



中国认可
国际互认
检测
TESTING
CNAS L2264

RF TEST REPORT

Applicant	ADTRAN, Inc.
FCC ID	HDC6304W
Product	EPON RG ONU
Model	6304W
Report No.	RXA1704-0118RF02R1
Issue Date	August 1, 2017

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15E (2016)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Performed by: Xianqing Li

Approved by: Kai Xu

TA Technology (Shanghai) Co., Ltd.

No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China

TEL: +86-021-50791141/2/3

FAX: +86-021-50791141/2/3-8000

TABLE OF CONTENT

1. Test Laboratory	4
1.1. Notes of the test report.....	4
1.2. Test facility	4
1.3. Testing Location.....	5
2. General Description of Equipment under Test.....	6
3. Test Information	7
4. Test Configuration	8
5. Test Case Results	9
5.1. Occupied Bandwidth	9
5.2. Average Power Output –Conducted.....	14
5.3. Frequency Stability.....	18
5.4. Power Spectral Density.....	21
5.5. Unwanted Emission	31
5.6. Conducted Emission	122
6. Main Test Instruments.....	131
ANNEX A: EUT Appearance and Test Setup	132
A.1 EUT Appearance	132
A.2 Test Setup	134

Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Average conducted output power	15.407(a)	PASS
2	Occupied bandwidth	15.407(e)	PASS
3	Frequency stability	15.407(g)	PASS
4	Maximum power spectral density	15.407(a)	PASS
5	Unwanted Emissions	15.407(b)	PASS
6	Conducted Emissions	15.207	PASS
Date of Testing: May 16, 2017 ~ June 8, 2017			



1. Test Laboratory

1.1. Notes of the test report

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

1.2. Test facility

CNAS (accreditation number: L2264)

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

FCC (recognition number is 428261)

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

IC (recognition number is 8510A)

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

VCCI (recognition number is C-4595, T-2154, R-4113, G-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
Country: P. R. China
Contact: Xu Kai
Telephone: +86-021-50791141/2/3
Fax: +86-021-50791141/2/3-8000
Website: <http://www.ta-shanghai.com>
E-mail: xukai@ta-shanghai.com

2. General Description of Equipment under Test

Client Information

Applicant	ADTRAN, Inc.
Applicant address	901 Explorer Blvd, Huntsville AL 35806
Agent	ubiQuoss, Inc.
Agent Address	83,Saneop-ro 155beon-gil, Gwonseon-gu, Suwon-si, Gyeonggi-do, Korea,16648
Manufacturer	Shenzhen Gongjin Electronics Co.,Ltd.
Manufacturer address	B116,B118,A211-A213,B201-B213,A311-A313,B411-413,BF08-09 Nanshan Medical Instrument Industry Park,1019# Nanhai Road, Nanshan District, Shenzhen, Guangdong, 518067, P.R.China

General information

EUT Description	
Model:	6304W
Tested Device Code:	0118S01
Hardware Version:	V01
Software Version:	V1.4
Power Supply:	AC Power Supply
Antenna Type:	Internal Antenna
Antenna Gain:	ANT1:3 dBi ANT2:3 dBi ANT3:3 dBi
Directional Gain:	3 dBi
Test Mode:	U-NII-1(5150MHz-5250MHz)
Modulation Type:	802.11a/n (HT20/HT40) : OFDM 802.11ac (HT20/HT40/HT80): OFDM
Max. Conducted Power	802.11a: 20.47 dBm 802.11n: 19.91 dBm 802.11ac: 19.68 dBm
Operating Frequency Range(s)	U-NII-1: 5150-5250MHz
EUT Accessory	
Adapter	Manufacture: Shenzhen Gongjin Electronics Co.,Ltd. Model : S24B72-120A200-C4
Note: The information of the EUT is declared by the manufacturer. Please refer to the specifications or user manual for details.	



3. Test Information

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

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

ANSI C63.10 (2013)

789033 D02 General UNII Test Procedures New Rules v01r04

KDB 662911 D01 Multiple Transmitter Output v02r01

4. Test Configuration

Test Mode

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

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

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

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

Worst-case data rates are shown as following table.

Band	Data Rate			
	Antenna 1	Antenna 2	Antenna 3	MIMO
802.11a	6 Mbps	6 Mbps	6 Mbps	/
802.11n HT20	MCS0	MCS0	MCS0	MCS8
802.11n HT40	MCS0	MCS0	MCS0	MCS8
802.11ac HT20	MCS0	MCS0	MCS0	MCS8
802.11ac HT40	MCS0	MCS0	MCS0	MCS8
802.11ac HT80	MCS0	MCS0	MCS0	MCS8
The device supports non-beamforming and beamforming function in 802.11n/ac, after pre-testing, beamforming mode has the worst emission value, so the worst case was recorded.				

The worst case Antenna mode for each of the following tests for Wi-Fi:

Test Cases	Antenna 1	Antenna 2	Antenna 3	MIMO
Average conducted output power	802.11a	802.11a	802.11a	802.11n HT20/40 802.11ac HT20/40/80
Occupied bandwidth	--	--	802.11a	802.11n HT20/40 802.11ac HT20/40/80
Frequency stability	--	--	802.11a	--
Power Spectral Density	802.11a	802.11a	802.11a	802.11n HT20/40 802.11ac HT20/40/80
Unwanted Emissions	--	--	O	--
Conducted Emissions	--	--	802.11a	802.11n HT20/40 802.11ac HT20/40/80
Note: "O": test all bands				

5. Test Case Results

5.1. Occupied Bandwidth

Ambient condition

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

Method of Measurement

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

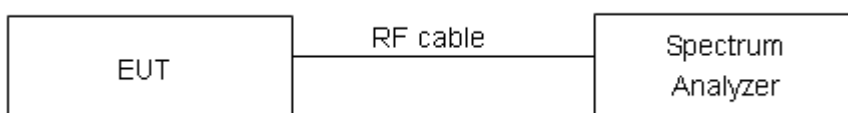
For U-NII-1, set RBW $\approx 1\%$ OCB kHz, VBW $\geq 3 \times$ RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in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

For U-NII-3, Set RBW = 100 kHz, VBW $\geq 3 \times$ RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

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

Use the 99 % power bandwidth function of the instrument

Test Setup



Limits

No specific occupied bandwidth requirements.

Measurement Uncertainty

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

**Test Results:****Antenna 3****U-NII-1**

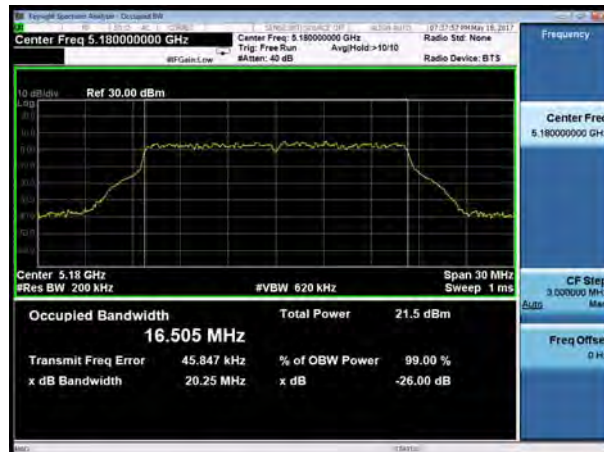
Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11a	5180	16.505	20.25	500	PASS
	5220	16.489	20.13	500	PASS
	5240	16.494	20.18	500	PASS

MIMO U-NII-1

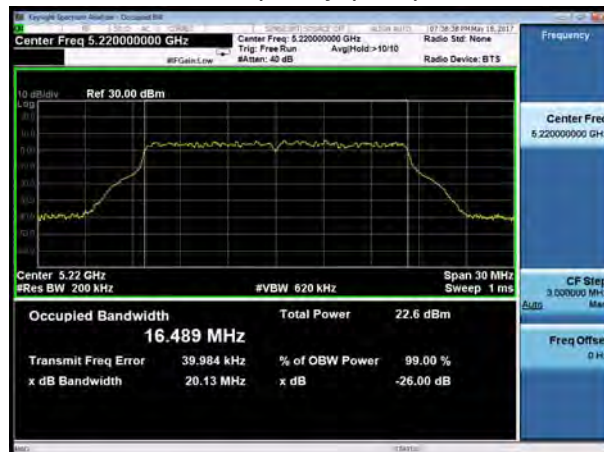
Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 26 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11n HT20	5180	17.745	20.96	500	PASS
	5200	17.720	20.65	500	PASS
	5240	17.734	20.63	500	PASS
802.11n HT40	5190	36.330	39.63	500	PASS
	5230	36.294	39.64	500	PASS
802.11ac HT20	5180	17.747	20.66	500	PASS
	5220	17.773	20.76	500	PASS
	5240	17.772	20.82	500	PASS
802.11ac HT40	5190	36.318	39.50	500	PASS
	5230	36.276	39.33	500	PASS
802.11ac HT80	5210	75.614	80.34	500	PASS

Antenna 2

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



U-NII-1, 802.11a Carrier frequency (MHz): 5200



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





MIMO

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



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



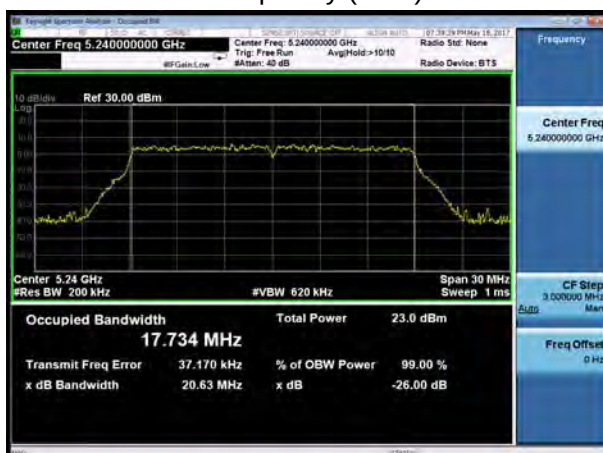
U-NII-1, 802.11n HT20
Carrier frequency (MHz): 5200



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



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



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



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



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



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



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



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



5.2. Average Power Output –Conducted

Ambient condition

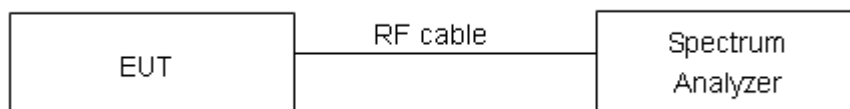
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

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

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

Test Setup



Limits

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

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Measurement Uncertainty

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

Test Results

Single Antenna Power Index									
Packet Type	Antenna 1			Antenna 2			Antenna 3		
	CH36	CH44	CH48	CH36	CH44	CH48	CH36	CH44	CH48
802.11a	16	16	16	16	16	16	16	16	16

MIMO Antenna Power Index									
Packet Type	Antenna 1			Antenna 2			Antenna 3		
	CH36	CH44	CH48	CH36	CH44	CH48	CH36	CH44	CH48
802.11n HT20	16	16	16	16	16	16	16	16	16
802.11ac HT20	16	16	16	16	16	16	16	16	16
Packet Type	CH38	CH46	/	CH38	CH46	/	CH38	CH46	/
802.11n HT40	14	16	/	14	16	/	14	16	/
802.11ac HT40	14	16	/	14	16	/	16	16	/
Packet Type	CH42	/	/	CH42	/	/	CH42	/	/
802.11ac HT80	16	/	/	16	/	/	14	/	/



Test results

SISO

Network Standards	Channel/ Frequency (MHz)	Output Power (dBm)								Limit (dBm)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Total Power			
		(dBm)	(mW)	(dBm)	(mW)	(dBm)	(mW)	(mW)	(dBm)		
U-NII-1 802.11a	36/5180	14.45	27.86	14.42	27.67	14.49	28.12	84.10	19.25	24	PASS
	44/5220	15.50	35.48	14.83	30.41	15.37	34.43	104.35	20.18	24	PASS
	48/5240	15.88	38.73	15.34	34.20	15.61	36.39	111.51	20.47	24	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)} + 10^{(\text{Power antenna3 in dBm}/10)})$.

2. The manufacturer declared the transmitter output signals is CDD mode And $N_{SS}=3$. According to KDB 662911 D01

Multiple Transmitter Output v02r01 2)f(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$,

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

So directional gain = $G_{ANT} + \text{Array Gain} = 3 + 0 = 3 \text{ dBi} < 6 \text{ dBi}$. So the power limit is 24dBm.



MIMO

Network Standards		Channel/ Frequency (MHz)	Output Power								Limit (dBm)	Conclusion
			ANT1		ANT2		ANT3		Total Power			
			(dBm)	(mW)	(dBm)	(mW)	(dBm)	(mW)	(mW)	(dBm)		
U-NII-1	802.11n HT20	36/5180	14.07	25.53	13.29	21.33	13.91	24.60	71.46	18.54	30.00	PASS
		44/5220	15.01	31.70	14.58	28.71	15.11	32.43	92.84	19.68	30.00	PASS
		48/5240	15.50	35.48	14.69	29.44	15.18	32.96	97.89	19.91	30.00	PASS
	802.11n HT40	38/5190	11.72	14.86	10.45	11.09	14.34	27.16	53.12	17.25	30.00	PASS
		46/5230	15.09	32.28	14.79	30.13	15.37	34.43	96.85	19.86	30.00	PASS
	802.11ac HT20	36/5180	13.81	24.04	13.24	21.09	13.84	24.21	69.34	18.41	30.00	PASS
		44/5220	14.91	30.97	14.21	26.36	14.85	30.55	87.89	19.44	30.00	PASS
		48/5240	15.15	32.73	14.47	27.99	15.04	31.92	92.64	19.67	30.00	PASS
	802.11ac HT40	38/5190	11.23	13.27	10.58	11.43	14.37	27.35	52.06	17.16	30.00	PASS
		46/5230	15.19	33.04	14.46	27.93	15.04	31.92	92.88	19.68	30.00	PASS
	802.11ac HT80	42/5210	14.14	25.94	13.62	23.01	10.84	12.13	61.09	17.86	30.00	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)} + 10^{(\text{Power antenna3 in dBm}/10)})$.

2. The manufacturer declared the transmitter output signals is CDD mode And $N_{ss}=3$. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$,

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT} ;

Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less, for 20-MHz channel widths with $N_{ANT} \geq 5$.

So directional gain = $G_{ANT} + \text{Array Gain} = 3 + 0 = 3 \text{ dBi} < 6 \text{ dBi}$. So the power limit is 30dBm.

5.3. Frequency Stability

Ambient condition

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

Method of Measurement

1. Frequency stability with respect to ambient temperature

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

2. Frequency stability when varying supply voltage

Unless otherwise specified, these tests shall be made at ambient room temperature (+15 C to +25

C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

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

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

Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

Measurement Uncertainty

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

**Test Results****Antenna 3**

Voltage (V)	Temperature (°C)	U-NII-1 Test Results			
		5200MHz			
		1min	2min	5min	10min
12.0	-20	5199.993966	5199.990963	5199.984073	5199.981780
12.0	-10	5199.989639	5199.983117	5199.977178	5199.974535
12.0	0	5199.980869	5199.982299	5199.968418	5199.972880
12.0	10	5199.973857	5199.980743	5199.959126	5199.972500
12.0	20	5199.968299	5199.980009	5199.949671	5199.963443
12.0	30	5199.963504	5199.977756	5199.944609	5199.961903
12.0	40	5199.953979	5199.974929	5199.943247	5199.952367
12.0	50	5199.947527	5199.965496	5199.937694	5199.945742
11.0	20	5199.940108	5199.965482	5199.930386	5199.945709
13.0	20	5199.935542	5199.961837	5199.920535	5199.940223
MHz		-0.064458	-0.038163	-0.079465	-0.059777
PPM		-12.395809	-7.339088	-15.281652	-11.495508

5.4. Power Spectral Density

Ambient condition

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

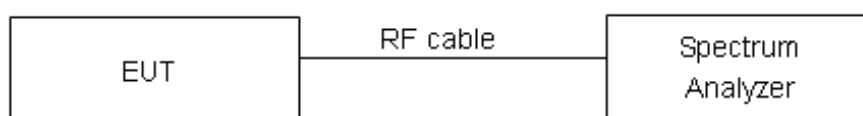
Method of Measurement

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

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

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

Test setup



Limits

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

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

Frequency Bands/MHz	Limits
5150-5250	17dBm/MHz

Measurement Uncertainty

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

**Test Results:****SISO**

Network Standards		Channel Number	Power Spectral Density								Limit (dBm /MHz)	Conclusion
			Antenna 1		Antenna 2		Antenna 3		Total PSD			
			(dBm / MHz)	(mW/ MHz)	(dBm / MHz)	(mW/ MHz)	(dBm / MHz)	(mW/ MHz)	(mW/ MHz)	(dBm / MHz)		
802.11a	U-NII-1	36	3.276	2.126	2.724	1.872	2.772	1.893	5.892	7.702	17	PASS
		40	4.096	2.568	4.157	2.604	4.324	2.706	7.879	8.965	17	PASS
		48	5.044	3.194	4.012	2.519	4.727	2.970	8.683	9.387	17	PASS

Note: 1. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a), the power spectral density = $10\log(10^{(\text{PSD antenna1 in dBm/10})} + 10^{(\text{PSD antenna2 in dBm/10})} + 10^{(\text{PSD antenna3 in dBm/10})})$

2. The manufacturer declared the transmitter output signals is CDD mode. And $N_{ss}=3$. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$, For power spectral density (PSD) measurements on all devices, Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB=0.

So directional gain = $G_{ANT} + \text{Array Gain} = 3+0=3$ dBi < 6dBi. So the power limit is 17dBm

MIMO

Network Standards		Channel Number	Power Spectral Density								Limit (dBm /MHz)	Conclusion
			ANT1		ANT2		ANT3		Total PSD			
			(dBm / MHz)	(mW/ MHz)	(dBm / MHz)	(mW/ MHz)	(dBm / MHz)	(mW/ MHz)	(mW/ MHz)	(dBm / MHz)		
802.11n HT20	U-NII-1	36	2.324	1.708	1.908	1.552	2.549	1.798	5.058	7.040	17	PASS
		44	3.579	2.280	3.265	2.121	3.681	2.334	6.735	8.283	17	PASS
		48	4.769	2.998	3.296	2.136	4.300	2.692	7.826	8.935	17	PASS
802.11n HT40	U-NII-1	38	-3.720	0.425	-3.480	0.449	0.250	1.059	1.933	2.861	17	PASS
		46	0.692	1.173	0.245	1.058	1.596	1.444	3.675	5.652	17	PASS
802.11ac HT20	U-NII-1	36	2.172	1.649	1.503	1.414	2.105	1.624	4.686	6.708	17	PASS
		44	3.581	2.281	2.969	1.981	3.705	2.347	6.609	8.201	17	PASS
		48	4.033	2.531	3.331	2.153	4.029	2.529	7.213	8.581	17	PASS
802.11ac HT40	U-NII-1	38	-3.900	0.407	-3.130	0.486	-0.310	0.931	1.825	2.612	17	PASS
		46	0.655	1.163	0.410	1.099	1.596	1.444	3.706	5.689	17	PASS
802.11ac HT80	U-NII-1	42	-2.720	0.535	-3.060	0.494	-6.010	0.251	1.279	1.070	17	PASS

Note: 1. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a), the power spectral density = $10\log(10^{(\text{PSD antenna1 in dBm/10})} + 10^{(\text{PSD antenna2 in dBm/10})} + 10^{(\text{PSD antenna3 in dBm/10})})$

2. The manufacturer declared the transmitter output signals is CDD mode. And $N_{ss}=3$. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$, For power spectral density (PSD) measurements on all devices, Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB=0.

So directional gain = $G_{ANT} + \text{Array Gain} = 3+0=3$ dBi < 6dBi. So the power limit is 17dBm



Antenna 1

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



Antenna 2

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



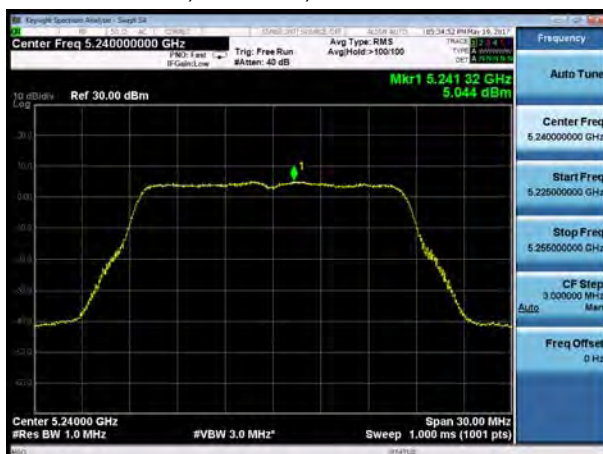
U-NII-1, 802.11a, Channel No.: 44



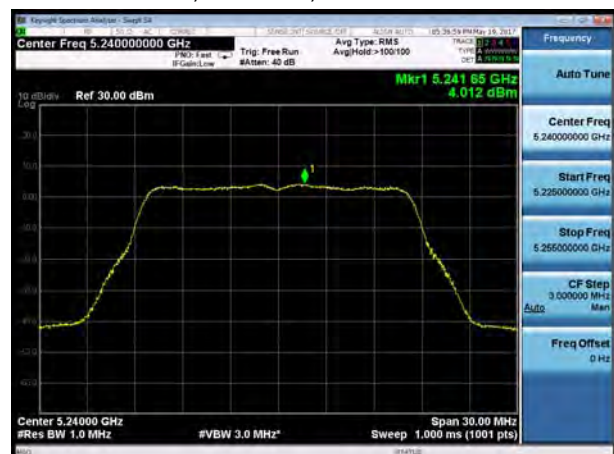
U-NII-1, 802.11a, Channel No.: 44



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



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





Antenna 3

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



U-NII-1, 802.11a, Channel No.: 44



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





MIMO Antenna 1

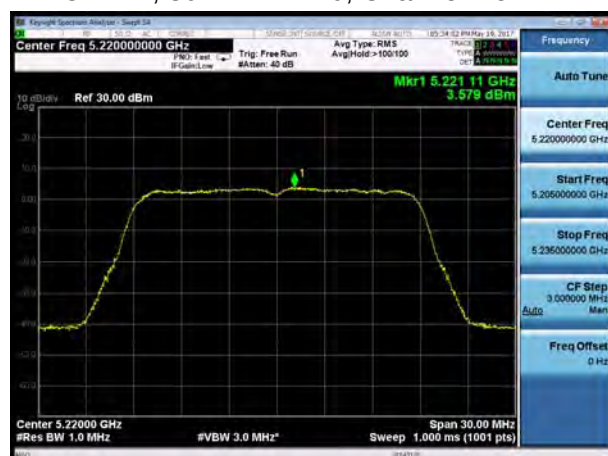
U-NII-1, 802.11n HT20, Channel No.: 36



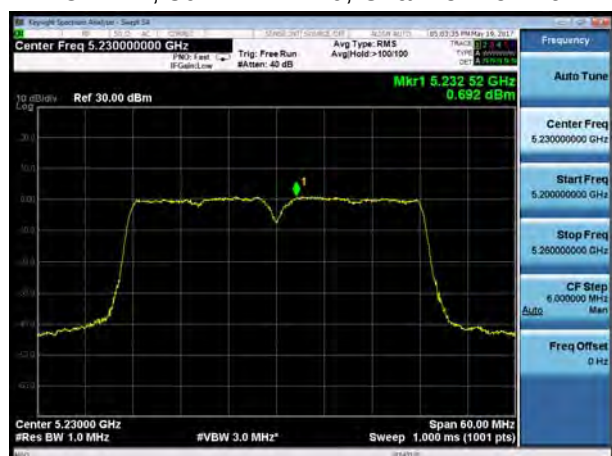
U-NII-1, 802.11n HT40, Channel No.: 38



U-NII-1, 802.11n HT20, Channel No.: 44



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



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

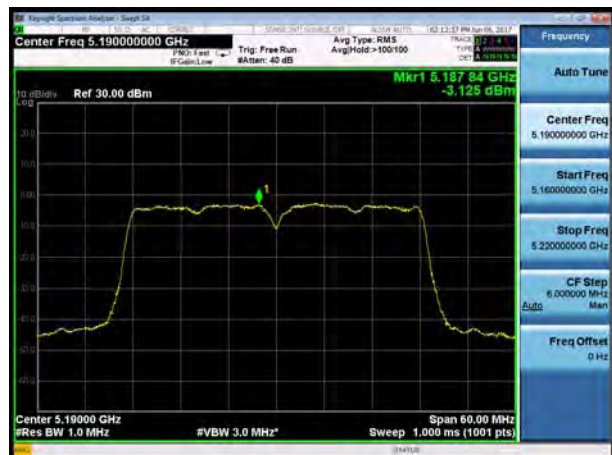




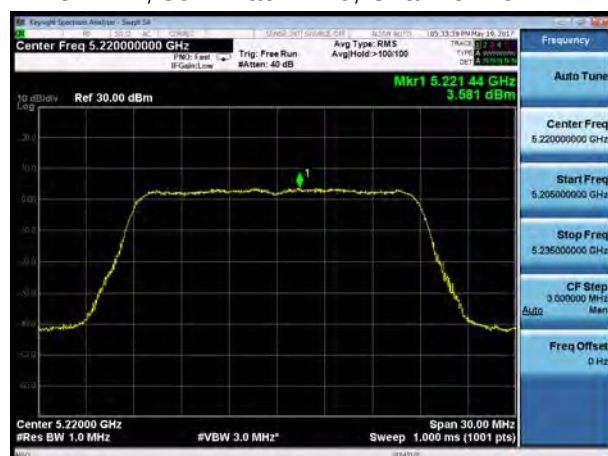
U-NII-1, 802.11ac HT20, Channel No.: 36



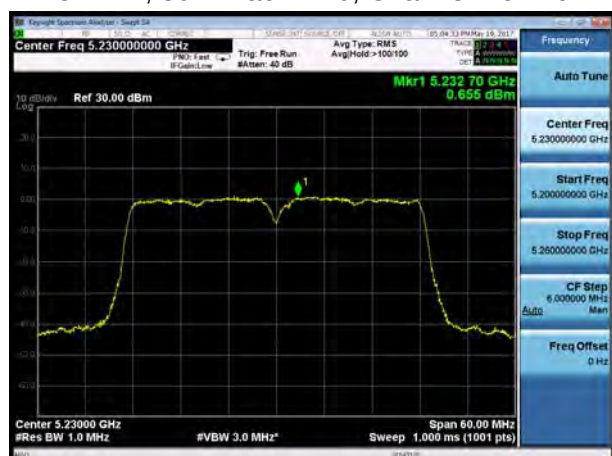
U-NII-1, 802.11ac HT40, Channel No.: 38



U-NII-1, 802.11ac HT20, Channel No.: 44



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



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



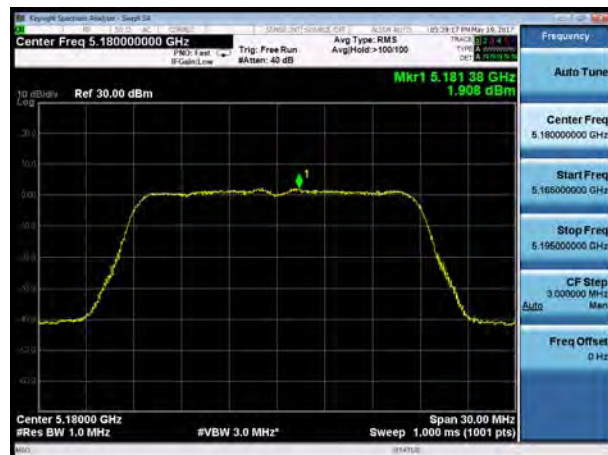
U-NII-1, 802.11ac HT80, Channel No.: 42





MIMO Antenna 2

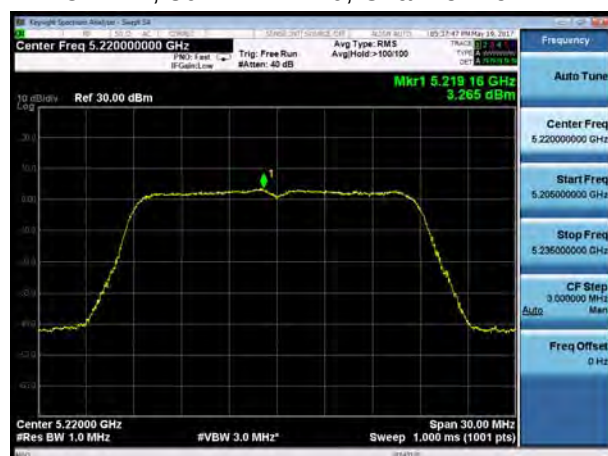
U-NII-1, 802.11n HT20, Channel No.: 36



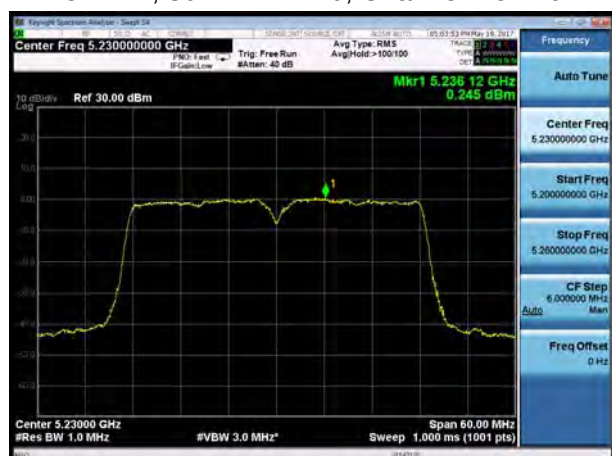
U-NII-1, 802.11n HT40, Channel No.: 38



U-NII-1, 802.11n HT20, Channel No.: 44



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



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



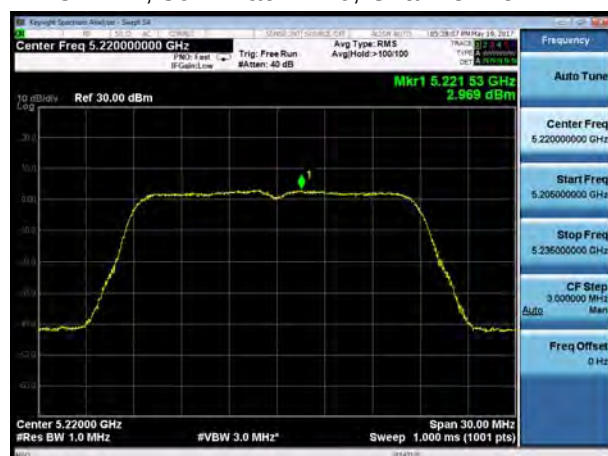
U-NII-1, 802.11ac HT20, Channel No.: 36



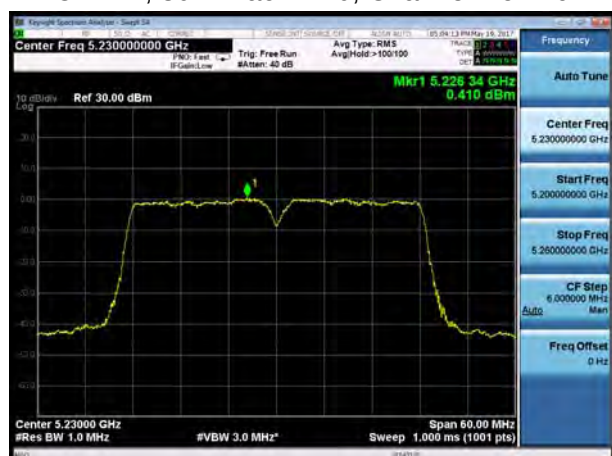
U-NII-1, 802.11ac HT40, Channel No.: 38



U-NII-1, 802.11ac HT20, Channel No.: 44



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



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

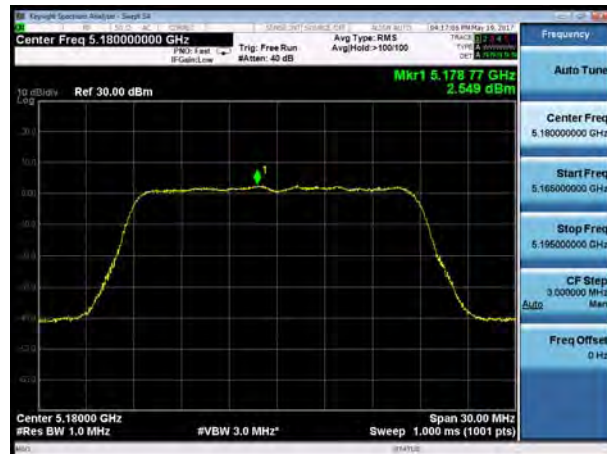


U-NII-1, 802.11ac HT80, Channel No.: 42

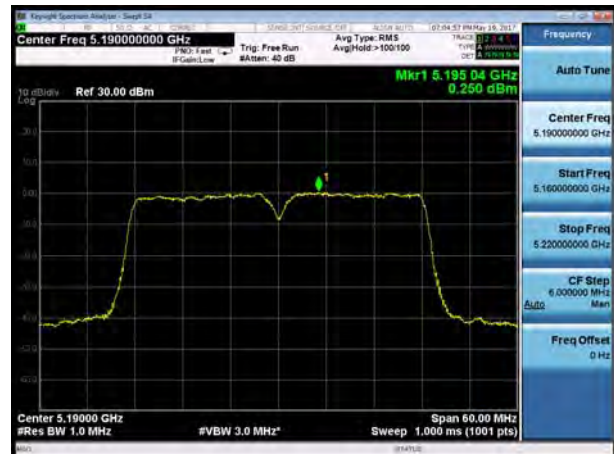


MIMO Antenna 3

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



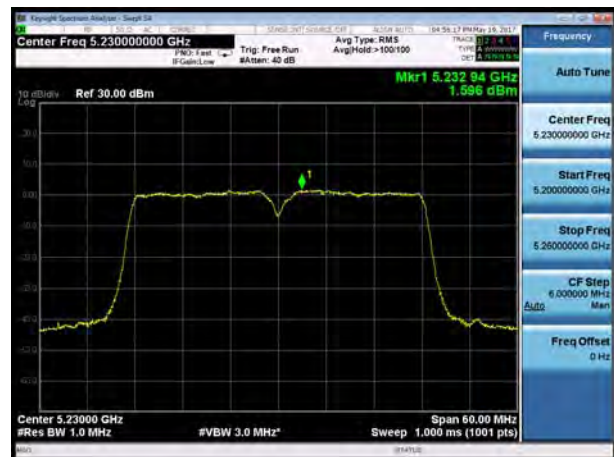
U-NII-1, 802.11n HT40, Channel No.: 38



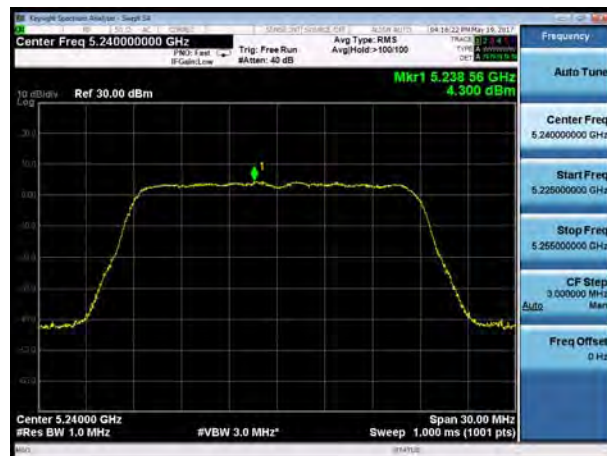
U-NII-1, 802.11n HT20, Channel No.: 44



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



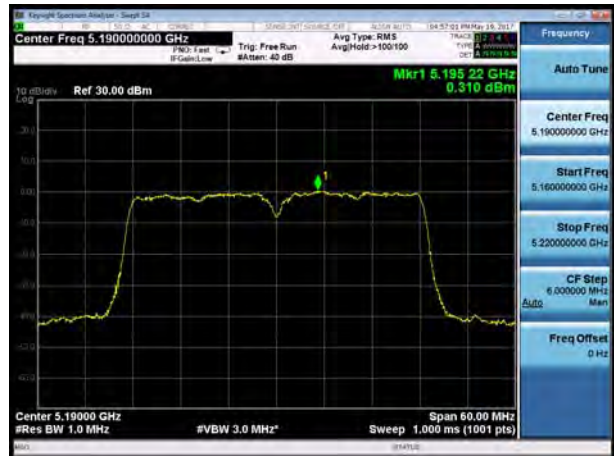
U-NII-1, 802.11n HT20, Channel No.: 48



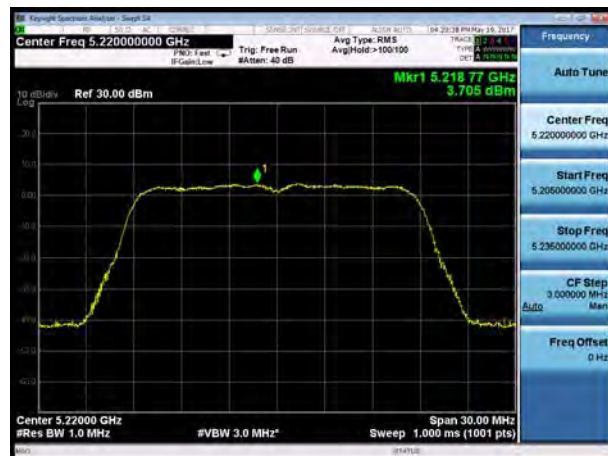
U-NII-1, 802.11ac HT20, Channel No.: 36



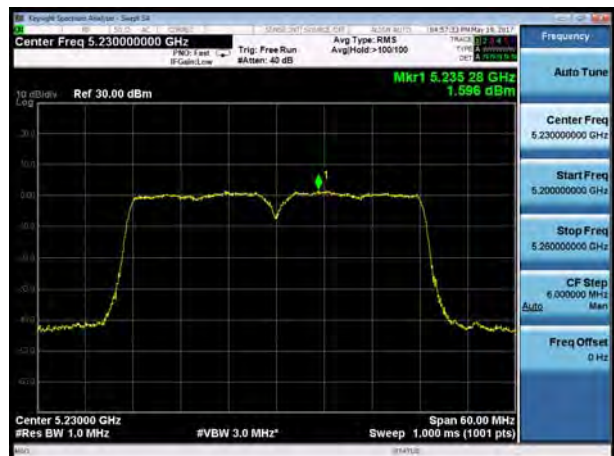
U-NII-1, 802.11ac HT40, Channel No.: 38



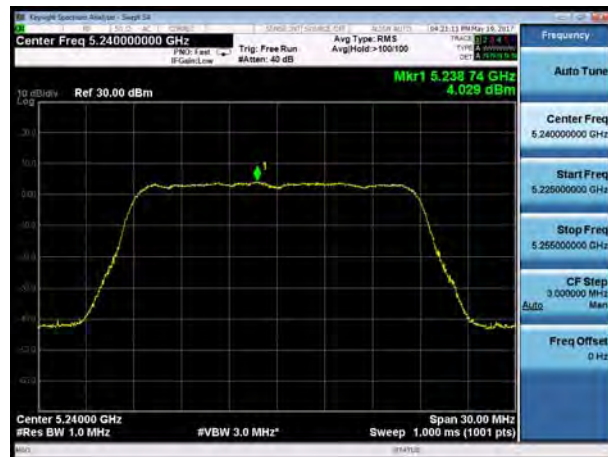
U-NII-1, 802.11ac HT20, Channel No.: 44



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



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



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



5.5. Unwanted Emission

Ambient condition

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

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10-2013. The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration. Sweep the whole frequency band range from 9kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

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

Set the spectrum analyzer in the following:

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

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

Above 1GHz (detector: Peak):

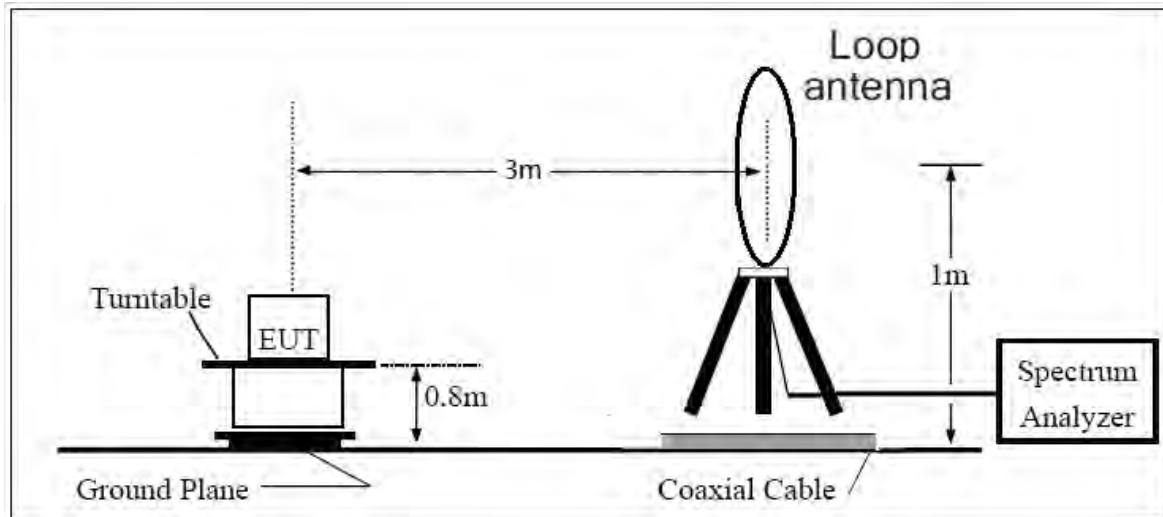
(a) PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO

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

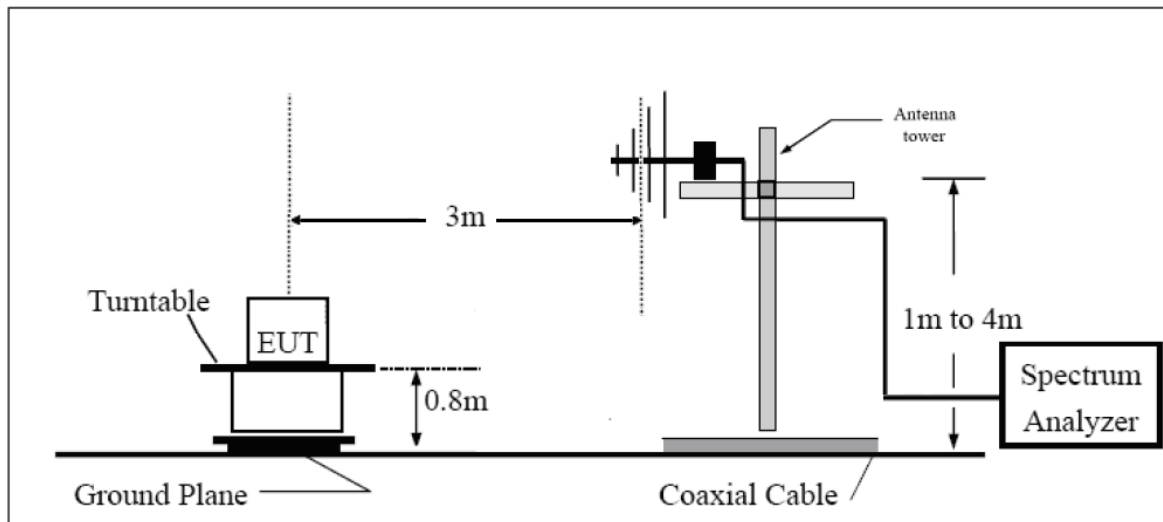
The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the worst case was recorded.

The test is in transmitting mode.

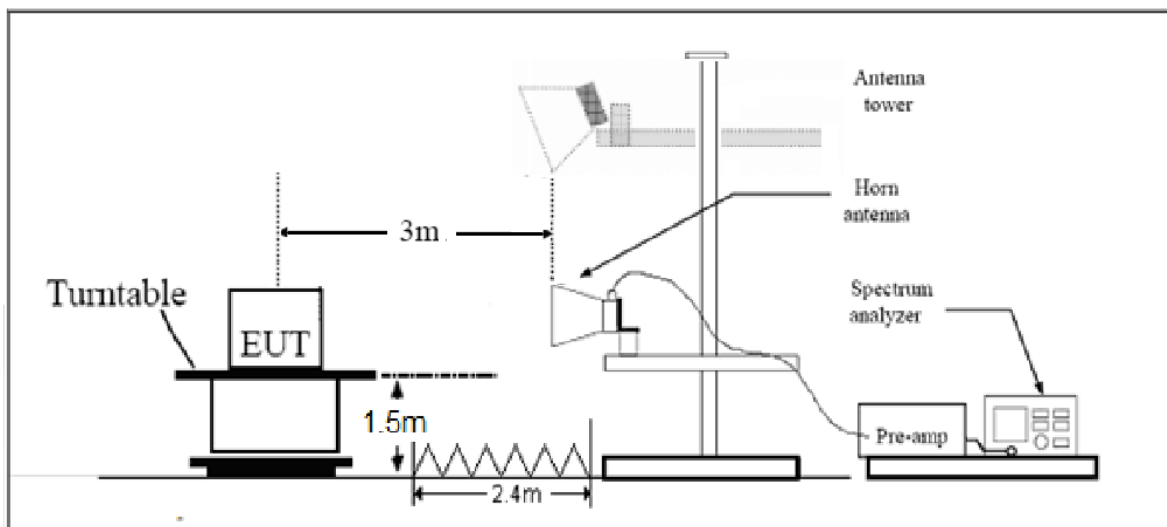
9KHz~~~30MHz



30MHz~~~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

- (1) For transmitters operating in the 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(68.2dB μ V/m).
- (2) 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
0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

Measurement Uncertainty

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

Frequency	Uncertainty
9KHz-30MHz	3.55 dB



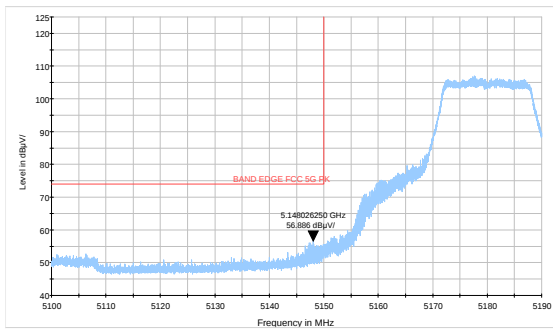
30MHz-200MHz	4.19 dB
200MHz-1GHz	3.63 dB
1GHz-26.5G	3.68 dB
26.5G-40GHz	4.76dB



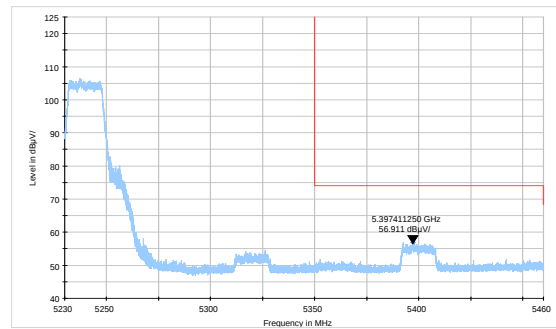
Test Results: The signal beyond the limit is carrier.

U-NII-1

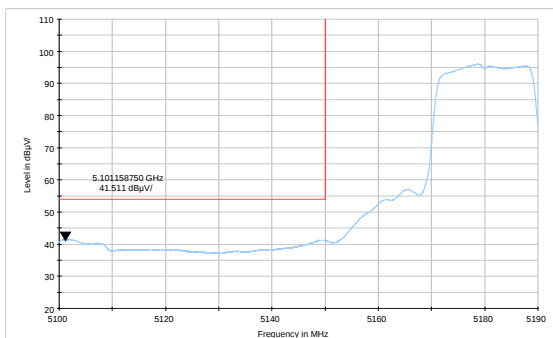
802.11a-Channel 36: Peak



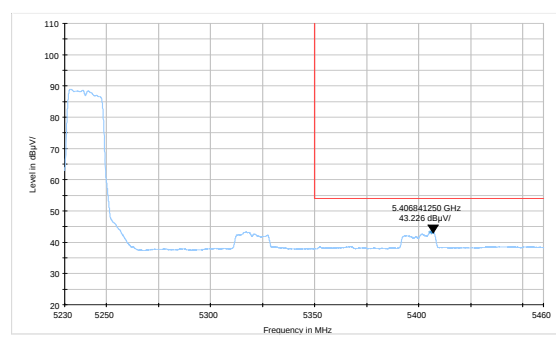
802.11a-Channel 48: Peak



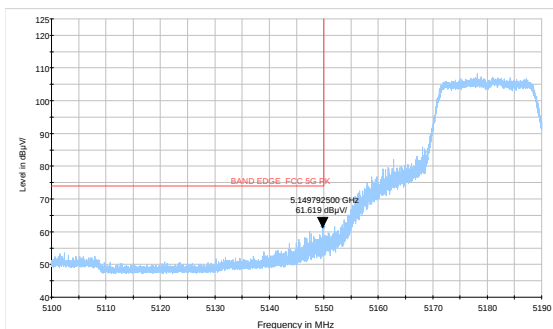
802.11a-Channel 36: Average



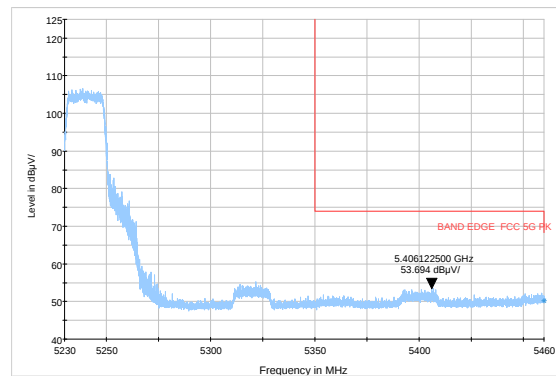
802.11a-Channel 48: Average



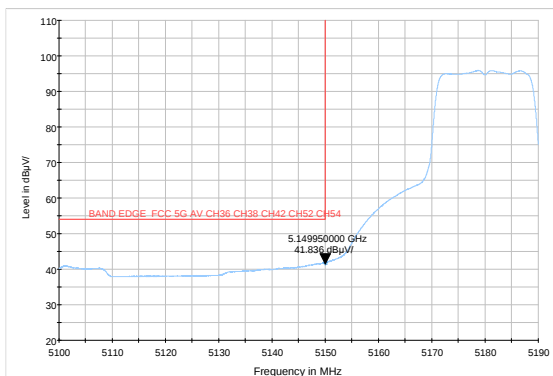
802.11n HT20-Channel 36: Peak



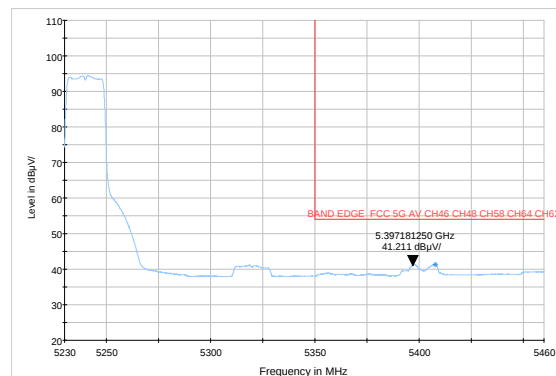
802.11n HT20-Channel 48: Peak



802.11n HT20-Channel 36: Average

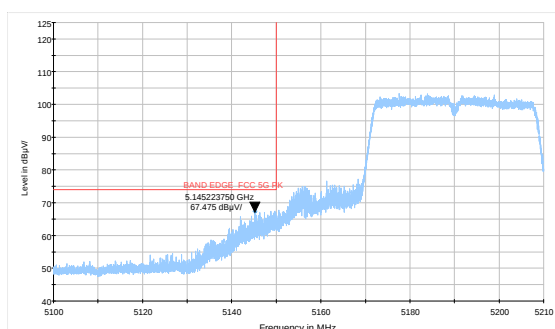


802.11n HT20-Channel 48: Average

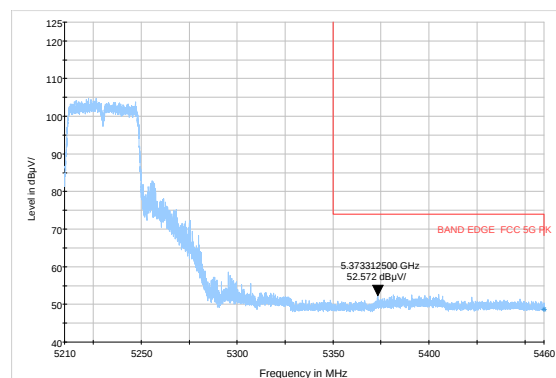




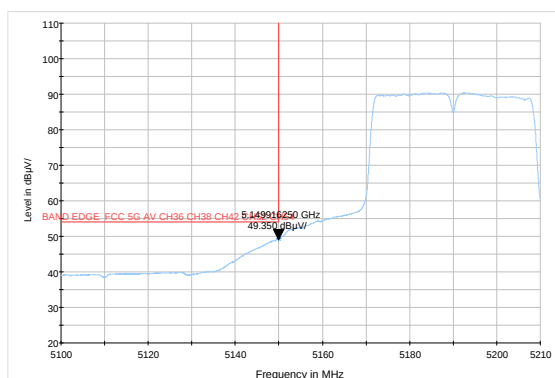
802.11n HT40-Channel 38: Peak



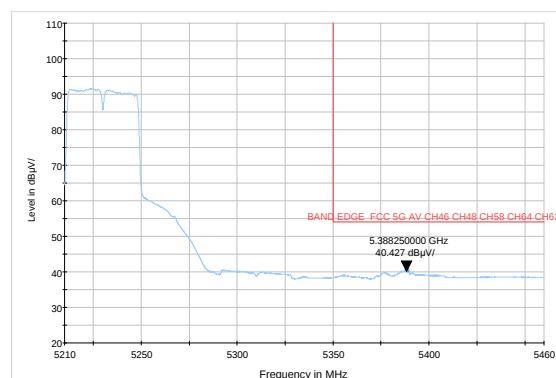
802.11n HT40-Channel 46: Peak



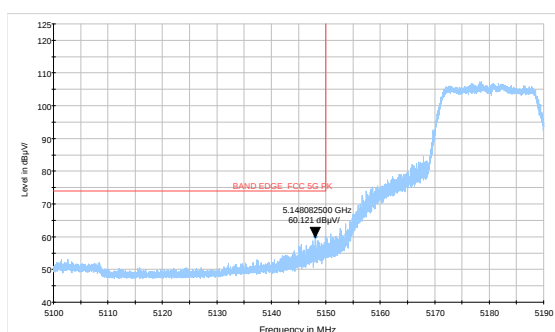
802.11n HT40-Channel 38: Average



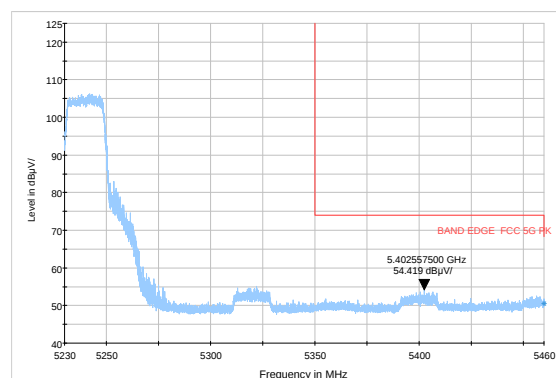
802.11n HT40-Channel 46: Average



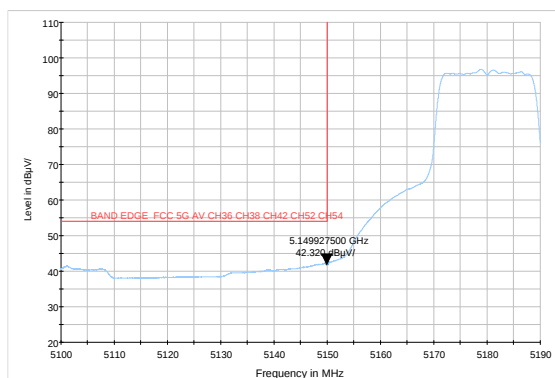
802.11ac HT20 -Channel 36: Peak



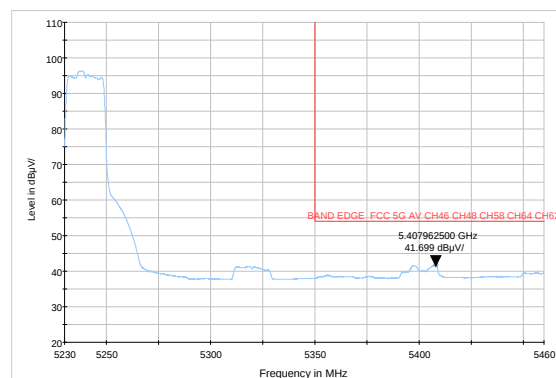
802.11ac HT20 -Channel 48: Peak



802.11ac HT20-Channel 36: Average

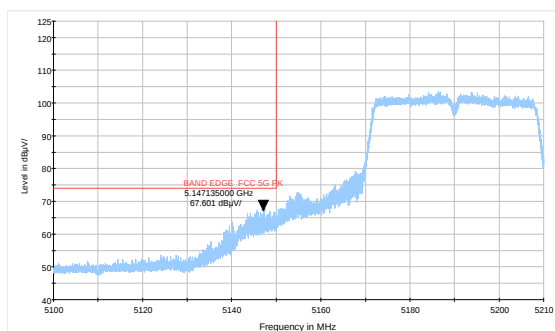


802.11ac HT20 -Channel 48: Average

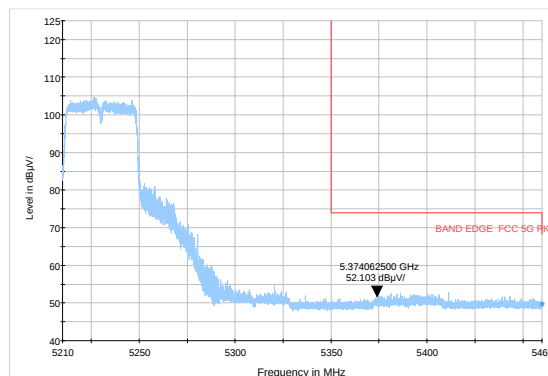




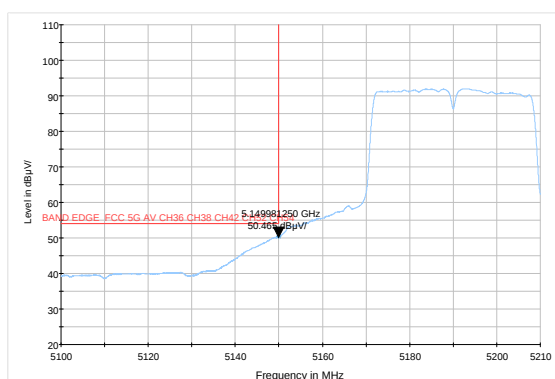
802.11ac HT40-Channel 38: Peak



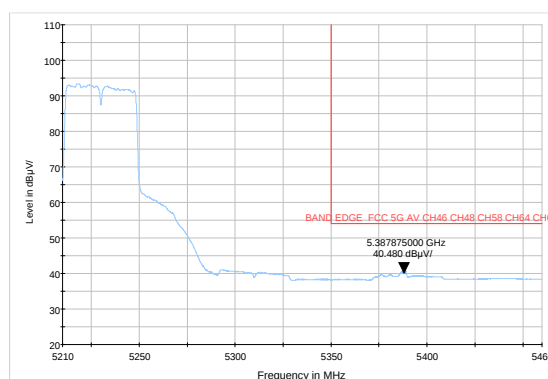
802.11ac HT40-Channel 46: Peak



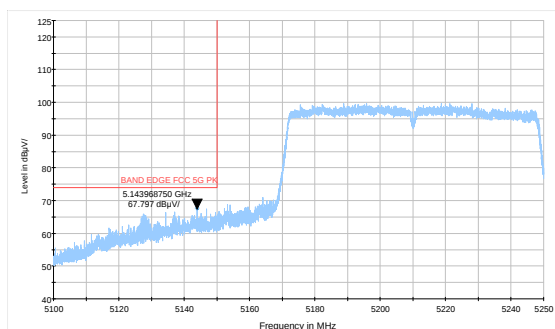
802.11ac HT40-Channel 38: Average



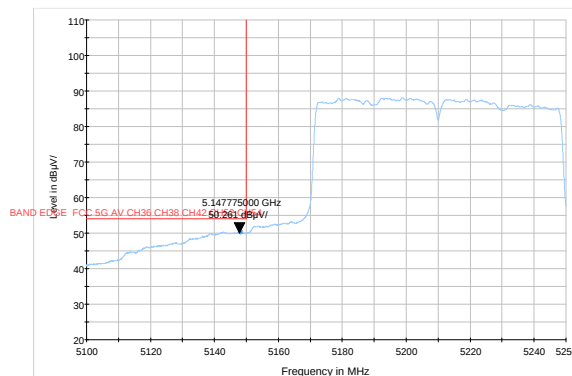
802.11ac HT40-Channel 46: Average



802.11ac HT80 -Channel 42: Peak



802.11ac HT80- Channel 42: Average



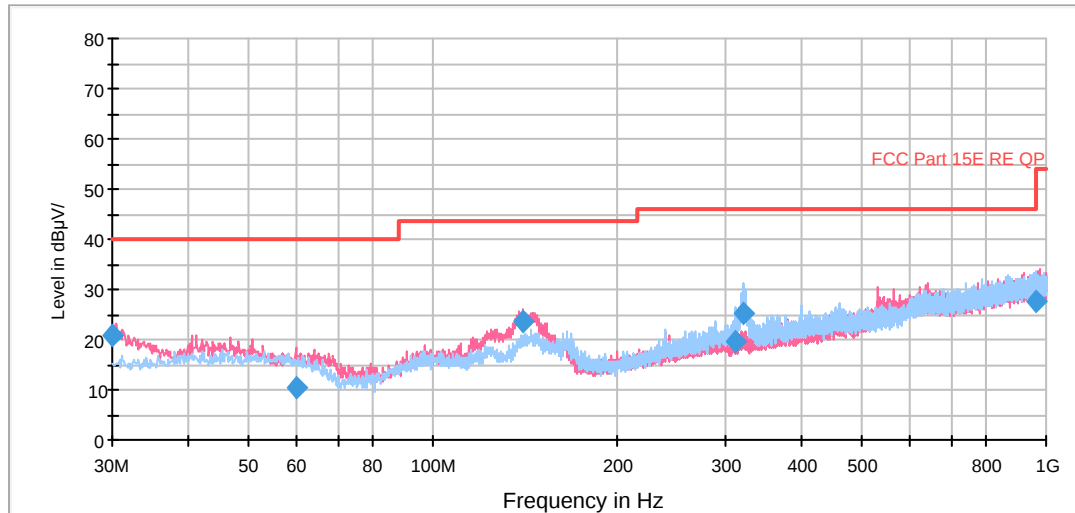
Result of RE

Test result

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

Antenna 3: 802.11a CH36

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

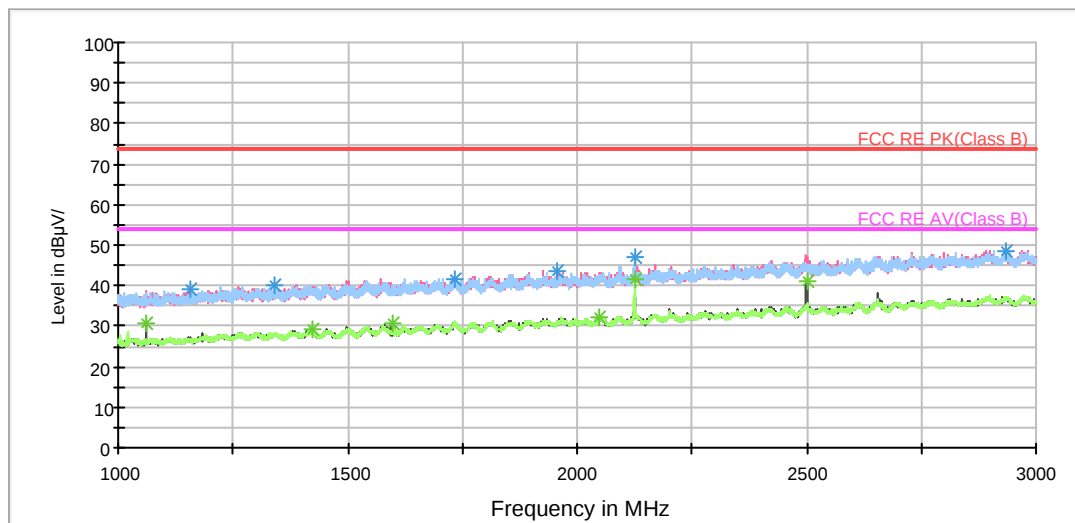
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.0	100.0	V	222.0	8.9	12.1	19.0	40.0
59.947500	10.3	113.0	V	20.0	-2.3	12.6	29.7	40.0
139.937500	23.6	100.0	V	266.0	14.6	9.0	19.9	43.5
310.892500	19.7	100.0	H	236.0	4.0	15.7	26.3	46.0
321.641250	25.1	100.0	H	239.0	9.0	16.1	20.9	46.0
959.983750	27.5	100.0	H	22.0	0.1	27.4	18.5	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

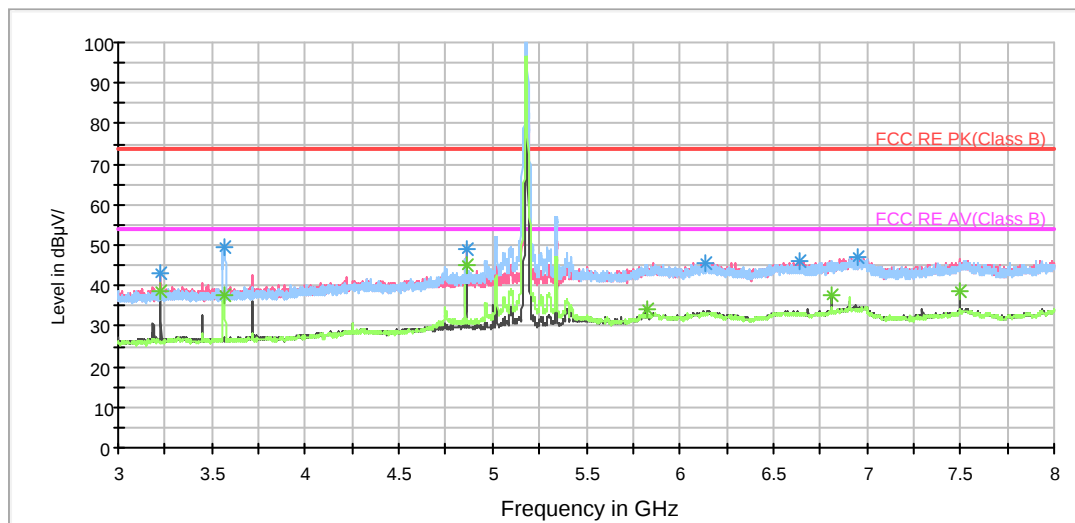
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1158.000000	39.1	101.0	V	315.0	47.5	-8.4	34.9	74
1342.000000	40.1	200.0	H	172.0	47.5	-7.4	33.9	74
1731.750000	41.8	101.0	V	207.0	46.6	-4.8	32.2	74
1956.250000	43.6	200.0	V	0.0	47.1	-3.5	30.4	74
2125.250000	46.9	200.0	H	352.0	49.2	-2.3	27.1	74
2935.500000	48.6	200.0	V	37.0	46.8	1.8	25.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	30.5	200.0	V	90.0	39.4	-8.9	23.5	54
1424.500000	29.2	101.0	H	114.0	36.1	-6.9	24.8	54
1599.750000	30.9	200.0	H	0.0	37.3	-6.4	23.1	54
2046.500000	32.1	101.0	H	229.0	35.3	-3.2	21.9	54
2125.000000	41.7	200.0	H	0.0	44.0	-2.3	12.3	54
2500.250000	41.1	200.0	V	10.0	41.3	-0.2	12.9	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

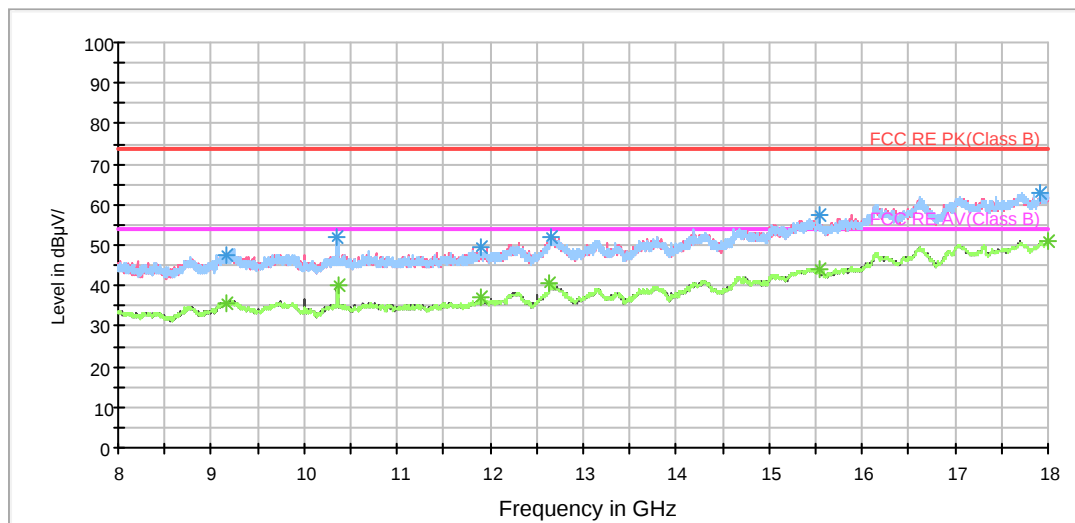
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3229.375000	42.9	200.0	V	2.0	45.6	-2.7	31.1	74
3568.125000	49.6	101.0	H	79.0	51.8	-2.2	24.4	74
4860.625000	49.2	101.0	V	150.0	47.5	1.7	24.8	74
6131.875000	45.6	200.0	V	191.0	40.2	5.4	28.4	74
6640.000000	45.9	200.0	V	0.0	40.4	5.5	28.1	74
6945.625000	46.9	101.0	H	0.0	40.8	6.1	27.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3228.750000	38.8	200.0	V	2.0	41.5	-2.7	15.2	54
3566.250000	37.6	101.0	H	79.0	39.8	-2.2	16.4	54
4860.625000	45.1	101.0	V	150.0	43.4	1.7	8.9	54
5827.500000	34.3	200.0	H	277.0	29.8	4.5	19.7	54
6812.500000	37.5	200.0	V	44.0	31.7	5.8	16.5	54
7500.000000	38.8	200.0	V	276.0	31.9	6.9	15.2	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

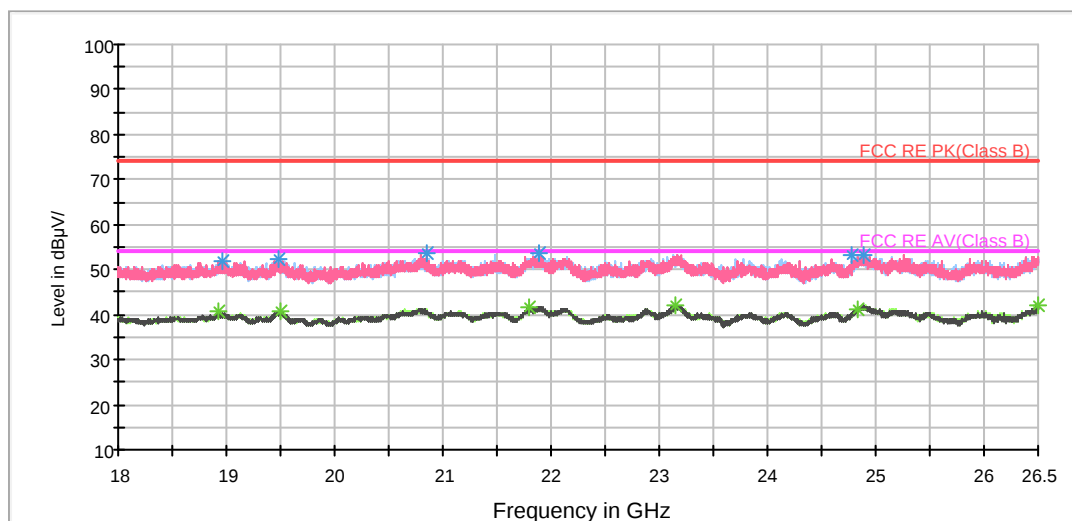
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9155.000000	47.5	205.0	V	156.0	37.2	10.3	26.5	74
10358.750000	52.0	205.0	V	202.0	42.2	9.8	22.0	74
11910.000000	49.3	205.0	H	294.0	37.3	12.0	24.7	74
12651.250000	52.1	205.0	V	156.0	38.0	14.1	21.9	74
15536.250000	57.3	205.0	V	110.0	38.4	18.9	16.7	74
17918.750000	62.9	205.0	H	19.0	37.2	25.7	11.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9157.500000	35.8	205.0	H	113.0	25.5	10.3	18.2	54
10361.250000	40.1	205.0	V	202.0	30.3	9.8	13.9	54
11898.750000	36.9	105.0	H	0.0	24.6	12.3	17.1	54
12641.250000	40.4	105.0	H	88.0	25.9	14.5	13.6	54
15536.250000	44.2	205.0	V	110.0	25.3	18.9	9.8	54
17998.750000	51.0	105.0	H	43.0	25.6	25.4	3.0	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

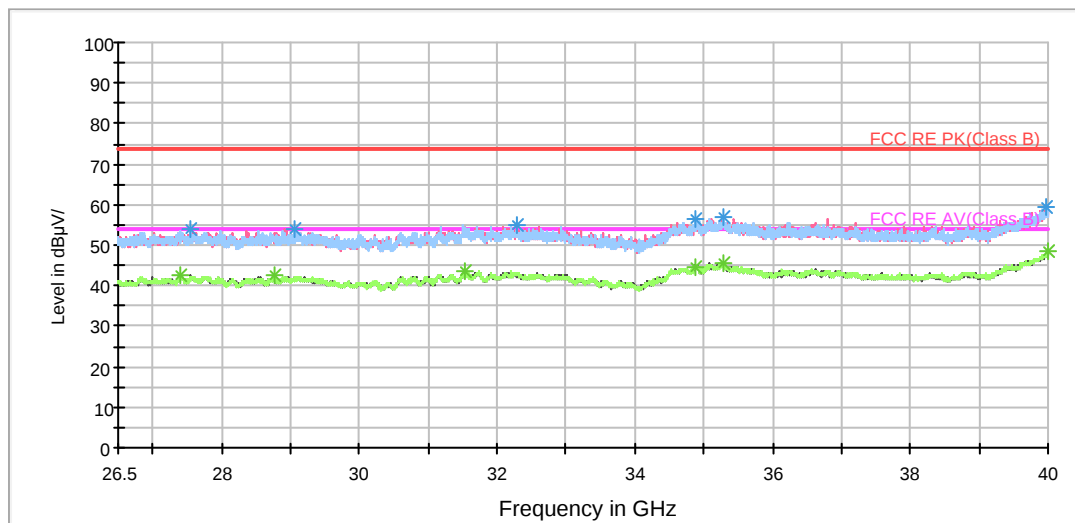
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18970.062500	51.8	V	170.0	51.9	-0.1	22.2	74
19475.812500	52.3	H	225.0	52.2	0.1	21.7	74
20856.000000	53.6	V	72.0	55.9	-2.3	20.4	74
21891.937500	53.7	H	141.0	55.3	-1.6	20.3	74
24786.187500	53.3	H	225.0	53.3	0.0	20.7	74
24882.875000	53.1	H	70.0	52.6	0.5	20.9	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18922.250000	40.5	V	127.0	40.4	0.1	13.5	54
19500.250000	40.6	H	196.0	40.5	0.1	13.4	54
21788.875000	41.5	H	155.0	43.6	-2.1	12.5	54
23157.375000	42.0	H	225.0	42.1	-0.1	12.0	54
24837.187500	41.2	V	45.0	40.9	0.3	12.8	54
26493.625000	42.1	H	225.0	41.0	1.1	11.9	54

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

BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27544.562500	54.0	H	357.0	53.6	0.4	20.0	74
29066.687500	53.9	H	12.0	54.0	-0.1	20.1	74
32283.062500	54.8	V	249.0	55.3	-0.5	19.2	74
34868.312500	56.4	V	172.0	54.7	1.7	17.6	74
35283.437500	56.8	H	123.0	54.9	1.9	17.2	74
39983.125000	59.2	H	0.0	53.3	5.9	14.8	74

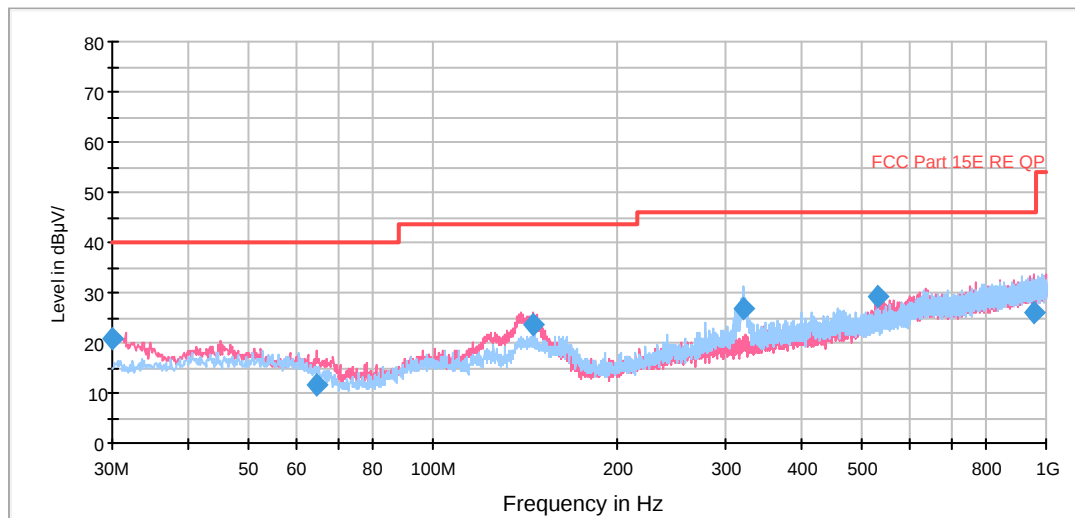
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27404.500000	42.4	H	0.0	42.0	0.4	11.6	54
28766.312500	42.4	V	76.0	42.8	-0.4	11.6	54
31535.500000	43.8	V	275.0	44.2	-0.4	10.2	54
34866.625000	44.6	V	215.0	42.9	1.7	9.4	54
35273.312500	45.5	H	0.0	43.5	2.0	8.5	54
39998.312500	48.5	V	207.0	42.5	6.0	5.5	54

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

802.11a CH40

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

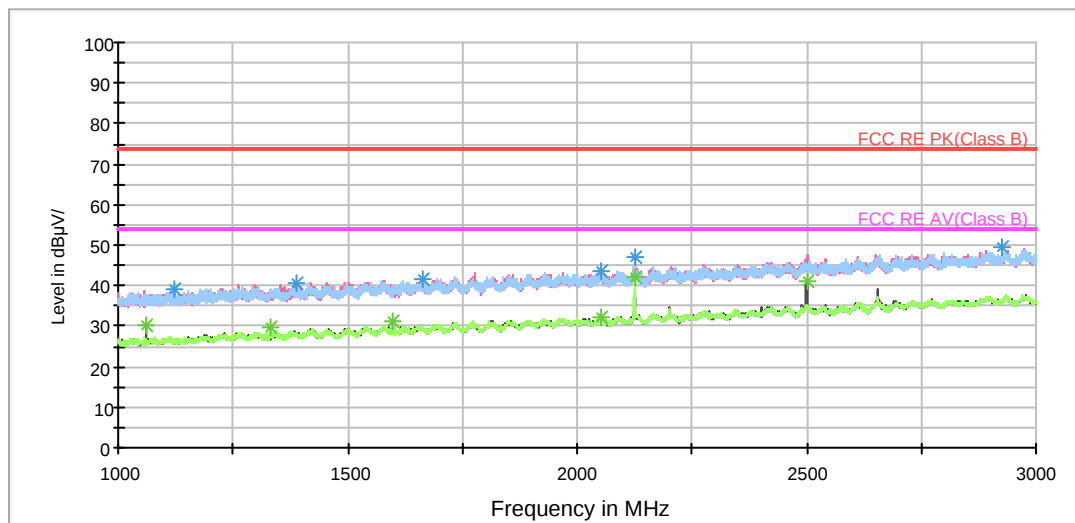
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.0	100.0	V	243.0	8.9	12.1	19.0	40.0
64.836250	11.8	100.0	V	209.0	1.0	10.8	28.2	40.0
145.676250	23.5	100.0	V	263.0	14.4	9.1	20.0	43.5
320.632500	26.7	114.0	H	34.0	10.5	16.2	19.3	46.0
531.247500	29.1	100.0	V	228.0	8.3	20.8	16.9	46.0
957.968750	26.1	113.0	V	0.0	-1.2	27.3	19.9	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

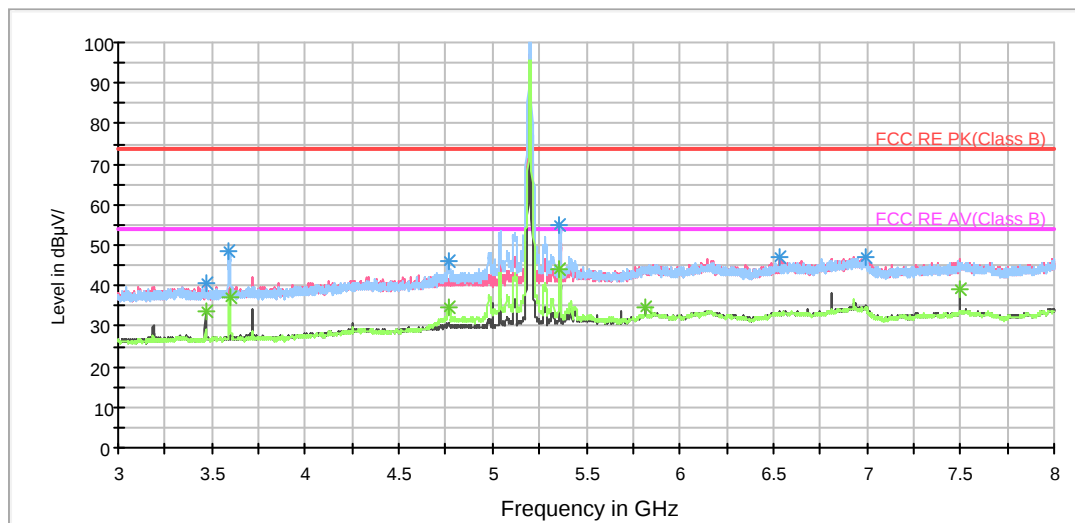
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1124.250000	39.2	200.0	V	199.0	47.7	-8.5	34.8	74
1386.750000	40.6	200.0	V	9.0	47.6	-7.0	33.4	74
1664.750000	41.5	200.0	H	193.0	46.7	-5.2	32.5	74
2051.000000	43.5	101.0	H	12.0	46.7	-3.2	30.5	74
2124.750000	46.8	200.0	H	0.0	49.1	-2.3	27.2	74
2927.750000	49.3	101.0	V	268.0	47.6	1.7	24.7	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	30.1	200.0	V	90.0	39.0	-8.9	23.9	54
1332.750000	29.5	200.0	H	330.0	36.9	-7.4	24.5	54
1600.000000	31.0	200.0	V	55.0	37.4	-6.4	23.0	54
2050.250000	32.3	200.0	V	1.0	35.5	-3.2	21.7	54
2125.000000	41.9	200.0	H	19.0	44.2	-2.3	12.1	54
2500.250000	40.9	200.0	V	18.0	41.1	-0.2	13.1	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8Hz

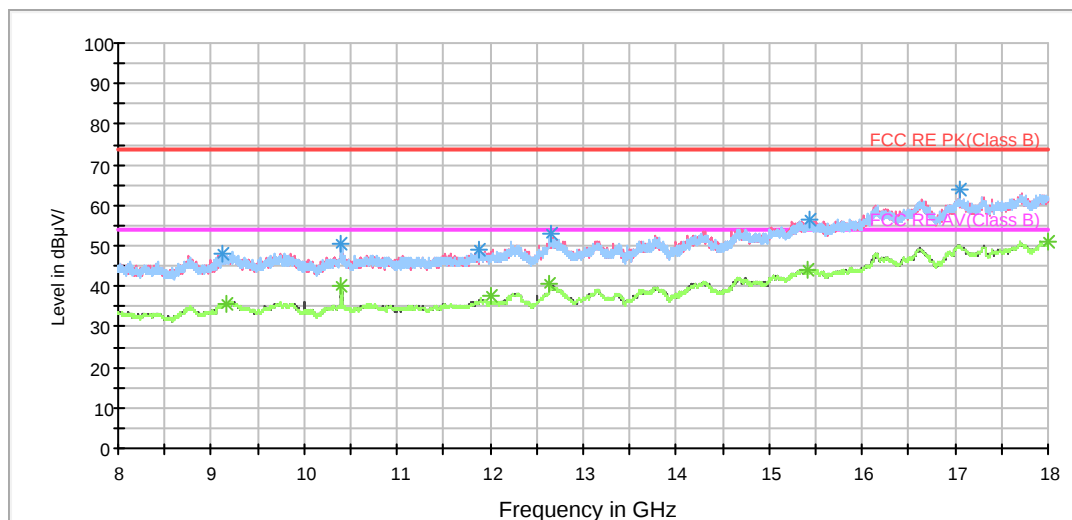
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3466.250000	40.5	205.0	V	158.0	42.6	-2.1	33.5	74
3592.500000	48.7	104.0	H	145.0	51.0	-2.3	25.3	74
4766.875000	46.2	205.0	H	172.0	45.1	1.1	27.8	74
5357.500000	55.0	104.0	H	124.0	52.7	2.3	19.0	74
6530.000000	46.9	205.0	V	96.0	41.5	5.4	27.1	74
6995.000000	47.2	205.0	V	201.0	40.7	6.5	26.8	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3466.250000	33.5	205.0	V	158.0	35.6	-2.1	20.5	54
3594.375000	37.3	104.0	H	145.0	39.6	-2.3	16.7	54
4766.250000	34.8	104.0	H	145.0	33.7	1.1	19.2	54
5357.500000	44.2	104.0	H	124.0	41.9	2.3	9.8	54
5812.500000	34.6	205.0	V	74.0	30.2	4.4	19.4	54
7500.000000	39.2	205.0	V	265.0	32.3	6.9	14.8	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8Hz to 18GHz

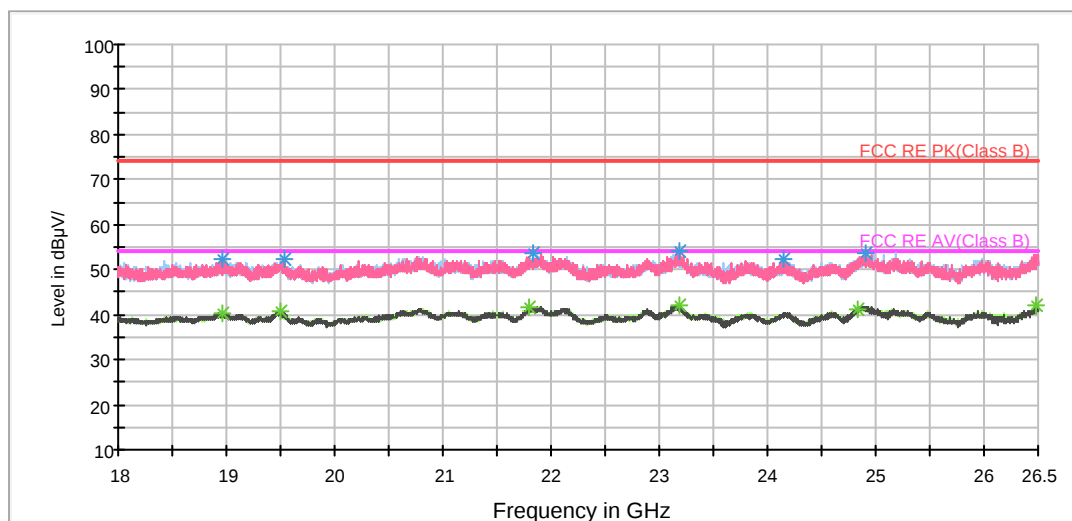
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9123.750000	48.2	205.0	H	22.2	26.0	5.8	74
10401.250000	50.7	205.0	V	29.6	21.1	3.3	74
11890.000000	48.8	205.0	H	23.9	24.9	5.2	74
12647.500000	52.7	105.0	V	31.5	21.2	1.3	74
15445.000000	56.3	205.0	H	38.9	17.4	-2.3	74
17043.750000	63.6	105.0	V	53.0	10.6	-9.6	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9155.000000	35.7	205.0	V	17.7	18.0	18.3	54
10398.750000	40.2	205.0	V	26.1	14.1	13.8	54
12000.000000	37.8	105.0	V	20.9	16.9	16.2	54
12640.000000	40.6	205.0	V	27.4	13.2	13.4	54
15423.750000	44.1	105.0	H	34.6	9.5	9.9	54
18000.000000	51.0	105.0	H	48.2	2.8	3.0	54

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

RE 18-26.5GHz PK+AV



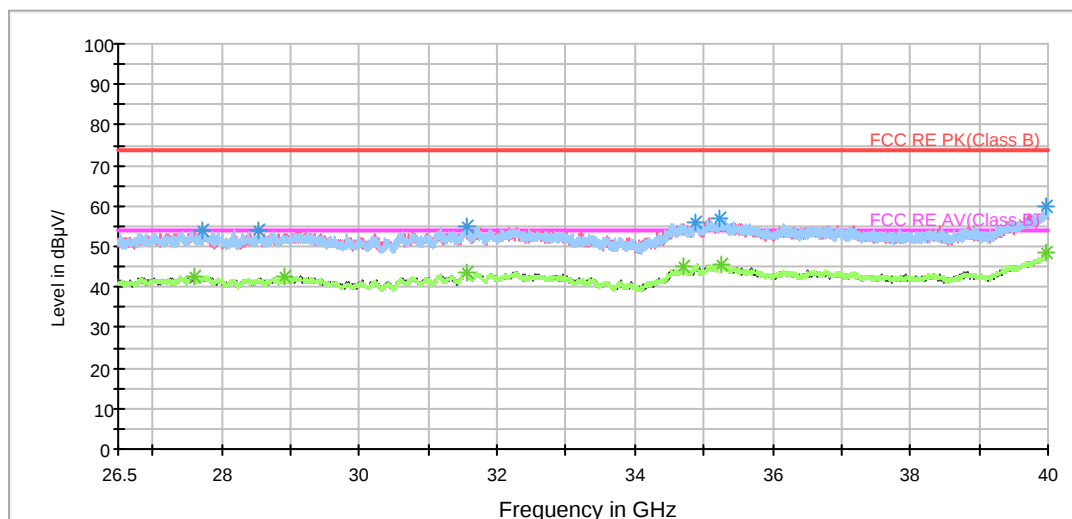
Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18966.875000	52.2	V	86.0	52.3	-0.1	21.8	74
19535.312500	52.4	H	225.0	52.4	0.0	21.6	74
21833.500000	53.5	H	225.0	55.4	-1.9	20.5	74
23193.500000	54.1	V	45.0	54.2	-0.1	19.9	74
24155.062500	52.3	V	45.0	53.0	-0.7	21.7	74
24915.812500	53.8	V	45.0	53.1	0.7	20.2	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18959.437500	40.4	V	60.0	40.4	0.0	13.6	54
19492.812500	40.5	V	143.0	40.4	0.1	13.5	54
21798.437500	41.6	H	172.0	43.7	-2.1	12.4	54
23186.062500	42.0	H	113.0	42.1	-0.1	12.0	54
24841.437500	41.4	H	99.0	41.1	0.3	12.6	54
26479.812500	42.0	H	200.0	40.9	1.1	12.0	54

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



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27735.250000	53.8	100.0	V	53.7	0.1	20.2	74
28533.437500	54.0	100.0	V	54.8	-0.8	20.0	74
31549.000000	55.2	100.0	V	55.6	-0.4	18.8	74
34866.625000	56.0	100.0	H	54.3	1.7	18.0	74
35239.562500	56.8	100.0	H	54.8	2.0	17.2	74
39983.125000	59.8	100.0	H	53.9	5.9	14.2	74

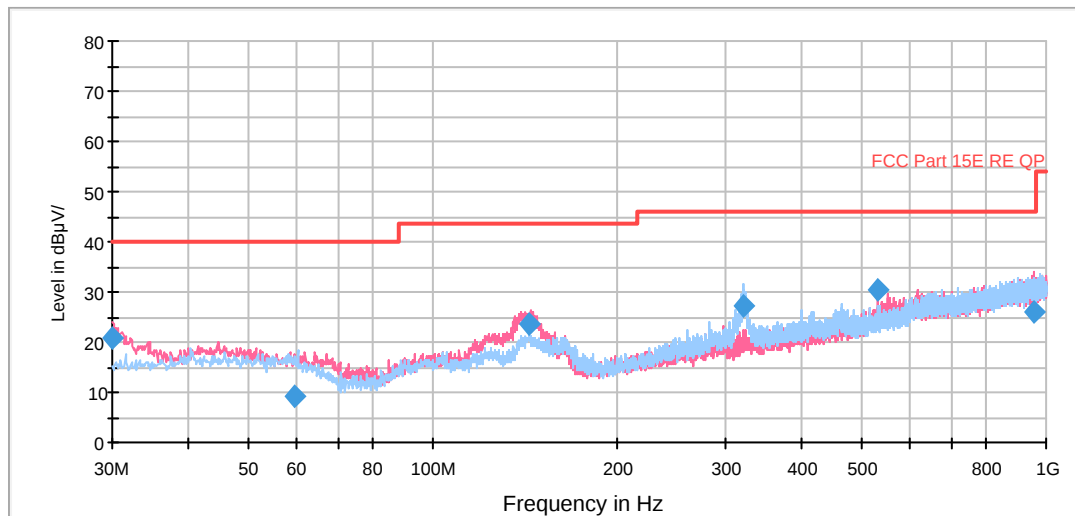
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27596.875000	42.6	100.0	V	42.2	0.4	11.4	54
28913.125000	42.7	100.0	V	42.8	-0.1	11.3	54
31550.687500	43.6	100.0	H	44.0	-0.4	10.4	54
34711.375000	44.8	100.0	V	44.0	0.8	9.2	54
35254.750000	45.7	100.0	H	43.7	2.0	8.3	54
39973.000000	48.5	100.0	H	42.7	5.8	5.5	54

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

802.11a CH48

FCC RE 0.03-1GHz QP Class B

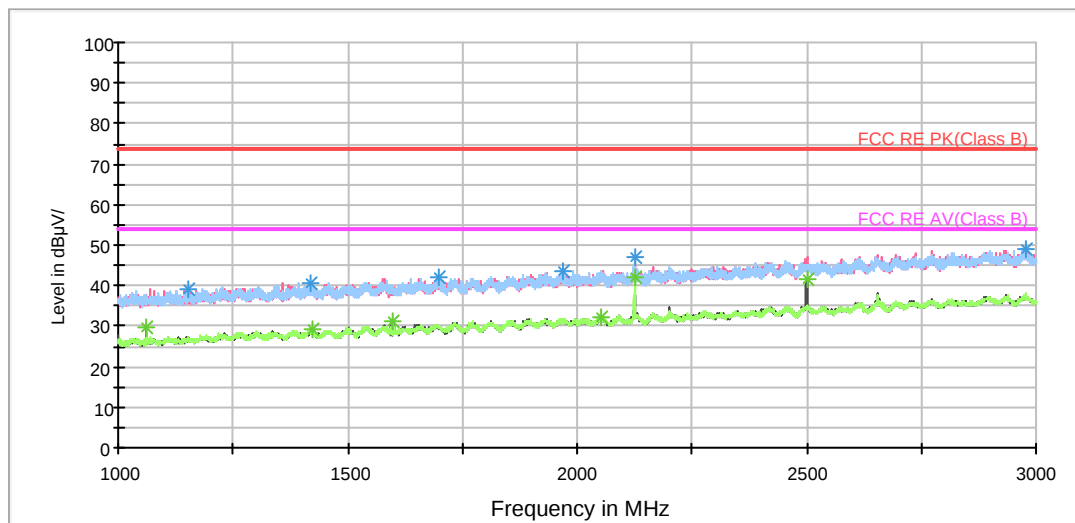


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.0	100.0	V	232.0	8.9	12.1	19.0	40.0
59.671250	9.4	125.0	H	0.0	-3.2	12.6	30.6	40.0
144.016250	23.6	100.0	V	267.0	14.5	9.1	19.9	43.5
320.433750	27.2	113.0	H	226.0	11.1	16.1	18.8	46.0
531.247500	30.5	100.0	V	294.0	9.7	20.8	15.5	46.0
953.965000	26.1	113.0	V	205.0	-1.1	27.2	19.9	46.0

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

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

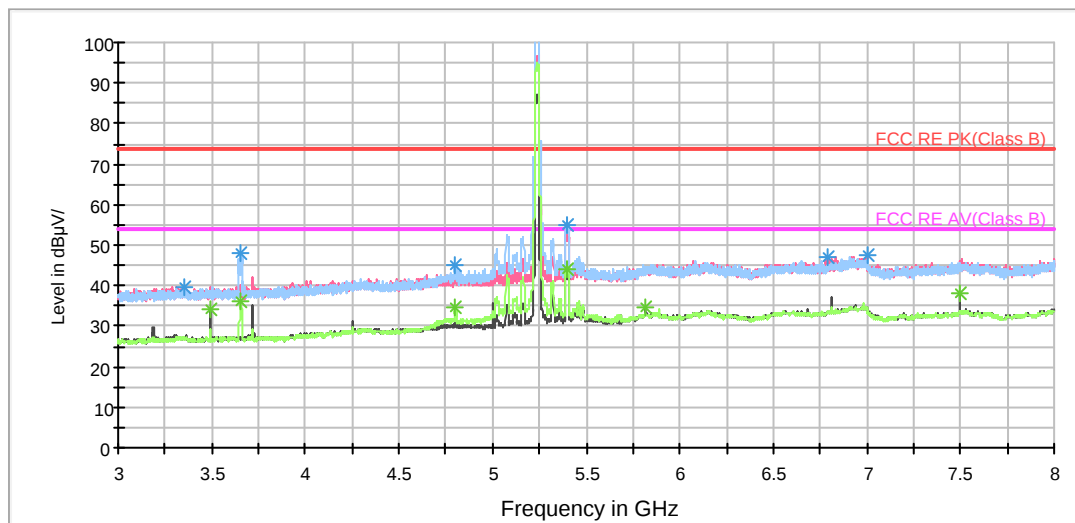
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1153.000000	39.1	200.0	H	190.0	47.6	-8.5	34.9	74
1419.750000	40.6	101.0	V	280.0	47.5	-6.9	33.4	74
1696.750000	42.2	101.0	V	0.0	47.2	-5.0	31.8	74
1967.250000	43.5	200.0	V	87.0	47.0	-3.5	30.5	74
2125.250000	47.0	200.0	H	0.0	49.3	-2.3	27.0	74
2977.500000	49.1	200.0	V	0.0	46.9	2.2	24.9	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	29.9	200.0	V	60.0	38.8	-8.9	24.1	54
1422.750000	29.0	101.0	V	0.0	35.9	-6.9	25.0	54
1600.000000	31.4	200.0	V	69.0	37.8	-6.4	22.6	54
2052.500000	32.2	200.0	H	20.0	35.4	-3.2	21.8	54
2125.000000	42.2	200.0	H	20.0	44.5	-2.3	11.8	54
2500.000000	41.4	200.0	V	16.0	41.6	-0.2	12.6	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8Hz

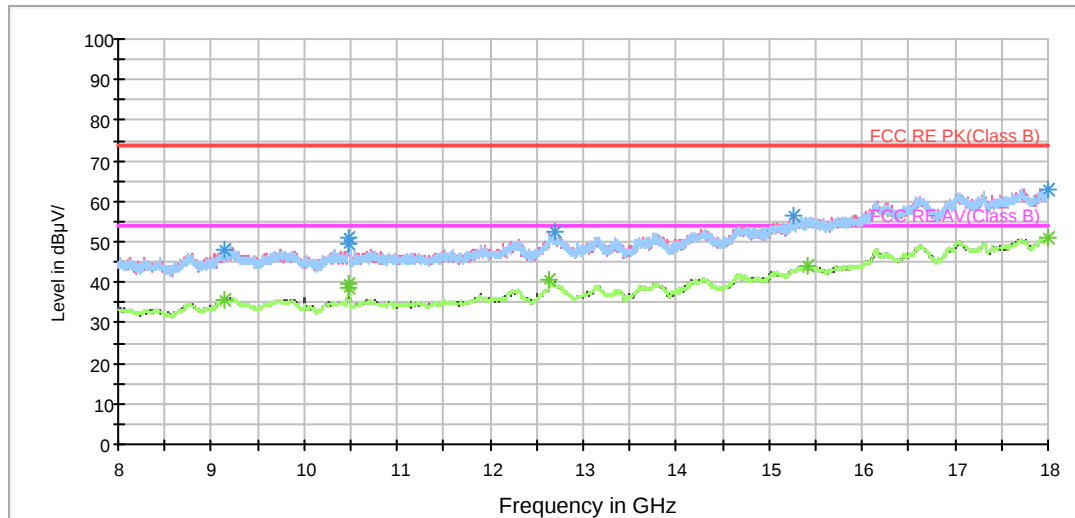
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3353.750000	39.7	205.0	V	0.0	42.0	-2.3	34.3	74
3655.000000	48.1	105.0	H	124.0	50.0	-1.9	25.9	74
4803.125000	45.2	105.0	H	146.0	43.9	1.3	28.8	74
5396.250000	54.8	105.0	H	124.0	52.3	2.5	19.2	74
6793.125000	46.8	205.0	V	46.0	41.1	5.7	27.2	74
7000.000000	47.4	205.0	V	0.0	40.8	6.6	26.6	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3493.125000	34.0	205.0	V	191.0	36.1	-2.1	20.0	54
3655.000000	36.1	105.0	H	124.0	38.0	-1.9	17.9	54
4803.125000	34.9	105.0	H	146.0	33.6	1.3	19.1	54
5393.125000	44.2	105.0	H	124.0	41.8	2.4	9.8	54
5812.500000	34.4	205.0	V	46.0	30.0	4.4	19.6	54
7500.000000	38.3	205.0	V	276.0	31.4	6.9	15.7	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9135.000000	48.0	205.0	V	66.0	38.0	10.0	26.0	74
10476.250000	51.2	205.0	H	207.0	41.2	10.0	22.8	74
10485.000000	49.5	205.0	H	207.0	39.4	10.1	24.5	74
12688.750000	52.4	105.0	H	316.0	38.2	14.2	21.6	74
15258.750000	56.4	205.0	V	0.0	37.8	18.6	17.6	74
17998.750000	62.9	205.0	V	110.0	37.5	25.4	11.1	74

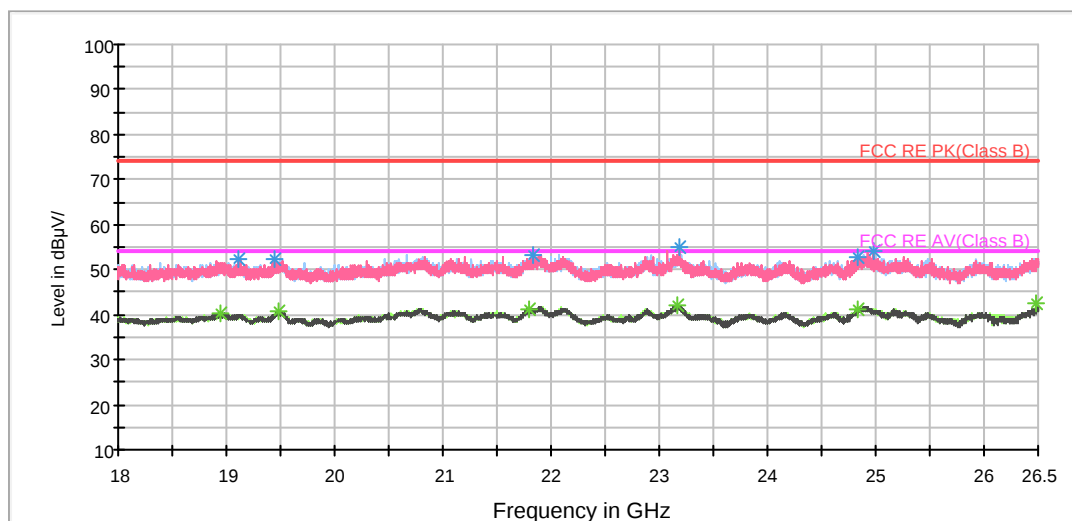
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9150.000000	35.7	205.0	V	0.0	25.6	10.1	18.3	54
10478.750000	39.8	205.0	H	207.0	29.7	10.1	14.2	54
10485.000000	38.7	205.0	H	207.0	28.6	10.1	15.3	54
12641.250000	40.4	205.0	H	0.0	25.9	14.5	13.6	54
15422.500000	44.0	205.0	H	252.0	24.6	19.4	10.0	54
17998.750000	51.0	105.0	V	321.0	25.6	25.4	3.0	54

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



RE 18-26.5GHz PK+AV



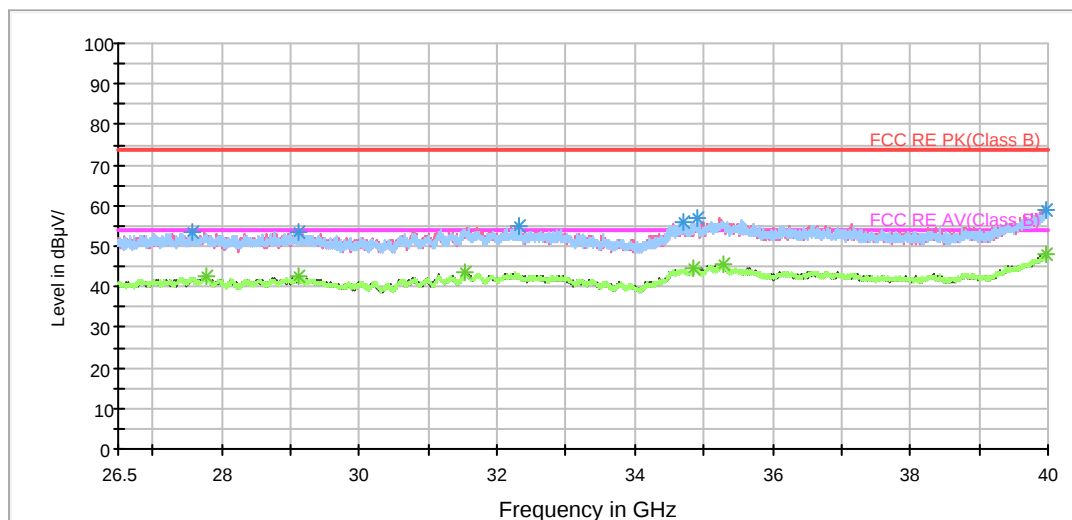
Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19112.437500	52.4	100.0	V	53.0	-0.6	21.6	74
19441.812500	52.5	100.0	V	52.5	0.0	21.5	74
21839.875000	53.3	100.0	V	55.2	-1.9	20.7	74
23187.125000	55.0	100.0	V	55.1	-0.1	19.0	74
24840.375000	52.7	100.0	V	52.4	0.3	21.3	74
24973.187500	54.0	100.0	V	53.0	1.0	20.0	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18949.875000	40.5	100.0	V	40.5	0.0	13.5	54
19475.812500	40.6	100.0	H	40.5	0.1	13.4	54
21804.812500	41.3	100.0	V	43.4	-2.1	12.7	54
23168.000000	42.1	100.0	H	42.2	-0.1	11.9	54
24841.437500	41.3	100.0	H	41.0	0.3	12.7	54
26484.062500	42.5	100.0	H	41.4	1.1	11.5	54

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



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27573.250000	53.7	100.0	H	53.3	0.4	20.3	74
29122.375000	53.7	100.0	V	53.9	-0.2	20.3	74
32321.875000	54.8	100.0	V	55.3	-0.5	19.2	74
34718.125000	55.9	100.0	V	55.0	0.9	18.1	74
34915.562500	56.7	100.0	H	54.7	2.0	17.3	74
39984.812500	59.1	100.0	V	53.2	5.9	14.9	74

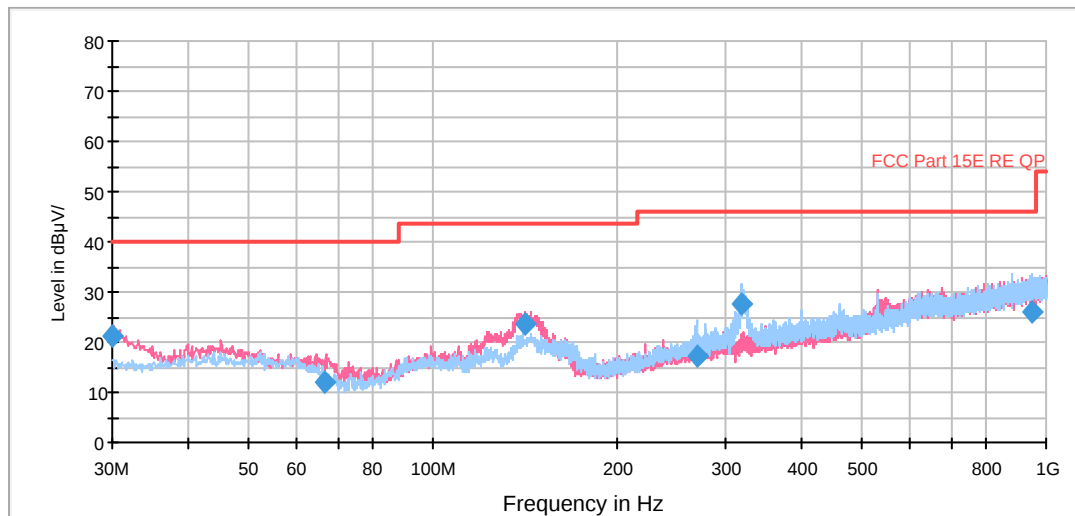
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27782.500000	42.5	100.0	H	42.5	0.0	11.5	54
29132.500000	42.4	100.0	H	42.6	-0.2	11.6	54
31520.312500	43.6	100.0	V	44.0	-0.4	10.4	54
34863.250000	44.7	100.0	V	43.0	1.7	9.3	54
35273.312500	45.6	100.0	V	43.6	2.0	8.4	54
39969.625000	48.2	100.0	V	42.4	5.8	5.8	54

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

802.11n (HT20) CH36

FCC RE 0.03-1GHz QP Class B

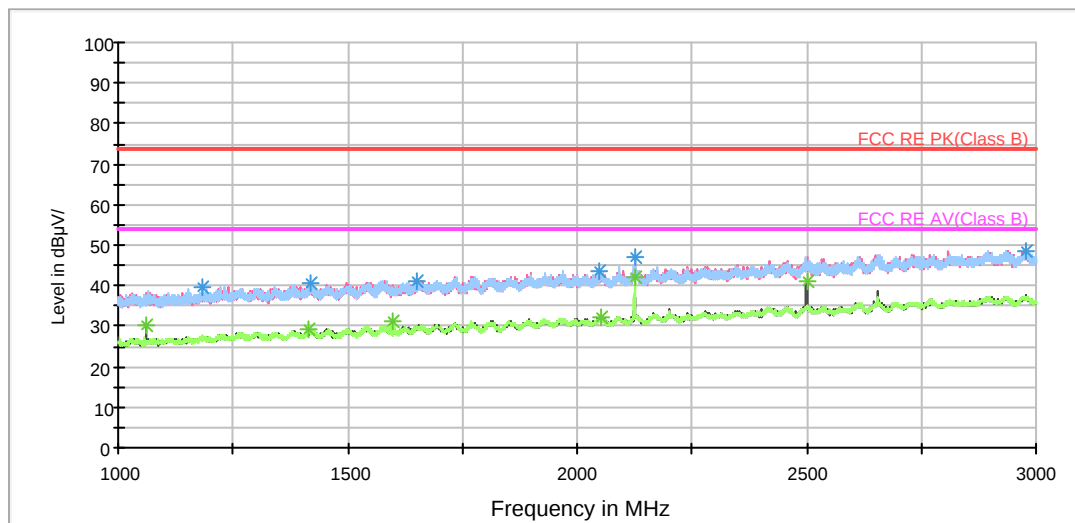


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.0	100.0	V	236.0	8.9	12.1	19.0	40.0
66.420000	12.1	114.0	V	153.0	2.0	10.1	27.9	40.0
141.665000	23.4	100.0	V	259.0	14.4	9.0	20.1	43.5
269.665000	17.3	113.0	H	140.0	2.4	14.9	28.7	46.0
319.585000	27.5	100.0	H	196.0	11.2	16.3	18.5	46.0
949.400000	26.1	125.0	H	239.0	-1.0	27.1	19.9	46.0

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

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

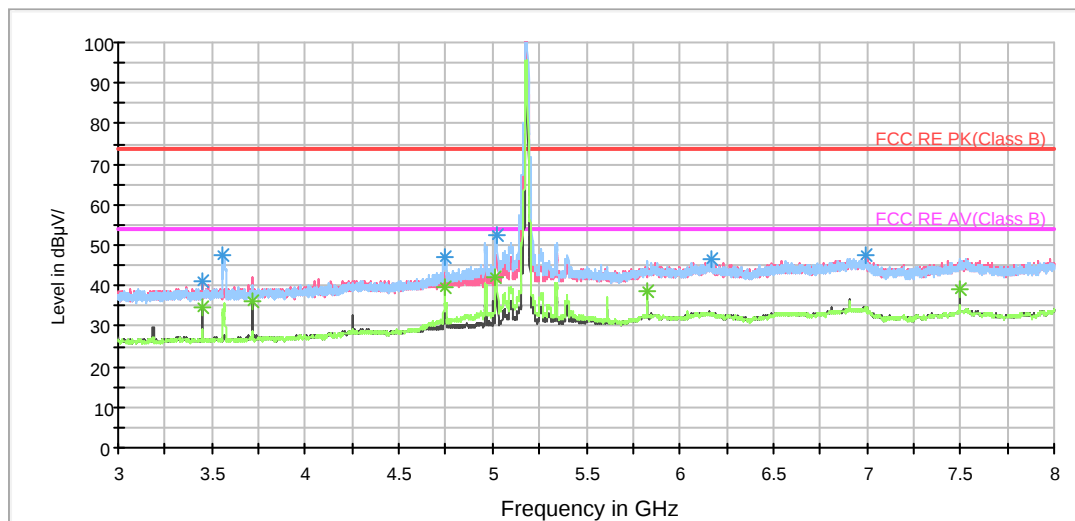
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1185.250000	39.4	100.0	H	113.0	47.5	-8.1	34.6	74
1420.000000	40.7	100.0	H	104.0	47.6	-6.9	33.3	74
1652.500000	41.3	100.0	V	245.0	46.4	-5.1	32.7	74
2047.000000	43.7	100.0	V	245.0	46.9	-3.2	30.3	74
2125.250000	46.9	200.0	H	172.0	49.2	-2.3	27.1	74
2978.750000	48.7	100.0	V	0.0	46.5	2.2	25.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	30.2	200.0	V	87.0	39.1	-8.9	23.8	54
1415.500000	29.1	200.0	V	65.0	36.1	-7.0	24.9	54
1599.750000	31.1	200.0	H	0.0	37.5	-6.4	22.9	54
2052.250000	32.2	200.0	V	231.0	35.4	-3.2	21.8	54
2125.000000	42.2	200.0	H	20.0	44.5	-2.3	11.8	54
2500.000000	40.9	200.0	V	12.0	41.1	-0.2	13.1	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

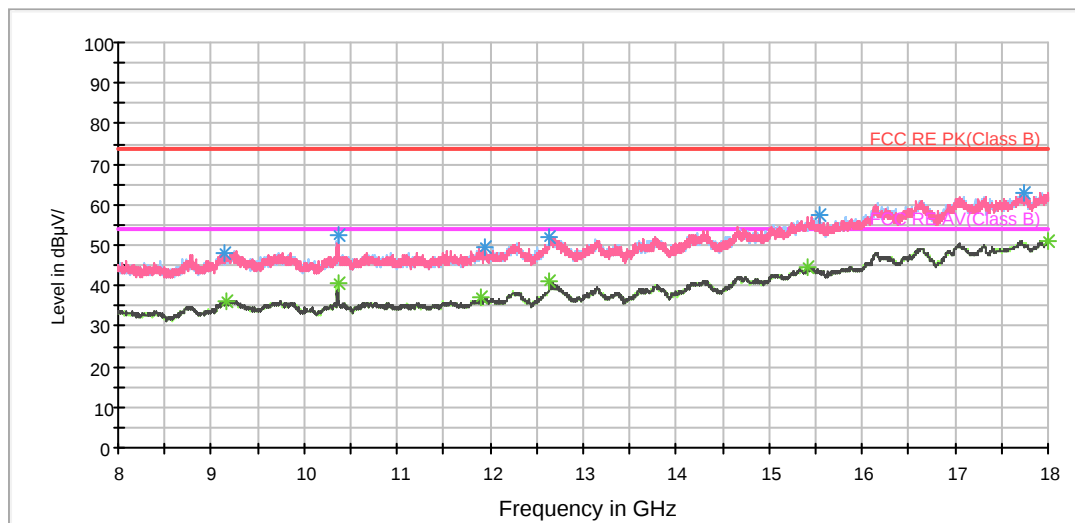
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3453.125000	41.3	225.0	V	189.0	43.5	-2.2	32.7	74
3561.875000	47.4	225.0	H	213.0	49.5	-2.1	26.6	74
4748.750000	47.0	125.0	H	296.0	46.0	1.0	27.0	74
5021.875000	52.7	125.0	H	168.0	51.1	1.6	21.3	74
6167.500000	46.4	125.0	H	168.0	40.8	5.6	27.6	74
6996.875000	47.8	125.0	V	191.0	41.3	6.5	26.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3453.125000	34.4	225.0	V	189.0	36.6	-2.2	19.6	54
3718.750000	35.9	225.0	V	210.0	37.5	-1.6	18.1	54
4748.125000	39.8	125.0	H	296.0	38.9	0.9	14.2	54
5016.875000	42.3	125.0	H	168.0	40.7	1.6	11.7	54
5827.500000	38.6	125.0	H	319.0	34.1	4.5	15.4	54
7500.000000	39.0	225.0	V	274.0	32.1	6.9	15.0	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

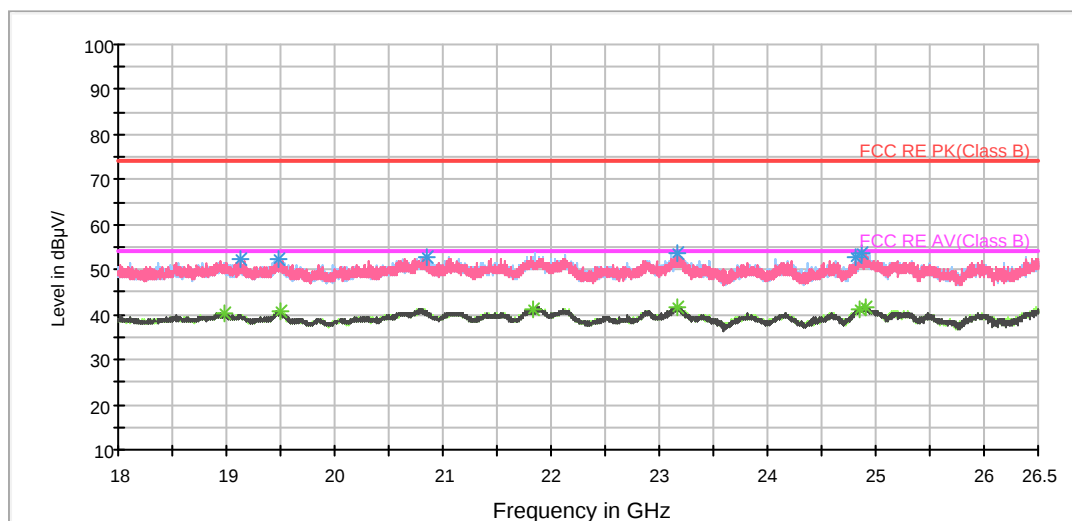
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9135.000000	47.9	150.0	V	0.0	37.9	10.0	26.1	74
10361.250000	52.7	150.0	H	289.0	42.9	9.8	21.3	74
11953.750000	49.6	150.0	V	0.0	37.8	11.8	24.4	74
12641.250000	52.0	150.0	V	88.0	37.5	14.5	22.0	74
15545.000000	57.5	150.0	V	0.0	38.6	18.9	16.5	74
17740.000000	63.1	150.0	H	0.0	39.1	24.0	10.9	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9155.000000	35.9	150.0	V	65.0	25.6	10.3	18.1	54
10360.000000	40.3	150.0	H	289.0	30.5	9.8	13.7	54
11896.250000	37.1	150.0	V	342.0	24.9	12.2	16.9	54
12640.000000	40.9	150.0	V	154.0	26.3	14.6	13.1	54
15416.250000	44.7	150.0	H	312.0	25.4	19.3	9.3	54
17998.750000	51.1	150.0	H	112.0	25.7	25.4	2.9	54

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

RE 18-26.5GHz PK+AV



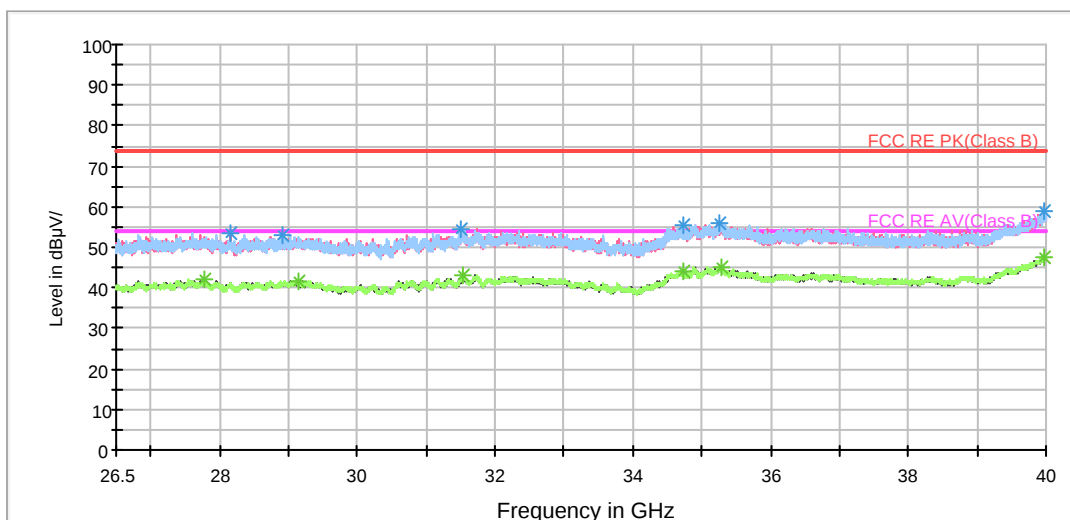
Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19137.937500	52.3	V	46.0	52.8	-0.5	21.7	74
19488.562500	52.2	H	225.0	52.1	0.1	21.8	74
20849.625000	52.9	V	59.0	55.1	-2.2	21.1	74
23169.062500	53.5	H	225.0	53.6	-0.1	20.5	74
24808.500000	52.9	H	225.0	52.8	0.1	21.1	74
24871.187500	53.7	V	113.0	53.3	0.4	20.3	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18974.312500	40.4	H	222.0	40.5	-0.1	13.6	54
19493.875000	40.8	H	225.0	40.7	0.1	13.2	54
21829.250000	41.3	V	113.0	43.2	-1.9	12.7	54
23158.437500	41.8	V	45.0	41.9	-0.1	12.2	54
24843.562500	41.2	H	225.0	40.9	0.3	12.8	54
24903.062500	41.7	V	45.0	41.1	0.6	12.3	54

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



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
28153.750000	53.4	V	173.0	53.9	-0.5	20.6	74
28908.062500	52.9	V	165.0	53.0	-0.1	21.1	74
31506.812500	54.4	H	90.0	54.8	-0.4	19.6	74
34733.312500	55.5	H	90.0	54.6	0.9	18.5	74
35251.375000	56.1	H	152.0	54.1	2.0	17.9	74
39969.625000	59.0	V	118.0	53.2	5.8	15.0	74

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

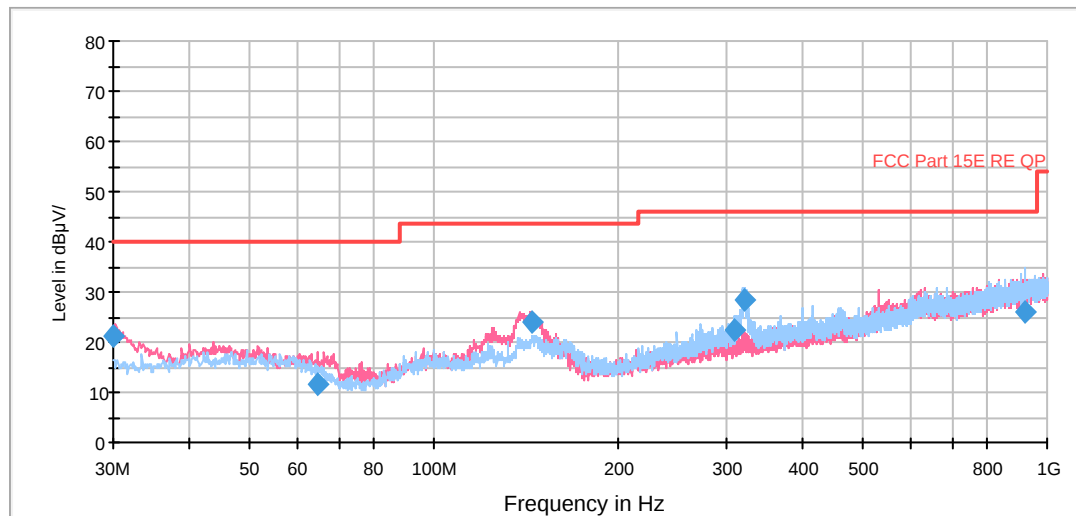
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27779.125000	42.0	V	270.0	41.9	0.1	12.0	54
29135.875000	41.7	V	270.0	41.9	-0.2	12.3	54
31522.000000	43.0	H	90.0	43.4	-0.4	11.0	54
34721.500000	44.3	V	270.0	43.4	0.9	9.7	54
35290.187500	45.2	H	224.0	43.3	1.9	8.8	54
39974.687500	47.7	H	100.0	41.9	5.8	6.3	54

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



802.11n (HT20) CH40

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.1	100.0	V	243.0	9.0	12.1	18.9	40.0
64.836250	11.8	100.0	V	184.0	1.0	10.8	28.2	40.0
144.051250	23.8	100.0	V	260.0	14.7	9.1	19.7	43.5
309.926250	22.4	100.0	H	228.0	6.4	16.0	23.6	46.0
319.988750	28.3	100.0	H	234.0	12.0	16.3	17.7	46.0
921.950000	25.9	100.0	H	142.0	-1.0	26.9	20.1	46.0

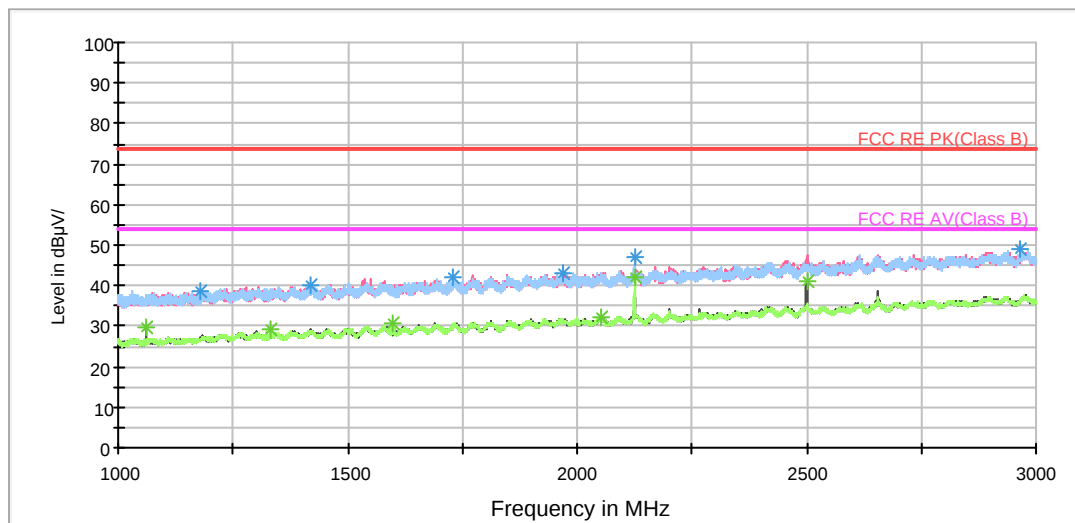
Remark: 1. Quasi-Peak = Reading value + Correction factor

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

3. Margin = Limit – Quasi-Peak



RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

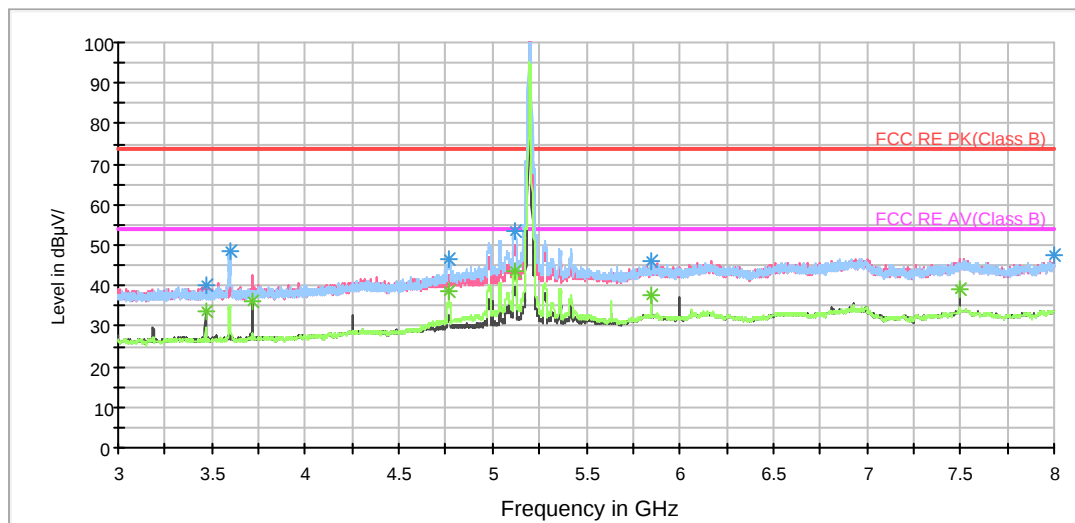
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1178.750000	38.5	100.0	H	105.0	46.5	-8.0	35.5	74
1421.000000	40.2	200.0	V	72.0	47.1	-6.9	33.8	74
1730.500000	42.1	200.0	H	318.0	47.0	-4.9	31.9	74
1971.000000	43.2	200.0	V	81.0	46.8	-3.6	30.8	74
2125.000000	47.2	200.0	H	19.0	49.5	-2.3	26.8	74
2966.250000	48.9	100.0	H	34.0	46.7	2.2	25.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	29.9	200.0	V	81.0	38.8	-8.9	24.1	54
1333.250000	29.0	200.0	H	0.0	36.4	-7.4	25.0	54
1599.750000	30.8	200.0	V	29.0	37.2	-6.4	23.2	54
2052.500000	32.2	200.0	H	336.0	35.4	-3.2	21.8	54
2125.000000	42.2	200.0	H	19.0	44.5	-2.3	11.8	54
2500.000000	41.2	200.0	V	10.0	41.4	-0.2	12.8	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

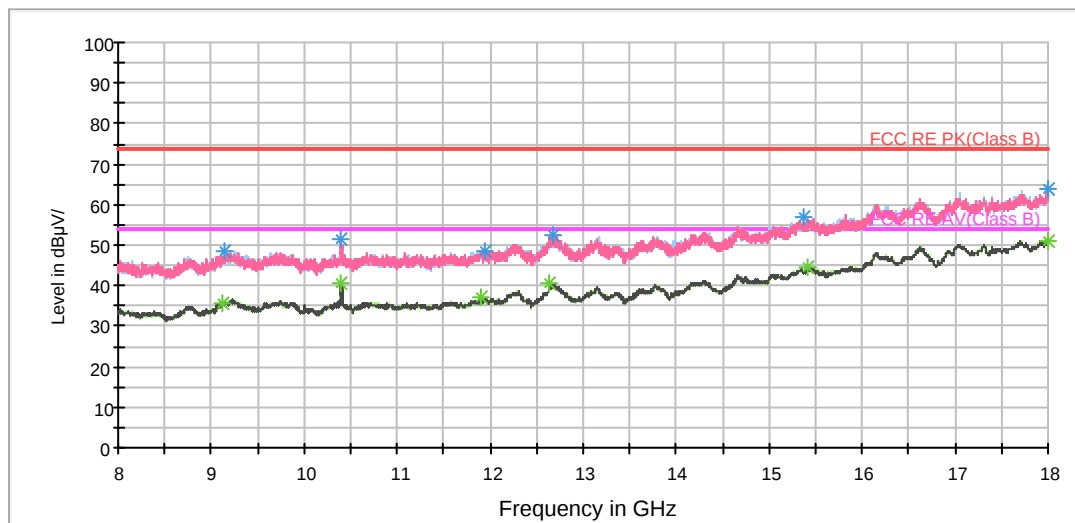
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3466.250000	40.2	225.0	V	170.0	42.3	-2.1	33.8	74
3595.625000	48.5	225.0	H	213.0	50.8	-2.3	25.5	74
4766.875000	46.5	125.0	H	296.0	45.4	1.1	27.5	74
5118.125000	53.2	125.0	H	189.0	51.4	1.8	20.8	74
5850.000000	45.9	125.0	H	320.0	41.2	4.7	28.1	74
8000.000000	47.4	225.0	V	128.0	40.1	7.3	26.6	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3466.250000	33.8	225.0	V	170.0	35.9	-2.1	20.2	54
3718.750000	35.9	225.0	V	211.0	37.5	-1.6	18.1	54
4766.875000	38.5	125.0	H	296.0	37.4	1.1	15.5	54
5118.125000	43.7	125.0	H	189.0	41.9	1.8	10.3	54
5850.000000	37.6	125.0	H	320.0	32.9	4.7	16.4	54
7500.000000	39.3	225.0	V	275.0	32.4	6.9	14.7	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

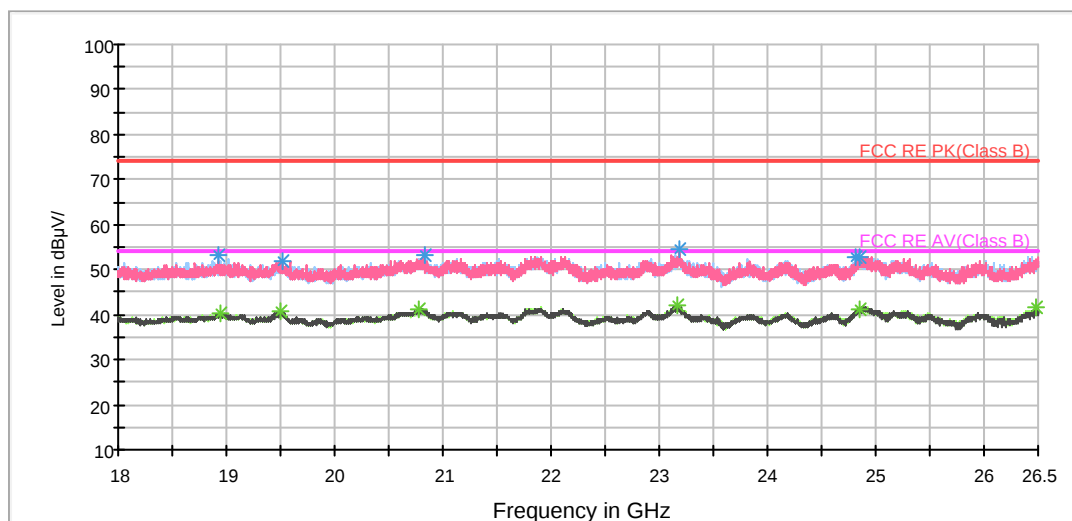
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9132.500000	48.7	150.0	H	0.0	38.7	10.0	25.3	74
10396.250000	51.6	150.0	V	202.0	42.2	9.4	22.4	74
11953.750000	48.6	150.0	V	0.0	36.8	11.8	25.4	74
12685.000000	52.2	150.0	V	293.0	38.0	14.2	21.8	74
15373.750000	56.9	150.0	H	0.0	38.5	18.4	17.1	74
17992.500000	63.6	150.0	V	0.0	38.3	25.3	10.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9120.000000	35.9	150.0	V	157.0	25.8	10.1	18.1	54
10400.000000	40.7	150.0	V	202.0	31.3	9.4	13.3	54
11902.500000	37.0	150.0	V	25.0	24.8	12.2	17.0	54
12640.000000	40.7	150.0	V	0.0	26.1	14.6	13.3	54
15423.750000	44.4	150.0	V	0.0	25.0	19.4	9.6	54
17998.750000	51.1	150.0	H	0.0	25.7	25.4	2.9	54

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

RE 18-26.5GHz PK+AV



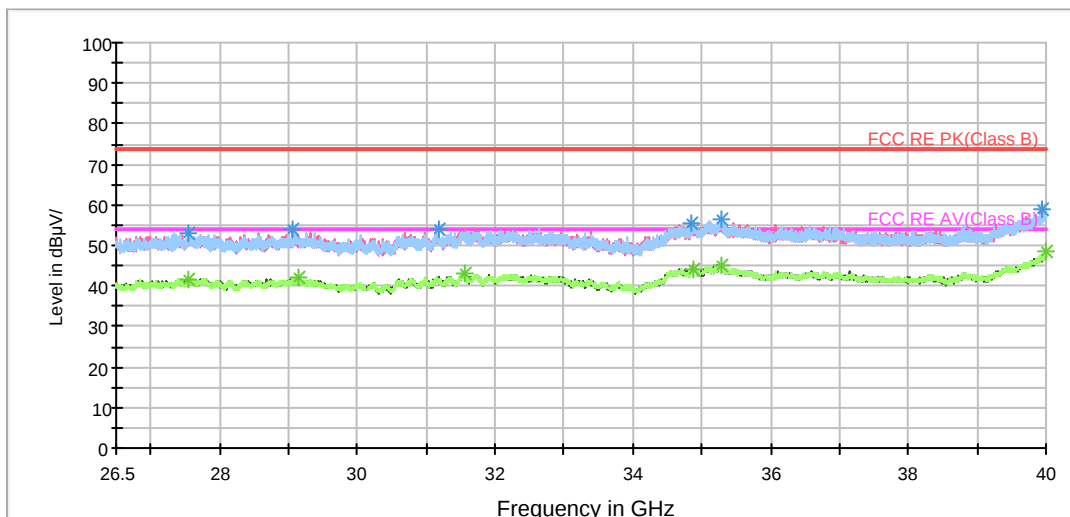
Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18933.937500	53.1	H	209.0	53.0	0.1	20.9	74
19513.000000	51.9	H	225.0	51.8	0.1	22.1	74
20840.062500	53.3	H	141.0	55.5	-2.2	20.7	74
23190.312500	54.4	V	184.0	54.5	-0.1	19.6	74
24815.937500	52.6	H	225.0	52.4	0.2	21.4	74
24854.187500	52.9	V	46.0	52.5	0.4	21.1	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18941.375000	40.4	V	113.0	40.4	0.0	13.6	54
19498.125000	40.7	H	225.0	40.6	0.1	13.3	54
20782.687500	41.3	V	141.0	43.2	-1.9	12.7	54
23164.812500	41.9	V	225.0	42.0	-0.1	12.1	54
24844.625000	41.3	V	45.0	41.0	0.3	12.7	54
26479.812500	41.8	H	195.0	40.7	1.1	12.2	54

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



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27549.625000	53.2	H	245.0	52.8	0.4	20.8	74
29054.875000	54.1	V	218.0	54.2	-0.1	19.9	74
31176.062500	53.9	H	107.0	54.5	-0.6	20.1	74
34859.875000	55.5	H	163.0	53.8	1.7	18.5	74
35273.312500	56.4	V	269.0	54.4	2.0	17.6	74
39956.125000	58.8	V	218.0	53.1	5.7	15.2	74

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

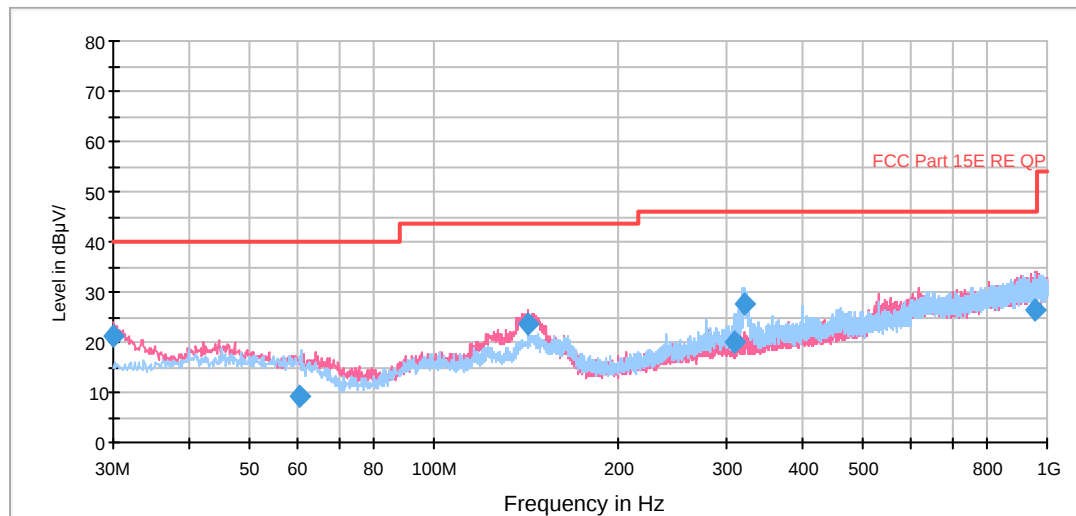
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27556.375000	41.8	V	218.0	41.4	0.4	12.2	54
29135.875000	41.8	H	98.0	42.0	-0.2	12.2	54
31555.750000	43.1	V	147.0	43.5	-0.4	10.9	54
34864.937500	44.3	V	251.0	42.6	1.7	9.7	54
35276.687500	45.2	H	115.0	43.2	2.0	8.8	54
39996.625000	48.3	V	128.0	42.4	5.9	5.7	54

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



802.11n (HT20) CH48

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

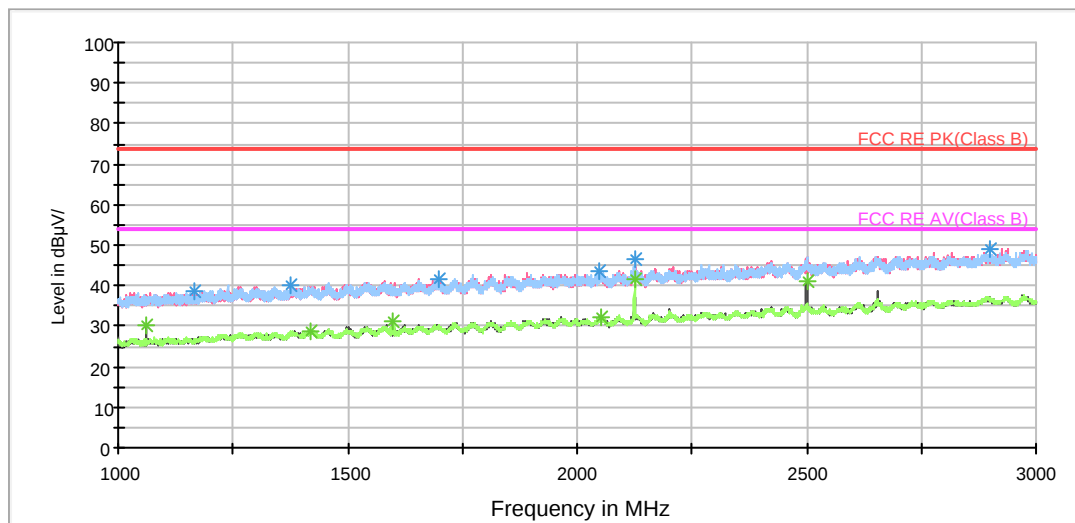
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.1	100.0	V	248.0	9.0	12.1	18.9	40.0
60.438750	9.4	125.0	H	305.0	-3.0	12.4	30.6	40.0
141.957500	23.7	100.0	V	258.0	14.7	9.0	19.8	43.5
308.998750	19.9	100.0	H	0.0	4.3	15.6	26.1	46.0
320.226250	27.4	114.0	H	225.0	11.4	16.0	18.6	46.0
955.136250	26.3	125.0	V	71.0	-1.0	27.3	19.7	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

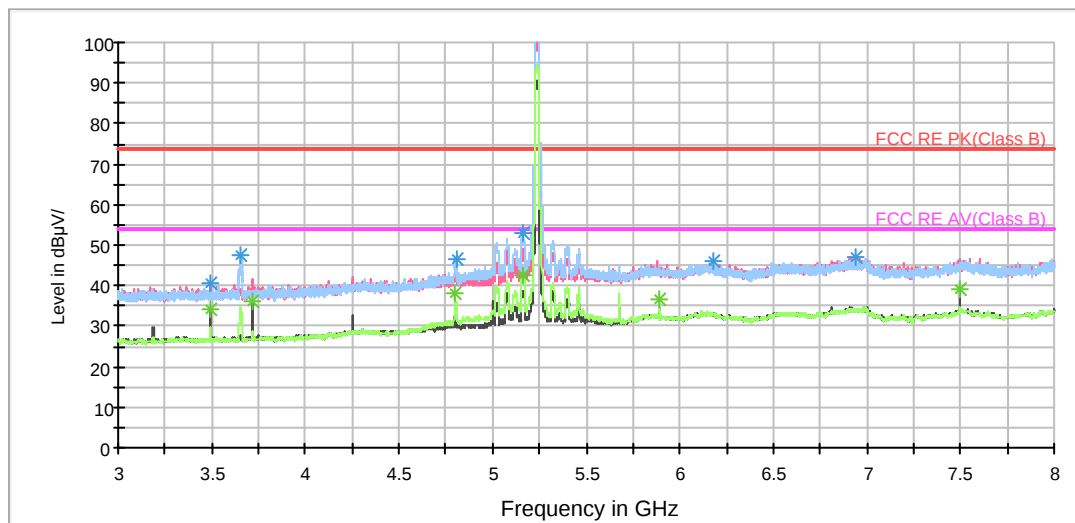
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1164.000000	38.8	200.0	V	37.0	47.1	-8.3	35.2	74
1375.500000	40.2	100.0	V	0.0	47.3	-7.1	33.8	74
1699.250000	41.5	200.0	H	317.0	46.5	-5.0	32.5	74
2047.000000	43.3	100.0	V	179.0	46.5	-3.2	30.7	74
2125.250000	46.6	200.0	H	327.0	48.9	-2.3	27.4	74
2898.500000	48.9	200.0	H	265.0	46.8	2.1	25.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.250000	30.0	200.0	V	47.0	38.9	-8.9	24.0	54
1419.750000	28.8	100.0	H	0.0	35.7	-6.9	25.2	54
1599.750000	31.4	200.0	V	37.0	37.8	-6.4	22.6	54
2050.500000	32.1	200.0	H	221.0	35.3	-3.2	21.9	54
2125.000000	41.8	200.0	H	184.0	44.1	-2.3	12.2	54
2500.000000	40.9	200.0	V	19.0	41.1	-0.2	13.1	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

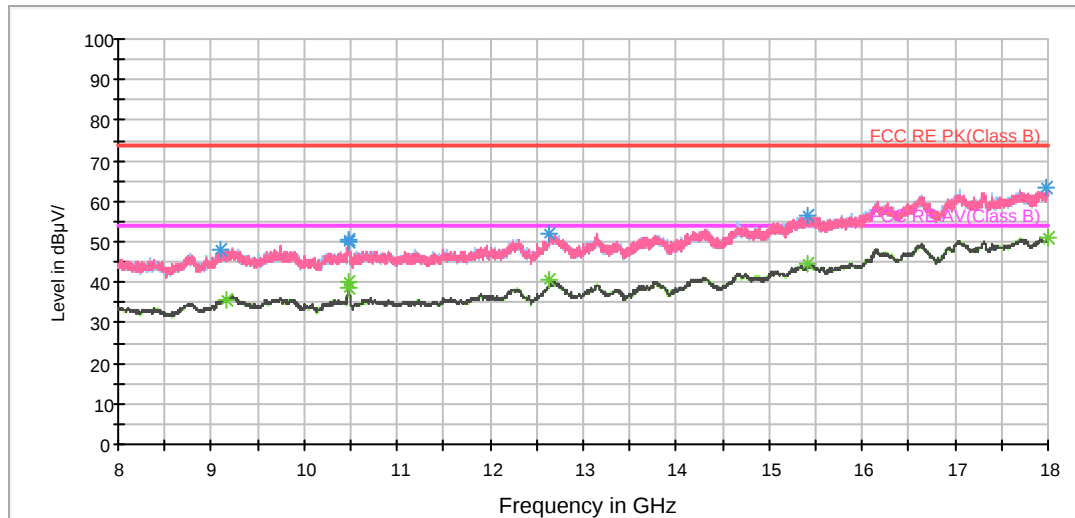
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3493.125000	40.6	125.0	V	232.0	42.7	-2.1	33.4	74
3655.000000	47.4	225.0	H	213.0	49.3	-1.9	26.6	74
4805.000000	46.7	125.0	H	253.0	45.4	1.3	27.3	74
5163.125000	53.2	125.0	H	167.0	51.2	2.0	20.8	74
6180.000000	45.9	125.0	H	1.0	40.6	5.3	28.1	74
6935.625000	46.9	225.0	H	318.0	40.8	6.1	27.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3493.125000	34.1	225.0	V	212.0	36.2	-2.1	19.9	54
3718.750000	35.9	225.0	V	212.0	37.5	-1.6	18.1	54
4803.125000	38.1	125.0	H	253.0	36.8	1.3	15.9	54
5161.250000	42.6	125.0	H	188.0	40.6	2.0	11.4	54
5895.000000	36.4	125.0	H	275.0	31.5	4.9	17.6	54
7500.000000	39.2	225.0	V	275.0	32.3	6.9	14.8	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

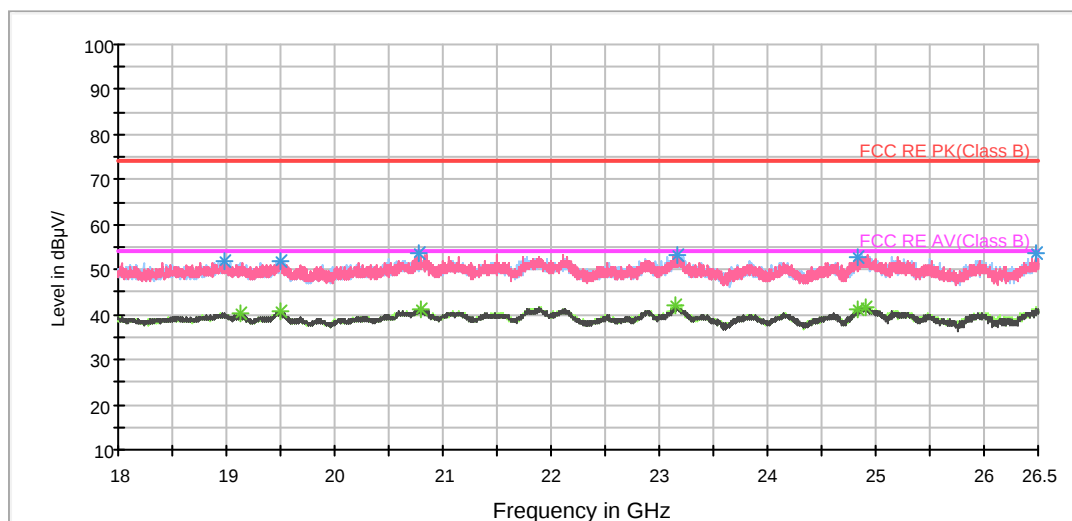
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9105.000000	48.1	150.0	H	336.0	38.5	9.6	25.9	74
10471.250000	50.0	150.0	H	203.0	40.1	9.9	24.0	74
10483.750000	50.6	150.0	V	199.0	40.5	10.1	23.4	74
12635.000000	52.2	150.0	H	336.0	38.2	14.0	21.8	74
15420.000000	56.7	150.0	V	313.0	37.3	19.4	17.3	74
17972.500000	63.2	150.0	H	0.0	38.3	24.9	10.8	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9157.500000	35.9	150.0	H	92.0	25.6	10.3	18.1	54
10480.000000	40.2	150.0	V	199.0	30.1	10.1	13.8	54
10483.750000	38.8	150.0	V	199.0	28.7	10.1	15.2	54
12640.000000	40.7	150.0	V	132.0	26.1	14.6	13.3	54
15418.750000	44.5	150.0	V	65.0	25.1	19.4	9.5	54
17998.750000	51.1	150.0	V	21.0	25.7	25.4	2.9	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

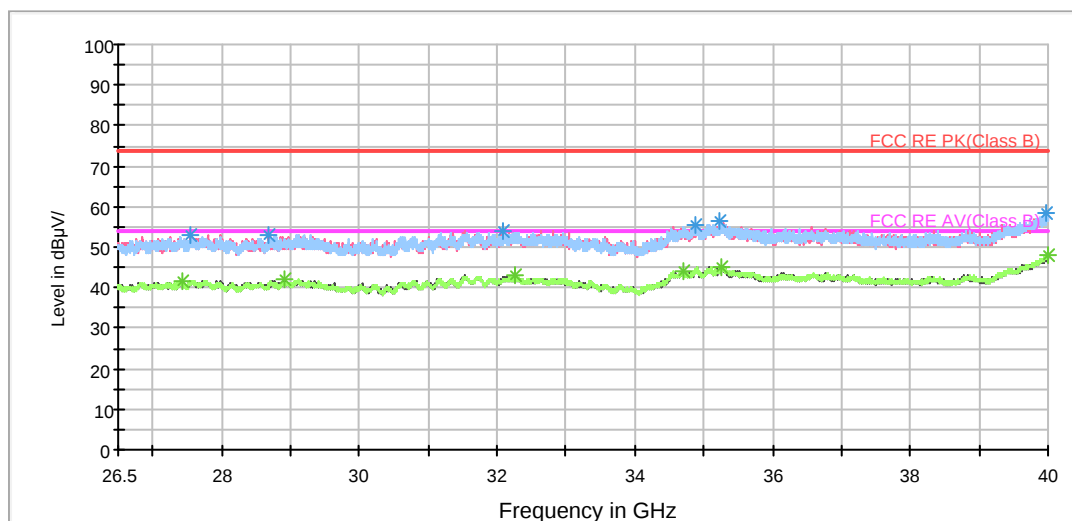
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18975.375000	52.0	H	225.0	52.1	-0.1	22.0	74
19507.687500	51.9	V	89.0	51.8	0.1	22.1	74
20772.062500	53.7	H	54.0	55.5	-1.8	20.3	74
23169.062500	53.2	V	142.0	53.3	-0.1	20.8	74
24829.750000	52.7	V	215.0	52.5	0.2	21.3	74
26484.062500	53.7	V	45.0	52.6	1.1	20.3	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19127.312500	40.2	H	225.0	40.7	-0.5	13.8	54
19502.375000	40.7	V	45.0	40.6	0.1	13.3	54
20794.375000	41.4	H	142.0	43.3	-1.9	12.6	54
23157.375000	42.0	H	209.0	42.1	-0.1	12.0	54
24836.125000	41.1	H	225.0	40.8	0.3	12.9	54
24900.937500	41.5	H	225.0	40.9	0.6	12.5	54

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

BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27558.062500	53.0	V	180.0	52.6	0.4	21.0	74
28680.250000	52.8	V	161.0	53.3	-0.5	21.2	74
32095.750000	54.1	H	234.0	54.4	-0.3	19.9	74
34866.625000	55.3	H	224.0	53.6	1.7	18.7	74
35242.937500	56.6	H	106.0	54.6	2.0	17.4	74
39976.375000	58.5	V	198.0	52.7	5.8	15.5	74

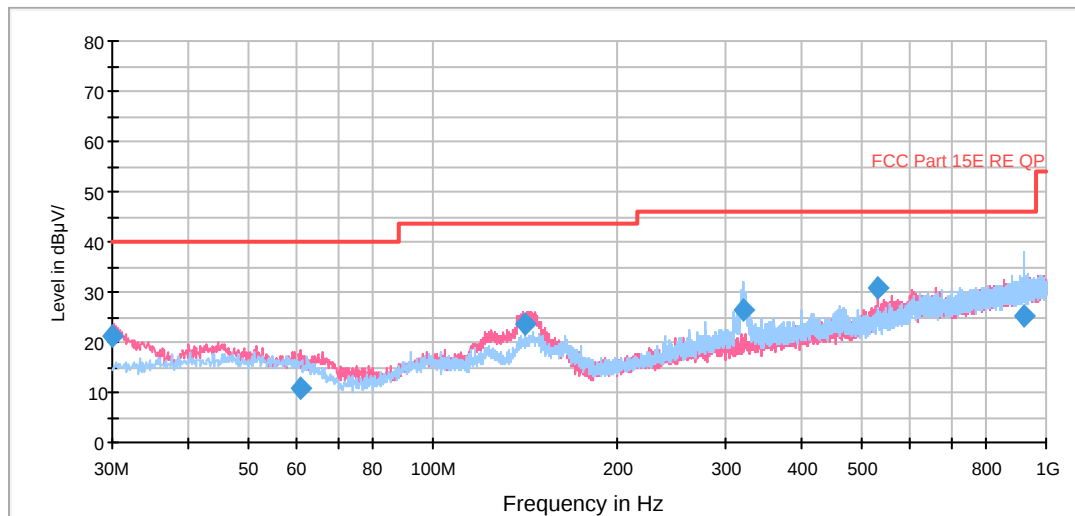
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27443.312500	41.8	V	198.0	41.4	0.4	12.2	54
28914.812500	41.9	V	241.0	42.0	-0.1	12.1	54
32264.500000	43.1	V	215.0	43.6	-0.5	10.9	54
34702.937500	44.1	V	270.0	43.3	0.8	9.9	54
35249.687500	45.1	V	270.0	43.1	2.0	8.9	54
39991.562500	48.0	H	195.0	42.1	5.9	6.0	54

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

802.11n (HT40) CH38

FCC RE 0.03-1GHz QP Class B

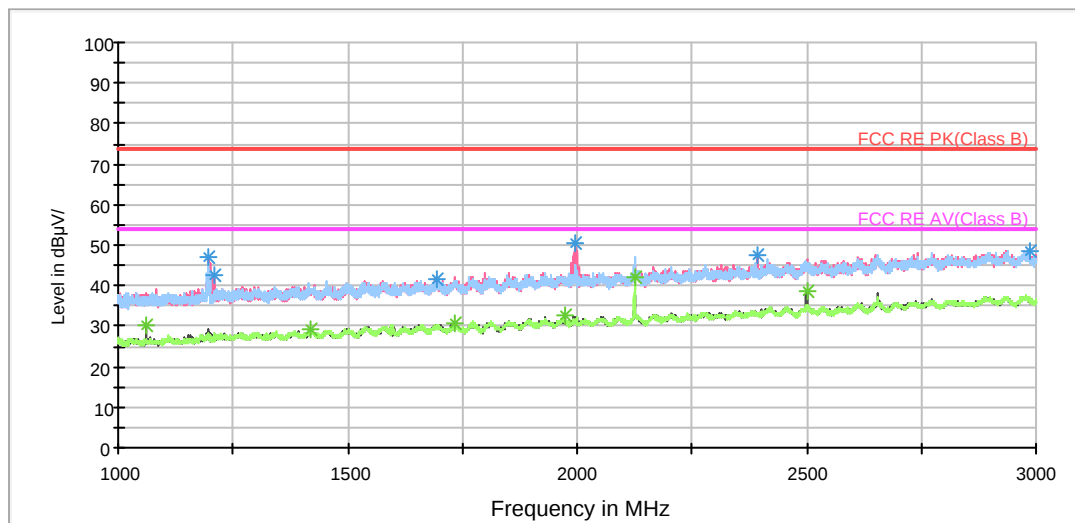


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.0	100.0	V	240.0	8.9	12.1	19.0	40.0
60.957500	10.9	114.0	V	185.0	-1.4	12.3	29.1	40.0
141.878750	23.6	100.0	V	270.0	14.6	9.0	19.9	43.5
321.365000	26.3	100.0	H	220.0	10.2	16.1	19.7	46.0
531.247500	31.0	100.0	V	307.0	10.2	20.8	15.0	46.0
921.310000	25.1	100.0	H	19.0	-1.0	26.1	20.9	46.0

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

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

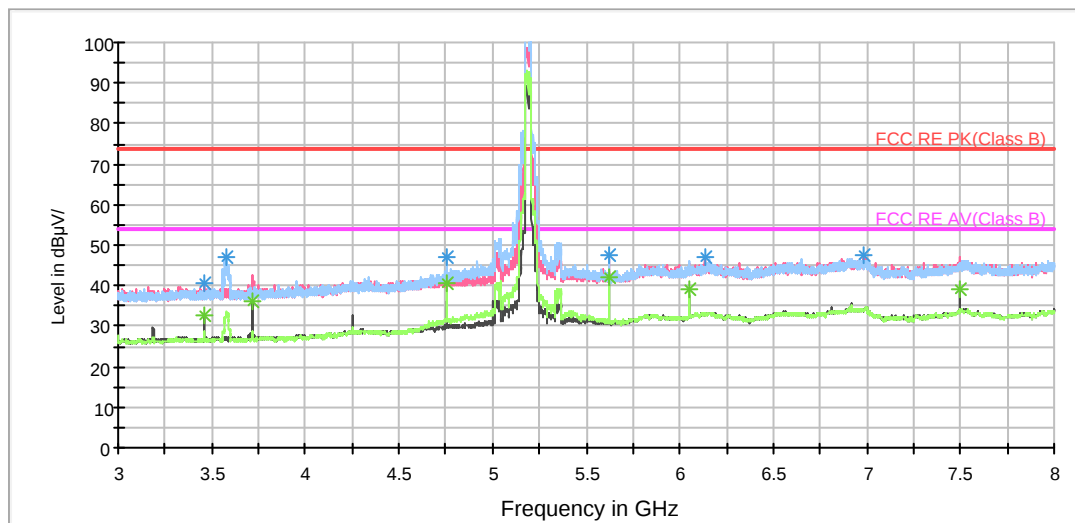
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.000000	46.9	100.0	V	275.0	55.1	-8.2	27.1	74
1209.250000	42.6	100.0	V	275.0	50.7	-8.1	31.4	74
1695.500000	41.7	200.0	V	298.0	46.7	-5.0	32.3	74
1994.000000	50.5	100.0	V	239.0	53.7	-3.2	23.5	74
2391.250000	47.5	200.0	V	134.0	48.9	-1.4	26.5	74
2986.000000	48.7	100.0	H	106.0	46.5	2.2	25.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	30.1	200.0	V	91.0	39.0	-8.9	23.9	54
1419.500000	29.0	200.0	H	332.0	35.9	-6.9	25.0	54
1732.000000	30.6	100.0	V	303.0	35.4	-4.8	23.4	54
1973.000000	32.6	100.0	V	258.0	36.2	-3.6	21.4	54
2125.000000	42.3	200.0	H	341.0	44.6	-2.3	11.7	54
2500.000000	38.6	200.0	V	16.0	38.8	-0.2	15.4	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

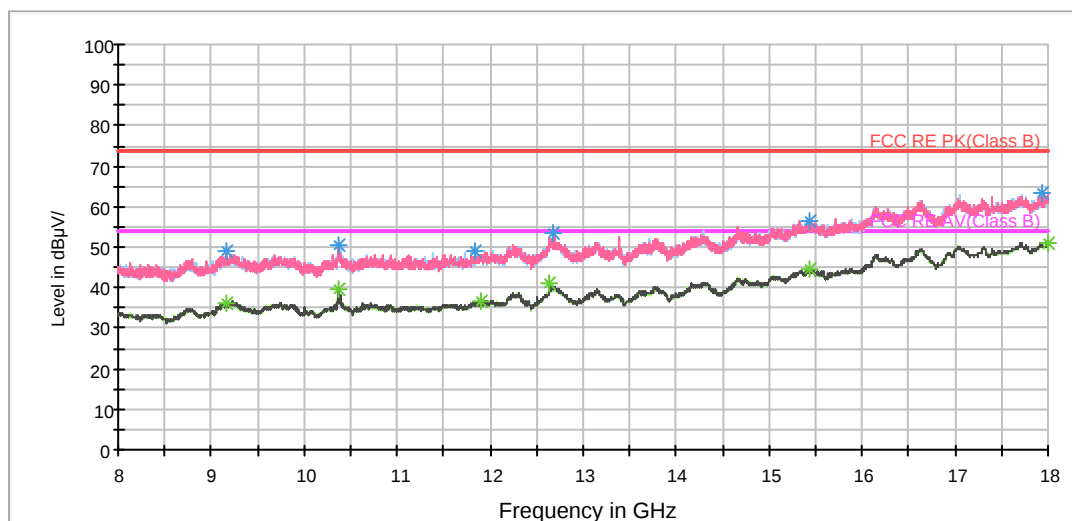
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3460.000000	40.6	225.0	V	166.0	42.8	-2.2	33.4	74
3581.875000	47.2	125.0	H	275.0	49.5	-2.3	26.8	74
4757.500000	47.0	125.0	H	232.0	45.9	1.1	27.0	74
5622.500000	47.3	225.0	H	340.0	43.9	3.4	26.7	74
6131.875000	46.8	225.0	V	19.0	41.4	5.4	27.2	74
6980.625000	47.3	125.0	V	280.0	40.9	6.4	26.7	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3460.000000	32.7	225.0	V	166.0	34.9	-2.2	21.3	54
3718.750000	36.0	225.0	V	229.0	37.6	-1.6	18.0	54
4757.500000	40.8	125.0	H	232.0	39.7	1.1	13.2	54
5622.500000	42.2	125.0	H	232.0	38.8	3.4	11.8	54
6055.000000	38.9	225.0	H	257.0	34.0	4.9	15.1	54
7500.000000	39.2	225.0	V	275.0	32.3	6.9	14.8	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

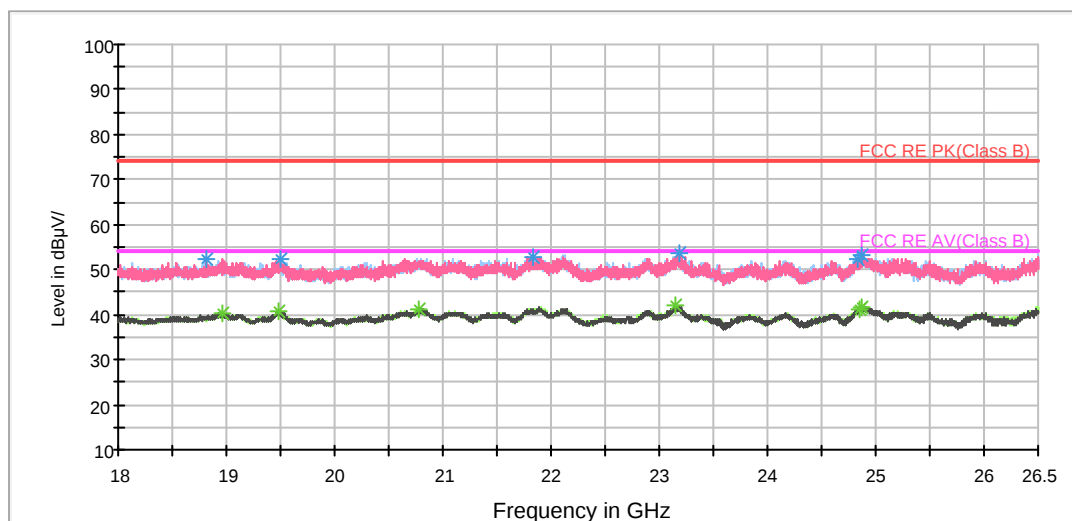
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9157.500000	49.0	150.0	V	179.0	38.7	10.3	25.0	74
10370.000000	50.5	150.0	V	43.0	40.7	9.8	23.5	74
11830.000000	48.9	150.0	V	0.0	37.3	11.6	25.1	74
12686.250000	53.5	150.0	H	67.0	39.3	14.2	20.5	74
15437.500000	56.3	150.0	V	21.0	36.8	19.5	17.7	74
17932.500000	63.2	150.0	H	0.0	37.9	25.3	10.8	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9157.500000	35.9	150.0	V	179.0	25.6	10.3	18.1	54
10380.000000	39.4	150.0	V	179.0	29.6	9.8	14.6	54
11900.000000	36.9	150.0	V	88.0	24.6	12.3	17.1	54
12642.500000	40.9	150.0	H	299.0	26.4	14.5	13.1	54
15425.000000	44.4	150.0	V	0.0	25.0	19.4	9.6	54
17998.750000	51.1	150.0	V	0.0	25.7	25.4	2.9	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18811.750000	52.4	V	45.0	52.4	0.0	21.6	74
19497.062500	52.3	H	225.0	52.2	0.1	21.7	74
21828.187500	52.7	V	111.0	54.6	-1.9	21.3	74
23177.562500	53.5	V	45.0	53.6	-0.1	20.5	74
24827.625000	52.4	V	45.0	52.2	0.2	21.6	74
24870.125000	53.2	V	111.0	52.8	0.4	20.8	74

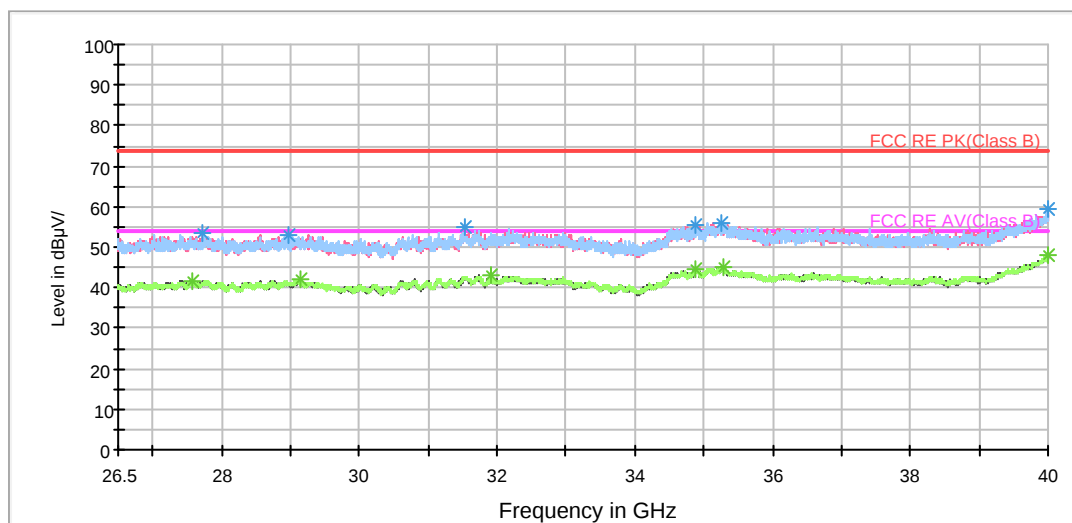
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18965.812500	40.4	H	210.0	40.5	-0.1	13.6	54
19486.437500	40.6	H	127.0	40.5	0.1	13.4	54
20784.812500	41.2	V	96.0	43.1	-1.9	12.8	54
23154.187500	42.0	H	225.0	42.1	-0.1	12.0	54
24844.625000	41.3	H	223.0	41.0	0.3	12.7	54
24872.250000	41.6	V	45.0	41.2	0.4	12.4	54

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



BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27735.250000	53.3	V	270.0	53.2	0.1	20.7	74
28963.750000	53.1	H	150.0	53.1	0.0	20.9	74
31537.187500	55.0	V	117.0	55.4	-0.4	19.0	74
34864.937500	55.2	H	253.0	53.5	1.7	18.8	74
35264.875000	56.0	H	94.0	54.0	2.0	18.0	74
39996.625000	59.4	H	90.0	53.5	5.9	14.6	74

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

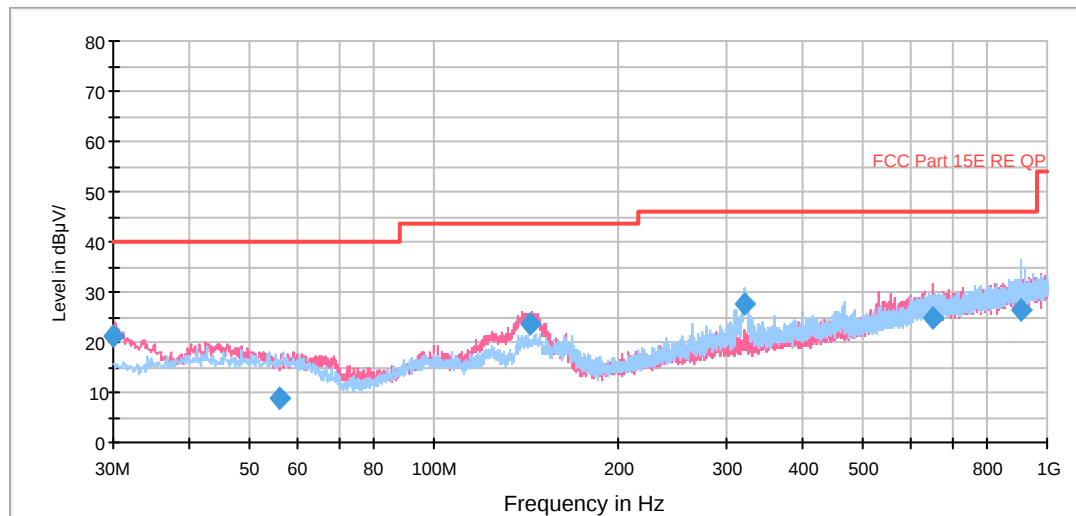
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27576.625000	41.8	V	270.0	41.4	0.4	12.2	54
29144.312500	41.8	H	90.0	42.1	-0.3	12.2	54
31898.312500	42.9	H	213.0	43.1	-0.2	11.1	54
34868.312500	44.4	V	270.0	42.7	1.7	9.6	54
35275.000000	45.1	H	103.0	43.1	2.0	8.9	54
39994.937500	48.0	H	90.0	42.1	5.9	6.0	54

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



802.11n (HT40) CH46

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

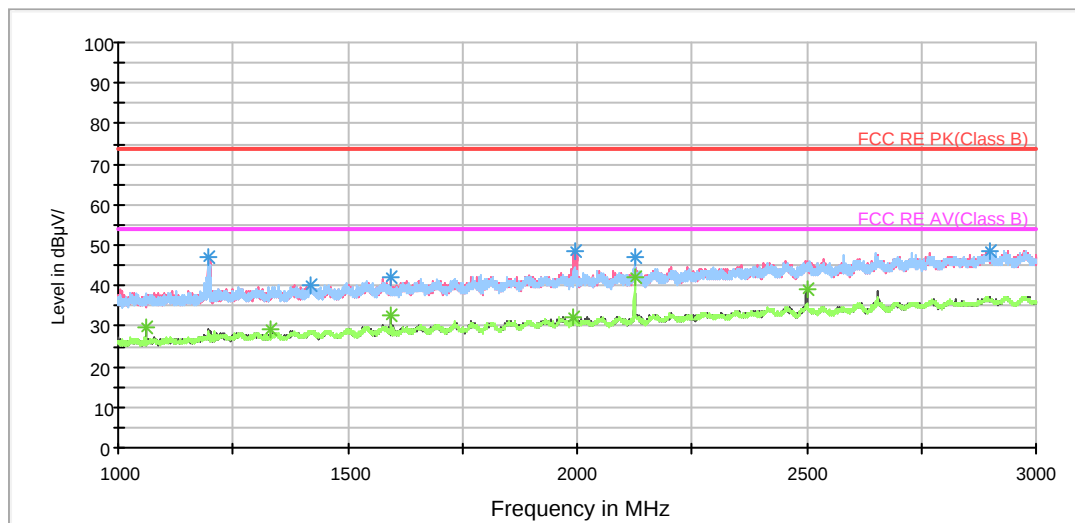
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.1	100.0	V	237.0	9.0	12.1	18.9	40.0
56.155000	9.0	125.0	H	0.0	-3.7	12.7	31.0	40.0
144.021250	23.8	100.0	V	266.0	14.7	9.1	19.7	43.5
321.487500	27.7	100.0	H	26.0	11.6	16.1	18.3	46.0
649.991250	24.9	100.0	V	248.0	1.6	23.3	21.1	46.0
907.203750	26.3	100.0	H	10.0	-0.7	27.0	19.7	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

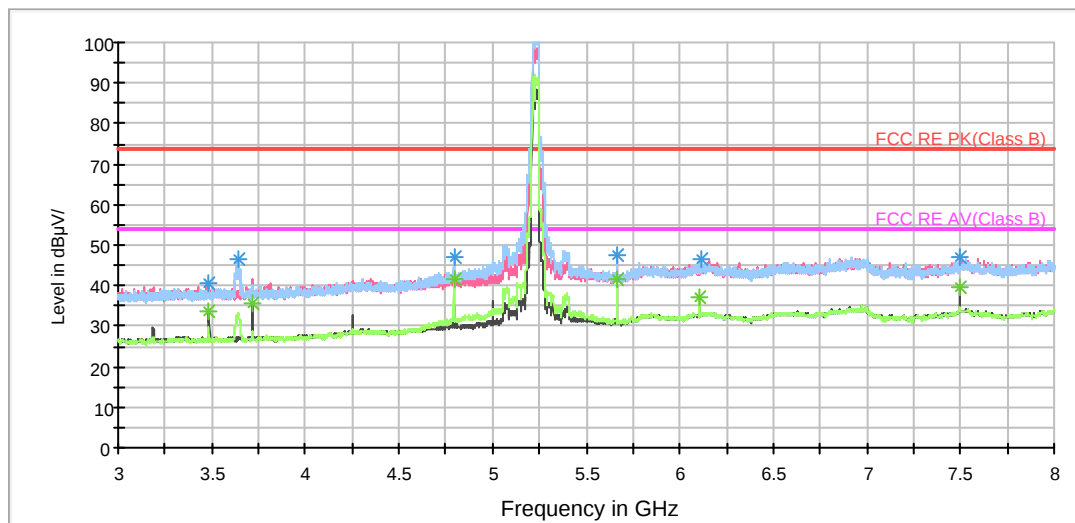
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.500000	47.1	100.0	V	274.0	55.3	-8.2	26.9	74
1421.250000	40.2	200.0	H	137.0	47.1	-6.9	33.8	74
1594.000000	42.2	200.0	V	80.0	48.6	-6.4	31.8	74
1994.750000	48.6	100.0	V	256.0	51.8	-3.2	25.4	74
2125.250000	46.9	200.0	H	156.0	49.2	-2.3	27.1	74
2900.250000	48.5	200.0	V	80.0	46.4	2.1	25.5	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	29.7	200.0	V	80.0	38.6	-8.9	24.3	54
1333.250000	29.0	200.0	H	337.0	36.4	-7.4	25.0	54
1594.000000	32.4	200.0	V	80.0	38.8	-6.4	21.6	54
1992.250000	32.3	100.0	V	238.0	35.6	-3.3	21.7	54
2125.000000	41.9	200.0	H	156.0	44.2	-2.3	12.1	54
2500.000000	39.2	200.0	V	15.0	39.4	-0.2	14.8	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

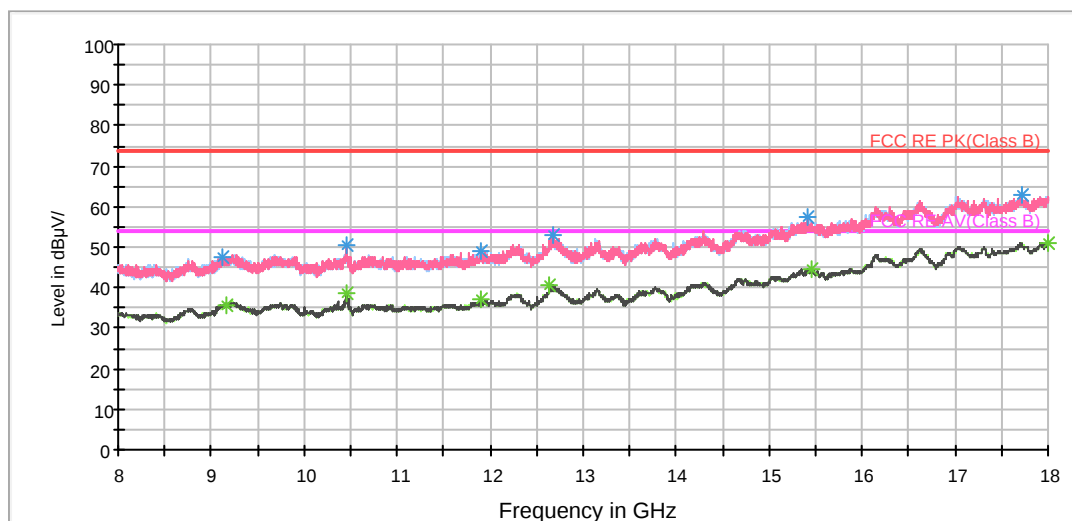
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3486.250000	40.8	125.0	V	234.0	42.8	-2.0	33.2	74
3643.750000	46.8	225.0	H	213.0	48.6	-1.8	27.2	74
4794.375000	47.2	125.0	H	252.0	46.0	1.2	26.8	74
5665.625000	47.5	225.0	H	255.0	44.1	3.4	26.5	74
6115.625000	46.4	125.0	H	85.0	41.1	5.3	27.6	74
7500.000000	47.2	225.0	V	275.0	40.3	6.9	26.8	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3486.250000	33.9	225.0	V	208.0	35.9	-2.0	20.1	54
3718.750000	35.7	225.0	V	229.0	37.3	-1.6	18.3	54
4793.750000	41.7	125.0	H	252.0	40.5	1.2	12.3	54
5665.625000	41.7	225.0	H	255.0	38.3	3.4	12.3	54
6101.875000	37.3	125.0	H	272.0	32.2	5.1	16.7	54
7500.000000	39.4	225.0	V	275.0	32.5	6.9	14.6	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

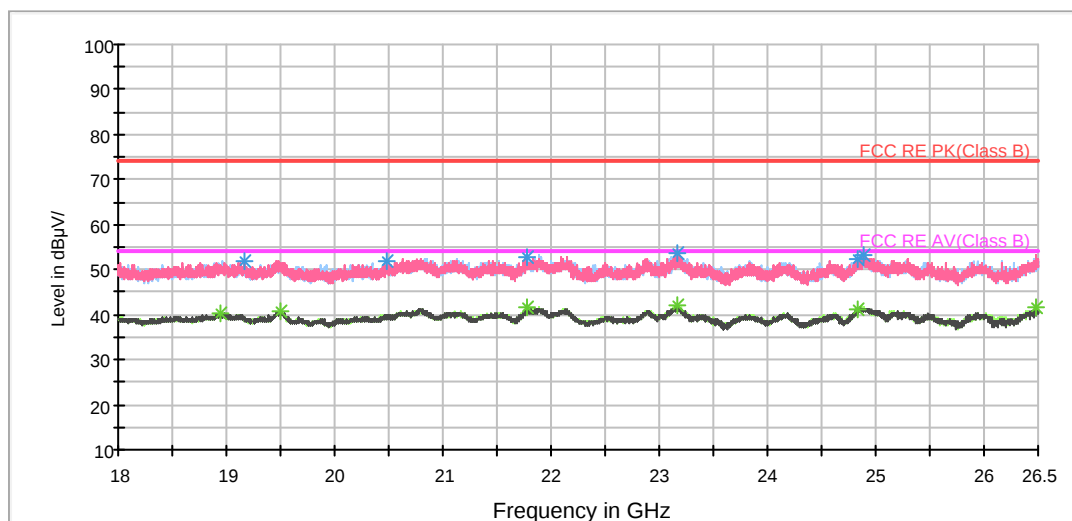
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9130.000000	47.5	150.0	V	203.0	37.5	10.0	26.5	74
10461.250000	50.3	150.0	V	203.0	40.6	9.7	23.7	74
11893.750000	48.9	150.0	V	0.0	36.8	12.1	25.1	74
12686.250000	53.0	150.0	V	271.0	38.8	14.2	21.0	74
15420.000000	57.2	150.0	V	25.0	37.8	19.4	16.8	74
17721.250000	62.9	150.0	H	357.0	38.3	24.6	11.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9153.750000	35.9	150.0	V	70.0	25.7	10.2	18.1	54
10460.000000	38.6	150.0	V	181.0	28.9	9.7	15.4	54
11898.750000	36.9	150.0	V	47.0	24.6	12.3	17.1	54
12641.250000	40.8	150.0	V	70.0	26.3	14.5	13.2	54
15447.500000	44.5	150.0	H	201.0	25.0	19.5	9.5	54
18000.000000	51.1	150.0	V	25.0	25.6	25.5	2.9	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

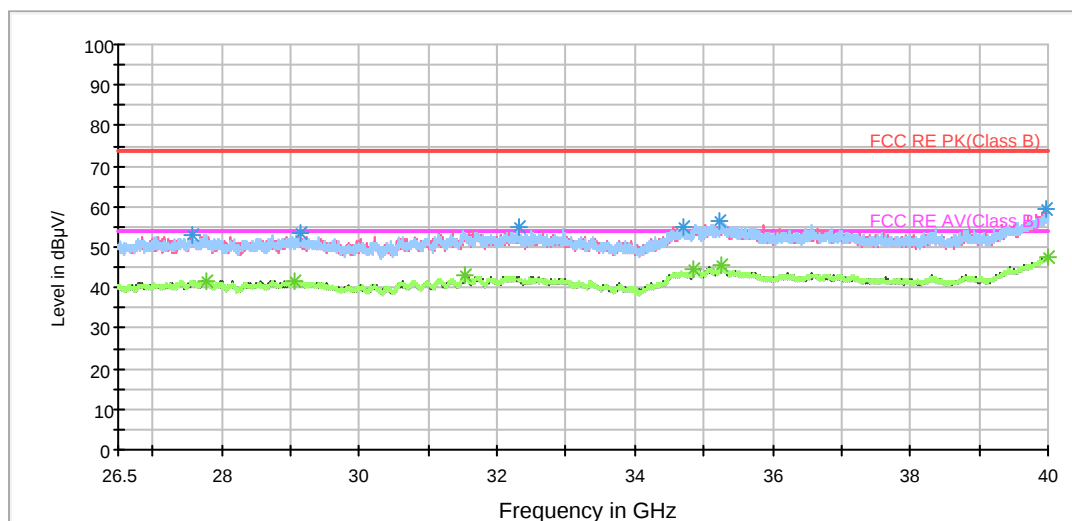
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19167.687500	51.8	V	61.0	52.3	-0.5	22.2	74
20476.687500	51.8	H	112.0	52.7	-0.9	22.2	74
21772.937500	52.6	V	129.0	54.8	-2.2	21.4	74
23168.000000	53.6	H	208.0	53.7	-0.1	20.4	74
24824.437500	52.2	V	156.0	52.0	0.2	21.8	74
24886.062500	53.4	V	88.0	52.9	0.5	20.6	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18945.625000	40.3	H	54.0	40.3	0.0	13.7	54
19494.937500	40.7	V	116.0	40.6	0.1	13.3	54
21776.125000	41.4	H	225.0	43.6	-2.2	12.6	54
23162.687500	41.9	H	85.0	42.0	-0.1	12.1	54
24838.250000	41.3	H	225.0	41.0	0.3	12.7	54
26479.812500	41.6	H	168.0	40.5	1.1	12.4	54

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

BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27581.687500	53.2	H	223.0	52.8	0.4	20.8	74
29137.562500	53.6	H	205.0	53.9	-0.3	20.4	74
32308.375000	55.1	H	90.0	55.6	-0.5	18.9	74
34713.062500	55.2	V	219.0	54.4	0.8	18.8	74
35242.937500	56.3	H	242.0	54.3	2.0	17.7	74
39983.125000	59.3	H	133.0	53.4	5.9	14.7	74

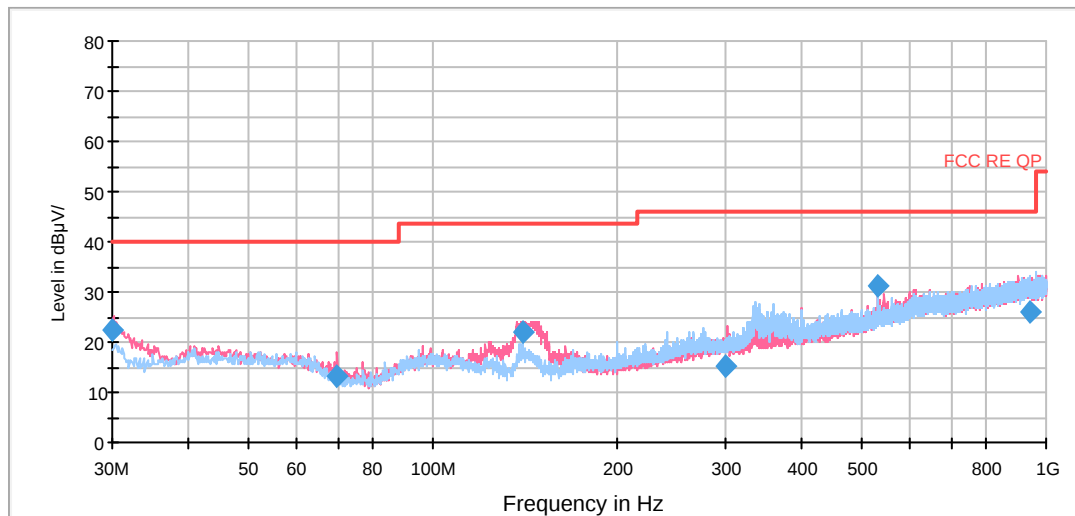
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27767.312500	41.7	V	165.0	41.6	0.1	12.3	54
29068.375000	41.8	H	90.0	41.9	-0.1	12.2	54
31540.562500	43.2	V	148.0	43.6	-0.4	10.8	54
34863.250000	44.5	H	106.0	42.8	1.7	9.5	54
35268.250000	45.5	V	270.0	43.5	2.0	8.5	54
39988.187500	47.7	V	174.0	41.8	5.9	6.3	54

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

802.11ac (HT20) CH36

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBμV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBμV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBμV/m)
30.000000	22.3	100.0	V	181.0	10.2	12.1	17.7	40.0
69.851250	13.3	175.0	V	242.0	4.7	8.6	26.7	40.0
139.846250	22.0	100.0	V	119.0	13.0	9.0	21.5	43.5
301.078750	15.1	100.0	V	246.0	-0.7	15.8	30.9	46.0
531.247500	31.0	175.0	H	0.0	10.2	20.8	15.0	46.0
943.662500	26.1	114.0	H	273.0	-1.1	27.2	19.9	46.0

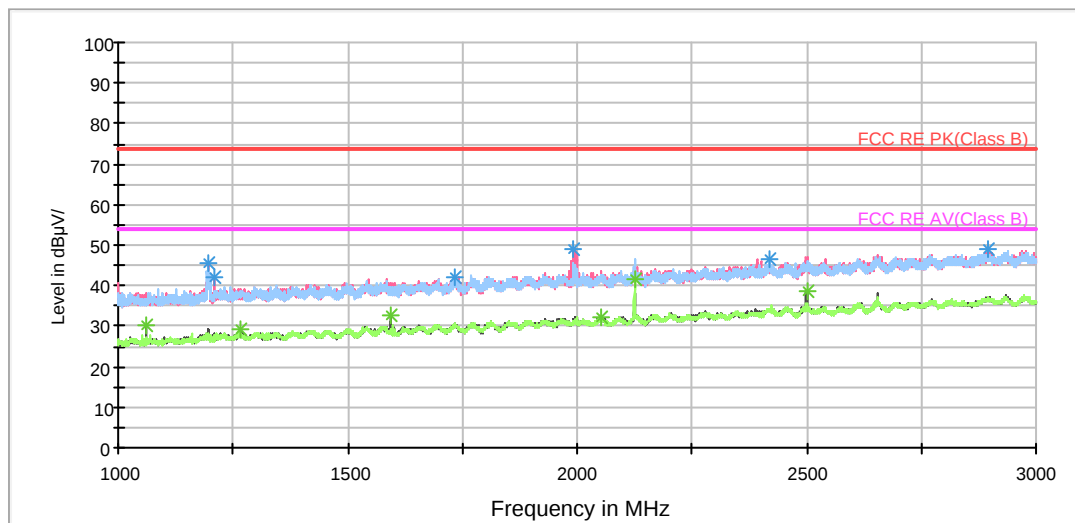
Remark: 1. Quasi-Peak = Reading value + Correction factor

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

3. Margin = Limit – Quasi-Peak



RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

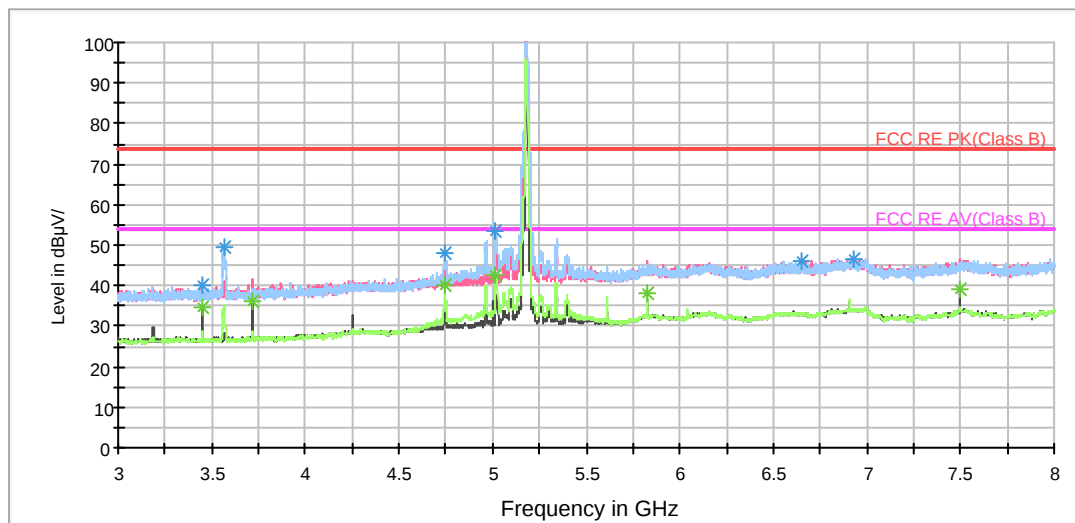
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.500000	45.4	200.0	V	270.0	53.6	-8.2	28.6	74
1208.500000	42.2	101.0	V	108.0	50.3	-8.1	31.8	74
1731.750000	42.1	200.0	H	321.0	46.9	-4.8	31.9	74
1992.500000	49.2	101.0	V	280.0	52.5	-3.3	24.8	74
2419.500000	46.7	200.0	H	321.0	47.3	-0.6	27.3	74
2894.500000	48.8	101.0	H	223.0	46.7	2.1	25.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	30.1	200.0	V	97.0	39.0	-8.9	23.9	54
1265.750000	29.3	200.0	V	262.0	37.0	-7.7	24.7	54
1593.750000	32.6	200.0	V	70.0	39.0	-6.4	21.4	54
2053.000000	32.2	200.0	V	88.0	35.4	-3.2	21.8	54
2125.000000	41.8	200.0	H	0.0	44.1	-2.3	12.2	54
2500.250000	38.8	200.0	V	0.0	39.0	-0.2	15.2	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

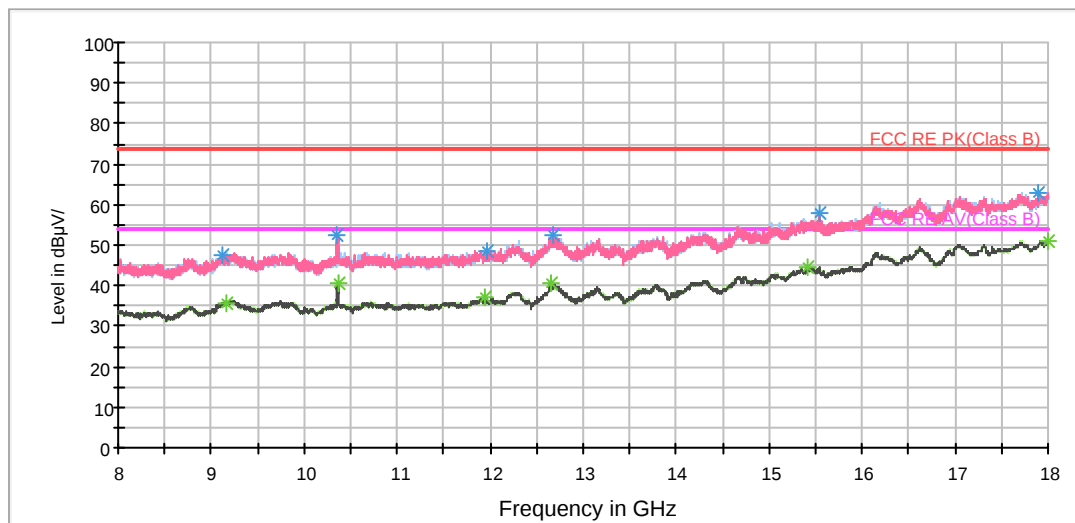
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3452.500000	40.2	225.0	V	211.0	42.4	-2.2	33.8	74
3567.500000	49.6	225.0	H	213.0	51.8	-2.2	24.4	74
4747.500000	47.8	125.0	H	297.0	46.9	0.9	26.2	74
5017.500000	53.4	125.0	H	191.0	51.8	1.6	20.6	74
6655.625000	46.1	225.0	V	2.0	40.6	5.5	27.9	74
6926.875000	46.8	225.0	V	23.0	40.6	6.2	27.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3453.125000	34.4	225.0	V	211.0	36.6	-2.2	19.6	54
3718.750000	35.9	225.0	V	211.0	37.5	-1.6	18.1	54
4748.125000	40.0	125.0	H	297.0	39.1	0.9	14.0	54
5018.125000	42.4	125.0	H	149.0	40.8	1.6	11.6	54
5827.500000	38.2	125.0	H	320.0	33.7	4.5	15.8	54
7500.000000	39.1	225.0	V	275.0	32.2	6.9	14.9	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

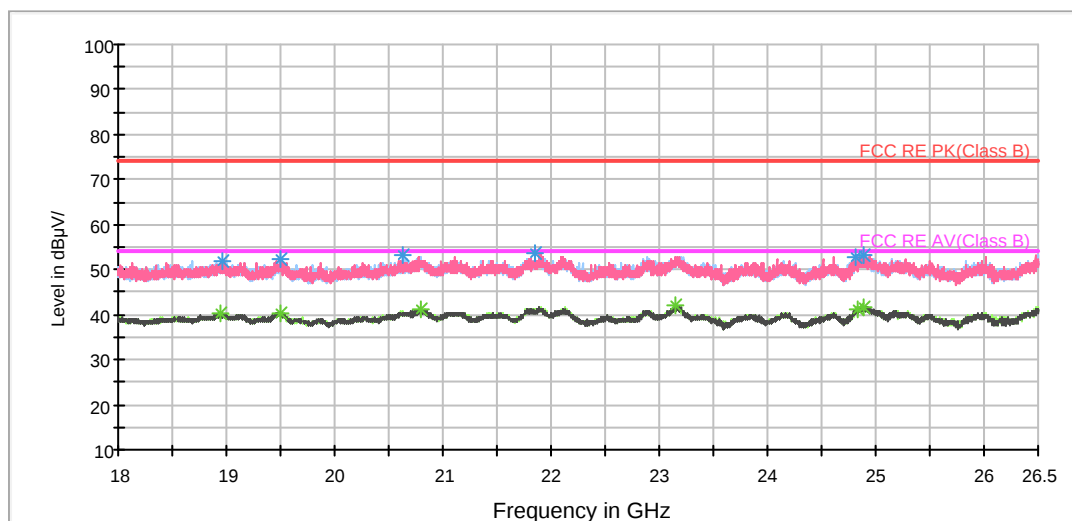
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9117.500000	47.7	150.0	V	0.0	37.7	10.0	26.3	74
10358.750000	52.7	150.0	H	204.0	42.9	9.8	21.3	74
11960.000000	48.7	150.0	V	69.0	36.8	11.9	25.3	74
12682.500000	52.3	150.0	V	202.0	38.1	14.2	21.7	74
15532.500000	57.8	150.0	V	69.0	38.7	19.1	16.2	74
17892.500000	63.0	150.0	H	136.0	38.0	25.0	11.0	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9156.250000	35.8	150.0	H	276.0	25.5	10.3	18.2	54
10360.000000	40.6	150.0	V	180.0	30.8	9.8	13.4	54
11941.250000	36.9	150.0	H	158.0	25.1	11.8	17.1	54
12648.750000	40.7	150.0	H	0.0	26.5	14.2	13.3	54
15418.750000	44.5	150.0	H	112.0	25.1	19.4	9.5	54
18000.000000	51.0	150.0	V	113.0	25.5	25.5	3.0	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

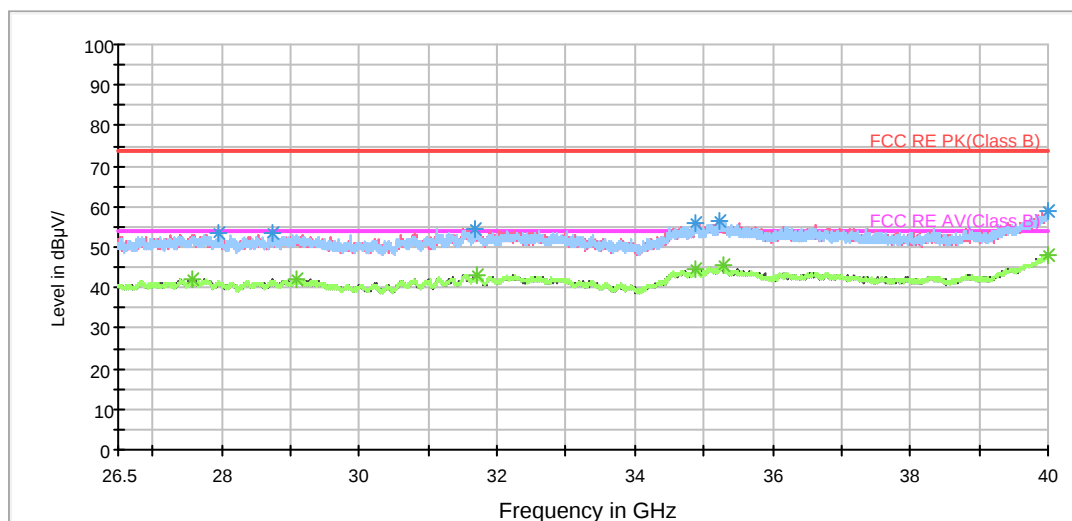
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18963.687500	51.8	V	45.0	51.8	0.0	22.2	74
19493.875000	52.1	V	181.0	52.0	0.1	21.9	74
20628.625000	53.1	H	225.0	54.3	-1.2	20.9	74
21855.812500	53.5	V	109.0	55.3	-1.8	20.5	74
24819.125000	53.0	H	208.0	52.8	0.2	21.0	74
24886.062500	53.2	H	111.0	52.7	0.5	20.8	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18942.437500	40.2	V	45.0	40.2	0.0	13.8	54
19497.062500	40.5	H	225.0	40.4	0.1	13.5	54
20800.750000	41.3	V	95.0	43.3	-2.0	12.7	54
23155.250000	42.1	V	68.0	42.2	-0.1	11.9	54
24839.312500	41.2	V	45.0	40.9	0.3	12.8	54
24882.875000	41.7	H	54.0	41.2	0.5	12.3	54

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

BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27949.562500	53.6	H	0.0	53.8	-0.2	20.4	74
28737.625000	53.4	H	117.0	53.8	-0.4	20.6	74
31684.000000	54.6	H	66.0	54.9	-0.3	19.4	74
34868.312500	55.7	H	1.0	54.0	1.7	18.3	74
35236.187500	56.6	V	0.0	54.6	2.0	17.4	74
39996.625000	58.9	H	230.0	53.0	5.9	15.1	74

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

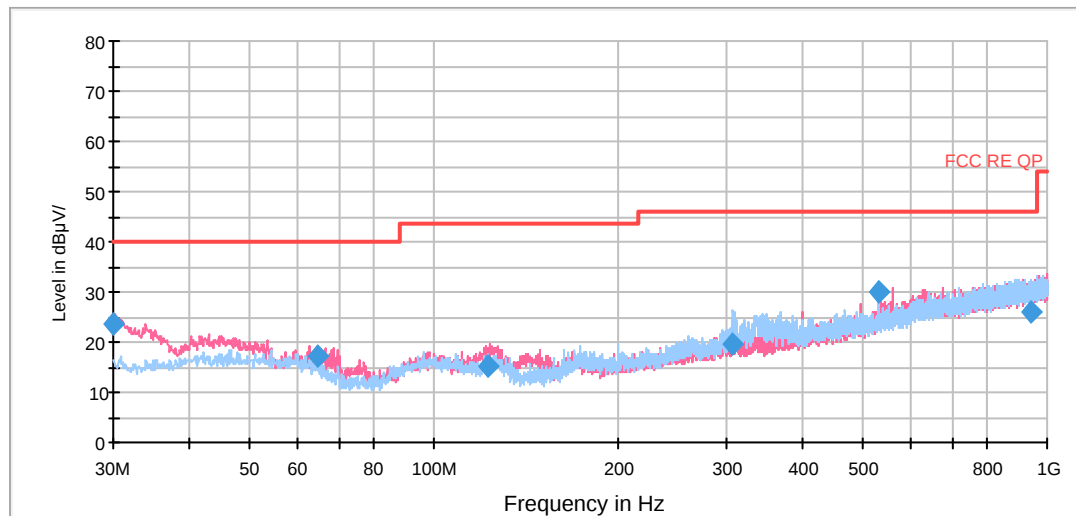
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27568.187500	42.2	H	75.0	41.8	0.4	11.8	54
29095.375000	42.1	H	0.0	42.3	-0.2	11.9	54
31704.250000	43.3	V	302.0	43.6	-0.3	10.7	54
34870.000000	44.3	V	219.0	42.6	1.7	9.7	54
35291.875000	45.4	H	117.0	43.5	1.9	8.6	54
39988.187500	48.1	H	16.0	42.2	5.9	5.9	54

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



802.11ac (HT20) CH40

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

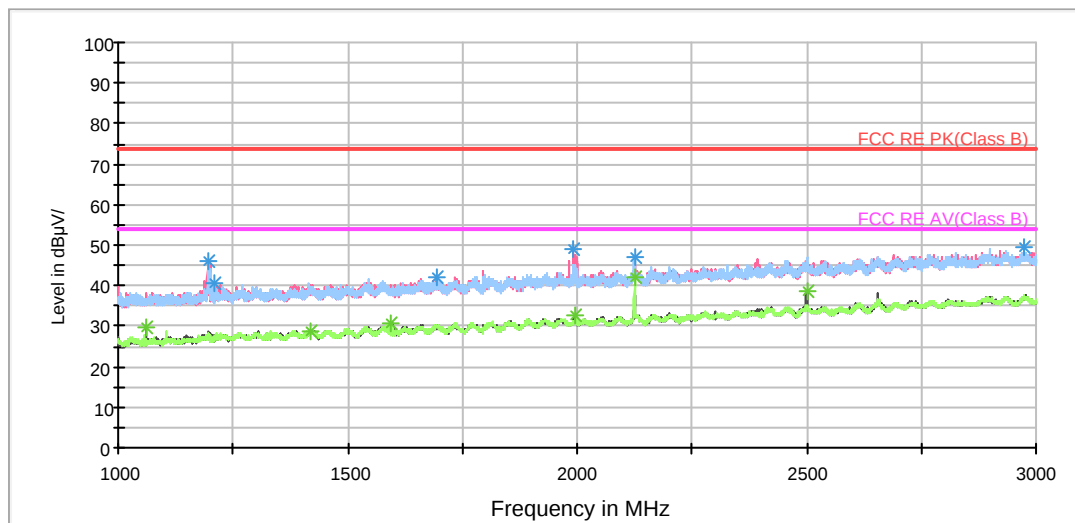
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	23.6	100.0	V	243.0	11.5	12.1	16.4	40.0
64.477500	17.3	114.0	V	209.0	6.4	10.9	22.7	40.0
122.962500	15.3	125.0	V	30.0	4.9	10.4	28.2	43.5
307.985000	19.7	100.0	H	76.0	3.8	15.9	26.3	46.0
531.247500	30.2	100.0	V	74.0	9.4	20.8	15.8	46.0
940.987500	26.1	100.0	H	171.0	-1.0	27.1	19.9	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

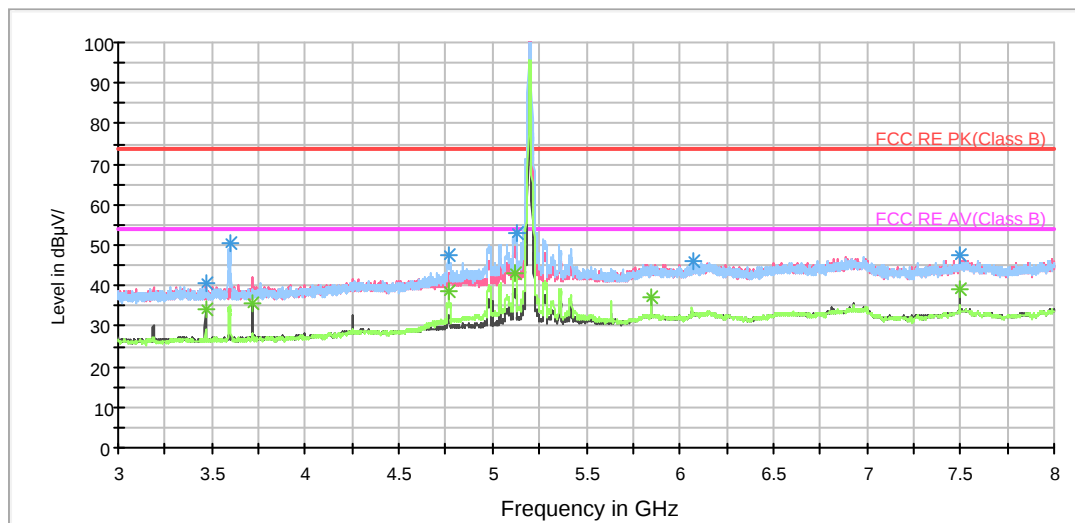
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	46.0	101.0	V	109.0	54.2	-8.2	28.0	74
1208.250000	40.5	100.0	H	268.0	48.6	-8.1	33.5	74
1695.000000	41.9	200.0	V	17.0	46.9	-5.0	32.1	74
1991.750000	48.8	101.0	V	282.0	52.1	-3.3	25.2	74
2125.000000	47.0	200.0	H	343.0	49.3	-2.3	27.0	74
2973.750000	49.5	101.0	V	317.0	47.3	2.2	24.5	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.250000	29.7	200.0	V	95.0	38.6	-8.9	24.3	54
1420.250000	29.0	101.0	V	273.0	35.9	-6.9	25.0	54
1593.750000	30.8	101.0	V	71.0	37.2	-6.4	23.2	54
1994.250000	32.5	101.0	V	291.0	35.7	-3.2	21.5	54
2125.000000	42.1	200.0	H	343.0	44.4	-2.3	11.9	54
2500.250000	38.5	200.0	V	17.0	38.7	-0.2	15.5	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

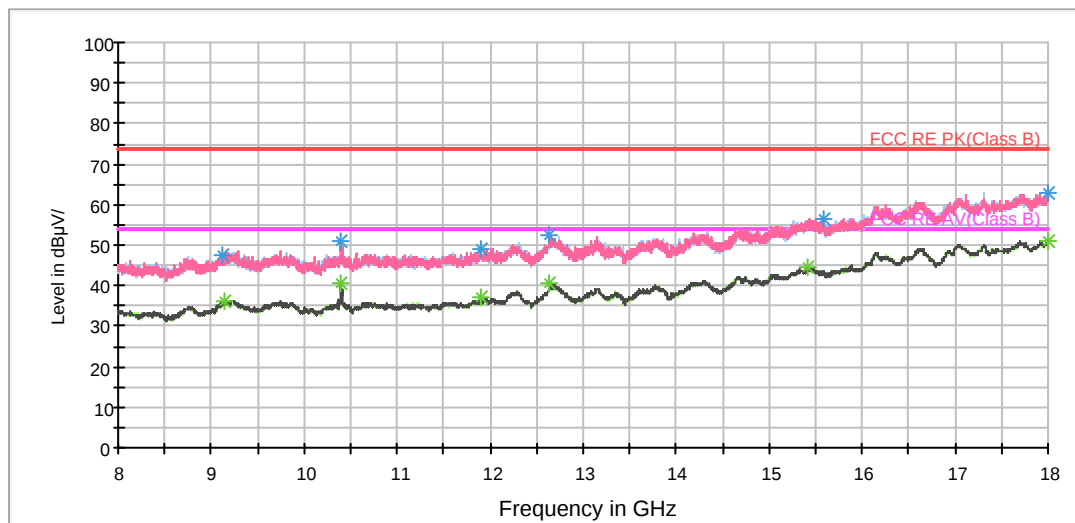
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3466.250000	40.7	225.0	V	147.0	42.8	-2.1	33.3	74
3598.750000	50.4	225.0	H	193.0	52.6	-2.2	23.6	74
4766.250000	47.8	125.0	H	297.0	46.7	1.1	26.2	74
5127.500000	53.1	125.0	H	165.0	51.2	1.9	20.9	74
6074.375000	45.9	225.0	V	232.0	40.8	5.1	28.1	74
7500.000000	47.4	225.0	V	274.0	40.5	6.9	26.6	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3466.250000	34.0	225.0	V	147.0	36.1	-2.1	20.0	54
3718.750000	35.8	225.0	V	210.0	37.4	-1.6	18.2	54
4766.875000	38.7	125.0	H	297.0	37.6	1.1	15.3	54
5121.250000	43.0	125.0	H	187.0	41.2	1.8	11.0	54
5850.000000	37.4	225.0	H	256.0	32.7	4.7	16.6	54
7500.000000	39.0	225.0	V	274.0	32.1	6.9	15.0	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

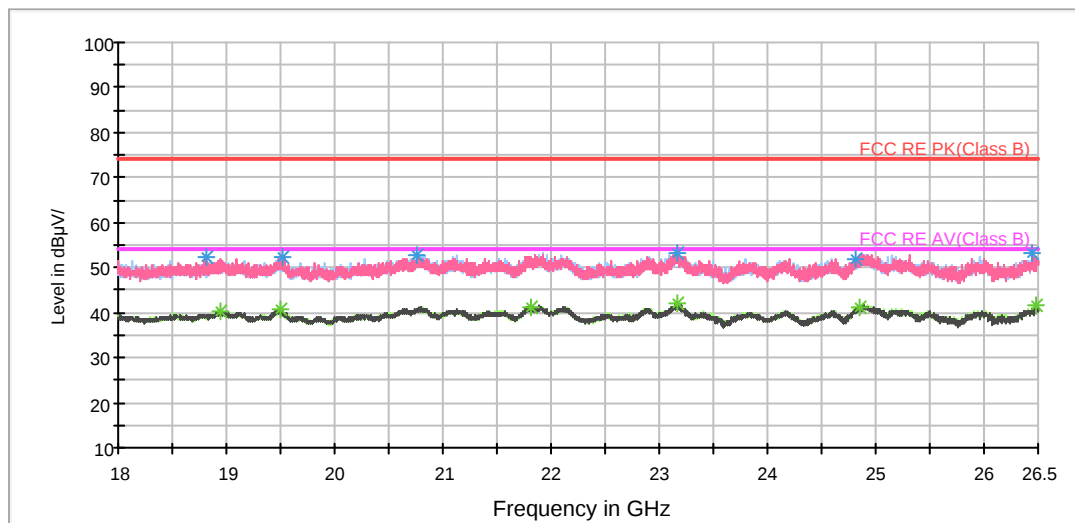
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9126.250000	47.5	150.0	V	110.0	37.5	10.0	26.5	74
10397.500000	50.9	150.0	V	199.0	41.5	9.4	23.1	74
11908.750000	49.1	150.0	H	227.0	37.1	12.0	24.9	74
12640.000000	52.2	150.0	V	88.0	37.6	14.6	21.8	74
15592.500000	56.6	150.0	V	0.0	37.7	18.9	17.4	74
17992.500000	62.9	150.0	V	110.0	37.6	25.3	11.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9133.750000	36.0	150.0	H	272.0	26.0	10.0	18.0	54
10400.000000	40.4	150.0	V	199.0	31.0	9.4	13.6	54
11898.750000	37.0	150.0	V	154.0	24.7	12.3	17.0	54
12641.250000	40.7	150.0	V	0.0	26.2	14.5	13.3	54
15422.500000	44.4	150.0	V	0.0	25.0	19.4	9.6	54
17997.500000	51.0	150.0	H	359.0	25.6	25.4	3.0	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

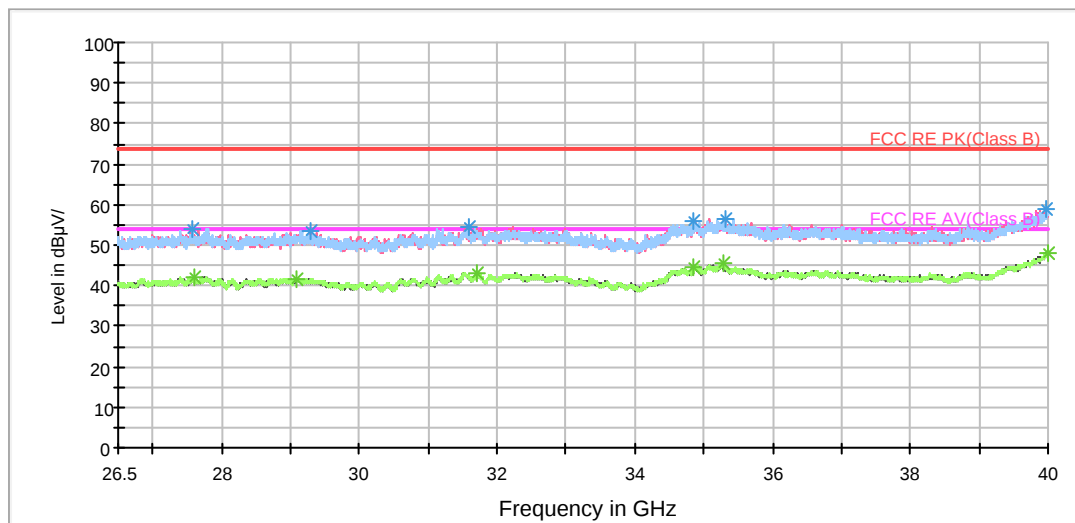
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18813.875000	52.4	V	60.0	52.4	0.0	21.6	74
19510.875000	52.3	H	139.0	52.2	0.1	21.7	74
20757.187500	52.8	H	225.0	54.5	-1.7	21.2	74
23161.625000	53.2	V	45.0	53.3	-0.1	20.8	74
24806.375000	52.0	H	98.0	51.9	0.1	22.0	74
26444.750000	53.3	H	125.0	52.3	1.0	20.7	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18939.250000	40.4	H	194.0	40.4	0.0	13.6	54
19501.312500	40.6	V	74.0	40.5	0.1	13.4	54
21813.312500	41.3	V	169.0	43.3	-2.0	12.7	54
23158.437500	42.0	H	53.0	42.1	-0.1	12.0	54
24844.625000	41.3	H	225.0	41.0	0.3	12.7	54
26472.375000	41.7	H	225.0	40.6	1.1	12.3	54

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

BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27576.625000	53.9	H	217.0	53.5	0.4	20.1	74
29281.000000	53.7	V	229.0	54.2	-0.5	20.3	74
31587.812500	54.4	V	195.0	54.8	-0.4	19.6	74
34858.187500	55.7	H	173.0	54.0	1.7	18.3	74
35317.187500	56.3	V	316.0	54.4	1.9	17.7	74
39979.750000	59.0	V	351.0	53.1	5.9	15.0	74

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

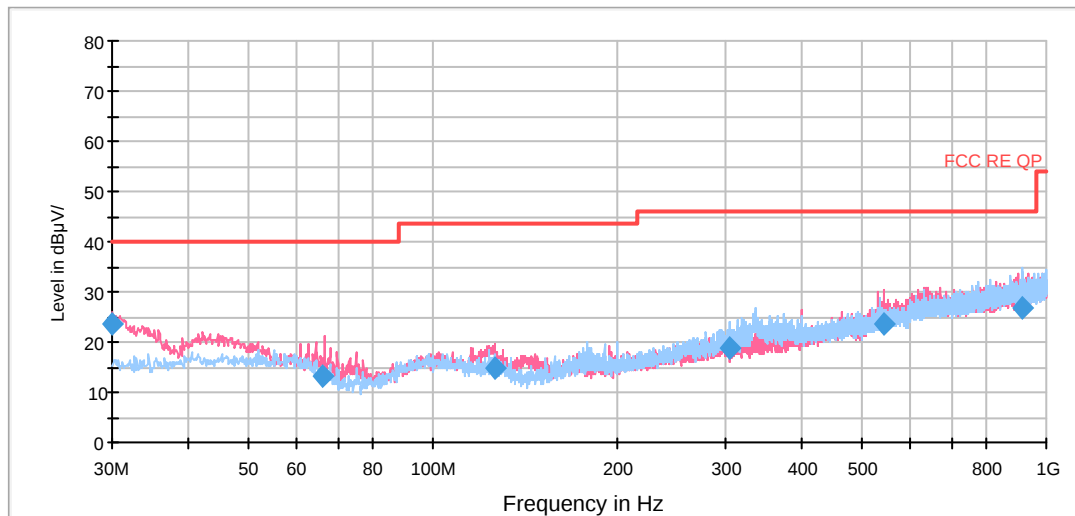
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27595.187500	42.1	H	234.0	41.7	0.4	11.9	54
29097.062500	41.8	H	0.0	42.0	-0.2	12.2	54
31717.750000	43.2	H	20.0	43.5	-0.3	10.8	54
34863.250000	44.7	H	183.0	43.0	1.7	9.3	54
35286.812500	45.3	V	0.0	43.4	1.9	8.7	54
39991.562500	48.2	V	162.0	42.3	5.9	5.8	54

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



802.11ac (HT20) CH48

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

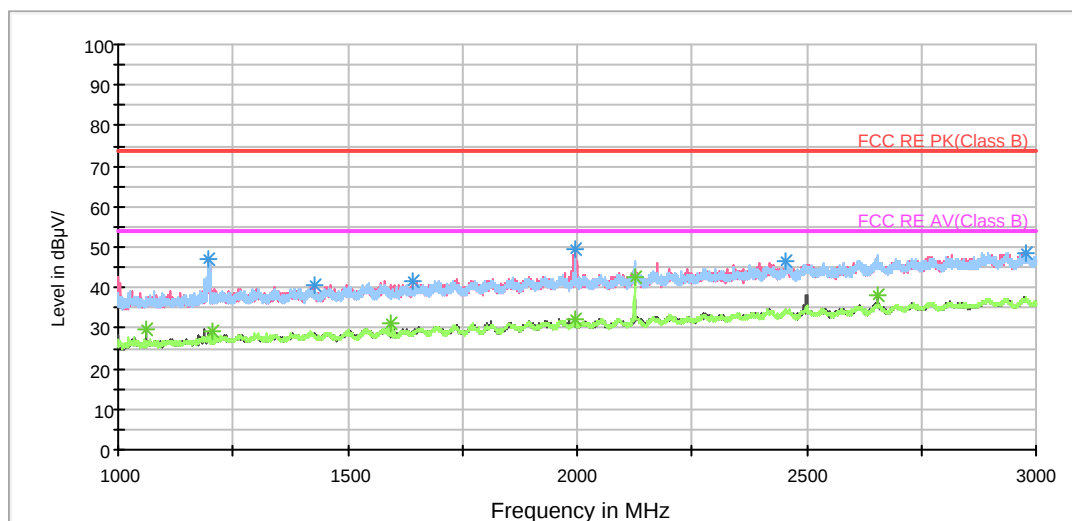
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	23.7	100.0	V	291.0	11.6	12.1	16.3	40.0
66.256250	13.3	100.0	V	254.0	3.1	10.2	26.7	40.0
126.031250	14.8	125.0	V	0.0	4.8	10.0	28.7	43.5
305.440000	18.7	100.0	H	87.0	2.9	15.8	27.3	46.0
543.977500	23.6	100.0	V	155.0	2.0	21.6	22.4	46.0
911.606250	26.7	100.0	H	10.0	-0.3	27.0	19.3	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

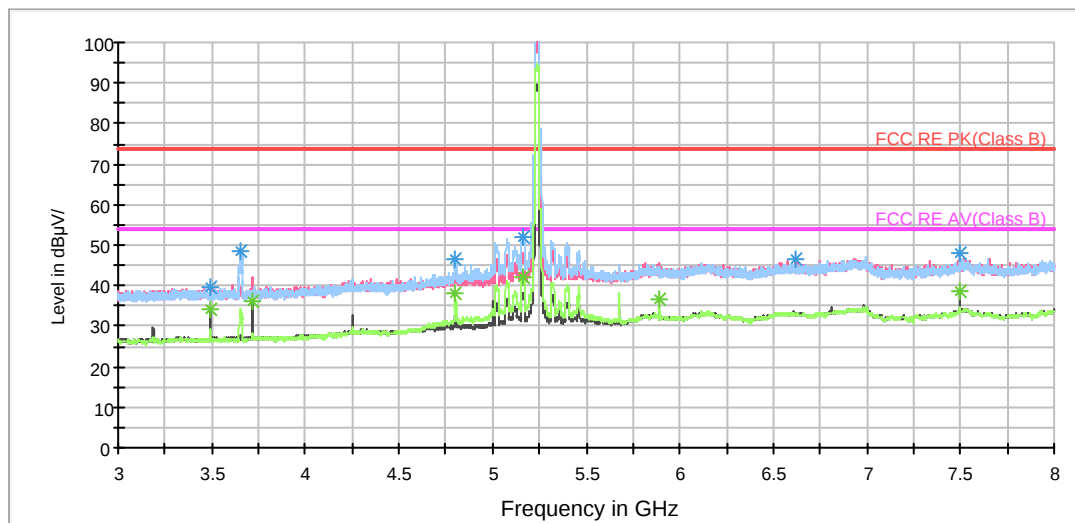
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.000000	47.1	200.0	V	260.0	55.3	-8.2	26.9	74
1428.000000	40.4	100.0	V	301.0	47.3	-6.9	33.6	74
1641.250000	41.8	100.0	V	248.0	46.5	-4.7	32.2	74
1995.500000	49.7	100.0	V	301.0	52.9	-3.2	24.3	74
2455.750000	46.7	101.0	H	1.0	47.2	-0.5	27.3	74
2979.500000	48.7	200.0	H	128.0	46.5	2.2	25.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	29.9	200.0	V	97.0	38.8	-8.9	24.1	54
1205.250000	29.2	100.0	V	275.0	37.3	-8.1	24.8	54
1593.750000	31.0	200.0	V	61.0	37.4	-6.4	23.0	54
1997.250000	32.2	200.0	V	143.0	35.5	-3.3	21.8	54
2125.000000	42.3	200.0	H	341.0	44.6	-2.3	11.7	54
2656.250000	38.2	200.0	V	152.0	37.8	0.4	15.8	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

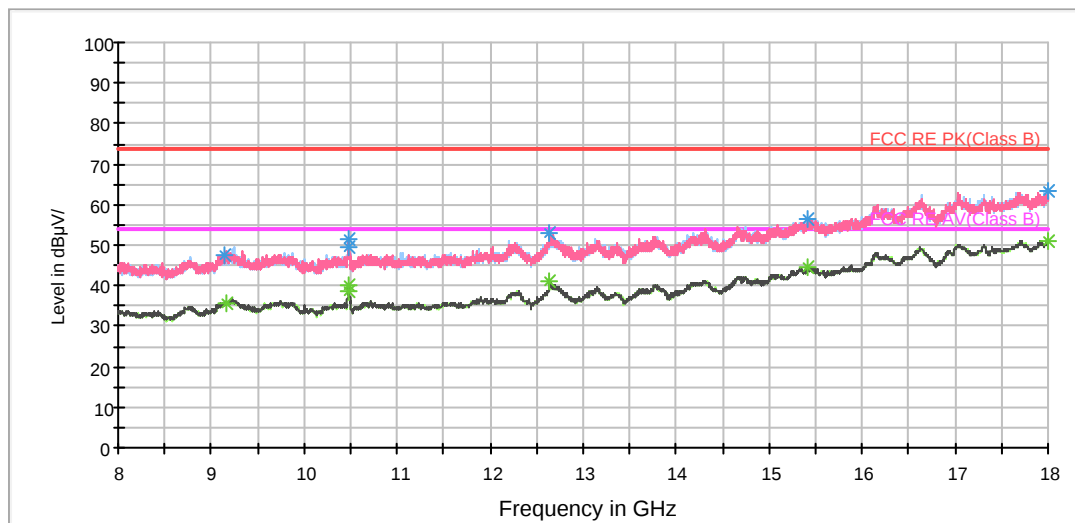
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3493.125000	39.8	225.0	V	211.0	41.9	-2.1	34.2	74
3656.875000	48.3	225.0	H	192.0	50.2	-1.9	25.7	74
4803.125000	46.4	125.0	H	252.0	45.1	1.3	27.6	74
5163.125000	52.0	125.0	H	167.0	50.0	2.0	22.0	74
6621.875000	46.5	225.0	V	0.0	41.0	5.5	27.5	74
7500.625000	48.3	225.0	V	274.0	41.4	6.9	25.7	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3493.125000	34.2	225.0	V	211.0	36.3	-2.1	19.8	54
3718.750000	35.9	225.0	V	211.0	37.5	-1.6	18.1	54
4803.125000	38.1	125.0	H	252.0	36.8	1.3	15.9	54
5163.125000	42.2	125.0	H	167.0	40.2	2.0	11.8	54
5895.000000	36.5	125.0	H	274.0	31.6	4.9	17.5	54
7500.000000	38.6	225.0	V	274.0	31.7	6.9	15.4	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

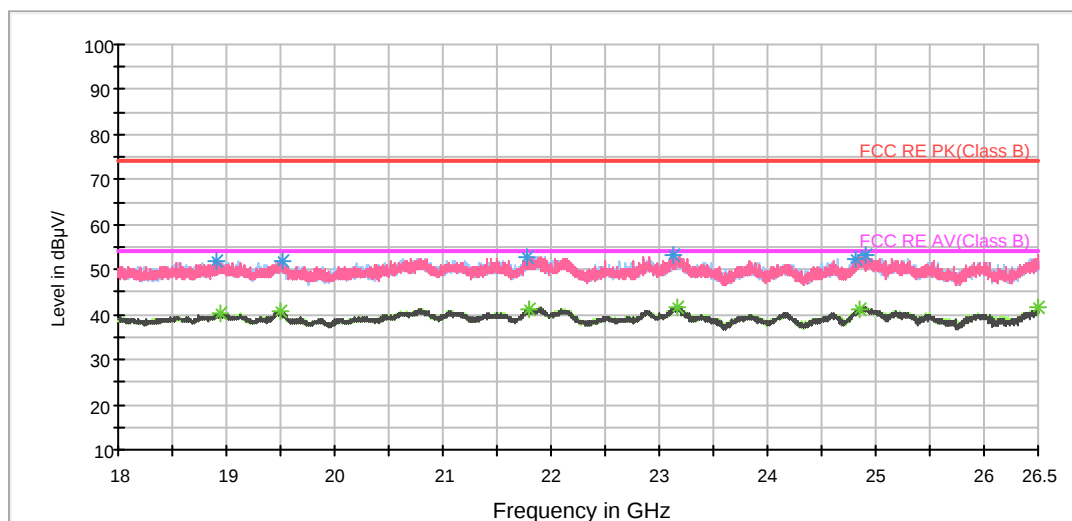
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9152.500000	47.4	150.0	V	44.0	37.2	10.2	26.6	74
10476.250000	51.5	150.0	V	199.0	41.5	10.0	22.5	74
10483.750000	49.3	150.0	V	199.0	39.2	10.1	24.7	74
12643.750000	53.0	150.0	V	110.0	38.6	14.4	21.0	74
15410.000000	56.5	150.0	H	228.0	37.4	19.1	17.5	74
17995.000000	63.1	150.0	H	0.0	37.8	25.3	10.9	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9157.500000	35.9	150.0	V	0.0	25.6	10.3	18.1	54
10480.000000	40.3	150.0	V	199.0	30.2	10.1	13.7	54
10483.750000	38.7	150.0	V	199.0	28.6	10.1	15.3	54
12641.250000	40.8	150.0	H	295.0	26.3	14.5	13.2	54
15422.500000	44.4	150.0	V	155.0	25.0	19.4	9.6	54
17998.750000	51.1	150.0	V	342.0	25.7	25.4	2.9	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

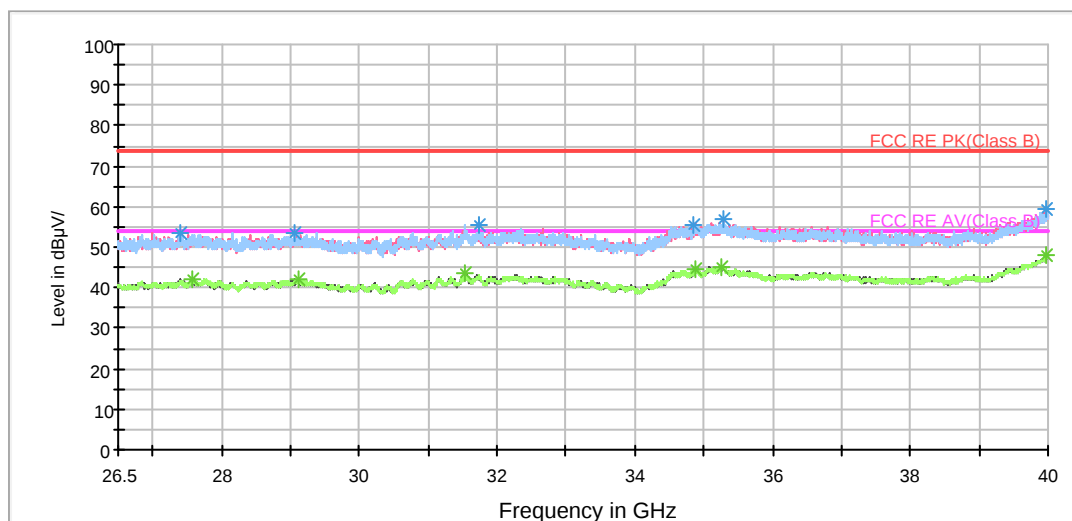
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18906.312500	52.0	V	45.0	51.9	0.1	22.0	74
19526.812500	52.1	V	114.0	52.1	0.0	21.9	74
21776.125000	52.8	H	153.0	55.0	-2.2	21.2	74
23129.750000	53.3	H	220.0	53.4	-0.1	20.7	74
24820.187500	52.5	H	167.0	52.3	0.2	21.5	74
24904.125000	53.4	V	141.0	52.8	0.6	20.6	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18952.000000	40.2	V	199.0	40.2	0.0	13.8	54
19501.312500	40.8	V	45.0	40.7	0.1	13.2	54
21795.250000	41.3	H	53.0	43.4	-2.1	12.7	54
23162.687500	41.8	V	71.0	41.9	-0.1	12.2	54
24843.562500	41.1	V	45.0	40.8	0.3	12.9	54
26494.687500	41.7	H	225.0	40.6	1.1	12.3	54

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

BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27399.437500	53.3	H	0.0	52.9	0.4	20.7	74
29070.062500	53.5	H	0.0	53.6	-0.1	20.5	74
31729.562500	55.2	H	139.0	55.5	-0.3	18.8	74
34861.562500	55.5	H	243.0	53.8	1.7	18.5	74
35288.500000	56.9	V	343.0	55.0	1.9	17.1	74
39974.687500	59.3	V	187.0	53.5	5.8	14.7	74

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

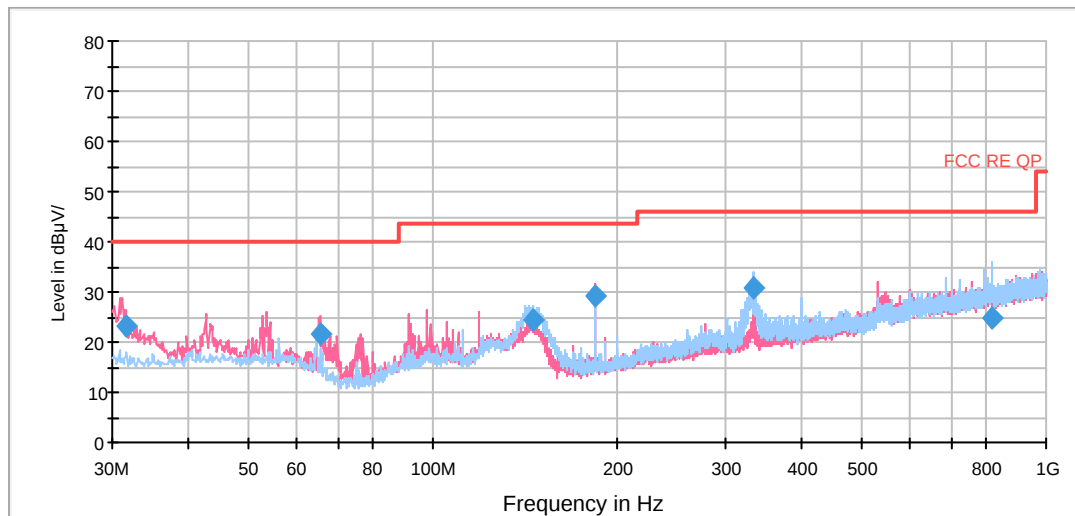
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27566.500000	42.0	V	0.0	41.6	0.4	12.0	54
29113.937500	42.0	H	97.0	42.2	-0.2	12.0	54
31525.375000	43.5	V	56.0	43.9	-0.4	10.5	54
34868.312500	44.3	H	234.0	42.6	1.7	9.7	54
35261.500000	45.3	V	358.0	43.3	2.0	8.7	54
39983.125000	48.2	H	21.0	42.3	5.9	5.8	54

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



802.11ac (HT40) CH38

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

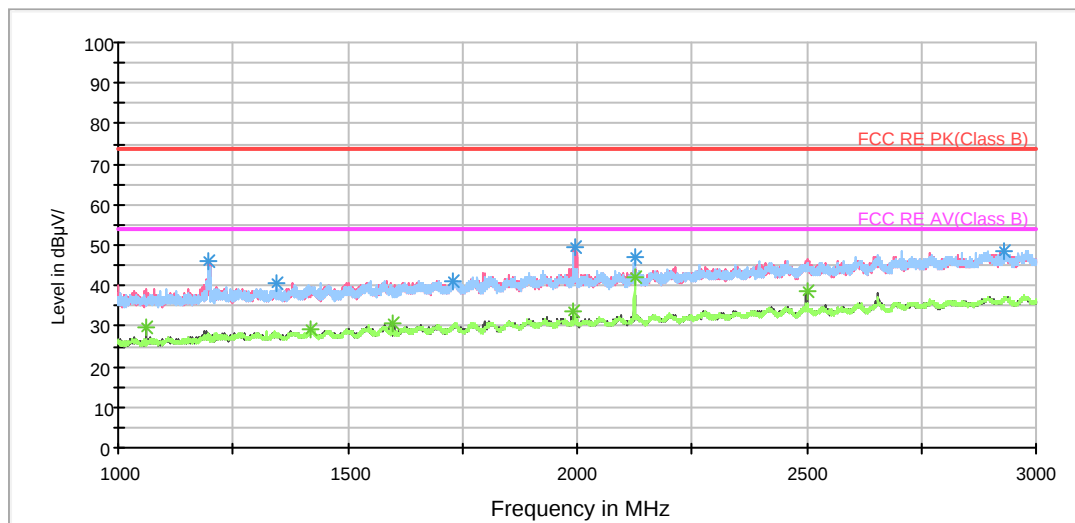
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
31.732500	23.2	203.0	V	235.0	11.3	11.9	16.8	40.0
65.445000	21.6	175.0	V	0.0	11.2	10.4	18.4	40.0
145.310000	24.3	188.0	H	84.0	15.3	9.0	19.2	43.5
184.270000	29.3	100.0	V	0.0	18.2	11.1	14.2	43.5
334.460000	30.7	100.0	H	288.0	14.1	16.6	15.3	46.0
813.598750	25.0	100.0	H	17.0	-0.6	25.6	21.0	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

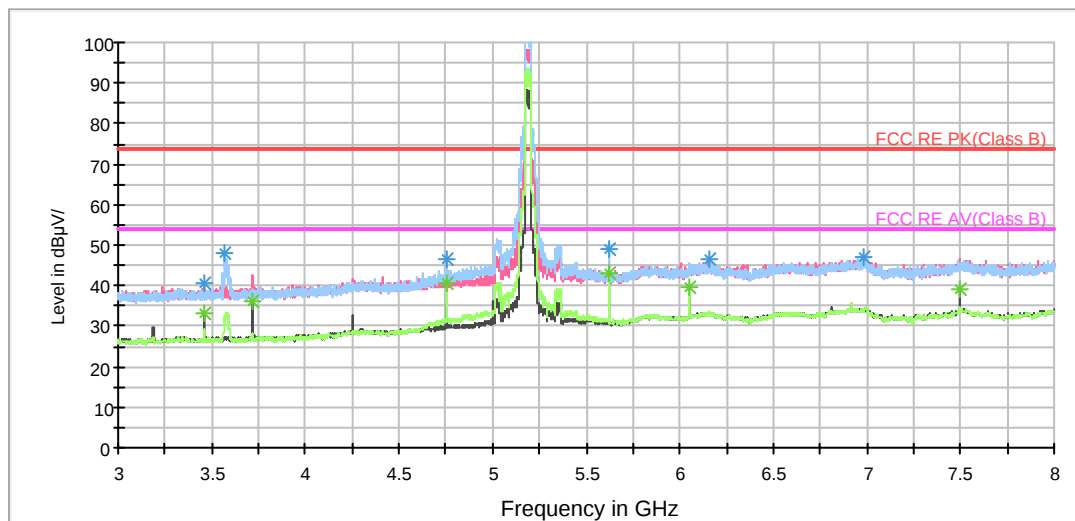
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.750000	46.0	101.0	V	99.0	54.2	-8.2	28.0	74
1344.500000	40.7	101.0	H	26.0	48.2	-7.5	33.3	74
1731.000000	41.3	200.0	V	152.0	46.2	-4.9	32.7	74
1997.750000	49.4	101.0	V	262.0	52.7	-3.3	24.6	74
2125.000000	47.0	200.0	H	346.0	49.3	-2.3	27.0	74
2929.750000	48.7	200.0	H	337.0	47.0	1.7	25.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	29.5	200.0	V	89.0	38.4	-8.9	24.5	54
1420.750000	29.0	200.0	H	292.0	35.9	-6.9	25.0	54
1600.000000	30.5	200.0	V	0.0	36.9	-6.4	23.5	54
1989.750000	33.9	200.0	V	143.0	37.3	-3.4	20.1	54
2125.000000	41.9	200.0	H	346.0	44.2	-2.3	12.1	54
2500.250000	38.7	200.0	V	18.0	38.9	-0.2	15.3	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

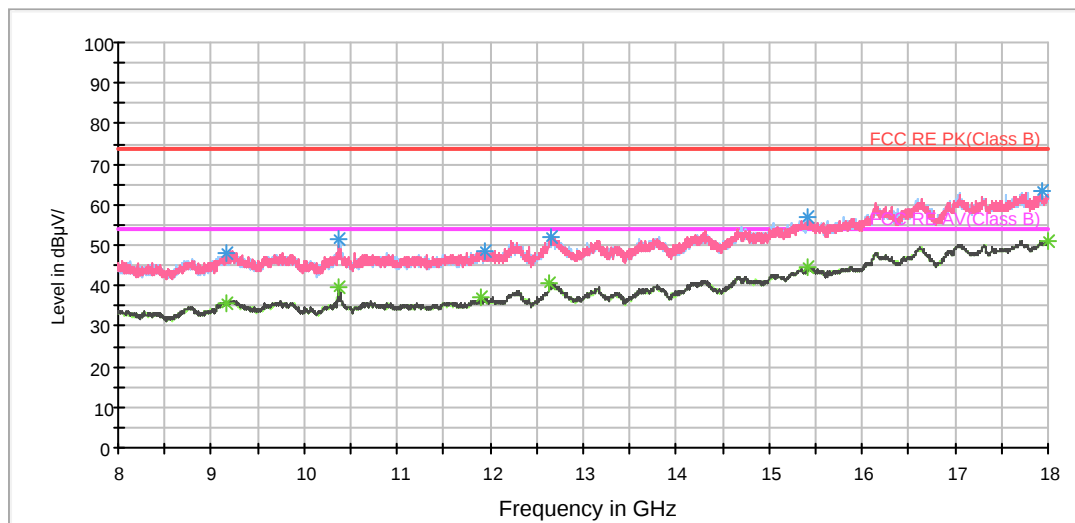
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3459.375000	40.8	225.0	V	211.0	43.0	-2.2	33.2	74
3571.875000	48.0	125.0	H	187.0	50.2	-2.2	26.0	74
4756.875000	46.5	125.0	H	230.0	45.4	1.1	27.5	74
5622.500000	48.9	225.0	H	343.0	45.5	3.4	25.1	74
6155.625000	46.3	225.0	V	0.0	40.7	5.6	27.7	74
6987.500000	46.8	125.0	V	0.0	40.4	6.4	27.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3460.000000	33.3	225.0	V	211.0	35.5	-2.2	20.7	54
3718.750000	36.1	225.0	V	211.0	37.7	-1.6	17.9	54
4757.500000	40.8	125.0	H	230.0	39.7	1.1	13.2	54
5622.500000	43.2	225.0	H	343.0	39.8	3.4	10.8	54
6055.000000	39.5	225.0	H	282.0	34.6	4.9	14.5	54
7500.000000	39.1	225.0	V	275.0	32.2	6.9	14.9	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9157.500000	48.2	150.0	V	0.0	37.9	10.3	25.8	74
10365.000000	51.3	150.0	H	293.0	41.5	9.8	22.7	74
11946.250000	48.4	150.0	V	225.0	36.6	11.8	25.6	74
12647.500000	52.1	150.0	H	90.0	37.8	14.3	21.9	74
15420.000000	57.2	150.0	H	0.0	37.8	19.4	16.8	74
17927.500000	63.3	150.0	H	203.0	37.8	25.5	10.7	74

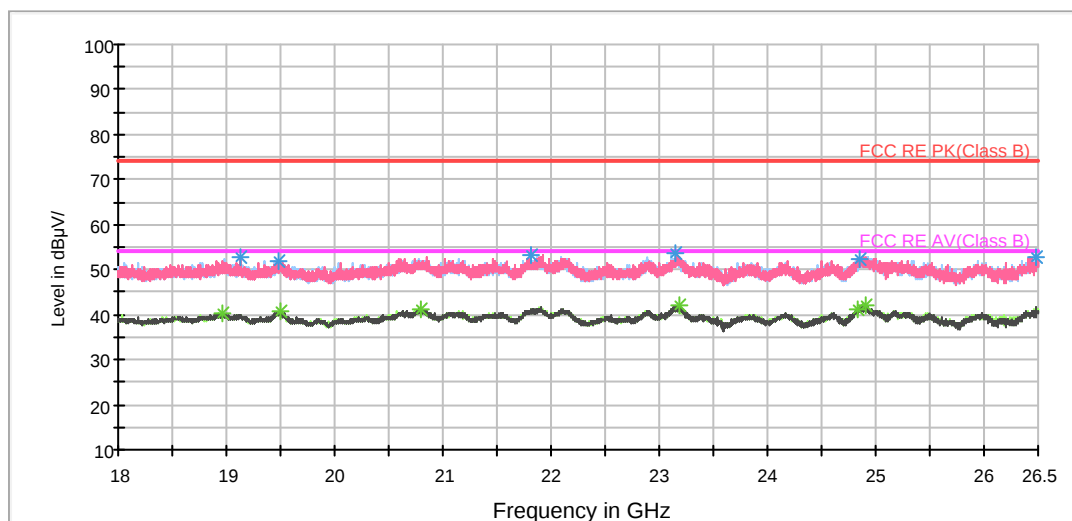
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9153.750000	35.9	150.0	V	155.0	25.7	10.2	18.1	54
10380.000000	39.4	150.0	V	177.0	29.6	9.8	14.6	54
11897.500000	37.0	150.0	V	88.0	24.8	12.2	17.0	54
12640.000000	40.8	150.0	V	133.0	26.2	14.6	13.2	54
15418.750000	44.4	150.0	V	247.0	25.0	19.4	9.6	54
17998.750000	51.1	150.0	V	0.0	25.7	25.4	2.9	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

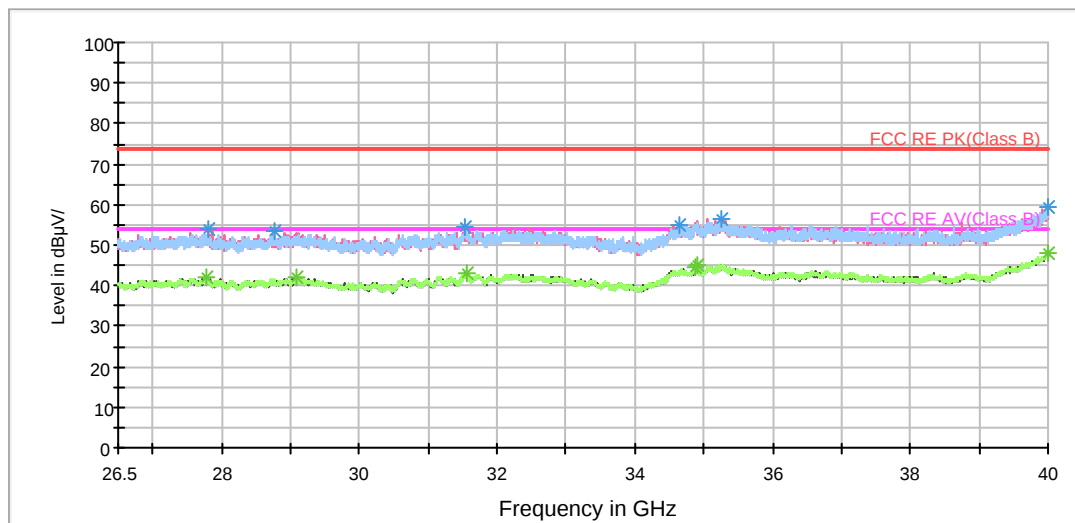
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19130.500000	52.9	V	58.0	53.4	-0.5	21.1	74
19484.312500	51.9	H	225.0	51.8	0.1	22.1	74
21815.437500	53.1	V	155.0	55.1	-2.0	20.9	74
23157.375000	53.6	H	113.0	53.7	-0.1	20.4	74
24844.625000	52.4	H	195.0	52.1	0.3	21.6	74
26479.812500	52.8	V	155.0	51.7	1.1	21.2	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18967.937500	40.2	H	225.0	40.3	-0.1	13.8	54
19505.562500	40.5	H	113.0	40.4	0.1	13.5	54
20791.187500	41.4	H	225.0	43.3	-1.9	12.6	54
23190.312500	41.9	V	45.0	42.0	-0.1	12.1	54
24839.312500	41.2	V	45.0	40.9	0.3	12.8	54
24903.062500	41.9	H	225.0	41.3	0.6	12.1	54

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

BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27801.062500	54.0	V	270.0	54.0	0.0	20.0	74
28779.812500	53.4	H	98.0	53.8	-0.4	20.6	74
31538.875000	54.6	V	158.0	55.0	-0.4	19.4	74
34632.062500	55.1	H	132.0	54.7	0.4	18.9	74
35258.125000	56.4	V	270.0	54.4	2.0	17.6	74
39996.625000	59.2	V	177.0	53.3	5.9	14.8	74

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

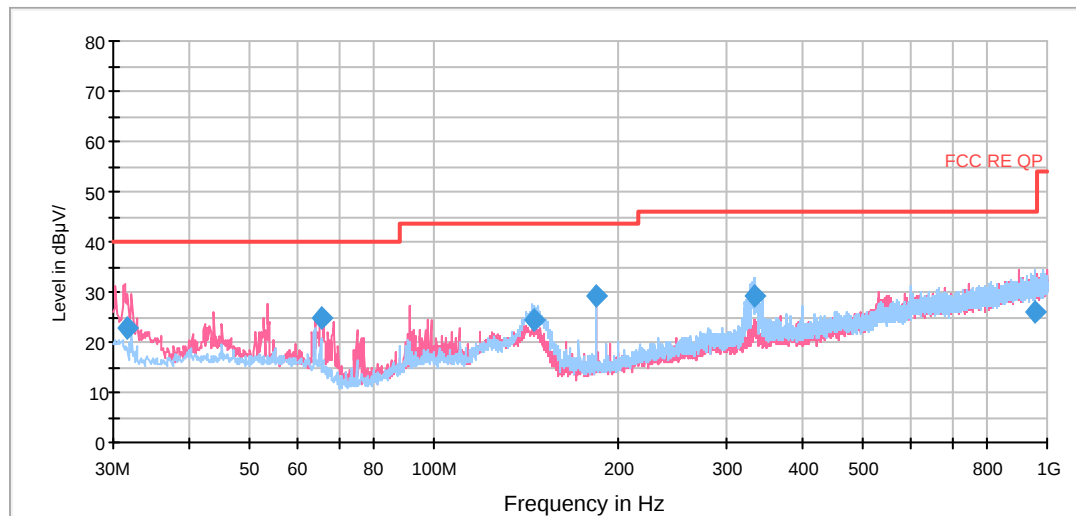
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27772.375000	41.9	V	186.0	41.8	0.1	12.1	54
29103.812500	42.0	H	141.0	42.2	-0.2	12.0	54
31559.125000	43.3	H	90.0	43.7	-0.4	10.7	54
34870.000000	44.5	V	148.0	42.8	1.7	9.5	54
34895.312500	45.2	H	124.0	43.3	1.9	8.8	54
39996.625000	47.9	V	177.0	42.0	5.9	6.1	54

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



802.11ac (HT40) CH46

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

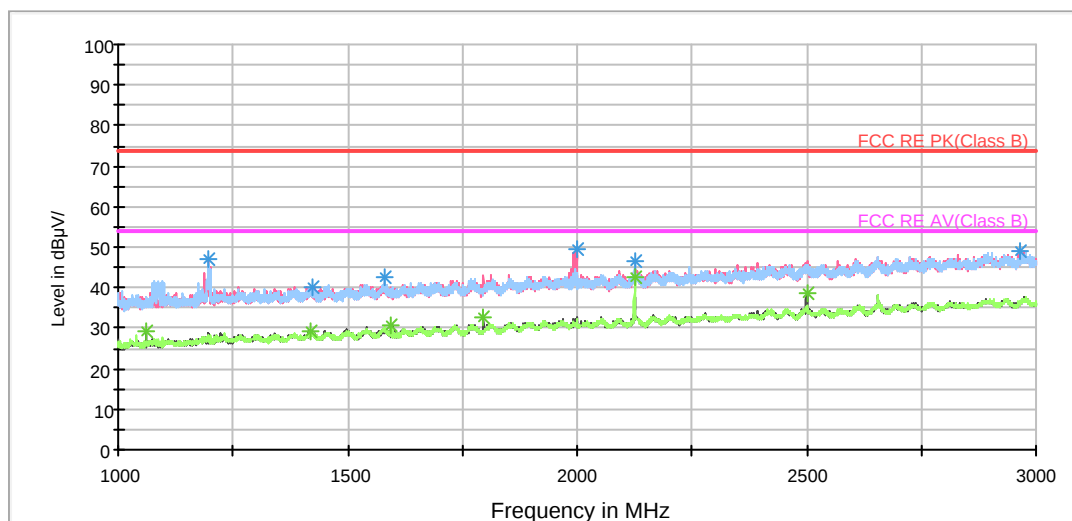
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
31.733750	22.9	100.0	V	325.0	11.0	11.9	17.1	40.0
65.447500	24.8	114.0	V	308.0	14.4	10.4	15.2	40.0
145.306250	24.5	189.0	H	83.0	15.5	9.0	19.0	43.5
184.270000	29.1	100.0	V	344.0	18.0	11.1	14.4	43.5
333.890000	29.1	100.0	H	312.0	12.8	16.3	16.9	46.0
953.961250	26.0	200.0	H	330.0	-1.2	27.2	20.0	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

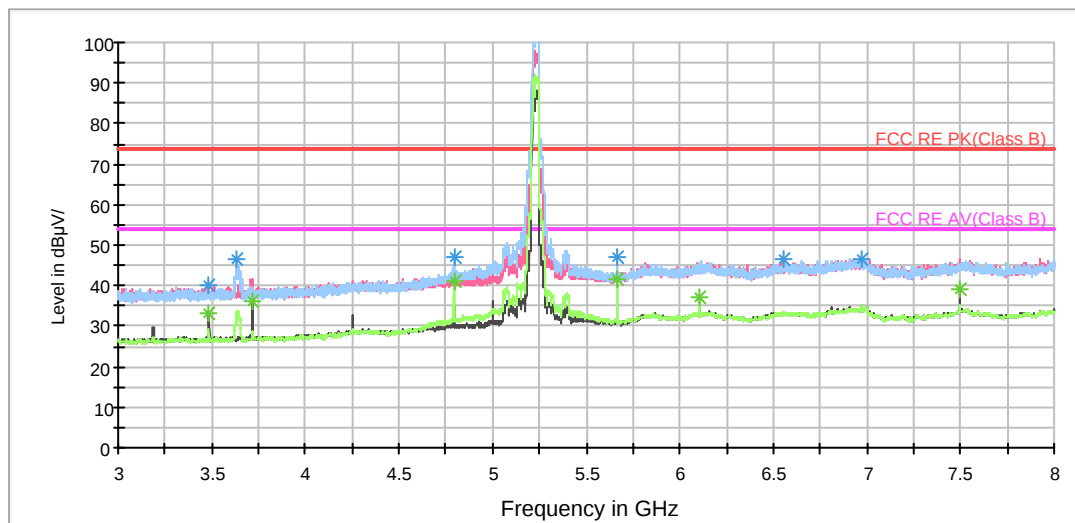
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.500000	47.1	101.0	V	266.0	55.3	-8.2	26.9	74
1423.000000	40.3	101.0	V	292.0	47.2	-6.9	33.7	74
1582.000000	42.4	200.0	H	0.0	48.7	-6.3	31.6	74
1999.000000	49.6	101.0	V	239.0	53.0	-3.4	24.4	74
2125.250000	46.5	200.0	H	343.0	48.8	-2.3	27.5	74
2964.750000	48.8	200.0	V	77.0	46.7	2.1	25.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	29.4	200.0	V	94.0	38.3	-8.9	24.6	54
1419.750000	29.2	200.0	V	104.0	36.1	-6.9	24.8	54
1594.000000	30.9	200.0	H	0.0	37.3	-6.4	23.1	54
1796.750000	32.9	101.0	V	317.0	37.0	-4.1	21.1	54
2125.000000	42.4	200.0	H	351.0	44.7	-2.3	11.6	54
2500.250000	38.6	200.0	V	6.0	38.8	-0.2	15.4	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

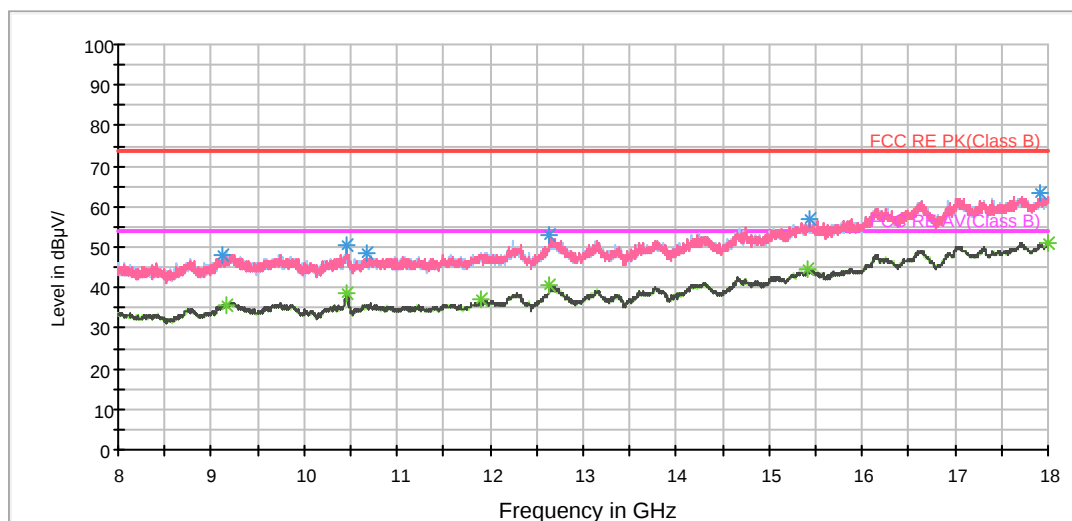
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3486.250000	40.1	225.0	V	190.0	42.1	-2.0	33.9	74
3631.875000	46.6	125.0	H	274.0	48.5	-1.9	27.4	74
4793.750000	47.2	125.0	H	252.0	46.0	1.2	26.8	74
5665.625000	47.2	225.0	H	255.0	43.8	3.4	26.8	74
6551.875000	46.4	225.0	V	87.0	40.8	5.6	27.6	74
6969.375000	46.7	125.0	H	167.0	40.4	6.3	27.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3486.250000	33.0	225.0	V	190.0	35.0	-2.0	21.0	54
3718.750000	35.9	225.0	V	212.0	37.5	-1.6	18.1	54
4794.375000	41.1	125.0	H	319.0	39.9	1.2	12.9	54
5665.625000	41.8	225.0	H	255.0	38.4	3.4	12.2	54
6101.875000	37.2	125.0	V	85.0	32.1	5.1	16.8	54
7500.000000	39.2	225.0	V	128.0	32.3	6.9	14.8	54

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

RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9118.750000	48.1	150.0	H	271.0	38.1	10.0	25.9	74
10461.250000	50.3	150.0	V	200.0	40.6	9.7	23.7	74
10675.000000	48.6	150.0	H	225.0	37.6	11.0	25.4	74
12641.250000	52.9	150.0	V	223.0	38.4	14.5	21.1	74
15428.750000	56.9	150.0	H	337.0	37.4	19.5	17.1	74
17923.750000	63.3	150.0	H	315.0	37.7	25.6	10.7	74

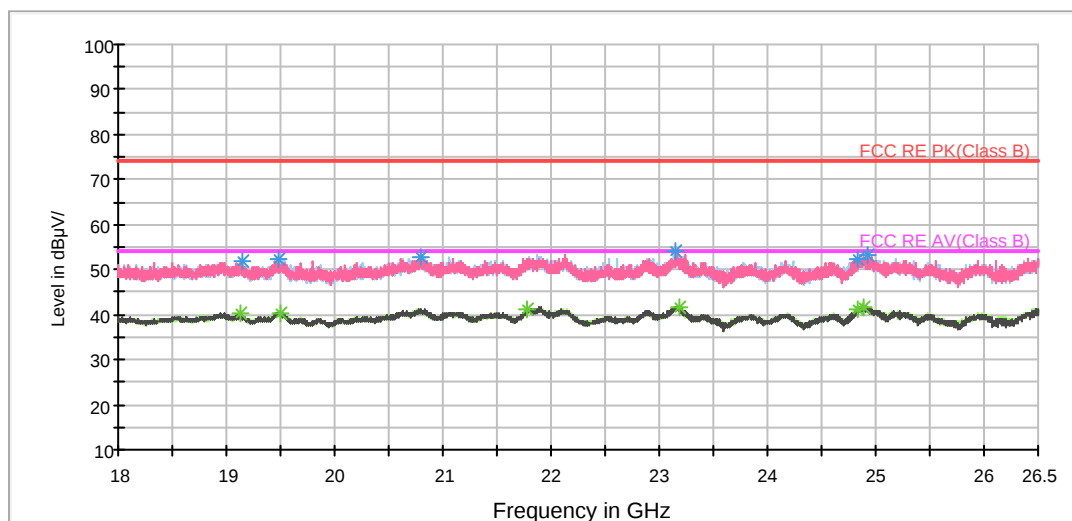
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9155.000000	35.9	150.0	V	90.0	25.6	10.3	18.1	54
10460.000000	38.8	150.0	V	200.0	29.1	9.7	15.2	54
11900.000000	37.0	150.0	H	293.0	24.7	12.3	17.0	54
12640.000000	40.7	150.0	H	358.0	26.1	14.6	13.3	54
15415.000000	44.4	150.0	V	0.0	25.1	19.3	9.6	54
17998.750000	50.9	150.0	V	47.0	25.5	25.4	3.1	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19141.125000	51.8	H	223.0	52.3	-0.5	22.2	74
19486.437500	52.5	H	182.0	52.4	0.1	21.5	74
20796.500000	52.8	V	45.0	54.7	-1.9	21.2	74
23141.437500	54.1	H	225.0	54.2	-0.1	19.9	74
24829.750000	52.3	H	223.0	52.1	0.2	21.7	74
24925.375000	53.4	H	45.0	52.7	0.7	20.6	74

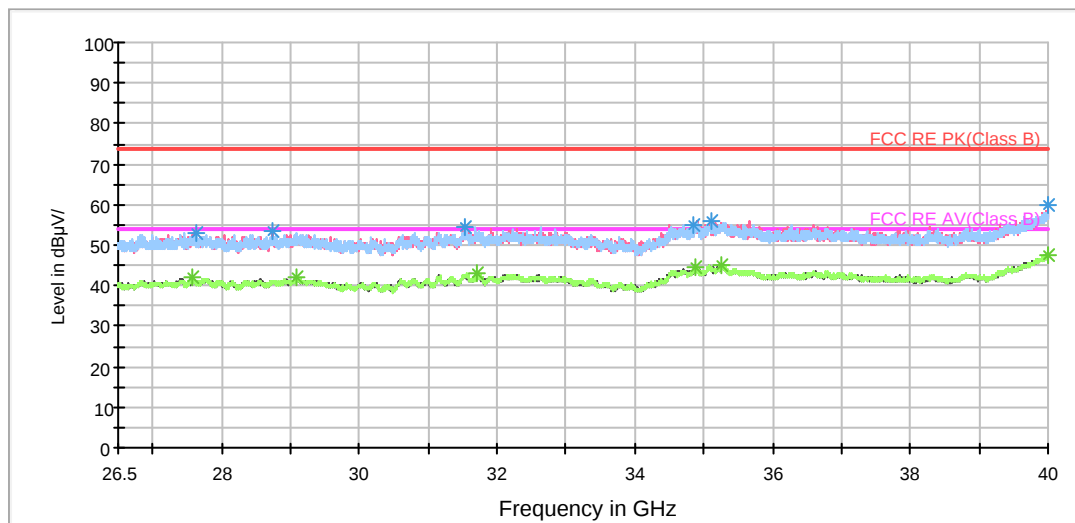
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19126.250000	40.1	H	169.0	40.6	-0.5	13.9	54
19502.375000	40.5	V	45.0	40.4	0.1	13.5	54
21777.187500	41.3	V	97.0	43.5	-2.2	12.7	54
23178.625000	41.8	V	45.0	41.9	-0.1	12.2	54
24840.375000	41.1	H	85.0	40.8	0.3	12.9	54
24890.312500	41.7	H	225.0	41.2	0.5	12.3	54

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



BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27627.250000	53.1	H	96.0	52.8	0.3	20.9	74
28741.000000	53.7	V	200.0	54.1	-0.4	20.3	74
31540.562500	54.6	H	187.0	55.0	-0.4	19.4	74
34851.437500	55.1	V	270.0	53.5	1.6	18.9	74
35123.125000	56.1	H	187.0	53.8	2.3	17.9	74
39998.312500	59.7	V	251.0	53.7	6.0	14.3	74

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

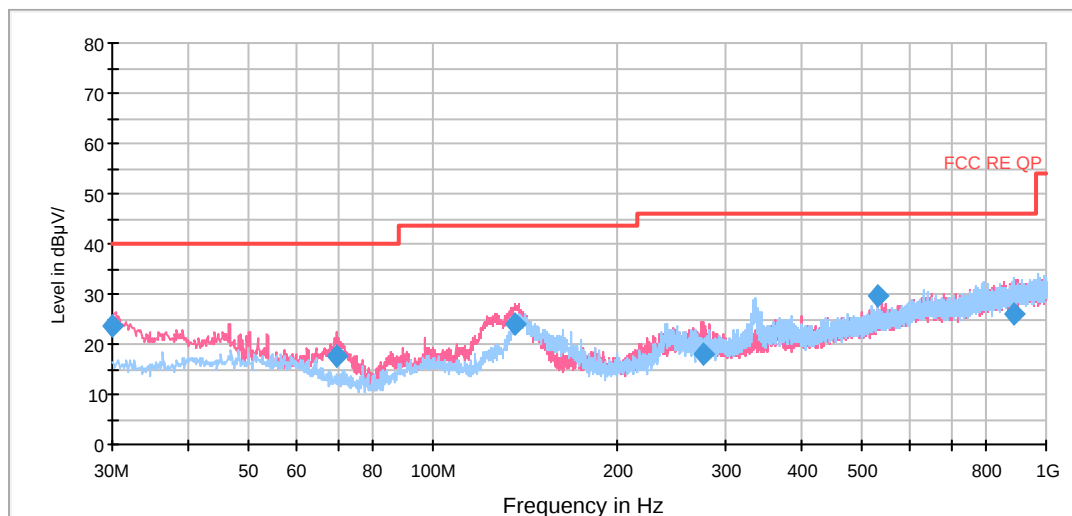
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27569.875000	41.9	H	150.0	41.5	0.4	12.1	54
29092.000000	41.9	H	142.0	42.1	-0.2	12.1	54
31707.625000	43.0	H	90.0	43.3	-0.3	11.0	54
34864.937500	44.5	V	165.0	42.8	1.7	9.5	54
35266.562500	45.1	V	243.0	43.1	2.0	8.9	54
39998.312500	47.8	V	251.0	41.8	6.0	6.2	54

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



802.11ac (HT80) CH42

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

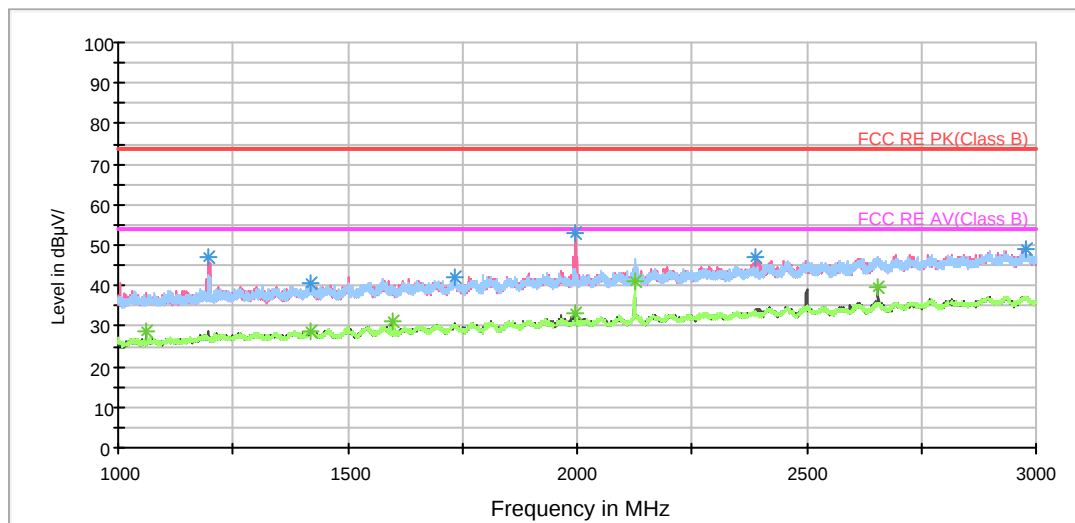
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	23.6	100.0	V	266.0	11.5	12.1	16.4	40.0
69.850000	17.6	114.0	V	0.0	9.0	8.6	22.4	40.0
135.977500	23.9	100.0	V	0.0	14.8	9.1	19.6	43.5
276.985000	18.1	100.0	V	246.0	3.0	15.1	27.9	46.0
531.247500	29.5	100.0	V	280.0	8.7	20.8	16.5	46.0
885.983750	26.0	100.0	H	140.0	-0.5	26.5	20.0	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Radiates Emission from 1GHz to 3GHz

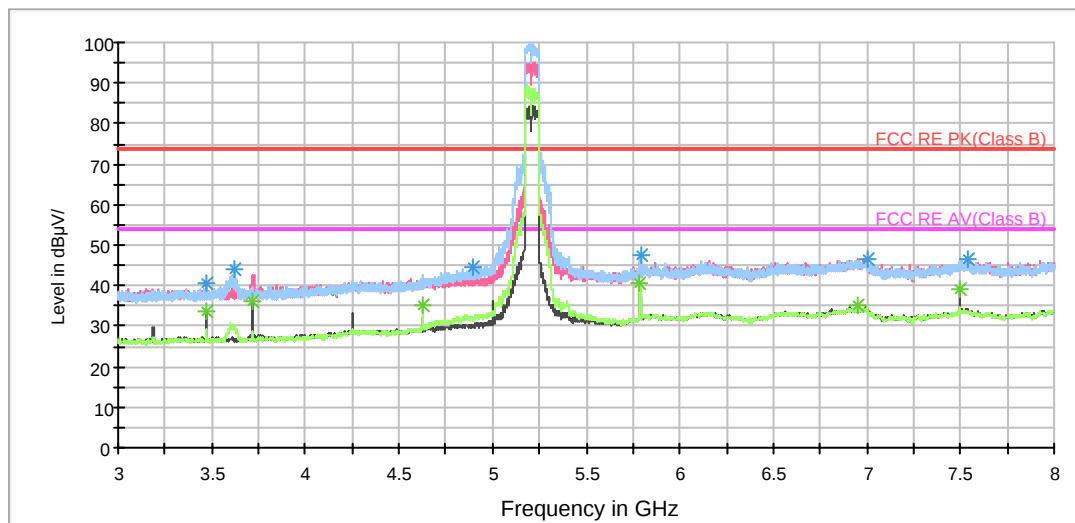
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.750000	47.1	125.0	V	266.0	55.3	-8.2	26.9	74
1419.250000	40.6	225.0	V	45.0	47.5	-6.9	33.4	74
1732.000000	42.1	125.0	V	319.0	46.9	-4.8	31.9	74
1997.750000	52.9	125.0	V	250.0	56.2	-3.3	21.1	74
2389.750000	46.8	125.0	V	303.0	48.2	-1.4	27.2	74
2976.000000	48.9	225.0	V	145.0	46.7	2.2	25.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	28.8	225.0	V	250.0	37.7	-8.9	25.2	54
1420.750000	28.9	125.0	V	62.0	35.8	-6.9	25.1	54
1600.000000	31.4	225.0	H	275.0	37.8	-6.4	22.6	54
1997.750000	33.0	125.0	V	250.0	36.3	-3.3	21.0	54
2125.000000	41.0	225.0	H	177.0	43.3	-2.3	13.0	54
2656.250000	39.4	225.0	V	197.0	39.0	0.4	14.6	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 3GHz to 8GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3473.125000	40.5	125.0	V	245.0	42.6	-2.1	33.5	74
3618.750000	44.2	225.0	H	214.0	46.2	-2.0	29.8	74
4896.875000	44.4	125.0	H	231.0	42.5	1.9	29.6	74
5789.375000	47.4	225.0	H	254.0	43.3	4.1	26.6	74
7000.000000	46.5	125.0	H	210.0	39.9	6.6	27.5	74
7538.750000	46.5	125.0	H	0.0	39.5	7.0	27.5	74

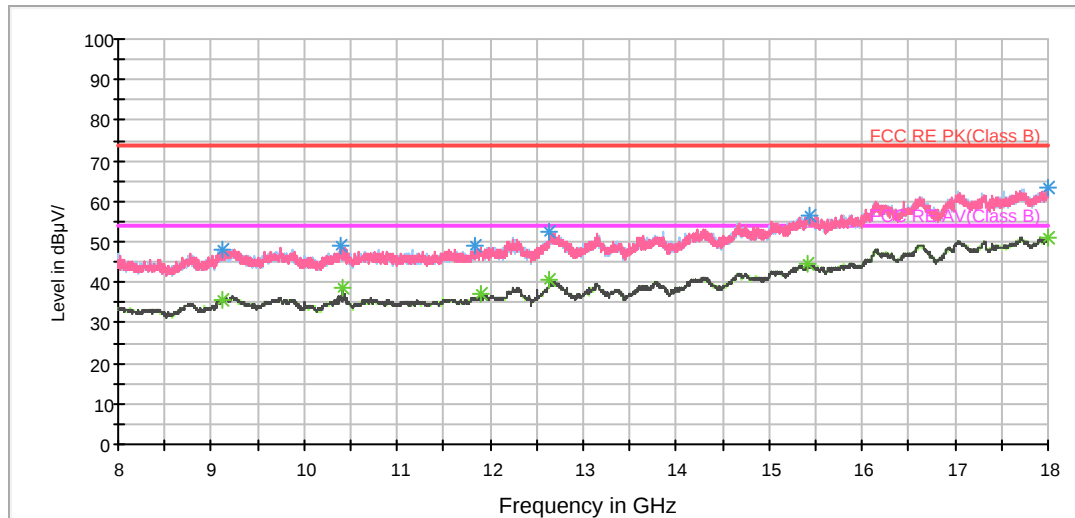
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3473.125000	33.5	225.0	V	190.0	35.6	-2.1	20.5	54
3718.750000	36.0	225.0	V	211.0	37.6	-1.6	18.0	54
4631.250000	35.0	125.0	H	210.0	34.1	0.9	19.0	54
5788.750000	40.5	225.0	H	170.0	36.4	4.1	13.5	54
6946.875000	35.1	225.0	H	192.0	28.9	6.2	18.9	54
7500.000000	39.0	225.0	V	276.0	32.1	6.9	15.0	54

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



RE 3-18GHz PK+AV



Radiates Emission from 8GHz to 18GHz

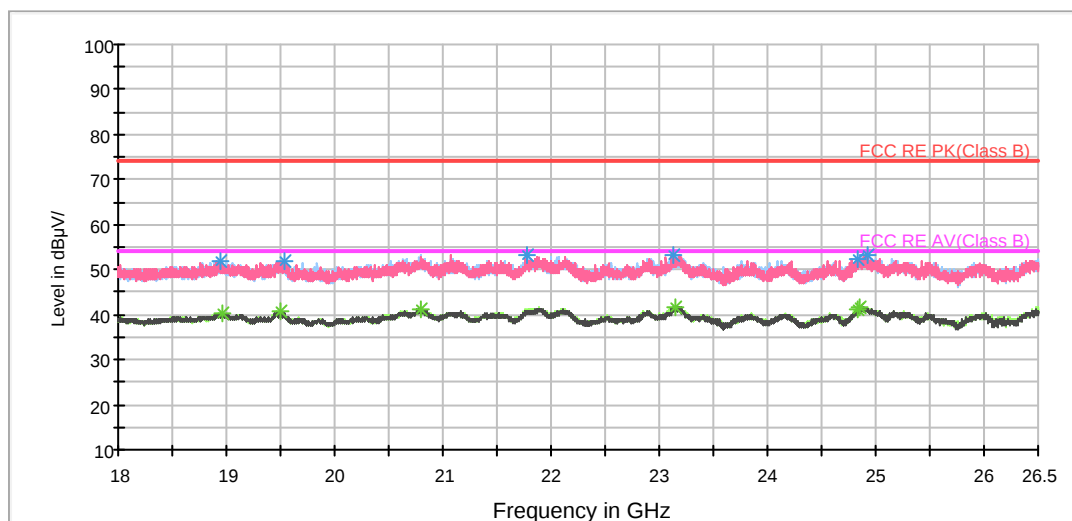
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9110.000000	48.2	150.0	H	136.0	38.4	9.8	25.8	74
10400.000000	48.8	150.0	V	181.0	39.4	9.4	25.2	74
11840.000000	49.2	150.0	H	339.0	37.6	11.6	24.8	74
12641.250000	52.4	150.0	V	0.0	37.9	14.5	21.6	74
15443.750000	56.4	150.0	V	92.0	36.9	19.5	17.6	74
18000.000000	63.4	150.0	H	251.0	37.9	25.5	10.6	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
9131.250000	35.9	150.0	V	70.0	25.9	10.0	18.1	54
10420.000000	38.5	150.0	V	181.0	28.7	9.8	15.5	54
11897.500000	37.1	150.0	V	0.0	24.9	12.2	16.9	54
12641.250000	40.7	150.0	H	206.0	26.2	14.5	13.3	54
15418.750000	44.4	150.0	H	317.0	25.0	19.4	9.6	54
18000.000000	51.1	150.0	V	0.0	25.6	25.5	2.9	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

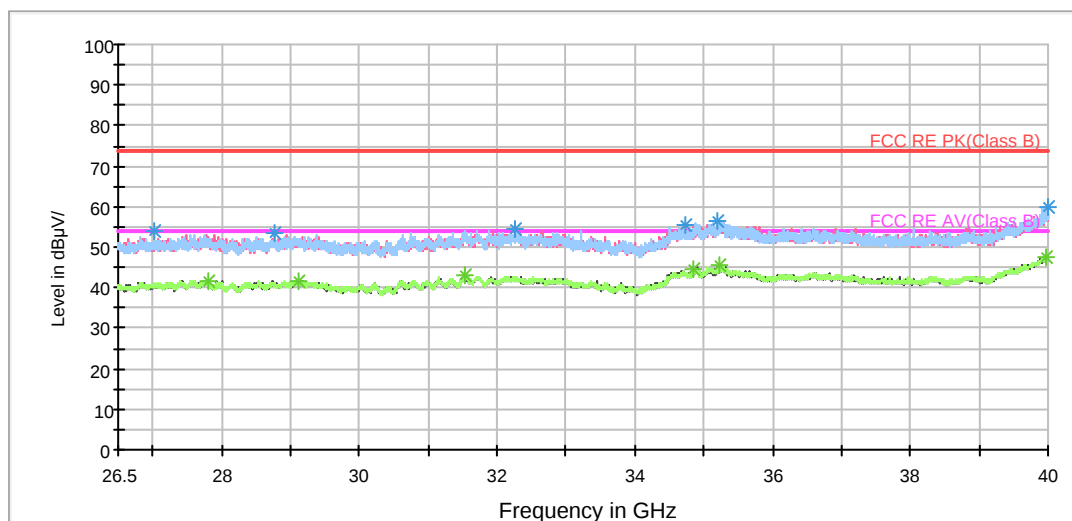
Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18940.312500	52.1	H	196.0	52.1	0.0	21.9	74
19542.750000	52.0	V	45.0	52.0	0.0	22.0	74
21775.062500	53.4	H	225.0	55.6	-2.2	20.6	74
23136.125000	53.2	V	114.0	53.3	-0.1	20.8	74
24826.562500	52.3	V	45.0	52.1	0.2	21.7	74
24917.937500	53.1	V	128.0	52.4	0.7	20.9	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18971.125000	40.3	H	114.0	40.4	-0.1	13.7	54
19504.500000	40.6	H	225.0	40.5	0.1	13.4	54
20790.125000	41.3	H	225.0	43.2	-1.9	12.7	54
23155.250000	41.8	V	216.0	41.9	-0.1	12.2	54
24842.500000	41.4	H	221.0	41.1	0.3	12.6	54
24857.375000	41.5	V	45.0	41.1	0.4	12.5	54

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

BELL RE 26.5-40GHz PK+AV



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27028.187500	53.9	H	100.0	54.1	-0.2	20.1	74
28771.375000	53.4	H	134.0	53.8	-0.4	20.6	74
32272.937500	54.3	H	152.0	54.8	-0.5	19.7	74
34741.750000	55.5	V	270.0	54.5	1.0	18.5	74
35197.375000	56.3	H	90.0	54.2	2.1	17.7	74
39988.187500	59.7	V	218.0	53.8	5.9	14.3	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
27809.500000	41.8	H	207.0	41.8	0.0	12.2	54
29110.562500	41.8	H	90.0	42.0	-0.2	12.2	54
31547.312500	43.0	H	134.0	43.4	-0.4	11.0	54
34863.250000	44.5	V	270.0	42.8	1.7	9.5	54
35239.562500	45.3	V	270.0	43.3	2.0	8.7	54
39976.375000	47.8	H	152.0	42.0	5.8	6.2	54

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

5.6. Conducted Emission

Ambient condition

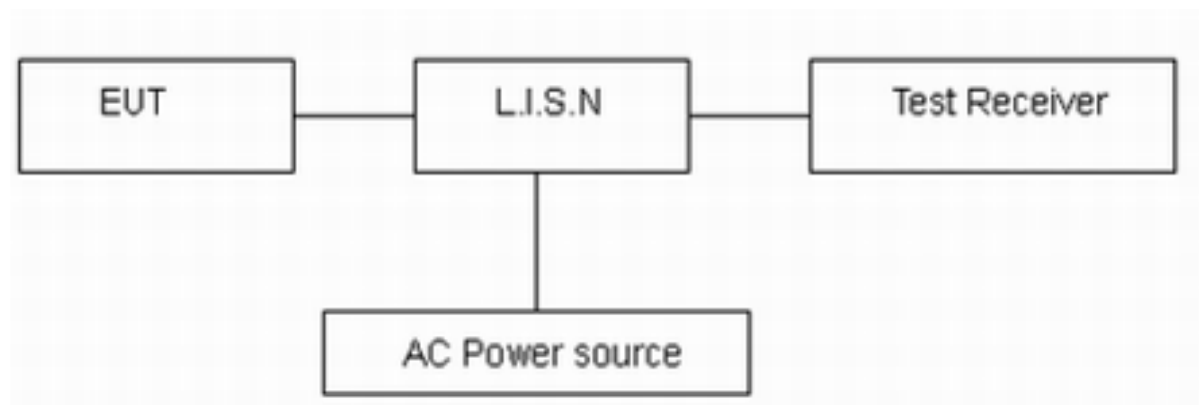
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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.

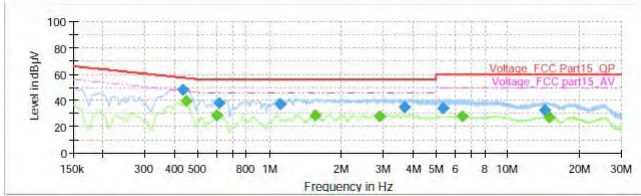
Measurement Uncertainty

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.

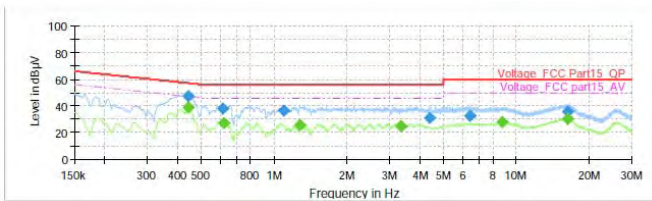
**Test Results:**

Following plots, Blue trace uses the peak detection and Green trace uses the average detection.

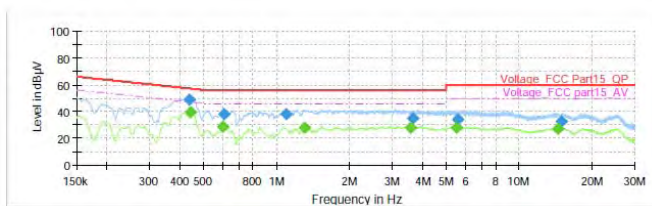
Antenna 3

802.11a, Channel No.: 36, L Line**Final Result**

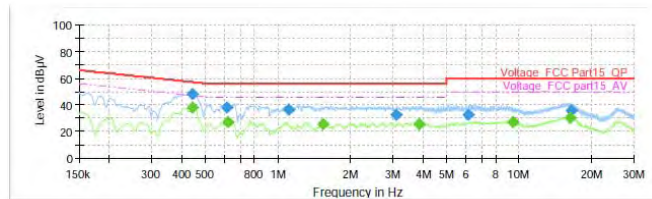
Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.431250	48.23	---	57.23	9.00	1000.0	9,000	L1	ON	19.2
0.447000	---	39.53	46.93	7.40	1000.0	9,000	L1	ON	19.2
0.597750	---	28.30	46.00	17.70	1000.0	9,000	L1	ON	19.3
0.613500	38.05	---	56.00	17.95	1000.0	9,000	L1	ON	19.3
1.104000	37.25	---	56.00	18.75	1000.0	9,000	L1	ON	19.2
1.549500	---	28.42	46.00	17.58	1000.0	9,000	L1	ON	19.2
2.881500	---	27.75	46.00	18.25	1000.0	9,000	L1	ON	19.1
3.680250	34.95	---	56.00	21.05	1000.0	9,000	L1	ON	19.1
5.347500	33.88	---	60.00	26.12	1000.0	9,000	L1	ON	19.1
6.396000	---	27.54	50.00	22.46	1000.0	9,000	L1	ON	19.1
14.282250	32.70	---	60.00	27.30	1000.0	9,000	L1	ON	19.5
14.939250	---	27.07	50.00	22.93	1000.0	9,000	L1	ON	19.5

802.11a, Channel No.: 36, N Line**Final Result**

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.442500	47.66	---	57.02	9.35	1000.0	9.000	N	ON	19.2
0.444750	---	38.96	46.97	8.01	1000.0	9.000	N	ON	19.2
0.613500	37.82	---	56.00	18.18	1000.0	9.000	N	ON	19.3
0.618000	---	27.45	46.00	18.55	1000.0	9.000	N	ON	19.3
1.099500	36.10	---	56.00	19.90	1000.0	9.000	N	ON	19.2
1.281750	---	25.91	46.00	20.09	1000.0	9.000	N	ON	19.2
3.347250	---	24.99	46.00	21.01	1000.0	9.000	N	ON	19.1
4.404750	30.74	---	56.00	25.26	1000.0	9.000	N	ON	19.1
6.418500	32.53	---	60.00	27.47	1000.0	9.000	N	ON	19.1
8.715750	---	27.80	50.00	22.20	1000.0	9.000	N	ON	19.3
16.219500	35.45	---	60.00	24.55	1000.0	9.000	N	ON	19.4
16.307250	---	30.15	50.00	19.85	1000.0	9.000	N	ON	19.4

802.11a, Channel No.: 40, L Line**Final Result**

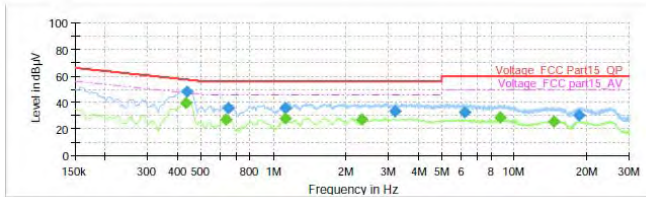
Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.435750	48.50	---	57.14	8.64	1000.0	9,000	L1	ON	19.2
0.444750	---	39.74	46.97	7.23	1000.0	9,000	L1	ON	19.2
0.602250	---	28.36	46.00	17.64	1000.0	9,000	L1	ON	19.3
0.606750	38.20	---	56.00	17.80	1000.0	9,000	L1	ON	19.3
1.095000	37.71	---	56.00	18.29	1000.0	9,000	L1	ON	19.2
1.299750	---	28.25	46.00	17.75	1000.0	9,000	L1	ON	19.2
3.565500	---	27.76	46.00	18.24	1000.0	9,000	L1	ON	19.1
3.642000	35.13	---	56.00	20.87	1000.0	9,000	L1	ON	19.1
5.500500	---	27.53	50.00	22.47	1000.0	9,000	L1	ON	19.1
5.604000	33.93	---	60.00	26.07	1000.0	9,000	L1	ON	19.1
14.430750	---	27.16	50.00	22.84	1000.0	9,000	L1	ON	19.5
14.988750	32.78	---	60.00	27.22	1000.0	9,000	L1	ON	19.5

802.11a, Channel No.: 40, N Line**Final Result**

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.440250	47.70	---	57.06	9.36	1000.0	9,000	N	ON	19.2
0.442500	---	38.18	47.02	8.84	1000.0	9,000	N	ON	19.2
0.611250	37.89	---	56.00	18.11	1000.0	9,000	N	ON	19.3
0.620250	---	27.40	46.00	18.60	1000.0	9,000	N	ON	19.3
1.101750	36.13	---	56.00	19.87	1000.0	9,000	N	ON	19.2
1.538250	---	25.64	46.00	20.36	1000.0	9,000	N	ON	19.2
3.108750	32.33	---	56.00	23.67	1000.0	9,000	N	ON	19.1
3.828750	---	25.42	46.00	20.58	1000.0	9,000	N	ON	19.0
6.177750	32.72	---	60.00	27.28	1000.0	9,000	N	ON	19.1
9.388500	---	26.96	50.00	23.04	1000.0	9,000	N	ON	19.3
16.318500	---	30.11	50.00	19.89	1000.0	9,000	N	ON	19.4
16.471500	35.52	---	60.00	24.48	1000.0	9,000	N	ON	19.4



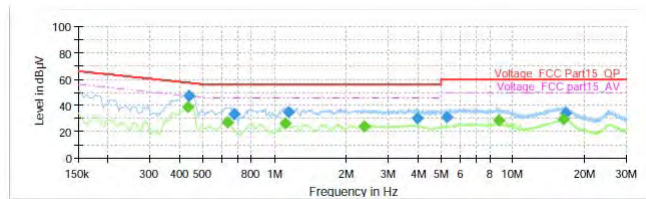
802.11a, Channel No.: 48, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.431250	---	39.44	47.23	7.78	1000.0	9.000	L1	ON	19.2
0.438000	48.35	---	57.10	8.75	1000.0	9.000	L1	ON	19.2
0.633750	---	27.20	46.00	18.80	1000.0	9.000	L1	ON	19.3
0.647250	35.99	---	56.00	20.01	1000.0	9.000	L1	ON	19.3
1.119750	---	27.96	46.00	18.04	1000.0	9.000	L1	ON	19.2
1.124250	35.98	---	56.00	20.02	1000.0	9.000	L1	ON	19.2
2.337000	---	26.90	46.00	19.10	1000.0	9.000	L1	ON	19.0
3.196500	33.56	---	56.00	22.44	1000.0	9.000	L1	ON	19.1
6.220500	32.30	---	60.00	27.70	1000.0	9.000	L1	ON	19.1
8.718000	---	28.96	50.00	21.04	1000.0	9.000	L1	ON	19.3
14.579250	---	25.66	50.00	24.34	1000.0	9.000	L1	ON	19.5
18.582000	29.88	---	60.00	30.12	1000.0	9.000	L1	ON	19.6

802.11a, Channel No.: 48, N Line



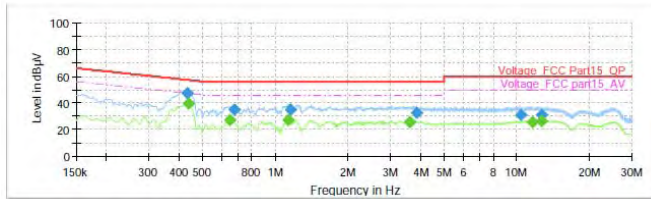
Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.431250	---	38.72	47.23	8.51	1000.0	9.000	N	ON	19.2
0.438000	47.49	---	57.10	9.61	1000.0	9.000	N	ON	19.2
0.636000	---	27.01	46.00	18.99	1000.0	9.000	N	ON	19.3
0.678750	33.64	---	56.00	22.36	1000.0	9.000	N	ON	19.3
1.104000	---	26.17	46.00	19.83	1000.0	9.000	N	ON	19.2
1.140000	34.62	---	56.00	21.38	1000.0	9.000	N	ON	19.2
2.366250	---	24.30	46.00	21.70	1000.0	9.000	N	ON	19.0
3.966000	30.59	---	56.00	25.41	1000.0	9.000	N	ON	19.0
5.295750	31.10	---	60.00	28.90	1000.0	9.000	N	ON	19.1
8.718000	---	28.66	50.00	21.34	1000.0	9.000	N	ON	19.3
16.228500	---	29.32	50.00	20.68	1000.0	9.000	N	ON	19.4
16.622250	33.76	---	60.00	26.24	1000.0	9.000	N	ON	19.5



MIMO

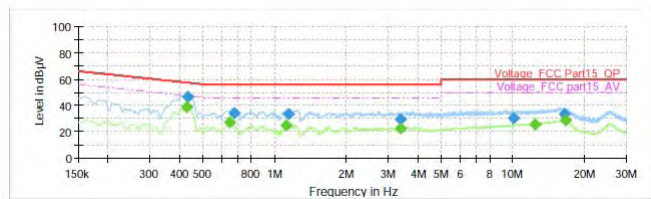
802.11n (HT20) , Channel No.: 36, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.431250	47.18	---	57.23	10.05	1000.0	9.000	L1	ON	19.2
0.435750	---	39.34	47.14	7.81	1000.0	9.000	L1	ON	19.2
0.645000	---	27.49	46.00	18.51	1000.0	9.000	L1	ON	19.3
0.676500	34.90	---	56.00	21.10	1000.0	9.000	L1	ON	19.3
1.126500	---	26.90	46.00	19.10	1000.0	9.000	L1	ON	19.2
1.153500	34.98	---	56.00	21.02	1000.0	9.000	L1	ON	19.2
3.594750	---	25.64	46.00	20.36	1000.0	9.000	L1	ON	19.1
3.837750	32.31	---	56.00	23.69	1000.0	9.000	L1	ON	19.0
10.353750	30.91	---	60.00	29.09	1000.0	9.000	L1	ON	19.4
11.553000	---	25.85	50.00	24.15	1000.0	9.000	L1	ON	19.4
12.588000	31.07	---	60.00	28.93	1000.0	9.000	L1	ON	19.5
12.662250	---	26.02	50.00	23.98	1000.0	9.000	L1	ON	19.5

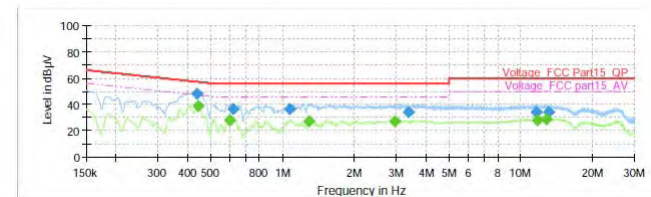
802.11n (HT20) , Channel No.: 36, N Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.426750	---	38.59	47.32	8.72	1000.0	9.000	N	ON	19.2
0.433500	46.26	---	57.19	10.93	1000.0	9.000	N	ON	19.2
0.645000	---	26.75	46.00	19.25	1000.0	9.000	N	ON	19.3
0.678750	34.06	---	56.00	21.94	1000.0	9.000	N	ON	19.3
1.124250	---	25.15	46.00	20.85	1000.0	9.000	N	ON	19.2
1.140000	33.31	---	56.00	22.69	1000.0	9.000	N	ON	19.2
3.358500	---	22.71	46.00	23.29	1000.0	9.000	N	ON	19.1
3.374250	29.25	---	56.00	26.75	1000.0	9.000	N	ON	19.1
10.018500	30.10	---	60.00	29.90	1000.0	9.000	N	ON	19.4
12.251750	---	25.67	50.00	24.33	1000.0	9.000	N	ON	19.4
16.404000	33.16	---	60.00	26.84	1000.0	9.000	N	ON	19.4
16.640250	---	28.30	50.00	21.70	1000.0	9.000	N	ON	19.5

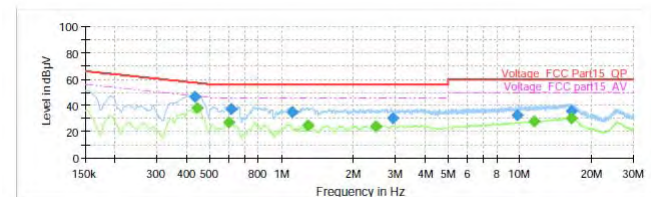
802.11n (HT20) , Channel No.: 40, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.435750	47.88	---	57.14	9.26	1000.0	9.000	L1	ON	19.2
0.440250	---	38.96	47.06	8.10	1000.0	9.000	L1	ON	19.2
0.597750	---	27.54	46.00	18.46	1000.0	9.000	L1	ON	19.3
0.622500	36.77	---	56.00	19.23	1000.0	9.000	L1	ON	19.3
1.074750	36.14	---	56.00	19.86	1000.0	9.000	L1	ON	19.2
1.295250	---	27.14	46.00	18.86	1000.0	9.000	L1	ON	19.2
2.969250	---	27.07	46.00	18.93	1000.0	9.000	L1	ON	19.1
3.365250	33.78	---	56.00	22.22	1000.0	9.000	L1	ON	19.1
11.564250	34.09	---	60.00	25.91	1000.0	9.000	L1	ON	19.4
11.742000	---	28.27	50.00	21.73	1000.0	9.000	L1	ON	19.4
12.833250	---	28.47	50.00	21.53	1000.0	9.000	L1	ON	19.5
13.121250	34.06	---	60.00	25.94	1000.0	9.000	L1	ON	19.5

802.11n (HT20) , Channel No.: 40, N Line

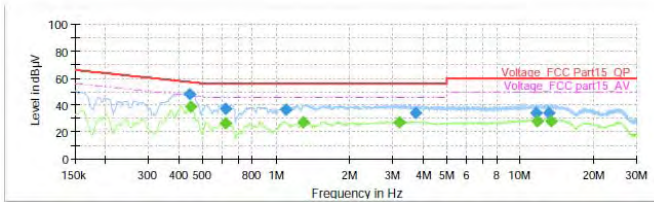


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.433500	46.74	---	57.19	10.44	1000.0	9.000	N	ON	19.2
0.444750	---	38.27	46.97	8.71	1000.0	9.000	N	ON	19.2
0.600000	---	27.31	46.00	18.69	1000.0	9.000	N	ON	19.3
0.611250	37.01	---	56.00	18.99	1000.0	9.000	N	ON	19.3
1.101750	34.65	---	56.00	21.35	1000.0	9.000	N	ON	19.2
1.295250	---	24.83	46.00	21.17	1000.0	9.000	N	ON	19.2
2.483250	---	23.86	46.00	22.14	1000.0	9.000	N	ON	19.0
2.931000	30.39	---	56.00	25.61	1000.0	9.000	N	ON	19.1
9.759750	32.41	---	60.00	27.59	1000.0	9.000	N	ON	19.4
11.519250	---	27.73	50.00	22.27	1000.0	9.000	N	ON	19.4
16.395000	---	30.52	50.00	19.48	1000.0	9.000	N	ON	19.4
16.514250	35.95	---	60.00	24.05	1000.0	9.000	N	ON	19.5



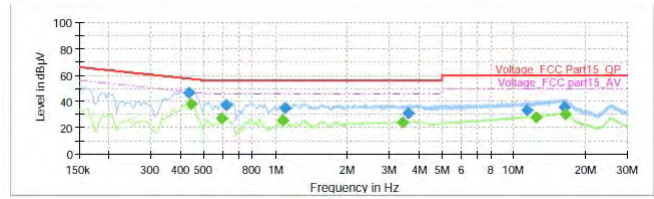
802.11n (HT20) , Channel No.: 48, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.440250	47.97	---	57.06	9.09	1000.0	9.000	L1	ON	19.2
0.449250	---	38.70	46.89	8.19	1000.0	9.000	L1	ON	19.2
0.618000	---	26.53	46.00	19.47	1000.0	9.000	L1	ON	19.3
0.618000	37.19	---	56.00	18.81	1000.0	9.000	L1	ON	19.3
1.095000	36.57	---	56.00	19.43	1000.0	9.000	L1	ON	19.2
1.288500	---	27.45	46.00	18.55	1000.0	9.000	L1	ON	19.2
3.183000	---	27.12	46.00	18.88	1000.0	9.000	L1	ON	19.1
3.709500	33.78	---	56.00	22.22	1000.0	9.000	L1	ON	19.1
11.546250	34.09	---	60.00	25.91	1000.0	9.000	L1	ON	19.4
11.762250	---	28.26	50.00	21.74	1000.0	9.000	L1	ON	19.4
13.105500	33.94	---	60.00	26.06	1000.0	9.000	L1	ON	19.5
13.346250	---	28.18	50.00	21.82	1000.0	9.000	L1	ON	19.5

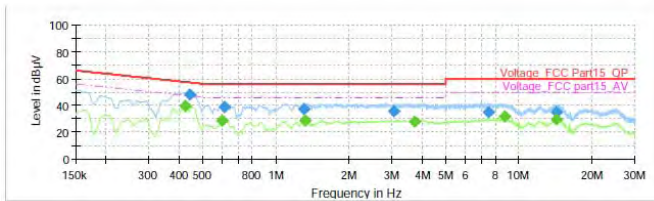
802.11n (HT20) , Channel No.: 48, N Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.431250	46.64	---	57.23	10.58	1000.0	9.000	N	ON	19.2
0.444750	---	38.09	46.97	8.88	1000.0	9.000	N	ON	19.2
0.595500	---	26.97	46.00	19.03	1000.0	9.000	N	ON	19.3
0.618000	36.93	---	56.00	19.07	1000.0	9.000	N	ON	19.3
1.077000	---	25.51	46.00	20.49	1000.0	9.000	N	ON	19.2
1.090500	34.87	---	56.00	21.13	1000.0	9.000	N	ON	19.2
3.421500	---	23.87	46.00	22.13	1000.0	9.000	N	ON	19.0
3.606000	30.89	---	56.00	25.11	1000.0	9.000	N	ON	19.1
11.305500	33.22	---	60.00	26.78	1000.0	9.000	N	ON	19.4
12.336000	---	27.90	50.00	22.10	1000.0	9.000	N	ON	19.4
16.264500	35.99	---	60.00	24.01	1000.0	9.000	N	ON	19.4
16.381500	---	30.53	50.00	19.47	1000.0	9.000	N	ON	19.4

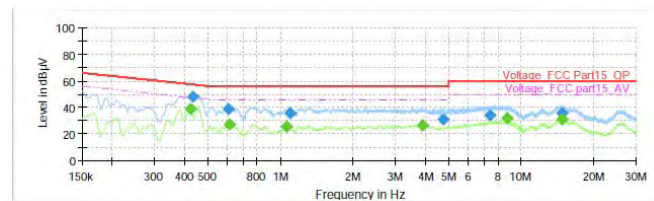
802.11n (HT40) , Channel No.: 38, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.422250	---	39.44	47.40	7.96	1000.0	9.000	L1	ON	19.2
0.442500	48.33	---	57.02	8.68	1000.0	9.000	L1	ON	19.2
0.602250	---	28.45	46.00	17.55	1000.0	9.000	L1	ON	19.3
0.615750	38.88	---	56.00	17.12	1000.0	9.000	L1	ON	19.3
1.311000	37.43	---	56.00	18.57	1000.0	9.000	L1	ON	19.2
1.313250	---	28.67	46.00	17.33	1000.0	9.000	L1	ON	19.2
3.075000	35.38	---	56.00	20.62	1000.0	9.000	L1	ON	19.1
3.716250	---	28.07	46.00	17.93	1000.0	9.000	L1	ON	19.1
7.518750	34.99	---	60.00	25.01	1000.0	9.000	L1	ON	19.2
8.718000	---	31.98	50.00	18.02	1000.0	9.000	L1	ON	19.3
14.280000	34.72	---	60.00	25.28	1000.0	9.000	L1	ON	19.5
14.336250	---	29.59	50.00	20.41	1000.0	9.000	L1	ON	19.5

802.11n (HT40) , Channel No.: 38, N Line

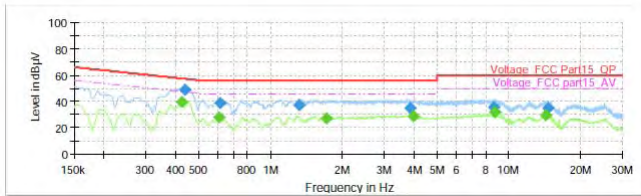


Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.422250	---	38.62	47.40	8.78	1000.0	9.000	N	ON	19.2
0.431250	47.68	---	57.23	9.54	1000.0	9.000	N	ON	19.2
0.604500	38.68	---	56.00	17.32	1000.0	9.000	N	ON	19.3
0.615750	---	26.92	46.00	19.08	1000.0	9.000	N	ON	19.3
1.056750	---	25.25	46.00	20.75	1000.0	9.000	N	ON	19.2
1.097250	35.47	---	56.00	20.53	1000.0	9.000	N	ON	19.2
3.891750	---	26.35	46.00	19.65	1000.0	9.000	N	ON	19.0
4.724250	30.74	---	56.00	25.26	1000.0	9.000	N	ON	19.1
7.435500	34.29	---	60.00	25.71	1000.0	9.000	N	ON	19.2
8.718000	---	31.89	50.00	18.11	1000.0	9.000	N	ON	19.3
14.703000	---	30.77	50.00	19.23	1000.0	9.000	N	ON	19.5
14.795250	35.80	---	60.00	24.20	1000.0	9.000	N	ON	19.5



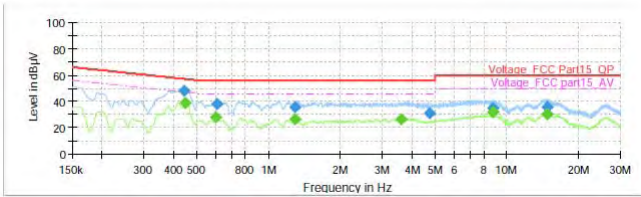
802.11n (HT40) , Channel No.: 46, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.422250	---	39.55	47.40	7.86	1000.0	9.000	L1	ON	19.2
0.438000	48.52	---	57.10	8.58	1000.0	9.000	L1	ON	19.2
0.609000	---	28.05	46.00	17.95	1000.0	9.000	L1	ON	19.3
0.613500	38.99	---	56.00	17.01	1000.0	9.000	L1	ON	19.3
1.313250	37.48	---	56.00	18.52	1000.0	9.000	L1	ON	19.2
1.722750	---	27.24	46.00	18.76	1000.0	9.000	L1	ON	19.2
3.835500	35.20	---	56.00	20.80	1000.0	9.000	L1	ON	19.0
3.954750	---	28.47	46.00	17.53	1000.0	9.000	L1	ON	19.0
8.655000	35.53	---	60.00	24.47	1000.0	9.000	L1	ON	19.3
8.718000	---	31.99	50.00	18.01	1000.0	9.000	L1	ON	19.3
14.273250	---	29.47	50.00	20.53	1000.0	9.000	L1	ON	19.5
14.559000	34.60	---	60.00	25.40	1000.0	9.000	L1	ON	19.5

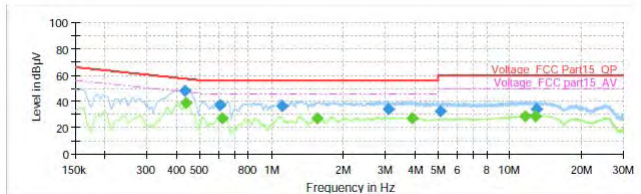
802.11n (HT40) , Channel No.: 46, N Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.440250	47.68	---	57.06	9.38	1000.0	9.000	N	ON	19.2
0.449250	---	38.55	46.89	8.34	1000.0	9.000	N	ON	19.2
0.600000	---	28.14	46.00	17.86	1000.0	9.000	N	ON	19.3
0.604500	38.34	---	56.00	17.66	1000.0	9.000	N	ON	19.3
1.288500	---	26.41	46.00	19.59	1000.0	9.000	N	ON	19.2
1.290750	35.68	---	56.00	20.32	1000.0	9.000	N	ON	19.2
3.617250	---	26.17	46.00	19.83	1000.0	9.000	N	ON	19.1
4.715250	31.18	---	56.00	24.82	1000.0	9.000	N	ON	19.1
8.691000	34.50	---	60.00	25.50	1000.0	9.000	N	ON	19.3
8.718000	---	31.85	50.00	18.15	1000.0	9.000	N	ON	19.3
14.736750	36.03	---	60.00	23.97	1000.0	9.000	N	ON	19.5
14.763750	---	30.52	50.00	19.48	1000.0	9.000	N	ON	19.5

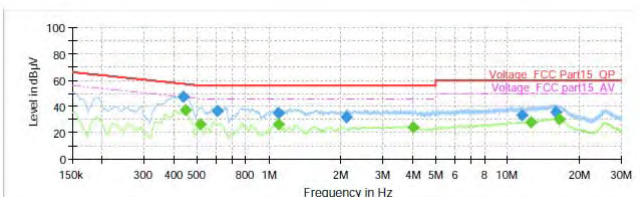
802.11ac (HT20) , Channel No.: 36, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.433500	47.93	---	57.19	9.25	1000.0	9.000	L1	ON	19.2
0.438000	---	39.07	47.10	8.03	1000.0	9.000	L1	ON	19.2
0.606750	37.03	---	56.00	18.97	1000.0	9.000	L1	ON	19.3
0.618000	---	27.15	46.00	18.85	1000.0	9.000	L1	ON	19.3
1.108500	36.57	---	56.00	19.43	1000.0	9.000	L1	ON	19.2
1.554000	---	27.46	46.00	18.54	1000.0	9.000	L1	ON	19.2
3.106500	34.10	---	56.00	21.90	1000.0	9.000	L1	ON	19.1
3.882750	---	27.14	46.00	18.86	1000.0	9.000	L1	ON	19.0
5.138250	32.66	---	60.00	27.34	1000.0	9.000	L1	ON	19.1
11.627250	---	28.34	50.00	21.66	1000.0	9.000	L1	ON	19.4
12.846750	---	28.46	50.00	21.54	1000.0	9.000	L1	ON	19.5
12.914250	34.03	---	60.00	25.97	1000.0	9.000	L1	ON	19.5

802.11ac (HT20) , Channel No.: 36, N Line

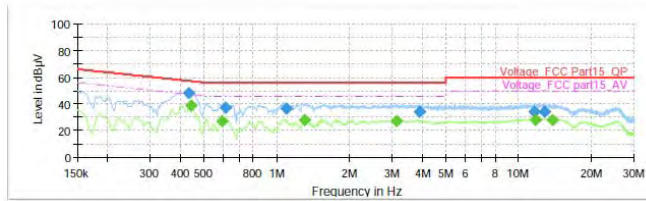


Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.438000	47.06	---	57.10	10.04	1000.0	9.000	N	ON	19.2
0.449250	---	37.35	46.89	9.54	1000.0	9.000	N	ON	19.2
0.514500	---	26.32	46.00	19.68	1000.0	9.000	N	ON	19.2
0.606750	36.72	---	56.00	19.28	1000.0	9.000	N	ON	19.3
1.090500	---	26.08	46.00	19.92	1000.0	9.000	N	ON	19.2
1.092750	34.96	---	56.00	21.04	1000.0	9.000	N	ON	19.2
2.121000	31.42	---	56.00	24.58	1000.0	9.000	N	ON	19.1
4.004250	---	23.91	46.00	22.09	1000.0	9.000	N	ON	19.0
11.499000	33.31	---	60.00	26.69	1000.0	9.000	N	ON	19.4
12.475500	---	28.16	50.00	21.84	1000.0	9.000	N	ON	19.4
15.852750	35.82	---	60.00	24.18	1000.0	9.000	N	ON	19.4
16.489500	---	30.45	50.00	19.55	1000.0	9.000	N	ON	19.5



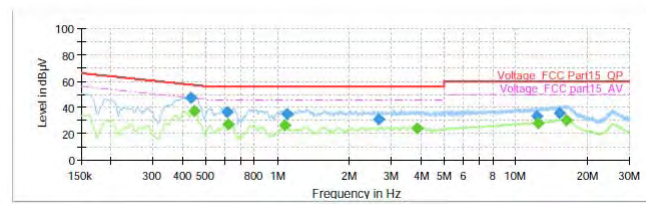
802.11ac (HT20) , Channel No.: 40, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.433500	47.97	---	57.19	9.21	1000.0	9,000	L1	ON	19.2
0.444750	---	39.07	46.97	7.91	1000.0	9,000	L1	ON	19.2
0.593250	---	27.20	46.00	18.80	1000.0	9,000	L1	ON	19.3
0.611250	37.07	---	56.00	18.93	1000.0	9,000	L1	ON	19.3
1.095000	36.54	---	56.00	19.46	1000.0	9,000	L1	ON	19.2
1.299750	---	27.77	46.00	18.23	1000.0	9,000	L1	ON	19.2
3.142500	---	27.05	46.00	18.95	1000.0	9,000	L1	ON	19.1
3.896250	33.73	---	56.00	22.27	1000.0	9,000	L1	ON	19.0
11.618250	33.90	---	60.00	26.10	1000.0	9,000	L1	ON	19.4
11.762250	---	28.28	50.00	21.72	1000.0	9,000	L1	ON	19.4
12.774750	34.08	---	60.00	25.92	1000.0	9,000	L1	ON	19.5
13.764750	---	28.22	50.00	21.78	1000.0	9,000	L1	ON	19.5

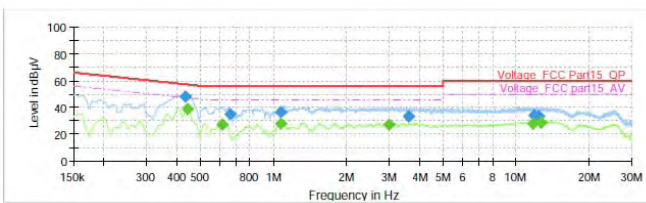
802.11ac (HT20) , Channel No.: 40, N Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.433500	46.99	---	57.19	10.19	1000.0	9,000	N	ON	19.2
0.449250	---	37.30	46.89	9.59	1000.0	9,000	N	ON	19.2
0.611250	36.76	---	56.00	19.24	1000.0	9,000	N	ON	19.3
0.618000	---	26.78	46.00	19.22	1000.0	9,000	N	ON	19.3
1.074750	---	26.63	46.00	19.37	1000.0	9,000	N	ON	19.2
1.090500	34.70	---	56.00	21.30	1000.0	9,000	N	ON	19.2
2.656500	31.07	---	56.00	24.93	1000.0	9,000	N	ON	19.0
3.835500	---	24.31	46.00	21.69	1000.0	9,000	N	ON	19.0
12.286500	33.43	---	60.00	26.57	1000.0	9,000	N	ON	19.4
12.354000	---	28.15	50.00	21.85	1000.0	9,000	N	ON	19.4
15.229500	35.52	---	60.00	24.48	1000.0	9,000	N	ON	19.4
16.316250	---	30.53	50.00	19.47	1000.0	9,000	N	ON	19.4

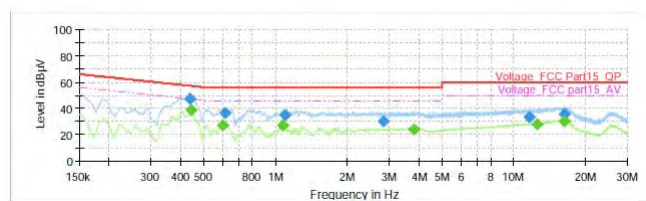
802.11ac (HT20) , Channel No.: 48, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.431250	47.71	---	57.23	9.52	1000.0	9,000	L1	ON	19.2
0.440250	---	38.93	47.06	8.13	1000.0	9,000	L1	ON	19.2
0.613500	---	27.42	46.00	18.58	1000.0	9,000	L1	ON	19.3
0.663000	35.09	---	56.00	20.91	1000.0	9,000	L1	ON	19.3
1.077000	36.59	---	56.00	19.41	1000.0	9,000	L1	ON	19.2
1.077000	---	28.28	46.00	17.72	1000.0	9,000	L1	ON	19.2
3.003000	---	26.98	46.00	19.02	1000.0	9,000	L1	ON	19.1
3.597000	33.71	---	56.00	22.29	1000.0	9,000	L1	ON	19.1
11.724000	---	28.29	50.00	21.71	1000.0	9,000	L1	ON	19.4
11.834250	34.07	---	60.00	25.93	1000.0	9,000	L1	ON	19.4
12.392250	33.72	---	60.00	26.28	1000.0	9,000	L1	ON	19.4
12.689250	---	28.41	50.00	21.59	1000.0	9,000	L1	ON	19.5

802.11ac (HT20) , Channel No.: 48, N Line

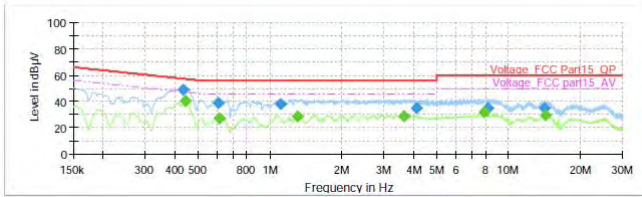


Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.438000	47.11	---	57.10	9.99	1000.0	9,000	N	ON	19.2
0.442500	---	38.47	47.02	8.55	1000.0	9,000	N	ON	19.2
0.602250	---	26.74	46.00	19.26	1000.0	9,000	N	ON	19.3
0.615750	36.61	---	56.00	19.39	1000.0	9,000	N	ON	19.3
1.074750	---	26.77	46.00	19.23	1000.0	9,000	N	ON	19.2
1.092750	34.77	---	56.00	21.23	1000.0	9,000	N	ON	19.2
2.825250	30.58	---	56.00	25.42	1000.0	9,000	N	ON	19.0
3.819750	---	24.24	46.00	21.76	1000.0	9,000	N	ON	19.0
11.631750	33.28	---	60.00	26.72	1000.0	9,000	N	ON	19.4
12.475500	---	28.10	50.00	21.90	1000.0	9,000	N	ON	19.4
16.192500	---	30.53	50.00	19.47	1000.0	9,000	N	ON	19.4
16.307250	35.98	---	60.00	24.02	1000.0	9,000	N	ON	19.4



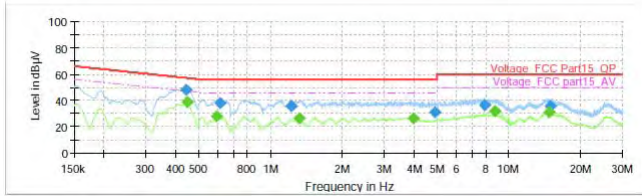
802.11ac (HT40) , Channel No.: 38, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.433500	48.56	---	57.19	8.63	1000.0	9.000	L1	ON	19.2
0.442500	---	40.07	47.02	6.94	1000.0	9.000	L1	ON	19.2
0.604500	38.42	---	56.00	17.58	1000.0	9.000	L1	ON	19.3
0.615750	---	27.49	46.00	18.51	1000.0	9.000	L1	ON	19.3
1.108500	37.66	---	56.00	18.34	1000.0	9.000	L1	ON	19.2
1.302000	---	28.75	46.00	17.25	1000.0	9.000	L1	ON	19.2
3.646500	---	28.65	46.00	17.35	1000.0	9.000	L1	ON	19.1
4.092000	34.85	---	56.00	21.15	1000.0	9.000	L1	ON	19.1
7.923750	---	31.85	50.00	18.15	1000.0	9.000	L1	ON	19.2
8.189250	35.07	---	60.00	24.93	1000.0	9.000	L1	ON	19.2
14.151750	35.09	---	60.00	24.91	1000.0	9.000	L1	ON	19.5
14.275500	---	29.76	50.00	20.24	1000.0	9.000	L1	ON	19.5

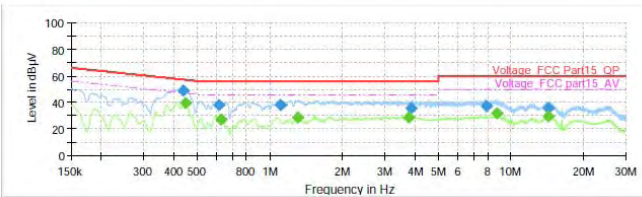
802.11ac (HT40) , Channel No.: 38, N Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.440250	47.92	---	57.06	9.13	1000.0	9.000	N	ON	19.2
0.449250	---	38.50	46.89	8.39	1000.0	9.000	N	ON	19.2
0.595500	---	28.12	46.00	17.88	1000.0	9.000	N	ON	19.3
0.613500	37.93	---	56.00	18.07	1000.0	9.000	N	ON	19.3
1.225500	35.62	---	56.00	20.38	1000.0	9.000	N	ON	19.2
1.313250	---	26.68	46.00	19.32	1000.0	9.000	N	ON	19.2
3.954750	---	26.51	46.00	19.49	1000.0	9.000	N	ON	19.0
4.902000	31.32	---	56.00	24.68	1000.0	9.000	N	ON	19.1
7.926000	36.08	---	60.00	23.92	1000.0	9.000	N	ON	19.2
8.718000	---	31.94	50.00	18.06	1000.0	9.000	N	ON	19.3
14.700750	---	30.98	50.00	19.02	1000.0	9.000	N	ON	19.5
14.959500	35.70	---	60.00	24.30	1000.0	9.000	N	ON	19.5

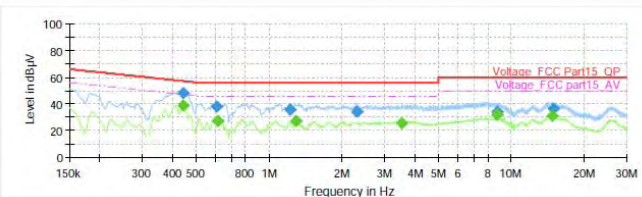
802.11ac (HT40) , Channel No.: 46, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.435750	48.81	---	57.14	8.33	1000.0	9.000	L1	ON	19.2
0.449250	---	39.37	46.89	7.52	1000.0	9.000	L1	ON	19.2
0.611250	38.26	---	56.00	17.74	1000.0	9.000	L1	ON	19.3
0.627000	---	27.38	46.00	18.62	1000.0	9.000	L1	ON	19.3
1.104000	37.74	---	56.00	18.26	1000.0	9.000	L1	ON	19.2
1.302000	---	28.88	46.00	17.12	1000.0	9.000	L1	ON	19.2
3.783750	---	28.36	46.00	17.64	1000.0	9.000	L1	ON	19.1
3.864750	35.41	---	56.00	20.59	1000.0	9.000	L1	ON	19.0
7.923750	37.13	---	60.00	22.87	1000.0	9.000	L1	ON	19.2
8.718000	---	32.04	50.00	17.96	1000.0	9.000	L1	ON	19.3
14.212500	---	29.69	50.00	20.31	1000.0	9.000	L1	ON	19.5
14.334000	35.28	---	60.00	24.72	1000.0	9.000	L1	ON	19.5

802.11ac (HT40) , Channel No.: 46, N Line

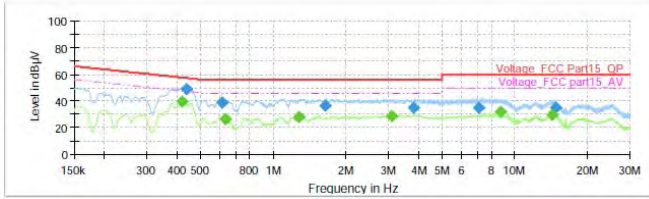


Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.440250	---	38.73	47.06	8.33	1000.0	9.000	N	ON	19.2
0.440250	47.93	---	57.06	9.12	1000.0	9.000	N	ON	19.2
0.609000	38.18	---	56.00	17.82	1000.0	9.000	N	ON	19.3
0.613500	---	27.28	46.00	18.72	1000.0	9.000	N	ON	19.3
1.225500	35.43	---	56.00	20.57	1000.0	9.000	N	ON	19.2
1.288500	---	26.82	46.00	19.18	1000.0	9.000	N	ON	19.2
2.292000	33.88	---	56.00	22.12	1000.0	9.000	N	ON	19.0
3.538500	---	25.88	46.00	20.12	1000.0	9.000	N	ON	19.1
8.718000	---	31.98	50.00	18.02	1000.0	9.000	N	ON	19.3
8.749500	34.42	---	60.00	25.58	1000.0	9.000	N	ON	19.3
14.700750	---	31.06	50.00	18.94	1000.0	9.000	N	ON	19.5
14.885250	36.14	---	60.00	23.86	1000.0	9.000	N	ON	19.5



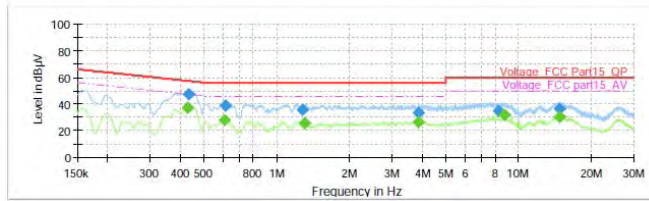
802.11ac HT80, Channel No.: 42, L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.420000	---	39.84	47.45	7.61	1000.0	9.000	L1	ON	19.2
0.438000	48.66	---	57.10	8.44	1000.0	9.000	L1	ON	19.2
0.611250	38.87	---	56.00	17.13	1000.0	9.000	L1	ON	19.3
0.631500	---	26.24	46.00	19.76	1000.0	9.000	L1	ON	19.3
1.279500	---	27.66	46.00	18.34	1000.0	9.000	L1	ON	19.2
1.635000	36.39	---	56.00	19.61	1000.0	9.000	L1	ON	19.2
3.079500	---	28.40	46.00	17.60	1000.0	9.000	L1	ON	19.1
3.817500	35.25	---	56.00	20.75	1000.0	9.000	L1	ON	19.0
7.059750	34.64	---	60.00	25.36	1000.0	9.000	L1	ON	19.2
8.718000	---	31.94	50.00	18.06	1000.0	9.000	L1	ON	19.3
14.275500	---	29.35	50.00	20.65	1000.0	9.000	L1	ON	19.5
14.700750	34.86	---	60.00	25.14	1000.0	9.000	L1	ON	19.5

802.11ac HT80, Channel No.: 42, N Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.429000	---	37.01	47.27	10.26	1000.0	9.000	N	ON	19.2
0.433500	47.67	---	57.19	9.52	1000.0	9.000	N	ON	19.2
0.604500	---	27.87	46.00	18.13	1000.0	9.000	N	ON	19.3
0.613500	38.60	---	56.00	17.40	1000.0	9.000	N	ON	19.3
1.281750	35.43	---	56.00	20.57	1000.0	9.000	N	ON	19.2
1.304250	---	25.42	46.00	20.58	1000.0	9.000	N	ON	19.2
3.833250	---	26.39	46.00	19.61	1000.0	9.000	N	ON	19.0
3.835500	33.04	---	56.00	22.96	1000.0	9.000	N	ON	19.0
8.232000	34.98	---	60.00	25.02	1000.0	9.000	N	ON	19.2
8.718000	---	31.75	50.00	18.25	1000.0	9.000	N	ON	19.3
14.703000	36.43	---	60.00	23.57	1000.0	9.000	N	ON	19.5
14.824500	---	30.47	50.00	19.53	1000.0	9.000	N	ON	19.5

6. Main Test Instruments

Name	Type	Manufacturer	Serial Number	Calibration Date	Expiration Time
Spectrum Analyzer	FSV30	R&S	100815	2016-12-16	2017-12-15
EMI Test Receiver	ESCI	R&S	100948	2017-05-20	2018-05-19
Loop Antenna	FMZB1519	SCHWARZBECK	1519-047	2017-02-18	2020-02-17
TRILOG Broadband Antenna	VULB 9163	Schwarzbeck	9163-201	2014-12-06	2017-12-05
Double Ridged Waveguide Horn Antenna	HF907	R&S	100126	2014-12-06	2017-12-05
Standard Gain Horn	3160-09	ETS-Lindgren	00102644	2015-01-30	2018-01-29
Broadband Horn Antenna	BBHA9170	Schwarzbeck	MRTSUE06024	2016-11-24	2019-11-23
EMI Test Receiver	ESCS30	R&S	100138	2016-12-16	2017-12-15
LISN	ENV216	R&S	101171	2016-12-16	2017-12-15
Spectrum Analyzer	N9010A	Agilent	MY47191109	2017-05-20	2018-05-19
RF Cable	SMA 15cm	Agilent	0001	2017-04-03	2017-07-02

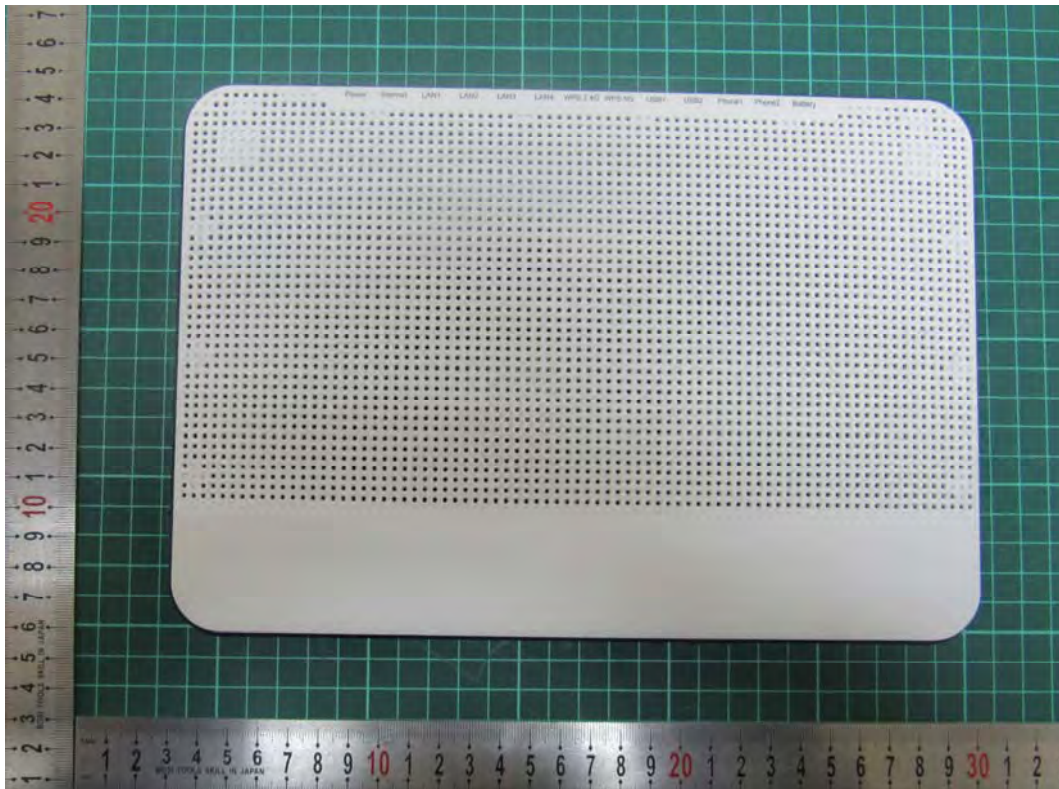
*****END OF REPORT *****

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



Front Side



Back Side

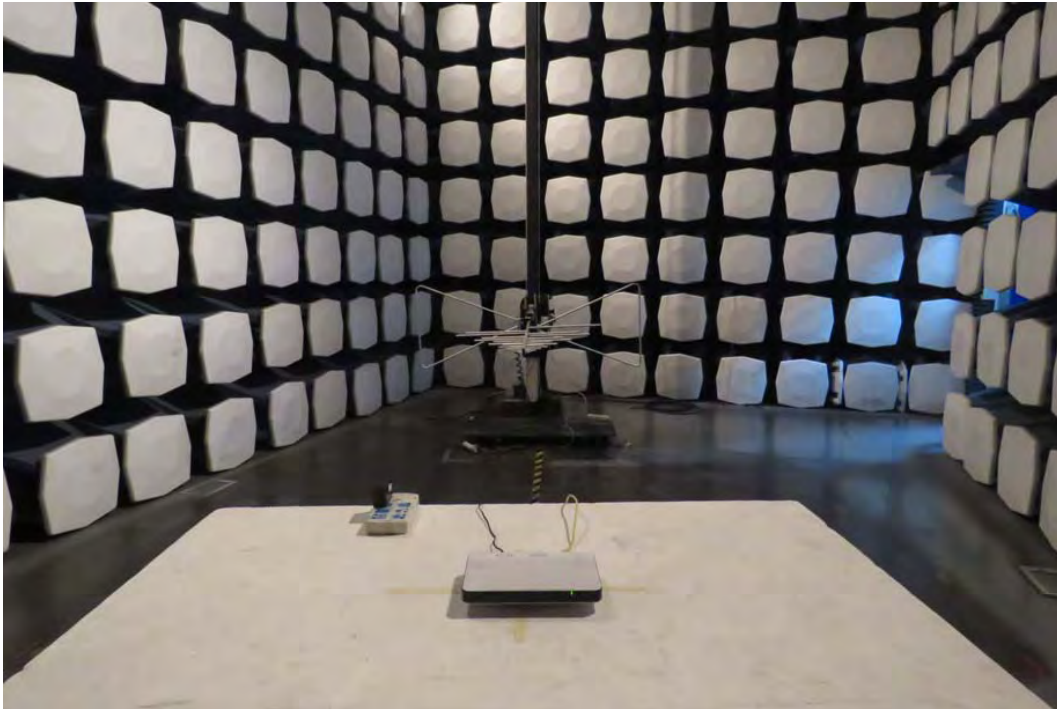
a: EUT



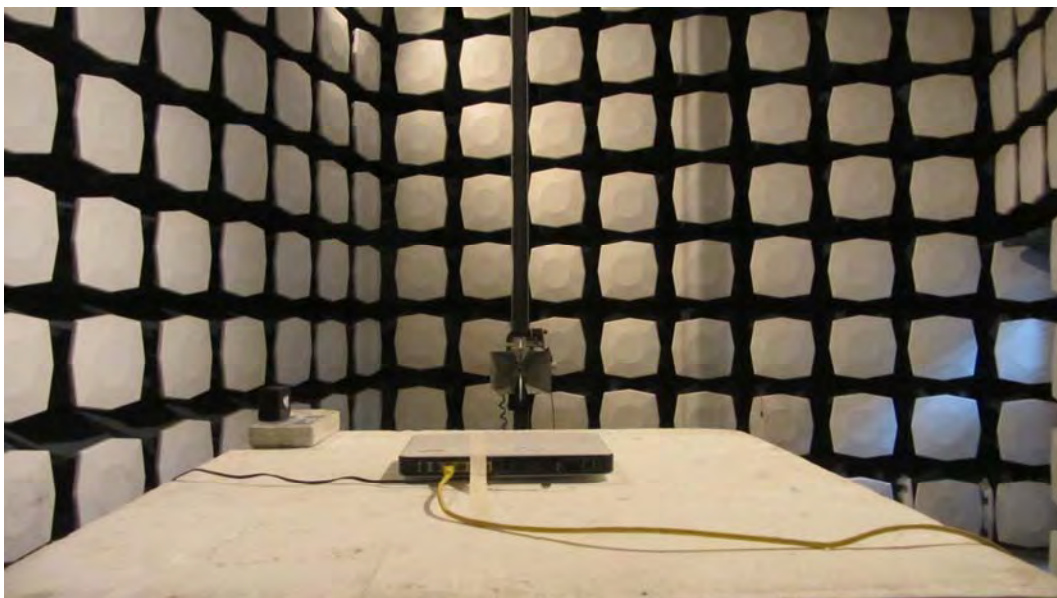
b: Adapter

Picture 1 EUT and Accessory

A.2 Test Setup

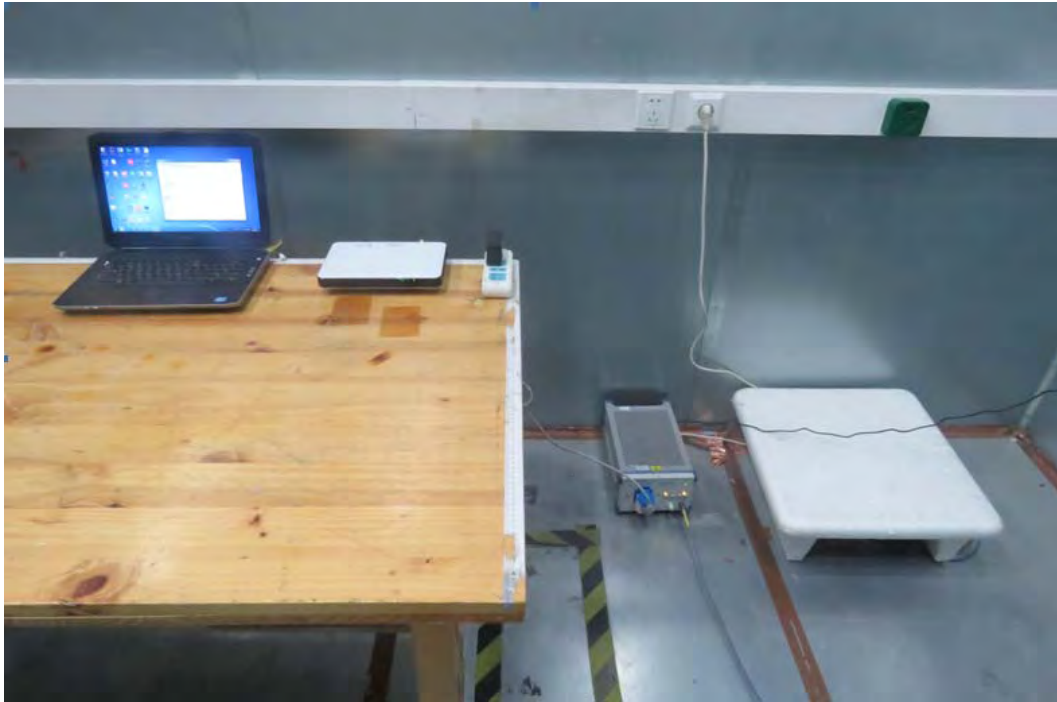


30MHz-1GHz



Above 1GHz

Picture 2 Radiated Emission Test Setup



Picture 3 Conducted Emission Test Setup