



中国认可  
国际互认  
检测  
TESTING  
CNAS L2264

## RF TEST REPORT

**Applicant** TP-LINK TECHNOLOGIES CO., LTD.  
**FCC ID** TE7T2UHP  
**Brand** TP-LINK  
**Product** AC600 High Power Wireless Dual Band  
USB Adapter  
**Model** Archer T2UHP  
**Report No.** RXA1608-0178RF03R2  
**Issue Date** November 22, 2016

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15E (2016)**. 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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### TA Technology (Shanghai) Co., Ltd.

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## Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Occupied bandwidth	15.407(e)	PASS
2	Conducted output power	15.407(a)	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 28, 2016~ September 29, 2016



## 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. This report must not be used by the client to claim product certification, approval, or endorsement by CNAS or any government agencies.

### 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 (recognition number is 428261)**

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-766)**

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.  
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong  
City: Shanghai  
Post code: 201201  
Country: P. R. China  
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Fax: +86-021-50791141/2/3-8000  
Website: <http://www.ta-shanghai.com>  
E-mail: [xukai@ta-shanghai.com](mailto:xukai@ta-shanghai.com)



## 2. General Description of Equipment under Test

### Client Information

<b>Applicant</b>	TP-LINK TECHNOLOGIES CO., LTD.
<b>Applicant address</b>	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen,China
<b>Manufacturer</b>	TP-LINK TECHNOLOGIES CO., LTD.
<b>Manufacturer address</b>	Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen,China

### General information

EUT Description	
Model:	Archer T2UHP
SN:	/
Power Supply:	USB Power Supply
Antenna Type:	External Antenna
Antenna Gain:	5.5 dBi
additional beamforming gain:	0 dB
Test Mode:	U-NII-1(5150MHz-5250MHz) U-NII-2A(5250MHz-5350MHz) U-NII-2C(5470MHz-5725MHz) U-NII-3(5725MHz-5850MHz)
Modulation Type:	802.11a/n (HT20/HT40) : OFDM 802.11ac (HT20/HT40/HT80): OFDM
Max. Conducted Power	802.11a: 21.76 dBm 802.11n: 21.88 dBm 802.11ac: 21.91 dBm
Operating Frequency Range(s)	U-NII-1: 5150-5250MHz U-NII-2A:5250-5350MHz U-NII-2C:5470-5725MHz U-NII-3: 5725-5850MHz
Note: The information of the EUT is declared by the manufacturer. Please refer to the specifications or user manual for details.	



### 3. Test Information

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

**FCC CFR47 Part 15E (2016) Unlicensed National Information Infrastructure Devices**

**ANSI C63.10 (2013)**

**KDB 789033 D02 General UNII Test Procedures New Rules v01r03**

**KDB 662911 D01 Multiple Transmitter Output v02r01**



## 4. Test Configuration

### Test Mode

The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

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 stand-up position (Z 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



## 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.

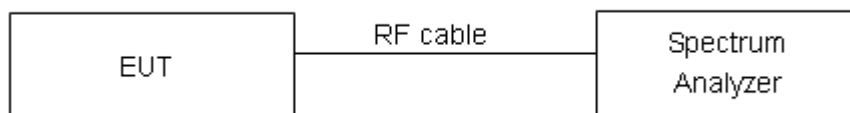
For U-NII-1, set RBW  $\approx$ 1% OCB kHz, VBW  $\geq$  3  $\times$  RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured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

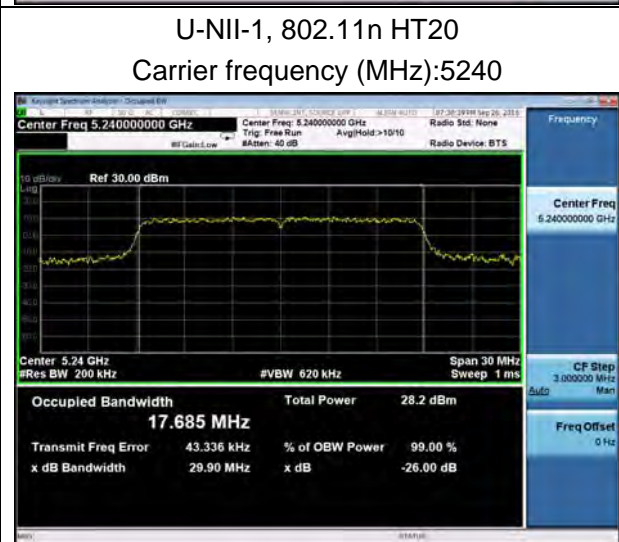
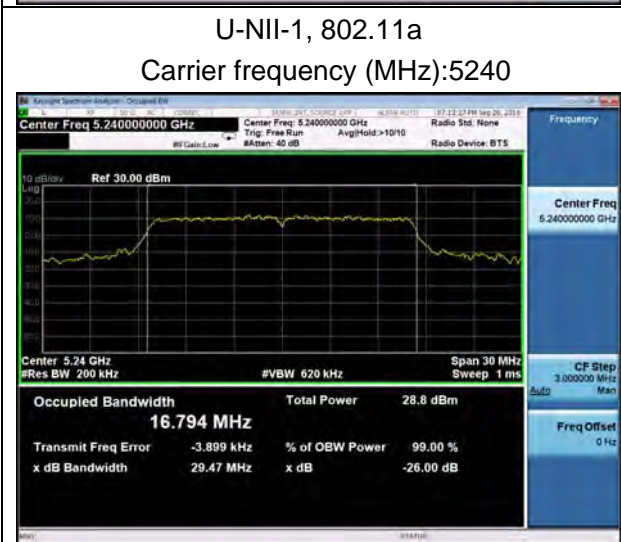
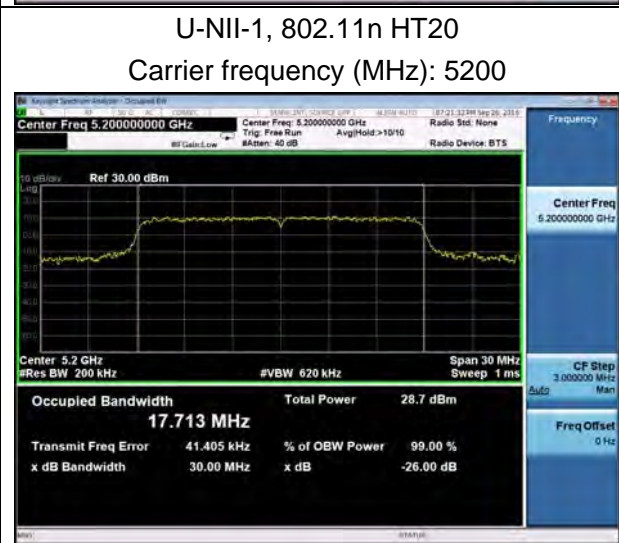
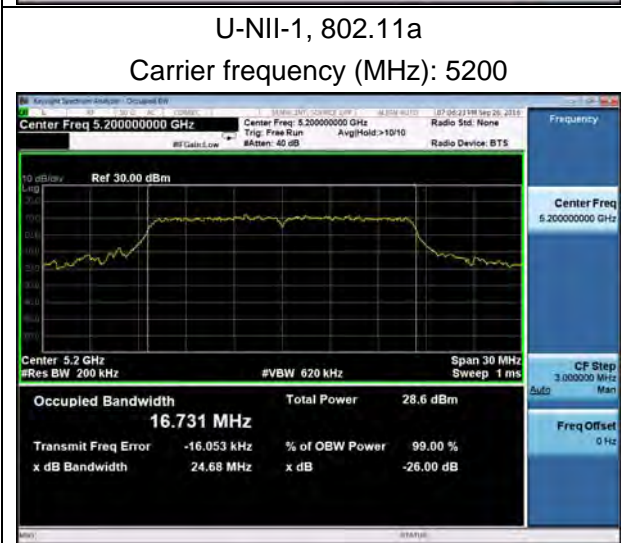
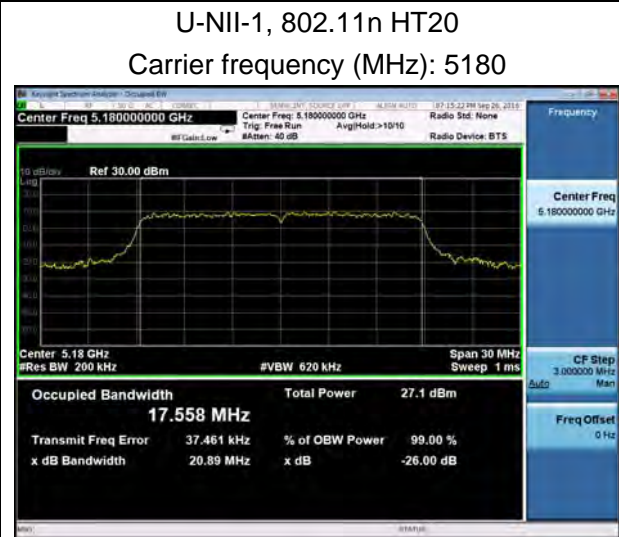
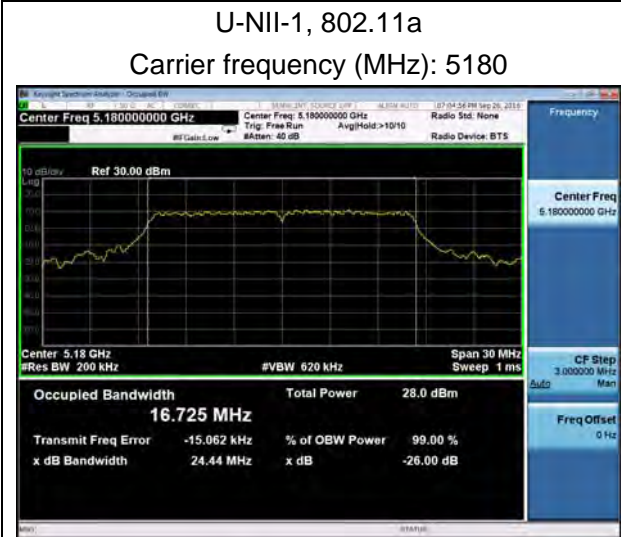
**Test Results:**

Network Standards		Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
U-NII-1	802.11a	5180	16.725	24.44	PASS
		5200	16.731	24.68	PASS
		5240	16.794	29.47	PASS
	802.11n HT20	5180	17.558	20.89	PASS
		5200	17.713	30.00	PASS
		5240	17.685	29.90	PASS
	802.11n HT40	5190	36.143	40.82	PASS
		5230	36.283	56.93	PASS
	802.11ac HT20	5180	17.555	20.63	PASS
		5200	17.686	29.94	PASS
		5240	18.075	30.00	PASS
	802.11ac HT40	5190	36.142	40.55	PASS
		5230	36.337	57.19	PASS
802.11ac HT80	5210	75.966	115.7	PASS	

Network Standards		Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
U-NII-2A	802.11a	5260	16.630	20.14	PASS
		5300	16.830	28.46	PASS
		5320	16.564	24.46	PASS
	802.11n HT20	5260	18.043	30.00	PASS
		5300	18.012	30.00	PASS
		5320	17.558	20.59	PASS
	802.11n HT40	5270	36.876	60.00	PASS
		5310	36.157	40.74	PASS
	802.11ac HT20	5260	18.678	30.00	PASS
		5300	18.014	30.00	PASS
		5320	17.558	20.29	PASS
	802.11ac HT40	5270	36.128	42.59	PASS
		5310	36.167	40.53	PASS
	802.11ac HT80	5290	75.526	87.18	PASS

Network Standards		Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Conclusion
U-NII-2C	802.11a	5500	16.642	20.86	PASS
		5580	16.527	21.05	PASS
		5700	16.645	21.02	PASS
	802.11n HT20	5500	17.549	20.59	PASS
		5580	17.525	20.05	PASS
		5700	17.536	20.12	PASS
	802.11n HT40	5510	36.157	40.88	PASS
		5550	36.287	57.50	PASS
		5670	36.187	40.66	PASS
	802.11ac HT20	5500	17.547	20.31	PASS
		5580	17.537	20.05	PASS
		5700	17.523	20.02	PASS
	802.11ac HT40	5510	36.140	40.48	PASS
		5550	36.299	53.98	PASS
		5670	36.154	40.63	PASS
802.11ac HT80	5530	75.509	86.73	PASS	

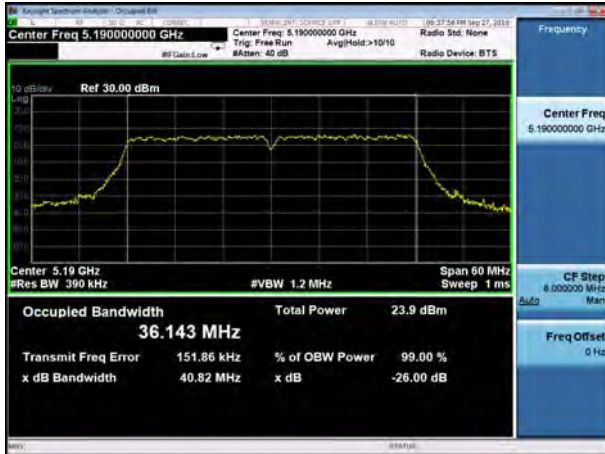
Network Standards		Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit(MHz)	Conclusion
U-NII-3	802.11a	5745	16.670	16.47	0.5	PASS
		5785	16.631	16.39	0.5	PASS
		5825	16.616	16.47	0.5	PASS
	802.11n HT20	5745	17.598	17.59	0.5	PASS
		5785	17.521	17.59	0.5	PASS
		5825	17.566	17.57	0.5	PASS
	802.11n HT40	5755	36.340	36.32	0.5	PASS
		5795	36.292	36.26	0.5	PASS
	802.11ac HT20	5745	17.585	17.57	0.5	PASS
		5785	17.519	17.56	0.5	PASS
		5825	17.601	17.59	0.5	PASS
	802.11ac HT40	5755	36.267	36.30	0.5	PASS
		5795	36.298	36.40	0.5	PASS
	802.11ac HT80	5775	75.554	76.00	0.5	PASS



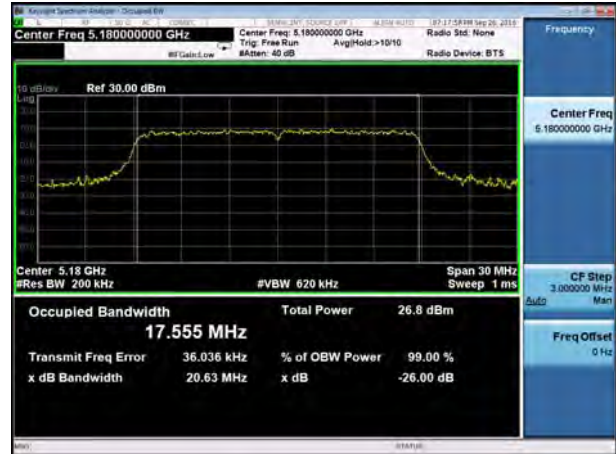




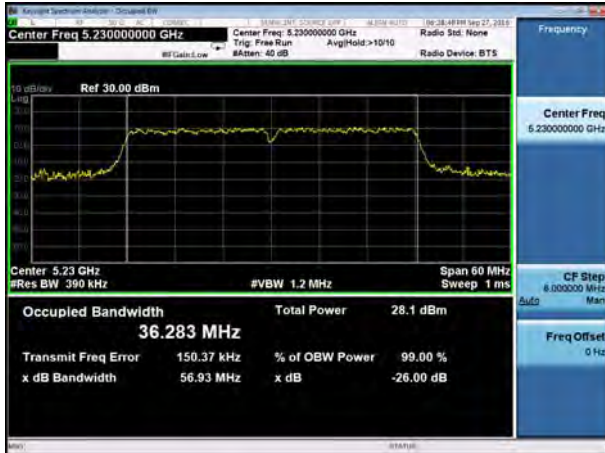
U-NII-1, 802.11n HT40  
Carrier frequency (MHz): 5190



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): 5200

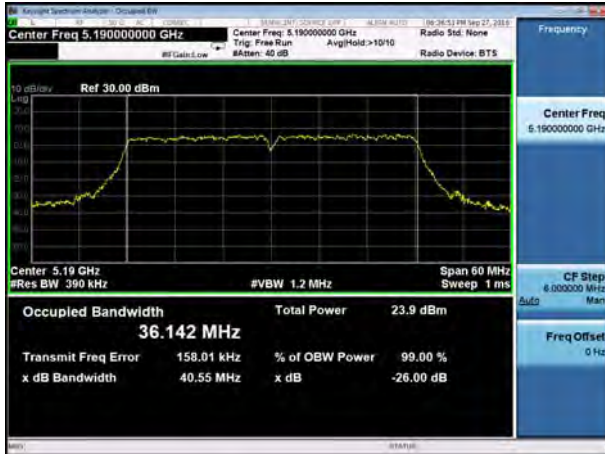


U-NII-1, 802.11ac HT20  
Carrier frequency (MHz): 5240

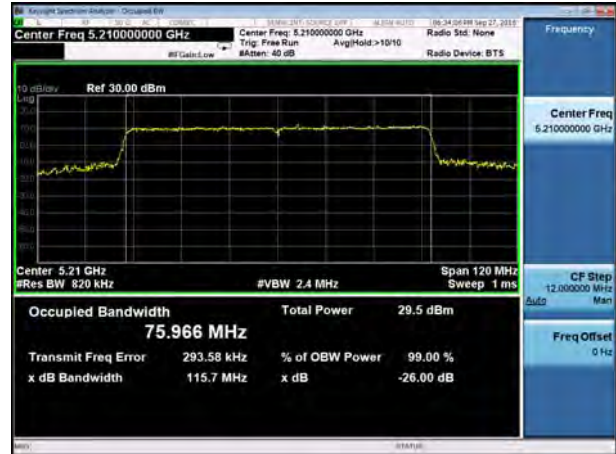




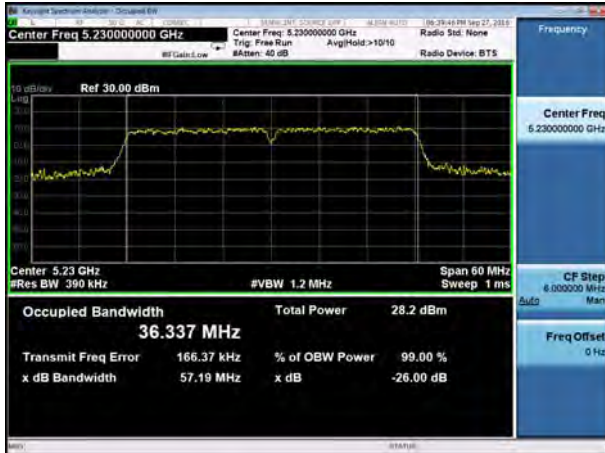
U-NII-1, 802.11ac HT40  
Carrier frequency (MHz): 5190



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



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







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



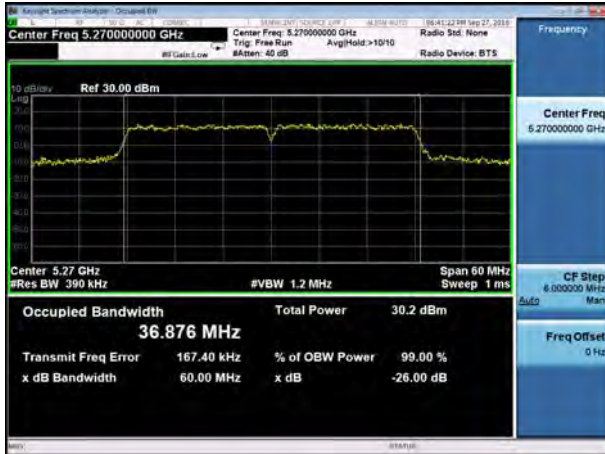
U-NII-2A, 802.11a  
Carrier frequency (MHz):5320



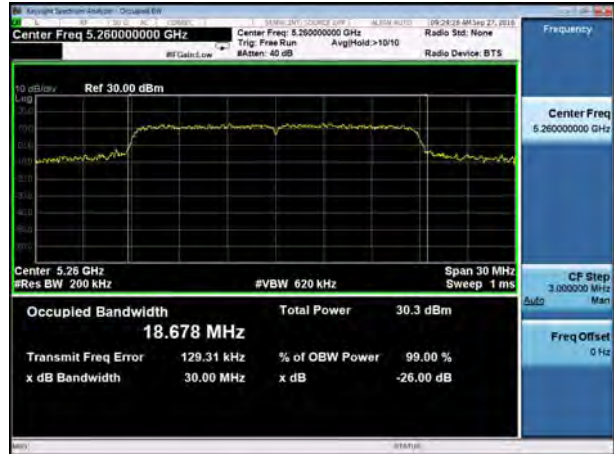
U-NII-2A, 802.11n HT20  
Carrier frequency (MHz):5320



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 HT20  
Carrier frequency (MHz): 5320







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



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



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

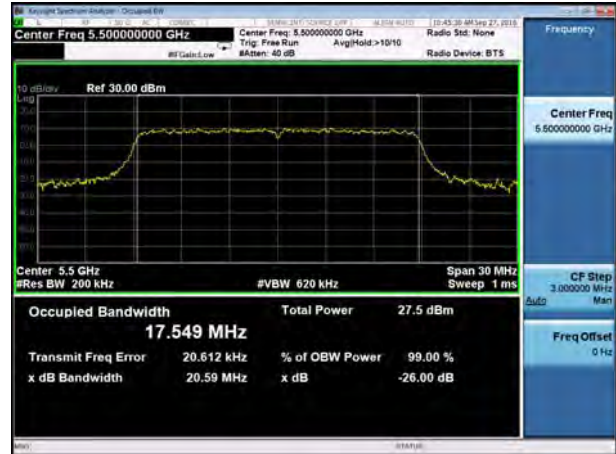




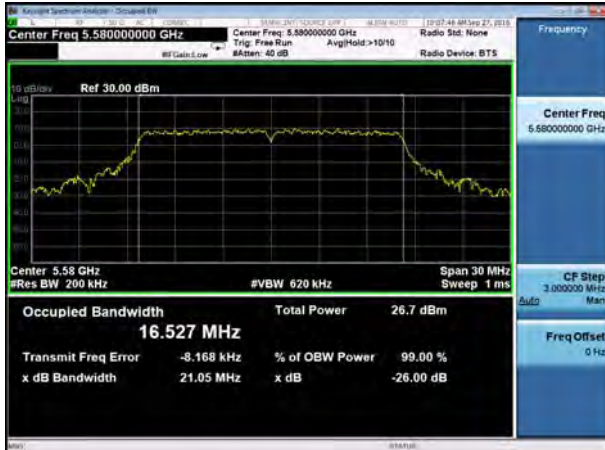
U-NII-2C, 802.11a  
Carrier frequency (MHz): 5500



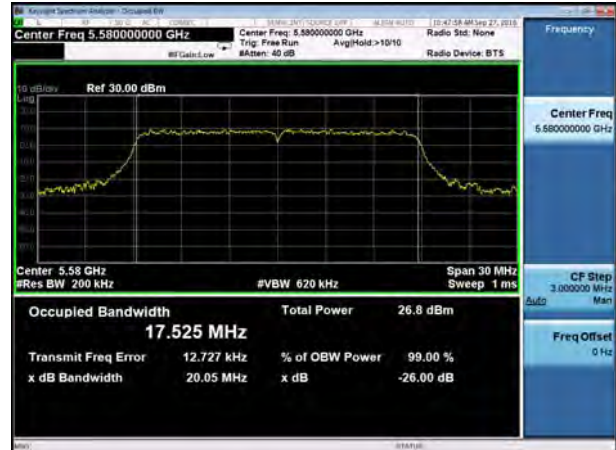
U-NII-2C, 802.11n HT20  
Carrier frequency (MHz): 5500



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



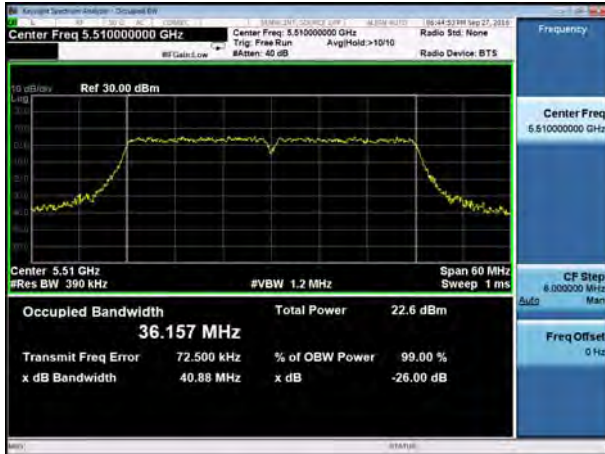
U-NII-2C, 802.11n HT20  
Carrier frequency (MHz):5700



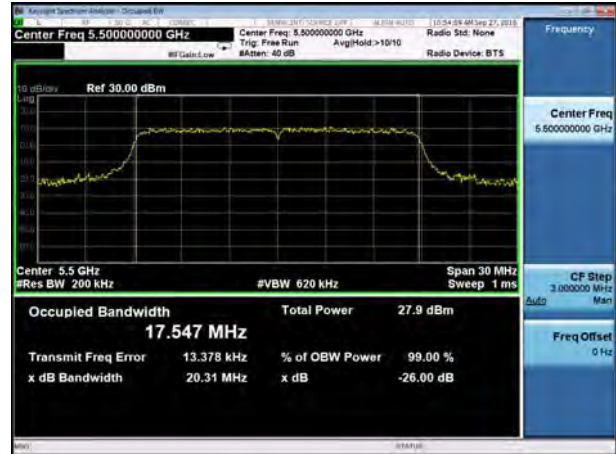




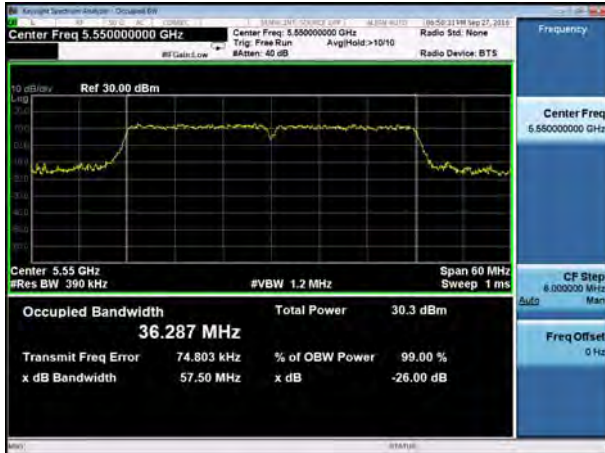
U-NII-2C, 802.11n HT40  
Carrier frequency (MHz): 5510



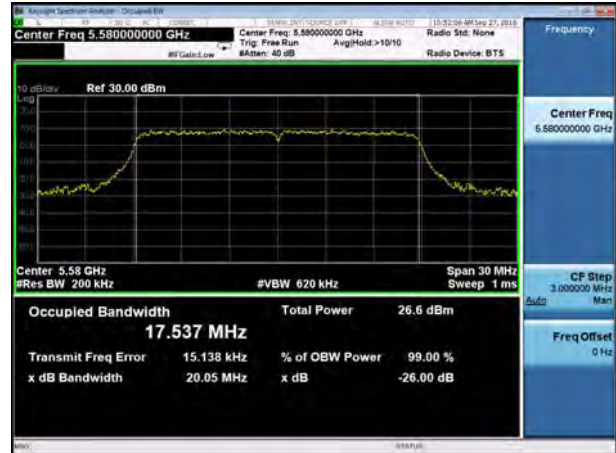
U-NII-2C, 802.11ac HT20  
Carrier frequency (MHz): 5500



U-NII-2C, 802.11n HT40  
Carrier frequency (MHz): 5550



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



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



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

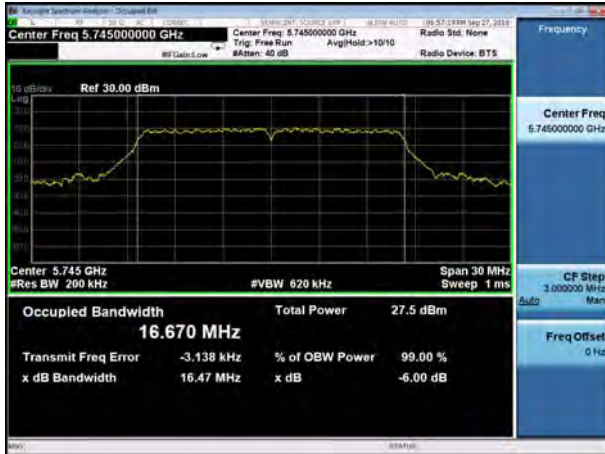




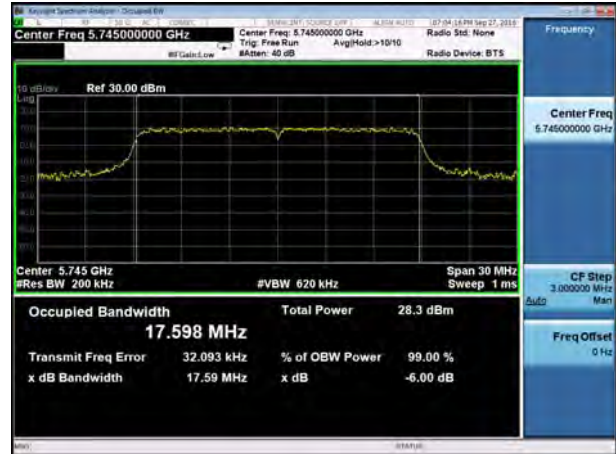




U-NII-3, 802.11a  
Carrier frequency (MHz): 5745



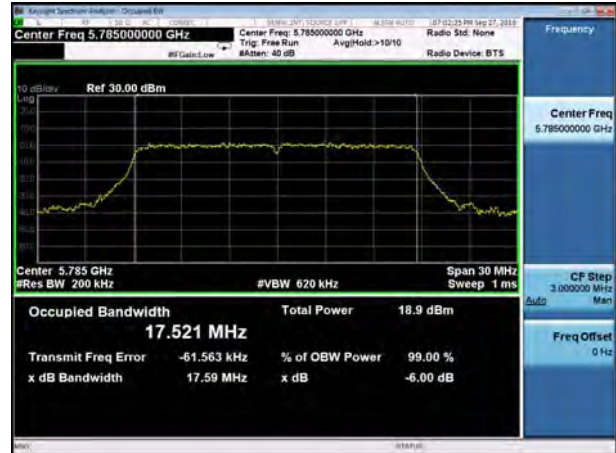
U-NII-3, 802.11n HT20  
Carrier frequency (MHz): 5745



U-NII-3, 802.11a  
Carrier frequency (MHz): 5785



U-NII-3, 802.11n HT20  
Carrier frequency (MHz): 5785



U-NII-3, 802.11a  
Carrier frequency (MHz): 5825



U-NII-3, 802.11n HT20  
Carrier frequency (MHz): 5825

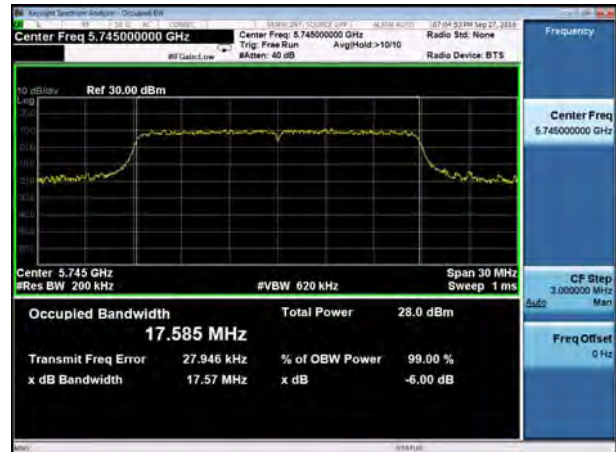




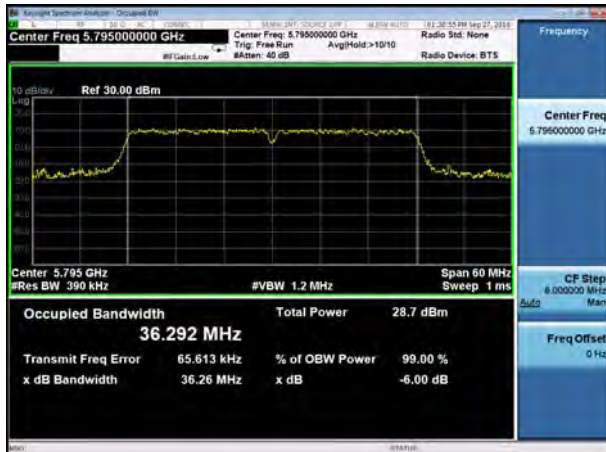
U-NII-3, 802.11n HT40  
Carrier frequency (MHz): 5755



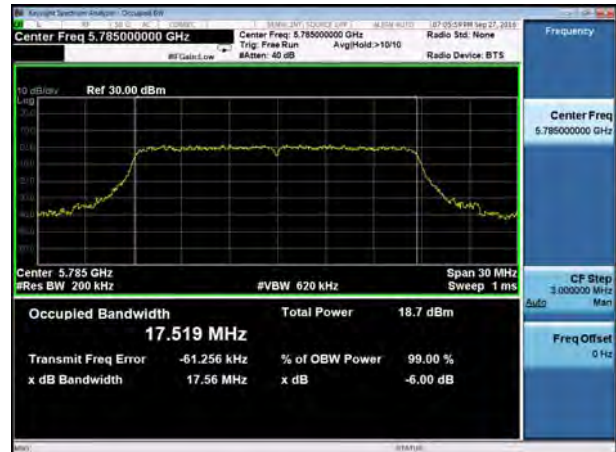
U-NII-3, 802.11ac HT20  
Carrier frequency (MHz): 5745



U-NII-3, 802.11n HT40  
Carrier frequency (MHz): 5795



U-NII-3, 802.11ac HT20  
Carrier frequency (MHz): 5785



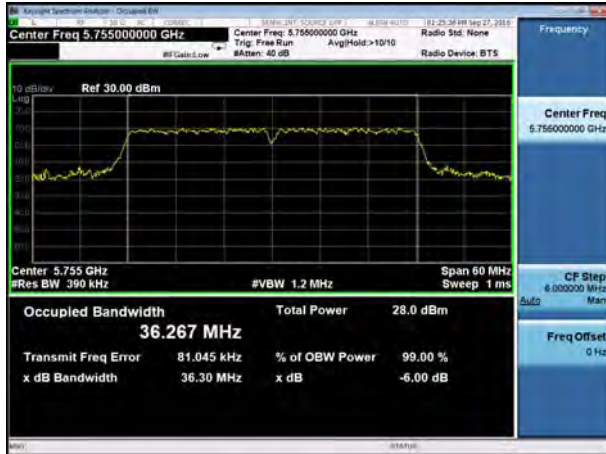
U-NII-3, 802.11ac HT20  
Carrier frequency (MHz): 5825



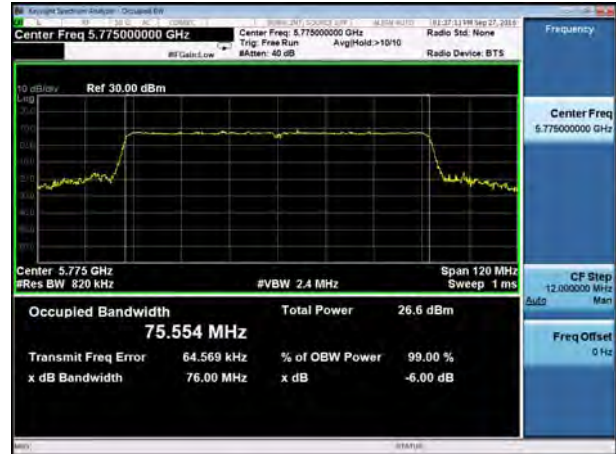




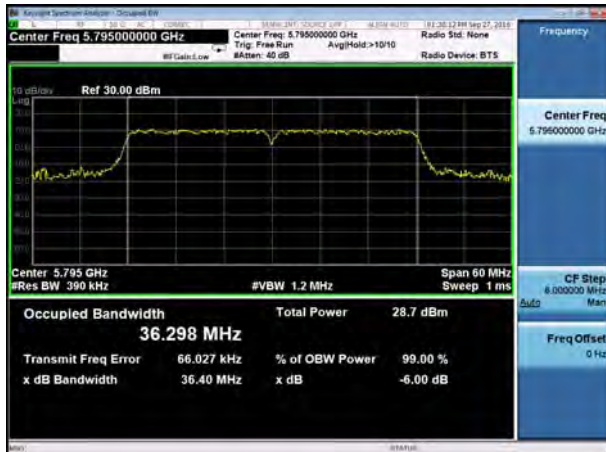
U-NII-3, 802.11ac HT40  
Carrier frequency (MHz): 5755



U-NII-3, 802.11ac HT80  
Carrier frequency (MHz): 5775



U-NII-3, 802.11ac HT40  
Carrier frequency (MHz): 5795



## 5.2. Conducted Output Power

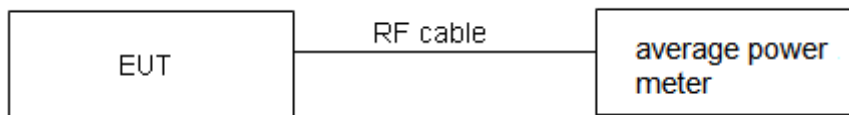
### Ambient condition

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

### Test Setup



### Limits

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

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi.

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.

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

### 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	CH40	CH48	CH52	CH60	CH64	CH100	CH116	CH140	CH149	CH157	CH165
802.11a	1A	19	17	15	13	13	12	17	17	18	17	18
802.11n HT20	1A	19	17	15	13	13	15	18	0E	18	18	19
802.11ac HT20	1A	18	17	16	13	19	14	18	0E	18	17	19
Packet Type	CH38	CH46	CH54	CH62	CH102	CH110	CH134	CH151	CH159	/	/	/
802.11n HT40	17	17	14	13	0B	16	15	15	18	/	/	/
802.11ac HT40	17	17	1A	13	0B	16	15	18	18	/	/	/
Packet Type	CH42	CH58	CH106	CH155	/	/	/	/	/	/	/	/
802.11ac HT80	15	0A	5	15	/	/	/	/	/	/	/	/



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	20.14	24.04>23.98	23.98	
		60/5300	28.46	25.54>23.98	23.98	
		64/5320	24.46	24.88>23.98	23.98	
	802.11n HT20	52/5260	30.00	25.77>23.98	23.98	
		60/5300	30.00	25.77>23.98	23.98	
		64/5320	20.59	24.14>23.98	23.98	
	802.11n HT40	54/5270	60.00	28.78>23.98	23.98	
		62/5310	40.74	27.10>23.98	23.98	
	802.11ac HT20	52/5260	30.00	25.77>23.98	23.98	
		60/5300	30.00	25.77>23.98	23.98	
		64/5320	20.29	24.07>23.98	23.98	
	802.11ac HT40	54/5270	42.59	27.29>23.98	23.98	
		62/5310	40.53	27.08>23.98	23.98	
802.11ac HT80	58/5290	87.18	30.40>23.98	23.98		
U-NII-2C	802.11a	100/5500	20.86	24.19>23.98	23.98	
		116/5580	21.05	24.23>23.98	23.98	
		140/5700	21.02	24.23>23.98	23.98	
	802.11n HT20	100/5500	20.59	24.14>23.98	23.98	
		116/5580	20.05	24.02>23.98	23.98	
		140/5700	20.12	24.04>23.98	23.98	
	802.11n HT40	102/5510	40.88	27.12>23.98	23.98	
		110/5550	57.50	28.60>23.98	23.98	
		134/5670	40.66	27.09>23.98	23.98	
	802.11ac HT20	100/5500	20.31	24.08>23.98	23.98	
		116/5580	20.05	24.02>23.98	23.98	
		140/5700	20.02	24.01>23.98	23.98	
	802.11ac HT40	102/5510	40.48	27.07>23.98	23.98	
		110/5550	53.98	28.32>23.98	23.98	
		134/5670	40.63	27.09>23.98	23.98	
	802.11ac HT80	106/5530	86.73	30.39>23.98	23.98	
	Note: 250mW=23.98dBm					



Network Standards		Channel/Frequency (MHz)	Average Output Power (dBm)	Limit(dBm)	Conclusion
U-NII-1	802.11a	36/5180	19.24	30	PASS
		40/5200	19.05	30	PASS
		48/5240	19.29	30	PASS
	802.11n HT20	36/5180	19.14	30	PASS
		40/5200	19.18	30	PASS
		48/5240	19.31	30	PASS
	802.11n HT40	38/5190	18.05	30	PASS
		46/5230	19.04	30	PASS
	802.11ac HT20	36/5180	19.31	30	PASS
		40/5200	19.43	30	PASS
		48/5240	19.14	30	PASS
	802.11ac HT40	38/5190	18.31	30	PASS
		46/5230	18.91	30	PASS
802.11ac HT80	42/5210	19.38	30	PASS	

Network Standards		Channel/Frequency (MHz)	Average Output Power (dBm)	Limit(dBm)	Conclusion
U-NII-2A	802.11a	52/5260	19.39	23.98	PASS
		60/5300	19.31	23.98	PASS
		64/5320	19.04	23.98	PASS
	802.11n HT20	52/5260	19.11	23.98	PASS
		60/5300	19.37	23.98	PASS
		64/5320	19.45	23.98	PASS
	802.11n HT40	54/5270	19.48	23.98	PASS
		62/5310	19.32	23.98	PASS
	802.11ac HT20	52/5260	19.43	23.98	PASS
		60/5300	19.46	23.98	PASS
		64/5320	19.48	23.98	PASS
	802.11ac HT40	54/5270	19.44	23.98	PASS
		62/5310	19.32	23.98	PASS
	802.11ac HT80	58/5290	14.16	23.98	PASS



Network Standards		Channel/Frequency (MHz)	Average Output Power (dBm)	Limit(dBm)	Conclusion
U-NII-2C	802.11a	100/5500	21.42	23.98	PASS
		116/5580	21.31	23.98	PASS
		140/5700	21.38	23.98	PASS
	802.11n HT20	100/5500	21.21	23.98	PASS
		116/5580	21.42	23.98	PASS
		140/5700	15.92	23.98	PASS
	802.11n HT40	102/5510	16.20	23.98	PASS
		110/5550	20.89	23.98	PASS
		134/5670	19.84	23.98	PASS
	802.11ac HT20	100/5500	21.04	23.98	PASS
		116/5580	21.49	23.98	PASS
		140/5700	16.88	23.98	PASS
	802.11ac HT40	102/5510	16.19	23.98	PASS
		110/5550	20.71	23.98	PASS
		134/5670	19.87	23.98	PASS
802.11ac HT80	106/5530	13.31	23.98	PASS	

Network Standards		Channel/Frequency (MHz)	Average Output Power (dBm)	Limit(dBm)	Conclusion
U-NII-3	802.11a	149/5745	21.76	30	PASS
		157/5785	21.57	30	PASS
		165/5825	21.35	30	PASS
	802.11n HT20	149/5745	21.81	30	PASS
		157/5785	21.62	30	PASS
		165/5825	21.88	30	PASS
	802.11n HT40	151/5755	21.85	30	PASS
		159/5795	21.78	30	PASS
	802.11ac HT20	149/5745	21.88	30	PASS
		157/5785	21.73	30	PASS
		165/5825	21.91	30	PASS
	802.11ac HT40	151/5755	21.56	30	PASS
		159/5795	21.38	30	PASS
	802.11ac HT80	155/5775	19.76	30	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

a) 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.

b) 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.

c) 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).

d) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.

e) 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.

f) 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.

g) Measure the frequency at each of frequencies specified in 5.6.

h) Switch OFF the EUT but do not switch OFF the oscillator heater.

i) Lower the chamber temperature by not more than 10 C, and allow the temperature inside the chamber to stabilize.

j) 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.

a) 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
5.00	-20	5199.970	5199.965	5199.954	5199.953
5.00	-10	5199.965	5199.959	5199.945	5199.952
5.00	0	5199.961	5199.951	5199.944	5199.944
5.00	10	5199.956	5199.943	5199.935	5199.935
5.00	20	5199.951	5199.940	5199.931	5199.926
5.00	30	5199.948	5199.930	5199.931	5199.922
5.00	40	5199.948	5199.930	5199.930	5199.921
5.00	50	5199.945	5199.922	5199.920	5199.915
4.75	20	5199.945	5199.932	5199.927	5199.926
5.25	20	5199.944	5199.934	5199.929	5199.918
MHz		-0.03	-0.035	-0.046	-0.047
PPM		-0.00058	-0.00067	-0.00088	-0.0009



Voltage (V)	Temperature (°C)	U-NII-2A Test Results			
		5300MHz			
		1min	2min	5min	10min
5.00	-20	5299.961	5299.958	5299.957	5299.956
5.00	-10	5299.953	5299.955	5299.950	5299.953
5.00	0	5299.946	5299.950	5299.943	5299.946
5.00	10	5299.937	5299.941	5299.942	5299.939
5.00	20	5299.935	5299.940	5299.940	5299.932
5.00	30	5299.933	5299.936	5299.936	5299.923
5.00	40	5299.927	5299.927	5299.929	5299.918
5.00	50	5299.923	5299.925	5299.924	5299.909
4.75	20	5299.925	5299.933	5299.934	5299.932
5.25	20	5299.925	5299.938	5299.937	5299.926
MHz		-0.039	-0.042	-0.043	-0.044
PPM		-0.00074	-0.00079	-0.00081	-0.00083





Voltage (V)	Temperature (°C)	U-NII-2C Test Results			
		5580MHz			
		1min	2min	5min	10min
5.00	-20	5579.955	5579.953	5579.952	5579.951
5.00	-10	5579.948	5579.944	5579.946	5579.951
5.00	0	5579.939	5579.936	5579.940	5579.941
5.00	10	5579.935	5579.928	5579.932	5579.934
5.00	20	5579.929	5579.919	5579.932	5579.934
5.00	30	5579.925	5579.911	5579.928	5579.928
5.00	40	5579.918	5579.907	5579.920	5579.923
5.00	50	5579.913	5579.897	5579.913	5579.913
4.75	20	5579.924	5579.914	5579.922	5579.932
5.25	20	5579.922	5579.919	5579.925	5579.927
MHz		-0.045	-0.047	-0.048	-0.049
PPM		-0.00081	-0.00084	-0.00086	-0.00088



Voltage (V)	Temperature (°C)	U-NII-3 Test Results			
		5785MHz			
		1min	2min	5min	10min
5.00	-20	5784.955	5784.954	5784.953	5784.952
5.00	-10	5784.947	5784.944	5784.948	5784.948
5.00	0	5784.945	5784.935	5784.947	5784.941
5.00	10	5784.937	5784.933	5784.939	5784.937
5.00	20	5784.927	5784.927	5784.931	5784.932
5.00	30	5784.919	5784.926	5784.928	5784.923
5.00	40	5784.914	5784.920	5784.928	5784.914
5.00	50	5784.912	5784.920	5784.923	5784.907
4.75	20	5784.920	5784.919	5784.929	5784.929
5.25	20	5784.927	5784.923	5784.928	5784.927
MHz		-0.045	-0.046	-0.047	-0.048
PPM		-0.00078	-0.0008	-0.00081	-0.00083

### 5.4. Power Spectral Density

**Ambient condition**

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

**Method of Measurement**

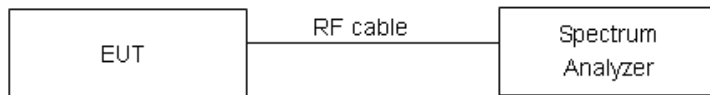
The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

Set RBW = 510 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, 5.25-5.35 GHz and 5.47-5.725 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 an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For 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 powerspectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

**Measurement Uncertainty**

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

**Test Results:****U-NII-1**

Network Standards	Channel Number	Power Spectral Density (dBm / MHz)	Limit (dBm / MHz)	Conclusion
802.11a	36	8.332	17	PASS
	40	8.629	17	PASS
	48	8.730	17	PASS
802.11n HT20	36	7.797	17	PASS
	40	7.988	17	PASS
	48	8.362	17	PASS
802.11n HT40	38	4.240	17	PASS
	46	5.055	17	PASS
802.11ac HT20	36	8.233	17	PASS
	40	7.666	17	PASS
	48	8.484	17	PASS
802.11ac HT40	38	3.931	17	PASS
	46	4.917	17	PASS
802.11ac HT80	42	1.151	17	PASS

**U-NII-2A**

Network Standards	Channel Number	Power Spectral Density (dBm / MHz)	Limit (dBm / MHz)	Conclusion
802.11a	52	8.252	11	PASS
	60	8.750	11	PASS
	64	9.207	11	PASS
802.11n HT20	52	7.774	11	PASS
	60	6.972	11	PASS
	64	8.076	11	PASS
802.11n HT40	54	4.128	11	PASS
	62	5.588	11	PASS
802.11ac HT20	52	8.446	11	PASS
	60	7.439	11	PASS
	64	10.720	11	PASS
802.11ac HT40	54	7.125	11	PASS
	62	5.433	11	PASS
802.11ac HT80	58	-2.033	11	PASS



## U-NII-2C

Network Standards	Channel Number	Power Spectral Density (dBm / MHz)	Limit (dBm / MHz)	Conclusion
802.11a	100	10.177	11	PASS
	116	10.285	11	PASS
	140	9.371	11	PASS
802.11n HT20	100	10.556	11	PASS
	116	10.008	11	PASS
	140	4.587	11	PASS
802.11n HT40	102	2.973	11	PASS
	110	7.219	11	PASS
	134	5.480	11	PASS
802.11ac HT20	100	10.672	11	PASS
	116	10.130	11	PASS
	140	4.728	11	PASS
802.11ac HT40	102	3.120	11	PASS
	110	7.321	11	PASS
	134	5.329	11	PASS
802.11ac HT80	106	-3.065	11	PASS

## U-NII-3

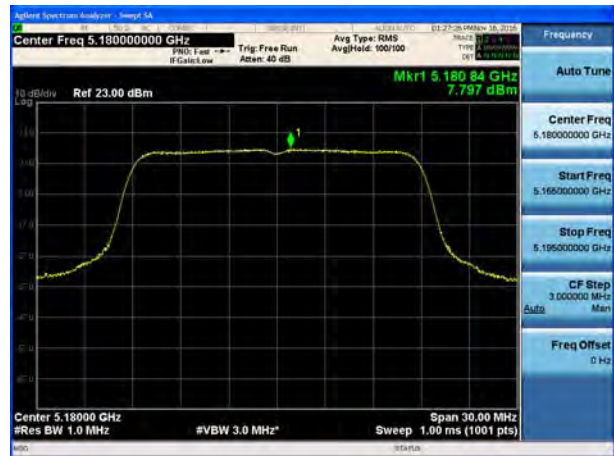
Network Standards	Channel Number	Power Spectral Density (dBm / 500kHz)	Limit (dBm / 500kHz)	Conclusion
802.11a	149	8.243	30	PASS
	157	7.423	30	PASS
	165	7.669	30	PASS
802.11n HT20	149	7.662	30	PASS
	157	7.612	30	PASS
	165	7.447	30	PASS
802.11n HT40	151	4.284	30	PASS
	159	5.424	30	PASS
802.11ac HT20	149	8.071	30	PASS
	157	7.287	30	PASS
	165	8.117	30	PASS
802.11ac HT40	151	4.501	30	PASS
	159	4.263	30	PASS
802.11ac HT80	155	0.658	30	PASS



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



U-NII-1, 802.11n HT20, Channel No.: 36



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



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



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

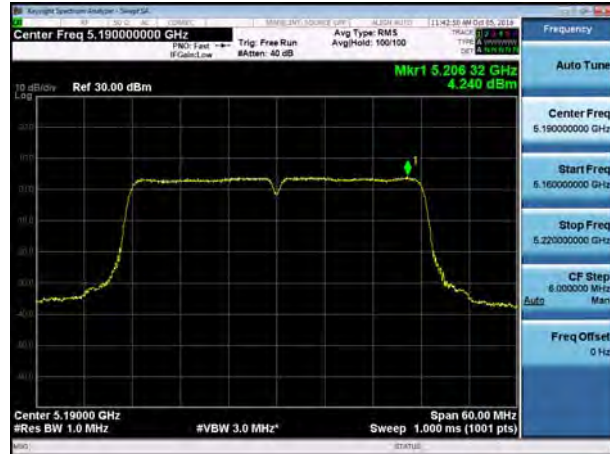


U-NII-1, 802.11n HT20, Channel No.: 48





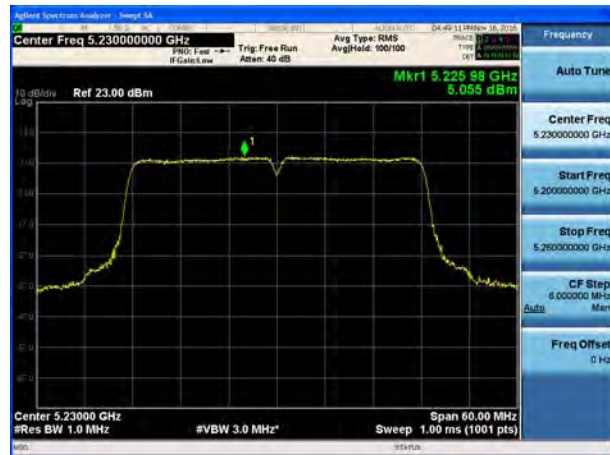
U-NII-1, 802.11n HT40, Channel No.: 38



U-NII-1, 802.11ac HT20, Channel No.: 36



U-NII-1, 802.11n HT40, Channel No.: 46



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

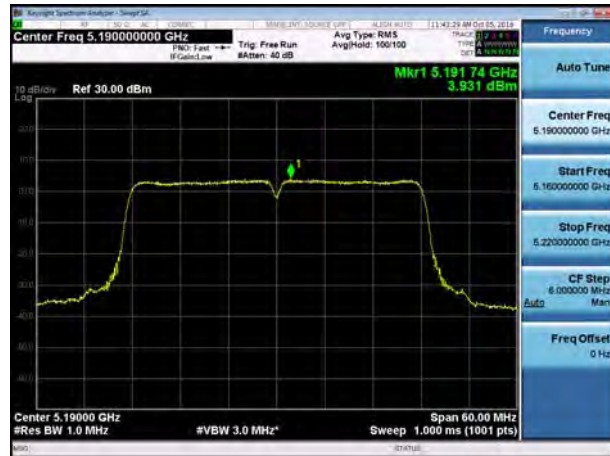


U-NII-1, 802.11ac HT20, Channel No.: 48





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



### U-NII-1, 802.11ac HT80, Channel No.: 42



### U-NII-1, 802.11ac HT40, Channel No.: 46



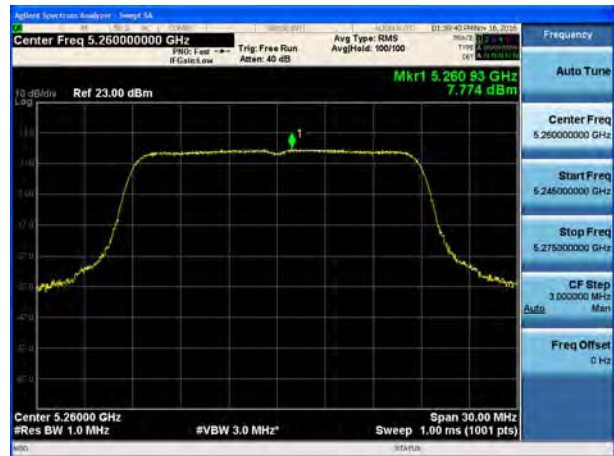




U-NII-2A, 802.11a, Channel No.: 52



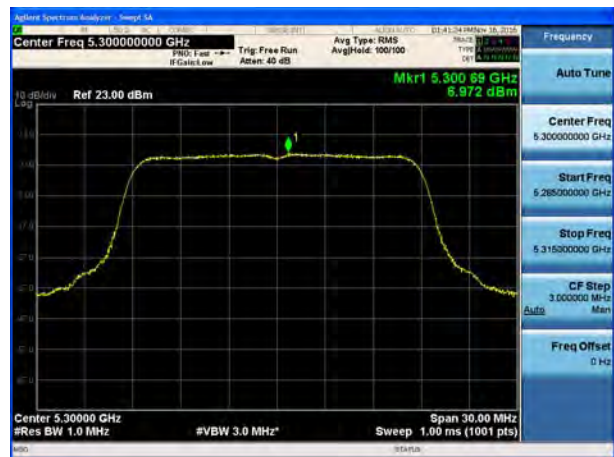
U-NII-2A, 802.11n HT20, Channel No.: 52



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



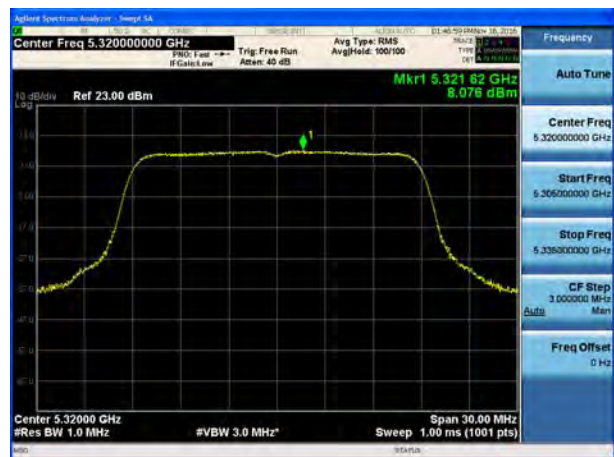
U-NII-2A, 802.11n HT20, Channel No.: 60



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

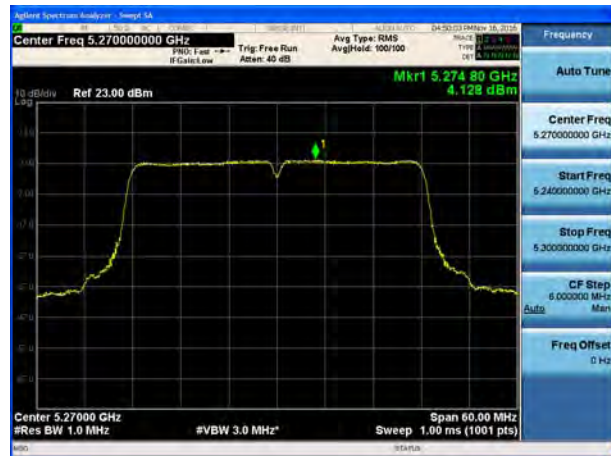


U-NII-2A, 802.11n HT20, Channel No.: 64





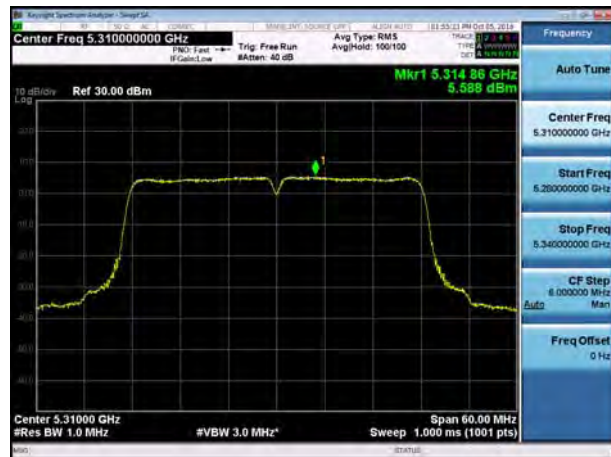
U-NII-2A, 802.11n HT40, Channel No.: 54



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



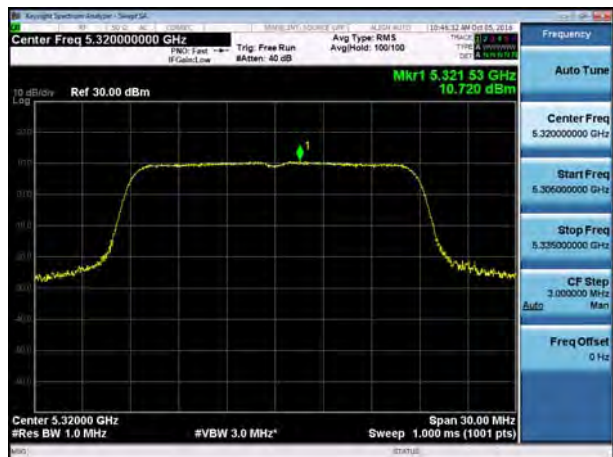
U-NII-2A, 802.11n HT40, Channel No.: 62



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

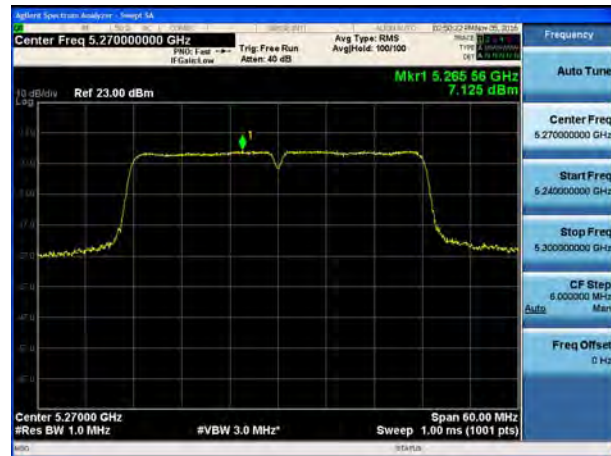


U-NII-2A, 802.11ac HT20, Channel No.: 64





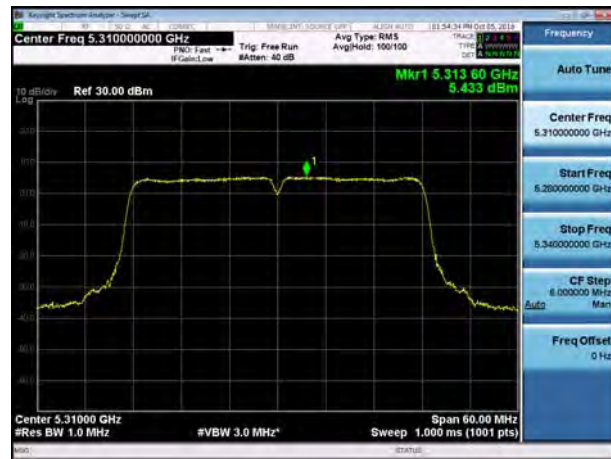
U-NII-2A, 802.11ac HT40, Channel No.: 54



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



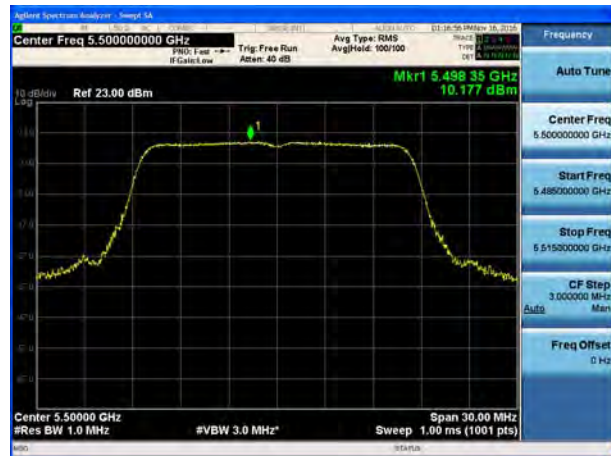
U-NII-2A, 802.11ac HT40, Channel No.: 62



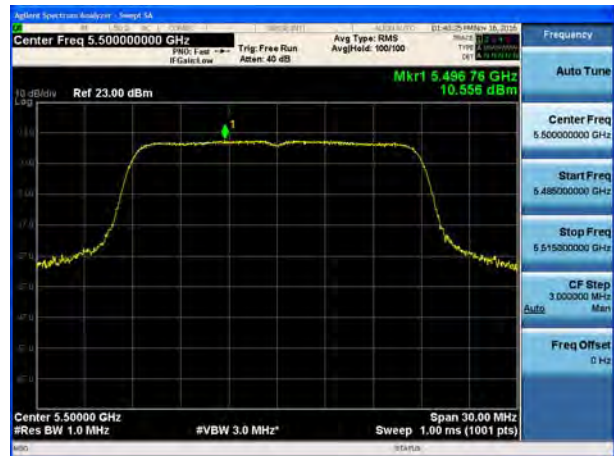




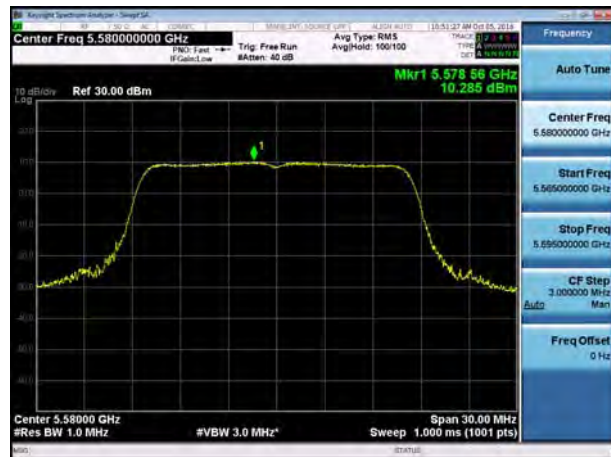
U-NII-2C, 802.11a, Channel No.: 100



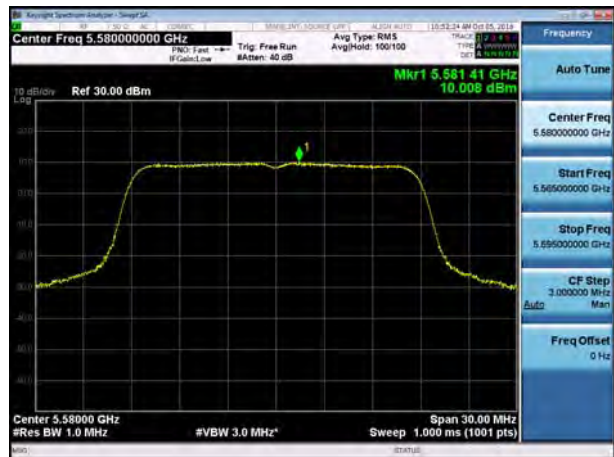
U-NII-2C, 802.11n HT20, Channel No.: 100



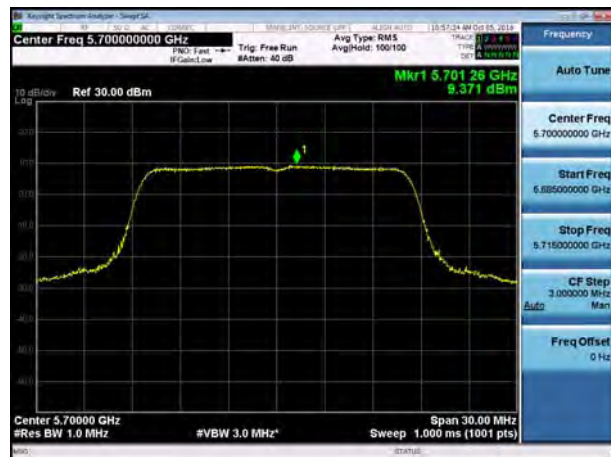
U-NII-2C, 802.11a, Channel No.: 116



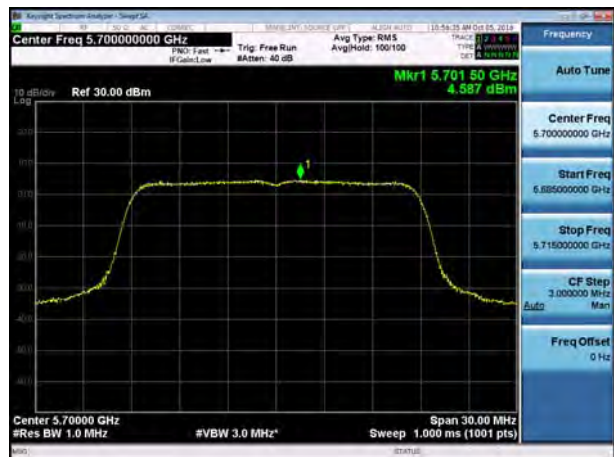
U-NII-2C, 802.11n HT20, Channel No.: 116



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

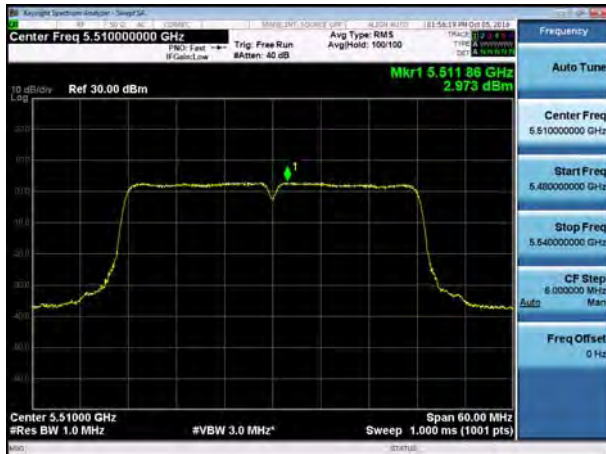


U-NII-2C, 802.11n HT20, Channel No.: 140





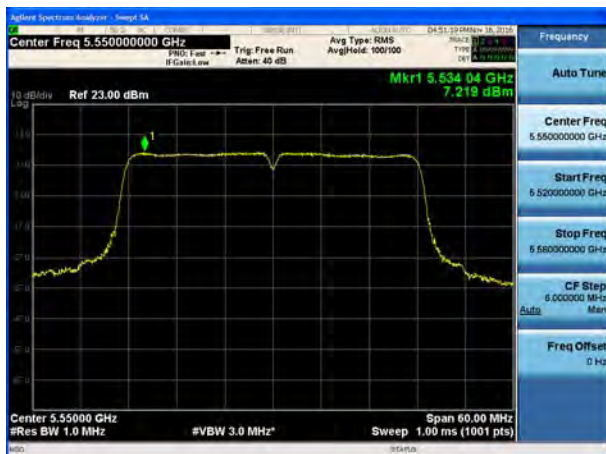
U-NII-2C, 802.11n HT40, Channel No.: 102



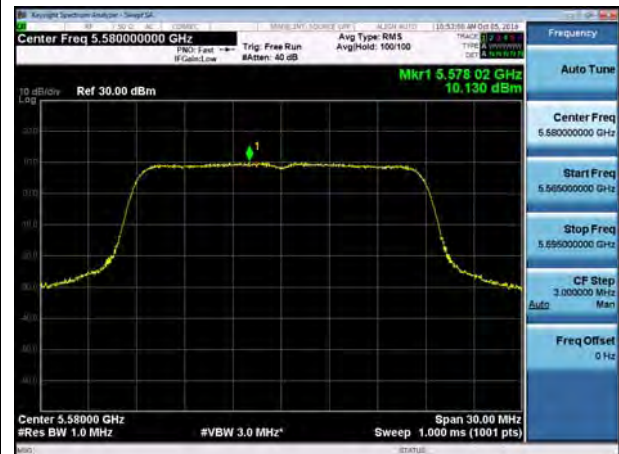
U-NII-2C, 802.11ac HT20, Channel No.: 100



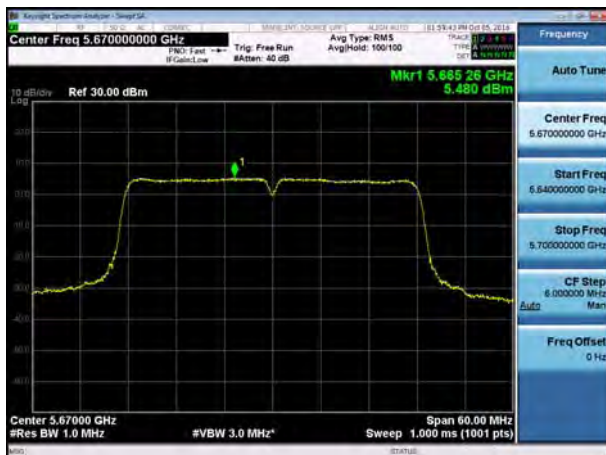
U-NII-2C, 802.11n HT40, Channel No.: 110



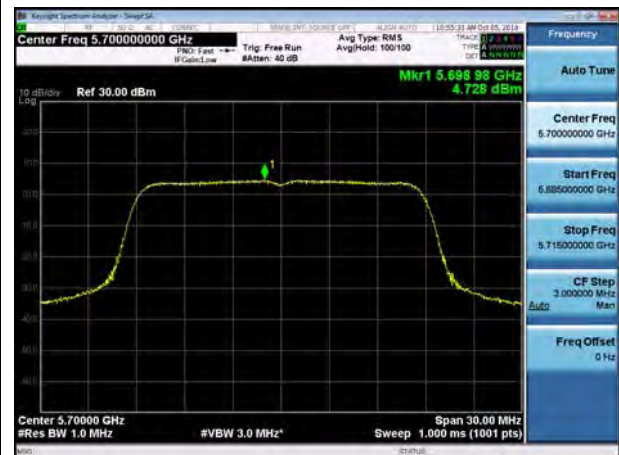
U-NII-2C, 802.11ac HT20, Channel No.: 116



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



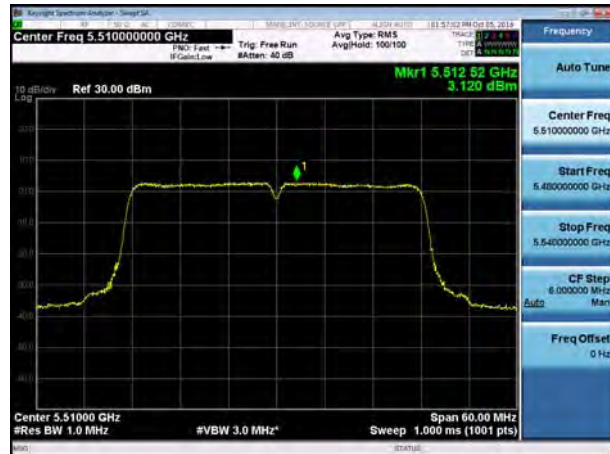
U-NII-2C, 802.11ac HT20, Channel No.: 140



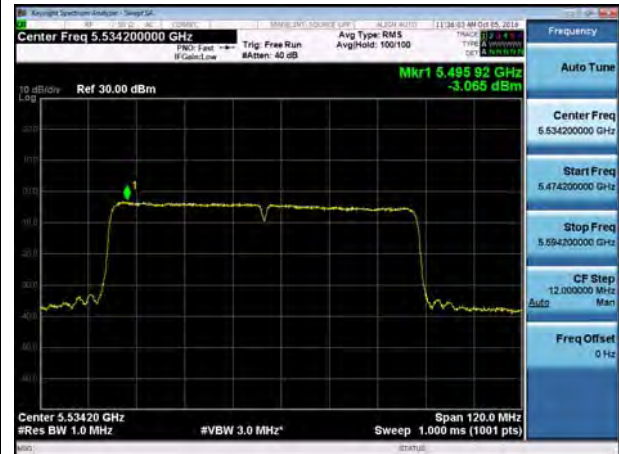




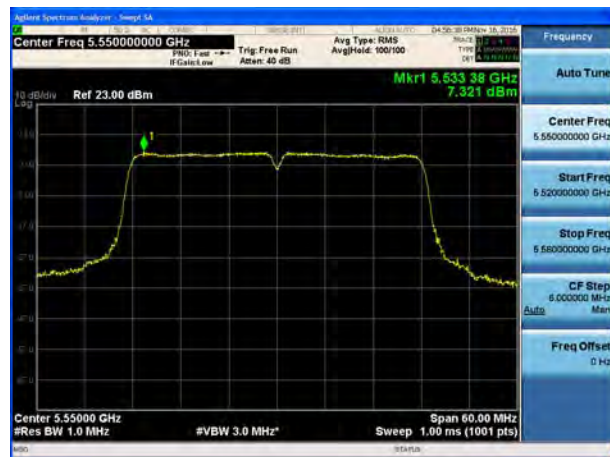
U-NII-2C, 802.11ac HT40, Channel No.: 102



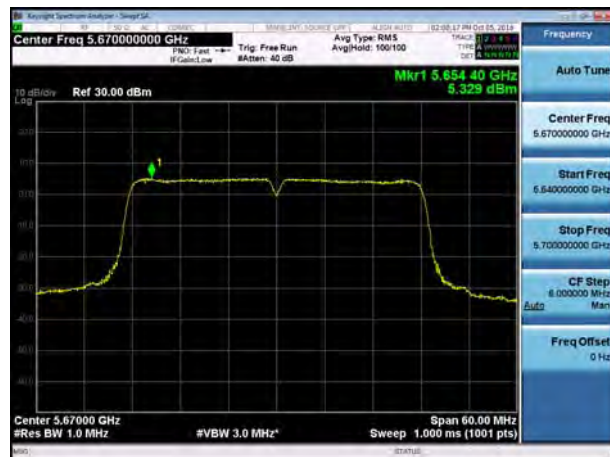
U-NII-2C, 802.11ac HT80, Channel No.: 106



U-NII-2C, 802.11ac HT40, Channel No.: 110

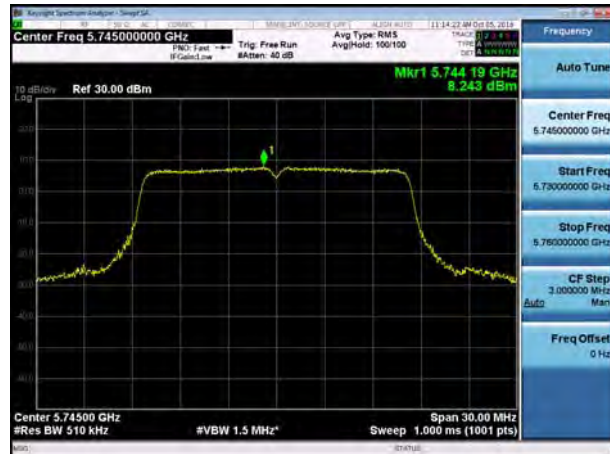


U-NII-2C, 802.11ac HT40, Channel No.: 134

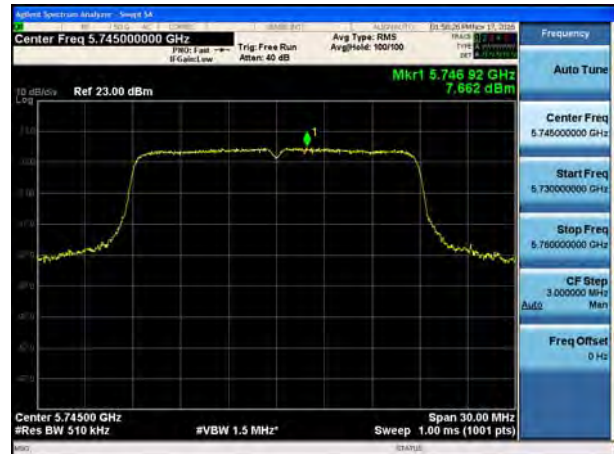




U-NII-3, 802.11a, Channel No.: 149



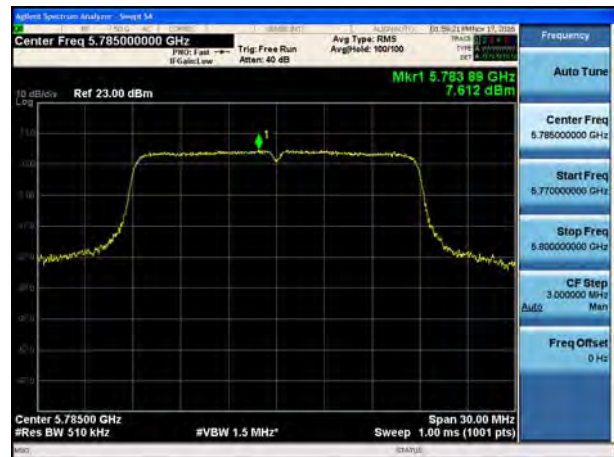
U-NII-3, 802.11n HT20, Channel No.: 149



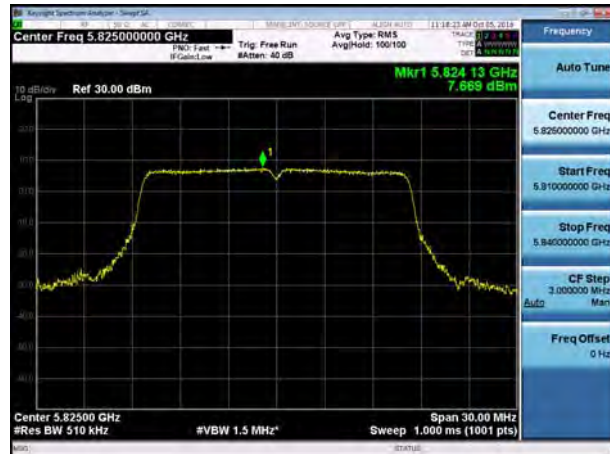
U-NII-3, 802.11a, Channel No.: 157



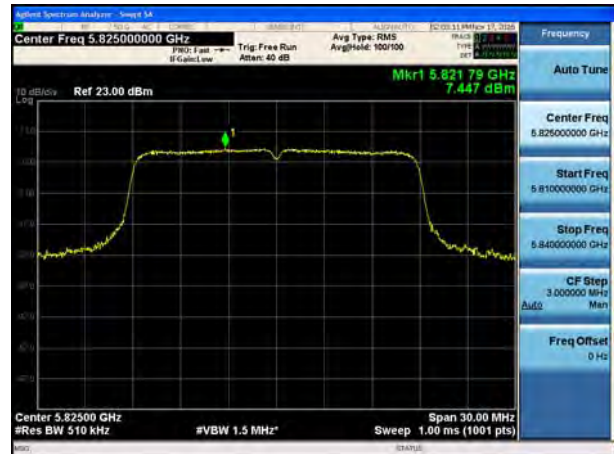
U-NII-3, 802.11n HT20, Channel No.: 157



U-NII-3, 802.11a, Channel No.: 165



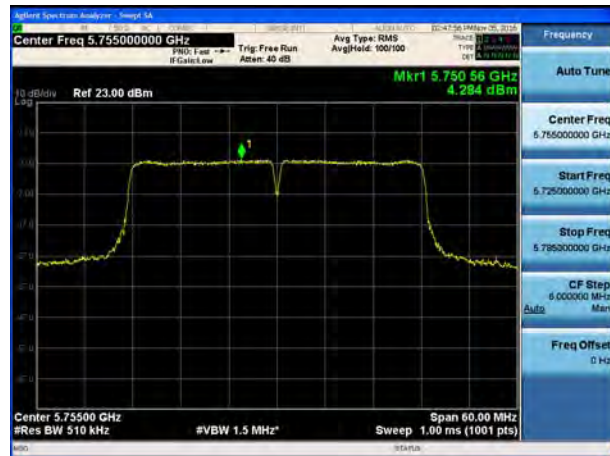
U-NII-3, 802.11n HT20, Channel No.: 165







U-NII-3, 802.11n HT40, Channel No.: 151



U-NII-3, 802.11ac HT20, Channel No.: 149



U-NII-3, 802.11n HT40, Channel No.: 159



U-NII-3, 802.11ac HT20, Channel No.: 157

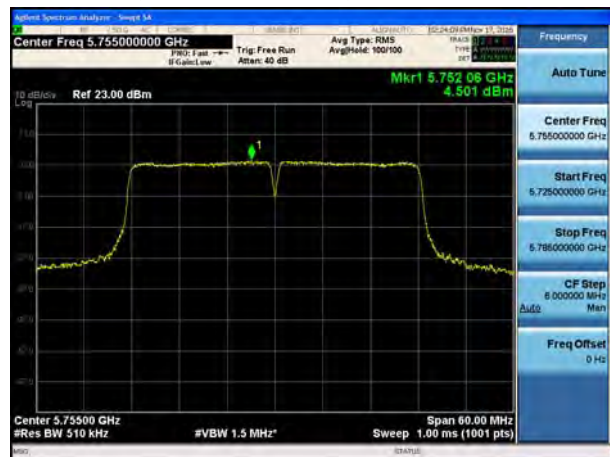


U-NII-3, 802.11ac HT20, Channel No.: 165





U-NII-3, 802.11ac HT40, Channel No.: 151



U-NII-3, 802.11ac HT80, Channel No.: 155



U-NII-3, 802.11ac HT40, Channel No.: 159



## 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):

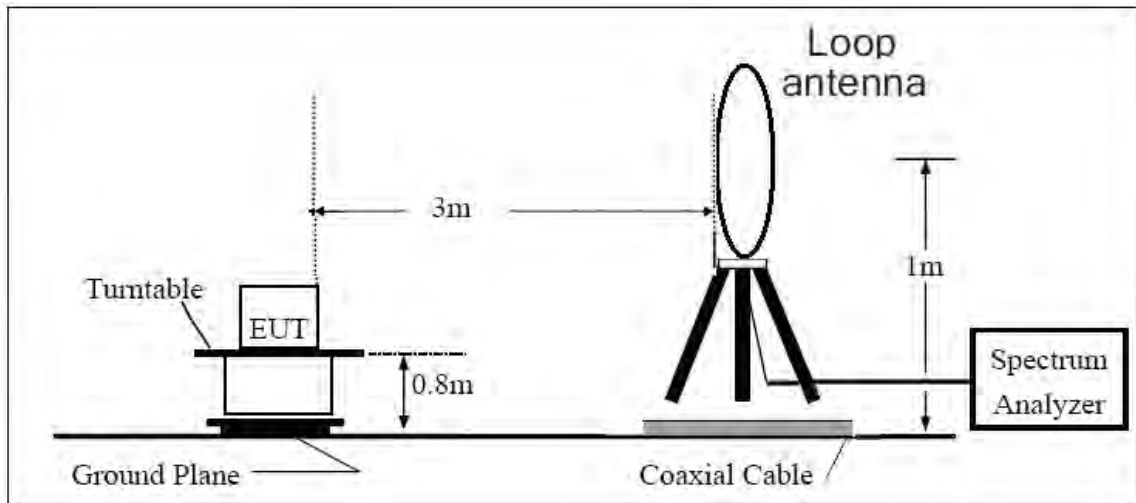
(a) PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO

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

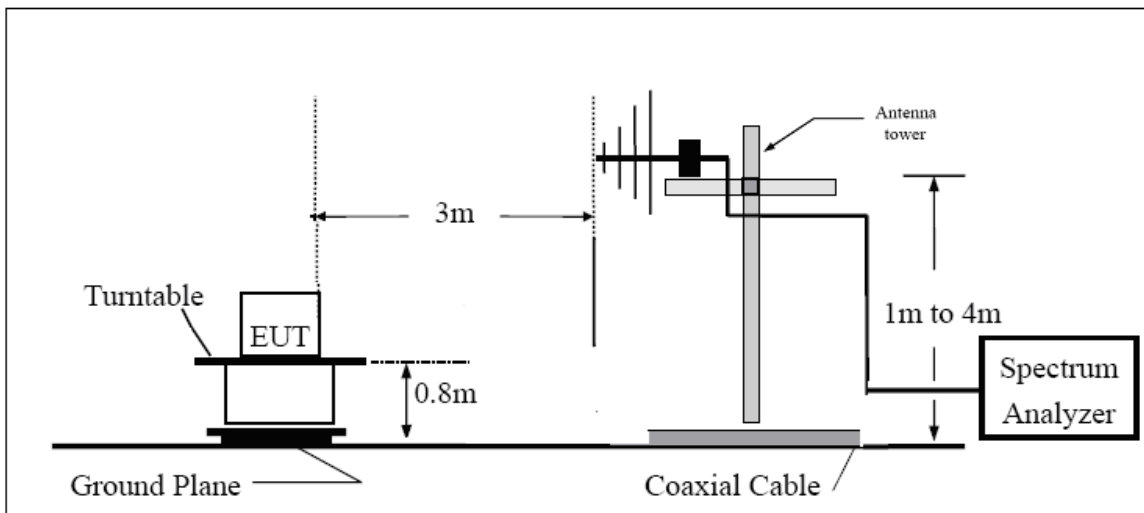
The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the worst case was recorded.

The test is in transmitting mode.

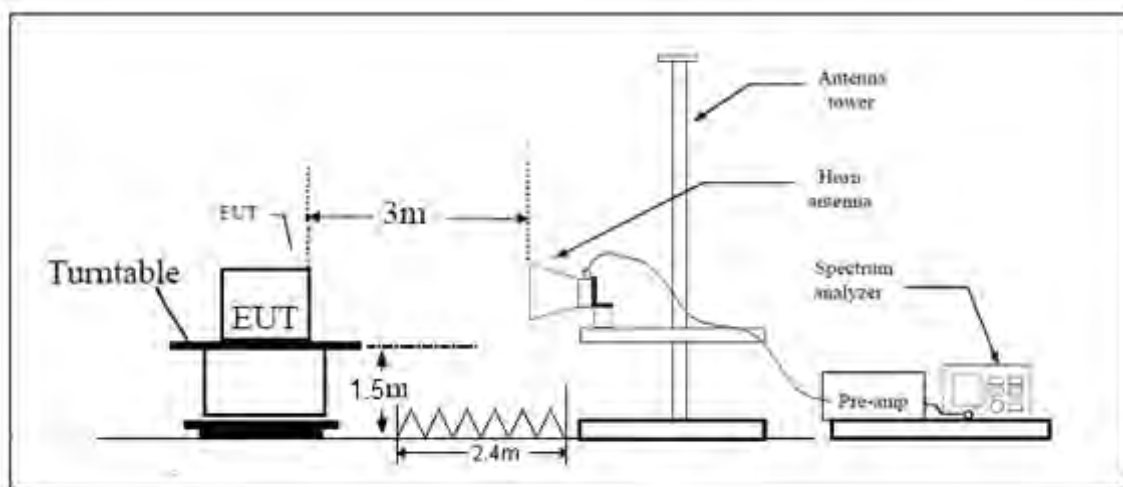
9KHz~~~30MHz



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

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

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



(6) Spurious Radiated Emissions are permitted in any of the frequency bands listed below:

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



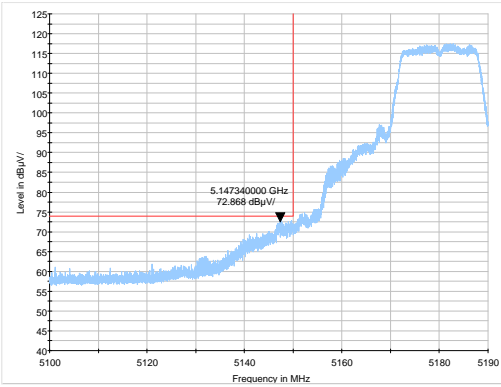
**Test Results:**

**PASS**

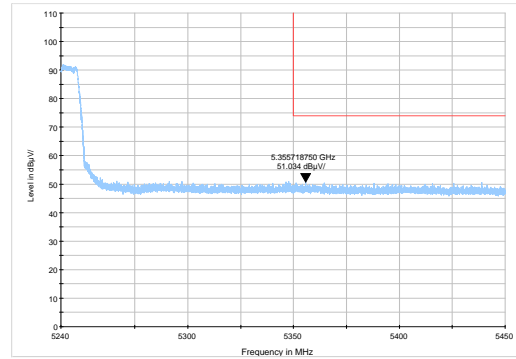
The signal beyond the limit is carrier.

**U-NII-1**

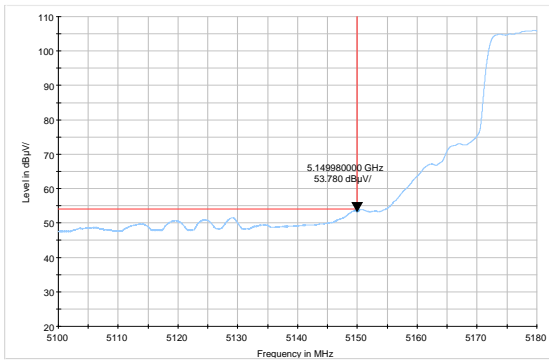
**802.11a-Channel 36: Peak**



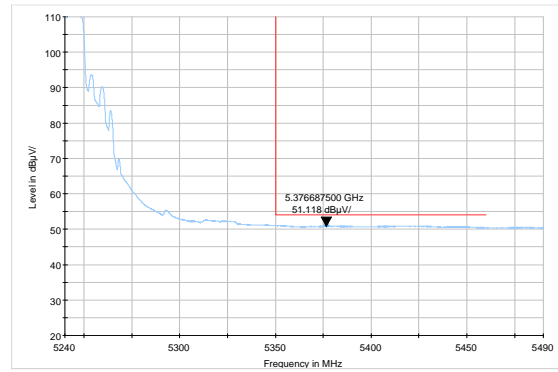
**802.11a-Channel 48: Peak**



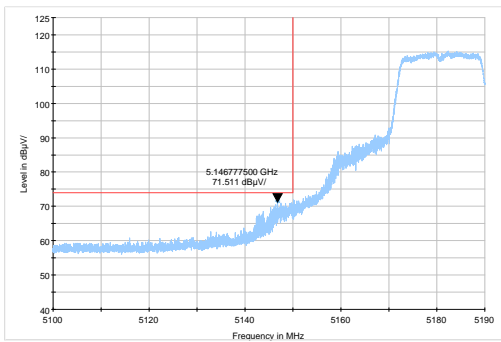
**802.11a-Channel 36: Average**



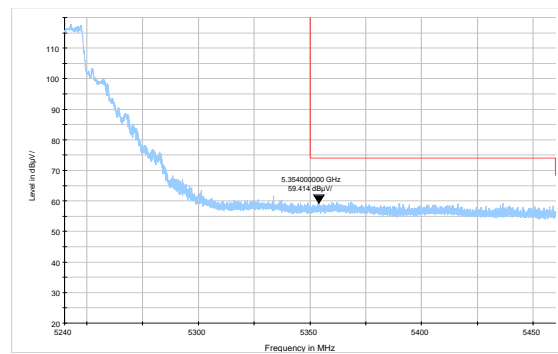
**802.11a-Channel 48: Average**



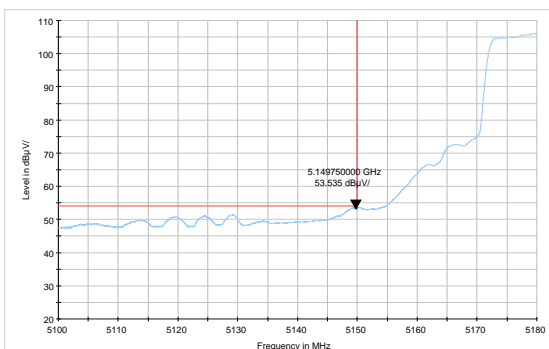
**802.11n HT20-Channel 36: Peak**



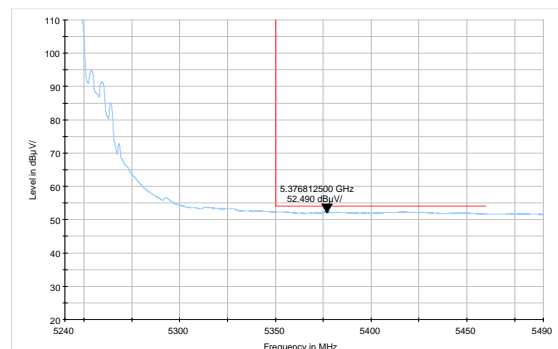
**802.11n HT20-Channel 48: Peak**



**802.11n HT20-Channel 36: Average**

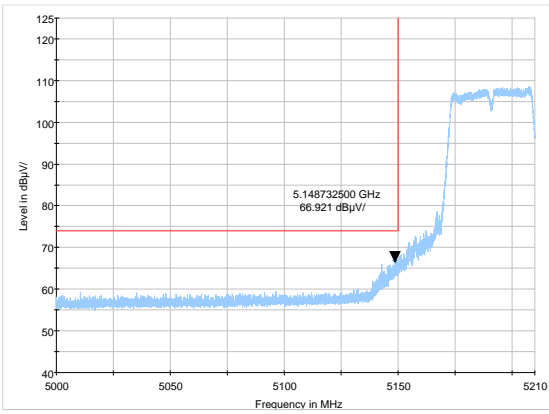


**802.11n HT20-Channel 48: Average**

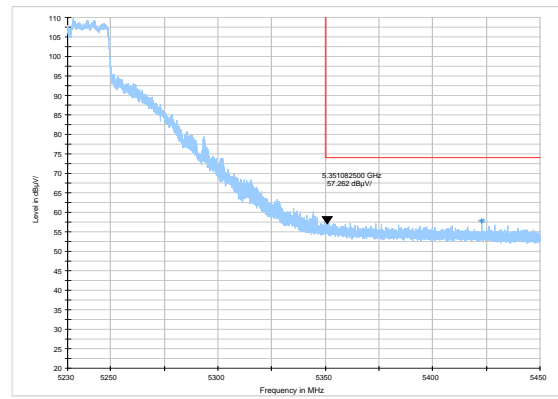




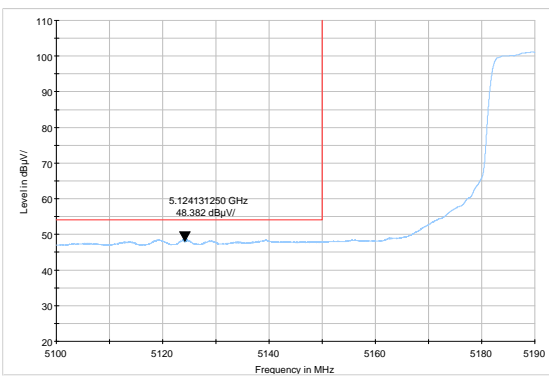
802.11n HT40-Channel 38: Peak



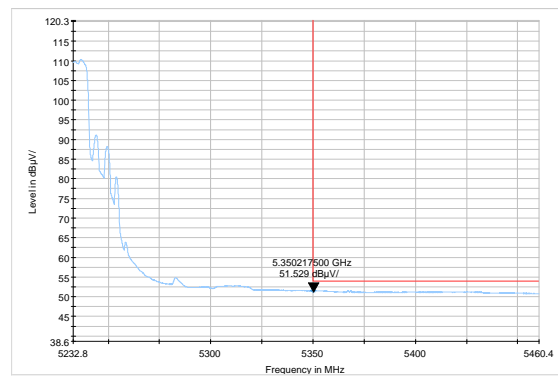
802.11n HT40-Channel 46: Peak



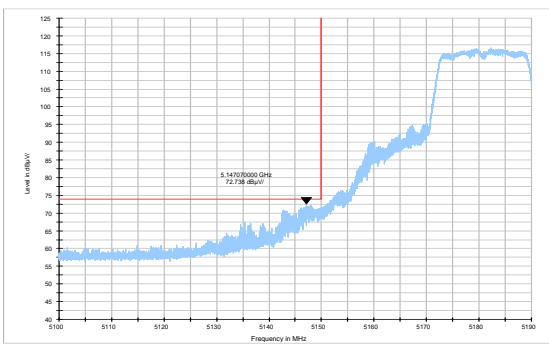
802.11n HT40-Channel 38: Average



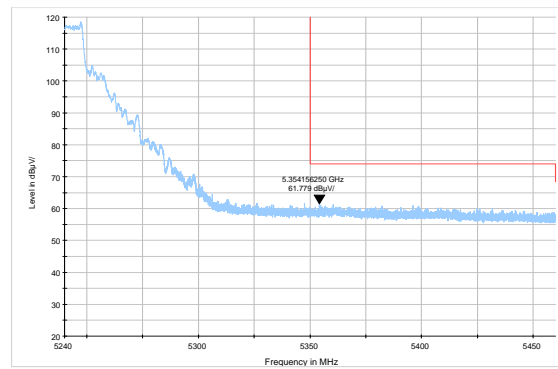
802.11n HT40-Channel 46: Average



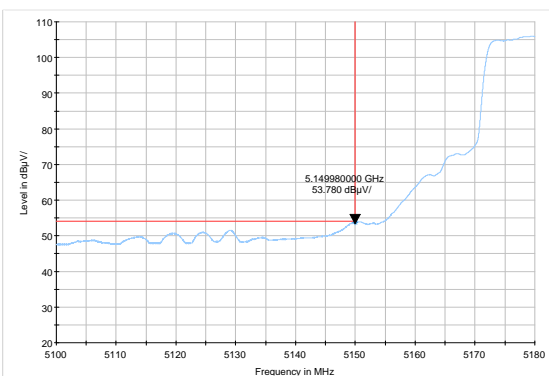
802.11ac HT20 -Channel 36: Peak



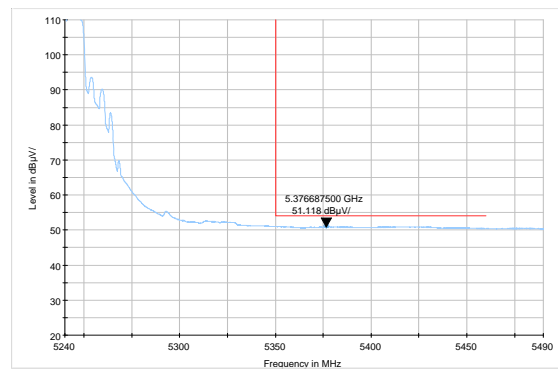
802.11ac HT20 -Channel 48: Peak



802.11ac HT20-Channel 36: Average

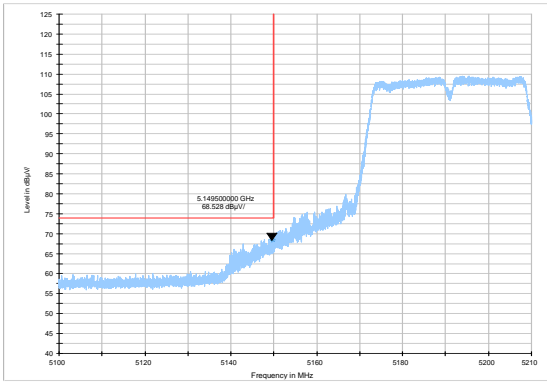


802.11ac HT20 -Channel 48: Average

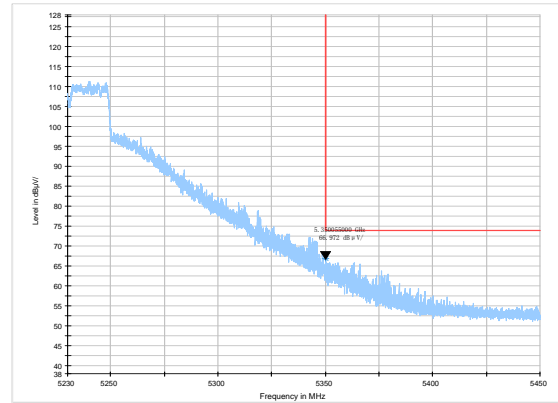




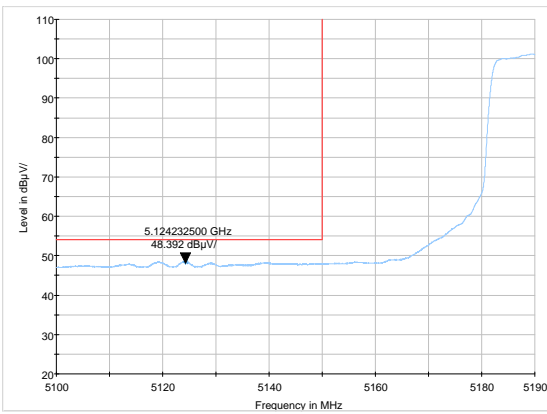
### 802.11ac HT40-Channel 38: Peak



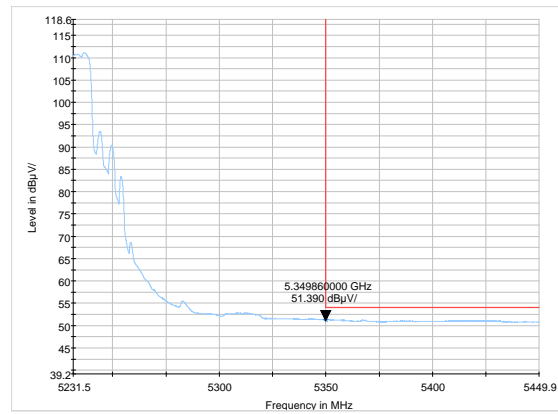
### 802.11ac HT40-Channel 46: Peak



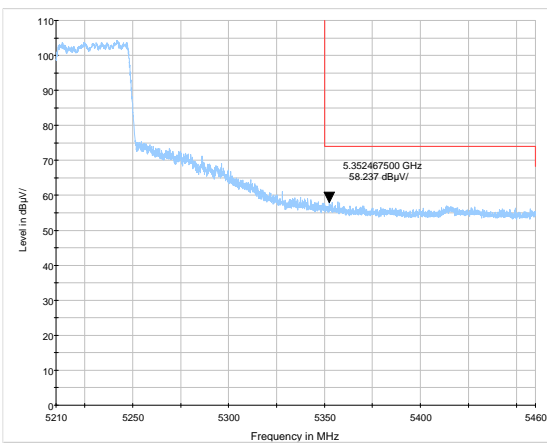
### 802.11ac HT40-Channel 38: Average



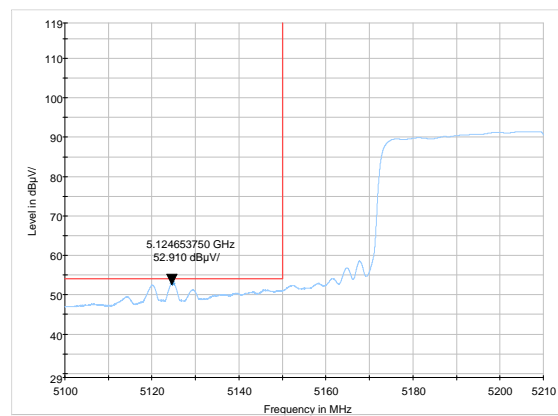
### 802.11ac HT40-Channel 46: Average



### 802.11ac HT80 -Channel 42: Peak



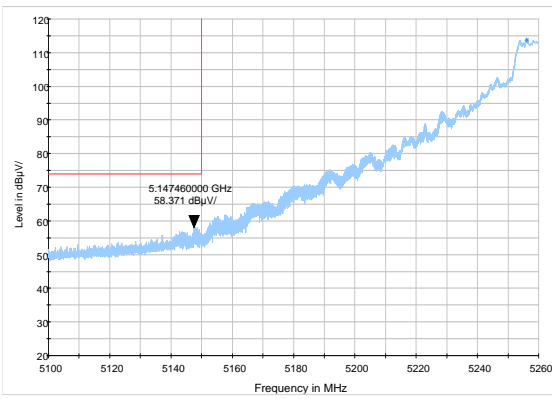
### 802.11ac HT80- Channel 42: Average



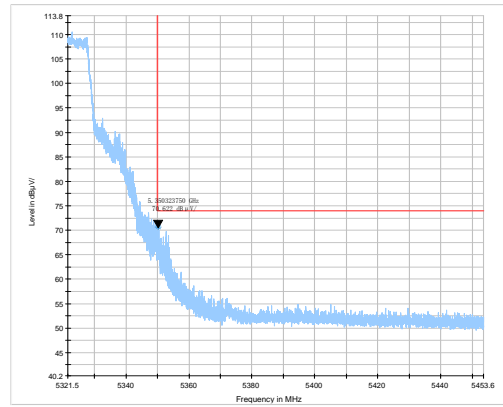


U-NII-2A

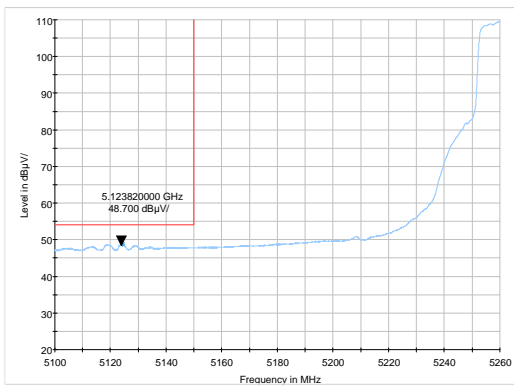
802.11a-Channel 52: Peak



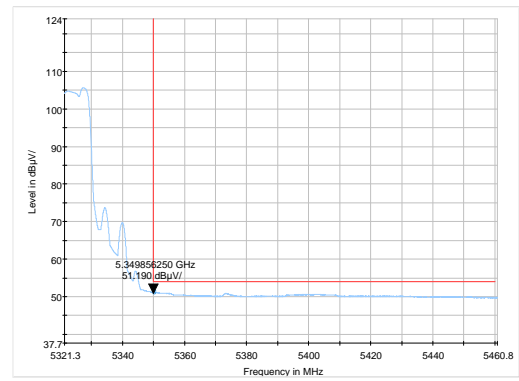
802.11a-Channel 64: Peak



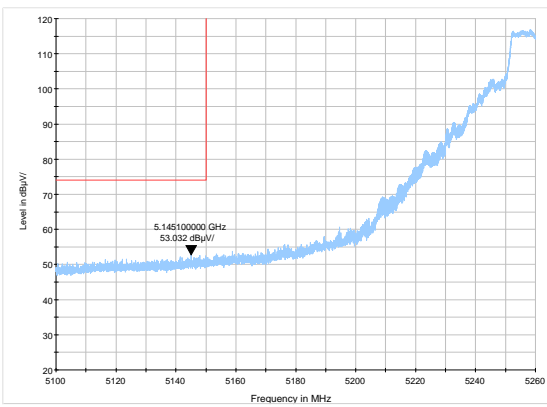
802.11a-Channel 52: Average



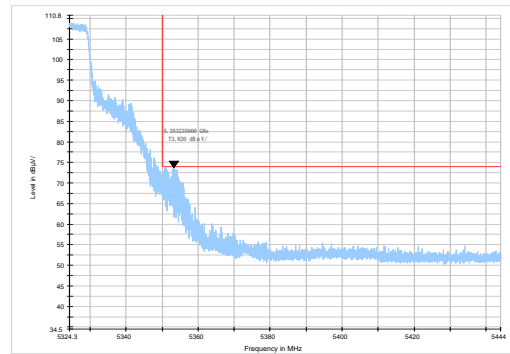
802.11a-Channel 64: Average



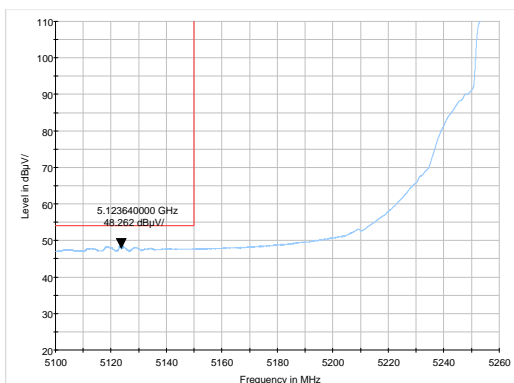
802.11n HT20-Channel 52: Peak



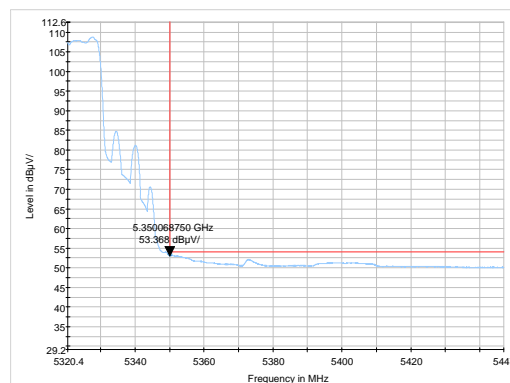
802.11n HT20-Channel 64: Peak



802.11n HT20-Channel 52: Average



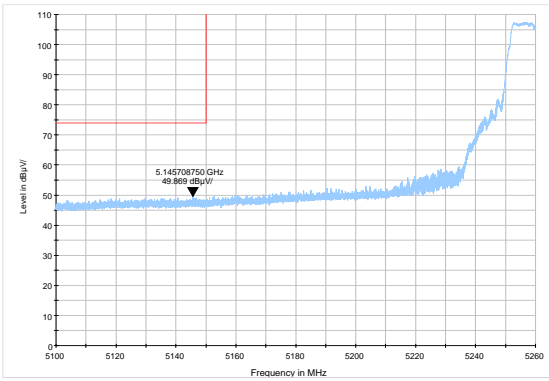
802.11n HT20-Channel 64: Average



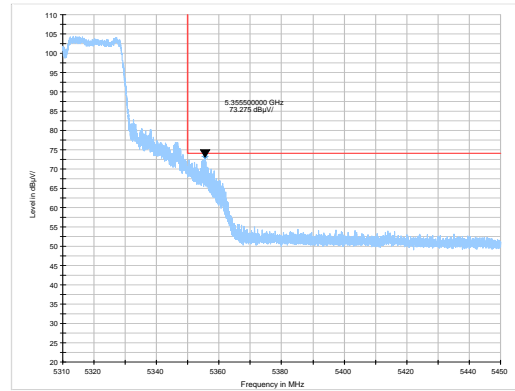




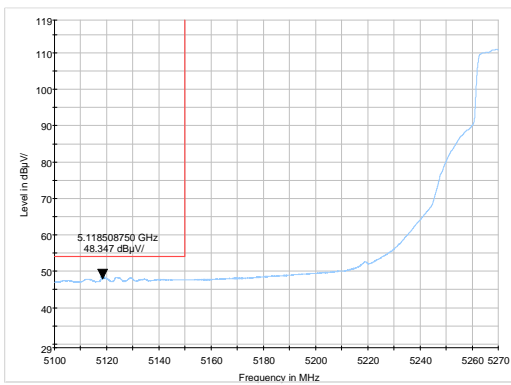
802.11n HT40-Channel 54: Peak



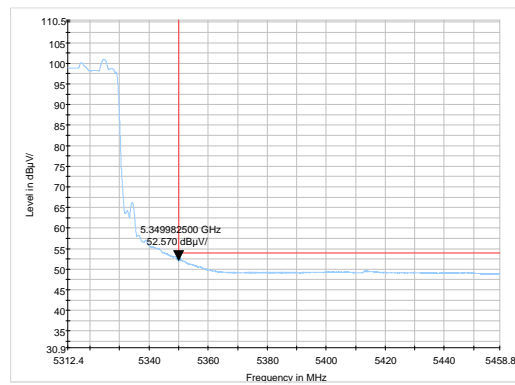
802.11n HT40-Channel 62: Peak



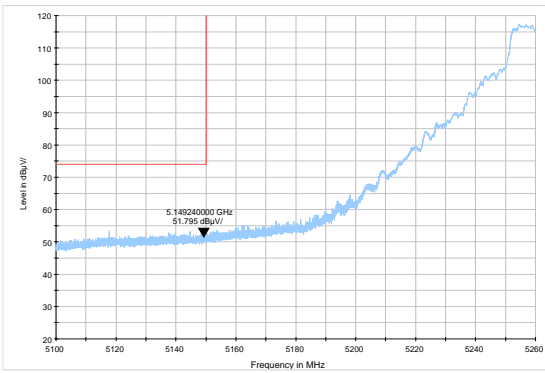
802.11n HT40-Channel 54: Average



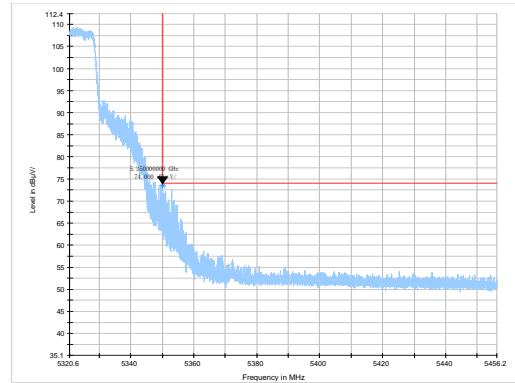
802.11n HT40-Channel 62: Average



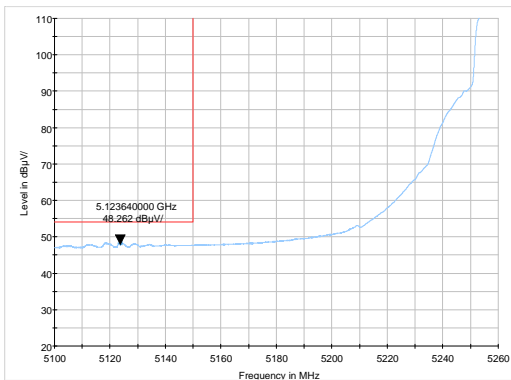
802.11ac HT20 -Channel 52: Peak



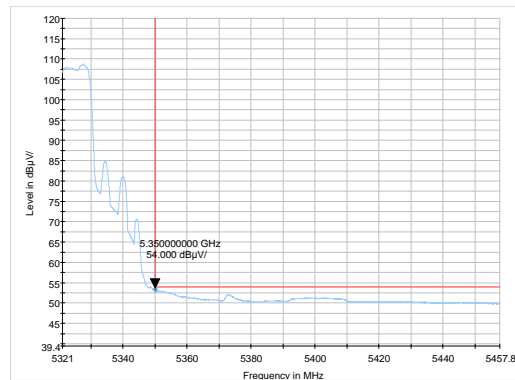
802.11ac HT20 -Channel 64: Peak



802.11ac HT20-Channel 52: Average

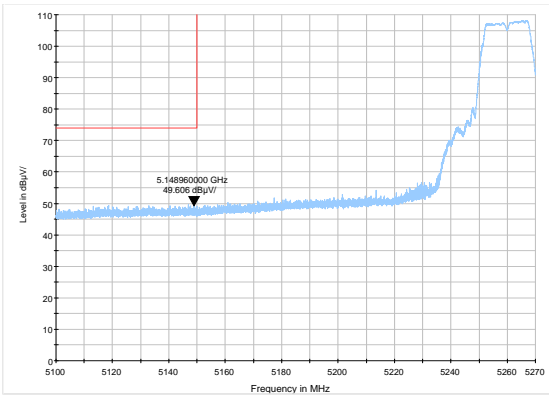


802.11ac HT20 -Channel 64: Average

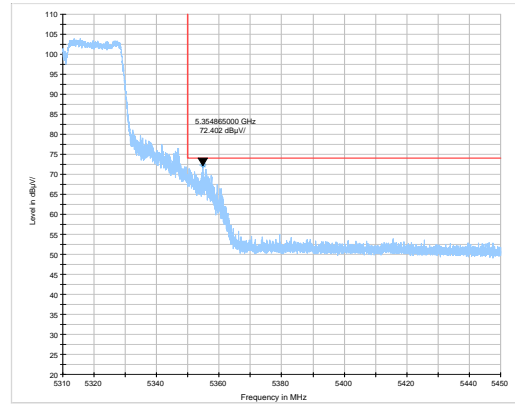




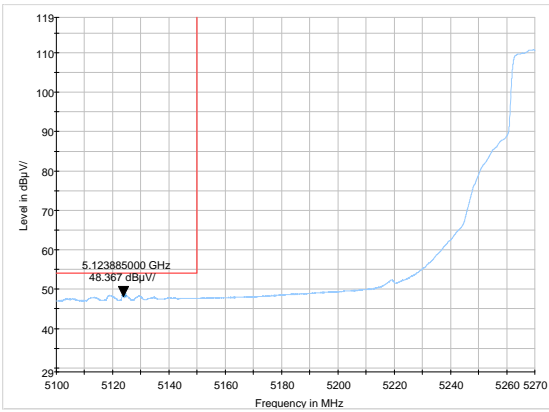
802.11ac HT40-Channel 54: Peak



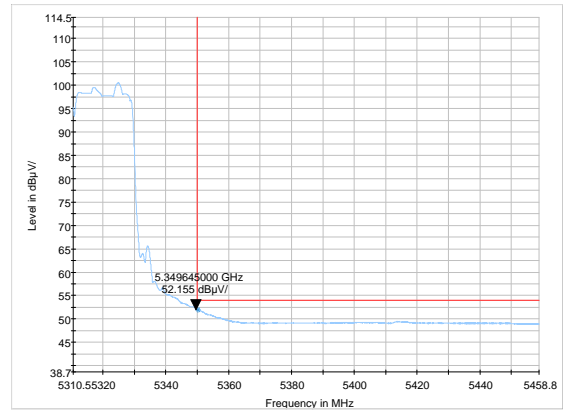
802.11ac HT40-Channel 62: Peak



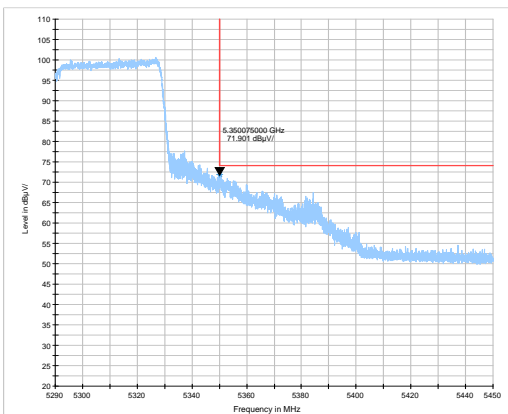
802.11ac HT40-Channel 54: Average



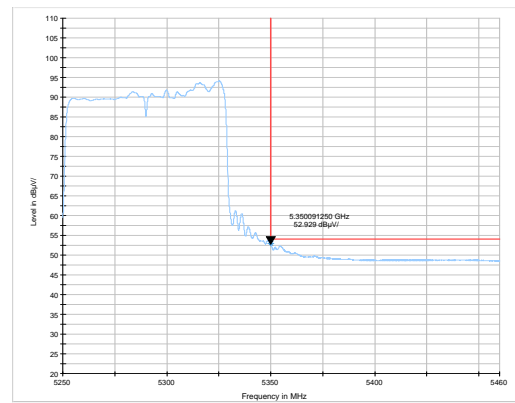
802.11ac HT40-Channel 62: Average



802.11ac HT80 -Channel 58: Peak



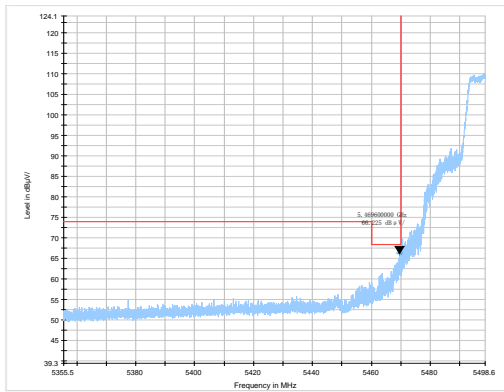
802.11ac HT80- Channel 58: Average



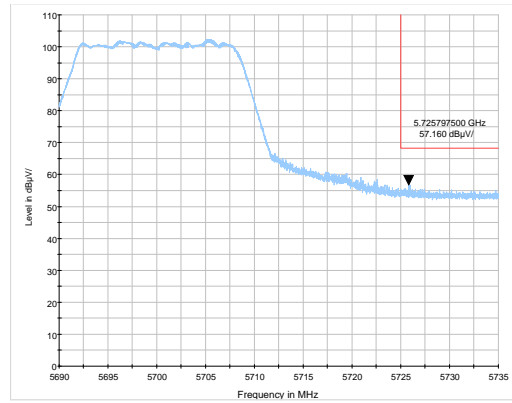


U-NII-2C

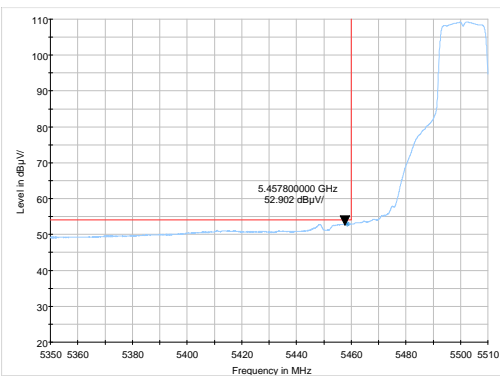
802.11a-Channel 100: Peak



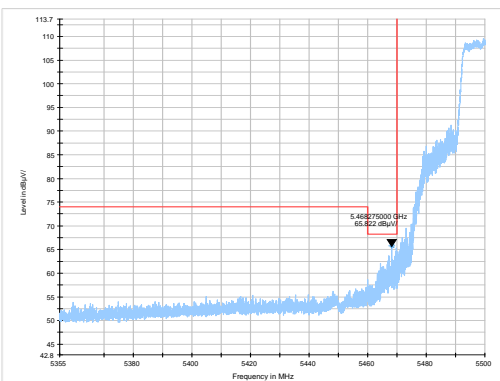
802.11a-Channel 140: Peak



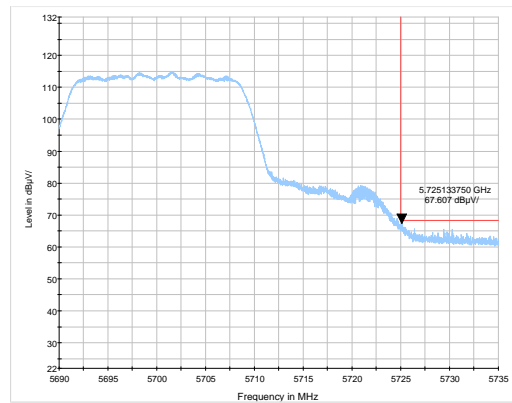
802.11a-Channel 100: Average



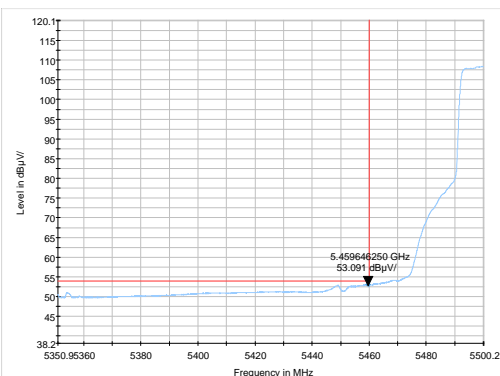
802.11n HT20-Channel 100: Peak



802.11n HT20-Channel 140: Peak

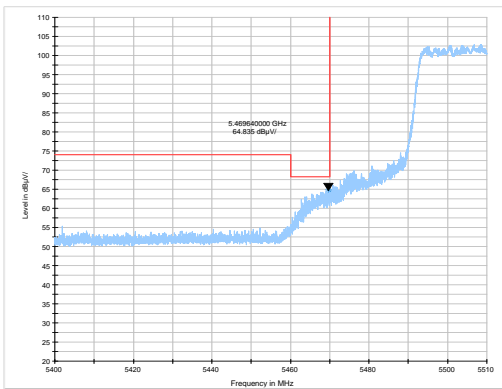


802.11n HT20-Channel 100: Average

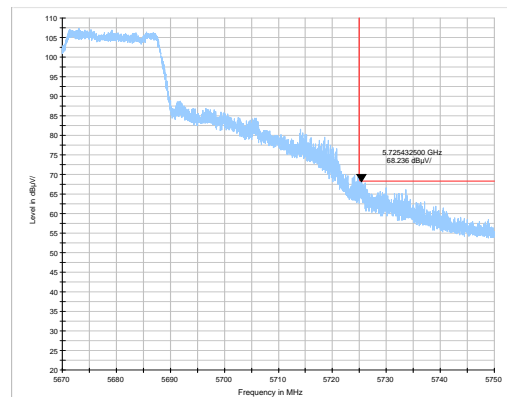




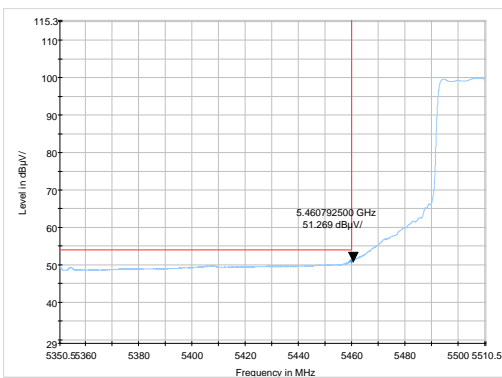
802.11n HT40-Channel 102: Peak



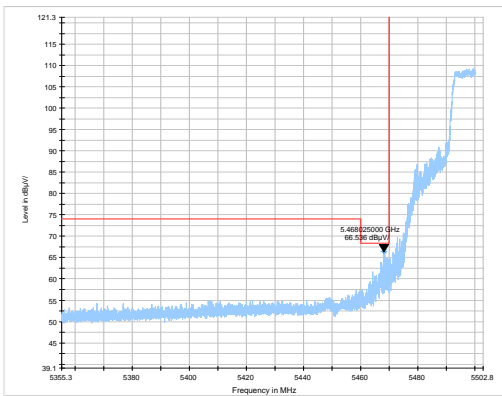
802.11n HT40-Channel 134: Peak



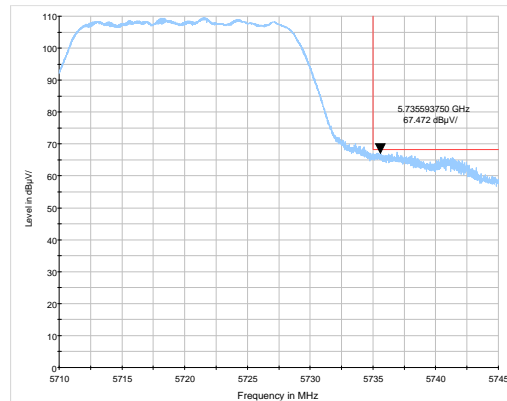
802.11n HT40-Channel 102: Average



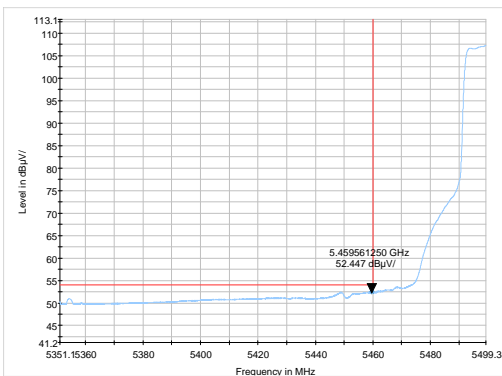
802.11ac HT20 -Channel 100: Peak



802.11ac HT20 -Channel 144: Peak

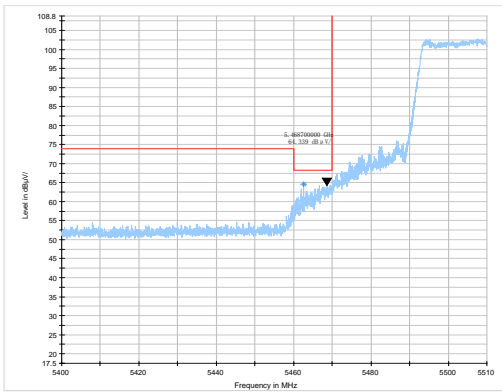


802.11ac HT20-Channel 100: Average

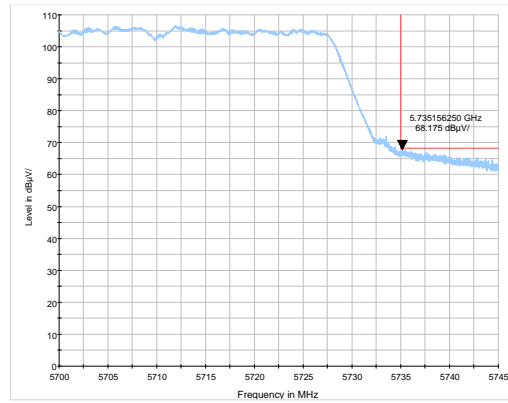




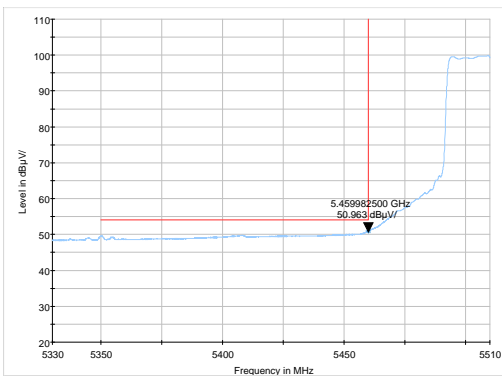
802.11ac HT40-Channel 102: Peak



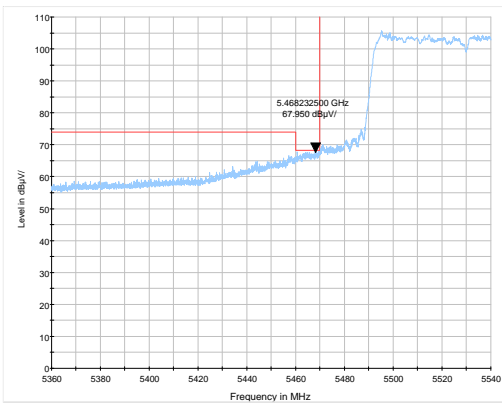
802.11ac HT40-Channel 142: Peak



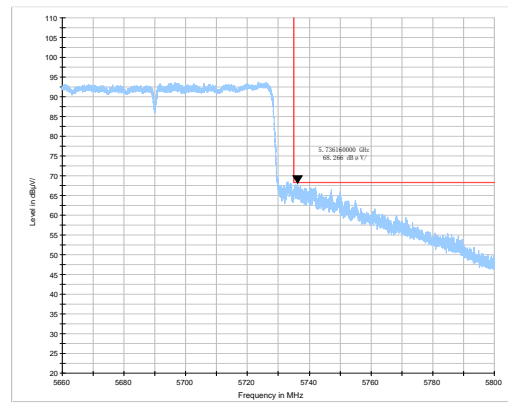
802.11ac HT40-Channel 102: Average



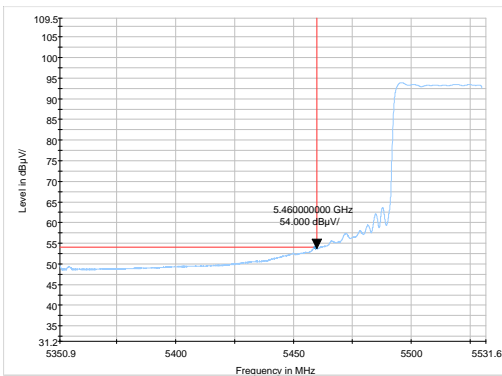
802.11ac HT80 -Channel 106: Peak



802.11ac HT80 -Channel 138: Peak



802.11ac HT80- Channel 106: Average

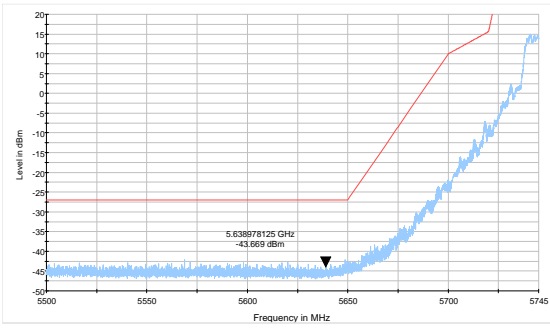




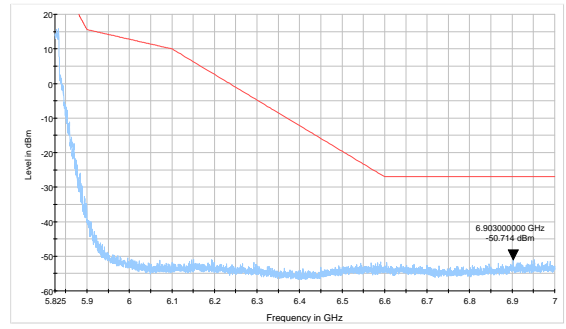


U-NII-3

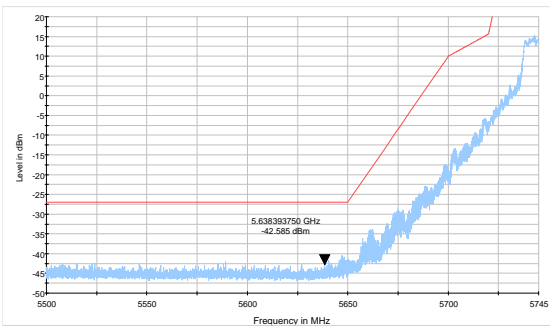
802.11a-Channel 149: Peak



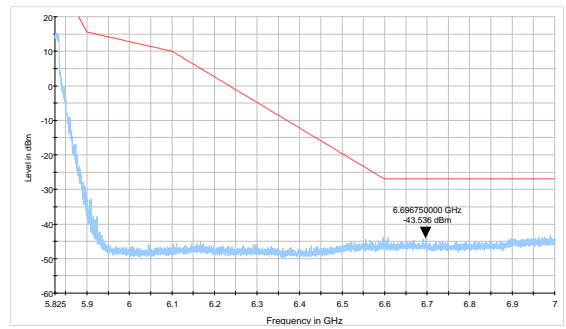
802.11a-Channel 165: Peak



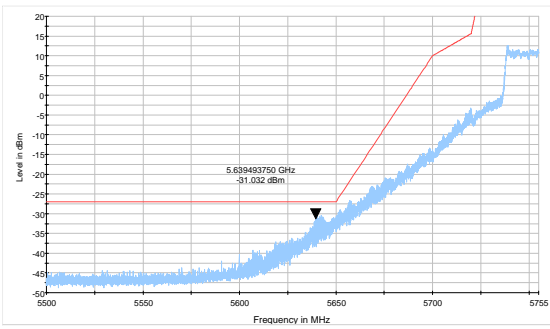
802.11n HT20-Channel 149: Peak



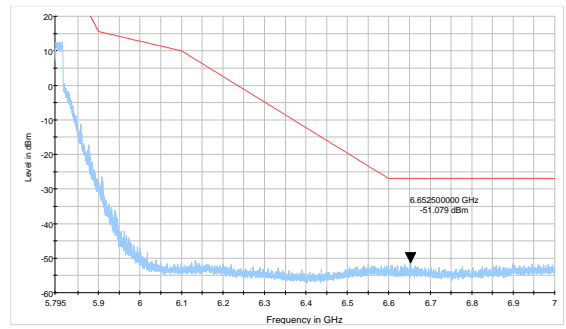
802.11n HT20-Channel 165: Peak



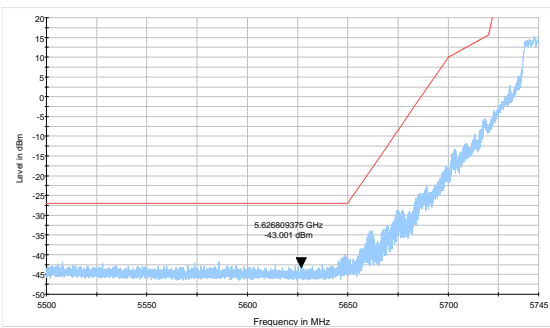
802.11n HT40-Channel 151: Peak



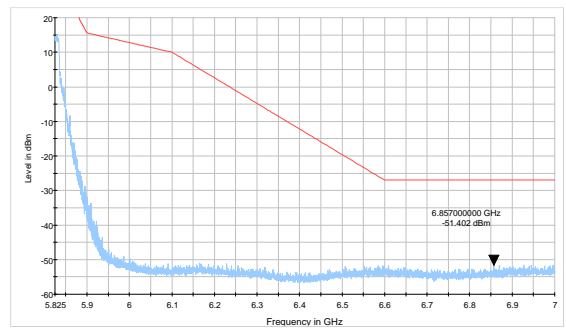
802.11n HT40-Channel 159: Peak



802.11ac HT20-Channel 149: Peak

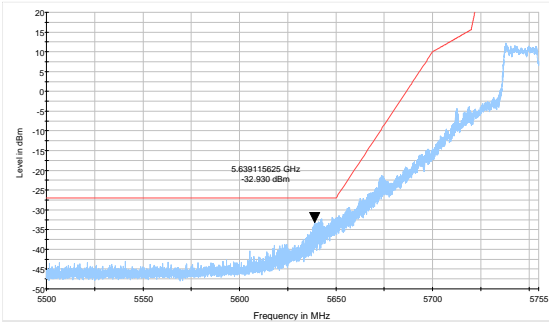


802.11ac HT20-Channel 165: Peak

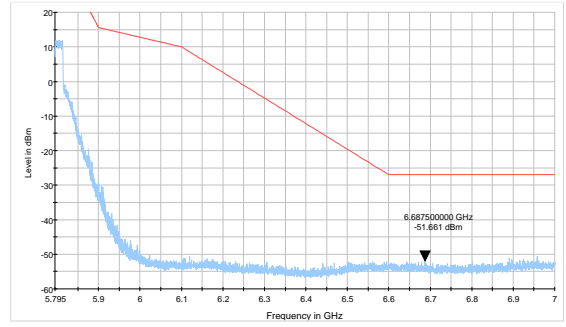




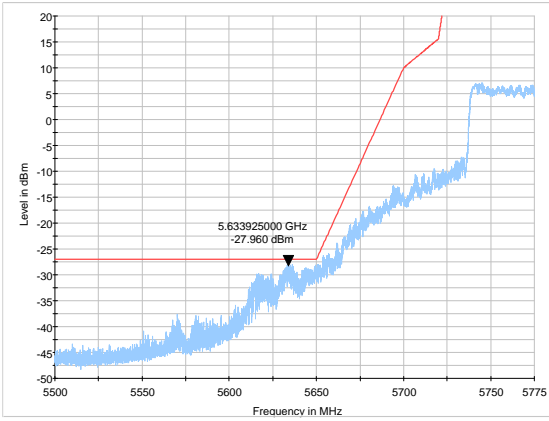
802.11ac HT40-Channel 151: Peak



802.11ac HT40-Channel 159: Peak



802.11ac HT80- Channel 155: Peak





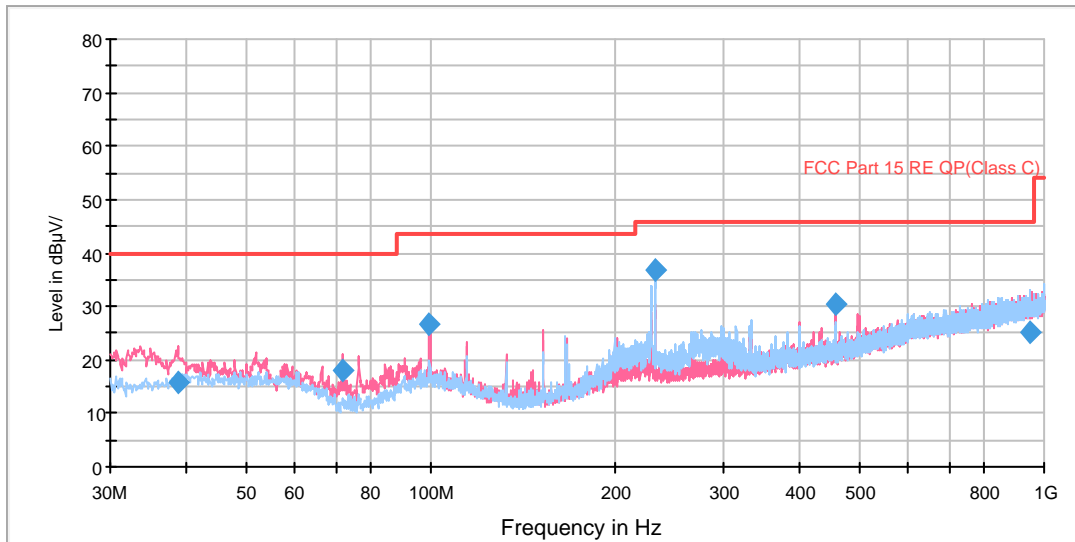
Result of RE

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.

802.11a CH36

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

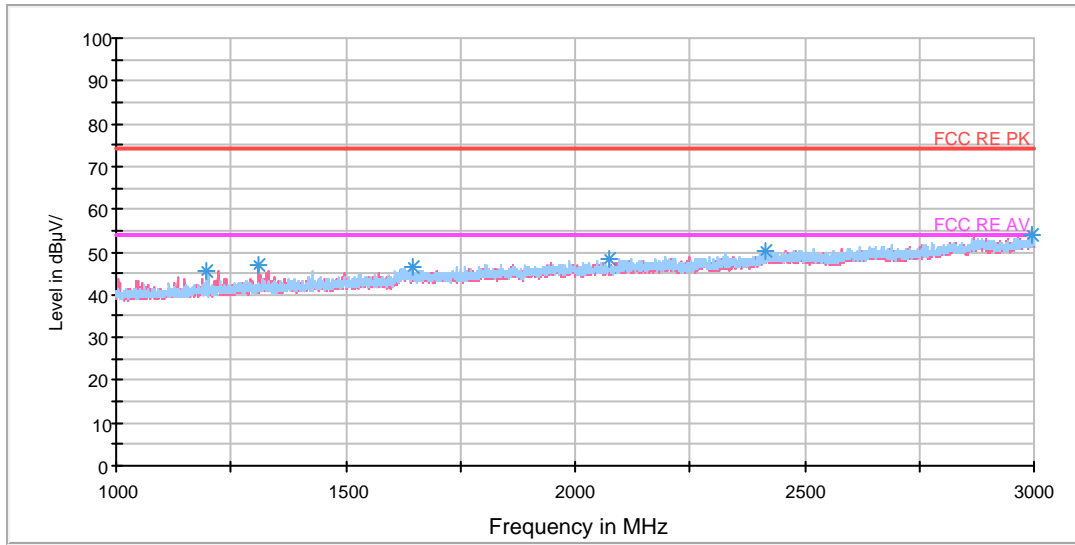
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
38.770000	15.9	100.0	V	230.0	28.8	12.9	24.1	40.0
71.992500	18.0	100.0	V	157.0	26.6	8.6	22.0	40.0
99.598750	26.7	100.0	V	226.0	39.9	13.2	16.8	43.5
232.370000	36.7	125.0	H	105.0	50.1	13.4	9.3	46.0
456.637500	30.3	114.0	V	185.0	49.3	19.0	15.7	46.0
949.565000	25.1	100.0	H	73.0	51.1	26.0	20.9	46.0

Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



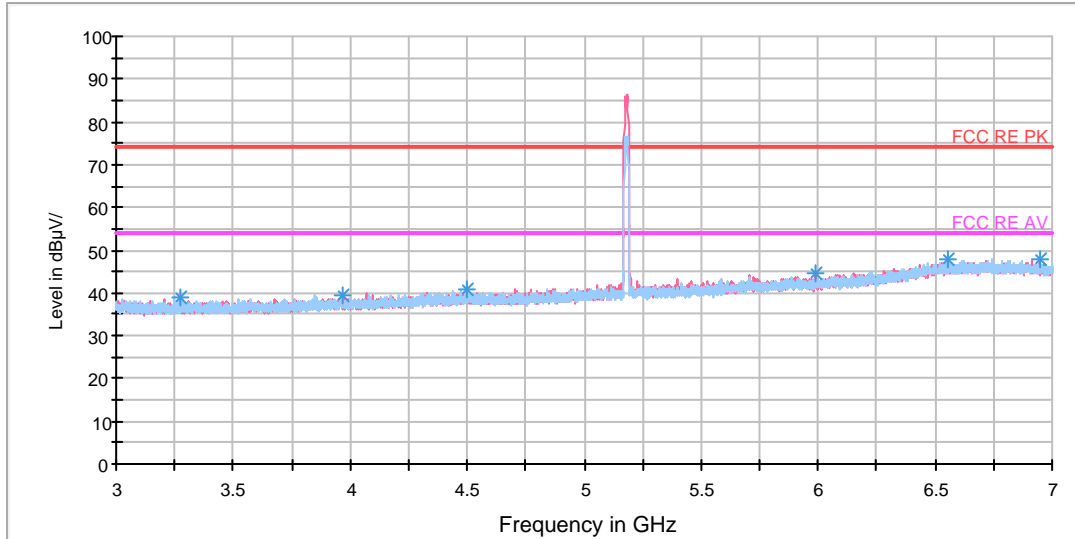
Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	45.4	102.0	V	186.0	53.6	-8.2	28.6	74
1311.000000	47.2	102.0	V	137.0	54.8	-7.6	26.8	74
1646.000000	46.3	102.0	H	0.0	51.2	-4.9	27.7	74
2076.000000	48.3	102.0	H	0.0	51.3	-3.0	25.7	74
2412.750000	50.4	102.0	H	18.0	50.9	-0.5	23.6	74
2994.500000	53.9	102.0	H	97.0	56.2	2.3	20.1	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)
1004.250000	32.4	102.0	V	54.0	41.7	-9.3	21.6	54
1324.000000	33.1	102.0	V	72.0	40.5	-7.4	20.9	54
1647.000000	35.6	102.0	V	327.0	40.6	-5.0	18.4	54
2062.250000	36.1	102.0	H	209.0	39.2	-3.1	17.9	54
2490.000000	39.2	102.0	H	194.0	39.5	0.3	14.8	54
2994.750000	45.2	102.0	V	13.0	47.5	2.3	8.8	54

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



Note: The signal beyond the limit is carrier.  
Radiates Emission from 3GHz to 7GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3278.000000	38.9	100.0	V	0.0	39.7	0.8	35.1	74
3966.500000	39.3	100.0	H	213.0	41.0	1.7	34.7	74
4495.000000	40.7	100.0	H	129.0	43.3	2.6	33.3	74
5992.500000	44.8	100.0	V	86.0	49.7	4.9	29.2	74
6557.000000	47.7	100.0	V	358.0	56.0	8.3	26.3	74
6944.500000	47.7	100.0	V	294.0	55.6	7.9	26.3	74

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

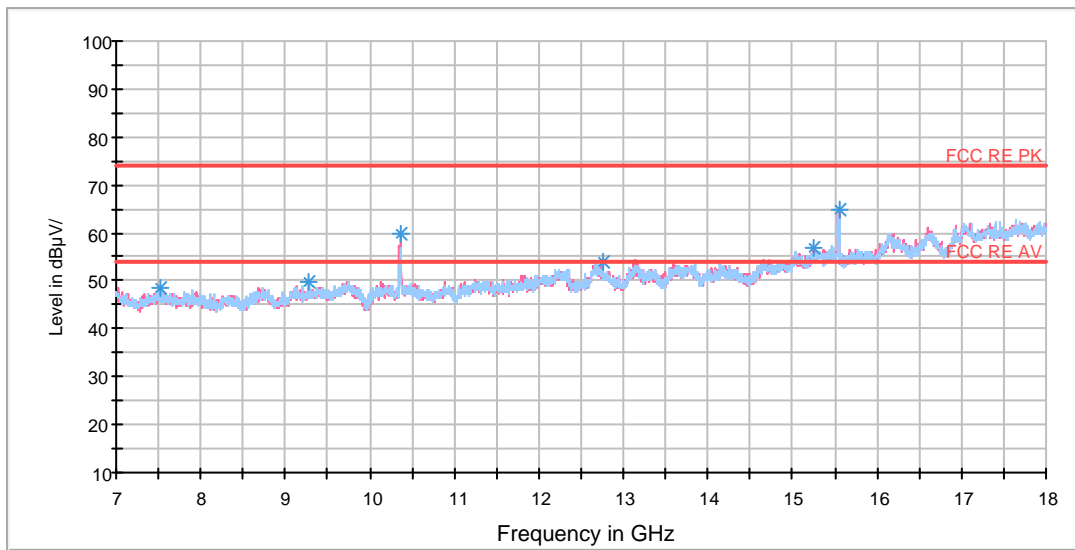
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3030.000000	26.6	100.0	H	129.0	27.4	0.8	27.4	54
3959.500000	27.8	100.0	H	23.0	30.0	2.2	26.2	54
4500.000000	28.6	100.0	H	3.0	31.5	2.9	25.4	54
6032.000000	32.4	100.0	H	0.0	37.6	5.2	21.6	54
6514.000000	35.4	100.0	H	1.0	43.6	8.2	18.6	54
6720.000000	35.9	100.0	H	15.0	44.5	8.6	18.1	54

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





RE 7-18GHz PK



Radiates Emission from 7GHz to 18GHz

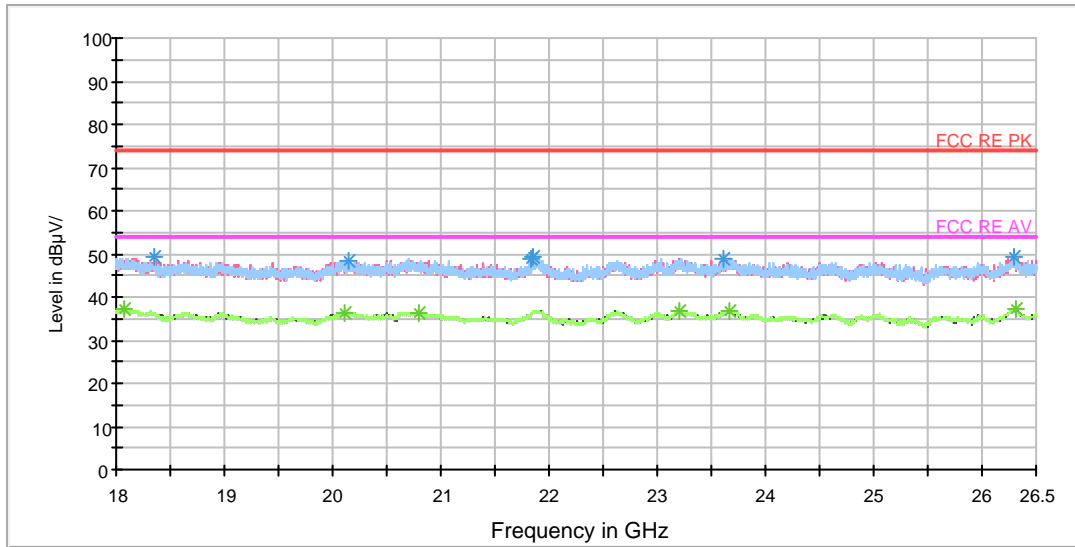
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7519.750000	48.5	101.0	V	43.0	55.7	7.2	25.5	74
9285.250000	49.9	101.0	H	148.0	59.0	9.1	24.1	74
10360.500000	59.8	101.0	V	18.0	69.8	10.0	14.2	74
12753.000000	53.9	101.0	H	349.0	68.5	14.6	20.1	74
15241.750000	56.8	101.0	V	55.0	75.2	18.4	17.2	74
15549.750000	64.6	101.0	V	319.0	83.3	18.7	9.4	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)
7000.000000	38.1	102.0	V	180.0	46.6	8.5	15.9	54
9587.750000	38.0	102.0	V	180.0	47.9	9.9	16.0	54
10360.500000	50.4	102.0	V	180.0	60.4	10.0	3.6	54
13138.000000	42.9	102.0	V	180.0	58.3	15.4	11.1	54
15335.250000	45.2	102.0	V	180.0	63.7	18.5	8.8	54
15544.250000	51.9	102.0	V	180.0	70.5	18.6	2.1	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

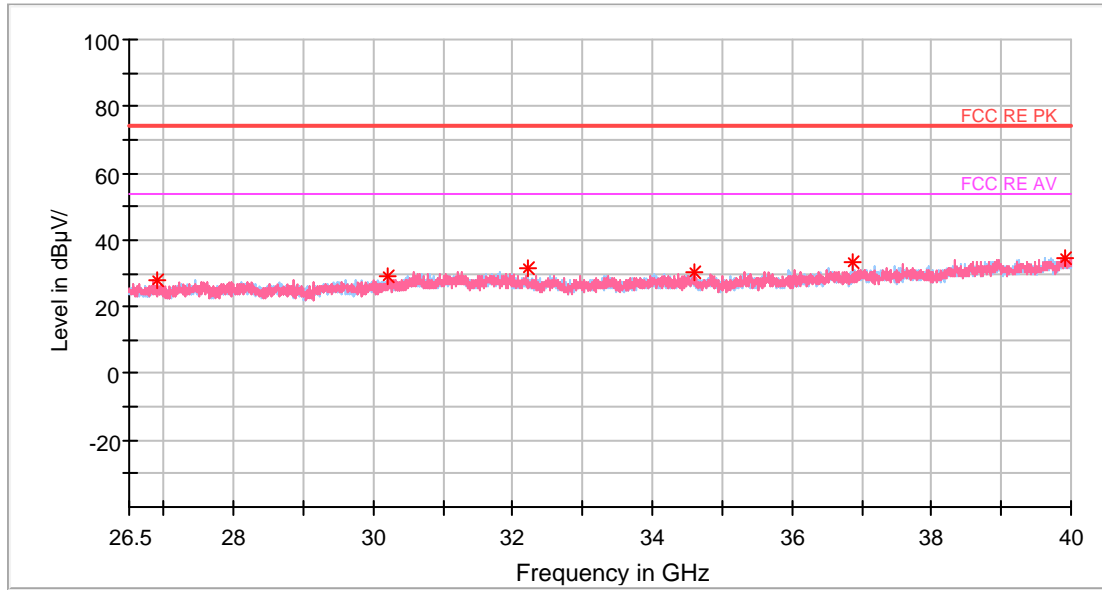
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18349.562500	49.3	H	0.0	52.6	-3.3	24.7	74
20149.437500	48.5	V	134.0	54.3	-5.8	25.5	74
21839.875000	49.0	V	289.0	57.0	-8.0	25.0	74
21859.000000	49.2	V	310.0	57.2	-8.0	24.8	74
23619.562500	48.9	V	353.0	54.8	-5.9	25.1	74
26297.062500	49.3	V	310.0	54.7	-5.4	24.7	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18078.625000	37.0	V	332.0	39.1	-2.1	17.0	54
20115.437500	36.4	V	89.0	42.2	-5.8	17.6	54
20790.125000	36.5	V	89.0	43.4	-6.9	17.5	54
23209.437500	36.9	H	250.0	42.9	-6.0	17.1	54
23669.500000	36.9	H	31.0	42.8	-5.9	17.1	54
26305.562500	37.0	V	332.0	42.4	-5.4	17.0	54

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

Full Spectrum



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
26901.625000	27.8	V	0.0	45.3	-17.5	46.2	74
30209.125000	29.1	H	0.0	46.2	-17.1	44.9	74
32207.125000	31.4	H	0.0	47.2	-15.8	42.6	74
34586.500000	30.3	V	0.0	47.0	-16.7	43.7	74
36868.000000	33.3	H	0.0	49.9	-16.6	40.7	74
39912.250000	34.8	V	0.0	50.7	-15.9	39.2	74

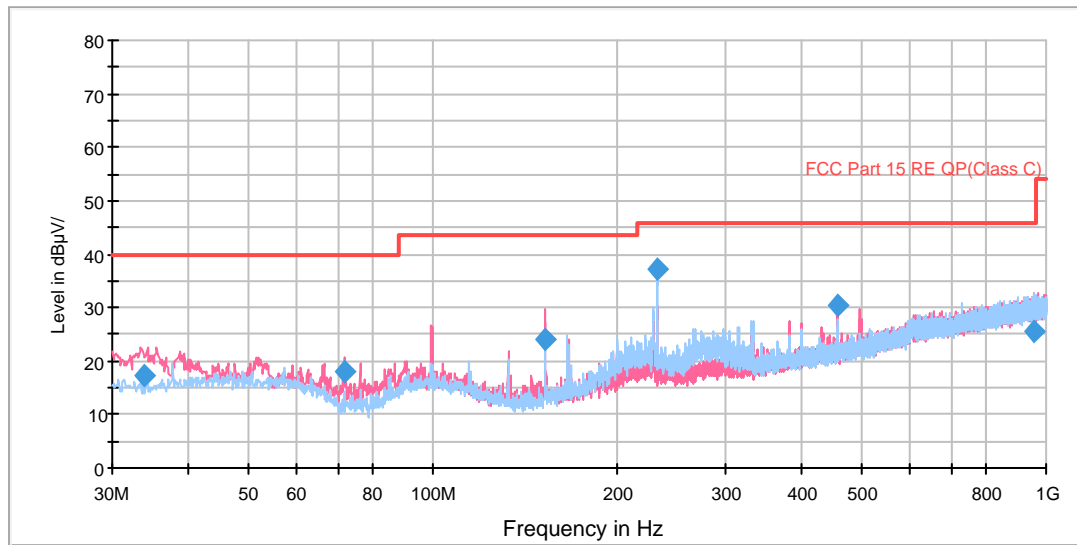
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27576.625000	18.2	H	0.0	35.3	-17.1	35.8	54
30236.125000	18.8	H	0.0	35.8	-17.0	35.2	54
31187.875000	20.5	H	0.0	36.5	-16.0	33.5	54
34492.000000	20.5	H	0.0	37.0	-16.5	33.5	54
37141.375000	21.5	V	0.0	38.1	-16.6	32.5	54
39905.500000	25.1	H	0.0	41.0	-15.9	28.9	54

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

802.11a CH40

FCC RE 0.03-1GHz QP Class C



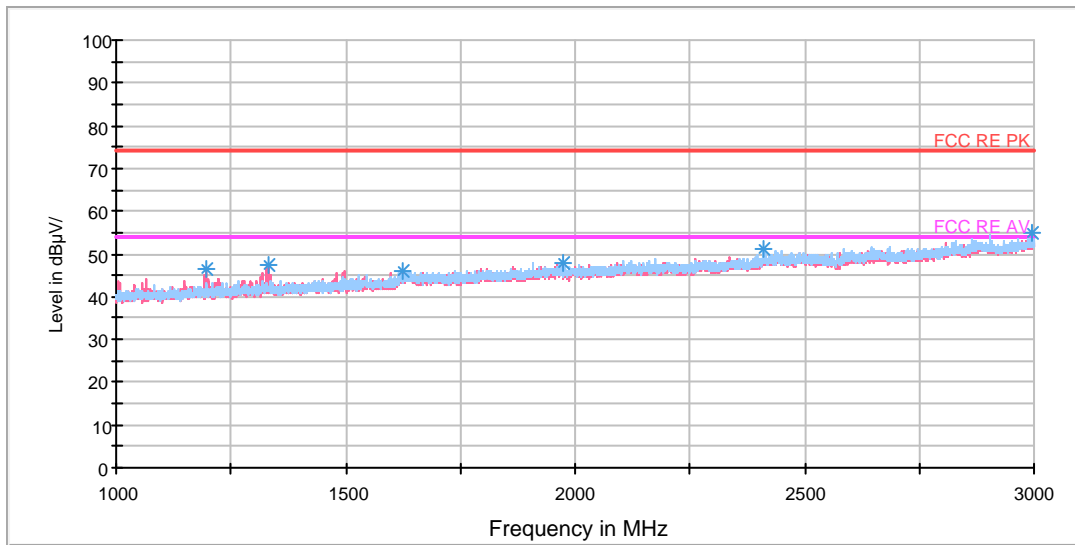
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
33.803750	17.4	100.0	V	289.0	29.3	11.9	22.6	40.0
71.992500	18.1	100.0	V	148.0	26.7	8.6	21.9	40.0
152.260000	24.2	100.0	V	265.0	33.5	9.3	19.3	43.5
232.366250	37.1	125.0	H	103.0	50.5	13.4	8.9	46.0
458.376250	30.6	114.0	V	193.0	49.6	19.0	15.4	46.0
957.282500	25.4	100.0	V	11.0	51.5	26.1	20.6	46.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor  
 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)  
 3. Margin = Limit – Quasi-Peak



RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

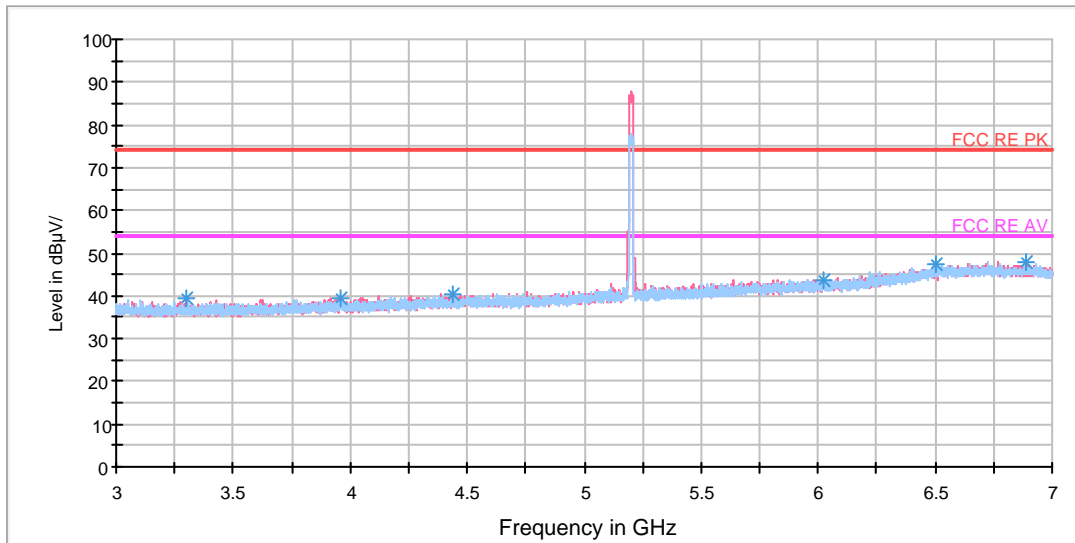
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.250000	46.7	102.0	V	139.0	54.9	-8.2	27.3	74
1330.500000	47.6	102.0	V	53.0	55.0	-7.4	26.4	74
1625.750000	46.0	102.0	V	0.0	50.8	-4.8	28.0	74
1972.500000	47.9	102.0	V	0.0	51.5	-3.6	26.1	74
2409.750000	51.1	102.0	H	275.0	51.6	-0.5	22.9	74
2994.750000	54.8	102.0	V	13.0	57.1	2.3	19.2	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)
1004.250000	32.5	102.0	V	139.0	41.8	-9.3	21.5	54
1317.000000	32.8	102.0	H	0.0	40.2	-7.4	21.2	54
1647.000000	35.3	102.0	V	359.0	40.3	-5.0	18.7	54
1960.750000	36.3	102.0	V	0.0	39.5	-3.2	17.7	54
2490.000000	39.1	102.0	H	64.0	39.4	0.3	14.9	54
2994.750000	45.1	102.0	H	327.0	47.4	2.3	8.9	54

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





Note: The signal beyond the limit is carrier.  
Radiates Emission from 3GHz to 7GHz

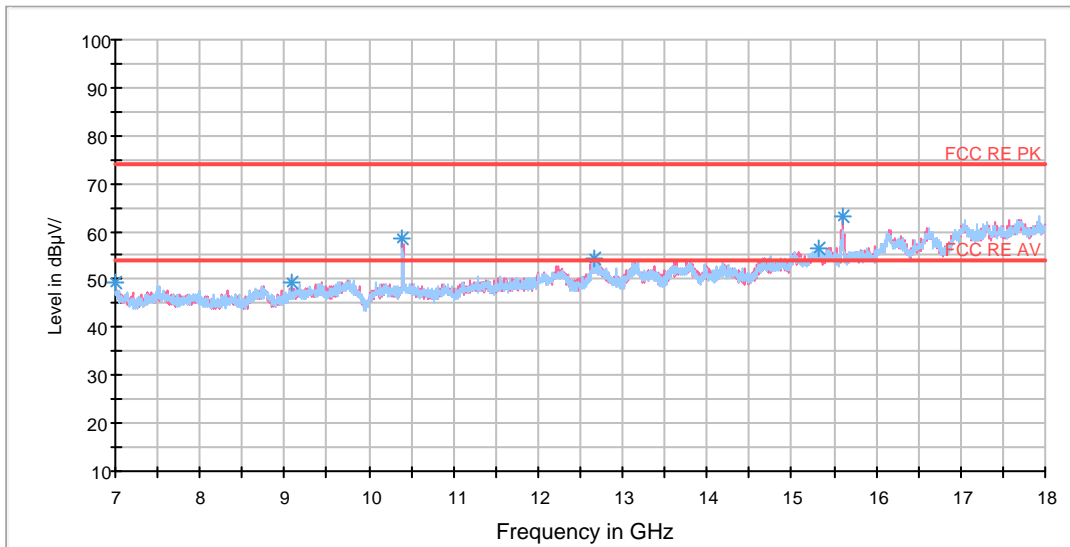
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3297.000000	39.3	100.0	V	0.0	40.0	0.7	34.7	74
3963.000000	39.5	100.0	V	0.0	41.5	2.0	34.5	74
4438.000000	40.6	100.0	H	0.0	43.1	2.5	33.4	74
6022.000000	43.7	100.0	H	69.0	48.8	5.1	30.3	74
6502.000000	47.4	100.0	H	120.0	55.6	8.2	26.6	74
6892.000000	48.0	100.0	H	146.0	56.5	8.5	26.0	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)
3300.500000	26.8	100.0	H	0.0	27.7	0.9	27.2	54
3960.500000	28.1	100.0	H	81.0	30.3	2.2	25.9	54
4501.500000	28.7	100.0	H	0.0	31.5	2.8	25.3	54
6025.000000	32.4	100.0	V	279.0	37.6	5.2	21.6	54
6523.500000	35.9	100.0	V	0.0	44.4	8.5	18.1	54
6864.500000	35.1	100.0	V	0.0	43.2	8.1	18.9	54

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

RE 7-18GHz PK



Radiates Emission from 7GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7000.000000	49.2	101.0	H	150.0	57.7	8.5	24.8	74
9087.250000	49.4	101.0	H	114.0	58.3	8.9	24.6	74
10393.500000	58.6	101.0	V	350.0	68.5	9.9	15.4	74
12676.000000	54.3	101.0	H	222.0	68.8	14.5	19.7	74
15329.750000	56.6	101.0	V	129.0	75.0	18.4	17.4	74
15610.250000	63.2	101.0	V	308.0	81.7	18.5	10.8	74

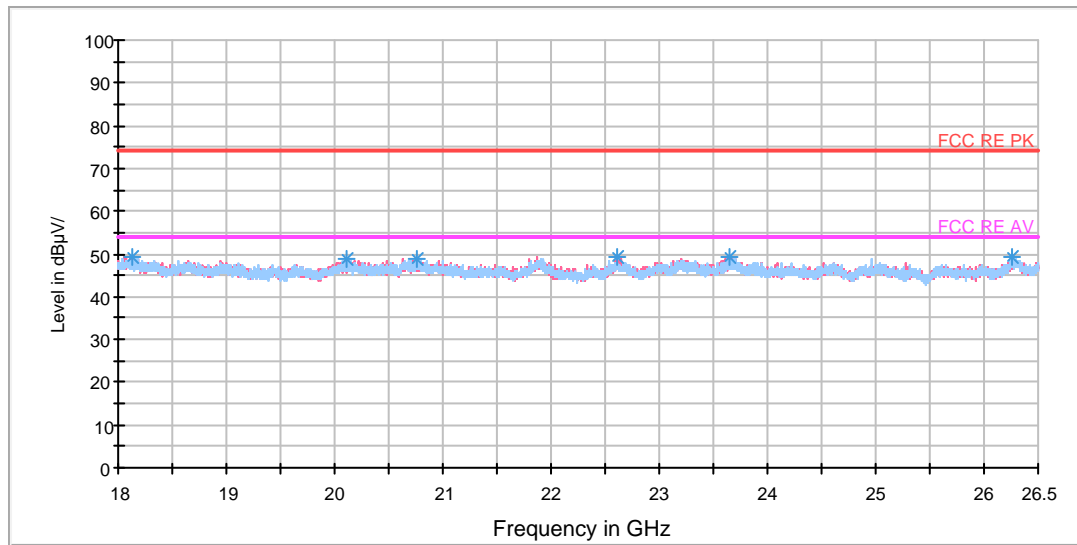
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7000.000000	38.2	102.0	V	180.0	46.7	8.5	15.8	54
9587.750000	38.0	102.0	V	180.0	47.9	9.9	16.0	54
10401.750000	50.5	102.0	V	0.0	60.4	9.9	3.5	54
13138.000000	42.9	102.0	V	0.0	58.3	15.4	11.1	54
15338.000000	45.2	102.0	V	0.0	63.8	18.6	8.8	54
15602.000000	53.8	102.0	V	0.0	72.4	18.6	0.2	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

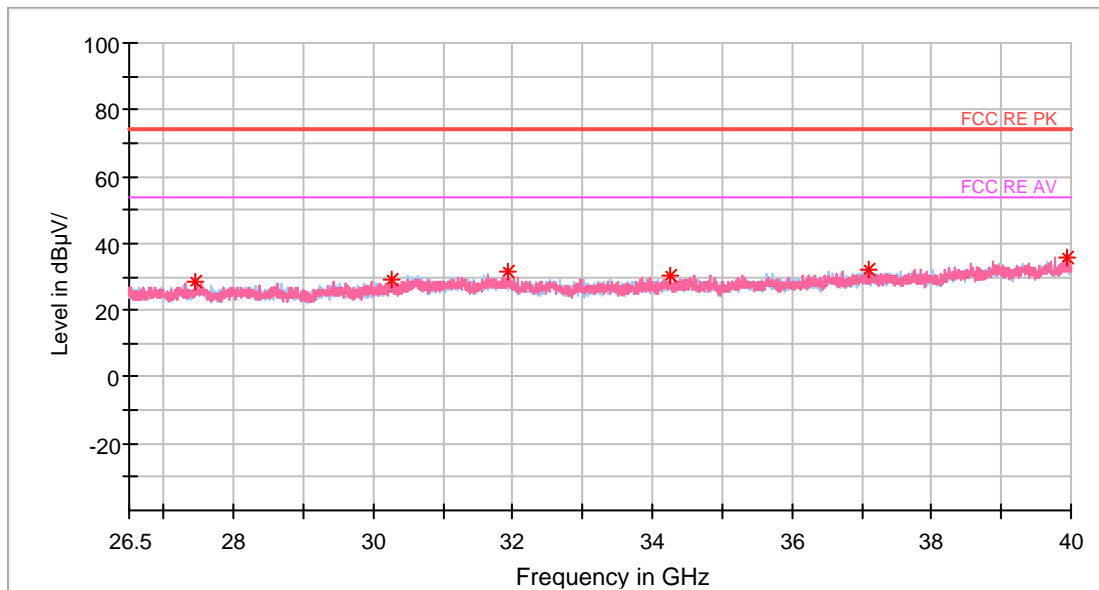
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18137.062500	49.3	V	42.0	51.7	-2.4	24.7	74
20119.687500	49.0	H	204.0	54.8	-5.8	25.0	74
20767.812500	48.9	H	181.0	55.8	-6.9	25.1	74
22617.625000	49.1	V	0.0	55.8	-6.7	24.9	74
23640.812500	49.3	V	0.0	55.2	-5.9	24.7	74
26255.625000	49.3	V	0.0	54.7	-5.4	24.7	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18061.625000	37.1	H	0.0	39.2	-2.1	16.9	54
20089.937500	36.3	H	159.0	42.0	-5.7	17.7	54
20648.812500	36.5	V	0.0	43.1	-6.6	17.5	54
23195.625000	36.9	H	114.0	42.9	-6.0	17.1	54
23710.937500	36.8	H	28.0	42.7	-5.9	17.2	54
26304.500000	37.0	V	245.0	42.4	-5.4	17.0	54

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

Full Spectrum



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27441.625000	28.6	V	0.0	45.6	-17.0	45.4	74
30266.500000	28.9	V	0.0	45.8	-16.9	45.1	74
31937.125000	31.5	H	0.0	47.1	-15.6	42.5	74
34249.000000	30.6	V	0.0	47.1	-16.5	43.4	74
37094.125000	31.9	H	0.0	48.5	-16.6	42.1	74
39952.750000	35.5	H	0.0	51.4	-15.9	38.5	74

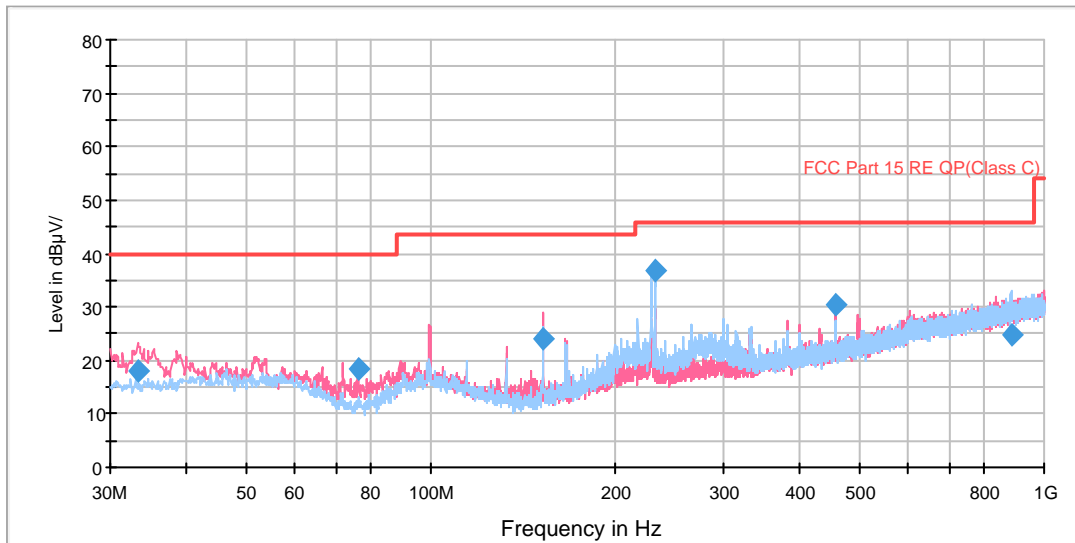
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27522.625000	17.7	H	0.0	34.8	-17.1	36.3	54
30202.375000	18.9	H	0.0	36.0	-17.1	35.1	54
31241.875000	20.2	H	0.0	36.3	-16.1	33.8	54
34576.375000	19.9	H	0.0	36.6	-16.7	34.1	54
36996.250000	22.1	H	0.0	38.7	-16.6	31.9	54
39902.125000	25.6	V	0.0	41.5	-15.9	28.4	54

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

802.11a CH48

FCC RE 0.03-1GHz QP Class C



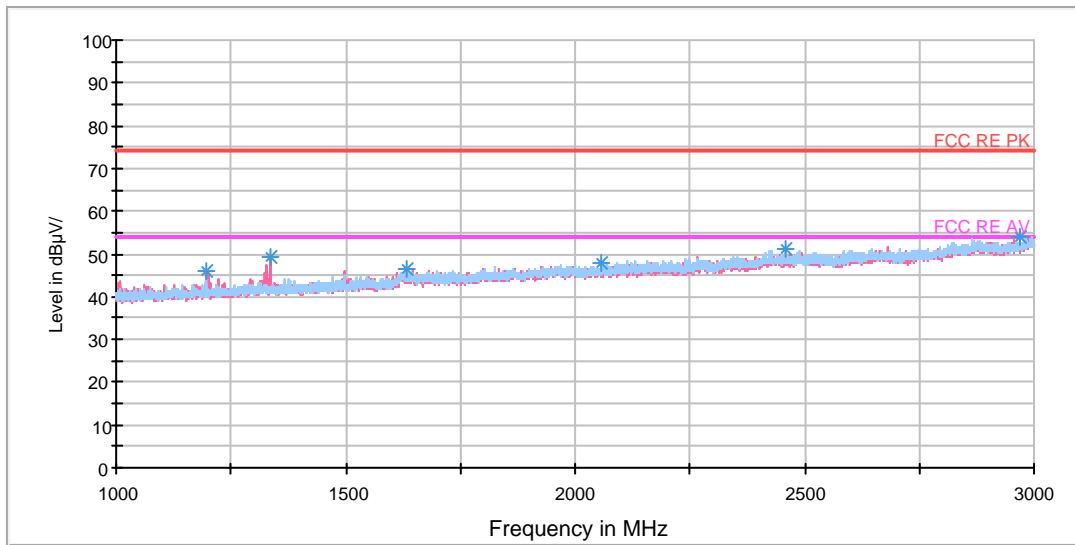
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
33.233750	18.0	100.0	V	0.0	29.9	11.9	22.0	40.0
76.357500	18.4	125.0	V	176.0	26.9	8.5	21.6	40.0
152.258750	23.9	100.0	V	254.0	33.2	9.3	19.6	43.5
232.366250	36.8	125.0	H	104.0	50.2	13.4	9.2	46.0
456.638750	30.5	114.0	V	176.0	49.5	19.0	15.5	46.0
883.917500	24.6	114.0	H	45.0	50.0	25.4	21.4	46.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor  
 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)  
 3. Margin = Limit – Quasi-Peak



RE 1G-3GHz PK+AV



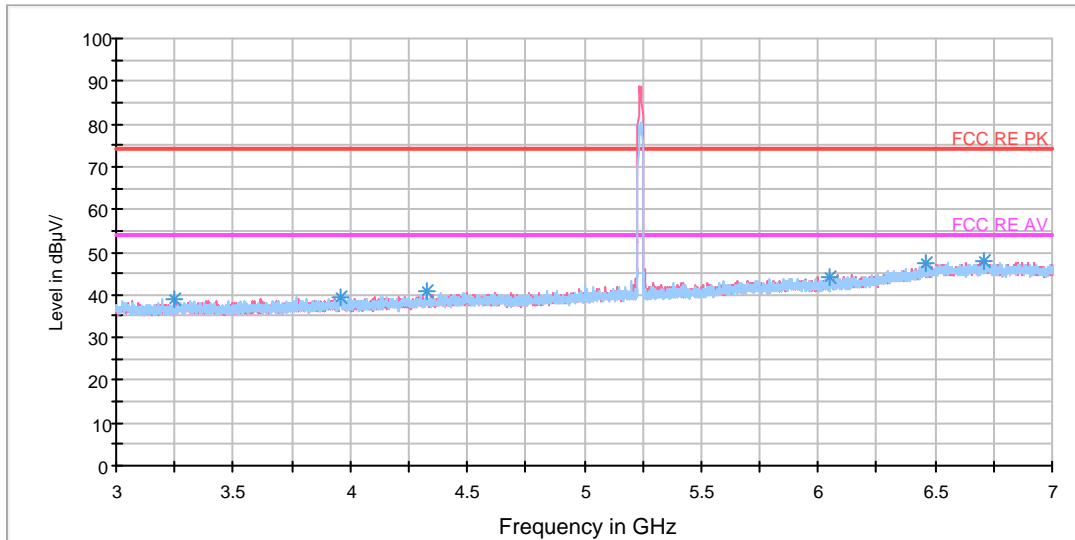
Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.500000	46.0	102.0	V	137.0	54.2	-8.2	28.0	74
1335.000000	49.1	102.0	V	247.0	56.5	-7.4	24.9	74
1631.500000	46.4	102.0	H	0.0	51.1	-4.7	27.6	74
2057.000000	48.1	102.0	H	80.0	51.3	-3.2	25.9	74
2459.750000	51.0	102.0	H	176.0	51.5	-0.5	23.0	74
2967.750000	54.2	102.0	H	144.0	56.4	2.2	19.8	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)
1006.750000	32.5	102.0	V	51.0	41.8	-9.3	21.5	54
1388.750000	32.6	102.0	V	327.0	39.6	-7.0	21.4	54
1647.000000	35.3	102.0	V	121.0	40.3	-5.0	18.7	54
1945.250000	36.0	102.0	H	64.0	39.3	-3.3	18.0	54
2488.500000	38.9	102.0	V	51.0	39.1	0.2	15.1	54
2994.750000	45.2	102.0	V	0.0	47.5	2.3	8.8	54

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



Note: The signal beyond the limit is carrier.  
Radiates Emission from 3GHz to 7GHz

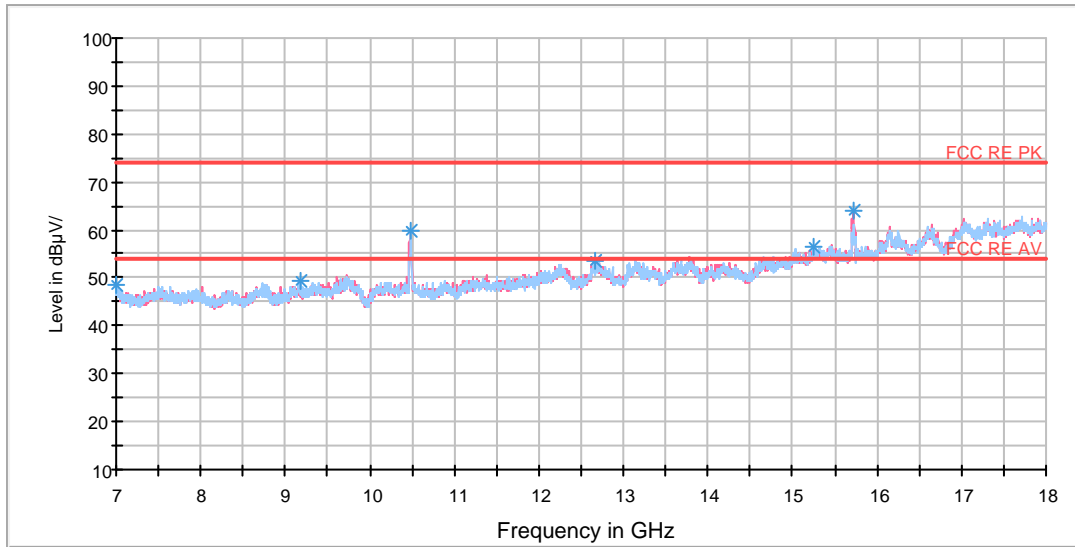
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3249.500000	39.0	100.0	V	273.0	39.7	0.7	35.0	74
3961.000000	39.5	100.0	H	18.0	41.7	2.2	34.5	74
4327.500000	40.8	100.0	V	0.0	43.1	2.3	33.2	74
6051.000000	44.2	100.0	V	358.0	49.2	5.0	29.8	74
6460.500000	47.6	100.0	H	18.0	55.4	7.8	26.4	74
6705.000000	47.9	100.0	V	300.0	56.3	8.4	26.1	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)
3042.000000	26.9	100.0	V	350.0	27.7	0.8	27.1	54
3960.000000	28.0	100.0	H	18.0	30.3	2.3	26.0	54
4578.500000	28.5	100.0	V	128.0	31.0	2.5	25.5	54
6059.500000	32.4	100.0	V	357.0	37.7	5.3	21.6	54
6472.000000	34.9	100.0	V	350.0	42.8	7.9	19.1	54
6721.000000	35.9	100.0	V	300.0	44.5	8.6	18.1	54

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

RE 7-18GHz PK



Radiates Emission from 7GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7005.500000	48.5	101.0	H	285.0	56.9	8.4	25.5	74
9183.500000	49.2	101.0	H	223.0	57.9	8.7	24.8	74
10476.000000	59.9	101.0	V	350.0	70.7	10.8	14.1	74
12673.250000	53.5	101.0	H	187.0	67.9	14.4	20.5	74
15239.000000	56.6	101.0	V	177.0	74.9	18.3	17.4	74
15731.250000	64.1	101.0	V	177.0	83.7	19.6	9.9	74

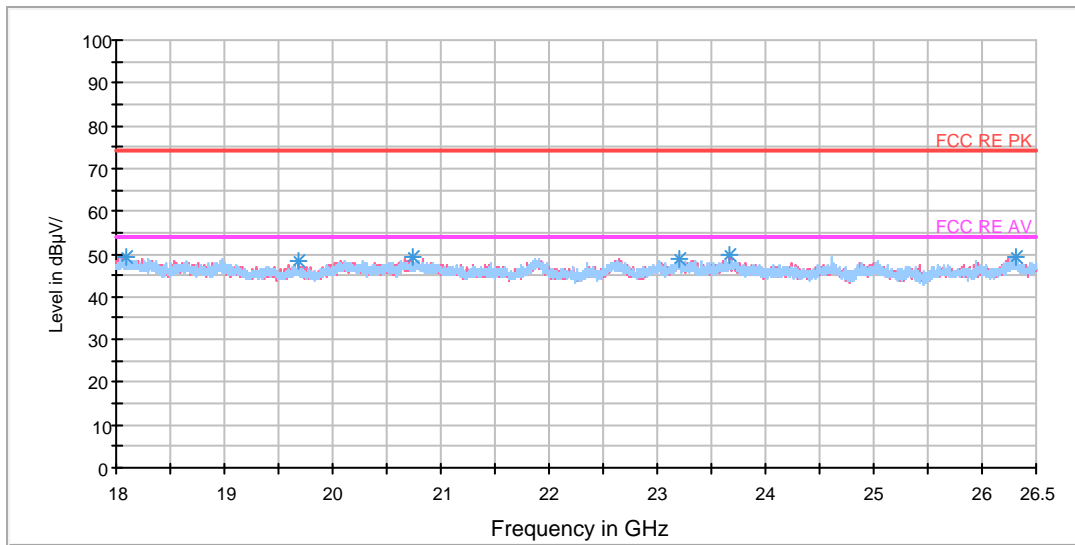
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7000.000000	38.1	102.0	V	180.0	46.6	8.5	15.9	54
9587.750000	37.9	102.0	V	0.0	47.8	9.9	16.1	54
10481.500000	50.4	102.0	V	180.0	61.3	10.9	3.6	54
13138.000000	43.1	102.0	V	180.0	58.5	15.4	10.9	54
15335.250000	45.2	102.0	V	180.0	63.7	18.5	8.8	54
15725.750000	53.8	102.0	V	0.0	73.4	19.6	0.2	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

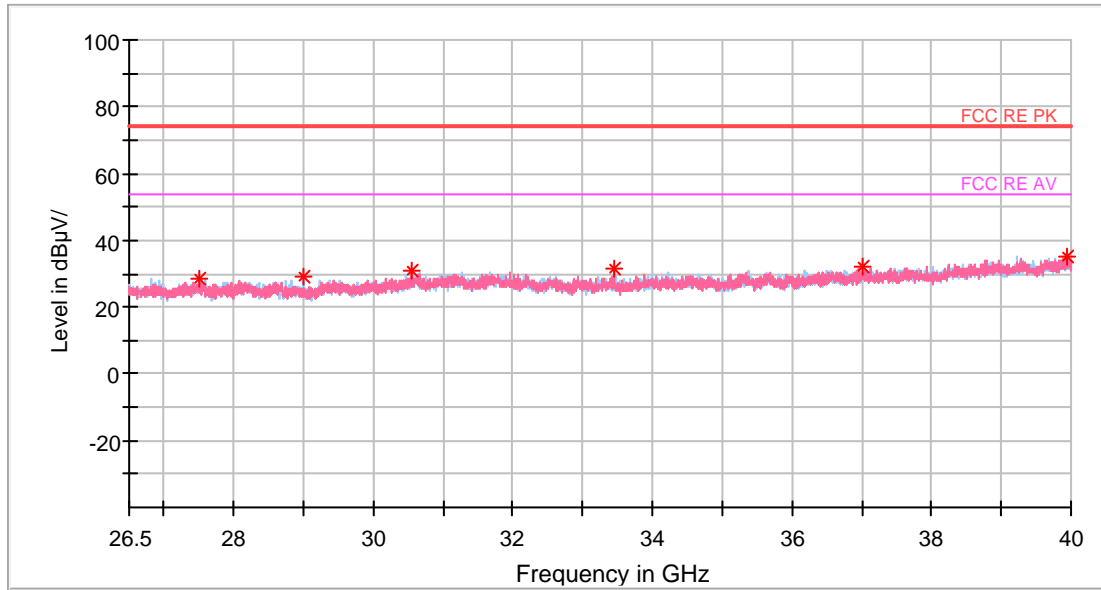
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18095.625000	49.3	V	332.0	51.5	-2.2	24.7	74
19687.250000	48.6	V	0.0	54.6	-6.0	25.4	74
20737.000000	49.3	V	200.0	56.1	-6.8	24.7	74
23198.812500	49.0	V	354.0	55.0	-6.0	25.0	74
23666.312500	49.8	V	19.0	55.7	-5.9	24.2	74
26306.625000	49.2	H	0.0	54.6	-5.4	24.8	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18058.437500	37.2	V	200.0	39.2	-2.0	16.8	54
20093.125000	36.5	H	160.0	42.3	-5.8	17.5	54
20764.625000	36.7	H	296.0	43.5	-6.8	17.3	54
21885.562500	36.8	V	111.0	44.8	-8.0	17.2	54
23671.625000	36.8	V	0.0	42.7	-5.9	17.2	54
26297.062500	36.9	V	0.0	42.3	-5.4	17.1	54

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

Full Spectrum



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27515.875000	28.5	H	0.0	45.6	-17.1	45.5	74
28990.750000	29.0	H	0.0	46.7	-17.7	45.0	74
30550.000000	30.7	V	0.0	47.1	-16.4	43.3	74
33449.125000	31.2	V	0.0	48.1	-16.9	42.8	74
37026.625000	32.0	H	0.0	48.6	-16.6	42.0	74
39932.500000	35.4	H	0.0	51.3	-15.9	38.6	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
28130.125000	17.7	V	0.0	34.2	-16.5	36.3	54
30263.125000	18.4	H	0.0	35.3	-16.9	35.6	54
31275.625000	20.3	V	0.0	36.4	-16.1	33.7	54
34586.500000	19.8	H	0.0	36.5	-16.7	34.2	54
37306.750000	21.6	V	0.0	38.1	-16.5	32.4	54
40000.000000	25.3	H	0.0	41.2	-15.9	28.7	54

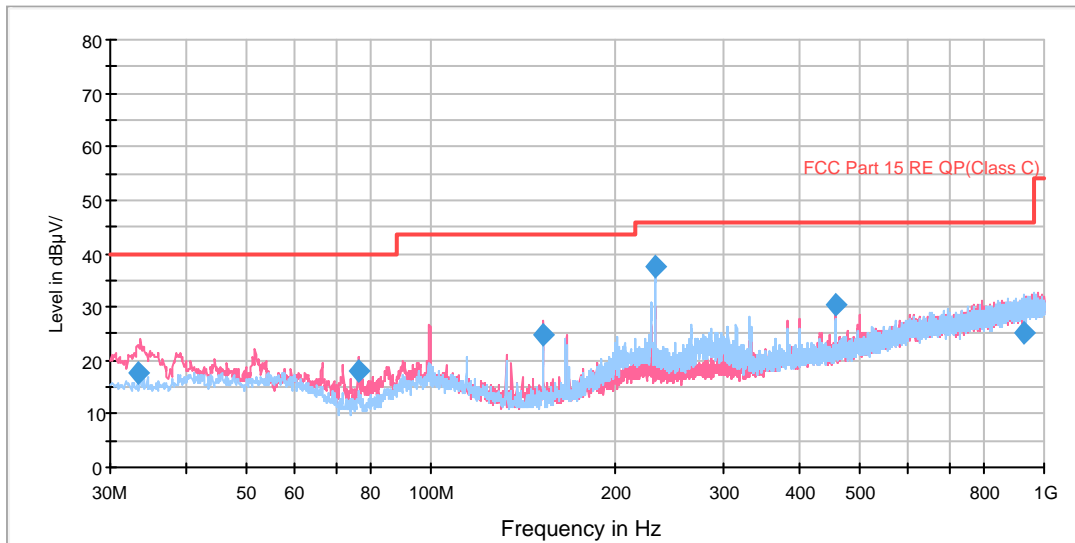
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)





802.11a CH52

FCC RE 0.03-1GHz QP Class C

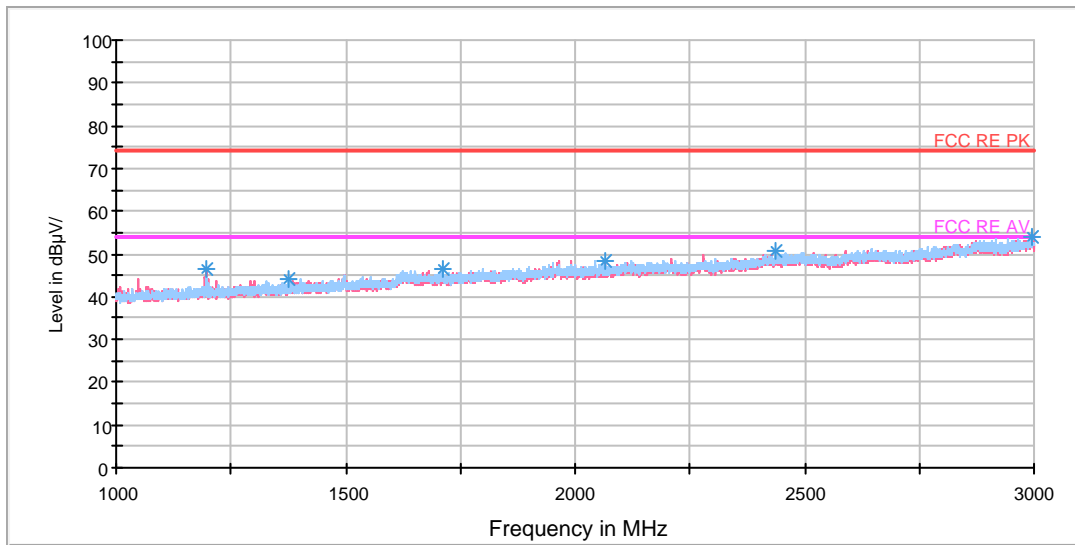


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
33.237500	17.8	100.0	V	10.0	29.7	11.9	22.2	40.0
76.357500	18.1	125.0	V	152.0	26.6	8.5	21.9	40.0
152.745000	24.8	100.0	V	278.0	34.1	9.3	18.7	43.5
232.771250	37.4	125.0	H	102.0	50.8	13.4	8.6	46.0
456.637500	30.2	114.0	V	188.0	49.2	19.0	15.8	46.0
930.038750	25.0	114.0	H	302.0	50.9	25.9	21.0	46.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor
- 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)
- 3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

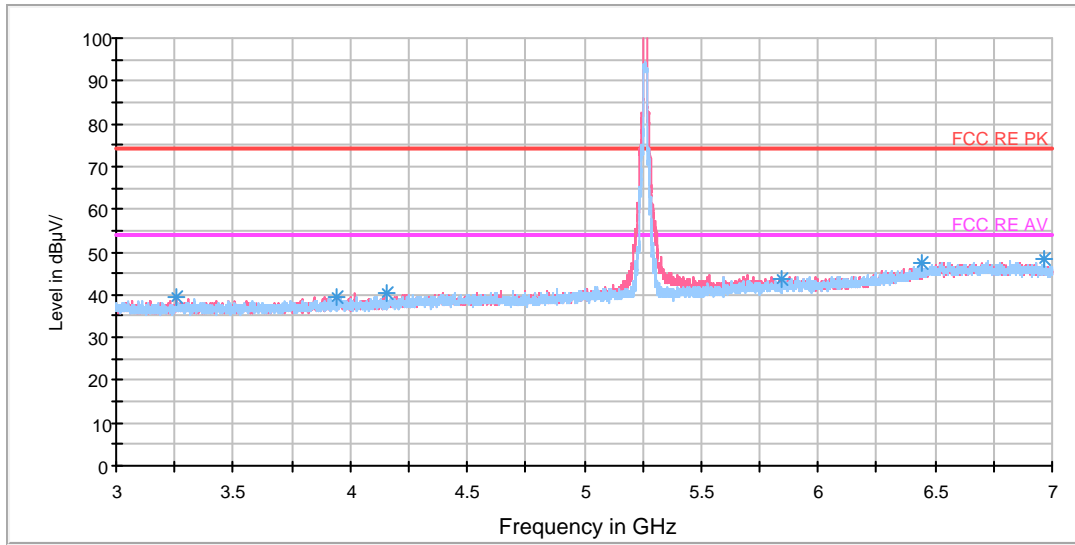
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.250000	46.6	102.0	V	295.0	54.8	-8.2	27.4	74
1374.750000	44.2	102.0	H	160.0	51.3	-7.1	29.8	74
1710.500000	46.5	102.0	H	0.0	51.3	-4.8	27.5	74
2065.500000	48.5	102.0	V	71.0	51.6	-3.1	25.5	74
2438.500000	50.5	102.0	H	0.0	50.9	-0.4	23.5	74
2994.750000	53.8	102.0	H	327.0	56.1	2.3	20.2	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)
1199.250000	32.6	102.0	V	137.0	40.8	-8.2	21.4	54
1381.000000	33.0	102.0	V	247.0	40.0	-7.0	21.0	54
1647.500000	35.2	102.0	V	121.0	40.2	-5.0	18.8	54
2055.750000	36.2	102.0	H	129.0	39.4	-3.2	17.8	54
2495.000000	39.1	102.0	V	53.0	39.2	0.1	14.9	54
2994.750000	45.3	102.0	H	327.0	47.6	2.3	8.7	54

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

RE 1G-18GHz PK+AV Class B



Note: The signal beyond the limit is carrier.  
Radiates Emission from 3GHz to 7GHz

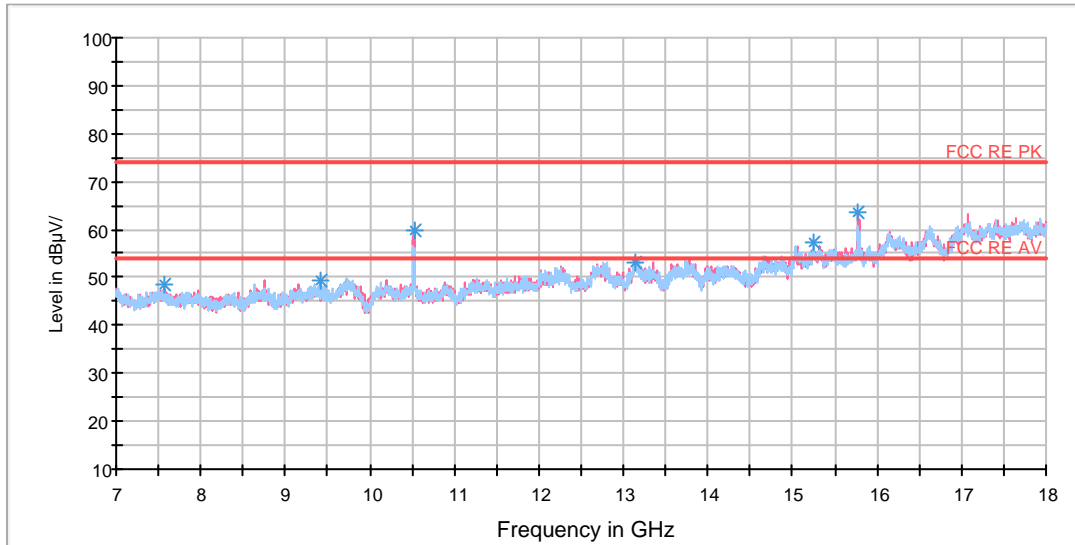
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3254.500000	39.2	100.0	V	332.0	39.9	0.7	34.8	74
3942.500000	39.5	100.0	V	82.0	40.7	1.2	34.5	74
4158.500000	40.6	100.0	V	256.0	42.0	1.4	33.4	74
5846.500000	43.6	100.0	V	96.0	48.4	4.8	30.4	74
6445.000000	47.3	100.0	V	7.0	55.0	7.7	26.7	74
6962.000000	48.2	100.0	H	0.0	56.3	8.1	25.8	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)
3051.000000	26.9	100.0	H	0.0	27.8	0.9	27.1	54
3960.500000	28.2	100.0	V	96.0	30.4	2.2	25.8	54
4504.000000	28.7	100.0	V	341.0	31.4	2.7	25.3	54
5492.000000	32.2	100.0	V	96.0	36.0	3.8	21.8	54
6059.500000	32.3	100.0	H	4.0	37.6	5.3	21.7	54
6722.000000	35.9	100.0	V	256.0	44.5	8.6	18.1	54

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

RE 7-18GHz PK



Radiates Emission from 7GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7566.500000	48.5	101.0	V	177.0	55.8	7.3	25.5	74
9411.750000	49.6	101.0	V	199.0	59.7	10.1	24.4	74
10522.750000	59.8	101.0	V	350.0	70.3	10.5	14.2	74
13132.500000	53.3	101.0	H	150.0	68.4	15.1	20.7	74
15244.500000	57.2	101.0	H	278.0	75.6	18.4	16.8	74
15780.750000	63.5	101.0	V	350.0	83.5	20.0	10.5	74

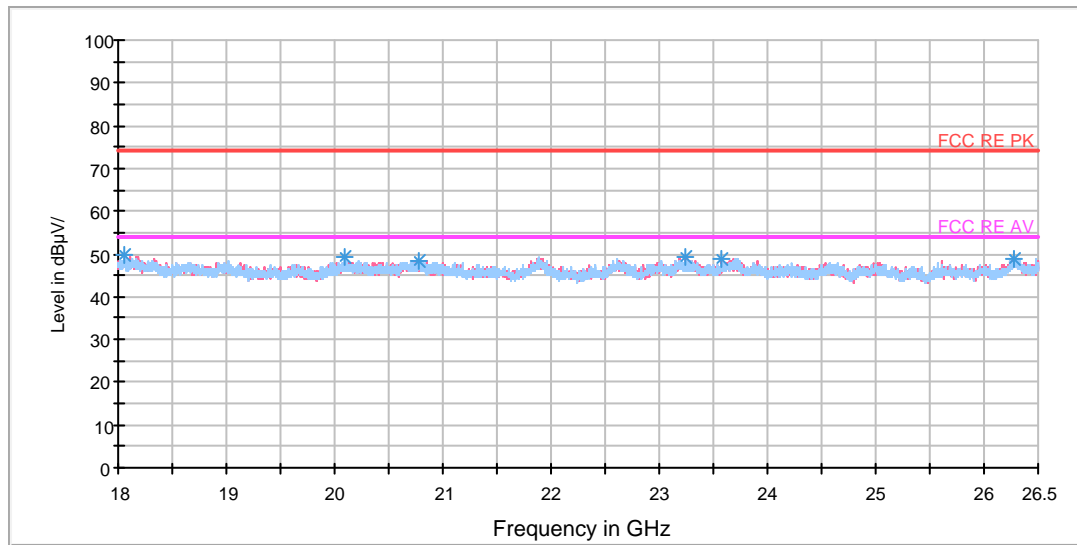
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7000.000000	38.2	102.0	V	180.0	46.7	8.5	15.8	54
9587.750000	38.0	102.0	V	180.0	47.9	9.9	16.0	54
10522.750000	50.0	102.0	V	180.0	60.5	10.5	4.0	54
13138.000000	43.0	102.0	V	0.0	58.4	15.4	11.0	54
15338.000000	45.2	102.0	V	0.0	63.8	18.6	8.8	54
15783.500000	52.8	102.0	V	0.0	72.8	20.0	1.2	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

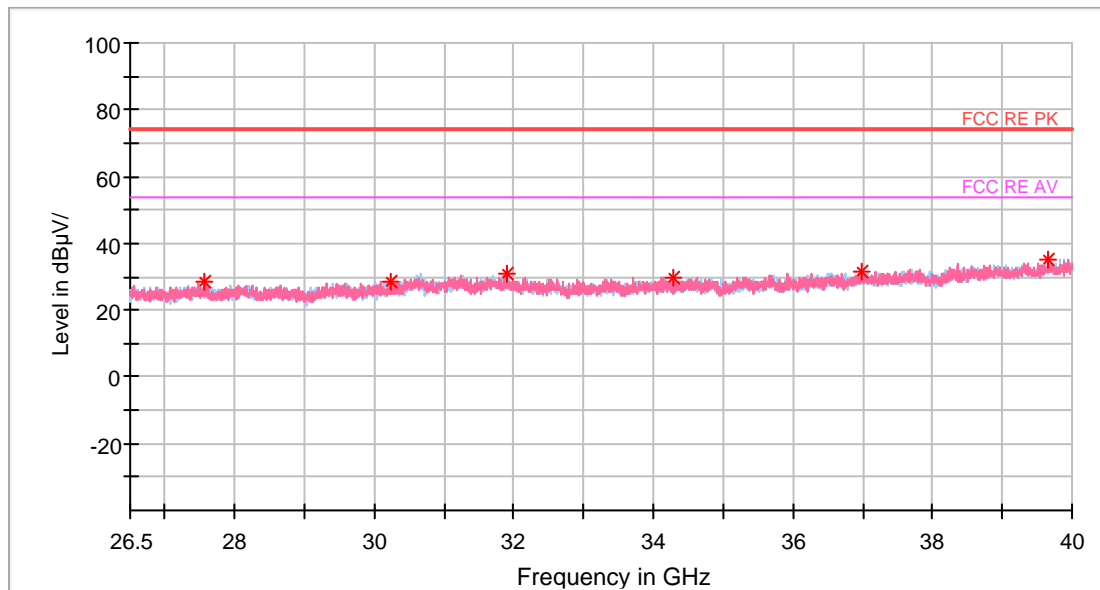
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18064.812500	49.6	H	0.0	51.7	-2.1	24.4	74
20093.125000	49.1	H	27.0	54.9	-5.8	24.9	74
20784.812500	48.6	H	228.0	55.5	-6.9	25.4	74
23234.937500	49.4	V	224.0	55.4	-6.0	24.6	74
23579.187500	49.0	V	290.0	54.9	-5.9	25.0	74
26283.250000	49.0	H	0.0	54.4	-5.4	25.0	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18062.687500	37.4	V	66.0	39.5	-2.1	16.6	54
20130.312500	36.4	V	0.0	42.2	-5.8	17.6	54
20780.562500	36.8	V	355.0	43.7	-6.9	17.2	54
21882.375000	36.9	H	5.0	44.9	-8.0	17.1	54
23683.312500	36.8	H	93.0	42.7	-5.9	17.2	54
26275.812500	37.0	V	0.0	42.4	-5.4	17.0	54

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

Full Spectrum



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27553.000000	28.7	V	0.0	45.8	-17.1	45.3	74
30239.500000	28.7	H	0.0	45.7	-17.0	45.3	74
31889.875000	31.1	H	0.0	46.6	-15.5	42.9	74
34296.250000	29.9	V	0.0	46.3	-16.4	44.1	74
36989.500000	31.2	H	0.0	47.8	-16.6	42.8	74
39652.375000	35.1	H	0.0	50.9	-15.8	38.9	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
28072.750000	17.9	V	0.0	34.4	-16.5	36.1	54
30286.750000	18.6	V	0.0	35.5	-16.9	35.4	54
30634.375000	20.3	H	0.0	36.7	-16.4	33.7	54
34616.875000	20.0	H	0.0	36.7	-16.7	34.0	54
36972.625000	22.1	V	0.0	38.7	-16.6	31.9	54
39935.875000	25.0	H	0.0	40.9	-15.9	29.0	54

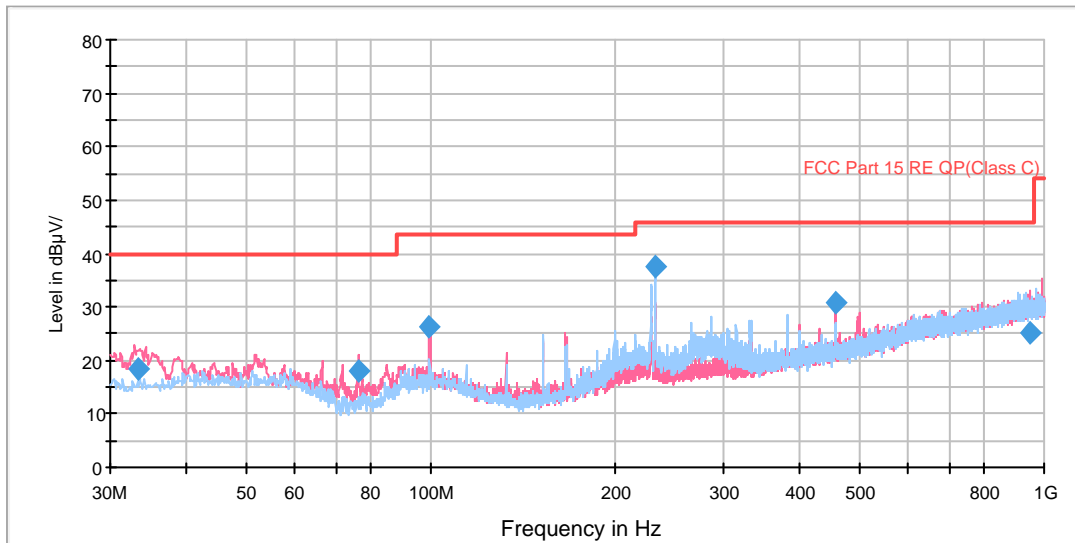
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)





802.11a CH60

FCC RE 0.03-1GHz QP Class C

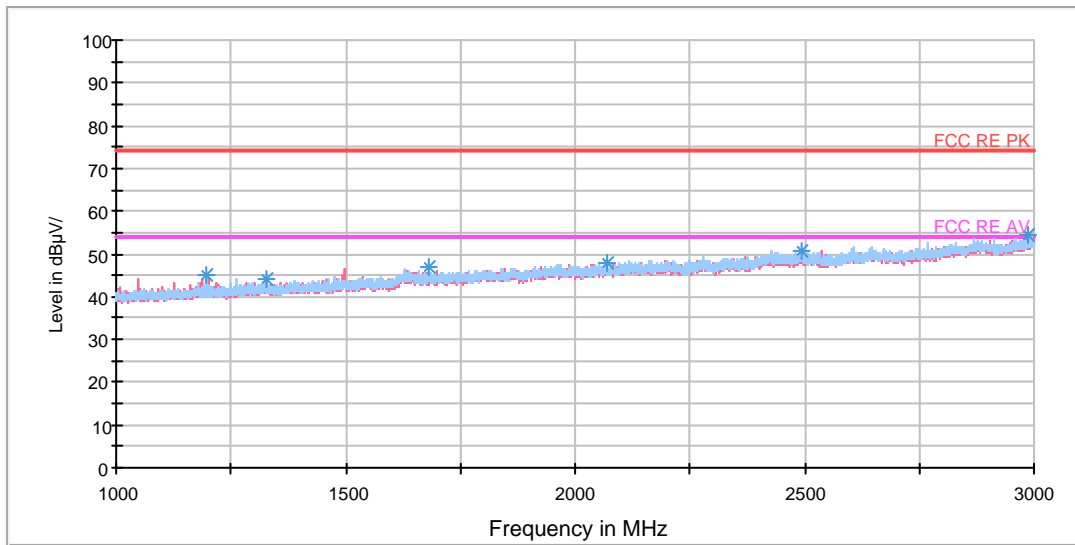


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
33.230000	18.3	100.0	V	313.0	30.2	11.9	21.7	40.0
76.356250	18.2	125.0	V	154.0	26.7	8.5	21.8	40.0
99.596250	26.2	100.0	V	228.0	39.4	13.2	17.3	43.5
232.771250	37.4	125.0	H	102.0	50.8	13.4	8.6	46.0
458.376250	30.8	114.0	V	186.0	49.8	19.0	15.2	46.0
950.533750	25.2	100.0	V	17.0	51.2	26.0	20.8	46.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor  
 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)  
 3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



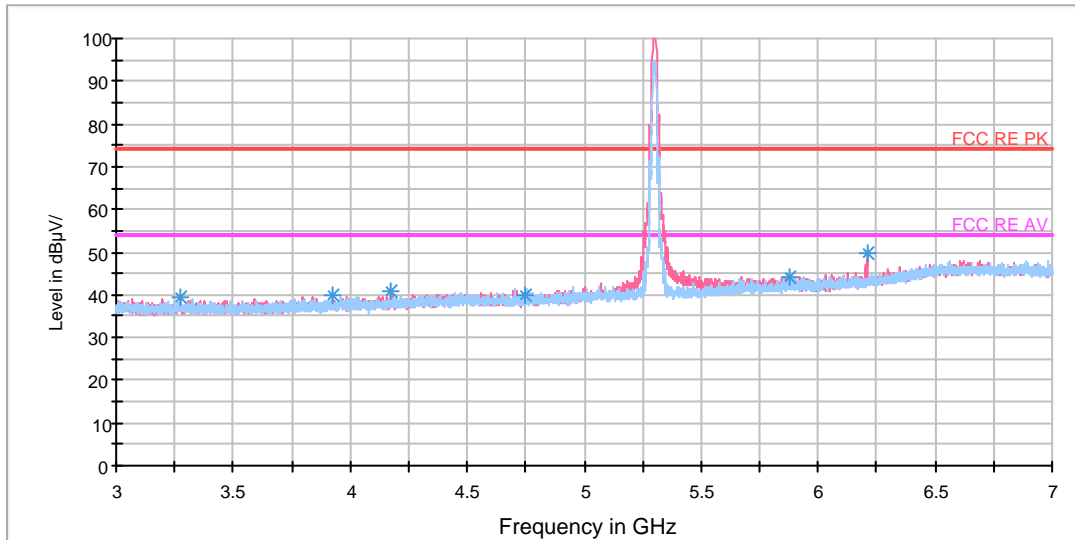
Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.500000	45.1	102.0	V	0.0	53.3	-8.2	28.9	74
1328.750000	44.2	102.0	V	186.0	51.6	-7.4	29.8	74
1680.000000	47.1	102.0	H	276.0	52.2	-5.1	26.9	74
2069.250000	47.7	102.0	H	225.0	50.8	-3.1	26.3	74
2493.250000	50.9	102.0	H	144.0	51.1	0.2	23.1	74
2986.500000	54.5	102.0	V	0.0	56.7	2.2	19.5	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)
1188.000000	32.2	102.0	V	297.0	40.4	-8.2	21.8	54
1316.750000	32.5	102.0	V	72.0	39.9	-7.4	21.5	54
1647.000000	35.3	102.0	V	203.0	40.3	-5.0	18.7	54
1960.500000	36.2	102.0	H	144.0	39.4	-3.2	17.8	54
2488.750000	39.2	102.0	H	0.0	39.4	0.2	14.8	54
2994.750000	45.4	102.0	H	328.0	47.7	2.3	8.6	54

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



Note: The signal beyond the limit is carrier.  
Radiates Emission from 3GHz to 7GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3272.000000	39.4	100.0	V	218.0	40.3	0.9	34.6	74
3925.000000	40.1	100.0	H	6.0	41.5	1.4	33.9	74
4174.500000	41.0	100.0	V	349.0	42.8	1.8	33.0	74
4744.500000	40.0	100.0	V	0.0	42.3	2.3	34.0	74
5880.000000	44.3	100.0	V	0.0	49.5	5.2	29.7	74
6211.000000	49.8	100.0	V	0.0	55.6	5.8	24.2	74

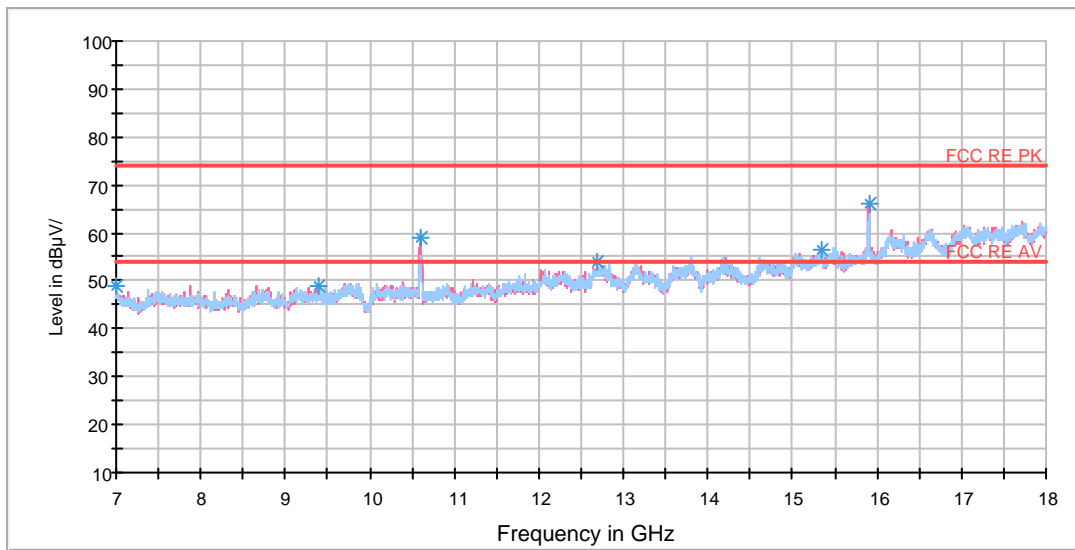
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3264.500000	26.9	100.0	V	245.0	27.7	0.8	27.1	54
3669.500000	26.7	100.0	H	169.0	27.7	1.0	27.3	54
3959.500000	28.0	100.0	V	296.0	30.2	2.2	26.0	54
4470.500000	28.7	100.0	H	307.0	31.2	2.5	25.3	54
5672.000000	32.2	100.0	V	54.0	36.6	4.4	21.8	54
6211.500000	39.1	100.0	V	0.0	44.9	5.8	14.9	54

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



RE 7-18GHz PK



Radiates Emission from 7GHz to 18GHz

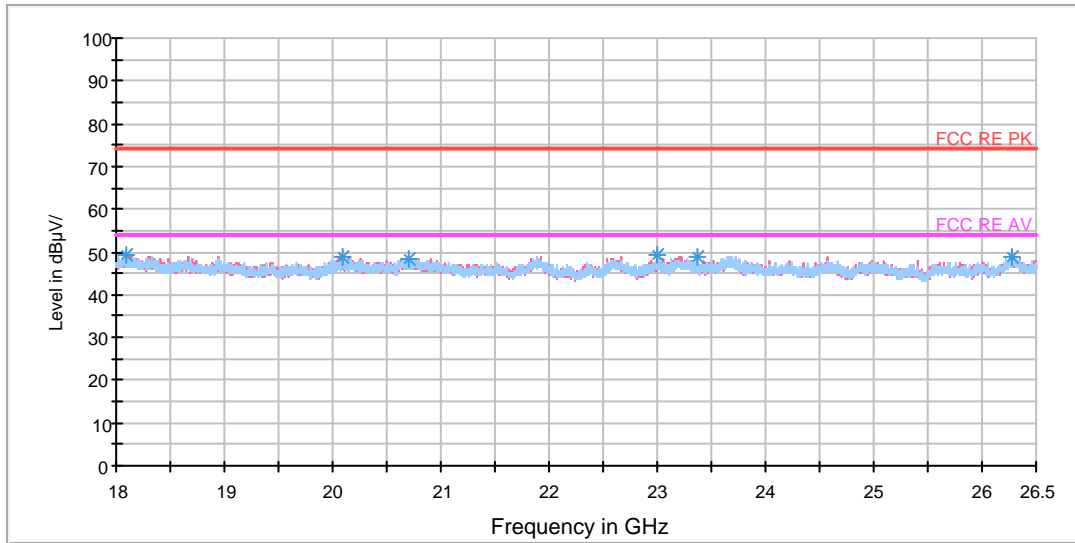
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7005.500000	48.8	101.0	V	71.0	57.2	8.4	25.2	74
9387.000000	49.0	101.0	H	171.0	58.9	9.9	25.0	74
10602.500000	59.1	101.0	V	16.0	69.2	10.1	14.9	74
12695.250000	54.1	101.0	H	150.0	68.7	14.6	19.9	74
15335.250000	56.3	101.0	H	245.0	74.8	18.5	17.7	74
15907.250000	66.0	101.0	V	167.0	86.1	20.1	8.0	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)
7000.000000	38.2	102.0	V	0.0	46.7	8.5	15.8	54
9587.750000	38.0	102.0	V	180.0	47.9	9.9	16.0	54
10602.500000	49.6	102.0	V	180.0	59.7	10.1	4.4	54
13138.000000	43.0	102.0	V	180.0	58.4	15.4	11.0	54
15335.250000	45.2	102.0	V	180.0	63.7	18.5	8.8	54
15901.750000	53.1	102.0	V	0.0	73.2	20.1	0.9	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

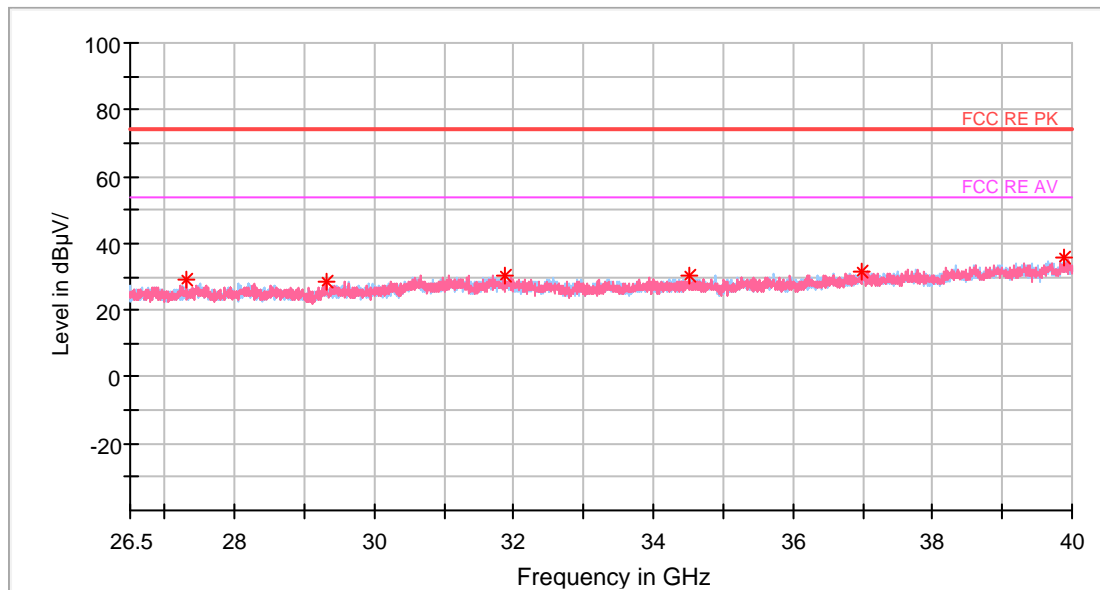
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18091.375000	49.5	H	31.0	51.7	-2.2	24.5	74
20086.750000	48.9	V	65.0	54.6	-5.7	25.1	74
20708.312500	48.5	V	333.0	55.2	-6.7	25.5	74
23000.125000	49.2	V	0.0	55.4	-6.2	24.8	74
23377.312500	48.8	H	0.0	54.7	-5.9	25.2	74
26276.875000	49.0	H	0.0	54.4	-5.4	25.0	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18058.437500	37.2	101.0	V	39.2	-2.0	16.8	54
20095.250000	36.6	101.0	V	42.4	-5.8	17.4	54
20769.937500	36.6	101.0	H	43.5	-6.9	17.4	54
21891.937500	36.9	101.0	V	44.9	-8.0	17.1	54
23681.187500	37.0	101.0	H	42.9	-5.9	17.0	54
26290.687500	37.0	101.0	V	42.4	-5.4	17.0	54

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

Full Spectrum



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27299.875000	28.9	V	0.0	45.9	-17.0	45.1	74
29311.375000	28.5	V	0.0	45.7	-17.2	45.5	74
31859.500000	30.4	V	0.0	45.9	-15.5	43.6	74
34512.250000	30.2	H	0.0	46.8	-16.6	43.8	74
36989.500000	31.5	V	0.0	48.1	-16.6	42.5	74
39892.000000	35.4	H	0.0	51.3	-15.9	38.6	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
28086.250000	17.9	V	0.0	34.4	-16.5	36.1	54
30239.500000	18.7	H	0.0	35.7	-17.0	35.3	54
31754.875000	20.3	H	0.0	35.7	-15.4	33.7	54
34826.125000	19.7	V	0.0	36.5	-16.8	34.3	54
37009.750000	21.8	H	0.0	38.4	-16.6	32.2	54
39919.000000	25.4	H	0.0	41.3	-15.9	28.6	54

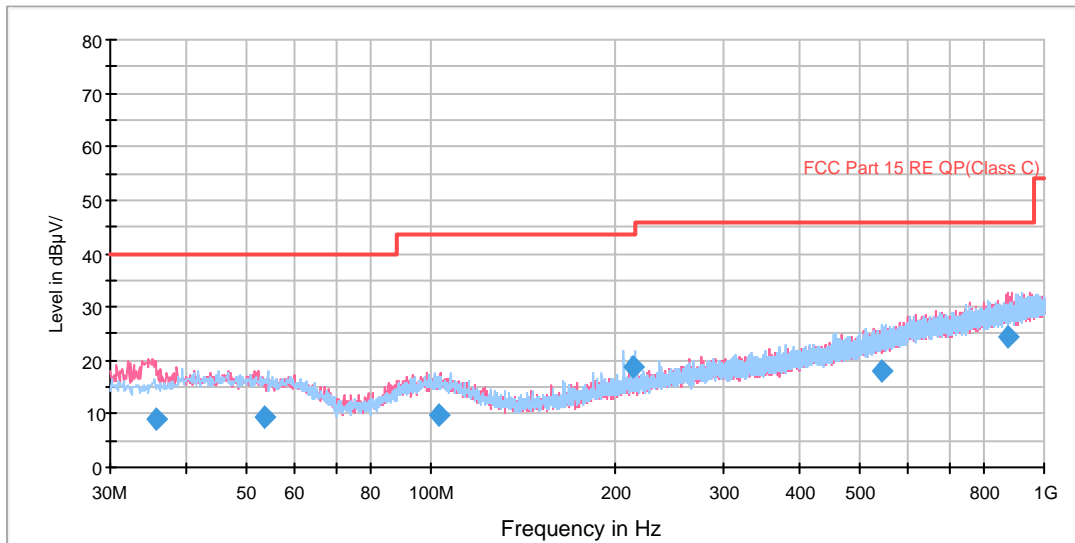
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)





802.11a CH64

FCC RE 0.03-1GHz QP Class C

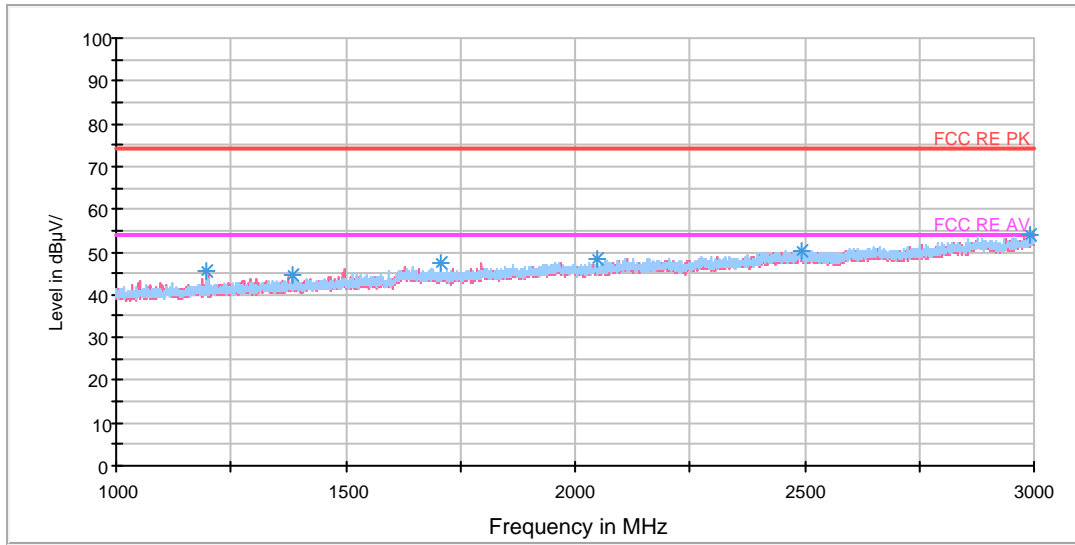


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
35.613750	9.0	100.0	V	0.0	21.0	12.0	31.0	40.0
53.650000	9.3	125.0	H	0.0	22.1	12.8	30.7	40.0
103.120000	9.7	125.0	V	249.0	22.6	12.9	33.8	43.5
214.263750	18.7	125.0	H	256.0	31.4	12.7	24.8	43.5
544.866250	18.2	100.0	H	326.0	39.1	20.9	27.8	46.0
874.022500	24.4	114.0	V	22.0	49.7	25.3	21.6	46.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor
- 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)
- 3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



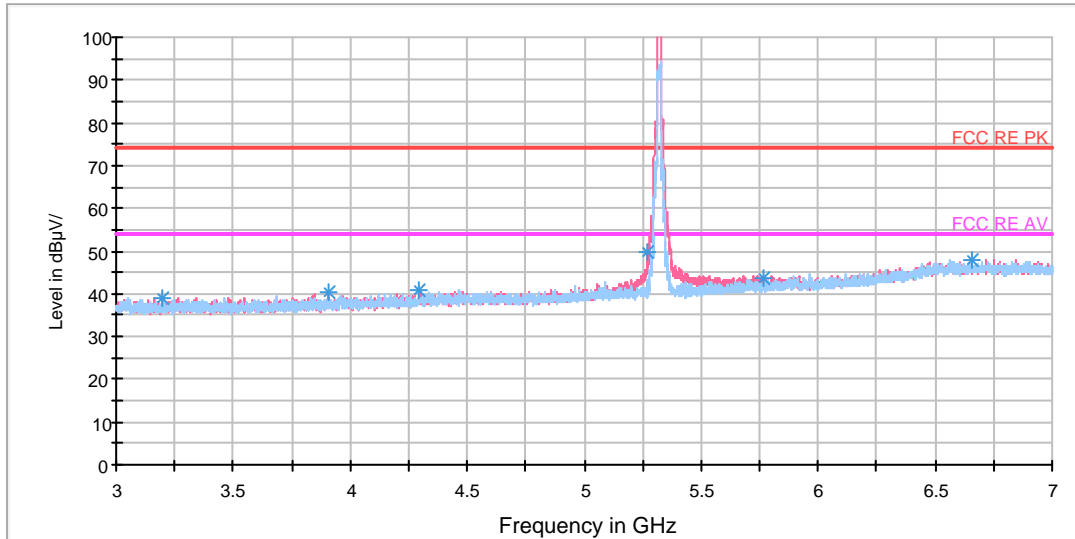
Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.750000	45.7	102.0	V	139.0	53.9	-8.2	28.3	74
1384.000000	44.4	102.0	V	264.0	51.4	-7.0	29.6	74
1709.250000	47.2	102.0	H	17.0	52.0	-4.8	26.8	74
2048.500000	48.2	102.0	H	226.0	51.4	-3.2	25.8	74
2491.750000	50.3	102.0	V	13.0	50.6	0.3	23.7	74
2991.250000	54.2	102.0	H	0.0	56.4	2.2	19.8	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)
1189.250000	31.8	102.0	V	122.0	40.0	-8.2	22.2	54
1303.750000	32.6	102.0	V	35.0	40.4	-7.8	21.4	54
1647.000000	35.1	102.0	V	0.0	40.1	-5.0	18.9	54
1995.500000	36.4	102.0	H	49.0	39.6	-3.2	17.6	54
2488.750000	39.1	102.0	H	34.0	39.3	0.2	14.9	54
2994.750000	45.0	102.0	H	328.0	47.3	2.3	9.0	54

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



Note: The signal beyond the limit is carrier.  
Radiates Emission from 3GHz to 7GHz

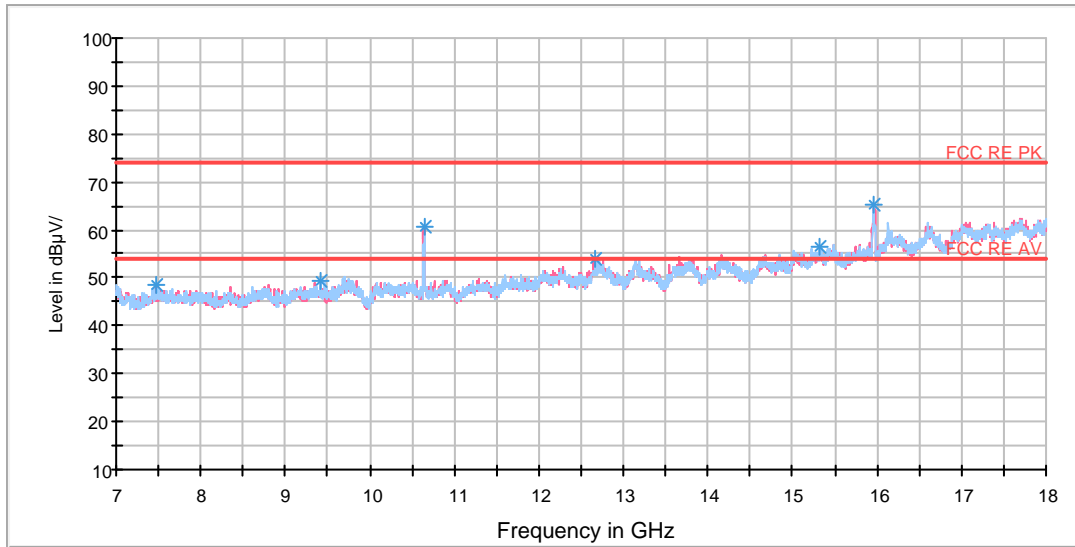
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3194.000000	38.9	100.0	V	192.0	39.4	0.5	35.1	74
3904.000000	40.2	100.0	V	318.0	41.6	1.4	33.8	74
4295.500000	41.0	100.0	H	79.0	42.9	1.9	33.0	74
5272.000000	49.5	100.0	V	348.0	52.5	3.0	24.5	74
5767.000000	43.6	100.0	V	0.0	48.5	4.9	30.4	74
6654.000000	48.1	100.0	V	151.0	56.5	8.4	25.9	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)
3027.500000	27.0	100.0	H	7.0	27.7	0.7	27.0	54
3960.000000	28.0	100.0	V	0.0	30.3	2.3	26.0	54
4472.000000	29.1	100.0	V	124.0	31.6	2.5	24.9	54
5277.000000	36.7	100.0	V	318.0	39.9	3.2	17.3	54
5613.000000	32.1	100.0	V	0.0	36.3	4.2	21.9	54
6781.500000	36.0	100.0	H	1.0	44.6	8.6	18.0	54

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

RE 7-18GHz PK



Radiates Emission from 7GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7475.750000	48.7	101.0	V	350.0	55.6	6.9	25.3	74
9420.000000	49.2	101.0	H	301.0	59.1	9.9	24.8	74
10643.750000	60.7	101.0	V	350.0	71.1	10.4	13.3	74
12673.250000	54.0	101.0	V	204.0	68.4	14.4	20	74
15327.000000	56.7	101.0	H	350.0	75.1	18.4	17.3	74
15967.750000	65.4	101.0	H	301.0	85.2	19.8	8.6	74

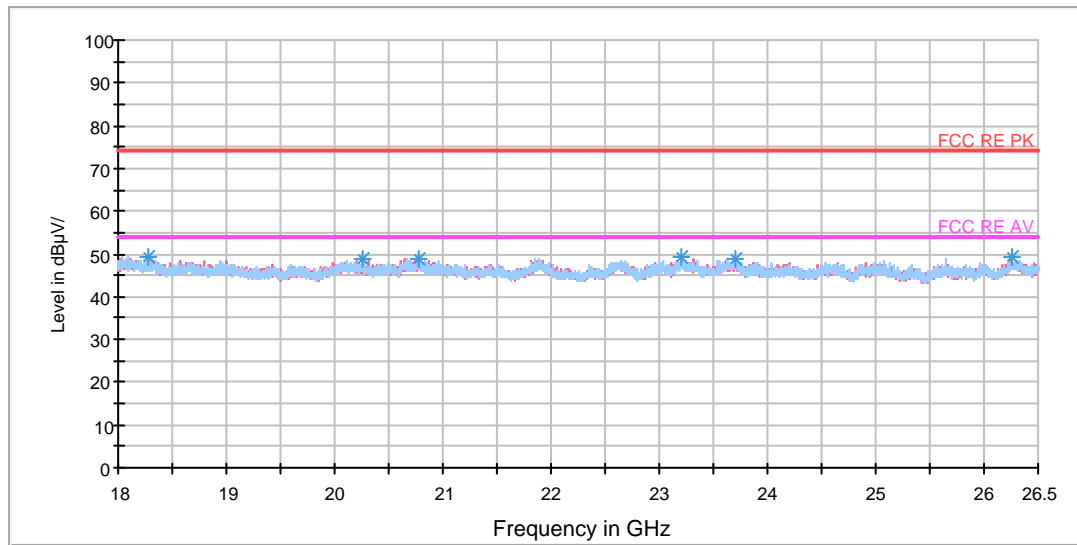
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7000.000000	38.2	102.0	V	180.0	46.7	8.5	15.8	54
9587.750000	38.0	102.0	V	180.0	47.9	9.9	16.0	54
10641.000000	50.4	102.0	V	0.0	60.8	10.4	3.6	54
13138.000000	43.1	102.0	V	180.0	58.5	15.4	10.9	54
15338.000000	45.2	102.0	V	0.0	63.8	18.6	8.8	54
15962.250000	53.2	102.0	V	180.0	73.2	20.0	0.8	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

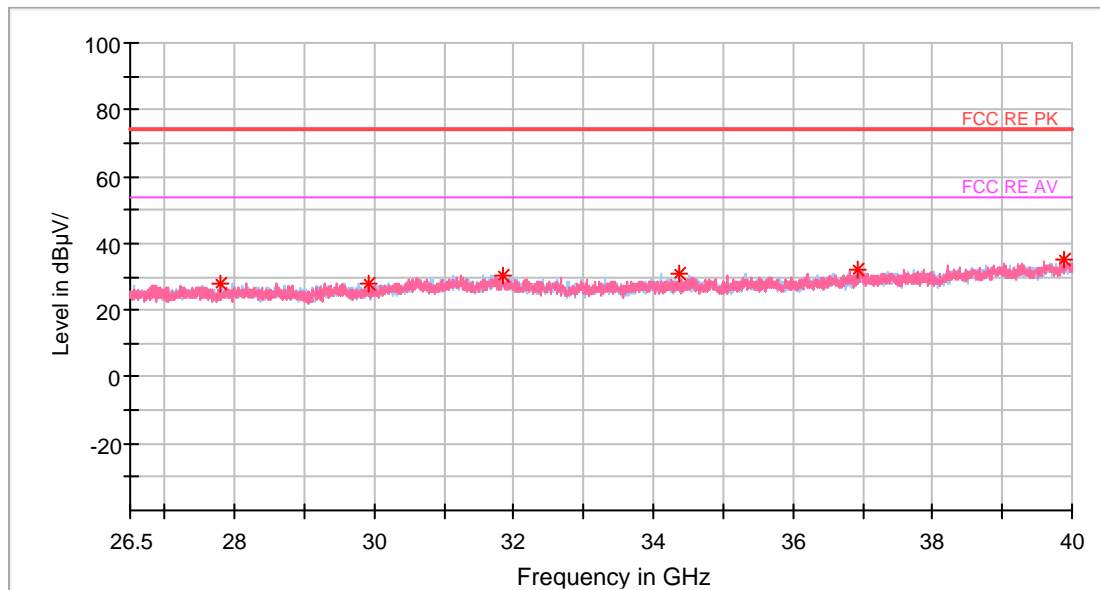
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18284.750000	49.2	H	160.0	52.2	-3.0	24.8	74
20259.937500	48.7	H	0.0	54.6	-5.9	25.3	74
20782.687500	49.0	V	308.0	55.9	-6.9	25.0	74
23197.750000	49.3	V	0.0	55.3	-6.0	24.7	74
23704.562500	48.9	V	221.0	54.8	-5.9	25.1	74
26262.000000	49.3	V	286.0	54.7	-5.4	24.7	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18062.687500	37.1	V	0.0	39.2	-2.1	16.9	54
20116.500000	36.3	H	272.0	42.1	-5.8	17.7	54
20641.375000	36.5	H	0.0	43.0	-6.5	17.5	54
21907.875000	37.0	V	89.0	45.0	-8.0	17.0	54
23670.562500	36.9	H	160.0	42.8	-5.9	17.1	54
26291.750000	37.0	H	30.0	42.4	-5.4	17.0	54

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

Full Spectrum



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27802.750000	28.1	H	0.0	45.0	-16.9	45.9	74
29915.500000	28.1	H	0.0	45.7	-17.6	45.9	74
31835.875000	30.6	V	0.0	46.1	-15.5	43.4	74
34360.375000	30.9	H	0.0	47.3	-16.4	43.1	74
36918.625000	31.9	H	0.0	48.5	-16.6	42.1	74
39881.875000	35.4	H	0.0	51.3	-15.9	38.6	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
28329.250000	17.6	H	0.0	34.3	-16.7	36.4	54
30205.750000	18.6	V	0.0	35.7	-17.1	35.4	54
31265.500000	20.2	V	0.0	36.3	-16.1	33.8	54
34586.500000	20.1	V	0.0	36.8	-16.7	33.9	54
36979.375000	21.7	V	0.0	38.3	-16.6	32.3	54
40000.000000	24.8	V	0.0	40.7	-15.9	29.2	54

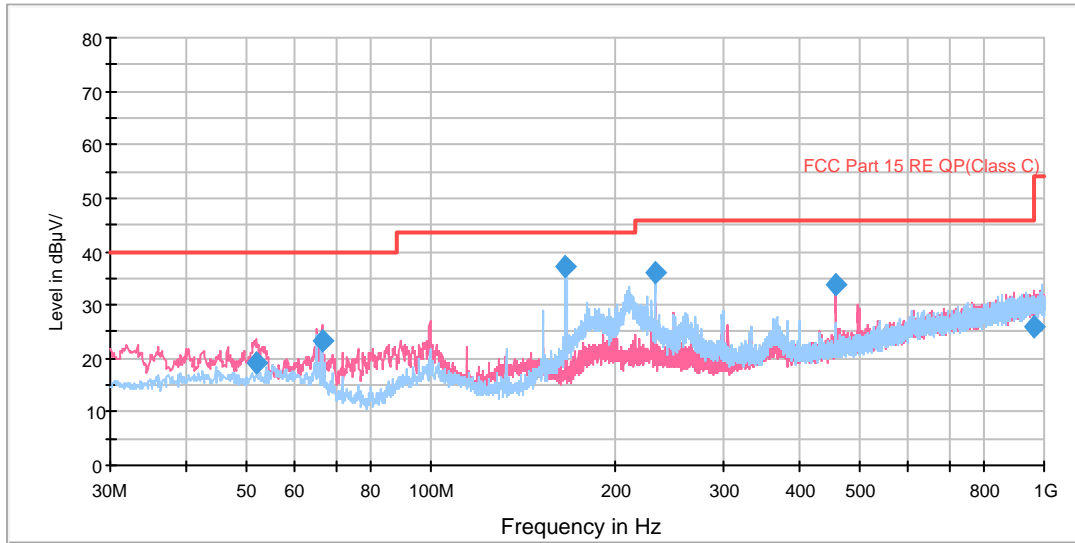
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)





802.11a CH100

FCC RE 0.03-1GHz QP Class C

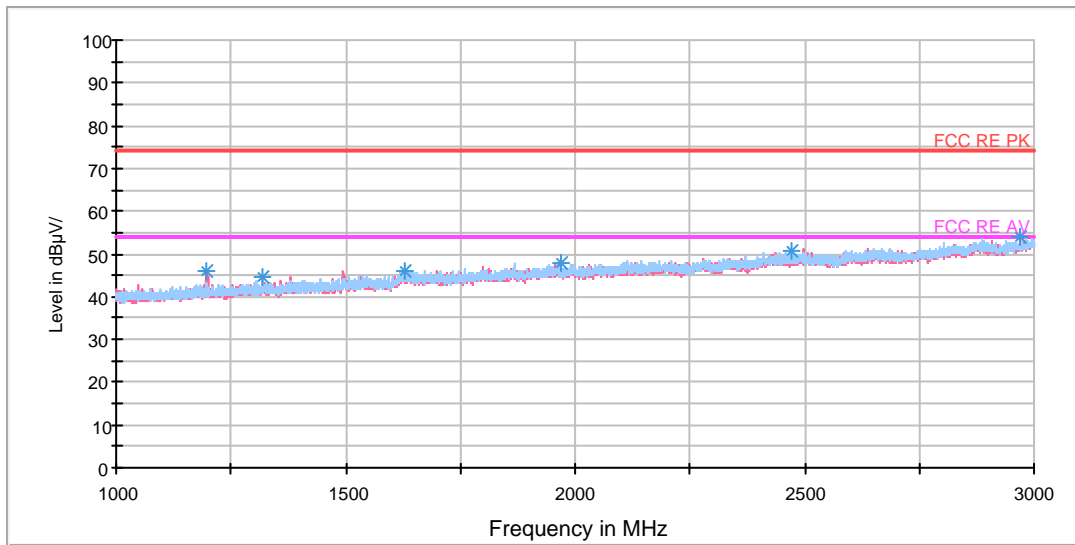


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
51.785000	19.1	100.0	V	156.0	32.0	12.9	20.9	40.0
66.415000	23.4	114.0	V	22.0	33.4	10.0	16.6	40.0
166.005000	37.1	125.0	H	200.0	47.1	10.0	6.4	43.5
232.371250	36.0	125.0	H	264.0	49.4	13.4	10.0	46.0
458.376250	33.8	114.0	V	195.0	52.8	19.0	12.2	46.0
960.027500	25.8	100.0	V	10.0	51.9	26.1	28.2	54.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor  
 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)  
 3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



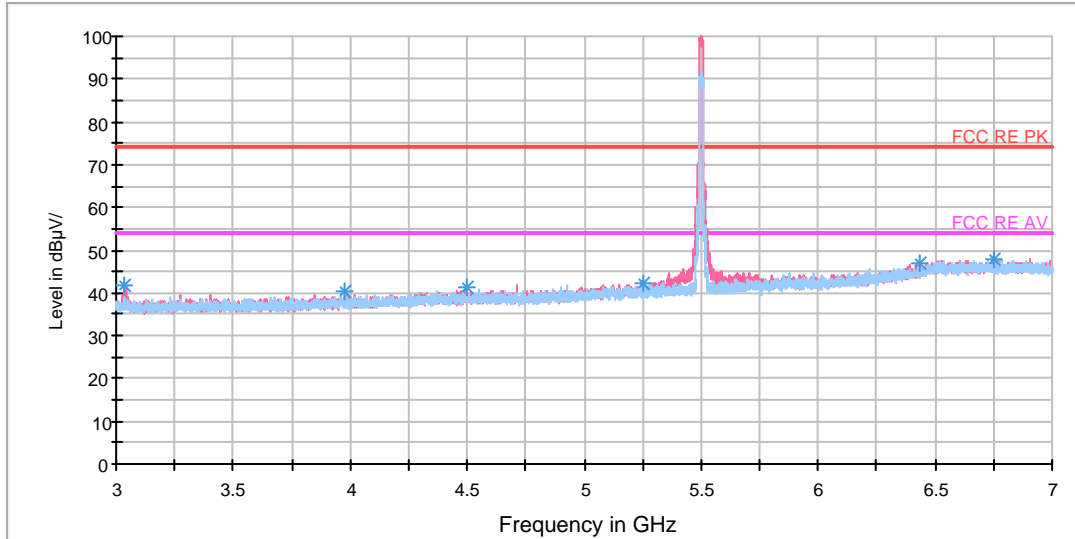
Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.750000	45.8	102.0	V	296.0	54.0	-8.2	28.2	74
1317.750000	44.8	102.0	H	0.0	52.2	-7.4	29.2	74
1630.750000	46.2	102.0	V	0.0	50.9	-4.7	27.8	74
1969.750000	47.8	102.0	H	93.0	51.4	-3.6	26.2	74
2473.750000	50.5	102.0	H	144.0	50.9	-0.4	23.5	74
2968.500000	53.8	102.0	V	52.0	56.0	2.2	20.2	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)
1195.500000	32.8	102.0	V	136.0	41.0	-8.2	21.2	54
1317.750000	32.6	102.0	H	0.0	40.0	-7.4	21.4	54
1638.000000	34.8	102.0	H	0.0	39.5	-4.7	19.2	54
1963.250000	36.1	102.0	H	192.0	39.4	-3.3	17.9	54
2492.250000	38.9	102.0	H	28.0	39.2	0.3	15.1	54
2994.750000	45.3	102.0	H	28.0	47.6	2.3	8.7	54

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



Note: The signal beyond the limit is carrier.  
Radiates Emission from 3GHz to 7GHz

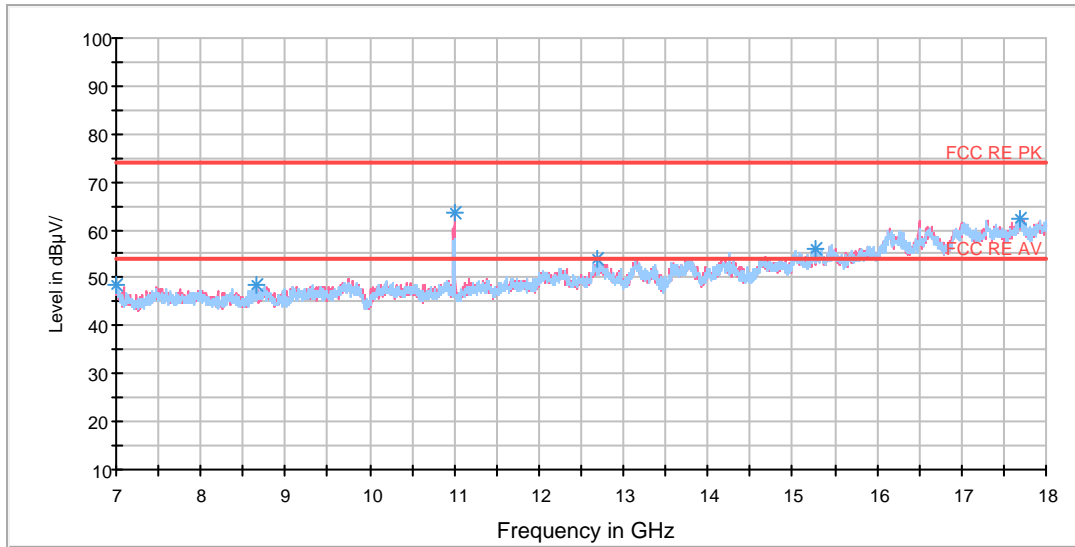
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3037.500000	41.8	100.0	V	244.0	42.6	0.8	32.2	74
3976.500000	40.5	100.0	H	159.0	41.8	1.3	33.5	74
4498.500000	41.4	100.0	H	0.0	44.2	2.8	32.6	74
5256.000000	42.1	100.0	V	356.0	45.6	3.5	31.9	74
6438.000000	47.1	100.0	V	282.0	54.6	7.5	26.9	74
6749.500000	48.0	100.0	H	4.0	56.2	8.2	26.0	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)
3037.500000	29.4	100.0	V	244.0	30.2	0.8	24.6	54
3960.000000	28.3	100.0	V	353.0	30.6	2.3	25.7	54
4493.000000	28.8	100.0	V	358.0	31.3	2.5	25.2	54
5261.000000	30.4	100.0	V	356.0	33.9	3.5	23.6	54
5818.000000	32.1	100.0	V	353.0	37.0	4.9	21.9	54
6720.000000	36.1	100.0	V	191.0	44.7	8.6	17.9	54

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

RE 7-18GHz PK



Radiates Emission from 7GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7002.750000	48.6	101.0	H	12.0	57.1	8.5	25.4	74
8669.250000	48.7	101.0	V	293.0	57.3	8.6	25.3	74
11004.000000	63.8	101.0	V	349.0	73.5	9.7	10.2	74
12681.500000	54.1	101.0	H	120.0	68.6	14.5	19.9	74
15263.750000	56.1	101.0	V	208.0	74.5	18.4	17.9	74
17703.000000	62.4	101.0	V	293.0	87.2	24.8	11.6	74

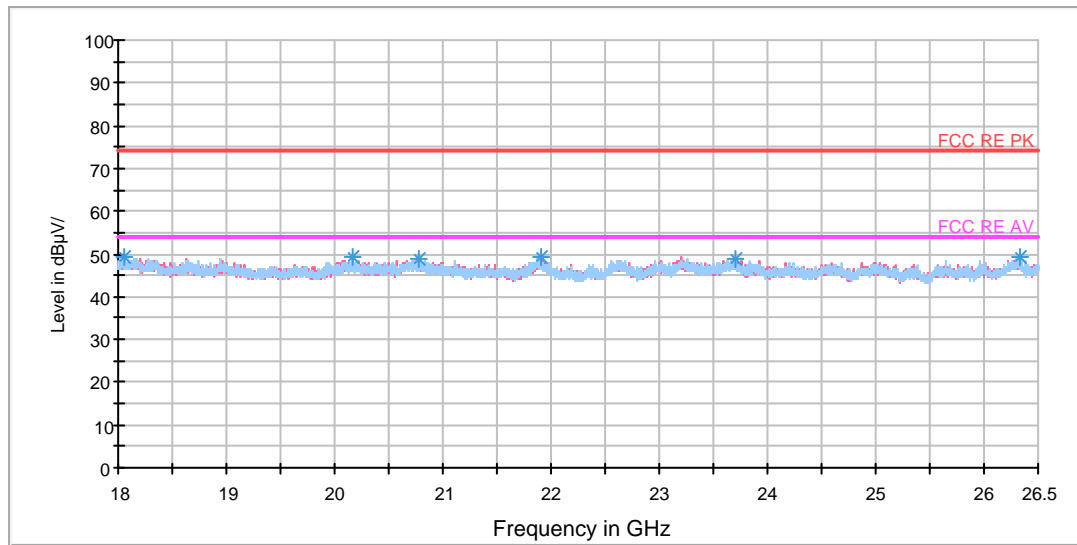
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7000.000000	38.3	102.0	V	0.0	46.8	8.5	15.7	54
9587.750000	37.9	102.0	V	180.0	47.8	9.9	16.1	54
11001.250000	53.6	102.0	V	180.0	63.3	9.7	0.4	54
13138.000000	43.1	102.0	V	180.0	58.5	15.4	10.9	54
15338.000000	45.2	102.0	V	180.0	63.8	18.6	8.8	54
17705.750000	51.8	102.0	V	180.0	76.6	24.8	2.2	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

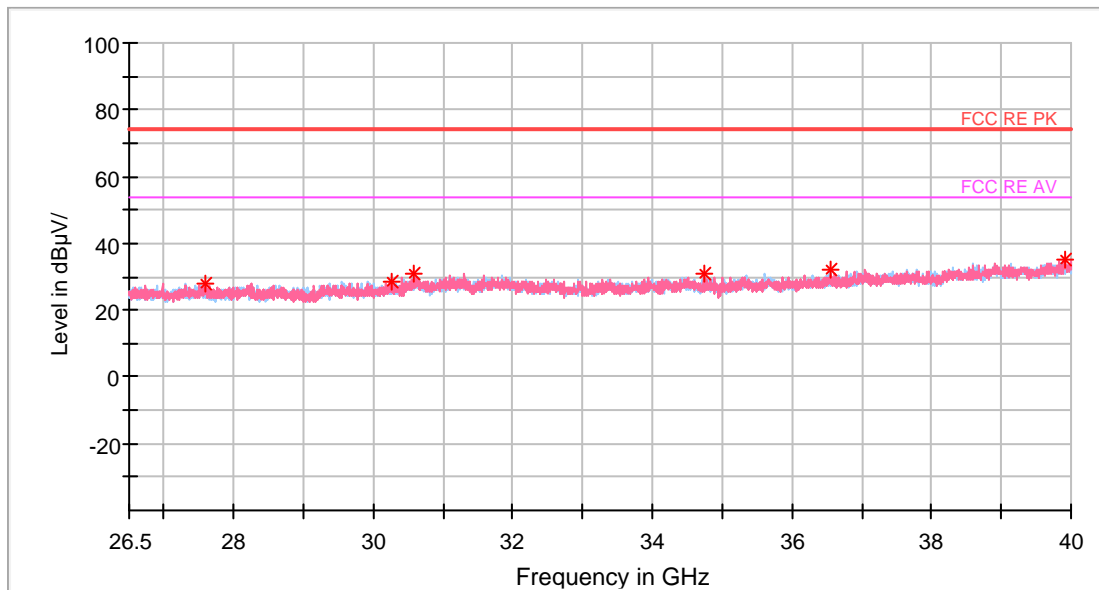
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18047.812500	49.1	V	0.0	51.1	-2.0	24.9	74
20161.125000	49.1	V	0.0	54.9	-5.8	24.9	74
20781.625000	48.8	V	330.0	55.7	-6.9	25.2	74
21914.250000	49.4	V	0.0	57.4	-8.0	24.6	74
23707.750000	48.6	H	342.0	54.5	-5.9	25.4	74
26341.687500	49.1	H	183.0	54.5	-5.4	24.9	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18031.875000	37.1	H	140.0	39.0	-1.9	16.9	54
20092.062500	36.3	V	352.0	42.1	-5.8	17.7	54
20740.187500	36.6	H	140.0	43.4	-6.8	17.4	54
21900.437500	37.0	H	271.0	45.0	-8.0	17.0	54
23706.687500	36.9	H	0.0	42.8	-5.9	17.1	54
26275.812500	37.0	V	111.0	42.4	-5.4	17.0	54

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

Full Spectrum



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27603.625000	28.0	V	0.0	45.0	-17.0	46.0	74
30253.000000	28.6	H	0.0	45.6	-17.0	45.4	74
30577.000000	30.8	H	0.0	47.2	-16.4	43.2	74
34731.625000	30.6	V	0.0	47.4	-16.8	43.4	74
36540.625000	32.4	H	0.0	49.0	-16.6	41.6	74
39908.875000	35.1	V	0.0	51.0	-15.9	38.9	74

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

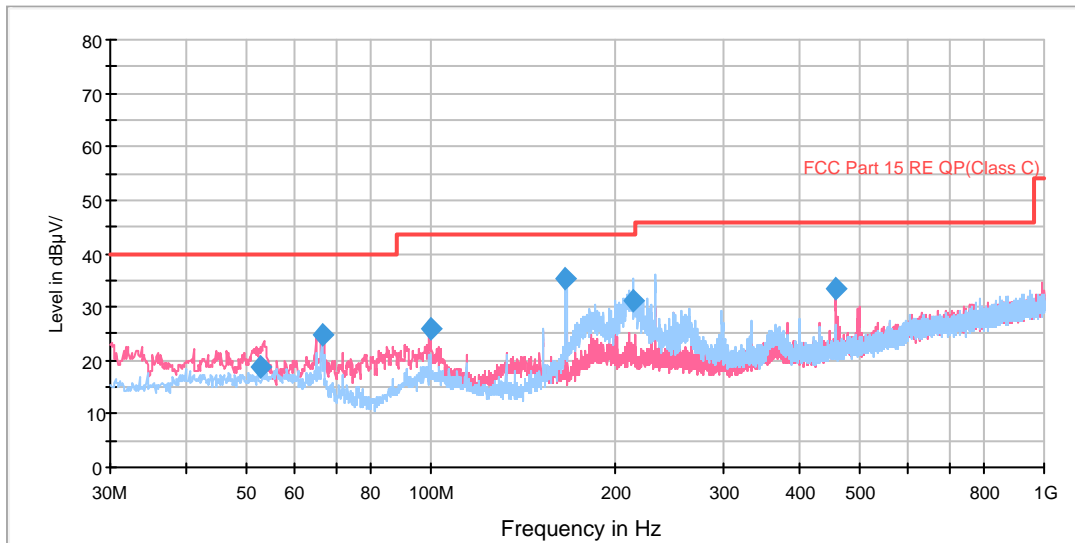
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
28106.500000	18.0	H	0.0	34.5	-16.5	36.0	54
30242.875000	18.9	V	0.0	35.9	-17.0	35.1	54
31856.125000	20.4	H	0.0	35.9	-15.5	33.6	54
34502.125000	20.1	V	0.0	36.7	-16.6	33.9	54
37003.000000	21.6	H	0.0	38.2	-16.6	32.4	54
39919.000000	24.8	V	0.0	40.7	-15.9	29.2	54

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



802.11a CH116

FCC RE 0.03-1GHz QP Class C

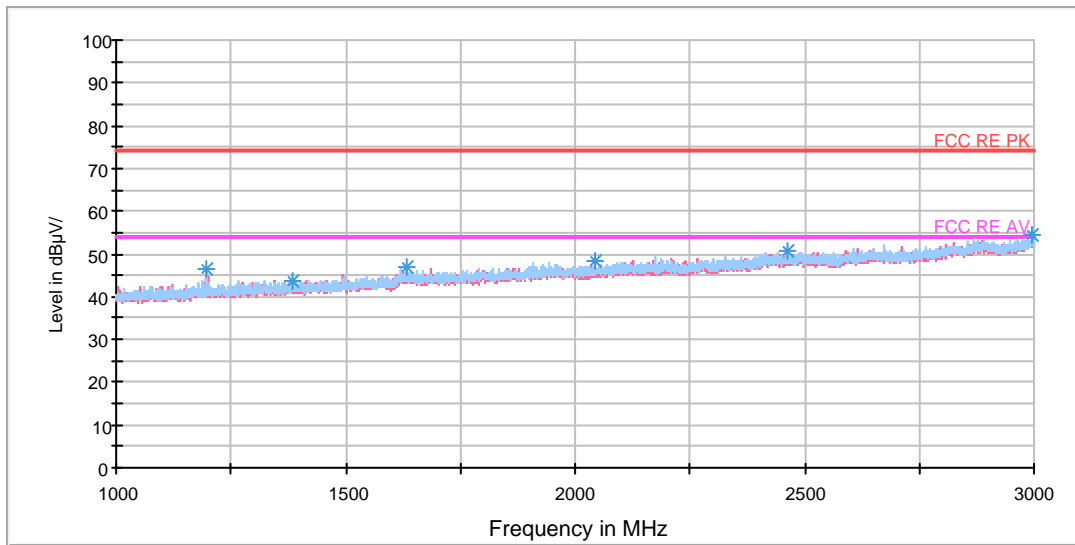


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
52.881250	18.6	100.0	V	213.0	31.4	12.8	21.4	40.0
66.416250	24.7	100.0	V	20.0	34.7	10.0	15.3	40.0
99.757500	26.1	100.0	V	49.0	39.3	13.2	17.4	43.5
166.005000	35.4	125.0	H	222.0	45.4	10.0	8.1	43.5
213.330000	31.2	125.0	H	259.0	43.8	12.6	12.3	43.5
458.376250	33.6	114.0	V	201.0	52.6	19.0	12.4	46.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor  
 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)  
 3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



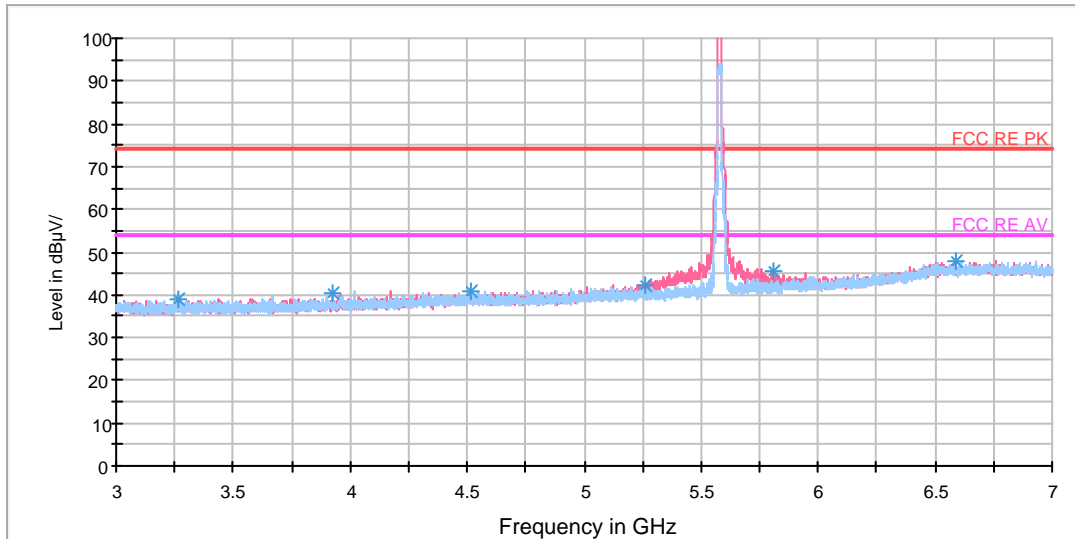
Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	46.4	102.0	V	137.0	54.6	-8.2	27.6	74
1385.000000	43.8	102.0	V	265.0	50.8	-7.0	30.2	74
1634.000000	46.8	102.0	H	259.0	51.5	-4.7	27.2	74
2042.000000	48.2	102.0	V	0.0	51.4	-3.2	25.8	74
2462.000000	50.6	102.0	H	34.0	51.1	-0.5	23.4	74
2994.500000	54.2	102.0	H	327.0	56.5	2.3	19.8	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)
1197.500000	32.1	102.0	V	122.0	40.3	-8.2	21.9	54
1336.750000	32.6	102.0	V	0.0	40.0	-7.4	21.4	54
1647.000000	35.7	102.0	V	0.0	40.7	-5.0	18.3	54
1993.250000	36.2	102.0	H	2.0	39.5	-3.3	17.8	54
2489.250000	39.0	102.0	H	129.0	39.3	0.3	15.0	54
2995.000000	45.7	102.0	H	327.0	48.0	2.3	8.3	54

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



Note: The signal beyond the limit is carrier.  
Radiates Emission from 3GHz to 7GHz

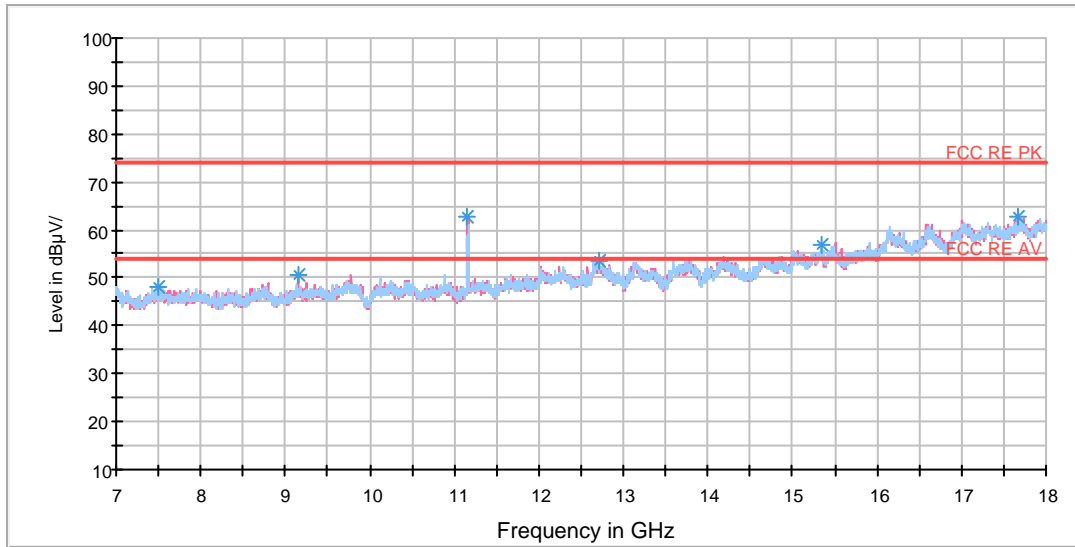
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3262.500000	39.1	100.0	V	205.0	39.9	0.8	34.9	74
3927.500000	40.2	100.0	H	3.0	41.6	1.4	33.8	74
4513.000000	40.9	100.0	H	232.0	43.2	2.3	33.1	74
5264.000000	42.1	100.0	V	358.0	45.4	3.3	31.9	74
5811.000000	45.4	100.0	V	0.0	50.2	4.8	28.6	74
6585.000000	48.0	100.0	V	330.0	56.1	8.1	26.0	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)
3046.000000	27.0	100.0	V	359.0	27.9	0.9	27.0	54
3960.000000	28.5	100.0	V	348.0	30.8	2.3	25.5	54
4328.000000	28.9	100.0	H	3.0	31.2	2.3	25.1	54
5259.000000	31.0	100.0	V	98.0	34.5	3.5	23.0	54
5868.000000	32.5	100.0	V	0.0	37.3	4.8	21.5	54
6674.000000	35.9	100.0	H	112.0	44.3	8.4	18.1	54

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

RE 7-18GHz PK



Radiates Emission from 7GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7495.000000	48.2	101.0	V	5.0	55.1	6.9	25.8	74
9147.750000	50.4	101.0	V	136.0	59.4	9.0	23.6	74
11158.000000	62.9	101.0	V	5.0	73.8	10.9	11.1	74
12714.500000	53.7	101.0	H	204.0	68.1	14.4	20.3	74
15340.750000	56.7	101.0	H	215.0	75.3	18.6	17.3	74
17678.250000	62.6	101.0	V	147.0	87.3	24.7	11.4	74

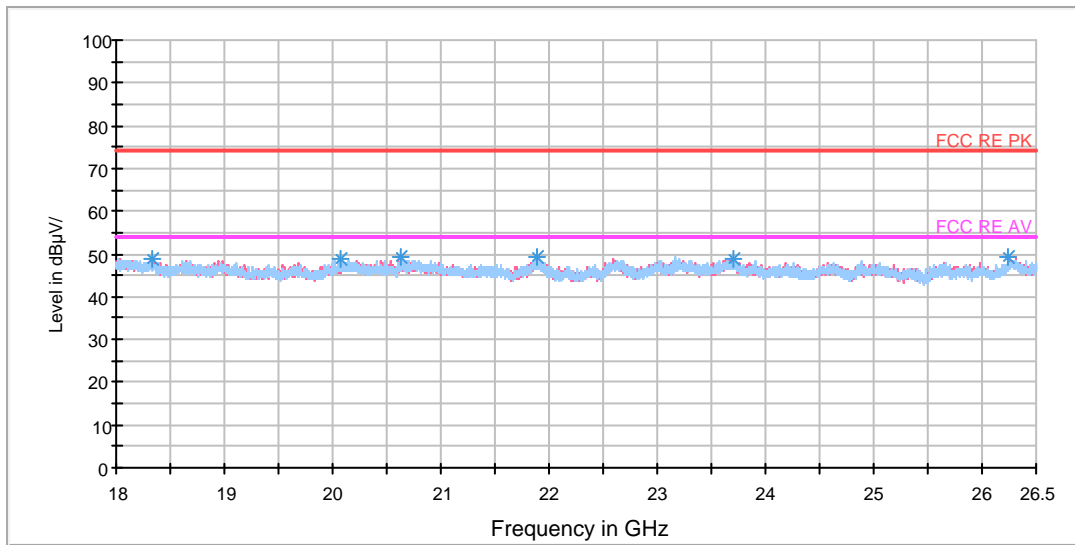
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7000.000000	38.3	102.0	V	180.0	46.8	8.5	15.7	54
9585.000000	38.0	102.0	V	180.0	47.9	9.9	16.0	54
11160.750000	53.6	102.0	V	180.0	64.6	11.0	0.4	54
13138.000000	43.2	102.0	V	180.0	58.6	15.4	10.8	54
15338.000000	45.2	102.0	V	180.0	63.8	18.6	8.8	54
18000.000000	51.8	102.0	V	180.0	77.2	25.4	2.2	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

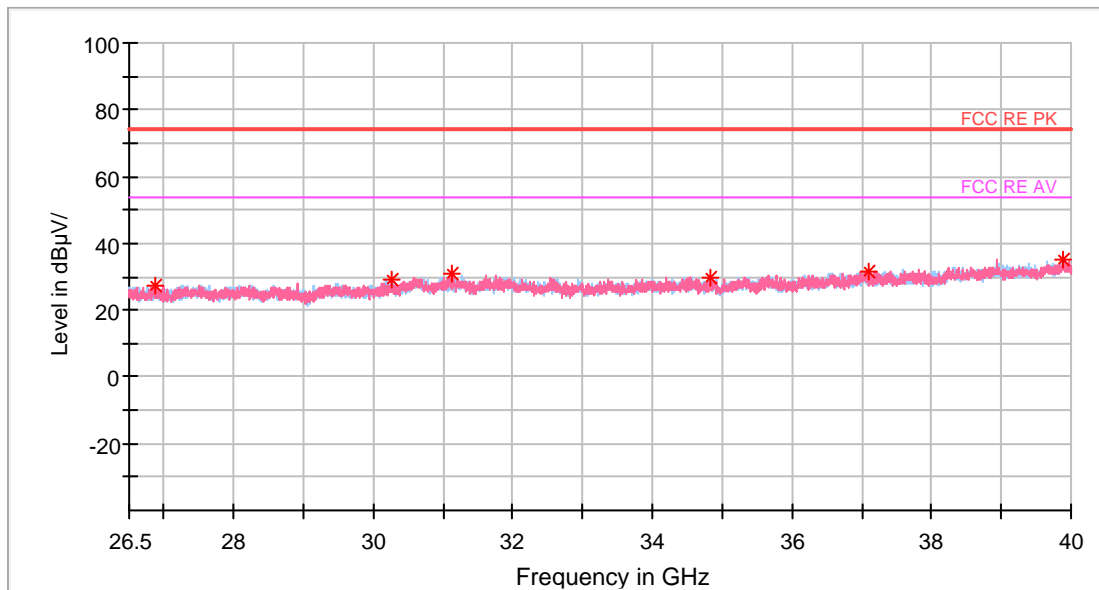
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18328.312500	48.8	V	268.0	52.0	-3.2	25.2	74
20079.312500	48.7	V	268.0	54.4	-5.7	25.3	74
20633.937500	49.4	H	156.0	55.9	-6.5	24.6	74
21888.750000	49.5	H	268.0	57.5	-8.0	24.5	74
23712.000000	49.0	V	289.0	54.9	-5.9	25.0	74
26238.625000	49.2	H	69.0	54.6	-5.4	24.8	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18061.625000	37.2	V	89.0	39.3	-2.1	16.8	54
20190.875000	36.4	V	112.0	42.3	-5.9	17.6	54
20784.812500	36.6	V	289.0	43.5	-6.9	17.4	54
21903.625000	36.9	V	180.0	44.9	-8.0	17.1	54
23701.375000	36.9	H	0.0	42.8	-5.9	17.1	54
26310.875000	37.0	H	0.0	42.4	-5.4	17.0	54

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

Full Spectrum



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
26871.250000	27.4	V	0.0	44.9	-17.5	46.6	74
30266.500000	29.1	V	0.0	46.0	-16.9	44.9	74
31127.125000	30.8	V	0.0	46.7	-15.9	43.2	74
34822.750000	29.9	H	0.0	46.7	-16.8	44.1	74
37111.000000	31.8	H	0.0	48.4	-16.6	42.2	74
39888.625000	35.0	H	0.0	50.9	-15.9	39.0	74

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

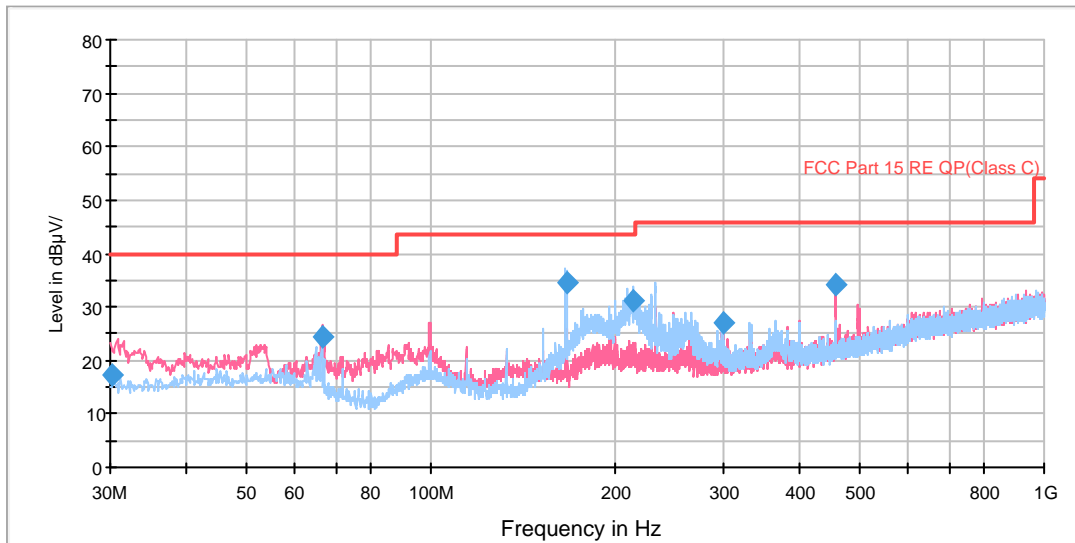
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27539.500000	17.8	H	0.0	34.9	-17.1	36.2	54
30313.750000	18.6	V	0.0	35.4	-16.8	35.4	54
30604.000000	20.3	V	0.0	36.7	-16.4	33.7	54
34549.375000	20.1	H	0.0	36.7	-16.6	33.9	54
37050.250000	22.0	H	0.0	38.6	-16.6	32.0	54
39986.500000	25.2	V	0.0	41.1	-15.9	28.8	54

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



802.11a CH132

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

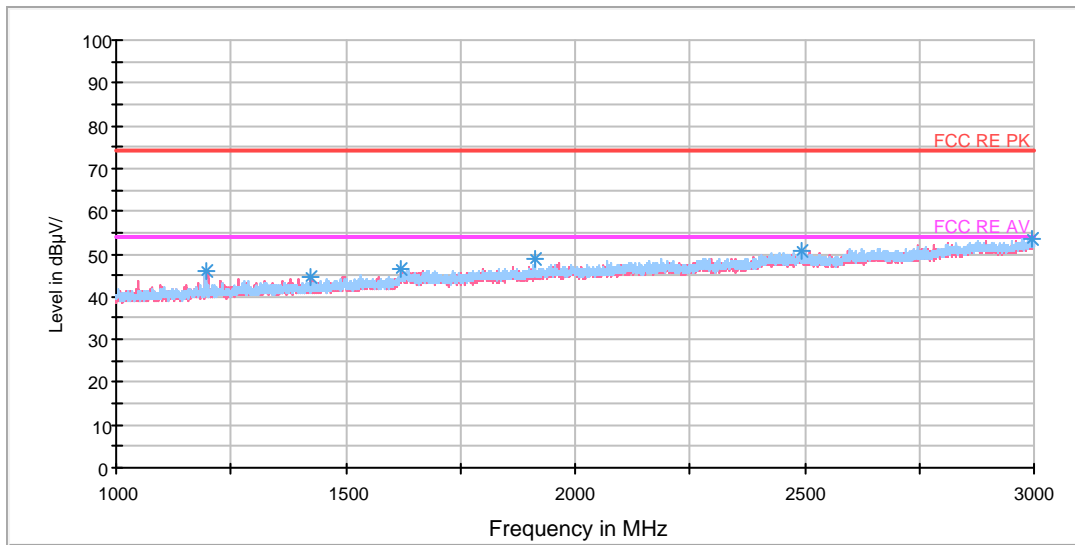
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.288750	17.4	100.0	V	0.0	29.3	11.9	22.6	40.0
66.495000	24.3	114.0	V	40.0	34.2	9.9	15.7	40.0
166.281250	34.6	125.0	H	204.0	44.6	10.0	8.9	43.5
213.291250	31.2	125.0	H	246.0	43.8	12.6	12.3	43.5
299.296250	27.2	114.0	H	159.0	42.6	15.4	18.8	46.0
458.416250	34.1	114.0	V	188.0	53.1	19.0	11.9	46.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor
- 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)
- 3. Margin = Limit – Quasi-Peak





RE 1G-3GHz PK+AV



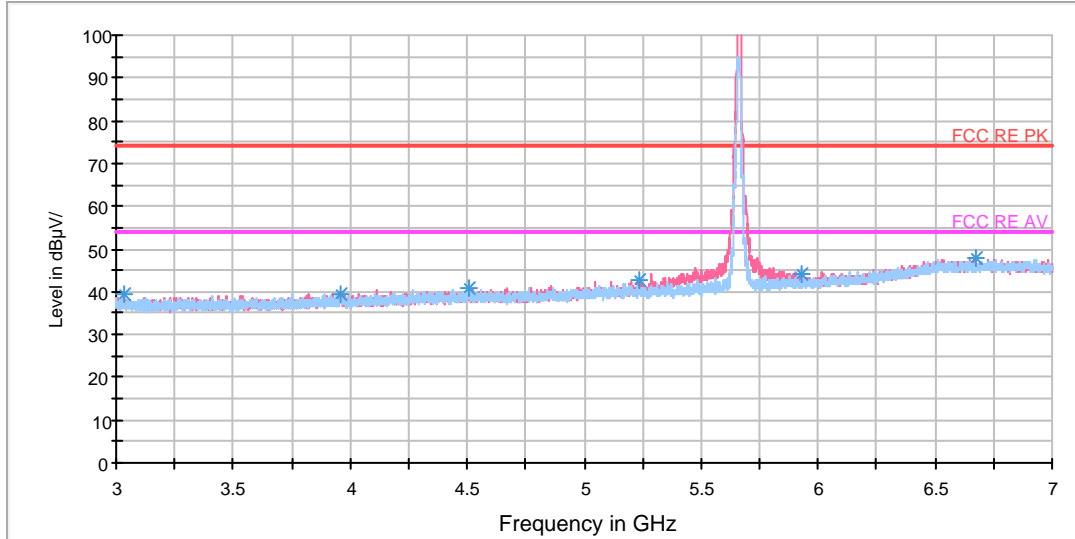
Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	46.1	102.0	V	291.0	54.3	-8.2	27.9	74
1422.250000	44.5	102.0	V	322.0	51.4	-6.9	29.5	74
1621.500000	46.3	102.0	H	31.0	51.1	-4.8	27.7	74
1911.000000	48.9	102.0	H	192.0	52.6	-3.7	25.1	74
2494.750000	50.7	102.0	H	224.0	50.8	0.1	23.3	74
2994.750000	53.7	102.0	H	328.0	56.0	2.3	20.3	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)
1196.250000	32.7	102.0	V	291.0	40.9	-8.2	21.3	54
1285.750000	32.2	102.0	V	37.0	39.9	-7.7	21.8	54
1647.000000	35.7	102.0	V	125.0	40.7	-5.0	18.3	54
1991.500000	36.1	102.0	V	190.0	39.4	-3.3	17.9	54
2490.000000	39.0	102.0	H	0.0	39.3	0.3	15.0	54
2994.750000	45.8	102.0	H	328.0	48.1	2.3	8.2	54

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



Note: The signal beyond the limit is carrier.  
Radiates Emission from 3GHz to 7GHz

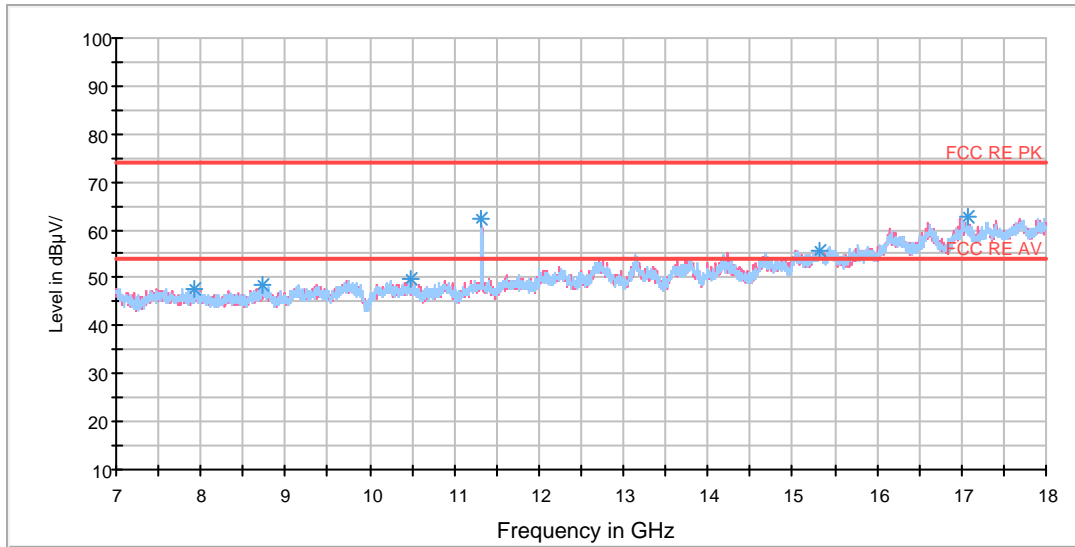
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3038.000000	39.2	100.0	V	245.0	40.0	0.8	34.8	74
3959.500000	39.6	100.0	V	0.0	41.8	2.2	34.4	74
4510.500000	40.6	100.0	V	245.0	43.0	2.4	33.4	74
5239.500000	42.6	100.0	V	56.0	46.2	3.6	31.4	74
5926.000000	44.0	100.0	V	232.0	48.7	4.7	30.0	74
6671.500000	47.7	100.0	V	285.0	56.1	8.4	26.3	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)
3030.500000	27.0	100.0	V	0.0	27.8	0.8	27.0	54
3960.000000	28.2	100.0	V	259.0	30.5	2.3	25.8	54
4390.000000	28.9	100.0	V	324.0	31.5	2.6	25.1	54
5231.500000	30.6	100.0	V	350.0	34.3	3.7	23.4	54
5879.000000	33.2	100.0	V	0.0	38.4	5.2	20.8	54
6721.500000	36.0	100.0	H	88.0	44.6	8.6	18.0	54

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

RE 7-18GHz PK



Radiates Emission from 7GHz to 18GHz

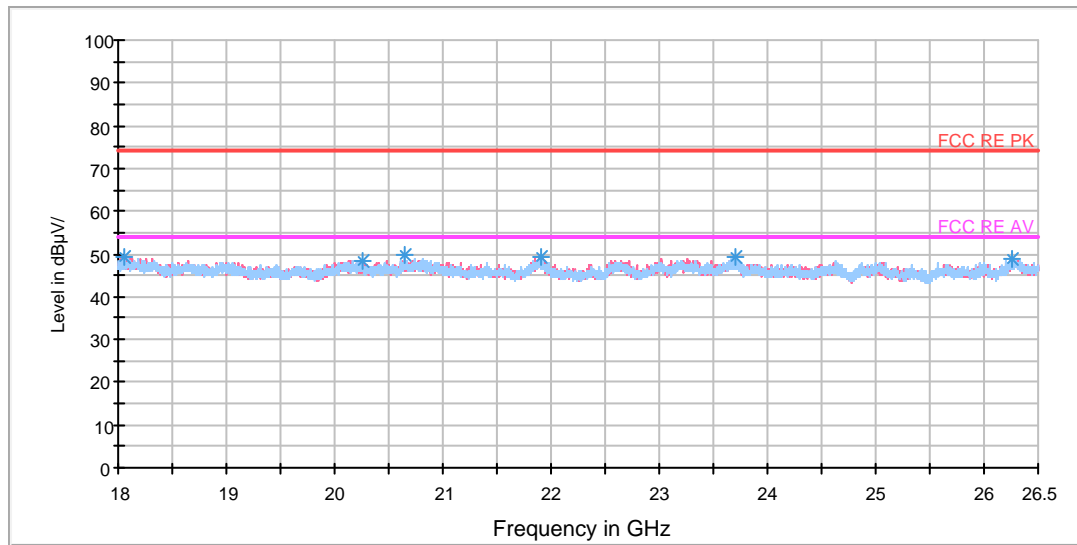
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
7935.000000	47.7	101.0	H	300.0	55.2	7.5	26.3	74
8735.250000	48.5	101.0	H	247.0	57.2	8.7	25.5	74
10495.250000	49.8	101.0	V	179.0	60.6	10.8	24.2	74
11320.250000	62.3	101.0	V	350.0	73.4	11.1	11.7	74
15321.500000	55.8	101.0	H	268.0	74.1	18.3	18.2	74
17065.000000	62.5	101.0	H	140.0	86.8	24.3	11.5	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)
7000.000000	38.3	102.0	V	180.0	46.8	8.5	15.7	54
9587.750000	38.0	102.0	V	180.0	47.9	9.9	16.0	54
9739.000000	39.0	102.0	V	180.0	49.7	10.7	15.0	54
11323.000000	53.3	102.0	V	180.0	64.3	11.0	0.7	54
15338.000000	45.3	102.0	V	180.0	63.9	18.6	8.7	54
17708.500000	51.8	102.0	V	180.0	76.6	24.8	2.2	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

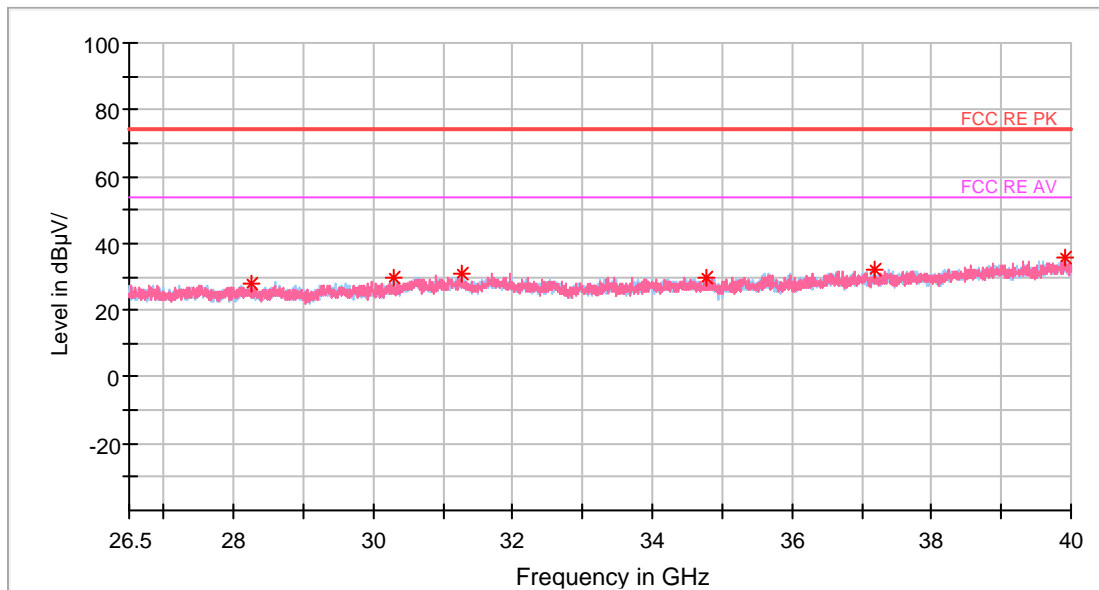
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18059.500000	49.3	V	0.0	51.4	-2.1	24.7	74
20267.375000	48.5	V	334.0	54.4	-5.9	25.5	74
20642.437500	49.7	H	94.0	56.2	-6.5	24.3	74
21902.562500	49.3	H	51.0	57.3	-8.0	24.7	74
23700.312500	49.3	H	116.0	55.2	-5.9	24.7	74
26266.250000	48.9	V	111.0	54.3	-5.4	25.1	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18066.937500	37.1	V	177.0	39.2	-2.1	16.9	54
20112.250000	36.4	V	221.0	42.2	-5.8	17.6	54
20660.500000	36.5	H	0.0	43.1	-6.6	17.5	54
21888.750000	37.0	H	116.0	45.0	-8.0	17.0	54
23669.500000	36.8	H	29.0	42.7	-5.9	17.2	54
26280.062500	36.9	H	72.0	42.3	-5.4	17.1	54

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

Full Spectrum



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
28251.625000	27.8	H	0.0	44.4	-16.6	46.2	74
30280.000000	29.9	H	0.0	46.8	-16.9	44.1	74
31275.625000	30.9	H	0.0	47.0	-16.1	43.1	74
34765.375000	29.9	V	0.0	46.7	-16.8	44.1	74
37195.375000	31.9	V	0.0	48.5	-16.6	42.1	74
39915.625000	35.8	V	0.0	51.7	-15.9	38.2	74

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

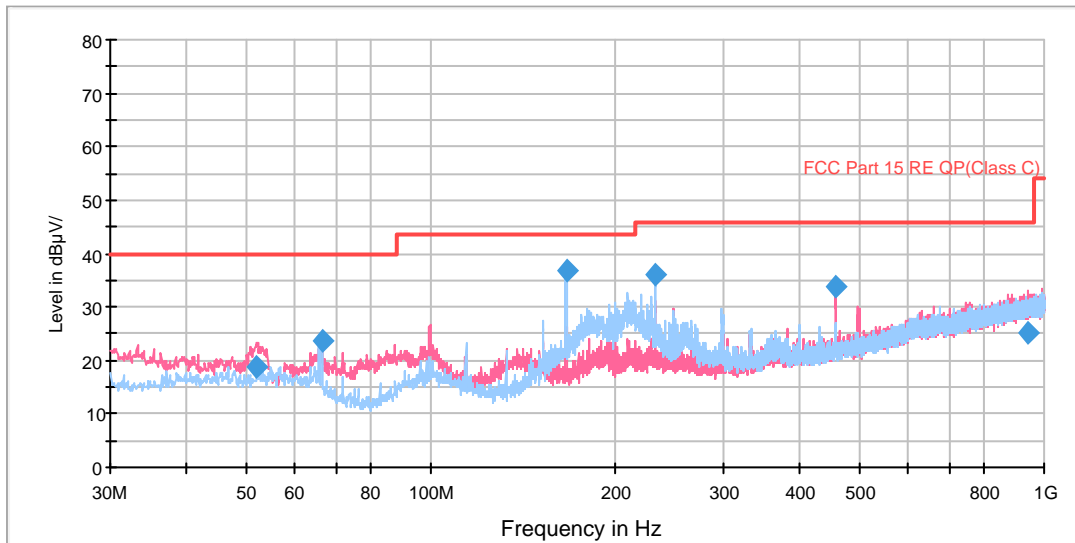
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
28251.625000	17.9	V	0.0	34.5	-16.6	36.1	54
30350.875000	18.7	V	0.0	35.4	-16.7	35.3	54
31231.750000	20.4	V	0.0	36.5	-16.1	33.6	54
34600.000000	19.8	V	0.0	36.5	-16.7	34.2	54
37067.125000	21.9	V	0.0	38.5	-16.6	32.1	54
39881.875000	25.4	H	0.0	41.3	-15.9	28.6	54

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



802.11a CH140

FCC RE 0.03-1GHz QP Class C



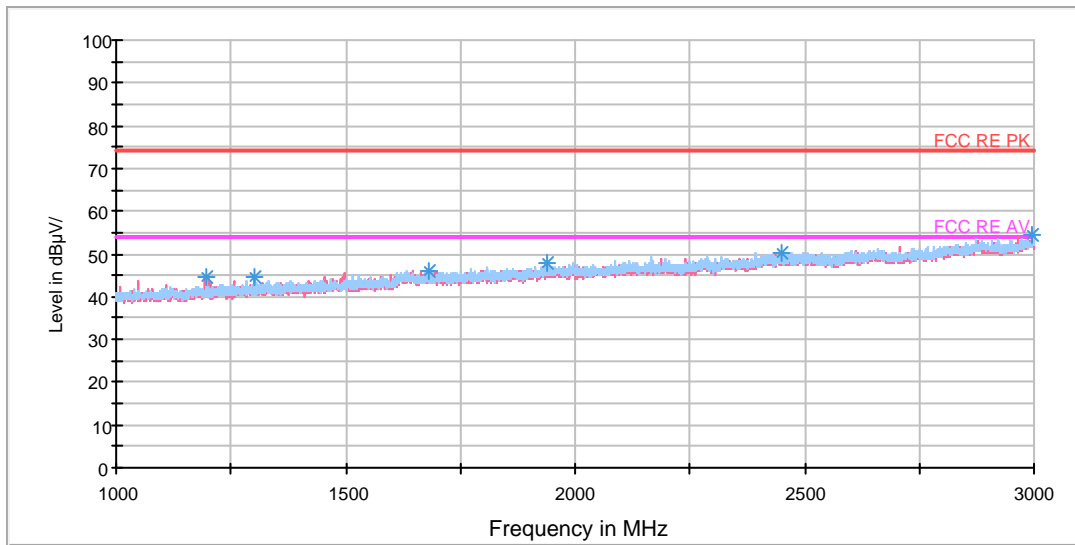
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
52.067500	18.8	100.0	V	168.0	31.7	12.9	21.2	40.0
66.496250	23.6	114.0	V	48.0	33.5	9.9	16.4	40.0
166.285000	36.6	125.0	H	202.0	46.6	10.0	6.9	43.5
232.366250	36.0	125.0	H	256.0	49.4	13.4	10.0	46.0
458.376250	33.8	114.0	V	201.0	52.8	19.0	12.2	46.0
940.706250	25.2	100.0	V	88.0	51.2	26.0	20.8	46.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor  
 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)  
 3. Margin = Limit – Quasi-Peak



RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	44.7	102.0	V	187.0	52.9	-8.2	29.3	74
1299.500000	44.6	102.0	V	14.0	52.5	-7.9	29.4	74
1679.500000	46.1	102.0	H	159.0	51.2	-5.1	27.9	74
1938.500000	47.8	102.0	V	172.0	51.5	-3.7	26.2	74
2449.500000	50.4	102.0	H	15.0	51.1	-0.7	23.6	74
2994.750000	54.5	102.0	H	326.0	56.8	2.3	19.5	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)
1172.750000	32.1	102.0	V	157.0	40.2	-8.1	21.9	54
1228.750000	32.3	102.0	V	140.0	40.0	-7.7	21.7	54
1647.000000	35.6	102.0	V	124.0	40.6	-5.0	18.4	54
2054.500000	36.1	102.0	H	0.0	39.3	-3.2	17.9	54
2490.000000	39.1	102.0	H	96.0	39.4	0.3	14.9	54
2994.750000	45.4	102.0	H	326.0	47.7	2.3	8.6	54

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