

TEST REPORT

Report No.: BCTC2608718591-4E

Applicant: CHINA DRAGON TECHNOLOGY LIMITED

Product Name: WiFi Module

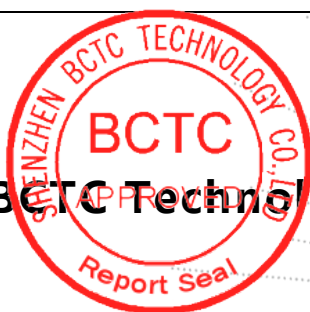
Test Model: CDW-G47663U-00

Tested Date: 2026-08-27 to 2026-09-10

Issued Date: 2026-09-10



Shenzhen BCTC Technology Co., Ltd.



FCC ID: ROW-G47663U

Product Name: WiFi Module

Trademark: CDTECH

Model/Type Ref.: CDW-G47663U-00

Prepared For: CHINA DRAGON TECHNOLOGY LIMITED

Address: B4 building, Haosan No.1 industry, nanpu road, shangliao community, xinqiao street, baoan district, Shenzhen, China

Manufacturer: CHINA DRAGON TECHNOLOGY LIMITED

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Prepared By: Shenzhen BCTC Technology Co., Ltd.

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Sample Received Date: 2026-08-27

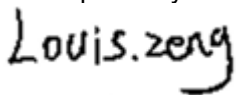
Sample tested Date: 2026-08-27 to 2026-09-10

Report No.: BCTC2608718591-4E

Test Standards: FCC 47 CFR Part 15 Subpart E (clause 15.407)
ANSI C63.10-2020 + Cor.1-2023+C63.10a-2024 + Errata to C63.10a-2024

Test Results: PASS

Prepared by :



Louis Zeng /Editor

Reviewer by :



Mike Zheng / Supervisor

Approved by:



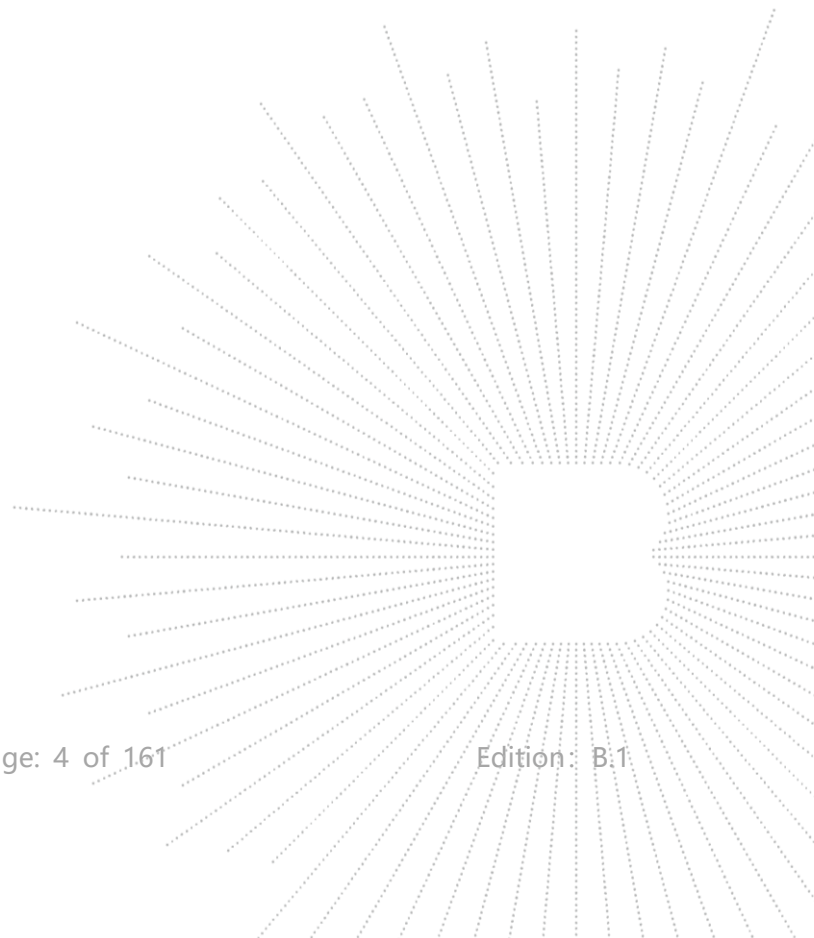
Sewen Guo/Manager

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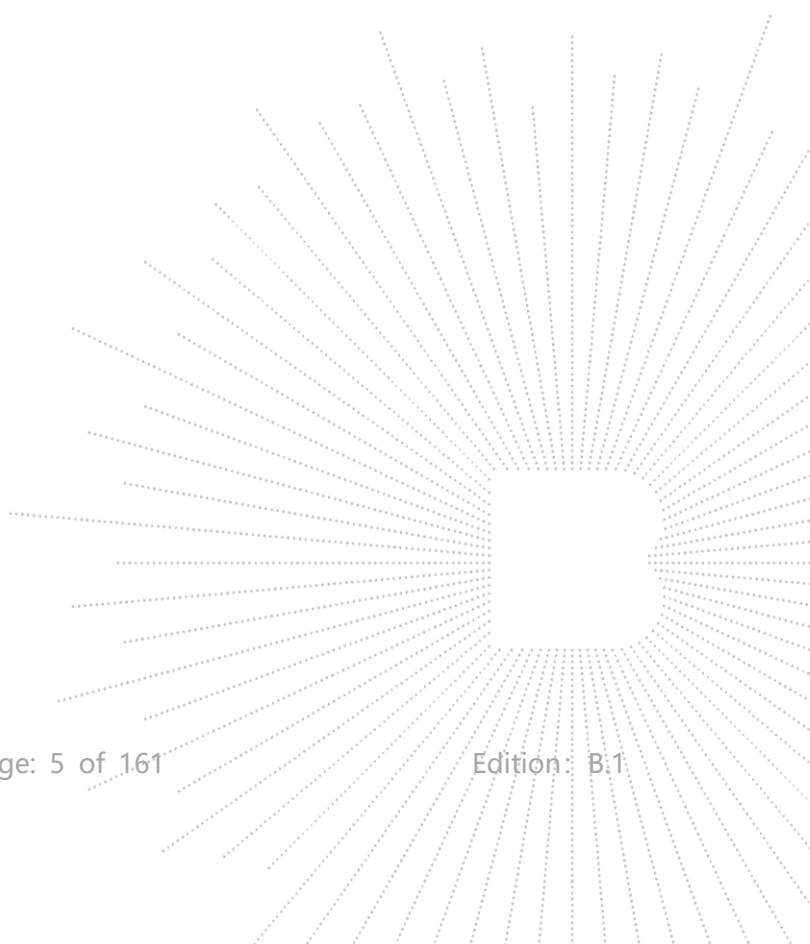
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1. Version

Report No.	Issue Date	Description	Approved
BCTC2608718591-4E	2026-09-10	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)	PASS
2	Conducted Emission	15.207	PASS
3	26 dB and 99% Emission Bandwidth	15.407 a 15.1049	PASS
4	Minimum 6 dB bandwidth	15.407(e)	PASS
5	Maximum Conducted Output Power	15.407 a	PASS
6	Band Edge	15.407 b	PASS
7	Power Spectral Density	15.407 a	PASS
8	Spurious Emissions at Antenna Terminals	15.407 b	PASS
9	Antenna Requirement	15.203	PASS

NOTE1: N/A (Not Applicable)

NOTE2: According to FCC OET KDB 558074, the report use radiated measurements in the restricted frequency bands. In addition, the radiated test is also performed to ensure the emissions emanating from the device cabinet also comply with the applicable limits.

Note 3: "*" indicates that the test results are determined base on FCC 47 CFR Part 15 Subpart E (clause 15.407). And the test results are took into account measurement uncertainty(see section 3 for measurement uncertainty information)

BCTC CO., LTD

3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2:2011/AMD2:2018. 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=4.8dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=5.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=5.0dB
5	Conducted Emission(150kHz-30MHz)	U=3.0dB
6	Power Spectral Density	U=3.46dB
7	Peak Power	U=0.31dB
8	Occupied Bandwidth/Frequency Range	U=3.46%
9	Conducted output power uncertainty	U=0.55dB
10	Frequency Error	U= 53.50 Hz
11	Frequency Drift	U=0.64 KHz
12	Temperature	U= 0.59 °C
13	Humidity	U= 5.3 %

4. Product Information and Test Setup

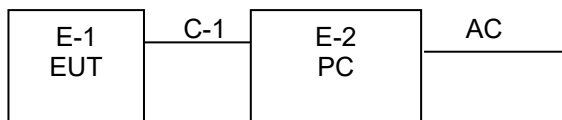
4.1 Product Information

Model/Type reference:	CDW-G47663U-00
Model differences:	N/A
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported	☒ 802.11a ☒ 802.11n(20MHz channel bandwidth) ☒ 802.11n(40MHz channel bandwidth) ☒ 802.11ac(20MHz channel bandwidth) ☒ 802.11ac(40MHz channel bandwidth) ☒ 802.11ac(80MHz channel bandwidth)
Operation Frequency:	5180-5240MHz for 802.11a/n/ac(HT20); 5190-5230MHz for 802.11n/ac(HT40); 5210MHz for 802.11 ac80; 5745-5825 MHz for 802.11a/n/ac(HT20); 5755-5795 MHz for 802.11n/ac(HT40); 5775MHz for 802.11 ac80
Type of Modulation:	☒ OFDM with BPSK/QPSK/16QAM/64QAM for 802.11a/n ☒ OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11ac
Number Of Channel	4 channels for 802.11 a/n/ac 20 in the 5180-5240MHz band; 2 channels for 802.11 n/ac 40 in the 5190-5230MHz band; 1 channels for 802.11 ac 80 in the 5210MHz band; 5 channels for 802.11 a/n/ac 20 in the 5745-5825MHz band; 2 channels for 802.11 n/ac 40 in the 5755-5795MHz band; 1 channels for 802.11 ac 80 in the 5775MHz band
Antenna installation:	PCB antenna*2
Antenna Gain:	5.1G Antenna A: 3.84 dBi; Antenna B: 3.8 dBi 5.8G Antenna A: 3.78 dBi; Antenna B: 3.59 dBi Remark: ☒ The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. The laboratory assumes no responsibility for its authenticity. ☐ The antenna gain of the product is provided by the customer, and the test data is affected by the customer information. The laboratory assumes no responsibility for its authenticity.
Ratings:	DC 5V

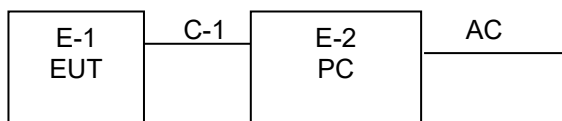
4.2 Test Setup Configuration

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	WiFi Module	CDTECH	CDW-G47663U-00	N/A	EUT
E-2	PC	Lenovo	ThinkPad E14 Gen2	N/A	Auxiliary

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

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

(U-NII-1) 5180MHz-5240MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	36	5180	40	5200
	44	5220	48	5240
40MHz	38	5190	46	5230
80MHz	42	5210		
(U-NII-3) 5745MHz-5825MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency
20MHz	149	5745	153	5765
	157	5785	161	5805
	165	5825		
40MHz	151	5755	159	5795
80MHz	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/ ac 40 CH38/ CH 46 802.11n/ ac 40 CH 151 / CH 159
Mode 3	802.11 ac 80 CH 42/ CH 155
Mode 4	Transmit mode

Notes:

1. The measurements are performed at the highest, middle, lowest available channels.
2. The measurements are performed at all Bit Rate of Transmitter, the worst data was reported
3. The 802.11ax mode is investigated among different tones(26/52/106/242-tone RU channel), full resource units (RU), partial resource units. The partial RU has no higher power than full RU's, thus the full RU is chosen as main test configuration.

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

RF Function	Mode Or Modulation type	ANT A Power Class	ANT B Power Class	Software For Testing
WIFI 5.1G	802.11a	1A	19	WCN Combo Tool #1
	802.11n/ac20	1A	19	
	802.11n/ac40	1A	18	
	802.11ac80	1A	18	
WIFI 5.8G	802.11a	1A	19	
	802.11n/ac20	1A	19	
	802.11n/ac40	1A	18	
	802.11ac80	19	18	

4.7 Antenna

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For power measurements on IEEE 802.11 devices,

Directional gain = GANT + Array Gain, where Array Gain is as follows:

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

GANT is set equal to the gain of the antenna having the highest gain.

For PSD measurements, the directional gain calculation follows F)2)f)ii) of KDB 662911 D01 v02r01.

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the k th antenna is being fed by spatial stream j , or zero if it is not;
 G_k is the gain in dBi of the k th antenna.

As minimum NSS=1 is supported by EUT, the formula can be simplified as:

Directional gain = $10 \cdot \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi

Where $G_1, G_2, \dots, G_N$ denotes single antenna gain.

5.1G

If a device has two antenna, GANT A= 3.84dBi; GANT B= 3.8dBi;

Directional gain of power measurement = max (3.84, 3.8) + 0 = 3.84 dBi

Directional gain of PSD measurement = $10 \cdot \log [(10^{3.84/20} + 10^{3.8/20})^2 / 2] = 6.83$ dBi

Antenna A (dBi)	Antenna B (dBi)	Directional gain for Power (dBi)	Directional gain for PSD (dBi)
3.84	3.8	3.84	6.83

5.8G

If a device has two antenna, GANT A= 3.78dBi; GANT B= 3.59dBi;

Directional gain of power measurement = max (3.78, 3.59) + 0 = 3.78 dBi

Directional gain of PSD measurement = $10 \cdot \log [(10^{3.78/20} + 10^{3.59/20})^2 / 2] = 6.70$ dBi

Antenna A (dBi)	Antenna B (dBi)	Directional gain for Power (dBi)	Directional gain for PSD (dBi)
3.78	3.59	3.78	6.70

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 Technology Co., Ltd.

Address: Room 101M, Unit 1, Building1, Pengyuan, No.18, Lilang Road, Shanglilang, Nanwan Subdistrict, Longgang District, Shenzhen, Guangdong, China.

The site and apparatus are constructed in conformance with the requirements of ANSI C63.4a-2017 and CISPR 16-1-1:2019 other equivalent standards.

FCC Test Firm Registration Number: 754702

ANAB certificate registration number is: CN3479

5.2 Test Instrument Used

Conducted emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESCI	101421	2026.08.24	2027.08.23
AMN	SCHWHRZBECK	NSLK8128	05152	2026.01.22	2027.01.21
AMN	SCHWHRZBECK	NSLK8127	8127739	2026.08.24	2027.08.23
Pulse Limiter	SCHWHRZBECK	VTSD 9561-F-N	00547	2026.08.24	2027.08.23
Temperature & Humidity	Wetest	HTC-1	/	2026.08.24	2027.08.23
Software	EZ-EMC	Ver.EMC-CON 3A1	/	/	/

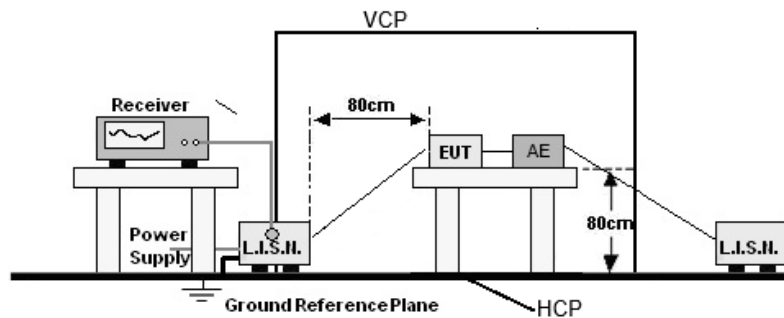
Radiated Emissions Test (966 Chamber)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	2023.09.25	2026.09.24
Loop Antenna	Schwarzbeck	FMZB1519B	00014	2026.01.05	2027.01.04
Broadband antenna	SCHWHRZBECK	VULB9168	01620	2026.08.22	2027.08.21
Horn antenna (1 GHz -18GHz)	SCHWARZBECK	BBHA 9120 D	2792	2026.08.22	2027.08.21
Horn antenna (18 GHz -40GHz)	SCHWARZBECK	BBHA9170	00822	2025.12.29	2026.12.28
Receiver	R&S	ESR	1316	2026.08.24	2027.08.23
Spectrum Analyzer	R&S	FSV40	101328	2026.01.22	2027.01.21
Amplifier	SCHWHRZBECK	BBV9744	568	2026.08.24	2027.08.23
Amplifier	EMC INSTRUMENTS CORPORATION	EMC0518A45SEE	EMT-SZ2233	2026.08.24	2027.08.23
Amplifier (18GHz-40GHz)	MITEQ	TTA1840-35-HG	2034381	2026.05.09	2027.05.08

Band 2.4G-2.5G Filter	COM-MW	ZBSF6-C5150-535 0-1117	2220980	2026.08.24	2027.08.23
Band 5.1G-5.3G Filter	COM-MW	ZBSF6-C2400-248 3.5-1116	2220981	2026.08.24	2027.08.23
Band 5.4G-5.7G Filter	COM-MW	ZBSF6-C5475-572 5-1118	2220982	2026.08.24	2027.08.23
Band 5.7G-5.8G Filter	COM-MW	ZBSF6-C5725-585 0-1082	2220979	2026.08.24	2027.08.23
RF cable 3# (9kHz-6GHz)	Yunyi	10M	/	2026.08.24	2027.08.23
RF cable 9# (9kHz-1GHz)	Yunyi	2M	/	2025.10.28	2026.10.27
RF cable 5# (1GHz -18GHz)	SKET	9M	18038626	2026.08.24	2027.08.23
RF cable 6# (1GHz -18GHz)	SKET	5M	#10	2026.08.24	2027.08.23
RF cable 10# (18GHz-40GHz)	/	2M	2M	2026.05.09	2027.05.08
RF cable 11# (18GHz-40GHz)	/	2.5M	2.5M	2026.05.09	2027.05.08
Temperature & Humidity	Wetest	HTC-1	/	2026.08.24	2027.08.23
Communication test set	R&S	CMW500	157483	2026.08.24	2027.08.23
Software	EZ-EMC	Ver.FA-03A2	/	/	/

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Spectrum Analyzer	Keysight	N9020A	MY51287403	2026.08.24	2027.08.23
Signal Generator	Keysight	N5182A	MY50144088	2026.08.24	2027.08.23
Power Sensor	Keysight	U2001	MY51250006	2025.10.28	2026.10.27
Temperature & Humidity	Wetest	HTC-1	/	2026.08.25	2027.08.24
Communication test set	R&S	CMW500	157483	2026.08.24	2027.08.23
Radio frequency control box	MWRFTest	MW100-RFCB	\	\	\
Software	MWRFTest	MTS 8310	V 3.0.0.0	\	\
Software	MWRFTest	MTS 8200	V 2.0.0.0	\	\
D.C. Power Supply	Elektro-Automatik GmbH & Co.KG	D-41747 Viersen	6230316	2026.08.24	2027.08.23
Temperature and humidity test chamber	Auchno	OJN-9606-408 L	19120183	2026.07.07	2027.07.06

6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

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

Notes:

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

6.3 Test Procedure

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

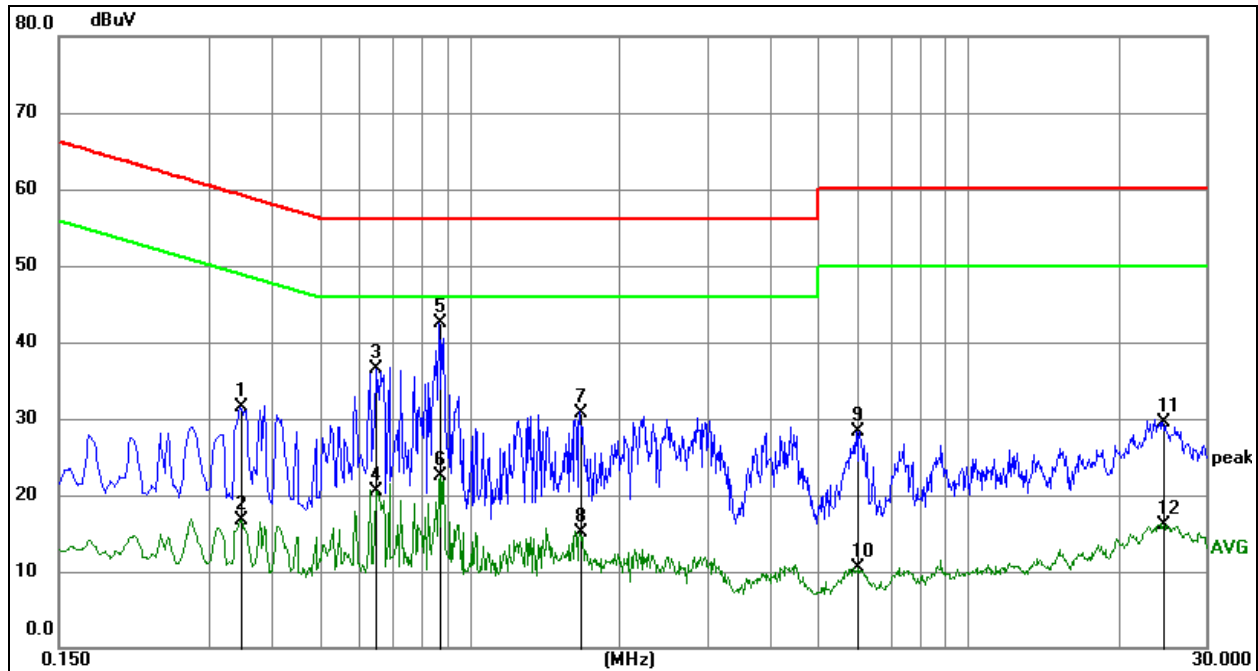
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak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

6.4 EUT Operating Conditions

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

6.5 Test Result

Temperature:	23°C	Relative Humidity:	56%RH
Pressure:	101KPa	Test Voltage :	AC 120/60Hz
Test Mode:	Mode 4	Polarization :	L



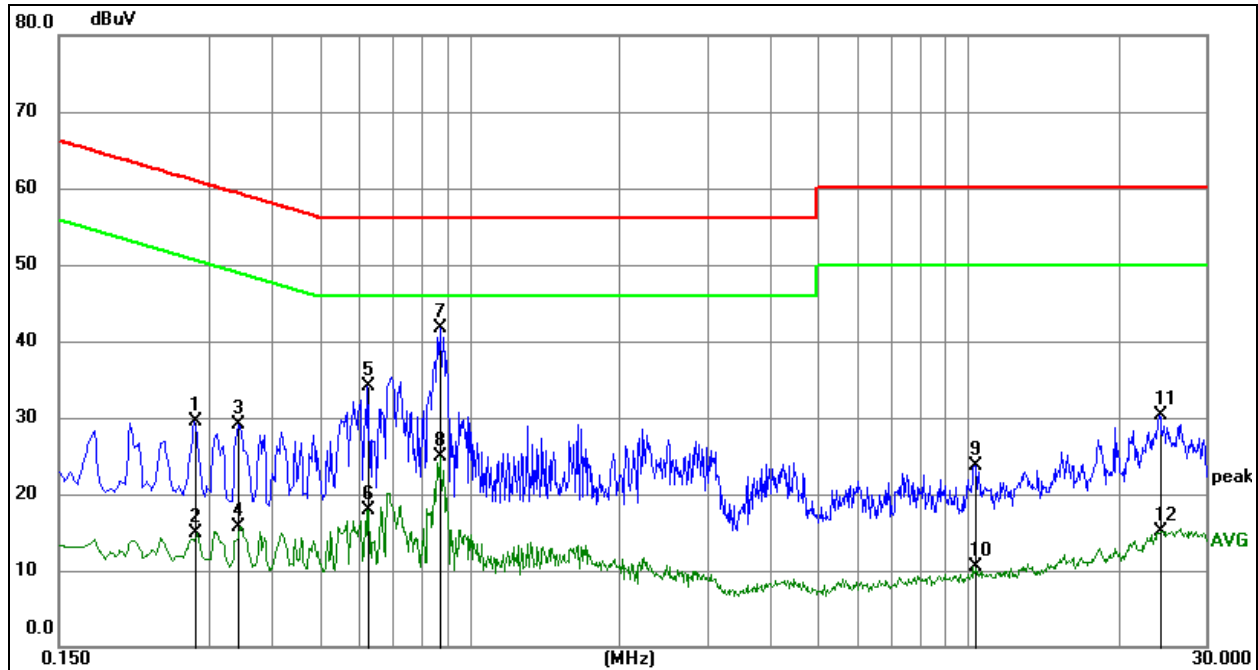
Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = LISN factor + Cable Loss+ Limiter (10dB).
3. Margin = (Reading+ Factor)-Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.3480	20.86	10.71	31.57	59.01	-27.44	QP
2	0.3480	6.04	10.71	16.75	49.01	-32.26	AVG
3	0.6495	25.64	10.81	36.45	56.00	-19.55	QP
4	0.6495	9.75	10.81	20.56	46.00	-25.44	AVG
5 *	0.8700	31.69	10.81	42.50	56.00	-13.50	QP
6	0.8700	11.65	10.81	22.46	46.00	-23.54	AVG
7	1.6665	19.65	11.15	30.80	56.00	-25.20	QP
8	1.6665	3.91	11.15	15.06	46.00	-30.94	AVG
9	5.9775	15.58	12.68	28.26	60.00	-31.74	QP
10	5.9775	-2.12	12.68	10.56	50.00	-39.44	AVG
11	24.5940	12.45	17.08	29.53	60.00	-30.47	QP
12	24.5940	-0.94	17.08	16.14	50.00	-33.86	AVG

* Indicates the worst data.

Temperature:	23°C	Relative Humidity:	56%RH
Pressure:	101KPa	Test Voltage :	AC 120V/60Hz
Test Mode:	Mode 4	Polarization :	N



Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = LISN factor + Cable Loss+ Limiter (10dB).
3. Margin = (Reading+ Factor)-Limit

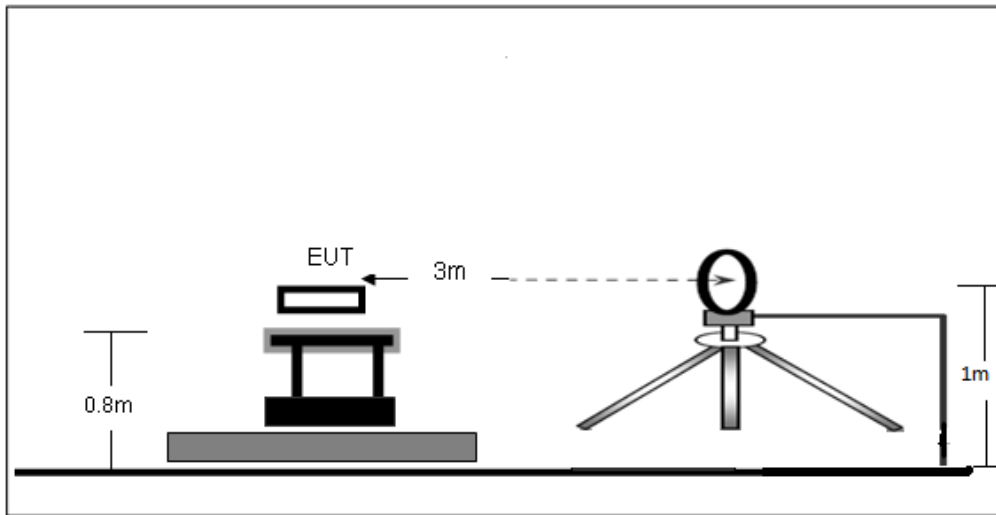
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.2805	18.85	10.71	29.56	60.80	-31.24	QP
2	0.2805	4.14	10.71	14.85	50.80	-35.95	AVG
3	0.3435	18.43	10.71	29.14	59.12	-29.98	QP
4	0.3435	5.08	10.71	15.79	49.12	-33.33	AVG
5	0.6270	23.37	10.83	34.20	56.00	-21.80	QP
6	0.6270	7.17	10.83	18.00	46.00	-28.00	AVG
7 *	0.8745	30.86	10.88	41.74	56.00	-14.26	QP
8	0.8745	14.07	10.88	24.95	46.00	-21.05	AVG
9	10.3380	9.97	13.80	23.77	60.00	-36.23	QP
10	10.3380	-3.35	13.80	10.45	50.00	-39.55	AVG
11	24.2520	13.12	17.12	30.24	60.00	-29.76	QP
12	24.2520	-1.99	17.12	15.13	50.00	-34.87	AVG

* Indicates the worst data.

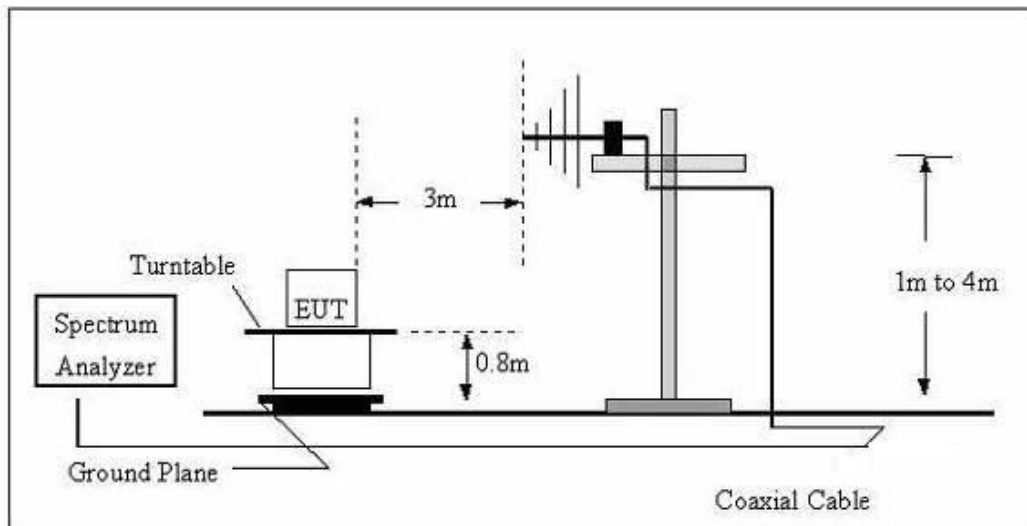
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

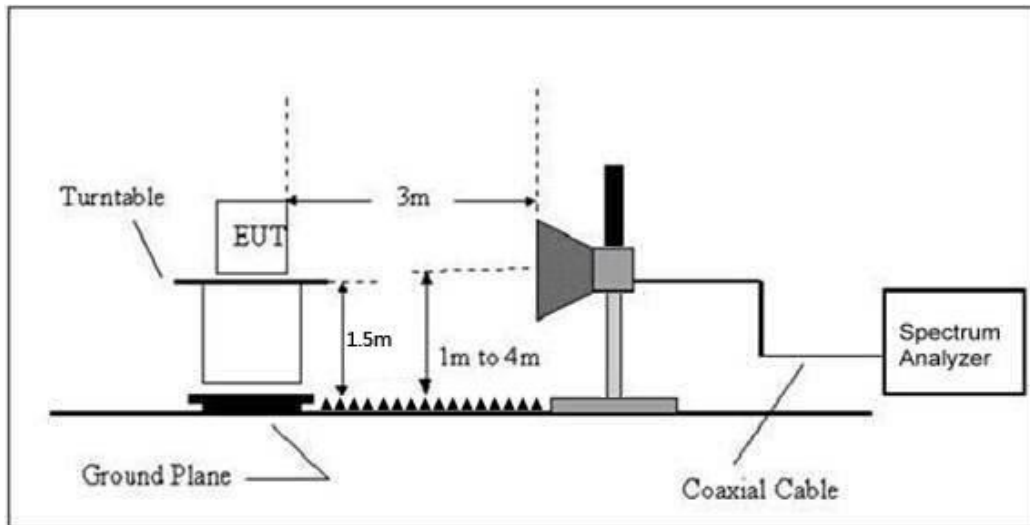
(A) Radiated Emission Test-Up Frequency Below 30MHz



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

Limits Of Radiated Emission Measurement (Above 1000MHz)

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

Notes:

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

7.3 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. 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%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	--

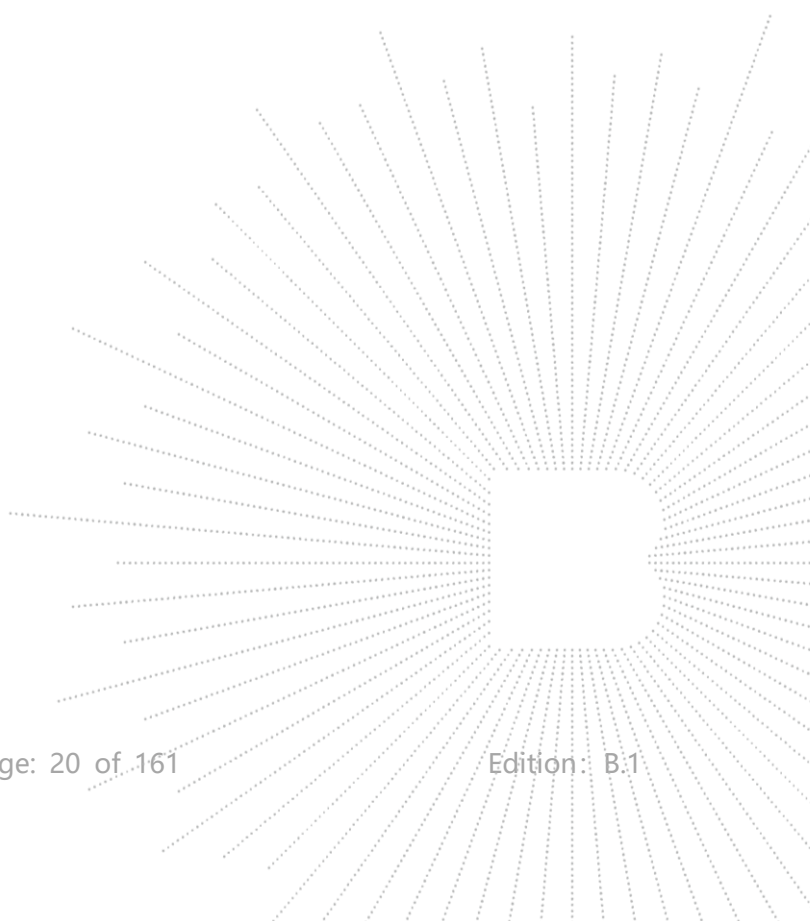
Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

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

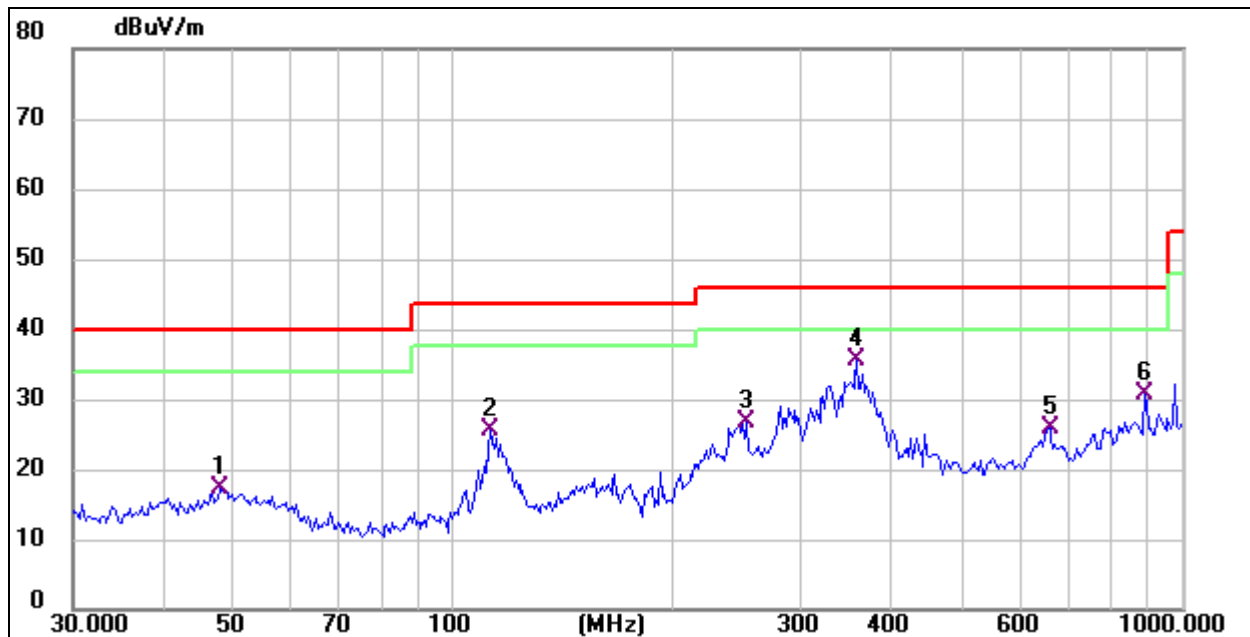
Distance extrapolation factor = $40 \log (\text{specific distance/test distance})$ (dB);

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



Between 30MHz – 1GHz

Temperature:	27°C	Relative Humidity:	47%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	Horizontal



Remark:

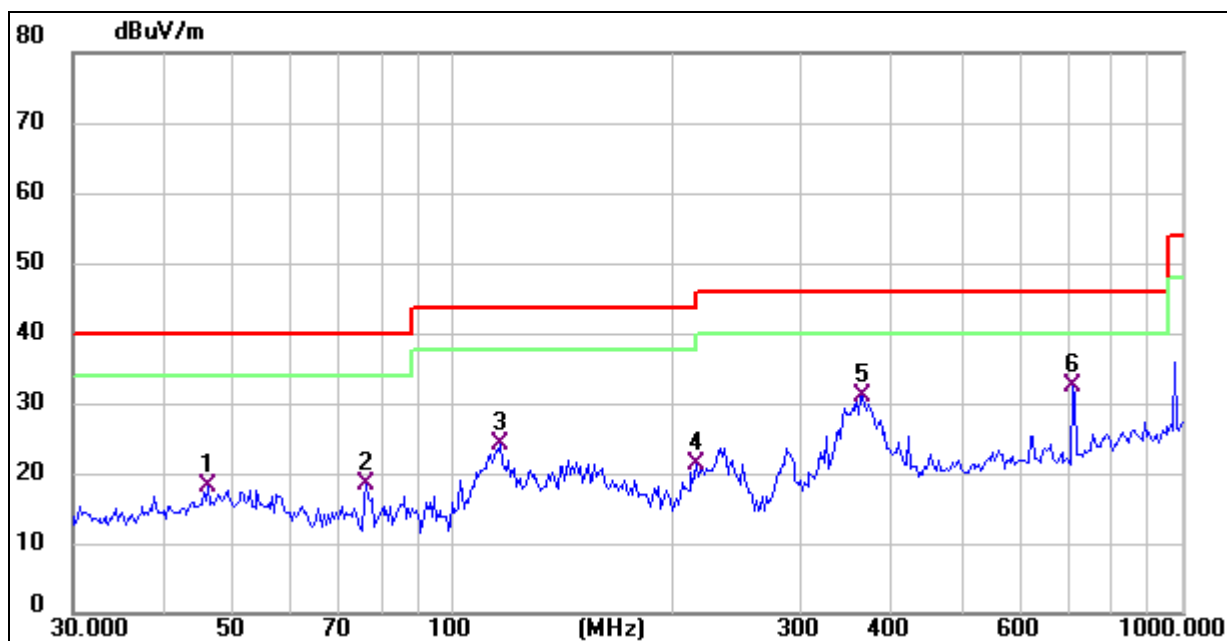
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Margin = (Reading + Factor) – Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	47.6586	27.92	-10.56	17.36	40.00	-22.64	QP
2	112.1305	37.51	-12.04	25.47	43.50	-18.03	QP
3	252.9482	38.87	-12.06	26.81	46.00	-19.19	QP
4 *	356.6758	45.36	-9.79	35.57	46.00	-10.43	QP
5	656.5300	28.80	-3.01	25.79	46.00	-20.21	QP
6	887.6099	30.47	0.33	30.80	46.00	-15.20	QP

* Indicates the worst data.

Temperature:	27°C	Relative Humidity:	47%RH
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Mode 4	Polarization:	Vertical



Remark:

Factor = Antenna Factor + Cable Loss – Pre-amplifier.

Margin = (Reading + Factor) – Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	46.0164	29.32	-11.04	18.28	40.00	-21.72	QP
2	75.7114	32.88	-14.54	18.34	40.00	-21.66	QP
3	116.1321	36.72	-12.55	24.17	43.50	-19.33	QP
4	215.2678	34.15	-12.94	21.21	43.50	-22.29	QP
5	364.2595	40.50	-9.56	30.94	46.00	-15.06	QP
6 *	709.1823	34.87	-2.54	32.33	46.00	-13.67	QP

* Indicates the worst data.

Between 1GHz – 40GHz

Test Mode :	TX(5.1G) - 802.11a
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.001	69.07	-10.51	58.56	68.20	-9.64	Pk
Vertical	4434.001	54.04	-10.51	43.53	54.00	-10.47	AV
Vertical	10360.130	53.10	-0.72	52.38	68.20	-15.82	Pk
Vertical	10360.130	44.12	-0.72	43.40	54.00	-10.60	AV
Vertical	15540.146	56.19	2.59	58.78	74.00	-15.22	Pk
Vertical	15540.146	44.94	2.59	47.53	54.00	-6.47	AV
Horizontal	4434.136	67.10	-10.51	56.59	68.20	-11.61	Pk
Horizontal	4434.136	54.28	-10.51	43.77	54.00	-10.23	AV
Horizontal	10360.116	56.50	-0.72	55.78	68.20	-12.42	Pk
Horizontal	10360.116	44.90	-0.72	44.18	54.00	-9.82	AV
Horizontal	15540.014	57.18	2.59	59.77	74.00	-14.23	Pk
Horizontal	15540.014	44.59	2.59	47.18	54.00	-6.82	AV
middle Channel (5200 MHz)-Above 1G							
Vertical	4592.107	68.90	-10.20	58.70	74.00	-15.30	Pk
Vertical	4592.107	54.02	-10.20	43.82	54.00	-10.18	AV
Vertical	10400.128	55.79	-0.67	55.12	68.20	-13.08	Pk
Vertical	10400.128	44.58	-0.67	43.91	54.00	-10.09	AV
Vertical	15600.196	58.04	2.67	60.71	74.00	-13.29	Pk
Vertical	15600.196	44.45	2.67	47.12	54.00	-6.88	AV
Horizontal	4592.067	67.85	-10.20	57.65	74.00	-16.35	Pk
Horizontal	4592.067	54.75	-10.20	44.55	54.00	-9.45	AV
Horizontal	10400.025	59.70	-0.67	59.03	68.20	-9.17	Pk
Horizontal	10400.025	44.65	-0.67	43.98	54.00	-10.02	AV
Horizontal	15600.185	57.87	2.67	60.54	74.00	-13.46	Pk
Horizontal	15600.185	44.82	2.67	47.49	54.00	-6.51	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.108	65.67	-9.45	56.22	74.00	-17.78	Pk
Vertical	4739.108	54.86	-9.45	45.41	54.00	-8.59	AV
Vertical	10480.154	56.65	-0.64	56.01	68.20	-12.19	Pk
Vertical	10480.154	44.57	-0.64	43.93	54.00	-10.07	AV
Vertical	15720.043	58.80	2.33	61.13	74.00	-12.87	Pk
Vertical	15720.043	44.25	2.33	46.58	54.00	-7.42	AV
Horizontal	4739.114	67.33	-9.45	57.88	74.00	-16.12	Pk
Horizontal	4739.114	54.58	-9.45	45.13	54.00	-8.87	AV
Horizontal	10480.098	57.11	-0.64	56.47	68.20	-11.73	Pk
Horizontal	10480.098	44.28	-0.64	43.64	54.00	-10.36	AV
Horizontal	15720.013	55.48	2.33	57.81	74.00	-16.19	Pk
Horizontal	15720.013	44.28	2.33	46.61	54.00	-7.39	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.
The worst case is Antenna A.

Test Mode :	TX(5.1G) - 802.11n-HT20
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.051	68.04	-10.51	57.53	68.20	-10.67	Pk
Vertical	4434.051	54.85	-10.51	44.34	54.00	-9.66	AV
Vertical	10360.065	53.85	-0.72	53.13	68.20	-15.07	Pk
Vertical	10360.065	44.88	-0.72	44.16	54.00	-9.84	AV
Vertical	15540.017	57.76	2.59	60.35	74.00	-13.65	Pk
Vertical	15540.017	44.35	2.59	46.94	54.00	-7.06	AV
Horizontal	4434.126	67.93	-10.51	57.42	68.20	-10.78	Pk
Horizontal	4434.126	54.22	-10.51	43.71	54.00	-10.29	AV
Horizontal	10360.028	55.83	-0.72	55.11	68.20	-13.09	Pk
Horizontal	10360.028	44.31	-0.72	43.59	54.00	-10.41	AV
Horizontal	15540.045	58.35	2.59	60.94	74.00	-13.06	Pk
Horizontal	15540.045	44.39	2.59	46.98	54.00	-7.02	AV
middle Channel (5200 MHz)-Above 1G							
Vertical	4592.102	69.30	-10.20	59.10	74.00	-14.90	Pk
Vertical	4592.102	54.45	-10.20	44.25	54.00	-9.75	AV
Vertical	10400.099	55.13	-0.67	54.46	68.20	-13.74	Pk
Vertical	10400.099	44.59	-0.67	43.92	54.00	-10.08	AV
Vertical	15600.178	57.40	2.67	60.07	74.00	-13.93	Pk
Vertical	15600.178	44.28	2.67	46.95	54.00	-7.05	AV
Horizontal	4592.020	65.75	-10.20	55.55	74.00	-18.45	Pk
Horizontal	4592.020	54.07	-10.20	43.87	54.00	-10.13	AV
Horizontal	10400.096	56.85	-0.67	56.18	68.20	-12.02	Pk
Horizontal	10400.096	44.71	-0.67	44.04	54.00	-9.96	AV
Horizontal	15600.157	59.24	2.67	61.91	74.00	-12.09	Pk
Horizontal	15600.157	44.82	2.67	47.49	54.00	-6.51	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.147	69.82	-9.45	60.37	74.00	-13.63	Pk
Vertical	4739.147	54.08	-9.45	44.63	54.00	-9.37	AV
Vertical	10480.021	55.05	-0.64	54.41	68.20	-13.79	Pk
Vertical	10480.021	44.15	-0.64	43.51	54.00	-10.49	AV
Vertical	15720.162	57.95	2.33	60.28	74.00	-13.72	Pk
Vertical	15720.162	44.79	2.33	47.12	54.00	-6.88	AV
Horizontal	4739.128	68.23	-9.45	58.78	74.00	-15.22	Pk
Horizontal	4739.128	54.10	-9.45	44.65	54.00	-9.35	AV
Horizontal	10480.181	55.83	-0.64	55.19	68.20	-13.01	Pk
Horizontal	10480.181	44.24	-0.64	43.60	54.00	-10.40	AV
Horizontal	15720.006	59.80	2.33	62.13	74.00	-11.87	Pk
Horizontal	15720.006	44.07	2.33	46.40	54.00	-7.60	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 MIMO.

Test Mode :	TX(5.1G) - 802.11n-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.073	67.14	-10.52	56.62	68.20	-11.58	Pk
Vertical	4434.073	54.73	-10.52	44.21	54.00	-9.79	AV
Vertical	10380.099	55.08	-0.70	54.38	68.20	-13.82	Pk
Vertical	10380.099	44.16	-0.70	43.46	54.00	-10.54	AV
Vertical	15570.050	57.67	2.39	60.06	74.00	-13.94	Pk
Vertical	15570.050	44.73	2.39	47.12	54.00	-6.88	AV
Horizontal	4434.018	69.02	-10.52	58.50	74.00	-15.50	Pk
Horizontal	4434.018	54.86	-10.52	44.34	54.00	-9.66	AV
Horizontal	10380.126	57.37	-0.70	56.67	68.20	-11.53	Pk
Horizontal	10380.126	44.20	-0.70	43.50	54.00	-10.50	AV
Horizontal	15570.079	57.28	2.39	59.67	74.00	-14.33	Pk
Horizontal	15570.079	44.31	2.39	46.70	54.00	-7.30	AV
High Channel (5230 MHz)-Above 1G							
Vertical	4739.139	67.17	-9.45	57.72	68.20	-10.48	Pk
Vertical	4739.139	54.69	-9.45	45.24	54.00	-8.76	AV
Vertical	10460.125	55.09	-0.65	54.44	68.20	-13.76	Pk
Vertical	10460.125	44.72	-0.65	44.07	54.00	-9.93	AV
Vertical	15690.160	56.47	2.33	58.80	74.00	-15.20	Pk
Vertical	15690.160	44.52	2.33	46.85	54.00	-7.15	AV
Horizontal	4739.079	66.31	-9.45	56.86	68.20	-11.34	Pk
Horizontal	4739.079	54.63	-9.45	45.18	54.00	-8.82	AV
Horizontal	10460.084	58.99	-0.65	58.34	68.20	-9.86	Pk
Horizontal	10460.084	44.08	-0.65	43.43	54.00	-10.57	AV
Horizontal	15690.148	57.94	2.33	60.27	74.00	-13.73	Pk
Horizontal	15690.148	44.81	2.33	47.14	54.00	-6.86	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 MIMO.

Test Mode:	TX(5.1G) - 802.11ac-HT20
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.008	68.30	-10.51	57.79	68.20	-10.41	Pk
Vertical	4434.008	54.15	-10.51	43.64	54.00	-10.36	AV
Vertical	10360.158	50.09	-0.72	49.37	68.20	-18.83	Pk
Vertical	10360.158	44.90	-0.72	44.18	54.00	-9.82	AV
Vertical	15540.168	56.20	2.59	58.79	74.00	-15.21	Pk
Vertical	15540.168	44.08	2.59	46.67	54.00	-7.33	AV
Horizontal	4434.196	66.98	-10.51	56.47	68.20	-11.73	Pk
Horizontal	4434.196	54.97	-10.51	44.46	54.00	-9.54	AV
Horizontal	10360.002	56.67	-0.72	55.95	68.20	-12.25	Pk
Horizontal	10360.002	44.52	-0.72	43.80	54.00	-10.20	AV
Horizontal	15540.074	59.76	2.59	62.35	74.00	-11.65	Pk
Horizontal	15540.074	44.04	2.59	46.63	54.00	-7.37	AV
middle Channel (5200 MHz)-Above 1G							
Vertical	4592.147	67.27	-10.20	57.07	74.00	-16.93	Pk
Vertical	4592.147	54.18	-10.20	43.98	54.00	-10.02	AV
Vertical	10400.151	56.84	-0.67	56.17	68.20	-12.03	Pk
Vertical	10400.151	44.79	-0.67	44.12	54.00	-9.88	AV
Vertical	15600.178	58.47	2.67	61.14	74.00	-12.86	Pk
Vertical	15600.178	44.27	2.67	46.94	54.00	-7.06	AV
Horizontal	4592.197	68.95	-10.20	58.75	74.00	-15.25	Pk
Horizontal	4592.197	54.89	-10.20	44.69	54.00	-9.31	AV
Horizontal	10400.182	58.07	-0.67	57.40	68.20	-10.80	Pk
Horizontal	10400.182	44.45	-0.67	43.78	54.00	-10.22	AV
Horizontal	15600.169	56.87	2.67	59.54	74.00	-14.46	Pk
Horizontal	15600.169	44.59	2.67	47.26	54.00	-6.74	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.100	68.60	-9.45	59.15	74.00	-14.85	Pk
Vertical	4739.100	54.44	-9.45	44.99	54.00	-9.01	AV
Vertical	10480.018	57.06	-0.64	56.42	68.20	-11.78	Pk
Vertical	10480.018	44.00	-0.64	43.36	54.00	-10.64	AV
Vertical	15720.016	56.57	2.33	58.90	74.00	-15.10	Pk
Vertical	15720.016	44.89	2.33	47.22	54.00	-6.78	AV
Horizontal	4739.117	68.27	-9.45	58.82	74.00	-15.18	Pk
Horizontal	4739.117	54.41	-9.45	44.96	54.00	-9.04	AV
Horizontal	10480.104	57.03	-0.64	56.39	68.20	-11.81	Pk
Horizontal	10480.104	44.78	-0.64	44.14	54.00	-9.86	AV
Horizontal	15720.111	55.93	2.33	58.26	74.00	-15.74	Pk
Horizontal	15720.111	44.25	2.33	46.58	54.00	-7.42	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 MIMO.

Test Mode:	TX(5.1G) - 802.11ac-HT40
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.166	67.91	-10.52	57.39	68.20	-10.81	Pk
Vertical	4434.166	54.86	-10.52	44.34	54.00	-9.66	AV
Vertical	10380.116	56.34	-0.70	55.64	68.20	-12.56	Pk
Vertical	10380.116	44.51	-0.70	43.81	54.00	-10.19	AV
Vertical	15570.099	59.99	2.39	62.38	74.00	-11.62	Pk
Vertical	15570.099	44.56	2.39	46.95	54.00	-7.05	AV
Horizontal	4434.036	69.83	-10.52	59.31	74.00	-14.69	Pk
Horizontal	4434.036	54.16	-10.52	43.64	54.00	-10.36	AV
Horizontal	10380.010	56.42	-0.70	55.72	68.20	-12.48	Pk
Horizontal	10380.010	44.54	-0.70	43.84	54.00	-10.16	AV
Horizontal	15570.007	57.12	2.39	59.51	74.00	-14.49	Pk
Horizontal	15570.007	44.55	2.39	46.94	54.00	-7.06	AV
middle Channel (5230 MHz)-Above 1G							
Vertical	4739.154	67.84	-9.45	58.39	68.20	-9.81	Pk
Vertical	4739.154	54.22	-9.45	44.77	54.00	-9.23	AV
Vertical	10460.177	55.08	-0.65	54.43	68.20	-13.77	Pk
Vertical	10460.177	44.32	-0.65	43.67	54.00	-10.33	AV
Vertical	15690.160	57.09	2.33	59.42	74.00	-14.58	Pk
Vertical	15690.160	44.60	2.33	46.93	54.00	-7.07	AV
Horizontal	4739.007	68.21	-9.45	58.76	68.20	-9.44	Pk
Horizontal	4739.007	54.97	-9.45	45.52	54.00	-8.48	AV
Horizontal	10460.098	55.81	-0.65	55.16	68.20	-13.04	Pk
Horizontal	10460.098	44.43	-0.65	43.78	54.00	-10.22	AV
Horizontal	15690.026	56.07	2.33	58.40	74.00	-15.60	Pk
Horizontal	15690.026	44.34	2.33	46.67	54.00	-7.33	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.

The worst case is Antenna MIMO.

Test Mode:	TX(5.1G) - 802.11ac-HT80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
(5210 MHz)-Above 1G							
Vertical	4434.185	69.35	-10.51	58.84	68.20	-9.36	Pk
Vertical	4434.185	54.95	-10.51	44.44	54.00	-9.56	AV
Vertical	10420.162	59.61	-0.66	58.95	68.20	-9.25	Pk
Vertical	10420.162	44.79	-0.66	44.13	54.00	-9.87	AV
Vertical	15630.055	55.78	2.55	58.33	74.00	-15.67	Pk
Vertical	15630.055	44.87	2.55	47.42	54.00	-6.58	AV
Horizontal	4434.142	65.36	-10.51	54.85	68.20	-13.35	Pk
Horizontal	4434.142	54.10	-10.51	43.59	54.00	-10.41	AV
Horizontal	10420.068	59.54	-0.66	58.88	68.20	-9.32	Pk
Horizontal	10420.068	44.11	-0.66	43.45	54.00	-10.55	AV
Horizontal	15630.146	58.45	2.55	61.00	74.00	-13.00	Pk
Horizontal	15630.146	44.33	2.55	46.88	54.00	-7.12	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 MIMO.

- ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge
- All the modes has been tested and the worst result 802.11n20 recorded as below:

Test mode: 802.11a Frequency(MHz): 5180

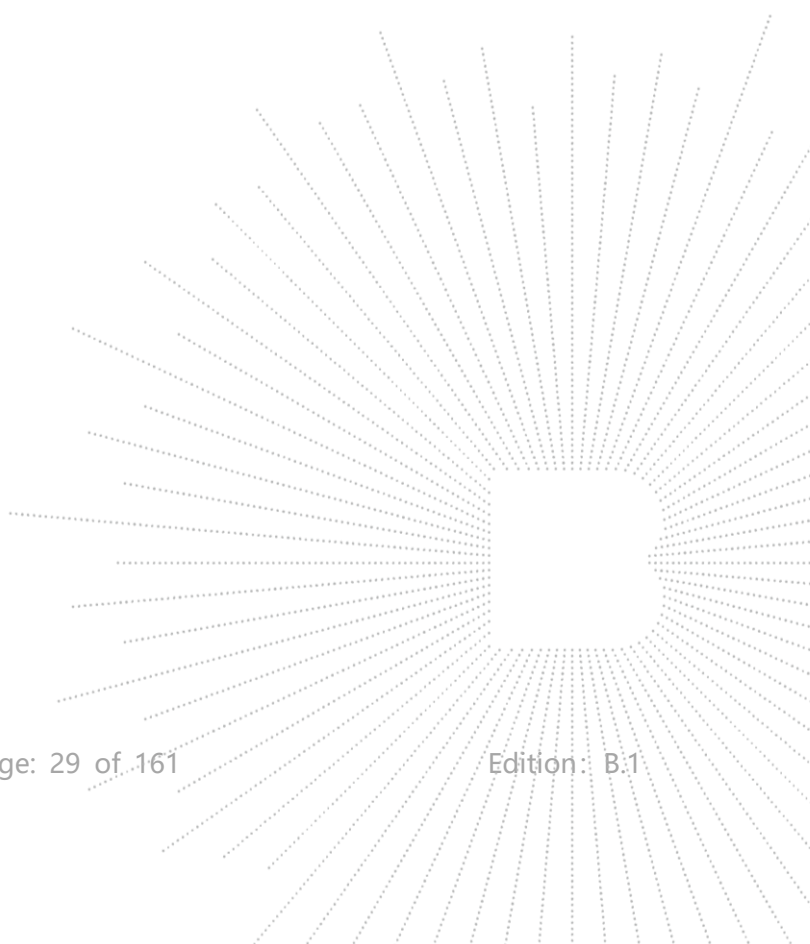
Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5151.88	H	65.72	74	49.02	54
5150.42	V	59.12	74	42.75	54

Test mode: 802.11a Frequency(MHz): 5240

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5302.44	H	46.55	74	36.72	54
5302.31	V	42.32	74	30.48	54

Note:

- (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
- (2) Emission Level= Reading Level+Correct Factor.
- (3) Correct Factor= Ant_F + Cab_L - Preamp



Test Mode:	TX(5.8G) - 802.11a
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.007	66.73	-10.36	56.37	74.00	-17.63	Pk
Vertical	4679.007	54.28	-10.36	43.92	54.00	-10.08	AV
Vertical	11490.053	57.25	-0.19	57.06	68.20	-11.14	Pk
Vertical	11490.053	44.44	-0.19	44.25	54.00	-9.75	AV
Vertical	17235.044	55.12	4.28	59.40	68.20	-8.80	Pk
Vertical	17235.044	44.04	4.28	48.32	54.00	-5.68	AV
Horizontal	4679.133	66.08	-10.36	55.72	74.00	-18.28	Pk
Horizontal	4679.133	54.52	-10.36	44.16	54.00	-9.84	AV
Horizontal	11490.080	56.52	-0.19	56.33	68.20	-11.87	Pk
Horizontal	11490.080	44.66	-0.19	44.47	54.00	-9.53	AV
Horizontal	17235.156	58.26	4.28	62.54	68.20	-5.66	Pk
Horizontal	17235.156	44.25	4.28	48.53	54.00	-5.47	AV
middle Channel (5785 MHz)-Above 1G							
Vertical	4592.083	67.11	-10.20	56.91	74.00	-17.09	Pk
Vertical	4592.083	54.23	-10.20	44.03	54.00	-9.97	AV
Vertical	11570.007	57.75	-0.21	57.54	68.20	-10.66	Pk
Vertical	11570.007	44.26	-0.21	44.05	54.00	-9.95	AV
Vertical	17355.089	59.16	4.68	63.84	68.20	-4.36	Pk
Vertical	17355.089	44.18	4.68	48.86	54.00	-5.14	AV
Horizontal	4592.181	69.71	-10.20	59.51	74.00	-14.49	Pk
Horizontal	4592.181	54.60	-10.20	44.40	54.00	-9.60	AV
Horizontal	11570.143	59.82	-0.21	59.61	68.20	-8.59	Pk
Horizontal	11570.143	44.93	-0.21	44.72	54.00	-9.28	AV
Horizontal	17355.162	58.43	4.68	63.11	68.20	-5.09	Pk
Horizontal	17355.162	44.80	4.68	49.48	54.00	-4.52	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.163	66.52	-7.08	59.44	68.20	-8.76	Pk
Vertical	6039.163	54.63	-7.08	47.55	54.00	-6.45	AV
Vertical	11650.137	59.90	-0.50	59.40	74.00	-14.60	Pk
Vertical	11650.137	44.63	-0.50	44.13	54.00	-9.87	AV
Vertical	17475.166	56.59	4.77	61.36	68.20	-6.84	Pk
Vertical	17475.166	44.51	4.77	49.28	54.00	-4.72	AV
Horizontal	6039.107	67.32	-7.08	60.24	68.20	-7.96	Pk
Horizontal	6039.107	54.93	-7.08	47.85	54.00	-6.15	AV
Horizontal	11650.036	59.23	-0.50	58.73	74.00	-15.27	Pk
Horizontal	11650.036	44.74	-0.50	44.24	54.00	-9.76	AV
Horizontal	17475.097	56.94	4.77	61.71	68.20	-6.49	Pk
Horizontal	17475.097	44.31	4.77	49.08	54.00	-4.92	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	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.028	66.66	-10.36	56.30	74.00	-17.70	Pk
Vertical	4679.028	54.46	-10.36	44.10	54.00	-9.90	AV
Vertical	11490.080	59.42	-0.19	59.23	68.20	-8.97	Pk
Vertical	11490.080	44.74	-0.19	44.55	54.00	-9.45	AV
Vertical	17235.127	55.93	4.28	60.21	68.20	-7.99	Pk
Vertical	17235.127	44.63	4.28	48.91	54.00	-5.09	AV
Horizontal	4679.194	68.26	-10.36	57.90	74.00	-16.10	Pk
Horizontal	4679.194	54.95	-10.36	44.59	54.00	-9.41	AV
Horizontal	11490.181	57.52	-0.19	57.33	68.20	-10.87	Pk
Horizontal	11490.181	44.10	-0.19	43.91	54.00	-10.09	AV
Horizontal	17235.184	55.54	4.28	59.82	68.20	-8.38	Pk
Horizontal	17235.184	44.77	4.28	49.05	54.00	-4.95	AV
middle Channel (5785 MHz)-Above 1G							
Vertical	4592.084	65.80	-10.20	55.60	74.00	-18.40	Pk
Vertical	4592.084	54.97	-10.20	44.77	54.00	-9.23	AV
Vertical	11570.196	57.19	-0.21	56.98	68.20	-11.22	Pk
Vertical	11570.196	44.80	-0.21	44.59	54.00	-9.41	AV
Vertical	17355.103	56.62	4.68	61.30	68.20	-6.90	Pk
Vertical	17355.103	44.78	4.68	49.46	54.00	-4.54	AV
Horizontal	4592.076	68.12	-10.20	57.92	74.00	-16.08	Pk
Horizontal	4592.076	54.28	-10.20	44.08	54.00	-9.92	AV
Horizontal	11570.107	57.01	-0.21	56.80	68.20	-11.40	Pk
Horizontal	11570.107	44.79	-0.21	44.58	54.00	-9.42	AV
Horizontal	17355.172	59.83	4.68	64.51	68.20	-3.69	Pk
Horizontal	17355.172	44.72	4.68	49.40	54.00	-4.60	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.139	66.61	-7.08	59.53	68.20	-8.67	Pk
Vertical	6039.139	54.09	-7.08	47.01	54.00	-6.99	AV
Vertical	11650.171	56.59	-0.50	56.09	74.00	-17.91	Pk
Vertical	11650.171	44.82	-0.50	44.32	54.00	-9.68	AV
Vertical	17475.083	55.36	4.77	60.13	68.20	-8.07	Pk
Vertical	17475.083	44.78	4.77	49.55	54.00	-4.45	AV
Horizontal	6039.054	67.47	-7.08	60.39	68.20	-7.81	Pk
Horizontal	6039.054	54.02	-7.08	46.94	54.00	-7.06	AV
Horizontal	11650.118	57.01	-0.50	56.51	74.00	-17.49	Pk
Horizontal	11650.118	44.38	-0.50	43.88	54.00	-10.12	AV
Horizontal	17475.026	57.90	4.77	62.67	68.20	-5.53	Pk
Horizontal	17475.026	44.45	4.77	49.22	54.00	-4.78	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 MIMO.

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.170	69.34	-10.36	58.98	74.00	-15.02	AV
Vertical	4679.170	54.58	-10.36	44.22	54.00	-9.78	Pk
Vertical	11510.047	58.72	-0.26	58.46	74.00	-15.54	AV
Vertical	11510.047	44.56	-0.26	44.30	54.00	-9.70	Pk
Vertical	17265.077	55.91	4.35	60.26	68.20	-7.94	AV
Vertical	17265.077	44.07	4.35	48.42	54.00	-5.58	Pk
Horizontal	4679.031	68.42	-10.36	58.06	74.00	-15.94	AV
Horizontal	4679.031	54.61	-10.36	44.25	54.00	-9.75	Pk
Horizontal	11510.150	56.08	-0.26	55.82	74.00	-18.18	AV
Horizontal	11510.150	44.12	-0.26	43.86	54.00	-10.14	Pk
Horizontal	17265.069	58.34	4.35	62.69	68.20	-5.51	AV
Horizontal	17265.069	44.62	4.35	48.97	54.00	-5.03	AV
middle Channel (5795 MHz)-Above 1G							
Vertical	6039.101	67.65	-7.08	60.57	68.20	-7.63	Pk
Vertical	6039.101	54.46	-7.08	47.38	54.00	-6.62	AV
Vertical	11590.015	57.97	-0.20	57.77	74.00	-16.23	Pk
Vertical	11590.015	44.92	-0.20	44.72	54.00	-9.28	AV
Vertical	17385.092	55.97	4.81	60.78	68.20	-7.42	Pk
Vertical	17385.092	44.97	4.81	49.78	54.00	-4.22	AV
Horizontal	6039.076	66.94	-7.08	59.86	68.20	-8.34	Pk
Horizontal	6039.076	54.54	-7.08	47.46	54.00	-6.54	AV
Horizontal	11590.132	59.86	-0.20	59.66	74.00	-14.34	Pk
Horizontal	11590.132	44.48	-0.20	44.28	54.00	-9.72	AV
Horizontal	17385.075	58.53	4.81	63.34	68.20	-4.86	Pk
Horizontal	17385.075	44.59	4.81	49.40	54.00	-4.60	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 MIMO.

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.168	68.40	-10.36	58.04	74.00	-15.96	Pk
Vertical	4679.168	54.24	-10.36	43.88	54.00	-10.12	AV
Vertical	11490.018	58.66	-0.19	58.47	68.20	-9.73	Pk
Vertical	11490.018	44.21	-0.19	44.02	54.00	-9.98	AV
Vertical	17235.197	56.35	4.28	60.63	68.20	-7.57	Pk
Vertical	17235.197	44.59	4.28	48.87	54.00	-5.13	AV
Horizontal	4679.067	65.96	-10.36	55.60	74.00	-18.40	Pk
Horizontal	4679.067	54.01	-10.36	43.65	54.00	-10.35	AV
Horizontal	11490.127	57.24	-0.19	57.05	68.20	-11.15	Pk
Horizontal	11490.127	44.32	-0.19	44.13	54.00	-9.87	AV
Horizontal	17235.040	55.32	4.28	59.60	68.20	-8.60	Pk
Horizontal	17235.040	44.83	4.28	49.11	54.00	-4.89	AV
middle Channel (5785 MHz)-Above 1G							
Vertical	4592.153	66.16	-10.20	55.96	74.00	-18.04	Pk
Vertical	4592.153	54.20	-10.20	44.00	54.00	-10.00	AV
Vertical	11570.063	55.69	-0.21	55.48	68.20	-12.72	Pk
Vertical	11570.063	44.72	-0.21	44.51	54.00	-9.49	AV
Vertical	17355.184	59.09	4.68	63.77	68.20	-4.43	Pk
Vertical	17355.184	44.23	4.68	48.91	54.00	-5.09	AV
Horizontal	4592.194	67.02	-10.20	56.82	74.00	-17.18	Pk
Horizontal	4592.194	54.78	-10.20	44.58	54.00	-9.42	AV
Horizontal	11570.073	56.62	-0.21	56.41	68.20	-11.79	Pk
Horizontal	11570.073	44.91	-0.21	44.70	54.00	-9.30	AV
Horizontal	17355.052	59.32	4.68	64.00	68.20	-4.20	Pk
Horizontal	17355.052	44.54	4.68	49.22	54.00	-4.78	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.099	66.04	-7.08	58.96	68.20	-9.24	Pk
Vertical	6039.099	54.47	-7.08	47.39	54.00	-6.61	AV
Vertical	11650.026	55.52	-0.50	55.02	74.00	-18.98	Pk
Vertical	11650.026	44.87	-0.50	44.37	54.00	-9.63	AV
Vertical	17475.108	58.20	4.77	62.97	68.20	-5.23	Pk
Vertical	17475.108	44.88	4.77	49.65	54.00	-4.35	AV
Horizontal	6039.021	69.83	-7.08	62.75	68.20	-5.45	Pk
Horizontal	6039.021	54.76	-7.08	47.68	54.00	-6.32	AV
Horizontal	11650.005	56.94	-0.50	56.44	74.00	-17.56	Pk
Horizontal	11650.005	44.15	-0.50	43.65	54.00	-10.35	AV
Horizontal	17475.034	56.53	4.77	61.30	68.20	-6.90	Pk
Horizontal	17475.034	44.19	4.77	48.96	54.00	-5.04	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 MIMO.

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

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.079	65.33	-10.36	54.97	74.00	-19.03	AV
Vertical	4679.079	54.83	-10.36	44.47	54.00	-9.53	Pk
Vertical	11510.141	57.44	-0.26	57.18	74.00	-16.82	AV
Vertical	11510.141	44.42	-0.26	44.16	54.00	-9.84	Pk
Vertical	17265.036	58.09	4.35	62.44	68.20	-5.76	AV
Vertical	17265.036	44.75	4.35	49.10	54.00	-4.90	Pk
Horizontal	4679.018	69.16	-10.36	58.80	74.00	-15.20	AV
Horizontal	4679.018	54.02	-10.36	43.66	54.00	-10.34	Pk
Horizontal	11510.160	57.12	-0.26	56.86	74.00	-17.14	AV
Horizontal	11510.160	44.95	-0.26	44.69	54.00	-9.31	Pk
Horizontal	17265.198	57.55	4.35	61.90	68.20	-6.30	AV
Horizontal	17265.198	44.14	4.35	48.49	54.00	-5.51	AV
middle Channel (5795 MHz)-Above 1G							
Vertical	6039.126	66.34	-7.08	59.26	68.20	-8.94	Pk
Vertical	6039.126	54.10	-7.08	47.02	54.00	-6.98	AV
Vertical	11590.104	56.28	-0.20	56.08	74.00	-17.92	Pk
Vertical	11590.104	44.99	-0.20	44.79	54.00	-9.21	AV
Vertical	17385.060	58.24	4.81	63.05	68.20	-5.15	Pk
Vertical	17385.060	44.73	4.81	49.54	54.00	-4.46	AV
Horizontal	6039.003	66.42	-7.08	59.34	68.20	-8.86	Pk
Horizontal	6039.003	54.11	-7.08	47.03	54.00	-6.97	AV
Horizontal	11590.133	55.48	-0.20	55.28	74.00	-18.72	Pk
Horizontal	11590.133	44.60	-0.20	44.40	54.00	-9.60	AV
Horizontal	17385.084	59.35	4.81	64.16	68.20	-4.04	Pk
Horizontal	17385.084	44.90	4.81	49.71	54.00	-4.29	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 MIMO.

Test Mode:	TX(5.8G) - 802.11ac-HT80
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Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
(5775 MHz)-Above 1G							
Vertical	4679.063	65.24	-10.36	54.88	74.00	-19.12	Pk
Vertical	4679.063	54.50	-10.36	44.14	54.00	-9.86	AV
Vertical	11550.145	58.19	0.23	58.42	74.00	-15.58	Pk
Vertical	11550.145	44.92	0.23	45.15	54.00	-8.85	AV
Vertical	17325.010	59.20	4.55	63.75	68.20	-4.45	Pk
Vertical	17325.010	44.41	4.55	48.96	54.00	-5.04	AV
Horizontal	4679.181	67.46	-10.36	57.10	74.00	-16.90	Pk
Horizontal	4679.181	54.43	-10.36	44.07	54.00	-9.93	AV
Horizontal	11550.070	56.79	0.23	57.02	74.00	-16.98	Pk
Horizontal	11550.070	44.59	0.23	44.82	54.00	-9.18	AV
Horizontal	17325.146	55.62	4.55	60.17	68.20	-8.03	Pk
Horizontal	17325.146	44.91	4.55	49.46	54.00	-4.54	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 MIMO.

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 5.25-5.35 GHz and 5.47-5.725 GHz bands,

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, 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

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

8.3 Test Procedure

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

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

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

8.4 EUT Operating Conditions

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

8.5 Test Result

Temperature:	23.6℃	Relative Humidity:	50%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)		Total (dBm/MHz)	Limit (dBm/MHz)	Verdict
			Ant A	Ant B			
NVNT	a	5180	2.41	1.99	/	11	Pass
NVNT	a	5200	2.03	1.88	/	11	Pass
NVNT	a	5240	2.58	2.46	/	11	Pass
NVNT	n20	5180	1.10	0.66	3.90	10.17	Pass
NVNT	n20	5200	0.85	0.63	3.75	10.17	Pass
NVNT	n20	5240	1.36	1.08	4.23	10.17	Pass
NVNT	n40	5190	-1.54	-2.43	1.05	10.17	Pass
NVNT	n40	5230	0.70	-0.39	3.20	10.17	Pass
NVNT	ac20	5180	1.01	0.71	3.87	10.17	Pass
NVNT	ac20	5200	0.74	0.55	3.66	10.17	Pass
NVNT	ac20	5240	1.20	1.10	4.16	10.17	Pass
NVNT	ac40	5190	-1.69	-2.19	1.08	10.17	Pass
NVNT	ac40	5230	-1.34	-1.64	1.52	10.17	Pass
NVNT	ac80	5210	-4.69	-5.69	-2.15	10.17	Pass

Note:

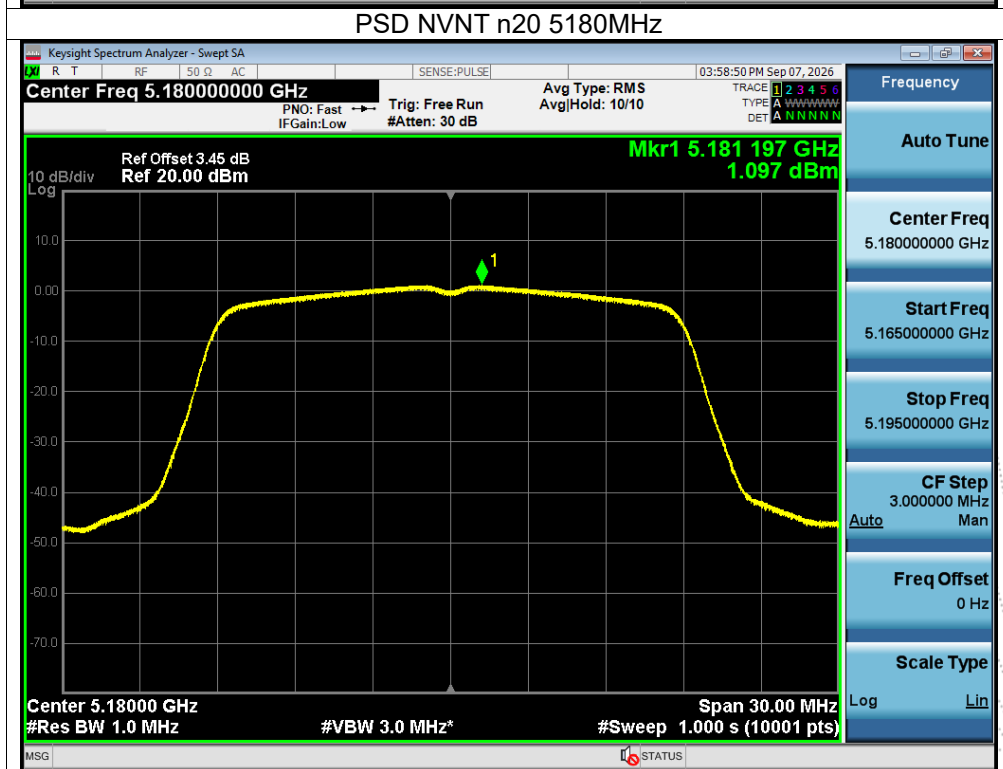
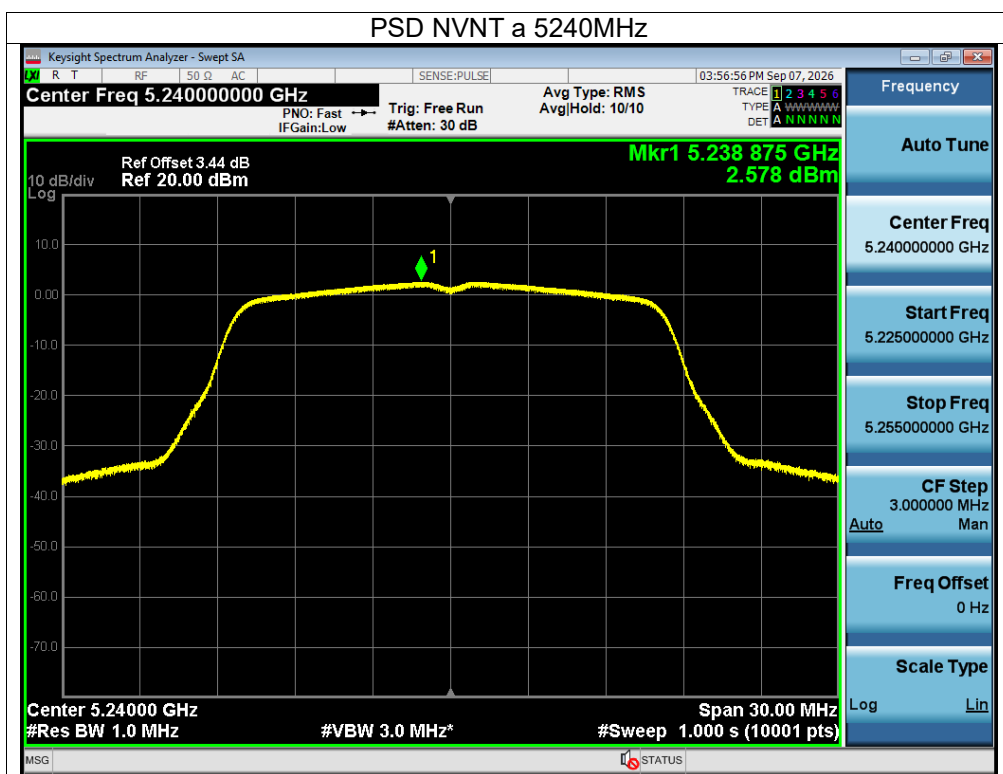
Antenna A gain:3.84 dBi, Antenna B gain: 3.8dBi, Directional gain=[GainANT + 10 log(NANT) dBi] =6.83 dBi>6dbi

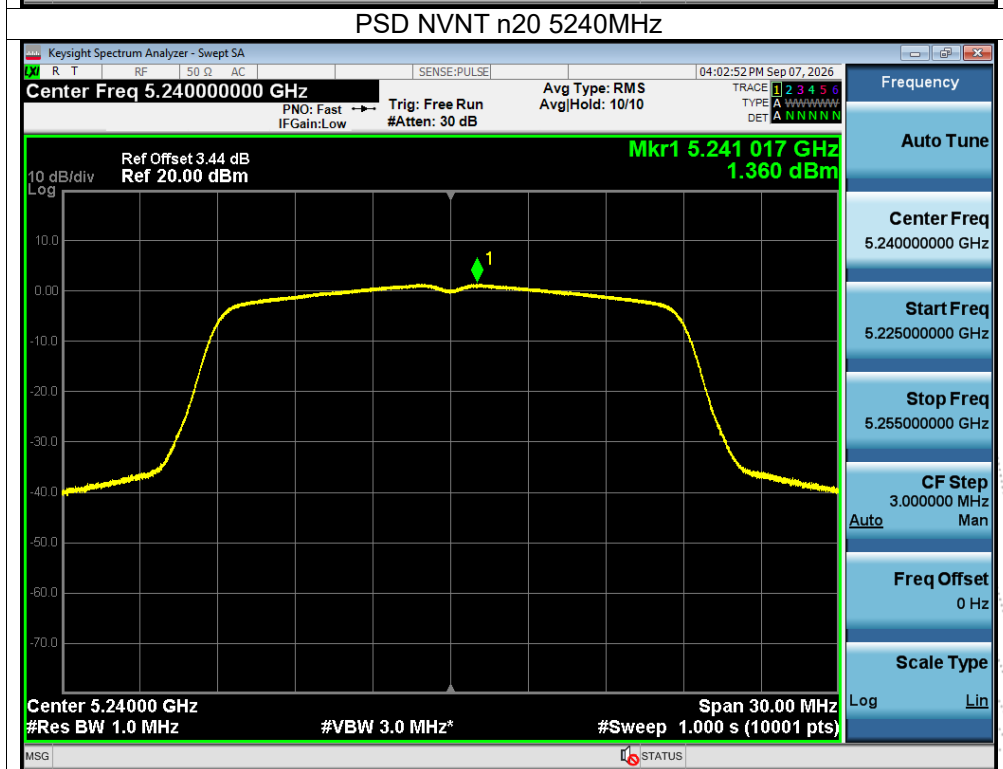
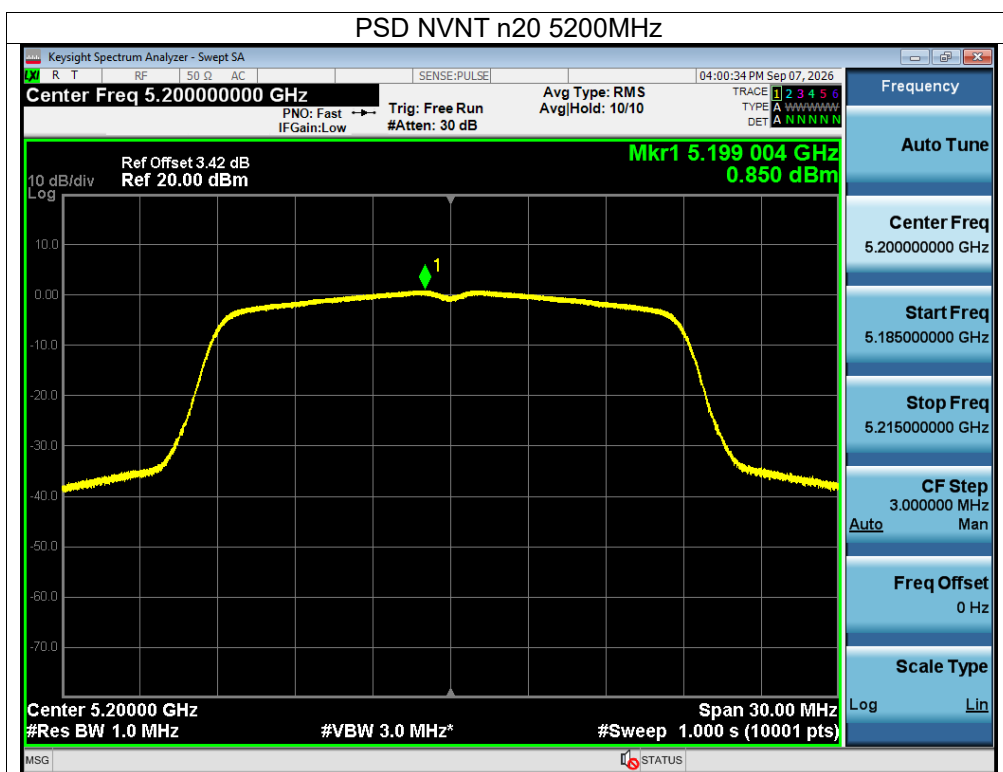
Limit=11-(6.83-6)=10.17 dbi

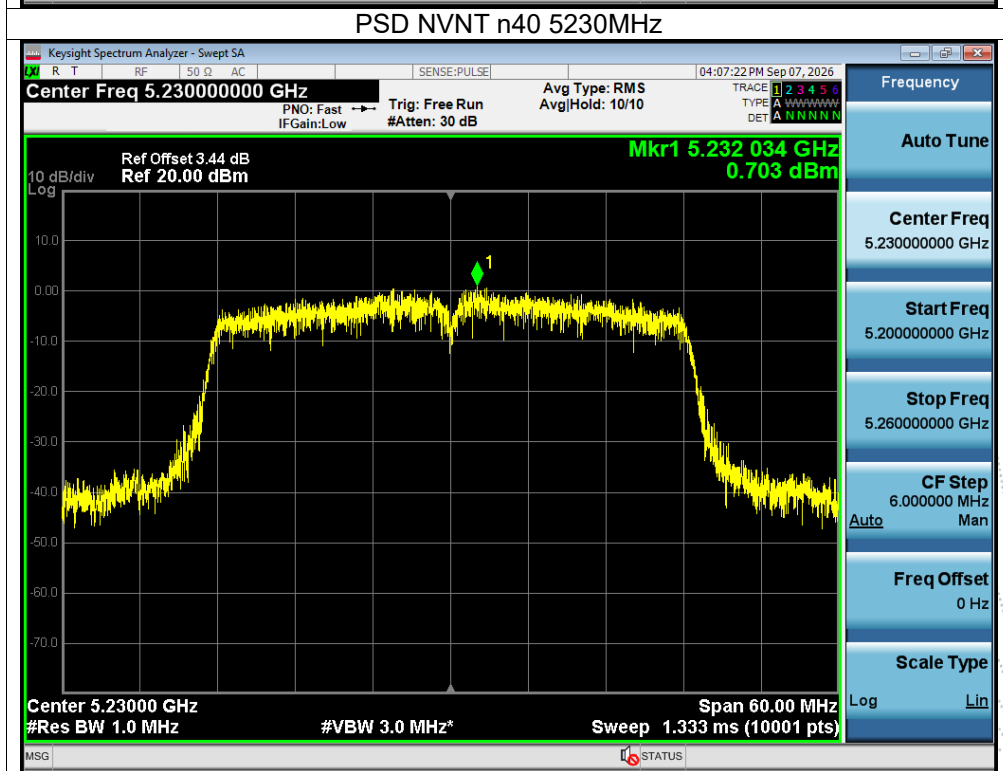
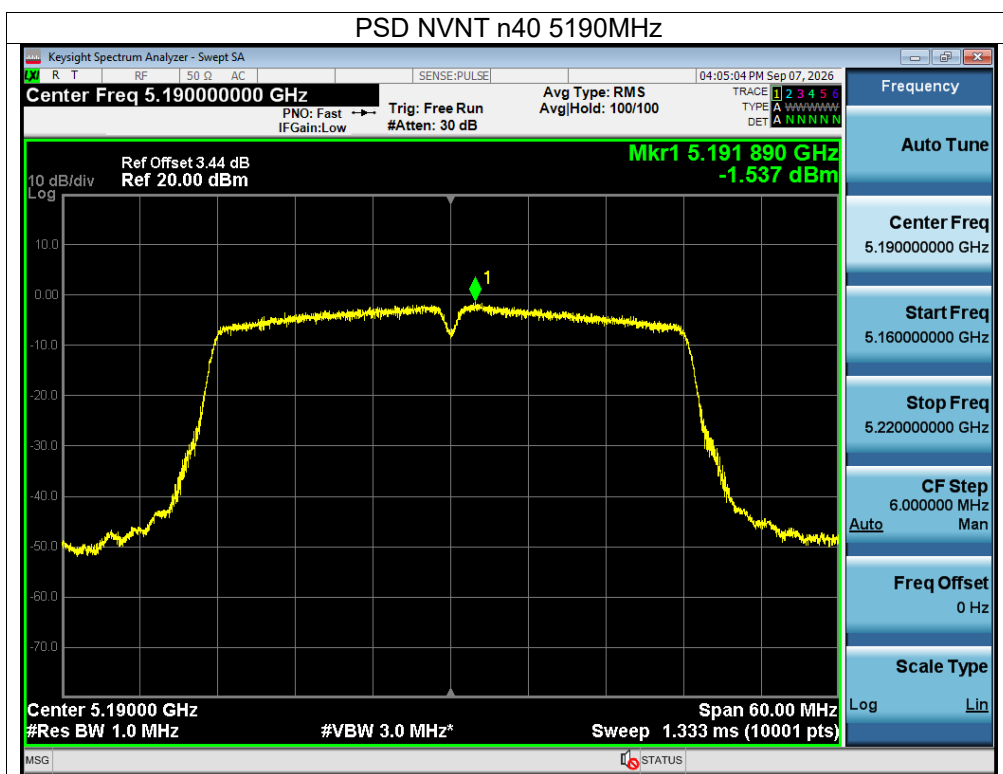
Total: antenna A+ antenna B

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

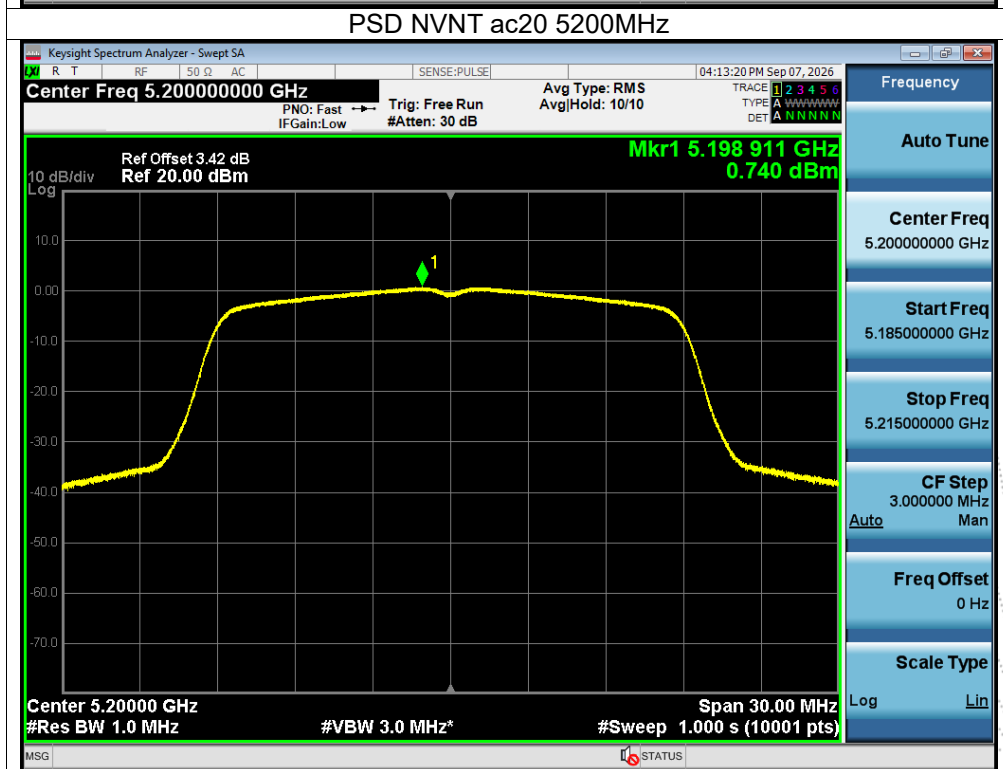
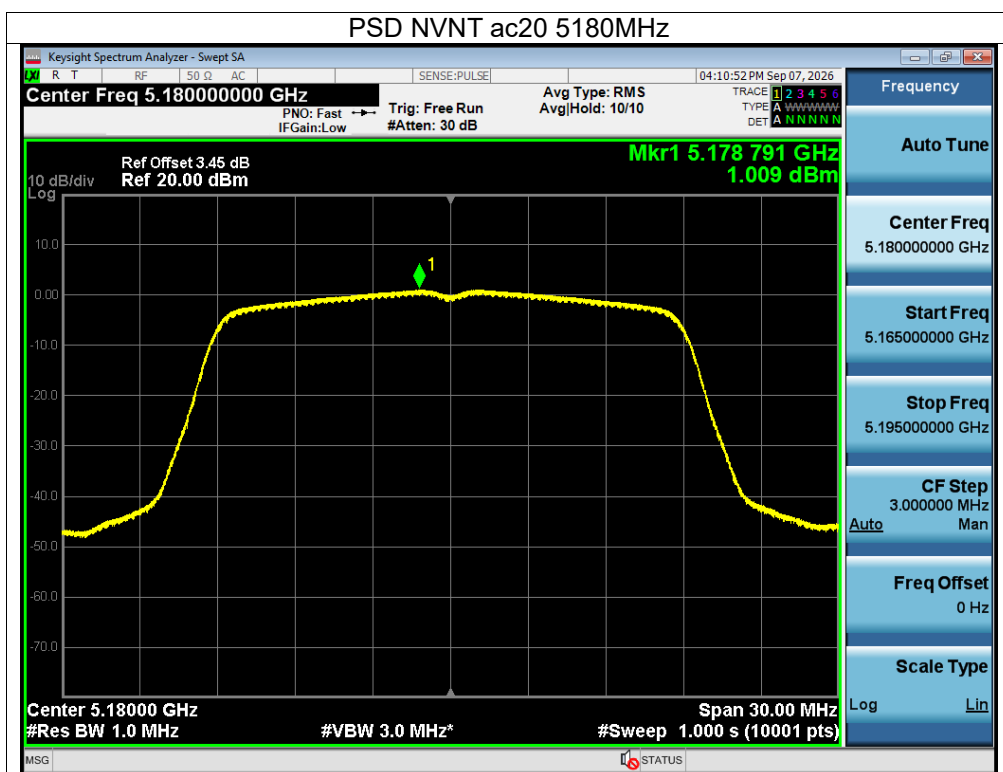


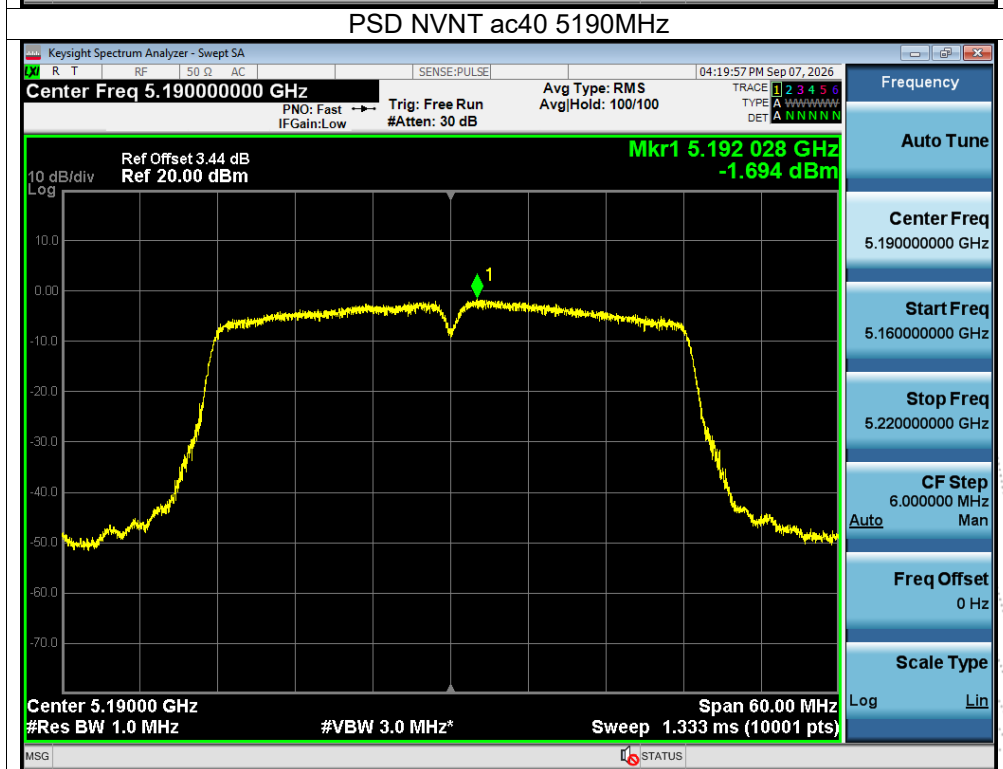
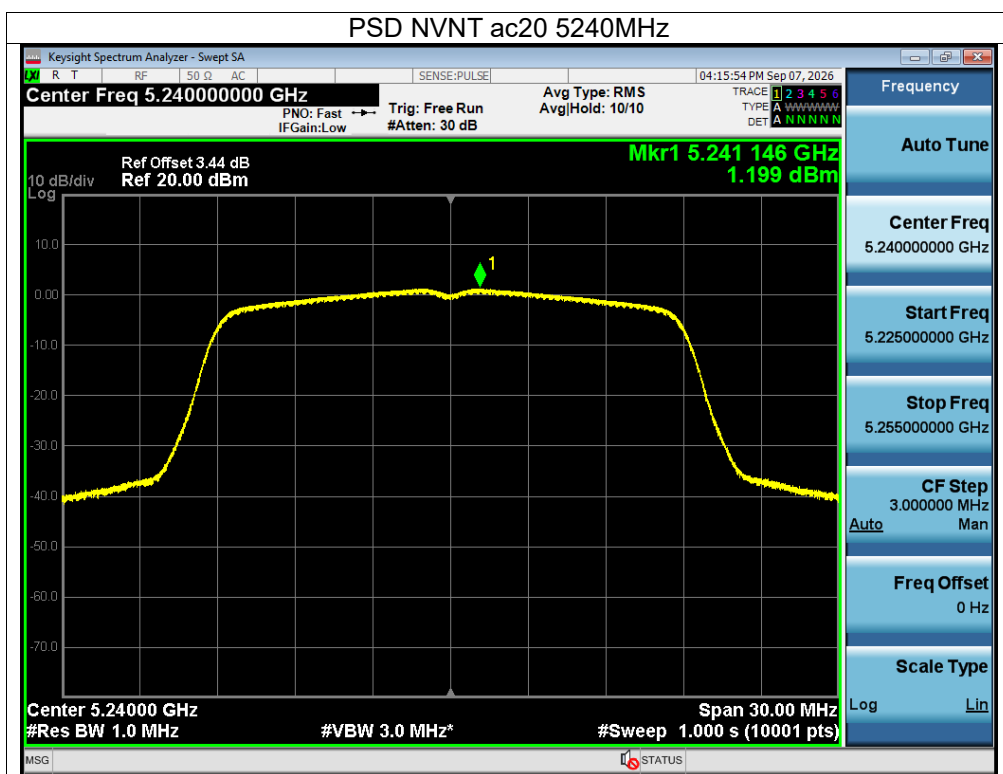


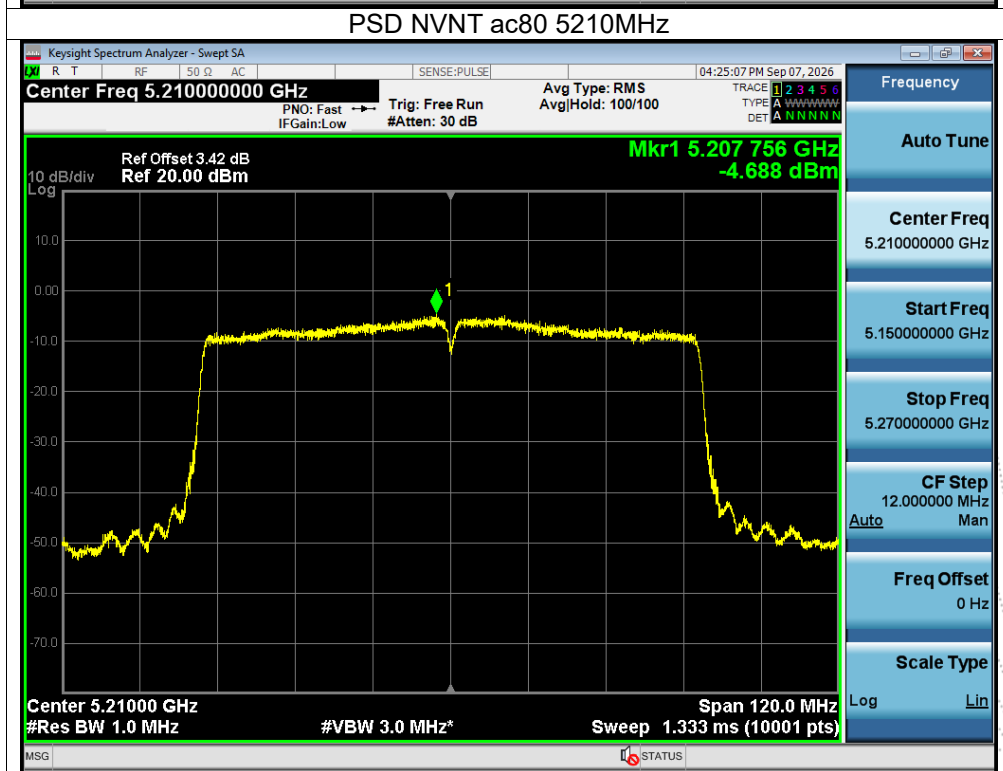
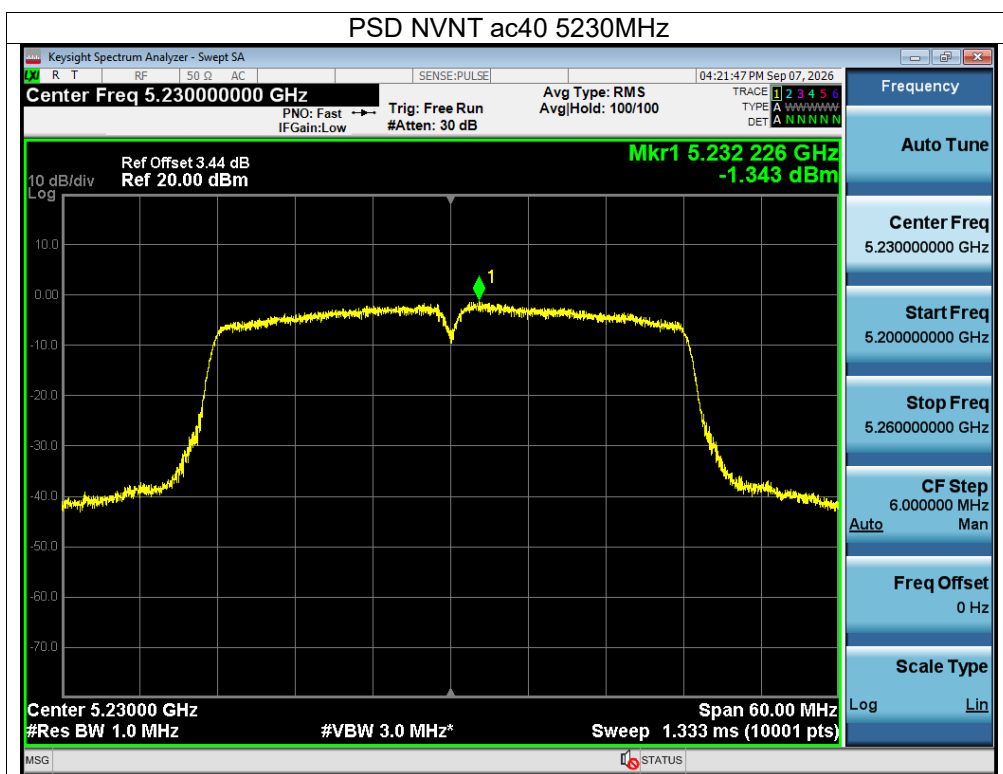




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Temperature:	23.6℃	Relative Humidity:	50%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5745-5825MHz)		

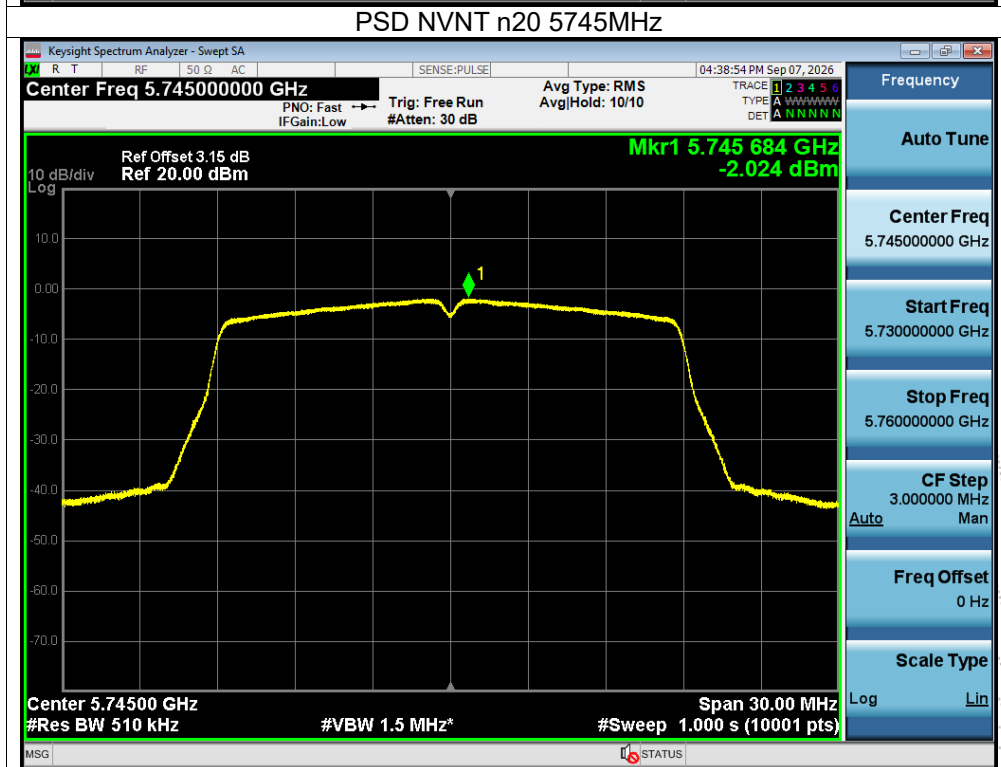
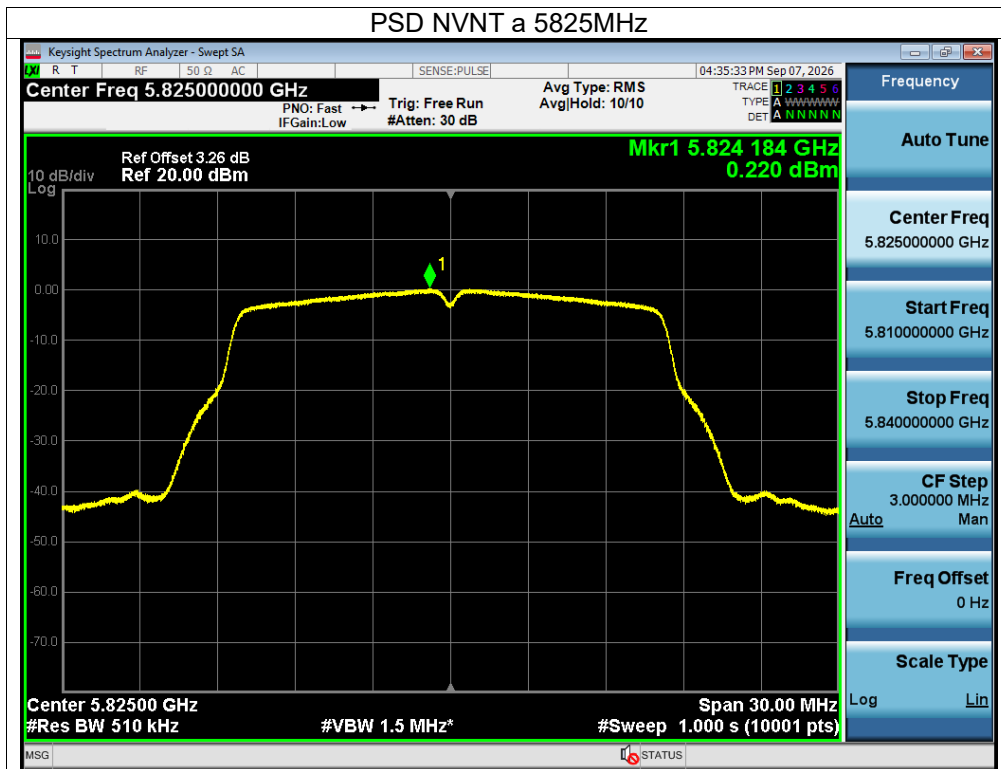
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)		Total (dBm/MHz)	Limit (dBm/MHz)	Verdict
			Ant A	Ant B			
NVNT	a	5745	-0.62	-0.40	/	30	Pass
NVNT	a	5785	0.27	0.05	/	30	Pass
NVNT	a	5825	0.22	0.16	/	30	Pass
NVNT	n20	5745	-2.02	-1.57	1.22	29.3	Pass
NVNT	n20	5785	-1.08	-1.27	1.84	29.3	Pass
NVNT	n20	5825	-1.04	-1.39	1.80	29.3	Pass
NVNT	n40	5755	-4.43	-4.71	-1.56	29.3	Pass
NVNT	n40	5795	-3.96	-4.54	-1.23	29.3	Pass
NVNT	ac20	5745	-1.29	-0.79	1.98	29.3	Pass
NVNT	ac20	5785	-1.12	-1.30	1.80	29.3	Pass
NVNT	ac20	5825	-0.63	-0.71	2.34	29.3	Pass
NVNT	ac40	5755	-2.18	-2.59	0.63	29.3	Pass
NVNT	ac40	5795	-3.90	-4.13	-1.00	29.3	Pass
NVNT	ac80	5775	-8.01	-8.04	-5.01	29.3	Pass

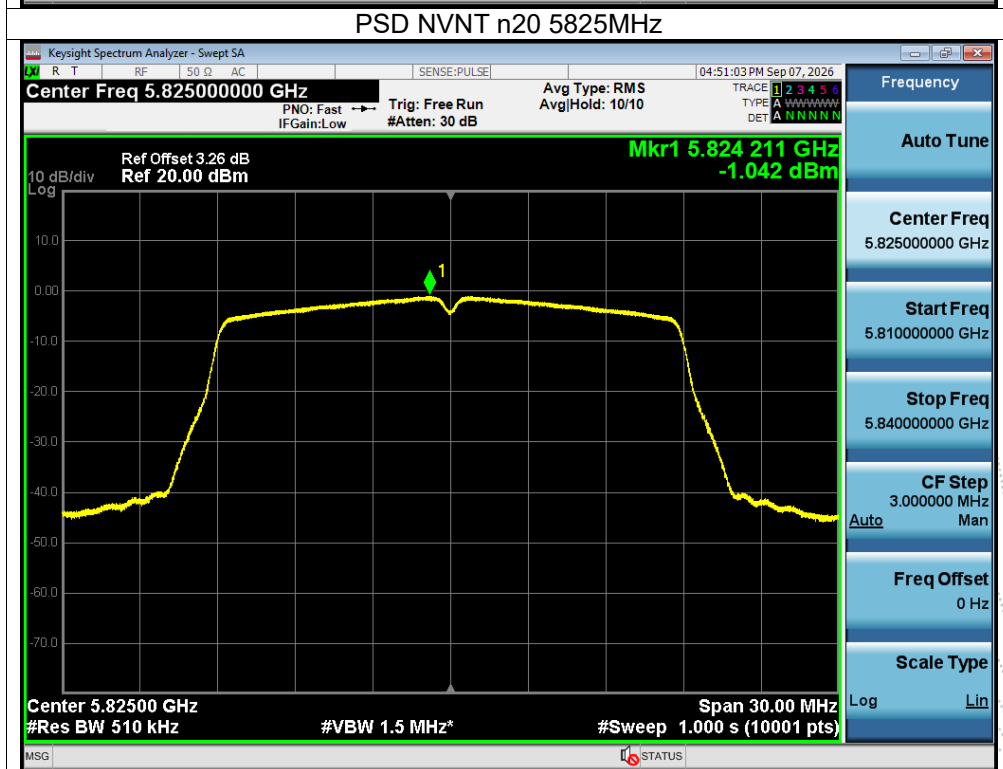
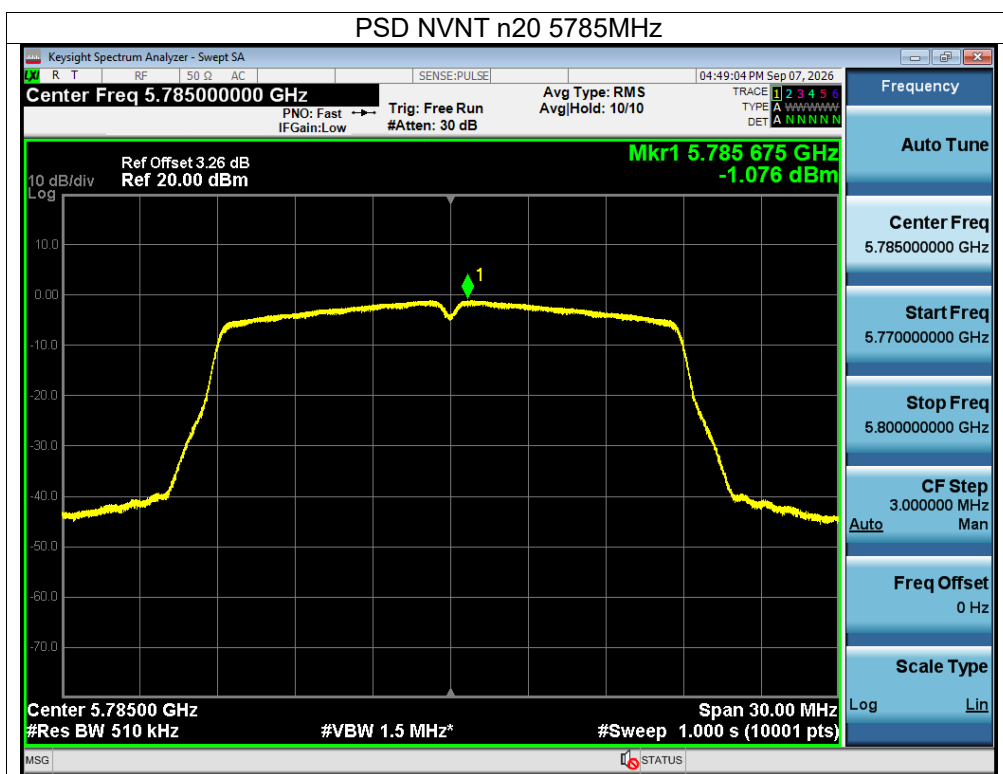
Note:
Antenna A gain:3.78 dBi, Antenna B gain: 3.59 dBi, Directional gain=[GainANT + 10 log(NANT) dBi] =6.7 dBi>6dbi
Limit=30-(6.7-6)=29.3 dbi

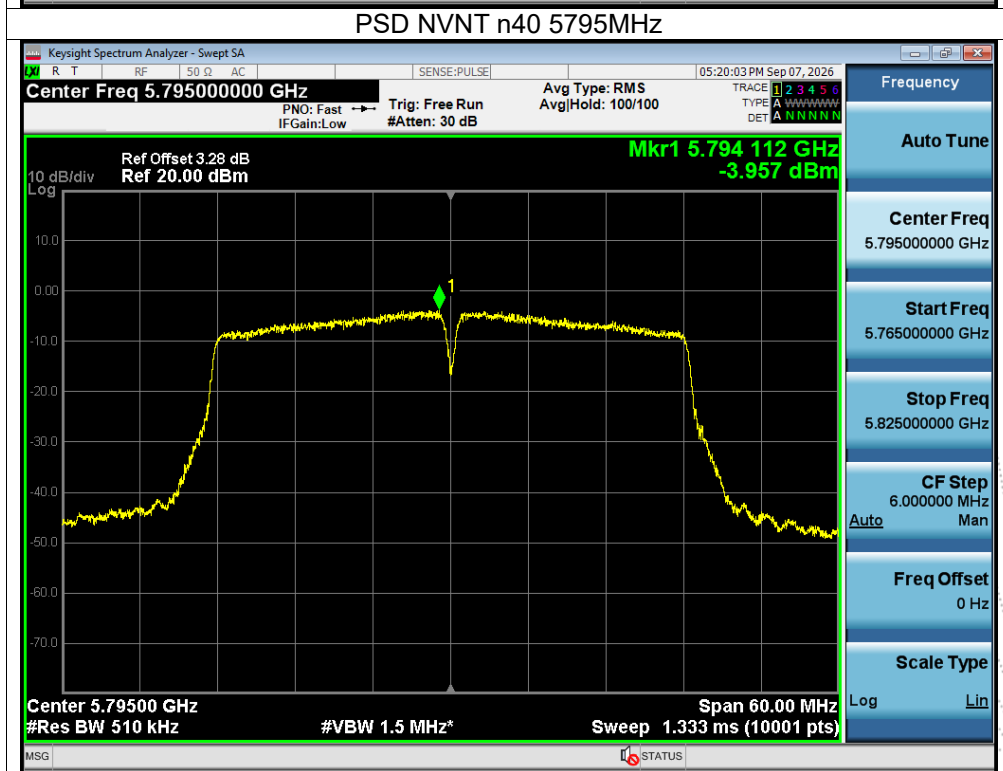
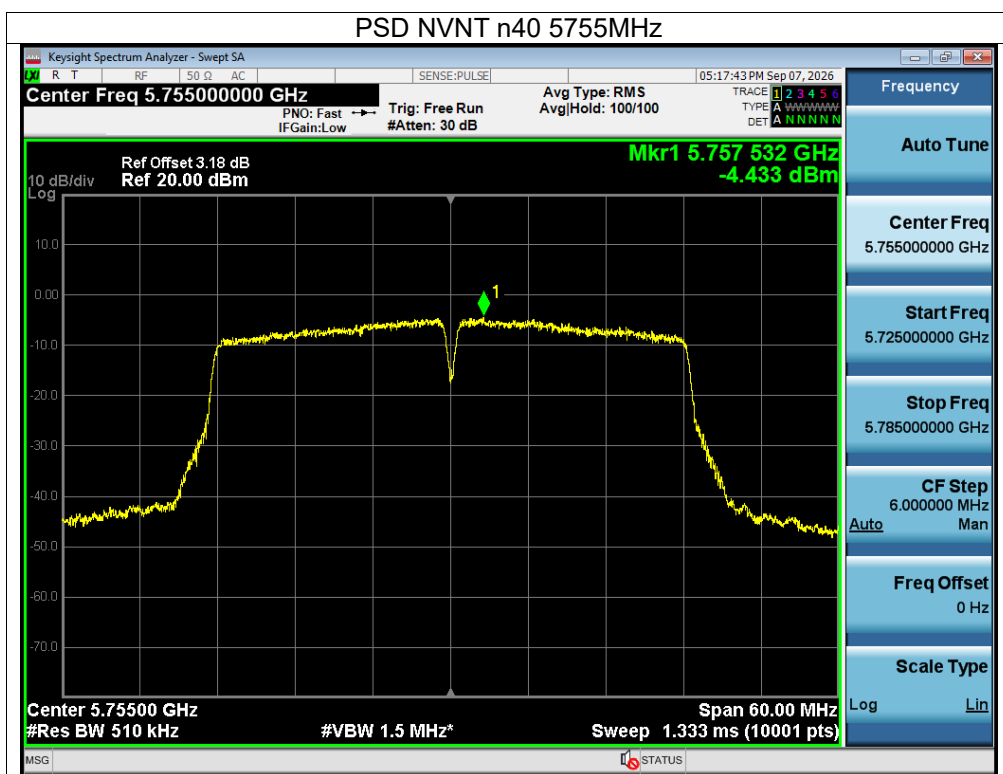
Total: antenna A+ antenna B

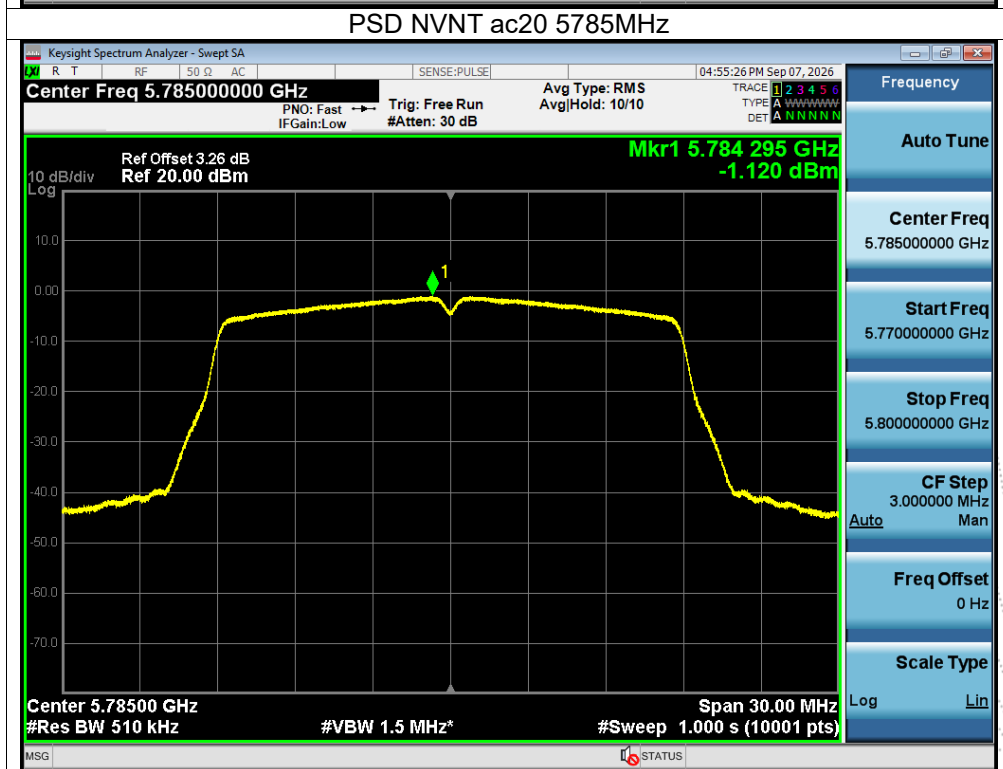
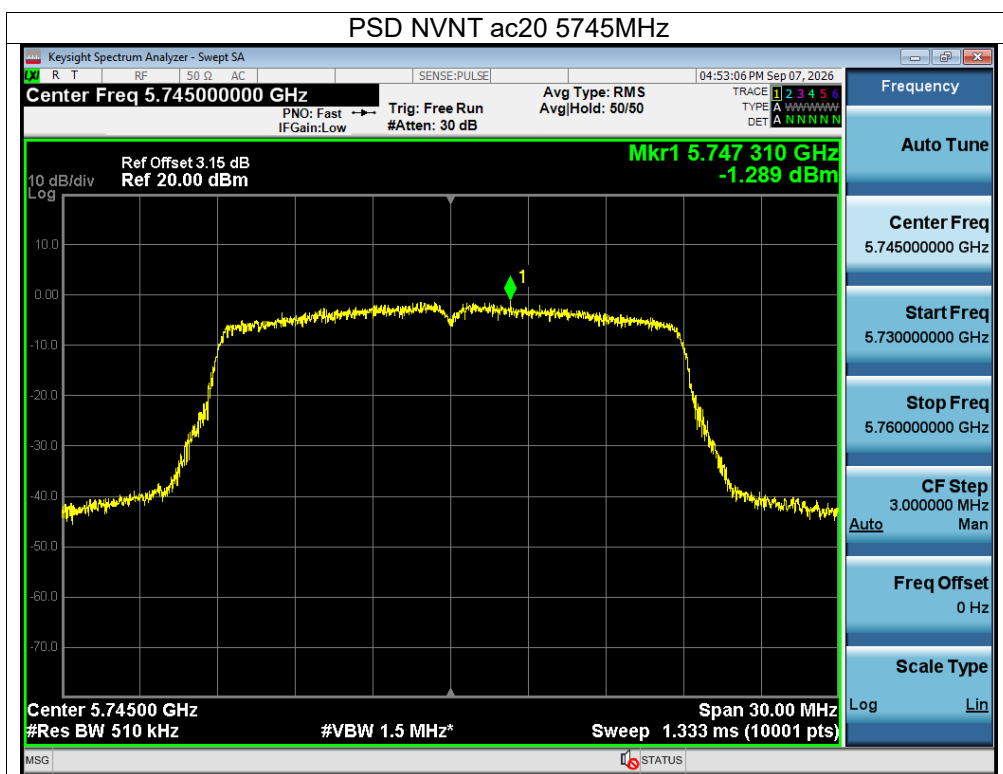
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

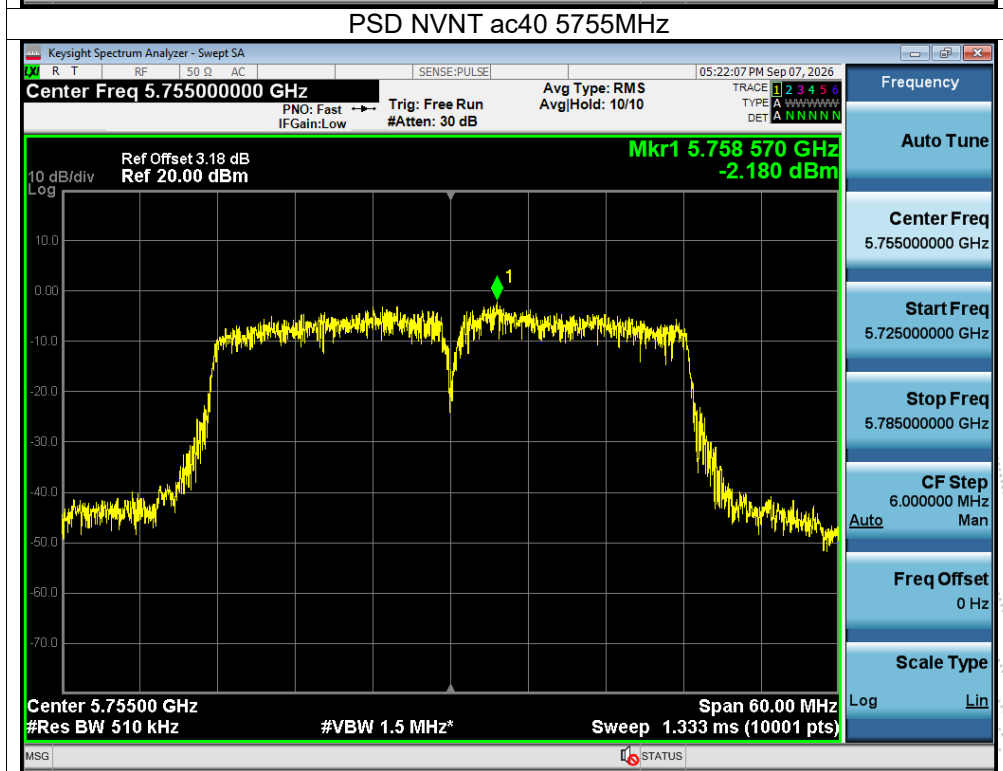
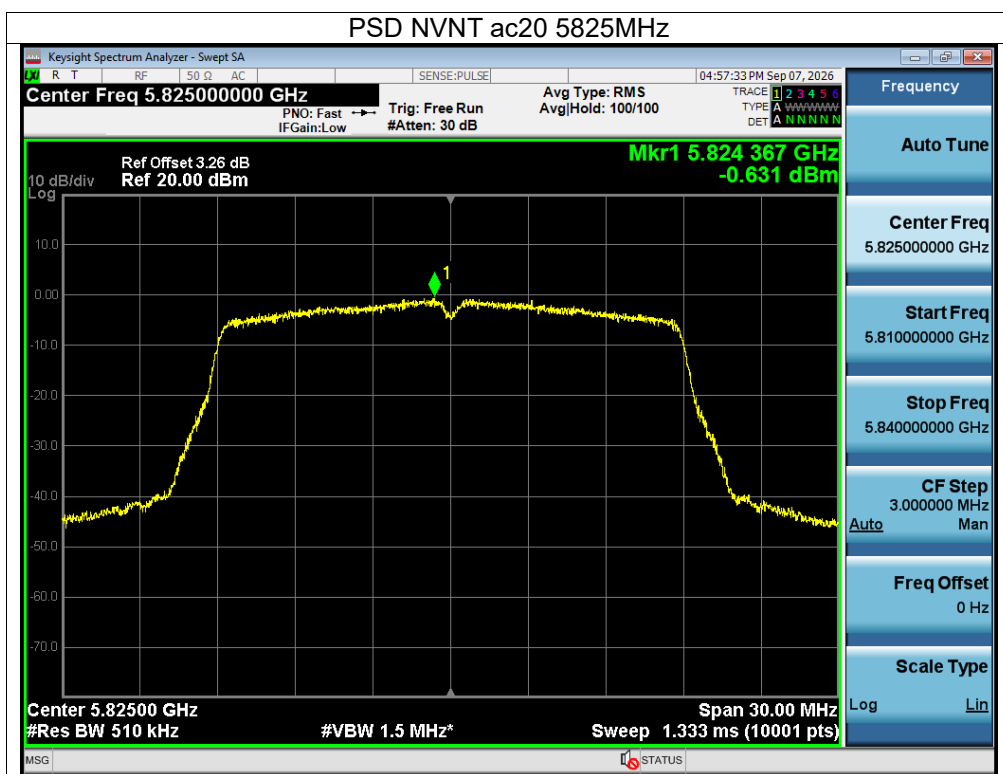


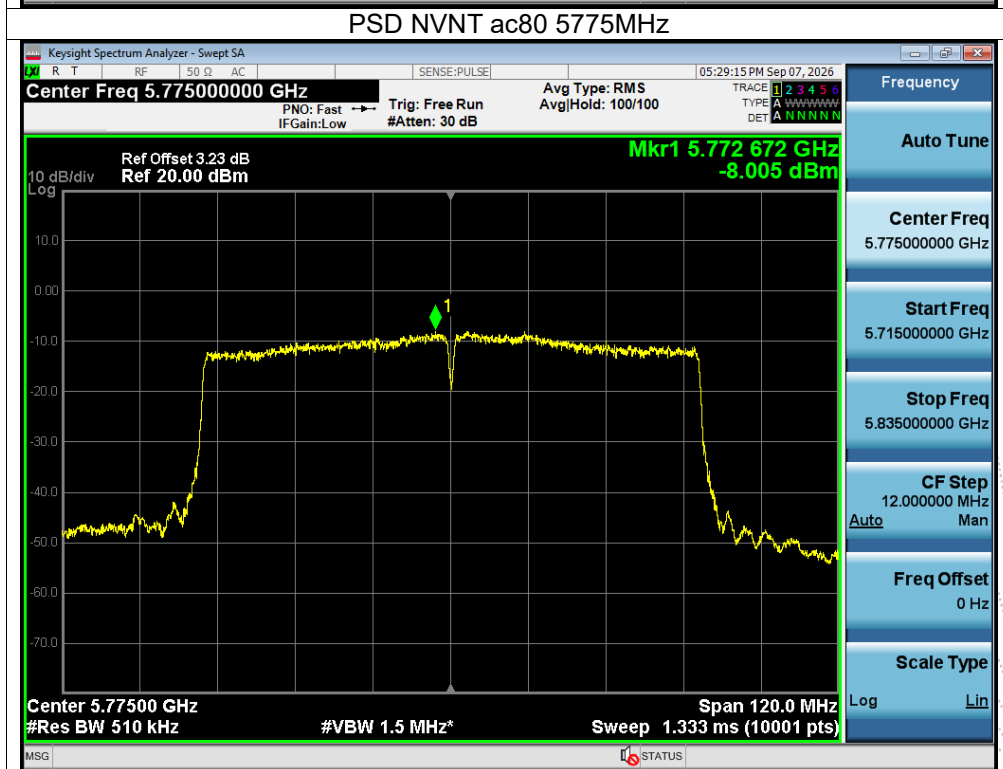
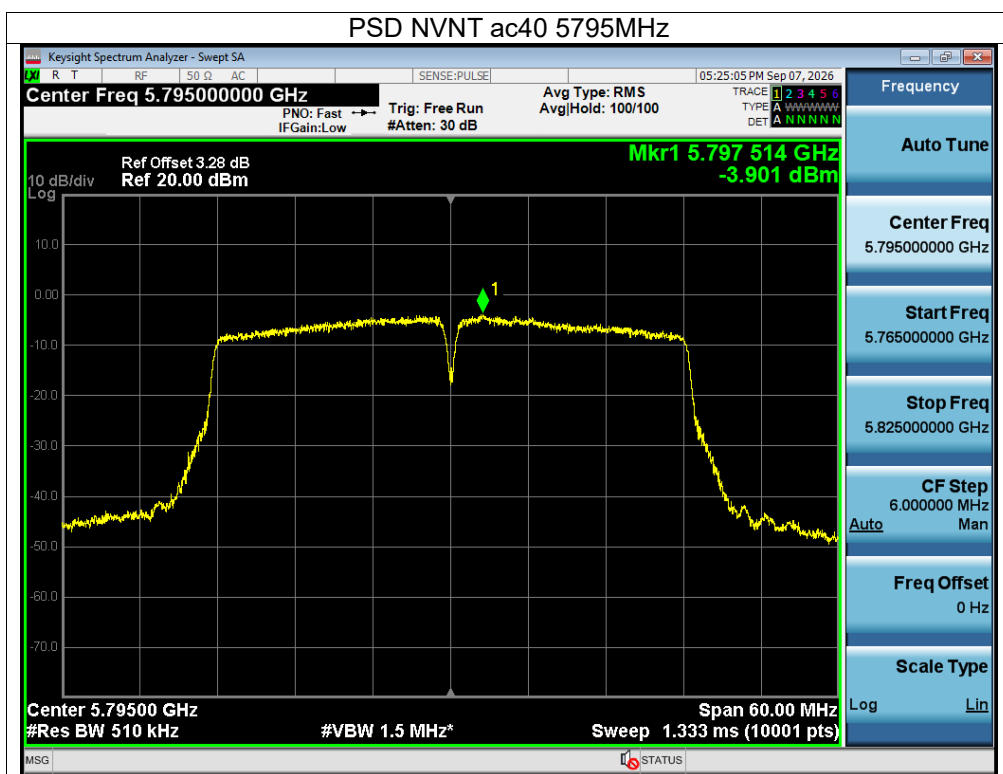






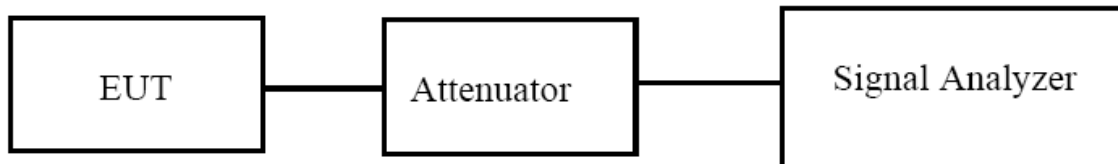






9. 26dB & 6dB & 99% Emission Bandwidth

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 peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

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.

Emission bandwidth for the band 5.725 GHz to 5.85 GHz

The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max-hold.
- e) Sweep = No faster than coupled (auto) time.
- f) Allow the trace to stabilize.
- g) 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.

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