

TEST REPORT

Report No.: BCTC2205554736-4E

Applicant: Shenzhen Hopeland Technologies CO., Ltd.

Product Name: Wing 820

Model/Type
reference: HY820

Tested Date: 2022-05-26 to 2022-06-06

Issued Date: 2022-06-06



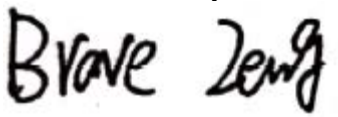
Shenzhen BCTC Testing Co., Ltd.



FCC ID:2ANBW-HY8201

Product Name: Wing 820
Trademark: Hopeland
Model/Type reference: HY820
Prepared For: Shenzhen Hopeland Technologies CO., Ltd.
Address: 17/F, Block A, Clou Bldg, Baoshen Road, Hi-tech Industrial Park North, Nanshan District, 518007, Shenzhen, China
Manufacturer: Shenzhen Hopeland Technologies CO., Ltd.
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Prepared By: Shenzhen BCTC Testing Co., Ltd.
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Sample Received Date: 2022-05-26
Sample tested Date: 2022-05-26 to 2022-06-06
Issue Date: 2022-06-06
Report No.: BCTC2205554736-4E
FCC Part15 15.407
ANSI C63.10-2013
KDB 662911 D01 v02r01
KDB 789033 D02 v02r01
Test Standards
Test Results: PASS
Remark: This is WIFI-5GHz band. radio test report.

Tested by:


Brave Zeng/ Project Handler

Approved by:


Zero Zhou/Reviewer

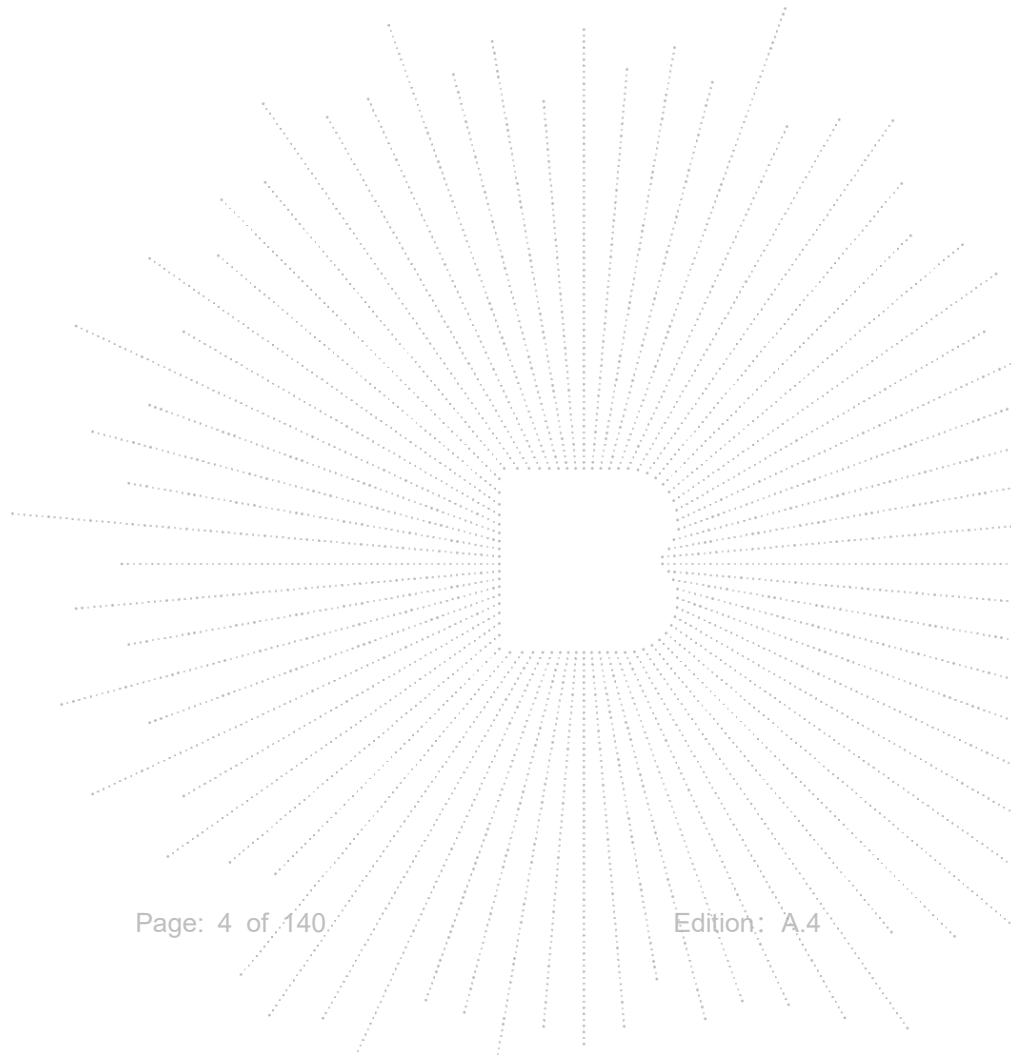
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Table Of Content

	Page
Test Report Declaration	
1. Version	5
2. Test Summary	6
3. Measurement Uncertainty	7
4. Product Information And Test Setup	8
4.1 Product Information	8
4.2 Test Setup Configuration	9
4.3 Support Equipment	9
4.4 Channel List	10
4.5 Test Mode	11
4.6 Table Of Parameters Of Text Software Setting	11
5. Test Facility And Test Instrument Used	12
5.1 Test Facility	12
5.2 Test Instrument Used	12
6. Conducted Emissions	14
6.1 Block Diagram Of Test Setup	14
6.2 Limit	14
6.3 Test procedure	14
6.4 EUT operating Conditions	15
6.5 Test Result	16
7. Radiated Emissions	18
7.1 Block Diagram Of Test Setup	18
7.2 Limit	19
7.3 Test procedure	20
7.4 EUT operating Conditions	21
7.5 Test Result	21
8. Power Spectral Density Test	36
8.1 Block Diagram Of Test Setup	36
8.2 Limit	36
8.3 Test procedure	37
8.4 EUT operating Conditions	37
8.5 Test Result	38
9. 26dB & 6dB & 99% Emission Bandwidth	53
9.1 Block Diagram Of Test Setup	53
9.2 Limit	53
9.3 Test procedure	53
9.4 EUT operating Conditions	54
9.5 Test Result	54
10. Maximum Conducted Output Power	84
10.1 Block Diagram Of Test Setup	84
10.2 Limit	84
10.3 Test procedure	84
10.4 EUT operating Conditions	85
10.5 Test Result	86
11. Out Of Band Emissions	101
11.1 Block Diagram Of Test Setup	101

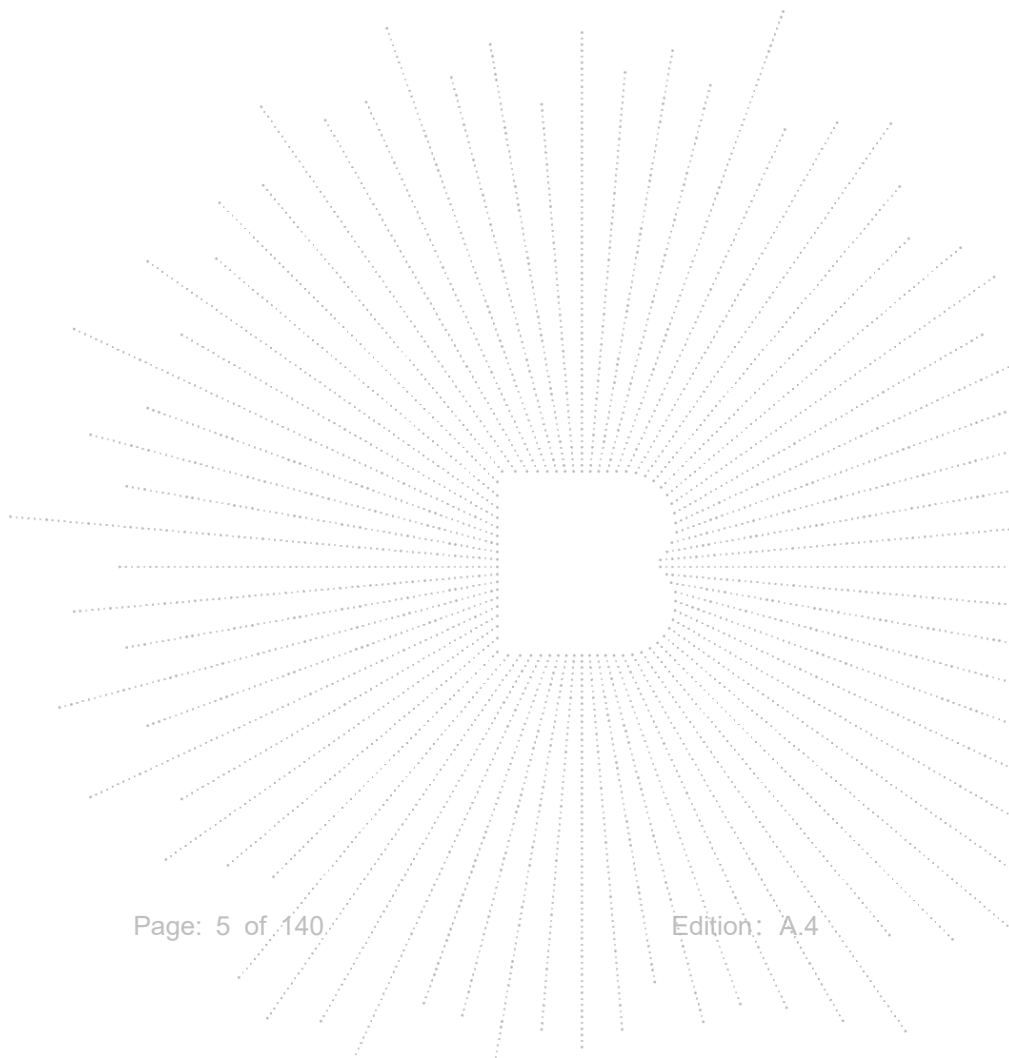
11.2	Limit	101
11.3	Test procedure	101
11.4	EUT operating Conditions	101
11.5	Test Result	102
12.	Spurious RF Conducted Emissions	114
12.1	Block Diagram Of Test Setup	114
12.2	Limit	114
12.3	Test procedure	114
12.4	Test Result	114
13.	Frequency Stability Measurement	129
13.1	Block Diagram Of Test Setup	129
13.2	Limit	129
13.3	Test procedure	129
13.4	Test Result	130
14.	Antenna Requirement	136
14.1	Limit	136
14.2	Test Antenna	136
15.	EUT Photographs	137
16.	EUT Test Setup Photographs	138

(Note: N/A Means Not Applicable)



1. Version

Report No.	Issue Date	Description	Approved
BCTC2205554736-4E	2022-06-06	Original	Valid



2. Test Summary

The Product has been tested according to the following specifications:

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

3. Measurement Uncertainty

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

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
2	3m chamber Radiated spurious emission(9KHz-30MHz)	U=3.7dB
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

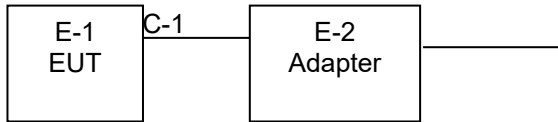
4.1 Product Information

Model/Type reference:	HY820
Model differences:	N/A
Hardware Version:	HY820-MB-A0
Software Version:	V09.1
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)/ac20; 5190-5230MHz for 802.11n(HT40)/ac40; 5210MHz for 802.11 ac80; 5745-5825 MHz for 802.11a/n(HT20)/ac20; 5755-5795 MHz for 802.11a/n(HT40)/ac40; 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:	1.78 dBi
Ratings:	AC 120V/60Hz/DC 3.85V
Adapter:	Model:HJ-0502000W2-ES Input:100-240V~50/60Hz 0.3A Output:5.0V --- 2.0A 10.0W

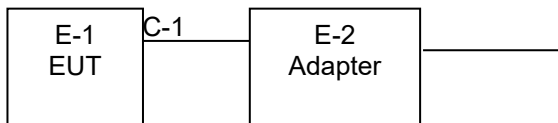
4.2 Test Setup Configuration

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

Conducted Emission:



Radiated Spurious Emission



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	Wing 820	Hopeland	HY820	N/A	EUT
E-2	Adapter	N/A	HJ-0502000W2-EU	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	N/A	N/A	1M	DC cable unshielded

Notes:

- All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Channel List

Frequency and Channel list for 802.11a/n/ac (5180-5240MHz):

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)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
42	5210	-	-	-	-	-	-

Frequency and Channel list for 802.11a/n/ac (5745-5825MHz):

802.11a/n/ac(20MHz) 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)	Channel	Frequency (MHz)
151	5755	159	5795	-	-	-	-

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

Conducted Emission	
Final Test Mode	Description
Mode 4	Link Mode

For Radiated Emission	
Final Test 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

Note: 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, Tangwei, 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

IC Registered No.: 23583

5.2 Test Instrument Used

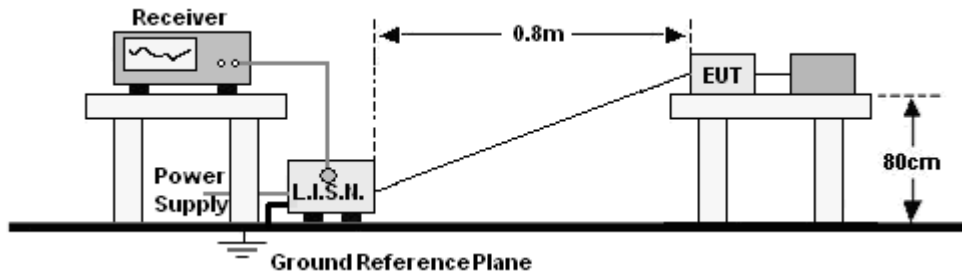
Conducted Emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESR3	102075	May 24, 2022	May 23, 2023
LISN	R&S	ENV216	101375	May 24, 2022	May 23, 2023
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Attenuator	\	10dB DC-6GHz	1650	May 24, 2022	May 23, 2023

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power Metter	Keysight	E4419	\	May 24, 2022	May 23, 2023
Power Sensor (AV)	Keysight	E9300A	\	May 24, 2022	May 23, 2023
Signal Analyzer 20kHz-26.5G Hz	Keysight	N9020A	MY49100060	May 24, 2022	May 23, 2023
Spectrum Analyzer 9kHz-40GHz	R&S	FSP 40	\	May 24, 2022	May 23, 2023

Radiated Emissions Test (966 Chamber)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	Jun. 06. 2020	Jun. 05, 2023
Receiver	R&S	ESR3	102075	May 24, 2022	May 23, 2023
Receiver	R&S	ESRP	101154	May 24, 2022	May 23, 2023
Amplifier	SKET	LAPA_01G18 G-45dB	\	May 24, 2022	May 23, 2023
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 24, 2022	May 23, 2023
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 26, 2022	May 25, 2023
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 24, 2022	May 23, 2023
Horn Antenn (18GHz-40GHz)	Schwarzbeck	BBHA9170	00822	Jun. 15, 2021	Jun. 14, 2022
Amplifier (18GHz-40GHz)	MITEQ	TTA1840-35- HG	2034381	May 26, 2022	May 25, 2023
Loop Antenna (9kHz-30MHz)	Schwarzbeck	FMZB1519B	00014	May 26, 2022	May 25, 2023
RF cables1 (9kHz-30MHz)	Huber+Suhnar	9kHz-30MHz	B1702988-000 8	May 26, 2022	May 25, 2023
RF cables2 (30MHz-1GHz)	Huber+Suhnar	30MHz-1GHz	1486150	May 26, 2022	May 25, 2023
RF cables3 (1GHz-40GHz)	Huber+Suhnar	1GHz-40GHz	1607106	May 26, 2022	May 25, 2023
Power Metter	Keysight	E4419	\	May 26, 2022	May 25, 2023
Power Sensor (AV)	Keysight	E9300A	\	May 26, 2022	May 25, 2023
Signal Analyzer 20kHz-26.5G Hz	Keysight	N9020A	MY49100060	May 26, 2022	May 25, 2023
Spectrum Analyzer 9kHz-40GHz	R&S	FSP 40	\	May 26, 2022	May 25, 2023
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

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

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

6.3 Test procedure

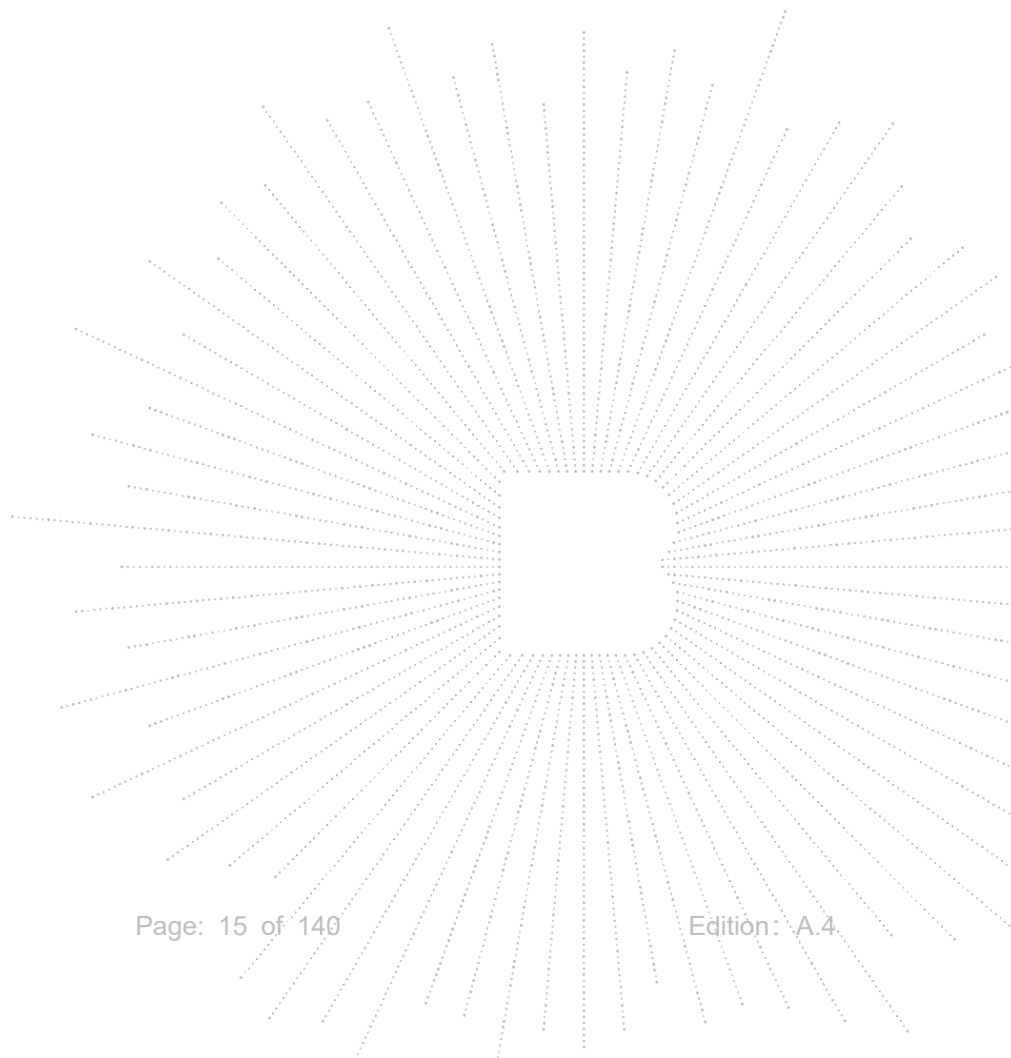
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

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

6.4 EUT operating Conditions

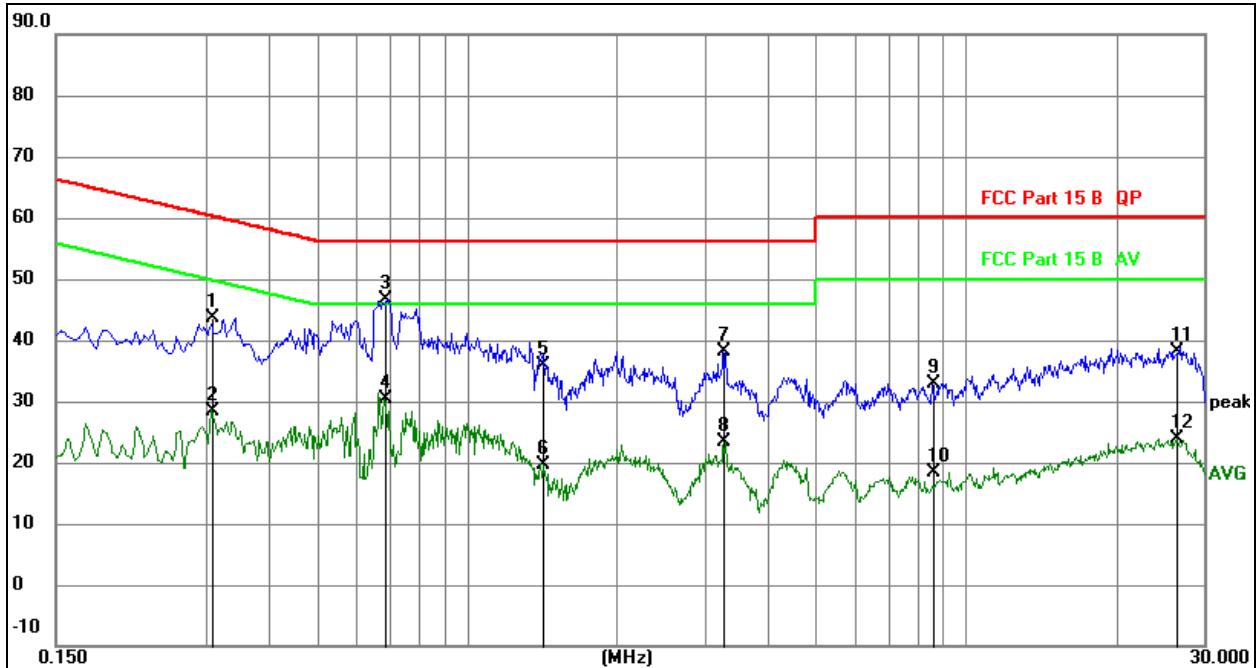
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

We pretest AC 120V and AC 240V, the worst voltage was AC 120V and the data recording in the report.



6.5 Test Result

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

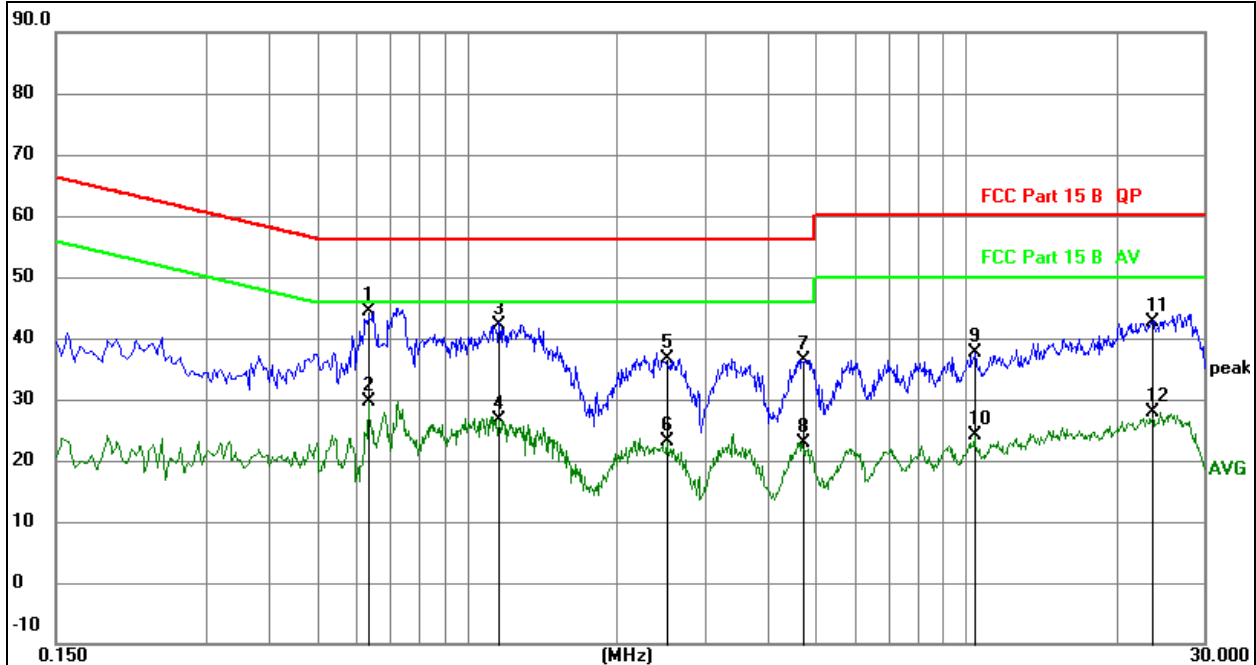


Remark:

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		0.3075	24.00	19.61	43.61	60.04	-16.43	QP
2		0.3075	8.89	19.61	28.50	50.04	-21.54	AVG
3	*	0.6855	26.89	19.62	46.51	56.00	-9.49	QP
4		0.6855	10.81	19.62	30.43	46.00	-15.57	AVG
5		1.4235	16.30	19.63	35.93	56.00	-20.07	QP
6		1.4235	0.00	19.63	19.63	46.00	-26.37	AVG
7		3.2685	18.47	19.66	38.13	56.00	-17.87	QP
8		3.2685	3.71	19.66	23.37	46.00	-22.63	AVG
9		8.5695	13.13	19.77	32.90	60.00	-27.10	QP
10		8.5695	-1.48	19.77	18.29	50.00	-31.71	AVG
11		26.4885	18.48	19.74	38.22	60.00	-21.78	QP
12		26.4885	4.09	19.74	23.83	50.00	-26.17	AVG

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


Remark:

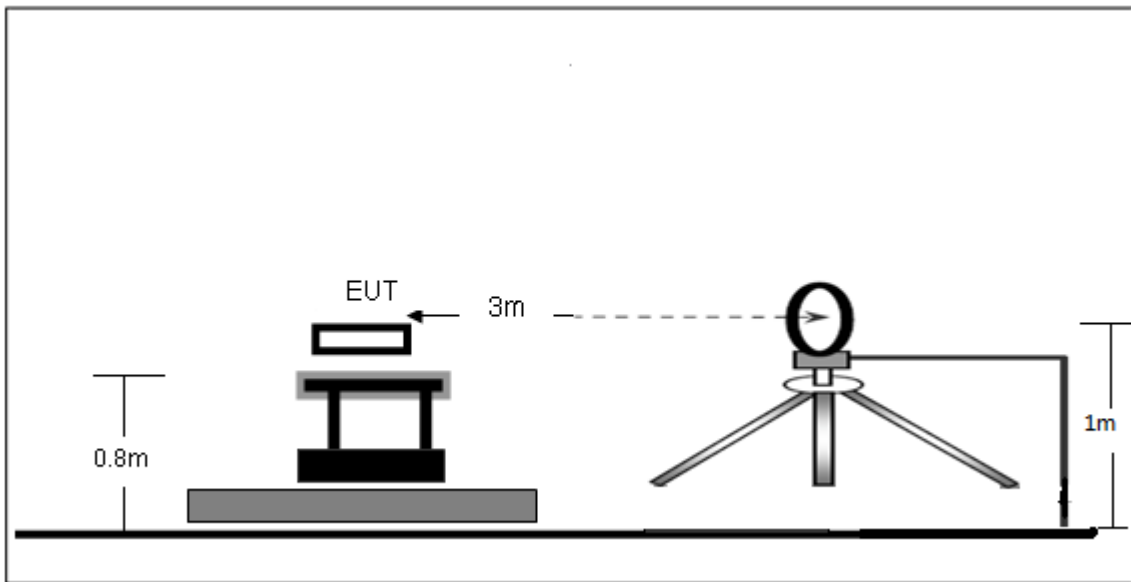
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq. MHz	Reading Level	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1	*	0.6338	24.70	19.62	44.32	56.00	-11.68	QP
2		0.6338	10.08	19.62	29.70	46.00	-16.30	AVG
3		1.1595	22.58	19.63	42.21	56.00	-13.79	QP
4		1.1595	7.04	19.63	26.67	46.00	-19.33	AVG
5		2.5133	16.92	19.64	36.56	56.00	-19.44	QP
6		2.5133	3.48	19.64	23.12	46.00	-22.88	AVG
7		4.6964	16.73	19.70	36.43	56.00	-19.57	QP
8		4.6964	3.23	19.70	22.93	46.00	-23.07	AVG
9		10.3972	17.75	19.80	37.55	60.00	-22.45	QP
10		10.3972	4.36	19.80	24.16	50.00	-25.84	AVG
11		23.5112	22.95	19.74	42.69	60.00	-17.31	QP
12		23.5112	8.06	19.74	27.80	50.00	-22.20	AVG

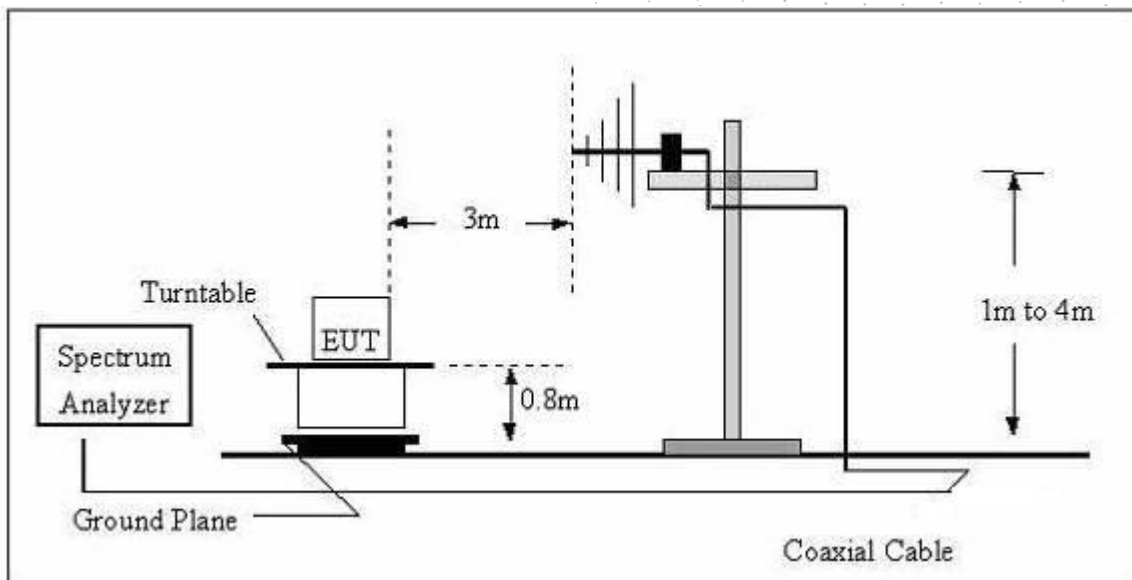
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

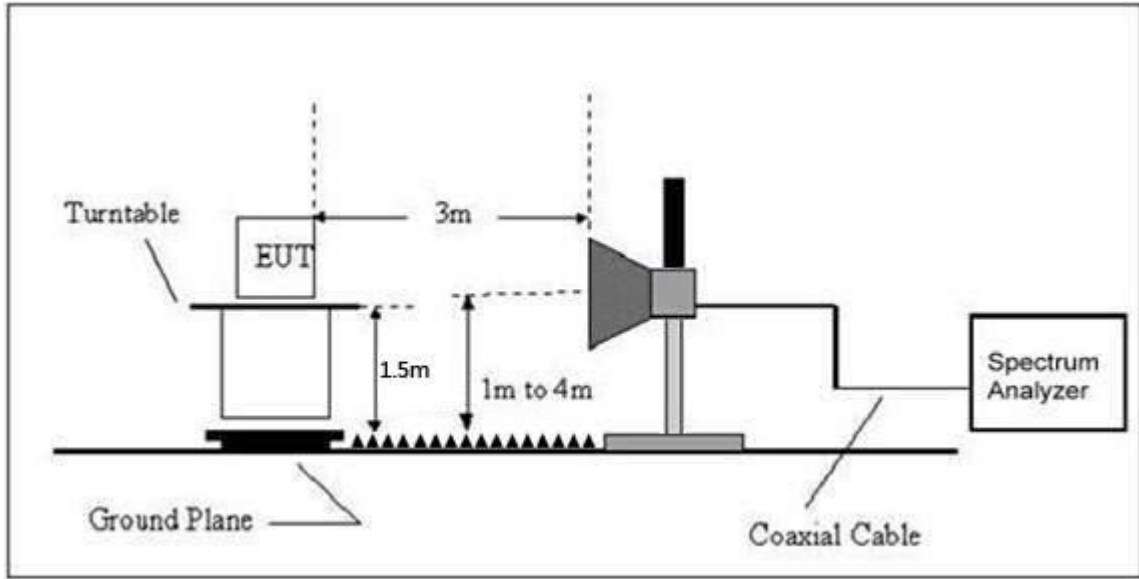
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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(kHz)	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	24000/F(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 C63.10-2013. 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

- 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:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120V/60Hz
Test Mode:	Mode 5	Polarization :	---

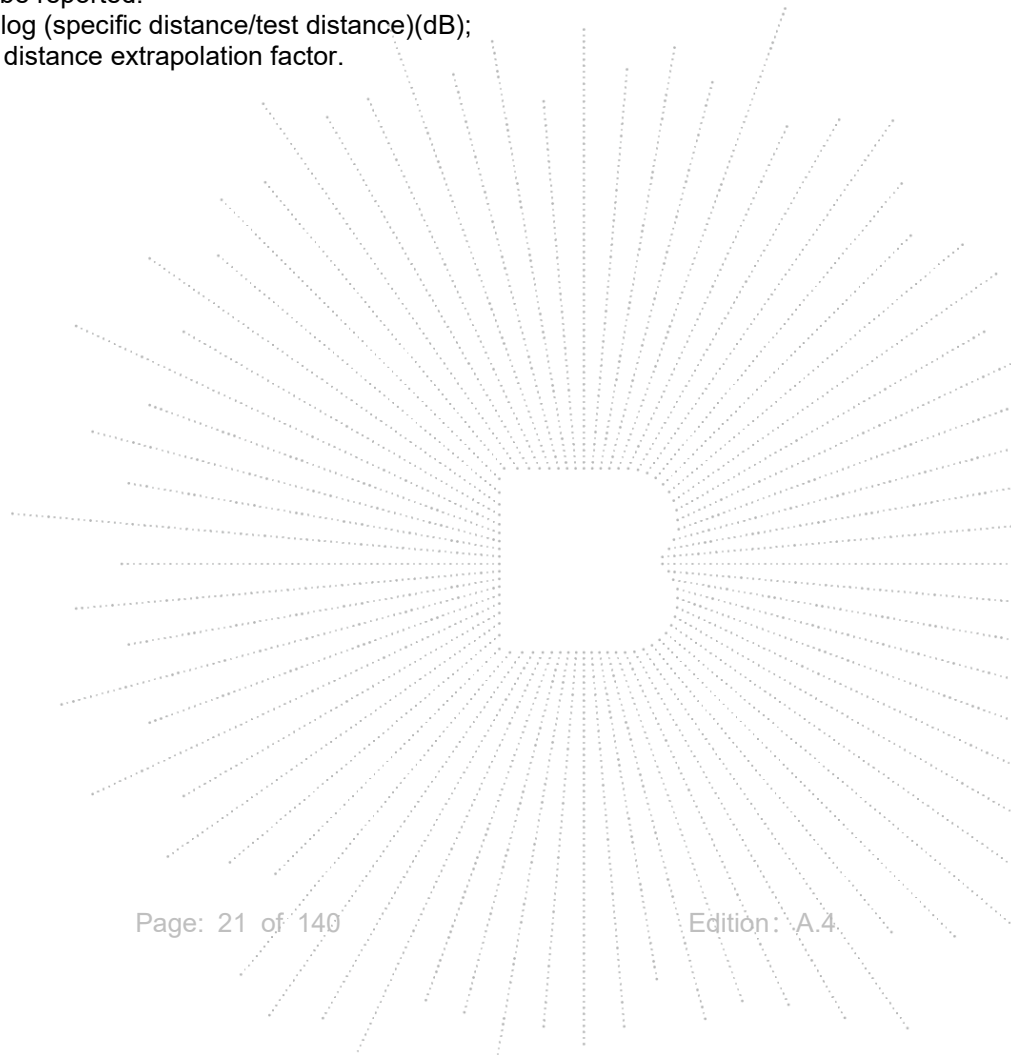
Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

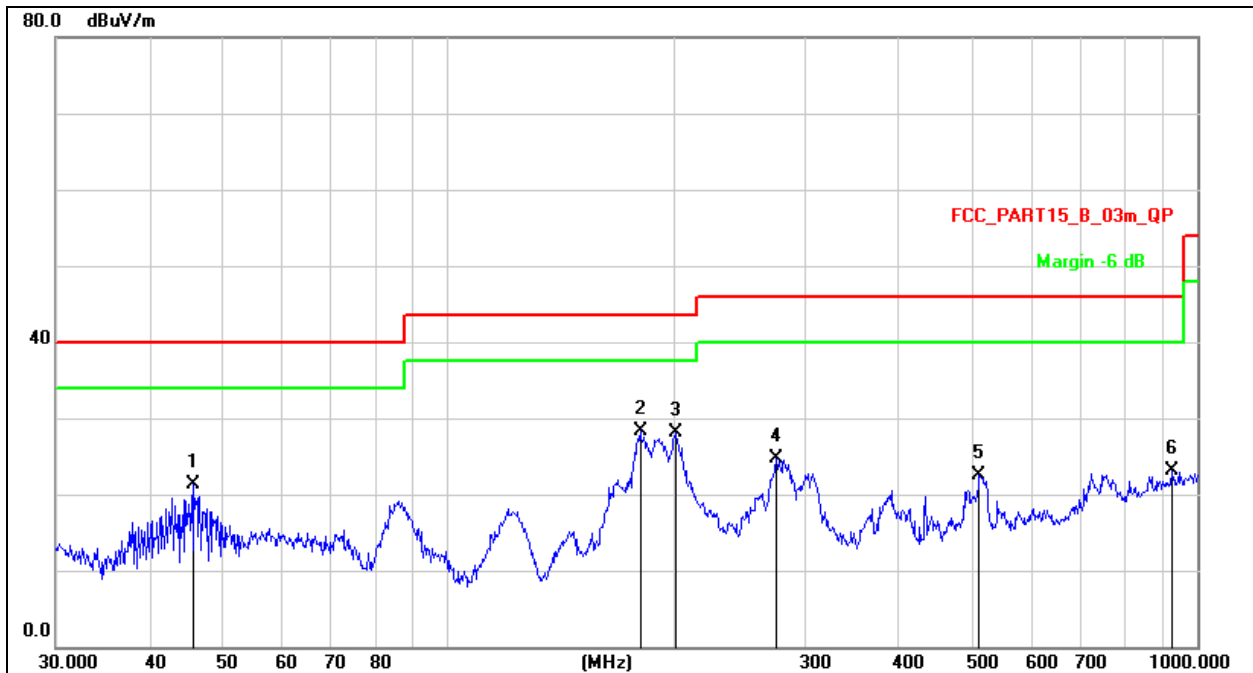
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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



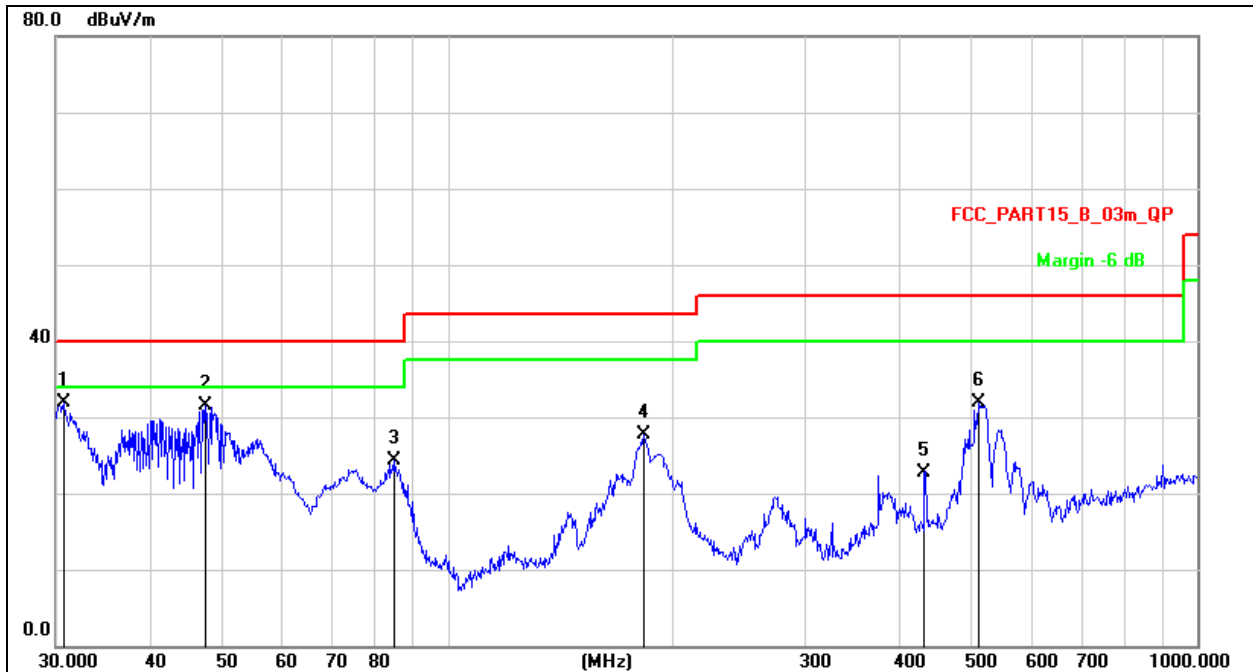
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120V/60Hz
Test Mode:	Mode 4	Polarization :	Horizontal


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	Detector
		MHz	dBuV	dB	dBuV/m	dB/m	dB	
1		45.8553	36.29	-15.08	21.21	40.00	-18.79	QP
2	*	180.6488	45.91	-17.54	28.37	43.50	-15.13	QP
3		201.3930	44.42	-16.27	28.15	43.50	-15.35	QP
4		274.1939	39.17	-14.40	24.77	46.00	-21.23	QP
5		511.8352	31.07	-8.64	22.43	46.00	-23.57	QP
6		925.7563	24.42	-1.30	23.12	46.00	-22.88	QP

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


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	Detector
		MHz	dBuV	dB	dBuV/m	dB/m	dB	
1	*	30.7455	48.95	-17.14	31.81	40.00	-8.19	QP
2		47.4918	46.42	-14.99	31.43	40.00	-8.57	QP
3		84.7019	43.71	-19.32	24.39	40.00	-15.61	QP
4		182.5592	45.19	-17.42	27.77	43.50	-15.73	QP
5		432.5457	33.14	-10.36	22.78	46.00	-23.22	QP
6		511.8352	40.64	-8.64	32.00	46.00	-14.00	QP

Test Mode:	TX(5.1G) - 802.11a
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G									
V	4434.188	63.08	5.94	35.40	44.00	60.42	68.2	-7.78	PK
V	4434.188	43.17	5.94	35.40	44.00	40.51	54	-13.49	AV
V	10360.071	60.28	8.46	39.75	44.50	63.99	68.2	-4.21	PK
V	10360.071	43.37	8.46	39.75	44.50	47.08	54	-6.92	AV
V	15540.177	63.98	10.12	38.80	44.10	68.80	74	-5.20	PK
V	15540.177	43.35	10.12	38.80	42.70	49.57	54	-4.43	AV
H	4434.158	63.11	5.94	35.18	44.00	60.23	68.2	-7.97	PK
H	4434.158	43.39	5.94	35.18	44.00	40.51	54	-13.49	AV
H	10360.085	54.33	8.46	38.71	44.50	57.00	68.2	-11.20	PK
H	10360.085	42.87	8.46	38.71	44.50	45.54	54	-8.46	AV
H	15540.159	54.72	10.12	38.38	44.10	59.12	74	-14.88	PK
H	15540.159	42.54	10.12	38.38	44.10	46.94	54	-7.06	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.176	60.80	6.48	36.35	44.05	59.58	74	-14.42	PK
V	4592.176	43.59	6.48	36.35	44.05	42.37	54	-11.63	AV
V	10400.042	64.89	8.47	37.88	44.51	66.73	68.2	-1.47	PK
V	10400.042	43.27	8.47	37.88	44.51	45.11	54	-8.89	AV
V	15600.100	60.98	10.12	38.80	44.10	65.80	74	-8.20	PK
V	15600.100	43.76	10.12	38.80	42.70	49.98	54	-4.02	AV
H	4592.189	64.48	6.48	36.37	44.05	63.28	74	-10.72	PK
H	4592.189	43.73	6.48	36.37	44.05	42.53	54	-11.47	AV
H	10400.005	51.45	8.47	38.64	44.50	54.06	68.2	-14.14	PK
H	10400.005	40.08	8.47	38.64	44.50	42.69	54	-11.31	AV
H	15600.011	52.00	10.12	38.38	44.10	56.40	74	-17.60	PK
H	15600.011	41.88	10.12	38.38	44.10	46.28	54	-7.72	AV
High Channel (5240 MHz)-Above 1G									
V	4739.164	64.78	7.10	37.24	43.50	65.62	74	-8.38	PK
V	4739.164	43.71	7.10	37.24	43.50	44.55	54	-9.45	AV
V	10480.110	60.23	8.46	37.68	44.50	61.87	68.2	-6.33	PK
V	10480.110	43.10	8.46	37.68	44.50	44.74	54	-9.26	AV
V	15720.181	64.58	10.12	38.80	44.10	69.40	74	-4.60	PK
V	15720.181	43.51	10.12	38.80	42.70	49.73	54	-4.27	AV
H	4739.029	62.46	7.10	37.24	43.50	63.30	74	-10.70	PK
H	4739.029	43.02	7.10	37.24	43.50	43.86	54	-10.14	AV
H	10480.014	54.99	8.46	38.57	44.50	57.52	68.2	-10.68	PK
H	10480.014	41.44	8.46	38.57	44.50	43.97	54	-10.03	AV
H	15720.009	54.10	10.12	38.38	44.10	58.50	74	-15.50	PK
H	15720.009	43.50	10.12	38.38	44.10	47.90	54	-6.10	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
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G									
V	4434.110	64.11	5.94	35.40	44.00	61.45	68.2	-6.75	PK
V	4434.110	43.08	5.94	35.40	44.00	40.42	54	-13.58	AV
V	10360.028	60.20	8.46	39.75	44.50	63.91	68.2	-4.29	PK
V	10360.028	43.90	8.46	39.75	44.50	47.61	54	-6.39	AV
V	15540.055	60.43	10.12	38.80	44.10	65.25	74	-8.75	PK
V	15540.055	43.32	10.12	38.80	42.70	49.54	54	-4.46	AV
H	4434.012	60.37	5.94	35.18	44.00	57.49	68.2	-10.71	PK
H	4434.012	43.82	5.94	35.18	44.00	40.94	54	-13.06	AV
H	10360.184	50.58	8.46	38.71	44.50	53.25	68.2	-14.95	PK
H	10360.184	44.33	8.46	38.71	44.50	47.00	54	-7.00	AV
H	15540.049	52.13	10.12	38.38	44.10	56.53	74	-17.47	PK
H	15540.049	43.74	10.12	38.38	44.10	48.14	54	-5.86	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.035	60.40	6.48	36.35	44.05	59.18	74	-14.82	PK
V	4592.035	43.95	6.48	36.35	44.05	42.73	54	-11.27	AV
V	10400.110	62.17	8.47	37.88	44.51	64.01	68.2	-4.19	PK
V	10400.110	43.17	8.47	37.88	44.51	45.01	54	-8.99	AV
V	15600.160	62.20	10.12	38.80	44.10	67.02	74	-6.98	PK
V	15600.160	43.17	10.12	38.80	42.70	49.39	54	-4.61	AV
H	4592.088	62.25	6.48	36.37	44.05	61.05	74	-12.95	PK
H	4592.088	43.24	6.48	36.37	44.05	42.04	54	-11.96	AV
H	10400.081	54.23	8.47	38.64	44.50	56.84	68.2	-11.36	PK
H	10400.081	41.92	8.47	38.64	44.50	44.53	54	-9.47	AV
H	15600.115	53.18	10.12	38.38	44.10	57.58	74	-16.42	PK
H	15600.115	40.99	10.12	38.38	44.10	45.39	54	-8.61	AV
High Channel (5240 MHz)-Above 1G									
V	4739.132	64.12	7.10	37.24	43.50	64.96	74	-9.04	PK
V	4739.132	43.75	7.10	37.24	43.50	44.59	54	-9.41	AV
V	10480.030	64.51	8.46	37.68	44.50	66.15	68.2	-2.05	PK
V	10480.030	43.53	8.46	37.68	44.50	45.17	54	-8.83	AV
V	15720.181	62.37	10.12	38.80	44.10	67.19	74	-6.81	PK
V	15720.181	43.34	10.12	38.80	42.70	49.56	54	-4.44	AV
H	4739.017	60.75	7.10	37.24	43.50	61.59	74	-12.41	PK
H	4739.017	43.34	7.10	37.24	43.50	44.18	54	-9.82	AV
H	10480.007	51.89	8.46	38.57	44.50	54.42	68.2	-13.78	PK
H	10480.007	43.11	8.46	38.57	44.50	45.64	54	-8.36	AV
H	15720.072	53.48	10.12	38.38	44.10	57.88	74	-16.12	PK
H	15720.072	44.21	10.12	38.38	44.10	48.61	54	-5.39	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-HT40
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G									
V	4434.151	60.78	5.94	35.40	44.00	58.12	68.2	-10.08	PK
V	4434.151	43.06	5.94	35.40	44.00	40.40	54	-13.60	AV
V	10380.166	61.03	8.46	39.75	44.50	64.74	68.2	-3.46	PK
V	10380.166	43.64	8.46	39.75	44.50	47.35	54	-6.65	AV
V	15570.146	60.56	10.12	38.80	44.10	65.38	74	-8.62	PK
V	15570.146	43.23	10.12	38.80	42.70	49.45	54	-4.55	AV
H	4434.081	61.59	5.94	35.18	44.00	58.71	74	-15.29	PK
H	4434.081	43.79	5.94	35.18	44.00	40.91	54	-13.09	AV
H	10380.014	54.62	8.46	38.71	44.50	57.29	68.2	-10.91	PK
H	10380.014	42.28	8.46	38.71	44.50	44.95	54	-9.05	AV
H	15570.073	50.38	10.12	38.38	44.10	54.78	74	-19.22	PK
H	15570.073	40.80	10.12	38.38	44.10	45.20	54	-8.80	AV
High Channel (5230 MHz)-Above 1G									
V	4739.009	62.27	6.48	36.35	44.05	61.05	68.2	-7.15	PK
V	4739.009	43.02	6.48	36.35	44.05	41.80	54	-12.20	AV
V	10460.084	63.33	8.47	37.88	44.51	65.17	68.2	-3.03	PK
V	10460.084	43.77	8.47	37.88	44.51	45.61	54	-8.39	AV
V	15690.068	60.74	10.12	38.80	44.10	65.56	74	-8.44	PK
V	15690.068	43.51	10.12	38.80	42.70	49.73	54	-4.27	AV
H	4739.077	62.97	6.48	36.37	44.05	61.77	68.2	-6.43	PK
H	4739.077	43.31	6.48	36.37	44.05	42.11	54	-11.89	AV
H	10460.082	52.60	8.47	38.64	44.50	55.21	68.2	-12.99	PK
H	10460.082	44.89	8.47	38.64	44.50	47.50	54	-6.50	AV
H	15690.029	54.37	10.12	38.38	44.10	58.77	74	-15.23	PK
H	15690.029	43.01	10.12	38.38	44.10	47.41	54	-6.59	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
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G									
V	4434.118	61.16	5.94	35.40	44.00	58.50	68.2	-9.70	PK
V	4434.118	43.62	5.94	35.40	44.00	40.96	54	-13.04	AV
V	10360.148	60.41	8.46	39.75	44.50	64.12	68.2	-4.08	PK
V	10360.148	43.97	8.46	39.75	44.50	47.68	54	-6.32	AV
V	15540.087	61.45	10.12	38.80	44.10	66.27	74	-7.73	PK
V	15540.087	43.53	10.12	38.80	42.70	49.75	54	-4.25	AV
H	4434.011	64.55	5.94	35.18	44.00	61.67	68.2	-6.53	PK
H	4434.011	43.82	5.94	35.18	44.00	40.94	54	-13.06	AV
H	10360.067	51.41	8.46	38.71	44.50	54.08	68.2	-14.12	PK
H	10360.067	43.77	8.46	38.71	44.50	46.44	54	-7.56	AV
H	15540.024	53.25	10.12	38.38	44.10	57.65	74	-16.35	PK
H	15540.024	41.04	10.12	38.38	44.10	45.44	54	-8.56	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.065	63.76	6.48	36.35	44.05	62.54	74	-11.46	PK
V	4592.065	43.32	6.48	36.35	44.05	42.10	54	-11.90	AV
V	10400.082	63.41	8.47	37.88	44.51	65.25	68.2	-2.95	PK
V	10400.082	43.58	8.47	37.88	44.51	45.42	54	-8.58	AV
V	15600.117	62.02	10.12	38.80	44.10	66.84	74	-7.16	PK
V	15600.117	43.43	10.12	38.80	42.70	49.65	54	-4.35	AV
H	4592.027	60.63	6.48	36.37	44.05	59.43	74	-14.57	PK
H	4592.027	43.20	6.48	36.37	44.05	42.00	54	-12.00	AV
H	10400.104	54.68	8.47	38.64	44.50	57.29	68.2	-10.91	PK
H	10400.104	42.16	8.47	38.64	44.50	44.77	54	-9.23	AV
H	15600.039	52.95	10.12	38.38	44.10	57.35	74	-16.65	PK
H	15600.039	44.75	10.12	38.38	44.10	49.15	54	-4.85	AV
High Channel (5240 MHz)-Above 1G									
V	4739.097	63.44	7.10	37.24	43.50	64.28	74	-9.72	PK
V	4739.097	43.26	7.10	37.24	43.50	44.10	54	-9.90	AV
V	10480.006	61.78	8.46	37.68	44.50	63.42	68.2	-4.78	PK
V	10480.006	43.62	8.46	37.68	44.50	45.26	54	-8.74	AV
V	15720.042	63.23	10.12	38.80	44.10	68.05	74	-5.95	PK
V	15720.042	43.97	10.12	38.80	42.70	50.19	54	-3.81	AV
H	4739.031	63.47	7.10	37.24	43.50	64.31	74	-9.69	PK
H	4739.031	43.64	7.10	37.24	43.50	44.48	54	-9.52	AV
H	10480.013	53.33	8.46	38.57	44.50	55.86	68.2	-12.34	PK
H	10480.013	41.44	8.46	38.57	44.50	43.97	54	-10.03	AV
H	15720.155	54.66	10.12	38.38	44.10	59.06	74	-14.94	PK
H	15720.155	40.54	10.12	38.38	44.10	44.94	54	-9.06	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:	TX(5.1G) - 802.11ac-HT40
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G									
V	4434.158	62.16	5.94	35.40	44.00	59.50	68.2	-8.70	PK
V	4434.158	43.57	5.94	35.40	44.00	40.91	54	-13.09	AV
V	10380.199	62.32	8.46	39.75	44.50	66.03	68.2	-2.17	PK
V	10380.199	43.03	8.46	39.75	44.50	46.74	54	-7.26	AV
V	15570.191	61.19	10.12	38.80	44.10	66.01	74	-7.99	PK
V	15570.191	43.85	10.12	38.80	42.70	50.07	54	-3.93	AV
H	4434.072	60.35	5.94	35.18	44.00	57.47	74	-16.53	PK
H	4434.072	43.43	5.94	35.18	44.00	40.55	54	-13.45	AV
H	10380.191	53.29	8.46	38.71	44.50	55.96	68.2	-12.24	PK
H	10380.191	40.83	8.46	38.71	44.50	43.50	54	-10.50	AV
H	15570.116	54.27	10.12	38.38	44.10	58.67	74	-15.33	PK
H	15570.116	43.60	10.12	38.38	44.10	48.00	54	-6.00	AV
High Channel (5230 MHz)-Above 1G									
V	4739.174	61.15	6.48	36.35	44.05	59.93	68.2	-8.27	PK
V	4739.174	43.18	6.48	36.35	44.05	41.96	54	-12.04	AV
V	10460.156	61.61	8.47	37.88	44.51	63.45	68.2	-4.75	PK
V	10460.156	43.39	8.47	37.88	44.51	45.23	54	-8.77	AV
V	15690.092	60.91	10.12	38.80	44.10	65.73	74	-8.27	PK
V	15690.092	43.02	10.12	38.80	42.70	49.24	54	-4.76	AV
H	4739.009	60.61	6.48	36.37	44.05	59.41	68.2	-8.79	PK
H	4739.009	43.93	6.48	36.37	44.05	42.73	54	-11.27	AV
H	10460.139	50.78	8.47	38.64	44.50	53.39	68.2	-14.81	PK
H	10460.139	42.62	8.47	38.64	44.50	45.23	54	-8.77	AV
H	15690.188	53.71	10.12	38.38	44.10	58.11	74	-15.89	PK
H	15690.188	42.95	10.12	38.38	44.10	47.35	54	-6.65	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.

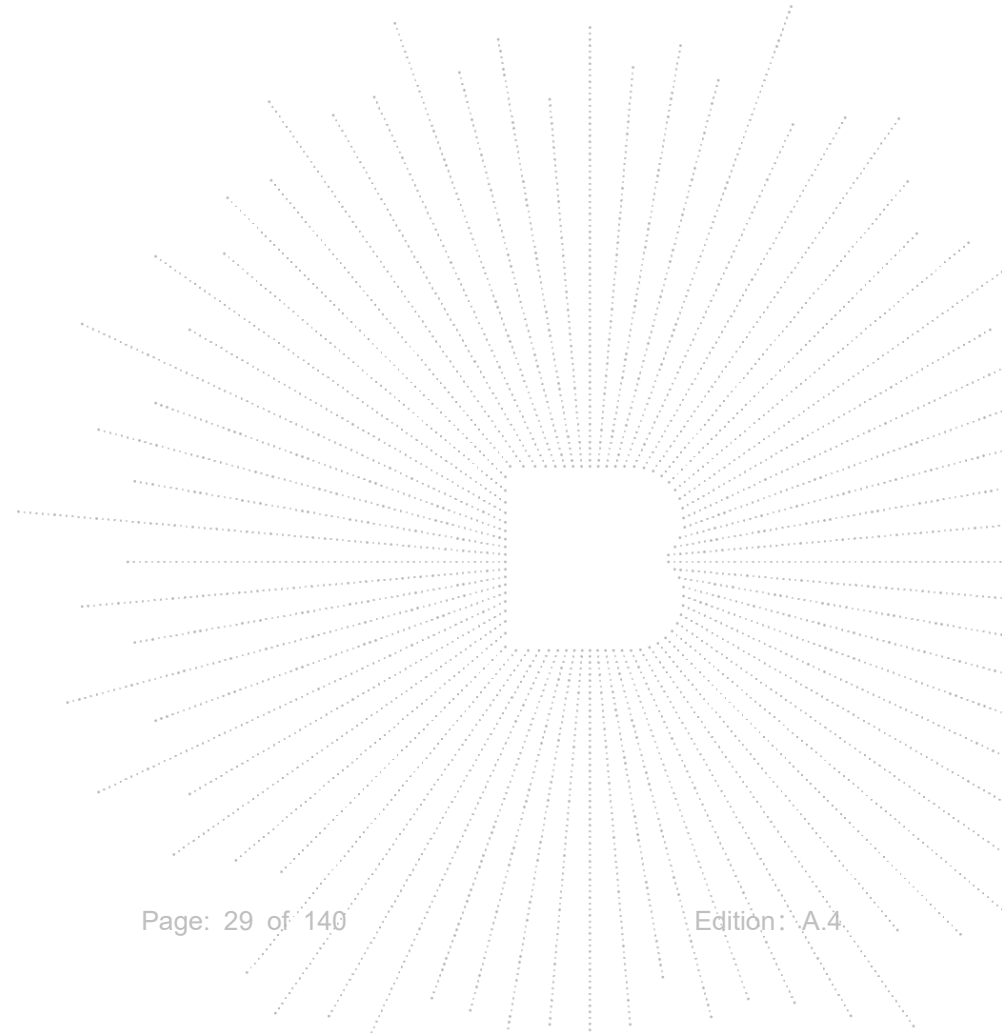
Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

Test Mode:	TX(5.1G) - 802.11ac-HT80
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
(5210 MHz)-Above 1G									
V	4434.007	61.57	5.94	35.40	44.00	58.91	68.2	-9.29	PK
V	4434.007	43.95	5.94	35.40	44.00	41.29	54	-12.71	AV
V	10420.065	63.42	8.46	39.75	44.50	67.13	68.2	-1.07	PK
V	10420.065	43.21	8.46	39.75	44.50	46.92	54	-7.08	AV
V	15630.183	64.85	10.12	38.80	44.10	69.67	74	-4.33	PK
V	15630.183	43.02	10.12	38.80	42.70	49.24	54	-4.76	AV
H	4434.168	61.40	5.94	35.18	44.00	58.52	68.2	-9.68	PK
H	4434.168	43.18	5.94	35.18	44.00	40.30	54	-13.70	AV
H	10420.061	52.23	8.46	38.71	44.50	54.90	68.2	-13.30	PK
H	10420.061	42.27	8.46	38.71	44.50	44.94	54	-9.06	AV
H	15630.033	52.03	10.12	38.38	44.10	56.43	74	-17.57	PK
H	15630.033	44.91	10.12	38.38	44.10	49.31	54	-4.69	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
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G									
V	4679.167	57.97	5.94	35.40	44.00	55.31	74	-18.69	PK
V	4679.167	43.32	5.94	35.40	44.00	40.66	54	-13.34	AV
V	11490.031	56.95	8.46	39.75	44.50	60.66	68.2	-7.54	PK
V	11490.031	43.26	8.46	39.75	44.50	46.97	54	-7.03	AV
V	17235.157	57.80	10.12	38.80	44.10	62.62	68.2	-5.58	PK
V	17235.157	43.57	10.12	38.80	42.70	49.79	54	-4.21	AV
H	4679.151	54.68	5.94	35.18	44.00	51.80	74	-22.20	PK
H	4679.151	43.78	5.94	35.18	44.00	40.90	54	-13.10	AV
H	11490.088	53.33	8.46	38.71	44.50	56.00	68.2	-12.20	PK
H	11490.088	43.92	8.46	38.71	44.50	46.59	54	-7.41	AV
H	17235.125	53.29	10.12	38.38	44.10	57.69	68.2	-10.51	PK
H	17235.125	40.82	10.12	38.38	44.10	45.22	54	-8.78	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.161	57.10	6.48	36.35	44.05	55.88	74	-18.12	PK
V	4592.161	43.86	6.48	36.35	44.05	42.64	54	-11.36	AV
V	11570.078	55.22	8.47	37.88	44.51	57.06	68.2	-11.14	PK
V	11570.078	43.13	8.47	37.88	44.51	44.97	54	-9.03	AV
V	17355.119	58.61	10.12	38.80	44.10	63.43	68.2	-4.77	PK
V	17355.119	39.02	10.12	38.80	42.70	45.24	54	-8.76	AV
H	4592.108	59.26	6.48	36.37	44.05	58.06	74	-15.94	PK
H	4592.108	43.65	6.48	36.37	44.05	42.45	54	-11.55	AV
H	11570.103	52.47	8.47	38.64	44.50	55.08	68.2	-13.12	PK
H	11570.103	43.21	8.47	38.64	44.50	45.82	54	-8.18	AV
H	17355.058	51.01	10.12	38.38	44.10	55.41	68.2	-12.79	PK
H	17355.058	40.67	10.12	38.38	44.10	45.07	54	-8.93	AV
High Channel (5825 MHz)-Above 1G									
V	6039.075	57.40	7.10	37.24	43.50	58.24	68.2	-9.96	PK
V	6039.075	43.55	7.10	37.24	43.50	44.39	54	-9.61	AV
V	11650.021	58.32	8.46	37.68	44.50	59.96	74	-14.04	PK
V	11650.021	43.39	8.46	37.68	44.50	45.03	54	-8.97	AV
V	17475.100	56.25	10.12	38.80	44.10	61.07	68.2	-7.13	PK
V	17475.100	43.50	10.12	38.80	42.70	49.72	54	-4.28	AV
H	6039.195	55.85	7.10	37.24	43.50	56.69	68.2	-11.51	PK
H	6039.195	43.95	7.10	37.24	43.50	44.79	54	-9.21	AV
H	11650.013	54.32	8.46	38.57	44.50	56.85	74	-17.15	PK
H	11650.013	41.76	8.46	38.57	44.50	44.29	54	-9.71	AV
H	17475.101	52.83	10.12	38.38	44.10	57.23	68.2	-10.97	PK
H	17475.101	44.43	10.12	38.38	44.10	48.83	54	-5.17	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
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G									
V	4679.022	56.98	5.94	35.40	44.00	54.32	74	-19.68	PK
V	4679.022	43.34	5.94	35.40	44.00	40.68	54	-13.32	AV
V	11490.118	53.85	8.46	39.75	44.50	57.56	68.2	-10.64	PK
V	11490.118	43.41	8.46	39.75	44.50	47.12	54	-6.88	AV
V	17235.162	60.55	10.12	38.80	44.10	65.37	68.2	-2.83	PK
V	17235.162	43.40	10.12	38.80	42.70	49.62	54	-4.38	AV
H	4679.047	58.67	5.94	35.18	44.00	55.79	74	-18.21	PK
H	4679.047	43.01	5.94	35.18	44.00	40.13	54	-13.87	AV
H	11490.079	51.52	8.46	38.71	44.50	54.19	68.2	-14.01	PK
H	11490.079	40.06	8.46	38.71	44.50	42.73	54	-11.27	AV
H	17235.027	50.13	10.12	38.38	44.10	54.53	68.2	-13.67	PK
H	17235.027	42.93	10.12	38.38	44.10	47.33	54	-6.67	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.129	59.98	6.48	36.35	44.05	58.76	74	-15.24	PK
V	4592.129	43.40	6.48	36.35	44.05	42.18	54	-11.82	AV
V	11570.033	55.56	8.47	37.88	44.51	57.40	68.2	-10.80	PK
V	11570.033	43.85	8.47	37.88	44.51	45.69	54	-8.31	AV
V	17355.126	59.26	10.12	38.80	44.10	64.08	68.2	-4.12	PK
V	17355.126	43.14	10.12	38.80	42.70	49.36	54	-4.64	AV
H	4592.113	59.57	6.48	36.37	44.05	58.37	74	-15.63	PK
H	4592.113	43.27	6.48	36.37	44.05	42.07	54	-11.93	AV
H	11570.161	51.13	8.47	38.64	44.50	53.74	68.2	-14.46	PK
H	11570.161	44.46	8.47	38.64	44.50	47.07	54	-6.93	AV
H	17355.095	54.07	10.12	38.38	44.10	58.47	68.2	-9.73	PK
H	17355.095	43.34	10.12	38.38	44.10	47.74	54	-6.26	AV
High Channel (5825 MHz)-Above 1G									
V	6039.166	57.68	7.10	37.24	43.50	58.52	68.2	-9.68	PK
V	6039.166	43.79	7.10	37.24	43.50	44.63	54	-9.37	AV
V	11650.163	56.07	8.46	37.68	44.50	57.71	74	-16.29	PK
V	11650.163	43.86	8.46	37.68	44.50	45.50	54	-8.50	AV
V	17475.116	57.34	10.12	38.80	44.10	62.16	68.2	-6.04	PK
V	17475.116	43.10	10.12	38.80	42.70	49.32	54	-4.68	AV
H	6039.021	58.03	7.10	37.24	43.50	58.87	68.2	-9.33	PK
H	6039.021	43.27	7.10	37.24	43.50	44.11	54	-9.89	AV
H	11650.191	54.72	8.46	38.57	44.50	57.25	74	-16.75	PK
H	11650.191	40.28	8.46	38.57	44.50	42.81	54	-11.19	AV
H	17475.114	52.44	10.12	38.38	44.10	56.84	68.2	-11.36	PK
H	17475.114	42.19	10.12	38.38	44.10	46.59	54	-7.41	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
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G									
V	4679.013	60.53	5.94	35.40	44.00	57.87	74	-16.13	PK
V	4679.013	43.58	5.94	35.40	44.00	40.92	54	-13.08	AV
V	11510.081	55.04	8.46	39.75	44.50	58.75	74	-15.25	PK
V	11510.081	43.98	8.46	39.75	44.50	47.69	54	-6.31	AV
V	17265.069	56.84	10.12	38.80	44.10	61.66	68.2	-6.54	PK
V	17265.069	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.151	59.01	5.94	35.18	44.00	56.13	74	-17.87	PK
H	4679.151	43.20	5.94	35.18	44.00	40.32	54	-13.68	AV
H	11510.053	52.01	8.46	38.71	44.50	54.68	74	-19.32	PK
H	11510.053	42.93	8.46	38.71	44.50	45.60	54	-8.40	AV
H	17265.127	53.05	10.12	38.38	44.10	57.45	68.2	-10.75	PK
H	17265.127	43.52	10.12	38.38	44.10	47.92	54	-6.08	AV
High Channel (5795 MHz)-Above 1G									
V	6039.187	60.89	6.48	36.35	44.05	59.67	68.2	-8.53	PK
V	6039.187	43.54	6.48	36.35	44.05	42.32	54	-11.68	AV
V	11590.159	57.00	8.47	37.88	44.51	58.84	74	-15.16	PK
V	11590.159	43.45	8.47	37.88	44.51	45.29	54	-8.71	AV
V	17385.165	55.91	10.12	38.80	44.10	60.73	68.2	-7.47	PK
V	17385.165	41.20	10.12	38.80	42.70	47.42	54	-6.58	AV
H	6039.169	57.22	6.48	36.37	44.05	56.02	68.2	-12.18	PK
H	6039.169	43.07	6.48	36.37	44.05	41.87	54	-12.13	AV
H	11590.068	52.48	8.47	38.64	44.50	55.09	74	-18.91	PK
H	11590.068	41.65	8.47	38.64	44.50	44.26	54	-9.74	AV
H	17385.160	52.91	10.12	38.38	44.10	57.31	68.2	-10.89	PK
H	17385.160	43.86	10.12	38.38	44.10	48.26	54	-5.74	AV

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

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

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

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

Test Mode:	TX(5.8G) - 802.11ac-HT20
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G									
V	4679.062	56.16	5.94	35.40	44.00	53.50	74	-20.50	PK
V	4679.062	43.84	5.94	35.40	44.00	41.18	54	-12.82	AV
V	11490.058	54.71	8.46	39.75	44.50	58.42	68.2	-9.78	PK
V	11490.058	43.95	8.46	39.75	44.50	47.66	54	-6.34	AV
V	17235.177	57.78	10.12	38.80	44.10	62.60	68.2	-5.60	PK
V	17235.177	43.32	10.12	38.80	42.70	49.54	54	-4.46	AV
H	4679.172	57.16	5.94	35.18	44.00	54.28	74	-19.72	PK
H	4679.172	43.37	5.94	35.18	44.00	40.49	54	-13.51	AV
H	11490.082	48.29	8.46	38.71	44.50	50.96	68.2	-17.24	PK
H	11490.082	42.94	8.46	38.71	44.50	45.61	54	-8.39	AV
H	17235.185	52.15	10.12	38.38	44.10	56.55	68.2	-11.65	PK
H	17235.185	42.65	10.12	38.38	44.10	47.05	54	-6.95	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.198	58.03	6.48	36.35	44.05	56.81	74	-17.19	PK
V	4592.198	43.80	6.48	36.35	44.05	42.58	54	-11.42	AV
V	11570.040	54.76	8.47	37.88	44.51	56.60	68.2	-11.60	PK
V	11570.040	43.98	8.47	37.88	44.51	45.82	54	-8.18	AV
V	17355.087	60.96	10.12	38.80	44.10	65.78	68.2	-2.42	PK
V	17355.087	43.59	10.12	38.80	42.70	49.81	54	-4.19	AV
H	4592.192	60.34	6.48	36.37	44.05	59.14	74	-14.86	PK
H	4592.192	43.37	6.48	36.37	44.05	42.17	54	-11.83	AV
H	11570.185	53.29	8.47	38.64	44.50	55.90	68.2	-12.30	PK
H	11570.185	43.02	8.47	38.64	44.50	45.63	54	-8.37	AV
H	17355.078	50.32	10.12	38.38	44.10	54.72	68.2	-13.48	PK
H	17355.078	40.26	10.12	38.38	44.10	44.66	54	-9.34	AV
High Channel (5825 MHz)-Above 1G									
V	6039.036	59.43	7.10	37.24	43.50	60.27	68.2	-7.93	PK
V	6039.036	43.56	7.10	37.24	43.50	44.40	54	-9.60	AV
V	11650.115	60.02	8.46	37.68	44.50	61.66	74	-12.34	PK
V	11650.115	43.25	8.46	37.68	44.50	44.89	54	-9.11	AV
V	17475.024	57.21	10.12	38.80	44.10	62.03	68.2	-6.17	PK
V	17475.024	43.40	10.12	38.80	42.70	49.62	54	-4.38	AV
H	6039.135	58.71	7.10	37.24	43.50	59.55	68.2	-8.65	PK
H	6039.135	43.15	7.10	37.24	43.50	43.99	54	-10.01	AV
H	11650.160	54.29	8.46	38.57	44.50	56.82	74	-17.18	PK
H	11650.160	43.60	8.46	38.57	44.50	46.13	54	-7.87	AV
H	17475.134	51.79	10.12	38.38	44.10	56.19	68.2	-12.01	PK
H	17475.134	41.45	10.12	38.38	44.10	45.85	54	-8.15	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
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Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G									
V	4679.200	59.62	5.94	35.40	44.00	56.96	74	-17.04	PK
V	4679.200	43.07	5.94	35.40	44.00	40.41	54	-13.59	AV
V	11510.139	56.02	8.46	39.75	44.50	59.73	74	-14.27	PK
V	11510.139	43.64	8.46	39.75	44.50	47.35	54	-6.65	AV
V	17265.158	56.69	10.12	38.80	44.10	61.51	68.2	-6.69	PK
V	17265.158	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.191	59.88	5.94	35.18	44.00	57.00	74	-17.00	PK
H	4679.191	43.89	5.94	35.18	44.00	41.01	54	-12.99	AV
H	11510.056	54.58	8.46	38.71	44.50	57.25	74	-16.75	PK
H	11510.056	41.40	8.46	38.71	44.50	44.07	54	-9.93	AV
H	17265.119	51.55	10.12	38.38	44.10	55.95	68.2	-12.25	PK
H	17265.119	41.64	10.12	38.38	44.10	46.04	54	-7.96	AV
High Channel (5795 MHz)-Above 1G									
V	6039.132	57.01	6.48	36.35	44.05	55.79	68.2	-12.41	PK
V	6039.132	43.01	6.48	36.35	44.05	41.79	54	-12.21	AV
V	11590.057	55.72	8.47	37.88	44.51	57.56	74	-16.44	PK
V	11590.057	43.56	8.47	37.88	44.51	45.40	54	-8.60	AV
V	17385.102	55.52	10.12	38.80	44.10	60.34	68.2	-7.86	PK
V	17385.102	41.21	10.12	38.80	42.70	47.43	54	-6.57	AV
H	6039.128	56.69	6.48	36.37	44.05	55.49	68.2	-12.71	PK
H	6039.128	43.56	6.48	36.37	44.05	42.36	54	-11.64	AV
H	11590.004	51.50	8.47	38.64	44.50	54.11	74	-19.89	PK
H	11590.004	42.35	8.47	38.64	44.50	44.96	54	-9.04	AV
H	17385.109	51.05	10.12	38.38	44.10	55.45	68.2	-12.75	PK
H	17385.109	43.27	10.12	38.38	44.10	47.67	54	-6.33	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.

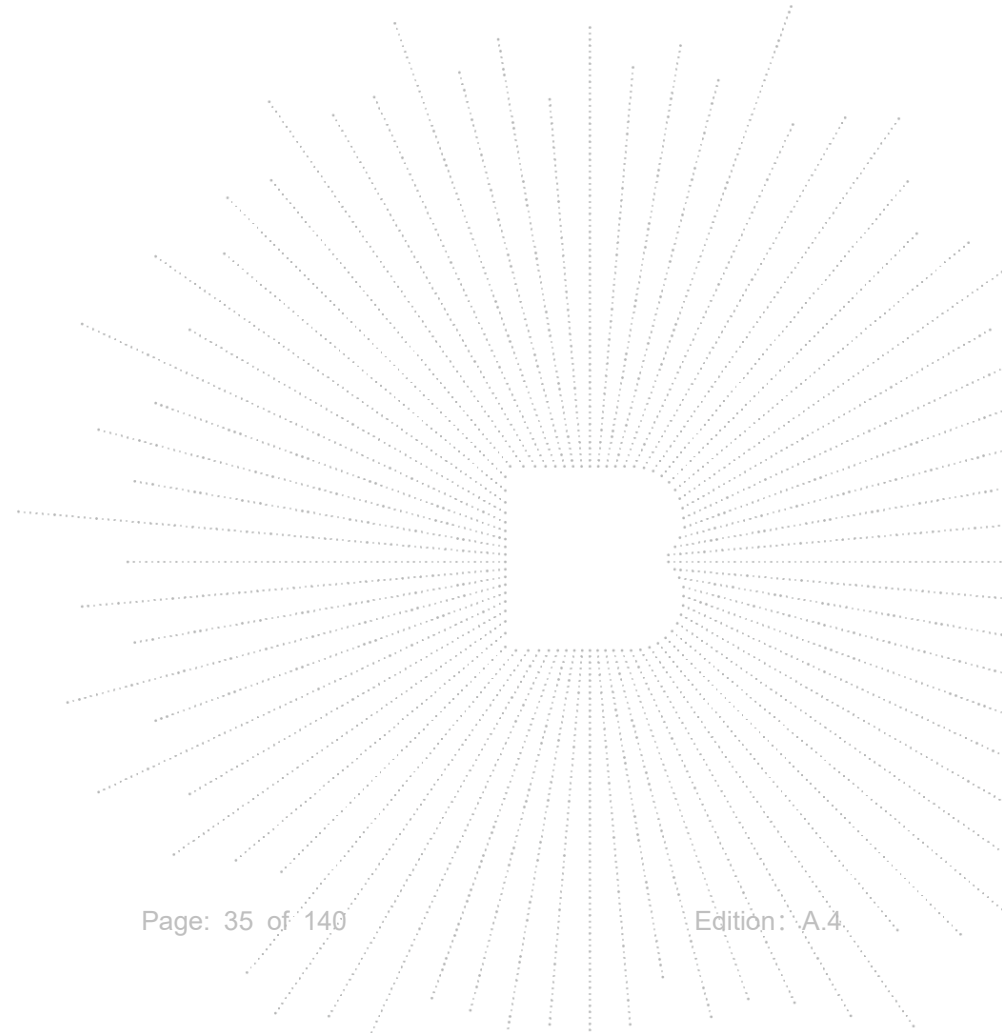
Emission level (dBuV/m) = 20 log Emission level (uV/m).

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

Test Mode:	TX(5.8G) - 802.11ac-HT80
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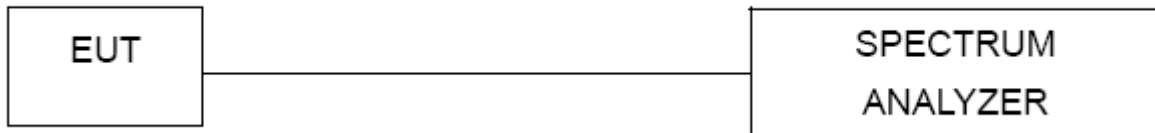
Polar (H/V)	Frequency	Meter Reading	Cable loss	Antenna Factor	Preamp Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	dB/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
(5775 MHz)-Above 1G									
V	4679.126	59.91	5.94	35.40	44.00	57.25	74	-16.75	PK
V	4679.126	43.57	5.94	35.40	44.00	40.91	54	-13.09	AV
V	11550.174	57.37	8.46	39.75	44.50	61.08	74	-12.92	PK
V	11550.174	43.57	8.46	39.75	44.50	47.28	54	-6.72	AV
V	17325.016	56.88	10.12	38.80	44.10	61.70	68.2	-6.50	PK
V	17325.016	41.79	10.12	38.80	42.70	48.01	54	-5.99	AV
H	4679.051	58.36	5.94	35.18	44.00	55.48	74	-18.52	PK
H	4679.051	43.17	5.94	35.18	44.00	40.29	54	-13.71	AV
H	11550.067	53.61	8.46	38.71	44.50	56.28	74	-17.72	PK
H	11550.067	43.26	8.46	38.71	44.50	45.93	54	-8.07	AV
H	17325.118	51.22	10.12	38.38	44.10	55.62	68.2	-12.58	PK
H	17325.118	43.61	10.12	38.38	44.10	48.01	54	-5.99	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 Wifi Repeater 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 Wifi Repeater 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 Wifi Repeaters 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 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 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

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

8.4 EUT operating Conditions

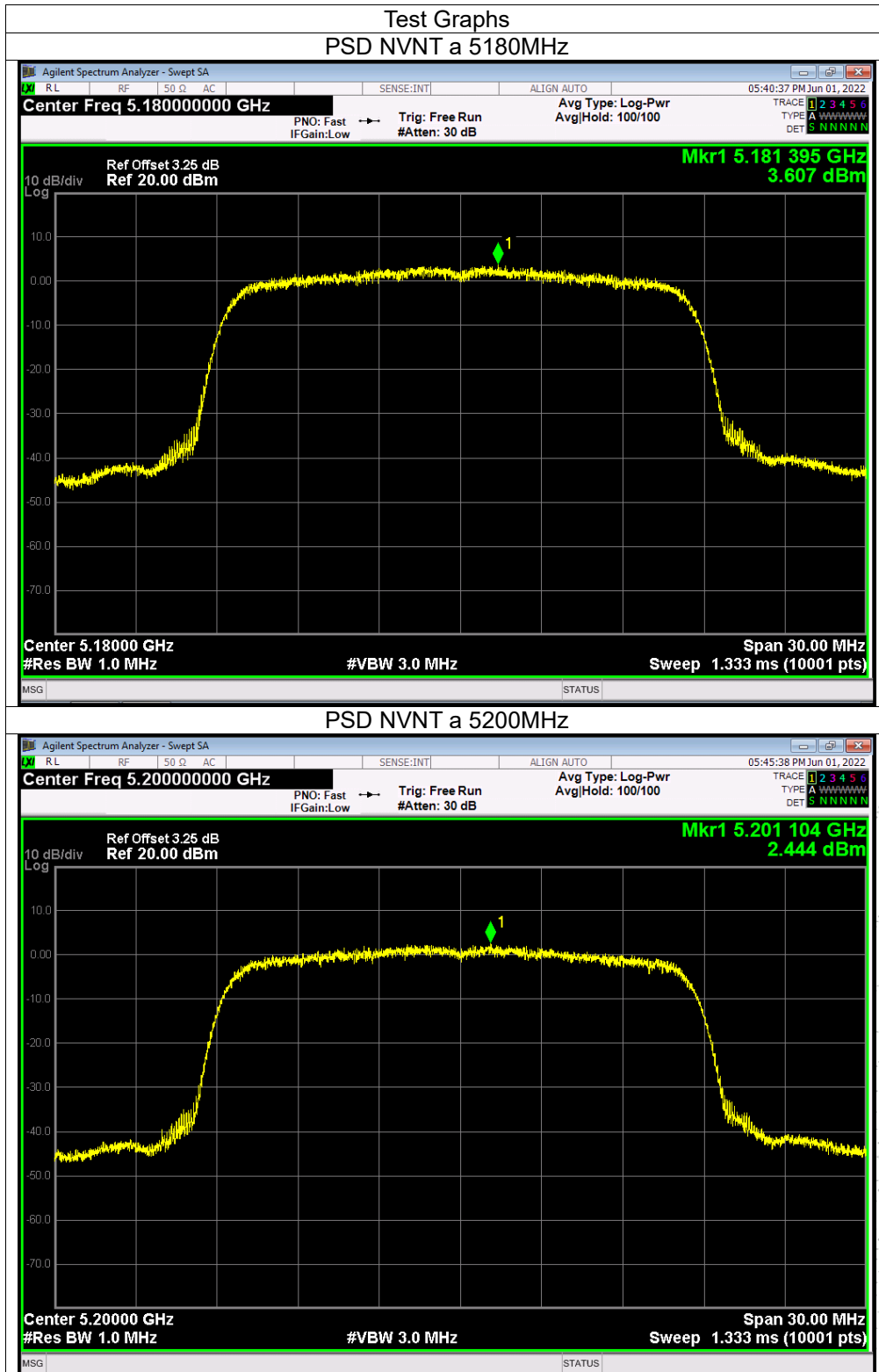
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

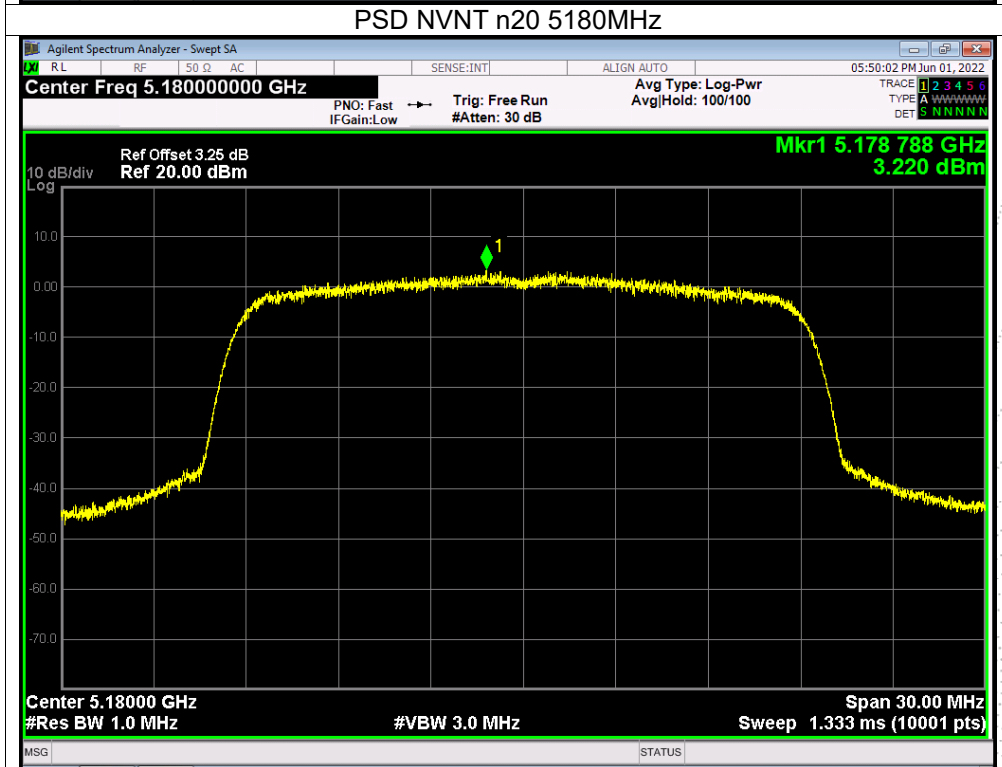
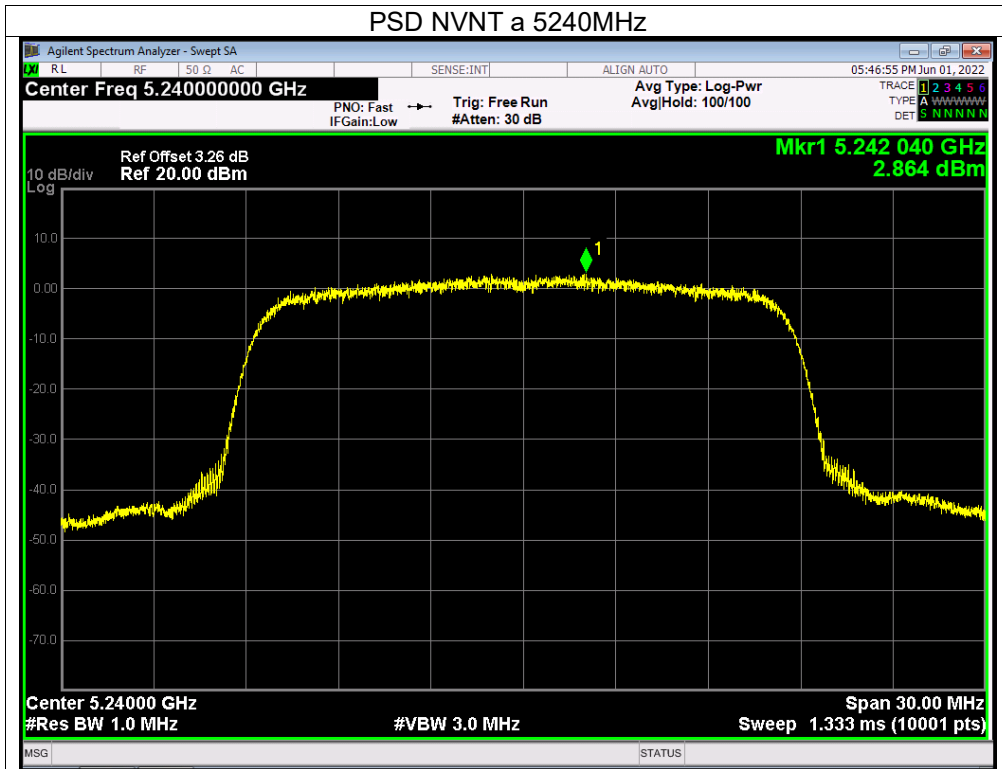
8.5 Test Result

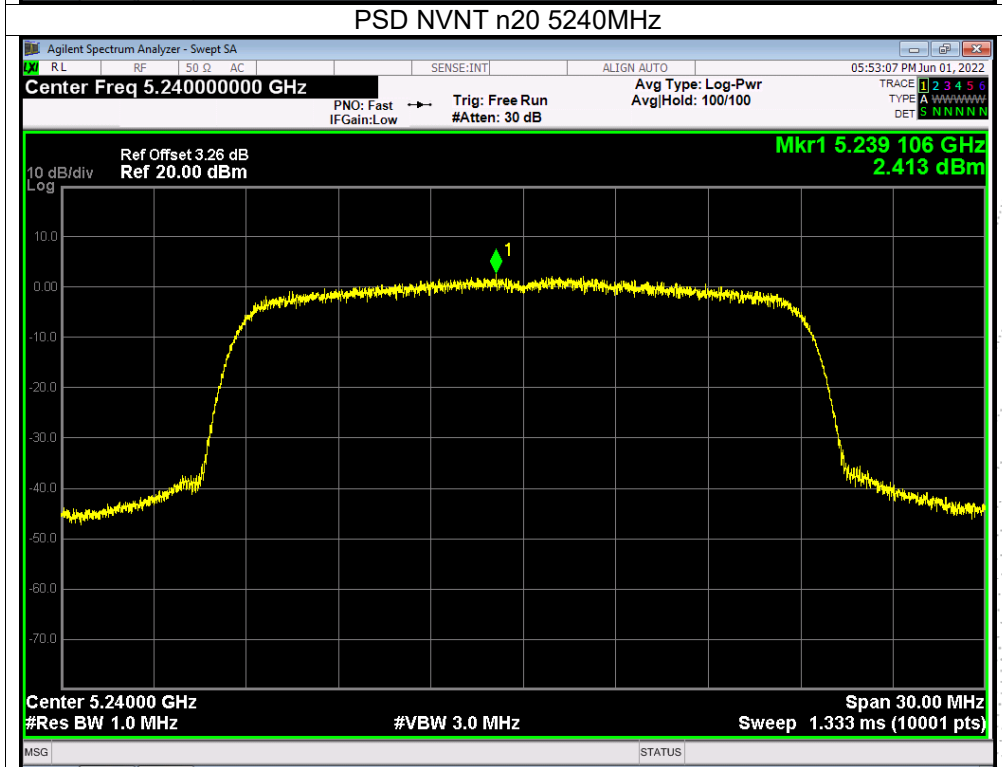
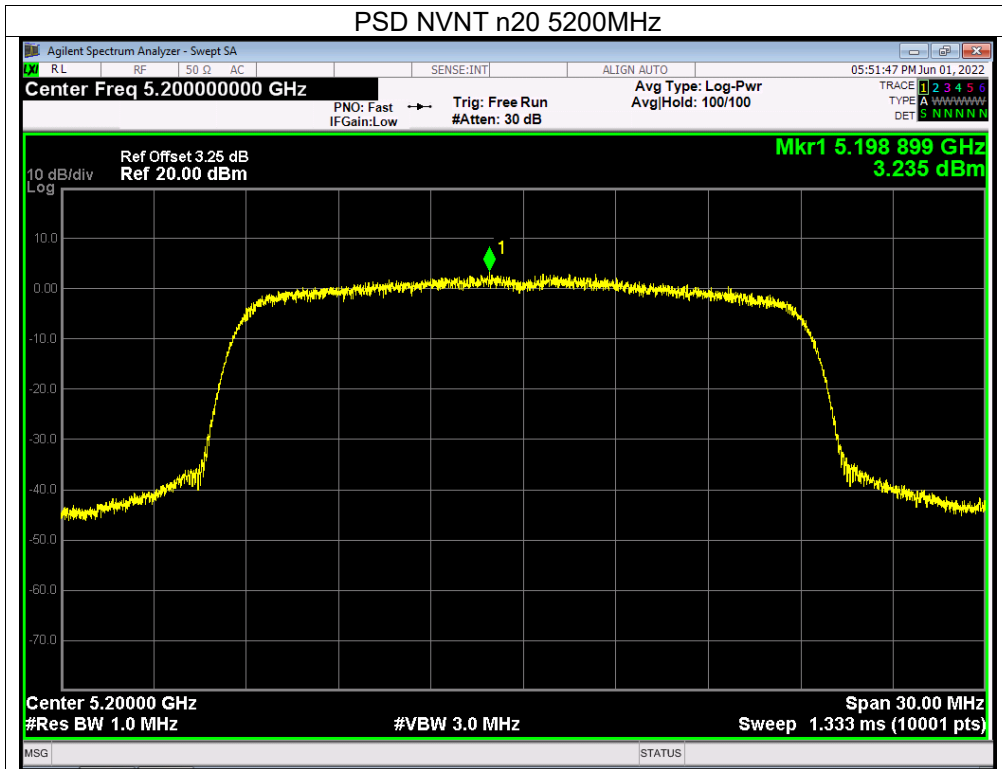
Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	(5180-5240MHz); (5745-5825MHz)		

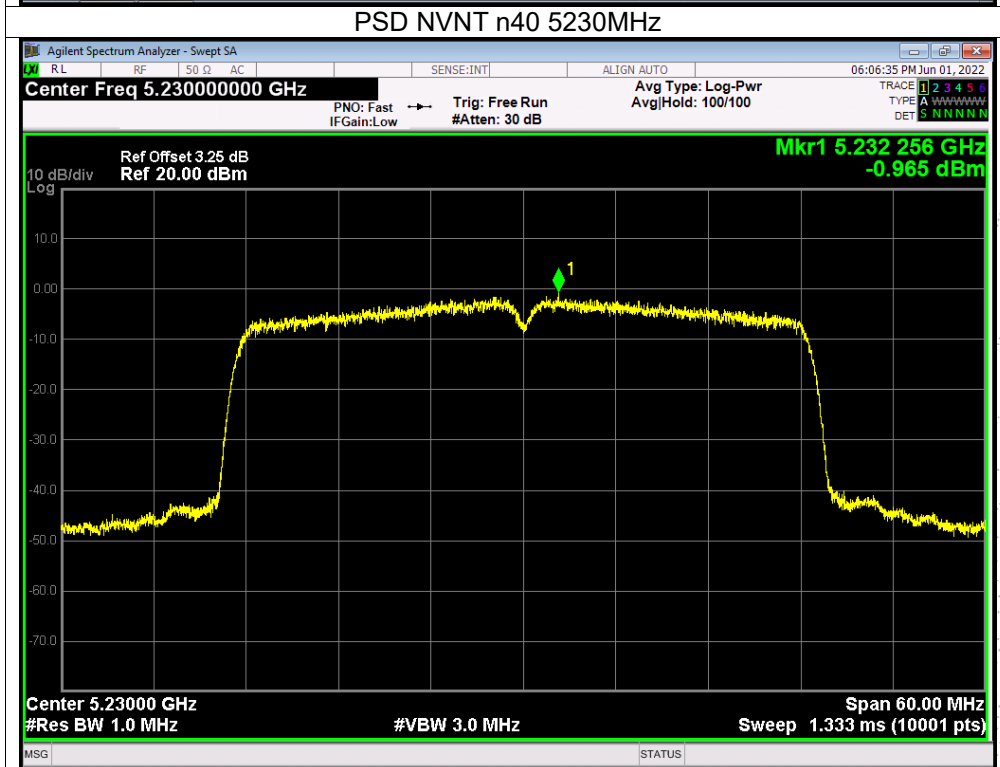
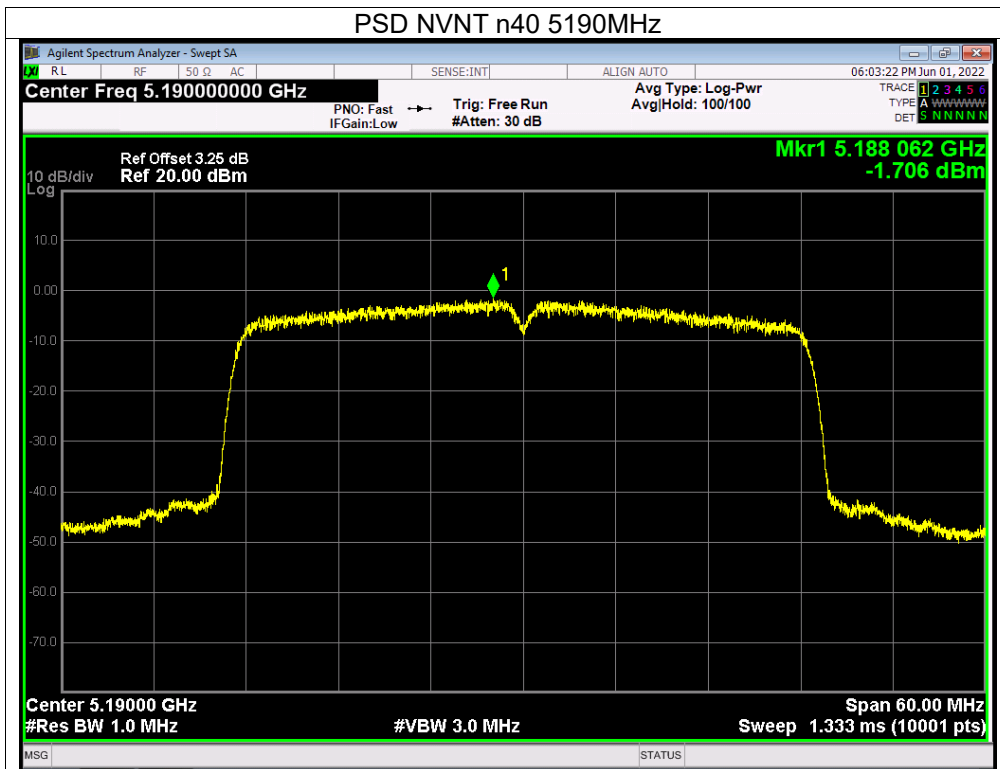
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	3.61	11	Pass
NVNT	a	5200	2.44	11	Pass
NVNT	a	5240	2.86	11	Pass
NVNT	n20	5180	3.22	11	Pass
NVNT	n20	5200	3.24	11	Pass
NVNT	n20	5240	2.41	11	Pass
NVNT	n40	5190	-1.71	11	Pass
NVNT	n40	5230	-0.97	11	Pass
NVNT	ac20	5180	3.12	11	Pass
NVNT	ac20	5200	1.96	11	Pass
NVNT	ac20	5240	3.08	11	Pass
NVNT	ac40	5190	-1.96	11	Pass
NVNT	ac40	5230	-1.89	11	Pass
NVNT	ac80	5210	-5.97	11	Pass

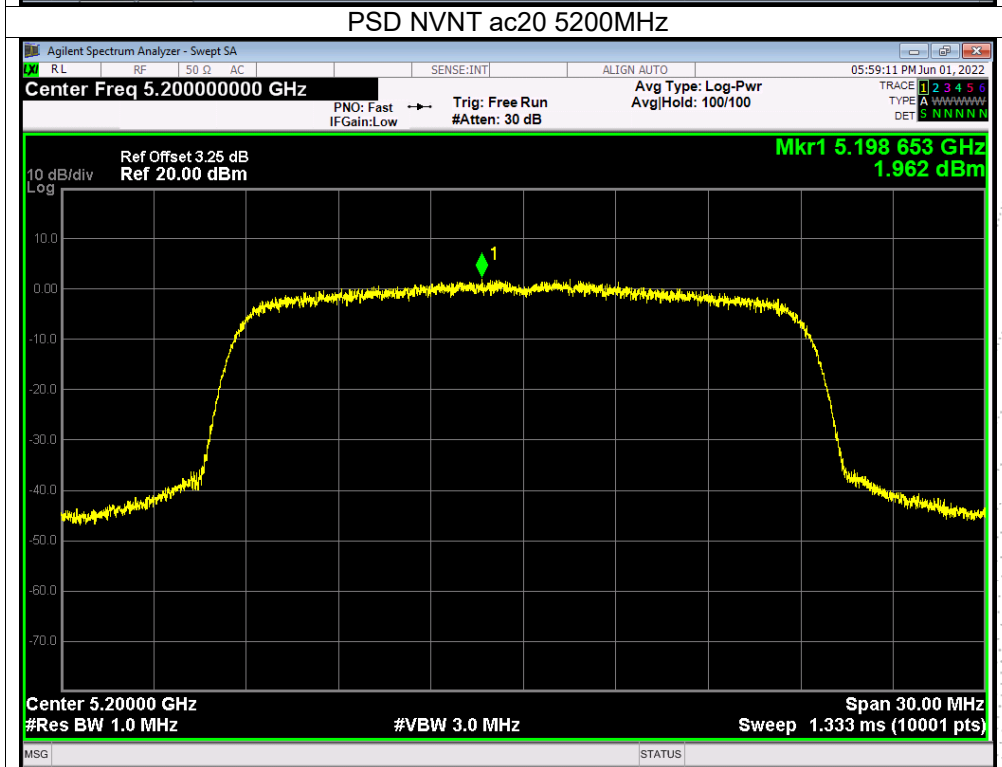
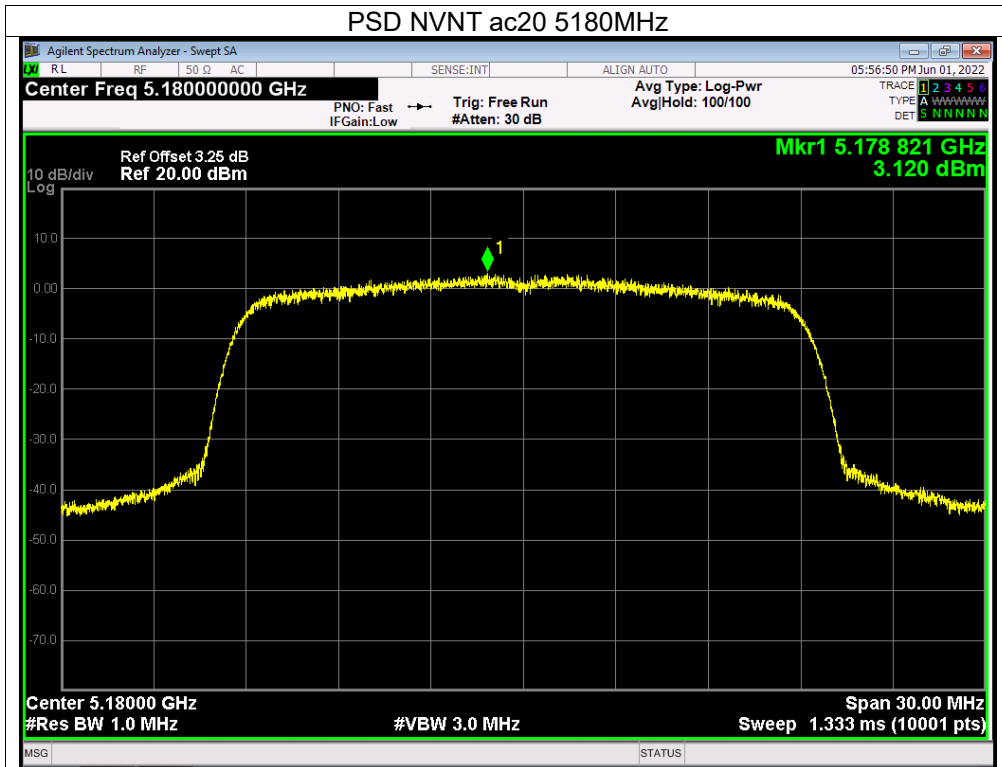
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
NVNT	a	5745	1.47	30	Pass
NVNT	a	5785	1.40	30	Pass
NVNT	a	5825	0.67	30	Pass
NVNT	n20	5745	0.25	30	Pass
NVNT	n20	5785	-0.24	30	Pass
NVNT	n20	5825	-0.94	30	Pass
NVNT	n40	5755	-3.63	30	Pass
NVNT	n40	5795	-4.26	30	Pass
NVNT	ac20	5745	0.08	30	Pass
NVNT	ac20	5785	-0.39	30	Pass
NVNT	ac20	5825	-0.61	30	Pass
NVNT	ac40	5755	-3.60	30	Pass
NVNT	ac40	5795	-5.13	30	Pass
NVNT	ac80	5775	-8.53	30	Pass

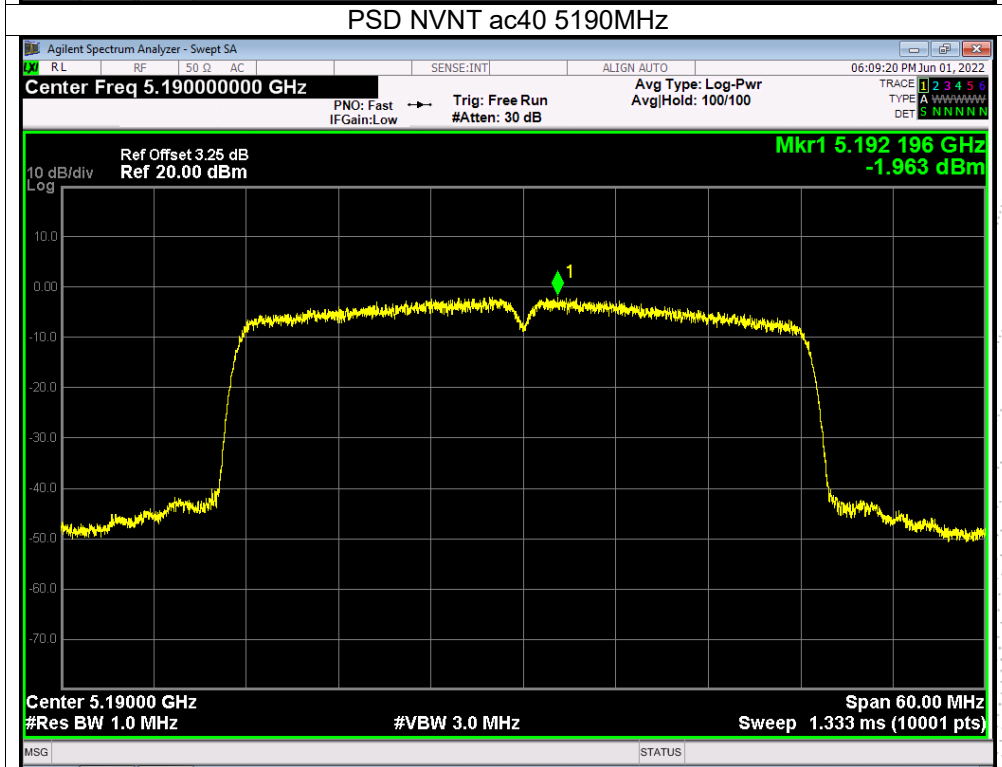
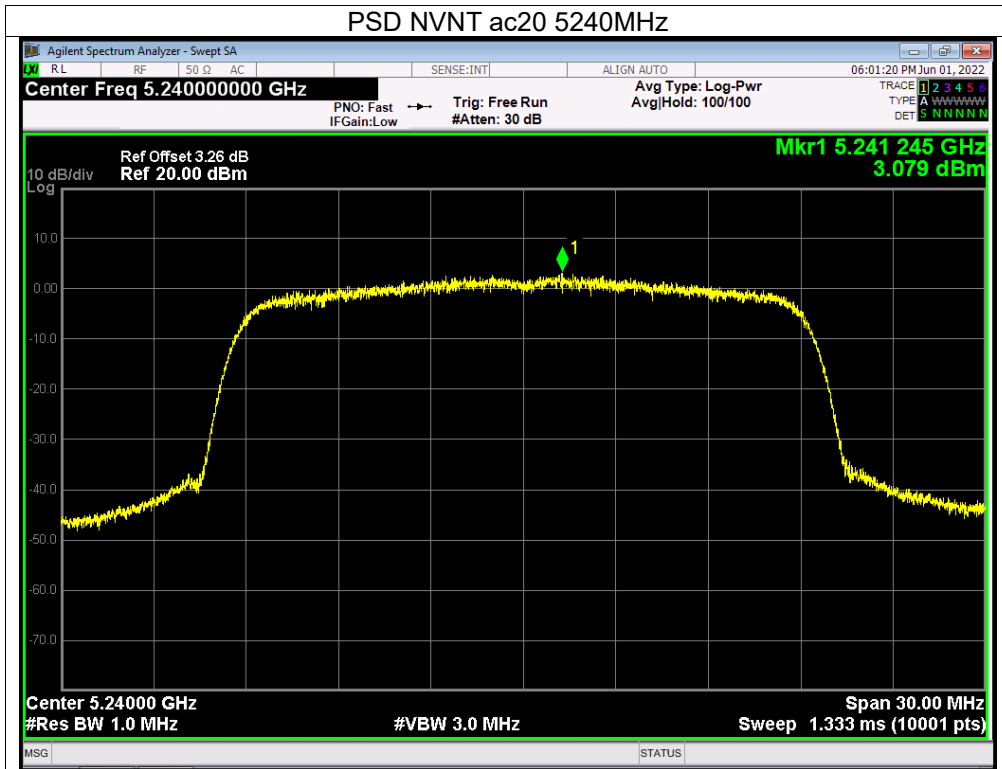


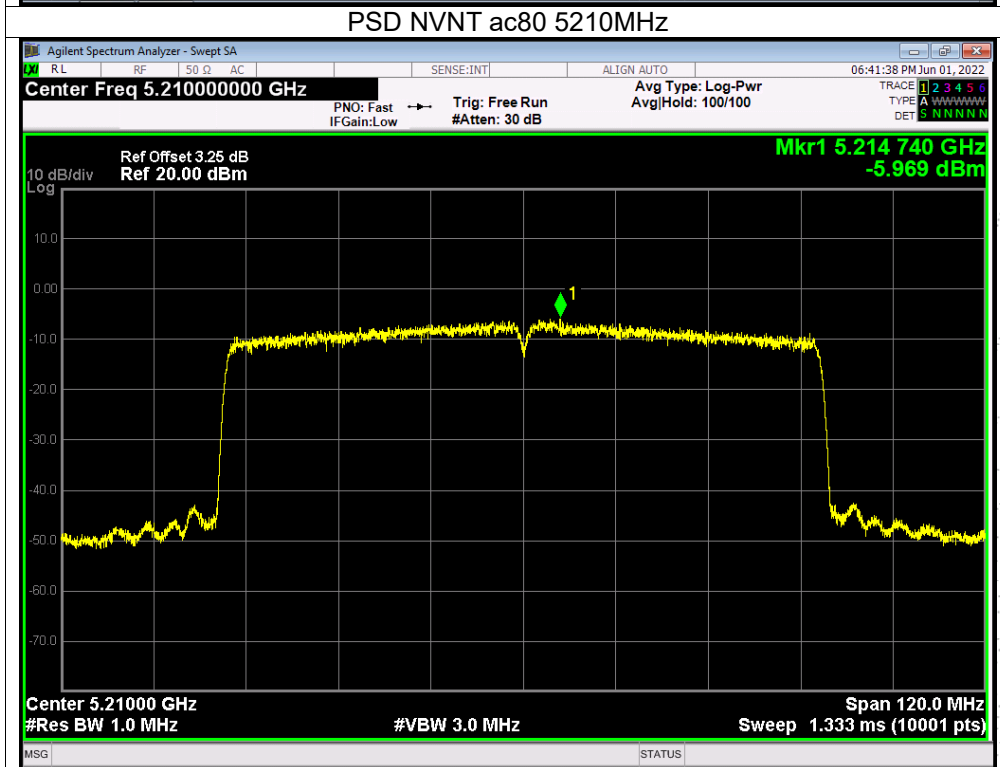
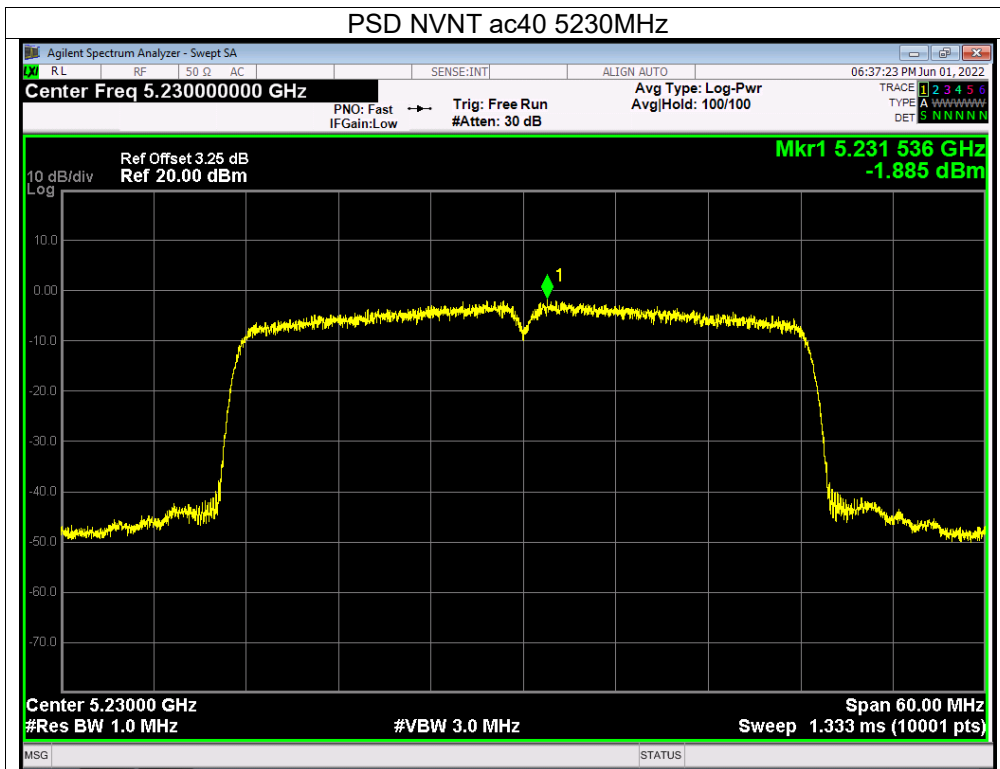


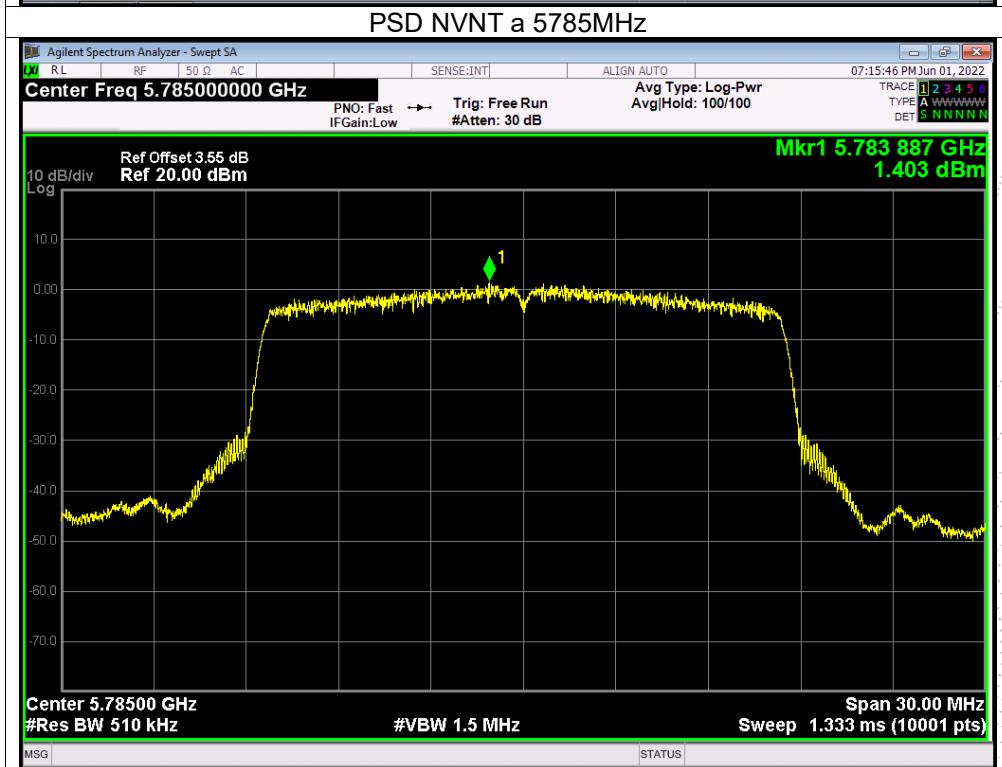
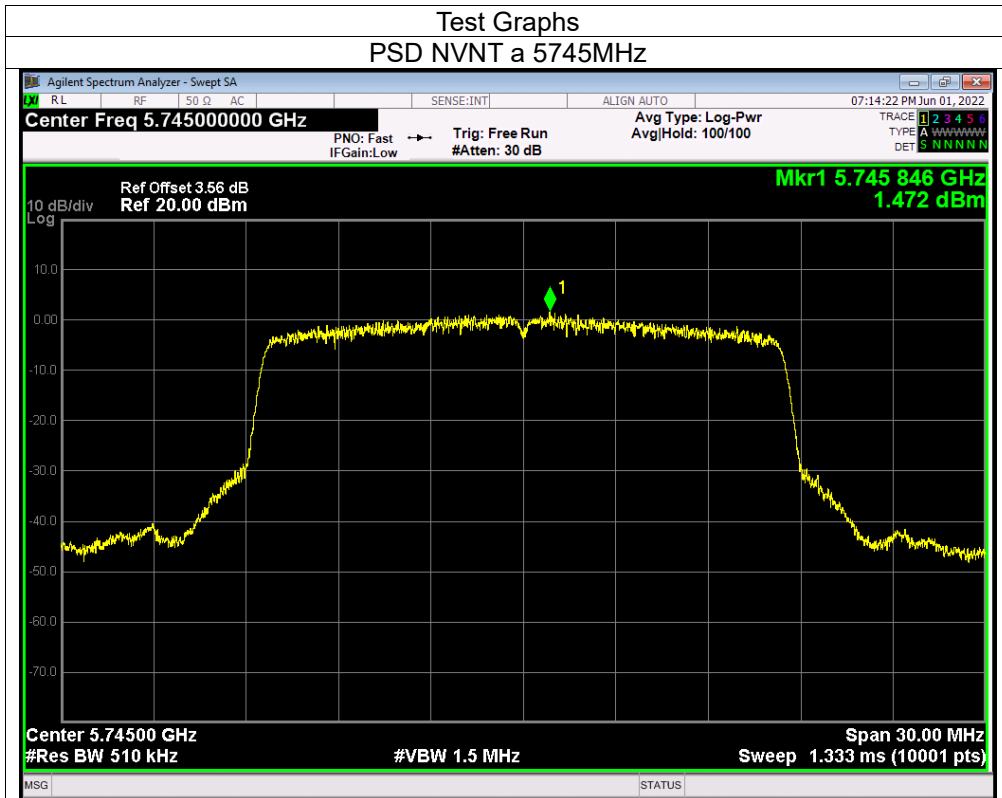


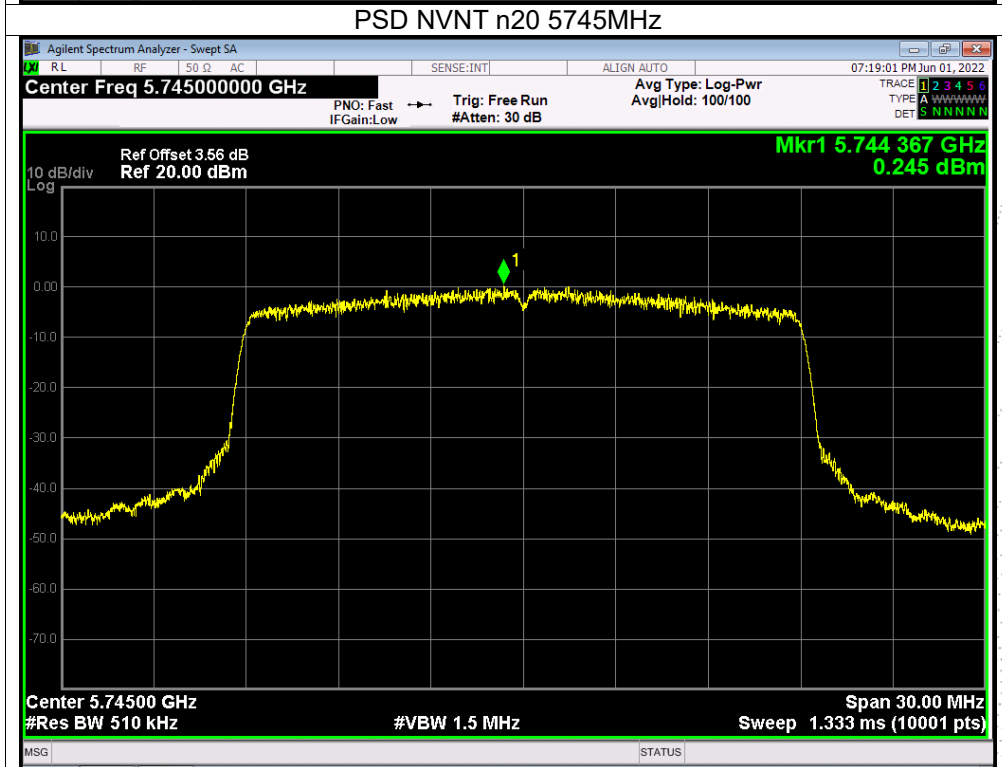
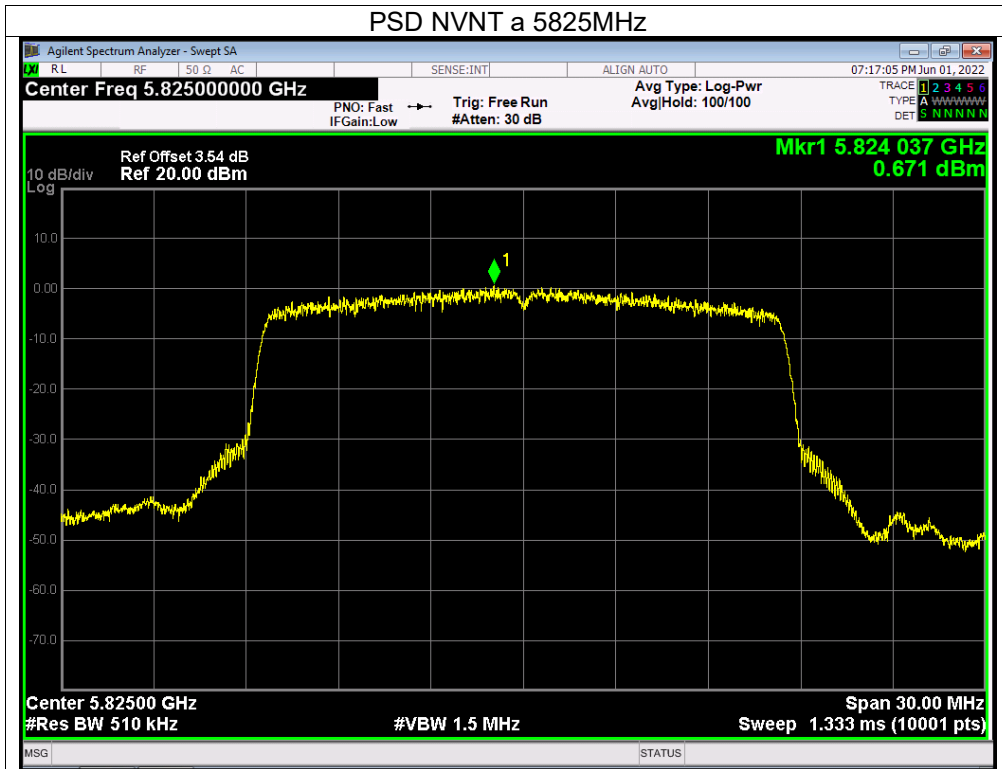


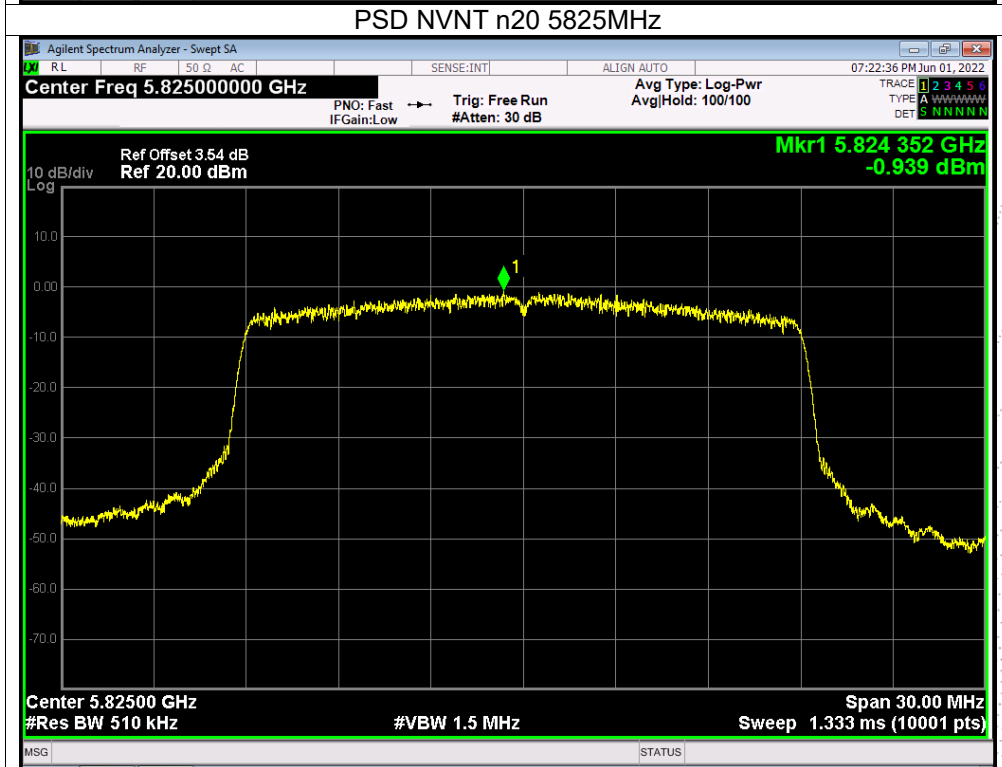
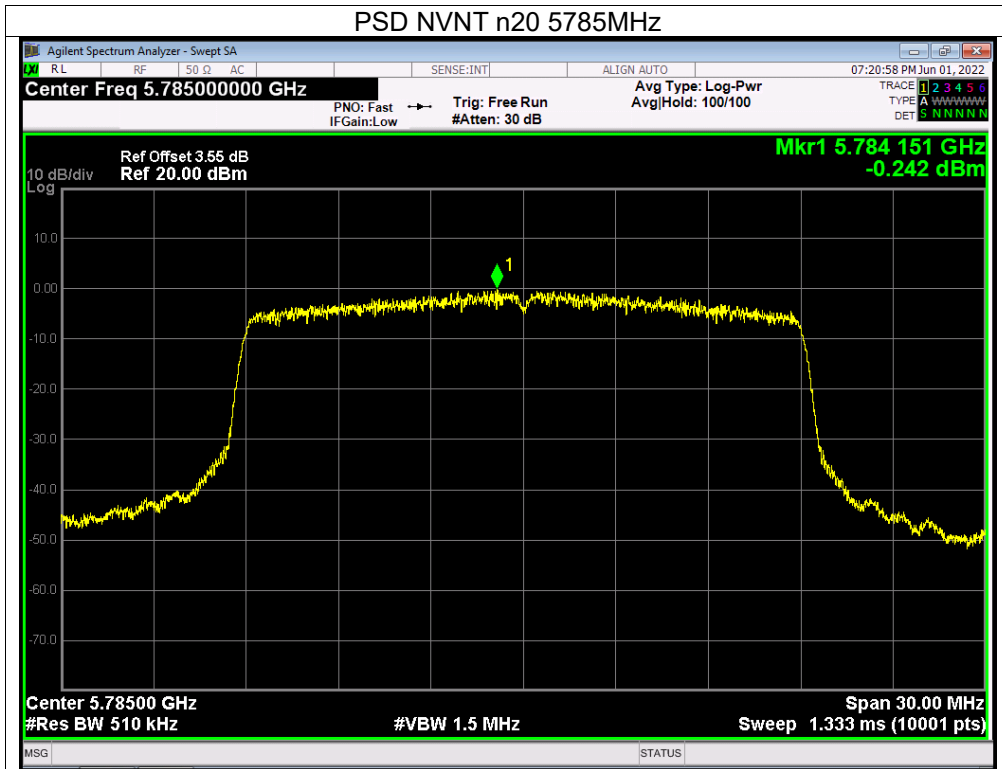


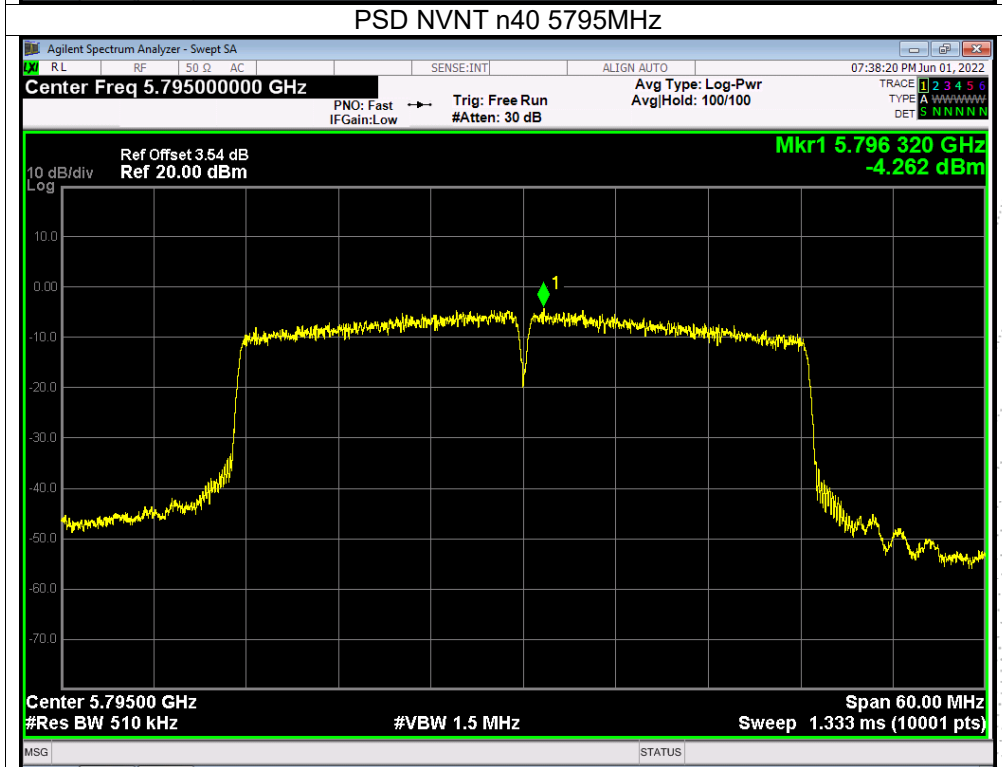
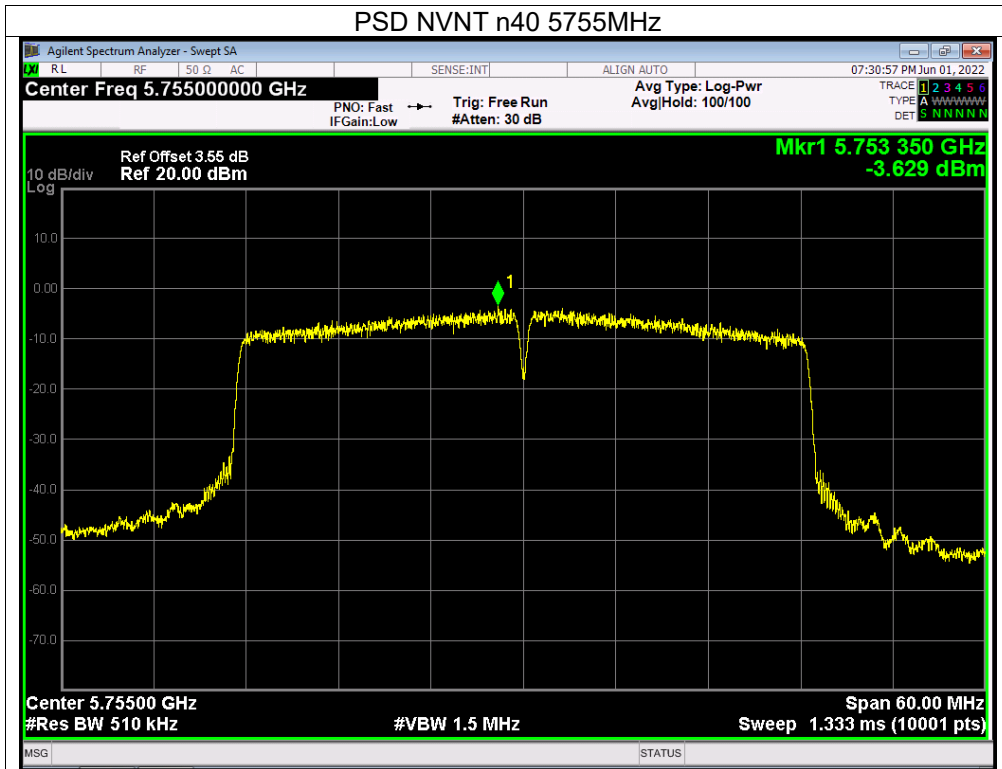


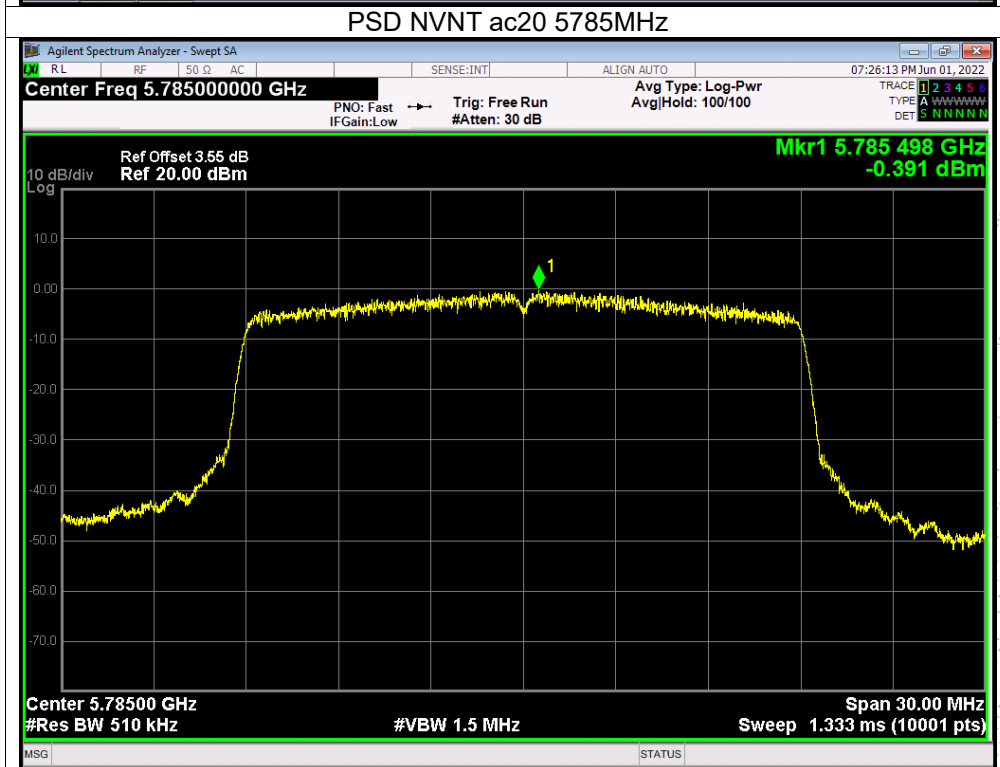
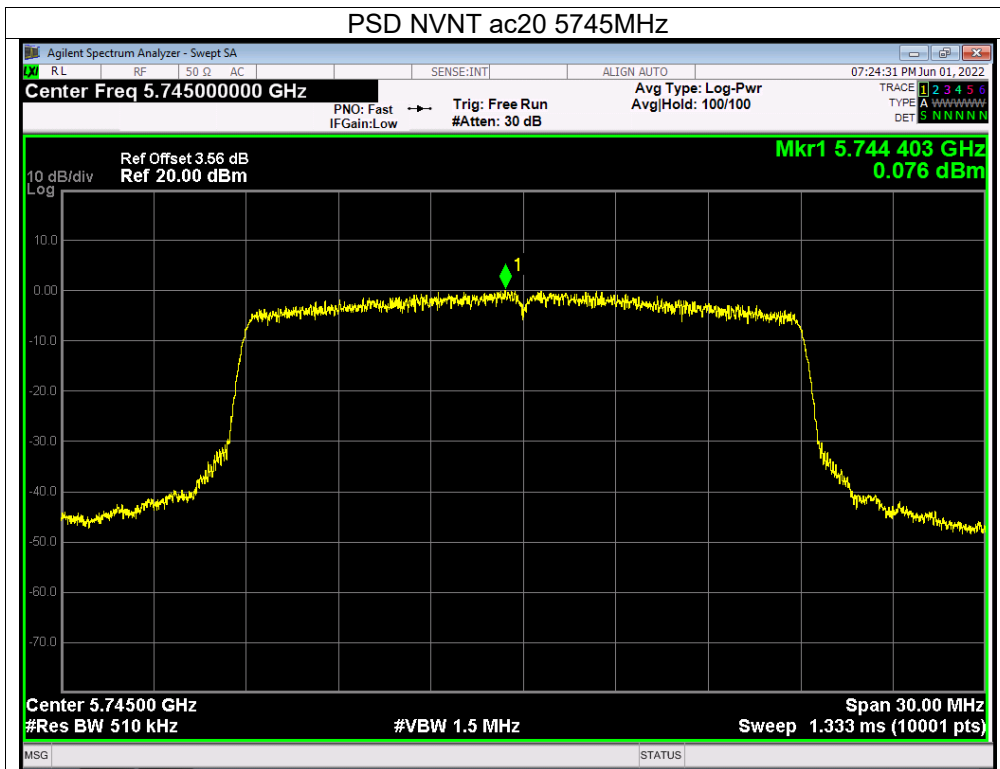


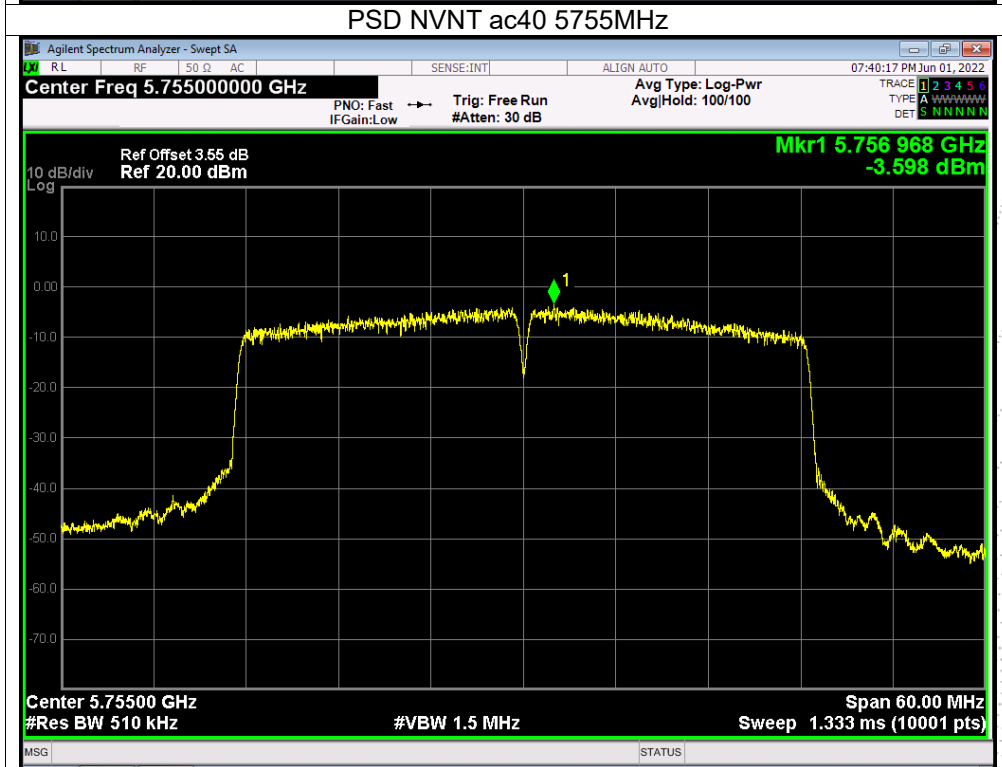
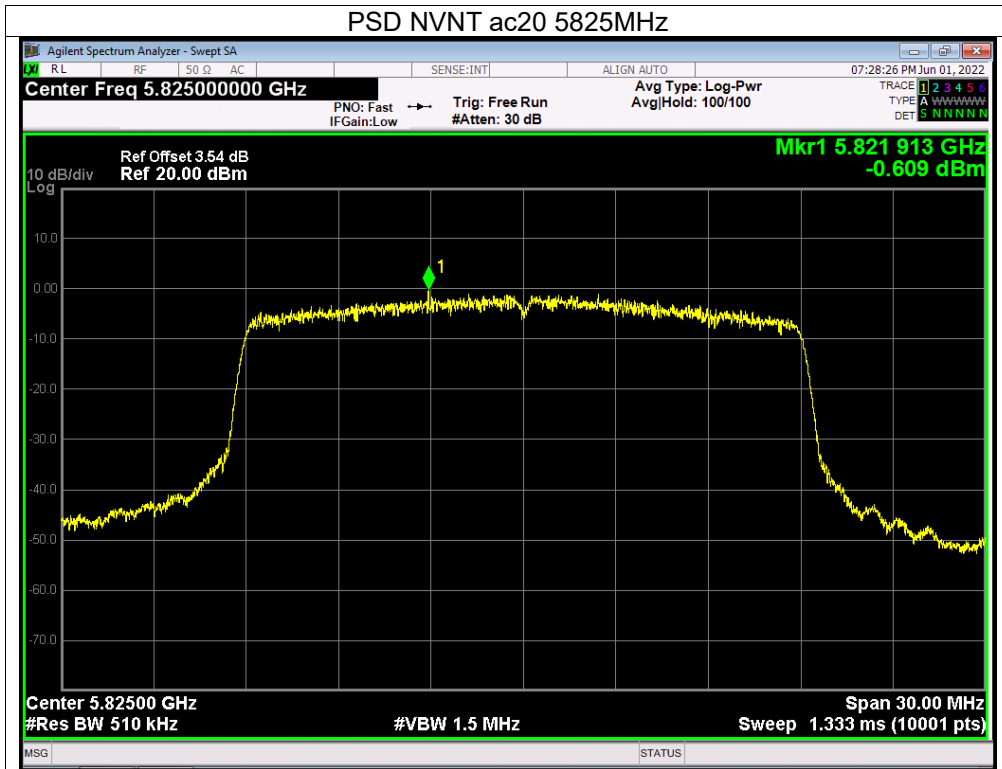


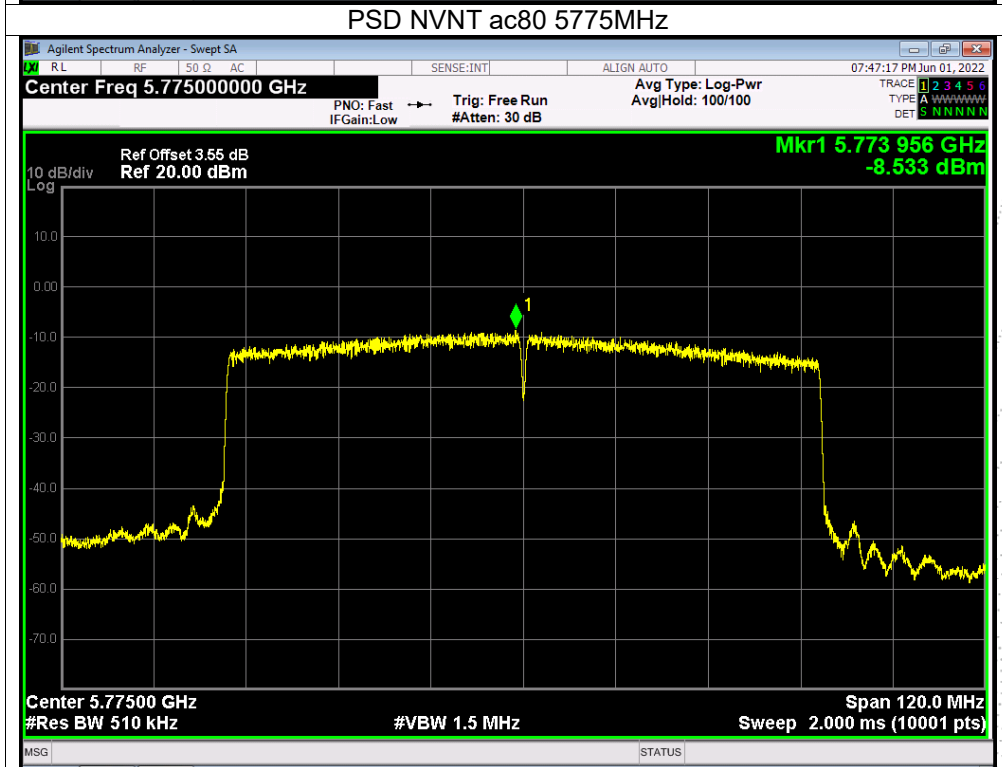
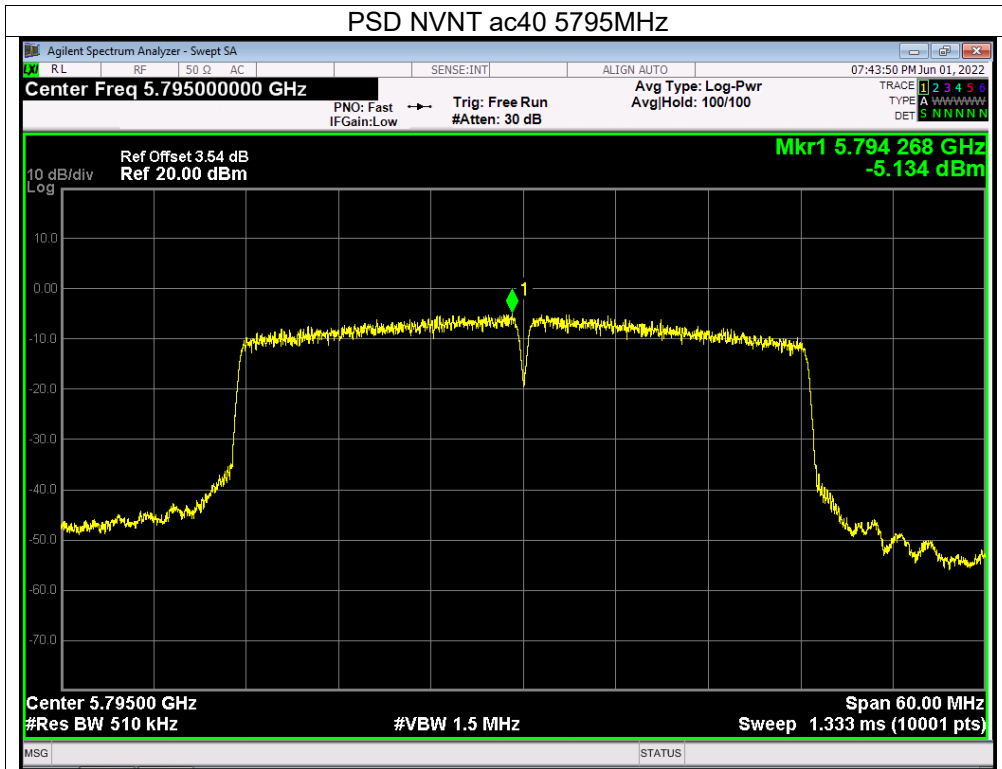






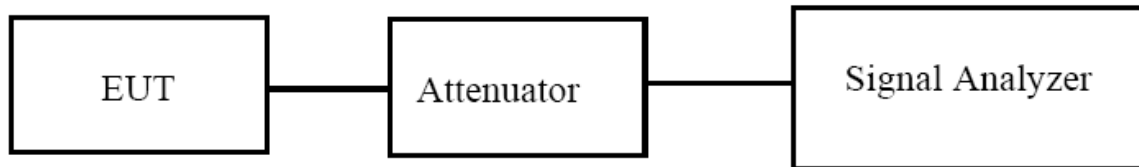






9. 26dB & 6dB & 99% Emission Bandwidth

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.

9.3 Test procedure

a) Set RBW = approximately 1% of the emission bandwidth.

b) Set the VBW > RBW.

c) Detector = Peak.

d) Trace mode = max hold.

e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

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

1. Set center frequency to the nominal EUT channel center frequency.

2. Set span = 1.5 times to 5.0 times the OBW.

3. Set RBW = 1 % to 5 % of the OBW

4. Set VBW $\geq 3 \cdot$ RBW

5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

6. Use the 99 % power bandwidth function of the instrument (if available).

7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

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 :	AC120V/60Hz
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	19.872	Pass
NVNT	a	5200	19.819	Pass
NVNT	a	5240	19.827	Pass
NVNT	n20	5180	20.355	Pass
NVNT	n20	5200	20.373	Pass
NVNT	n20	5240	20.312	Pass
NVNT	n40	5190	41.269	Pass
NVNT	n40	5230	41.024	Pass
NVNT	ac20	5180	20.370	Pass
NVNT	ac20	5200	20.221	Pass
NVNT	ac20	5240	20.252	Pass
NVNT	ac40	5190	41.303	Pass
NVNT	ac40	5230	41.573	Pass
NVNT	ac80	5210	81.104	Pass

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5180	16.383
NVNT	a	5200	16.380
NVNT	a	5240	16.414
NVNT	n20	5180	17.542
NVNT	n20	5200	17.564
NVNT	n20	5240	17.547
NVNT	n40	5190	35.966
NVNT	n40	5230	35.973
NVNT	ac20	5180	17.560
NVNT	ac20	5200	17.542
NVNT	ac20	5240	17.571
NVNT	ac40	5190	35.916
NVNT	ac40	5230	36.003
NVNT	ac80	5210	75.322

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC120V/60Hz
Test Mode:	(5745-5825MHz)		

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	16.335	0.5	Pass
NVNT	a	5785	16.321	0.5	Pass
NVNT	a	5825	16.326	0.5	Pass
NVNT	n20	5745	17.571	0.5	Pass
NVNT	n20	5785	17.591	0.5	Pass
NVNT	n20	5825	17.568	0.5	Pass
NVNT	n40	5755	35.910	0.5	Pass
NVNT	n40	5795	36.326	0.5	Pass
NVNT	ac20	5745	17.573	0.5	Pass
NVNT	ac20	5785	17.571	0.5	Pass
NVNT	ac20	5825	17.571	0.5	Pass
NVNT	ac40	5755	35.689	0.5	Pass
NVNT	ac40	5795	35.123	0.5	Pass
NVNT	ac80	5775	75.924	0.5	Pass

Condition	Mode	Frequency (MHz)	99% OBW (MHz)
NVNT	a	5745	16.425
NVNT	a	5785	16.414
NVNT	a	5825	16.398
NVNT	n20	5745	17.558
NVNT	n20	5785	17.553
NVNT	n20	5825	17.544
NVNT	n40	5755	35.967
NVNT	n40	5795	35.918
NVNT	ac20	5745	17.577
NVNT	ac20	5785	17.546
NVNT	ac20	5825	17.543
NVNT	ac40	5755	35.927
NVNT	ac40	5795	35.884
NVNT	ac80	5775	75.148

