



中国认可
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检测
TESTING
CNAS L2264

RF TEST REPORT

Applicant ADTRAN, Inc.
FCC ID HDC6304W
Product EPON RG ONU
Model 6304W
Report No. RXA1704-0118RF01R1
Issue Date August 1, 2017

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

Performed by: Xianqing Li

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Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Maximum Average conducted output power	15.247(b)(3)	PASS
2	6 dB bandwidth	15.247(a)(2)	PASS
3	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: May 16, 2017~ June 8, 2017			



1. Test Laboratory

1.1. Notes of the test report

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

1.2. Test facility

CNAS (accreditation number: L2264)

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

FCC (recognition number is 428261)

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

IC (recognition number is 8510A)

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

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

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

A2LA (Certificate Number: 3857.01)

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



1.3. Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Xu Kai
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Website: <http://www.ta-shanghai.com>
E-mail: xukai@ta-shanghai.com



2. General Description of Equipment under Test

Client Information

Applicant	ADTRAN, Inc.
Applicant address	901 Explorer Blvd, Huntsville AL 35806
Agent	ubiQuoss, Inc.
Agent Address	83,Saneop-ro 155beon-gil, Gwonseon-gu, Suwon-si, Gyeonggi-do, Korea,16648
Manufacturer	Shenzhen Gongjin Electronics Co.,Ltd.
Manufacturer address	B116,B118,A211-A213,B201-B213,A311-A313,B411-413,BF0 8-09 Nanshan Medical Instrument Industry Park,1019# Nanhai Road, Nanshan District, Shenzhen, Guangdong, 518067, P.R.China

General information

EUT Description	
Model:	6304W
Tested Device Code:	0118S01
Hardware Version:	V01
Software Version:	V1.4
Power Supply:	AC adapter
Antenna Type:	Internal Antenna
Antenna Connector:	A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)
Antenna Gain:	ANT1:4.5 dBi ANT2:4.5 dBi
Directional Gain:	4.5 dBi
Test Mode:	Antenna 1 802.11b, 802.11g, 802.11n(HT20/HT40);
	Antenna 2 802.11g, 802.11n(HT20/HT40);
Modulation Type:	802.11b: DSSS; 802.11g/n(HT20/HT40): OFDM
Max. Conducted Power	Wi-Fi 2.4G: 20.53 dBm
Operating Frequency Range(s)	802.11b/g/n(HT20): 2412 ~ 2462 MHz 802.11n(HT40): 2422 ~ 2452 MHz
EUT Accessory	
Charger	Manufacturer: Shenzhen Gongjin Electronics Co.,Ltd. Model: S24B72-120A200-C4
Note: The information of the EUT is declared by the manufacturer. Please refer to the specifications or user manual for details.	



3. Applied Standards

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

Test standards

- **FCC CFR47 Part 15C (2016) Radio Frequency Devices**
- **ANSI C63.10 (2013)**
- **KDB 558074 D01 DTS Meas Guidance v04**
- **KDB 662911 D01 Multiple Transmitter Output v02r01**

4. Test Configuration

Test Mode

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

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

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

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

Worst-case data rates are shown as following table.

Band	Data Rate		
	Antenna 1	Antenna 2	MIMO
802.11b	1 Mbps	--	--
802.11g	6 Mbps	6 Mbps	--
802.11n HT20	MCS0	MCS0	MCS8
802.11n HT40	MCS0	MCS0	MCS8

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

Test Cases	Antenna 1	Antenna 2	MIMO
Average Power Output –Conducted	802.11b/g	802.11g	802.11n HT20/HT40
6dB Bandwidth	802.11b/g	802.11g	802.11n HT20/HT40
Band Edge	802.11b/g	802.11g	802.11n HT20/HT40
Power Spectral Density	802.11b/g	802.11g	802.11n HT20/HT40
Spurious RF Conducted Emissions	802.11b/g/n HT20/HT40	802.11g/n HT20/HT40	802.11n HT20/HT40
Radiates Emission in the Restricted Band	802.11b/g	--	802.11n HT20/HT40
Radiates Emission	802.11b/g	--	802.11n HT20/HT40
Conducted Emission	802.11b/g	--	802.11n HT20/HT40

5. Test Case Results

5.1. Average Power Output –Conducted

Ambient condition

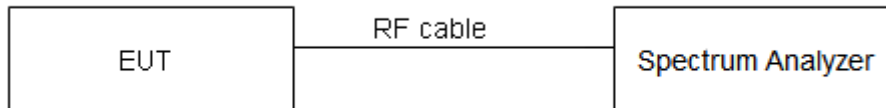
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to Spectrum Analyzer with a known loss. The EUT is max power transmission with proper modulation. The Average detector is used. We use Maximum Average Conducted Output Power Level Method in KDB 558074 D01/KDB662911 D01 for this test.

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

Test Setup



Limits

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

Average Output Power	≤ 1W (30dBm)
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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****CDD power setup**

Packet Type	Antenna 1 Power Index			Antenna 2 Power Index		
	CH1	CH6	CH11	CH1	CH6	CH11
802.11b	19.5	19.5	19.5	/	/	/
802.11g	18	18	18	19	19	19
802.11n HT20	16.5	19	17	16.5	19	17
Packet Type	CH3	CH6	CH9	CH3	CH6	CH9
802.11n HT40	15	18	16	15	18	16

SISO

Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)						Limit (dBm)	Conclusion
		Antenna 1		Antenna 2		Total Power			
		(dBm)	(mW)	(dBm)	(mW)	(mW)	(dBm)		
802.11b	2412	18.92	77.98	/	/	77.98	18.92	30	PASS
	2437	18.46	70.15	/	/	70.15	18.46	30	PASS
	2462	18.47	70.31	/	/	70.31	18.47	30	PASS
802.11g	2412	17.25	53.09	17.00	50.12	103.21	20.14	30	PASS
	2437	17.25	53.09	17.77	59.84	112.93	20.53	30	PASS
	2462	17.08	51.05	16.38	43.45	94.50	19.75	30	PASS

Note: 1. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),
The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)})$.

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

For power measurements on IEEE 802.11 devices,

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

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

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

So directional gain = $G_{ANT} + \text{Array Gain} = 4.5 + 0 = 4.5 \text{ dBi} < 6 \text{ dBi}$. So the power limit is 30dBm

**MIMO**

Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)						Limit (dBm)	Conclusion
		Antenna 1		Antenna 2		Total Power			
		(dBm)	(mW)	(dBm)	(mW)	(mW)	(dBm)		
802.11n HT20	2412	15.40	34.67	15.15	32.73	67.40	18.29	30	PASS
	2437	17.50	56.23	16.29	42.56	98.79	19.95	30	PASS
	2462	15.59	36.22	15.80	38.02	74.24	18.71	30	PASS
802.11n HT40	2422	14.33	27.10	13.75	23.71	50.81	17.06	30	PASS
	2437	17.48	55.98	16.35	43.15	99.13	19.96	30	PASS
	2452	13.99	25.06	14.46	27.93	52.99	17.24	30	PASS

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

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

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

For power measurements on IEEE 802.11 devices,

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

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

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

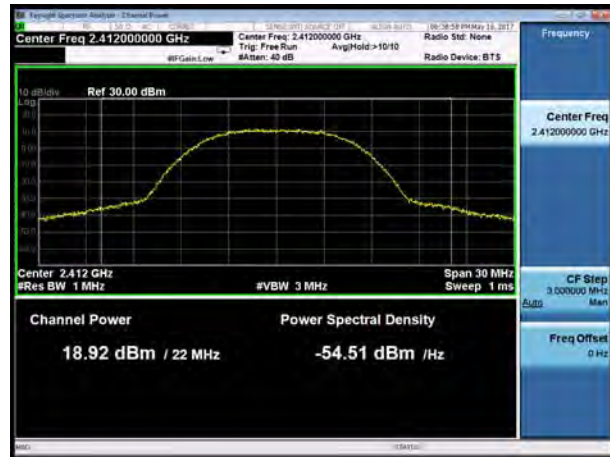
So directional gain = $G_{ANT} + \text{Array Gain} = 4.5 + 0 = 4.5 \text{ dBi} < 6 \text{ dBi}$. So the power limit is 30dBm



SISO

Antenna 1

802.11b, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2412



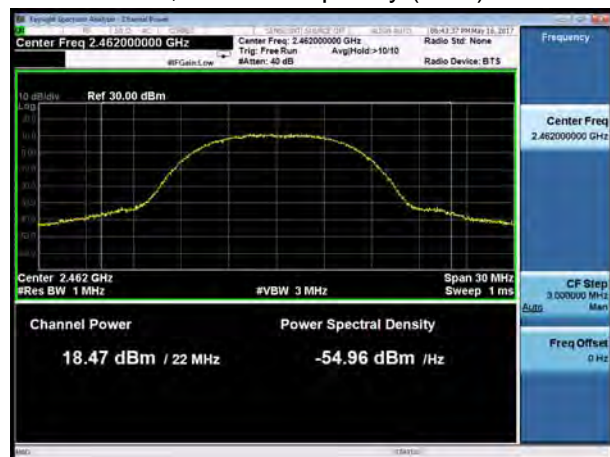
802.11b, Carrier frequency (MHz): 2437



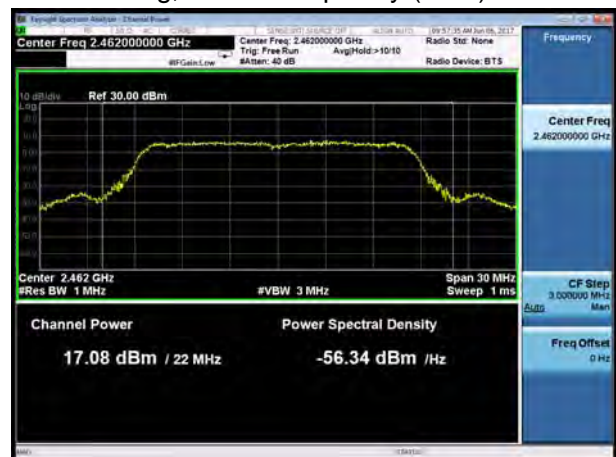
802.11g, Carrier frequency (MHz): 2437



802.11b, Carrier frequency (MHz): 2462



802.11g, Carrier frequency (MHz): 2462





Antenna 2

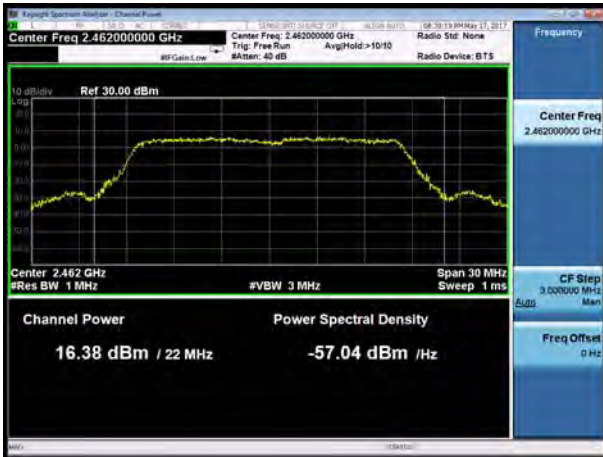
802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2437



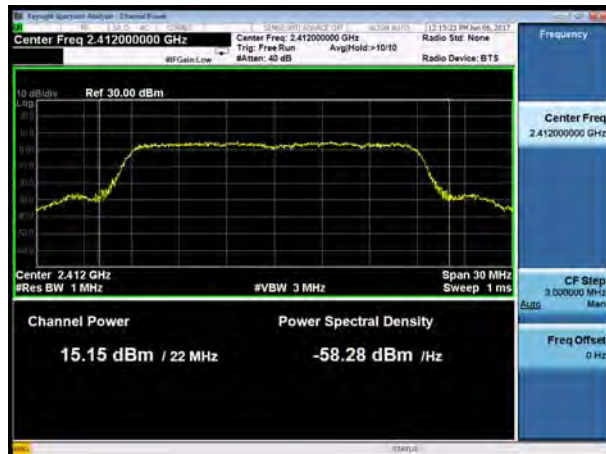
802.11g, Carrier frequency (MHz): 2462



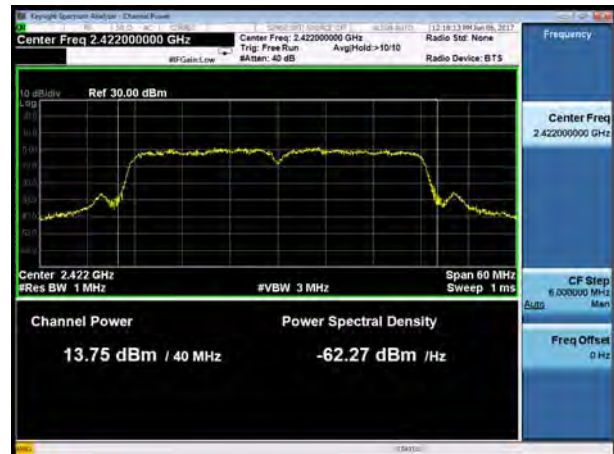


Antenna 2

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



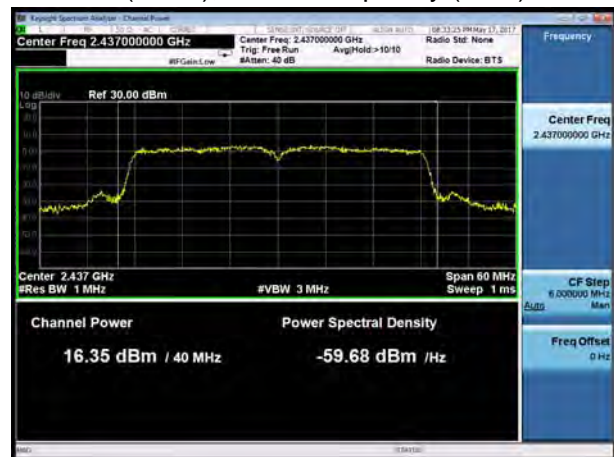
802.11n(HT40), Carrier frequency (MHz): 2422



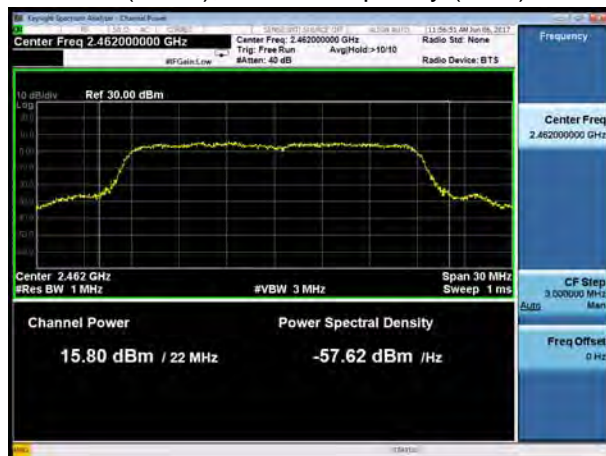
802.11n(HT20), Carrier frequency (MHz): 2437



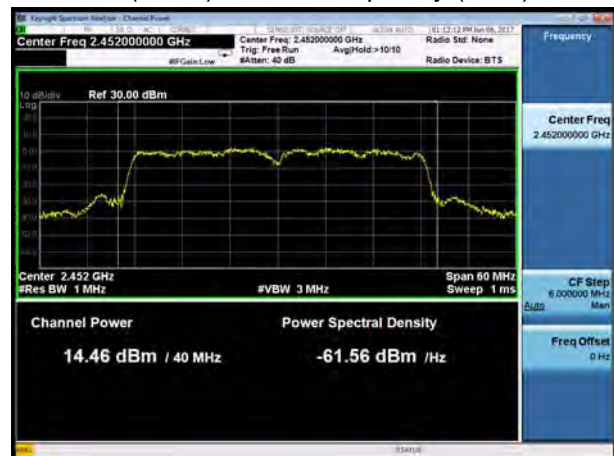
802.11n(HT40), Carrier frequency (MHz): 2437



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



802.11n(HT40), Carrier frequency (MHz): 2452



5.2. 6dB Bandwidth

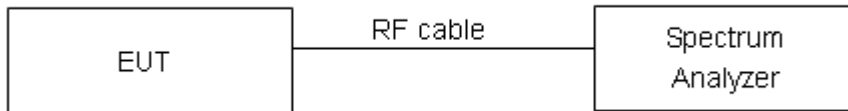
Ambient condition

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
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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:****SISO****Antenna 1**

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11b	2412	10.707	8.573	500	PASS
	2437	10.754	8.615	500	PASS
	2462	10.761	8.645	500	PASS
802.11g	2412	16.497	16.54	500	PASS
	2437	16.514	16.54	500	PASS
	2462	16.496	16.51	500	PASS

Antenna 2

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11g	2412	16.491	16.54	500	PASS
	2437	16.500	16.56	500	PASS
	2462	16.489	16.52	500	PASS

MIMO

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11n HT20	2412	17.693	17.79	500	PASS
	2437	17.675	17.76	500	PASS
	2462	17.696	17.78	500	PASS
802.11n HT40	2422	36.040	36.38	500	PASS
	2437	36.063	36.35	500	PASS
	2452	36.028	35.99	500	PASS



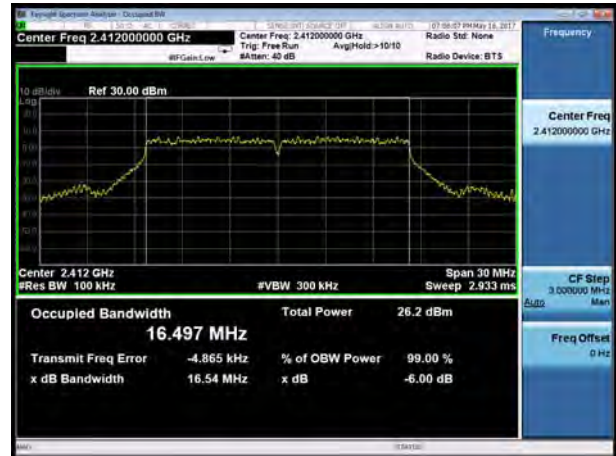
SISO

Antenna 1

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



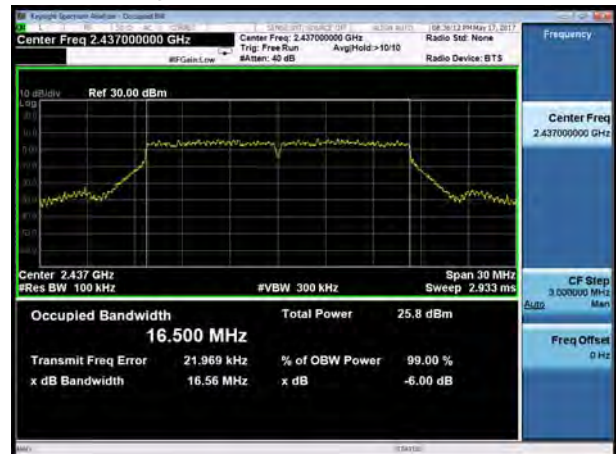


Antenna 2

802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz):2462

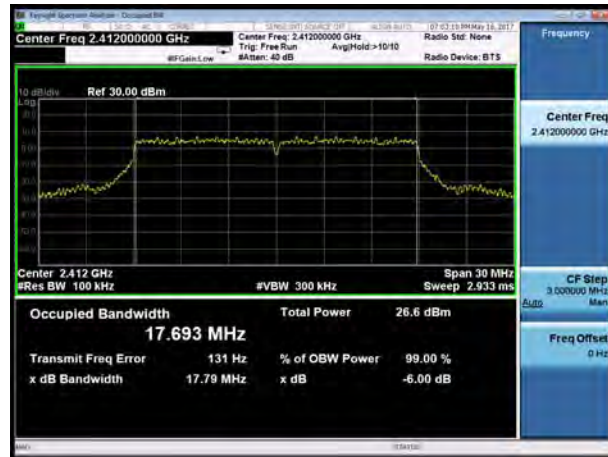




MIMO

Antenna 1

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



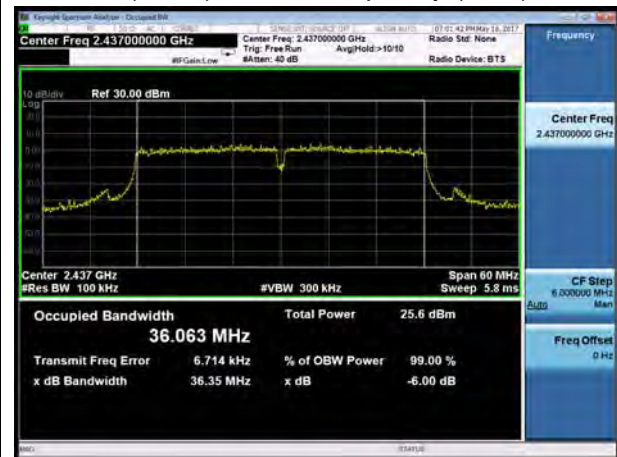
802.11n(HT40), Carrier frequency (MHz): 2422



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



802.11n(HT40), Carrier frequency (MHz): 2437



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



802.11n(HT40), Carrier frequency (MHz):2452



5.3. Band Edge

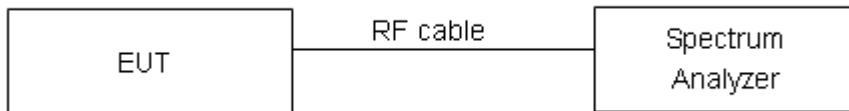
Ambient condition

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

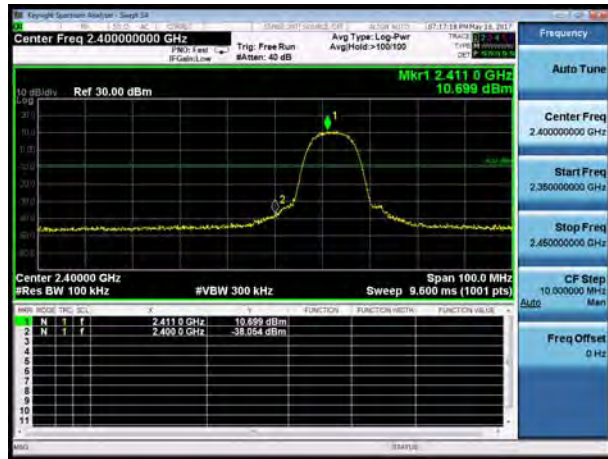


Test Results: PASS

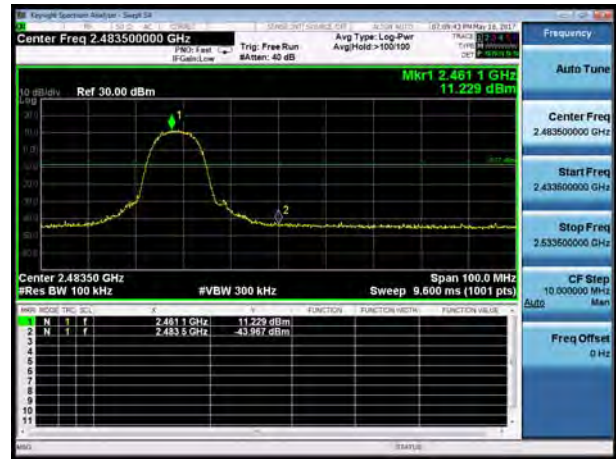
SISO

Antenna 1

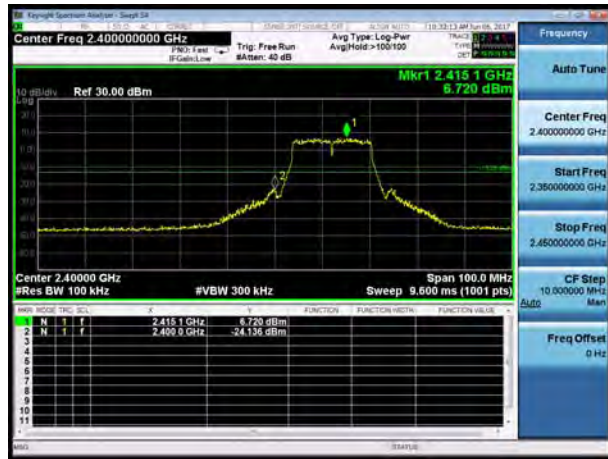
802.11b, Carrier frequency (MHz): 2412



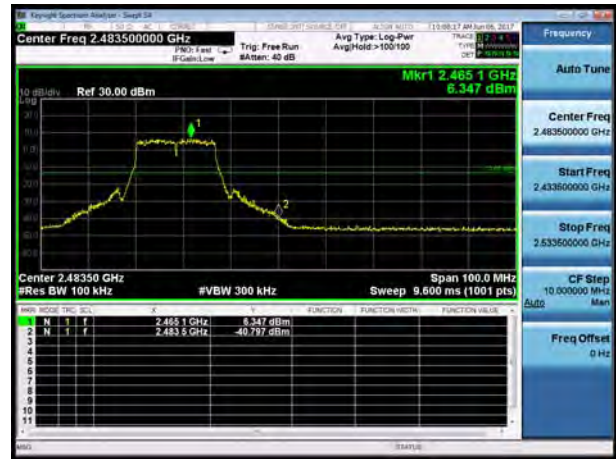
802.11b, Carrier frequency (MHz):2462



802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz):2462

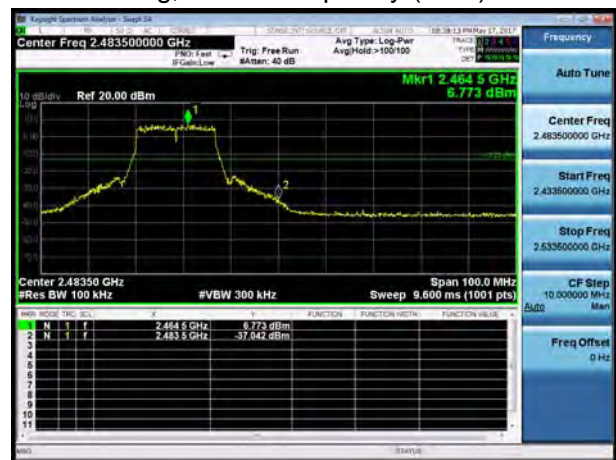


Antenna 2

802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz):2462

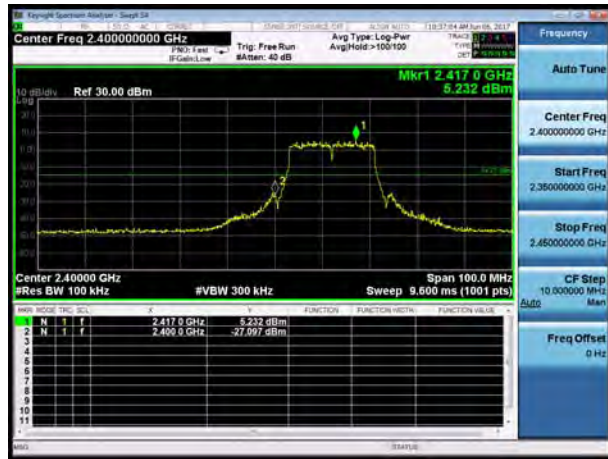




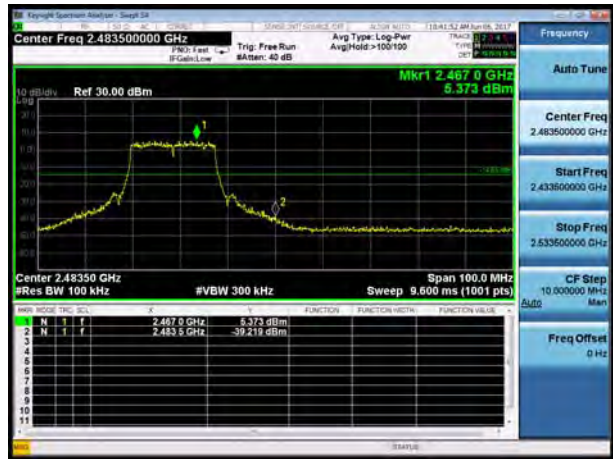
MIMO

Antenna 1

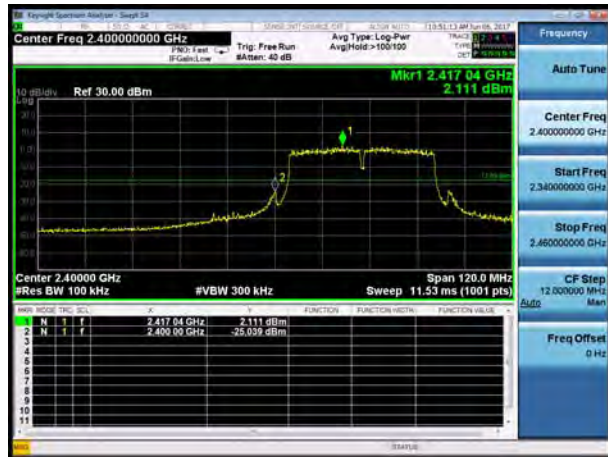
802.11n(HT20), Carrier frequency (MHz): 2412



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



802.11n(HT40), Carrier frequency (MHz): 2422



802.11n(HT40), Carrier frequency (MHz):2452



5.4. Power Spectral Density

Ambient condition

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

Method of Measurement

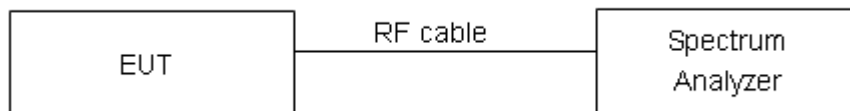
The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

RBW is set to 3 kHz and VBW is set to 10 kHz for 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 Average power spectral density is recorded.

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

Test setup



Limits

Rule 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	≤ 8 dBm / 3kHz
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Measurement Uncertainty

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

Test Results:

SISO

Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)						Limit (dBm / 3kHz)	Conclusion
		Antenna 1		Antenna 2		Total PSD			
		(dBm / 3kHz)	(mW/ 3kHz)	(dBm / 3kHz)	(mW/ 3kHz)	(mW/ 3kHz)	(dBm / 3kHz)		
802.11b	1	-13.613	0.044	/	/	0.044	-13.613	8	PASS
	6	-14.105	0.039	/	/	0.039	-14.105	8	PASS
	11	-13.908	0.041	/	/	0.041	-13.908	8	PASS
802.11g	1	-15.847	0.026	-16.323	0.023	0.049	-13.068	8	PASS
	6	-15.979	0.025	-16.551	0.022	0.047	-13.245	8	PASS
	11	-16.476	0.023	-16.432	0.023	0.045	-13.444	8	PASS

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

2. The manufacturer declared the transmitter output signals is CDD mode. And $N_{ss}=2$. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$, For power spectral density (PSD) measurements on all devices, Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB=0. So directional gain = $G_{ANT} + \text{Array Gain} = 4.5+0=4.5$ dBi < 6dBi. So the power limit is 8dBm

MIMO

Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)						Limit (dBm / 3kHz)	Conclusion
		Antenna 1		Antenna 2		Total PSD			
		(dBm / 3kHz)	(mW/ 3kHz)	(dBm / 3kHz)	(mW/ 3kHz)	(mW/ 3kHz)	(dBm / 3kHz)		
802.11n HT20	1	-16.556	0.022	-16.829	0.021	0.043	-13.680	8	PASS
	6	-14.609	0.035	-15.520	0.028	0.063	-12.030	8	PASS
	11	-16.386	0.023	-16.251	0.024	0.047	-13.308	8	PASS
802.11n HT40	3	-19.352	0.012	-20.168	0.010	0.021	-16.731	8	PASS
	6	-17.504	0.018	-17.533	0.018	0.035	-14.508	8	PASS
	9	-19.344	0.012	-19.671	0.011	0.022	-16.494	8	PASS

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

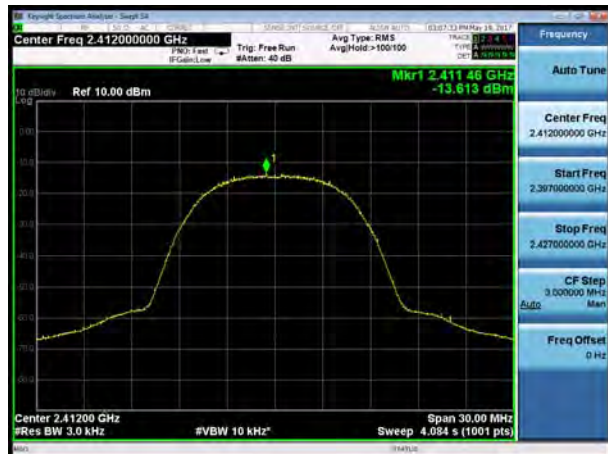
2. The manufacturer declared the transmitter output signals is CDD mode. And $N_{ss}=2$. According to KDB 662911 D01 Multiple Transmitter Output v02r01 2)f)(i): If all antennas have the same gain, Directional gain = $G_{ANT} + \text{Array Gain}$, For power spectral density (PSD) measurements on all devices, Array Gain = $10 \log(N_{ANT}/N_{SS})$ dB=0. So directional gain = $G_{ANT} + \text{Array Gain} = 4.5+0=4.5$ dBi < 6dBi. So the power limit is 8dBm.



SISO

Antenna 1

802.11b, Channel No.: 1



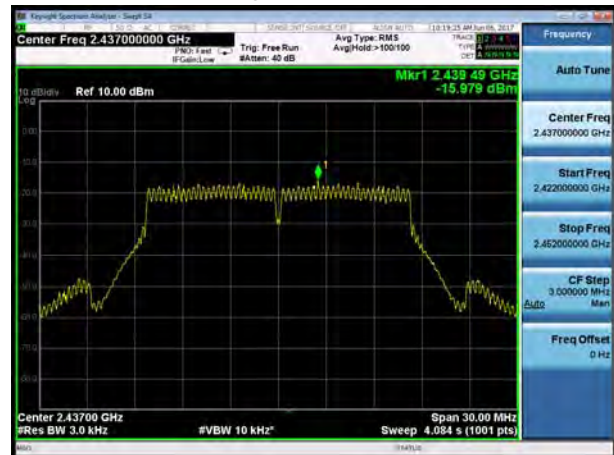
802.11g, Channel No.: 1



802.11b, Channel No.: 6



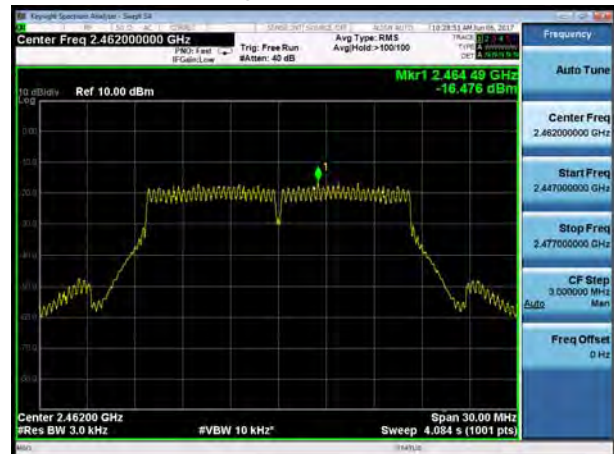
802.11g, Channel No.: 6



802.11b, Channel No.: 11



802.11g, Channel No.: 11



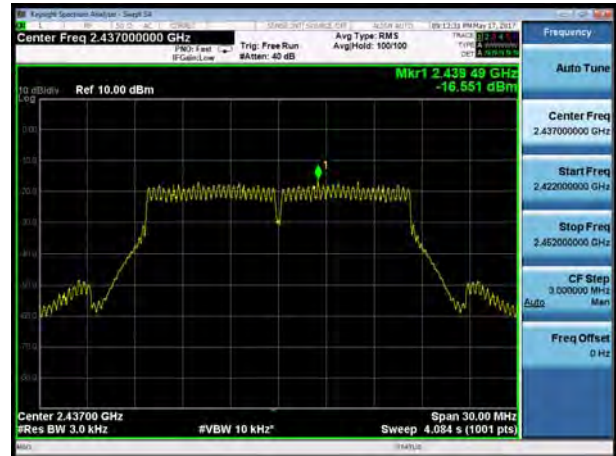


Antenna 2

802.11g, Channel No.: 1



802.11g, Channel No.: 6



802.11g, Channel No.: 11

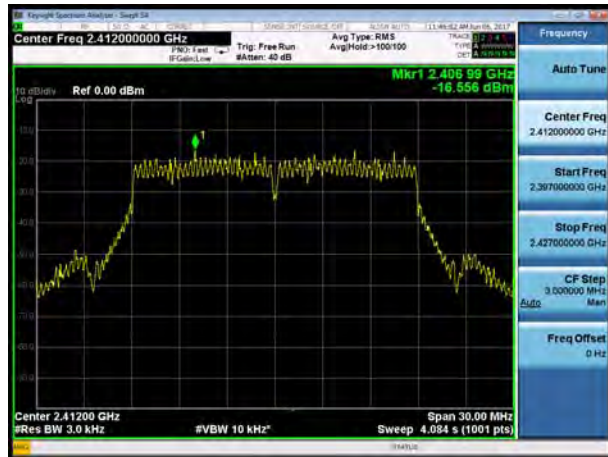




MIMO

Antenna 1

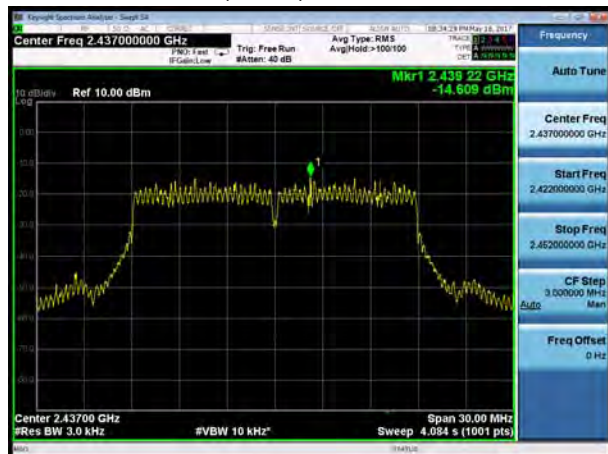
802.11n(HT20), Channel No. 1



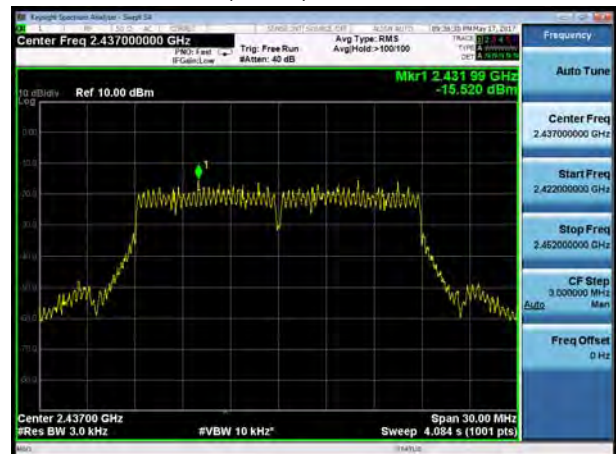
802.11n(HT40), Channel No. 3



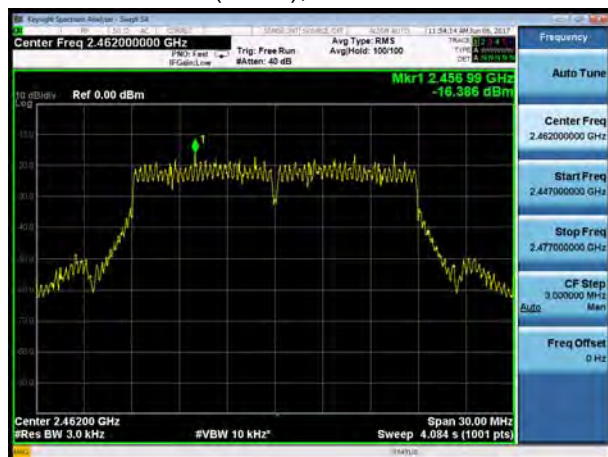
802.11n(HT20), Channel No. 6



802.11n(HT40), Channel No. 6



802.11n(HT20), Channel No. 11



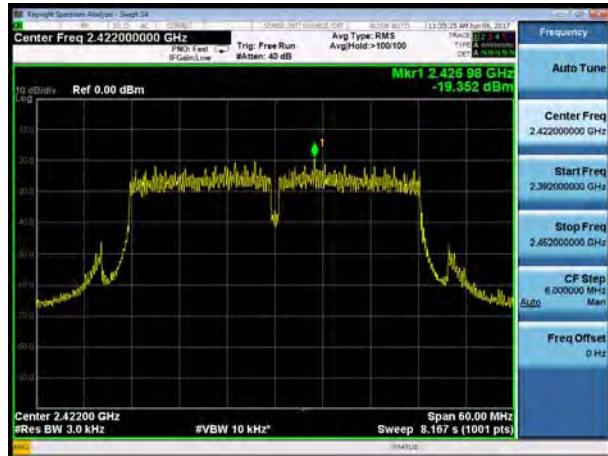
802.11n(HT40), Channel No. 9



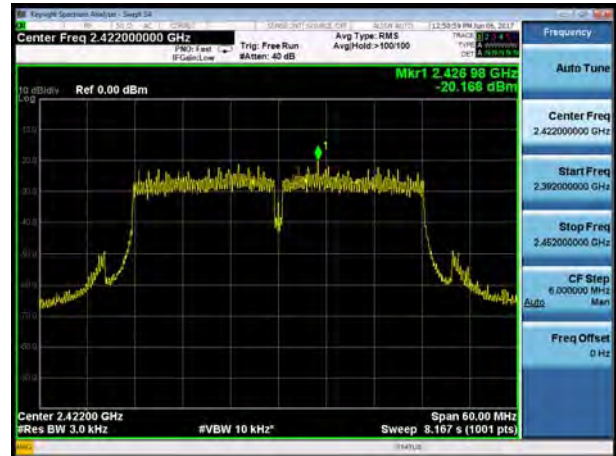


Antenna 2

802.11n(HT20), Channel No. 1



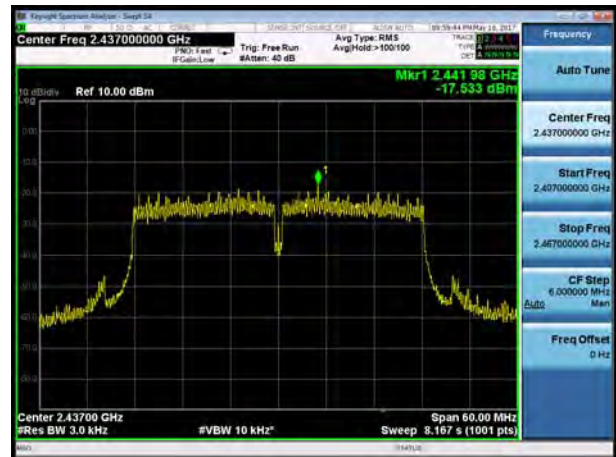
802.11n(HT40), Channel No. 3



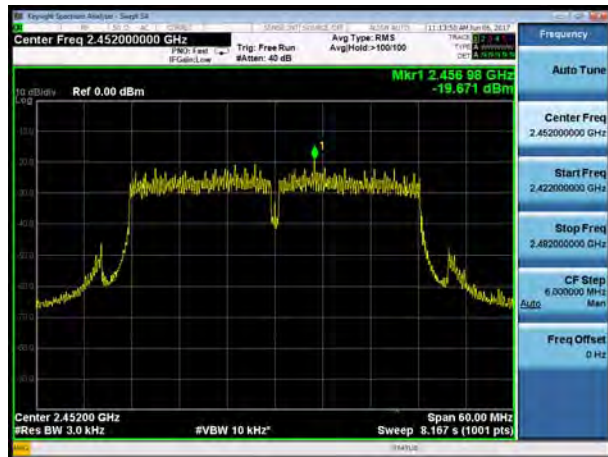
802.11n(HT20), Channel No. 6



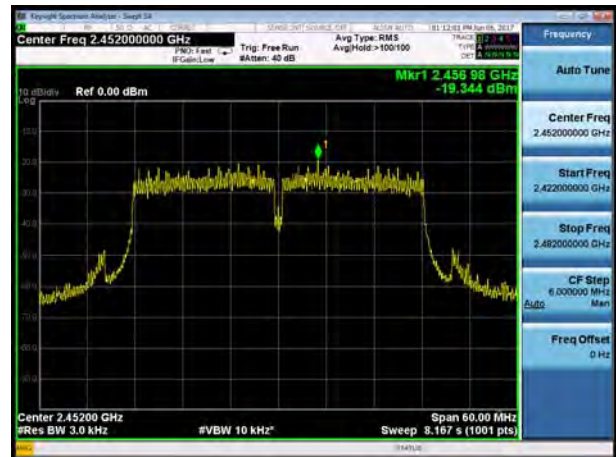
802.11n(HT40), Channel No. 6



802.11n(HT20), Channel No. 11



802.11n(HT40), Channel No. 9



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 set 100 kHz and VBW set 300kHz, 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 (dBm)
SISO Antenna 1	802.11b	2412	-2.562	-22.562
		2437	-8.699	-28.699
		2462	-10.112	-30.112
	802.11g	2412	-9.023	-29.023
		2437	-8.771	-28.771
		2462	-5.888	-25.888
	802.11n HT20	2412	-8.304	-28.304
		2437	-6.875	-26.875
		2462	-4.352	-24.352
	802.11n HT40	2422	-5.834	-25.834
		2437	-7.132	-27.132
		2452	-11.260	-31.260
SISO Antenna 2	802.11g	2412	-13.372	-33.372
		2437	-15.487	-35.487
		2462	-12.947	-32.947
	802.11n	2412	-14.903	-34.903



	HT20	2437	-14.669	-34.669
		2462	-13.062	-33.062
	802.11n HT40	2422	-10.976	-30.976
		2437	-15.253	-35.253
		2452	-14.909	-34.909
MIMO	802.11n HT20	2412	-12.622	-32.622
		2437	-13.254	-33.254
		2462	-15.971	-35.971
	802.11n HT40	2422	-8.118	-28.118
		2437	-12.781	-32.781
		2452	-16.907	-36.907

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

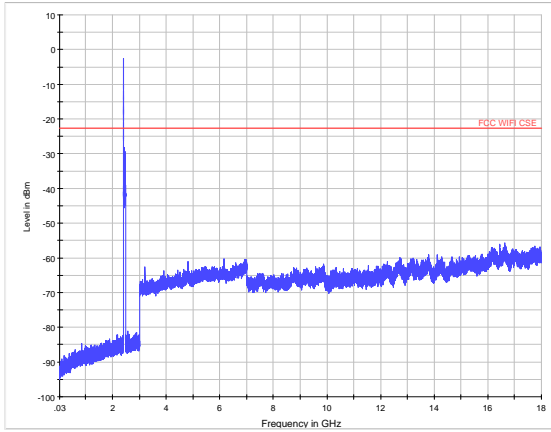


Test Results:

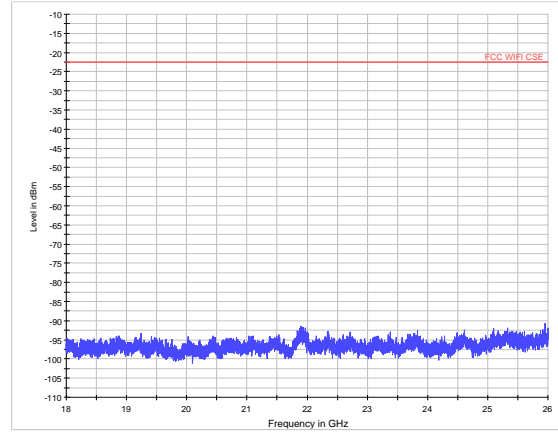
If disturbances were found more than 20dB below limit line, the mark is not required for the EUT.
The signal beyond the limit is carrier.

SISO

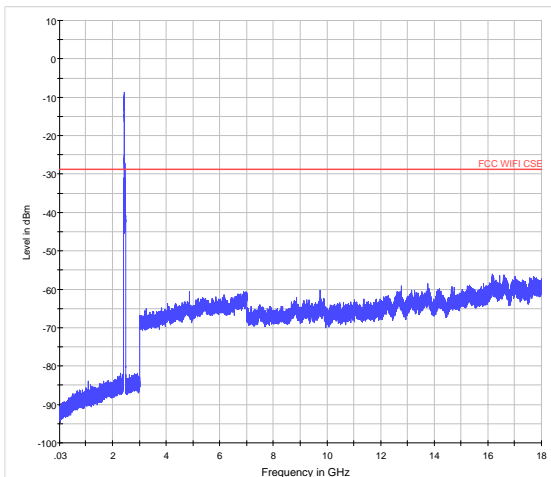
Antenna 1



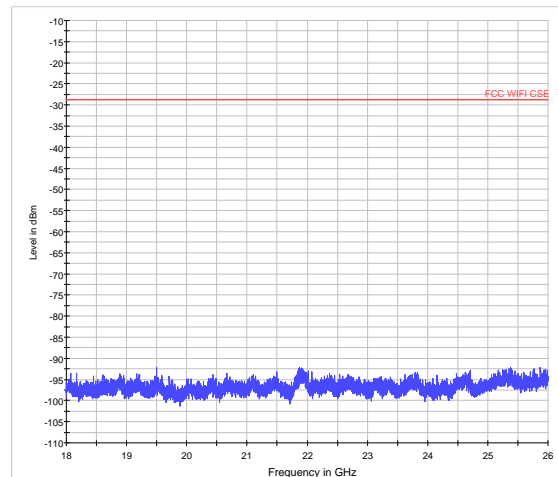
802.11b CH1 30MHz to 18GHz



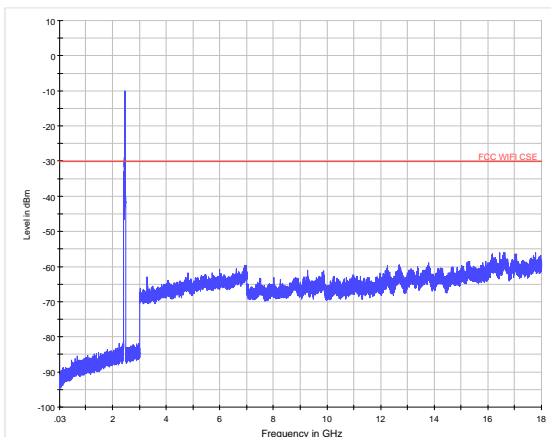
802.11b CH1 18GHz to 26.5GHz



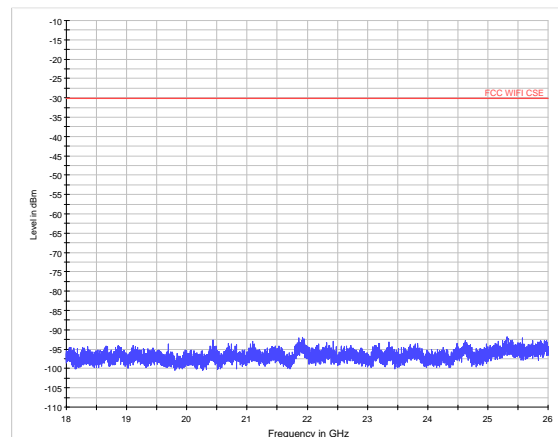
802.11b CH6 30MHz to 18GHz



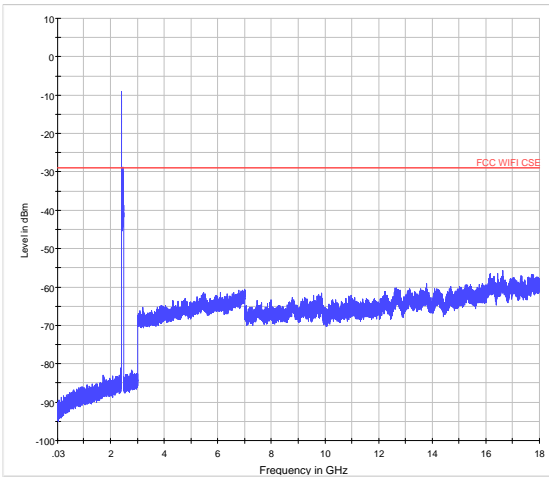
802.11b CH6 18GHz to 26.5GHz



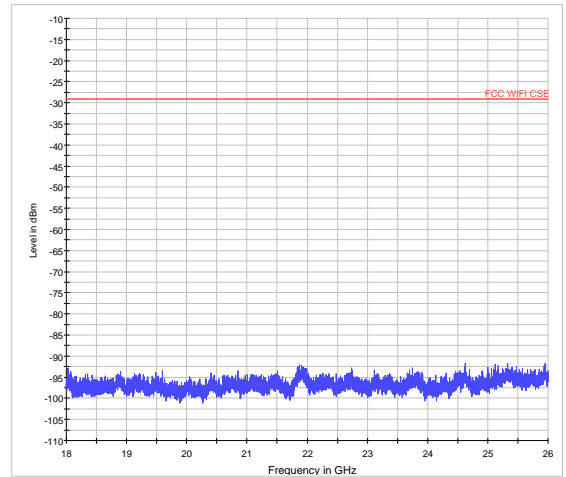
802.11b CH11 30MHz to 18GHz



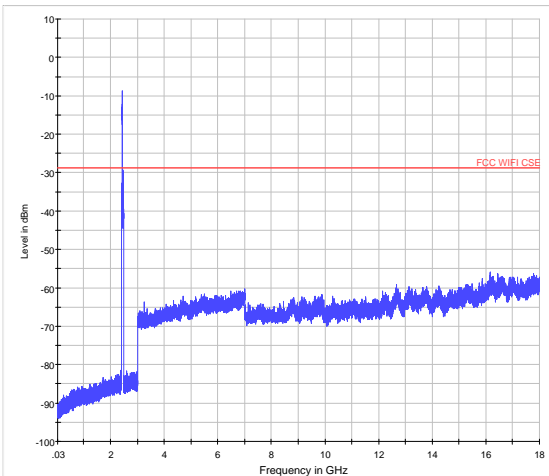
802.11b CH11 18GHz to 26.5GHz



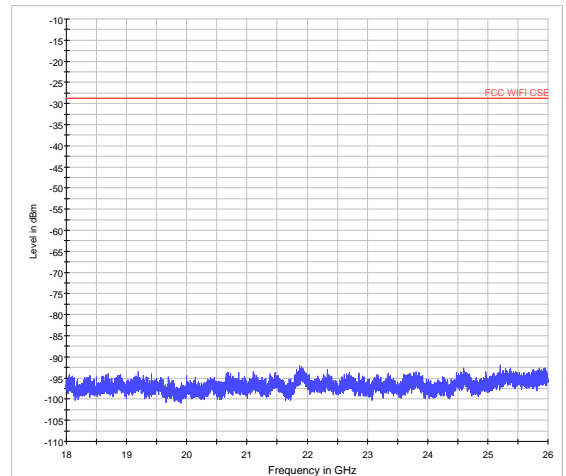
802.11g CH1 30MHz to 18GHz



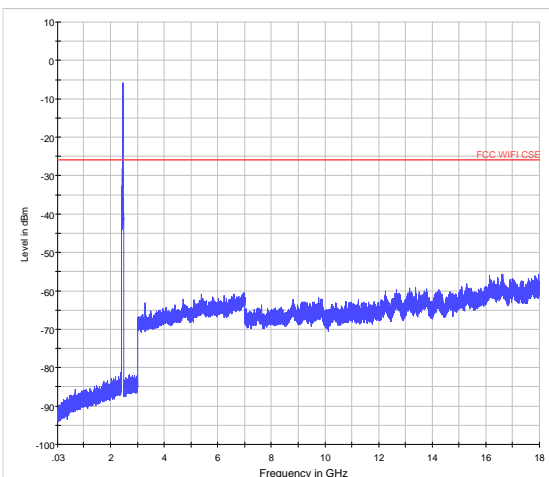
802.11g CH1 18GHz to 26.5GHz



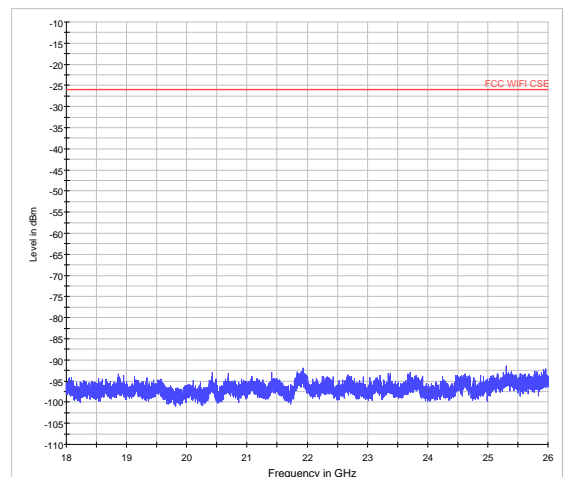
802.11g CH6 30MHz to 18GHz



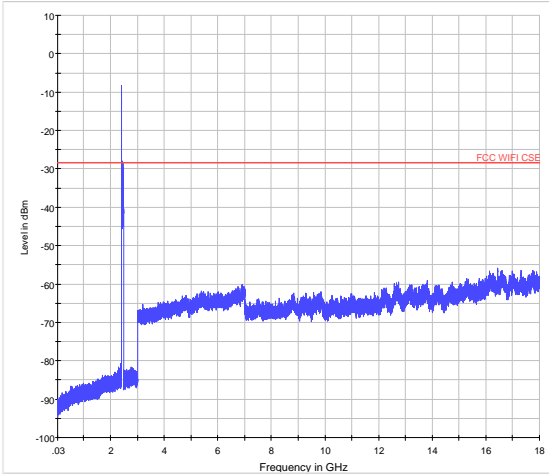
802.11g CH6 18GHz to 26.5GHz



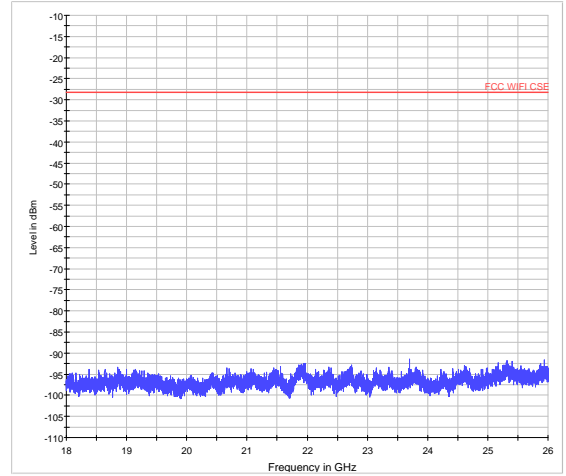
802.11g CH11 30MHz to 18GHz



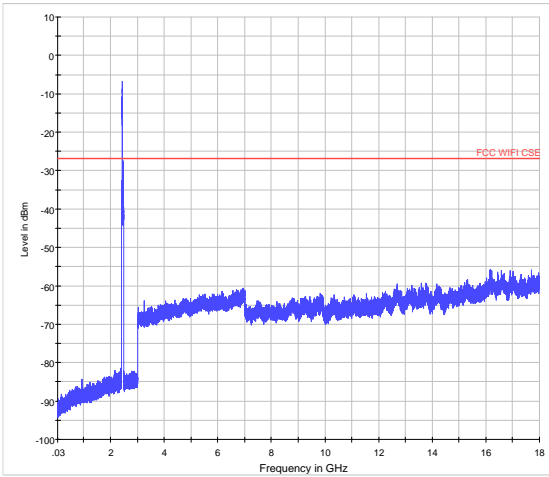
802.11g CH11 18GHz to 26.5GHz



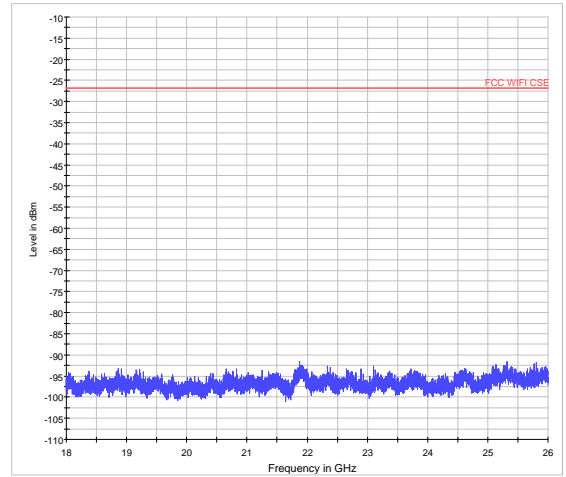
802.11n (HT20) CH1 30MHz to 18GHz



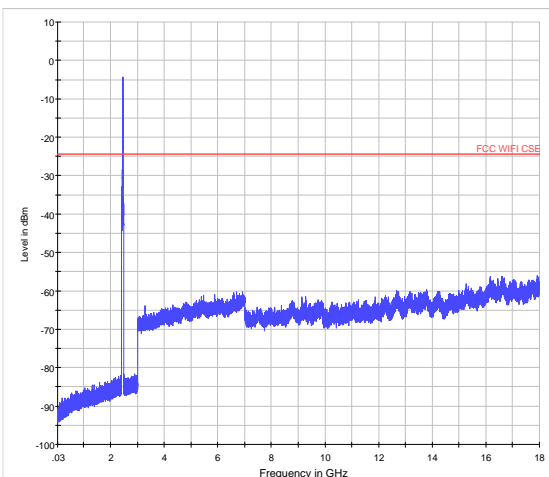
802.11n (HT20) CH1 18GHz to 26.5GHz



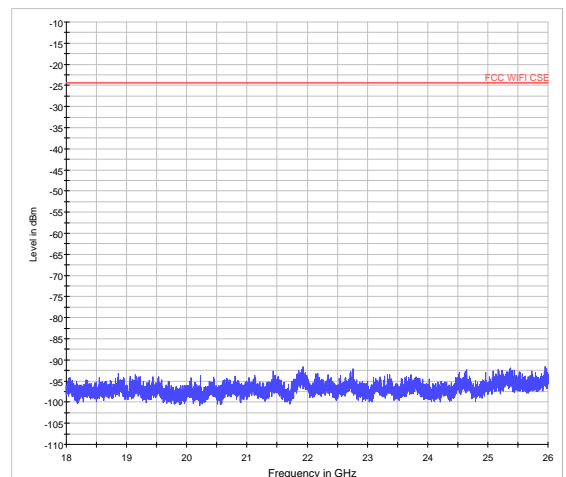
802.11n (HT20) CH6 30MHz to 18GHz



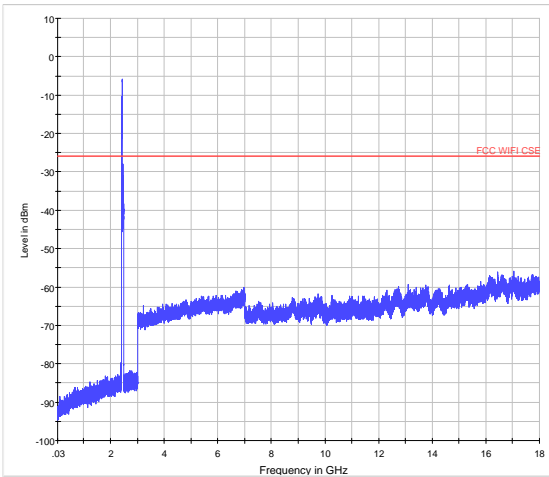
802.11n (HT20) CH6 18GHz to 26.5GHz



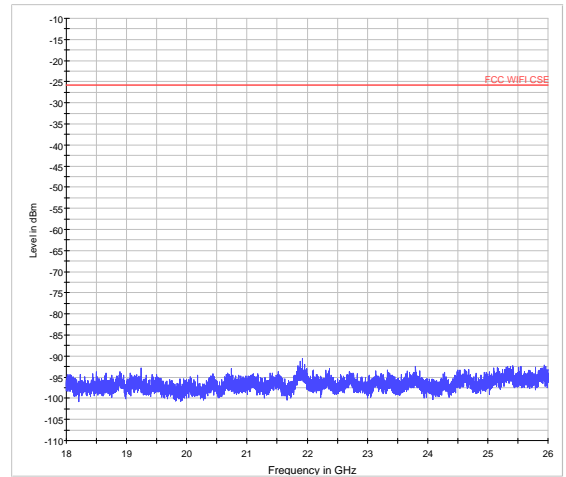
802.11n (HT20) CH11 30MHz to 18GHz



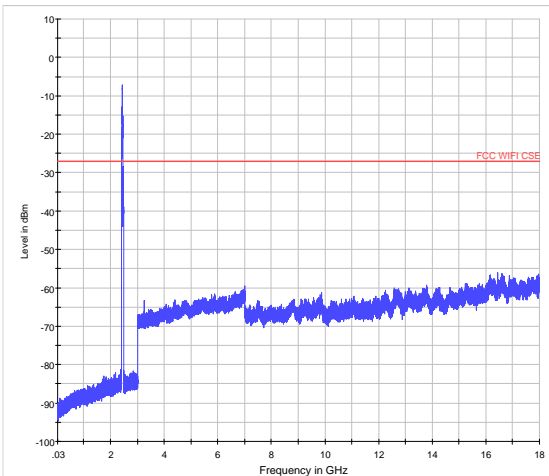
802.11n (HT20) CH11 18GHz to 26.5GHz



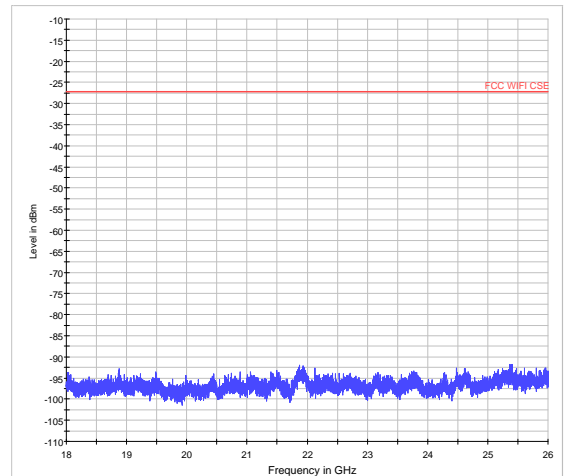
802.11n (HT40) CH3 30MHz to 18GHz



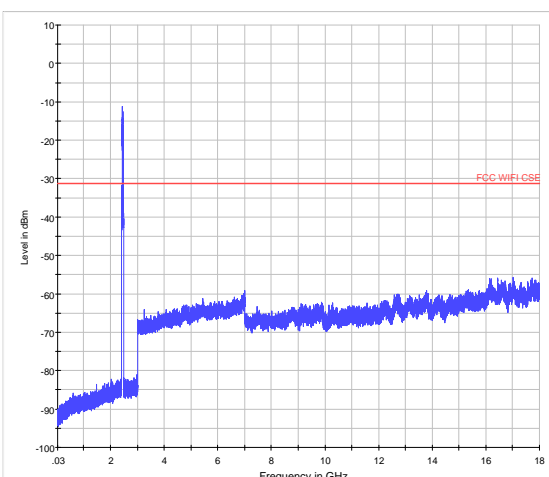
802.11n (HT40) CH3 18GHz to 26.5GHz



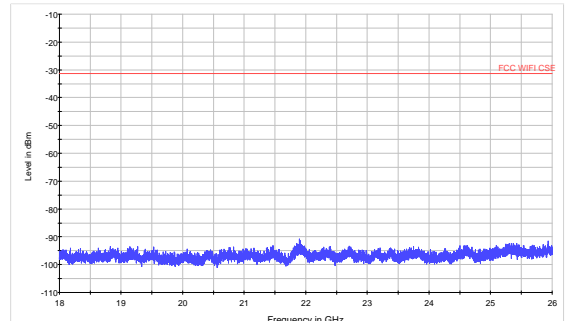
802.11n (HT40) CH6 30MHz to 18GHz



802.11n (HT40) CH6 18GHz to 26.5GHz



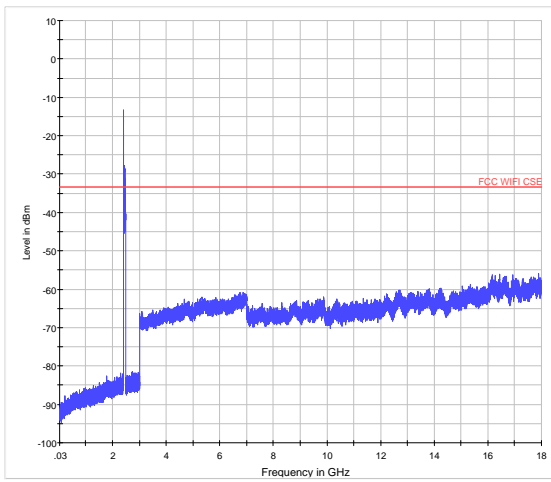
802.11n (HT40) CH9 30MHz to 18GHz



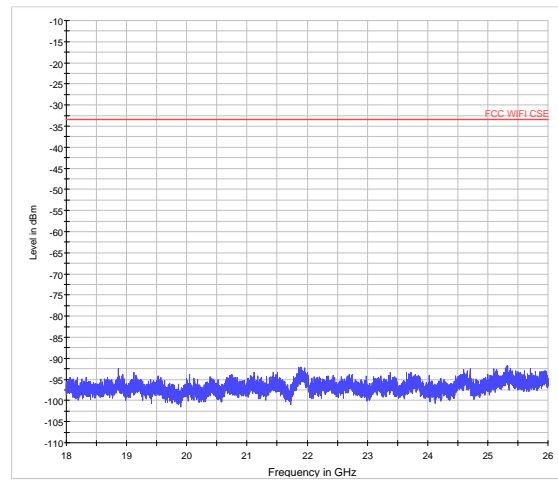
802.11n (HT40) CH9 18GHz to 26.5GHz



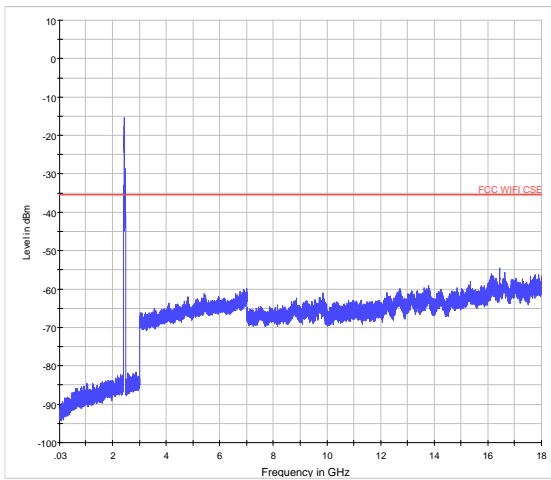
Antenna 2



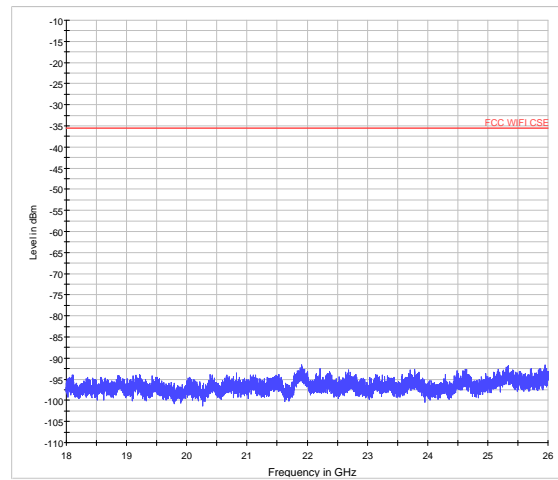
802.11g CH1 30MHz to 18GHz



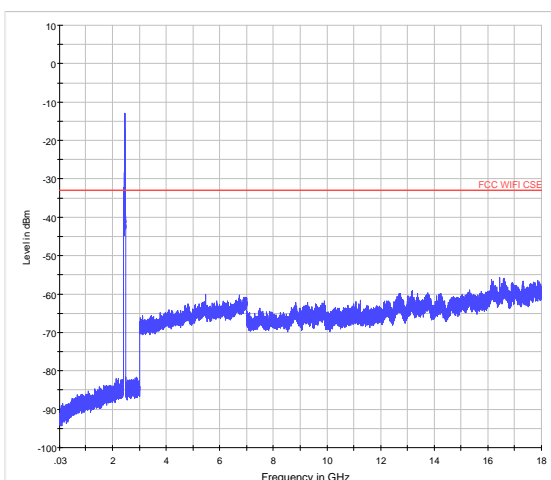
802.11g CH1 18GHz to 26.5GHz



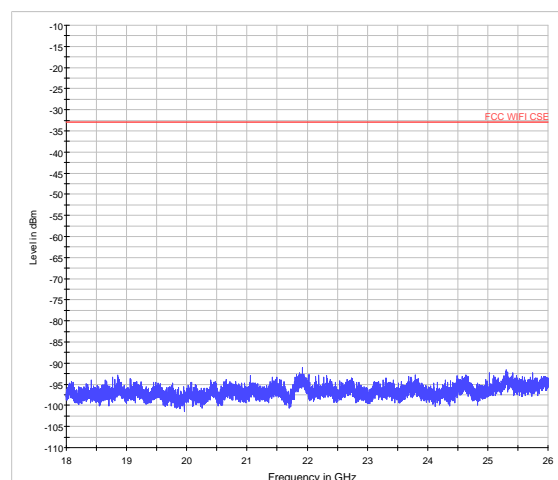
802.11g CH6 30MHz to 18GHz



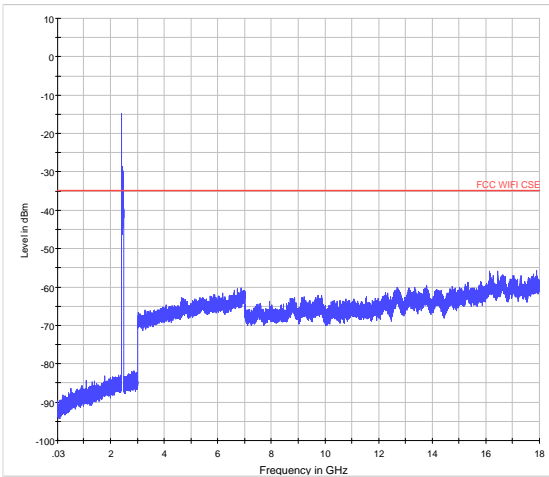
802.11g CH6 18GHz to 26.5GHz



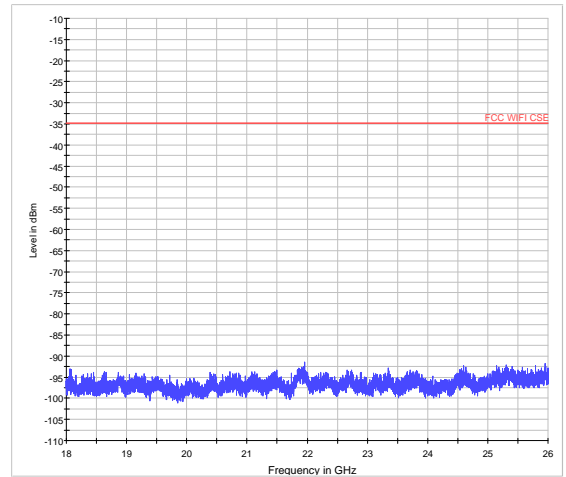
802.11g CH11 30MHz to 18GHz



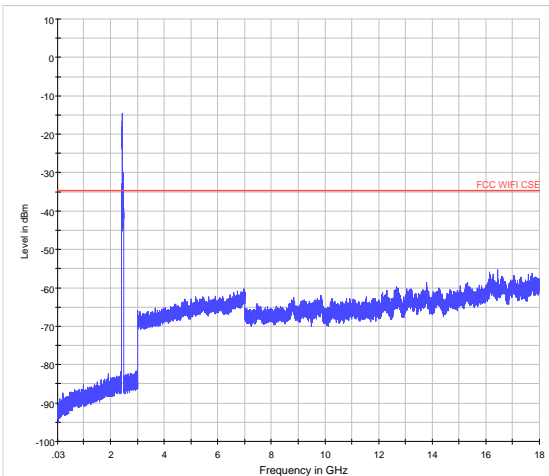
802.11g CH11 18GHz to 26.5GHz



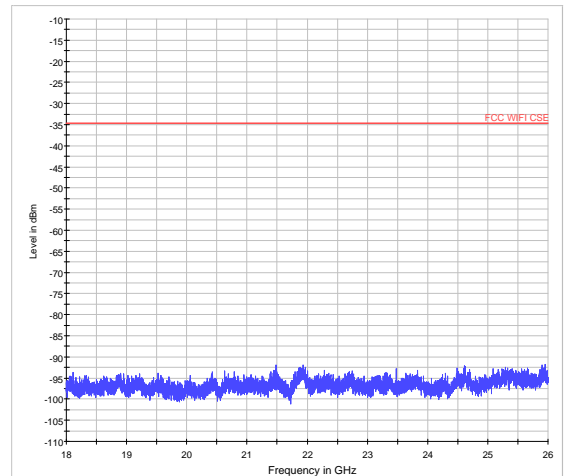
802.11n (HT20) CH1 30MHz to 18GHz



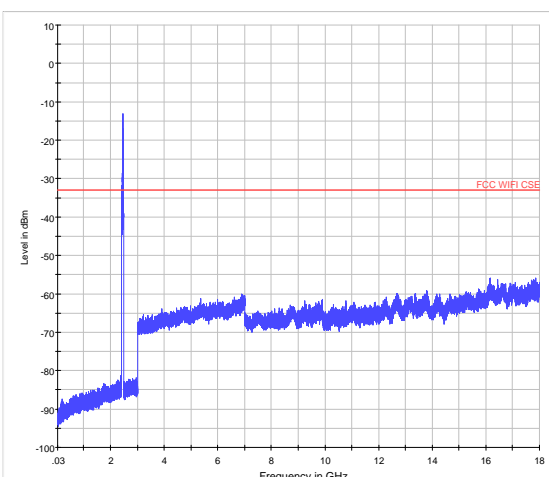
802.11n (HT20) CH1 18GHz to 26.5GHz



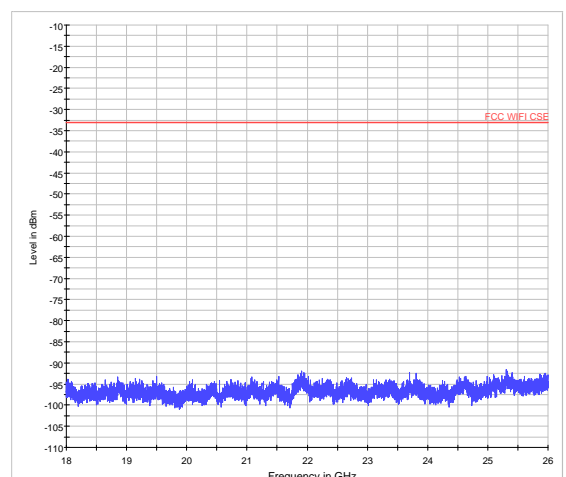
802.11n (HT20) CH6 30MHz to 18GHz



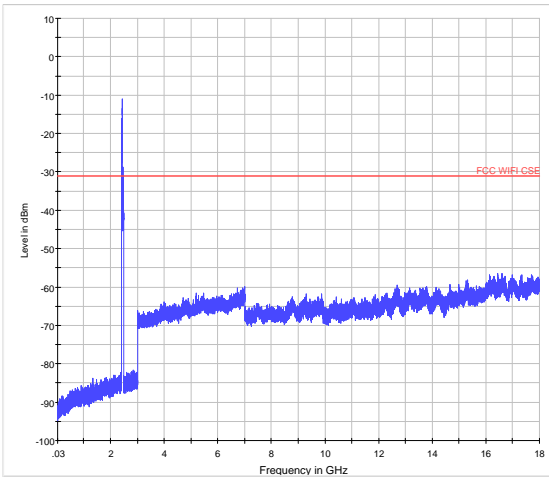
802.11n (HT20) CH6 18GHz to 26.5GHz



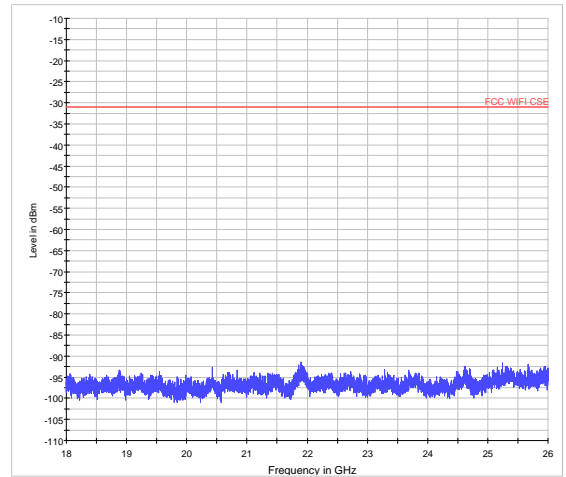
802.11n (HT20) CH11 30MHz to 18GHz



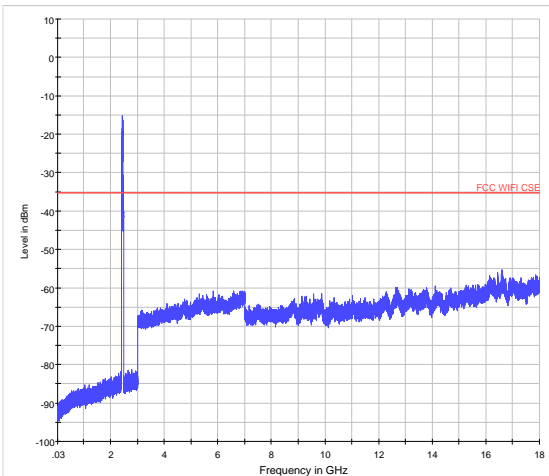
802.11n (HT20) CH11 18GHz to 26.5GHz



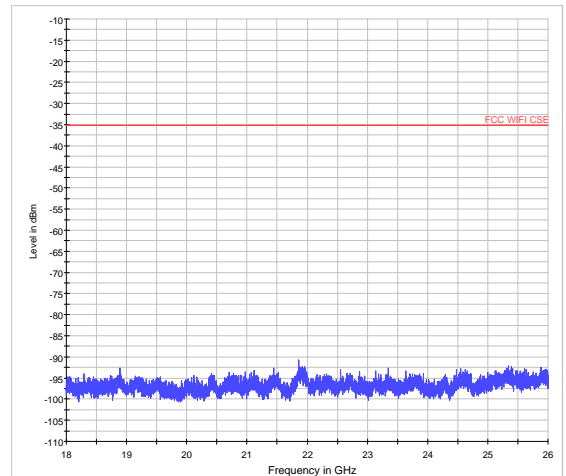
802.11n (HT40) CH3 30MHz to 18GHz



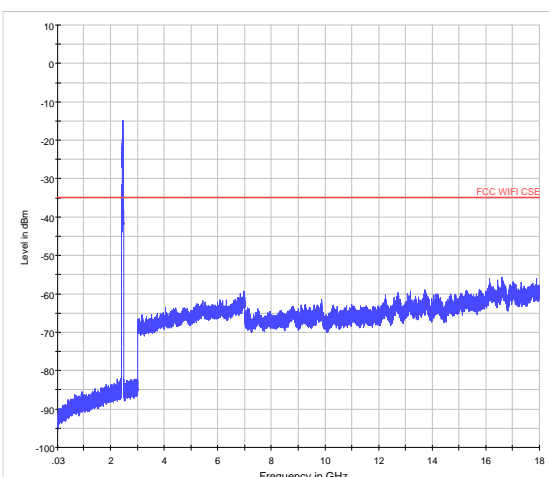
802.11n (HT40) CH3 18GHz to 26.5GHz



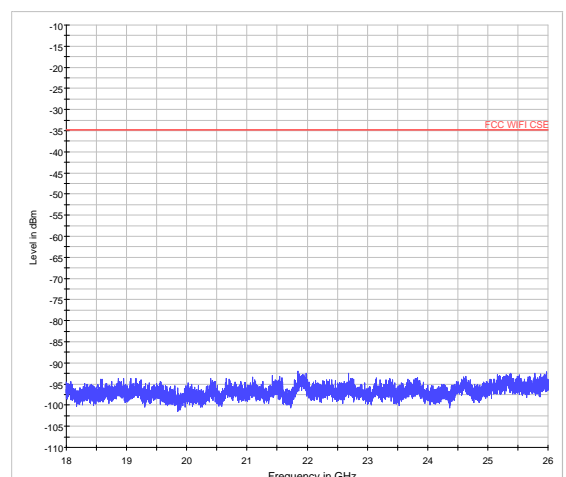
802.11n (HT40) CH6 30MHz to 18GHz



802.11n (HT40) CH6 18GHz to 26.5GHz



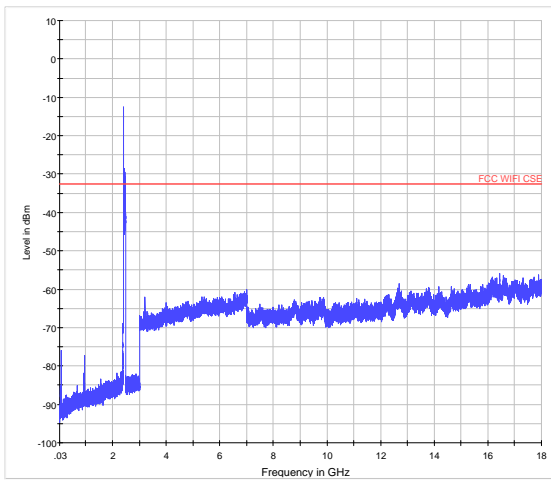
802.11n (HT40) CH9 30MHz to 18GHz



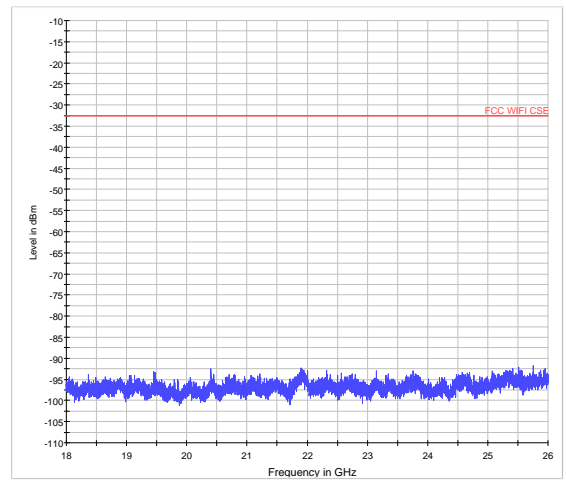
802.11n (HT40) CH9 18GHz to 26.5GHz



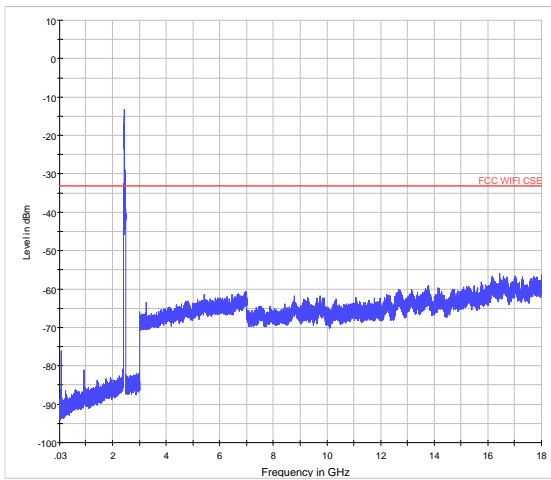
MIMO



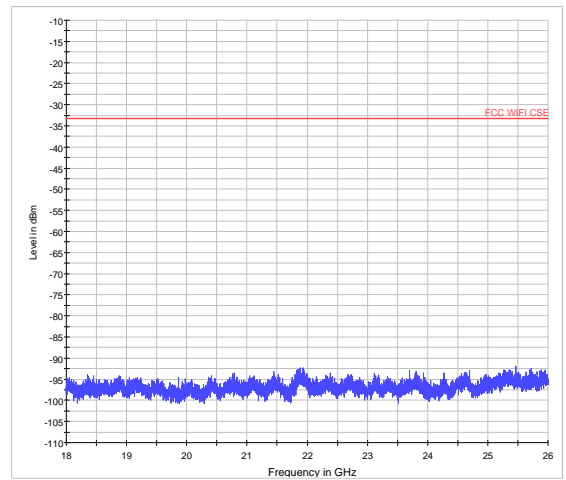
802.11n (HT20) CH1 30MHz to 18GHz



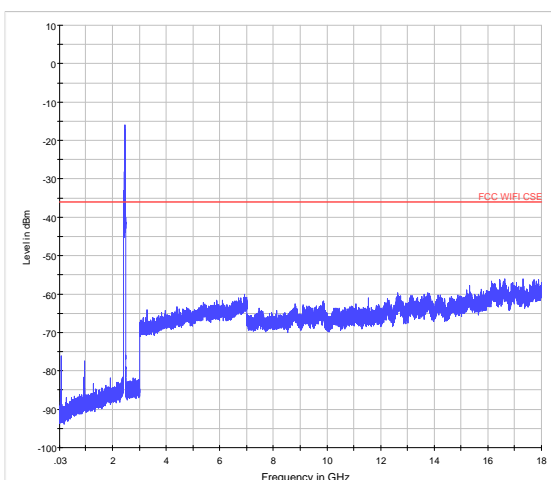
802.11n (HT20) CH1 18GHz to 26.5GHz



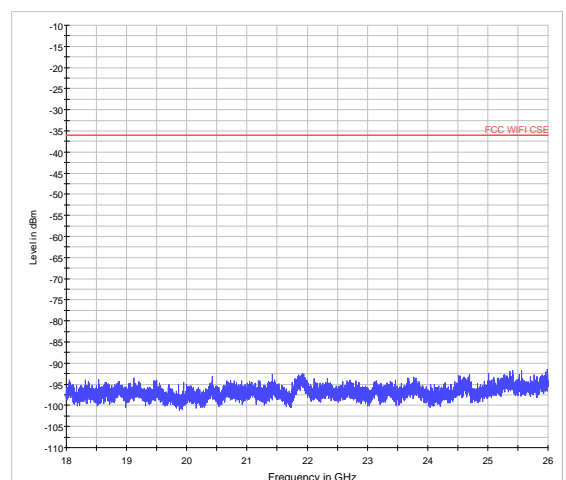
802.11n (HT20) CH6 30MHz to 18GHz



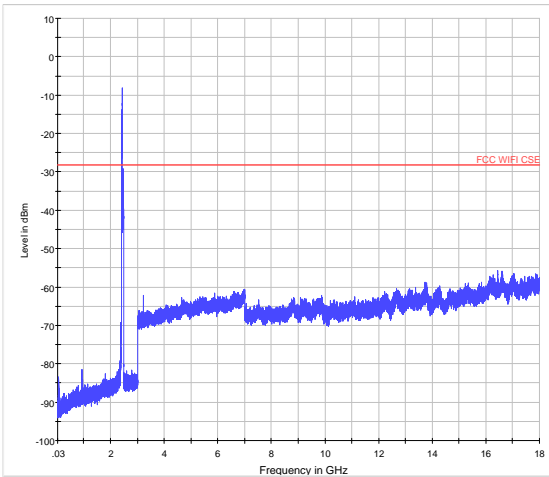
802.11n (HT20) CH6 18GHz to 26.5GHz



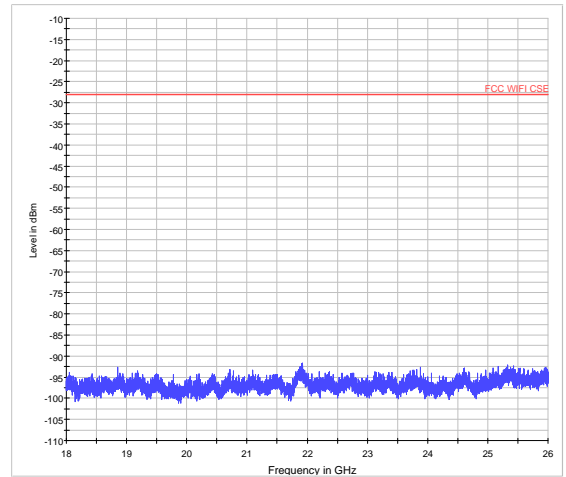
802.11n (HT20) CH11 30MHz to 18GHz



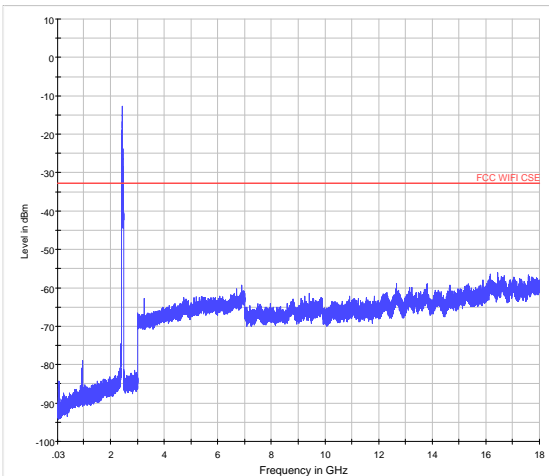
802.11n (HT20) CH11 18GHz to 26.5GHz



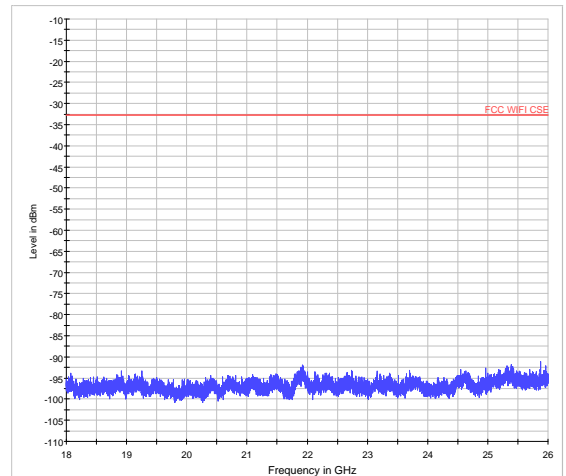
802.11n (HT40) CH3 30MHz to 18GHz



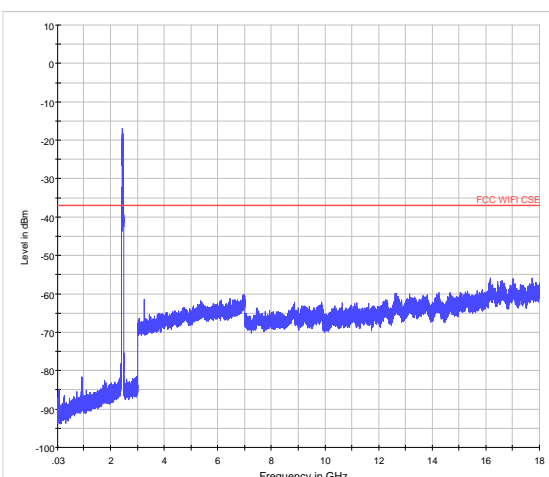
802.11n (HT40) CH3 18GHz to 26.5GHz



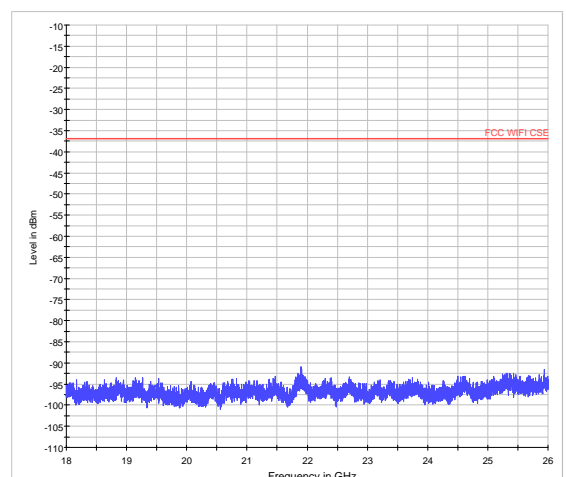
802.11n (HT40) CH6 30MHz to 18GHz



802.11n (HT40) CH6 18GHz to 26.5GHz



802.11n (HT40) CH9 30MHz to 18GHz



802.11n (HT40) CH9 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.VBW is three times RBW,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:

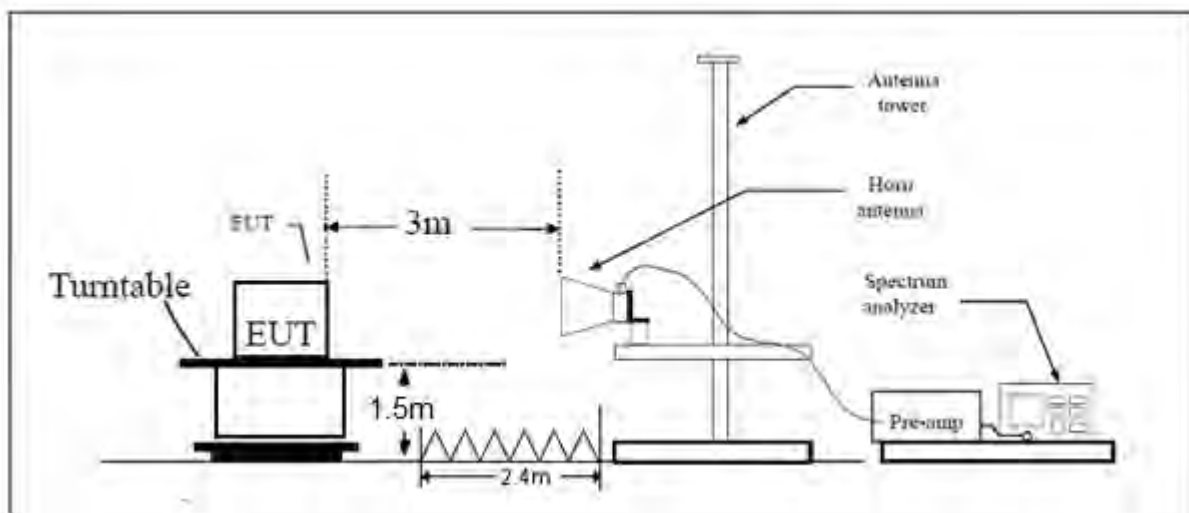
- (a) PEAK: RBW=1MHz; VBW=3MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

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.

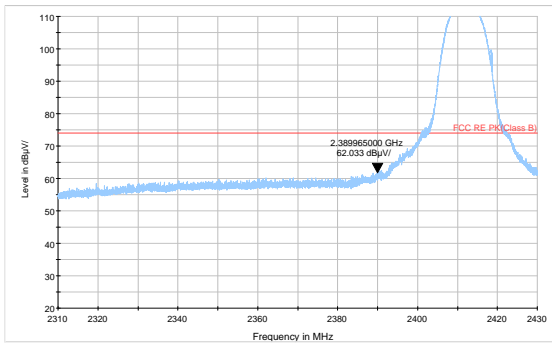


Test Results:

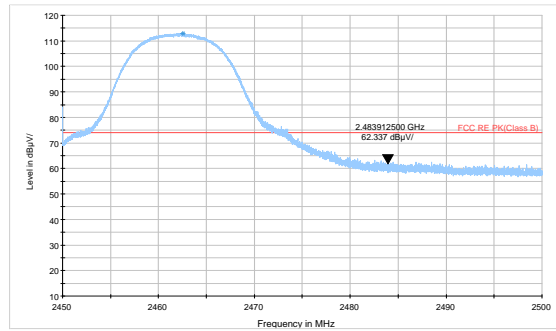
The signal beyond the limit is carrier.

SISO Antenna 1

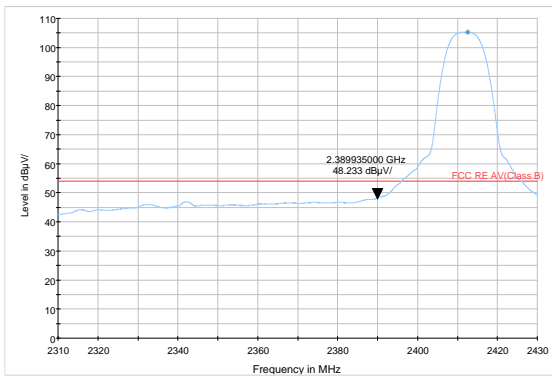
802.11b-Channel 1: Peak



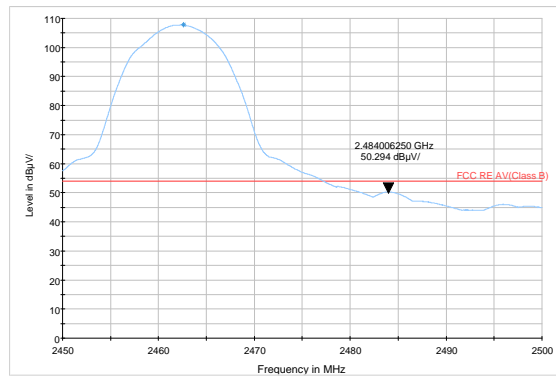
802.11b-Channel 11: Peak



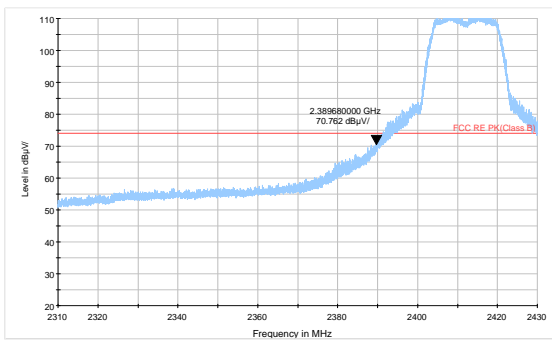
802.11b-Channel 1: Average



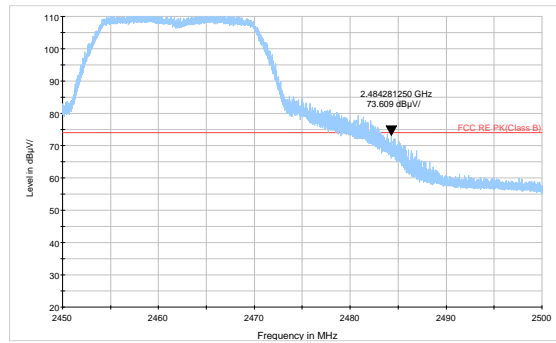
802.11b-Channel 11: Average



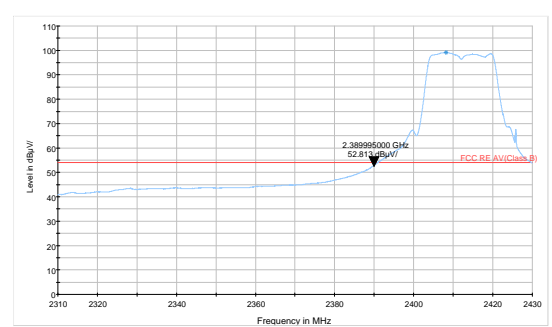
802.11g-Channel 1: Peak



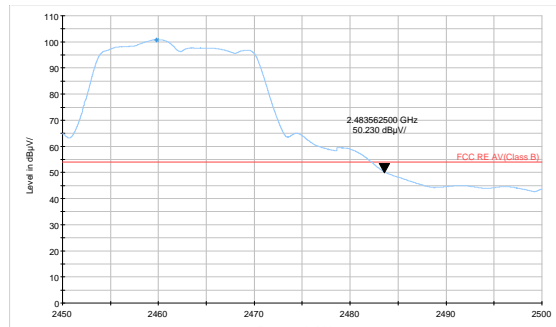
802.11g-Channel 11: Peak



802.11g-Channel 1: Average



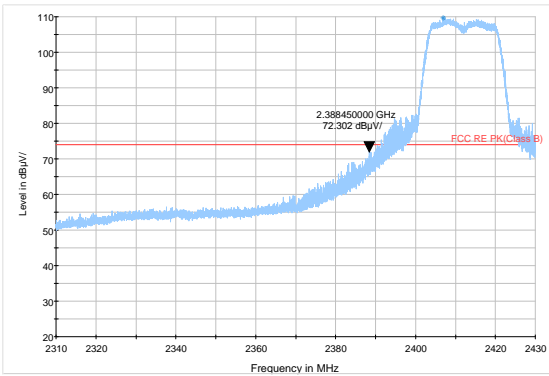
802.11g-Channel 11: Average



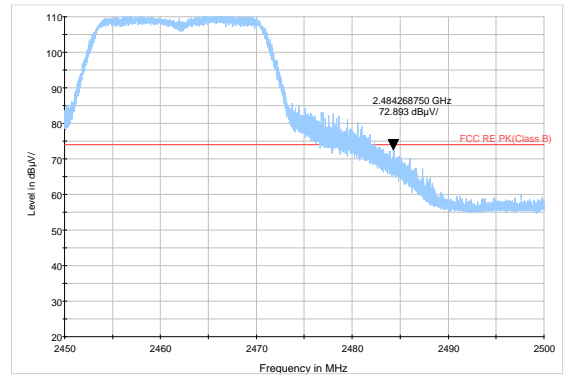


MIMO

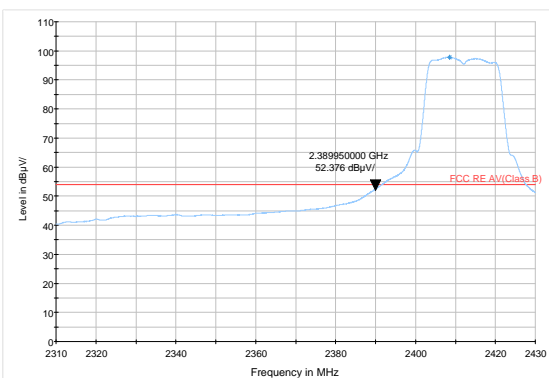
802.11n HT20 -Channel 1: Peak



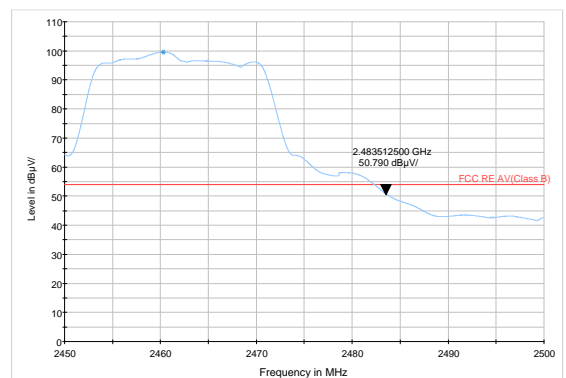
802.11n HT20-Channel 11: Peak



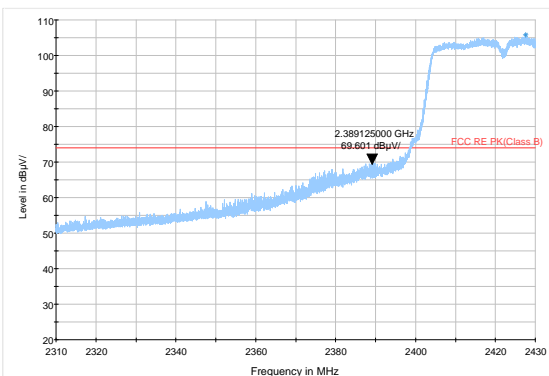
802.11n HT20-Channel 1: Average



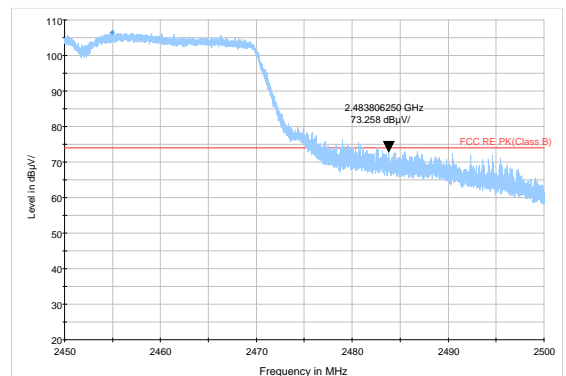
802.11n HT20-Channel 11: Average



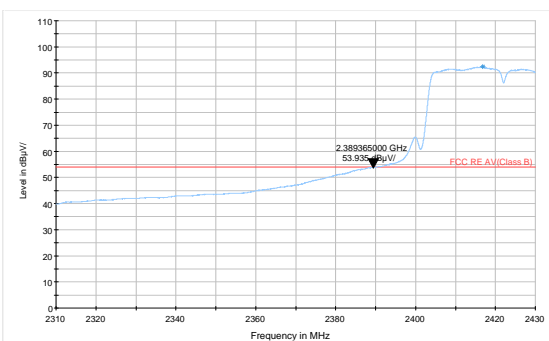
802.11n HT40 -Channel 3: Peak



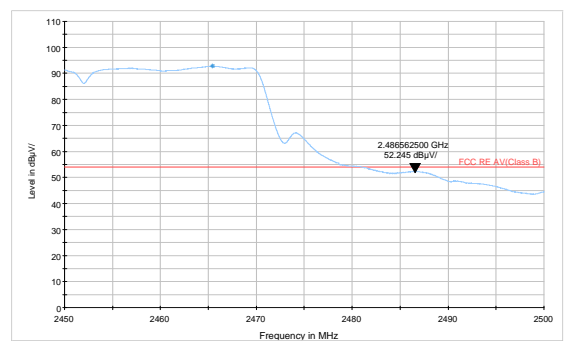
802.11n HT40-Channel 9: Peak



802.11n HT40-Channel 3: Average



802.11n HT40-Channel 9: 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

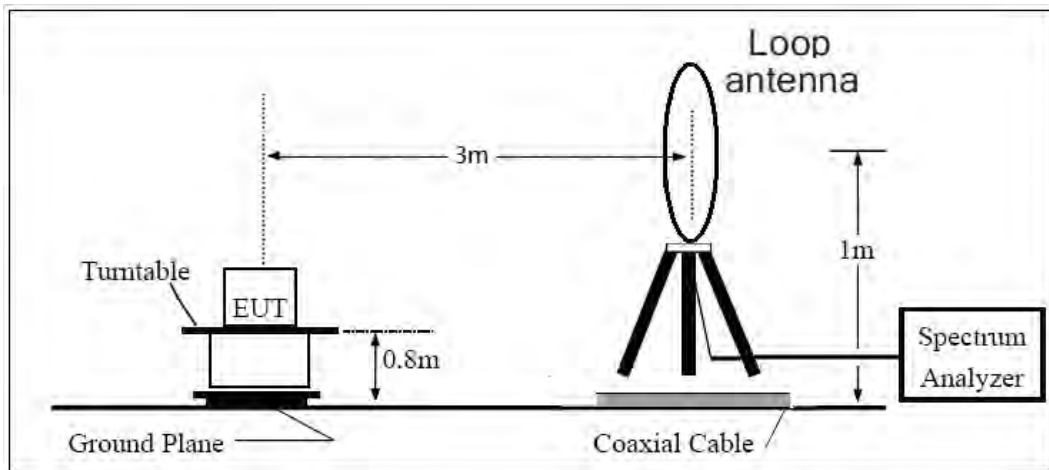
(b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

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.

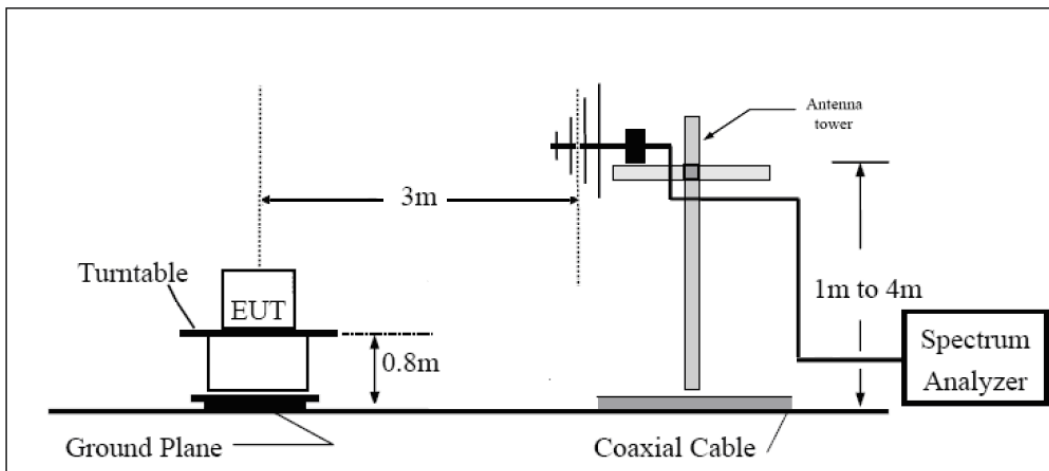
The test is in transmitting mode.

Test setup

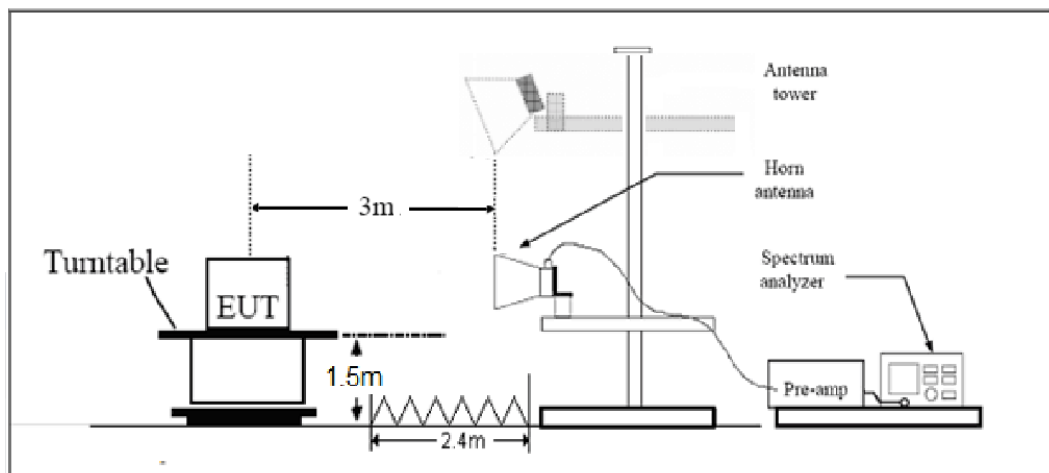
9KHz ~ 30MHz



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.

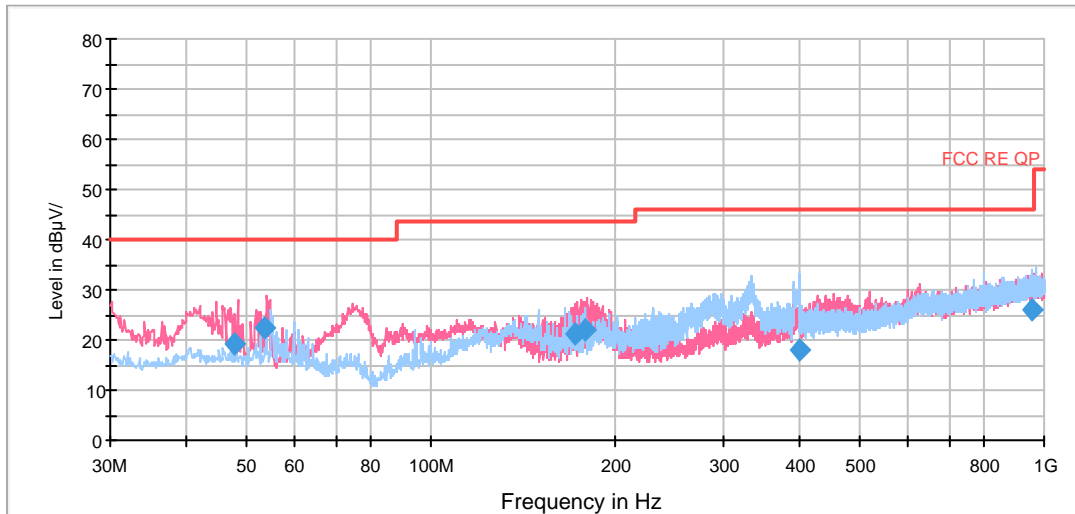
The following graphs display the maximum values of horizontal and vertical by software.

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

SISO Antenna 1

802.11b CH1

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

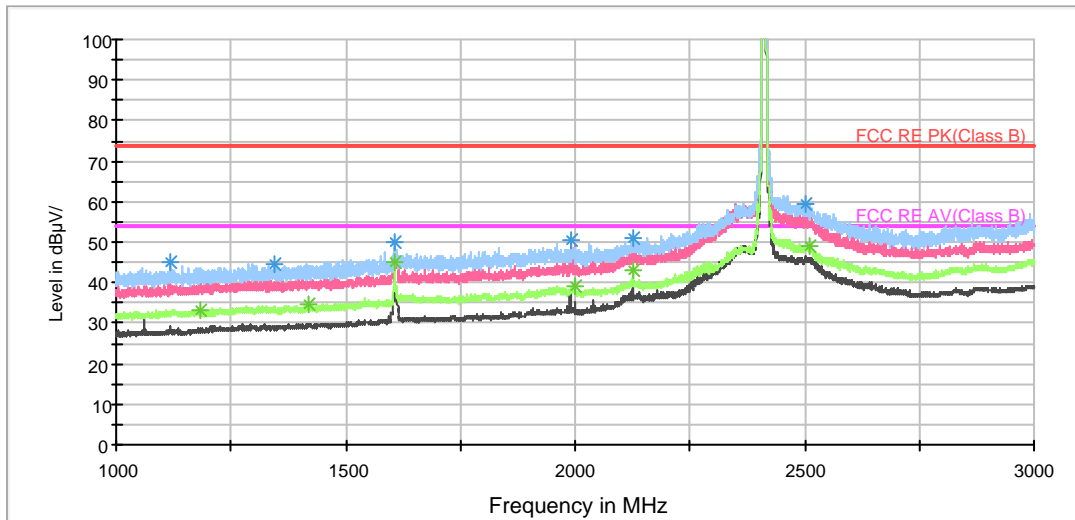
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
47.870000	19.1	100.0	V	225.0	32.2	-13.1	20.9	40.0
53.607500	22.2	100.0	V	259.0	35.0	-12.8	17.8	40.0
171.617500	21.3	100.0	V	110.0	31.8	-10.5	22.2	43.5
179.143750	22.1	100.0	V	189.0	33.1	-11.0	21.4	43.5
399.728750	18.1	100.0	H	99.0	36.4	-18.3	27.9	46.0
955.992500	26.1	100.0	H	305.0	53.4	-27.3	19.9	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

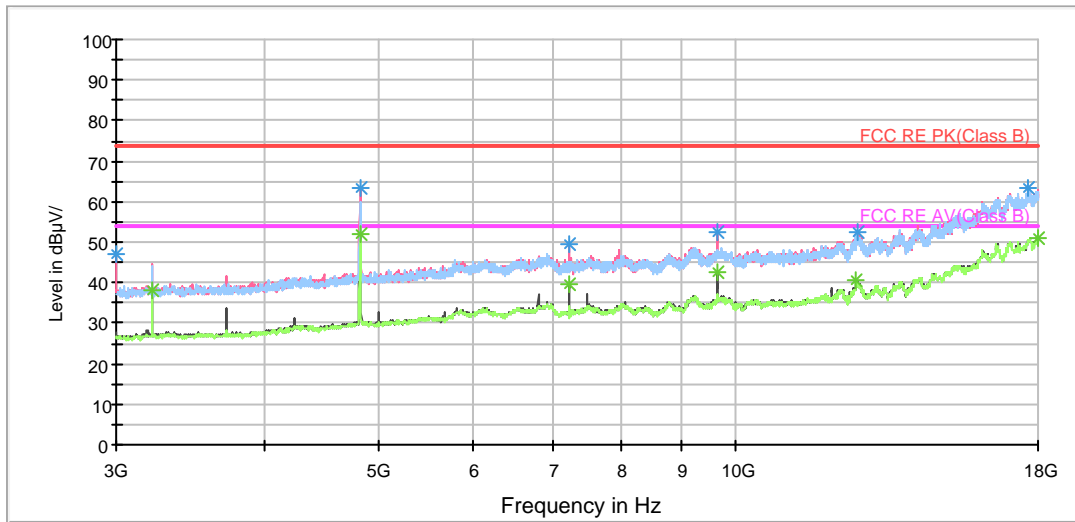
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1119.750000	44.9	200.0	H	263.0	53.4	-8.5	29.1	74
1345.250000	44.8	200.0	H	168.0	52.3	-7.5	29.2	74
1608.000000	49.8	200.0	H	99.0	55.8	-6.0	24.2	74
1992.250000	50.3	101.0	V	247.0	53.6	-3.3	23.7	74
2124.750000	51.2	200.0	H	0.0	53.5	-2.3	22.8	74
2502.750000	59.5	200.0	H	0.0	59.7	-0.2	14.5	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)
1184.000000	33.4	200.0	H	177.0	41.5	-8.1	20.6	54
1418.500000	34.4	200.0	H	132.0	41.3	-6.9	19.6	54
1608.000000	45.3	200.0	H	102.0	51.3	-6.0	8.7	54
2000.000000	39.0	200.0	H	213.0	42.4	-3.4	15.0	54
2124.750000	43.3	200.0	H	0.0	45.6	-2.3	10.7	54
2509.500000	49.2	200.0	H	79.0	49.4	-0.2	4.8	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

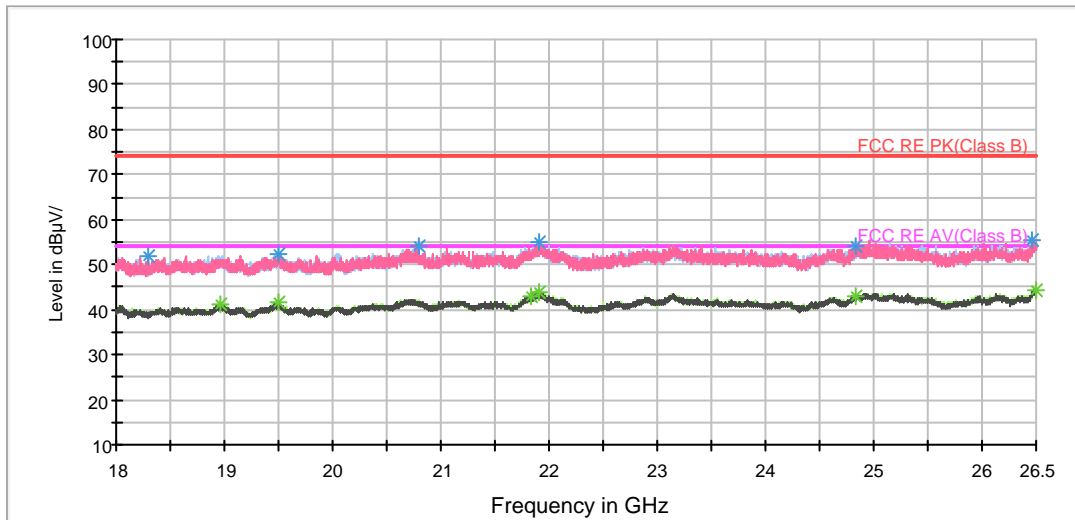
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3000.000000	47.2	101.0	V	320.0	50.4	-3.2	26.8	74
4822.500000	63.3	200.0	V	0.0	62.0	1.3	10.7	74
7237.500000	49.4	200.0	V	152.0	42.5	6.9	24.6	74
9648.750000	52.6	200.0	V	0.0	42.8	9.8	21.4	74
12682.500000	52.6	101.0	V	0.0	38.4	14.2	21.4	74
17685.000000	63.4	100.0	H	63.0	38.8	24.6	10.6	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3215.625000	37.9	101.0	V	343.0	40.7	-2.8	16.1	54
4824.375000	52.2	200.0	V	0.0	50.8	1.4	1.8	54
7233.750000	39.6	200.0	V	152.0	32.8	6.8	14.4	54
9648.750000	42.5	200.0	V	0.0	32.7	9.8	11.5	54
12641.250000	40.5	101.0	V	298.0	26.0	14.5	13.5	54
18000.000000	51.1	100.0	H	0.0	25.6	25.5	2.9	54

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

BELL_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)
18297.500000	52.1	V	87.0	51.2	0.9	21.9	74
19496.000000	52.5	V	106.0	52.4	0.1	21.5	74
20799.687500	54.3	V	46.0	56.2	-1.9	19.7	74
21907.875000	55.1	H	174.0	56.6	-1.5	18.9	74
24825.500000	54.0	V	115.0	53.8	0.2	20.0	74
26463.875000	55.6	H	225.0	54.5	1.1	18.4	74

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

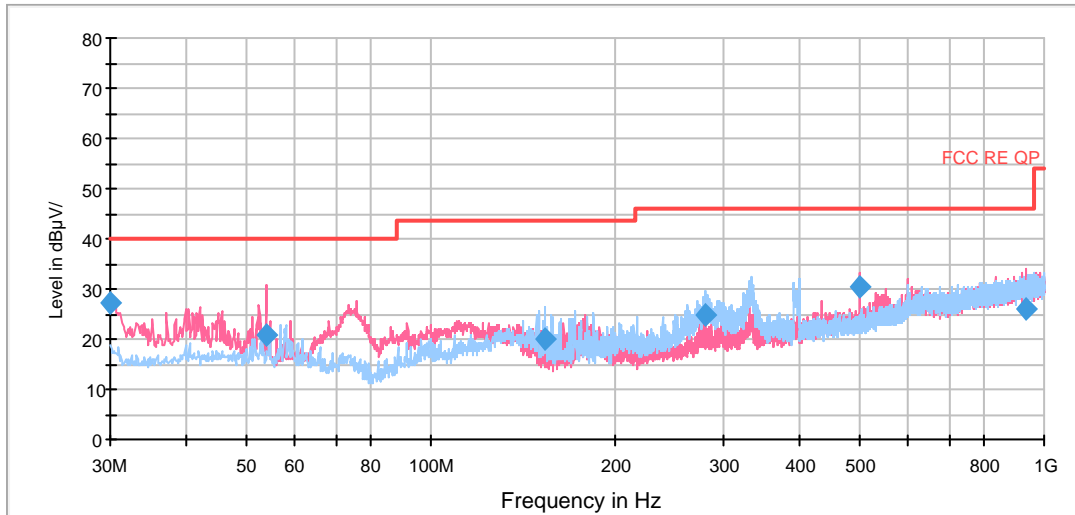
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18965.812500	41.0	V	87.0	41.1	-0.1	13.0	54
19500.250000	41.8	V	96.0	41.7	0.1	12.2	54
21837.750000	42.8	H	217.0	44.7	-1.9	11.2	54
21900.437500	43.9	H	225.0	45.5	-1.6	10.1	54
24837.187500	43.0	H	225.0	42.7	0.3	11.0	54
26492.562500	44.5	V	149.0	43.4	1.1	9.5	54

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



802.11b CH6

FCC RE 0.03-1GHz QP Class B

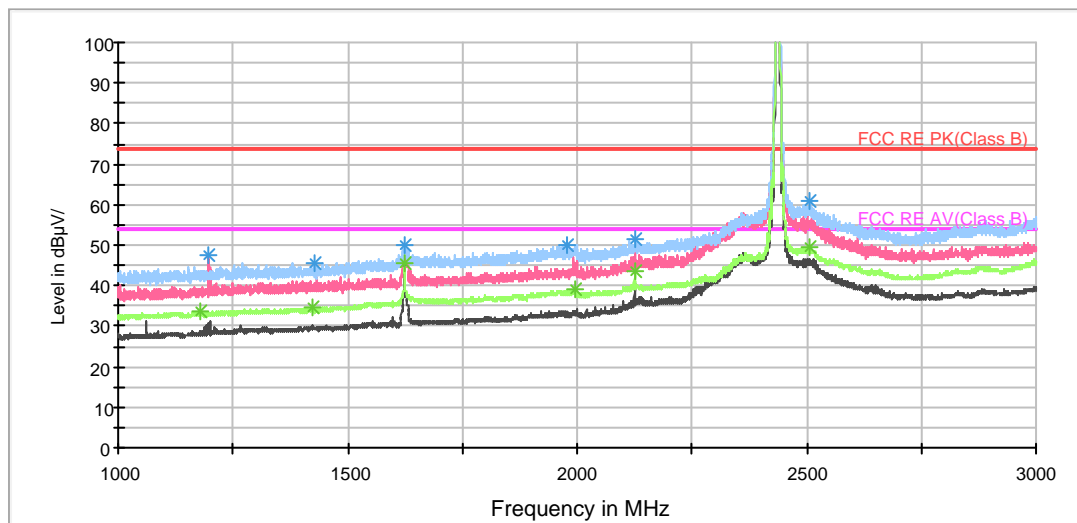


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	27.0	100.0	V	102.0	39.1	-12.1	13.0	40.0
53.766250	21.0	100.0	V	95.0	33.8	-12.8	19.0	40.0
153.555000	19.9	125.0	H	224.0	29.4	-9.5	23.6	43.5
279.975000	24.7	114.0	H	80.0	39.9	-15.2	21.3	46.0
500.005000	30.2	114.0	V	89.0	50.1	-19.9	15.8	46.0
936.986250	25.9	125.0	V	324.0	52.9	-27.0	20.1	46.0

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

RE 1G-3GHz PK+AV



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)
1197.750000	47.8	101.0	V	165.0	56.0	-8.2	26.2	74
1426.000000	45.7	200.0	H	22.0	52.6	-6.9	28.3	74
1624.500000	50.1	200.0	H	22.0	54.9	-4.8	23.9	74
1978.000000	50.1	101.0	H	0.0	53.8	-3.7	23.9	74
2125.250000	51.4	200.0	H	22.0	53.7	-2.3	22.6	74
2508.500000	61.0	200.0	H	147.0	61.2	-0.2	13.0	74

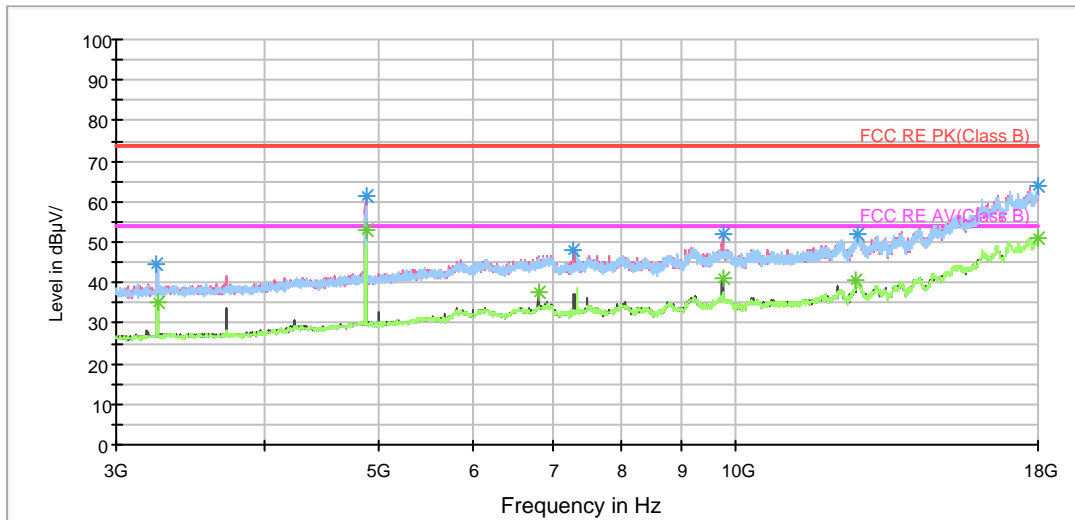
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1178.000000	33.6	200.0	H	165.0	41.6	-8.0	20.4	54
1422.500000	34.4	101.0	H	22.0	41.3	-6.9	19.6	54
1624.500000	45.4	200.0	V	0.0	50.2	-4.8	8.6	54
1994.750000	39.1	200.0	H	0.0	42.3	-3.2	14.9	54
2125.250000	43.4	200.0	H	22.0	45.7	-2.3	10.6	54
2504.750000	49.4	200.0	H	285.0	49.6	-0.2	4.6	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)
3247.500000	44.6	200.0	H	0.0	47.1	-2.5	29.4	74
4873.125000	61.4	200.0	V	0.0	59.6	1.8	12.6	74
7303.125000	48.2	200.0	V	156.0	41.2	7.0	25.8	74
9748.125000	52.0	200.0	V	111.0	42.2	9.8	22.0	74
12676.875000	51.9	100.0	H	107.0	37.7	14.2	22.1	74
17994.375000	63.6	100.0	H	0.0	38.3	25.3	10.4	74

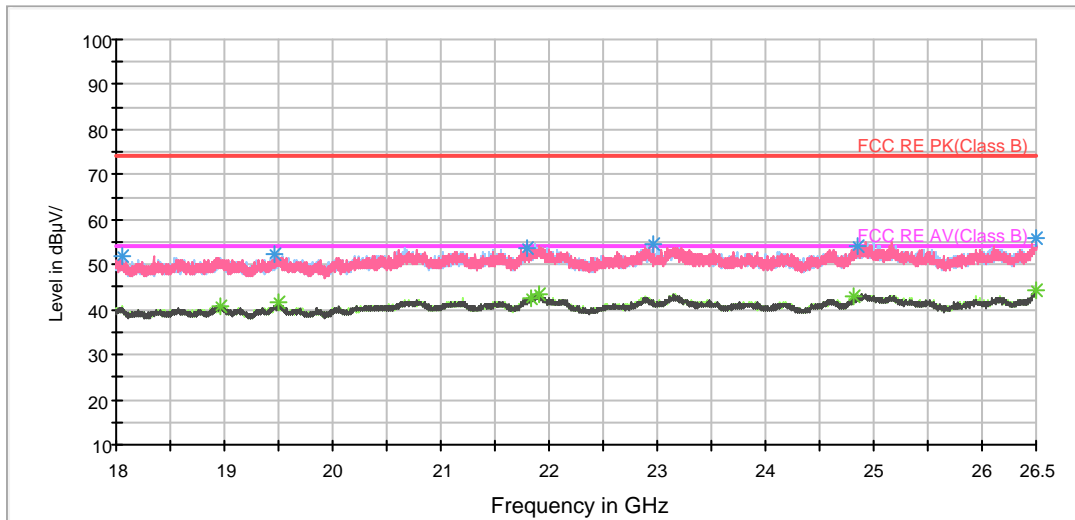
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3249.375000	35.4	200.0	H	0.0	37.9	-2.5	18.6	54
4873.125000	53.2	200.0	V	0.0	51.4	1.8	0.8	54
6811.875000	37.4	200.0	V	65.0	31.6	5.8	16.6	54
9748.125000	41.2	200.0	V	111.0	31.4	9.8	12.8	54
12641.250000	40.4	200.0	V	156.0	25.9	14.5	13.6	54
18000.000000	51.1	100.0	H	0.0	25.6	25.5	2.9	54

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



BELL_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)
18061.625000	52.0	H	164.0	50.6	1.4	22.0	74
19456.687500	52.1	H	137.0	52.1	0.0	21.9	74
21793.125000	53.8	V	45.0	55.9	-2.1	20.2	74
22957.625000	54.6	V	116.0	54.7	-0.1	19.4	74
24843.562500	54.0	V	68.0	53.7	0.3	20.0	74
26497.875000	55.7	H	181.0	54.6	1.1	18.3	74

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

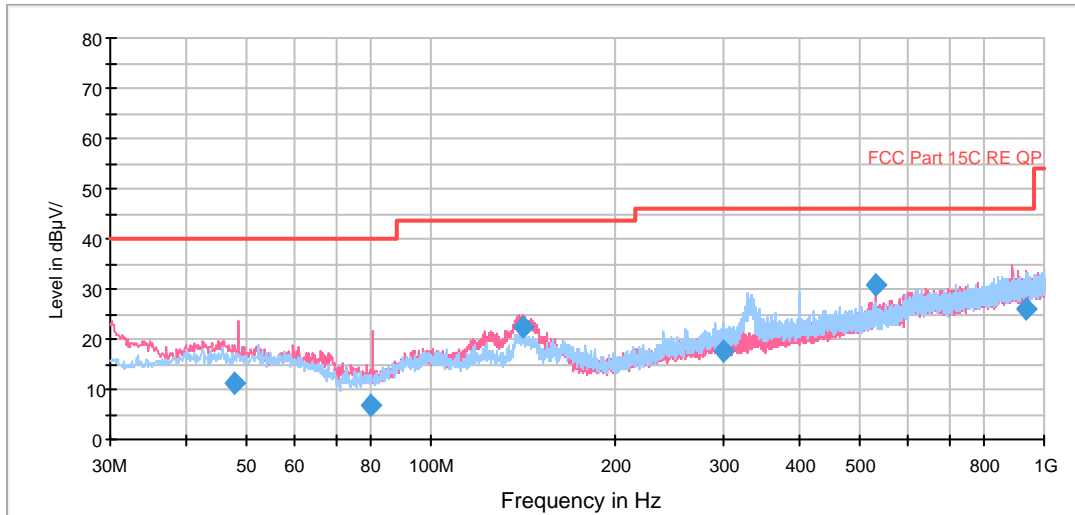
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18970.062500	41.0	V	61.0	41.1	-0.1	13.0	54
19503.437500	41.6	V	179.0	41.5	0.1	12.4	54
21834.562500	42.7	H	155.0	44.6	-1.9	11.3	54
21905.750000	43.4	H	155.0	44.9	-1.5	10.6	54
24819.125000	42.8	H	225.0	42.6	0.2	11.2	54
26498.937500	44.5	H	215.0	43.4	1.1	9.5	54

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



802.11b CH11

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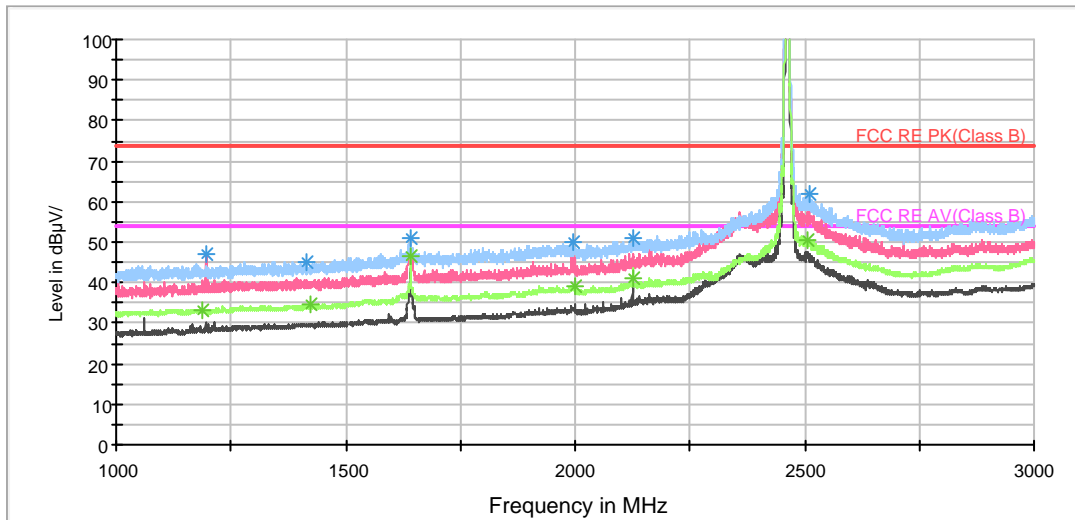


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
47.951250	11.4	100.0	V	322.0	24.6	-13.2	28.6	40.0
80.001250	6.8	100.0	V	322.0	15.4	-8.6	33.2	40.0
141.065000	22.3	100.0	V	104.0	31.3	-9.0	21.2	43.5
299.981250	17.8	100.0	H	11.0	33.6	-15.8	28.2	46.0
531.247500	30.7	100.0	V	305.0	51.5	-20.8	15.3	46.0
935.453750	25.9	114.0	V	290.0	52.9	-27.0	20.1	46.0

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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

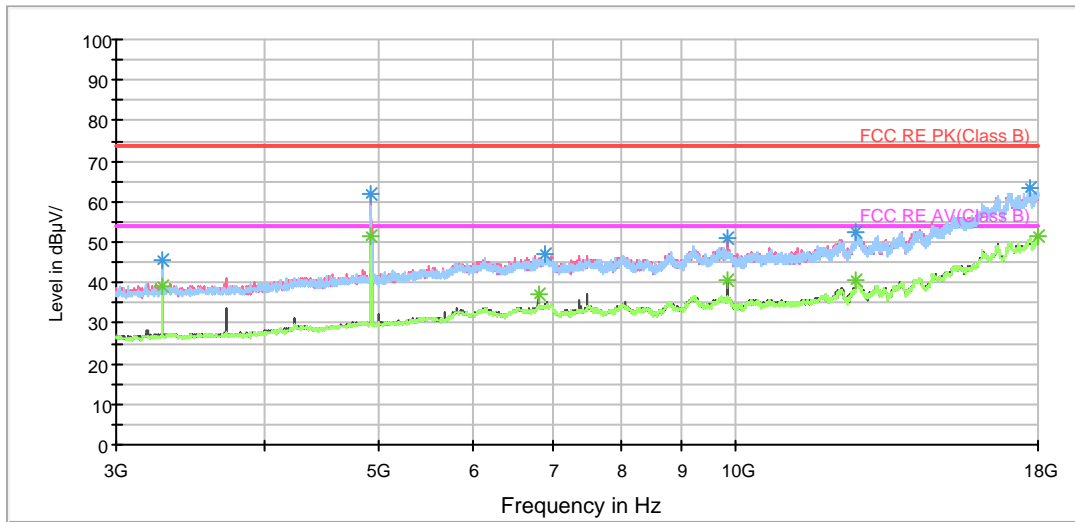
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.500000	47.2	101.0	V	8.0	55.4	-8.2	26.8	74
1416.500000	45.2	200.0	H	45.0	52.2	-7.0	28.8	74
1641.250000	50.9	200.0	H	246.0	55.6	-4.7	23.1	74
1993.750000	50.1	200.0	H	0.0	53.4	-3.3	23.9	74
2125.250000	51.1	100.0	H	17.0	53.4	-2.3	22.9	74
2508.750000	61.8	200.0	H	0.0	62.0	-0.2	12.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1188.250000	33.4	200.0	H	151.0	41.6	-8.2	20.6	54
1423.000000	34.4	200.0	H	151.0	41.3	-6.9	19.6	54
1641.500000	46.5	200.0	H	96.0	51.2	-4.7	7.5	54
1999.750000	39.2	200.0	H	0.0	42.6	-3.4	14.8	54
2125.250000	41.1	100.0	H	8.0	43.4	-2.3	12.9	54
2507.000000	50.7	200.0	H	272.0	50.9	-0.2	3.3	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)
3281.250000	45.6	200.0	H	0.0	47.7	-2.1	28.4	74
4923.750000	62.1	200.0	V	0.0	60.2	1.9	11.9	74
6896.250000	46.8	100.0	V	230.0	40.6	6.2	27.2	74
9847.500000	50.9	200.0	V	129.0	40.6	10.3	23.1	74
12637.500000	52.3	200.0	V	0.0	38.0	14.3	21.7	74
17700.000000	63.3	200.0	H	0.0	38.6	24.7	10.7	74

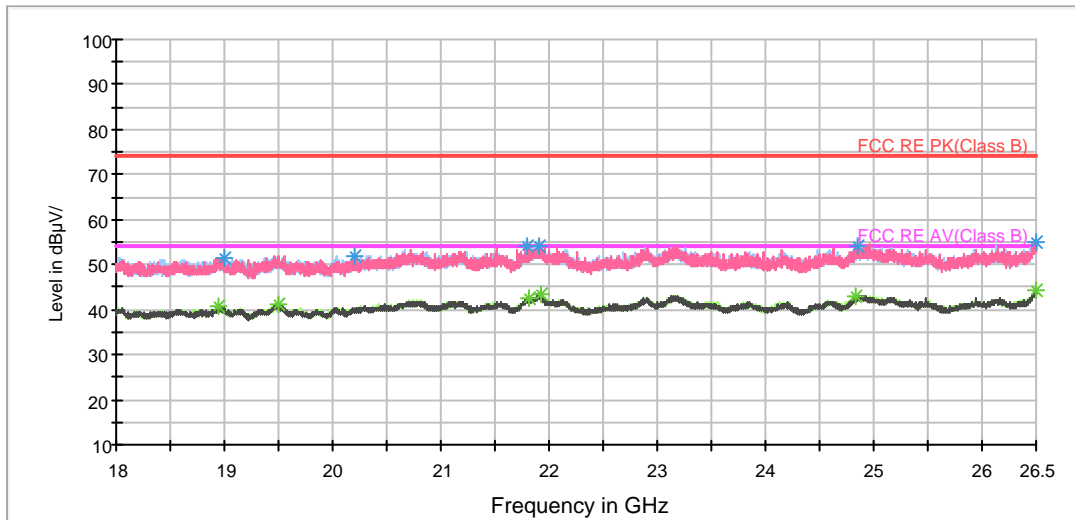
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	38.9	100.0	V	343.0	41.0	-2.1	15.1	54
4923.750000	51.6	200.0	V	0.0	49.7	1.9	2.4	54
6811.875000	37.2	200.0	V	62.0	31.4	5.8	16.8	54
9847.500000	40.7	200.0	V	129.0	30.4	10.3	13.3	54
12641.250000	40.5	200.0	V	0.0	26.0	14.5	13.5	54
18000.000000	51.3	200.0	V	0.0	25.8	25.5	2.7	54

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



BELL_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)
19006.187500	51.6	H	225.0	51.8	-0.2	22.4	74
20201.500000	52.1	V	124.0	53.4	-1.3	21.9	74
21801.625000	54.2	H	147.0	56.3	-2.1	19.8	74
21903.625000	54.2	H	225.0	55.8	-1.6	19.8	74
24843.562500	54.0	H	225.0	53.7	0.3	20.0	74
26497.875000	54.9	H	217.0	53.8	1.1	19.1	74

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

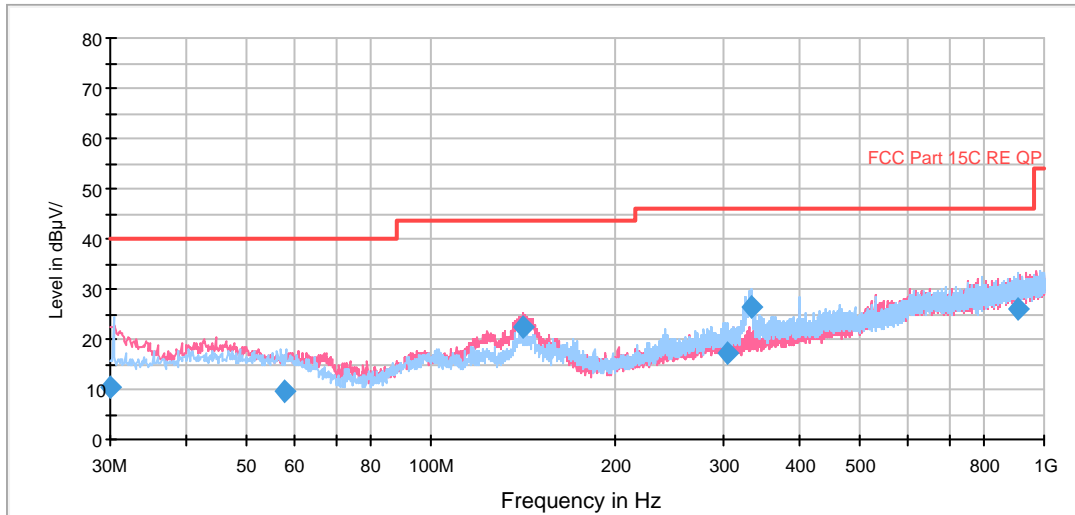
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18936.062500	40.7	V	45.0	40.6	0.1	13.3	54
19499.187500	41.1	V	132.0	41.0	0.1	12.9	54
21815.437500	42.6	V	46.0	44.6	-2.0	11.4	54
21921.687500	43.3	H	225.0	44.8	-1.5	10.7	54
24837.187500	42.8	H	101.0	42.5	0.3	11.2	54
26500.000000	44.1	H	225.0	43.0	1.1	9.9	54

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



802.11g CH1

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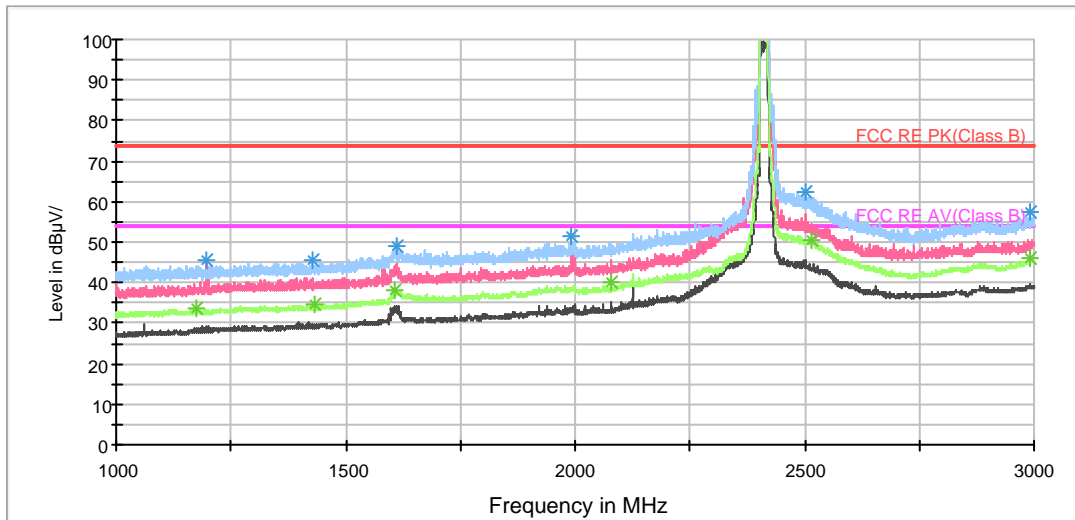
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	10.2	125.0	H	54.0	22.3	-12.1	29.8	40.0
57.638750	9.5	125.0	H	135.0	22.1	-12.6	30.5	40.0
141.026250	22.3	100.0	V	114.0	31.3	-9.0	21.2	43.5
305.075000	17.3	100.0	H	26.0	33.1	-15.8	28.7	46.0
332.643750	26.6	100.0	H	226.0	43.2	-16.6	19.4	46.0
908.980000	25.9	100.0	H	26.0	52.8	-26.9	20.1	46.0

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



RE 1G-3GHz PK+AV



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)
1198.500000	45.7	125.0	V	133.0	53.9	-8.2	28.3	74
1426.250000	45.4	125.0	H	19.0	52.3	-6.9	28.6	74
1610.750000	48.8	225.0	H	169.0	54.6	-5.8	25.2	74
1992.500000	51.2	125.0	V	0.0	54.5	-3.3	22.8	74
2503.750000	62.3	225.0	H	0.0	62.5	-0.2	11.7	74
2989.500000	57.4	225.0	H	204.0	55.2	2.2	16.6	74

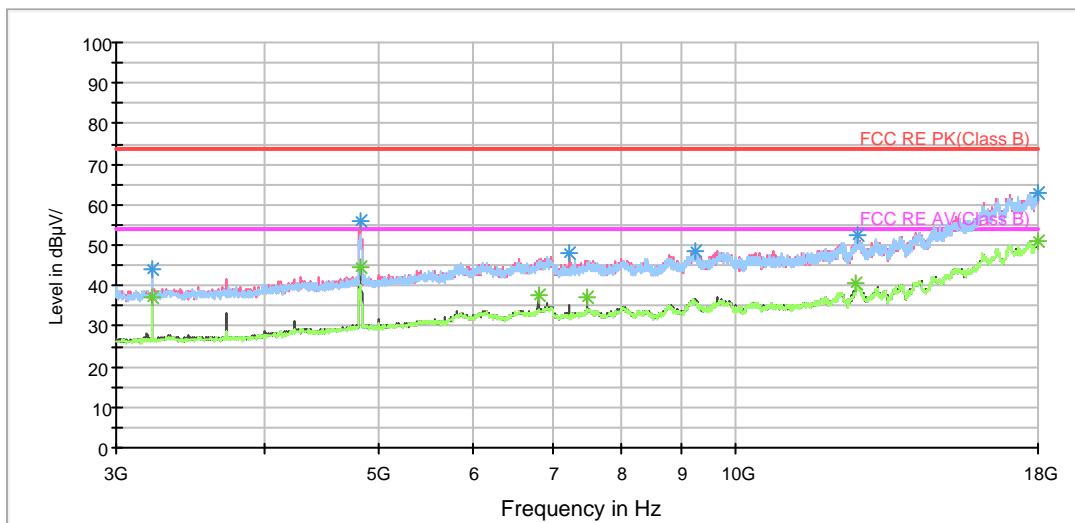
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1174.250000	33.6	225.0	H	169.0	41.6	-8.0	20.4	54
1433.250000	34.5	225.0	H	0.0	41.4	-6.9	19.5	54
1608.500000	38.0	225.0	H	122.0	43.9	-5.9	16.0	54
2080.000000	40.2	225.0	H	169.0	43.2	-3.0	13.8	54
2514.500000	50.7	225.0	H	19.0	50.9	-0.2	3.3	54
2992.750000	45.9	125.0	H	305.0	43.7	2.2	8.1	54

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



RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

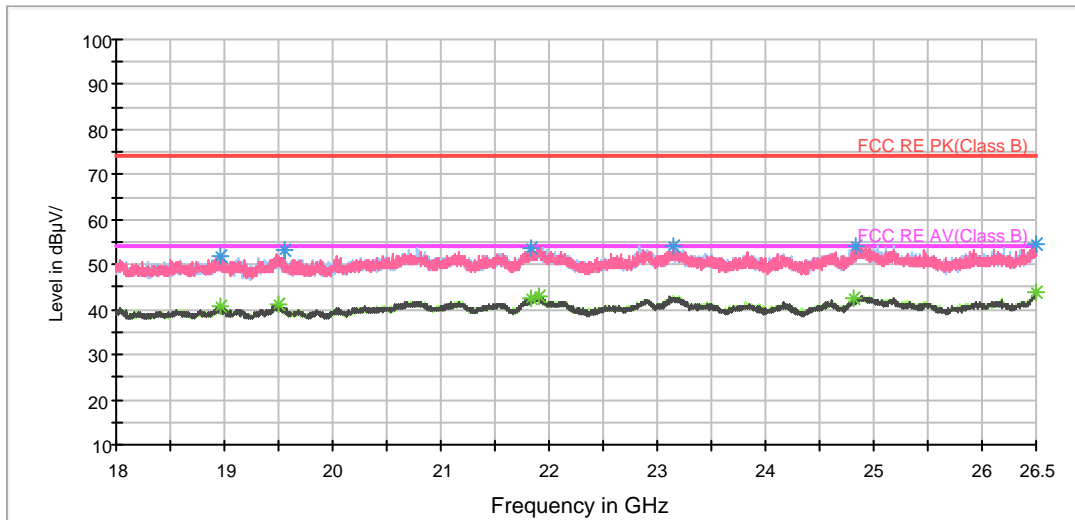
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3215.625000	44.2	100.0	V	342.0	47.0	-2.8	29.8	74
4818.750000	55.9	200.0	V	0.0	54.6	1.3	18.1	74
7230.000000	48.1	200.0	V	153.0	41.4	6.7	25.9	74
9230.625000	48.7	100.0	H	17.0	38.8	9.9	25.3	74
12684.375000	52.3	200.0	V	18.0	38.1	14.2	21.7	74
17996.250000	63.0	100.0	V	297.0	37.6	25.4	11.0	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3215.625000	37.2	100.0	V	342.0	40.0	-2.8	16.8	54
4822.500000	44.5	200.0	V	0.0	43.2	1.3	9.5	54
6811.875000	37.5	200.0	V	40.0	31.7	5.8	16.5	54
7500.000000	37.2	200.0	V	62.0	30.3	6.9	16.8	54
12641.250000	40.6	200.0	V	199.0	26.1	14.5	13.4	54
17998.125000	51.1	200.0	H	321.0	25.7	25.4	2.9	54

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

BELL_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	51.7	V	73.0	51.7	0.0	22.3	74
19549.125000	53.1	V	73.0	53.2	-0.1	20.9	74
21835.625000	53.4	H	117.0	55.3	-1.9	20.6	74
23152.062500	54.3	V	45.0	54.4	-0.1	19.7	74
24834.000000	53.9	H	206.0	53.7	0.2	20.1	74
26493.625000	54.7	H	180.0	53.6	1.1	19.3	74

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

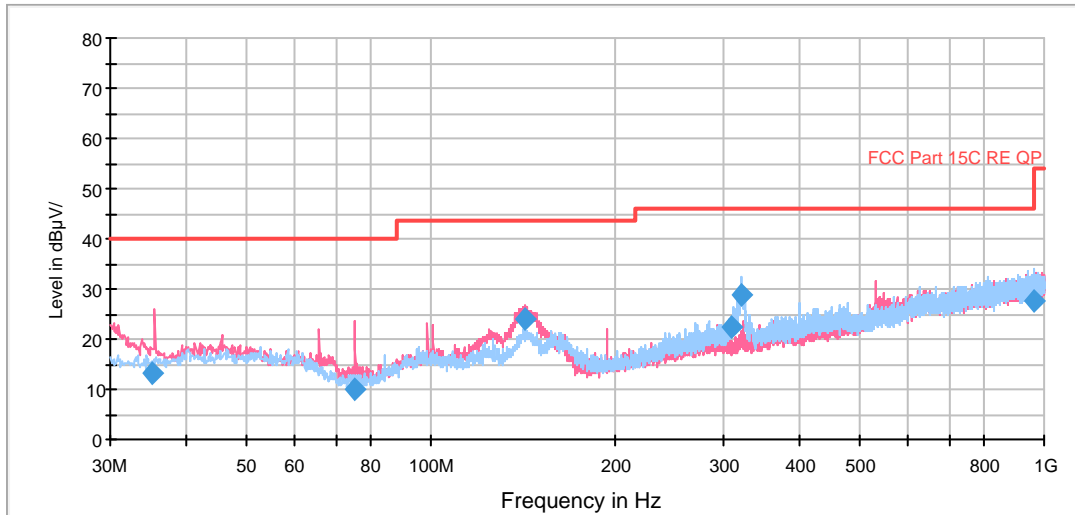
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18971.125000	40.6	V	73.0	40.7	-0.1	13.4	54
19493.875000	41.0	V	73.0	40.9	0.1	13.0	54
21839.875000	42.5	H	189.0	44.4	-1.9	11.5	54
21905.750000	42.9	H	189.0	44.4	-1.5	11.1	54
24814.875000	42.7	V	124.0	42.6	0.1	11.3	54
26497.875000	43.7	H	225.0	42.6	1.1	10.3	54

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



802.11g CH6

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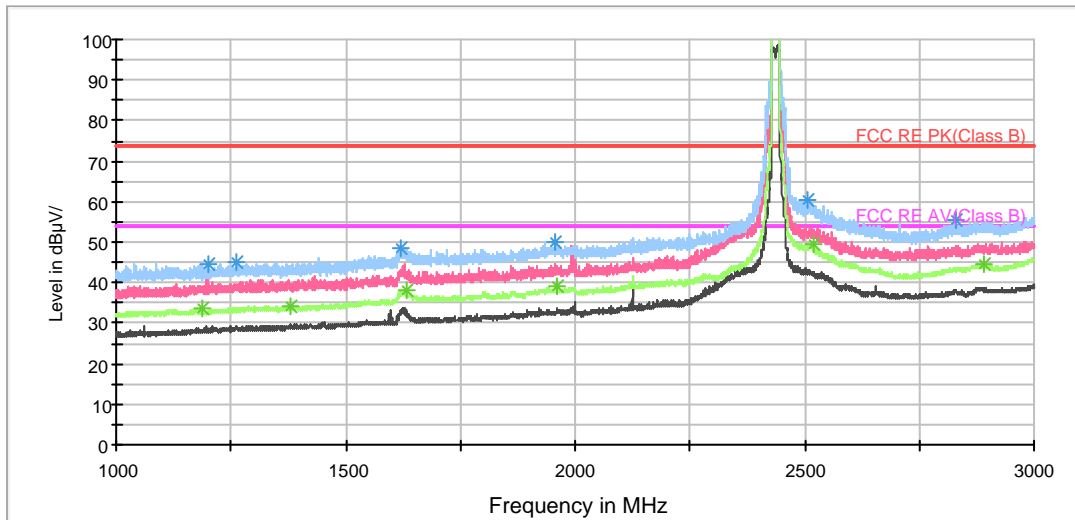


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
35.136250	13.1	100.0	V	315.0	25.2	-12.1	26.9	40.0
74.986250	10.1	125.0	V	212.0	18.7	-8.6	29.9	40.0
142.363750	23.8	100.0	V	256.0	32.8	-9.0	19.7	43.5
309.640000	22.4	100.0	H	224.0	38.4	-16.0	23.6	46.0
321.610000	29.0	100.0	H	239.0	45.1	-16.1	17.0	46.0
959.985000	27.5	100.0	H	86.0	54.9	-27.4	18.5	46.0

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

RE 1G-3GHz PK+AV



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)
1199.000000	44.8	125.0	H	172.0	53.0	-8.2	29.2	74
1260.750000	45.3	125.0	H	164.0	53.1	-7.8	28.7	74
1619.750000	48.7	225.0	H	0.0	53.5	-4.8	25.3	74
1957.000000	49.9	225.0	H	0.0	53.3	-3.4	24.1	74
2506.000000	60.2	225.0	H	0.0	60.4	-0.2	13.8	74
2830.750000	55.3	125.0	H	0.0	53.7	1.6	18.7	74

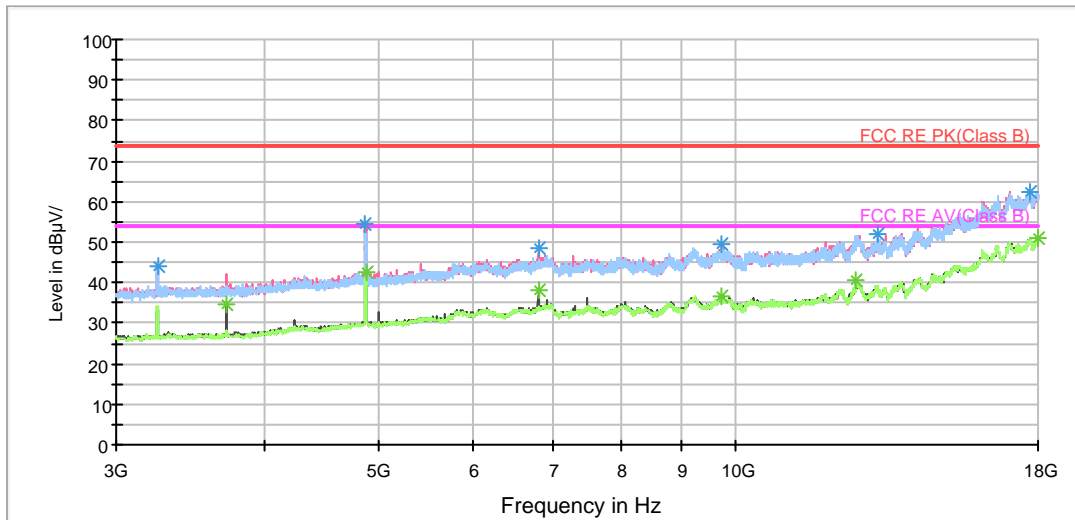
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1186.500000	33.4	225.0	H	147.0	41.5	-8.1	20.6	54
1379.000000	34.3	125.0	H	164.0	41.3	-7.0	19.7	54
1631.250000	38.1	225.0	H	94.0	42.8	-4.7	15.9	54
1960.500000	39.1	225.0	H	164.0	42.3	-3.2	14.9	54
2520.500000	49.4	225.0	H	21.0	49.7	-0.3	4.6	54
2890.250000	44.7	225.0	H	38.0	42.5	2.2	9.3	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)
3249.375000	44.1	200.0	H	0.0	46.6	-2.5	29.9	74
4871.250000	54.2	200.0	V	0.0	52.4	1.8	19.8	74
6811.875000	48.5	200.0	V	91.0	42.7	5.8	25.5	74
9744.375000	49.4	200.0	V	0.0	39.5	9.9	24.6	74
13166.250000	52.1	200.0	H	223.0	38.1	14.0	21.9	74
17692.500000	62.6	200.0	V	206.0	38.0	24.6	11.4	74

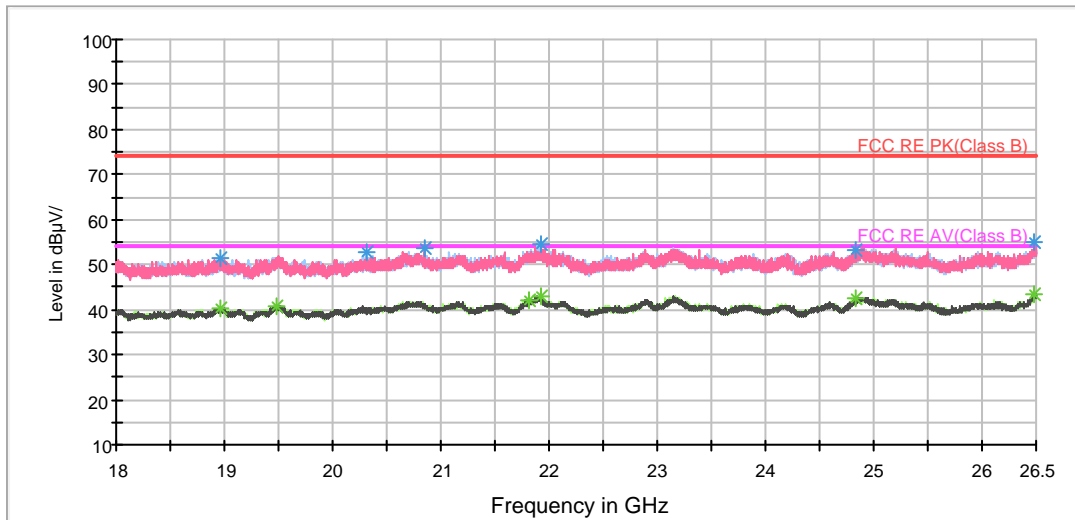
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3718.125000	34.6	200.0	V	67.0	36.2	-1.6	19.4	54
4873.125000	42.3	200.0	V	0.0	40.5	1.8	11.7	54
6811.875000	38.0	200.0	V	91.0	32.2	5.8	16.0	54
9744.375000	36.7	200.0	V	0.0	26.8	9.9	17.3	54
12639.375000	40.5	200.0	H	86.0	26.0	14.5	13.5	54
18000.000000	51.0	200.0	V	0.0	25.5	25.5	3.0	54

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



BELL_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)
18958.375000	51.4	V	45.0	51.4	0.0	22.6	74
20305.625000	52.8	H	216.0	53.8	-1.0	21.2	74
20843.250000	53.6	V	45.0	55.8	-2.2	20.4	74
21933.375000	54.6	H	82.0	56.0	-1.4	19.4	74
24839.312500	53.1	V	45.0	52.8	0.3	20.9	74
26485.125000	55.0	V	87.0	53.9	1.1	19.0	74

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

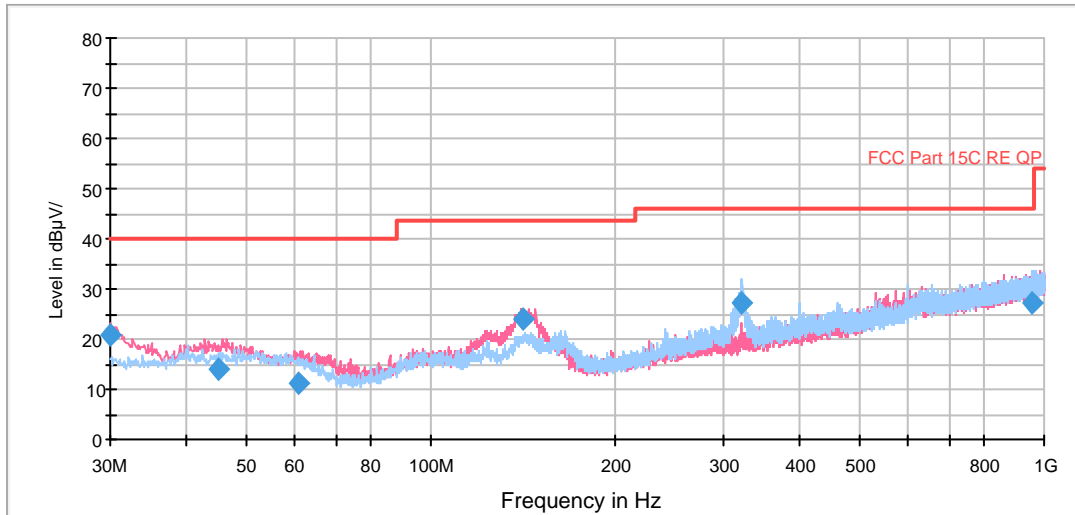
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18971.125000	40.3	H	225.0	40.4	-0.1	13.7	54
19488.562500	40.9	H	225.0	40.8	0.1	13.1	54
21809.062500	42.3	V	134.0	44.3	-2.0	11.7	54
21918.500000	43.0	V	116.0	44.5	-1.5	11.0	54
24842.500000	42.3	V	160.0	42.0	0.3	11.7	54
26485.125000	43.3	V	87.0	42.2	1.1	10.7	54

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



802.11g CH11

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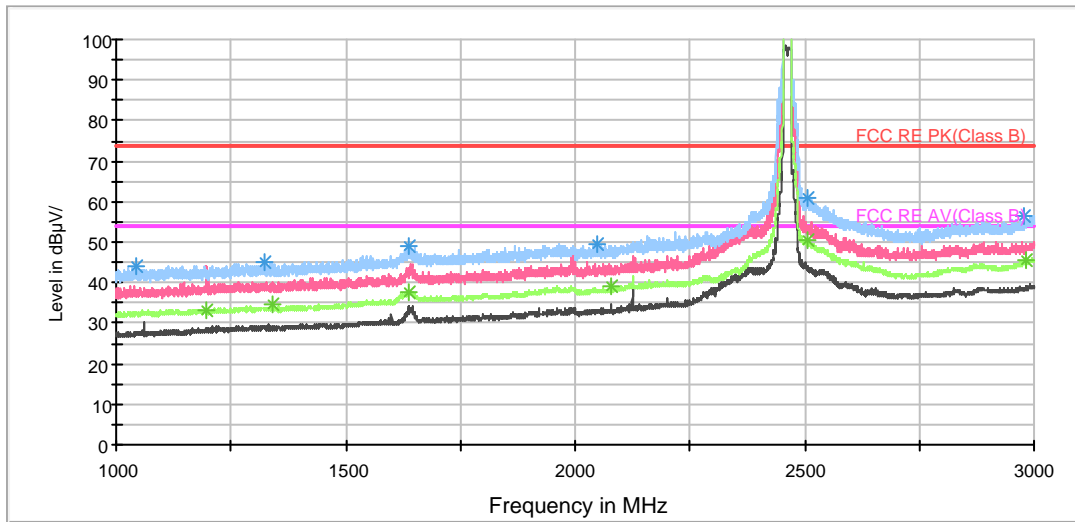


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	20.6	100.0	V	189.0	32.7	-12.1	19.4	40.0
45.028750	14.2	100.0	V	175.0	27.4	-13.2	25.8	40.0
60.961250	11.2	114.0	V	214.0	23.5	-12.3	28.8	40.0
141.140000	23.9	100.0	V	268.0	32.9	-9.0	19.6	43.5
322.052500	27.2	125.0	H	243.0	43.5	-16.3	18.8	46.0
959.180000	27.2	100.0	H	237.0	54.6	-27.4	18.8	46.0

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

RE 1G-3GHz PK+AV



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)
1043.000000	44.3	225.0	H	156.0	53.3	-9.0	29.7	74
1321.000000	45.1	225.0	H	324.0	52.4	-7.3	28.9	74
1639.250000	48.8	225.0	H	351.0	53.5	-4.7	25.2	74
2049.250000	49.4	225.0	H	0.0	52.6	-3.2	24.6	74
2504.500000	60.9	225.0	H	86.0	61.1	-0.2	13.1	74
2979.250000	56.2	225.0	H	247.0	54.0	2.2	17.8	74

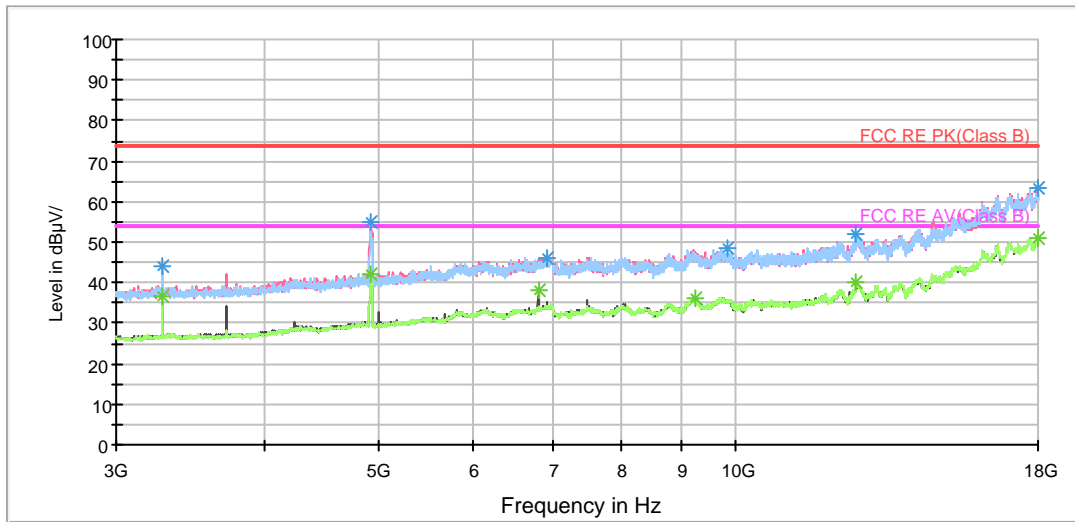
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.250000	33.3	125.0	H	78.0	41.5	-8.2	20.7	54
1340.000000	34.4	225.0	H	175.0	41.8	-7.4	19.6	54
1638.250000	37.8	225.0	H	44.0	42.5	-4.7	16.2	54
2079.750000	39.3	125.0	H	0.0	42.3	-3.0	14.7	54
2508.000000	50.5	225.0	H	112.0	50.7	-0.2	3.5	54
2981.750000	45.4	225.0	H	184.0	43.2	2.2	8.6	54

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



RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

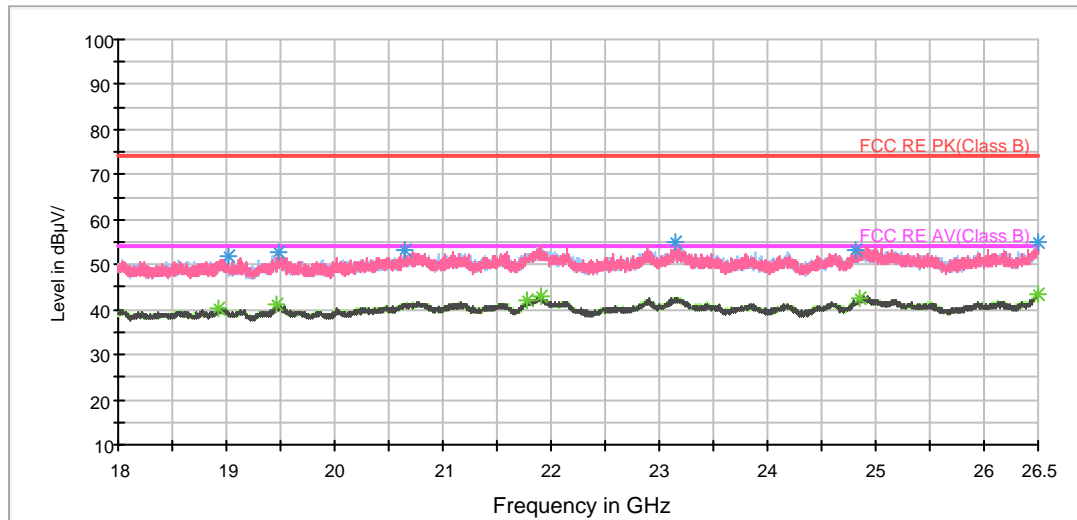
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	44.2	200.0	H	157.0	46.3	-2.1	29.8	74
4923.750000	55.0	200.0	H	139.0	53.1	1.9	19.0	74
6937.500000	46.1	200.0	H	139.0	40.0	6.1	27.9	74
9847.500000	48.3	200.0	H	30.0	38.0	10.3	25.7	74
12639.375000	51.8	200.0	H	0.0	37.3	14.5	22.2	74
17994.375000	63.3	200.0	H	168.0	38.0	25.3	10.7	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	36.7	200.0	H	157.0	38.8	-2.1	17.3	54
4923.750000	42.3	200.0	V	351.0	40.4	1.9	11.7	54
6811.875000	37.9	200.0	V	139.0	32.1	5.8	16.1	54
9240.000000	36.3	200.0	V	139.0	26.4	9.9	17.7	54
12643.125000	40.3	200.0	H	63.0	25.9	14.4	13.7	54
17998.125000	51.0	200.0	V	0.0	25.6	25.4	3.0	54

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

BELL_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)
19010.437500	51.7	H	225.0	51.9	-0.2	22.3	74
19472.625000	52.9	V	45.0	52.8	0.1	21.1	74
20641.375000	53.1	H	128.0	54.3	-1.2	20.9	74
23141.437500	54.8	V	45.0	54.9	-0.1	19.2	74
24815.937500	53.2	V	60.0	53.0	0.2	20.8	74
26494.687500	54.9	H	197.0	53.8	1.1	19.1	74

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

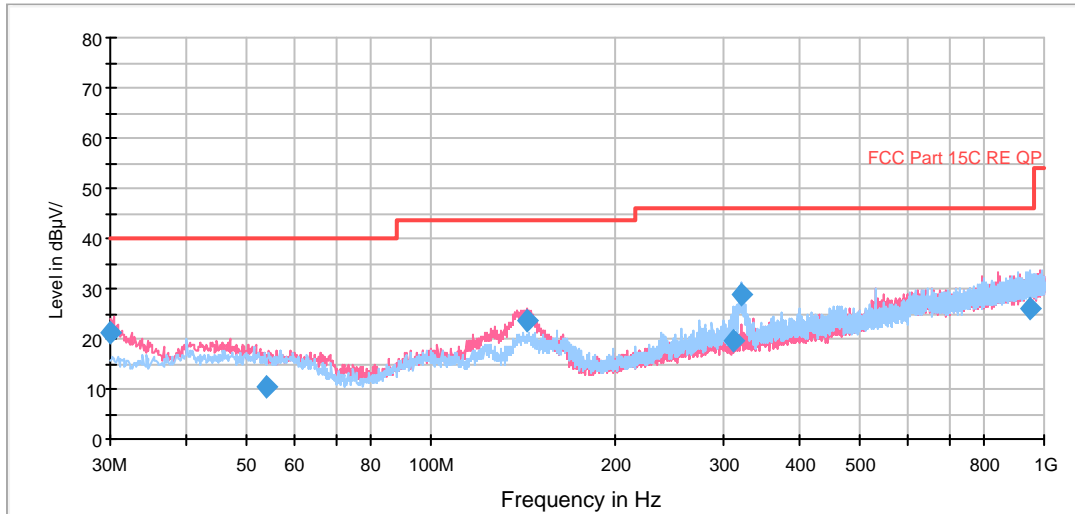
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18928.625000	40.4	V	45.0	40.3	0.1	13.6	54
19465.187500	41.3	V	72.0	41.2	0.1	12.7	54
21783.562500	42.3	H	223.0	44.5	-2.2	11.7	54
21905.750000	43.0	V	97.0	44.5	-1.5	11.0	54
24844.625000	42.6	V	52.0	42.3	0.3	11.4	54
26494.687500	43.6	H	197.0	42.5	1.1	10.4	54

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

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802.11n (HT20) CH1

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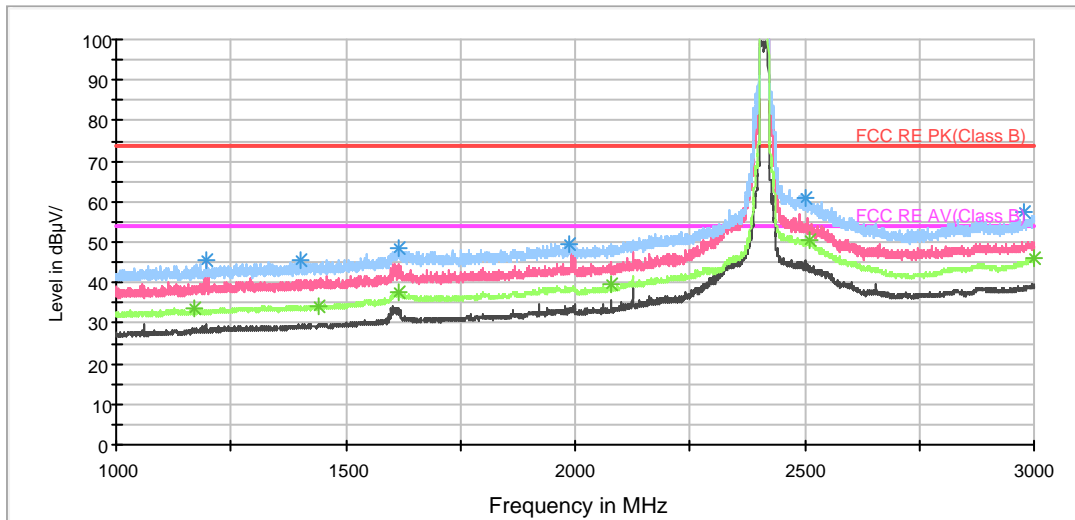


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.1	100.0	V	249.0	33.2	-12.1	18.9	40.0
53.892500	10.5	100.0	V	212.0	23.3	-12.8	29.5	40.0
143.207500	23.7	100.0	V	263.0	32.7	-9.0	19.8	43.5
310.930000	19.5	100.0	H	214.0	35.2	-15.7	26.5	46.0
319.993750	28.6	100.0	H	34.0	44.9	-16.3	17.4	46.0
951.220000	26.1	100.0	H	300.0	53.3	-27.2	19.9	46.0

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

RE 1G-3GHz PK+AV



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)
1198.250000	45.5	125.0	V	162.0	53.7	-8.2	28.5	74
1401.500000	45.3	225.0	H	0.0	52.4	-7.1	28.7	74
1616.250000	48.4	225.0	H	109.0	53.6	-5.2	25.6	74
1989.000000	49.7	225.0	H	0.0	53.1	-3.4	24.3	74
2502.250000	60.7	225.0	H	12.0	60.9	-0.2	13.3	74
2979.000000	57.2	125.0	H	335.0	55.0	2.2	16.8	74

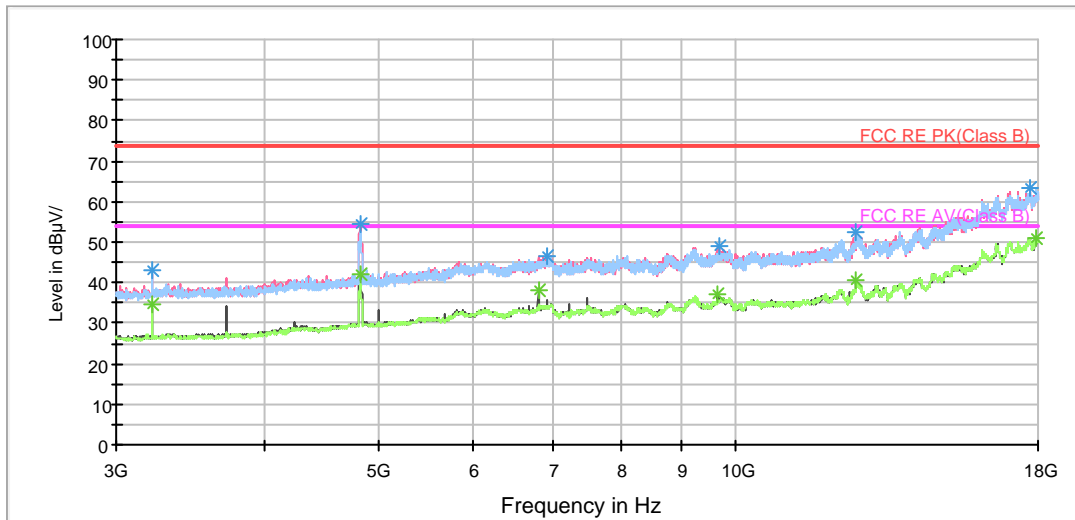
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1170.250000	33.5	225.0	H	12.0	41.6	-8.1	20.5	54
1442.000000	34.4	125.0	H	12.0	41.2	-6.8	19.6	54
1616.000000	37.7	225.0	H	179.0	42.9	-5.2	16.3	54
2080.000000	39.8	225.0	H	0.0	42.8	-3.0	14.2	54
2511.000000	50.5	225.0	H	30.0	50.7	-0.2	3.5	54
2998.250000	46.2	125.0	H	134.0	43.9	2.3	7.8	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)
3215.625000	42.9	200.0	H	0.0	45.7	-2.8	31.1	74
4822.500000	54.6	200.0	V	0.0	53.3	1.3	19.4	74
6937.500000	46.7	200.0	V	92.0	40.6	6.1	27.3	74
9693.750000	48.8	200.0	V	139.0	39.2	9.6	25.2	74
12641.250000	52.3	200.0	V	0.0	37.8	14.5	21.7	74
17705.625000	63.5	200.0	V	254.0	38.8	24.7	10.5	74

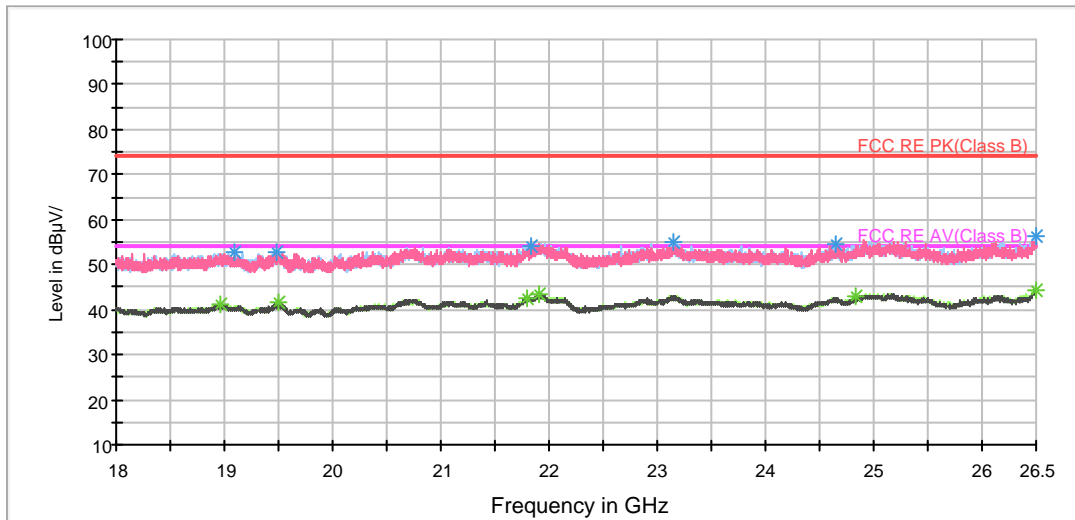
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3215.625000	34.5	200.0	H	0.0	37.3	-2.8	19.5	54
4822.500000	41.9	200.0	V	0.0	40.6	1.3	12.1	54
6811.875000	38.1	200.0	V	68.0	32.3	5.8	15.9	54
9648.750000	37.0	200.0	V	139.0	27.2	9.8	17.0	54
12639.375000	40.4	200.0	H	15.0	25.9	14.5	13.6	54
17921.250000	50.9	200.0	V	321.0	25.2	25.7	3.1	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19101.812500	52.9	H	185.0	53.4	-0.5	21.1	74
19472.625000	52.9	V	45.0	52.8	0.1	21.1	74
21828.187500	54.1	V	88.0	56.0	-1.9	19.9	74
23142.500000	55.0	H	225.0	55.1	-0.1	19.0	74
24641.687500	54.3	H	225.0	54.5	-0.2	19.7	74
26497.875000	56.2	H	142.0	55.1	1.1	17.8	74

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

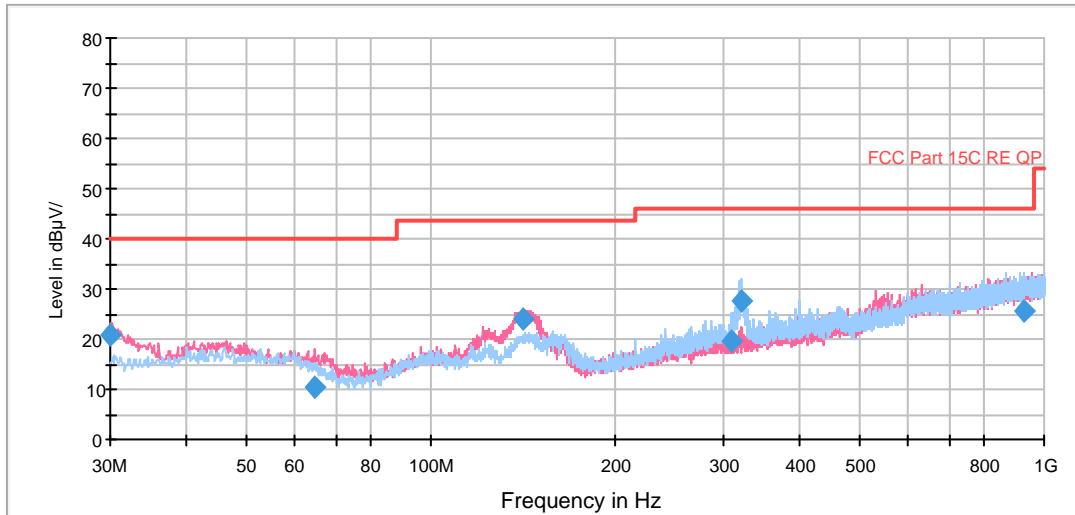
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18972.187500	41.1	H	99.0	41.2	-0.1	12.9	54
19498.125000	41.5	V	129.0	41.4	0.1	12.5	54
21804.812500	42.7	H	197.0	44.8	-2.1	11.3	54
21915.312500	43.3	H	225.0	44.8	-1.5	10.7	54
24840.375000	42.8	H	225.0	42.5	0.3	11.2	54
26498.937500	44.4	V	45.0	43.3	1.1	9.6	54

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



802.11n (HT20) CH6

FCC RE 0.03-1GHz QP Class B

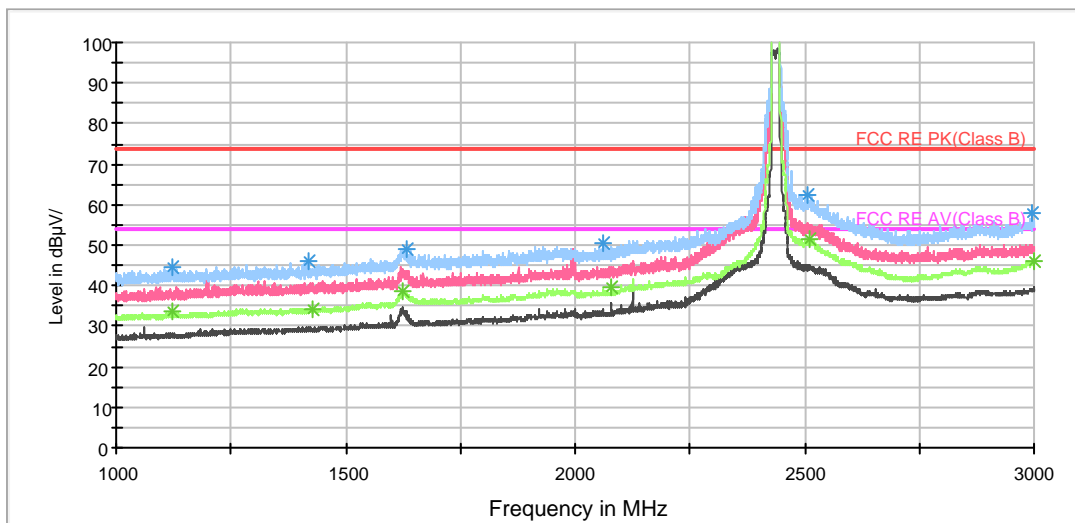


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	20.6	100.0	V	181.0	32.7	-12.1	19.4	40.0
64.836250	10.5	100.0	V	0.0	21.3	-10.8	29.5	40.0
141.107500	23.8	100.0	V	263.0	32.8	-9.0	19.7	43.5
309.440000	19.8	114.0	H	0.0	35.8	-16.0	26.2	46.0
320.270000	27.6	111.0	H	234.0	43.7	-16.1	18.4	46.0
924.983750	25.7	100.0	H	170.0	52.7	-27.0	20.3	46.0

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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

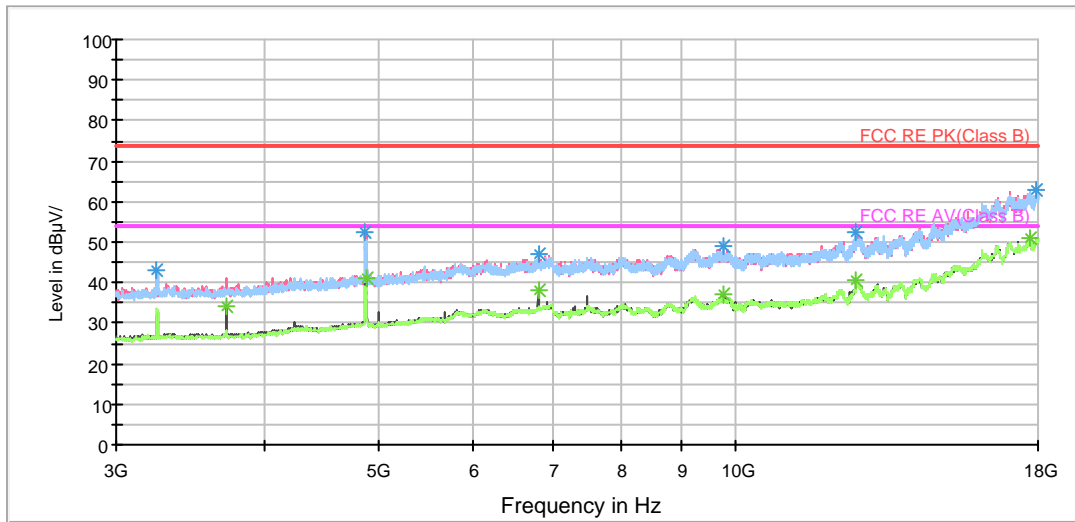
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1123.500000	44.4	125.0	H	166.0	52.9	-8.5	29.6	74
1419.000000	45.8	225.0	H	0.0	52.7	-6.9	28.2	74
1632.750000	48.9	225.0	H	219.0	53.6	-4.7	25.1	74
2060.000000	50.3	125.0	H	0.0	53.4	-3.1	23.7	74
2504.500000	62.3	225.0	H	26.0	62.5	-0.2	11.7	74
2997.500000	57.8	125.0	H	52.0	55.5	2.3	16.2	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)
1123.750000	33.5	225.0	H	113.0	42.0	-8.5	20.5	54
1426.000000	34.4	225.0	H	166.0	41.3	-6.9	19.6	54
1624.500000	38.5	225.0	H	0.0	43.3	-4.8	15.5	54
2080.000000	39.7	125.0	H	0.0	42.7	-3.0	14.3	54
2513.000000	51.5	225.0	H	8.0	51.7	-0.2	2.5	54
2998.000000	45.9	225.0	H	121.0	43.6	2.3	8.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

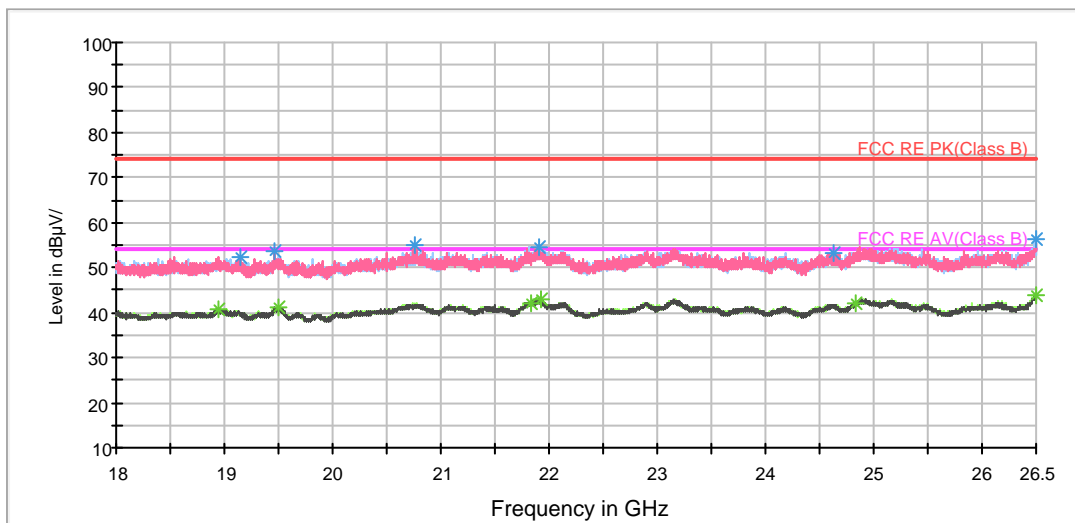
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3247.500000	43.2	200.0	H	341.0	45.7	-2.5	30.8	74
4869.375000	52.6	200.0	V	0.0	50.8	1.8	21.4	74
6811.875000	47.0	200.0	V	69.0	41.2	5.8	27.0	74
9751.875000	48.9	200.0	V	208.0	39.1	9.8	25.1	74
12641.250000	52.5	200.0	H	316.0	38.0	14.5	21.5	74
17921.250000	62.9	200.0	H	130.0	37.2	25.7	11.1	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3718.125000	34.3	200.0	V	185.0	35.9	-1.6	19.7	54
4873.125000	40.9	200.0	V	0.0	39.1	1.8	13.1	54
6811.875000	38.1	200.0	V	69.0	32.3	5.8	15.9	54
9750.000000	37.0	200.0	V	139.0	27.2	9.8	17.0	54
12641.250000	40.4	200.0	V	0.0	25.9	14.5	13.6	54
17709.375000	51.1	200.0	V	0.0	26.4	24.7	2.9	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19147.500000	52.4	V	45.0	52.9	-0.5	21.6	74
19459.875000	53.6	H	113.0	53.5	0.1	20.4	74
20761.437500	54.8	V	115.0	56.5	-1.7	19.2	74
21908.937500	54.7	V	47.0	56.2	-1.5	19.3	74
24631.062500	53.4	H	225.0	53.6	-0.2	20.6	74
26491.500000	56.2	H	197.0	55.1	1.1	17.8	74

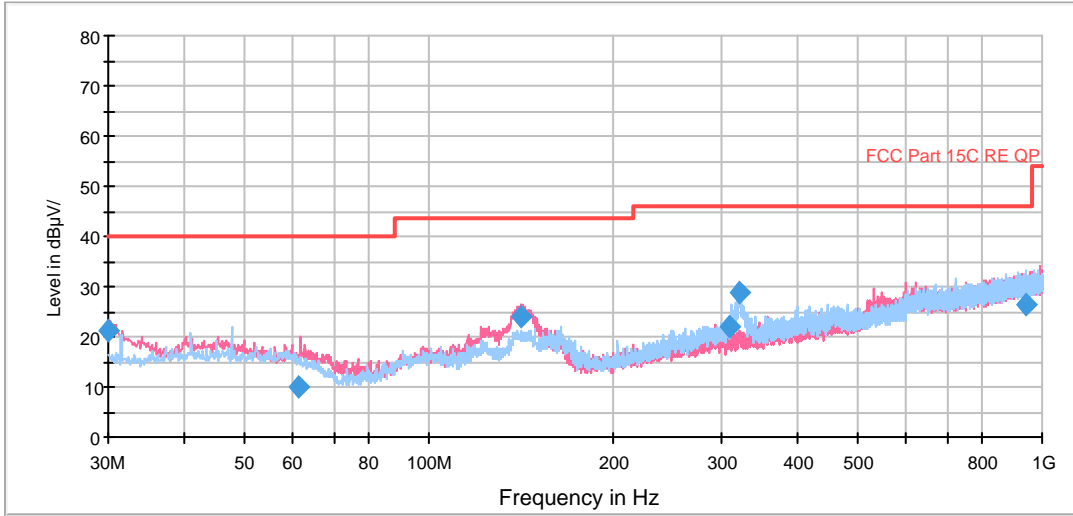
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18944.562500	40.8	H	210.0	40.8	0.0	13.2	54
19496.000000	41.4	H	225.0	41.3	0.1	12.6	54
21826.062500	42.3	H	225.0	44.2	-1.9	11.7	54
21921.687500	43.0	V	101.0	44.5	-1.5	11.0	54
24842.500000	42.2	H	225.0	41.9	0.3	11.8	54
26500.000000	43.9	V	156.0	42.8	1.1	10.1	54

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

802.11n (HT20) CH11

FCC RE 0.03-1GHz QP Class B

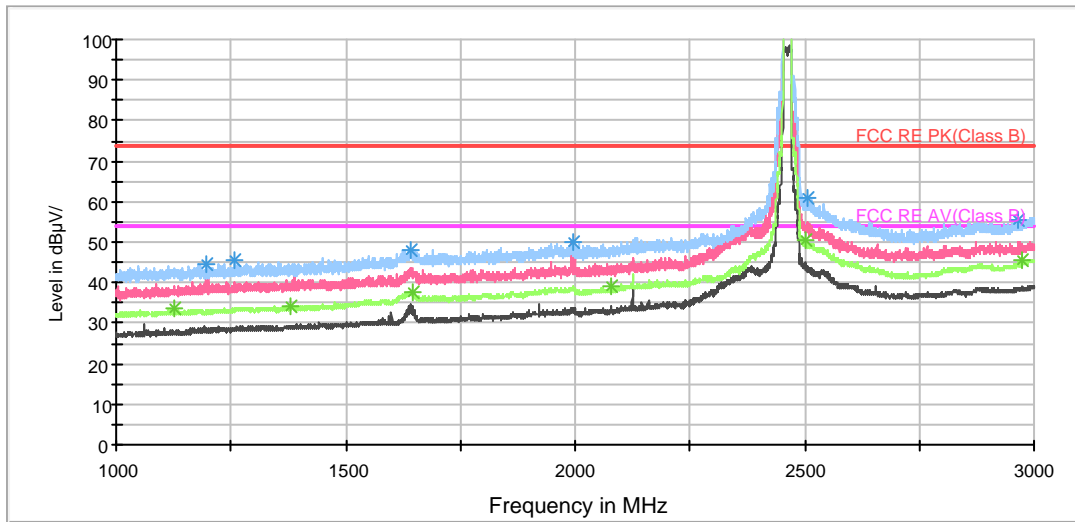


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.0	100.0	V	242.0	33.1	-12.1	19.0	40.0
61.328750	10.1	114.0	V	281.0	22.1	-12.0	29.9	40.0
141.028750	23.8	100.0	V	269.0	32.8	-9.0	19.7	43.5
309.283750	21.9	100.0	H	190.0	37.8	-15.9	24.1	46.0
319.995000	28.9	100.0	H	2.0	45.2	-16.3	17.1	46.0
939.578750	26.3	100.0	H	129.0	53.4	-27.1	19.7	46.0

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

RE 1G-3GHz PK+AV



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)
1194.750000	44.5	225.0	V	150.0	52.7	-8.2	29.5	74
1259.750000	45.8	225.0	H	295.0	53.6	-7.8	28.2	74
1640.000000	48.2	225.0	H	88.0	52.9	-4.7	25.8	74
1995.500000	50.0	225.0	H	3.0	53.2	-3.2	24.0	74
2508.000000	61.1	225.0	H	0.0	61.3	-0.2	12.9	74
2965.250000	55.5	125.0	H	0.0	53.4	2.1	18.5	74

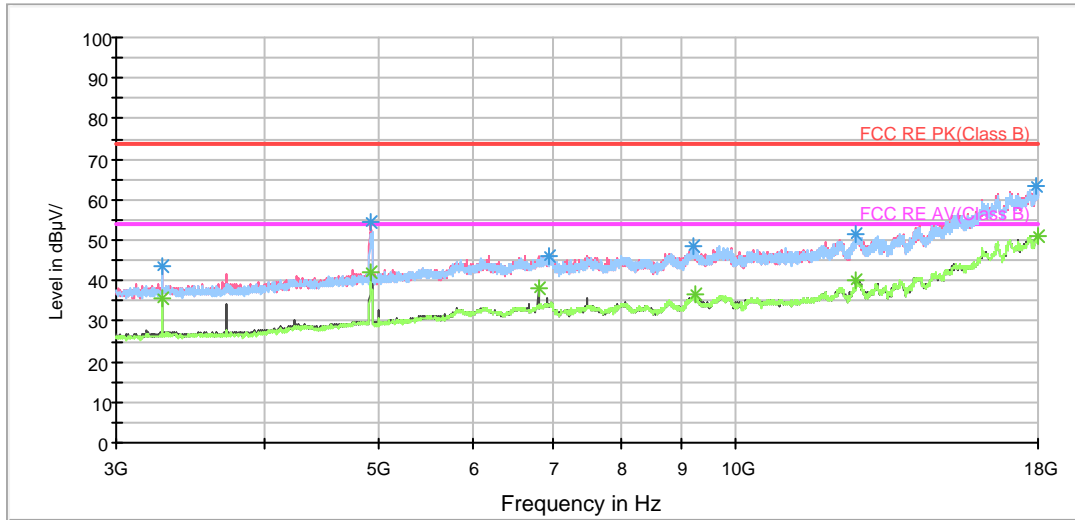
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1126.000000	33.5	225.0	H	150.0	41.9	-8.4	20.5	54
1379.750000	34.3	225.0	H	0.0	41.3	-7.0	19.7	54
1645.000000	37.8	225.0	H	0.0	42.7	-4.9	16.2	54
2080.000000	39.2	225.0	H	3.0	42.2	-3.0	14.8	54
2501.750000	50.4	225.0	H	98.0	50.6	-0.2	3.6	54
2975.750000	45.4	125.0	H	0.0	43.2	2.2	8.6	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)
3281.250000	43.7	200.0	H	0.0	45.8	-2.1	30.3	74
4920.000000	54.2	200.0	V	115.0	52.3	1.9	19.8	74
6960.000000	46.3	200.0	H	154.0	40.1	6.2	27.7	74
9226.875000	48.5	200.0	V	18.0	38.6	9.9	25.5	74
12650.625000	51.7	200.0	V	139.0	37.6	14.1	22.3	74
17923.125000	63.6	200.0	H	0.0	37.9	25.7	10.4	74

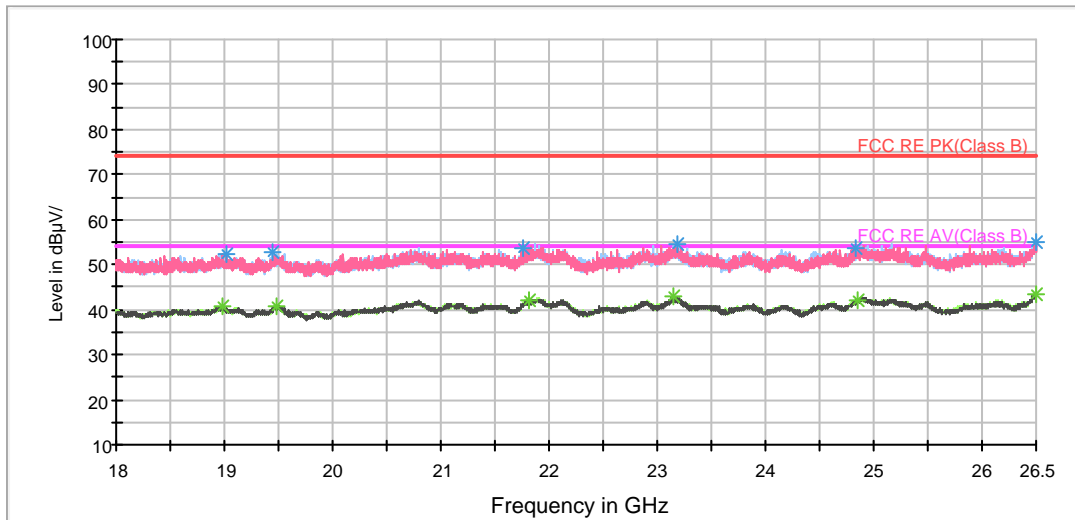
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3281.250000	35.7	200.0	H	0.0	37.8	-2.1	18.3	54
4923.750000	41.8	200.0	V	115.0	39.9	1.9	12.2	54
6811.875000	38.3	200.0	V	67.0	32.5	5.8	15.7	54
9240.000000	36.4	200.0	H	41.0	26.5	9.9	17.6	54
12643.125000	40.2	200.0	V	299.0	25.8	14.4	13.8	54
18000.000000	51.2	200.0	V	0.0	25.7	25.5	2.8	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)
19014.687500	52.2	V	171.0	52.4	-0.2	21.8	74
19449.250000	52.6	H	225.0	52.6	0.0	21.4	74
21762.312500	53.5	H	225.0	55.8	-2.3	20.5	74
23178.625000	54.7	H	209.0	54.8	-0.1	19.3	74
24841.437500	53.6	H	53.0	53.3	0.3	20.4	74
26491.500000	54.9	V	142.0	53.8	1.1	19.1	74

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

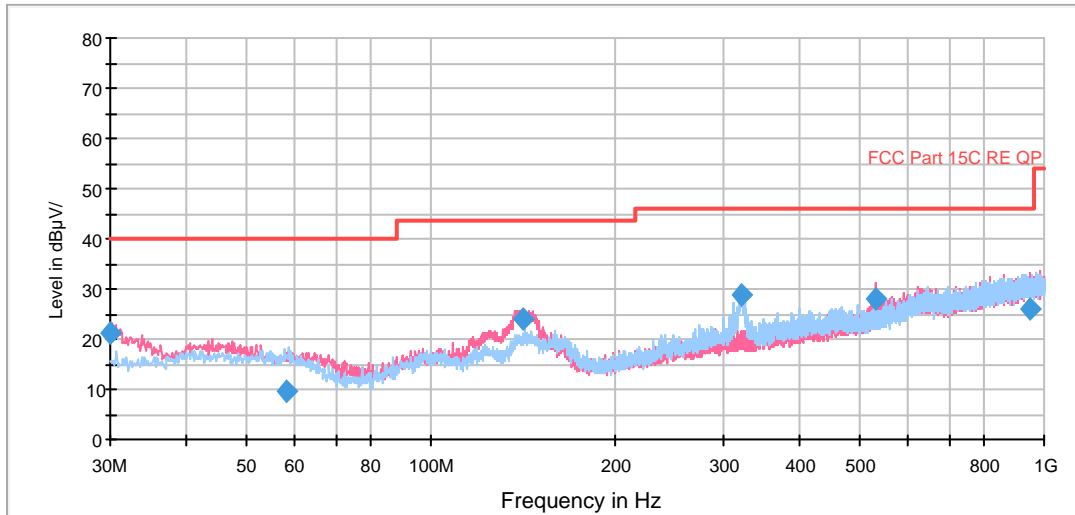
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18980.687500	40.7	V	217.0	40.8	-0.1	13.3	54
19484.312500	40.9	V	45.0	40.8	0.1	13.1	54
21809.062500	42.2	H	142.0	44.2	-2.0	11.8	54
23156.312500	42.8	V	115.0	42.9	-0.1	11.2	54
24843.562500	42.3	H	99.0	42.0	0.3	11.7	54
26500.000000	43.6	H	53.0	42.5	1.1	10.4	54

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



802.11n (HT40) CH3

FCC RE 0.03-1GHz QP Class B

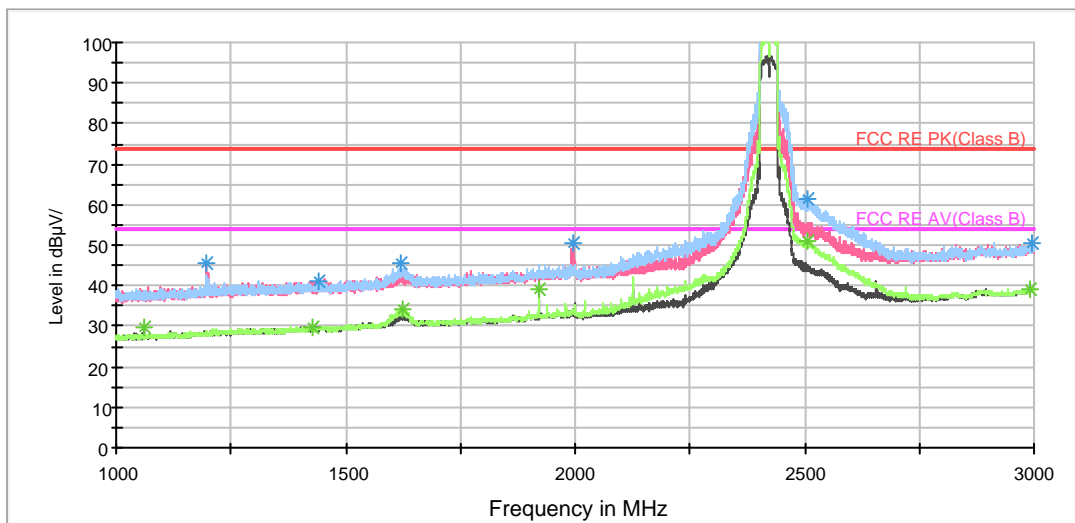


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	21.1	100.0	V	233.0	33.2	-12.1	18.9	40.0
58.256250	9.7	125.0	H	118.0	22.4	-12.7	30.3	40.0
141.026250	23.9	100.0	V	264.0	32.9	-9.0	19.6	43.5
319.991250	28.7	100.0	H	242.0	45.0	-16.3	17.3	46.0
531.247500	28.0	100.0	V	93.0	48.8	-20.8	18.0	46.0
951.383750	26.1	114.0	V	22.0	53.3	-27.2	19.9	46.0

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

RE 1G-3GHz PK+AV



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)
1198.000000	45.7	125.0	V	283.0	53.9	-8.2	28.3	74
1439.750000	41.2	225.0	H	322.0	48.1	-6.9	32.8	74
1620.750000	45.5	225.0	H	106.0	50.3	-4.8	28.5	74
1994.750000	50.7	125.0	V	357.0	53.9	-3.2	23.3	74
2507.750000	61.3	225.0	H	0.0	61.5	-0.2	12.7	74
2994.000000	50.7	125.0	H	0.0	48.4	2.3	23.3	74

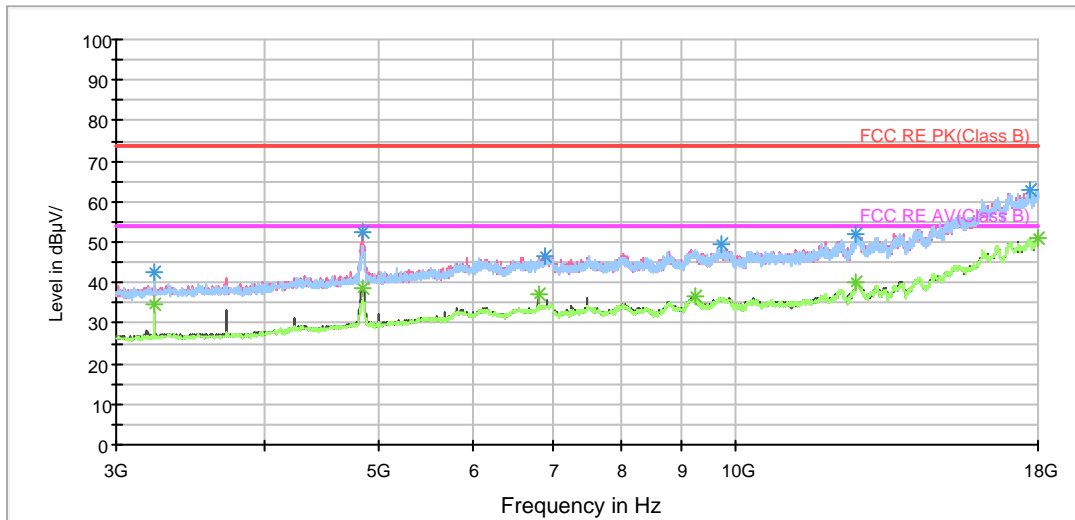
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	29.6	225.0	V	61.0	38.5	-8.9	24.4	54
1426.000000	29.7	125.0	H	243.0	36.6	-6.9	24.3	54
1624.500000	34.3	225.0	H	106.0	39.1	-4.8	19.7	54
1920.000000	39.1	225.0	H	0.0	43.2	-4.1	14.9	54
2506.750000	51.2	225.0	H	0.0	51.4	-0.2	2.8	54
2991.000000	39.2	225.0	H	0.0	37.0	2.2	14.8	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)
3228.750000	42.6	200.0	H	156.0	45.3	-2.7	31.4	74
4839.375000	52.3	200.0	V	352.0	50.7	1.6	21.7	74
6901.875000	46.4	100.0	V	138.0	40.1	6.3	27.6	74
9720.000000	49.3	100.0	H	138.0	39.8	9.5	24.7	74
12650.625000	52.0	100.0	H	312.0	37.9	14.1	22.0	74
17711.250000	63.0	100.0	H	0.0	38.3	24.7	11.0	74

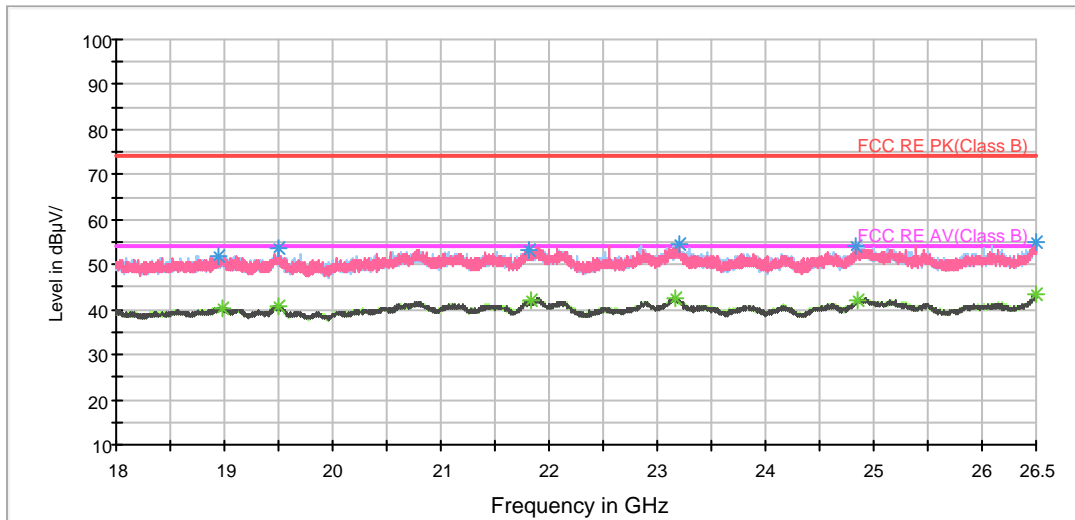
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3228.750000	34.8	200.0	H	156.0	37.5	-2.7	19.2	54
4841.250000	38.6	200.0	V	324.0	37.0	1.6	15.4	54
6811.875000	37.0	200.0	V	138.0	31.2	5.8	17.0	54
9238.125000	36.6	200.0	H	138.0	26.7	9.9	17.4	54
12641.250000	40.3	200.0	H	0.0	25.8	14.5	13.7	54
18000.000000	51.1	200.0	V	64.0	25.6	25.5	2.9	54

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



RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18938.187500	52.0	V	74.0	52.0	0.0	22.0	74
19496.000000	53.7	V	45.0	53.6	0.1	20.3	74
21811.187500	53.4	V	45.0	55.4	-2.0	20.6	74
23200.937500	54.7	V	142.0	54.8	-0.1	19.3	74
24839.312500	54.3	V	74.0	54.0	0.3	19.7	74
26493.625000	55.0	V	185.0	53.9	1.1	19.0	74

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

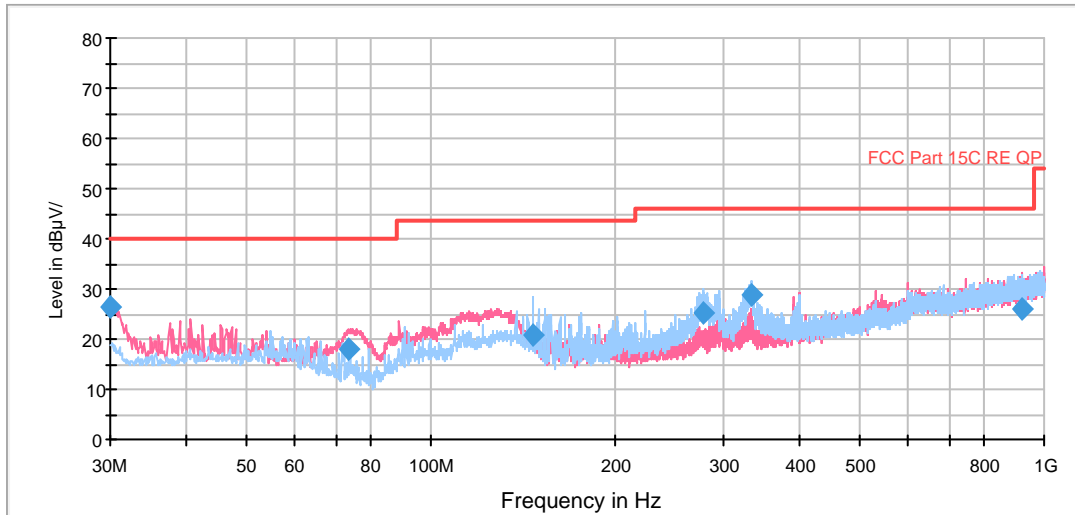
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18979.625000	40.5	H	225.0	40.6	-0.1	13.5	54
19499.187500	40.8	V	45.0	40.7	0.1	13.2	54
21835.625000	41.9	H	225.0	43.8	-1.9	12.1	54
23158.437500	42.6	V	45.0	42.7	-0.1	11.4	54
24844.625000	42.0	H	225.0	41.7	0.3	12.0	54
26493.625000	43.4	V	185.0	42.3	1.1	10.6	54

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



802.11n (HT40) CH6

FCC RE 0.03-1GHz QP Class B

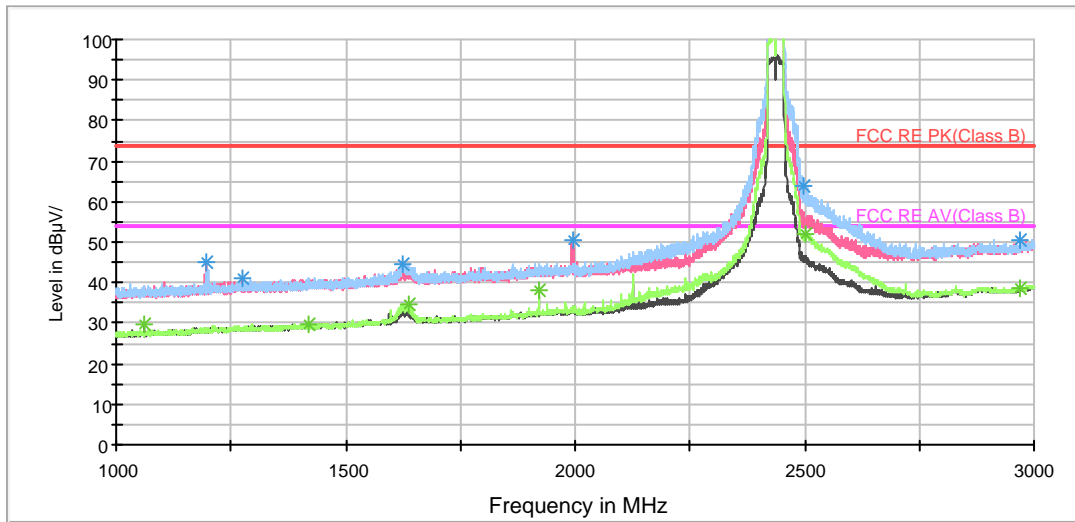


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	26.3	100.0	V	284.0	38.4	-12.1	13.7	40.0
73.533750	17.9	100.0	V	116.0	26.6	-8.7	22.1	40.0
147.202500	20.9	125.0	H	45.0	30.0	-9.1	22.6	43.5
278.963750	25.2	113.0	H	237.0	40.4	-15.2	20.8	46.0
333.736250	28.9	100.0	H	310.0	45.2	-16.3	17.1	46.0
917.311250	25.9	100.0	V	306.0	52.9	-27.0	20.1	46.0

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

RE 1G-3GHz PK+AV



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)
1198.000000	45.3	125.0	V	345.0	53.5	-8.2	28.7	74
1275.750000	41.2	125.0	V	0.0	48.8	-7.6	32.8	74
1624.250000	44.4	225.0	H	95.0	49.2	-4.8	29.6	74
1996.250000	50.4	125.0	V	359.0	53.7	-3.3	23.6	74
2499.750000	63.6	225.0	H	0.0	63.8	-0.2	10.4	74
2970.750000	50.7	125.0	H	21.0	48.5	2.2	23.3	74

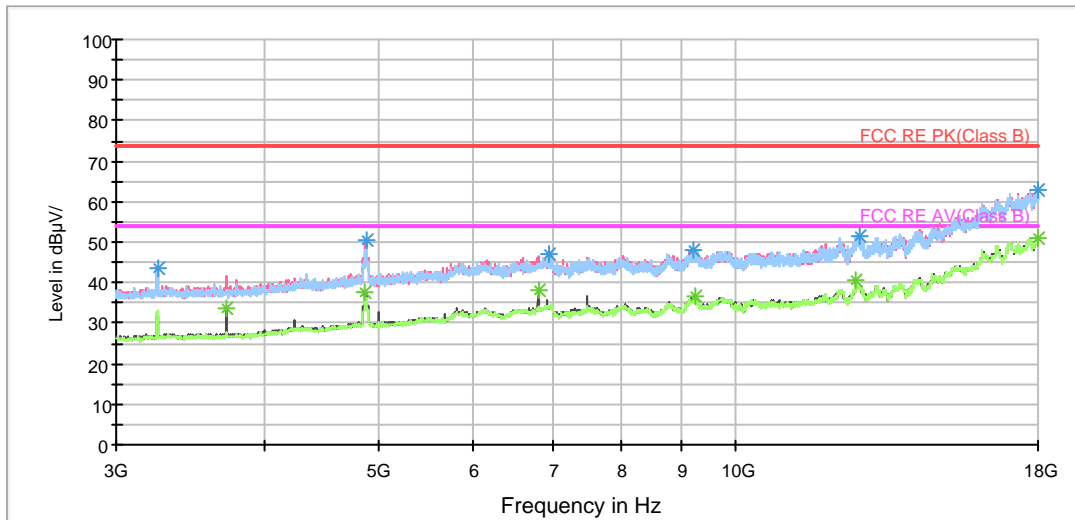
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	29.7	225.0	V	0.0	38.6	-8.9	24.3	54
1421.250000	29.9	225.0	H	164.0	36.8	-6.9	24.1	54
1637.750000	34.7	225.0	H	95.0	39.4	-4.7	19.3	54
1920.000000	38.3	225.0	H	0.0	42.4	-4.1	15.7	54
2503.000000	52.1	225.0	H	0.0	52.3	-0.2	1.9	54
2970.750000	38.8	225.0	V	138.0	36.6	2.2	15.2	54

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



RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

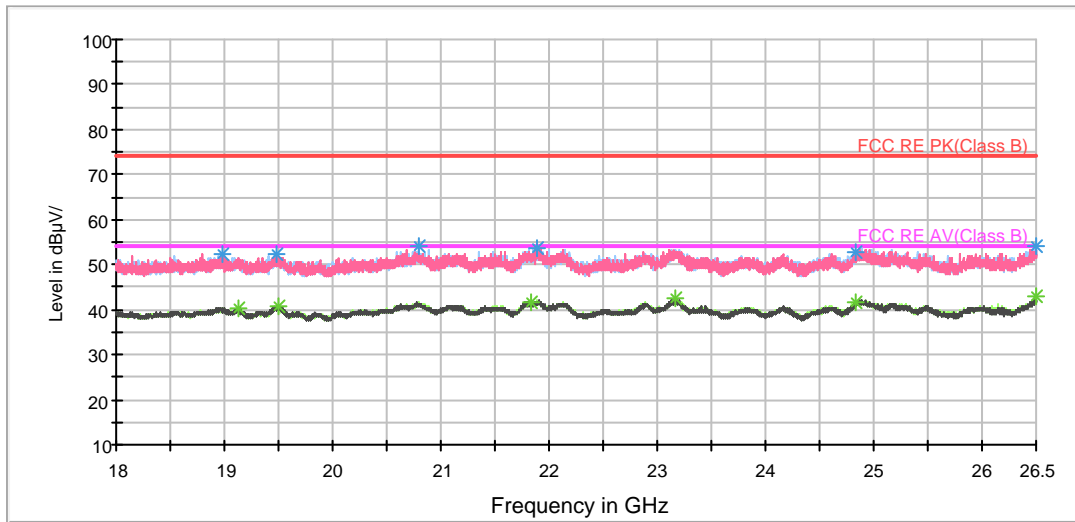
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3249.375000	43.7	200.0	H	0.0	46.2	-2.5	30.3	74
4878.750000	50.5	200.0	V	0.0	48.7	1.8	23.5	74
6967.500000	47.2	200.0	H	268.0	40.9	6.3	26.8	74
9213.750000	48.1	200.0	H	16.0	38.1	10.0	25.9	74
12712.500000	51.6	200.0	V	319.0	37.7	13.9	22.4	74
17996.250000	63.0	200.0	V	206.0	37.6	25.4	11.0	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3718.125000	33.6	200.0	V	68.0	35.2	-1.6	20.4	54
4865.625000	37.4	200.0	V	0.0	35.7	1.7	16.6	54
6811.875000	38.2	200.0	V	91.0	32.4	5.8	15.8	54
9238.125000	36.6	200.0	V	319.0	26.7	9.9	17.4	54
12639.375000	40.4	200.0	V	250.0	25.9	14.5	13.6	54
18000.000000	51.0	200.0	V	206.0	25.5	25.5	3.0	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18978.562500	52.1	H	183.0	52.2	-0.1	21.9	74
19477.937500	52.1	V	45.0	52.0	0.1	21.9	74
20797.562500	54.0	H	114.0	55.9	-1.9	20.0	74
21885.562500	53.9	V	46.0	55.5	-1.6	20.1	74
24832.937500	52.7	H	225.0	52.5	0.2	21.3	74
26498.937500	54.2	H	224.0	53.1	1.1	19.8	74

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

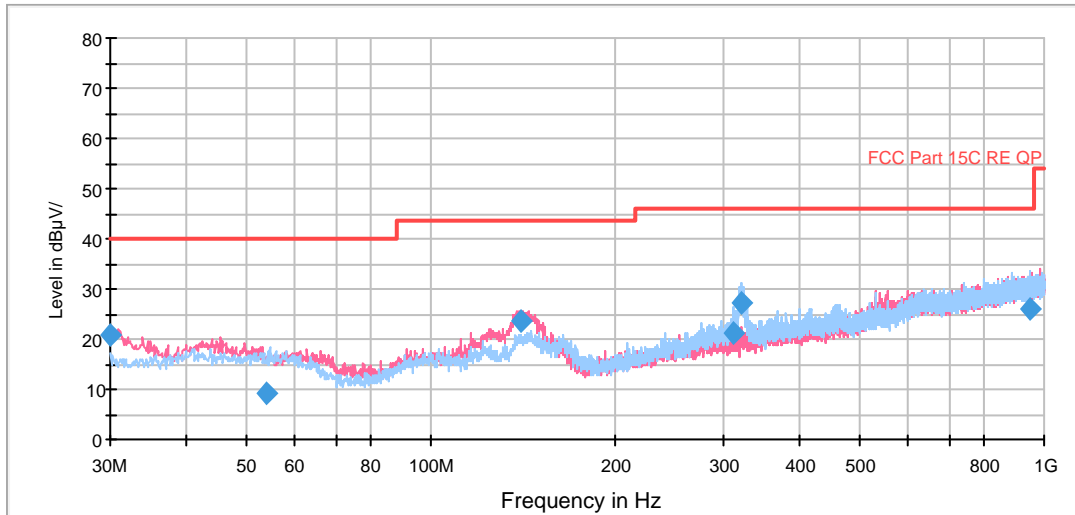
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19131.562500	40.5	H	114.0	41.0	-0.5	13.5	54
19507.687500	40.8	V	45.0	40.7	0.1	13.2	54
21838.812500	41.8	H	225.0	43.7	-1.9	12.2	54
23169.062500	42.3	H	198.0	42.4	-0.1	11.7	54
24840.375000	41.7	H	212.0	41.4	0.3	12.3	54
26495.750000	42.8	H	70.0	41.7	1.1	11.2	54

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



802.11n (HT40) CH9

FCC RE 0.03-1GHz QP Class B

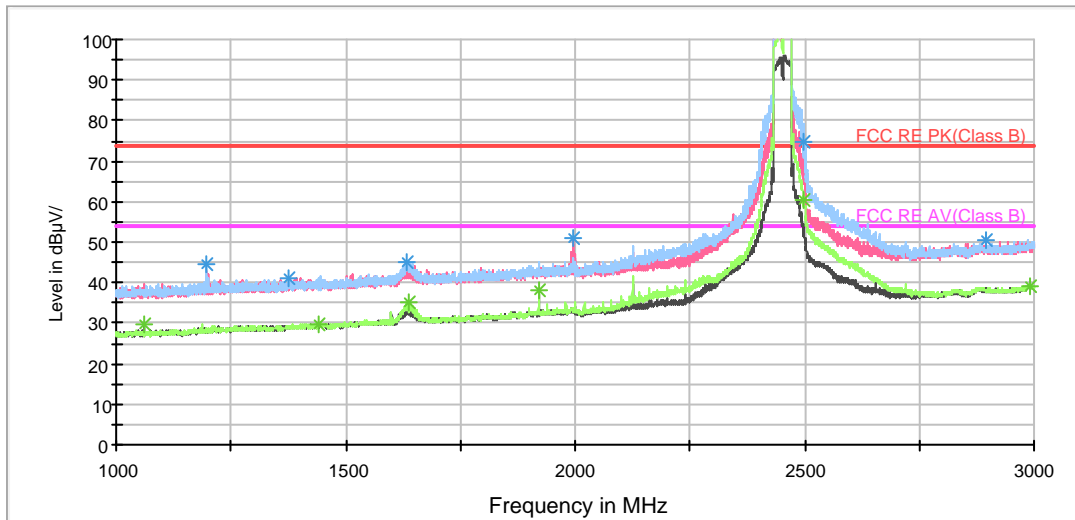


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	20.9	100.0	V	201.0	33.0	-12.1	19.1	40.0
54.013750	9.1	114.0	H	92.0	22.1	-13.0	30.9	40.0
139.851250	23.6	100.0	V	268.0	32.6	-9.0	19.9	43.5
310.652500	21.4	100.0	H	202.0	37.0	-15.6	24.6	46.0
320.475000	27.3	100.0	H	238.0	43.4	-16.1	18.7	46.0
947.018750	26.1	100.0	H	302.0	53.3	-27.2	19.9	46.0

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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

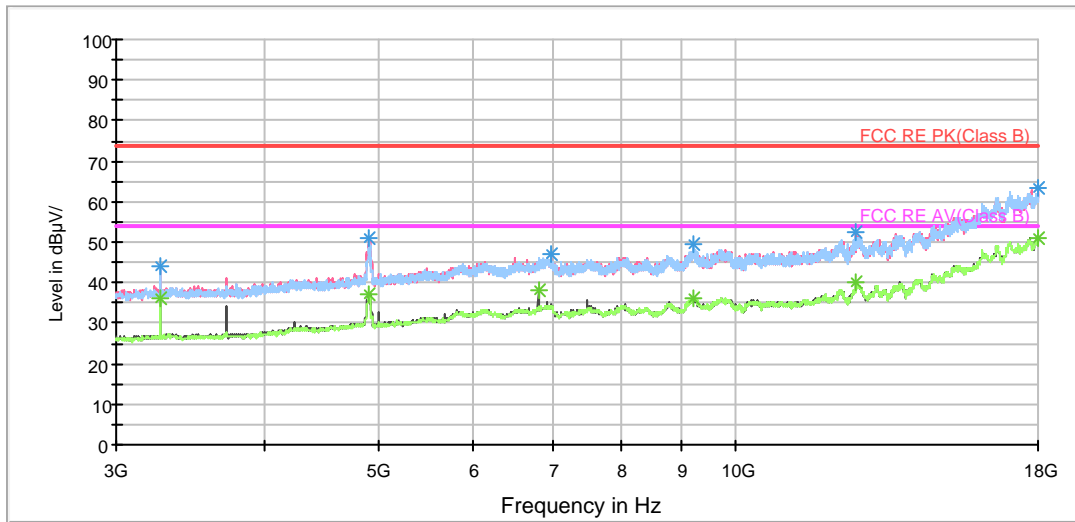
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.750000	44.7	125.0	H	259.0	52.9	-8.2	29.3	74
1376.500000	41.2	125.0	H	0.0	48.3	-7.1	32.8	74
1631.250000	45.0	225.0	H	351.0	49.7	-4.7	29.0	74
1996.750000	51.1	125.0	V	292.0	54.4	-3.3	22.9	74
2897.000000	50.6	225.0	V	8.0	48.5	2.1	23.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1062.500000	29.6	225.0	V	156.0	38.5	-8.9	24.4	54
1441.750000	29.7	125.0	H	16.0	36.6	-6.9	24.3	54
1636.000000	35.4	225.0	H	132.0	40.1	-4.7	18.6	54
1920.000000	38.1	225.0	H	359.0	42.2	-4.1	15.9	54
2991.000000	39.3	225.0	V	141.0	37.1	2.2	14.7	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

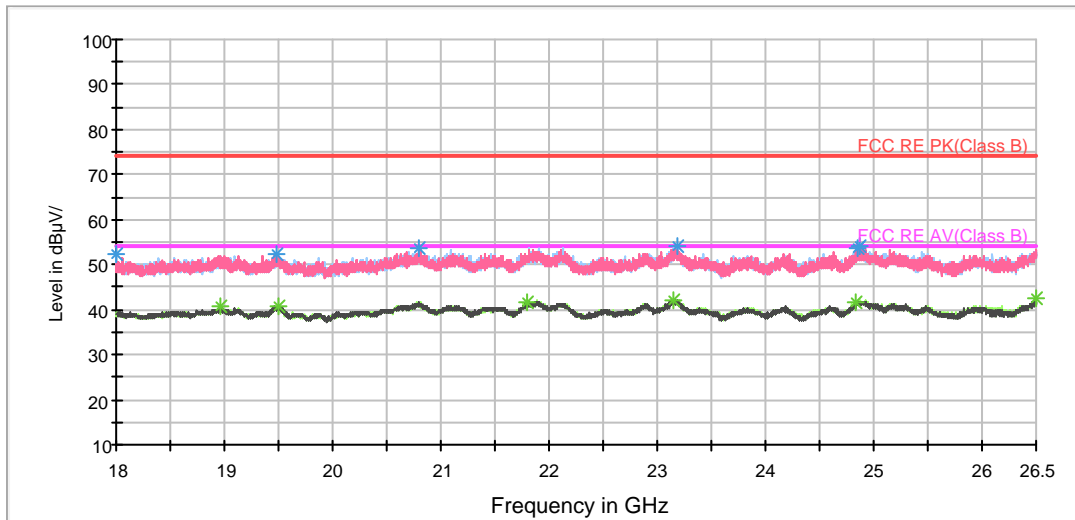
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3268.125000	44.1	200.0	H	185.0	46.5	-2.4	29.9	74
4908.750000	50.8	200.0	V	0.0	48.9	1.9	23.2	74
6982.500000	46.9	200.0	H	0.0	40.5	6.4	27.1	74
9226.875000	49.6	200.0	H	149.0	39.7	9.9	24.4	74
12639.375000	52.5	200.0	V	184.0	38.0	14.5	21.5	74
17985.000000	63.2	200.0	V	278.0	38.1	25.1	10.8	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3268.125000	36.1	200.0	H	185.0	38.5	-2.4	17.9	54
4895.625000	37.2	200.0	V	0.0	35.3	1.9	16.8	54
6811.875000	38.2	200.0	V	167.0	32.4	5.8	15.8	54
9210.000000	36.3	200.0	V	149.0	26.2	10.1	17.7	54
12639.375000	40.3	200.0	V	185.0	25.8	14.5	13.7	54
18000.000000	51.1	200.0	V	92.0	25.6	25.5	2.9	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18004.250000	52.2	H	223.0	50.7	1.5	21.8	74
19481.125000	52.4	V	45.0	52.3	0.1	21.6	74
20803.937500	53.8	V	60.0	55.8	-2.0	20.2	74
23192.437500	54.0	H	210.0	54.1	-0.1	20.0	74
24843.562500	53.5	V	45.0	53.2	0.3	20.5	74
24876.500000	54.0	H	113.0	53.5	0.5	20.0	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18966.875000	40.6	V	74.0	40.7	-0.1	13.4	54
19505.562500	40.9	H	196.0	40.8	0.1	13.1	54
21796.312500	41.6	H	210.0	43.7	-2.1	12.4	54
23148.875000	42.0	H	84.0	42.1	-0.1	12.0	54
24839.312500	41.7	V	45.0	41.4	0.3	12.3	54
26498.937500	42.7	H	225.0	41.6	1.1	11.3	54

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

5.8. Conducted Emission

Ambient condition

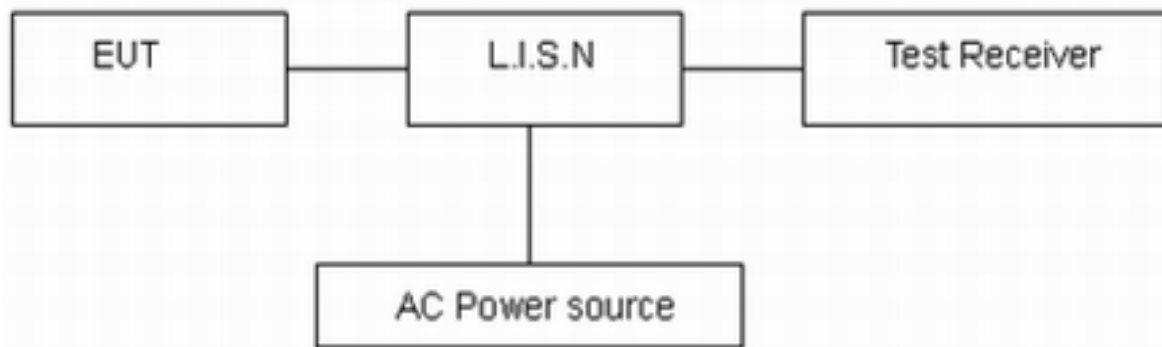
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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:

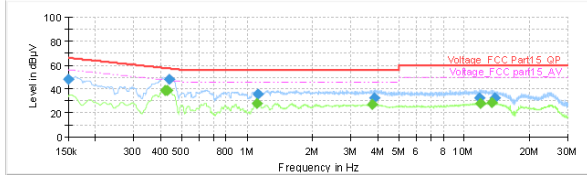
Following plots, Blue trace uses the peak detection and Green trace uses the average detection.

SISO

Antenna 1

802.11b, Channel No.: 1

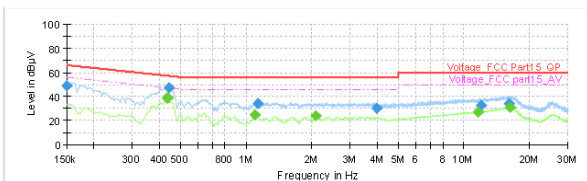
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 15 rows of test data for Channel No. 1.

N Line

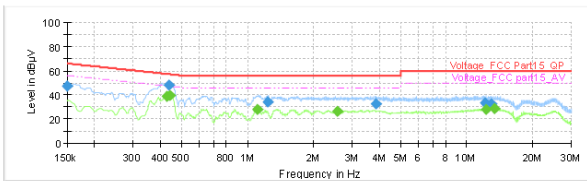


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 15 rows of test data for Channel No. 1.

802.11b, Channel No.: 6

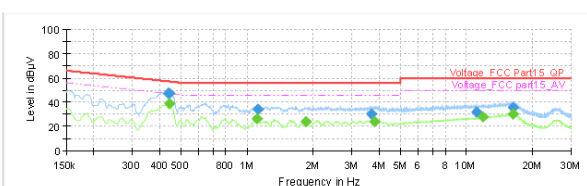
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 15 rows of test data for Channel No. 6.

N Line



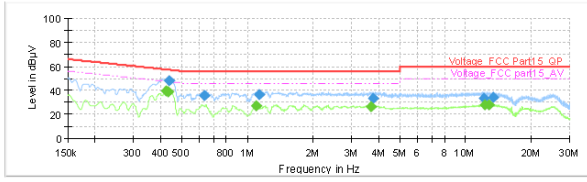
Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 15 rows of test data for Channel No. 6.



802.11b, Channel No.: 11

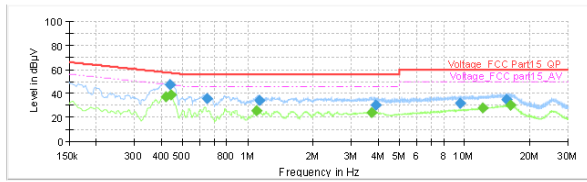
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data for 802.11b L Line.

N Line

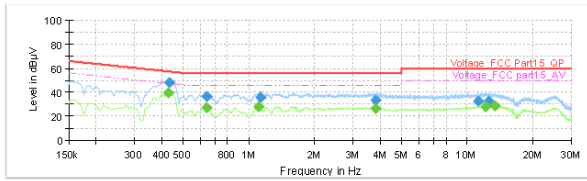


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data for 802.11b N Line.

802.11g, Channel No.: 1

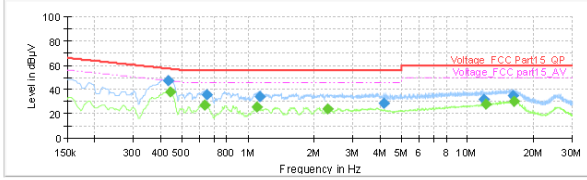
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data for 802.11g L Line.

N Line



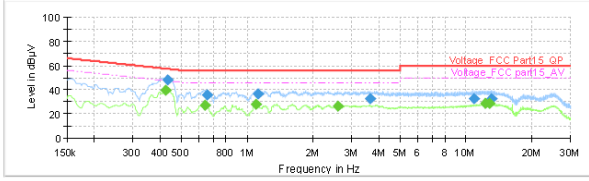
Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data for 802.11g N Line.



802.11g, Channel No.: 6

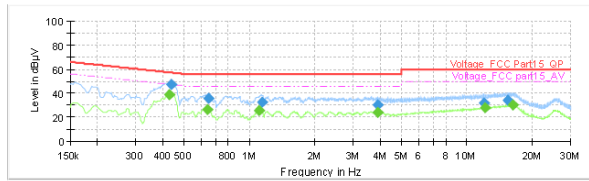
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 13 rows of test data.

N Line

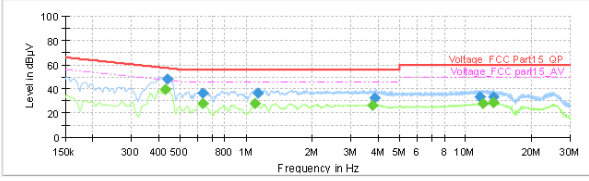


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 13 rows of test data.

802.11g, Channel No.: 11

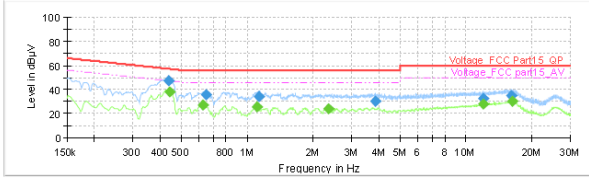
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 13 rows of test data.

N Line



Final Result

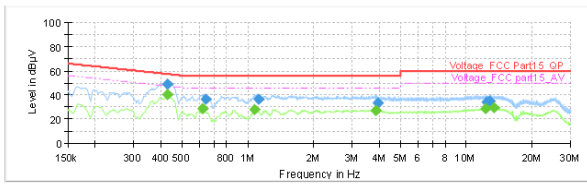
Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 13 rows of test data.



MIMO

802.11n(HT20), Channel No.: 1

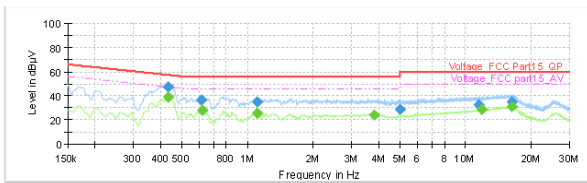
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.

N Line

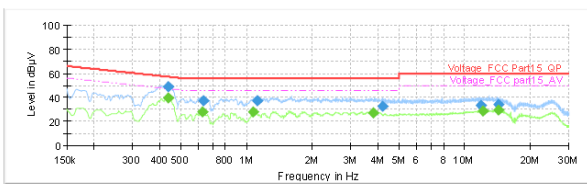


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.

802.11n(HT20), Channel No.: 6

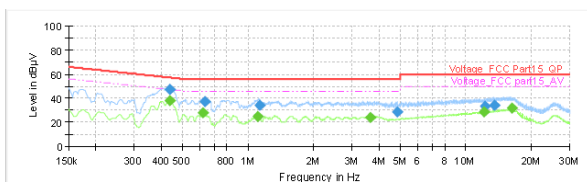
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.

N Line



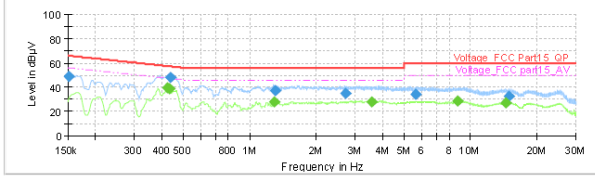
Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.



802.11n(HT20), Channel No.: 11

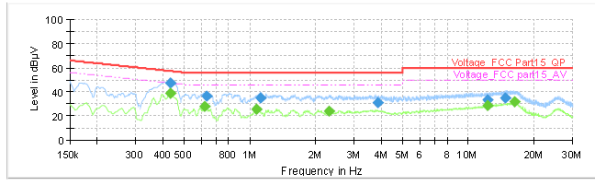
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data for L Line.

N Line

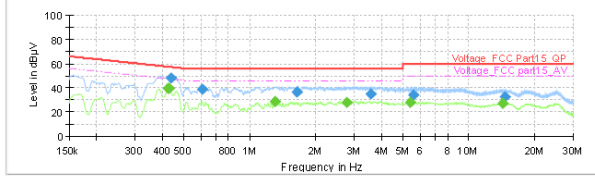


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data for N Line.

802.11n(HT40), Channel No.: 3

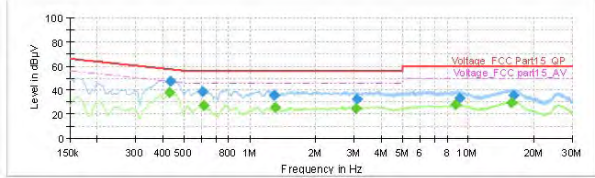
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data for L Line.

N Line



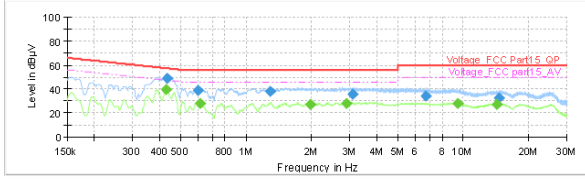
Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data for N Line.



802.11n(HT40), Channel No.: 6

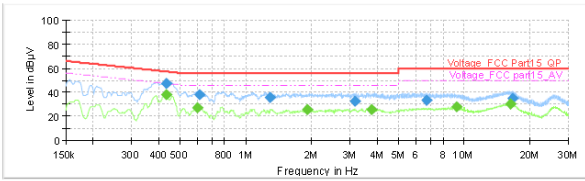
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.

N Line

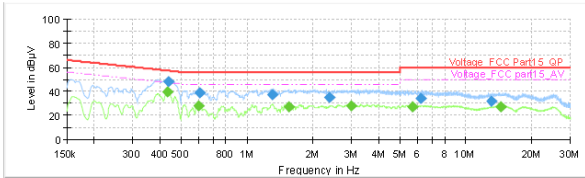


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.

802.11n(HT40), Channel No.: 9

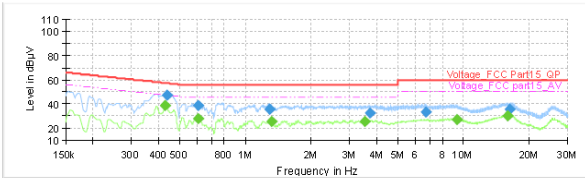
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.

N Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.



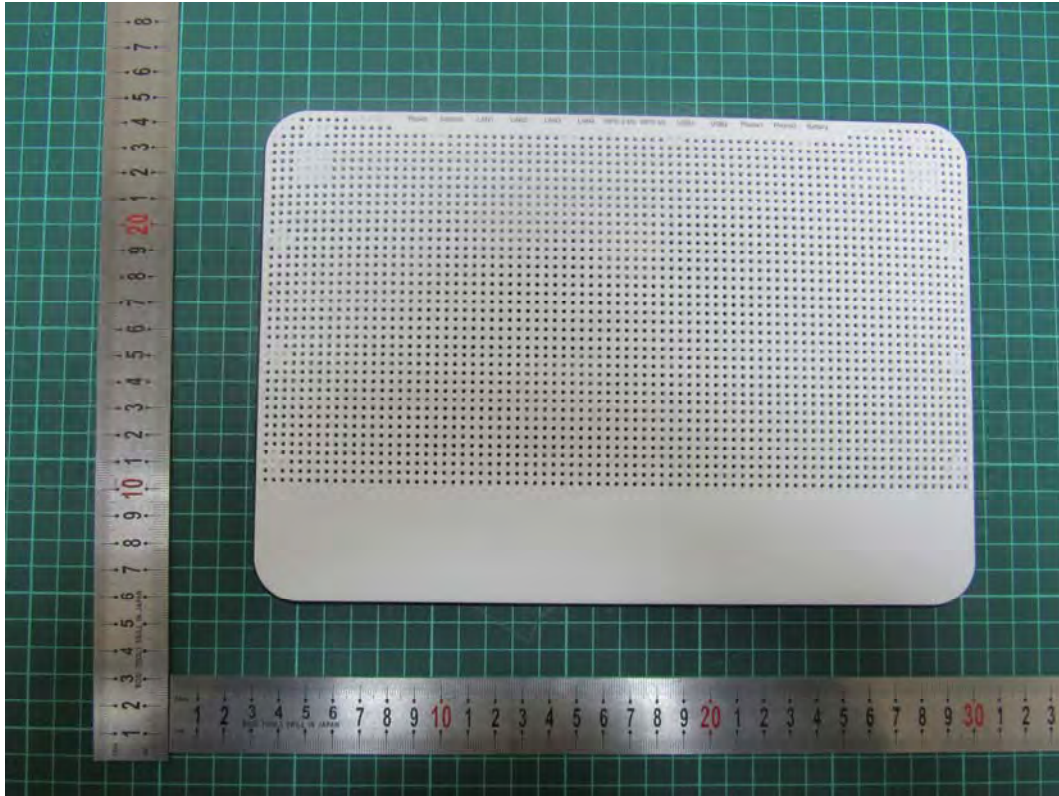
6. Main Test Instruments

Name	Type	Manufacturer	Serial Number	Calibration Date	Expiration Time
Spectrum Analyzer	FSV30	R&S	100815	2016-12-16	2017-12-15
EMI Test Receiver	ESCI	R&S	100948	2017-05-20	2018-05-19
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
Loop Antenna	FMZB1519	SCHWARZBECK	1519-047	2017-02-18	2020-02-17
Standard Gain Horn	3160-09	ETS-Lindgren	00102644	2015-01-30	2018-01-29
EMI Test Receiver	ESCS30	R&S	100138	2016-12-16	2017-12-15
LISN	ENV216	R&S	101171	2016-12-16	2019-12-15
Spectrum Analyzer	N9010A	Agilent	MY47191109	2016-05-21	2017-05-20
Spectrum Analyzer	N9010A	Agilent	MY47191109	2017-05-20	2018-05-19
RF Cable	SMA 15cm	Agilent	0001	2017-02-06	2017-08-05

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

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



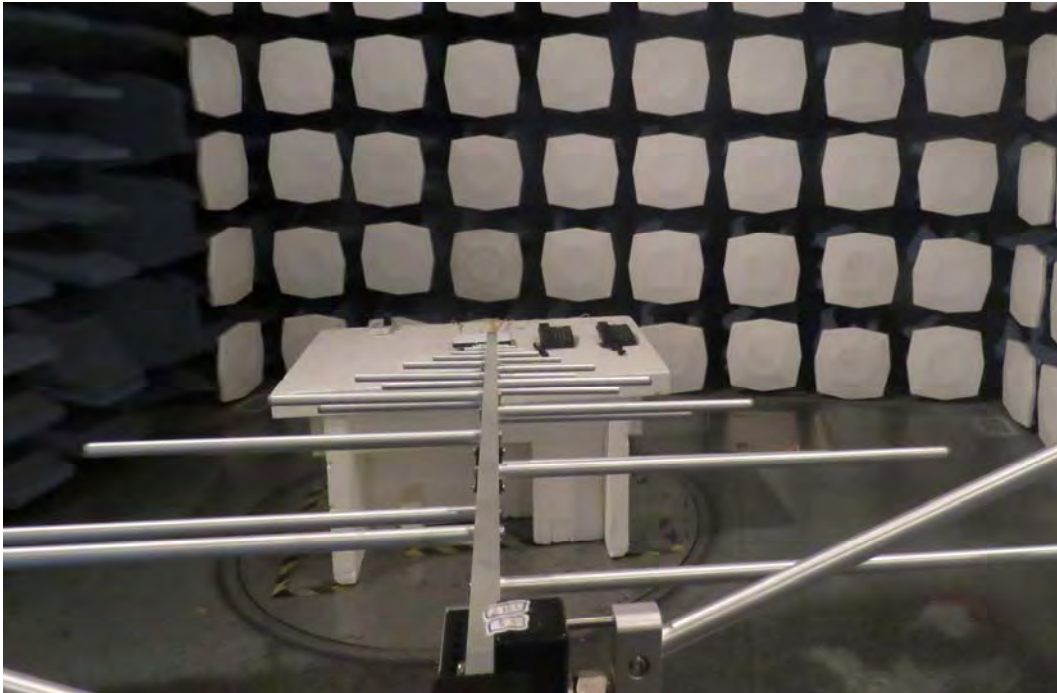
a: EUT



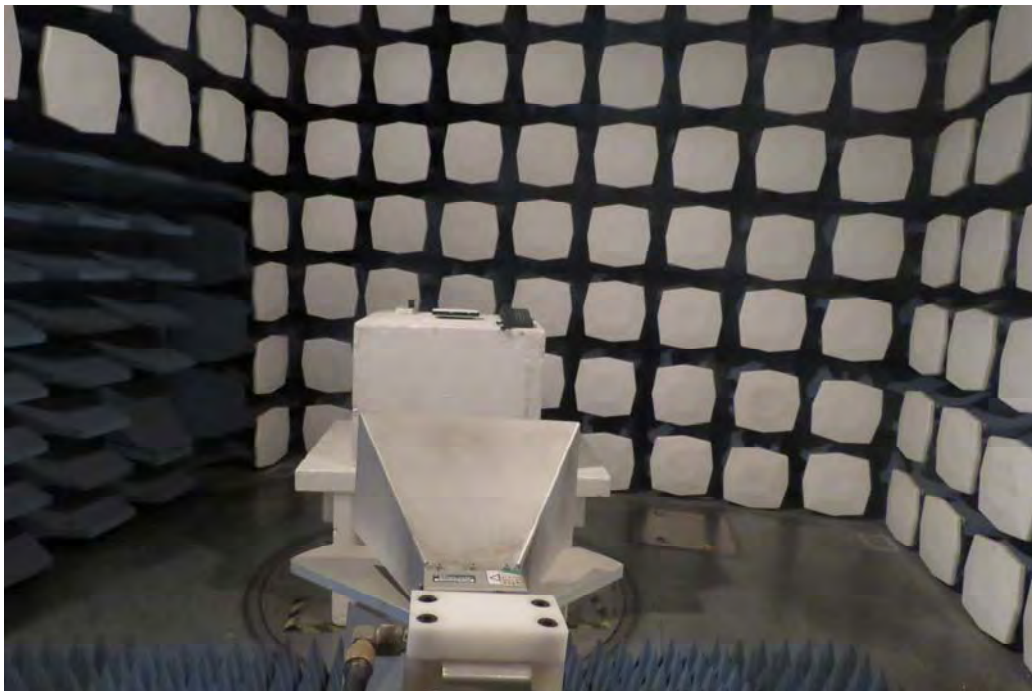
c: Adapter

Picture 1 EUT and Accessory

A.2 Test Setup



30M Hz-1GHz



Above 1GHz

Picture 2 Radiated Emission Test Setup



Picture 3 Conducted Emission Test Setup