

TEST REPORT

Report No.: BCTC2204652521-2E

Applicant: REOLINK INNOVATION LIMITED

Product Name: WiFi IP Camera

Model/Type
reference: E1 Pro

Tested Date: 2022-04-07 to 2022-04-21

Issued Date: 2022-04-21



Shenzhen BCTC Testing Co., Ltd.



FCC ID:2AYHE-2204D

Product Name: WiFi IP Camera

Trademark: 

Model/Type reference: E1 Pro
T1 Pro

Prepared For: REOLINK INNOVATION LIMITED

Address: FLAT/RM 705 7/F FA YUEN COMMERCIAL BUILDING 75-77 FA YUEN STREET
MONG KOK KL HONG KONG

Manufacturer: REOLINK INNOVATION LIMITED

Address: FLAT/RM 705 7/F FA YUEN COMMERCIAL BUILDING 75-77 FA YUEN STREET
MONG KOK KL HONG KONG

Factory: Shenzhen Reolink Technology Co., Ltd.

Address: 2-4th Floor, Building 2, Yuanling Industrial Park, ShangWu, Shiyan Street, Bao'an District, Shenzhen, China

Prepared By: Shenzhen BCTC Testing Co., Ltd.

Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Sample Received Date: 2022-04-07

Sample tested Date: 2022-04-07 to 2022-04-21

Issue Date: 2022-04-21

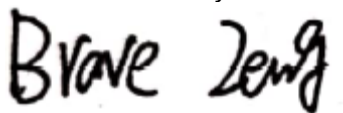
Report No.: BCTC2204652521-2E

FCC Part15 15.407

Test Standards: ANSI C63.10-2013
KDB 662911 D01 v02r01
KDB 789033 D02 v02r01

Test Results: PASS

Tested by:



Brave Zeng/ Project Handler

Approved by:



Zero Zhou/Reviewer

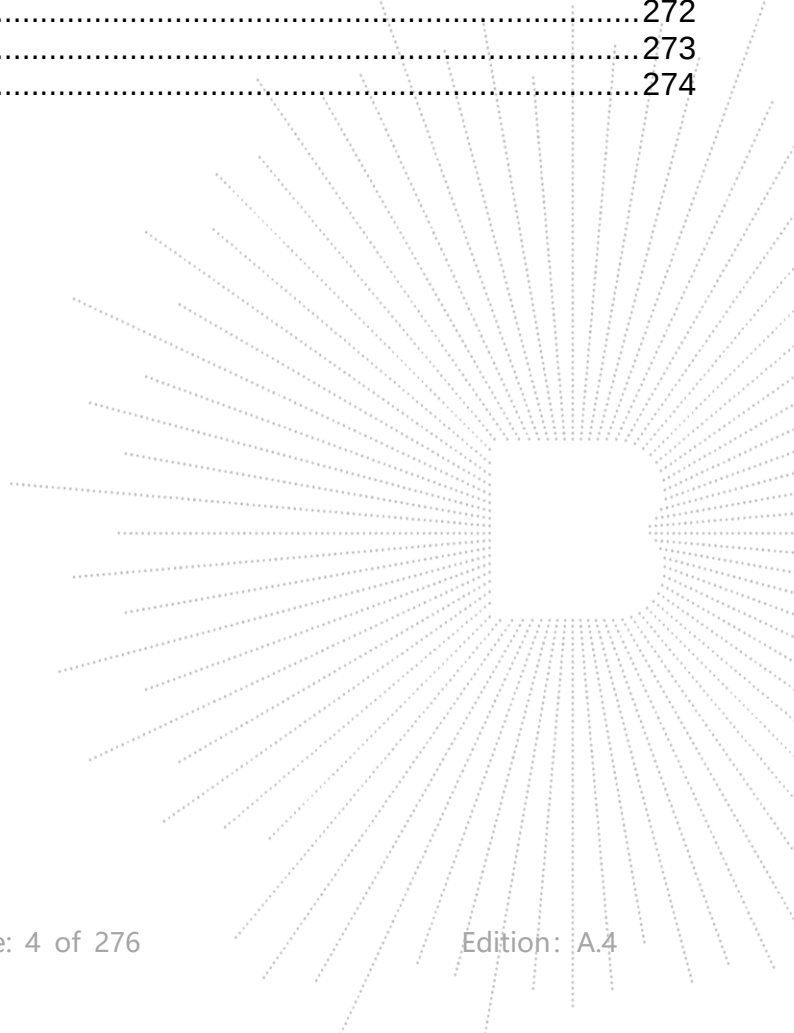
The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

Table Of Content

Test Report Declaration	Page
1. Version	5
2. Test Summary	6
3. Measurement Uncertainty	7
4. Product Information And Test Setup	8
4.1 Product Information.....	8
4.2 Test Setup Configuration	9
4.3 Support Equipment	9
4.4 Channel List	10
4.5 Test Mode	11
4.6 Table Of Parameters Of Text Software Setting.....	11
4.7 Antenna.....	12
5. Test Facility And Test Instrument Used.....	13
5.1 Test Facility.....	13
5.2 Test Instrument Used.....	13
6. Conducted Emissions.....	15
6.1 Block Diagram Of Test Setup.....	15
6.2 Limit	15
6.3 Test Procedure	15
6.4 EUT Operating Conditions	15
6.5 Test Result.....	16
7. Radiated Emissions.....	18
7.1 Block Diagram Of Test Setup.....	18
7.2 Limit	19
7.3 Test Procedure	20
7.4 EUT Operating Conditions	21
7.5 Test Result.....	21
8. Power Spectral Density Test	48
8.1 Block Diagram Of Test Setup.....	48
8.2 Limit	48
8.3 Test Procedure	49
8.4 EUT Operating Conditions	49
8.5 Test Result.....	49
9. 26dB & 6dB & 99% Emission Bandwidth	80
9.1 Block Diagram Of Test Setup.....	80
9.2 Limit	80
9.3 Test Procedure	80
9.4 EUT Operating Conditions	80
9.5 Test Result.....	81
10. Maximum Conducted Output Power.....	142
10.1 Block Diagram Of Test Setup.....	142
10.2 Limit	142
10.3 Test Procedure	142
10.4 EUT Operating Conditions	143

10.5	Test Result.....	143
11.	Out Of Band Emissions	145
11.1	Block Diagram Of Test Setup.....	145
11.2	Limit	145
11.3	Test Procedure	145
11.4	EUT Operating Conditions	145
11.5	Test Result.....	145
12.	Spurious RF Conducted Emissions.....	168
12.1	Block Diagram Of Test Setup.....	168
12.2	Limit	168
12.3	Test Procedure	168
12.4	Test Result.....	168
13.	Frequency Stability Measurement	198
13.1	Block Diagram Of Test Setup.....	198
13.2	Limit	198
13.3	Test Procedure	198
13.4	Test Result.....	199
14.	Duty Cycle Of Test Signal	211
14.1	Standard Requirement	211
14.2	Formula.....	211
14.3	Test Procedure	211
14.4	Test Result.....	211
15.	Antenna Requirement	272
15.1	Limit	272
15.2	Test Result.....	272
16.	EUT Photographs.....	273
17.	EUT Test Setup Photographs.....	274

(Note: N/A Means Not Applicable)



1. Version

Report No.	Issue Date	Description	Approved
BCTC2204652521-2E	2022-04-21	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No.	Results
1	Spurious Radiated Emissions	15.209(a), 15.407 (b)(1) 15.407 (b)(4) 15.407 (b)(8)	PASS
2	Conducted Emission	15.207	PASS
3	26 dB and 99% Emission Bandwidth	15.407 (a)(12) 15.1049	PASS
4	Minimum 6 dB bandwidth	15.407(e)	PASS
5	Maximum Conducted Output Power	15.407 (a)(1) 15.407 (a)(3)	PASS
6	Band Edge	2.1051, 15.407(b)(1) 15.407(b)(4)	PASS
7	Power Spectral Density	15.407 (a)(1) 15.407 (a)(3)	PASS
8	Spurious Emissions at Antenna Terminals	2.1051, 15.407(b)	PASS
9	Antenna Requirement	15.203	PASS

3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(9kHz-30MHz)	U=3.7dB
2	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
5	Conducted Emission(150kHz-30MHz)	U=3.20dB
6	Conducted Adjacent channel power	U=1.38dB
7	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59°C

4. Product Information And Test Setup

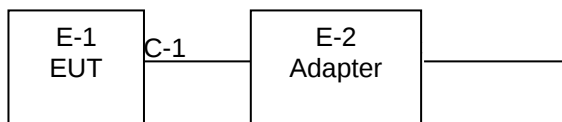
4.1 Product Information

Model/Type reference:	E1 Pro T1 Pro
Model differences:	All the model are the same circuit and RF module, except model names.
Hardware Version:	N15C10_V130
Software Version:	802_22040902
IEEE 802.11 WLAN Mode Supported	802.11a/n (20MHz channel bandwidth) 802.11n (40MHz channel bandwidth) 802.11ac(80MHz channel bandwidth) 5180-5240MHz for 802.11a/n/ac(HT20); 5190-5230MHz for 802.11n/ac(HT40); 5210MHz for 802.11 ac80; 5260-5320MHz for 802.11a/n/ac(HT20); 5270-5310MHz for 802.11n/ac(HT40); 5290MHz for 802.11 ac80;
Operation Frequency:	5500-5700MHz for 802.11a/n/ac(HT20); 5410-5670MHz for 802.11n/ac(HT40); 5530-5610MHz for 802.11 ac80; 5745-5825 MHz for 802.11a/n/ac(HT20); 5755-5795 MHz for 802.11n/ac(HT40); 5775MHz for 802.11 ac80
Data Rate	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac(VHT20): NSS1, MCS0-MCS8 802.11ac(VHT40/VHT80):NSS1, MCS0-MCS9
Type of Modulation:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM for 802.11a/n/ac
Antenna installation:	Internal antenna*2
Antenna Gain:	5.1G: Antenna A & B: 5.38 dBi 5.3G: Antenna A & B: 5.38 dBi 5.6G: Antenna A & B: 5.38 dBi 5.8G: Antenna A & B: 5.38 dBi
Ratings:	AC 120V/60Hz
Adapter:	Model: ADS-12AM-06 05005EPCU Input:100-240V~50/60Hz 0.3A max Output: DC 5.0V 1.0A

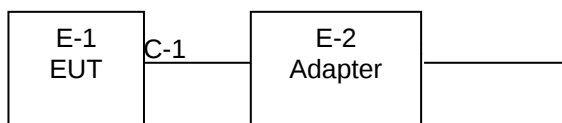
4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

Conducted Emission:



Radiated Spurious Emission



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	WiFi IP Camera	Ref. the P2	E1 Pro	T1 Pro	EUT
E-2	Adapter	N/A	ADS-12AM-06 05005EPCU	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	N/A	N/A	3M	DC cable unshielded

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Channel List

(U-NII-1) 5180MHz-5240MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	36	5180	40	5200
	44	5220	48	5240
40MHz	38	5190	46	5230
80MHz	42	5210		
(U-NII-2A) 5260MHz-5320MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	52	5260	56	5280
	60	5300	64	5320
40MHz	54	5270	62	5310
80MHz	58	5290		
(U-NII-2C) 5500MHz-5700MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	100	5500	105	5520
	108	5540	112	5560
	116	5580	120	5600
	124	5620	128	5640
	132	5660	136	5680
	140	5700		
40MHz	102	5510	110	5550
	118	5590	126	5630
	134	5670	142	5710
80MHz	106	5530	122	5610
	138	5690		
(U-NII-3) 5745MHz-5825MHz				
Bandwidth	Channel	Frequency (MHz)	Channel	Frequency (MHz)
20MHz	149	5745	153	5765
	157	5785	161	5805
	165	5825		
40MHz	151	5775	159	5795
80MHz	155	5775		

4.5 Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11a / n/ ac 20 CH36/ CH40/ CH 48 802.11a / n/ ac 20 CH52/ CH56/ CH 64 802.11a / n/ ac 20 CH100/ CH116/ CH 140 802.11a /n/ ac 20 CH149/ CH157/ CH 165
Mode 2	802.11n/ ac40 CH38/ CH 46 802.11n/ ac40 CH54/ CH 62 802.11n/ ac40 CH102/ CH 110/CH134 802.11n/ ac40 CH 151 / CH 159
Mode 3	802.11 ac80 CH 42/ CH 58/ CH 106/ CH 155
Mode 4	Link Mode

Conducted Emission	
Final Test Mode	Description
Mode 4	Link Mode

Note:

(1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.

4.6 Table Of Parameters Of Text Software Setting

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters

Test software Version	CMD		
Parameters	DEF	DEF	DEF

4.7 Antenna

5.1G&5.3G&5.6G&5.8G

Ant.	Brand	Model Name	Antenna Type	Gain (dBi)	NOTE
A	N/A	N/A	Internal antenna	5.38	N/A
B	N/A	N/A	Internal antenna	5.38	N/A

EUT has two Internal antennas with Max gain GANT 5.38dBi on every antenna, also can operat with one spatial streams according to KDB662911 D01 v02r01,
Directional gain= GANT + Array Gain, where Array Gain is as follows.

1)For power spectral density(PSD) measurements,
Array Gain= $10\log(NANT/NSS)$ dB= $10\log(2/1)$ =3.01 dBi,
So the directional gain for PSD is 8.39 dBi

2)For power measurements,
The Array gain=0 for $NANT \leq 4$,
So the directional gain for Power measurements is 5.38dBi

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.
FCC Test Firm Registration Number: 712850
IC Registered No.: 23583

5.2 Test Instrument Used

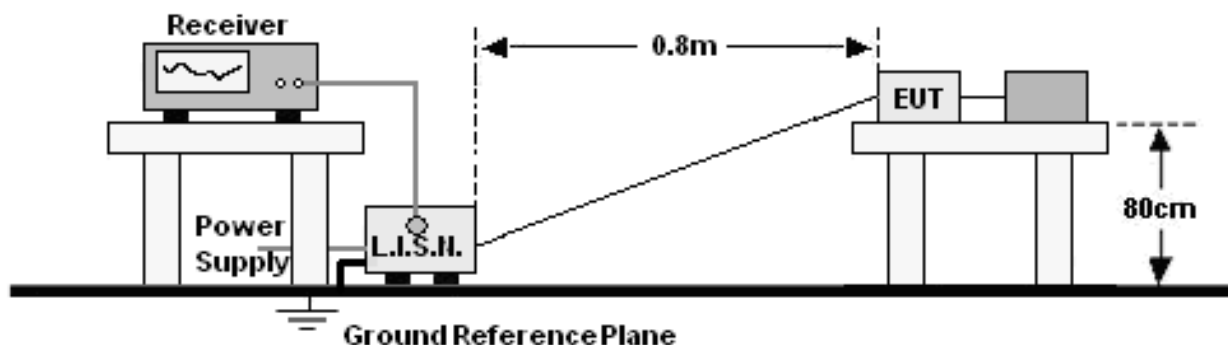
Conducted emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESR3	102075	May 28, 2021	May 27, 2022
LISN	R&S	ENV216	101375	May 28, 2021	May 27, 2022
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Attenuator	\	10dB DC-6GHz	1650	May 28, 2021	May 27, 2022

RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power Metter	Keysight	E4419	\	May 28, 2021	May 27, 2022
Power Sensor (AV)	Keysight	E9300A	\	May 28, 2021	May 27, 2022
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 28, 2021	May 27, 2022
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	\	May 28, 2021	May 27, 2022

Radiated emissions Test (966 chamber)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	Jun. 06. 2020	Jun. 05, 2023
Receiver	R&S	ESR3	102075	May 28, 2021	May 27, 2022
Receiver	R&S	ESRP	101154	May 28, 2021	May 27, 2022
Amplifier	SKET	LAPA_01G18 G-45dB	\	May 28, 2021	May 27, 2022
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 28, 2021	May 27, 2022
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	Jun. 01, 2021	May 31, 2022
Horn Antenna	Schwarzbeck	BBHA9120D	1541	Jun. 02, 2021	Jun. 01, 2022
Horn Antenn(18GHz -40GHz)	Schwarzbeck	BBHA9170	00822	Jun. 15, 2021	Jun. 14, 2022
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35- HG	2034381	May 28, 2021	May 27, 2022
Loop Antenna(9kHz -30MHz)	Schwarzbeck	FMZB1519B	00014	Jun. 02, 2021	Jun. 01, 2022
RF cables1(9kHz- 30MHz)	Huber+Suhnar	9kHz-30MHz	B1702988-00 08	May 28, 2021	May 27, 2022
RF cables2(30MH z-1GHz)	Huber+Suhnar	30MHz-1GH z	1486150	May 28, 2021	May 27, 2022
RF cables3(1GHz- 40GHz)	Huber+Suhnar	1GHz-40GHz	1607106	May 28, 2021	May 27, 2022
Power Metter	Keysight	E4419	\	May 28, 2021	May 27, 2022
Power Sensor (AV)	Keysight	E9300A	\	May 28, 2021	May 27, 2022
Signal Analyzer20kHz -26.5GHz	Keysight	N9020A	MY49100060	May 28, 2021	May 27, 2022
Spectrum Analyzer9kHz- 40GHz	R&S	FSP40	\	May 28, 2021	May 27, 2022
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

Frequency (MHz)	Limit (dBuV)	
	Quas-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Notes:

- *Decreasing linearly with logarithm of frequency.
- The lower limit shall apply at the transition frequencies.

6.3 Test Procedure

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

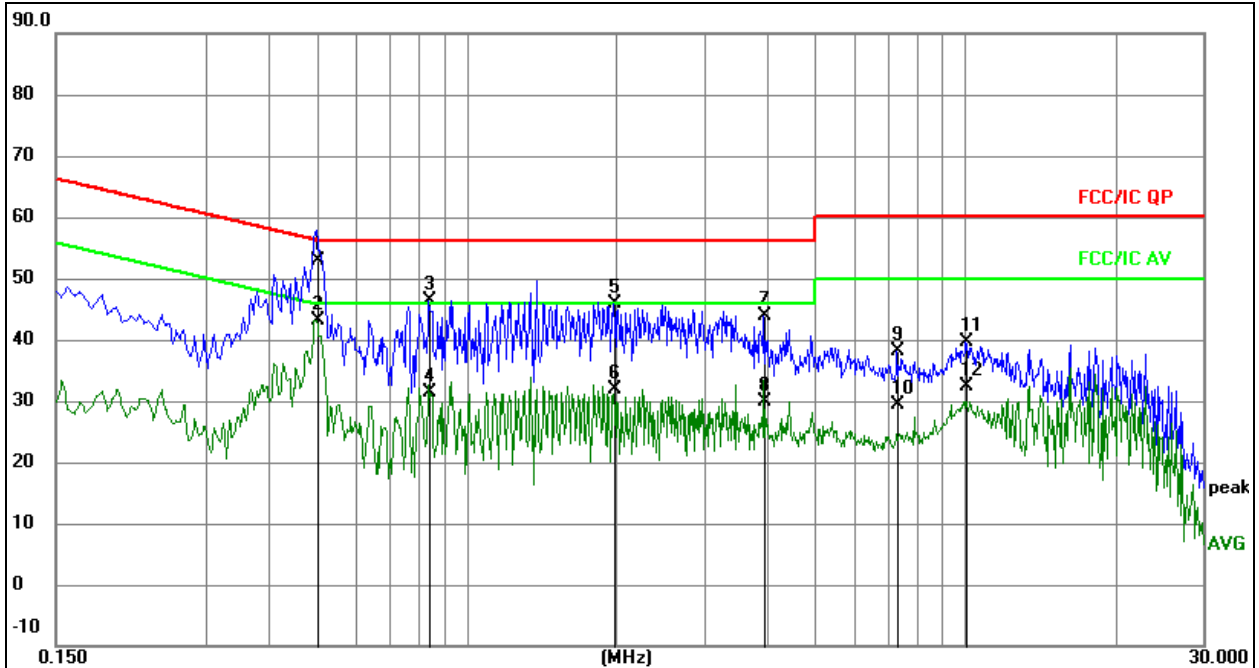
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
- For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

6.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

6.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Phase:	L
Test Voltage:	AC120V/60Hz	Test Mode:	Mode 4

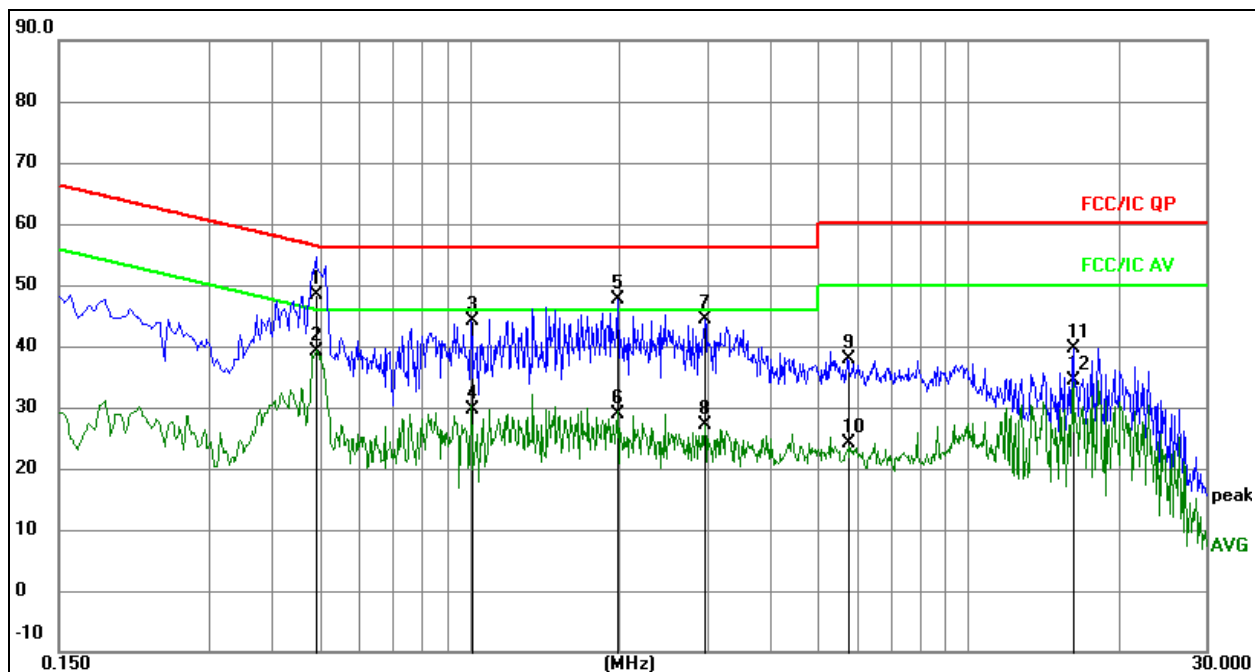


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over= Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz		dB	dBuV	dBuV	dB	
1		0.5010	33.20	19.61	52.81	56.00	-3.19	QP
2	*	0.5010	23.59	19.61	43.20	46.00	-2.80	AVG
3		0.8429	26.75	19.61	46.36	56.00	-9.64	QP
4		0.8429	11.86	19.61	31.47	46.00	-14.53	AVG
5		1.9769	26.28	19.62	45.90	56.00	-10.10	QP
6		1.9769	12.36	19.62	31.98	46.00	-14.02	AVG
7		3.9570	24.31	19.67	43.98	56.00	-12.02	QP
8		3.9570	10.19	19.67	29.86	46.00	-16.14	AVG
9		7.3140	18.49	19.74	38.23	60.00	-21.77	QP
10		7.3140	9.60	19.74	29.34	50.00	-20.66	AVG
11		10.0635	19.80	19.79	39.59	60.00	-20.41	QP
12		10.0635	12.66	19.79	32.45	50.00	-17.55	AVG

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101kPa	Phase:	N
Test Voltage:	AC120V/60Hz	Test Mode:	Mode 4



Remark:

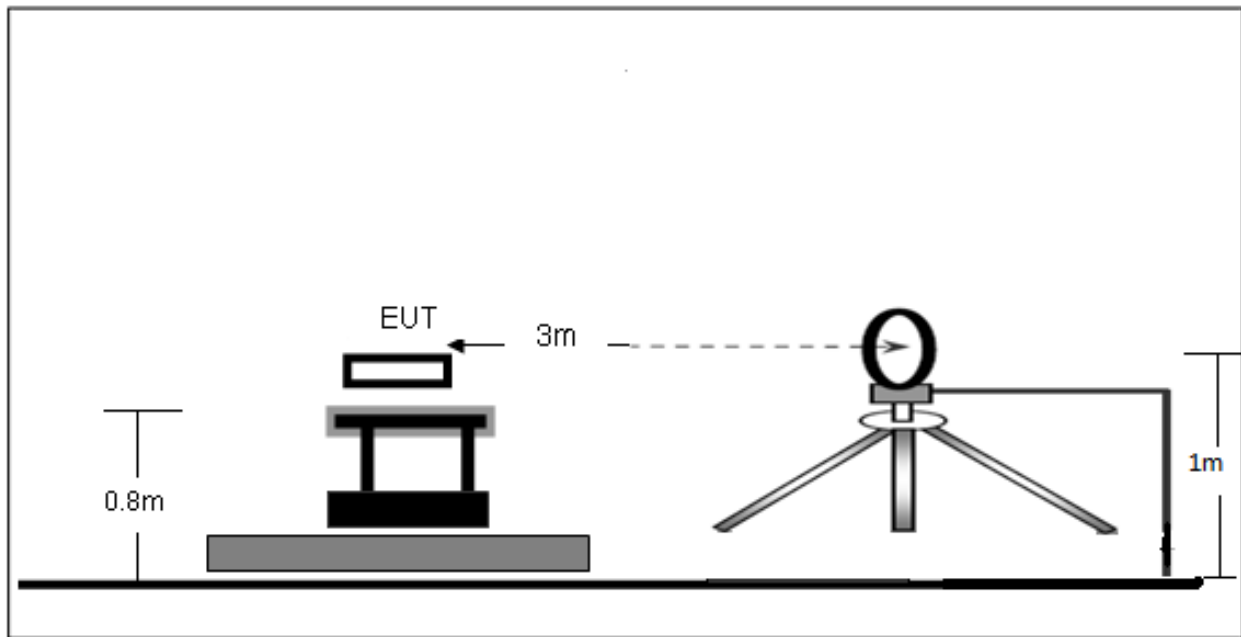
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over= Measurement-Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.4910	28.79	19.61	48.40	56.15	-7.75	QP
2	*	0.4910	19.53	19.61	39.14	46.15	-7.01	AVG
3		1.0050	24.50	19.62	44.12	56.00	-11.88	QP
4		1.0050	10.09	19.62	29.71	46.00	-16.29	AVG
5		1.9801	28.08	19.62	47.70	56.00	-8.30	QP
6		1.9801	9.26	19.62	28.88	46.00	-17.12	AVG
7		2.9619	24.78	19.65	44.43	56.00	-11.57	QP
8		2.9619	7.46	19.65	27.11	46.00	-18.89	AVG
9		5.7135	18.17	19.71	37.88	60.00	-22.12	QP
10		5.7135	4.43	19.71	24.14	50.00	-25.86	AVG
11		16.2256	19.95	19.76	39.71	60.00	-20.29	QP
12		16.2256	14.65	19.76	34.41	50.00	-15.59	AVG

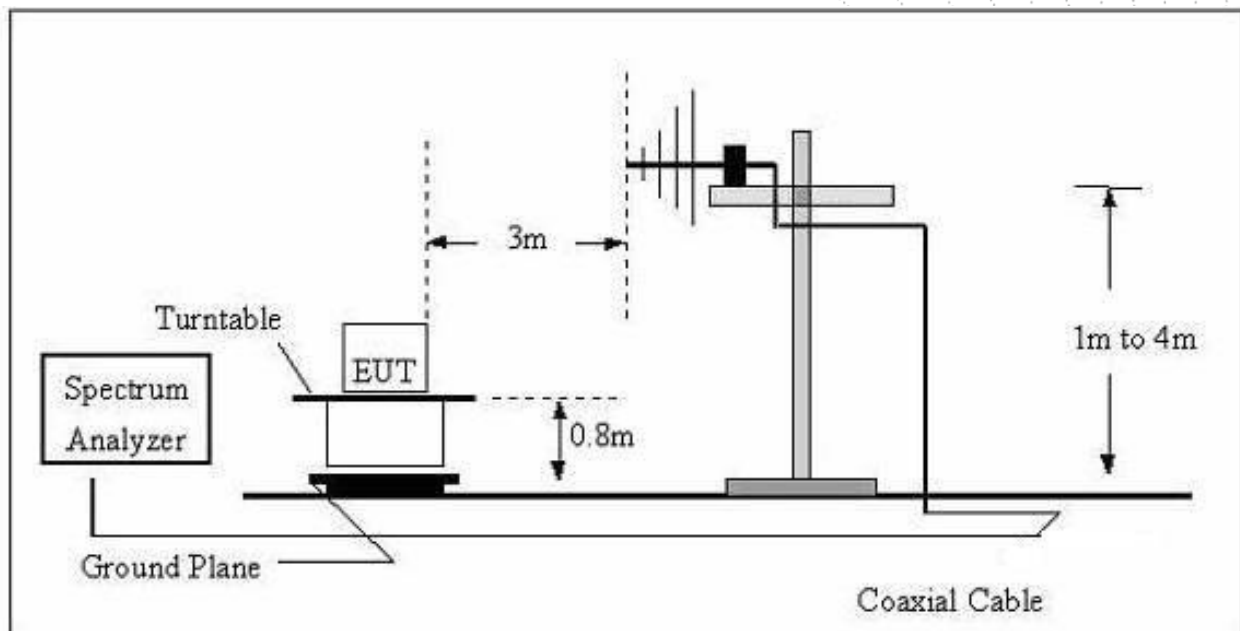
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

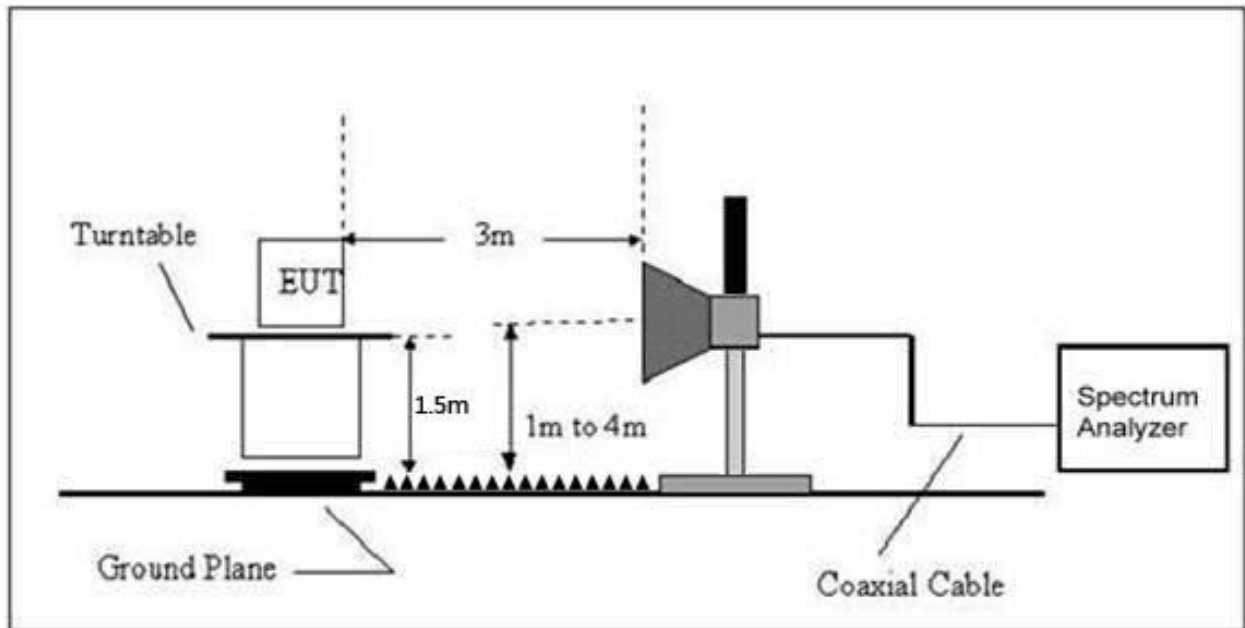
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



7.2 Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency (MHz)	Field Strength uV/m	Distance (m)	Field Strength Limit at 3m Distance	
			uV/m	dBuV/m
0.009 ~ 0.490	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log(2400/F(\text{kHz})) + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log(24000/F(\text{kHz})) + 40$
1.705 ~ 30	30	30	$100 * 30$	$20\log(30) + 40$
30 ~ 88	100	3	100	$20\log(100)$
88 ~ 216	150	3	150	$20\log(150)$
216 ~ 960	200	3	200	$20\log(200)$
Above 960	500	3	500	$20\log(500)$

Limits Of Radiated Emission Measurement (Above 1000MHz)

Frequency (MHz)	Limit (dBuV/m) (at 3M)	
	Peak	Average
Above 1000	74	54

Notes:

- (1)The limit for radiated test was performed according to FCC PART 15C.
- (2)The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

7.3 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205.

It must be performed with the highest gain of each type of antenna proposed for use with the EUT.

Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	10 Hz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where $RBWCF [dB] = 10 \cdot \lg(100 [kHz] / \text{narrower RBW} [kHz])$. , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

7.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

7.5 Test Result

Below 30MHz

Temperature:	26°C	Relative Humidity:	24%
Pressure:	101 kPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 4	Polarization:	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:

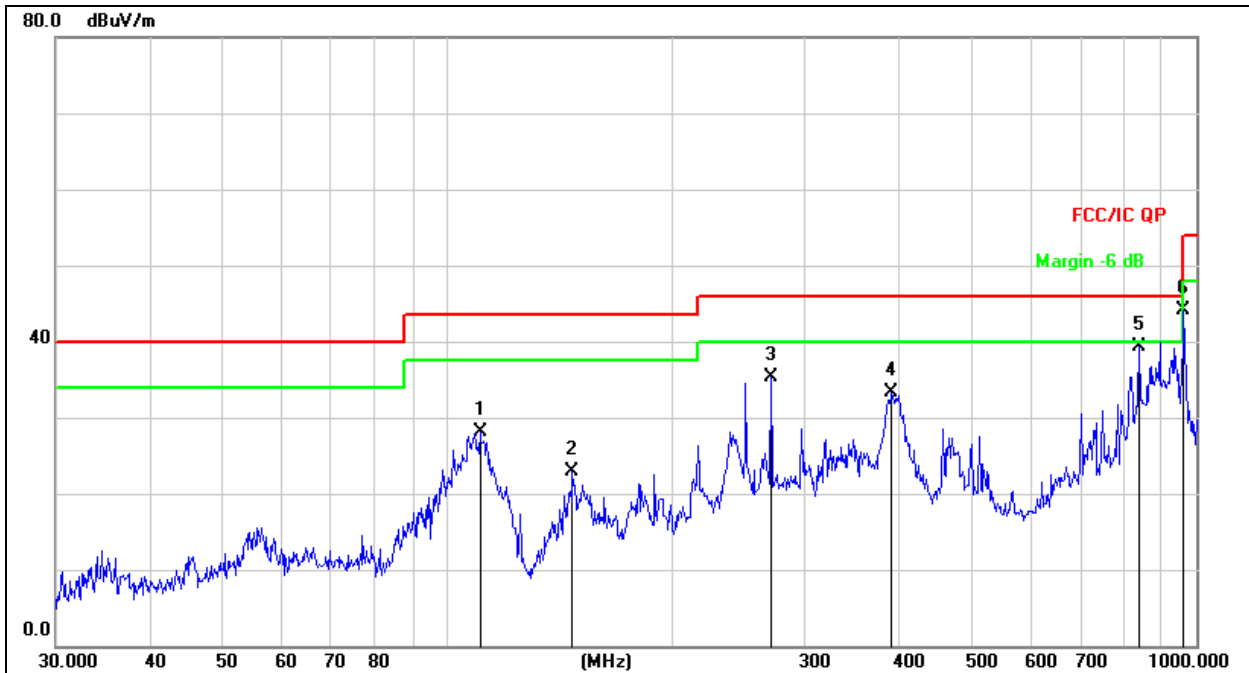
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance}) (dB)$;

Limit line = specific limits (dBuV) + distance extrapolation factor.

Between 30MHz – 1GHz

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage :	AC120V/60Hz
Test Mode :	Mode 4	Polarization :	Horizontal

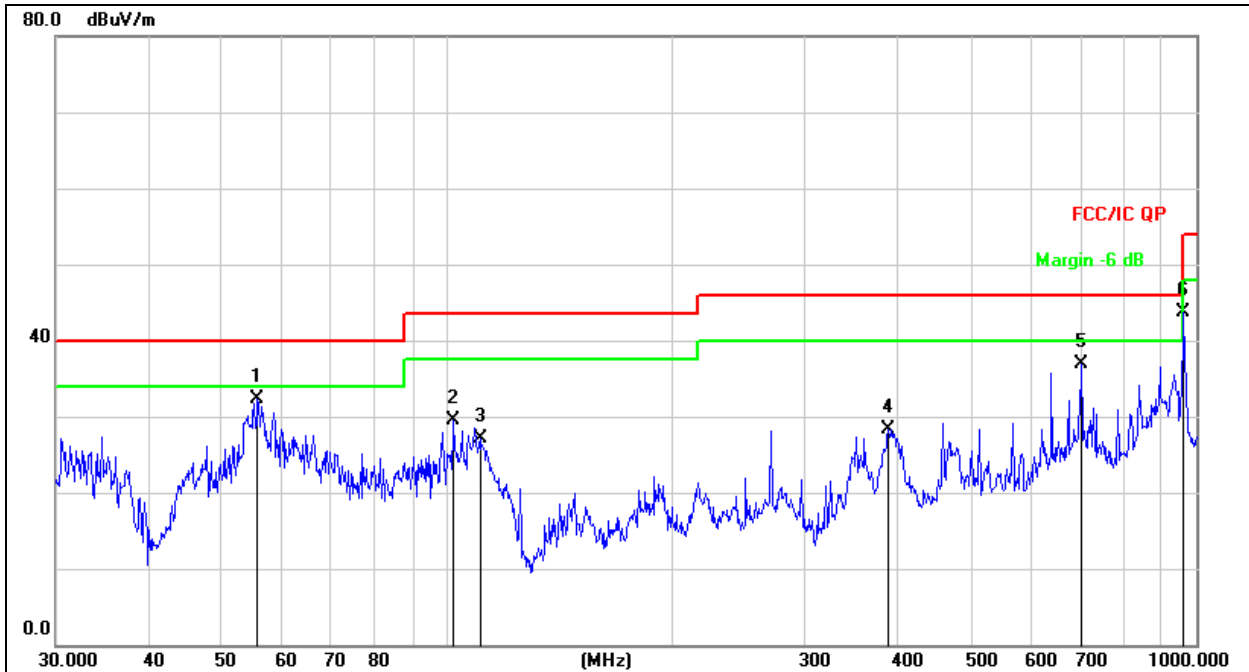


Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement=Reading Level+ Correct Factor
3. Over= Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		110.5687	44.97	-16.84	28.13	43.50	-15.37	QP
2		146.8876	42.21	-19.28	22.93	43.50	-20.57	QP
3		270.3747	49.63	-14.29	35.34	46.00	-10.66	QP
4		392.0951	44.44	-11.08	33.36	46.00	-12.64	QP
5	*	839.1817	40.34	-1.04	39.30	46.00	-6.70	QP
6		962.1622	43.71	0.42	44.13	54.00	-9.87	QP

Temperature:	26°C	Relative Humidity:	54%
Pressure:	101 kPa	Test Voltage :	AC120V/60Hz
Test Mode :	Mode 4	Polarization :	Vertical



Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement=Reading Level+ Correct Factor
3. Over= Measurement-Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	55.8046	47.97	-15.76	32.21	40.00	-7.79	QP
2		102.0014	45.85	-16.26	29.59	43.50	-13.91	QP
3		110.5687	43.85	-16.84	27.01	43.50	-16.49	QP
4		387.9920	39.58	-11.20	28.38	46.00	-17.62	QP
5		701.7609	40.58	-3.64	36.94	46.00	-9.06	QP
6		962.1622	43.30	0.42	43.72	54.00	-10.28	QP

Between 1GHz – 40GHz

Test Mode:	TX(5.1G) - 802.11a
------------	--------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G									
V	4434.007	63.72	5.94	35.40	44.00	61.06	68.2	-7.14	PK
V	4434.007	43.29	5.94	35.40	44.00	40.63	54	-13.37	AV
V	10360.196	62.27	8.46	39.75	44.50	65.98	68.2	-2.22	PK
V	10360.196	43.70	8.46	39.75	44.50	47.41	54	-6.59	AV
V	15540.115	60.81	10.12	38.80	44.10	65.63	74	-8.37	PK
V	15540.115	43.94	10.12	38.80	42.70	50.16	54	-3.84	AV
H	4434.025	61.78	5.94	35.18	44.00	58.90	68.2	-9.30	PK
H	4434.025	43.82	5.94	35.18	44.00	40.94	54	-13.06	AV
H	10360.156	54.86	8.46	38.71	44.50	57.53	68.2	-10.67	PK
H	10360.156	42.41	8.46	38.71	44.50	45.08	54	-8.92	AV
H	15540.062	50.70	10.12	38.38	44.10	55.10	74	-18.90	PK
H	15540.062	40.71	10.12	38.38	44.10	45.11	54	-8.89	AV
middle Channel (5200 MHz)-Above 1G									
V	4592.042	64.46	6.48	36.35	44.05	63.24	74	-10.76	PK
V	4592.042	43.79	6.48	36.35	44.05	42.57	54	-11.43	AV
V	10400.100	61.02	8.47	37.88	44.51	62.86	68.2	-5.34	PK
V	10400.100	43.61	8.47	37.88	44.51	45.45	54	-8.55	AV
V	15600.130	60.33	10.12	38.80	44.10	65.15	74	-8.85	PK
V	15600.130	43.36	10.12	38.80	42.70	49.58	54	-4.42	AV
H	4592.011	64.00	6.48	36.37	44.05	62.80	74	-11.20	PK
H	4592.011	43.69	6.48	36.37	44.05	42.49	54	-11.51	AV
H	10400.036	50.01	8.47	38.64	44.50	52.62	68.2	-15.58	PK
H	10400.036	41.29	8.47	38.64	44.50	43.90	54	-10.10	AV
H	15600.057	52.16	10.12	38.38	44.10	56.56	74	-17.44	PK
H	15600.057	40.76	10.12	38.38	44.10	45.16	54	-8.84	AV
High Channel (5240 MHz)-Above 1G									
V	4739.056	64.91	7.10	37.24	43.50	65.75	74	-8.25	PK
V	4739.056	43.02	7.10	37.24	43.50	43.86	54	-10.14	AV
V	10480.002	64.18	8.46	37.68	44.50	65.82	68.2	-2.38	PK
V	10480.002	43.10	8.46	37.68	44.50	44.74	54	-9.26	AV
V	15720.118	61.49	10.12	38.80	44.10	66.31	74	-7.69	PK
V	15720.118	43.20	10.12	38.80	42.70	49.42	54	-4.58	AV
H	4739.164	63.63	7.10	37.24	43.50	64.47	74	-9.53	PK
H	4739.164	43.74	7.10	37.24	43.50	44.58	54	-9.42	AV
H	10480.027	52.87	8.46	38.57	44.50	55.40	68.2	-12.80	PK
H	10480.027	41.09	8.46	38.57	44.50	43.62	54	-10.38	AV
H	15720.172	51.85	10.12	38.38	44.10	56.25	74	-17.75	PK
H	15720.172	43.12	10.12	38.38	44.10	47.52	54	-6.48	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

The worst case is Antenna A.

Test Mode:	TX(5.1G) - 802.11n-HT20
------------	-------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G									
V	4434.000	61.35	5.94	35.40	44.00	58.69	68.2	-9.51	PK
V	4434.000	43.31	5.94	35.40	44.00	40.65	54	-13.35	AV
V	10360.173	61.18	8.46	39.75	44.50	64.89	68.2	-3.31	PK
V	10360.173	43.72	8.46	39.75	44.50	47.43	54	-6.57	AV
V	15540.101	64.33	10.12	38.80	44.10	69.15	74	-4.85	PK
V	15540.101	43.10	10.12	38.80	42.70	49.32	54	-4.68	AV
H	4434.087	62.84	5.94	35.18	44.00	59.96	68.2	-8.24	PK
H	4434.087	43.53	5.94	35.18	44.00	40.65	54	-13.35	AV
H	10360.061	52.36	8.46	38.71	44.50	55.03	68.2	-13.17	PK
H	10360.061	44.86	8.46	38.71	44.50	47.53	54	-6.47	AV
H	15540.075	52.49	10.12	38.38	44.10	56.89	74	-17.11	PK
H	15540.075	40.16	10.12	38.38	44.10	44.56	54	-9.44	AV
middle Channel (5200 MHz)-Above 1G									
V	4592.068	62.43	6.48	36.35	44.05	61.21	74	-12.79	PK
V	4592.068	43.64	6.48	36.35	44.05	42.42	54	-11.58	AV
V	10400.085	64.96	8.47	37.88	44.51	66.80	68.2	-1.40	PK
V	10400.085	43.27	8.47	37.88	44.51	45.11	54	-8.89	AV
V	15600.168	64.19	10.12	38.80	44.10	69.01	74	-4.99	PK
V	15600.168	43.34	10.12	38.80	42.70	49.56	54	-4.44	AV
H	4592.053	63.57	6.48	36.37	44.05	62.37	74	-11.63	PK
H	4592.053	43.44	6.48	36.37	44.05	42.24	54	-11.76	AV
H	10400.124	50.15	8.47	38.64	44.50	52.76	68.2	-15.44	PK
H	10400.124	40.61	8.47	38.64	44.50	43.22	54	-10.78	AV
H	15600.171	54.17	10.12	38.38	44.10	58.57	74	-15.43	PK
H	15600.171	43.09	10.12	38.38	44.10	47.49	54	-6.51	AV
High Channel (5240 MHz)-Above 1G									
V	4739.190	64.58	7.10	37.24	43.50	65.42	74	-8.58	PK
V	4739.190	43.43	7.10	37.24	43.50	44.27	54	-9.73	AV
V	10480.128	63.20	8.46	37.68	44.50	64.84	68.2	-3.36	PK
V	10480.128	43.74	8.46	37.68	44.50	45.38	54	-8.62	AV
V	15720.175	63.15	10.12	38.80	44.10	67.97	74	-6.03	PK
V	15720.175	43.22	10.12	38.80	42.70	49.44	54	-4.56	AV
H	4739.055	64.12	7.10	37.24	43.50	64.96	74	-9.04	PK
H	4739.055	43.62	7.10	37.24	43.50	44.46	54	-9.54	AV
H	10480.064	50.81	8.46	38.57	44.50	53.34	68.2	-14.86	PK
H	10480.064	43.32	8.46	38.57	44.50	45.85	54	-8.15	AV
H	15720.187	52.38	10.12	38.38	44.10	56.78	74	-17.22	PK
H	15720.187	42.88	10.12	38.38	44.10	47.28	54	-6.72	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode :	TX(5.1G) - 802.11n-HT40
-------------	-------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detector Type
Low Channel (5190 MHz)-Above 1G									
V	4434.103	62.47	5.94	35.40	44.00	59.81	68.2	-8.39	PK
V	4434.103	43.05	5.94	35.40	44.00	40.39	54	-13.61	AV
V	10380.103	60.35	8.46	39.75	44.50	64.06	68.2	-4.14	PK
V	10380.103	43.06	8.46	39.75	44.50	46.77	54	-7.23	AV
V	15570.174	61.13	10.12	38.80	44.10	65.95	74	-8.05	PK
V	15570.174	43.49	10.12	38.80	42.70	49.71	54	-4.29	AV
H	4434.028	64.43	5.94	35.18	44.00	61.55	74	-12.45	PK
H	4434.028	43.77	5.94	35.18	44.00	40.89	54	-13.11	AV
H	10380.160	54.18	8.46	38.71	44.50	56.85	68.2	-11.35	PK
H	10380.160	40.47	8.46	38.71	44.50	43.14	54	-10.86	AV
H	15570.180	50.31	10.12	38.38	44.10	54.71	74	-19.29	PK
H	15570.180	41.20	10.12	38.38	44.10	45.60	54	-8.40	AV
middle Channel (5230 MHz)-Above 1G									
V	4739.090	62.60	6.48	36.35	44.05	61.38	68.2	-6.82	PK
V	4739.090	43.82	6.48	36.35	44.05	42.60	54	-11.40	AV
V	10460.109	63.08	8.47	37.88	44.51	64.92	68.2	-3.28	PK
V	10460.109	43.27	8.47	37.88	44.51	45.11	54	-8.89	AV
V	15690.055	64.77	10.12	38.80	44.10	69.59	74	-4.41	PK
V	15690.055	43.52	10.12	38.80	42.70	49.74	54	-4.26	AV
H	4739.199	61.74	6.48	36.37	44.05	60.54	68.2	-7.66	PK
H	4739.199	43.33	6.48	36.37	44.05	42.13	54	-11.87	AV
H	10460.100	51.89	8.47	38.64	44.50	54.50	68.2	-13.70	PK
H	10460.100	43.96	8.47	38.64	44.50	46.57	54	-7.43	AV
H	15690.191	50.96	10.12	38.38	44.10	55.36	74	-18.64	PK
H	15690.191	42.65	10.12	38.38	44.10	47.05	54	-6.95	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ac-HT20
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5180 MHz)-Above 1G									
V	4434.048	63.12	5.94	35.40	44.00	60.46	68.2	-7.74	PK
V	4434.048	43.36	5.94	35.40	44.00	40.70	54	-13.30	AV
V	10360.193	62.25	8.46	39.75	44.50	65.96	68.2	-2.24	PK
V	10360.193	43.24	8.46	39.75	44.50	46.95	54	-7.05	AV
V	15540.060	62.86	10.12	38.80	44.10	67.68	74	-6.32	PK
V	15540.060	43.94	10.12	38.80	42.70	50.16	54	-3.84	AV
H	4434.053	62.69	5.94	35.18	44.00	59.81	68.2	-8.39	PK
H	4434.053	43.03	5.94	35.18	44.00	40.15	54	-13.85	AV
H	10360.102	53.06	8.46	38.71	44.50	55.73	68.2	-12.47	PK
H	10360.102	40.57	8.46	38.71	44.50	43.24	54	-10.76	AV
H	15540.020	52.14	10.12	38.38	44.10	56.54	74	-17.46	PK
H	15540.020	44.78	10.12	38.38	44.10	49.18	54	-4.82	AV
Middle Channel (5200 MHz)-Above 1G									
V	4592.023	61.73	6.48	36.35	44.05	60.51	74	-13.49	PK
V	4592.023	43.50	6.48	36.35	44.05	42.28	54	-11.72	AV
V	10400.130	61.46	8.47	37.88	44.51	63.30	68.2	-4.90	PK
V	10400.130	43.98	8.47	37.88	44.51	45.82	54	-8.18	AV
V	15600.039	63.32	10.12	38.80	44.10	68.14	74	-5.86	PK
V	15600.039	43.48	10.12	38.80	42.70	49.70	54	-4.30	AV
H	4592.084	61.69	6.48	36.37	44.05	60.49	74	-13.51	PK
H	4592.084	43.10	6.48	36.37	44.05	41.90	54	-12.10	AV
H	10400.013	51.00	8.47	38.64	44.50	53.61	68.2	-14.59	PK
H	10400.013	44.98	8.47	38.64	44.50	47.59	54	-6.41	AV
H	15600.142	50.51	10.12	38.38	44.10	54.91	74	-19.09	PK
H	15600.142	41.83	10.12	38.38	44.10	46.23	54	-7.77	AV
High Channel (5240 MHz)-Above 1G									
V	4739.076	60.52	7.10	37.24	43.50	61.36	74	-12.64	PK
V	4739.076	43.34	7.10	37.24	43.50	44.18	54	-9.82	AV
V	10480.046	62.72	8.46	37.68	44.50	64.36	68.2	-3.84	PK
V	10480.046	43.04	8.46	37.68	44.50	44.68	54	-9.32	AV
V	15720.113	63.03	10.12	38.80	44.10	67.85	74	-6.15	PK
V	15720.113	43.92	10.12	38.80	42.70	50.14	54	-3.86	AV
H	4739.166	62.88	7.10	37.24	43.50	63.72	74	-10.28	PK
H	4739.166	43.98	7.10	37.24	43.50	44.82	54	-9.18	AV
H	10480.012	51.32	8.46	38.57	44.50	53.85	68.2	-14.35	PK
H	10480.012	43.06	8.46	38.57	44.50	45.59	54	-8.41	AV
H	15720.174	51.53	10.12	38.38	44.10	55.93	74	-18.07	PK
H	15720.174	44.76	10.12	38.38	44.10	49.16	54	-4.84	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ac-HT40
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5190 MHz)-Above 1G									
V	4434.143	62.97	5.94	35.40	44.00	60.31	68.2	-7.89	PK
V	4434.143	43.75	5.94	35.40	44.00	41.09	54	-12.91	AV
V	10380.057	60.41	8.46	39.75	44.50	64.12	68.2	-4.08	PK
V	10380.057	43.19	8.46	39.75	44.50	46.90	54	-7.10	AV
V	15570.146	63.71	10.12	38.80	44.10	68.53	74	-5.47	PK
V	15570.146	43.34	10.12	38.80	42.70	49.56	54	-4.44	AV
H	4434.165	61.31	5.94	35.18	44.00	58.43	74	-15.57	PK
H	4434.165	43.93	5.94	35.18	44.00	41.05	54	-12.95	AV
H	10380.066	54.44	8.46	38.71	44.50	57.11	68.2	-11.09	PK
H	10380.066	44.02	8.46	38.71	44.50	46.69	54	-7.31	AV
H	15570.036	50.05	10.12	38.38	44.10	54.45	74	-19.55	PK
H	15570.036	40.38	10.12	38.38	44.10	44.78	54	-9.22	AV
High Channel (5230 MHz)-Above 1G									
V	4739.015	61.96	6.48	36.35	44.05	60.74	68.2	-7.46	PK
V	4739.015	43.41	6.48	36.35	44.05	42.19	54	-11.81	AV
V	10460.026	61.06	8.47	37.88	44.51	62.90	68.2	-5.30	PK
V	10460.026	43.45	8.47	37.88	44.51	45.29	54	-8.71	AV
V	15690.049	64.18	10.12	38.80	44.10	69.00	74	-5.00	PK
V	15690.049	43.34	10.12	38.80	42.70	49.56	54	-4.44	AV
H	4739.128	64.09	6.48	36.37	44.05	62.89	68.2	-5.31	PK
H	4739.128	43.97	6.48	36.37	44.05	42.77	54	-11.23	AV
H	10460.185	50.26	8.47	38.64	44.50	52.87	68.2	-15.33	PK
H	10460.185	44.09	8.47	38.64	44.50	46.70	54	-7.30	AV
H	15690.116	53.36	10.12	38.38	44.10	57.76	74	-16.24	PK
H	15690.116	44.35	10.12	38.38	44.10	48.75	54	-5.25	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.1G) - 802.11ac-HT80
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
(5210 MHz)-Above 1G									
V	4434.036	64.40	5.94	35.40	44.00	61.74	68.2	-6.46	PK
V	4434.036	43.21	5.94	35.40	44.00	40.55	54	-13.45	AV
V	10420.185	63.17	8.46	39.75	44.50	66.88	68.2	-1.32	PK
V	10420.185	43.76	8.46	39.75	44.50	47.47	54	-6.53	AV
V	15630.127	61.57	10.12	38.80	44.10	66.39	74	-7.61	PK
V	15630.127	43.24	10.12	38.80	42.70	49.46	54	-4.54	AV
H	4434.081	63.72	5.94	35.18	44.00	60.84	68.2	-7.36	PK
H	4434.081	43.19	5.94	35.18	44.00	40.31	54	-13.69	AV
H	10420.034	53.66	8.46	38.71	44.50	56.33	68.2	-11.87	PK
H	10420.034	41.68	8.46	38.71	44.50	44.35	54	-9.65	AV
H	15630.119	51.97	10.12	38.38	44.10	56.37	74	-17.63	PK
H	15630.119	41.14	10.12	38.38	44.10	45.54	54	-8.46	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.3G) - 802.11a
------------	--------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detector Type
Low Channel (5260 MHz)-Above 1G									
V	4434.150	63.14	5.94	35.40	44.00	60.48	68.2	-7.72	PK
V	4434.150	43.99	5.94	35.40	44.00	41.33	54	-12.67	AV
V	10520.111	63.28	8.46	39.75	44.50	66.99	68.2	-1.21	PK
V	10520.111	43.94	8.46	39.75	44.50	47.65	54	-6.35	AV
V	15780.108	63.13	10.12	38.80	44.10	67.95	74	-6.05	PK
V	15780.108	43.48	10.12	38.80	42.70	49.70	54	-4.30	AV
H	4434.147	60.89	5.94	35.18	44.00	58.01	68.2	-10.19	PK
H	4434.147	43.46	5.94	35.18	44.00	40.58	54	-13.42	AV
H	10520.033	50.14	8.46	38.71	44.50	52.81	68.2	-15.39	PK
H	10520.033	41.00	8.46	38.71	44.50	43.67	54	-10.33	AV
H	15780.184	54.75	10.12	38.38	44.10	59.15	74	-14.85	PK
H	15780.184	43.42	10.12	38.38	44.10	47.82	54	-6.18	AV
middle Channel (5280 MHz)-Above 1G									
V	4592.115	63.07	6.48	36.35	44.05	61.85	74	-12.15	PK
V	4592.115	43.36	6.48	36.35	44.05	42.14	54	-11.86	AV
V	10560.049	64.07	8.47	37.88	44.51	65.91	68.2	-2.29	PK
V	10560.049	43.34	8.47	37.88	44.51	45.18	54	-8.82	AV
V	15840.184	60.86	10.12	38.80	44.10	65.68	74	-8.32	PK
V	15840.184	43.03	10.12	38.80	42.70	49.25	54	-4.75	AV
H	4592.174	61.84	6.48	36.37	44.05	60.64	74	-13.36	PK
H	4592.174	43.87	6.48	36.37	44.05	42.67	54	-11.33	AV
H	10560.186	50.72	8.47	38.64	44.50	53.33	68.2	-14.87	PK
H	10560.186	43.65	8.47	38.64	44.50	46.26	54	-7.74	AV
H	15840.068	54.28	10.12	38.38	44.10	58.68	74	-15.32	PK
H	15840.068	44.98	10.12	38.38	44.10	49.38	54	-4.62	AV
High Channel (5320 MHz)-Above 1G									
V	4739.012	63.66	7.10	37.24	43.50	64.50	74	-9.50	PK
V	4739.012	43.19	7.10	37.24	43.50	44.03	54	-9.97	AV
V	10640.136	64.96	8.46	37.68	44.50	66.60	68.2	-1.60	PK
V	10640.136	43.24	8.46	37.68	44.50	44.88	54	-9.12	AV
V	15960.189	60.18	10.12	38.80	44.10	65.00	74	-9.00	PK
V	15960.189	43.26	10.12	38.80	42.70	49.48	54	-4.52	AV
H	4739.179	63.16	7.10	37.24	43.50	64.00	74	-10.00	PK
H	4739.179	43.39	7.10	37.24	43.50	44.23	54	-9.77	AV
H	10640.094	50.91	8.46	38.57	44.50	53.44	68.2	-14.76	PK
H	10640.094	44.29	8.46	38.57	44.50	46.82	54	-7.18	AV
H	15960.173	50.08	10.12	38.38	44.10	54.48	74	-19.52	PK
H	15960.173	40.52	10.12	38.38	44.10	44.92	54	-9.08	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

The worst case is Antenna A.

Test Mode:	TX(5.3G) - 802.11n-HT20
------------	-------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detector Type
Low Channel (5260 MHz)-Above 1G									
V	4434.191	60.03	5.94	35.40	44.00	57.37	68.2	-10.83	PK
V	4434.191	43.06	5.94	35.40	44.00	40.40	54	-13.60	AV
V	10520.126	60.49	8.46	39.75	44.50	64.20	68.2	-4.00	PK
V	10520.126	43.11	8.46	39.75	44.50	46.82	54	-7.18	AV
V	15780.073	61.70	10.12	38.80	44.10	66.52	74	-7.48	PK
V	15780.073	43.31	10.12	38.80	42.70	49.53	54	-4.47	AV
H	4434.072	60.51	5.94	35.18	44.00	57.63	68.2	-10.57	PK
H	4434.072	43.23	5.94	35.18	44.00	40.35	54	-13.65	AV
H	10520.184	54.46	8.46	38.71	44.50	57.13	68.2	-11.07	PK
H	10520.184	44.26	8.46	38.71	44.50	46.93	54	-7.07	AV
H	15780.111	54.18	10.12	38.38	44.10	58.58	74	-15.42	PK
H	15780.111	42.05	10.12	38.38	44.10	46.45	54	-7.55	AV
middle Channel (5280 MHz)-Above 1G									
V	4592.080	60.44	6.48	36.35	44.05	59.22	74	-14.78	PK
V	4592.080	43.83	6.48	36.35	44.05	42.61	54	-11.39	AV
V	10560.020	64.69	8.47	37.88	44.51	66.53	68.2	-1.67	PK
V	10560.020	43.10	8.47	37.88	44.51	44.94	54	-9.06	AV
V	15840.000	62.34	10.12	38.80	44.10	67.16	74	-6.84	PK
V	15840.000	43.43	10.12	38.80	42.70	49.65	54	-4.35	AV
H	4592.142	63.84	6.48	36.37	44.05	62.64	74	-11.36	PK
H	4592.142	43.91	6.48	36.37	44.05	42.71	54	-11.29	AV
H	10560.081	52.97	8.47	38.64	44.50	55.58	68.2	-12.62	PK
H	10560.081	42.19	8.47	38.64	44.50	44.80	54	-9.20	AV
H	15840.105	50.17	10.12	38.38	44.10	54.57	74	-19.43	PK
H	15840.105	42.53	10.12	38.38	44.10	46.93	54	-7.07	AV
High Channel (5320 MHz)-Above 1G									
V	4739.032	60.44	7.10	37.24	43.50	61.28	74	-12.72	PK
V	4739.032	43.13	7.10	37.24	43.50	43.97	54	-10.03	AV
V	10640.071	61.93	8.46	37.68	44.50	63.57	68.2	-4.63	PK
V	10640.071	43.62	8.46	37.68	44.50	45.26	54	-8.74	AV
V	15960.057	63.35	10.12	38.80	44.10	68.17	74	-5.83	PK
V	15960.057	43.29	10.12	38.80	42.70	49.51	54	-4.49	AV
H	4739.178	62.96	7.10	37.24	43.50	63.80	74	-10.20	PK
H	4739.178	43.32	7.10	37.24	43.50	44.16	54	-9.84	AV
H	10640.105	54.60	8.46	38.57	44.50	57.13	68.2	-11.07	PK
H	10640.105	44.08	8.46	38.57	44.50	46.61	54	-7.39	AV
H	15960.162	52.33	10.12	38.38	44.10	56.73	74	-17.27	PK
H	15960.162	44.08	10.12	38.38	44.10	48.48	54	-5.52	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode :	TX(5.3G) - 802.11n-HT40
-------------	-------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detector Type
Low Channel (5270 MHz)-Above 1G									
V	4434.002	61.88	5.94	35.40	44.00	59.22	68.2	-8.98	PK
V	4434.002	43.73	5.94	35.40	44.00	41.07	54	-12.93	AV
V	10540.196	63.99	8.46	39.75	44.50	67.70	68.2	-0.50	PK
V	10540.196	43.22	8.46	39.75	44.50	46.93	54	-7.07	AV
V	15810.125	61.77	10.12	38.80	44.10	66.59	74	-7.41	PK
V	15810.125	43.59	10.12	38.80	42.70	49.81	54	-4.19	AV
H	4434.062	61.25	5.94	35.18	44.00	58.37	74	-15.63	PK
H	4434.062	43.57	5.94	35.18	44.00	40.69	54	-13.31	AV
H	10540.119	52.37	8.46	38.71	44.50	55.04	68.2	-13.16	PK
H	10540.119	44.65	8.46	38.71	44.50	47.32	54	-6.68	AV
H	15810.191	53.82	10.12	38.38	44.10	58.22	74	-15.78	PK
H	15810.191	44.18	10.12	38.38	44.10	48.58	54	-5.42	AV
middle Channel (5310 MHz)-Above 1G									
V	4739.147	62.04	6.48	36.35	44.05	60.82	68.2	-7.38	PK
V	4739.147	43.20	6.48	36.35	44.05	41.98	54	-12.02	AV
V	10620.141	62.36	8.47	37.88	44.51	64.20	68.2	-4.00	PK
V	10620.141	43.38	8.47	37.88	44.51	45.22	54	-8.78	AV
V	15930.172	64.41	10.12	38.80	44.10	69.23	74	-4.77	PK
V	15930.172	43.03	10.12	38.80	42.70	49.25	54	-4.75	AV
H	4739.061	64.60	6.48	36.37	44.05	63.40	68.2	-4.80	PK
H	4739.061	43.83	6.48	36.37	44.05	42.63	54	-11.37	AV
H	10620.183	51.24	8.47	38.64	44.50	53.85	68.2	-14.35	PK
H	10620.183	43.93	8.47	38.64	44.50	46.54	54	-7.46	AV
H	15930.169	50.37	10.12	38.38	44.10	54.77	74	-19.23	PK
H	15930.169	40.68	10.12	38.38	44.10	45.08	54	-8.92	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode :	TX(5.3G) - 802.11ac-HT20
-------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5260 MHz)-Above 1G									
V	4434.129	62.30	5.94	35.40	44.00	59.64	68.2	-8.56	PK
V	4434.129	43.79	5.94	35.40	44.00	41.13	54	-12.87	AV
V	10520.094	63.58	8.46	39.75	44.50	67.29	68.2	-0.91	PK
V	10520.094	43.42	8.46	39.75	44.50	47.13	54	-6.87	AV
V	15780.135	62.16	10.12	38.80	44.10	66.98	74	-7.02	PK
V	15780.135	43.27	10.12	38.80	42.70	49.49	54	-4.51	AV
H	4434.047	61.40	5.94	35.18	44.00	58.52	68.2	-9.68	PK
H	4434.047	43.87	5.94	35.18	44.00	40.99	54	-13.01	AV
H	10520.031	54.77	8.46	38.71	44.50	57.44	68.2	-10.76	PK
H	10520.031	41.02	8.46	38.71	44.50	43.69	54	-10.31	AV
H	15780.124	53.27	10.12	38.38	44.10	57.67	74	-16.33	PK
H	15780.124	43.65	10.12	38.38	44.10	48.05	54	-5.95	AV
middle Channel (5280 MHz)-Above 1G									
V	4592.120	62.49	6.48	36.35	44.05	61.27	74	-12.73	PK
V	4592.120	43.94	6.48	36.35	44.05	42.72	54	-11.28	AV
V	10560.098	61.59	8.47	37.88	44.51	63.43	68.2	-4.77	PK
V	10560.098	43.16	8.47	37.88	44.51	45.00	54	-9.00	AV
V	15840.182	63.39	10.12	38.80	44.10	68.21	74	-5.79	PK
V	15840.182	43.59	10.12	38.80	42.70	49.81	54	-4.19	AV
H	4592.130	63.65	6.48	36.37	44.05	62.45	74	-11.55	PK
H	4592.130	43.73	6.48	36.37	44.05	42.53	54	-11.47	AV
H	10560.123	51.55	8.47	38.64	44.50	54.16	68.2	-14.04	PK
H	10560.123	44.08	8.47	38.64	44.50	46.69	54	-7.31	AV
H	15840.066	54.76	10.12	38.38	44.10	59.16	74	-14.84	PK
H	15840.066	42.07	10.12	38.38	44.10	46.47	54	-7.53	AV
High Channel (5320 MHz)-Above 1G									
V	4739.142	64.17	7.10	37.24	43.50	65.01	74	-8.99	PK
V	4739.142	43.62	7.10	37.24	43.50	44.46	54	-9.54	AV
V	10640.148	63.00	8.46	37.68	44.50	64.64	68.2	-3.56	PK
V	10640.148	43.84	8.46	37.68	44.50	45.48	54	-8.52	AV
V	15960.064	64.99	10.12	38.80	44.10	69.81	74	-4.19	PK
V	15960.064	43.76	10.12	38.80	42.70	49.98	54	-4.02	AV
H	4739.150	62.34	7.10	37.24	43.50	63.18	74	-10.82	PK
H	4739.150	43.39	7.10	37.24	43.50	44.23	54	-9.77	AV
H	10640.196	50.86	8.46	38.57	44.50	53.39	68.2	-14.81	PK
H	10640.196	42.36	8.46	38.57	44.50	44.89	54	-9.11	AV
H	15960.116	50.82	10.12	38.38	44.10	55.22	74	-18.78	PK
H	15960.116	41.46	10.12	38.38	44.10	45.86	54	-8.14	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode :	TX(5.3G) - 802.11ac-HT40
-------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detector Type
Low Channel (5270 MHz)-Above 1G									
V	4434.176	62.79	5.94	35.40	44.00	60.13	68.2	-8.07	PK
V	4434.176	43.59	5.94	35.40	44.00	40.93	54	-13.07	AV
V	10540.141	61.56	8.46	39.75	44.50	65.27	68.2	-2.93	PK
V	10540.141	43.80	8.46	39.75	44.50	47.51	54	-6.49	AV
V	15810.041	63.14	10.12	38.80	44.10	67.96	74	-6.04	PK
V	15810.041	43.77	10.12	38.80	42.70	49.99	54	-4.01	AV
H	4434.109	63.24	5.94	35.18	44.00	60.36	74	-13.64	PK
H	4434.109	43.44	5.94	35.18	44.00	40.56	54	-13.44	AV
H	10540.063	52.05	8.46	38.71	44.50	54.72	68.2	-13.48	PK
H	10540.063	43.61	8.46	38.71	44.50	46.28	54	-7.72	AV
H	15810.154	53.30	10.12	38.38	44.10	57.70	74	-16.30	PK
H	15810.154	43.14	10.12	38.38	44.10	47.54	54	-6.46	AV
middle Channel (5310 MHz)-Above 1G									
V	4739.117	60.91	6.48	36.35	44.05	59.69	68.2	-8.51	PK
V	4739.117	43.68	6.48	36.35	44.05	42.46	54	-11.54	AV
V	10620.113	60.71	8.47	37.88	44.51	62.55	68.2	-5.65	PK
V	10620.113	43.04	8.47	37.88	44.51	44.88	54	-9.12	AV
V	15930.150	63.76	10.12	38.80	44.10	68.58	74	-5.42	PK
V	15930.150	43.70	10.12	38.80	42.70	49.92	54	-4.08	AV
H	4739.041	62.57	6.48	36.37	44.05	61.37	68.2	-6.83	PK
H	4739.041	43.07	6.48	36.37	44.05	41.87	54	-12.13	AV
H	10620.067	54.07	8.47	38.64	44.50	56.68	68.2	-11.52	PK
H	10620.067	43.70	8.47	38.64	44.50	46.31	54	-7.69	AV
H	15930.081	51.19	10.12	38.38	44.10	55.59	74	-18.41	PK
H	15930.081	40.67	10.12	38.38	44.10	45.07	54	-8.93	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.3G) - 802.11ac-HT80
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
(5290 MHz)-Above 1G									
V	4434.135	60.74	5.94	35.40	44.00	58.08	68.2	-10.12	PK
V	4434.135	43.78	5.94	35.40	44.00	41.12	54	-12.88	AV
V	10580.010	60.49	8.46	39.75	44.50	64.20	68.2	-4.00	PK
V	10580.010	43.52	8.46	39.75	44.50	47.23	54	-6.77	AV
V	15870.115	64.36	10.12	38.80	44.10	69.18	74	-4.82	PK
V	15870.115	43.49	10.12	38.80	42.70	49.71	54	-4.29	AV
H	4434.184	63.75	5.94	35.18	44.00	60.87	68.2	-7.33	PK
H	4434.184	43.43	5.94	35.18	44.00	40.55	54	-13.45	AV
H	10580.112	50.46	8.46	38.71	44.50	53.13	68.2	-15.07	PK
H	10580.112	40.22	8.46	38.71	44.50	42.89	54	-11.11	AV
H	15870.112	54.93	10.12	38.38	44.10	59.33	74	-14.67	PK
H	15870.112	43.32	10.12	38.38	44.10	47.72	54	-6.28	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.6G) - 802.11a
------------	--------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5500 MHz)-Above 1G									
V	4434.198	64.15	5.94	35.40	44.00	61.49	68.2	-6.71	PK
V	4434.198	43.90	5.94	35.40	44.00	41.24	54	-12.76	AV
V	11000.005	63.31	8.46	39.75	44.50	67.02	68.2	-1.18	PK
V	11000.005	43.63	8.46	39.75	44.50	47.34	54	-6.66	AV
V	16500.158	60.24	10.12	38.80	44.10	65.06	74	-8.94	PK
V	16500.158	43.33	10.12	38.80	42.70	49.55	54	-4.45	AV
H	4434.141	63.65	5.94	35.18	44.00	60.77	68.2	-7.43	PK
H	4434.141	43.73	5.94	35.18	44.00	40.85	54	-13.15	AV
H	11000.086	54.52	8.46	38.71	44.50	57.19	68.2	-11.01	PK
H	11000.086	41.74	8.46	38.71	44.50	44.41	54	-9.59	AV
H	16500.015	51.53	10.12	38.38	44.10	55.93	74	-18.07	PK
H	16500.015	42.69	10.12	38.38	44.10	47.09	54	-6.91	AV
Middle Channel (5580 MHz)-Above 1G									
V	4592.142	62.21	6.48	36.35	44.05	60.99	74	-13.01	PK
V	4592.142	43.74	6.48	36.35	44.05	42.52	54	-11.48	AV
V	11160.069	64.03	8.47	37.88	44.51	65.87	68.2	-2.33	PK
V	11160.069	44.00	8.47	37.88	44.51	45.84	54	-8.16	AV
V	16740.035	61.36	10.12	38.80	44.10	66.18	74	-7.82	PK
V	16740.035	43.49	10.12	38.80	42.70	49.71	54	-4.29	AV
H	4592.073	63.00	6.48	36.37	44.05	61.80	74	-12.20	PK
H	4592.073	43.63	6.48	36.37	44.05	42.43	54	-11.57	AV
H	11160.012	50.96	8.47	38.64	44.50	53.57	68.2	-14.63	PK
H	11160.012	43.43	8.47	38.64	44.50	46.04	54	-7.96	AV
H	16740.197	51.90	10.12	38.38	44.10	56.30	74	-17.70	PK
H	16740.197	40.22	10.12	38.38	44.10	44.62	54	-9.38	AV
High Channel (5700 MHz)-Above 1G									
V	4739.116	60.37	7.10	37.24	43.50	61.21	74	-12.79	PK
V	4739.116	43.92	7.10	37.24	43.50	44.76	54	-9.24	AV
V	11400.160	62.15	8.46	37.68	44.50	63.79	68.2	-4.41	PK
V	11400.160	43.33	8.46	37.68	44.50	44.97	54	-9.03	AV
V	17100.077	61.97	10.12	38.80	44.10	66.79	74	-7.21	PK
V	17100.077	43.03	10.12	38.80	42.70	49.25	54	-4.75	AV
H	4739.008	60.02	7.10	37.24	43.50	60.86	74	-13.14	PK
H	4739.008	43.82	7.10	37.24	43.50	44.66	54	-9.34	AV
H	11400.047	53.16	8.46	38.57	44.50	55.69	68.2	-12.51	PK
H	11400.047	43.82	8.46	38.57	44.50	46.35	54	-7.65	AV
H	17100.137	51.59	10.12	38.38	44.10	55.99	74	-18.01	PK
H	17100.137	40.99	10.12	38.38	44.10	45.39	54	-8.61	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

The worst case is Antenna A.

Test Mode:	TX(5.6G) - 802.11n-HT20
------------	-------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5500 MHz)-Above 1G									
V	4434.140	62.21	5.94	35.40	44.00	59.55	68.2	-8.65	PK
V	4434.140	43.19	5.94	35.40	44.00	40.53	54	-13.47	AV
V	11000.110	61.50	8.46	39.75	44.50	65.21	68.2	-2.99	PK
V	11000.110	43.08	8.46	39.75	44.50	46.79	54	-7.21	AV
V	16500.020	62.03	10.12	38.80	44.10	66.85	74	-7.15	PK
V	16500.020	43.41	10.12	38.80	42.70	49.63	54	-4.37	AV
H	4434.139	61.12	5.94	35.18	44.00	58.24	68.2	-9.96	PK
H	4434.139	43.51	5.94	35.18	44.00	40.63	54	-13.37	AV
H	11000.115	54.11	8.46	38.71	44.50	56.78	68.2	-11.42	PK
H	11000.115	44.14	8.46	38.71	44.50	46.81	54	-7.19	AV
H	16500.117	53.07	10.12	38.38	44.10	57.47	74	-16.53	PK
H	16500.117	43.32	10.12	38.38	44.10	47.72	54	-6.28	AV
Middle Channel (5580 MHz)-Above 1G									
V	4592.003	63.01	6.48	36.35	44.05	61.79	74	-12.21	PK
V	4592.003	43.63	6.48	36.35	44.05	42.41	54	-11.59	AV
V	11160.024	64.26	8.47	37.88	44.51	66.10	68.2	-2.10	PK
V	11160.024	43.79	8.47	37.88	44.51	45.63	54	-8.37	AV
V	16740.045	64.60	10.12	38.80	44.10	69.42	74	-4.58	PK
V	16740.045	43.59	10.12	38.80	42.70	49.81	54	-4.19	AV
H	4592.121	61.41	6.48	36.37	44.05	60.21	74	-13.79	PK
H	4592.121	43.24	6.48	36.37	44.05	42.04	54	-11.96	AV
H	11160.168	50.50	8.47	38.64	44.50	53.11	68.2	-15.09	PK
H	11160.168	41.11	8.47	38.64	44.50	43.72	54	-10.28	AV
H	16740.014	53.86	10.12	38.38	44.10	58.26	74	-15.74	PK
H	16740.014	41.84	10.12	38.38	44.10	46.24	54	-7.76	AV
High Channel (5700 MHz)-Above 1G									
V	4739.173	60.65	7.10	37.24	43.50	61.49	74	-12.51	PK
V	4739.173	43.16	7.10	37.24	43.50	44.00	54	-10.00	AV
V	11400.145	60.83	8.46	37.68	44.50	62.47	68.2	-5.73	PK
V	11400.145	43.81	8.46	37.68	44.50	45.45	54	-8.55	AV
V	17100.135	63.25	10.12	38.80	44.10	68.07	74	-5.93	PK
V	17100.135	43.33	10.12	38.80	42.70	49.55	54	-4.45	AV
H	4739.103	60.04	7.10	37.24	43.50	60.88	74	-13.12	PK
H	4739.103	43.41	7.10	37.24	43.50	44.25	54	-9.75	AV
H	11400.079	50.71	8.46	38.57	44.50	53.24	68.2	-14.96	PK
H	11400.079	41.72	8.46	38.57	44.50	44.25	54	-9.75	AV
H	17100.036	50.11	10.12	38.38	44.10	54.51	74	-19.49	PK
H	17100.036	40.40	10.12	38.38	44.10	44.80	54	-9.20	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.6G) - 802.11n-HT40
------------	-------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5510 MHz)-Above 1G									
V	4434.187	60.81	5.94	35.40	44.00	58.15	68.2	-10.05	PK
V	4434.187	43.67	5.94	35.40	44.00	41.01	54	-12.99	AV
V	10200.049	63.39	8.46	39.75	44.50	67.10	68.2	-1.10	PK
V	10200.049	43.68	8.46	39.75	44.50	47.39	54	-6.61	AV
V	15300.084	62.17	10.12	38.80	44.10	66.99	74	-7.01	PK
V	15300.084	43.22	10.12	38.80	42.70	49.44	54	-4.56	AV
H	4434.086	64.76	5.94	35.18	44.00	61.88	68.2	-6.32	PK
H	4434.086	43.62	5.94	35.18	44.00	40.74	54	-13.26	AV
H	10200.022	52.17	8.46	38.71	44.50	54.84	68.2	-13.36	PK
H	10200.022	41.07	8.46	38.71	44.50	43.74	54	-10.26	AV
H	15300.148	50.96	10.12	38.38	44.10	55.36	74	-18.64	PK
H	15300.148	41.55	10.12	38.38	44.10	45.95	54	-8.05	AV
Middle Channel (5550 MHz)-Above 1G									
V	4592.055	61.51	6.48	36.35	44.05	60.29	74	-13.71	PK
V	4592.055	43.52	6.48	36.35	44.05	42.30	54	-11.70	AV
V	11100.160	62.45	8.47	37.88	44.51	64.29	68.2	-3.91	PK
V	11100.160	43.75	8.47	37.88	44.51	45.59	54	-8.41	AV
V	16650.016	61.12	10.12	38.80	44.10	65.94	74	-8.06	PK
V	16650.016	43.75	10.12	38.80	42.70	49.97	54	-4.03	AV
H	4592.060	62.20	6.48	36.37	44.05	61.00	74	-13.00	PK
H	4592.060	43.41	6.48	36.37	44.05	42.21	54	-11.79	AV
H	11100.138	51.72	8.47	38.64	44.50	54.33	68.2	-13.87	PK
H	11100.138	44.83	8.47	38.64	44.50	47.44	54	-6.56	AV
H	16650.172	52.13	10.12	38.38	44.10	56.53	74	-17.47	PK
H	16650.172	43.92	10.12	38.38	44.10	48.32	54	-5.68	AV
High Channel (5670 MHz)-Above 1G									
V	4739.038	64.46	7.10	37.24	43.50	65.30	74	-8.70	PK
V	4739.038	43.60	7.10	37.24	43.50	44.44	54	-9.56	AV
V	11340.080	60.37	8.46	37.68	44.50	62.01	68.2	-6.19	PK
V	11340.080	43.10	8.46	37.68	44.50	44.74	54	-9.26	AV
V	17010.091	62.01	10.12	38.80	44.10	66.83	74	-7.17	PK
V	17010.091	43.71	10.12	38.80	42.70	49.93	54	-4.07	AV
H	4739.113	64.79	7.10	37.24	43.50	65.63	74	-8.37	PK
H	4739.113	43.65	7.10	37.24	43.50	44.49	54	-9.51	AV
H	11340.004	53.77	8.46	38.57	44.50	56.30	68.2	-11.90	PK
H	11340.004	43.90	8.46	38.57	44.50	46.43	54	-7.57	AV
H	17010.150	50.14	10.12	38.38	44.10	54.54	74	-19.46	PK
H	17010.150	42.41	10.12	38.38	44.10	46.81	54	-7.19	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.6G) - 802.11ac-HT20
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5500 MHz)-Above 1G									
V	4434.058	64.75	5.94	35.40	44.00	62.09	68.2	-6.11	PK
V	4434.058	43.82	5.94	35.40	44.00	41.16	54	-12.84	AV
V	11000.006	62.79	8.46	39.75	44.50	66.50	68.2	-1.70	PK
V	11000.006	43.97	8.46	39.75	44.50	47.68	54	-6.32	AV
V	16500.136	60.62	10.12	38.80	44.10	65.44	74	-8.56	PK
V	16500.136	43.85	10.12	38.80	42.70	50.07	54	-3.93	AV
H	4434.139	64.59	5.94	35.18	44.00	61.71	68.2	-6.49	PK
H	4434.139	43.20	5.94	35.18	44.00	40.32	54	-13.68	AV
H	11000.076	54.07	8.46	38.71	44.50	56.74	68.2	-11.46	PK
H	11000.076	43.52	8.46	38.71	44.50	46.19	54	-7.81	AV
H	16500.080	53.48	10.12	38.38	44.10	57.88	74	-16.12	PK
H	16500.080	43.20	10.12	38.38	44.10	47.60	54	-6.40	AV
Middle Channel (5580 MHz)-Above 1G									
V	4592.001	63.86	6.48	36.35	44.05	62.64	74	-11.36	PK
V	4592.001	43.61	6.48	36.35	44.05	42.39	54	-11.61	AV
V	11160.143	61.10	8.47	37.88	44.51	62.94	68.2	-5.26	PK
V	11160.143	43.64	8.47	37.88	44.51	45.48	54	-8.52	AV
V	16740.035	60.06	10.12	38.80	44.10	64.88	74	-9.12	PK
V	16740.035	43.29	10.12	38.80	42.70	49.51	54	-4.49	AV
H	4592.011	64.12	6.48	36.37	44.05	62.92	74	-11.08	PK
H	4592.011	43.43	6.48	36.37	44.05	42.23	54	-11.77	AV
H	11160.070	53.99	8.47	38.64	44.50	56.60	68.2	-11.60	PK
H	11160.070	40.95	8.47	38.64	44.50	43.56	54	-10.44	AV
H	16740.035	52.80	10.12	38.38	44.10	57.20	74	-16.80	PK
H	16740.035	40.45	10.12	38.38	44.10	44.85	54	-9.15	AV
High Channel (5700 MHz)-Above 1G									
V	4739.149	60.25	7.10	37.24	43.50	61.09	74	-12.91	PK
V	4739.149	43.13	7.10	37.24	43.50	43.97	54	-10.03	AV
V	11400.076	64.95	8.46	37.68	44.50	66.59	68.2	-1.61	PK
V	11400.076	43.42	8.46	37.68	44.50	45.06	54	-8.94	AV
V	17100.001	60.25	10.12	38.80	44.10	65.07	74	-8.93	PK
V	17100.001	43.69	10.12	38.80	42.70	49.91	54	-4.09	AV
H	4739.042	64.17	7.10	37.24	43.50	65.01	74	-8.99	PK
H	4739.042	43.90	7.10	37.24	43.50	44.74	54	-9.26	AV
H	11400.103	50.71	8.46	38.57	44.50	53.24	68.2	-14.96	PK
H	11400.103	41.99	8.46	38.57	44.50	44.52	54	-9.48	AV
H	17100.025	53.87	10.12	38.38	44.10	58.27	74	-15.73	PK
H	17100.025	41.20	10.12	38.38	44.10	45.60	54	-8.40	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.6G) - 802.11ac-HT40
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5510 MHz)-Above 1G									
V	4434.090	62.64	5.94	35.40	44.00	59.98	68.2	-8.22	PK
V	4434.090	43.54	5.94	35.40	44.00	40.88	54	-13.12	AV
V	10200.142	61.30	8.46	39.75	44.50	65.01	68.2	-3.19	PK
V	10200.142	43.09	8.46	39.75	44.50	46.80	54	-7.20	AV
V	15300.190	61.79	10.12	38.80	44.10	66.61	74	-7.39	PK
V	15300.190	43.62	10.12	38.80	42.70	49.84	54	-4.16	AV
H	4434.101	62.88	5.94	35.18	44.00	60.00	68.2	-8.20	PK
H	4434.101	43.78	5.94	35.18	44.00	40.90	54	-13.10	AV
H	10200.124	54.78	8.46	38.71	44.50	57.45	68.2	-10.75	PK
H	10200.124	40.84	8.46	38.71	44.50	43.51	54	-10.49	AV
H	15300.114	53.11	10.12	38.38	44.10	57.51	74	-16.49	PK
H	15300.114	41.39	10.12	38.38	44.10	45.79	54	-8.21	AV
Middle Channel (5550 MHz)-Above 1G									
V	4592.071	64.09	6.48	36.35	44.05	62.87	74	-11.13	PK
V	4592.071	43.94	6.48	36.35	44.05	42.72	54	-11.28	AV
V	11100.083	63.62	8.47	37.88	44.51	65.46	68.2	-2.74	PK
V	11100.083	43.60	8.47	37.88	44.51	45.44	54	-8.56	AV
V	16650.029	64.13	10.12	38.80	44.10	68.95	74	-5.05	PK
V	16650.029	43.31	10.12	38.80	42.70	49.53	54	-4.47	AV
H	4592.120	63.88	6.48	36.37	44.05	62.68	74	-11.32	PK
H	4592.120	43.09	6.48	36.37	44.05	41.89	54	-12.11	AV
H	11100.049	53.21	8.47	38.64	44.50	55.82	68.2	-12.38	PK
H	11100.049	40.11	8.47	38.64	44.50	42.72	54	-11.28	AV
H	16650.136	53.92	10.12	38.38	44.10	58.32	74	-15.68	PK
H	16650.136	44.75	10.12	38.38	44.10	49.15	54	-4.85	AV
High Channel (5670 MHz)-Above 1G									
V	4739.018	61.41	7.10	37.24	43.50	62.25	74	-11.75	PK
V	4739.018	43.23	7.10	37.24	43.50	44.07	54	-9.93	AV
V	11340.027	61.00	8.46	37.68	44.50	62.64	68.2	-5.56	PK
V	11340.027	43.11	8.46	37.68	44.50	44.75	54	-9.25	AV
V	17010.186	64.22	10.12	38.80	44.10	69.04	74	-4.96	PK
V	17010.186	43.71	10.12	38.80	42.70	49.93	54	-4.07	AV
H	4739.153	64.43	7.10	37.24	43.50	65.27	74	-8.73	PK
H	4739.153	43.08	7.10	37.24	43.50	43.92	54	-10.08	AV
H	11340.013	50.98	8.46	38.57	44.50	53.51	68.2	-14.69	PK
H	11340.013	44.70	8.46	38.57	44.50	47.23	54	-6.77	AV
H	17010.120	51.79	10.12	38.38	44.10	56.19	74	-17.81	PK
H	17010.120	44.62	10.12	38.38	44.10	49.02	54	-4.98	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.6G) - 802.11ac-HT80
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5530 MHz)-Above 1G									
V	4434.134	62.01	5.94	35.40	44.00	59.35	68.2	-8.85	PK
V	4434.134	43.01	5.94	35.40	44.00	40.35	54	-13.65	AV
V	11060.145	62.86	8.46	39.75	44.50	66.57	68.2	-1.63	PK
V	11060.145	43.10	8.46	39.75	44.50	46.81	54	-7.19	AV
V	16590.043	61.52	10.12	38.80	44.10	66.34	74	-7.66	PK
V	16590.043	43.92	10.12	38.80	42.70	50.14	54	-3.86	AV
H	4434.136	63.31	5.94	35.18	44.00	60.43	74	-13.57	PK
H	4434.136	43.38	5.94	35.18	44.00	40.50	54	-13.50	AV
H	11060.132	53.44	8.46	38.71	44.50	56.11	68.2	-12.09	PK
H	11060.132	40.04	8.46	38.71	44.50	42.71	54	-11.29	AV
H	16590.137	54.37	10.12	38.38	44.10	58.77	74	-15.23	PK
H	16590.137	42.16	10.12	38.38	44.10	46.56	54	-7.44	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.8G) - 802.11a
------------	--------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G									
V	4679.152	58.87	5.94	35.40	44.00	56.21	74	-17.79	PK
V	4679.152	43.25	5.94	35.40	44.00	40.59	54	-13.41	AV
V	11490.055	57.13	8.46	39.75	44.50	60.84	68.2	-7.36	PK
V	11490.055	43.16	8.46	39.75	44.50	46.87	54	-7.13	AV
V	17235.059	58.33	10.12	38.80	44.10	63.15	68.2	-5.05	PK
V	17235.059	43.73	10.12	38.80	42.70	49.95	54	-4.05	AV
H	4679.013	55.80	5.94	35.18	44.00	52.92	74	-21.08	PK
H	4679.013	43.75	5.94	35.18	44.00	40.87	54	-13.13	AV
H	11490.017	51.42	8.46	38.71	44.50	54.09	68.2	-14.11	PK
H	11490.017	41.66	8.46	38.71	44.50	44.33	54	-9.67	AV
H	17235.115	51.66	10.12	38.38	44.10	56.06	68.2	-12.14	PK
H	17235.115	40.24	10.12	38.38	44.10	44.64	54	-9.36	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.160	54.61	6.48	36.35	44.05	53.39	74	-20.61	PK
V	4592.160	43.20	6.48	36.35	44.05	41.98	54	-12.02	AV
V	11570.197	57.72	8.47	37.88	44.51	59.56	68.2	-8.64	PK
V	11570.197	43.26	8.47	37.88	44.51	45.10	54	-8.90	AV
V	17355.149	60.44	10.12	38.80	44.10	65.26	68.2	-2.94	PK
V	17355.149	39.29	10.12	38.80	42.70	45.51	54	-8.49	AV
H	4592.183	59.33	6.48	36.37	44.05	58.13	74	-15.87	PK
H	4592.183	43.91	6.48	36.37	44.05	42.71	54	-11.29	AV
H	11570.076	54.87	8.47	38.64	44.50	57.48	68.2	-10.72	PK
H	11570.076	43.89	8.47	38.64	44.50	46.50	54	-7.50	AV
H	17355.137	50.42	10.12	38.38	44.10	54.82	68.2	-13.38	PK
H	17355.137	41.77	10.12	38.38	44.10	46.17	54	-7.83	AV
High Channel (5825 MHz)-Above 1G									
V	6039.031	56.77	7.10	37.24	43.50	57.61	68.2	-10.59	PK
V	6039.031	43.94	7.10	37.24	43.50	44.78	54	-9.22	AV
V	11650.187	60.72	8.46	37.68	44.50	62.36	74	-11.64	PK
V	11650.187	43.82	8.46	37.68	44.50	45.46	54	-8.54	AV
V	17475.133	53.56	10.12	38.80	44.10	58.38	68.2	-9.82	PK
V	17475.133	43.21	10.12	38.80	42.70	49.43	54	-4.57	AV
H	6039.011	55.49	7.10	37.24	43.50	56.33	68.2	-11.87	PK
H	6039.011	43.59	7.10	37.24	43.50	44.43	54	-9.57	AV
H	11650.165	50.68	8.46	38.57	44.50	53.21	74	-20.79	PK
H	11650.165	41.22	8.46	38.57	44.50	43.75	54	-10.25	AV
H	17475.138	53.51	10.12	38.38	44.10	57.91	68.2	-10.29	PK
H	17475.138	44.79	10.12	38.38	44.10	49.19	54	-4.81	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

The worst case is Antenna A.

Test Mode:	TX(5.8G) - 802.11n-HT20
------------	-------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G									
V	4679.120	58.65	5.94	35.40	44.00	55.99	74	-18.01	PK
V	4679.120	43.71	5.94	35.40	44.00	41.05	54	-12.95	AV
V	11490.016	53.91	8.46	39.75	44.50	57.62	68.2	-10.58	PK
V	11490.016	43.31	8.46	39.75	44.50	47.02	54	-6.98	AV
V	17235.064	59.38	10.12	38.80	44.10	64.20	68.2	-4.00	PK
V	17235.064	43.69	10.12	38.80	42.70	49.91	54	-4.09	AV
H	4679.172	56.02	5.94	35.18	44.00	53.14	74	-20.86	PK
H	4679.172	43.45	5.94	35.18	44.00	40.57	54	-13.43	AV
H	11490.057	51.67	8.46	38.71	44.50	54.34	68.2	-13.86	PK
H	11490.057	42.46	8.46	38.71	44.50	45.13	54	-8.87	AV
H	17235.027	54.33	10.12	38.38	44.10	58.73	68.2	-9.47	PK
H	17235.027	42.19	10.12	38.38	44.10	46.59	54	-7.41	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.070	60.24	6.48	36.35	44.05	59.02	74	-14.98	PK
V	4592.070	43.08	6.48	36.35	44.05	41.86	54	-12.14	AV
V	11570.070	55.34	8.47	37.88	44.51	57.18	68.2	-11.02	PK
V	11570.070	43.96	8.47	37.88	44.51	45.80	54	-8.20	AV
V	17355.043	61.85	10.12	38.80	44.10	66.67	68.2	-1.53	PK
V	17355.043	43.58	10.12	38.80	42.70	49.80	54	-4.20	AV
H	4592.077	57.33	6.48	36.37	44.05	56.13	74	-17.87	PK
H	4592.077	43.58	6.48	36.37	44.05	42.38	54	-11.62	AV
H	11570.106	54.88	8.47	38.64	44.50	57.49	68.2	-10.71	PK
H	11570.106	41.43	8.47	38.64	44.50	44.04	54	-9.96	AV
H	17355.028	50.75	10.12	38.38	44.10	55.15	68.2	-13.05	PK
H	17355.028	40.64	10.12	38.38	44.10	45.04	54	-8.96	AV
High Channel (5825 MHz)-Above 1G									
V	6039.019	59.15	7.10	37.24	43.50	59.99	68.2	-8.21	PK
V	6039.019	43.23	7.10	37.24	43.50	44.07	54	-9.93	AV
V	11650.124	59.64	8.46	37.68	44.50	61.28	74	-12.72	PK
V	11650.124	43.39	8.46	37.68	44.50	45.03	54	-8.97	AV
V	17475.034	58.79	10.12	38.80	44.10	63.61	68.2	-4.59	PK
V	17475.034	43.85	10.12	38.80	42.70	50.07	54	-3.93	AV
H	6039.027	58.89	7.10	37.24	43.50	59.73	68.2	-8.47	PK
H	6039.027	43.97	7.10	37.24	43.50	44.81	54	-9.19	AV
H	11650.103	51.44	8.46	38.57	44.50	53.97	74	-20.03	PK
H	11650.103	44.45	8.46	38.57	44.50	46.98	54	-7.02	AV
H	17475.030	51.05	10.12	38.38	44.10	55.45	68.2	-12.75	PK
H	17475.030	44.70	10.12	38.38	44.10	49.10	54	-4.90	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.8G) - 802.11n-HT40
------------	-------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5755 MHz)-Above 1G									
V	4679.003	57.39	5.94	35.40	44.00	54.73	74	-19.27	PK
V	4679.003	43.84	5.94	35.40	44.00	41.18	54	-12.82	AV
V	11510.028	56.32	8.46	39.75	44.50	60.03	74	-13.97	PK
V	11510.028	43.24	8.46	39.75	44.50	46.95	54	-7.05	AV
V	17265.091	55.28	10.12	38.80	44.10	60.10	68.2	-8.10	PK
V	17265.091	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.046	57.49	5.94	35.18	44.00	54.61	74	-19.39	PK
H	4679.046	43.12	5.94	35.18	44.00	40.24	54	-13.76	AV
H	11510.010	51.99	8.46	38.71	44.50	54.66	74	-19.34	PK
H	11510.010	42.24	8.46	38.71	44.50	44.91	54	-9.09	AV
H	17265.088	51.59	10.12	38.38	44.10	55.99	68.2	-12.21	PK
H	17265.088	41.26	10.12	38.38	44.10	45.66	54	-8.34	AV
High Channel (5795 MHz)-Above 1G									
V	6039.141	58.26	6.48	36.35	44.05	57.04	68.2	-11.16	PK
V	6039.141	43.94	6.48	36.35	44.05	42.72	54	-11.28	AV
V	11590.054	58.87	8.47	37.88	44.51	60.71	74	-13.29	PK
V	11590.054	43.24	8.47	37.88	44.51	45.08	54	-8.92	AV
V	17385.143	55.15	10.12	38.80	44.10	59.97	68.2	-8.23	PK
V	17385.143	41.54	10.12	38.80	42.70	47.76	54	-6.24	AV
H	6039.095	58.18	6.48	36.37	44.05	56.98	68.2	-11.22	PK
H	6039.095	43.69	6.48	36.37	44.05	42.49	54	-11.51	AV
H	11590.181	51.99	8.47	38.64	44.50	54.60	74	-19.40	PK
H	11590.181	40.16	8.47	38.64	44.50	42.77	54	-11.23	AV
H	17385.065	50.91	10.12	38.38	44.10	55.31	68.2	-12.89	PK
H	17385.065	44.87	10.12	38.38	44.10	49.27	54	-4.73	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.8G) - 802.11ac-HT20
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5745 MHz)-Above 1G									
V	4679.044	56.24	5.94	35.40	44.00	53.58	74	-20.42	PK
V	4679.044	43.66	5.94	35.40	44.00	41.00	54	-13.00	AV
V	11490.040	53.04	8.46	39.75	44.50	56.75	68.2	-11.45	PK
V	11490.040	43.74	8.46	39.75	44.50	47.45	54	-6.55	AV
V	17235.188	61.88	10.12	38.80	44.10	66.70	68.2	-1.50	PK
V	17235.188	43.72	10.12	38.80	42.70	49.94	54	-4.06	AV
H	4679.046	60.61	5.94	35.18	44.00	57.73	74	-16.27	PK
H	4679.046	43.54	5.94	35.18	44.00	40.66	54	-13.34	AV
H	11490.052	47.57	8.46	38.71	44.50	50.24	68.2	-17.96	PK
H	11490.052	41.68	8.46	38.71	44.50	44.35	54	-9.65	AV
H	17235.127	54.30	10.12	38.38	44.10	58.70	68.2	-9.50	PK
H	17235.127	44.69	10.12	38.38	44.10	49.09	54	-4.91	AV
Middle Channel (5785 MHz)-Above 1G									
V	4592.029	60.64	6.48	36.35	44.05	59.42	74	-14.58	PK
V	4592.029	43.40	6.48	36.35	44.05	42.18	54	-11.82	AV
V	11570.169	54.59	8.47	37.88	44.51	56.43	68.2	-11.77	PK
V	11570.169	43.26	8.47	37.88	44.51	45.10	54	-8.90	AV
V	17355.078	61.99	10.12	38.80	44.10	66.81	68.2	-1.39	PK
V	17355.078	43.31	10.12	38.80	42.70	49.53	54	-4.47	AV
H	4592.053	58.52	6.48	36.37	44.05	57.32	74	-16.68	PK
H	4592.053	43.43	6.48	36.37	44.05	42.23	54	-11.77	AV
H	11570.045	51.20	8.47	38.64	44.50	53.81	68.2	-14.39	PK
H	11570.045	43.23	8.47	38.64	44.50	45.84	54	-8.16	AV
H	17355.099	50.56	10.12	38.38	44.10	54.96	68.2	-13.24	PK
H	17355.099	44.90	10.12	38.38	44.10	49.30	54	-4.70	AV
High Channel (5825 MHz)-Above 1G									
V	6039.091	59.64	7.10	37.24	43.50	60.48	68.2	-7.72	PK
V	6039.091	43.24	7.10	37.24	43.50	44.08	54	-9.92	AV
V	11650.098	56.92	8.46	37.68	44.50	58.56	74	-15.44	PK
V	11650.098	43.71	8.46	37.68	44.50	45.35	54	-8.65	AV
V	17475.157	57.95	10.12	38.80	44.10	62.77	68.2	-5.43	PK
V	17475.157	43.72	10.12	38.80	42.70	49.94	54	-4.06	AV
H	6039.066	55.58	7.10	37.24	43.50	56.42	68.2	-11.78	PK
H	6039.066	43.37	7.10	37.24	43.50	44.21	54	-9.79	AV
H	11650.109	51.86	8.46	38.57	44.50	54.39	74	-19.61	PK
H	11650.109	40.76	8.46	38.57	44.50	43.29	54	-10.71	AV
H	17475.071	53.69	10.12	38.38	44.10	58.09	68.2	-10.11	PK
H	17475.071	43.31	10.12	38.38	44.10	47.71	54	-6.29	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.8G) - 802.11ac-HT40
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (5755 MHz)-Above 1G									
V	4679.125	58.39	5.94	35.40	44.00	55.73	74	-18.27	PK
V	4679.125	43.14	5.94	35.40	44.00	40.48	54	-13.52	AV
V	11510.074	55.56	8.46	39.75	44.50	59.27	74	-14.73	PK
V	11510.074	43.84	8.46	39.75	44.50	47.55	54	-6.45	AV
V	17265.189	55.94	10.12	38.80	44.10	60.76	68.2	-7.44	PK
V	17265.189	2.00	10.12	38.80	42.70	8.22	54	-45.78	AV
H	4679.108	58.64	5.94	35.18	44.00	55.76	74	-18.24	PK
H	4679.108	43.11	5.94	35.18	44.00	40.23	54	-13.77	AV
H	11510.156	54.34	8.46	38.71	44.50	57.01	74	-16.99	PK
H	11510.156	42.45	8.46	38.71	44.50	45.12	54	-8.88	AV
H	17265.125	50.17	10.12	38.38	44.10	54.57	68.2	-13.63	PK
H	17265.125	40.76	10.12	38.38	44.10	45.16	54	-8.84	AV
High Channel (5795 MHz)-Above 1G									
V	6039.035	58.38	6.48	36.35	44.05	57.16	68.2	-11.04	PK
V	6039.035	43.33	6.48	36.35	44.05	42.11	54	-11.89	AV
V	11590.006	57.77	8.47	37.88	44.51	59.61	74	-14.39	PK
V	11590.006	43.77	8.47	37.88	44.51	45.61	54	-8.39	AV
V	17385.107	55.49	10.12	38.80	44.10	60.31	68.2	-7.89	PK
V	17385.107	41.35	10.12	38.80	42.70	47.57	54	-6.43	AV
H	6039.049	56.19	6.48	36.37	44.05	54.99	68.2	-13.21	PK
H	6039.049	43.82	6.48	36.37	44.05	42.62	54	-11.38	AV
H	11590.037	54.88	8.47	38.64	44.50	57.49	74	-16.51	PK
H	11590.037	43.09	8.47	38.64	44.50	45.70	54	-8.30	AV
H	17385.040	50.26	10.12	38.38	44.10	54.66	68.2	-13.54	PK
H	17385.040	42.53	10.12	38.38	44.10	46.93	54	-7.07	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

Test Mode:	TX(5.8G) - 802.11ac-HT80
------------	--------------------------

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
(5775 MHz)-Above 1G									
V	4679.173	59.79	5.94	35.40	44.00	57.13	74	-16.87	PK
V	4679.173	43.62	5.94	35.40	44.00	40.96	54	-13.04	AV
V	11550.039	55.48	8.46	39.75	44.50	59.19	74	-14.81	PK
V	11550.039	43.72	8.46	39.75	44.50	47.43	54	-6.57	AV
V	17325.176	57.51	10.12	38.80	44.10	62.33	68.2	-5.87	PK
V	17325.176	41.40	10.12	38.80	42.70	47.62	54	-6.38	AV
H	4679.068	58.51	5.94	35.18	44.00	55.63	74	-18.37	PK
H	4679.068	43.39	5.94	35.18	44.00	40.51	54	-13.49	AV
H	11550.164	54.83	8.46	38.71	44.50	57.50	74	-16.50	PK
H	11550.164	42.25	8.46	38.71	44.50	44.92	54	-9.08	AV
H	17325.025	54.55	10.12	38.38	44.10	58.95	68.2	-9.25	PK
H	17325.025	44.56	10.12	38.38	44.10	48.96	54	-5.04	AV

Note: PK value is lower than the Average value limit, So average didn't record.

The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

Test Mode is MIMO Mode.

8. Power Spectral Density Test

8.1 Block Diagram Of Test Setup



8.2 Limit

For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

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

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

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

For the band 5.725-5.85 GHz

(3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.3 Test Procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- Set $VBW \geq 3 RBW$.
- If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since $RBW=100 \text{ KHz}$ is available on nearly all spectrum analyzers.

8.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

8.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	(U-NII-1, U-NII-2A, U-NII-2C, U-NII-3)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)		Limit (dBm)	Verdict
			AntA	AntB		
NVNT	a	5180	0.89	1.9	11	Pass
NVNT	a	5200	0.13	0.66	11	Pass
NVNT	a	5240	-0.99	-0.15	11	Pass
NVNT	a	5260	-1.92	-0.36	11	Pass
NVNT	a	5280	-1.46	0.6	11	Pass
NVNT	a	5320	-1.8	-0.25	11	Pass
NVNT	a	5500	-1.31	-0.64	11	Pass
NVNT	a	5580	-2.51	1.01	11	Pass
NVNT	a	5700	-1.65	-0.46	11	Pass
NVNT	a	5745	-5.34	-3.53	30	Pass
NVNT	a	5785	-6.62	-4.11	30	Pass
NVNT	a	5825	-6.42	-4.33	30	Pass

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm)		Total (dBm)	Limit (dBm)	Verdict
			AntA	AntB			
NVNT	n20	5180	-1.16	-0.23	2.34	8.61	Pass
NVNT	n20	5200	-3.56	1.34	2.56	8.61	Pass
NVNT	n20	5240	-2.35	-0.95	1.42	8.61	Pass
NVNT	n20	5260	-0.95	0.46	2.82	8.61	Pass
NVNT	n20	5280	-1.18	-0.45	2.21	8.61	Pass
NVNT	n20	5320	-1.78	-0.72	1.79	8.61	Pass
NVNT	n20	5500	-1.58	-1.08	1.69	8.61	Pass
NVNT	n20	5580	-1.1	0.55	2.81	8.61	Pass
NVNT	n20	5700	-1.01	-1.33	1.84	8.61	Pass
NVNT	n20	5745	-7.94	-3.97	-2.51	27.61	Pass
NVNT	n20	5785	-6.5	-5.02	-2.69	27.61	Pass
NVNT	n20	5825	-9.18	-4.99	-3.59	27.61	Pass
NVNT	n40	5190	-6.67	-6.15	-3.39	8.61	Pass
NVNT	n40	5230	-5.88	-4.37	-2.05	8.61	Pass
NVNT	n40	5270	-6.52	-6.8	-3.65	8.61	Pass
NVNT	n40	5310	-8.63	-8.42	-5.51	8.61	Pass
NVNT	n40	5510	-4.3	-5.54	-1.87	8.61	Pass
NVNT	n40	5550	-4.86	-5.23	-2.03	8.61	Pass
NVNT	n40	5670	-8.3	-6.21	-4.12	8.61	Pass
NVNT	n40	5755	-10.08	-9.67	-6.86	27.61	Pass
NVNT	n40	5795	-10.47	-8.45	-6.33	27.61	Pass
NVNT	ac20	5180	-0.85	-0.07	2.57	8.61	Pass
NVNT	ac20	5200	-1.99	0.64	2.53	8.61	Pass
NVNT	ac20	5240	-2.72	0.44	2.15	8.61	Pass
NVNT	ac20	5260	-0.52	-0.17	2.67	8.61	Pass
NVNT	ac20	5280	-1.61	-0.69	1.88	8.61	Pass
NVNT	ac20	5320	-2.35	-0.52	1.67	8.61	Pass
NVNT	ac20	5500	-3.17	-1.6	0.70	8.61	Pass
NVNT	ac20	5580	-0.67	0.71	3.08	8.61	Pass
NVNT	ac20	5700	-2.52	-1.43	1.07	8.61	Pass
NVNT	ac20	5745	-4.51	-4.74	-1.61	27.61	Pass
NVNT	ac20	5785	-5.19	-5.12	-2.14	27.61	Pass
NVNT	ac20	5825	-3.67	-6.03	-1.68	27.61	Pass
NVNT	ac40	5190	-7.85	-7.27	-4.54	8.61	Pass
NVNT	ac40	5230	-5.28	-5.86	-2.55	8.61	Pass
NVNT	ac40	5270	-6.1	-4.47	-2.20	8.61	Pass
NVNT	ac40	5310	-6.63	-6.38	-3.49	8.61	Pass
NVNT	ac40	5510	-5.3	-6.76	-2.96	8.61	Pass
NVNT	ac40	5550	-7.11	-3.86	-2.18	8.61	Pass
NVNT	ac40	5670	-7.22	-4.83	-2.85	8.61	Pass
NVNT	ac40	5755	-11.4	-9.21	-7.16	27.61	Pass
NVNT	ac40	5795	-11.22	-10.79	-7.99	27.61	Pass
NVNT	ac80	5210	-13.62	-10.55	-8.81	8.61	Pass
NVNT	ac80	5290	-13.47	-14.29	-10.85	8.61	Pass
NVNT	ac80	5530	-12.08	-13.66	-9.79	8.61	Pass
NVNT	ac80	5775	-16.48	-14.78	-12.54	27.61	Pass

Note:

1.U-NII-1,U-NII-2A,U-NII-2C: $8.39\text{dbi} > 6.0\text{ dbi}$ so power limit= $11-(8.39-6.0)=8.61$

2.U-NII-3: $8.39\text{dbi} > 6.0\text{ dbi}$ so power limit= $30-(8.39-6.0)=27.61$

Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

