



RF TEST REPORT

Applicant Huawei Technologies Co., Ltd.
FCC ID QISSTK-LX1
Product Smart Phone
Model STK-LX1
Report No. R1903H0032-R6V1
Issue Date March 28, 2019

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15E (2018)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Performed by: Peng Tao

Approved by: Kai Xu

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Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Unwanted Emissions	15.407(b)	PASS
2	Conducted Emissions	15.207	PASS
Date of Testing: March 8, 2019~ March 23, 2019			



1. Test Laboratory

1.1. Notes of the test report

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

1.2. Test facility

CNAS (accreditation number: L2264)

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

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

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

IC (recognition number is 8510A)

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

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

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

A2LA (Certificate Number: 3857.01)

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



1.3. Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City: Shanghai
Post code: 201201
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E-mail: xukai@ta-shanghai.com

2. General Description of Equipment under Test

Client Information

Applicant	Huawei Technologies Co., Ltd.
Applicant address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.China.
Manufacturer	Huawei Technologies Co., Ltd.
Manufacturer address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.China.

General information

EUT Description	
Model	STK-LX1
IMEI	IMEI 1:860815040043101 IMEI 2:860815040048027
Hardware Version	HL1STKM
Software Version	STK-LX1 9.0.1.18
Power Supply	Battery/AC adapter
Antenna Type	Internal Antenna
Antenna Gain	0 dBi
additional beamforming gain	NA
Test Mode(s)	U-NII-1(5150MHz-5250MHz) U-NII-2A(5250MHz-5350MHz) U-NII-2C(5470MHz-5725MHz) U-NII-3(5725MHz-5850MHz)
Modulation Type	802.11a/n (HT20/HT40) : OFDM 802.11ac (VHT20/VHT40/VHT80): OFDM
Operating Frequency Range(s)	U-NII-1: 5150-5250MHz U-NII-2A:5250-5350MHz U-NII-2C:5470-5725MHz U-NII-3: 5725-5850MHz
Operating temperature range:	0° C to 35° C
Operating voltage range:	3.6V to 4.4 V
State AC voltage:	3.82V
EUT Accessory	



Adapter 1	Manufacturer: Huawei Technologies Co., Ltd. Model: HW-050200U01 Input Voltage: 100-240V ~50/60Hz 0.5A Output Voltage: 5V  2A
Adapter 2	Manufacturer: Huawei Technologies Co., Ltd. Model: HW-050200E01 Input Voltage: 100-240V ~50/60Hz 0.5A Output Voltage: 5V  2A
Adapter 3	Manufacturer: Huawei Technologies Co., Ltd. Model: HW-050200B01 Input Voltage: 100-240V ~50/60Hz 0.5A Output Voltage: 5V  2A
Adapter 4	Manufacturer: Huawei Technologies Co., Ltd. Model: HW-050200A01 Input Voltage: 100-240V ~50/60Hz 0.5A Output Voltage: 5V  2A
Adapter 5	Manufacturer: Huawei Technologies Co., Ltd. Model: HW-050200U02 Input Voltage: 100-240V ~50/60Hz 0.5A Output Voltage: 5V  2A
Adapter 6	Manufacturer: Huawei Technologies Co., Ltd. Model: HW-050200E02 Input Voltage: 100-240V ~50/60Hz 0.5A Output Voltage: 5V  2A
Adapter 7	Manufacturer: Huawei Technologies Co., Ltd. Model: HW-050200A02 Input Voltage: 100-240V ~50/60Hz 0.5A Output Voltage: 5V  2A
Adapter 8	Manufacturer: Huawei Technologies Co., Ltd. Model: HW-050200B02 Input Voltage: 100-240V ~50/60Hz 0.5A Output Voltage: 5V  2A
Battery	Manufacturer: Huawei Technologies Co., Ltd. Model: HB446486ECW Rated capacity: 3900mAh Nominal Voltage:  +3.82V Charging Voltage:  +4.40V
Earphone 1	Manufacturer: Boluo County Quancheng Electronic Co.,Ltd Model: 1293-3283-3.5MM-322
Earphone 2	Manufacturer: Jiangxi Lianchuang Hongsheng Electronic Co.,LTD Model: MEND1532B528A02
USB cable 1	Manufacturer: NingBo Broad Telecommunication Co.,Ltd. Model: WA0020



USB cable 2	Manufacturer: LUXSHARE Precision Industry Co., Ltd. Model: L99UC131-CS-H
USB cable 3	Manufacturer: HONGFUJIN PRECISION INDUSTRIAL (SHENZHEN).LTD Model: CUDU01B-HC295-EH
USB cable 4	Manufacturer: Freeport Resources Enterprises (Jiangxi) Co.,Ltd Model: 18-93C2CHO-001HF
USB cable 5	Manufacturer: Dongguan Mingji Electronics Technology Group Co.,Ltd Model: 203-1572-0
Note: The information of the EUT is declared by the manufacturer. 2. There is more than one Adapter /USB cable /Earphone, each one should be applied throughout the compliance test respectively, and however, only the worst case (Adapter 1/USB cable 2/ Earphone 2) will be recorded in this report.	



3. Applied Standards

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

FCC CFR47 Part 15E (2018) Unlicensed National Information Infrastructure Devices

ANSI C63.10 (2013)

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

4. Test Configuration

Test Mode

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

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

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

Worst-case data rates are shown as following table.

Band	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

**Wireless Technology and Frequency Range**

Wireless Technology		Bandwidth	Channel	Frequency
Wi-Fi	U-NII-1	20 MHz	36	5180MHz
			40	5200MHz
			44	5220MHz
			48	5240MHz
		40 MHz	38	5190MHz
			46	5230MHz
		80 MHz	42	5210MHz
	U-NII-2A	20 MHz	52	5260MHz
			56	5280MHz
			60	5300MHz
			64	5320MHz
		40 MHz	54	5270MHz
			62	5310MHz
		80 MHz	58	5290MHz
	U-NII-2C	20 MHz	100	5500MHz
			104	5520MHz
			108	5540MHz
			112	5560MHz
			116	5580MHz
			120	5600MHz
			124	5620MHz
			128	5640MHz
			132	5660MHz
			136	5680MHz
			140	5700MHz
		40 MHz	102	5510MHz
			110	5550MHz
			118	5590MHz
			126	5630MHz
			134	5670MHz
			142	5710MHz
		80 MHz	106	5530MHz
			122	5610MHz
			138	5690MHz
	U-NII-3	20 MHz	149	5745MHz
			153	5765MHz
			157	5785MHz
			161	5805MHz



			165	5825MHz
		40 MHz	151	5755MHz
			159	5795MHz
		80 MHz	155	5775MHz
Does this device support TDWR Band? ☒ Yes ☐ No				

5. Test Case Results

5.1. 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):

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

1) RBW = 1 MHz.

2) VBW $\geq$ [3 $\times$ RBW]

3) Detector = peak.

4) Sweep time = auto.

5) Trace mode = max hold.

6) Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, then the time required for the trace to stabilize will increase by a factor of approximately 1 / D, where D is the duty cycle.

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

a) RBW = 1 MHz.

b) VBW $\geq$ [3 $\times$ RBW].

c) Detector = RMS (power averaging), if [span / (# of points in sweep)] $\leq$ RBW / 2. Satisfying this condition can require increasing the number of points in the sweep or reducing the span. If the condition is not satisfied, then the detector mode shall be set to peak.

d) Averaging type = power (i.e., rms) (As an alternative, the detector and averaging type may be set



for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)

e) Sweep time = auto.

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

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

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

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

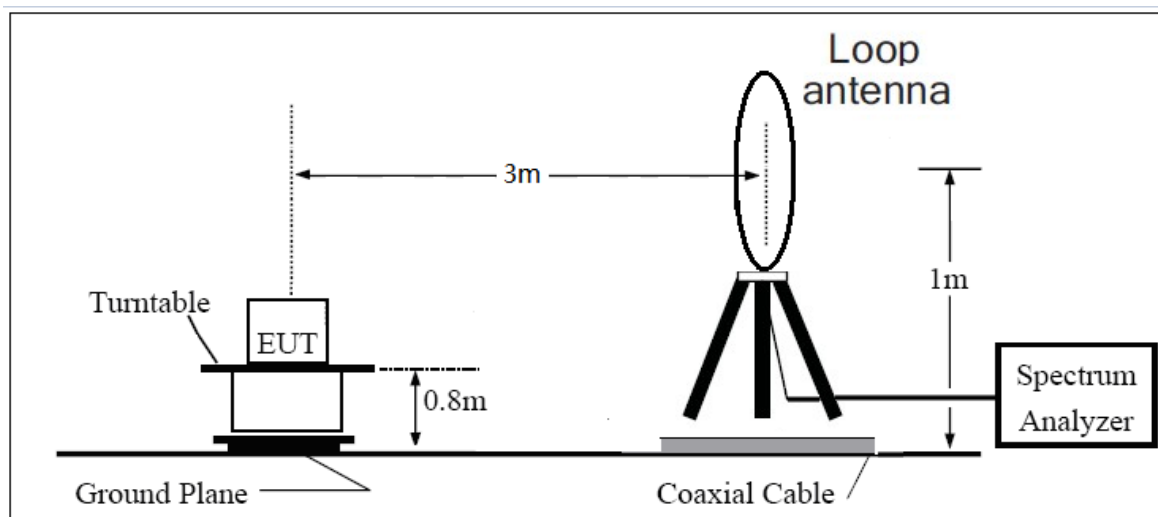
3) If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

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

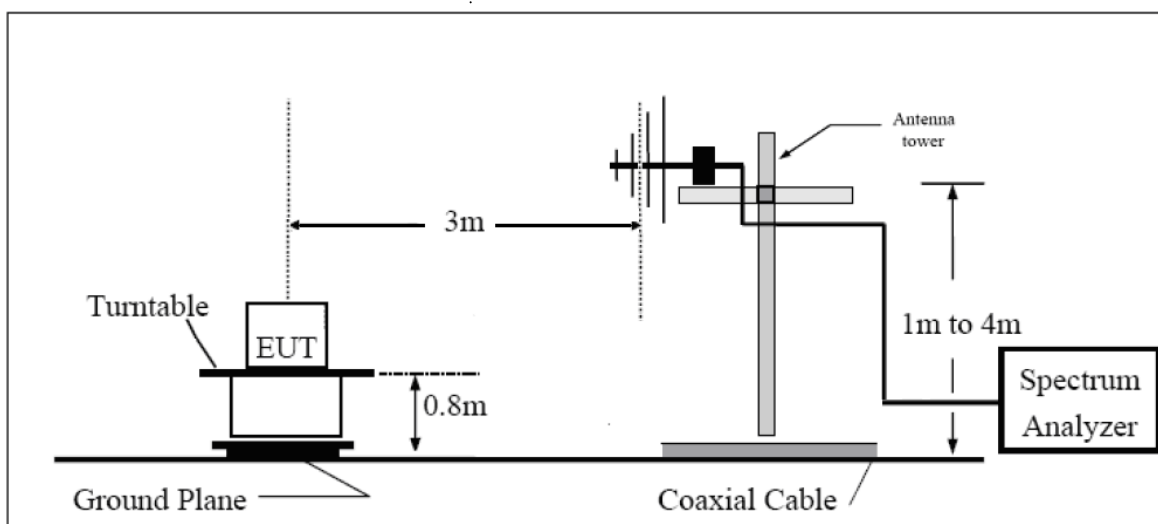
The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the loop antenna is vertical, others antenna are vertical and horizontal.

The test is in transmitting mode.

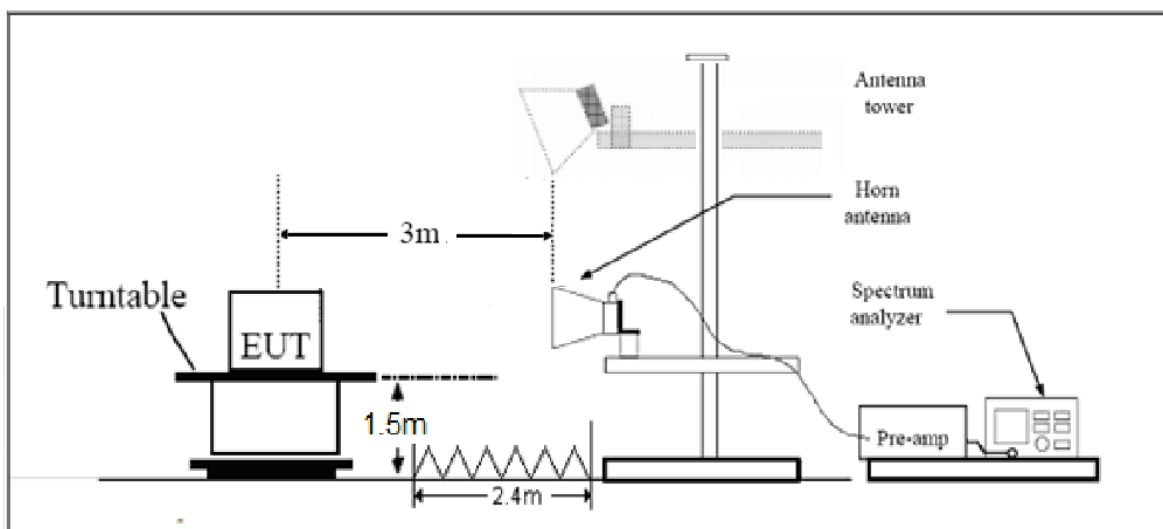
9KHz~~~30MHz



30MHz~~~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

- (1) For transmitters operating in the 5725-5850 MHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- (2) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz(68.2dBμV/m).
- (3) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz(68.2dBμV/m).
- (4) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz(68.2dBμV/m).

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

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

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

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

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

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

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

Measurement Uncertainty

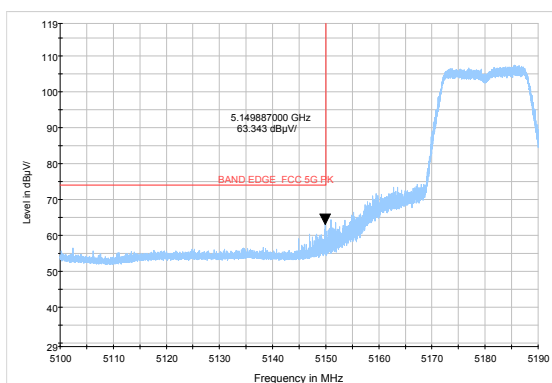
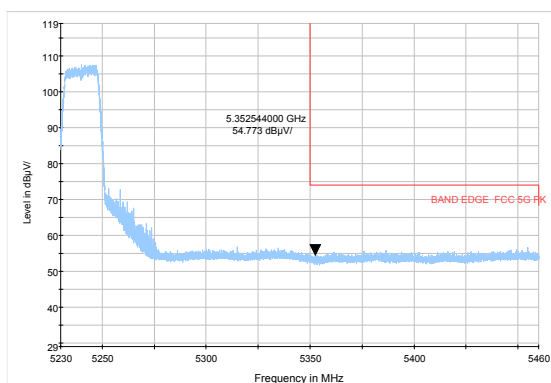
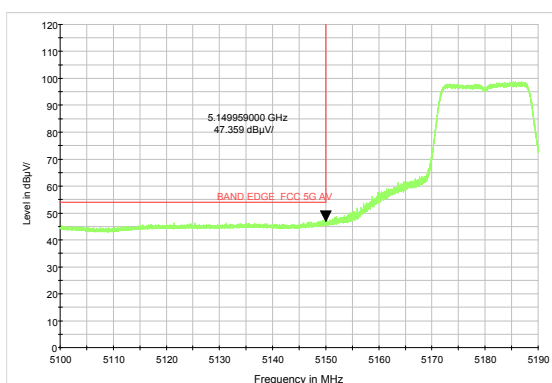
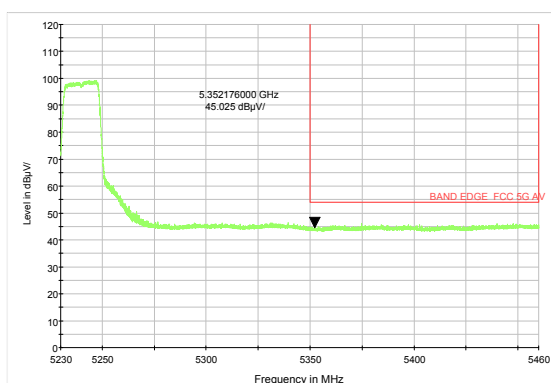
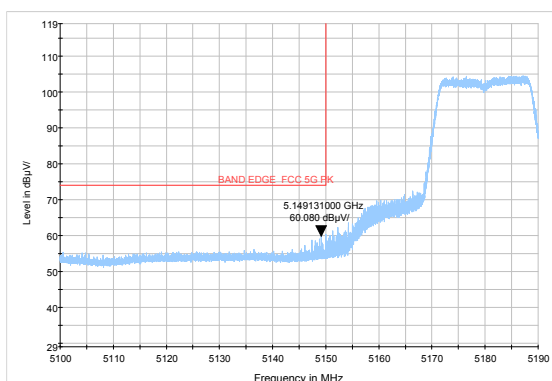
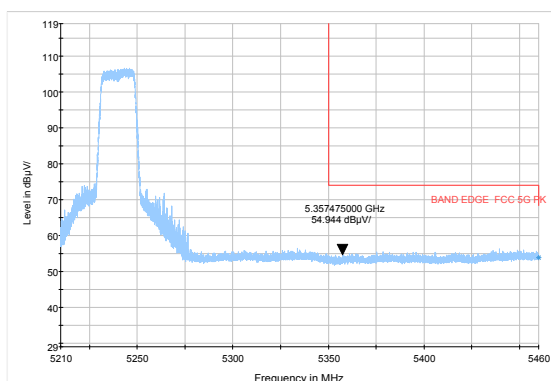
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.02 dB
200MHz-1GHz	3.28 dB
1GHz-18G	3.70 dB
18GHz-26.5GHz	5.78 dB
26.5G-40GHz	5.82 dB

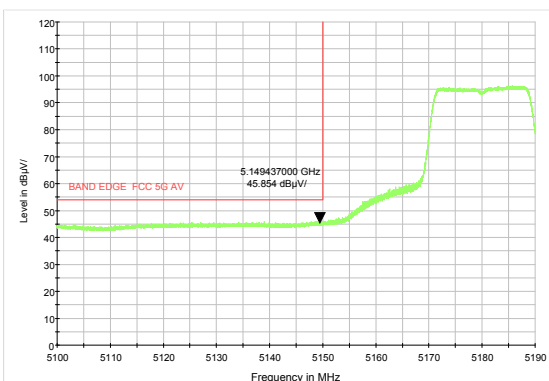
**Test Results:**

The modulation and bandwidth are similar for 802.11n mode for 20MHz/40MHz and 802.11ac mode for V20MHz/V40MHz, therefore investigated worst case to representative mode in test report.

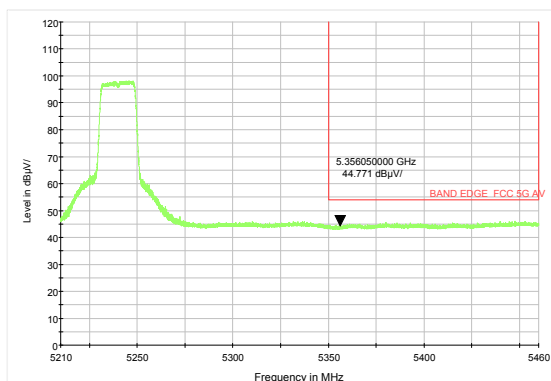
The signal beyond the limit is carrier.

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**

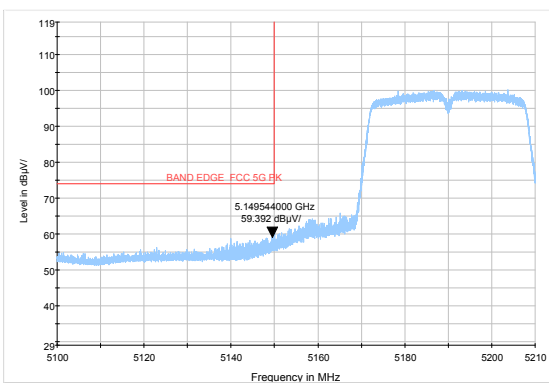
802.11n HT20-Channel 36: Average



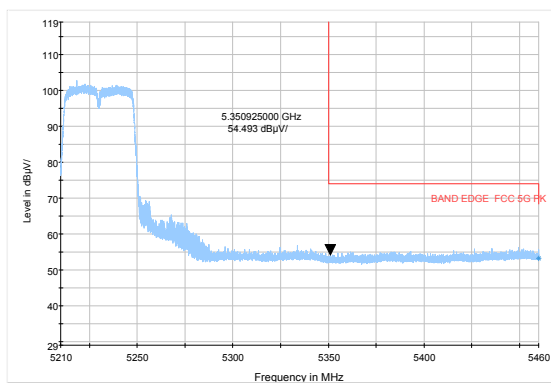
802.11n HT20-Channel 48: Average



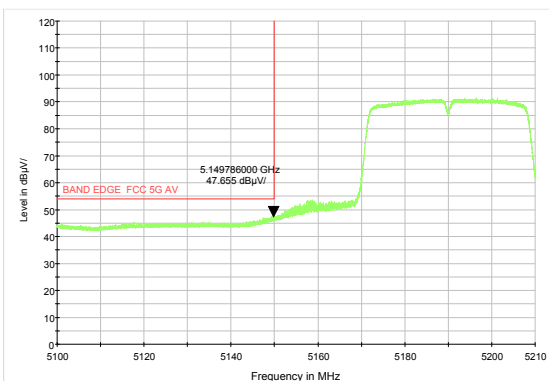
802.11n HT40-Channel 38: Peak



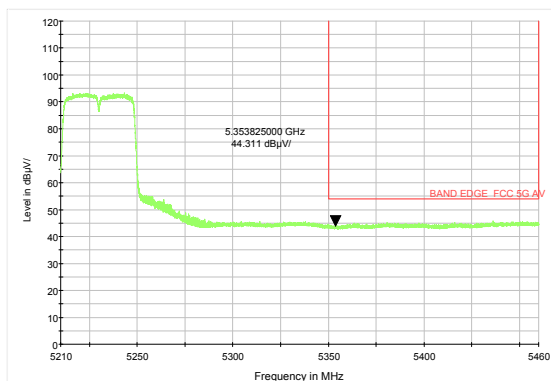
802.11n HT40-Channel 46: Peak



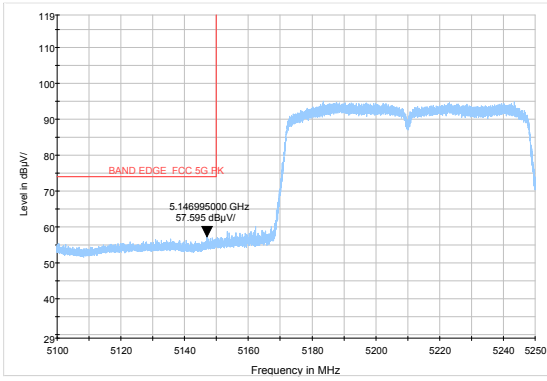
802.11n HT40-Channel 38: Average



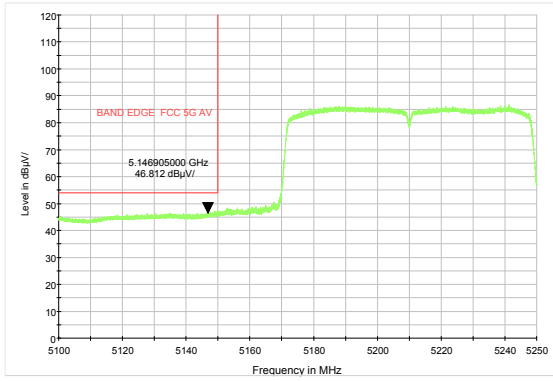
802.11n HT40-Channel 46: Average



802.11ac VHT80 –Channel 42: Peak

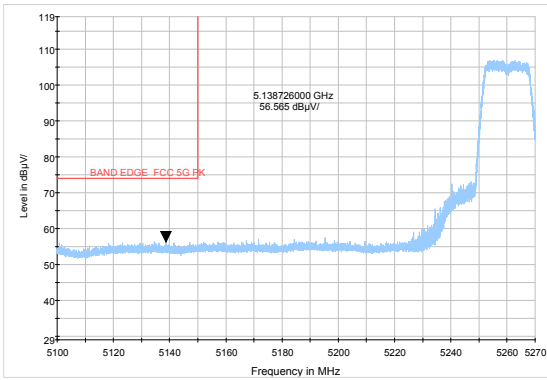


802.11ac VHT80- Channel 42: Average

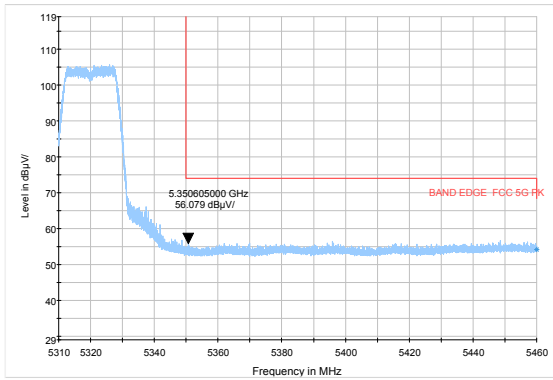


U-NII-2A

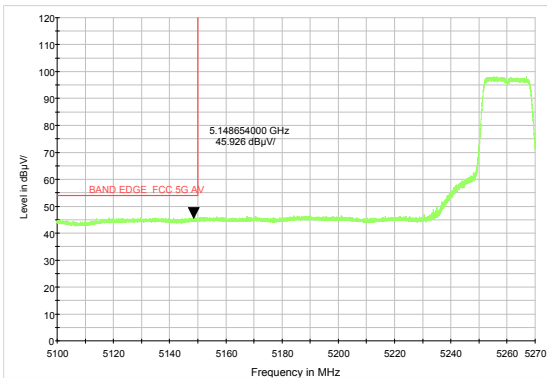
802.11a-Channel 52: Peak



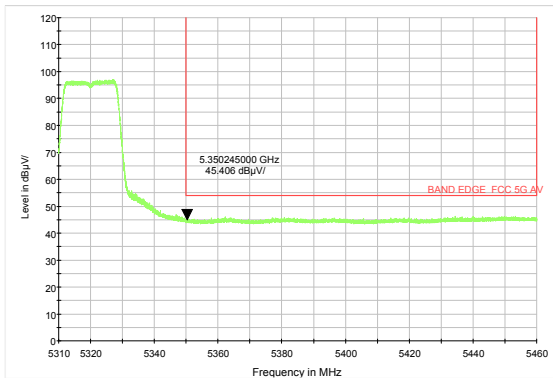
802.11a-Channel 64: Peak



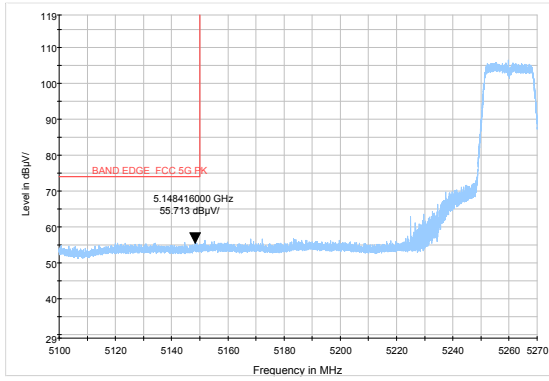
802.11a-Channel 52: Average



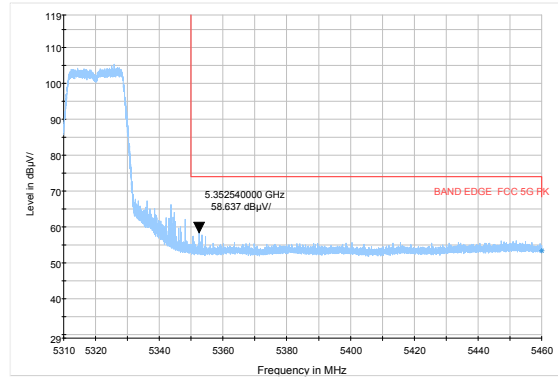
802.11a-Channel 64: Average



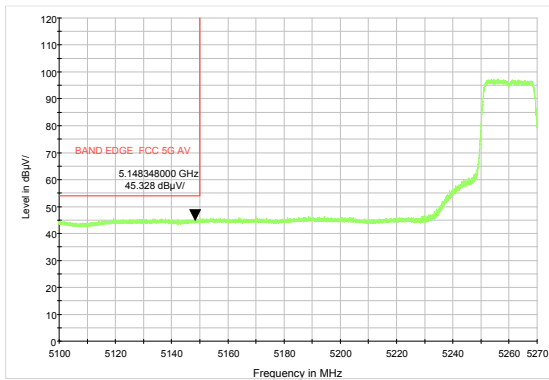
802.11n HT20-Channel 52: Peak



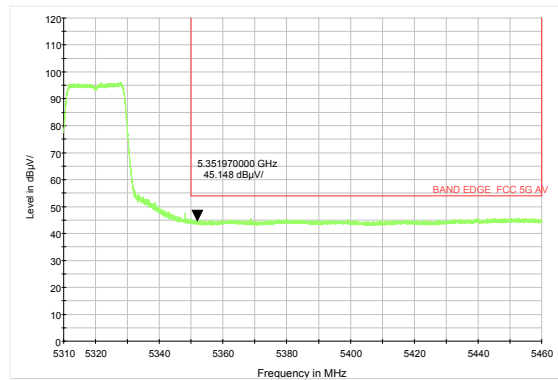
802.11n HT20-Channel 64: Peak



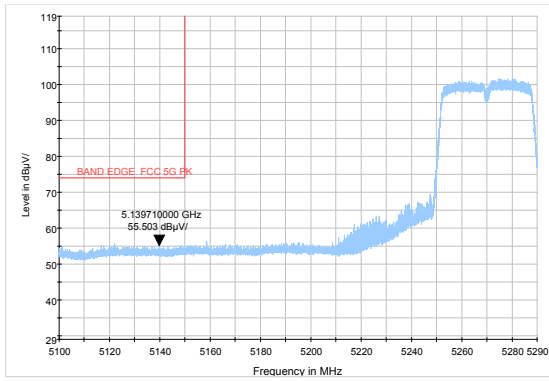
802.11n HT20-Channel 52: Average



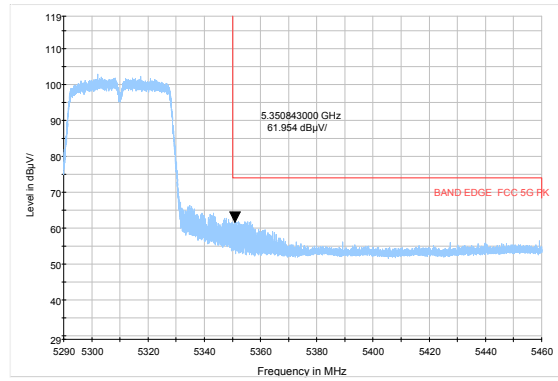
802.11n HT20-Channel 64: Average



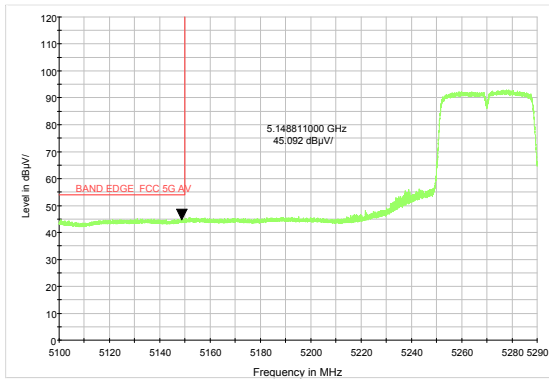
802.11n HT40-Channel 54: Peak



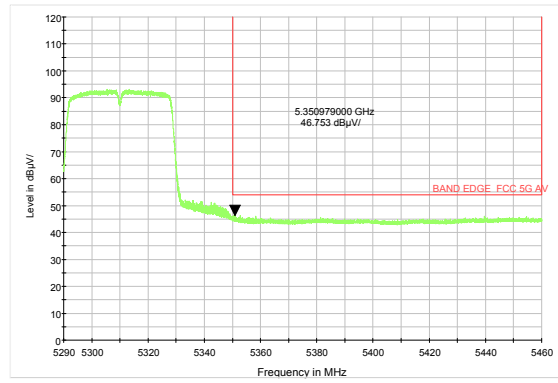
802.11n HT40-Channel 62: Peak



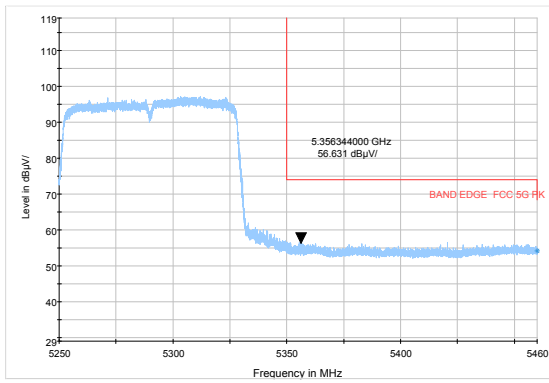
802.11n HT40-Channel 54: Average



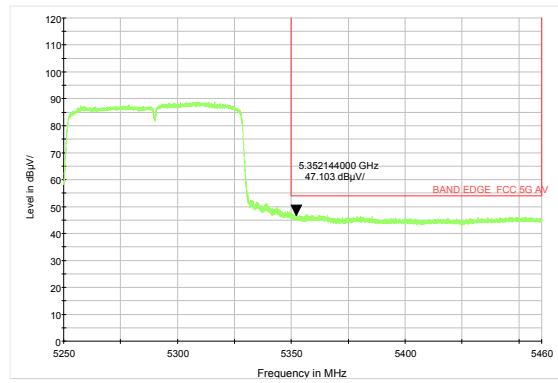
802.11n HT40-Channel 62: Average



802.11ac VHT80 -Channel 58: Peak



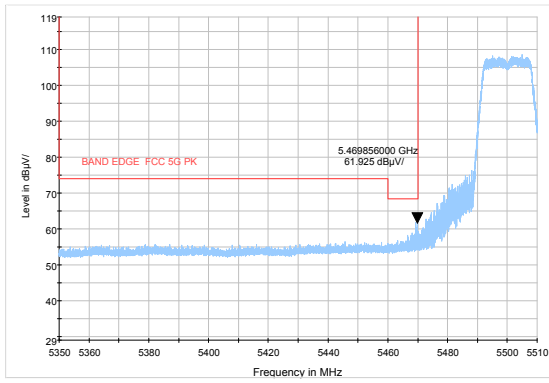
802.11ac VHT80- Channel 58: Average



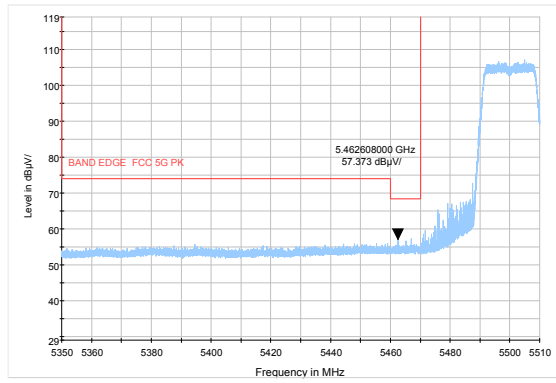


U-NII-2C

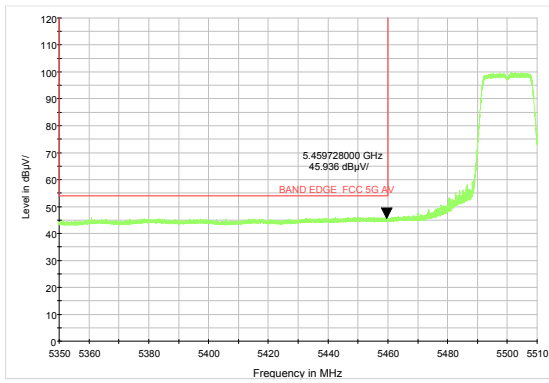
802.11a-Channel 100: Peak



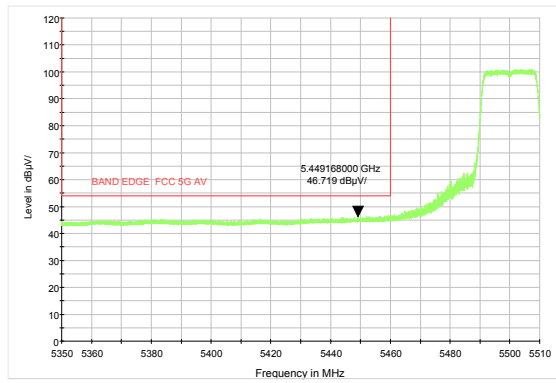
802.11n HT20-Channel 100: Peak



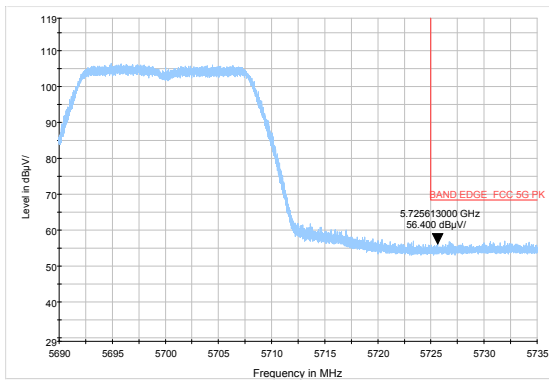
802.11a-Channel 100: Average



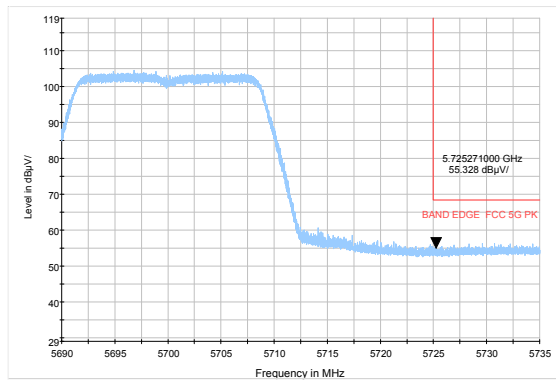
802.11n HT20-Channel 100: Average



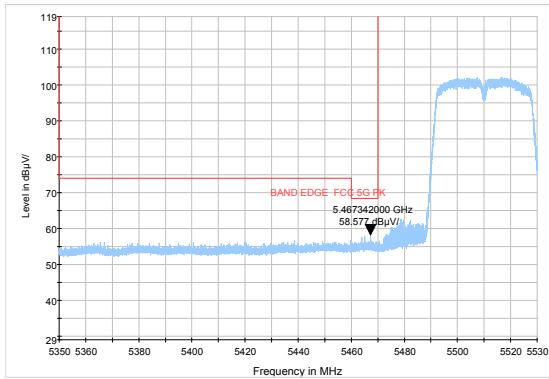
802.11a-Channel 140: Peak



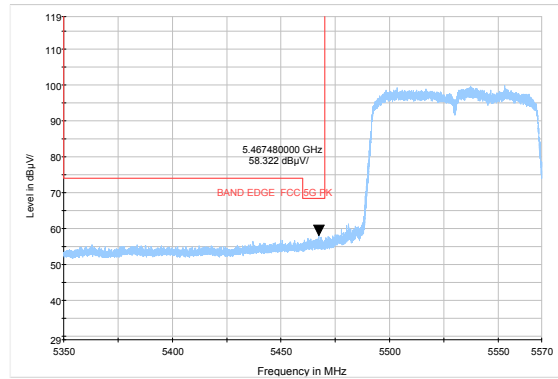
802.11n HT20-Channel 140: Peak



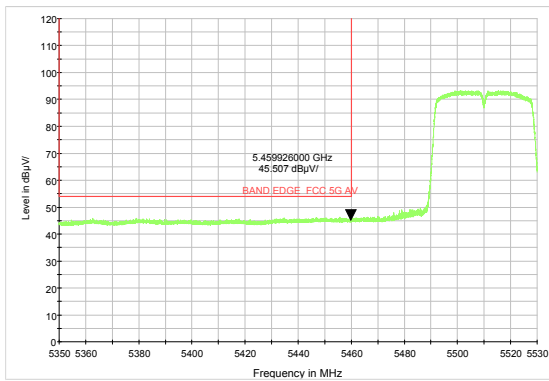
802.11n HT40-Channel 102: Peak



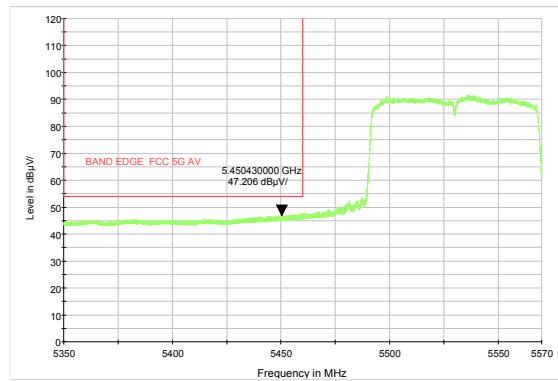
802.11ac VHT80 -Channel 106: Peak



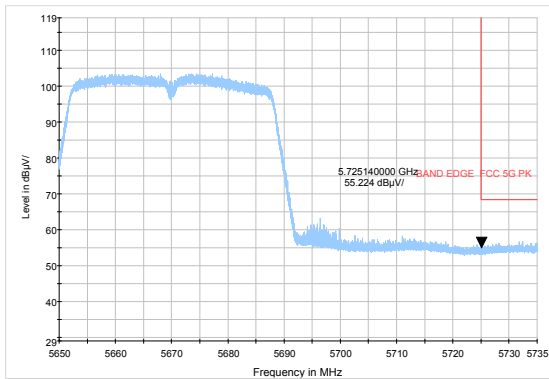
802.11n HT40-Channel 102: Average



802.11ac VHT80- Channel 106: Average



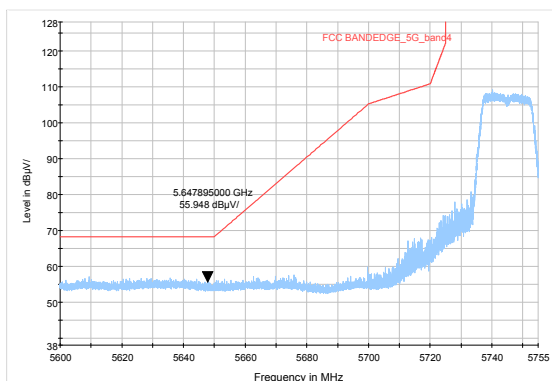
802.11n HT40-Channel 134: Peak



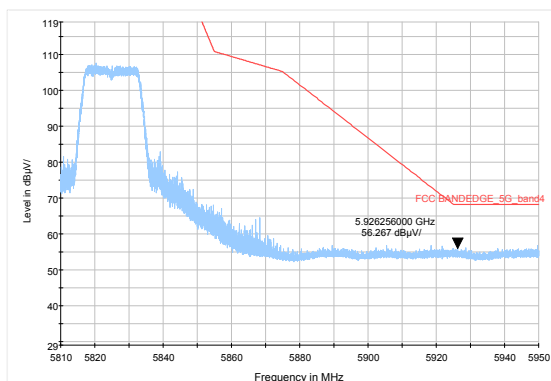


U-NII-3

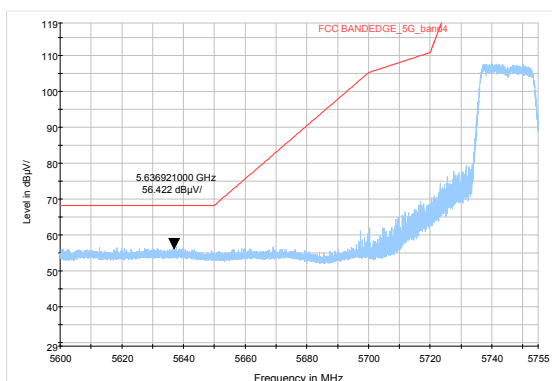
802.11a-Channel 149: Peak



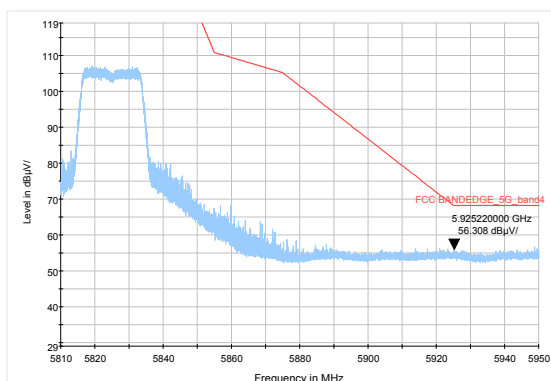
802.11a-Channel 165: Peak



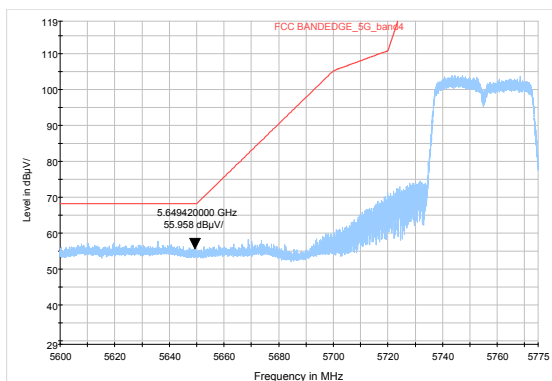
802.11n HT20-Channel 149: Peak



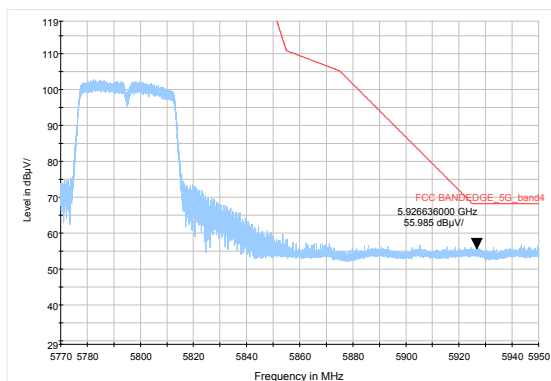
802.11n HT20-Channel 165: Peak



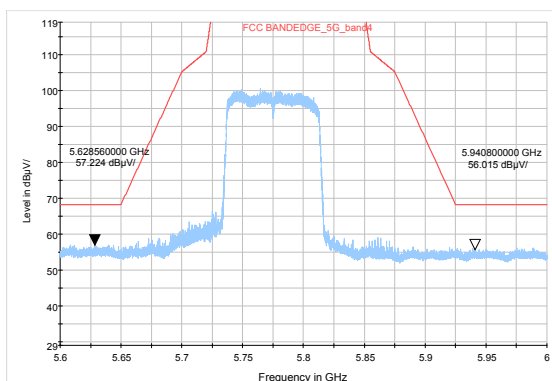
802.11n HT40-Channel 151: Peak



802.11n HT40-Channel 159: Peak



802.11ac VHT80- Channel 155: Peak



Result of RE

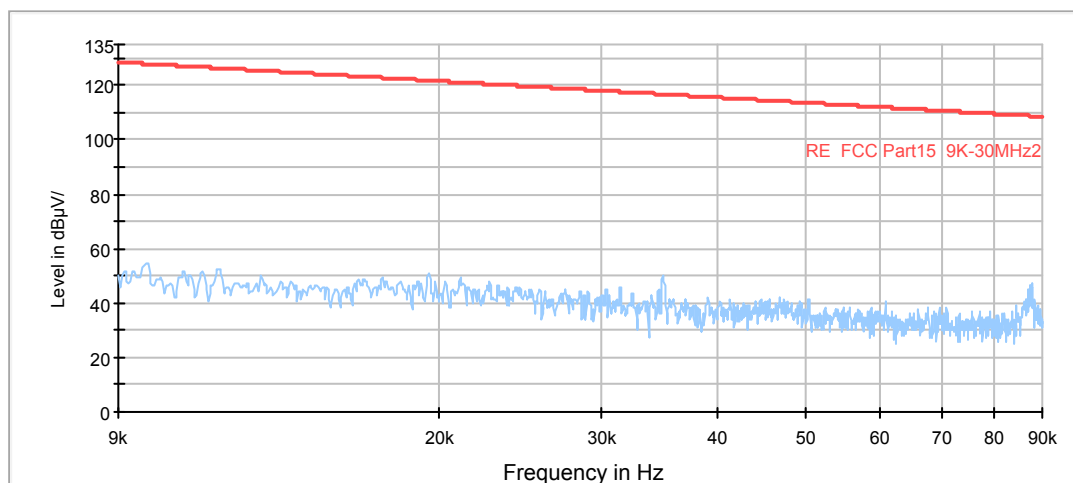
Test result

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier,

During the test, the Radiates Emission from 9kHz to 1GHz was performed in all modes with all channels, 802.11a, Channel 36 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

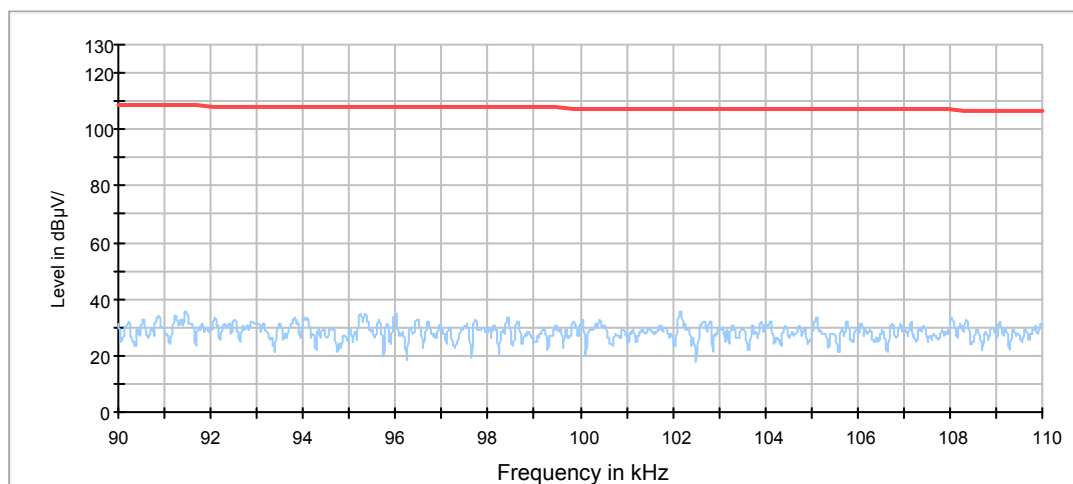
Continuous TX mode:

FCC RE 9K-90KHz AV

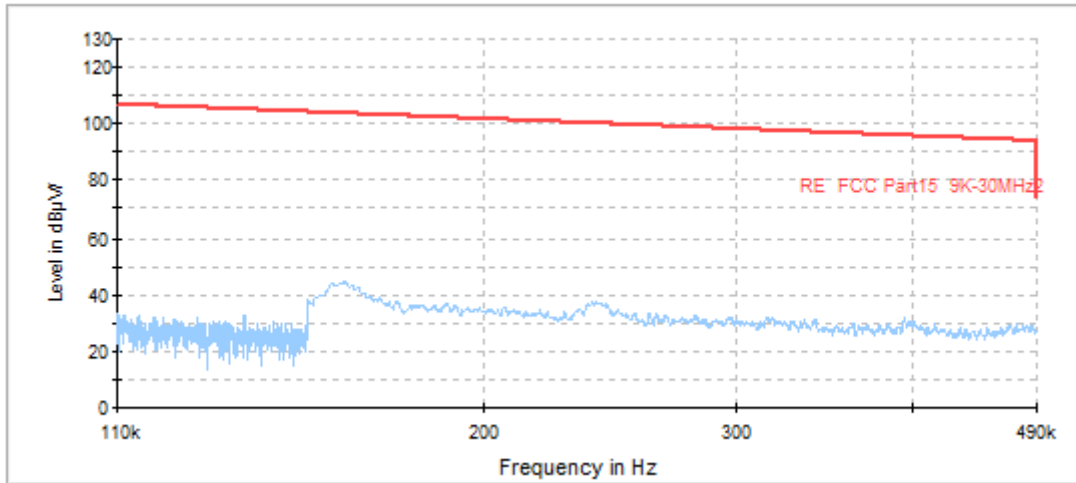


Radiates Emission from 9KHz to 90KHz

FCC RE 90K-110KHz QP

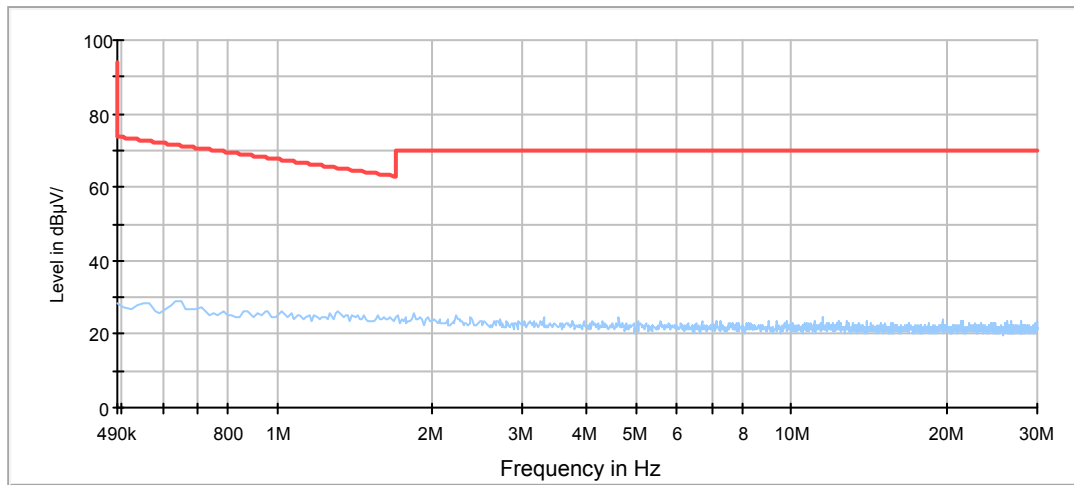


Radiates Emission from 90KHz to 110KHz



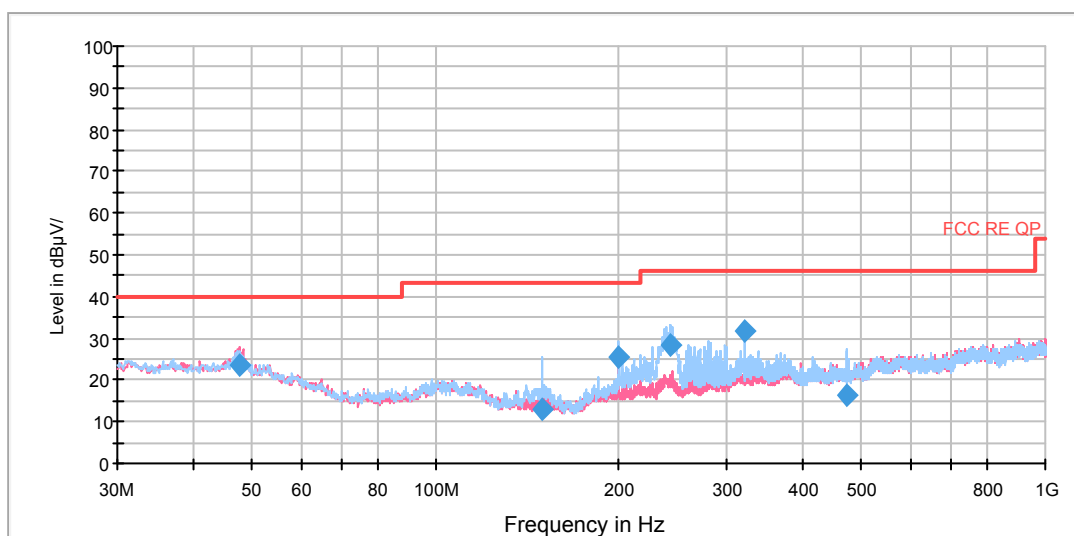
Radiates Emission from 110KHz to 490KHz

FCC RE 490K-30MHz QP



Radiates Emission from 490KHz to 30MHz

RE 30M-1GHz QP



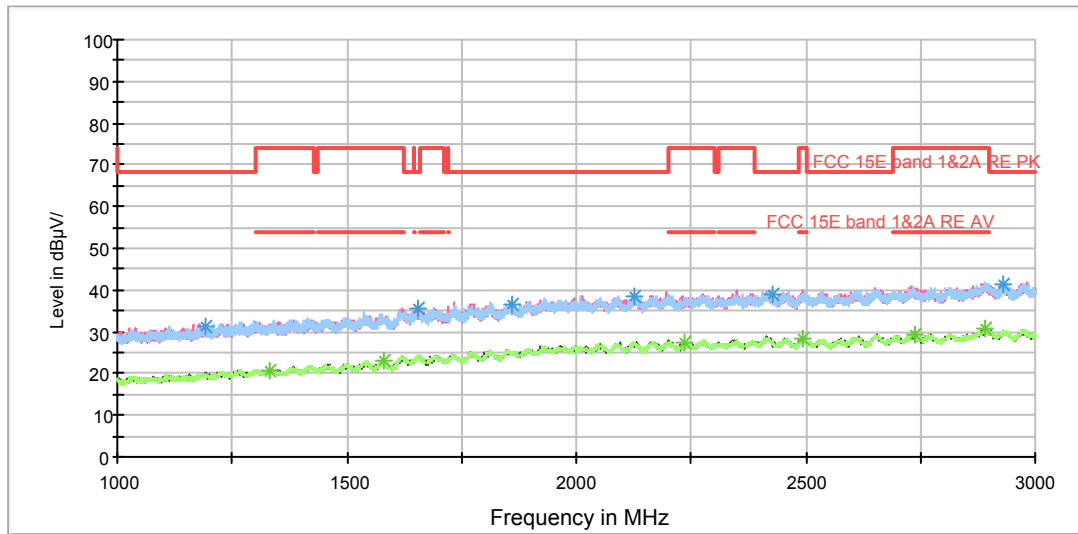
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
47.622297	23.7	120.0	V	275.0	-5.0	16.3	40.0
149.296725	12.8	225.0	H	7.0	-15.2	30.7	43.5
199.892519	25.5	125.0	H	284.0	-13.3	18.0	43.5
242.947500	28.3	120.0	H	350.0	-11.8	17.7	46.0
319.990000	31.6	100.0	H	274.0	-9.2	14.4	46.0
473.073250	16.2	225.0	H	257.0	-8.3	29.8	46.0

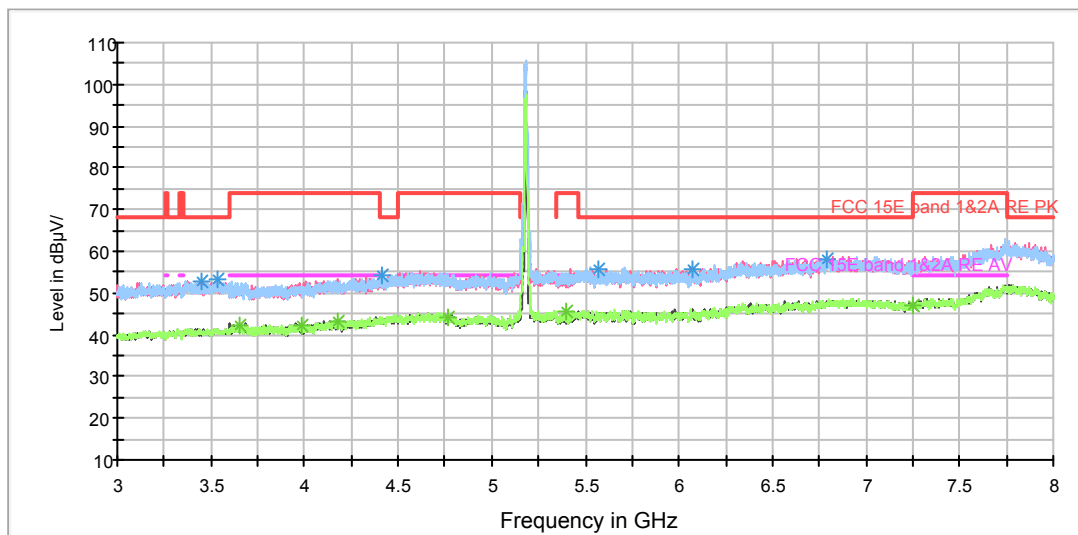
Remark: 1. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

2. Margin = Limit – Quasi-Peak

802.11a CH36

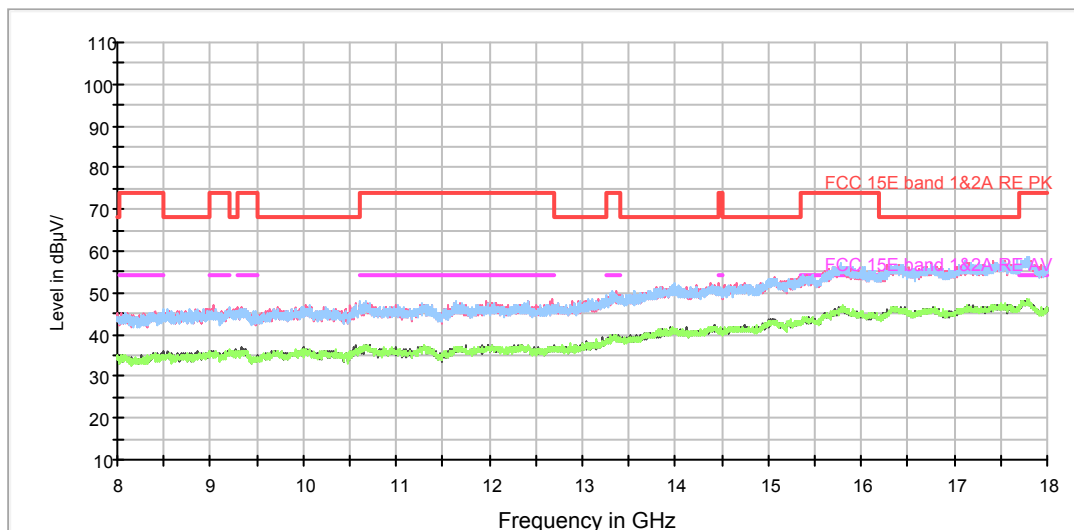


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

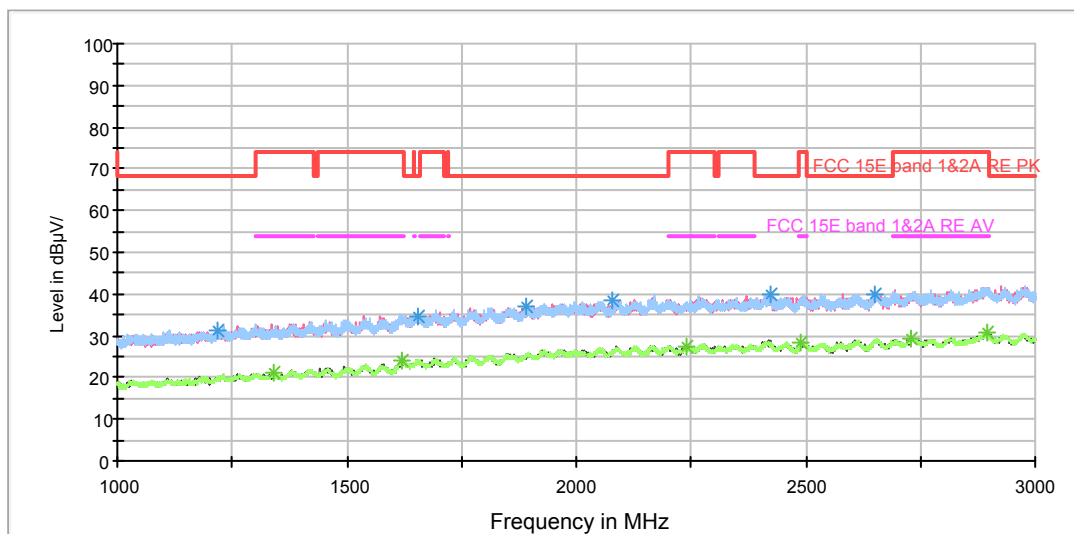
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3452.000000	53.0	200.0	V	145.0	9.5	15.2	68.2
3539.500000	53.2	200.0	H	340.0	9.8	15.0	68.2
4418.500000	54.5	200.0	H	313.0	12.9	13.7	68.2
5570.000000	55.5	200.0	V	118.0	15.0	12.7	68.2
6068.500000	55.8	200.0	V	145.0	16.7	12.4	68.2
6785.000000	58.2	200.0	H	187.0	18.2	10.0	68.2

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

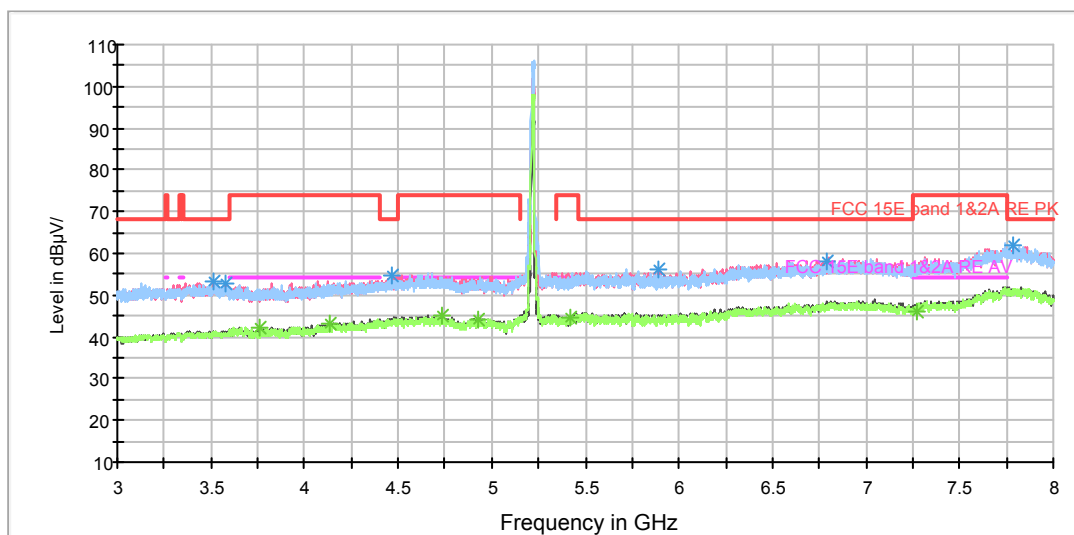
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3657.000000	42.2	200.0	H	277.0	10.2	11.8	54
3988.000000	42.2	200.0	H	304.0	11.0	11.8	54
4174.500000	43.0	200.0	V	344.0	12.0	11.0	54
4767.500000	44.4	200.0	H	332.0	13.5	9.6	54
5400.000000	45.4	100.0	H	201.0	14.1	8.6	54
7253.500000	47.0	200.0	H	0.0	19.0	7.0	54

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

802.11a CH44

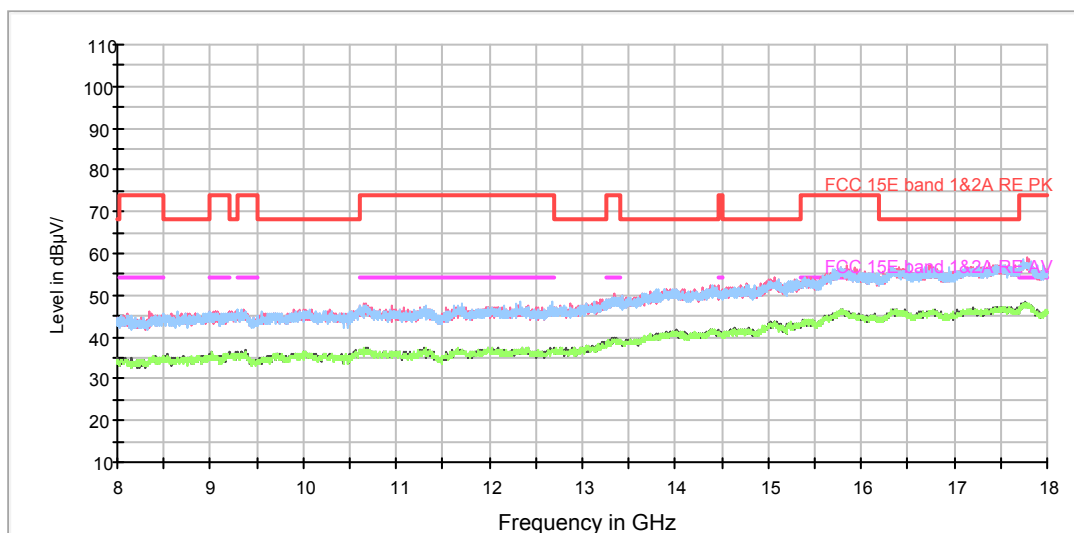


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

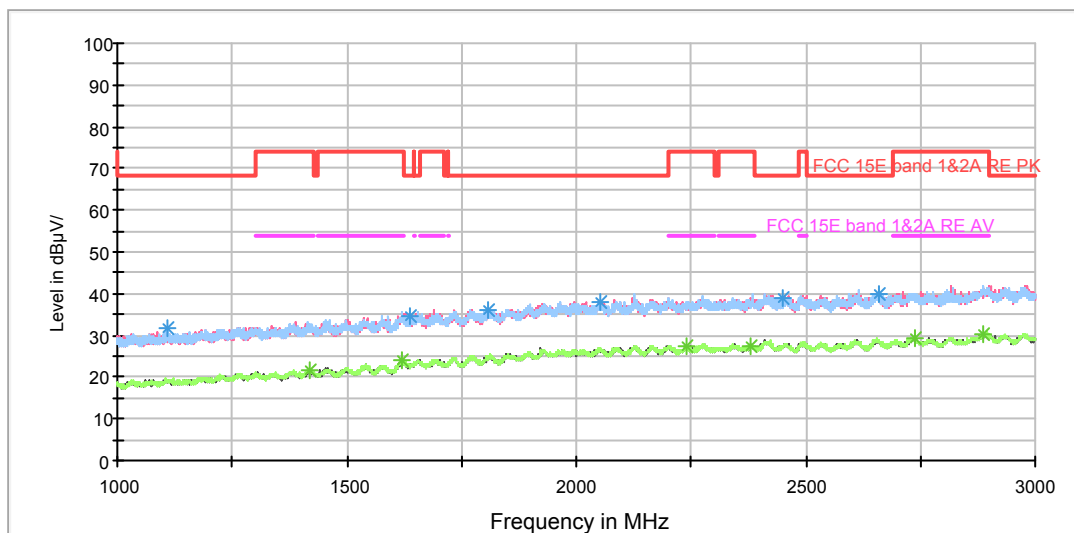
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3516.500000	53.2	200.0	V	165.0	9.9	15.0	68.2
3574.000000	53.0	200.0	V	72.0	10.0	15.2	68.2
4466.000000	54.5	100.0	V	114.0	13.0	13.7	68.2
5887.000000	56.2	200.0	V	183.0	15.9	12.0	68.2
6787.500000	58.3	100.0	V	58.0	18.2	9.9	68.2
7784.000000	61.8	100.0	H	155.0	23.5	6.4	68.2

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

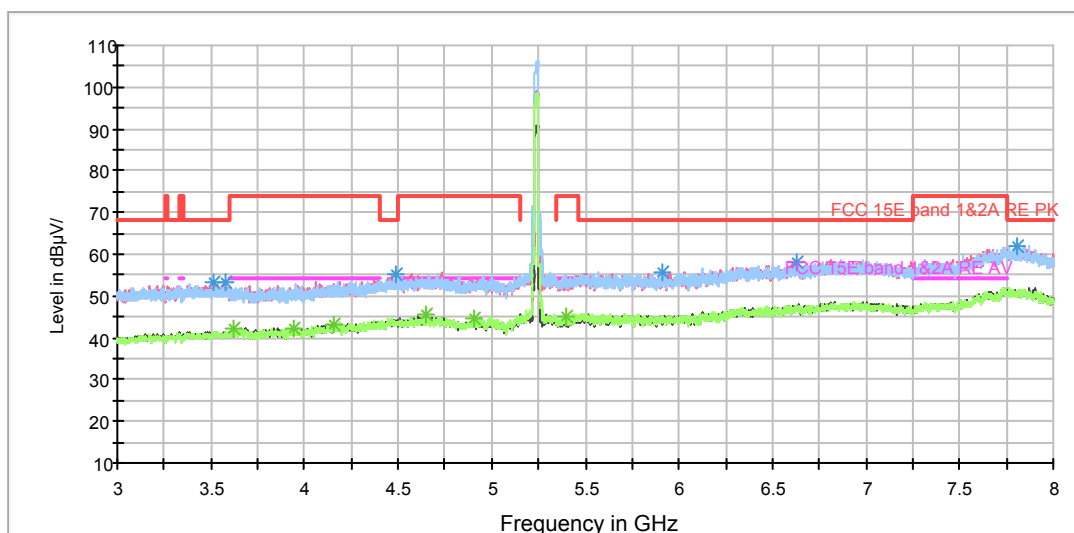
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3764.500000	42.0	200.0	V	100.0	10.2	12.0	54
4139.000000	43.2	200.0	H	97.0	11.7	10.8	54
4738.000000	45.3	200.0	V	255.0	13.7	8.7	54
4927.000000	44.3	200.0	V	1.0	13.8	9.7	54
5417.000000	44.8	200.0	H	288.0	14.1	9.2	54
7269.000000	46.0	200.0	H	261.0	19.1	8.0	54

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

802.11a CH48

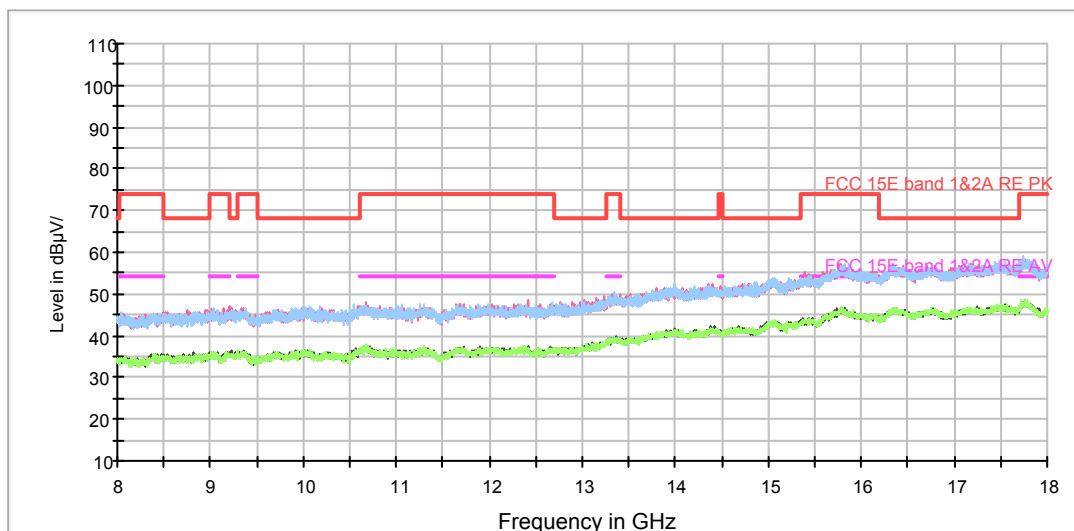


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

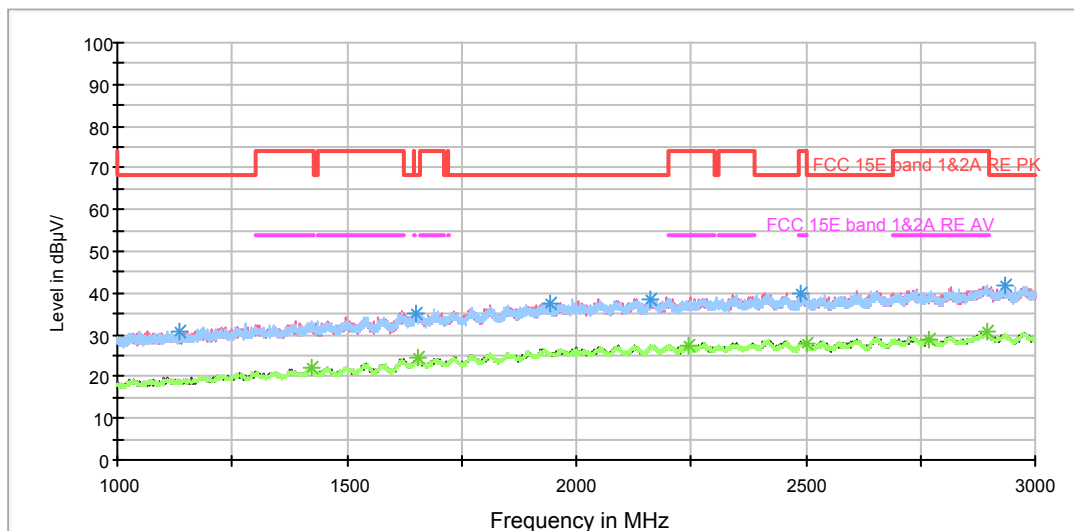
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3510.000000	53.1	200.0	V	237.0	10.0	15.1	68.2
3574.000000	53.1	200.0	H	345.0	10.0	15.1	68.2
4488.500000	55.0	200.0	H	301.0	12.9	13.2	68.2
5908.000000	55.7	200.0	H	146.0	16.0	12.5	68.2
6628.500000	58.2	200.0	V	354.0	17.8	10.0	68.2
7810.000000	62.1	100.0	H	235.0	23.5	6.1	68.2

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

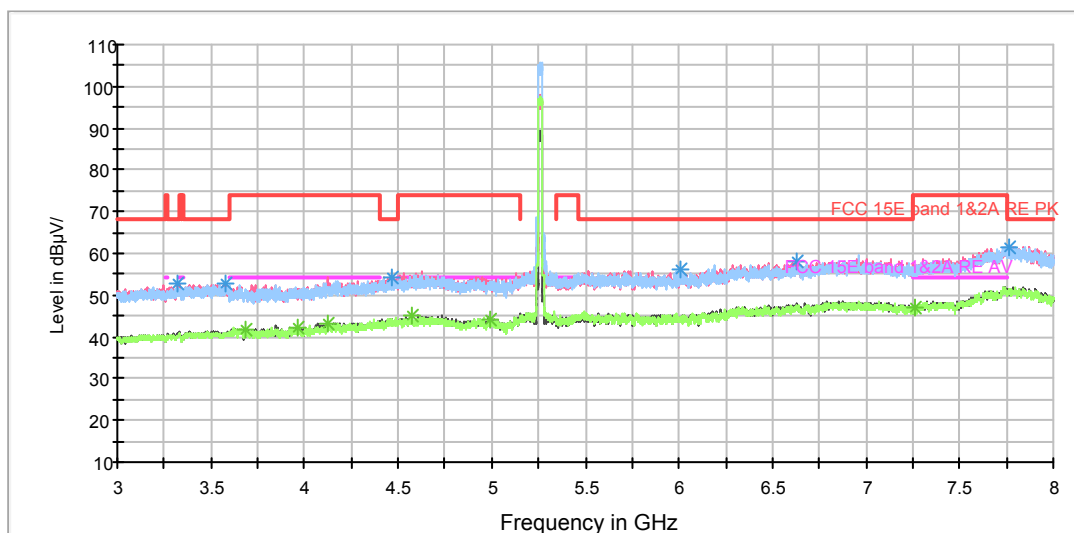
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3617.000000	42.2	200.0	V	94.0	10.2	11.8	54
3945.500000	42.2	200.0	V	48.0	10.9	11.8	54
4151.500000	43.3	200.0	H	118.0	11.8	10.7	54
4651.500000	45.6	200.0	V	12.0	13.4	8.4	54
4903.000000	44.5	200.0	H	0.0	13.9	9.5	54
5400.000000	44.9	200.0	H	301.0	14.1	9.1	54

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

802.11a CH52

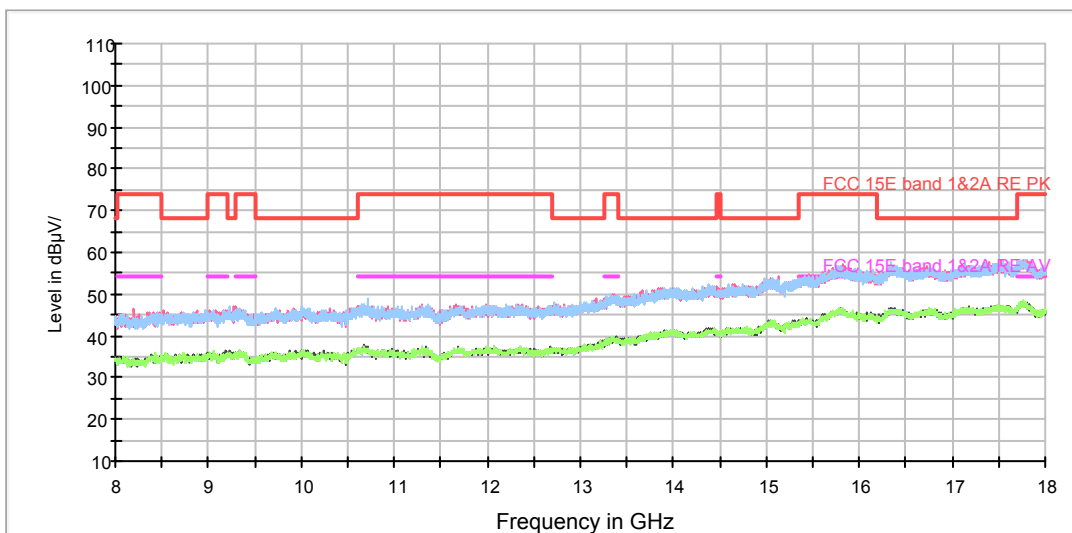


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

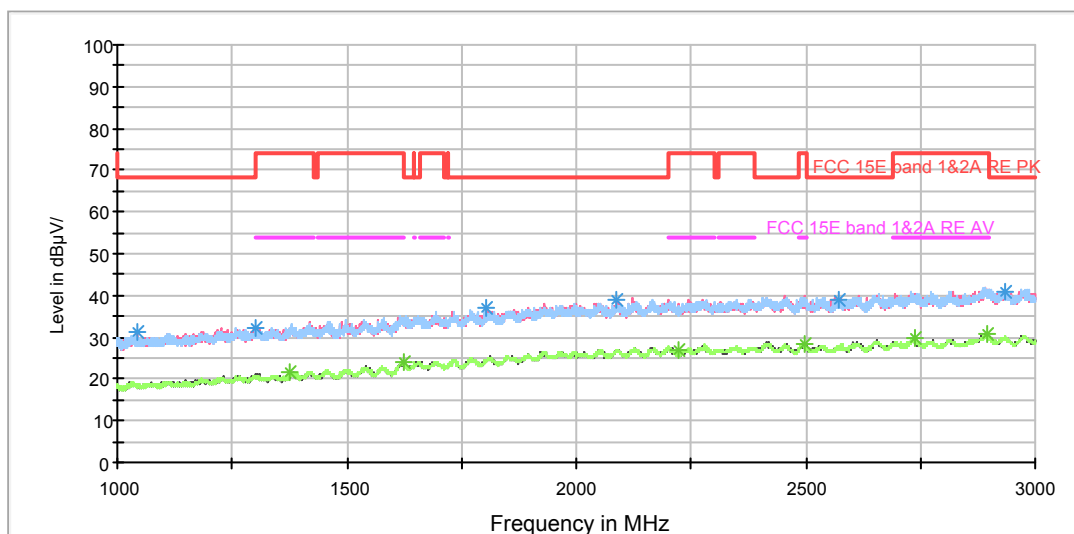
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3316.000000	53.0	200.0	V	51.0	9.4	15.2	68.2
3581.000000	53.0	200.0	V	192.0	10.0	15.2	68.2
4466.000000	54.4	200.0	V	0.0	13.0	13.8	68.2
6008.000000	55.9	200.0	H	117.0	16.3	12.3	68.2
6627.500000	57.9	100.0	V	0.0	17.8	10.3	68.2
7766.500000	61.6	100.0	V	353.0	23.6	6.6	68.2

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

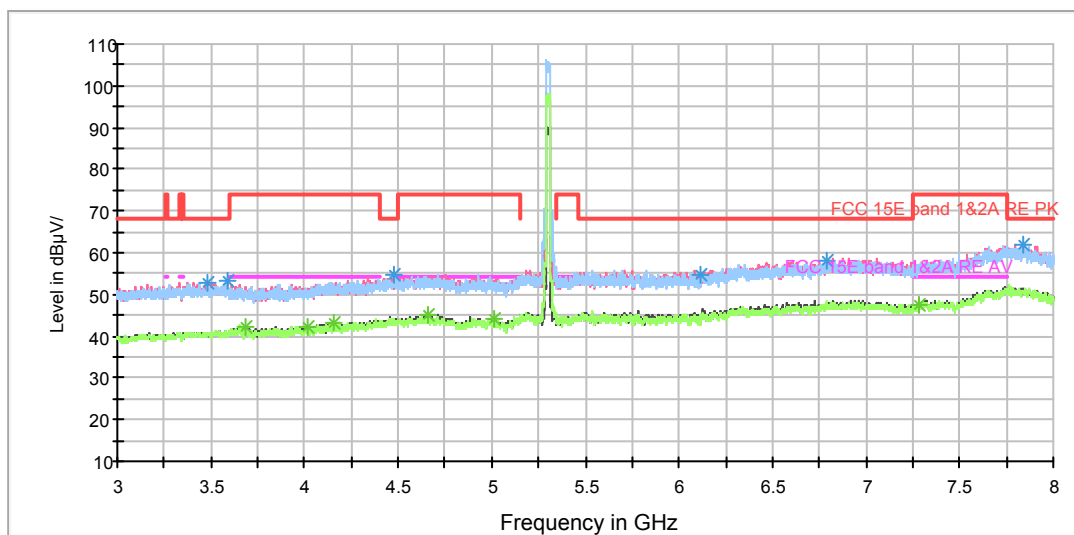
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3684.500000	41.9	200.0	V	59.0	10.3	12.1	54
3959.500000	42.0	200.0	V	86.0	10.9	12.0	54
4124.500000	43.2	200.0	H	154.0	11.6	10.8	54
4569.000000	45.0	200.0	V	104.0	13.1	9.0	54
4995.000000	44.4	200.0	V	68.0	14.1	9.6	54
7256.000000	46.8	200.0	H	320.0	19.0	7.2	54

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

802.11a CH60

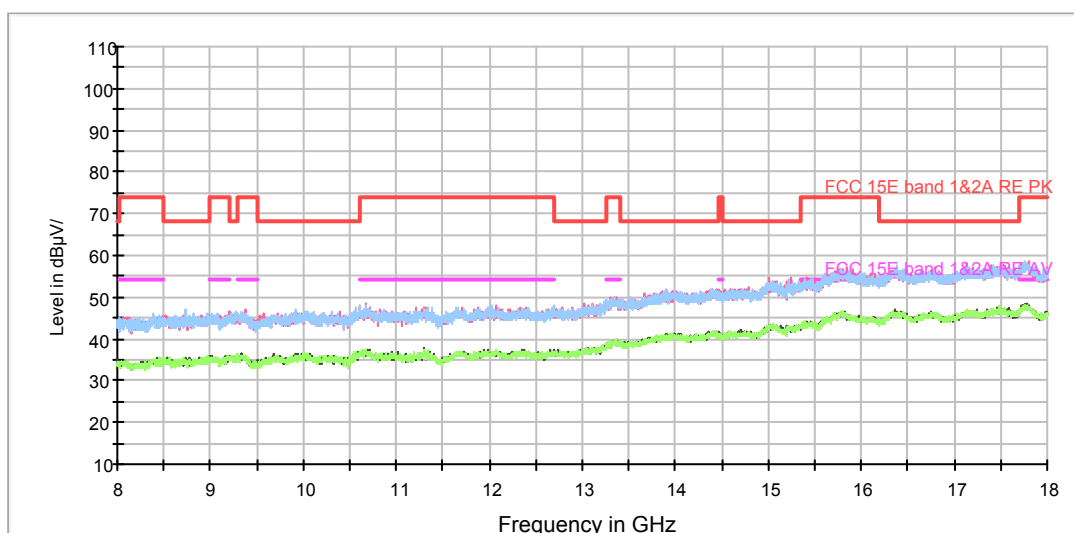


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

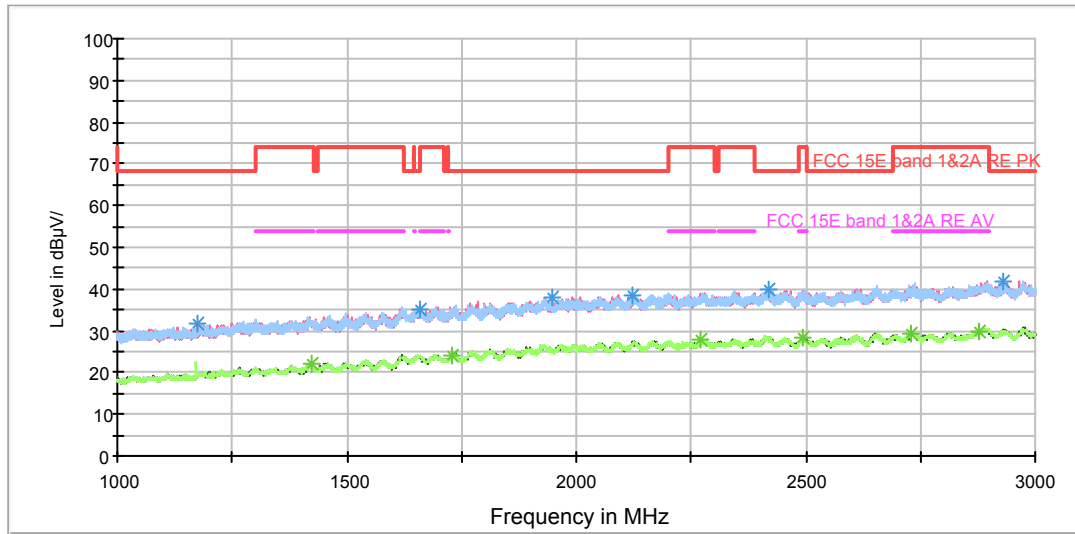
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3485.500000	52.8	200.0	V	169.0	9.8	15.4	68.2
3591.000000	53.5	200.0	V	205.0	10.1	14.7	68.2
4475.500000	54.5	200.0	V	53.0	12.9	13.7	68.2
6117.500000	54.9	100.0	V	223.0	17.2	13.3	68.2
6789.000000	57.9	200.0	V	187.0	18.2	10.3	68.2
7840.000000	61.9	100.0	V	259.0	23.4	6.3	68.2

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

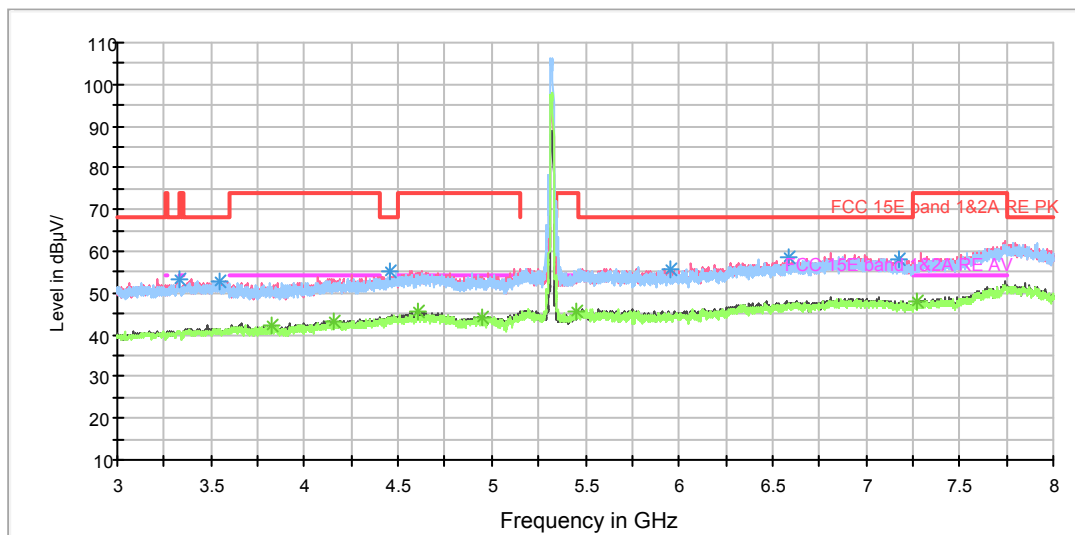
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3687.500000	42.3	200.0	H	324.0	10.2	11.7	54
4012.000000	42.3	200.0	V	70.0	11.1	11.7	54
4153.500000	43.2	200.0	V	259.0	11.8	10.8	54
4658.000000	45.1	200.0	V	79.0	13.4	8.9	54
5008.500000	44.1	200.0	V	133.0	14.2	9.9	54
7282.000000	47.4	200.0	V	10.0	19.2	6.6	54

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

802.11a CH64

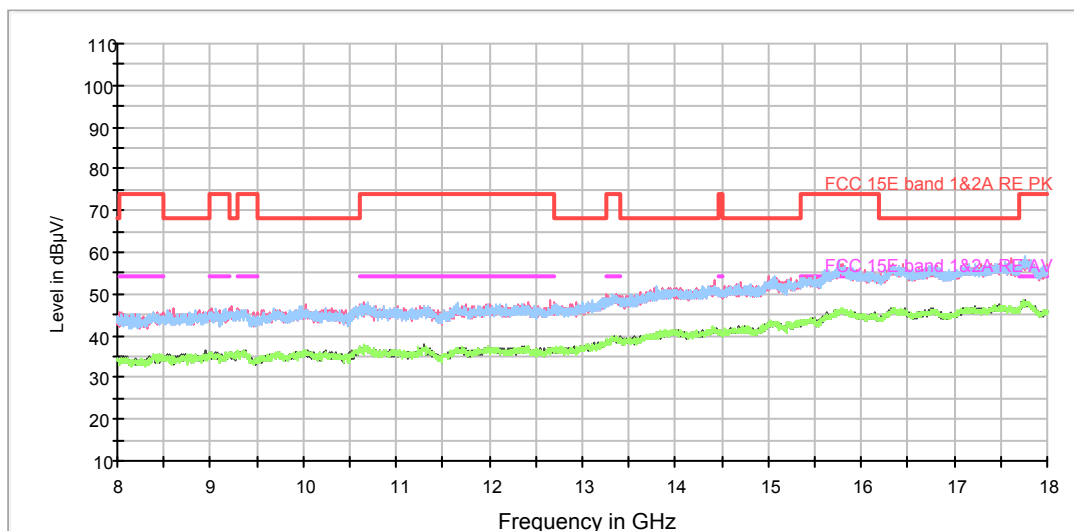


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

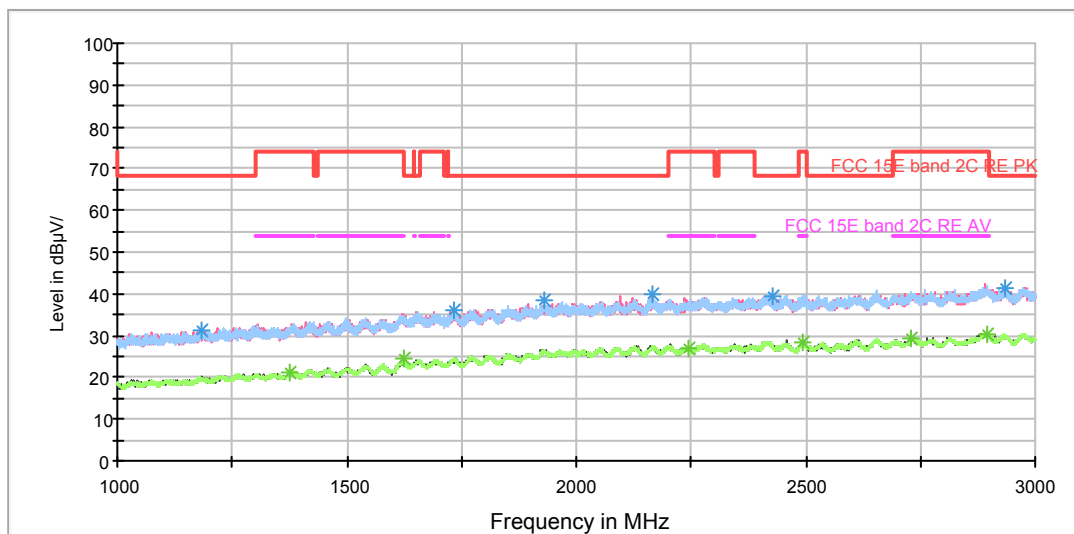
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3327.500000	53.4	200.0	V	229.0	9.5	14.8	68.2
3542.000000	52.7	200.0	H	295.0	9.8	15.5	68.2
4458.500000	55.0	100.0	V	332.0	13.0	13.2	68.2
5960.000000	55.6	200.0	V	25.0	16.1	12.6	68.2
6586.000000	58.7	200.0	V	126.0	17.7	9.5	68.2
7175.500000	58.1	200.0	V	7.0	19.0	10.1	68.2

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

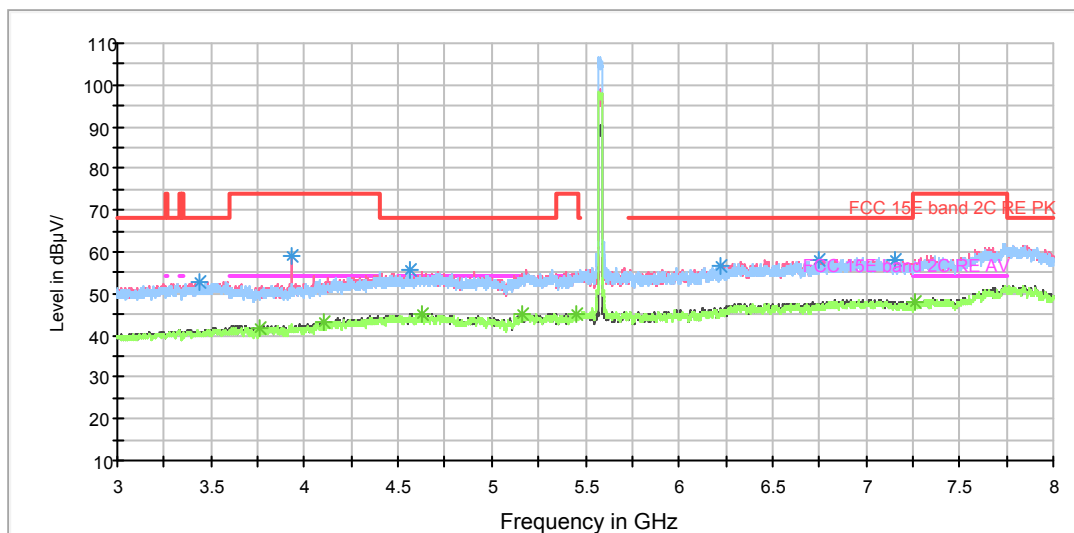
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3824.500000	42.3	200.0	H	286.0	10.4	11.7	54
4153.500000	43.3	200.0	V	0.0	11.8	10.7	54
4606.500000	45.4	200.0	V	303.0	13.3	8.6	54
4949.500000	44.2	200.0	V	80.0	13.7	9.8	54
5454.000000	45.6	200.0	H	277.0	14.4	8.4	54
7275.500000	48.0	200.0	V	98.0	19.1	6.0	54

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

802.11a CH116

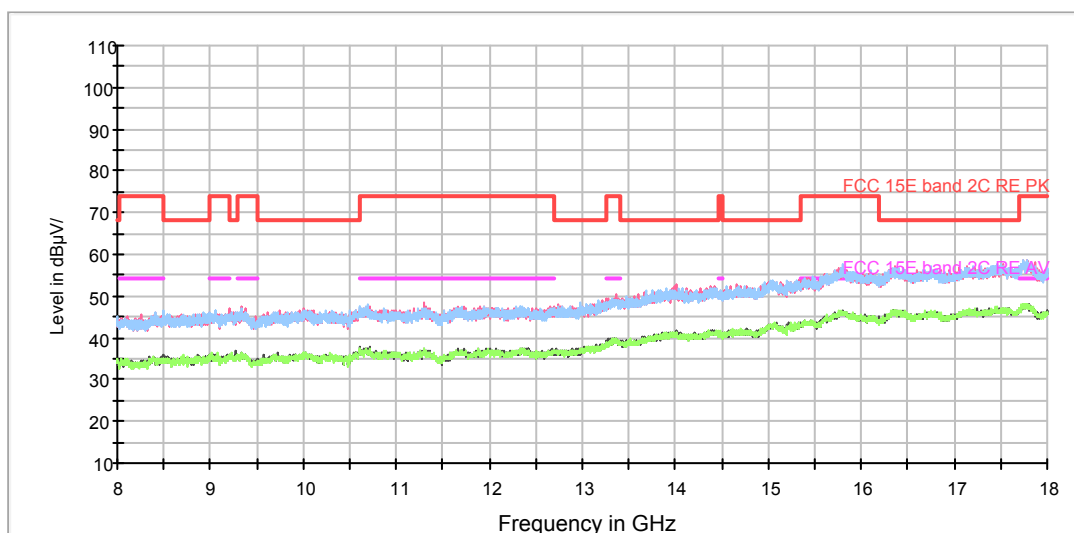


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

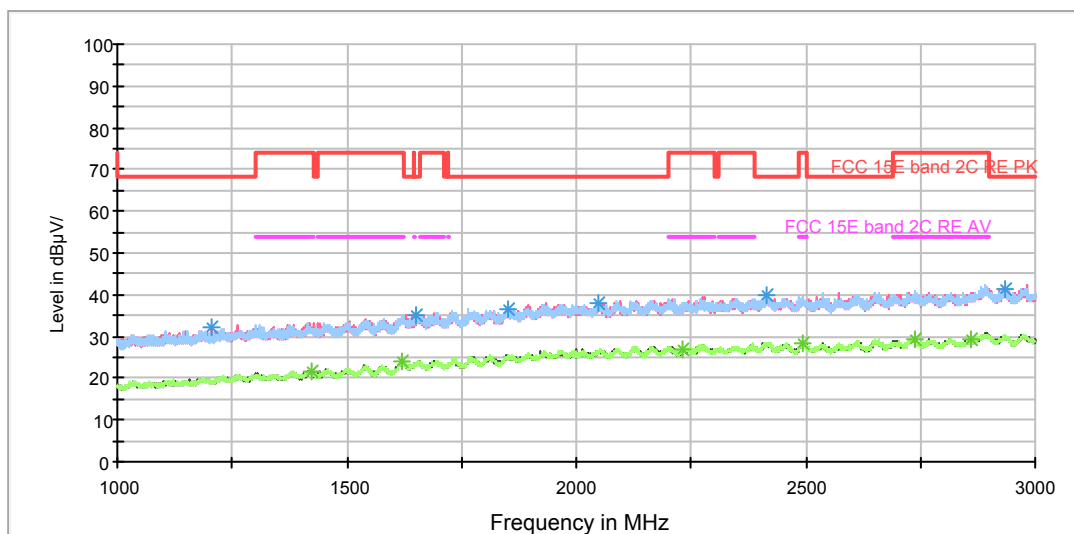
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3439.000000	52.9	200.0	V	32.0	9.5	15.3	68.2
3936.000000	59.2	200.0	V	0.0	10.9	14.8	74
4567.000000	55.7	200.0	V	68.0	13.1	12.5	68.2
6223.500000	56.5	200.0	H	263.0	17.3	11.7	68.2
6749.500000	58.2	200.0	V	261.0	18.0	10.0	68.2
7155.000000	58.2	200.0	V	333.0	19.0	10.0	68.2

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

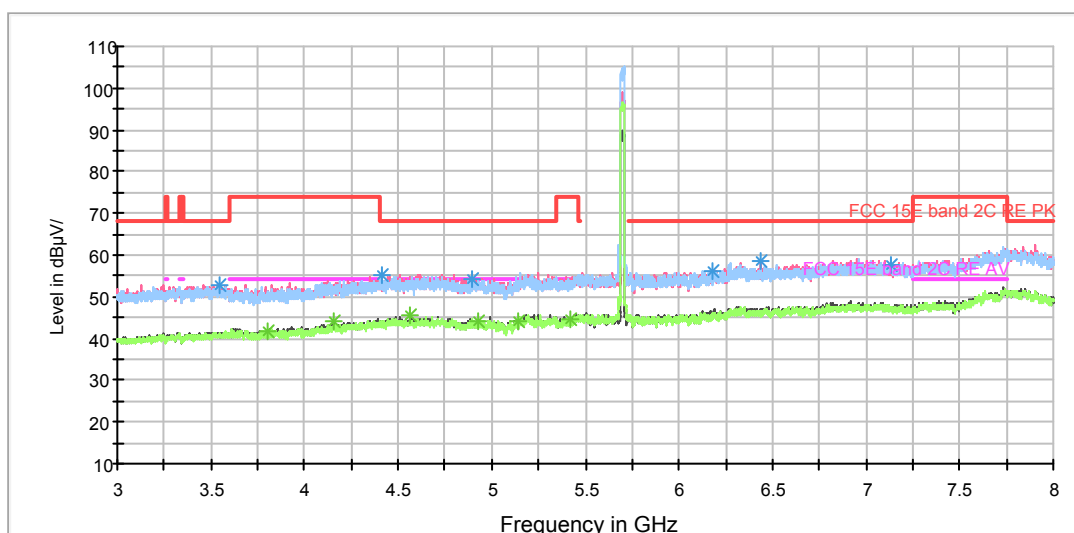
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3762.000000	41.8	200.0	V	41.0	10.2	12.2	54
4105.000000	43.3	200.0	H	254.0	11.5	10.7	54
4630.500000	45.3	200.0	V	14.0	13.4	8.7	54
5164.000000	45.0	200.0	V	242.0	14.6	9.0	54
5449.000000	45.2	200.0	H	325.0	14.3	8.8	54
7265.500000	47.8	200.0	V	77.0	19.1	6.2	54

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

802.11a CH140

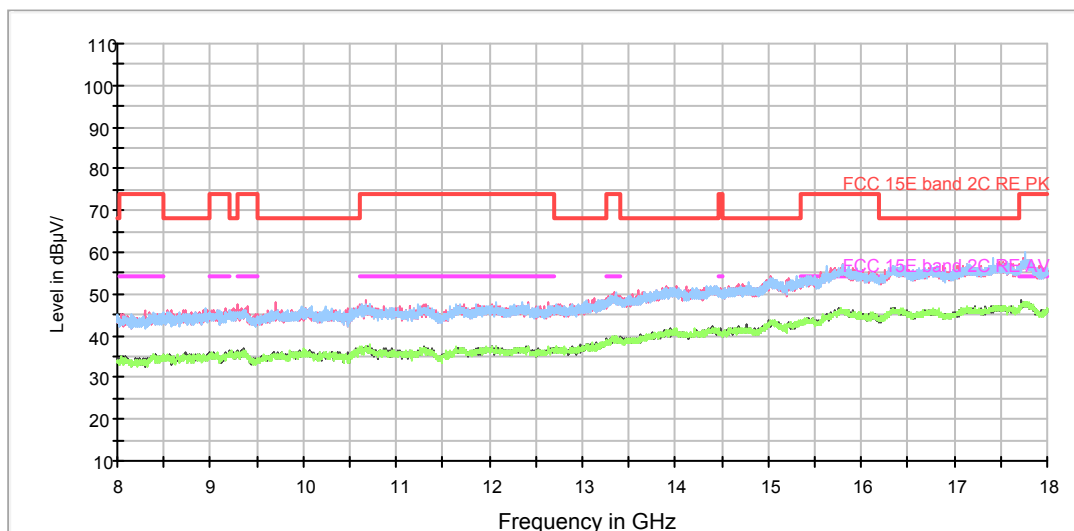


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

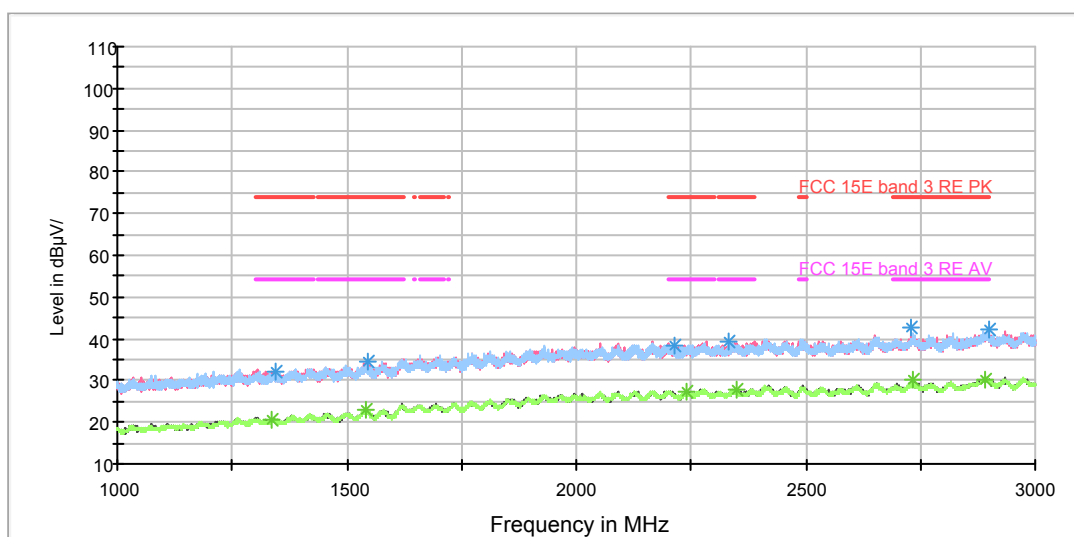
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3547.000000	52.6	200.0	H	0.0	9.9	15.6	68.2
4412.500000	55.3	200.0	V	149.0	12.9	12.9	68.2
4896.000000	54.4	200.0	H	312.0	13.8	13.8	68.2
6182.000000	56.3	200.0	H	249.0	17.2	11.9	68.2
6438.500000	58.4	100.0	V	212.0	17.4	9.8	68.2
7138.000000	57.8	100.0	H	0.0	19.1	10.4	68.2

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

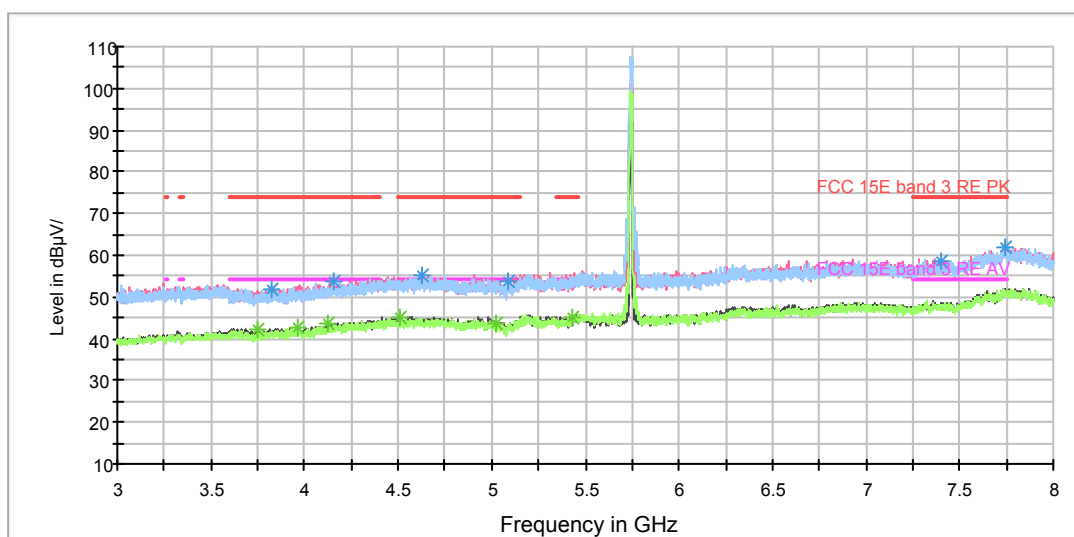
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3801.000000	41.9	200.0	V	94.0	10.3	12.1	54
4153.000000	43.9	200.0	V	252.0	11.8	10.1	54
4564.000000	45.4	200.0	V	261.0	13.1	8.6	54
4927.000000	44.3	200.0	V	0.0	13.8	9.7	54
5138.000000	44.3	200.0	V	279.0	14.3	9.7	54
5419.000000	44.7	200.0	H	168.0	14.1	9.3	54

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

802.11a CH149

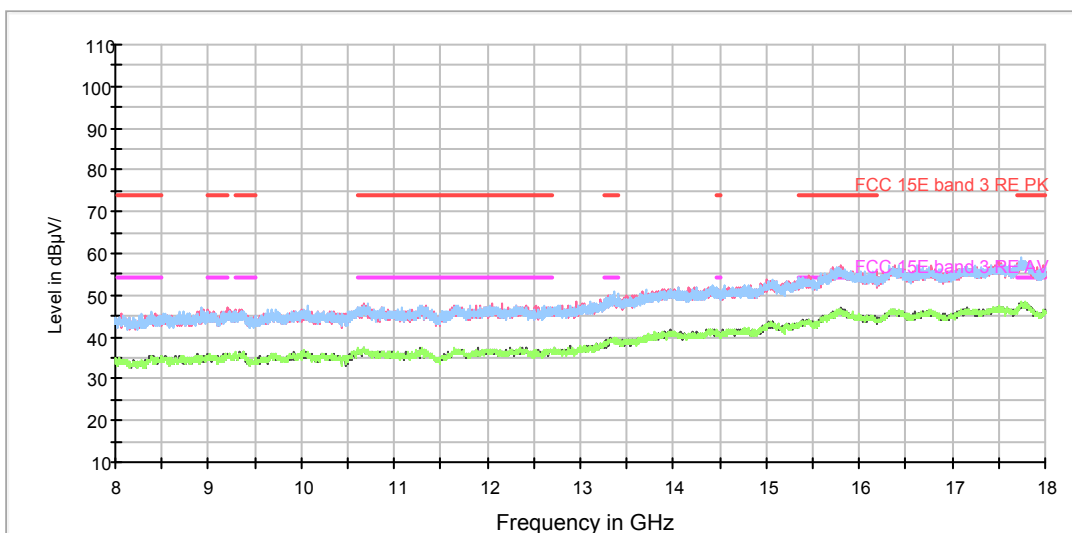


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

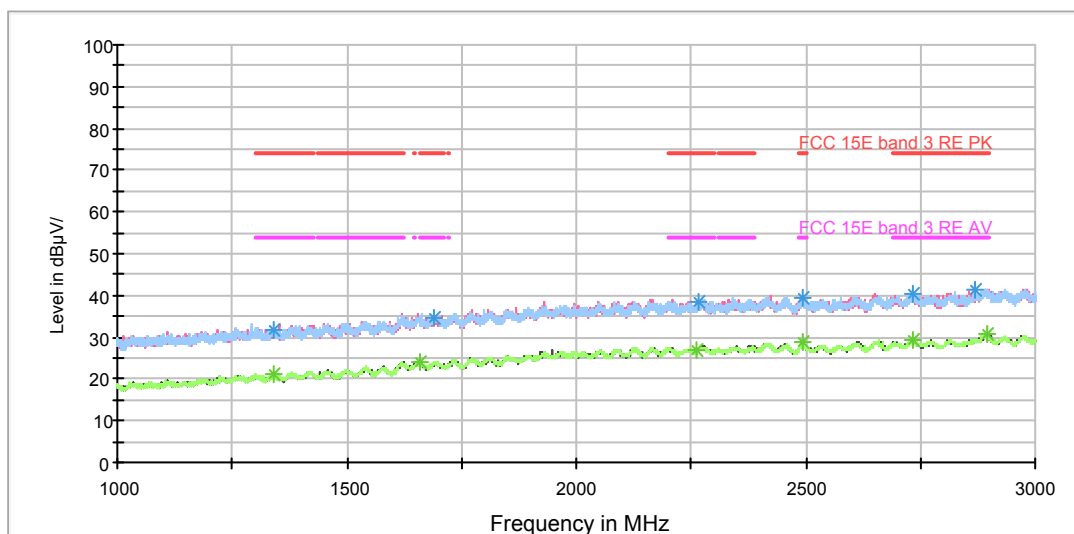
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3825.500000	52.0	200.0	V	30.0	10.5	22.0	74
4156.000000	53.7	200.0	V	84.0	11.9	20.3	74
4628.500000	55.2	200.0	H	0.0	13.4	18.8	74
5089.500000	53.7	200.0	V	48.0	13.9	20.3	74
7405.500000	58.4	200.0	V	0.0	19.5	15.6	74
7740.500000	62.0	200.0	H	145.0	23.1	12.0	74

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

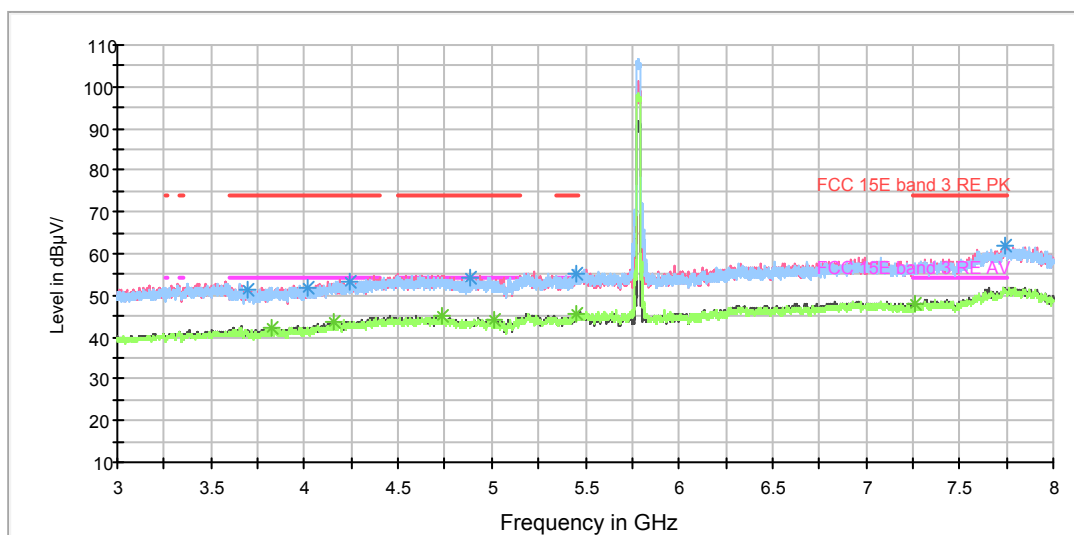
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3745.500000	42.5	200.0	V	1.0	10.1	11.5	54
3961.000000	42.6	200.0	V	39.0	10.9	11.4	54
4126.500000	43.5	200.0	V	267.0	11.6	10.5	54
4505.000000	44.9	200.0	H	119.0	12.9	9.1	54
5027.000000	43.8	200.0	H	172.0	14.2	10.2	54
5432.000000	45.1	200.0	V	1.0	14.2	8.9	54

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

802.11a CH157

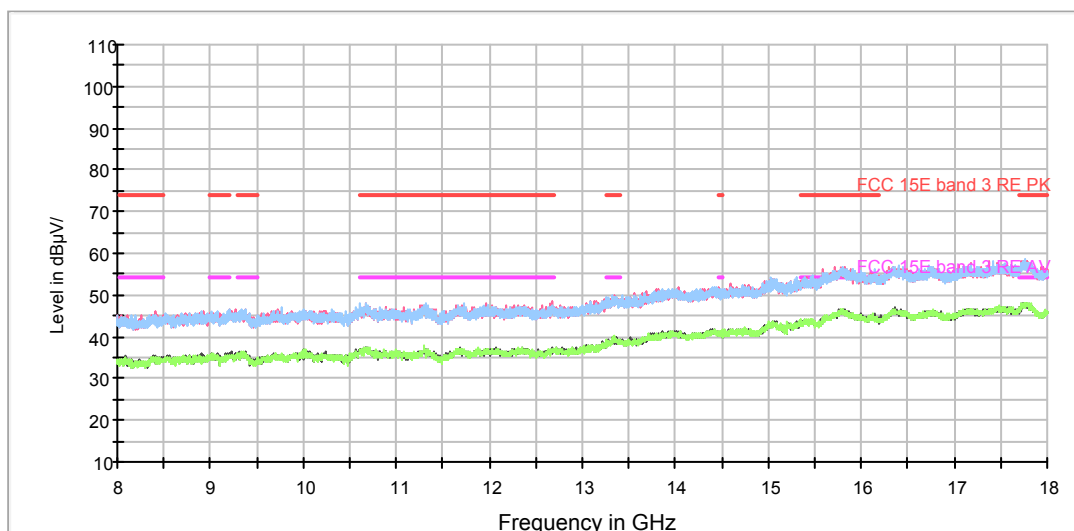


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

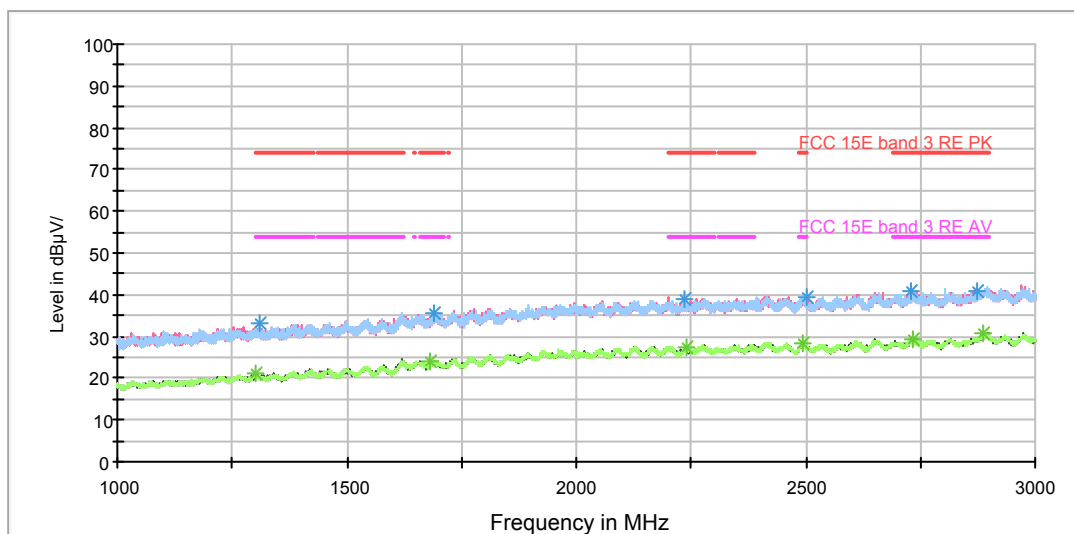
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3700.000000	51.4	200.0	V	198.0	10.1	22.6	74
4020.500000	51.8	200.0	V	79.0	11.1	22.2	74
4244.500000	53.3	200.0	V	89.0	12.0	20.7	74
4889.500000	54.1	200.0	H	99.0	13.8	19.9	74
5446.500000	55.0	200.0	H	266.0	14.3	19.0	74
7739.000000	61.8	200.0	V	0.0	23.1	12.2	74

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

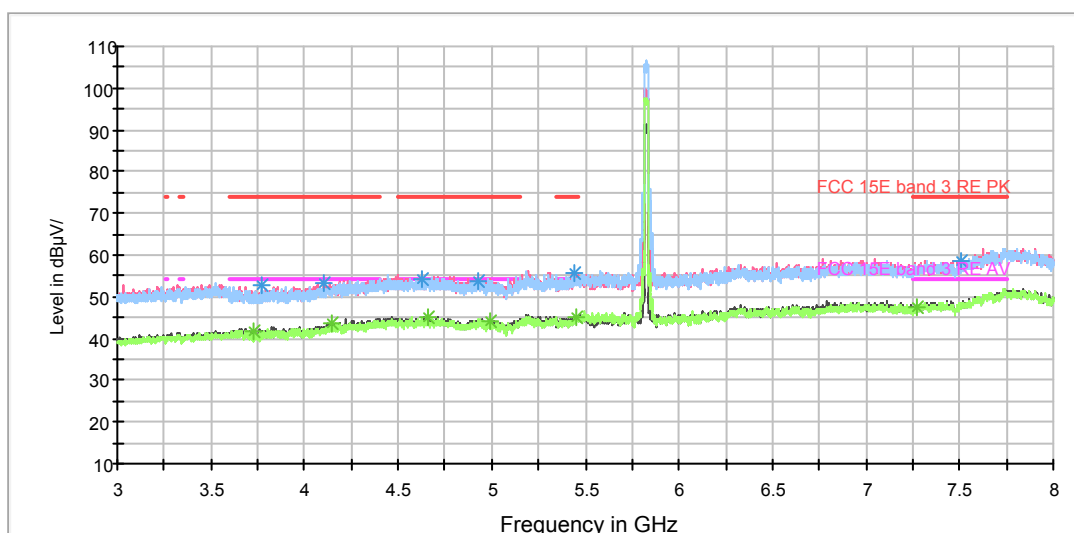
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3823.500000	42.1	200.0	H	347.0	10.4	11.9	54
4152.000000	43.5	200.0	H	266.0	11.8	10.5	54
4732.000000	45.2	200.0	V	43.0	13.8	8.8	54
5011.500000	44.0	200.0	H	0.0	14.3	10.0	54
5452.000000	45.6	200.0	H	200.0	14.3	8.4	54
7259.000000	47.8	200.0	V	0.0	19.0	6.2	54

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

802.11a CH165

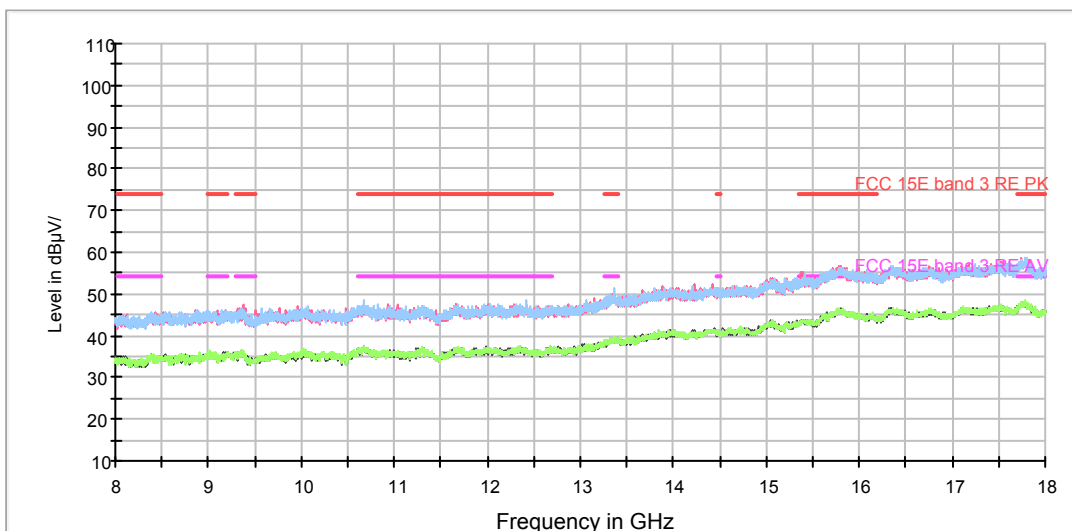


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

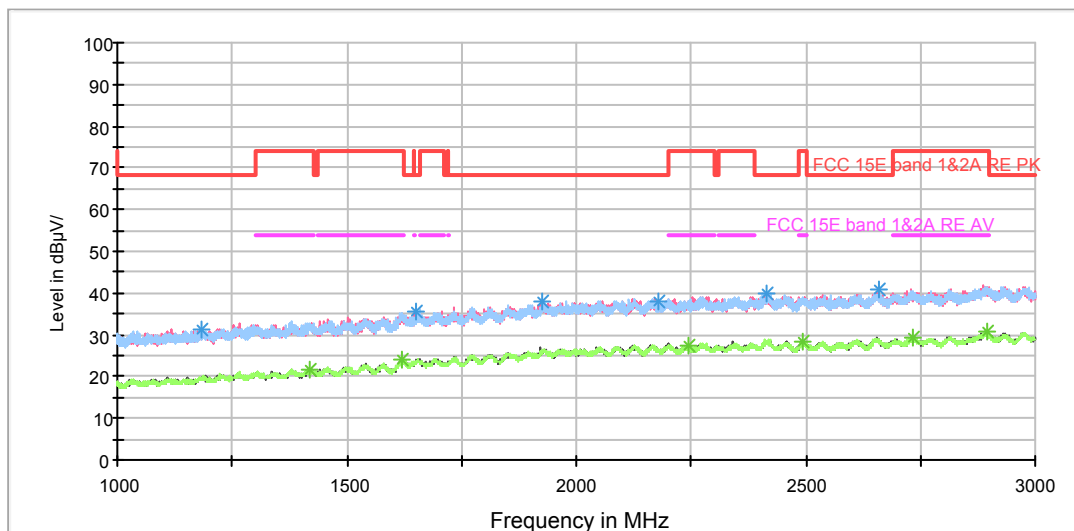
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3769.500000	52.6	200.0	H	273.0	10.2	21.4	74
4104.500000	53.3	200.0	V	300.0	11.5	20.7	74
4625.000000	54.5	200.0	H	209.0	13.4	19.5	74
4927.500000	53.6	200.0	H	0.0	13.8	20.4	74
5440.500000	55.9	100.0	H	214.0	14.2	18.1	74
7512.500000	58.7	100.0	V	298.0	20.2	15.3	74

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

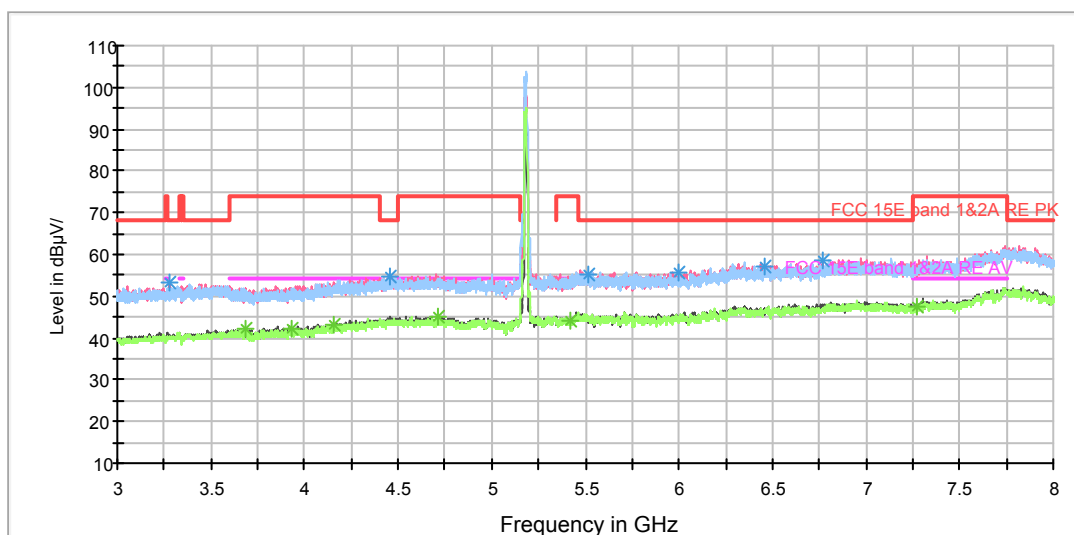
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3723.000000	41.8	200.0	V	108.0	10.0	12.2	54
4149.500000	43.6	200.0	V	226.0	11.8	10.4	54
4657.000000	45.0	200.0	V	352.0	13.4	9.0	54
4990.500000	44.2	200.0	V	334.0	14.0	9.8	54
5447.000000	45.2	200.0	V	72.0	14.3	8.8	54
7275.000000	47.5	200.0	V	117.0	19.1	6.5	54

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

802.11n (HT20) CH36

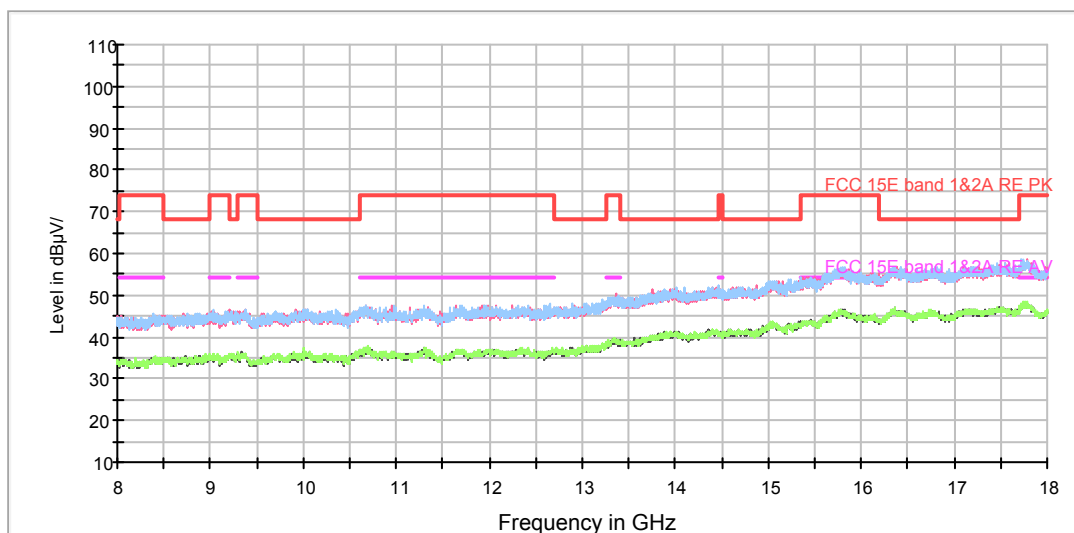


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

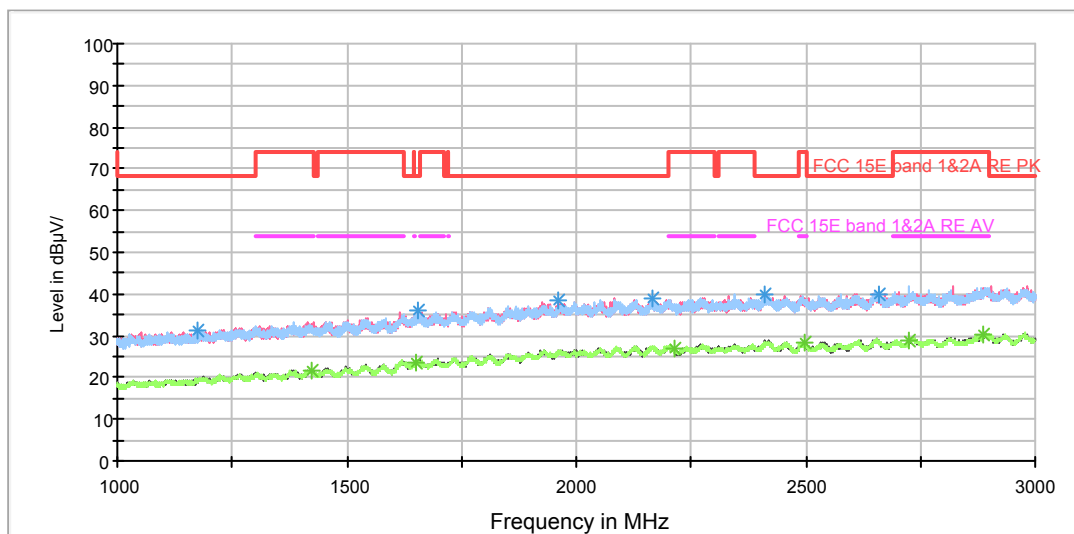
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3274.500000	53.2	200.0	V	78.0	9.0	15.0	68.2
4453.500000	54.9	200.0	V	169.0	13.1	13.3	68.2
5514.000000	55.4	200.0	V	88.0	14.8	12.8	68.2
6003.000000	55.8	200.0	H	234.0	16.3	12.4	68.2
6457.000000	57.2	200.0	H	0.0	17.5	11.0	68.2
6771.000000	58.3	200.0	V	115.0	18.1	9.9	68.2

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

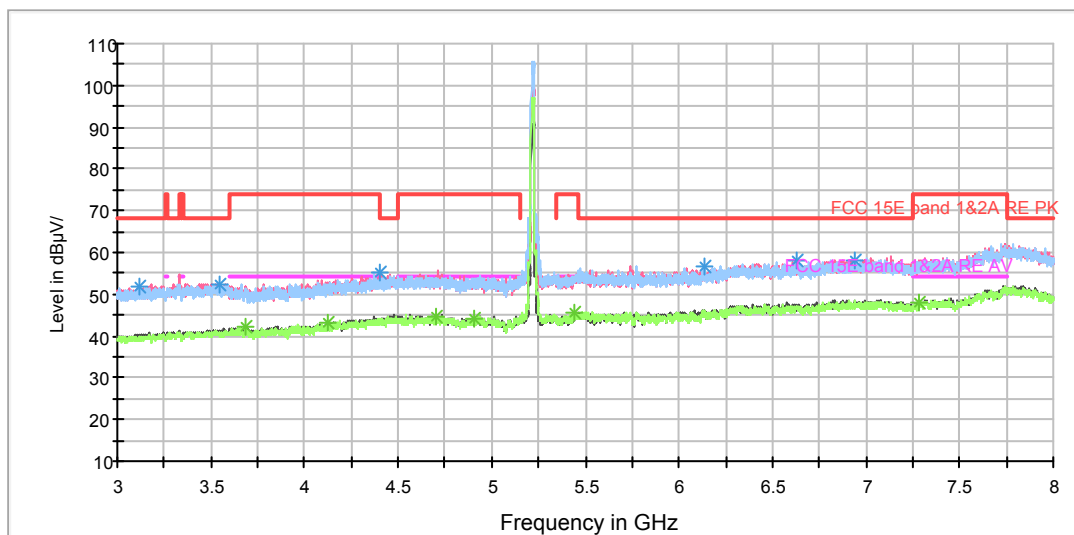
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3683.000000	42.3	200.0	V	42.0	10.3	11.7	54
3927.500000	42.3	200.0	V	0.0	10.9	11.7	54
4153.000000	43.3	200.0	V	7.0	11.8	10.7	54
4712.500000	45.3	200.0	V	151.0	13.8	8.7	54
5416.500000	44.3	200.0	V	24.0	14.1	9.7	54
7268.000000	47.7	200.0	V	217.0	19.1	6.3	54

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

802.11n (HT20) CH44

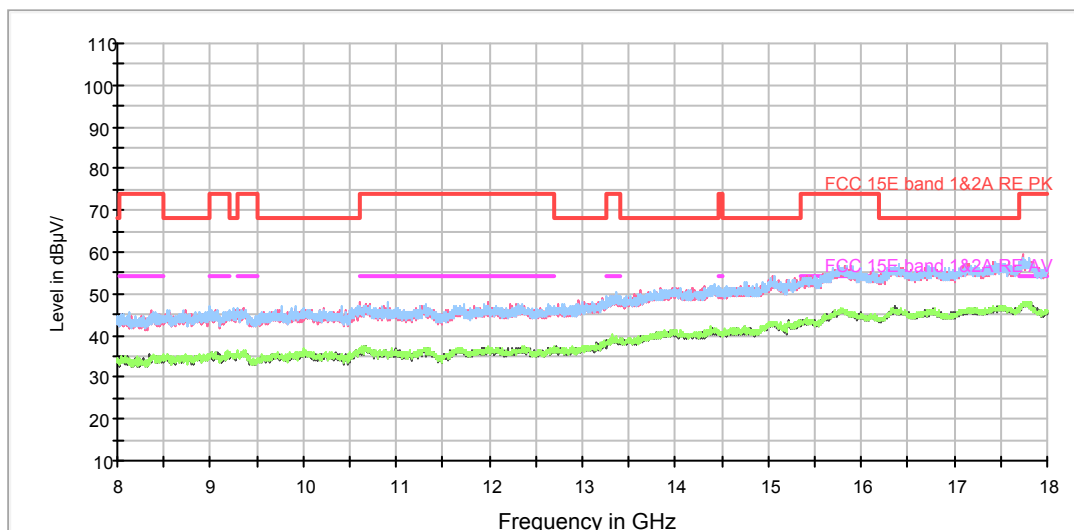


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

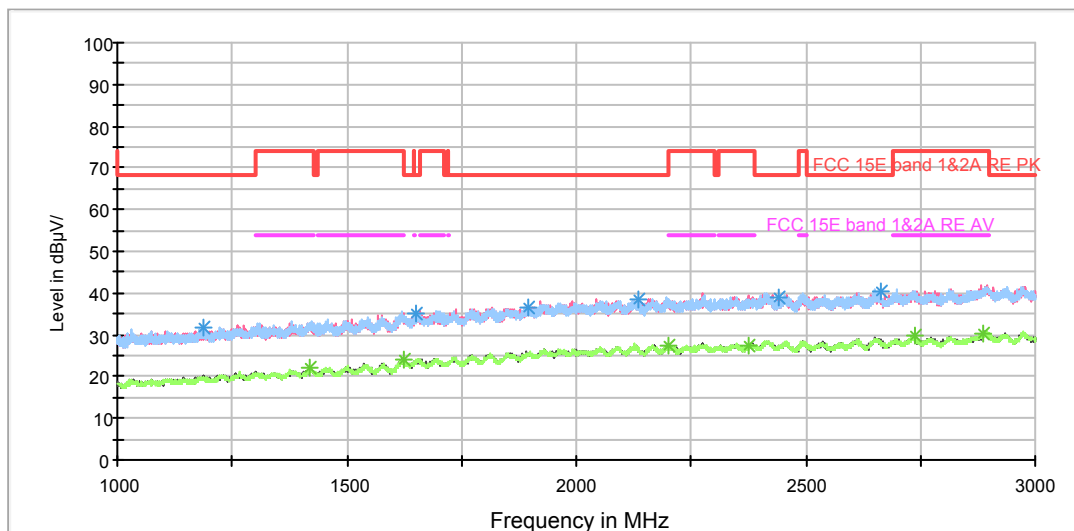
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3116.500000	51.6	200.0	H	193.0	8.3	16.6	68.2
3545.000000	52.5	200.0	V	174.0	9.9	15.7	68.2
4400.000000	55.3	200.0	V	329.0	12.8	12.9	68.2
6132.500000	56.4	200.0	H	228.0	17.2	11.8	68.2
6630.500000	57.8	200.0	V	19.0	17.8	10.4	68.2
6941.500000	58.1	200.0	V	10.0	19.1	10.1	68.2

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

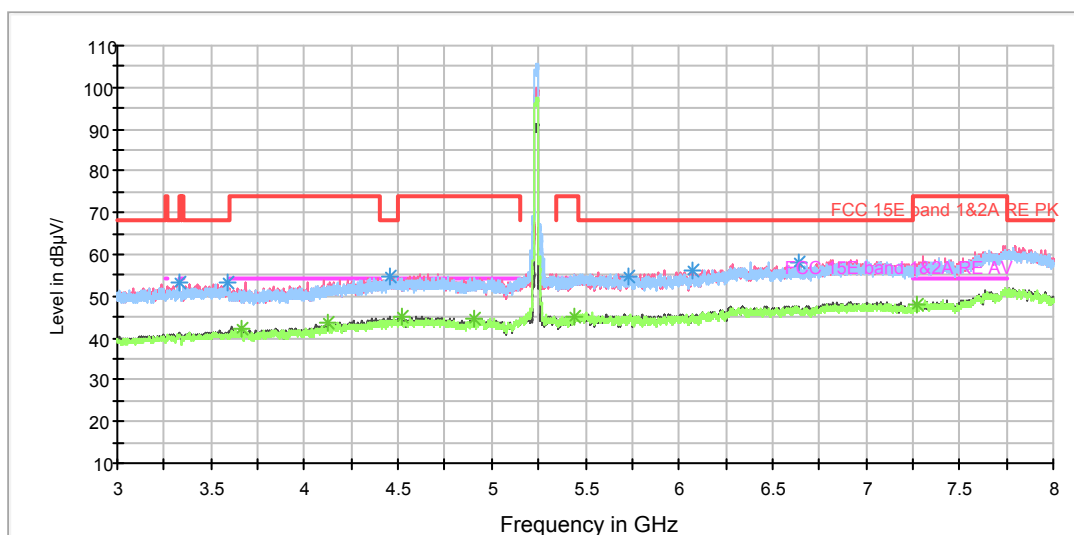
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3686.500000	42.0	200.0	V	102.0	10.2	12.0	54
4124.000000	43.4	200.0	V	0.0	11.6	10.6	54
4706.500000	44.7	200.0	V	349.0	13.7	9.3	54
4905.000000	44.4	200.0	V	55.0	13.9	9.6	54
5441.500000	45.3	100.0	H	196.0	14.3	8.7	54
7283.500000	48.0	200.0	H	255.0	19.2	6.0	54

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

802.11n (HT20) CH48

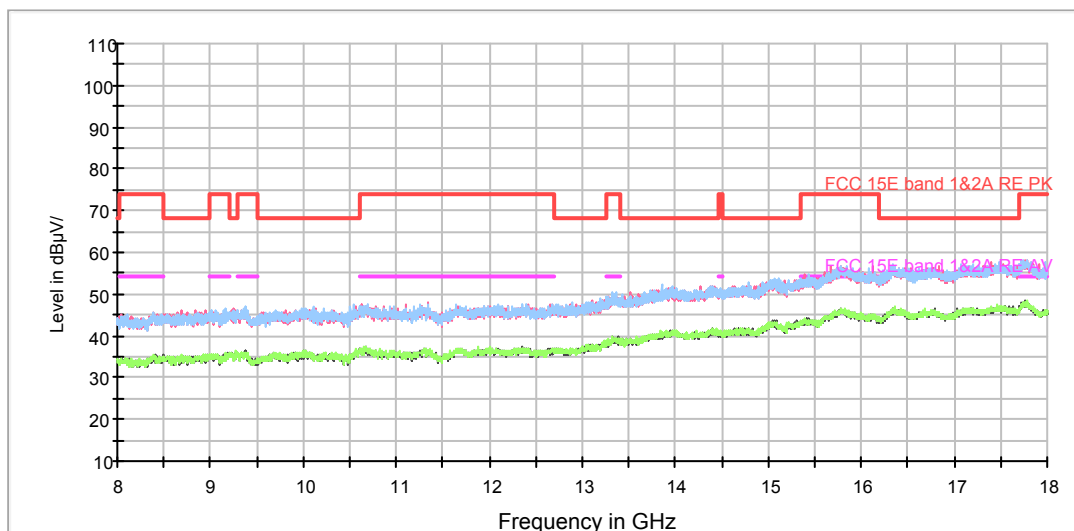


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

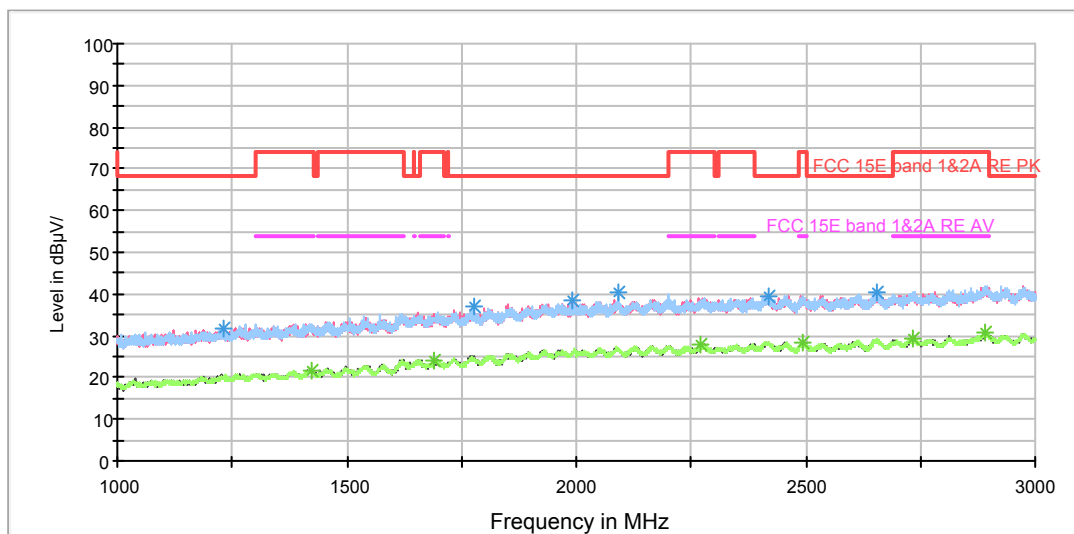
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3329.000000	53.0	200.0	H	228.0	9.6	15.2	68.2
3585.500000	53.1	200.0	H	291.0	10.1	15.1	68.2
4456.000000	54.9	200.0	H	263.0	13.0	13.3	68.2
5728.500000	54.9	200.0	V	7.0	15.9	13.3	68.2
6636.500000	58.3	200.0	V	215.0	17.8	9.9	68.2
7794.000000	62.0	200.0	V	0.0	23.5	6.2	68.2

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

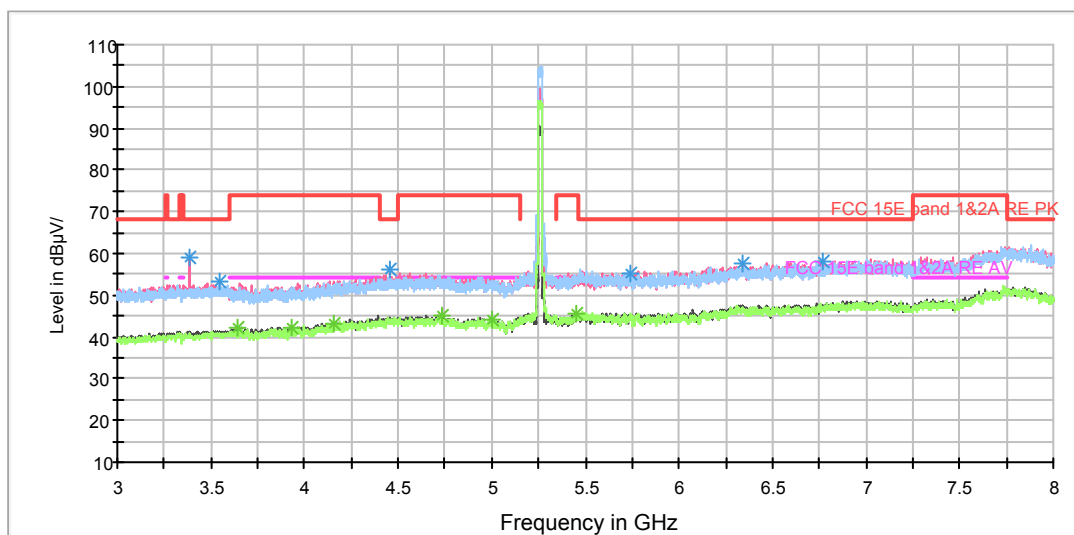
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3663	42.3	200	V	88	10.2	11.7	54
4120.5	43.8	200	V	7	11.6	10.2	54
4520	45	200	V	70	12.9	9.0	54
4901.5	44.6	200	V	150	13.8	9.4	54
5439	45.3	200	H	308	14.2	8.7	54
7275.5	47.9	200	H	191	19.1	6.1	54

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

802.11n (HT20) CH52

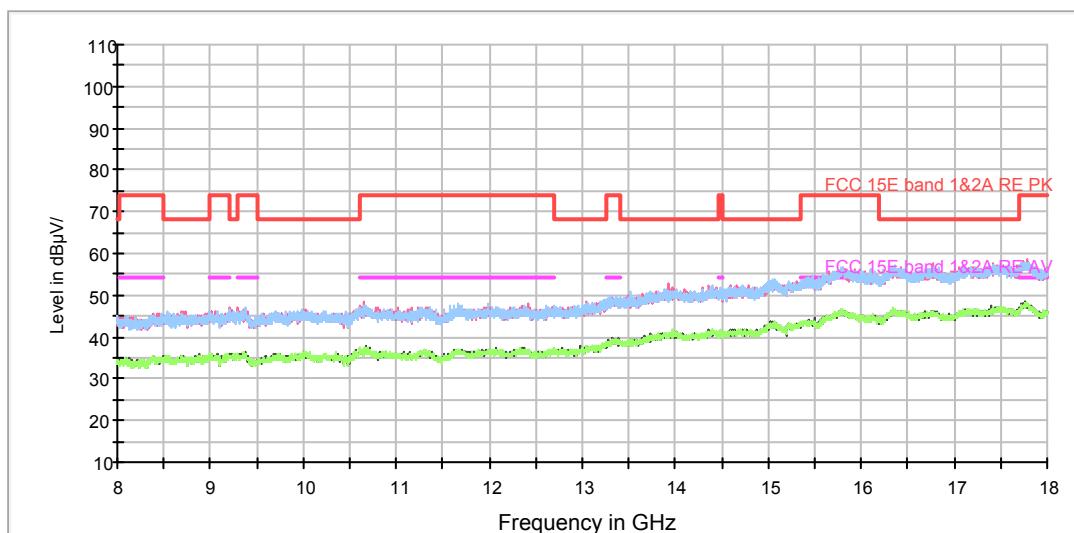


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

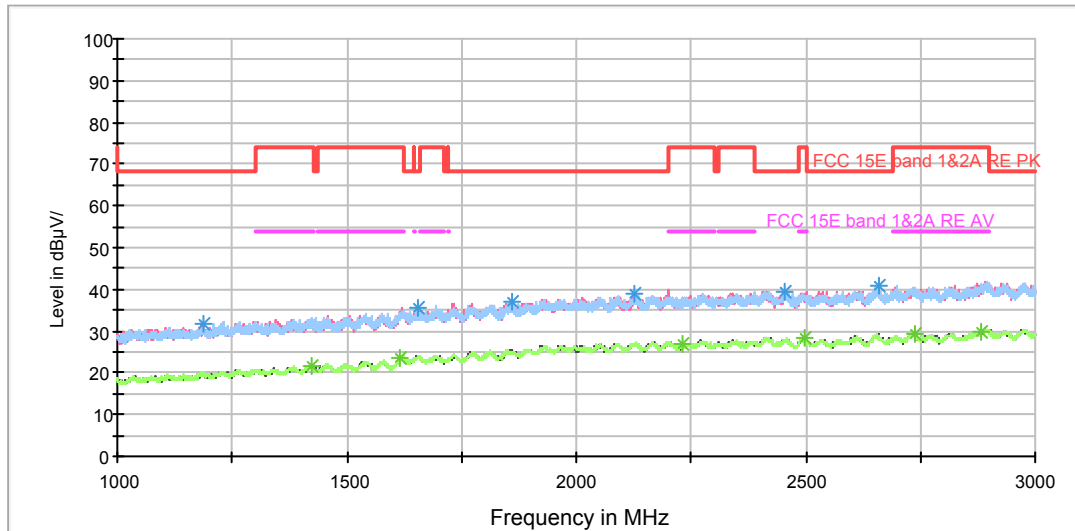
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3381.000000	58.9	200.0	V	181.0	9.5	9.3	68.2
3546.000000	53.4	200.0	H	354.0	9.9	14.8	68.2
4455.000000	56.0	200.0	V	48.0	13.1	12.2	68.2
5737.000000	55.3	200.0	V	145.0	15.8	12.9	68.2
6339.000000	57.4	200.0	V	29.0	17.9	10.8	68.2
6767.500000	58.1	200.0	H	191.0	18.1	10.1	68.2

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

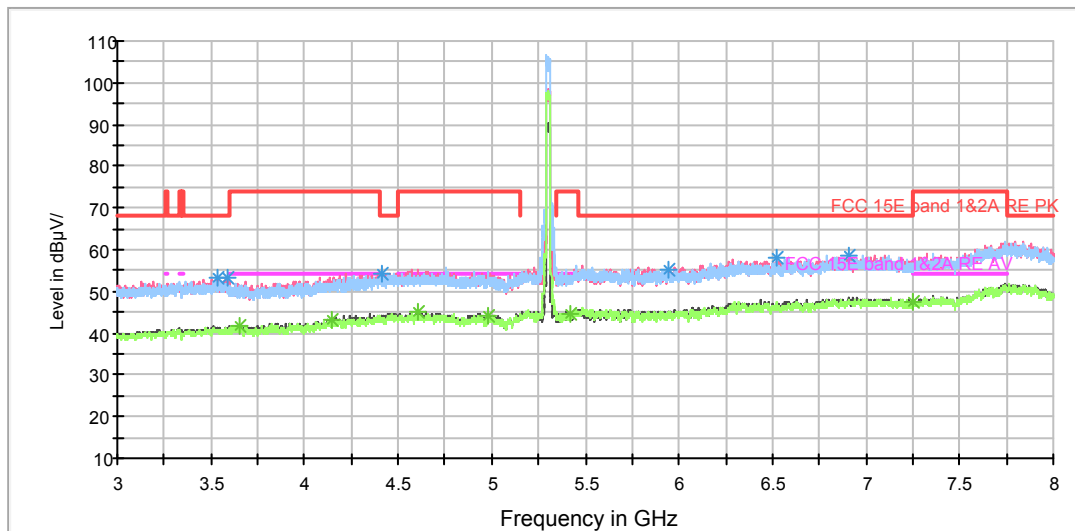
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3647.500000	42.1	200.0	V	0.0	10.2	11.9	54
3928.500000	42.3	200.0	V	237.0	10.9	11.7	54
4158.000000	43.3	200.0	V	11.0	11.9	10.7	54
4730.500000	45.1	200.0	V	191.0	13.8	8.9	54
5007.000000	44.1	200.0	V	56.0	14.2	9.9	54
5454.000000	45.6	200.0	H	291.0	14.4	8.4	54

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

802.11n (HT20) CH60

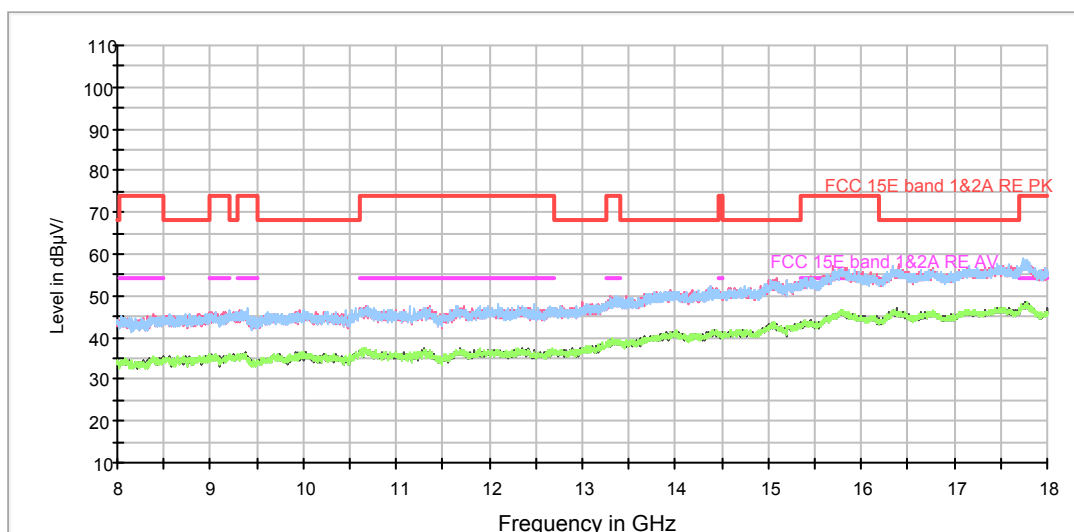


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

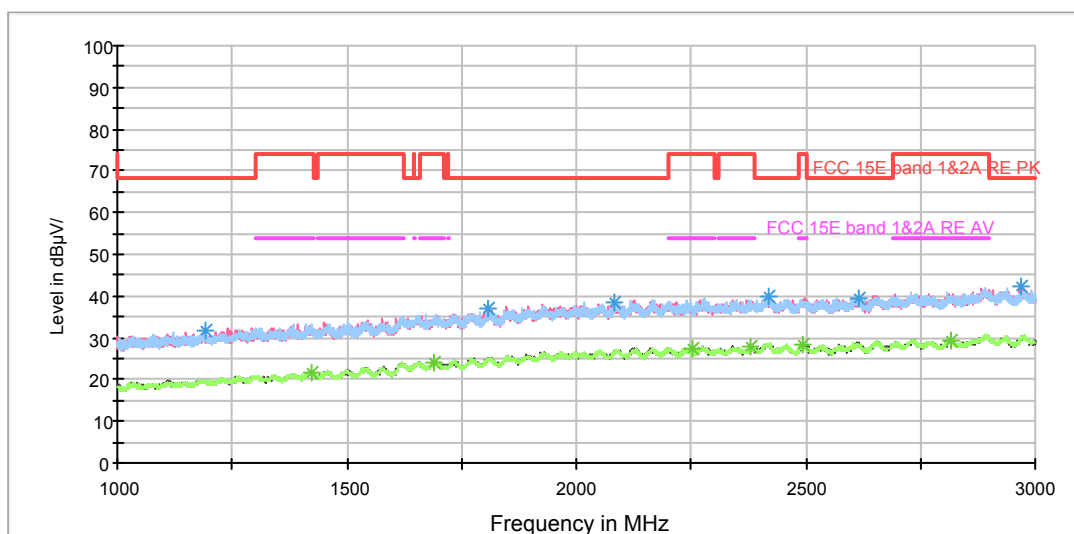
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3531.500000	53.4	200.0	V	264.0	9.9	14.8	68.2
3590.000000	53.1	200.0	V	90.0	10.1	15.1	68.2
4413.000000	54.5	200.0	V	80.0	12.9	13.7	68.2
5939.000000	55.2	200.0	V	60.0	16.1	13.0	68.2
6518.000000	58.3	200.0	H	191.0	17.5	9.9	68.2
6909.000000	58.8	100.0	V	64.0	18.9	9.4	68.2

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

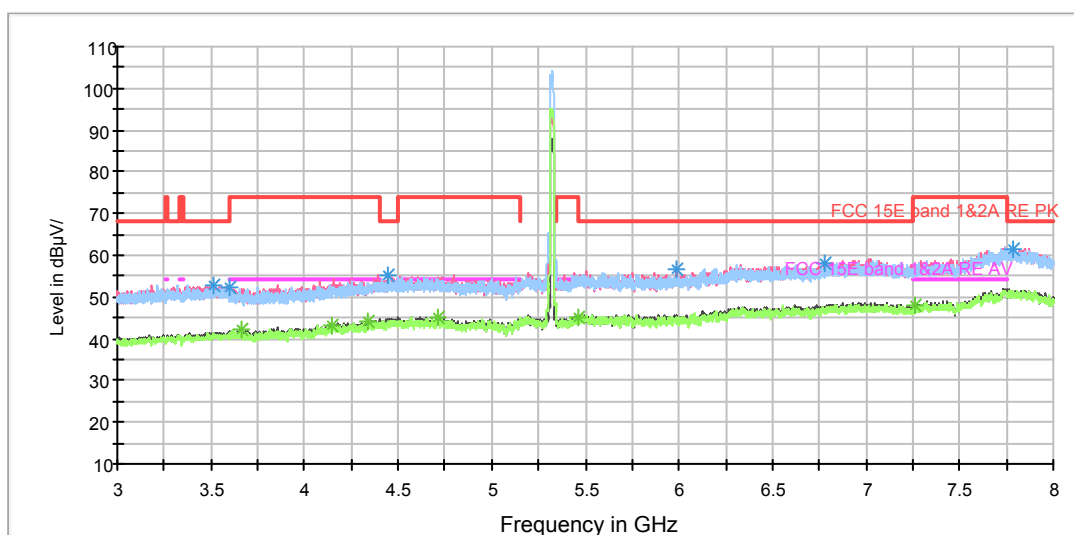
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3648.000000	41.9	200.0	V	180.0	10.2	12.1	54
4143.500000	43.2	200.0	H	255.0	11.8	10.8	54
4604.500000	45.0	200.0	V	14.0	13.3	9.0	54
4977.000000	44.3	200.0	H	16.0	13.9	9.7	54
5421.500000	44.6	200.0	H	282.0	14.1	9.4	54
7250.500000	47.6	200.0	V	254.0	18.9	6.4	54

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

802.11n (HT20) CH64

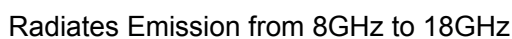


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



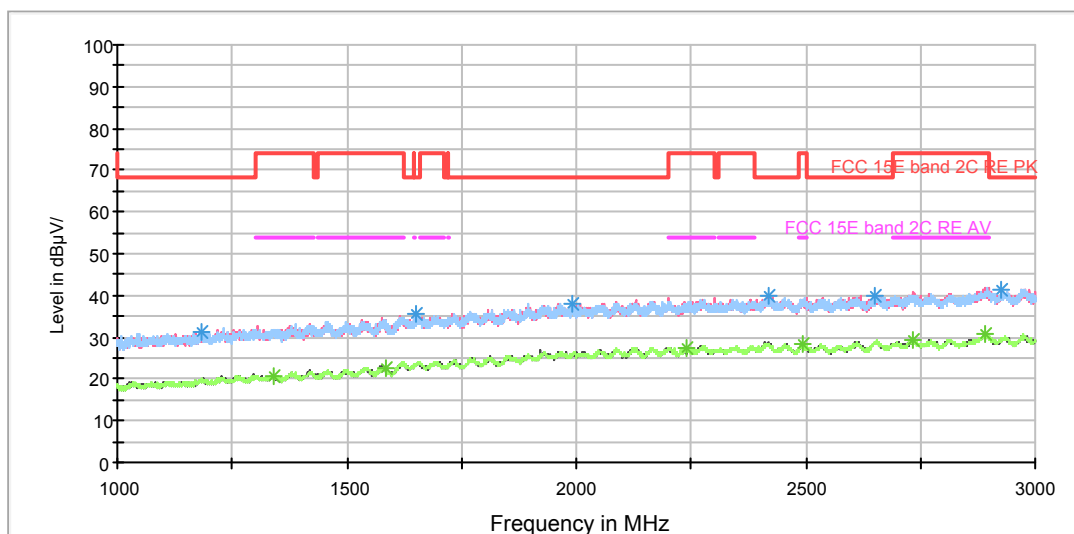
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3509.000000	52.9	200.0	V	286.0	10.0	15.3	68.2
3597.000000	52.5	200.0	V	6.0	10.2	15.7	68.2
4448.000000	55.3	200.0	V	33.0	13.1	12.9	68.2
5989.500000	56.7	200.0	V	51.0	16.2	11.5	68.2
6774.500000	57.8	200.0	V	114.0	18.1	10.4	68.2
7789.500000	61.4	100.0	V	119.0	23.5	6.8	68.2

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

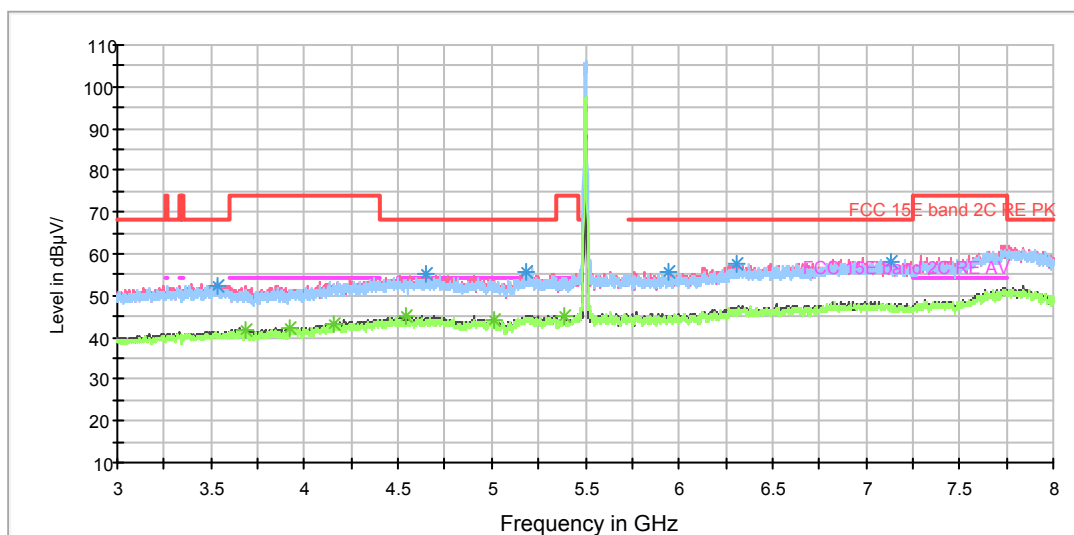
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3663.000000	42.4	200.0	H	342.0	10.2	11.6	54
4149.500000	43.3	200.0	V	132.0	11.8	10.7	54
4338.000000	44.1	200.0	V	6.0	12.6	9.9	54
4711.500000	45.0	200.0	V	15.0	13.8	9.0	54
5465.500000	45.3	200.0	V	132.0	14.4	8.7	54
7261.000000	48.0	200.0	H	315.0	19.0	6.0	54

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

802.11n (HT20) CH100

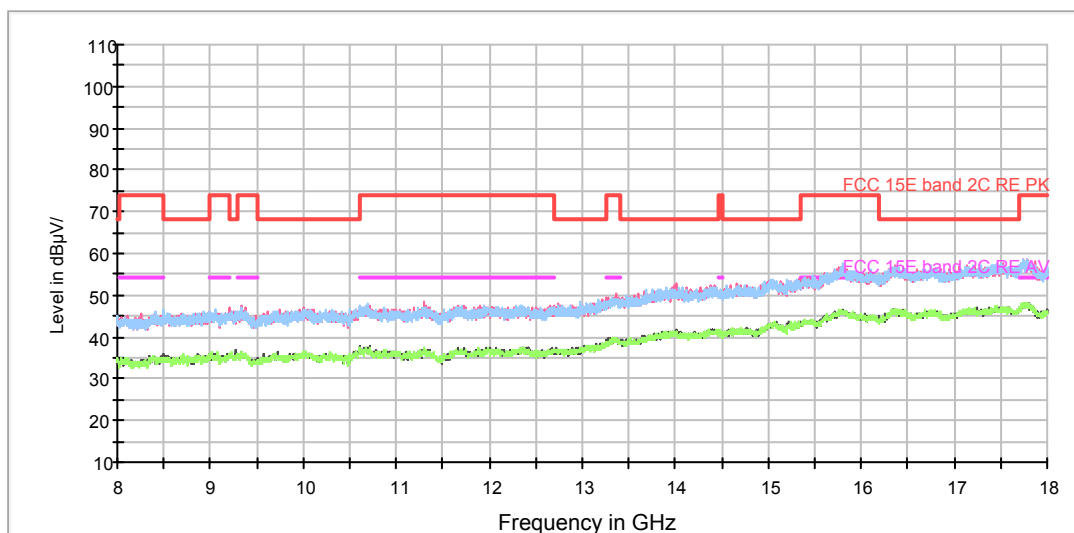


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

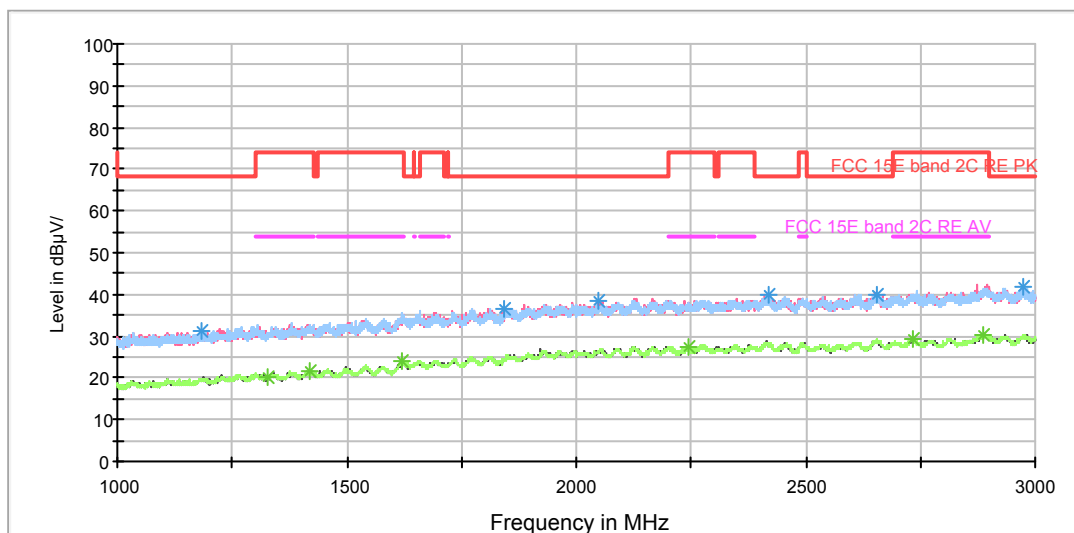
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3538.500000	52.5	200.0	V	223.0	9.8	15.7	68.2
4649.500000	55.1	200.0	V	233.0	13.4	13.1	68.2
5187.500000	55.9	200.0	V	242.0	14.7	12.3	68.2
5947.500000	55.6	100.0	V	302.0	16.1	12.6	68.2
6312.500000	57.8	200.0	V	178.0	17.7	10.4	68.2
7135.500000	58.1	200.0	H	232.0	19.1	10.1	68.2

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

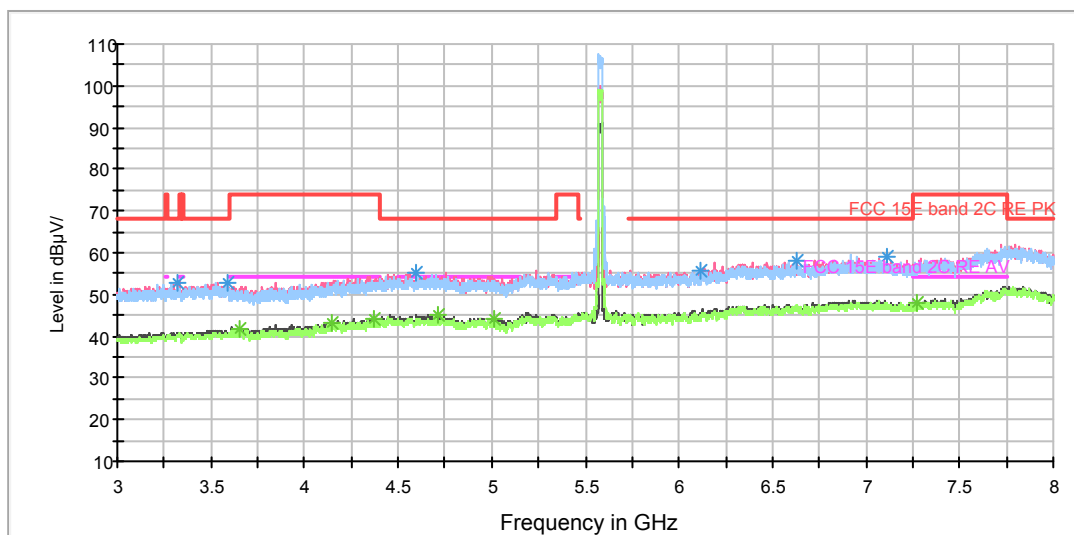
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3689.000000	41.9	200.0	V	168.0	10.2	12.1	54
3922.000000	42.0	200.0	V	0.0	10.9	12.0	54
4154.000000	43.2	200.0	V	69.0	11.8	10.8	54
4547.000000	45.0	200.0	V	196.0	13.0	9.0	54
5012.000000	44.1	200.0	V	1.0	14.3	9.9	54
5383.500000	45.1	200.0	H	268.0	14.1	8.9	54

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

802.11n (HT20) CH116

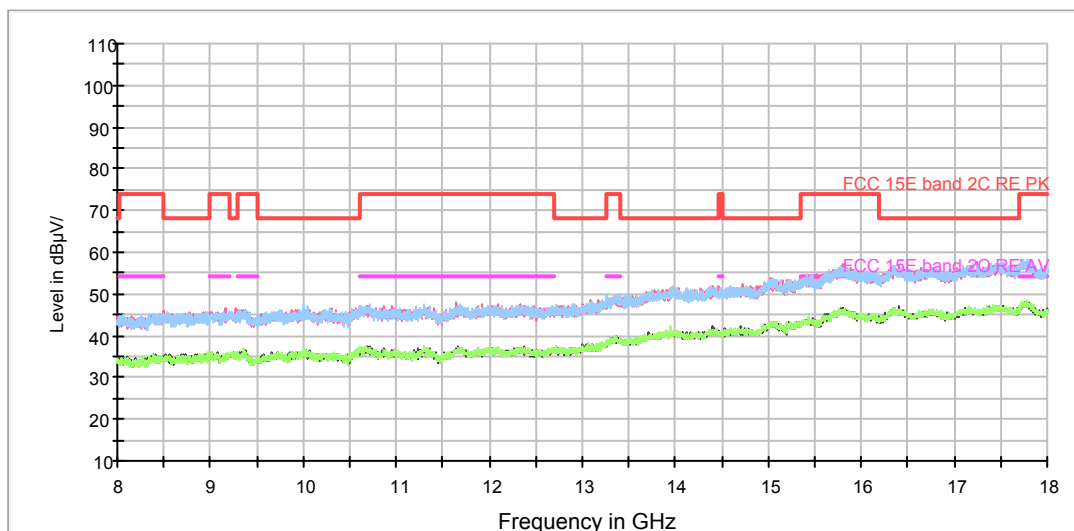


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

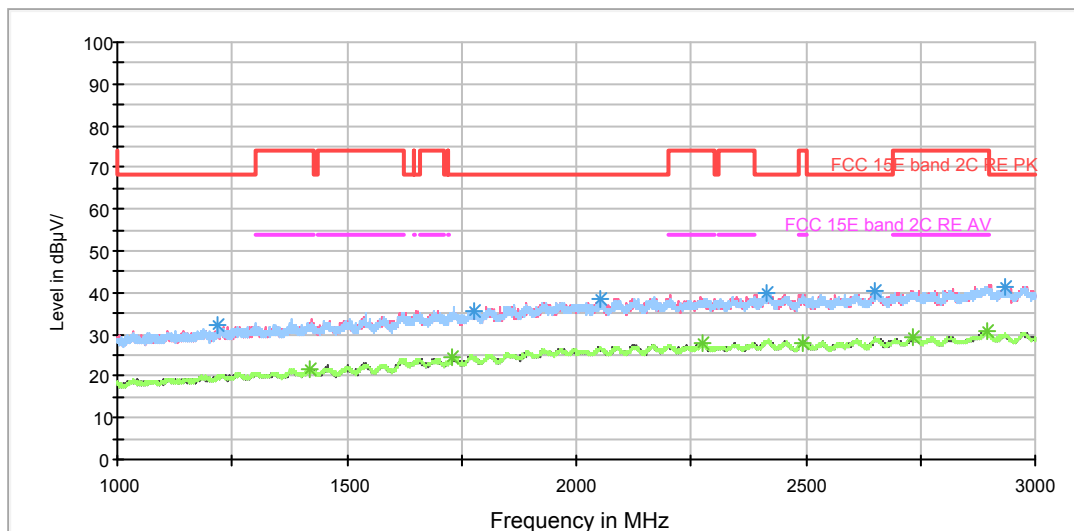
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3318.500000	53.0	200.0	V	0.0	9.5	15.2	68.2
3585.500000	52.9	200.0	V	105.0	10.1	15.3	68.2
4594.000000	55.3	200.0	V	0.0	13.3	12.9	68.2
6116.000000	55.6	200.0	V	0.0	17.2	12.6	68.2
6633.500000	58.1	200.0	V	188.0	17.8	10.1	68.2
7112.000000	58.8	200.0	V	51.0	19.1	9.4	68.2

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

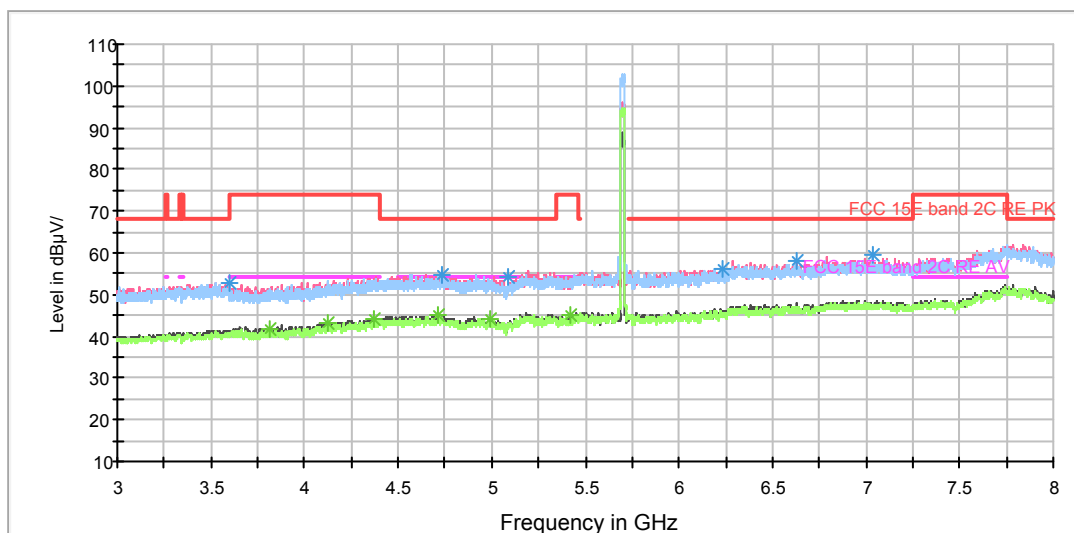
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3652.000000	41.8	200.0	V	115.0	10.2	12.2	54
4150.000000	43.2	200.0	V	244.0	11.8	10.8	54
4374.500000	44.3	200.0	H	309.0	12.7	9.7	54
4715.000000	45.0	200.0	V	51.0	13.8	9.0	54
5014.000000	44.1	200.0	V	87.0	14.3	9.9	54
7275.000000	47.8	200.0	V	51.0	19.1	6.2	54

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

802.11n (HT20) CH140

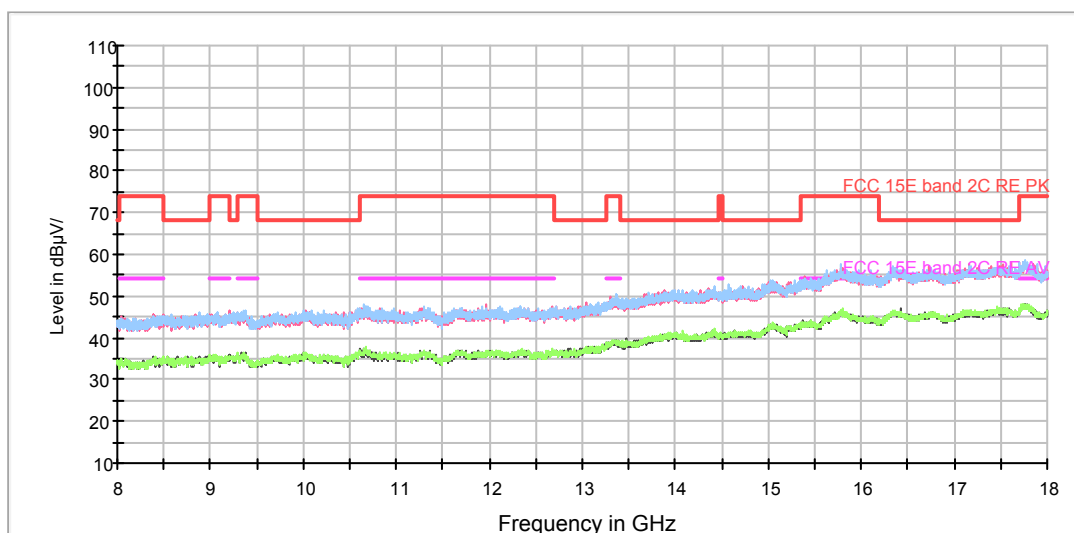


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

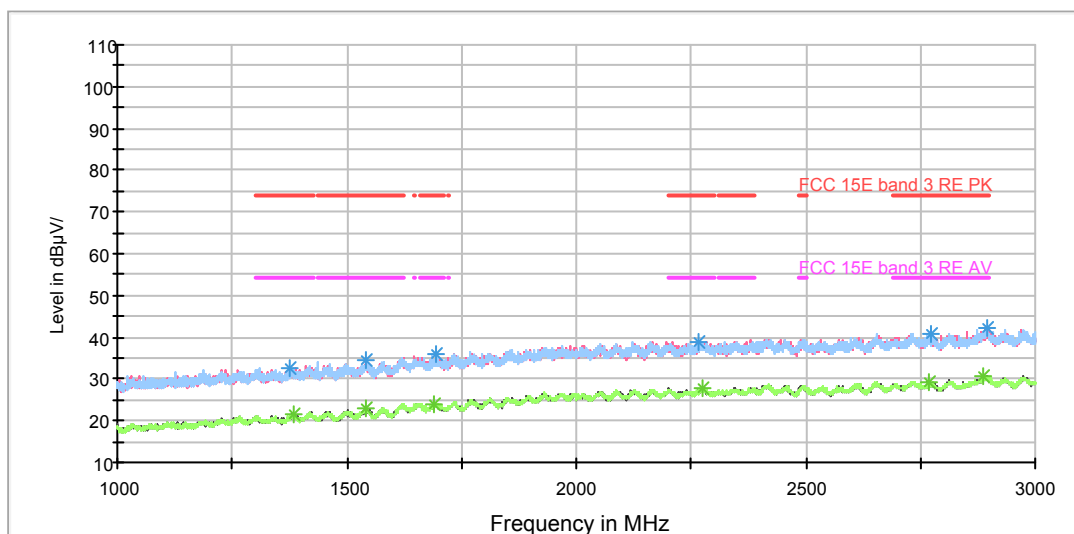
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3599.500000	52.8	200.0	H	11.0	10.2	15.4	68.2
4733.000000	54.8	200.0	V	84.0	13.8	13.4	68.2
5083.000000	54.1	200.0	H	116.0	13.9	14.1	68.2
6229.000000	56.0	100.0	H	341.0	17.3	12.2	68.2
6625.000000	58.1	200.0	V	57.0	17.8	10.1	68.2
7031.500000	59.4	200.0	H	325.0	18.8	8.8	68.2

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

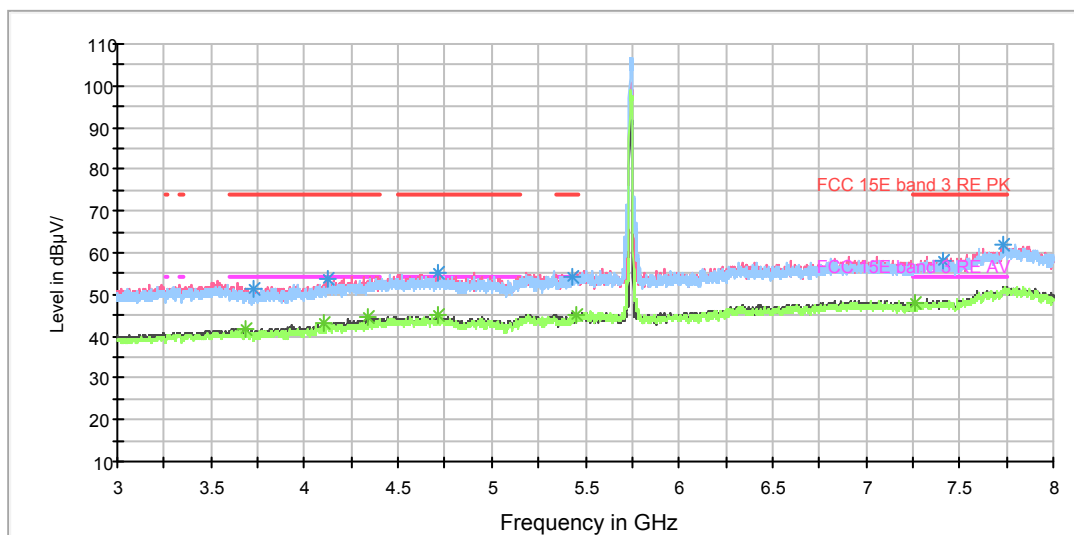
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3818.000000	41.8	200.0	H	189.0	10.4	12.2	54
4126.000000	43.2	200.0	V	17.0	11.6	10.8	54
4366.000000	44.0	200.0	V	57.0	12.7	10.0	54
4717.000000	45.1	200.0	V	102.0	13.8	8.9	54
4990.000000	44.0	200.0	V	28.0	14.0	10.0	54
5418.000000	44.9	200.0	V	57.0	14.1	9.1	54

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

802.11n (HT20) CH149

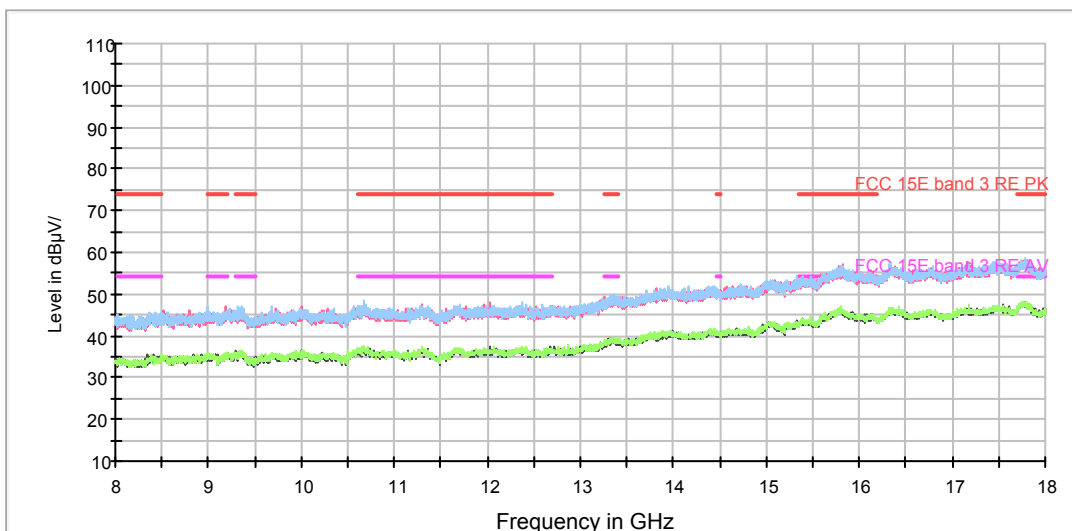


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

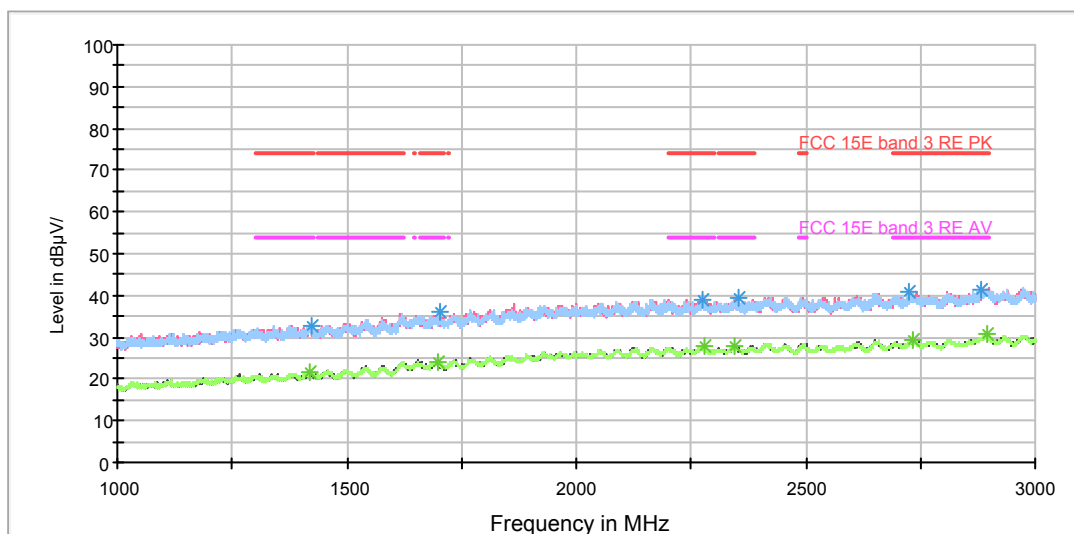
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3724.500000	51.4	200.0	V	0.0	10.0	22.6	74
4124.000000	53.7	200.0	V	100.0	11.6	20.3	74
4716.000000	55.1	200.0	V	7.0	13.8	18.9	74
5426.500000	54.2	200.0	V	79.0	14.1	19.8	74
7413.000000	58.3	200.0	V	255.0	19.5	15.7	74
7732.000000	61.8	200.0	V	25.0	23.0	12.2	74

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

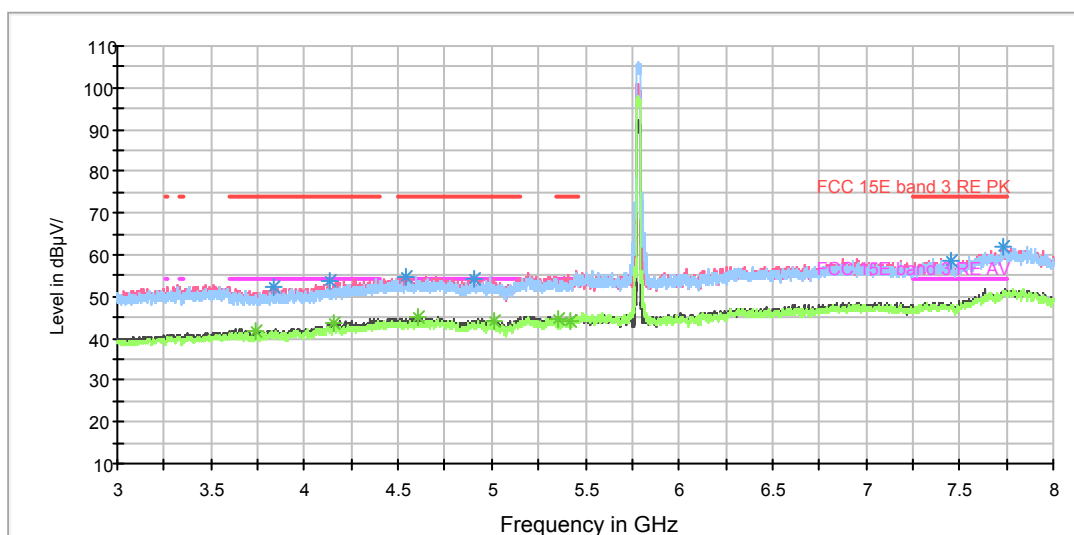
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3687.000000	41.8	200.0	V	16.0	10.2	12.2	54
4107.000000	43.1	200.0	V	154.0	11.5	10.9	54
4339.000000	44.4	200.0	V	0.0	12.6	9.6	54
4713.500000	45.1	200.0	V	109.0	13.8	8.9	54
5449.500000	45.3	200.0	V	7.0	14.3	8.7	54
7260.500000	47.9	200.0	V	7.0	19.0	6.1	54

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

802.11n (HT20) CH157

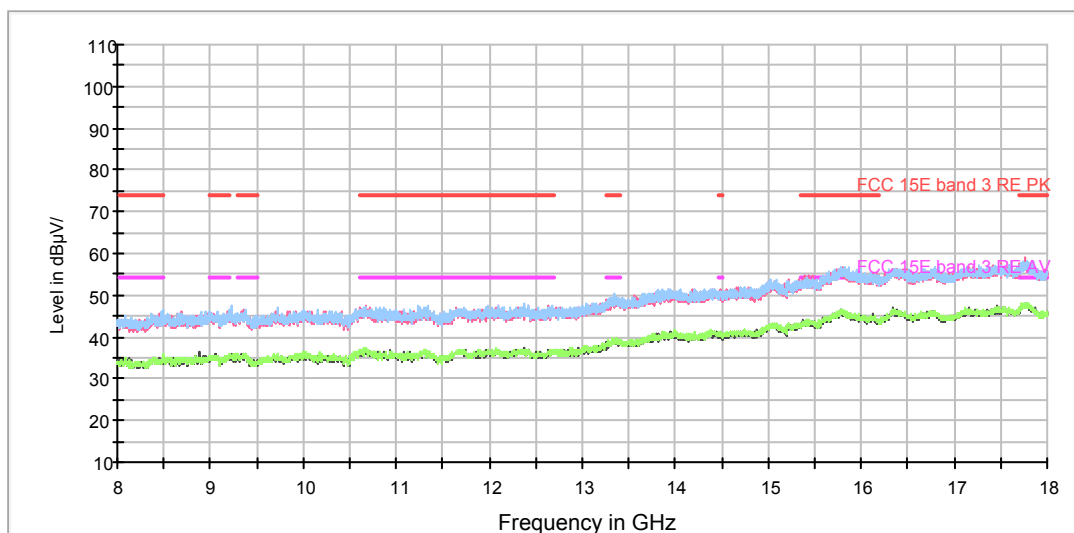


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

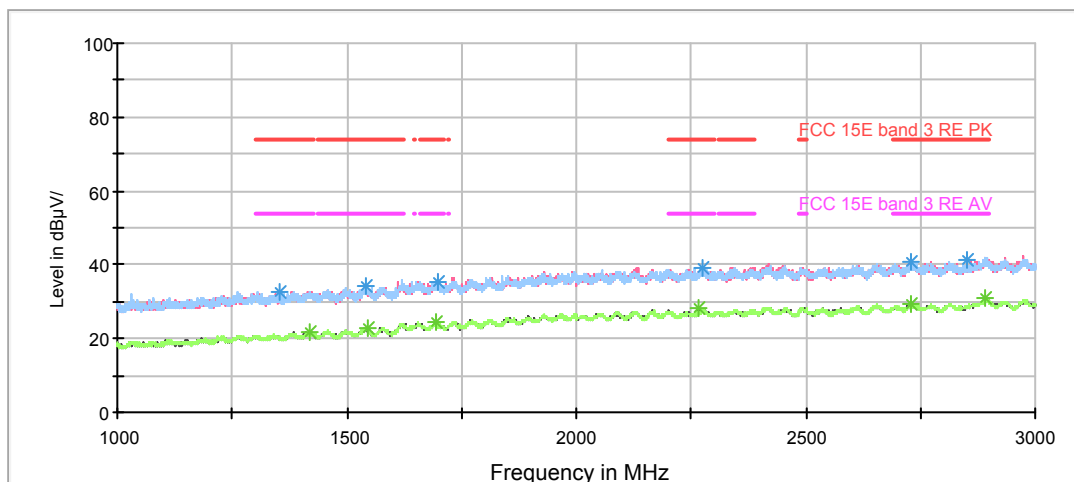
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3840.000000	52.1	200.0	V	137.0	10.5	21.9	74
4138.500000	53.6	200.0	V	137.0	11.7	20.4	74
4542.500000	54.7	200.0	V	74.0	13.0	19.3	74
4906.500000	54.1	200.0	V	56.0	13.9	19.9	74
7454.000000	58.4	200.0	H	313.0	19.8	15.6	74
7737.500000	62.0	200.0	H	359.0	23.1	12.0	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3736.000000	41.8	200.0	V	110.0	10.0	12.2	54
4158.000000	43.8	200.0	V	0.0	11.9	10.2	54
4609.500000	45.1	200.0	V	340.0	13.3	8.9	54
5011.000000	44.0	200.0	V	220.0	14.3	10.0	54
5360.000000	44.4	200.0	V	0.0	14.3	9.6	54
5415.500000	44.3	200.0	V	147.0	14.1	9.7	54

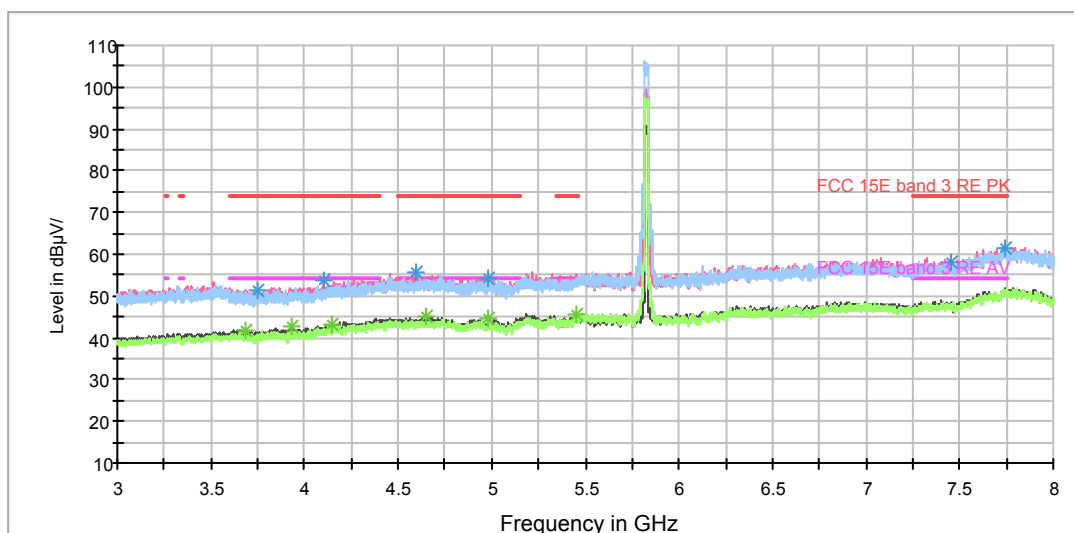
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH165



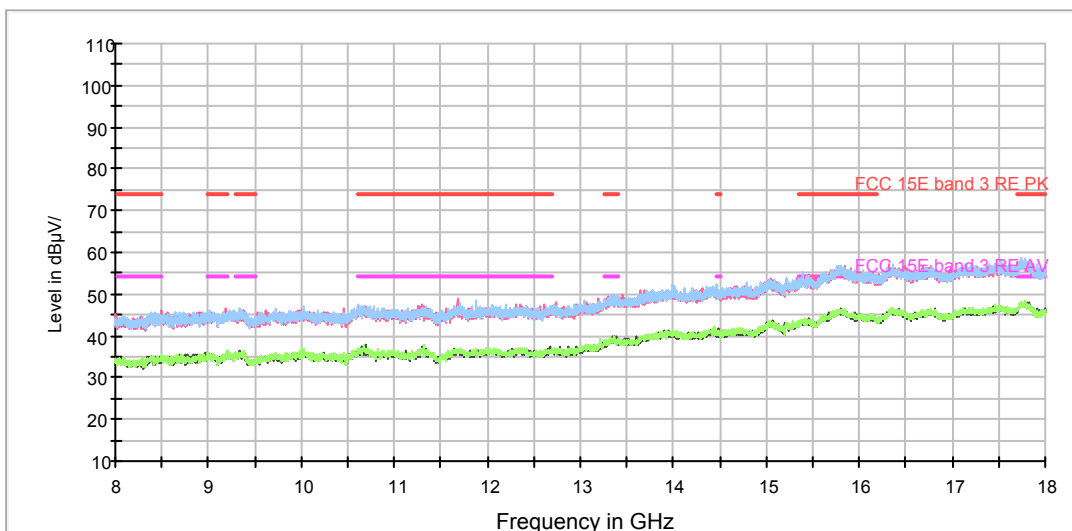
Comment

Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

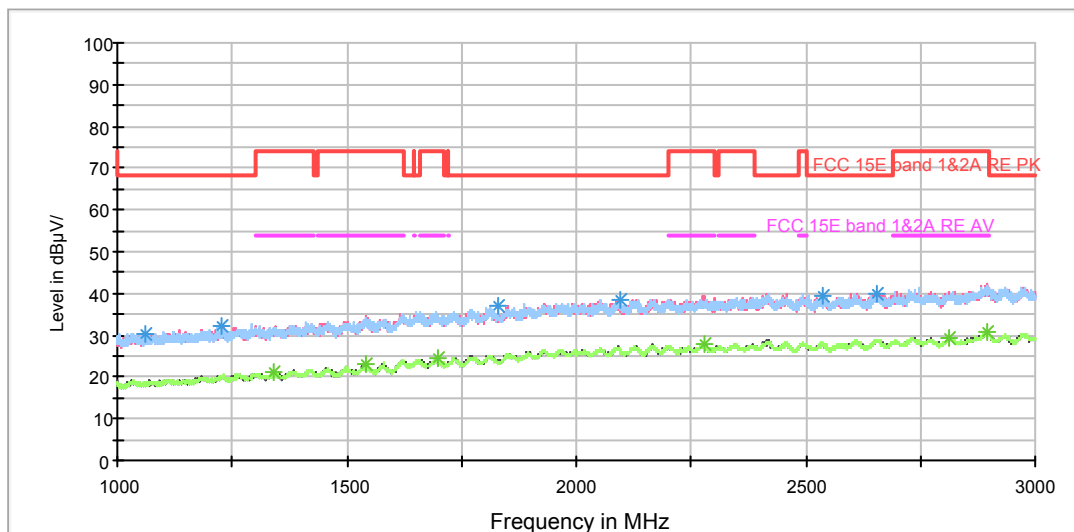
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3754.000000	51.1	200.0	H	116.0	10.1	22.9	74
4105.500000	53.5	200.0	V	95.0	11.5	20.5	74
4600.000000	55.8	200.0	V	59.0	13.3	18.2	74
4986.000000	54.2	200.0	V	252.0	14.0	19.8	74
7455.000000	57.8	200.0	H	252.0	19.8	16.2	74
7741.000000	61.6	200.0	V	23.0	23.2	12.4	74

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

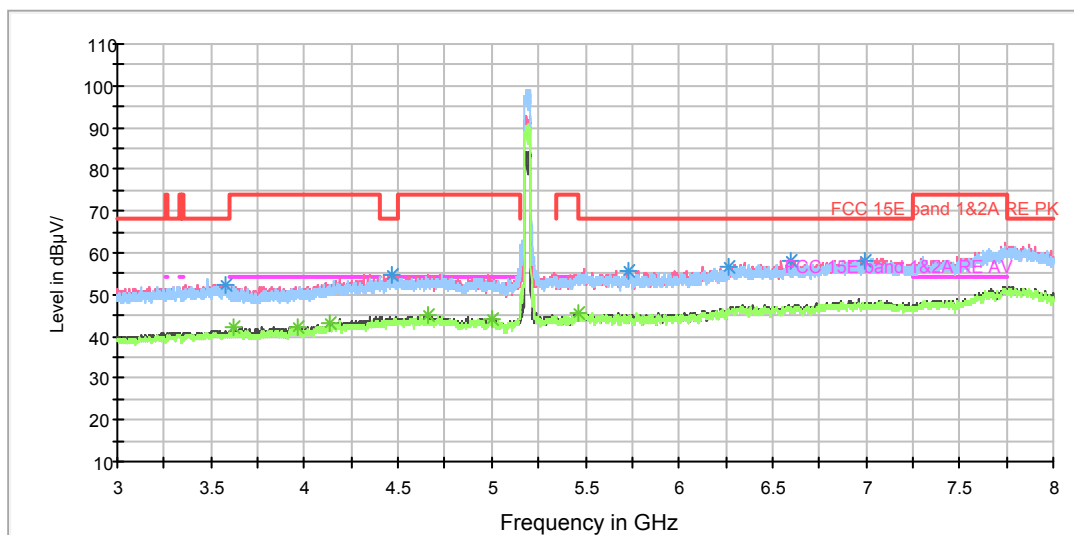
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3686.500000	41.7	200.0	V	59.0	10.2	12.3	54
3933.000000	42.5	200.0	V	177.0	10.9	11.5	54
4149.000000	42.9	200.0	V	87.0	11.8	11.1	54
4649.000000	45.0	200.0	V	95.0	13.4	9.0	54
4982.000000	44.5	200.0	V	196.0	13.9	9.5	54
5452.500000	45.6	200.0	V	50.0	14.3	8.4	54

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

802.11n (HT40) CH38

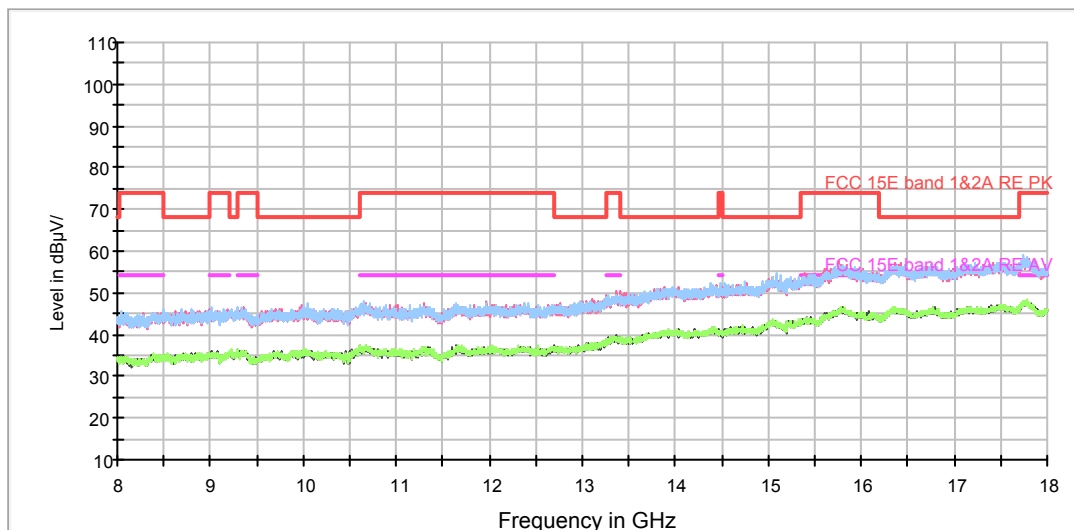


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

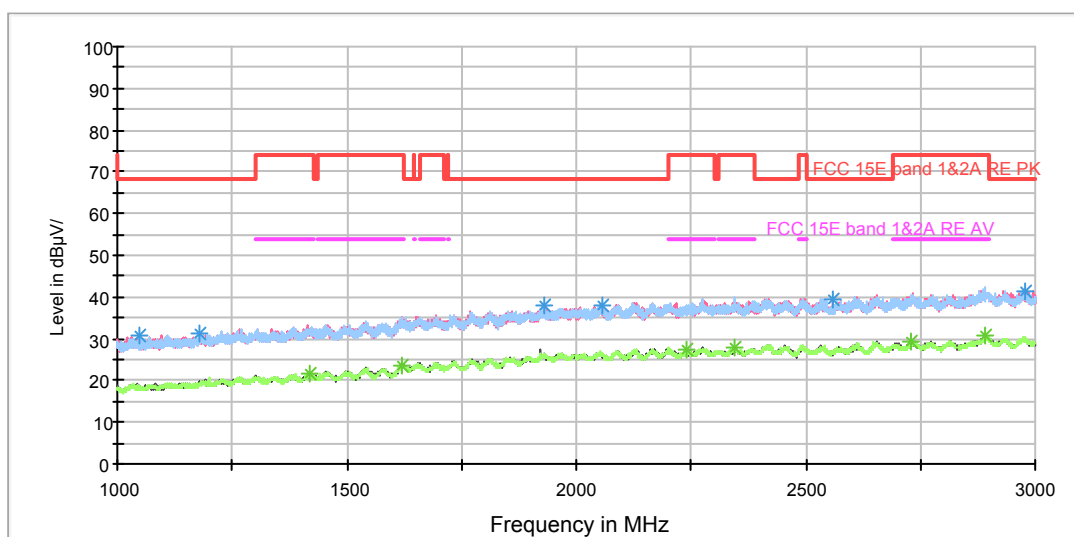
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3576.000000	52.5	200.0	H	187.0	10.0	15.7	68.2
4471.000000	54.9	200.0	V	175.0	13.0	13.3	68.2
5733.000000	55.5	200.0	V	175.0	15.8	12.7	68.2
6596.000000	58.1	200.0	V	0.0	17.7	10.1	68.2
6993.500000	58.2	200.0	V	0.0	19.0	10.0	68.2
6270.000000	56.7	200.0	V	325.0	17.5	11.5	68.2

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

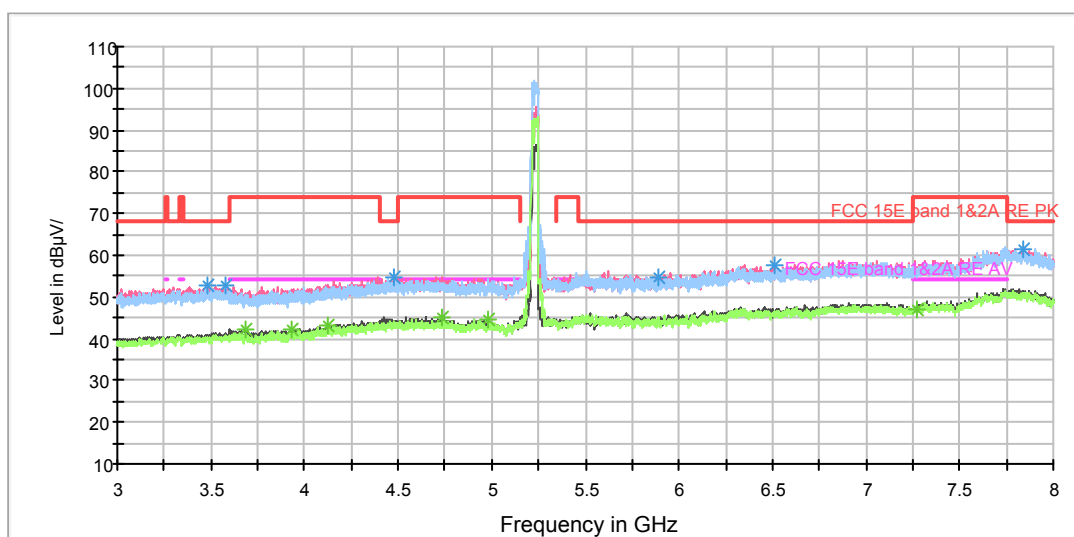
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3616.000000	42.0	200.0	H	0.0	10.2	12.0	54
3959.000000	42.0	200.0	V	241.0	10.9	12.0	54
4140.000000	43.0	200.0	V	287.0	11.7	11.0	54
4661.000000	45.0	200.0	V	1.0	13.4	9.0	54
4999.000000	44.3	200.0	V	0.0	14.1	9.7	54
5459.500000	45.4	200.0	V	74.0	14.4	8.6	54

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

802.11n (HT40) CH46

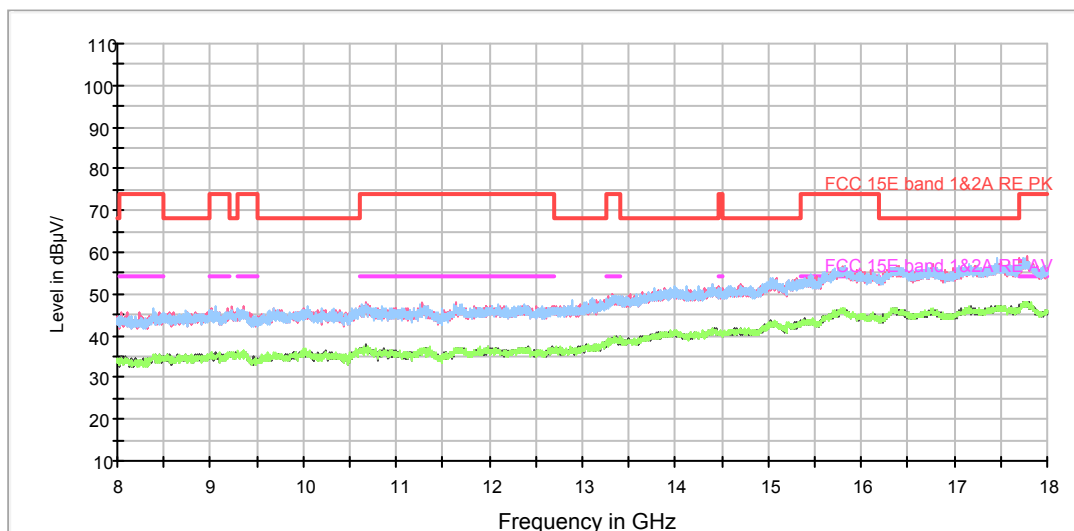


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

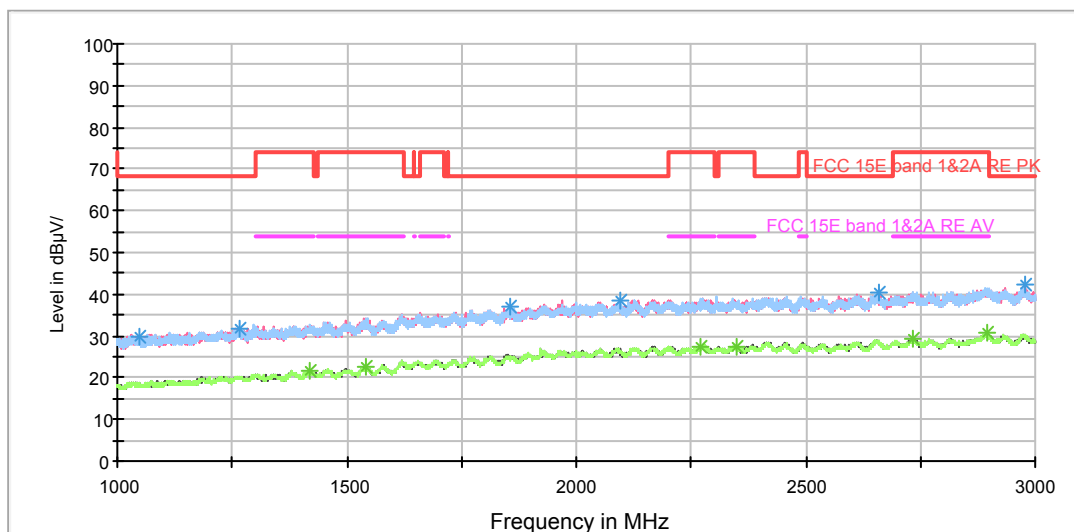
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3484.000000	52.6	200.0	V	54.0	9.8	15.6	68.2
3580.500000	52.8	200.0	H	301.0	10.0	15.4	68.2
4481.500000	54.6	200.0	V	26.0	12.9	13.6	68.2
5891.500000	54.9	200.0	V	54.0	16.0	13.3	68.2
6517.000000	57.8	200.0	V	275.0	17.5	10.4	68.2
7836.500000	61.6	200.0	V	0.0	23.4	6.6	68.2

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

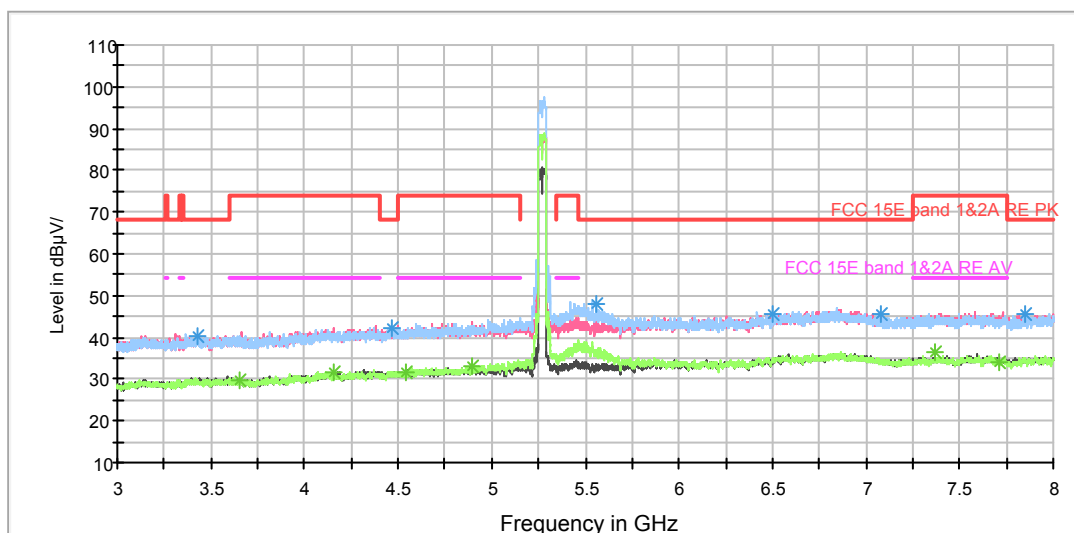
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3689.000000	42.0	200.0	V	266.0	10.2	12.0	54
3928.000000	42.2	200.0	V	154.0	10.9	11.8	54
4124.500000	43.3	200.0	V	145.0	11.6	10.7	54
4739.000000	45.1	200.0	V	126.0	13.7	8.9	54
4984.500000	44.4	200.0	V	63.0	13.9	9.6	54
7267.500000	47.0	200.0	H	0.0	19.1	7.0	54

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

802.11n (HT40) CH54

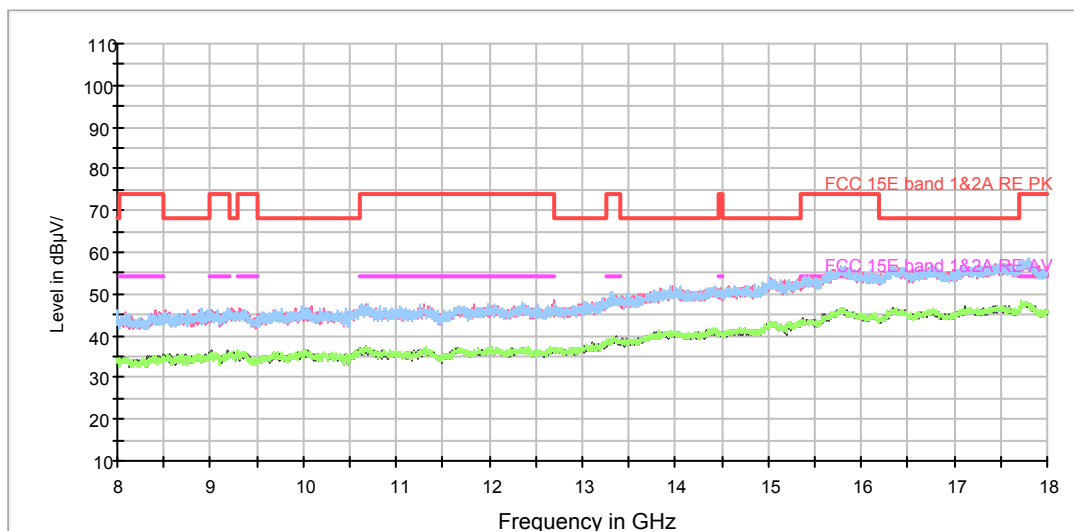


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

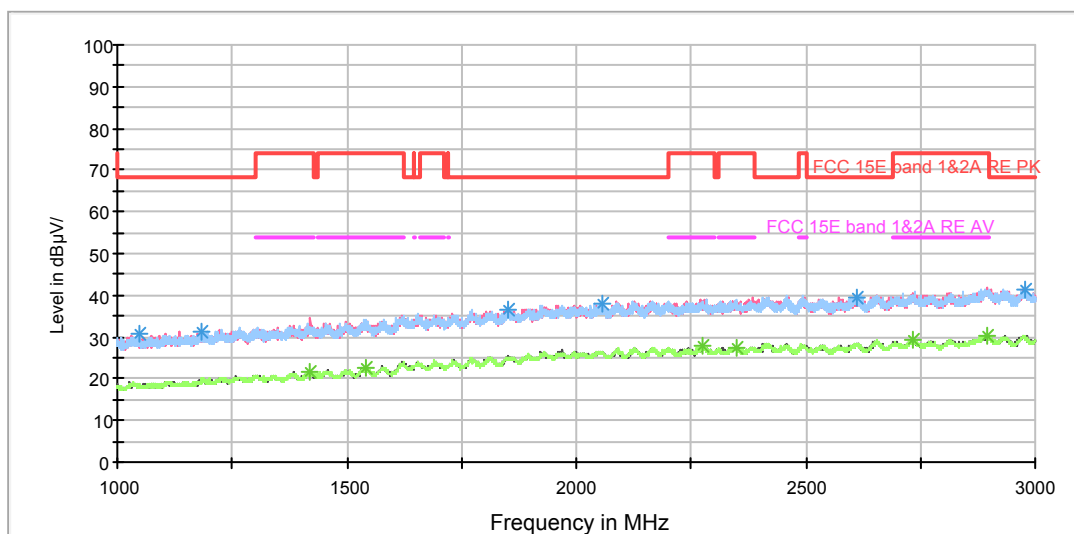
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3431.875000	40.4	100.0	V	188.0	-2.0	27.8	68.2
4466.875000	42.1	200.0	V	137.0	0.6	26.1	68.2
5558.750000	47.8	100.0	H	210.0	3.1	20.4	68.2
6498.750000	45.8	100.0	H	0.0	4.8	22.4	68.2
7075.625000	45.5	200.0	V	35.0	5.5	22.7	68.2
7853.125000	45.6	100.0	V	296.0	6.1	22.6	68.2

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

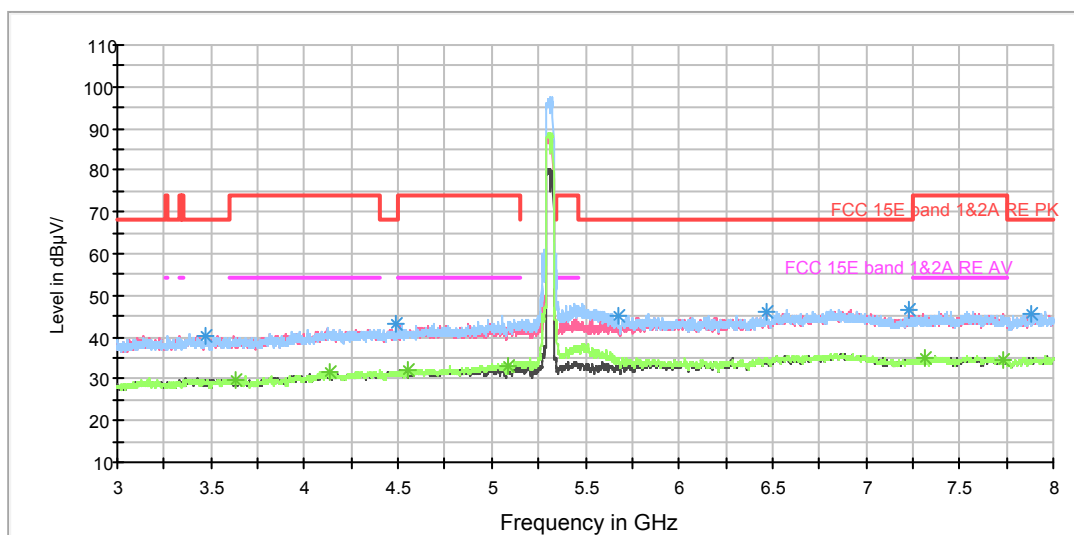
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3650.000000	29.8	200.0	V	12.0	-1.4	24.2	54
4155.000000	31.6	100.0	V	217.0	0.2	22.4	54
4541.250000	31.4	200.0	V	4.0	0.7	22.6	54
4897.500000	32.9	200.0	H	313.0	1.5	21.1	54
7368.125000	36.5	100.0	V	26.0	5.3	17.5	54
7711.875000	34.0	100.0	V	180.0	6.1	20.0	54

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

802.11n (HT40) CH62

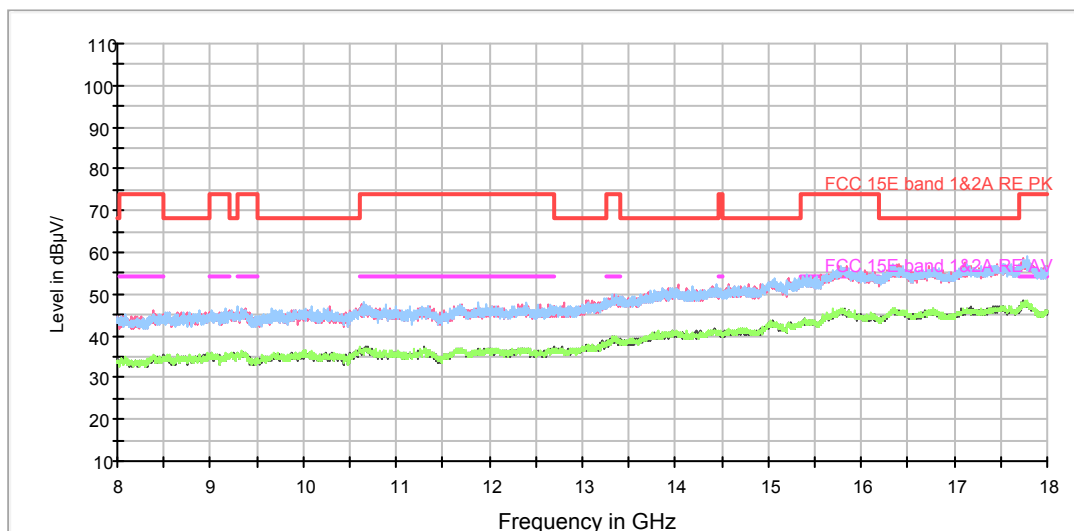


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

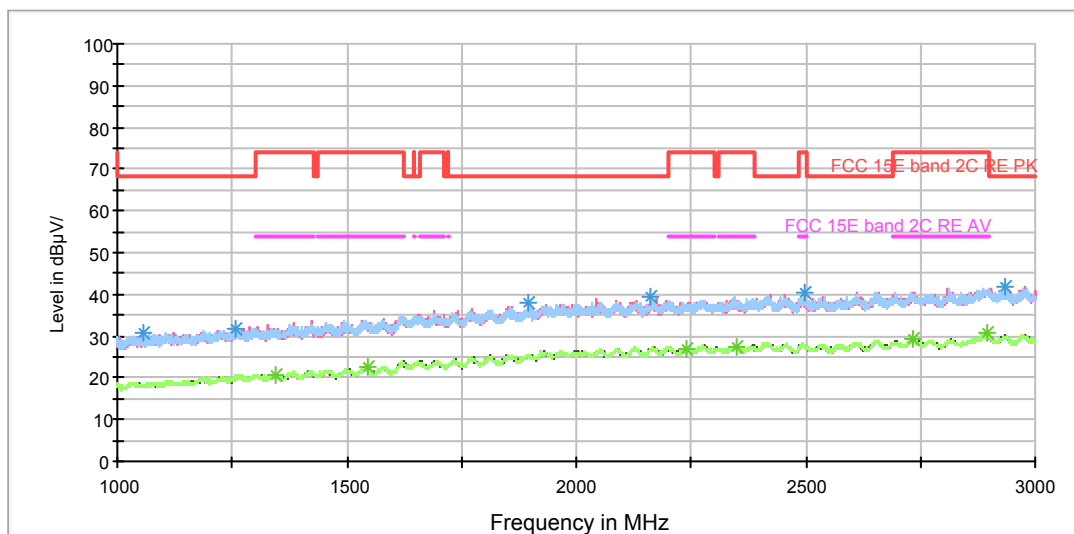
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3472.500000	40.2	100.0	H	252.0	-1.8	28.0	68.2
4493.125000	43.2	100.0	H	39.0	0.6	25.0	68.2
5673.750000	45.2	100.0	H	212.0	3.3	23.0	68.2
6472.500000	46.1	100.0	V	175.0	4.8	22.1	68.2
7229.375000	46.7	200.0	V	236.0	5.4	21.5	68.2
7876.875000	45.7	200.0	H	327.0	6.1	22.5	68.2

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

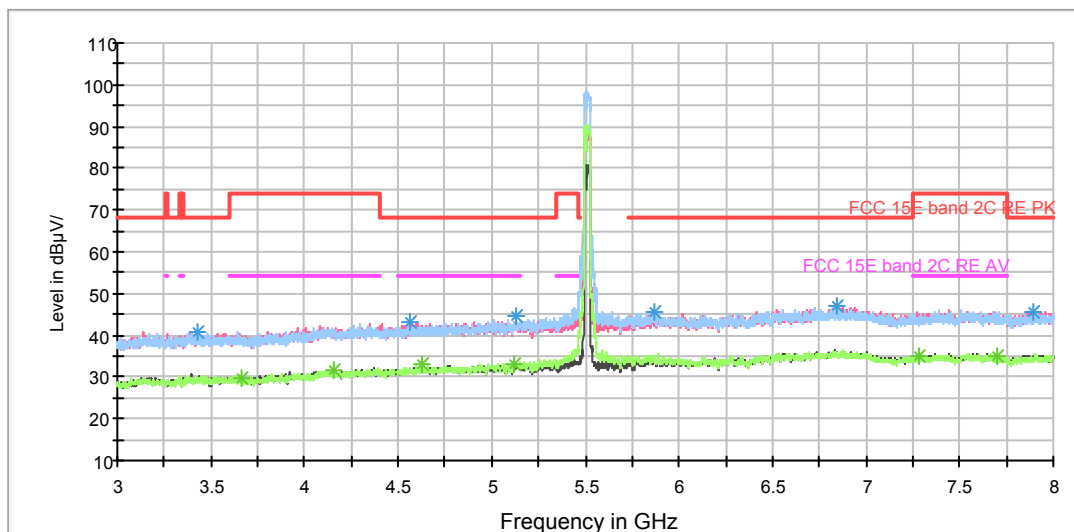
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3631.875000	29.8	200.0	H	213.0	-1.4	24.2	54
4131.875000	31.6	200.0	V	219.0	0.1	22.4	54
4557.500000	31.9	200.0	V	93.0	0.8	22.1	54
5083.750000	33.0	200.0	H	319.0	1.8	21.0	54
7313.750000	35.1	200.0	H	118.0	5.3	18.9	54
7730.000000	34.5	100.0	V	348.0	6.1	19.5	54

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

802.11n (HT40) CH102

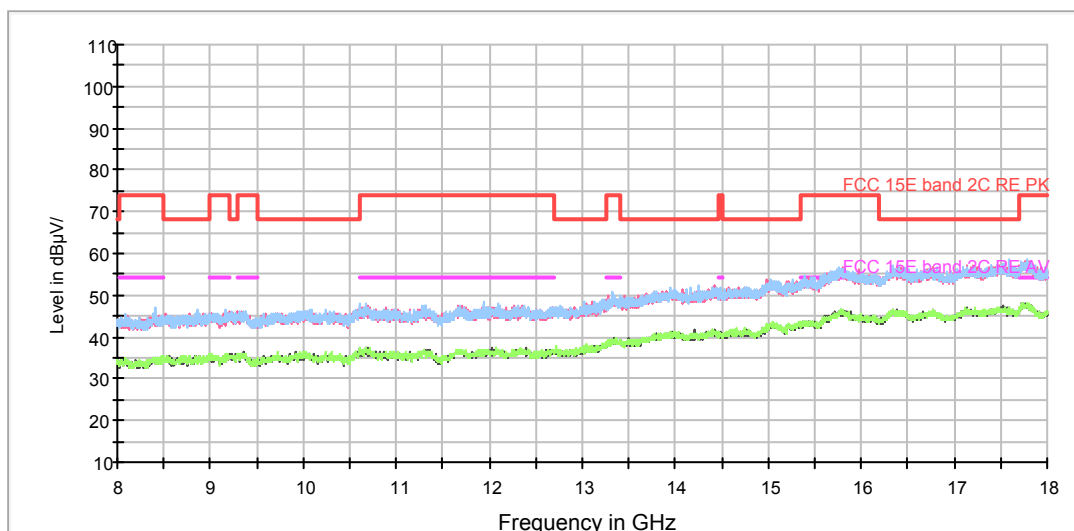


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

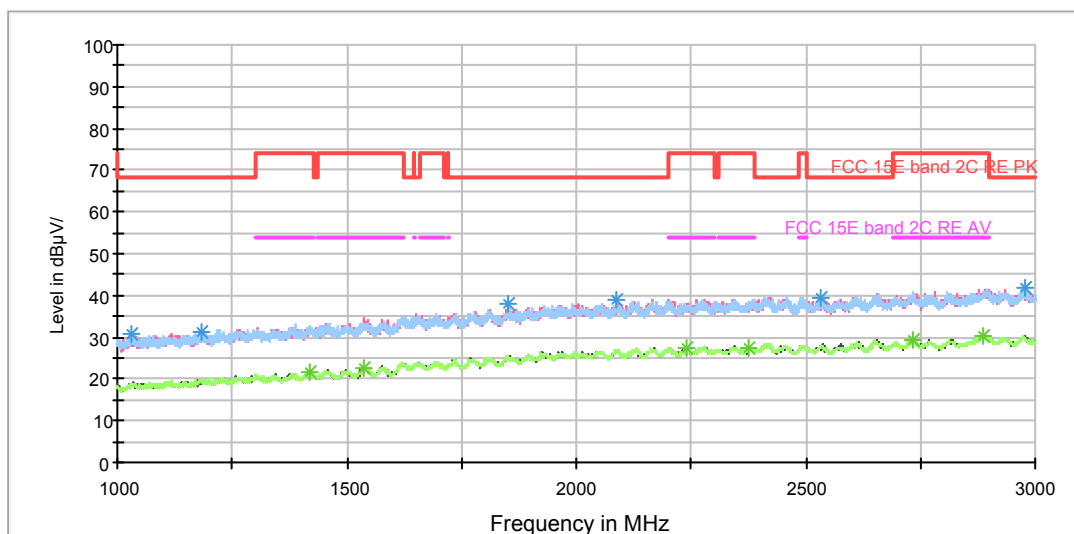
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3429.375000	40.8	100.0	H	81.0	-2.0	27.4	68.2
4559.375000	43.0	100.0	V	353.0	0.8	25.2	68.2
5126.250000	44.5	200.0	H	351.0	1.8	23.7	68.2
5866.875000	45.6	200.0	H	210.0	3.7	22.6	68.2
6840.625000	47.0	100.0	V	306.0	5.4	21.2	68.2
7890.000000	45.4	100.0	V	337.0	6.1	22.8	68.2

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

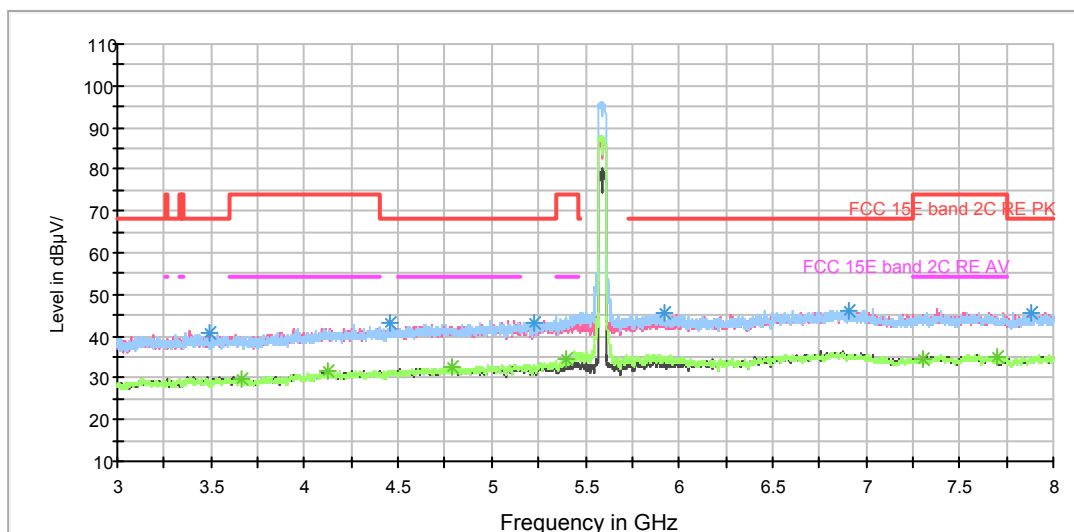
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3666.250000	29.8	200.0	V	35.0	-1.4	24.2	54
4159.375000	31.5	100.0	V	274.0	0.2	22.5	54
4624.375000	32.9	100.0	V	143.0	0.9	21.1	54
5118.125000	33.0	200.0	H	288.0	1.8	21.0	54
7279.375000	35.1	200.0	H	147.0	5.4	18.9	54
7696.875000	35.0	200.0	V	89.0	6.1	19.0	54

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

802.11n (HT40) CH118

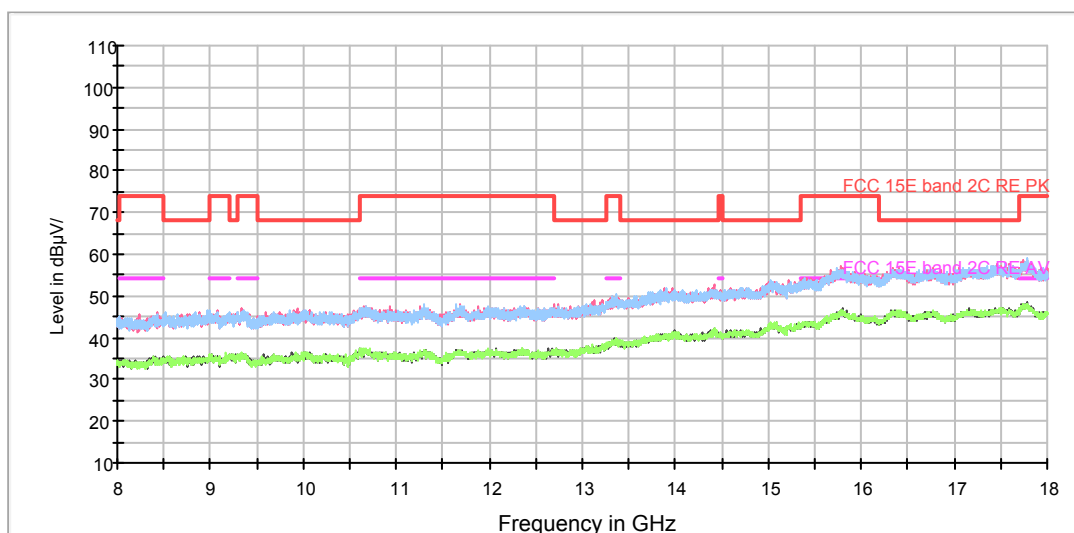


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

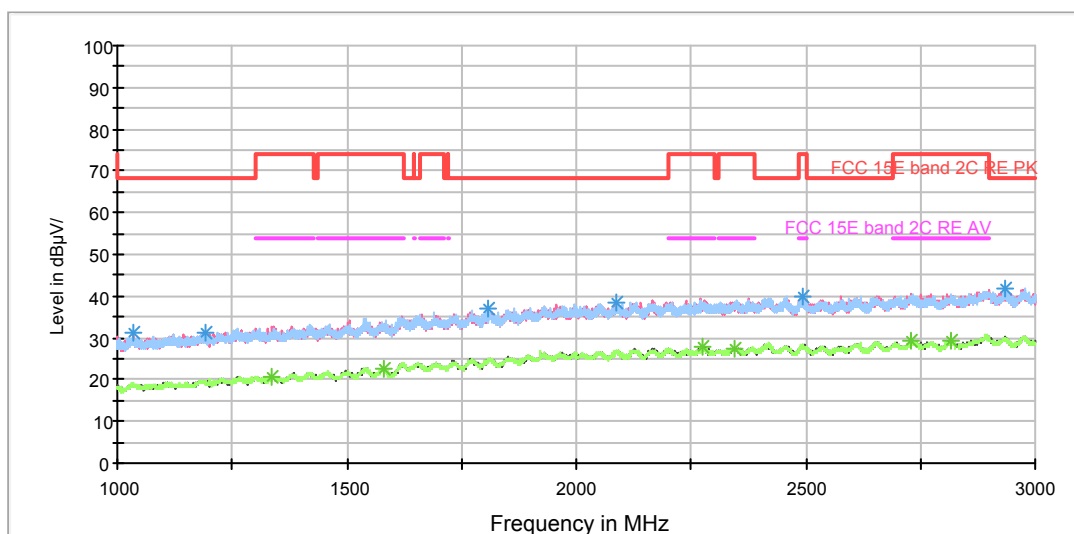
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3489.375000	40.8	100.0	V	279.0	-1.7	27.4	68.2
4452.500000	43.2	200.0	V	73.0	0.6	25.0	68.2
5226.250000	43.3	200.0	H	338.0	2.0	24.9	68.2
5924.375000	45.6	100.0	H	223.0	3.7	22.6	68.2
6903.750000	46.2	200.0	V	200.0	5.4	22.0	68.2
7887.500000	45.6	200.0	H	43.0	6.1	22.6	68.2

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

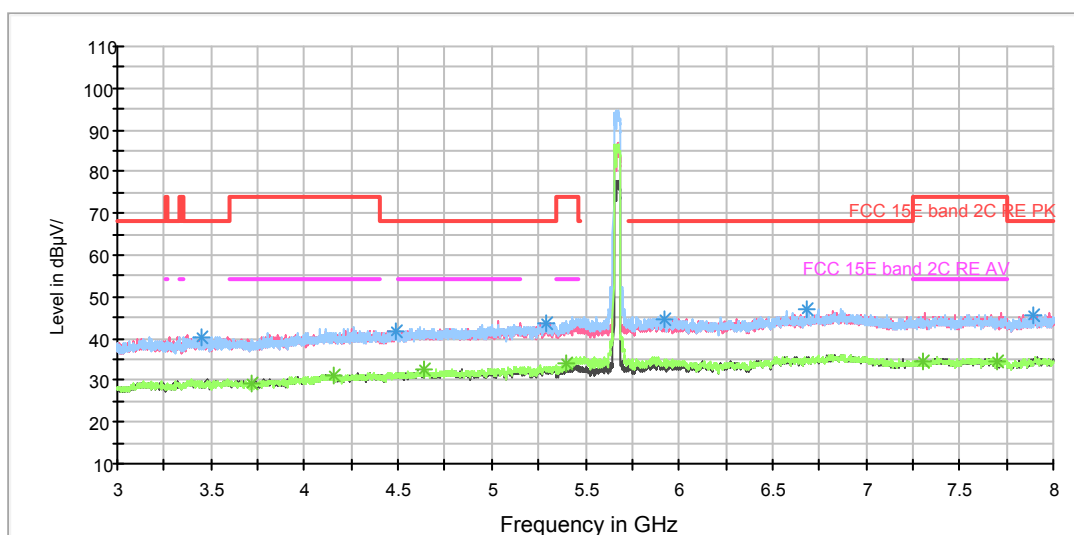
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3658.750000	29.6	100.0	V	264.0	-1.4	24.4	54
4121.875000	31.6	200.0	V	120.0	0.1	22.4	54
4786.250000	32.8	200.0	H	356.0	1.4	21.2	54
5396.250000	34.4	100.0	H	252.0	2.5	19.6	54
7302.500000	34.5	100.0	V	331.0	5.3	19.5	54
7698.125000	35.0	200.0	H	92.0	6.1	19.0	54

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

802.11n (HT40) CH134

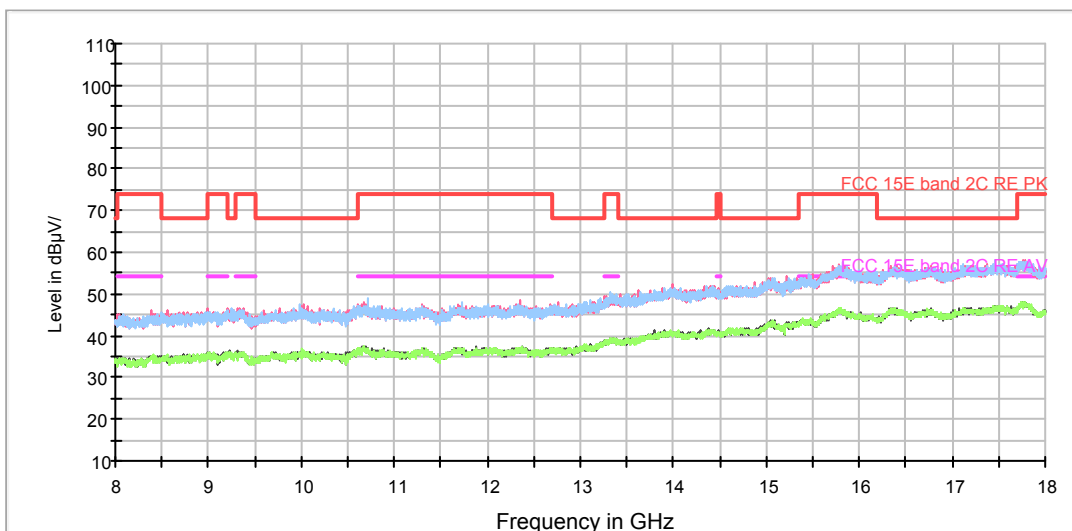


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

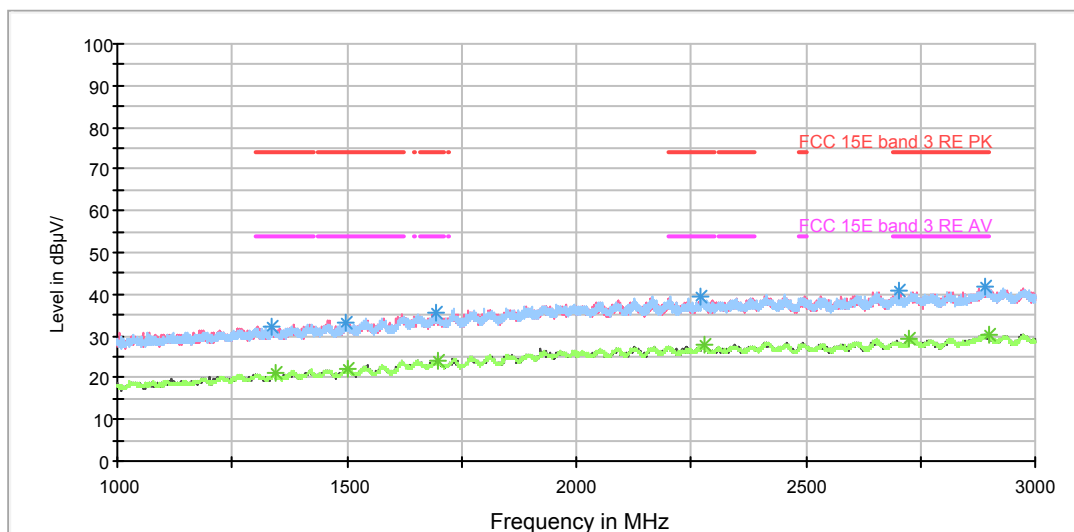
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3448.750000	40.2	200.0	V	302.0	-1.9	28.0	68.2
4490.625000	41.9	200.0	H	239.0	0.6	26.3	68.2
5286.250000	43.9	100.0	H	223.0	2.1	24.3	68.2
5923.750000	44.4	200.0	H	285.0	3.7	23.8	68.2
6686.250000	47.1	100.0	H	59.0	5.3	21.1	68.2
7894.375000	45.6	200.0	H	340.0	6.1	22.6	68.2

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

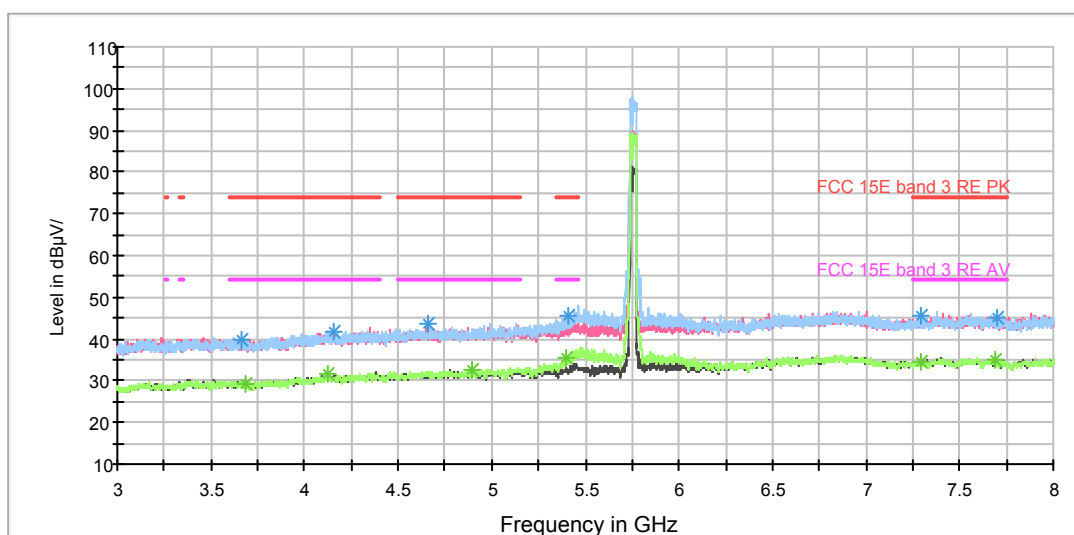
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3716.875000	29.5	200.0	H	301.0	-1.4	24.5	54
4155.625000	31.3	200.0	H	193.0	0.2	22.7	54
4643.125000	32.5	200.0	H	309.0	1.0	21.5	54
5399.375000	34.0	100.0	H	282.0	2.5	20.0	54
7308.750000	34.6	200.0	V	0.0	5.3	19.4	54
7695.000000	34.7	200.0	V	101.0	6.1	19.3	54

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

802.11n (HT40) CH151

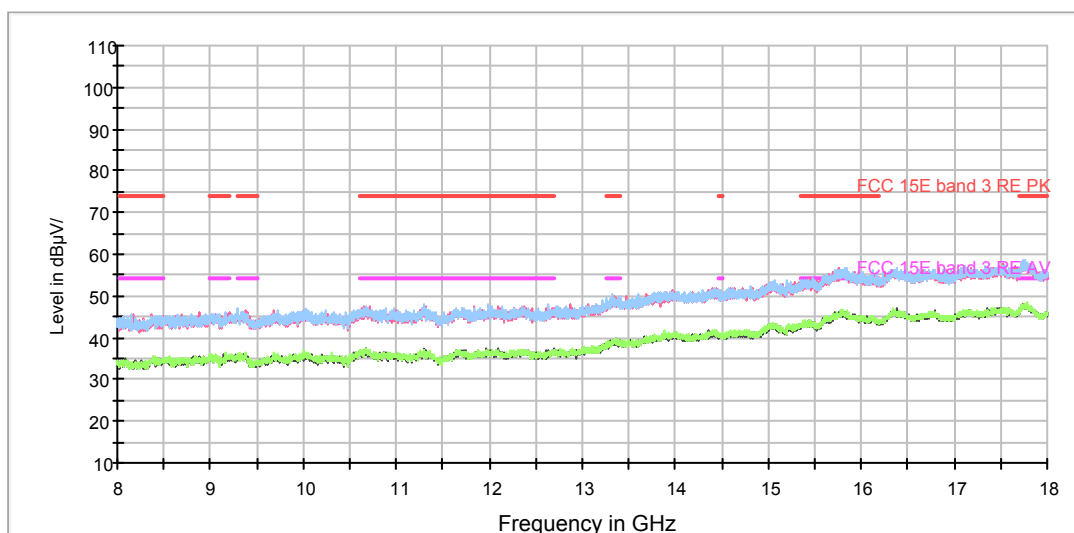


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

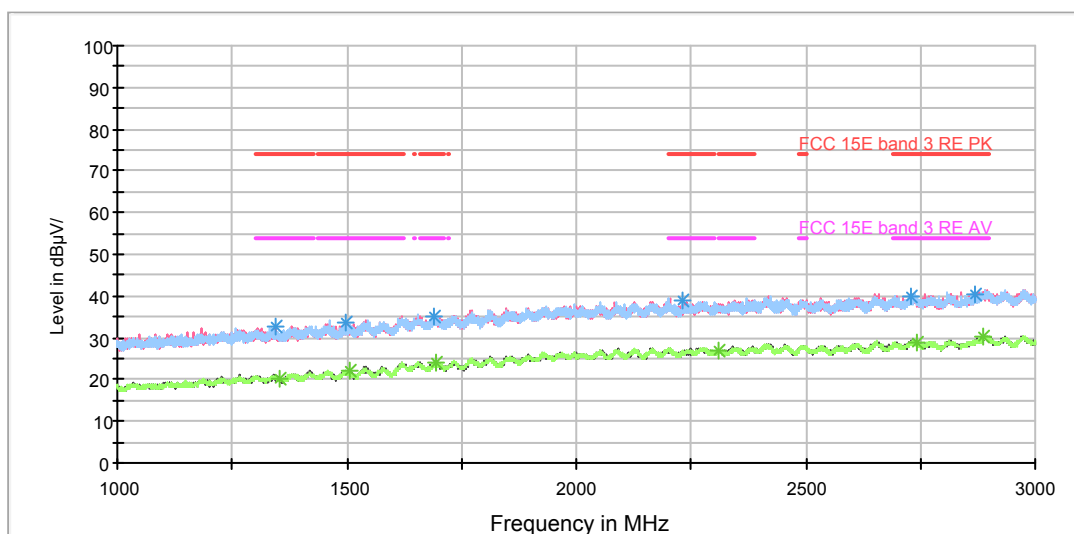
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3659.375000	39.8	100.0	H	5.0	-1.4	34.2	74
4152.500000	41.9	200.0	V	159.0	0.1	32.1	74
4663.125000	43.5	200.0	H	359.0	1.0	30.5	74
5413.750000	45.3	100.0	H	223.0	2.6	28.7	74
7295.000000	45.4	200.0	H	146.0	5.3	28.6	74
7700.625000	45.1	200.0	H	0.0	6.1	28.9	74

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

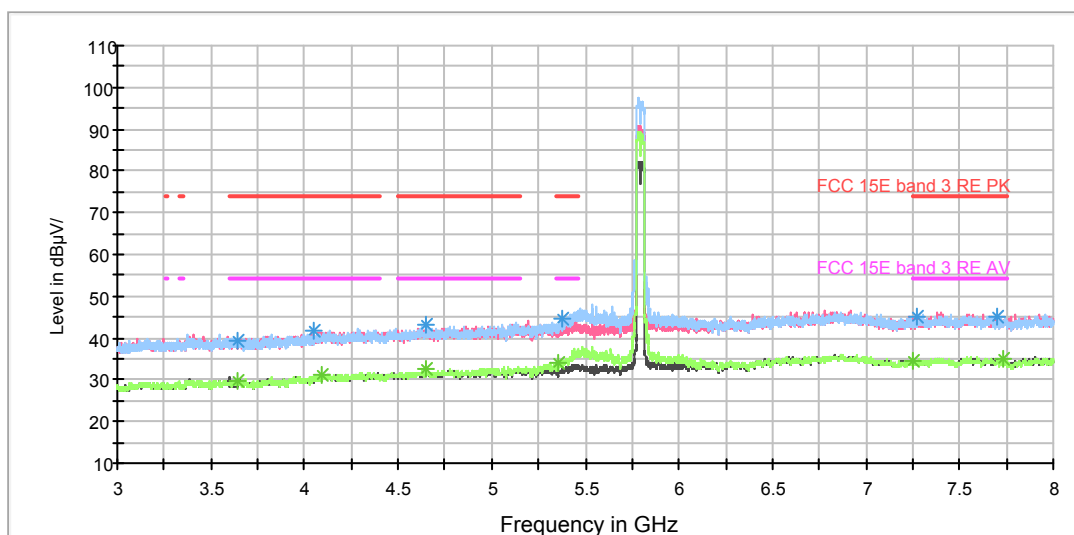
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3680.000000	29.4	200.0	H	250.0	-1.4	24.6	54
4121.250000	31.5	200.0	H	343.0	0.1	22.5	54
4893.125000	32.5	200.0	H	219.0	1.5	21.5	54
5398.750000	35.5	100.0	H	217.0	2.5	18.5	54
7290.625000	34.7	200.0	V	242.0	5.3	19.3	54
7689.375000	34.9	100.0	V	327.0	6.0	19.1	54

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

802.11n (HT40) CH159

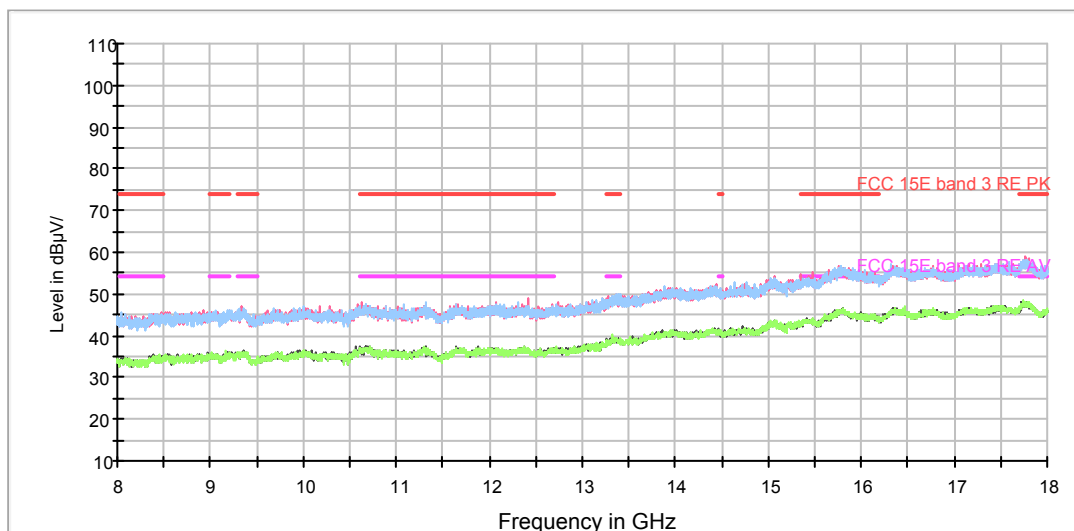


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

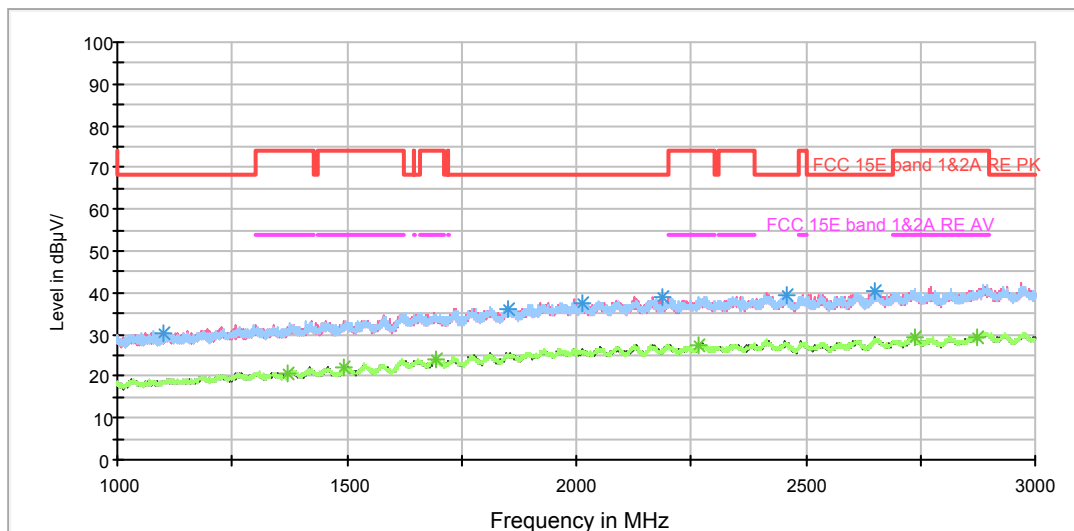
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4048.125000	41.9	200.0	H	183.0	-0.1	32.1	74
4646.875000	43.0	200.0	H	22.0	1.0	31.0	74
3640.000000	39.2	100.0	V	318.0	-1.4	34.8	74
5375.625000	44.8	100.0	H	310.0	2.5	29.2	74
7271.250000	45.0	200.0	V	11.0	5.4	29.0	74
7701.250000	45.1	200.0	H	227.0	6.1	28.9	74

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

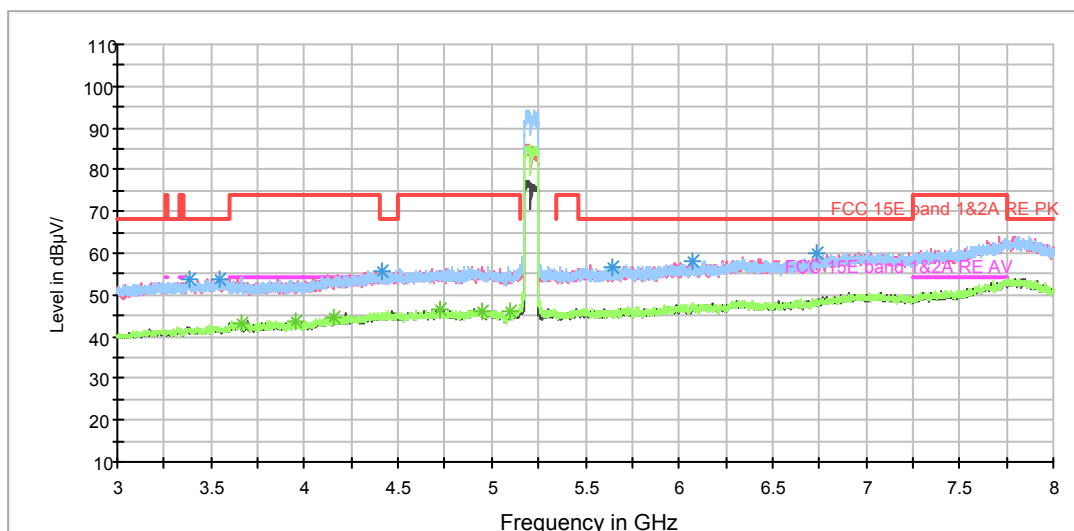
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4088.750000	31.4	100.0	H	9.0	0.0	22.6	54
4648.125000	32.6	200.0	H	273.0	1.0	21.4	54
3646.250000	29.9	100.0	V	357.0	-1.4	24.1	54
5360.625000	34.2	100.0	H	202.0	2.4	19.8	54
7254.375000	34.5	100.0	V	357.0	5.4	19.5	54
7730.625000	34.8	100.0	V	241.0	6.1	19.2	54

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

802.11ac (HT80) CH42

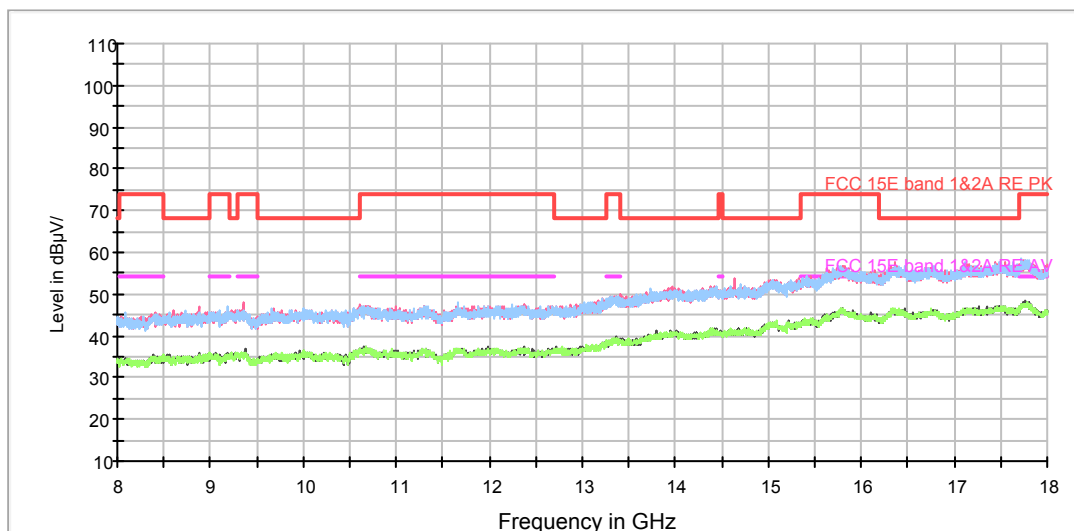


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

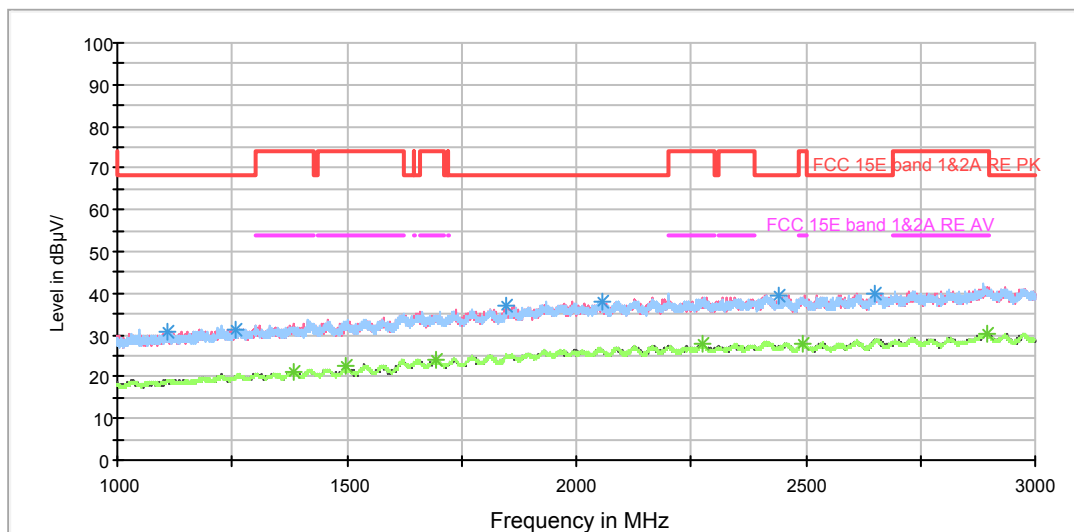
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3387.000000	53.6	100.0	V	326.0	9.5	14.6	68.2
3545.000000	53.8	100.0	H	214.0	9.9	14.4	68.2
4409.500000	55.7	100.0	V	110.0	12.9	12.5	68.2
5640.000000	56.8	100.0	H	180.0	15.1	11.4	68.2
6075.500000	57.9	200.0	V	154.0	16.7	10.3	68.2
6733.000000	60.2	100.0	H	106.0	18.0	8.0	68.2

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

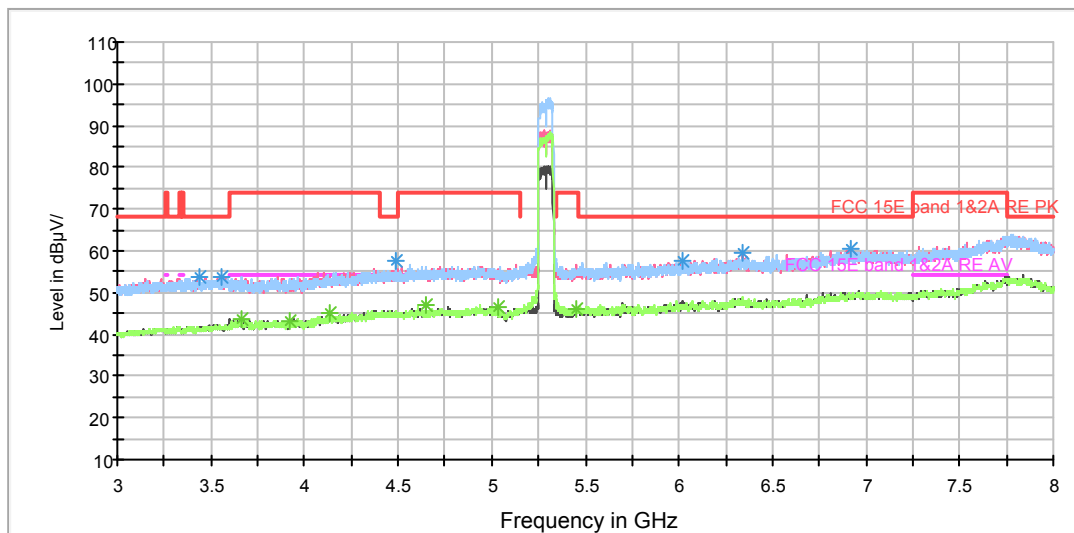
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3661.000000	43.4	100.0	H	24.0	10.2	10.6	54
3948.500000	43.6	200.0	H	262.0	10.9	10.4	54
4155.500000	44.8	100.0	V	353.0	11.8	9.2	54
4718.500000	46.5	100.0	H	15.0	13.8	7.5	54
4946.000000	46.2	100.0	H	15.0	13.7	7.8	54
5099.500000	45.9	100.0	H	60.0	14.0	8.1	54

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

802.11ac (HT80) CH58

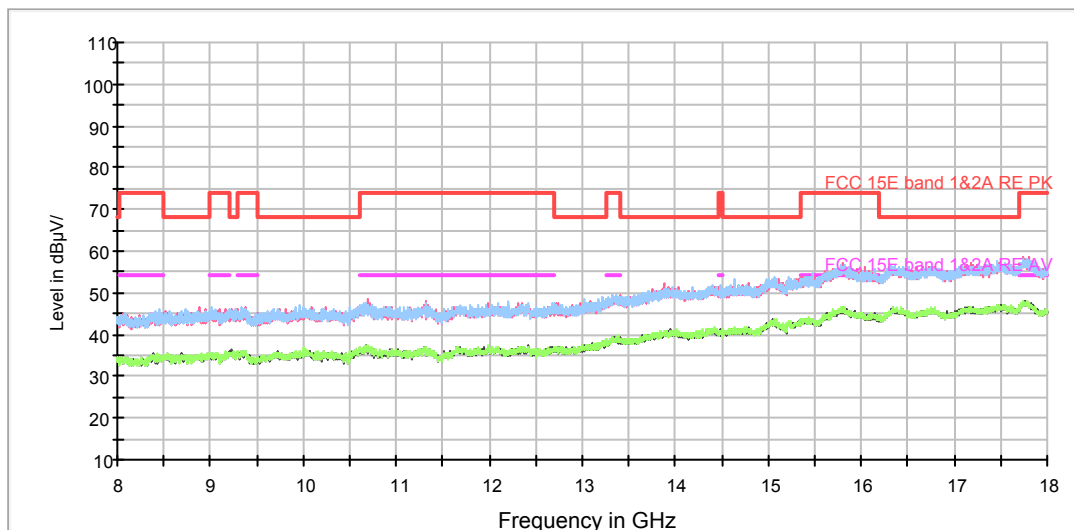


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

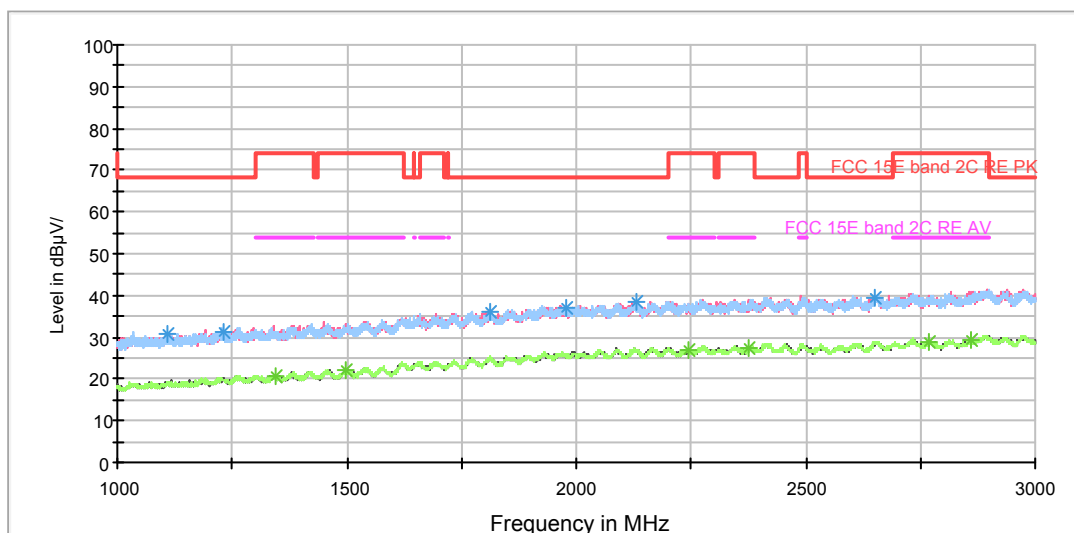
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3437.000000	53.6	100.0	H	147.0	9.5	14.6	68.2
3553.000000	53.8	100.0	H	39.0	9.9	14.4	68.2
4490.000000	57.5	200.0	H	278.0	12.9	10.7	68.2
6021.000000	57.8	200.0	V	326.0	16.4	10.4	68.2
6339.500000	59.5	100.0	V	61.0	17.9	8.7	68.2
6915.500000	60.3	100.0	V	320.0	18.9	7.9	68.2

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

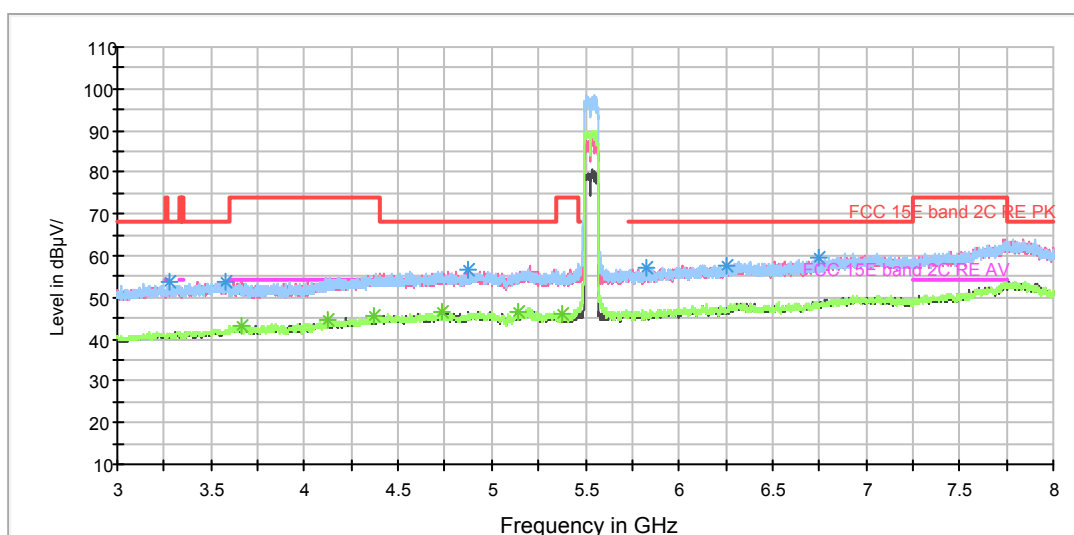
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3659.000000	43.6	100.0	H	238.0	10.2	10.4	54
3926.000000	43.2	100.0	V	220.0	10.9	10.8	54
4137.500000	45.0	100.0	V	111.0	11.7	9.0	54
4648.000000	46.9	100.0	V	256.0	13.4	7.1	54
5030.000000	46.5	100.0	H	183.0	14.1	7.5	54
5450.000000	46.2	100.0	H	84.0	14.3	7.8	54

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

802.11ac (HT80) CH106

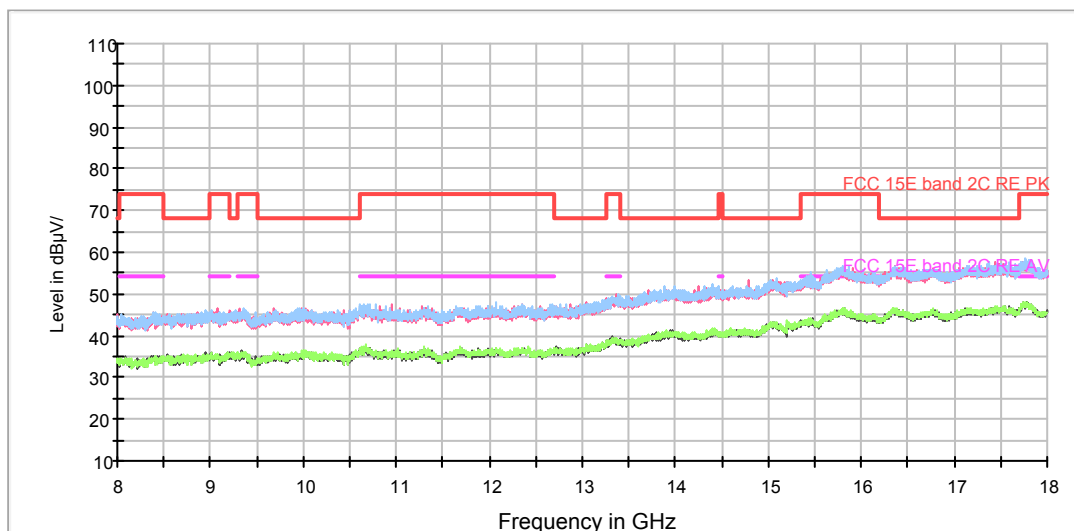


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

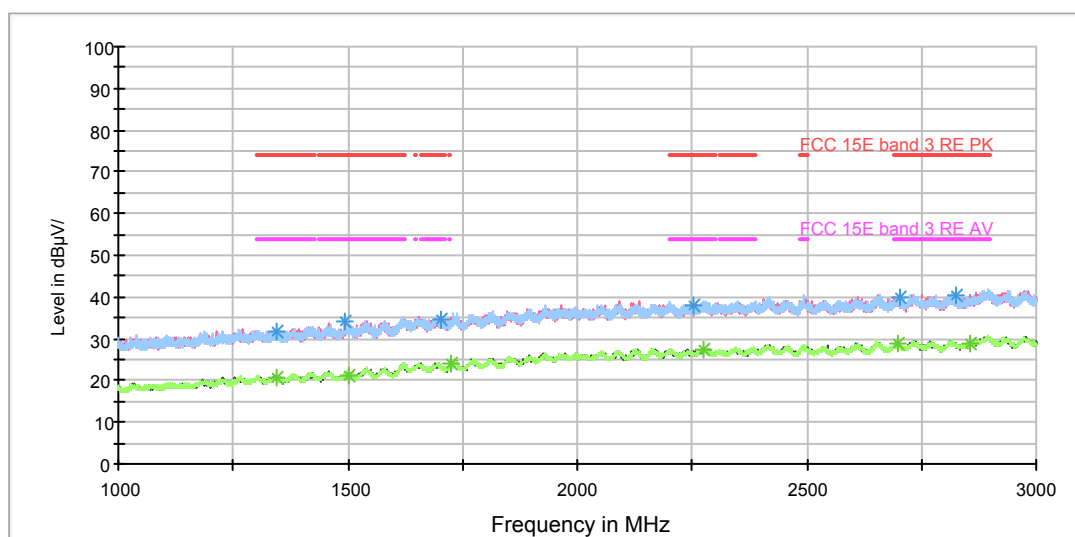
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3275.500000	53.9	100.0	H	49.0	9.0	14.3	68.2
3581.500000	53.9	100.0	H	173.0	10.0	14.3	68.2
4870.500000	56.6	100.0	H	85.0	13.8	11.6	68.2
5822.500000	57.0	100.0	H	321.0	15.8	11.2	68.2
6251.500000	57.5	100.0	V	162.0	17.4	10.7	68.2
6750.000000	59.3	100.0	H	292.0	18.0	8.9	68.2

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

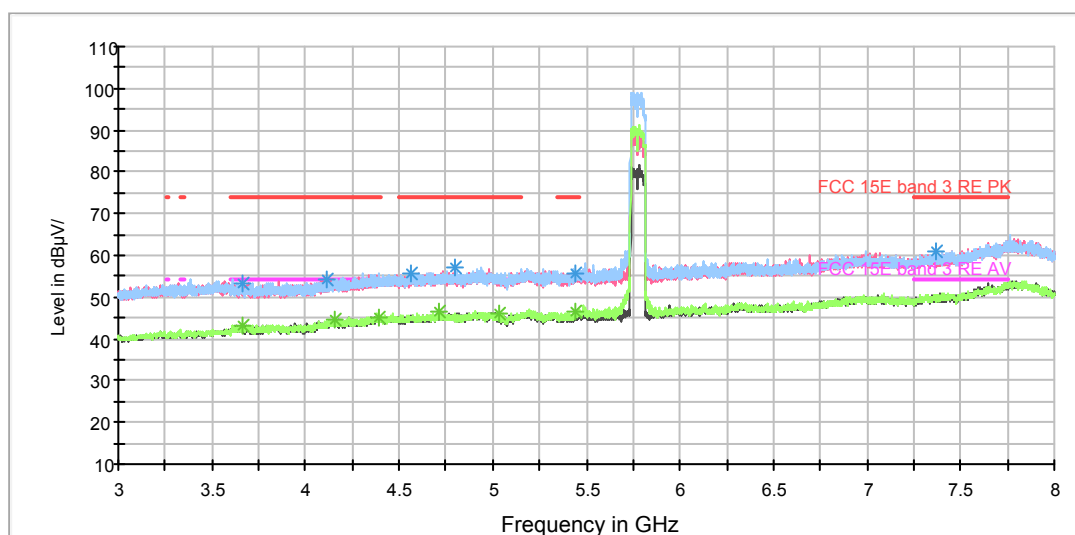
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3660.000000	43.3	100.0	H	13.0	10.2	10.7	54
4129.000000	44.4	100.0	H	76.0	11.7	9.6	54
4366.500000	45.5	100.0	H	101.0	12.7	8.5	54
4733.500000	46.3	100.0	H	22.0	13.8	7.7	54
5136.500000	46.4	100.0	V	254.0	14.3	7.6	54
5381.000000	45.8	100.0	H	137.0	14.1	8.2	54

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

802.11ac (HT80) CH155

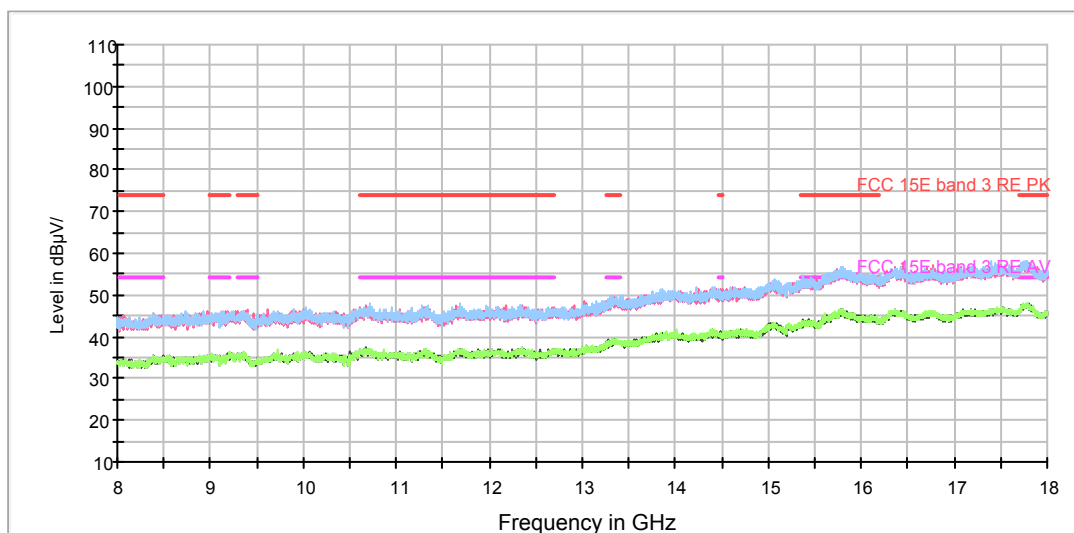


Radiates Emission from 1GHz to 3GHz



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz



Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3662.500000	53.2	100.0	H	7.0	10.2	20.8	74
4109.500000	54.4	200.0	V	108.0	11.5	19.6	74
4568.000000	55.5	100.0	H	25.0	13.1	18.5	74
4801.500000	57.0	100.0	V	201.0	13.4	17.0	74
5443.000000	55.7	100.0	V	89.0	14.3	18.3	74
7368.000000	61.1	100.0	H	141.0	19.4	12.9	74

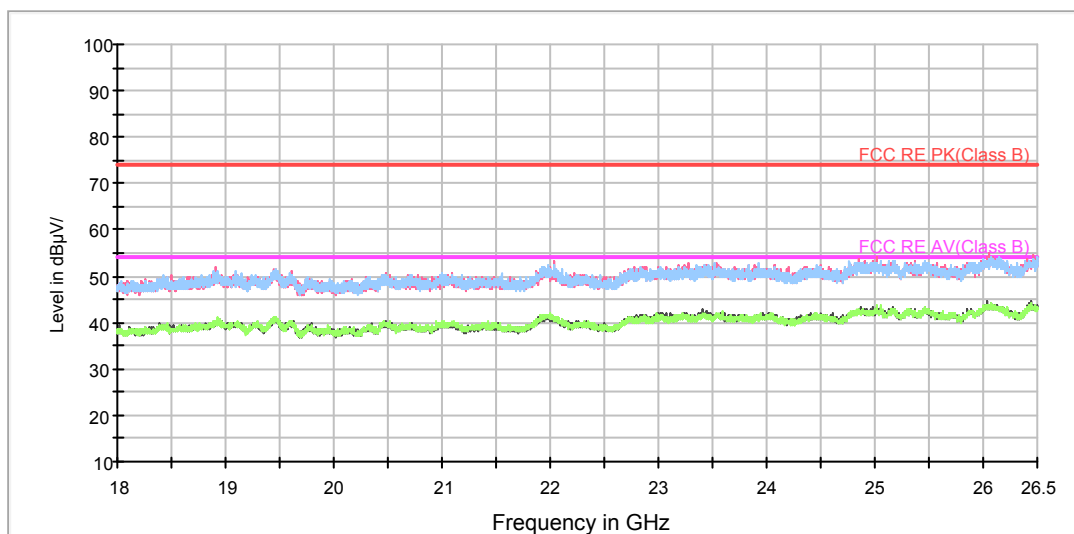
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3659.500000	43.4	200.0	H	161.0	10.2	10.6	54
4158.000000	44.6	100.0	H	167.0	11.9	9.4	54
4396.500000	45.1	100.0	H	204.0	12.8	8.9	54
4712.000000	46.3	100.0	H	114.0	13.8	7.7	54
5031.500000	46.2	100.0	H	242.0	14.1	7.8	54
5437.000000	46.4	100.0	H	260.0	14.2	7.6	54

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

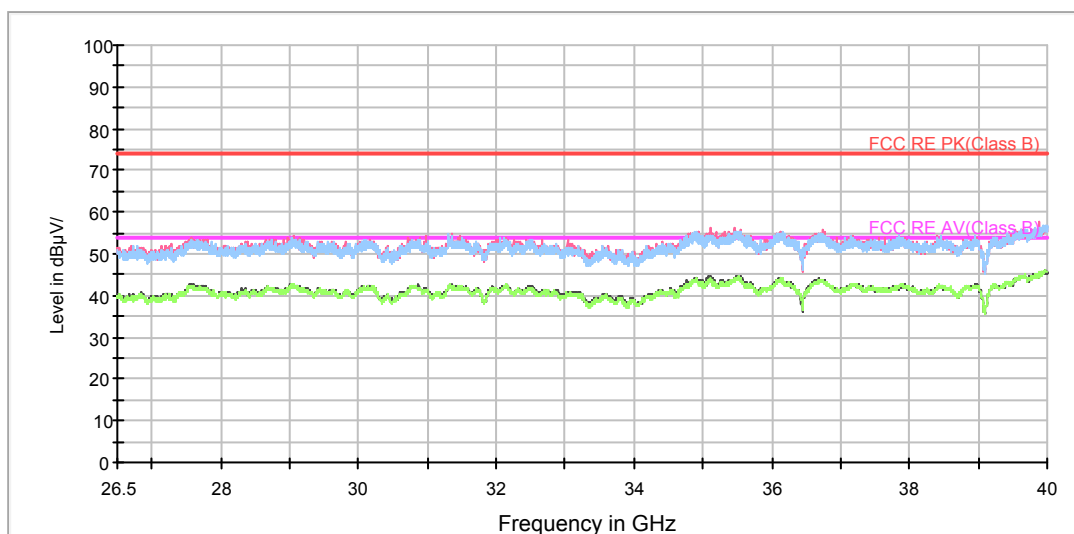
During the test, the Radiates Emission from 18GHz to 40GHz was performed in all modes with all channels, 802.11a, Channel 36 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

5.2. Conducted Emission

Ambient condition

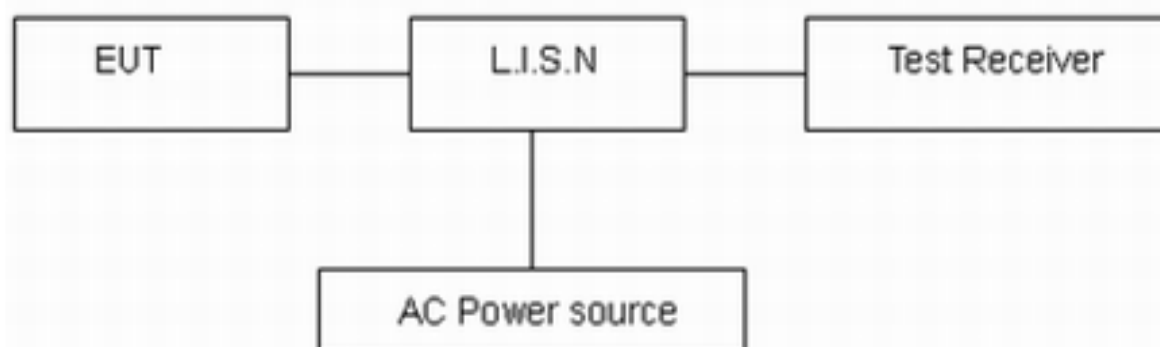
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

The EUT IS placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10-2013. Connect the AC power line of the EUT to the LISN Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, VBW is set to 30kHz The measurement result should include both L line and N line.

The test is in transmitting mode.

Test Setup



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

Limits

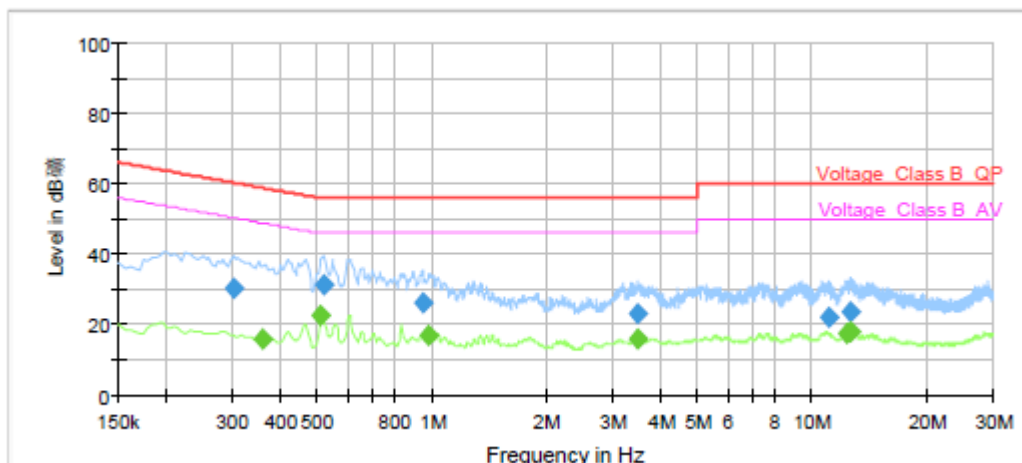
Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46 *
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

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

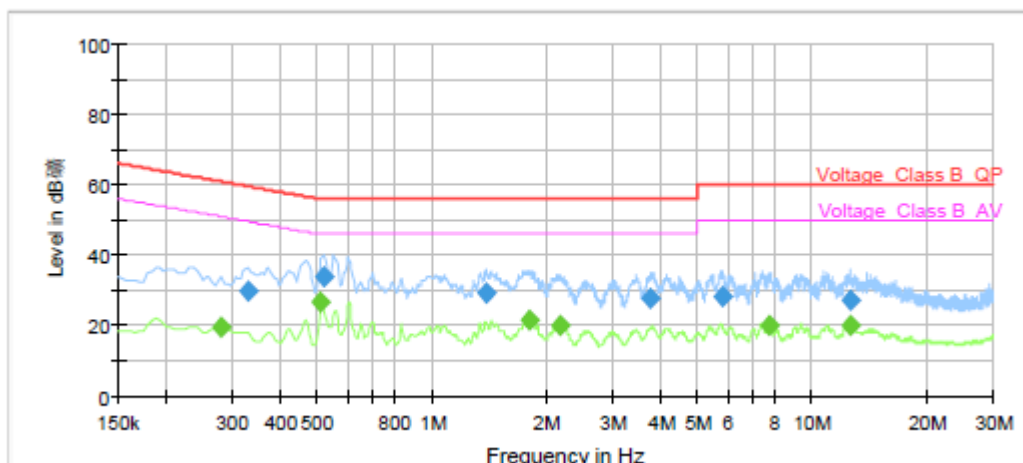
Test Results:

Following plots, Blue trace uses the peak detection and Green trace uses the average detection. During the test, the Conducted Emission was performed in all modes with all channels, 802.11a, Channel 36 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.30	30.33	---	60.22	29.89	1000.0	9.000	L1	ON	19.20
0.36	---	16.02	48.75	32.73	1000.0	9.000	L1	ON	19.18
0.51	---	22.71	46.00	23.29	1000.0	9.000	L1	ON	19.24
0.52	31.29	---	56.00	24.71	1000.0	9.000	L1	ON	19.24
0.95	25.99	---	56.00	30.01	1000.0	9.000	L1	ON	19.24
0.98	---	17.08	46.00	28.92	1000.0	9.000	L1	ON	19.24
3.48	---	15.92	46.00	30.08	1000.0	9.000	L1	ON	19.05
3.49	22.99	---	56.00	33.01	1000.0	9.000	L1	ON	19.05
11.08	22.13	---	60.00	37.87	1000.0	9.000	L1	ON	19.36
12.33	---	17.63	50.00	32.37	1000.0	9.000	L1	ON	19.42
12.68	---	17.89	50.00	32.11	1000.0	9.000	L1	ON	19.47
12.73	23.45	---	60.00	36.55	1000.0	9.000	L1	ON	19.48

L line Conducted Emission from 150 KHz to 30 MHz



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.28	---	19.57	50.87	31.30	1000.0	9.000	N	ON	19.16
0.33	29.73	---	59.51	29.78	1000.0	9.000	N	ON	19.18
0.51	---	26.54	46.00	19.46	1000.0	9.000	N	ON	19.24
0.52	33.73	---	56.00	22.27	1000.0	9.000	N	ON	19.24
1.39	29.43	---	56.00	26.57	1000.0	9.000	N	ON	19.18
1.81	---	21.54	46.00	24.46	1000.0	9.000	N	ON	19.17
2.18	---	20.09	46.00	25.91	1000.0	9.000	N	ON	19.07
3.75	27.90	---	56.00	28.10	1000.0	9.000	N	ON	19.06
5.80	28.27	---	60.00	31.73	1000.0	9.000	N	ON	19.10
7.74	---	19.84	50.00	30.16	1000.0	9.000	N	ON	19.21
12.61	27.14	---	60.00	32.86	1000.0	9.000	N	ON	19.44
12.62	---	19.84	50.00	30.16	1000.0	9.000	N	ON	19.44

N line Conducted Emission from 150 KHz to 30 MHz



6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Spectrum Analyzer	R&S	FSV40	15195-01-00	2018-05-20	2019-05-19
EMI Test Receiver	R&S	ESCI	100948	2018-05-20	2019-05-19
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2017-09-26	2019-09-25
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	9163-201	2017-11-18	2019-11-17
Double Ridged Waveguide Horn Antenna	R&S	HF907	100126	2018-07-07	2020-07-06
Standard Gain Horn	ETS-Lindgren	3160-09	00102643	2018-06-20	2020-06-19
Standard Gain Horn	STEATITE	QSH-SL-26-40-K-15	16779	2017-07-20	2019-07-19
Broadband Horn Antenna	SCHWARZBECK	BBHA 9120D	430	2018-07-07	2020-07-06
EMI Test Receiver	R&S	ESR	101667	2018-05-20	2019-05-19
LISN	R&S	ENV216	101171	2016-12-16	2019-12-15
Software	R&S	EMC32	9.26.0	/	/

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