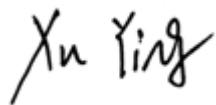


RF TEST REPORT

Applicant	Quectel Wireless Solutions Co., Ltd.
FCC ID	XMR2023FCU740R
Product	Wi-Fi 4 Module
Brand	Quectel
Model	FCU740R
Report No.	R2304A0502-R2
Issue Date	June 7, 2023

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15E (2022)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.



Prepared by: Xu Ying



Approved by: Xu Kai

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Summary of measurement results

Number	Test Case	Clause in FCC rules	Verdict
1	Average output power	15.407(a)	PASS
2	Occupied bandwidth	15.407(e)	PASS
3	Frequency stability	15.407(g)	PASS
4	Power spectral density	15.407(a)	PASS
5	Unwanted Emissions	15.407(b)	PASS
6	Conducted Emissions	15.207	PASS
Date of Testing: May 4, 2023 ~ May 16, 2023			
Date of Sample Received: April 28, 2023			
Note: PASS: The EUT complies with the essential requirements in the standard. FAIL: The EUT does not comply with the essential requirements in the standard. All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

1. Test Laboratory

1.1. Notes of the test report

This report shall not be reproduced in full or partial, without the written approval of **TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

1.3. Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
Address: Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City: Shanghai
Post code: 201201
Country: P. R. China
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Website: <http://www.ta-shanghai.com>
E-mail: xukai@ta-shanghai.com

2. General Description of Equipment under Test

2.1. Applicant and Manufacturer Information

Applicant	Quectel Wireless Solutions Co., Ltd.
Applicant address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China, 200233
Manufacturer	Quectel Wireless Solutions Co., Ltd.
Manufacturer address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai, China, 200233

2.2. General information

EUT Description	
Model	FCU740R
SN	E1549065G200215
Hardware Version	R1.0
Software Version	/
Power Supply	External power supply
Antenna Type	External Antenna
Antenna Connector	SMA Male (Center Pin) (module use unique antenna connector meet with the standard FCC Part 15.203 unique antenna connector requirement)
Operating Frequency Range(s)	U-NII-1: 5150MHz-5250MHz U-NII-2A:5250MHz -5350MHz U-NII-2C:5470MHz-5725MHz U-NII-3: 5725MHz -5850MHz
Modulation Type	802.11a/n (HT20/HT40) : OFDM
Max. Output Power	18.04 dBm
Testing temperature range:	-20 ° C to 50° C
Operating temperature range:	-10° C to 70 ° C
Operating voltage range:	3V to 3.6 V
State DC voltage:	3.3V
Auxiliary test equipment	
Antenna	Manufacturer: XinHengYang Model: WYA00DG Antenna Gain: 4.85 dBi
PC 1	PC Manufacturer: Dell Model: Latitude 3301 (SN: 1Q6DJW2)
PC 2	PC Manufacturer: Dell

Model: Latitude 3490 (SN: FMKRBV2)

Note:

1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.
2. This device support automatically discontinue transmission, while the device is not transmitting any information, the device can automatically discontinue transmission and become standby mode for power saving. The device can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.
3. (a) Manufacturers implements security features in any digitally modulated devices capable of operating in any of the U-NII bands, so that third parties are not able to reprogram the device to operate outside the parameters for which the device was certified. The software prevents the user from operating the transmitter with operating frequencies, output power, modulation types or other radio frequency parameters outside those that were approved for the device. Manufacturers uses means including, but not limited to the use of a private network that allows only authenticated users to download software, electronic signatures in software or coding in hardware that is decoded by software to verify that new software can be legally loaded into a device to meet these requirements and must describe the methods in their application for equipment authorization.
(b) Manufacturers take steps to ensure that DFS functionality cannot be disabled by the operator of the U-NII device.

3. Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test standards:

FCC CFR47 Part 15E (2022) Unlicensed National Information Infrastructure Devices

ANSI C63.10-2013

Reference standard:

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

4. Test Configuration

Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

Mode	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

Wireless Technology and Frequency Range

Wireless Technology		Bandwidth	Channel	Frequency
Wi-Fi	U-NII-1	20 MHz	36	5180MHz
			40	5200MHz
			44	5220MHz
			48	5240MHz
		40 MHz	38	5190MHz
			46	5230MHz
	U-NII-2A	20 MHz	52	5260MHz
			56	5280MHz
			60	5300MHz
			64	5320MHz
		40 MHz	54	5270MHz
			62	5310MHz
	U-NII-2C	20 MHz	100	5500MHz
			104	5520MHz
			108	5540MHz
			112	5560MHz
			116	5580MHz
			120	5600MHz
			124	5620MHz
			128	5640MHz
			132	5660MHz
			136	5680MHz
			140	5700MHz
			144	5720MHz
		40 MHz	102	5510MHz
			110	5550MHz
			118	5590MHz
			126	5630MHz
			134	5670MHz
			142	5710MHz
	U-NII-3	20 MHz	149	5745MHz
			153	5765MHz
			157	5785MHz
			161	5805MHz
			165	5825MHz
		40 MHz	151	5755MHz
			159	5795MHz
	80 MHz	155	5775MHz	
Does this device support TPC Function? ☒ Yes ☐ No				
Does this device support TDWR Band? ☒ Yes ☐ No				

5. Test Case Results

5.1. Occupied Bandwidth

Ambient condition

Temperature	Relative humidity
20°C ~25°C	45%~50%

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

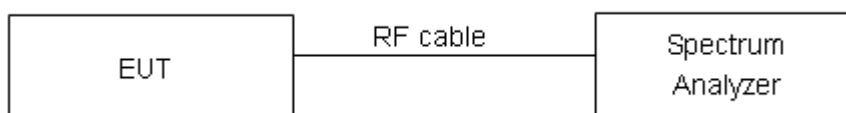
For U-NII-1/U-NII-2A/U-NII-2C, set RBW $\approx 1\%$ OCB kHz, VBW $\geq 3 \times$ RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.

For U-NII-3, Set RBW = 100 kHz, VBW $\geq 3 \times$ RBW, 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.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

Use the 99 % power bandwidth function of the instrument

Test Setup



Limits

Rule FCC Part §15.407(e)

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results:
U-NII-1

Mode	Channel/ Frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	36/5180	16.427	23.07	PASS
	40/5200	16.421	22.97	PASS
	48/5240	16.467	25.09	PASS
802.11n HT20	36/5180	17.533	24.23	PASS
	40/5200	17.550	25.52	PASS
	48/5240	17.510	22.49	PASS
802.11n HT40	38/5190	35.582	60.21	PASS
	46/5230	35.560	57.60	PASS

U-NII-2A

Mode	Channel/ Frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	52/5260	16.480	23.84	PASS
	60/5300	16.498	23.61	PASS
	64/5320	16.450	24.32	PASS
802.11n HT20	52/5260	17.574	25.06	PASS
	60/5300	17.539	25.17	PASS
	64/5320	17.551	25.10	PASS
802.11n HT40	54/5270	35.537	55.34	PASS
	62/5310	35.571	52.45	PASS

U-NII-2C

Mode	Channel/ Frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
802.11a	100/5500	16.734	29.59	PASS
	120/5600	16.990	31.27	PASS
	140/5700	17.167	34.14	PASS

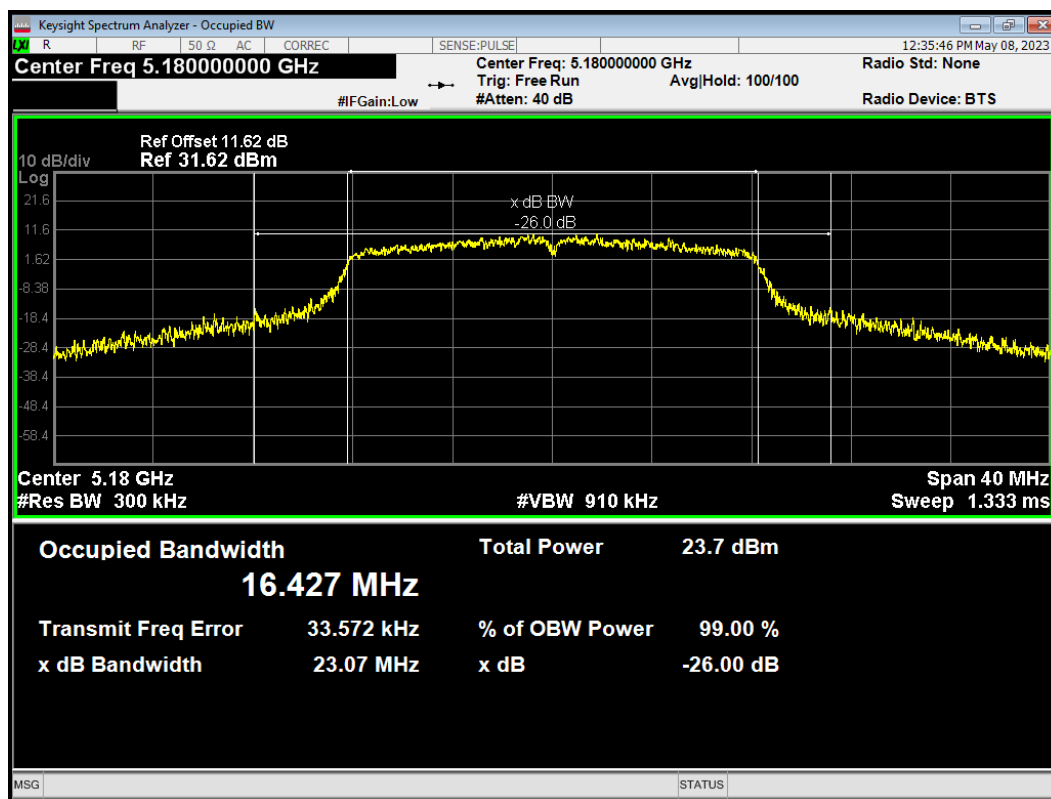
	144/5720	17.287	32.65	PASS
802.11n HT20	100/5500	17.749	29.55	PASS
	120/5600	18.001	32.09	PASS
	140/5700	18.038	35.22	PASS
	144/5720	18.135	33.74	PASS
802.11n HT40	102/5510	35.884	67.20	PASS
	118/5590	35.760	65.12	PASS
	134/5670	35.795	70.04	PASS
	142/5710	35.839	68.54	PASS

U-NII-3

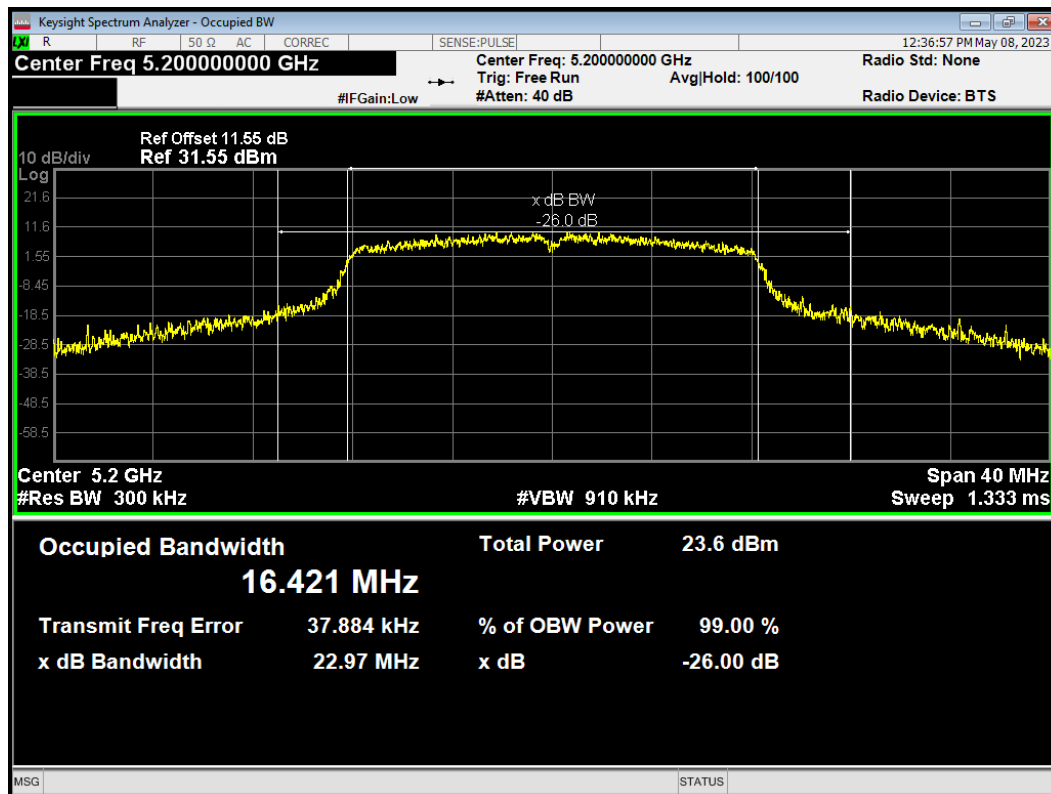
Mode	Channel/ Frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11a	144/5720	17.133	11.96	500	PASS
	149/5745	18.459	12.77	500	PASS
	157/5785	21.737	13.88	500	PASS
	165/5825	22.992	15.09	500	PASS
802.11n HT20	144/5720	18.102	13.86	500	PASS
	149/5745	18.956	15.00	500	PASS
	157/5785	21.963	12.61	500	PASS
	165/5825	22.603	14.43	500	PASS
802.11n HT40	142/5710	36.179	32.53	500	PASS
	151/5755	38.219	31.30	500	PASS
	159/5795	36.991	32.50	500	PASS

U-NII-1

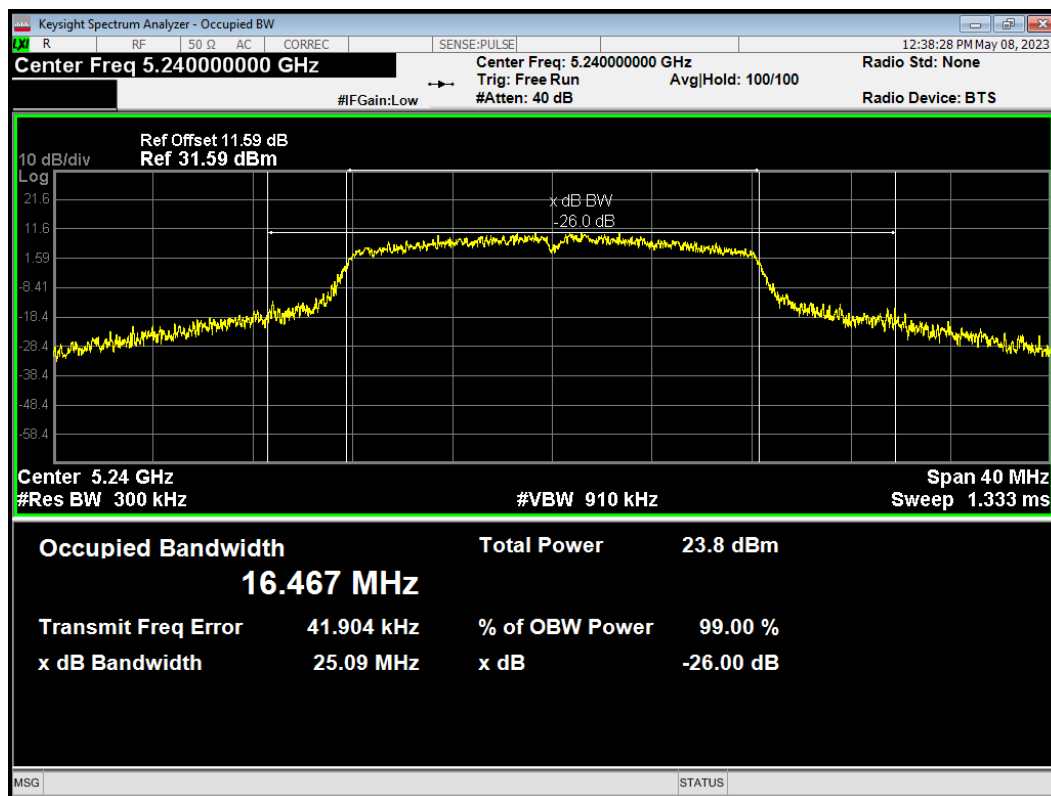
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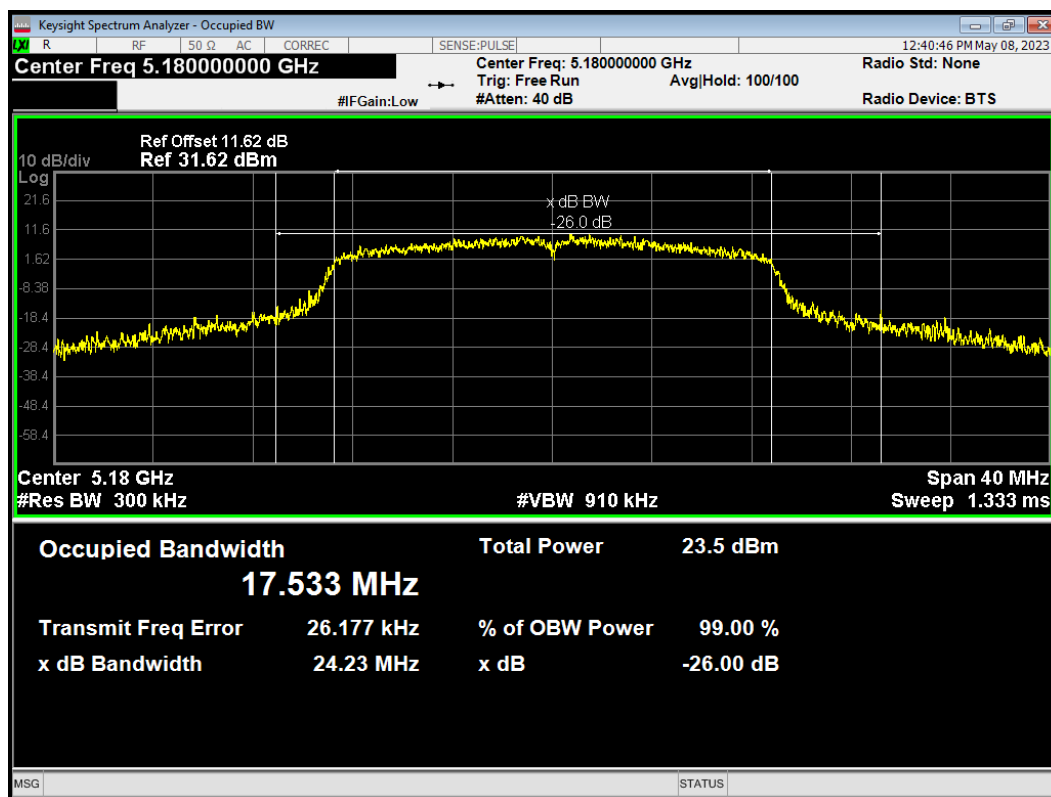
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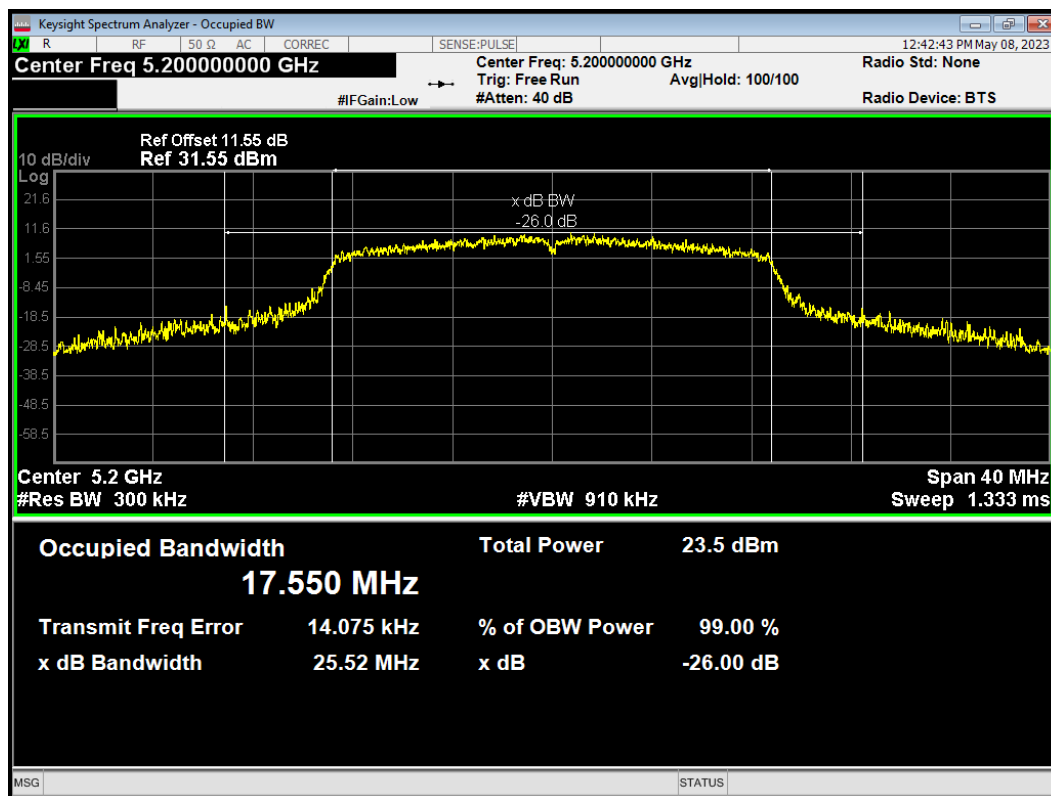
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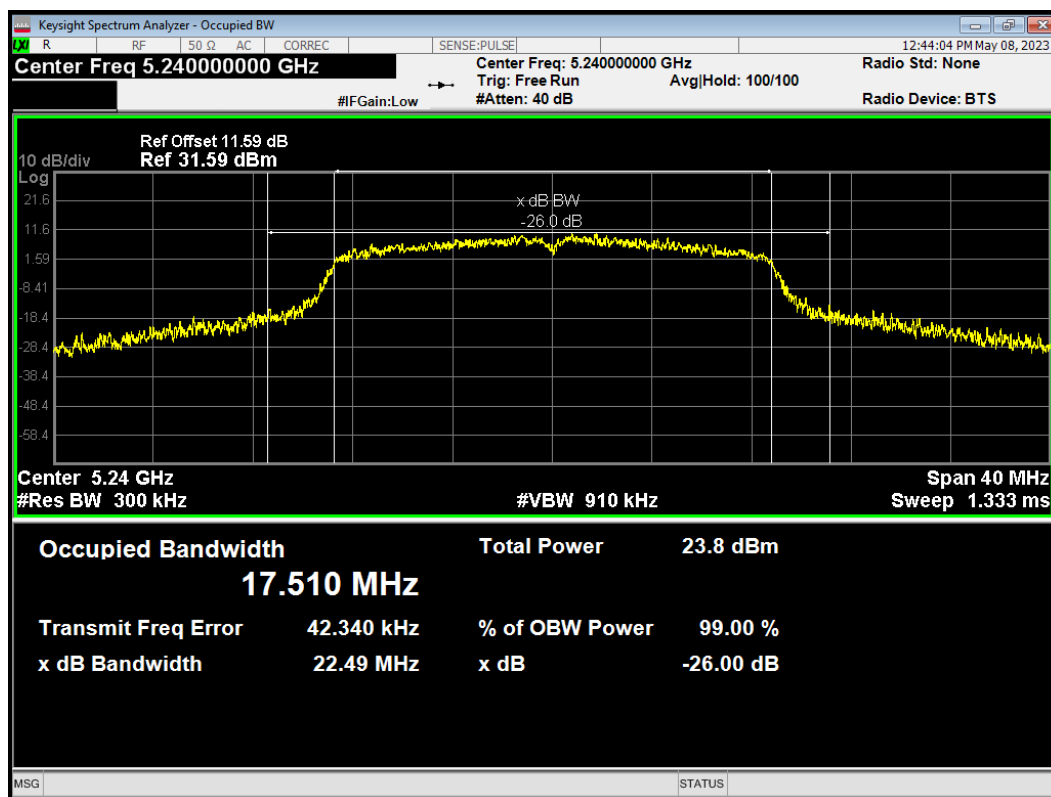
OBW 802.11n(HT20) 5180MHz



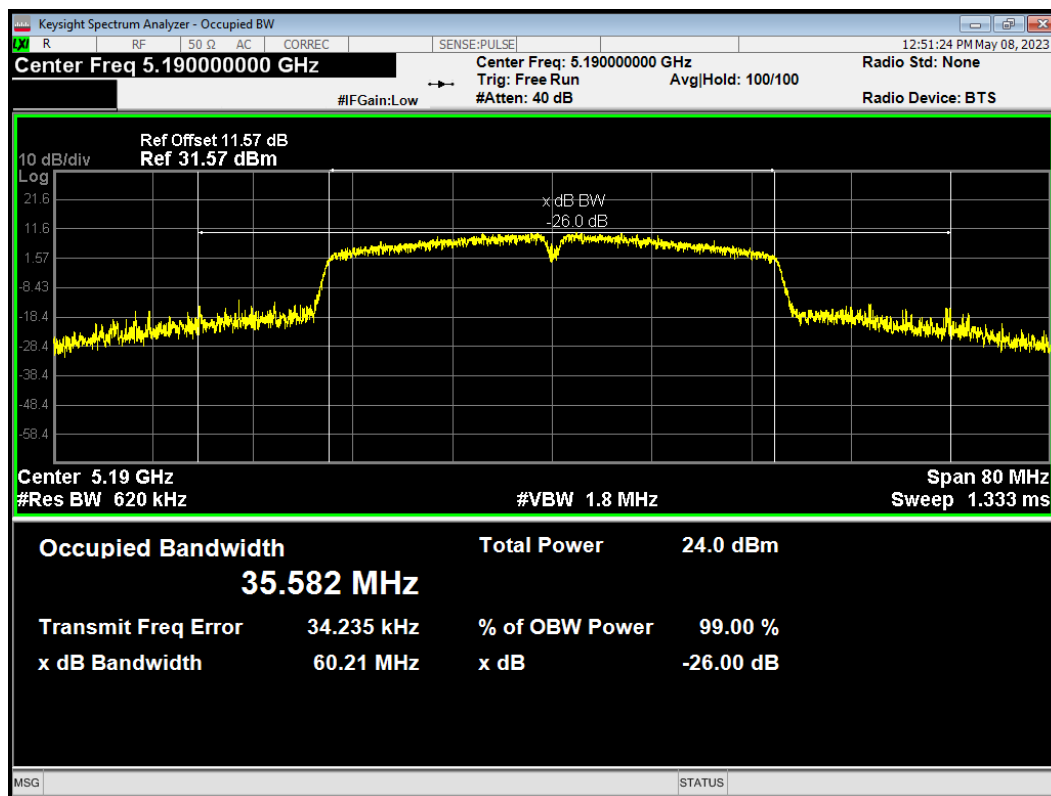
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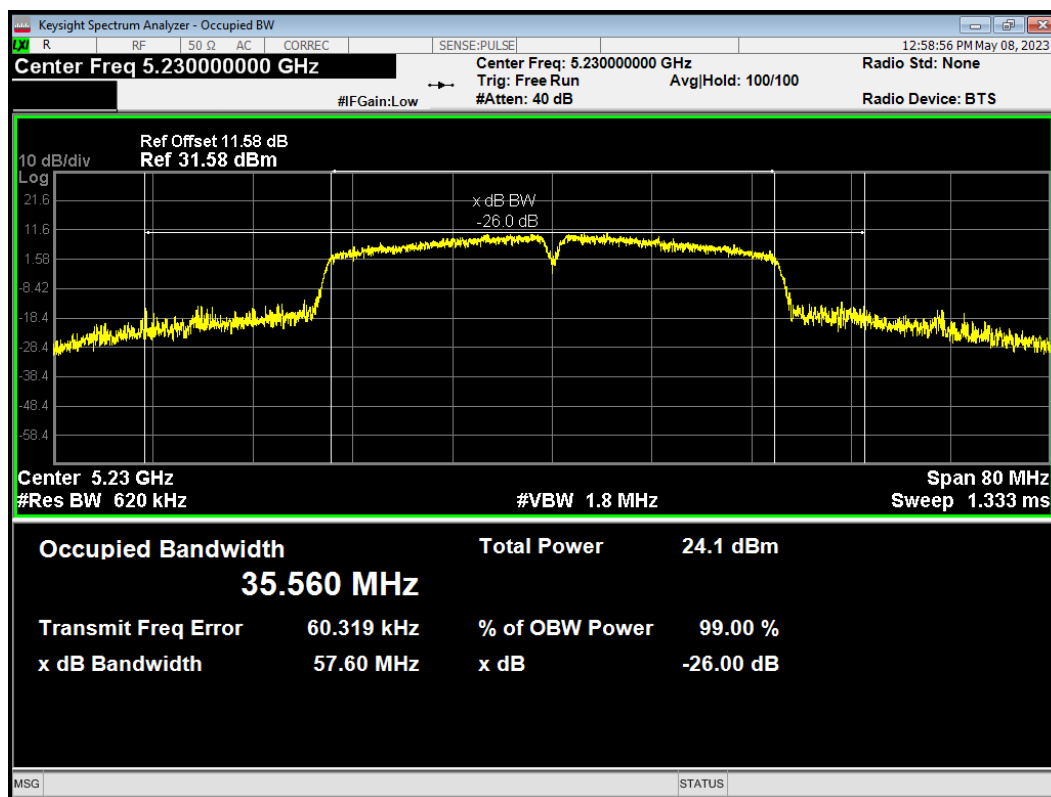
OBW 802.11n(HT20) 5240MHz



OBW 802.11n(HT40) 5190MHz

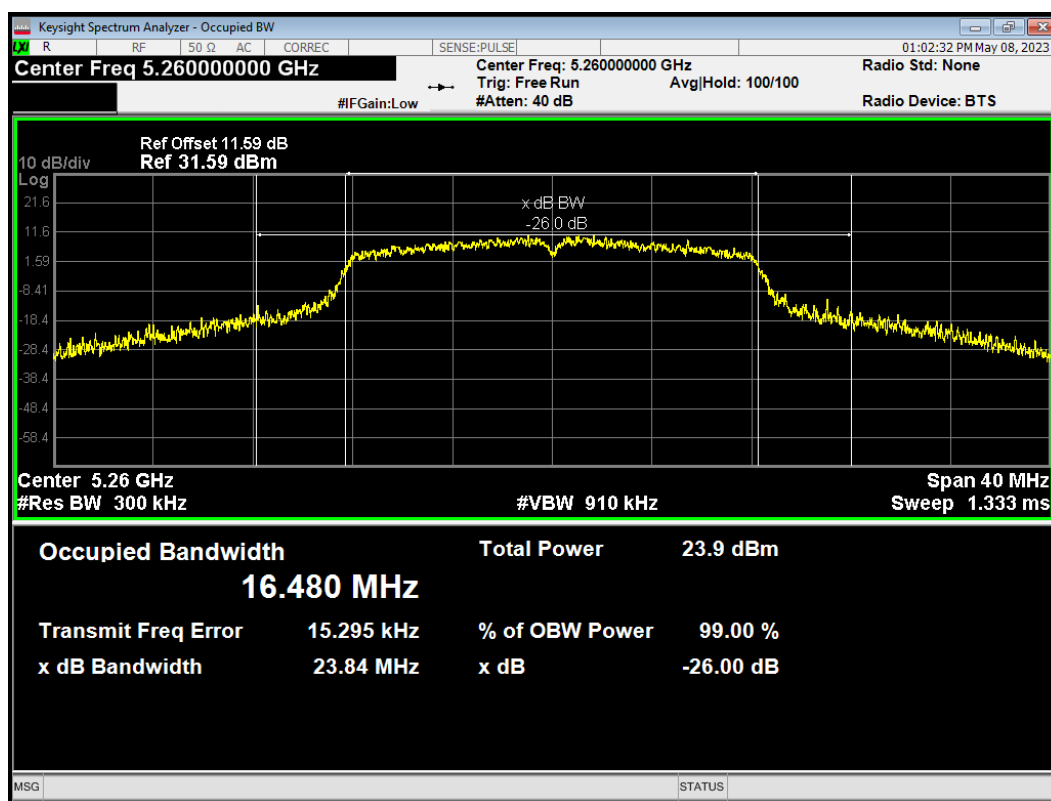


OBW 802.11n(HT40) 5230MHz

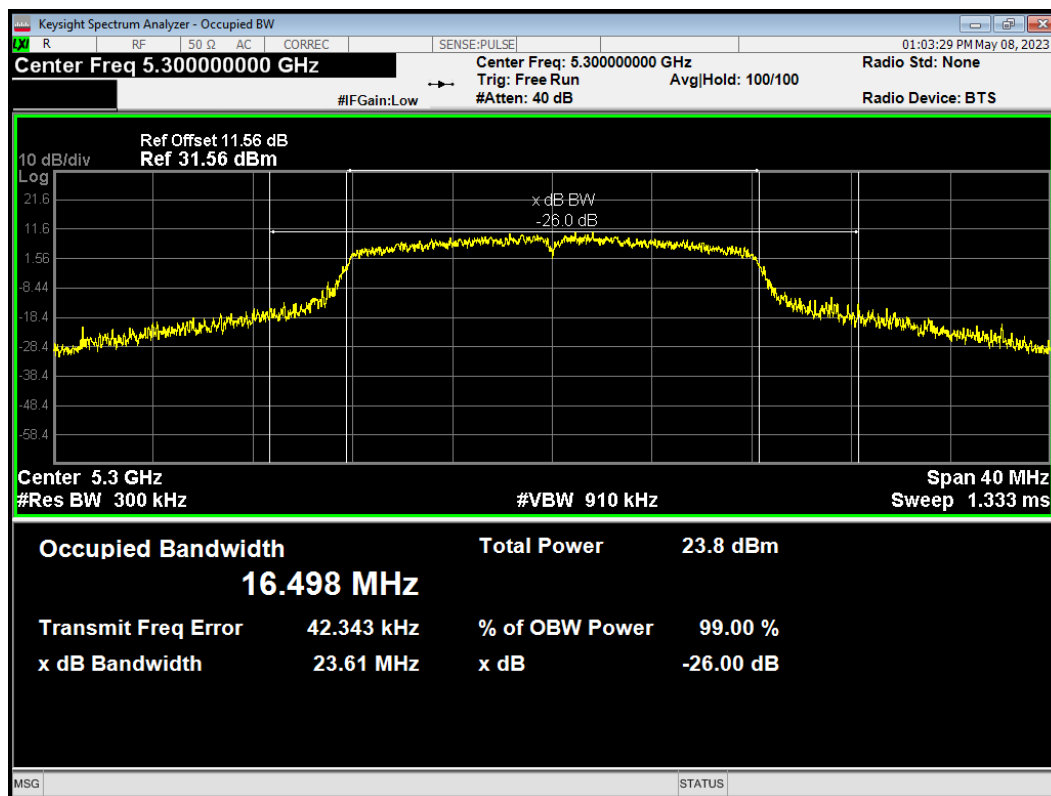


U-NII-2A

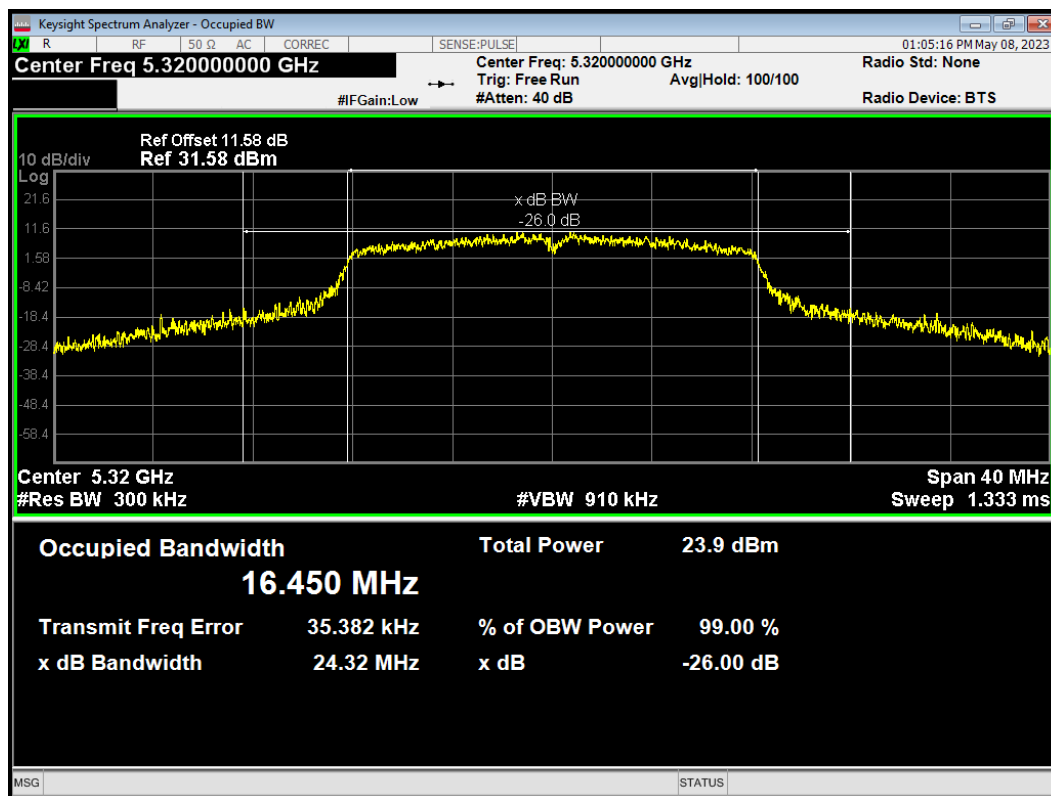
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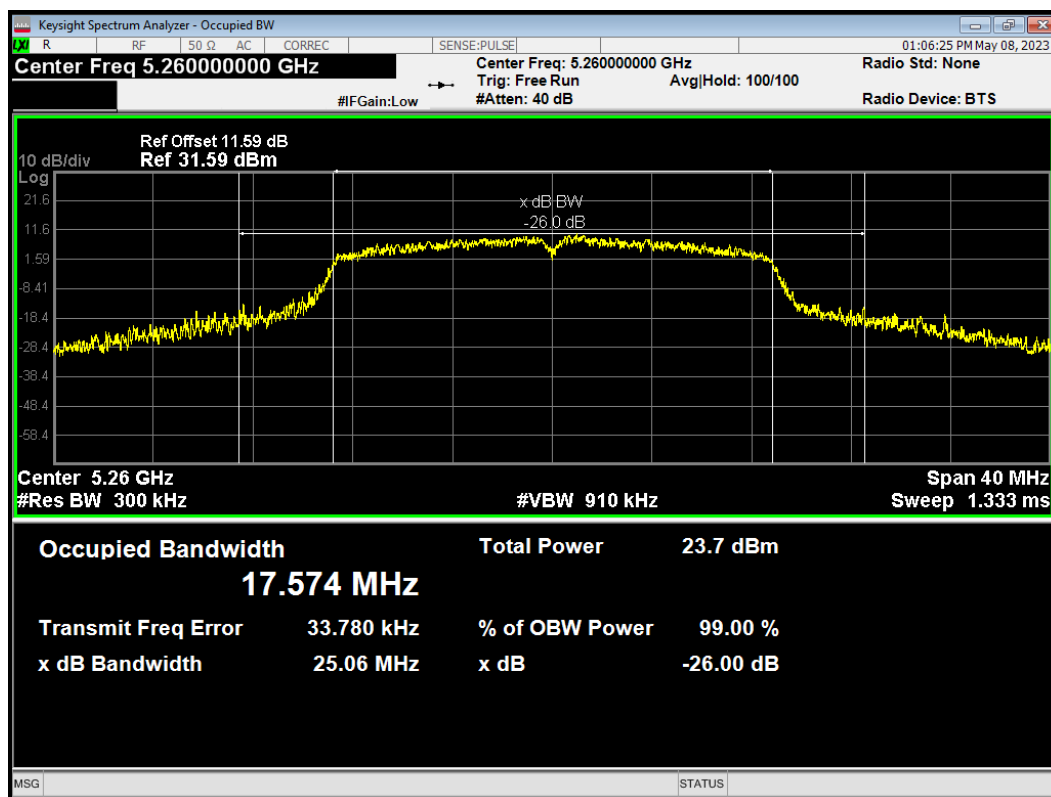
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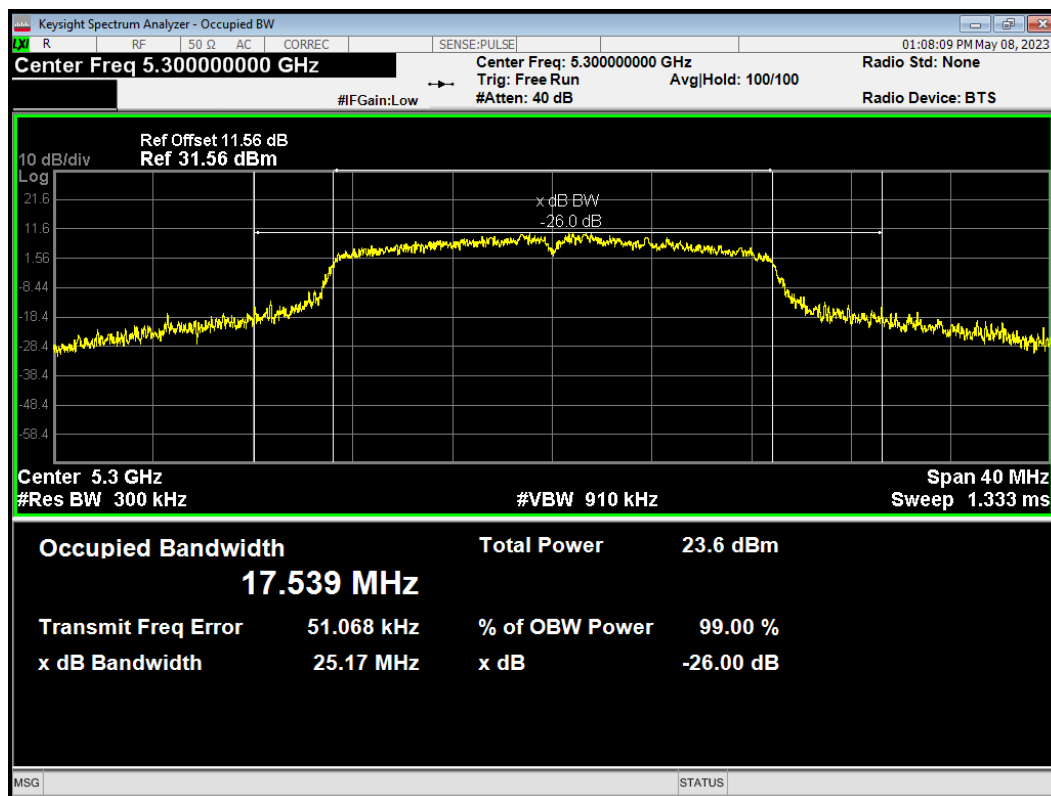
OBW 802.11a 5320MHz



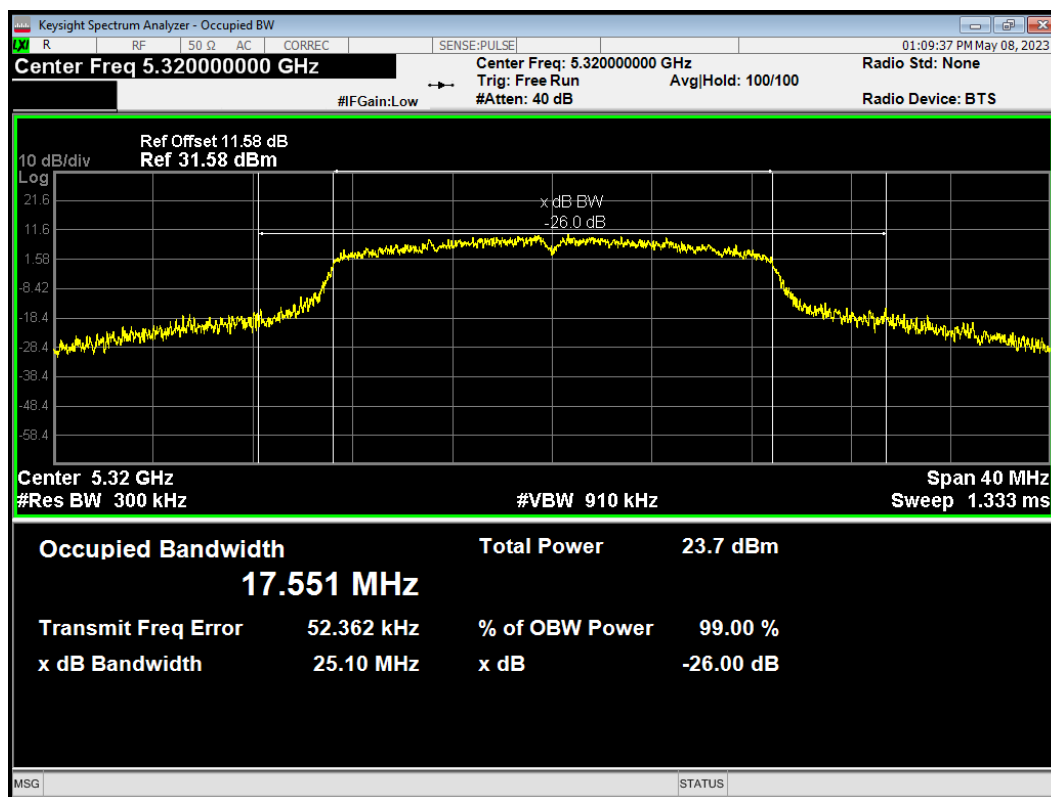
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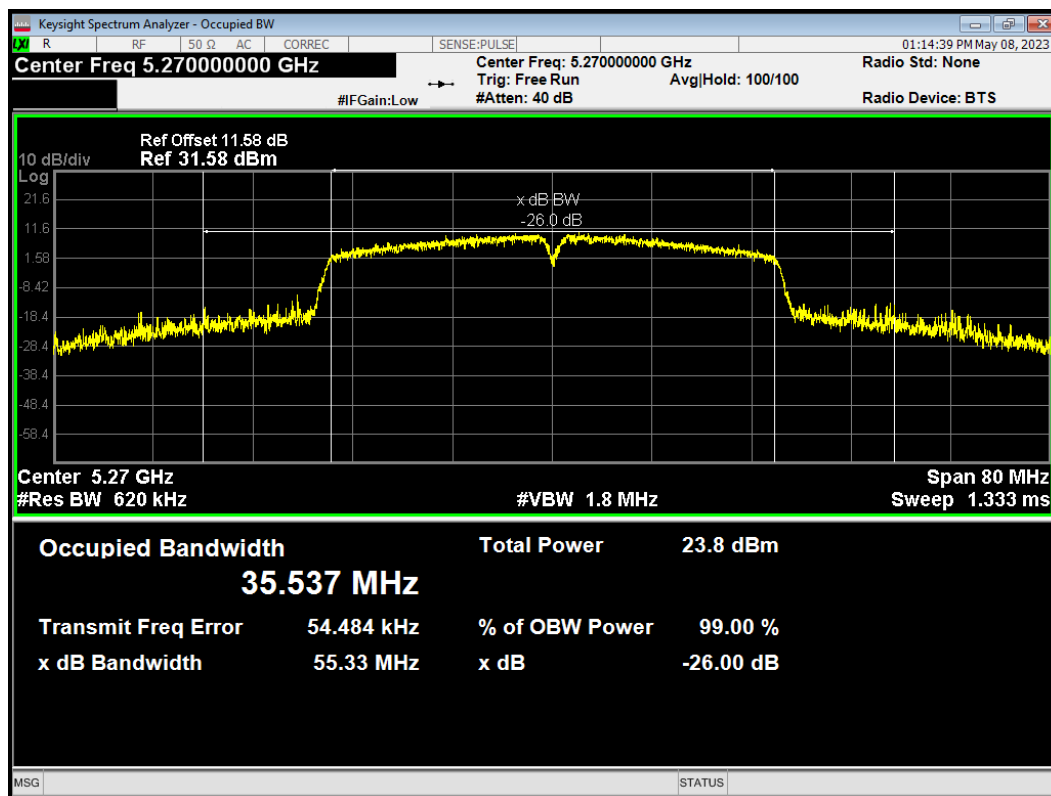
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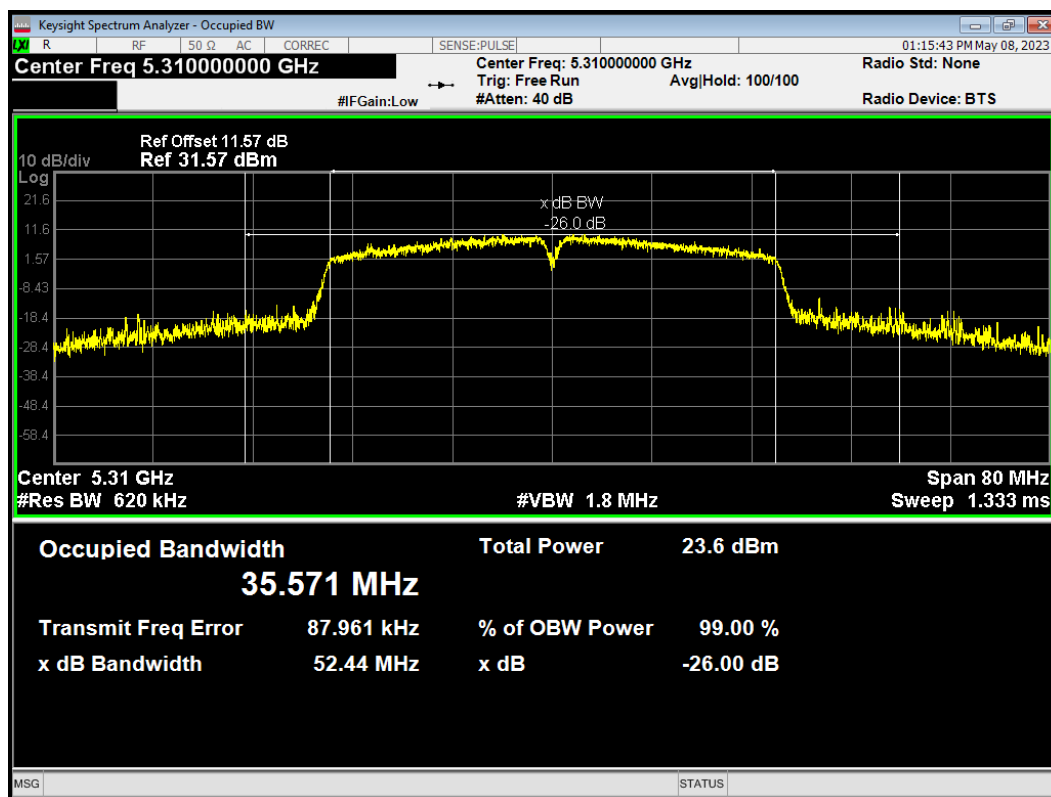
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OBW 802.11n(HT40) 5270MHz

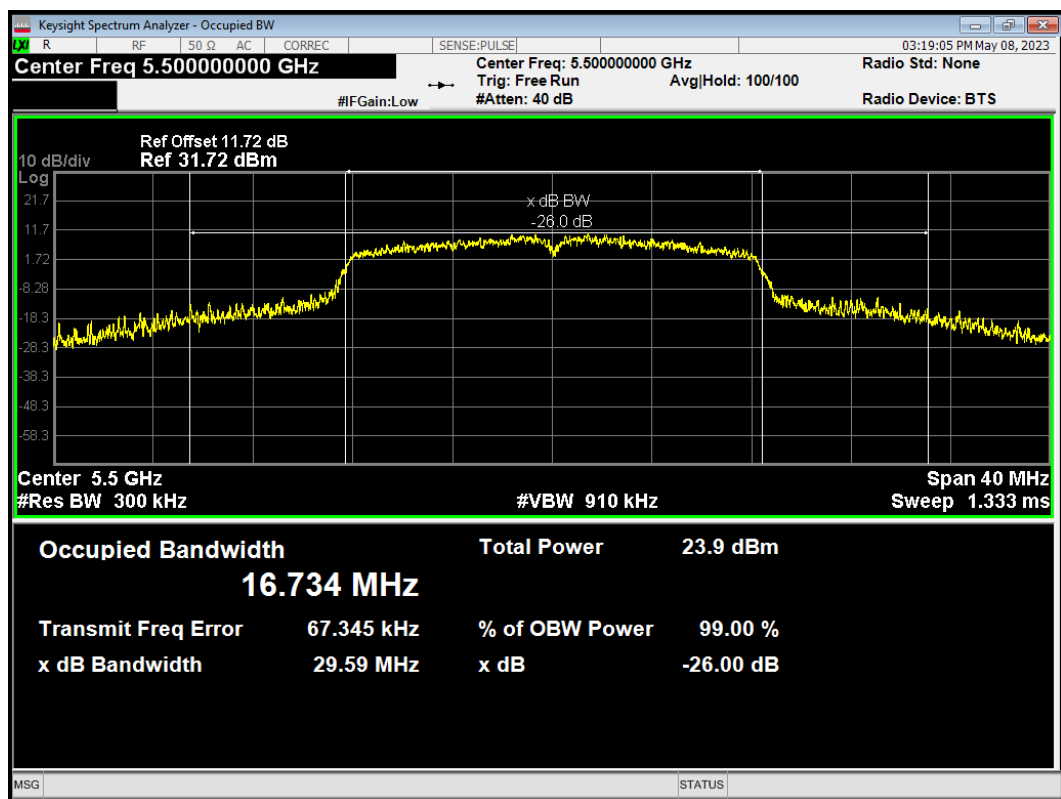


OBW 802.11n(HT40) 5310MHz

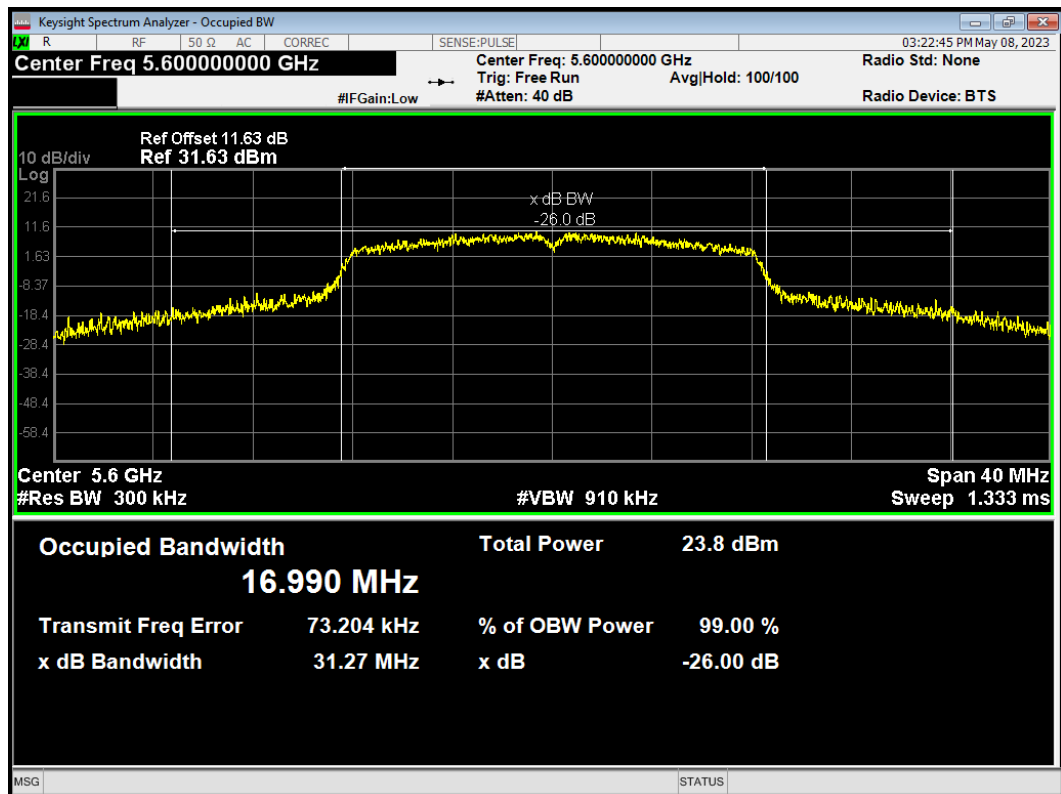


U-NII-2C

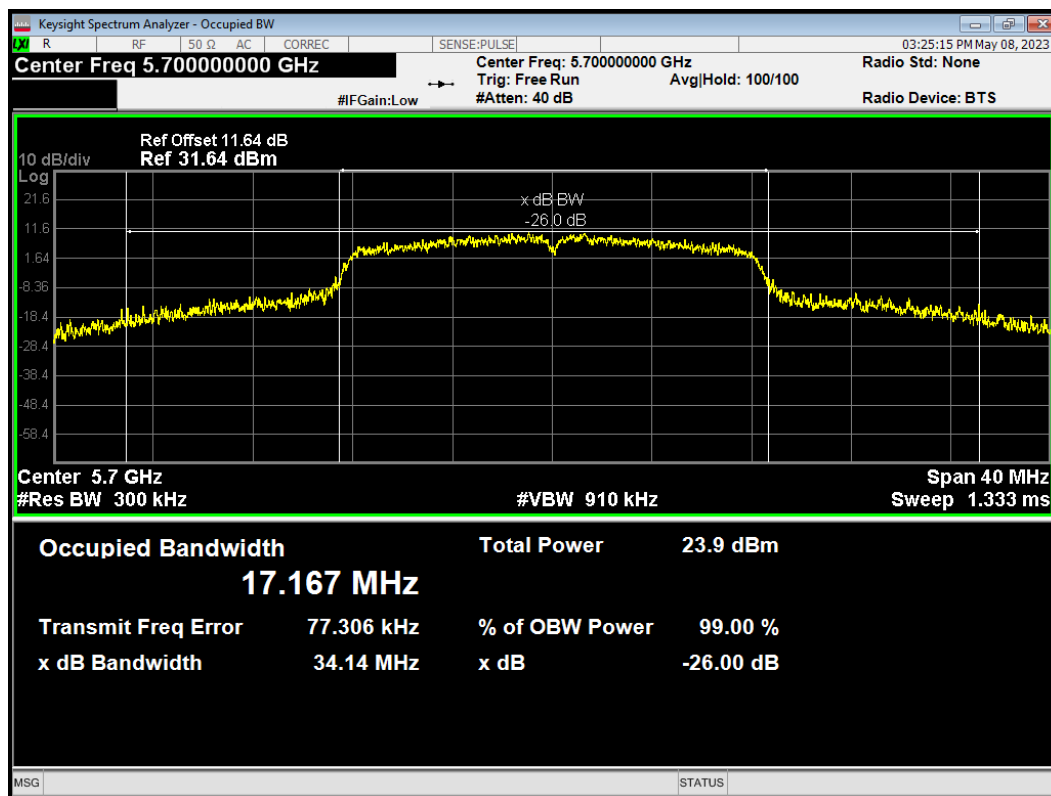
OBW 802.11a 5500MHz



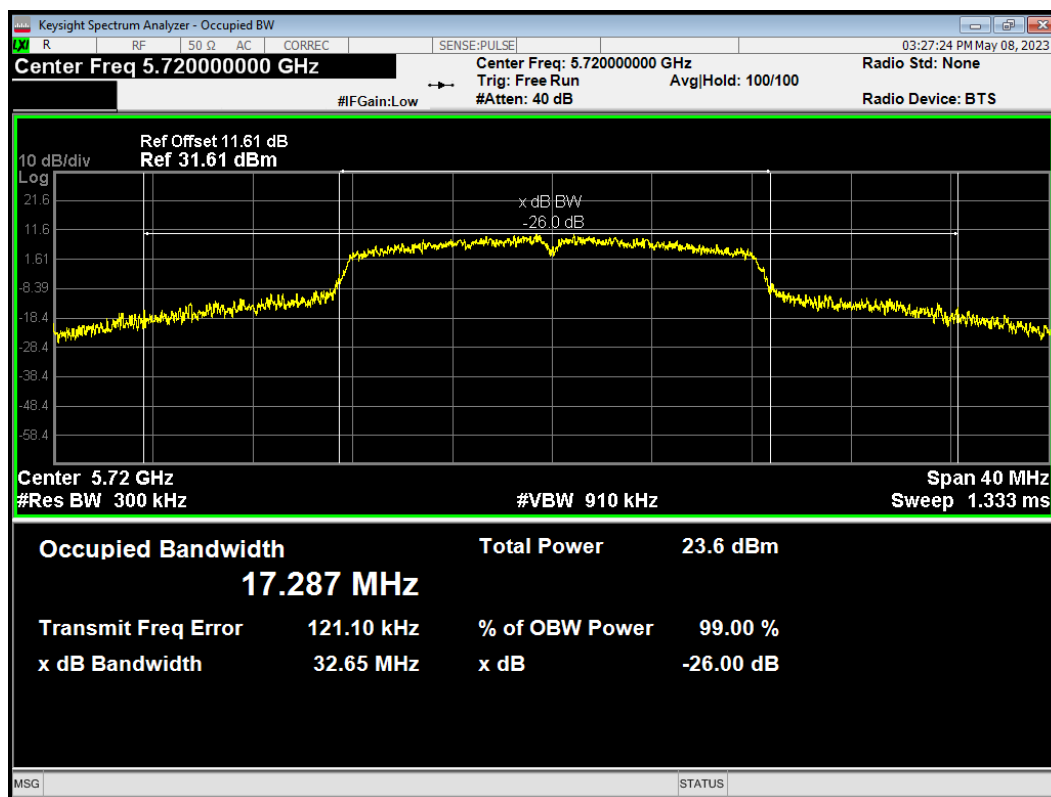
OBW 802.11a 5600MHz



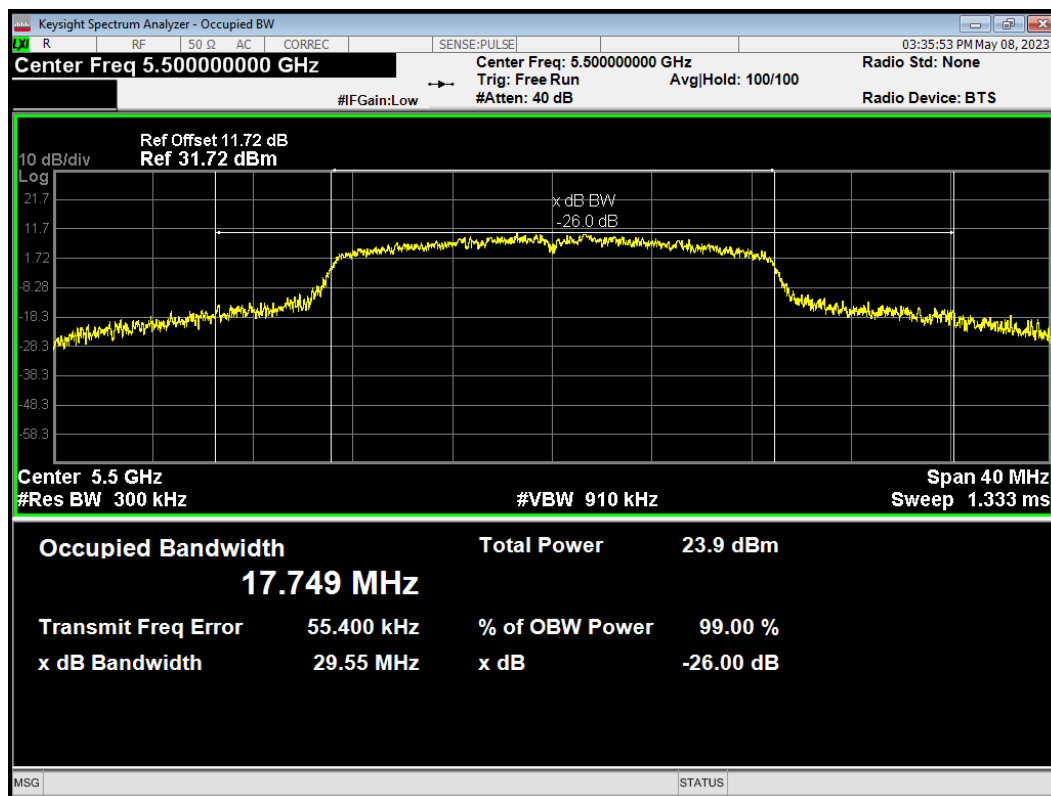
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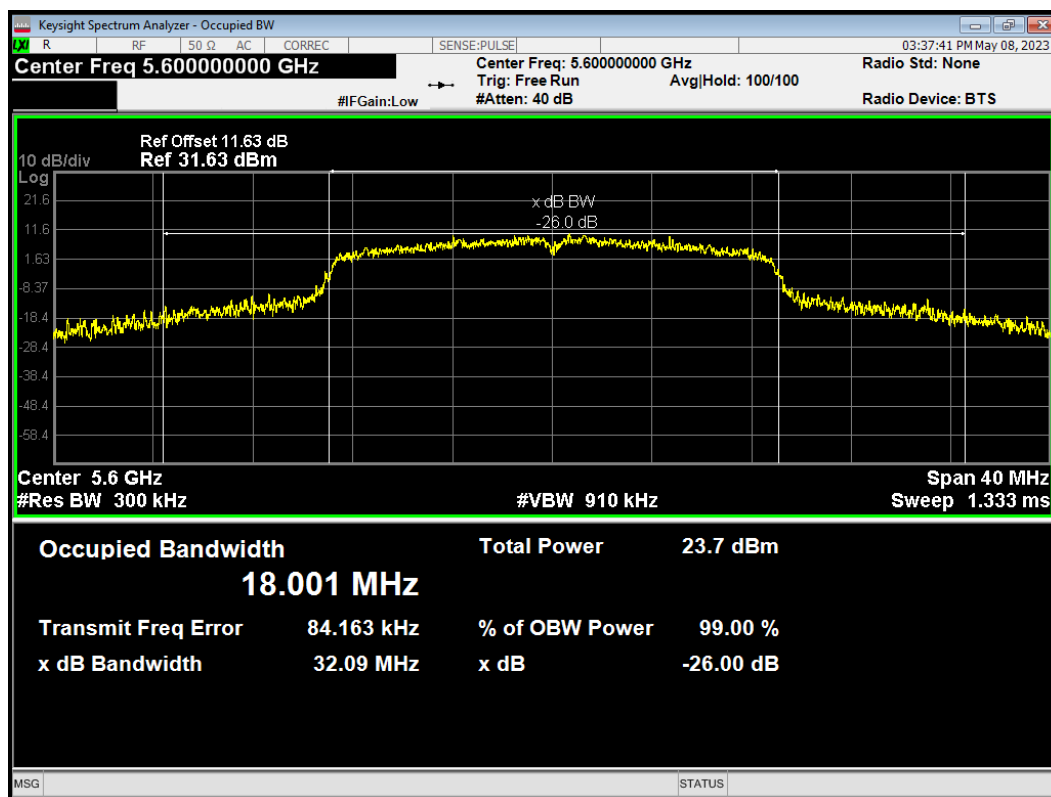
OBW 802.11a 5720MHz



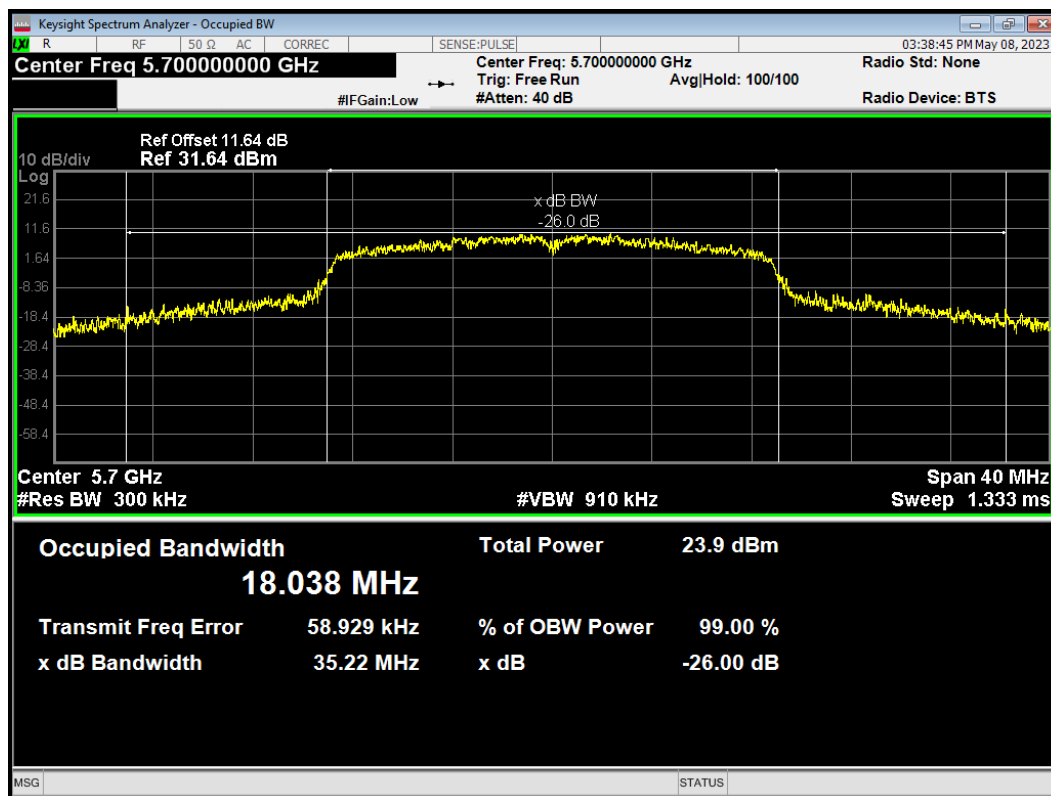
OBW 802.11n(HT20) 5500MHz



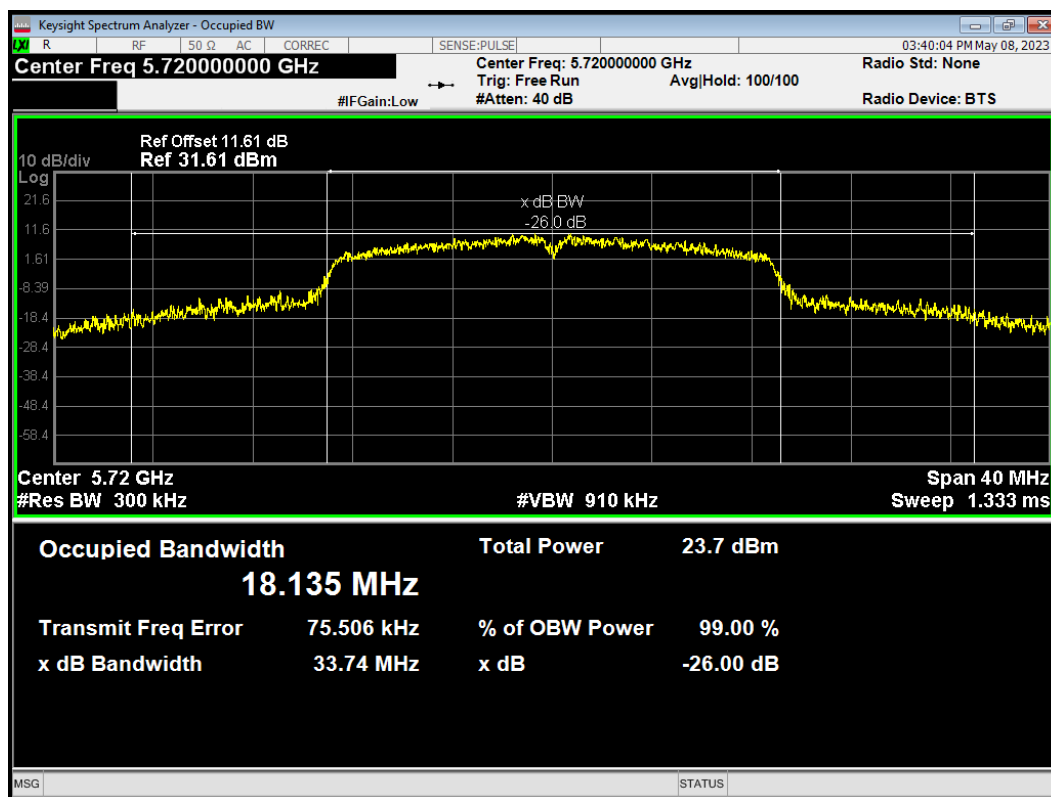
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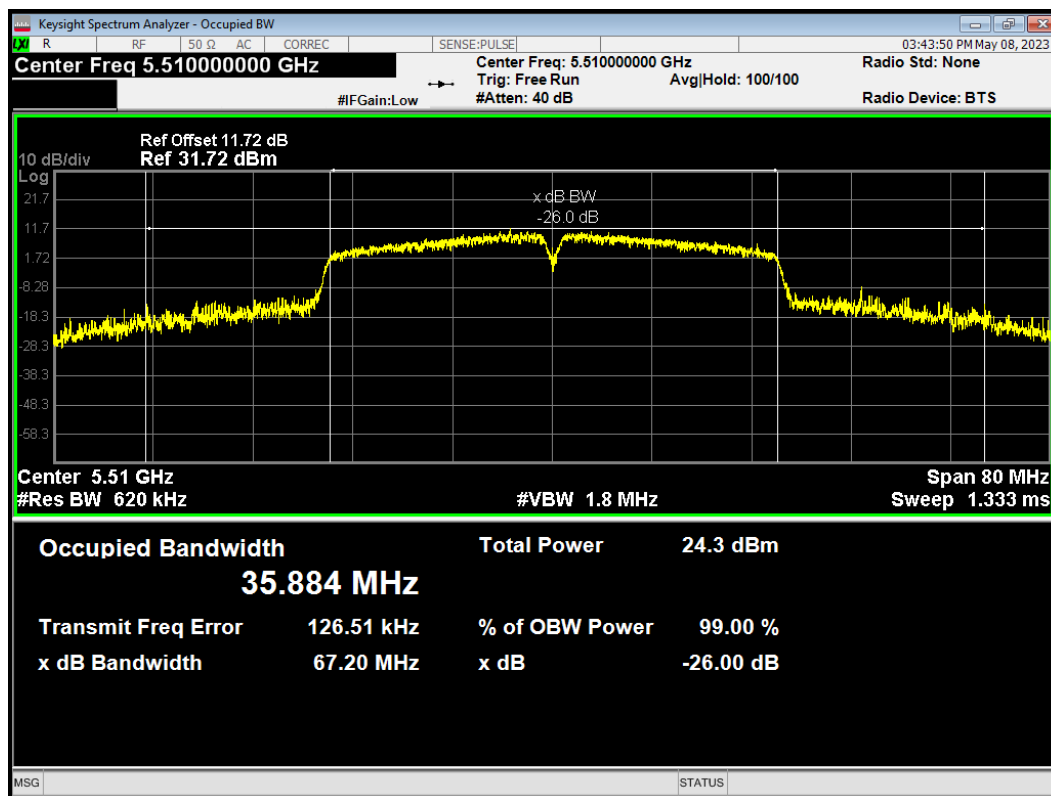
OBW 802.11n(HT20) 5700MHz



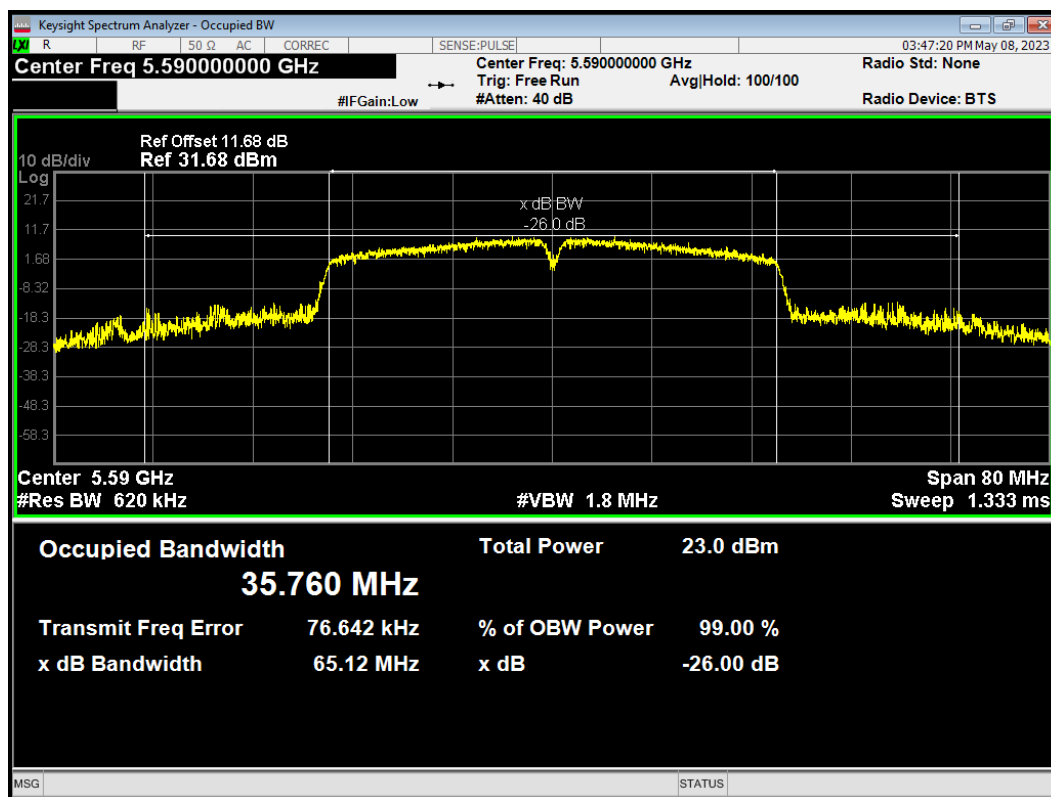
OBW 802.11n(HT20) 5720MHz



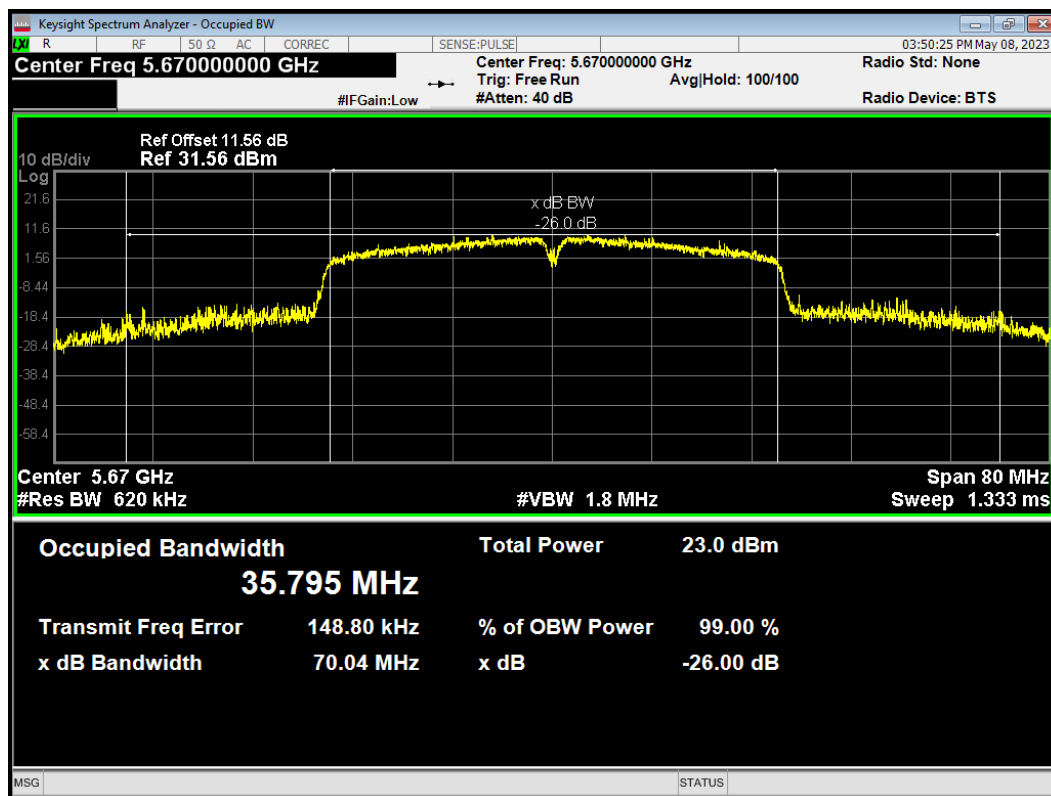
OBW 802.11n(HT40) 5510MHz



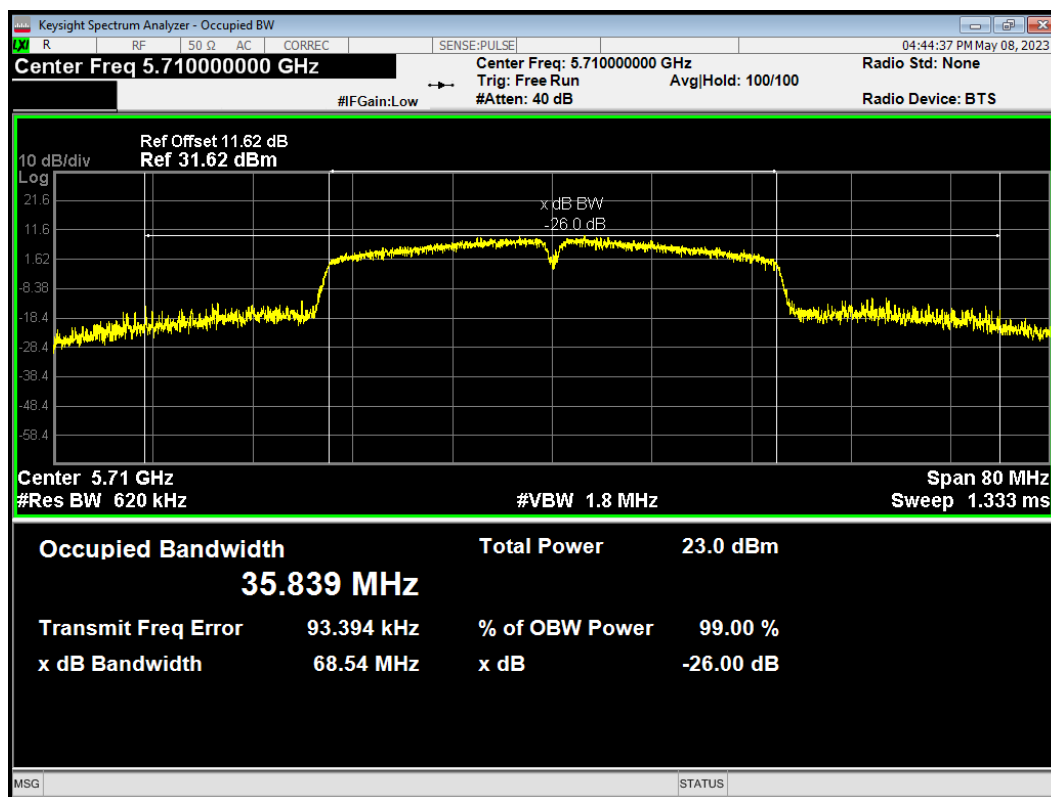
OBW 802.11n(HT40) 5590MHz



OBW 802.11n(HT40) 5670MHz



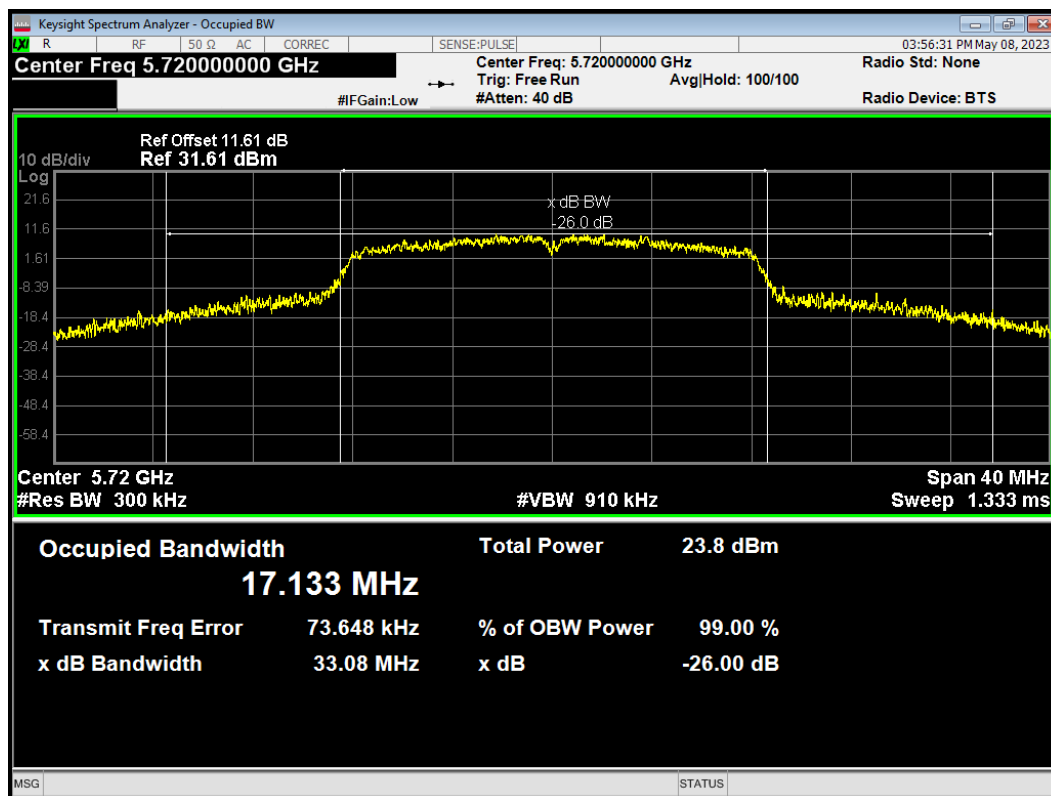
OBW 802.11n(HT40) 5710MHz



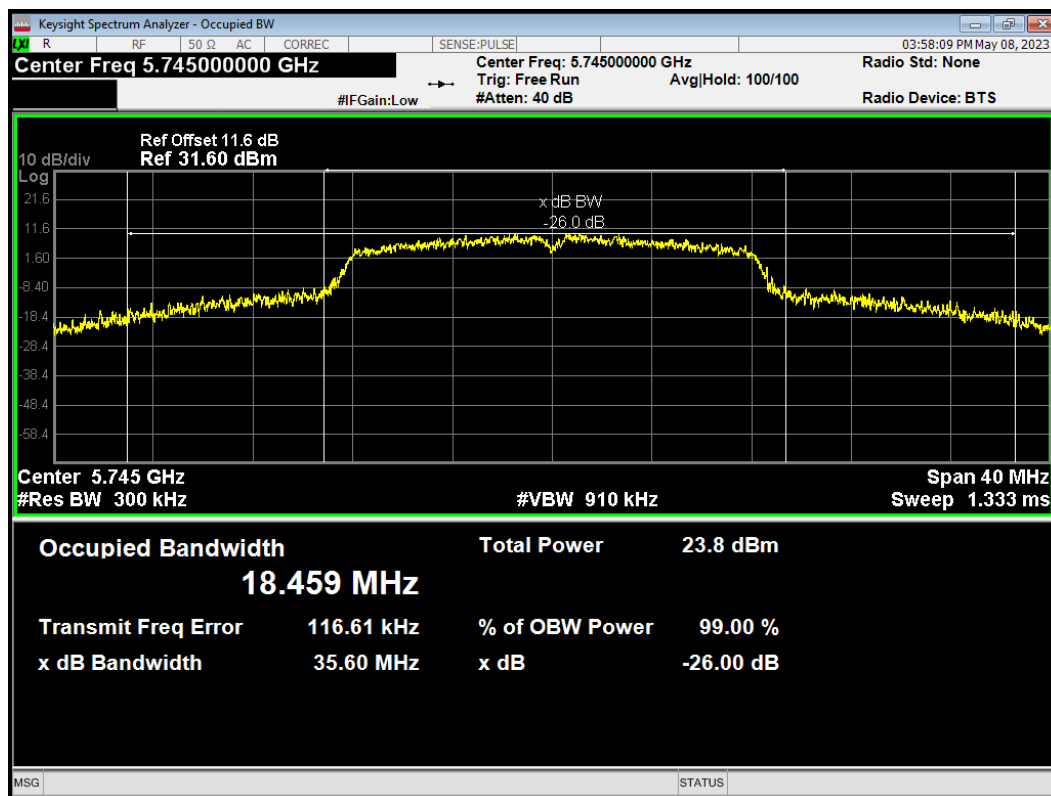
U-NII-3

99% bandwidth

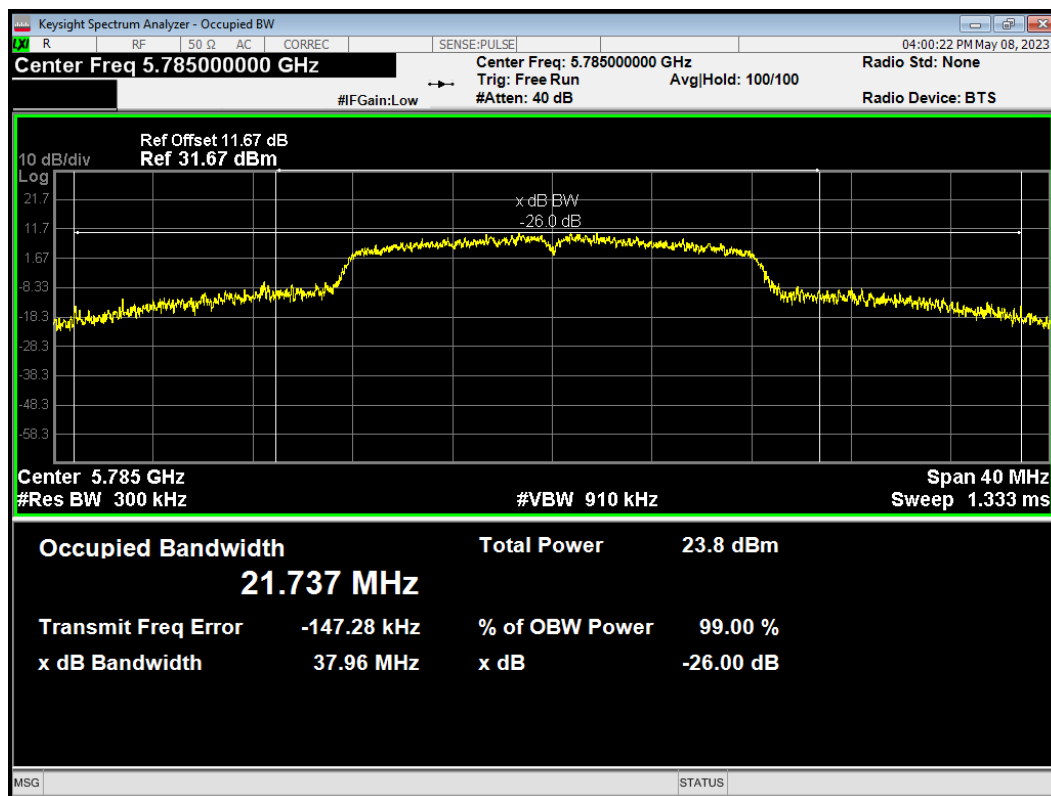
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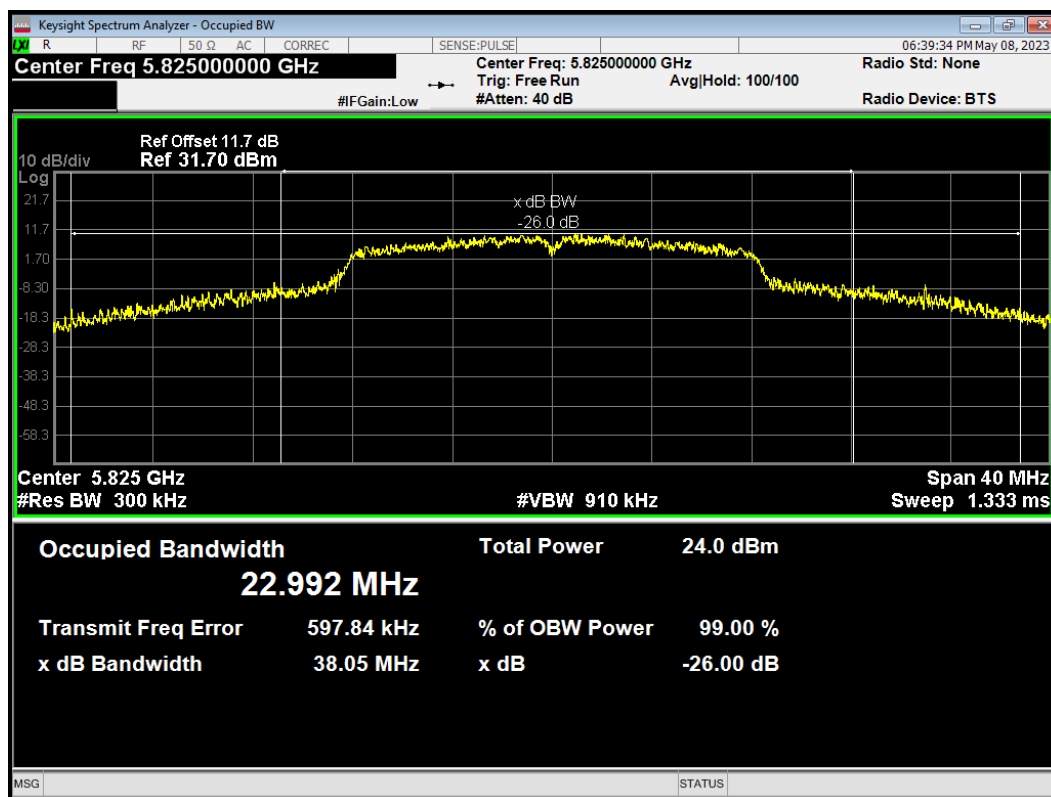
OBW 802.11a 5745MHz



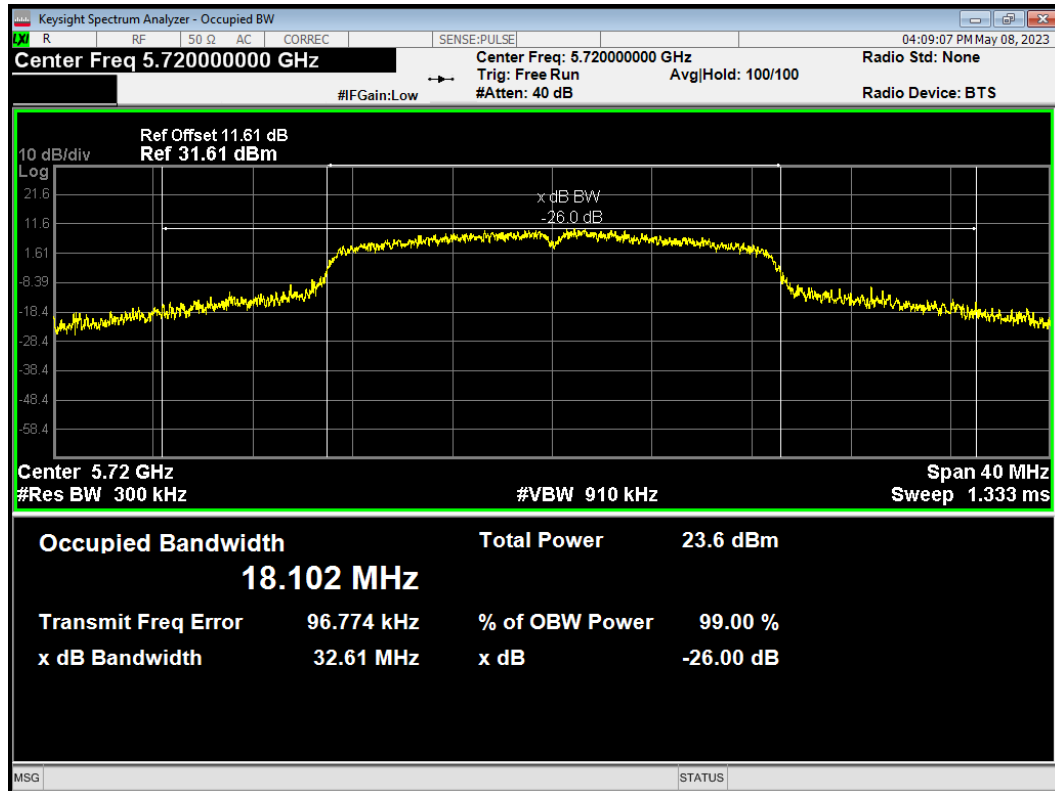
OBW 802.11a 5785MHz



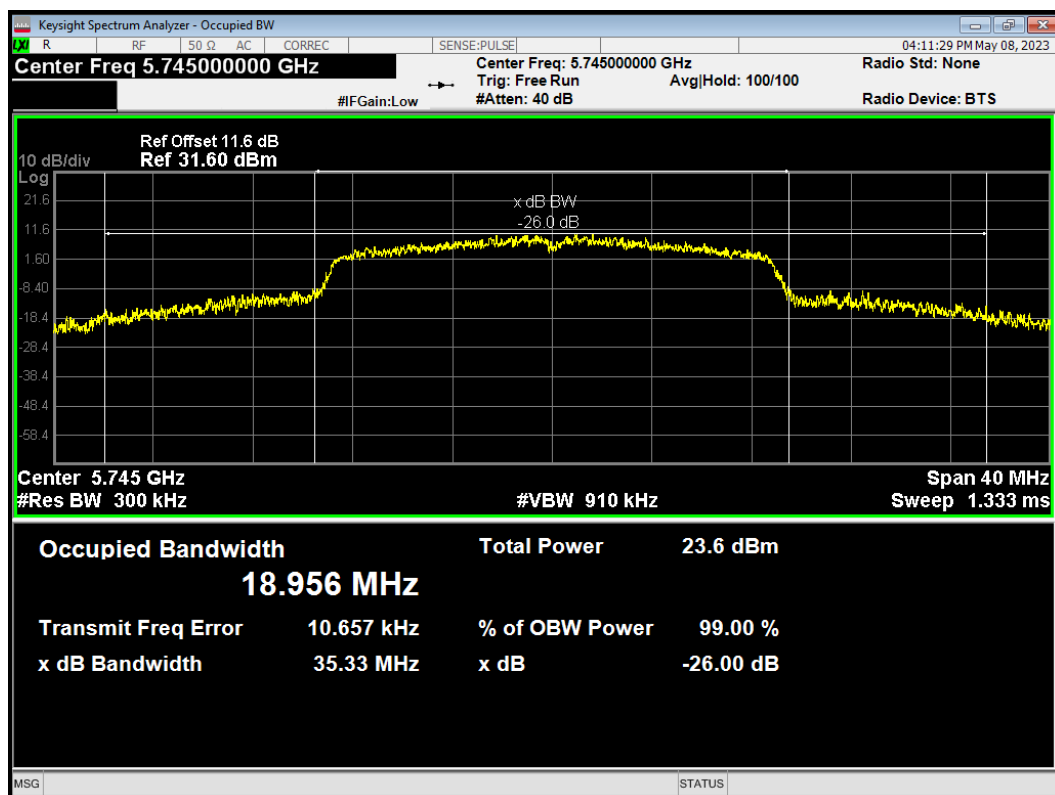
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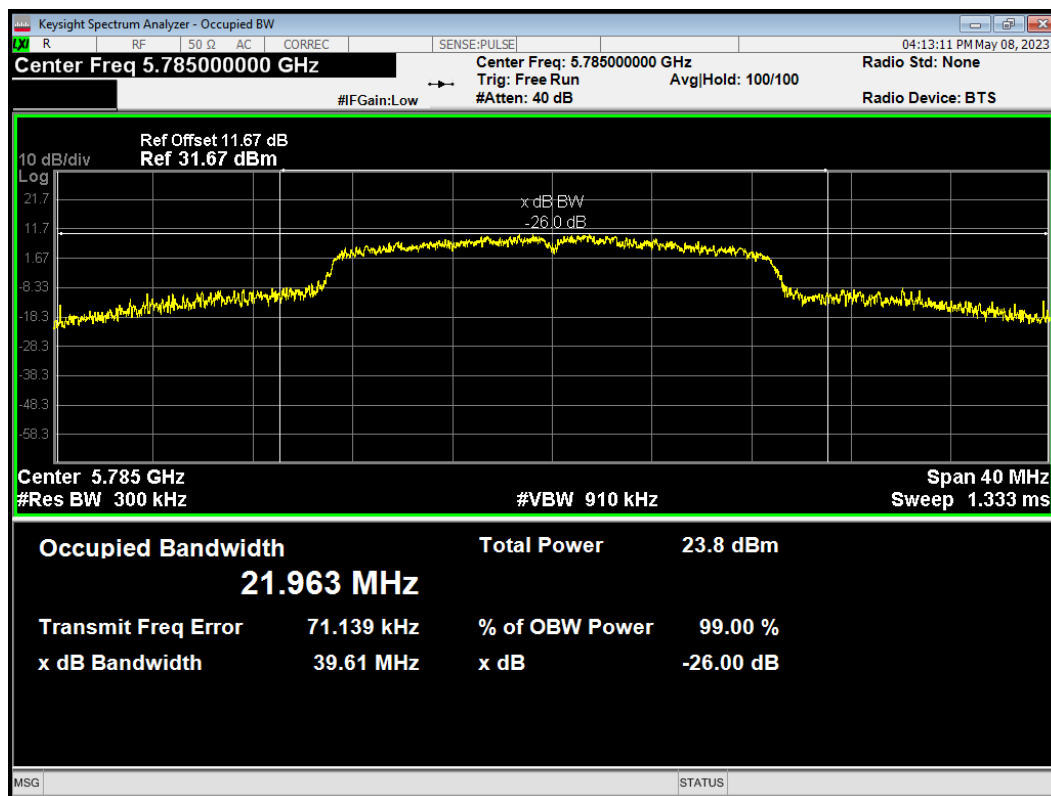
OBW 802.11n(HT20) 5720MHz



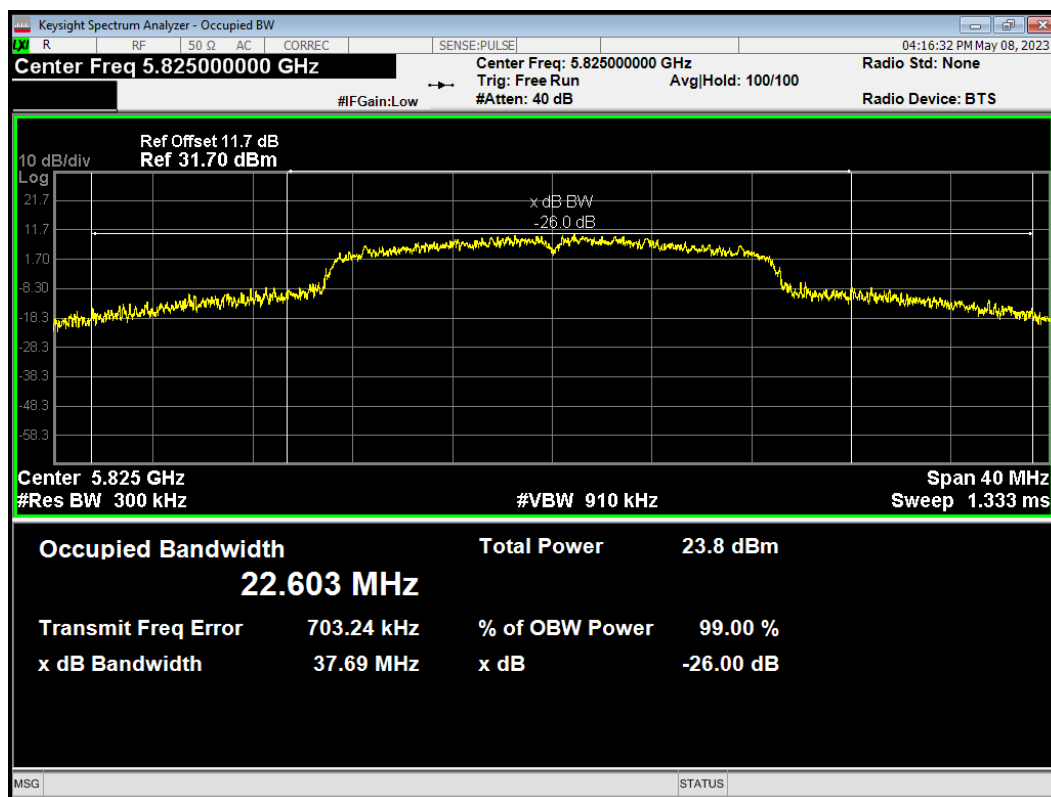
OBW 802.11n(HT20) 5745MHz



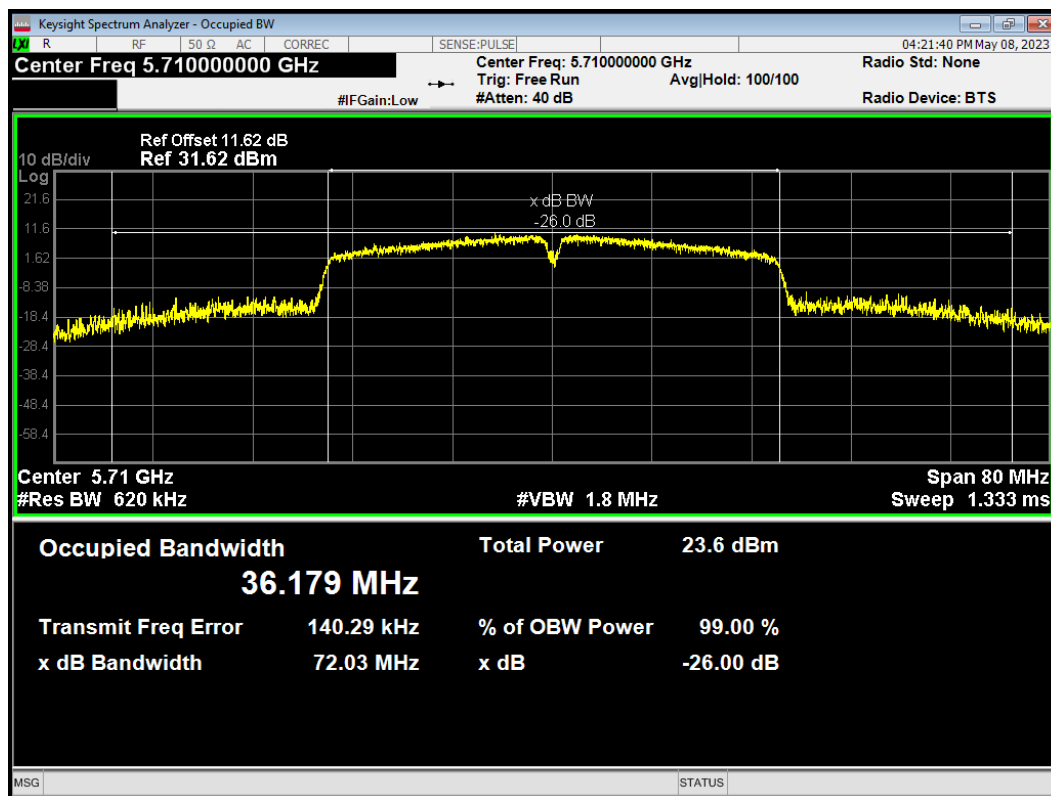
OBW 802.11n(HT20) 5785MHz



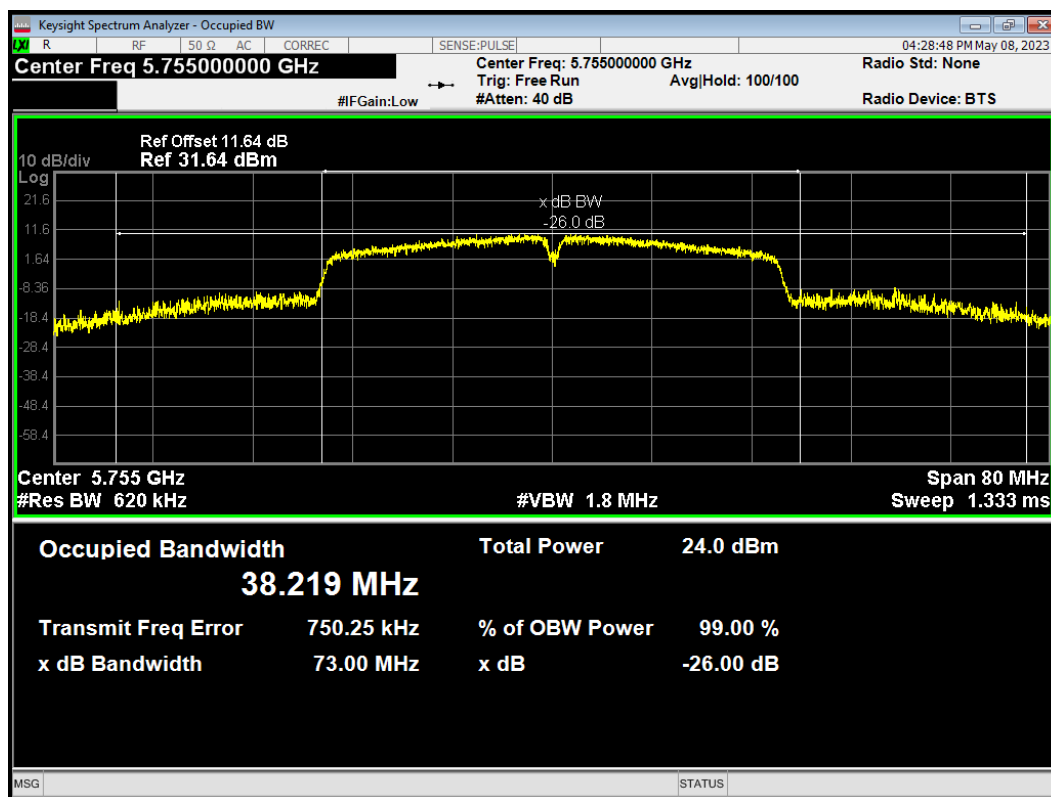
OBW 802.11n(HT20) 5825MHz



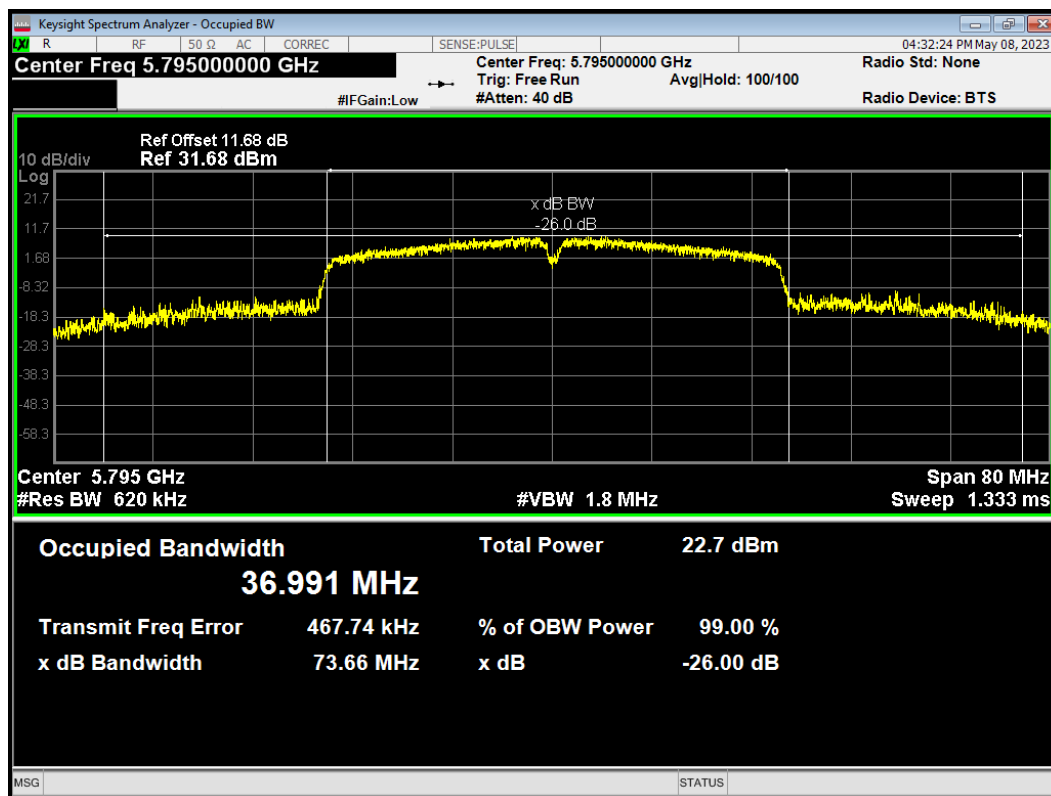
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OBW 802.11n(HT40) 5755MHz

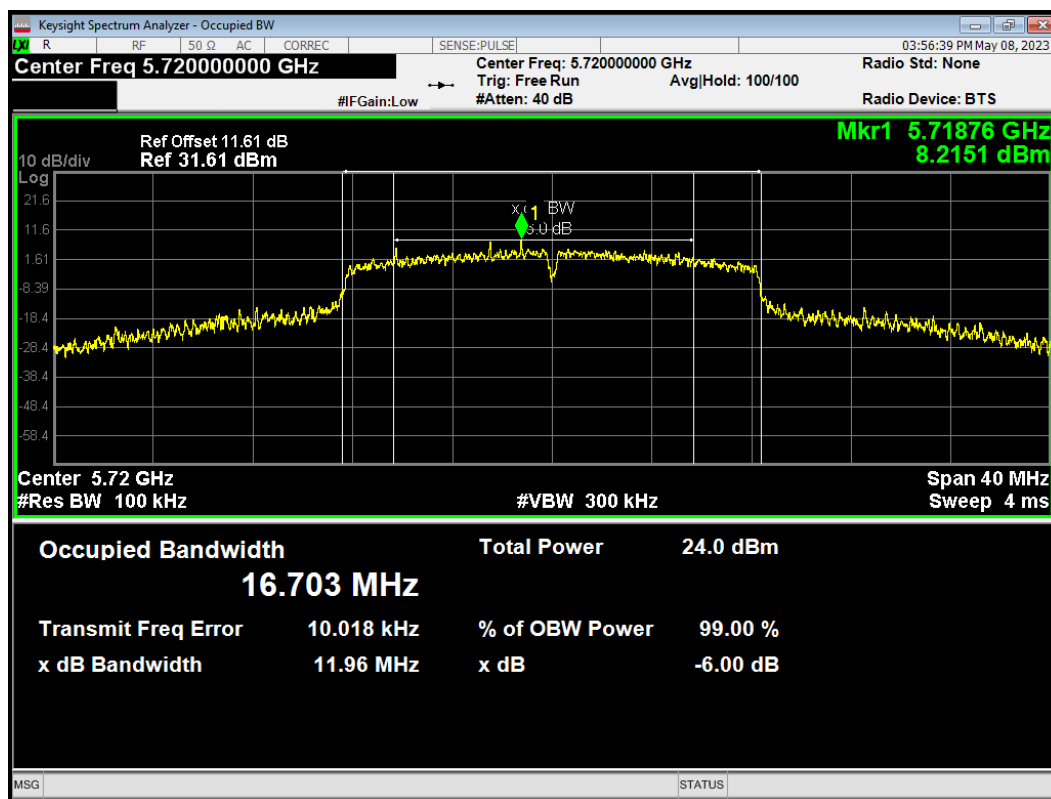


OBW 802.11n(HT40) 5795MHz

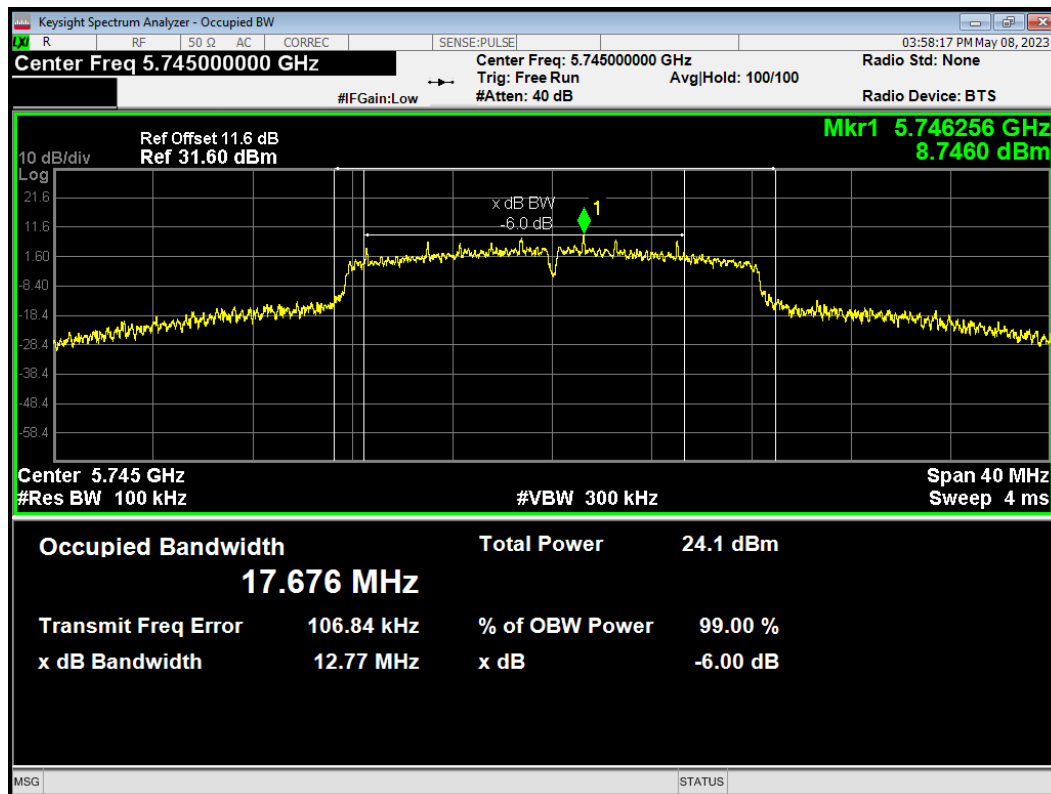


Minimum 6 dB bandwidth

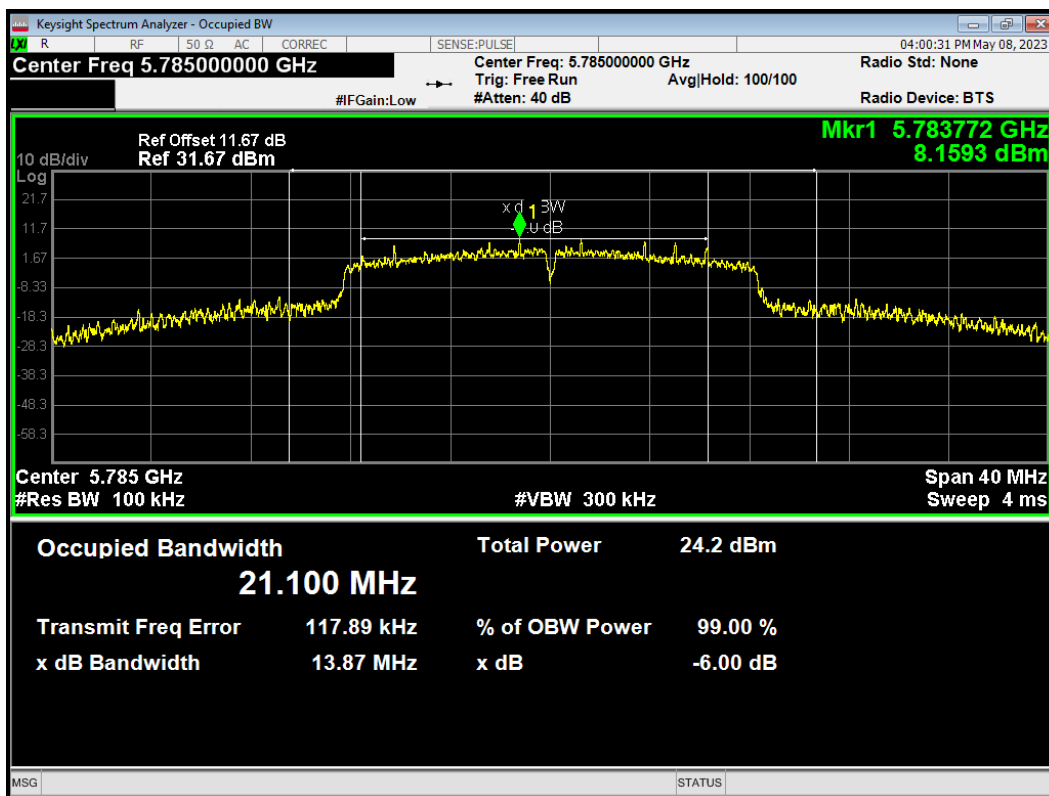
-6dB Bandwidth 802.11a 5720MHz



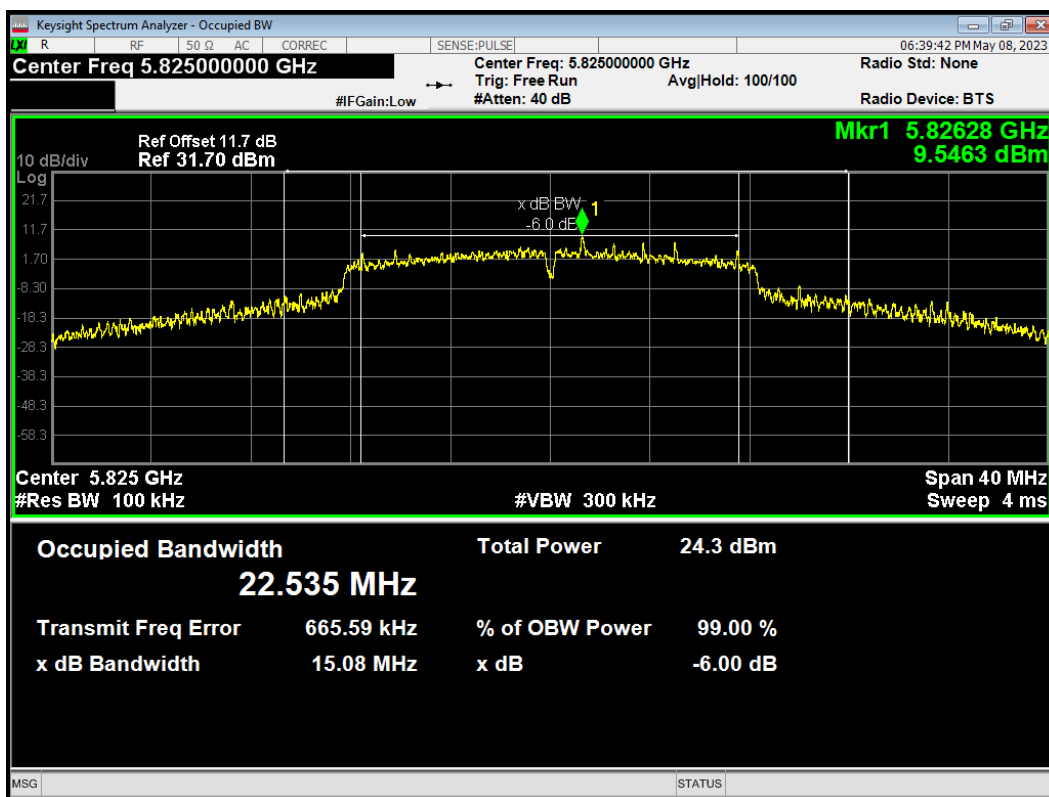
-6dB Bandwidth 802.11a 5745MHz



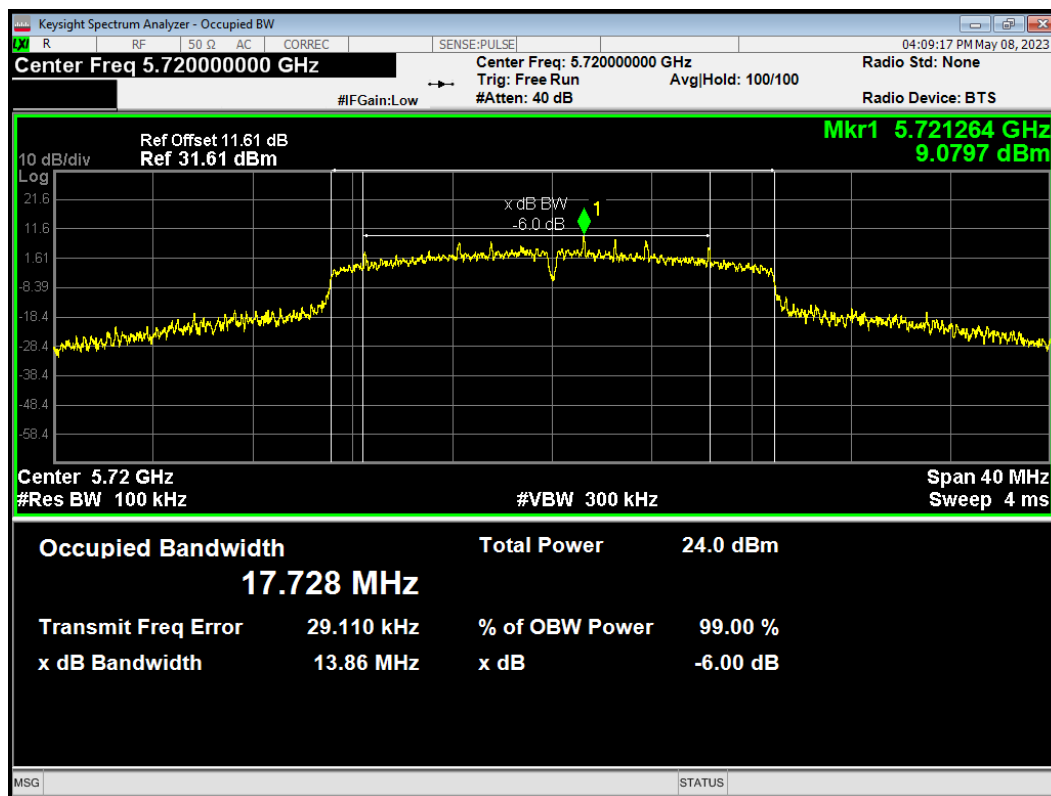
-6dB Bandwidth 802.11a 5785MHz



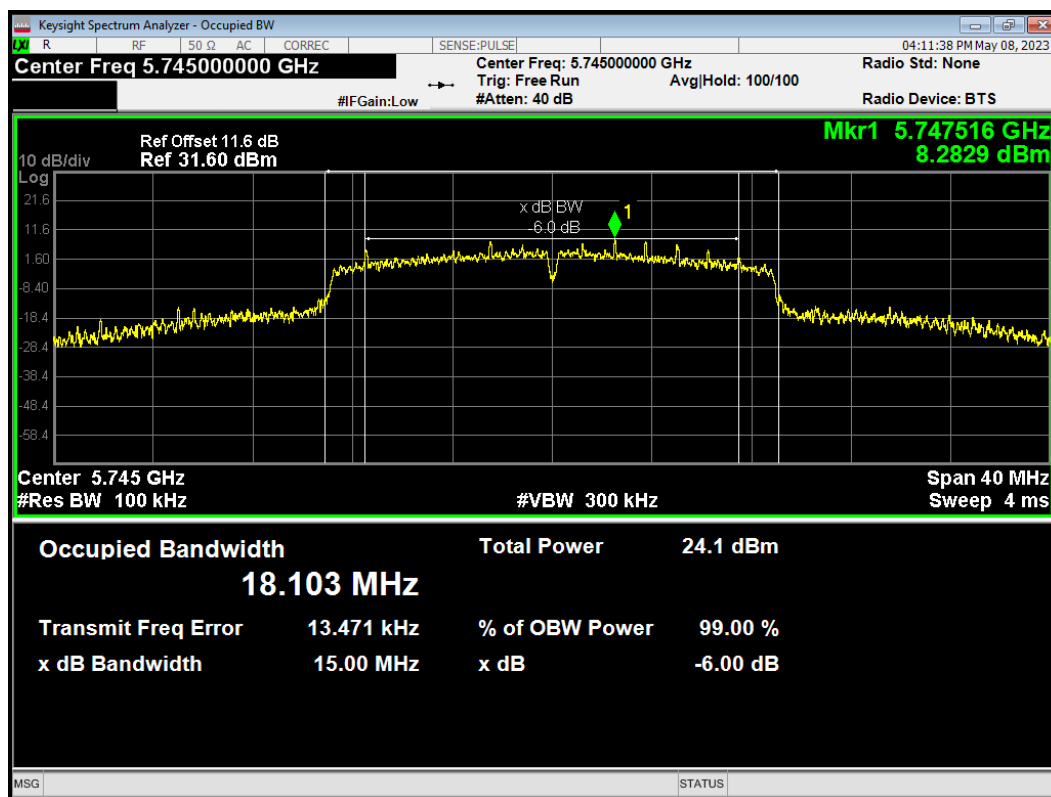
-6dB Bandwidth 802.11a 5825MHz



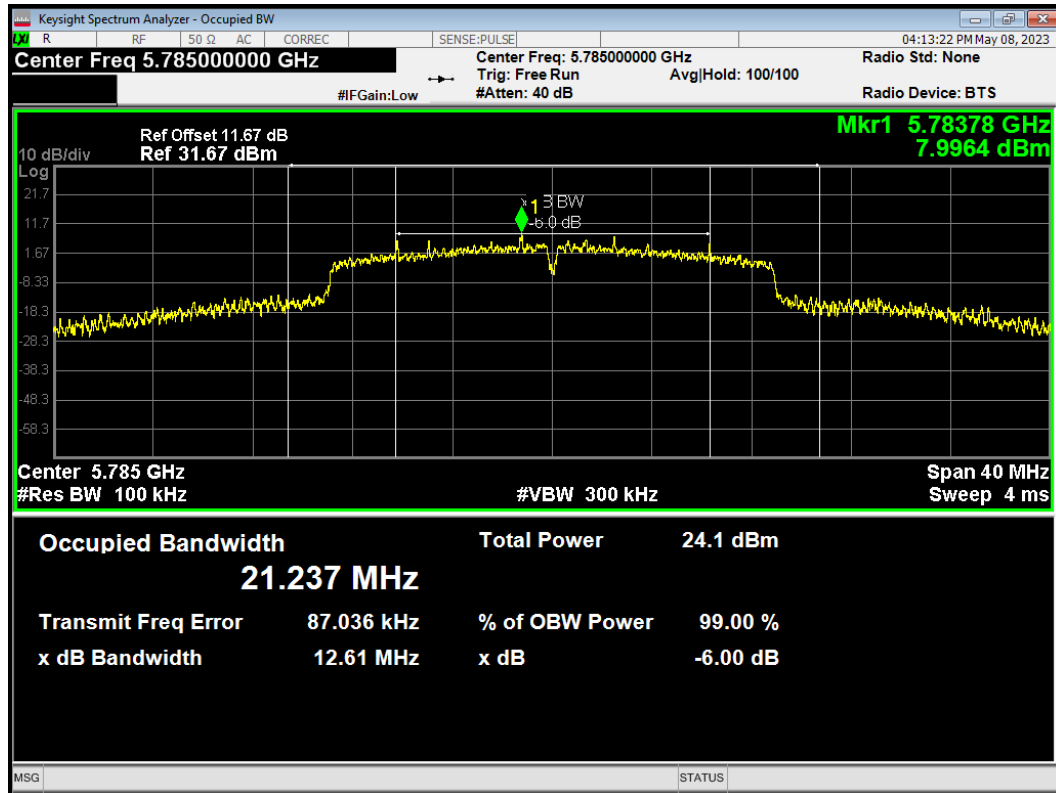
-6dB Bandwidth 802.11n(HT20) 5720MHz



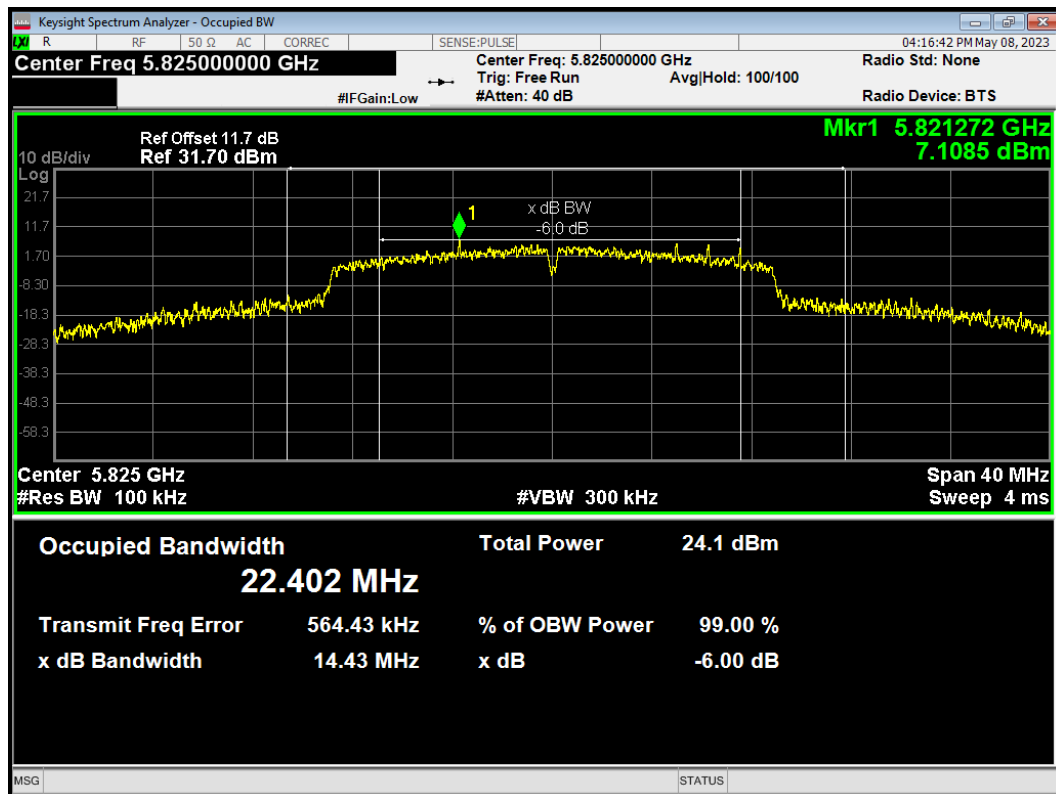
-6dB Bandwidth 802.11n(HT20) 5745MHz



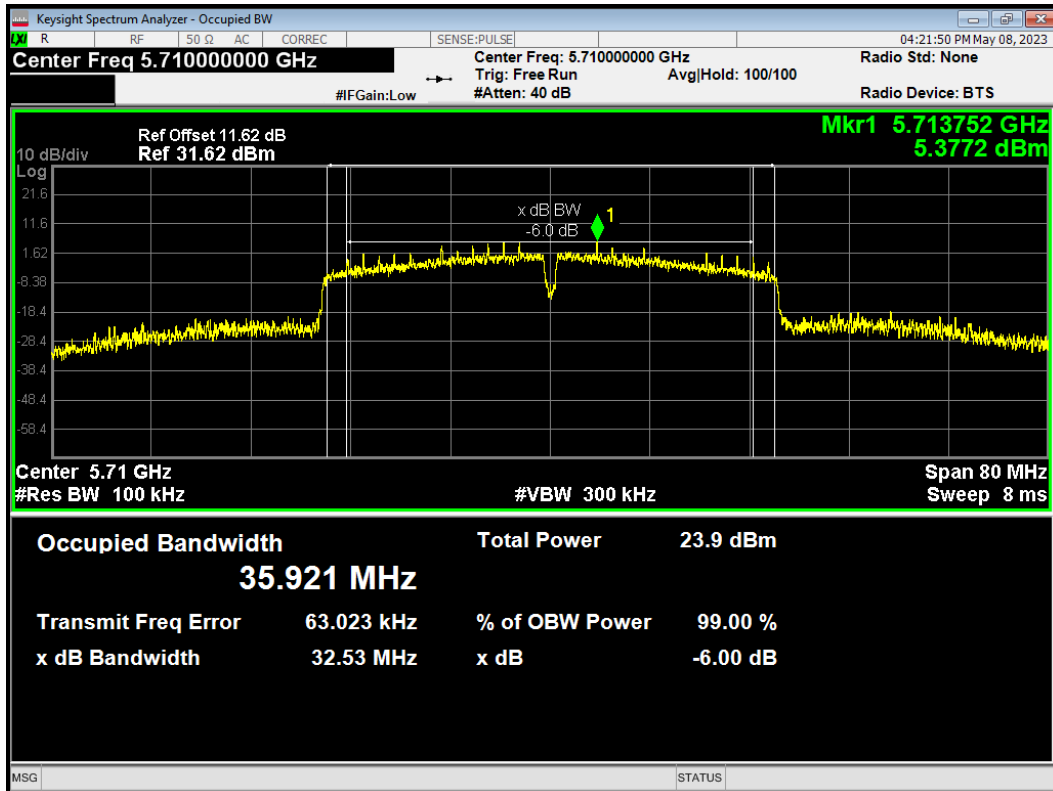
-6dB Bandwidth 802.11n(HT20) 5785MHz



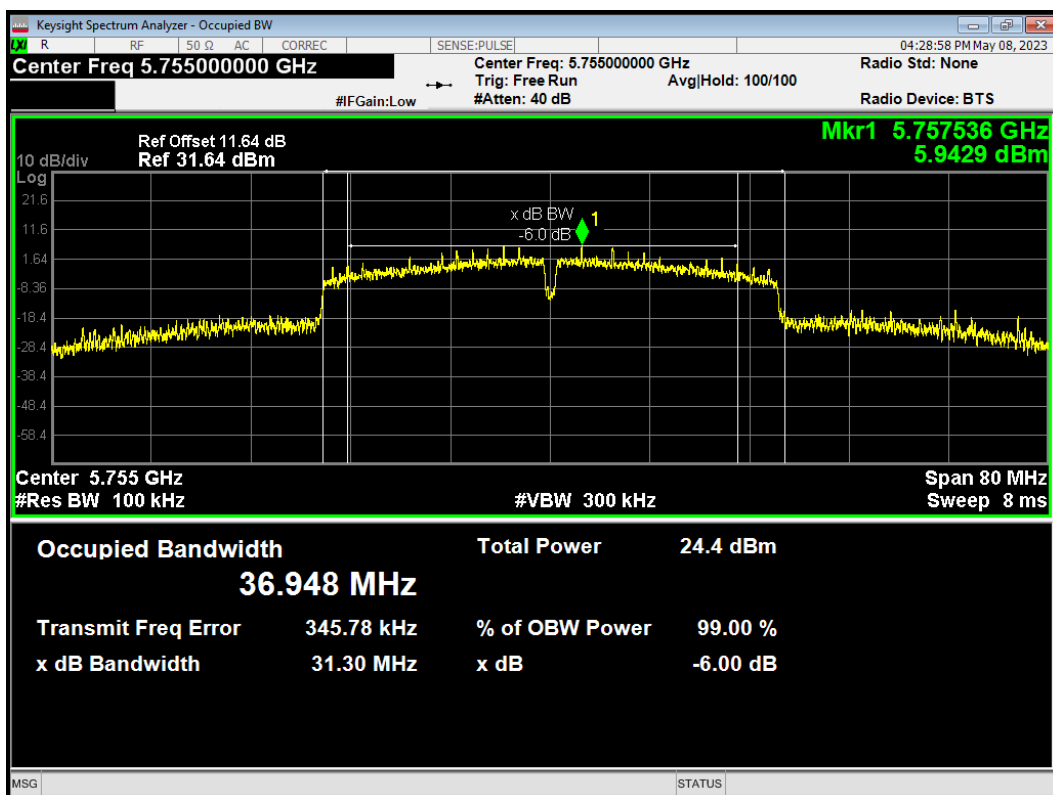
-6dB Bandwidth 802.11n(HT20) 5825MHz



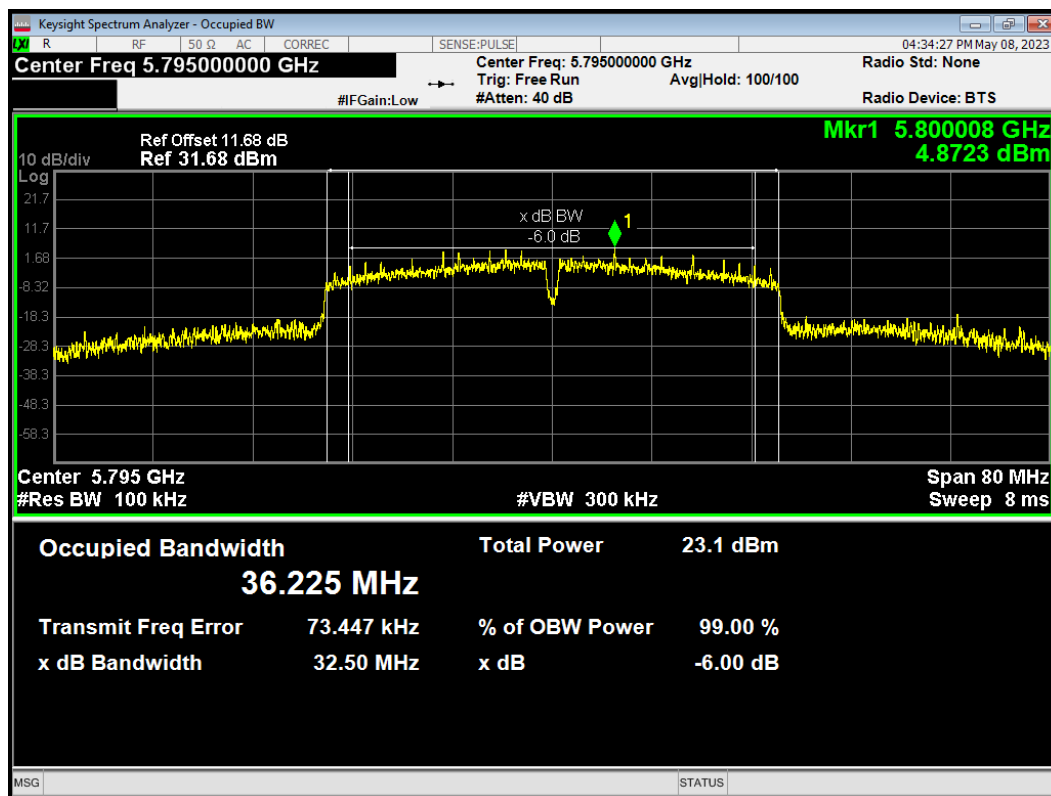
-6dB Bandwidth 802.11n(HT40) 5710MHz



-6dB Bandwidth 802.11n(HT40) 5755MHz



-6dB Bandwidth 802.11n(HT40) 5795MHz



5.2. Average Power Output

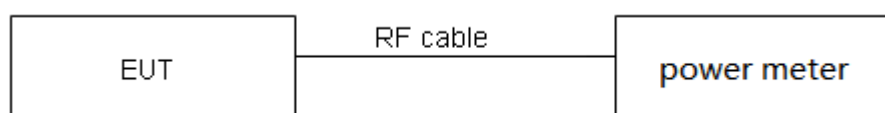
Ambient condition

Temperature	Relative humidity
20°C ~25°C	45%~50%

Methods of Measurement

During the process of the testing, The EUT was connected to the average power meter through an external attenuator and a known loss cable. The EUT is max power transmission with proper modulation. We use Maximum average Conducted Output Power Level Method in KDB789033 for this test

Test Setup



Limits

Rule FCC Part 15.407(a)(1)(2)(3)

(1) 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 conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, 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 conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, 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 conducted output power over the frequency band of operation shall not exceed 1 W. In addition, 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 conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. 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.

(2) 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.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, 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.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.44 \text{ dB}$.

Test Results

Mode	Duty cycle	Duty cycle correction Factor(dB)
802.11a	0.91	0.41
802.11n HT20	0.89	0.51
802.11n HT40	0.54	2.71
Note: when Duty cycle ≥ 0.98 , Duty cycle correction Factor not required.		

Power Index				
Channel	802.11a	802.11n HT20	Channel	802.11n HT40
CH36	18.5	18.5	CH38	19.0
CH40	18.5	18.5	CH46	19.0
CH48	18.5	18.5	/	/
CH52	18.5	18.5	CH54	18.5
CH60	18.5	18.5	CH62	18.5
CH64	18.5	18.5	/	/
CH100	19.0	19.0	CH102	19.5
CH120	19.5	19.5	CH118	18.5
CH140	19.5	19.5	CH134	18.5
CH144	19.5	19.5	CH142	18.5
CH149	19.5	19.5	CH151	19.5
CH157	20.0	20.0	CH159	19.0
CH165	21.5	21.5	/	/

Test Mode		Channel/ Frequency (MHz)	B=26 dB bandwidth (MHz)	Limit 11 dBm + 10 log B (dBm)	Final Limit (dBm)
U-NII-2A	802.11a	52/5260	23.84	24.77 >24	24
		60/5300	23.61	24.73 >24	24
		64/5320	24.32	24.86 >24	24
	802.11n HT20	52/5260	25.06	24.99 >24	24
		60/5300	25.17	25.01 >24	24
		64/5320	25.10	25.00 >24	24
	802.11n HT40	54/5270	55.34	28.43 >24	24
		62/5310	52.45	28.20 >24	24
U-NII-2C	802.11a	100/5500	29.59	25.71 >24	24
		120/5600	31.27	25.95 >24	24
		140/5700	34.14	26.33 >24	24
		144/5720	32.65	26.14 >24	24
	802.11n HT20	100/5500	29.55	25.71 >24	24
		120/5600	32.09	26.06 >24	24
		140/5700	35.22	26.47 >24	24
		144/5720	33.74	26.28 >24	24
	802.11n HT40	102/5510	67.20	29.27 >24	24
		118/5590	65.12	29.14 >24	24
		134/5670	70.04	29.45 >24	24
		142/5710	68.54	29.36 >24	24
Note: 250mW=24dBm					

U-NII-1

Test Mode	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	36/5180	17.56	17.97	30	PASS
	40/5200	17.56	17.97	30	PASS
	48/5240	17.60	18.01	30	PASS
802.11n HT20	36/5180	17.46	17.97	30	PASS
	40/5200	17.41	17.92	30	PASS
	48/5240	17.46	17.97	30	PASS
802.11n HT40	38/5190	15.21	17.92	30	PASS
	46/5230	15.19	17.90	30	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

U-NII-2A

Test Mode	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	52/5260	17.59	18.00	24	PASS
	60/5300	17.51	17.92	24	PASS
	64/5320	17.56	17.97	24	PASS
802.11n HT20	52/5260	17.51	18.02	24	PASS
	60/5300	17.40	17.91	24	PASS
	64/5320	17.43	17.94	24	PASS
802.11n HT40	54/5270	15.25	17.96	24	PASS
	62/5310	15.21	17.92	24	PASS

Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor

U-NII-2C

Test Mode	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	100/5500	17.63	18.04	24	PASS
	120/5600	17.60	18.01	24	PASS
	140/5700	17.57	17.98	24	PASS
	144/5720	16.98	17.39	24	PASS
802.11n HT20	100/5500	17.50	18.01	24	PASS

	120/5600	17.44	17.95	24	PASS
	140/5700	17.46	17.97	24	PASS
	144/5720	16.70	17.21	24	PASS
802.11n HT40	102/5510	15.24	17.95	24	PASS
	118/5590	15.25	17.96	24	PASS
	134/5670	15.26	17.97	24	PASS
	142/5710	15.02	17.73	24	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor					

U-NII-3

Test Mode	Channel/ Frequency (MHz)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Limit (dBm)	Conclusion
802.11a	144/5720	8.75	9.16	30	PASS
	149/5745	17.56	17.97	30	PASS
	157/5785	17.51	17.92	30	PASS
	165/5825	17.59	18.00	30	PASS
802.11n HT20	144/5720	9.19	9.70	30	PASS
	149/5745	17.45	17.96	30	PASS
	157/5785	17.49	18.00	30	PASS
	165/5825	17.45	17.96	30	PASS
802.11n HT40	142/5710	1.58	4.29	30	PASS
	151/5755	15.20	17.91	30	PASS
	159/5795	15.20	17.91	30	PASS
Note: Average Power with duty factor = Average Power Measured +Duty cycle correction factor					

5.3. Frequency Stability

Ambient condition

Temperature	Relative humidity
20°C ~25°C	45%~50%

Method of Measurement

1. Frequency stability with respect to ambient temperature

- Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.
- Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.
- Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.
- Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.
- While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.
- Measure the frequency at each of frequencies specified in 5.6.
- Switch OFF the EUT but do not switch OFF the oscillator heater.
- Lower the chamber temperature by not more than 10°C, and allow the temperature inside the chamber to stabilize.
- Repeat step f) through step i) down to the lowest specified temperature.

2. Frequency stability when varying supply voltage

Unless otherwise specified, these tests shall be made at ambient room temperature (+15°C to +25 °C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

- Supply the EUT with nominal voltage or install a new or fully charged battery in the EUT. Turn ON the EUT and couple its output to a frequency counter or other frequency-measuring instrument.

- b) Tune the EUT to one of the number of frequencies required in 5.6. Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- c) Measure the frequency at each of the frequencies specified in 5.6.
- d) Repeat the above procedure at 85% and 115% of the nominal supply voltage.

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 users manual.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936\text{Hz}$

Test Results

Voltage (V)	Temperature (°C)	U-NII-1 Test Results			
		5200MHz			
		1min	2min	5min	10min
3.3	-20	5199.999510	5199.992205	5199.989701	5199.985864
3.3	-10	5200.009301	5199.983092	5199.982160	5199.981917
3.3	0	5200.004844	5199.980865	5199.975738	5199.977489
3.3	10	5199.997707	5199.979935	5199.971795	5199.970919
3.3	20	5199.988064	5199.973693	5199.962326	5199.962439
3.3	30	5199.981848	5199.967358	5199.954151	5199.960709
3.3	40	5199.975722	5199.965663	5199.947024	5199.960213
3.3	50	5199.971764	5199.956764	5199.943416	5199.958340
3	20	5199.968490	5199.950212	5199.936730	5199.957649
3.6	20	5199.960572	5199.947641	5199.929072	5199.955868
Max. ΔMHz		-0.039428	-0.052359	-0.070928	-0.044132
PPM		-7.582308	-10.069038	-13.640000	-8.486923

Voltage (V)	Temperature (°C)	U-NII-2A Test Results			
		5300MHz			
		1min	2min	5min	10min
3.3	-20	5299.993794	5299.983887	5299.983480	5299.980434
3.3	-10	5299.990957	5299.976736	5299.974823	5299.975207
3.3	0	5299.990315	5299.967651	5299.967038	5299.971465
3.3	10	5299.986220	5299.958511	5299.959674	5299.969220
3.3	20	5299.977609	5299.952965	5299.959654	5299.967046
3.3	30	5299.967874	5299.946294	5299.954654	5299.963253
3.3	40	5299.958855	5299.938304	5299.944846	5299.955677
3.3	50	5299.955671	5299.934732	5299.939675	5299.953935
3	20	5299.951071	5299.927735	5299.931027	5299.949562
3.6	20	5299.949087	5299.927048	5299.924583	5299.947165
Max. ΔMHz		-0.050913	-0.072952	-0.075417	-0.052835
PPM		-9.606226	-13.764528	-14.229623	-9.968868

Voltage (V)	Temperature (°C)	U-NII-2C Test Results			
		5580MHz			
		1min	2min	5min	10min
3.3	-20	5580.009503	5580.007507	5580.006294	5580.001889
3.3	-10	5580.002685	5580.004897	5580.003906	5579.996753
3.3	0	5579.995667	5580.002148	5579.996644	5579.987360
3.3	10	5579.987207	5579.998877	5579.990421	5579.980125
3.3	20	5579.982060	5579.992947	5579.982087	5579.970241
3.3	30	5579.974464	5579.990948	5579.972970	5579.968530
3.3	40	5579.970217	5579.988220	5579.965360	5579.966289
3.3	50	5579.969656	5579.984567	5579.961023	5579.960691
3	20	5579.962750	5579.983536	5579.956274	5579.951387
3.6	20	5579.959669	5579.982133	5579.954026	5579.945674
Max. ΔMHz		-0.040331	-0.017867	-0.045974	-0.054326
PPM		-7.227778	-3.201971	-8.239068	-9.735842

Voltage (V)	Temperature (°C)	U-NII-3 Test Results			
		5785MHz			
		1min	2min	5min	10min
3.3	-20	5784.997693	5784.987829	5784.981822	5784.973071
3.3	-10	5784.990852	5784.985349	5784.976512	5784.969764
3.3	0	5784.989011	5784.985049	5784.971661	5784.963170
3.3	10	5784.979163	5784.978044	5784.966004	5784.953349
3.3	20	5784.976396	5784.971674	5784.961532	5784.944411
3.3	30	5784.968347	5784.971057	5784.961503	5784.944235
3.3	40	5784.961858	5784.963686	5784.960547	5784.937103
3.3	50	5784.953799	5784.955477	5784.951487	5784.936114
3	20	5784.952884	5784.947464	5784.949554	5784.927973
3.6	20	5784.949584	5784.946981	5784.940877	5784.924155
Max. ΔMHz		-0.050416	-0.053019	-0.059123	-0.075845
PPM		-8.714952	-9.164909	-10.220052	-13.110631

5.4. Power Spectral Density

Ambient condition

Temperature	Relative humidity
20°C ~25°C	45%~50%

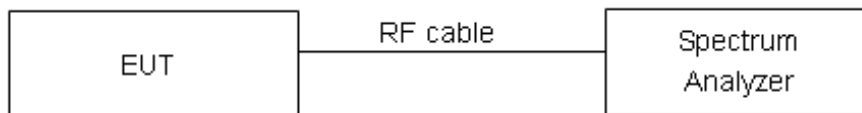
Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

Set RBW = 1MHz, VBW =3MHz for the band 5.150-5.250GHz, 5.250-5.350GHz, 5.470-5.725GHz.
Set RBW = 470kHz, VBW =1.5MHz for the band 5.725-5.850GHz

The conducted PSD is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

Test setup



Limits

Rule FCC Part 15.407(a)(1)/ Part 15.407(a)(2) / Part 15.407(a)(3)

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.

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. 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 5.25-5.35 GHz and 5.47-5.725 GHz bands, 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, the maximum power spectral density shall not exceed 30 dBm in any 500kHz 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.

Frequency Bands/MHz	Limits
5150-5250	17dBm/MHz
5.25-5.35 GHz and 5.47-5.725 GHz	11dBm/MHz
5725-5850	30dBm/500kHz

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.75\text{dB}$.

Test Results:
U-NII-1

Mode	Channel/ Frequency (MHz)	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	36/5180	8.56	8.97	17	PASS
	40/5200	8.33	8.74	17	PASS
	48/5240	8.29	8.70	17	PASS
802.11n HT20	36/5180	7.98	8.49	17	PASS
	40/5200	7.69	8.20	17	PASS
	48/5240	8.14	8.65	17	PASS
802.11n HT40	38/5190	3.45	6.16	17	PASS
	46/5230	3.66	6.37	17	PASS
Note: Power Spectral Density =Read Value+Duty cycle correction factor					

U-NII-2A

Mode	Channel/ Frequency (MHz)	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	52/5260	8.68	9.09	11	PASS
	60/5300	8.46	8.87	11	PASS
	64/5320	8.50	8.91	11	PASS
802.11n HT20	52/5260	8.11	8.62	11	PASS
	60/5300	8.41	8.92	11	PASS
	64/5320	8.51	9.02	11	PASS
802.11n HT40	54/5270	4.57	7.28	11	PASS
	62/5310	3.09	5.80	11	PASS
Note: Power Spectral Density =Read Value+Duty cycle correction factor					

U-NII-2C

Mode	Channel/ Frequency (MHz)	Read Value (dBm /MHz)	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	100/5500	8.74	9.15	11	PASS
	120/5600	8.49	8.90	11	PASS
	140/5700	8.72	9.13	11	PASS
	144/5720	8.08	8.49	11	PASS

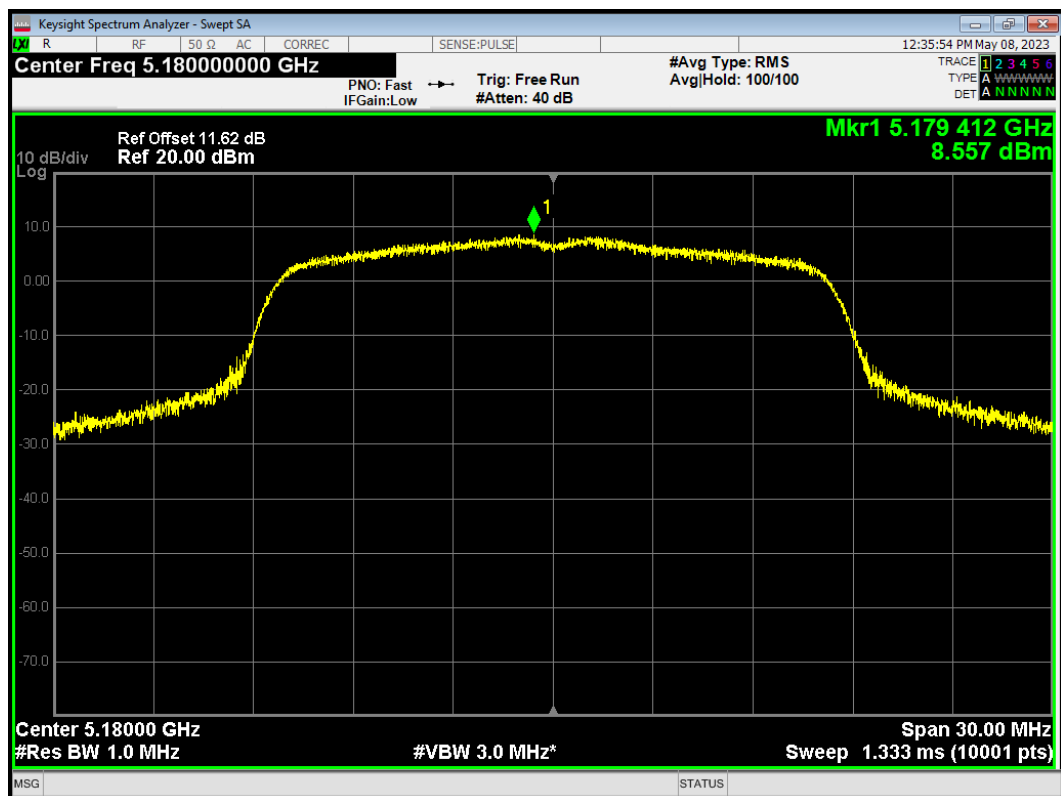
802.11n HT20	100/5500	8.32	8.83	11	PASS
	120/5600	8.26	8.77	11	PASS
	140/5700	8.35	8.86	11	PASS
	144/5720	8.15	8.66	11	PASS
802.11n HT40	102/5510	4.08	6.79	11	PASS
	118/5590	4.12	6.83	11	PASS
	134/5670	3.15	5.86	11	PASS
	142/5710	3.07	5.78	11	PASS
Note: Power Spectral Density =Read Value+Duty cycle correction factor					

U-NII-3

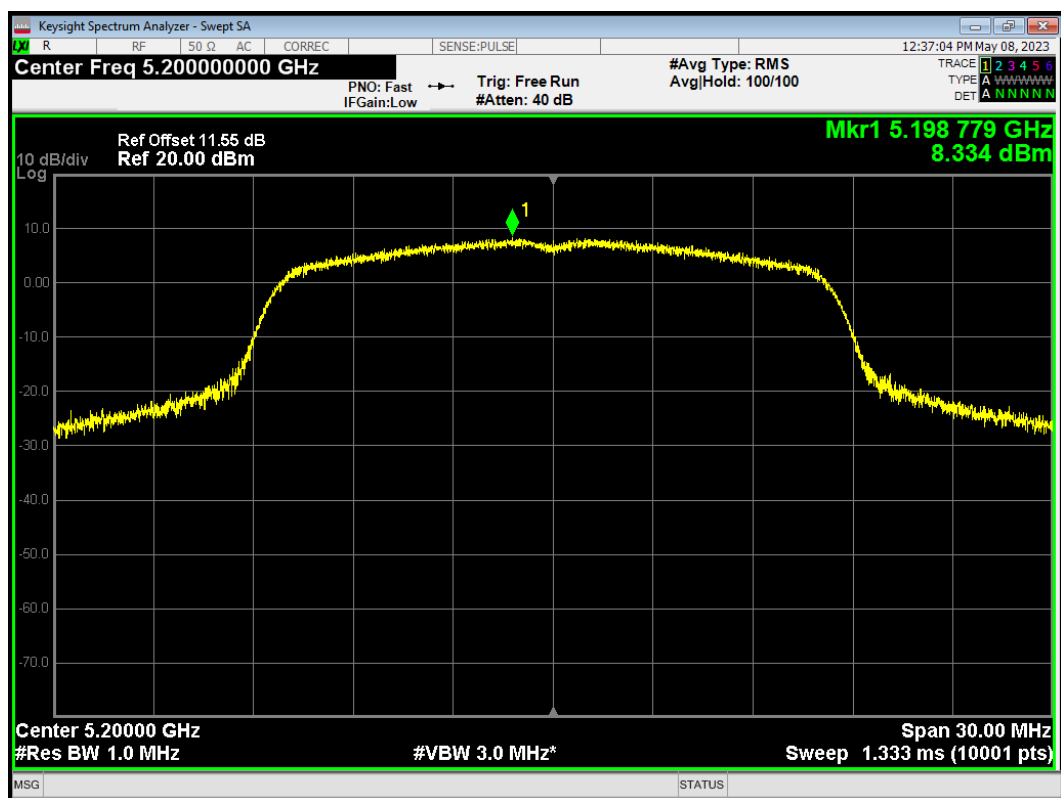
Mode	Channel/ Frequency (MHz)	Read Value (dBm/470kHz)	Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)	Conclusion
802.11a	144/5720	2.89	3.57	30	PASS
	149/5745	5.12	5.80	30	PASS
	157/5785	5.73	6.41	30	PASS
	165/5825	6.02	6.70	30	PASS
802.11n HT20	144/5720	2.74	3.52	30	PASS
	149/5745	5.14	5.92	30	PASS
	157/5785	4.62	5.40	30	PASS
	165/5825	5.34	6.12	30	PASS
802.11n HT40	142/5710	-5.85	-2.87	30	PASS
	151/5755	0.01	2.99	30	PASS
	159/5795	-0.82	2.16	30	PASS
Note: PSD=Read Value+Duty cycle correction factor +10*log(500/470)					

U-NII-1

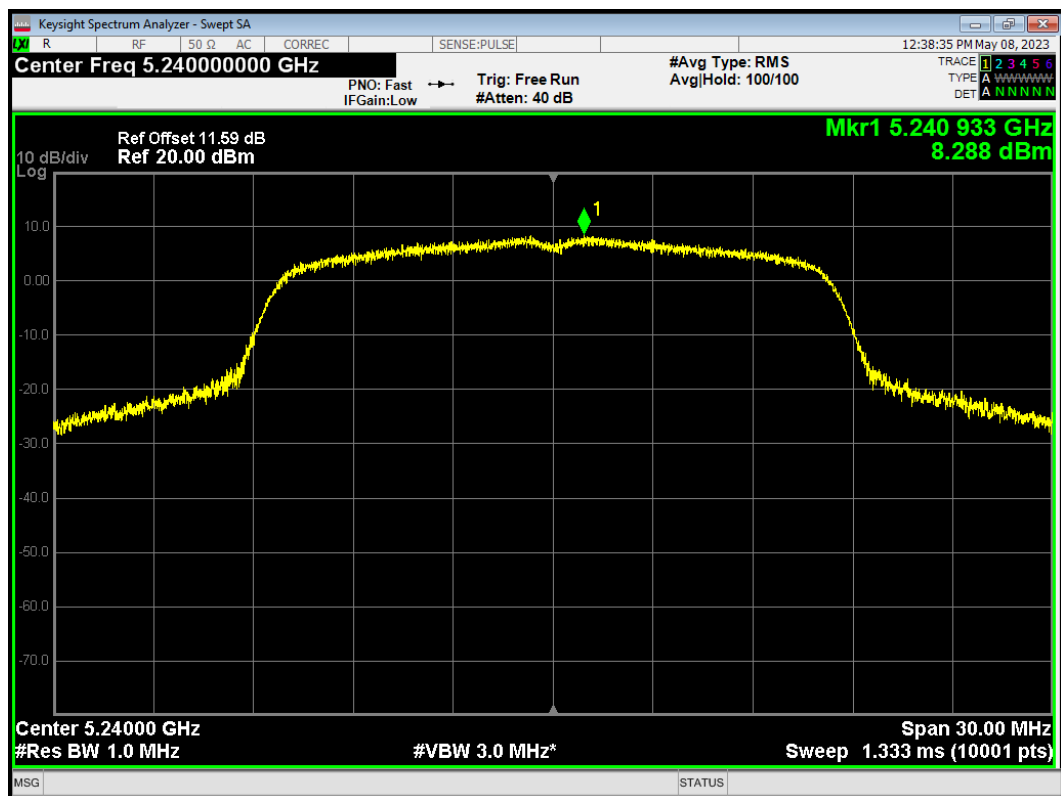
PSD 802.11a 5180MHz



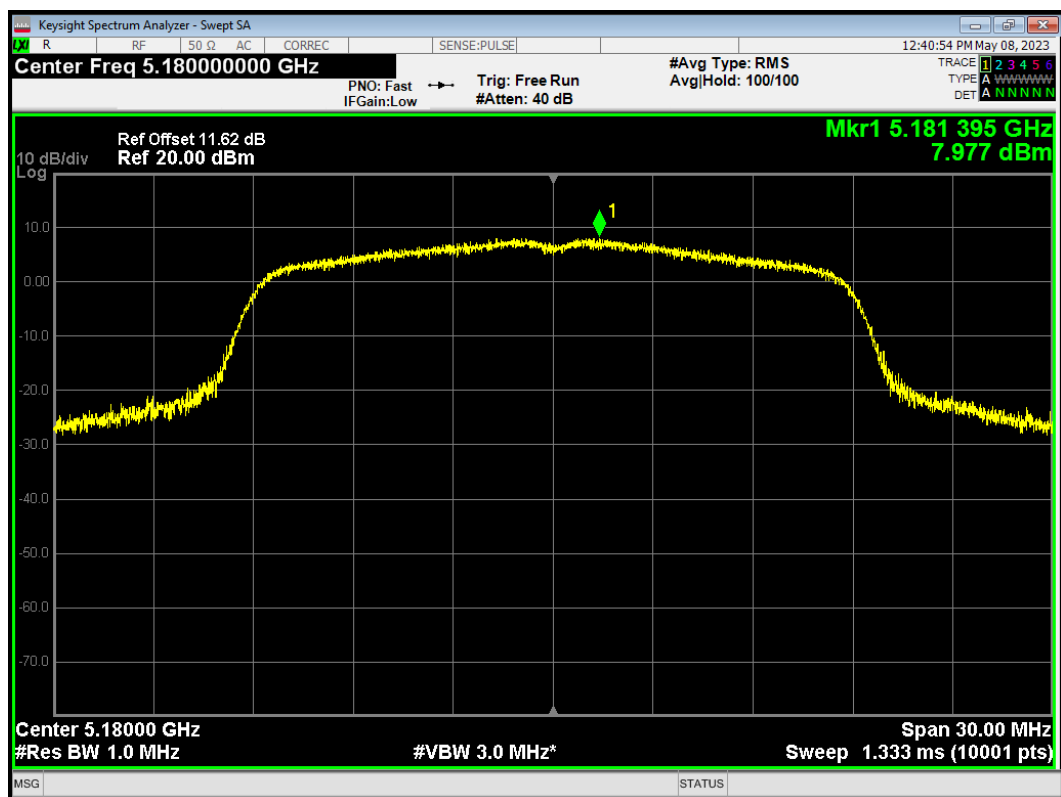
PSD 802.11a 5200MHz



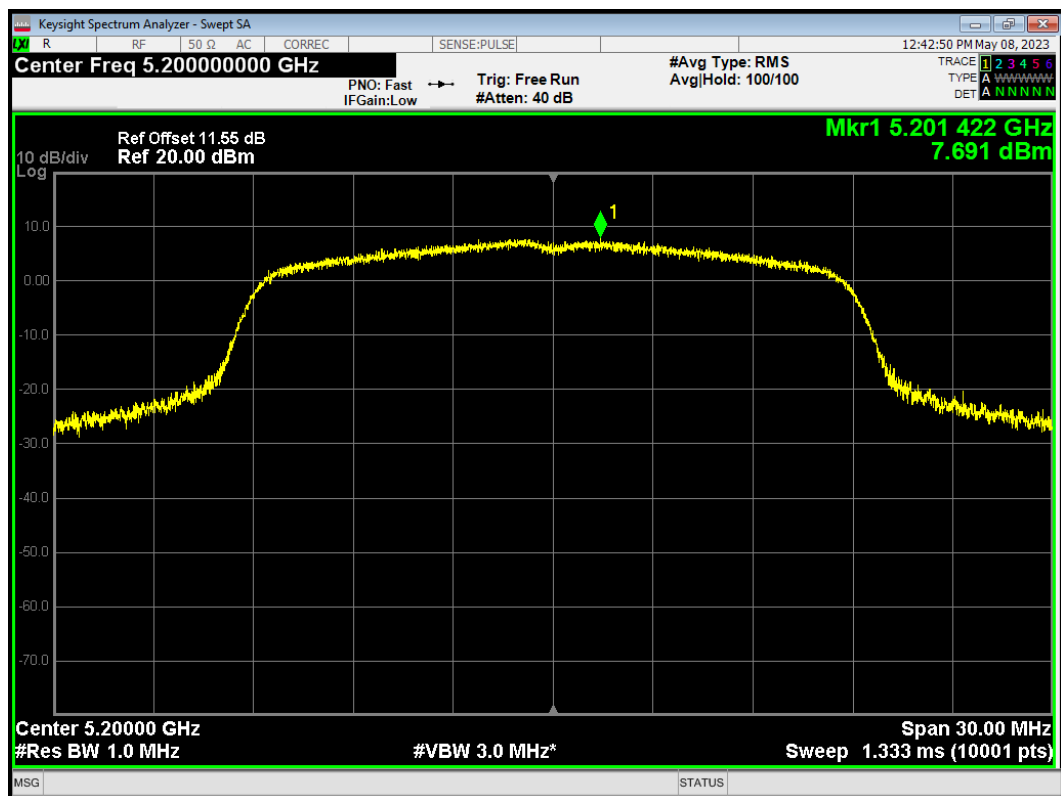
PSD 802.11a 5240MHz



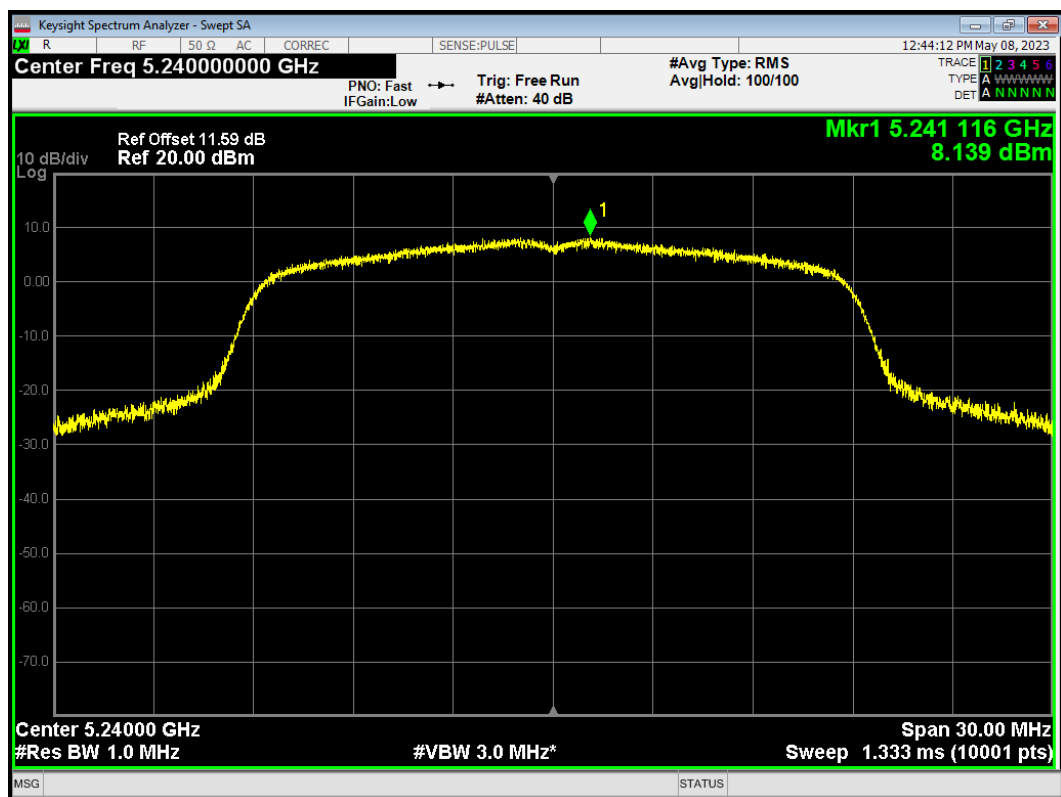
PSD 802.11n(HT20) 5180MHz



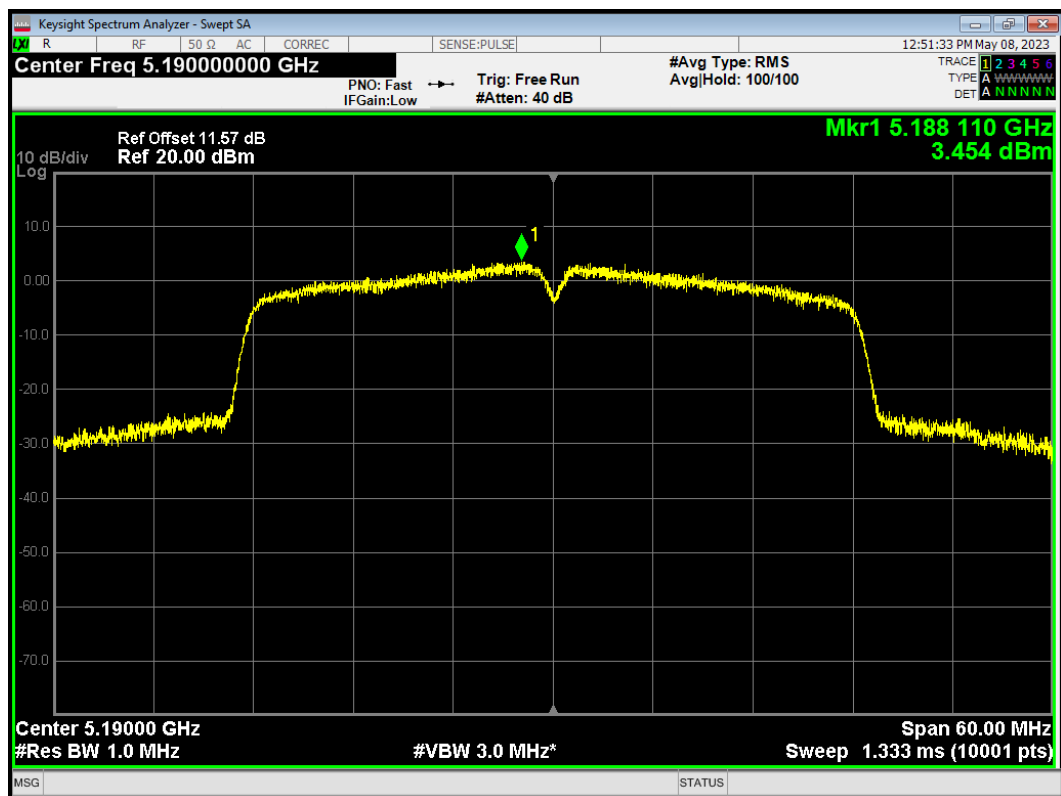
PSD 802.11n(HT20) 5200MHz



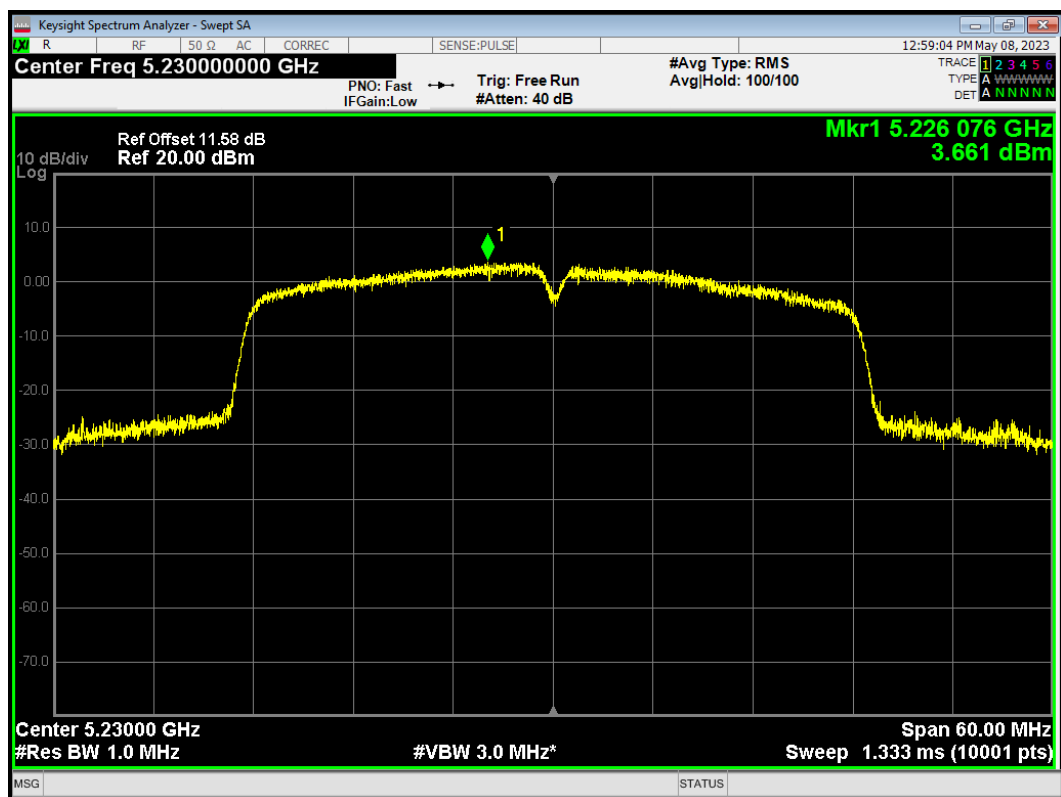
PSD 802.11n(HT20) 5240MHz



PSD 802.11n(HT40) 5190MHz

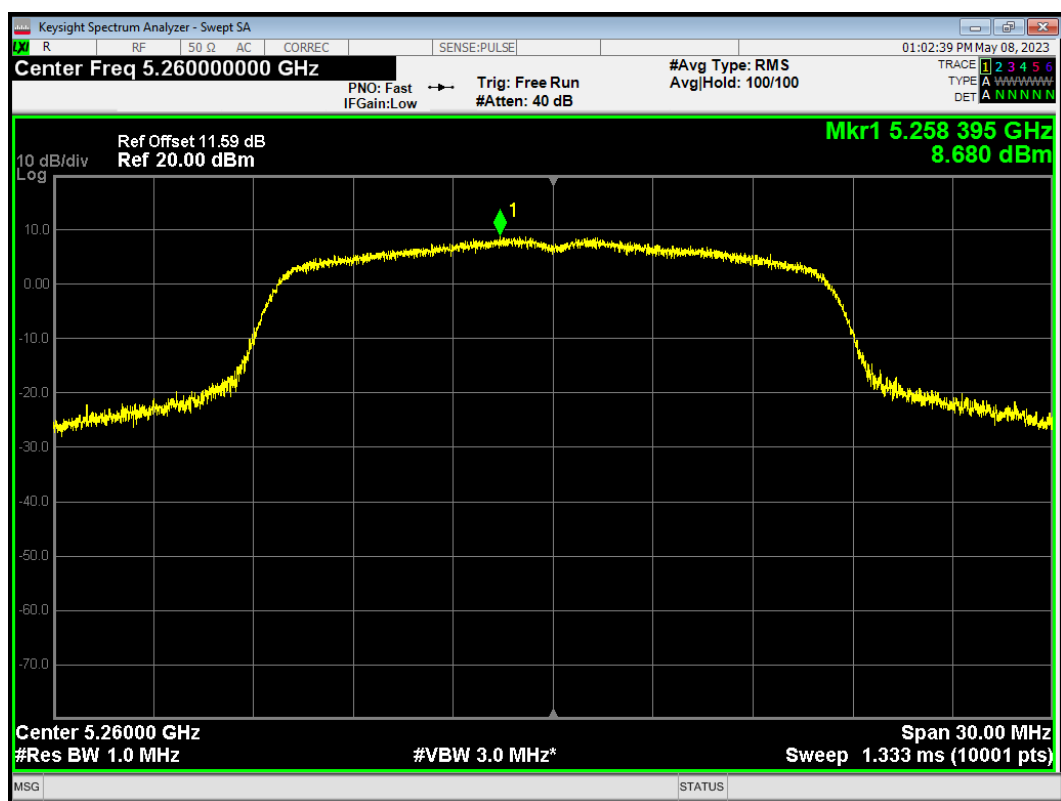


PSD 802.11n(HT40) 5230MHz

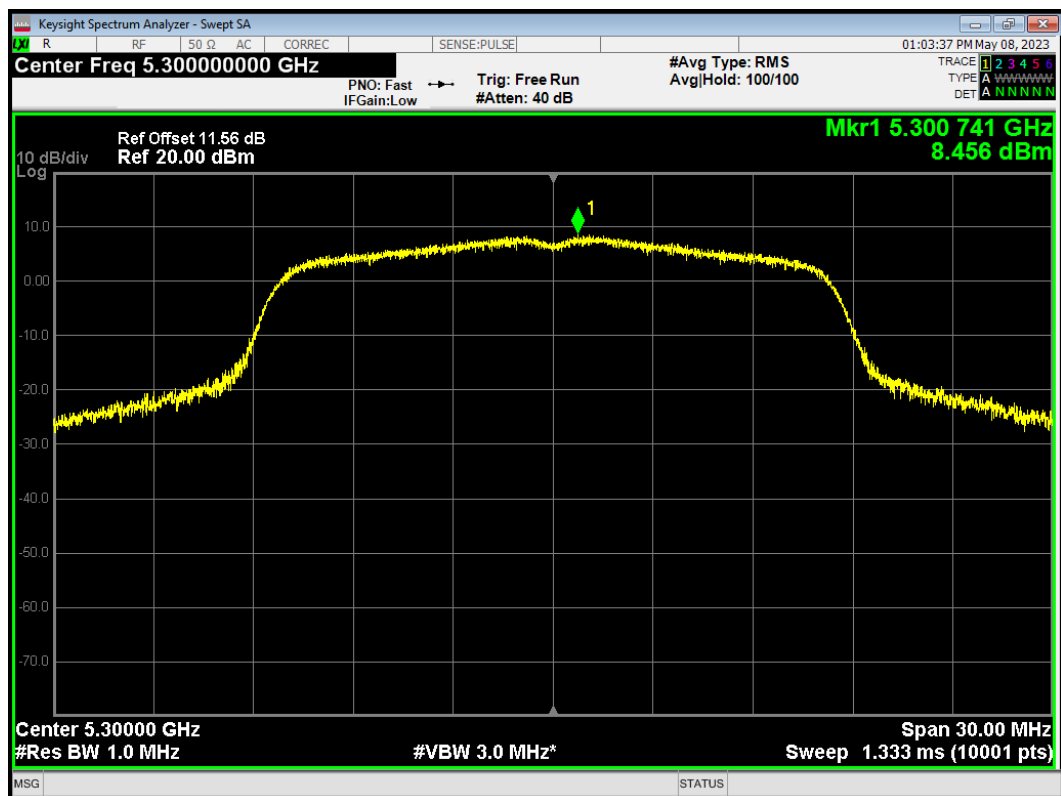


U-NII-2A

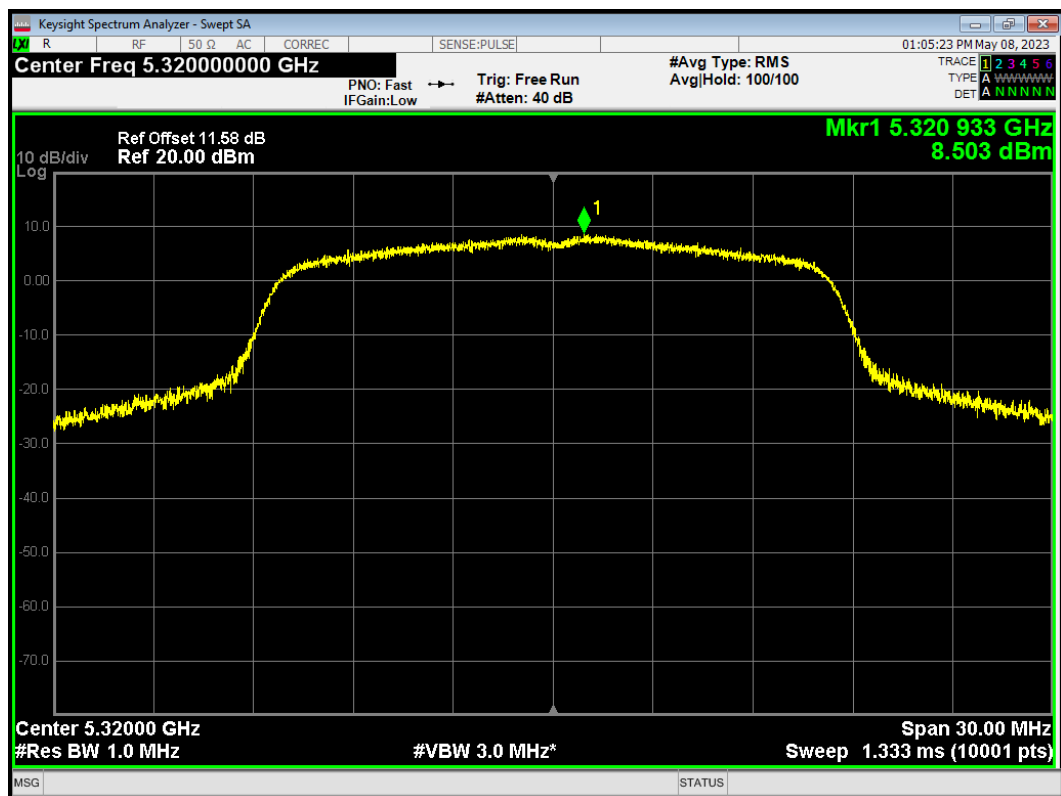
PSD 802.11a 5260MHz



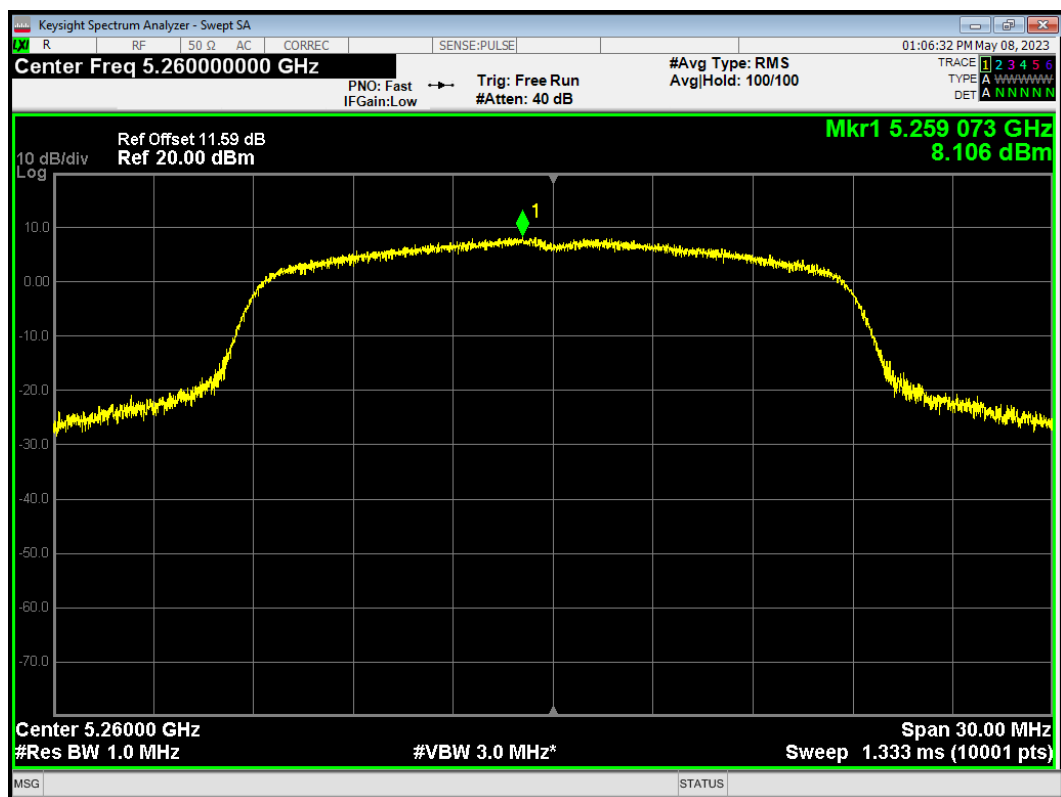
PSD 802.11a 5300MHz



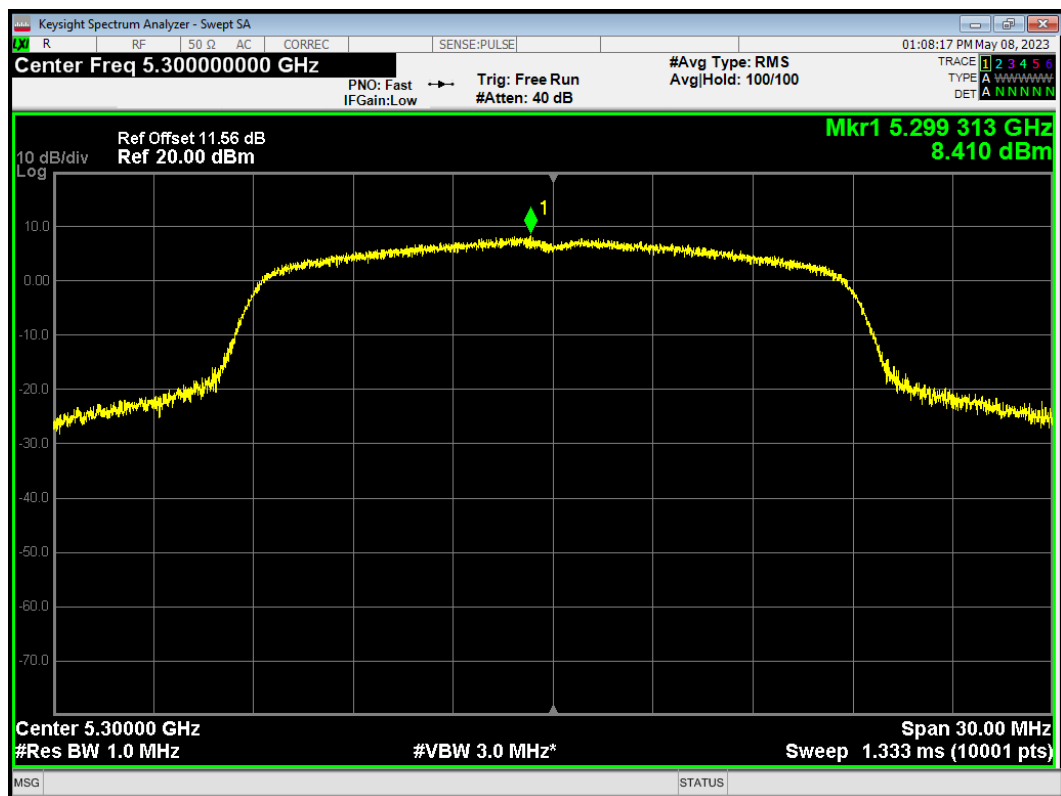
PSD 802.11a 5320MHz



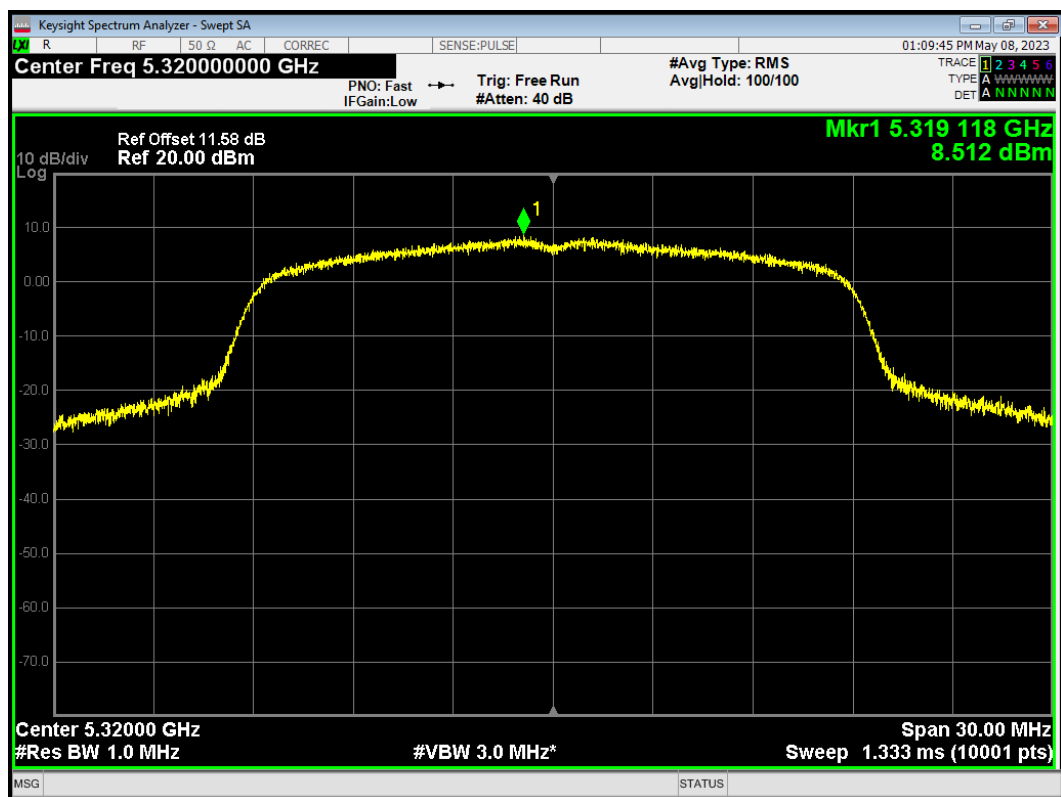
PSD 802.11n(HT20) 5260MHz



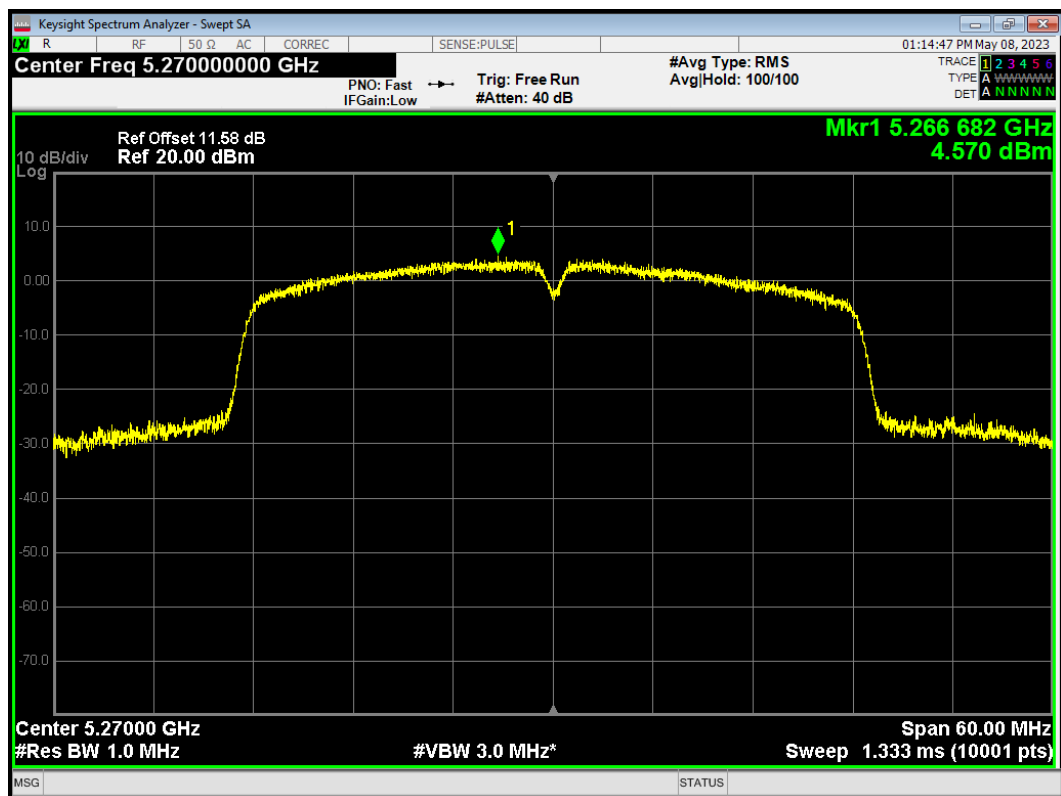
PSD 802.11n(HT20) 5300MHz



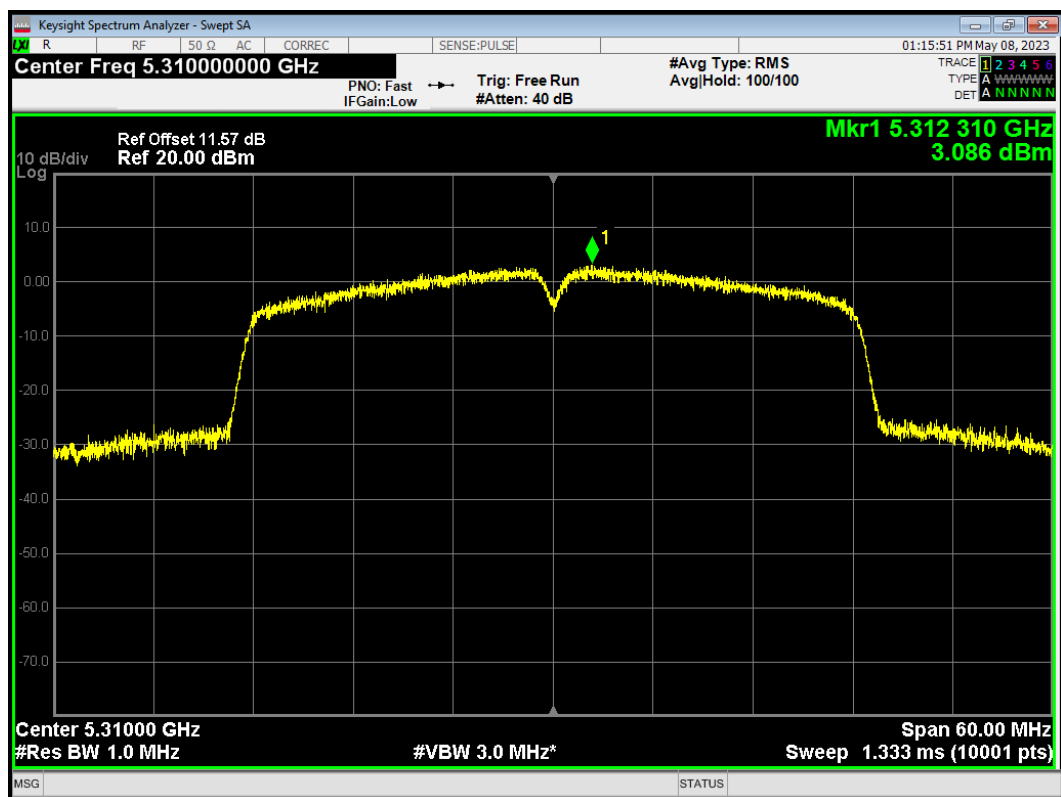
PSD 802.11n(HT20) 5320MHz



PSD 802.11n(HT40) 5270MHz

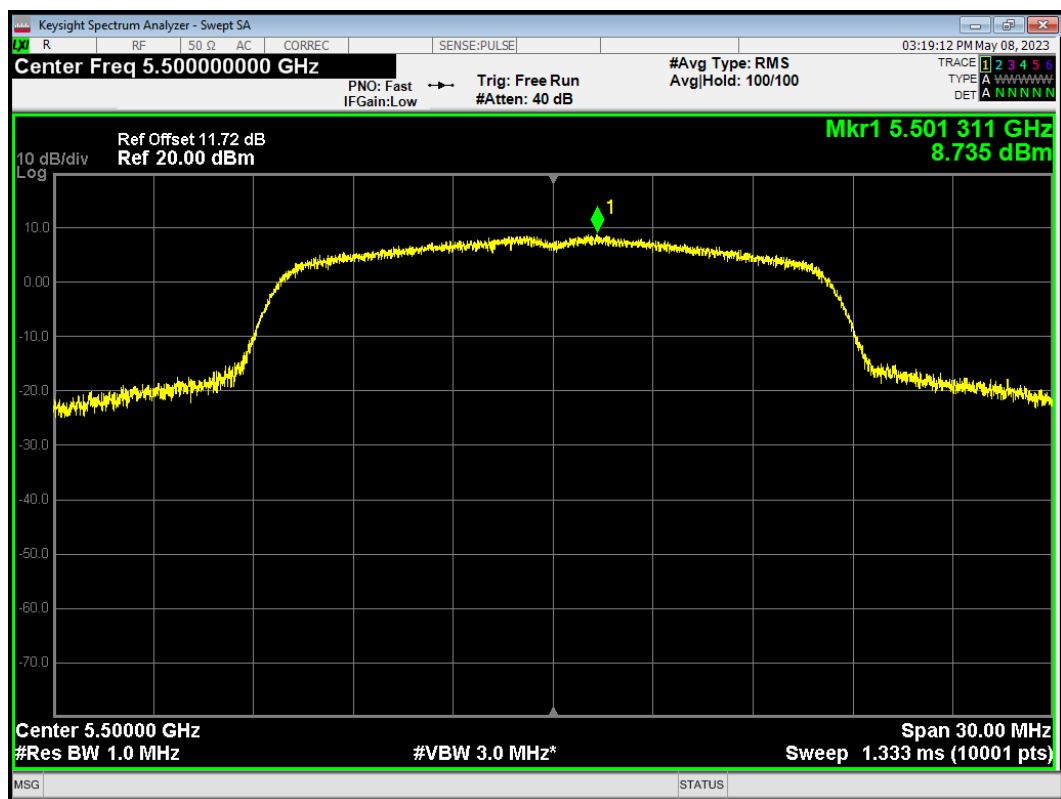


PSD 802.11n(HT40) 5310MHz

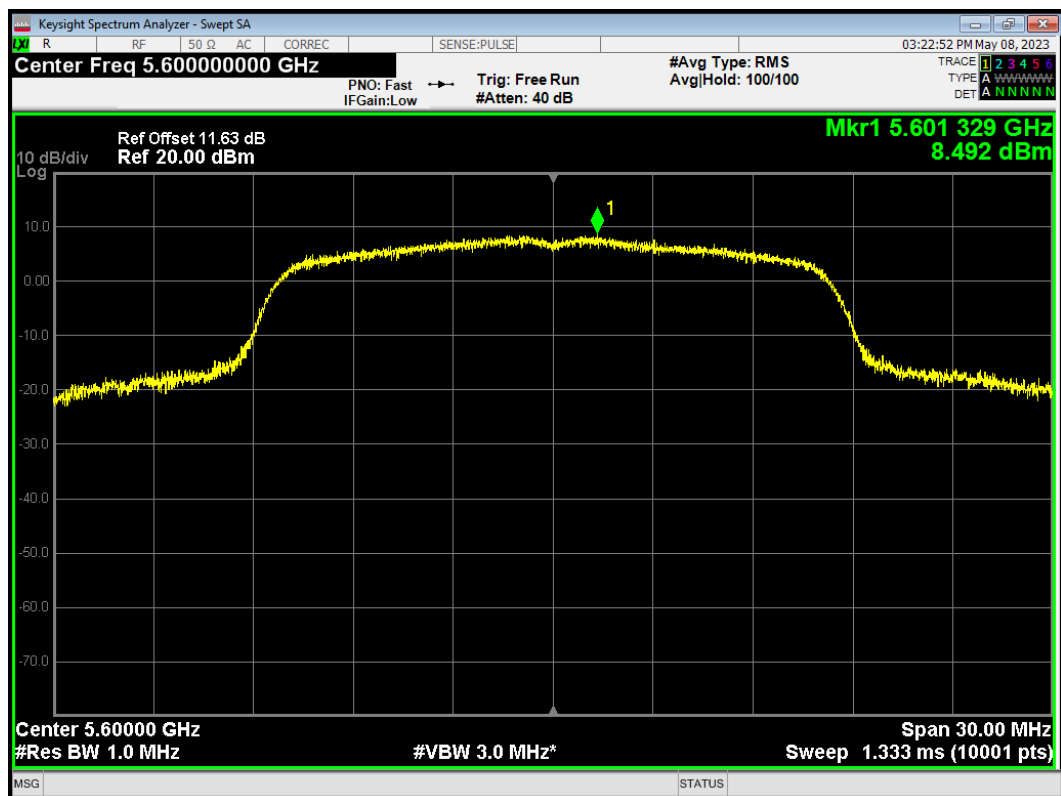


U-NII-2C

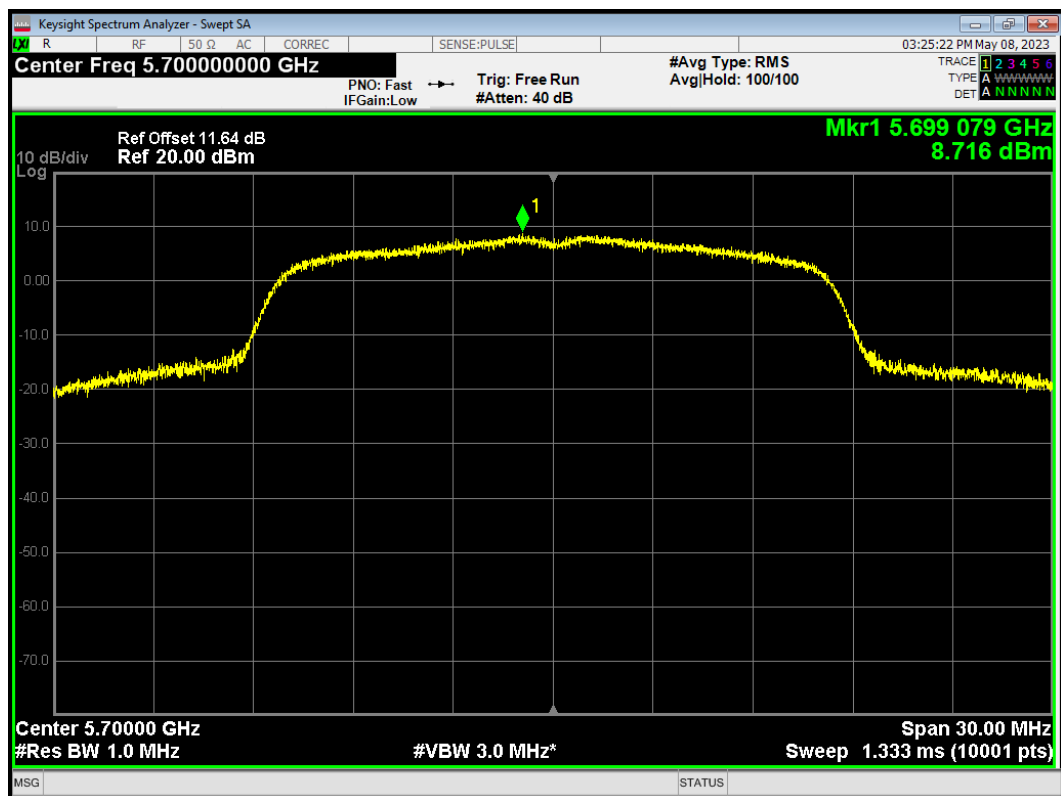
PSD 802.11a 5500MHz



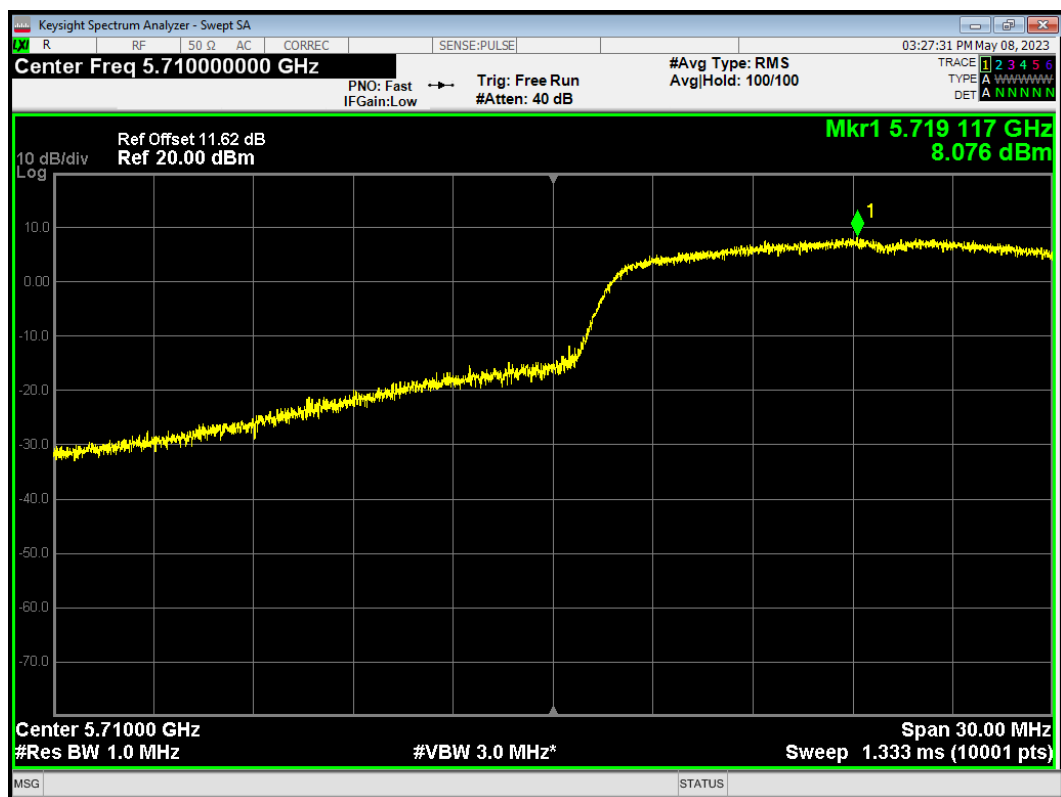
PSD 802.11a 5600MHz



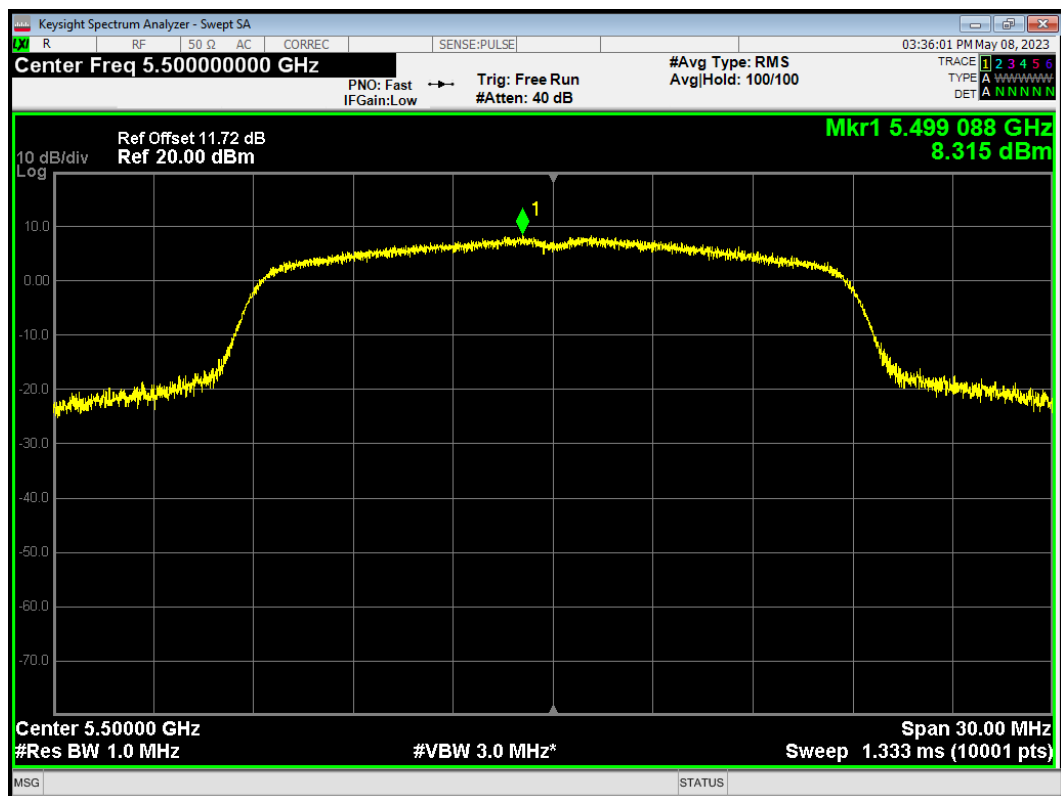
PSD 802.11a 5700MHz



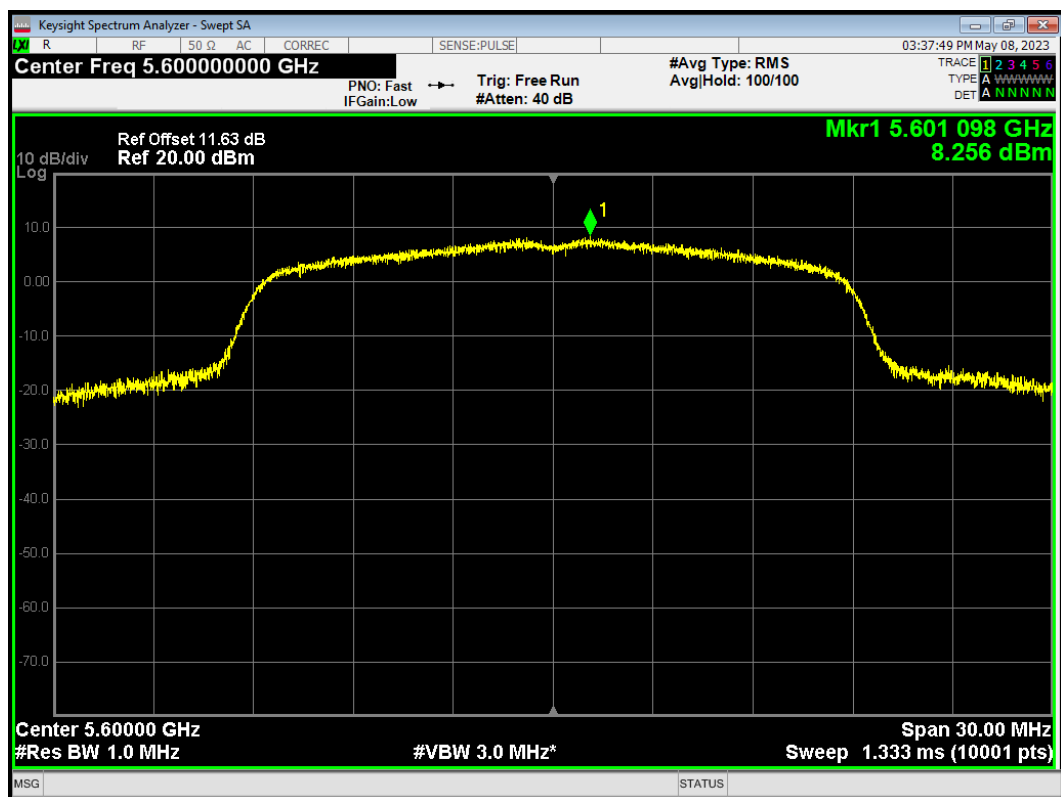
PSD 802.11a 5720MHz



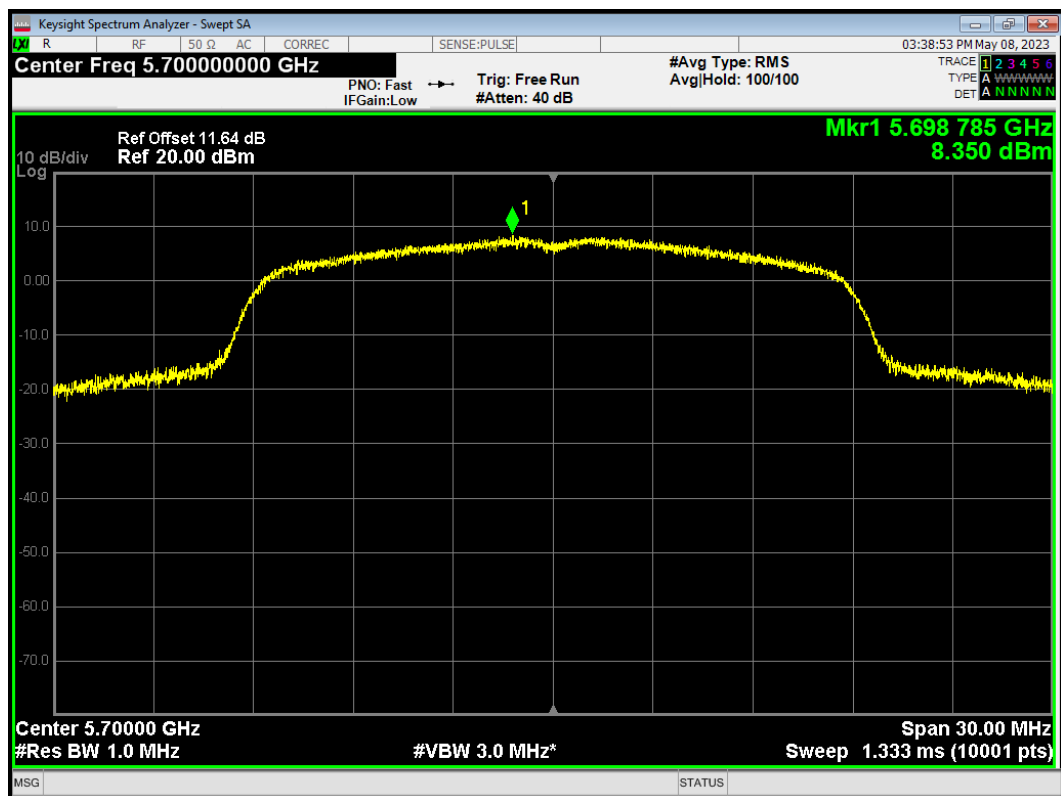
PSD 802.11n(HT20) 5500MHz



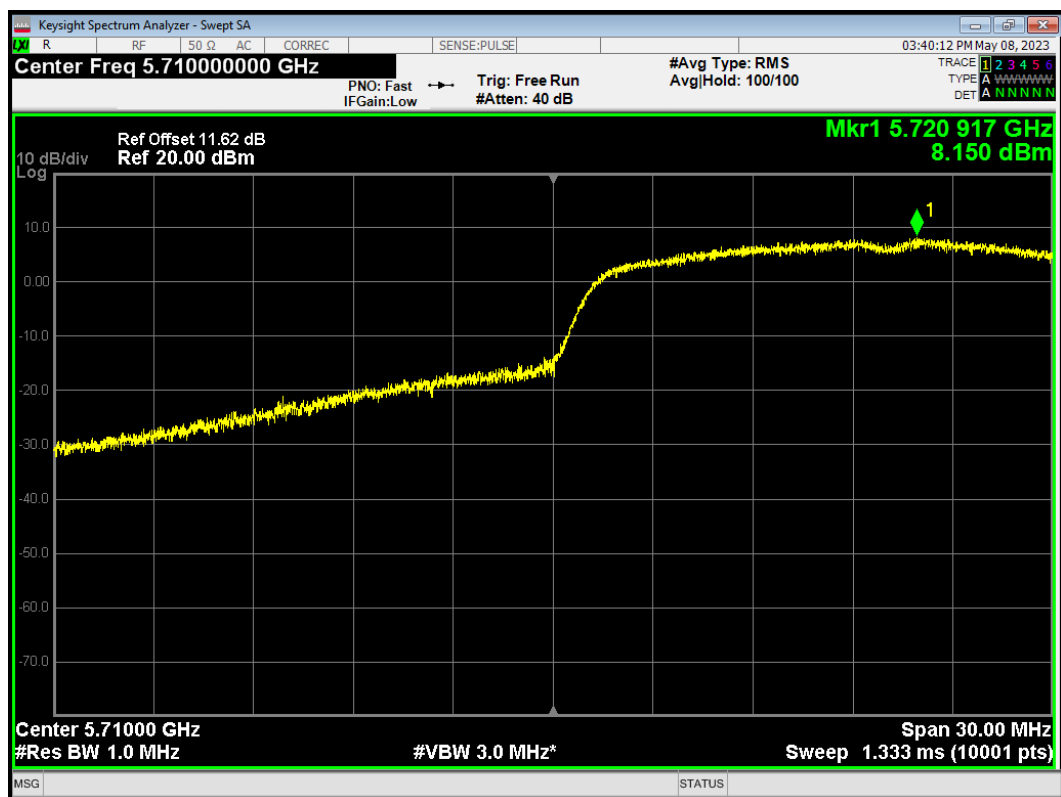
PSD 802.11n(HT20) 5600MHz



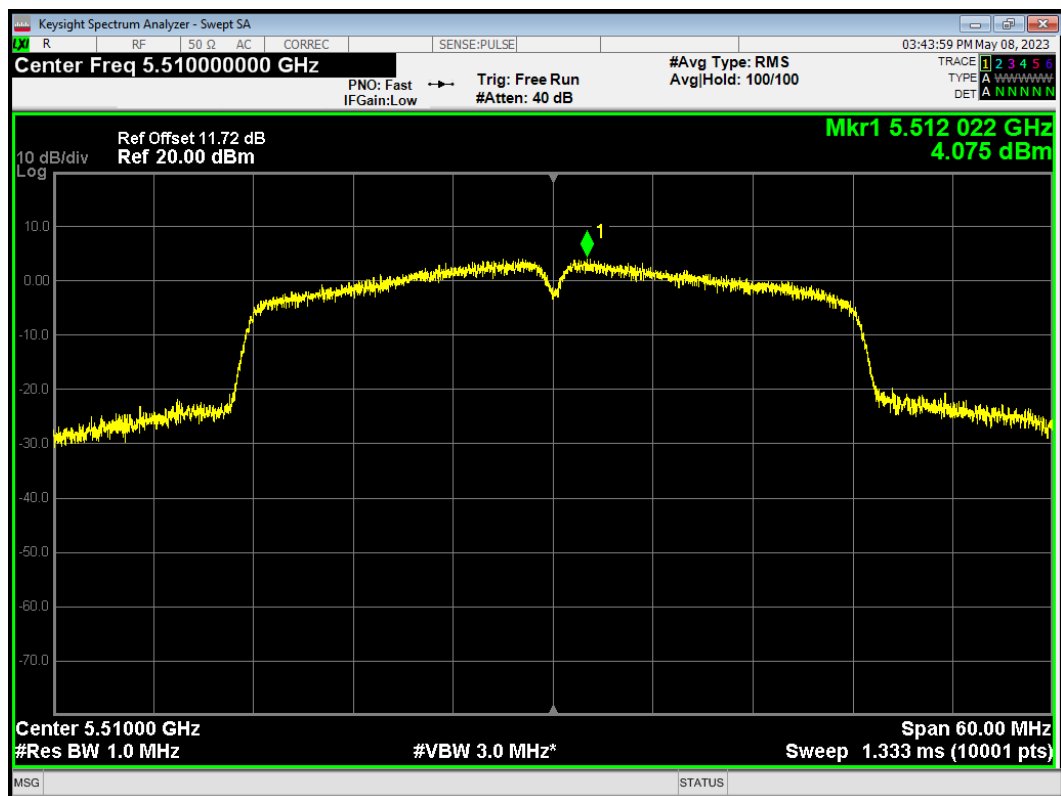
PSD 802.11n(HT20) 5700MHz



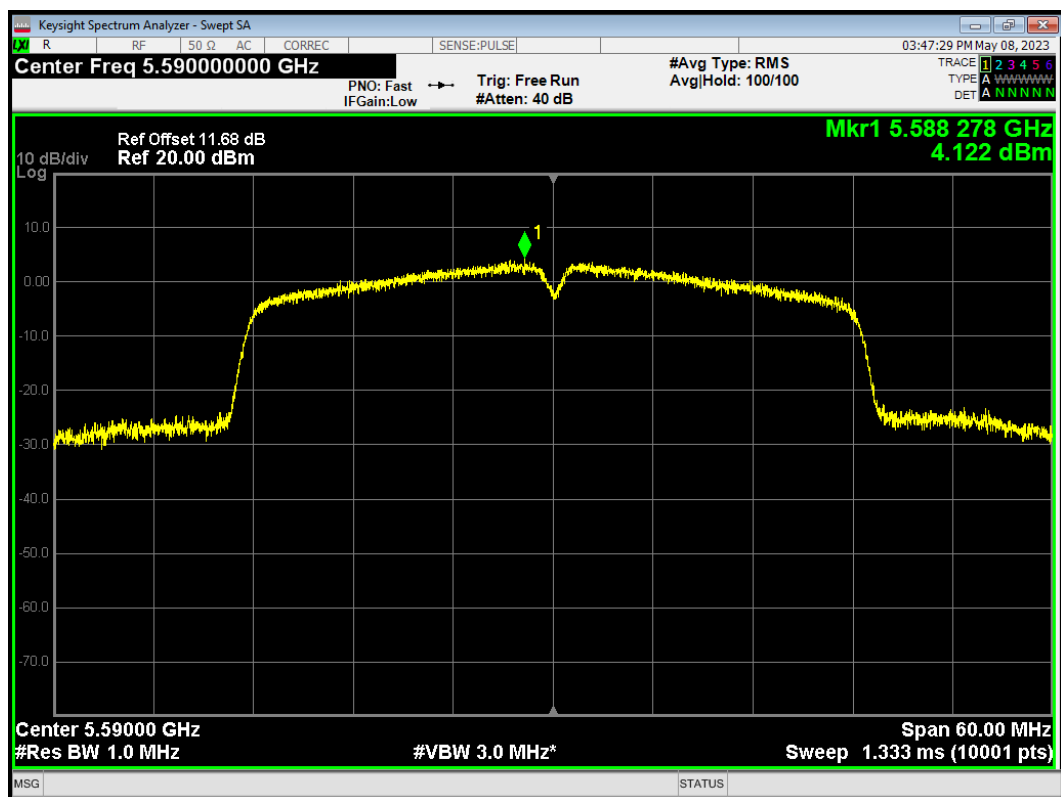
PSD 802.11n(HT20) 5720MHz



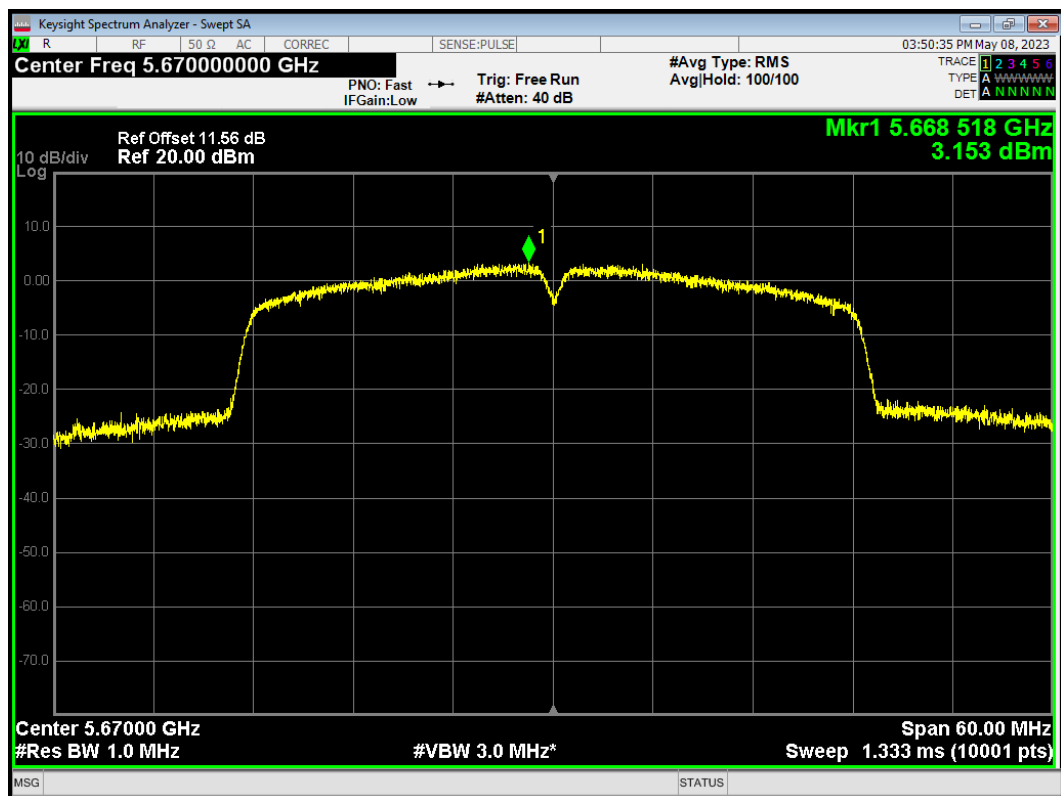
PSD 802.11n(HT40) 5510MHz



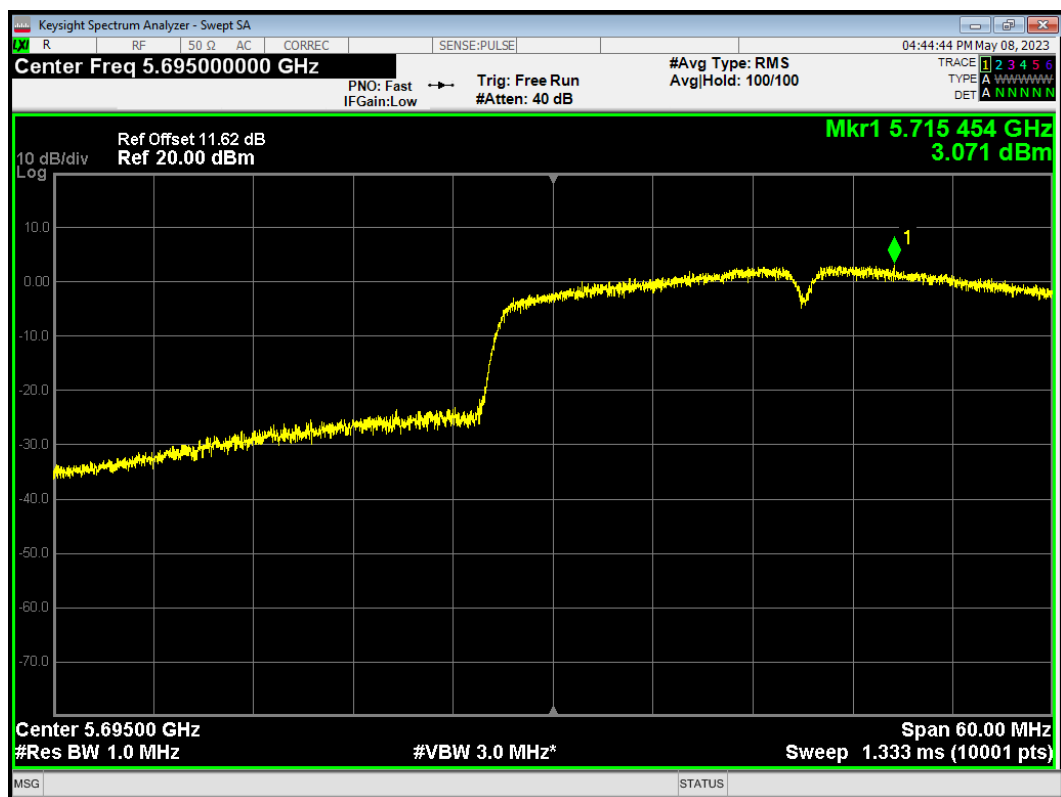
PSD 802.11n(HT40) 5590MHz



PSD 802.11n(HT40) 5670MHz

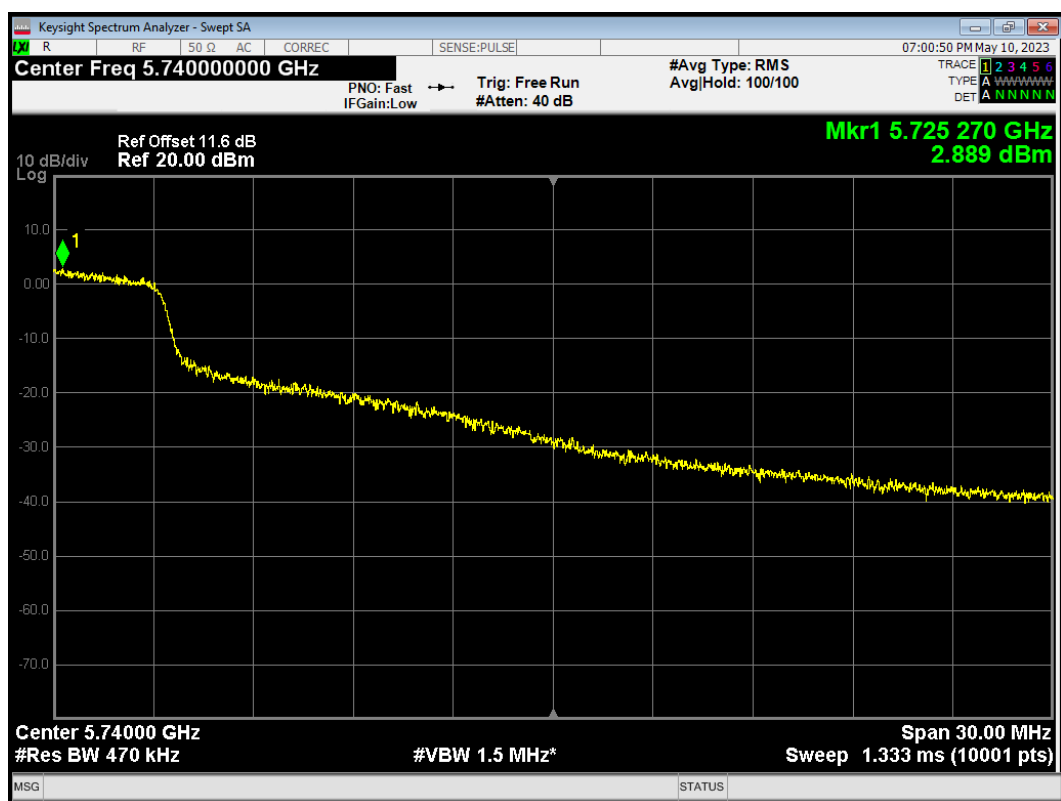


PSD 802.11n(HT40) 5710MHz

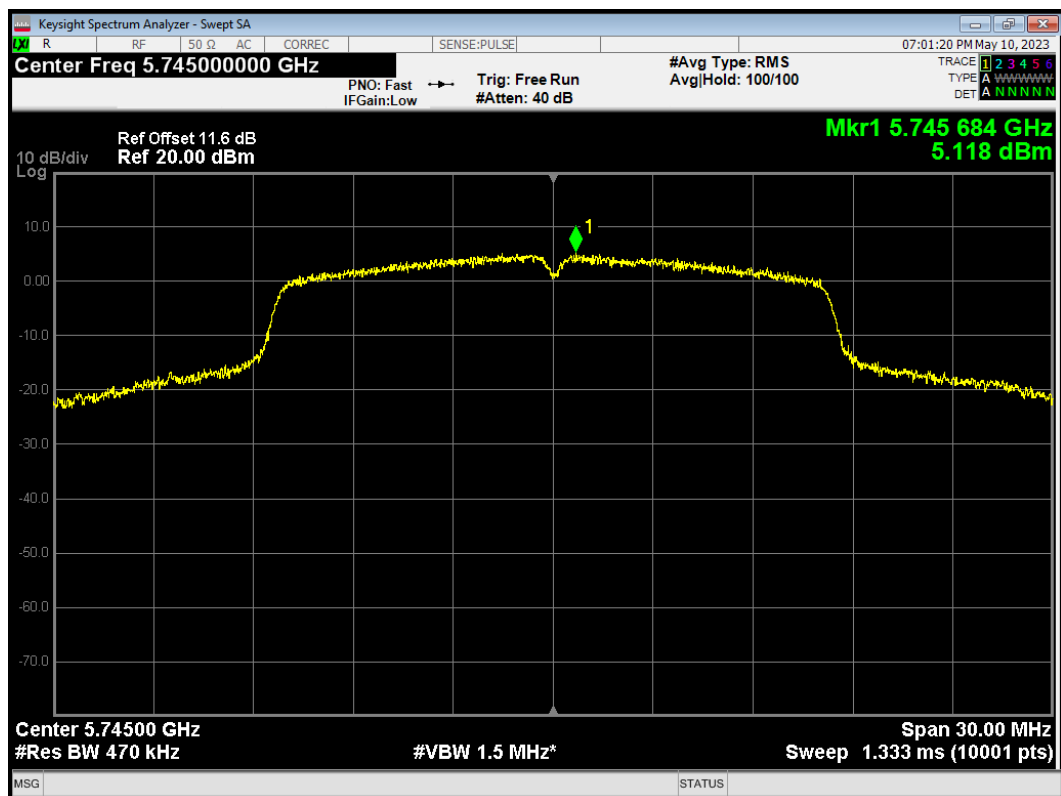


U-NII-3

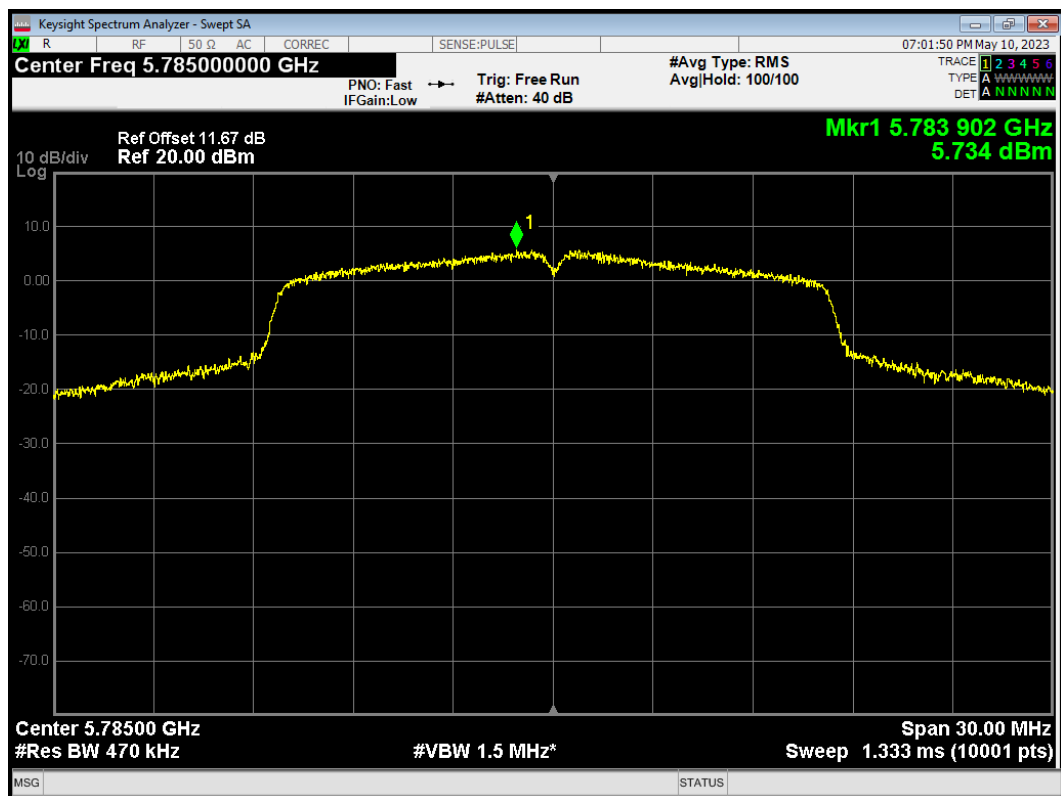
PSD 802.11a 5720MHz



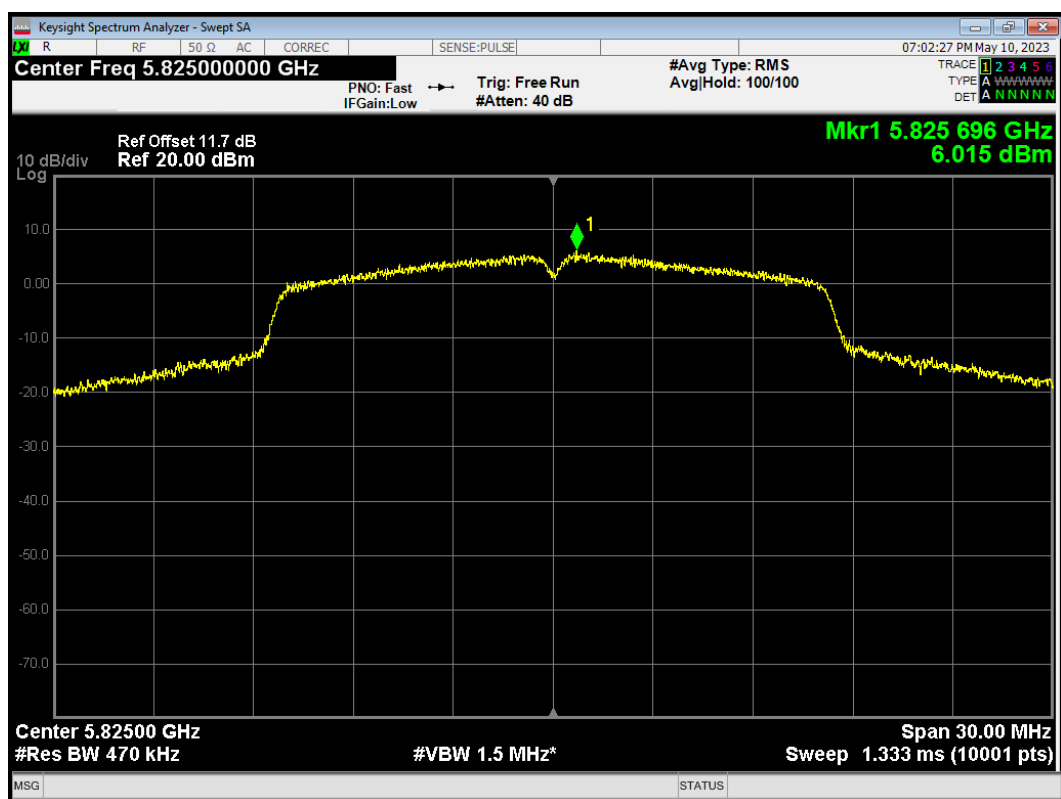
PSD 802.11a 5745MHz



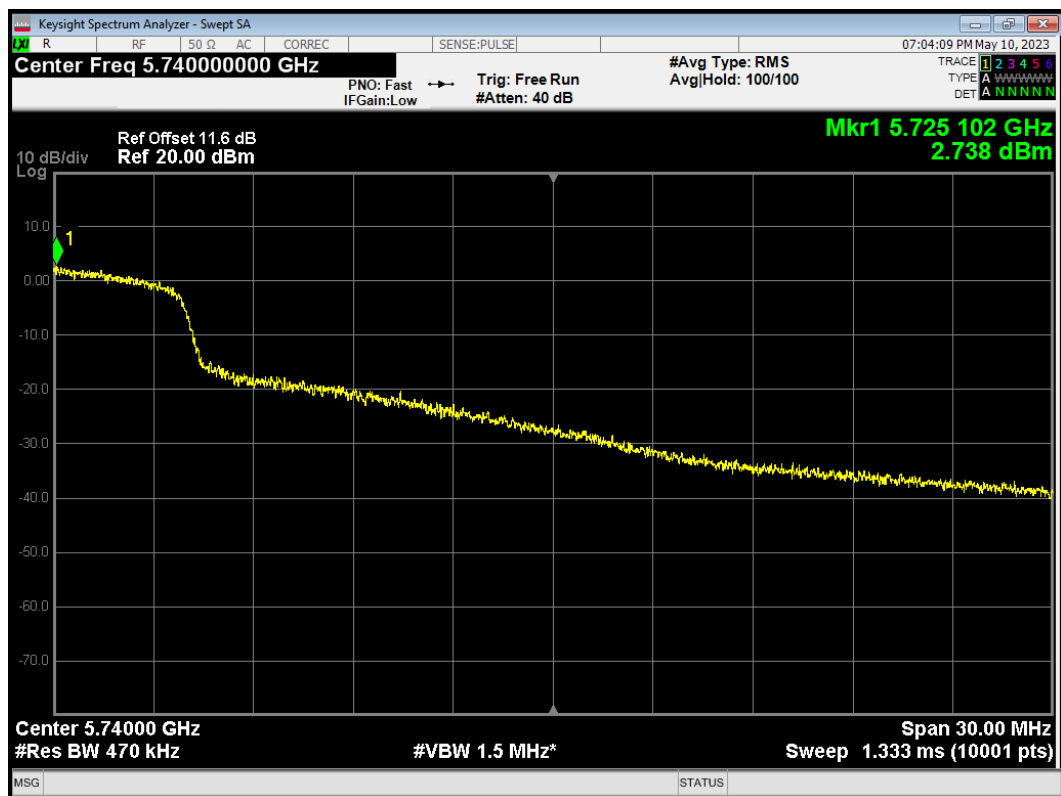
PSD 802.11a 5785MHz



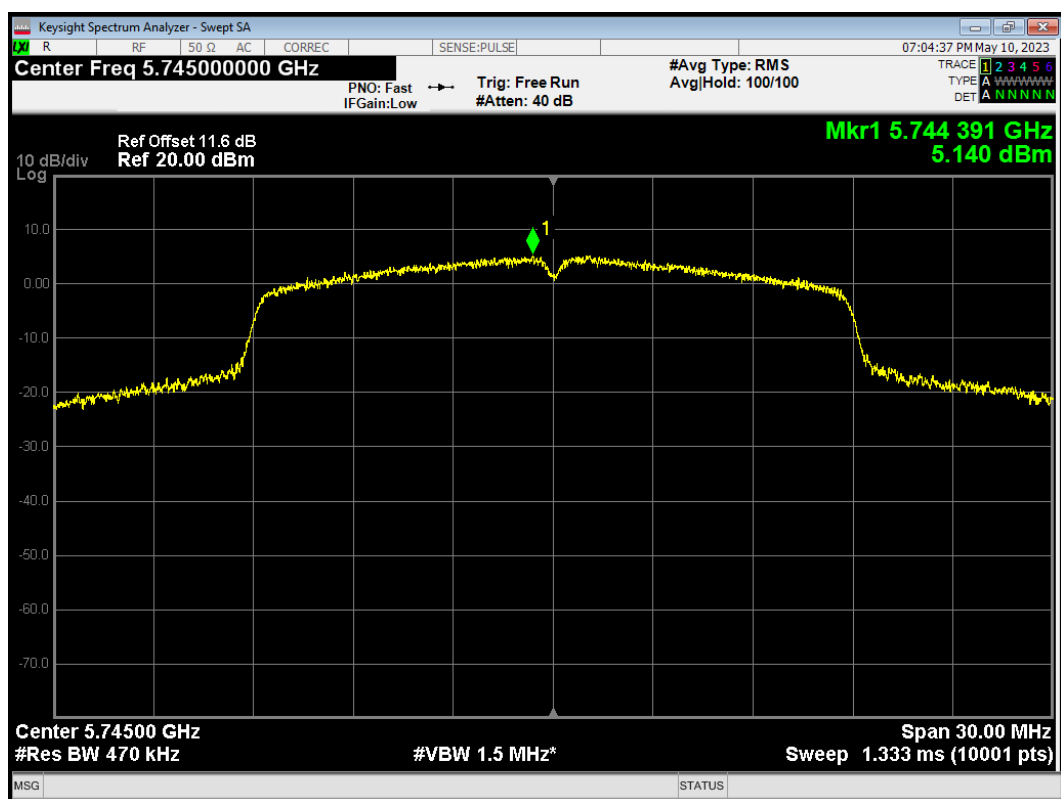
PSD 802.11a 5825MHz



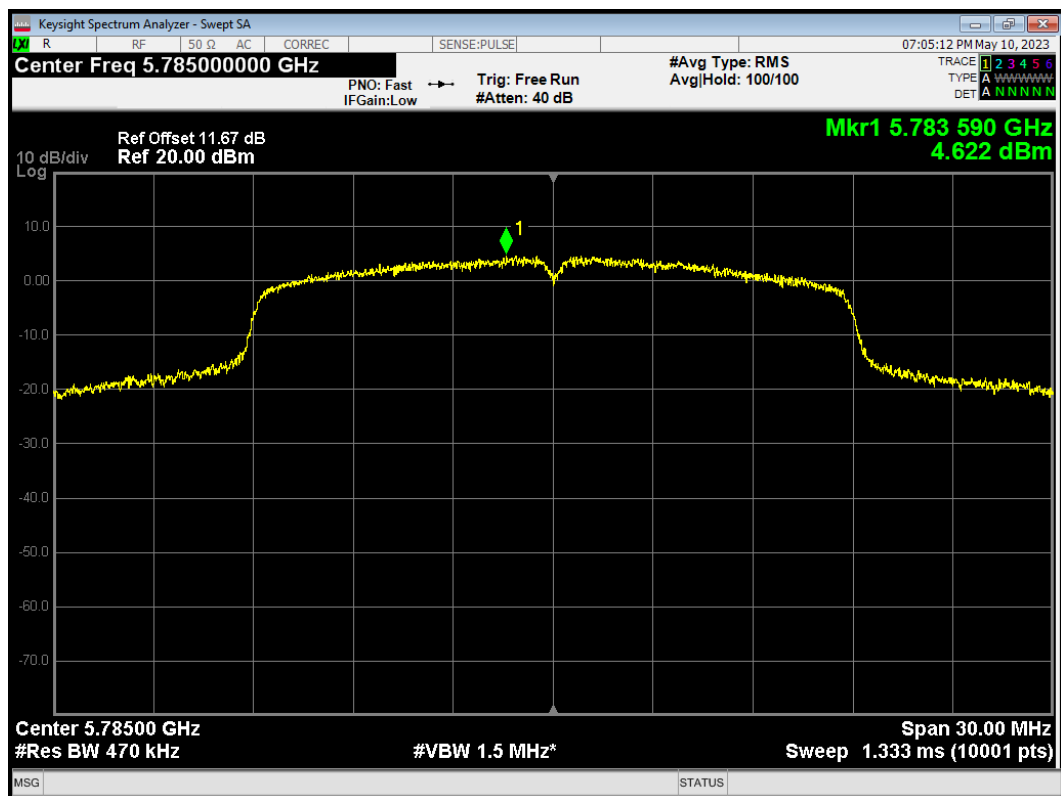
PSD 802.11n(HT20) 5720MHz



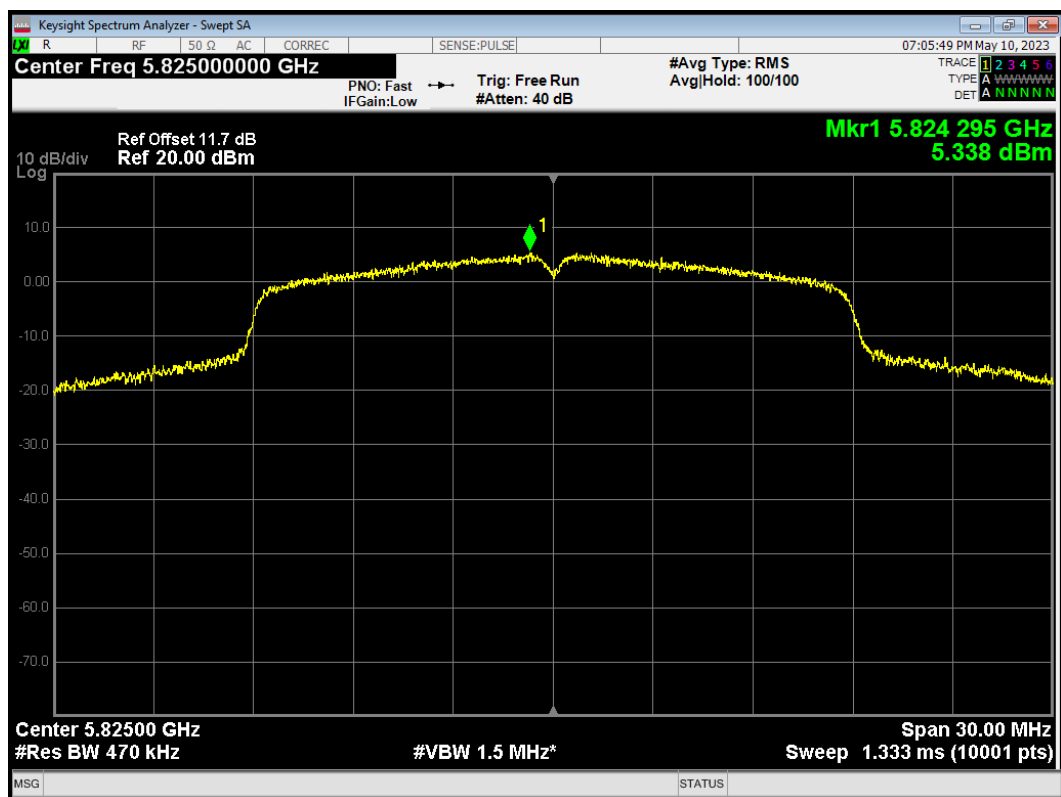
PSD 802.11n(HT20) 5745MHz



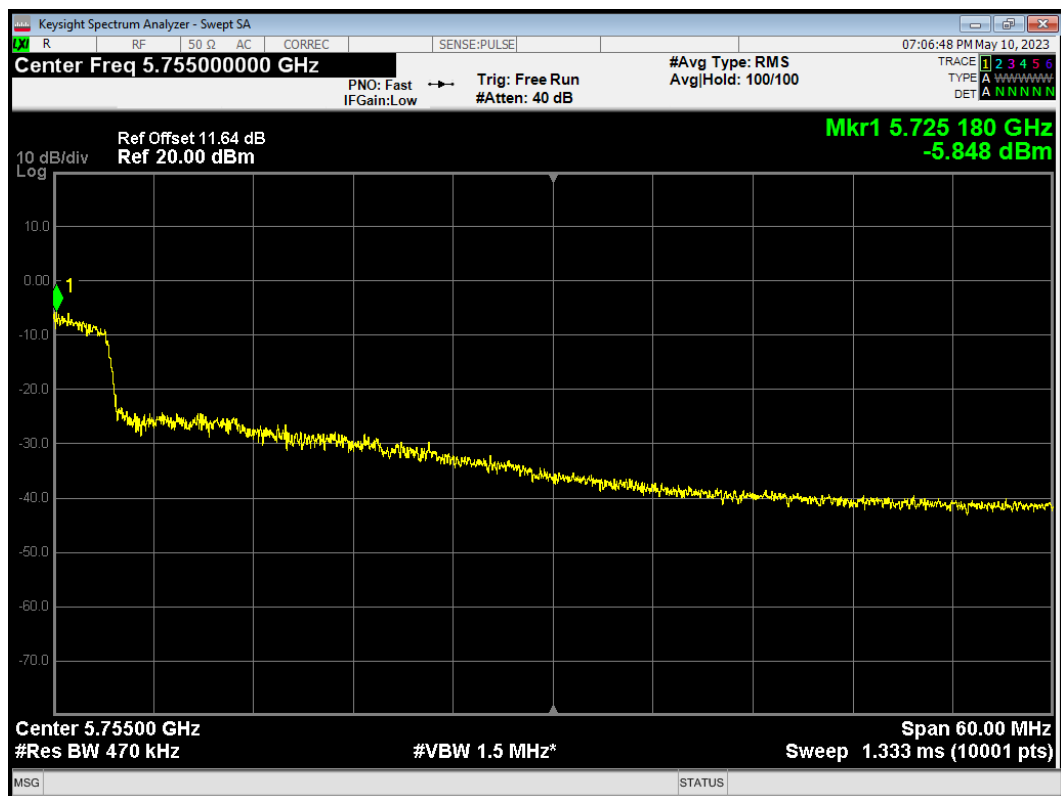
PSD 802.11n(HT20) 5785MHz



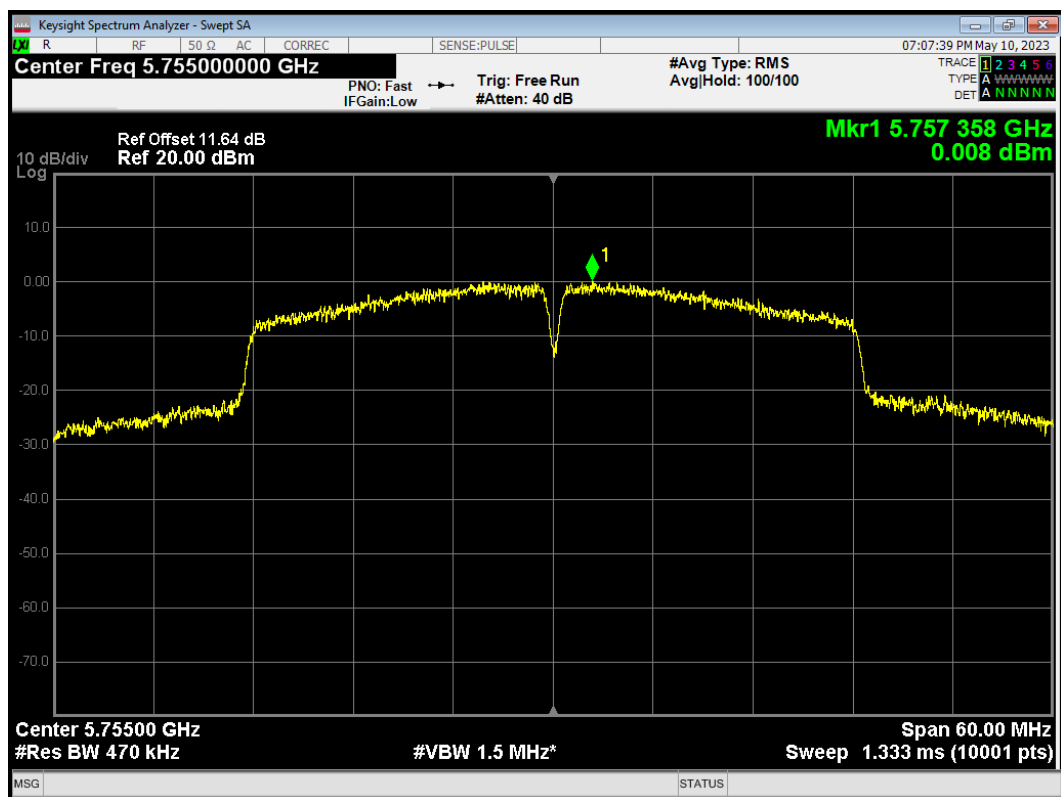
PSD 802.11n(HT20) 5825MHz



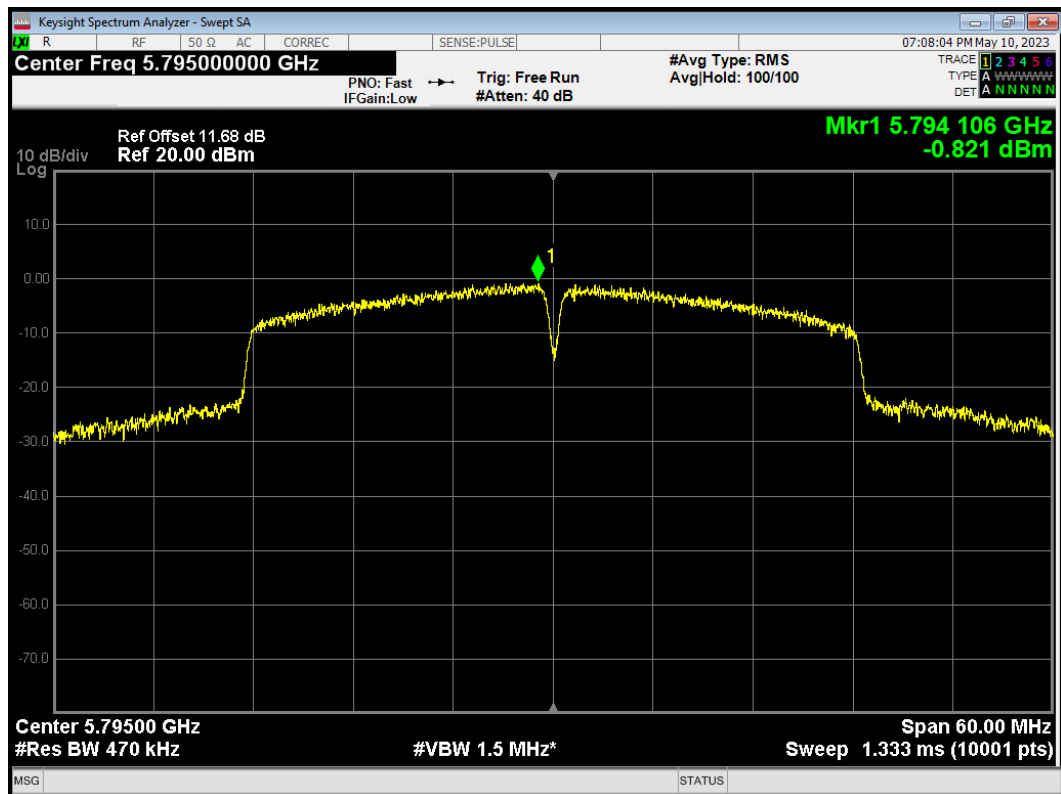
PSD 802.11n(HT40) 5710MHz



PSD 802.11n(HT40) 5755MHz



PSD 802.11n(HT40) 5795MHz



5.5. Unwanted Emission

Ambient condition

Temperature	Relative humidity
20°C ~25°C	45%~50%

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10. The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration.

Sweep the whole frequency band range from 9kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

Set the spectrum analyzer in the following:

9kHz~150 kHz

RBW=200Hz, VBW=1kHz/ Sweep=AUTO

150 kHz~30MHz

RBW=9KHz, VBW=30KHz,/ Sweep=AUTO

Below 1GHz

RBW=100kHz / VBW=300kHz / Sweep=AUTO

a) Peak emission levels are measured by setting the instrument as follows:

Above 1GHz

PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO

b) Average emission levels are measured by setting the instrument as follows:

Above 1GHz

AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

c) Detector: The measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

d) Averaging type = power (i.e., rms) (As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)

e) Sweep time = auto.

f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, then the number of traces shall be increased by a factor of 1 / D, where D is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and

OFF with the transmit cycle, at least 100 traces shall be averaged.)

g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, then a correction factor shall be added to the measurement results prior to comparing with the emission limit, to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:

1) If power averaging (rms) mode was used in the preceding step e), then the correction factor is $[10 \log (1 / D)]$, where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB shall be added to the measured emission levels.

2) If linear voltage averaging mode was used in the preceding step e), then the correction factor is $[20 \log (1 / D)]$, where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB shall be added to the measured emission levels.

3) If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

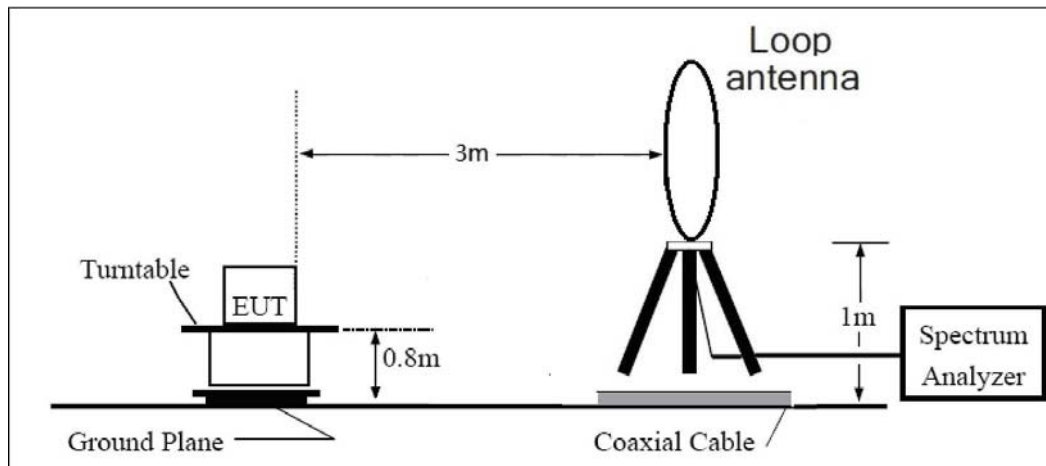
Reduce the video bandwidth until no significant variations in the displayed signal are observed in subsequent traces, provided the video bandwidth is no less than 1 Hz. For regulatory requirements that specify averaging only over the transmit duration (e.g., digital transmission system [DTS] and Unlicensed National Information Infrastructure [U-NII]), the video bandwidth shall be greater than $[1 / (\text{minimum transmitter on time})]$ and no less than 1 Hz.

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the loop antenna is vertical, others antenna are vertical and horizontal.

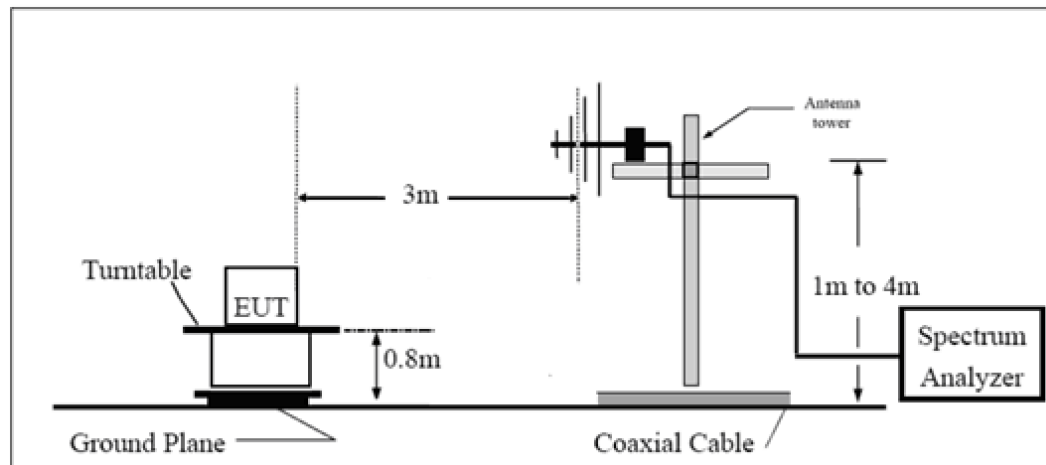
The test is in transmitting mode.

Test setup

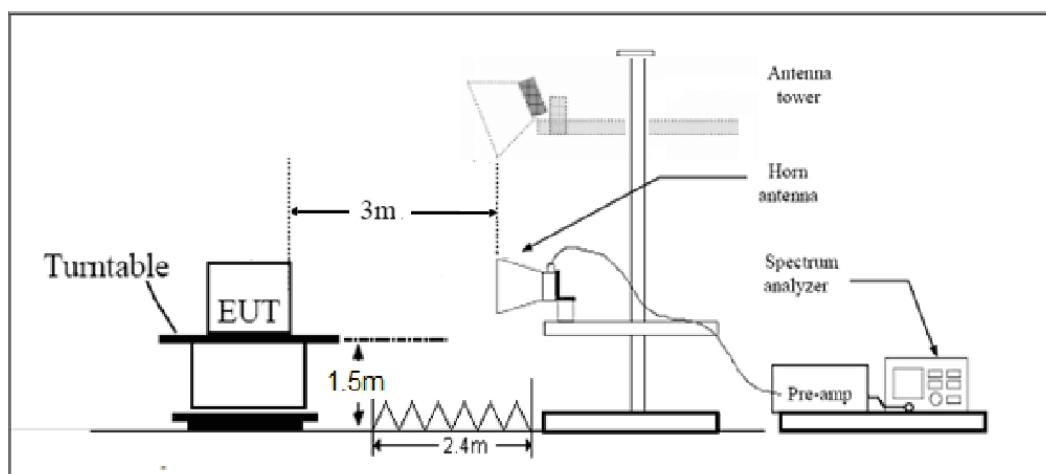
9KHz~ 30MHz



30MHz~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

- (1) For transmitters operating in the 5725-5850 MHz 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.
- (2) 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 e.i.r.p. of -27 dBm/MHz(68.2dBμV/m).
- (3) 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 e.i.r.p. of -27 dBm/MHz(68.2dBμV/m).
- (4) 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 e.i.r.p. of -27 dBm/MHz(68.2dBμV/m).

Note: the following formula is used to convert the EIRP to field strength

§1、 $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{meters}]) + 104.77$, where E = field strength and

d = distance at which field strength limit is specified in the rules;

§2、 $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2$, for d = 3 meters

- (5) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table.

Frequency of emission (MHz)	Field strength(μV/m)	Field strength(dBμV/m)
0.009–0.490	2400/F(kHz)	/
0.490–1.705	24000/F(kHz)	/
1.705–30.0	30	/
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.17 dB
200MHz-1GHz	4.84 dB
1-18GHz	4.35 dB
18-26.5GHz	5.90 dB
26.5GHz~40GHz	5.92 dB

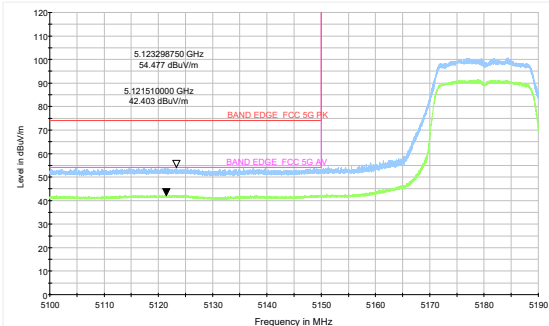
Test Results:

A symbol (dBuV/m) in the test plot below means (dBμV/m)

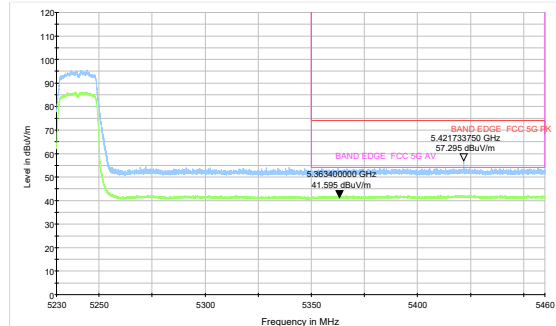
The signal beyond the limit is carrier.

U-NII-1

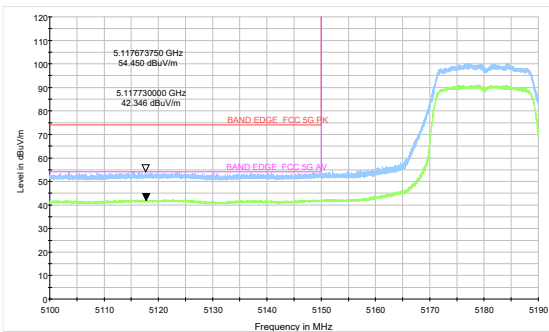
802.11a-Channel 36: Peak + Average



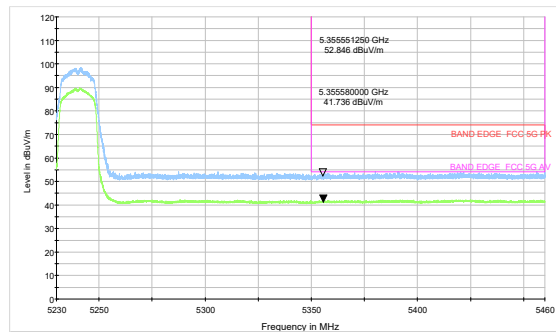
802.11a-Channel 48: Peak + Average



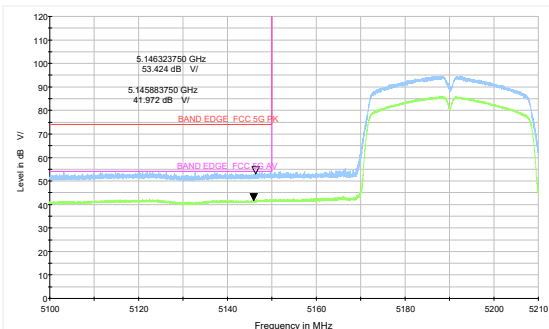
802.11n HT20-Channel 36: Peak + Average



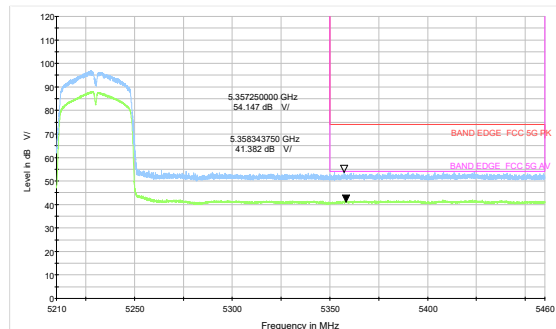
802.11n HT20-Channel 48: Peak + Average



802.11n HT40-Channel 38: Peak + Average

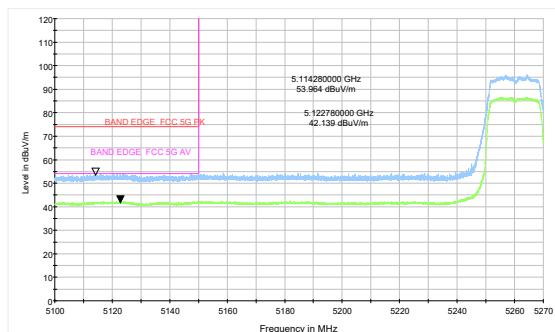


802.11n HT40-Channel 46: Peak + Average

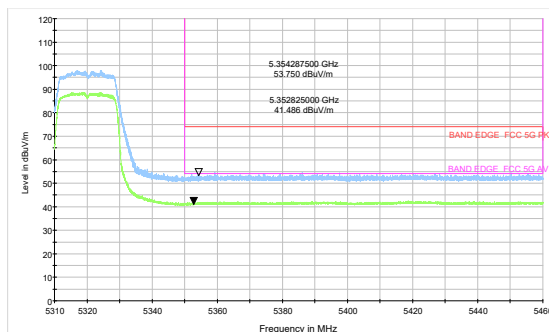


U-NII-2A

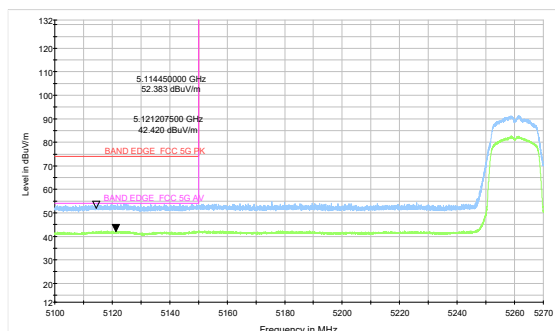
802.11a-Channel 52: Peak + Average



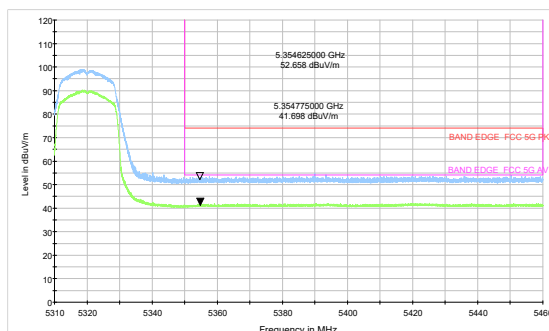
802.11a-Channel 64: Peak + Average



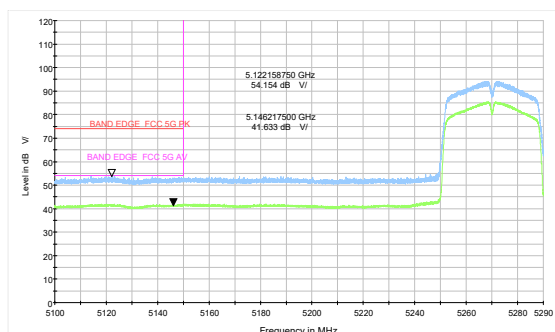
802.11n HT20-Channel 52: Peak + Average



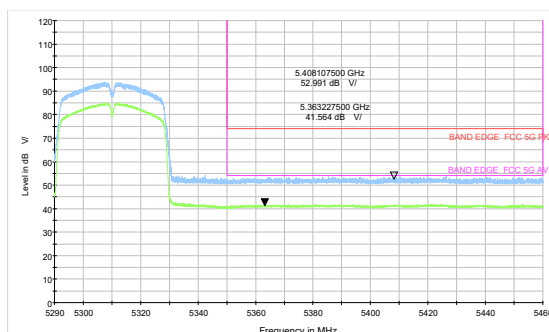
802.11n HT20-Channel 64: Peak + Average



802.11n HT40-Channel 54: Peak + Average

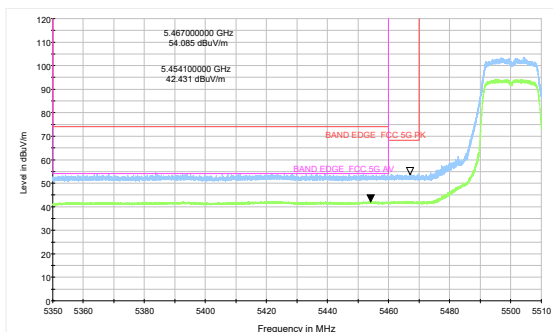


802.11n HT40-Channel 62: Peak + Average

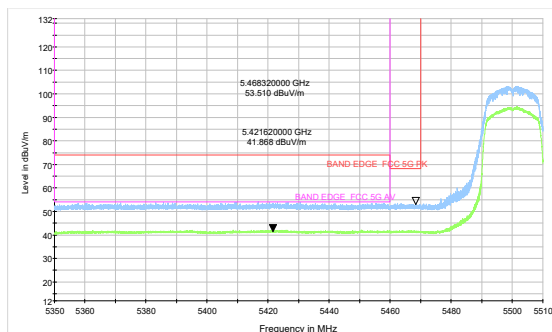


U-NII-2C

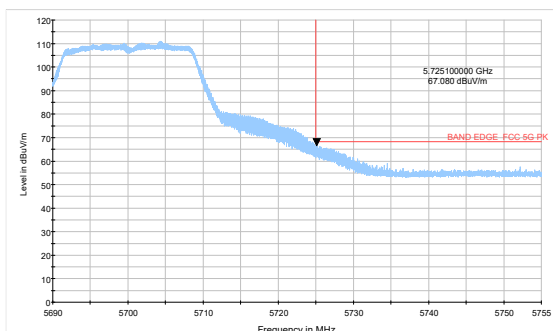
802.11a-Channel 100: Peak + Average



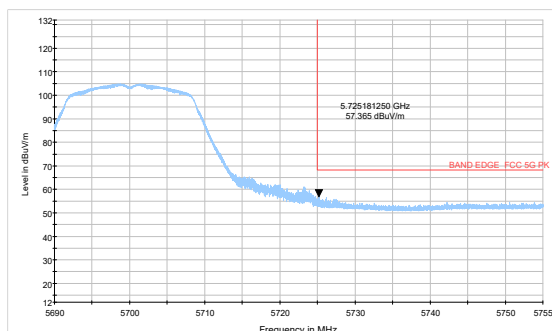
802.11n HT20-Channel 100: Peak + Average



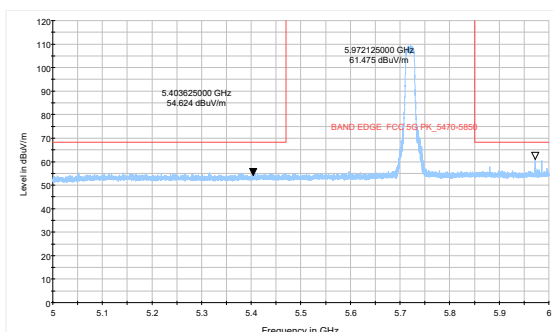
802.11a-Channel 140: Peak



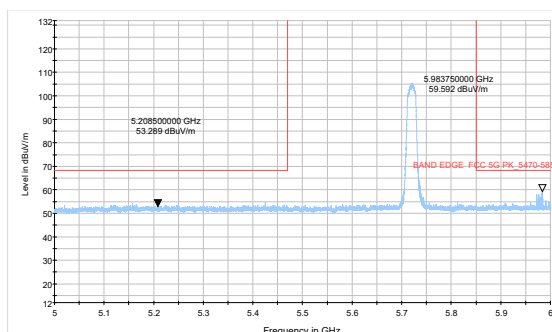
802.11n HT20-Channel 140: Peak



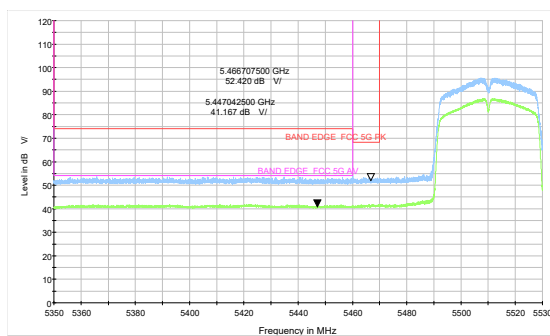
802.11a-Channel 144: Peak



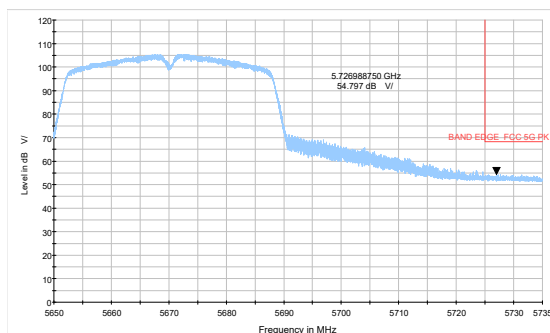
802.11n HT20-Channel 144: Peak



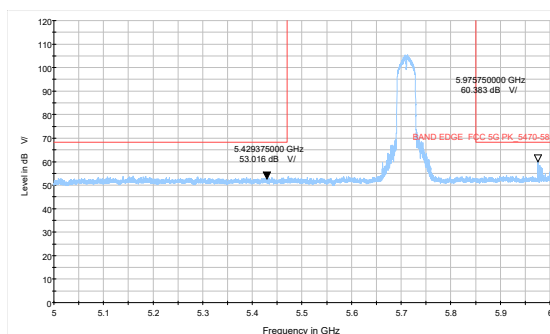
802.11n HT40-Channel 102: Peak + Average



802.11n HT40-Channel 134: Peak

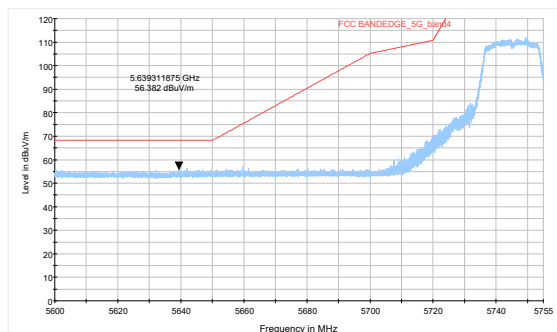


802.11n HT40-Channel 142: Peak

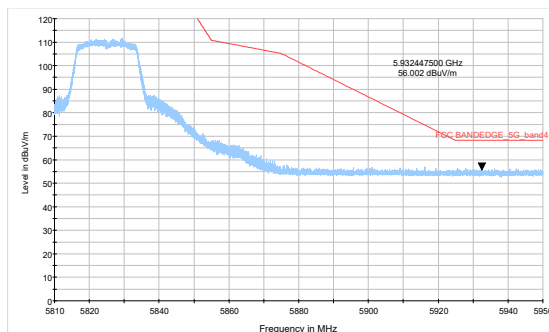


U-NII-3

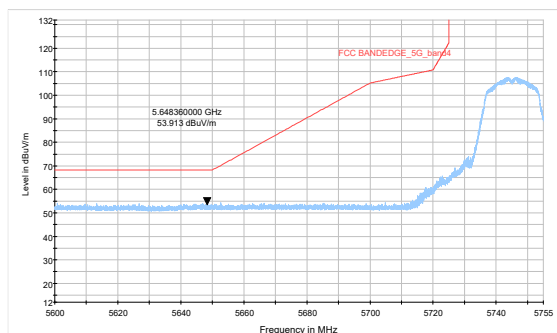
802.11a-Channel 149: Peak



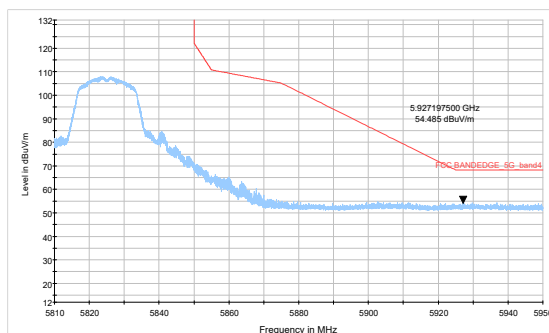
802.11a-Channel 165: Peak



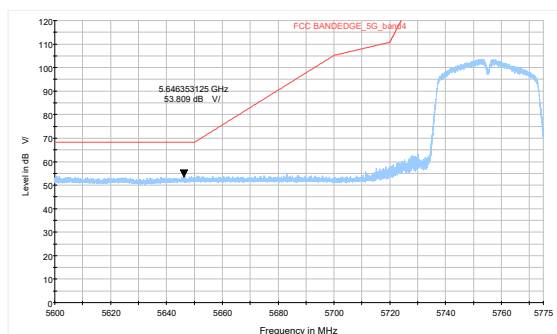
802.11n HT20-Channel 149: Peak



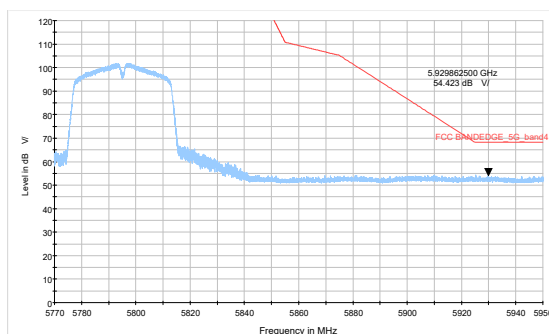
802.11n HT20-Channel 165: Peak



802.11n HT40-Channel 151: Peak



802.11n HT40-Channel 159: Peak



Result of RE

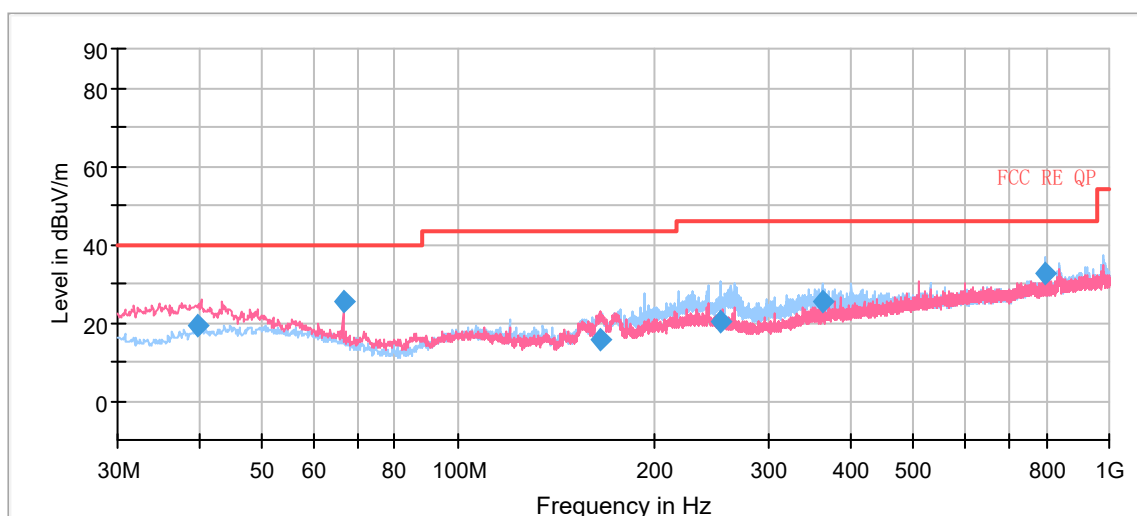
Test result

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the Emissions in the frequency band 9kHz-30MHz are more than 20dB below the limit are not reported.

A symbol (dBuV/m) in the test plot below means (dBμV/m)

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, 802.11n (HT20), Channel 149 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Continuous TX mode:



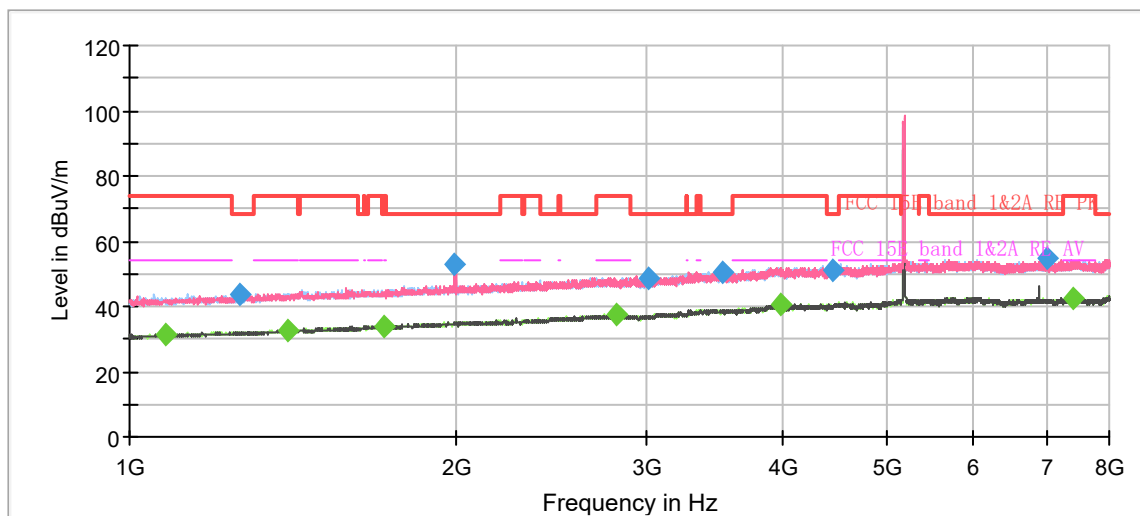
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
39.746250	19.30	40.00	20.70	1000.0	100.0	V	0.0
66.657500	25.51	40.00	14.49	1000.0	125.0	V	269.0
165.472500	15.77	43.50	27.73	1000.0	100.0	V	83.0
253.706250	20.13	46.00	25.87	1000.0	109.0	H	16.0
361.941250	25.58	46.00	20.42	1000.0	100.0	H	96.0
797.033750	32.38	46.00	13.62	1000.0	207.0	H	171.0

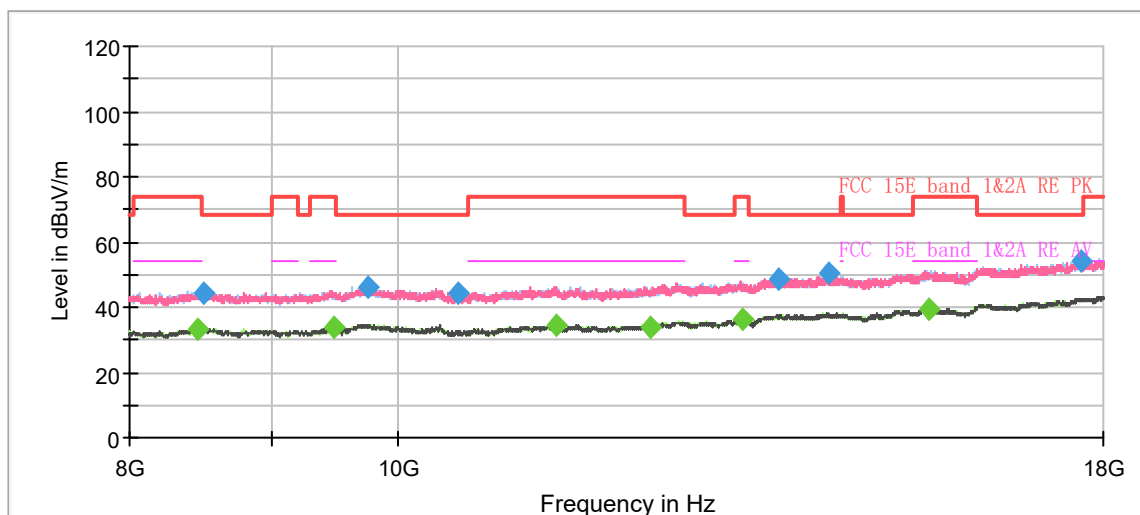
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit – Quasi-Peak

802.11a CH36



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



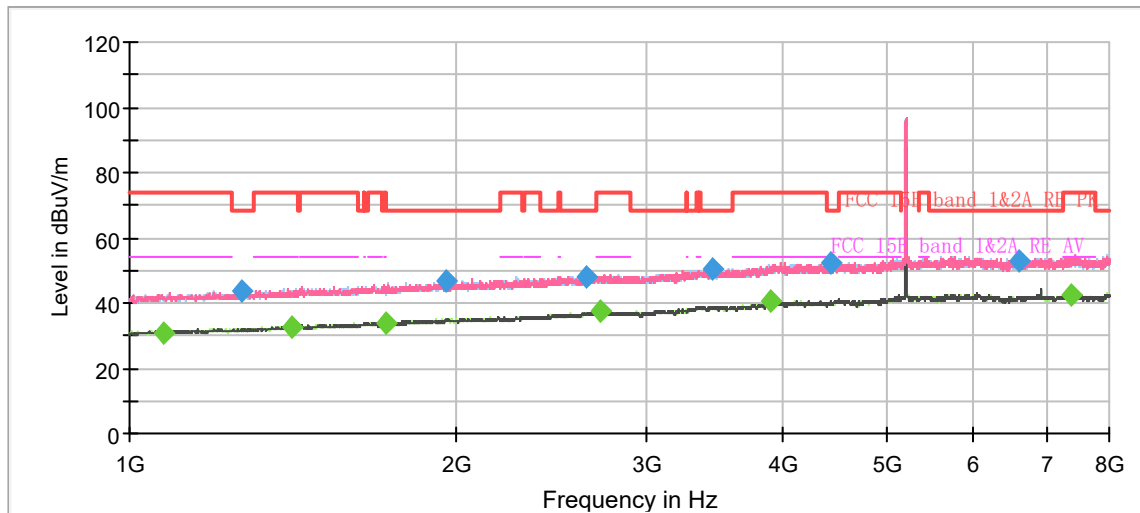
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1077.875000	---	31.51	54.00	22.49	500.0	200.0	H	65.0	-8.6
1262.500000	43.59	---	68.20	24.61	500.0	200.0	V	258.0	-7.4
1399.000000	---	32.81	54.00	21.19	500.0	200.0	H	338.0	-6.5
1719.250000	---	33.84	54.00	20.16	500.0	100.0	V	0.0	-4.9
1992.250000	53.23	---	68.20	14.97	500.0	200.0	V	294.0	-3.5
2813.875000	---	37.28	54.00	16.72	500.0	200.0	H	257.0	0.0
3003.750000	48.48	---	68.20	19.72	500.0	200.0	V	179.0	0.5
3526.125000	50.49	---	68.20	17.71	500.0	100.0	V	72.0	2.6
3980.250000	---	40.49	54.00	13.51	500.0	100.0	H	4.0	4.5
4444.000000	50.80	---	68.20	17.40	500.0	200.0	H	46.0	5.3
7011.250000	54.51	---	68.20	13.69	500.0	100.0	H	332.0	8.9
7396.250000	---	42.56	54.00	11.44	500.0	200.0	V	199.0	9.3

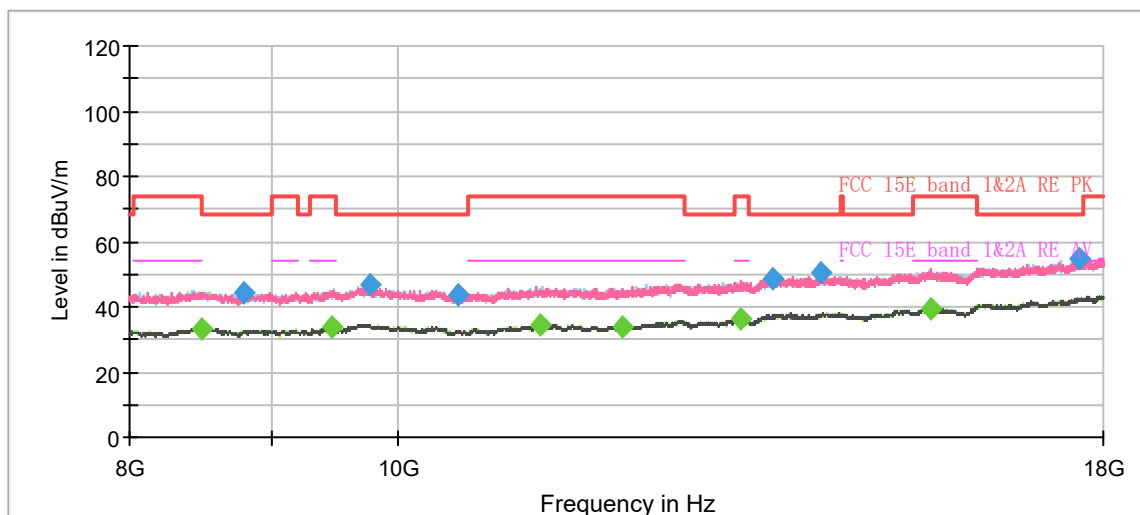
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH40



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



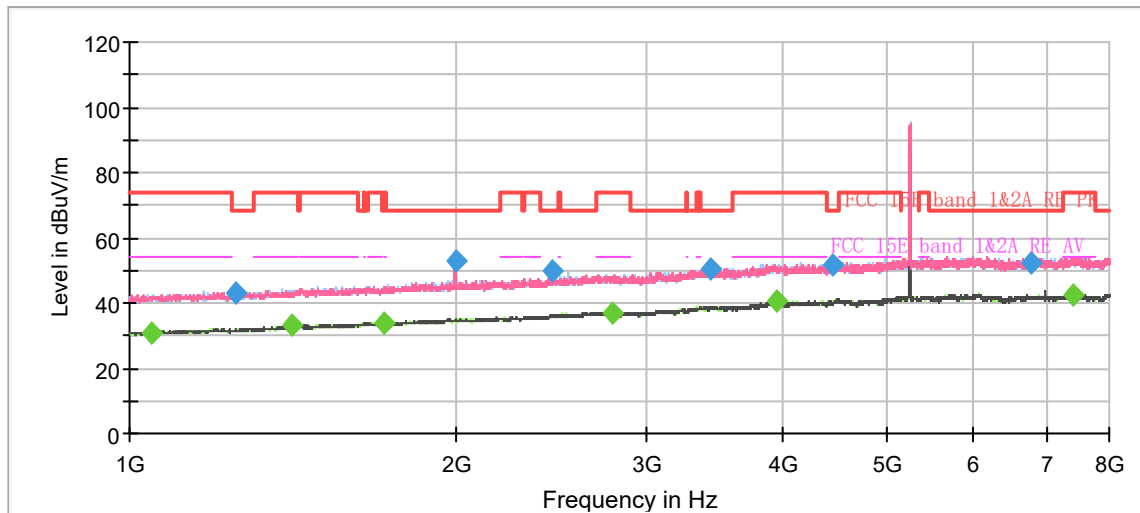
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1074.375000	---	31.02	54.00	22.98	500.0	200.0	H	311.0	-8.6
1271.250000	43.51	---	68.20	24.69	500.0	100.0	V	35.0	-7.3
1409.500000	---	32.65	54.00	21.35	500.0	100.0	V	116.0	-6.4
1721.875000	---	33.93	54.00	20.07	500.0	200.0	V	0.0	-4.8
1956.375000	46.62	---	68.20	21.58	500.0	200.0	V	163.0	-3.6
2638.000000	48.22	---	68.20	19.98	500.0	200.0	V	163.0	-0.5
2721.125000	---	37.30	54.00	16.70	500.0	200.0	V	321.0	-0.1
3441.250000	50.57	---	68.20	17.63	500.0	200.0	H	133.0	2.3
3905.875000	---	40.40	54.00	13.60	500.0	200.0	H	146.0	4.3
4422.125000	52.29	---	68.20	15.91	500.0	200.0	H	47.0	5.2
6614.875000	53.02	---	68.20	15.18	500.0	200.0	H	3.0	8.3
7385.750000	---	42.54	54.00	11.46	500.0	200.0	V	0.0	9.3

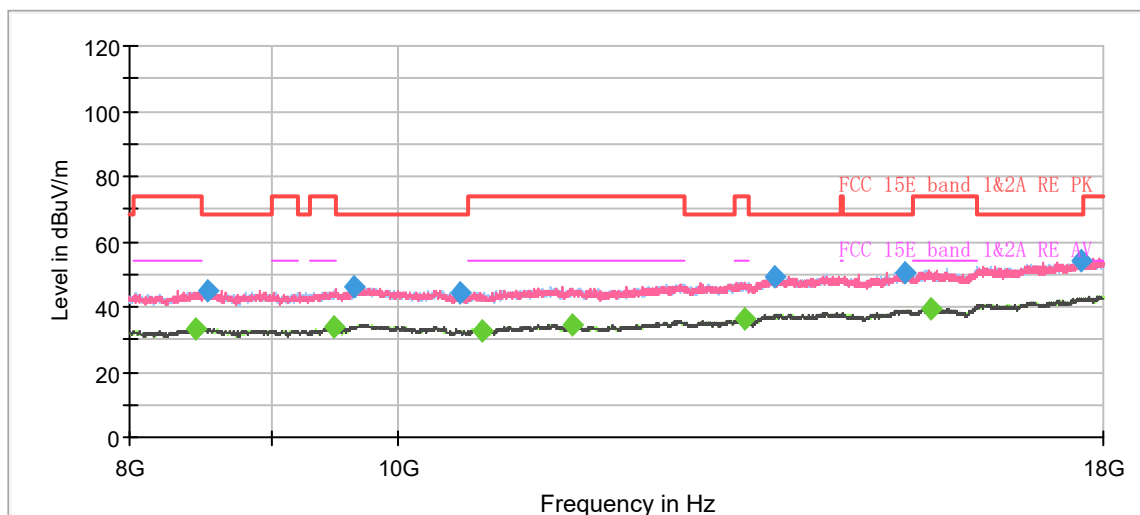
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH48



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



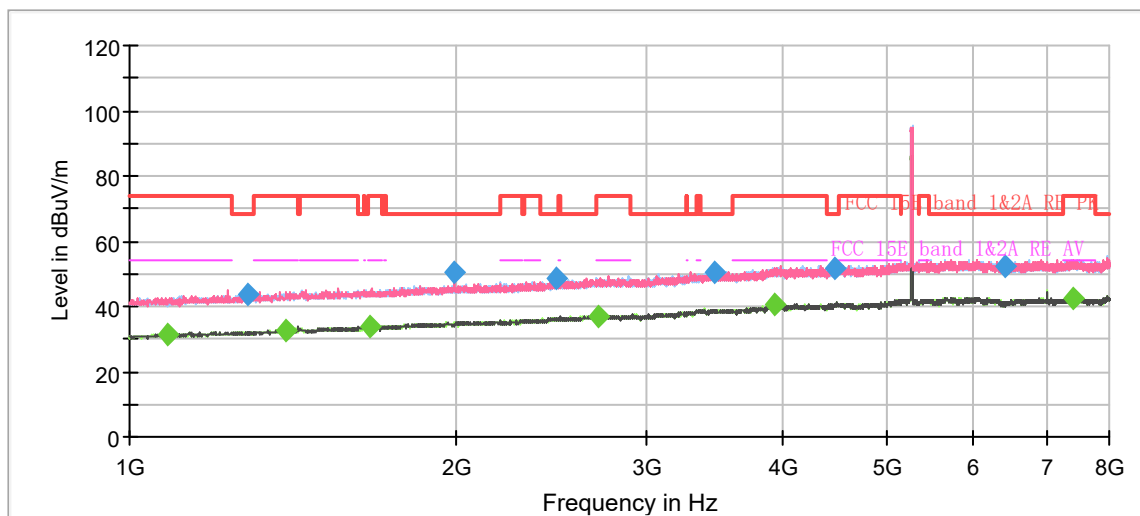
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1049.875000	---	30.97	54.00	23.03	500.0	100.0	H	98.0	-8.7
1252.875000	43.21	---	68.20	24.99	500.0	100.0	H	160.0	-7.4
1413.000000	---	33.03	54.00	20.97	500.0	200.0	H	270.0	-6.4
1719.250000	---	34.00	54.00	20.00	500.0	200.0	H	212.0	-4.9
1996.625000	52.93	---	68.20	15.27	500.0	100.0	V	215.0	-3.5
2457.750000	49.65	---	68.20	18.55	500.0	100.0	H	107.0	-1.3
2790.250000	---	37.06	54.00	16.94	500.0	200.0	V	103.0	0.0
3430.750000	50.51	---	68.20	17.69	500.0	100.0	V	332.0	2.3
3953.125000	---	40.77	54.00	13.23	500.0	100.0	V	83.0	4.4
4457.125000	51.91	---	68.20	16.29	500.0	100.0	V	281.0	5.4
6774.125000	52.49	---	68.20	15.71	500.0	100.0	H	155.0	8.6
7398.875000	---	42.62	54.00	11.38	500.0	200.0	V	73.0	9.3

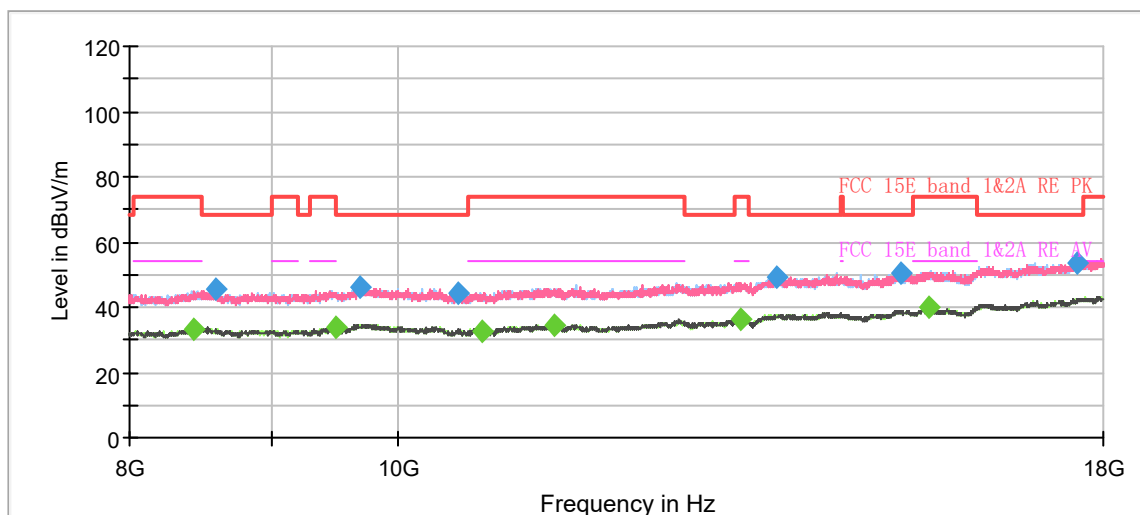
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH52



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



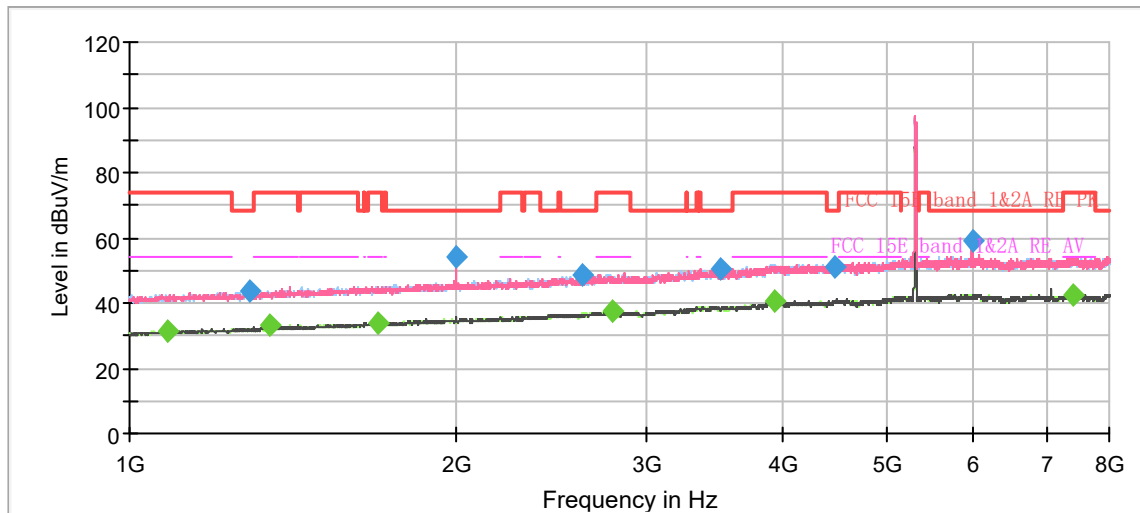
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1084.000000	---	31.41	54.00	22.59	500.0	200.0	H	278.0	-8.6
1283.500000	43.48	---	68.20	24.72	500.0	200.0	V	232.0	-7.3
1395.500000	---	32.87	54.00	21.13	500.0	100.0	V	251.0	-6.5
1663.250000	---	33.84	54.00	20.16	500.0	100.0	H	28.0	-5.1
1994.000000	50.51	---	68.20	17.69	500.0	200.0	V	37.0	-3.5
2474.375000	48.33	---	68.20	19.87	500.0	100.0	V	95.0	-1.3
2705.375000	---	37.11	54.00	16.89	500.0	100.0	H	270.0	-0.1
3464.875000	50.50	---	68.20	17.70	500.0	100.0	V	339.0	2.4
3939.125000	---	40.84	54.00	13.16	500.0	200.0	V	131.0	4.4
4462.375000	51.84	---	68.20	16.37	500.0	100.0	H	13.0	5.4
6425.875000	52.48	---	68.20	15.72	500.0	100.0	H	28.0	8.1
7398.875000	---	42.69	54.00	11.31	500.0	200.0	H	204.0	9.3

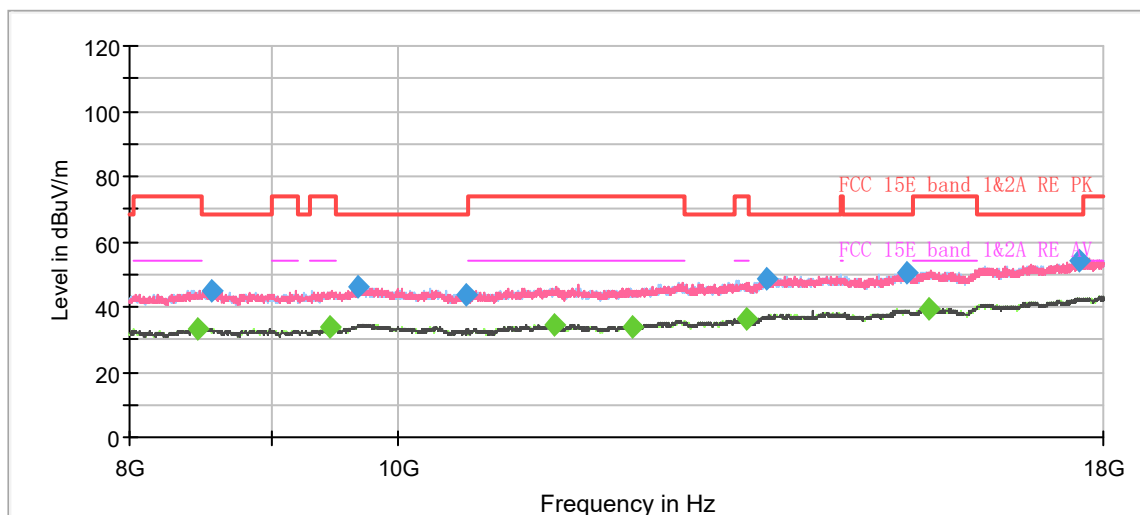
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH60



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



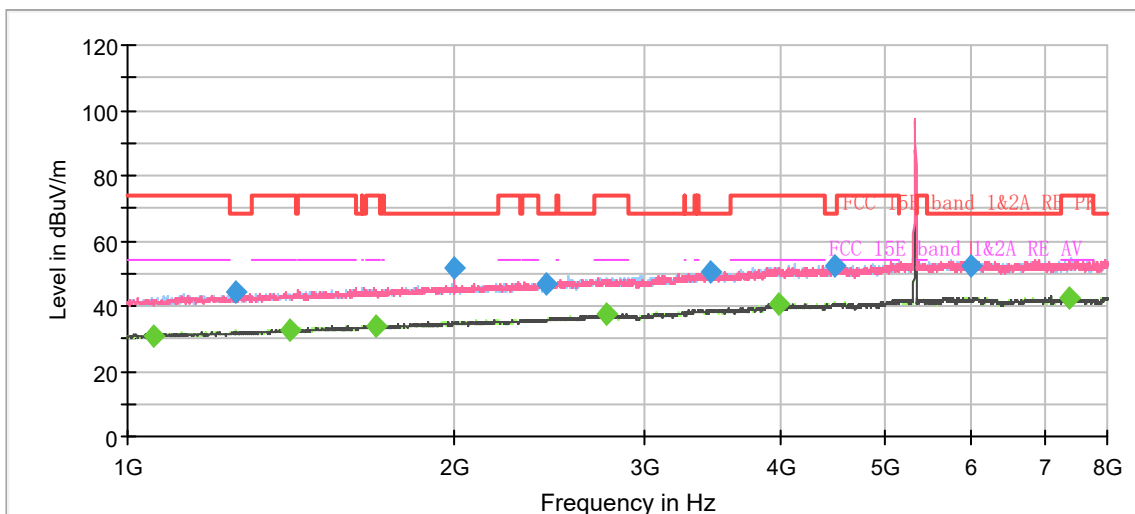
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1084.875000	---	31.59	54.00	22.41	500.0	100.0	H	306.0	-8.6
1288.750000	43.91	---	68.20	24.29	500.0	200.0	H	69.0	-7.2
1349.125000	---	33.17	54.00	20.83	500.0	100.0	V	264.0	-6.8
1691.250000	---	33.78	54.00	20.22	500.0	200.0	H	129.0	-5.0
1999.250000	54.43	---	68.20	13.77	500.0	100.0	V	329.0	-3.4
2614.375000	48.85	---	68.20	19.35	500.0	200.0	V	332.0	-0.6
2782.375000	---	37.36	54.00	16.64	500.0	100.0	V	69.0	0.0
3499.875000	50.43	---	68.20	17.77	500.0	200.0	H	95.0	2.5
3931.250000	---	40.39	54.00	13.61	500.0	100.0	H	163.0	4.4
4458.875000	51.32	---	68.20	16.88	500.0	200.0	H	134.0	5.4
5981.375000	59.12	---	68.20	9.08	500.0	100.0	V	108.0	8.0
7410.250000	---	42.42	54.00	11.58	500.0	100.0	H	213.0	9.2

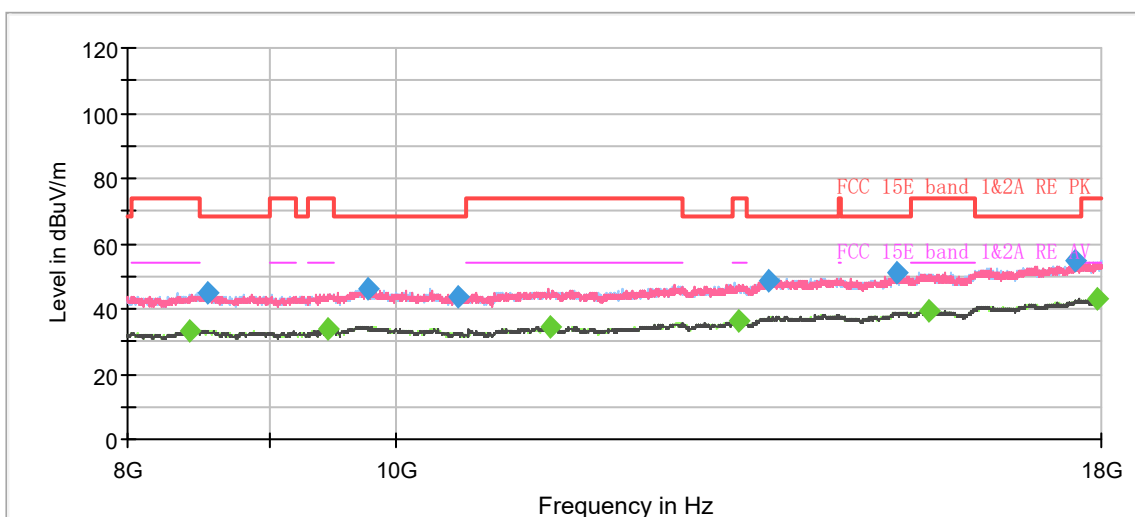
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH64



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



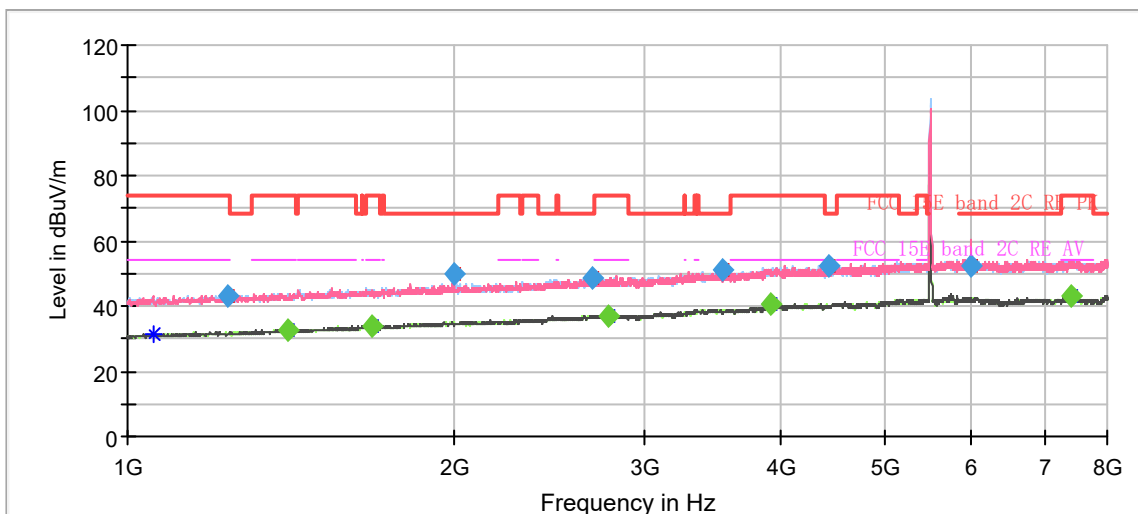
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1055.125000	---	30.98	54.00	23.02	500.0	200.0	V	319.0	-8.7
1255.500000	44.12	---	68.20	24.08	500.0	200.0	H	321.0	-7.4
1411.250000	---	32.79	54.00	21.21	500.0	100.0	V	67.0	-6.4
1693.875000	---	33.94	54.00	20.06	500.0	100.0	V	211.0	-5.0
2000.125000	51.45	---	68.20	16.75	500.0	100.0	V	10.0	-3.4
2433.250000	46.78	---	68.20	21.42	500.0	100.0	H	200.0	-1.5
2763.125000	---	37.34	54.00	16.66	500.0	100.0	V	62.0	-0.1
3442.125000	50.37	---	68.20	17.83	500.0	100.0	H	210.0	2.3
3975.875000	---	40.65	54.00	13.35	500.0	100.0	V	256.0	4.5
4479.875000	52.37	---	68.20	15.83	500.0	100.0	V	271.0	5.4
5998.000000	52.61	---	68.20	15.59	500.0	100.0	H	340.0	8.0
7388.375000	---	42.71	54.00	11.29	500.0	200.0	V	81.0	9.3

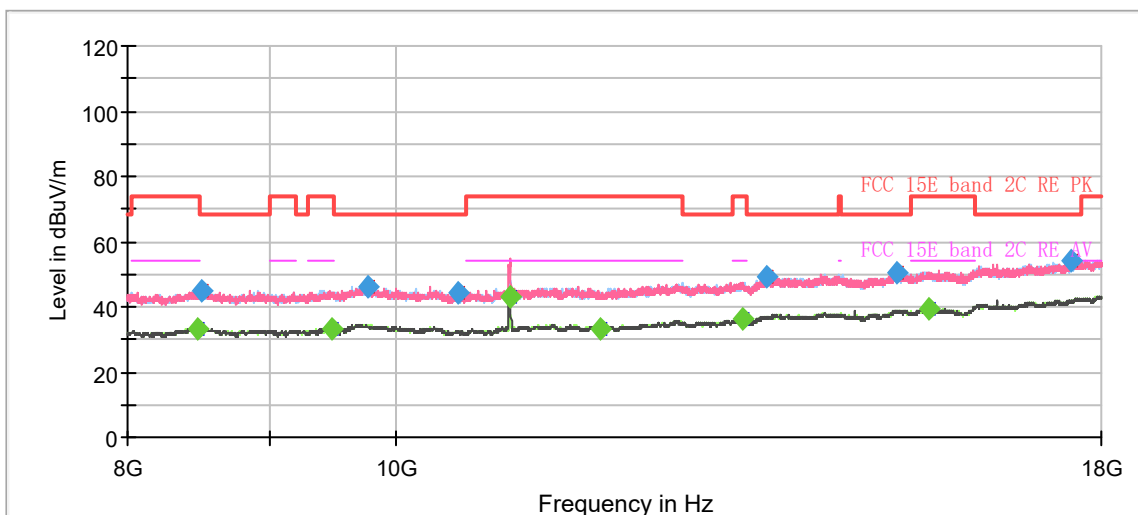
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH100



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



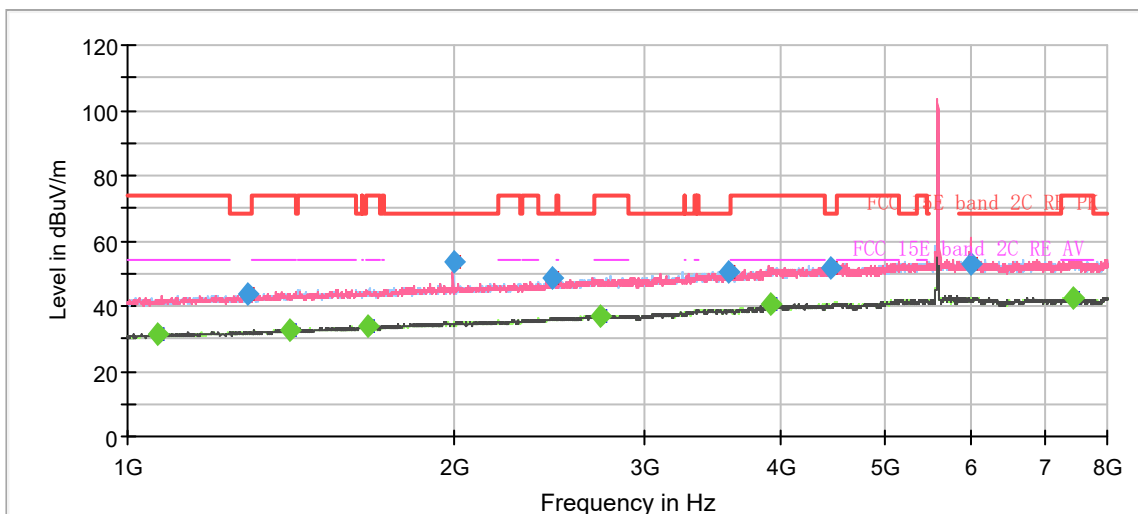
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1238.133750	42.81	---	68.20	25.39	500.0	100.0	H	320.0	-7.5
1406.875000	---	32.72	54.00	21.28	500.0	200.0	V	289.0	-6.4
1678.125000	---	33.80	54.00	20.20	500.0	100.0	H	227.0	-5.0
1999.250000	49.80	---	68.20	18.40	500.0	100.0	H	16.0	-3.4
2677.375000	48.39	---	68.20	19.81	500.0	200.0	V	280.0	-0.2
2771.000000	---	37.15	54.00	16.85	500.0	200.0	V	246.0	0.0
3529.625000	50.94	---	68.20	17.26	500.0	200.0	V	275.0	2.6
3919.000000	---	40.37	54.00	13.63	500.0	200.0	H	94.0	4.4
4437.875000	52.43	---	68.20	15.77	500.0	200.0	H	157.0	5.3
5981.375000	52.57	---	68.20	15.63	500.0	100.0	H	114.0	8.0
7405.875000	---	42.89	54.00	11.11	500.0	100.0	V	1.0	9.3
1238.133750	42.81	---	68.20	25.39	500.0	100.0	H	320.0	-7.5

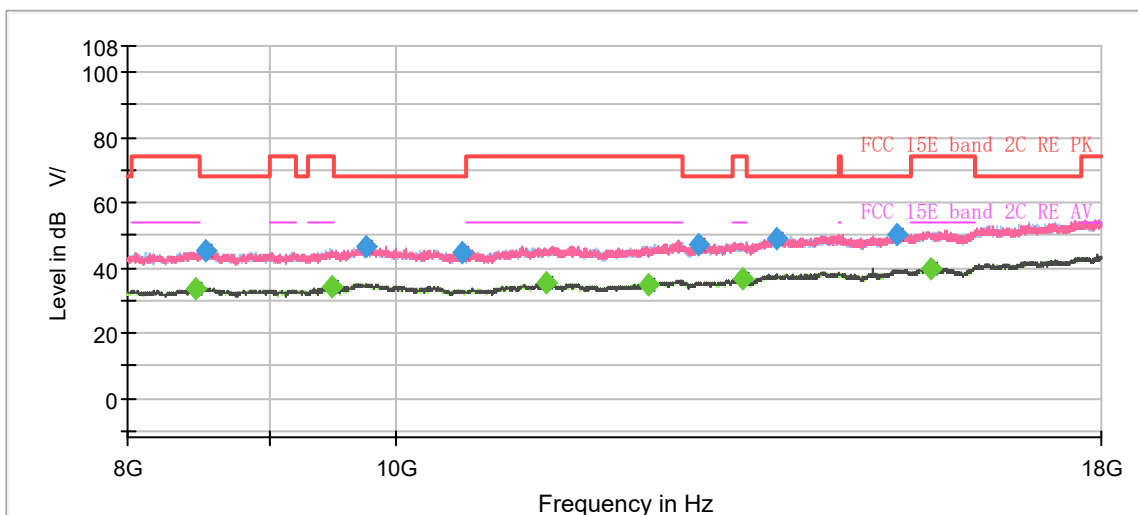
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH116



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



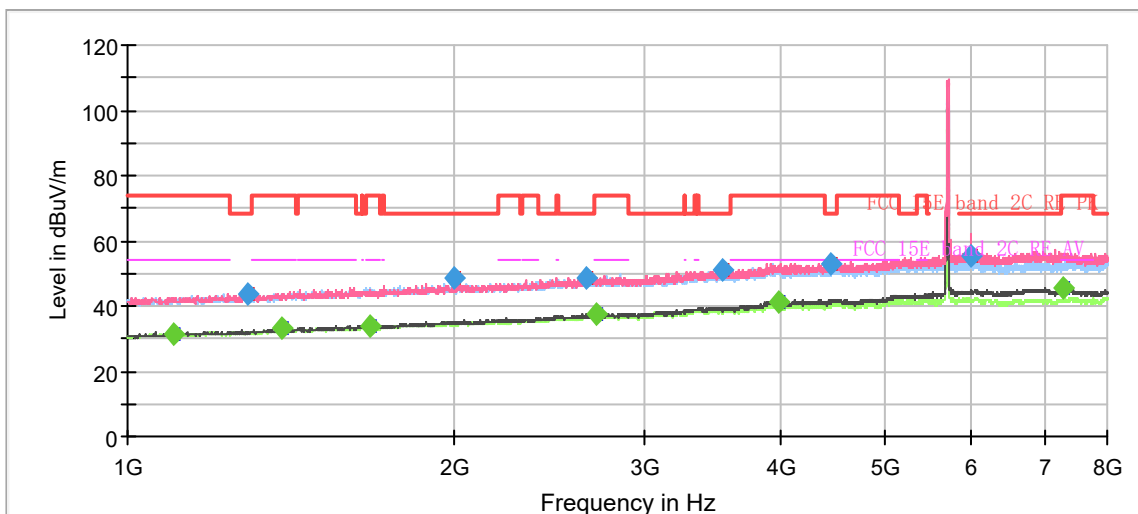
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1066.500000	---	31.14	54.00	22.86	500.0	200.0	H	34.0	-8.6
1290.928750	43.59	---	68.20	24.61	500.0	100.0	H	342.0	-7.2
1413.875000	---	32.75	54.00	21.25	500.0	100.0	V	144.0	-6.4
1665.875000	---	33.66	54.00	20.34	500.0	100.0	V	207.0	-5.1
1998.983750	53.58	---	68.20	14.62	500.0	200.0	V	332.0	-3.5
2465.625000	48.58	---	68.20	19.62	500.0	100.0	V	102.0	-1.3
2732.500000	---	37.23	54.00	16.77	500.0	200.0	H	103.0	-0.1
3576.875000	50.30	---	68.20	17.90	500.0	100.0	H	297.0	2.6
3922.500000	---	40.45	54.00	13.55	500.0	200.0	H	243.0	4.4
4452.750000	51.52	---	68.20	16.68	500.0	200.0	H	59.0	5.3
5998.875000	52.97	---	68.20	15.23	500.0	200.0	H	0.0	8.0
7452.250000	---	42.51	54.00	11.49	500.0	100.0	H	282.0	9.1

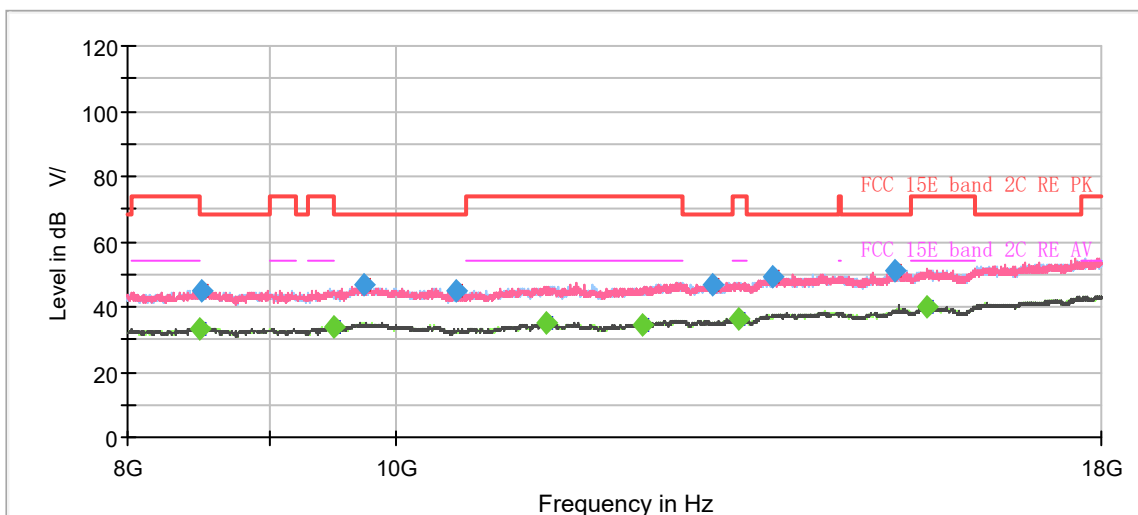
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH140



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



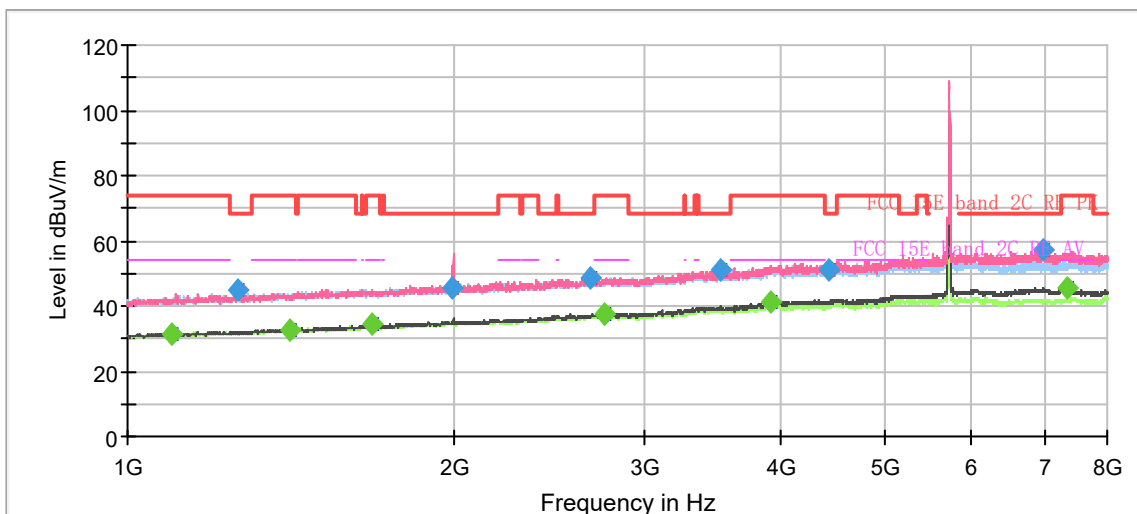
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1102.375000	---	31.57	54.00	22.43	500.0	200.0	V	70.0	-8.4
1290.500000	43.48	---	68.20	24.72	500.0	100.0	H	320.0	-7.2
1385.875000	---	32.99	54.00	21.01	500.0	200.0	V	144.0	-6.6
1676.375000	---	33.99	54.00	20.01	500.0	200.0	V	0.0	-5.0
1997.500000	48.92	---	68.20	19.28	500.0	200.0	H	214.0	-3.4
2645.875000	48.80	---	68.20	19.40	500.0	200.0	V	129.0	-0.4
2702.750000	---	37.58	54.00	16.42	500.0	200.0	V	70.0	-0.1
3529.625000	50.93	---	68.20	17.27	500.0	200.0	V	18.0	2.6
3982.875000	---	41.42	54.00	12.58	500.0	200.0	V	139.0	4.5
4454.500000	52.71	---	68.20	15.49	500.0	200.0	V	245.0	5.3
5997.125000	55.43	---	68.20	12.77	500.0	100.0	V	89.0	8.0
7288.625000	---	45.32	54.00	8.68	500.0	200.0	V	51.0	9.3

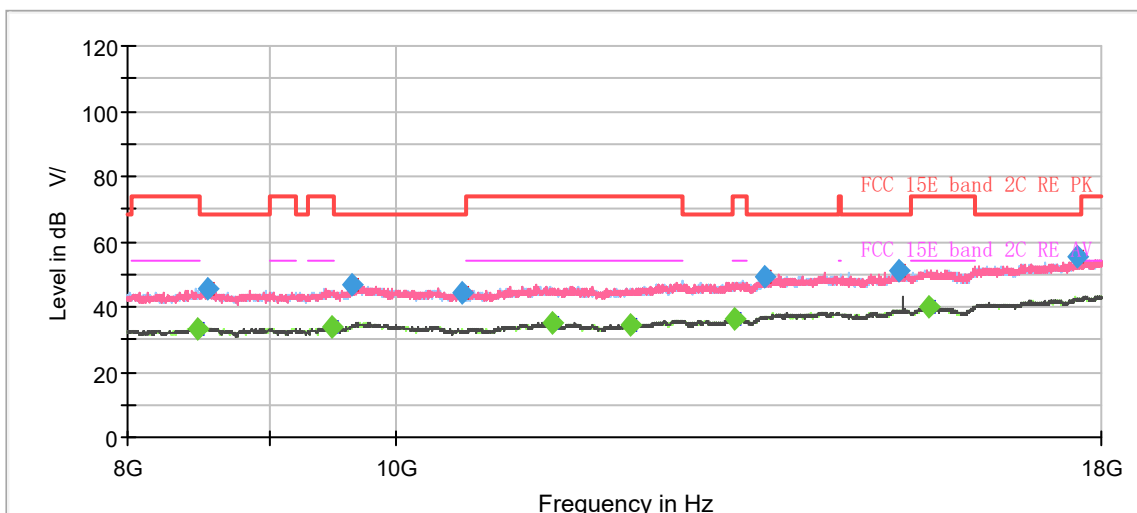
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH144



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



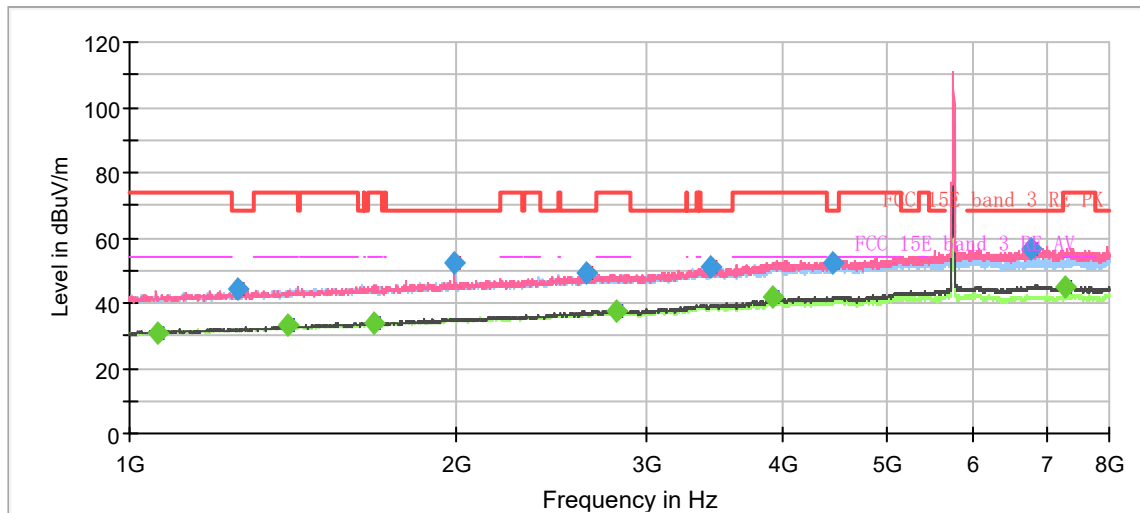
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1096.250000	---	31.52	54.00	22.48	500.0	200.0	H	89.0	-8.4
1266.000000	45.14	---	68.20	23.06	500.0	200.0	V	7.0	-7.4
1413.875000	---	32.77	54.00	21.23	500.0	200.0	V	16.0	-6.4
1677.250000	---	34.61	54.00	19.39	500.0	200.0	V	67.0	-5.0
1994.000000	45.61	---	68.20	22.59	500.0	100.0	H	0.0	-3.5
2670.375000	48.52	---	68.20	19.68	500.0	200.0	V	81.0	-0.3
2752.625000	---	37.42	54.00	16.58	500.0	200.0	V	7.0	-0.1
3522.625000	51.05	---	68.20	17.15	500.0	200.0	V	47.0	2.6
3921.625000	---	41.39	54.00	12.61	500.0	200.0	V	21.0	4.4
4438.750000	51.35	---	68.20	16.85	500.0	200.0	V	62.0	5.3
6992.000000	57.37	---	68.20	10.83	500.0	200.0	V	95.0	8.8
7358.625000	---	45.49	54.00	8.51	500.0	200.0	V	12.0	9.3

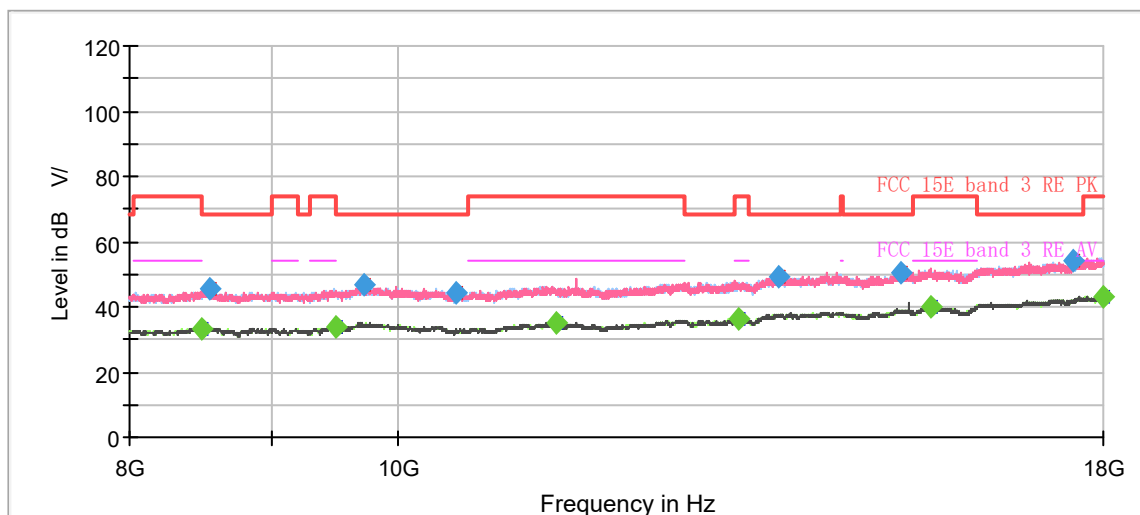
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH149



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



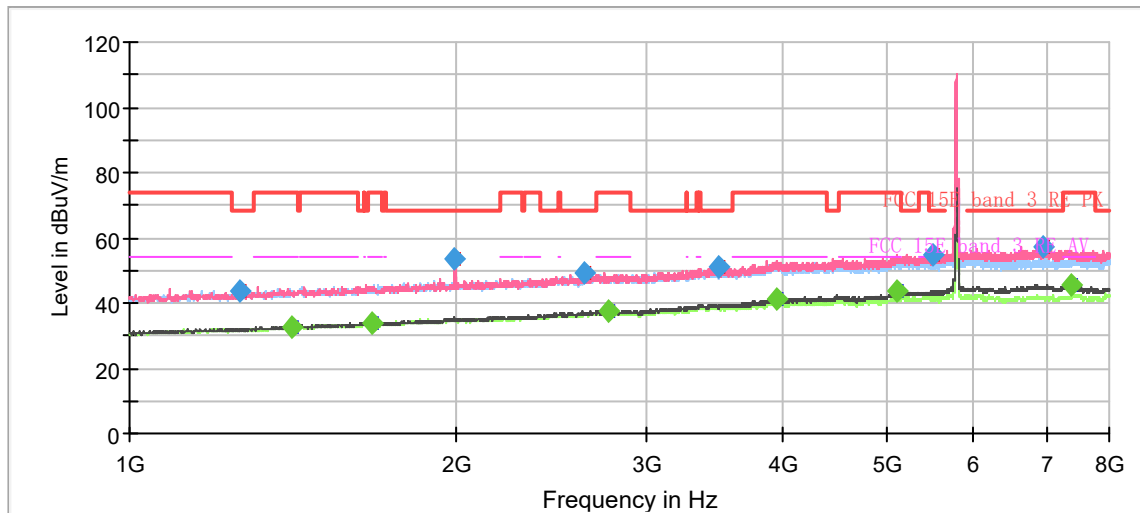
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1060.375000	---	30.99	54.00	23.01	500.0	100.0	H	109.0	-8.7
1258.125000	44.08	---	68.20	24.12	500.0	100.0	H	266.0	-7.4
1399.875000	---	33.21	54.00	20.79	500.0	200.0	V	34.0	-6.5
1678.125000	---	33.92	54.00	20.08	500.0	200.0	V	20.0	-5.0
1992.250000	52.50	---	68.20	15.70	500.0	200.0	V	346.0	-3.5
2637.125000	49.43	---	68.20	18.77	500.0	200.0	V	44.0	-0.5
2811.250000	---	37.50	54.00	16.50	500.0	200.0	V	25.0	0.0
3431.625000	50.85	---	68.20	17.35	500.0	200.0	V	30.0	2.3
3922.500000	---	41.55	54.00	12.45	500.0	200.0	V	15.0	4.4
4439.625000	52.12	---	68.20	16.08	500.0	200.0	V	140.0	5.3
6780.250000	56.39	---	68.20	11.81	500.0	200.0	V	15.0	8.7
7300.000000	---	45.19	54.00	8.81	500.0	200.0	V	105.0	9.3

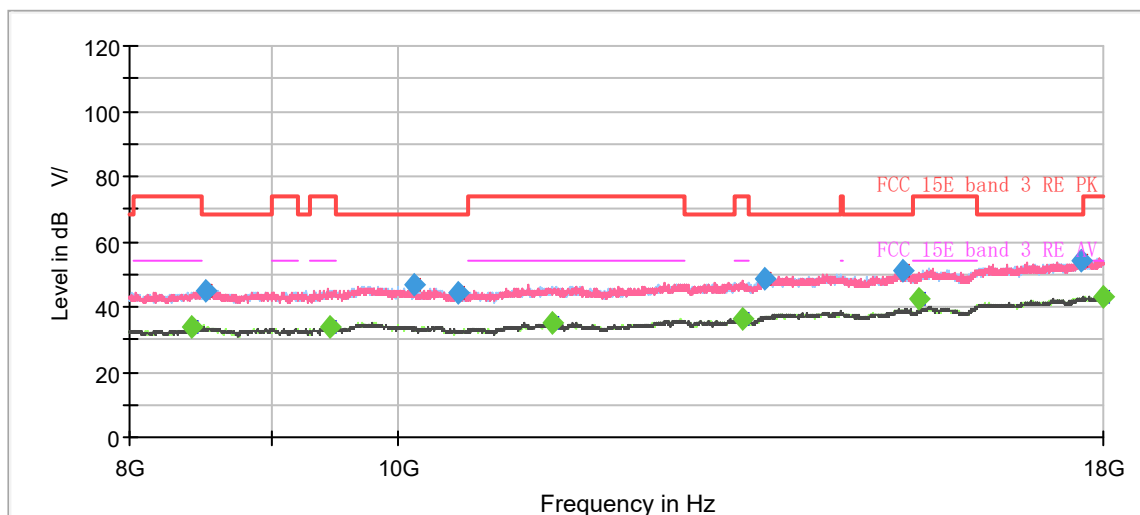
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH157



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



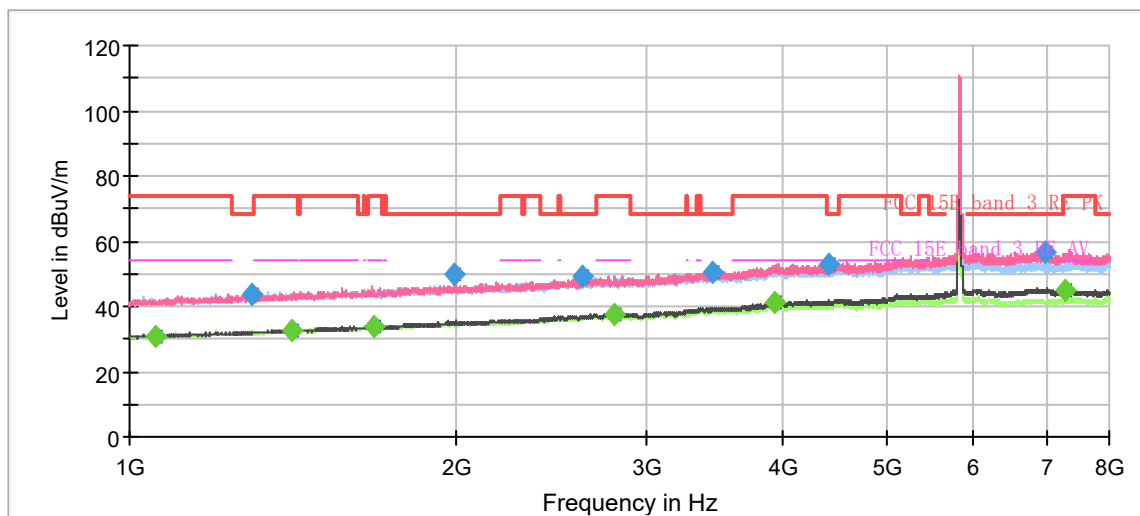
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1262.500000	43.69	---	68.20	24.51	500.0	200.0	H	271.0	-7.4
1413.000000	---	32.87	54.00	21.13	500.0	200.0	H	247.0	-6.4
1674.625000	---	34.14	54.00	19.86	500.0	200.0	V	162.0	-5.0
1993.125000	53.44	---	68.20	14.76	500.0	100.0	V	304.0	-3.5
2626.625000	48.96	---	68.20	19.24	500.0	100.0	V	51.0	-0.5
2759.625000	---	37.57	54.00	16.43	500.0	200.0	V	21.0	-0.1
3497.250000	50.94	---	68.20	17.26	500.0	200.0	V	157.0	2.5
3955.750000	---	41.37	54.00	12.63	500.0	200.0	V	86.0	4.4
5102.000000	---	43.55	54.00	10.45	500.0	200.0	V	51.0	6.9
5491.375000	55.00	---	68.20	13.20	500.0	200.0	V	107.0	7.7
6963.125000	57.02	---	68.20	11.18	500.0	200.0	V	142.0	8.8
7384.000000	---	45.39	54.00	8.61	500.0	200.0	V	137.0	9.3

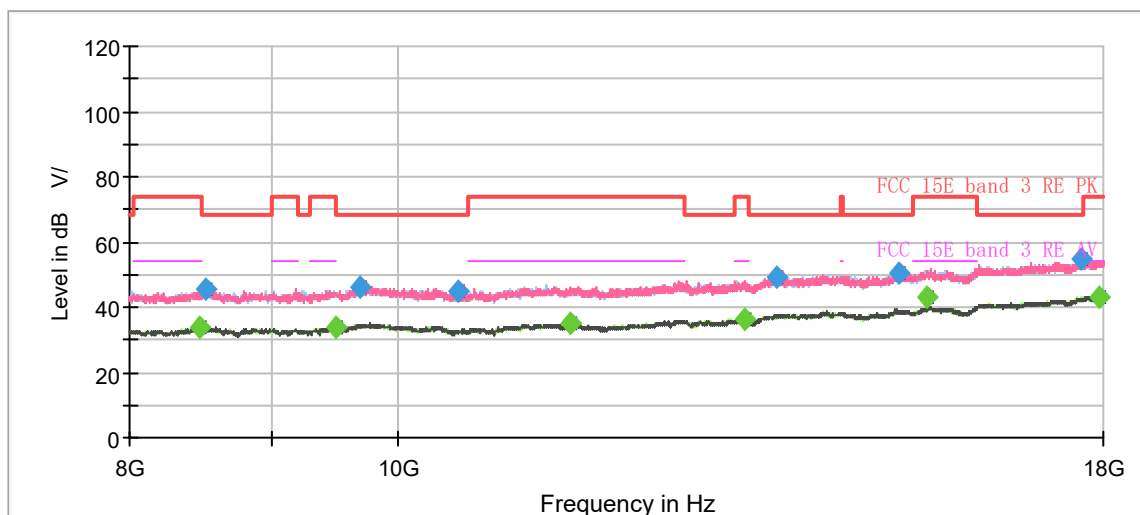
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH165



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



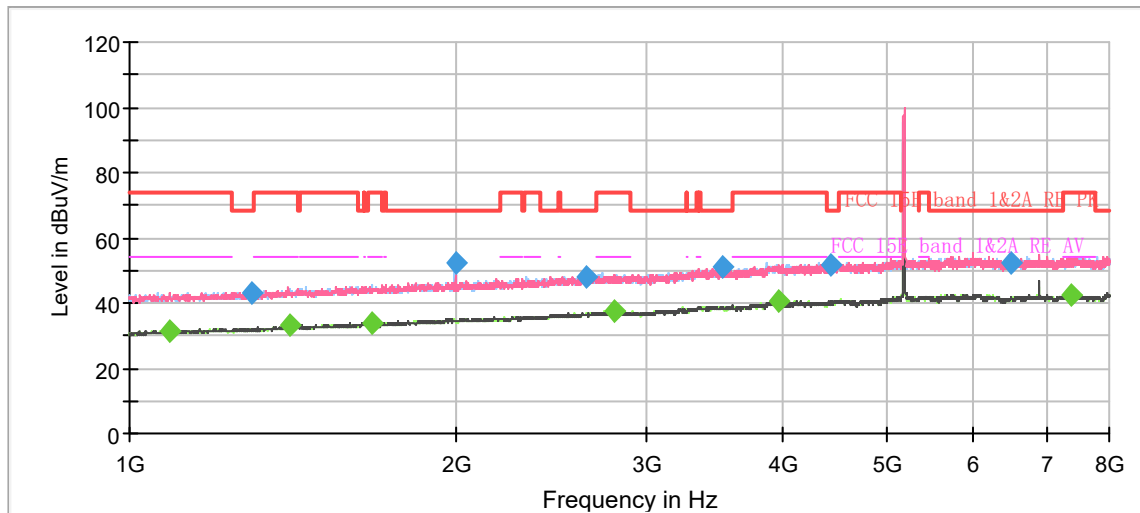
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1055.125000	---	31.07	54.00	22.93	500.0	200.0	H	132.0	-8.7
1298.375000	43.45	---	68.20	24.75	500.0	100.0	H	8.0	-7.2
1412.125000	---	32.81	54.00	21.19	500.0	100.0	H	257.0	-6.4
1678.125000	---	33.95	54.00	20.05	500.0	200.0	V	112.0	-5.0
1994.000000	49.63	---	68.20	18.57	500.0	100.0	H	128.0	-3.5
2611.750000	49.22	---	68.20	18.98	500.0	100.0	H	61.0	-0.6
2804.250000	---	37.76	54.00	16.24	500.0	200.0	V	74.0	0.0
3446.500000	50.75	---	68.20	17.45	500.0	200.0	V	29.0	2.4
3938.250000	---	41.45	54.00	12.55	500.0	200.0	V	0.0	4.4
4419.500000	52.62	---	68.20	15.58	500.0	200.0	V	46.0	5.2
6969.250000	56.43	---	68.20	11.77	500.0	200.0	V	145.0	8.8
7288.625000	---	45.08	54.00	8.92	500.0	200.0	V	29.0	9.3

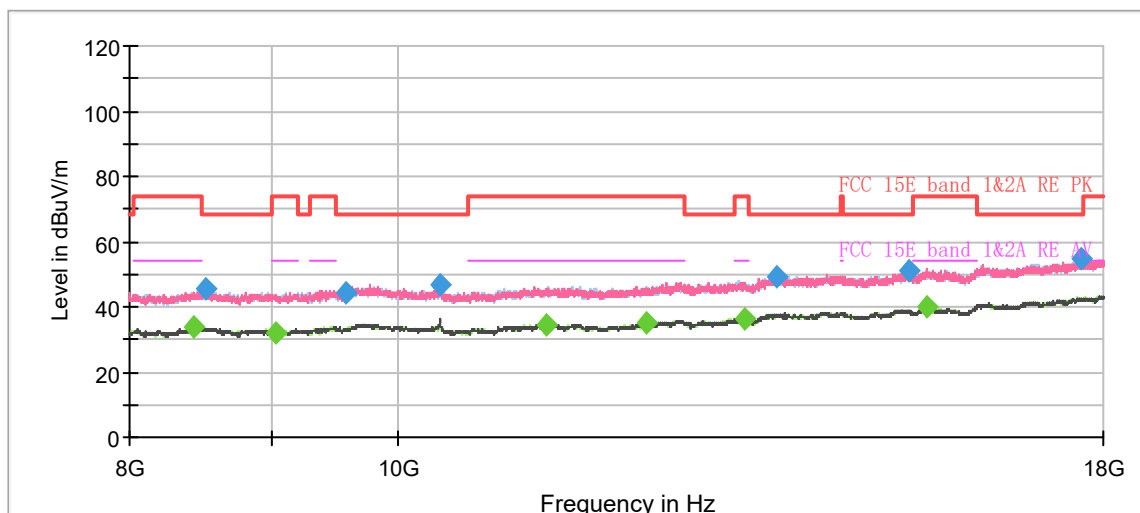
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH36



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



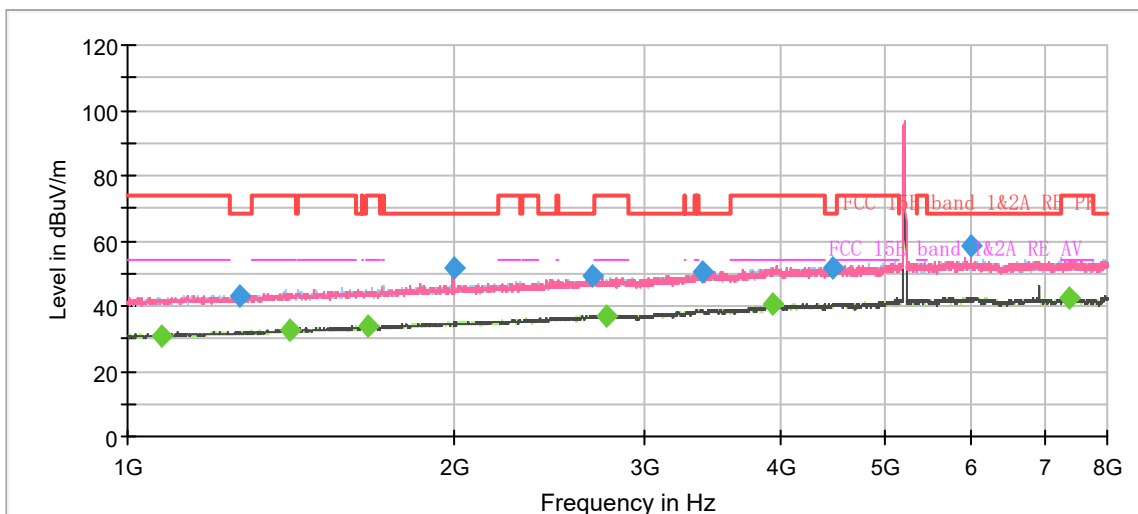
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1091.000000	---	31.19	54.00	22.81	500.0	100.0	V	344.0	-8.5
1296.625000	43.36	---	68.20	24.84	500.0	100.0	V	208.0	-7.2
1405.125000	---	32.95	54.00	21.05	500.0	200.0	V	69.0	-6.4
1671.125000	---	33.96	54.00	20.04	500.0	100.0	V	65.0	-5.1
1999.250000	52.38	---	68.20	15.82	500.0	200.0	H	258.0	-3.4
2634.500000	48.14	---	68.20	20.06	500.0	200.0	V	177.0	-0.5
2792.875000	---	37.30	54.00	16.70	500.0	100.0	V	241.0	0.0
3527.000000	50.81	---	68.20	17.39	500.0	200.0	H	341.0	2.6
3973.250000	---	40.63	54.00	13.37	500.0	100.0	V	125.0	4.5
4432.625000	51.97	---	68.20	16.23	500.0	100.0	H	310.0	5.3
6496.750000	52.35	---	68.20	15.85	500.0	200.0	H	174.0	8.1
7388.375000	---	42.51	54.00	11.49	500.0	200.0	H	273.0	9.3

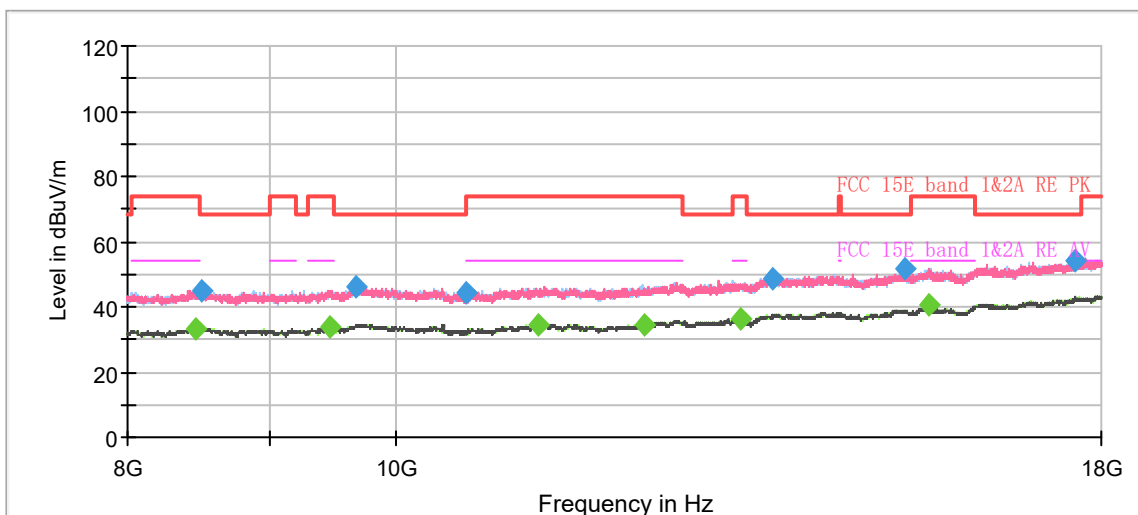
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH40



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



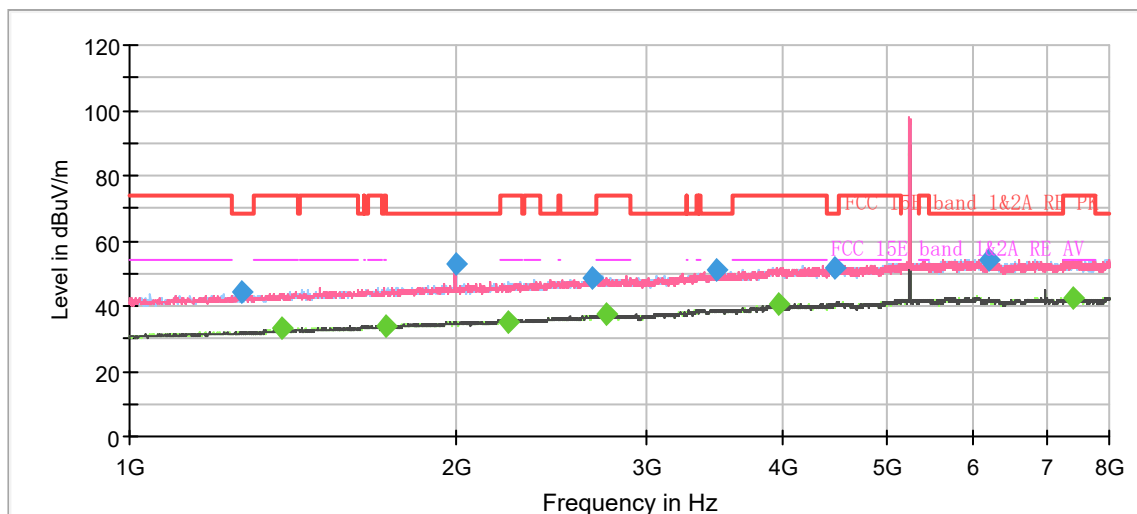
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1074.375000	---	30.93	54.00	23.07	500.0	200.0	H	0.0	-8.6
1270.375000	43.30	---	68.20	24.90	500.0	200.0	V	137.0	-7.3
1412.125000	---	32.78	54.00	21.22	500.0	200.0	V	137.0	-6.4
1668.500000	---	34.08	54.00	19.92	500.0	200.0	V	74.0	-5.1
1998.375000	51.53	---	68.20	16.67	500.0	100.0	V	30.0	-3.4
2682.625000	49.17	---	68.20	19.03	500.0	200.0	H	351.0	-0.2
2757.875000	---	37.10	54.00	16.90	500.0	100.0	H	280.0	-0.1
3388.750000	50.41	---	68.20	17.79	500.0	200.0	V	122.0	2.2
3934.750000	---	40.50	54.00	13.50	500.0	200.0	H	47.0	4.4
4459.750000	51.40	---	68.20	16.80	500.0	200.0	H	209.0	5.4
5995.375000	58.31	---	68.20	9.89	500.0	200.0	V	301.0	8.0
7385.750000	---	42.71	54.00	11.29	500.0	100.0	H	28.0	9.3

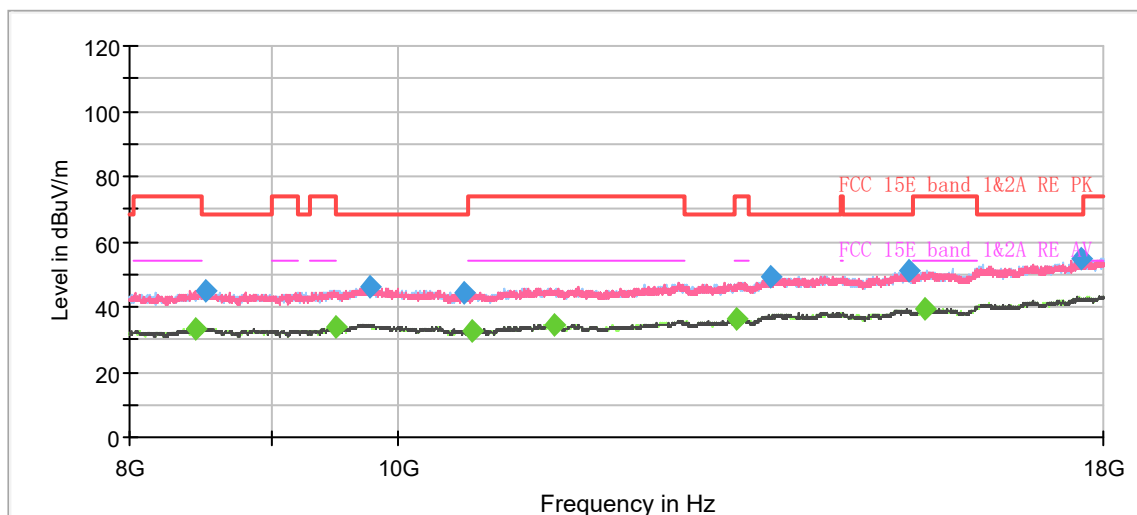
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH48



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



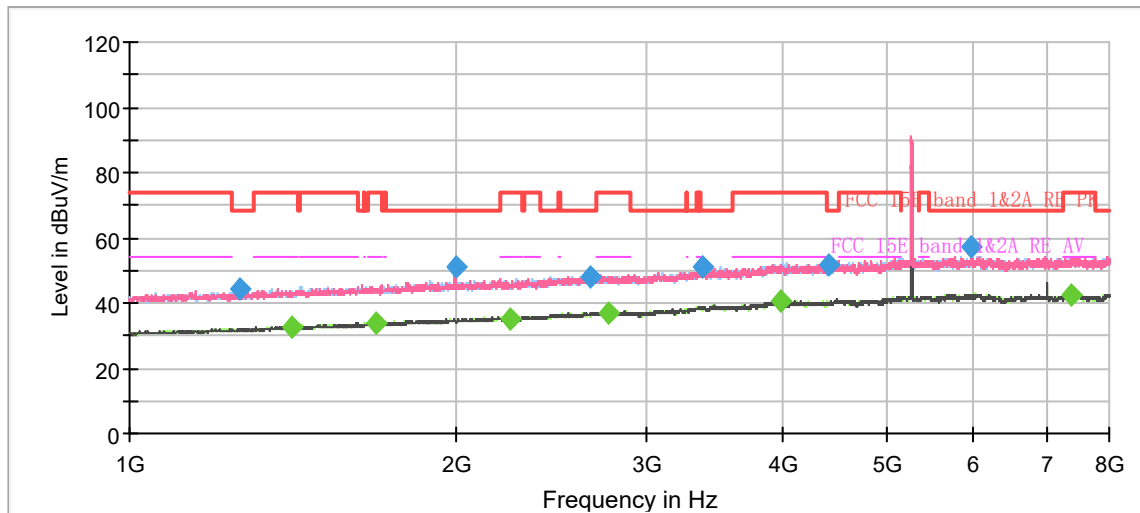
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1270.375000	44.01	---	68.20	24.19	500.0	200.0	H	210.0	-7.3
1383.250000	---	32.98	54.00	21.02	500.0	200.0	V	53.0	-6.6
1721.875000	---	33.78	54.00	20.22	500.0	200.0	V	237.0	-4.8
1999.250000	53.07	---	68.20	15.13	500.0	200.0	V	330.0	-3.4
2229.375000	---	34.84	54.00	19.16	500.0	100.0	H	296.0	-2.5
2675.625000	48.37	---	68.20	19.83	500.0	200.0	V	130.0	-0.2
2750.875000	---	37.27	54.00	16.73	500.0	100.0	H	305.0	-0.1
3474.500000	50.83	---	68.20	17.37	500.0	100.0	V	302.0	2.5
3962.750000	---	40.34	54.00	13.66	500.0	200.0	V	256.0	4.4
4466.750000	51.55	---	68.20	16.65	500.0	200.0	H	99.0	5.4
6196.625000	54.18	---	68.20	14.02	500.0	100.0	V	36.0	8.1
7400.625000	---	42.68	54.00	11.32	500.0	200.0	H	37.0	9.3

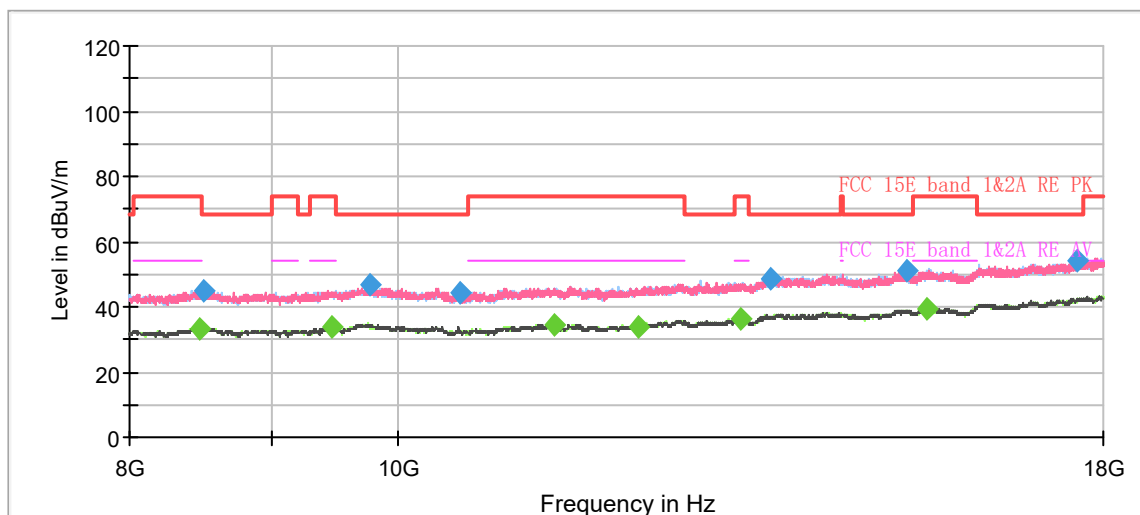
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH52



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



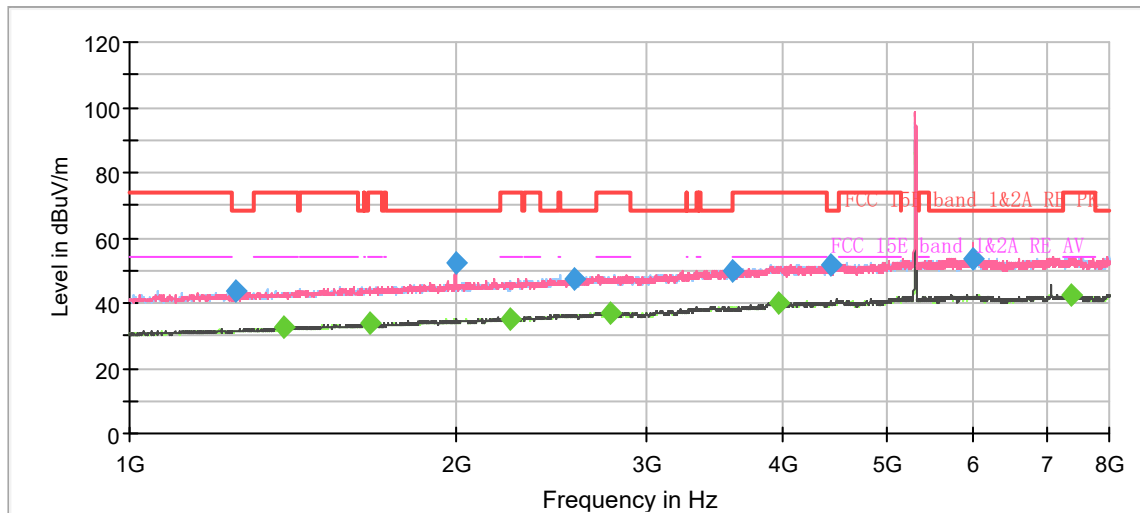
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1261.625000	44.31	---	68.20	23.89	500.0	200.0	H	27.0	-7.4
1411.250000	---	32.76	54.00	21.24	500.0	100.0	V	287.0	-6.4
1685.125000	---	33.70	54.00	20.30	500.0	200.0	H	27.0	-5.0
1996.625000	51.16	---	68.20	17.04	500.0	200.0	V	0.0	-3.5
2240.750000	---	35.00	54.00	19.00	500.0	200.0	H	0.0	-2.4
2657.250000	48.30	---	68.20	19.90	500.0	100.0	V	2.0	-0.4
2765.750000	---	37.17	54.00	16.83	500.0	200.0	H	248.0	-0.1
3375.625000	50.98	---	68.20	17.22	500.0	100.0	V	82.0	2.2
3980.250000	---	40.43	54.00	13.57	500.0	100.0	V	242.0	4.5
4419.500000	51.85	---	68.20	16.35	500.0	200.0	H	324.0	5.2
5972.625000	57.50	---	68.20	10.70	500.0	100.0	V	110.0	8.0
7384.875000	---	42.70	54.00	11.30	500.0	200.0	H	77.0	9.3

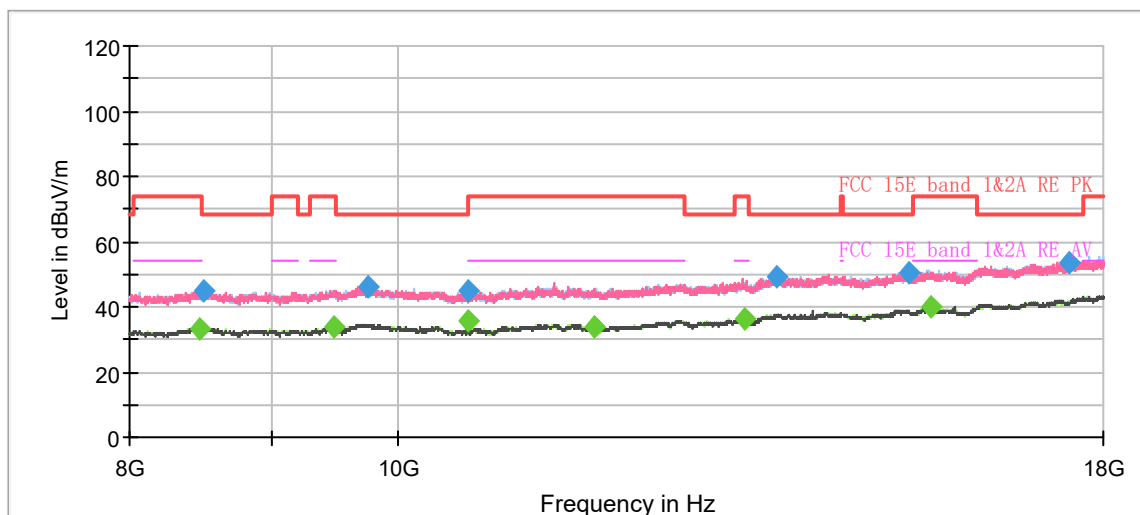
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH60



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



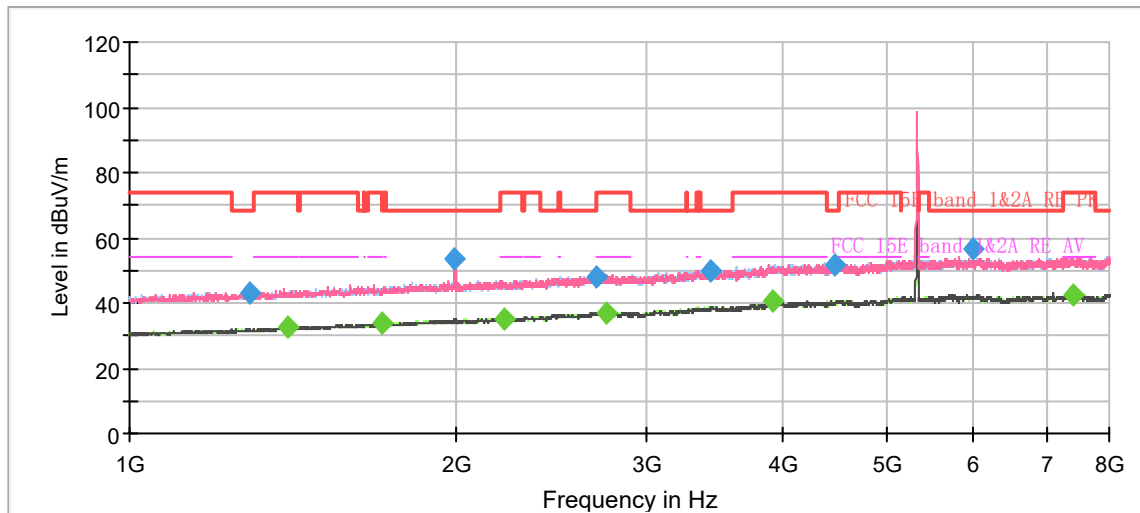
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1251.125000	43.39	---	68.20	24.81	500.0	200.0	H	144.0	-7.4
1387.625000	---	32.56	54.00	21.44	500.0	200.0	H	154.0	-6.6
1664.125000	---	33.87	54.00	20.13	500.0	200.0	V	35.0	-5.1
1998.375000	52.49	---	68.20	15.71	500.0	200.0	V	0.0	-3.4
2239.000000	---	34.80	54.00	19.20	500.0	100.0	V	44.0	-2.4
2575.000000	47.40	---	68.20	20.80	500.0	100.0	H	320.0	-0.8
2773.625000	---	36.90	54.00	17.10	500.0	100.0	V	54.0	0.0
3598.750000	50.09	---	68.20	18.11	500.0	200.0	H	175.0	2.7
3970.625000	---	40.22	54.00	13.78	500.0	100.0	V	126.0	4.5
4438.750000	51.89	---	68.20	16.31	500.0	200.0	H	55.0	5.3
5996.250000	53.34	---	68.20	14.86	500.0	200.0	V	349.0	8.0
7390.125000	---	42.75	54.00	11.25	500.0	200.0	H	100.0	9.3

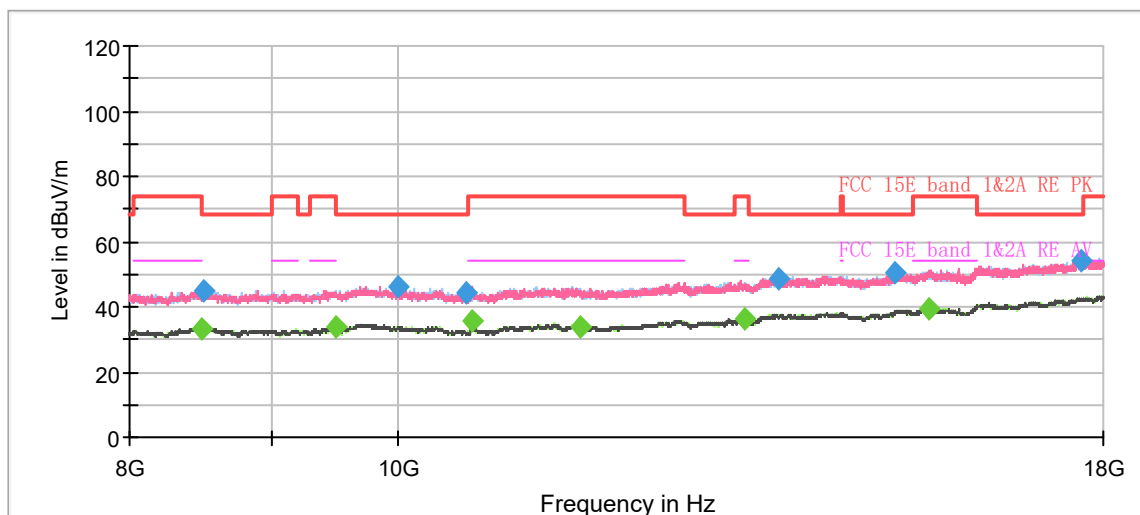
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH64



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



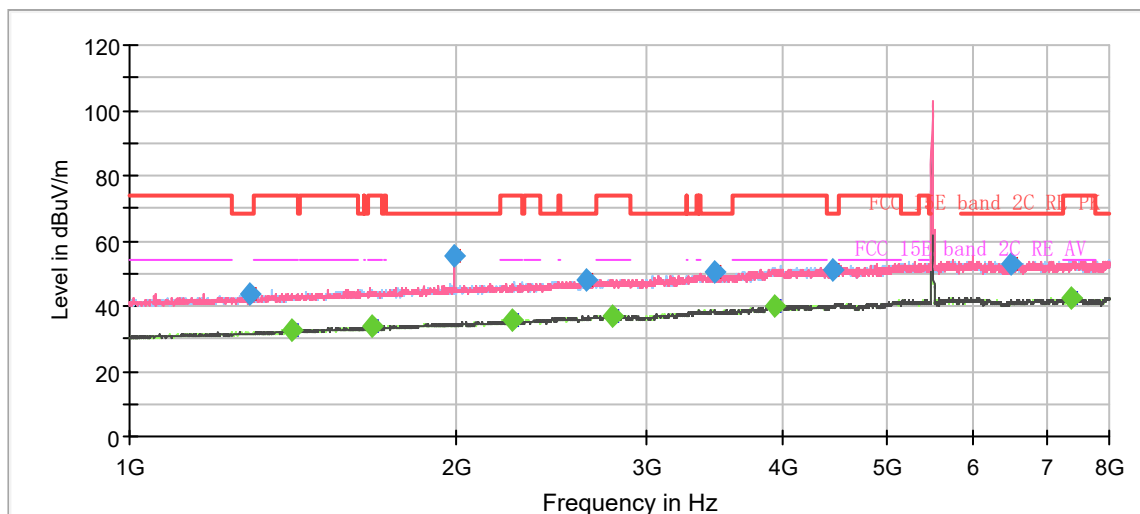
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1288.750000	43.12	---	68.20	25.08	500.0	200.0	V	295.0	-7.2
1400.750000	---	32.43	54.00	21.57	500.0	200.0	V	359.0	-6.5
1707.000000	---	33.59	54.00	20.41	500.0	100.0	V	0.0	-4.9
1992.250000	53.27	---	68.20	14.93	500.0	100.0	V	26.0	-3.5
2218.000000	---	34.95	54.00	19.05	500.0	200.0	H	96.0	-2.5
2687.875000	48.26	---	68.20	19.94	500.0	100.0	H	276.0	-0.2
2753.500000	---	36.98	54.00	17.02	500.0	200.0	V	235.0	-0.1
3438.625000	50.04	---	68.20	18.16	500.0	200.0	V	55.0	2.3
3923.375000	---	40.37	54.00	13.63	500.0	200.0	H	106.0	4.4
4461.500000	51.42	---	68.20	16.78	500.0	200.0	H	193.0	5.4
5998.000000	56.79	---	68.20	11.41	500.0	200.0	V	344.0	8.0
7401.500000	---	42.52	54.00	11.48	500.0	100.0	V	126.0	9.3

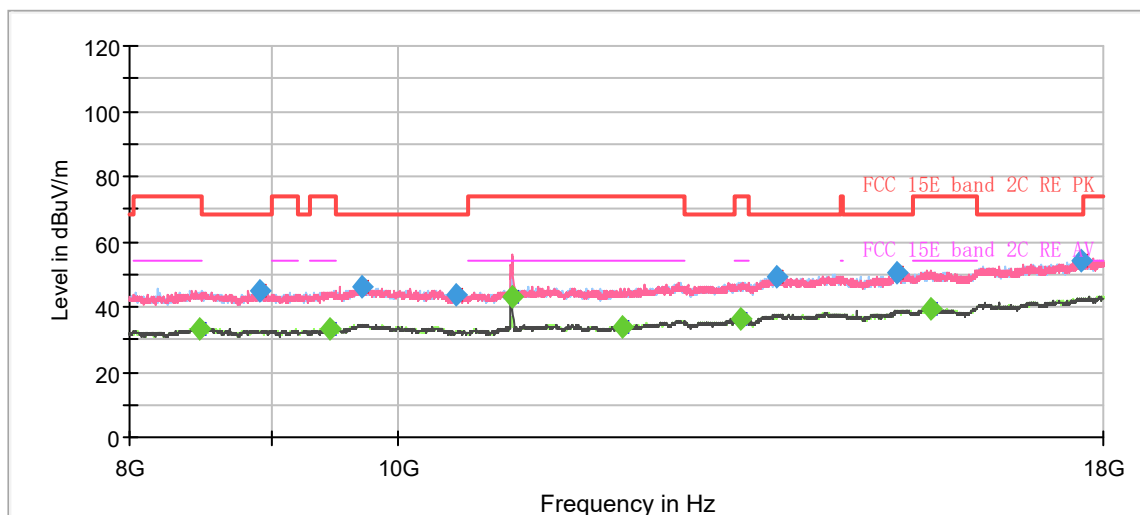
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH100



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



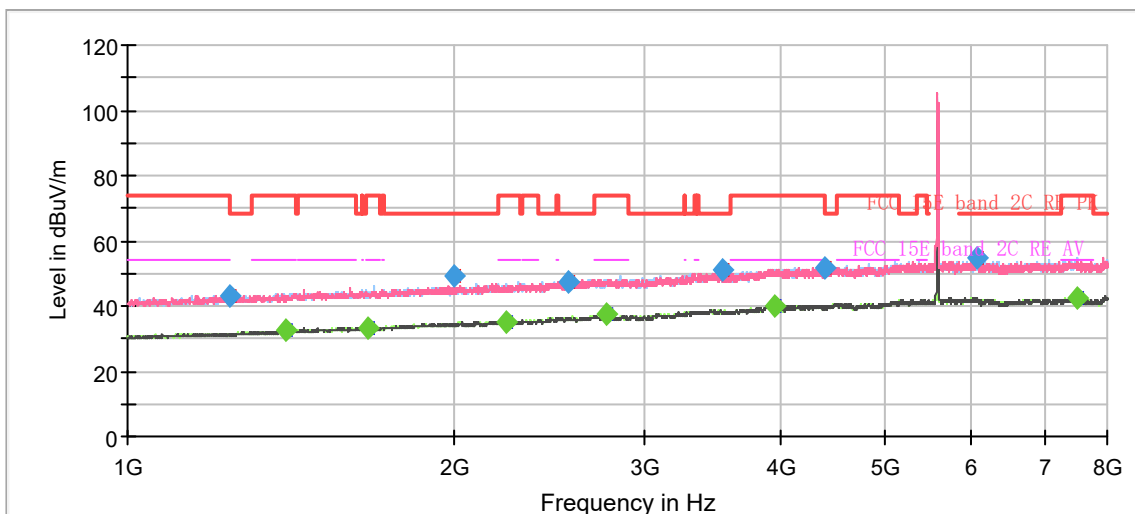
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1293.125000	43.57	---	68.20	24.63	500.0	100.0	V	7.0	-7.2
1413.000000	---	32.67	54.00	21.33	500.0	200.0	V	290.0	-6.4
1672.875000	---	33.70	54.00	20.30	500.0	200.0	H	244.0	-5.0
1993.125000	55.13	---	68.20	13.07	500.0	200.0	V	320.0	-3.5
2248.625000	---	35.41	54.00	18.59	500.0	200.0	V	176.0	-2.4
2631.875000	48.16	---	68.20	20.04	500.0	200.0	H	72.0	-0.5
2783.250000	---	37.08	54.00	16.92	500.0	100.0	V	252.0	0.0
3458.750000	50.49	---	68.20	17.71	500.0	100.0	V	311.0	2.4
3933.000000	---	40.30	54.00	13.70	500.0	100.0	H	333.0	4.4
4450.125000	51.29	---	68.20	16.91	500.0	200.0	V	335.0	5.3
6504.625000	52.66	---	68.20	15.54	500.0	100.0	H	290.0	8.1
7394.500000	---	42.64	54.00	11.36	500.0	200.0	V	241.0	9.3

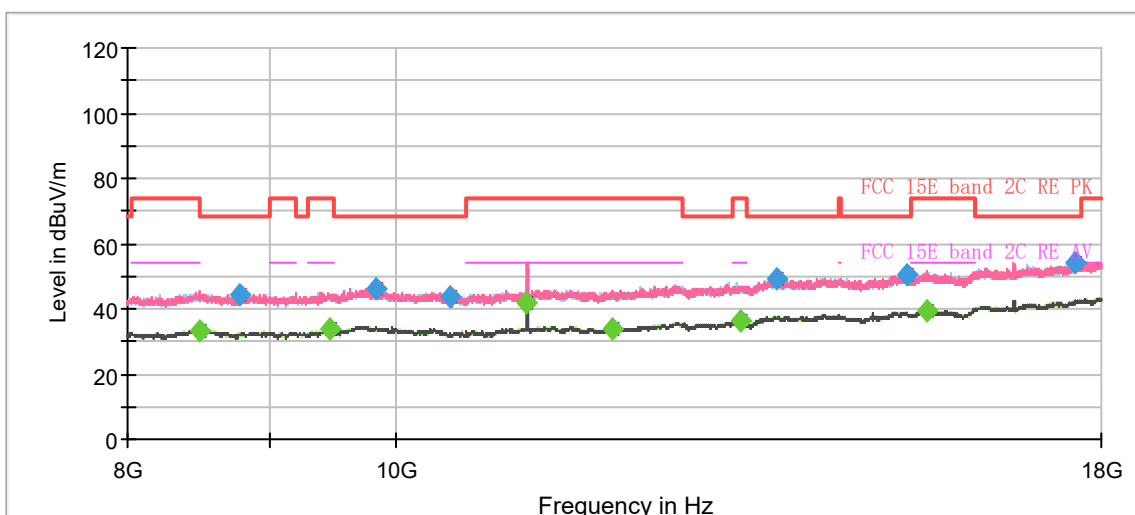
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH116



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



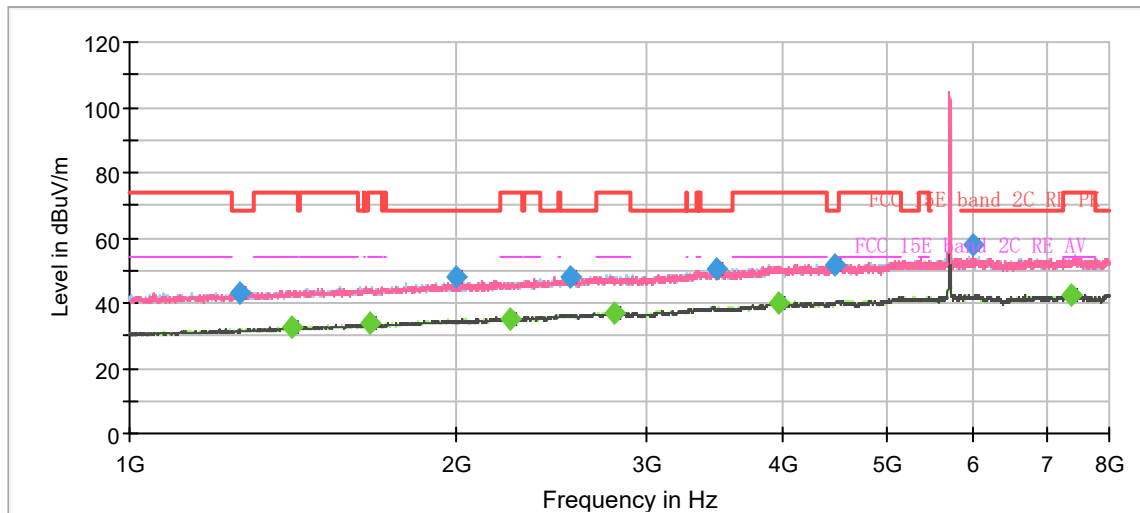
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1243.250000	43.15	---	68.20	25.05	500.0	200.0	H	0.0	-7.5
1401.625000	---	32.67	54.00	21.33	500.0	200.0	V	238.0	-6.5
1663.250000	---	33.51	54.00	20.49	500.0	200.0	H	34.0	-5.1
2000.125000	49.33	---	68.20	18.87	500.0	100.0	H	262.0	-3.4
2234.625000	---	34.87	54.00	19.13	500.0	200.0	H	109.0	-2.4
2544.375000	47.37	---	68.20	20.83	500.0	200.0	H	39.0	-1.0
2763.125000	---	37.26	54.00	16.74	500.0	100.0	V	32.0	-0.1
3542.750000	50.94	---	68.20	17.26	500.0	200.0	V	258.0	2.6
3950.500000	---	40.31	54.00	13.69	500.0	100.0	V	131.0	4.4
4394.125000	51.87	---	74.00	22.13	500.0	200.0	H	59.0	5.1
6057.500000	54.68	---	68.20	13.52	500.0	200.0	V	334.0	8.1
7497.750000	---	42.70	54.00	11.30	500.0	100.0	H	357.0	8.9

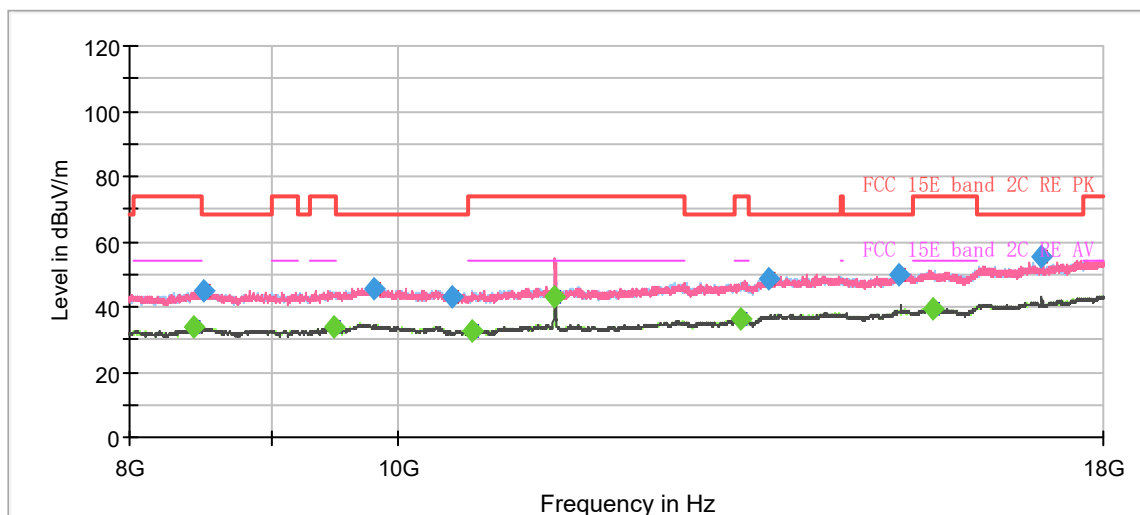
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH140



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



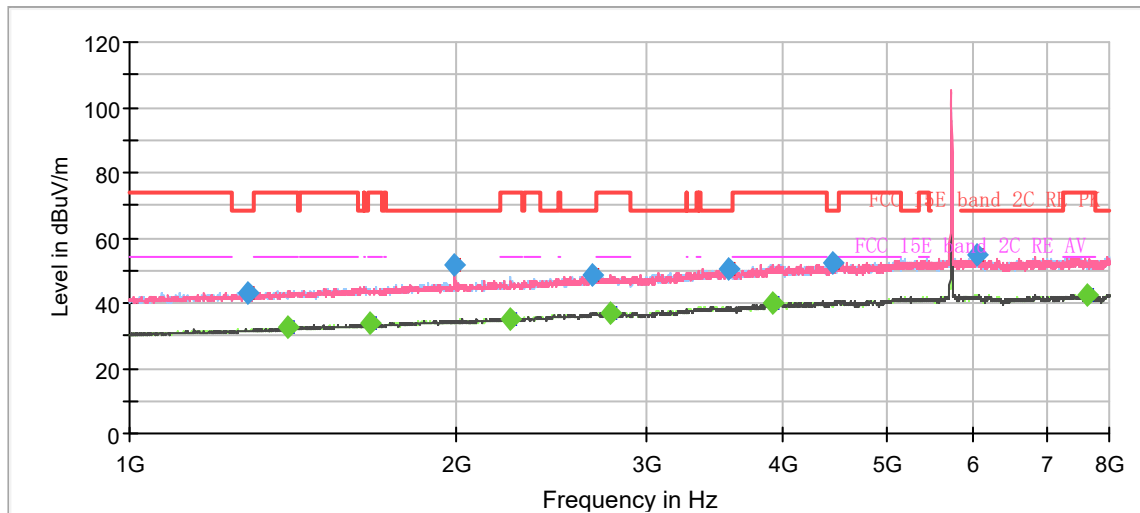
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1263.375000	42.85	---	68.20	25.35	500.0	200.0	V	56.0	-7.4
1412.125000	---	32.64	54.00	21.36	500.0	200.0	H	289.0	-6.4
1668.500000	---	33.90	54.00	20.10	500.0	200.0	V	356.0	-5.1
2001.000000	48.21	---	68.20	19.99	500.0	100.0	V	358.0	-3.4
2246.875000	---	34.82	54.00	19.18	500.0	200.0	H	16.0	-2.4
2553.125000	47.86	---	68.20	20.34	500.0	200.0	H	77.0	-0.9
2803.375000	---	36.84	54.00	17.16	500.0	200.0	V	13.0	0.0
3479.750000	50.46	---	68.20	17.74	500.0	200.0	V	222.0	2.5
3973.250000	---	40.15	54.00	13.85	500.0	200.0	H	165.0	4.5
4471.125000	51.62	---	68.20	16.58	500.0	200.0	H	245.0	5.4
6000.625000	58.14	---	68.20	10.06	500.0	200.0	V	46.0	8.0
7385.750000	---	42.60	54.00	11.40	500.0	200.0	V	272.0	9.3

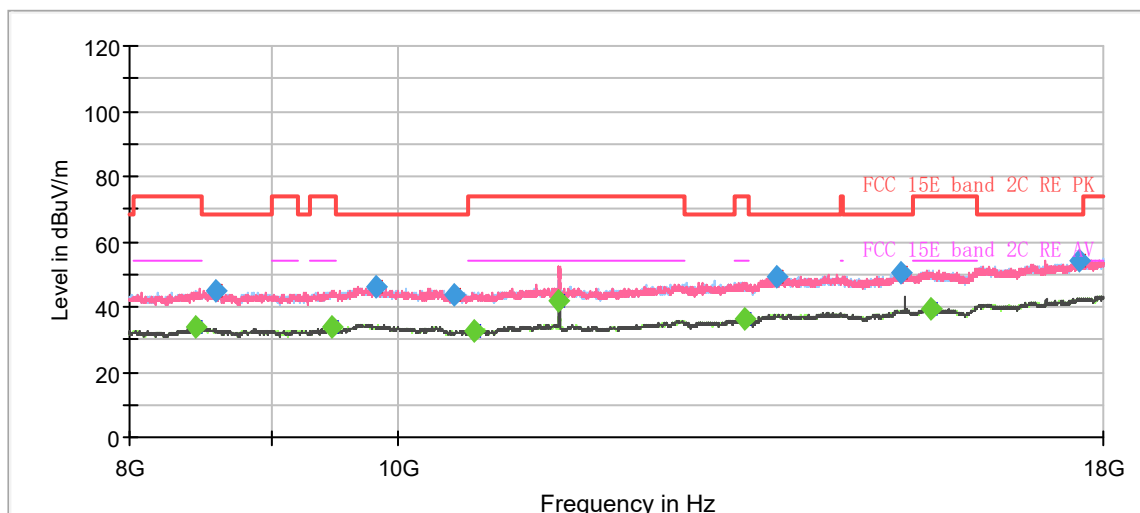
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH144



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



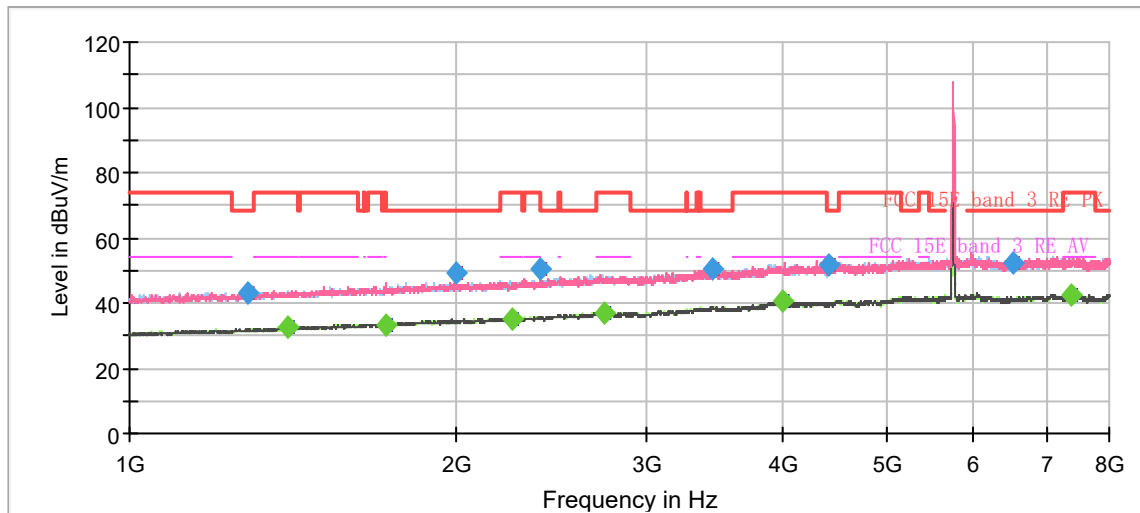
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1282.625000	43.33	---	68.20	24.87	500.0	200.0	V	37.0	-7.3
1400.750000	---	32.59	54.00	21.41	500.0	200.0	V	307.0	-6.5
1665.875000	---	33.70	54.00	20.30	500.0	200.0	V	352.0	-5.1
1993.125000	51.84	---	68.20	16.36	500.0	100.0	V	212.0	-3.5
2242.500000	---	35.33	54.00	18.67	500.0	100.0	H	266.0	-2.4
2675.625000	48.66	---	68.20	19.54	500.0	100.0	H	74.0	-0.2
2780.625000	---	37.15	54.00	16.85	500.0	100.0	H	0.0	0.0
3571.625000	50.69	---	68.20	17.51	500.0	100.0	H	241.0	2.6
3919.000000	---	40.26	54.00	13.74	500.0	200.0	V	0.0	4.4
4446.625000	52.03	---	68.20	16.17	500.0	200.0	V	302.0	5.3
6050.500000	54.65	---	68.20	13.55	500.0	200.0	H	141.0	8.1
7627.250000	---	42.58	54.00	11.42	500.0	200.0	V	277.0	8.9

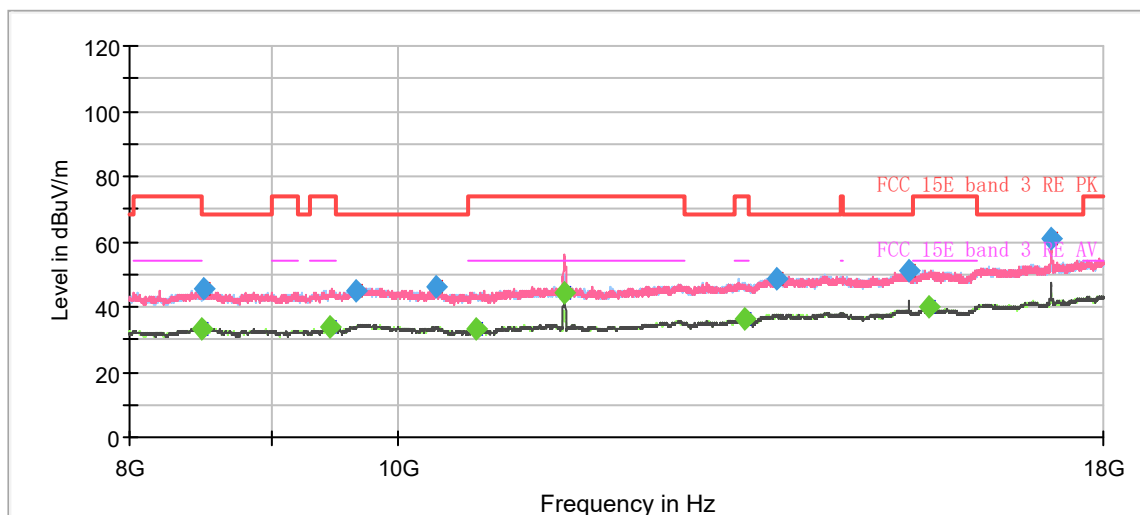
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH149



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



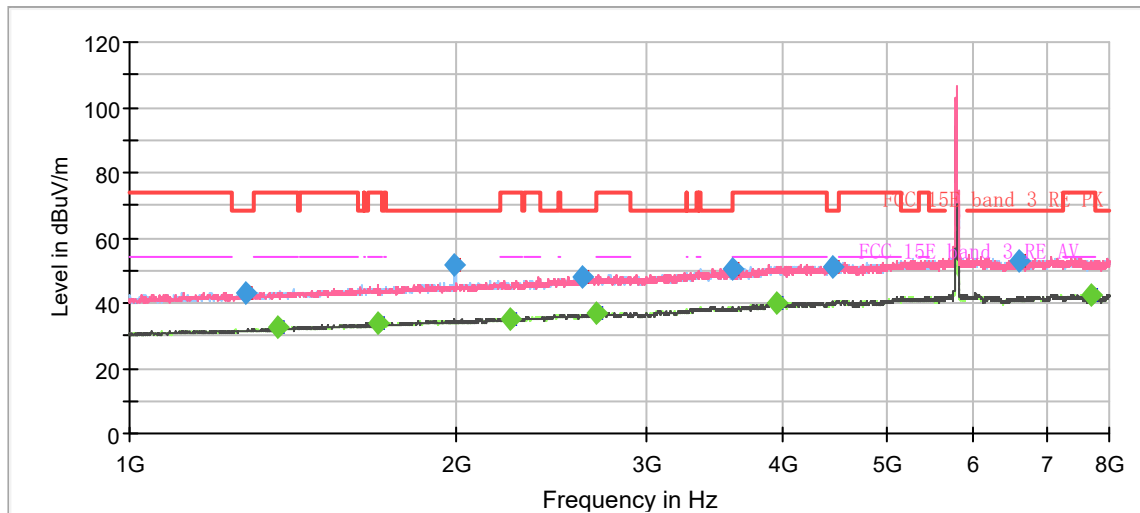
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1285.250000	43.30	---	68.20	24.90	500.0	200.0	V	232.0	-7.2
1398.125000	---	32.73	54.00	21.27	500.0	200.0	H	79.0	-6.5
1720.125000	---	33.46	54.00	20.54	500.0	200.0	V	237.0	-4.9
1999.250000	49.29	---	68.20	18.91	500.0	200.0	H	74.0	-3.4
2256.500000	---	35.11	54.00	18.89	500.0	200.0	H	32.0	-2.3
2392.125000	50.17	---	68.20	18.03	500.0	200.0	V	237.0	-1.8
2736.000000	---	37.09	54.00	16.91	500.0	200.0	V	217.0	-0.1
3453.500000	50.31	---	68.20	17.89	500.0	200.0	V	137.0	2.4
3998.625000	---	40.35	54.00	13.65	500.0	100.0	H	304.0	4.5
4419.500000	51.74	---	68.20	16.46	500.0	200.0	H	83.0	5.2
6535.250000	52.34	---	68.20	15.86	500.0	200.0	H	98.0	8.1
7390.125000	---	42.56	54.00	11.44	500.0	100.0	H	75.0	9.3
17238.75000	60.73	---	68.20	7.47	500.0	200.0	V	120.0	12.0

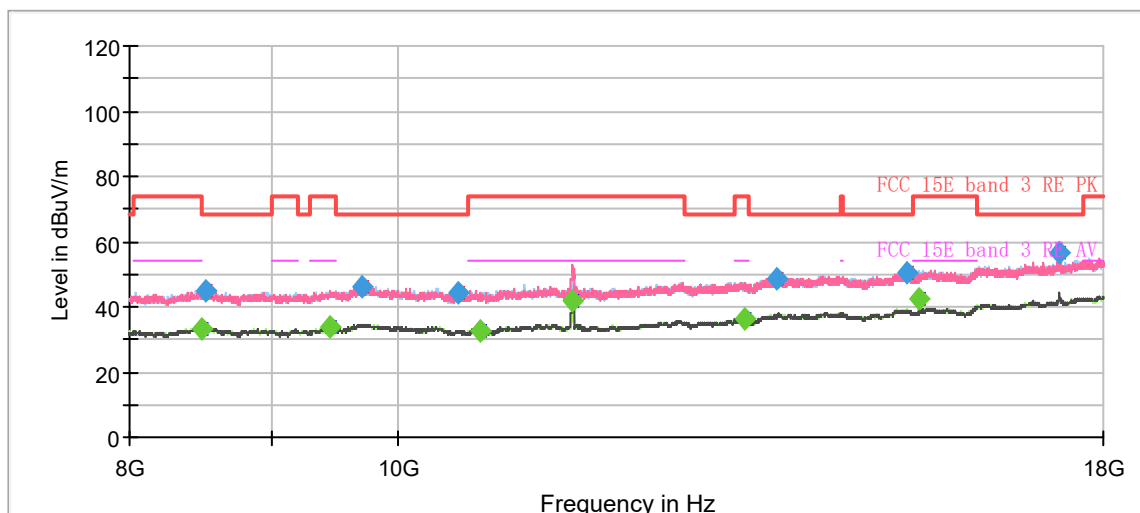
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH157



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



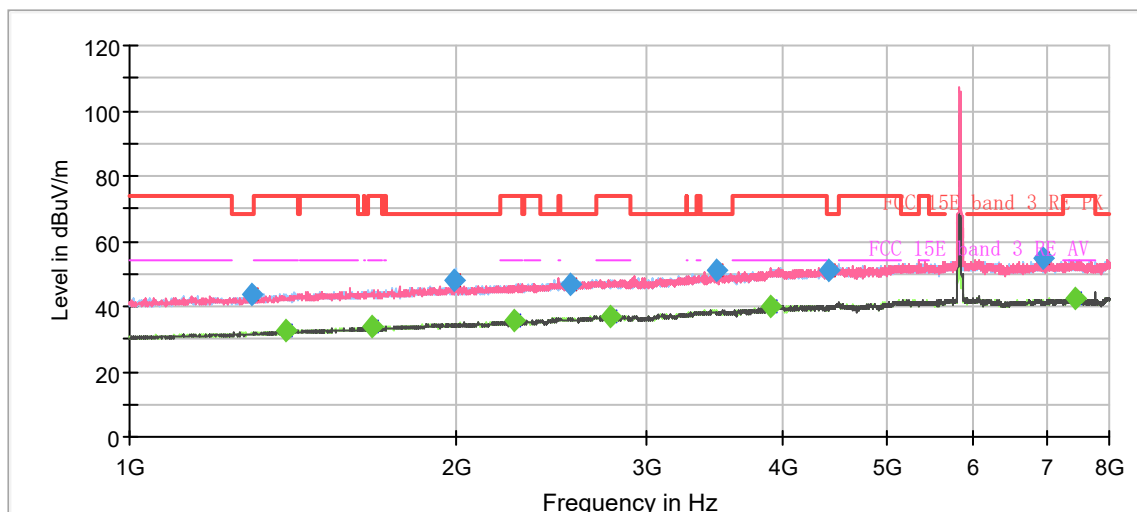
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1280.875000	43.05	---	68.20	25.15	500.0	100.0	V	223.0	-7.3
1368.375000	---	32.38	54.00	21.62	500.0	100.0	V	53.0	-6.7
1693.875000	---	33.57	54.00	20.43	500.0	100.0	H	142.0	-5.0
1994.000000	51.62	---	68.20	16.58	500.0	200.0	H	295.0	-3.5
2246.875000	---	35.24	54.00	18.76	500.0	200.0	V	211.0	-2.4
2617.875000	48.08	---	68.20	20.12	500.0	100.0	H	146.0	-0.6
2698.375000	---	36.87	54.00	17.13	500.0	100.0	H	20.0	-0.1
3589.125000	50.33	---	68.20	17.87	500.0	200.0	H	338.0	2.7
3955.750000	---	40.22	54.00	13.78	500.0	200.0	V	135.0	4.4
4456.250000	50.88	---	68.20	17.32	500.0	100.0	H	63.0	5.3
6616.625000	52.92	---	68.20	15.28	500.0	100.0	H	151.0	8.3
7713.875000	---	42.56	54.00	11.44	500.0	200.0	V	76.0	8.9

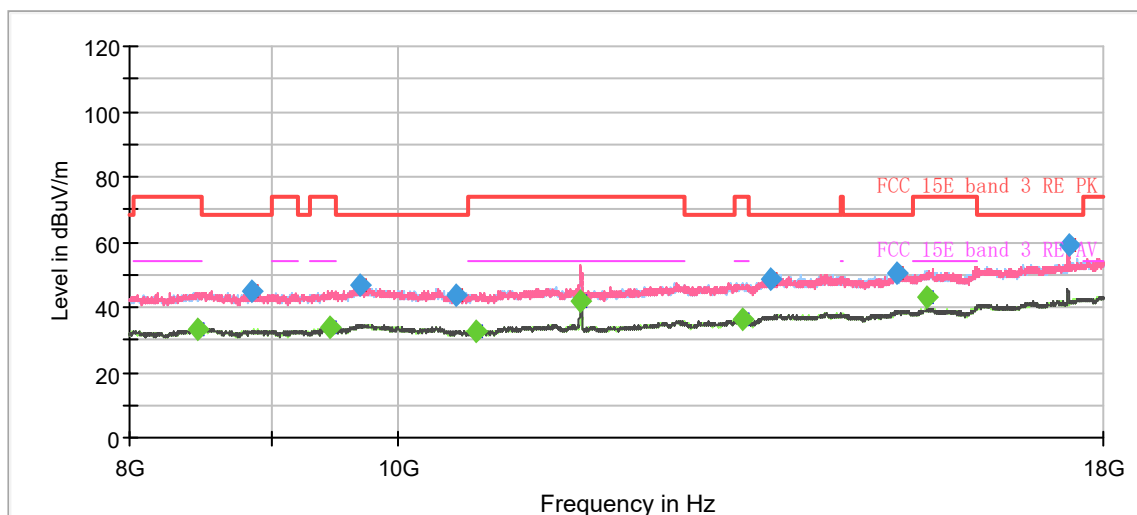
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH165



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



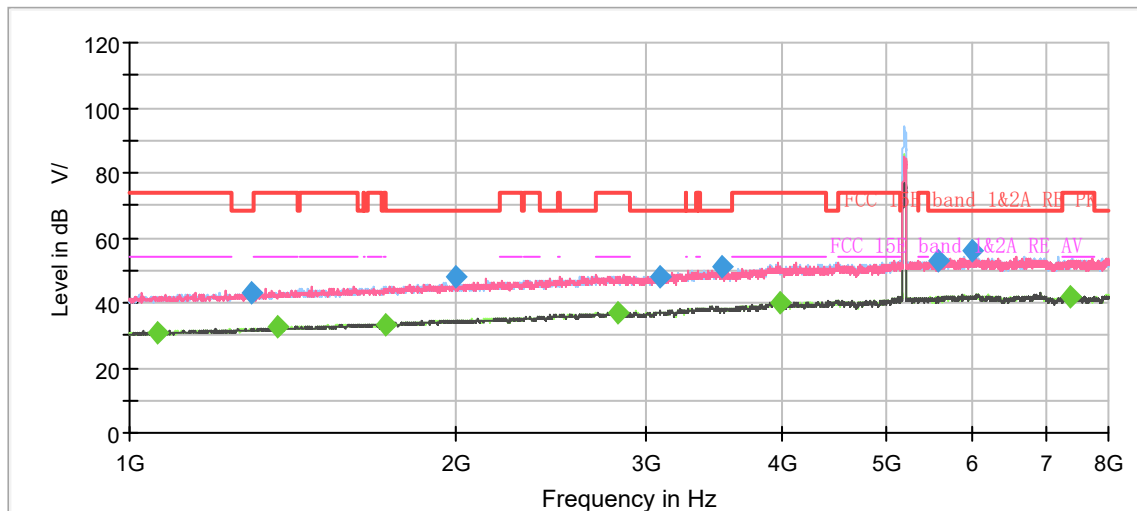
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1295.750000	43.42	---	68.20	24.78	500.0	200.0	H	191.0	-7.2
1392.000000	---	32.51	54.00	21.49	500.0	100.0	V	107.0	-6.5
1672.875000	---	33.59	54.00	20.41	500.0	100.0	H	154.0	-5.0
1992.250000	47.83	---	68.20	20.37	500.0	200.0	H	294.0	-3.5
2264.375000	---	35.44	54.00	18.56	500.0	100.0	H	70.0	-2.3
2547.000000	46.82	---	68.20	21.38	500.0	100.0	H	66.0	-1.0
2778.000000	---	36.91	54.00	17.09	500.0	200.0	V	148.0	0.0
3478.875000	50.79	---	68.20	17.41	500.0	100.0	H	112.0	2.5
3891.875000	---	40.08	54.00	13.92	500.0	200.0	H	139.0	4.2
4420.375000	51.33	---	68.20	16.87	500.0	200.0	H	40.0	5.2
6938.625000	54.99	---	68.20	13.21	500.0	100.0	H	273.0	8.8
7439.125000	---	42.45	54.00	11.55	500.0	100.0	H	164.0	9.1
17482.50000	59.35	---	68.20	8.85	500.0	200.0	V	106.0	12.5

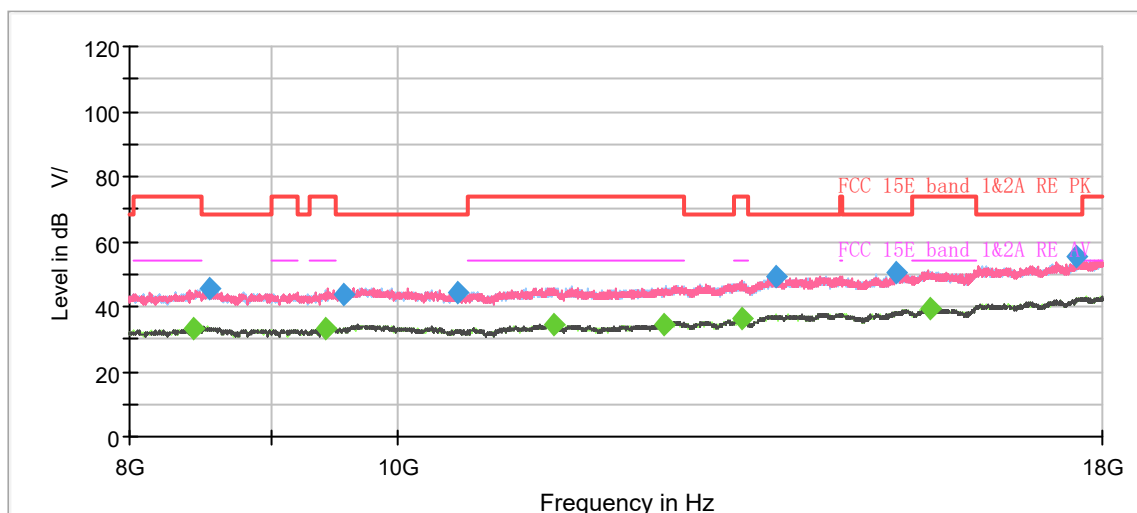
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH38



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



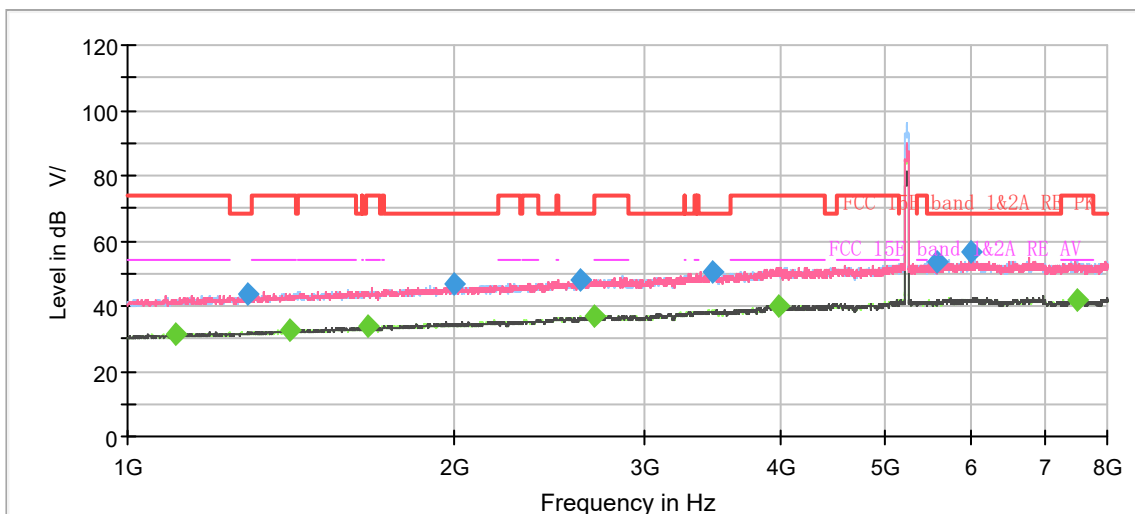
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1060.375000	---	30.99	54.00	23.01	500.0	100.0	H	165.0	-8.7
1297.500000	43.20	---	68.20	25.00	500.0	100.0	V	84.0	-7.2
1370.125000	---	32.58	54.00	21.42	500.0	200.0	H	238.0	-6.7
1721.000000	---	33.51	54.00	20.49	500.0	200.0	V	0.0	-4.8
2000.125000	48.24	---	68.20	19.94	500.0	200.0	H	301.0	-3.4
2823.500000	---	37.03	54.00	16.97	500.0	200.0	H	110.0	0.1
3089.500000	48.27	---	68.20	19.93	500.0	200.0	H	325.0	0.8
3522.625000	50.95	---	68.20	17.25	500.0	100.0	V	215.0	2.6
3990.750000	---	39.99	54.00	14.01	500.0	100.0	V	147.0	4.5
5582.375000	53.03	---	68.20	15.17	500.0	200.0	H	319.0	7.9
5991.000000	56.09	---	68.20	12.11	500.0	100.0	V	224.0	8.0
7389.250000	---	42.02	54.00	11.98	500.0	200.0	H	196.0	9.3

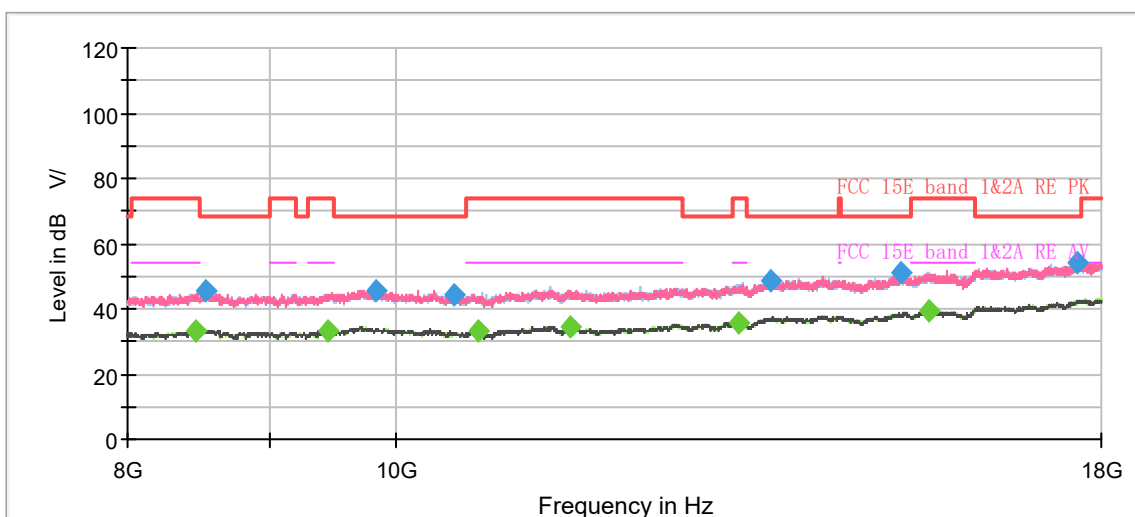
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH46



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



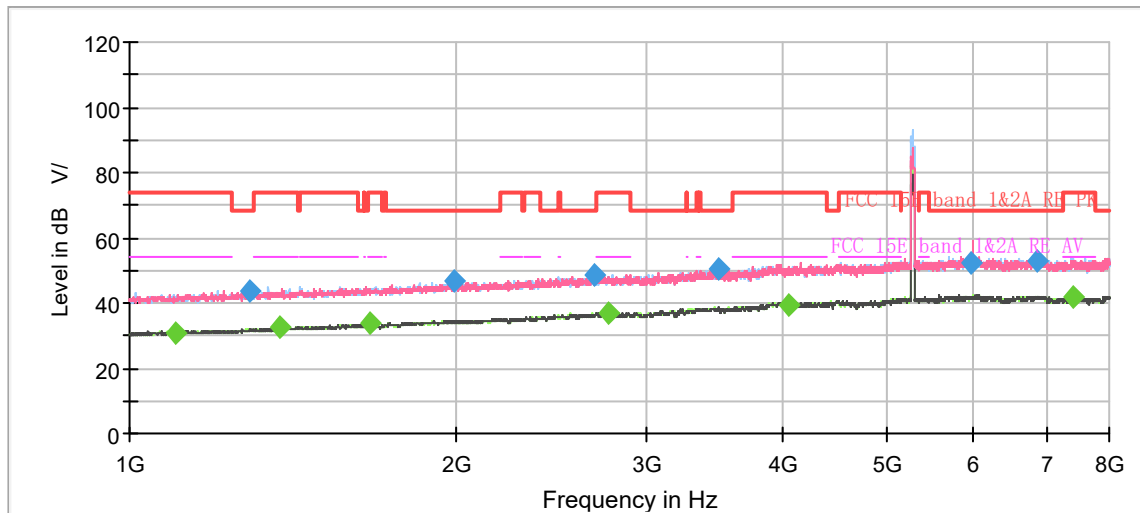
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1106.750000	---	31.27	54.00	22.73	500.0	200.0	H	71.0	-8.3
1289.625000	43.52	---	68.20	24.68	500.0	200.0	H	128.0	-7.2
1410.375000	---	32.46	54.00	21.54	500.0	200.0	H	263.0	-6.4
1662.375000	---	33.62	54.00	20.38	500.0	200.0	V	152.0	-5.1
1999.250000	46.94	---	68.20	21.26	500.0	200.0	H	358.0	-3.4
2615.250000	48.24	---	68.20	19.96	500.0	200.0	V	322.0	-0.6
2690.500000	---	36.90	54.00	17.10	500.0	100.0	V	267.0	-0.1
3457.000000	50.35	---	68.20	17.85	500.0	200.0	V	144.0	2.4
3977.625000	---	40.22	54.00	13.78	500.0	100.0	V	210.0	4.5
5577.125000	53.33	---	68.20	14.87	500.0	100.0	V	334.0	7.9
5979.625000	56.61	---	68.20	11.59	500.0	200.0	V	265.0	8.0
7511.750000	---	41.89	54.00	12.11	500.0	200.0	V	78.0	8.9

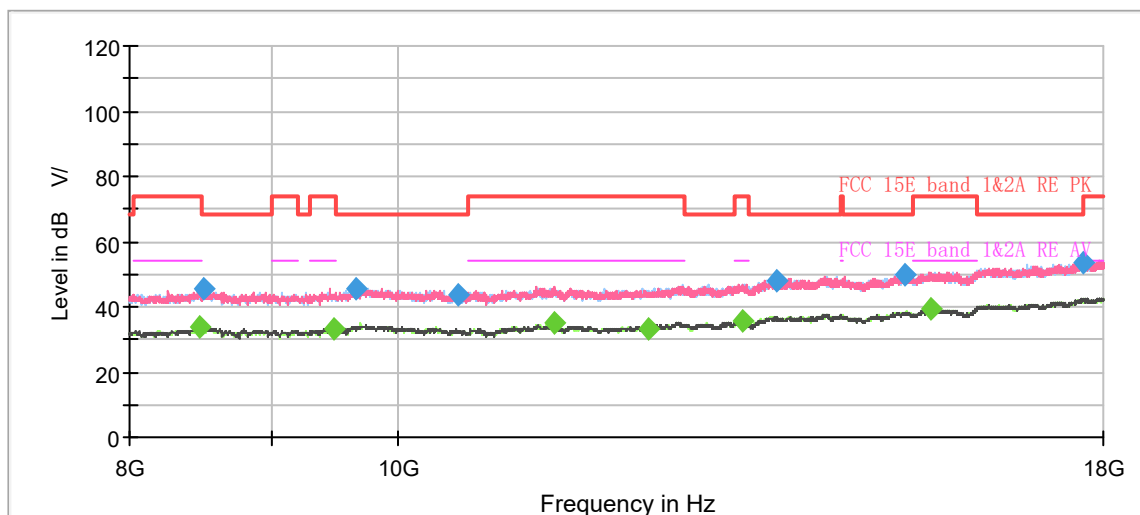
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH54



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



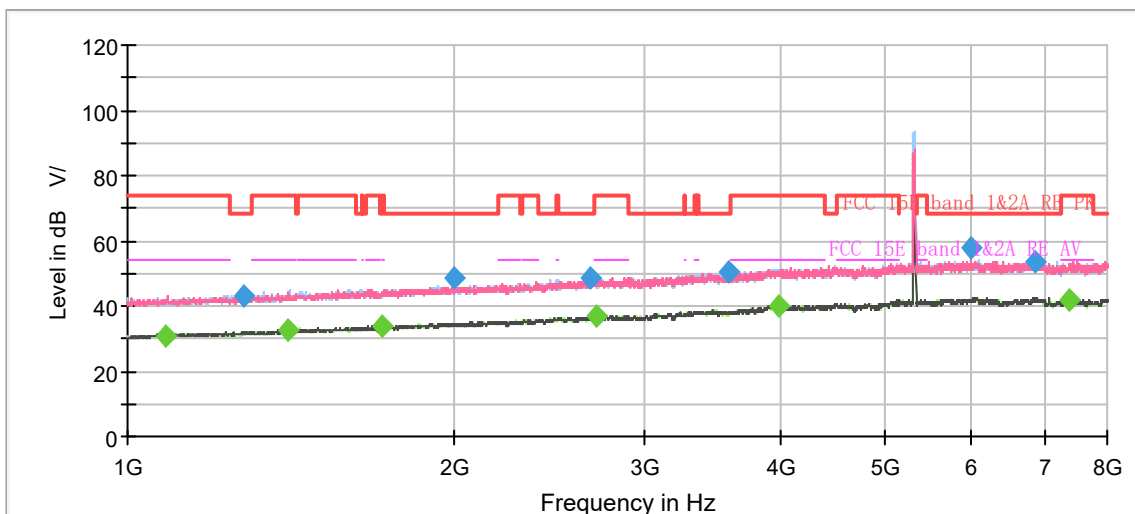
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1101.500000	---	30.75	54.00	23.25	500.0	100.0	H	4.0	-8.4
1288.750000	43.69	---	68.20	24.51	500.0	200.0	V	39.0	-7.2
1373.625000	---	32.50	54.00	21.50	500.0	200.0	V	74.0	-6.7
1665.000000	---	33.63	54.00	20.37	500.0	200.0	V	150.0	-5.1
1993.125000	47.03	---	68.20	21.17	500.0	200.0	V	78.0	-3.5
2679.125000	48.47	---	68.20	19.73	500.0	200.0	V	168.0	-0.2
2758.750000	---	37.02	54.00	16.98	500.0	100.0	V	353.0	-0.1
3498.125000	50.43	---	68.20	17.77	500.0	200.0	V	334.0	2.5
4045.875000	---	39.53	54.00	14.47	500.0	200.0	V	64.0	4.6
5977.000000	52.05	---	68.20	16.15	500.0	200.0	H	343.0	8.0
6861.625000	52.76	---	68.20	15.44	500.0	200.0	H	0.0	8.7
7395.375000	---	41.87	54.00	12.13	500.0	200.0	H	51.0	9.3

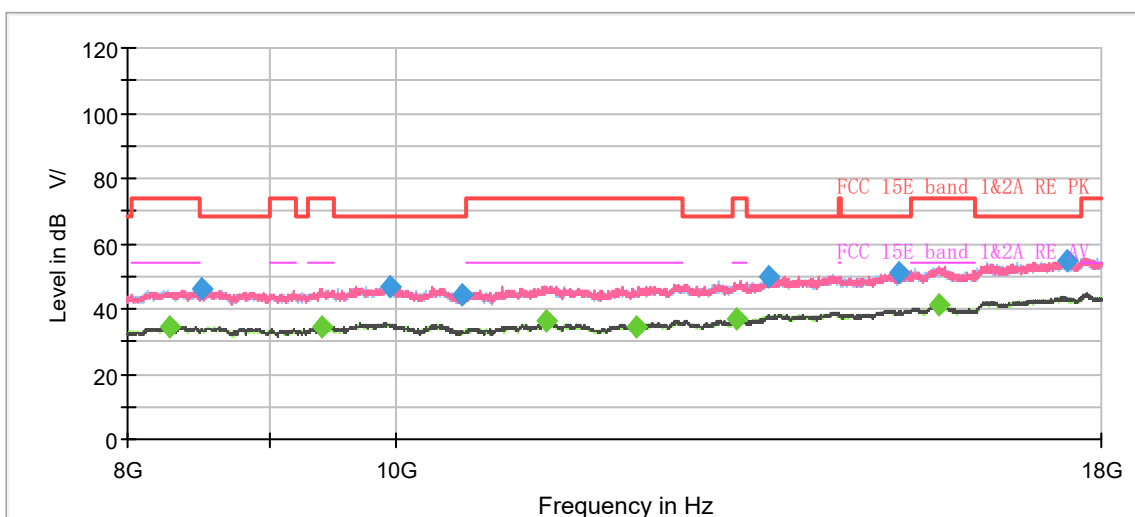
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH62



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



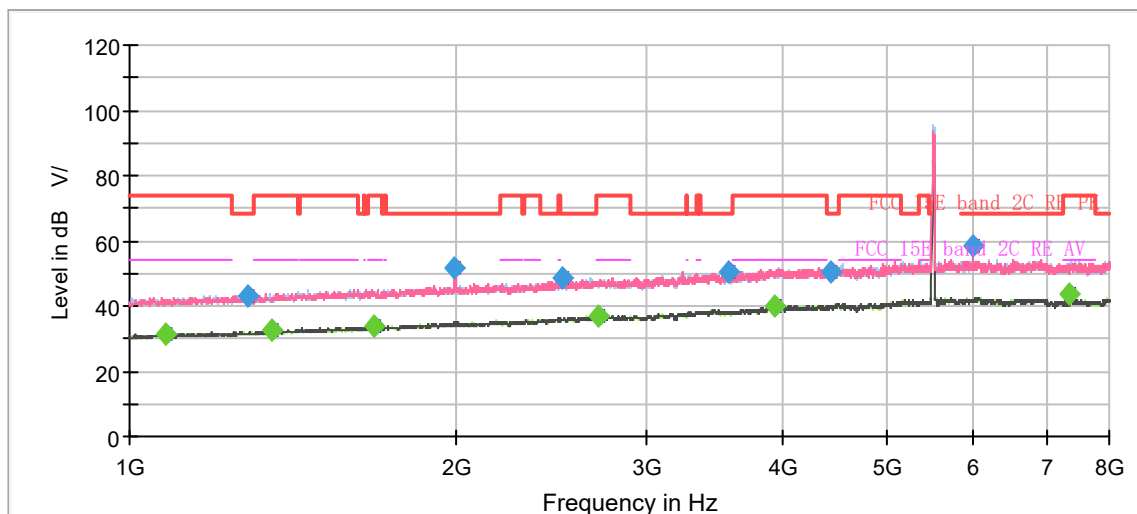
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1085.750000	---	30.62	54.00	23.38	500.0	100.0	H	204.0	-8.5
1278.250000	43.18	---	68.20	25.02	500.0	100.0	V	289.0	-7.3
1404.250000	---	32.58	54.00	21.42	500.0	200.0	V	118.0	-6.5
1719.250000	---	33.61	54.00	20.39	500.0	200.0	H	70.0	-4.9
1997.500000	48.61	---	68.20	19.59	500.0	100.0	V	185.0	-3.4
2670.375000	48.48	---	68.20	19.72	500.0	100.0	V	302.0	-0.3
2700.125000	---	36.77	54.00	17.23	500.0	200.0	V	64.0	-0.1
3576.000000	50.59	---	68.20	17.61	500.0	100.0	V	316.0	2.6
3989.875000	---	40.16	54.00	13.84	500.0	200.0	H	266.0	4.5
5989.250000	57.76	---	68.20	10.44	500.0	100.0	V	189.0	8.0
6864.250000	53.81	---	68.20	14.39	500.0	200.0	H	320.0	8.8
7390.125000	---	41.94	54.00	12.06	500.0	100.0	V	0.0	9.3

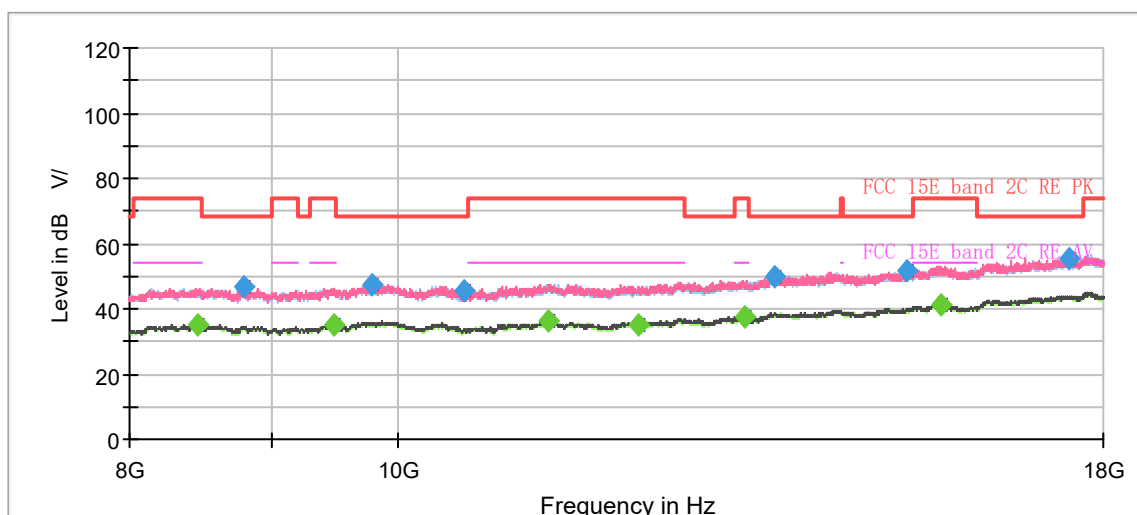
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH102



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



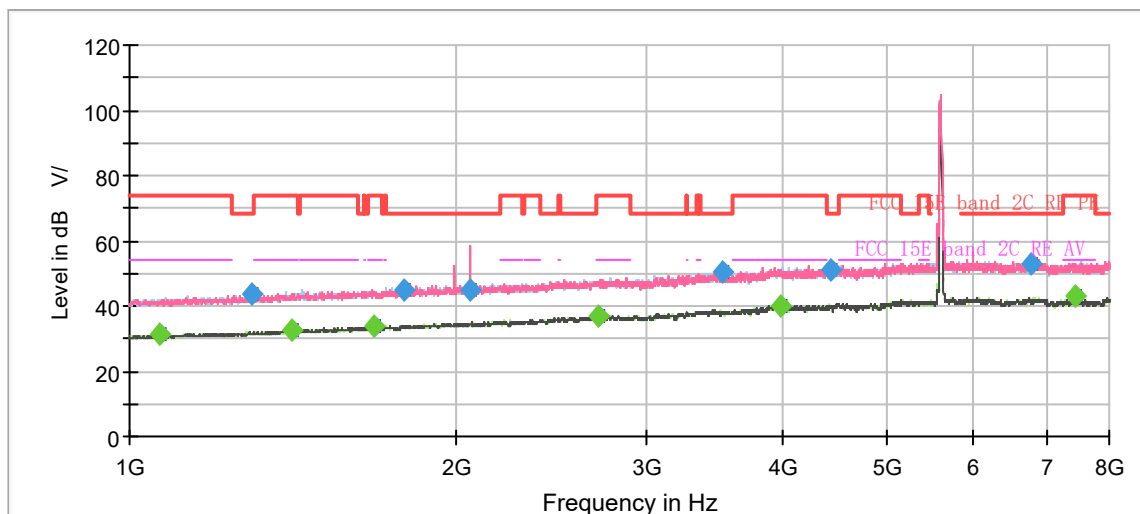
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1078.750000	---	31.31	54.00	22.69	500.0	200.0	H	249.0	-8.6
1285.250000	43.20	---	68.20	25.00	500.0	200.0	V	69.0	-7.2
1350.875000	---	32.44	54.00	21.56	500.0	200.0	V	100.0	-6.8
1681.625000	---	33.64	54.00	20.36	500.0	100.0	V	0.0	-5.0
1991.375000	51.86	---	68.20	16.34	500.0	100.0	V	211.0	-3.5
2505.000000	48.47	---	68.20	19.73	500.0	100.0	H	32.0	-1.1
2702.750000	---	36.89	54.00	17.11	500.0	100.0	H	165.0	-0.1
3563.750000	50.29	---	68.20	17.91	500.0	100.0	V	16.0	2.6
3930.375000	---	40.00	54.00	14.00	500.0	200.0	V	93.0	4.4
4423.000000	50.73	---	68.20	17.47	500.0	200.0	H	206.0	5.2
5988.375000	58.36	---	68.20	9.84	500.0	100.0	V	114.0	8.0
7347.250000	---	43.56	54.00	10.44	500.0	200.0	V	105.0	9.3

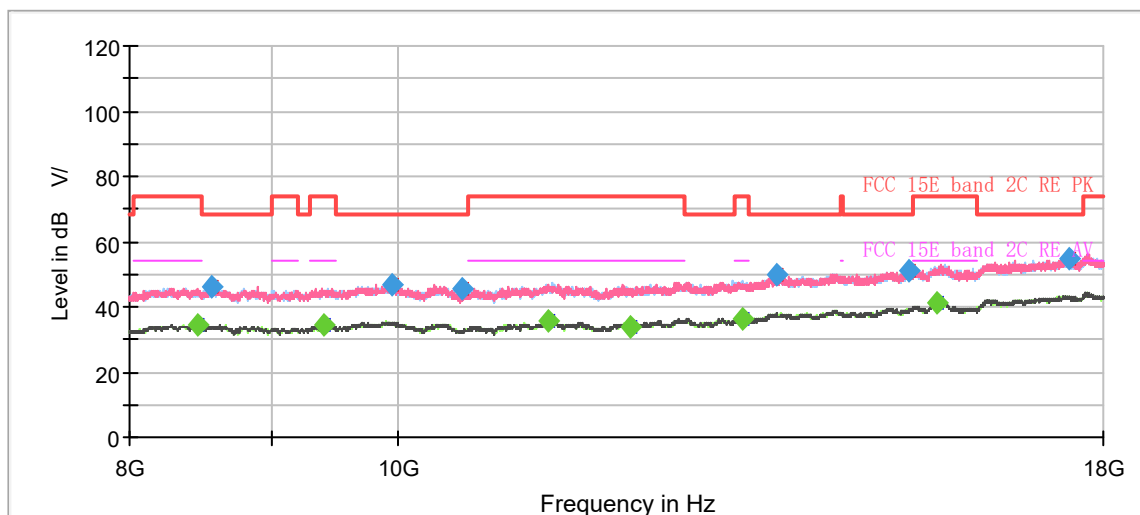
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH118



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



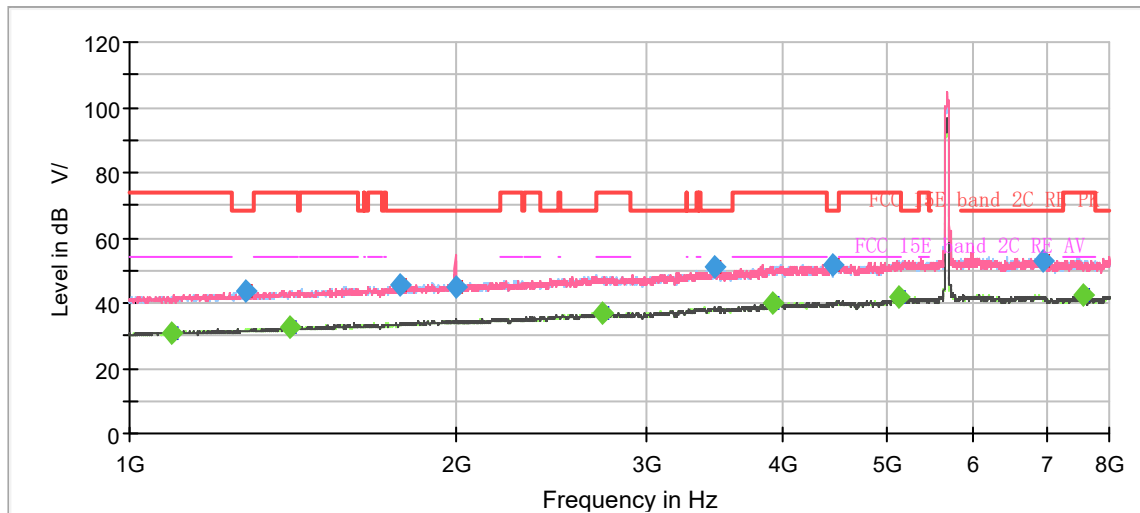
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1063.875000	---	31.09	54.00	22.91	500.0	200.0	H	249.0	-8.6
1294.875000	43.49	---	68.20	24.71	500.0	200.0	V	42.0	-7.2
1409.500000	---	32.49	54.00	21.51	500.0	200.0	V	23.0	-6.4
1679.000000	---	33.66	54.00	20.34	500.0	100.0	H	270.0	-5.0
1790.125000	44.80	---	68.20	23.40	500.0	100.0	H	180.0	-4.5
2059.625000	45.00	---	68.20	23.20	500.0	100.0	H	246.0	-3.2
2708.875000	---	36.90	54.00	17.10	500.0	100.0	V	251.0	-0.1
3515.625000	50.20	---	68.20	18.00	500.0	200.0	H	319.0	2.6
3988.125000	---	39.96	54.00	14.04	500.0	100.0	H	122.0	4.5
4433.500000	51.16	---	68.20	17.04	500.0	100.0	H	89.0	5.3
6787.250000	52.72	---	68.20	15.48	500.0	200.0	H	254.0	8.7
7454.000000	---	43.35	54.00	10.65	500.0	200.0	V	106.0	9.1

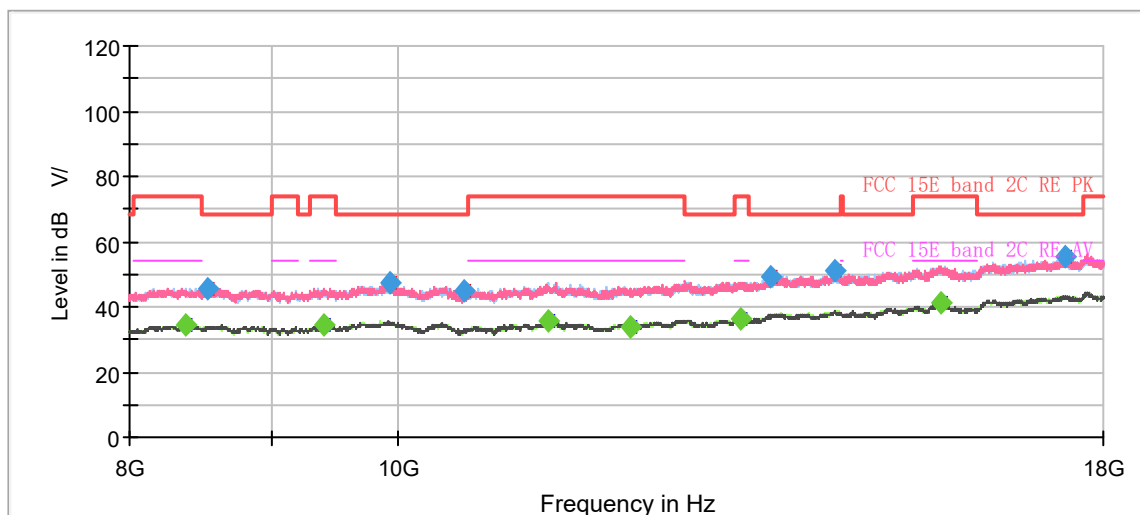
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH134



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



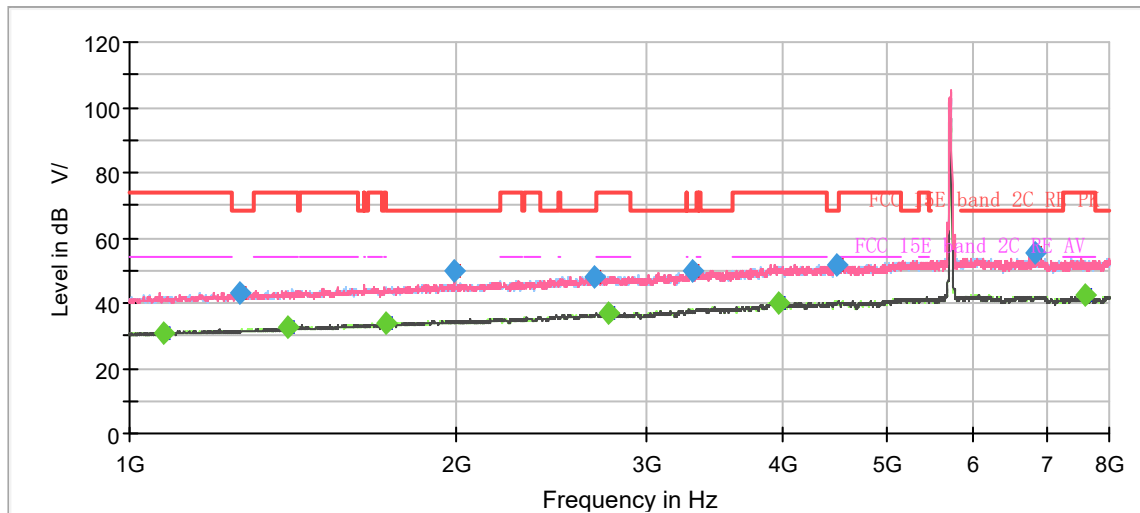
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1094.500000	---	30.48	54.00	23.52	500.0	100.0	H	18.0	-8.5
1280.875000	43.56	---	68.20	24.64	500.0	200.0	H	332.0	-7.3
1403.375000	---	32.43	54.00	21.57	500.0	100.0	V	254.0	-6.5
1771.750000	45.35	---	68.20	22.85	500.0	100.0	V	185.0	-4.6
1998.375000	45.23	---	68.20	22.97	500.0	200.0	V	284.0	-3.4
2733.375000	---	36.79	54.00	17.21	500.0	100.0	H	62.0	-0.1
3463.125000	51.25	---	68.20	16.95	500.0	100.0	H	171.0	2.4
3915.500000	---	40.04	54.00	13.96	500.0	100.0	V	170.0	4.4
4443.125000	51.75	---	68.20	16.45	500.0	100.0	V	226.0	5.3
5123.875000	---	41.57	54.00	12.43	500.0	200.0	V	153.0	7.0
6948.250000	52.65	---	68.20	15.55	500.0	100.0	H	57.0	8.8
7560.750000	---	42.26	54.00	11.74	500.0	200.0	V	105.0	8.8

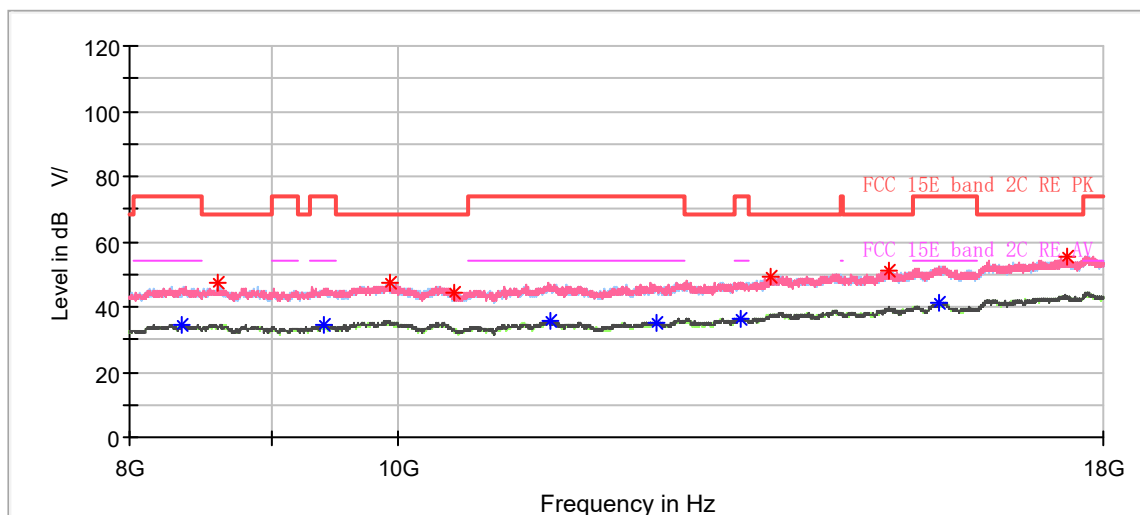
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH142



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



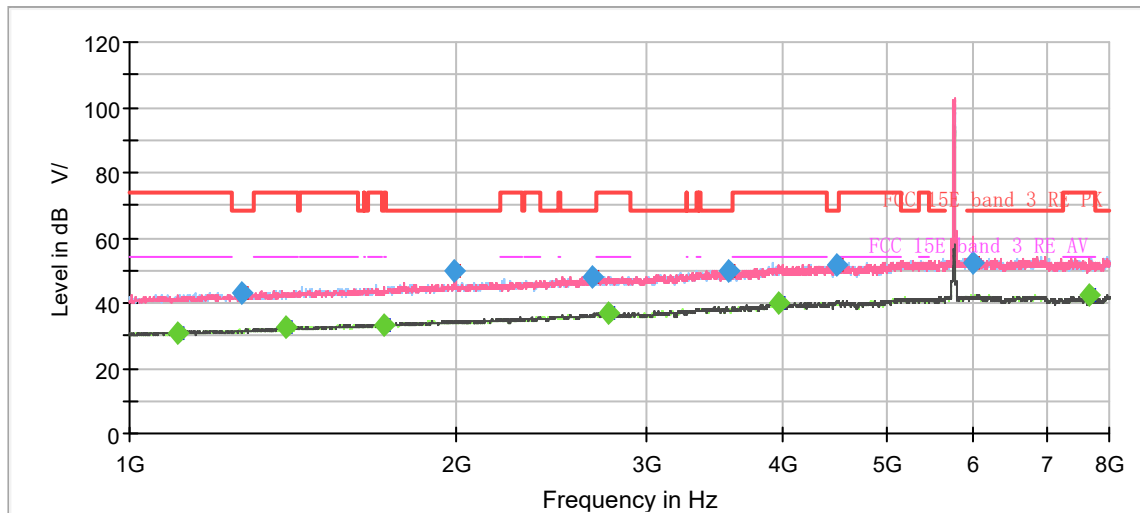
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1074.375000	---	30.72	54.00	23.28	500.0	200.0	H	170.0	-8.6
1263.375000	43.23	---	68.20	24.97	500.0	100.0	H	198.0	-7.4
1399.875000	---	32.62	54.00	21.38	500.0	100.0	V	334.0	-6.5
1720.125000	---	33.70	54.00	20.30	500.0	100.0	V	348.0	-4.9
1991.375000	49.88	---	68.20	18.32	500.0	200.0	V	157.0	-3.5
2680.000000	48.08	---	68.20	20.12	500.0	200.0	H	170.0	-0.2
2758.750000	---	36.86	54.00	17.14	500.0	200.0	V	278.0	-0.1
3306.500000	50.01	---	68.20	18.19	500.0	200.0	V	326.0	1.9
3971.500000	---	40.09	54.00	13.91	500.0	100.0	H	75.0	4.5
4482.500000	51.95	---	68.20	16.25	500.0	100.0	H	94.0	5.4
6845.000000	55.24	---	68.20	12.96	500.0	100.0	V	209.0	8.7
7614.125000	---	42.53	54.00	11.47	500.0	200.0	V	104.0	8.8

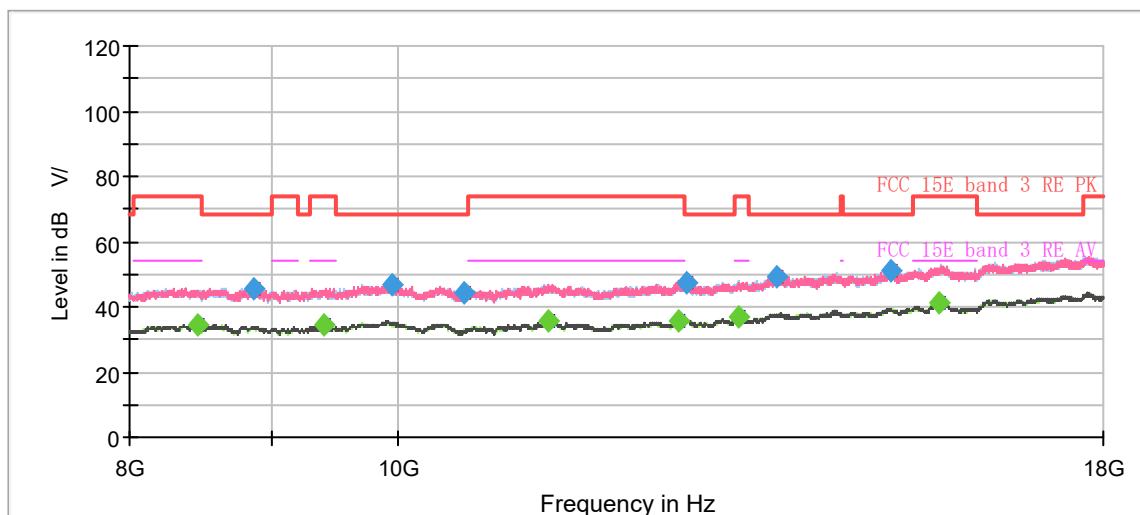
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH151



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



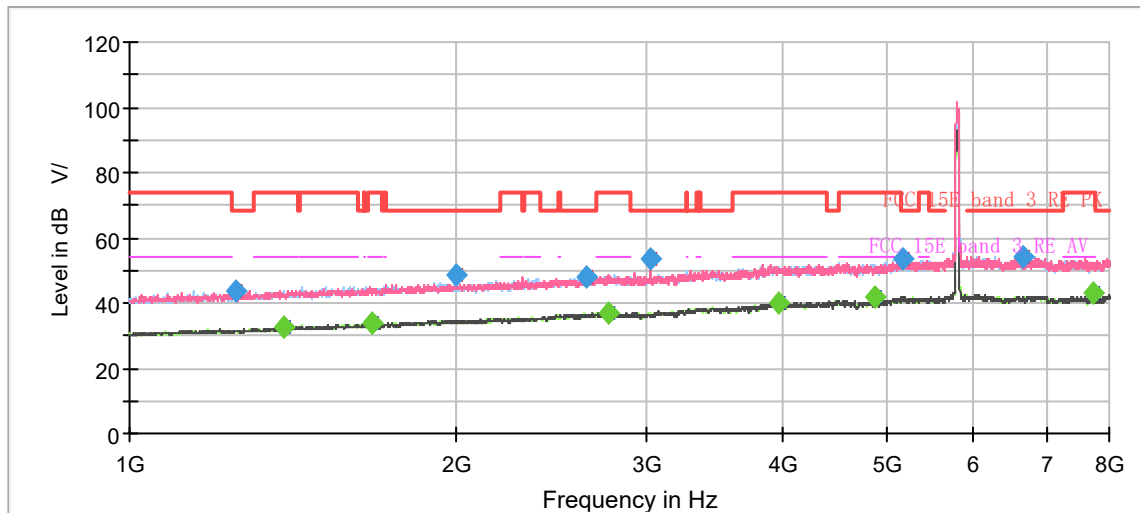
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1108.500000	---	30.67	54.00	23.33	500.0	100.0	H	117.0	-8.3
1271.250000	43.11	---	68.20	25.09	500.0	100.0	H	184.0	-7.3
1392.000000	---	32.45	54.00	21.55	500.0	100.0	V	41.0	-6.5
1719.250000	---	33.49	54.00	20.51	500.0	200.0	V	280.0	-4.9
1995.750000	49.80	---	68.20	18.40	500.0	200.0	V	152.0	-3.5
2669.500000	48.27	---	68.20	19.93	500.0	100.0	V	83.0	-0.3
2757.875000	---	36.82	54.00	17.18	500.0	100.0	V	247.0	-0.1
3565.500000	50.15	---	68.20	18.05	500.0	100.0	H	227.0	2.6
3971.500000	---	39.99	54.00	14.01	500.0	100.0	V	141.0	4.5
4478.125000	51.59	---	68.20	16.61	500.0	200.0	V	214.0	5.4
5978.750000	52.02	---	68.20	16.18	500.0	100.0	V	125.0	8.0
7673.625000	---	42.24	54.00	11.76	500.0	200.0	V	90.0	8.9

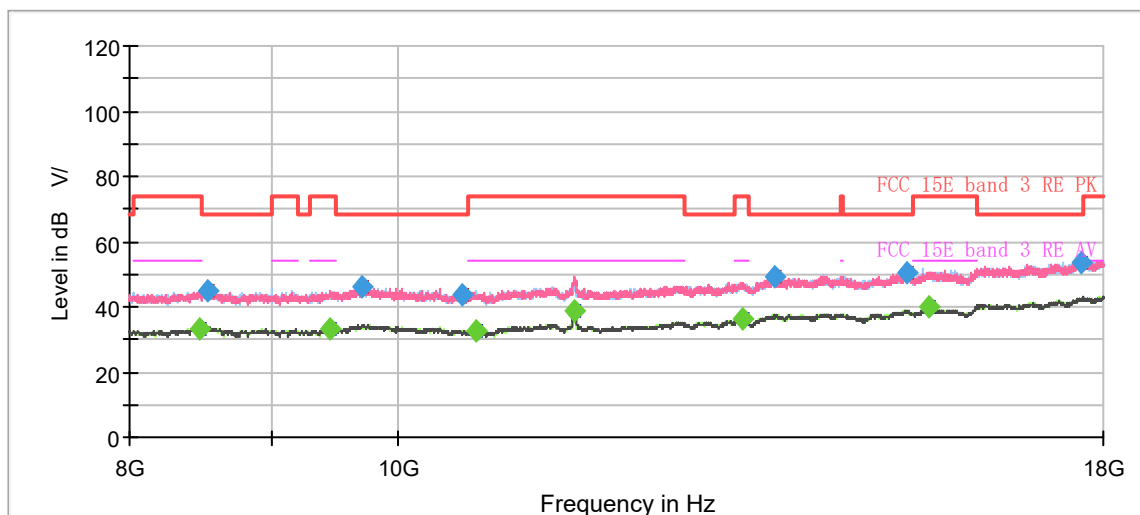
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH159



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



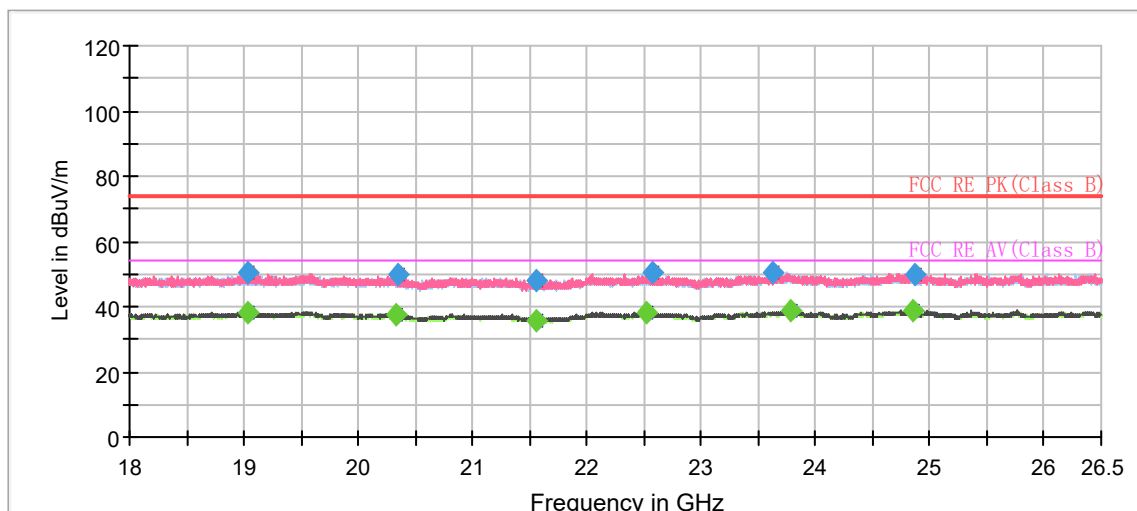
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1253.750000	43.51	---	68.20	24.69	500.0	100.0	V	262.0	-7.4
1389.375000	---	32.32	54.00	21.68	500.0	200.0	V	322.0	-6.6
1672.875000	---	33.59	54.00	20.41	500.0	100.0	H	213.0	-5.0
1998.375000	48.58	---	68.20	19.62	500.0	200.0	H	8.0	-3.4
2638.875000	48.12	---	68.20	20.08	500.0	100.0	H	162.0	-0.5
2762.250000	---	36.84	54.00	17.16	500.0	200.0	H	267.0	-0.1
3023.875000	53.40	---	68.20	14.80	500.0	200.0	V	204.0	0.6
3966.250000	---	40.08	54.00	13.92	500.0	100.0	V	157.0	4.5
4874.500000	---	41.93	54.00	12.07	500.0	100.0	V	147.0	5.9
5162.375000	53.33	---	68.20	14.87	500.0	100.0	V	267.0	7.1
6666.500000	54.35	---	68.20	13.85	500.0	100.0	V	98.0	8.4
7727.000000	---	42.96	54.00	11.04	500.0	200.0	V	246.0	8.9

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

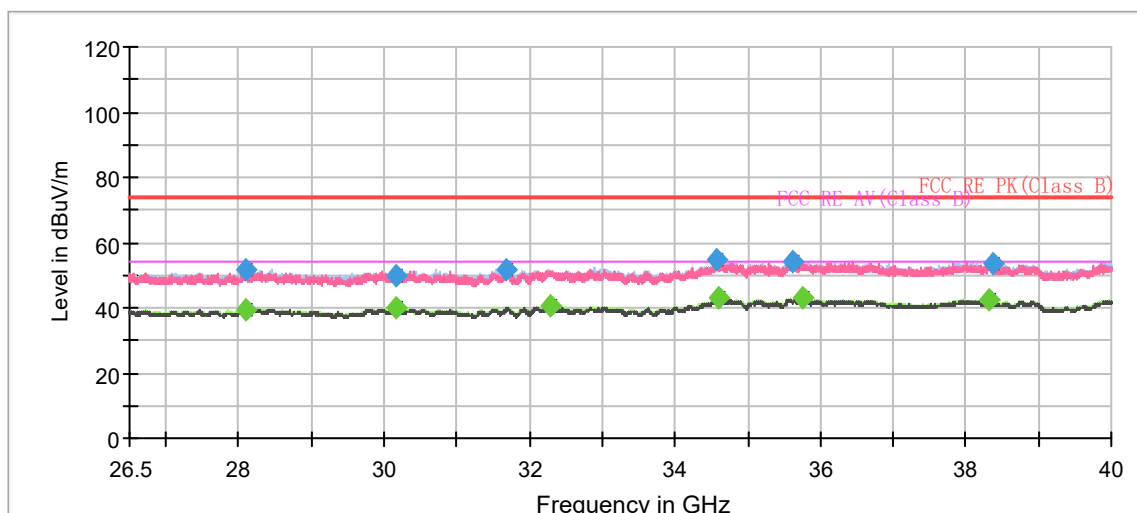
2. Margin = Limit –MAX Peak/ Average

During the test, the Radiates Emission from 18GHz to 40GHz was performed in all modes with all channels, 802.11n (HT20), Channel 149 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19035.937500	---	38.05	54.00	15.95	500.0	100.0	V	295.0	-5.6
19040.187500	50.62	---	74.00	23.38	500.0	200.0	V	22.0	-5.6
20339.625000	---	37.25	54.00	16.75	500.0	200.0	V	201.0	-5.1
20344.937500	50.06	---	74.00	23.94	500.0	200.0	V	233.0	-5.1
21554.062500	---	35.85	54.00	18.15	500.0	200.0	H	170.0	-5.2
21556.187500	47.89	---	74.00	26.11	500.0	200.0	V	91.0	-5.2
22524.125000	---	38.38	54.00	15.62	500.0	200.0	V	91.0	-3.9
22568.750000	50.59	---	74.00	23.41	500.0	200.0	V	105.0	-4.0
23621.687500	50.54	---	74.00	23.46	500.0	200.0	H	299.0	-2.7
23775.750000	---	38.78	54.00	15.22	500.0	200.0	H	323.0	-2.4
24849.937500	---	38.69	54.00	15.31	500.0	200.0	H	137.0	-2.3
24874.375000	50.03	---	74.00	23.97	500.0	100.0	H	96.0	-2.3



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
28099.750000	51.45	---	74.00	22.55	500.0	200.0	H	346.0	-0.3
28103.125000	---	39.09	54.00	14.91	500.0	200.0	H	298.0	-0.3
30160.187500	---	39.80	54.00	14.20	500.0	100.0	H	47.0	-0.3
30165.250000	49.71	---	74.00	24.29	500.0	100.0	H	219.0	-0.3
31685.687500	51.93	---	74.00	22.07	500.0	100.0	H	236.0	-1.7
32289.812500	---	40.52	54.00	13.48	500.0	100.0	H	67.0	-1.2
34571.312500	54.91	---	74.00	19.09	500.0	200.0	H	0.0	2.7
34588.187500	---	42.86	54.00	11.14	500.0	100.0	H	77.0	2.8
35607.437500	54.44	---	74.00	19.56	500.0	100.0	H	47.0	3.0
35766.062500	---	42.93	54.00	11.07	500.0	200.0	H	0.0	3.2
38319.250000	---	42.41	54.00	11.59	500.0	100.0	H	88.0	3.7
38373.250000	53.43	---	74.00	20.57	500.0	200.0	H	56.0	3.6

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit-MAX Peak/ Average

5.6. Conducted Emission

Ambient condition

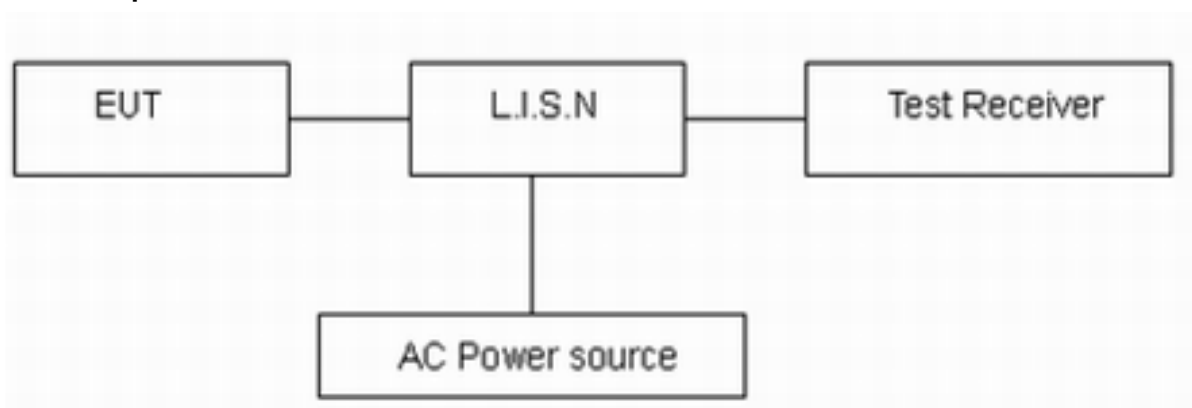
Temperature	Relative humidity
20°C ~25°C	45%~50%

Methods of Measurement

The EUT IS placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10. Connect the AC power line of the EUT to the LISN Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, VBW is set to 30kHz The measurement result should include both L line and N line.

The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

Limits

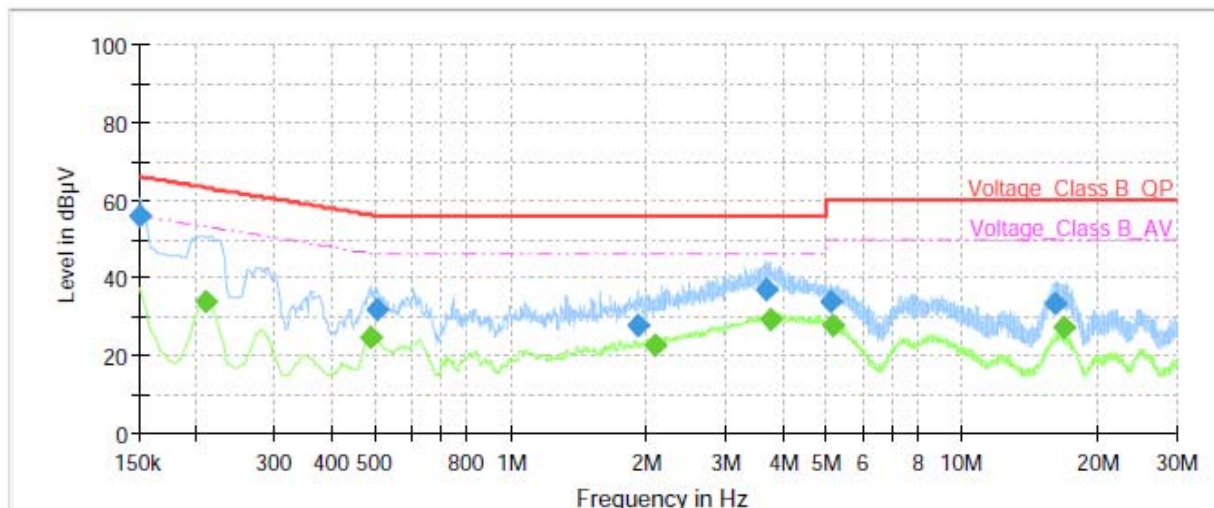
Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

Test Results:

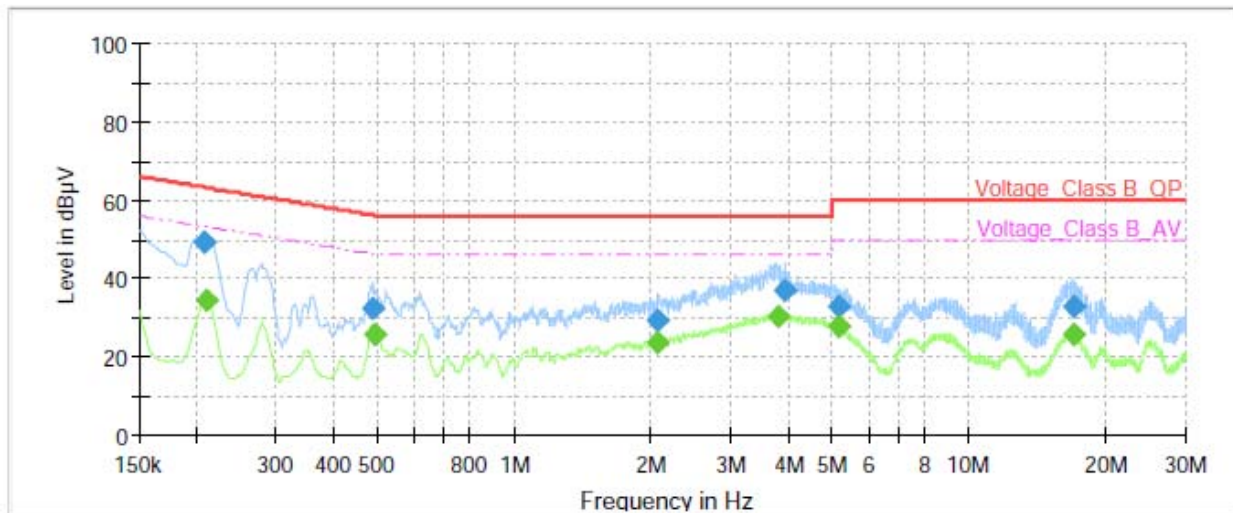
Following plots, Blue trace uses the peak detection and Green trace uses the average detection. During the test, the Conducted Emission was performed in all modes with all channels, 802.11n (HT20), Channel 149 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	55.99	---	66.00	10.01	1000.0	9.000	L1	ON	21.0
0.21	---	34.00	53.18	19.18	1000.0	9.000	L1	ON	21.1
0.49	---	24.43	46.17	21.74	1000.0	9.000	L1	ON	20.9
0.51	31.57	---	56.00	24.43	1000.0	9.000	L1	ON	20.9
1.91	27.63	---	56.00	28.37	1000.0	9.000	L1	ON	19.7
2.08	---	22.77	46.00	23.23	1000.0	9.000	L1	ON	19.7
3.70	37.02	---	56.00	18.98	1000.0	9.000	L1	ON	19.5
3.77	---	29.40	46.00	16.60	1000.0	9.000	L1	ON	19.5
5.14	33.69	---	60.00	26.31	1000.0	9.000	L1	ON	19.5
5.18	---	27.80	50.00	22.20	1000.0	9.000	L1	ON	19.5
16.02	33.51	---	60.00	26.49	1000.0	9.000	L1	ON	19.6
16.73	---	26.98	50.00	23.02	1000.0	9.000	L1	ON	19.7

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 KHz to 30 MHz



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.21	49.11	---	63.27	14.16	1000.0	9.000	N	ON	21.1
0.21	---	34.30	53.18	18.88	1000.0	9.000	N	ON	21.1
0.49	32.38	---	56.21	23.83	1000.0	9.000	N	ON	20.9
0.49	---	25.79	46.10	20.31	1000.0	9.000	N	ON	20.9
2.06	---	23.54	46.00	22.46	1000.0	9.000	N	ON	19.7
2.07	29.39	---	56.00	26.61	1000.0	9.000	N	ON	19.7
3.82	---	30.17	46.00	15.83	1000.0	9.000	N	ON	19.5
3.93	36.95	---	56.00	19.05	1000.0	9.000	N	ON	19.5
5.15	32.87	---	60.00	27.13	1000.0	9.000	N	ON	19.5
5.19	---	27.47	50.00	22.53	1000.0	9.000	N	ON	19.5
17.03	---	25.77	50.00	24.23	1000.0	9.000	N	ON	19.7
17.08	32.79	---	60.00	27.21	1000.0	9.000	N	ON	19.7

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 KHz to 30 MHz

6. Main Test Instruments

Date of Testing: May 4, 2023 ~ May 10, 2023

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Power Sensor	R&S	NRP18S	101954	2022-05-14	2023-05-13
Spectrum Analyzer	KEYSIGHT	N9020A	MY51330870	2022-05-14	2023-05-13
DC Power Supply	UNI-T	UTP1306S+	2205D0517232	2022-12-10	2023-12-09
TEMPERATURE CHAMBER	ESPEC	SU-242	93000506	2022-12-10	2023-12-09

Date of Testing: May 6, 2023 ~ May 16, 2023

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Unwanted Emissions					
Spectrum Analyzer	R&S	FSV40	101186	2022-05-14	2023-05-13
				2023-05-12	2024-05-11
EMI Test Receiver	R&S	ESR	102389	2022-05-25	2023-05-24
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	1023	2020-06-08	2023-06-07
Horn Antenna	R&S	HF907	102723	2021-07-24	2024-07-23
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Horn Antenna	STEATITE	QSH-SL-26-40-K-15	16779	2023-01-17	2026-01-16
Software	R&S	EMC32	9.26.01	/	/
Conducted Emissions					
EMI Test Receiver	R&S	ESR	101667	2022-05-25	2023-05-24
LISN	R&S	ENV216	102191	2022-12-13	2024-12-09
Software	R&S	EMC32	10.35.10	/	/

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.

***** END OF REPORT *****