

TEST REPORT

Report No.: BCTC2503804847-4E

Applicant: Dongguan Consung Smart Technology Co.,Ltd

Product Name: AI Calendar

Test Model: DF-15T

Tested Date: 2025-03-24 to 2025-04-15

Issued Date: 2025-04-16

Shenzhen BCTC Testing Co., Ltd.



FCC ID:2AZ6H-DF15T

Product Name: AI Calendar
Trademark: Ai-Calendar
Model/Type reference: DF-15T
DF-18T, DF-21T, DF-23T, DF-32T
Prepared For: Dongguan Consung Smart Technology Co.,Ltd
Address: Building 11, No. 400, Jienan Road, Humen Town, Dongguan City, China
Manufacturer: Dongguan Consung Smart Technology Co.,Ltd
Address: Building 11, No. 400, Jienan Road, Humen Town, Dongguan City, China
Prepared By: Shenzhen BCTC Testing Co., Ltd.
Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng,
Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date: 2025-03-24
Sample tested Date: 2025-03-24 to 2025-04-15
Issue Date: 2025-04-16
Report No.: BCTC2503804847-4E
Test Standards: FCC Part15 15.407
ANSI C63.10-2013
KDB 789033 D02 v02r01
Test Results: PASS

Tested by:



Tang Changyu/ Project Handler

Approved by:



Zero Zhou/Reviewer

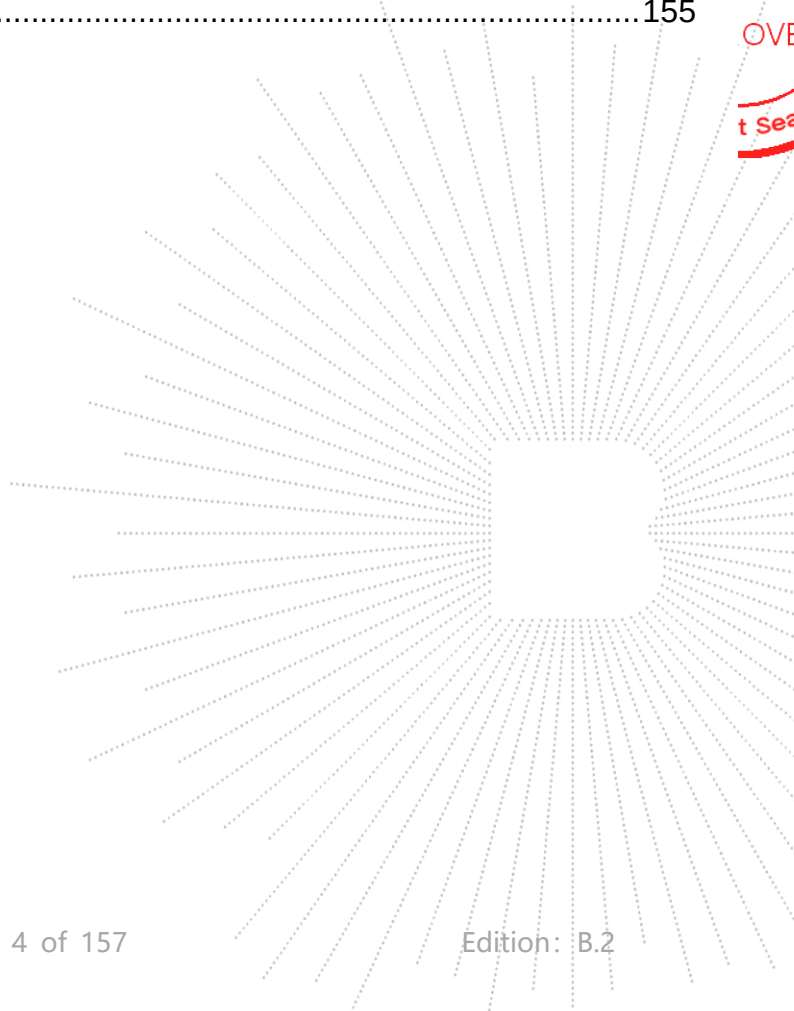
The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information 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	8
4.3 Support Equipment	9
4.4 Channel List	9
4.5 Test Mode	10
5. Test Facility And Test Instrument Used	11
5.1 Test Facility	11
5.2 Test Instrument Used.....	11
6. Conducted Emissions.....	13
6.1 Block Diagram Of Test Setup.....	13
6.2 Limit	13
6.3 Test Procedure	13
6.4 EUT Operating Conditions	13
6.5 Test Result.....	14
7. Radiated Emissions.....	16
7.1 Block Diagram Of Test Setup.....	16
7.2 Limit	17
7.3 Test Procedure	18
7.4 EUT Operating Conditions	19
7.5 Test Result.....	19
8. Power Spectral Density Test	37
8.1 Block Diagram Of Test Setup.....	37
8.2 Limit	37
8.3 Test Procedure	38
8.4 EUT Operating Conditions	38
8.5 Test Result.....	39
9. 26dB & 6dB & 99% Emission Bandwidth	59
9.1 Block Diagram Of Test Setup.....	59
9.2 Limit	59
9.3 Test Procedure	59
9.4 EUT Operating Conditions	60
9.5 Test Result.....	60
10. Maximum Conducted Output Power.....	98
10.1 Block Diagram Of Test Setup.....	98
10.2 Limit	98
10.3 Test Procedure	98
10.4 EUT Operating Conditions	99
10.5 Test Result.....	100
11. Out Of Band Emissions	102

11.1	Block Diagram Of Test Setup.....	102
11.2	Limit	102
11.3	Test Procedure	102
11.4	EUT Operating Conditions	102
11.5	Test Result.....	103
12.	Spurious RF Conducted Emissions.....	117
12.1	Block Diagram Of Test Setup.....	117
12.2	Limit	117
12.3	Test Procedure	117
12.4	Test Result.....	117
13.	Frequency Stability Measurement.....	136
13.1	Block Diagram Of Test Setup.....	136
13.2	Limit	136
13.3	Test Procedure	136
13.4	Test Result.....	137
14.	Duty Cycle Of Test Signal	143
14.1	Standard Requirement.....	143
14.2	Formula.....	143
14.3	Test Procedure	143
14.4	Test Result.....	143
15.	Antenna Requirement	153
15.1	Limit	153
15.2	Test Result.....	153
16.	EUT Photographs.....	154
17.	EUT Test Setup Photographs.....	155

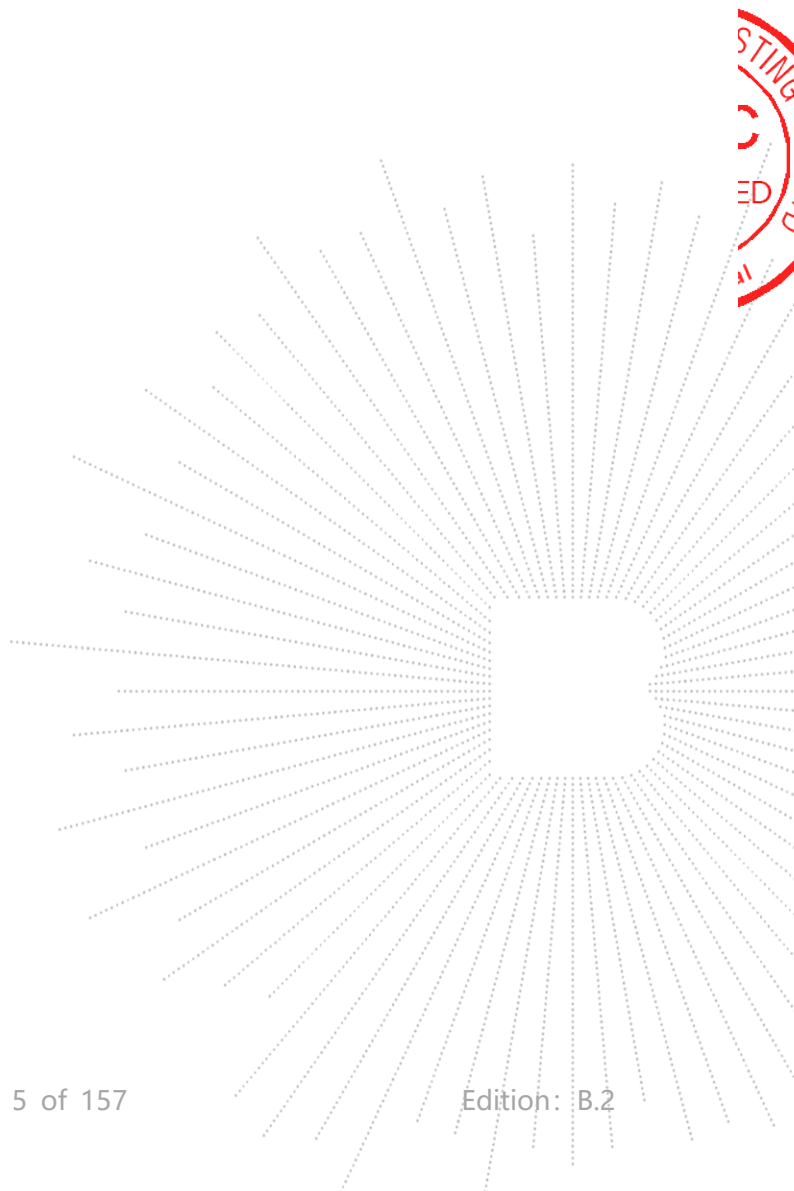
(Note: N/A Means Not Applicable)



TEST
TO
OVER
t Sea

1. Version

Report No.	Issue Date	Description	Approved
BCTC2503804847-4E	2025-04-16	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:	DF-15T DF-18T, DF-21T, DF-23T, DF-32T
Model differences:	All the model are the same circuit and RF module, except model names.
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported	802.11a/n/ac/ax(20MHz channel bandwidth) 802.11n/ac/ax(40MHz channel bandwidth) 5180-5240MHz for 802.11a/n/ac(HT20)/ax(HT20); 5190-5230MHz for 802.11n/ac(HT40)/ax(HT40); 5745-5825 MHz for 802.11a/n/ac(HT20)/ax(HT20); 5755-5795 MHz for 802.11n/ac(HT40)/ax(HT40);
Operation Frequency:	802.11a: 6,9,12,18,24,36,48,54Mbps; 802.11n(HT20/HT40):MCS0-MCS15; 802.11ac/ax(VHT20): NSS1, MCS0-MCS8 802.11acax(VHT40):NSS1, MCS0-MCS9
Data Rate	OFDM/OFDMA
Type of Modulation:	4 channels for 802.11a/n20/ax20 in the 5180-5240MHz band ; 2 channels for 802.11 n40/ax40 in the 5190-5230MHz band ; 5 channels for 802.11a/n20/ax20 in the 5745-5825MHz band ; 2 channels for 802.11 n40/ax40 in the 5755-5795MHz band ;
Number Of Channel	Internal antenna 5.1G: -0.52 dBi 5.8G: 1.66 dBi
Antenna installation:	Remark: ☒ The antenna gain of the product comes from the antenna report provided by the customer, and the test data is affected by the customer information. ☐ The antenna gain of the product is provided by the customer, and the test data is affected by the customer information.
Antenna Gain:	DC 12V From Adapter
Ratings:	Manufacture: Shenzhen Keweiye Electronics CO.,LTD Model No.:KWY40W-1203000
Adapter Information:	Input: AC 100-240V 50/60Hz 1.0A Output: DC 12V 3000mA

4.2 Test Setup Configuration

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

4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	AI Calendar	Ai-Calendar	DF-15T	N/A	EUT
E-2	Adapter	N/A	KWY40W-1203000	N/A	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	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

5.1G

802.11a/n/ac (20MHz)/ ax (20MHz) Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220	-	-	-	-
40	5200	48	5240	-	-	-	-

802.11n /ac(40MHz)/ ax(40MHz) Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	-	-	-	-	-	-
46	5230	-	-	-	-	-	-

5.8G

802.11a/n/ac(20 MHz)/ ax(20 MHz) Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	153	5765	157	5785	161	5805
165	5825	-	-	-	-	-	-

802.11n/ac 40MHz/ ax 40MHz Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795	-	-

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/ax 20 CH36/ CH40/ CH 48 802.11a /n/ ac 20/ax 20 CH149/ CH157/ CH 165
Mode 2	802.11n/ ac40/ax 40 CH38/ CH 46 802.11n/ ac40/ax 40 CH 151 / CH 159
Mode 3	WIFI Linking+BT Linking

Note:

1. The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
2. This prototype does not support RU mode

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

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, Zhancheng, 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

A2LA certificate registration number is: CN1212

ISED Registered No.: 23583

ISED CAB identifier: CN0017

5.2 Test Instrument Used

Conducted Emissions Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Receiver	R&S	ESR	102075	May 16, 2024	May 15, 2025
LISN	R&S	ENV216	101375	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Pulse limiter	Schwarzbeck	VTSD9561-F	01323	May 16, 2024	May 15, 2025

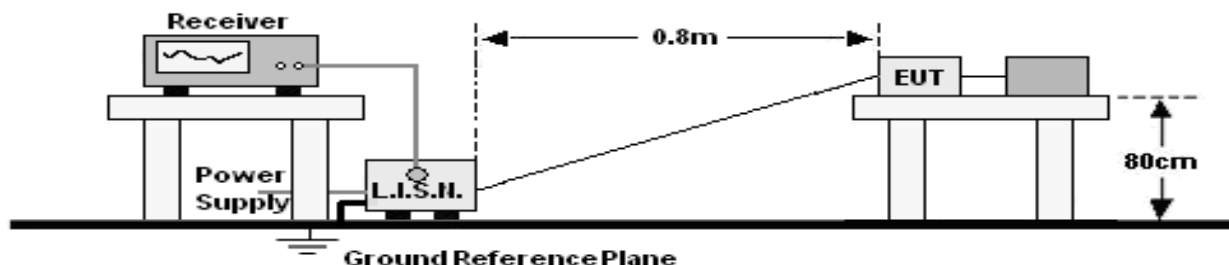
RF Conducted Test					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
Power meter	Keysight	E4419	\	May 16, 2024	May 15, 2025
Power Sensor (AV)	Keysight	E9300A	\	May 16, 2024	May 15, 2025
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 16, 2024	May 15, 2025
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Radio frequency control box	MAIWEI	MW100-RFC B	\	\	\
Software	MAIWEI	MTS 8310	\	\	\

Radiated Emissions Test (966 Chamber01)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	May 16, 2024	May 15, 2025
Receiver	R&S	ESR	102075	May 16, 2024	May 15, 2025
Receiver	R&S	ESRP	101154	May 16, 2024	May 15, 2025
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 16, 2024	May 15, 2025
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 21, 2024	May 20, 2025
Loop Antenna(9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	May 21, 2024	May 20, 2025
Amplifier	SKET	LAPA_01G18 G-45dB	SK2021040901	May 16, 2024	May 15, 2025
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Amplifier(18G Hz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 16, 2024	May 15, 2025
Horn Antenna(18G Hz-40GHz)	Schwarzbeck	BBHA9170	00822	May 21, 2024	May 20, 2025
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	100363	May 16, 2024	May 15, 2025
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

CO. LTD.

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

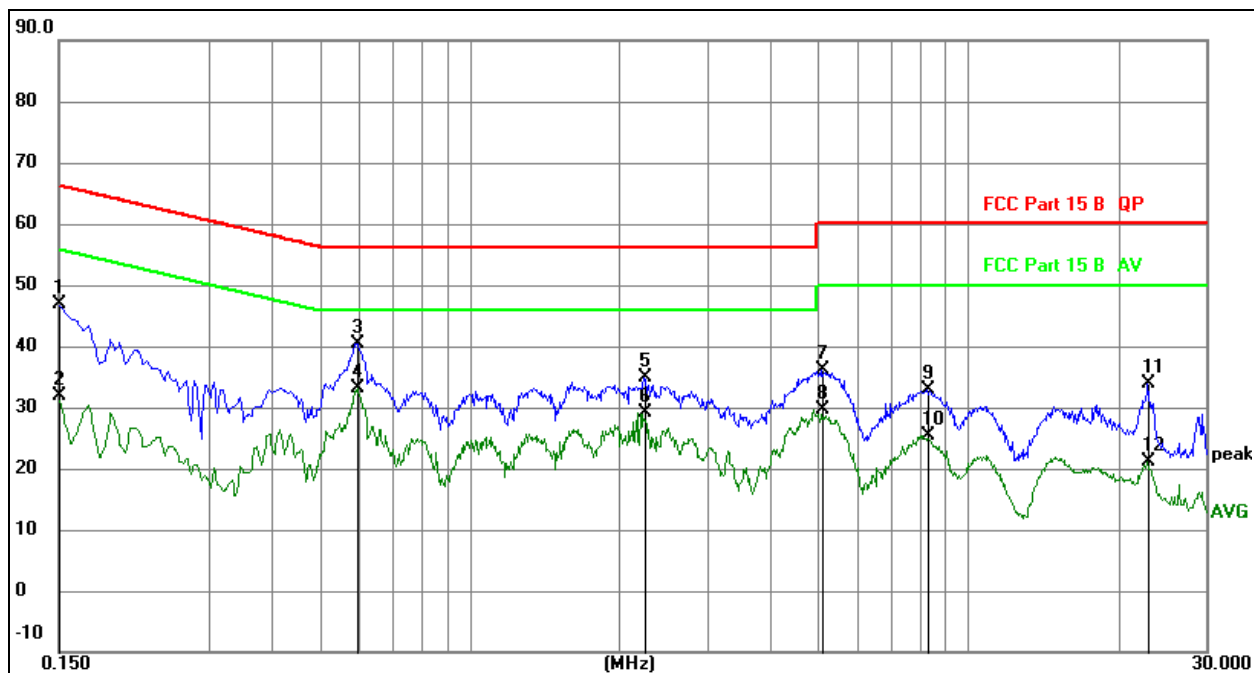
- The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
- The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak 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:	25.2 °C	Relative Humidity:	52%
Pressure:	101KPa	Phase :	L
Test Mode:	Mode 3	Test Voltage :	AC120V/60Hz

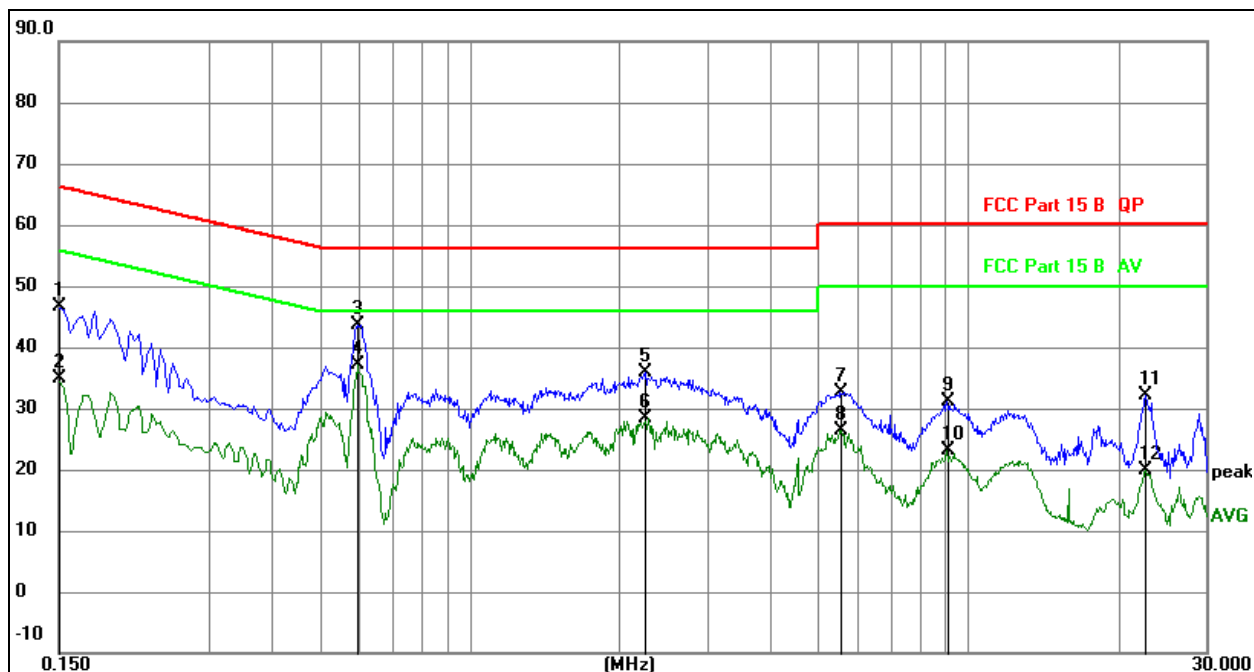


Remark:

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	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1500	26.83	20.07	46.90	66.00	-19.10	QP
2		0.1500	11.91	20.07	31.98	56.00	-24.02	AVG
3		0.5955	20.39	20.08	40.47	56.00	-15.53	QP
4	*	0.5955	12.93	20.08	33.01	46.00	-12.99	AVG
5		2.2470	14.89	20.10	34.99	56.00	-21.01	QP
6		2.2470	8.96	20.10	29.06	46.00	-16.94	AVG
7		5.1045	15.87	20.15	36.02	60.00	-23.98	QP
8		5.1045	9.51	20.15	29.66	50.00	-20.34	AVG
9		8.2995	12.75	20.16	32.91	60.00	-27.09	QP
10		8.2995	5.16	20.16	25.32	50.00	-24.68	AVG
11		22.8974	13.53	20.31	33.84	60.00	-26.16	QP
12		22.8974	0.70	20.31	21.01	50.00	-28.99	AVG

Temperature:	25.2 °C	Relative Humidity:	52%
Pressure:	101KPa	Phase :	N
Test Mode:	Mode 3	Test Voltage :	AC120V/60Hz



Remark:

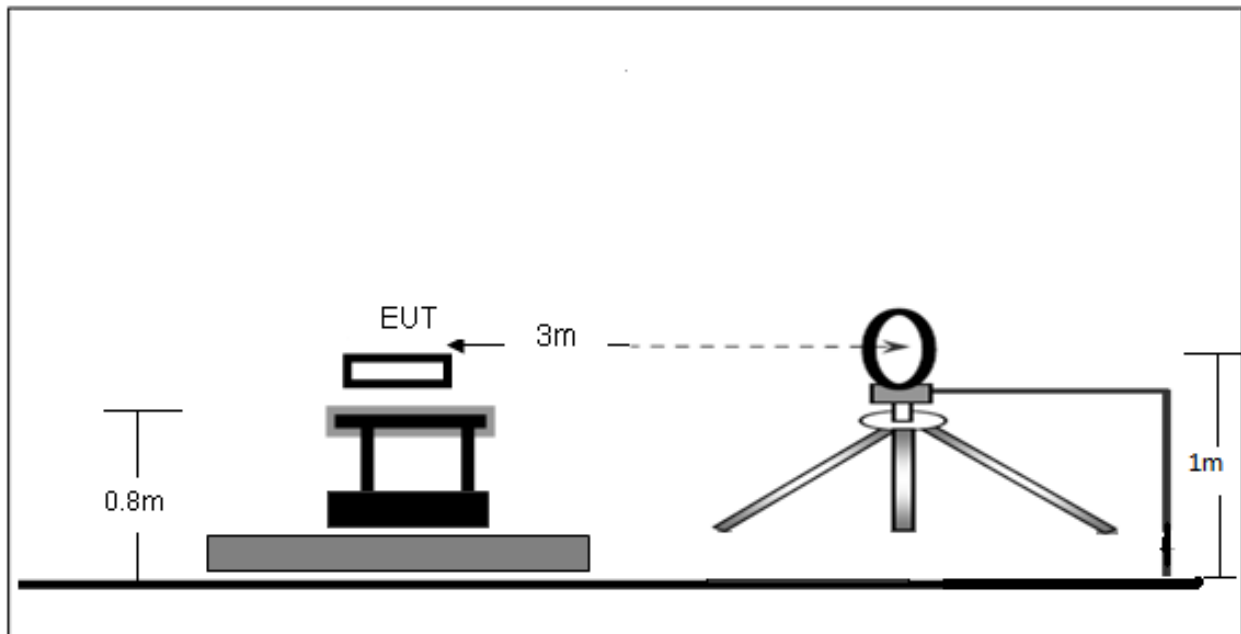
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement=Reading Level+ Correct Factor
4. Over1 Measurement-Limit

No.	Mk.	Freq. MHz	Reading Level dB	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1500	26.45	20.07	46.52	66.00	-19.48	QP
2		0.1500	14.78	20.07	34.85	56.00	-21.15	AVG
3		0.5948	23.45	20.08	43.53	56.00	-12.47	QP
4	*	0.5948	17.13	20.08	37.21	46.00	-8.79	AVG
5		2.2486	15.68	20.10	35.78	56.00	-20.22	QP
6		2.2486	8.19	20.10	28.29	46.00	-17.71	AVG
7		5.5347	12.48	20.15	32.63	60.00	-27.37	QP
8		5.5347	6.33	20.15	26.48	50.00	-23.52	AVG
9		9.0592	10.84	20.17	31.01	60.00	-28.99	QP
10		9.0592	2.92	20.17	23.09	50.00	-26.91	AVG
11		22.6551	11.72	20.31	32.03	60.00	-27.97	QP
12		22.6551	-0.42	20.31	19.89	50.00	-30.11	AVG

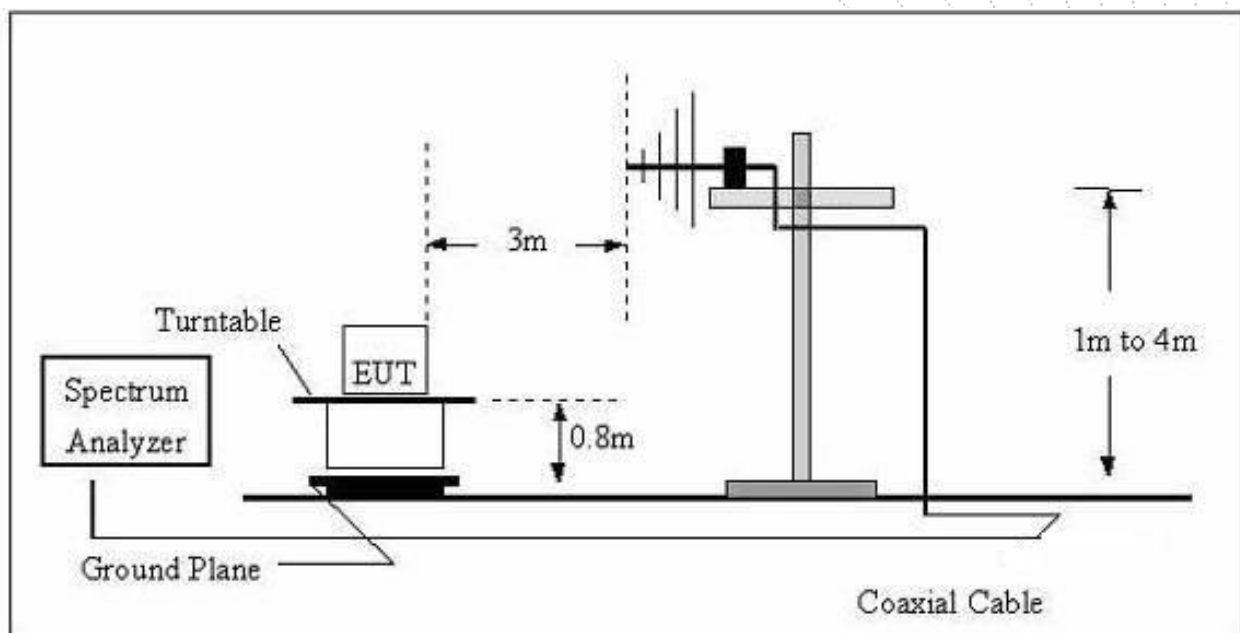
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

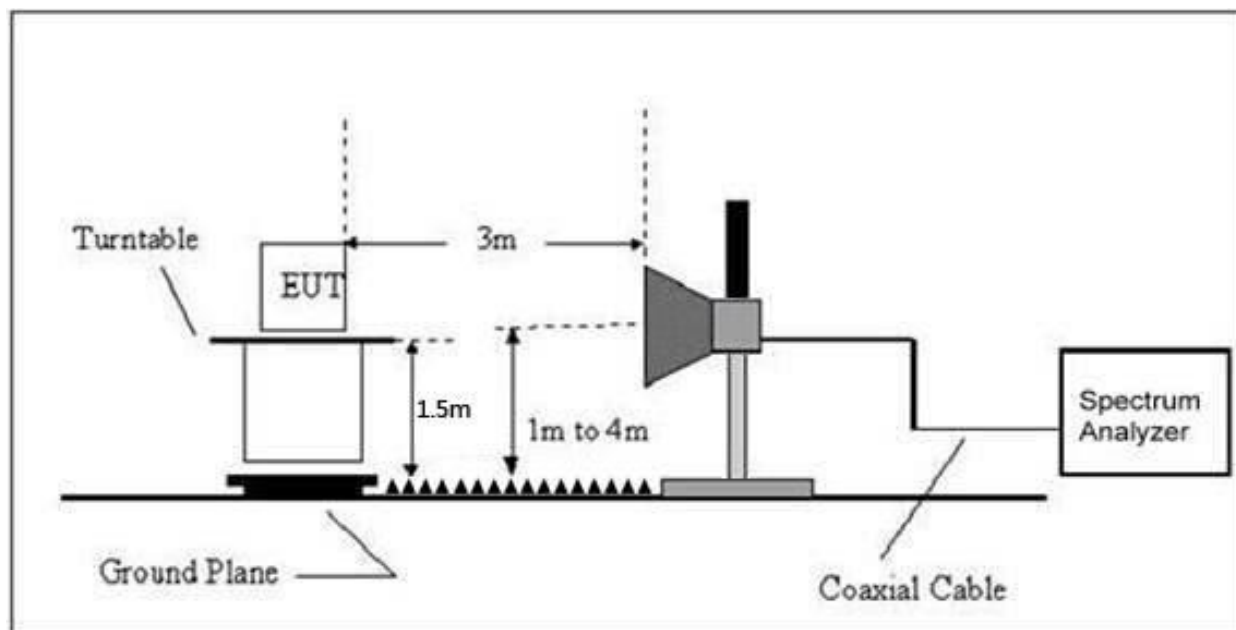
(A) Radiated Emission Test-Up Frequency Below 30MHz



(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

- 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.
- 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.
- 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.
- 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.
- 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.
- 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:	25.5 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz
Test Mode:	Mode 3	Polarization :	--

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

Note:

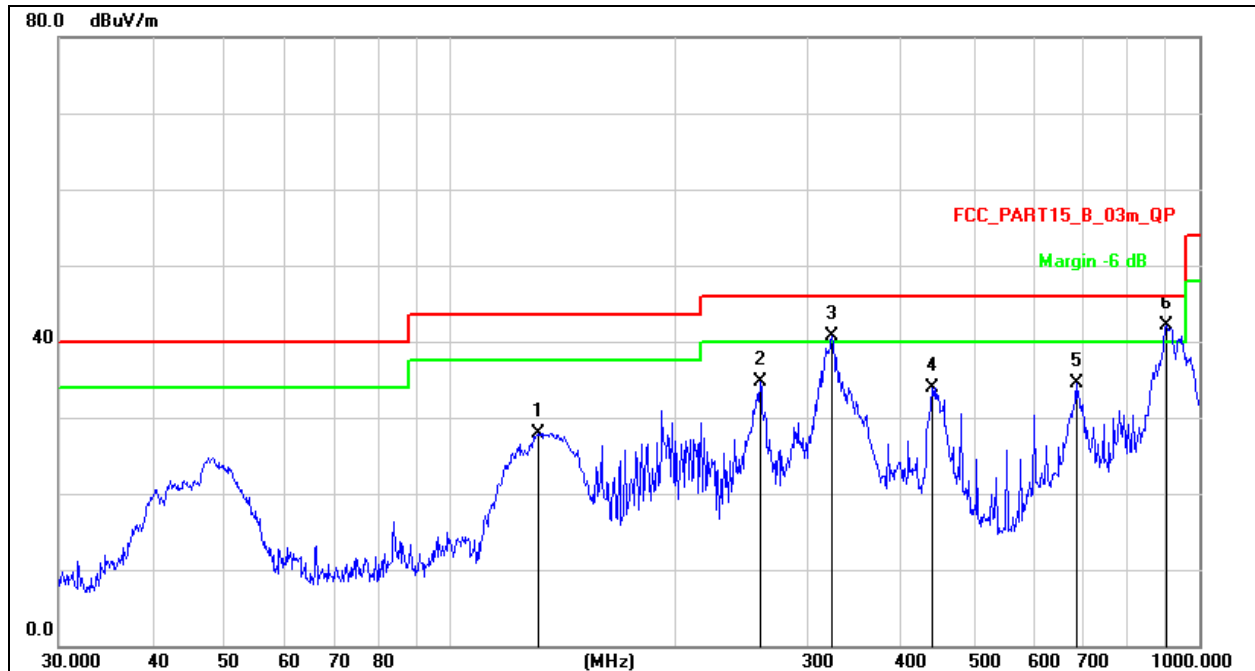
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

Between 30MHz – 1GHz

Temperature:	25.5 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Horizontal
Test Mode:	Mode 3	Test Voltage :	AC120V/60Hz

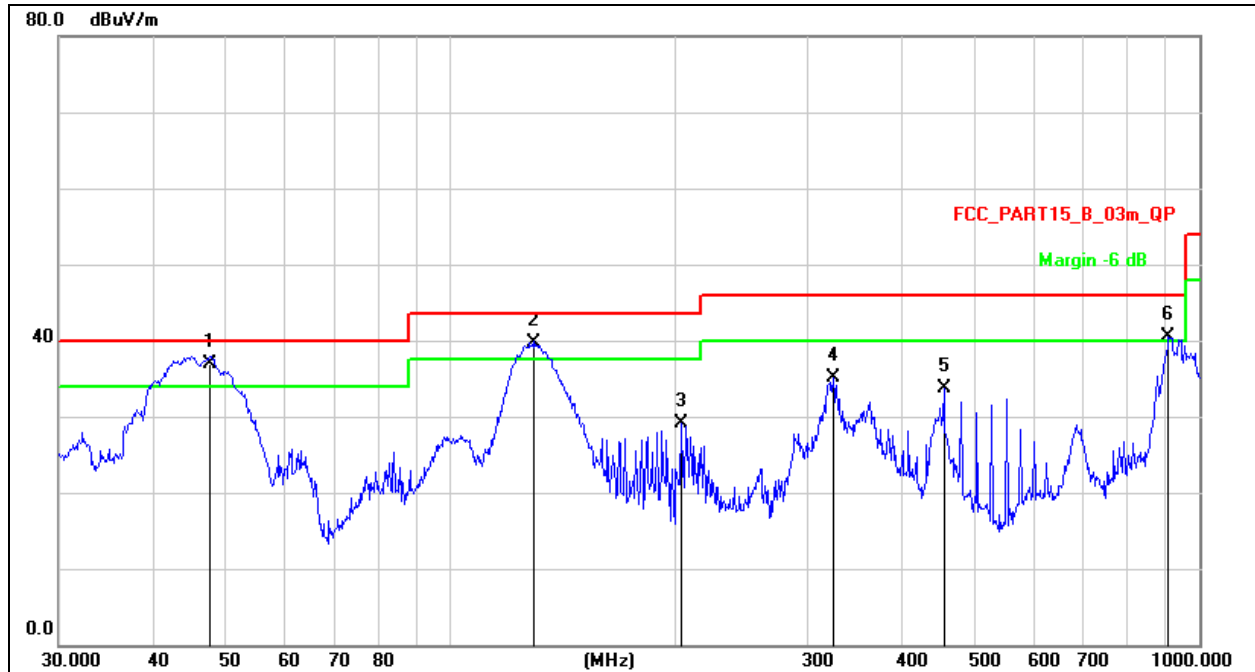


Remark:

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	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		130.8369	46.03	-18.09	27.94	43.50	-15.56	QP
2		259.2338	48.75	-14.10	34.65	46.00	-11.35	QP
3	!	323.3204	53.18	-12.42	40.76	46.00	-5.24	QP
4		440.1963	44.04	-10.05	33.99	46.00	-12.01	QP
5		684.7454	40.41	-5.85	34.56	46.00	-11.44	QP
6	*	903.3094	45.21	-3.11	42.10	46.00	-3.90	QP

Temperature:	25.5 °C	Relative Humidity:	54%
Pressure:	101KPa	Phase :	Vertical
Test Mode:	Mode 3	Test Voltage :	AC120V/60Hz



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	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1	*	47.6586	51.07	-14.09	36.98	40.00	-3.02	QP
2	!	129.4677	57.79	-17.99	39.80	43.50	-3.70	QP
3		203.5228	44.66	-15.62	29.04	43.50	-14.46	QP
4		324.4561	47.47	-12.38	35.09	46.00	-10.91	QP
5		455.9058	43.43	-9.71	33.72	46.00	-12.28	QP
6	!	909.6667	43.66	-3.09	40.57	46.00	-5.43	QP

Between 1GHz – 40GHz

- ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge
- All the modes has been tested and the worst result 802.11a (antenna a) recorded as below:

Test mode: 802.11a (antenna a) Frequency(MHz): 5180

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5120.63	H	59.61	74	46.26	54
5149.12	V	56.83	74	41.22	54

Test mode: 802.11a (antenna a) Frequency(MHz): 5240

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
5303.06	H	44.69	74	30.48	54
5302.37	V	42.13	74	29.04	54

Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp

TEST
TO
OVER
t See

Test Mode: TX(5.1G) - 802.11a

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.165	71.93	-20.73	51.20	68.2	-17.00	PK
Vertical	4434.165	59.14	-20.73	38.41	54	-15.59	AV
Vertical	10360.151	62.22	-9.36	52.86	68.2	-15.34	PK
Vertical	10360.151	49.99	-9.36	40.63	54	-13.37	AV
Vertical	15540.033	60.18	-7.84	52.34	74	-21.66	PK
Vertical	15540.033	49.34	-7.84	41.50	54	-12.50	AV
Horizontal	4434.083	74.28	-20.73	53.55	68.2	-14.65	PK
Horizontal	4434.083	59.45	-20.73	38.72	54	-15.28	AV
Horizontal	10360.068	62.75	-9.36	53.39	68.2	-14.81	PK
Horizontal	10360.068	49.66	-9.36	40.30	54	-13.70	AV
Horizontal	15540.121	64.52	-7.84	56.68	74	-17.32	PK
Horizontal	15540.121	49.58	-7.84	41.74	54	-12.26	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.127	70.99	-20.42	50.58	74	-23.42	PK
Vertical	4592.127	59.51	-20.42	39.10	54	-14.90	AV
Vertical	10400.189	63.76	-9.30	54.46	68.2	-13.74	PK
Vertical	10400.189	49.28	-9.30	39.98	54	-14.02	AV
Vertical	15600.095	63.55	-7.82	55.73	74	-18.27	PK
Vertical	15600.095	49.98	-7.82	42.16	54	-11.84	AV
Horizontal	4592.102	72.60	-20.42	52.18	74	-21.82	PK
Horizontal	4592.102	59.39	-20.42	38.98	54	-15.02	AV
Horizontal	10400.143	61.40	-9.30	52.10	68.2	-16.10	PK
Horizontal	10400.143	49.71	-9.30	40.41	54	-13.59	AV
Horizontal	15600.017	60.26	-7.82	52.44	74	-21.56	PK
Horizontal	15600.017	49.91	-7.82	42.09	54	-11.91	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.113	73.85	-20.12	53.72	74	-20.28	PK
Vertical	4739.113	59.97	-20.12	39.85	54	-14.15	AV
Vertical	10480.070	61.45	-9.18	52.27	68.2	-15.93	PK
Vertical	10480.070	49.60	-9.18	40.42	54	-13.58	AV
Vertical	15720.112	62.54	-7.78	54.76	74	-19.24	PK
Vertical	15720.112	49.44	-7.78	41.66	54	-12.34	AV
Horizontal	4739.088	74.19	-20.12	54.06	74	-19.94	PK
Horizontal	4739.088	59.15	-20.12	39.02	54	-14.98	AV
Horizontal	10480.133	64.48	-9.18	55.30	68.2	-12.90	PK
Horizontal	10480.133	49.51	-9.18	40.33	54	-13.67	AV
Horizontal	15720.143	64.52	-7.78	56.74	74	-17.26	PK
Horizontal	15720.143	49.40	-7.78	41.62	54	-12.38	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:	TX(5.1G) - 802.11n-HT20
------------	-------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.077	70.35	-20.73	49.62	68.2	-18.58	PK
Vertical	4434.077	59.74	-20.73	39.01	54	-14.99	AV
Vertical	10360.116	61.44	-9.36	52.08	68.2	-16.12	PK
Vertical	10360.116	49.72	-9.36	40.36	54	-13.64	AV
Vertical	15540.191	64.60	-7.84	56.76	74	-17.24	PK
Vertical	15540.191	49.71	-7.84	41.87	54	-12.13	AV
Horizontal	4434.091	72.17	-20.73	51.43	68.2	-16.77	PK
Horizontal	4434.091	59.80	-20.73	39.07	54	-14.93	AV
Horizontal	10360.149	61.34	-9.36	51.98	68.2	-16.22	PK
Horizontal	10360.149	49.75	-9.36	40.39	54	-13.61	AV
Horizontal	15540.155	64.05	-7.84	56.21	74	-17.79	PK
Horizontal	15540.155	49.78	-7.84	41.94	54	-12.06	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.058	73.10	-20.42	52.68	74	-21.32	PK
Vertical	4592.058	59.87	-20.42	39.45	54	-14.55	AV
Vertical	10400.140	61.56	-9.30	52.26	68.2	-15.94	PK
Vertical	10400.140	49.21	-9.30	39.91	54	-14.09	AV
Vertical	15600.128	60.23	-7.82	52.41	74	-21.59	PK
Vertical	15600.128	49.72	-7.82	41.90	54	-12.10	AV
Horizontal	4592.189	70.57	-20.42	50.16	74	-23.84	PK
Horizontal	4592.189	59.00	-20.42	38.59	54	-15.41	AV
Horizontal	10400.001	61.84	-9.30	52.54	68.2	-15.66	PK
Horizontal	10400.001	49.56	-9.30	40.26	54	-13.74	AV
Horizontal	15600.017	63.90	-7.82	56.08	74	-17.92	PK
Horizontal	15600.017	49.31	-7.82	41.49	54	-12.51	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.157	72.62	-20.12	52.49	74	-21.51	PK
Vertical	4739.157	59.46	-20.12	39.34	54	-14.66	AV
Vertical	10480.113	62.84	-9.18	53.66	68.2	-14.54	PK
Vertical	10480.113	49.75	-9.18	40.57	54	-13.43	AV
Vertical	15720.152	60.98	-7.78	53.20	74	-20.80	PK
Vertical	15720.152	49.05	-7.78	41.27	54	-12.73	AV
Horizontal	4739.139	70.20	-20.12	50.08	74	-23.92	PK
Horizontal	4739.139	59.03	-20.12	38.91	54	-15.09	AV
Horizontal	10480.086	63.49	-9.18	54.31	68.2	-13.89	PK
Horizontal	10480.086	49.14	-9.18	39.96	54	-14.04	AV
Horizontal	15720.121	63.82	-7.78	56.04	74	-17.96	PK
Horizontal	15720.121	49.28	-7.78	41.50	54	-12.50	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:	TX(5.1G) - 802.11n-HT40
------------	-------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.174	74.34	-20.73	53.60	68.2	-14.60	PK
Vertical	4434.174	59.36	-20.73	38.63	54	-15.37	AV
Vertical	10380.148	63.80	-9.33	54.47	68.2	-13.73	PK
Vertical	10380.148	49.24	-9.33	39.91	54	-14.09	AV
Vertical	15570.013	64.13	-7.83	56.30	74	-17.70	PK
Vertical	15570.013	49.05	-7.83	41.22	54	-12.78	AV
Horizontal	4434.055	73.40	-20.73	52.67	74	-21.33	PK
Horizontal	4434.055	59.31	-20.73	38.58	54	-15.42	AV
Horizontal	10380.048	63.98	-9.33	54.65	68.2	-13.55	PK
Horizontal	10380.048	49.63	-9.33	40.30	54	-13.70	AV
Horizontal	15570.041	60.14	-7.83	52.31	74	-21.69	PK
Horizontal	15570.041	49.13	-7.83	41.30	54	-12.70	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.063	71.41	-20.12	51.29	68.2	-16.91	PK
Vertical	4739.063	59.50	-20.12	39.38	54	-14.62	AV
Vertical	10460.066	63.22	-9.21	54.01	68.2	-14.19	PK
Vertical	10460.066	49.48	-9.21	40.27	54	-13.73	AV
Vertical	15690.189	60.37	-7.79	52.58	74	-21.42	PK
Vertical	15690.189	49.22	-7.79	41.43	54	-12.57	AV
Horizontal	4739.159	74.57	-20.12	54.45	68.2	-13.75	PK
Horizontal	4739.159	59.23	-20.12	39.11	54	-14.89	AV
Horizontal	10460.114	64.48	-9.21	55.27	68.2	-12.93	PK
Horizontal	10460.114	49.70	-9.21	40.49	54	-13.51	AV
Horizontal	15690.112	61.14	-7.79	53.35	74	-20.65	PK
Horizontal	15690.112	49.42	-7.79	41.63	54	-12.37	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:	TX(5.1G) - 802.11ac-HT20
------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.097	70.85	-20.73	50.12	68.2	-18.08	PK
Vertical	4434.097	59.26	-20.73	38.53	54	-15.47	AV
Vertical	10360.068	61.95	-9.36	52.59	68.2	-15.61	PK
Vertical	10360.068	49.77	-9.36	40.41	54	-13.59	AV
Vertical	15540.078	63.01	-7.84	55.17	74	-18.83	PK
Vertical	15540.078	49.20	-7.84	41.36	54	-12.64	AV
Horizontal	4434.060	73.34	-20.73	52.61	68.2	-15.59	PK
Horizontal	4434.060	59.81	-20.73	39.08	54	-14.92	AV
Horizontal	10360.006	64.65	-9.36	55.29	68.2	-12.91	PK
Horizontal	10360.006	49.61	-9.36	40.25	54	-13.75	AV
Horizontal	15540.143	61.40	-7.84	53.56	74	-20.44	PK
Horizontal	15540.143	49.96	-7.84	42.12	54	-11.88	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.074	72.14	-20.42	51.73	74	-22.27	PK
Vertical	4592.074	59.49	-20.42	39.07	54	-14.93	AV
Vertical	10400.164	63.44	-9.30	54.14	68.2	-14.06	PK
Vertical	10400.164	49.91	-9.30	40.61	54	-13.39	AV
Vertical	15600.166	64.97	-7.82	57.15	74	-16.85	PK
Vertical	15600.166	49.39	-7.82	41.57	54	-12.43	AV
Horizontal	4592.142	74.05	-20.42	53.63	74	-20.37	PK
Horizontal	4592.142	59.29	-20.42	38.87	54	-15.13	AV
Horizontal	10400.067	64.09	-9.30	54.79	68.2	-13.41	PK
Horizontal	10400.067	49.87	-9.30	40.57	54	-13.43	AV
Horizontal	15600.026	60.56	-7.82	52.74	74	-21.26	PK
Horizontal	15600.026	49.30	-7.82	41.48	54	-12.52	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.062	71.64	-20.12	51.52	74	-22.48	PK
Vertical	4739.062	59.08	-20.12	38.96	54	-15.04	AV
Vertical	10480.132	60.97	-9.18	51.79	68.2	-16.41	PK
Vertical	10480.132	49.99	-9.18	40.81	54	-13.19	AV
Vertical	15720.037	61.88	-7.78	54.10	74	-19.90	PK
Vertical	15720.037	49.18	-7.78	41.40	54	-12.60	AV
Horizontal	4739.094	74.93	-20.12	54.81	74	-19.19	PK
Horizontal	4739.094	59.72	-20.12	39.60	54	-14.40	AV
Horizontal	10480.151	60.99	-9.18	51.81	68.2	-16.39	PK
Horizontal	10480.151	49.28	-9.18	40.10	54	-13.90	AV
Horizontal	15720.198	64.15	-7.78	56.37	74	-17.63	PK
Horizontal	15720.198	49.90	-7.78	42.12	54	-11.88	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:	TX(5.1G) - 802.11ac-HT40
------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.029	73.73	-20.73	53.00	68.2	-15.20	PK
Vertical	4434.029	59.05	-20.73	38.32	54	-15.68	AV
Vertical	10380.170	60.63	-9.33	51.30	68.2	-16.90	PK
Vertical	10380.170	49.95	-9.33	40.62	54	-13.38	AV
Vertical	15570.068	63.08	-7.83	55.25	74	-18.75	PK
Vertical	15570.068	49.53	-7.83	41.70	54	-12.30	AV
Horizontal	4434.135	74.30	-20.73	53.57	74	-20.43	PK
Horizontal	4434.135	59.33	-20.73	38.60	54	-15.40	AV
Horizontal	10380.070	60.17	-9.33	50.84	68.2	-17.36	PK
Horizontal	10380.070	49.27	-9.33	39.94	54	-14.06	AV
Horizontal	15570.140	61.69	-7.83	53.86	74	-20.14	PK
Horizontal	15570.140	49.14	-7.83	41.31	54	-12.69	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.002	73.19	-20.12	53.07	68.2	-15.13	PK
Vertical	4739.002	59.74	-20.12	39.62	54	-14.38	AV
Vertical	10460.084	61.81	-9.21	52.60	68.2	-15.60	PK
Vertical	10460.084	49.05	-9.21	39.84	54	-14.16	AV
Vertical	15690.023	63.74	-7.79	55.95	74	-18.05	PK
Vertical	15690.023	49.63	-7.79	41.84	54	-12.16	AV
Horizontal	4739.114	74.16	-20.12	54.04	68.2	-14.16	PK
Horizontal	4739.114	59.79	-20.12	39.67	54	-14.33	AV
Horizontal	10460.089	64.78	-9.21	55.57	68.2	-12.63	PK
Horizontal	10460.089	49.60	-9.21	40.39	54	-13.61	AV
Horizontal	15690.140	63.69	-7.79	55.90	74	-18.10	PK
Horizontal	15690.140	49.53	-7.79	41.74	54	-12.26	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:	TX(5.1G) - 802.11ax-HT20
------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5180 MHz)-Above 1G							
Vertical	4434.058	74.42	-20.73	53.69	68.2	-14.51	PK
Vertical	4434.058	59.37	-20.73	38.64	54	-15.36	AV
Vertical	10360.066	60.77	-9.36	51.41	68.2	-16.79	PK
Vertical	10360.066	49.40	-9.36	40.04	54	-13.96	AV
Vertical	15540.068	63.37	-7.84	55.53	74	-18.47	PK
Vertical	15540.068	49.56	-7.84	41.72	54	-12.28	AV
Horizontal	4434.166	70.28	-20.73	49.55	68.2	-18.65	PK
Horizontal	4434.166	59.87	-20.73	39.14	54	-14.86	AV
Horizontal	10360.184	61.55	-9.36	52.19	68.2	-16.01	PK
Horizontal	10360.184	49.20	-9.36	39.84	54	-14.16	AV
Horizontal	15540.026	64.44	-7.84	56.60	74	-17.40	PK
Horizontal	15540.026	49.78	-7.84	41.94	54	-12.06	AV
Middle Channel (5200 MHz)-Above 1G							
Vertical	4592.072	73.54	-20.42	53.13	74	-20.87	PK
Vertical	4592.072	59.89	-20.42	39.48	54	-14.52	AV
Vertical	10400.093	64.58	-9.30	55.28	68.2	-12.92	PK
Vertical	10400.093	49.15	-9.30	39.85	54	-14.15	AV
Vertical	15600.082	61.42	-7.82	53.60	74	-20.40	PK
Vertical	15600.082	49.07	-7.82	41.25	54	-12.75	AV
Horizontal	4592.062	74.30	-20.42	53.88	74	-20.12	PK
Horizontal	4592.062	59.21	-20.42	38.79	54	-15.21	AV
Horizontal	10400.078	63.87	-9.30	54.57	68.2	-13.63	PK
Horizontal	10400.078	50.00	-9.30	40.70	54	-13.30	AV
Horizontal	15600.195	60.94	-7.82	53.12	74	-20.88	PK
Horizontal	15600.195	49.22	-7.82	41.40	54	-12.60	AV
High Channel (5240 MHz)-Above 1G							
Vertical	4739.190	74.76	-20.12	54.64	74	-19.36	PK
Vertical	4739.190	59.37	-20.12	39.25	54	-14.75	AV
Vertical	10480.155	63.74	-9.18	54.56	68.2	-13.64	PK
Vertical	10480.155	49.46	-9.18	40.28	54	-13.72	AV
Vertical	15720.015	63.31	-7.78	55.53	74	-18.47	PK
Vertical	15720.015	49.79	-7.78	42.01	54	-11.99	AV
Horizontal	4739.166	70.78	-20.12	50.66	74	-23.34	PK
Horizontal	4739.166	59.14	-20.12	39.02	54	-14.98	AV
Horizontal	10480.109	63.57	-9.18	54.39	68.2	-13.81	PK
Horizontal	10480.109	49.27	-9.18	40.09	54	-13.91	AV
Horizontal	15720.179	62.48	-7.78	54.70	74	-19.30	PK
Horizontal	15720.179	49.71	-7.78	41.93	54	-12.07	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:	TX(5.1G) - 802.11ax-HT40
------------	--------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5190 MHz)-Above 1G							
Vertical	4434.125	71.51	-20.73	50.78	68.2	-17.42	PK
Vertical	4434.125	59.45	-20.73	38.72	54	-15.28	AV
Vertical	10380.179	63.97	-9.33	54.64	68.2	-13.56	PK
Vertical	10380.179	49.42	-9.33	40.09	54	-13.91	AV
Vertical	15570.131	62.59	-7.83	54.76	74	-19.24	PK
Vertical	15570.131	49.82	-7.83	41.99	54	-12.01	AV
Horizontal	4434.083	71.43	-20.73	50.70	74	-23.30	PK
Horizontal	4434.083	59.13	-20.73	38.40	54	-15.60	AV
Horizontal	10380.083	63.74	-9.33	54.41	68.2	-13.79	PK
Horizontal	10380.083	49.15	-9.33	39.82	54	-14.18	AV
Horizontal	15570.182	62.55	-7.83	54.72	74	-19.28	PK
Horizontal	15570.182	49.05	-7.83	41.22	54	-12.78	AV
Middle Channel (5230 MHz)-Above 1G							
Vertical	4739.172	72.63	-20.12	52.51	68.2	-15.69	PK
Vertical	4739.172	59.52	-20.12	39.40	54	-14.60	AV
Vertical	10460.145	62.79	-9.21	53.58	68.2	-14.62	PK
Vertical	10460.145	49.04	-9.21	39.83	54	-14.17	AV
Vertical	15690.174	63.98	-7.79	56.19	74	-17.81	PK
Vertical	15690.174	49.20	-7.79	41.41	54	-12.59	AV
Horizontal	4739.094	73.11	-20.12	52.98	68.2	-15.22	PK
Horizontal	4739.094	59.39	-20.12	39.27	54	-14.73	AV
Horizontal	10460.106	61.76	-9.21	52.55	68.2	-15.65	PK
Horizontal	10460.106	49.74	-9.21	40.53	54	-13.47	AV
Horizontal	15690.005	62.01	-7.79	54.22	74	-19.78	PK
Horizontal	15690.005	49.50	-7.79	41.71	54	-12.29	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:	TX (5.8G) -- 802.11a
------------	----------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.089	71.35	-20.24	51.11	74	-22.89	PK
Vertical	4679.089	59.84	-20.24	39.60	54	-14.40	AV
Vertical	11490.056	63.42	-8.79	54.63	68.2	-13.57	PK
Vertical	11490.056	49.91	-8.79	41.12	54	-12.88	AV
Vertical	17235.037	58.68	-3.18	55.50	68.2	-12.70	PK
Vertical	17235.037	44.77	-3.18	41.59	54	-12.41	AV
Horizontal	4679.162	73.67	-20.73	52.94	74	-21.06	PK
Horizontal	4679.162	59.64	-20.73	38.91	54	-15.09	AV
Horizontal	11490.105	62.61	-8.79	53.82	68.2	-14.38	PK
Horizontal	11490.105	49.22	-8.79	40.43	54	-13.57	AV
Horizontal	17235.089	57.51	-3.18	54.33	68.2	-13.87	PK
Horizontal	17235.089	45.00	-3.18	41.82	54	-12.18	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.044	70.27	-20.42	49.86	74	-24.14	PK
Vertical	4592.044	59.49	-20.42	39.07	54	-14.93	AV
Vertical	11570.182	60.81	-8.86	51.95	68.2	-16.25	PK
Vertical	11570.182	49.82	-8.86	40.96	54	-13.04	AV
Vertical	17355.187	57.66	-2.52	55.14	68.2	-13.06	PK
Vertical	17355.187	44.29	-2.52	41.77	54	-12.23	AV
Horizontal	4592.172	70.11	-20.42	49.69	74	-24.31	PK
Horizontal	4592.172	59.28	-20.42	38.87	54	-15.13	AV
Horizontal	11570.094	63.82	-8.86	54.96	68.2	-13.24	PK
Horizontal	11570.094	49.26	-8.86	40.40	54	-13.60	AV
Horizontal	17355.120	58.39	-2.52	55.87	68.2	-12.33	PK
Horizontal	17355.120	44.73	-2.52	42.21	54	-11.79	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.099	70.15	-18.93	51.21	68.2	-16.99	PK
Vertical	6039.099	59.34	-18.93	40.40	54	-13.60	AV
Vertical	11650.163	60.84	-8.92	51.92	74	-22.08	PK
Vertical	11650.163	49.44	-8.92	40.52	54	-13.48	AV
Vertical	17475.077	56.63	-1.86	54.77	68.2	-13.43	PK
Vertical	17475.077	44.44	-1.86	42.58	54	-11.42	AV
Horizontal	6039.156	74.04	-18.93	55.11	68.2	-13.09	PK
Horizontal	6039.156	59.25	-18.93	40.31	54	-13.69	AV
Horizontal	11650.136	64.78	-8.92	55.86	74	-18.14	PK
Horizontal	11650.136	49.32	-8.92	40.40	54	-13.60	AV
Horizontal	17475.143	58.57	-1.86	56.71	68.2	-11.49	PK
Horizontal	17475.143	44.02	-1.86	42.16	54	-11.84	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: TX (5.8G) --802.11n-HT20

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.185	73.62	-20.24	53.37	74	-20.63	PK
Vertical	4679.185	59.01	-20.24	38.77	54	-15.23	AV
Vertical	11490.062	63.34	-8.79	54.55	68.2	-13.65	PK
Vertical	11490.062	49.86	-8.79	41.07	54	-12.93	AV
Vertical	17235.137	56.13	-3.18	52.95	68.2	-15.25	PK
Vertical	17235.137	44.15	-3.18	40.97	54	-13.03	AV
Horizontal	4679.145	72.59	-20.24	52.35	74	-21.65	PK
Horizontal	4679.145	59.95	-20.24	39.71	54	-14.29	AV
Horizontal	11490.081	62.11	-8.79	53.32	68.2	-14.88	PK
Horizontal	11490.081	49.51	-8.79	40.72	54	-13.28	AV
Horizontal	17235.036	55.28	-3.18	52.10	68.2	-16.10	PK
Horizontal	17235.036	44.96	-3.18	41.78	54	-12.22	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.156	71.34	-20.42	50.93	74	-23.07	PK
Vertical	4592.156	59.25	-20.42	38.83	54	-15.17	AV
Vertical	11570.138	64.78	-8.86	55.92	68.2	-12.28	PK
Vertical	11570.138	49.39	-8.86	40.53	54	-13.47	AV
Vertical	17355.188	57.10	-2.52	54.58	68.2	-13.62	PK
Vertical	17355.188	44.19	-2.52	41.67	54	-12.33	AV
Horizontal	4592.172	70.16	-20.42	49.75	74	-24.25	PK
Horizontal	4592.172	59.91	-20.42	39.50	54	-14.50	AV
Horizontal	11570.066	60.21	-8.86	51.35	68.2	-16.85	PK
Horizontal	11570.066	49.17	-8.86	40.31	54	-13.69	AV
Horizontal	17355.177	57.61	-2.52	55.09	68.2	-13.11	PK
Horizontal	17355.177	44.24	-2.52	41.72	54	-12.28	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.148	70.43	-18.93	51.50	68.2	-16.70	PK
Vertical	6039.148	59.59	-18.93	40.65	54	-13.35	AV
Vertical	11650.019	64.35	-8.92	55.43	74	-18.57	PK
Vertical	11650.019	49.03	-8.92	40.11	54	-13.89	AV
Vertical	17475.076	59.25	-1.86	57.39	68.2	-10.81	PK
Vertical	17475.076	44.17	-1.86	42.31	54	-11.69	AV
Horizontal	6039.133	72.97	-18.93	54.03	68.2	-14.17	PK
Horizontal	6039.133	59.36	-18.93	40.43	54	-13.57	AV
Horizontal	11650.014	64.88	-8.92	55.96	74	-18.04	PK
Horizontal	11650.014	49.01	-8.92	40.09	54	-13.91	AV
Horizontal	17475.023	58.98	-1.86	57.12	68.2	-11.08	PK
Horizontal	17475.023	44.97	-1.86	43.11	54	-10.89	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:	TX (5.8G) -- 802.11n-HT40
------------	---------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.071	71.26	-20.24	51.02	74	-22.98	PK
Vertical	4679.071	59.93	-20.24	39.69	54	-14.31	AV
Vertical	11510.194	61.97	-8.81	53.16	74	-20.84	PK
Vertical	11510.194	49.27	-8.81	40.46	54	-13.54	AV
Vertical	17265.037	58.05	-3.01	55.04	68.2	-13.16	PK
Vertical	17265.037	44.76	-3.01	41.75	54	-12.25	AV
Horizontal	4679.023	71.90	-20.24	51.66	74	-22.34	PK
Horizontal	4679.023	60.00	-20.24	39.75	54	-14.25	AV
Horizontal	11510.035	62.19	-8.81	53.38	74	-20.62	PK
Horizontal	11510.035	49.44	-8.81	40.63	54	-13.37	AV
Horizontal	17265.126	57.92	-3.01	54.91	68.2	-13.29	PK
Horizontal	17265.126	44.98	-3.01	41.97	54	-12.03	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.157	74.73	-18.93	55.80	68.2	-12.40	PK
Vertical	6039.157	59.04	-18.93	40.10	54	-13.90	AV
Vertical	11590.016	61.99	-8.87	53.12	74	-20.88	PK
Vertical	11590.016	49.77	-8.87	40.90	54	-13.10	AV
Vertical	17385.074	58.66	-2.35	56.31	68.2	-11.89	PK
Vertical	17385.074	44.64	-2.35	42.29	54	-11.71	AV
Horizontal	6039.183	73.88	-18.93	54.95	68.2	-13.25	PK
Horizontal	6039.183	59.17	-18.93	40.24	54	-13.76	AV
Horizontal	11590.049	61.62	-8.87	52.75	74	-21.25	PK
Horizontal	11590.049	49.91	-8.87	41.04	54	-12.96	AV
Horizontal	17385.011	56.25	-2.35	53.90	68.2	-14.30	PK
Horizontal	17385.011	44.48	-2.35	42.13	54	-11.87	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: TX (5.8G) --802.11ac-HT20

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.138	70.04	-20.24	49.80	74	-24.20	PK
Vertical	4679.138	59.27	-20.24	39.03	54	-14.97	AV
Vertical	11490.109	63.26	-8.79	54.47	68.2	-13.73	PK
Vertical	11490.109	49.30	-8.79	40.51	54	-13.49	AV
Vertical	17235.043	59.33	-3.18	56.15	68.2	-12.05	PK
Vertical	17235.043	44.34	-3.18	41.16	54	-12.84	AV
Horizontal	4679.014	71.95	-20.24	51.71	74	-22.29	PK
Horizontal	4679.014	59.98	-20.24	39.74	54	-14.26	AV
Horizontal	11490.017	61.51	-8.79	52.72	68.2	-15.48	PK
Horizontal	11490.017	49.12	-8.79	40.33	54	-13.67	AV
Horizontal	17235.091	55.95	-3.18	52.77	68.2	-15.43	PK
Horizontal	17235.091	44.87	-3.18	41.69	54	-12.31	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.034	73.77	-20.42	53.36	74	-20.64	PK
Vertical	4592.034	59.60	-20.42	39.18	54	-14.82	AV
Vertical	11570.095	64.38	-8.86	55.52	68.2	-12.68	PK
Vertical	11570.095	49.24	-8.86	40.38	54	-13.62	AV
Vertical	17355.016	56.74	-2.52	54.22	68.2	-13.98	PK
Vertical	17355.016	44.50	-2.52	41.98	54	-12.02	AV
Horizontal	4592.054	74.11	-20.42	53.69	74	-20.31	PK
Horizontal	4592.054	59.83	-20.42	39.41	54	-14.59	AV
Horizontal	11570.189	61.22	-8.86	52.36	68.2	-15.84	PK
Horizontal	11570.189	49.37	-8.86	40.51	54	-13.49	AV
Horizontal	17355.093	57.29	-2.52	54.77	68.2	-13.43	PK
Horizontal	17355.093	44.25	-2.52	41.73	54	-12.27	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.111	71.01	-18.93	52.07	68.2	-16.13	PK
Vertical	6039.111	59.71	-18.93	40.78	54	-13.22	AV
Vertical	11650.101	62.91	-8.92	53.99	74	-20.01	PK
Vertical	11650.101	49.40	-8.92	40.48	54	-13.52	AV
Vertical	17475.089	55.66	-1.86	53.80	68.2	-14.40	PK
Vertical	17475.089	44.13	-1.86	42.27	54	-11.73	AV
Horizontal	6039.055	74.23	-18.93	55.29	68.2	-12.91	PK
Horizontal	6039.055	59.43	-18.93	40.50	54	-13.50	AV
Horizontal	11650.052	61.09	-8.92	52.17	74	-21.83	PK
Horizontal	11650.052	49.65	-8.92	40.73	54	-13.27	AV
Horizontal	17475.055	59.07	-1.86	57.21	68.2	-10.99	PK
Horizontal	17475.055	44.13	-1.86	42.27	54	-11.73	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 :	TX (5.8G) -- 802.11ac-HT40
-------------	----------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.186	72.62	-20.24	52.38	74	-21.62	PK
Vertical	4679.186	59.58	-20.24	39.34	54	-14.66	AV
Vertical	11510.022	62.46	-8.81	53.65	74	-20.35	PK
Vertical	11510.022	49.89	-8.81	41.08	54	-12.92	AV
Vertical	17265.169	55.12	-3.01	52.11	68.2	-16.09	PK
Vertical	17265.169	44.52	-3.01	41.51	54	-12.49	AV
Horizontal	4679.011	74.28	-20.24	54.04	74	-19.96	PK
Horizontal	4679.011	59.14	-20.24	38.90	54	-15.10	AV
Horizontal	11510.008	60.94	-8.81	52.13	74	-21.87	PK
Horizontal	11510.008	49.42	-8.81	40.61	54	-13.39	AV
Horizontal	17265.101	56.45	-3.01	53.44	68.2	-14.76	PK
Horizontal	17265.101	44.16	-3.01	41.15	54	-12.85	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.057	71.46	-18.93	52.53	68.2	-15.67	PK
Vertical	6039.057	59.23	-18.93	40.30	54	-13.70	AV
Vertical	11590.192	64.18	-8.87	55.31	74	-18.69	PK
Vertical	11590.192	49.15	-8.87	40.28	54	-13.72	AV
Vertical	17385.138	55.57	-2.35	53.22	68.2	-14.98	PK
Vertical	17385.138	44.05	-2.35	41.70	54	-12.30	AV
Horizontal	6039.066	70.77	-18.93	51.84	68.2	-16.36	PK
Horizontal	6039.066	59.98	-18.93	41.05	54	-12.95	AV
Horizontal	11590.056	62.89	-8.87	54.02	74	-19.98	PK
Horizontal	11590.056	49.14	-8.87	40.27	54	-13.73	AV
Horizontal	17385.113	56.06	-2.35	53.71	68.2	-14.49	PK
Horizontal	17385.113	44.22	-2.35	41.87	54	-12.13	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: TX (5.8G) --802.11ax-HT20

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5745 MHz)-Above 1G							
Vertical	4679.015	70.55	-20.24	50.30	74	-23.70	PK
Vertical	4679.015	59.66	-20.24	39.42	54	-14.58	AV
Vertical	11490.177	61.83	-8.79	53.04	68.2	-15.16	PK
Vertical	11490.177	49.44	-8.79	40.65	54	-13.35	AV
Vertical	17235.082	56.42	-3.18	53.24	68.2	-14.96	PK
Vertical	17235.082	44.31	-3.18	41.13	54	-12.87	AV
Horizontal	4679.198	74.91	-20.24	54.67	74	-19.33	PK
Horizontal	4679.198	59.56	-20.24	39.32	54	-14.68	AV
Horizontal	11490.125	60.18	-8.79	51.39	68.2	-16.81	PK
Horizontal	11490.125	49.14	-8.79	40.35	54	-13.65	AV
Horizontal	17235.037	55.21	-3.18	52.03	68.2	-16.17	PK
Horizontal	17235.037	44.56	-3.18	41.38	54	-12.62	AV
Middle Channel (5785 MHz)-Above 1G							
Vertical	4592.022	70.31	-20.42	49.89	74	-24.11	PK
Vertical	4592.022	59.55	-20.42	39.14	54	-14.86	AV
Vertical	11570.024	60.83	-8.86	51.97	68.2	-16.23	PK
Vertical	11570.024	49.91	-8.86	41.05	54	-12.95	AV
Vertical	17355.066	57.35	-2.52	54.83	68.2	-13.37	PK
Vertical	17355.066	44.26	-2.52	41.74	54	-12.26	AV
Horizontal	4592.109	72.96	-20.42	52.54	74	-21.46	PK
Horizontal	4592.109	59.53	-20.42	39.12	54	-14.88	AV
Horizontal	11570.117	63.32	-8.86	54.46	68.2	-13.74	PK
Horizontal	11570.117	49.71	-8.86	40.85	54	-13.15	AV
Horizontal	17355.125	55.43	-2.52	52.91	68.2	-15.29	PK
Horizontal	17355.125	44.48	-2.52	41.96	54	-12.04	AV
High Channel (5825 MHz)-Above 1G							
Vertical	6039.071	73.94	-18.93	55.00	68.2	-13.20	PK
Vertical	6039.071	60.00	-18.93	41.07	54	-12.93	AV
Vertical	11650.126	62.22	-8.92	53.30	74	-20.70	PK
Vertical	11650.126	49.39	-8.92	40.47	54	-13.53	AV
Vertical	17475.129	58.95	-1.86	57.09	68.2	-11.11	PK
Vertical	17475.129	44.30	-1.86	42.44	54	-11.56	AV
Horizontal	6039.165	70.16	-18.93	51.23	68.2	-16.97	PK
Horizontal	6039.165	59.35	-18.93	40.42	54	-13.58	AV
Horizontal	11650.020	64.76	-8.92	55.84	74	-18.16	PK
Horizontal	11650.020	49.01	-8.92	40.09	54	-13.91	AV
Horizontal	17475.174	58.51	-1.86	56.65	68.2	-11.55	PK
Horizontal	17475.174	44.84	-1.86	42.98	54	-11.02	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 :	TX (5.8G) -- 802.11ax-HT40
-------------	----------------------------

Polar	Frequency	Reading Level	Correct Factor	Measurement	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5755 MHz)-Above 1G							
Vertical	4679.196	72.96	-20.24	52.72	74	-21.28	PK
Vertical	4679.196	59.71	-20.24	39.47	54	-14.53	AV
Vertical	11510.128	61.02	-8.81	52.21	74	-21.79	PK
Vertical	11510.128	49.09	-8.81	40.28	54	-13.72	AV
Vertical	17265.144	55.08	-3.01	52.07	68.2	-16.13	PK
Vertical	17265.144	44.06	-3.01	41.05	54	-12.95	AV
Horizontal	4679.178	70.24	-20.24	50.00	74	-24.00	PK
Horizontal	4679.178	59.39	-20.24	39.14	54	-14.86	AV
Horizontal	11510.015	64.71	-8.81	55.90	74	-18.10	PK
Horizontal	11510.015	49.12	-8.81	40.31	54	-13.69	AV
Horizontal	17265.190	56.35	-3.01	53.34	68.2	-14.86	PK
Horizontal	17265.190	44.97	-3.01	41.96	54	-12.04	AV
Middle Channel (5795 MHz)-Above 1G							
Vertical	6039.052	72.67	-18.93	53.74	68.2	-14.46	PK
Vertical	6039.052	59.32	-18.93	40.39	54	-13.61	AV
Vertical	11590.097	63.39	-8.87	54.52	74	-19.48	PK
Vertical	11590.097	49.79	-8.87	40.92	54	-13.08	AV
Vertical	17385.192	59.75	-2.35	57.40	68.2	-10.80	PK
Vertical	17385.192	44.79	-2.35	42.44	54	-11.56	AV
Horizontal	6039.021	73.49	-18.93	54.55	68.2	-13.65	PK
Horizontal	6039.021	59.67	-18.93	40.74	54	-13.26	AV
Horizontal	11590.164	61.66	-8.87	52.79	74	-21.21	PK
Horizontal	11590.164	49.77	-8.87	40.90	54	-13.10	AV
Horizontal	17385.192	57.63	-2.35	55.28	68.2	-12.92	PK
Horizontal	17385.192	44.60	-2.35	42.25	54	-11.75	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.

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

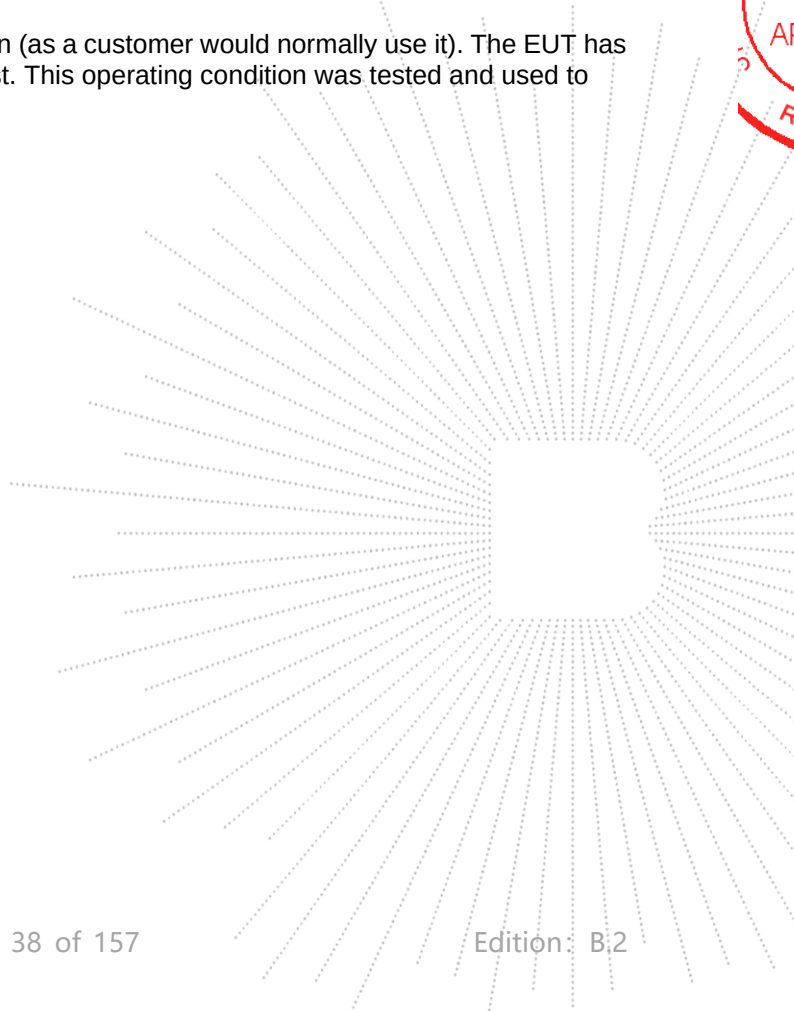
For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 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:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) 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.
- d) 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.
- e) 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:	AC 120V/60Hz
Test Mode:	TX Frequency U-NII-1 (5180-5240MHz) TX Frequency U-NII-3(5745-5825MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/1MHz)	Limit (dBm/1MHz)	Verdict
NVNT	a	5180	-4.14	11	Pass
NVNT	a	5200	-3.49	11	Pass
NVNT	a	5240	-2.56	11	Pass
NVNT	n20	5180	-4.3	11	Pass
NVNT	n20	5200	-5.19	11	Pass
NVNT	n20	5240	-6.44	11	Pass
NVNT	n40	5190	-8.15	11	Pass
NVNT	n40	5230	-10.42	11	Pass
NVNT	ac20	5180	-3.28	11	Pass
NVNT	ac20	5200	-5.01	11	Pass
NVNT	ac20	5240	-6.17	11	Pass
NVNT	ac40	5190	-8	11	Pass
NVNT	ac40	5230	-10.43	11	Pass
NVNT	ax20	5180	-5.39	11	Pass
NVNT	ax20	5200	-4.64	11	Pass
NVNT	ax20	5240	-5.9	11	Pass
NVNT	ax40	5190	-8.88	11	Pass
NVNT	ax40	5230	-9.95	11	Pass

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/510KHz)	Conducted PSD (dBm/500KHz)	Limit (dBm)	Verdict
NVNT	a	5745	-5.72	-5.806	30	Pass
NVNT	a	5785	-8.01	-8.096	30	Pass
NVNT	a	5825	-9.04	-9.126	30	Pass
NVNT	n20	5745	-8.35	-8.436	30	Pass
NVNT	n20	5785	-7.83	-7.916	30	Pass
NVNT	n20	5825	-11.1	-11.186	30	Pass
NVNT	n40	5755	-11.32	-11.406	30	Pass
NVNT	n40	5795	-13.31	-13.396	30	Pass
NVNT	ac20	5745	-6.67	-6.756	30	Pass
NVNT	ac20	5785	-8.18	-8.266	30	Pass
NVNT	ac20	5825	-11.61	-11.696	30	Pass
NVNT	ac40	5755	-11.22	-11.306	30	Pass
NVNT	ac40	5795	-13.57	-13.656	30	Pass
NVNT	ax20	5745	-7.52	-7.606	30	Pass
NVNT	ax20	5785	-10.8	-10.886	30	Pass
NVNT	ax20	5825	-9.96	-10.046	30	Pass
NVNT	ax40	5755	-12.41	-12.496	30	Pass
NVNT	ax40	5795	-13.68	-13.766	30	Pass

Note: Correction Factor = $10\log(500\text{KHz}/\text{RBW in measurement}) = -0.086$

