



RF TEST REPORT

Applicant	Huawei Technologies Co., Ltd.
FCC ID	QISLYO-L02
Product	Smart Phone
Model	HUAWEI LYO-L02
Report No.	RHA1606-0039RF05R1
Issue Date	June 16, 2016

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15C (2015)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Reviewed by: Lingling Kang/ Manager

Approved by: Kai Xu/ Director



中国认可
国际互认
检测
TESTING
CNAS L2264

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. Applied Standards	8
4. Test Configuration	9
5. Test Case Results	10
5.1. Peak Power Output –Conducted	10
5.2. 6dB Bandwidth	12
5.3. Band Edge	16
5.4. Power Spectral Density	18
5.5. Spurious RF Conducted Emissions.....	22
5.6. Radiated Emissions in the Restricted Band	27
5.7. Radiates Emission	31
5.8. Conducted Emission	70
6. Main Test Instruments	79

Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Maximum peak conducted output power	15.247(b)(3)	PASS
2	6 dB bandwidth	15.247(a)(2)	PASS
3	Maximum power spectral density	15.247(e)	PASS
4	Band Edge	15.247(d)	PASS
5	Spurious RF Conducted Emissions	15.247(d)	PASS
6	Radiated Emissions in restricted frequency bands	15.247(d),15.205,15.209	PASS
7	Radiated Emissions	15.247(d),15.205,15.209	PASS
8	Conducted Emissions	15.207	PASS
Date of Testing: June 8, 2016~ June 13, 2016			

1. Test Laboratory

1.1. Notes of the test report

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

1.2. Test facility

CNAS (accreditation number:L2264)

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

FCC (recognition number is 428261)

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

IC (recognition number is 8510A)

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

VCCI (recognition number is C-4595, T-2154, R-4113, G-766)

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

A2LA (Certificate Number: 3857.01)

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



1.3. Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City: Shanghai
Post code: 201201
Country: P. R. China
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	Huawei Technologies Co., Ltd.
Applicant address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129 P.R.China
Manufacturer	Huawei Technologies Co., Ltd.
Manufacturer address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129 P.R.China

Accessory Equipment Details

Name	Model	Manufacturer	Note
Battery 1	HB4342A1RBC	Sunwoda electronic Co., Ltd	2200mAh
Battery 2	HB4342A1RBC	Scud (Fujian) Electronics Co., Ltd	2200mAh
Adapter 1	HW-050100B01	Huizhou BYD Electronic CO.,LTD	/
Adapter 2	HW-050100E01	Huizhou BYD Electronic CO.,LTD	/
Adapter 3	HW-050100B01	SHENZHEN HUNTKEY ELECTRIC CO., LTD	/
Adapter 4	HW-050100E01	SHENZHEN HUNTKEY ELECTRIC CO., LTD	/
Adapter 5	HW-050100B01	Dongguan Phitek Electronics Co.,Ltd	/
Adapter 6	HW-050100E01	Dongguan Phitek Electronics Co.,Ltd	/

General information

Model:	HUAWEI LYO-L02
IMEI:	869325021672861
HW Version:	Ver.A
Software Version:	LYO-L02C000B009
Power Supply:	Battery/AC adapter
Antenna Type:	Internal Antenna
Antenna Connector:	Mini RF III Switch Connectors
Test Mode:	Bluetooth(Low Energy) 802.11b 802.11g, 802.11n(HT20);
Modulation Type:	BLE :GFSK 802.11b: DSSS; 802.11g/n(HT20): OFDM
Max. Conducted Power	Wi-Fi 2.4G :17.78 dBm



	BLE : -1.873 dBm
Operating Frequency Range(s)	2400 ~ 2483.5 MHz
Note: The information of the EUT is declared by the manufacturer. Please refer to the specifications or user manual for details.	



3. Applied Standards

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

FCC CFR47 Part 15C (2015) Radio Frequency Devices

ANSI C63.10 (2013)

KDB 558074 D01 DTS Meas Guidance v03r05

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%. There is more than one Battery and adapter, each one should be applied throughout the compliance test respectively, and however, only the worst case (Battery 2/Adapter 3) will be recorded in this report.

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
Bluetooth(Low Energy)	1Mbps
802.11b	5.5 Mbps
802.11g	18 Mbps
802.11n HT20	MCS0

5. Test Case Results

5.1. Peak Power Output –Conducted

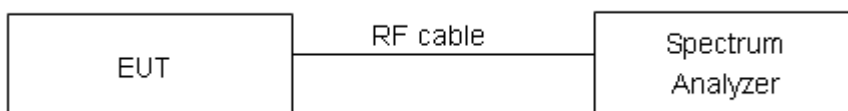
Ambient condition

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 peak power meter with a known loss. The EUT is max power transmission with proper modulation. The peak detector is used. We use Maximum Peak Conducted Output Power Level Method in KDB 558074 D01 for this test.

Test Setup



Limits

Rule Part 15.247 (b) (3) specifies that " For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz: 1 Watt."

Peak Output Power	$\leq 1\text{W}$ (30dBm)
-------------------	--------------------------

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

Network Standards	Carrier frequency (MHz)	Peak Output Power (dBm)	Limit (dBm)	Conclusion
802.11b	2412	17.35	30	PASS
	2437	17.78	30	PASS
	2462	17.13	30	PASS
802.11g	2412	15.23	30	PASS
	2437	15.69	30	PASS
	2462	15.41	30	PASS
802.11n HT20	2412	15.05	30	PASS
	2437	15.38	30	PASS
	2462	15.57	30	PASS
Bluetooth (Low Energy)	2402	-1.873	30	PASS
	2440	-2.457	30	PASS
	2480	-2.072	30	PASS

5.2. 6dB Bandwidth

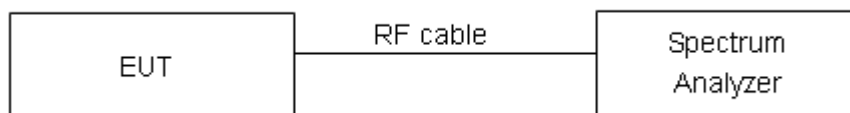
Ambient condition

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. RBW is set to 100 kHz; VBW is set to 300 kHz on spectrum analyzer.

Test Setup



Limits

Rule Part 15.247 (a) (2) specifies that “Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.”

minimum 6 dB bandwidth	≥ 500 kHz
------------------------	-----------

Measurement Uncertainty

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

Test Results:

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit(kHz)	Conclusion
802.11b	2412	12.686	9.321	500	PASS
	2437	12.667	8.856	500	PASS
	2462	12.147	8.181	500	PASS
802.11g	2412	16.469	16.48	500	PASS
	2437	16.466	16.46	500	PASS
	2462	16.345	14.01	500	PASS
802.11n HT20	2412	17.680	17.74	500	PASS
	2437	17.605	17.39	500	PASS
	2462	17.480	12.76	500	PASS
Bluetooth (Low Energy)	2402	1.0208	0.696	500	PASS
	2440	1.0222	0.698	500	PASS
	2480	1.0211	0.701	500	PASS



802.11b, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2437



802.11b, Carrier frequency (MHz): 2462



802.11g, Carrier frequency (MHz): 2462



802.11n(HT20), Carrier frequency (MHz): 2412



BLE Carrier frequency (MHz): 2402



802.11n(HT20), Carrier frequency (MHz): 2437



BLE Carrier frequency (MHz): 2440



802.11n(HT20), Carrier frequency (MHz): 2462



BLE Carrier frequency (MHz): 2480



5.3. Band Edge

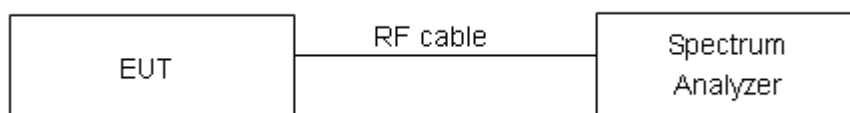
Ambient condition

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 the band edge of the lowest and highest channels were measured. The peak detector is used and RBW is set to 100 kHz and VBW is set to 300 kHz on spectrum analyzer. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

Rule Part 15.247(d) specifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.”

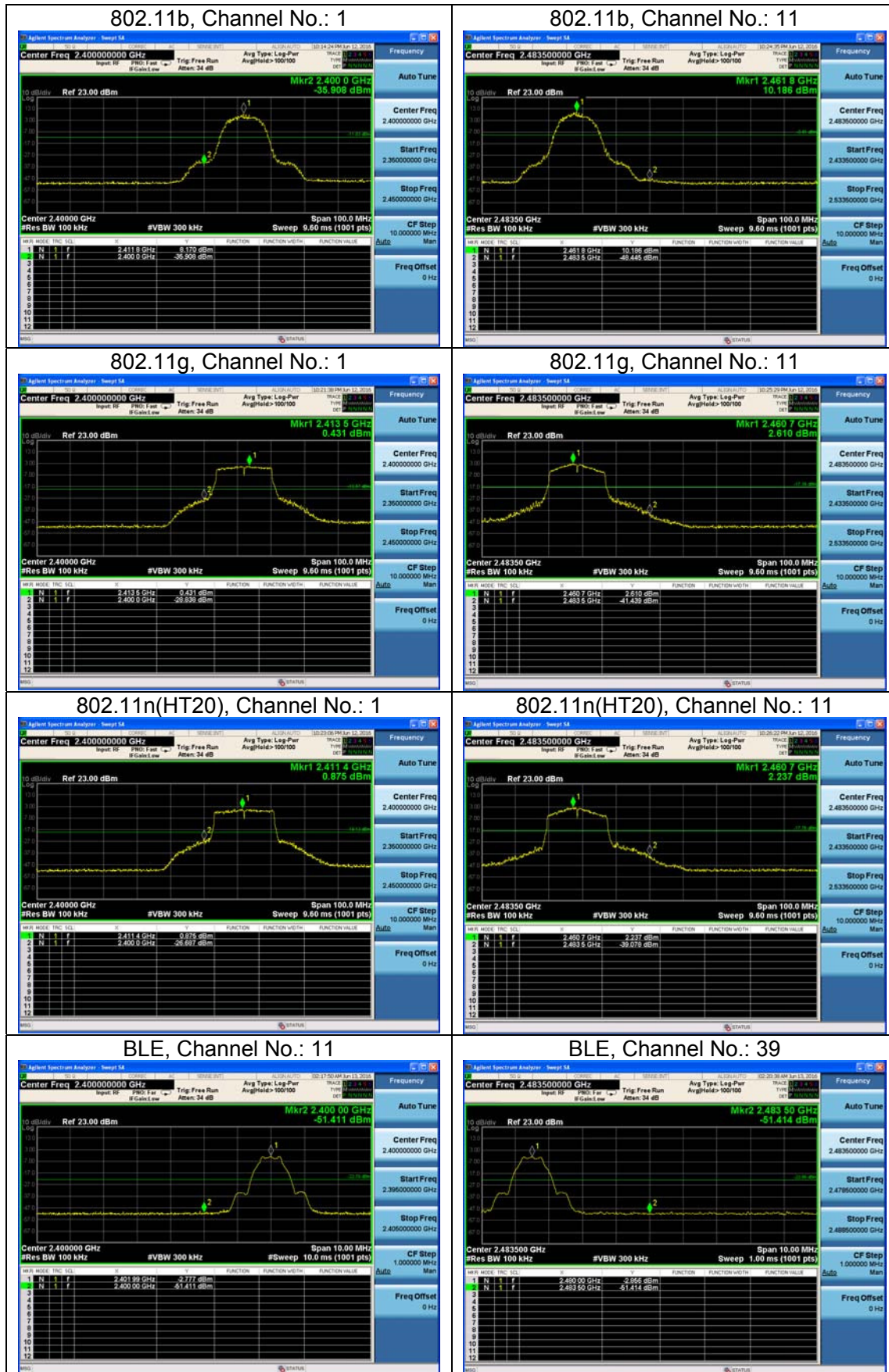
Measurement Uncertainty

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

Frequency	Uncertainty
2GHz-3GHz	1.407 dB



Test Results: PASS



5.4. Power Spectral Density

Ambient condition

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

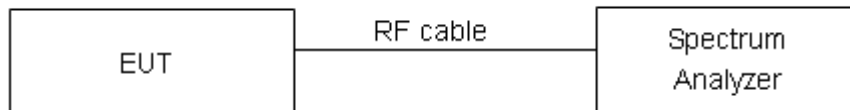
Method of Measurement

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

RBW is set to 3 kHz and VBW is set to 10 kHz for BLE/ Wi-Fi 2.4G on spectrum analyzer.

Set the span to 1.5 times the DTS channel bandwidth. Sweep time = auto couple. Trace mode = max hold. The peak power spectral density is recorded.

Test setup



Limits

Rule Part 15.247(e) specifies that” For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. ”

Limits	$\leq 8 \text{ dBm} / 3\text{kHz}$
--------	------------------------------------

Measurement Uncertainty

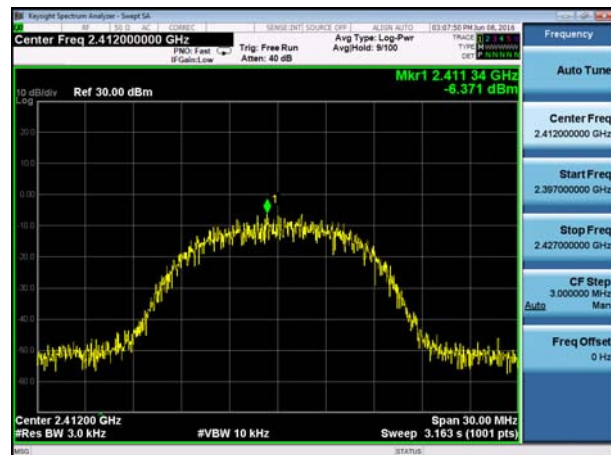
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.75\text{dB}$.

Test Results:

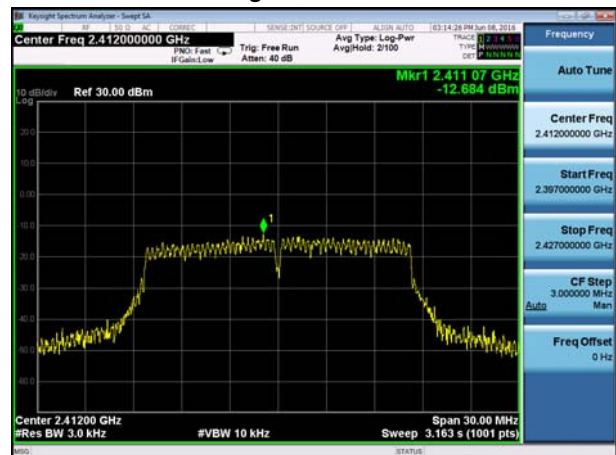
Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)	Limit (dBm / 3kHz)	Conclusion
802.11b	1	-6.371	8	PASS
	6	-5.754	8	PASS
	11	-4.424	8	PASS
802.11g	1	-12.684	8	PASS
	6	-12.841	8	PASS
	11	-9.971	8	PASS
802.11n HT20	1	-12.600	8	PASS
	6	-12.255	8	PASS
	11	-10.276	8	PASS
Bluetooth (Low Energy)	0	-13.902	8	PASS
	19	-14.590	8	PASS
	39	-14.087	8	PASS



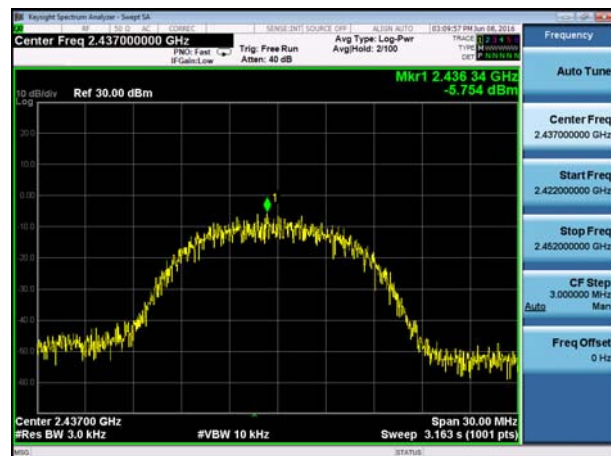
802.11b, Channel No.: 1



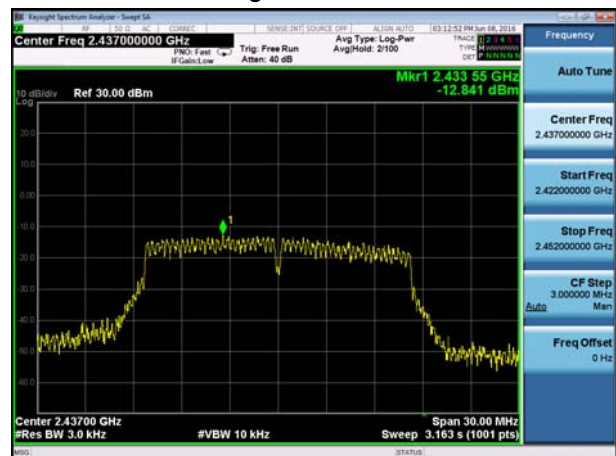
802.11g, Channel No.: 1



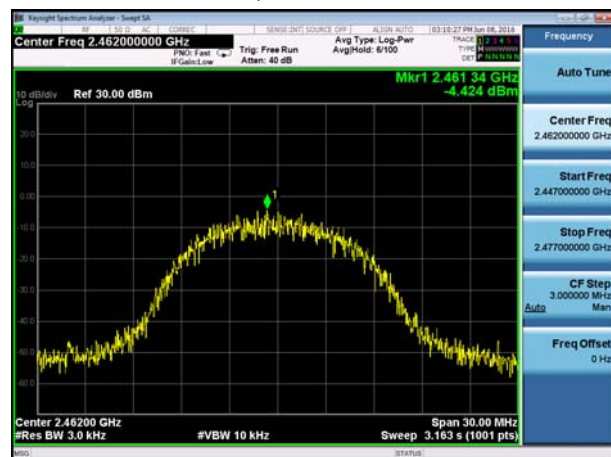
802.11b, Channel No.: 6



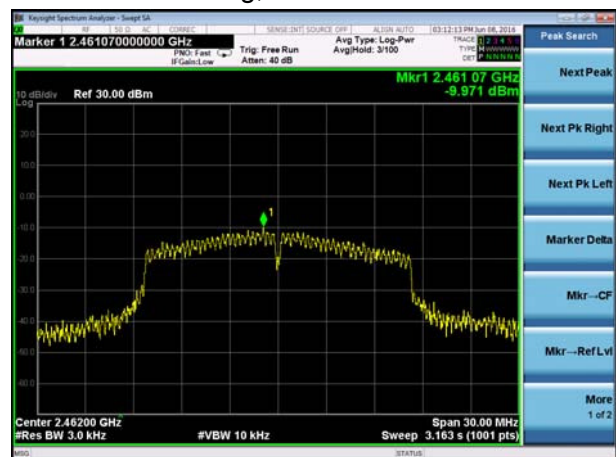
802.11g, Channel No.: 6



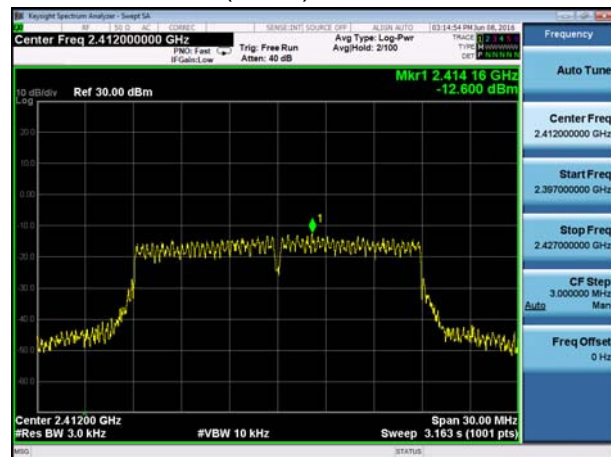
802.11b, Channel No.: 11



802.11g, Channel No.: 11



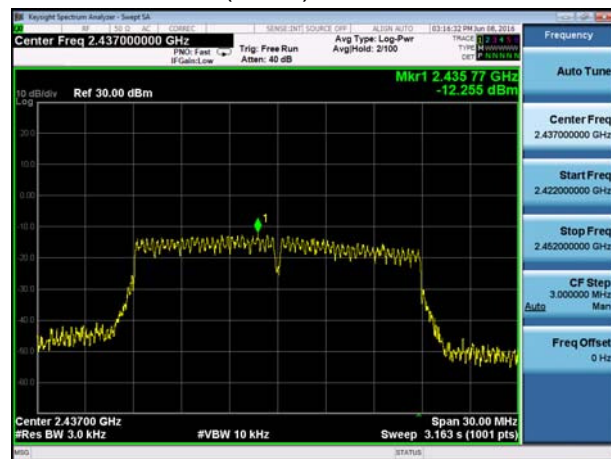
802.11n(HT20), Channel No. 1



BLE, Channel No.: 0



802.11n(HT20), Channel No. 6



BLE, Channel No.: 19



802.11n(HT20), Channel No. 11



BLE, Channel No.: 39



5.5. Spurious RF Conducted Emissions

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 with a known loss. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. RBW and VBW are set to 100 kHz, Sweep is set to ATUO.

The test is in transmitting mode.

Test setup



Limits

Rule Part 15.247(d) pacifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.”

Network Standards	Carrier frequency (MHz)	Reference value (dBm)	Limit
802.11b	2412	10.785	-9.215
	2437	5.023	-14.977
	2462	8.324	-11.676
802.11g	2412	5.707	-14.293
	2437	0.958	-19.042
	2462	5.773	-14.227
802.11n HT20	2412	6.372	-13.628
	2437	-0.529	-20.529
	2462	4.744	-15.256
Bluetooth (Low Energy)	2402	0.257	-19.743
	2440	-8.456	-28.456
	2480	-2.289	-22.289

**Measurement Uncertainty**

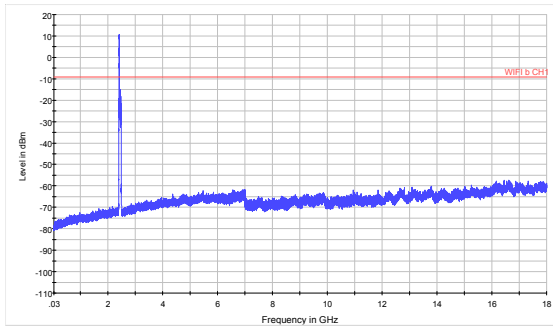
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-26GHz	1.407 dB

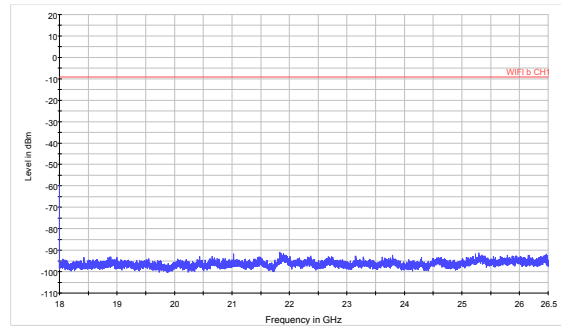
**Test Results:**

If disturbances were found more than 20dB below limit line, the mark is not required for the EUT.
The signal beyond the limit is carrier.

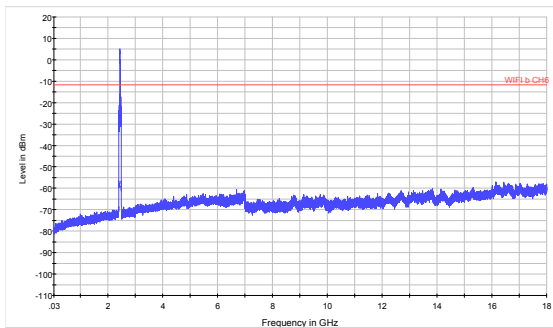
802.11b CH1 30MHz to 18GHz



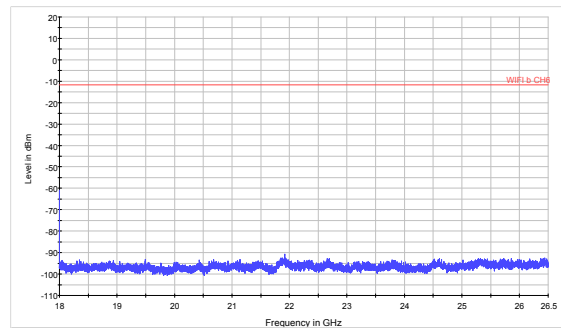
802.11b CH1 18GHz to 26.5GHz



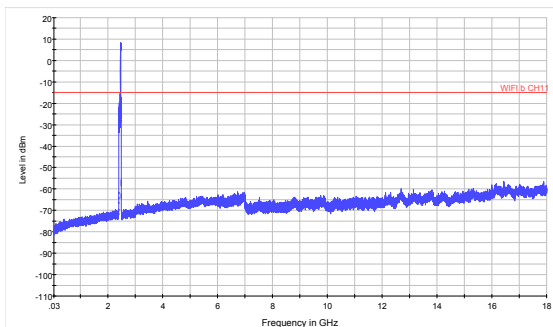
802.11b CH6 30MHz to 18GHz



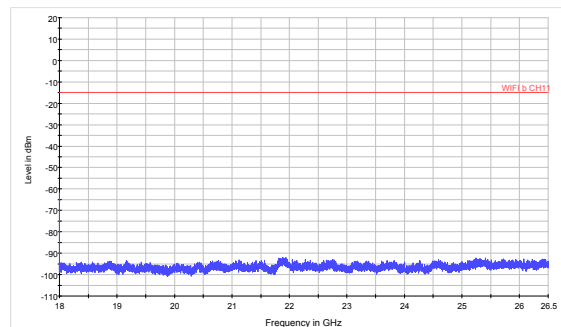
802.11b CH6 18GHz to 26.5GHz



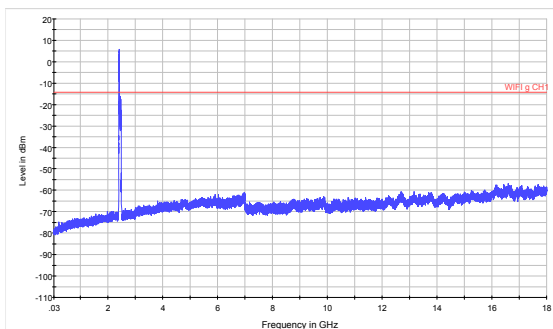
802.11b CH11 30MHz to 18GHz



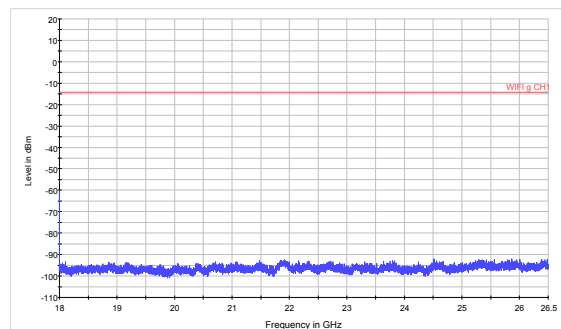
802.11b CH11 18GHz to 26.5GHz



802.11g CH1 30MHz to 18GHz

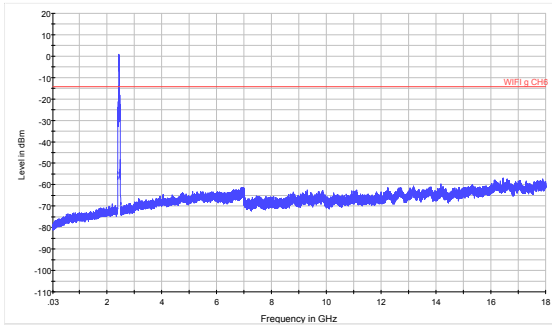


802.11g CH1 18GHz to 26.5GHz

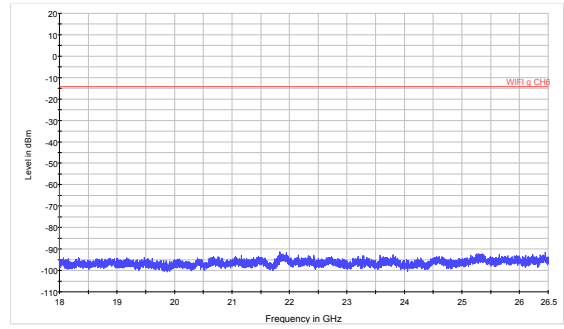




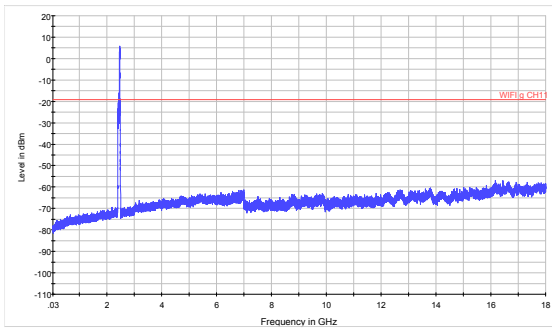
802.11g CH6 30MHz to 18GHz



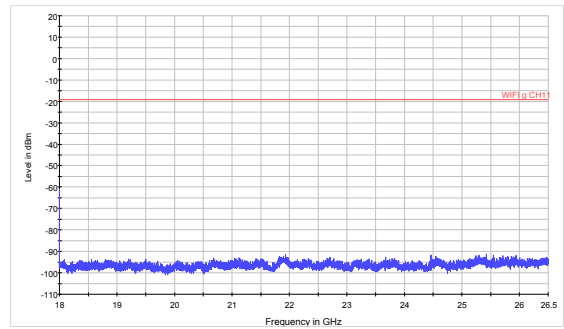
802.11g CH6 18GHz to 26.5GHz



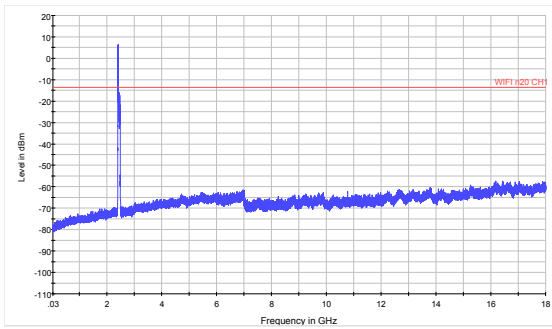
802.11g CH11 30MHz to 18GHz



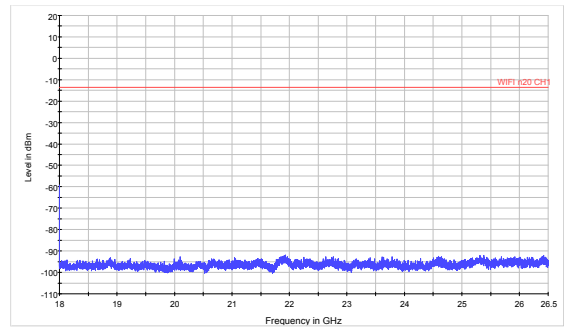
802.11g CH11 18GHz to 26.5GHz



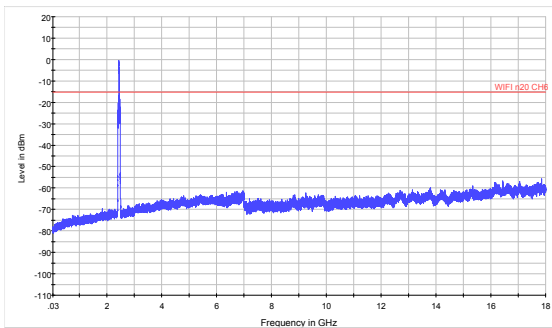
802.11n (HT20) CH1 30MHz to 18GHz



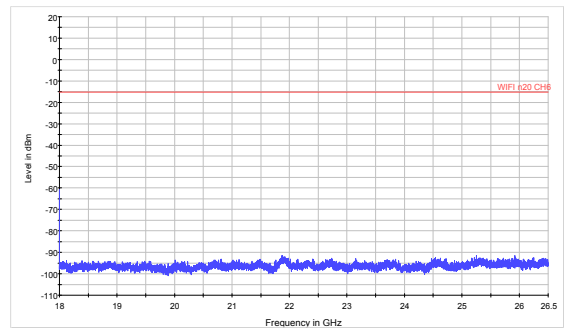
802.11n (HT20) CH1 18GHz to 26.5GHz



802.11n (HT20) CH6 30MHz to 18GHz

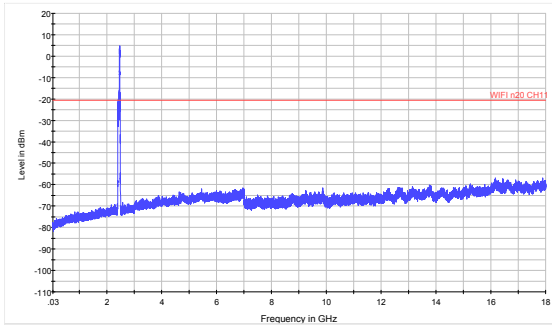


802.11n (HT20) CH6 18GHz to 26.5GHz

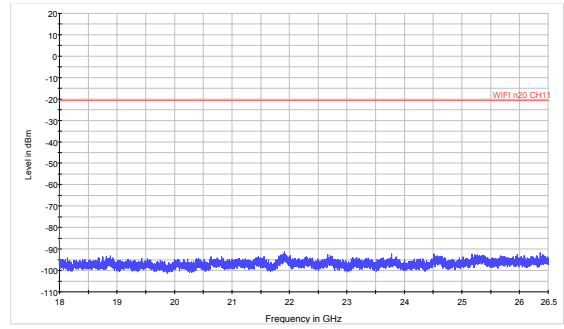




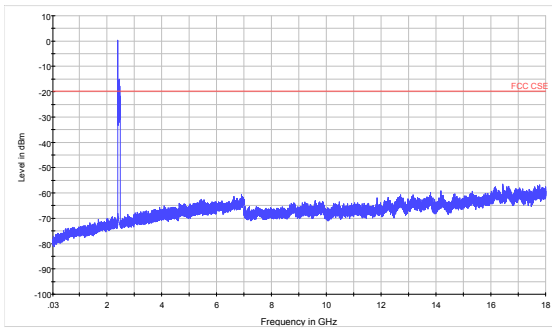
802.11n (HT20) CH11 30MHz to 18GHz



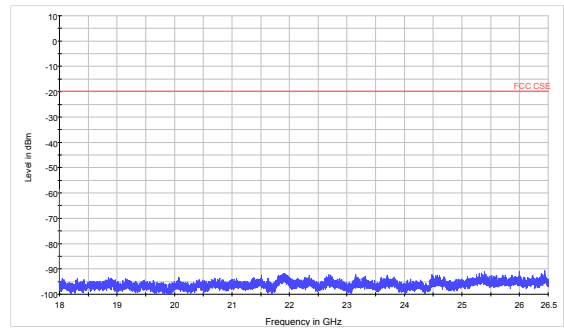
802.11n (HT20) CH11 18GHz to 26.5GHz



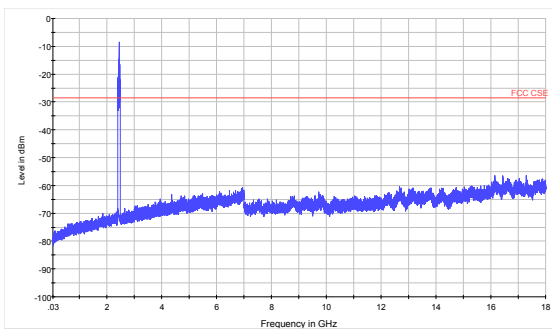
BLE CH0 30MHz to 18GHz



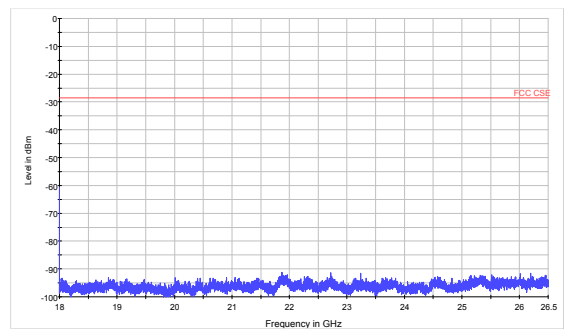
BLE CH0 18GHz to 26.5GHz



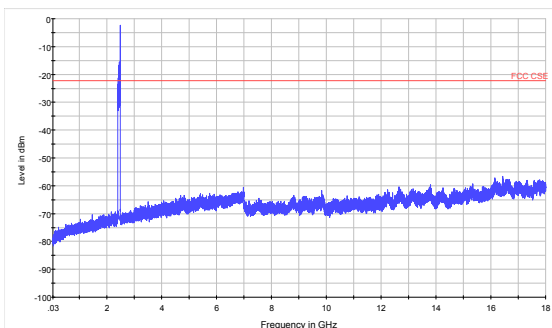
BLE CH19 30MHz to 18GHz



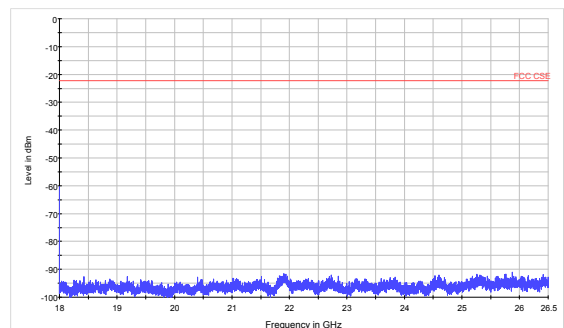
BLE CH19 18GHz to 26.5GHz



BLE CH39 30MHz to 18GHz



BLE CH39 18GHz to 26.5GHz



5.6. Radiated Emissions in the Restricted Band

Ambient condition

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

Method of Measurement

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 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. RBW is set to 100kHz. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing. Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

Set the spectrum analyzer in the following:

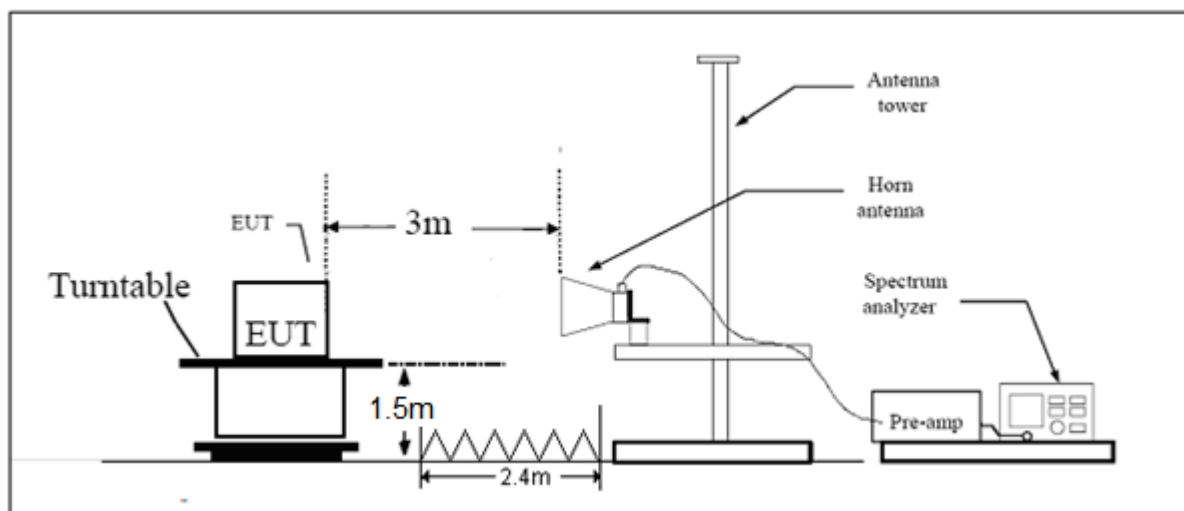
- (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz / VBW=1MHz / Sweep=AUTO

This setting method can refer to **KDB 558074**.

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

The test is in transmitting mode.

Test setup



Note: Area side: 2.4mX3.6m

Limits

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

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

Limit in restricted band

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

§15.35(b)

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

Peak Limit=74 dBuV/m

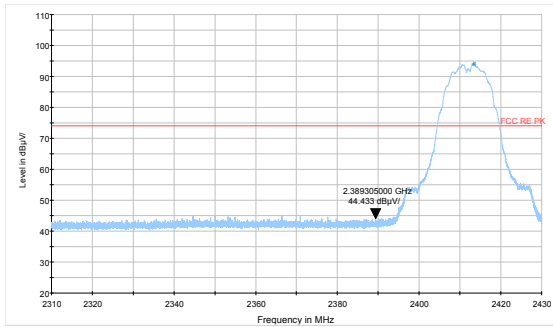
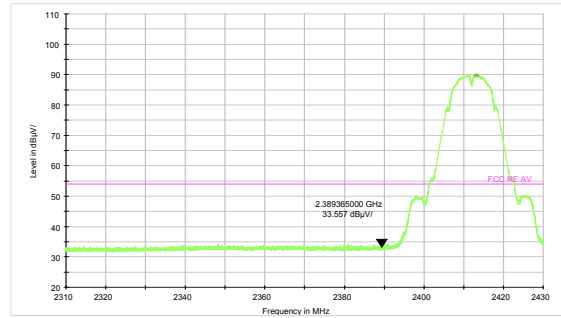
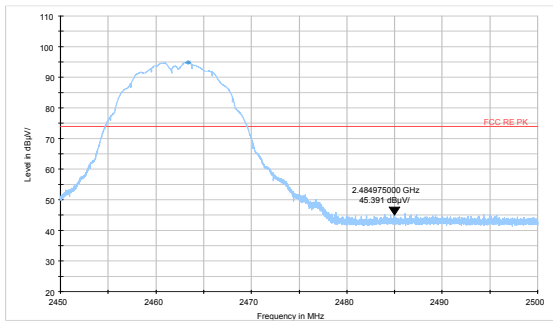
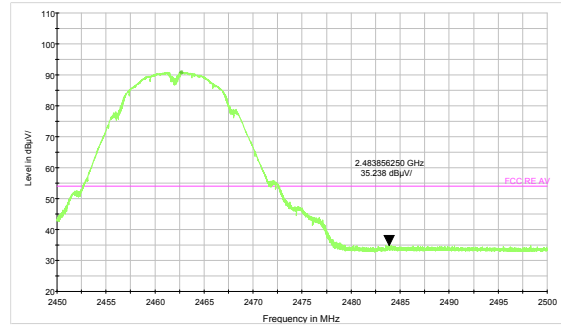
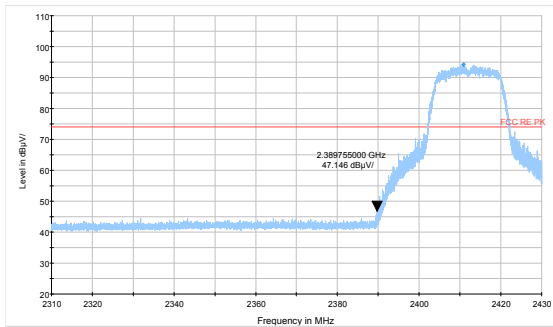
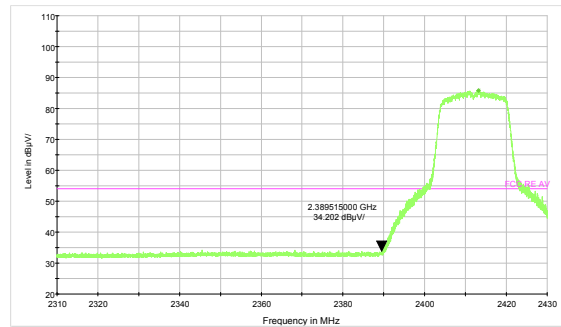
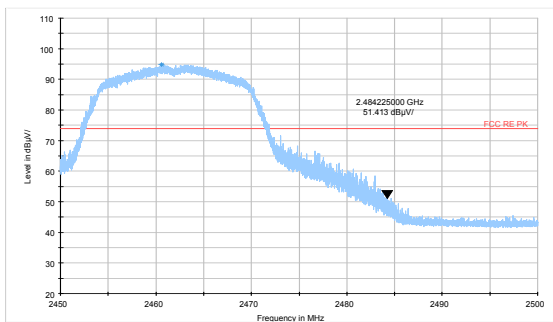
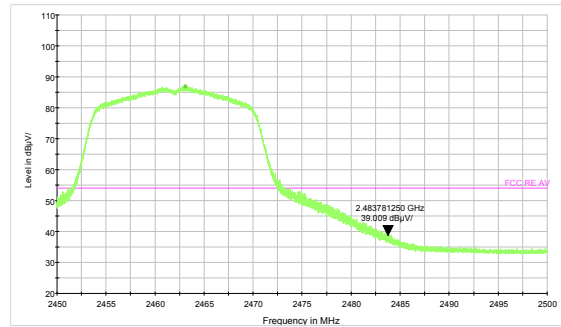
Average Limit=54 dBuV/m

Measurement Uncertainty

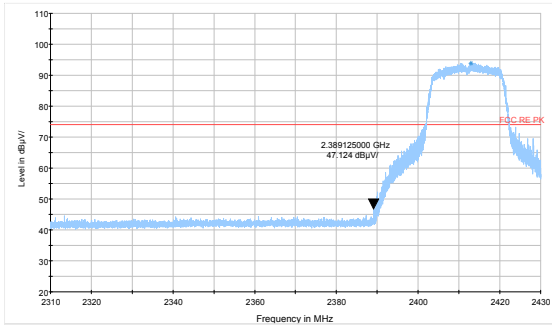
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 3.55$ dB.

**Test Results:****PASS**

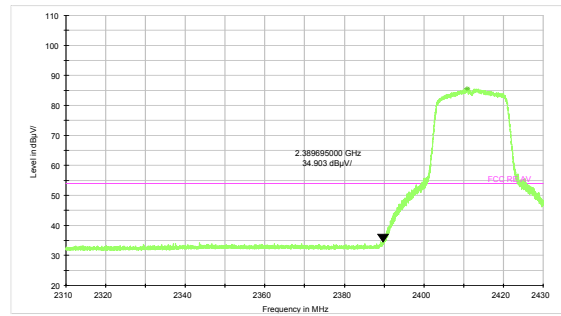
The signal beyond the limit is carrier.

802.11b-Channel 1: Peak**802.11b-Channel 1: Average****802.11b-Channel 11: Peak****802.11b-Channel 11: Average****802.11g-Channel 1: Peak****802.11g-Channel 1: Average****802.11g-Channel 11: Peak****802.11g-Channel 11: Average**

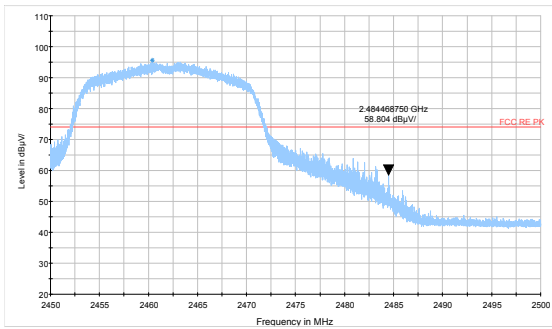
802.11n HT20 -Channel 1: Peak



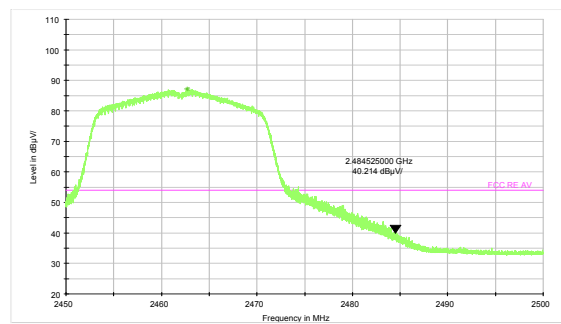
802.11n HT20-Channel 1: Average



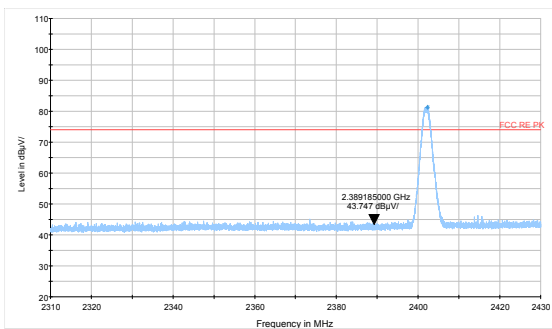
802.11n HT20-Channel 11: Peak



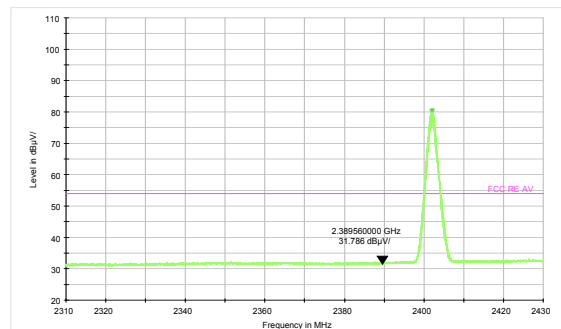
802.11n HT20-Channel 11: Average



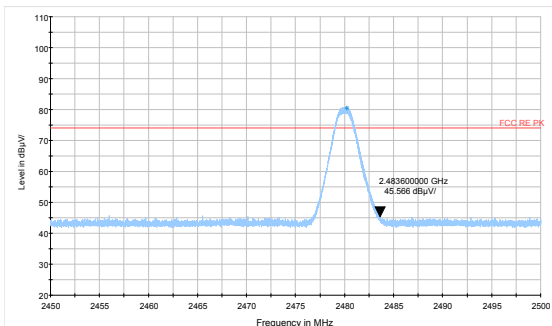
BLE -Channel 0: Peak



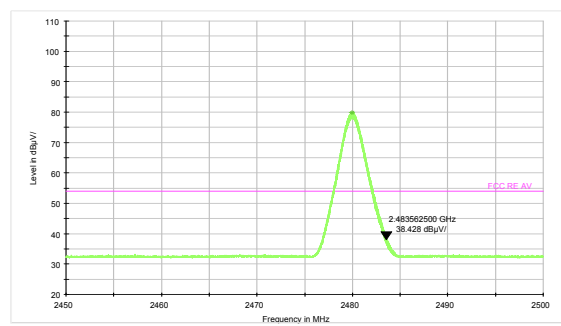
BLE -Channel 0: Average



BLE -Channel 39: Peak



BLE -Channel 39: Average



5.7. Radiates Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	102.5kPa

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

During the test, below 30MHz, the center of the loop shall be 1 meters; above 30MHz, 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=100 kHz / VBW=300 kHz / Sweep=AUTO

Above 1GHz (detector: Peak):

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

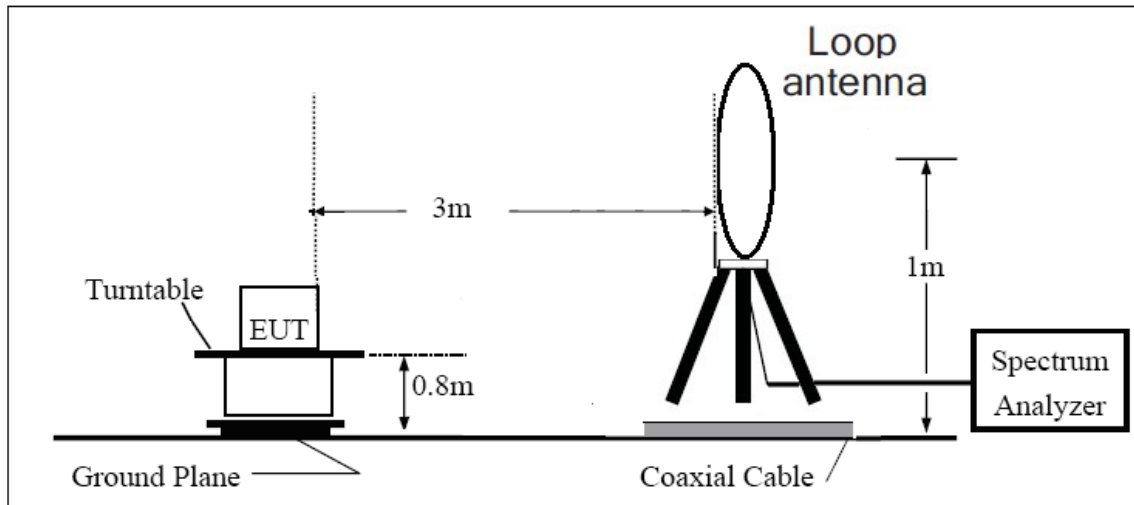
(b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

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.

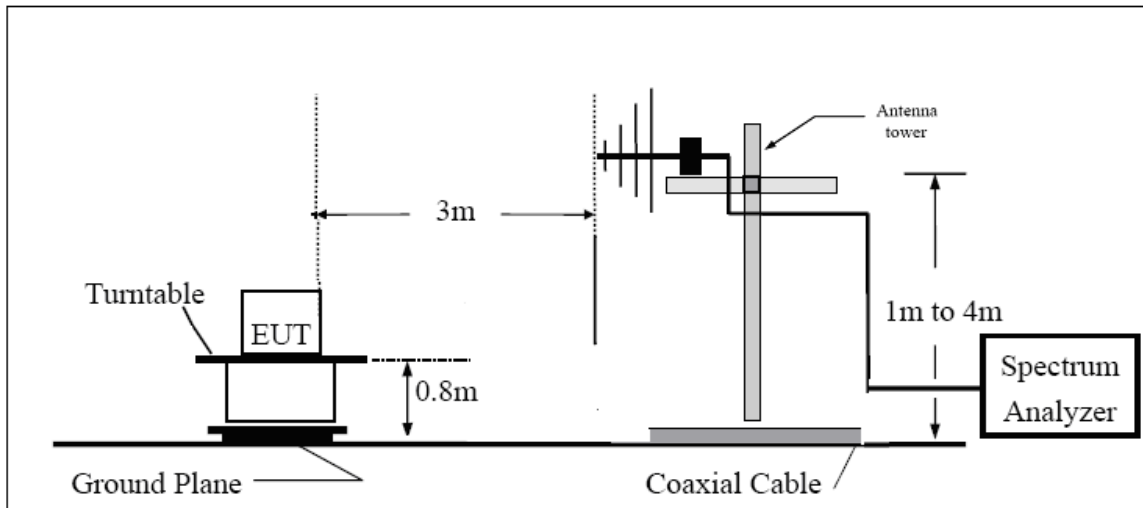
The test is in transmitting mode.

Test setup

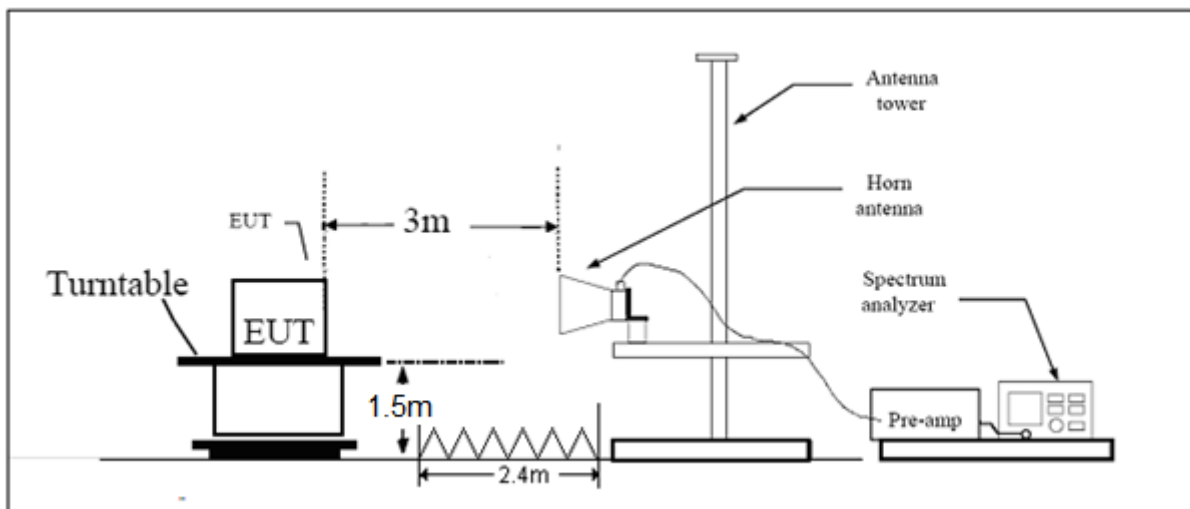
9KHz~~~ 30MHz



30MHz~~~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

Rule Part 15.247(d) specifies that “In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).”

Limit in restricted band

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

§15.35(b)

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

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
Above 1GHz	3.68 dB

Test result

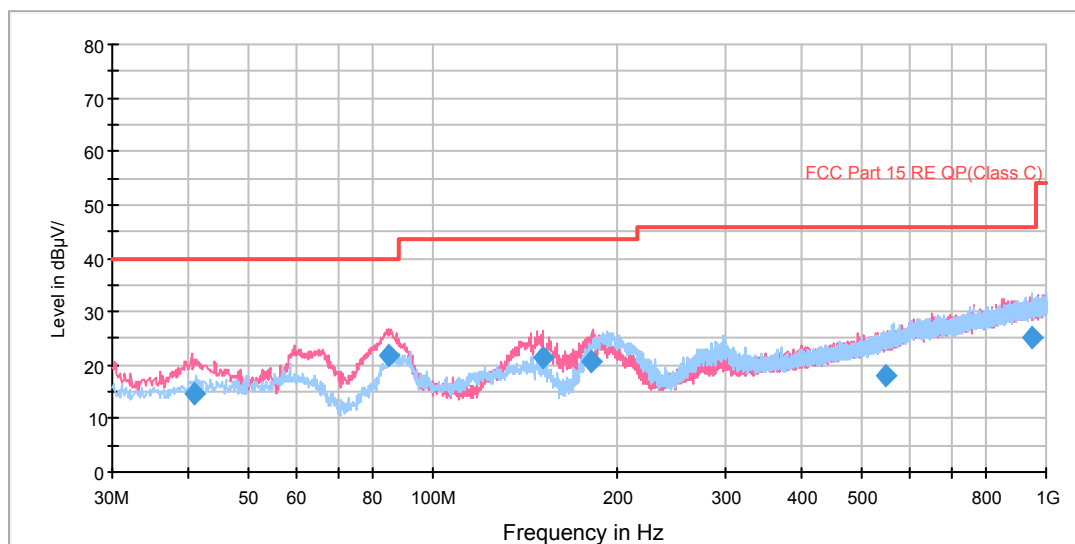
Sweep from 9 kHz to 30MHz, and the emissions more than 20 dB below the permissible value are not reported.

The following graphs display the maximum values of horizontal and vertical by software.

For above 1GHz, Blue trace uses the peak detection, Green trace uses the average detection.

802.11b CH1

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

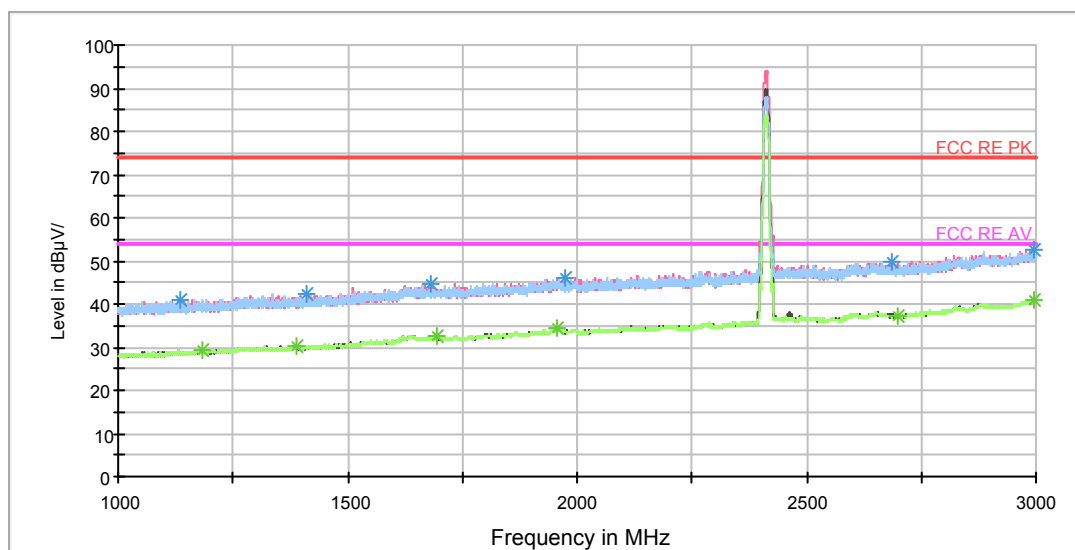
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.707500	14.8	100.0	V	344.0	28.0	13.2	25.2	40.0
84.720000	21.7	100.0	V	122.0	31.8	10.1	18.3	40.0
151.446250	21.4	100.0	V	247.0	30.6	9.2	22.1	43.5
181.566250	20.5	100.0	V	235.0	31.4	10.9	23.0	43.5
545.873750	18.1	114.0	H	109.0	39.0	20.9	27.9	46.0
951.663750	25.0	100.0	H	151.0	51.0	26.0	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



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

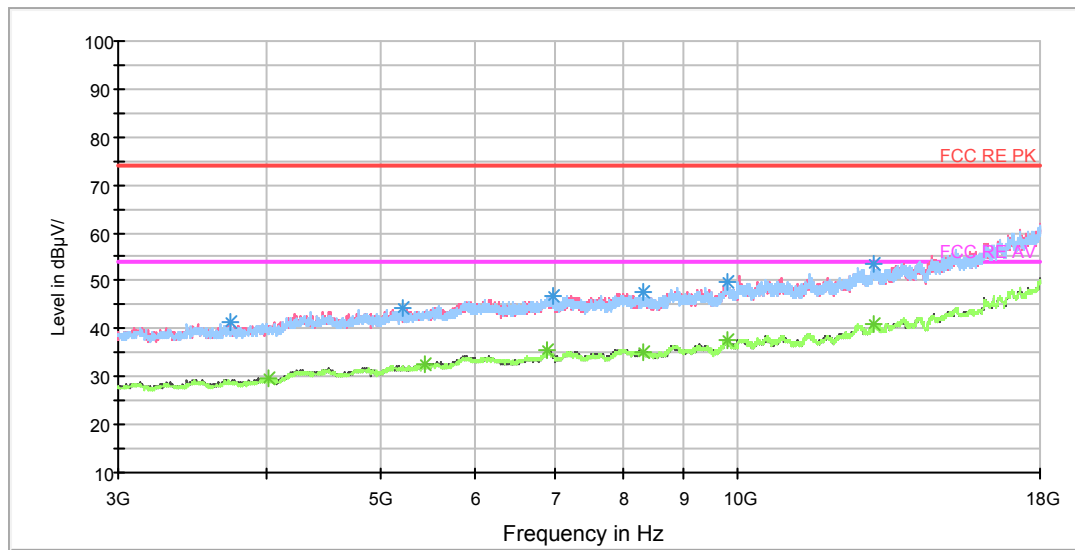
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1134.000000	41.1	101.0	V	355.0	49.5	-8.4	32.9	74
1412.250000	42.2	101.0	H	63.0	49.3	-7.1	31.8	74
1679.500000	44.7	101.0	V	0.0	49.8	-5.1	29.3	74
1973.750000	46.3	101.0	H	0.0	49.9	-3.6	27.7	74
2996.250000	52.7	101.0	H	120.0	55.0	2.3	21.3	74
2685.000000	49.8	101.0	V	0.0	49.9	-0.1	24.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1184.000000	29.2	101.0	H	0.0	37.3	-8.1	24.8	54
1389.250000	30.3	101.0	V	308.0	37.3	-7.0	23.7	54
1695.000000	32.6	101.0	H	194.0	37.6	-5.0	21.4	54
1958.000000	34.2	101.0	V	271.0	37.5	-3.3	19.8	54
2993.750000	41.0	101.0	V	130.0	43.2	-2.2	13.0	54
2700.250000	37.4	101.0	V	0.0	37.4	-0.0	16.6	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

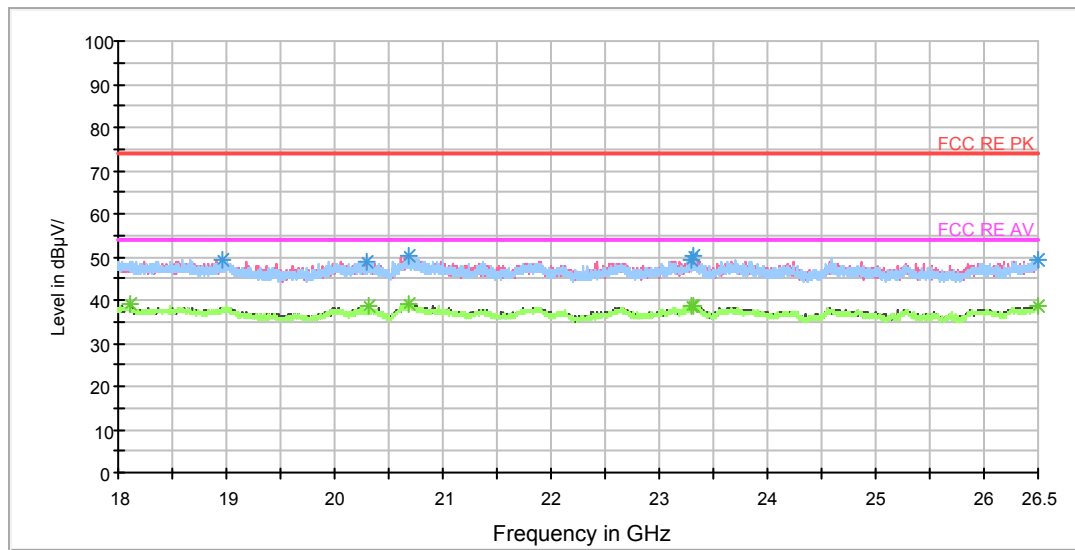
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3735.000000	41.2	100.0	V	0.0	41.5	-0.3	32.8	74
5225.625000	44.1	201.0	H	285.0	47.8	-3.7	29.9	74
6973.125000	46.8	100.0	H	0.0	53.4	-6.6	27.2	74
8328.750000	47.7	201.0	H	301.0	56.8	-9.1	26.3	74
9806.250000	49.6	100.0	H	28.0	61.8	-12.2	24.4	74
13040.625000	53.7	201.0	V	4.0	69.9	-16.2	20.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4010.625000	29.7	201.0	V	158.0	30.2	-0.5	24.3	54
5446.875000	32.5	100.0	V	267.0	36.3	-3.8	21.5	54
6913.125000	35.4	100.0	V	0.0	42.3	-6.9	18.6	54
8326.875000	35.3	201.0	V	281.0	44.4	-9.1	18.7	54
9804.375000	37.6	201.0	H	81.0	49.8	-12.2	16.4	54
13031.250000	40.9	100.0	H	0.0	57.1	-16.2	13.1	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)
18956.250000	49.4	H	196.0	54.4	-5.0	24.6	74
20299.250000	48.9	V	211.0	54.9	-6.0	25.1	74
20691.312500	50.3	H	62.0	57.0	-6.7	23.7	74
23292.312500	49.3	V	329.0	55.3	-6.0	24.7	74
23315.687500	50.4	V	335.0	56.4	-6.0	23.6	74
26496.812500	49.2	H	57.0	54.6	-5.4	24.8	74

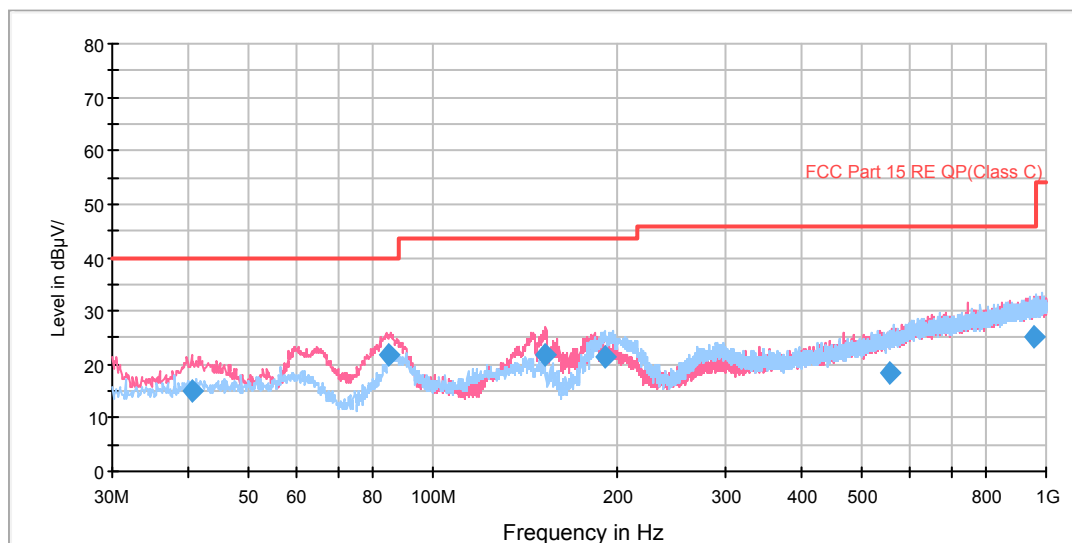
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18108.375000	38.9	V	223.0	41.2	-2.3	15.1	54
20315.187500	38.5	H	111.0	44.5	-6.0	15.5	54
20679.625000	39.3	V	241.0	45.9	-6.6	14.7	54
23289.125000	38.4	V	335.0	44.4	-6.0	15.6	54
23322.062500	38.8	H	62.0	44.8	-6.0	15.2	54
26494.687500	38.7	V	341.0	44.1	-5.4	15.3	54

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

802.11b CH6

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

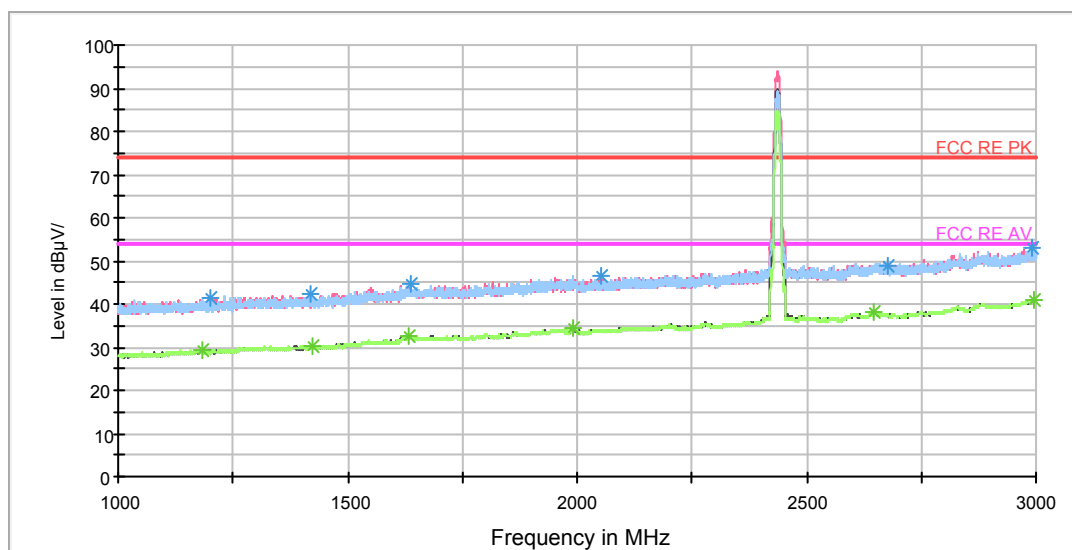
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.547500	15.1	100.0	V	36.0	28.3	13.2	24.9	40.0
84.435000	21.7	125.0	V	312.0	31.7	10.0	18.3	40.0
152.347500	21.7	100.0	V	247.0	31.0	9.3	21.8	43.5
190.852500	21.5	125.0	H	93.0	33.0	11.5	22.0	43.5
555.743750	18.6	100.0	H	313.0	39.8	21.2	27.4	46.0
955.940000	25.1	125.0	V	123.0	51.2	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



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

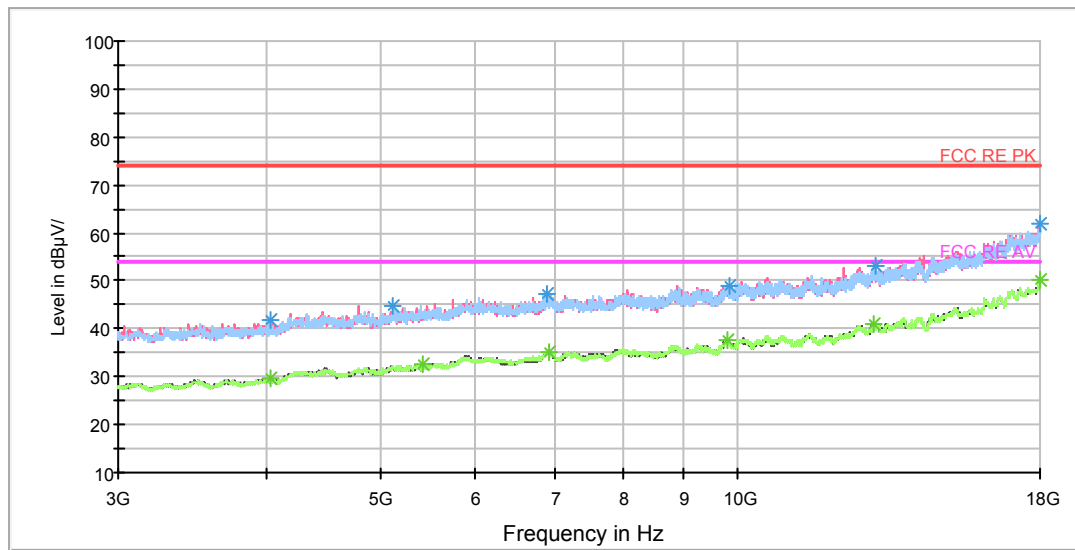
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.250000	41.4	101.0	V	332.0	49.6	-8.2	32.6	74
1420.750000	42.2	101.0	H	231.0	49.1	-6.9	31.8	74
1637.750000	44.5	101.0	V	0.0	49.2	-4.7	29.5	74
2053.750000	46.4	101.0	V	267.0	49.6	-3.2	27.6	74
2675.000000	49.1	101.0	V	304.0	49.3	-0.2	24.9	74
2990.000000	52.9	101.0	V	332.0	55.1	-2.2	21.1	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)
1182.250000	29.4	101.0	H	164.0	37.4	-8.0	24.6	54
1421.750000	30.3	101.0	V	0.0	37.2	-6.9	23.7	54
1631.250000	32.6	101.0	H	72.0	37.3	-4.7	21.4	54
1992.500000	34.4	101.0	V	154.0	37.7	-3.3	19.6	54
2646.500000	38.1	101.0	V	211.0	38.4	-0.3	15.9	54
2996.250000	41.0	101.0	H	0.0	43.3	-2.3	13.0	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

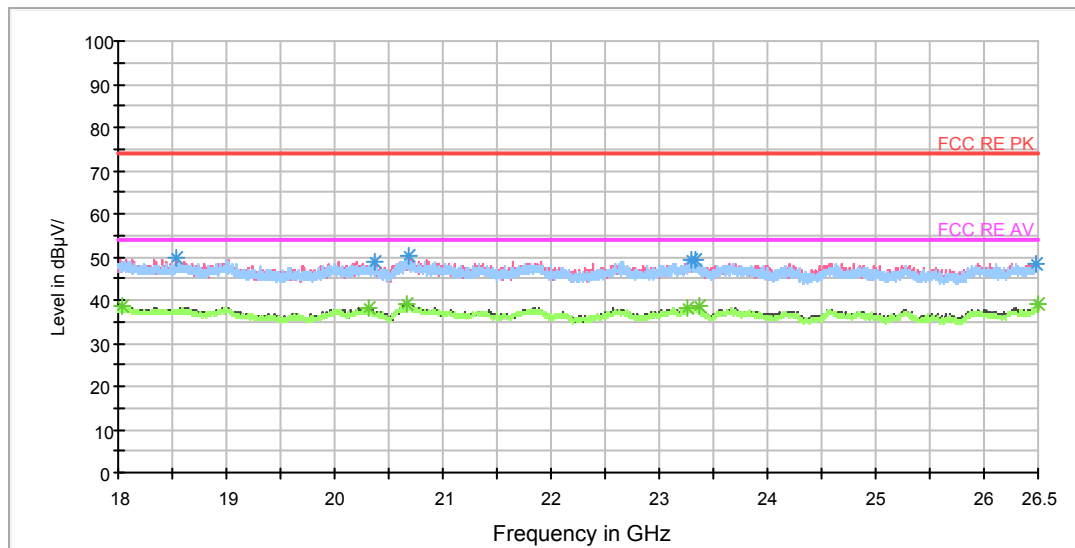
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4029.375000	41.8	200.0	H	331.0	42.4	-0.6	32.2	74
5124.375000	44.7	100.0	H	347.0	48.3	-3.6	29.3	74
6911.250000	47.1	100.0	H	0.0	54.0	-6.9	26.9	74
9826.875000	49.0	200.0	V	186.0	61.0	-12.0	25.0	74
13081.875000	53.0	100.0	V	0.0	69.2	-16.2	21.0	74
17977.500000	61.9	200.0	V	186.0	87.0	-25.1	12.1	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)
4040.625000	29.5	100.0	H	64.0	30.1	0.6	24.5	54
5415.000000	32.5	100.0	H	111.0	36.2	3.7	21.5	54
6928.125000	35.2	200.0	V	170.0	42.0	6.8	18.8	54
9802.500000	37.5	200.0	V	4.0	49.8	12.3	16.5	54
13008.750000	41.0	100.0	V	235.0	57.2	16.2	13.0	54
17998.125000	50.2	100.0	V	30.0	75.6	25.4	3.8	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18528.062500	49.7	V	75.0	53.7	-4.0	24.3	74
20371.500000	48.8	V	219.0	54.9	-6.1	25.2	74
20679.625000	50.0	V	82.0	56.6	-6.6	24.0	74
23292.312500	49.4	V	213.0	55.4	-6.0	24.6	74
23336.937500	49.4	V	219.0	55.4	-6.0	24.6	74
26474.500000	48.5	H	78.0	53.9	-5.4	25.5	74

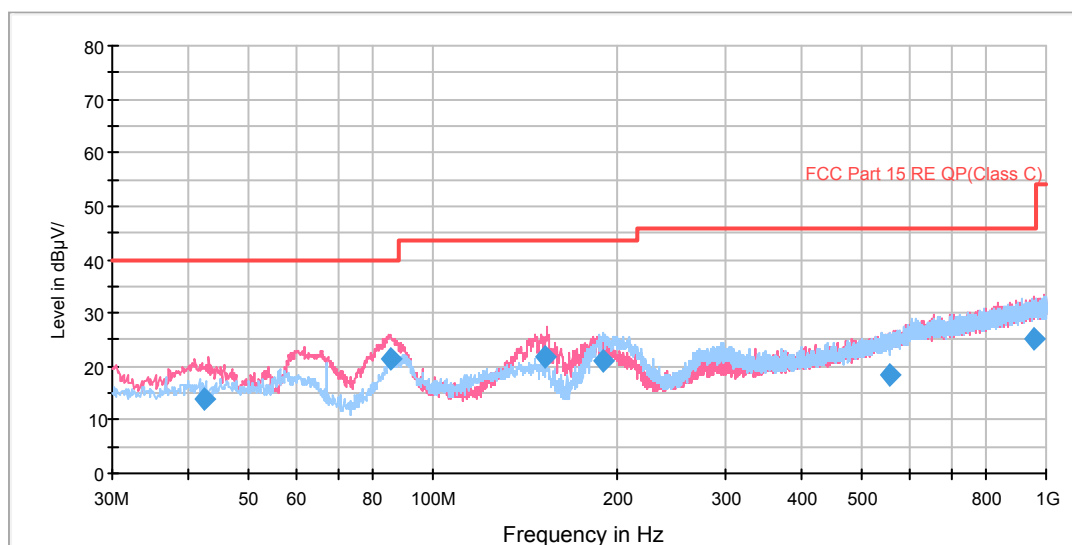
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18029.750000	38.6	H	53.0	40.5	-1.9	15.4	54
20320.500000	38.1	V	332.0	44.1	-6.0	15.9	54
20669.000000	39.0	V	194.0	45.6	-6.6	15.0	54
23263.625000	38.2	V	194.0	44.2	-6.0	15.8	54
23364.562500	38.4	V	75.0	44.3	-5.9	15.6	54
26492.562500	38.9	V	357.0	44.3	-5.4	15.1	54

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

802.11b CH11

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

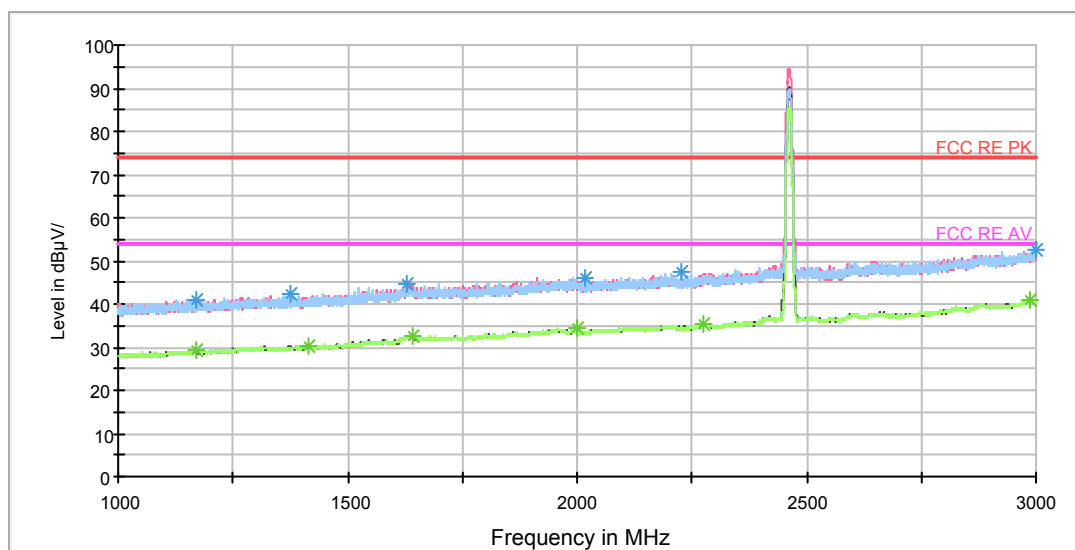
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
42.535000	14.0	100.0	V	138.0	27.1	13.1	26.0	40.0
85.290000	21.5	114.0	V	138.0	31.8	10.3	18.5	40.0
152.590000	21.6	100.0	V	253.0	30.9	9.3	21.9	43.5
189.922500	21.1	125.0	H	84.0	32.5	11.4	22.4	43.5
555.492500	18.6	100.0	H	220.0	39.8	21.2	27.4	46.0
954.848750	25.1	100.0	V	10.0	51.2	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



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

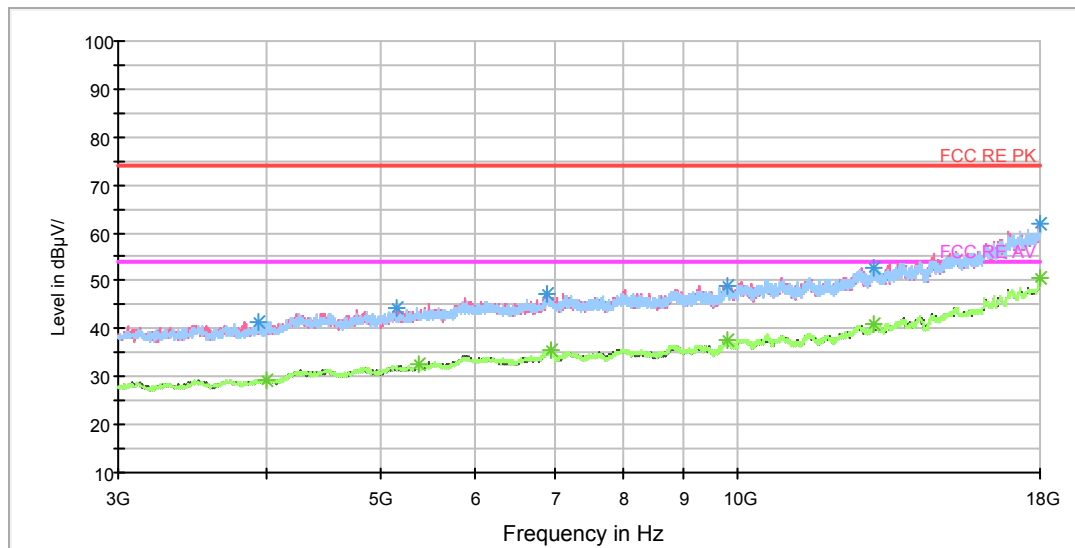
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1171.500000	41.0	101.0	H	41.0	49.1	-8.1	33.0	74
1377.250000	42.3	101.0	H	192.0	49.4	-7.1	31.7	74
1627.500000	44.8	101.0	V	344.0	49.6	-4.8	29.2	74
2019.250000	46.1	101.0	H	161.0	49.7	-3.6	27.9	74
2228.750000	47.6	101.0	H	86.0	50.1	-2.5	26.4	74
2999.500000	52.7	101.0	H	0.0	55.0	-2.3	21.3	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)
1169.250000	29.4	101.0	V	234.0	37.5	-8.1	24.6	54
1415.000000	30.4	101.0	H	13.0	37.4	-7.0	23.6	54
1640.000000	32.6	101.0	H	0.0	37.3	-4.7	21.4	54
1999.500000	34.3	101.0	V	242.0	37.7	-3.4	19.7	54
2273.250000	35.3	101.0	V	261.0	36.9	-1.6	18.7	54
2989.000000	40.9	101.0	V	214.0	43.1	-2.2	13.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

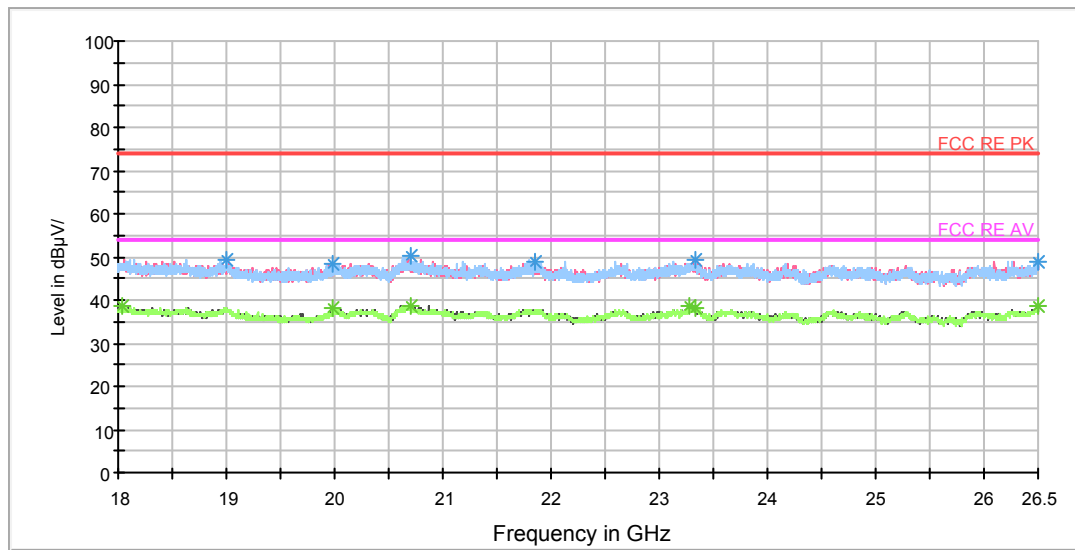
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3941.250000	41.5	100.0	H	0.0	41.6	-0.1	32.5	74
5150.625000	44.3	200.0	H	80.0	47.9	-3.6	29.7	74
6909.375000	47.3	100.0	V	0.0	54.2	-6.9	26.7	74
9804.375000	48.9	200.0	V	5.0	61.1	-12.2	25.1	74
13020.000000	52.9	100.0	H	49.0	69.1	-16.2	21.1	74
17992.500000	62.0	200.0	V	110.0	87.3	-25.3	12.0	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4001.250000	29.5	200.0	V	95.0	30.0	-0.5	24.5	54
5381.250000	32.5	100.0	H	110.0	36.2	-3.7	21.5	54
6945.000000	35.5	200.0	H	112.0	42.2	-6.7	18.5	54
9815.625000	37.7	100.0	H	297.0	49.8	-12.1	16.3	54
13025.625000	41.0	100.0	H	0.0	57.2	-16.2	13.0	54
18000.000000	50.4	100.0	H	141.0	75.8	-25.4	3.6	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)
18995.562500	49.4	V	200.0	54.4	-5.0	24.6	74
19990.062500	48.5	H	0.0	54.2	-5.7	25.5	74
20707.250000	50.3	H	41.0	57.0	-6.7	23.7	74
21846.250000	48.9	V	224.0	56.9	-8.0	25.1	74
23332.687500	49.2	H	113.0	55.2	-6.0	24.8	74
26491.500000	49.0	H	155.0	54.4	-5.4	25.0	74

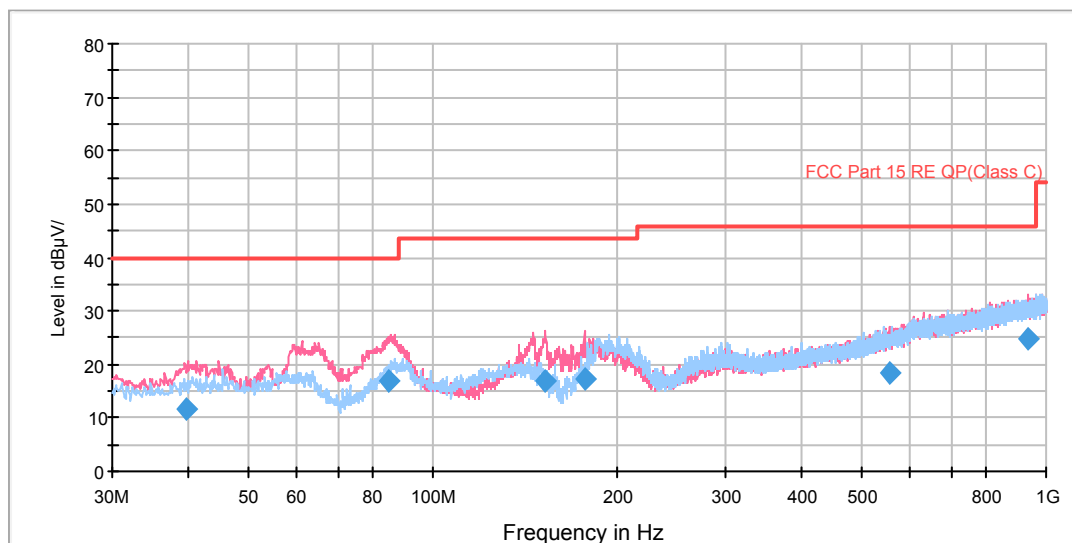
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18037.187500	38.6	V	321.0	40.6	-2.0	15.4	54
19974.125000	38.0	H	23.0	43.7	-5.7	16.0	54
20696.625000	38.6	V	333.0	45.3	-6.7	15.4	54
23287.000000	38.6	H	211.0	44.6	-6.0	15.4	54
23330.562500	38.2	H	198.0	44.2	-6.0	15.8	54
26500.000000	38.4	H	255.0	43.9	-5.5	15.6	54

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

802.11g CH1

FCC RE 0.03-1GHz QP Class C

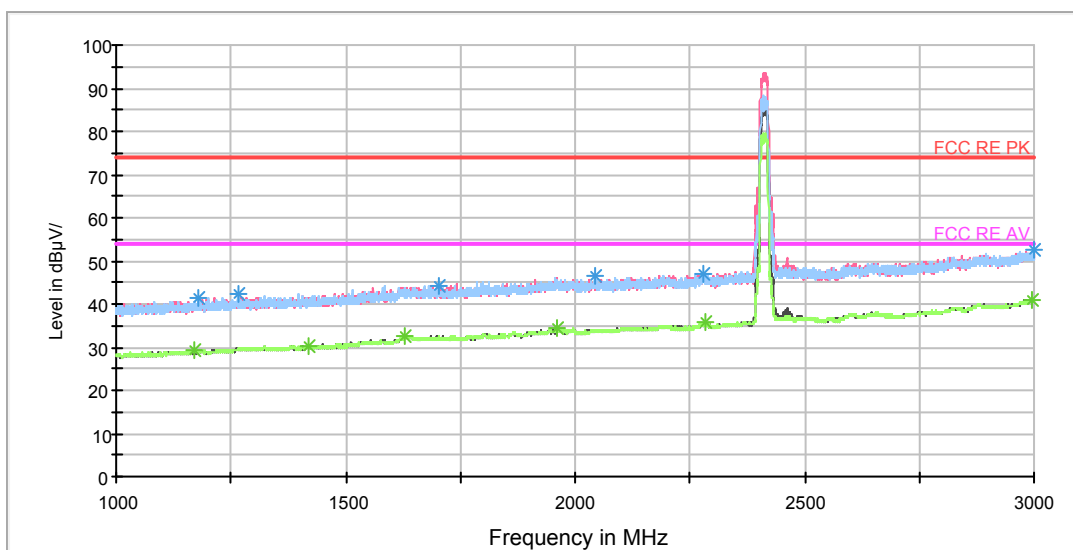


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
39.621250	11.8	100.0	V	355.0	24.9	-13.1	28.2	40.0
84.730000	17.0	125.0	V	11.0	27.1	-10.1	23.0	40.0
152.421250	16.8	100.0	V	242.0	26.1	-9.3	26.7	43.5
176.871250	17.1	100.0	V	246.0	27.8	-10.7	26.4	43.5
556.593750	18.5	100.0	V	343.0	39.7	-21.2	27.5	46.0
934.967500	24.9	100.0	V	17.0	50.8	-25.9	21.1	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



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

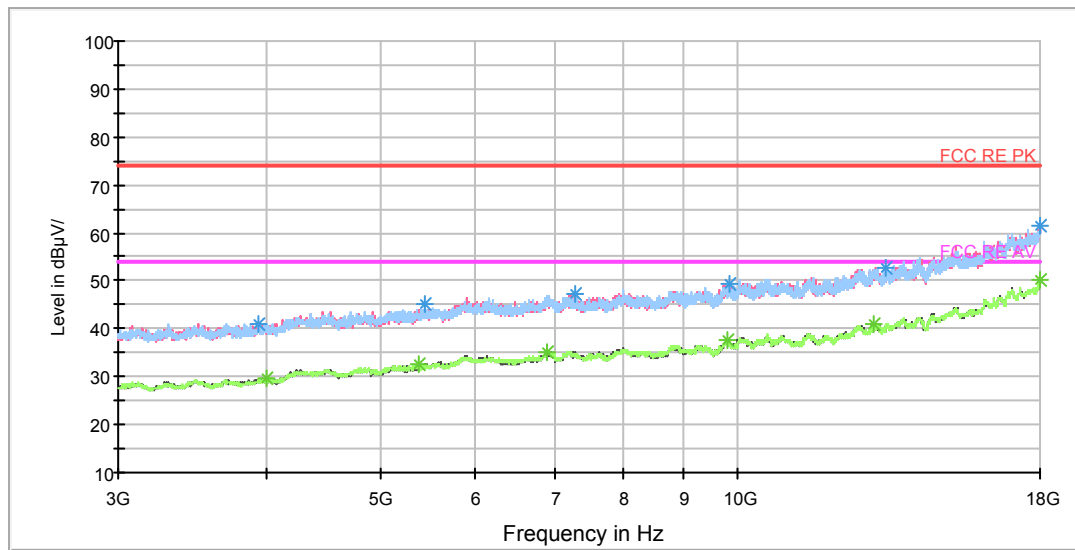
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1177.250000	41.2	101.0	H	27.0	49.2	-8.0	32.8	74
1264.500000	42.1	101.0	H	0.0	49.8	-7.7	31.9	74
1703.000000	44.3	101.0	H	290.0	49.2	-4.9	29.7	74
2041.500000	46.7	101.0	H	231.0	49.9	-3.2	27.3	74
2278.250000	46.9	101.0	V	185.0	48.3	-1.4	27.1	74
2999.750000	52.6	101.0	H	74.0	54.9	2.3	21.4	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)
1169.750000	29.4	101.0	V	0.0	37.5	-8.1	24.6	54
1417.250000	30.2	101.0	H	0.0	37.1	-6.9	23.8	54
1629.250000	32.6	101.0	V	0.0	37.3	-4.7	21.4	54
1959.250000	34.3	101.0	H	74.0	37.5	-3.2	19.7	54
2283.000000	35.6	101.0	V	195.0	37.0	-1.4	18.4	54
2994.750000	40.9	101.0	H	46.0	43.2	-2.3	13.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

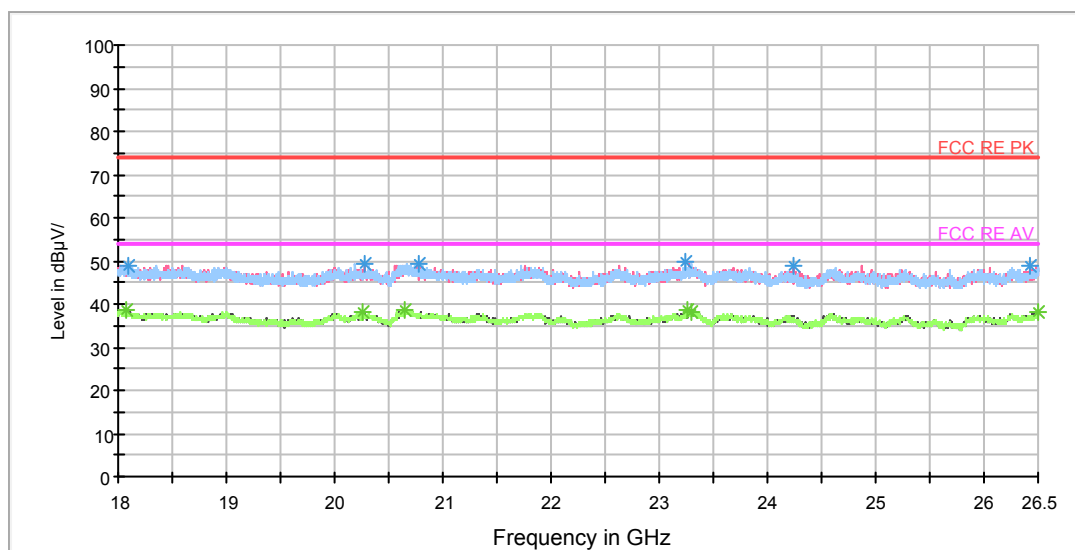
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3945.000000	41.2	200.0	V	51.0	41.3	-0.1	32.8	74
5448.750000	45.0	200.0	H	206.0	48.8	-3.8	29.0	74
7278.750000	47.1	200.0	V	0.0	55.8	-8.7	26.9	74
9853.125000	49.3	200.0	H	0.0	61.0	-11.7	24.7	74
13333.125000	52.7	100.0	H	0.0	68.4	-15.7	21.3	74
17975.625000	61.4	100.0	V	0.0	86.5	-25.1	12.6	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)
4003.125000	29.6	100.0	H	63.0	30.1	-0.5	24.4	54
5377.500000	32.5	100.0	H	216.0	36.2	-3.7	21.5	54
6892.500000	35.2	200.0	V	187.0	42.1	-6.9	18.8	54
9813.750000	37.7	200.0	V	66.0	49.8	-12.1	16.3	54
13021.875000	41.0	100.0	H	155.0	57.2	-16.2	13.0	54
17985.000000	50.3	100.0	V	205.0	75.5	-25.2	3.7	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)
18086.062500	49.0	V	305.0	51.2	-2.2	25.0	74
20278.000000	49.2	V	317.0	55.2	-6.0	24.8	74
20783.750000	49.4	V	225.0	56.3	-6.9	24.6	74
23246.625000	49.8	H	241.0	55.8	-6.0	24.2	74
24236.875000	48.7	V	281.0	54.6	-5.9	25.3	74
26433.062500	48.9	V	0.0	54.3	-5.4	25.1	74

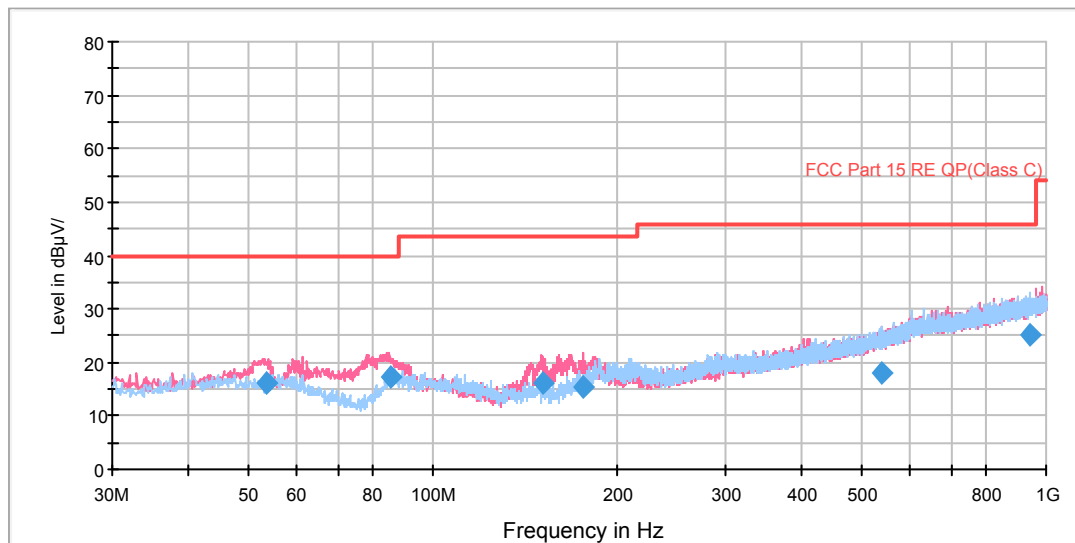
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18069.062500	38.4	V	183.0	40.5	-2.1	15.6	54
20265.250000	37.9	H	64.0	43.8	-5.9	16.1	54
20652.000000	38.6	V	42.0	45.2	-6.6	15.4	54
23250.875000	38.6	H	40.0	44.6	-6.0	15.4	54
23302.937500	38.3	V	213.0	44.3	-6.0	15.7	54
26498.937500	38.3	H	64.0	43.7	-5.4	15.7	54

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

802.11g CH6

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

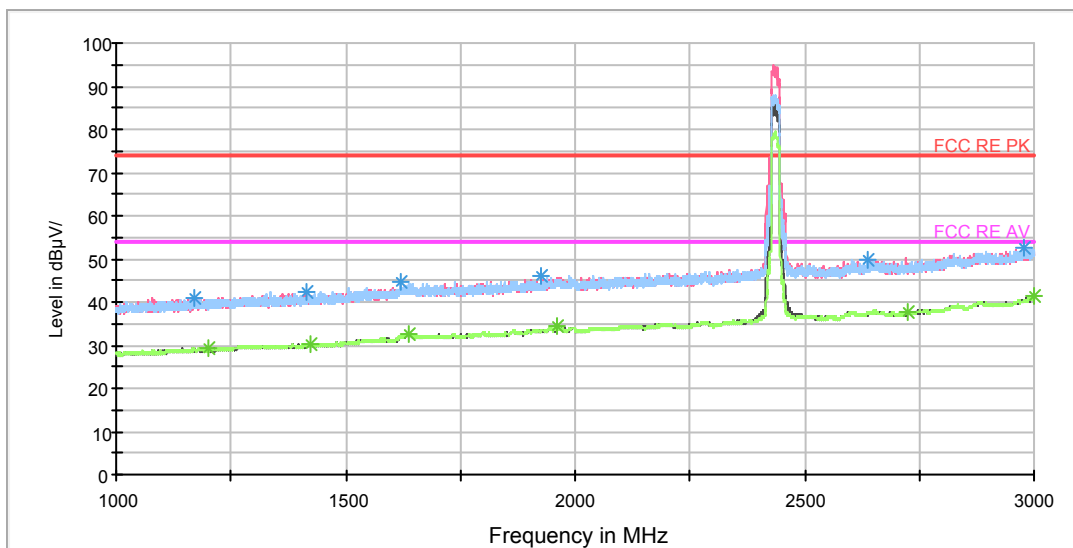
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
53.405000	16.1	100.0	V	310.0	28.9	12.8	23.9	40.0
85.247500	17.3	125.0	V	301.0	27.6	10.3	22.7	40.0
151.203750	16.2	100.0	V	242.0	25.4	9.2	27.3	43.5
175.818750	15.4	100.0	V	246.0	26.0	10.6	28.1	43.5
539.861250	18.1	125.0	V	338.0	38.9	20.8	27.9	46.0
943.826250	25.1	100.0	H	22.0	51.2	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



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

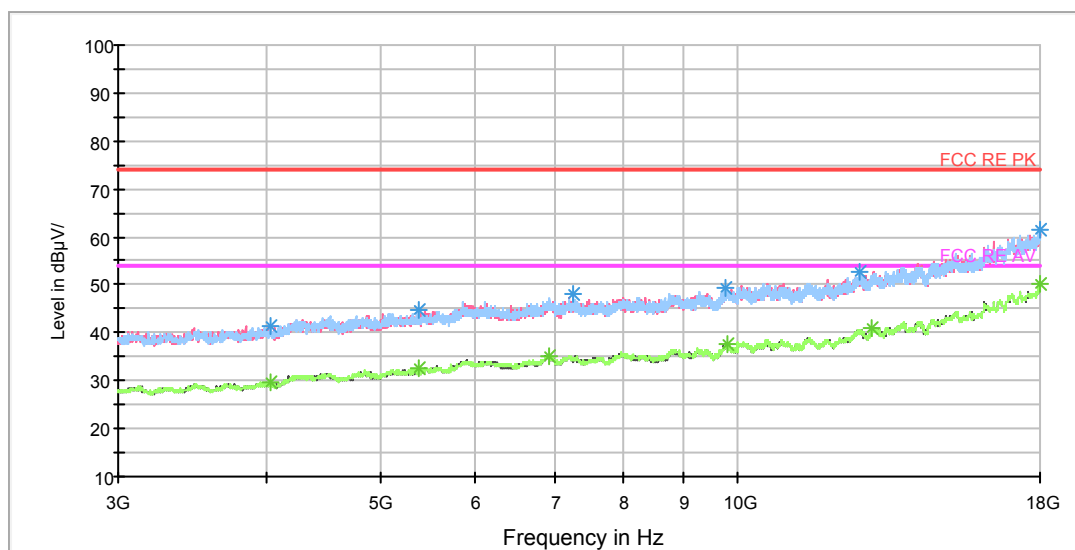
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1170.250000	41.2	101.0	V	240.0	49.3	-8.1	32.8	74
1414.750000	42.3	101.0	V	138.0	49.3	-7.0	31.7	74
1621.000000	44.6	101.0	H	0.0	49.4	-4.8	29.4	74
1926.000000	46.2	101.0	V	221.0	49.9	-3.7	27.8	74
2638.250000	50.0	101.0	H	186.0	50.1	-0.1	24.0	74
2977.250000	52.8	101.0	H	0.0	55.0	-2.2	21.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.000000	29.5	101.0	H	340.0	37.7	-8.2	24.5	54
1423.250000	30.2	101.0	V	286.0	37.1	-6.9	23.8	54
1637.750000	32.5	101.0	H	0.0	37.2	-4.7	21.5	54
1961.750000	34.2	101.0	H	8.0	37.4	-3.2	19.8	54
2723.000000	37.5	101.0	V	296.0	37.8	-0.3	16.5	54
2998.750000	41.2	101.0	V	259.0	43.5	-2.3	12.8	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

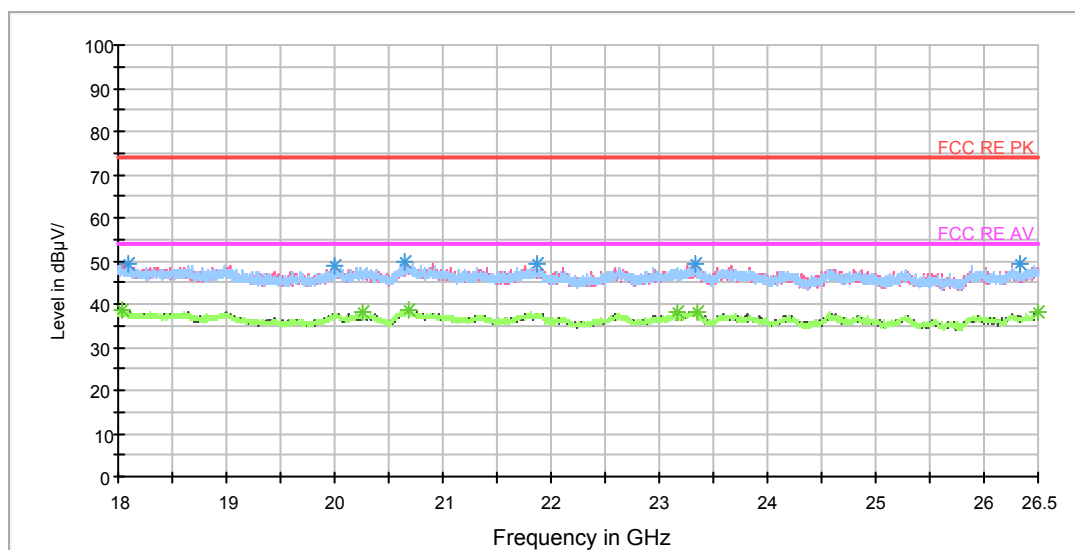
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4027.500000	41.3	200.0	H	174.0	41.9	-0.6	32.7	74
5383.125000	44.8	100.0	H	136.0	48.5	-3.7	29.2	74
7265.625000	47.9	100.0	H	0.0	56.6	-8.7	26.1	74
9774.375000	49.4	200.0	H	0.0	61.4	-12.0	24.6	74
12699.375000	52.7	100.0	H	105.0	67.8	-15.1	21.3	74
17979.375000	61.3	100.0	V	327.0	86.5	-25.2	12.7	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)
4027.500000	29.6	100.0	V	252.0	30.2	-0.6	24.4	54
5390.625000	32.5	200.0	H	283.0	36.2	-3.7	21.5	54
6920.625000	35.2	200.0	H	359.0	42.1	-6.9	18.8	54
9808.125000	37.6	200.0	V	180.0	49.8	-12.2	16.4	54
13001.250000	40.9	100.0	V	343.0	57.1	-16.2	13.1	54
18000.000000	50.2	200.0	H	297.0	75.6	-25.4	3.8	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18091.375000	49.3	H	42.0	51.5	-2.2	24.7	74
19997.500000	48.7	V	276.0	54.4	-5.7	25.3	74
20654.125000	49.9	H	79.0	56.5	-6.6	24.1	74
21867.500000	49.3	H	324.0	57.3	-8.0	24.7	74
23329.500000	49.1	V	306.0	55.1	-6.0	24.9	74
26338.500000	49.3	H	143.0	54.7	-5.4	24.7	74

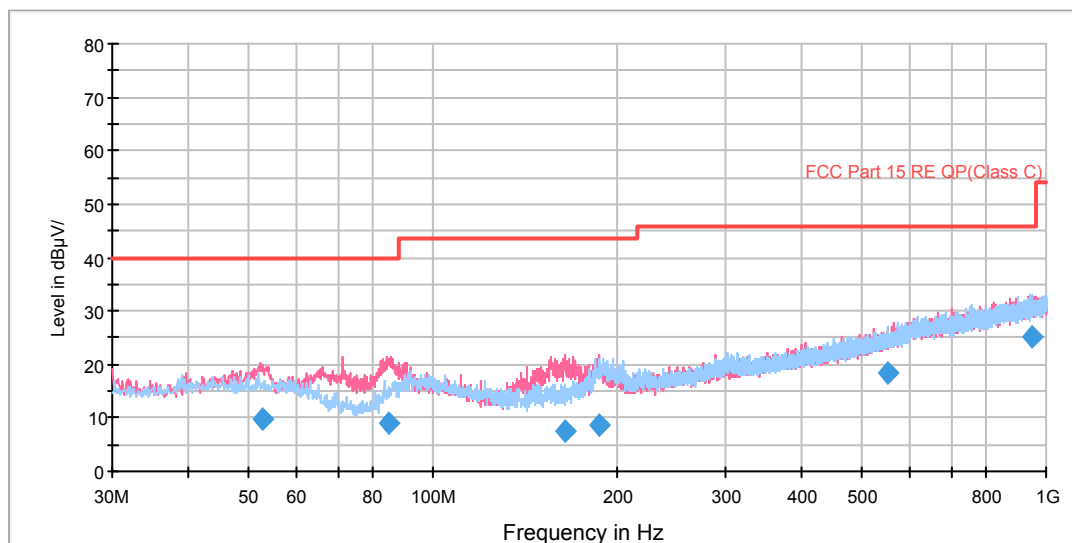
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18044.625000	38.5	V	23.0	40.5	-2.0	15.5	54
20261.000000	38.1	H	241.0	44.0	-5.9	15.9	54
20684.937500	38.6	V	269.0	45.3	-6.7	15.4	54
23166.937500	37.9	V	336.0	44.0	-6.1	16.1	54
23344.375000	38.2	H	85.0	44.1	-5.9	15.8	54
26492.562500	38.3	V	269.0	43.7	-5.4	15.7	54

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

802.11g CH11

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

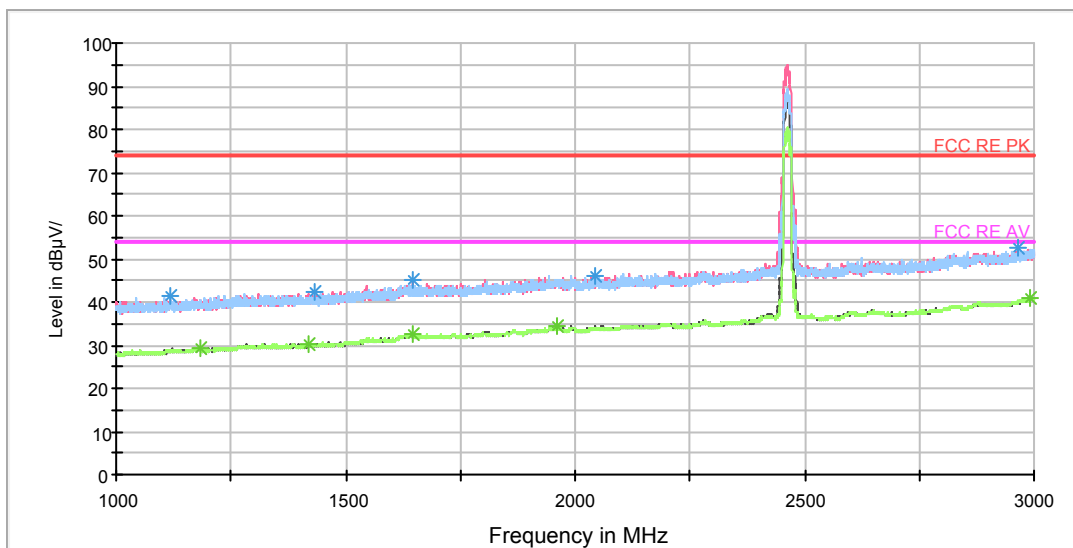
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
52.590000	9.7	125.0	V	190.0	22.6	-12.9	30.3	40.0
84.516250	9.0	125.0	V	187.0	19.1	-10.1	31.0	40.0
164.345000	7.6	100.0	V	250.0	17.5	-9.9	35.9	43.5
186.330000	8.7	100.0	V	238.0	19.9	-11.2	34.8	43.5
551.418750	18.4	100.0	H	0.0	39.4	-21.0	27.6	46.0
945.601250	25.1	100.0	H	208.0	51.1	-26.0	20.9	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

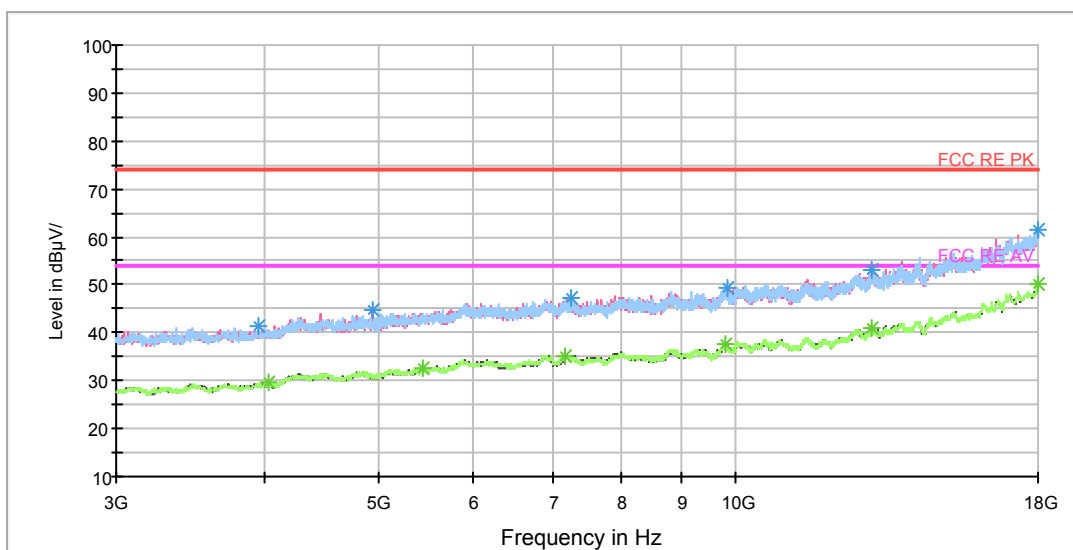
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1119.500000	41.2	101.0	H	0.0	49.7	-8.5	32.8	74
1433.250000	42.1	101.0	H	28.0	49.0	-6.9	31.9	74
1645.000000	45.2	101.0	V	100.0	50.1	-4.9	28.8	74
2044.250000	46.1	101.0	V	315.0	49.3	-3.2	27.9	74
2966.500000	52.6	101.0	H	250.0	54.8	2.2	21.4	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)
1183.500000	29.2	101.0	V	119.0	37.3	-8.1	24.8	54
1418.750000	30.3	101.0	V	315.0	37.2	-6.9	23.7	54
1644.250000	32.5	101.0	H	213.0	37.3	-4.8	21.5	54
1959.750000	34.4	101.0	H	84.0	37.6	-3.2	19.6	54
2992.750000	41.1	101.0	H	204.0	43.3	2.2	12.9	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

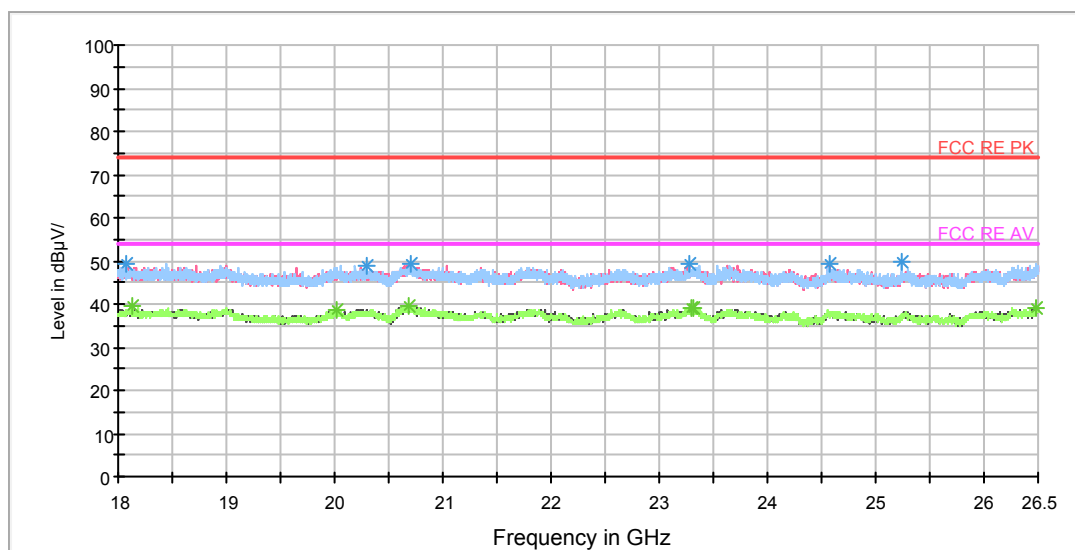
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3952.500000	41.2	100.0	V	342.0	41.4	-0.2	32.8	74
4931.250000	44.7	200.0	V	165.0	47.8	-3.1	29.3	74
7258.125000	47.4	100.0	H	0.0	56.1	-8.7	26.6	74
9828.750000	49.2	100.0	V	221.0	61.2	-12.0	24.8	74
13035.000000	53.1	200.0	V	0.0	69.3	-16.2	20.9	74
17986.875000	61.5	100.0	V	112.0	86.7	-25.2	12.5	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)
4031.250000	29.8	200.0	V	0.0	30.4	-0.6	24.2	54
5435.625000	32.5	200.0	H	0.0	36.3	-3.8	21.5	54
7173.750000	35.2	200.0	V	90.0	43.8	-8.6	18.8	54
9798.750000	37.7	100.0	V	342.0	50.0	-12.3	16.3	54
13023.750000	41.1	200.0	V	247.0	57.3	-16.2	12.9	54
17998.125000	50.3	200.0	H	356.0	75.7	-25.4	3.7	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)
18079.687500	49.4	H	21.0	51.5	-2.1	24.6	74
20292.875000	48.8	H	257.0	54.8	-6.0	25.2	74
20707.250000	49.1	V	347.0	55.8	-6.7	24.9	74
23280.625000	49.1	V	295.0	55.1	-6.0	24.9	74
24580.062500	49.1	V	334.0	55.1	-6.0	24.9	74
25236.687500	49.9	H	35.0	55.7	-5.8	24.1	74

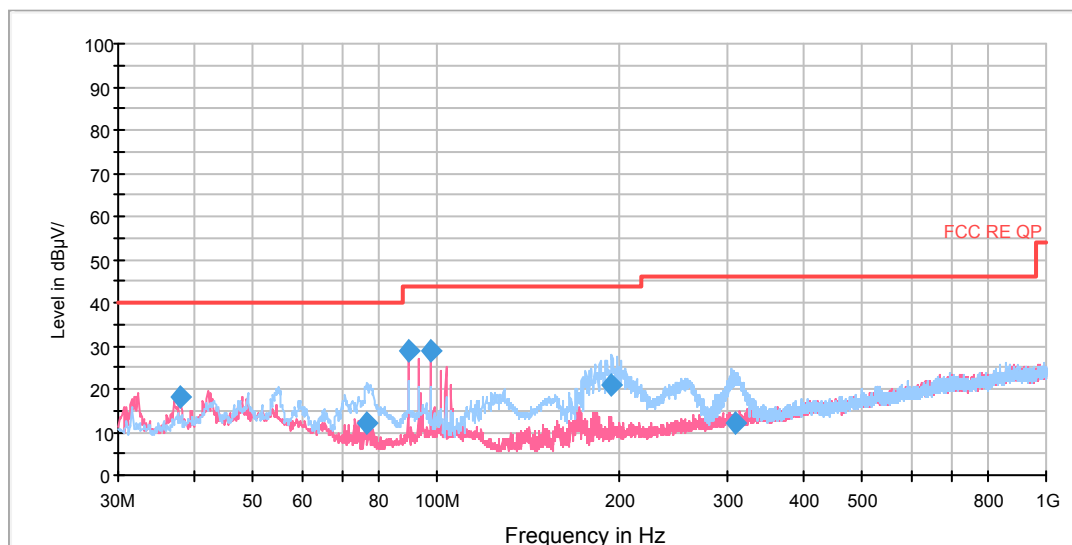
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18123.250000	39.6	H	229.0	41.9	-2.3	14.4	54
20019.812500	38.8	V	334.0	44.5	-5.7	15.2	54
20680.687500	39.6	V	302.0	46.2	-6.6	14.4	54
23293.375000	38.8	H	8.0	44.8	-6.0	15.2	54
23319.937500	39.3	V	347.0	45.3	-6.0	14.7	54
26473.437500	39.2	H	68.0	44.6	-5.4	14.8	54

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

802.11n (HT20) CH1

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

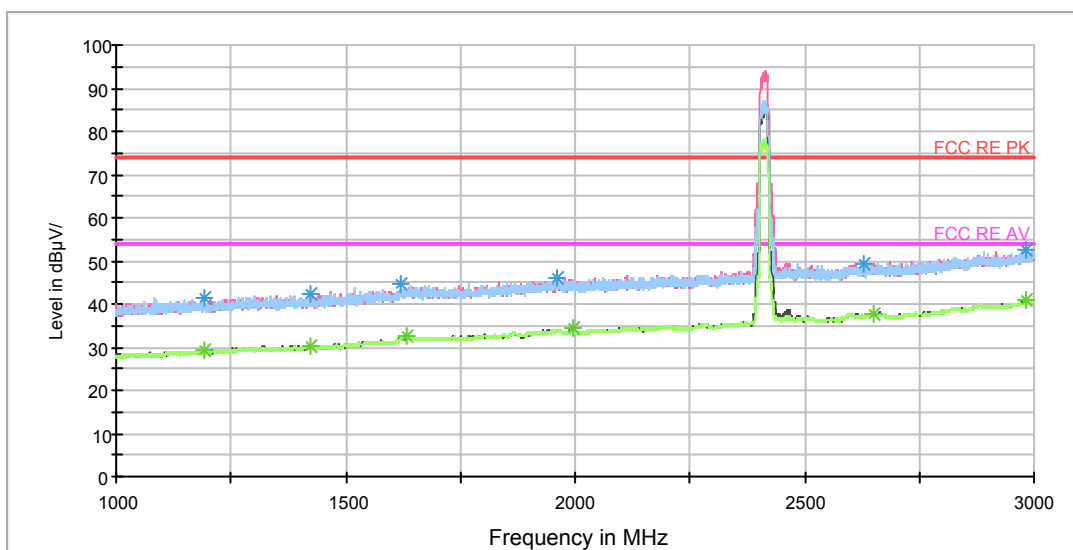
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
37.866547	18.2	102.0	V	142.0	40.1	-21.9	21.8	40.0
76.771440	12.3	127.0	H	16.0	41.0	-28.7	27.7	40.0
89.952756	29.0	120.0	V	22.0	55.9	-26.9	14.5	43.5
97.733356	28.7	120.0	V	170.0	54.1	-25.4	14.8	43.5
193.082334	20.7	103.0	H	33.0	47.5	-26.8	22.8	43.5
310.318750	11.9	102.0	H	0.0	35.0	-23.1	34.1	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



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

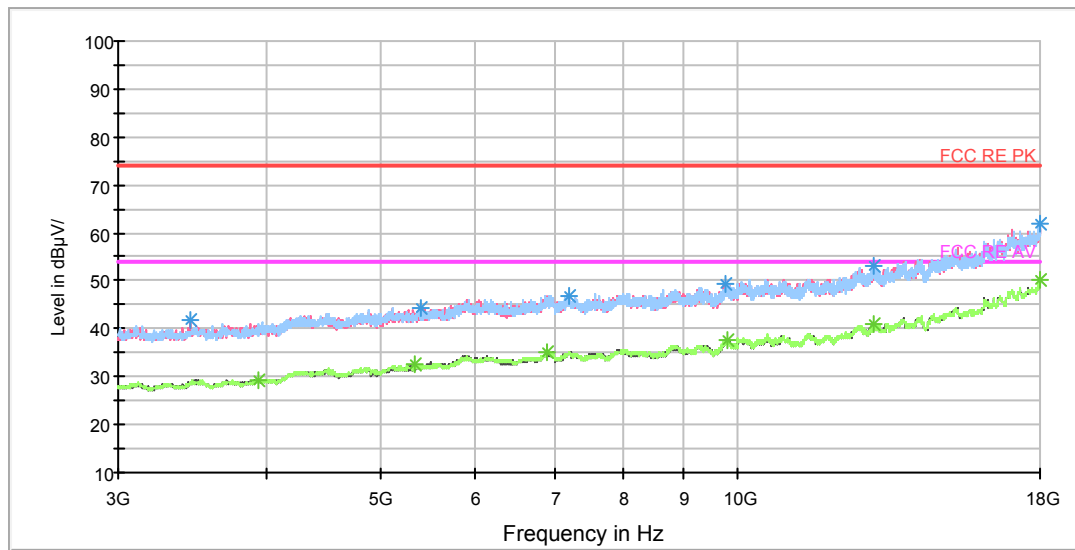
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1191.000000	41.4	101.0	H	0.0	49.6	-8.2	32.6	74
1422.750000	42.5	101.0	H	0.0	49.4	-6.9	31.5	74
1619.750000	44.6	101.0	H	27.0	49.4	-4.8	29.4	74
1959.500000	46.3	101.0	V	343.0	49.5	-3.2	27.7	74
2627.250000	49.1	101.0	V	279.0	49.2	-0.1	24.9	74
2984.500000	52.4	101.0	H	203.0	54.6	-2.2	21.6	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)
1193.500000	29.4	101.0	V	279.0	37.6	-8.2	24.6	54
1423.250000	30.3	101.0	H	156.0	37.2	-6.9	23.7	54
1632.500000	32.5	101.0	V	325.0	37.2	-4.7	21.5	54
1994.750000	34.2	101.0	H	0.0	37.4	-3.2	19.8	54
2648.750000	37.9	101.0	V	9.0	38.3	-0.4	16.1	54
2983.750000	40.9	101.0	V	148.0	43.1	-2.2	13.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

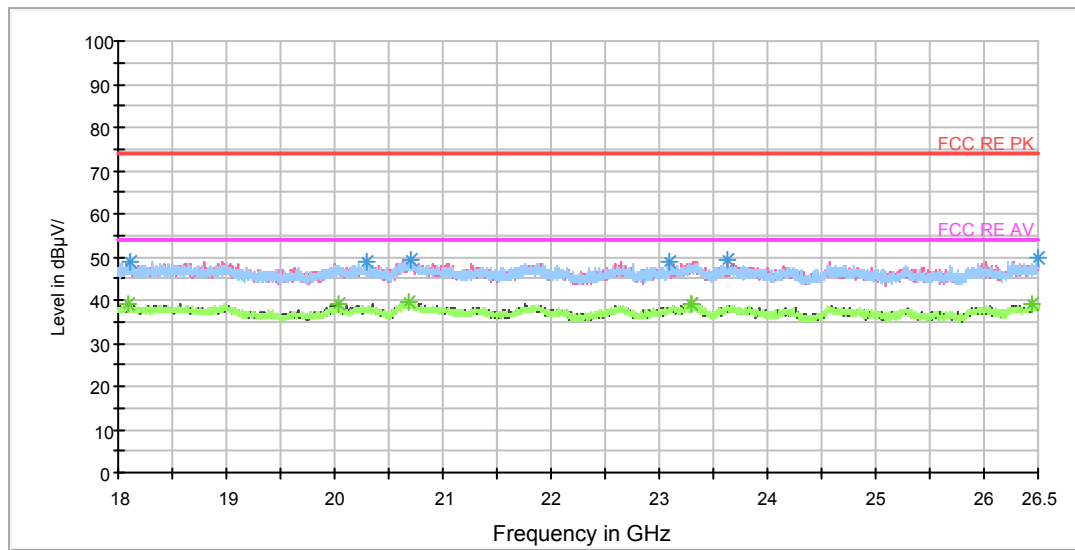
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3451.875000	41.8	200.0	V	0.0	42.7	-0.9	32.2	74
5405.625000	44.5	200.0	H	158.0	48.2	-3.7	29.5	74
7209.375000	46.9	200.0	V	126.0	55.6	-8.7	27.1	74
9776.250000	49.3	200.0	V	4.0	61.3	-12.0	24.7	74
13036.875000	53.0	200.0	H	0.0	69.2	-16.2	21.0	74
17998.125000	62.1	200.0	H	0.0	87.5	-25.4	11.9	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)
3943.125000	29.4	200.0	V	34.0	29.5	-0.1	24.6	54
5340.000000	32.5	200.0	H	0.0	36.3	-3.8	21.5	54
6900.000000	35.2	200.0	H	143.0	42.2	-7.0	18.8	54
9796.875000	37.7	100.0	V	126.0	49.9	-12.2	16.3	54
13014.375000	41.0	200.0	H	358.0	57.2	-16.2	13.0	54
17996.250000	50.1	100.0	V	313.0	75.5	-25.4	3.9	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)
18114.750000	48.9	H	65.0	51.2	-2.3	25.1	74
20295.000000	48.7	V	237.0	54.7	-6.0	25.3	74
20695.562500	49.3	H	99.0	56.0	-6.7	24.7	74
23097.875000	48.7	V	0.0	54.8	-6.1	25.3	74
23631.250000	49.3	V	297.0	55.2	-5.9	24.7	74
26500.000000	49.9	H	17.0	55.4	-5.5	24.1	74

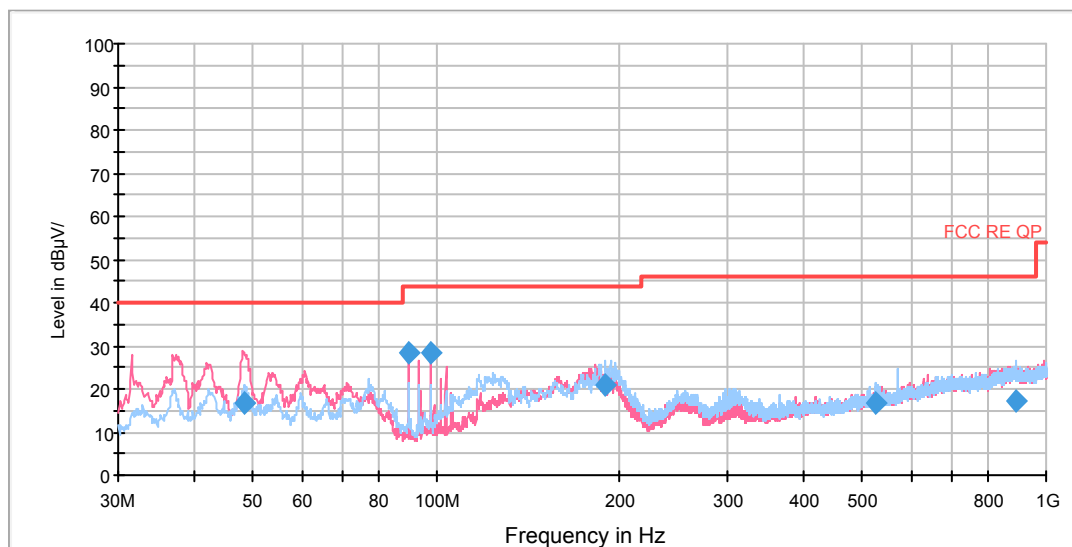
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18092.437500	39.0	V	270.0	41.2	-2.2	15.0	54
20028.312500	39.1	H	338.0	44.8	-5.7	14.9	54
20688.125000	39.6	V	136.0	46.3	-6.7	14.4	54
23293.375000	39.2	H	17.0	45.2	-6.0	14.8	54
23301.875000	39.2	H	4.0	45.2	-6.0	14.8	54
26450.062500	39.1	V	150.0	44.5	-5.4	14.9	54

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

802.11n (HT20) CH6

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

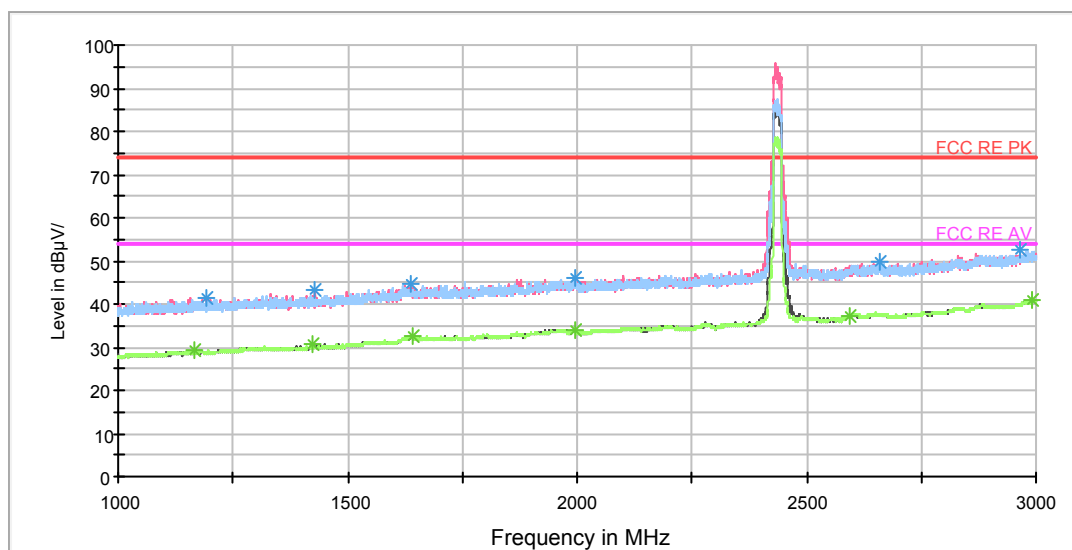
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
48.186416	16.5	101.0	V	131.0	36.7	-20.2	23.5	40.0
89.952756	28.6	101.0	V	22.0	55.5	-26.9	14.9	43.5
97.733356	28.2	101.0	V	182.0	53.6	-25.4	15.3	43.5
189.287300	21.1	101.0	H	35.0	48.4	-27.3	22.4	43.5
527.005500	16.5	177.0	H	100.0	35.1	-18.6	29.5	46.0
891.469750	17.0	126.0	H	7.0	29.7	-12.7	29.0	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



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

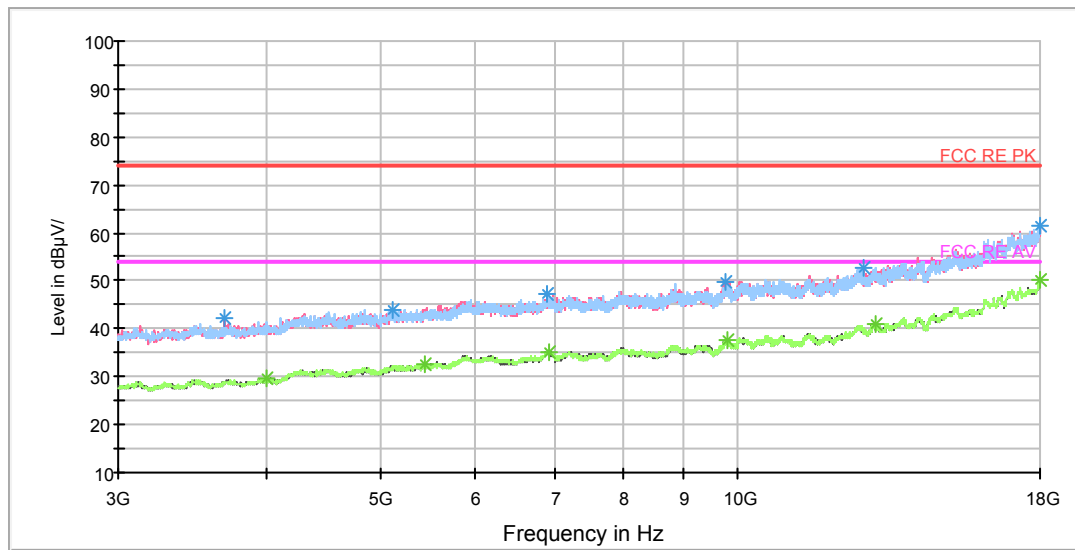
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1191.750000	41.3	101.0	V	159.0	49.5	-8.2	32.7	74
1430.000000	43.1	101.0	V	282.0	50.0	-6.9	30.9	74
1636.750000	44.6	101.0	V	345.0	49.3	-4.7	29.4	74
1993.500000	46.1	101.0	H	43.0	49.4	-3.3	27.9	74
2657.750000	50.0	101.0	H	0.0	50.4	-0.4	24.0	74
2966.250000	52.3	101.0	V	0.0	54.5	-2.2	21.7	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)
1165.000000	29.3	101.0	V	72.0	37.5	-8.2	24.7	54
1422.250000	30.5	101.0	V	82.0	37.4	-6.9	23.5	54
1640.000000	32.6	101.0	H	89.0	37.3	-4.7	21.4	54
1994.250000	34.2	101.0	H	15.0	37.4	-3.2	19.8	54
2594.500000	37.4	101.0	V	253.0	37.6	-0.2	16.6	54
2992.750000	40.9	101.0	H	52.0	43.1	-2.2	13.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

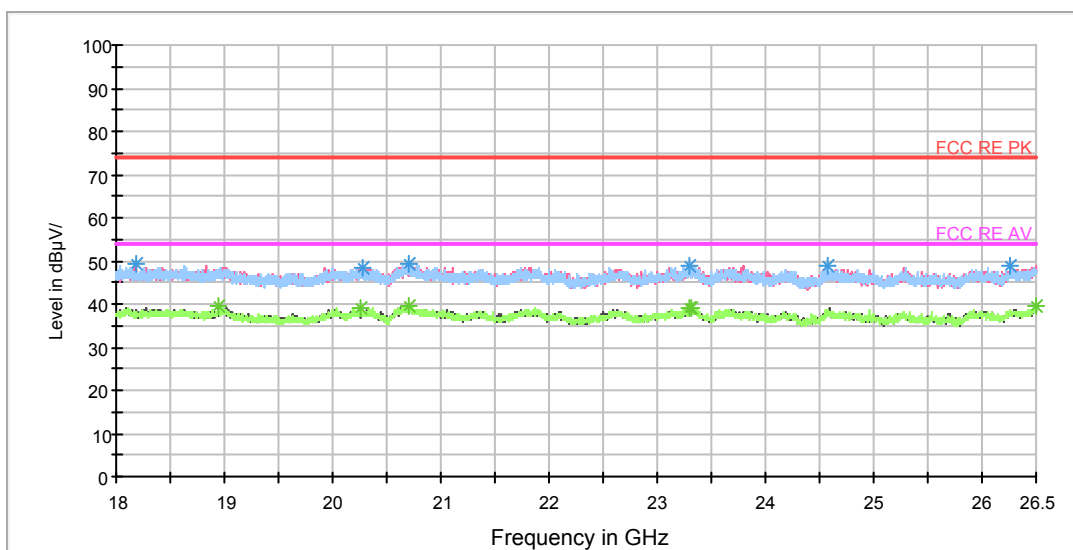
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3684.375000	42.0	100.0	V	171.0	42.4	-0.4	32.0	74
5120.625000	44.0	100.0	V	278.0	47.6	-3.6	30.0	74
6915.000000	47.3	201.0	V	19.0	54.2	-6.9	26.7	74
9783.750000	49.9	100.0	V	324.0	62.0	-12.1	24.1	74
12768.750000	52.6	201.0	V	4.0	67.7	-15.1	21.4	74
17985.000000	61.7	100.0	V	324.0	86.9	-25.2	12.3	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)
3997.500000	29.9	201.0	V	265.0	30.4	0.5	24.1	54
5437.500000	32.4	201.0	H	316.0	36.2	3.8	21.6	54
6922.500000	35.3	201.0	H	0.0	42.1	6.8	18.7	54
9810.000000	37.8	201.0	V	141.0	50.0	12.2	16.2	54
13068.750000	41.0	201.0	V	202.0	57.2	16.2	13.0	54
17994.375000	50.1	201.0	V	0.0	75.4	25.3	3.9	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)
18183.812500	49.5	V	296.0	52.1	-2.6	24.5	74
20270.562500	48.5	H	18.0	54.4	-5.9	25.5	74
20699.812500	49.4	H	84.0	56.1	-6.7	24.6	74
23290.187500	48.7	H	199.0	54.7	-6.0	25.3	74
24579.000000	48.9	H	118.0	54.9	-6.0	25.1	74
26268.375000	48.8	H	343.0	54.2	-5.4	25.2	74

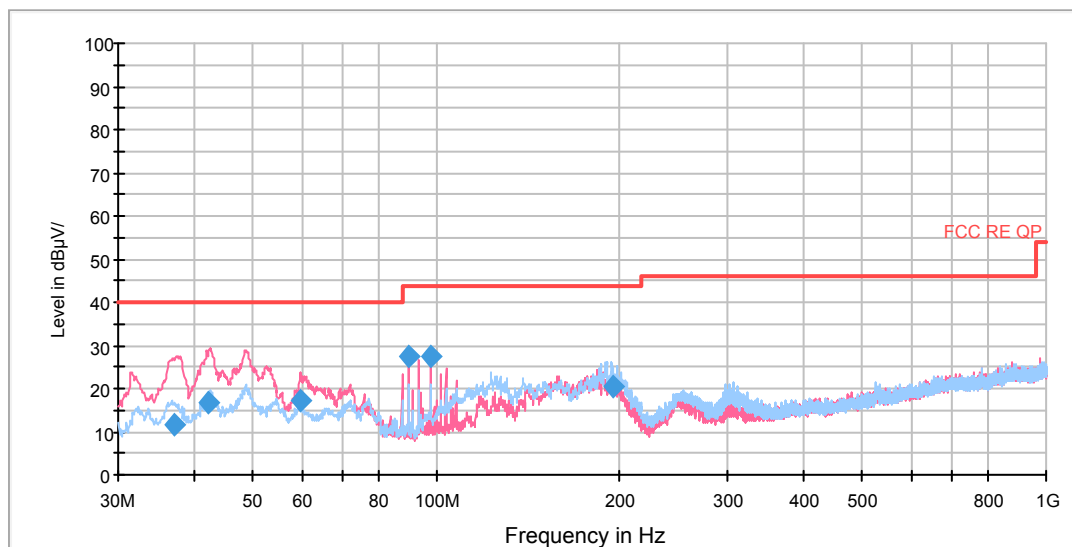
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18945.625000	39.5	V	201.0	44.4	-4.9	14.5	54
20268.437500	39.1	H	224.0	45.0	-5.9	14.9	54
20704.062500	39.5	H	78.0	46.2	-6.7	14.5	54
23292.312500	39.0	H	51.0	45.0	-6.0	15.0	54
23313.562500	39.3	V	104.0	45.3	-6.0	14.7	54
26492.562500	39.7	H	138.0	45.1	-5.4	14.3	54

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

802.11n (HT20) CH11

RE 30M-1GHz QP



Radiates Emission from 30MHz to 1GHz

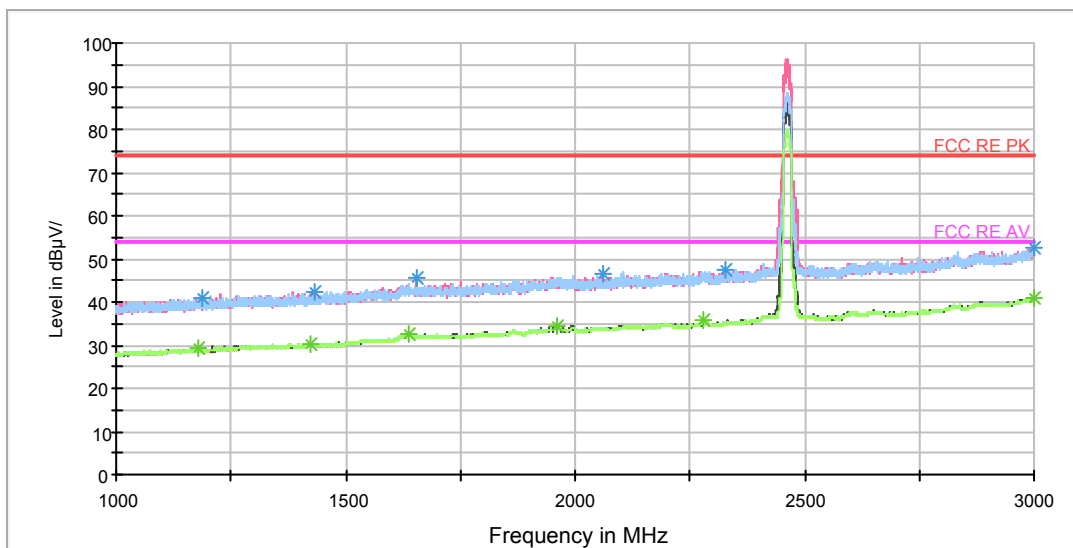
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
36.978972	11.7	100.0	V	296.0	33.8	-22.1	28.3	40.0
42.301581	16.6	100.0	V	265.0	37.0	-20.4	23.4	40.0
59.855516	17.0	101.0	V	168.0	40.2	-23.2	23.0	40.0
89.952756	27.4	126.0	V	34.0	54.3	-26.9	16.1	43.5
97.733356	27.6	102.0	V	149.0	53.0	-25.4	15.9	43.5
194.043281	20.5	102.0	H	33.0	47.1	-26.6	23.0	43.5

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



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

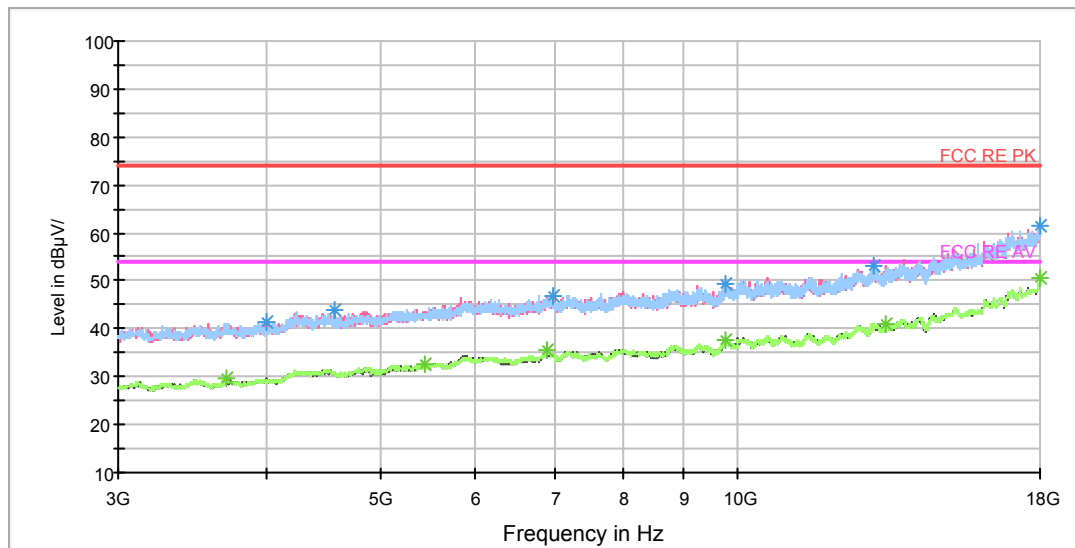
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1187.000000	41.1	101.0	H	36.0	49.2	-8.1	32.9	74
1431.750000	42.3	101.0	V	241.0	49.2	-6.9	31.7	74
1653.000000	45.4	101.0	V	334.0	50.5	-5.1	28.6	74
2060.500000	46.3	101.0	V	139.0	49.4	-3.1	27.7	74
2329.500000	47.5	101.0	V	195.0	49.0	-1.5	26.5	74
2998.500000	52.7	101.0	V	204.0	55.0	-2.3	21.3	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)
1177.750000	29.5	101.0	H	109.0	37.5	-8.0	24.5	54
1421.500000	30.3	101.0	V	0.0	37.2	-6.9	23.7	54
1637.500000	32.5	101.0	H	165.0	37.2	-4.7	21.5	54
1960.250000	34.3	101.0	V	53.0	37.5	-3.2	19.7	54
2281.250000	35.7	101.0	H	109.0	37.1	-1.4	18.3	54
2998.750000	41.0	101.0	H	165.0	43.3	-2.3	13.0	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

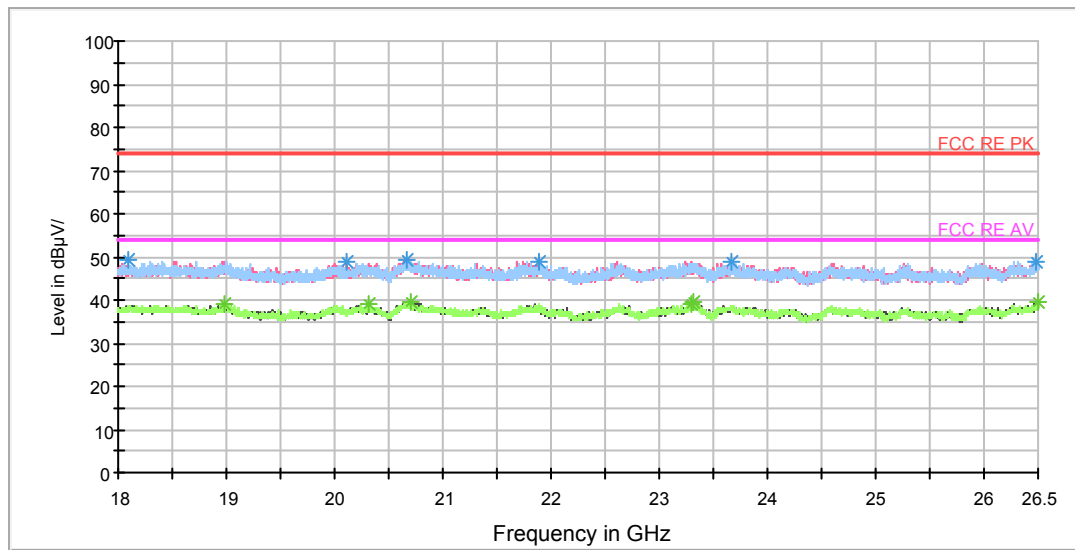
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3997.500000	41.4	200.0	V	110.0	41.9	-0.5	32.6	74
4567.500000	44.0	101.0	V	345.0	46.3	-2.3	30.0	74
6980.625000	46.9	101.0	V	299.0	53.4	-6.5	27.1	74
9757.500000	49.3	101.0	H	185.0	61.0	-11.7	24.7	74
13020.000000	53.1	200.0	V	233.0	69.3	-16.2	20.9	74
17996.250000	61.3	200.0	H	127.0	86.7	-25.4	12.7	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)
3705.000000	29.5	200.0	V	94.0	29.8	-0.3	24.5	54
5443.125000	32.6	101.0	V	0.0	36.4	-3.8	21.4	54
6913.125000	35.4	200.0	V	0.0	42.3	-6.9	18.6	54
9750.000000	37.7	200.0	V	140.0	49.4	-11.7	16.3	54
13351.875000	41.0	101.0	V	0.0	56.8	-15.8	13.0	54
17992.500000	50.4	101.0	H	1.0	75.7	-25.3	3.6	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)
18099.875000	49.2	H	211.0	51.4	-2.2	24.8	74
20115.437500	48.9	V	148.0	54.7	-5.8	25.1	74
20663.687500	49.2	H	91.0	55.8	-6.6	24.8	74
21889.812500	49.0	V	329.0	57.0	-8.0	25.0	74
23658.875000	48.9	H	185.0	54.8	-5.9	25.1	74
26490.437500	48.9	H	172.0	54.3	-5.4	25.1	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18977.500000	39.0	V	336.0	44.0	-5.0	15.0	54
20319.437500	38.8	H	172.0	44.8	-6.0	15.2	54
20706.187500	39.8	H	0.0	46.5	-6.7	14.2	54
23288.062500	39.1	V	196.0	45.1	-6.0	14.9	54
23317.812500	39.4	H	91.0	45.4	-6.0	14.6	54
26492.562500	39.3	H	0.0	44.7	-5.4	14.7	54

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

5.8. Conducted Emission

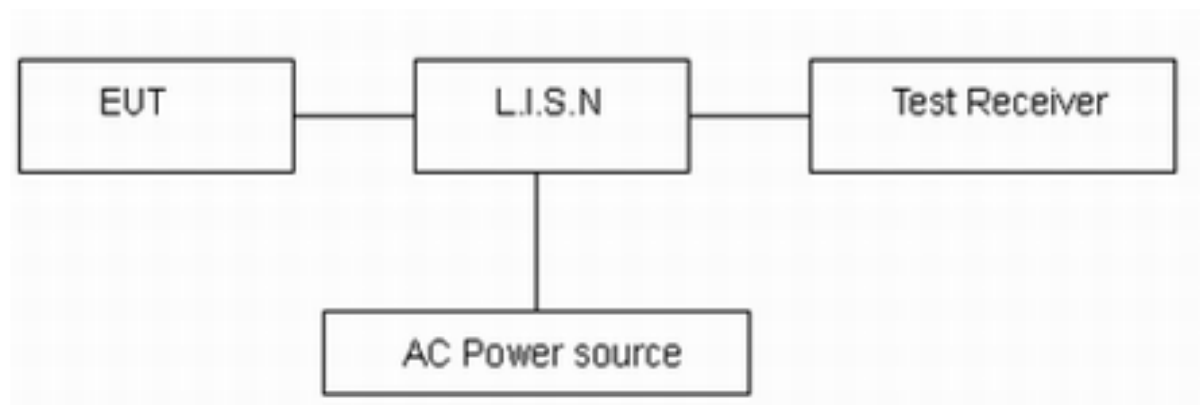
Ambient condition

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 L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, 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

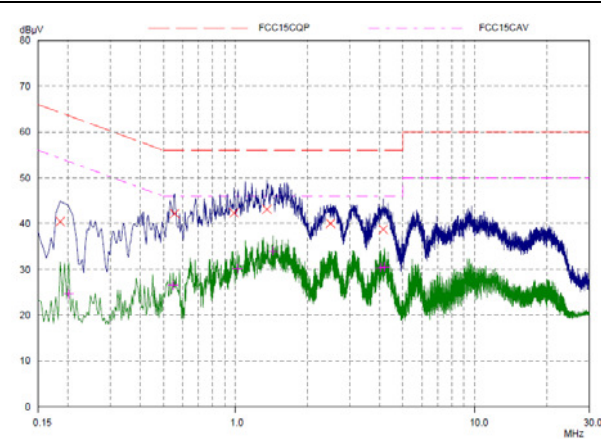
*: Decreases with the logarithm of the frequency.

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.

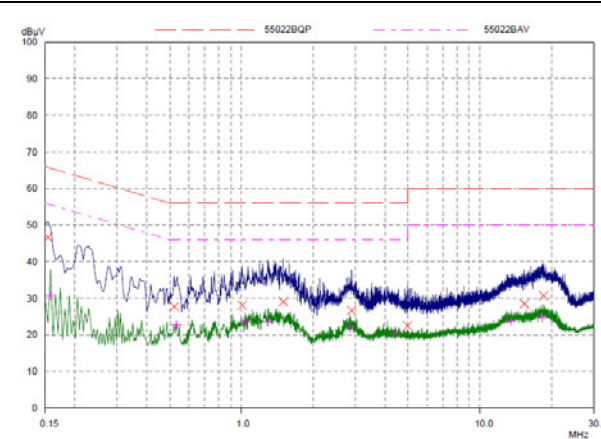
**Test Results:**

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

802.11b, Channel No.: 1 L Line**Final Measurement Results**

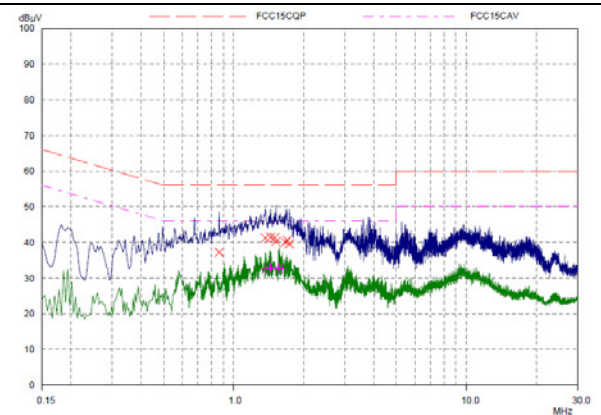
Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
0.18515	40.45	64.25	23.80	L1	gnd
0.55625	42.18	56.00	13.82	L1	gnd
0.98593	42.32	56.00	13.68	L1	gnd
1.35312	43.15	56.00	12.85	L1	gnd
2.49375	40.04	56.00	15.96	L1	gnd
4.14217	38.70	56.00	17.30	L1	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
0.20078	24.64	53.58	28.94	L1	gnd
0.54843	26.50	46.00	19.50	L1	gnd
1.01718	30.25	46.00	15.75	L1	gnd
1.43515	33.99	46.00	12.01	L1	gnd
4.0289	30.39	46.00	15.61	L1	gnd
4.18905	30.55	46.00	15.45	L1	gnd

802.11b, Channel No.: 1 N Line**Final Measurement Results**

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
0.1539	46.62	65.79	19.17	N	gnd
0.52109	27.69	56.00	28.31	N	gnd
1.00546	28.05	56.00	27.95	N	gnd
1.49375	29.06	56.00	26.94	N	gnd
2.89218	26.62	56.00	29.38	N	gnd
4.9664	22.43	56.00	33.57	N	gnd
15.35312	28.49	60.00	31.51	N	gnd
18.48984	30.71	60.00	29.29	N	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
0.15781	30.71	55.58	24.87	N	gnd
0.53281	22.68	46.00	23.32	N	gnd
1.03281	23.60	46.00	22.40	N	gnd
1.28671	23.69	46.00	22.31	N	gnd
2.85312	22.10	46.00	23.90	N	gnd
4.41171	20.42	46.00	25.58	N	gnd
13.54843	23.85	50.00	26.15	N	gnd
18.22421	24.80	50.00	25.20	N	gnd

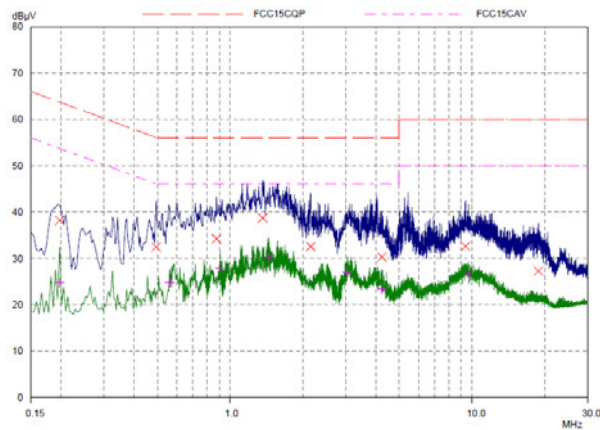
802.11b, Channel No.: 6 L Line**Final Measurement Results**

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
0.86484	37.20	56.00	18.80	L1	gnd
1.36484	41.26	56.00	14.74	L1	gnd
1.43906	41.47	56.00	14.53	L1	gnd
1.49765	41.33	56.00	14.67	L1	gnd
1.51718	40.22	56.00	15.78	L1	gnd
1.69953	40.04	56.00	15.96	L1	gnd
1.69296	40.68	56.00	15.32	L1	gnd
1.73203	39.57	56.00	16.43	L1	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
1.36484	32.56	46.00	13.44	L1	gnd
1.42734	32.63	46.00	13.37	L1	gnd
1.43515	33.07	46.00	12.93	L1	gnd
1.44296	32.76	46.00	13.24	L1	gnd
1.55625	32.72	46.00	13.28	L1	gnd
1.56406	33.10	46.00	12.90	L1	gnd
1.57187	32.67	46.00	13.33	L1	gnd
1.61875	32.60	46.00	13.40	L1	gnd



802.11b, Channel No.: 6 N Line

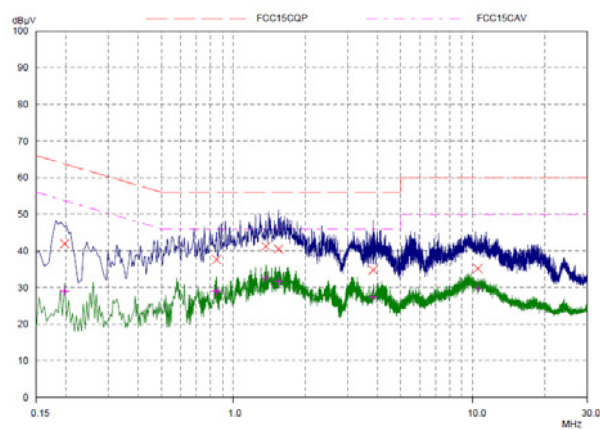


Final Measurement Results

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Phase -	PE -
0.19687	38.22	63.74	25.52	N	gnd
0.49375	32.48	56.10	23.62	N	gnd
0.87656	34.25	56.00	21.75	N	gnd
1.36093	38.73	56.00	17.27	N	gnd
2.15	32.58	56.00	23.42	N	gnd
4.23203	30.33	56.00	25.67	N	gnd
9.38828	32.64	60.00	27.36	N	gnd
18.82187	27.30	60.00	32.70	N	gnd

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB	Phase -	PE -
0.19687	24.80	53.74	28.94	N	gnd
0.56015	24.79	46.00	21.21	N	gnd
0.90781	27.87	46.00	18.13	N	gnd
1.43906	30.26	46.00	15.74	N	gnd
3.05234	27.06	46.00	18.94	N	gnd
4.22812	23.53	46.00	22.47	N	gnd
9.65	26.69	50.00	23.31	N	gnd

802.11b, Channel No.: 11 L Line

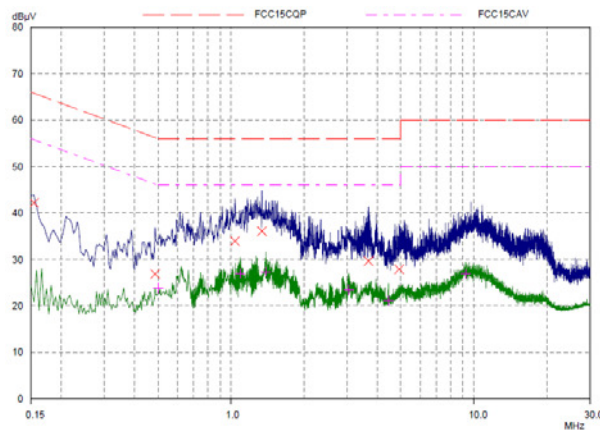


Final Measurement Results

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Phase -	PE -
0.19687	41.97	63.74	21.77	L1	gnd
0.84921	37.61	56.00	18.39	L1	gnd
1.36484	41.28	56.00	14.72	L1	gnd
1.54062	40.52	56.00	15.48	L1	gnd
3.8375	34.74	56.00	21.26	L1	gnd
10.48984	35.18	60.00	24.82	L1	gnd

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB	Phase -	PE -
0.19687	28.91	53.74	24.83	L1	gnd
0.84921	28.88	46.00	17.12	L1	gnd
1.36484	32.62	46.00	13.38	L1	gnd
1.54062	31.67	46.00	14.33	L1	gnd
3.8375	27.39	46.00	18.61	L1	gnd
10.48984	29.85	50.00	20.15	L1	gnd

802.11b, Channel No.: 11 N Line



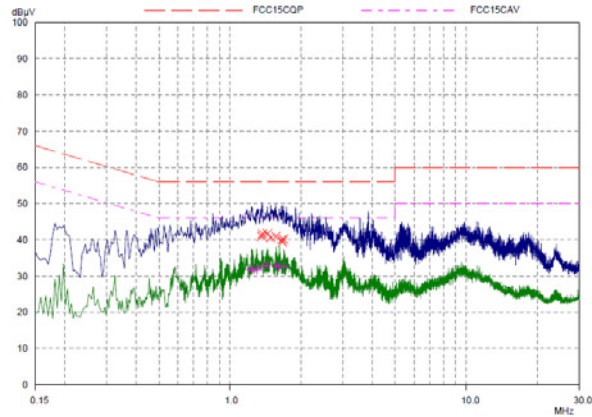
Final Measurement Results

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Phase -	PE -
0.1539	42.18	65.79	23.61	N	gnd
0.48593	26.85	56.24	29.39	N	gnd
1.03671	33.94	56.00	22.06	N	gnd
1.3375	36.09	56.00	19.91	N	gnd
3.67734	29.63	56.00	26.37	N	gnd
4.91953	27.90	56.00	28.10	N	gnd

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB	Phase -	PE -
0.50156	23.84	46.00	22.16	N	gnd
1.0875	26.97	46.00	19.03	N	gnd
1.39218	27.32	46.00	18.68	N	gnd
3.04453	23.47	46.00	22.53	N	gnd
4.44296	21.13	46.00	24.87	N	gnd
9.24375	26.86	50.00	23.14	N	gnd



802.11g, Channel No.: 1 L Line

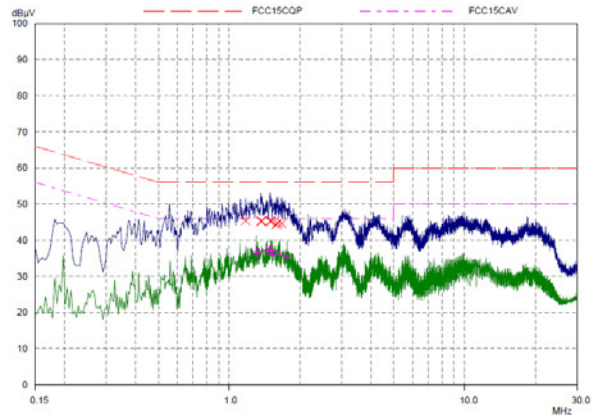


Final Measurement Results

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Phase -	PE -
1.36093	41.00	56.00	15.00	L1	gnd
1.36875	41.68	56.00	14.32	L1	gnd
1.43906	41.71	56.00	14.29	L1	gnd
1.48593	40.58	56.00	15.42	L1	gnd
1.56015	40.94	56.00	15.06	L1	gnd
1.6539	40.10	56.00	15.90	L1	gnd
1.66171	39.39	56.00	16.61	L1	gnd
1.68515	40.14	56.00	15.86	L1	gnd

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB	Phase -	PE -
1.23203	31.81	46.00	14.19	L1	gnd
1.23984	32.01	46.00	13.99	L1	gnd
1.29453	31.82	46.00	14.18	L1	gnd
1.37656	32.81	46.00	13.19	L1	gnd
1.43906	33.07	46.00	12.93	L1	gnd
1.56796	32.98	46.00	13.02	L1	gnd
1.61484	32.48	46.00	13.52	L1	gnd
1.68906	32.55	46.00	13.45	L1	gnd

802.11g, Channel No.: 1 N Line

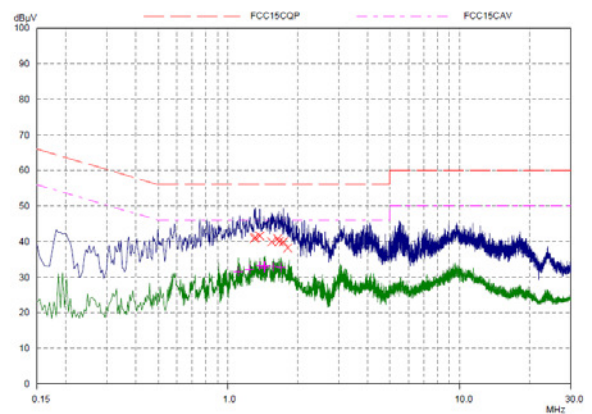


Final Measurement Results

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Phase -	PE -
1.17343	45.46	56.00	10.54	N	gnd
1.36093	45.29	56.00	10.71	N	gnd
1.37656	45.21	56.00	10.79	N	gnd
1.48684	45.34	56.00	10.66	N	gnd
1.50937	45.26	56.00	10.74	N	gnd
1.58359	44.40	56.00	11.60	N	gnd
1.60703	44.65	56.00	11.35	N	gnd
1.68953	44.62	56.00	11.38	N	gnd

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB	Phase -	PE -
1.30234	36.08	46.00	9.14	N	gnd
1.31796	36.39	46.00	9.61	N	gnd
1.43906	37.27	46.00	8.73	N	gnd
1.49375	37.31	46.00	8.69	N	gnd
1.50937	37.16	46.00	8.84	N	gnd
1.525	36.04	46.00	9.96	N	gnd
1.63828	36.22	46.00	9.78	N	gnd
1.75937	35.55	46.00	10.45	N	gnd

802.11g, Channel No.: 6 L Line



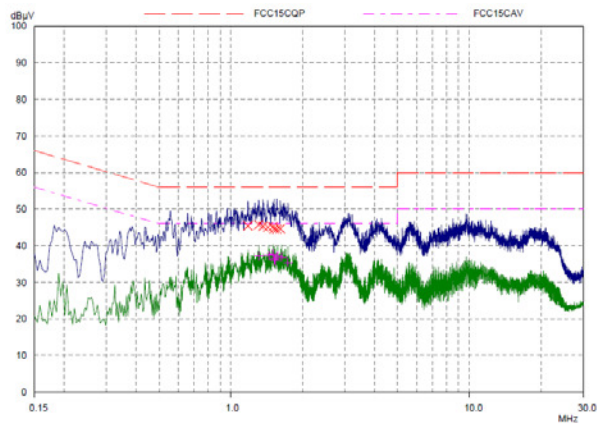
Final Measurement Results

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Phase -	PE -
1.29843	40.88	56.00	15.12	L1	gnd
1.31015	41.18	56.00	14.82	L1	gnd
1.36875	41.58	56.00	14.42	L1	gnd
1.54062	39.88	56.00	16.12	L1	gnd
1.63828	40.80	56.00	15.20	L1	gnd
1.65781	39.92	56.00	16.08	L1	gnd
1.73203	39.91	56.00	16.09	L1	gnd
1.81015	38.21	56.00	17.79	L1	gnd

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB	Phase -	PE -
1.10703	31.59	46.00	14.41	L1	gnd
1.23593	32.15	46.00	13.85	L1	gnd
1.37265	33.12	46.00	12.88	L1	gnd
1.42734	32.57	46.00	13.43	L1	gnd
1.43515	33.25	46.00	12.75	L1	gnd
1.44296	33.01	46.00	12.99	L1	gnd
1.57187	32.92	46.00	13.08	L1	gnd
1.68906	32.68	46.00	13.32	L1	gnd



802.11g, Channel No.: 6 N Line

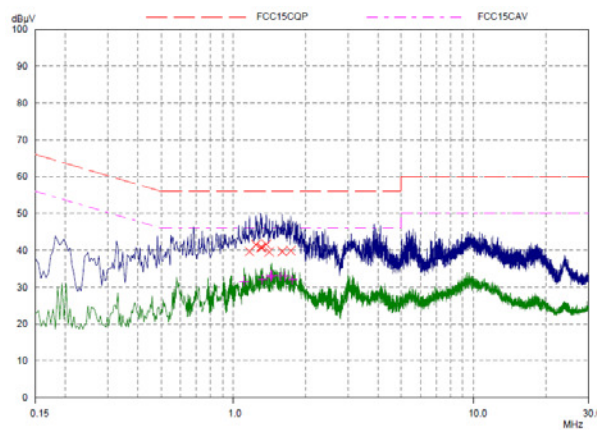


Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
1.17734	45.42	56.00	10.58	N	gnd
1.30625	45.75	56.00	10.25	N	gnd
1.36093	45.33	56.00	10.67	N	gnd
1.42734	45.10	56.00	10.90	N	gnd
1.49765	45.14	56.00	10.86	N	gnd
1.51718	44.64	56.00	11.36	N	gnd
1.55625	44.56	56.00	11.44	N	gnd
1.60703	44.67	56.00	11.33	N	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
1.31015	37.17	46.00	8.83	N	gnd
1.43906	37.42	46.00	8.58	N	gnd
1.50156	37.67	46.00	8.33	N	gnd
1.51718	36.46	46.00	9.54	N	gnd
1.53281	35.96	46.00	10.04	N	gnd
1.56796	37.24	46.00	8.76	N	gnd
1.63046	36.94	46.00	9.06	N	gnd
1.73203	35.46	46.00	10.54	N	gnd

802.11g, Channel No.: 11 L Line

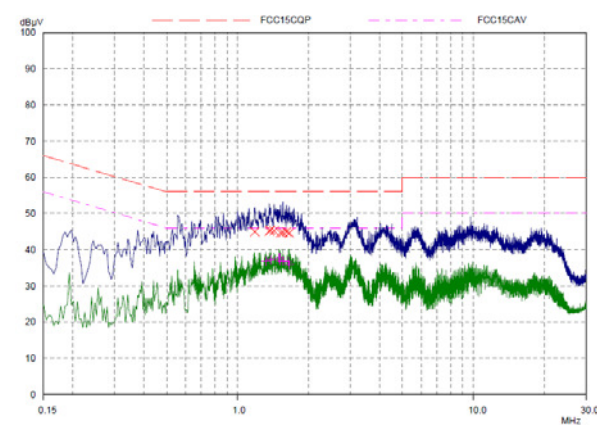


Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
1.16562	39.66	56.00	16.34	L1	gnd
1.23984	41.51	56.00	14.49	L1	gnd
1.29843	40.72	56.00	15.28	L1	gnd
1.31406	40.74	56.00	15.26	L1	gnd
1.36875	41.56	56.00	14.44	L1	gnd
1.40781	39.56	56.00	16.44	L1	gnd
1.59531	39.65	56.00	16.35	L1	gnd
1.73203	39.85	56.00	16.15	L1	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
1.10703	31.52	46.00	14.48	L1	gnd
1.32187	32.10	46.00	13.90	L1	gnd
1.42734	32.70	46.00	13.30	L1	gnd
1.43515	33.31	46.00	12.69	L1	gnd
1.44296	33.13	46.00	12.87	L1	gnd
1.57187	32.92	46.00	13.08	L1	gnd
1.63437	32.98	46.00	13.02	L1	gnd
1.75937	32.04	46.00	13.96	L1	gnd

802.11g, Channel No.: 11 N Line



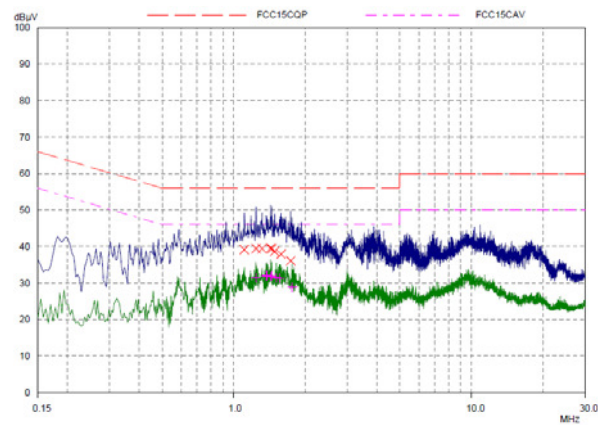
Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
1.18125	45.02	56.00	10.98	N	gnd
1.36093	45.17	56.00	10.83	N	gnd
1.37656	45.45	56.00	10.55	N	gnd
1.42734	45.24	56.00	10.76	N	gnd
1.52109	44.68	56.00	11.32	N	gnd
1.55625	44.76	56.00	11.24	N	gnd
1.61093	45.01	56.00	10.99	N	gnd
1.6539	44.66	56.00	11.34	N	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
1.31406	36.86	46.00	9.14	N	gnd
1.37656	37.19	46.00	8.81	N	gnd
1.49765	37.67	46.00	8.33	N	gnd
1.50546	37.74	46.00	8.26	N	gnd
1.51328	37.01	46.00	8.99	N	gnd
1.55234	36.93	46.00	9.07	N	gnd
1.63437	36.71	46.00	9.29	N	gnd
1.6539	35.89	46.00	10.11	N	gnd



802.11n(HT20), Channel No.: 1 L Line

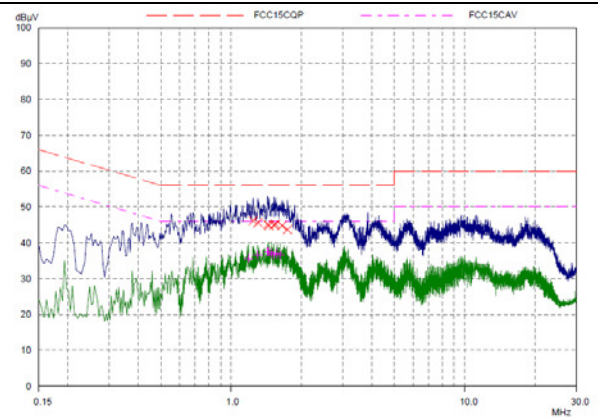


Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
1.10703	39.16	56.00	16.84	L1	gnd
1.23984	39.46	56.00	16.54	L1	gnd
1.31406	39.45	56.00	16.55	L1	gnd
1.42734	39.50	56.00	16.50	L1	gnd
1.44687	39.43	56.00	16.57	L1	gnd
1.48593	38.69	56.00	17.31	L1	gnd
1.57968	37.92	56.00	18.08	L1	gnd
1.73593	36.11	56.00	19.89	L1	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
1.23593	31.53	46.00	14.47	L1	gnd
1.36484	31.91	46.00	14.09	L1	gnd
1.38046	32.11	46.00	13.89	L1	gnd
1.42734	31.78	46.00	14.22	L1	gnd
1.44296	31.99	46.00	14.01	L1	gnd
1.50937	31.53	46.00	14.47	L1	gnd
1.55625	31.38	46.00	14.62	L1	gnd
1.75937	28.84	46.00	17.16	L1	gnd

802.11n(HT20), Channel No.: 1 N Line

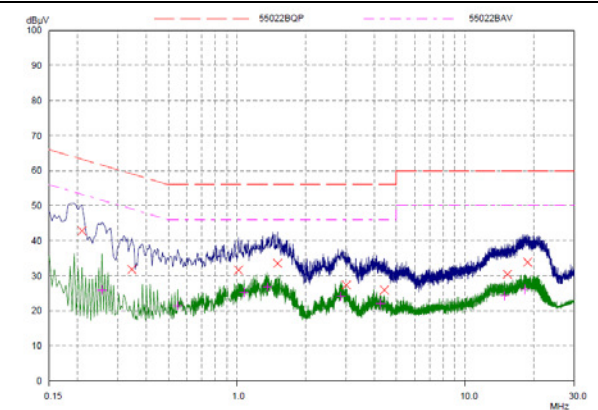


Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
1.23984	46.17	56.00	9.83	N	gnd
1.30234	45.65	56.00	10.35	N	gnd
1.43125	45.14	56.00	10.86	N	gnd
1.45078	44.86	56.00	11.14	N	gnd
1.52109	45.02	56.00	10.98	N	gnd
1.54843	45.22	56.00	10.78	N	gnd
1.65	44.80	56.00	11.20	N	gnd
1.73984	43.70	56.00	12.30	N	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
1.18515	35.65	46.00	10.35	N	gnd
1.29843	36.63	46.00	9.37	N	gnd
1.43515	37.57	46.00	8.43	N	gnd
1.44296	37.42	46.00	8.58	N	gnd
1.48984	37.16	46.00	8.84	N	gnd
1.52109	36.54	46.00	9.46	N	gnd
1.57187	37.02	46.00	8.98	N	gnd
1.61875	36.55	46.00	9.45	N	gnd

802.11n(HT20), Channel No.: 6 L Line



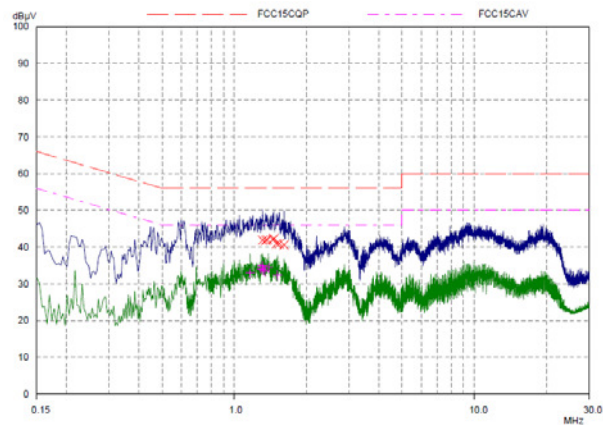
Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
0.20859	42.84	63.26	20.42	L1	gnd
0.34531	31.81	59.07	27.26	L1	gnd
1.01328	31.61	56.00	24.39	L1	gnd
1.50546	33.55	56.00	22.45	L1	gnd
3.01328	27.37	56.00	28.63	L1	gnd
4.42343	25.94	56.00	30.06	L1	gnd
15.32968	30.42	60.00	29.58	L1	gnd
18.79062	33.89	60.00	26.11	L1	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
0.25546	26.00	51.58	25.58	L1	gnd
0.54843	21.51	46.00	24.49	L1	gnd
1.07187	25.31	46.00	20.69	L1	gnd
1.35312	26.87	46.00	19.13	L1	gnd
2.85312	24.17	46.00	21.83	L1	gnd
4.24375	22.04	46.00	23.96	L1	gnd
14.88437	24.35	50.00	25.65	L1	gnd
18.25546	26.13	50.00	23.87	L1	gnd



802.11n(HT20), Channel No.: 6 N Line

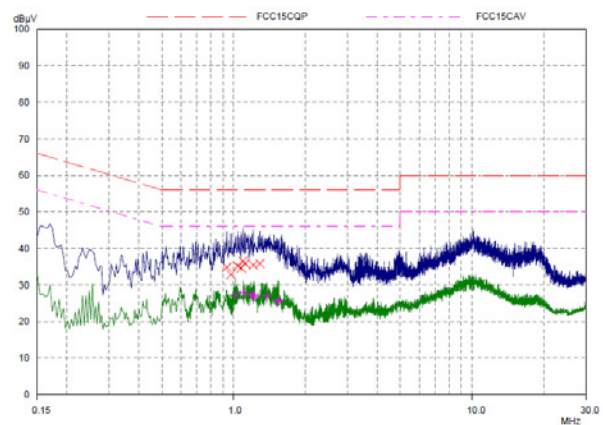


Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
1.31015	41.84	56.00	14.16	N	gnd
1.34921	41.82	56.00	14.18	N	gnd
1.36875	42.03	56.00	13.97	N	gnd
1.44687	42.02	56.00	13.98	N	gnd
1.45859	42.28	56.00	13.72	N	gnd
1.49765	40.95	56.00	15.05	N	gnd
1.53671	40.93	56.00	15.07	N	gnd
1.61093	40.61	56.00	15.39	N	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
1.16171	32.91	46.00	13.09	N	gnd
1.29062	34.11	46.00	11.89	N	gnd
1.30625	34.83	46.00	11.17	N	gnd
1.31406	33.84	46.00	12.16	N	gnd
1.32187	33.80	46.00	12.20	N	gnd
1.3375	33.41	46.00	12.59	N	gnd
1.38437	34.45	46.00	11.55	N	gnd
1.51328	32.34	46.00	13.66	N	gnd

802.11n(HT20), Channel No.: 11 L Line

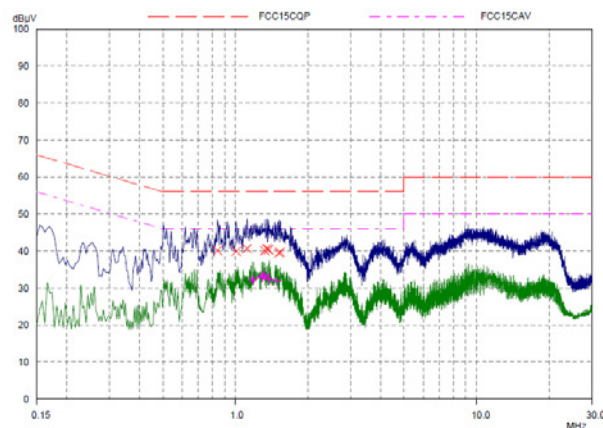


Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
0.93515	34.85	56.00	21.15	L1	gnd
0.97421	32.88	56.00	23.12	L1	gnd
1.04062	35.19	56.00	20.81	L1	gnd
1.07578	34.63	56.00	21.37	L1	gnd
1.09531	36.49	56.00	19.51	L1	gnd
1.11484	35.91	56.00	20.09	L1	gnd
1.20859	35.44	56.00	20.56	L1	gnd
1.28671	35.89	56.00	20.11	L1	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
1.01718	27.17	46.00	18.83	L1	gnd
1.09531	27.76	46.00	18.24	L1	gnd
1.17734	27.37	46.00	18.63	L1	gnd
1.20859	27.20	46.00	18.80	L1	gnd
1.22421	26.71	46.00	19.29	L1	gnd
1.37656	27.05	46.00	18.95	L1	gnd
1.5289	25.43	46.00	20.57	L1	gnd
1.54453	25.65	46.00	20.35	L1	gnd

802.11n(HT20), Channel No.: 11 N Line



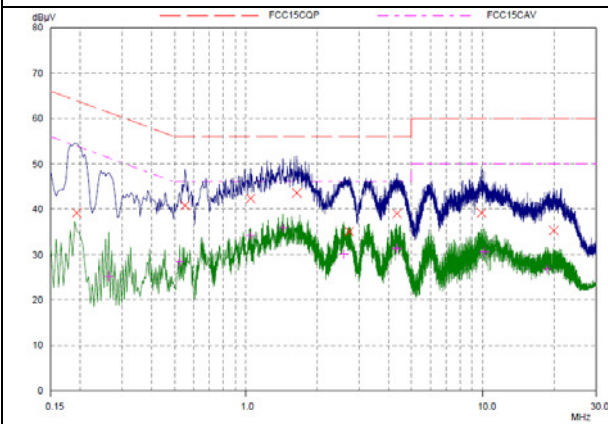
Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
0.8414	40.16	56.00	15.84	N	gnd
1.00546	39.95	56.00	16.05	N	gnd
1.11484	40.68	56.00	15.32	N	gnd
1.32187	40.12	56.00	15.88	N	gnd
1.34921	40.69	56.00	15.31	N	gnd
1.36875	40.41	56.00	15.59	N	gnd
1.51328	39.52	56.00	16.48	N	gnd
1.53281	39.72	56.00	16.28	N	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
1.17343	32.22	46.00	13.78	N	gnd
1.18906	32.47	46.00	13.53	N	gnd
1.28671	32.92	46.00	13.08	N	gnd
1.30234	33.28	46.00	12.72	N	gnd
1.31796	33.62	46.00	12.38	N	gnd
1.36484	32.62	46.00	13.38	N	gnd
1.38046	32.37	46.00	13.63	N	gnd
1.47812	31.99	46.00	14.01	N	gnd



BLE, Channel No.: 0 L Line

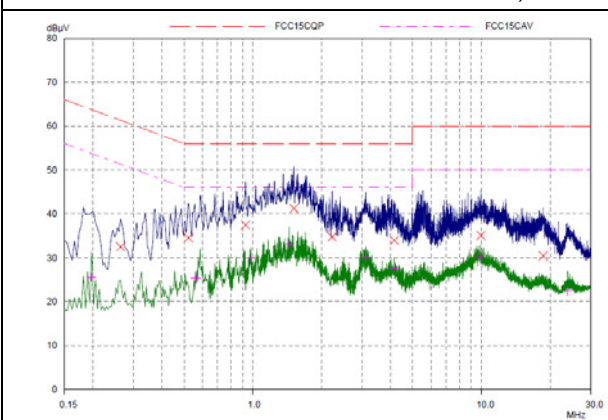


Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
0.19296	39.16	63.91	24.75	L1	gnd
0.55234	40.81	56.00	15.19	L1	gnd
1.04453	42.41	56.00	13.59	L1	gnd
1.63628	43.63	56.00	12.37	L1	gnd
2.72812	35.10	56.00	20.90	L1	gnd
4.3414	39.02	56.00	16.98	L1	gnd
9.86484	39.15	60.00	20.85	L1	gnd
19.91562	35.32	60.00	24.68	L1	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
0.26328	25.20	51.33	26.13	L1	gnd
0.525	20.36	46.00	17.62	L1	gnd
1.04052	34.22	46.00	11.78	L1	gnd
1.43125	35.91	46.00	10.09	L1	gnd
2.5875	30.10	46.00	15.90	L1	gnd
4.31406	31.42	46.00	14.58	L1	gnd
10.13046	30.63	50.00	19.37	L1	gnd
18.72031	26.85	50.00	23.15	L1	gnd

BLE, Channel No.: 0 N Line

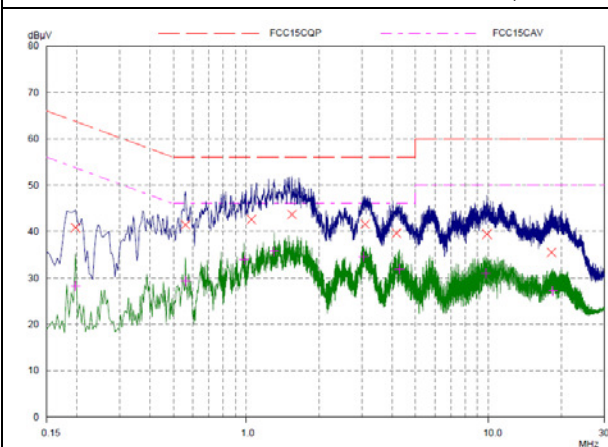


Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
0.26328	32.49	61.33	28.84	N	gnd
0.52109	34.52	56.00	21.48	N	gnd
0.92734	37.60	56.00	18.50	N	gnd
1.50937	41.23	56.00	14.77	N	gnd
2.22031	34.74	56.00	21.26	N	gnd
4.1578	33.96	56.00	22.04	N	gnd
9.93515	35.04	60.00	24.96	N	gnd
18.62656	30.44	60.00	29.56	N	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
0.19687	25.61	53.74	28.13	N	gnd
0.56015	25.38	46.00	20.62	N	gnd
0.97812	30.02	46.00	15.98	N	gnd
1.43906	32.99	46.00	13.01	N	gnd
3.11484	30.11	46.00	15.89	N	gnd
4.1539	27.55	46.00	18.45	N	gnd
9.86484	30.23	50.00	19.77	N	gnd
23.81015	22.40	50.00	27.60	N	gnd

BLE, Channel No.: 19 L Line



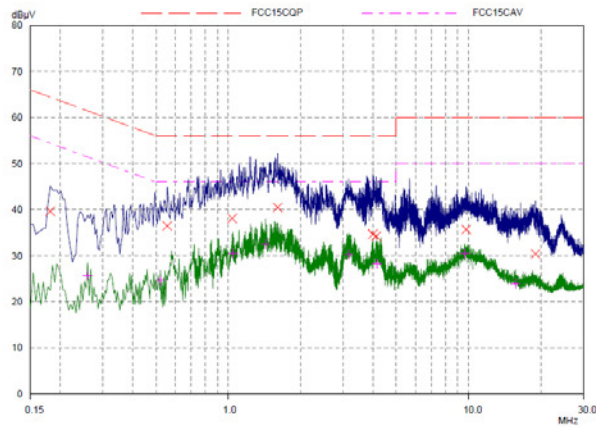
Final Measurement Results

Frequency MHz	QP Level dBμV	QP Limit dBμV	QP Delta dB	Phase -	PE -
0.19687	40.83	63.74	22.91	L1	gnd
0.56015	41.45	56.00	14.55	L1	gnd
1.04843	42.61	56.00	13.39	L1	gnd
1.54062	43.69	56.00	12.31	L1	gnd
3.09531	41.56	56.00	14.44	L1	gnd
4.16953	39.59	56.00	16.41	L1	gnd
9.85312	39.43	60.00	20.57	L1	gnd
18.23203	35.50	60.00	24.50	L1	gnd

Frequency MHz	AV Level dBμV	AV Limit dBμV	AV Delta dB	Phase -	PE -
0.19687	28.25	53.74	25.49	L1	gnd
0.56015	29.35	46.00	16.65	L1	gnd
0.97812	33.85	46.00	12.15	L1	gnd
1.30234	35.75	46.00	10.25	L1	gnd
3.04453	34.57	46.00	11.43	L1	gnd
4.28281	31.85	46.00	14.15	L1	gnd
9.74765	31.05	50.00	18.95	L1	gnd
18.43906	27.30	50.00	22.70	L1	gnd



BLE, Channel No.: 19 N Line

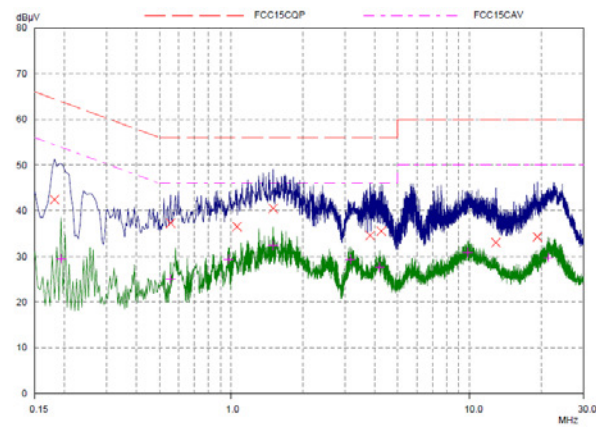


Final Measurement Results

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Phase -	PE -
0.18125	39.68	64.43	24.75	N	gnd
0.55625	36.50	56.00	19.50	N	gnd
1.03671	38.09	56.00	17.91	N	gnd
1.50312	40.49	56.00	15.51	N	gnd
3.98984	34.67	56.00	21.33	N	gnd
4.12655	34.25	56.00	21.75	N	gnd
9.75546	35.71	60.00	24.29	N	gnd
16.9664	30.41	60.00	29.59	N	gnd

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB	Phase -	PE -
0.25937	25.65	51.45	25.80	N	gnd
0.52109	24.63	46.00	21.37	N	gnd
1.04453	30.52	46.00	15.48	N	gnd
1.42734	32.54	46.00	13.46	N	gnd
3.17343	30.29	46.00	15.71	N	gnd
4.14609	28.25	46.00	17.75	N	gnd
9.63437	30.48	50.00	19.52	N	gnd
15.65781	23.99	50.00	26.01	N	gnd

BLE, Channel No.: 39 L Line

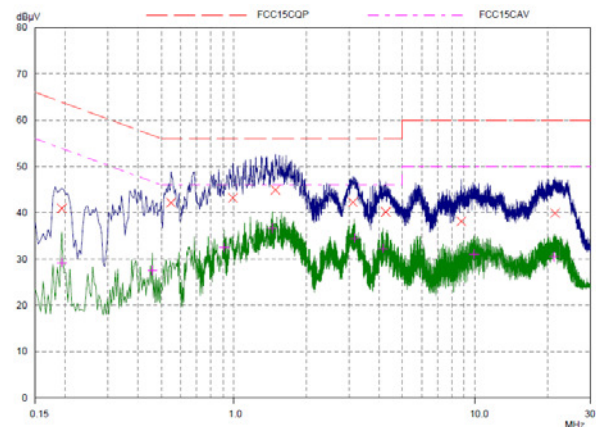


Final Measurement Results

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Phase -	PE -
0.18125	42.40	64.43	22.03	L1	gnd
0.55625	37.30	56.00	18.70	L1	gnd
1.05625	36.52	56.00	19.48	L1	gnd
1.49765	40.51	56.00	15.49	L1	gnd
3.82187	34.55	56.00	21.45	L1	gnd
4.25937	35.51	56.00	20.49	L1	gnd
12.9	33.05	60.00	26.95	L1	gnd
19.25156	34.28	60.00	25.72	L1	gnd

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB	Phase -	PE -
0.19296	29.53	53.91	24.38	L1	gnd
0.55625	25.09	46.00	20.91	L1	gnd
0.97421	29.36	46.00	16.64	L1	gnd
1.49765	32.36	46.00	13.64	L1	gnd
3.1539	29.38	46.00	16.62	L1	gnd
4.19687	27.63	46.00	18.37	L1	gnd
9.8375	30.82	50.00	19.18	L1	gnd
21.3375	29.71	50.00	20.29	L1	gnd

BLE, Channel No.: 39 N Line



Final Measurement Results

Frequency MHz	QP Level dBuV	QP Limit dBuV	QP Delta dB	Phase -	PE -
0.19296	40.90	63.91	23.01	N	gnd
0.54843	42.17	56.00	13.83	N	gnd
0.98984	43.22	56.00	12.78	N	gnd
1.48593	44.91	56.00	11.09	N	gnd
3.11484	42.26	56.00	13.74	N	gnd
4.26328	40.17	56.00	15.83	N	gnd
8.76718	38.13	60.00	21.87	N	gnd
21.4625	39.92	60.00	20.08	N	gnd

Frequency MHz	AV Level dBuV	AV Limit dBuV	AV Delta dB	Phase -	PE -
0.19296	29.21	53.91	24.70	N	gnd
0.45859	27.58	46.72	19.14	N	gnd
0.91171	32.49	46.00	13.51	N	gnd
1.44296	36.67	46.00	9.33	N	gnd
3.1539	34.51	46.00	11.49	N	gnd
4.14609	32.30	46.00	13.70	N	gnd
9.91171	31.09	50.00	18.91	N	gnd
21.275	30.53	50.00	19.47	N	gnd



6. Main Test Instruments

Name	Type	Manufacturer	Serial Number	Calibration Date	Expiration Time
EMI Test Receiver	ESCI	R&S	100948	2016-05-21	2017-05-20
Loop Antenna	FMZB1519	SCHWARZBECK	1519-047	2014-02-29	2017-02-28
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
EMI Test Receiver	ESCS30	R&S	100138	2015-12-17	2016-12-16
LISN	ENV216	R&S	101171	2013-12-18	2016-12-17
Spectrum Analyzer	N9010A	Agilent	MY47191109	2016-05-21	2017-05-20
MOB COMMS DC SUPPLY	66319D	Agilent	MY43004105	2016-05-21	2017-05-20
Peak Power Meter	U2021XA	Keysight	MY78520134	2016-05-21	2017-05-20
Spectrum Analyzer	FSV30	R&S	100815	2015-12-17	2016-12-16
RF Cable	SMA 15cm	Agilent	0001	2015-05-07	2016-07-06

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