



RF TEST REPORT

Applicant ZTE Corporation
FCC ID SRQ-Z-01K
Product LTE/WCDMA/GSM Multi-Mode Digital
Mobile Phone
Model Z-01K
Report No. RXC1708-0286RF12R1
Issue Date November 14, 2017

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15E (2017)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Performed by: Xianqing Li

Approved by: Kai Xu

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Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Average conducted output power	15.407(a)	PASS
2	Occupied bandwidth	15.407(e)	PASS
3	Frequency stability	15.407(g)	PASS
4	Maximum power spectral density	15.407(a)	PASS
5	Unwanted Emissions	15.407(b)	PASS
6	Conducted Emissions	15.207	PASS
Date of Testing: August 21, 2017~ October 16, 2017			



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. The client to claim product certification, approval, or endorsement by any government agencies must not use this report.

1.2. Test facility

CNAS (accreditation number: L2264)

TA Technology (Shanghai) Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

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.

IC (recognition number is 8510A)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Canada to perform electromagnetic emission measurement.

VCCI (recognition number is C-4595, T-2154, R-4113, G-10766)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Japan to perform electromagnetic emission measurement.

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.
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2. General Description of Equipment under Test

Client Information

Applicant	ZTE Corporation
Applicant address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China
Manufacturer	ZTE Corporation
Manufacturer address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

General information

EUT Description	
Model:	Z-01K
IMEI	865318030013228
Hardware Version:	udnA
Software Version:	P996A20_DCMV1.0.0B20
Power Supply:	Battery/AC adapter
Antenna Type:	Internal Antenna
Antenna Gain:	Antenna 1: 5.5 dBi
Test Mode:	U-NII-1(5150MHz-5250MHz) U-NII-2A(5250MHz-5350MHz) U-NII-2C(5470MHz-5725MHz)
Modulation Type:	802.11a/n (HT20/HT40) : OFDM 802.11ac (HT20.HT40/HT80): OFDM
Max. Conducted Power	11.84 dBm
Operating Frequency Range(s)	U-NII-1: 5150-5250MHz U-NII-2A:5250-5350MHz U-NII-2C:5470-5725MHz
EUT Accessory	
Battery	Manufacturer: SCUD (Fujian) Electronics Co., Ltd Model: Li3929T44P8h686049 Power Rating: DC 3.85V, Li-ion
Note: The information of the EUT is declared by the manufacturer.	



3. Applied Standards

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

FCC CFR47 Part 15E (2017) Unlicensed National Information Infrastructure Devices

ANSI C63.10 (2013)

KDB 789033 D02 General UNII Test Procedures New Rules v01r04

KDB 662911 D01 Multiple Transmitter Output 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.

Band	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac HT20	MCS0
802.11ac HT40	MCS0
802.11ac HT80	MCS0

The device supports non-beamforming and beamforming function in 802.11n/ac, after pre-testing, beamforming mode has the worst emission value, so the worst case was recorded.

Band	T _{on} (ms)	T _(on+off) (ms)	Duty cycle	Duty cycle correction Factor(dB)
802.11a	2.064	2.168	0.952	0.213
802.11n HT20	1.912	2.032	0.941	0.264
802.11n HT40	1.912	2.032	0.941	0.264
802.11ac HT20	1.936	2.048	0.945	0.244
802.11ac HT40	1.936	2.048	0.945	0.244
802.11ac HT80	1.936	2.048	0.945	0.244

Note: when Duty cycle>0.98, Duty cycle correction Factor not required.

**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
		80 MHz	42	5210MHz
	U-NII-2A	20 MHz	52	5260MHz
			56	5280MHz
			60	5300MHz
			64	5320MHz
		40 MHz	54	5270MHz
			62	5310MHz
		80 MHz	58	5290MHz
	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
		40 MHz	102	5510MHz
			110	5550MHz
			118	5590MHz
			126	5630MHz
			134	5670MHz
		80 MHz	106	5530MHz
			122	5610MHz
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	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

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

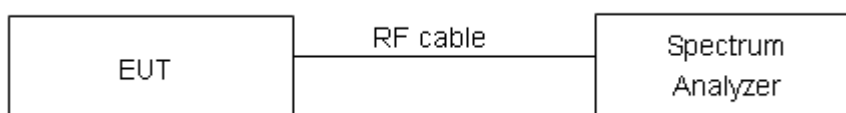
For U-NII-1, set RBW $\approx 1\%$ OCB kHz, VBW $\geq 3 \times$ RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in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

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11a	5180	16.239	18.58	500	PASS
	5220	16.236	18.69	500	PASS
	5240	16.233	18.87	500	PASS
802.11n HT20	5180	17.383	19.58	500	PASS
	5200	17.390	19.32	500	PASS
	5240	17.367	19.48	500	PASS
802.11n HT40	5190	35.773	39.86	500	PASS
	5230	35.756	39.59	500	PASS
802.11ac HT20	5180	17.405	19.64	500	PASS
	5220	17.418	19.40	500	PASS
	5240	17.431	19.67	500	PASS
802.11ac HT40	5190	35.792	39.78	500	PASS
	5230	35.701	40.23	500	PASS
802.11ac HT80	5210	74.992	81.77	500	PASS

U-NII-2A

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11a	5260	16.236	18.35	500	PASS
	5300	16.235	18.32	500	PASS
	5320	16.226	18.31	500	PASS
802.11n HT20	5260	17.409	19.61	500	PASS
	5300	17.386	19.63	500	PASS
	5320	17.392	19.84	500	PASS
802.11n HT40	5270	35.720	39.88	500	PASS
	5310	35.780	39.72	500	PASS
802.11ac HT20	5260	17.387	19.57	500	PASS
	5300	17.424	19.76	500	PASS
	5320	17.423	19.59	500	PASS
802.11ac HT40	5270	35.743	40.09	500	PASS
	5310	35.714	40.04	500	PASS
802.11ac HT80	5290	74.953	82.20	500	PASS

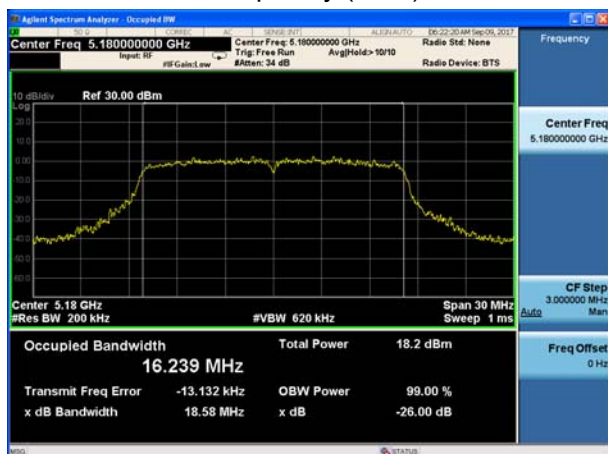


U-NII-2C

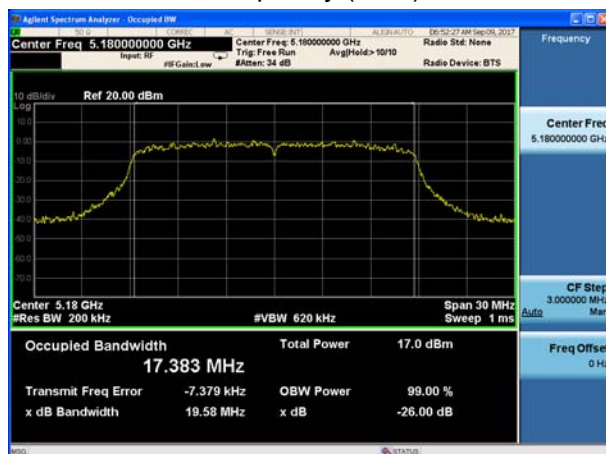
Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11a	5500	16.238	18.28	500	PASS
	5580	16.221	18.69	500	PASS
	5700	16.250	18.75	500	PASS
802.11n HT20	5500	17.390	19.57	500	PASS
	5580	17.405	19.63	500	PASS
	5700	17.392	20.04	500	PASS
802.11n HT40	5510	35.778	39.63	500	PASS
	5670	35.725	40.18	500	PASS
802.11ac HT20	5500	17.407	19.70	500	PASS
	5580	17.396	19.96	500	PASS
	5700	17.408	19.54	500	PASS
802.11ac HT40	5510	35.719	39.77	500	PASS
	5670	35.754	39.97	500	PASS
802.11ac HT80	5530	74.999	81.53	500	PASS
	5610	75.077	83.36	500	PASS



U-NII-1, 802.11a
Carrier frequency (MHz): 5180



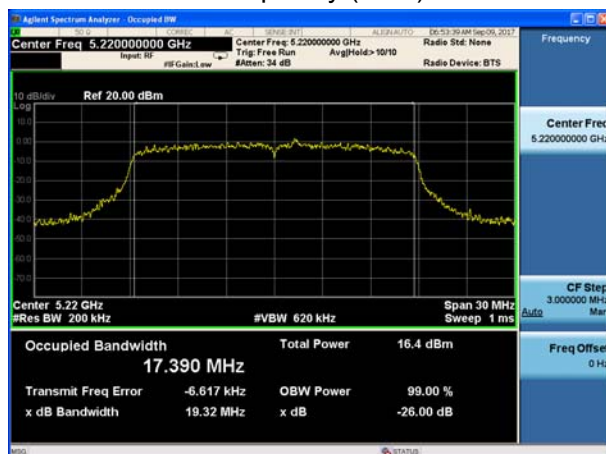
U-NII-1, 802.11n HT20
Carrier frequency (MHz): 5180



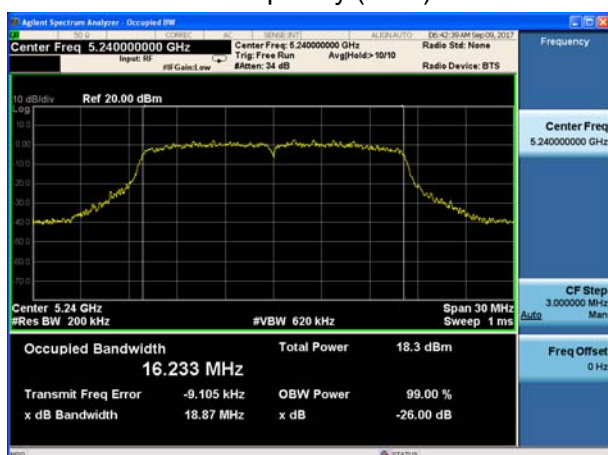
U-NII-1, 802.11a
Carrier frequency (MHz): 5220



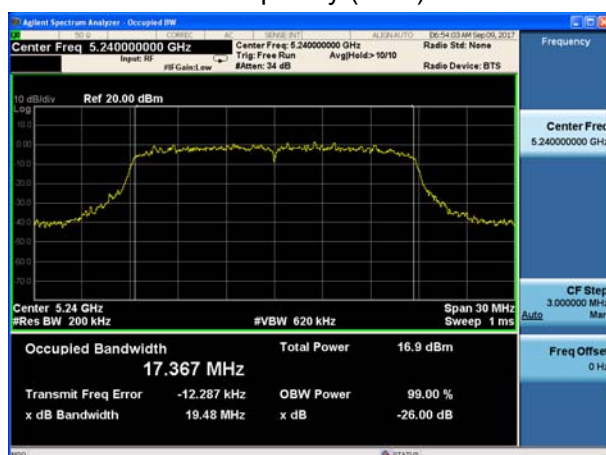
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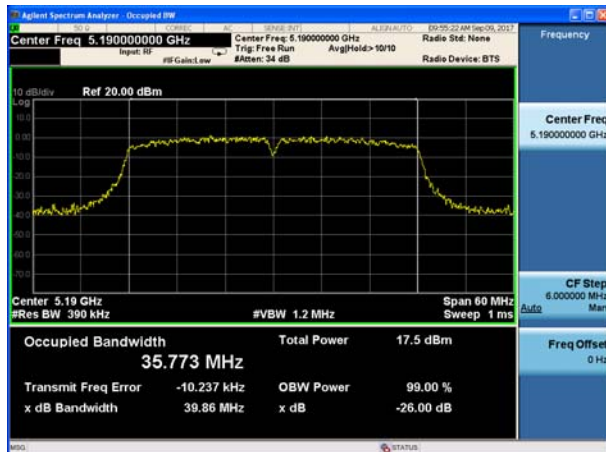
U-NII-1, 802.11a
Carrier frequency (MHz): 5240



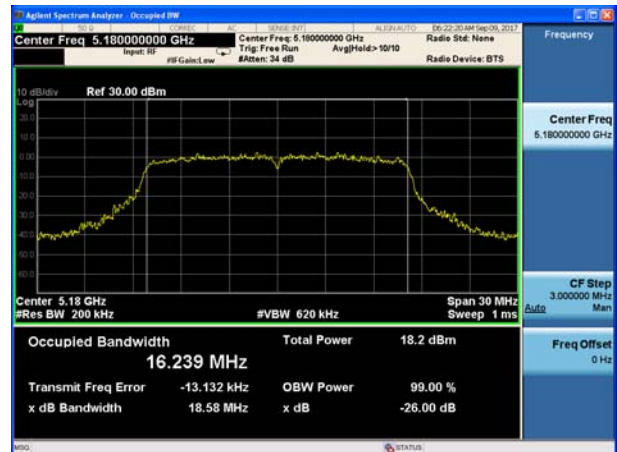
U-NII-1, 802.11n HT20
Carrier frequency (MHz): 5240



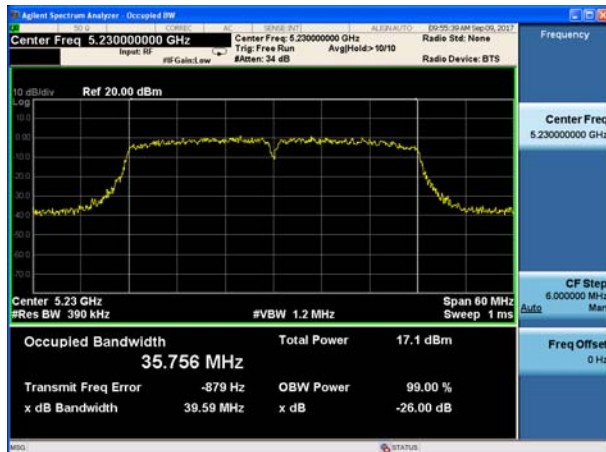
U-NII-1, 802.11n HT40 Carrier frequency (MHz): 5190



U-NII-1, 802.11ac HT20 Carrier frequency (MHz): 5180



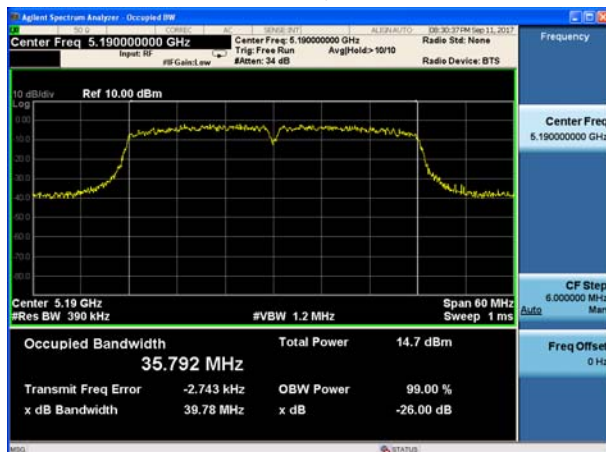
U-NII-1, 802.11n HT40 Carrier frequency (MHz): 5230



U-NII-1, 802.11ac HT20 Carrier frequency (MHz): 5220



U-NII-1, 802.11ac HT40 Carrier frequency (MHz): 5190

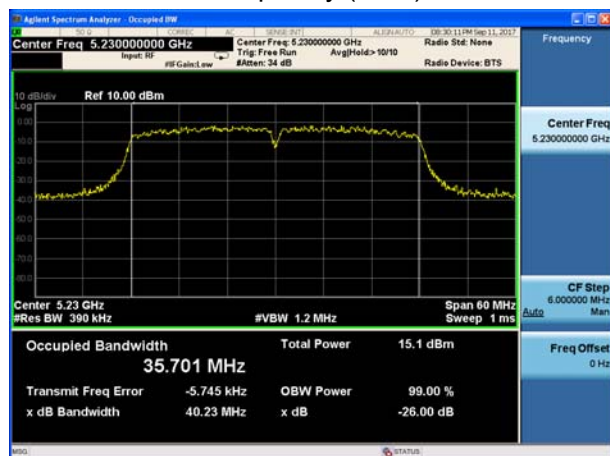


U-NII-1, 802.11ac HT20 Carrier frequency (MHz): 5240

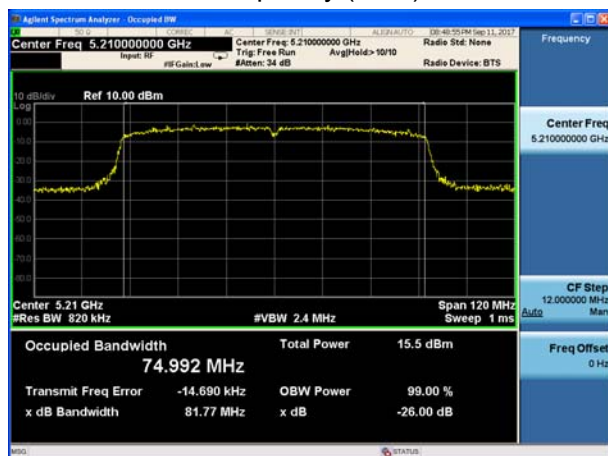




U-NII-1, 802.11ac HT40
Carrier frequency (MHz): 5230



U-NII-1, 802.11ac HT80
Carrier frequency (MHz): 5210



U-NII-2A, 802.11a
Carrier frequency (MHz): 5260



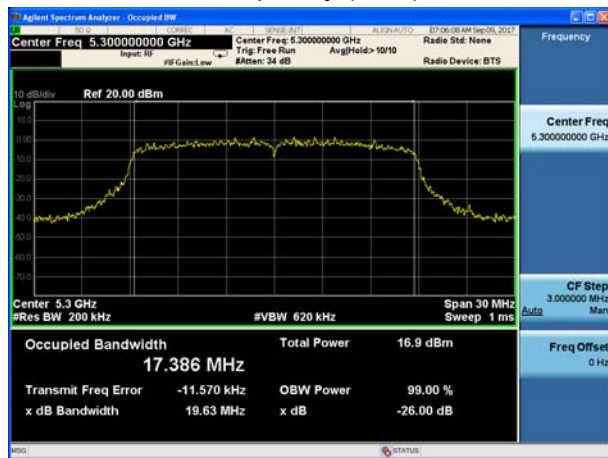
U-NII-2A, 802.11n HT20
Carrier frequency (MHz): 5260



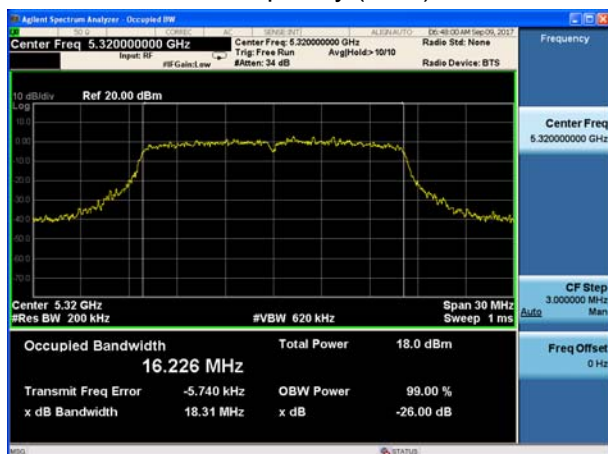
U-NII-2A, 802.11a
Carrier frequency (MHz): 5300



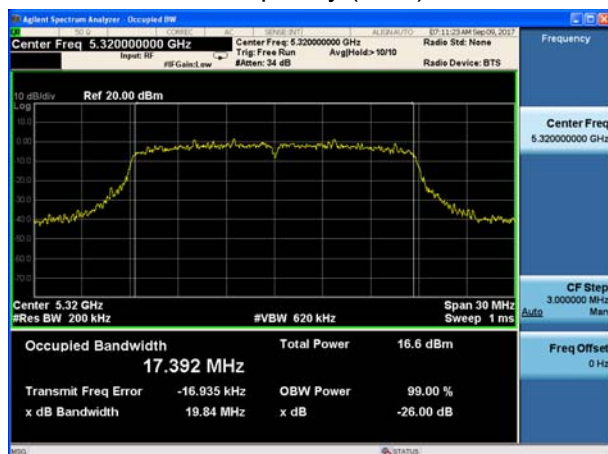
U-NII-2A, 802.11n HT20
Carrier frequency (MHz): 5300



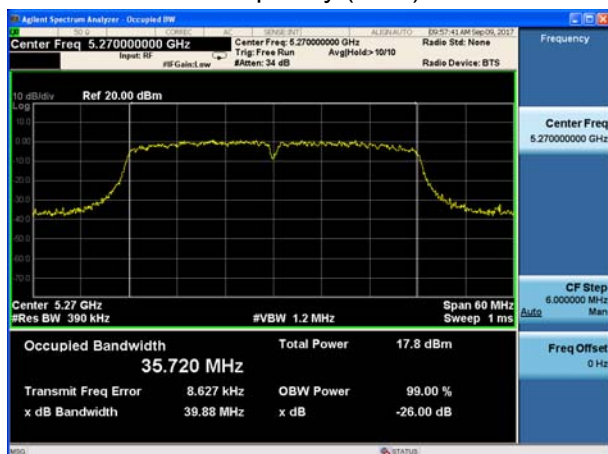
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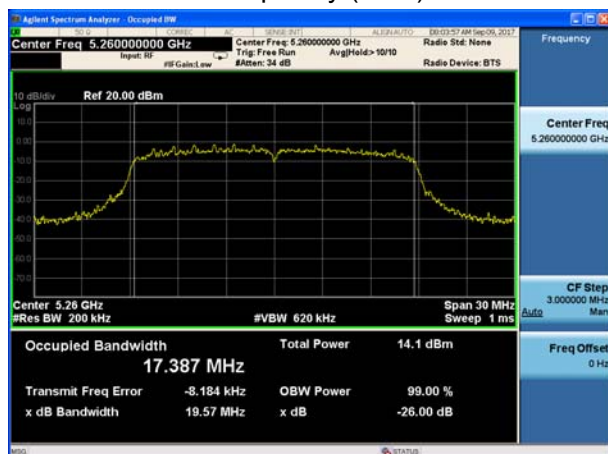
U-NII-2A, 802.11n HT20 Carrier frequency (MHz):5320



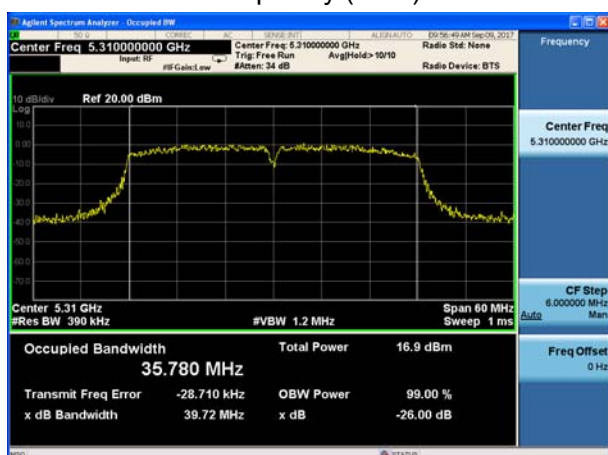
U-NII-2A, 802.11n HT40 Carrier frequency (MHz): 5270



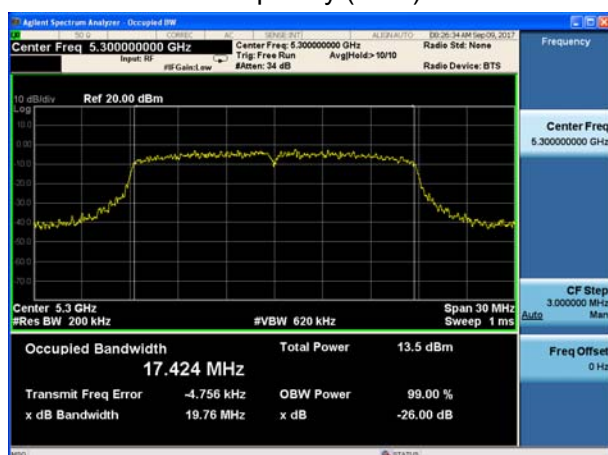
U-NII-2A, 802.11ac HT20 Carrier frequency (MHz):5260



U-NII-2A, 802.11n HT40 Carrier frequency (MHz): 5310



U-NII-2A, 802.11ac HT20 Carrier frequency (MHz): 5300

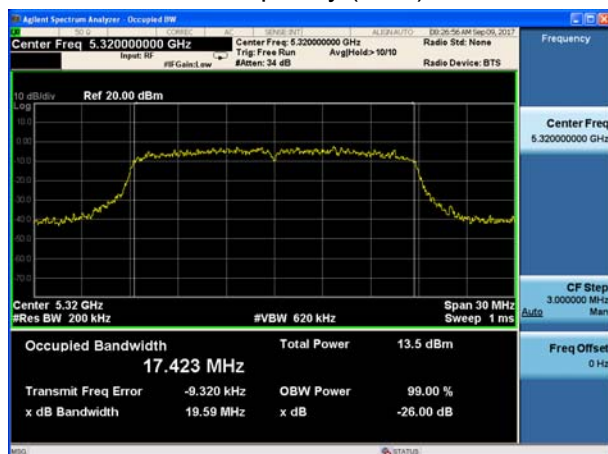




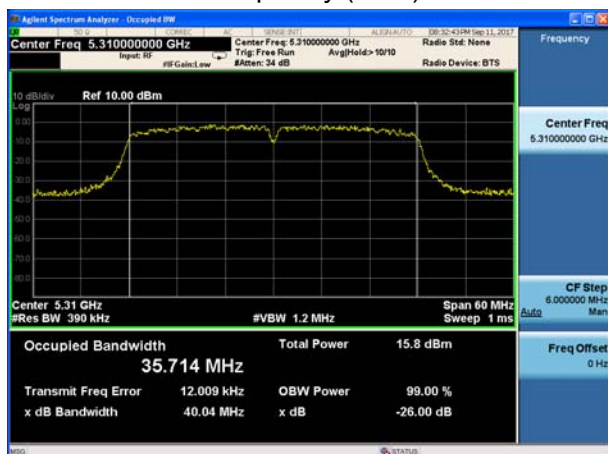
U-NII-2A, 802.11ac HT40
Carrier frequency (MHz): 5270



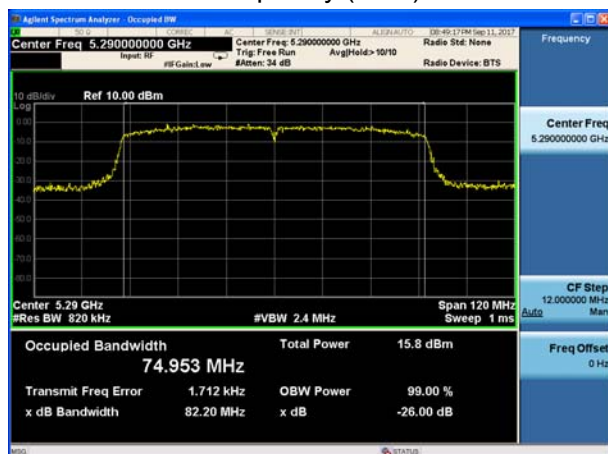
U-NII-2A, 802.11ac HT20
Carrier frequency (MHz): 5320



U-NII-2A, 802.11ac HT40
Carrier frequency (MHz): 5310

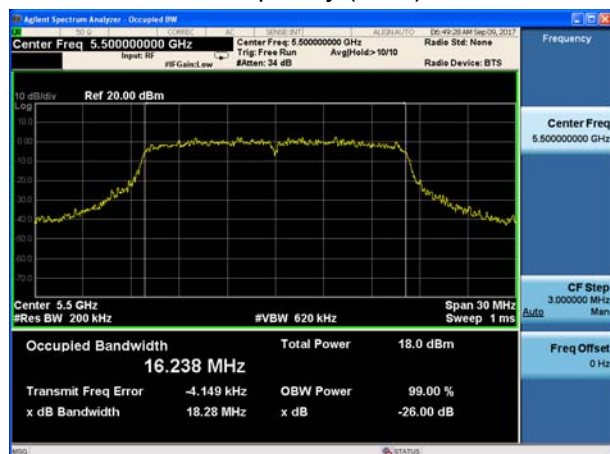


U-NII-2A, 802.11ac HT80
Carrier frequency (MHz): 5290

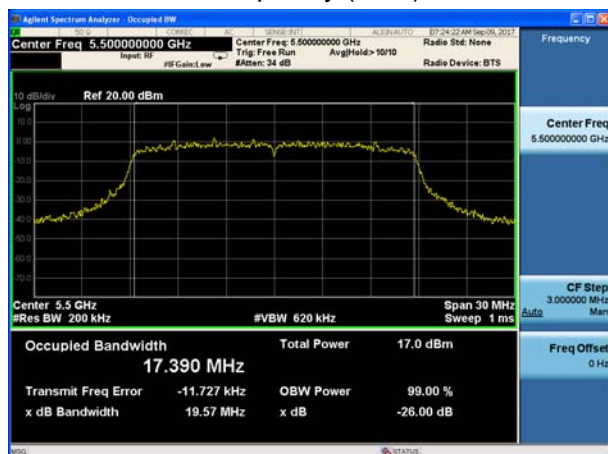




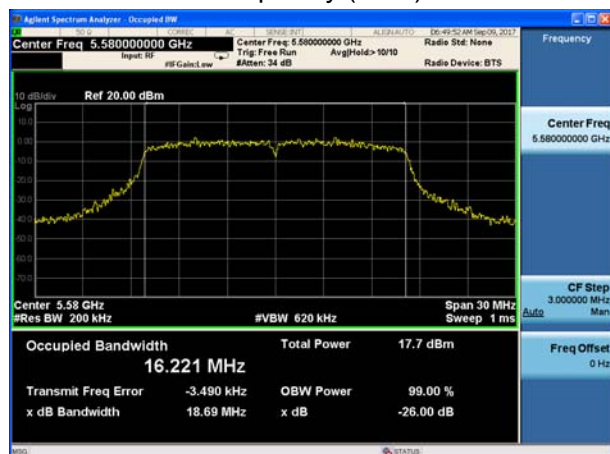
U-NII-2C, 802.11a
Carrier frequency (MHz): 5500



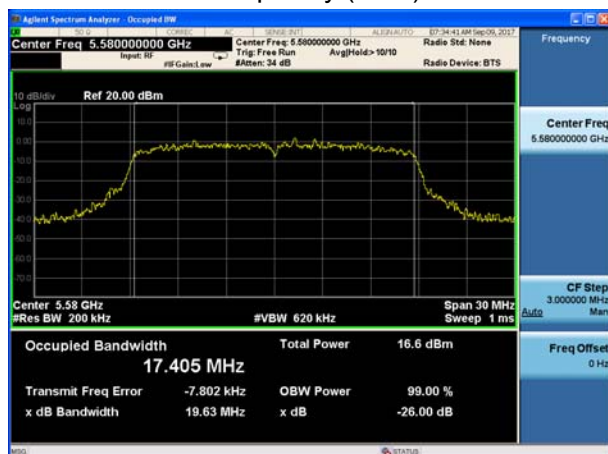
U-NII-2C, 802.11n HT20
Carrier frequency (MHz): 5500



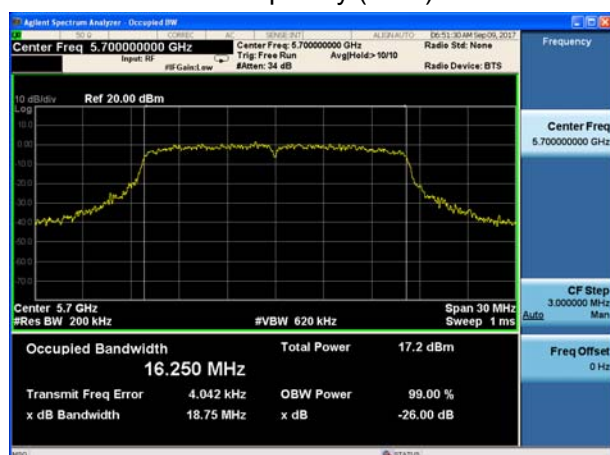
U-NII-2C, 802.11a
Carrier frequency (MHz): 5580



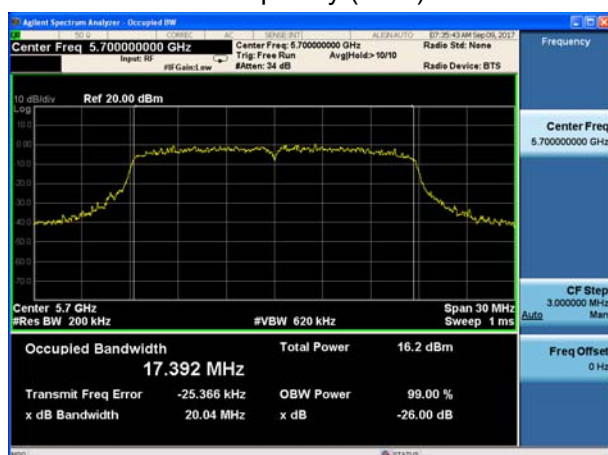
U-NII-2C, 802.11n HT20
Carrier frequency (MHz): 5580



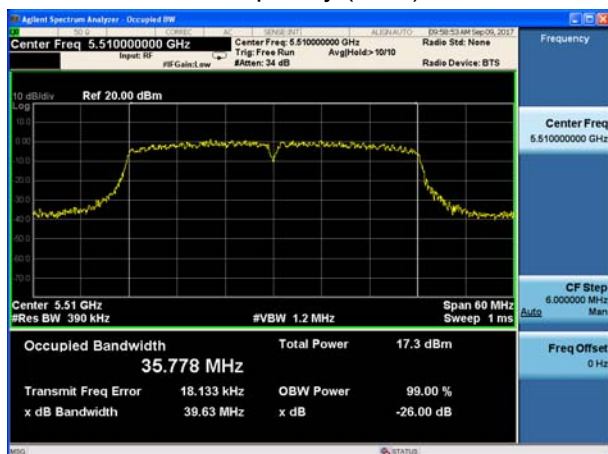
U-NII-2C, 802.11a
Carrier frequency (MHz): 5700



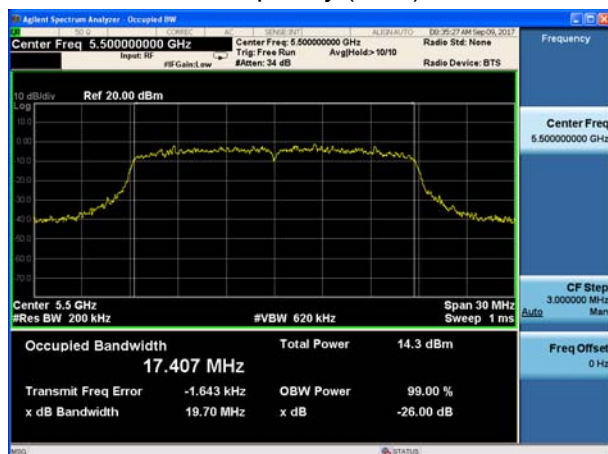
U-NII-2C, 802.11n HT20
Carrier frequency (MHz): 5700



U-NII-2C, 802.11n HT40 Carrier frequency (MHz): 5510



U-NII-2C, 802.11ac HT20 Carrier frequency (MHz): 5500



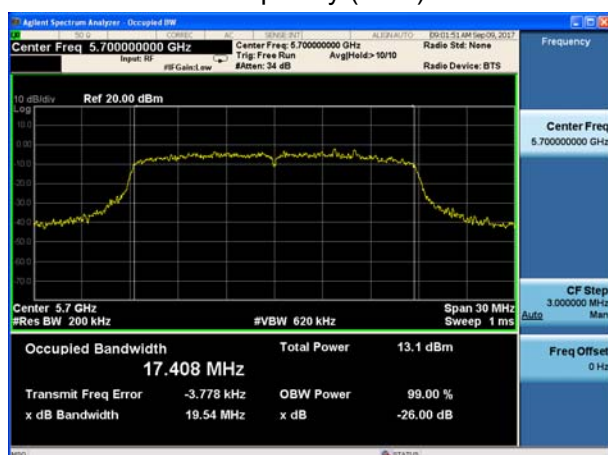
U-NII-2C, 802.11n HT40 Carrier frequency (MHz): 5670



U-NII-2C, 802.11ac HT20 Carrier frequency (MHz): 5580

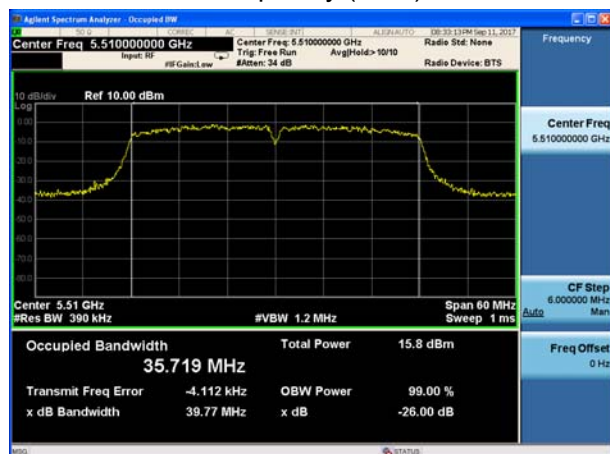


U-NII-2C, 802.11ac HT20 Carrier frequency (MHz): 5700

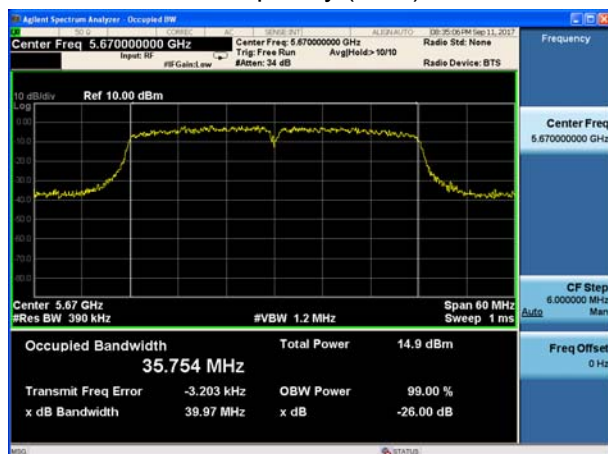




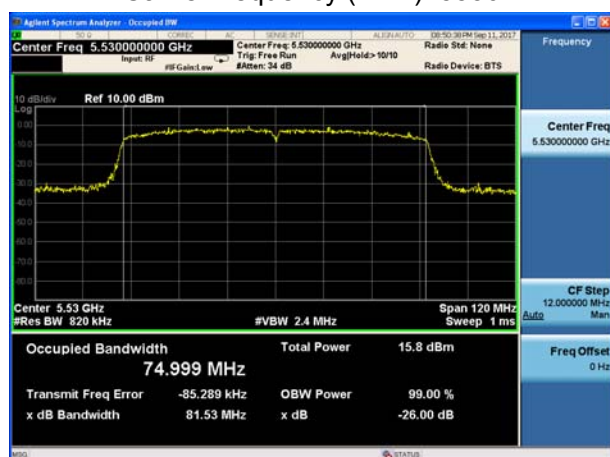
U-NII-2C, 802.11ac HT40
Carrier frequency (MHz): 5510



U-NII-2C, 802.11ac HT40
Carrier frequency (MHz): 5670



U-NII-2C, 802.11ac HT80
Carrier frequency (MHz): 5530



U-NII-2C, 802.11ac HT80
Carrier frequency (MHz): 5610



5.2. Average Power Output –Conducted

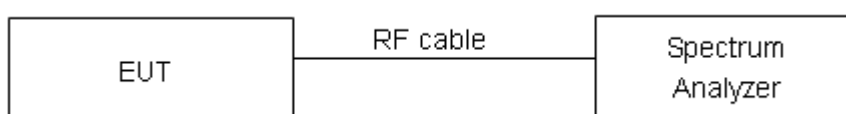
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to spectrum analyzer 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)

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 conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, 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 $k = 2$, $U = 0.44$ dB.



Test Results

Single Antenna Power Index									
Packet Type	CH36	CH44	CH48	CH52	CH60	CH64	CH100	CH116	CH140
802.11a	14	14	14	14	14	14	14	14	14
802.11n HT20	13	13	13	13	13	13	13	13	13
802.11ac HT20	10	10	10	10	10	10	10	10	10
Packet Type	CH38	CH46	CH54	CH62	CH102	CH134	/	/	/
802.11n HT40	13	13	13	13	13	13	/	/	/
802.11ac HT40	10	10	10	10	10	10	/	/	/
Packet Type	CH42	CH58	CH106	CH122	/	/	/	/	/
802.11ac HT80	10	10	10	10	/	/	/	/	/

Network Standards		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	18.35	23.64<24	23.64
		60/5300	18.32	23.63<24	23.63
		64/5320	18.31	23.63<24	23.63
	802.11n HT20	52/5260	19.61	23.92<24	23.92
		60/5300	19.63	23.93<24	23.93
		64/5320	19.84	23.98<24	23.98
	802.11n HT40	54/5270	39.88	27.01>24	24.00
		62/5310	39.72	26.99>24	24.00
	802.11ac HT20	52/5260	19.57	23.92<24	23.92
		60/5300	19.76	23.96<24	23.96
		64/5320	19.59	23.92<24	23.92
	802.11ac HT40	54/5270	40.09	27.03>24	24.00
		62/5310	40.04	27.02>24	24.00
802.11ac HT80	58/5290	82.20	30.15>24	24.00	
U-NII-2C	802.11a	100/5500	18.28	23.62<24	23.62
		116/5580	18.69	23.72<24	23.72
		140/5700	18.75	23.73<24	23.73
	802.11n HT20	100/5500	19.57	23.92<24	23.92
		116/5580	19.63	23.93<24	23.93
		140/5700	20.04	24.02>24	24.00
	802.11n HT40	102/5510	39.63	26.98>24	24.00
		134/5670	40.18	27.04>24	24.00



	802.11ac HT20	100/5500	19.70	23.94<24	23.94
		116/5580	19.96	24.00>24	24.00
		140/5700	19.54	23.91<24	23.91
	802.11ac HT40	102/5510	39.77	27.00>24	24.00
		134/5670	39.97	27.02>24	24.00
	802.11ac HT80	106/5530	81.53	30.11>24	24.00
		122/5610	83.36	30.21>24	24.00
Note: 250mW=24dBm					

Test results

Note: Output Power=Read Value+Duty cycle correction factor

U-NII-1

Network Standards	Channel/ Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Conclusion
802.11a	36/5180	11.763	24.00	PASS
	40/5220	11.763	24.00	PASS
	48/5240	11.863	24.00	PASS
802.11n HT20	36/5180	10.674	24.00	PASS
	40/5200	10.834	24.00	PASS
	48/5240	10.844	24.00	PASS
802.11n HT40	38/5190	11.184	24.00	PASS
	46/5230	11.164	24.00	PASS
802.11ac HT20	36/5180	7.864	24.00	PASS
	40/5200	7.804	24.00	PASS
	48/5240	7.824	24.00	PASS
802.11ac HT40	38/5190	8.494	24.00	PASS
	46/5230	8.414	24.00	PASS
802.11ac HT80	42/5210	7.774	24.00	PASS

U-NII-2A

Network Standards	Channel/ Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Conclusion
802.11a	52/5260	11.873	23.64	PASS
	60/5300	11.913	23.63	PASS
	64/5320	12.003	23.63	PASS
802.11n HT20	52/5260	10.854	23.92	PASS
	60/5300	10.874	23.93	PASS
	64/5320	10.994	23.98	PASS
802.11n HT40	54/5270	11.304	24.00	PASS
	62/5310	11.144	24.00	PASS
802.11ac HT20	52/5260	8.024	23.92	PASS
	60/5300	8.054	23.96	PASS
	64/5320	8.114	23.92	PASS
802.11ac HT40	54/5270	8.864	24.00	PASS
	62/5310	9.134	24.00	PASS
802.11ac HT80	58/5290	8.134	24.00	PASS



U-NII-2C

Network Standards	Channel/ Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Conclusion
802.11a	100/5500	12.053	23.62	PASS
	116/5580	11.993	23.72	PASS
	140/5700	11.163	23.73	PASS
802.11n HT20	100/5500	11.094	23.92	PASS
	116/5580	10.864	23.93	PASS
	140/5700	10.124	24.00	PASS
802.11n HT40	102/5510	11.184	24.00	PASS
	134/5670	10.694	24.00	PASS
802.11ac HT20	100/5500	8.204	23.94	PASS
	116/5580	7.834	24.00	PASS
	140/5700	7.244	23.91	PASS
802.11ac HT40	102/5510	9.014	24.00	PASS
	134/5670	8.464	24.00	PASS
802.11ac HT80	106/5530	8.134	24.00	PASS
	128/5610	7.724	24.00	PASS

5.3. Frequency Stability

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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
3.85	-20	5199.992980	5199.984785	5199.975323	5199.968640
3.85	-10	5199.991798	5199.980699	5199.966679	5199.966166
3.85	0	5199.989012	5199.978912	5199.959581	5199.959230
3.85	10	5199.982621	5199.971612	5199.952973	5199.954939
3.85	20	5199.979095	5199.966094	5199.945079	5199.950689
3.85	30	5199.977941	5199.964493	5199.936875	5199.943999
3.85	40	5199.971452	5199.959162	5199.931507	5199.941034
3.85	50	5199.965452	5199.956543	5199.922553	5199.939785
3.465	20	5199.964469	5199.950670	5199.921149	5199.936718
4.235	20	5199.959741	5199.950189	5199.913504	5199.930065
MHz		-0.040259	-0.049811	-0.086496	-0.069935
PPM		-7.742190	-9.579004	-16.633819	-13.449078

Voltage (V)	Temperature (°C)	U-NII-2A Test Results			
		5300MHz			
		1min	2min	5min	10min
3.85	-20	5299.994167	5299.987649	5299.985880	5299.983661
3.85	-10	5299.990236	5299.978434	5299.985457	5299.980318
3.85	0	5299.983302	5299.969331	5299.984395	5299.977850
3.85	10	5299.977432	5299.962726	5299.979697	5299.972374
3.85	20	5299.975235	5299.956421	5299.971860	5299.971915
3.85	30	5299.970895	5299.954806	5299.966472	5299.967020
3.85	40	5299.963026	5299.947125	5299.960685	5299.960839
3.85	50	5299.954298	5299.943484	5299.953306	5299.954989
3.465	20	5299.950168	5299.938625	5299.944451	5299.949030
4.235	20	5299.950142	5299.932212	5299.941950	5299.947519
MHz		-0.049858	-0.067788	-0.058050	-0.052481
PPM		-9.407144	-12.790229	-10.952854	-9.902095



Voltage (V)	Temperature (°C)	U-NII-2C Test Results			
		5580MHz			
		1min	2min	5min	10min
3.85	-20	5580.009023	5580.004793	5580.003308	5580.000153
3.85	-10	5580.000945	5580.001134	5580.002111	5579.995749
3.85	0	5579.997116	5579.992593	5579.995136	5579.993623
3.85	10	5579.987985	5579.990058	5579.989371	5579.990138
3.85	20	5579.985400	5579.987632	5579.980615	5579.987610
3.85	30	5579.984875	5579.979360	5579.977024	5579.978238
3.85	40	5579.979597	5579.972580	5579.968385	5579.972757
3.85	50	5579.976585	5579.964494	5579.961621	5579.968249
3.465	20	5579.971403	5579.954800	5579.957388	5579.967736
4.235	20	5579.963375	5579.948987	5579.947440	5579.962906
MHz		-0.036625	-0.051013	-0.052560	-0.037094
PPM		-6.563646	-9.142133	-9.419439	-6.647659

5.4. Power Spectral Density

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

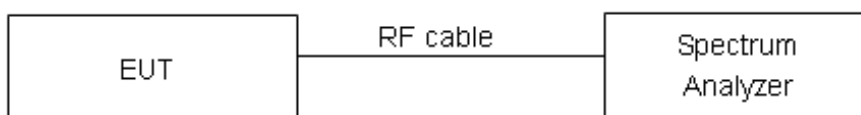
The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

Set RBW = 500 kHz, VBW =1.5MHz for the band 5.725-5.85 GHz

Set RBW = 1 MHz, VBW =3MHz for the band 5.150-5.250 GHz

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 client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum 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 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.

Frequency Bands/MHz	Limits
5150-5250	11dBm/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:**

Note: Power Spectral Density =Read Value+Duty cycle correction factor

U-NII-1

Network Standards	Channel Number	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	36	-0.417	11	PASS
	40	1.179	11	PASS
	48	0.613	11	PASS
802.11n HT20	36	-0.441	11	PASS
	40	-0.376	11	PASS
	48	-0.462	11	PASS
802.11n HT40	38	-3.068	11	PASS
	46	-3.169	11	PASS
802.11ac HT20	36	-3.417	11	PASS
	40	-3.403	11	PASS
	48	-3.165	11	PASS
802.11ac HT40	38	-5.426	11	PASS
	46	-5.136	11	PASS
802.11ac HT80	42	-9.142	11	PASS

U-NII-2A

Network Standards	Channel Number	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	52	0.937	11	PASS
	60	0.886	11	PASS
	64	1.021	11	PASS
802.11n HT20	52	-0.325	11	PASS
	60	-0.230	11	PASS
	64	-0.176	11	PASS
802.11n HT40	54	-3.099	11	PASS
	62	-2.907	11	PASS
802.11ac HT20	52	-3.417	11	PASS
	60	-3.403	11	PASS
	64	-3.165	11	PASS
802.11ac HT40	54	-5.151	11	PASS
	62	-4.580	11	PASS
802.11ac HT80	58	-8.995	11	PASS

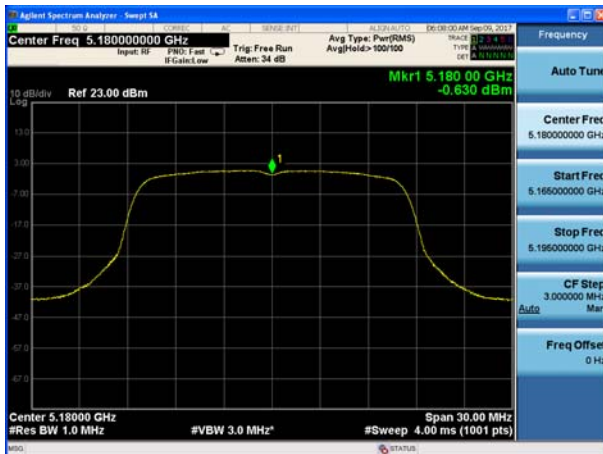


U-NII-2C

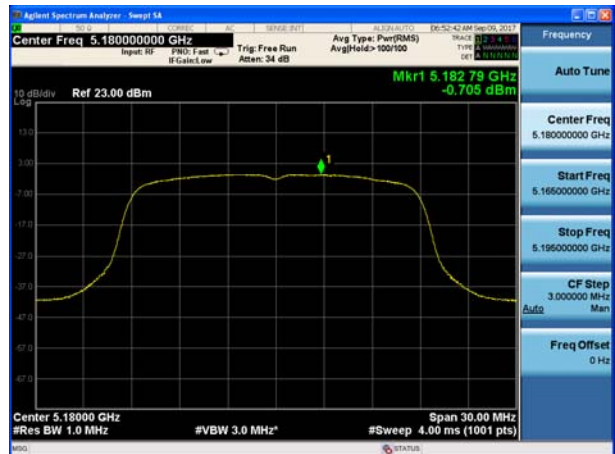
Network Standards	Channel Number	Power Spectral Density (dBm /MHz)	Limit (dBm /MHz)	Conclusion
802.11a	100	1.322	11	PASS
	116	1.103	11	PASS
	140	0.007	11	PASS
802.11n HT20	100	-0.102	11	PASS
	116	-0.358	11	PASS
	140	-1.095	11	PASS
802.11n HT40	102	-2.772	11	PASS
	134	-3.619	11	PASS
802.11ac HT20	100	-3.770	11	PASS
	116	-4.098	11	PASS
	140	-5.426	11	PASS
802.11ac HT40	102	-5.477	11	PASS
	134	-5.325	11	PASS
802.11ac HT80	106	-9.586	11	PASS
	128	-9.881	11	PASS



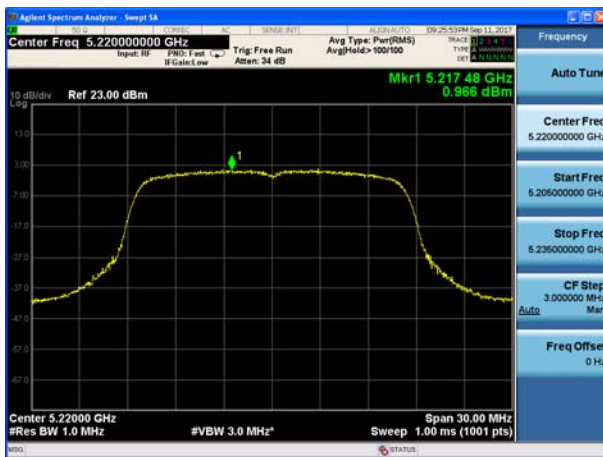
U-NII-1, 802.11a, Channel No.: 36



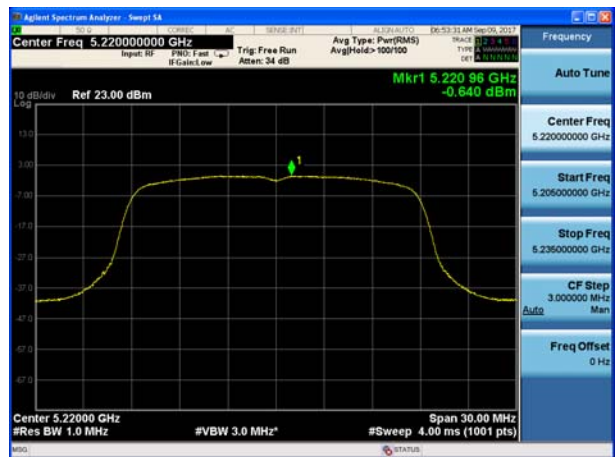
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U-NII-1, 802.11a, Channel No.: 40



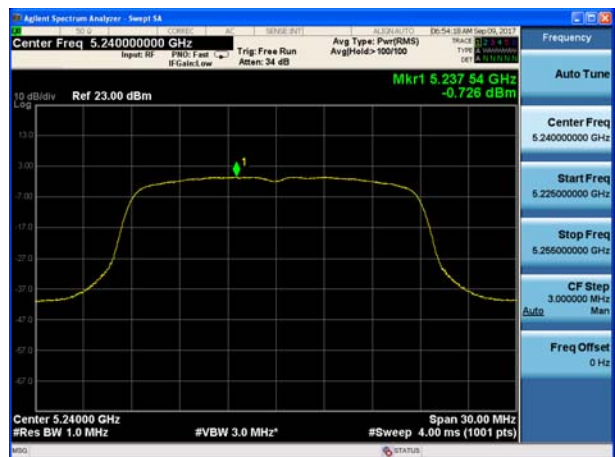
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U-NII-1, 802.11a, Channel No.: 48

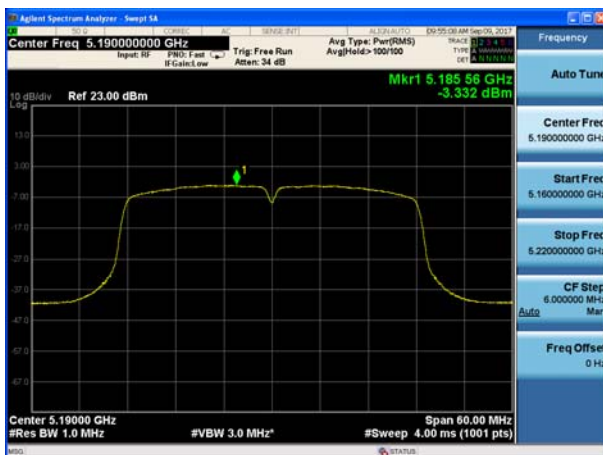


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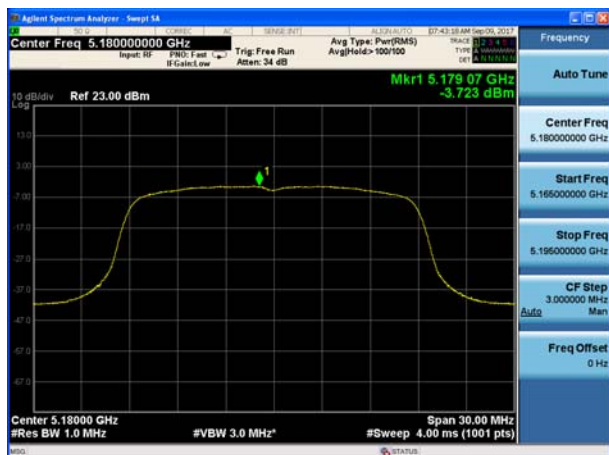




U-NII-1, 802.11n HT40, Channel No.: 38



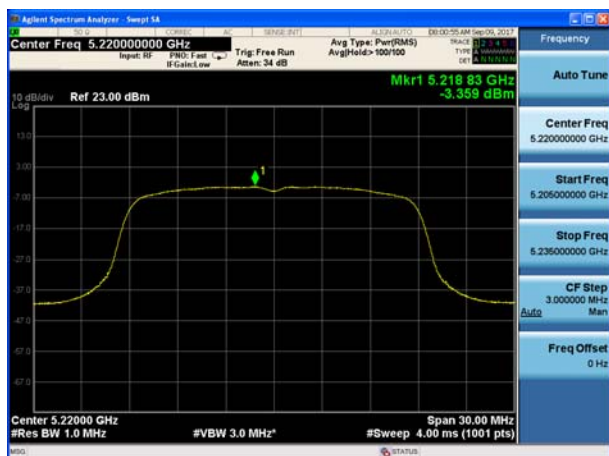
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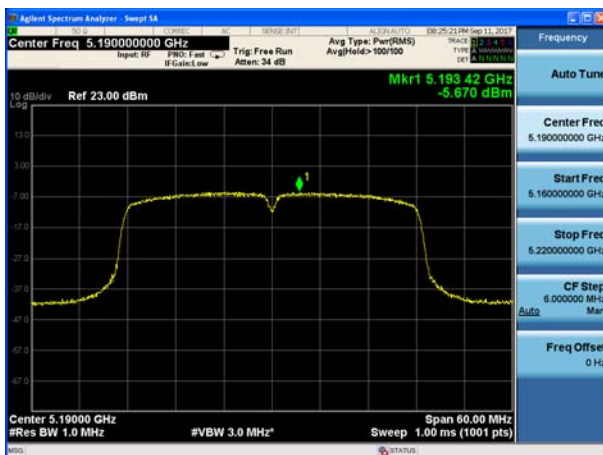
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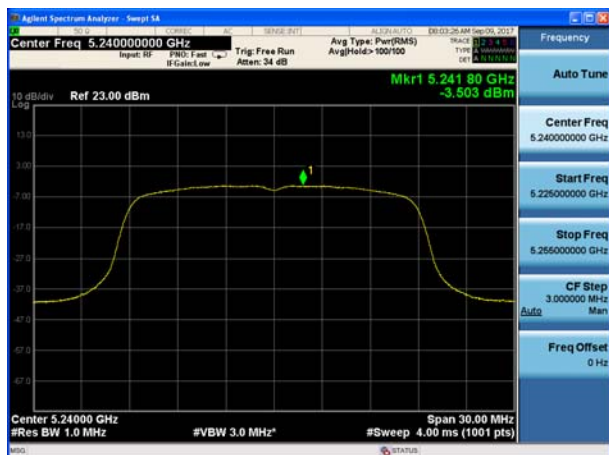
U-NII-1, 802.11ac HT20, Channel No.: 40



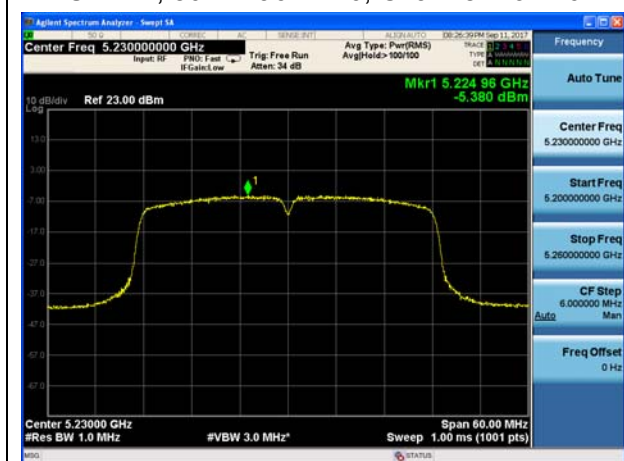
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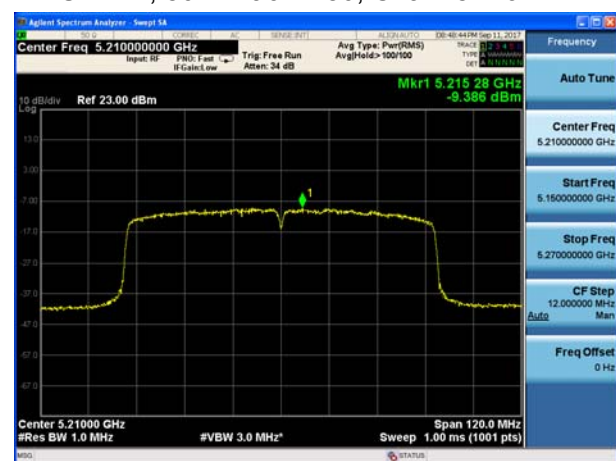
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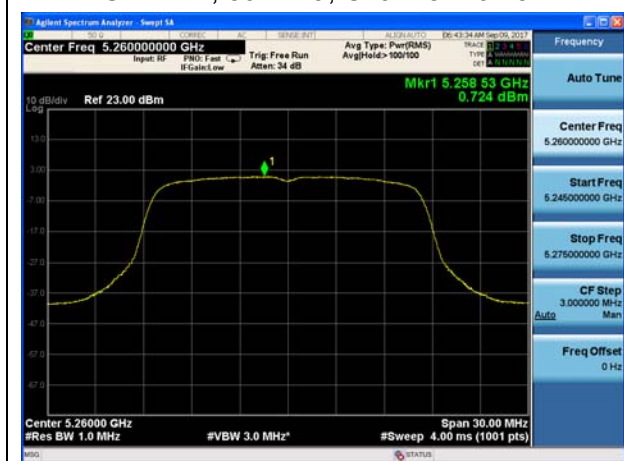
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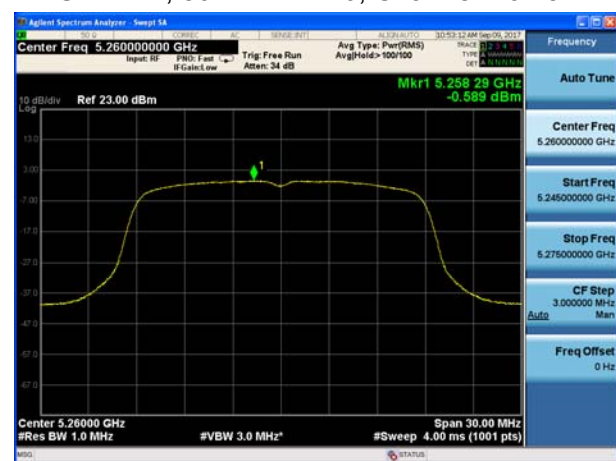
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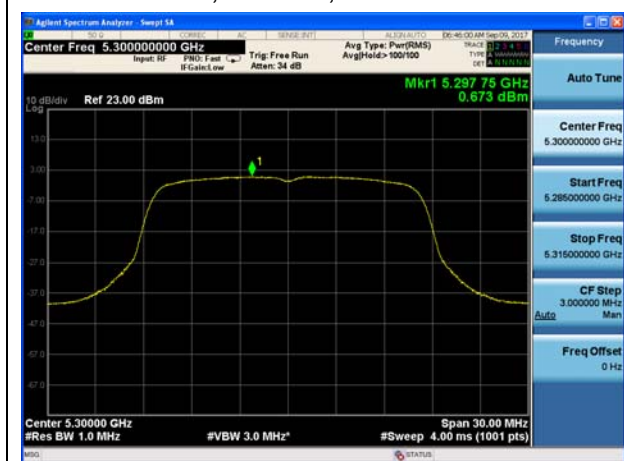
U-NII-2A, 802.11a, Channel No.: 52



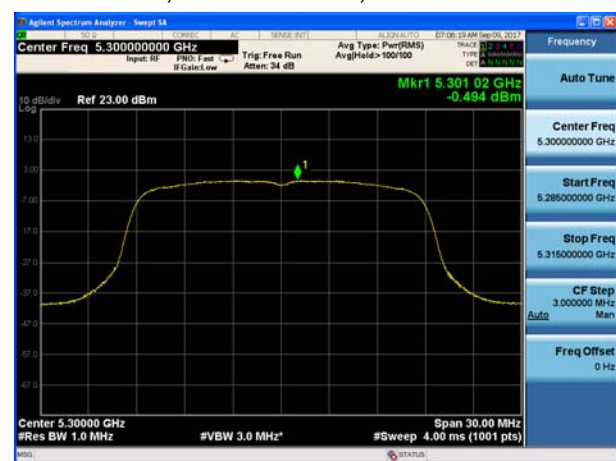
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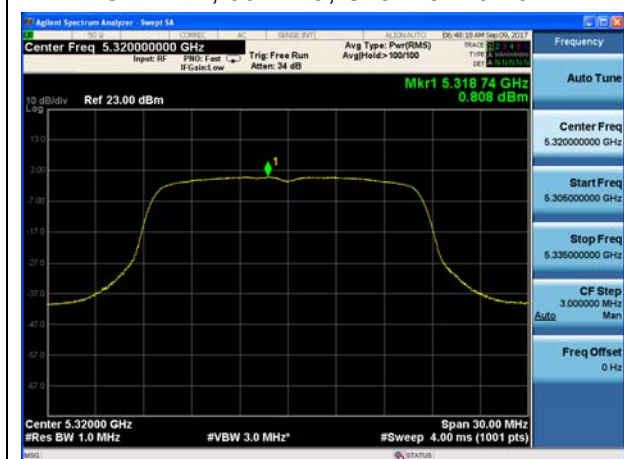
U-NII-2A, 802.11a, Channel No.: 60



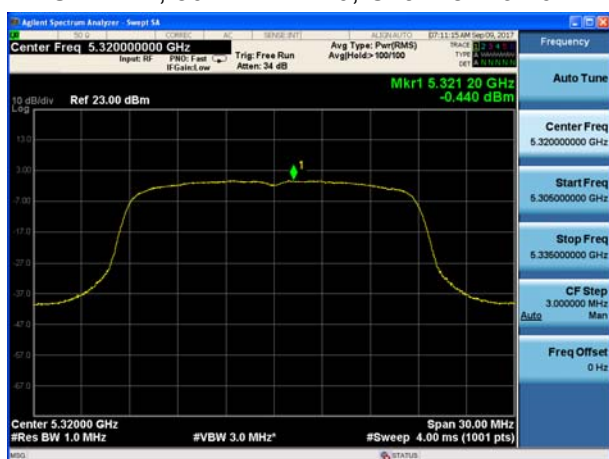
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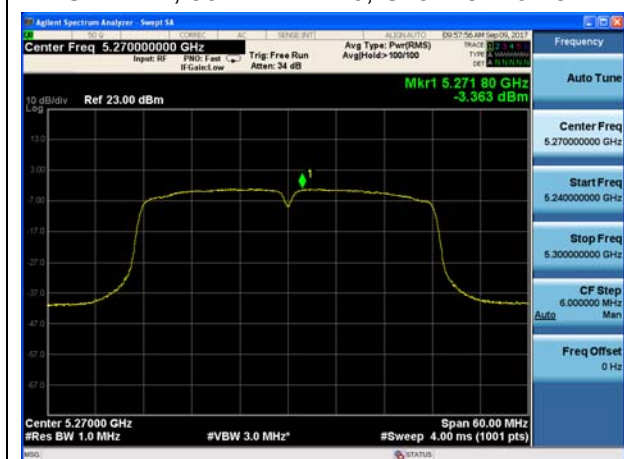
U-NII-2A, 802.11a, Channel No.: 64



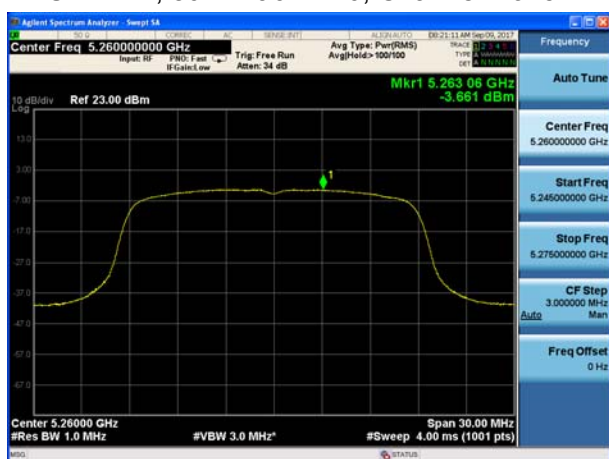
U-NII-2A, 802.11n HT20, Channel No.: 64



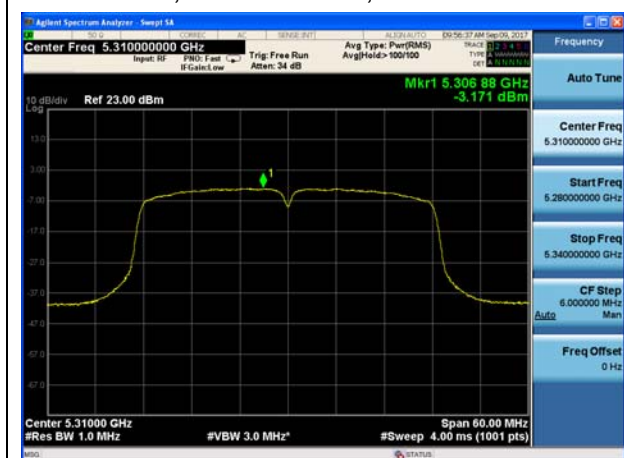
U-NII-2A, 802.11n HT40, Channel No.: 54



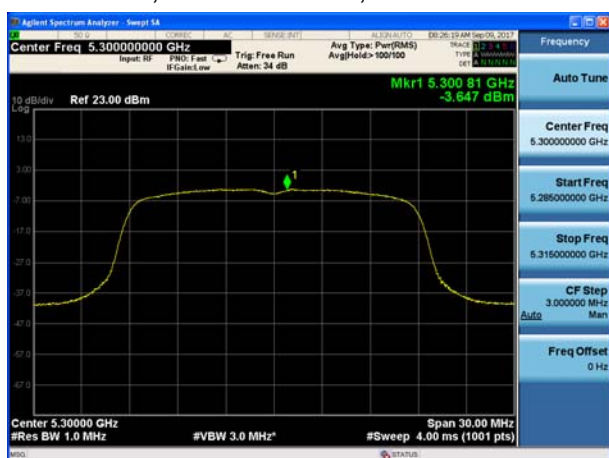
U-NII-2A, 802.11ac HT20, Channel No.:52



U-NII-2A, 802.11n HT40, Channel No.: 62

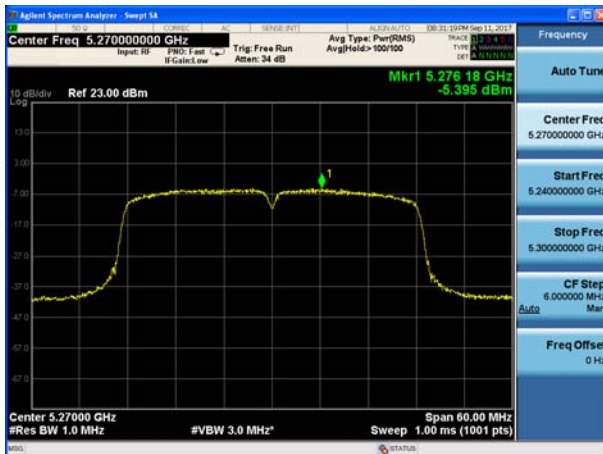


U-NII-2A, 802.11ac HT20, Channel No.: 60

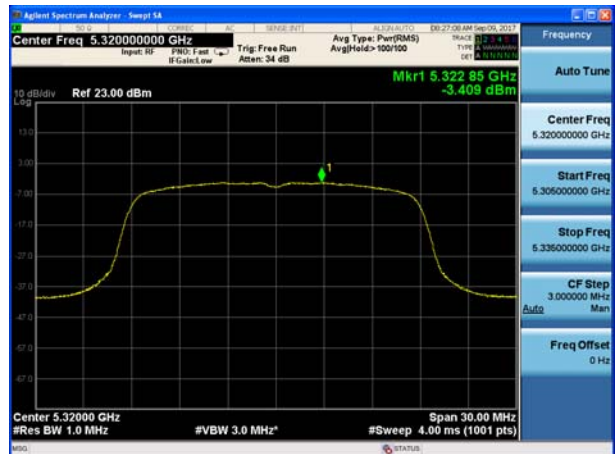




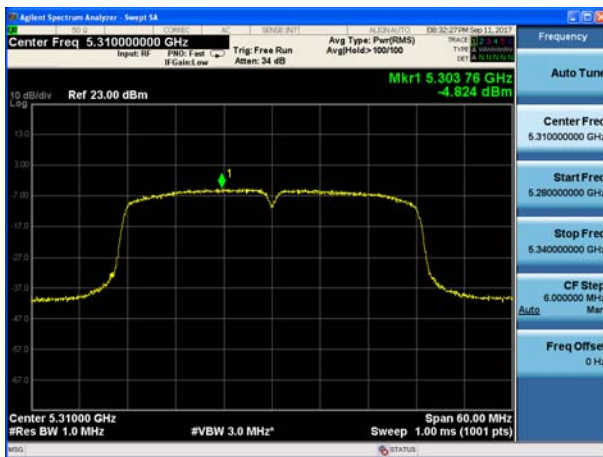
U-NII-2A, 802.11ac HT40, Channel No.: 54



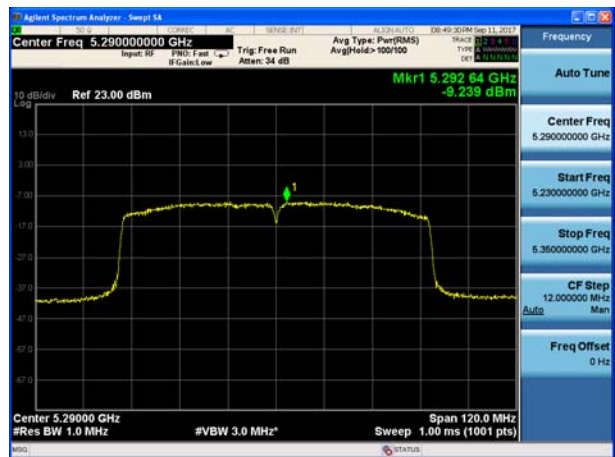
U-NII-2A, 802.11ac HT20, Channel No.: 64



U-NII-2A, 802.11ac HT40, Channel No.: 62

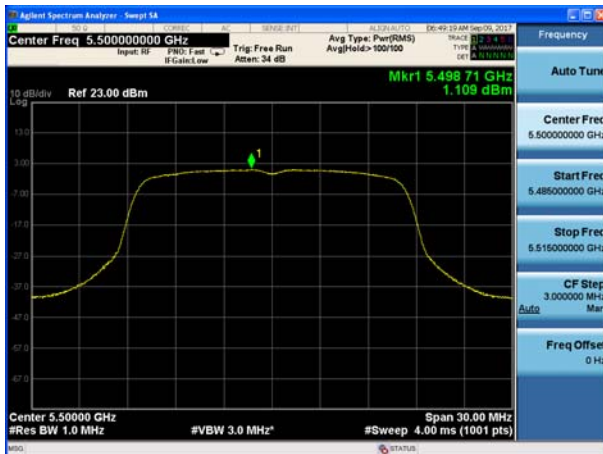


U-NII-2A, 802.11ac HT80, Channel No.: 58





U-NII-2C, 802.11a, Channel No.: 100



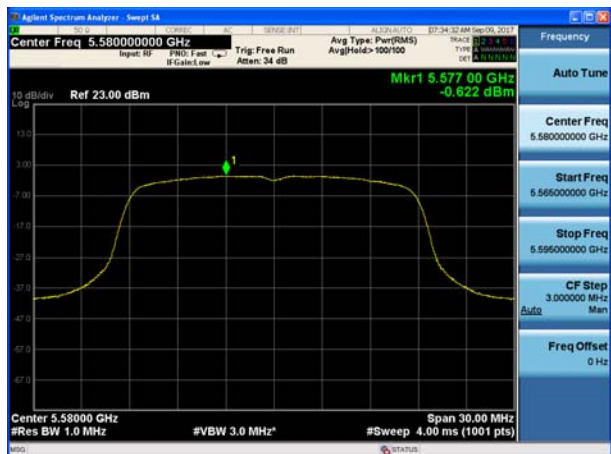
U-NII-2C, 802.11n HT20, Channel No.: 100



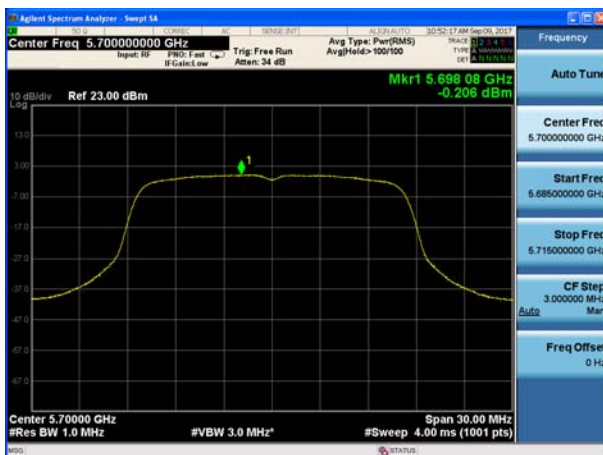
U-NII-2C, 802.11a, Channel No.: 116



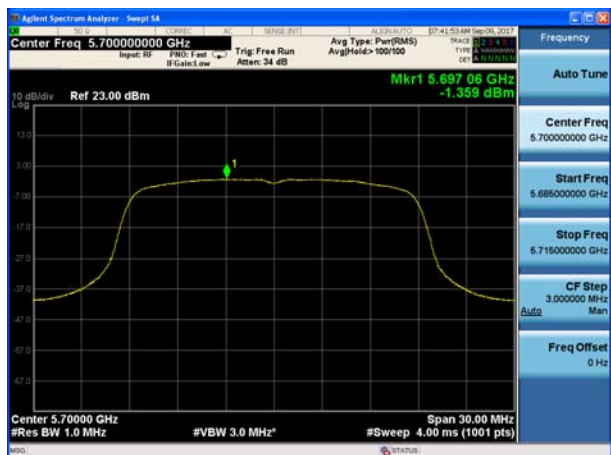
U-NII-2C, 802.11n HT20, Channel No.: 116



U-NII-2C, 802.11a, Channel No.: 140

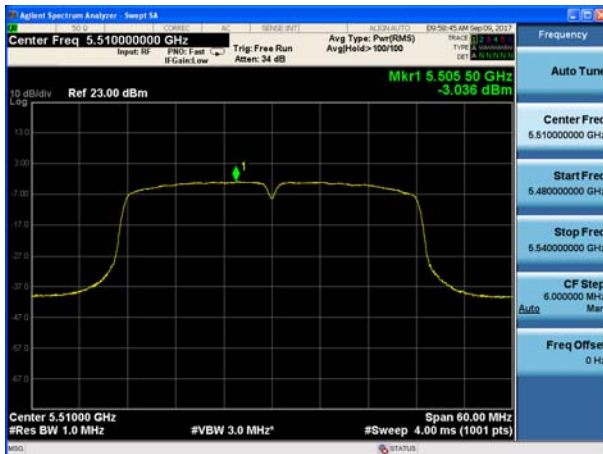


U-NII-2C, 802.11n HT20, Channel No.: 140





U-NII-2C, 802.11n HT40, Channel No.: 102



U-NII-2C, 802.11ac HT20, Channel No.: 100



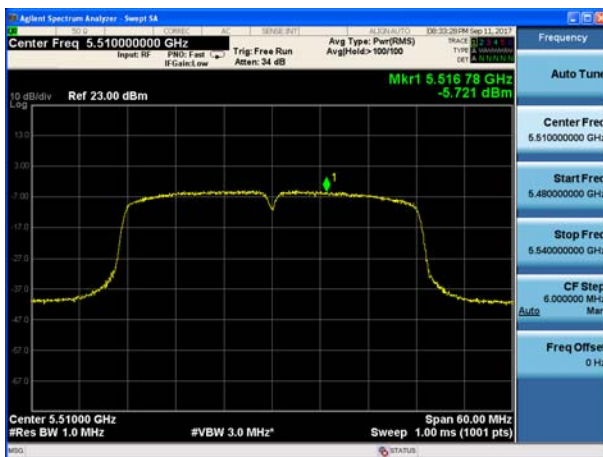
U-NII-2C, 802.11n HT40, Channel No.: 134



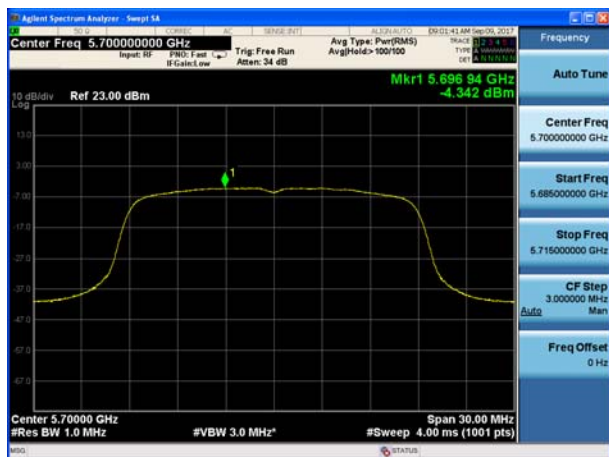
U-NII-2C, 802.11ac HT20, Channel No.: 116



U-NII-2C, 802.11ac HT40, Channel No.: 102

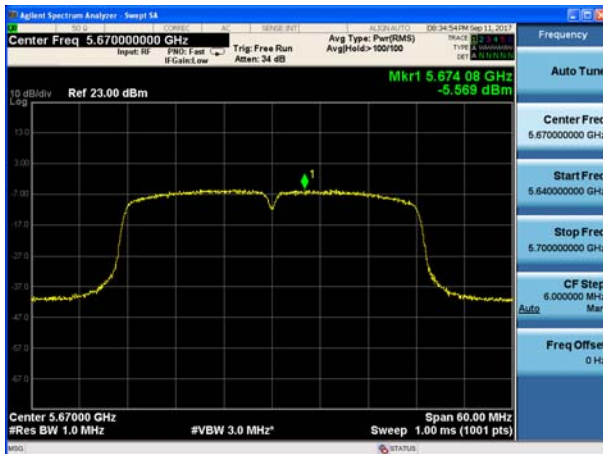


U-NII-2C, 802.11ac HT20, Channel No.: 140

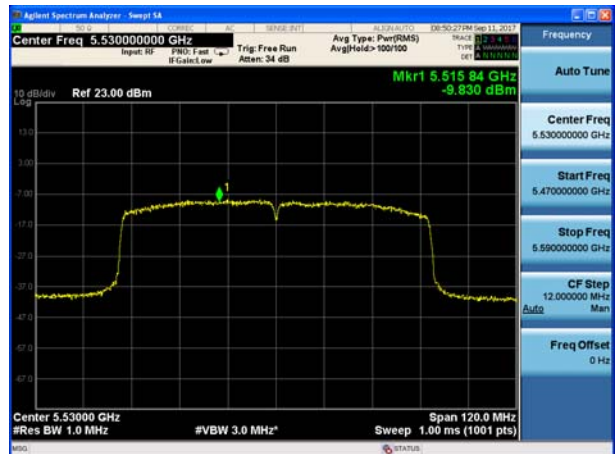




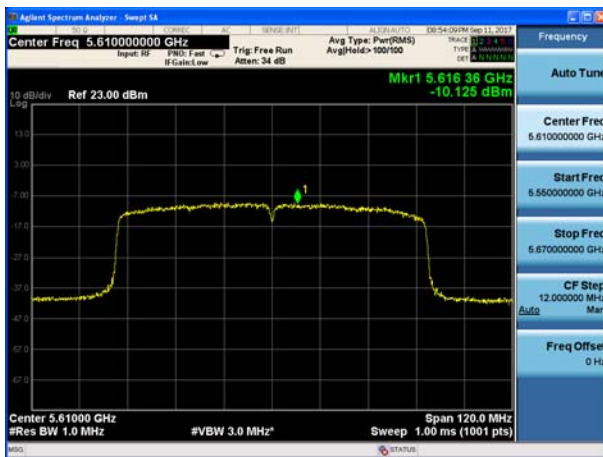
U-NII-2C, 802.11ac HT40, Channel No.: 134



U-NII-2C, 802.11ac HT80, Channel No.: 106



U-NII-2C, 802.11ac HT80, Channel No.: 128



5.5. Unwanted Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10-2013. 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:

Below 1GHz (detector: Peak and Quasi-Peak)

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

Above 1GHz (detector: Peak):

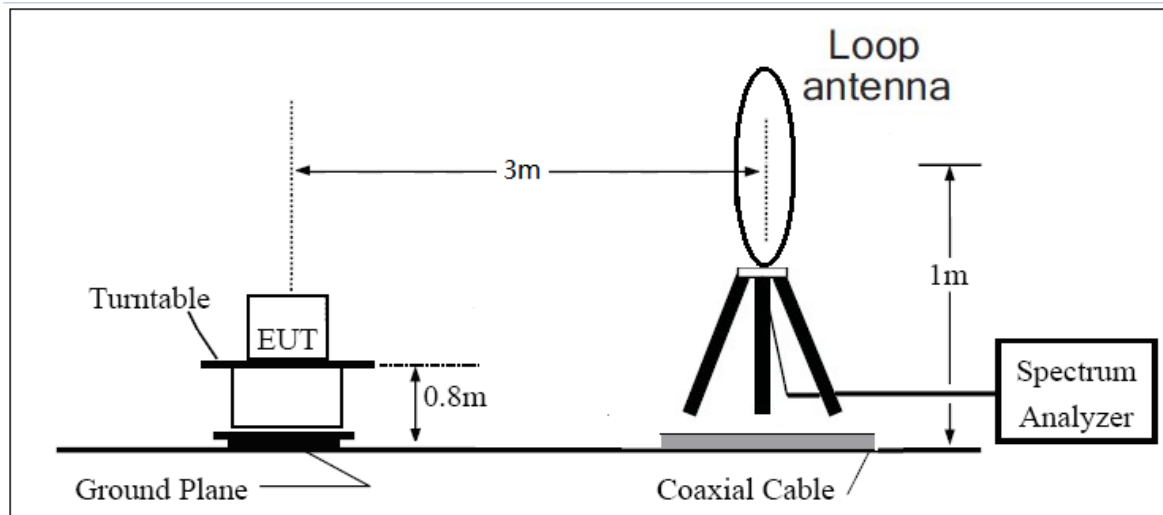
(a) PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO

(b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

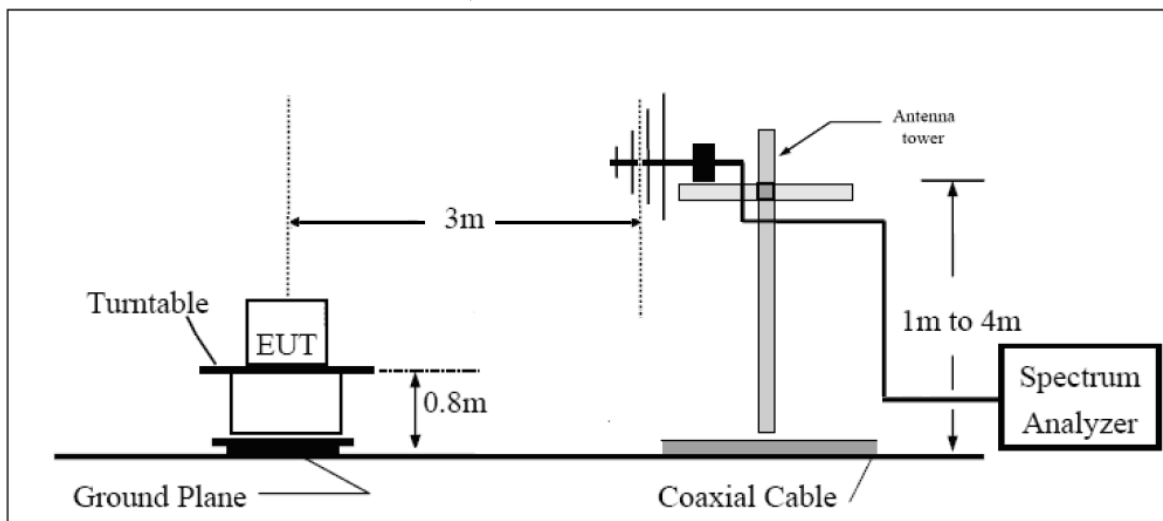
The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie downposition (X axis) and the worst case was recorded.

The test is in transmitting mode.

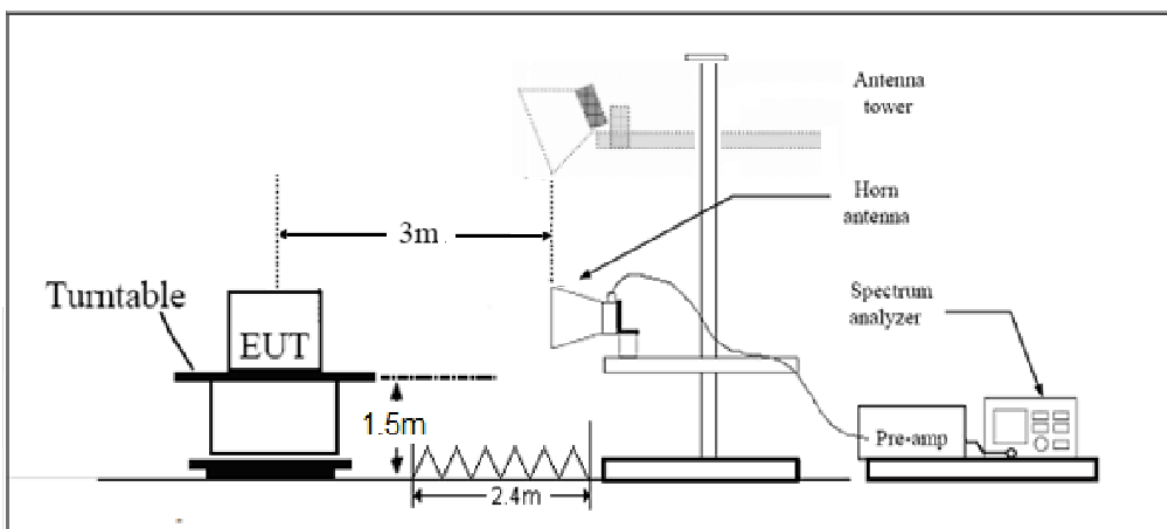
9KHz~~~30MHz



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(uV/m)	Field strength(dBuV/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
¹ 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 $k = 1.96$.

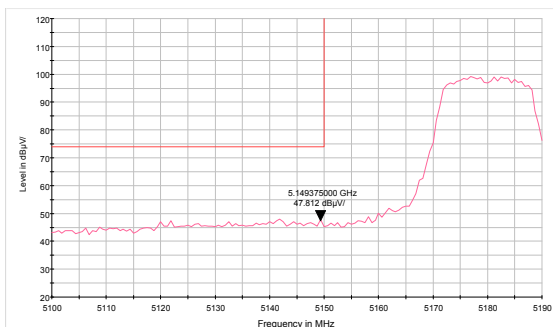
Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.19 dB
200MHz-1GHz	3.63 dB
1GHz-26.5G	3.68 dB
26.5G-40GHz	4.76dB

Test Results:

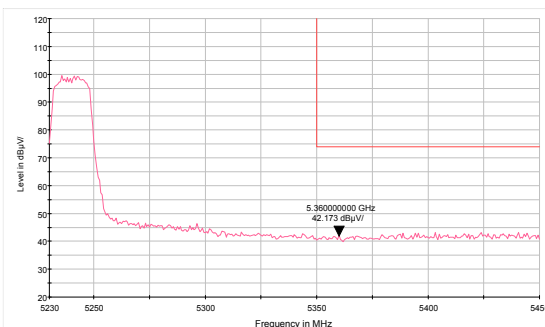
The signal beyond the limit is carrier.

U-NII-1

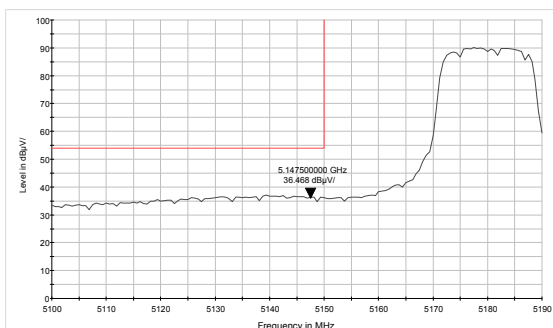
802.11a-Channel 36: Peak



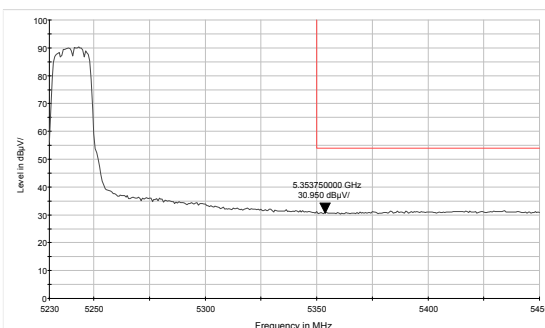
802.11a-Channel 48: Peak



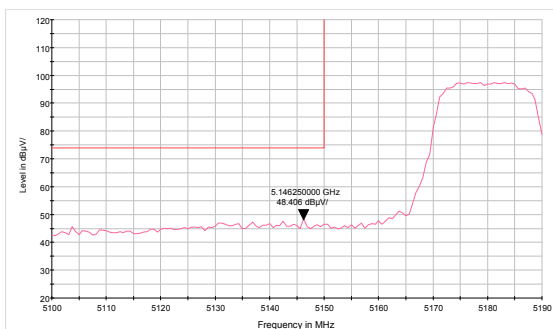
802.11a-Channel 36: Average



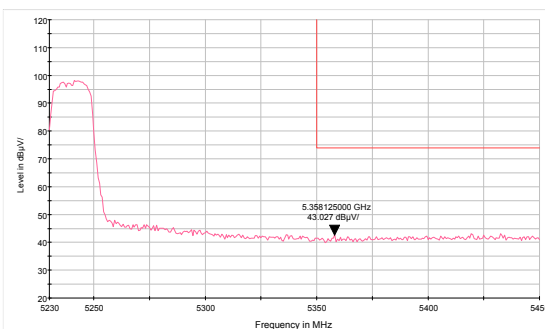
802.11a-Channel 48: Average



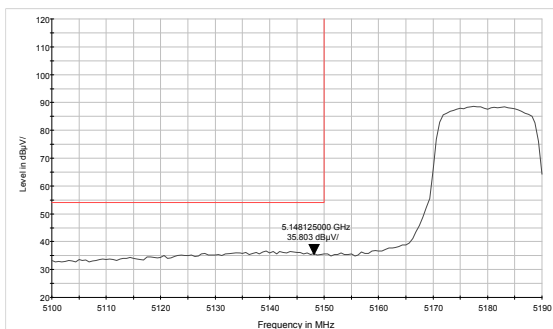
802.11n HT20-Channel 36: Peak



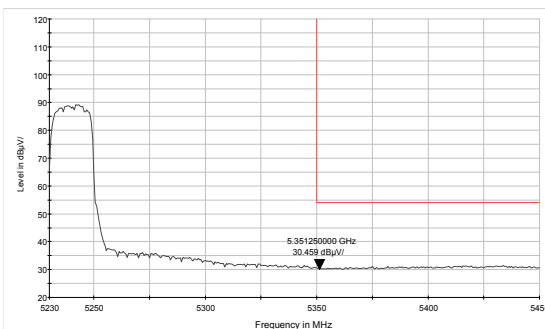
802.11n HT20-Channel 48: Peak

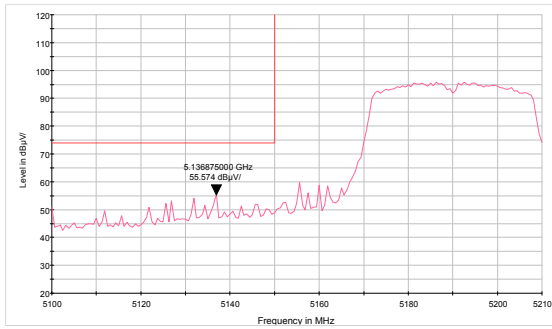
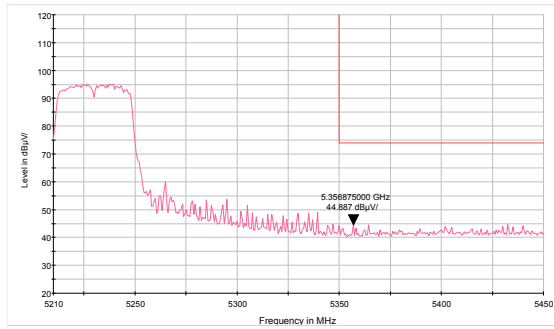
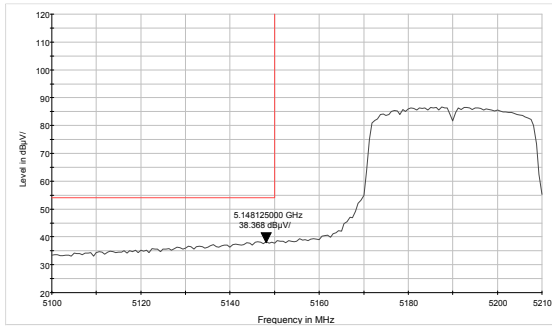
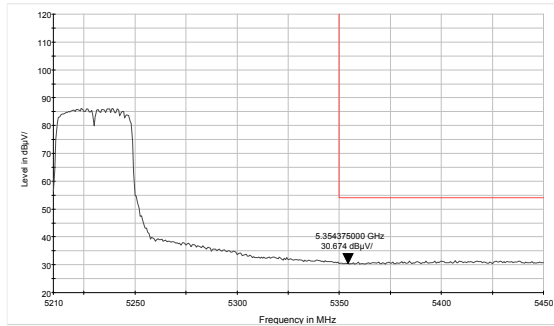
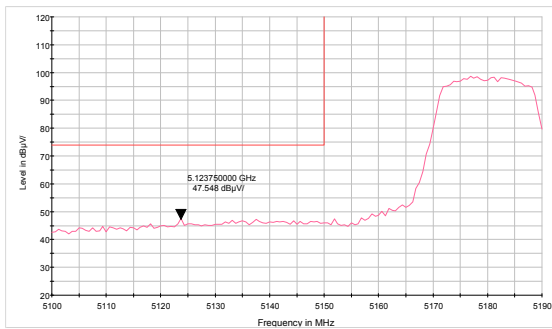
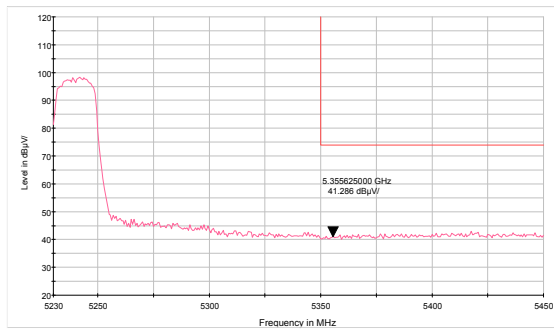
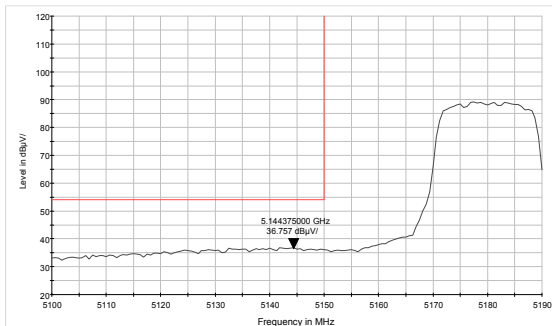
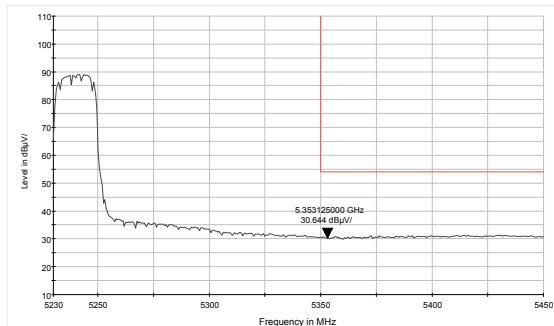


802.11n HT20-Channel 36: Average

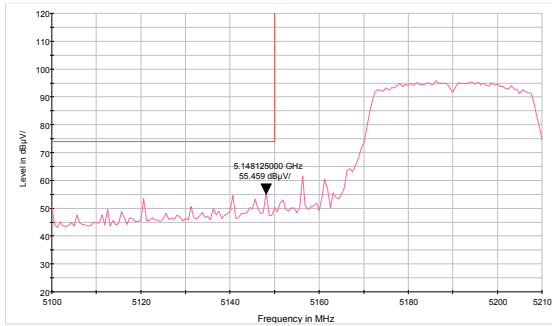


802.11n HT20-Channel 48: Average

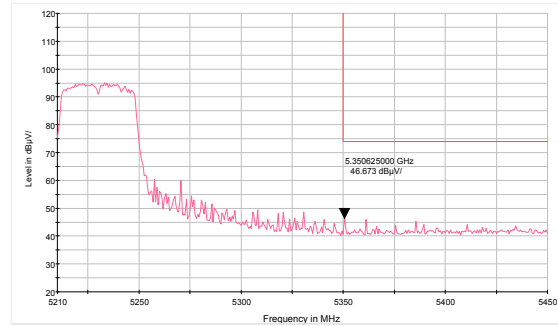


**802.11n HT40-Channel 38: Peak****802.11n HT40-Channel 46: Peak****802.11n HT40-Channel 38: Average****802.11n HT40-Channel 46: Average****802.11ac HT20 -Channel 36: Peak****802.11ac HT20 -Channel 48: Peak****802.11ac HT20-Channel 36: Average****802.11ac HT20 -Channel 48: Average**

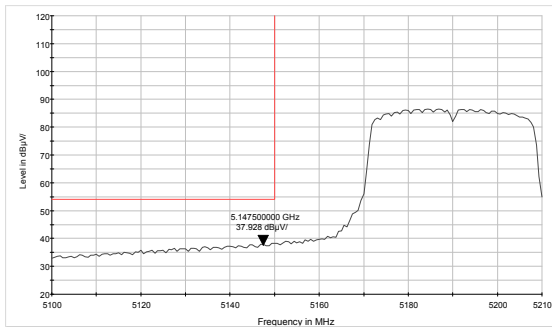
802.11ac HT40-Channel 38: Peak



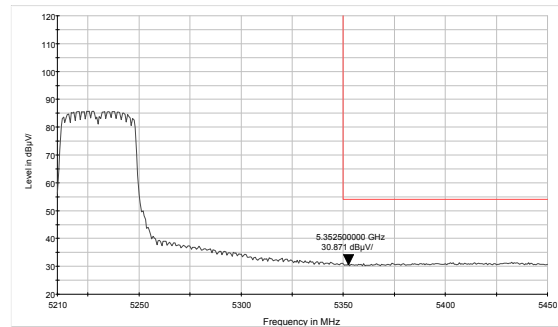
802.11ac HT40-Channel 46: Peak



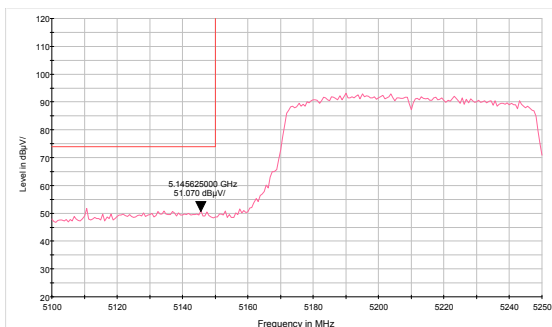
802.11ac HT40-Channel 38: Average



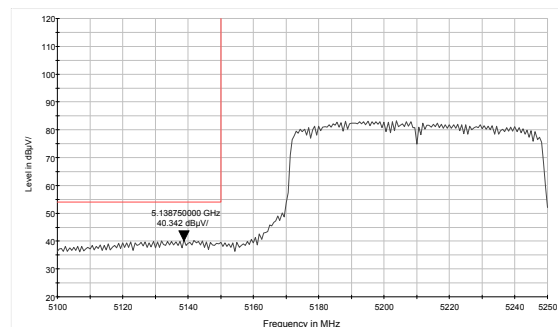
802.11ac HT40-Channel 46: Average



802.11ac HT80 –Channel 42: Peak



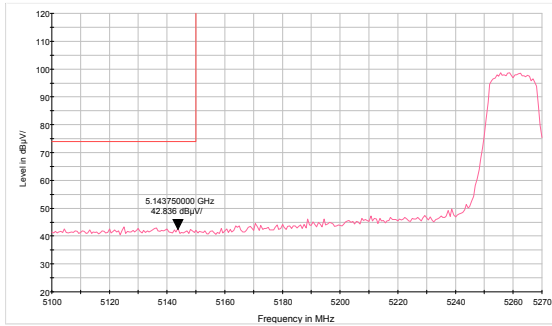
802.11ac HT80- Channel 42: Average



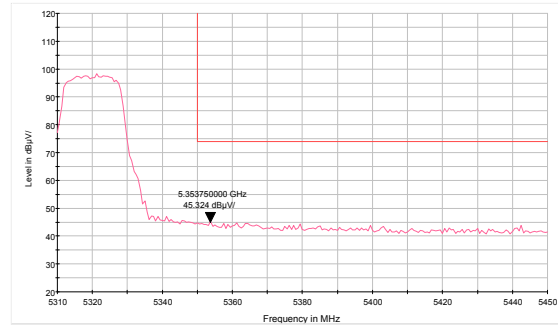


U-NII-2A

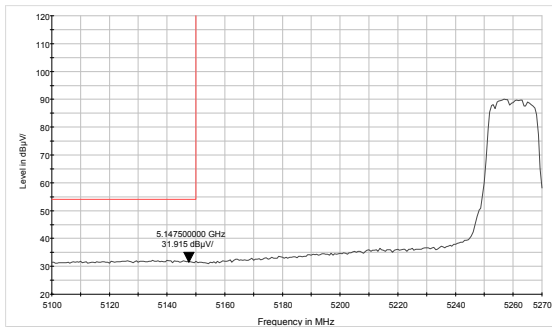
802.11a-Channel 52: Peak



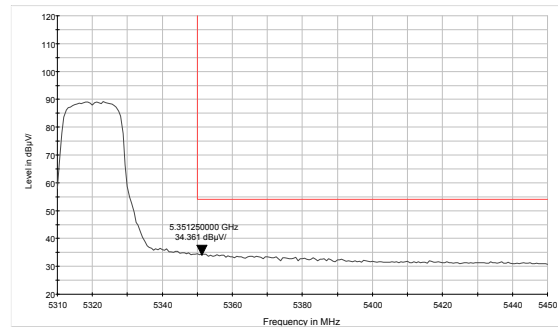
802.11a-Channel 64: Peak



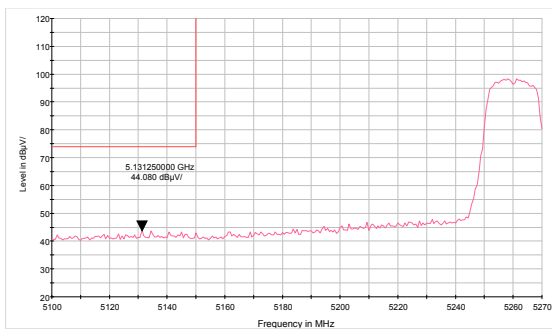
802.11a-Channel 52: Average



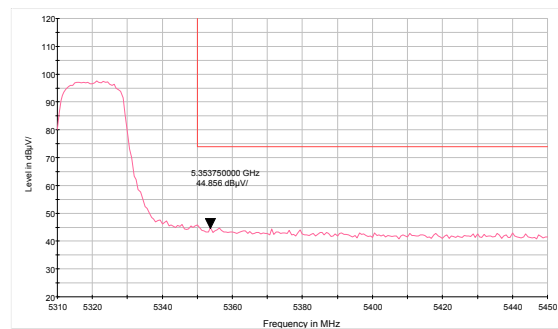
802.11a-Channel 64: Average



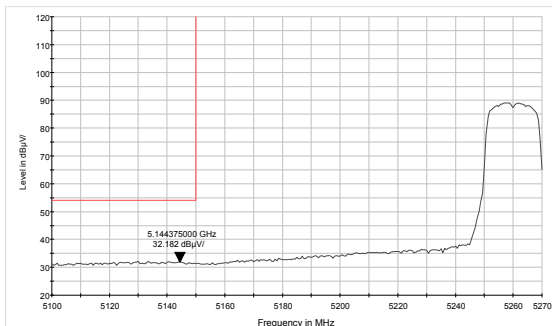
802.11n HT20-Channel 52: Peak



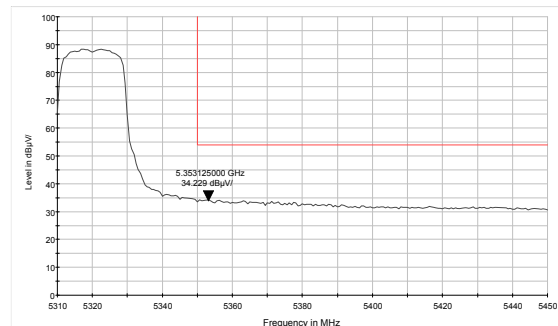
802.11n HT20-Channel 64: Peak



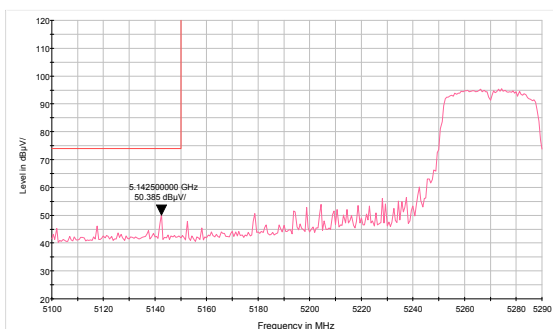
802.11n HT20-Channel 52: Average



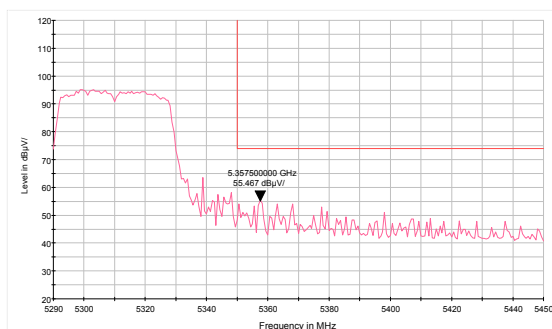
802.11n HT20-Channel 64: Average



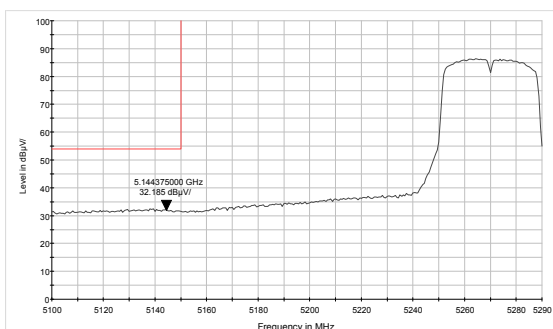
802.11n HT40-Channel 54: Peak



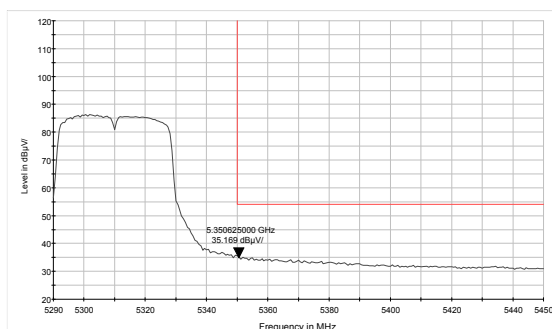
802.11n HT40-Channel 62: Peak



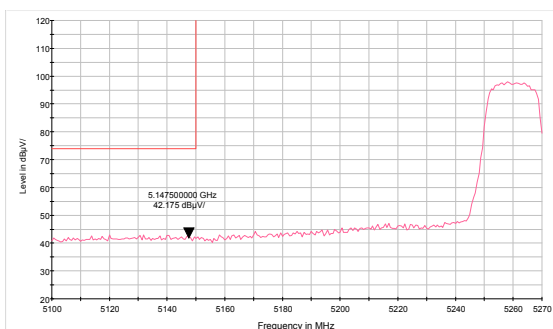
802.11n HT40-Channel 54: Average



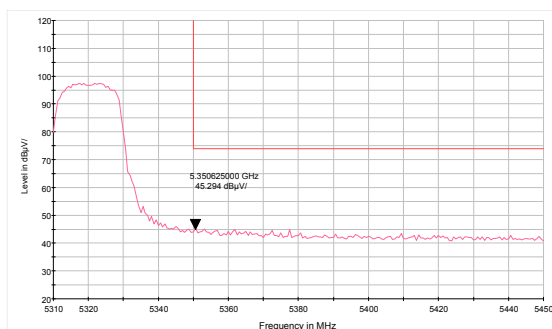
802.11n HT40-Channel 62: Average



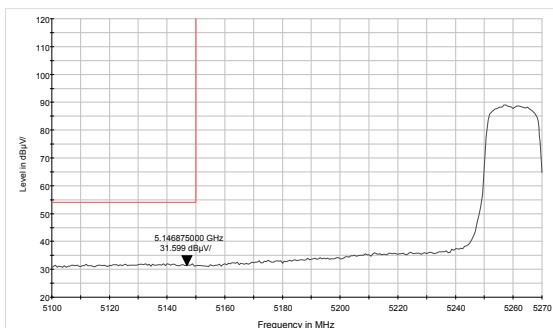
802.11ac HT20 -Channel 52: Peak



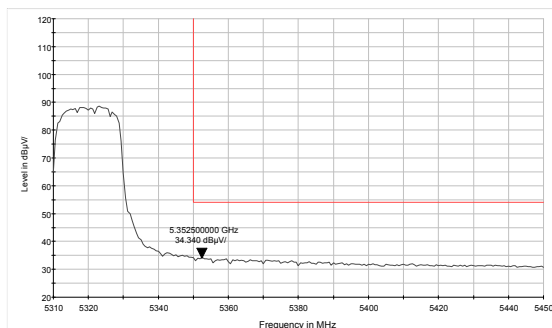
802.11ac HT20 -Channel 64: Peak



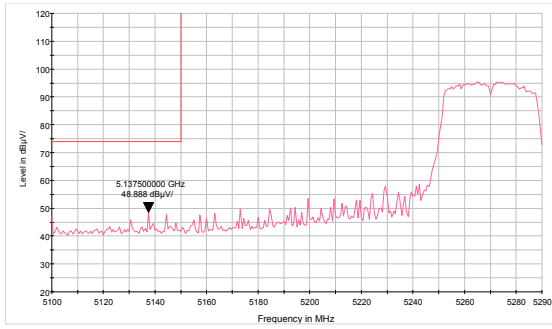
802.11ac HT20-Channel 52: Average



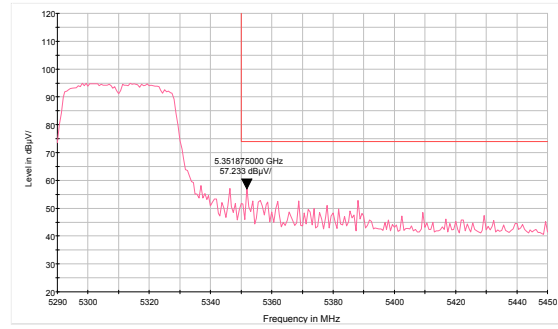
802.11ac HT20 -Channel 64: Average



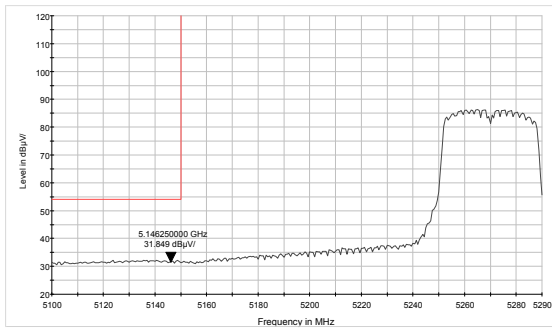
802.11ac HT40-Channel 54: Peak



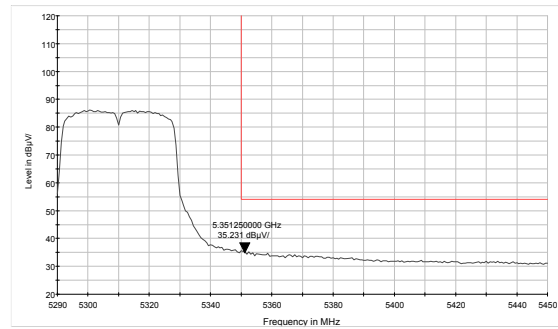
802.11ac HT40-Channel 62: Peak



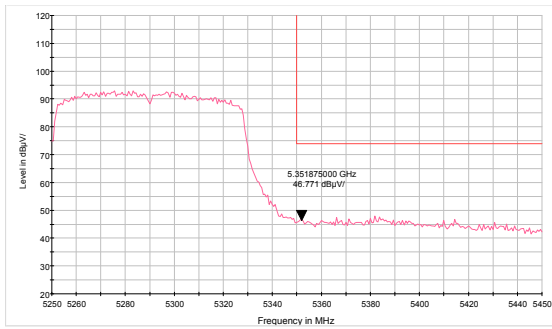
802.11ac HT40-Channel 54: Average



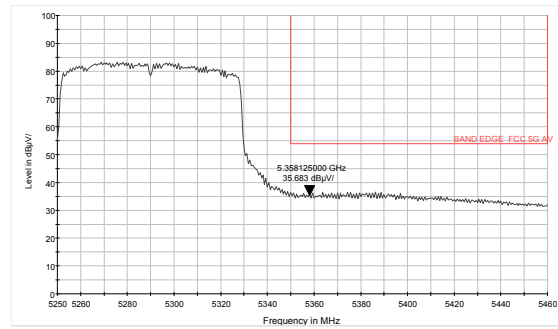
802.11ac HT40-Channel 62: Average



802.11ac HT80 –Channel 58: Peak



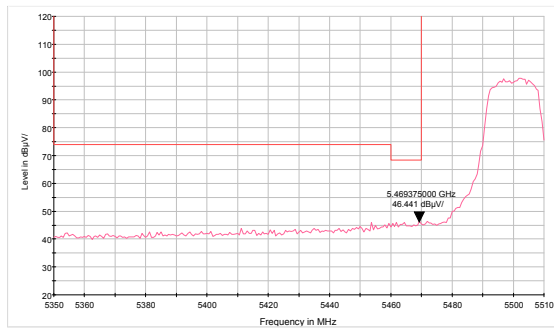
802.11ac HT80- Channel 58: Average



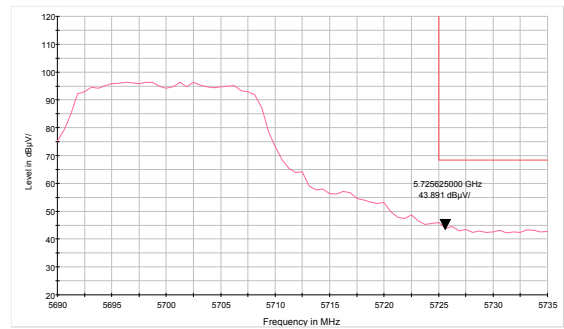


U-NII-2C

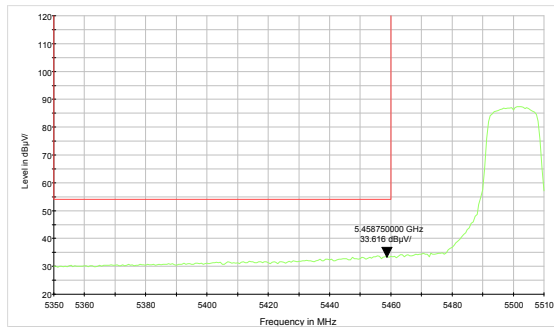
802.11a-Channel 100: Peak



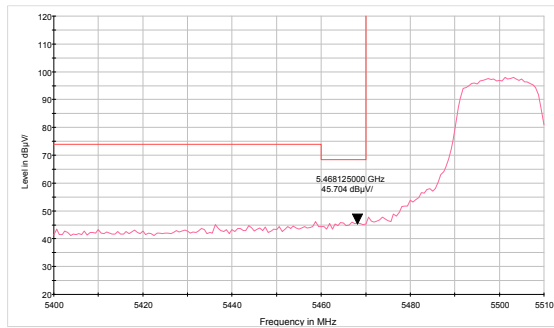
802.11a-Channel 140: Peak



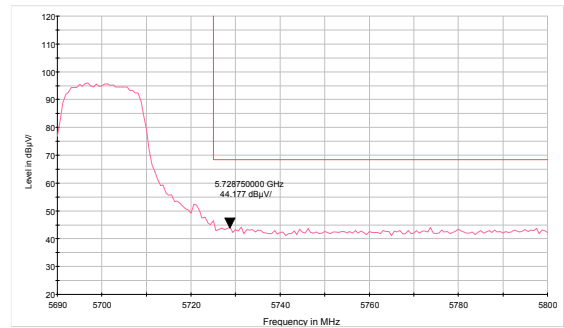
802.11a-Channel 100: Average



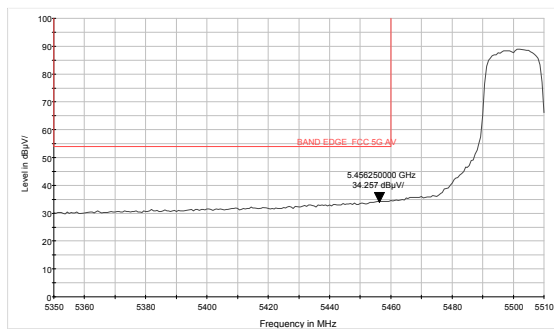
802.11n HT20-Channel 100: Peak



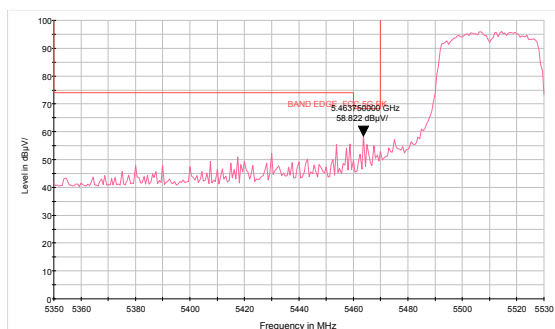
802.11n HT20-Channel 140: Peak



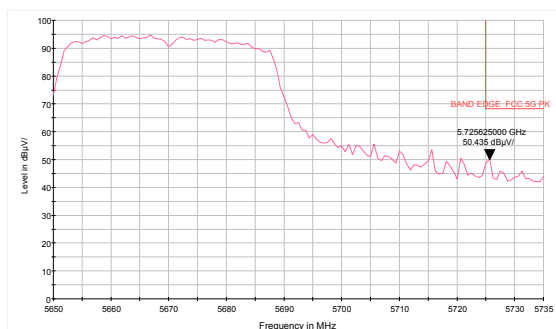
802.11n HT20-Channel 100: Average



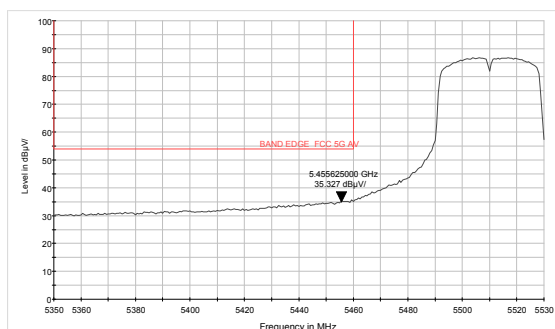
802.11n HT40-Channel 102: Peak



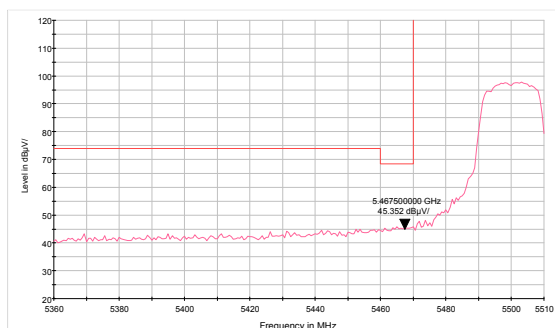
802.11n HT40-Channel 134: Peak



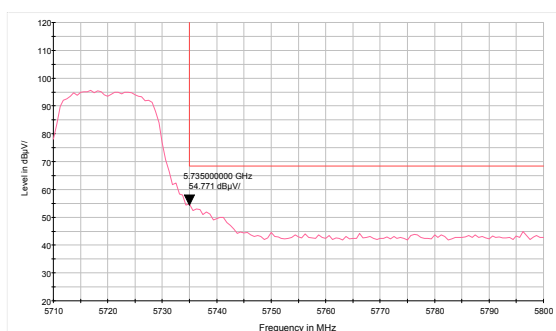
802.11n HT40-Channel 102: Average



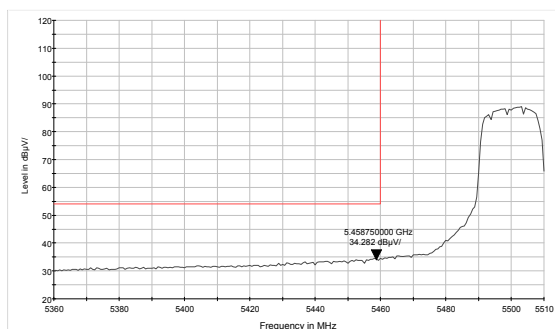
802.11ac HT20 -Channel 100: Peak



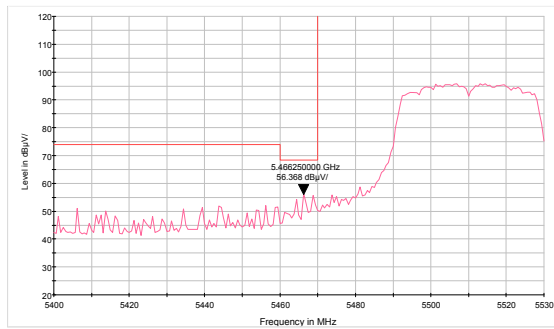
802.11ac HT20 -Channel 144: Peak



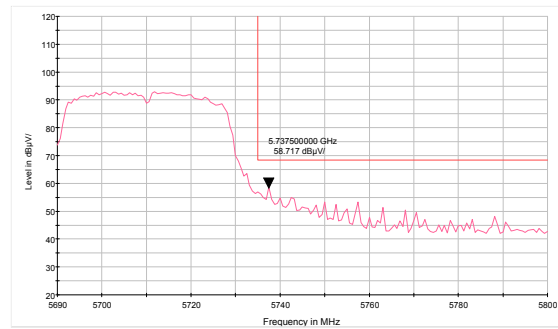
802.11ac HT20-Channel 100: Average



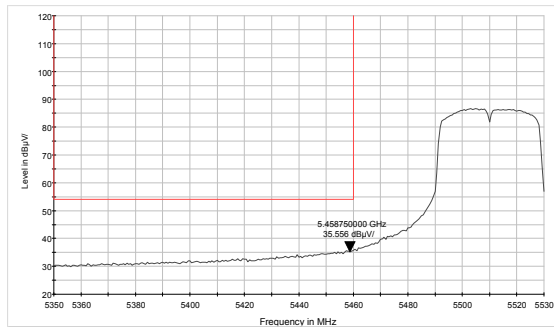
802.11ac HT40-Channel 102: Peak



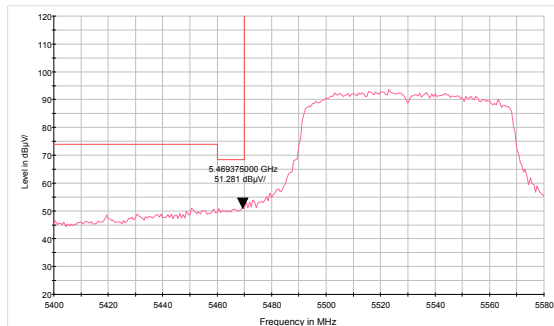
802.11ac HT40-Channel 142: Peak



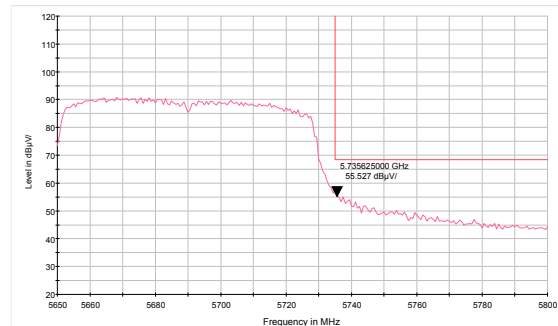
802.11ac HT40-Channel 102: Average



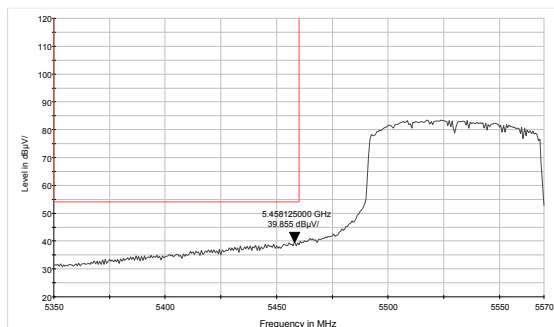
802.11ac HT80 –Channel 106: Peak



802.11ac HT80 –Channel 138: Peak



802.11ac HT80- Channel 106: Average



Result of RE

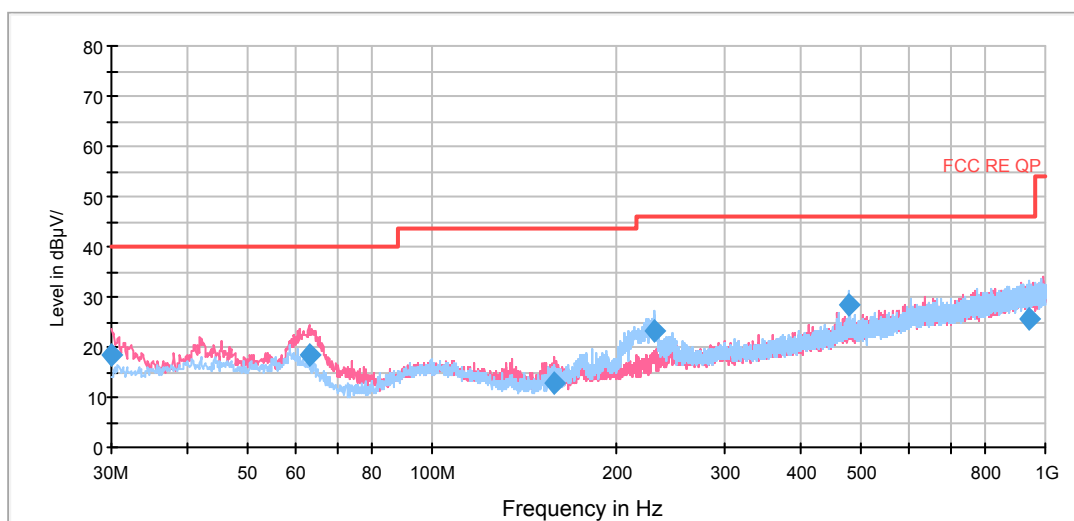
Test result

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, and 9KHz-30MHz, the emissions more than 20 dB below the permissible value are not reported.

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, 802.11a, Channel 36 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Continuous TX mode:

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz



802.11a CH36

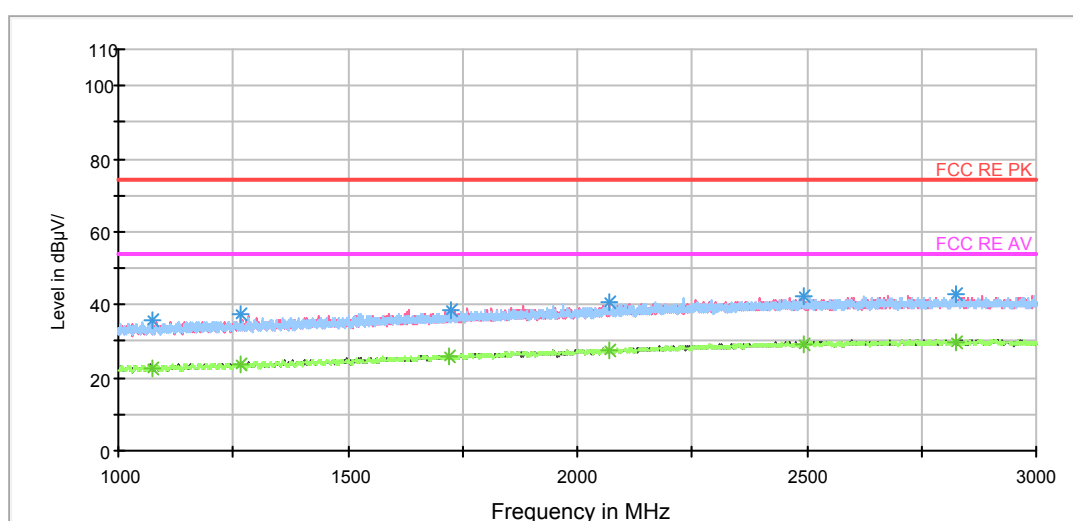
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1073.250000	35.5	100.0	H	4.0	44.3	-8.8	38.5	74
1266.500000	37.7	100.0	H	0.0	45.5	-7.8	36.3	74
1724.750000	38.6	100.0	H	0.0	43.7	-5.1	35.4	74
2071.000000	40.5	100.0	V	358.0	43.4	-2.9	33.5	74
2493.750000	42.4	100.0	H	141.0	43.3	-0.9	31.6	74
2824.750000	42.9	100.0	V	0.0	43.3	-0.4	31.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1073.250000	22.4	100.0	H	4.0	31.2	-8.8	31.6	54
1266.500000	23.7	100.0	H	0.0	31.5	-7.8	30.3	54
1720.500000	25.8	100.0	V	0.0	30.9	-5.1	28.2	54
2069.250000	27.5	100.0	V	212.0	30.5	-3.0	26.5	54
2493.750000	29.2	100.0	H	141.0	30.1	-0.9	24.8	54
2824.750000	29.9	100.0	V	0.0	30.3	-0.4	24.1	54

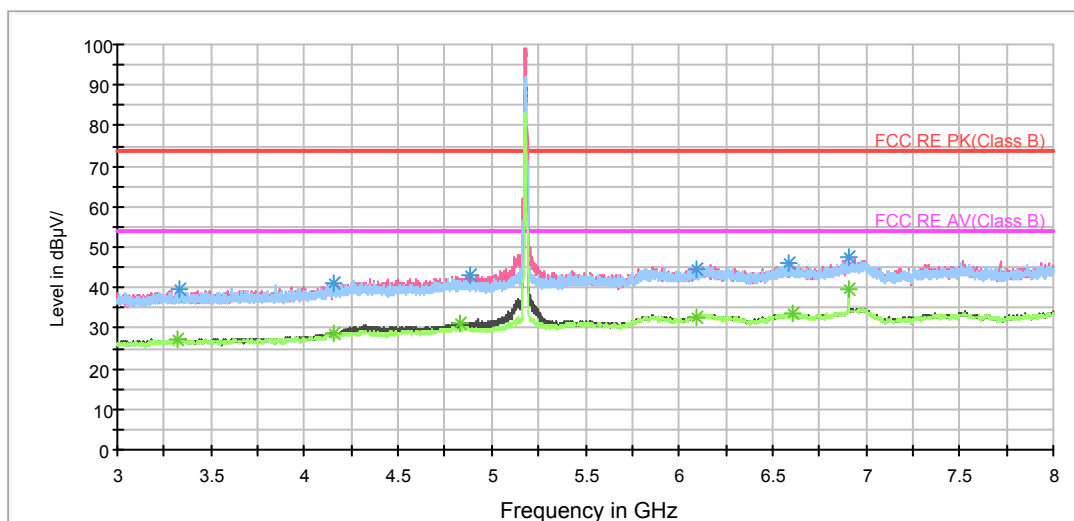
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



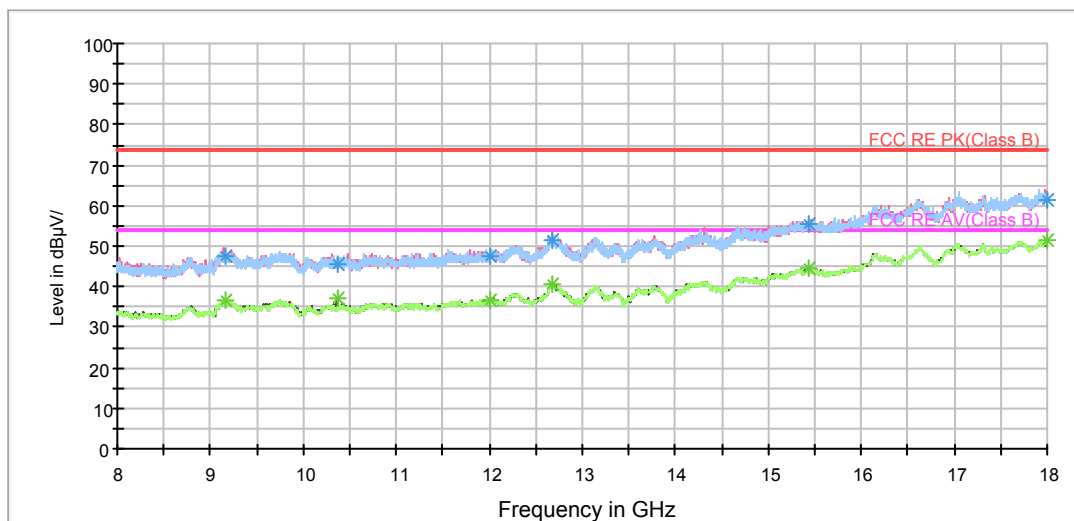
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



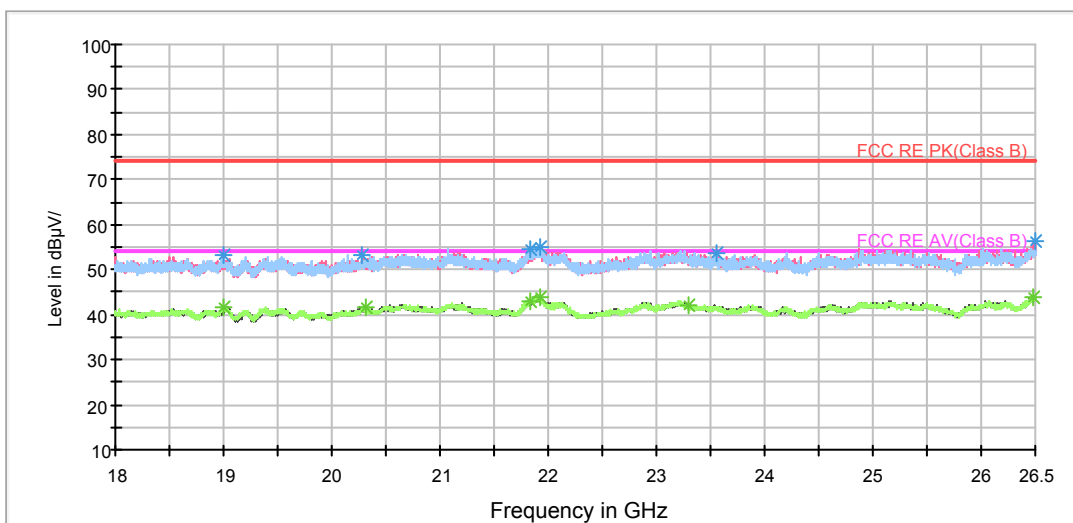
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



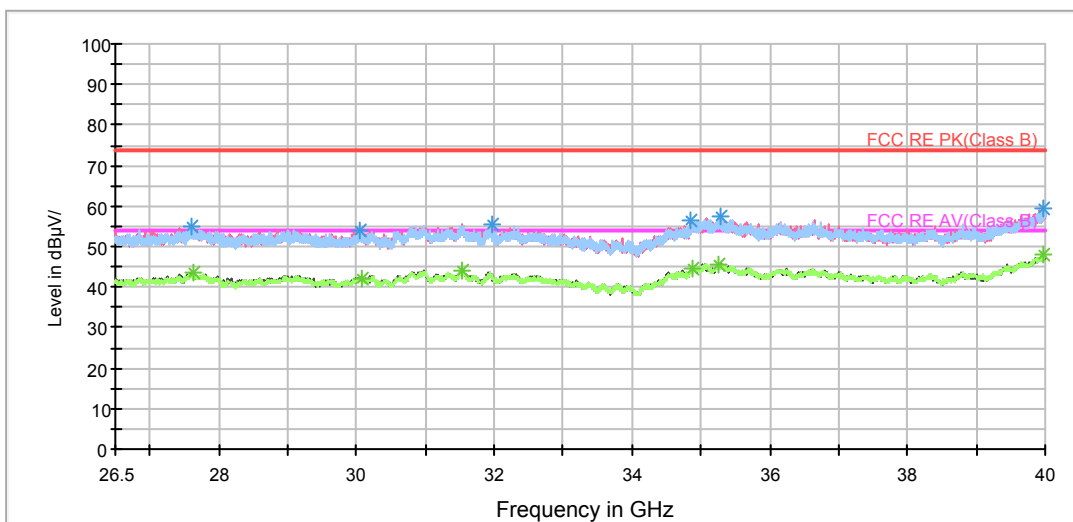
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11a CH40

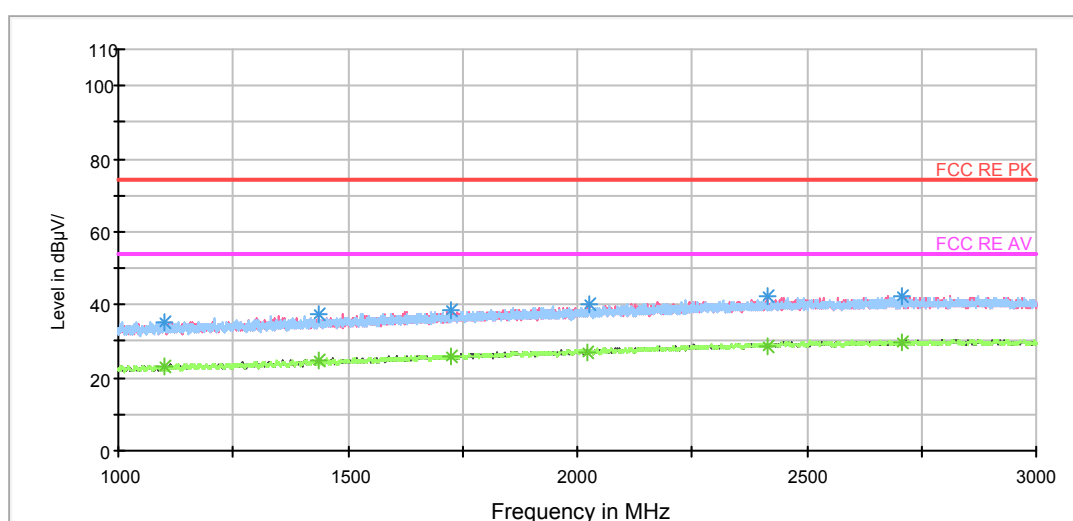
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1101.250000	35.4	100.0	V	0.0	44.1	-8.7	38.6	74
1438.500000	37.2	100.0	V	142.0	43.9	-6.7	36.8	74
1723.000000	38.3	100.0	V	337.0	43.4	-5.1	35.7	74
2027.750000	40.2	100.0	V	337.0	43.6	-3.4	33.8	74
2412.750000	42.4	100.0	V	337.0	43.6	-1.2	31.6	74
2707.750000	42.3	100.0	V	236.0	43.0	-0.7	31.7	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1101.250000	23.1	100.0	V	0.0	31.8	-8.7	30.9	54
1438.500000	24.6	100.0	V	142.0	31.3	-6.7	29.4	54
1723.000000	26.1	100.0	V	337.0	31.2	-5.1	27.9	54
2021.750000	27.0	100.0	V	0.0	30.3	-3.3	27.0	54
2412.750000	28.7	100.0	V	337.0	29.9	-1.2	25.3	54
2707.750000	29.9	100.0	V	236.0	30.6	-0.7	24.1	54

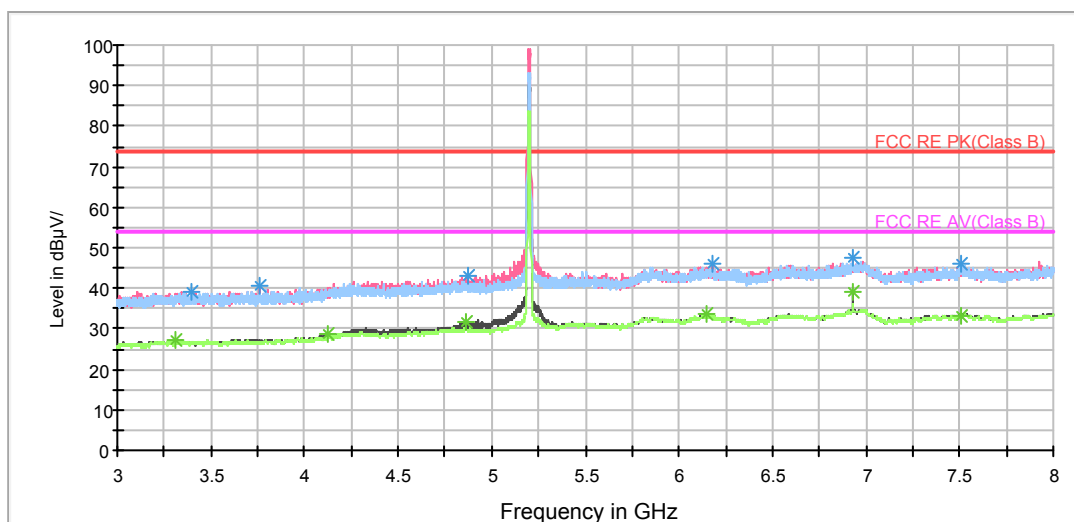
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



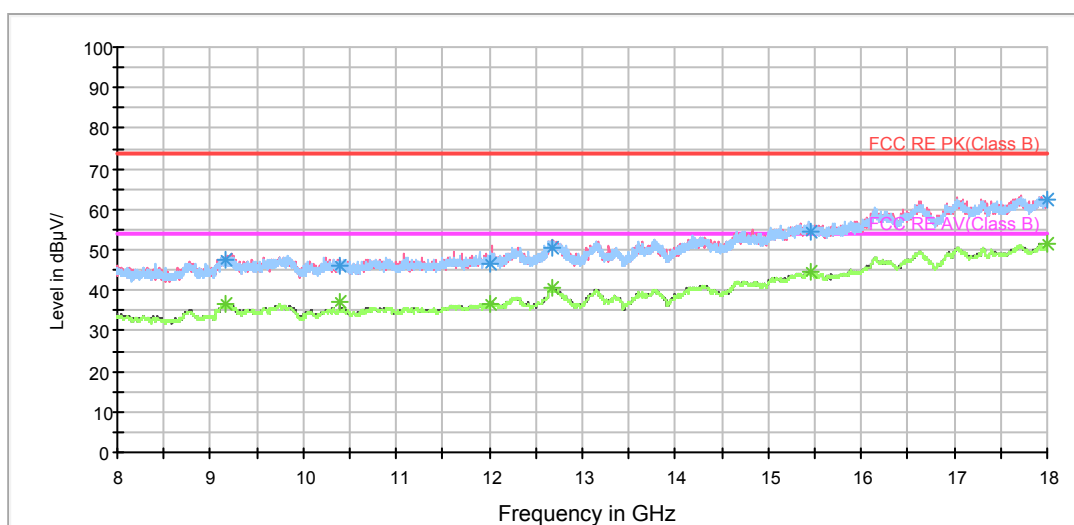
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



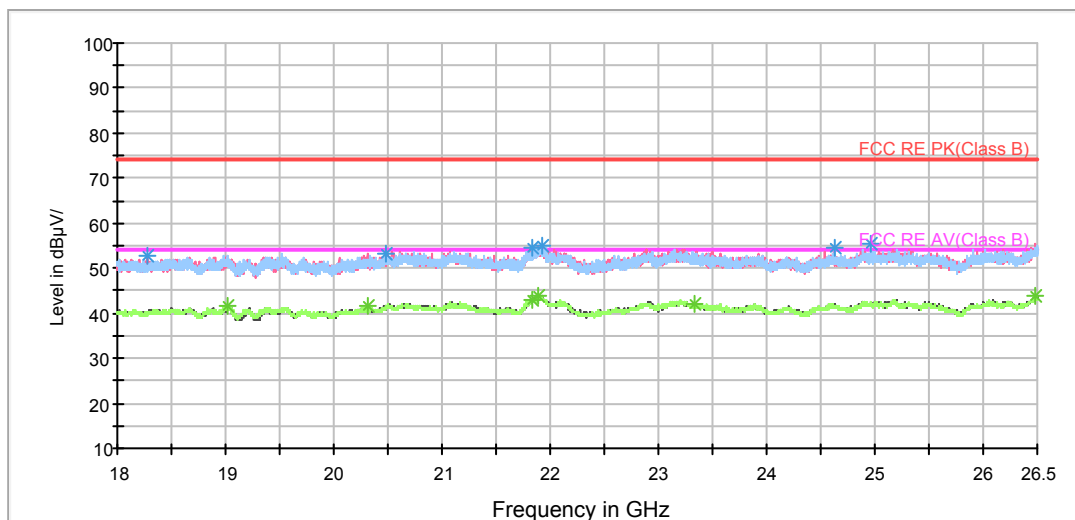
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



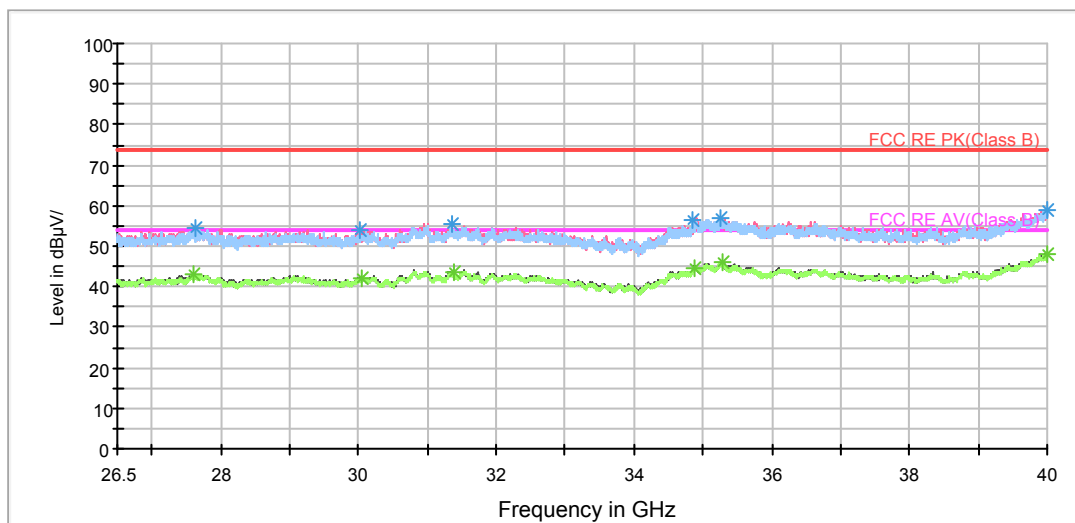
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11a CH48

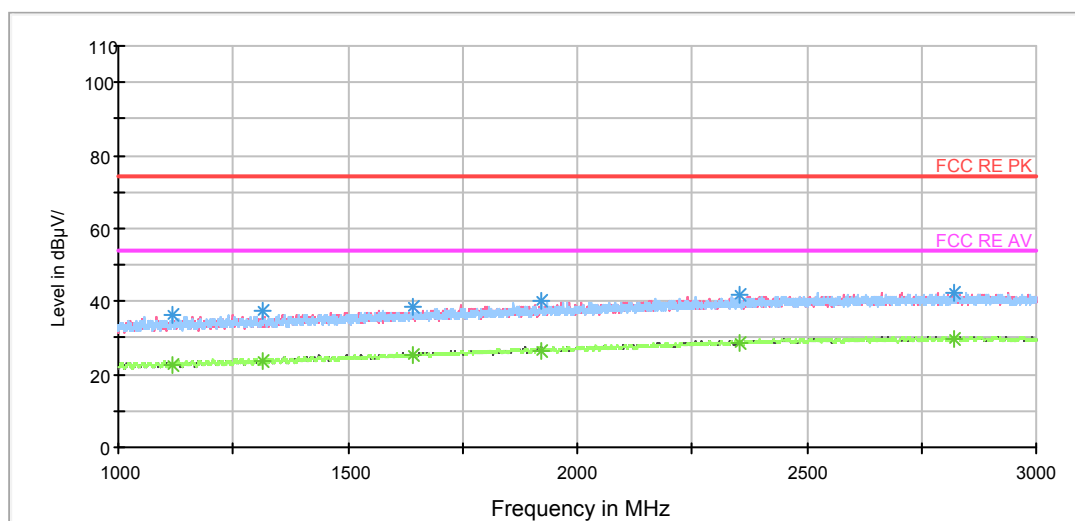
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1118.000000	36.1	100.0	H	158.0	44.7	-8.6	37.9	74
1313.750000	37.3	100.0	H	13.0	44.8	-7.5	36.7	74
1641.000000	38.4	100.0	H	0.0	44.0	-5.6	35.6	74
1922.750000	39.9	100.0	V	358.0	43.7	-3.8	34.1	74
2352.000000	41.6	100.0	V	151.0	43.1	-1.5	32.4	74
2821.250000	42.5	100.0	H	88.0	42.9	-0.4	31.5	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1118.000000	22.8	100.0	H	158.0	31.4	-8.6	31.2	54
1313.750000	23.6	100.0	H	13.0	31.1	-7.5	30.4	54
1641.000000	25.4	100.0	H	0.0	31.0	-5.6	28.6	54
1922.750000	26.6	100.0	V	358.0	30.4	-3.8	27.4	54
2352.000000	28.8	100.0	V	151.0	30.3	-1.5	25.2	54
2821.250000	29.8	100.0	H	88.0	30.2	-0.4	24.2	54

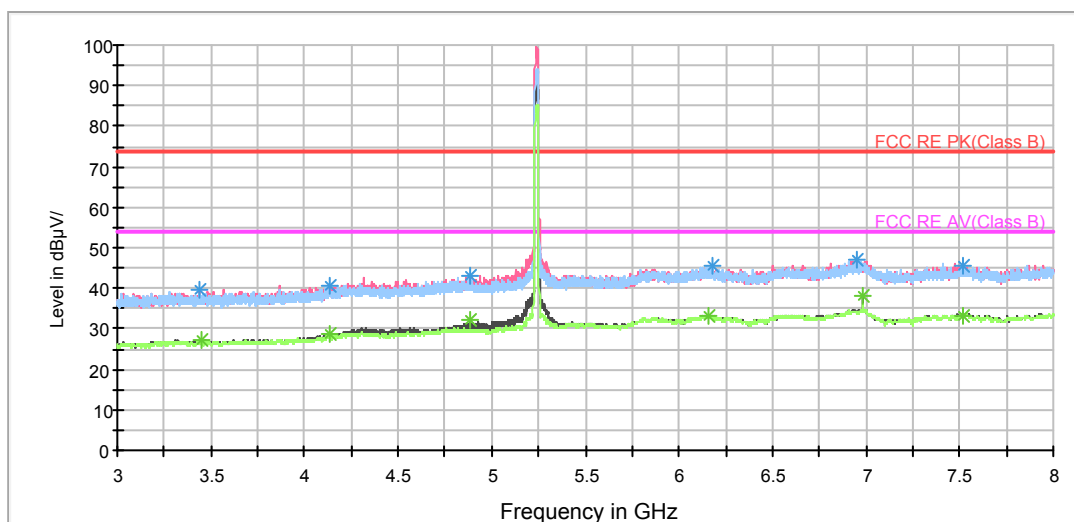
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



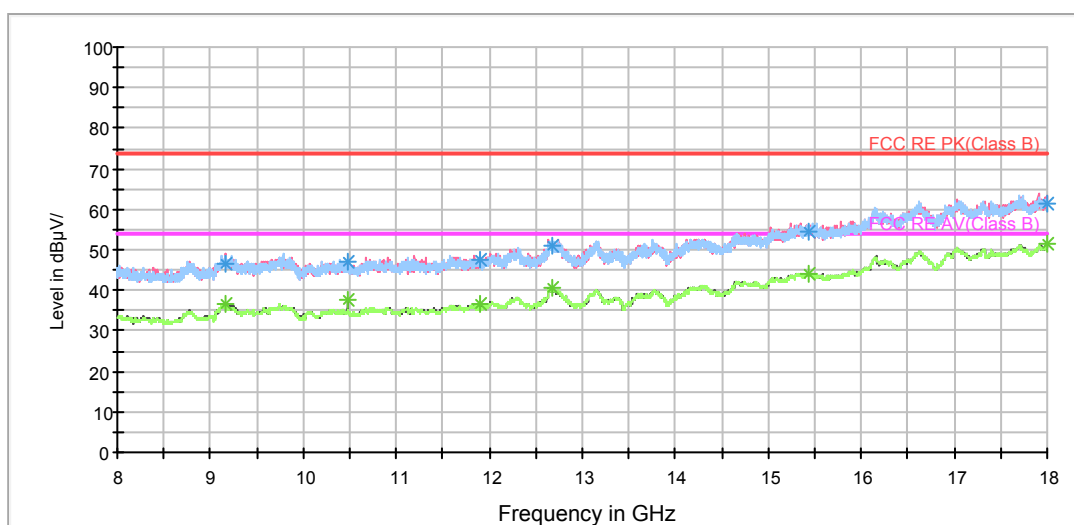
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



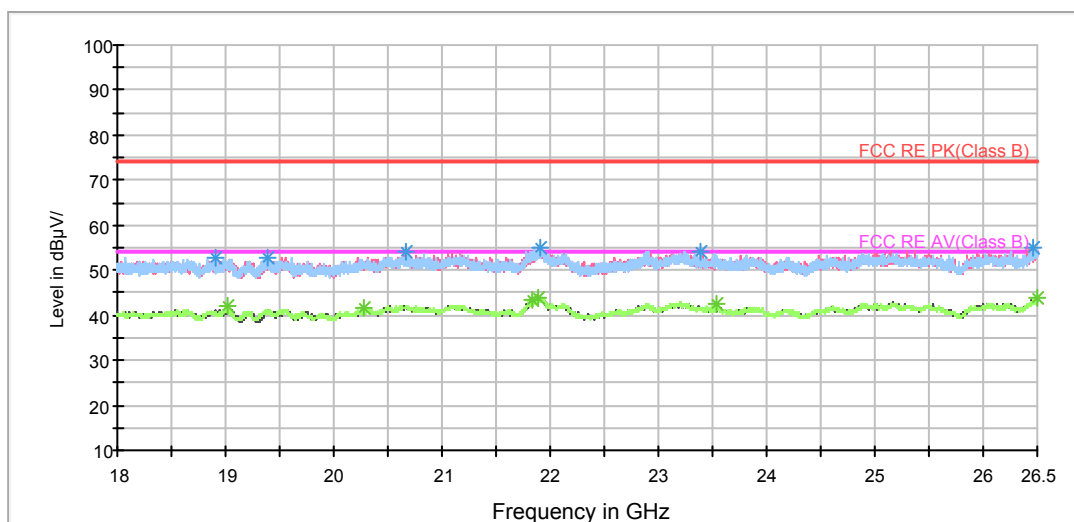
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



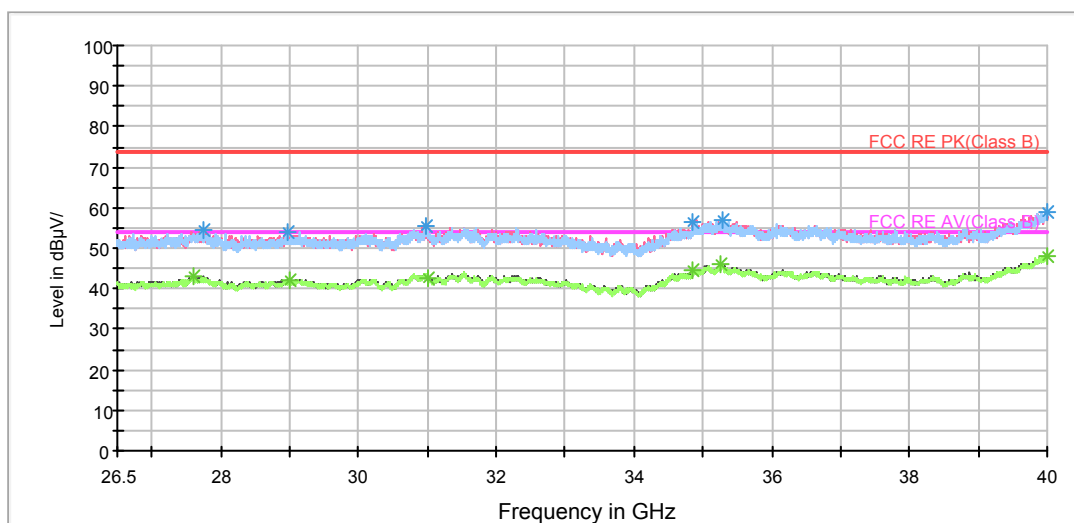
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11a CH52

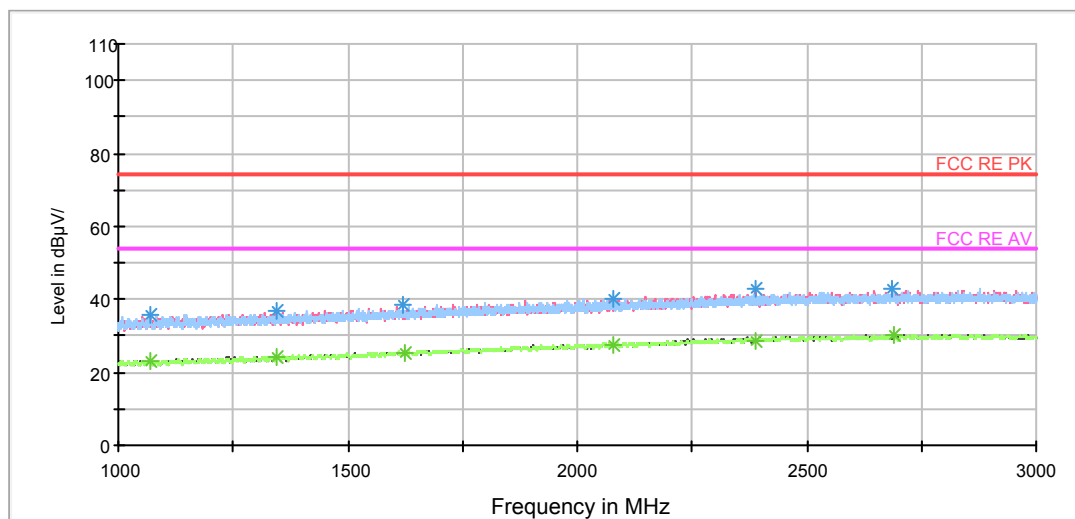
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1068.500000	35.8	100.0	V	277.0	44.7	-8.9	38.2	74
1345.500000	36.8	100.0	V	0.0	44.1	-7.3	37.2	74
1622.000000	38.6	100.0	H	0.0	44.3	-5.7	35.4	74
2077.250000	40.1	100.0	H	0.0	43.1	-3.0	33.9	74
2386.500000	42.8	100.0	V	257.0	44.2	-1.4	31.2	74
2686.000000	43.1	100.0	H	240.0	43.7	-0.6	30.9	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1069.500000	22.8	100.0	V	297.0	31.7	-8.9	31.2	54
1345.500000	24.1	100.0	V	0.0	31.4	-7.3	29.9	54
1623.000000	25.3	100.0	H	154.0	31.0	-5.7	28.7	54
2076.750000	27.3	100.0	V	359.0	30.3	-3.0	26.7	54
2386.500000	28.7	100.0	V	257.0	30.1	-1.4	25.3	54
2691.250000	30.0	100.0	H	0.0	30.7	-0.7	24.0	54

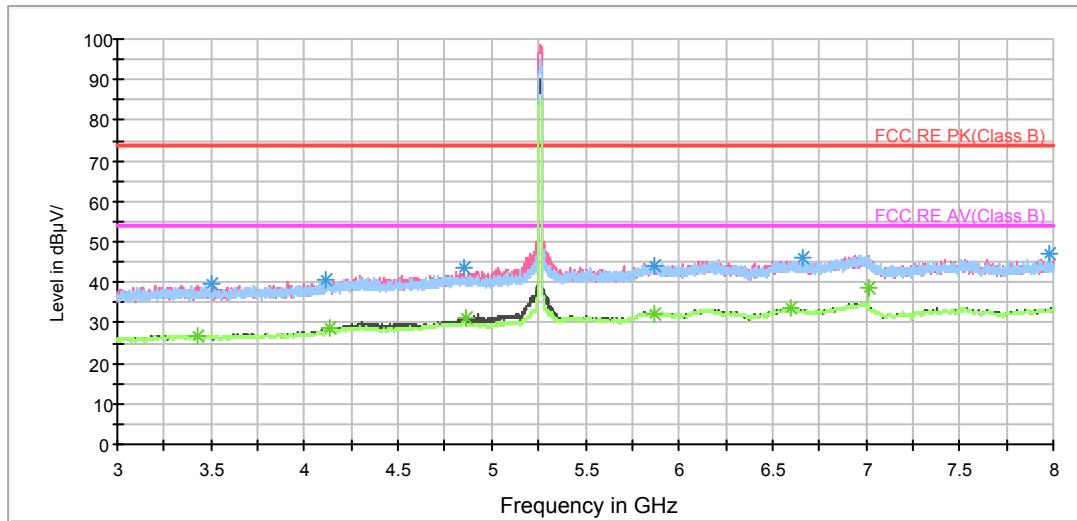
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



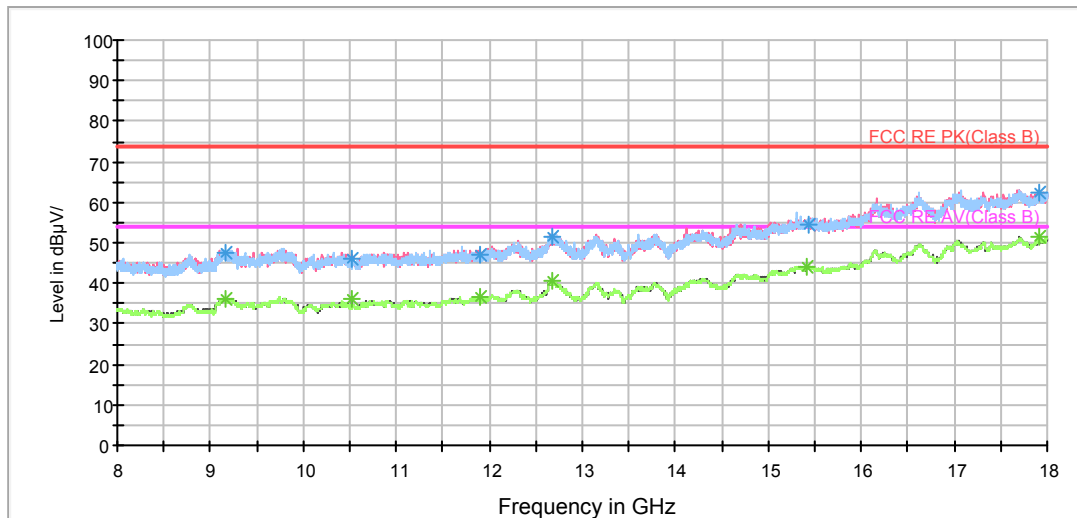
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



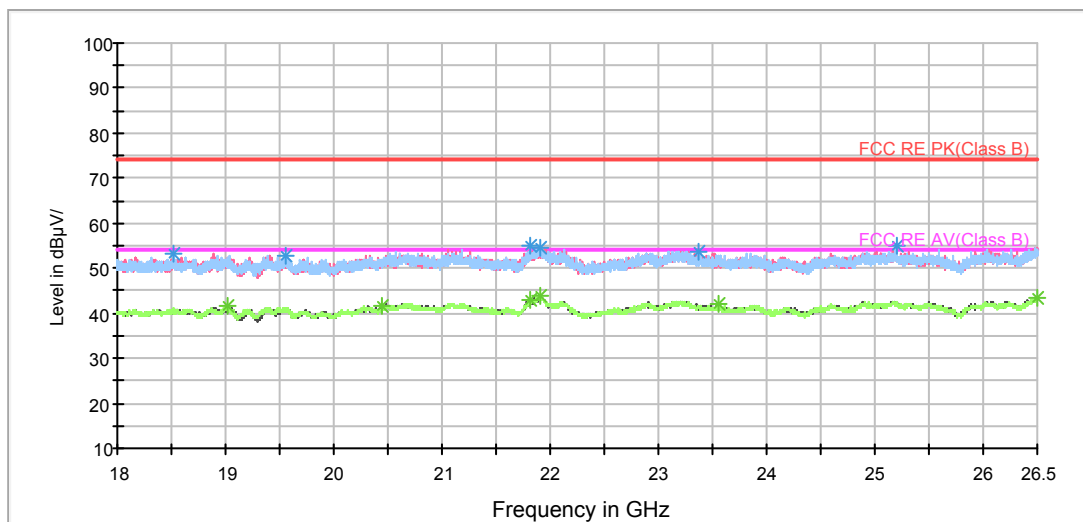
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11a CH56

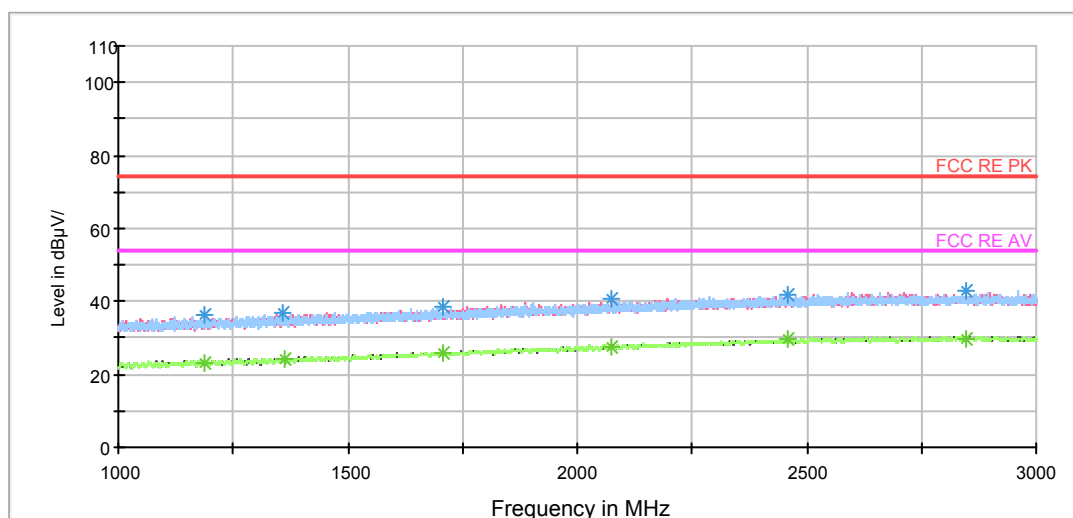
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1189.750000	36.2	100.0	V	68.0	44.5	-8.3	37.8	74
1360.000000	36.6	100.0	H	0.0	43.8	-7.2	37.4	74
1707.000000	38.4	100.0	V	296.0	43.7	-5.3	35.6	74
2074.250000	40.7	100.0	V	344.0	43.7	-3.0	33.3	74
2456.500000	41.6	100.0	V	223.0	42.7	-1.1	32.4	74
2847.750000	42.8	100.0	H	151.0	43.4	-0.6	31.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1189.750000	23.2	100.0	V	68.0	31.5	-8.3	30.8	54
1362.000000	24.1	100.0	V	0.0	31.3	-7.2	29.9	54
1707.000000	25.8	100.0	V	296.0	31.1	-5.3	28.2	54
2074.250000	27.5	100.0	V	344.0	30.5	-3.0	26.5	54
2456.500000	29.4	100.0	V	223.0	30.5	-1.1	24.6	54
2847.750000	29.6	100.0	H	151.0	30.2	-0.6	24.4	54

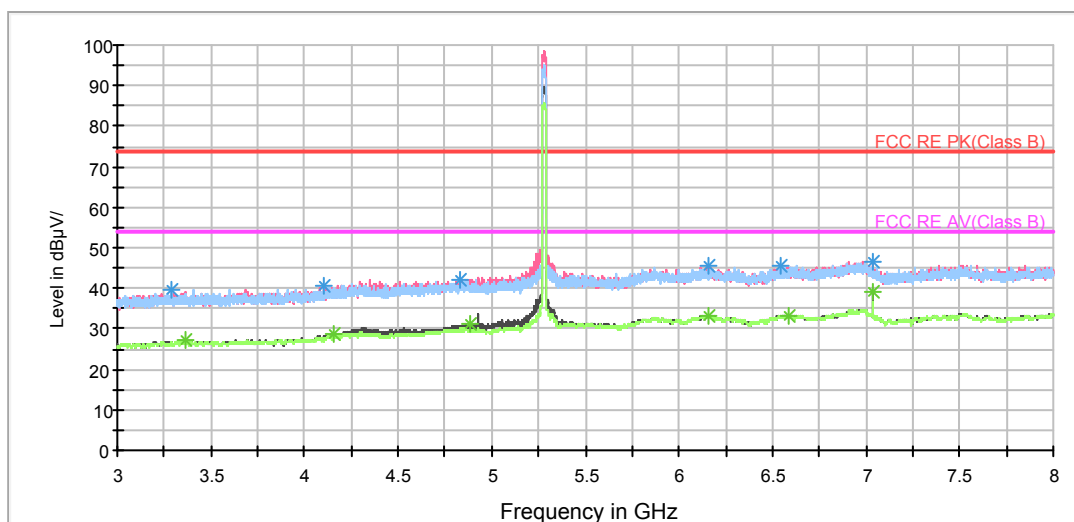
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



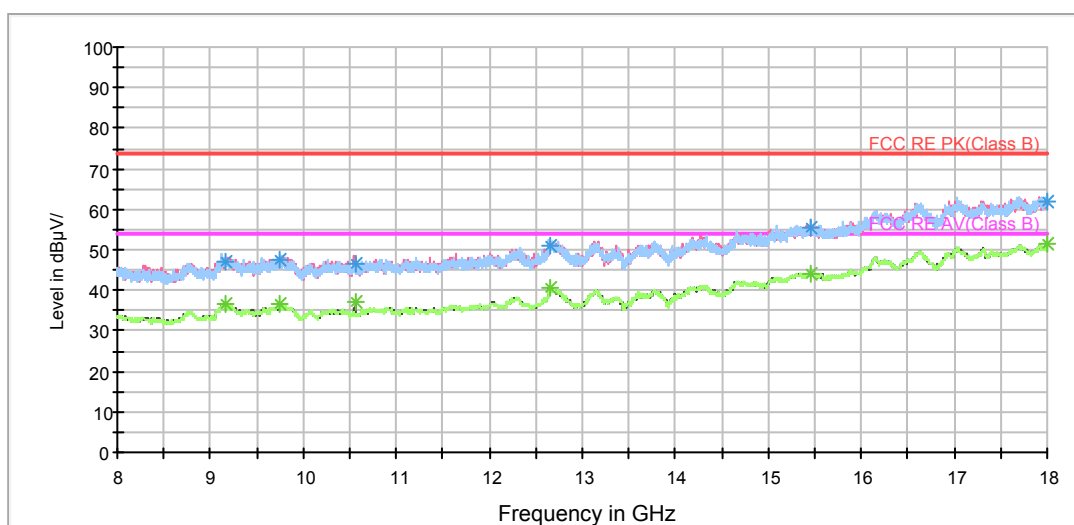
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



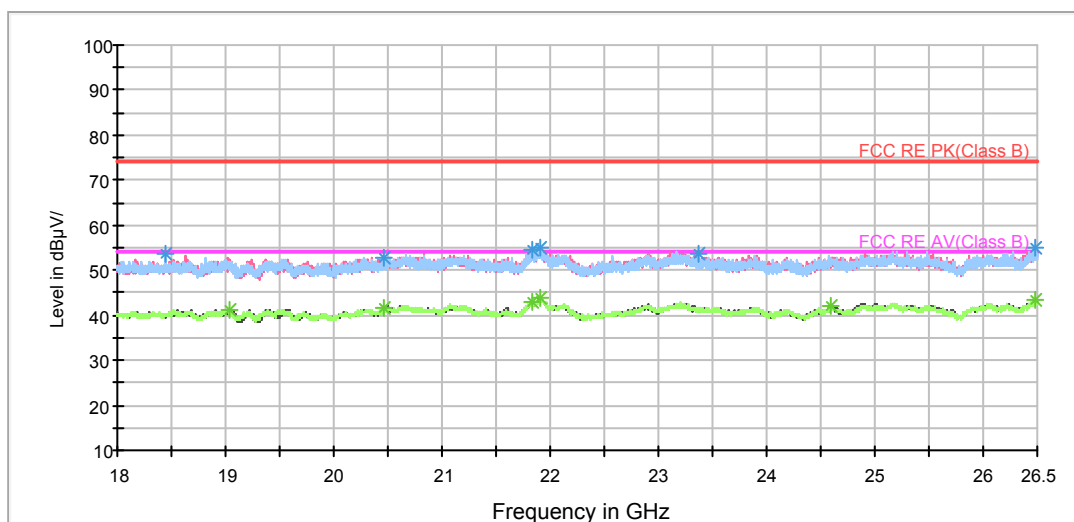
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



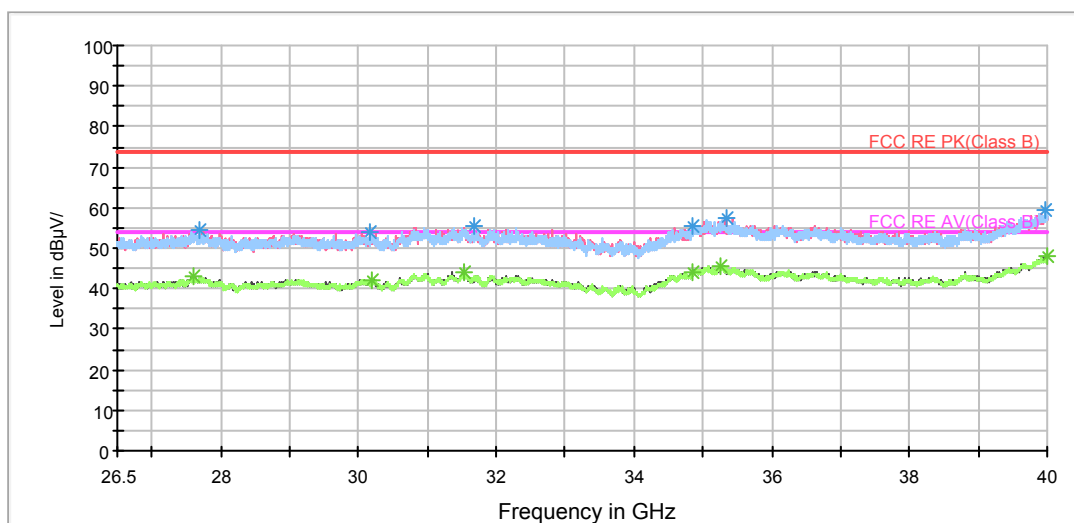
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11a CH64

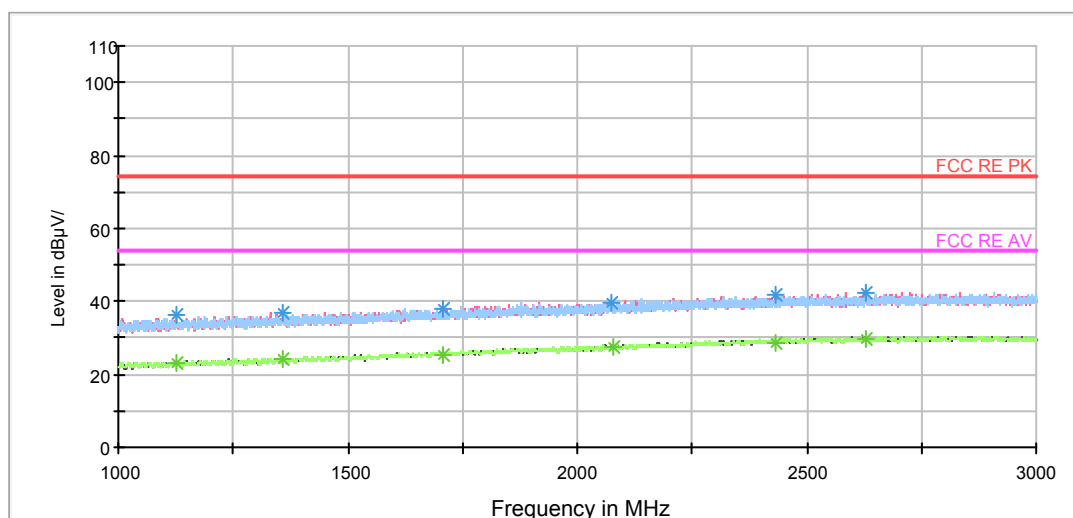
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1128.250000	36.2	100.0	H	0.0	44.8	-8.6	37.8	74
1360.000000	37.1	100.0	H	4.0	44.3	-7.2	36.9	74
1705.500000	38.1	100.0	H	7.0	43.4	-5.3	35.9	74
2074.000000	39.6	100.0	H	7.0	42.6	-3.0	34.4	74
2433.000000	41.7	100.0	V	319.0	42.9	-1.2	32.3	74
2627.500000	42.5	100.0	H	167.0	43.2	-0.7	31.5	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1128.250000	23.2	100.0	H	0.0	31.8	-8.6	30.8	54
1360.000000	24.1	100.0	H	4.0	31.3	-7.2	29.9	54
1709.250000	25.1	100.0	H	89.0	30.3	-5.2	28.9	54
2080.500000	27.3	100.0	H	282.0	30.3	-3.0	26.7	54
2433.000000	28.9	100.0	V	319.0	30.1	-1.2	25.1	54
2627.500000	29.7	100.0	H	167.0	30.4	-0.7	24.3	54

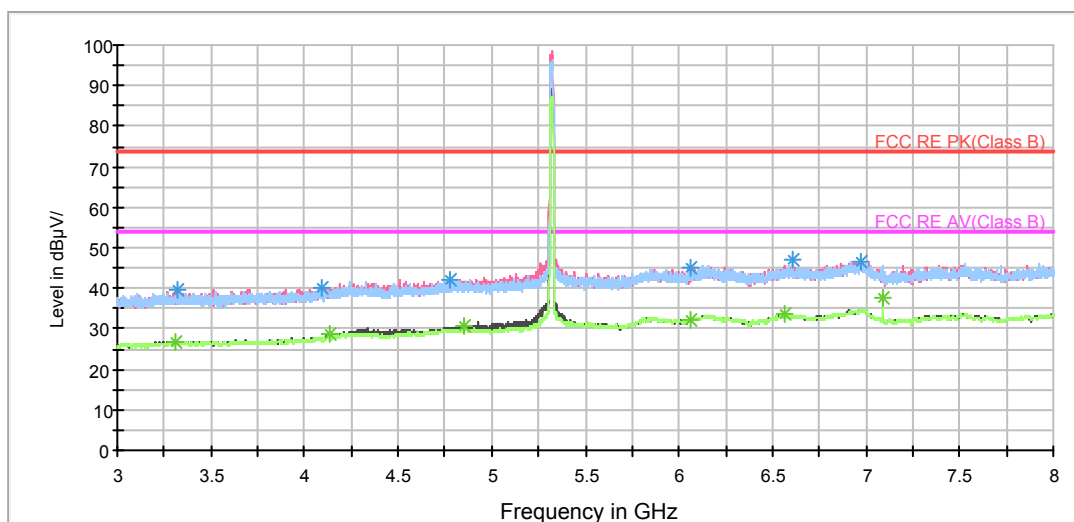
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



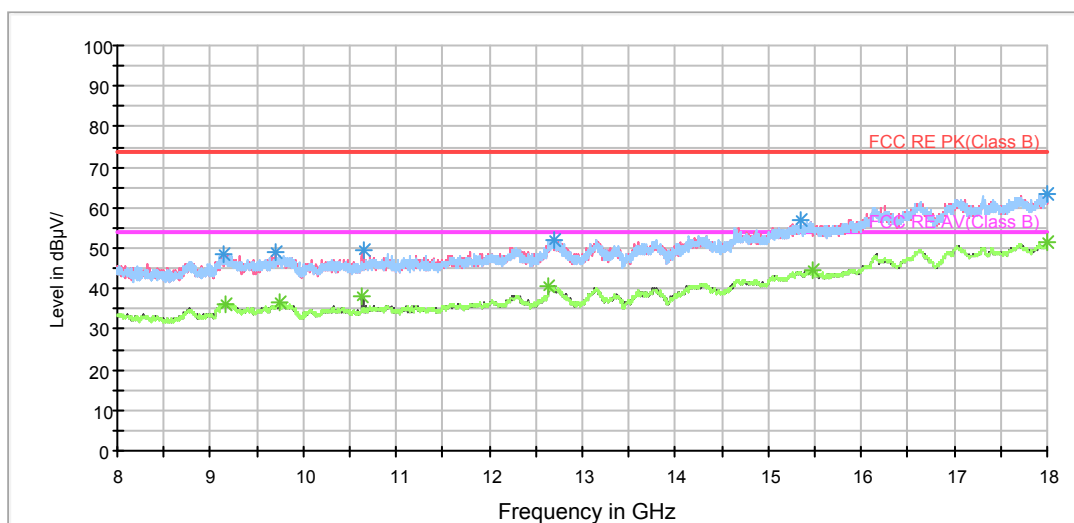
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



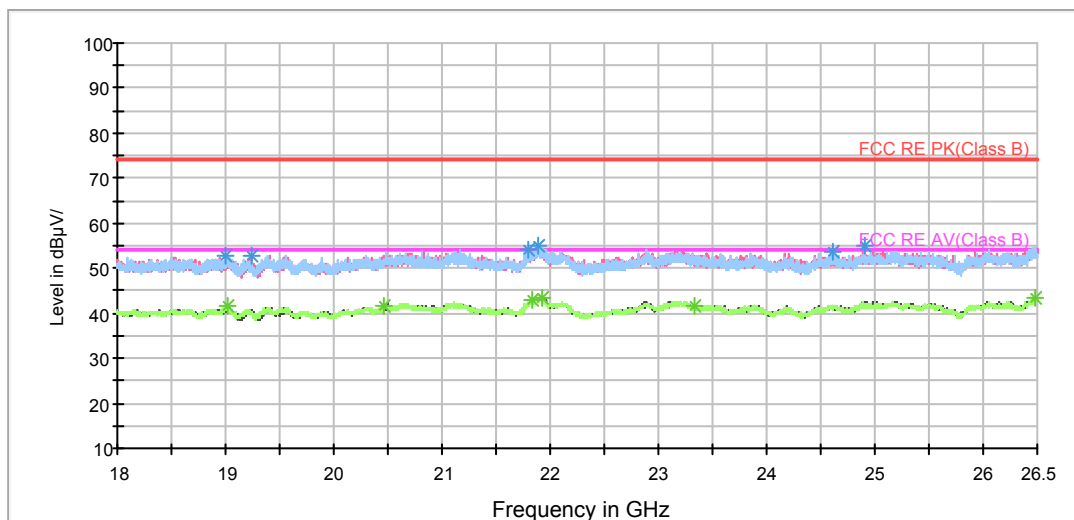
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



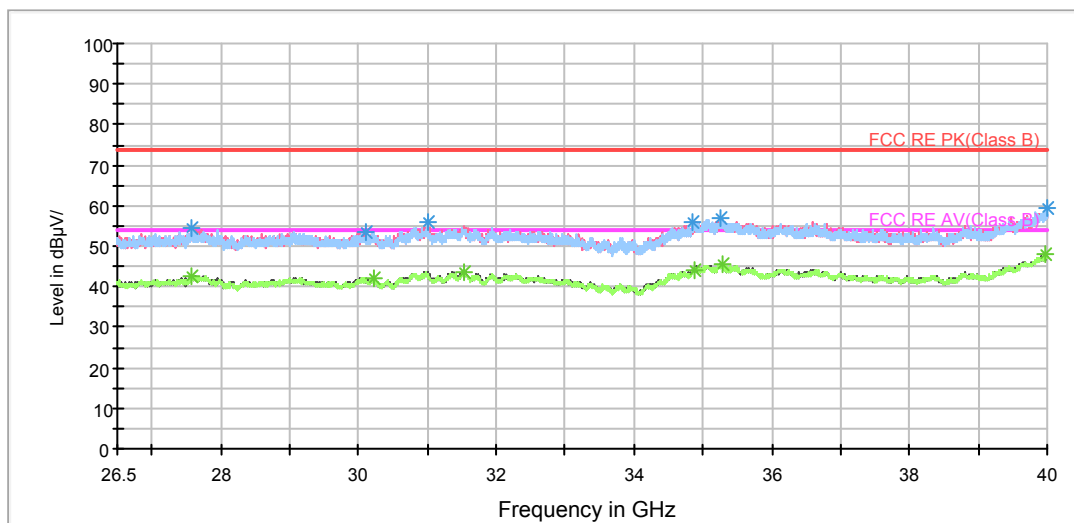
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11a CH100

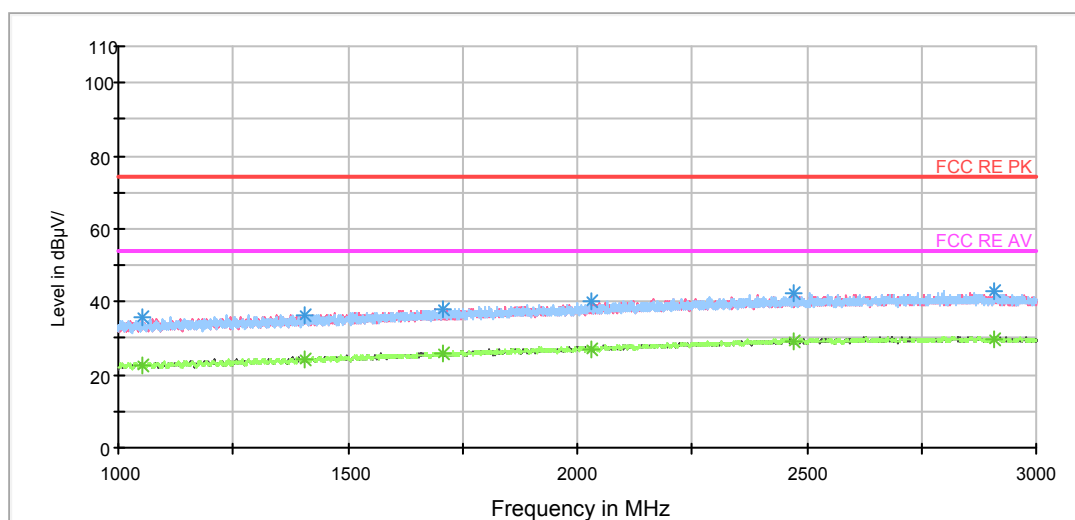
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1050.250000	35.7	100.0	V	310.0	44.7	-9.0	38.3	74
1406.250000	36.3	100.0	V	263.0	43.2	-6.9	37.7	74
1706.250000	38.0	100.0	H	0.0	43.3	-5.3	36.0	74
2031.000000	40.2	100.0	V	110.0	43.6	-3.4	33.8	74
2473.000000	42.2	100.0	V	353.0	43.2	-1.0	31.8	74
2909.500000	42.8	100.0	V	283.0	43.2	-0.4	31.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1050.250000	22.6	100.0	V	310.0	31.6	-9.0	31.4	54
1405.500000	24.2	100.0	V	331.0	31.1	-6.9	29.8	54
1706.250000	25.6	100.0	H	0.0	30.9	-5.3	28.4	54
2031.000000	26.9	100.0	V	110.0	30.3	-3.4	27.1	54
2473.000000	28.9	100.0	V	353.0	29.9	-1.0	25.1	54
2909.500000	29.9	100.0	V	283.0	30.3	-0.4	24.1	54

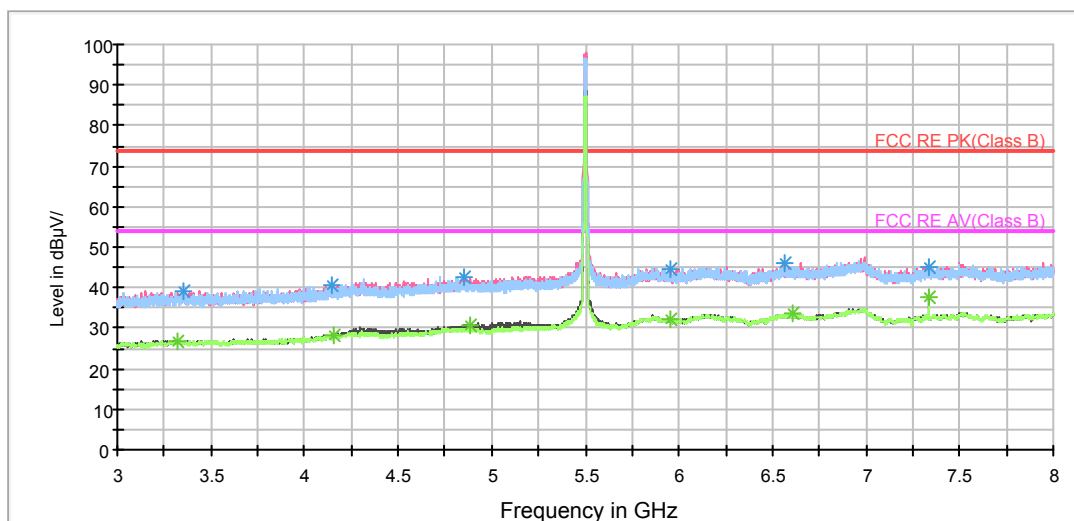
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



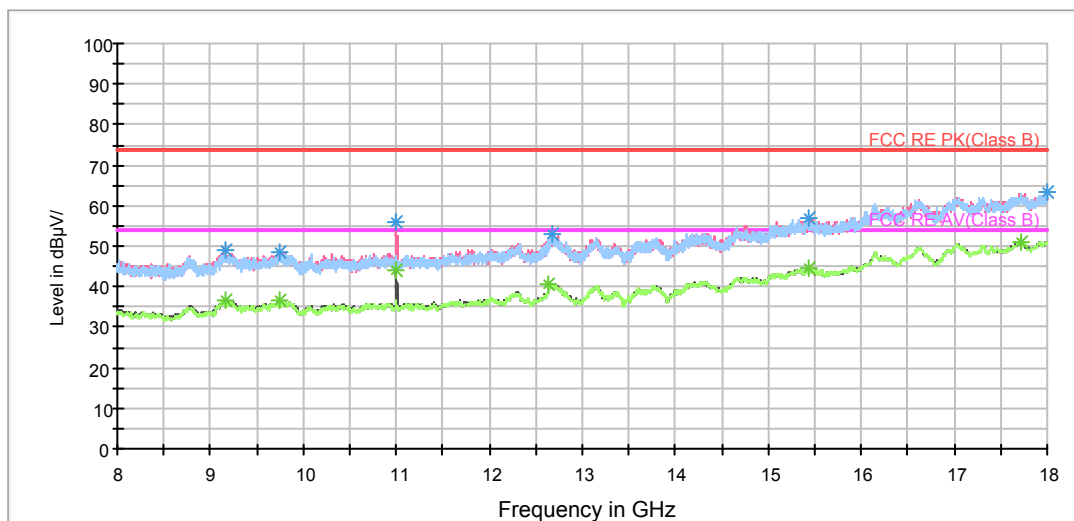
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



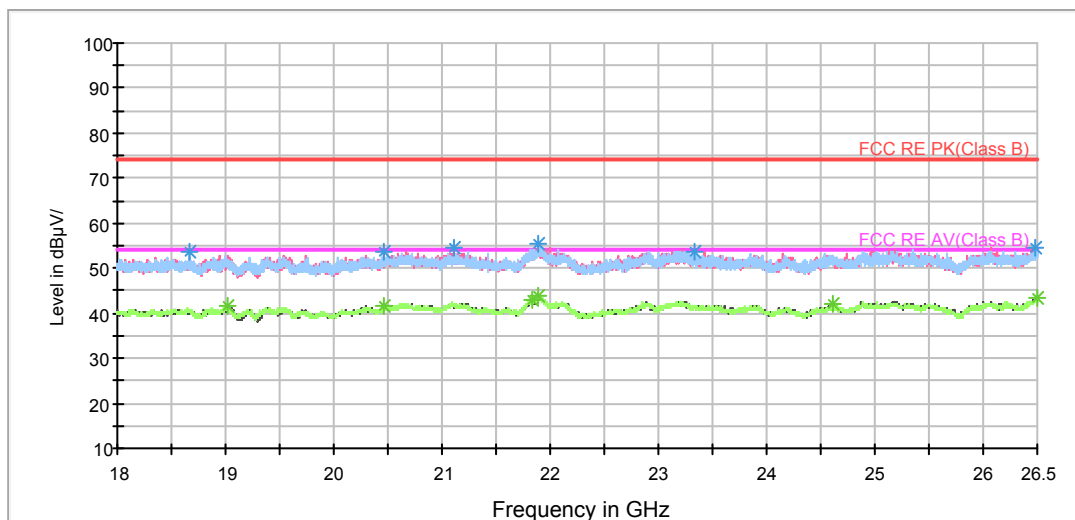
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



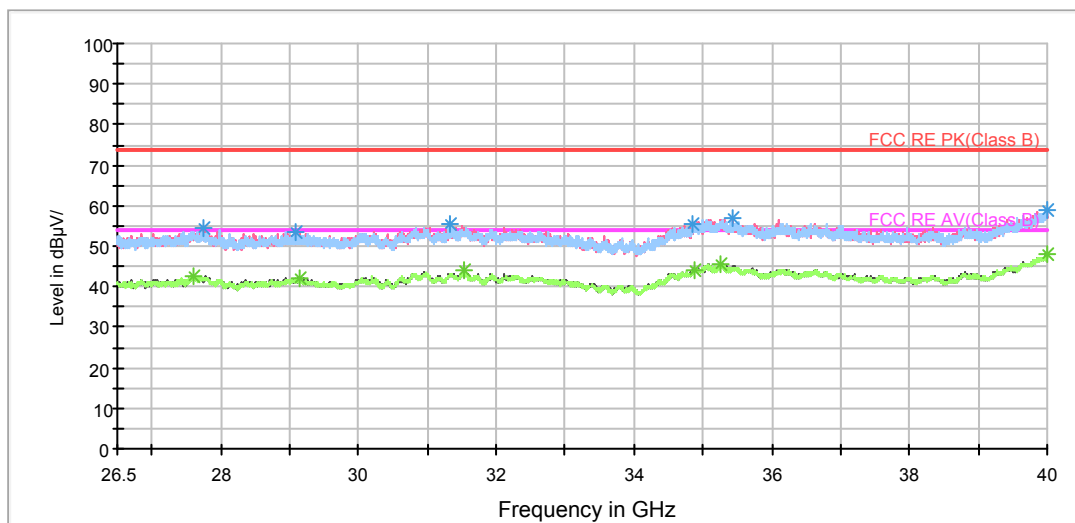
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11a CH116

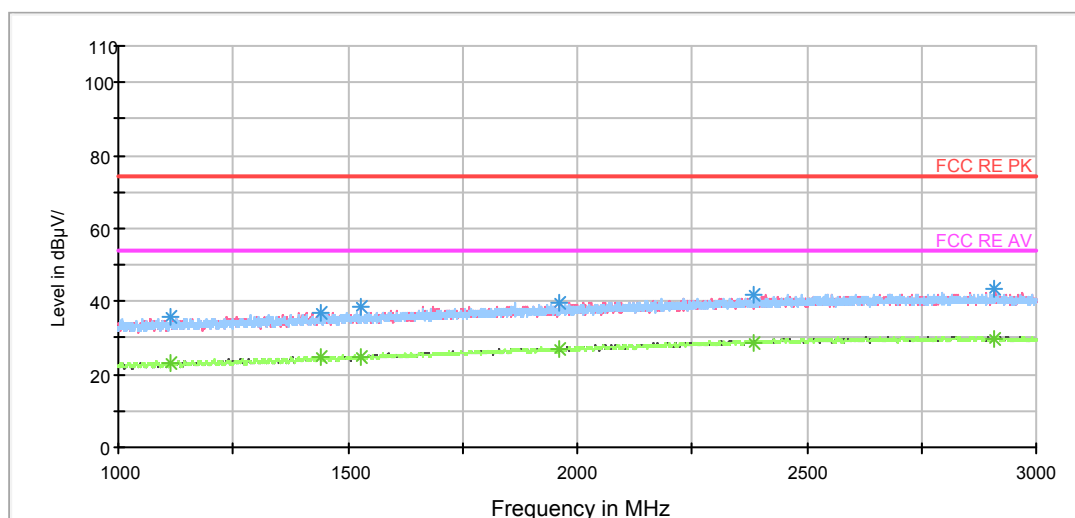
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1112.750000	35.5	100.0	H	89.0	44.1	-8.6	38.5	74
1439.000000	36.7	100.0	H	30.0	43.4	-6.7	37.3	74
1528.750000	38.4	100.0	V	359.0	44.7	-6.3	35.6	74
1962.500000	39.8	100.0	V	171.0	43.5	-3.7	34.2	74
2385.000000	41.8	100.0	H	0.0	43.2	-1.4	32.2	74
2910.250000	43.6	100.0	V	358.0	44.0	-0.4	30.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1112.750000	22.9	100.0	H	89.0	31.5	-8.6	31.1	54
1440.750000	24.6	100.0	V	279.0	31.3	-6.7	29.4	54
1528.750000	24.7	100.0	V	359.0	31.0	-6.3	29.3	54
1962.500000	26.7	100.0	V	171.0	30.4	-3.7	27.3	54
2385.000000	28.8	100.0	H	0.0	30.2	-1.4	25.2	54
2910.250000	29.7	100.0	V	358.0	30.1	-0.4	24.3	54

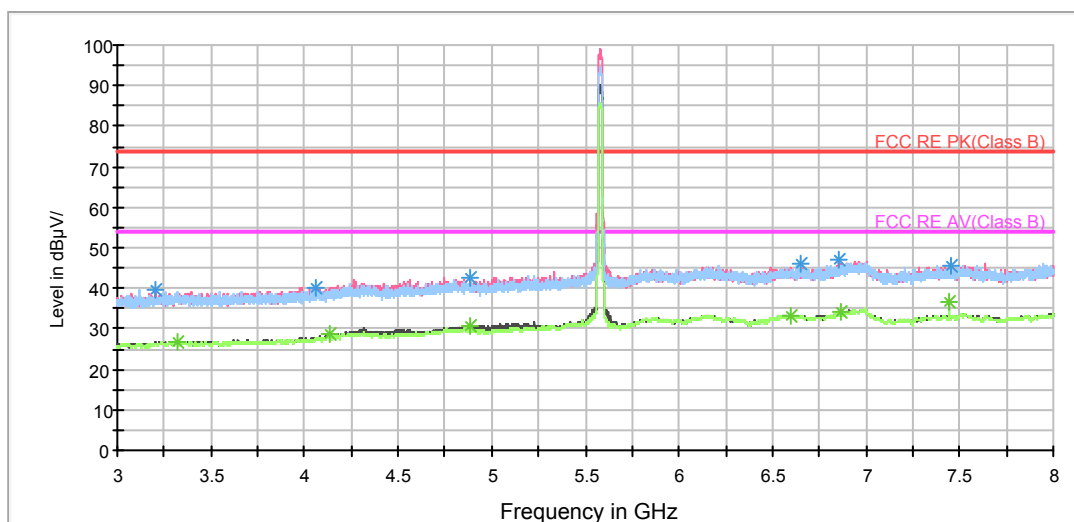
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



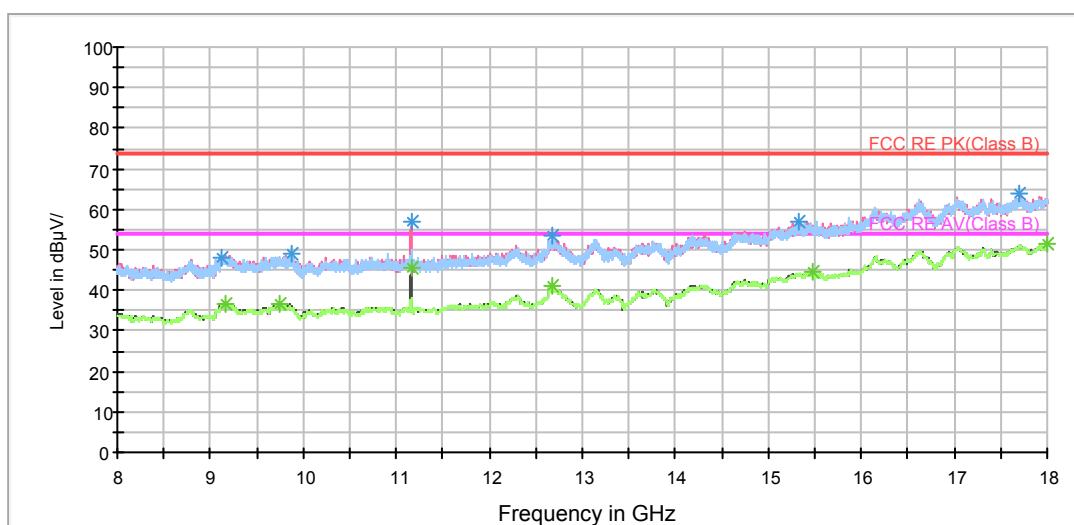
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



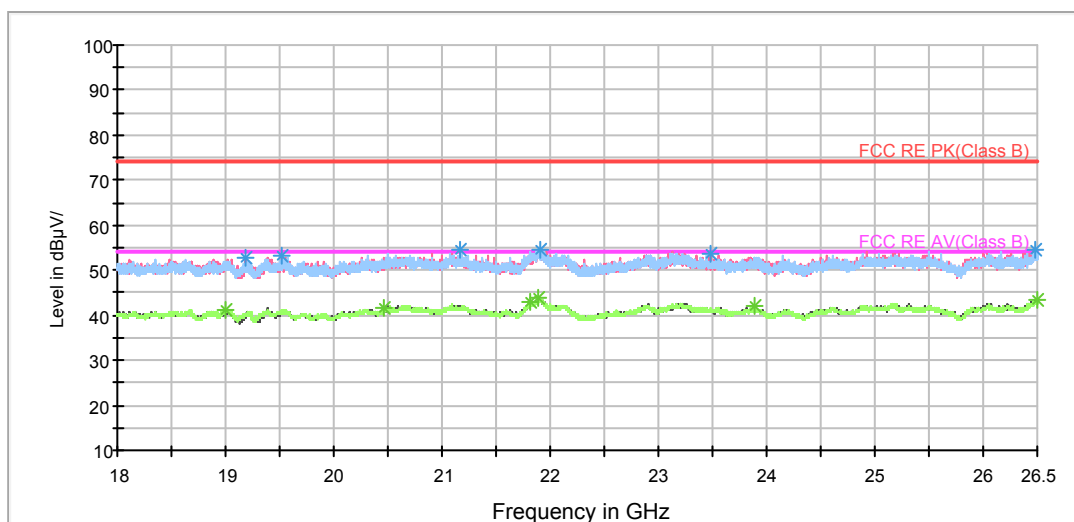
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



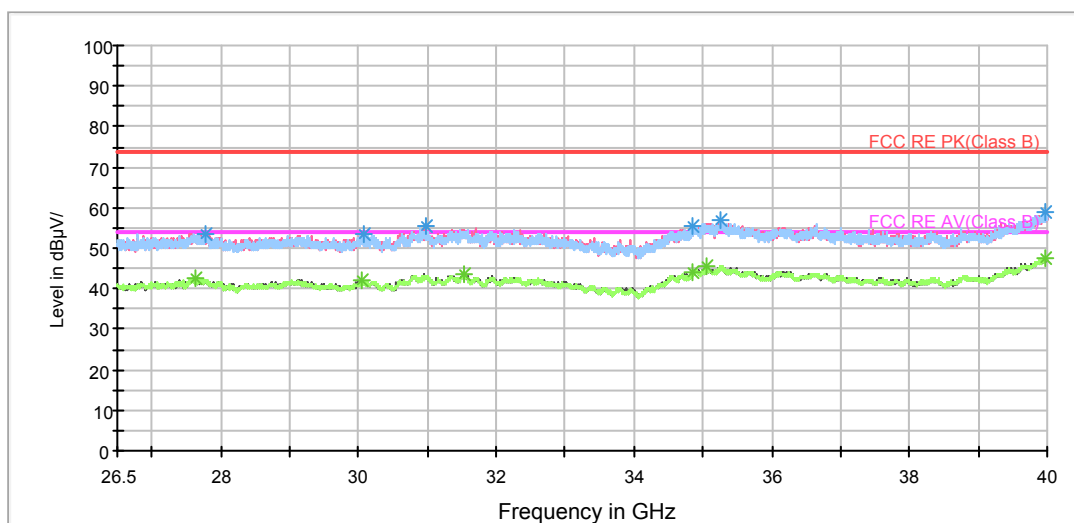
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11a CH140

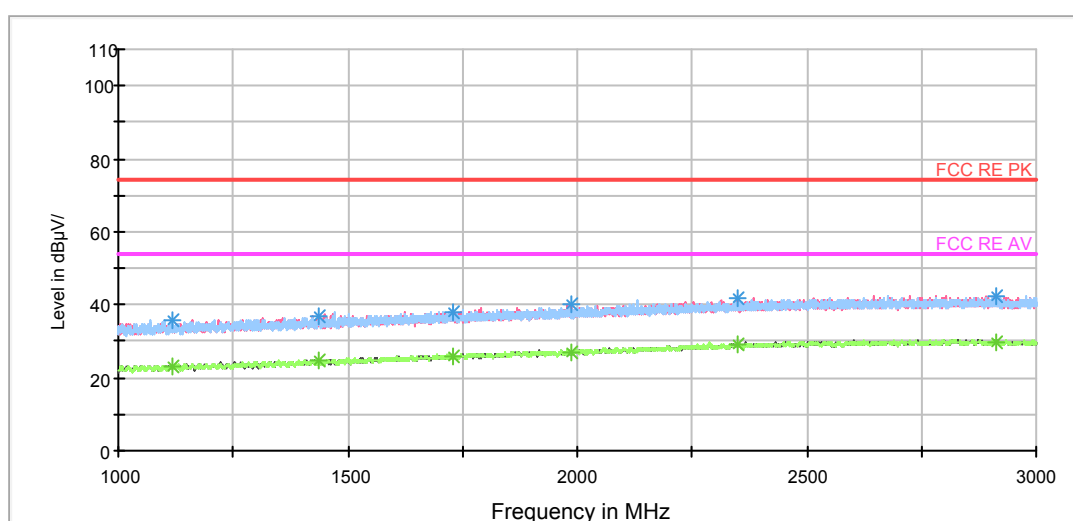
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1115.750000	35.9	100.0	H	0.0	44.5	-8.6	38.1	74
1438.000000	37.1	100.0	V	231.0	43.8	-6.7	36.9	74
1727.250000	38.2	100.0	H	34.0	43.3	-5.1	35.8	74
1987.250000	40.4	100.0	V	171.0	44.0	-3.6	33.6	74
2350.250000	41.8	100.0	V	0.0	43.3	-1.5	32.2	74
2914.500000	42.6	100.0	H	204.0	43.0	-0.4	31.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1115.750000	23.0	100.0	H	0.0	31.6	-8.6	31.0	54
1438.000000	24.6	100.0	V	231.0	31.3	-6.7	29.4	54
1727.250000	25.7	100.0	H	34.0	30.8	-5.1	28.3	54
1987.250000	26.7	100.0	V	171.0	30.3	-3.6	27.3	54
2348.250000	29.0	100.0	V	322.0	30.5	-1.5	25.0	54
2914.500000	29.9	100.0	H	204.0	30.3	-0.4	24.1	54

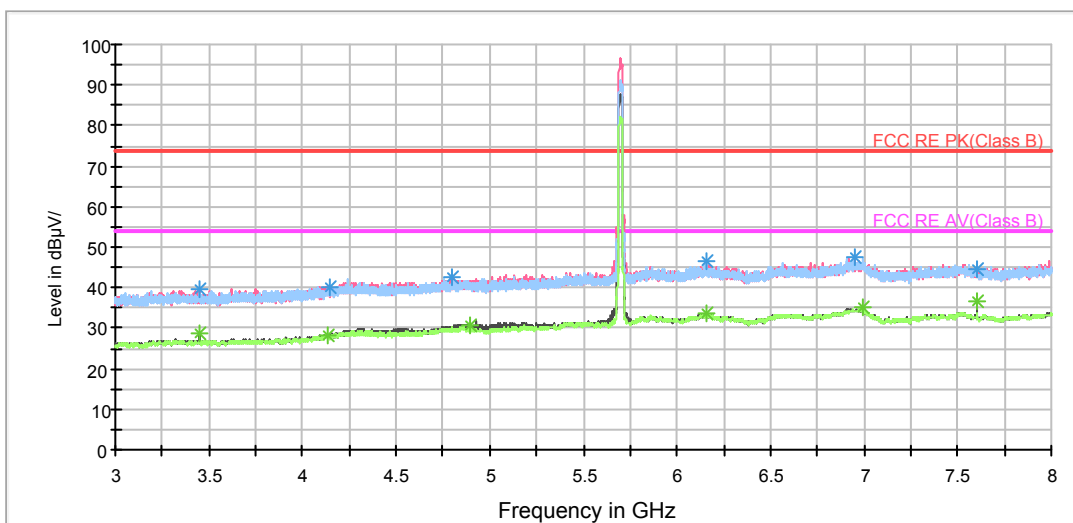
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



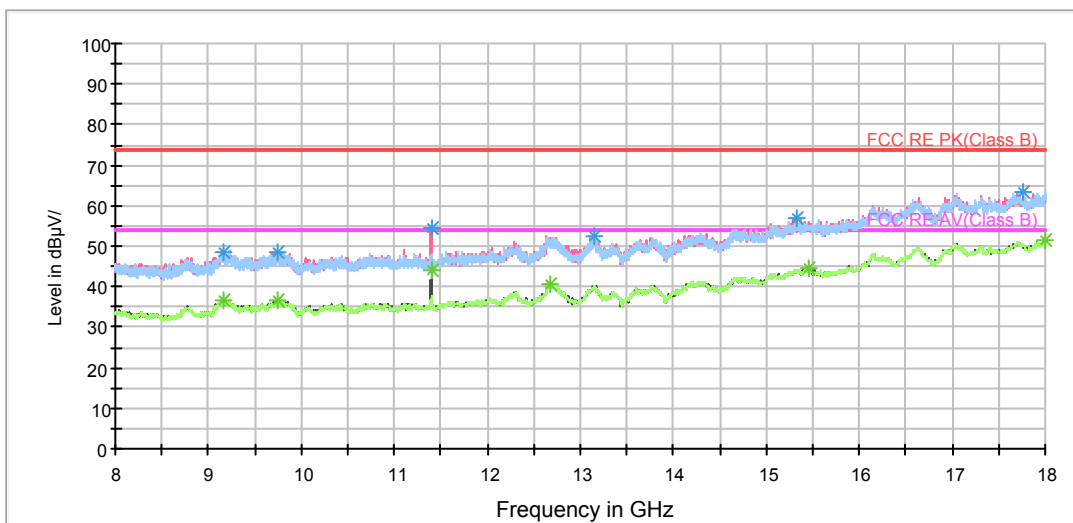
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



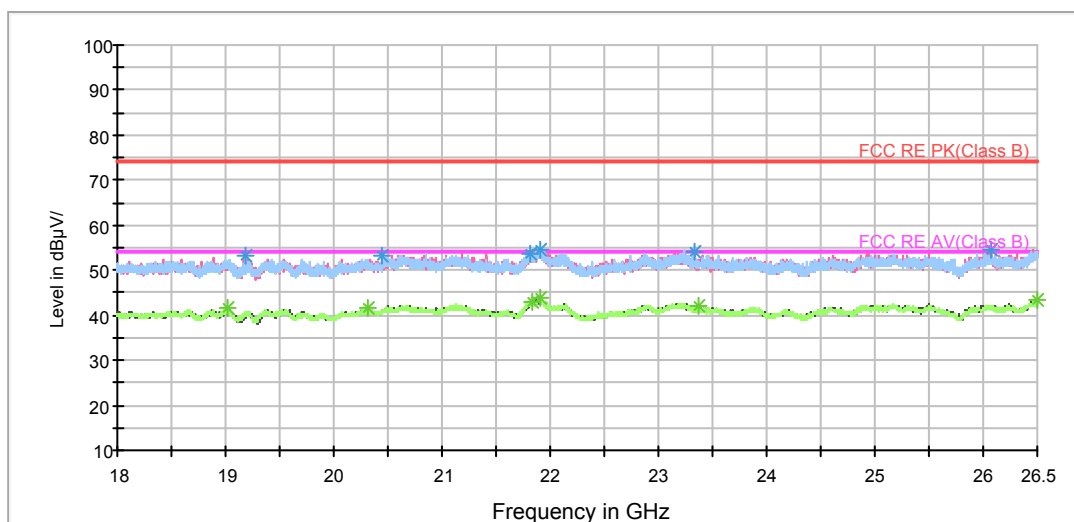
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



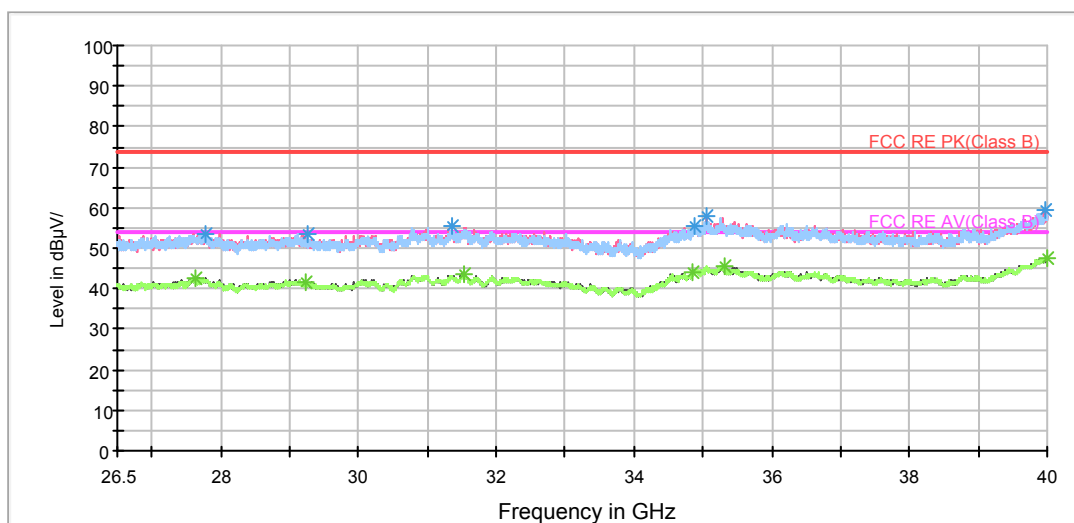
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT20) CH36

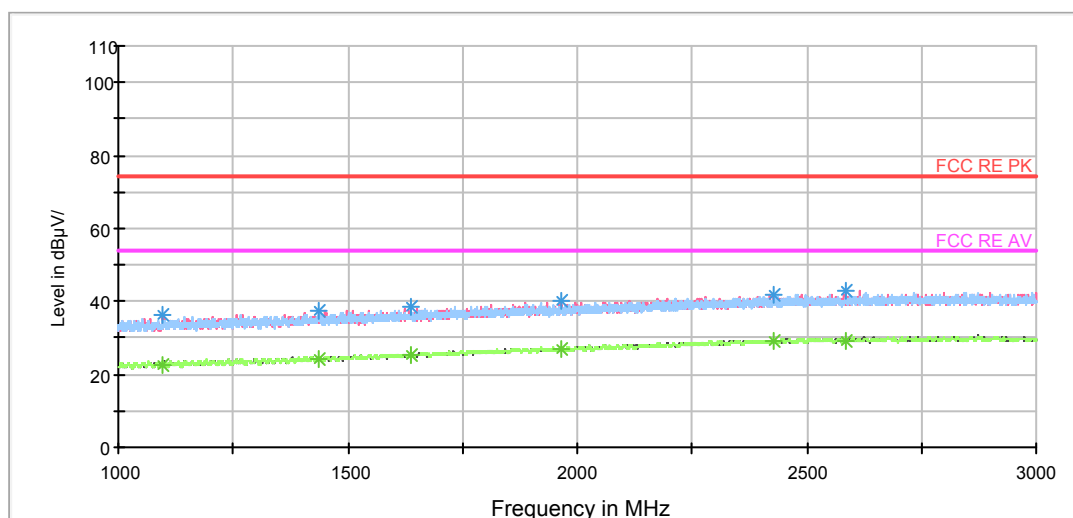
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1096.750000	36.0	100.0	V	120.0	44.8	-8.8	38.0	74
1436.500000	37.4	100.0	H	37.0	44.2	-6.8	36.6	74
1639.000000	38.3	100.0	H	0.0	44.0	-5.7	35.7	74
1963.500000	40.3	100.0	V	273.0	44.0	-3.7	33.7	74
2427.750000	41.9	100.0	V	356.0	43.1	-1.2	32.1	74
2585.750000	42.7	100.0	V	348.0	43.5	-0.8	31.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1096.750000	22.7	100.0	V	120.0	31.5	-8.8	31.3	54
1436.500000	24.4	100.0	H	37.0	31.2	-6.8	29.6	54
1639.000000	25.3	100.0	H	0.0	31.0	-5.7	28.7	54
1963.500000	27.0	100.0	V	273.0	30.7	-3.7	27.0	54
2427.750000	29.0	100.0	V	356.0	30.2	-1.2	25.0	54
2585.750000	29.4	100.0	V	348.0	30.2	-0.8	24.6	54

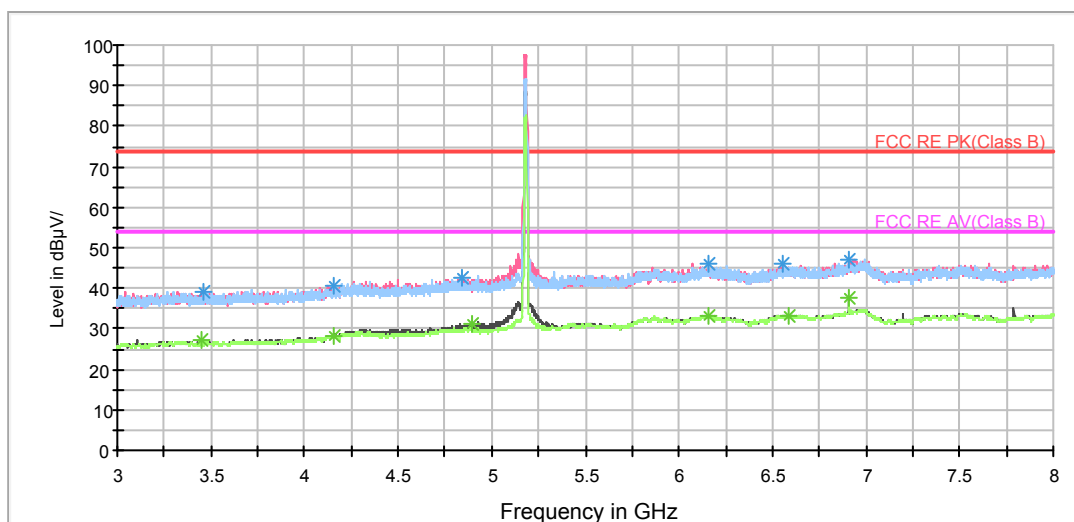
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



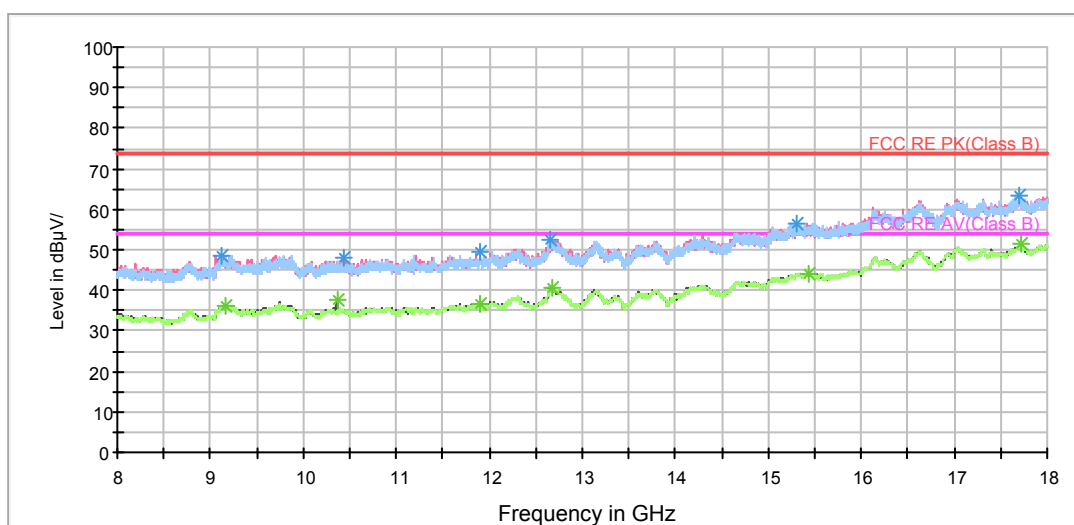
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



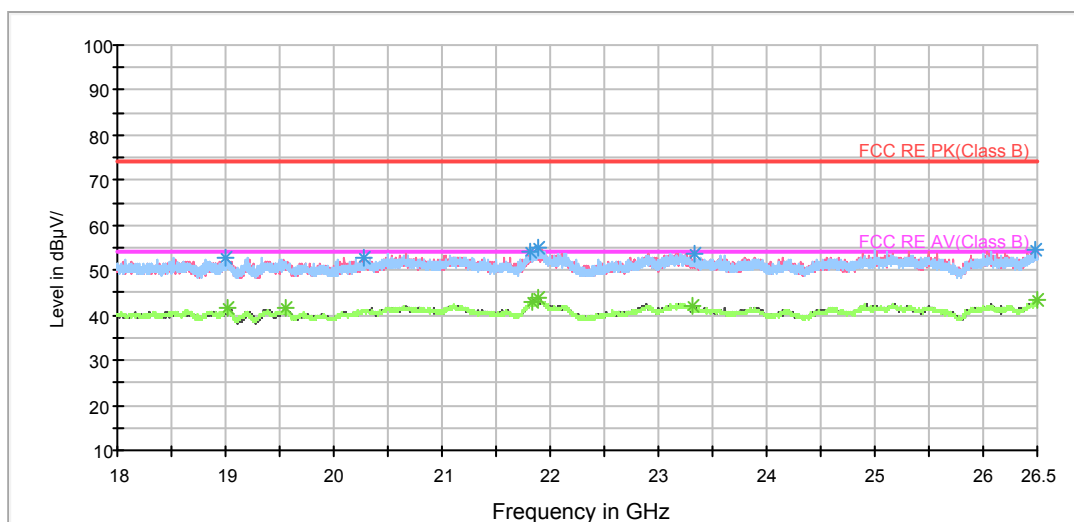
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



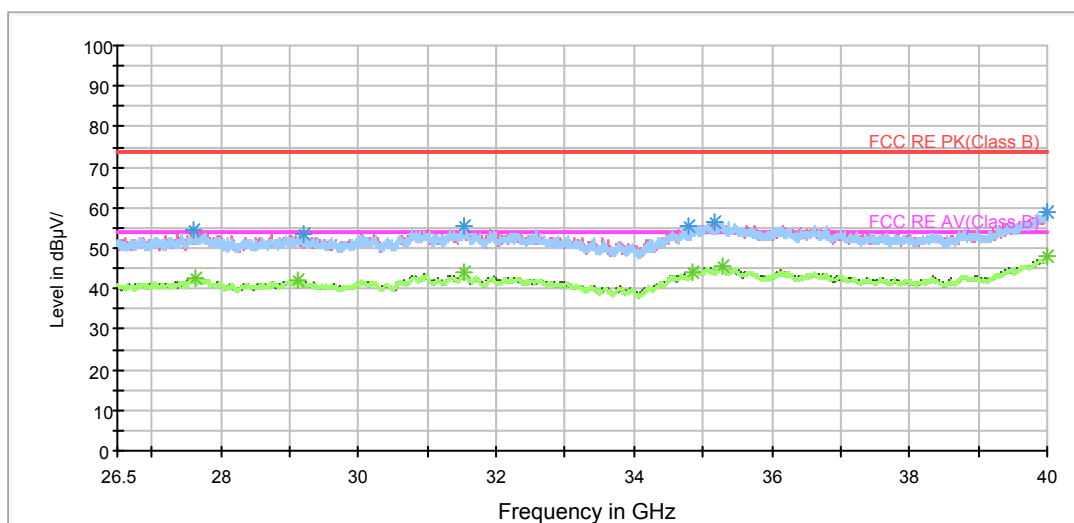
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT20) CH40

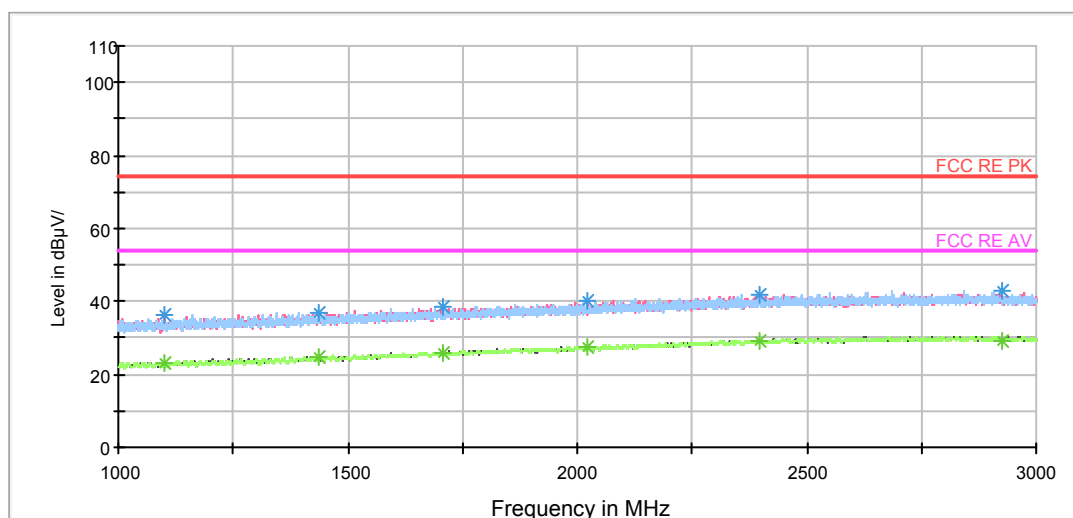
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1100.750000	36.1	100.0	V	120.0	44.8	-8.7	37.9	74
1438.250000	36.8	100.0	V	0.0	43.5	-6.7	37.2	74
1708.500000	38.3	100.0	H	186.0	43.5	-5.2	35.7	74
2023.250000	40.0	100.0	V	0.0	43.3	-3.3	34.0	74
2399.500000	41.8	100.0	H	23.0	43.1	-1.3	32.2	74
2925.250000	43.0	100.0	H	83.0	43.3	-0.3	31.0	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1100.750000	22.9	100.0	V	120.0	31.6	-8.7	31.1	54
1438.250000	24.7	100.0	V	0.0	31.4	-6.7	29.3	54
1708.500000	25.6	100.0	H	186.0	30.8	-5.2	28.4	54
2023.250000	27.2	100.0	V	0.0	30.5	-3.3	26.8	54
2399.500000	29.0	100.0	H	23.0	30.3	-1.3	25.0	54
2925.250000	29.3	100.0	H	83.0	29.6	-0.3	24.7	54

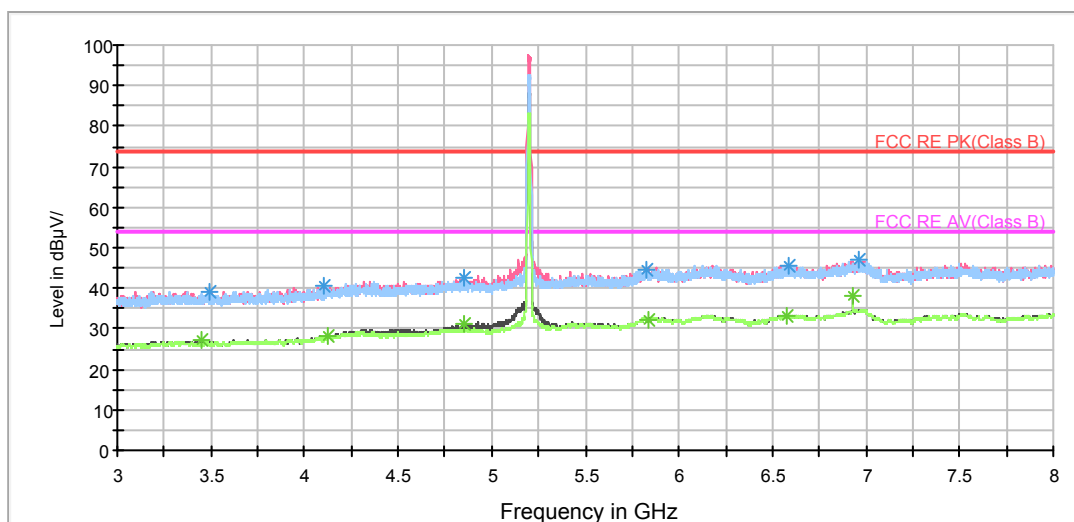
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



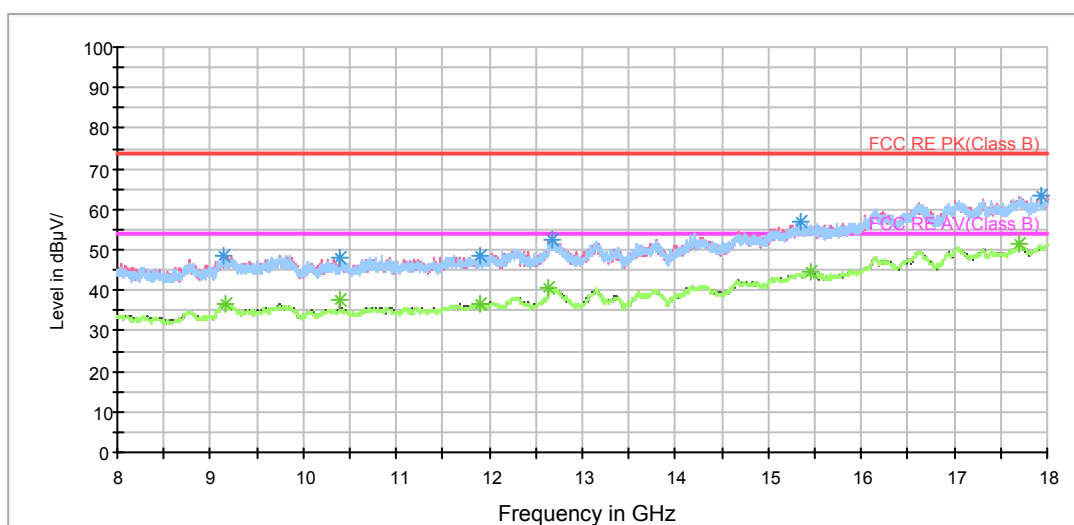
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



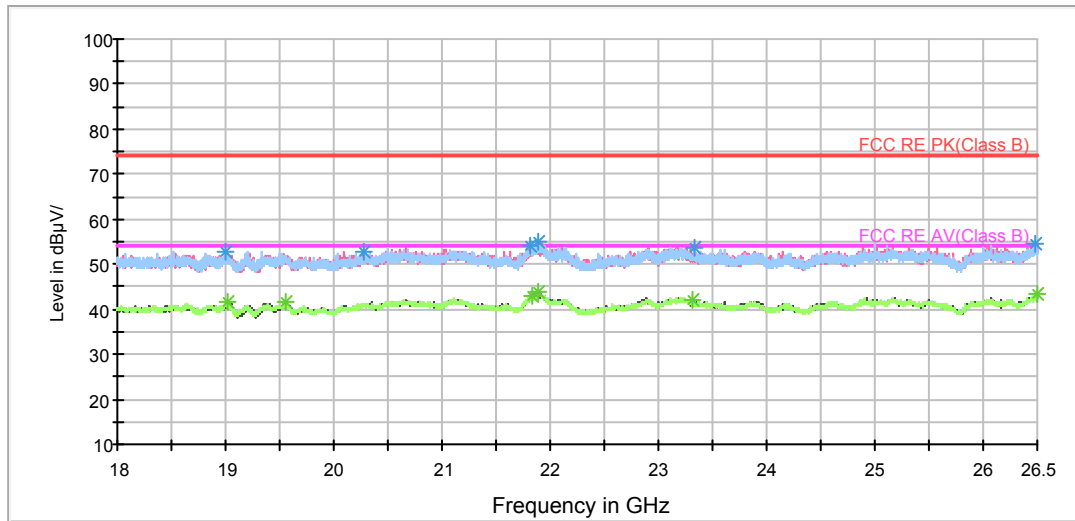
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



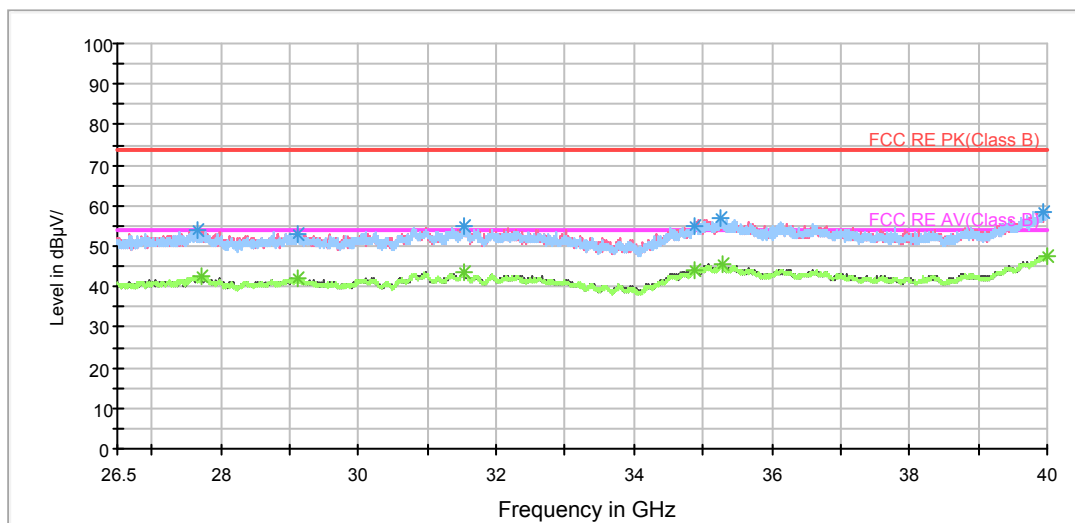
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT20) CH48

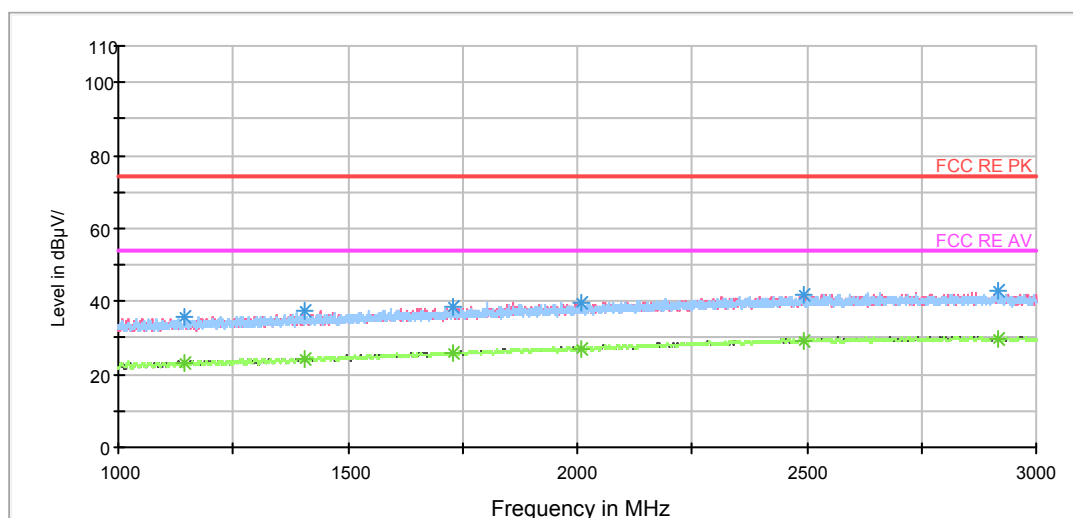
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1144.250000	35.6	100.0	V	348.0	44.1	-8.5	38.4	74
1406.750000	37.5	100.0	H	141.0	44.4	-6.9	36.5	74
1730.000000	38.6	100.0	H	315.0	43.6	-5.0	35.4	74
2008.750000	39.9	100.0	H	162.0	43.3	-3.4	34.1	74
2491.500000	41.7	100.0	V	0.0	42.6	-0.9	32.3	74
2916.500000	42.7	100.0	H	0.0	43.0	-0.3	31.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1144.250000	23.0	100.0	V	348.0	31.5	-8.5	31.0	54
1406.750000	24.3	100.0	H	141.0	31.2	-6.9	29.7	54
1730.000000	25.8	100.0	H	315.0	30.8	-5.0	28.2	54
2008.750000	27.1	100.0	H	162.0	30.5	-3.4	26.9	54
2491.500000	29.2	100.0	V	0.0	30.1	-0.9	24.8	54
2916.500000	29.8	100.0	H	0.0	30.1	-0.3	24.2	54

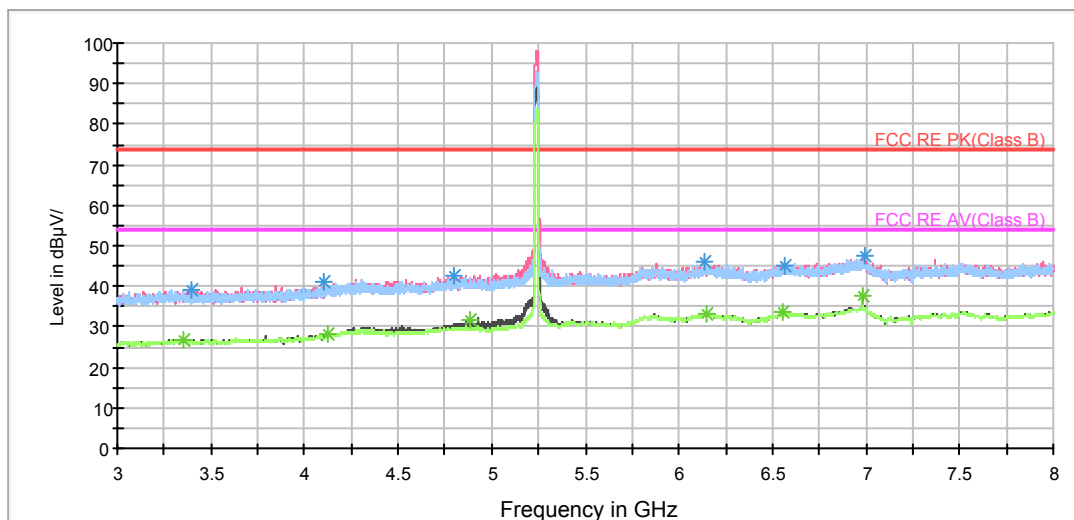
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



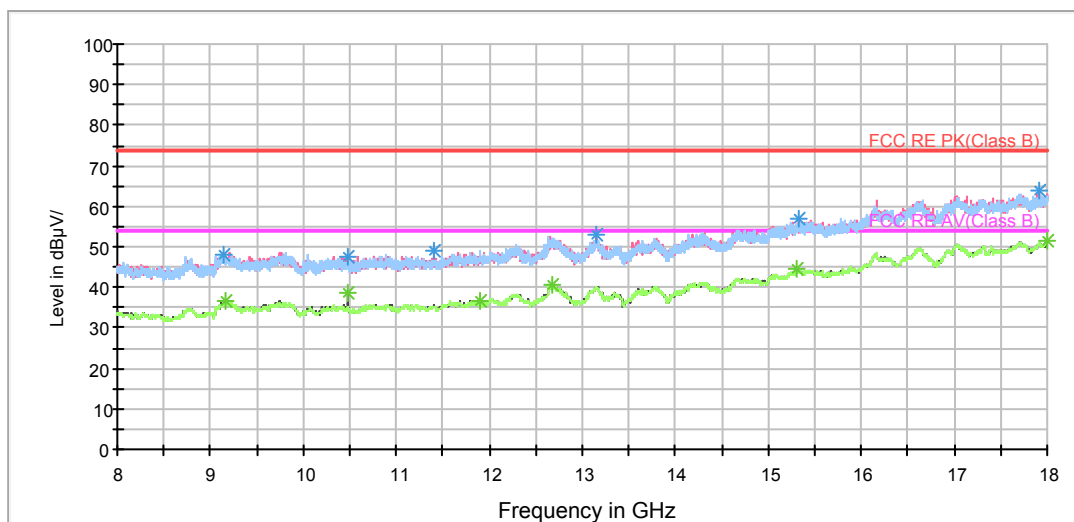
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



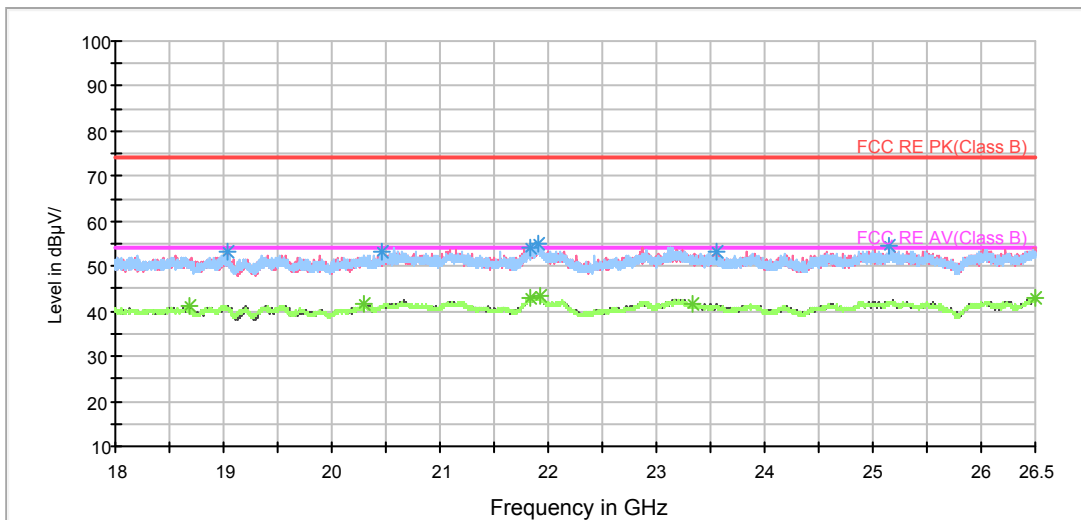
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



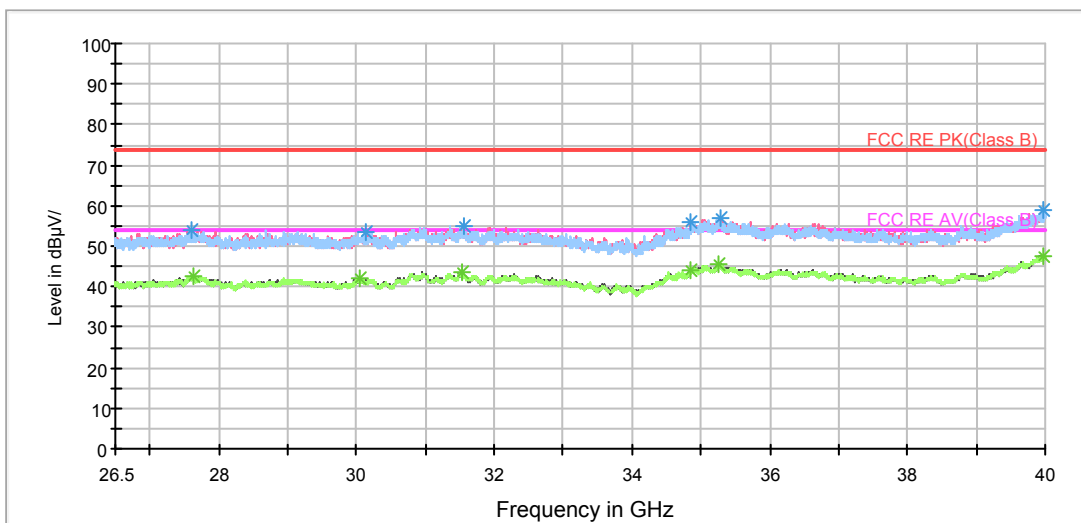
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT20) CH52

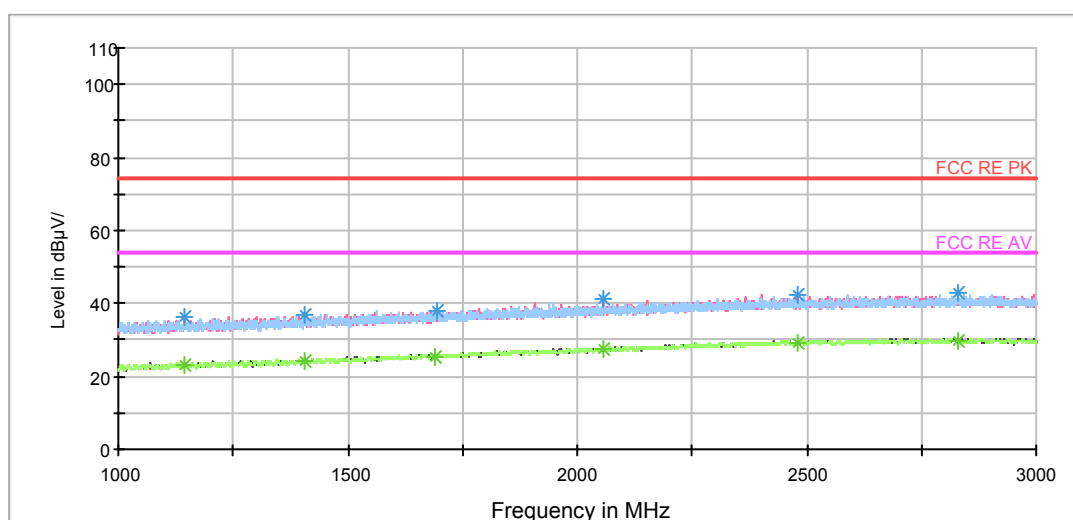
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1145.250000	36.0	100.0	V	340.0	44.5	-8.5	38.0	74
1404.500000	37.1	100.0	H	32.0	44.0	-6.9	36.9	74
1696.250000	38.0	100.0	V	249.0	43.3	-5.3	36.0	74
2057.500000	41.1	100.0	V	300.0	44.2	-3.1	32.9	74
2481.500000	42.3	100.0	V	320.0	43.3	-1.0	31.7	74
2831.500000	42.8	100.0	H	261.0	43.3	-0.5	31.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1145.250000	23.1	100.0	V	340.0	31.6	-8.5	30.9	54
1404.500000	24.3	100.0	H	32.0	31.2	-6.9	29.7	54
1688.000000	25.5	100.0	V	249.0	30.9	-5.4	28.5	54
2057.500000	27.4	100.0	V	300.0	30.5	-3.1	26.6	54
2481.500000	29.1	100.0	V	320.0	30.1	-1.0	24.9	54
2831.500000	29.8	100.0	H	261.0	30.3	-0.5	24.2	54

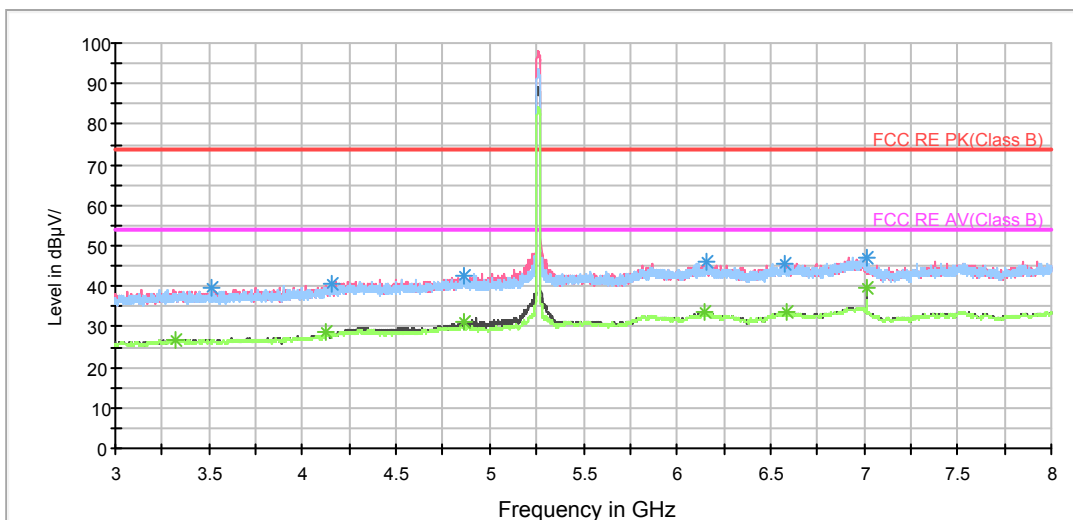
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



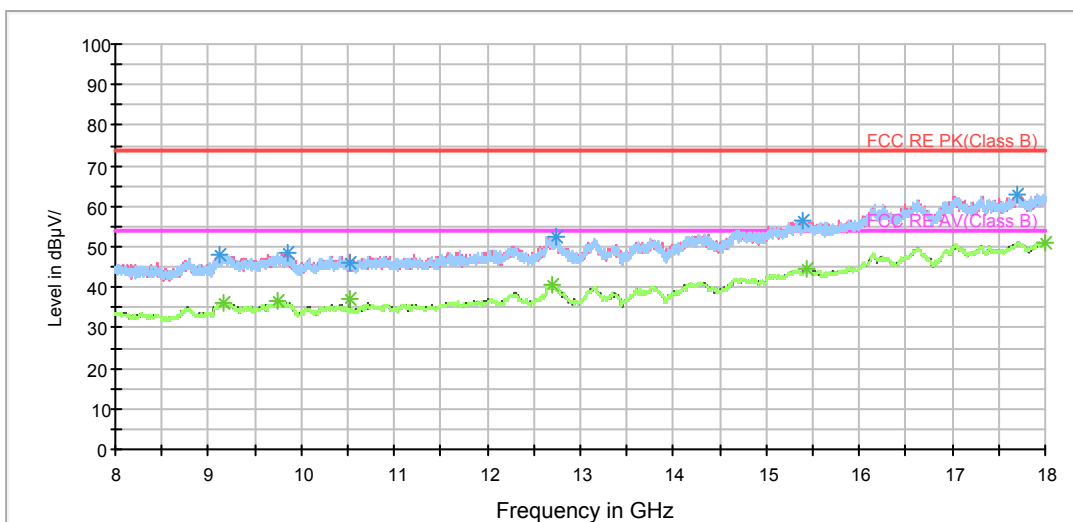
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



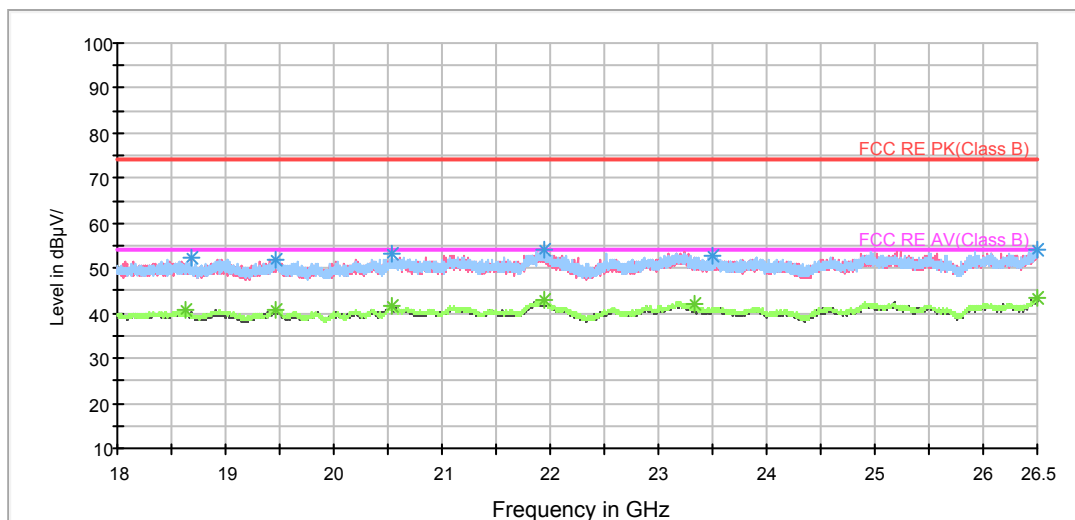
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



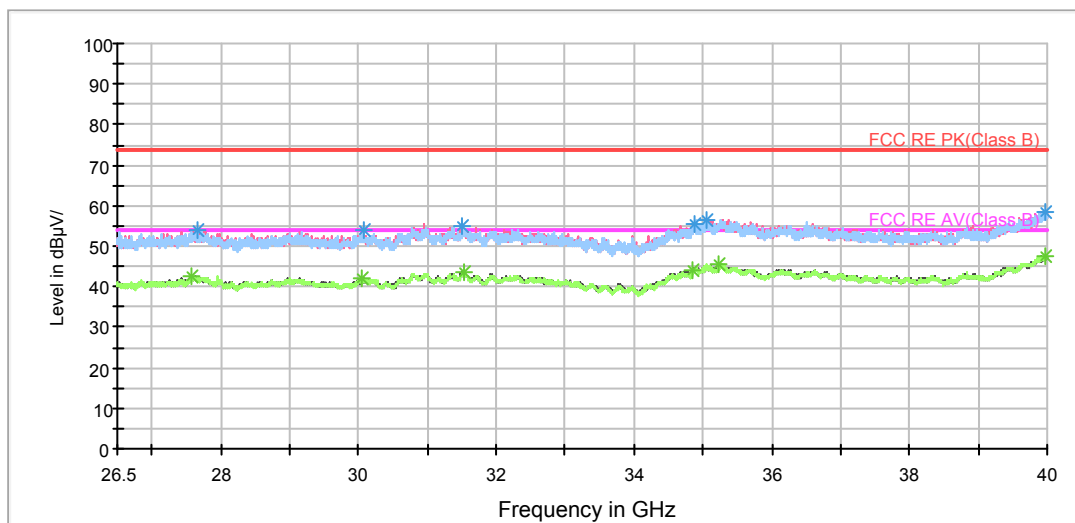
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT20) CH56

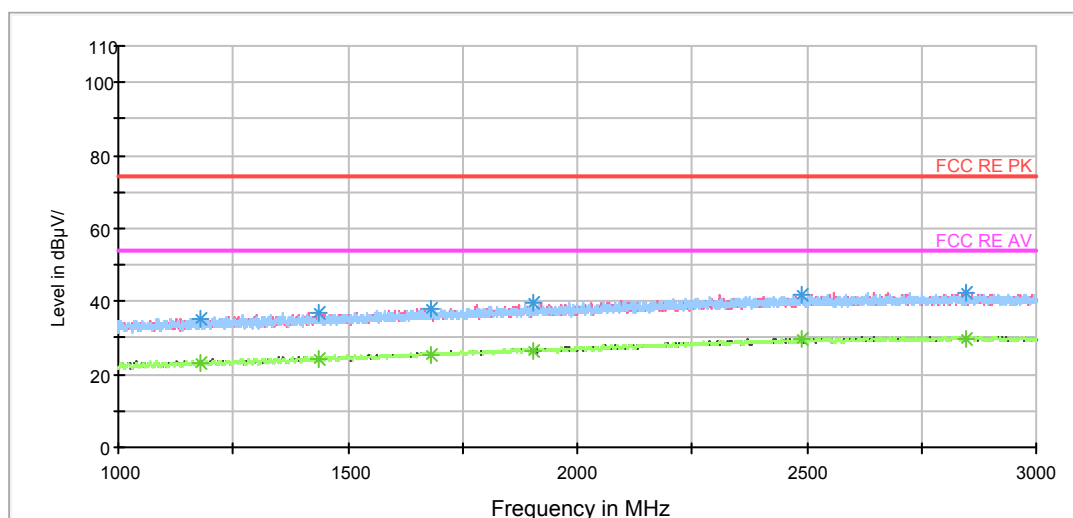
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1179.500000	35.4	100.0	H	3.0	43.8	-8.4	38.6	74
1435.250000	37.0	100.0	H	157.0	43.8	-6.8	37.0	74
1681.250000	38.1	100.0	V	343.0	43.5	-5.4	35.9	74
1902.250000	39.9	100.0	V	123.0	43.9	-4.0	34.1	74
2488.750000	42.0	100.0	H	157.0	42.9	-0.9	32.0	74
2846.750000	42.5	100.0	V	0.0	43.0	-0.5	31.5	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1178.750000	23.2	100.0	V	285.0	31.6	-8.4	30.8	54
1435.250000	24.2	100.0	H	157.0	31.0	-6.8	29.8	54
1681.250000	25.5	100.0	V	343.0	30.9	-5.4	28.5	54
1902.250000	26.5	100.0	V	123.0	30.5	-4.0	27.5	54
2488.750000	29.5	100.0	H	157.0	30.4	-0.9	24.5	54
2846.750000	29.6	100.0	V	0.0	30.1	-0.5	24.4	54

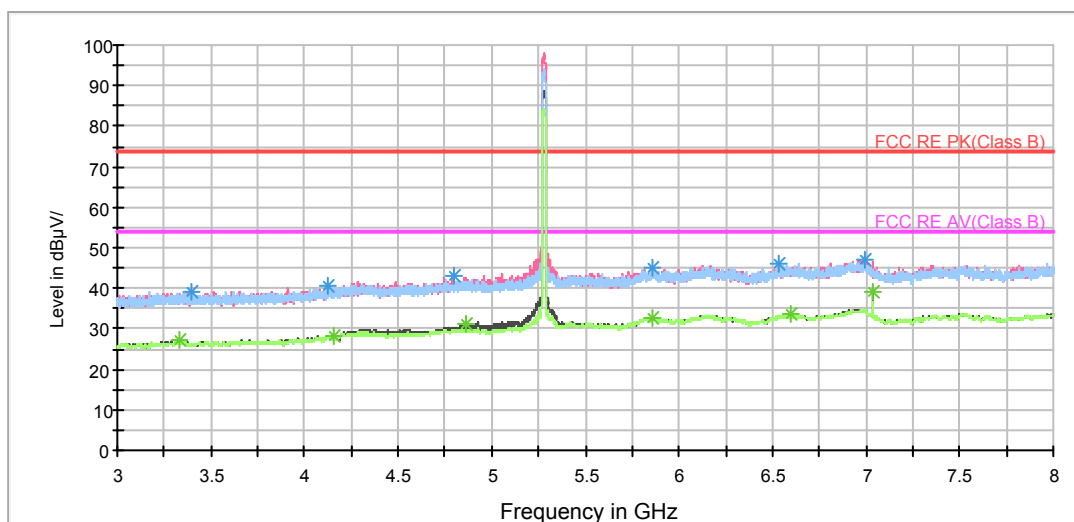
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



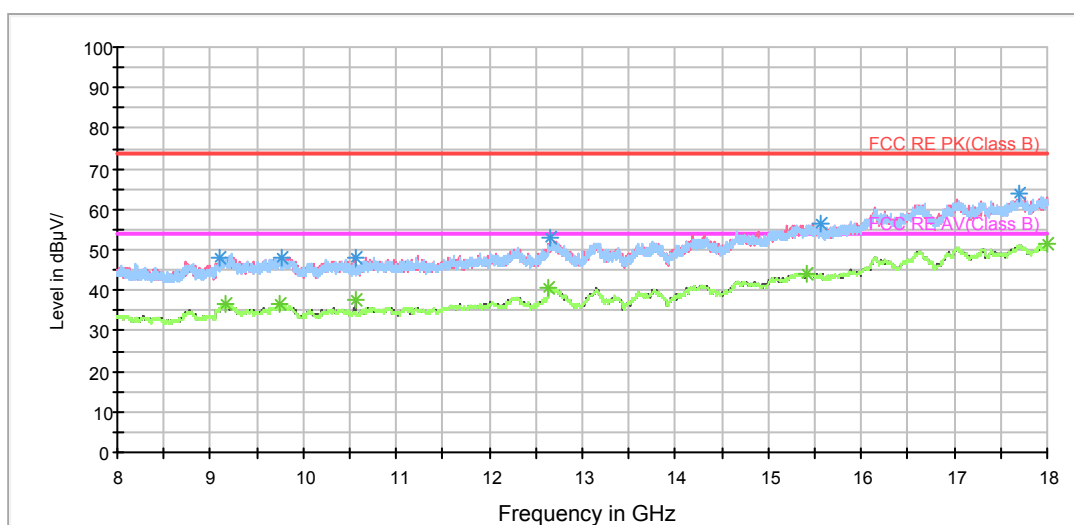
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



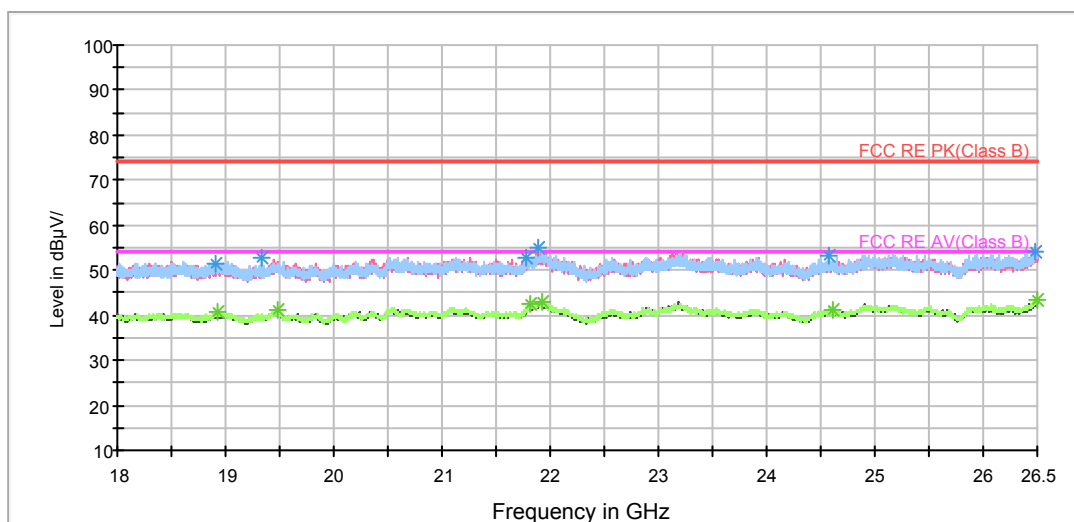
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



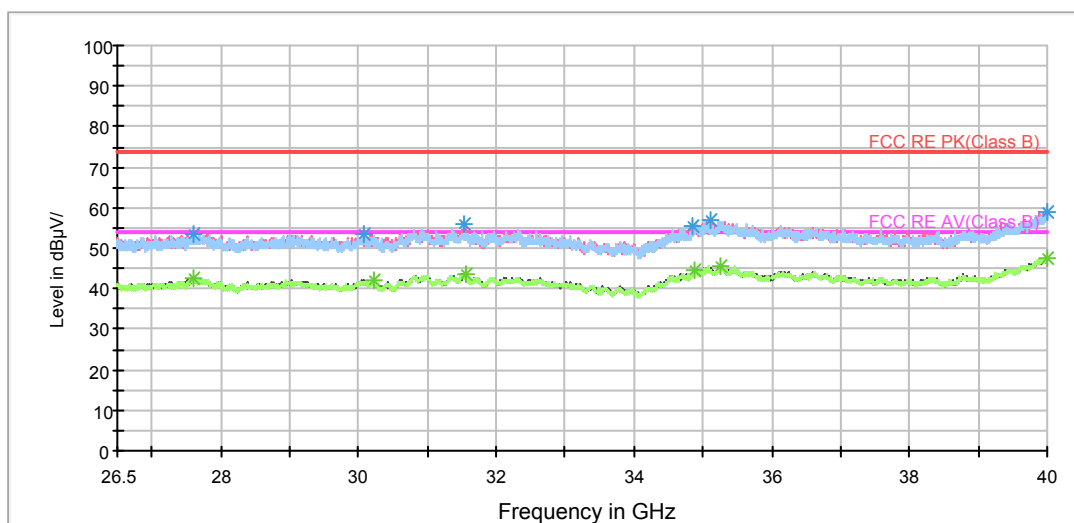
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT20) CH64

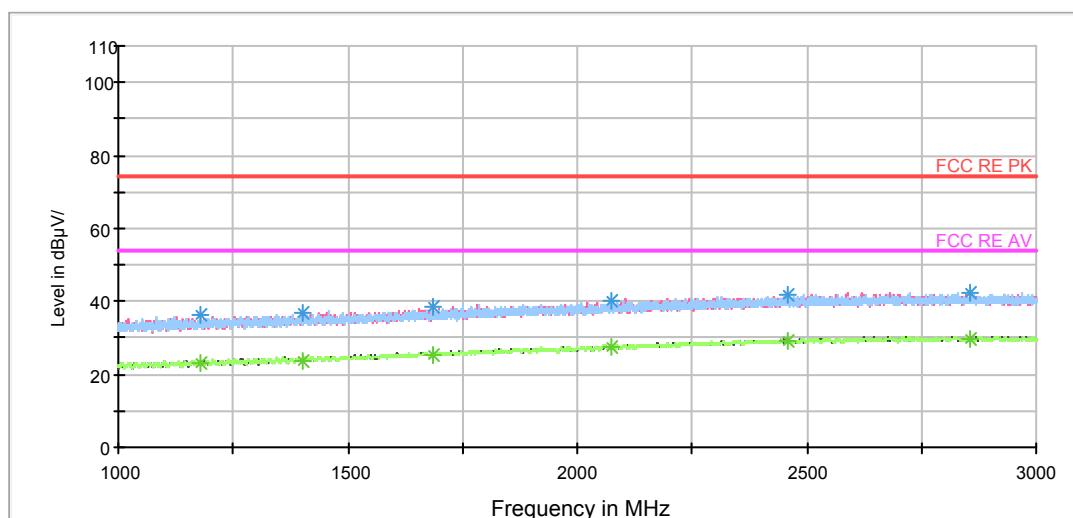
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1177.750000	36.1	100.0	H	136.0	44.5	-8.4	37.9	74
1401.250000	36.6	100.0	V	300.0	43.6	-7.0	37.4	74
1687.000000	38.5	100.0	H	46.0	43.9	-5.4	35.5	74
2073.750000	40.2	100.0	H	127.0	43.2	-3.0	33.8	74
2456.750000	41.8	100.0	H	36.0	42.9	-1.1	32.2	74
2855.750000	42.4	100.0	H	77.0	42.9	-0.5	31.6	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1177.750000	23.2	100.0	H	136.0	31.6	-8.4	30.8	54
1401.250000	23.8	100.0	V	300.0	30.8	-7.0	30.2	54
1687.000000	25.5	100.0	H	46.0	30.9	-5.4	28.5	54
2073.750000	27.4	100.0	H	127.0	30.4	-3.0	26.6	54
2456.750000	29.0	100.0	H	36.0	30.1	-1.1	25.0	54
2855.750000	29.7	100.0	H	77.0	30.2	-0.5	24.3	54

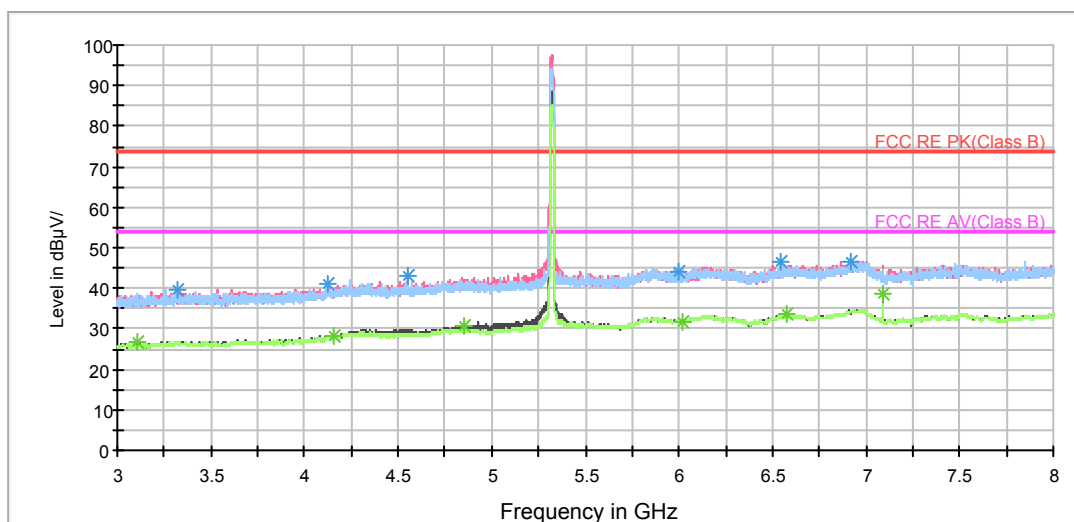
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



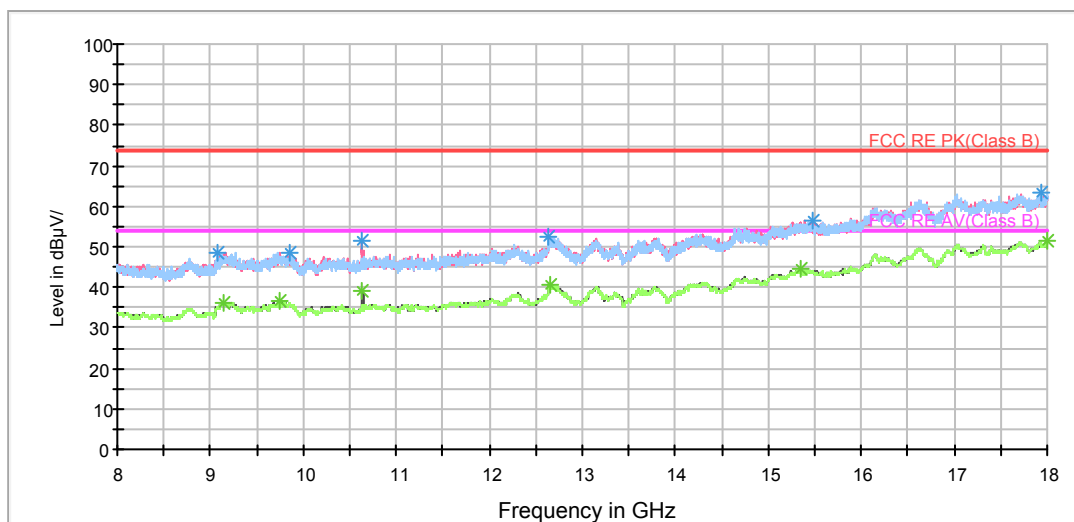
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



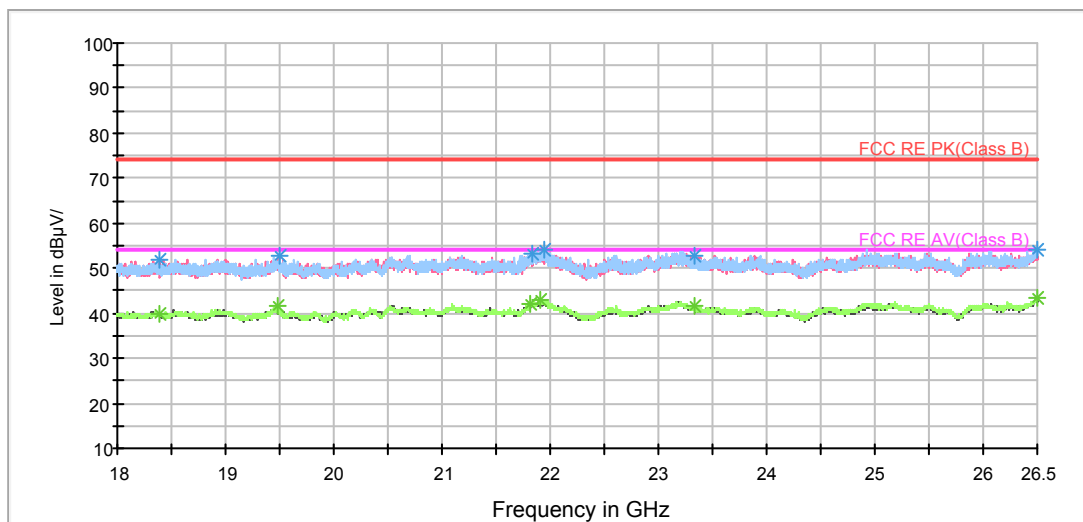
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT20) CH100

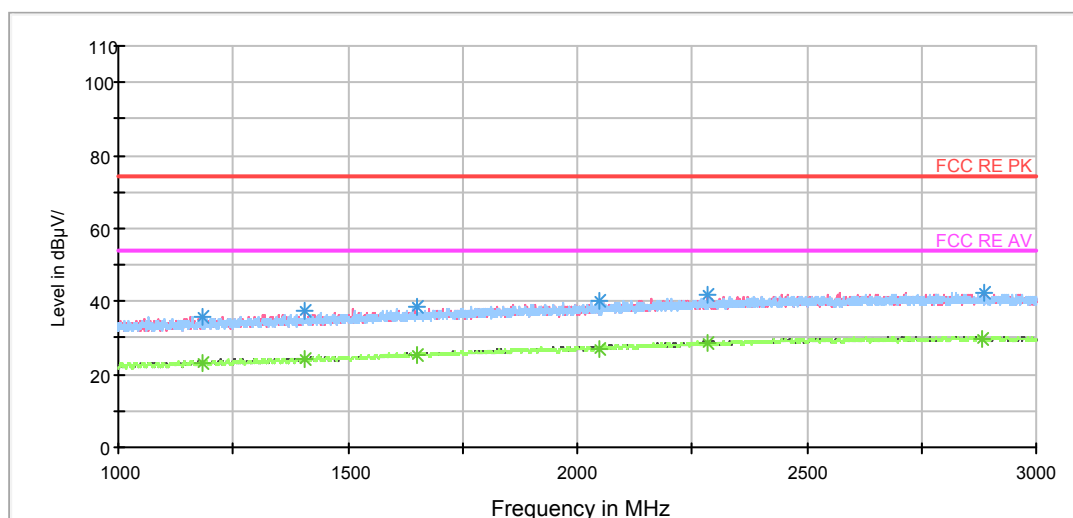
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1181.750000	36.0	100.0	V	288.0	44.4	-8.4	38.0	74
1407.750000	37.3	100.0	V	0.0	44.2	-6.9	36.7	74
1651.500000	38.3	100.0	H	2.0	43.9	-5.6	35.7	74
2046.500000	40.3	100.0	H	19.0	43.5	-3.2	33.7	74
2283.000000	41.9	100.0	V	78.0	43.8	-1.9	32.1	74
2886.500000	42.6	100.0	V	0.0	43.1	-0.5	31.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1181.750000	23.0	100.0	V	288.0	31.4	-8.4	31.0	54
1407.750000	24.4	100.0	V	0.0	31.3	-6.9	29.6	54
1651.500000	25.2	100.0	H	2.0	30.8	-5.6	28.8	54
2046.500000	27.1	100.0	H	19.0	30.3	-3.2	26.9	54
2283.000000	28.6	100.0	V	78.0	30.5	-1.9	25.4	54
2882.750000	29.6	100.0	V	171.0	30.0	-0.4	24.4	54

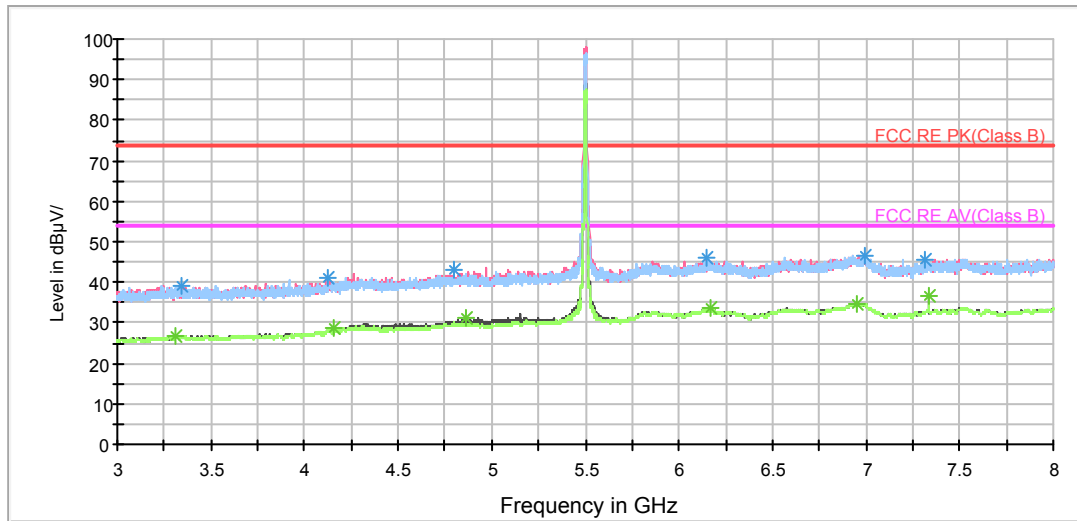
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



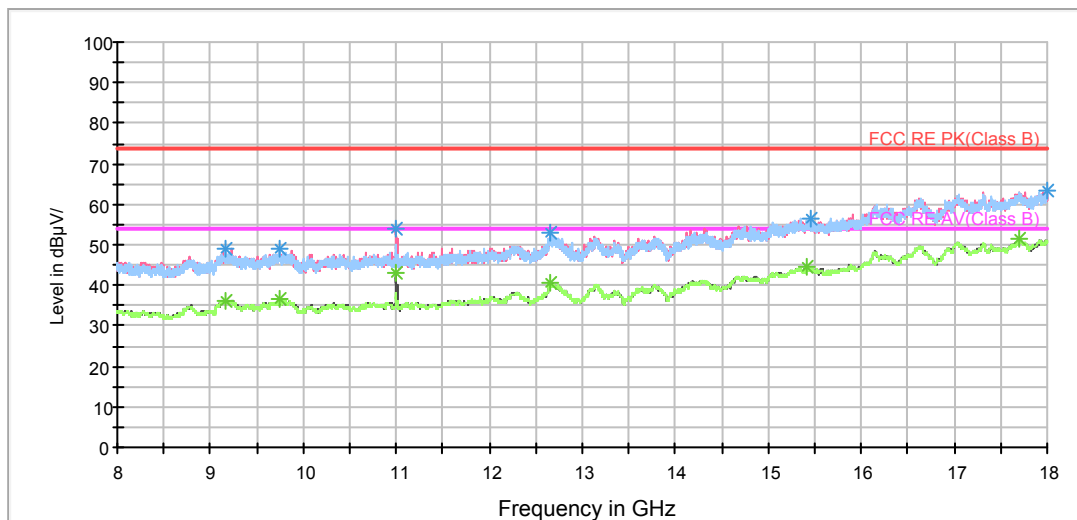
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



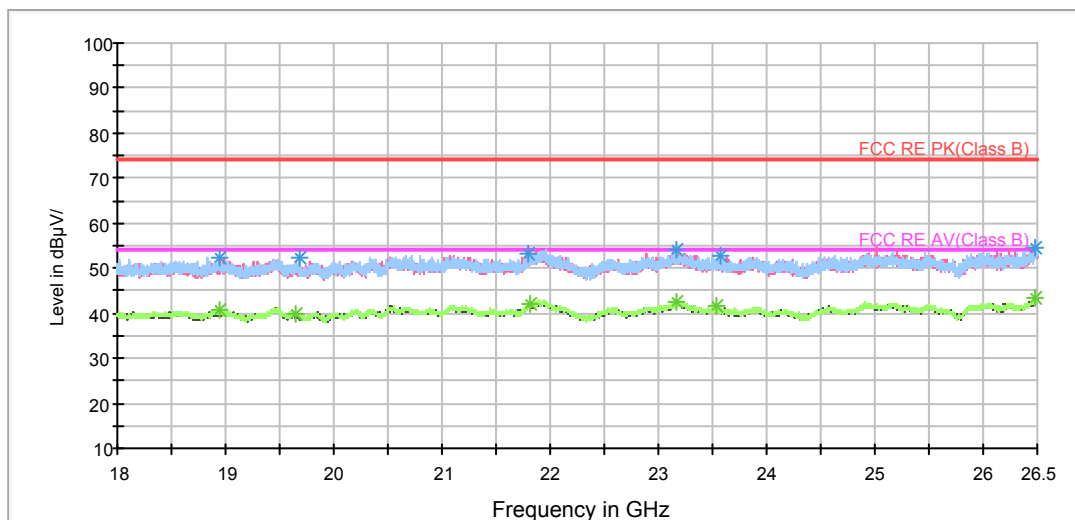
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



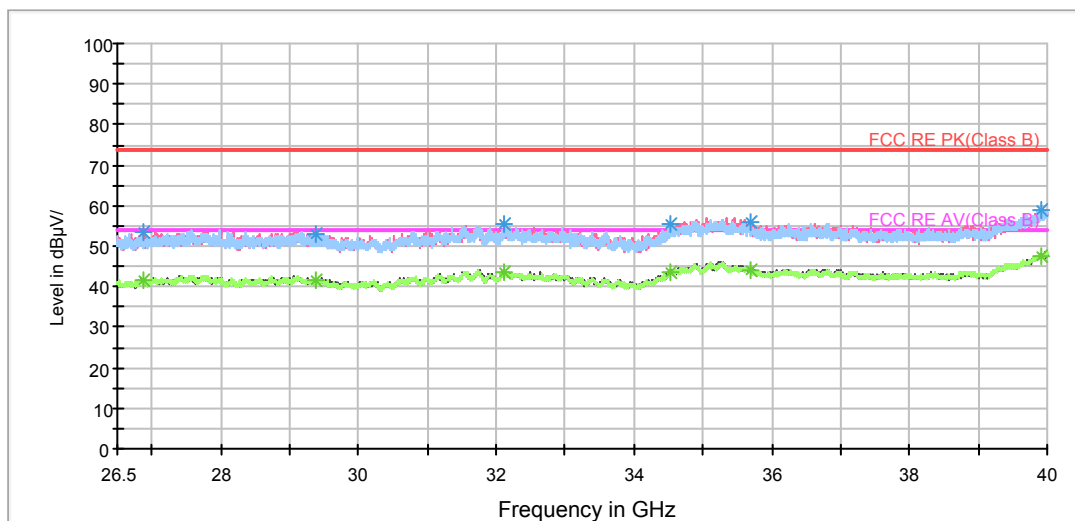
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT20) CH116

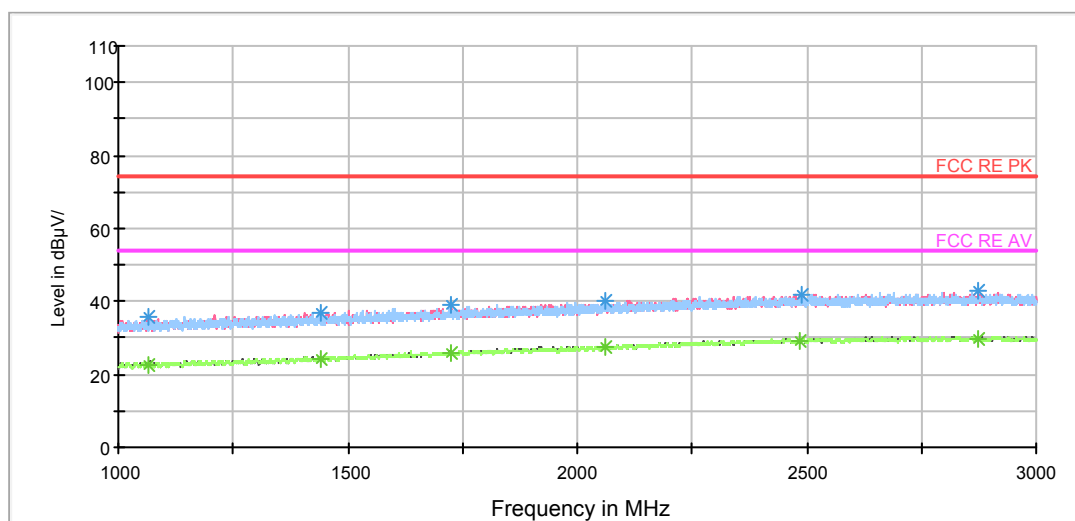
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1064.500000	35.8	100.0	V	359.0	44.7	-8.9	38.2	74
1442.000000	36.9	100.0	V	120.0	43.6	-6.7	37.1	74
1727.000000	39.1	100.0	V	243.0	44.2	-5.1	34.9	74
2063.000000	39.9	100.0	V	33.0	42.9	-3.0	34.1	74
2488.000000	41.8	100.0	H	4.0	42.7	-0.9	32.2	74
2874.500000	42.9	100.0	V	253.0	43.3	-0.4	31.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1064.500000	22.6	100.0	V	359.0	31.5	-8.9	31.4	54
1442.000000	24.4	100.0	V	120.0	31.1	-6.7	29.6	54
1727.000000	25.8	100.0	V	243.0	30.9	-5.1	28.2	54
2062.750000	27.5	100.0	V	99.0	30.5	-3.0	26.5	54
2482.750000	29.0	100.0	V	151.0	30.0	-1.0	25.0	54
2874.500000	29.8	100.0	V	253.0	30.2	-0.4	24.2	54

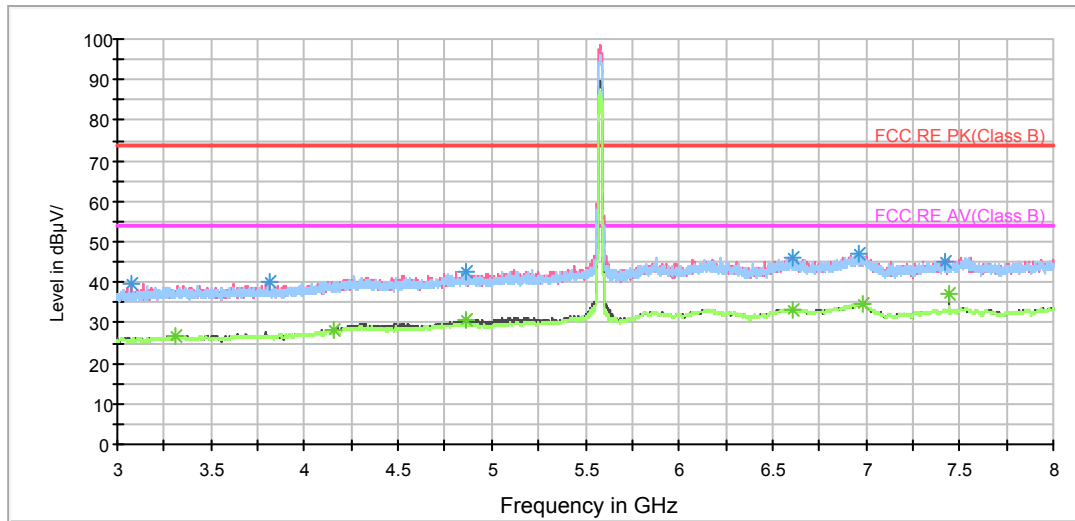
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



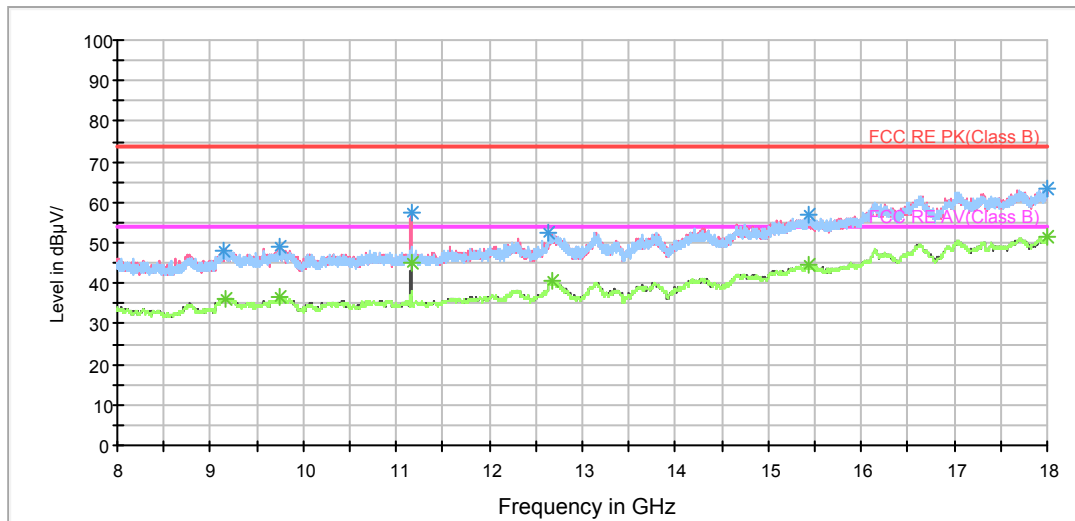
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



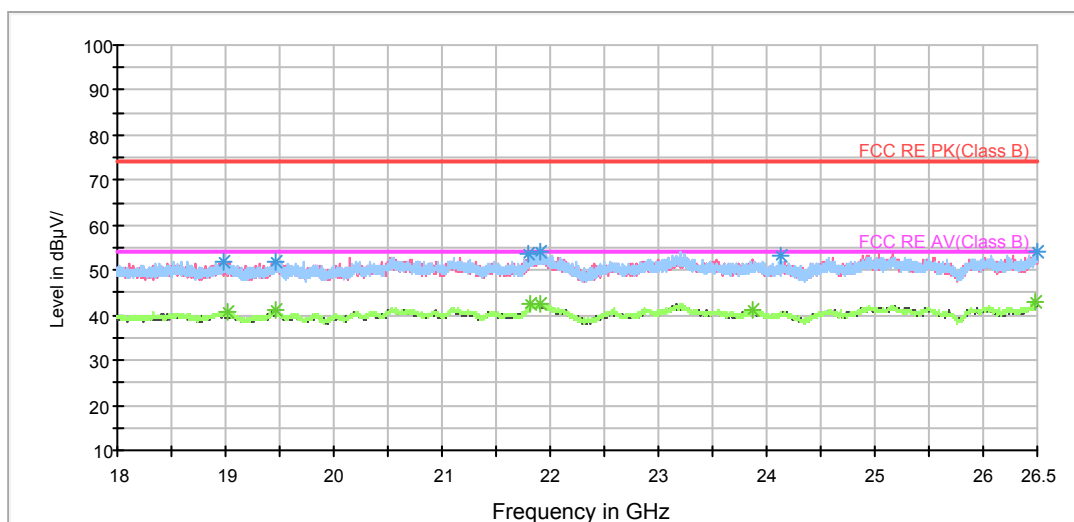
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



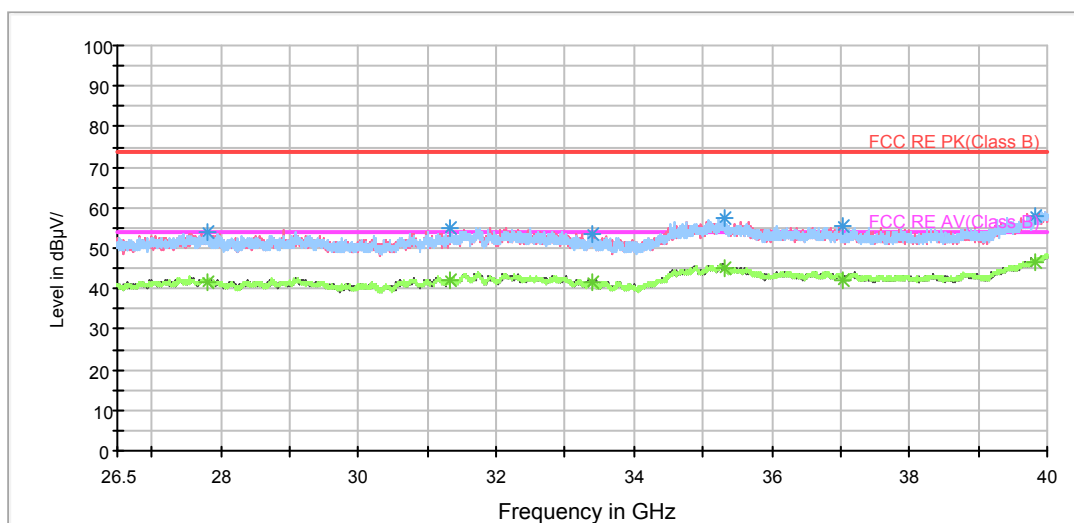
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT20) CH140

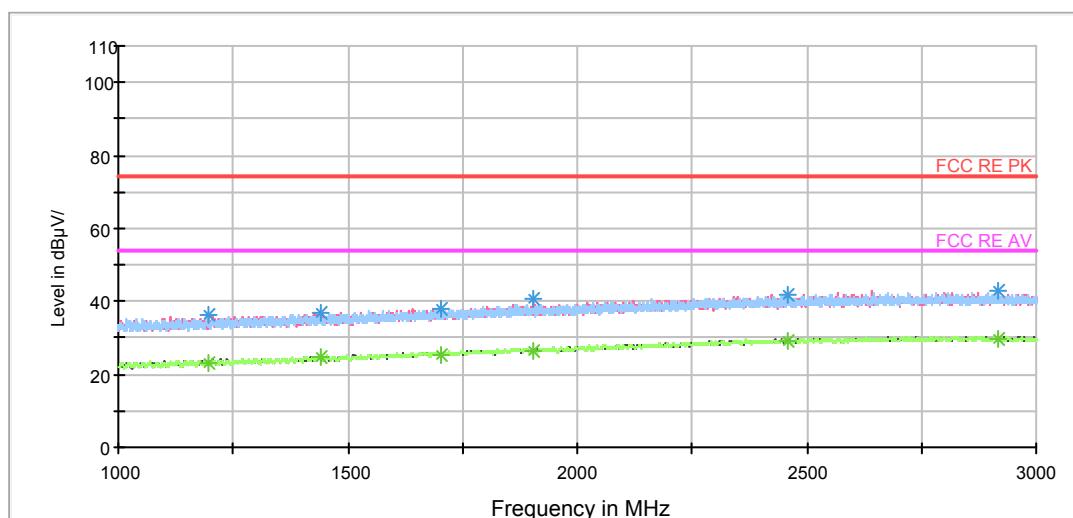
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.250000	36.2	100.0	V	340.0	44.4	-8.2	37.8	74
1439.000000	37.1	100.0	H	229.0	43.8	-6.7	36.9	74
1703.500000	38.0	100.0	V	358.0	43.3	-5.3	36.0	74
1905.750000	40.5	100.0	V	358.0	44.5	-4.0	33.5	74
2459.500000	42.1	100.0	V	356.0	43.2	-1.1	31.9	74
2916.250000	42.9	100.0	V	0.0	43.3	-0.4	31.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.250000	23.0	100.0	V	340.0	31.2	-8.2	31.0	54
1439.000000	24.5	100.0	H	229.0	31.2	-6.7	29.5	54
1703.500000	25.3	100.0	V	358.0	30.6	-5.3	28.7	54
1905.750000	26.5	100.0	V	358.0	30.5	-4.0	27.5	54
2459.500000	29.1	100.0	V	356.0	30.2	-1.1	24.9	54
2916.250000	29.9	100.0	V	0.0	30.3	-0.4	24.1	54

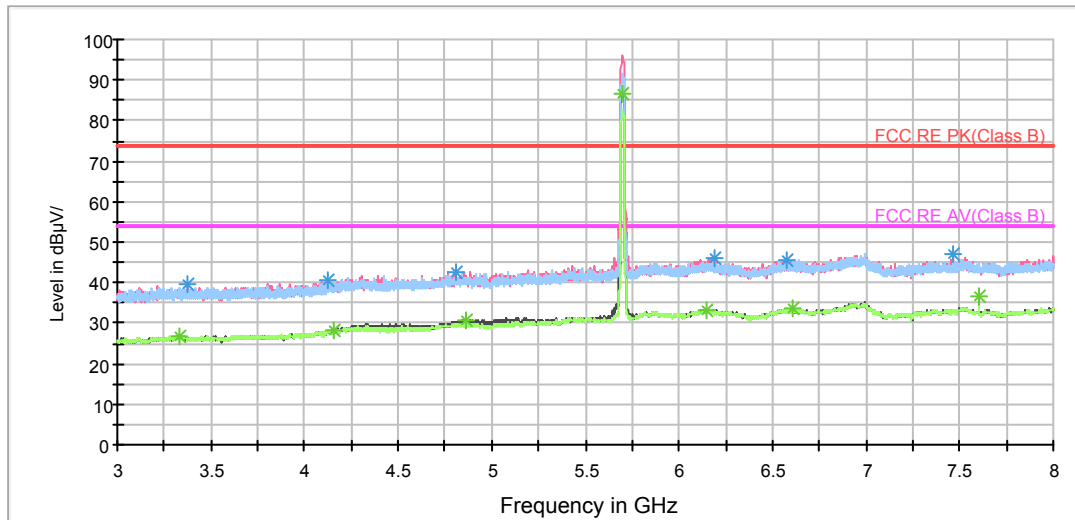
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

FCC RE 1G-18GHz PK+AV Class B



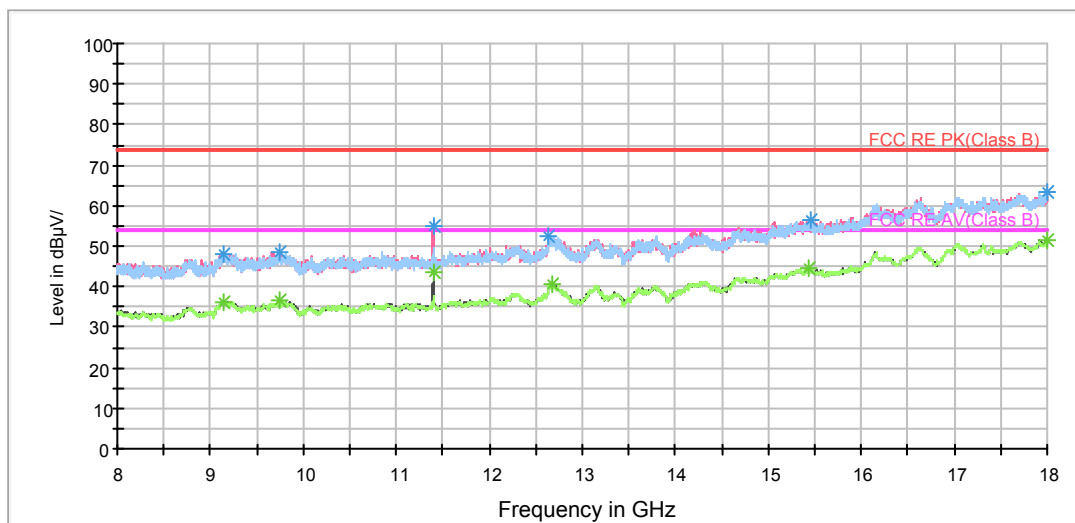
Radiates Emission from 1GHz to 3GHz

RE 3-18GHz PK+AV



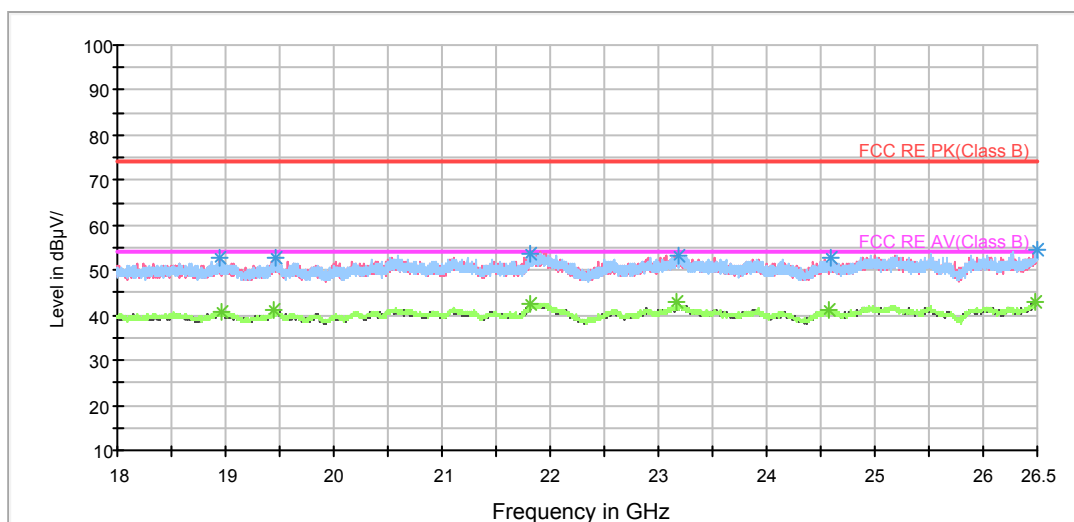
Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 8GHz

RE 3-18GHz PK+AV



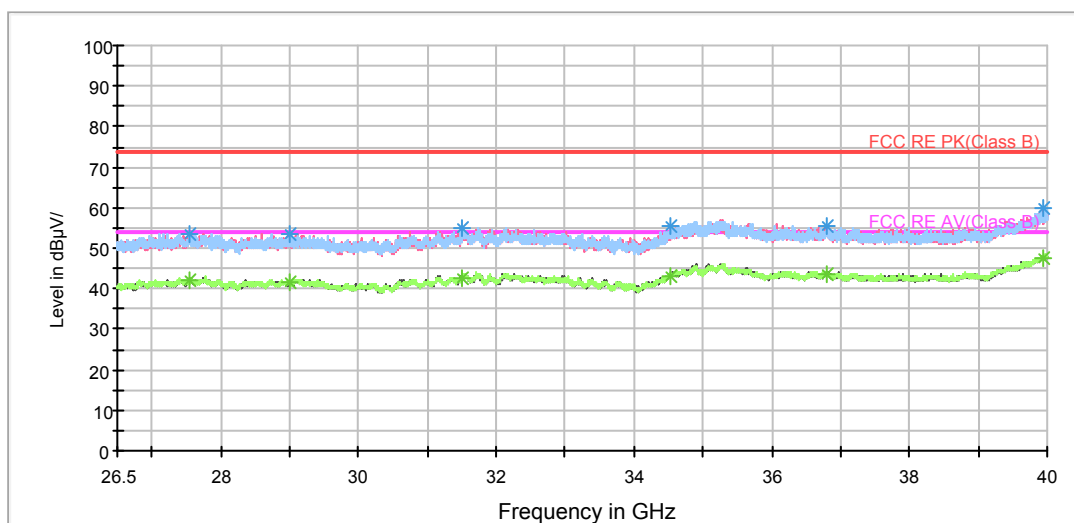
Radiates Emission from 8GHz to 18GHz

BELL_RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

BELL_RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz



802.11n (HT40) CH38

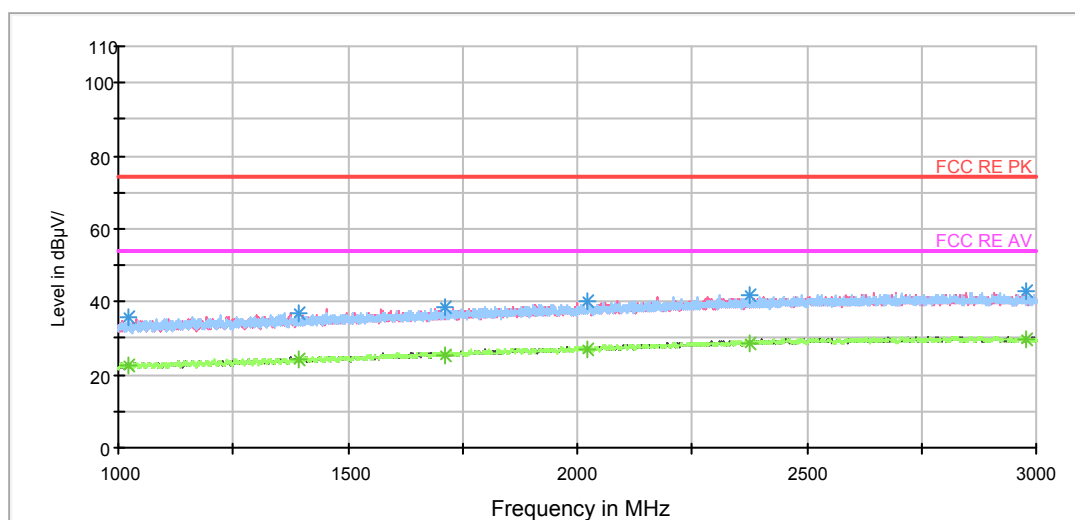
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1022.250000	36.0	100.0	H	30.0	45.1	-9.1	38.0	74
1393.000000	36.7	100.0	V	0.0	43.7	-7.0	37.3	74
1712.250000	38.6	100.0	V	348.0	43.8	-5.2	35.4	74
2021.250000	40.1	100.0	V	359.0	43.4	-3.3	33.9	74
2374.750000	41.8	100.0	H	70.0	43.2	-1.4	32.2	74
2980.250000	42.8	100.0	H	90.0	43.2	-0.4	31.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1022.250000	22.4	100.0	H	30.0	31.5	-9.1	31.6	54
1393.000000	24.0	100.0	V	0.0	31.0	-7.0	30.0	54
1712.250000	25.4	100.0	V	348.0	30.6	-5.2	28.6	54
2021.250000	26.9	100.0	V	359.0	30.2	-3.3	27.1	54
2374.750000	28.7	100.0	H	70.0	30.1	-1.4	25.3	54
2980.250000	29.4	100.0	H	90.0	29.8	-0.4	24.6	54

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

FCC RE 1G-18GHz PK+AV Class B



Radiates Emission from 1GHz to 3GHz