

Report No.: AR/2020/C001004

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FCC TEST REPORT

Application No.: AR/2020/C0010

Applicant: Xiaomi Communications Co., Ltd.

Address of Applicant #019, 9th Floor, Building 6, 33 Xi'ergi Middle Road, Haidian District, Beijing, China,

100085

Manufacturer: Xiaomi Communications Co., Ltd.

Address of Manufacturer #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China,

100085

EUT Description: Mobile Phone Model No.: M2012K11G Trade Mark: Xiaomi

2AFZZK11G FCC ID:

47 CFR FCC Part 2, Subpart J Standards:

47 CFR Part 15, Subpart C

Date of Receipt: 2021/1/31

Date of Test: 2021/1/31 to 2021/3/19

Date of Issue: 2021/3/19

Test Result: PASS *

Authorized Signature:

Derek Yang Wireless Laboratory Manager



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In the configuration tested, the EUT detailed in this report complied with the standards specified above.



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Version 1

	Revision Record					
Version	Chapter	Date	Modifier	Remark		
01		2021-03-19		Original		

Authorized for issue by:		
Prepared By	Dee.Zheng	
	(Dee Zheng) /Project Engineer	
Checked By	Samil	
	(Daniel Wang) /Reviewer	



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Test Summary 2

Test Item	Test Requirement	Test Method	Test Result	Result	Test Lab*
AC Power Line Conducted Emission	15.207	ANSI C63.10 2013	Clause 4.2	PASS	В
Duty Cycle			Clause 4.3	PASS	Α
Conducted Output Power	15.247 (b)(3)	ANSI C63.10 2013	Clause 4.4	PASS	Α
DTS (6 dB) Bandwidth & 99% Occupied Bandwidth	15.247 (a)(2)	ANSI C63.10 2013	Clause 4.5	PASS	Α
Power Spectral Density	15.247 (e)	ANSI C63.10 2013	Clause 4.6	PASS	Α
Band-edge for RF Conducted Emissions	15.247(d)	ANSI C63.10 2013	Clause 4.7	PASS	Α
RF Conducted Spurious Emissions	15.247(d)	ANSI C63.10 2013	Clause 4.8	PASS	Α
Radiated Spurious Emissions	15.247(d);15.205/15.209	ANSI C63.10 2013	Clause 4.9	PASS	В
Restricted bands around fundamental frequency (Radiated Emission)	15.247(d);15.205/15.209	ANSI C63.10 2013	Clause 4.10	PASS	В





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General Information 3

3.1 Details of Client

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Address of Applicant	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer:	Xiaomi Communications Co., Ltd.
Address of Manufacturer	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

3.2 Test Location

Lab A:

Company:	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
Address:	No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China
Post code:	518057

Lab B:

Company:	SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD.
Address:	1/F, Unit D, Building 1, Kanghong Orange Technology Park, No.137, Keyuan 3rd Road, Fengdong New City, Xi'an, Shaanxi China
Post code:	710086





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3.1 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

Lab A:

A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC -Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

Lab B:

A2LA (Certificate No. 4854.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

Designation Number: CN1271.





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3.2 General Description of EUT

EUT Description:	Mobile Phone		
Model No.:	M2012K11G		
Trade Mark:	Xiaomi		
Hardware Version:	P2.1		
Software Version:	MIUI12		
IEEE 802.11 WLAN Mode Supported	 ⊠ 802.11B (20 MHz channel bandwidth), ⊠ 802.11G (20 MHz channel bandwidth) ⊠ 802.11N (20 MHz channel bandwidth), ⊠ 802.11N (40 MHz channel bandwidth) ⊠ 802.11AX (20 MHz channel bandwidth), ⊠ 802.11AX (40 MHz channel bandwidth) 		
Operation Frequency:	2400 MHz -2483.5MHz fc = 2407 MHz + N * 5 MHz, where: -fc = "Operating Frequency" in MHz, -N = "Channel Number" with the range from 1 to 11 for the 20 MHz channel bandwidth, or 3 to 9 for the 40 MHz channel bandwidth.		
Type of Modulation:	IEEE for 802.11B: DSSS IEEE for 802.11G: OFDM IEEE for 802.11N(HT20)/AX(HE20): OFDM/OFDMA IEEE for 802.11N(HT40)/AX(HE40): OFDM /OFDMA		
Sample Type:	⊠ Portable Device,		
Antenna Type:	PIFA Antenna		
Antenna Ports	⊠ Ant 1, ⊠ Ant 2, □ Ant 3		
Smart System	☐ SISO (for 802.11B/G/N), ☑ MIMO (for 802.11N): 2 Tx & 2 Rx, ☐ Diversity (for 802.11B/G): Tx & Rx		
Antenna Gain:	-3.1dBi(ANT1); -3.4dBi(ANT2);		

	Operation Frequency of each channel (802.11B/G/N HT20/AX HE20)						
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz		
	Opera	ation Freque	ncy of each cl	hannel (802.1	1N HT40/AX I	HE40)	
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	2422MHz	6	2437MHz	9	2452MHz		
4	2427MHz	7	2442MHz	·			
5	2432MHz	8	2447MHz				



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Remark:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency for 802.11B/G/N (HT20)/AX (HE20)	Frequency for 802.11N (HT40) /AX (HE40)
The Lowest channel	2412MHz	2422MHz
The Middle channel	2437MHz	2437MHz
The Highest channel	2462MHz	2452MHz

3.3 Test Environment and Mode

Operating Environment:				
Temperature:	25.0 °C			
Humidity:	50 % RH			
Atmospheric Pressure:	101.30 KPa			
Test mode:				
Transmitting mode:	Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.			

3.4 Description of Support Units

The EUT has been tested independent unit.





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Test results and Measurement Data 4

4.1 Antenna Requirement

Standard requirement: 47 CFR Part 15C Section 15.203 /247(c)

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is -3.1dBi(ANT1); -3.4dBi(ANT2);





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4.2 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207			
Test Method:	ANSI C63.10: 2013			
Test Frequency Range:	150kHz to 30MHz			
Limit:	Fragues and range (MIII-)	Limit (dBuV)		
	Frequency range (MHz)	Quasi-peak	Average	
	0.15-0.5	66 to 56*	56 to 46*	
	0.5-5	0.5-5 56		
	5-30	60	50	
	* Decreases with the log	arithm of the frequency.		
Test Procedure:	* Decreases with the logarithm of the frequency. 1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of			
	In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.			



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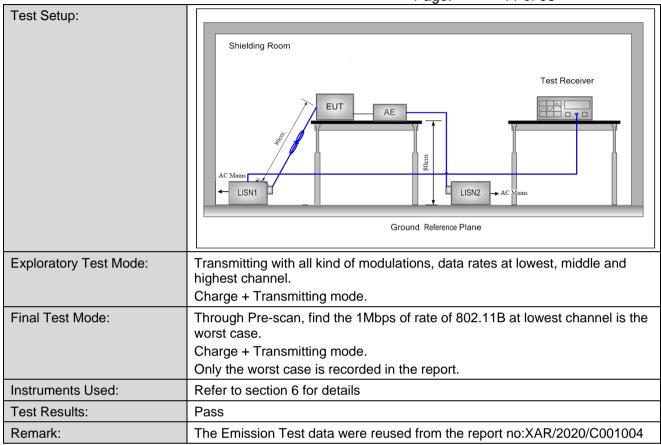
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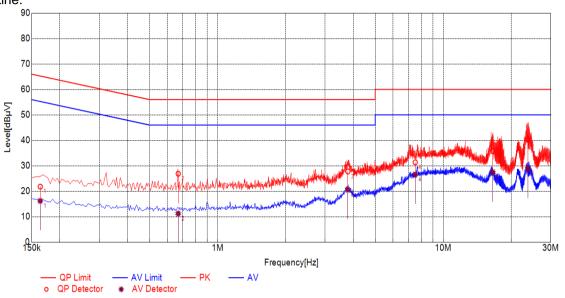
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Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live Line:



Test Graph

Final	Final Data List												
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Туре				
1	0.1638	10.10	21.80	65.27	43.47	16.20	55.27	39.07	L				
2	0.6693	10.10	26.90	56.00	29.10	11.21	46.00	34.79	L				
3	3.7813	10.10	27.75	56.00	28.25	20.59	46.00	25.41	L				
4	7.5182	10.10	31.34	60.00	28.66	26.58	50.00	23.42	L				
5	16.5932	10.11	35.76	60.00	24.24	27.44	50.00	22.56	L				
6	23.7356	10.11	40.38	60.00	19.62	28.93	50.00	21.07	L				



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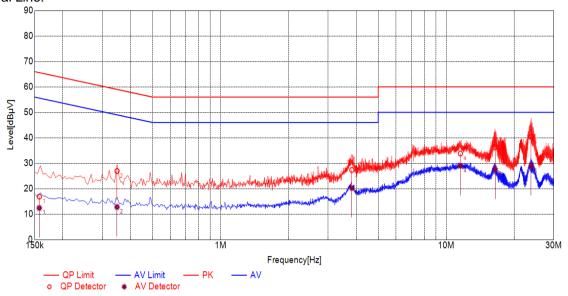
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Test Graph

Final	Final Data List												
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Туре				
1	0.1573	10.10	16.89	65.61	48.72	12.42	55.61	43.19	N				
2	0.3478	10.10	26.93	59.01	32.08	12.80	49.01	36.21	N				
3	3.8179	10.10	27.35	56.00	28.65	20.27	46.00	25.73	N				
4	11.5587	10.10	33.81	60.00	26.19	28.99	50.00	21.01	N				
5	16.4893	10.11	36.28	60.00	23.72	27.58	50.00	22.42	Ν				
6	23.7879	10.11	40.38	60.00	19.62	28.85	50.00	21.15	N				

Remarks:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.



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4.3 Duty Cycle

The detailed test data see: Appendix

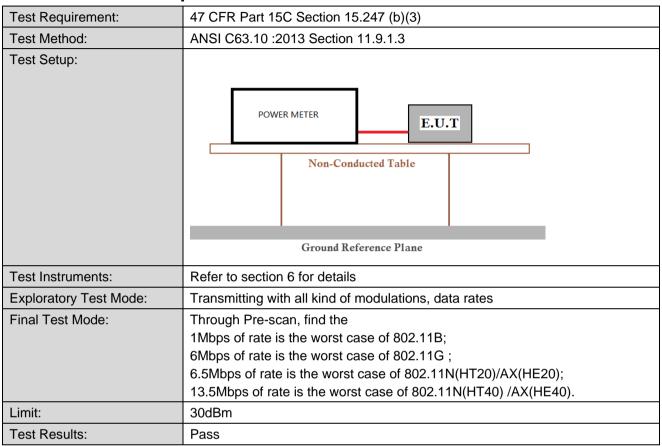




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4.4 Conducted Output Power



The detailed test data see: Appendix C





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4.5 DTS (6 dB) Bandwidth & 99% Occupied Bandwidth

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(2)					
Test Method:	ANSI C63.10: 2013 Section 11.8.1 Option 1					
Test Setup:	Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane					
Instruments Used:	Refer to section 6 for details					
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates					
Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11G; 6.5Mbps of rate is the worst case of 802.11N(HT20)/AX(HE20); 13.5Mbps of rate is the worst case of 802.11N(HT40) /AX(HE40).					
Limit:	≥ 500 kHz					
Test Results:	Pass					

The detailed test data see: Appendix C

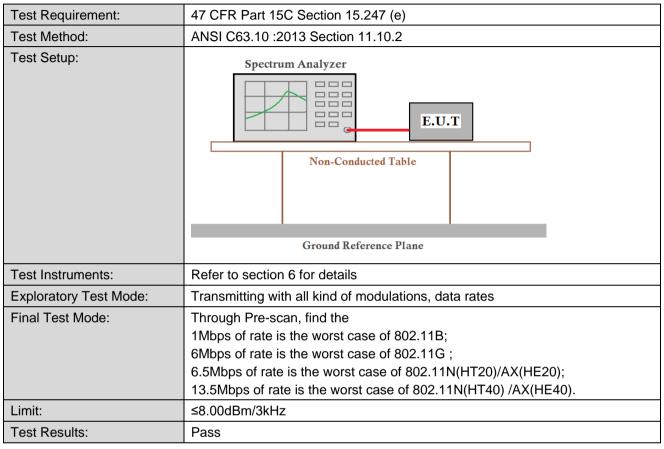




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4.6 Power Spectral Density



The detailed test data see: Appendix C

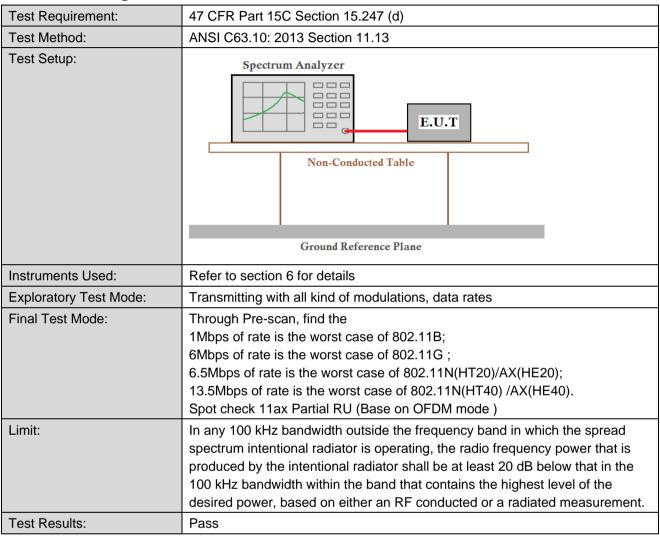




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4.7 Band-edge for RF Conducted Emissions



The detailed test data see: Appendix C

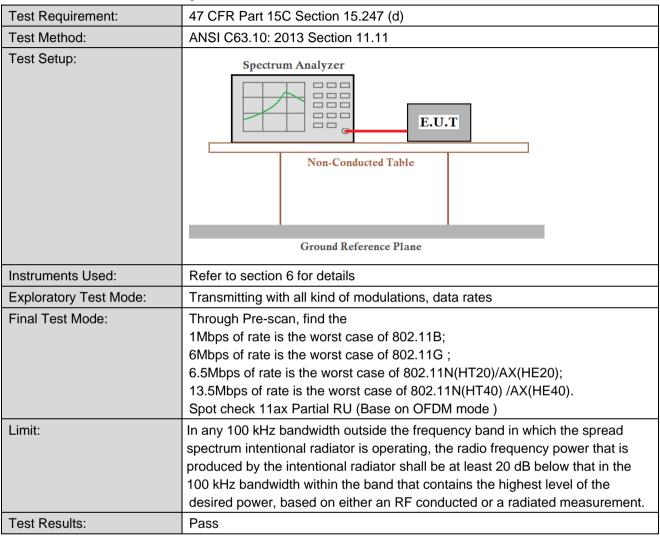




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4.8 RF Conducted Spurious Emissions



The detailed test data see: Appendix C





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4.9 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15C Section	47 CFR Part 15C Section 15.209 and 15.205										
Test Method:	ANSI C63.10 :2013 Sect	ion 11.12										
Test Site:	Measurement Distance:	3m or 10m (Semi-	Anechoic Ch	amber)								
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark							
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak							
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average							
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak							
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak							
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average							
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak							
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak							
		Peak	1MHz	3MHz	Peak							
	Ab 4011-	Peak	1MHz	10Hz	Average							
	Above 1GHz			(DC≥0.98) ≥1/T								
				√ / (DC<0.98)								
Limit:		Field strength	Limit	(DC<0.90)	Measurement							
Limit	Frequency	(microvolt/meter)		Remark	distance (m)							
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300							
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30							
	1.705MHz-30MHz	30	-	-	30							
	30MHz-88MHz	100	40.0	Quasi-peak	3							
	88MHz-216MHz	150	43.5	Quasi-peak	3							
	216MHz-960MHz	200	46.0	Quasi-peak	3							
	960MHz-1GHz	500	54.0	Quasi-peak	3							
	Above 1GHz	500	54.0	Average	3							
	Remark: 15.35(b),Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.											



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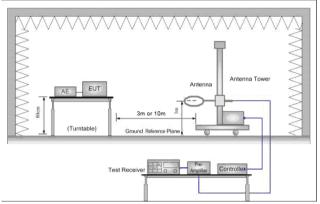
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Test Setup:



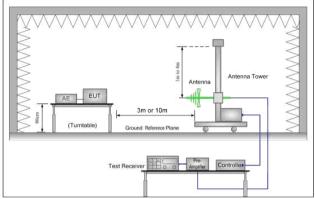


Figure 1. Below 30MHz

Figure 2. 30MHz to 1GHz

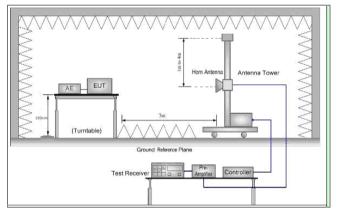


Figure 3. Above 1 GHz

Test Procedure:

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- e. Use the following spectrum analyzer settings:
 - Span shall wide enough to fully capture the emission being (1) measured:
 - (2)Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz; $VBW \ge RBW$; Sweep = auto;
 - Detector function = peak; Trace = max hold for peak
 - (3)For average measurement: use duty cycle correction factor method per 15.35(c).



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	: a.g.: == :: : :
	Duty cycle = On time/100 milliseconds
	On time = N 1 *L 1 +N 2 *L 2 ++N n-1 *LN n-1 +N n *L n
	Where N 1 is number of type 1 pulses, L 1 is length of type 1 pulses, etc.
	Average Emission Level = Peak Emission Level + 20*log(Duty cycle)
	f. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters(for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
	g. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
	h. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
	i. Test the EUT in the lowest channel, the middle channel ,the Highest channel.
	j. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.
	k. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
	Charge + Transmitting mode.
Final Test Mode:	Pretest the EUT at Charge + Transmitting mode.
	Through Pre-scan, find the
	1Mbps of rate is the worst case of 802.11B;
	6Mbps of rate is the worst case of 802.11G;
	6.5Mbps of rate is the worst case of 802.11N(HT20)/AX(HE20);
	13.5Mbps of rate is the worst case of 802.11N(HT40)AX(HE40);
	Spot check 11ax Partial RU (Base on OFDM mode)
	For below 1GHz, through Pre-scan, find the 1Mbps of rate of 802.11B at lowest channel is the worst case. Only the worst case is recorded in the report.
Instruments Used:	Refer to section 6 for details
Test Results:	Pass
Remark:	The Emission Test data were reused from the report no:XAR/2020/C001004





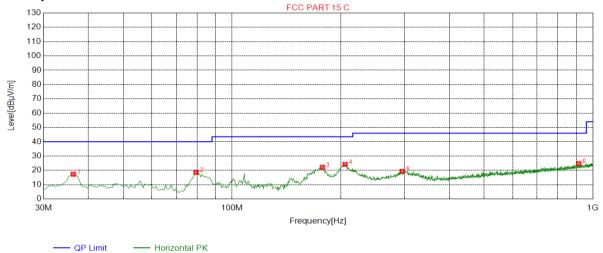
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Radiated emission below 1GHz 4.9.1

Charge + Transmitting 4.9.1.1

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	36.3082	17.32	-32.34	40.00	22.68	100	235	Horizontal					
2	79.4947	18.59	-35.79	40.00	21.41	200	102	Horizontal					
3	177.999	22.15	-33.05	43.50	21.35	100	211	Horizontal					
4	205.657	24.21	-30.70	43.50	19.29	200	220	Horizontal					
5	295.913	19.29	-27.97	46.00	26.71	100	344	Horizontal					
6	914.112	24.72	-15.02	46.00	21.28	100	60	Horizontal					

Final Data List



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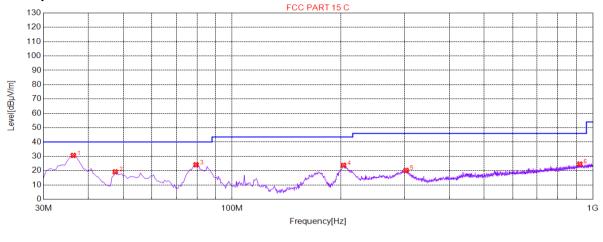
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Test Graph



QP Limit QP Detector

Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	36.3082	30.64	-32.34	40.00	9.36	200	16	Vertical					
2	47.4687	19.16	-30.20	40.00	20.84	100	306	Vertical					
3	79.4947	24.12	-35.79	40.00	15.88	100	256	Vertical					
4	203.7169	23.76	-30.74	43.50	19.74	200	322	Vertical					
5	303.6768	20.13	-27.75	46.00	25.87	100	359	Vertical					
6	920.4202	24.57	-14.92	46.00	21.43	100	162	Vertical					

Final Data List



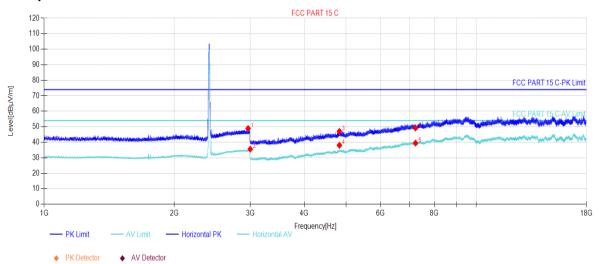


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Transmitter emission above 1GHz 4.9.2 4.9.2.1 802.11B Channel 1

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2965.196	48.90	7.25	74.00	25.10	132	142	Horizontal					
2	2999.800	35.57	7.41	54.00	18.43	154	24	Horizontal					
3	4824.000	47.01	-10.56	74.00	26.99	151	205	Horizontal					
4	4824.000	38.05	-10.56	54.00	15.95	134	227	Horizontal					
5	7236.000	39.49	-2.59	54.00	14.51	149	303	Horizontal					
6	7236.000	49.19	-2.59	74.00	24.81	162	216	Horizontal					

Final Data List



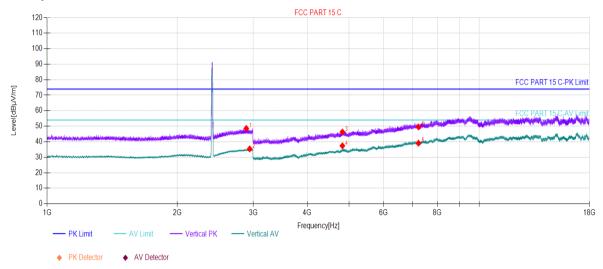


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802.11B Channel 1 4.9.2.2

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2890.389	48.56	6.93	74.00	25.44	254	323	Vertical					
2	2942.994	35.39	7.15	54.00	18.61	245	113	Vertical					
3	4824.000	46.28	-10.56	74.00	27.72	261	173	Vertical					
4	4824.000	37.38	-10.56	54.00	16.62	235	173	Vertical					
5	7236.000	39.08	-2.59	54.00	14.92	241	151	Vertical					
6	7236.000	49.56	-2.59	74.00	24.44	241	303	Vertical					

Final Data List



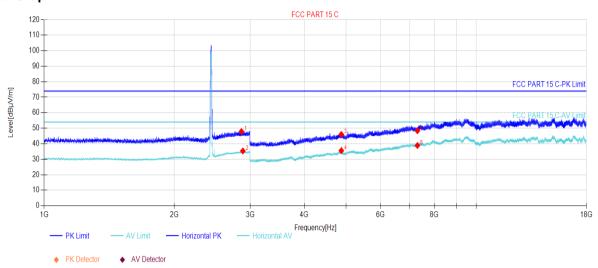


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802.11B Channel 6 4.9.2.3

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2862.186	47.87	6.87	74.00	26.13	154	158	Horizontal					
2	2883.988	35.33	6.91	54.00	18.67	135	196	Horizontal					
3	4874.000	46.01	-10.40	74.00	27.99	142	9	Horizontal					
4	4874.000	35.55	-10.40	54.00	18.45	165	194	Horizontal					
5	7311.000	38.88	-2.58	54.00	15.12	124	205	Horizontal					
6	7311.000	48.40	-2.58	74.00	25.60	135	281	Horizontal					

Final Data List



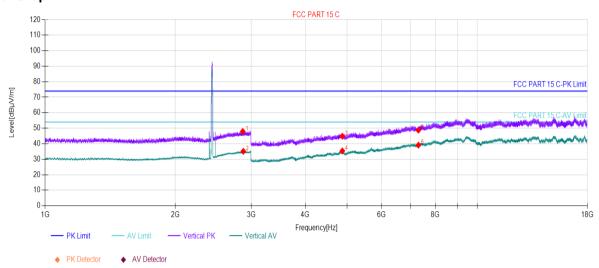


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802.11B Channel 6 4.9.2.4

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2866.786	47.93	6.88	74.00	26.07	241	136	Vertical					
2	2874.987	35.11	6.89	54.00	18.89	245	354	Vertical					
3	4874.000	44.86	-10.40	74.00	29.14	235	86	Vertical					
4	4874.000	35.37	-10.40	54.00	18.63	244	303	Vertical					
5	7311.000	39.09	-2.58	54.00	14.91	261	271	Vertical					
6	7311.000	48.76	-2.58	74.00	25.24	241	303	Vertical					

Final Data List



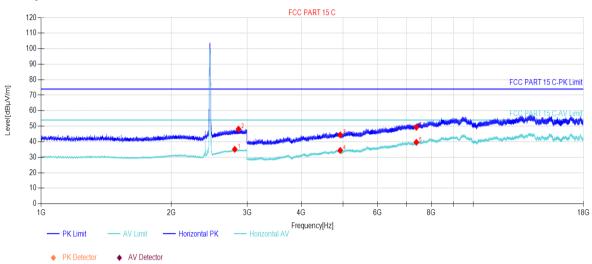


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802.11B Channel 11 4.9.2.5

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2806.380	35.10	6.74	54.00	18.90	164	85	Horizontal					
2	2863.386	48.13	6.87	74.00	25.87	174	24	Horizontal					
3	4924.000	44.40	-10.22	74.00	29.60	164	226	Horizontal					
4	4924.000	34.41	-10.22	54.00	19.59	141	226	Horizontal					
5	7386.000	39.60	-2.06	54.00	14.40	133	130	Horizontal					
6	7386.000	49.30	-2.06	74.00	24.70	166	226	Horizontal					

Final Data List



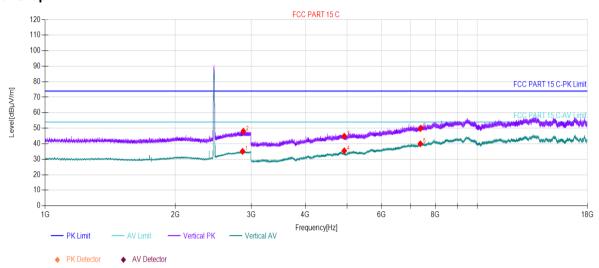


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802.11B Channel 11 4.9.2.6

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2864.386	35.10	6.87	54.00	18.90	265	41	Vertical			
2	2875.587	48.04	6.90	74.00	25.96	245	298	Vertical			
3	4924.000	44.82	-10.22	74.00	29.18	258	183	Vertical			
4	4924.000	35.44	-10.22	54.00	18.56	277	303	Vertical			
5	7386.000	39.99	-2.06	54.00	14.01	278	173	Vertical			
6	7386.000	49.79	-2.06	74.00	24.21	268	260	Vertical			

Final Data List



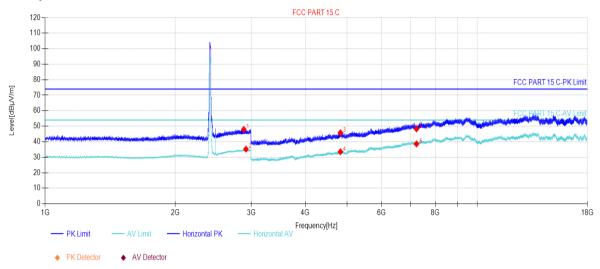


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802.11G Channel 1 4.9.2.7

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2882.388	47.92	6.91	74.00	26.08	154	252	Horizontal			
2	2916.391	35.24	7.03	54.00	18.76	135	146	Horizontal			
3	4824.000	45.77	-10.56	74.00	28.23	162	259	Horizontal			
4	4824.000	33.52	-10.56	54.00	20.48	174	183	Horizontal			
5	7236.000	38.61	-2.59	54.00	15.39	168	41	Horizontal			
6	7236.000	48.32	-2.59	74.00	25.68	174	52	Horizontal			

Final Data List



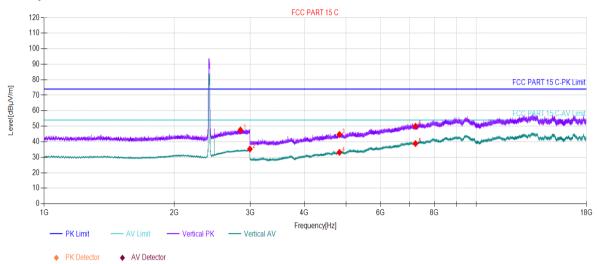


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802.11G Channel 1 4.9.2.8

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2846.384	47.59	6.83	74.00	26.41	234	213	Vertical			
2	2994.399	35.29	7.38	54.00	18.71	214	274	Vertical			
3	4824.000	44.67	-10.56	74.00	29.33	219	206	Vertical			
4	4824.000	33.15	-10.56	54.00	20.85	204	314	Vertical			
5	7236.000	38.83	-2.59	54.00	15.17	236	10	Vertical			
6	7236.000	50.03	-2.59	74.00	23.97	198	53	Vertical			

Final Data List



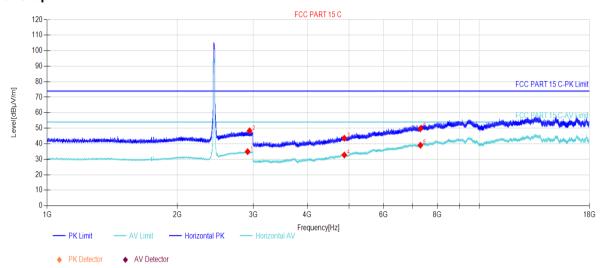


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802.11G Channel 6 4.9.2.9

Test Graph



Suspected List

Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity		
1	2911.191	34.89	7.00	54.00	19.11	135	198	Horizontal		
2	2940.994	48.31	7.14	74.00	25.69	154	30	Horizontal		
3	4874.000	43.53	-10.40	74.00	30.47	148	181	Horizontal		
4	4874.000	32.72	-10.40	54.00	21.28	168	347	Horizontal		
5	7311.000	39.04	-2.58	54.00	14.96	159	138	Horizontal		
6	7311.000	49.73	-2.58	74.00	24.27	152	7	Horizontal		

Final Data List



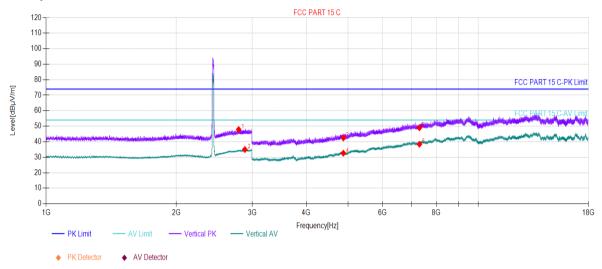


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802.11G Channel 6 4.9.2.10

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2790.179	47.87	6.63	74.00	26.13	231	197	Vertical			
2	2884.188	34.99	6.92	54.00	19.01	214	86	Vertical			
3	4874.000	42.48	-10.40	74.00	31.52	224	64	Vertical			
4	4874.000	32.62	-10.40	54.00	21.38	198	97	Vertical			
5	7311.000	38.40	-2.58	54.00	15.60	178	141	Vertical			
6	7311.000	49.01	-2.58	74.00	24.99	189	216	Vertical			

Final Data List



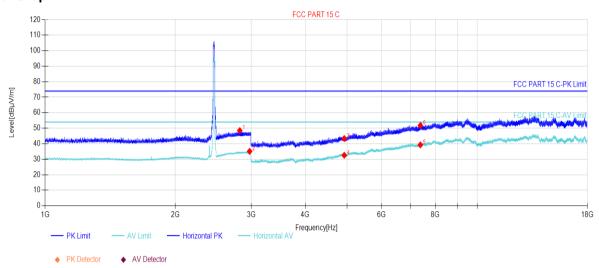


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802.11G Channel 11 4.9.2.11

Test Graph



Suspected List

Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity		
1	2821.782	48.48	6.78	74.00	25.52	158	230	Horizontal		
2	2973.397	35.11	7.29	54.00	18.89	151	152	Horizontal		
3	4924.000	43.36	-10.22	74.00	30.64	156	271	Horizontal		
4	4924.000	32.57	-10.22	54.00	21.43	168	217	Horizontal		
5	7386.000	39.25	-2.06	54.00	14.75	172	357	Horizontal		
6	7386.000	51.78	-2.06	74.00	22.22	152	141	Horizontal		

Final Data List



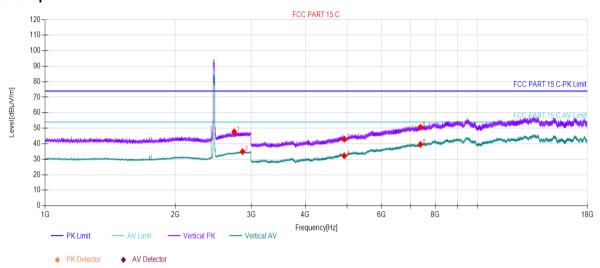


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802.11G Channel 11 4.9.2.12

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2739.574	47.68	6.11	74.00	26.32	150	174	Vertical			
2	2864.186	34.92	6.87	54.00	19.08	150	64	Vertical			
3	4924.000	42.99	-10.22	74.00	31.01	150	357	Vertical			
4	4924.000	32.21	-10.22	54.00	21.79	150	301	Vertical			
5	7386.000	39.53	-2.06	54.00	14.47	150	347	Vertical			
6	7386.000	50.63	-2.06	74.00	23.37	150	147	Vertical			

Final Data List



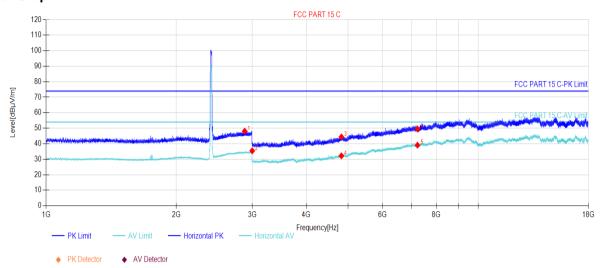


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802.11N20 Channel 1 4.9.2.13

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2880.988	48.05	6.91	74.00	25.95	143	259	Horizontal			
2	2999.199	35.45	7.41	54.00	18.55	165	80	Horizontal			
3	4824.000	44.36	-10.56	74.00	29.64	158	30	Horizontal			
4	4824.000	32.21	-10.56	54.00	21.79	152	357	Horizontal			
5	7236.000	39.09	-2.59	54.00	14.91	153	41	Horizontal			
6	7236.000	49.52	-2.59	74.00	24.48	168	151	Horizontal			

Final Data List



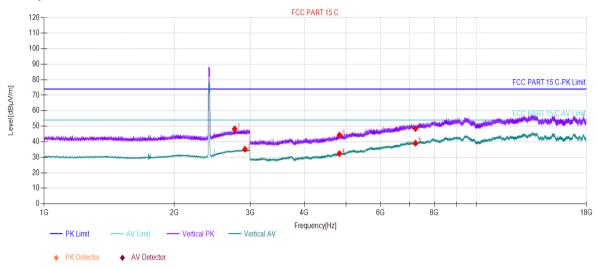


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802.11N20 Channel 1 4.9.2.14

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2760.576	48.26	6.32	74.00	25.74	234	190	Vertical			
2	2916.391	35.12	7.03	54.00	18.88	224	118	Vertical			
3	4824.000	44.21	-10.56	74.00	29.79	204	53	Vertical			
4	4824.000	32.32	-10.56	54.00	21.68	218	249	Vertical			
5	7236.000	39.05	-2.59	54.00	14.95	195	282	Vertical			
6	7236.000	48.51	-2.59	74.00	25.49	189	184	Vertical			

Final Data List



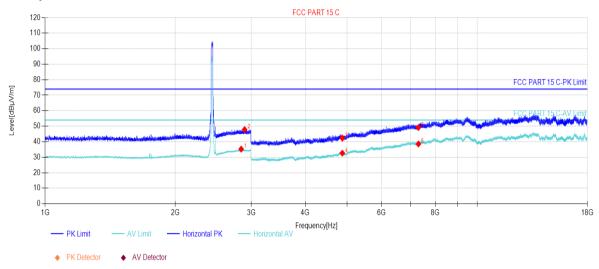


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802.11N20 Channel 6 4.9.2.15

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2843.184	35.26	6.83	54.00	18.74	152	64	Horizontal			
2	2895.389	47.84	6.94	74.00	26.16	158	188	Horizontal			
3	4874.000	42.32	-10.40	74.00	31.68	167	20	Horizontal			
4	4874.000	32.64	-10.40	54.00	21.36	159	20	Horizontal			
5	7311.000	38.57	-2.58	54.00	15.43	154	95	Horizontal			
6	7311.000	49.20	-2.58	74.00	24.80	149	172	Horizontal			

Final Data List



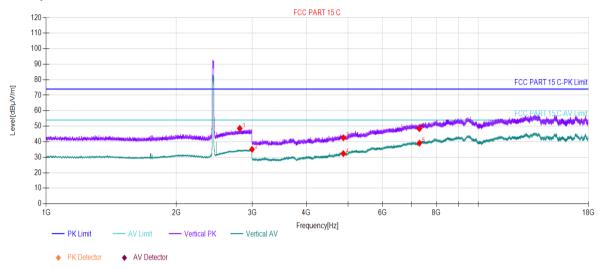


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802.11N20 Channel 6 4.9.2.16

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2806.580	48.61	6.74	74.00	25.39	241	135	Vertical			
2	2996.199	35.10	7.39	54.00	18.90	215	152	Vertical			
3	4874.000	42.56	-10.40	74.00	31.44	205	205	Vertical			
4	4874.000	32.37	-10.40	54.00	21.63	238	314	Vertical			
5	7311.000	39.10	-2.58	54.00	14.90	198	325	Vertical			
6	7311.000	48.43	-2.58	74.00	25.57	195	43	Vertical			

Final Data List



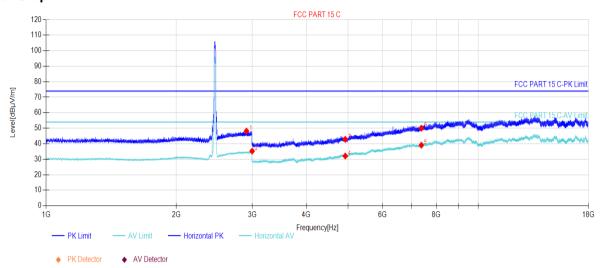


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802.11N20 Channel 11 4.9.2.17

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2908.790	48.16	6.99	74.00	25.84	158	92	Horizontal			
2	2997.799	35.25	7.40	54.00	18.75	156	176	Horizontal			
3	4924.000	42.85	-10.22	74.00	31.15	149	8	Horizontal			
4	4924.000	32.10	-10.22	54.00	21.90	167	97	Horizontal			
5	7386.000	39.04	-2.06	54.00	14.96	163	173	Horizontal			
6	7386.000	49.99	-2.06	74.00	24.01	152	0	Horizontal			

Final Data List



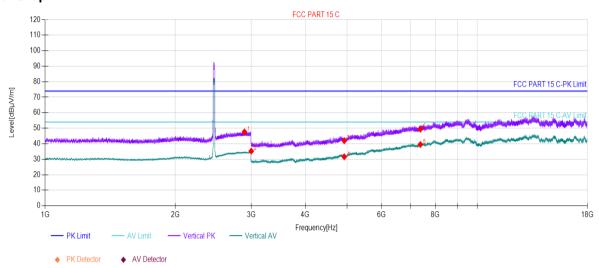


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802.11N20 Channel 11 4.9.2.18

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2892.989	47.62	6.93	74.00	26.38	153	242	Vertical			
2	2999.800	35.25	7.41	54.00	18.75	167	147	Vertical			
3	4924.000	41.97	-10.22	74.00	32.03	154	347	Vertical			
4	4924.000	31.60	-10.22	54.00	22.40	159	303	Vertical			
5	7386.000	39.52	-2.06	54.00	14.48	155	21	Vertical			
6	7386.000	49.43	-2.06	74.00	24.57	168	162	Vertical			

Final Data List



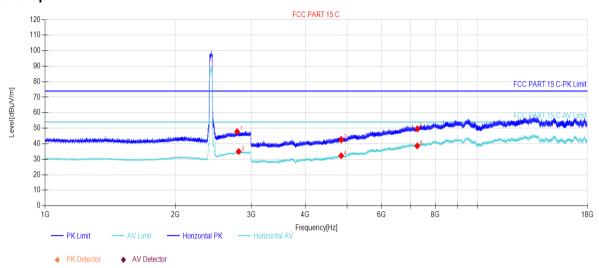


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802.11N40 Channel 3 4.9.2.19

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2782.578	47.82	6.55	74.00	26.18	153	163	Horizontal			
2	2804.580	34.97	6.74	54.00	19.03	158	13	Horizontal			
3	4844.000	42.45	-10.50	74.00	31.55	167	357	Horizontal			
4	4844.000	32.27	-10.50	54.00	21.73	149	249	Horizontal			
5	7266.000	38.61	-2.62	54.00	15.39	142	108	Horizontal			
6	7266.000	49.63	-2.62	74.00	24.37	156	281	Horizontal			

Final Data List



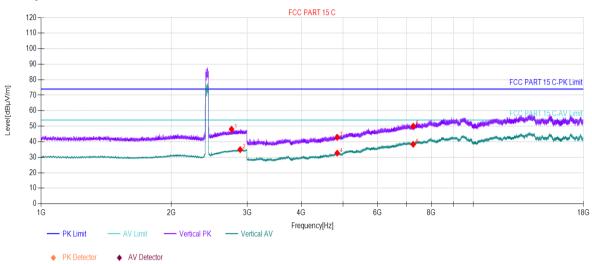


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802.11N40 Channel 3 4.9.2.20

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2758.375	48.08	6.30	74.00	25.92	211	164	Vertical			
2	2888.788	34.91	6.93	54.00	19.09	203	324	Vertical			
3	4844.000	42.79	-10.50	74.00	31.21	208	293	Vertical			
4	4844.000	32.66	-10.50	54.00	21.34	198	325	Vertical			
5	7266.000	38.35	-2.62	54.00	15.65	196	1	Vertical			
6	7266.000	50.04	-2.62	74.00	23.96	209	162	Vertical			

Final Data List



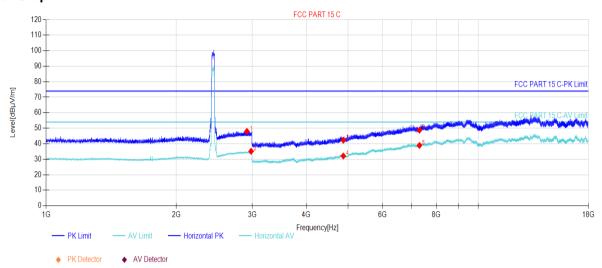


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802.11N40 Channel 6 4.9.2.21

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2915.591	47.96	7.02	74.00	26.04	146	349	Horizontal			
2	2981.398	35.15	7.32	54.00	18.85	158	186	Horizontal			
3	4874.000	42.25	-10.40	74.00	31.75	154	96	Horizontal			
4	4874.000	32.09	-10.40	54.00	21.91	143	139	Horizontal			
5	7311.000	38.93	-2.58	54.00	15.07	159	117	Horizontal			
6	7311.000	48.74	-2.58	74.00	25.26	167	8	Horizontal			

Final Data List



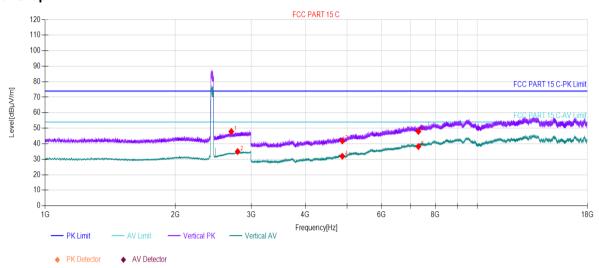


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802.11N40 Channel 6 4.9.2.22

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2696.969	47.86	5.69	74.00	26.14	214	19	Vertical			
2	2789.579	34.97	6.62	54.00	19.03	198	64	Vertical			
3	4874.000	41.83	-10.40	74.00	32.17	195	206	Vertical			
4	4874.000	31.93	-10.40	54.00	22.07	206	0	Vertical			
5	7311.000	38.21	-2.58	54.00	15.79	211	227	Vertical			
6	7311.000	47.93	-2.58	74.00	26.07	208	227	Vertical			

Final Data List



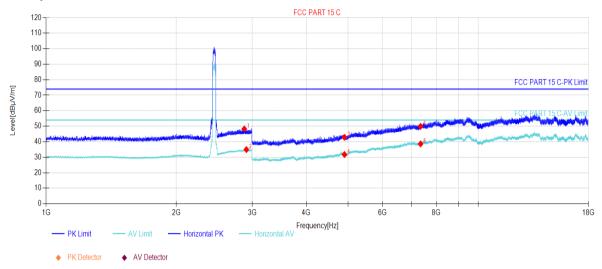


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802.11N40 Channel 9 4.9.2.23

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2874.987	48.25	6.89	74.00	25.75	149	218	Horizontal			
2	2907.190	34.95	6.98	54.00	19.05	162	251	Horizontal			
3	4904.000	42.87	-10.30	74.00	31.13	152	64	Horizontal			
4	4904.000	31.75	-10.30	54.00	22.25	158	193	Horizontal			
5	7356.000	38.59	-2.27	54.00	15.41	159	215	Horizontal			
6	7356.000	49.92	-2.27	74.00	24.08	167	237	Horizontal			

Final Data List



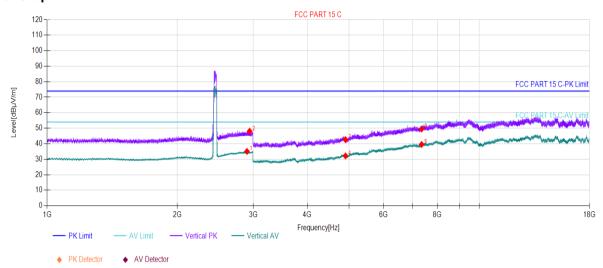


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802.11N40 Channel 9 4.9.2.24

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2900.990	35.05	6.95	54.00	18.95	208	291	Vertical			
2	2942.194	48.06	7.14	74.00	25.94	198	296	Vertical			
3	4904.000	42.62	-10.30	74.00	31.38	195	282	Vertical			
4	4904.000	32.14	-10.30	54.00	21.86	205	1	Vertical			
5	7356.000	39.54	-2.27	54.00	14.46	214	108	Vertical			
6	7356.000	49.51	-2.27	74.00	24.49	216	303	Vertical			

Final Data List



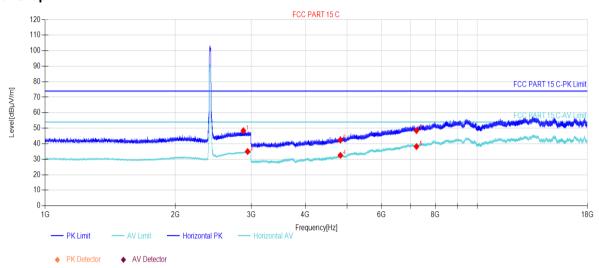


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802.11AX20 Channel 1 4.9.2.25

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2876.387	48.37	6.90	74.00	25.63	146	334	Horizontal			
2	2941.994	34.98	7.14	54.00	19.02	158	24	Horizontal			
3	4824.000	42.38	-10.56	74.00	31.62	156	141	Horizontal			
4	4824.000	32.52	-10.56	54.00	21.48	142	271	Horizontal			
5	7236.000	38.20	-2.59	54.00	15.80	152	54	Horizontal			
6	7236.000	48.50	-2.59	74.00	25.50	149	185	Horizontal			

Final Data List



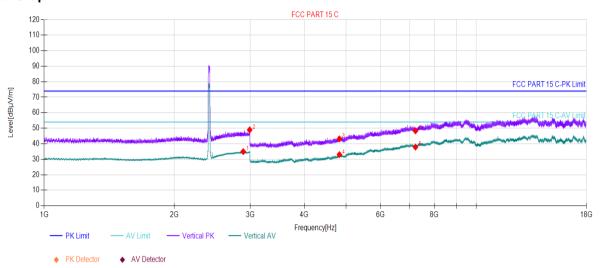


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802.11AX20 Channel 1 4.9.2.26

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2889.589	34.94	6.93	54.00	19.06	217	158	Vertical			
2	2990.599	48.97	7.37	74.00	25.03	198	24	Vertical			
3	4824.000	43.13	-10.56	74.00	30.87	189	74	Vertical			
4	4824.000	32.96	-10.56	54.00	21.04	203	325	Vertical			
5	7236.000	37.84	-2.59	54.00	16.16	205	63	Vertical			
6	7236.000	48.29	-2.59	74.00	25.71	209	347	Vertical			

Final Data List



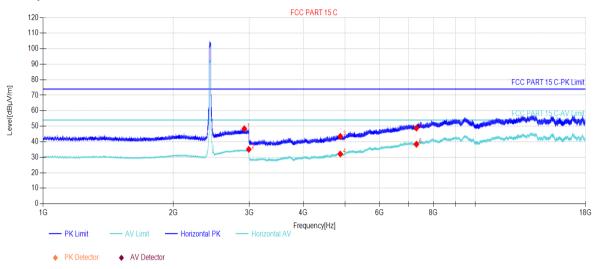


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802.11AX20 Channel 6 4.9.2.27

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2921.392	48.36	7.05	74.00	25.64	153	304	Horizontal			
2	2991.999	35.08	7.37	54.00	18.92	158	136	Horizontal			
3	4874.000	43.44	-10.40	74.00	30.56	167	75	Horizontal			
4	4874.000	32.09	-10.40	54.00	21.91	162	216	Horizontal			
5	7311.000	38.37	-2.58	54.00	15.63	142	128	Horizontal			
6	7311.000	48.82	-2.58	74.00	25.18	149	281	Horizontal			

Final Data List



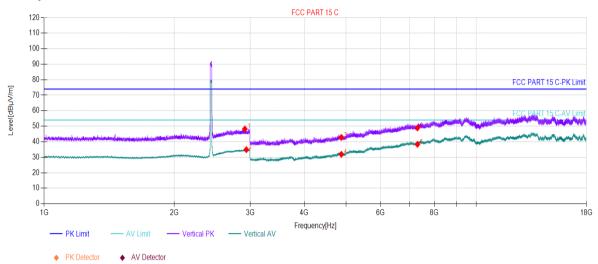


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802.11AX20 Channel 6 4.9.2.28

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2914.591	48.21	7.02	74.00	25.79	195	213	Vertical			
2	2937.593	34.89	7.12	54.00	19.11	191	41	Vertical			
3	4874.000	42.75	-10.40	74.00	31.25	204	74	Vertical			
4	4874.000	31.88	-10.40	54.00	22.12	206	248	Vertical			
5	7311.000	38.33	-2.58	54.00	15.67	212	117	Vertical			
6	7311.000	48.90	-2.58	74.00	25.10	219	270	Vertical			

Final Data List



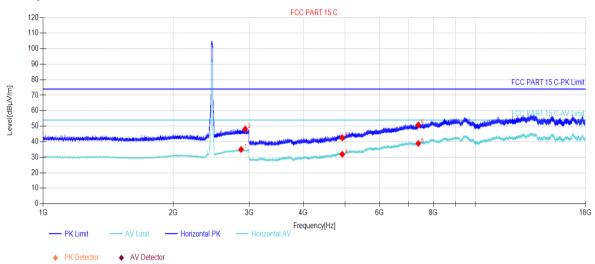


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802.11AX20 Channel 11 4.9.2.29

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2871.587	35.01	6.89	54.00	18.99	143	70	Horizontal			
2	2935.793	48.16	7.11	74.00	25.84	158	203	Horizontal			
3	4924.000	42.54	-10.22	74.00	31.46	154	84	Horizontal			
4	4924.000	31.91	-10.22	54.00	22.09	149	336	Horizontal			
5	7386.000	38.92	-2.06	54.00	15.08	159	117	Horizontal			
6	7386.000	50.82	-2.06	74.00	23.18	162	215	Horizontal			

Final Data List



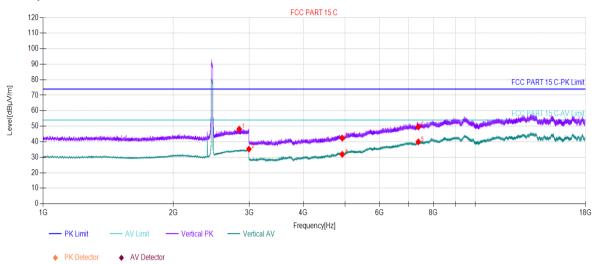


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802.11AX20 Channel 11 4.9.2.30

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2843.784	48.16	6.83	74.00	25.84	204	324	Vertical			
2	2994.799	35.26	7.39	54.00	18.74	198	357	Vertical			
3	4924.000	42.32	-10.22	74.00	31.68	209	347	Vertical			
4	4924.000	31.87	-10.22	54.00	22.13	189	41	Vertical			
5	7386.000	39.92	-2.06	54.00	14.08	201	107	Vertical			
6	7386.000	49.52	-2.06	74.00	24.48	214	0	Vertical			

Final Data List



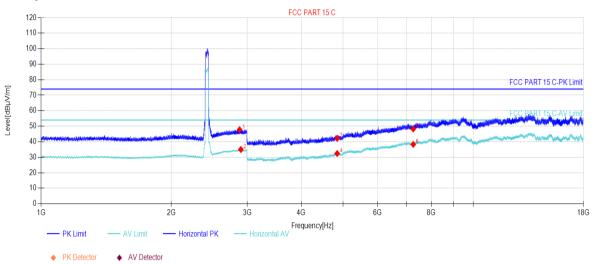


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802.11AX40 Channel 3 4.9.2.31

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2879.588	47.78	6.91	74.00	26.22	153	24	Horizontal			
2	2898.789	34.99	6.95	54.00	19.01	149	124	Horizontal			
3	4844.000	42.16	-10.50	74.00	31.84	158	64	Horizontal			
4	4844.000	32.39	-10.50	54.00	21.61	161	97	Horizontal			
5	7266.000	38.26	-2.62	54.00	15.74	168	195	Horizontal			
6	7266.000	48.25	-2.62	74.00	25.75	163	31	Horizontal			

Final Data List



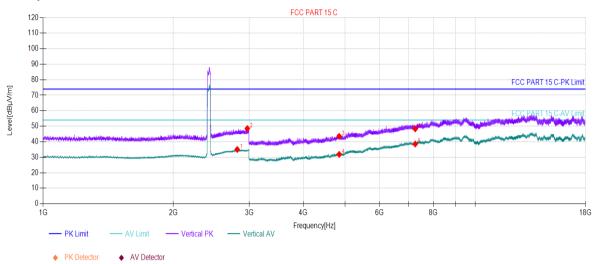


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802.11AX40 Channel 3 4.9.2.32

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2813.181	35.02	6.76	54.00	18.98	195	203	Vertical			
2	2968.796	48.51	7.27	74.00	25.49	201	108	Vertical			
3	4844.000	43.46	-10.50	74.00	30.54	206	336	Vertical			
4	4844.000	31.84	-10.50	54.00	22.16	209	336	Vertical			
5	7266.000	38.54	-2.62	54.00	15.46	191	65	Vertical			
6	7266.000	48.33	-2.62	74.00	25.67	215	357	Vertical			

Final Data List



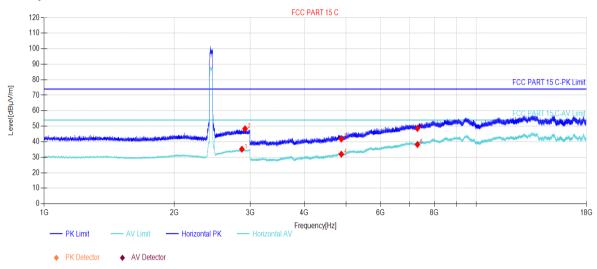


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802.11AX40 Channel 6 4.9.2.33

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2868.986	35.20	6.88	54.00	18.80	167	90	Horizontal			
2	2918.191	48.35	7.03	74.00	25.65	152	207	Horizontal			
3	4874.000	41.73	-10.40	74.00	32.27	159	152	Horizontal			
4	4874.000	31.97	-10.40	54.00	22.03	169	238	Horizontal			
5	7311.000	38.22	-2.58	54.00	15.78	145	54	Horizontal			
6	7311.000	48.58	-2.58	74.00	25.42	172	282	Horizontal			

Final Data List



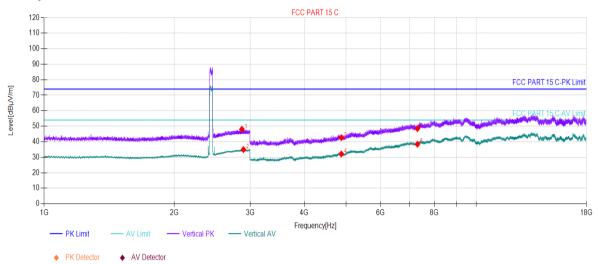


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802.11AX40 Channel 6 4.9.2.34

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2868.586	48.06	6.88	74.00	25.94	212	3	Vertical			
2	2892.989	34.96	6.93	54.00	19.04	196	175	Vertical			
3	4874.000	42.65	-10.40	74.00	31.35	194	347	Vertical			
4	4874.000	32.12	-10.40	54.00	21.88	202	315	Vertical			
5	7311.000	38.41	-2.58	54.00	15.59	207	336	Vertical			
6	7311.000	48.50	-2.58	74.00	25.50	209	1	Vertical			

Final Data List



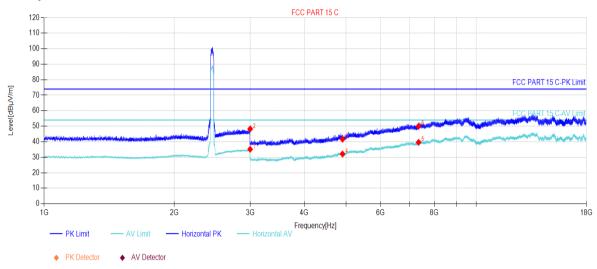


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802.11AX40 Channel 9 4.9.2.35

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2997.799	35.14	7.40	54.00	18.86	157	353	Horizontal			
2	2998.599	48.26	7.40	74.00	25.74	149	97	Horizontal			
3	4904.000	41.65	-10.30	74.00	32.35	142	97	Horizontal			
4	4904.000	32.11	-10.30	54.00	21.89	152	184	Horizontal			
5	7356.000	39.61	-2.27	54.00	14.39	161	42	Horizontal			
6	7356.000	50.00	-2.27	74.00	24.00	168	325	Horizontal			

Final Data List



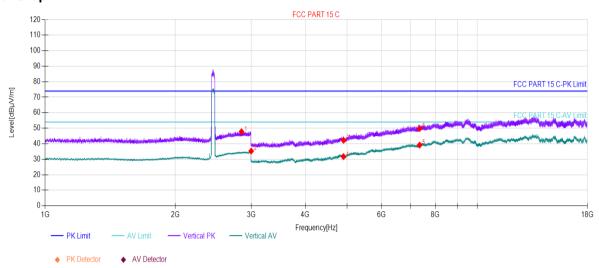


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802.11AX40 Channel 9 4.9.2.36

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2847.584	47.77	6.83	74.00	26.23	195	8	Vertical			
2	2998.599	35.27	7.40	54.00	18.73	193	335	Vertical			
3	4904.000	42.24	-10.30	74.00	31.76	204	183	Vertical			
4	4904.000	31.72	-10.30	54.00	22.28	215	8	Vertical			
5	7356.000	39.13	-2.27	54.00	14.87	218	73	Vertical			
6	7356.000	49.82	-2.27	74.00	24.18	209	204	Vertical			

Final Data List





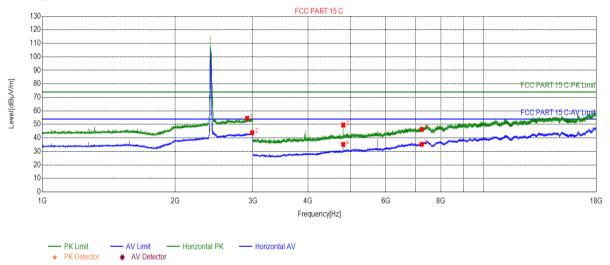
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Spot check 11ax Partial RU (Base on OFDM mode)

802.11AX20 Channel 1 Partial RU 26-Left 4.9.2.37

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2911.477	54.54	10.53	74.00	19.46	178	21	Horizontal					
2	2989.497	43.89	10.57	54.00	10.11	179	122	Horizontal					
3	4806.840	49.53	-17.17	74.00	24.47	156	354	Horizontal					
4	4807.590	35.26	-17.17	54.00	18.74	241	354	Horizontal					
5	7236.000	46.33	-9.45	74.00	27.67	223	332	Horizontal					
6	7236.000	35.26	-9.45	54.00	18.74	247	257	Horizontal					

Final Data List



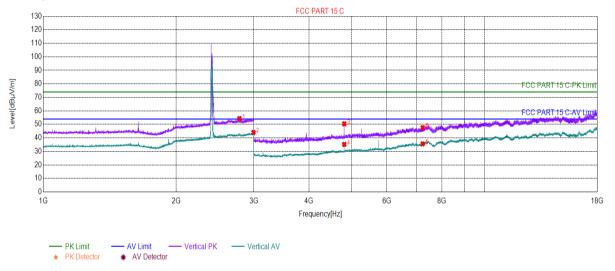


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802.11AX20_Channel 1 Partial RU 26-Left 4.9.2.38

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2781.445	54.28	9.88	74.00	19.72	201	299	Vertical					
2	2993.498	44.03	10.66	54.00	9.97	198	59	Vertical					
3	4806.840	50.45	-17.17	74.00	23.55	178	351	Vertical					
4	4807.590	35.22	-17.17	54.00	18.78	182	351	Vertical					
5	7236.000	35.58	-9.45	54.00	18.42	193	246	Vertical					
6	7236.000	47.58	-9.45	74.00	26.42	209	216	Vertical					

Final Data List



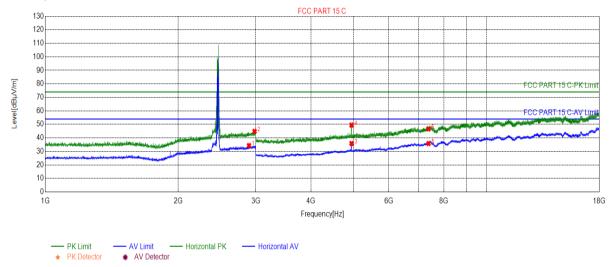


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802.11AX20_Channel 11 Partial RU 26-Right 4.9.2.39

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2894.473	34.33	10.42	54.00	19.67	159	204	Horizontal					
2	2979.995	44.84	10.63	74.00	29.16	149	27	Horizontal					
3	4941.097	35.86	-16.42	54.00	18.14	179	36	Horizontal					
4	4941.097	49.48	-16.42	74.00	24.52	265	29	Horizontal					
5	7386.000	35.84	-8.98	54.00	18.16	179	193	Horizontal					
6	7386.000	46.67	-8.98	74.00	27.33	189	186	Horizontal					

Final Data List



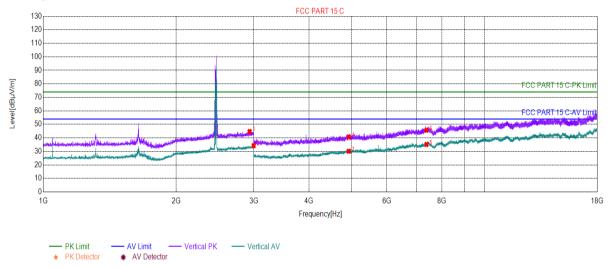


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802.11AX20 Channel 11 Partial RU 26-Right 4.9.2.40

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2934.483	44.73	10.63	74.00	29.27	189	20	Vertical					
2	2996.499	34.28	10.72	54.00	19.72	241	149	Vertical					
3	4924.000	30.16	-16.54	54.00	23.84	149	124	Vertical					
4	4924.000	40.73	-16.54	74.00	33.27	221	198	Vertical					
5	7386.000	35.16	-8.98	54.00	18.84	179	176	Vertical					
6	7386.000	45.69	-8.98	74.00	28.31	196	241	Vertical					

Final Data List

Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
 - Final Test Level =Receiver Reading + Antenna Factor + Cable Factor Preamplifier Factor
- 2) Scan from 9kHz to 25GHz, the disturbance between 9KHz to 30MHz and 18GHz to 25GHz was very low, and the above harmonics were the highest point could be found when testing, The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.
- 4) All Modes have been tested, but only the worst case data displayed in this report.



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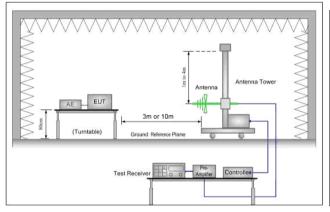


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4.10Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15C Section 1	7 CFR Part 15C Section 15.209 and 15.205											
Test Method:	ANSI C63.10: 2013 Section	NSI C63.10: 2013 Section 11.12											
Test Site:	Measurement Distance: 3n	Measurement Distance: 3m or 10m (Semi-Anechoic Chamber)											
Limit:	Frequency	Limit (dBuV/m)	Remark										
	30MHz-88MHz	40.0	Quasi-peak										
	88MHz-216MHz	43.5	Quasi-peak										
	216MHz-960MHz	46.0	Quasi-peak										
	960MHz-1GHz	54.0	Quasi-peak										
	Above 4CU-	54.0	Average Value										
	Above IGHZ	Above 1GHz 74.0 Peak Value											
Test Setup:		-											



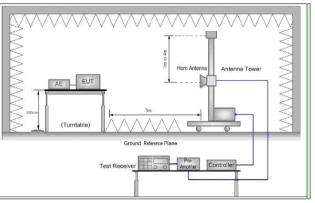


Figure 1. 30MHz to 1GHz

Figure 2. Above 1 GHz

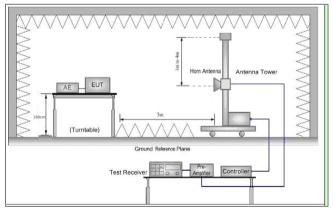


Figure 3. Above 1 GHz



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above the ground at a 3 or 10 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel, the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete. Exploratory Test Mode: Final Test Mode: Pretest the EUT at Charge + Transmitting mode. Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11N(HT20)/AX(HE20); 13.5Mbps of rate is the worst case of 802.11N(HT40)AX(HE40); Spot check 11ax Partial RU (Base on OFDM mode) Only the worst case is recorded in the report	Test Procedure:	, , , , , , , , , , , , , , , , , , , ,
Charge + Transmitting mode. Final Test Mode: Pretest the EUT at Charge + Transmitting mode. Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11G; 6.5Mbps of rate is the worst case of 802.11N(HT20)/AX(HE20); 13.5Mbps of rate is the worst case of 802.11N(HT40)AX(HE40); Spot check 11ax Partial RU (Base on OFDM mode) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details		 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel h. Test the EUT in the lowest channel, the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode,And found the X axis positioning which it is worse case.
Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11G; 6.5Mbps of rate is the worst case of 802.11N(HT20)/AX(HE20); 13.5Mbps of rate is the worst case of 802.11N(HT40)AX(HE40); Spot check 11ax Partial RU (Base on OFDM mode) Only the worst case is recorded in the report. Instruments Used: Refer to section 5.10 for details	Exploratory Test Mode:	1
	Final Test Mode:	Through Pre-scan, find the 1Mbps of rate is the worst case of 802.11B; 6Mbps of rate is the worst case of 802.11G; 6.5Mbps of rate is the worst case of 802.11N(HT20)/AX(HE20); 13.5Mbps of rate is the worst case of 802.11N(HT40)AX(HE40); Spot check 11ax Partial RU (Base on OFDM mode)
Test Results: Pass	Instruments Used:	Refer to section 5.10 for details
1631 1633		
Remark: The Emission Test data were reused from the report no:XAR/2020/C001004	Test Results:	Pass





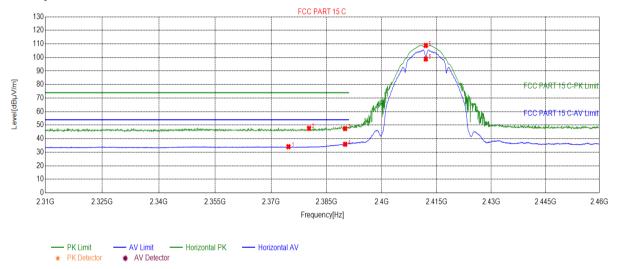
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4.10.1 **Test Plots**

802.11B Channel 1 MIMO 4.10.1.1

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2374.682	34.07	7.95	54.00	19.93	147	108	Horizontal					
2	2380.235	47.62	7.99	74.00	26.38	152	302	Horizontal					
3	2390.000	47.45	7.98	74.00	26.55	167	313	Horizontal					
4	2390.000	35.88	7.98	54.00	18.12	155	59	Horizontal					
5	2412.000	98.83	8.16	0.00	-98.83	162	62	Horizontal					
6	2412.000	108.85	8.16	0.00	-108.85	159	51	Horizontal					

Final Data List



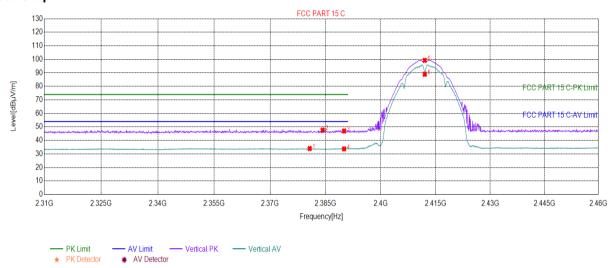


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802.11B Channel 1 MIMO 4.10.1.2

Test Graph



Suspected List

Suspe	Suspected List											
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity				
1	2380.685	34.00	7.97	54.00	20.00	203	251	Vertical				
2	2384.212	47.66	7.86	74.00	26.34	211	198	Vertical				
3	2390.000	46.97	7.98	74.00	27.03	197	141	Vertical				
4	2390.000	33.74	7.98	54.00	20.26	192	156	Vertical				
5	2412.000	88.94	8.16	0.00	-88.94	186	160	Vertical				
6	2412.000	99.24	8.16	0.00	-99.24	184	156	Vertical				

Final Data List



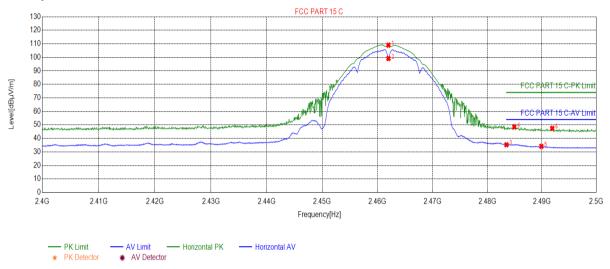


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802.11B Channel 11 MIMO 4.10.1.3

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2462.000	109.01	8.75	0.00	-109.01	157	59	Horizontal					
2	2462.000	99.11	8.75	0.00	-99.11	154	59	Horizontal					
3	2483.500	35.32	8.50	54.00	18.68	151	63	Horizontal					
4	2484.942	48.50	8.49	74.00	25.50	162	205	Horizontal					
5	2489.894	34.12	8.62	54.00	19.88	168	51	Horizontal					
6	2491.895	47.46	8.61	74.00	26.54	148	213	Horizontal					

Final Data List



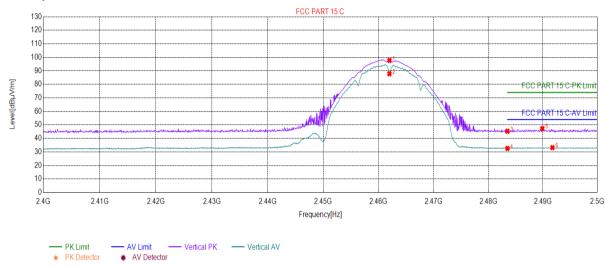


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802.11B Channel 11 MIMO 4.10.1.4

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2462.000	97.67	8.75	0.00	-97.67	201	165	Vertical					
2	2462.000	87.87	8.75	0.00	-87.87	211	169	Vertical					
3	2483.500	45.34	8.50	74.00	28.66	216	105	Vertical					
4	2483.500	32.60	8.50	54.00	21.40	196	165	Vertical					
5	2489.894	47.23	8.62	74.00	26.77	199	97	Vertical					
6	2491.745	33.20	8.61	54.00	20.80	187	29	Vertical					

Final Data List



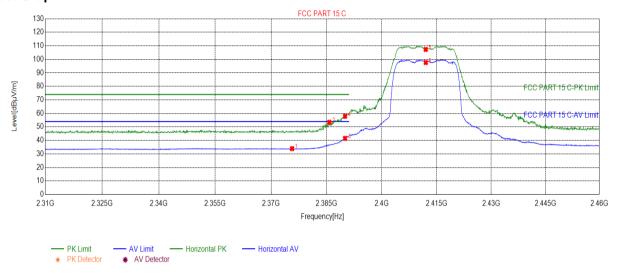


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802.11G Channel 1 MIMO 4.10.1.5

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2375.657	33.93	7.95	54.00	20.07	158	14	Horizontal					
2	2385.712	53.42	7.85	74.00	20.58	151	252	Horizontal					
3	2390.000	41.51	7.98	54.00	12.49	148	215	Horizontal					
4	2390.000	57.93	7.98	74.00	16.07	162	211	Horizontal					
5	2412.000	107.32	8.16	0.00	-107.32	168	59	Horizontal					
6	2412.000	97.63	8.16	0.00	-97.63	165	55	Horizontal					

Final Data List



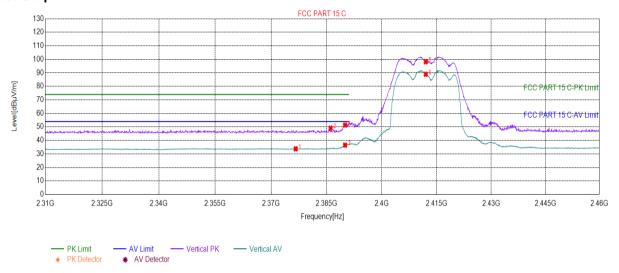


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802.11G Channel 1 MIMO 4.10.1.6

Test Graph



Suspected List

Suspe	Suspected List												
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity					
1	2376.633	33.79	7.96	54.00	20.21	205	32	Vertical					
2	2386.088	49.09	7.86	74.00	24.91	195	145	Vertical					
3	2390.000	36.52	7.98	54.00	17.48	192	164	Vertical					
4	2390.000	51.38	7.98	74.00	22.62	189	145	Vertical					
5	2412.000	98.19	8.16	0.00	-98.19	184	168	Vertical					
6	2412.000	88.94	8.16	0.00	-88.94	209	168	Vertical					

Final Data List



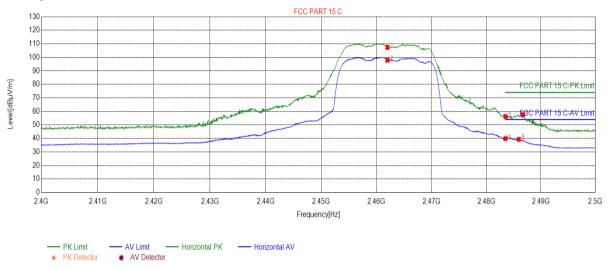


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802.11G Channel 11 MIMO 4.10.1.7

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2462.000	107.32	8.75	0.00	-107.32	148	63	Horizontal			
2	2462.000	97.87	8.75	0.00	-97.87	152	67	Horizontal			
3	2483.500	56.13	8.50	74.00	17.87	145	313	Horizontal			
4	2483.500	39.88	8.50	54.00	14.12	167	248	Horizontal			
5	2485.943	39.29	8.51	54.00	14.71	162	214	Horizontal			
6	2486.693	57.57	8.53	74.00	16.43	159	63	Horizontal			

Final Data List



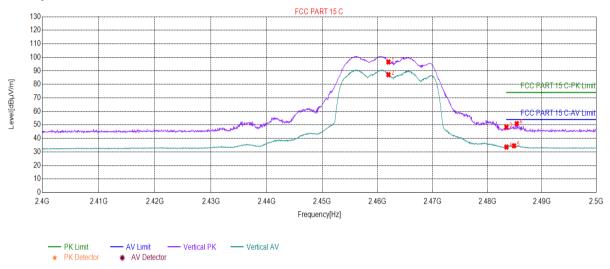


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802.11G Channel 11 MIMO 4.10.1.8

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2462.000	96.54	8.75	0.00	-96.54	205	154	Vertical			
2	2462.000	87.17	8.75	0.00	-87.17	208	150	Vertical			
3	2483.500	48.39	8.50	74.00	25.61	195	316	Vertical			
4	2483.500	33.66	8.50	54.00	20.34	197	154	Vertical			
5	2484.892	34.56	8.49	54.00	19.44	191	150	Vertical			
6	2485.392	50.94	8.50	74.00	23.06	211	150	Vertical			

Final Data List



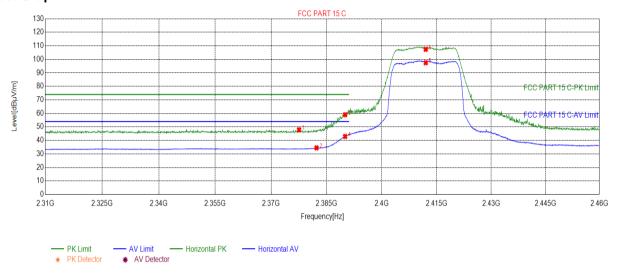


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802.11N20 Channel 1 MIMO 4.10.1.9

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2377.533	47.85	7.97	74.00	26.15	154	283	Horizontal			
2	2382.261	34.48	7.92	54.00	19.52	162	51	Horizontal			
3	2390.000	58.98	7.98	74.00	15.02	151	62	Horizontal			
4	2390.000	42.95	7.98	54.00	11.05	149	207	Horizontal			
5	2412.000	97.46	8.16	0.00	-97.46	142	62	Horizontal			
6	2412.000	107.40	8.16	0.00	-107.40	159	66	Horizontal			

Final Data List



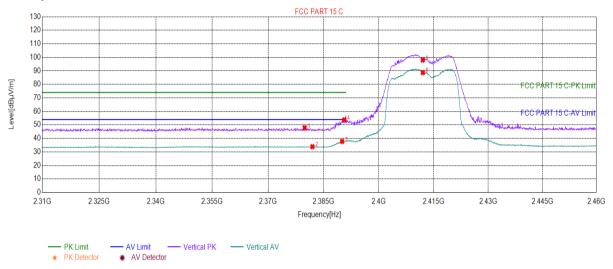


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802.11N20 Channel 1 MIMO 4.10.1.10

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2379.859	47.89	7.99	74.00	26.11	203	290	Vertical			
2	2381.961	33.88	7.93	54.00	20.12	195	305	Vertical			
3	2390.000	37.79	7.98	54.00	16.21	197	161	Vertical			
4	2390.590	53.72	7.98	74.00	20.28	191	169	Vertical			
5	2412.000	88.70	8.16	0.00	-88.70	209	165	Vertical			
6	2412.000	98.01	8.16	0.00	-98.01	214	169	Vertical			

Final Data List



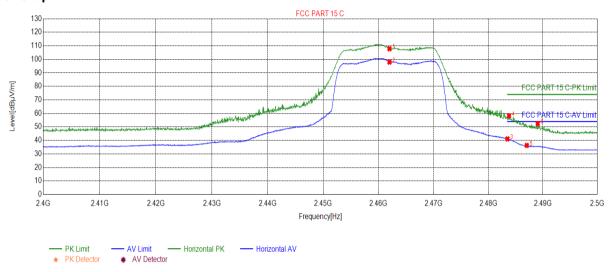


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802.11N20 Channel 11 MIMO 4.10.1.11

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2462.000	107.82	8.75	0.00	-107.82	149	214	Horizontal			
2	2462.000	97.94	8.75	0.00	-97.94	152	207	Horizontal			
3	2483.500	41.12	8.50	54.00	12.88	159	62	Horizontal			
4	2483.791	58.17	8.50	74.00	15.83	143	66	Horizontal			
5	2487.043	36.30	8.54	54.00	17.70	156	214	Horizontal			
6	2489.044	52.41	8.60	74.00	21.59	162	214	Horizontal			

Final Data List



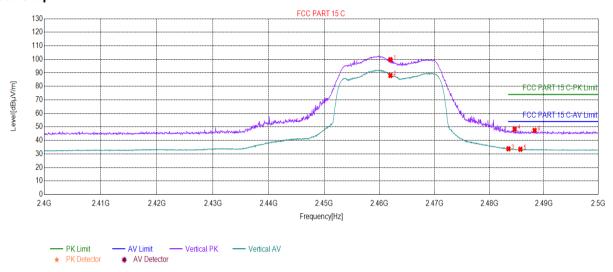


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802.11N20 Channel 11 MIMO 4.10.1.12

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2462.000	99.78	8.75	0.00	-99.78	204	161	Vertical			
2	2462.000	88.02	8.75	0.00	-88.02	211	161	Vertical			
3	2483.500	33.81	8.50	54.00	20.19	209	157	Vertical			
4	2484.642	48.35	8.49	74.00	25.65	201	240	Vertical			
5	2485.692	33.48	8.51	54.00	20.52	215	244	Vertical			
6	2488.294	47.39	8.58	74.00	26.61	203	324	Vertical			

Final Data List



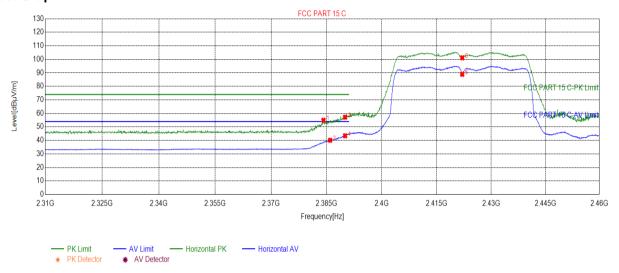


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802.11N40 Channel 3 MIMO 4.10.1.13

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2384.137	54.91	7.86	74.00	19.09	145	46	Horizontal			
2	2385.938	40.12	7.86	54.00	13.88	153	54	Horizontal			
3	2390.000	57.16	7.98	74.00	16.84	149	217	Horizontal			
4	2390.000	43.43	7.98	54.00	10.57	162	244	Horizontal			
5	2422.000	88.93	8.45	0.00	-88.93	159	206	Horizontal			
6	2422.000	101.12	8.45	0.00	-101.12	168	46	Horizontal			

Final Data List



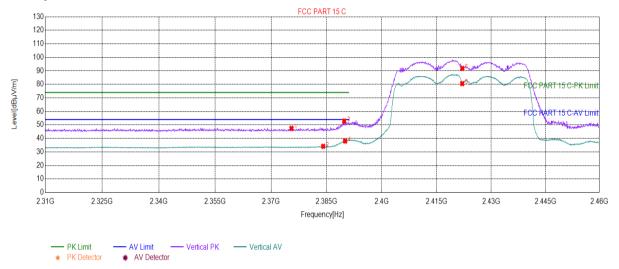


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802.11N40 Channel 3 MIMO 4.10.1.14

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2375.507	47.48	7.95	74.00	26.52	203	4	Vertical			
2	2384.062	34.17	7.86	54.00	19.83	198	164	Vertical			
3	2389.764	52.86	7.98	74.00	21.14	187	141	Vertical			
4	2390.000	38.04	7.98	54.00	15.96	192	145	Vertical			
5	2422.000	80.56	8.45	0.00	-80.56	182	161	Vertical			
6	2422.000	91.83	8.45	0.00	-91.83	211	145	Vertical			

Final Data List



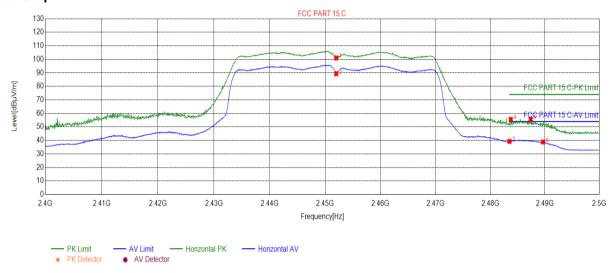


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802.11N40 Channel 9 MIMO 4.10.1.15

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2452.000	100.99	8.65	0.00	-100.99	143	216	Horizontal			
2	2452.000	89.38	8.65	0.00	-89.38	159	212	Horizontal			
3	2483.500	39.30	8.50	54.00	14.70	157	246	Horizontal			
4	2483.741	55.55	8.50	74.00	18.45	149	204	Horizontal			
5	2487.393	55.67	8.55	74.00	18.33	162	208	Horizontal			
6	2489.644	38.85	8.61	54.00	15.15	154	204	Horizontal			

Final Data List



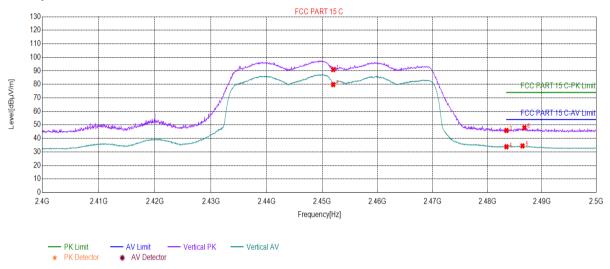


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802.11N40 Channel 9 MIMO 4.10.1.16

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2452.000	90.95	8.65	0.00	-90.95	213	160	Vertical			
2	2452.000	79.86	8.65	0.00	-79.86	198	164	Vertical			
3	2483.500	45.87	8.50	74.00	28.13	187	236	Vertical			
4	2483.500	33.83	8.50	54.00	20.17	192	240	Vertical			
5	2486.443	34.46	8.53	54.00	19.54	201	240	Vertical			
6	2486.793	47.90	8.54	74.00	26.10	179	145	Vertical			

Final Data List



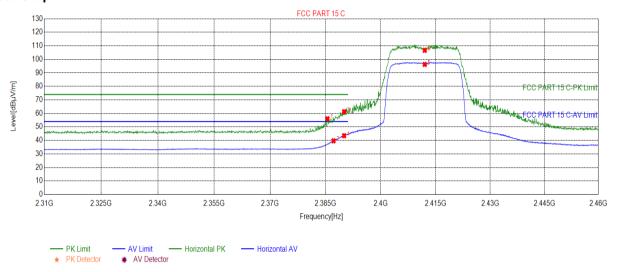


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802.11AX20 Channel 1 MIMO 4.10.1.17

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2385.487	56.01	7.85	74.00	17.99	145	215	Horizontal			
2	2387.138	39.70	7.90	54.00	14.30	156	211	Horizontal			
3	2390.000	61.23	7.98	74.00	12.77	124	242	Horizontal			
4	2390.000	43.50	7.98	54.00	10.50	135	215	Horizontal			
5	2412.000	96.24	8.16	0.00	-96.24	147	215	Horizontal			
6	2412.000	106.69	8.16	0.00	-106.69	168	219	Horizontal			

Final Data List



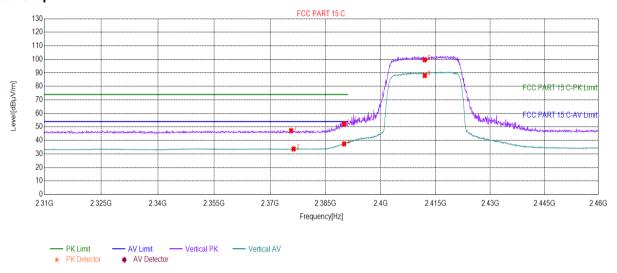


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802.11AX20 Channel 1 MIMO 4.10.1.18

Test Graph



Suspected List

Suspe	Suspected List										
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity			
1	2375.657	47.23	7.95	74.00	26.77	211	225	Vertical			
2	2376.333	33.69	7.96	54.00	20.31	222	62	Vertical			
3	2390.000	52.23	7.98	74.00	21.77	235	156	Vertical			
4	2390.000	37.40	7.98	54.00	16.60	246	160	Vertical			
5	2412.000	88.03	8.16	0.00	-88.03	264	160	Vertical			
6	2412.000	99.64	8.16	0.00	-99.64	287	156	Vertical			

Final Data List



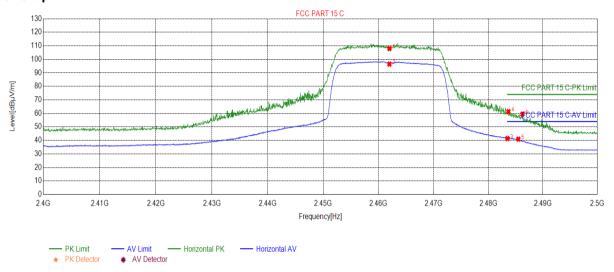


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802.11AX20 Channel 11 MIMO 4.10.1.19

Test Graph



Suspected List

Suspe	Suspected List									
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity		
1	2462.000	107.97	8.75	0.00	-107.97	146	203	Horizontal		
2	2462.000	96.49	8.75	0.00	-96.49	150	211	Horizontal		
3	2483.500	41.39	8.50	54.00	12.61	127	207	Horizontal		
4	2483.691	61.29	8.50	74.00	12.71	135	211	Horizontal		
5	2485.492	40.95	8.50	54.00	13.05	151	59	Horizontal		
6	2486.243	59.44	8.52	74.00	14.56	156	215	Horizontal		

Final Data List



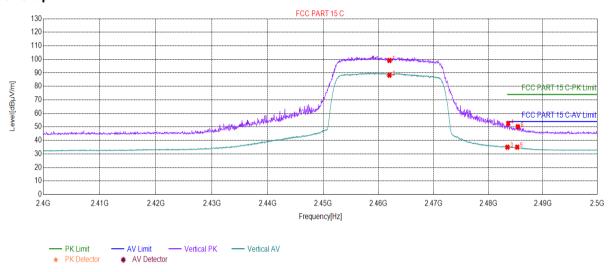


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802.11AX20 Channel 11 MIMO 4.10.1.20

Test Graph



Suspected List

Suspe	Suspected List									
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity		
1	2462.000	99.17	8.75	0.00	-99.17	235	160	Vertical		
2	2462.000	88.27	8.75	0.00	-88.27	224	160	Vertical		
3	2483.500	35.00	8.50	54.00	19.00	287	148	Vertical		
4	2483.641	52.54	8.50	74.00	21.46	269	156	Vertical		
5	2485.292	35.02	8.50	54.00	18.98	255	144	Vertical		
6	2485.392	50.18	8.50	74.00	23.82	278	160	Vertical		

Final Data List



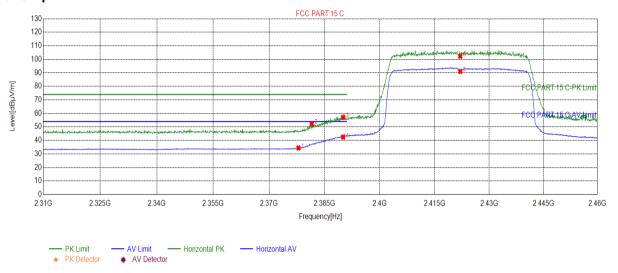


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802.11AX40 Channel 3 MIMO 4.10.1.21

Test Graph



Suspected List

Suspe	Suspected List									
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity		
1	2377.909	34.42	7.97	54.00	19.58	156	215	Horizontal		
2	2381.510	52.32	7.95	74.00	21.68	145	215	Horizontal		
3	2390.000	57.02	7.98	74.00	16.98	158	261	Horizontal		
4	2390.000	42.51	7.98	54.00	11.49	178	219	Horizontal		
5	2422.000	91.03	8.45	0.00	-91.03	169	215	Horizontal		
6	2422.000	102.28	8.45	0.00	-102.28	161	211	Horizontal		

Final Data List



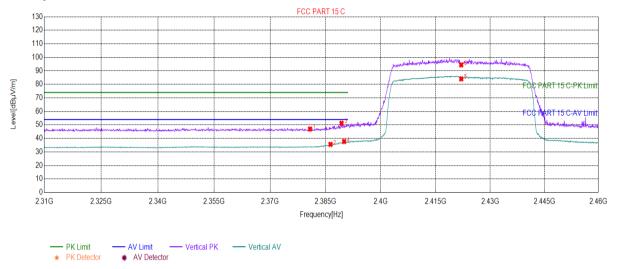


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802.11AX40 Channel 3 MIMO 4.10.1.22

Test Graph



Suspected List

Suspe	Suspected List									
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity		
1	2380.760	46.95	7.97	74.00	27.05	241	107	Vertical		
2	2386.313	35.61	7.87	54.00	18.39	263	161	Vertical		
3	2389.314	51.23	7.96	74.00	22.77	245	157	Vertical		
4	2390.000	37.70	7.98	54.00	16.30	288	161	Vertical		
5	2422.000	84.07	8.45	0.00	-84.07	287	161	Vertical		
6	2422.000	94.42	8.45	0.00	-94.42	265	161	Vertical		

Final Data List



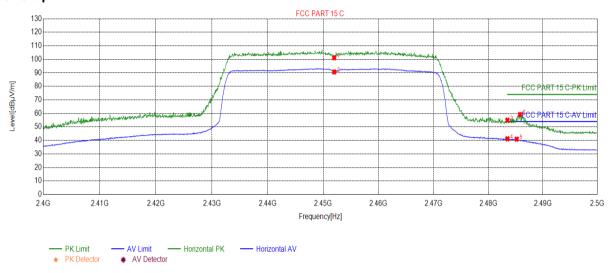


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802.11AX40 Channel 9 MIMO 4.10.1.23

Test Graph



Suspected List

Suspe	Suspected List									
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity		
1	2452.000	101.15	8.65	0.00	-101.15	135	63	Horizontal		
2	2452.000	90.68	8.65	0.00	-90.68	126	206	Horizontal		
3	2483.500	54.96	8.50	74.00	19.04	165	206	Horizontal		
4	2483.500	41.20	8.50	54.00	12.80	145	198	Horizontal		
5	2485.192	40.95	8.49	54.00	13.05	144	198	Horizontal		
6	2485.792	59.20	8.51	74.00	14.80	135	52	Horizontal		

Final Data List



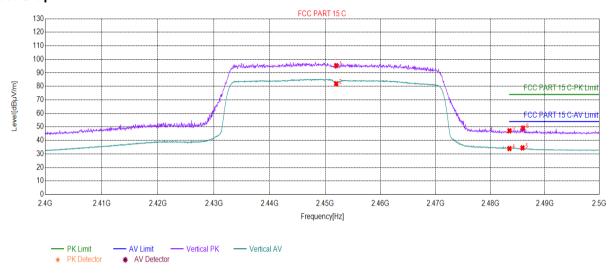


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802.11AX40 Channel 9 MIMO 4.10.1.24

Test Graph



Suspected List

Suspe	Suspected List									
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity		
1	2452.000	95.38	8.65	0.00	-95.38	258	157	Vertical		
2	2452.000	81.92	8.65	0.00	-81.92	265	161	Vertical		
3	2483.500	47.12	8.50	74.00	26.88	255	161	Vertical		
4	2483.500	33.96	8.50	54.00	20.04	254	161	Vertical		
5	2485.892	34.47	8.51	54.00	19.53	253	161	Vertical		
6	2485.993	49.14	8.51	74.00	24.86	261	165	Vertical		

Final Data List





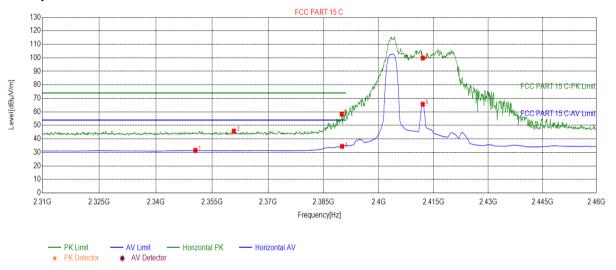
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Spot check 11ax Partial RU (Base on OFDM mode)

802.11AX20 Channel 1 Partial RU 26-Left 4.10.1.25

Test Graph



Suspected List

Suspe	Suspected List									
NIO	Freq.	Level	Factor	Limit	Margin	Height	Angle	D		
NO.	[MHz]	[dBµV/m]	[dB]	[dBµV/m]	[dB]	[cm]	[°]	Polarity		
1	2350.520	31.53	8.22	54.00	22.47	153	157	Horizontal		
2	2360.800	45.78	8.01	74.00	28.22	149	154	Horizontal		
3	2389.915	58.42	7.98	74.00	15.58	161	163	Horizontal		
4	2390.000	34.50	7.98	54.00	19.50	157	176	Horizontal		
5	2412.000	99.88	8.16	0.00	-99.88	152	142	Horizontal		
6	2412.000	65.67	8.16	0.00	-65.67	169	129	Horizontal		

Final Data List



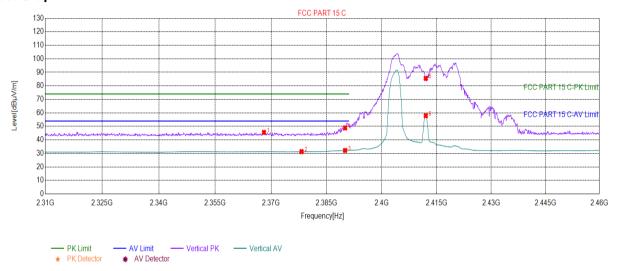


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802.11AX20_Channel 1 Partial RU 26-Left 4.10.1.26

Test Graph



Suspected List

Suspe	Suspected List									
NO	Freq.	Level	Factor	Limit	Margin	Height	Angle	5		
NO.	[MHz]	[dBµV/m]	[dB]	[dBµV/m]	[dB]	[cm]	[°]	Polarity		
1	2368.079	45.56	8.08	74.00	28.44	170	204.0	Vertical		
2	2378.209	31.36	7.98	54.00	22.64	170	204.0	Vertical		
3	2390.000	32.20	7.98	54.00	21.80	170	204.0	Vertical		
4	2390.000	48.93	7.98	74.00	25.07	170	204.0	Vertical		
5	2412.000	85.54	8.16	0.00	-85.54	170	204.0	Vertical		
6	2412.000	57.92	8.16	0.00	-57.92	170	204.0	Vertical		

Final Data List



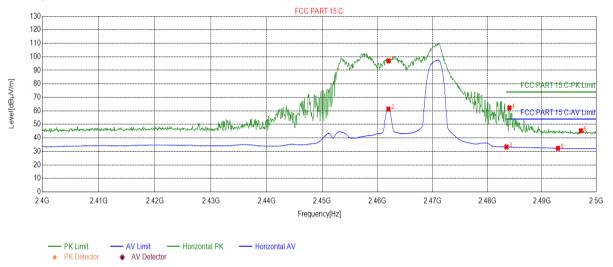


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802.11AX20_Channel 11 Partial RU 26-Right 4.10.1.27

Test Graph



Suspected List

Suspe	Suspected List									
NO	Freq.	Level	Factor	Limit	Margin	Height	Angle	D		
NO.	[MHz]	[dBµV/m]	[dB]	[dBµV/m]	[dB]	[cm]	[°]	Polarity		
1	2462.000	97.01	8.75	0.00	-97.01	159	189	Horizontal		
2	2462.000	61.34	8.75	0.00	-61.34	148	167	Horizontal		
3	2483.500	33.30	8.50	54.00	20.70	168	152	Horizontal		
4	2484.042	62.30	8.50	74.00	11.70	142	195	Horizontal		
5	2492.946	32.33	8.60	54.00	21.67	153	204	Horizontal		
6	2497.148	45.31	8.54	74.00	28.69	155	211	Horizontal		

Final Data List



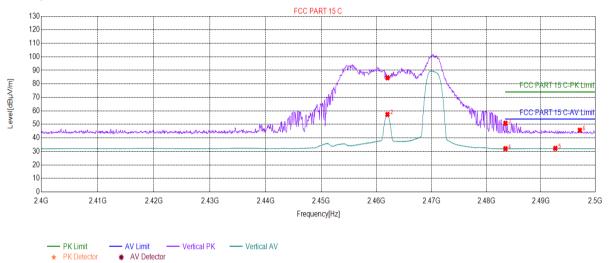


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802.11AX20_Channel 11 Partial RU 26-Right 4.10.1.28

Test Graph



Suspected List

<u>ouspec</u>	tcu List									
Susp	Suspected List									
NO.	Freq.	Level	Factor	Limit	Margin	Height	Angle	Polarity		
140.	[MHz]	[dBµV/m]	[dB]	[dBµV/m]	[dB]	[cm]	[°]	1 Glanty		
1	2462.000	84.51	8.75	0.00	-84.51	201	201	Vertical		
2	2462.000	57.35	8.75	0.00	-57.35	236	198	Vertical		
3	2483.500	50.87	8.50	74.00	23.13	245	189	Vertical		
4	2483.500	32.02	8.50	54.00	21.98	217	164	Vertical		
5	2492.646	32.26	8.60	54.00	21.74	198	152	Vertical		
6	2497.148	45.66	8.54	74.00	28.34	192	220	Vertical		

Final Data List

Remark:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor All Modes have been tested, but only the worst case data displayed in this report.



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Measurement Uncertainty (95% confidence levels, k=2)

Lab A:

No.	Item	Measurement Uncertainty		
1	Total RF power, conducted	±0.75dB		
2	RF power density, conducted	±2.84dB		
3	Spurious emissions, conducted	±0.75dB		
4	Temperature test	±1°C		
5	Humidity test	±3%		
6	DC and low frequency voltages	±0.5%		

Lab B:

No.	Item	Measurement Uncertainty
		±4.8dB (30MHz-1GHz)
4	Dedicted Courieus arrivaies test	±5.2dB (1GHz-6GHz)
1	Radiated Spurious emission test	±5.5dB (6GHz-18GHz)
		±5.02dB (18GHz-40GHz)
2	Conduct emission test	±3.4 dB (9KHz- 30MHz)





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Equipment List

RF conducted test									
Test Equipment	Manufacturer	Model No.	Inventory No	Cal. date	Cal.Duedate				
				(yyyy-mm-dd)	(yyyy-mm-dd)				
DC Power Supply	Agilent Technologie Inc	66311B	W009-09	2020/7/15	2021/7/15				
Signal Analyzer	Rohde & Schwarz	FSV	W025-05	2021/1/3	2022/1/2				
				2020/1/4	2021/1/3				
Coaxial Cable	SGS	N/A	SEM031-01	2020/6/12	2021/6/11				
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A				
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2020/7/14	2021/7/14				
Temperature Chamber	GIANT FORCE	ICT-150-40-CP AR	W027-03	2020/10/27	2021/10/27				
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2020/7/14	2021/7/14				





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RSE&RE&CE Test System								
Equipment	Manufacturer	Model No.	Cal Date	Cal Due Date	Inventory No.			
Semi-Anechoic Chamber	Brilliant-emc	966	NCR	NCR	XAW03-35-01			
MXA signal analyzer	Keysight	N9020A	2020-04-02	2021-04-02	XAW01-06-01			
Radio communication analyzer	ROHDE&SCHWARZ	CMW 500	2020-04-02	2021-04-02	XAW01-03-02			
Test receiver	ROHDE&SCHWARZ	ESR	2020-09-11	2021-09-10	XAW01-08-01			
Receiving antenna	Rosenberger	VULB 9163	2019-10-13	2021-10-12	XAW01-09-01			
Receiving antenna	Rosenberger	BBHA 9120D	2019-10-13	2021-10-12	XAW01-09-02			
Receiving antenna	Rosenberger	BBHA 9170	2019-10-13	2021-10-12	XAW01-09-03			
Directional antenna rack controller	Max-Full	MF-7802BS	NCR	NCR	XAW03-03-01			
High-speed antenna rack controller	Max-Full	MF-7802	NCR	NCR	XAW03-04-01			
Filter bank	Tonscend	JS0806-F	NCR	NCR	XAW03-05-01			
Filter bank	Tonscend	JS0806s	NCR	NCR	XAW03-05-02			
Amplifier	Tonscend	TAP00903040	2020-10-26	2021-10-25	XAW01-41-01			
Amplifier	Tonscend	TAP01018048	2020-10-26	2021-10-25	XAW01-41-02			
Amplifier	Tonscend	TAP18040048	2020-10-26	2021-10-25	XAW01-41-03			
Amplifier	Shanghai Steed	YX28980930	2020-10-26	2021-10-25	XAW01-41-06			
Artificial network	ROHDE&SCHWARZ	ENV216	2020-08-04	2021-08-03	XAW01-19-02			
Temperature and humidity meter	MingGao	TH101B	2020-06-11	2021-05-11	XAW01-01-01			
Measurement Software	Tonscend	TS+ RSE&RE	NCR	NCR	XAW02-05-01			
Measurement Software	Tonscend	TS+ CE	NCR	NCR	XAW02-05-02			



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7 **Photographs - EUT Constructional Details**

Refer to DTS Setup Photos.

The End

