18	52.55	68.2	-15.65	Pk
Vertical	17235.125	44.93	-3.18	41.75	54	-12.25	AV
Horizontal	4679.102	70.81	-20.24	50.57	74	-23.43	Pk
Horizontal	4679.102	59.35	-20.24	39.11	54	-14.89	AV
Horizontal	11490.085	61.28	-8.79	52.49	68.2	-15.71	Pk
Horizontal	11490.085	49.15	-8.79	40.36	54	-13.64	AV
Horizontal	17235.083	58.70	-3.18	55.52	68.2	-12.68	Pk
Horizontal	17235.083	44.51	-3.18	41.33	54	-12.67	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.086	71.33	-20.42	50.92	74	-23.08	Pk
Vertical	4592.086	59.12	-20.42	38.70	54	-15.30	AV
Vertical	11570.105	62.55	-8.86	53.69	68.2	-14.51	Pk
Vertical	11570.105	49.34	-8.86	40.48	54	-13.52	AV
Vertical	17355.149	56.36	-2.52	53.84	68.2	-14.36	Pk
Vertical	17355.149	44.67	-2.52	42.15	54	-11.85	AV
Horizontal	4592.116	72.73	-20.42	52.32	74	-21.68	Pk
Horizontal	4592.116	59.40	-20.42	38.98	54	-15.02	AV
Horizontal	11570.023	62.93	-8.86	54.07	68.2	-14.13	Pk
Horizontal	11570.023	49.70	-8.86	40.84	54	-13.16	AV
Horizontal	17355.103	58.64	-2.52	56.12	68.2	-12.08	Pk
Horizontal	17355.103	44.53	-2.52	42.01	54	-11.99	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.070	74.53	-18.93	55.60	68.2	-12.60	Pk
Vertical	6039.070	59.58	-18.93	40.65	54	-13.35	AV
Vertical	11650.067	63.59	-8.92	54.67	74	-19.33	Pk
Vertical	11650.067	49.63	-8.92	40.71	54	-13.29	AV
Vertical	17475.034	55.89	-1.86	54.03	68.2	-14.17	Pk
Vertical	17475.034	44.29	-1.86	42.43	54	-11.57	AV
Horizontal	6039.006	73.32	-18.93	54.39	68.2	-13.81	Pk
Horizontal	6039.006	59.10	-18.93	40.17	54	-13.83	AV
Horizontal	11650.091	60.09	-8.92	51.17	74	-22.83	Pk
Horizontal	11650.091	49.01	-8.92	40.09	54	-13.91	AV
Horizontal	17475.026	57.68	-1.86	55.82	68.2	-12.38	Pk
Horizontal	17475.026	44.01	-1.86	42.15	54	-11.85	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 is MIMO Mode.

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	4679.115	71.72	-20.24	51.48	74	-22.52	Pk
Vertical	4679.115	59.73	-20.24	39.49	54	-14.51	AV
Vertical	11510.166	62.03	-8.81	53.22	74	-20.78	Pk
Vertical	11510.166	49.40	-8.81	40.59	54	-13.41	AV
Vertical	17265.165	55.77	-3.01	52.76	68.2	-15.44	Pk
Vertical	17265.165	44.10	-3.01	41.09	54	-12.91	AV
Horizontal	4679.149	73.65	-20.24	53.41	74	-20.59	Pk
Horizontal	4679.149	59.04	-20.24	38.80	54	-15.20	AV
Horizontal	11510.039	64.84	-8.81	56.03	74	-17.97	Pk
Horizontal	11510.039	49.57	-8.81	40.76	54	-13.24	AV
Horizontal	17265.162	56.50	-3.01	53.49	68.2	-14.71	Pk
Horizontal	17265.162	44.27	-3.01	41.26	54	-12.74	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.070	74.85	-18.93	55.92	68.2	-12.28	Pk
Vertical	6039.070	59.19	-18.93	40.26	54	-13.74	AV
Vertical	11590.193	63.38	-8.87	54.51	74	-19.49	Pk
Vertical	11590.193	49.57	-8.87	40.70	54	-13.30	AV
Vertical	17385.016	57.34	-2.35	54.99	68.2	-13.21	Pk
Vertical	17385.016	44.82	-2.35	42.47	54	-11.53	AV
Horizontal	6039.144	72.03	-18.93	53.10	68.2	-15.10	Pk
Horizontal	6039.144	59.92	-18.93	40.99	54	-13.01	AV
Horizontal	11590.049	61.21	-8.87	52.34	74	-21.66	Pk
Horizontal	11590.049	49.30	-8.87	40.43	54	-13.57	AV
Horizontal	17385.169	57.01	-2.35	54.66	68.2	-13.54	Pk
Horizontal	17385.169	44.24	-2.35	41.89	54	-12.11	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 is MIMO Mode.

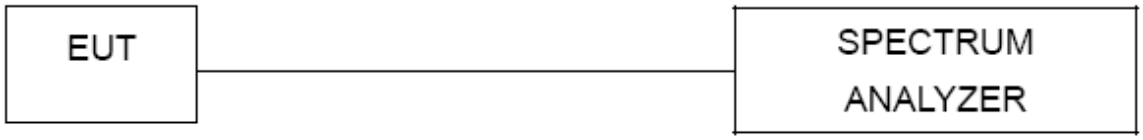
Test Mode :	TX (5.8G) -- 802.11ac 80

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	4679.058	74.04	-20.24	53.80	74	-20.20	Pk
Vertical	4679.058	59.80	-20.24	39.56	54	-14.44	AV
Vertical	11550.078	61.63	-8.84	52.79	74	-21.21	Pk
Vertical	11550.078	49.15	-8.84	40.31	54	-13.69	AV
Vertical	17325.049	58.42	-2.68	55.74	68.2	-12.46	Pk
Vertical	17325.049	44.05	-2.68	41.37	54	-12.63	AV
Horizontal	4679.086	73.49	-20.24	53.25	74	-20.75	Pk
Horizontal	4679.086	59.94	-20.24	39.70	54	-14.30	AV
Horizontal	11550.104	60.58	-8.84	51.74	74	-22.26	Pk
Horizontal	11550.104	49.85	-8.84	41.01	54	-12.99	AV
Horizontal	17325.002	59.38	-2.68	56.70	68.2	-11.50	Pk
Horizontal	17325.002	44.52	-2.68	41.84	54	-12.16	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 is MIMO Mode.

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 ≥ 1/T, where T is defined in section II.B.I.a).

b) Set VBW ≥ 3 RBW.

c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/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 10log(1MHz/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

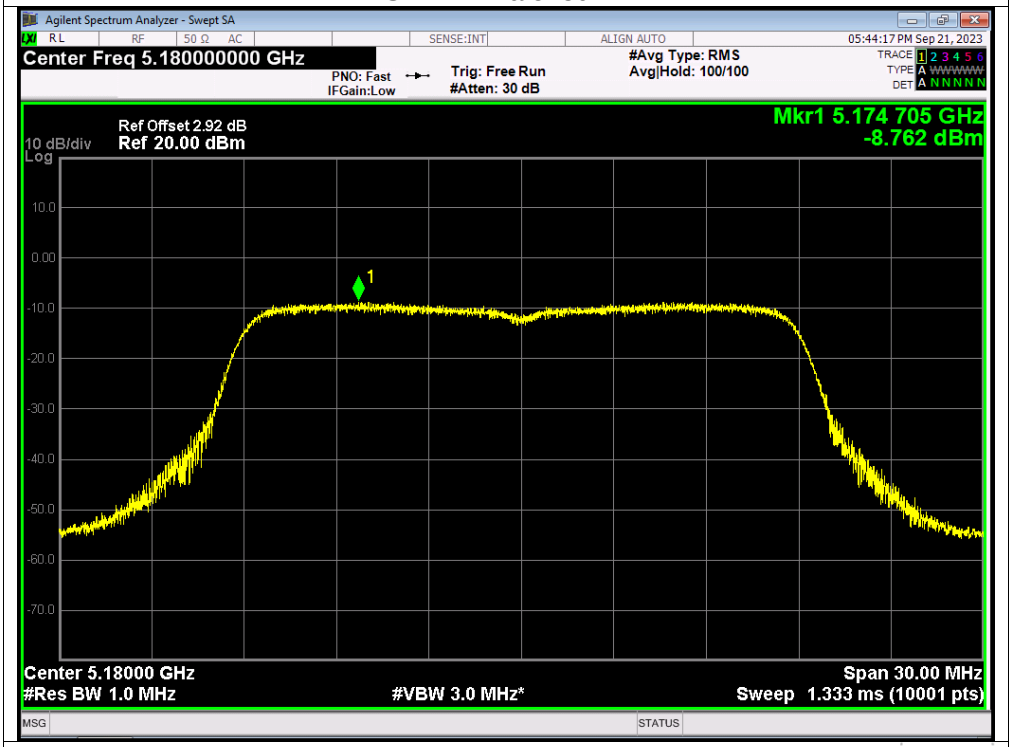
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 12V
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)		Total (dBm/MHz)	Limit (dBm/MHz)	Verdict
			Ant A	Ant B			
NVNT	a	5180	-8.76	-8.64	/	11	Pass
NVNT	a	5200	-8.4	-8.45	/	11	Pass
NVNT	a	5240	**-7.94**	-8.53	/	11	Pass
NVNT	n20	5180	-9.56	-9.54	-6.54	11	Pass
NVNT	n20	5200	-9.12	-9.74	-6.41	11	Pass
NVNT	n20	5240	-9.16	-9.83	-6.47	11	Pass
NVNT	n40	5190	-13.58	-14.64	-11.07	11	Pass
NVNT	n40	5230	-13.79	-15.08	-11.38	11	Pass
NVNT	ac20	5180	-9.27	-10.7	-6.92	11	Pass
NVNT	ac20	5200	-9.29	-11.29	-7.17	11	Pass
NVNT	ac20	5240	-9.33	-11.04	-7.09	11	Pass
NVNT	ac40	5190	-12.28	-14.23	-10.14	11	Pass
NVNT	ac40	5230	-13.15	-14.83	-10.90	11	Pass
NVNT	ac80	5210	-16.58	-17.35	-13.94	11	Pass

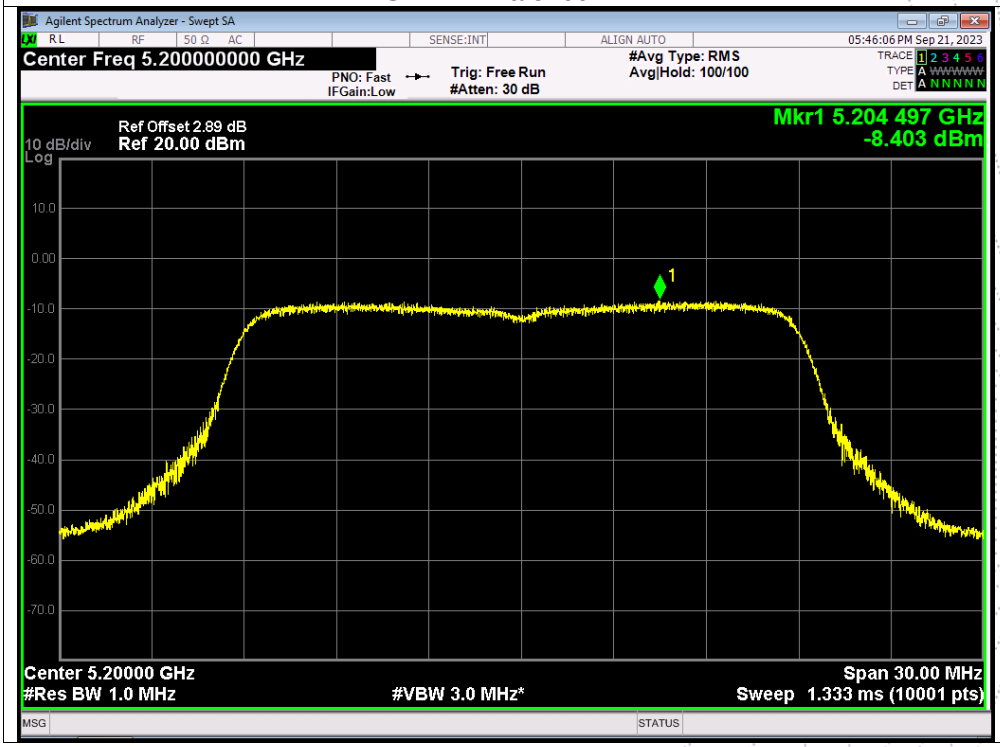
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

Test Graphs

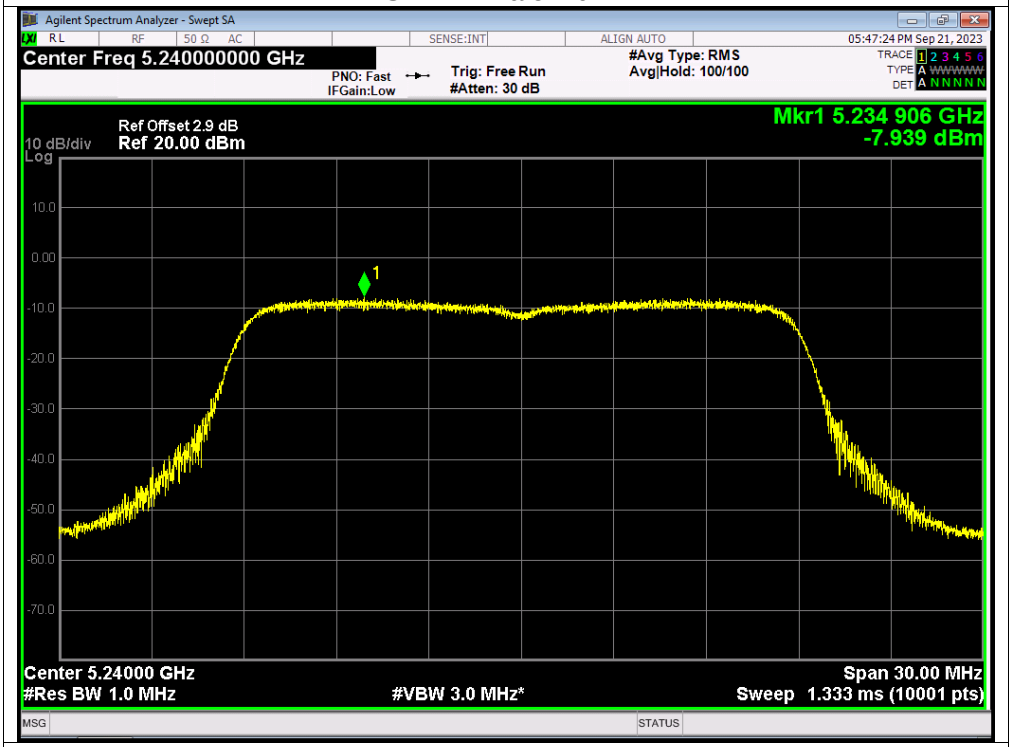
PSD NVNT a 5180MHz



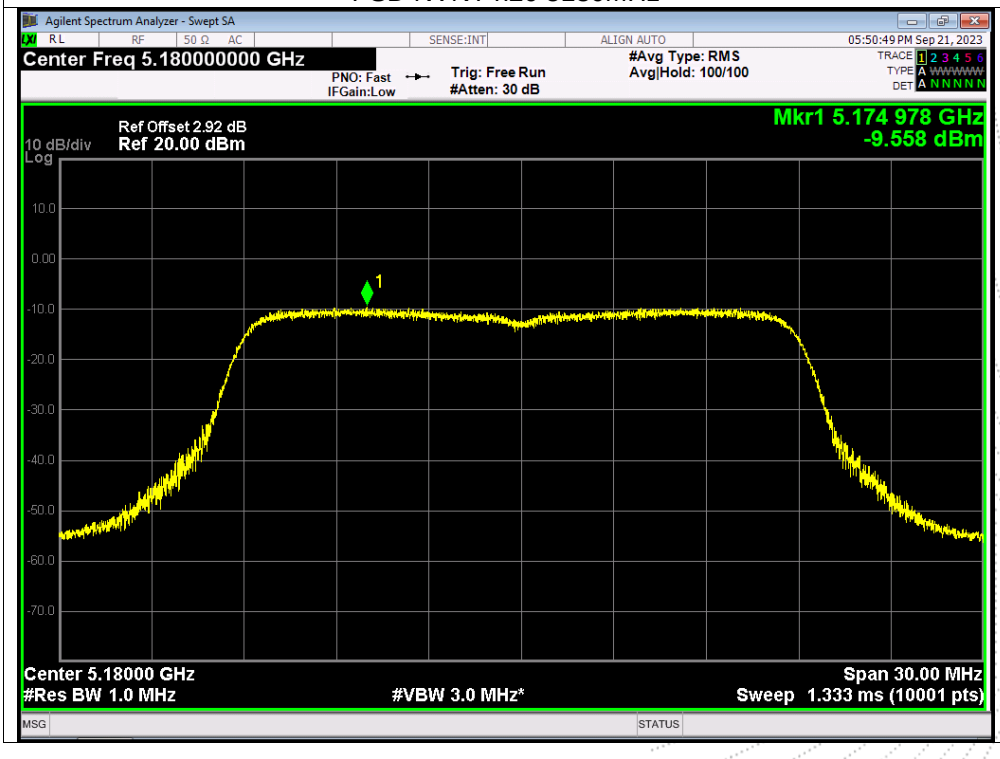
PSD NVNT a 5200MHz



PSD NVNT a 5240MHz



PSD NVNT n20 5180MHz



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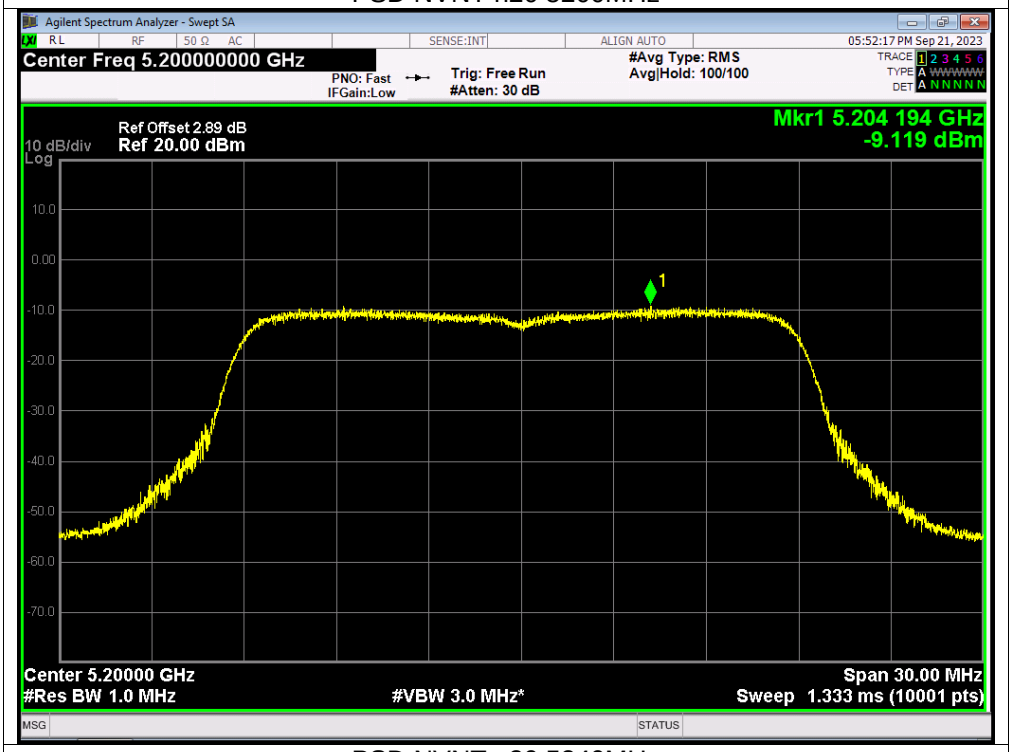
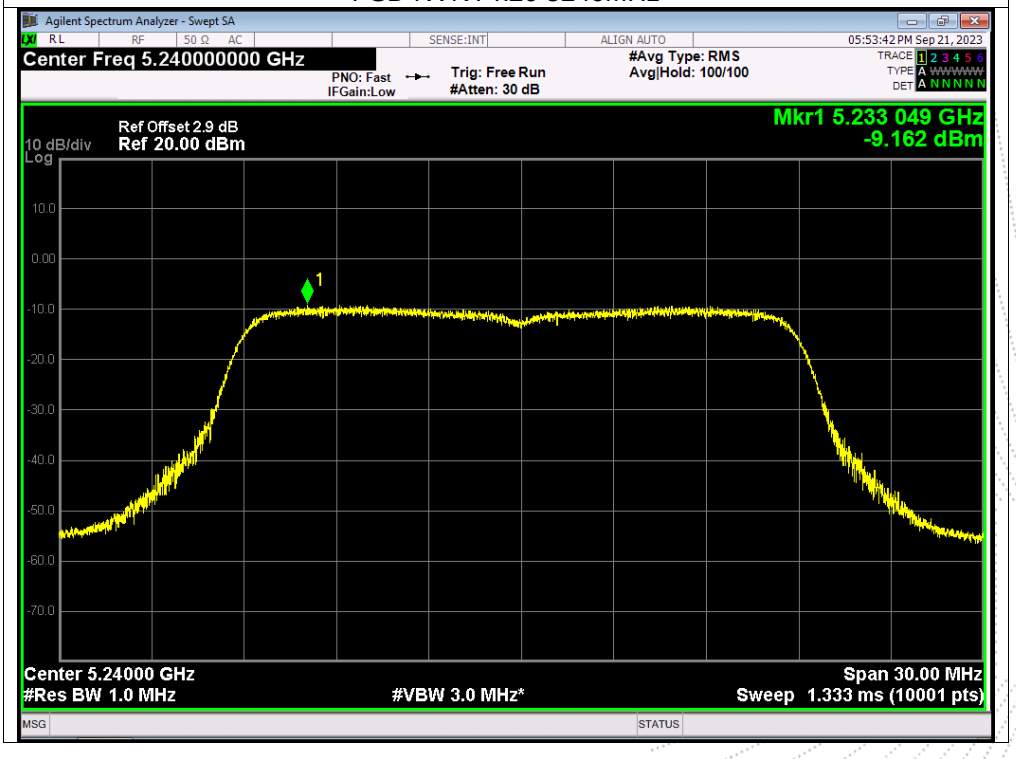
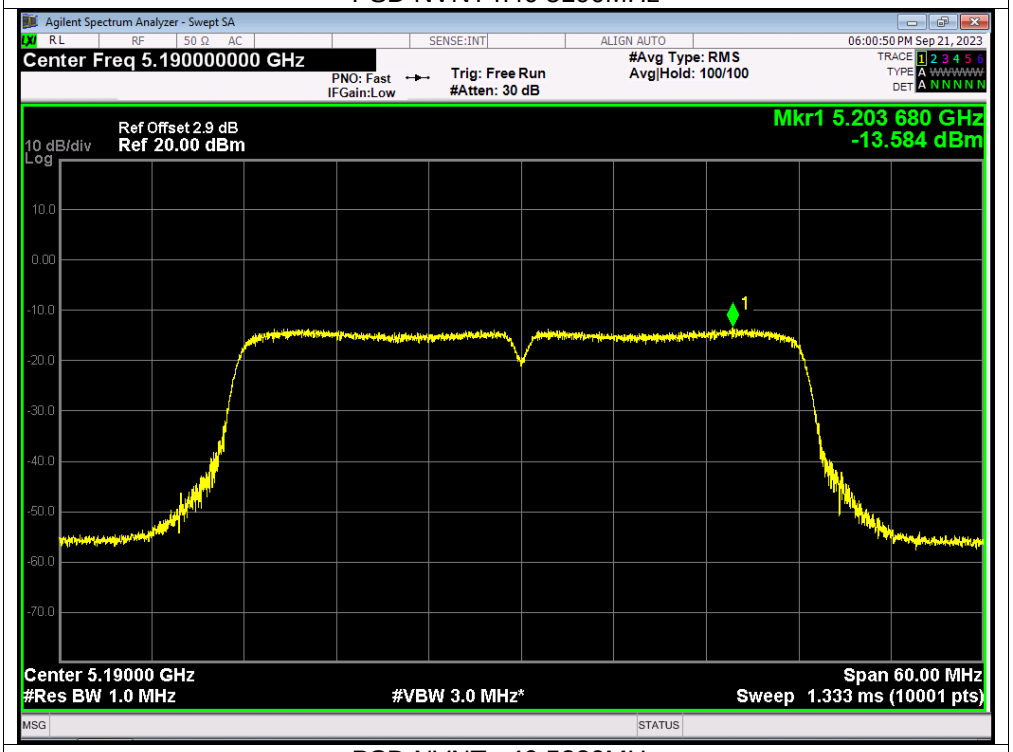


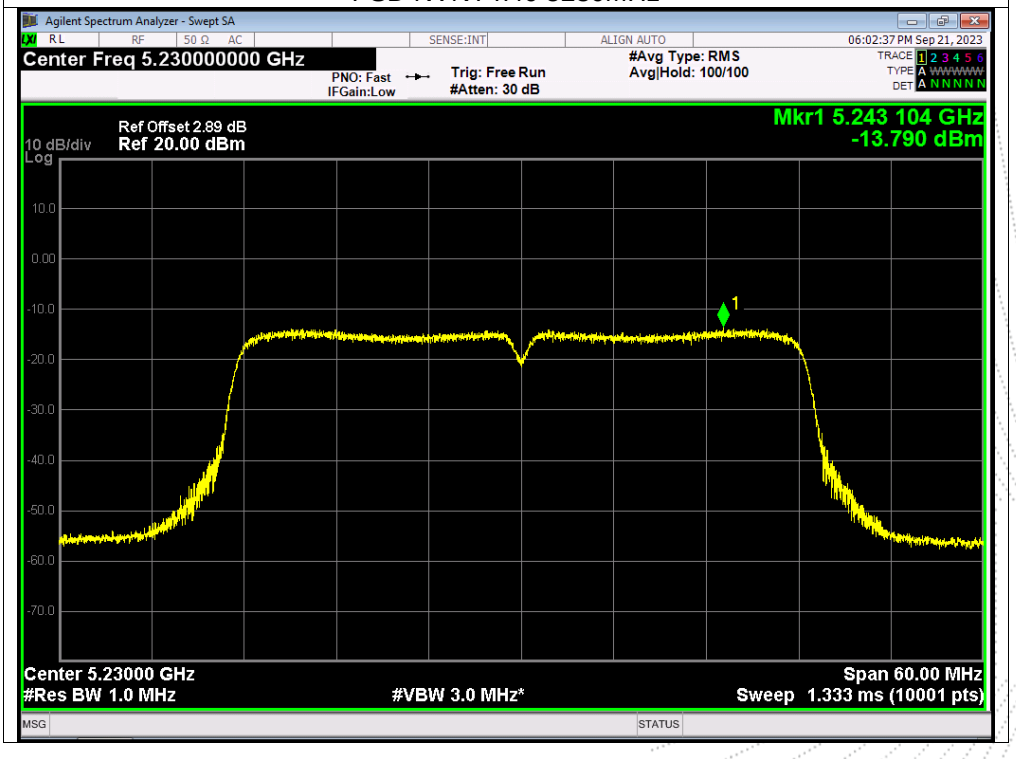
PSD NVNT n20 5240MHz



PSD NVNT n40 5190MHz



PSD NVNT n40 5230MHz



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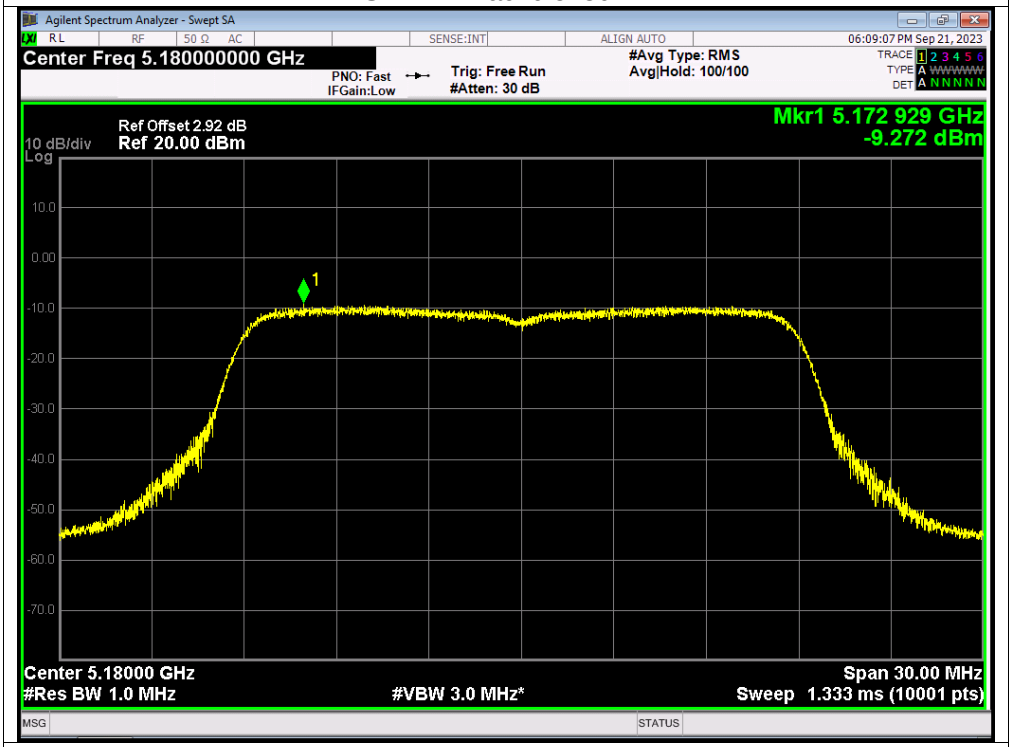

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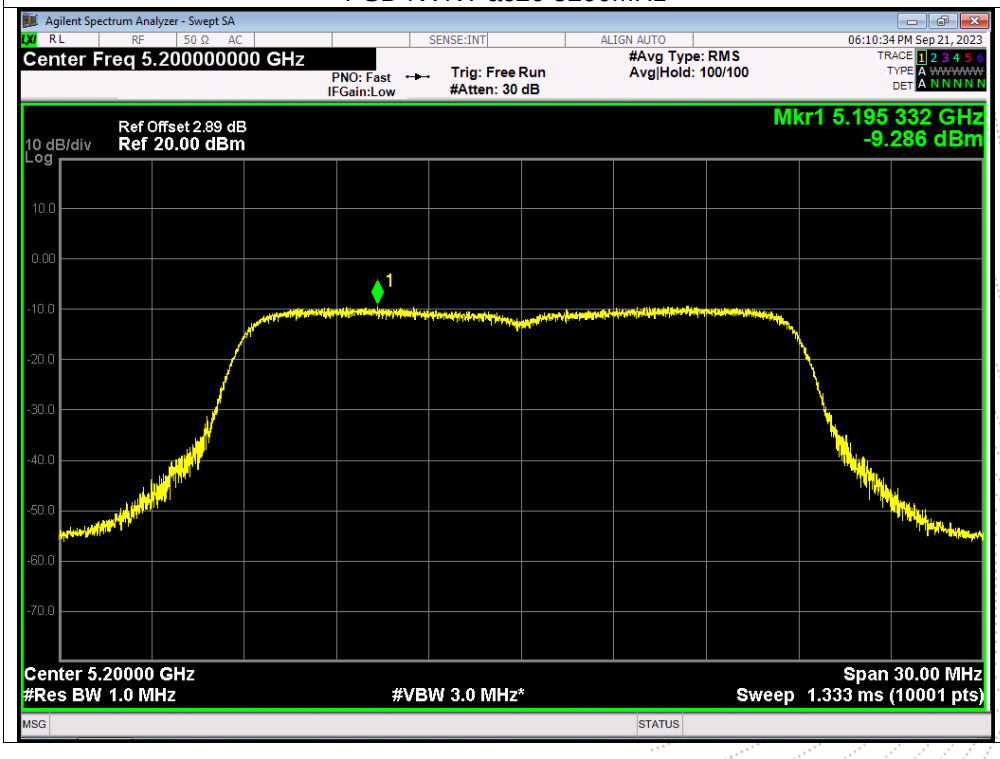

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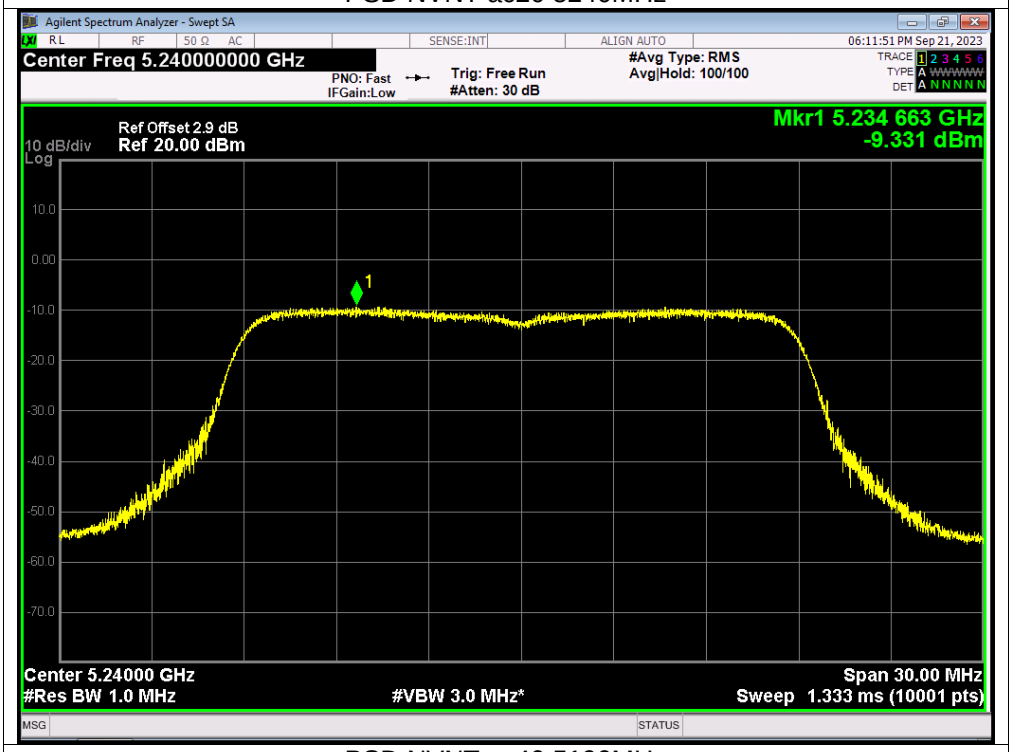

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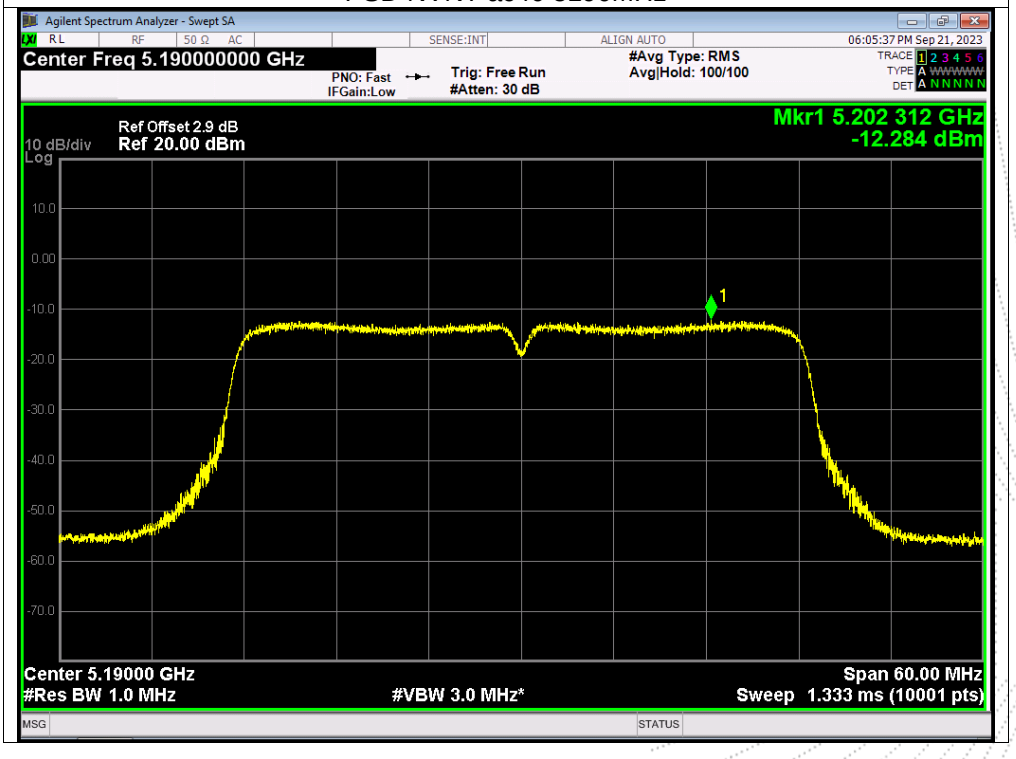
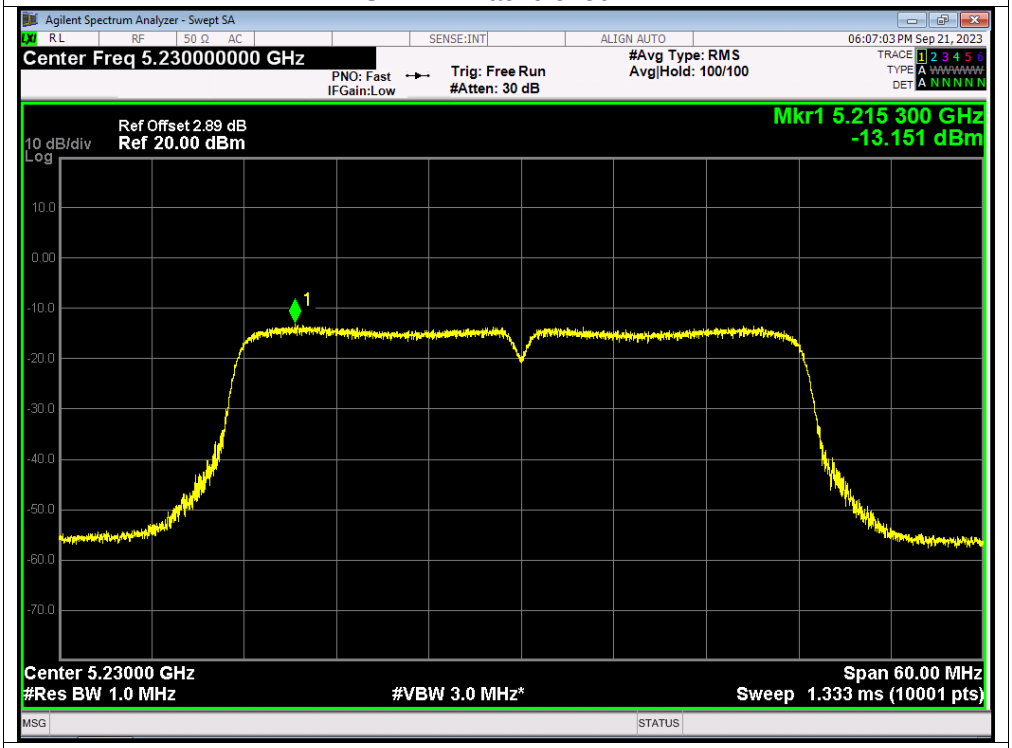
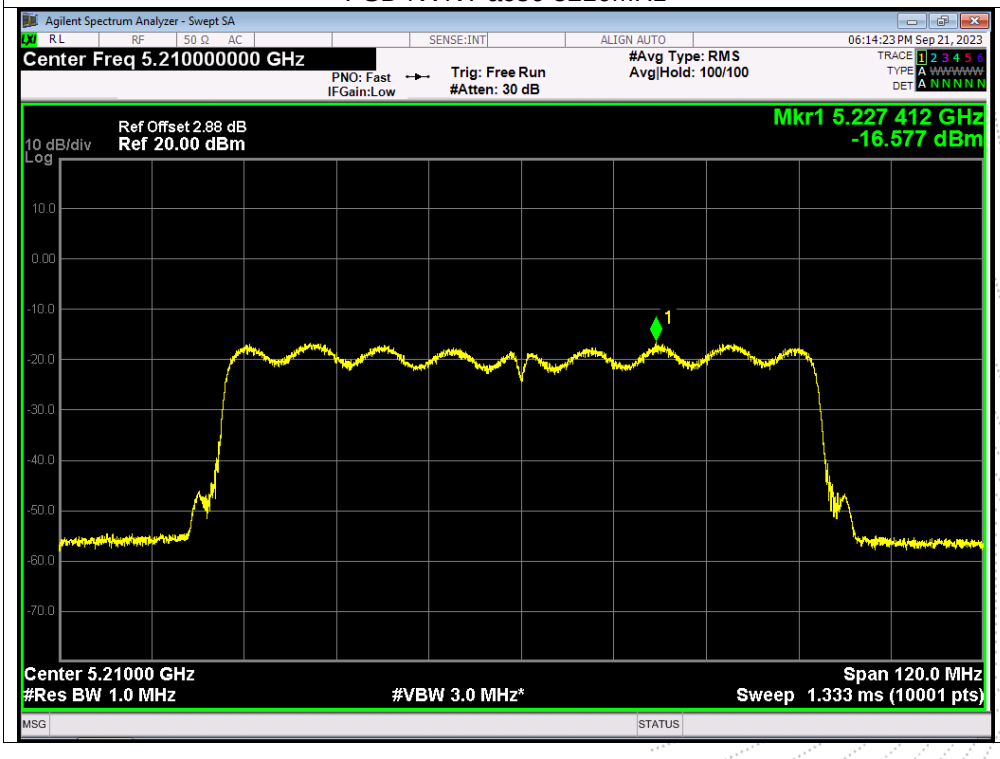


PSD NVNT ac40 5230MHz



PSD NVNT ac80 5210MHz

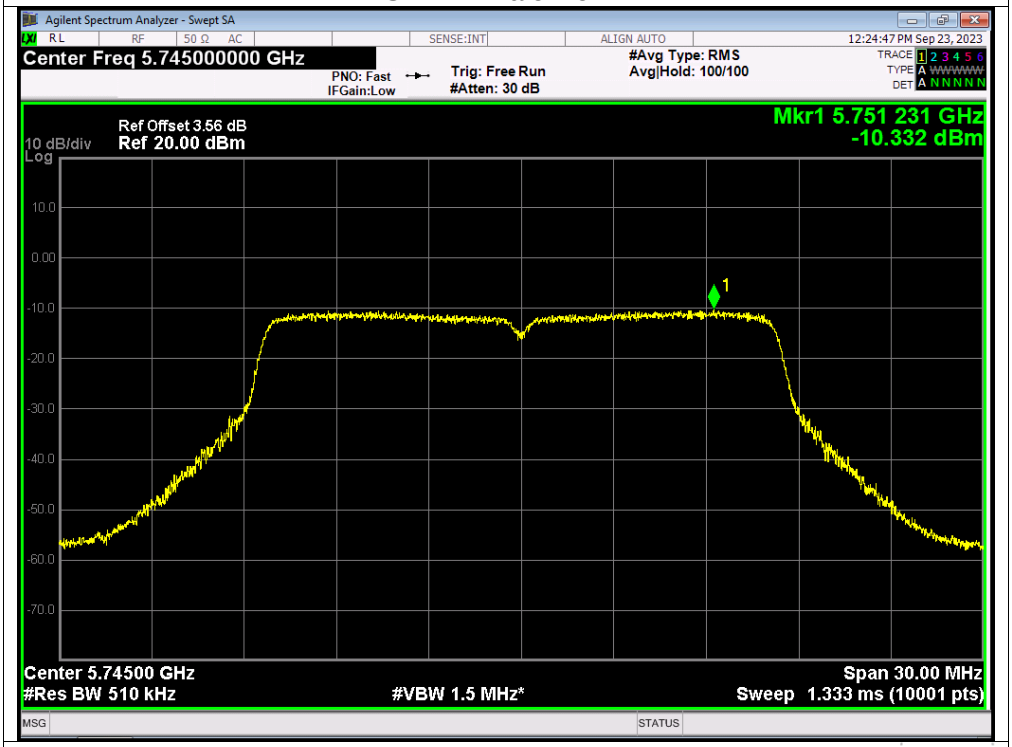


Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 12V
Test Mode:	TX Frequency U-NII-3 (5745-5825MHz)		

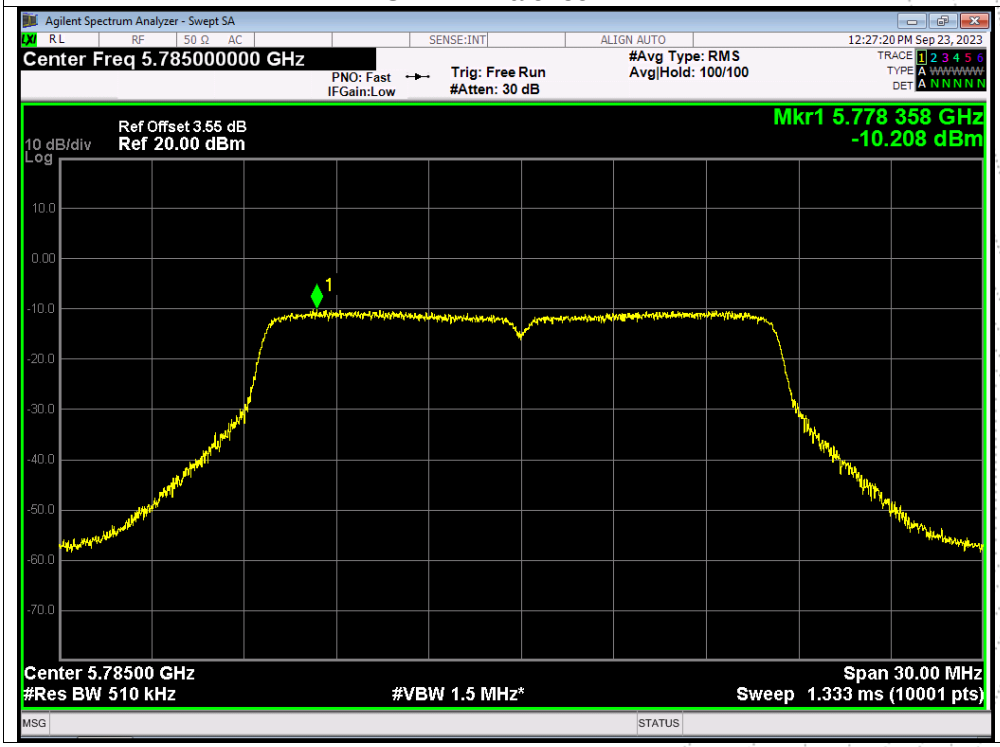
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)		Total (dBm)	Limit (dBm)	Verdict
			Ant A	Ant B			
NVNT	a	5745	-10.33	-11.18	/	30	Pass
NVNT	a	5785	-10.21	-10.74	/	30	Pass
NVNT	a	5825	**-10.14**	-10.93	/	30	Pass
NVNT	n20	5745	-11.6	-12.34	-8.94	30	Pass
NVNT	n20	5785	-11.44	-12.18	-8.78	30	Pass
NVNT	n20	5825	-11.6	-12.23	-8.89	30	Pass
NVNT	n40	5755	-15.4	-16.24	-12.79	30	Pass
NVNT	n40	5795	-15.2	-15.91	-12.53	30	Pass
NVNT	ac20	5745	-11.62	-12.05	-8.82	30	Pass
NVNT	ac20	5785	-11.44	-12.44	-8.90	30	Pass
NVNT	ac20	5825	-11.45	-12.61	-8.98	30	Pass
NVNT	ac40	5755	-15.58	-17.38	-13.38	30	Pass
NVNT	ac40	5795	-14.74	-17.03	-12.73	30	Pass
NVNT	ac80	5775	-18.1	-19.96	-15.92	30	Pass

Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

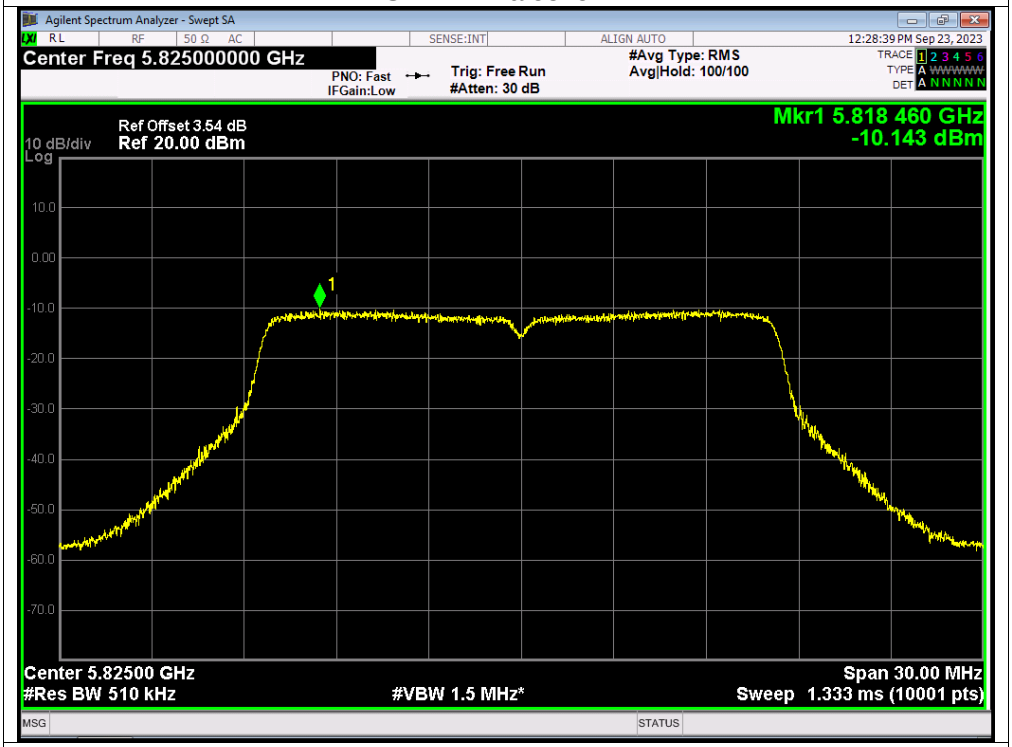
Test Graphs
PSD NVNT a 5745MHz



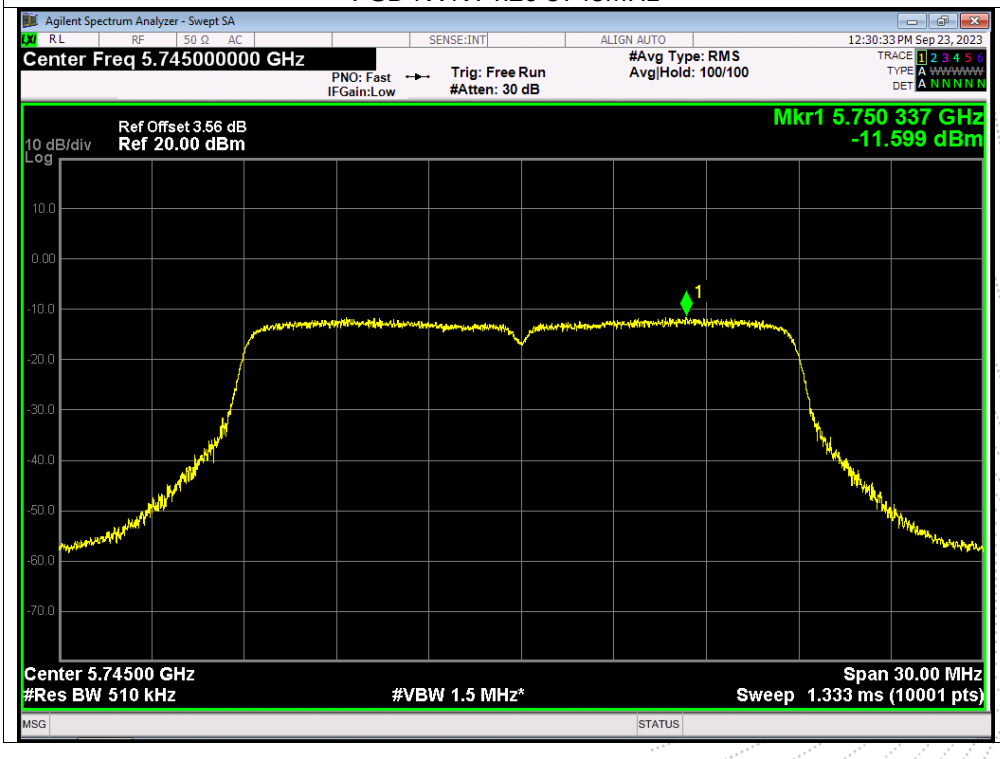
PSD NVNT a 5785MHz



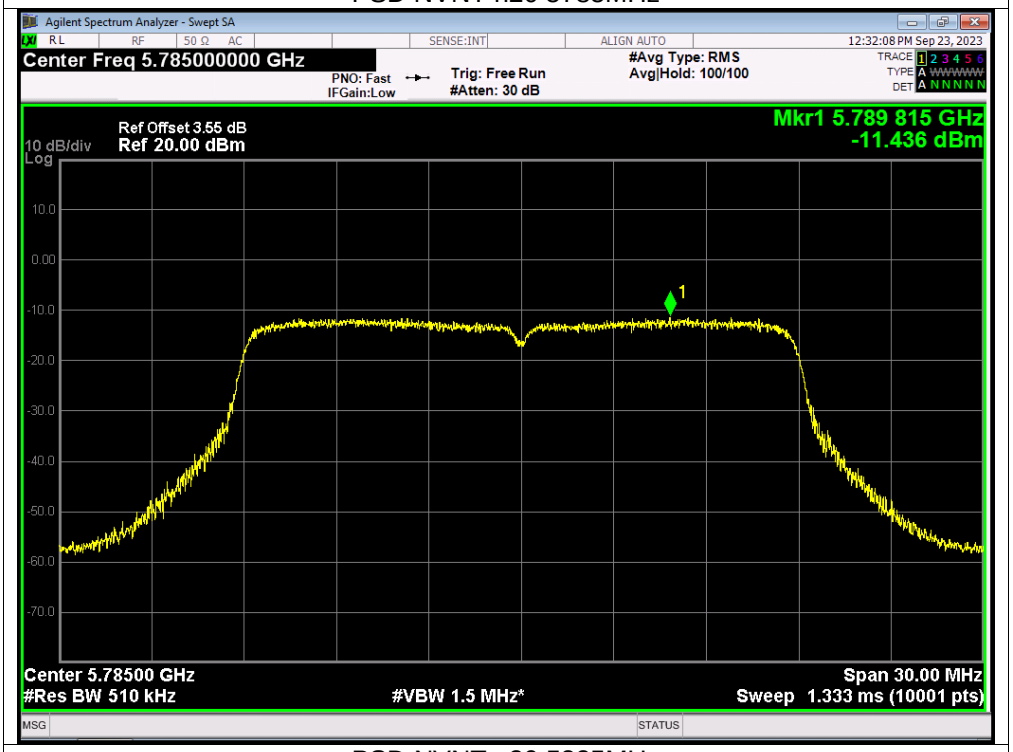
PSD NVNT a 5825MHz



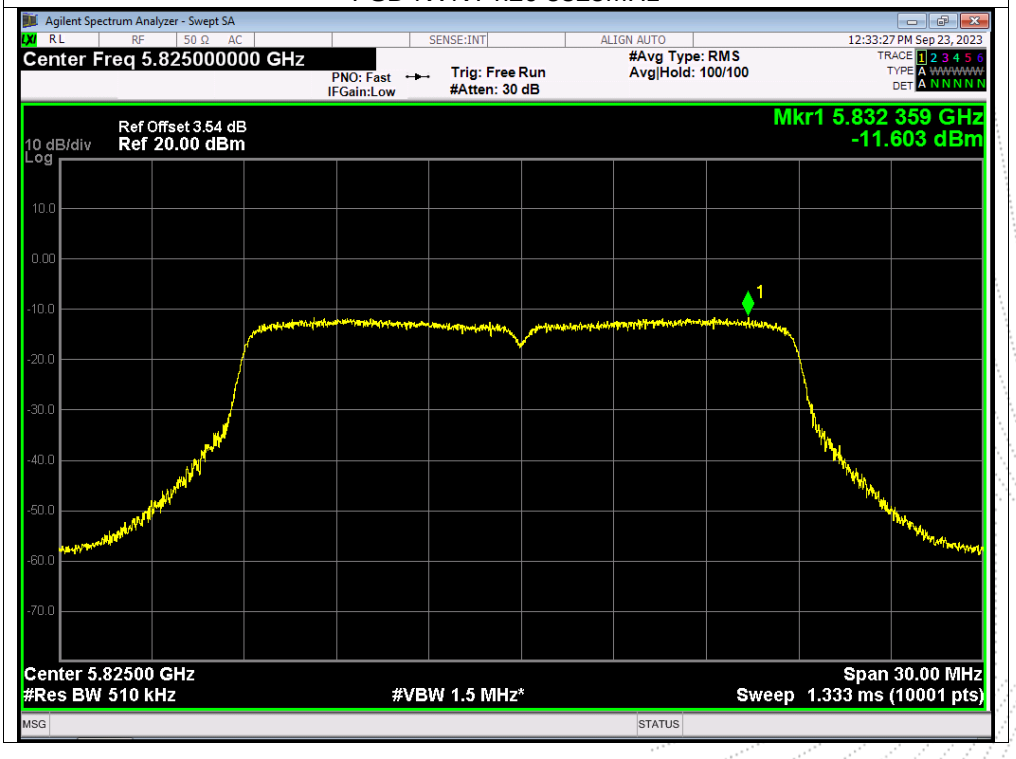
PSD NVNT n20 5745MHz



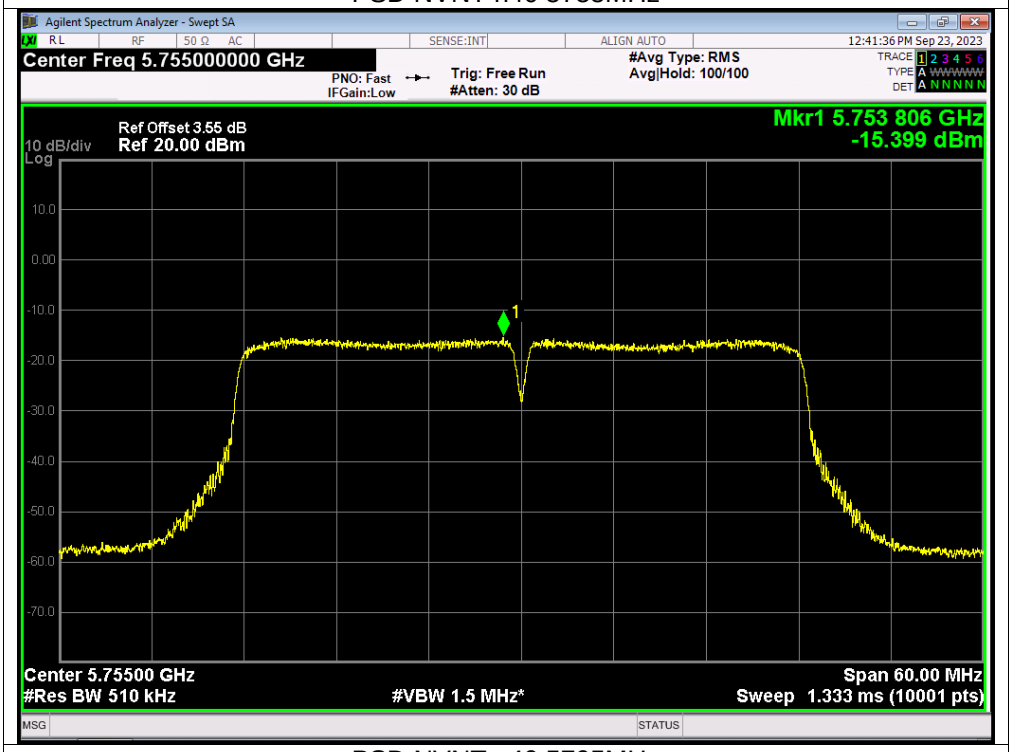
PSD NVNT n20 5785MHz



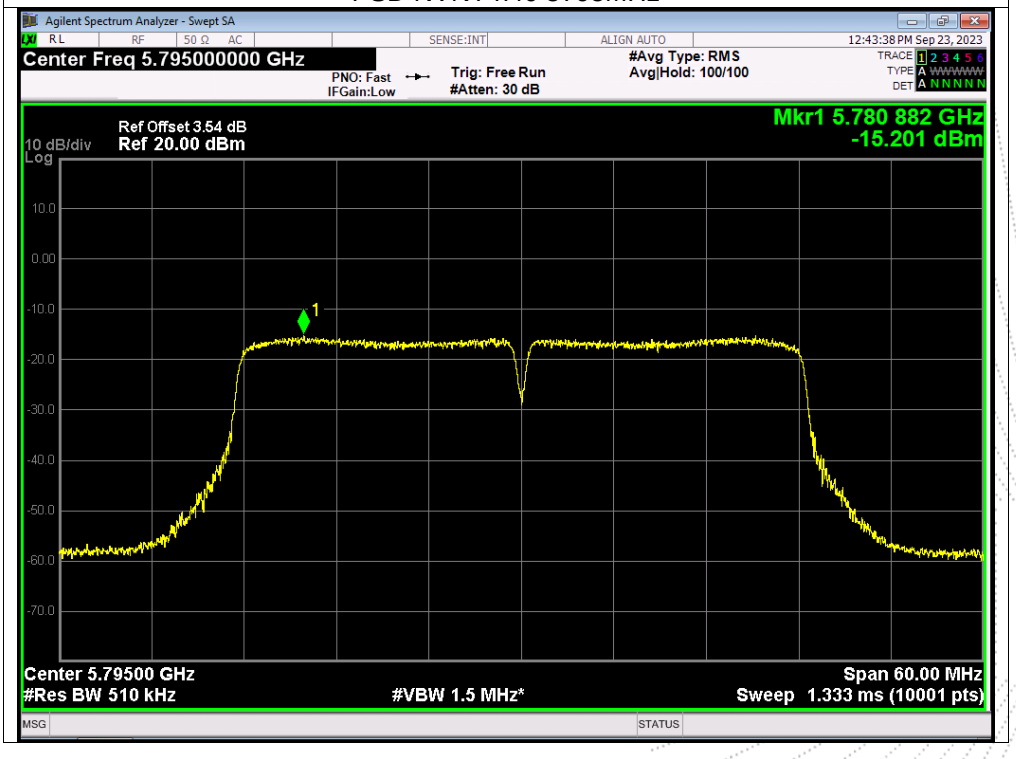
PSD NVNT n20 5825MHz



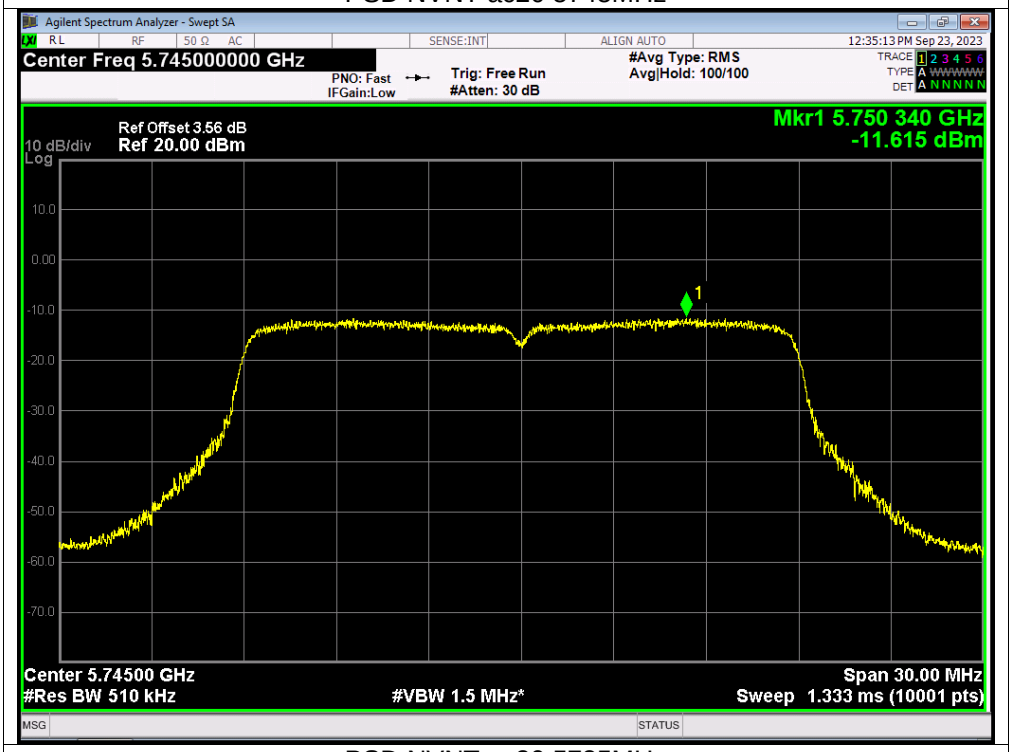
PSD NVNT n40 5755MHz



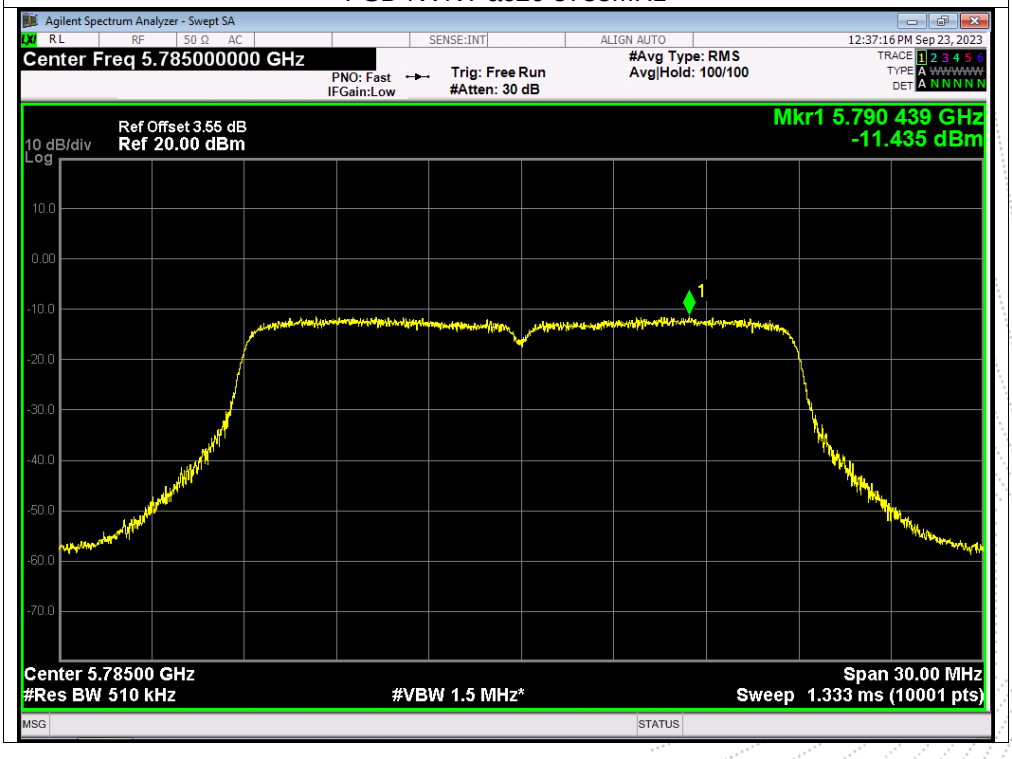
PSD NVNT n40 5795MHz



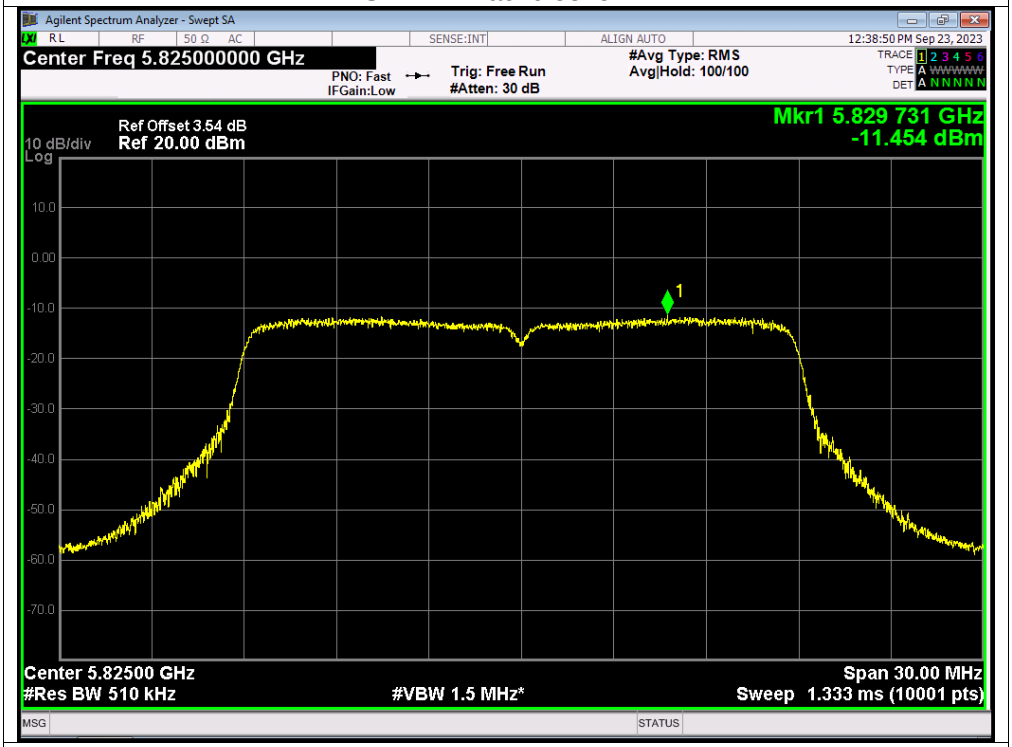
PSD NVNT ac20 5745MHz



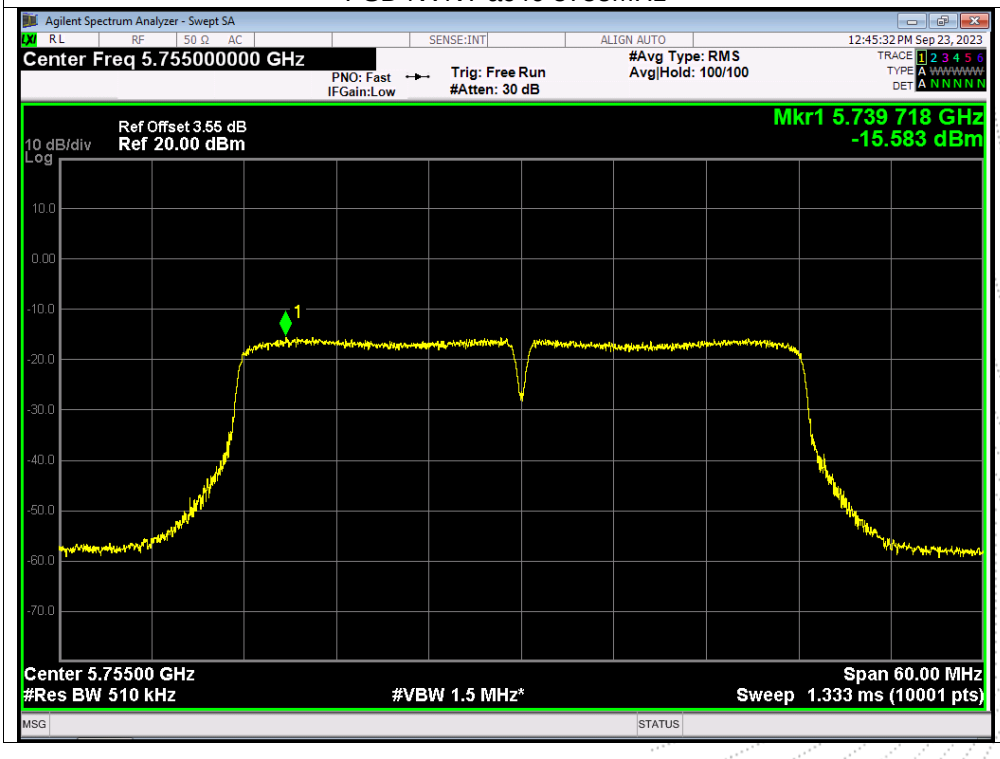
PSD NVNT ac20 5785MHz



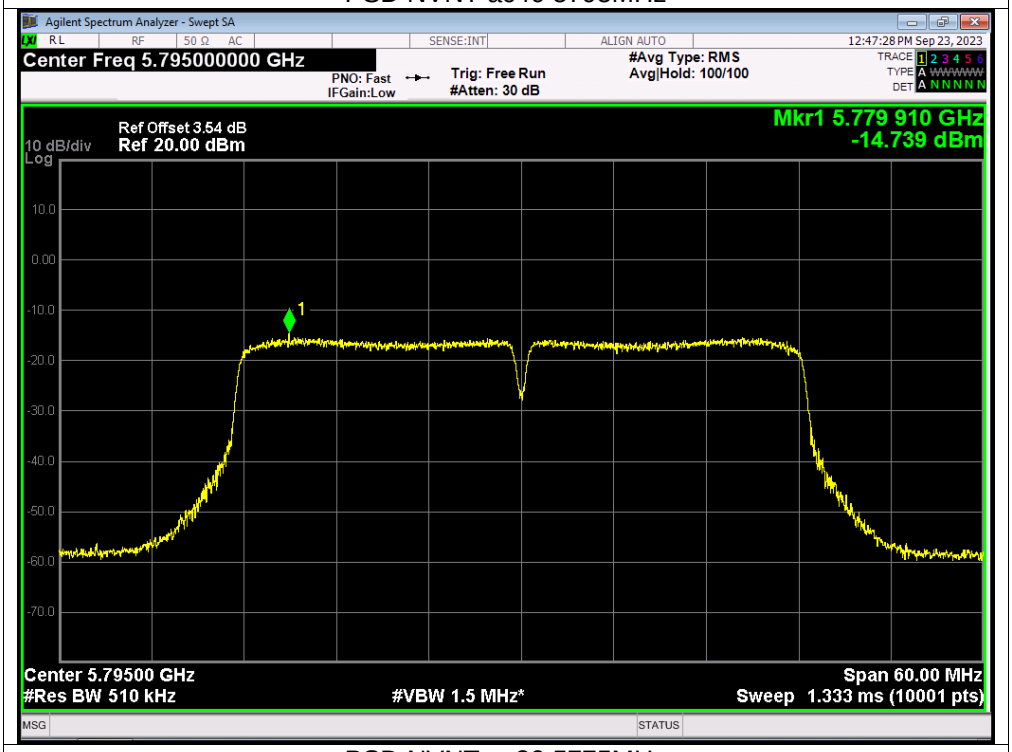
PSD NVNT ac20 5825MHz



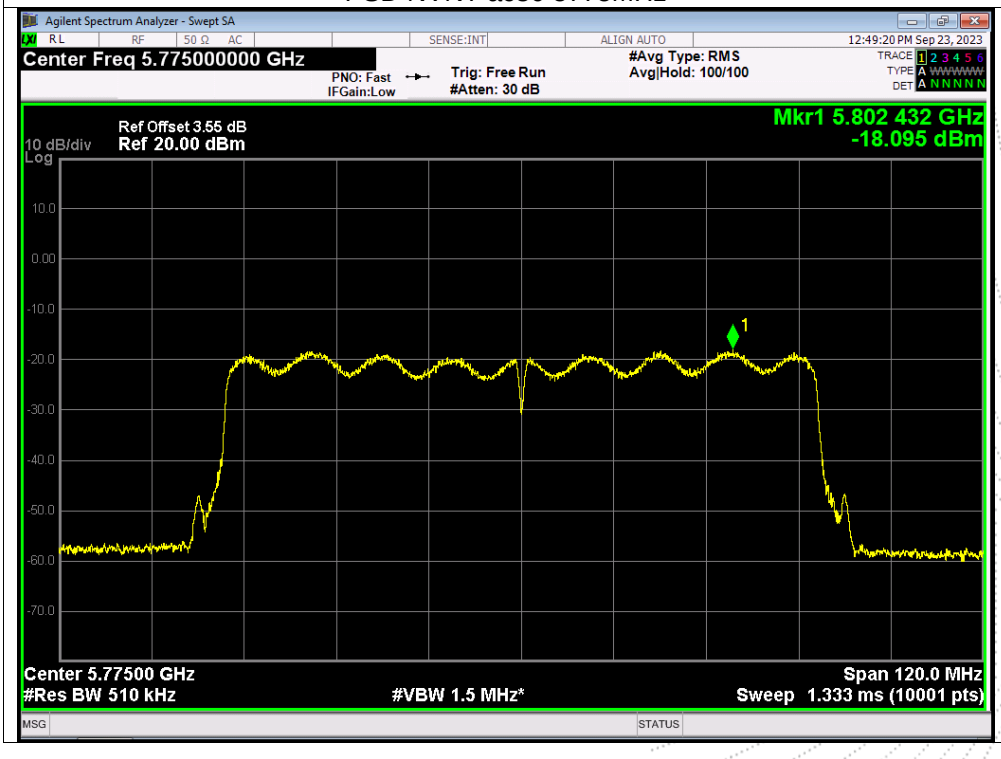
PSD NVNT ac40 5755MHz



PSD NVNT ac40 5795MHz

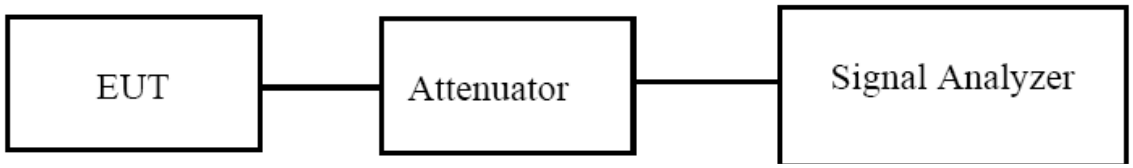


PSD NVNT ac80 5775MHz



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 ≥ 3 · 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) ≥ 3 x 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.