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检测
TESTING
CNAS L2264

RF TEST REPORT

Applicant	Huawei Technologies Co., Ltd.
FCC ID	QISR227H
Product	Mobile WiFi
Brand	HUAWEI
Model	R227h
Report No.	RHA1705-0046RF04R2
Issue Date	July 4, 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.

Xianqing Li

Performed by: Xianqing Li

Kai Xu

Approved by: Kai Xu

TA Technology (Shanghai) Co., Ltd.

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Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	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 9, 2017~ May 18, 2017and June 25, 2017 ~ June 29, 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 CNAS or any government agencies.

1.2. Test facility

CNAS (accreditation number: L2264)

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

FCC (recognition number is 428261)

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

IC (recognition number is 8510A)

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

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

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

A2LA (Certificate Number: 3857.01)

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

1.3. Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
Address:	No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Xu Kai
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	http://www.ta-shanghai.com
E-mail:	xukai@ta-shanghai.com

2. General Description of Equipment under Test

Client Information

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

General information

EUT Description	
Model:	R227h
SN:	/
Hardware Version:	CL1E5785SM06
Software Version:	21.130.00.00.00
Power Supply:	Battery/AC adapter
Antenna Type:	Internal Antenna
Antenna Connector:	A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)
Antenna Gain:	Antenna 1: 1.57 dBi Antenna 2: 1.57 dBi
Directional Gain:	1.57 dBi
Test Mode:	802.11b 802.11g, 802.11n(HT20/HT40);
Modulation Type:	802.11b: DSSS; 802.11g/n(HT20/HT40): OFDM
Max. Conducted Power	Wi-Fi 2.4G : 17.26dBm
Operating Frequency Range(s)	802.11b/g/n(HT20): 2412 ~ 2457 MHz 802.11n(HT40): 2422 ~ 2447 MHz
EUT Accessory	
Adapter 1	Manufacturer: Huizhou BYD Electronic Co., Ltd Model: HW-050200E01
Adapter 2	Manufacturer: Shenzhen Huntkey Electronic Co., Ltd Model: HW-050200E01
Adapter 3	Manufacturer: Huizhou BYD Electronic Co., Ltd Model: HW-050200U01

Adapter 4	Manufacturer: Shenzhen Huntkey Electronic Co., Ltd Model: HW-050200U01
Adapter 5	Manufacturer: Dongguan Phitek Electronic Co., Ltd Model: HW-050200U01
Adapter 6	Manufacturer: Huizhou BYD Electronic Co., Ltd Model: HW-050200B01
Adapter 7	Manufacturer: Shenzhen Huntkey Electronic Co., Ltd Model: HW-050200B01
Adapter 8	Manufacturer: Dongguan Phitek Electronic Co., Ltd Model: HW-050200B01
Adapter 9	Manufacturer: Huizhou BYD Electronic Co., Ltd Model: HW-050200A01
Adapter 10	Manufacturer: Shenzhen Huntkey Electronic Co., Ltd Model: HW-050200A01
Adapter 11	Manufacturer: Dongguan Phitek Electronic Co., Ltd Model: HW-050200A01
Battery	Manufacturer: Huawei Technologies Co., Ltd. Model: HB824666RBC Power Rating: DC 3.8V, 3000mAh, Li-ion
USB Extend Cable	100cm Cable, Shielded
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	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	O	O	802.11n HT20 802.11n HT40
6dB Bandwidth	--	O	--
Band Edge	--	O	--
Power Spectral Density	O	O	802.11n HT20 802.11n HT40
Spurious RF Conducted Emissions	O	O	802.11n HT20 802.11n HT40
Radiates Emission in the Restricted Band	--	802.11b 802.11g	802.11n HT20 802.11n HT40
Radiates Emission	--	802.11b 802.11g	802.11n HT20 802.11n HT40
Conducted Emission	--	802.11b 802.11g	802.11n HT20 802.11n HT40
Note：“O”: test all bands			

5. Test Case Results

5.1. Average Power Output –Conducted

Ambient condition

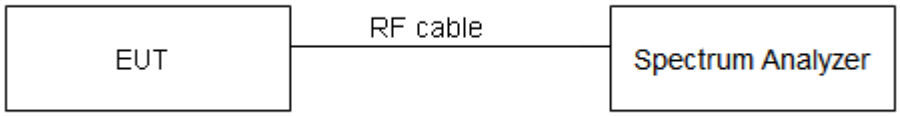
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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)

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

Packet Type	Antenna 1 Power Index			Antenna 2 Power Index		
	CH1	CH6	CH10	CH1	CH6	CH10
802.11b	17	17	17	17	17	17
802.11g	15	15	15	15	15	15
802.11n HT20	14	14	14	14	14	14
Packet Type	**CH3**	**CH5**	**CH8**	**CH3**	**CH5**	**CH8**
802.11n HT40	12	12	12	12	12	12

MIMO Power Index			
Packet Type	**CH1**	**CH6**	**CH10**
802.11n HT20	14	14	14
Packet Type	**CH3**	**CH5**	**CH8**
802.11n HT40	12	12	12

SISO Antenna 1

Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)	Limit (dBm)	Conclusion
802.11b	2412	16.28	30	PASS
	2437	16.07	30	PASS
	2457	16.24	30	PASS
802.11g	2412	12.79	30	PASS
	2437	12.57	30	PASS
	2457	14.31	30	PASS
802.11n HT20	2412	13.11	30	PASS
	2437	12.78	30	PASS
	2457	13.64	30	PASS
802.11n HT40	2422	11.71	30	PASS
	2432	11.79	30	PASS
	2447	11.92	30	PASS

SISO Antenna 2

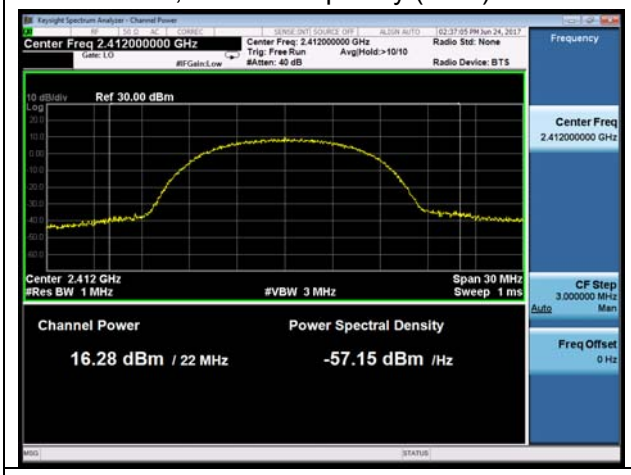
Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)	Limit (dBm)	Conclusion
802.11b	2412	16.42	30	PASS
	2437	15.16	30	PASS
	2457	17.26	30	PASS
802.11g	2412	14.31	30	PASS
	2437	13.55	30	PASS
	2457	15.07	30	PASS
802.11n HT20	2412	13.45	30	PASS
	2437	12.58	30	PASS
	2457	14.04	30	PASS
802.11n HT40	2422	11.73	30	PASS
	2432	11.76	30	PASS
	2447	11.87	30	PASS

MIMO

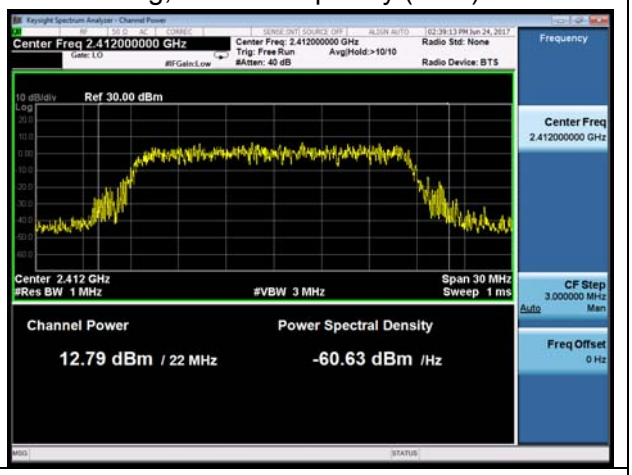
Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)			Limit (dBm)	Conclusion
		Ant 1	Ant 2	MIMO		
802.11n HT20	2412	13.06	13.24	16.16	30	PASS
	2437	12.68	12.44	15.57	30	PASS
	2457	13.42	13.33	16.39	30	PASS
802.11n HT40	2422	11.61	11.29	14.46	30	PASS
	2437	11.68	11.53	14.62	30	PASS
	2447	11.72	11.65	14.70	30	PASS

SISO Antenna 1

802.11b, Carrier frequency (MHz): 2412

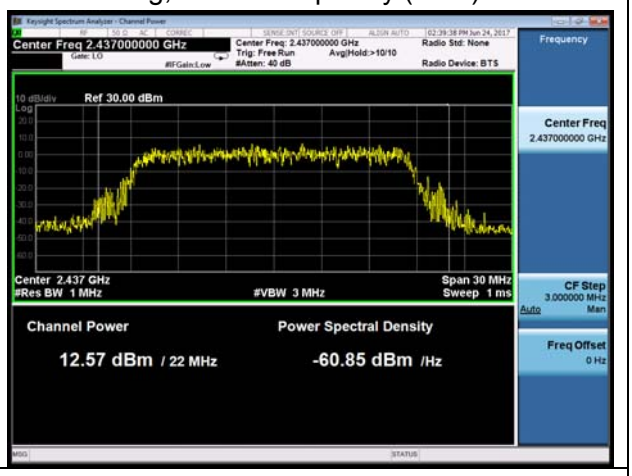


802.11g, Carrier frequency (MHz): 2412

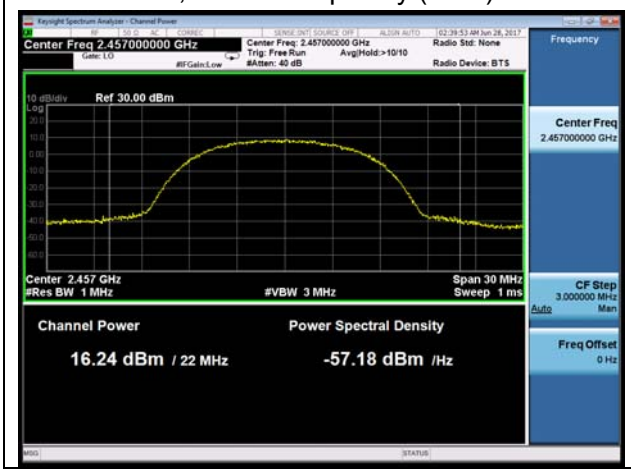


802.11b, Carrier frequency (MHz): 2437

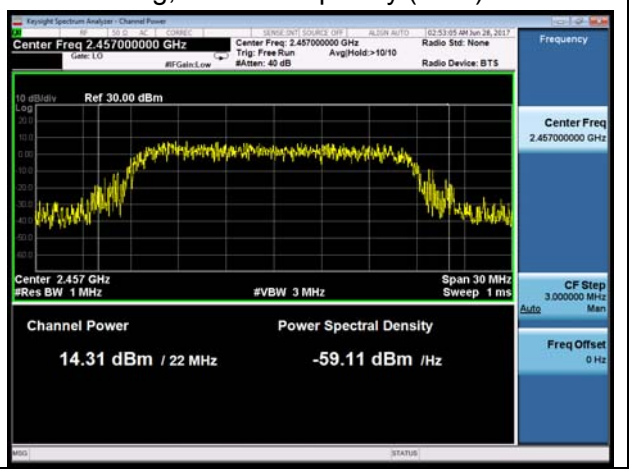
802.11g, Carrier frequency (MHz): 2437



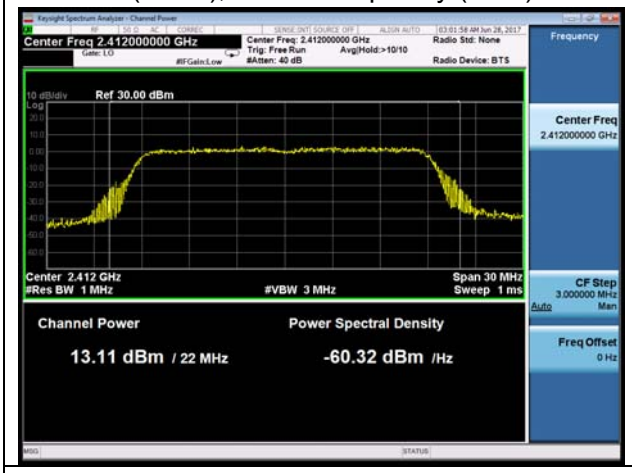
802.11b, Carrier frequency (MHz):2457



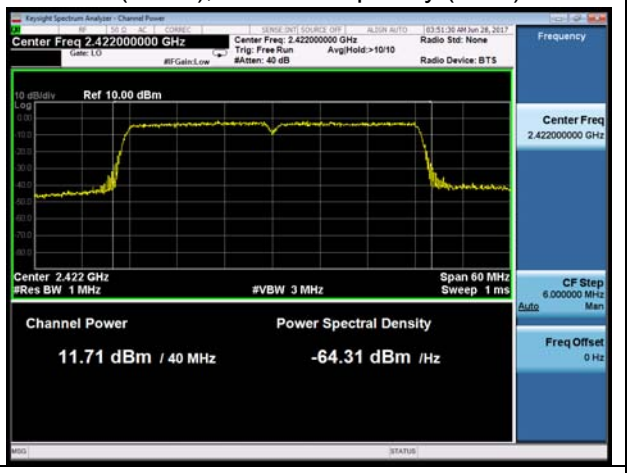
802.11g, Carrier frequency (MHz):2457



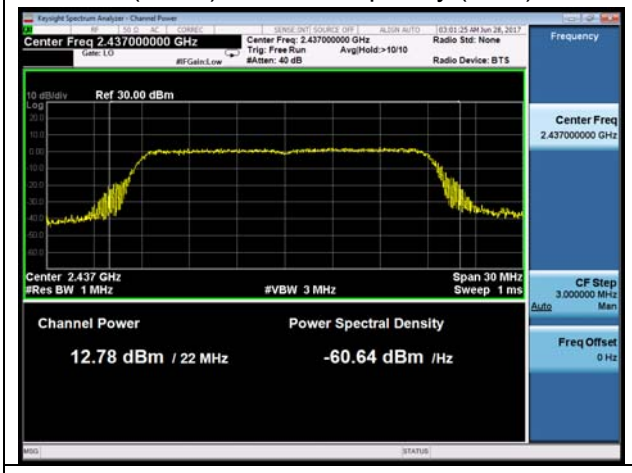
802.11n(HT20), Carrier frequency (MHz): 2412



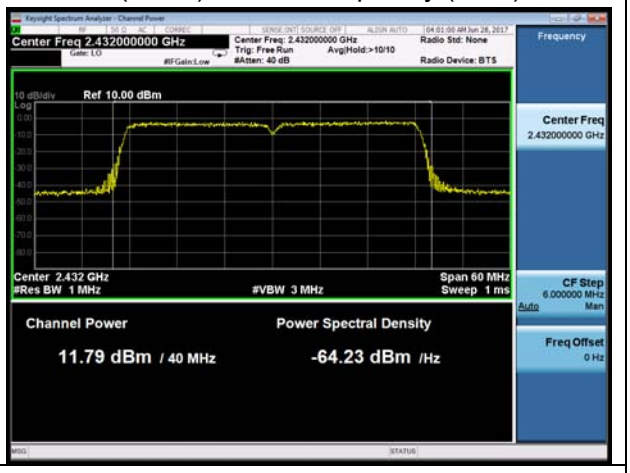
802.11n(HT40), Carrier frequency (MHz): 2422



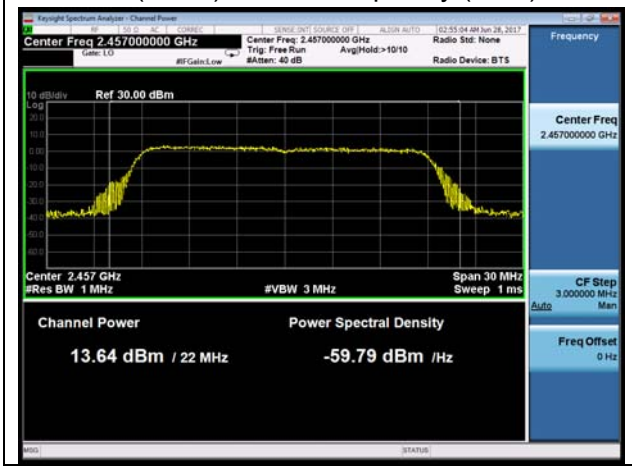
802.11n(HT20), Carrier frequency (MHz): 2437



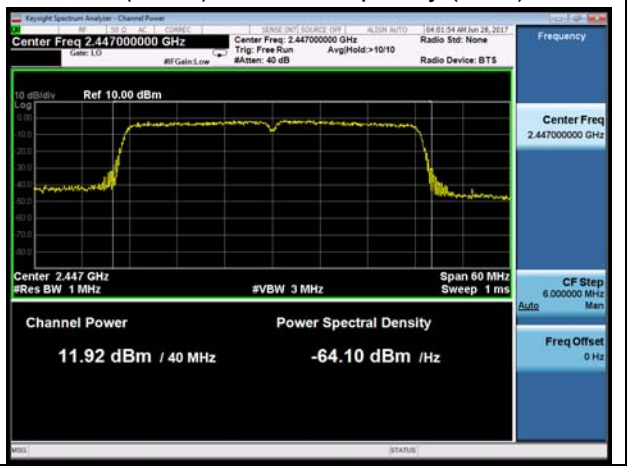
802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT20), Carrier frequency (MHz):2457



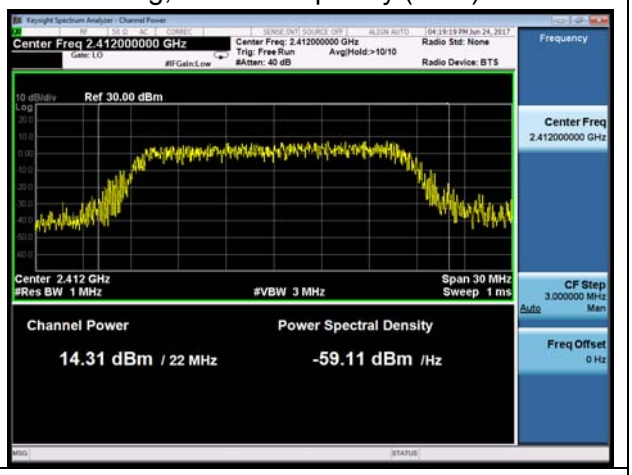
802.11n(HT40), Carrier frequency (MHz):2447



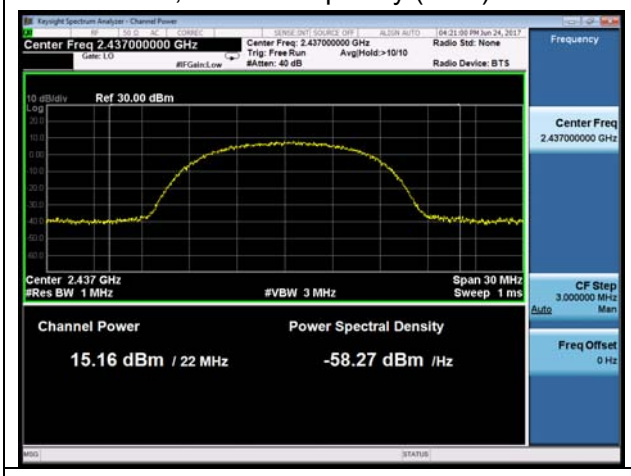
SISO Antenna 2

802.11b, Carrier frequency (MHz): 2412

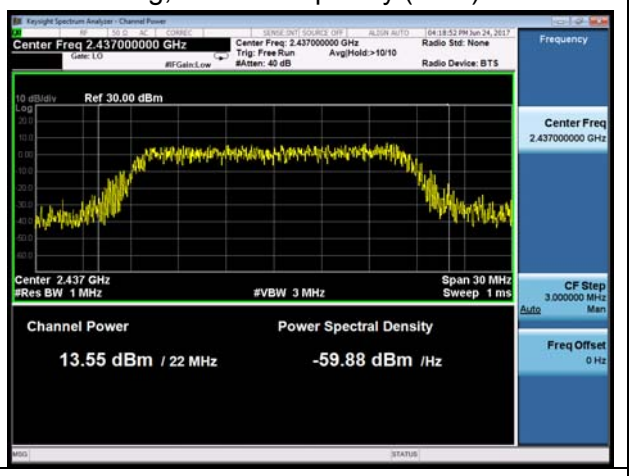
802.11g, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437

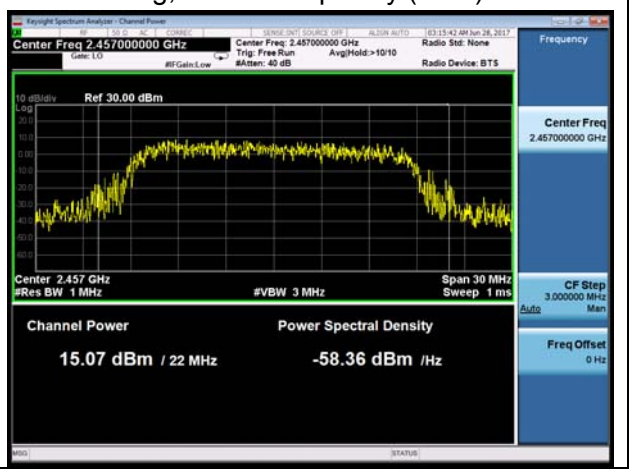


802.11g, Carrier frequency (MHz): 2437

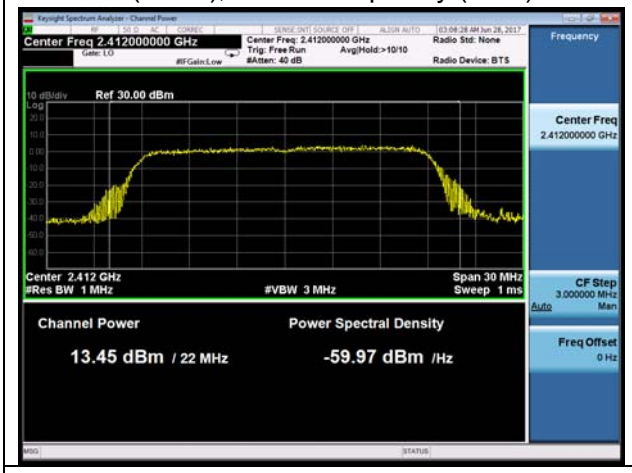


802.11b, Carrier frequency (MHz):2457

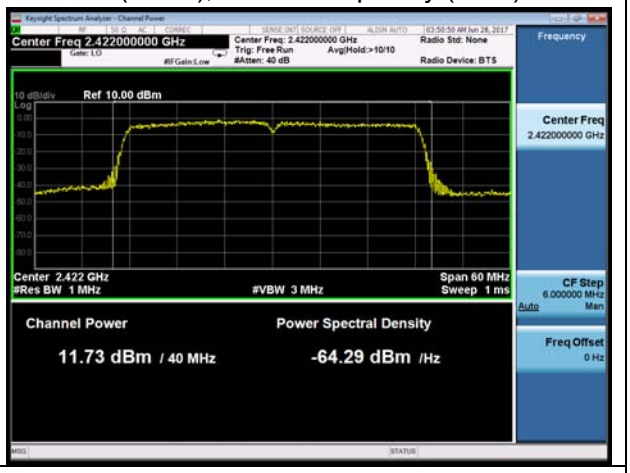
802.11g, Carrier frequency (MHz):2457



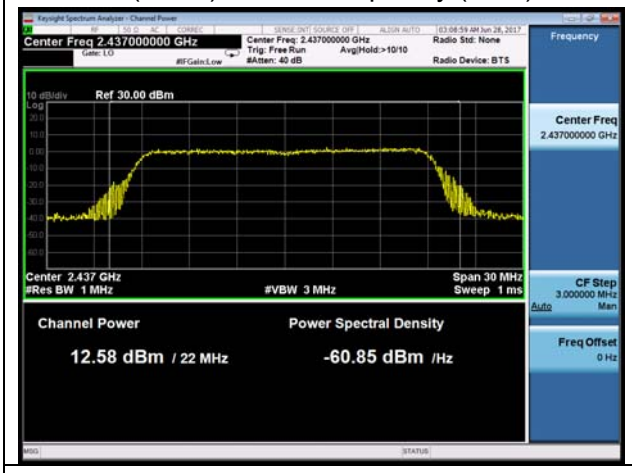
802.11n(HT20), Carrier frequency (MHz): 2412



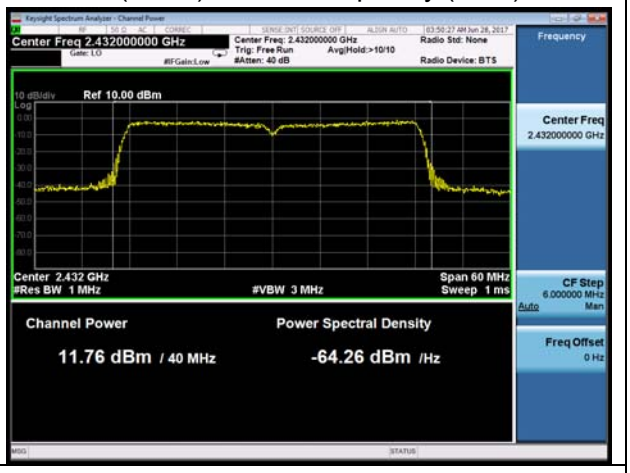
802.11n(HT40), Carrier frequency (MHz): 2422



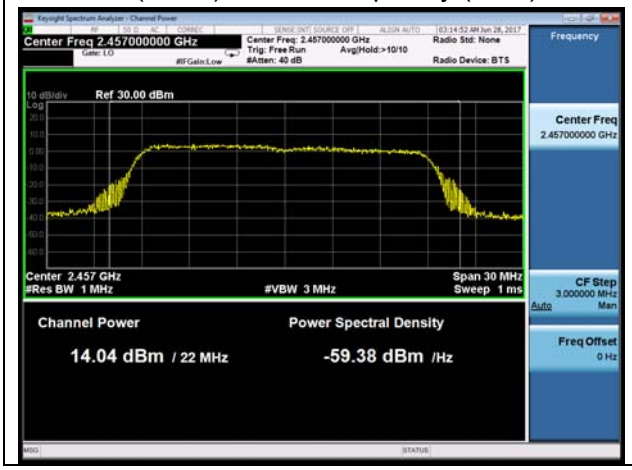
802.11n(HT20), Carrier frequency (MHz): 2437



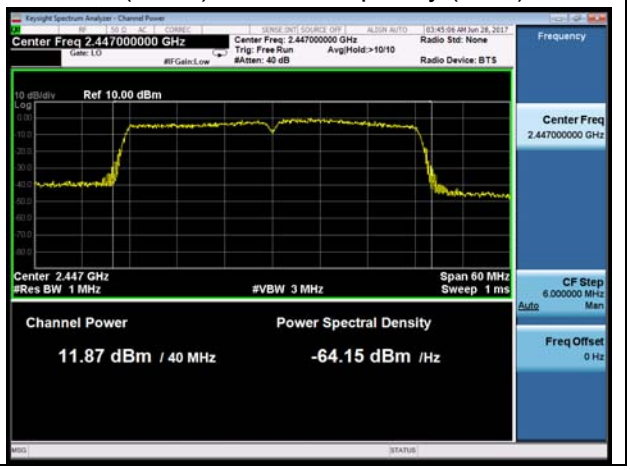
802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT20), Carrier frequency (MHz):2457

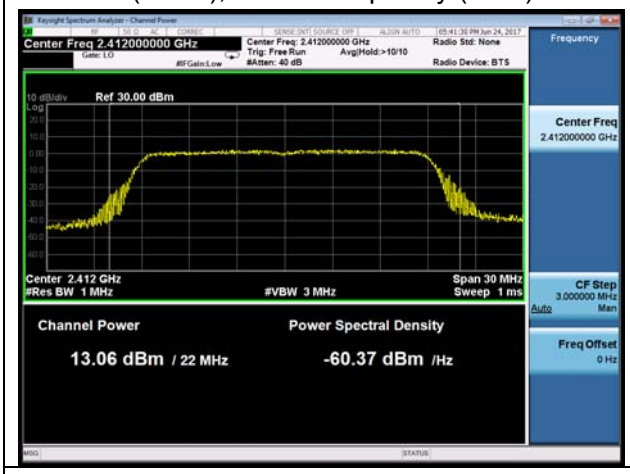


802.11n(HT40), Carrier frequency (MHz):2447

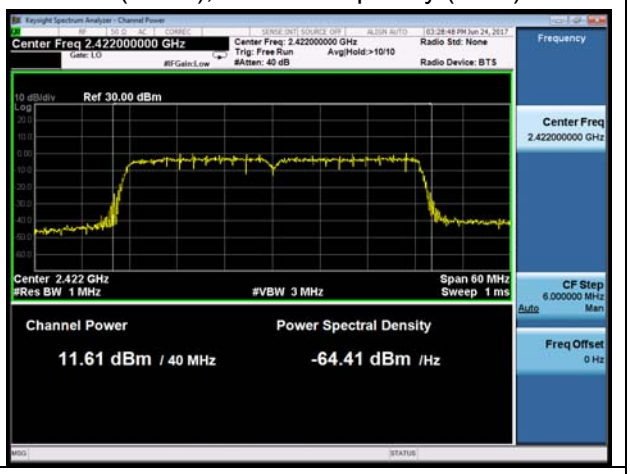


MIMO Antenna 1

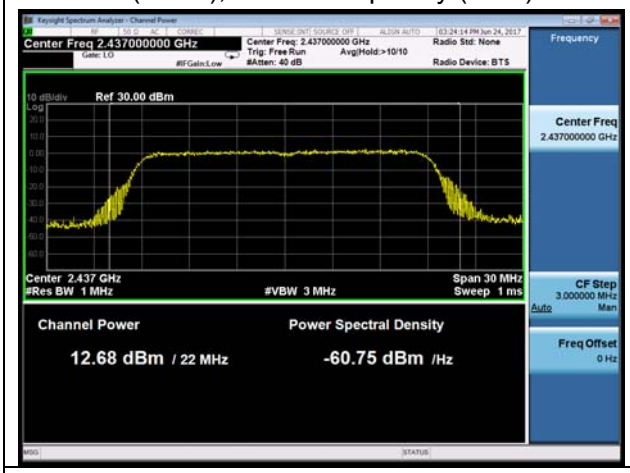
802.11n(HT20), Carrier frequency (MHz): 2412



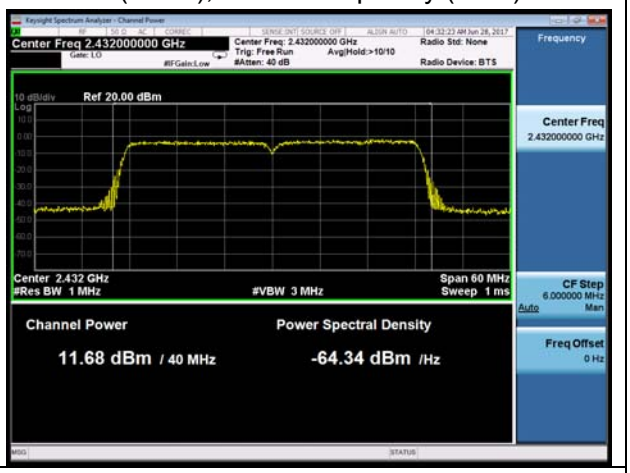
802.11n(HT40), Carrier frequency (MHz): 2422



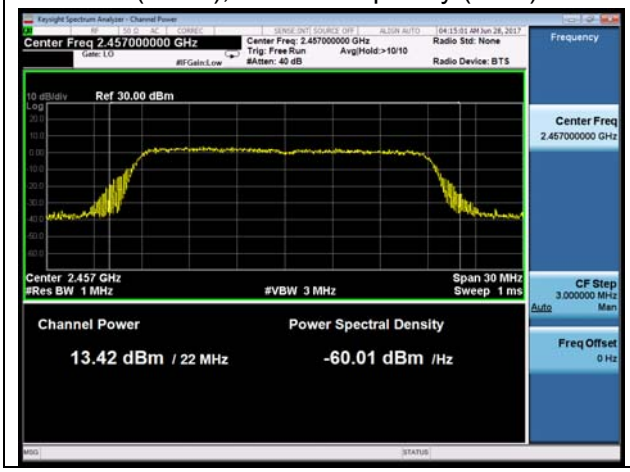
802.11n(HT20), Carrier frequency (MHz): 2437



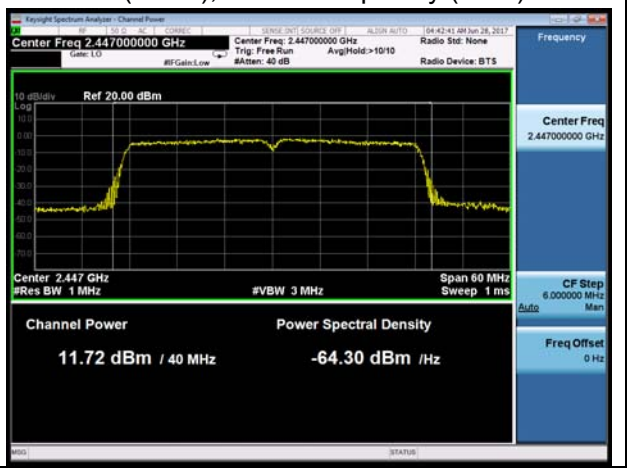
802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT20), Carrier frequency (MHz):2457

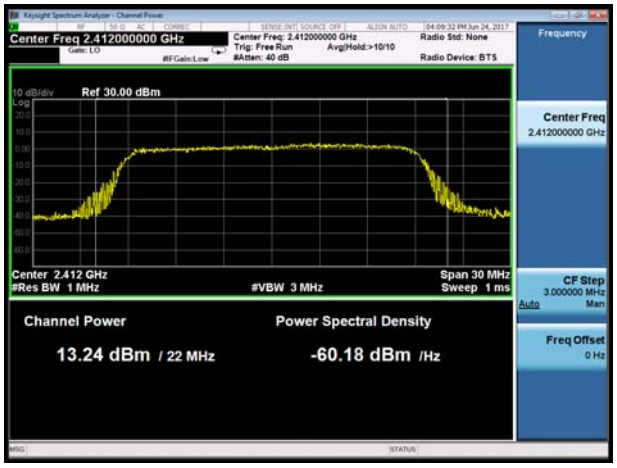


802.11n(HT40), Carrier frequency (MHz):2447

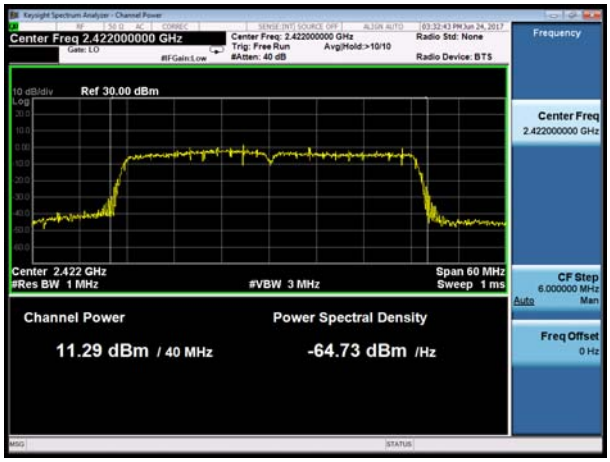


MIMO Antenna 2

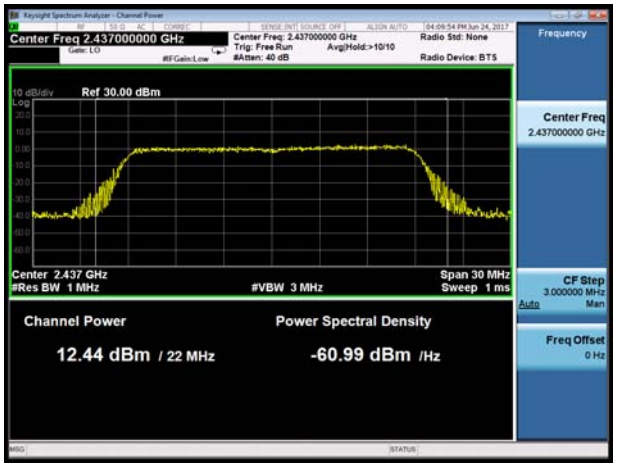
802.11n(HT20), Carrier frequency (MHz): 2412



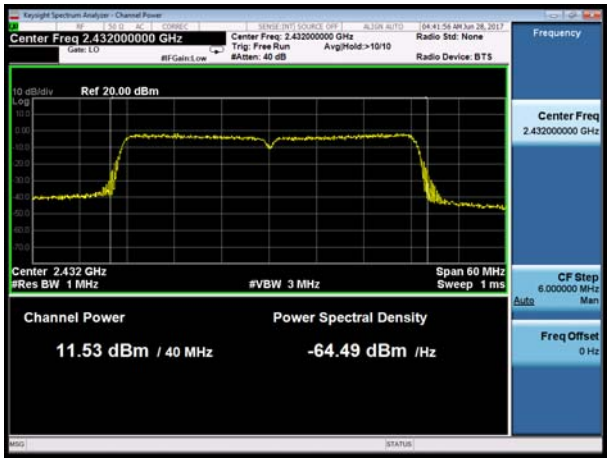
802.11n(HT40), Carrier frequency (MHz): 2422



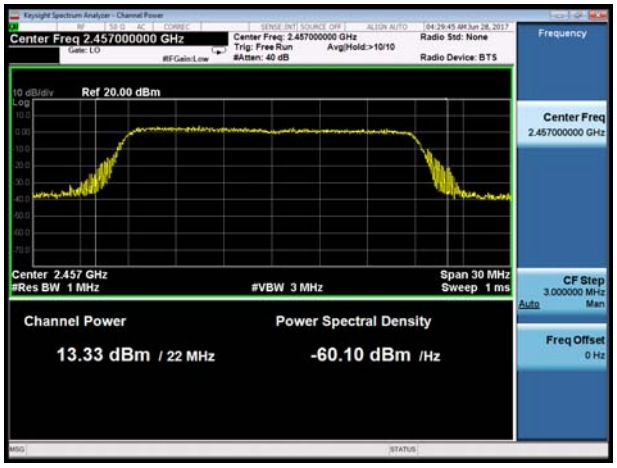
802.11n(HT20), Carrier frequency (MHz): 2437



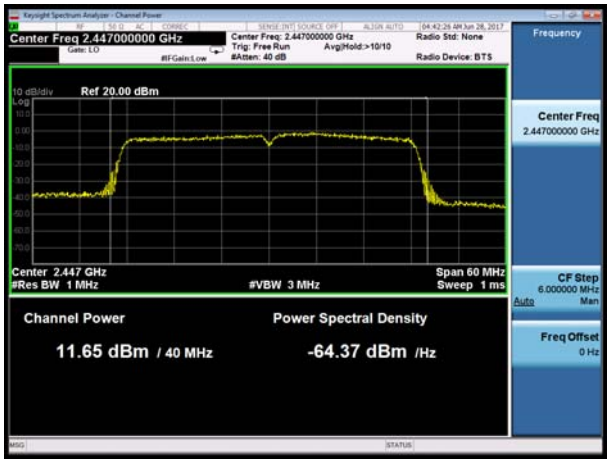
802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT20), Carrier frequency (MHz):2457



802.11n(HT40), Carrier frequency (MHz):2447



5.2. 6dB Bandwidth

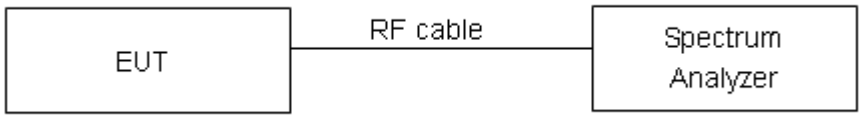
Ambient condition

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

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. RBW is set to 100 kHz; VBW is set to 300 kHz on spectrum analyzer.

Test Setup



Limits

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

minimum 6 dB bandwidth	≥ 500 kHz

Measurement Uncertainty

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

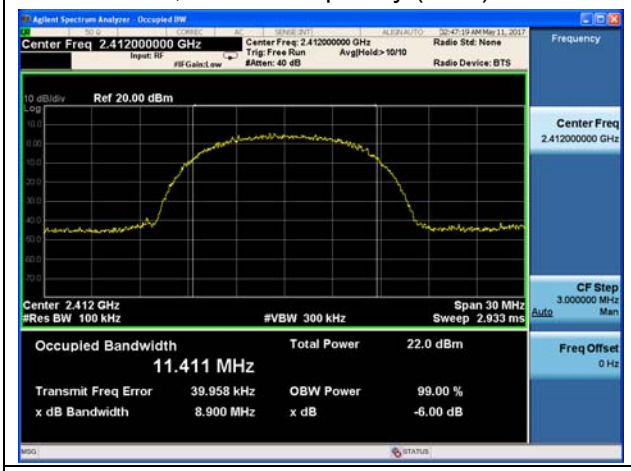
Test Results:

SISO Antenna 2

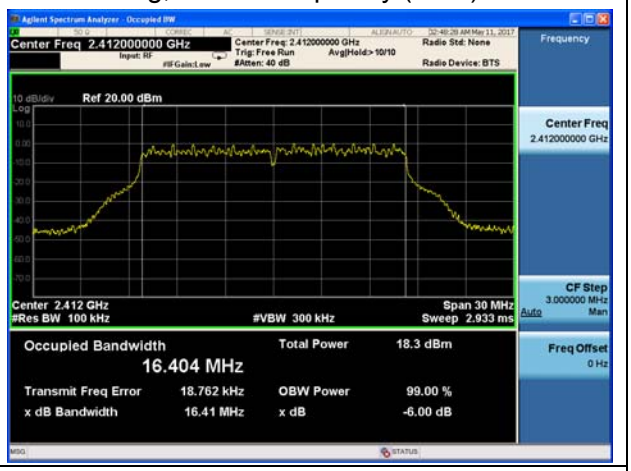
Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11b	2412	11.411	8.900	500	PASS
	2437	11.492	8.430	500	PASS
	2457	11.561	8.429	500	PASS
802.11g	2412	16.404	16.41	500	PASS
	2437	16.434	16.44	500	PASS
	2457	16.420	16.24	500	PASS
802.11n HT20	2412	17.658	17.73	500	PASS
	2437	17.689	17.73	500	PASS
	2457	17.673	17.71	500	PASS
802.11n HT40	2422	36.185	36.49	500	PASS
	2432	36.200	36.50	500	PASS
	2447	36.055	35.95	500	PASS

SISO Antenna 1

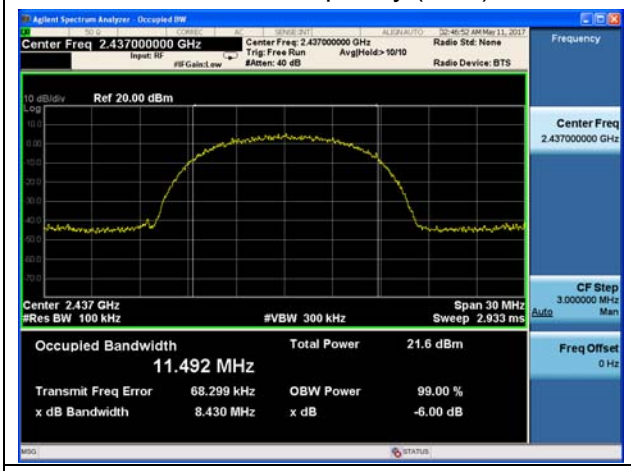
802.11b, Carrier frequency (MHz): 2412



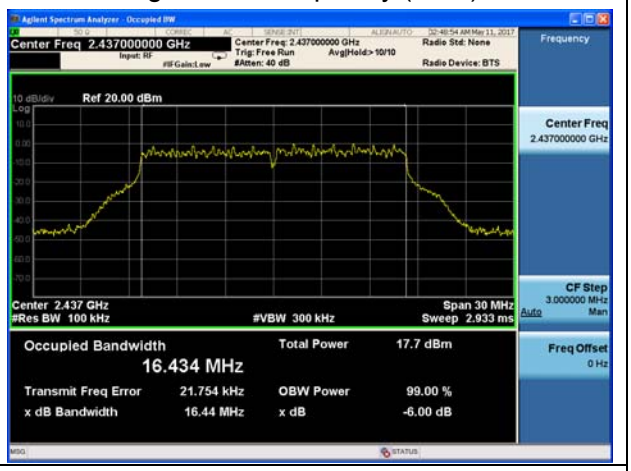
802.11g, Carrier frequency (MHz): 2412



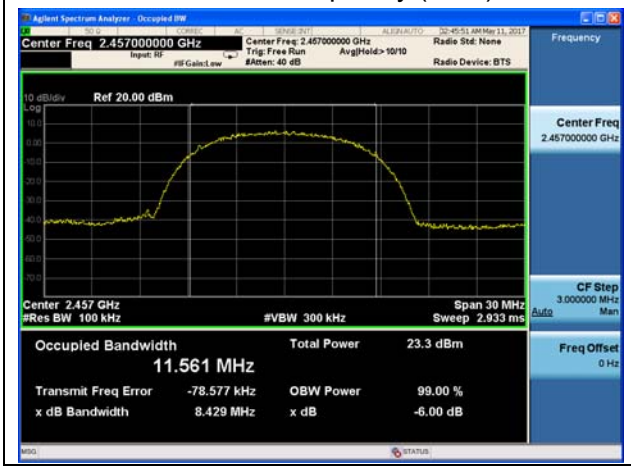
802.11b, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2437

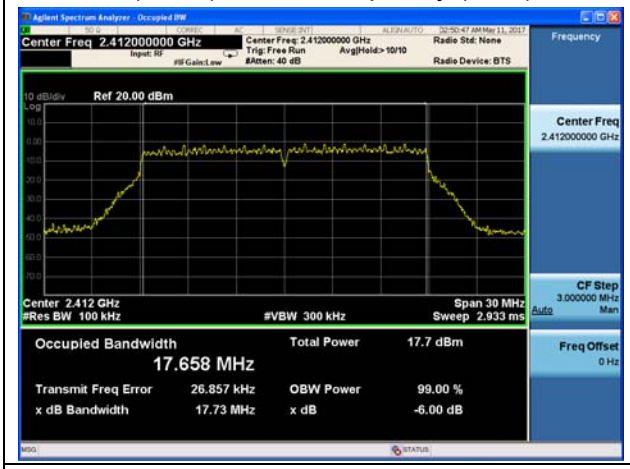


802.11b, Carrier frequency (MHz):2457

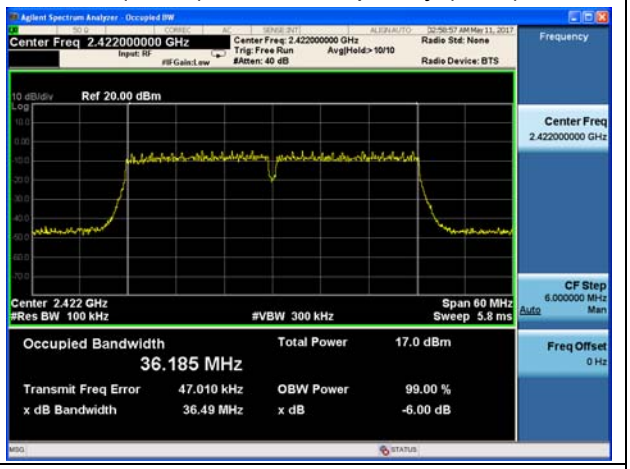


802.11g, Carrier frequency (MHz):2457

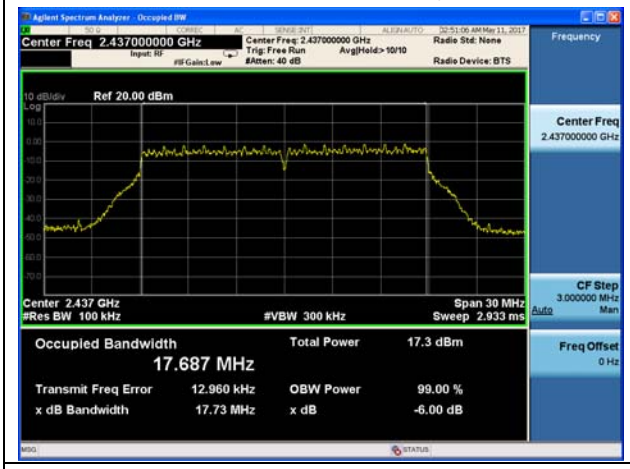
802.11n(HT20), Carrier frequency (MHz): 2412



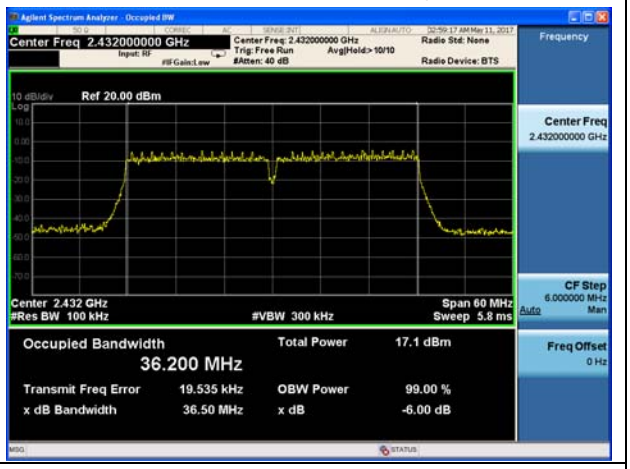
802.11n(HT40), Carrier frequency (MHz): 2422



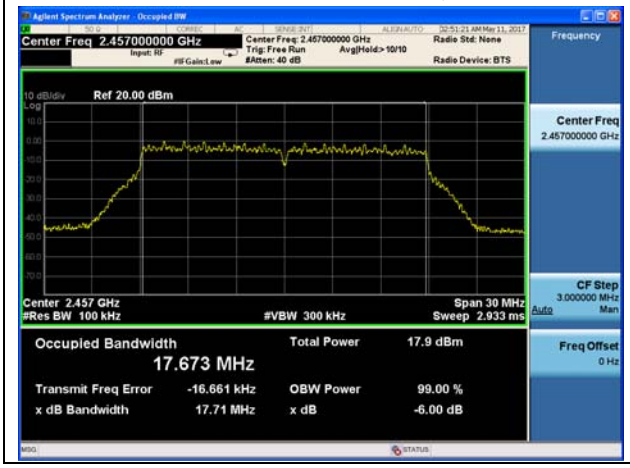
802.11n(HT20), Carrier frequency (MHz): 2437



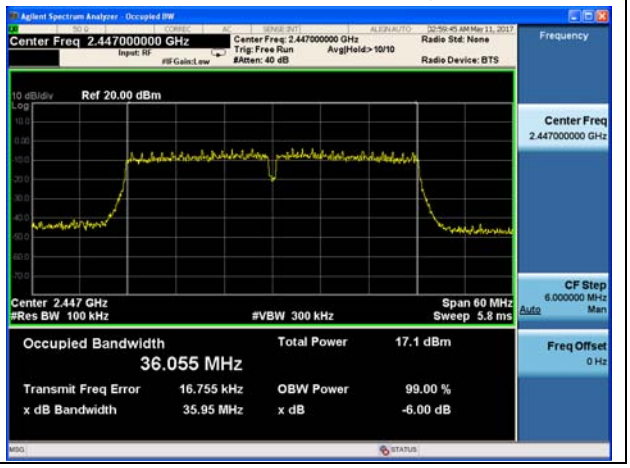
802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT20), Carrier frequency (MHz):2457



802.11n(HT40), Carrier frequency (MHz):2447



5.3. Band Edge

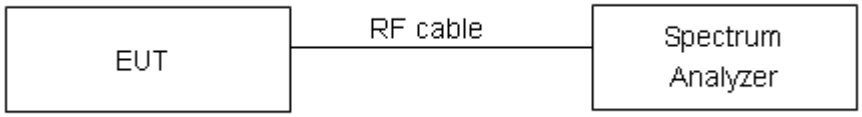
Ambient condition

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

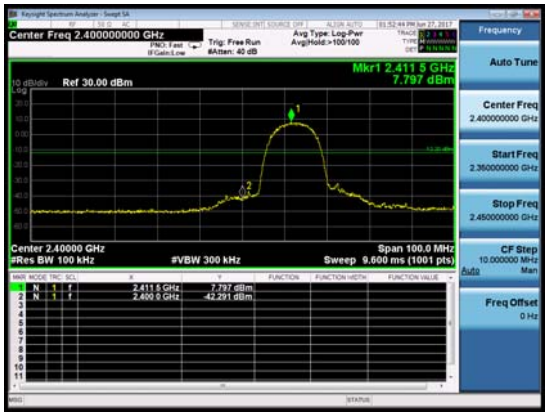
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96.

Frequency	Uncertainty
2GHz-3GHz	1.407 dB

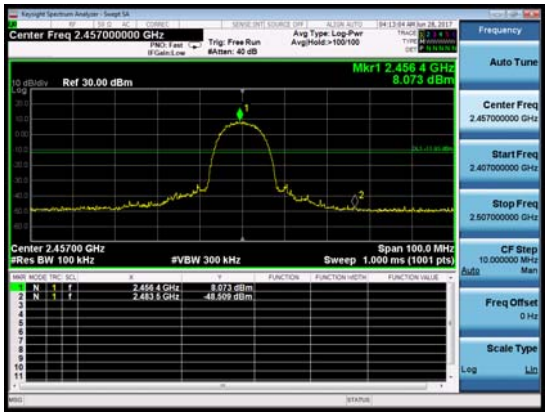
Test Results

SISO Antenna 1

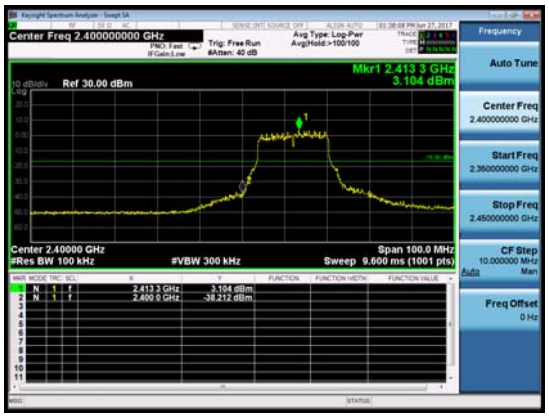
802.11b, Channel No.: 1



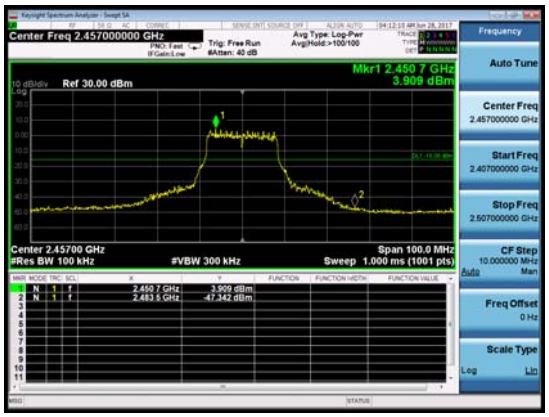
802.11b, Channel No.: 10



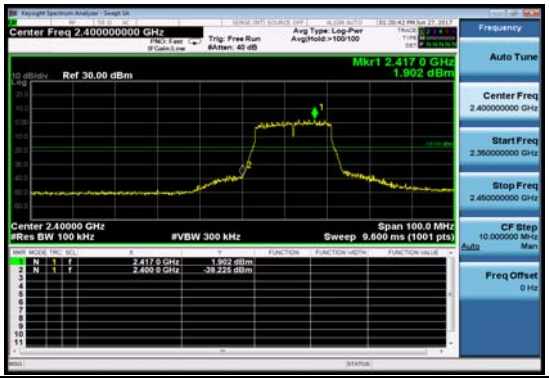
802.11g, Channel No.: 1



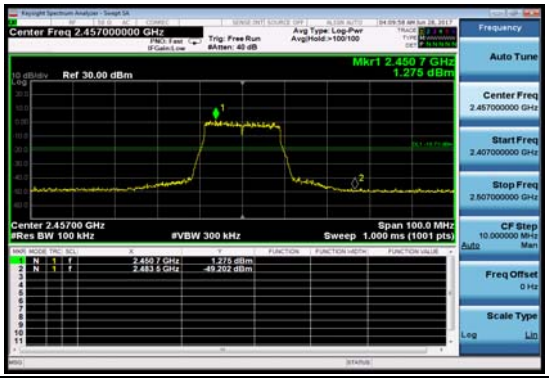
802.11g, Channel No.: 10



802.11n(HT20), Channel No.: 1

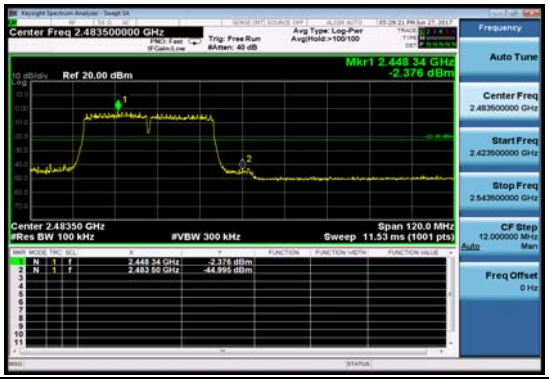


802.11n(HT20), Channel No.: 10



802.11n(HT40), Channel No.: 3

802.11n(HT40), Channel No.: 8



5.4. Power Spectral Density

Ambient condition

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

Method of Measurement

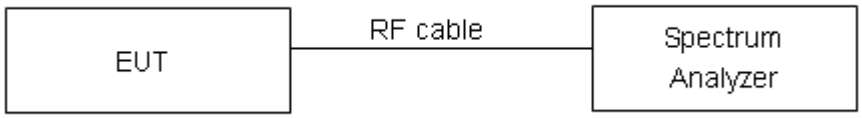
The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

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

Measurement Uncertainty

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

Test Results:

SISO Antenna 1

Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)	Limit (dBm / 3kHz)	Conclusion
802.11b	1	-17.42	8	PASS
	6	-18.18	8	PASS
	10	-16.18	8	PASS
802.11g	1	-20.83	8	PASS
	6	-21.03	8	PASS
	10	-19.34	8	PASS
802.11n HT20	1	-21.22	8	PASS
	6	-21.76	8	PASS
	10	-20.93	8	PASS
802.11n HT40	3	-26.03	8	PASS
	5	-26.65	8	PASS
	8	-25.51	8	PASS

SISO Antenna 2

Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)	Limit (dBm / 3kHz)	Conclusion
802.11b	1	-17.12	8	PASS
	6	-18.37	8	PASS
	10	-15.07	8	PASS
802.11g	1	-19.75	8	PASS
	6	-20.96	8	PASS
	10	-18.66	8	PASS
802.11n HT20	1	-21.03	8	PASS
	6	-21.62	8	PASS
	10	-20.01	8	PASS
802.11n HT40	3	-26.09	8	PASS
	5	-25.59	8	PASS
	8	-25.65	8	PASS

MIMO

Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)			Limit (dBm / 3kHz)	Conclusion
		Ant 1	Ant 2	MIMO		
802.11n HT20	1	-22.18	-21.41	-18.77	8	PASS
	6	-22.56	-22.59	-19.57	8	PASS
	10	-21.17	-21.32	-18.23	8	PASS
802.11n HT40	3	-26.95	-25.9	-23.38	8	PASS
	5	-25.95	-25.32	-22.62	8	PASS
	8	-25.97	-24.83	-22.35	8	PASS

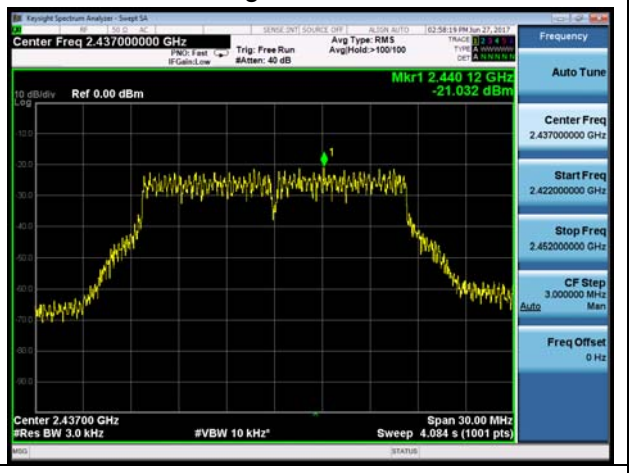
SISO Antenna 1

802.11b, Channel No.: 1

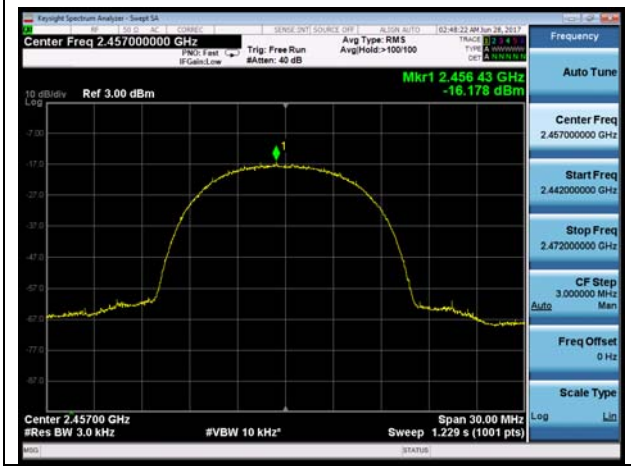
802.11g, Channel No.: 1

802.11b, Channel No.: 6

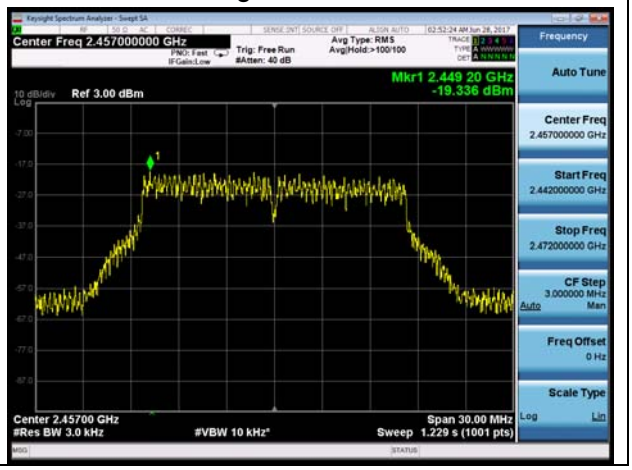
802.11g, Channel No.: 6



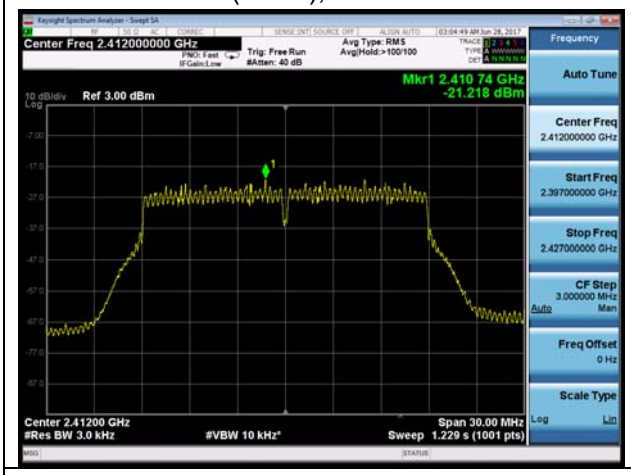
802.11b, Channel No.: 10



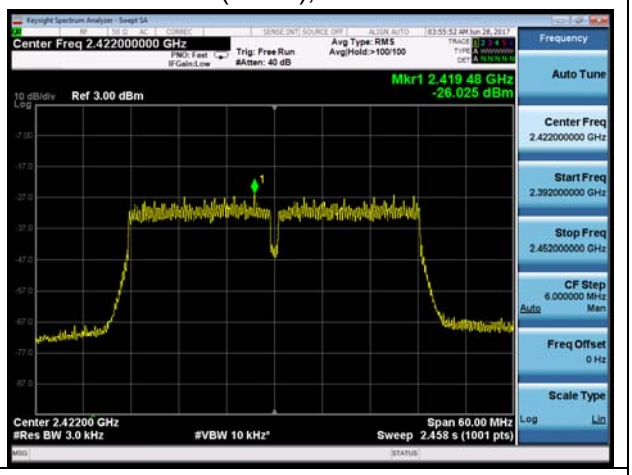
802.11g, Channel No.: 10



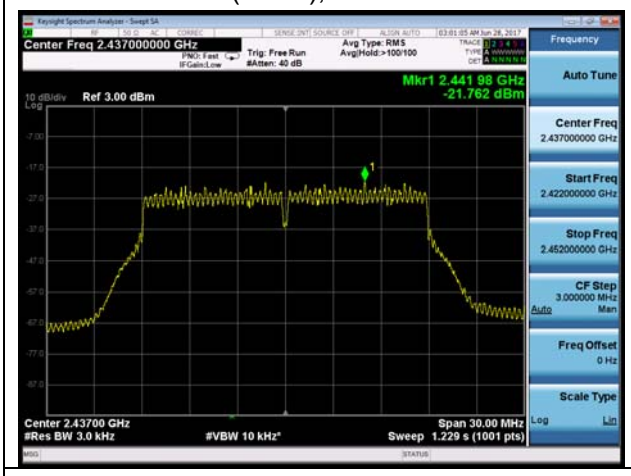
802.11n(HT20), Channel No. 1



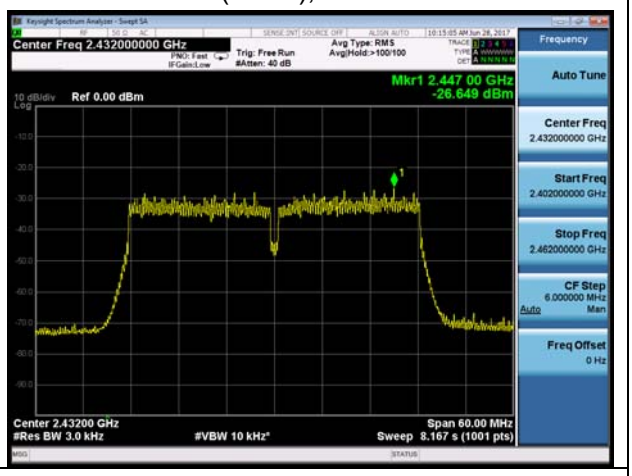
802.11n(HT40), Channel No. 3



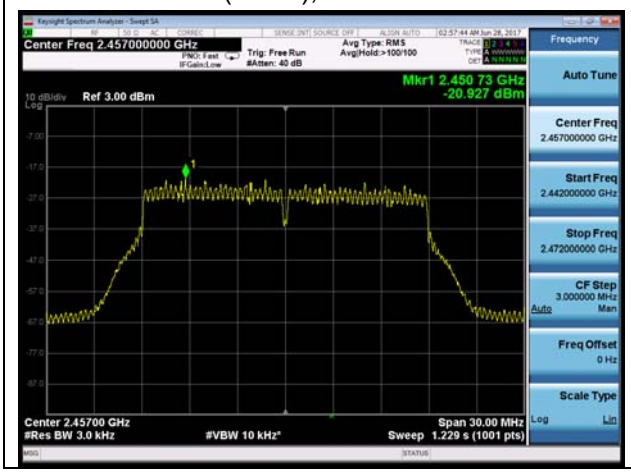
802.11n(HT20), Channel No. 6



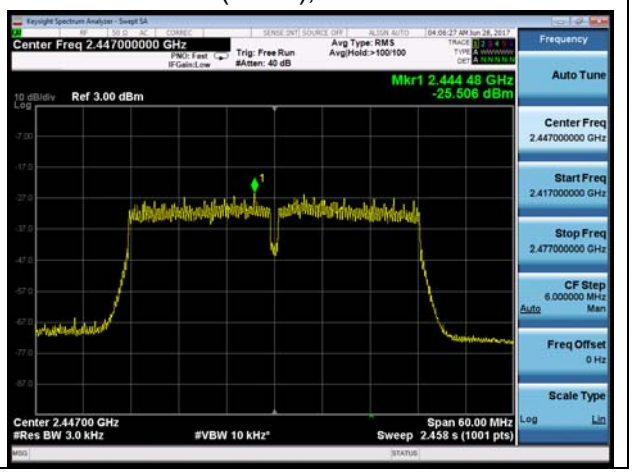
802.11n(HT40), Channel No. 5



802.11n(HT20), Channel No. 10



802.11n(HT40), Channel No. 8



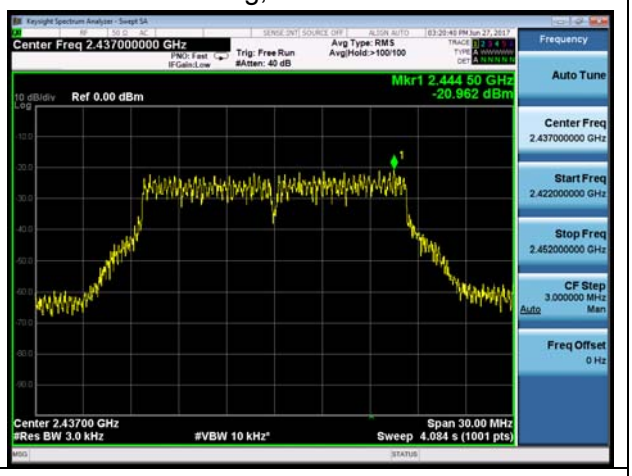
SISO Antenna 2

802.11b, Channel No.: 1

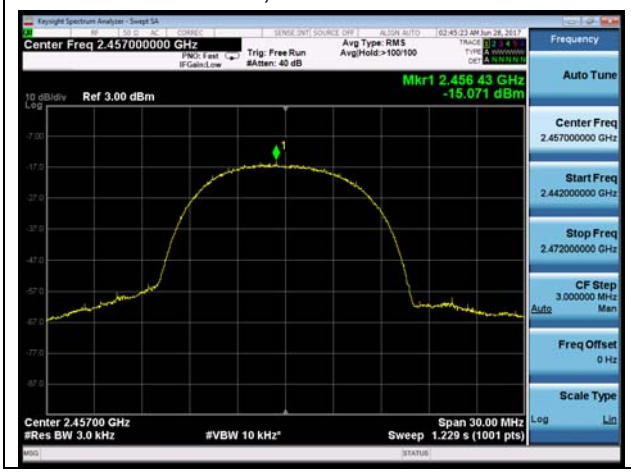
802.11g, Channel No.: 1

802.11b, Channel No.: 6

802.11g, Channel No.: 6

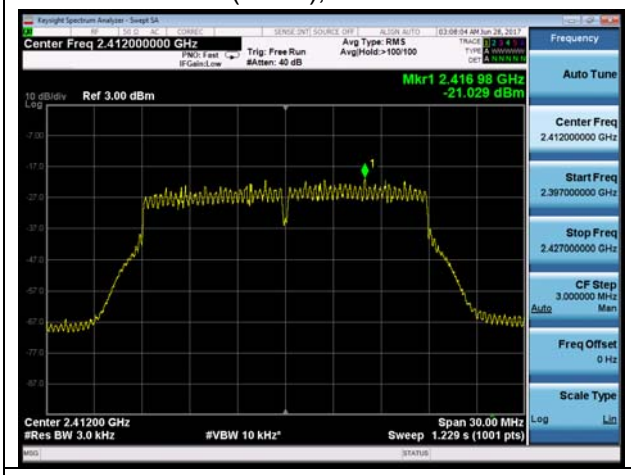


802.11b, Channel No.: 10



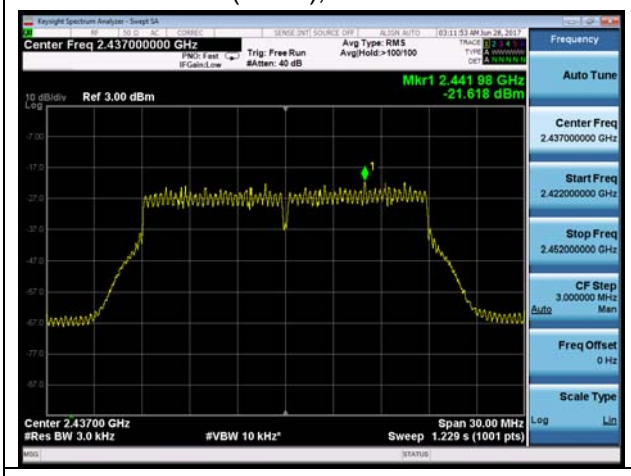
802.11g, Channel No.: 10

802.11n(HT20), Channel No. 1

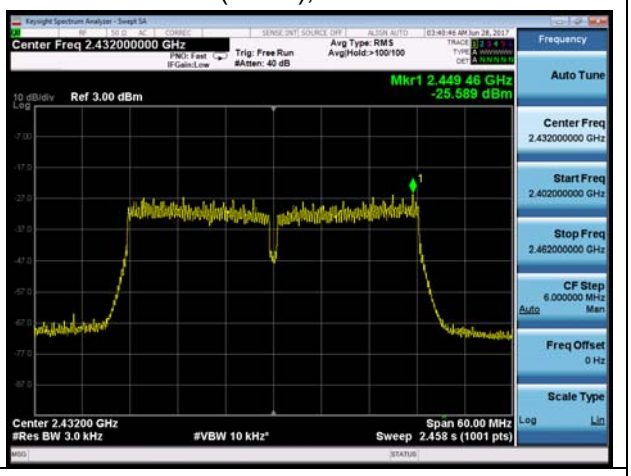


802.11n(HT40), Channel No. 3

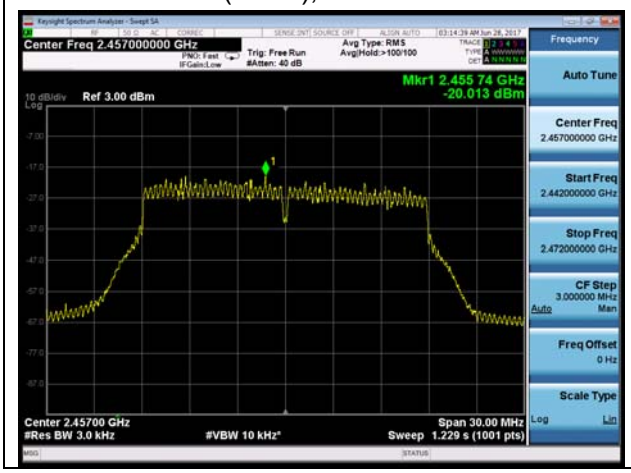
802.11n(HT20), Channel No. 6



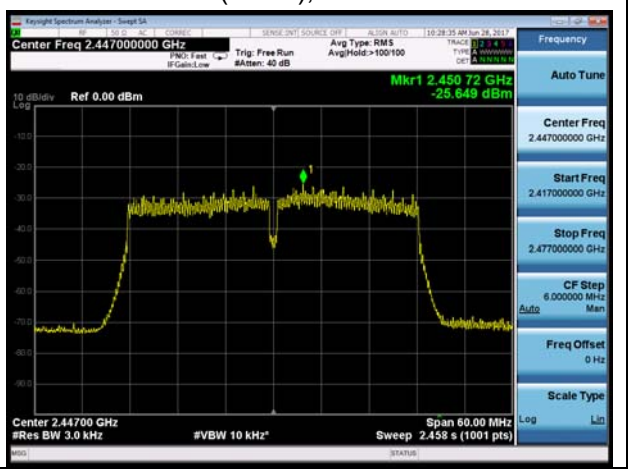
802.11n(HT40), Channel No. 5



802.11n(HT20), Channel No. 10

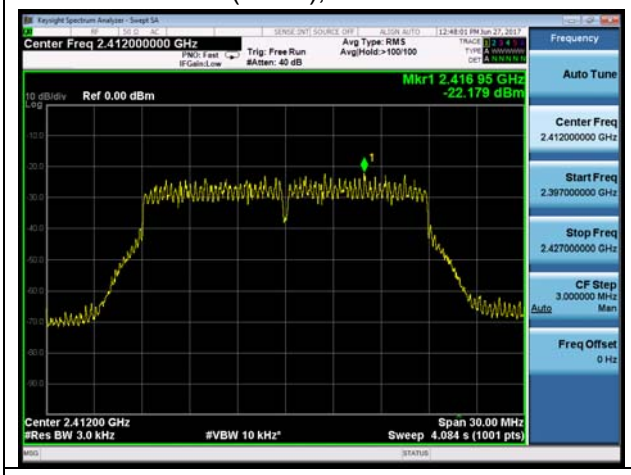


802.11n(HT40), Channel No. 8

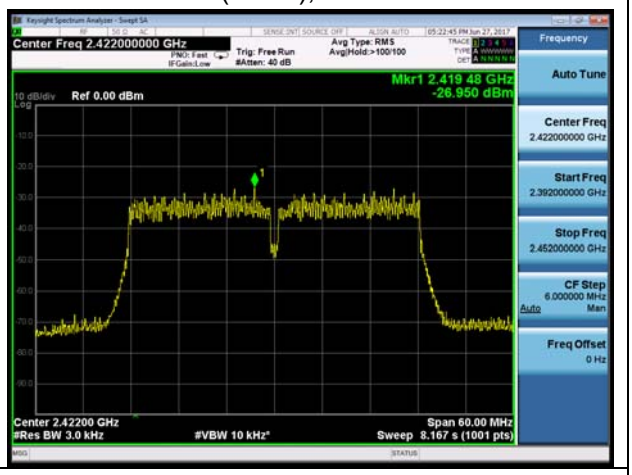


MIMO Antenna 1

802.11n(HT20), Channel No. 1



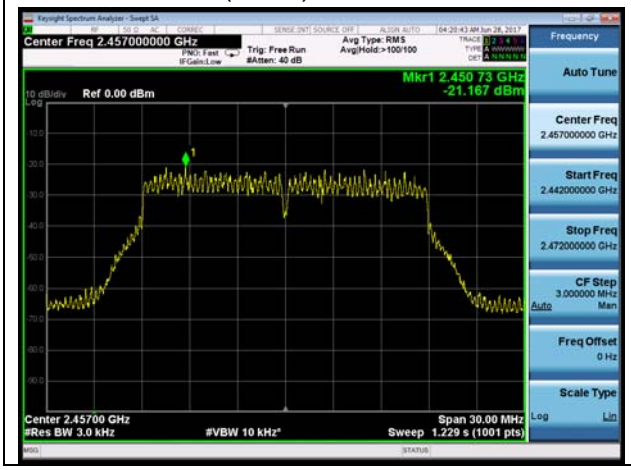
802.11n(HT40), Channel No. 3



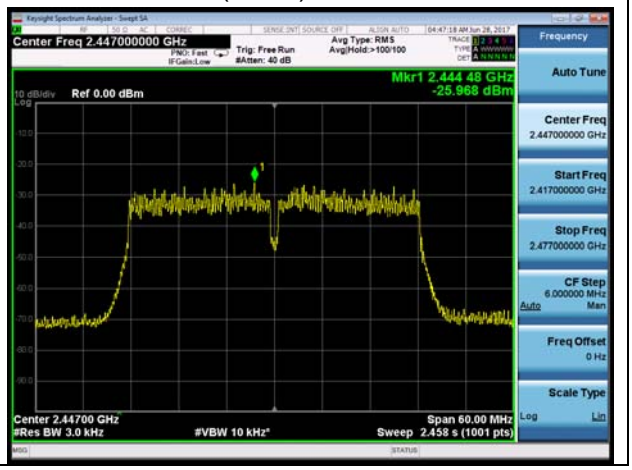
802.11n(HT20), Channel No. 6

802.11n(HT40), Channel No. 5

802.11n(HT20), Channel No. 10



802.11n(HT40), Channel No. 8



MIMO Antenna 2

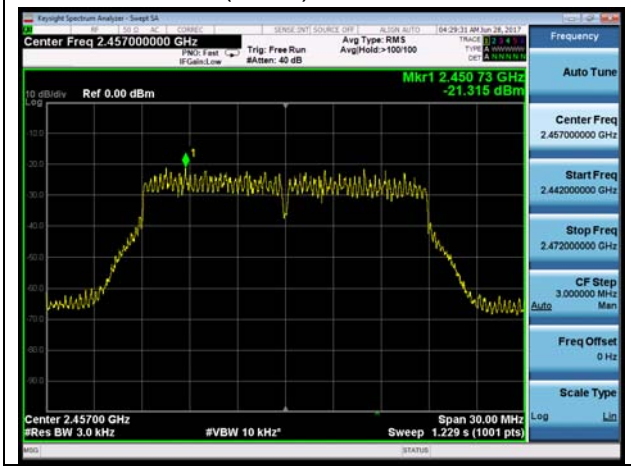
802.11n(HT20), Channel No. 1

802.11n(HT40), Channel No. 3

802.11n(HT20), Channel No. 6

802.11n(HT40), Channel No. 5

802.11n(HT20), Channel No. 10



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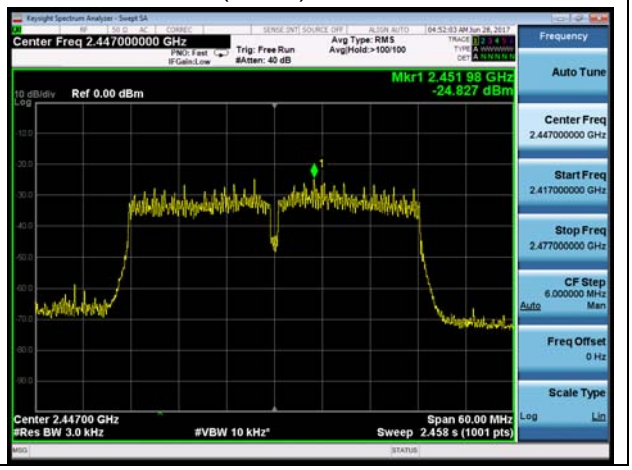

5.5. Spurious RF Conducted Emissions

Ambient condition

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

Method of Measurement

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

Test setup

Limits

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

Antenna 1

Network Standards	Carrier frequency (MHz)	Reference value (dBm)	Limit
802.11b	2412	4.92	-15.08
	2437	3.55	-16.45
	2457	4.56	-15.44
802.11g	2412	-0.10	-20.10
	2437	-1.25	-21.25
	2457	0.43	-19.58
802.11n HT20	2412	-0.86	-20.86
	2437	-2.11	-22.11
	2457	-0.81	-20.81
802.11n HT40	2422	-4.33	-24.33
	2432	-4.96	-24.96
	2447	-4.47	-24.47

Antenna 2

Network Standards	Carrier frequency (MHz)	Reference value (dBm)	Limit
802.11b	2412	4.01	-16.00
	2437	4.83	-15.18
	2457	4.96	-15.05
802.11g	2412	0.16	-19.84
	2437	-0.75	-20.75
	2457	0.10	-19.90
802.11n HT20	2412	-0.63	-20.63
	2437	-1.65	-21.65
	2457	-0.66	-20.66
802.11n HT40	2422	-3.92	-23.92
	2432	-4.54	-24.54
	2447	-4.31	-24.31

MIMO

Network Standards	Carrier frequency (MHz)	Reference value (dBm)	Limit
802.11n HT20	2412	-7.28	-27.28
	2437	-8.93	-28.93
	2457	-7.70	-27.70
802.11n HT40	2422	-11.13	-31.13
	2432	-7.07	-27.07
	2447	-11.40	-31.40

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

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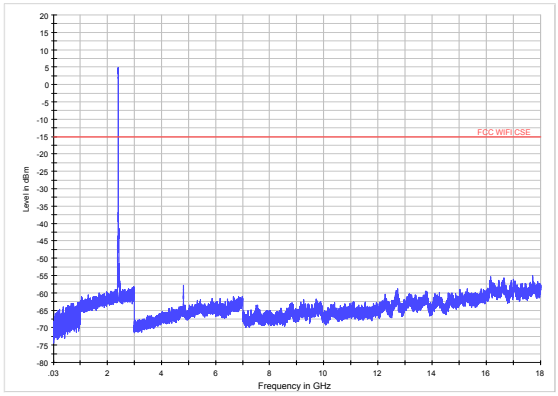
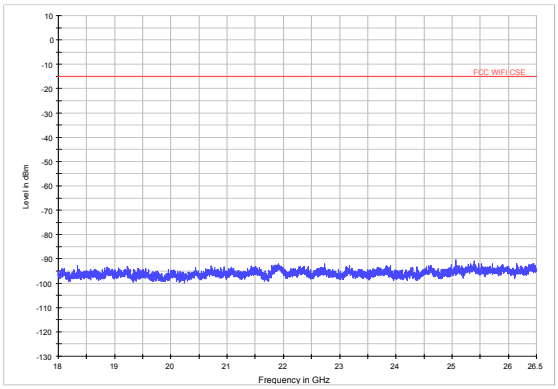
<td> 

802.11b CH1 30MHz to18GHz</td>
<td> 

802.11b CH1 18GHz to 26.5GHz</td>
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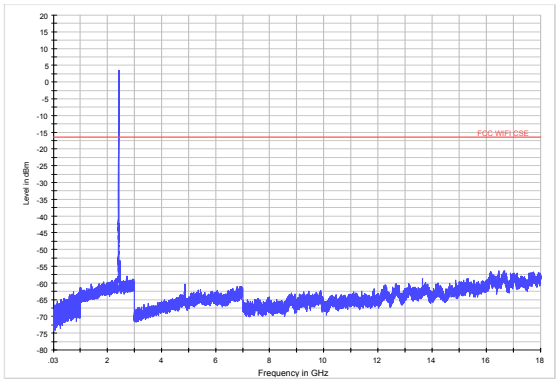
<td> 

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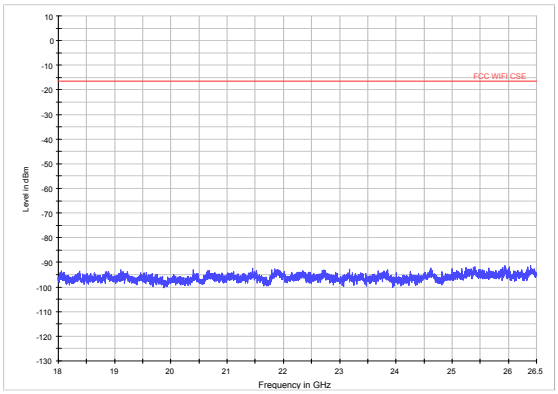
<td> 

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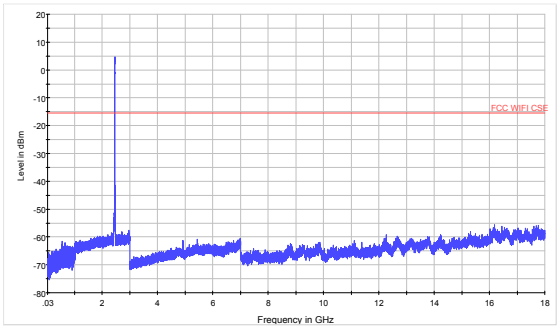
<td> 

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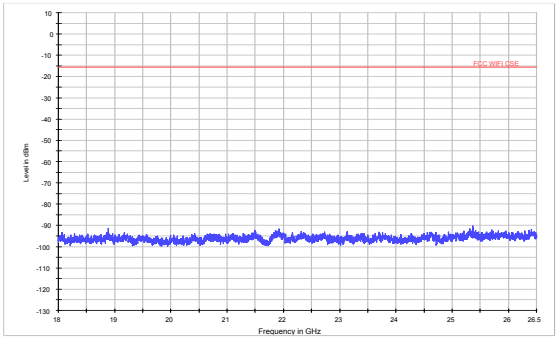
<td> 

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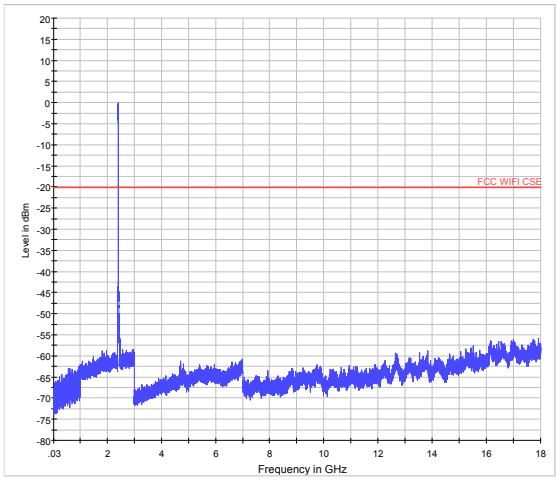

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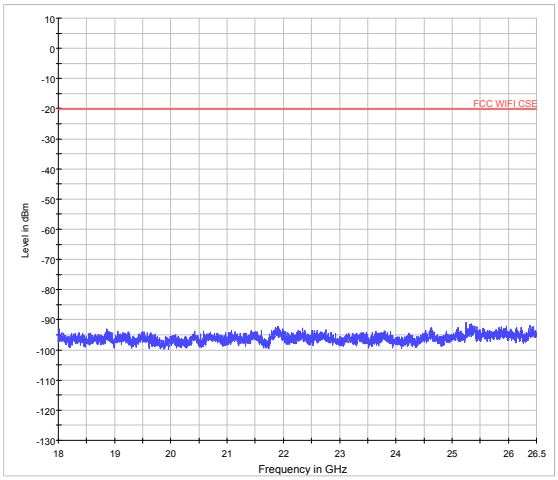

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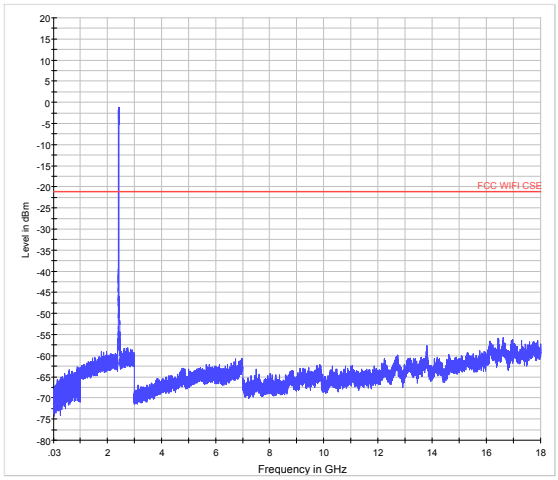

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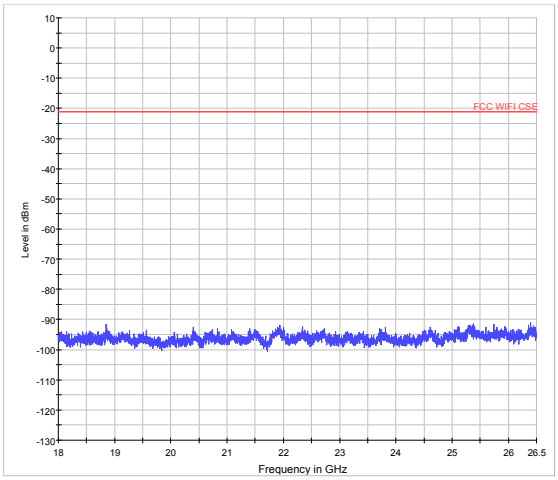

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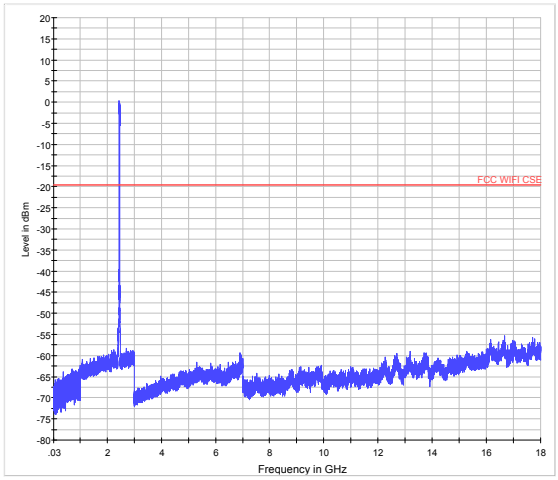

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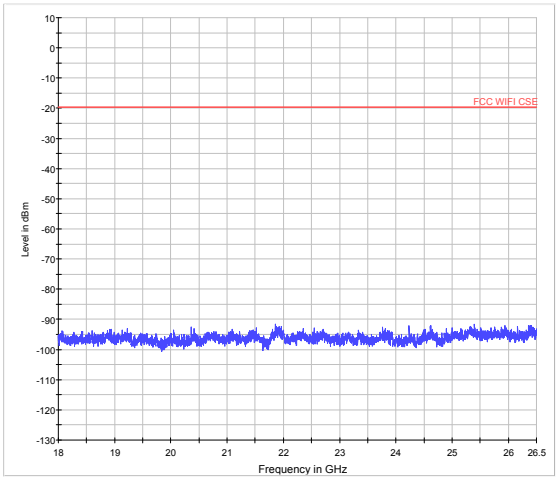

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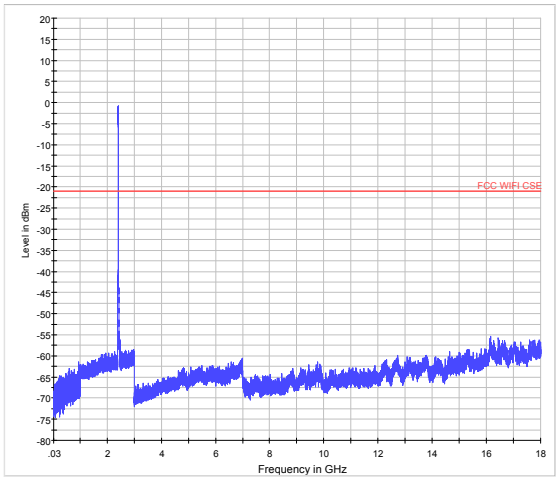

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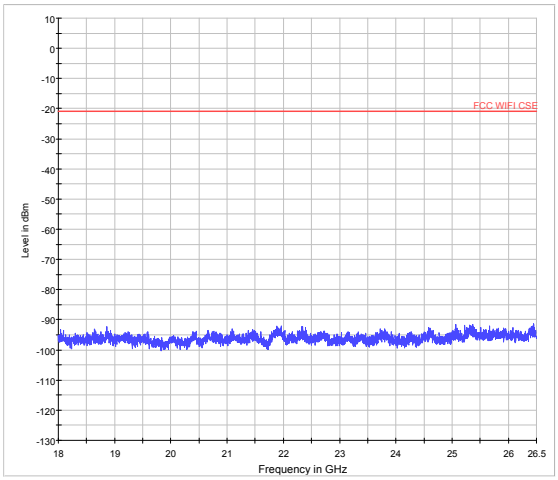

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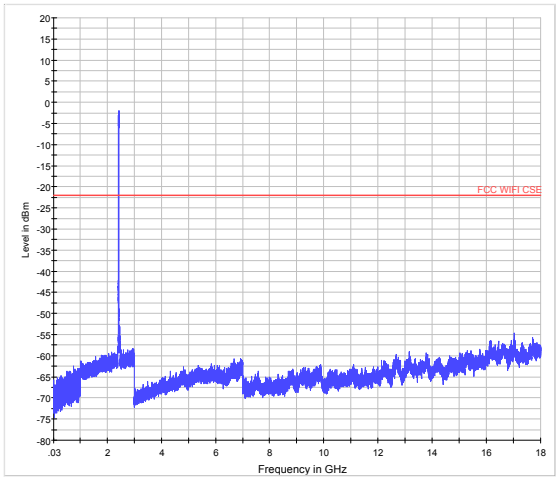

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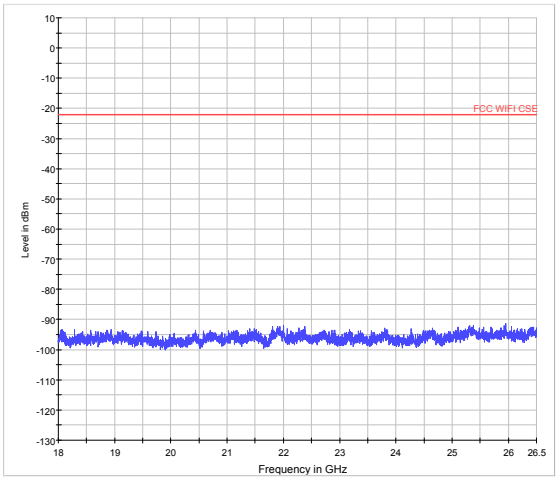

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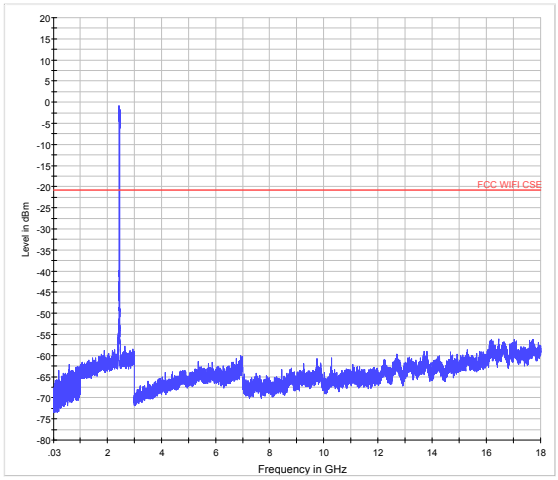

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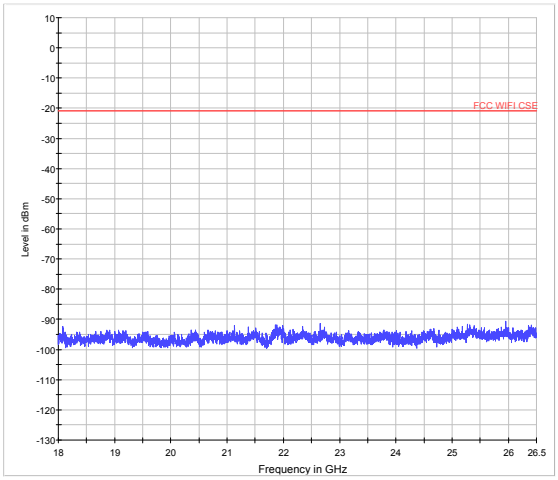

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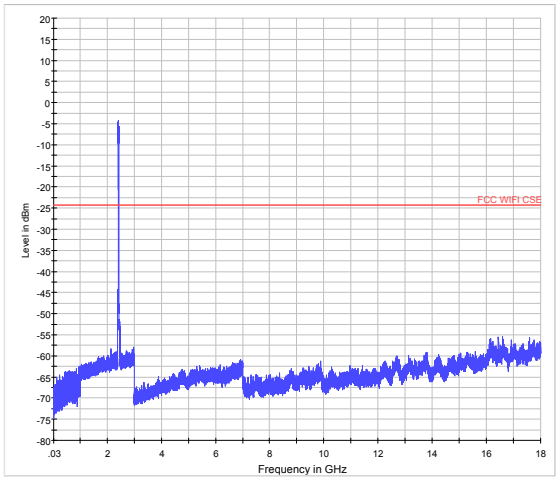
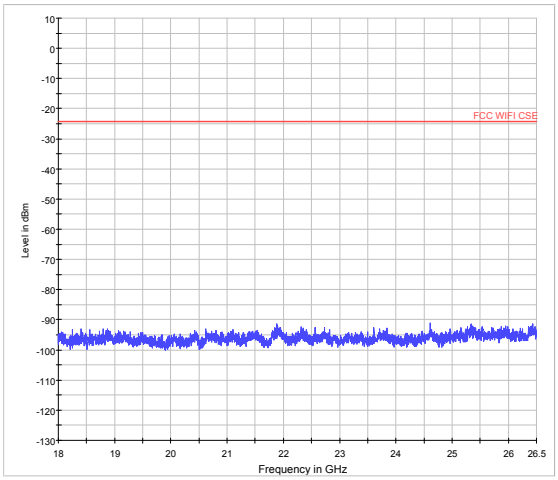
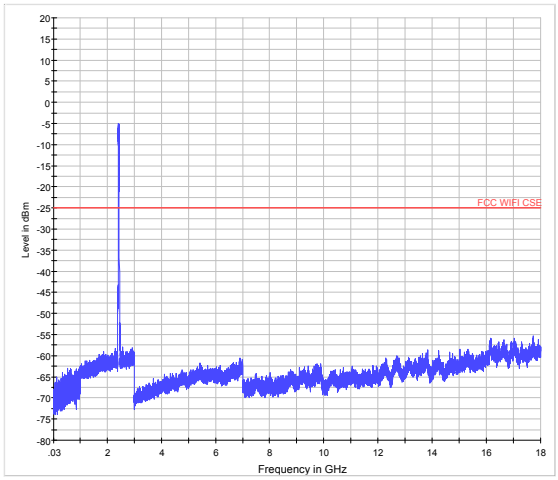


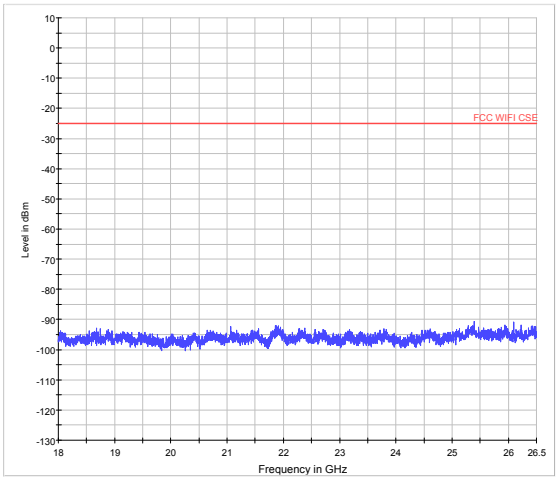
802.11n (HT40) CH3 30MHz to18GHz



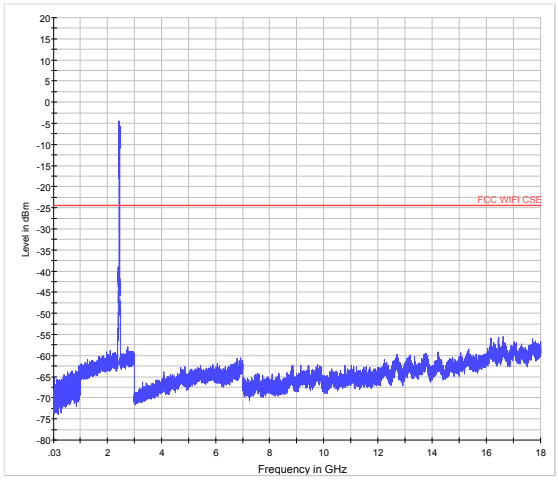
802.11n (HT40) CH3 18GHz to 26.5GHz



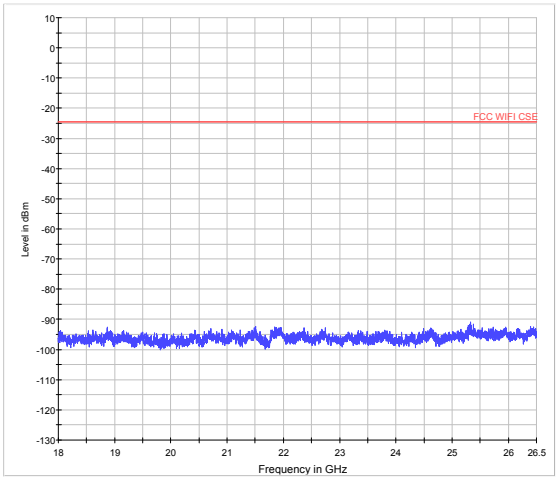
802.11n (HT40) CH5 30MHz to18GHz



802.11n (HT40) CH5 18GHz to 26.5GHz

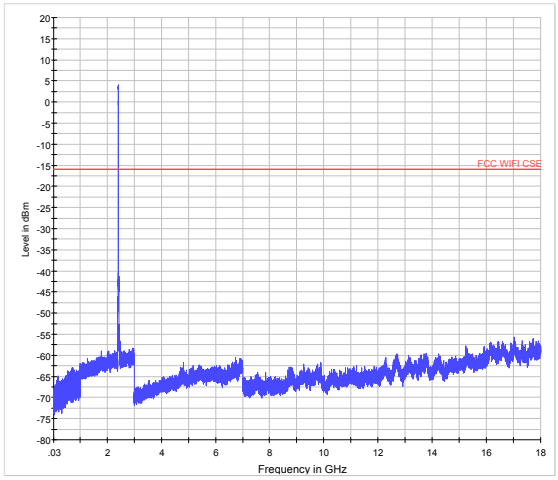


802.11n (HT40) CH8 30MHz to18GHz

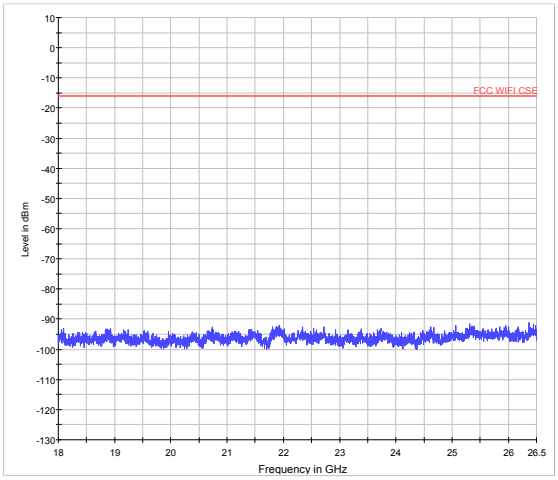


802.11n (HT40) CH8 18GHz to 26.5GHz

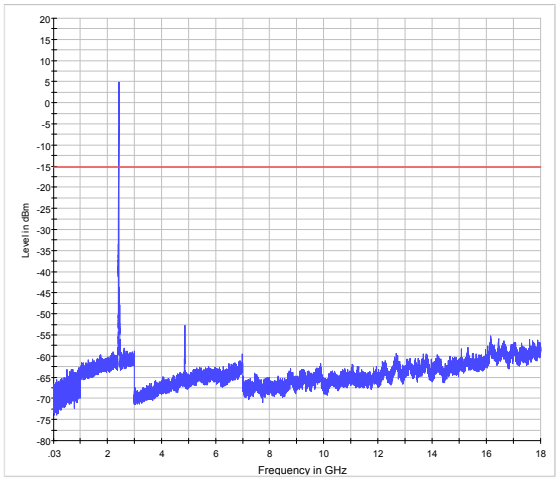
SISO Antenna 2



802.11b CH1 30MHz to18GHz



802.11b CH1 18GHz to 26.5GHz



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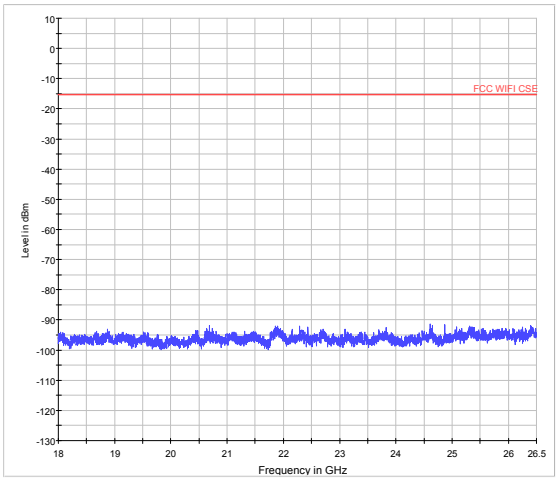
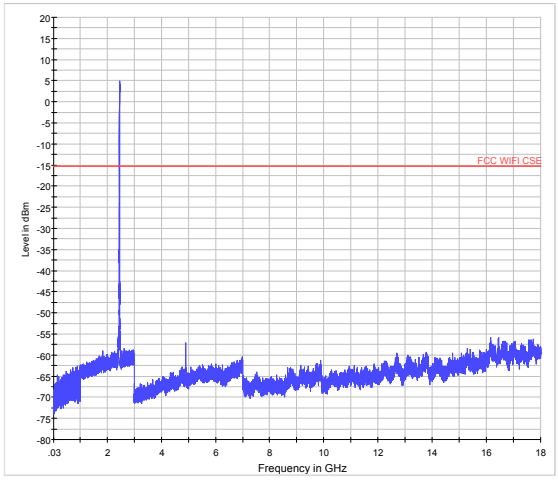
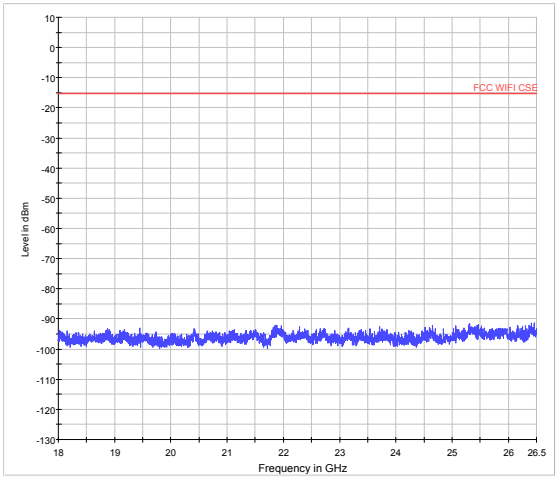


802.11b CH6 18GHz to 26.5GHz



802.11b CH10 30MHz to 18GHz



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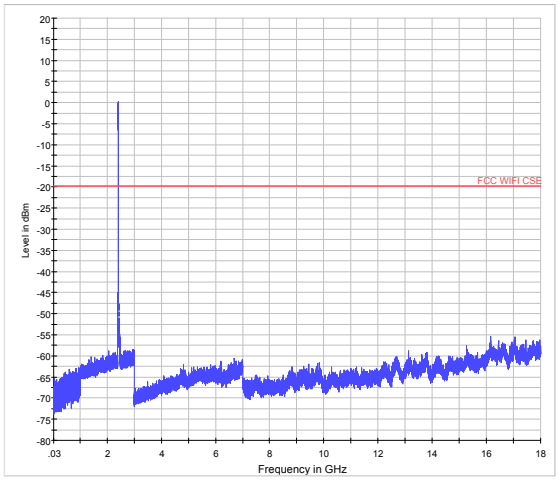
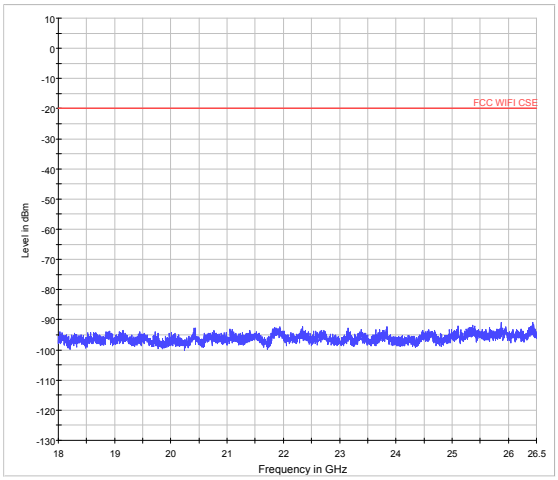


802.11g CH1 30MHz to 18GHz



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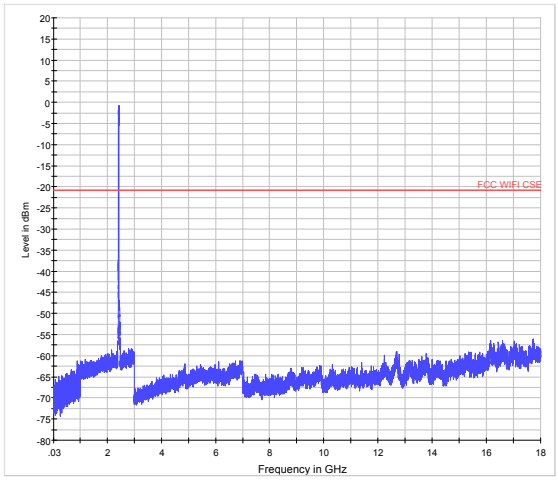

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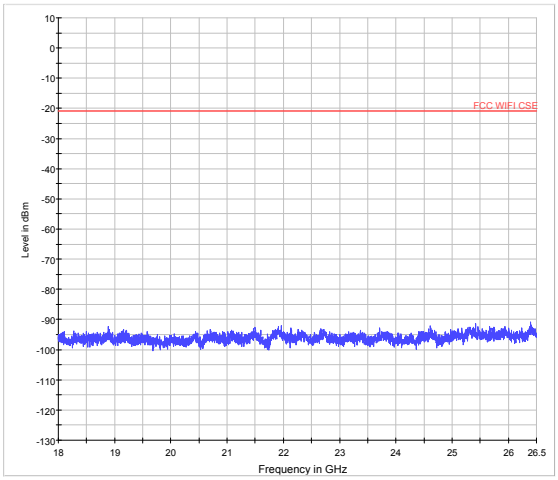
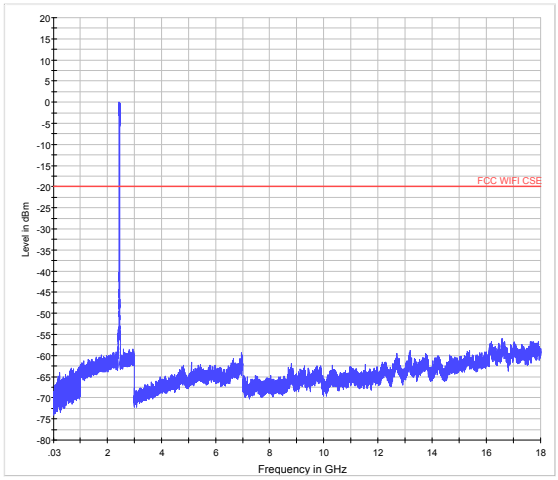
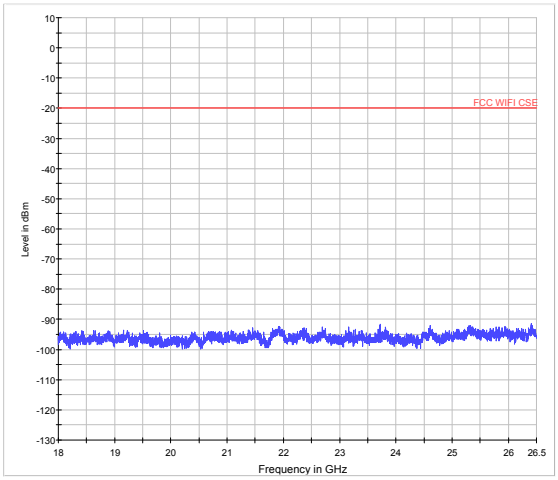


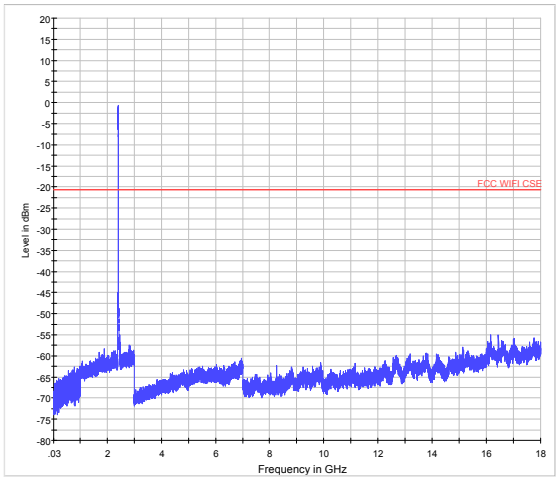
802.11g CH6 18GHz to 26.5GHz



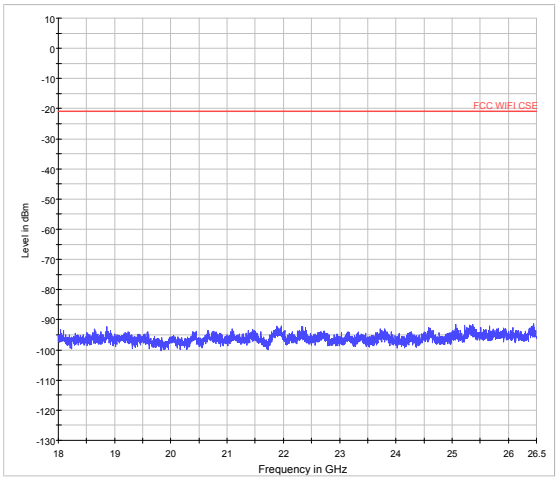
802.11g CH10 30MHz to 18GHz



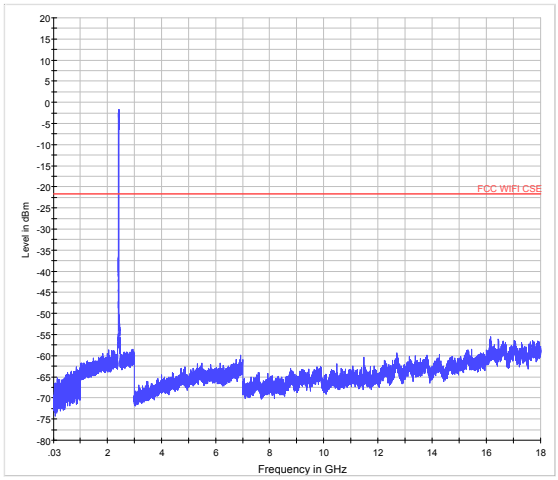
802.11g CH10 18GHz to 26.5GHz



802.11n (HT20) CH1 30MHz to18GHz



802.11n (HT20) CH1 18GHz to 26.5GHz



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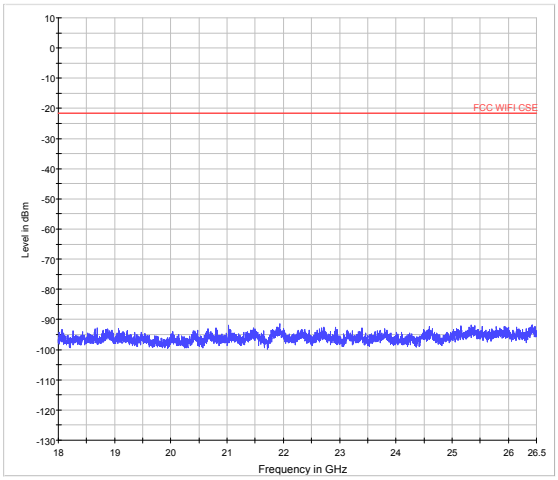

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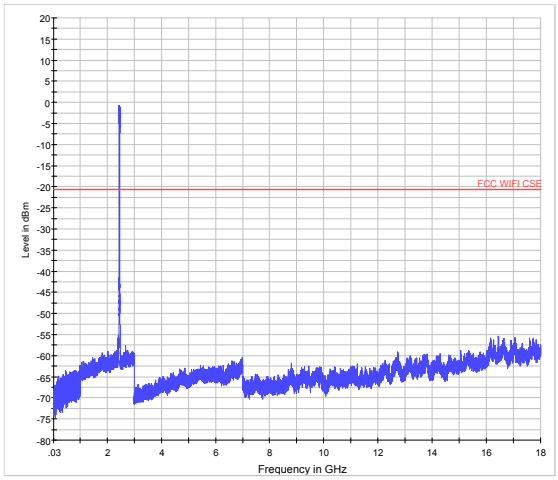

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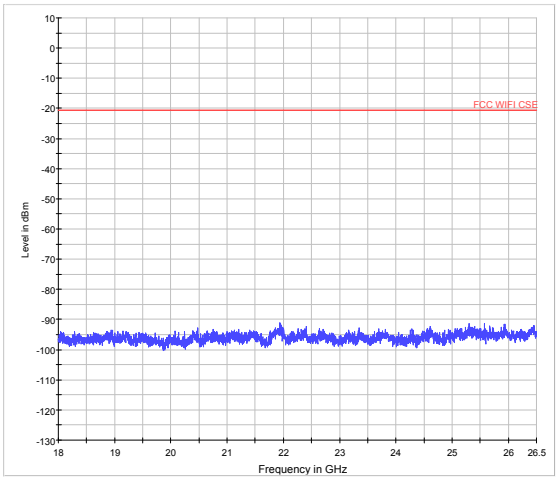

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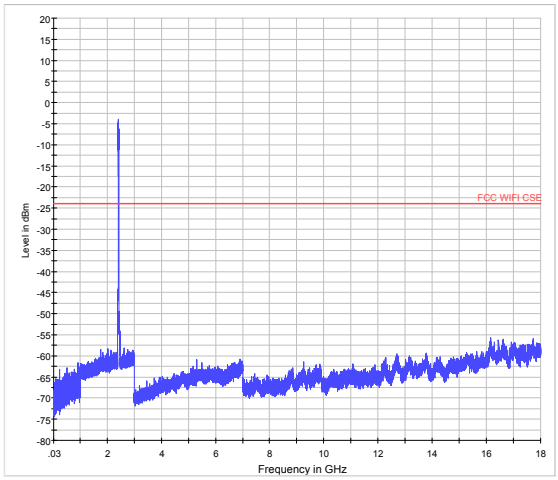
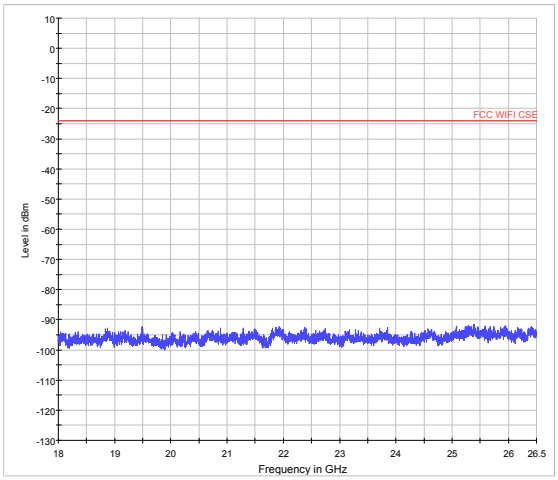
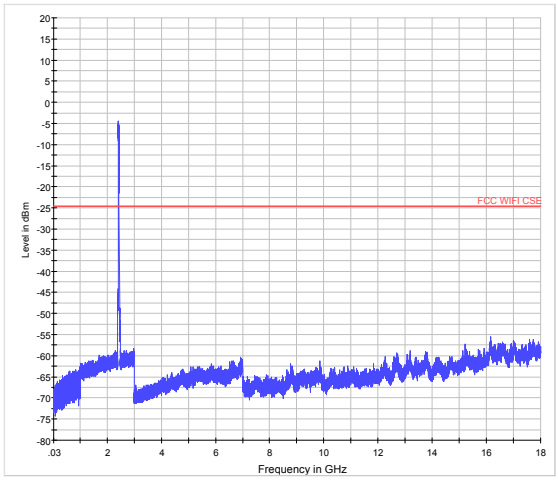


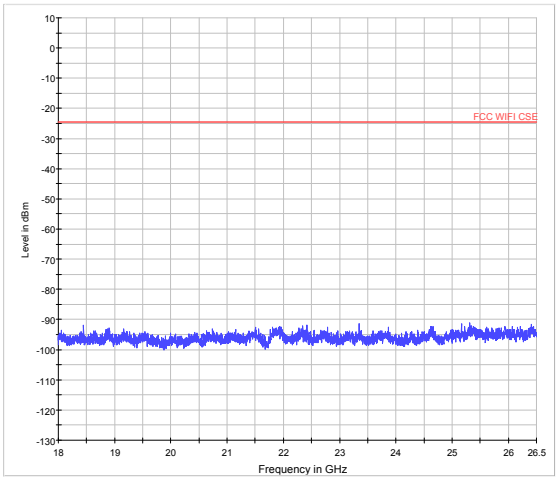
802.11n (HT40) CH3 30MHz to18GHz



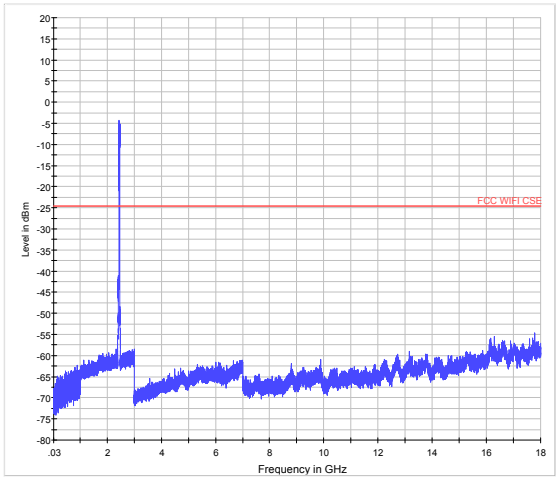
802.11n (HT40) CH3 18GHz to 26.5GHz



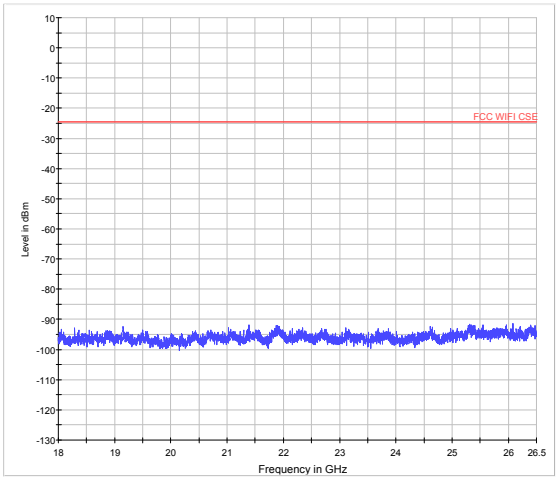
802.11n (HT40) CH5 30MHz to18GHz



802.11n (HT40) CH5 18GHz to 26.5GHz

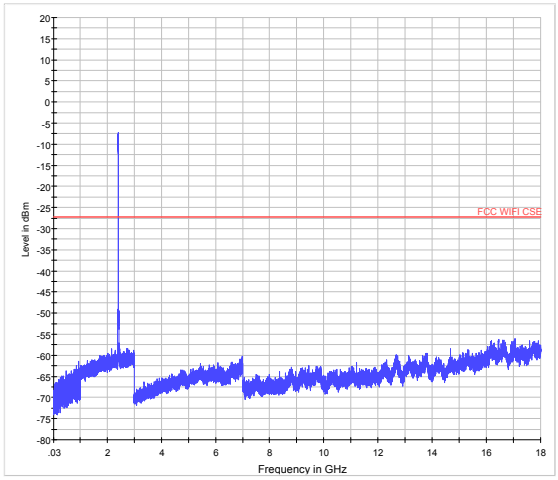


802.11n (HT40) CH8 30MHz to18GHz

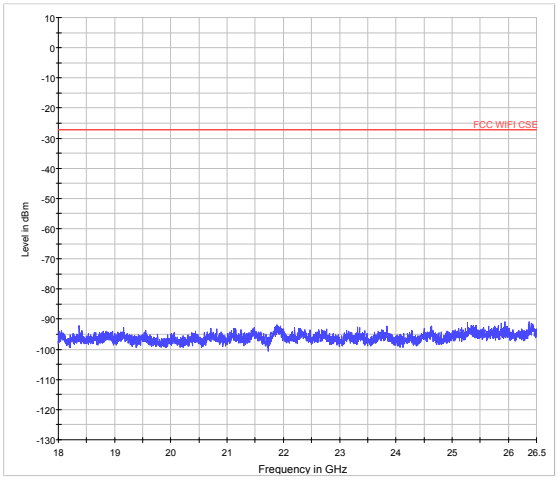


802.11n (HT40) CH8 18GHz to 26.5GHz

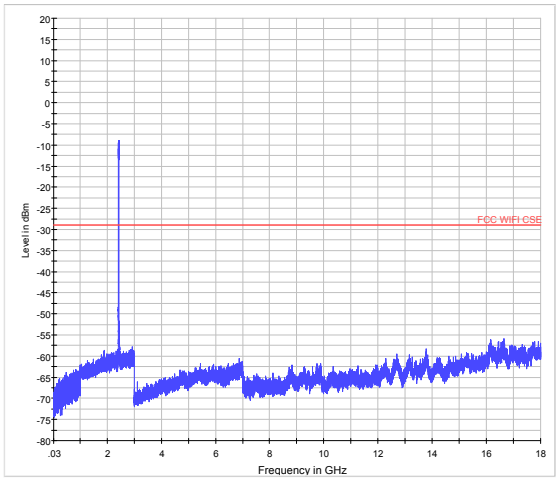
MIMO



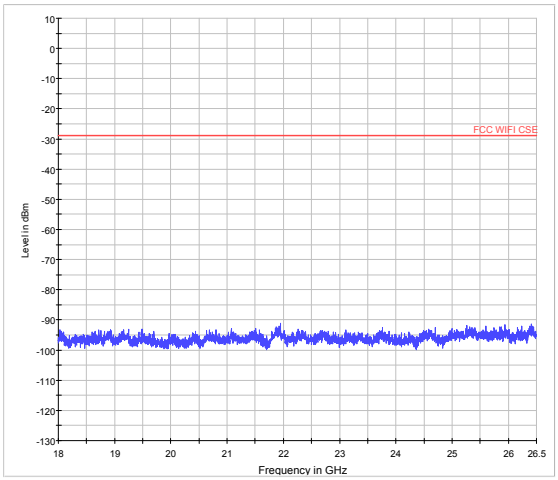
802.11n (HT20) CH1 30MHz to18GHz



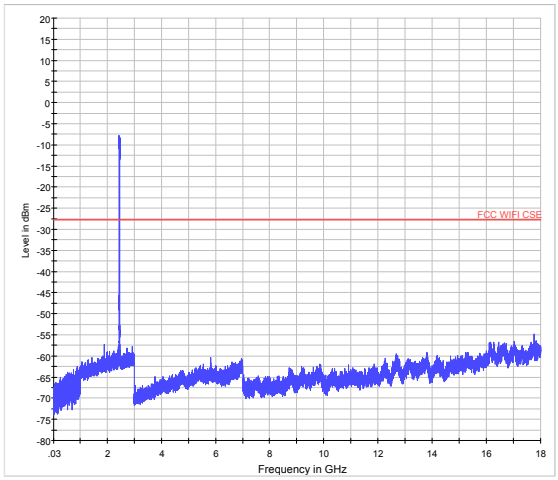
802.11n (HT20) CH1 18GHz to 26.5GHz



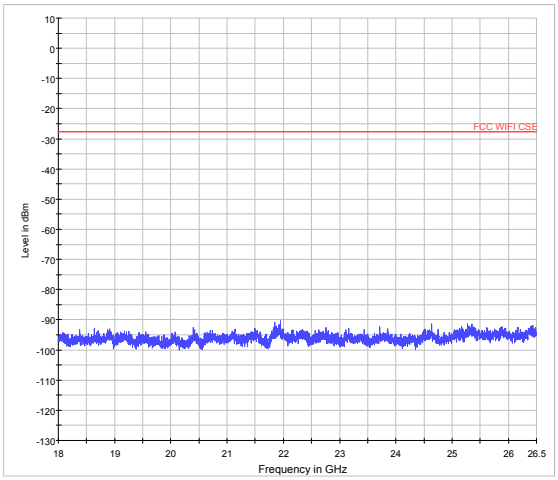
802.11n (HT20) CH6 30MHz to18GHz



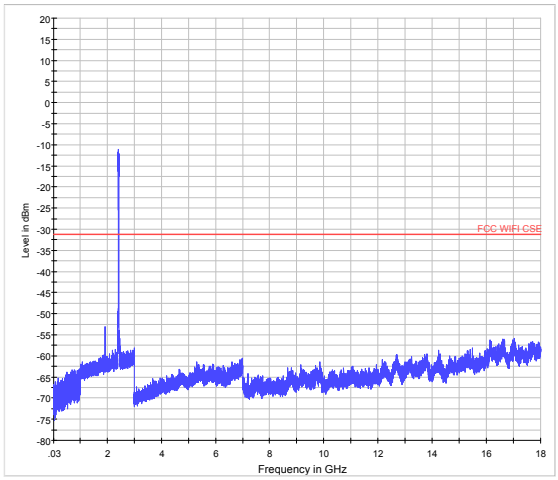
802.11n (HT20) CH6 18GHz to 26.5GHz



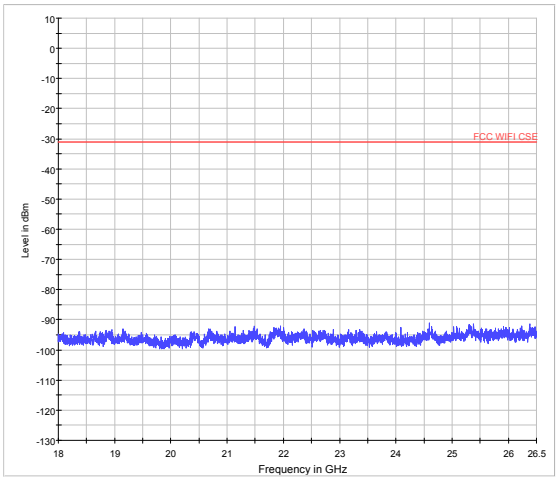
802.11n (HT20) CH10 30MHz to18GHz



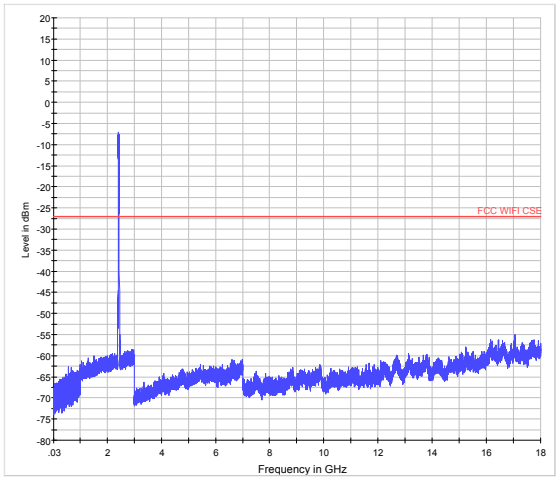
802.11n (HT20) CH10 18GHz to 26.5GHz



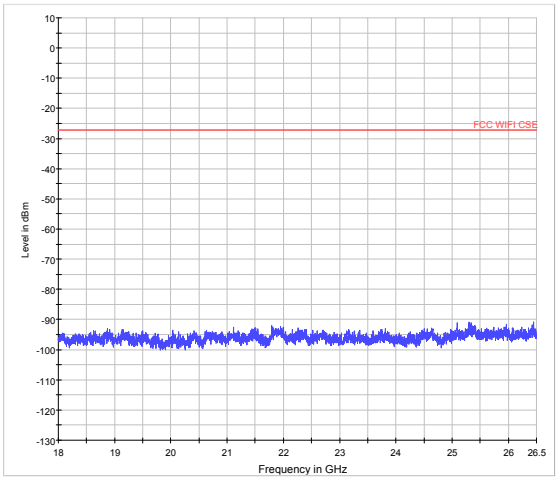
802.11n (HT40) CH3 30MHz to18GHz



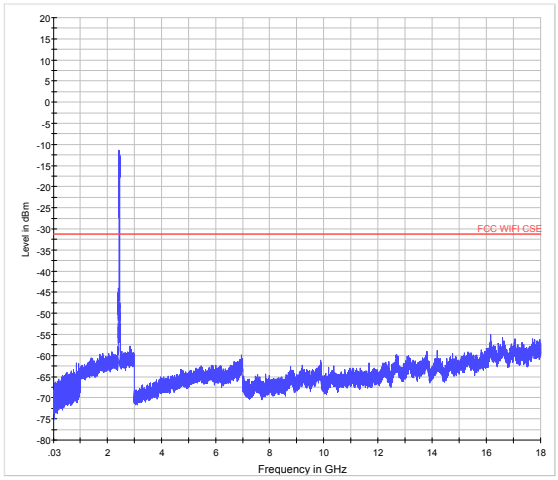
802.11n (HT40) CH3 18GHz to 26.5GHz



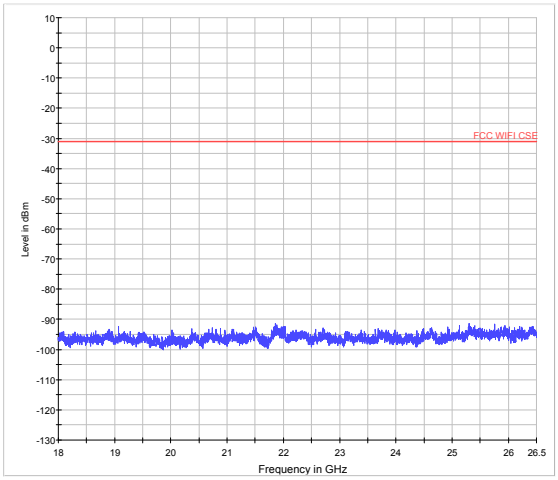
802.11n (HT40) CH5 30MHz to18GHz



802.11n (HT40) CH5 18GHz to 26.5GHz



802.11n (HT40) CH8 30MHz to18GHz



802.11n (HT40) CH8 18GHz to 26.5GHz

5.6. Radiated Emissions in the Restricted Band

Ambient condition

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

Method of Measurement

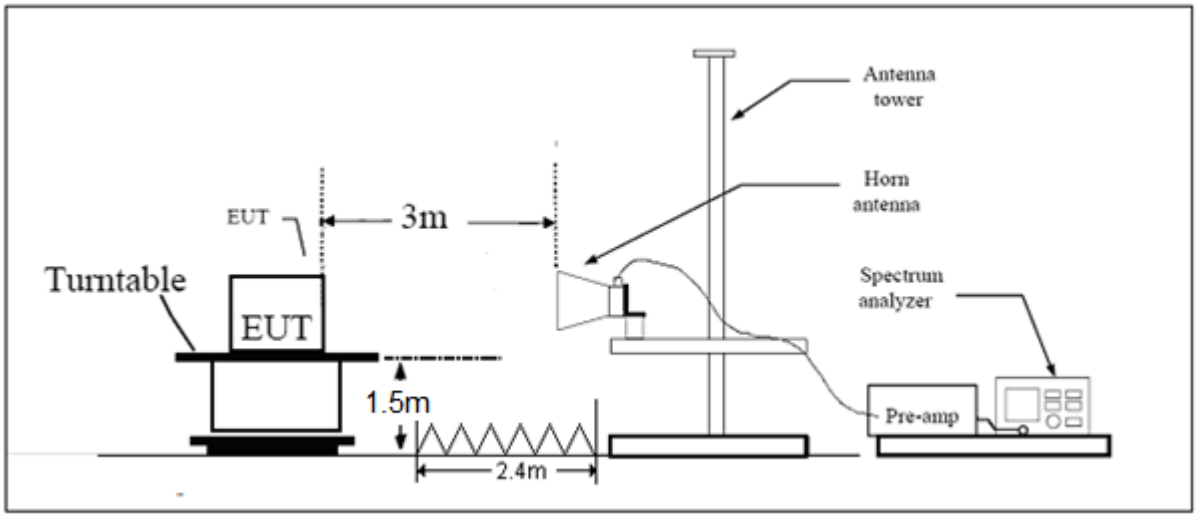
The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. RBW is set to 100kHz.The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing. Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

Set the spectrum analyzer in the following:
(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
(b) AVERAGE: RBW=1MHz / VBW=1MHz / Sweep=AUTO
This setting method can refer to **KDB 558074.**

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

The test is in transmitting mode.

Test setup



Note: Area side: 2.4mX3.6m

Limits

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

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

Limit in restricted band

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

§15.35(b)

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

Peak Limit=74 dBuV/m

Average Limit=54 dBuV/m

Measurement Uncertainty

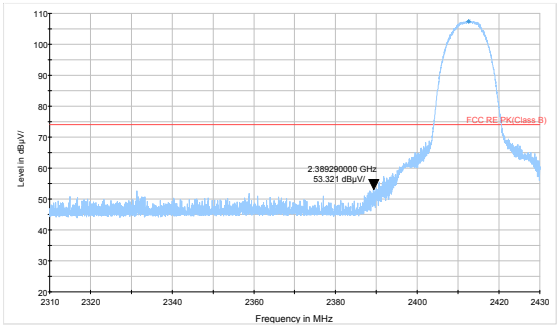
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U= 3.55 dB.

Test Results:

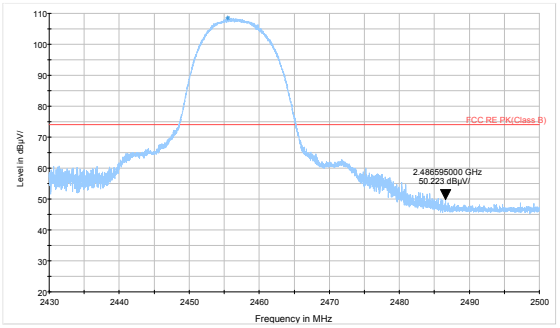
The signal beyond the limit is carrier.

SISO Antenna 1

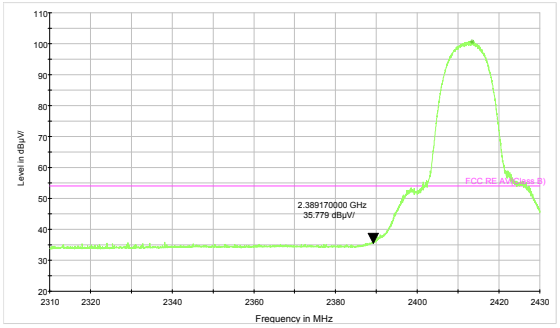
802.11b-Channel 1: Peak



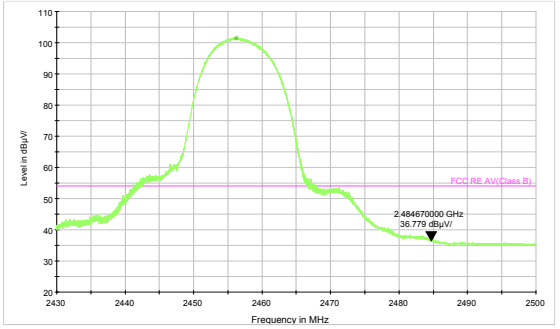
802.11b-Channel 10: Peak



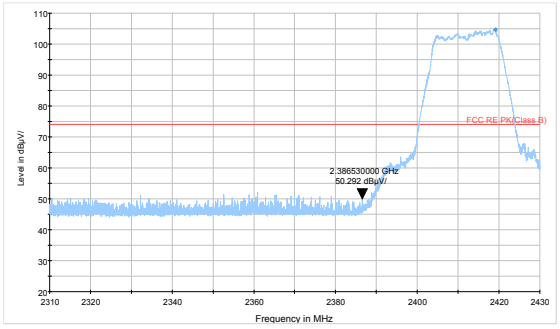
802.11b-Channel 1: Average



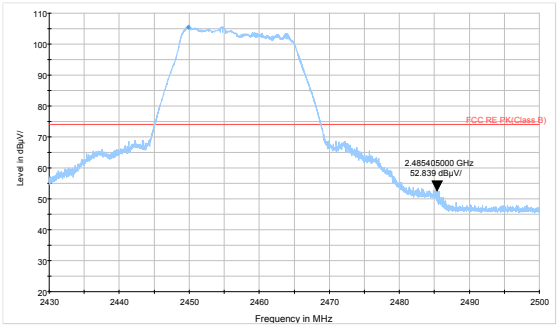
802.11b-Channel 10: Average



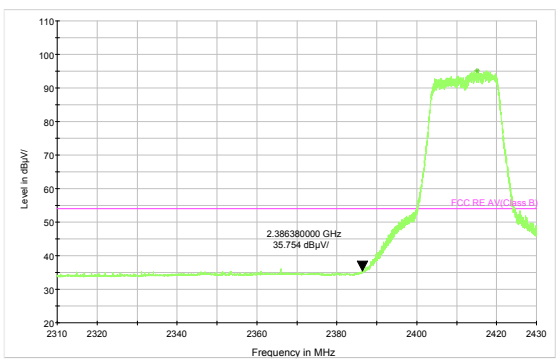
802.11g-Channel 1: Peak



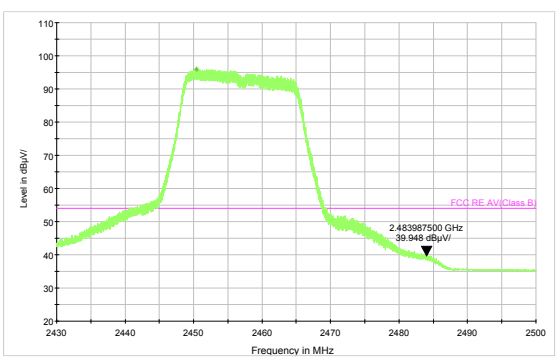
802.11g-Channel 10: Peak



802.11g-Channel 1: Average

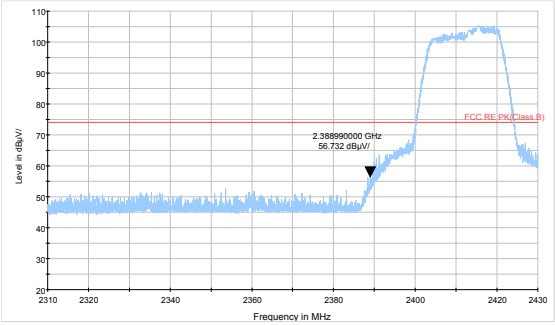


802.11g-Channel 10: Average

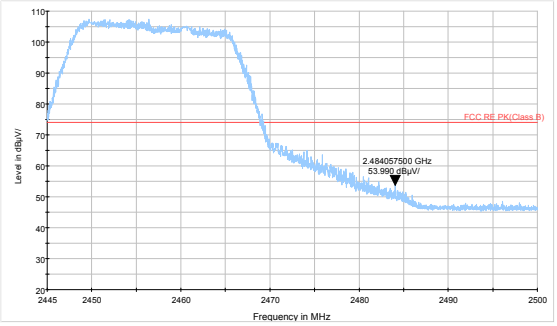


MIMO

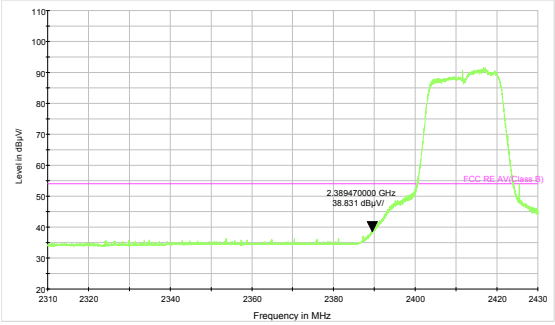
802.11n HT20 -Channel 1: Peak



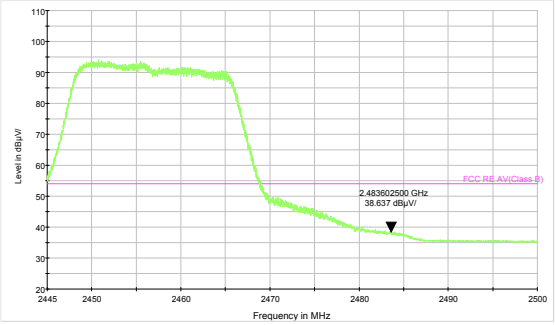
802.11n HT20-Channel 10: Peak



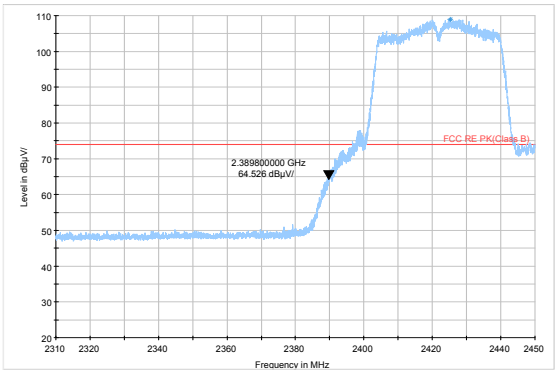
802.11n HT20-Channel 1: Average



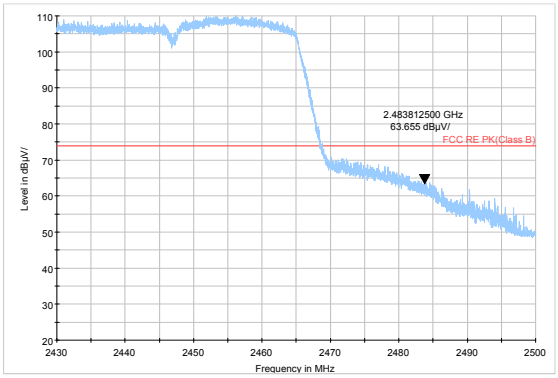
802.11n HT20-Channel 10: Average



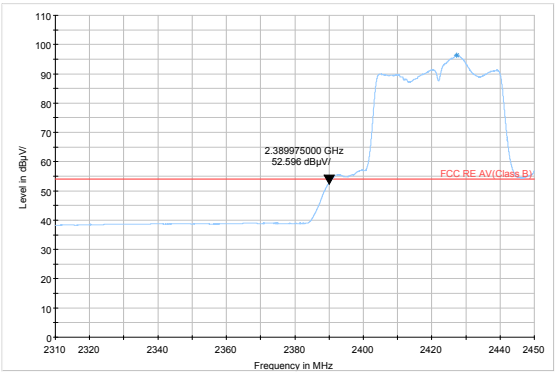
802.11n HT40 -Channel 3: Peak



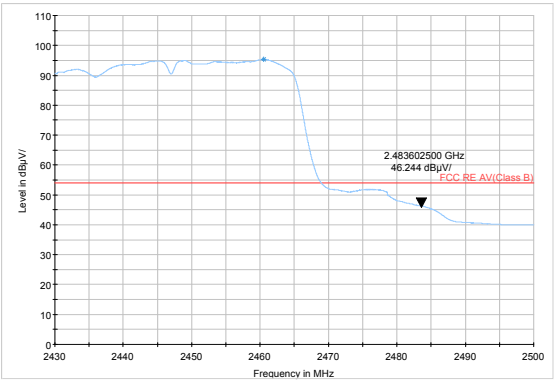
802.11n HT40- Channel 8: Peak



802.11n HT40-Channel 3: Average



802.11n HT40-Channel 8: 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.

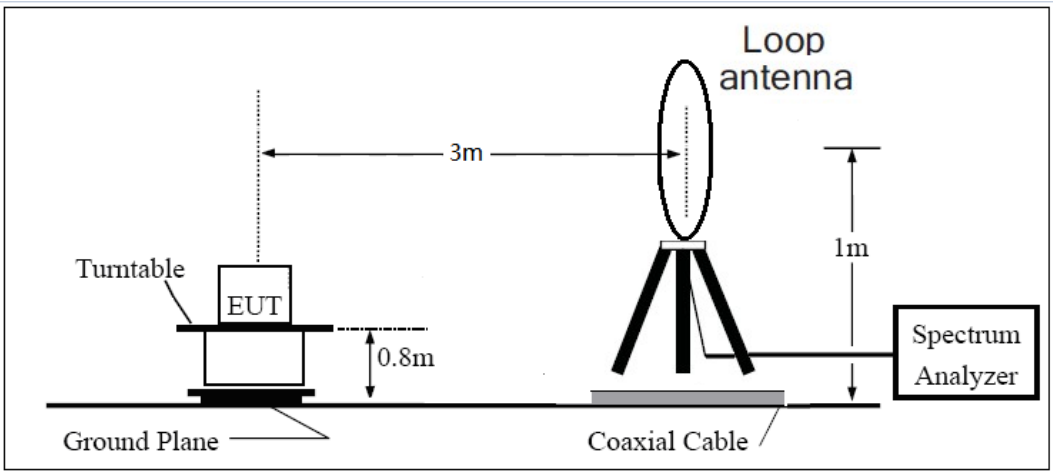
During the test, below 30MHz, the center of the loop shall be 1 meters; above 30MHz, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum 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.

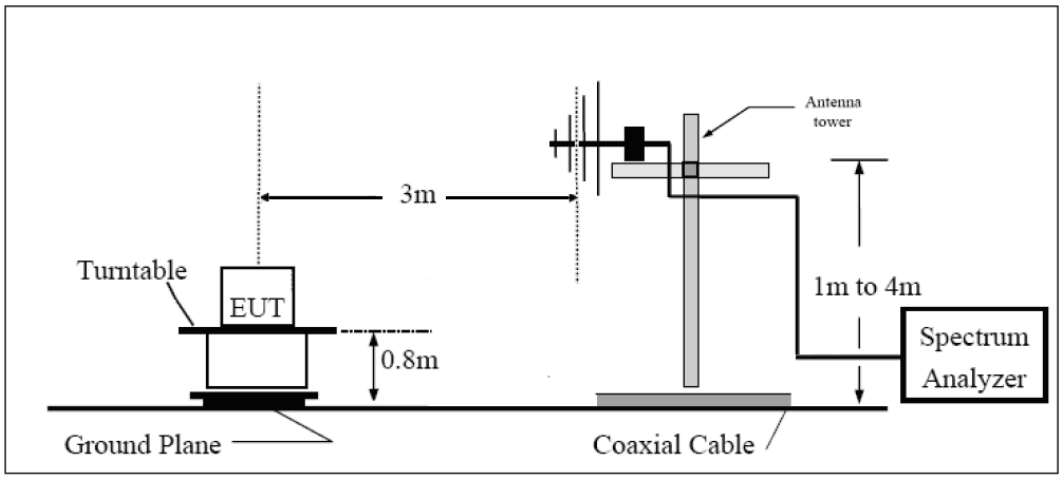
The test is in transmitting mode.

Test setup

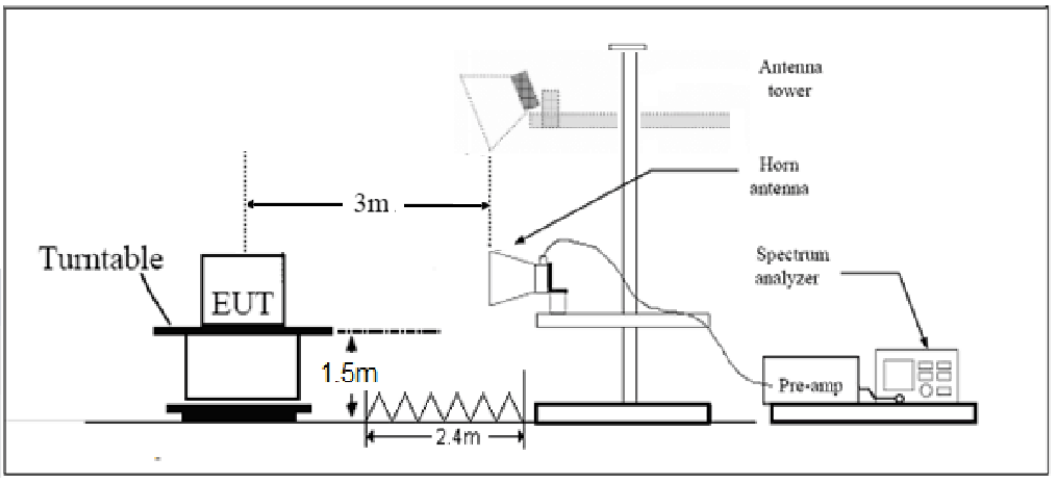
9KHz ~ 30MHz



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.

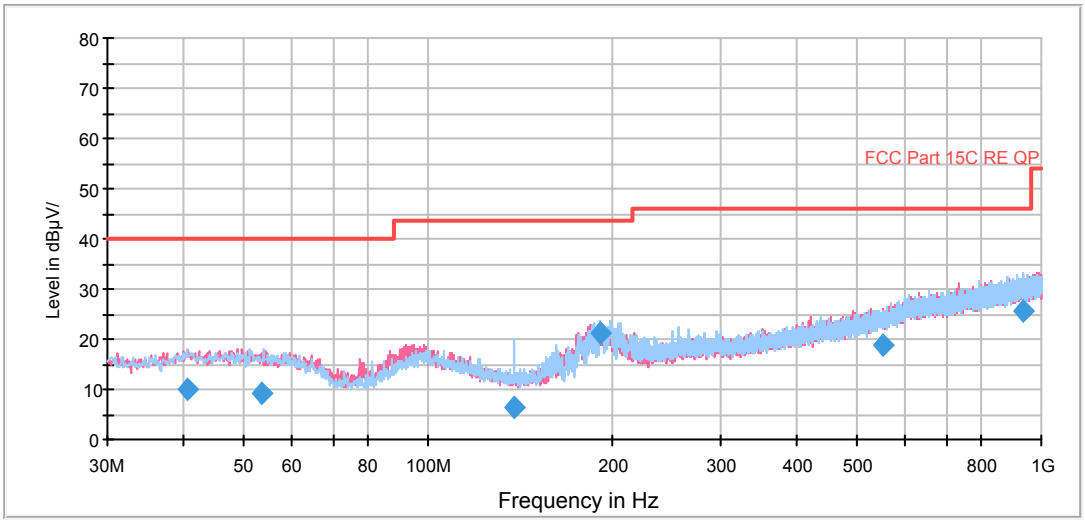
The following graphs display the maximum values of horizontal and vertical by software.

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

SISO Antenna 2

802.11b CH1

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

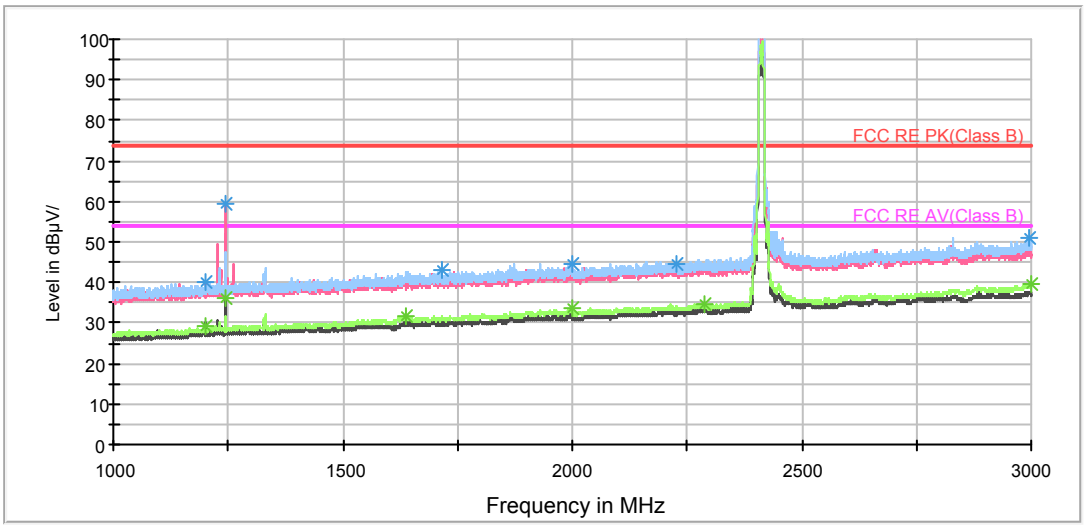
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.590000	10.1	125.0	V	350.0	23.4	-13.3	29.9	40.0
53.407500	9.1	125.0	H	154.0	21.9	-12.8	30.9	40.0
138.678750	6.3	125.0	H	93.0	15.3	-9.0	37.2	43.5
191.500000	21.3	100.0	H	282.0	33.0	-11.7	22.2	43.5
550.970000	18.7	100.0	V	74.0	40.3	-21.6	27.3	46.0
932.987500	25.7	100.0	H	190.0	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

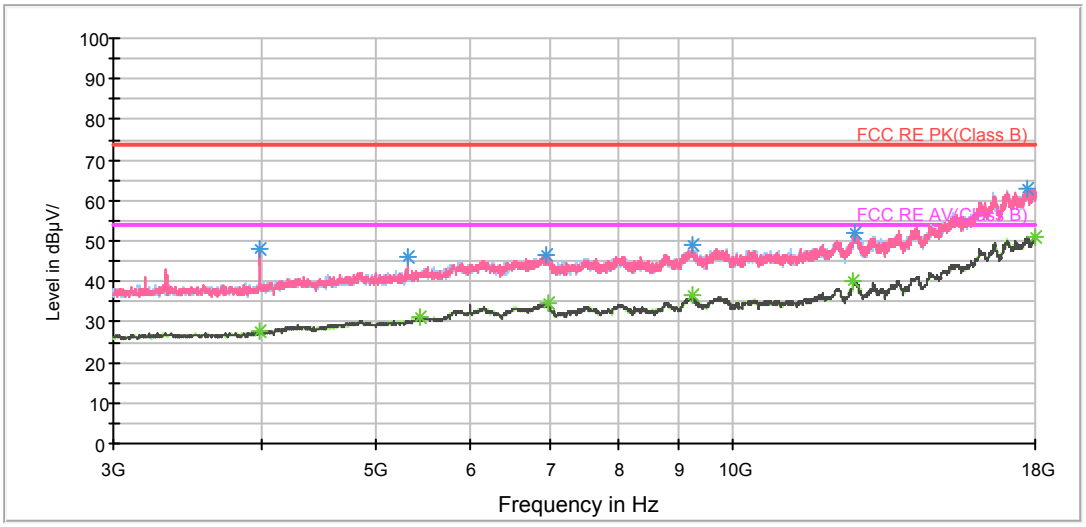
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.750000	40.1	100.0	V	224.0	48.3	-8.2	33.9	74
1244.500000	59.4	100.0	V	161.0	67.4	-8.0	14.6	74
1714.750000	43.0	100.0	H	77.0	47.9	-4.9	31.0	74
1998.000000	44.7	100.0	H	145.0	48.1	-3.4	29.3	74
2225.750000	44.7	100.0	H	0.0	47.1	-2.4	29.3	74
2996.000000	51.1	100.0	H	15.0	48.8	2.3	22.9	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.500000	29.0	100.0	V	224.0	37.2	-8.2	25.0	54
1244.500000	36.2	100.0	V	161.0	44.2	-8.0	17.8	54
1637.500000	31.7	100.0	H	0.0	36.4	-4.7	22.3	54
1998.000000	33.6	100.0	H	145.0	37.0	-3.4	20.4	54
2287.000000	34.6	100.0	H	15.0	36.2	-1.6	19.4	54
2998.750000	39.5	100.0	H	177.0	37.2	2.3	14.5	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

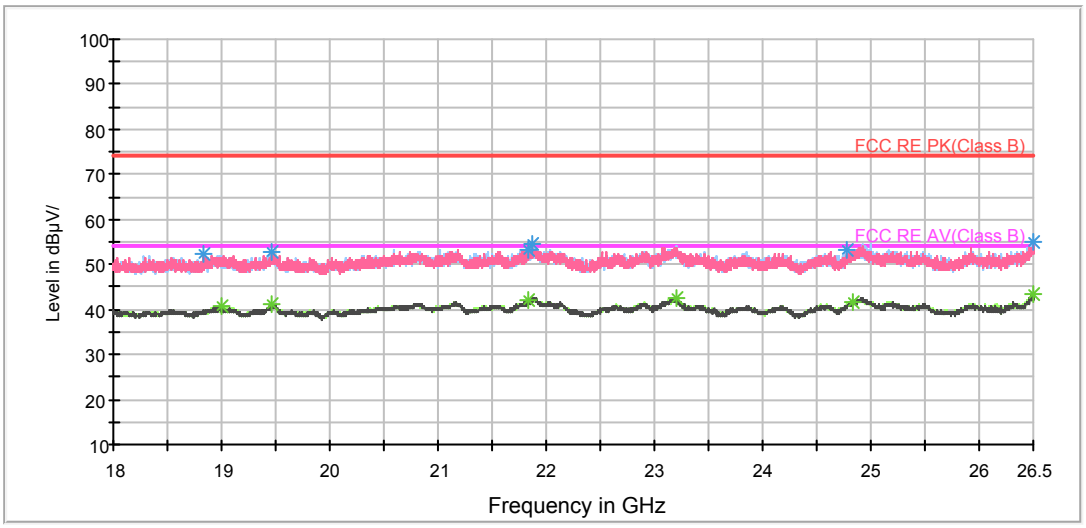
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3988.125000	48.2	100.0	V	137.0	49.2	-1.0	25.8	74
5326.875000	45.9	100.0	V	0.0	43.6	2.3	28.1	74
6963.750000	46.8	100.0	H	243.0	40.6	6.2	27.2	74
9230.625000	48.9	100.0	V	0.0	39.0	9.9	25.1	74
12675.000000	52.1	100.0	V	81.0	38.0	14.1	21.9	74
17709.375000	62.7	100.0	V	0.0	38.0	24.7	11.3	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)
3984.375000	27.9	100.0	V	137.0	28.9	-1.0	26.1	54
5437.500000	31.0	100.0	V	0.0	28.1	2.9	23.0	54
6997.500000	34.7	100.0	H	262.0	28.2	6.5	19.3	54
9234.375000	36.4	100.0	H	74.0	26.5	9.9	17.6	54
12639.375000	40.3	100.0	H	354.0	25.8	14.5	13.7	54
18000.000000	51.2	100.0	V	25.0	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)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18828.750000	52.1	100.0	V	90.0	52.1	0.0	21.9	74
19468.375000	52.6	100.0	V	222.0	52.5	0.1	21.4	74
21825.000000	53.4	100.0	V	156.0	55.4	-2.0	20.6	74
21874.937500	54.4	100.0	V	263.0	56.1	-1.7	19.6	74
24775.562500	53.3	100.0	H	193.0	53.4	-0.1	20.7	74
26500.000000	54.9	100.0	V	119.0	53.8	1.1	19.1	74

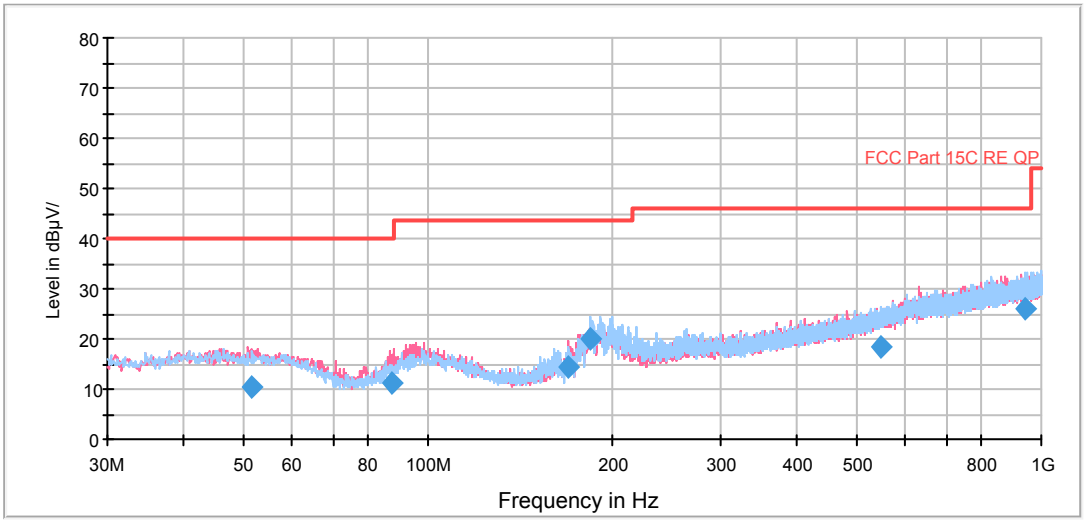
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19001.937500	40.5	100.0	H	211.0	40.7	-0.2	13.5	54
19465.187500	41.0	100.0	V	175.0	40.9	0.1	13.0	54
21839.875000	41.9	100.0	H	96.0	43.8	-1.9	12.1	54
23197.750000	42.6	100.0	H	270.0	42.7	-0.1	11.4	54
24840.375000	41.8	100.0	H	241.0	41.5	0.3	12.2	54
26498.937500	43.5	100.0	H	231.0	42.4	1.1	10.5	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

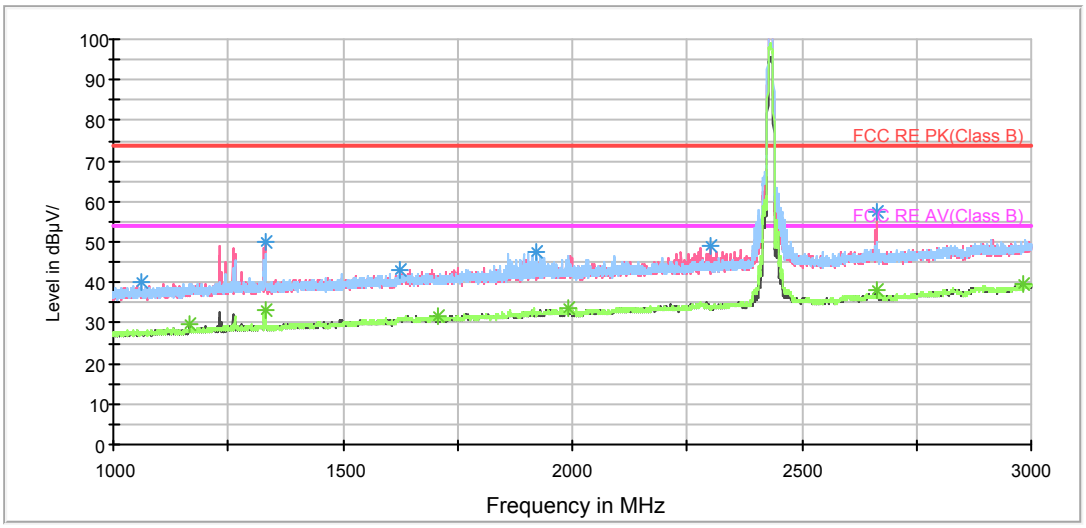
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
51.416250	10.4	100.0	V	302.0	-2.7	13.1	29.6	40.0
87.146250	11.3	125.0	V	143.0	0.3	11.0	28.7	40.0
169.560000	14.5	100.0	V	236.0	4.1	10.4	29.0	43.5
184.188750	19.9	114.0	H	281.0	8.8	11.1	23.6	43.5
547.976250	18.6	100.0	H	22.0	-2.9	21.5	27.4	46.0
943.372500	26.0	125.0	H	111.0	-1.2	27.2	20.0	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

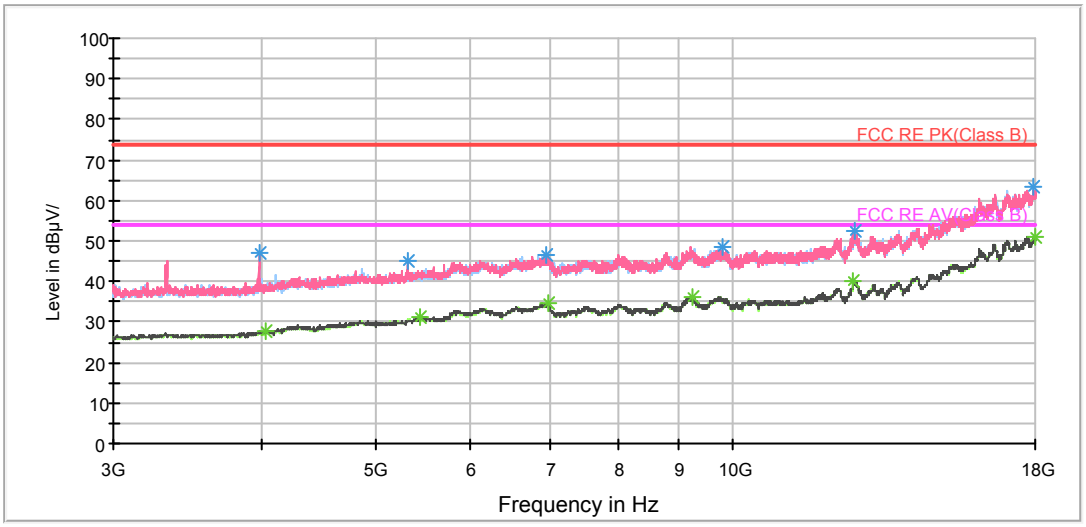
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1061.250000	40.3	100.0	H	121.0	49.2	-8.9	33.7	74
1329.750000	50.0	100.0	V	192.0	57.4	-7.4	24.0	74
1625.750000	43.2	100.0	V	236.0	48.0	-4.8	30.8	74
1922.250000	47.5	100.0	H	15.0	51.5	-4.0	26.5	74
2299.500000	48.9	100.0	V	332.0	51.1	-2.2	25.1	74
2662.750000	57.5	100.0	V	304.0	57.2	0.3	16.5	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)
1167.500000	29.6	100.0	V	0.0	37.8	-8.2	24.4	54
1331.250000	33.1	100.0	V	223.0	40.5	-7.4	20.9	54
1705.500000	31.8	100.0	V	322.0	36.7	-4.9	22.2	54
1992.500000	33.9	100.0	H	0.0	37.2	-3.3	20.1	54
2662.750000	38.1	100.0	V	304.0	37.8	0.3	15.9	54
2984.000000	39.6	100.0	H	23.0	37.4	2.2	14.4	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

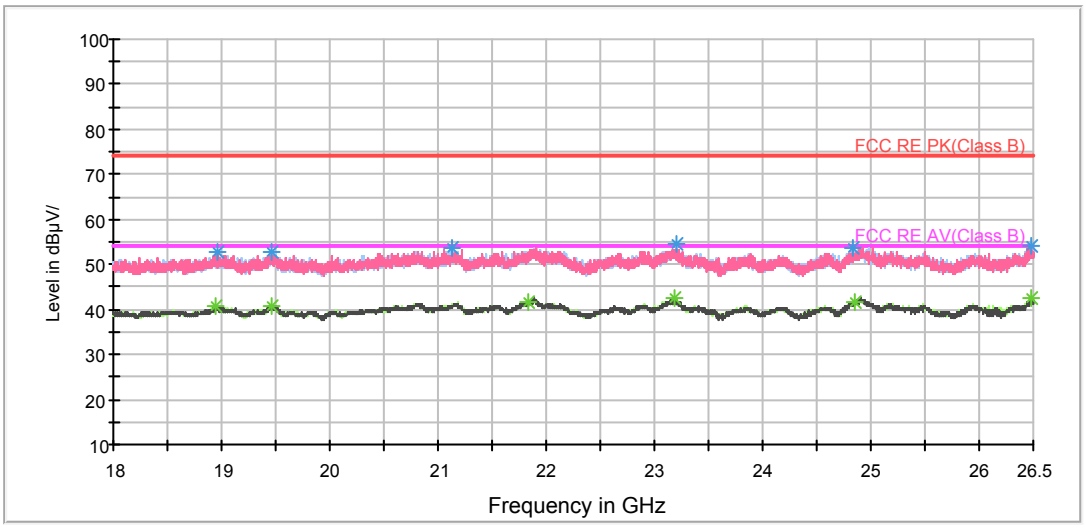
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3982.500000	47.0	100.0	V	0.0	48.0	-1.0	27.0	74
5325.000000	45.3	100.0	V	65.0	43.0	2.3	28.7	74
6946.875000	46.4	100.0	H	245.0	40.2	6.2	27.6	74
9795.000000	48.4	100.0	H	75.0	38.5	9.9	25.6	74
12684.375000	52.6	100.0	H	281.0	38.4	14.2	21.4	74
17923.125000	63.4	100.0	H	0.0	37.7	25.7	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)
4040.625000	27.7	100.0	V	0.0	28.7	-1.0	26.3	54
5446.875000	31.0	100.0	V	137.0	28.2	2.8	23.0	54
6997.500000	34.8	100.0	H	281.0	28.3	6.5	19.2	54
9232.500000	36.3	100.0	V	83.0	26.4	9.9	17.7	54
12641.250000	40.3	100.0	V	65.0	25.8	14.5	13.7	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)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18972.187500	52.9	100.0	V	90.0	53.0	-0.1	21.1	74
19467.312500	52.6	100.0	H	270.0	52.5	0.1	21.4	74
21131.187500	53.7	100.0	V	90.0	55.1	-1.4	20.3	74
23195.625000	54.6	100.0	H	259.0	54.7	-0.1	19.4	74
24836.125000	53.5	100.0	V	91.0	53.2	0.3	20.5	74
26484.062500	54.0	100.0	V	165.0	52.9	1.1	20.0	74

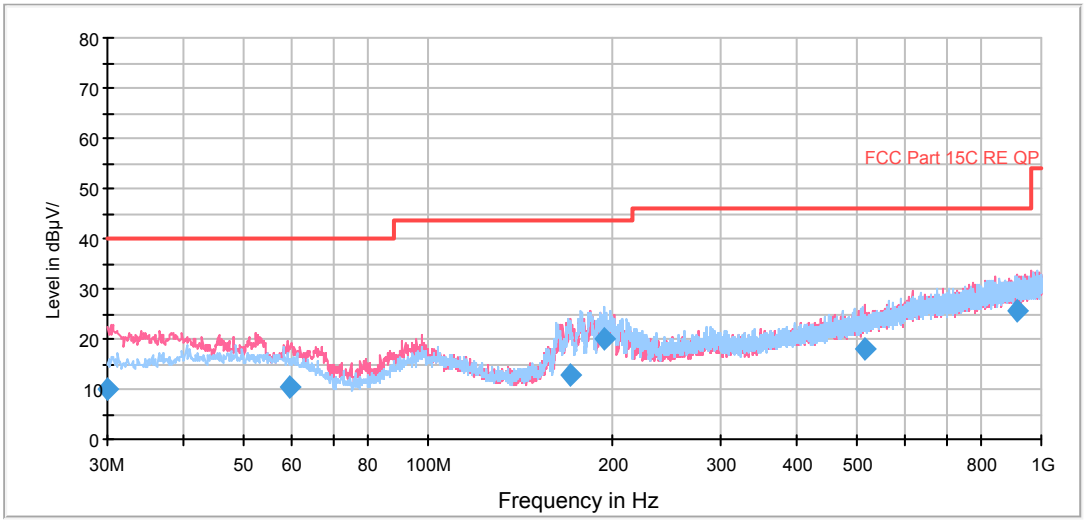
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18939.250000	40.6	100.0	V	90.0	40.6	0.0	13.4	54
19455.625000	41.0	100.0	H	195.0	41.0	0.0	13.0	54
21838.812500	41.6	100.0	H	269.0	43.5	-1.9	12.4	54
23192.437500	42.6	100.0	V	119.0	42.7	-0.1	11.4	54
24843.562500	41.5	100.0	V	137.0	41.2	0.3	12.5	54
26484.062500	42.5	100.0	H	195.0	41.4	1.1	11.5	54

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

802.11b CH10

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

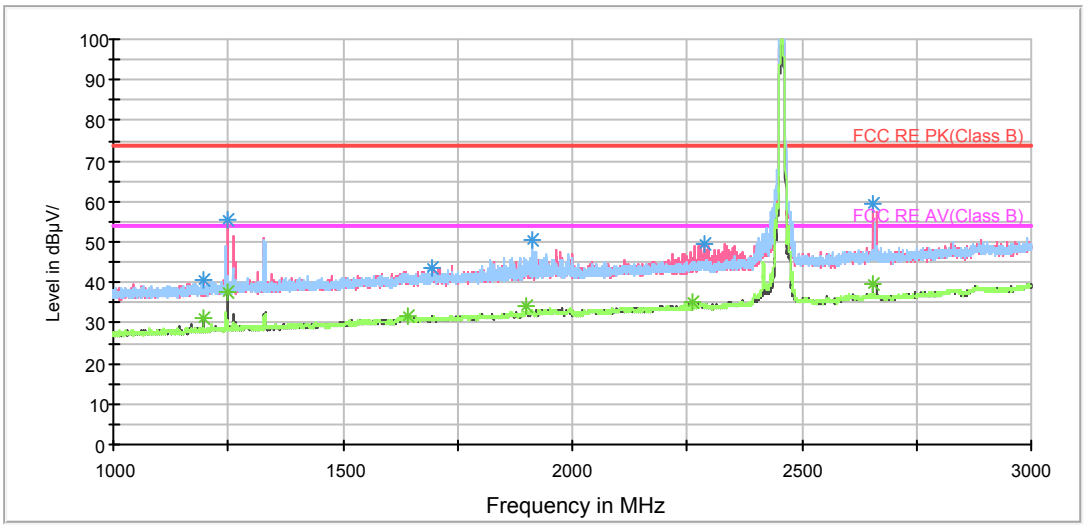
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
42.373750	9.2	100.0	H	22.0	22.5	-13.3	30.8	40.0
62.856250	9.3	100.0	V	0.0	20.8	-11.5	30.7	40.0
172.876250	12.4	114.0	H	263.0	22.8	-10.4	31.1	43.5
200.801250	20.1	125.0	H	281.0	32.4	-12.3	23.4	43.5
549.961250	18.7	111.0	V	96.0	40.3	-21.6	27.3	46.0
899.975000	25.4	125.0	H	99.0	52.2	-26.8	20.6	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

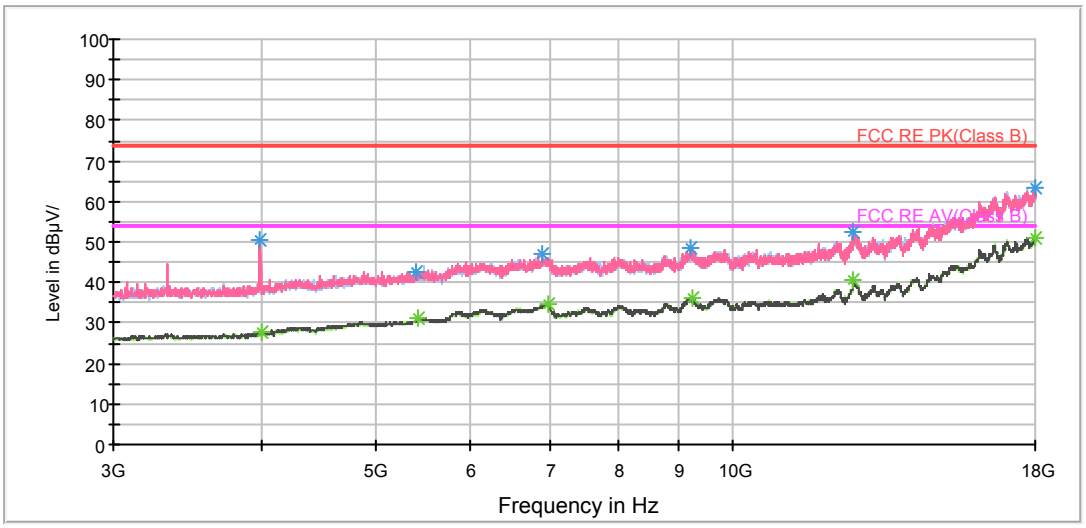
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.000000	40.3	100.0	V	225.0	48.5	-8.2	33.7	74
1250.000000	55.4	100.0	V	216.0	63.4	-8.0	18.6	74
1695.500000	43.6	100.0	H	100.0	48.6	-5.0	30.4	74
1912.000000	50.3	100.0	H	91.0	54.0	-3.7	23.7	74
2286.250000	49.6	100.0	V	343.0	51.2	-1.6	24.4	74
2655.250000	59.5	100.0	V	308.0	59.1	0.4	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)
1195.000000	31.0	100.0	V	225.0	39.2	-8.2	23.0	54
1250.000000	37.5	100.0	V	216.0	45.5	-8.0	16.5	54
1644.000000	31.7	100.0	V	352.0	36.5	-4.8	22.3	54
1898.250000	34.1	100.0	H	146.0	37.9	-3.8	19.9	54
2263.250000	35.1	100.0	V	308.0	37.0	-1.9	18.9	54
2655.250000	39.9	100.0	V	308.0	39.5	0.4	14.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

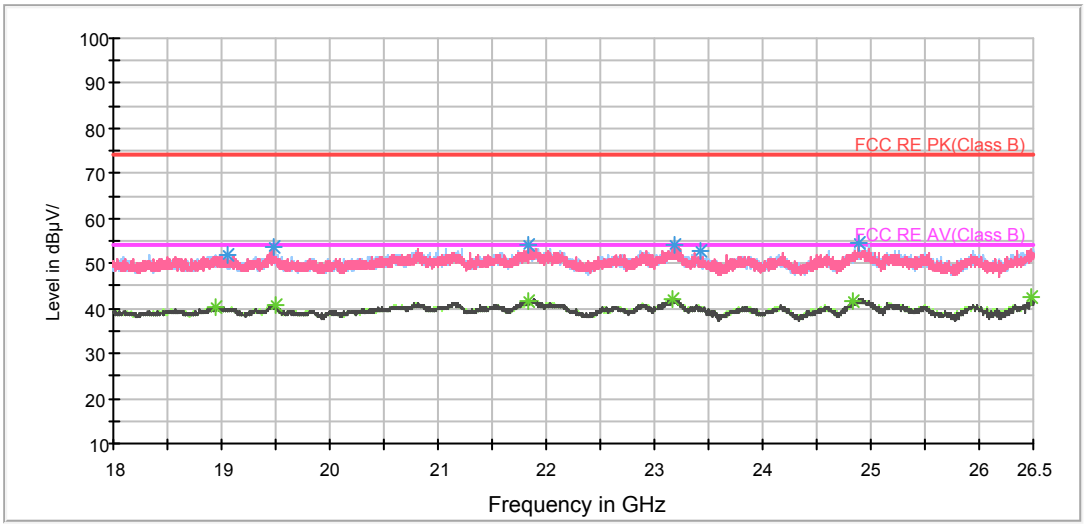
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3993.750000	50.4	100.0	V	45.0	51.5	-1.1	23.6	74
5409.375000	42.8	100.0	H	0.0	40.2	2.6	31.2	74
6907.500000	47.0	100.0	V	0.0	40.8	6.2	27.0	74
9208.125000	48.6	100.0	V	63.0	38.5	10.1	25.4	74
12641.250000	52.5	100.0	H	295.0	38.0	14.5	21.5	74
17966.250000	63.3	100.0	H	241.0	38.5	24.8	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)
3999.375000	27.8	100.0	V	191.0	28.9	-1.1	26.2	54
5431.875000	31.1	100.0	H	185.0	28.3	2.8	22.9	54
6991.875000	34.7	100.0	H	130.0	28.2	6.5	19.3	54
9234.375000	36.4	100.0	V	9.0	26.5	9.9	17.6	54
12641.250000	40.5	100.0	V	210.0	26.0	14.5	13.5	54
18000.000000	51.0	100.0	V	118.0	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)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19058.250000	52.1	100.0	H	191.0	52.5	-0.4	21.9	74
19472.625000	53.8	100.0	V	175.0	53.7	0.1	20.2	74
21839.875000	54.1	100.0	V	93.0	56.0	-1.9	19.9	74
23186.062500	54.3	100.0	H	270.0	54.4	-0.1	19.7	74
23421.937500	52.7	100.0	H	107.0	52.8	-0.1	21.3	74
24893.500000	54.4	100.0	H	270.0	53.8	0.6	19.6	74

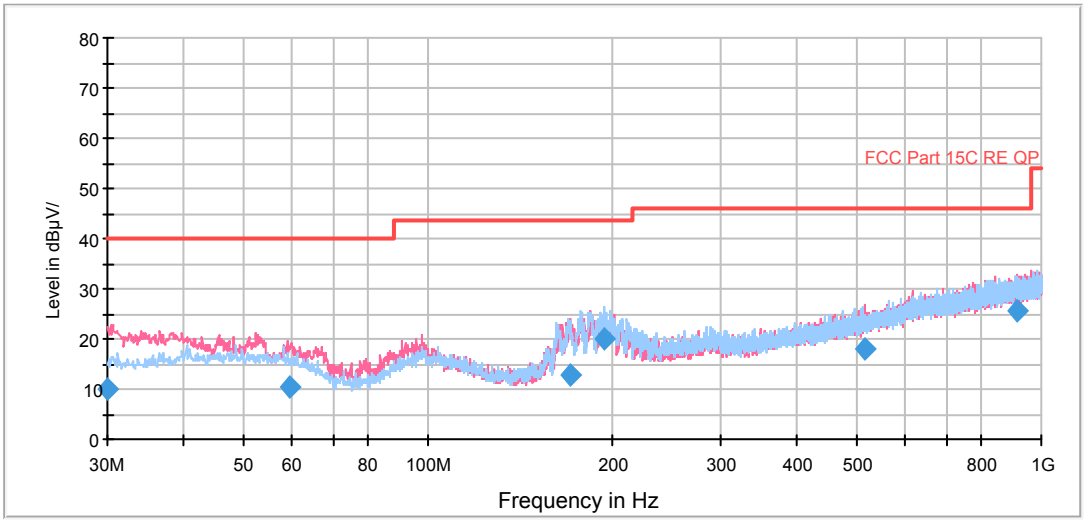
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18946.687500	40.4	100.0	H	270.0	40.4	0.0	13.6	54
19494.937500	40.8	100.0	V	157.0	40.7	0.1	13.2	54
21838.812500	41.4	100.0	H	270.0	43.3	-1.9	12.6	54
23169.062500	42.1	100.0	H	182.0	42.2	-0.1	11.9	54
24832.937500	41.5	100.0	V	93.0	41.3	0.2	12.5	54
26480.875000	42.5	100.0	H	90.0	41.4	1.1	11.5	54

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

802.11g CH1

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

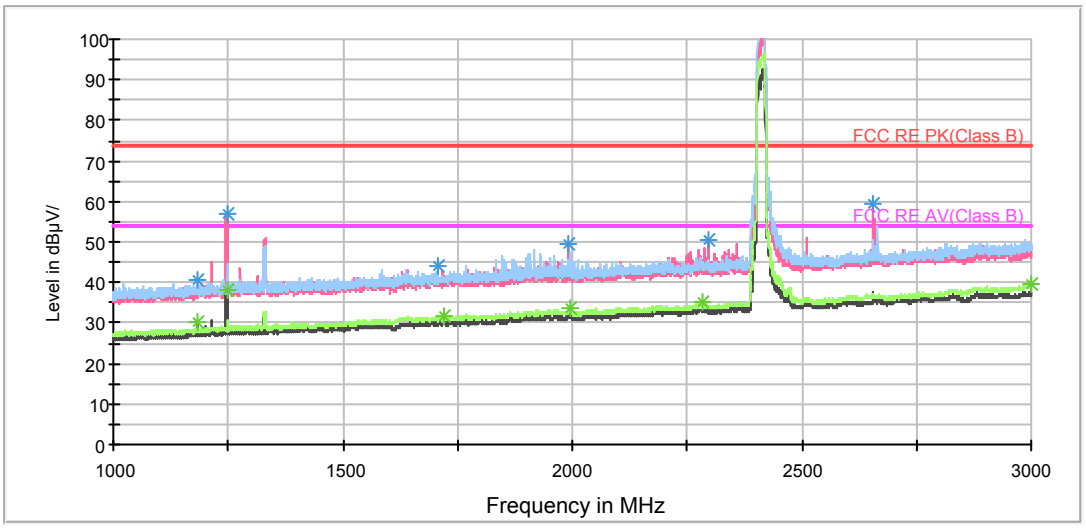
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.040000	10.1	100.0	V	206.0	22.2	-12.1	29.9	40.0
59.700000	10.3	100.0	V	350.0	22.9	-12.6	29.7	40.0
170.330000	12.6	100.0	V	266.0	22.9	-10.3	30.9	43.5
193.968750	20.1	125.0	H	278.0	31.9	-11.8	23.4	43.5
516.978750	17.9	100.0	V	173.0	38.8	-20.9	28.1	46.0
912.981250	25.5	114.0	V	353.0	52.5	-27.0	20.5	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

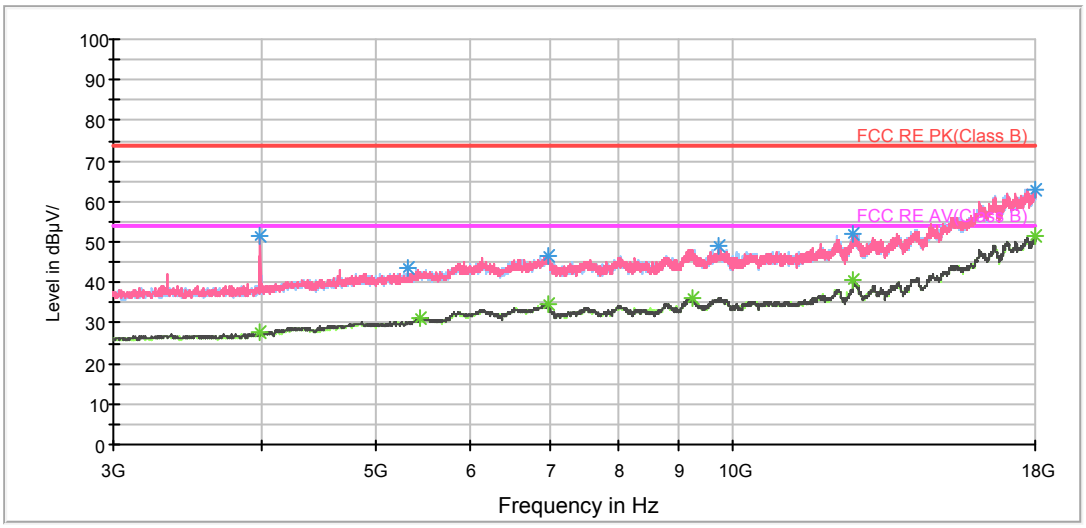
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1182.250000	40.8	100.0	V	225.0	48.8	-8.0	33.2	74
1247.500000	57.0	100.0	V	194.0	65.0	-8.0	17.0	74
1709.250000	44.2	100.0	V	0.0	49.0	-4.8	29.8	74
1992.250000	49.6	100.0	V	177.0	52.9	-3.3	24.4	74
2298.750000	50.6	100.0	V	216.0	52.7	-2.1	23.4	74
2655.750000	59.3	100.0	V	305.0	58.9	0.4	14.7	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)
1182.250000	30.3	100.0	V	225.0	38.3	-8.0	23.7	54
1247.500000	38.2	100.0	V	194.0	46.2	-8.0	15.8	54
1722.500000	31.4	100.0	H	45.0	36.4	-5.0	22.6	54
1995.250000	33.6	100.0	H	149.0	36.8	-3.2	20.4	54
2285.500000	35.0	100.0	H	119.0	36.5	-1.5	19.0	54
2999.250000	39.5	100.0	H	9.0	37.2	2.3	14.5	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

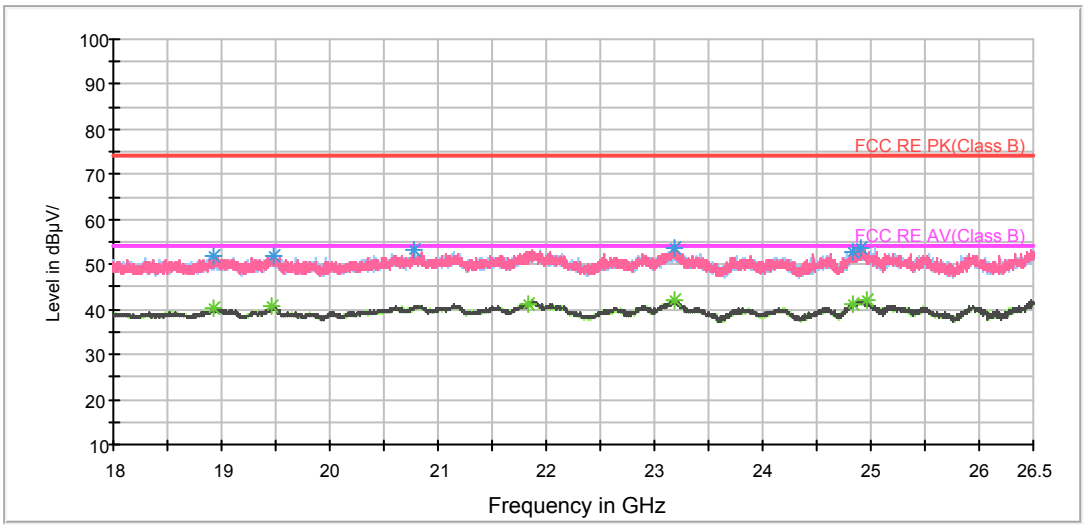
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3993.750000	51.6	100.0	V	153.0	52.7	-1.1	22.4	74
5319.375000	43.4	100.0	V	80.0	41.0	2.4	30.6	74
6995.625000	46.5	100.0	V	62.0	40.0	6.5	27.5	74
9733.125000	49.1	100.0	H	0.0	39.3	9.8	24.9	74
12641.250000	52.2	100.0	H	350.0	37.7	14.5	21.8	74
17994.375000	63.1	100.0	V	62.0	37.8	25.3	10.9	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3993.750000	27.6	100.0	V	153.0	28.7	-1.1	26.4	54
5446.875000	31.0	100.0	V	0.0	28.2	2.8	23.0	54
6995.625000	34.7	100.0	H	0.0	28.2	6.5	19.3	54
9238.125000	36.2	100.0	H	0.0	26.3	9.9	17.8	54
12641.250000	40.4	100.0	H	350.0	25.9	14.5	13.6	54
18000.000000	51.2	100.0	V	25.0	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)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18916.937500	51.9	100.0	H	246.0	51.8	0.1	22.1	74
19483.250000	51.8	100.0	H	229.0	51.7	0.1	22.2	74
20786.937500	53.1	100.0	H	270.0	55.0	-1.9	20.9	74
23182.875000	53.6	100.0	V	144.0	53.7	-0.1	20.4	74
24829.750000	52.9	100.0	H	246.0	52.7	0.2	21.1	74
24910.500000	53.6	100.0	H	270.0	53.0	0.6	20.4	74

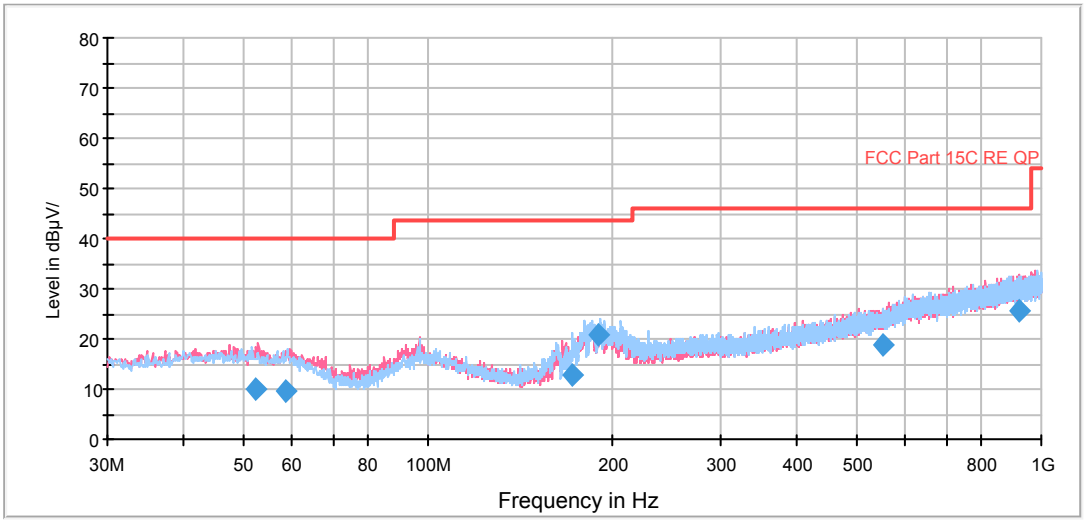
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18935.000000	40.2	100.0	H	246.0	40.1	0.1	13.8	54
19459.875000	40.7	100.0	H	174.0	40.6	0.1	13.3	54
21837.750000	41.2	100.0	V	90.0	43.1	-1.9	12.8	54
23192.437500	42.1	100.0	V	90.0	42.2	-0.1	11.9	54
24841.437500	41.1	100.0	H	270.0	40.8	0.3	12.9	54
24955.125000	42.0	100.0	V	127.0	41.1	0.9	12.0	54

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

802.11g CH6

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

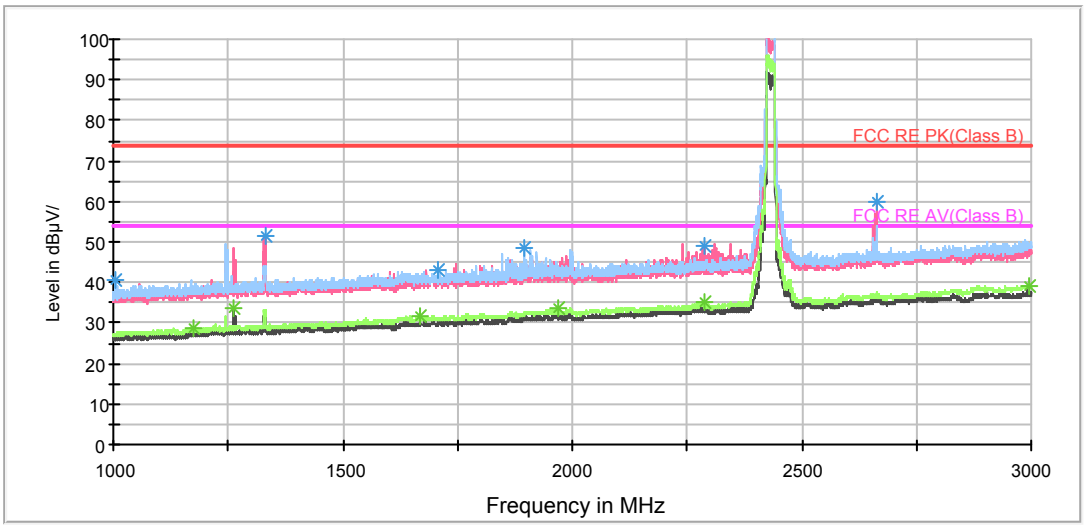
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
52.396250	9.9	100.0	V	30.0	22.8	-12.9	30.1	40.0
58.498750	9.4	100.0	H	276.0	22.1	-12.7	30.6	40.0
171.901250	12.9	100.0	H	276.0	23.5	-10.6	30.6	43.5
189.935000	20.9	100.0	H	282.0	32.4	-11.5	22.6	43.5
553.641250	18.8	125.0	H	129.0	40.5	-21.7	27.2	46.0
919.132500	25.6	125.0	V	80.0	52.6	-27.0	20.4	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

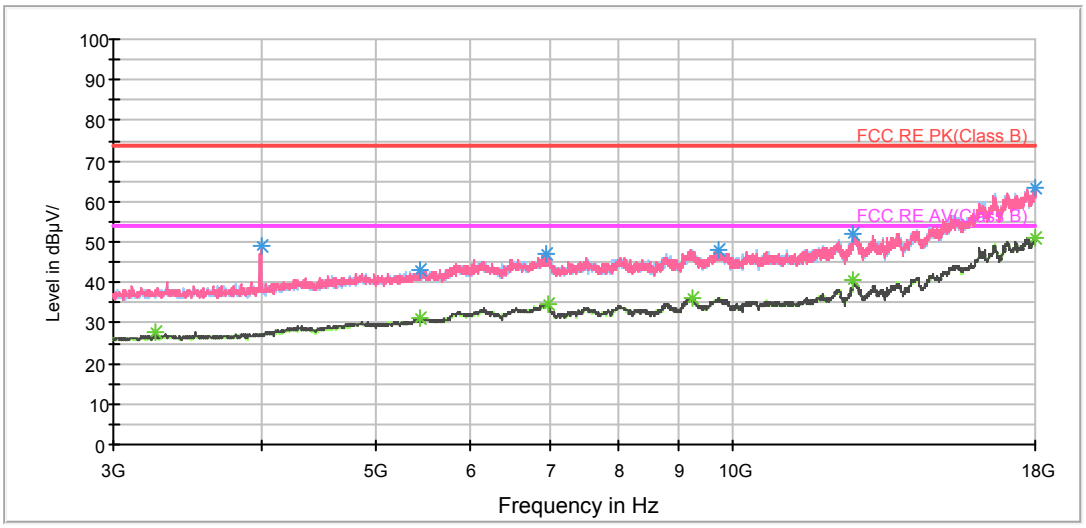
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1003.250000	40.8	100.0	H	94.0	50.1	-9.3	33.2	74
1330.250000	51.4	100.0	V	272.0	58.8	-7.4	22.6	74
1707.750000	42.9	100.0	H	171.0	47.7	-4.8	31.1	74
1894.500000	48.5	100.0	H	94.0	52.5	-4.0	25.5	74
2286.750000	49.1	100.0	V	140.0	50.7	-1.6	24.9	74
2663.000000	60.0	100.0	V	325.0	59.7	0.3	14.0	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)
1175.750000	28.9	100.0	V	193.0	36.9	-8.0	25.1	54
1263.000000	33.9	100.0	V	176.0	41.6	-7.7	20.1	54
1666.500000	31.8	100.0	H	86.0	36.9	-5.1	22.2	54
1971.500000	33.8	100.0	H	94.0	37.4	-3.6	20.2	54
2286.500000	35.0	100.0	H	40.0	36.6	-1.6	19.0	54
2995.000000	39.3	100.0	H	40.0	37.0	2.3	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

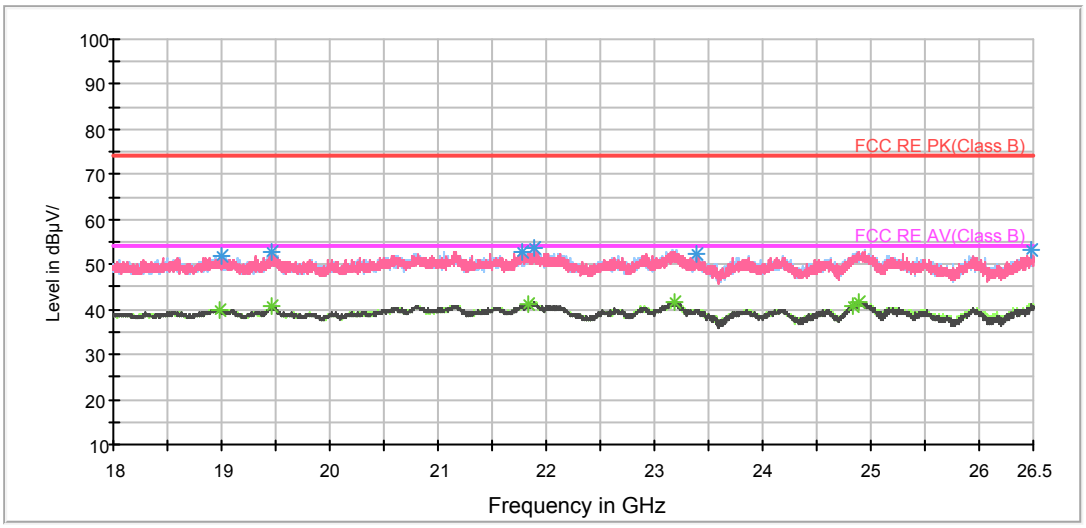
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3995.625000	49.1	100.0	V	284.0	50.2	-1.1	24.9	74
5437.500000	42.9	100.0	H	352.0	40.0	2.9	31.1	74
6967.500000	47.1	100.0	V	155.0	40.8	6.3	26.9	74
9738.750000	48.2	100.0	V	0.0	38.2	10.0	25.8	74
12639.375000	52.1	100.0	H	0.0	37.6	14.5	21.9	74
18000.000000	63.6	100.0	V	210.0	38.1	25.5	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)
3256.875000	27.8	100.0	V	247.0	30.3	-2.5	26.2	54
5433.750000	31.0	100.0	H	0.0	28.2	2.8	23.0	54
6990.000000	34.8	100.0	V	191.0	28.3	6.5	19.2	54
9230.625000	36.1	100.0	V	173.0	26.2	9.9	17.9	54
12643.125000	40.5	100.0	V	191.0	26.1	14.4	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)

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19004.062500	51.8	100.0	V	194.0	52.0	-0.2	22.2	74
19469.437500	53.0	100.0	V	90.0	52.9	0.1	21.0	74
21769.750000	53.0	100.0	V	131.0	55.2	-2.2	21.0	74
21881.312500	53.5	100.0	V	104.0	55.2	-1.7	20.5	74
23392.187500	52.4	100.0	H	245.0	52.5	-0.1	21.6	74
26476.625000	53.2	100.0	H	236.0	52.1	1.1	20.8	74

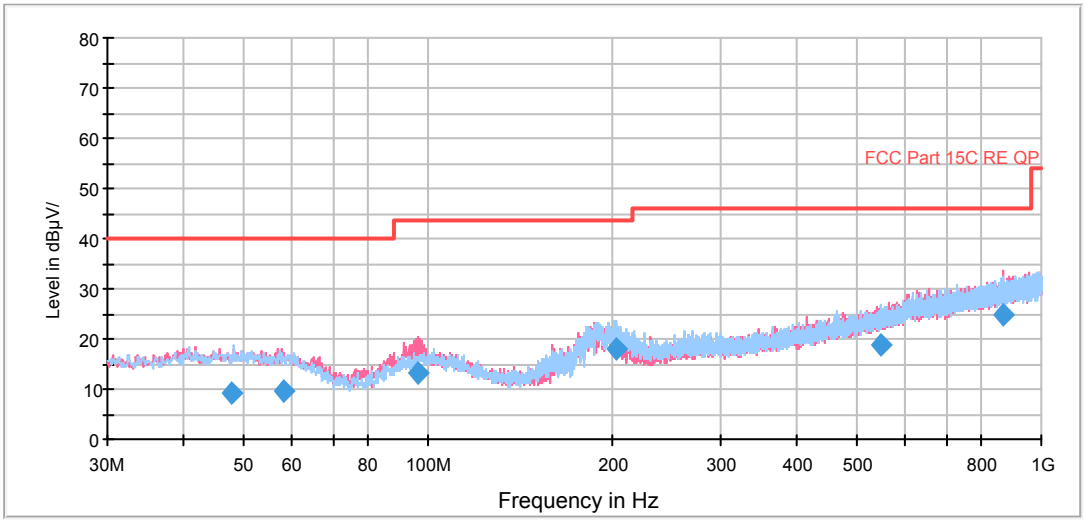
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18973.250000	40.0	100.0	V	90.0	40.1	-0.1	14.0	54
19457.750000	40.8	100.0	V	263.0	40.8	0.0	13.2	54
21830.312500	41.1	100.0	H	136.0	43.0	-1.9	12.9	54
23186.062500	41.7	100.0	V	167.0	41.8	-0.1	12.3	54
24834.000000	40.9	100.0	H	236.0	40.7	0.2	13.1	54
24885.000000	41.8	100.0	V	213.0	41.3	0.5	12.2	54

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

802.11g CH10

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

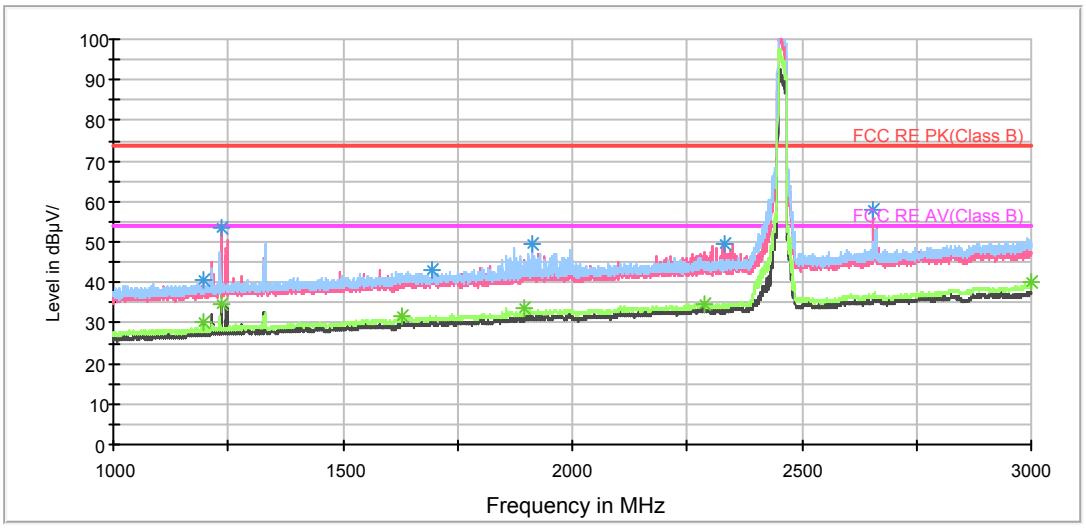
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
47.708750	9.2	100.0	H	175.0	22.3	-13.1	30.8	40.0
58.046250	9.6	114.0	V	127.0	22.3	-12.7	30.4	40.0
96.528750	13.2	100.0	V	145.0	26.0	-12.8	30.3	43.5
202.132500	18.1	100.0	H	293.0	30.2	-12.1	25.4	43.5
548.948750	18.6	100.0	V	286.0	40.1	-21.5	27.4	46.0
863.600000	24.9	100.0	V	59.0	51.0	-26.1	21.1	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

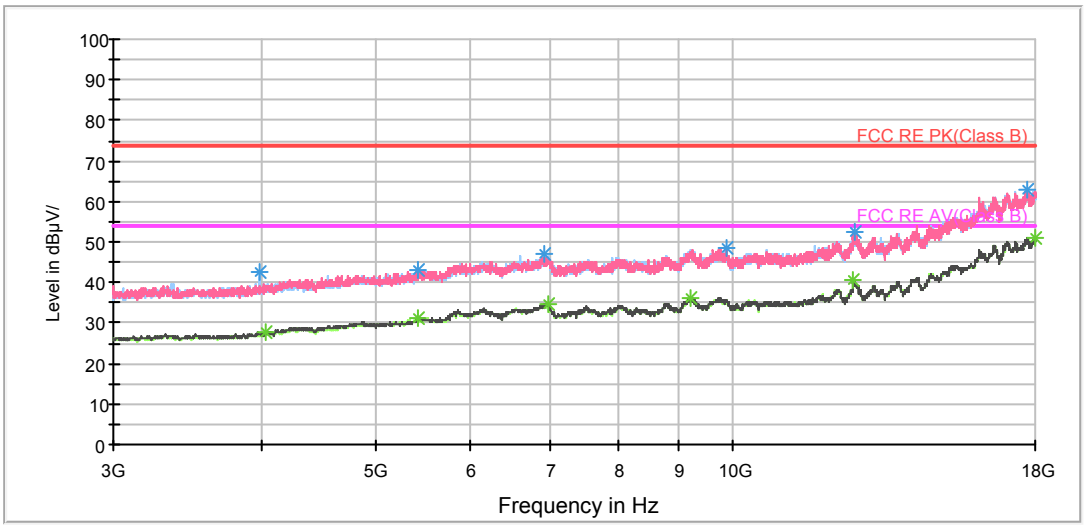
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.500000	40.4	100.0	V	220.0	48.6	-8.2	33.6	74
1234.250000	53.5	100.0	V	195.0	61.3	-7.8	20.5	74
1695.750000	43.1	100.0	H	94.0	48.1	-5.0	30.9	74
1914.000000	49.7	100.0	H	0.0	53.5	-3.8	24.3	74
2331.500000	49.5	100.0	V	0.0	51.0	-1.5	24.5	74
2655.500000	58.0	100.0	V	335.0	57.6	0.4	16.0	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)
1197.500000	30.1	100.0	V	220.0	38.3	-8.2	23.9	54
1234.250000	34.5	100.0	V	195.0	42.3	-7.8	19.5	54
1627.000000	31.5	100.0	H	85.0	36.3	-4.8	22.5	54
1896.500000	33.7	100.0	H	146.0	37.6	-3.9	20.3	54
2290.000000	34.7	100.0	H	31.0	36.4	-1.7	19.3	54
2998.250000	39.9	100.0	H	67.0	37.6	2.3	14.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

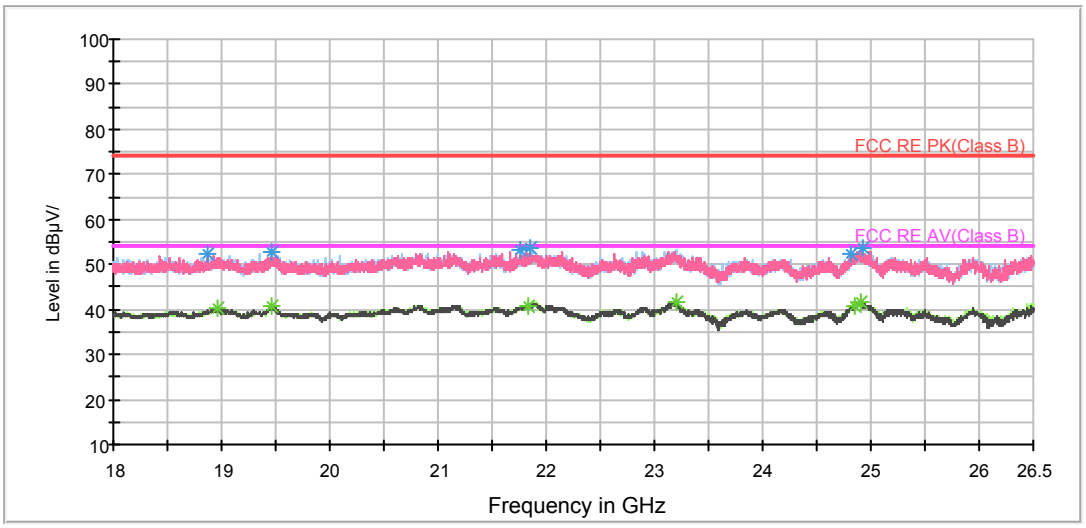
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3990.000000	42.6	100.0	H	94.0	43.6	-1.0	31.4	74
5413.125000	42.9	100.0	H	351.0	40.3	2.6	31.1	74
6935.625000	47.0	100.0	H	0.0	40.9	6.1	27.0	74
9881.250000	48.3	100.0	V	284.0	38.0	10.3	25.7	74
12676.875000	52.5	100.0	H	315.0	38.3	14.2	21.5	74
17713.125000	62.8	100.0	V	189.0	38.2	24.6	11.2	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)
4038.750000	27.9	100.0	V	97.0	28.9	-1.0	26.1	54
5431.875000	31.1	100.0	H	0.0	28.3	2.8	22.9	54
6995.625000	34.8	100.0	V	226.0	28.3	6.5	19.2	54
9208.125000	36.3	100.0	V	263.0	26.2	10.1	17.7	54
12641.250000	40.6	100.0	H	260.0	26.1	14.5	13.4	54
17996.250000	51.1	100.0	V	97.0	25.7	25.4	2.9	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18873.375000	52.3	100.0	V	100.0	52.2	0.1	21.7	74
19466.250000	52.6	100.0	H	270.0	52.5	0.1	21.4	74
21758.062500	53.0	100.0	H	209.0	55.3	-2.3	21.0	74
21854.750000	53.6	100.0	H	270.0	55.4	-1.8	20.4	74
24819.125000	52.3	100.0	H	192.0	52.1	0.2	21.7	74
24924.312500	53.7	100.0	H	270.0	53.0	0.7	20.3	74

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

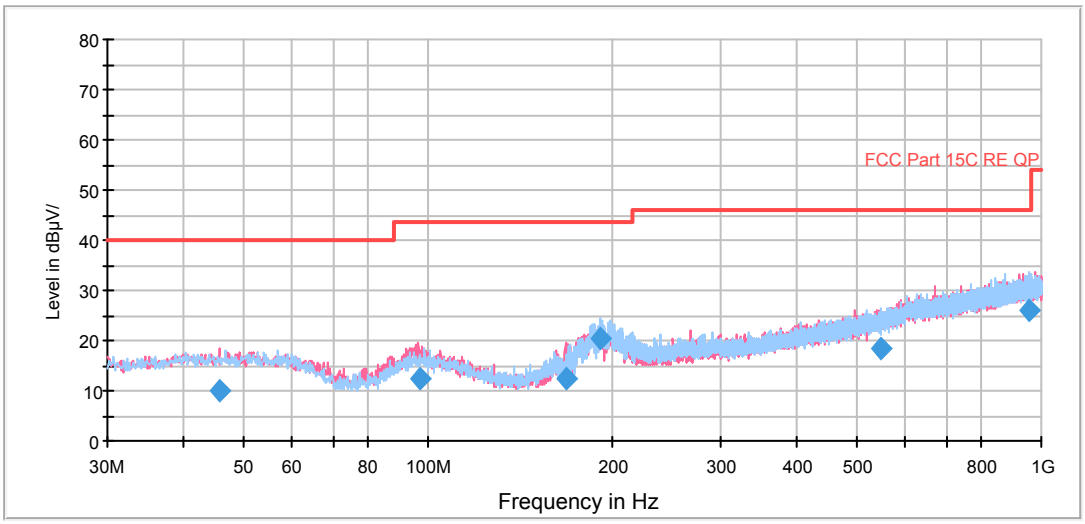
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18965.812500	40.2	100.0	V	90.0	40.3	-0.1	13.8	54
19458.812500	40.5	100.0	H	146.0	40.5	0.0	13.5	54
21838.812500	40.9	100.0	H	270.0	42.8	-1.9	13.1	54
23194.562500	41.7	100.0	V	90.0	41.8	-0.1	12.3	54
24843.562500	40.9	100.0	V	90.0	40.6	0.3	13.1	54
24910.500000	41.6	100.0	V	174.0	41.0	0.6	12.4	54

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

MIMO

802.11n (HT20) CH1

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

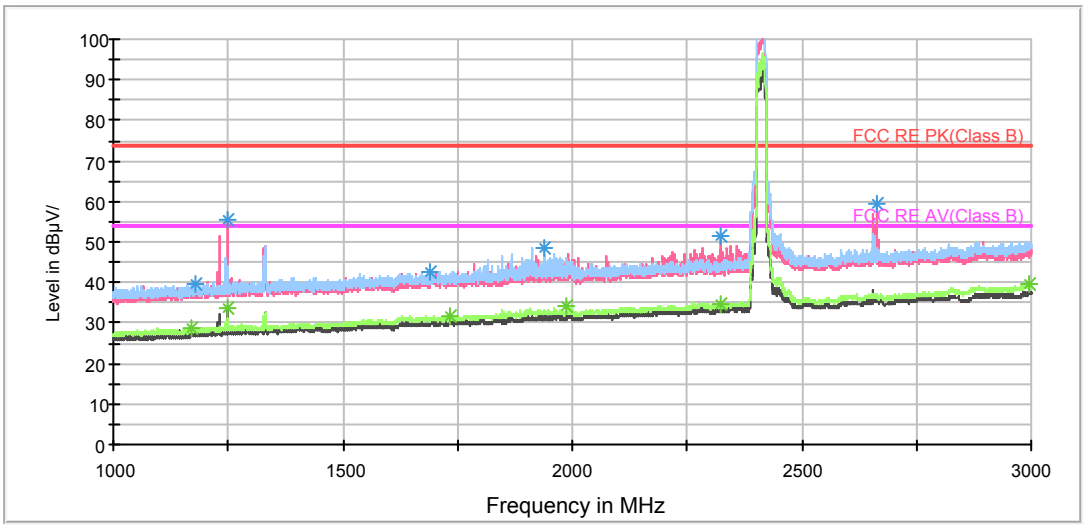
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
45.882500	10.0	100.0	V	100.0	23.2	-13.2	30.0	40.0
96.766250	12.6	125.0	V	266.0	25.5	-12.9	30.9	43.5
168.057500	12.3	114.0	V	214.0	22.5	-10.2	31.2	43.5
191.505000	20.3	100.0	H	278.0	32.0	-11.7	23.2	43.5
547.978750	18.6	100.0	H	181.0	40.1	-21.5	27.4	46.0
955.457500	26.1	100.0	H	168.0	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

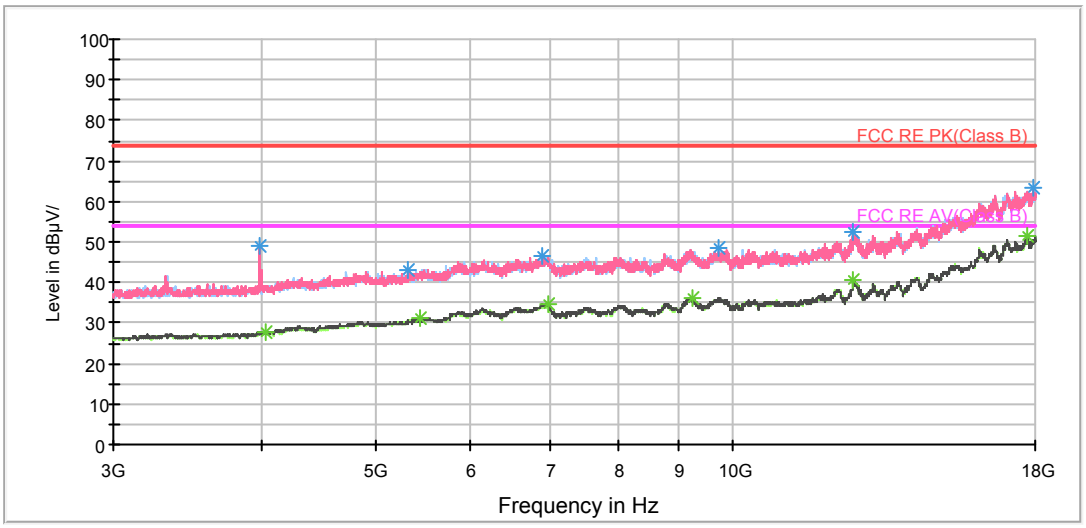
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1177.500000	39.5	100.0	H	10.0	47.5	-8.0	34.5	74
1248.250000	55.3	100.0	V	256.0	63.3	-8.0	18.7	74
1691.000000	42.7	100.0	H	1.0	47.7	-5.0	31.3	74
1938.250000	48.5	100.0	H	147.0	52.2	-3.7	25.5	74
2321.500000	51.7	100.0	V	185.0	53.4	-1.7	22.3	74
2662.750000	59.5	100.0	V	185.0	59.2	0.3	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)
1170.250000	28.7	100.0	H	35.0	36.8	-8.1	25.3	54
1248.250000	33.8	100.0	V	256.0	41.8	-8.0	20.2	54
1731.750000	31.7	100.0	H	181.0	36.5	-4.8	22.3	54
1987.750000	33.9	100.0	H	90.0	37.4	-3.5	20.1	54
2325.250000	34.5	100.0	H	10.0	36.1	-1.6	19.5	54
2993.500000	39.7	100.0	H	0.0	37.5	2.2	14.3	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

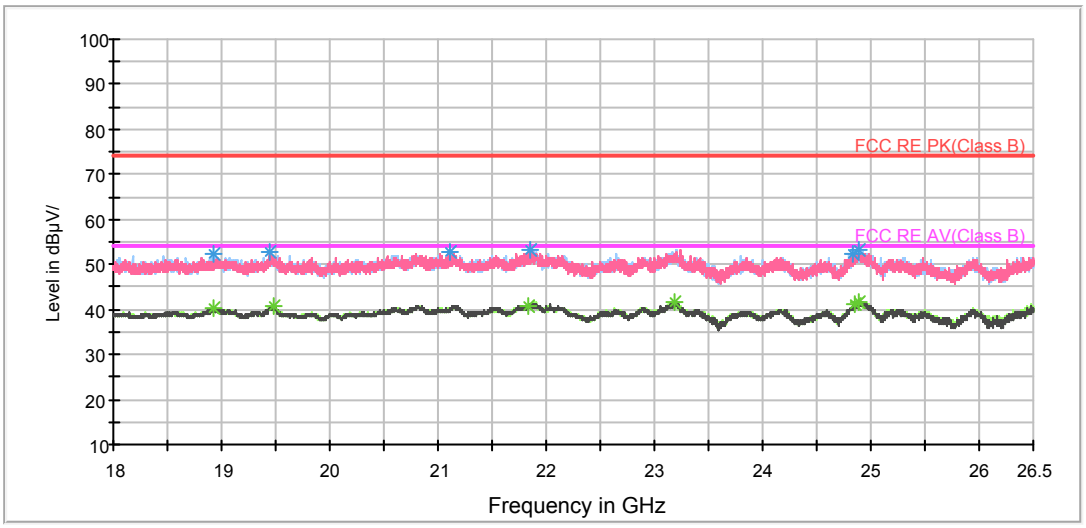
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3986.250000	48.9	100.0	V	83.0	49.9	-1.0	25.1	74
5317.500000	43.0	100.0	V	157.0	40.6	2.4	31.0	74
6907.500000	46.4	100.0	V	157.0	40.2	6.2	27.6	74
9744.375000	48.4	100.0	H	111.0	38.5	9.9	25.6	74
12637.500000	52.6	100.0	H	297.0	38.3	14.3	21.4	74
17917.500000	63.1	100.0	V	0.0	37.4	25.7	10.9	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4027.500000	27.7	100.0	V	11.0	28.8	-1.1	26.3	54
5433.750000	31.1	100.0	H	0.0	28.3	2.8	22.9	54
6997.500000	34.8	100.0	V	138.0	28.3	6.5	19.2	54
9232.500000	36.3	100.0	H	297.0	26.4	9.9	17.7	54
12639.375000	40.4	100.0	H	224.0	25.9	14.5	13.6	54
17709.375000	51.4	100.0	V	0.0	26.7	24.7	2.6	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18925.437500	52.2	100.0	H	270.0	52.1	0.1	21.8	74
19437.562500	52.7	100.0	V	130.0	52.7	0.0	21.3	74
21106.750000	52.7	100.0	V	270.0	54.0	-1.3	21.3	74
21847.312500	53.4	100.0	H	270.0	55.2	-1.8	20.6	74
24842.500000	52.5	100.0	H	270.0	52.2	0.3	21.5	74
24882.875000	53.2	100.0	H	210.0	52.7	0.5	20.8	74

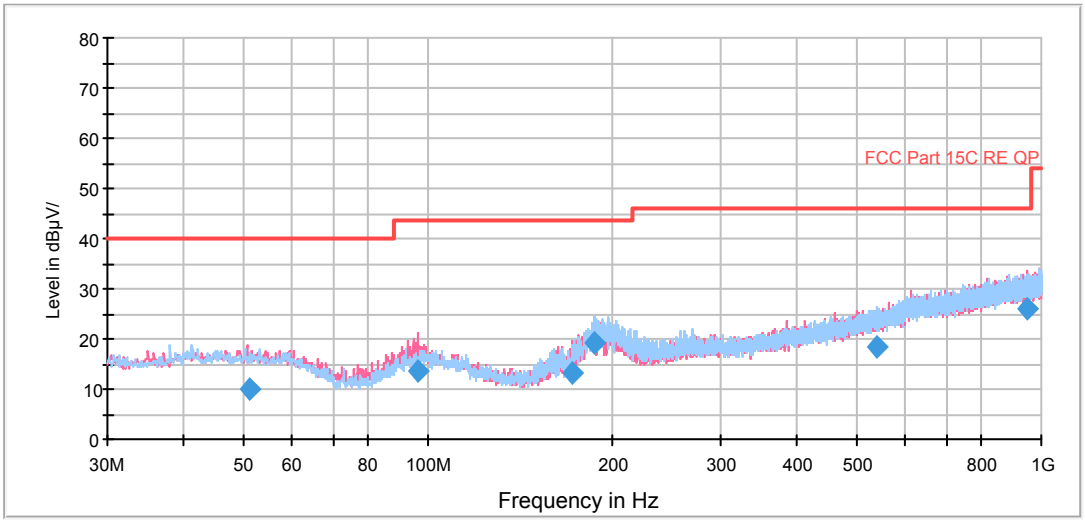
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18932.875000	40.1	100.0	V	149.0	40.0	0.1	13.9	54
19480.062500	40.7	100.0	H	219.0	40.6	0.1	13.3	54
21838.812500	40.9	100.0	V	90.0	42.8	-1.9	13.1	54
23192.437500	41.7	100.0	V	90.0	41.8	-0.1	12.3	54
24843.562500	41.1	100.0	H	264.0	40.8	0.3	12.9	54
24890.312500	41.5	100.0	H	270.0	41.0	0.5	12.5	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

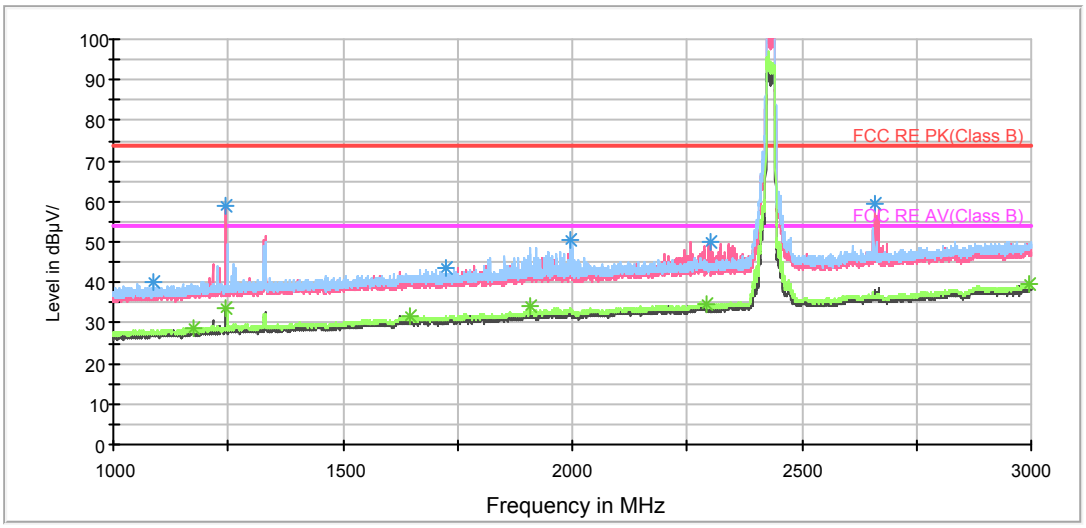
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
51.212500	10.2	100.0	V	300.0	23.3	-13.1	29.8	40.0
96.565000	13.7	100.0	V	160.0	26.5	-12.8	29.8	43.5
171.660000	13.1	100.0	V	250.0	23.6	-10.5	30.4	43.5
186.458750	19.2	100.0	H	281.0	30.5	-11.3	24.3	43.5
539.975000	18.5	100.0	H	16.0	39.9	-21.4	27.5	46.0
951.182500	25.9	125.0	V	100.0	53.1	-27.2	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

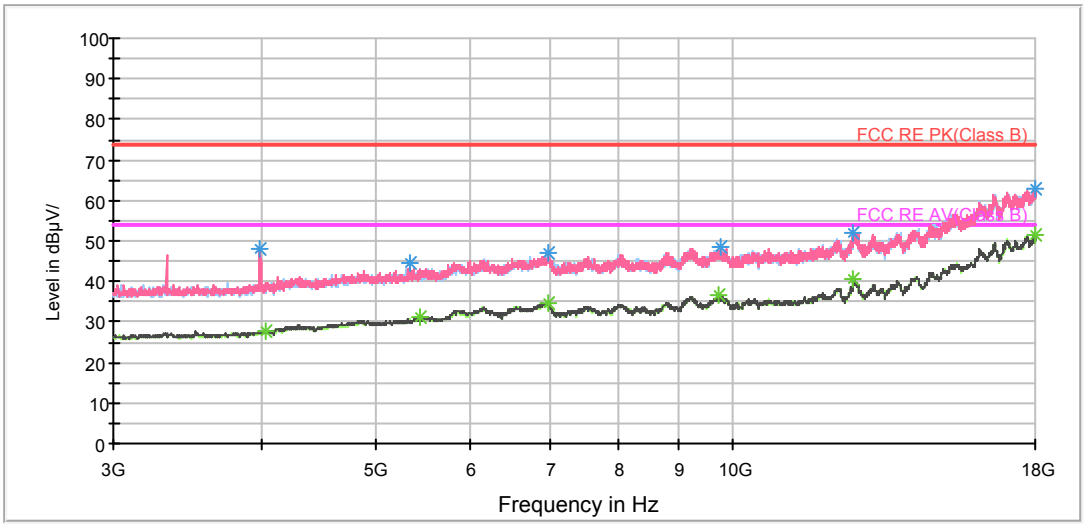
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1088.500000	40.1	100.0	H	245.0	49.0	-8.9	33.9	74
1244.750000	58.9	100.0	V	241.0	66.9	-8.0	15.1	74
1725.750000	43.3	100.0	H	36.0	48.4	-5.1	30.7	74
1994.500000	50.3	100.0	H	88.0	53.5	-3.2	23.7	74
2299.750000	50.1	100.0	V	187.0	52.3	-2.2	23.9	74
2657.500000	59.4	100.0	V	205.0	59.0	0.4	14.6	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)
1176.250000	28.8	100.0	H	2.0	36.8	-8.0	25.2	54
1244.750000	33.7	100.0	V	241.0	41.7	-8.0	20.3	54
1645.500000	31.6	100.0	H	132.0	36.5	-4.9	22.4	54
1908.500000	34.0	100.0	H	132.0	37.8	-3.8	20.0	54
2293.000000	34.6	100.0	H	36.0	36.5	-1.9	19.4	54
2995.750000	39.7	100.0	H	97.0	37.4	2.3	14.3	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

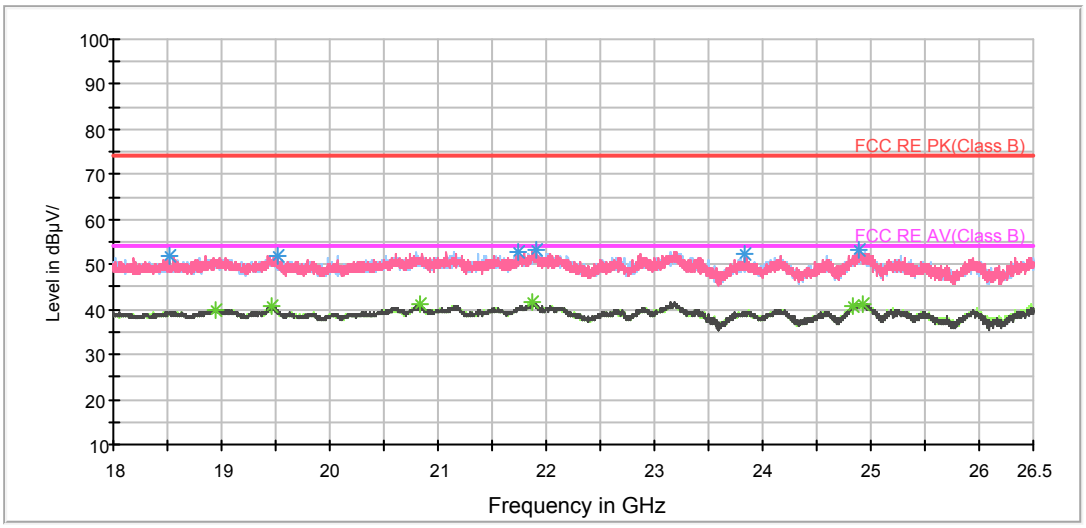
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3986.250000	48.1	100.0	V	85.0	49.1	-1.0	25.9	74
5332.500000	44.5	100.0	V	158.0	42.2	2.3	29.5	74
6990.000000	47.0	100.0	V	0.0	40.5	6.5	27.0	74
9761.250000	48.6	100.0	V	0.0	39.0	9.6	25.4	74
12652.500000	51.9	100.0	H	0.0	37.8	14.1	22.1	74
17994.375000	63.0	100.0	V	0.0	37.7	25.3	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)
4035.000000	27.8	100.0	V	0.0	28.8	-1.0	26.2	54
5433.750000	31.1	100.0	V	85.0	28.3	2.8	22.9	54
6993.750000	34.7	100.0	H	240.0	28.2	6.5	19.3	54
9744.375000	36.4	100.0	H	0.0	26.5	9.9	17.6	54
12641.250000	40.4	100.0	V	140.0	25.9	14.5	13.6	54
18000.000000	51.4	100.0	H	277.0	25.9	25.5	2.6	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18512.125000	51.9	100.0	H	270.0	51.6	0.3	22.1	74
19509.812500	52.0	100.0	V	101.0	51.9	0.1	22.0	74
21747.437500	52.7	100.0	V	90.0	55.1	-2.4	21.3	74
21911.062500	53.2	100.0	V	92.0	54.7	-1.5	20.8	74
23835.250000	52.4	100.0	H	174.0	53.3	-0.9	21.6	74
24891.375000	53.3	100.0	V	138.0	52.8	0.5	20.7	74

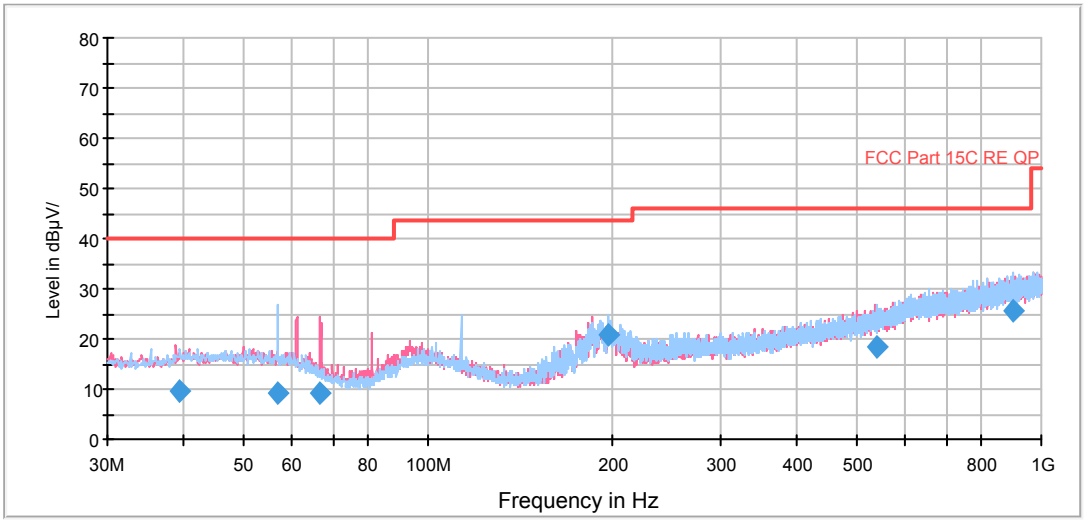
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18942.437500	40.1	100.0	H	250.0	40.1	0.0	13.9	54
19464.125000	40.9	100.0	H	270.0	40.8	0.1	13.1	54
20833.687500	41.0	100.0	H	250.0	43.1	-2.1	13.0	54
21870.687500	41.5	100.0	H	174.0	43.2	-1.7	12.5	54
24842.500000	40.7	100.0	H	174.0	40.4	0.3	13.3	54
24921.125000	41.4	100.0	H	270.0	40.7	0.7	12.6	54

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

802.11n (HT20) CH10

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

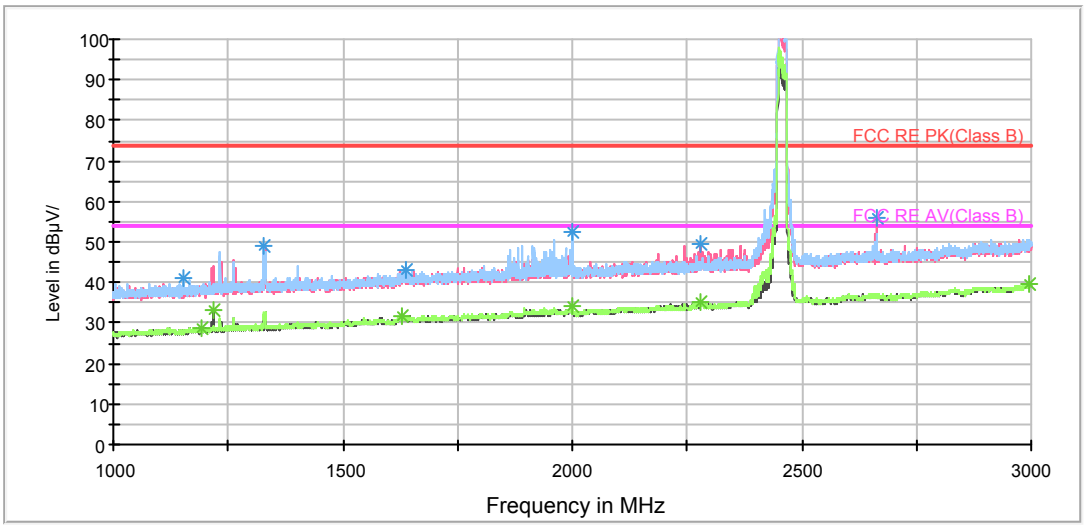
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
39.451250	9.6	114.0	V	249.0	22.7	-13.1	30.4	40.0
56.996250	9.3	114.0	H	37.0	22.1	-12.8	30.7	40.0
66.577500	9.2	100.0	V	336.0	19.3	-10.1	30.8	40.0
196.833750	21.0	125.0	H	280.0	33.0	-12.0	22.5	43.5
539.975000	18.5	125.0	H	21.0	39.9	-21.4	27.5	46.0
897.987500	25.5	100.0	H	159.0	52.3	-26.8	20.5	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

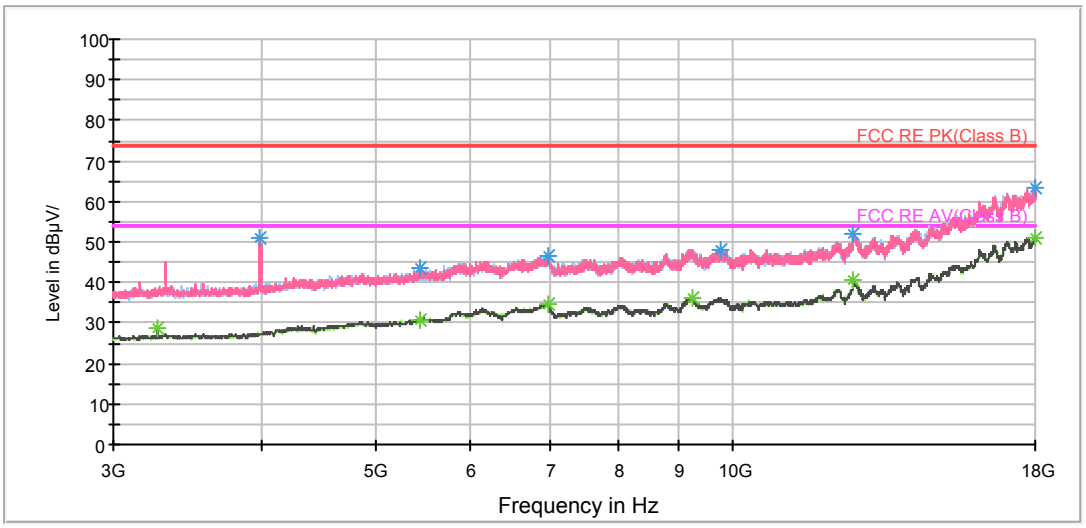
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1152.000000	40.8	100.0	H	156.0	49.3	-8.5	33.2	74
1329.500000	49.1	100.0	H	16.0	56.5	-7.4	24.9	74
1636.500000	42.9	100.0	V	335.0	47.6	-4.7	31.1	74
1998.250000	52.7	100.0	H	93.0	56.1	-3.4	21.3	74
2279.750000	49.7	100.0	V	0.0	51.0	-1.3	24.3	74
2662.000000	56.0	100.0	V	317.0	55.7	0.3	18.0	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)
1191.000000	28.9	100.0	H	174.0	37.1	-8.2	25.1	54
1217.250000	33.1	100.0	V	209.0	41.0	-7.9	20.9	54
1631.000000	31.8	100.0	V	249.0	36.5	-4.7	22.2	54
1998.250000	34.3	100.0	H	93.0	37.7	-3.4	19.7	54
2279.750000	34.9	100.0	V	0.0	36.2	-1.3	19.1	54
2994.250000	39.6	100.0	V	209.0	37.3	2.3	14.4	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

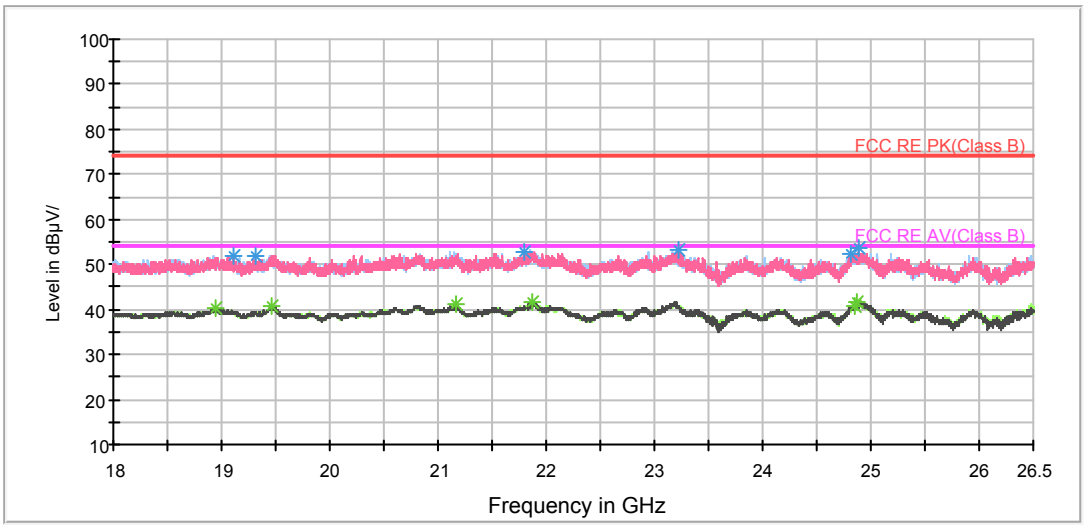
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3991.875000	50.8	100.0	V	121.0	51.8	-1.0	23.2	74
5433.750000	43.4	100.0	H	131.0	40.6	2.8	30.6	74
6997.500000	46.7	100.0	H	187.0	40.2	6.5	27.3	74
9750.000000	48.2	100.0	H	333.0	38.4	9.8	25.8	74
12641.250000	51.9	100.0	V	286.0	37.4	14.5	22.1	74
17986.875000	63.6	100.0	V	0.0	38.5	25.1	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)
3264.375000	28.9	100.0	V	104.0	31.3	-2.4	25.1	54
5437.500000	30.9	100.0	V	48.0	28.0	2.9	23.1	54
6997.500000	34.8	100.0	H	187.0	28.3	6.5	19.2	54
9236.250000	36.3	100.0	V	104.0	26.4	9.9	17.7	54
12637.500000	40.4	100.0	V	212.0	26.1	14.3	13.6	54
18000.000000	51.2	100.0	V	30.0	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)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19117.750000	51.8	100.0	V	90.0	52.4	-0.6	22.2	74
19310.062500	51.8	100.0	H	255.0	52.0	-0.2	22.2	74
21801.625000	52.9	100.0	V	90.0	55.0	-2.1	21.1	74
23222.187500	53.4	100.0	H	270.0	53.5	-0.1	20.6	74
24820.187500	52.2	100.0	V	92.0	52.0	0.2	21.8	74
24886.062500	53.7	100.0	H	201.0	53.2	0.5	20.3	74

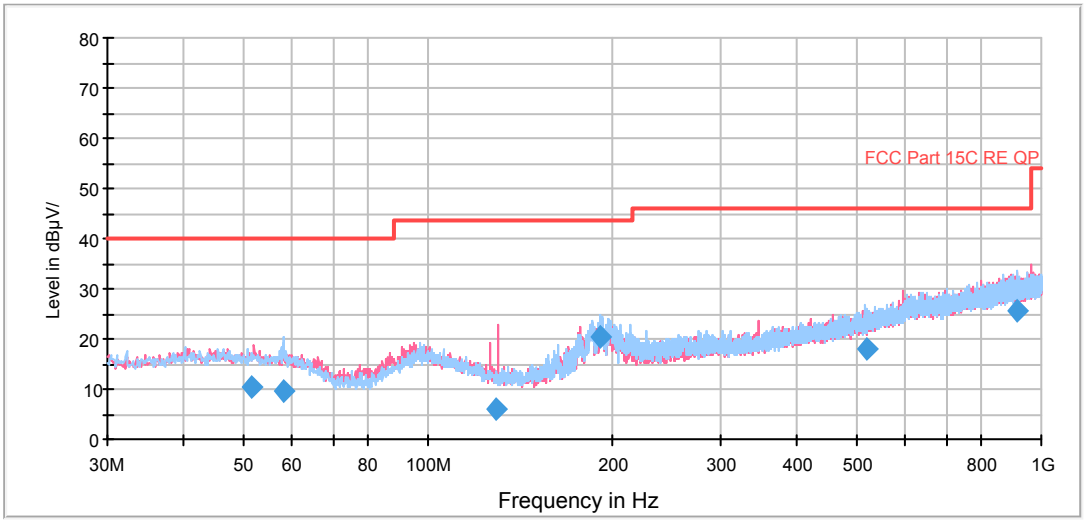
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18938.187500	40.2	100.0	V	253.0	40.2	0.0	13.8	54
19455.625000	40.6	100.0	V	102.0	40.6	0.0	13.4	54
21164.125000	41.0	100.0	H	219.0	42.5	-1.5	13.0	54
21878.125000	41.7	100.0	H	255.0	43.4	-1.7	12.3	54
24844.625000	40.8	100.0	V	148.0	40.5	0.3	13.2	54
24876.500000	41.5	100.0	V	263.0	41.0	0.5	12.5	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

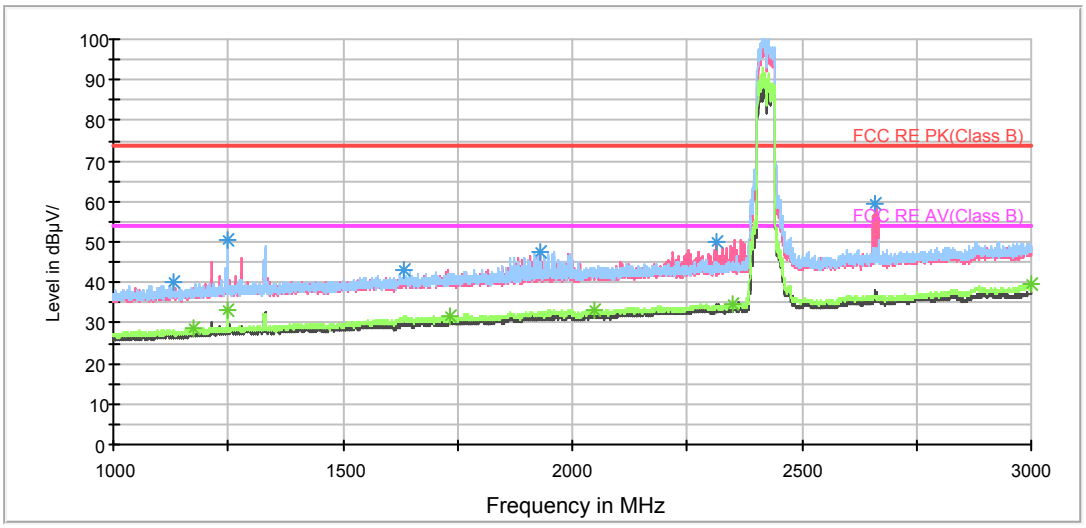
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
51.587500	10.3	100.0	V	22.0	23.4	-13.1	29.7	40.0
58.051250	9.6	125.0	H	63.0	22.3	-12.7	30.4	40.0
129.431250	5.9	125.0	V	270.0	15.4	-9.5	37.6	43.5
191.501250	20.2	125.0	H	277.0	31.9	-11.7	23.3	43.5
517.987500	18.0	114.0	H	237.0	39.0	-21.0	28.0	46.0
915.810000	25.6	125.0	H	17.0	52.6	-27.0	20.4	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

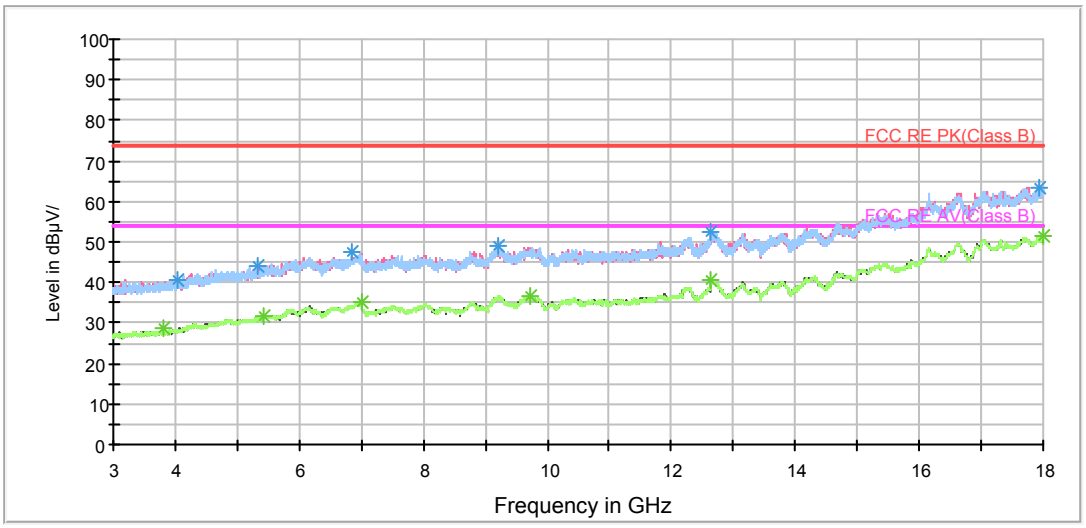
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1129.250000	39.9	100.0	H	0.0	48.3	-8.4	34.1	74
1247.250000	50.5	100.0	H	183.0	58.5	-8.0	23.5	74
1633.500000	42.9	100.0	H	55.0	47.6	-4.7	31.1	74
1929.750000	47.7	100.0	V	235.0	51.4	-3.7	26.3	74
2314.000000	49.8	100.0	V	209.0	51.7	-1.9	24.2	74
2657.750000	59.2	100.0	V	332.0	58.8	0.4	14.8	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)
1174.000000	28.7	100.0	H	0.0	36.8	-8.1	25.3	54
1247.250000	33.2	100.0	H	183.0	41.2	-8.0	20.8	54
1732.000000	31.8	100.0	H	0.0	36.6	-4.8	22.2	54
2050.000000	33.2	100.0	H	43.0	36.4	-3.2	20.8	54
2350.500000	34.9	100.0	H	43.0	36.2	-1.3	19.1	54
2999.250000	39.7	100.0	H	12.0	37.4	2.3	14.3	54

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

RE 3-18GHz PK+AV_BELL SWEEP



Radiates Emission from 3GHz to 18GHz

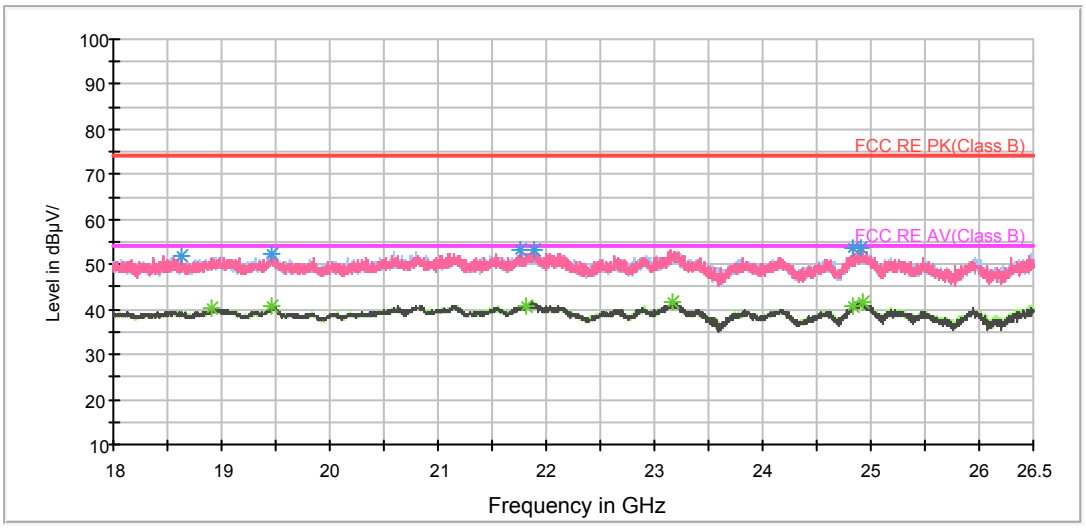
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4020.000000	40.7	105.0	V	91.0	41.9	-1.2	33.3	74
5315.625000	44.0	155.0	H	208.0	41.6	2.4	30.0	74
6858.750000	47.5	155.0	H	277.0	41.7	5.8	26.5	74
9210.000000	48.8	205.0	H	0.0	38.7	10.1	25.2	74
12645.000000	52.6	155.0	H	254.0	38.2	14.4	21.4	74
17921.250000	63.3	205.0	H	63.0	37.6	25.7	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)
3795.000000	28.6	205.0	V	138.0	30.3	-1.7	25.4	54
5433.750000	31.7	105.0	V	324.0	28.9	2.8	22.3	54
6995.625000	34.9	155.0	V	41.0	28.4	6.5	19.1	54
9738.750000	36.7	155.0	V	41.0	26.7	10.0	17.3	54
12641.250000	40.8	205.0	V	230.0	26.3	14.5	13.2	54
18000.000000	51.5	205.0	H	0.0	26.0	25.5	2.5	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)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18634.312500	51.8	100.0	H	193.0	51.7	0.1	22.2	74
19456.687500	52.4	100.0	V	90.0	52.4	0.0	21.6	74
21760.187500	53.2	100.0	H	220.0	55.5	-2.3	20.8	74
21886.625000	53.3	100.0	H	238.0	54.9	-1.6	20.7	74
24842.500000	53.6	100.0	V	203.0	53.3	0.3	20.4	74
24913.687500	53.5	100.0	V	222.0	52.8	0.7	20.5	74

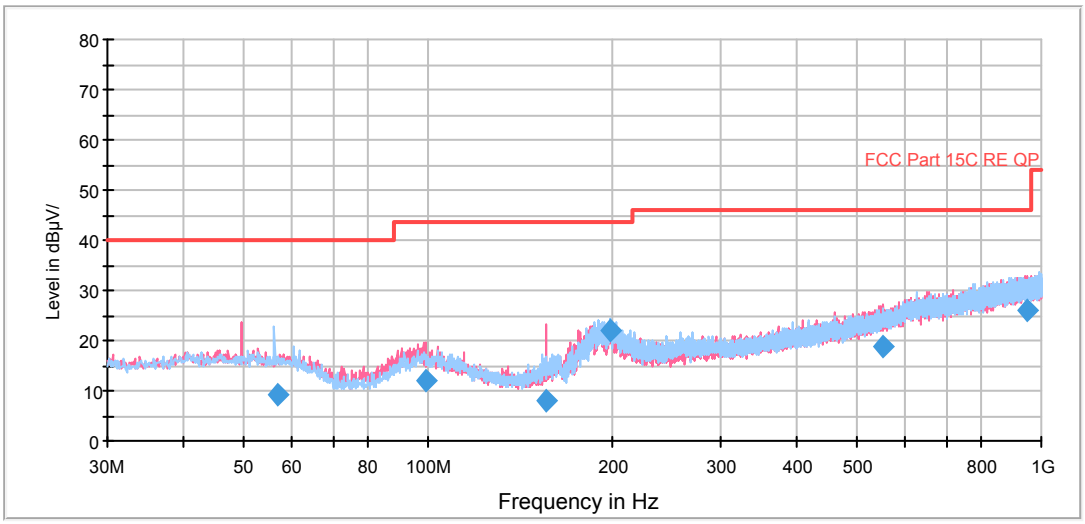
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18909.500000	40.3	100.0	H	270.0	40.2	0.1	13.7	54
19460.937500	40.7	100.0	V	90.0	40.6	0.1	13.3	54
21813.312500	40.9	100.0	V	90.0	42.9	-2.0	13.1	54
23165.875000	41.5	100.0	H	256.0	41.6	-0.1	12.5	54
24840.375000	40.9	100.0	V	121.0	40.6	0.3	13.1	54
24917.937500	41.5	100.0	V	270.0	40.8	0.7	12.5	54

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

802.11n (HT40) CH5

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)
56.790000	9.2	125.0	H	26.0	22.0	-12.8	30.8	40.0
99.152500	12.1	116.0	V	269.0	25.2	-13.1	31.4	43.5
156.417500	8.2	100.0	V	318.0	17.7	-9.5	35.3	43.5
198.248750	21.8	125.0	H	277.0	33.8	-12.0	21.7	43.5
553.841250	18.8	100.0	V	277.0	40.5	-21.7	27.2	46.0
947.221250	26.0	125.0	V	344.0	53.2	-27.2	20.0	46.0

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

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

3. Margin = Limit – Quasi-Peak