FCC TEST REPORT

FCC ID: 2BLBN-SMART

On Behalf of

DONGGUAN JIEHONG INTELLIGEN TECHNOLOGY CO.,LTD.

MID

Model No.: Smart_10, Smart_9, Smart_X, Smart_Pro_Max, Spark_Pro_Max, 10_Pro, Smart S26, Spark_Top_Pro, Smart_GT, Hot_60_Pro_Max, Hot_70_Pro_Max, Smart_11, Smart_12, Smart_13

Prepared for	:	DONGGUAN JIEHONG INTELLIGEN TECHNOLOGY CO.,LTD.
Address	:	3-4F, No.8, Jinsheng Road, Jinxia Village, Chang'an Town, Dongguan City, Guangdong Province, China

Prepared By	:	Shenzhen PSI Testing Co., Ltd.
Address	:	1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Report Number	:	psi2507083-C01-R04
Date of Receipt	:	July 7, 2025
Date of Test	:	July 8, 2025-September 4, 2025
Date of Report	:	September 4, 2025
Version Number	:	V0

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TEST REPORT DECLARATION

Applicant	:	DONGGUAN JIEHONG INTELLIGEN TECHNOLOGY CO.,LTD.
Address	:	3-4F, No.8, Jinsheng Road, Jinxia Village, Chang'an Town, Dongguan City, Guangdong Province, China
Manufacturer	:	DONGGUAN JIEHONG INTELLIGEN TECHNOLOGY CO.,LTD.
Address	:	3-4F, No.8, Jinsheng Road, Jinxia Village, Chang'an Town, Dongguan City, Guangdong Province, China
EUT Description	:	MID
(A) Model No.	:	Smart_10, Smart_9, Smart_X, Smart_Pro_Max, Spark_Pro_Max, 10_Pro, Smart S26, Spark_Top_Pro, Smart_GT, Hot_60_Pro_Max, Hot_70_Pro_Max, Smart_11, Smart_12, Smart_13
(B) Trademark	:	SuperKing

Measurement Standard Used:

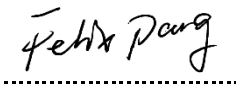
FCC Rules and Regulations Part 15 Subpart E

ANSI C63.10:2013

Test Result: PASS

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart E&RSS-247 limits both conducted and radiated emissions. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....:	Felix Pang Test Engineer	
Approved by (name + signature).....:	Simple Guan Project Manager	
Date of issue.....:	September 4, 2025	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	September 4, 2025	Initial released Issue	Felix Pang

1 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	Section 15.203 Section 7.1.4 RSS-Gen Issue 5	PASS
AC Power Line Conducted Emission	Section 15.207 Section 7.2.4 RSS-GEN(8.8), ANSI C63.10	PASS
occupied bandwidth	Section 15.407 (e)	PASS
Maximum Conducted Output Power	Section 15.407(a), RSS-247 5.4(2)	PASS
Power Spectral Density	Section 15.407(a), RSS-247 5.2(2)	PASS
Undesirable Emission	Section 15.407(b), RSS-247 5.5	PASS
Radiated Emission	Section 15.407(b)&15.209 Section 5.5 RSS-Gen(8.9), RSS-247(5.5), ANSI C63.10	PASS
Band Edge	15.205, RSS-247 Issue 2, ANSI C63.10	PASS
Frequency Stability	15.407(f), RSS-GEN(6.11)	PASS

Remark:

1. Pass: The EUT complies with the essential requirements in the standard.

2. Frequency Stability: The manufacturer stated in the user's manual.

3. The conclusion of this test report is judged by actual test data without considering measurement uncertainty.

4. Measurement-method usage KDB 789033 D02 General UNII Test Procedures New Rules v02r01

1.1 Measurement Uncertainty

Item	Uncertainty
Uncertainty for Power Line Conducted Emissions Test	2.17dB
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	3.5dB
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	2.74dB(Polarize: V)
	2.76dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 18GHz)	4.29dB(Polarize: V)
	4.82dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (18GHz to 40GHz)	4.31dB(Polarize: V)
	4.30dB(Polarize: H)
Uncertainty for radio frequency	48.24KHz
Uncertainty for conducted RF Power	0.41dB
Uncertainty for Power Spectral Density	0.39 dB
Occupied-Bandwidth	968Hz
Conducted-Spurious Emission	1.26dB

2 General Information

2.1 General Description of EUT

EUT Name	:	MID
Model	:	Smart_10, Smart_9, Smart_X, Smart_Pro_Max, Spark_Pro_Max, 10_Pro, Smart S26, Spark_Top_Pro, Smart_GT, Hot_60_Pro_Max, Hot_70_Pro_Max, Smart_11, Smart_12, Smart_13
Diff	:	There is no difference between the models except the appearance color. So all the test were performed on the model Smart_10.
Test Voltage	:	DC 5V from adapter, DC 3.85V from battery.

Radio Technology	:	5G WIFI
Operation frequency	:	802.11a/802.11ac20/802.11n(HT20): 5745-5825MHz 802.11ac40/802.11n(HT40): 5755-5795MHz
Channel separation	:	20MHz for 802.11a/802.11ac20/802.11n(HT20) 40MHz for 802.11ac40/802.11n(HT40)
Modulation technology:	:	IEEE 802.11n: OFDM (64QAM,16QAM,QPSK,BPSK) IEEE 802.11a: OFDM (64QAM,16QAM,QPSK,BPSK) IEEE 802.11ac: OFDM (64QAM,16QAM, 256QAM,QPSK,BPSK)
Antenna Type	:	Internal antenna, Maximum Gain is 1.41dBi.
PMN	:	N/A
HVIN	:	N/A
Software version	:	N/A
Hardware version/FVIN	:	N/A
Note	:	Antenna information is provided by applicant. Testing lab is not responsible for the accuracy of the information.

2.2 Test mode

Transmitting mode Keep the EUT in transmitting with modulation.
EUT was test with 99% duty cycle at its maximum power control level.

Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

2.3 Test Facility

Shenzhen PSI Testing Co., Ltd.

1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

September 13, 2023 File on Federal Communication Commission
Registration Number: 916281

2.4 Description of Support Units

Accessories	:	Power Adapter
Manufacturer	:	Shenzhen Keweiye Electronics Co., LTD
Model	:	KWY10W-0502000US
Rating	:	Input: 100-240V~50/60Hz 0.3A Output: DC 5.0V/2.0A
Accessories	:	USB cable(1m)
Manufacturer	:	N/A

2.5 Deviation from Standards

None.

2.6 Abnormalities from Standard Conditions

None.

2.7 Other Information Requested by the Customer

None.

2.8 Additional instructions

Software (Used for test) from client

Channel	Power level
Lowest	Default
Middle	Default
Highest	Default

3 Test Instruments list

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Last Cal.	Cal. Interval
1.	9*6*6 anechoic chamber	SKET	9*6*6	N/A	/	2022.12.20	3 Year
2.	Test Receiver	Rohde&Schwarz	ESCI 7	101032/003	4.42 SP3	2024.12.18	1 Year
3.	L.I.S.N.#1	Rohde&Schwarz	ENV216	102282	/	2024.12.18	1 Year
4.	L.I.S.N.#2	RFT	NNB111	13835240	/	2024.12.18	1 Year
5.	Loop Antenna	Schwarz beck	FMZB 1519B	00128	/	2025.01.02	2 Year
6.	Bilog Antenna	Schwarz beck	VULB 9168	01448	/	2025.01.02	2 Year
7.	Spectrum Analyzer	Rohde&Schwarz	FSV-40N	101648	3.70	2024.12.18	1 Year
8.	Horn Antenna	Schwarz beck	BBHA 9120 D	02706	/	2025.01.02	2 Year
9.	Amplifier	SKET	LAPA_01G18G-45dB	SK2022032901	/	2024.12.18	1 Year
10.	Horn Antenna	Schwarz beck	BBHA 9170	00946	/	2024.12.31	2 Year
11.	Amplifier	SKET	LNPA_0118G-45	SK2020010801	/	2024.12.18	1 Year
12	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.02-1111533-Fz	/	2024.12.18	1 Year
13	RF Sensor Unit	Tachoy	TR1029-2	20220428P008	/	2024.12.18	1 Year
14	Spectrum Analyzer	Agilent	N9020A	MY51281067	A.14.03	2024.12.18	1 Year
15	Temp. & Humid Chamber	Auchno	9606	/	/	2024.12.18	1 Year
16	Regulated DC Power Supply	Xinouhua	ADC120V10A	202211251638	/	2024.12.18	1 Year
17	Power meter	Agilent	E4419B	GB40202121	/	2024.12.18	1 Year
18	6dB Attenuator	Schwarzbeck	DGA 9552N 6dB	CK4186	/	2024.12.18	1 Year

For Test Software Information

Item	Software Name	Manufacturer	Version
RE	EZ_EMC	Farad	PSI-3A1
CE	EZ_EMC	Farad	PSI-3A1
RF	RTS	TACHOY	V1.0.0

4 Test results and Measurement Data

4.1 Antenna requirement

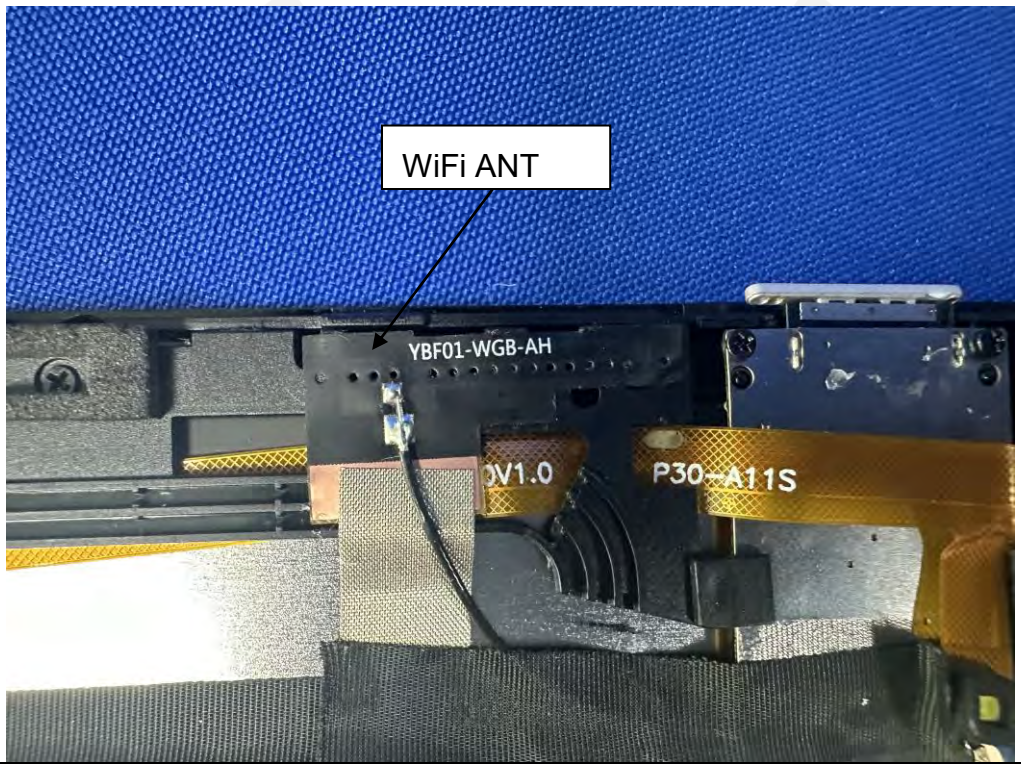
Standard requirement:	FCC Part15 C Section 15.203

15.203 requirement:

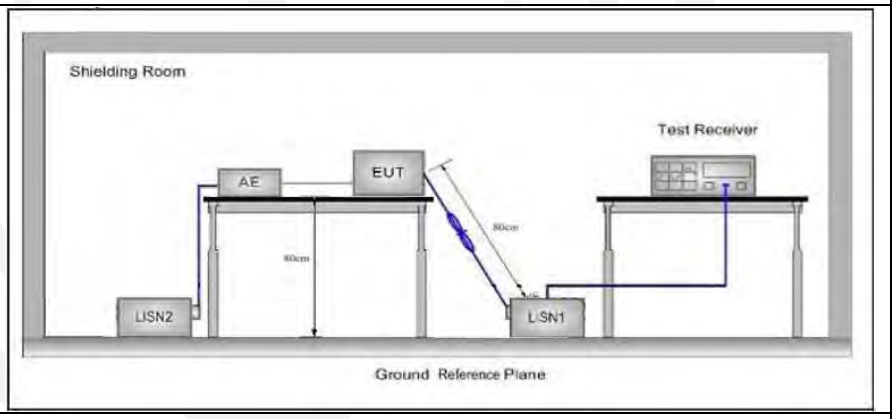
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

E.U.T Antenna:	

Internal antenna, Maximum Gain is 1.41dBi, for 5745-5825MHz



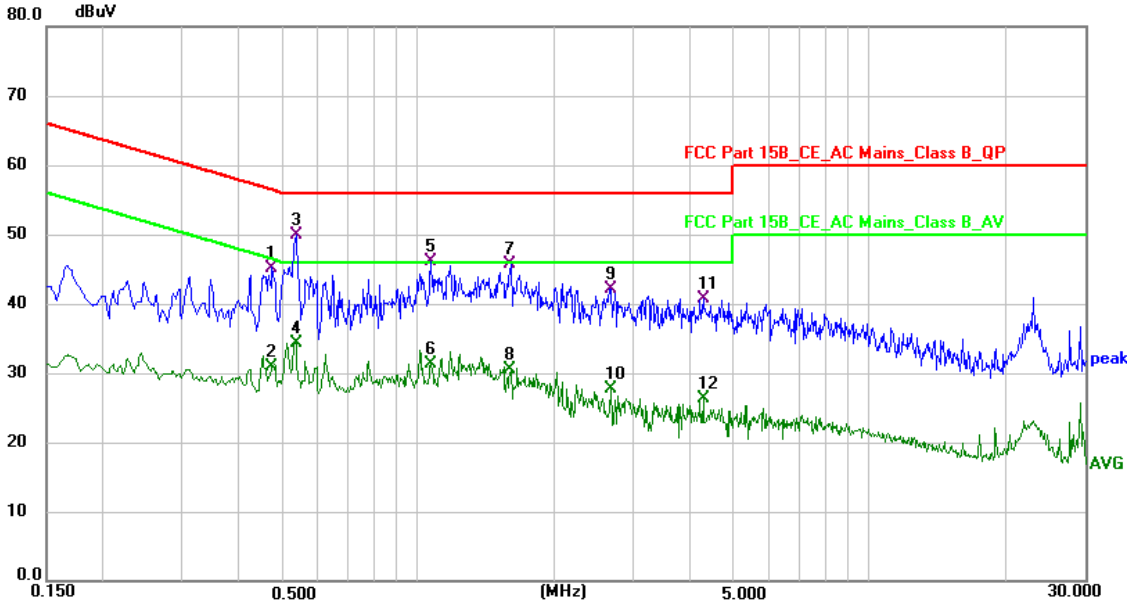
4.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207, RSS-Gen §8.8
Test Method:	ANSI C63.10:2013
Test Frequency Range:	150KHz to 30MHz
Class / Severity:	Class B
Receiver setup:	RBW=9KHz, VBW=30KHz
Limit:	Frequency range (MHz) / Limit (dBuV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 * Decreases with the logarithm of the frequency.
Test procedure	The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.
Test setup:	
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Measurement Data

An initial pre-scan was performed on the line and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

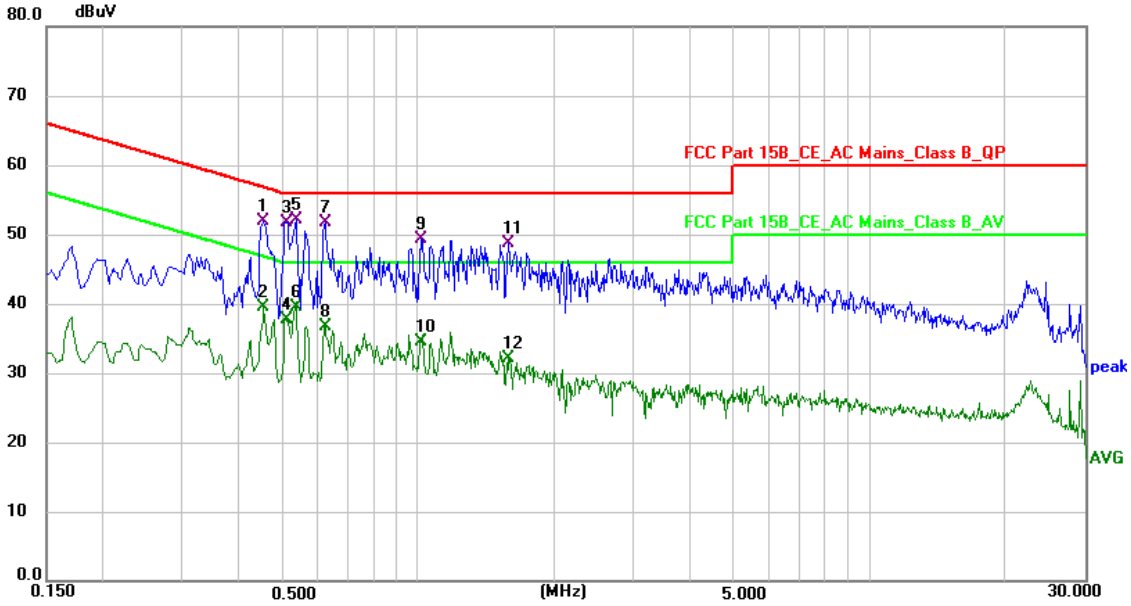
Line:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.4740	35.37	9.83	45.20	56.44	-11.24	QP	P
2	0.4740	21.08	9.83	30.91	46.44	-15.53	AVG	P
3 *	0.5340	40.03	9.83	49.86	56.00	-6.14	QP	P
4	0.5340	24.52	9.83	34.35	46.00	-11.65	AVG	P
5	1.0660	36.68	9.41	46.09	56.00	-9.91	QP	P
6	1.0660	21.85	9.41	31.26	46.00	-14.74	AVG	P
7	1.6019	36.36	9.40	45.76	56.00	-10.24	QP	P
8	1.6019	21.06	9.40	30.46	46.00	-15.54	AVG	P
9	2.6700	32.78	9.38	42.16	56.00	-13.84	QP	P
10	2.6700	18.35	9.38	27.73	46.00	-18.27	AVG	P
11	4.2780	31.35	9.40	40.75	56.00	-15.25	QP	P
12	4.2780	16.96	9.40	26.36	46.00	-19.64	AVG	P

Note: *:Maximum data x:Over limit !:over margin Level = Reading + Factor Margin = Level - Limit

Neutral:

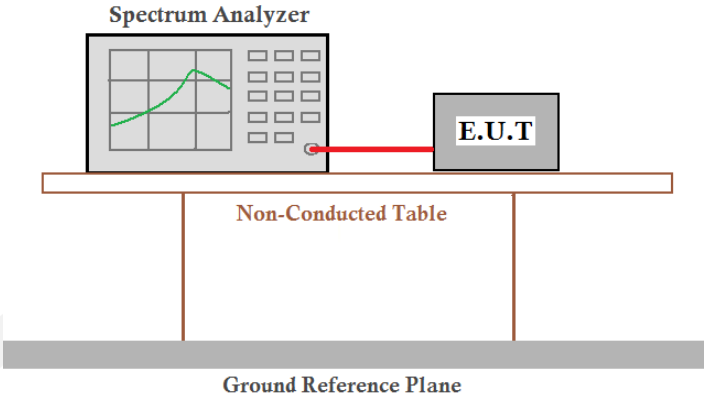


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.4540	42.26	9.67	51.93	56.80	-4.87	QP	P
2	0.4540	29.85	9.67	39.52	46.80	-7.28	AVG	P
3	0.5100	42.02	9.78	51.80	56.00	-4.20	QP	P
4	0.5100	27.88	9.78	37.66	46.00	-8.34	AVG	P
5 *	0.5340	42.29	9.78	52.07	56.00	-3.93	QP	P
6	0.5340	29.66	9.78	39.44	46.00	-6.56	AVG	P
7	0.6220	41.96	9.78	51.74	56.00	-4.26	QP	P
8	0.6220	26.89	9.78	36.67	46.00	-9.33	AVG	P
9	1.0180	39.86	9.51	49.37	56.00	-6.63	QP	P
10	1.0180	25.04	9.51	34.55	46.00	-11.45	AVG	P
11	1.5900	39.32	9.36	48.68	56.00	-7.32	QP	P
12	1.5900	22.66	9.36	32.02	46.00	-13.98	AVG	P

Note: *:Maximum data x:Over limit !:over margin Level = Reading + Factor Margin = Level - Limit

All modes and channels have been tested and only the A 5180MHz mode with the worst data is listed.

4.3 Emission Bandwidth and 99% Occupied Bandwidth

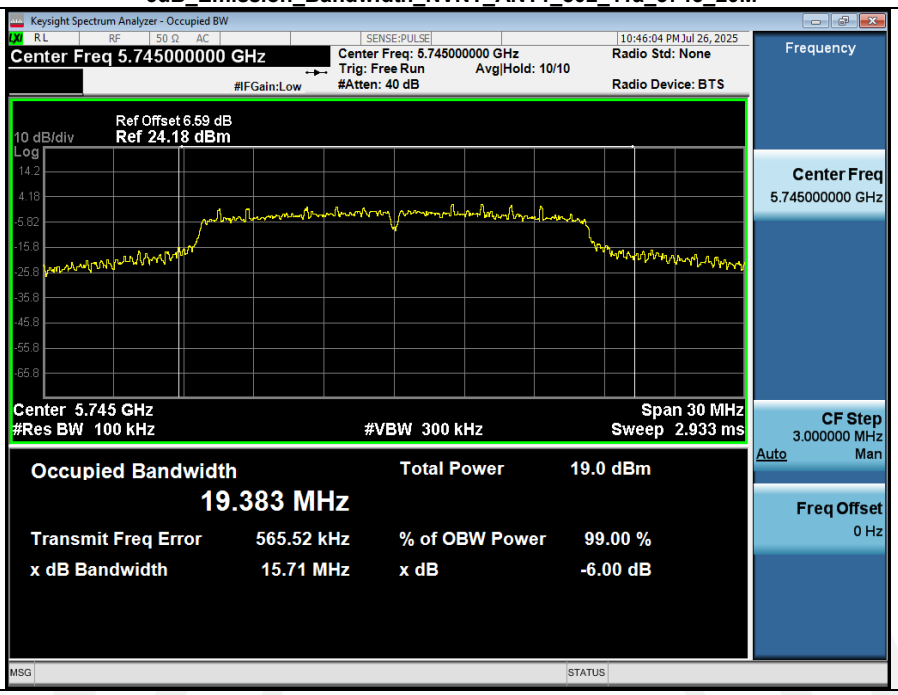
Test Requirement:	FCC Part15 E Section 15.407, RSS-Gen §6.7; RSS-247 §6.2
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	N/A
Test setup:	
Test procedure:	According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Measurement Data:

Band 4 (5725-5850 MHz):

Condition	Antenna	Mode	Frequency(MHz)	6dB_Emission_Bandwidth(MHz)	Limit(MHz)	Result
NVNT	ANT1	802.11a	5745.00	15.711	0.500	Pass
NVNT	ANT1	802.11a	5785.00	15.459	0.500	Pass
NVNT	ANT1	802.11a	5825.00	15.978	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	13.900	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	15.150	0.500	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	17.269	0.500	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	15.340	0.500	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	17.262	0.500	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	17.023	0.500	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	35.151	0.500	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	35.154	0.500	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	35.160	0.500	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	35.123	0.500	Pass

-6dB_Emission_Bandwidth_NVNT_ANT1_802_11a_5745_20M



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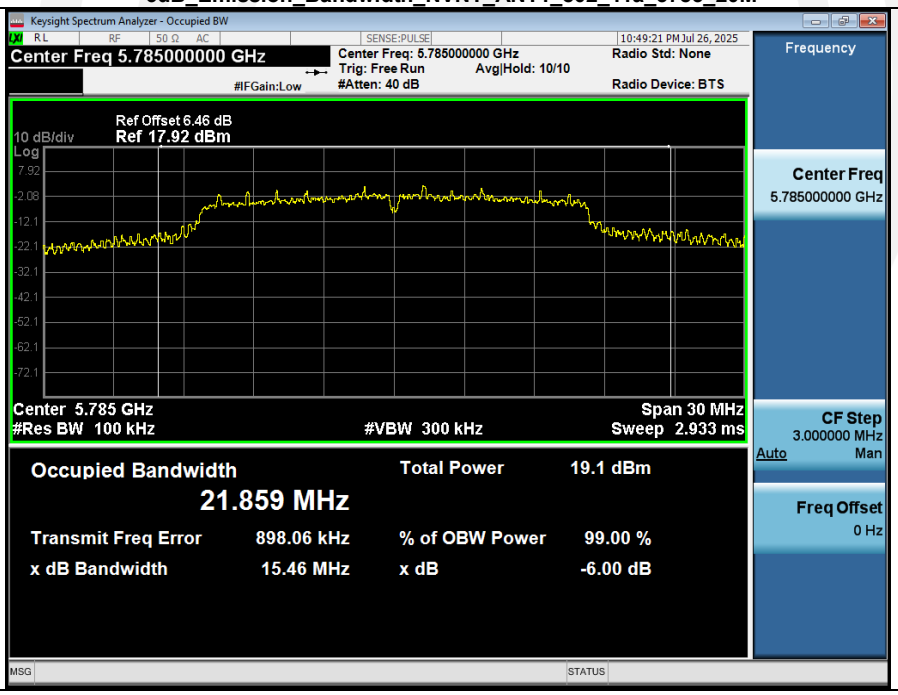

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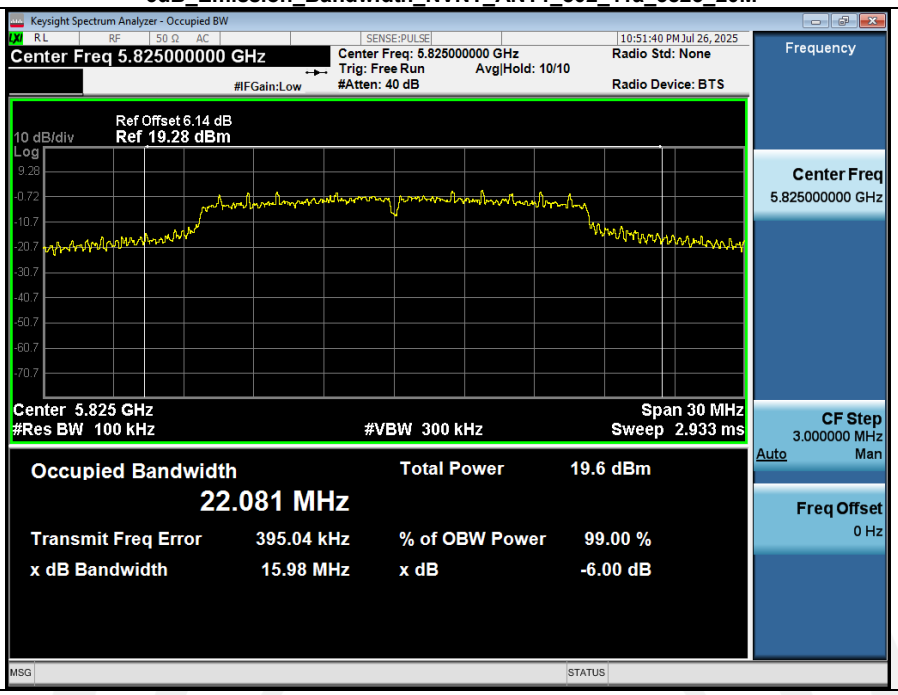

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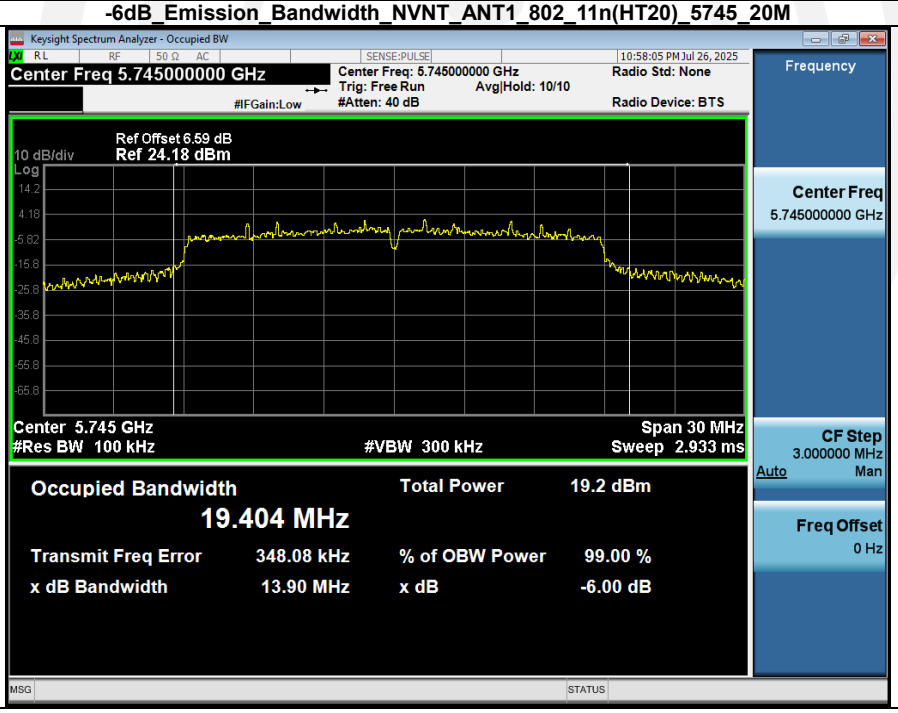

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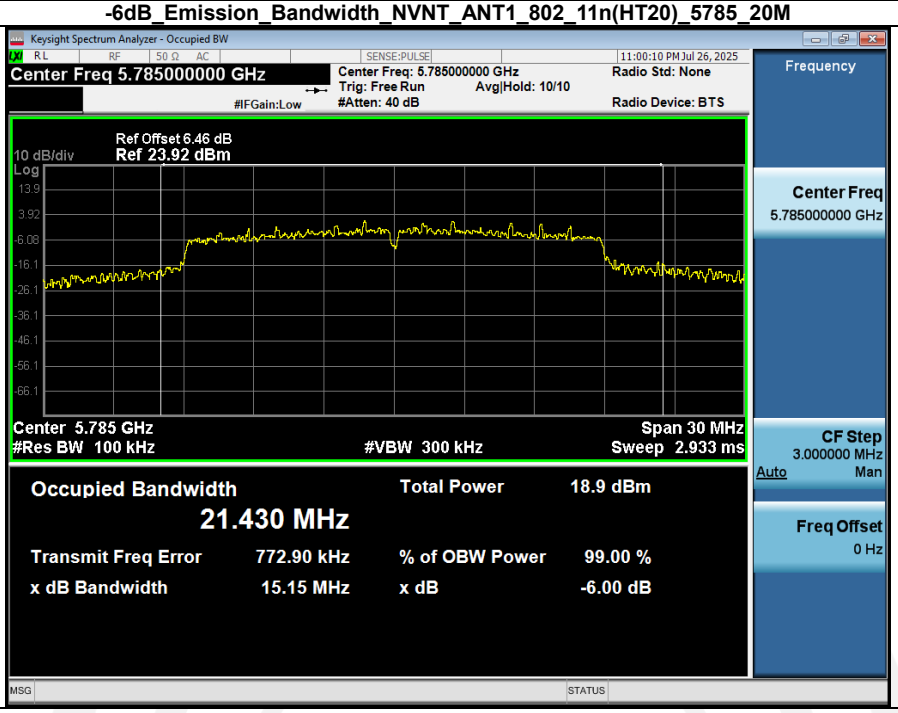

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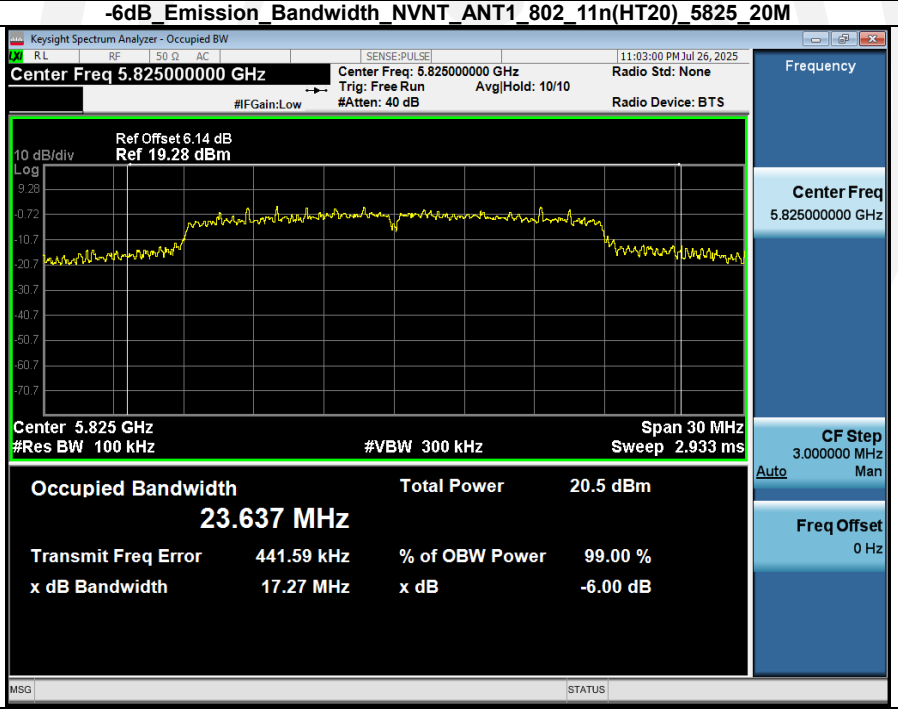

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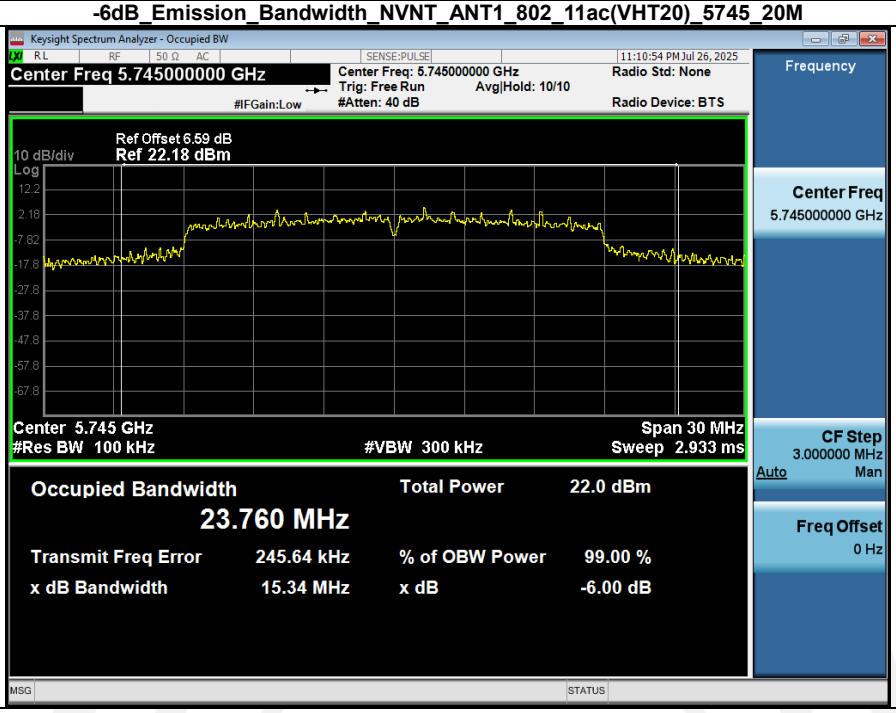

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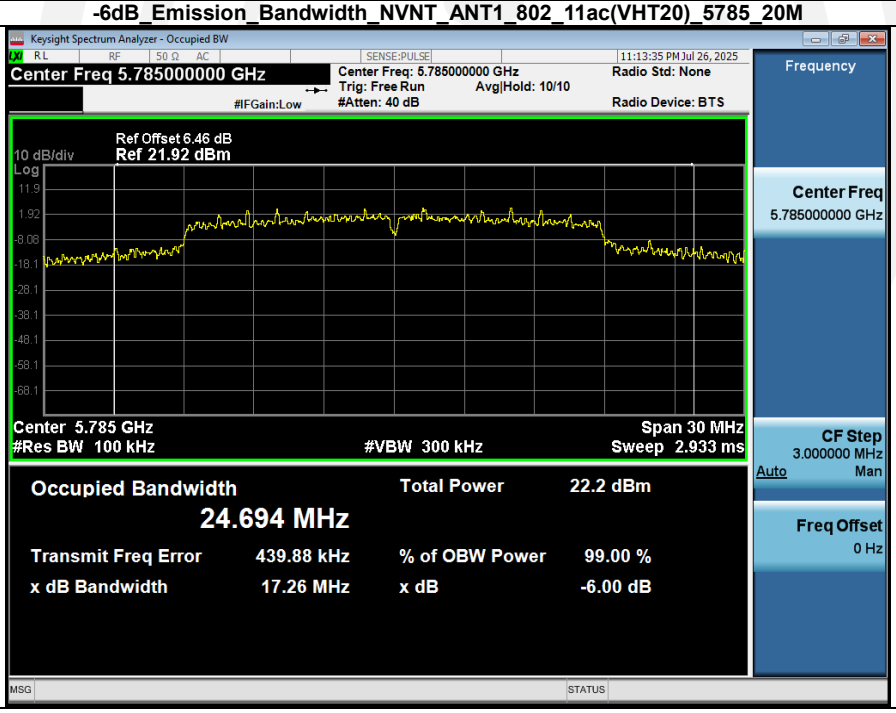

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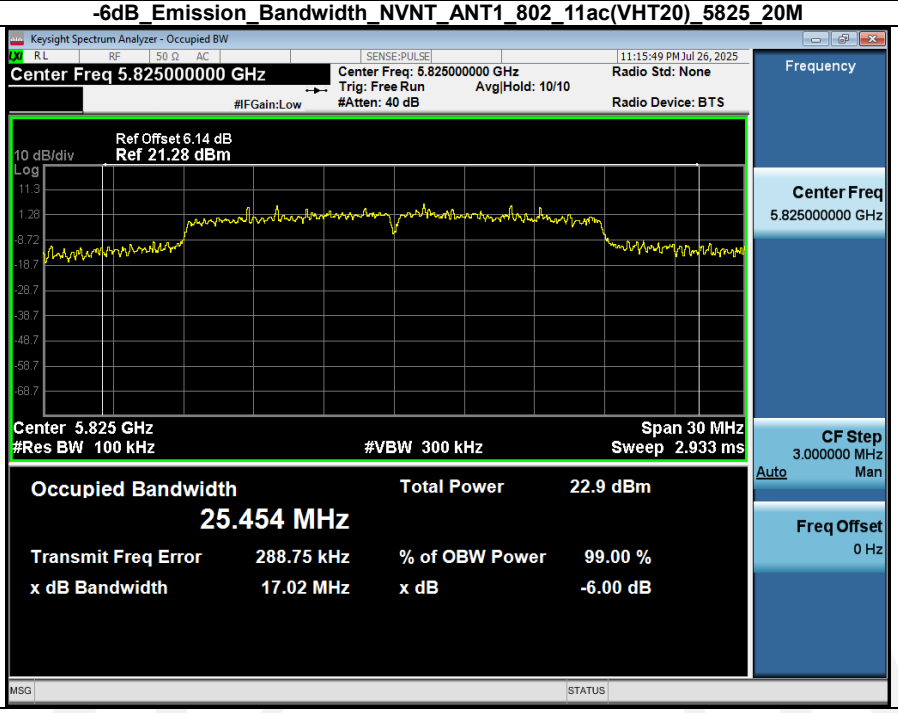

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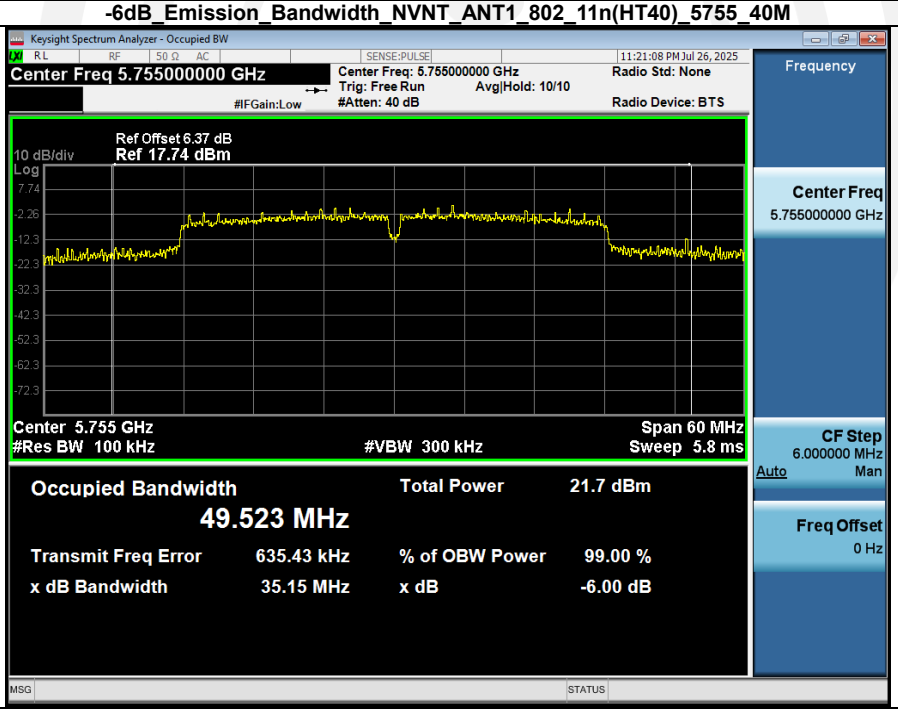

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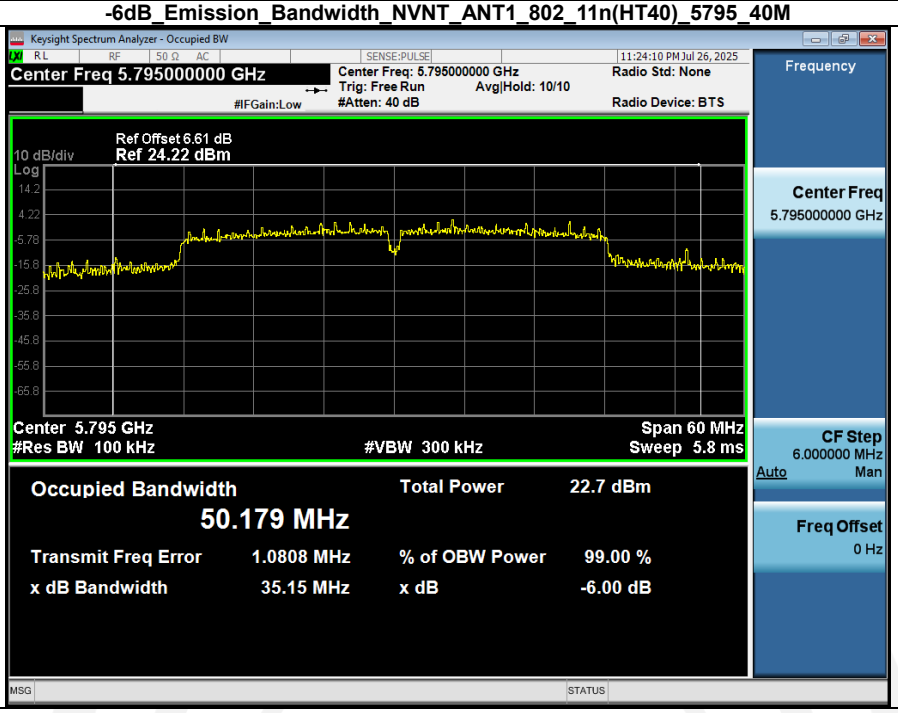

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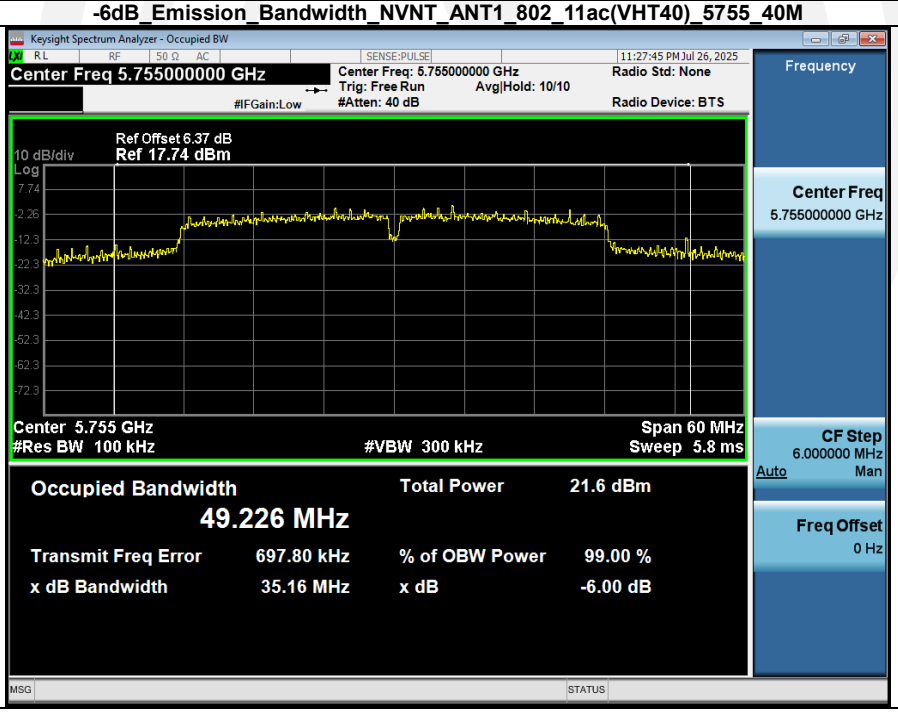

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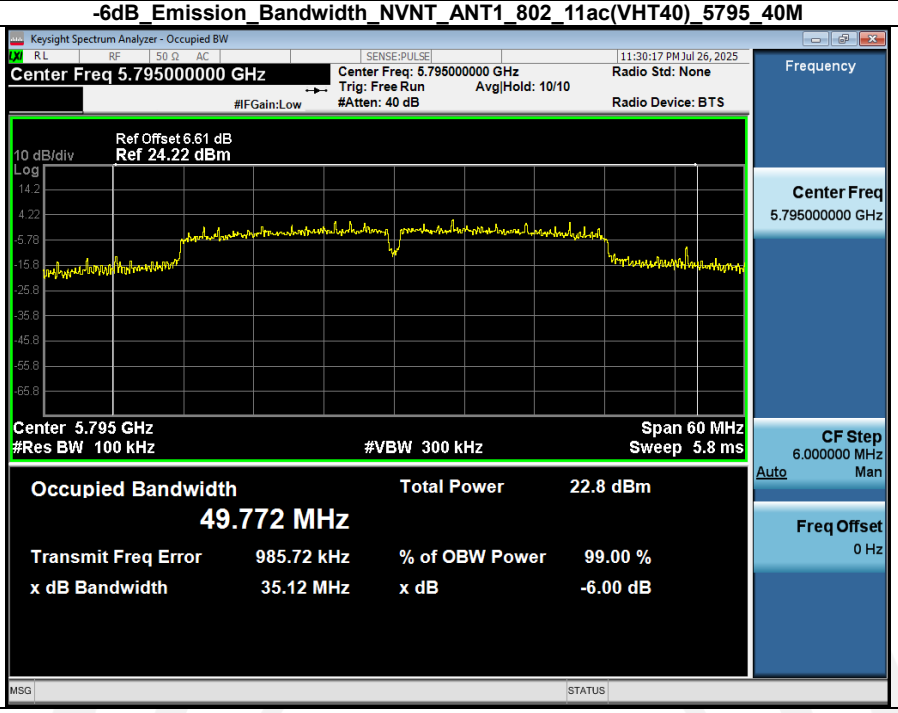
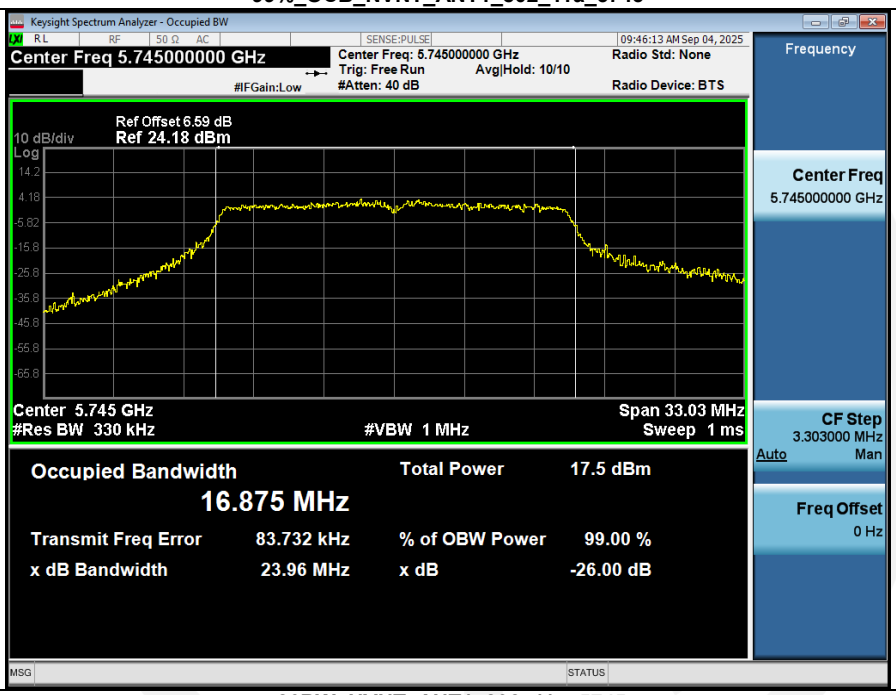


Condition	Antenna	Modulation	Frequency(MHz)	- 26dB_Emission_Bandwidth(MHz)	Occupied Bandwidth(MHz)
NVNT	ANT1	802.11a	5745.00	22.86	16.88
NVNT	ANT1	802.11a	5785.00	21.04	16.75
NVNT	ANT1	802.11a	5825.00	25.69	16.93
NVNT	ANT1	802.11n(HT20)	5745.00	25.24	18.06
NVNT	ANT1	802.11n(HT20)	5785.00	21.46	17.96
NVNT	ANT1	802.11n(HT20)	5825.00	26.23	18.13
NVNT	ANT1	802.11ac(VHT20)	5745.00	25.73	18.10
NVNT	ANT1	802.11ac(VHT20)	5785.00	21.90	17.96
NVNT	ANT1	802.11ac(VHT20)	5825.00	26.88	18.15
NVNT	ANT1	802.11n(HT40)	5755.00	49.45	36.47
NVNT	ANT1	802.11n(HT40)	5795.00	40.74	36.38
NVNT	ANT1	802.11ac(VHT40)	5755.00	49.97	36.59
NVNT	ANT1	802.11ac(VHT40)	5795.00	40.70	36.22

99%_OCB_NVNT_ANT1_802_11a_5745



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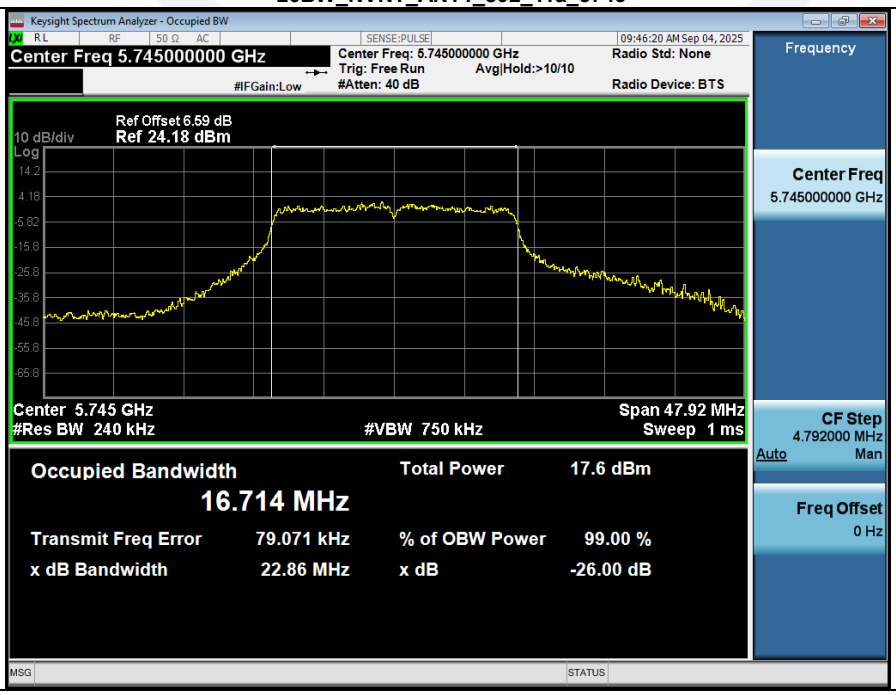

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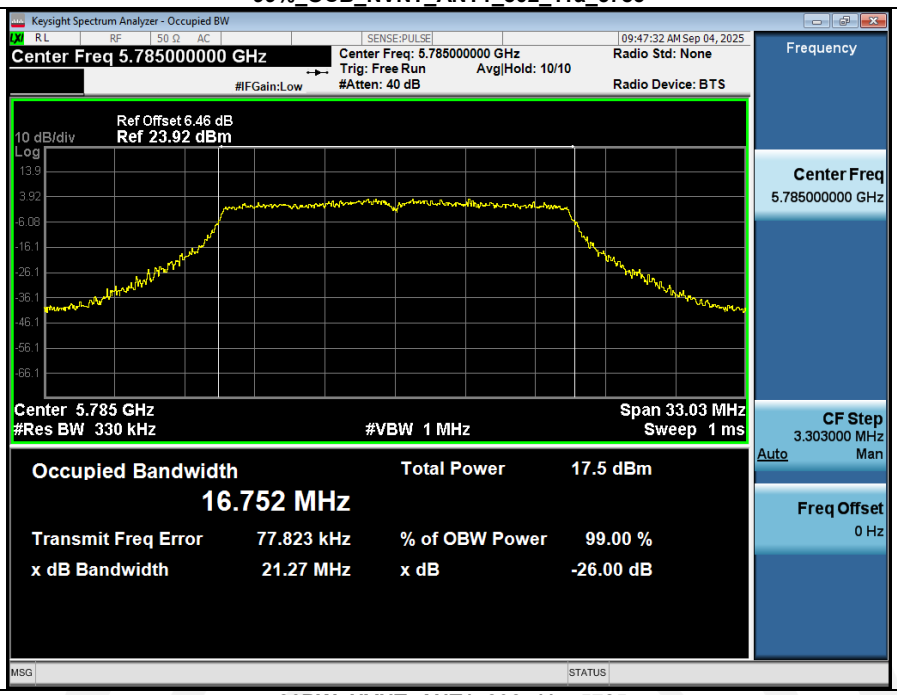

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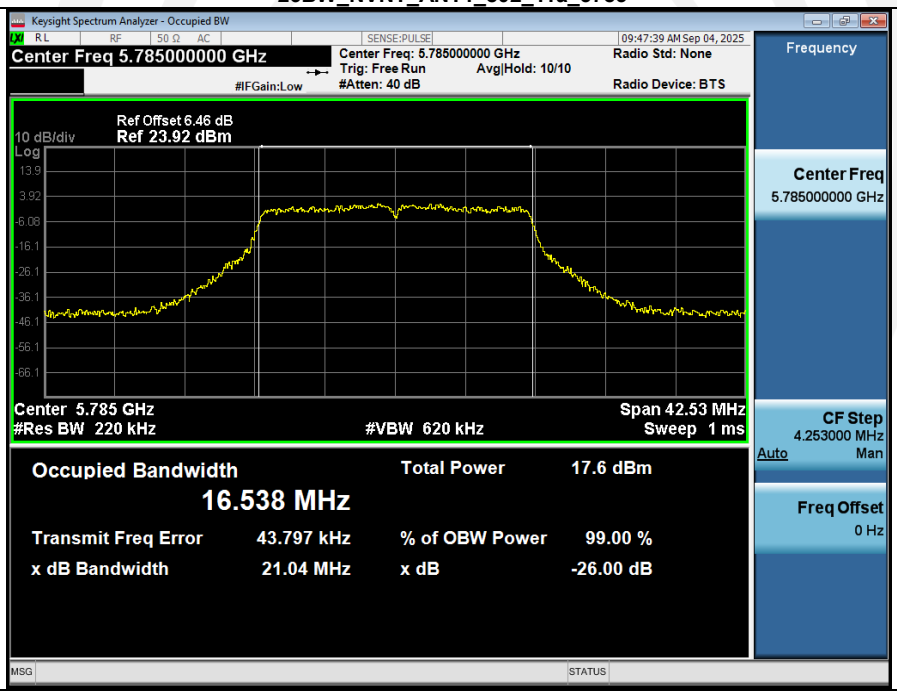

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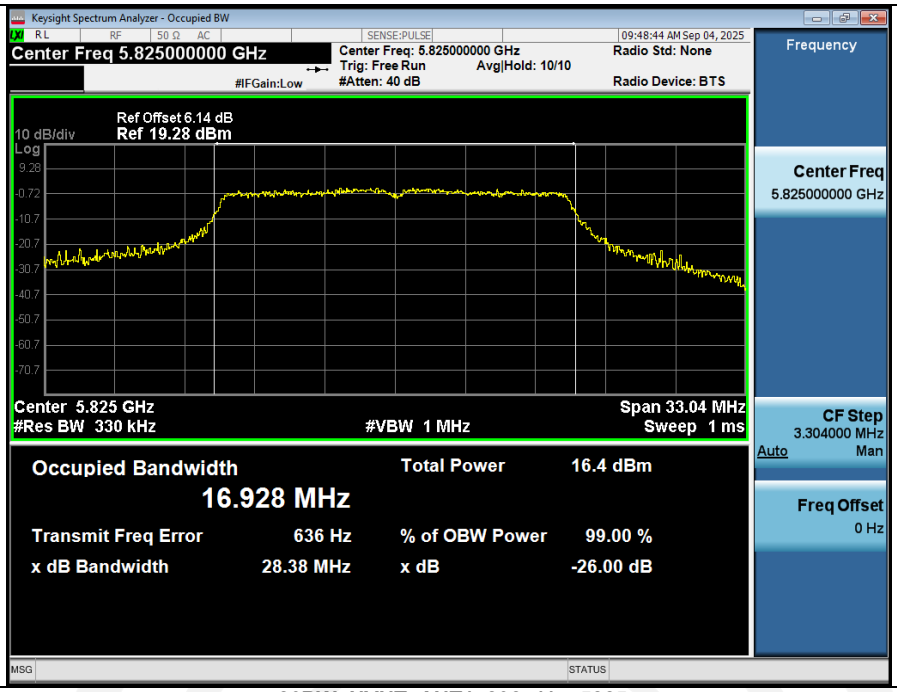

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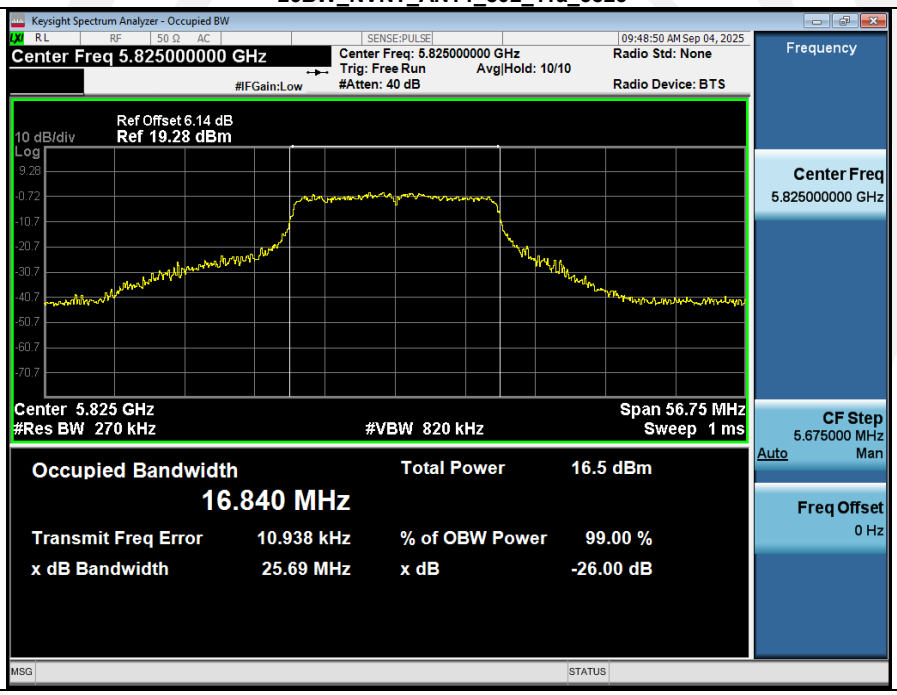

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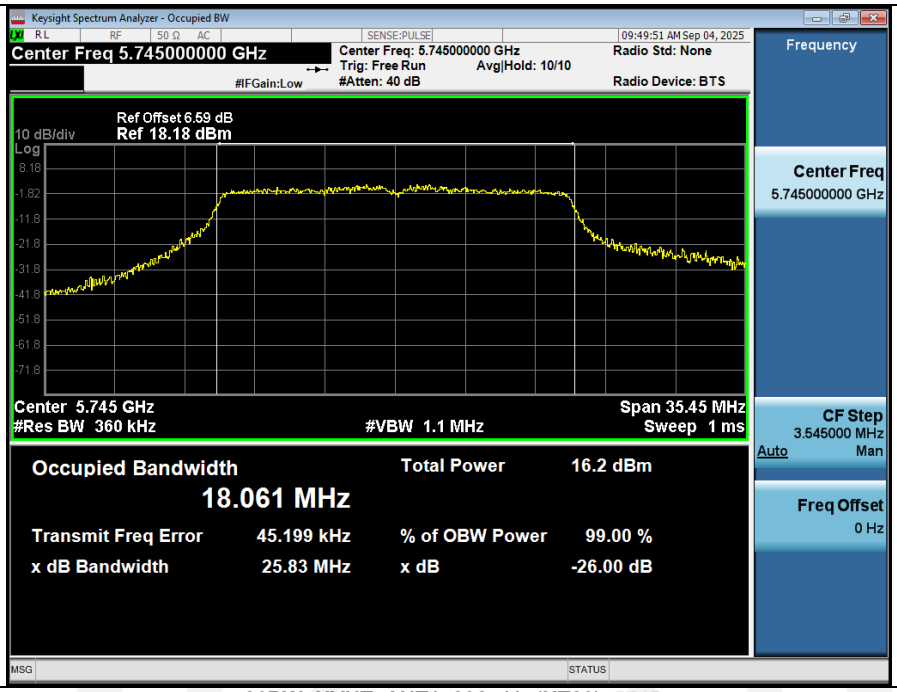

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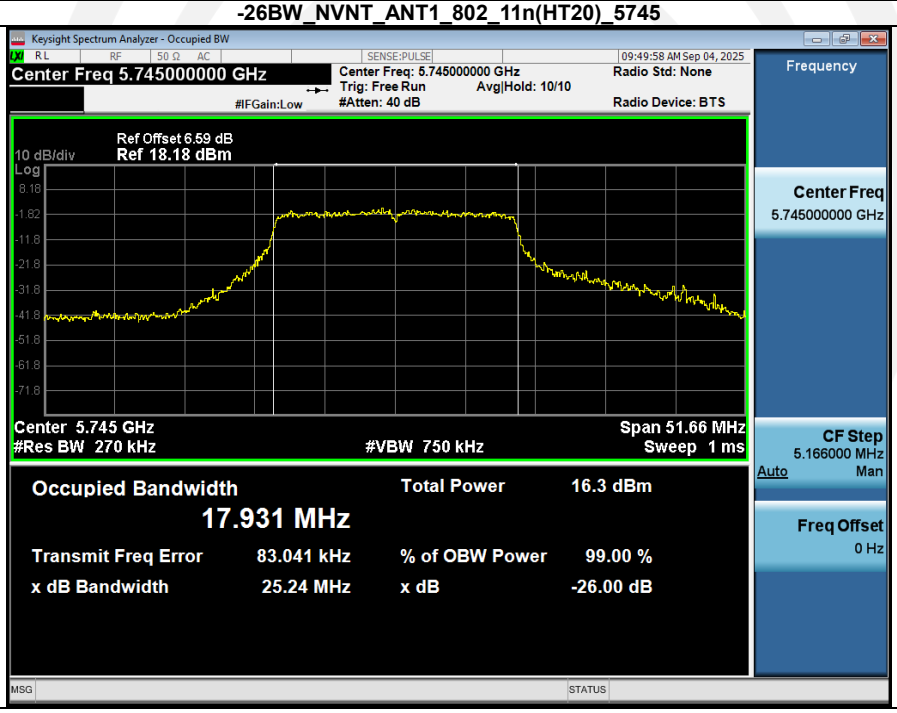

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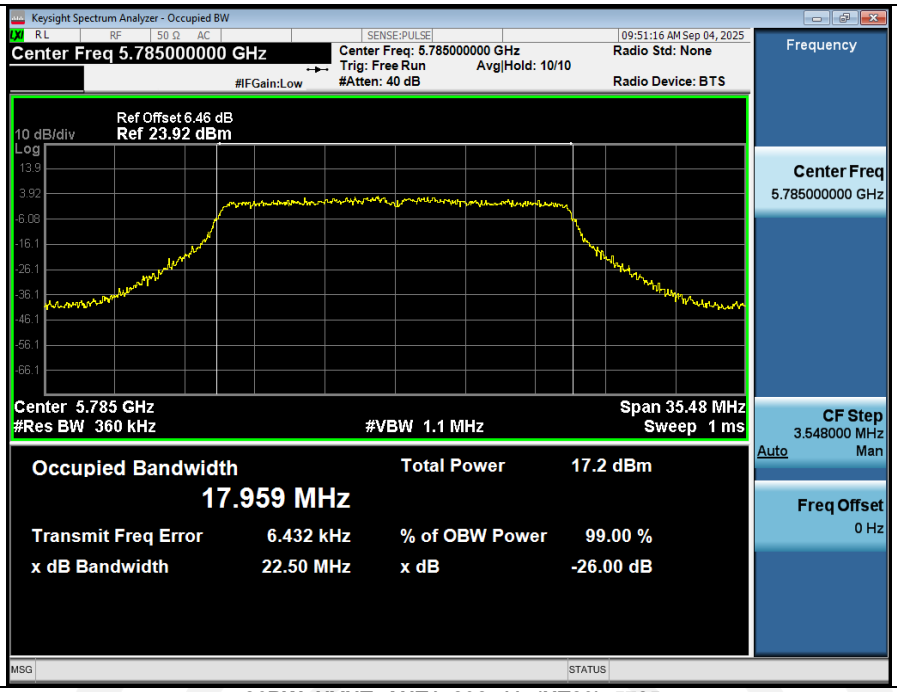

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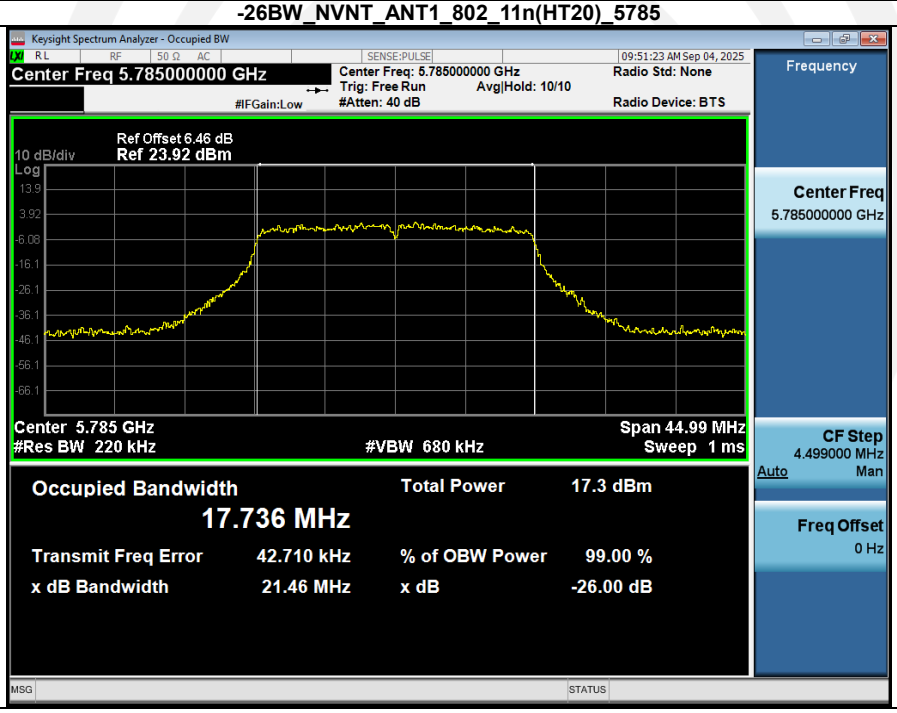

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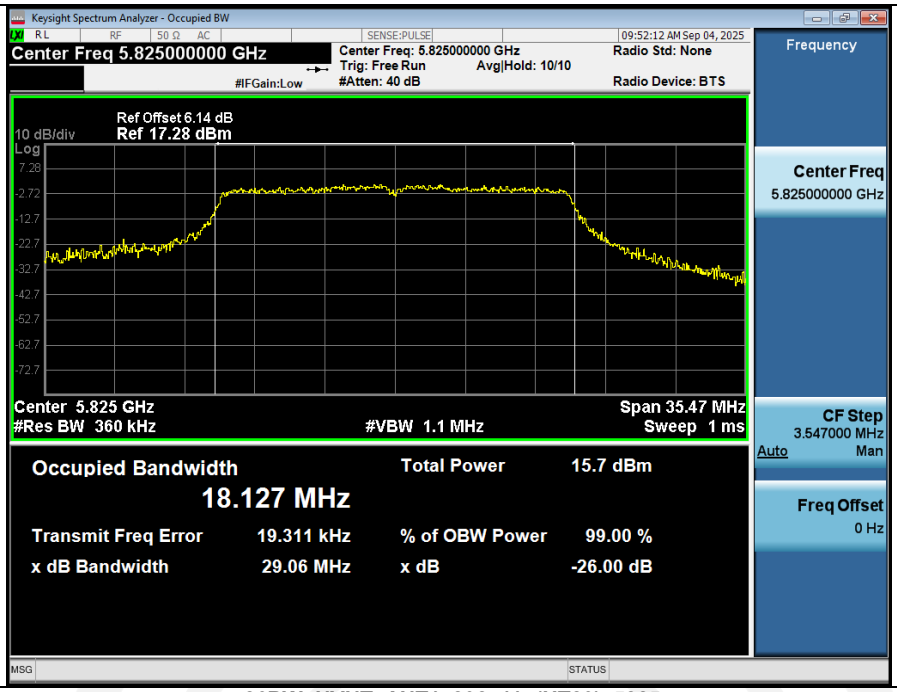

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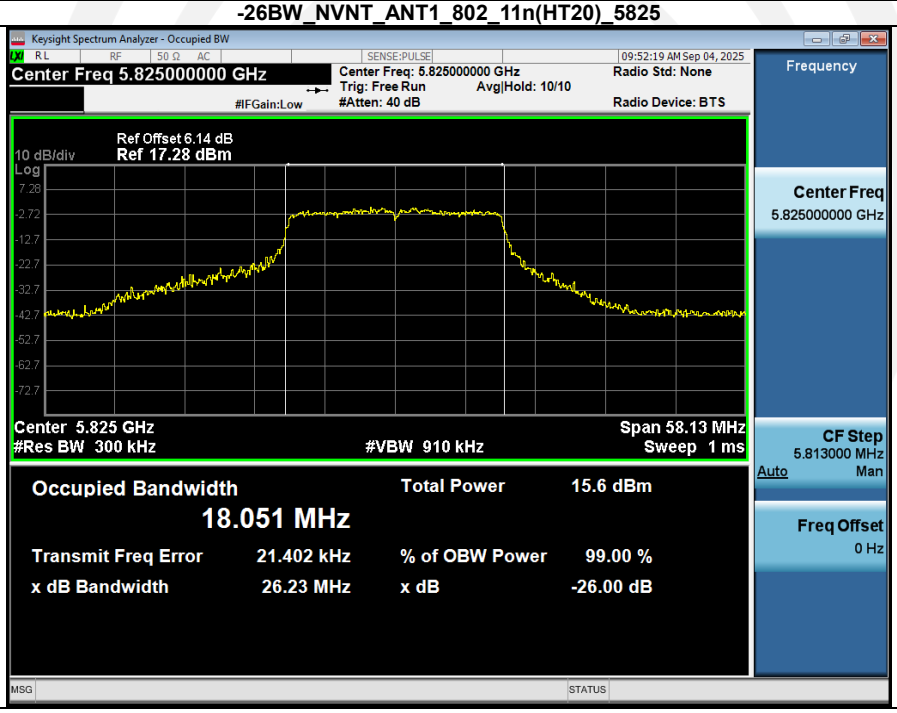

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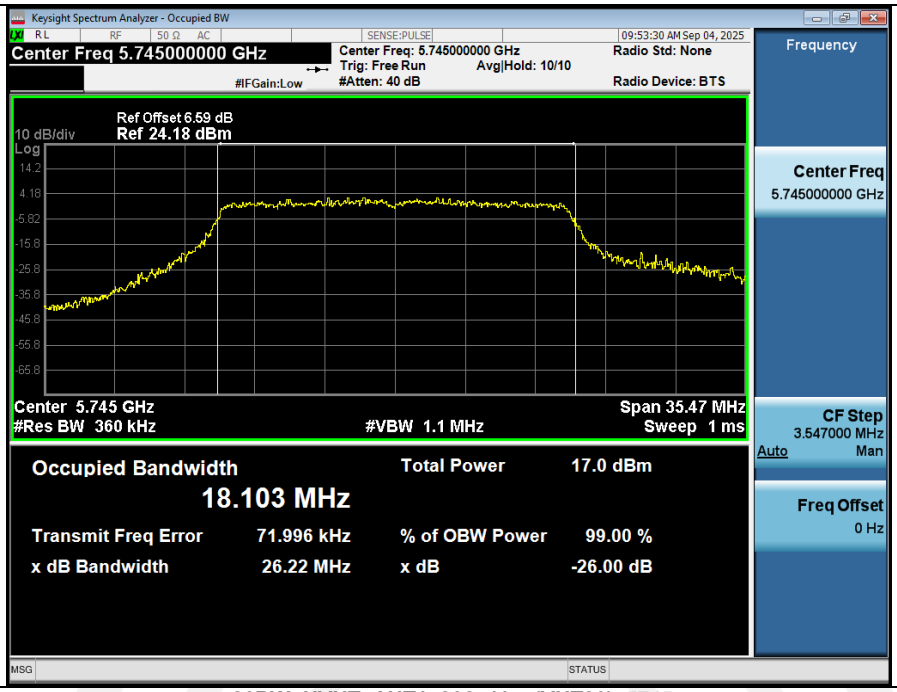

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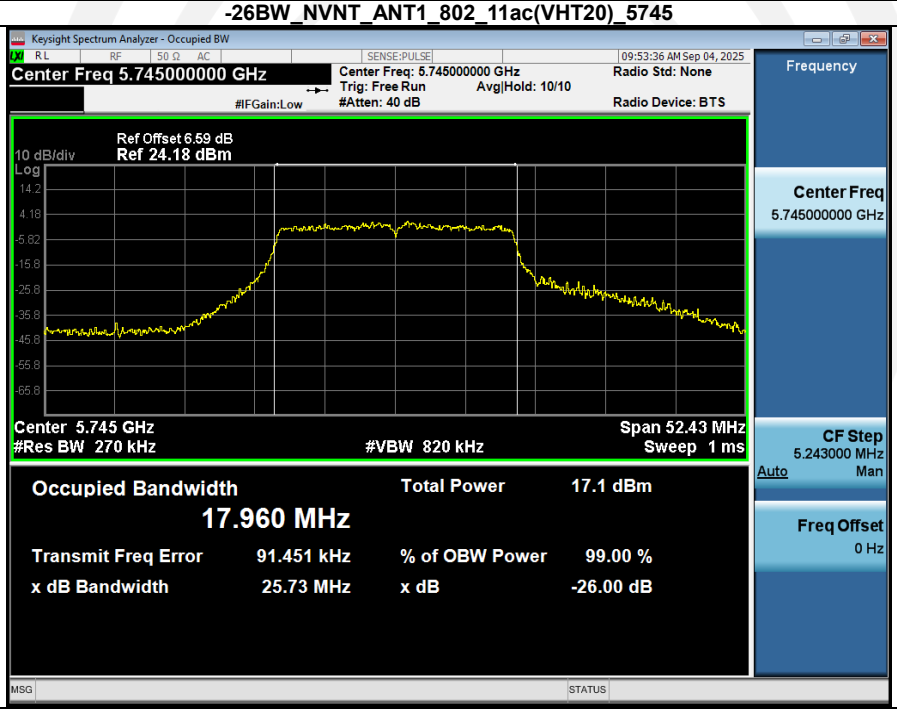

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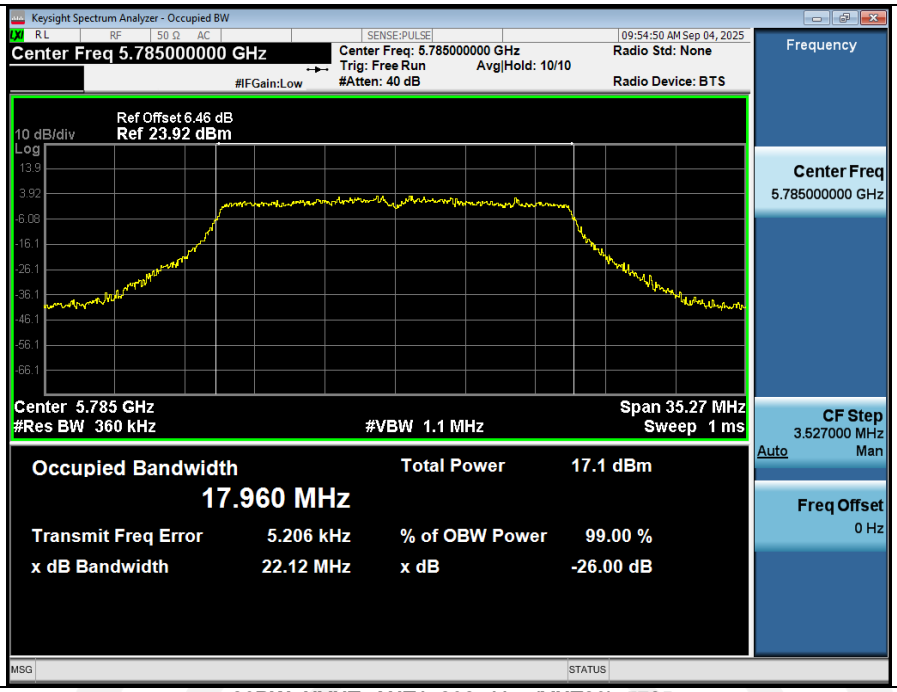

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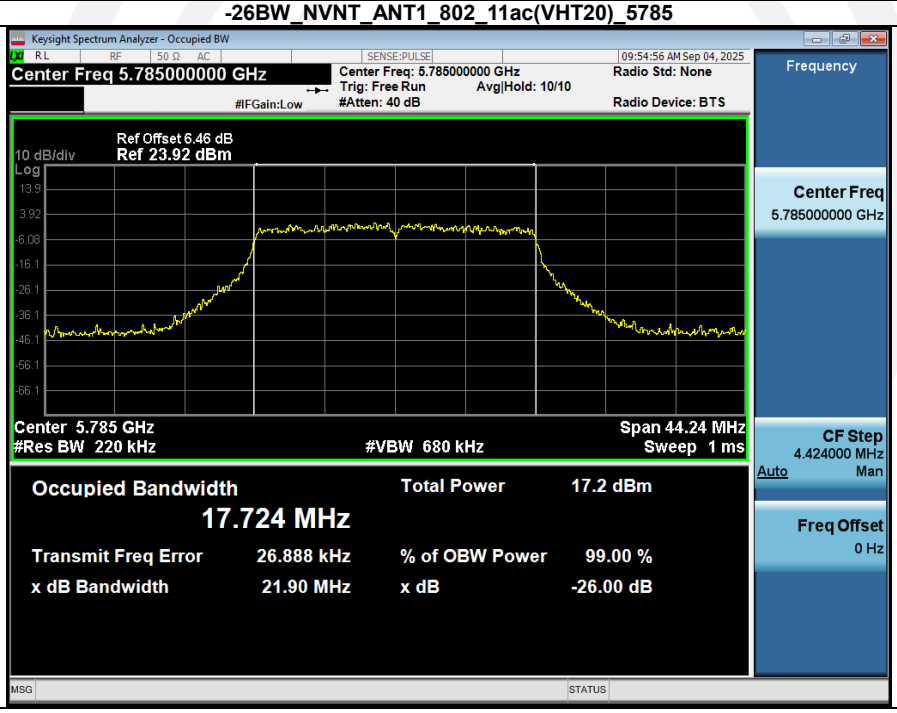

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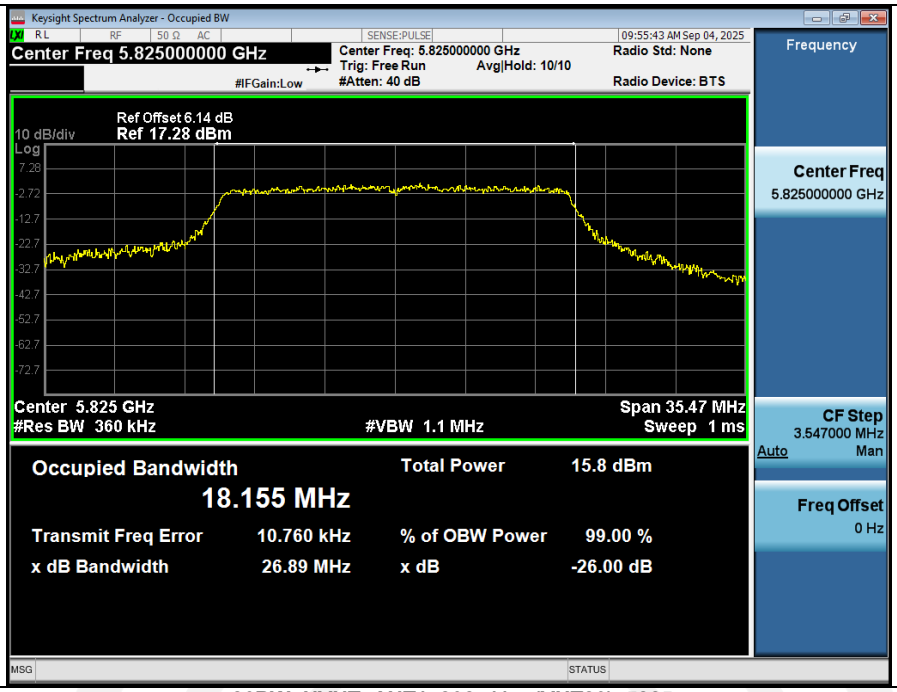

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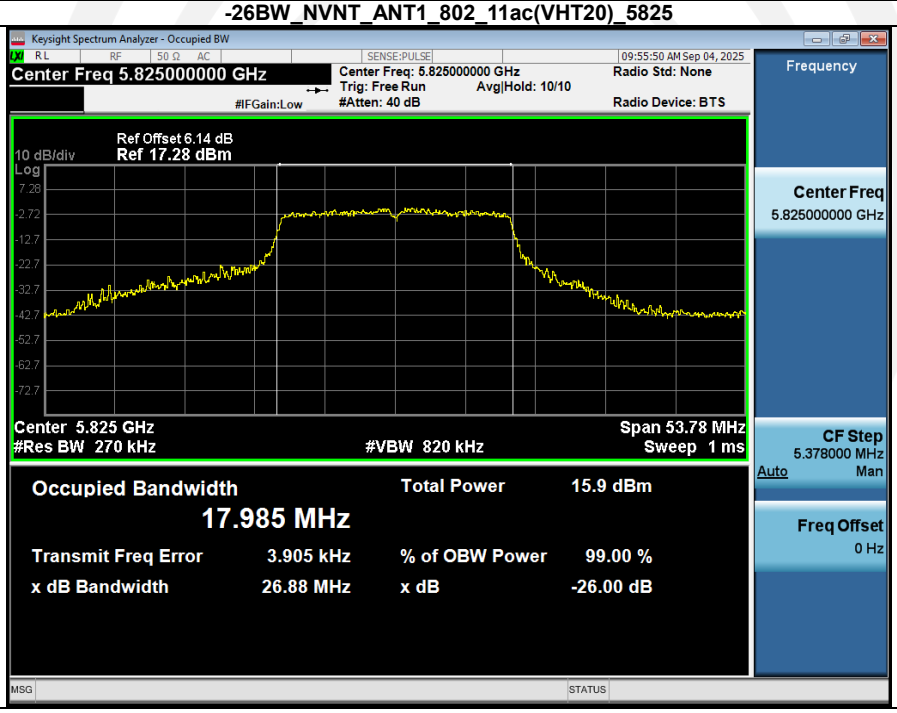

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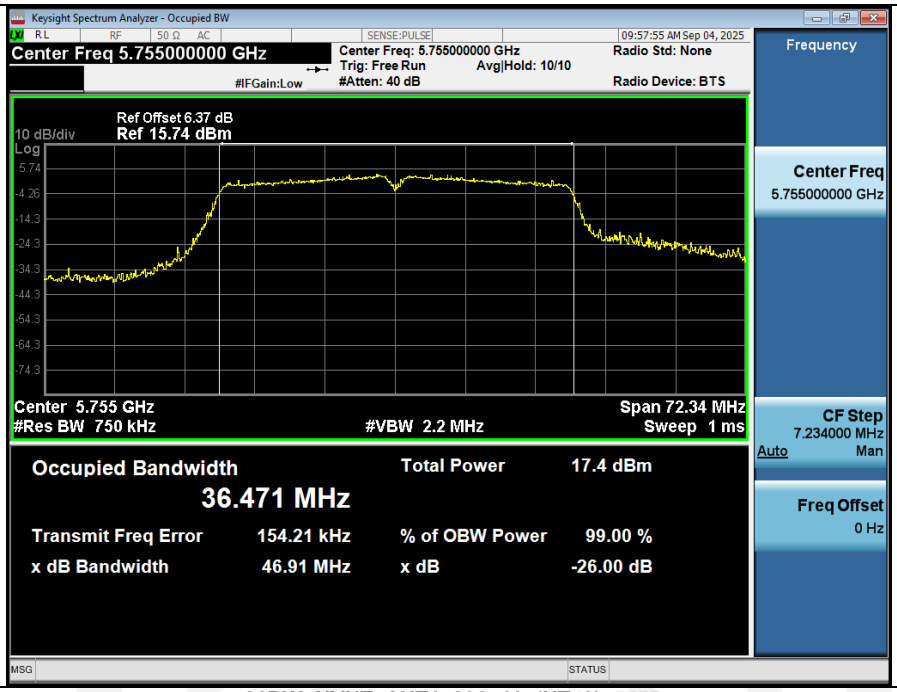

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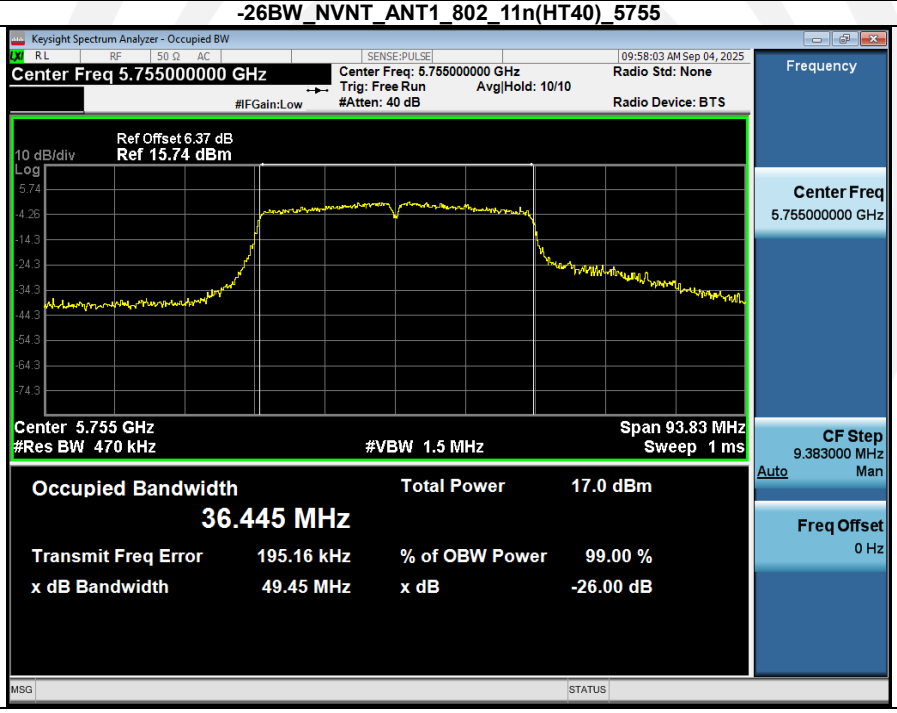

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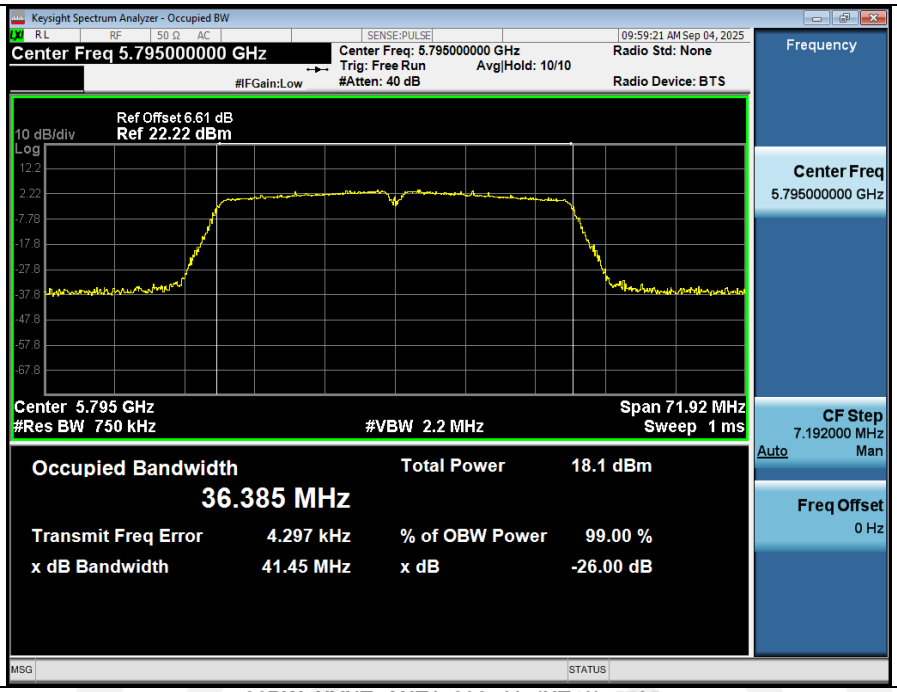

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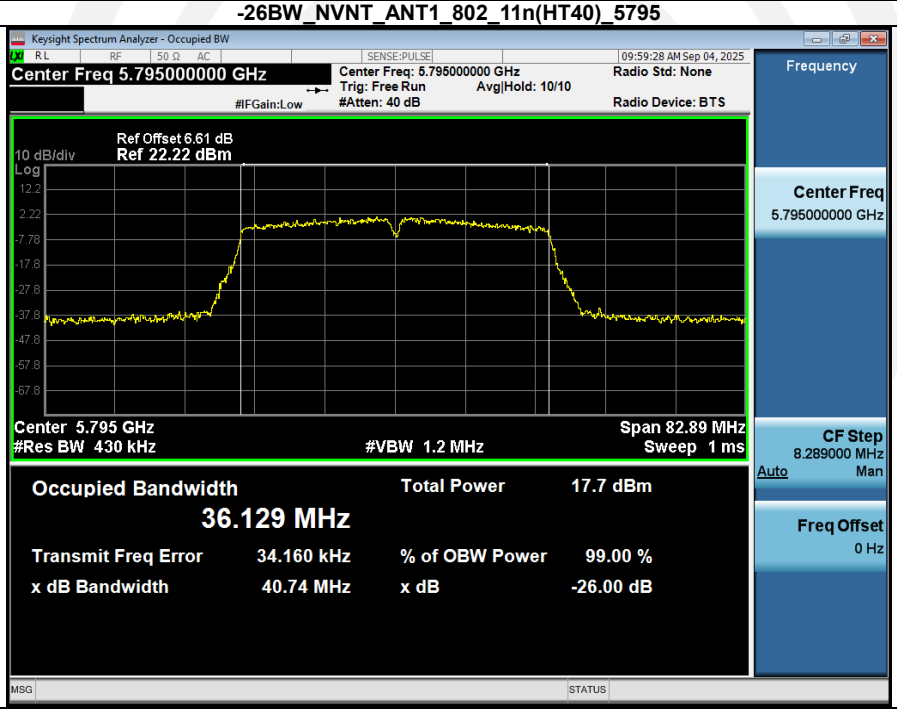
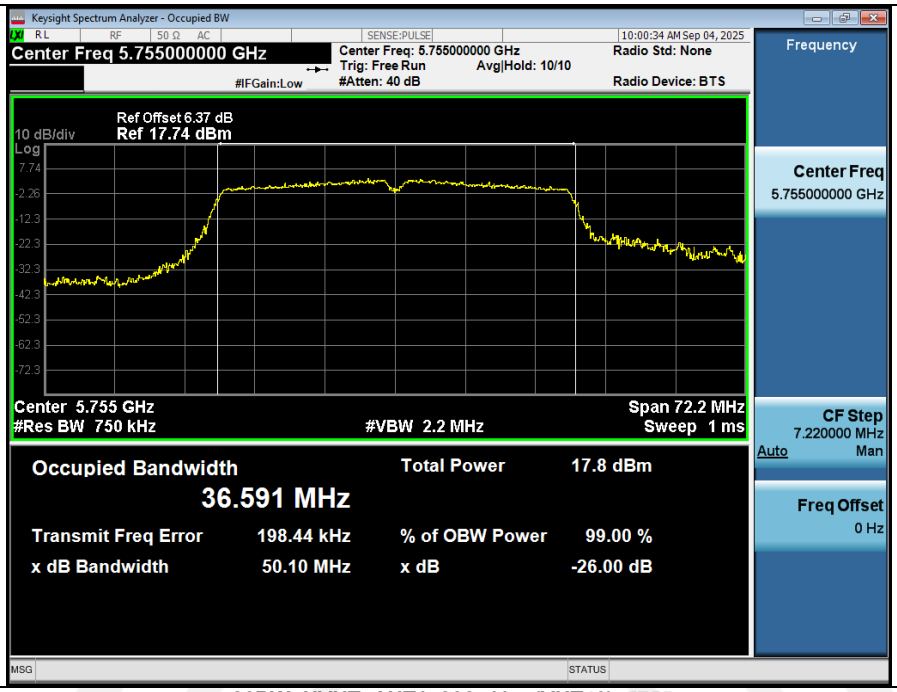


99%_OCB_NVNT_ANT1_802_11ac(VHT40)_5755



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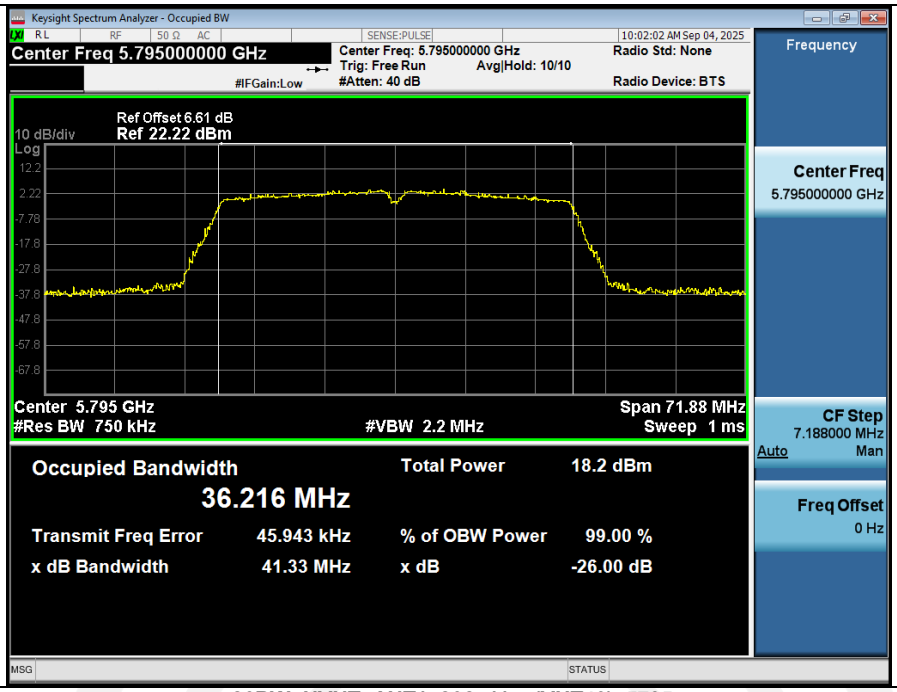
99%_OCB_NVNT_ANT1_802_11ac(VHT40)_5795



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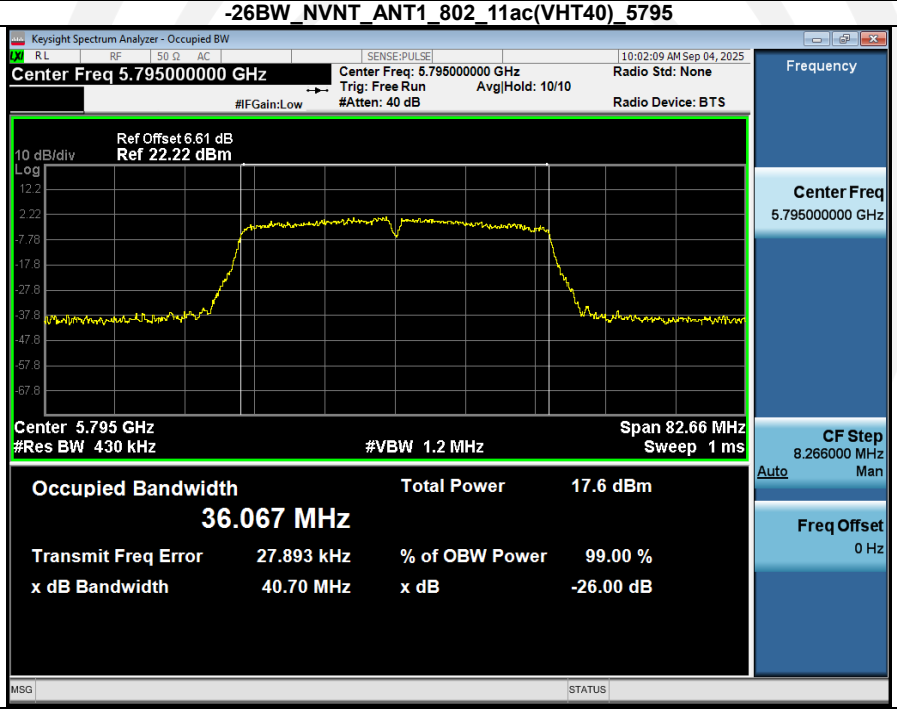
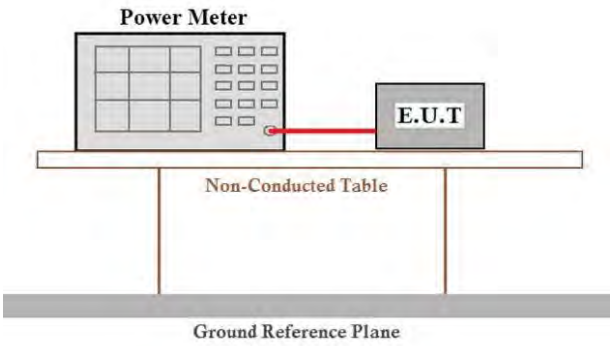


4.4 Maximum Conducted Output Power

Test Requirement:	FCC Part15 E Section 15.407, RSS-247 §6.2
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	For the band 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 250mW. For the band 5.725-5.85GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 1W. IC: For the 5.15–5.25 GHz band, For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. For the 5.25–5.35 GHz band, Other than devices installed in vehicles, the maximum conducted output power shall not exceed 250 mW or 11 + 10 log10 B, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10 B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. For the 5.47–5.6 GHz and 5.65–5.725 GHz band, the maximum conducted output power shall not exceed 250 mW or 11 + 10 log10 B, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10 B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance. If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
Test setup:	
Test procedure:	**Measurement using an RF average power meter** (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the

	conditions listed below are satisfied a) The EUT is configured to transmit continuously or to transmit with a constant duty cycle. b) At all times when the EUT is transmitting, it must be transmitting at its maximum power control level. c) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five. (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section B). (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter. (iv) Adjust the measurement in dBm by adding 10 log(1/x) where x is the duty cycle (e.g., 10log(1/0.25) if the duty cycle is 25 percent).
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

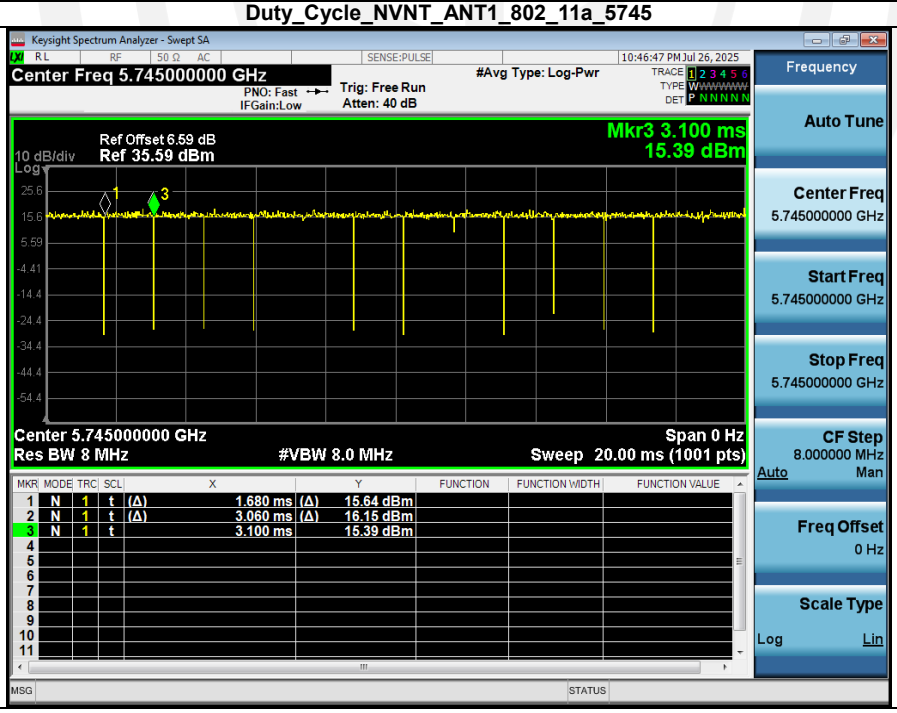
Measurement Data:

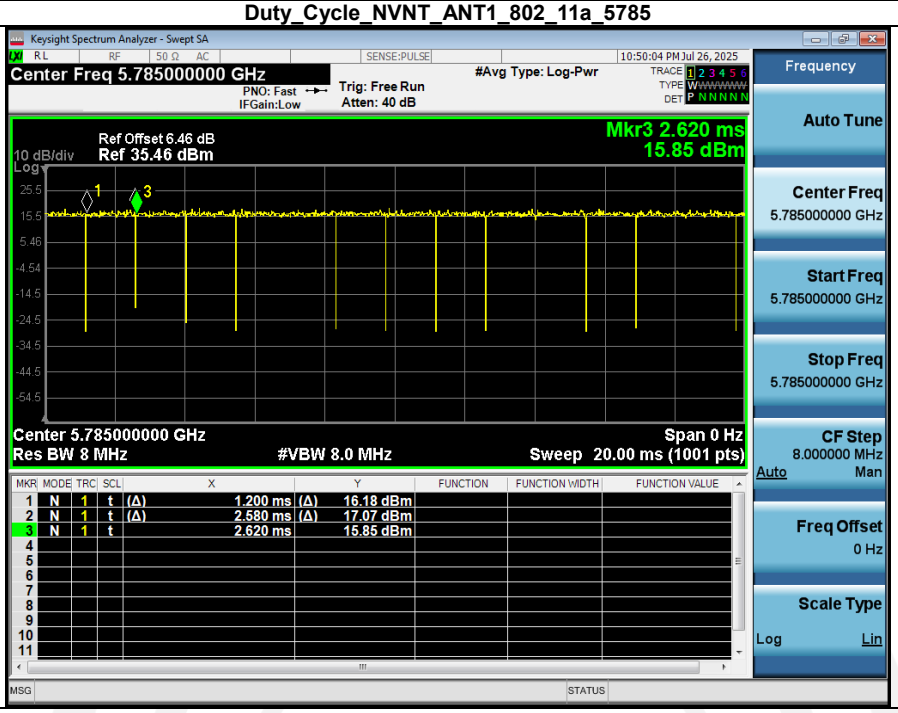
Band 4 (5725 – 5850 MHz)

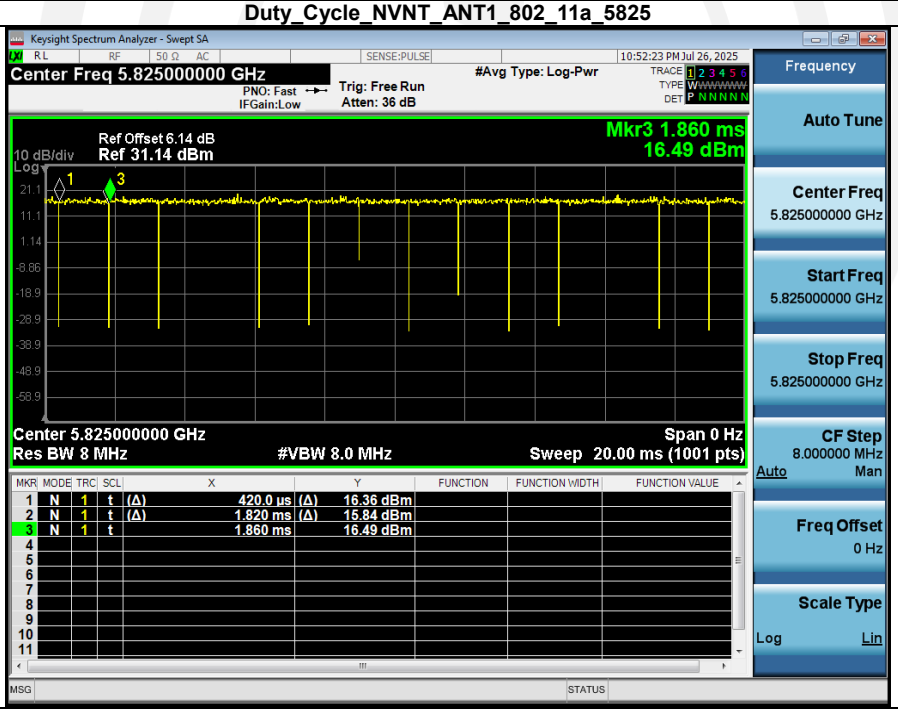
Condition	Antenna	Modulation	Frequency (MHz)	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11a	5745.00	12.07	0.12	12.19	30	Pass
NVNT	ANT1	802.11a	5785.00	12.15	0.12	12.27	30	Pass
NVNT	ANT1	802.11a	5825.00	12.82	0.12	12.94	30	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	12.08	0.13	12.21	30	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	11.98	0.13	12.11	30	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	13.31	0.13	13.44	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	14.44	0.13	14.57	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	14.83	0.13	14.96	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	15.40	0.13	15.53	30	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	13.98	0.26	14.24	30	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	15.07	0.26	15.33	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	13.85	0.26	14.11	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	14.86	0.26	15.12	30	Pass

Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty_factor
NVNT	ANT1	802.11a	5745.00	97.18	0.12
NVNT	ANT1	802.11a	5785.00	97.18	0.12
NVNT	ANT1	802.11a	5825.00	97.22	0.12
NVNT	ANT1	802.11n(HT20)	5745.00	97.01	0.13
NVNT	ANT1	802.11n(HT20)	5785.00	97.01	0.13
NVNT	ANT1	802.11n(HT20)	5825.00	97.01	0.13
NVNT	ANT1	802.11ac(VHT20)	5745.00	98.50	0.00
NVNT	ANT1	802.11ac(VHT20)	5785.00	97.01	0.13
NVNT	ANT1	802.11ac(VHT20)	5825.00	97.01	0.13
NVNT	ANT1	802.11n(HT40)	5755.00	97.10	0.13
NVNT	ANT1	802.11n(HT40)	5795.00	94.12	0.26
NVNT	ANT1	802.11ac(VHT40)	5755.00	94.12	0.26
NVNT	ANT1	802.11ac(VHT40)	5795.00	94.12	0.26

Duty_Cycle_NVNT_ANT1_802_11a_5745



Duty_Cycle_NVNT_ANT1_802_11a_5785


Duty_Cycle_NVNT_ANT1_802_11a_5825


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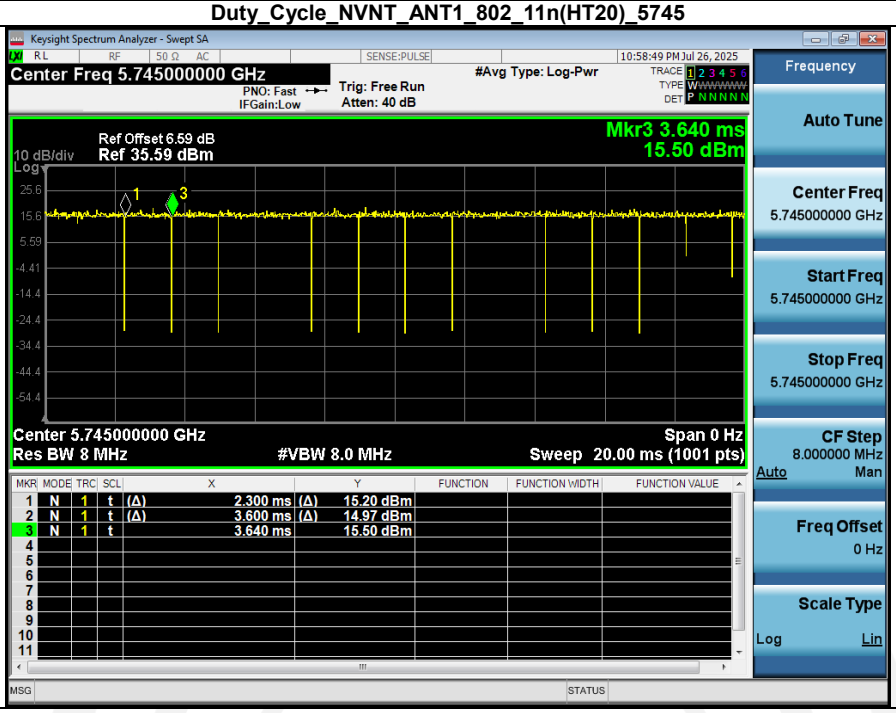

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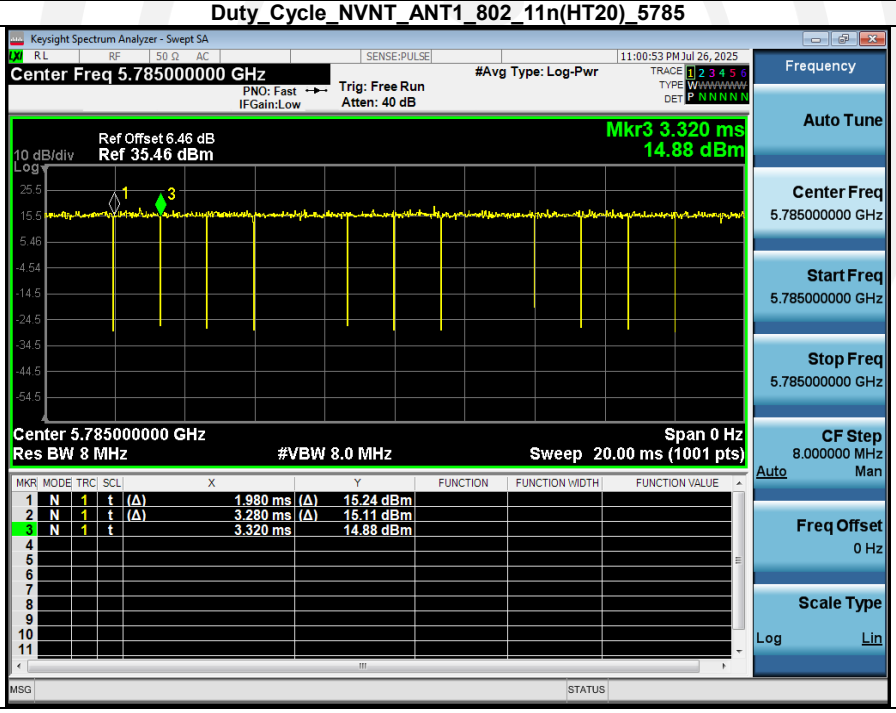
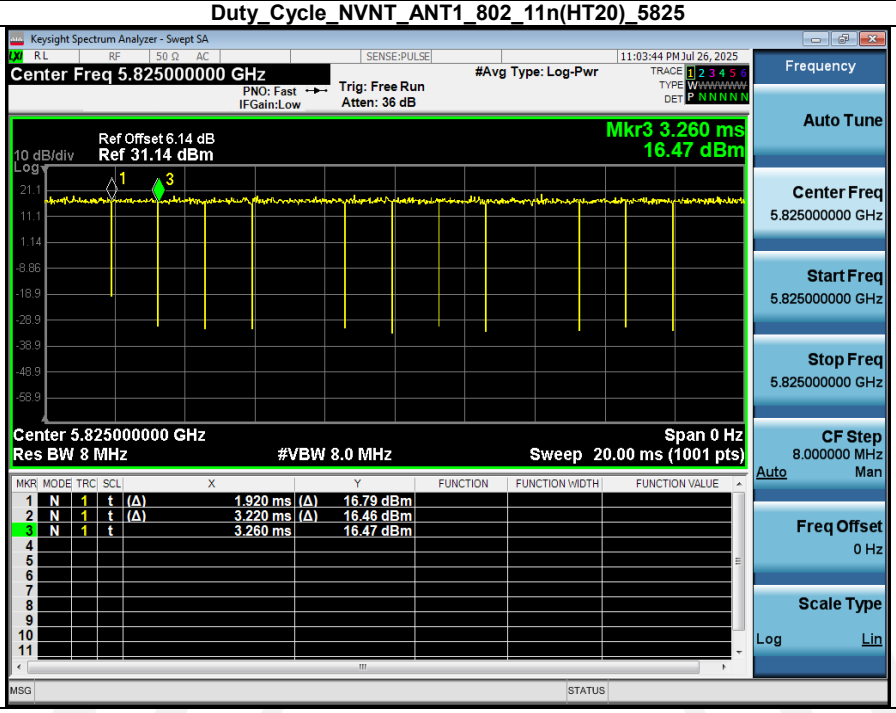
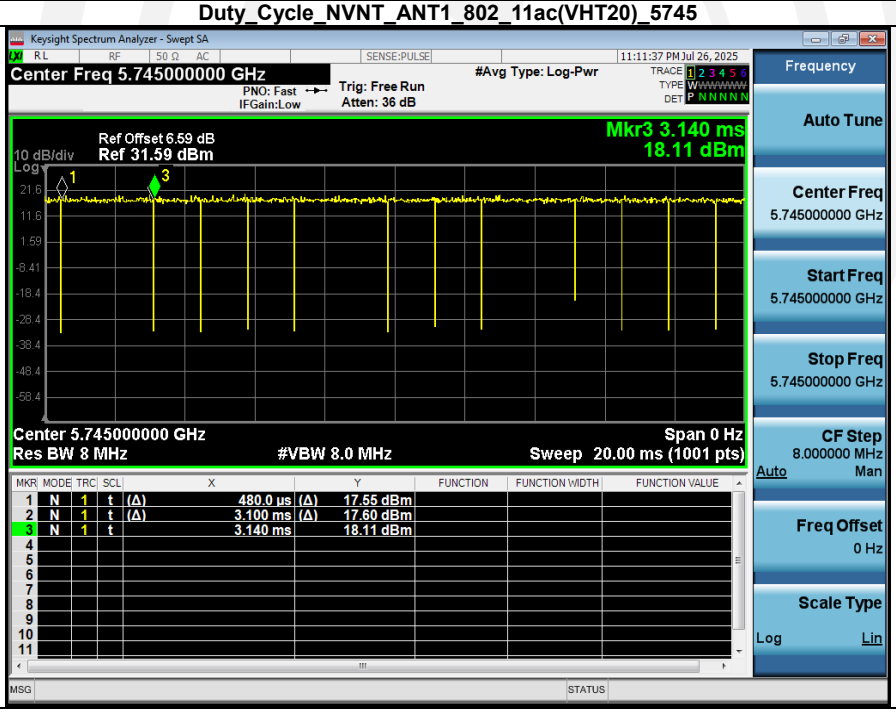


Duty_Cycle_NVNT_ANT1_802_11n(HT20)_5825



Duty_Cycle_NVNT_ANT1_802_11ac(VHT20)_5745



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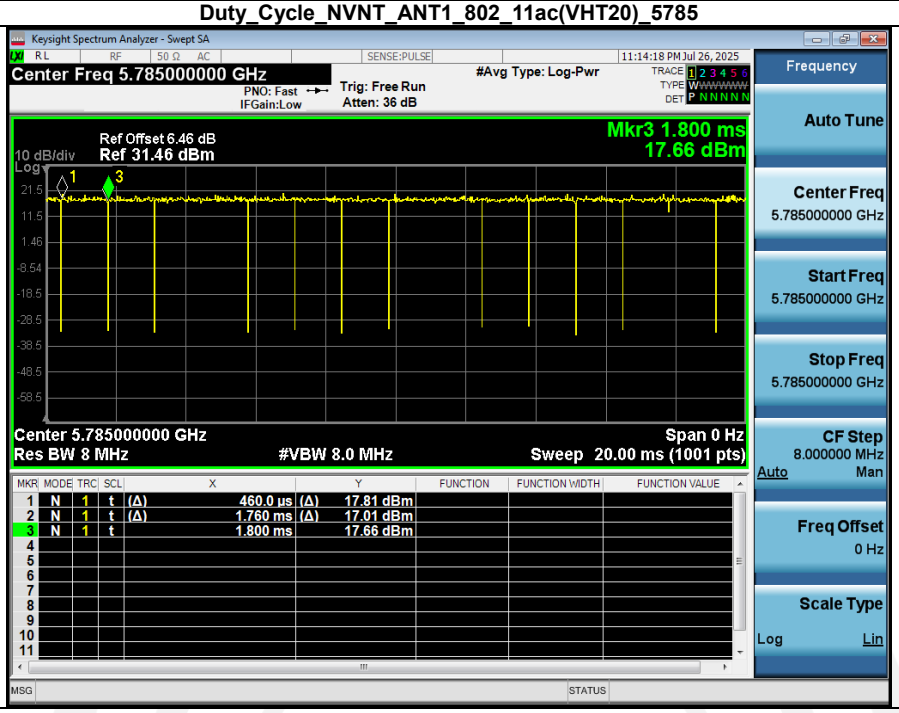

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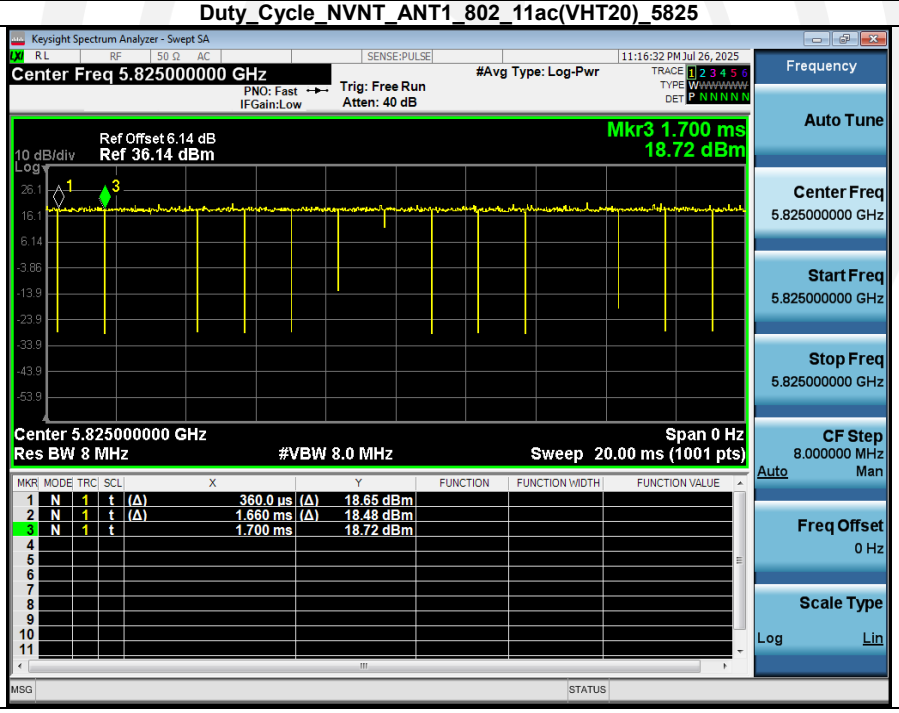

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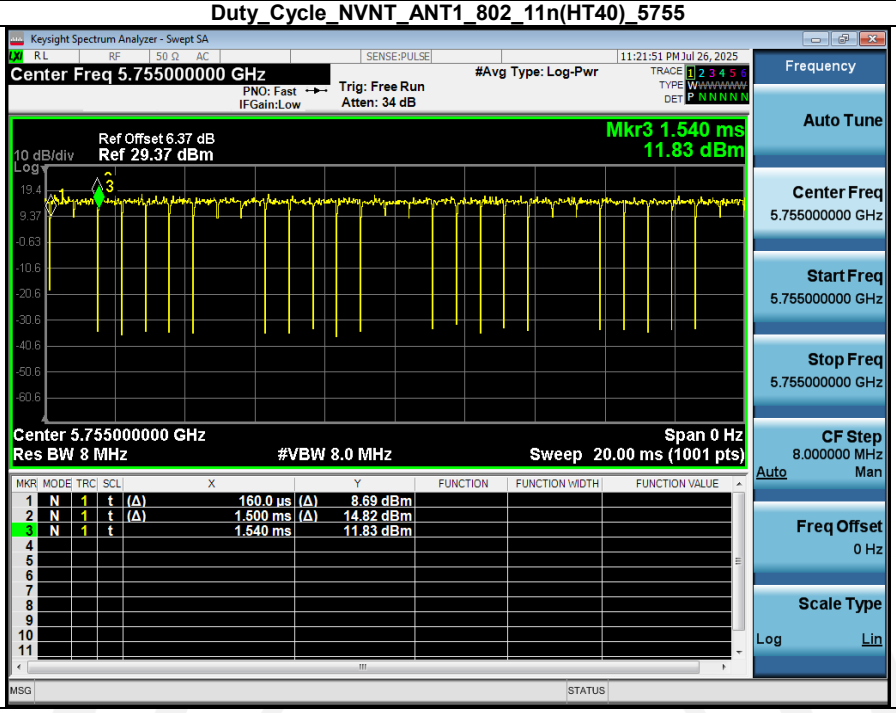

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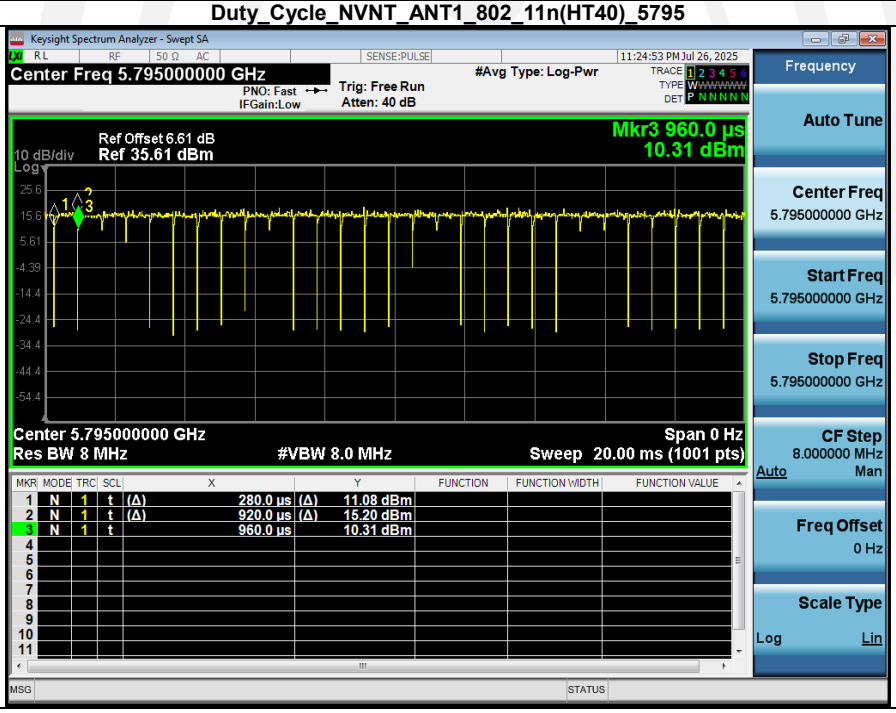

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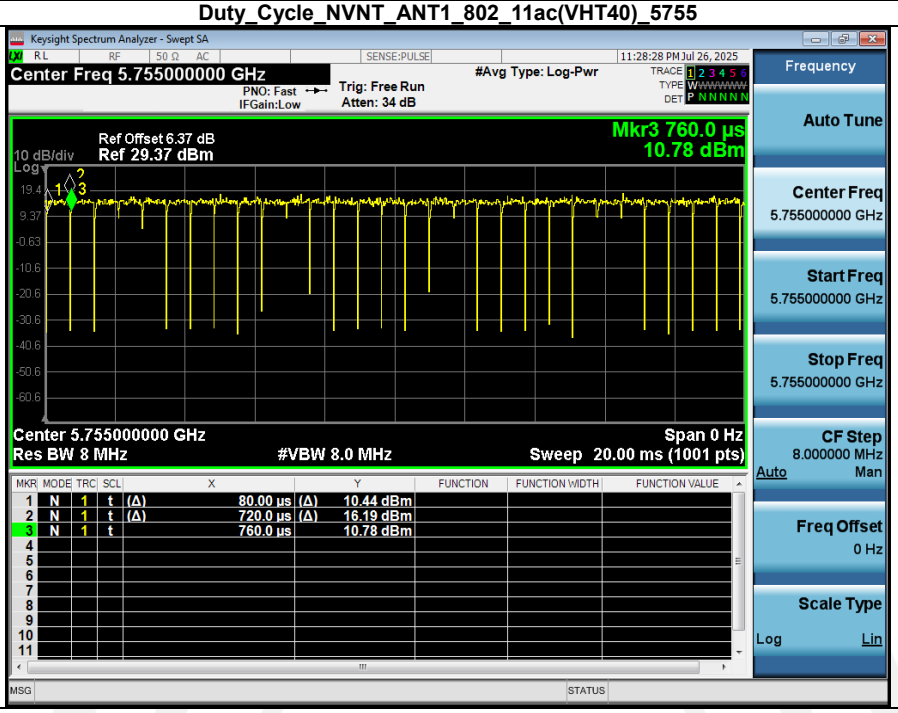

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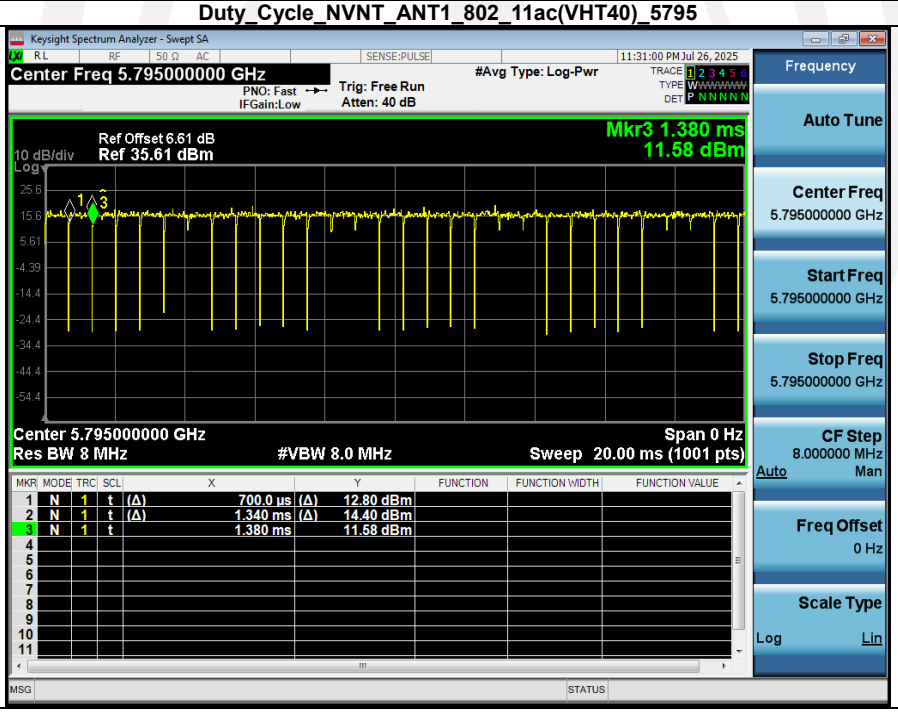
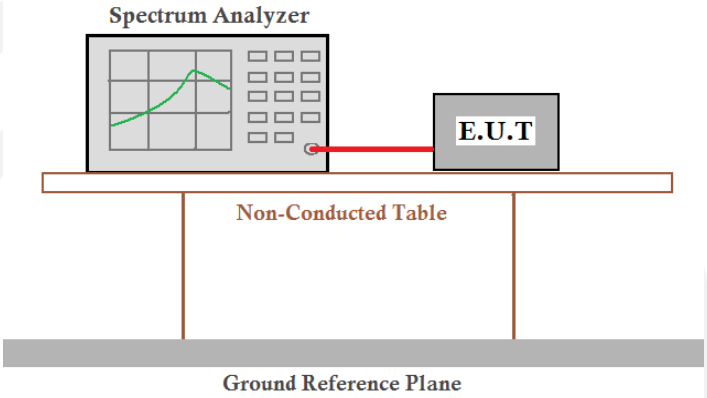


4.5 Power Spectral Density

Test Requirement:	FCC Part15 E Section 15.407, RSS-247 §6.2
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	FCC: 1.≤11.00dBm/MHz for 5150MHz-5250MHz, 5250-5350MHz and 5470-5725 MHz 2.≤30.00dBm/500KHz for 5725MHz-5850MHz IC: 1.For the 5.15-5.25 GHz, The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band. 2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.
Test setup:	
Test procedure:	1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, “Compute power…”. 2) Use the peak search function on the instrument to find the peak of the spectrum. 3) Make the following adjustments to the peak value of the spectrum, if applicable: a) If Method SA-2 or SA-2 Alternative was used, add 10 log(1/x), where x is the duty cycle, to the peak of the spectrum. b) If Method SA-3 Alternative was used and the linear mode was used in step E)2)g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging. 4) The result is the PSD.
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Measurement Data

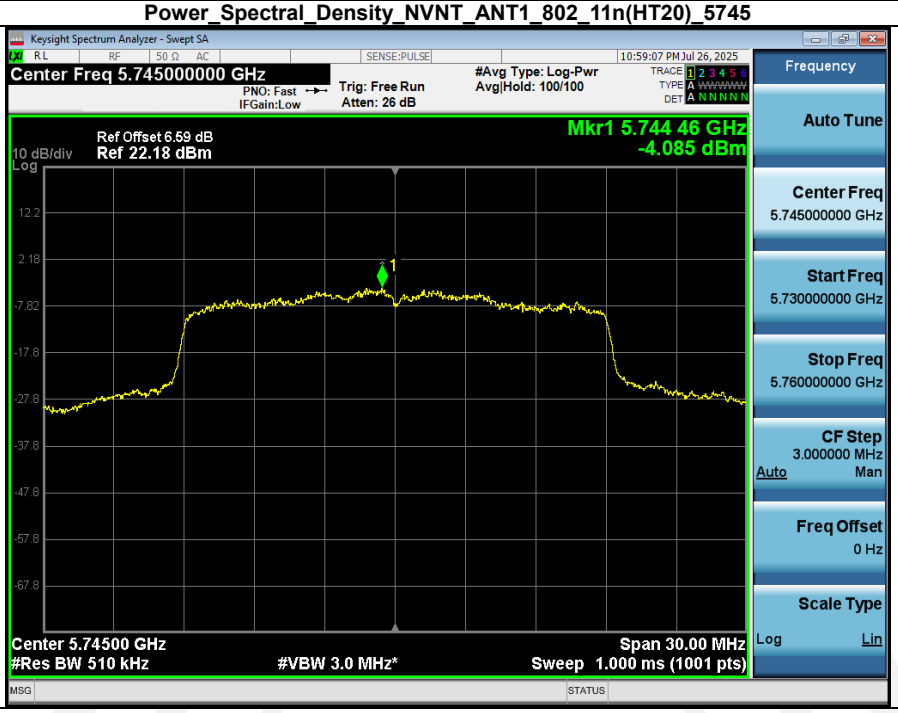
Band 4 (5725 – 5850 MHz)

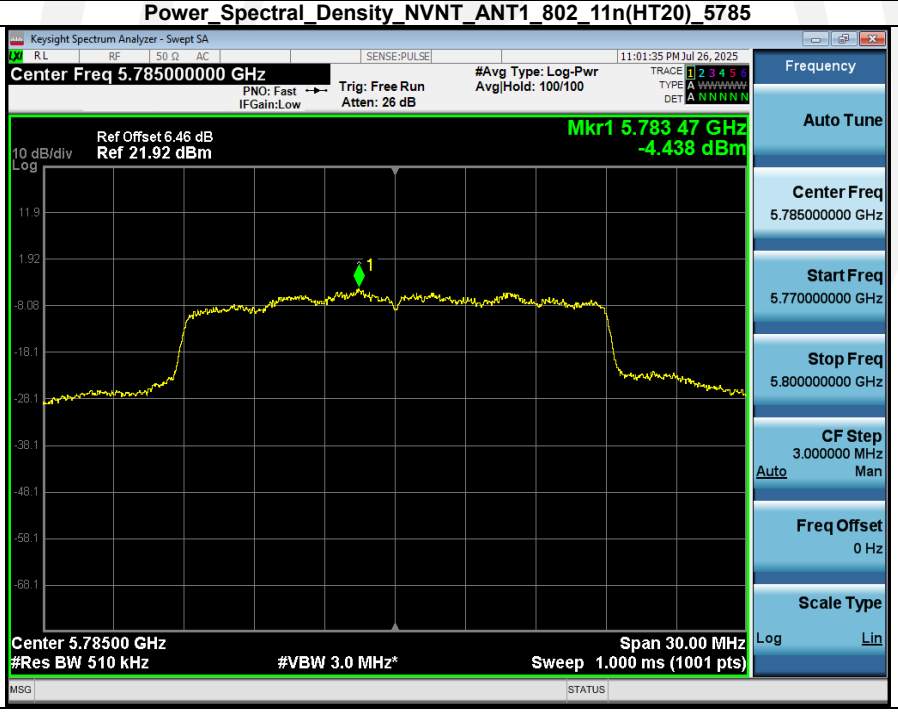
Condition	Antenna	Modulation	Frequency (MHz)	PSD_SA (dBm/RBW)	Duty factor (dB)	RB factor(dB)	PSD (dBm/500kHz)	Limit (dBm/500kHz)	Result
NVNT	ANT1	802.11a	5745.00	-3.76	0.12	-0	-3.72	30	Pass
NVNT	ANT1	802.11a	5785.00	-4.07	0.12	-0	-4.03	30	Pass
NVNT	ANT1	802.11a	5825.00	-3.51	0.12	-0	-3.47	30	Pass
NVNT	ANT1	802.11n(HT20)	5745.00	-4.08	0.13	-0	-4.04	30	Pass
NVNT	ANT1	802.11n(HT20)	5785.00	-4.44	0.13	-0	-4.39	30	Pass
NVNT	ANT1	802.11n(HT20)	5825.00	-2.54	0.13	-0	-2.49	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5745.00	-2.38	0.00	-0	-2.47	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5785.00	-1.58	0.13	-0	-1.54	30	Pass
NVNT	ANT1	802.11ac(VHT20)	5825.00	-1.05	0.13	-0	-1.00	30	Pass
NVNT	ANT1	802.11n(HT40)	5755.00	-5.98	0.13	-0	-5.94	30	Pass
NVNT	ANT1	802.11n(HT40)	5795.00	-5.24	0.26	-0	-5.06	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5755.00	-6.78	0.26	-0	-6.60	30	Pass
NVNT	ANT1	802.11ac(VHT40)	5795.00	-5.59	0.26	-0	-5.42	30	Pass

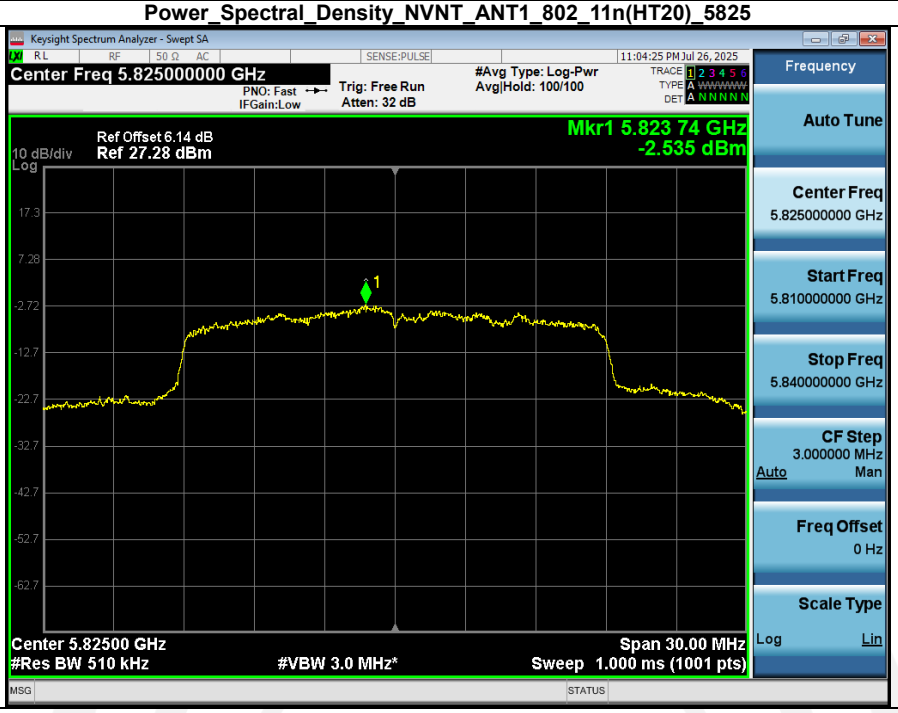
Power_Spectral_Density_NVNT_ANT1_802_11a_5745

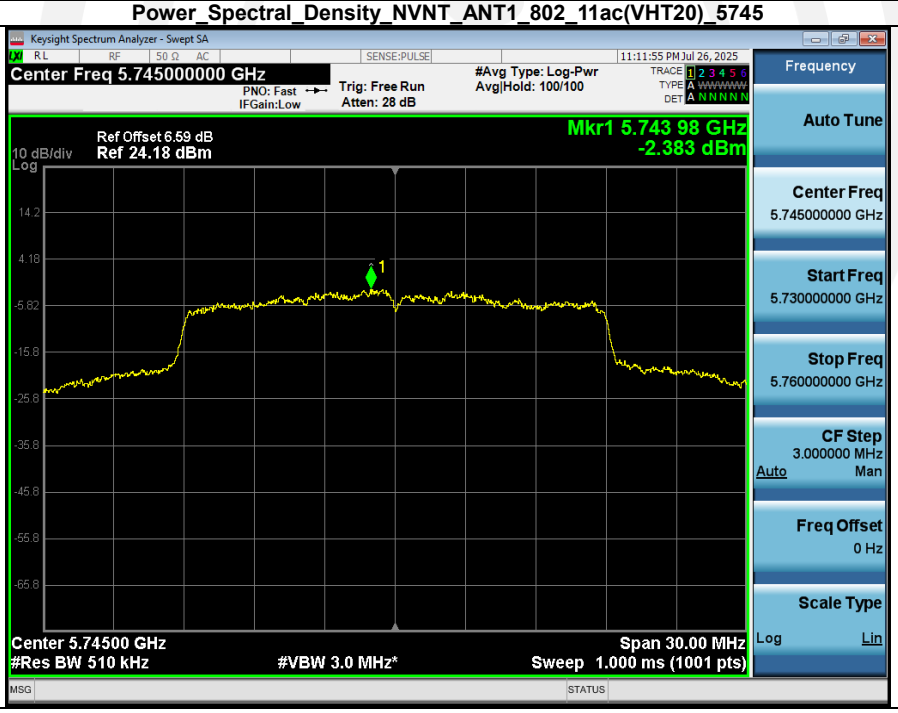
Power_Spectral_Density_NVNT_ANT1_802_11a_5785


Power_Spectral_Density_NVNT_ANT1_802_11a_5825


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5745


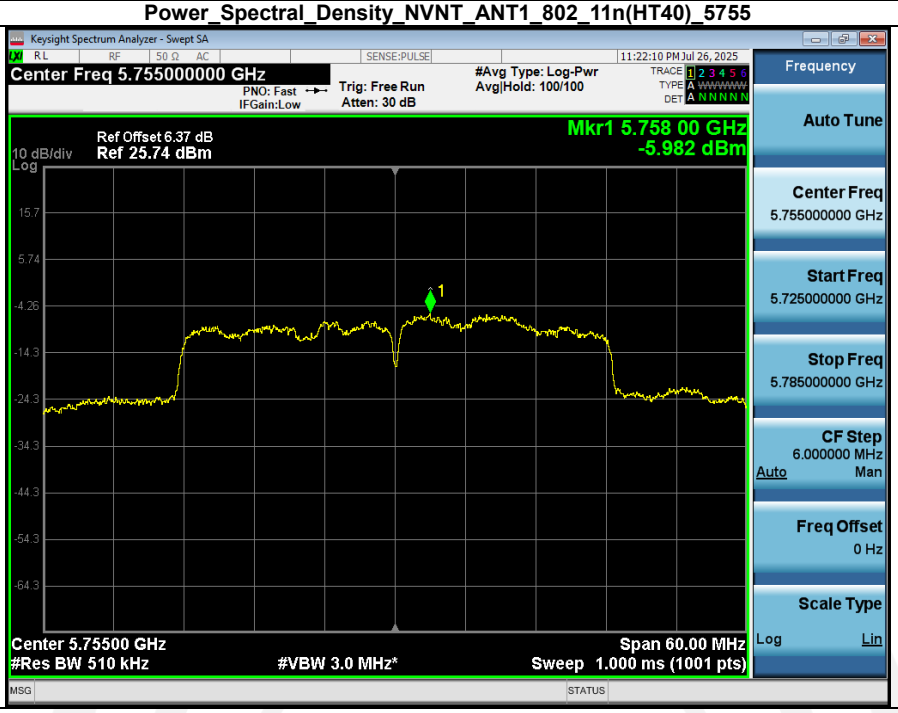
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5785


Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_5825


Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT20)_5745


Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT20)_5785


Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT20)_5825


Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_5755


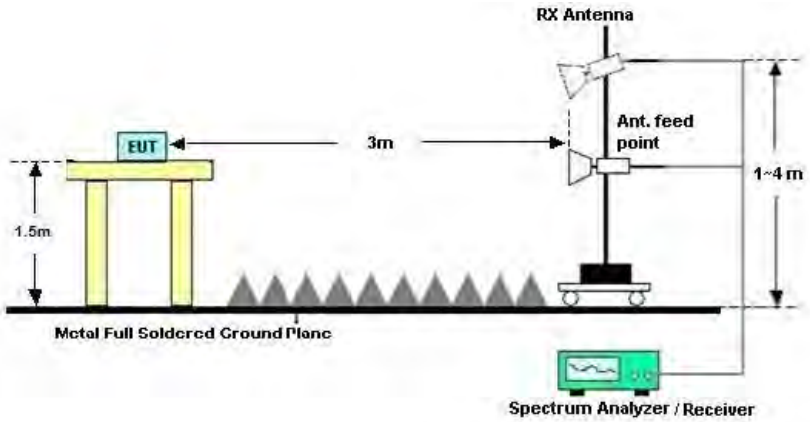
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_5795


Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT40)_5755


Power_Spectral_Density_NVNT_ANT1_802_11ac(VHT40)_5795


4.6 Band Edge

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 E Section 15.407 and 15.205, RSS-Gen §8.9</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m (Semi-Anechoic Chamber)</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Remark</th></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>AV</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><th>Frequency</th><th>Limit (dBuV/m @3m)</th><th>Remark</th></tr>
<tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr>
<tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr>
<tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr>
<tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>54.0</td><td>Average Value</td></tr>
<tr><td>68.2</td><td>Peak Value</td></tr>
</table>
Undesirable emission limits:
(1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.
(2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.
(3) For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of −27 dBm/MHz.
(4) For transmitters operating in the 5.725-5.85 GHz band:
All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
</td></tr>
<tr><td>Test Procedure:</td><td>
a. The EUT was placed on the top of a rotating table 1.5 m above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values
</td></tr>
</table>

	of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test setup:	Above 1GHz 
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

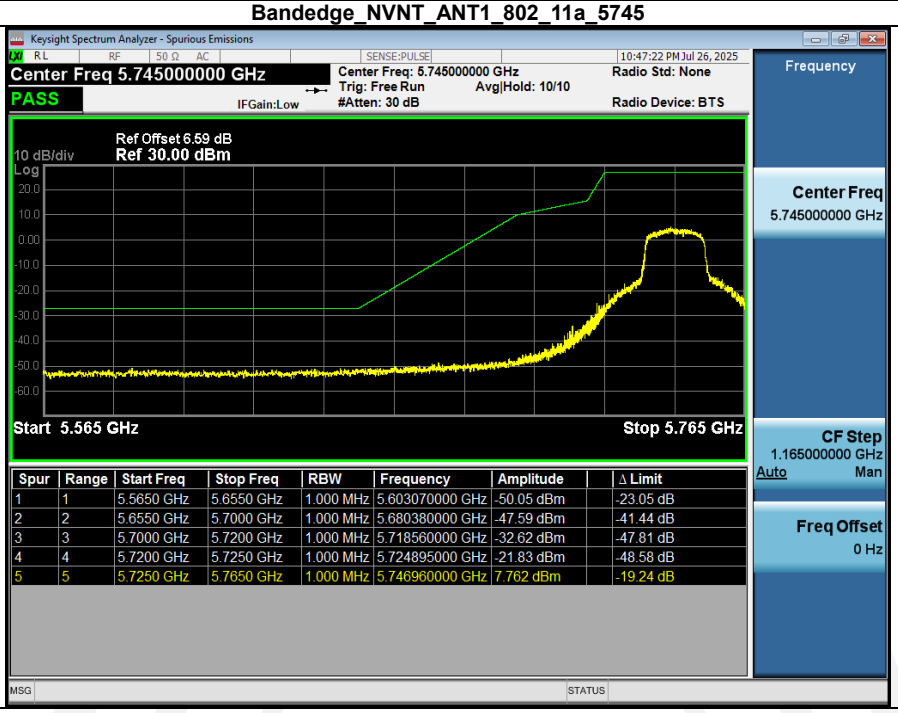
Remark:
According to KDB 789033 D02 v02r01 section G) 1) (d), for For measurements above 1000 MHz @ 3m distance, the limit of field strength is computed as follows:
E[dBuV/m] = EIRP[dBm] + 95.2,
For example, if EIRP = -27dBm
E[dBuV/m] = -27 + 95.2 = 68.2dBuV/m.

Measurement Data:

Band4

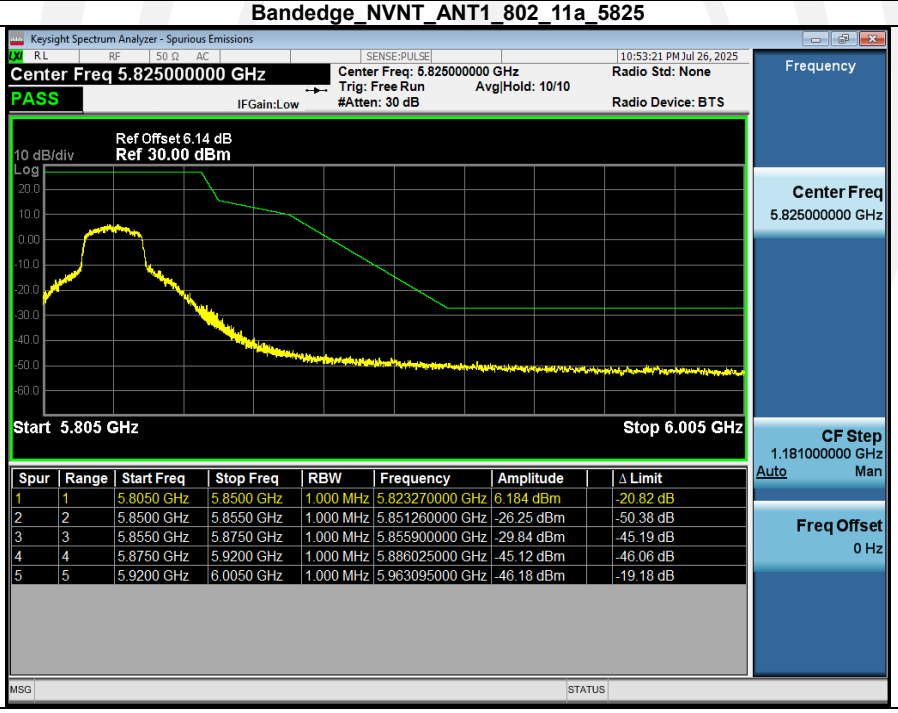
Condition	Antenna	Modulation	TX_Frequency (MHz)	Frequency Area(MHz)	Frequency(MHz)	Amplitude(dBm)	Limit(dBm)	Result
NVNT	ANT1	802.11a	LCH	5565-5655	5603.070	-50.05	-27.00	Pass
NVNT	ANT1	802.11a	LCH	5655-5700	5680.380	-47.59	-6.13	Pass
NVNT	ANT1	802.11a	LCH	5700-5720	5718.560	-32.62	15.20	Pass
NVNT	ANT1	802.11a	LCH	5720-5725	5724.895	-21.83	26.76	Pass
NVNT	ANT1	802.11a	HCH	5850-5855	5851.260	-26.25	24.13	Pass
NVNT	ANT1	802.11a	HCH	5855-5875	5855.900	-29.84	15.35	Pass
NVNT	ANT1	802.11a	HCH	5875-5920	5886.025	-45.12	0.94	Pass
NVNT	ANT1	802.11a	HCH	5920-6005	5963.095	-46.18	-27.00	Pass
NVNT	ANT1	802.11n(HT20)	LCH	5565-5655	5645.730	-49.74	-27.00	Pass
NVNT	ANT1	802.11n(HT20)	LCH	5655-5700	5697.975	-47.05	8.34	Pass
NVNT	ANT1	802.11n(HT20)	LCH	5700-5720	5719.620	-31.14	15.49	Pass
NVNT	ANT1	802.11n(HT20)	LCH	5720-5725	5724.625	-23.98	26.15	Pass
NVNT	ANT1	802.11n(HT20)	HCH	5850-5855	5852.250	-23.91	21.87	Pass
NVNT	ANT1	802.11n(HT20)	HCH	5855-5875	5855.320	-27.03	15.51	Pass
NVNT	ANT1	802.11n(HT20)	HCH	5875-5920	5882.425	-43.38	3.89	Pass
NVNT	ANT1	802.11n(HT20)	HCH	5920-6005	5981.455	-45.26	-27.00	Pass
NVNT	ANT1	802.11ac(VHT20)	LCH	5565-5655	5611.890	-50.49	-27.00	Pass
NVNT	ANT1	802.11ac(VHT20)	LCH	5655-5700	5699.460	-35.35	9.56	Pass
NVNT	ANT1	802.11ac(VHT20)	LCH	5700-5720	5718.880	-21.93	15.29	Pass
NVNT	ANT1	802.11ac(VHT20)	LCH	5720-5725	5723.630	-17.88	23.88	Pass
NVNT	ANT1	802.11ac(VHT20)	HCH	5850-5855	5852.205	-17.19	21.97	Pass
NVNT	ANT1	802.11ac(VHT20)	HCH	5855-5875	5858.920	-19.93	14.50	Pass
NVNT	ANT1	802.11ac(VHT20)	HCH	5875-5920	5882.425	-31.95	3.89	Pass
NVNT	ANT1	802.11ac(VHT20)	HCH	5920-6005	5928.755	-43.61	-27.00	Pass
NVNT	ANT1	802.11n(HT40)	LCH	5595-5655	5654.940	-44.25	-27.00	Pass
NVNT	ANT1	802.11n(HT40)	LCH	5655-5700	5696.445	-29.31	7.08	Pass
NVNT	ANT1	802.11n(HT40)	LCH	5700-5720	5716.020	-18.47	14.49	Pass
NVNT	ANT1	802.11n(HT40)	LCH	5720-5725	5722.205	-15.38	20.63	Pass
NVNT	ANT1	802.11n(HT40)	HCH	5850-5855	5853.445	-20.12	19.15	Pass
NVNT	ANT1	802.11n(HT40)	HCH	5855-5875	5858.540	-21.48	14.61	Pass
NVNT	ANT1	802.11n(HT40)	HCH	5875-5920	5877.295	-26.30	8.11	Pass
NVNT	ANT1	802.11n(HT40)	HCH	5920-5955	5935.015	-32.68	-27.00	Pass
NVNT	ANT1	802.11ac(VHT40)	LCH	5595-5655	5651.640	-46.28	-27.00	Pass
NVNT	ANT1	802.11ac(VHT40)	LCH	5655-5700	5696.985	-28.26	7.52	Pass
NVNT	ANT1	802.11ac(VHT40)	LCH	5700-5720	5719.760	-17.57	15.53	Pass
NVNT	ANT1	802.11ac(VHT40)	LCH	5720-5725	5723.575	-15.16	23.75	Pass
NVNT	ANT1	802.11ac(VHT40)	HCH	5850-5855	5851.810	-19.24	22.87	Pass
NVNT	ANT1	802.11ac(VHT40)	HCH	5855-5875	5859.380	-21.39	14.37	Pass
NVNT	ANT1	802.11ac(VHT40)	HCH	5875-5920	5878.060	-27.84	7.48	Pass
NVNT	ANT1	802.11ac(VHT40)	HCH	5920-5955	5920.210	-33.80	-27.00	Pass

Bandedge_NVNT_ANT1_802_11a_5745



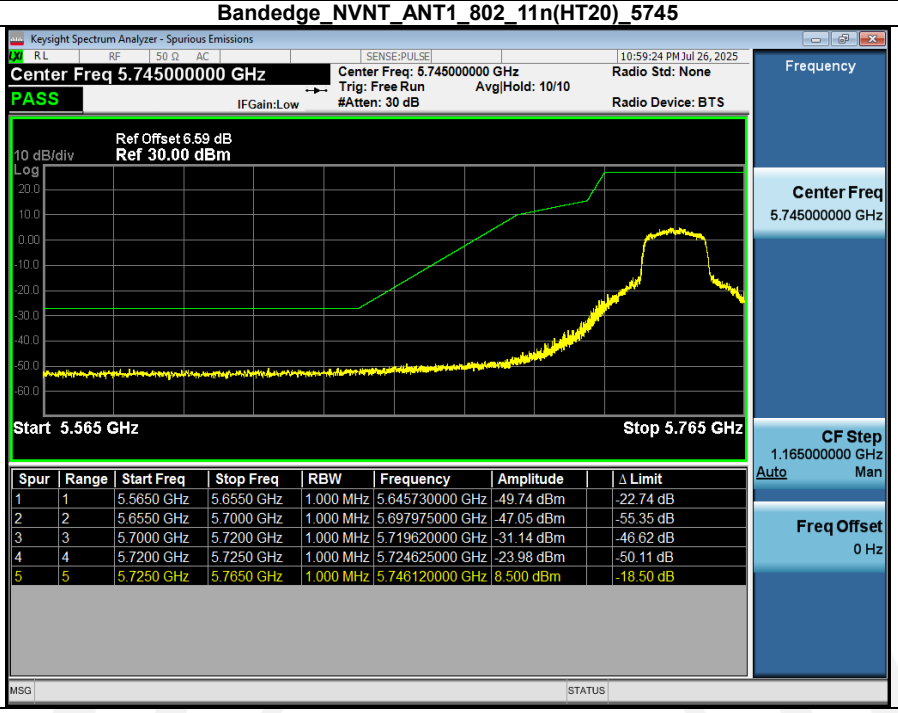
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.5650 GHz	5.6550 GHz	1.000 MHz	5.603070000 GHz	-50.05 dBm	-23.05 dB
2	2	5.6550 GHz	5.7000 GHz	1.000 MHz	5.680380000 GHz	-47.59 dBm	-41.44 dB
3	3	5.7000 GHz	5.7200 GHz	1.000 MHz	5.718560000 GHz	-32.62 dBm	-47.81 dB
4	4	5.7200 GHz	5.7250 GHz	1.000 MHz	5.724895000 GHz	-21.83 dBm	-48.58 dB
5	5	5.7250 GHz	5.7650 GHz	1.000 MHz	5.746960000 GHz	7.762 dBm	-19.24 dB

Bandedge_NVNT_ANT1_802_11a_5825



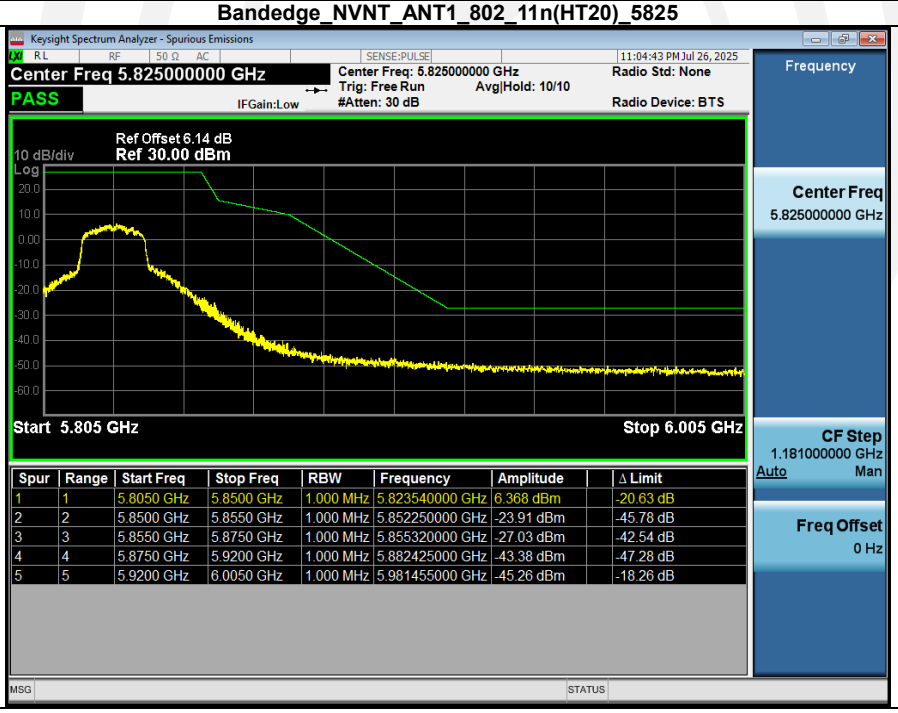
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.8050 GHz	5.8500 GHz	1.000 MHz	5.823270000 GHz	6.184 dBm	-20.82 dB
2	2	5.8500 GHz	5.8550 GHz	1.000 MHz	5.851260000 GHz	-26.25 dBm	-50.38 dB
3	3	5.8550 GHz	5.8750 GHz	1.000 MHz	5.855900000 GHz	-29.84 dBm	-45.19 dB
4	4	5.8750 GHz	5.9200 GHz	1.000 MHz	5.886025000 GHz	-45.12 dBm	-46.06 dB
5	5	5.9200 GHz	6.0050 GHz	1.000 MHz	5.963095000 GHz	-46.18 dBm	-19.18 dB

Bandedge_NVNT_ANT1_802_11n(HT20)_5745



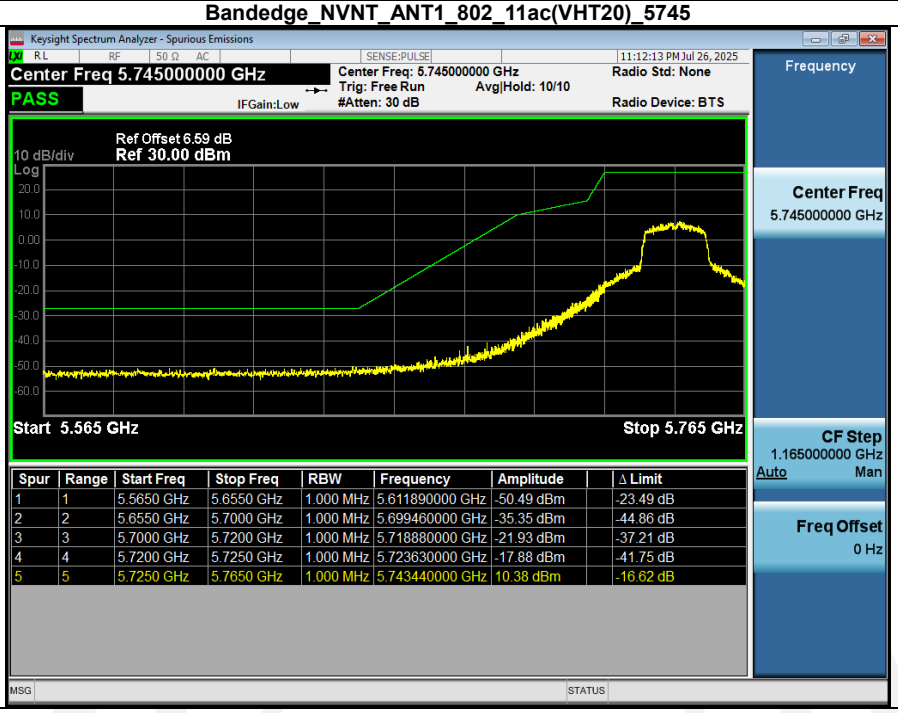
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.5650 GHz	5.6550 GHz	1.000 MHz	5.645730000 GHz	-49.74 dBm	-22.74 dB
2	2	5.6550 GHz	5.7000 GHz	1.000 MHz	5.697975000 GHz	-47.05 dBm	-55.35 dB
3	3	5.7000 GHz	5.7200 GHz	1.000 MHz	5.719620000 GHz	-31.14 dBm	-46.62 dB
4	4	5.7200 GHz	5.7250 GHz	1.000 MHz	5.724625000 GHz	-23.98 dBm	-50.11 dB
5	5	5.7250 GHz	5.7650 GHz	1.000 MHz	5.746120000 GHz	8.500 dBm	-18.50 dB

Bandedge_NVNT_ANT1_802_11n(HT20)_5825



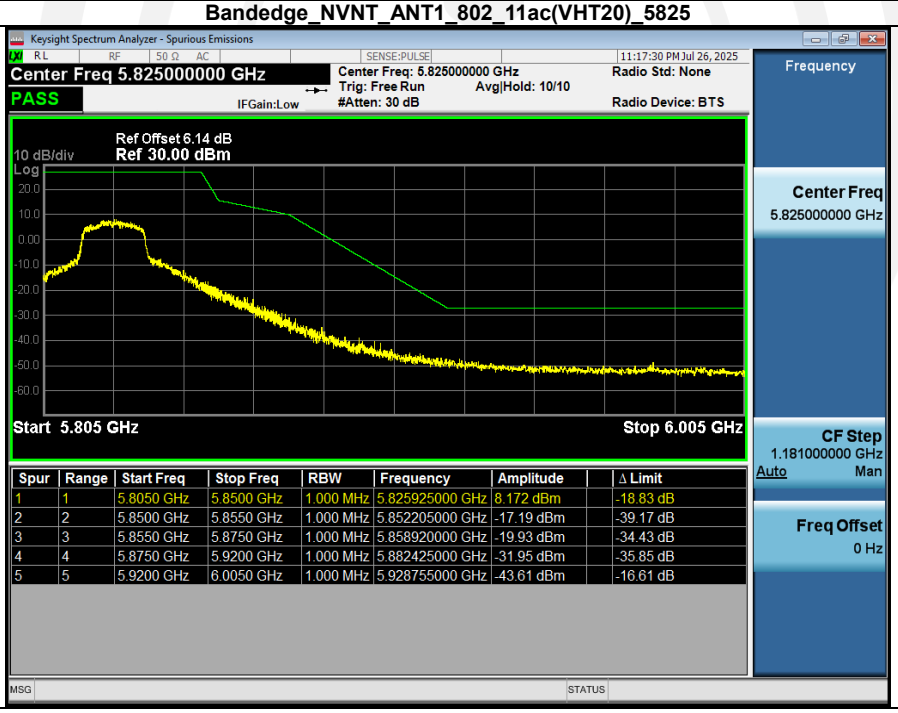
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.8050 GHz	5.8500 GHz	1.000 MHz	5.823540000 GHz	6.368 dBm	-20.63 dB
2	2	5.8500 GHz	5.8550 GHz	1.000 MHz	5.852250000 GHz	-23.91 dBm	-45.78 dB
3	3	5.8550 GHz	5.8750 GHz	1.000 MHz	5.855320000 GHz	-27.03 dBm	-42.54 dB
4	4	5.8750 GHz	5.9200 GHz	1.000 MHz	5.882425000 GHz	-43.38 dBm	-47.28 dB
5	5	5.9200 GHz	6.0050 GHz	1.000 MHz	5.981455000 GHz	-45.26 dBm	-18.26 dB

Bandedge_NVNT_ANT1_802_11ac(VHT20)_5745



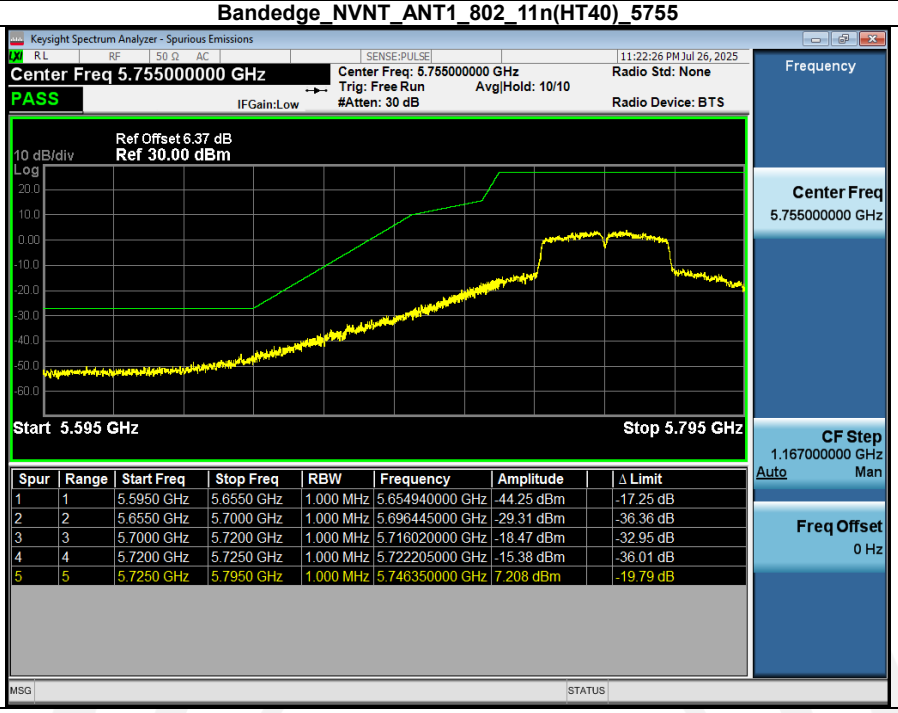
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.5650 GHz	5.6550 GHz	1.000 MHz	5.611890000 GHz	-50.49 dBm	-23.49 dB
2	2	5.6550 GHz	5.7000 GHz	1.000 MHz	5.699460000 GHz	-35.35 dBm	-44.86 dB
3	3	5.7000 GHz	5.7200 GHz	1.000 MHz	5.718880000 GHz	-21.93 dBm	-37.21 dB
4	4	5.7200 GHz	5.7250 GHz	1.000 MHz	5.723630000 GHz	-17.88 dBm	-41.75 dB
5	5	5.7250 GHz	5.7650 GHz	1.000 MHz	5.743440000 GHz	10.38 dBm	-16.62 dB

Bandedge_NVNT_ANT1_802_11ac(VHT20)_5825



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.8050 GHz	5.8500 GHz	1.000 MHz	5.825925000 GHz	8.172 dBm	-18.83 dB
2	2	5.8500 GHz	5.8550 GHz	1.000 MHz	5.852205000 GHz	-17.19 dBm	-39.17 dB
3	3	5.8550 GHz	5.8750 GHz	1.000 MHz	5.858920000 GHz	-19.93 dBm	-34.43 dB
4	4	5.8750 GHz	5.9200 GHz	1.000 MHz	5.882425000 GHz	-31.95 dBm	-35.85 dB
5	5	5.9200 GHz	6.0050 GHz	1.000 MHz	5.928755000 GHz	-43.61 dBm	-16.61 dB

Bandedge_NVNT_ANT1_802_11n(HT40)_5755

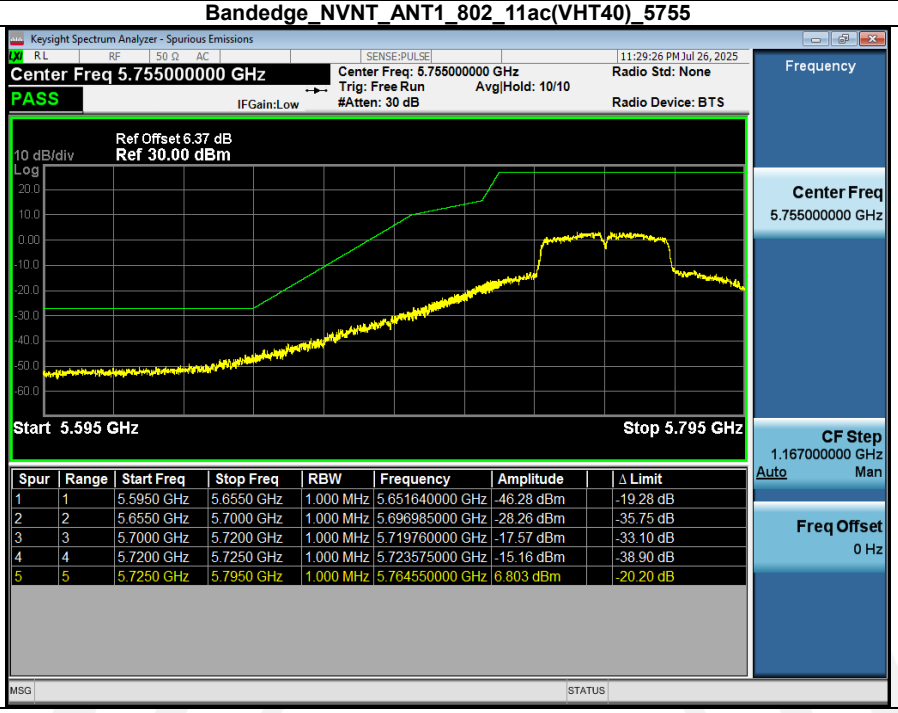


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.5950 GHz	5.6550 GHz	1.000 MHz	5.654940000 GHz	-44.25 dBm	-17.25 dB
2	2	5.6550 GHz	5.7000 GHz	1.000 MHz	5.696445000 GHz	-29.31 dBm	-36.36 dB
3	3	5.7000 GHz	5.7200 GHz	1.000 MHz	5.716020000 GHz	-18.47 dBm	-32.95 dB
4	4	5.7200 GHz	5.7250 GHz	1.000 MHz	5.722205000 GHz	-15.38 dBm	-36.01 dB
5	5	5.7250 GHz	5.7950 GHz	1.000 MHz	5.746350000 GHz	7.208 dBm	-19.79 dB

Bandedge_NVNT_ANT1_802_11n(HT40)_5795

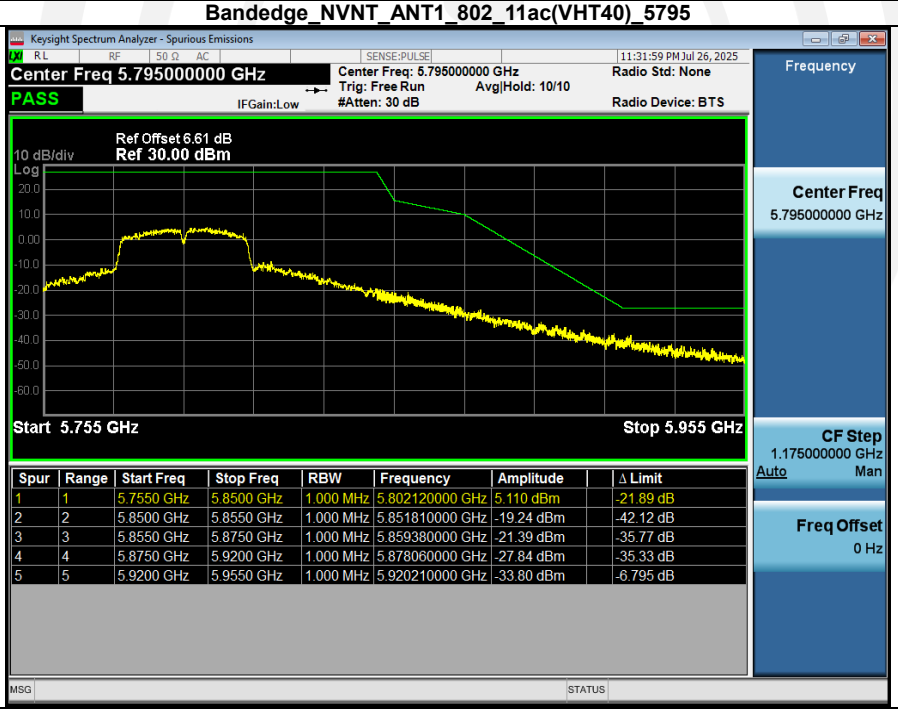
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.7550 GHz	5.8500 GHz	1.000 MHz	5.797465000 GHz	4.475 dBm	-22.52 dB
2	2	5.8500 GHz	5.8550 GHz	1.000 MHz	5.853445000 GHz	-20.12 dBm	-39.27 dB
3	3	5.8550 GHz	5.8750 GHz	1.000 MHz	5.858540000 GHz	-21.48 dBm	-36.09 dB
4	4	5.8750 GHz	5.9200 GHz	1.000 MHz	5.877295000 GHz	-26.30 dBm	-34.42 dB
5	5	5.9200 GHz	5.9550 GHz	1.000 MHz	5.935015000 GHz	-32.68 dBm	-5.678 dB

Bandedge_NVNT_ANT1_802_11ac(VHT40)_5755



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.5950 GHz	5.6550 GHz	1.000 MHz	5.651640000 GHz	-46.28 dBm	-19.28 dB
2	2	5.6550 GHz	5.7000 GHz	1.000 MHz	5.696985000 GHz	-28.26 dBm	-35.75 dB
3	3	5.7000 GHz	5.7200 GHz	1.000 MHz	5.719760000 GHz	-17.57 dBm	-33.10 dB
4	4	5.7200 GHz	5.7250 GHz	1.000 MHz	5.723575000 GHz	-15.16 dBm	-38.90 dB
5	5	5.7250 GHz	5.7950 GHz	1.000 MHz	5.764550000 GHz	6.803 dBm	-20.20 dB

Bandedge_NVNT_ANT1_802_11ac(VHT40)_5795



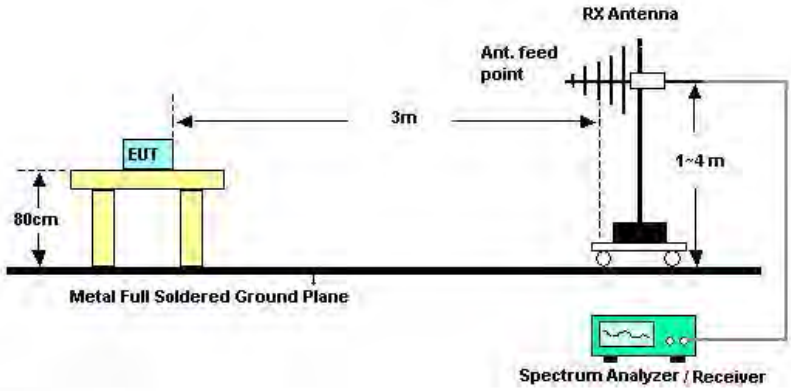
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	5.7550 GHz	5.8500 GHz	1.000 MHz	5.802120000 GHz	5.110 dBm	-21.89 dB
2	2	5.8500 GHz	5.8550 GHz	1.000 MHz	5.851810000 GHz	-19.24 dBm	-42.12 dB
3	3	5.8550 GHz	5.8750 GHz	1.000 MHz	5.859380000 GHz	-21.39 dBm	-35.77 dB
4	4	5.8750 GHz	5.9200 GHz	1.000 MHz	5.878060000 GHz	-27.84 dBm	-35.33 dB
5	5	5.9200 GHz	5.9550 GHz	1.000 MHz	5.920210000 GHz	-33.80 dBm	-6.795 dB

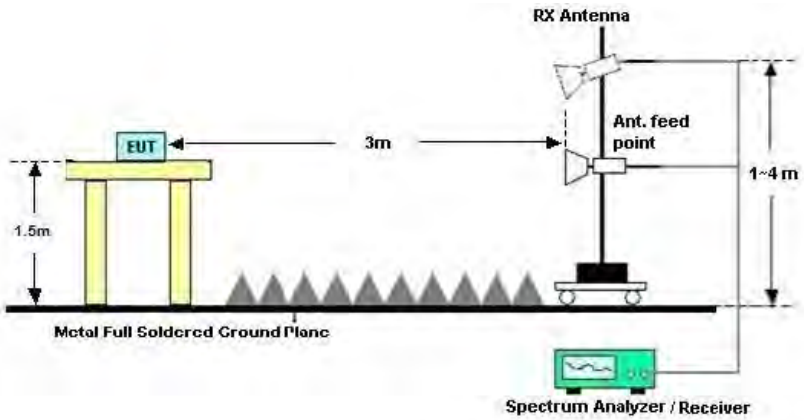
4.7 Radiated Emission

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209 and 15.205, RSS-Gen §8.9</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td>30MHz to 40GHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m (Semi-Anechoic Chamber)</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Value</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>AV</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr>
<tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr>
<tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr>
<tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>74.0</td><td>Peak Value</td></tr>
<tr><td>54.0</td><td>Average Value</td></tr>
</table>
</td></tr>
<tr><td>Test Procedure:</td><td>
Substitution method was performed to determine the actual ERP emission levels of the EUT.
The following test procedure as below:

1>.Below 1GHz test procedure:
1. The EUT was placed on the top of a rotating table (0.8m for below 1GHz and 1.5 meters for above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

2>.Above 1GHz test procedure:
1. On the test site as test setup graph above,the EUT shall be placed at the 1.5m support on the turntable and in the position closest to normal use as declared by the provider.
2. The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter.The output of the test antenna shall be connected to the measuring receiver.
3. The transmitter shall be switched on, if possible, without modulation and the measuring receiver shall be tuned to the frequency of the
</td></tr>
</table>

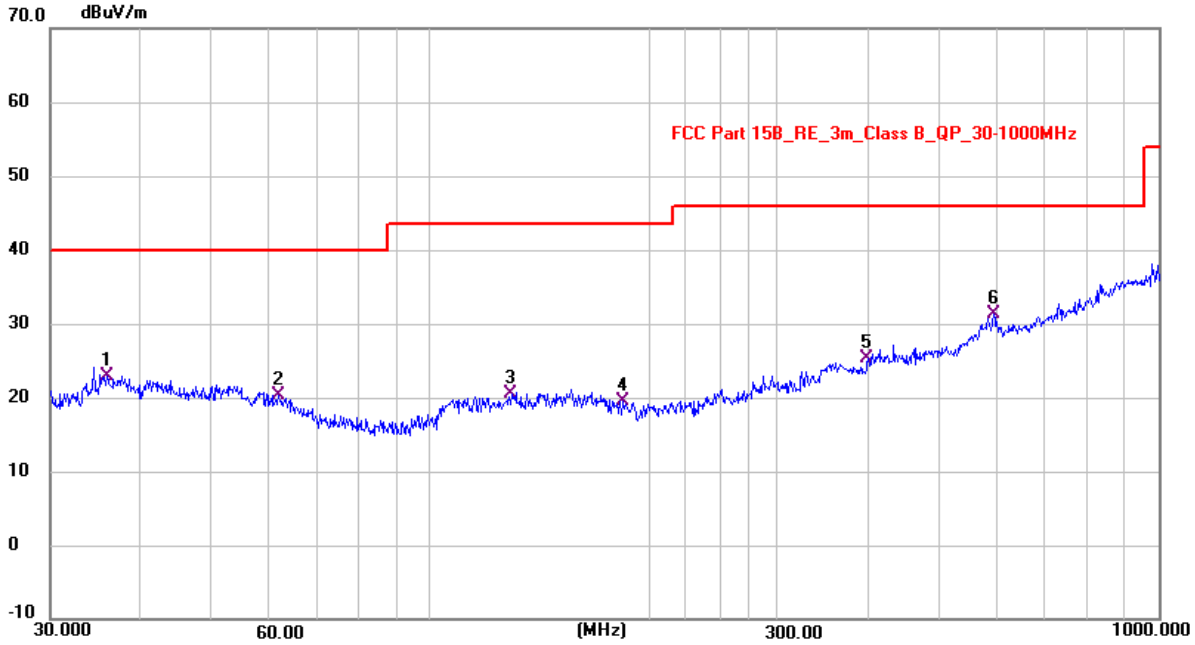
	transmitter under test. 4. The test antenna shall be raised and lowered from 1m to 4m until a maximum signal level is detected by the measuring receiver. Then the turntable should be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver. 5. Repeat step 4 for test frequency with the test antenna polarized horizontally. 6. Remove the transmitter and replace it with a substitution antenna 7. Feed the substitution antenna at the transmitter end with a signal generator connected to the antenna by means of a nonradiating cable. With the antennas at both ends vertically polarized, and with the signal generator tuned to a particular test frequency, raise and lower the test antenna to obtain a maximum reading at the spectrum analyzer. Adjust the level of the signal generator output until the previously recorded maximum reading for this set of conditions is obtained. This should be done carefully repeating the adjustment of the test antenna and generator output. 8. Repeat step 7 with both antennas horizontally polarized for each test frequency. 9. Calculate power in dBm into a reference ideal half-wave dipole antenna by reducing the readings obtained in steps 7 and 8 by the power loss in the cable between the generator and the antenna, and further corrected for the gain of the substitution antenna used relative to an ideal half-wave dipole antenna by the following formula: EIRP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBi) where: Pg is the generator output power into the substitution antenna.
Test setup:	Below 1GHz  Above 1GHz

	
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Measurement Data:

From 30MHz to 1000MHz:					
Test Date	:	2025.07.26	Temperature	:	26℃
Test Engineer	:	Felix Pang	Humidity	:	54%
Test Mode	:	GFSK mode			
Test Results	:	**PASS**			
Note:	1. The test results are listed in next pages. 2. All modes have been tested, and only worst data of ac20 5745MHz (DC 3.85V from battery) mode was listed in this report.				

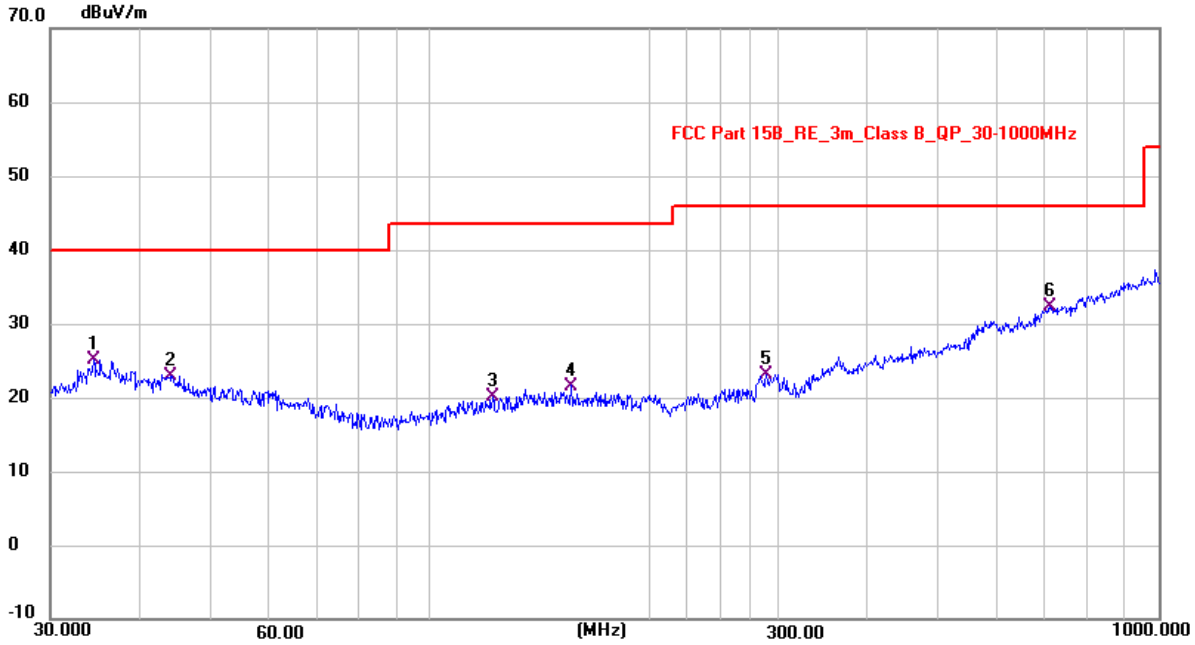
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	35.9690	9.75	13.06	22.81	40.00	-17.19	QP
2	61.9950	8.39	11.94	20.33	40.00	-19.67	QP
3	129.1276	8.43	12.09	20.52	43.50	-22.98	QP
4	184.3281	8.46	11.01	19.47	43.50	-24.03	QP
5	399.7301	9.19	16.18	25.37	46.00	-20.63	QP
6 *	593.8300	10.82	20.54	31.36	46.00	-14.64	QP

Note: Level = Reading + Factor Margin = Level - Limit

Polarization: Horizontal

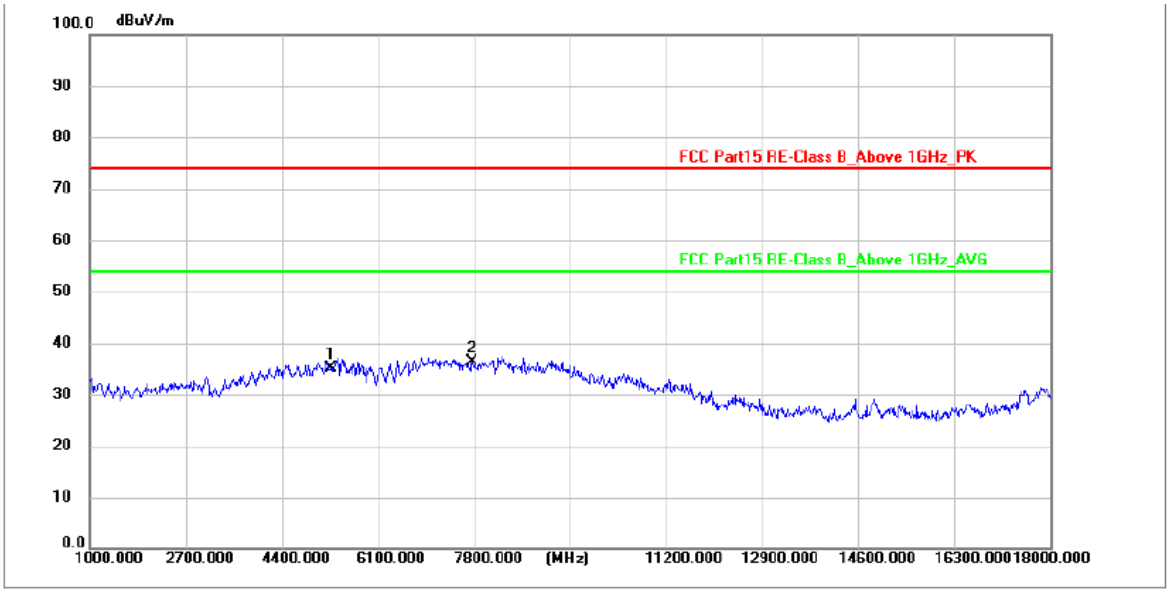


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	34.4568	12.20	12.82	25.02	40.00	-14.98	QP
2	43.9271	9.53	13.47	23.00	40.00	-17.00	QP
3	121.6551	8.45	11.59	20.04	43.50	-23.46	QP
4	155.9781	8.43	13.17	21.60	43.50	-21.90	QP
5	289.7631	9.66	13.50	23.16	46.00	-22.84	QP
6 *	710.1154	10.10	22.12	32.22	46.00	-13.78	QP

Note: Level = Reading + Factor Margin = Level - Limit

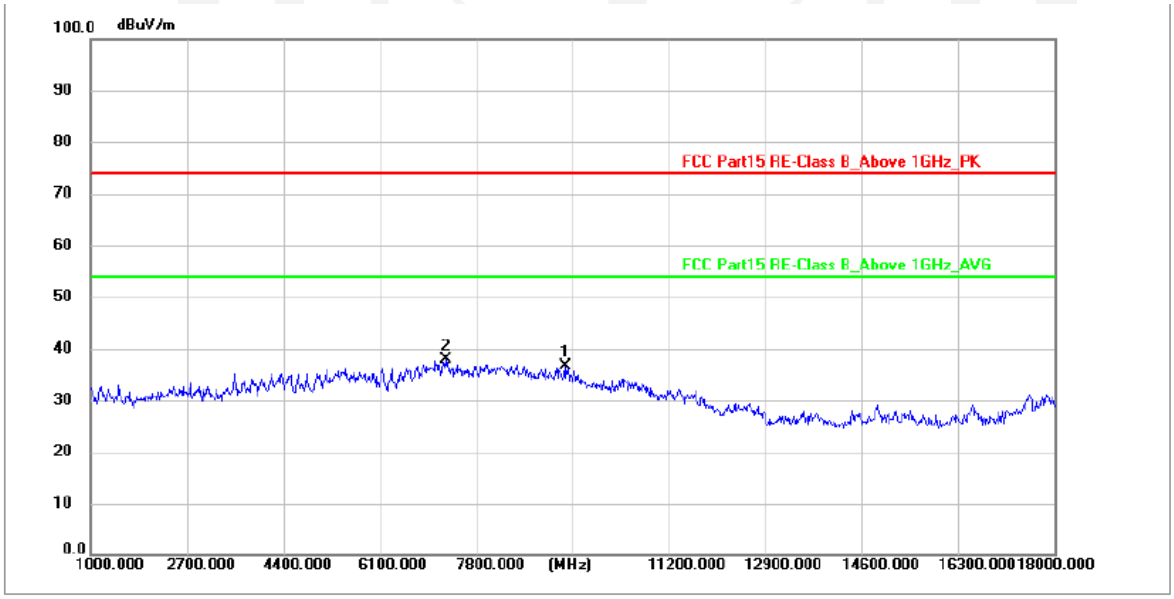
Above 1GHz:

802.11a 5745MHz
Polarization: Vertical



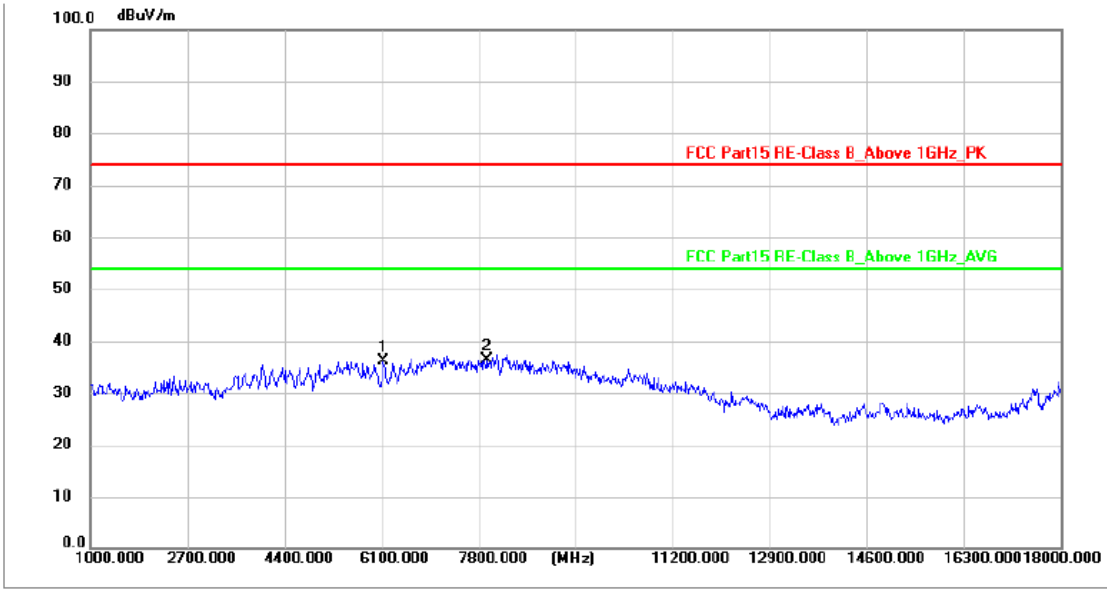
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5269.125	47.33	-12.10	35.23	74.00	-38.77	peak	150	24	P	
2 *	7770.250	43.69	-7.36	36.33	74.00	-37.67	peak	150	102	P	

Polarization: Horizontal



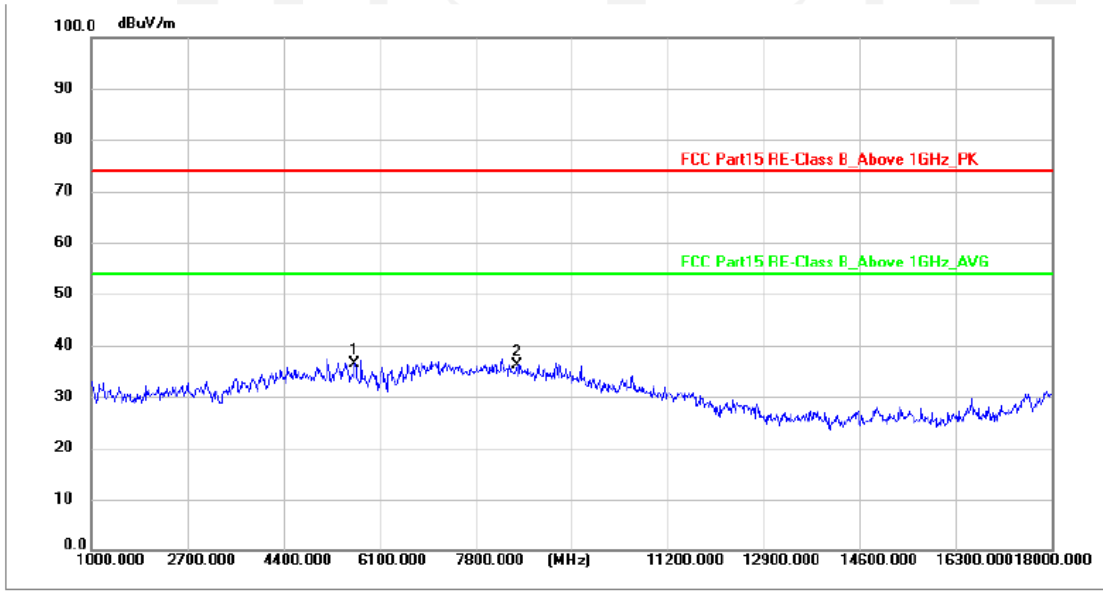
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	9372.500	42.57	-5.99	36.58	74.00	-37.42	peak	150	242	P	
2 *	7264.500	45.58	-7.81	37.77	74.00	-36.23	peak	150	201	P	

802.11a 5825MHz
Polarization: Vertical



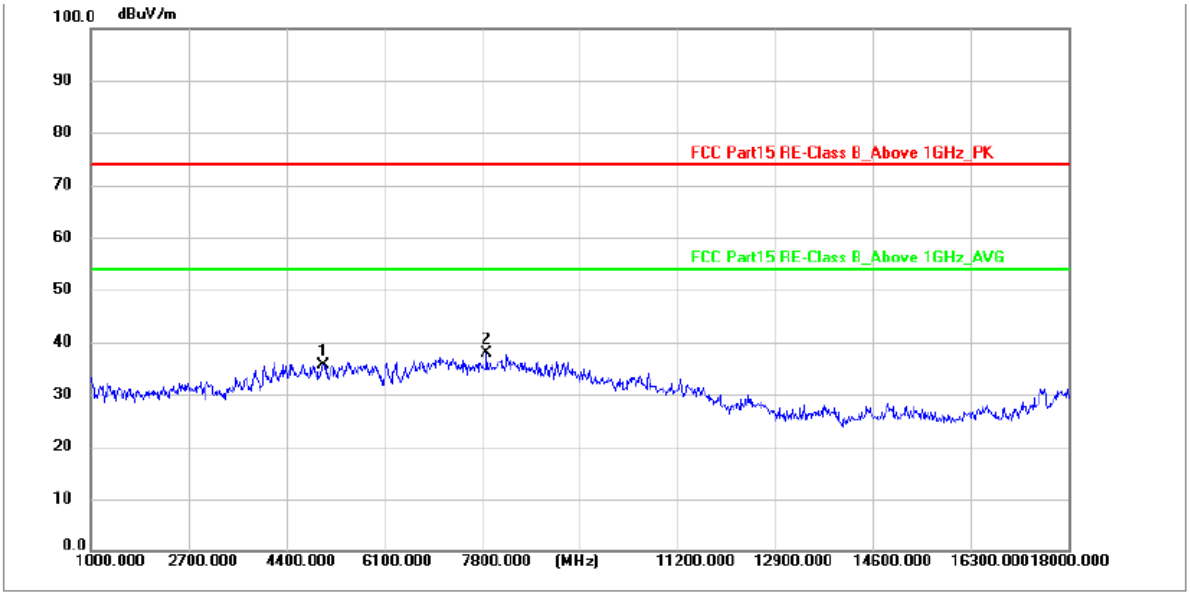
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	6142.500	46.48	-10.46	36.02	74.00	-37.98	peak	150	230	P	
2 *	7963.625	43.56	-7.19	36.37	74.00	-37.63	peak	150	145	P	

Polarization: Horizontal



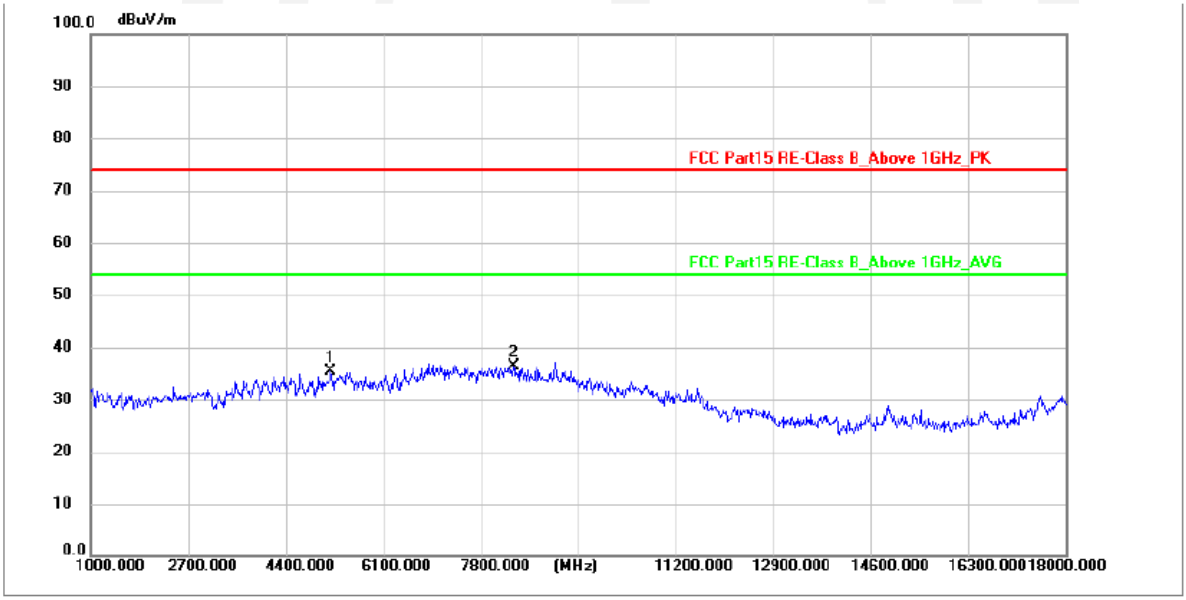
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	5662.663	47.70	-11.43	36.27	74.00	-37.73	peak	150	147	P	
2	8538.539	42.85	-6.65	36.20	74.00	-37.80	peak	150	205	P	

802.11n(HT20) 5745MHz
Polarization: Vertical



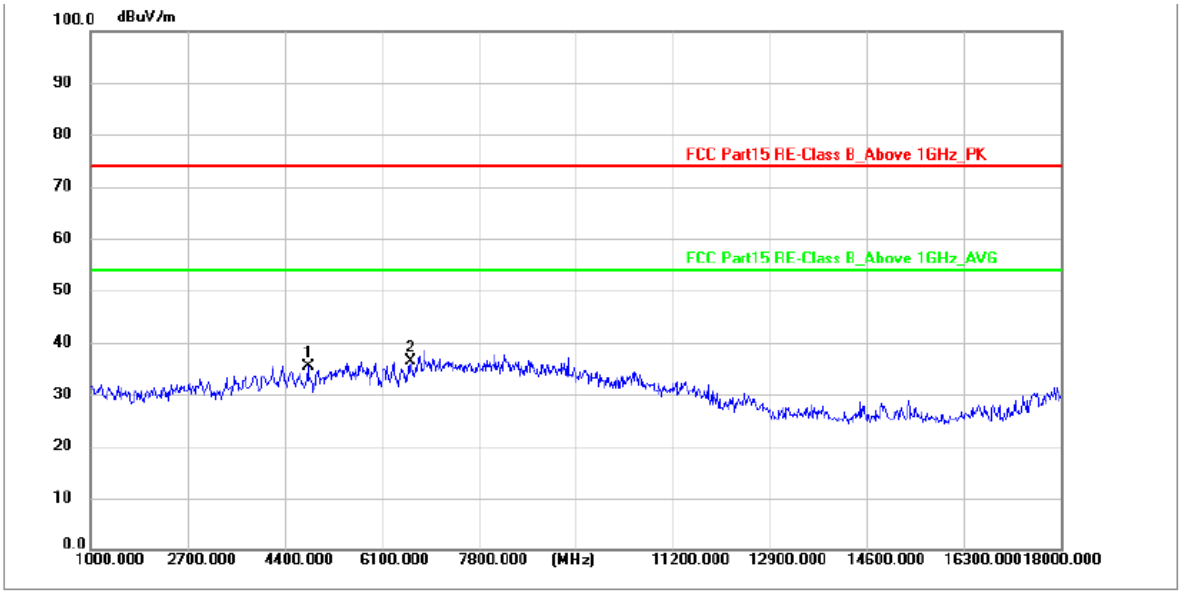
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5060.875	48.08	-12.45	35.63	74.00	-38.37	peak	150	175	P	
2 *	7893.500	45.09	-7.26	37.83	74.00	-36.17	peak	150	221	P	

Polarization: Horizontal



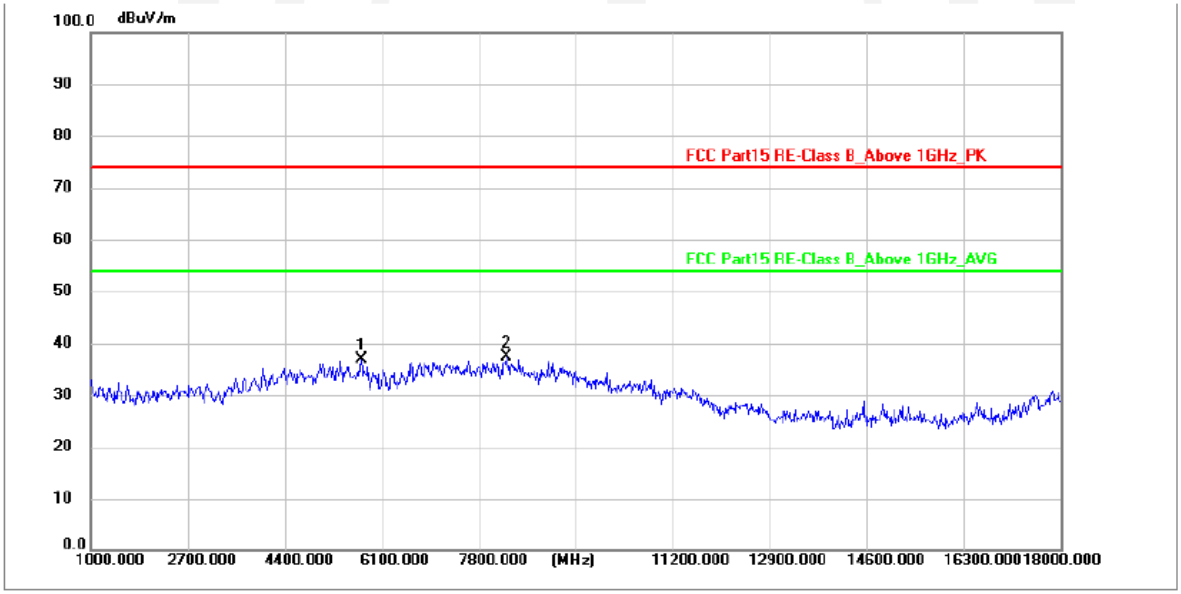
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5173.347	48.52	-13.10	35.42	74.00	-38.58	peak	150	261	P	
2 *	8375.752	43.30	-6.80	36.50	74.00	-37.50	peak	150	221	P	

802.11n(HT20) 5825MHz
Polarization: Vertical



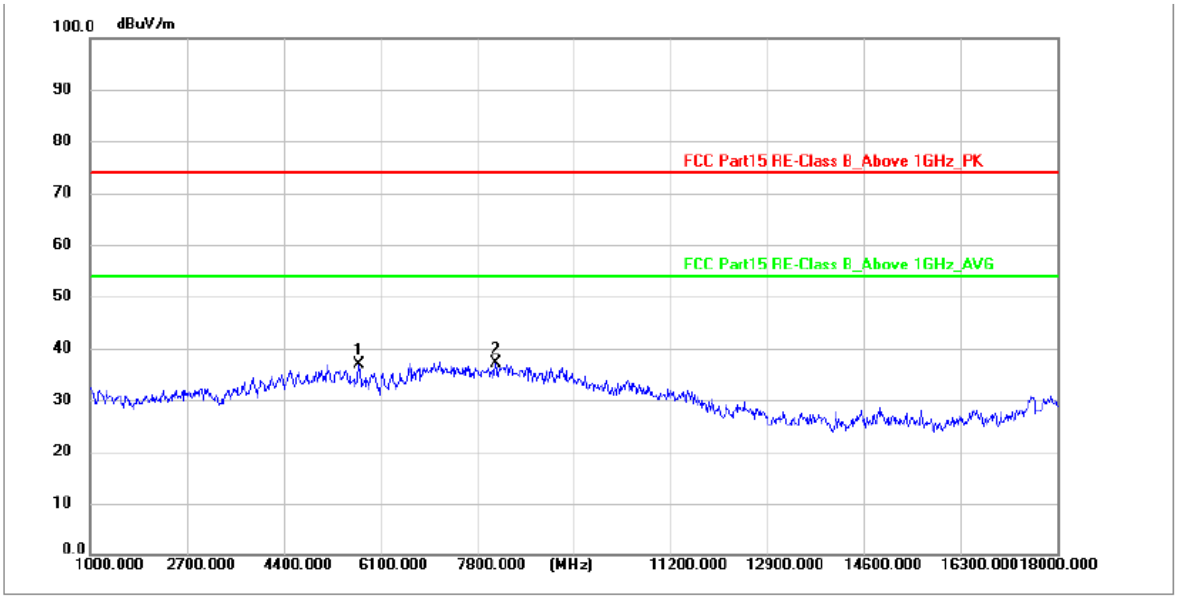
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	4816.500	49.44	-14.03	35.41	74.00	-38.59	peak	150	110	P	
2 *	6622.750	45.42	-9.10	36.32	74.00	-37.68	peak	150	321	P	

Polarization: Horizontal



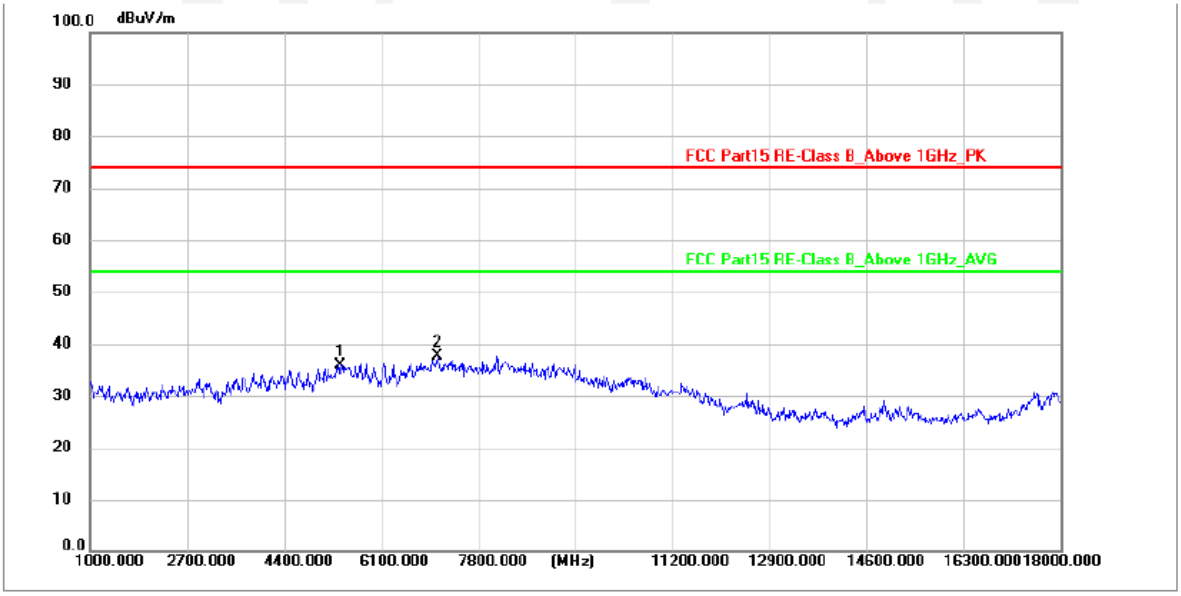
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5753.625	48.05	-11.28	36.77	74.00	-37.23	peak	150	145	P	
2 *	8286.625	44.30	-6.88	37.42	74.00	-36.58	peak	150	227	P	

802.11ac(HT20) 5745MHz
Polarization: Vertical



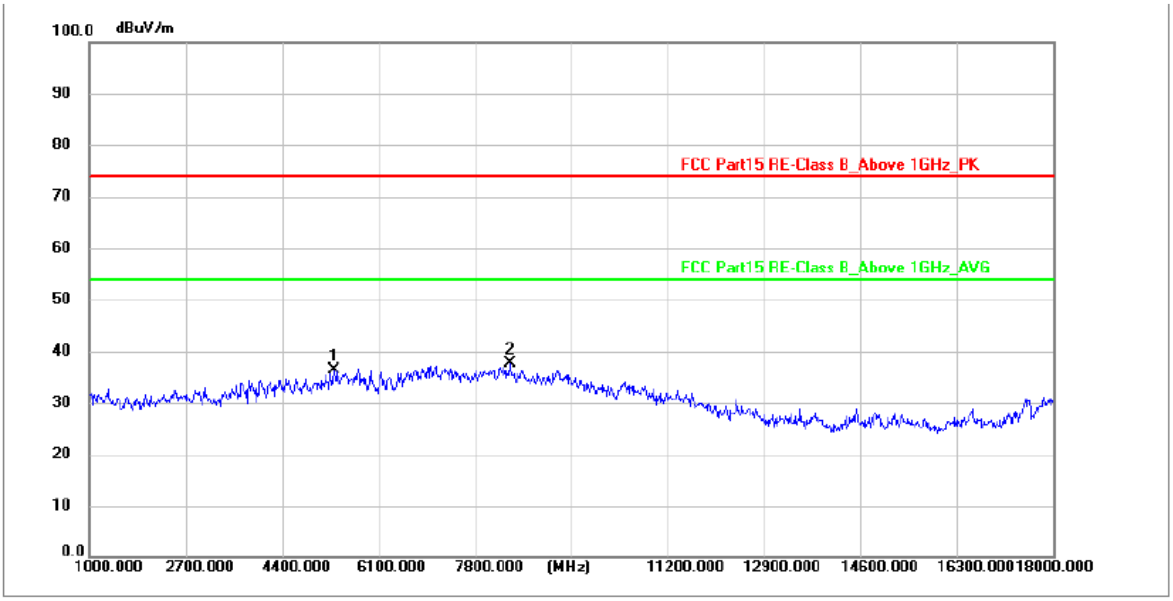
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5738.750	48.25	-11.31	36.94	74.00	-37.06	peak	150	220	P	
2 *	8135.750	44.24	-7.04	37.20	74.00	-36.80	peak	150	120	P	

Polarization: Horizontal



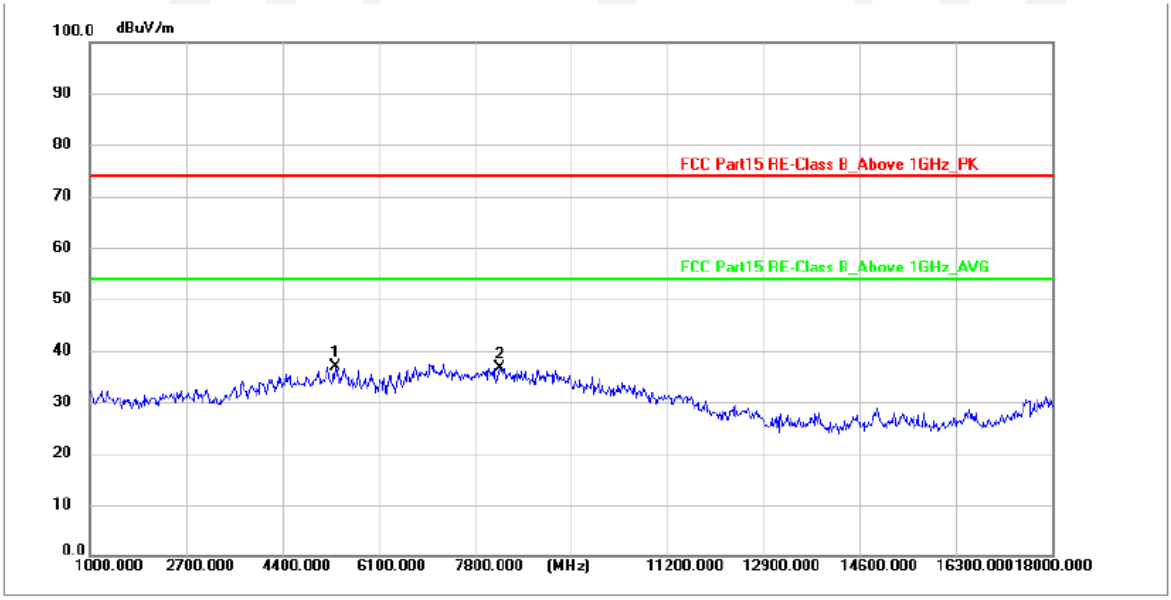
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5398.750	48.47	-12.48	35.99	74.00	-38.01	peak	150	89	P	
2 *	7086.000	45.67	-7.97	37.70	74.00	-36.30	peak	150	204	P	

802.11ac(HT20) 5825MHz
Polarization: Vertical



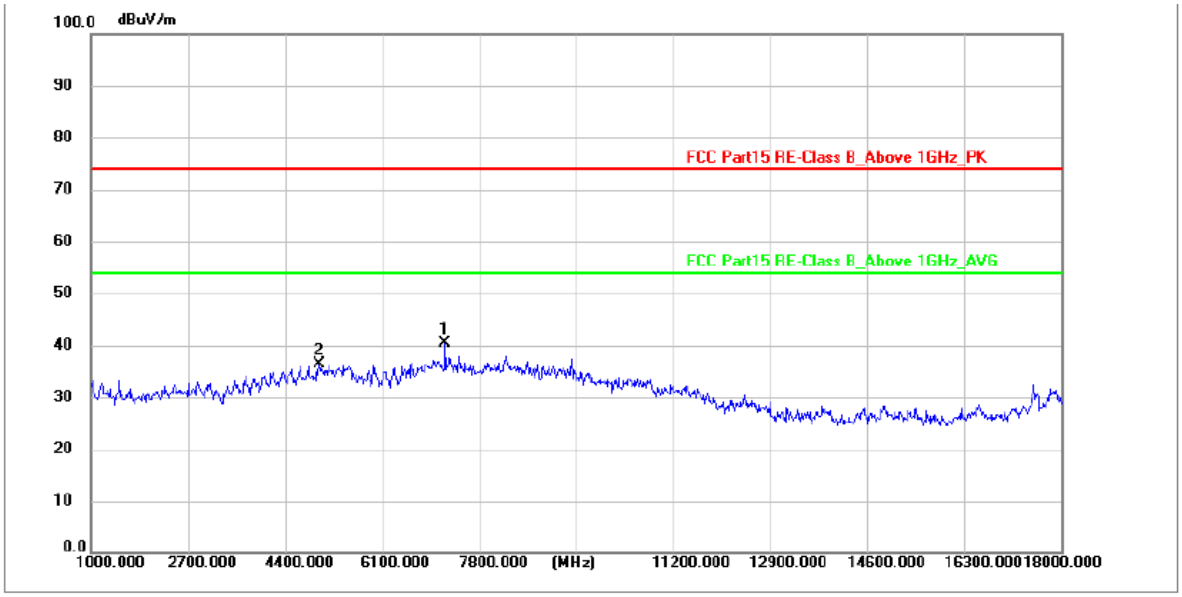
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5326.500	48.98	-12.67	36.31	74.00	-37.69	peak	150	114	P	
2 *	8424.750	44.28	-6.75	37.53	74.00	-36.47	peak	150	221	P	

Polarization: Horizontal



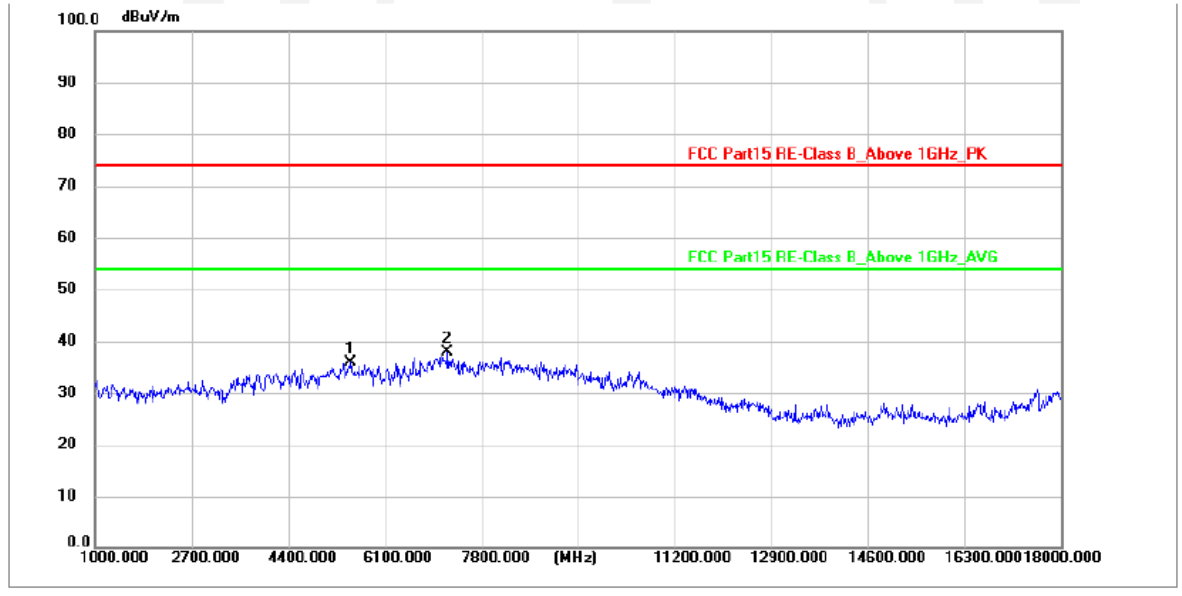
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	5347.750	48.98	-11.98	37.00	74.00	-37.00	peak	150	41	P	
2	8256.875	43.58	-6.91	36.67	74.00	-37.33	peak	150	204	P	

802.11n(HT40) 5755MHz
Polarization: Vertical



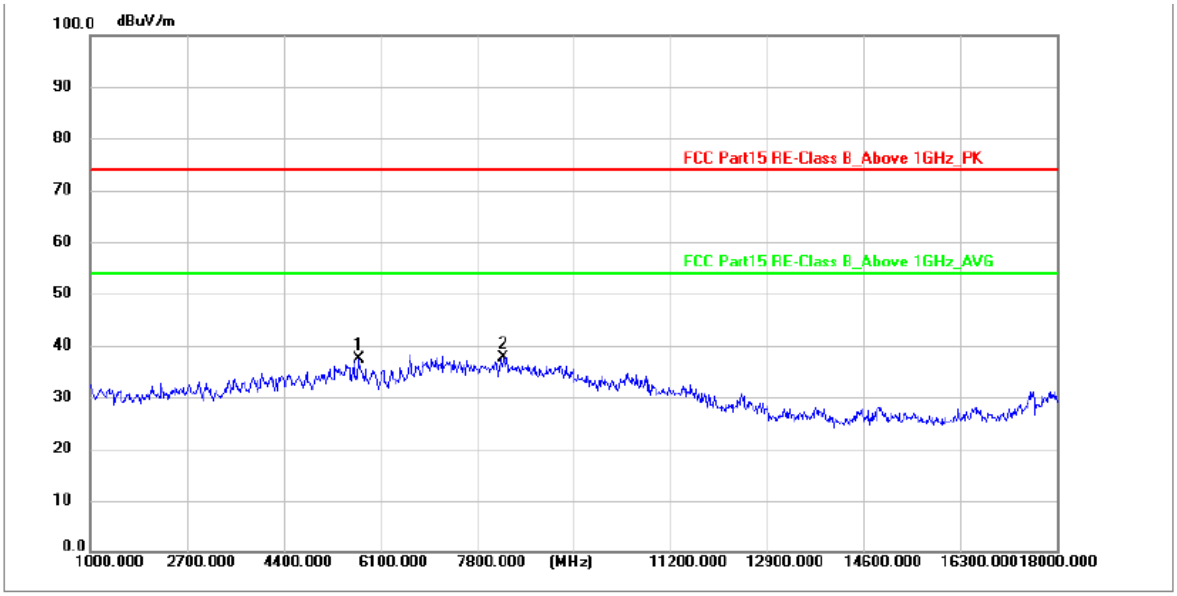
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	7205.000	48.26	-7.87	40.39	74.00	-33.61	peak	150	217	P	
2	5007.750	48.96	-12.55	36.41	74.00	-37.59	peak	150	310	P	

Polarization: Horizontal



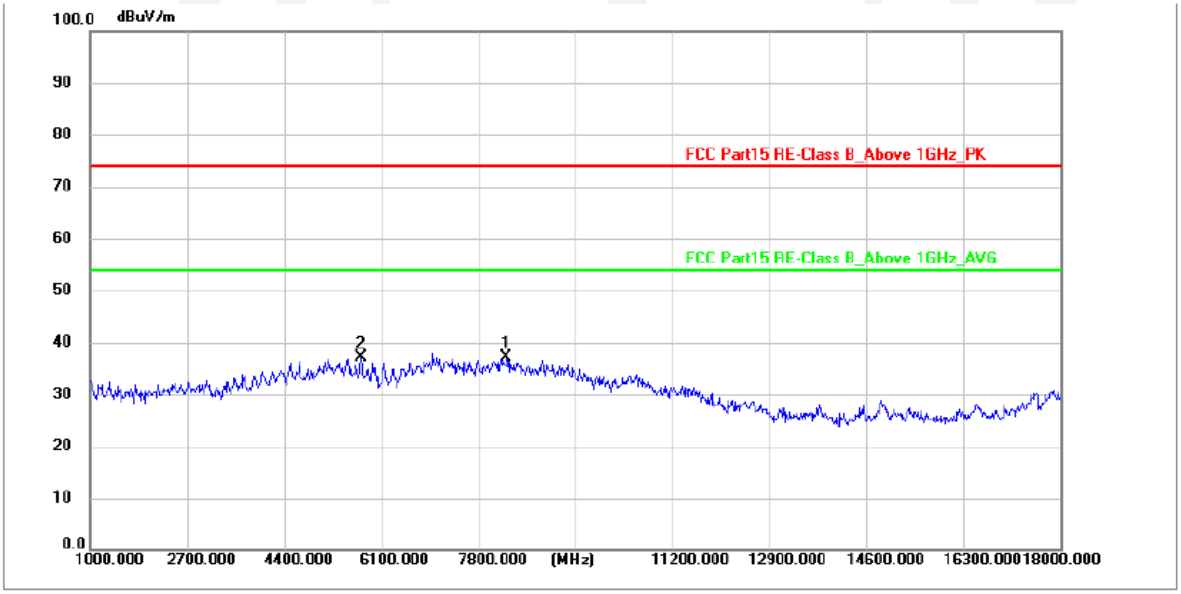
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5511.375	48.02	-12.19	35.83	74.00	-38.17	peak	150	21	P	
2 *	7211.375	45.75	-7.86	37.89	74.00	-36.11	peak	150	70	P	

802.11n(HT40) 5795MHz
Polarization: Vertical



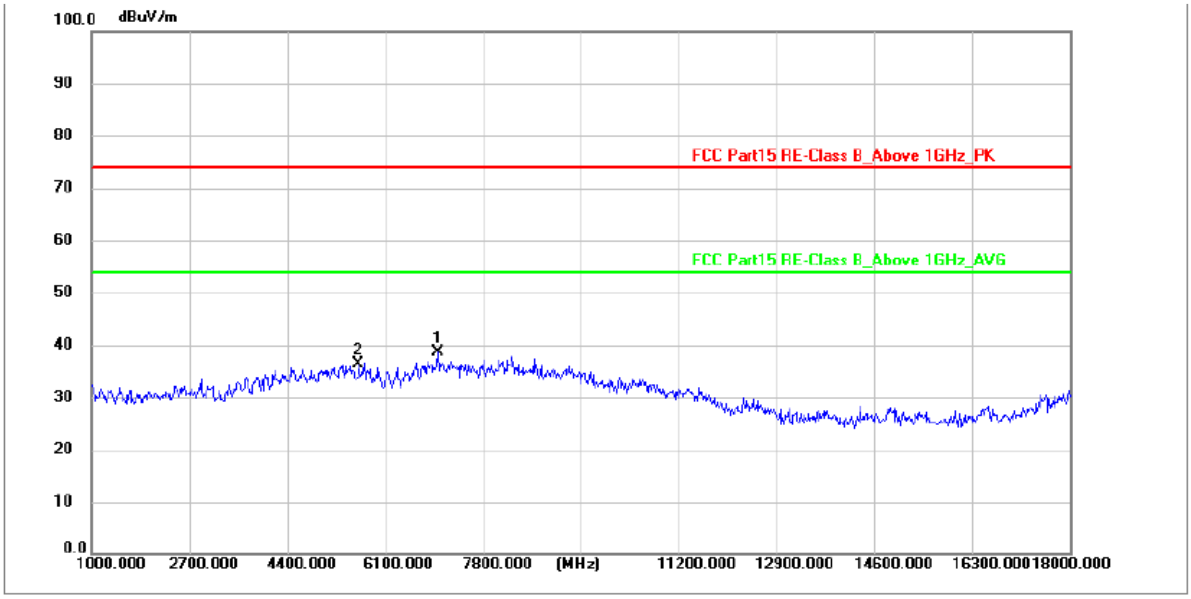
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5738.750	49.01	-11.57	37.44	74.00	-36.56	peak	150	47	P	
2 *	8271.750	44.50	-6.90	37.60	74.00	-36.40	peak	150	104	P	

Polarization: Horizontal



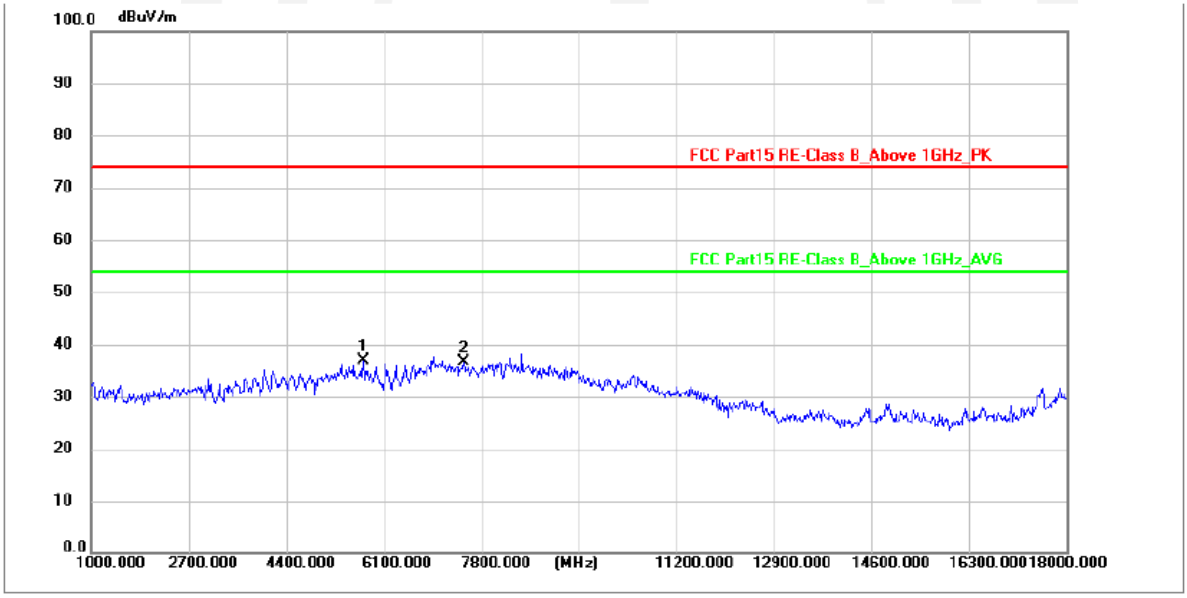
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	8305.750	43.98	-6.86	37.12	74.00	-36.88	peak	150	89	P	
2	5751.500	48.30	-11.28	37.02	74.00	-36.98	peak	150	204	P	

802.11ac(HT40) 5755MHz
Polarization: Vertical



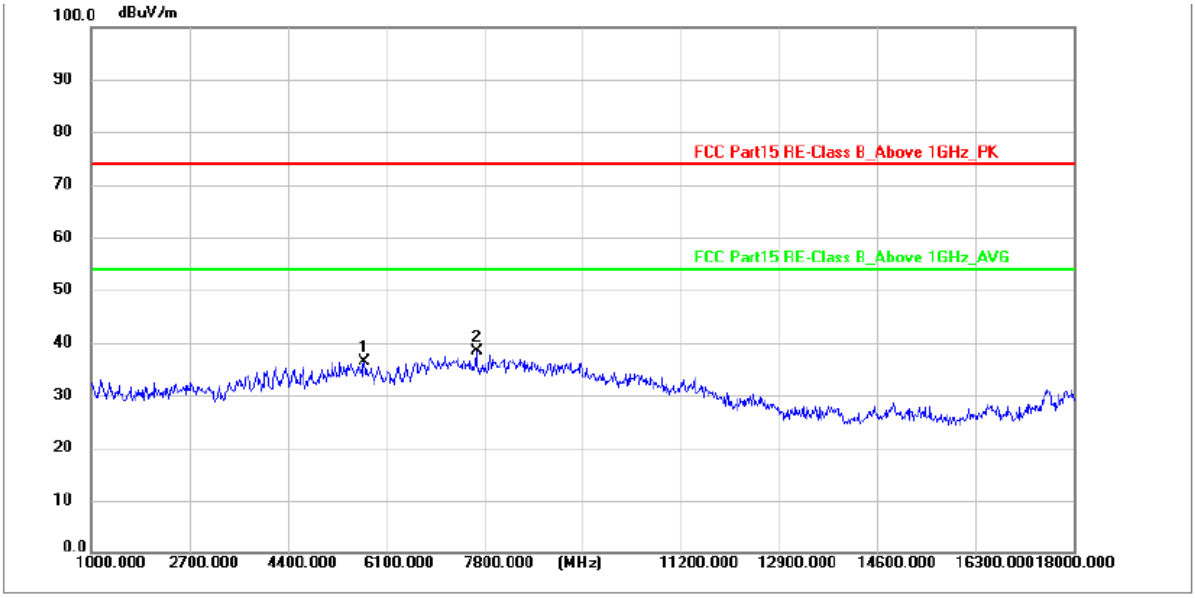
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	7026.500	46.76	-8.02	38.74	74.00	-35.26	peak	150	40	P	
2	5655.875	47.90	-11.44	36.46	74.00	-37.54	peak	150	117	P	

Polarization: Horizontal



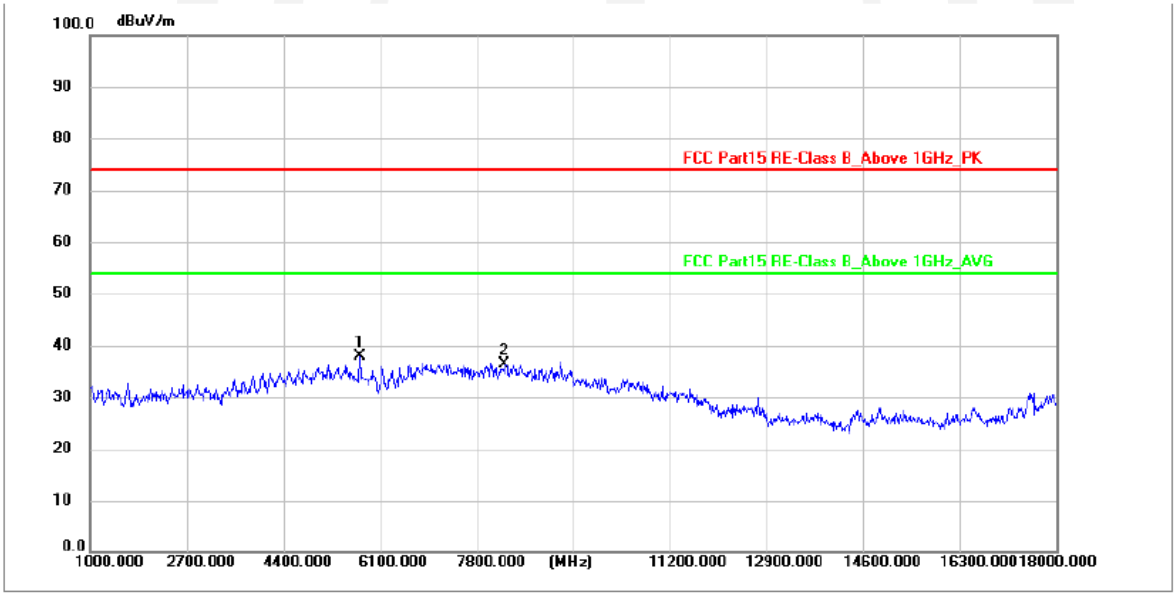
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	5747.250	48.39	-11.55	36.84	74.00	-37.16	peak	150	335	P	
2	7502.500	44.26	-7.60	36.66	74.00	-37.34	peak	150	114	P	

802.11ac(HT40) 5795MHz
Polarization: Vertical



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	5736.625	48.05	-11.57	36.48	74.00	-37.52	peak	150	301	P	
2 *	7674.625	45.74	-7.44	38.30	74.00	-35.70	peak	150	116	P	

Polarization: Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	5749.375	49.09	-11.30	37.79	74.00	-36.21	peak	150	227	P	
2	8307.875	43.33	-6.86	36.47	74.00	-37.53	peak	150	109	P	

Note:

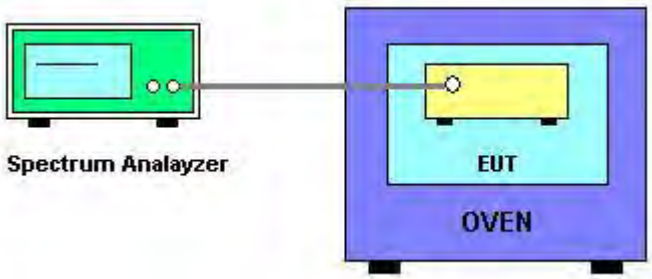
1. Level = Reading + Factor Margin = Level - Limit.

2. The test trace is same as the ambient noise (the test frequency range: 18GHz~40GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

4. This Report only show the test plots of the worst case.

4.8 Frequency stability

Test Standard	15.407(f), RSS-Gen §6.11
Test limit	Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
Test setup:	
Test results:	Pass

Measurement Data:

Mode	Voltage (V)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	DC 3.47V	5744.993	7	5824.993	7
	DC 3.85V	5744.996	4	5824.992	8
	DC 4.24V	5744.993	7	5824.996	4

Mode	Temperature (℃)	FHL (5745MHz)	Deviation (KHz)	FHH (5825MHz)	Deviation (KHz)
Band 4 (5725-5850 MHz)	-10℃	5744.995	5	5824.994	6
	0℃	5744.993	7	5824.995	5
	+10℃	5744.998	2	5824.995	5
	+20℃	5744.994	6	5824.996	4
	+30℃	5744.995	5	5824.995	5
	+40℃	5744.996	4	5824.996	4
	+50℃	5744.998	2	5824.995	5

--------END OF REPORT-------