



# TEST REPORT

FCC/IC UNII ax Test for LGSBWAX12  
Certification

**APPLICANT**  
LG Electronics Inc.

**REPORT NO.**  
HCT-RF-2009-FI001-R1

**DATE OF ISSUE**  
14 September 2020

**Tested by**  
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Accredited by KOLAS, Republic of KOREA

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<h1 style="margin: 0;">TEST REPORT</h1> <p style="margin: 0;">FCC/IC UNII Test for LGSBWAX12</p>	<p><b>REPORT NO.</b> HCT-RF-2009-FI001-R1</p> <p><b>DATE OF ISSUE</b> September 14, 2020</p> <p><b>Additional Model</b> -</p>
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**Applicant**      **LG Electronics Inc.**  
222, LG-ro, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

<b>Eut Type</b>	RF Module
<b>Model Name</b>	LGSBWAX12
<b>FCC ID</b>	BEJLGSBWAX12
<b>IC</b>	2703H-LGSBWAX12
<b>Modulation type</b>	GFSK
<b>FCC Classification</b>	Unlicensed National Information Infrastructure(NII)
<b>FCC Rule Part(s)</b>	Part 15.407
<b>IC Rule Part(s)</b>	RSS-247 Issue 2 (February 2017) RSS-Gen Issue 5_Amendment 1 (March 2019)

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.  
This test results were applied only to the test methods required by the standard.

## REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	September 10, 2020	Initial Release
1	September 14, 2020	Typo correction (Page 36)

### Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC / IC Rules under normal use and maintenance.

This laboratory is not accredited for the test results marked \*.

The above Test Report is the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA.

\* The report shall not be reproduced except in full(only partly) without approval of the laboratory.

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## 1. GENERAL INFORMATION

### EUT DESCRIPTION

Model	LGSBWAX12	
Additional Model	-	
EUT Type	RF Module	
Power Supply	DC 3.30 V	
Modulation Type	OFDMA	
Frequency Range (MHz)	U-NII-1	20MHz BW : 5180 - 5240 40MHz BW : 5190 - 5230 80MHz BW : 5210
	U-NII-2A	20MHz BW : 5260 - 5320 40MHz BW : 5270 - 5310 80MHz BW : 5290
	U-NII-2C	20MHz BW : 5500 - 5720 40MHz BW : 5510 - 5710 80MHz BW : 5530 - 5690
	U-NII-3	20MHz BW : 5745 - 5825 40MHz BW : 5755 - 5795 80MHz BW : 5775
Antenna type	Metal press Ant	
Antenna Peak Gain	Ant.1: 0.05 dBi(UNII 1), 0.98 dBi(UNII 2A)/ 1.41 dBi(UNII 2C)/ 1.44 dBi(UNII 3) Ant.2: 1.42 dBi(UNII 1), 1.45 dBi(UNII 2A)/ 1.37 dBi(UNII 2C)/ 1.42 dBi(UNII 3)	
Straddle channel	Supported	
TDWR Band	Not Supported	
Dynamic Frequency Selection	Slave without radar detection	
Date(s) of Tests	July 02, 2020 ~ September 04, 2020	
PMN (Product Marketing Number)	LGSBWAX12	
HVIN (Hardware Version Identification Number)	ETWCHMBC01	
FVIN (Firmware Version Identification Number)	MT7921_V1.0	
HMN (Host Marketing Name)	N/A	
EUT serial numbers	ETWCHMBC01-01, ETWCHMBC01-02, ETWCHMBC01-03, ETWCHMBC01-04	
EUT Cable Type.	Basic Cable Type, FFC Cable Type	

## ANTENNA CONFIGURATIONS

1. The device employs MIMO technology. Below are the possible configurations

Configurations	SISO		SDM	CDD
	Ant1	Ant2	Ant1 + Ant2	Ant1 + Ant2
802.11ax	O	O	O	O

**Note:**

1. O = Support, X = Not Support
2. SISO = Single Input Single Output
3. SDM = Spatial Diversity Multiplexing
4. CDD = Cyclic Delay Diversity

## 2. Directional Gain Calculation

According to KDB 662911 D01 Multiple Transmitter Output v02r01

Directional gain =  $10 \cdot \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N]$  dBi

Band	Ant Gain (dBi)		Directional Gain = $10 \cdot \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N]$ dBi
	Ant1(Aux)	Ant2(Main)	
UNII 1	Ant1(Aux)	0.05	3.77
	Ant2(Main)	1.42	
UNII 2A	Ant1(Aux)	0.98	4.23
	Ant2(Main)	1.45	
UNII 2C	Ant1(Aux)	1.41	4.40
	Ant2(Main)	1.37	
UNII 3	Ant1(Aux)	1.44	4.44
	Ant2(Main)	1.42	

## 2. MAXIMUM OUTPUT POWER

The transmitter has a maximum total conducted average output power as follows:

Band	Mode	SISO				MIMO	
		(Ant1) Power		(Ant2) Power		(Ant 1 + Ant 2) Power	
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)
UNII1	802.11ax (HE20)	12.22	0.017	12.57	0.018	15.41	0.035
	802.11ax (HE40)	13.04	0.020	12.82	0.019	15.95	0.039
	802.11ax (HE80)	10.26	0.011	10.41	0.011	13.34	0.022
UNII2A	802.11ax (HE20)	12.46	0.018	12.68	0.019	15.56	0.036
	802.11ax (HE40)	12.97	0.020	12.66	0.018	15.83	0.038
	802.11ax (HE80)	12.92	0.020	13.15	0.021	16.02	0.040
UNII2C	802.11ax (HE20)	13.19	0.021	12.52	0.018	15.75	0.038
	802.11ax (HE40)	13.30	0.021	12.44	0.018	15.74	0.038
	802.11ax (HE80)	13.21	0.021	12.70	0.019	15.83	0.038
UNII3	802.11ax (HE20)	12.48	0.018	12.78	0.019	15.64	0.037
	802.11ax (HE40)	12.89	0.019	12.39	0.017	15.65	0.037
	802.11ax (HE80)	12.76	0.019	12.60	0.018	15.65	0.037

### 3. TEST METHODOLOGY

The measurement procedure described in FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 dated December 14, 2017 entitled “Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part15, Subpart E” and ANSI C63.10(Version : 2013) ‘the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices’ were used in the measurement.

#### EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

#### EUT EXERCISE

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.407 under the FCC Rules Part 15 Subpart E. / RSS-Gen issue 5, RSS-247 issue 2.

#### GENERAL TEST PROCEDURES

##### Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 6.2 of ANSI C63.10. (Version :2013) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

##### Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane below 1GHz. Above 1GHz with 1.5m using absorbers between the EUT and receive antenna. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 6.6.5 of ANSI C63.10. (Version: 2013)

## DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

## 4. INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment's, which is traceable to recognized national standards.

Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2017).

## 5. FACILITIES AND ACCREDITATIONS

### 5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

## 5.1 FACILITIES

The SAC(Semi-Anechoic Chamber) and conducted measurement facility used to collect the radiated data are located at the 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA.

The site is constructed in conformance with the requirements of ANSI C63.4. (Version :2014) and CISPR Publication 22.

Detailed description of test facility was submitted to the Commission and accepted dated April 02, 2018 (Registration Number: KR0032 ).

For ISED, test facility was accepted dated February 14, 2019 (CAB identifier: KR0032).

## 6. ANTENNA REQUIREMENTS

**According to FCC 47 CFR § 15.203, § 15.407 / RSS-Gen (Issue 5) Section 8:**

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- (1) The antennas of this E.U.T are permanently attached.
- (2) The E.U.T Complies with the requirement of § 15.203, § 15.407

## 7. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013.

All measurement uncertainty values are shown with a coverage factor of  $k=2$  to indicate a 95 % level of confidence.

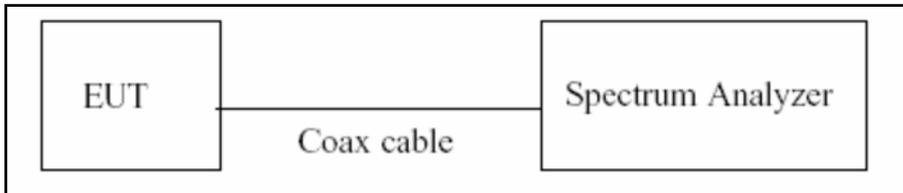
The measurement data shown herein meets or exceeds the  $U_{CISPR}$  measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance

Parameter	Expanded Uncertainty ( $\pm$ dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.82
Radiated Disturbance (9 kHz ~ 30 MHz)	3.40
Radiated Disturbance (30 MHz ~ 1 GHz)	4.80
Radiated Disturbance (1 GHz ~ 18 GHz)	5.70
Radiated Disturbance (18 GHz ~ 40 GHz)	5.05

## 8. DESCRIPTION OF TESTS

### 8.1. Duty Cycle

#### Test Configuration



#### Test Procedure

The transmitter output is connected to the Spectrum Analyzer.

We tested according to Procedure B.2 in KDB 789033 D02 v02r01.

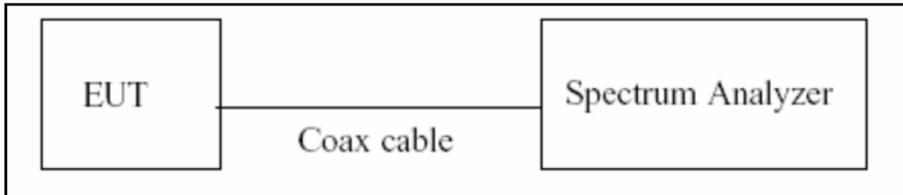
1. RBW = 8 MHz (the largest available value)
2. VBW = 8 MHz ( $\geq$  RBW)
3. SPAN = 0 Hz
4. Detector = Peak
5. Number of points in sweep > 100
6. Trace mode = Clear write
7. Measure  $T_{total}$  and  $T_{on}$
8. Calculate Duty Cycle =  $T_{on} / T_{total}$  and Duty Cycle Factor =  $10\log(1/\text{Duty Cycle})$

## 8.2. 6dB Bandwidth & 26dB Bandwidth & 99 % Bandwidth

### Limit

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

### Test Configuration



### Test Procedure(26dB Bandwidth)

The transmitter output is connected to the Spectrum Analyzer.

We tested according to Procedure C.1 in KDB 789033 D02 v02r01.

1. RBW = approximately 1 % of the emission bandwidth
2. VBW > RBW
3. Detector = Peak
4. Trace mode = max hold
5. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

### Test Procedure (6dB Bandwidth)

The transmitter output is connected to the Spectrum Analyzer.

We tested according to Procedure C.2 in KDB 789033 D02 v02r01.

1. RBW = 100 kHz
2. VBW  $\geq$  3 x RBW
3. Detector = Peak
4. Trace mode = max hold
5. Allow the trace to stabilize
6. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points(upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### Note:

1. We tested X dB bandwidth using the automatic bandwidth measurement capability of a spectrum analyzer.

2. DFS test channels should be defined. So, We performed the OBW test to prove that no part of the fundamental emissions of any channels belong to UNII1 and UNII3 band for DFS.
3. The 26 dB bandwidth is used to determine the conducted power limits.

#### **Test Procedure (99 % Bandwidth for IC)**

The transmitter output is connected to the spectrum analyzer.

RBW = 1% ~ 5% of the occupied bandwidth

VBW  $\cong$  3 x RBW

Detector = Peak

Trace mode = max hold

Sweep = auto couple

Allow the trace to stabilize

Note : We tested OBW using the automatic bandwidth measurement capability of a spectrum analyzer.

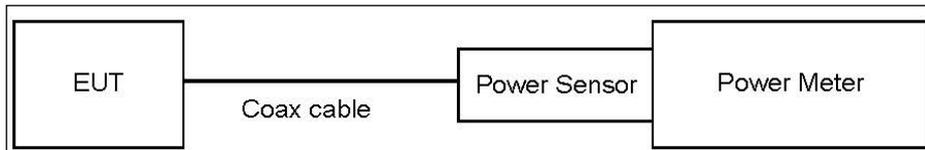
### 8.3. Output Power Measurement

#### Limit

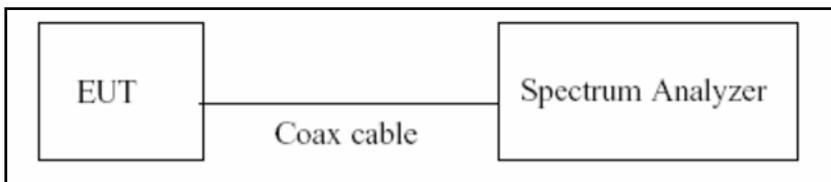
Band	Limit
UNII 1	- Master : Not exceed 1 W(=30dBm) - Slave : Not exceed 250 mW(=23.98 dBm)
UNII 2A, 2C	Not exceed the lesser of 250 mW or 11 dBm + 10 log B, (where B is the 26 dB emission bandwidth in megahertz.)
UNII 3	Not exceed 1 W(=30dBm)

#### Test Configuration

##### Power Meter



##### Spectrum Analyzer(Only Straddle Channel)



#### Test Procedure(Power Meter)

We tested according to Procedure E.3.a in KDB 789033 D02 v02r01.

1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

#### Test Procedure(Spectrum Analyzer)

The transmitter output is connected to the Spectrum Analyzer.

We use the spectrum analyzer's integrated band power measurement function.

We tested according to Procedure E.2.d) in KDB 789033 D02 v02r01.



1. Measure the duty cycle.
2. Set span to encompass the 26 dB EBW of the signal.
3. RBW = 1 MHz.
4. VBW  $\geq$  3 MHz.
5. Number of points in sweep  $\geq$  2 x span/RBW.
6. Sweep time = auto.
7. Detector = RMS.
8. Do not use sweep triggering. Allow the sweep to “free run”.
9. Trace average at least 100 traces in power averaging(RMS) mode
10. Integrated bandwidth = OBW
11. Add  $10\log(1/x)$ , where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

**Sample Calculation**

Total Power(dBm) = Reading Value(dBm) + ATT loss(dB) + Cable loss(dB) + Duty Cycle Factor(dB)

**Note**

1. Spectrum reading values are not plot data.  
The power results in plot is already including the actual values of loss for the attenuator and cable combination.
2. Spectrum offset = Attenuator loss(20 dB) + Cable loss
3. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1	20.74
UNII 2A	20.74
UNII 2C	20.74
UNII 3	20.74

(Actual value of loss for the attenuator and cable combination)

**Limit & Ant Gain Calculation (FCC&IC)**

Operating Mode	Band	Mode	Operating Ant.	Ant. Gain (dBi)	#E.I.R.P Limit (dBm)	Conducted Limit (dBm)
SISO	UNII 1	802.11ax HE20	Ant 1(Aux)	0.05	22.27	23.98
			Ant 2(Main)	1.42	22.27	23.98
	UNII 2A		Ant 1(Aux)	0.98	29.31	23.31
			Ant 2(Main)	1.45	29.29	23.29
	UNII 2C		Ant 1(Aux)	1.41	29.31	23.31
			Ant 2(Main)	1.37	29.29	23.29
	UNII 3		Ant 1(Aux)	1.44	N/A	30.00
Ant 2(Main)		1.42	N/A	30.00		
MIMO	UNII 1	802.11ax HE20	Ant 1(Aux) & Ant 2(Main)	3.77	22.27	23.98
	UNII 2A			4.23	29.29	23.29
	UNII 2C			4.40	29.29	23.29
	UNII 3			4.44	N/A	30.00
SISO	UNII 1	802.11ax HE40/ HE80	Ant 1(Aux)	0.05	22.46	23.98
			Ant 2(Main)	1.42	22.42	23.98
	UNII 2A		Ant 1(Aux)	0.98	29.46	23.46
			Ant 2(Main)	1.45	29.40	23.40
	UNII 2C		Ant 1(Aux)	1.41	29.43	23.43
			Ant 2(Main)	1.37	29.24	23.24
	UNII 3		Ant 1(Aux)	1.44	N/A	30.00
Ant 2(Main)		1.42	N/A	30.00		
MIMO	UNII 1	802.11ax HE40/ HE80	Ant 1(Aux) & Ant 2(Main)	3.77	22.42	23.98
	UNII 2A			4.23	29.40	23.40
	UNII 2C			4.40	29.24	23.24
	UNII 3			4.44	N/A	30.00

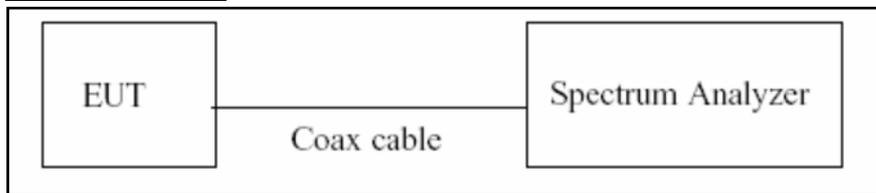
#Note: IC Limit

#### 8.4. Power Spectral Density

##### Limit

Band	Limit
UNII 1	11 dBm/MHz
UNII 2A, 2C	11 dBm/MHz
UNII 3	30 dBm/500 kHz

##### Test Configuration



##### Test Procedure

We tested according to Procedure F in KDB 789033 D02 v02r01.

1. Set span to encompass the entire emission bandwidth(EBW) of the signal.
2. RBW = 1 MHz(510 kHz for UNII 3)
3. VBW  $\geq$  3 MHz
4. Number of points in sweep  $\geq$  2 x span/RBW.
5. Sweep time = auto.
6. Detector = RMS(i.e., power averaging), if available. Otherwise, use sample detector mode.
7. Do not use sweep triggering. Allow the sweep to “free run”.
8. Trace average at least 100 traces in power averaging(RMS) mode
9. Use the peak search function on the spectrum analyzer to find the peak of the spectrum.
10. If Method SA-2 was used, add  $10 \log(1/x)$ , where x is the duty cycle, to the peak of the spectrum.



**Sample Calculation**

Total PSD(dBm) = Reading Value(dBm) + ATT loss(dB) + Cable loss(dB) + Duty Cycle Factor(dB)

**Note**

1. Spectrum reading values are not plot data.

The PSD results in plot is already including the actual values of loss for the attenuator and cable combination.

2. Spectrum offset = Attenuator loss(20 dB) + Cable loss

3. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1	20.74
UNII 2A	20.74
UNII 2C	20.74
UNII 3	20.74

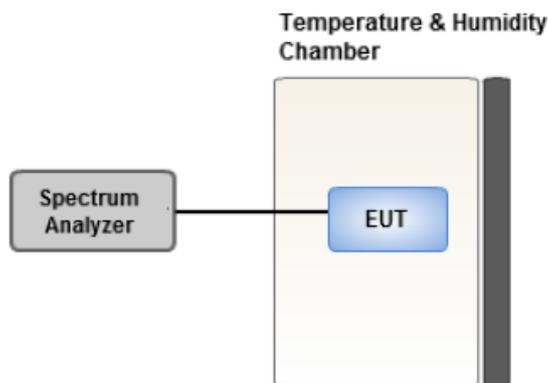
(Actual value of loss for the attenuator and cable combination)

## 8.5. Frequency Stability

### Limit

Maintained within the band

### Test Configuration



### Test Procedure

1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -30 °C and 50 °C.
2. The temperature was incremented by 10 °C intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.
3. The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.
4. While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.

## 8.6. AC Power line Conducted Emissions

### Limit

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN).

Frequency Range (MHz)	Limits (dB $\mu$ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56 <sup>(a)</sup>	56 to 46 <sup>(a)</sup>
0.50 to 5	56	46
5 to 30	60	50
5 to 30	60	50

<sup>(a)</sup>Decreases with the logarithm of the frequency.

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

### Test Configuration

See test photographs attached in Annex A for the actual connections between EUT and support equipment.

### Test Procedure

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors : Quasi Peak and Average Detector.

### Sample Calculation

Quasi-peak(Final Result) = Reading Value + Correction Factor



**8.7. Radiated Test**

**Limit**

1. UNII 1: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of  $-27$  dBm/MHz.
  
2. UNII 2A, 2C: All emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of  $-27$  dBm/MHz.
  
3. UNII 3: All emissions shall be limited to a level of  $-27$  dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
  
4. All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Section 15.209.

**FCC**

Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30

**IC**

Frequency (MHz)	Field Strength (uA/m)	Measurement Distance (m)
0.009 – 0.490	6.37/F(kHz)	300
0.490 – 1.705	63.7/F(kHz)	30
1.705 – 30	0.08	30

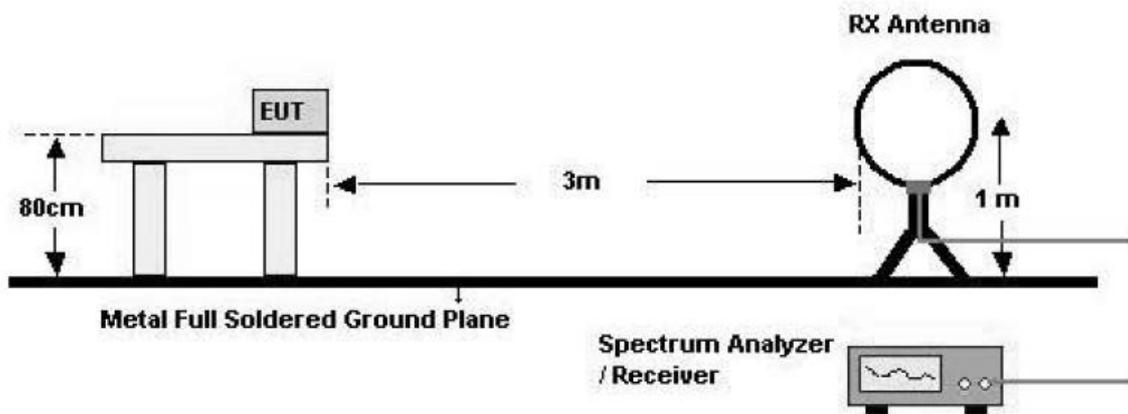


FCC&IC

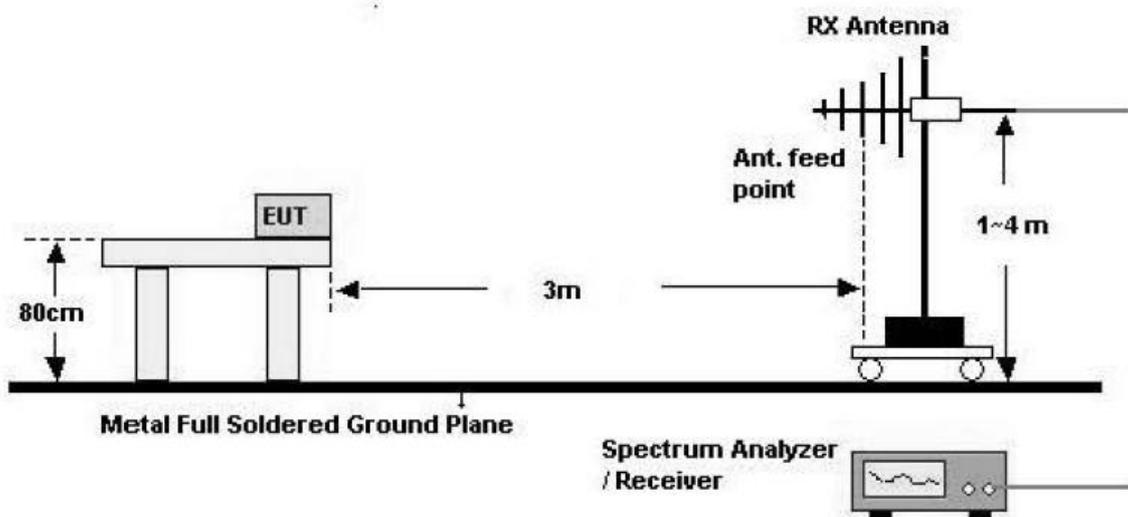
Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Configuration

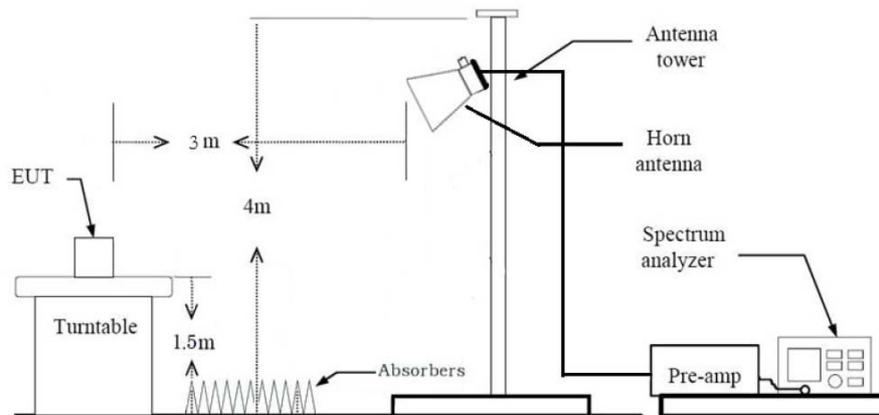
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



**Test Procedure of Radiated spurious emissions(Below 30 MHz)**

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The loop antenna was placed at a location 3m from the EUT
3. The EUT is placed on a turntable, which is 0.8m above ground plane.
4. We have done x, y, z planes in EUT and horizontal and vertical polarization and Parallel to the ground plane in detecting antenna.
5. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
6. Distance Correction Factor(0.009 MHz – 0.490 MHz) =  $40\log(3\text{ m}/300\text{ m}) = -80\text{ dB}$   
Measurement Distance : 3 m
7. Distance Correction Factor(0.490 MHz – 30 MHz) =  $40\log(3\text{ m}/30\text{ m}) = -40\text{ dB}$   
Measurement Distance : 3 m
8. Spectrum Setting
  - Frequency Range = 9 kHz ~ 30 MHz
  - Detector = Peak
  - Trace = Maxhold
  - RBW = 9 kHz
  - VBW  $\geq 3 \times$  RBW
9. Total = Reading Value + Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F)
10. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

**KDB 414788 OFS and Chamber Correlation Justification**

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

**Test Procedure of Radiated spurious emissions(Below 1GHz)**

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The EUT is placed on a turntable, which is 0.8m above ground plane.
3. The Hybrid antenna was placed at a location 3m from the EUT, which is varied from 1m to 4m to find out the highest emissions.
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.

6. Spectrum Setting

(1) Measurement Type(Peak):

- Measured Frequency Range : 30 MHz – 1 GHz
- Detector = Peak
- Trace = Maxhold
- RBW = 100 kHz
- VBW  $\geq$  3 x RBW

(2) Measurement Type(Quasi-peak):

- Measured Frequency Range : 30 MHz – 1 GHz
- Detector = Quasi-Peak
- RBW = 120 kHz

※In general, (1) is used mainly

7. Total = Reading Value + Antenna Factor(A.F) + Cable Loss(C.L)

8. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

**Test Procedure of Radiated spurious emissions (Above 1 GHz)**

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. The unit was tested with its standard battery.

**8. Spectrum Setting**

(1) Measurement Type (Peak, G.5 in KDB 789033 v02r01):

- RBW = 1 MHz
- VBW  $\geq$  3 MHz
- Detector = Peak
- Sweep Time = auto
- Trace mode = max hold
- Allow sweeps to continue until the trace stabilizes.

Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately 1/x, where x is the duty cycle.

(2) Measurement Type (Average, G.6.c in KDB 789033 v02r01):

- RBW = 1 MHz
- VBW  $\geq$  3 MHz
- The analyzer is set to linear detector mode.
- Averaging type = power (*i.e.*, RMS)
- Sweep time = auto.
- Trace mode = average (at least 100 traces).
- If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning on and off with the transmit cycle, no duty cycle correction is required for that emission.

9. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor
10. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency
11. Distance extrapolation factor =  $20\log(\text{test distance} / \text{specific distance})$  (dB)
12. Total = Reading Value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(G) + Distance Factor(D.F)

### Test Procedure of Radiated Restricted Band Edge

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. The unit was tested with its standard battery.

### 8. Spectrum Setting

(1) Measurement Type(Peak, G.5 in KDB 789033 v02r01):

- RBW = 1 MHz
- VBW  $\geq$  3 MHz
- Detector = Peak
- Sweep Time = auto
- Trace mode = max hold
- Allow sweeps to continue until the trace stabilizes.

Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately  $1/x$ , where x is the duty cycle.

(2) Measurement Type (Average, G.6.c in KDB 789033 v02r01):

- RBW = 1 MHz
- VBW  $\geq$  3 MHz
- The analyzer is set to linear detector mode.
- Averaging type = power (*i.e.*, RMS)
- Sweep time = auto.
- Trace mode = average (at least 100 traces).
- If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning on and off with the transmit cycle, no duty cycle correction is required for that emission.

### 9. Measured Frequency Range :

- 4500MHz ~ 5150MHz
- 5350MHz ~ 5460MHz
- 5460MHz ~ 5470MHz



- (75 MHz or more below the 5725MHz) ~ 5725MHz
- 5850MHz ~ (75 MHz or more above the 5850MHz)
- 10. Distance extrapolation factor =  $20\log(\text{test distance} / \text{specific distance})$  (dB)
- 11. Total = Reading Value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(G) + Attenuator + Distance Factor(D.F)

**The actual setting value of VBW**

Mode	Tone	Worst Data rate (Mbps)	Duty Cycle	Duty Cycle Factor (dB)	VBW (1/T) (kHz)	The actual setting value of VBW (Hz)
802.11ax (HE20)	26	MCS 0	0.973	0.12	0.623	1000
	52	MCS 0	0.974	0.11	0.656	1000
	106	MCS 0	0.969	0.14	0.715	1000
	242	MCS 0	0.964	0.16	0.825	1000
	SU	MCS 0	0.641	1.93	3.018	10000
802.11ax (HE40)	26	MCS 0	0.958	0.19	0.633	1000
	52	MCS 0	0.955	0.20	0.667	1000
	106	MCS 0	0.954	0.20	0.726	1000
	242	MCS 0	0.964	0.16	0.827	1000
	484	MCS 0	0.964	0.16	0.833	1000
	SU	MCS 0	0.587	2.31	3.236	10000
802.11ax (HE80)	26	MCS 0	0.958	0.19	0.633	1000
	52	MCS 0	0.962	0.17	0.664	1000
	106	MCS 0	0.969	0.14	0.714	1000
	242	MCS 0	0.964	0.16	0.827	1000
	484	MCS 0	0.966	0.15	0.829	1000
	996	MCS 0	0.965	0.16	0.870	1000
	SU	MCS 0	0.562	2.50	3.361	10000



8.8. Test RU offset for Tones

BW (MHz)	Tones (T)	RU offset	Test RU offset		
			Low	Mid	High
20	26	0~8	0	4	8
	52	37~40	37	38	40
	106	53~54	53	-	54
	242	61	-	61	-
40	26	0~17	0	9	17
	52	37~44	37	41	44
	106	53~56	53	54	56
	242	61~62	61	-	62
	484	65	-	65	-
80	26	0~36	0	18	36
	52	37~52	37	45	52
	106	53~60	53	57	60
	242	61~64	61	62	64
	484	65~66	65	-	66
	996	67	-	67	-

### 8.8. Receiver Spurious Emissions

#### Limit

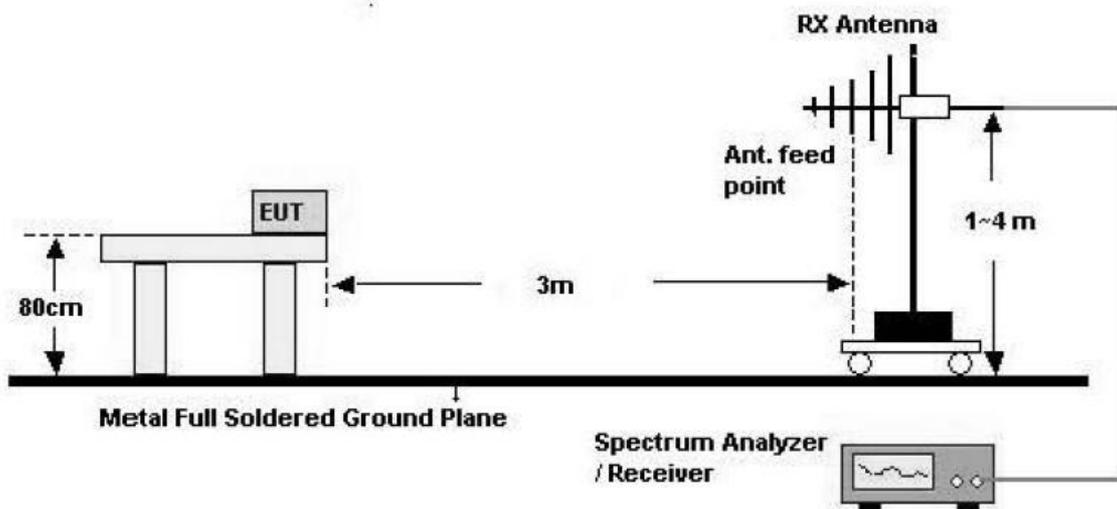
Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Note:

Measurements for compliance with the limits in table may be performed at distances other than 3 metres.

#### Test Configuration

30 MHz - 1 GHz



#### Test Procedure of Receiver Spurious Emissions (Below 1GHz)

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The EUT is placed on a turntable, which is 0.8m above ground plane.
3. The Hybrid antenna was placed at a location 3m from the EUT, which is varied from 1m to 4m to find out the highest emissions.
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. The turntable shall be rotated for 360 degrees to determine the position of maximum emission

level.

## 6. Spectrum Setting

### (1) Measurement Type(Peak):

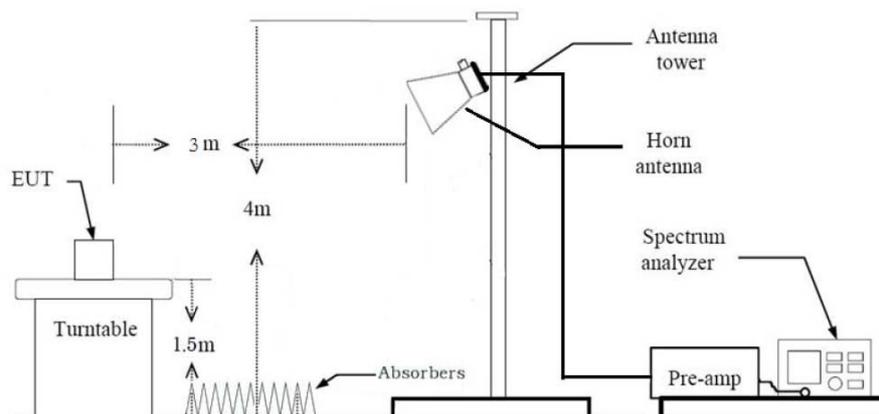
- Measured Frequency Range : 30 MHz – 1 GHz
- Detector = Peak
- Trace = Maxhold
- RBW = 100 kHz
- VBW  $\geq$  3 x RBW

### (2) Measurement Type(Quasi-peak):

- Measured Frequency Range : 30 MHz – 1 GHz
- Detector = Quasi-Peak
- RBW = 120 kHz

## 7. Total = Reading Value + Antenna Factor(A.F) + Cable Loss(C.L)

Above 1 GHz



### Test Procedure of Radiated spurious emissions (Above 1 GHz)

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
6. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
7. The unit was tested with its standard battery.
8. Spectrum Setting

(1) Measurement Type(Peak):

- Measured Frequency Range : 1 GHz – 25 GHz
- Detector = Peak
- Trace = Maxhold
- RBW = 1 MHz
- VBW  $\geq 3 \times$  RBW

(2) Measurement Type(Average):

- We performed using a reduced video BW method was done with the analyzer in linear mode
- Measured Frequency Range : 1 GHz – 25 GHz
- Detector = Peak
- Trace = Maxhold
- RBW = 1 MHz
- VBW  $\geq 1/\tau$  Hz, where  $\tau$  = pulse width in seconds

The actual setting value of VBW = 1 kHz

9. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

10. Distance extrapolation factor =  $20\log(\text{test distance} / \text{specific distance})$  (dB)

11. Total = Reading Value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(G) + Distance Factor(D.F)

## 8.9. Worst case configuration and mode

### Conducted test

1. All data rate of operation were investigated and the worst case results are reported.

-HE20 : MCS0(26Tone, 52Tone, 106Tone, 242Tone)

MCS2(SU)

-HE40 : MCS0(26Tone, 52Tone, 106Tone, 242Tone, 484Tone)

MCS2(SU)

-HE80 : MCS0(26Tone, 52Tone, 106Tone, 242Tone, 484Tone, 996Tone)

MCS1(SU)

### Radiated test

1. Full RU(Resource Unit) mode and SU(Single Unit) mode have no difference in physical waveform.

This Report has been described Full RU(Resource Unit) or SU(Single Unit) mode with worst output power

2. All modes of operation were investigated and the worst case configuration results are reported.

- Mode : Stand alone + Notebook

- Worstcase : Stand alone + Notebook

3. EUT Axis

- Radiated Spurious Emissions : Z

- Radiated Restricted Band Edge : X

4. All data rate of operation were investigated and the worst case results are reported.

(Worst case : MCS0)

5. All Antenna of operation were investigated and the worst case results are reported

- Mode : Ant1(SISO), Ant2(SISO), Ant1+Ant2(SDM), Ant1+Ant2(CDD)

- Worstcase : Ant1+Ant2(CDD)

6. All position of loop antenna were investigated and the test result is a no critical peak found at all positions.

- Position : Horizontal, Vertical, Parallel to the ground plane

7. All mode(Tone, RU Offset) of operation were investigated and the worst case configuration results are reported



Test	Tone	RU Offset
RSE	[HE 20] Worst case(Highest Power) : 242T	[HE 20] 61 (Mid)
	[HE 20] Additional Tone(Highest PSD) : 26T	[HE 20] 0 (Low), 8 (High)
Bandedge (UNII1,2A,2C)	[HE 20] Worst case(Highest Power) : 242T [HE 40] Worst case(Highest Power) : 484T [HE 80] Worst case(Highest Power) : 996T	[HE 20] 61 [HE 40] 65 [HE 80] 97
	[HE 20] Additional Tone: 26T [HE 20] Additional Tone: 52T [HE 20] Additional Tone: 106T  [HE 40] Additional Tone: 26T [HE 40] Additional Tone: 52T [HE 40] Additional Tone: 106T [HE 40] Additional Tone: 242T  [HE 80] Additional Tone: 26T [HE 80] Additional Tone: 52T [HE 80] Additional Tone: 106T [HE 80] Additional Tone: 242T [HE 80] Additional Tone: 484T	[HE20] Low Edge : 0/ 37/53 High Edge : 8/40/54  [HE40] Low Edge : 0/37/53/61 High Edge : 17/44/56/62  [HE80] Low Edge : 0/37/53/61/65 High Edge : 36/52/60/64/66
Bandedge (UNII3)	[HE 20] Worst case(Highest Power) : 242T [HE 40] Worst case(Highest Power) : 484T [HE 80] Worst case(Highest Power) : 996T	[HE 20] 61 [HE 40] 65 [HE 80] 97

**Radiated test(DBS)**

1. All modes of operation were investigated and the worst case configuration results are reported.
  - Mode : Stand alone + Notebook
  - Worstcase : Stand alone + Notebook
2. LGSBWAX12 were tested and the worst case results are reported.
3. EUT Axis
  - Radiated Spurious Emissions : Z
4. Test case

RSDB	5GHz WIFI		2.4GHz WIFI		Test case
	Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 GHz RSDB Only	A			B	Case1

Not RSDB	5GHz WIFI		2.4GHz Bluetooth	Test case
	Ant1	Ant2	Ant1	
Bluetooth + 5 GHz	A		B	-
		A	B	-
	A	A	B	Case2

5. The following tables show the worst case configurations determined during testing.  
(Worst case: The lowest margin condition the channels and modes were selected for test.)

Test case	Description	2.4 GHz Emission	5 GHz Emission
1	Antenna	Ant 2	Ant 1
	Channel	11	52
	Data Rate	1Mbps	MCS0
	Mode	802.11b	802.11ax(HE20)(26 Tone)(RU 8)

Test case	Description	Bluetooth Emission	5 GHz Emission
2	Antenna	Ant 1	Ant 1
	Channel	78	52
	Data Rate	1 Mbps	MCS 0
	Mode	8DPSK : 3-DH5	802.11ax(HE20)(26 Tone)(RU 8)



-  
**AC Power line Conducted Emissions**

1. Please refer to the LGSBWAX12 [UNII] Test Report.



### 9. SUMMARY OF TEST RESULTS

FCC

Test Description	FCC Part Section(s)	Test Limit	Test Condition	Test Result
26dB Bandwidth	§ 15.407 (for Power Measurement)	N/A	Conducted	PASS
6 dB Bandwidth	§ 15.407(e)	>500 kHz (5725-5850 MHz)		PASS
Maximum Conducted Output Power	§ 15.407(a)(1)	< 250 mW(5150-5250 MHz)  < 250 mW or 11+10 log log <sub>10</sub> (BW) dBm (5250-5350 MHz)  < 250 mW or 11+10 log log <sub>10</sub> (BW) dBm (5470-5725 MHz)  <1 W(5725-5850 MHz)		PASS
Peak Power Spectral Density	§ 15.407(a)(1),(5)	<11 dBm/ MHz (5150-5250 MHz) <11 dBm/ MHz (5250-5350 MHz) <11 dBm/ MHz (5470-5725 MHz) <30 dBm/500 kHz(5725-5850 MHz)		PASS
Frequency Stability	§ 15.407(g) § 2.1055	Maintained within the band		PASS
AC Conducted Emissions 150 kHz-30 MHz	15.207	<FCC 15.207 limits		PASS
Undesirable Emissions	§ 15.407(b)	<-27 dBm/MHz EIRP (UNII1, 2A, 2C) cf. Section 8.7 (UNII 3)		PASS
General Field Strength Limits(Restricted Bands and Radiated Emission Limits)	15.205, 15.407(b)(5), (6)	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Radiated	PASS



IC

Test Description	IC Part Section(s)	Test Limit	Test Condition	Test Result
99% Bandwidth	RSS-GEN, 6.7	N/A	CONDUCTED	PASS
6 dB Bandwidth	RSS-247, 6.2.4.1	> 500 kHz (5725~5850 MHz)		PASS
Maximum Conducted Output Power,	RSS-247, 6.2	< 250 mW or 11+10 log <sub>10</sub> (BW) dBm (5470-5600, 5650-5725 MHz) Whichever power is less		PASS
	RSS-247, 6.2.4.1	<1 W (5725-5850 MHz)		
Maximum e.i.r.p	RSS-247, 6.2	< 200 mW or 10+10 log <sub>10</sub> (BW) dBm (5150-5250 MHz) < 1 W or 17+10 log <sub>10</sub> (BW) dBm (5250-5350 MHz) < 1 W or 17+10 log <sub>10</sub> (BW) dBm (5470-5725 MHz) Whichever power is less		PASS
Power Spectral Density	RSS-247 6.2	<10 dBm/ MHz(e.i.r.p.) (5150-5250 MHz) <11 dBm/MHz(Conducted) (5250-5350 MHz, 5470-5600 MHz, 5650-5725 MHz)		PASS
	RSS-247, 6.2.4.1	<30 dBm/500 kHz(Conducted) (5725-5850 MHz)		
Frequency Stability	RSS-GEN 8.11	should be kept within at least the central 80% of its permitted operating frequency band in order to minimize the possibility of out-of-band operation.		PASS
AC Conducted Emissions 150 kHz-30 MHz	RSS-GEN, 8.8	RSS-GEN section 8.8 table 4		PASS
Undesirable Emissions	RSS-247, 6.2.1.2	26 dBc at 5250~5350 MHz (5150~5350 MHz)	PASS	
	RSS-247, 6.2	<-27 dBm/ MHz EIRP (5150-5350 MHz, 5470-5725 MHz)	PASS	
	RSS-247, 6.2.4.2	cf. Section 9.8.1 (UNII 3)		
General Field Strength Limits(Restricted Bands and Radiated Emission Limits)	RSS-Gen, 8.9 RSS-Gen, 8.10	RSS-Gen section 8.9 table 5, 6 section 8.10 table 7	RADIATED	PASS
Receiver Spurious Emissions	RSS-GEN, 5 RSS-GEN, 7.3	RSS-GEN section 7.3 table 3	PASS	

**Note:**

1. Please refer to the LGSBWAX12 [UNII] Test Report.

## 10. TEST RESULT

### 10.1 DUTY CYCLE

#### 802.11ax(HE20)

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (HE20)	26	MCS0	1.605	1.650	0.973	0.12
		MCS1	1.524	1.569	0.971	0.13
		MCS2	1.950	1.990	0.980	0.09
		MCS3	1.485	1.530	0.971	0.13
		MCS4	1.012	1.056	0.958	0.18
		MCS5	0.778	0.824	0.944	0.25
		MCS6	0.700	0.744	0.941	0.26
		MCS7	0.638	0.684	0.933	0.30
		MCS8	0.544	0.588	0.925	0.34
		MCS9	0.500	0.544	0.919	0.37
		MCS10	0.448	0.492	0.911	0.41
	MCS11	0.416	0.480	0.867	0.62	
	52	MCS0	1.525	1.565	0.974	0.11
		MCS1	1.485	1.530	0.971	0.13
		MCS2	1.920	1.965	0.977	0.10
		MCS3	1.460	1.505	0.970	0.13
		MCS4	0.996	1.041	0.957	0.19
		MCS5	0.768	0.813	0.945	0.25
		MCS6	0.687	0.732	0.939	0.28
		MCS7	0.632	0.676	0.934	0.30
		MCS8	0.537	0.581	0.924	0.35
		MCS9	0.492	0.537	0.917	0.38
		MCS10	0.443	0.488	0.909	0.42
	MCS11	0.411	0.455	0.902	0.45	
	106	MCS0	1.398	1.443	0.969	0.14
		MCS1	1.380	1.425	0.968	0.14
		MCS2	1.797	1.842	0.976	0.11
		MCS3	1.368	1.410	0.970	0.13
		MCS4	0.933	0.978	0.954	0.20



Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS5	0.720	0.765	0.941	0.26
		MCS6	0.648	0.693	0.935	0.29
		MCS7	0.592	0.636	0.930	0.31
		MCS8	0.503	0.547	0.919	0.37
		MCS9	0.463	0.508	0.913	0.40
		MCS10	0.420	0.465	0.904	0.44
		MCS11	0.383	0.428	0.896	0.48
	242	MCS0	1.212	1.257	0.964	0.16
		MCS1	1.203	1.248	0.964	0.16
		MCS2	1.572	1.617	0.972	0.12
		MCS3	1.200	1.242	0.966	0.15
		MCS4	0.825	0.870	0.948	0.23
		MCS5	0.635	0.679	0.934	0.29
		MCS6	0.572	0.616	0.928	0.33
		MCS7	0.524	0.569	0.922	0.35
		MCS8	0.448	0.492	0.910	0.41
		MCS9	0.413	0.457	0.903	0.44
		MCS10	0.371	0.416	0.893	0.49
		MCS11	0.344	0.388	0.886	0.53

802.11ax(HE40)

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax(HE40)	26	MCS0	1.580	1.650	0.958	0.19
		MCS1	1.490	1.565	0.952	0.21
		MCS2	1.920	1.995	0.962	0.17
		MCS3	1.460	1.530	0.954	0.20
		MCS4	0.985	1.055	0.934	0.30
		MCS5	0.753	0.822	0.916	0.38
		MCS6	0.678	0.747	0.908	0.42
		MCS7	0.616	0.684	0.901	0.45
		MCS8	0.528	0.588	0.898	0.47
		MCS9	0.476	0.544	0.875	0.58
		MCS10	0.430	0.492	0.874	0.58
	MCS11	0.390	0.460	0.848	0.72	
	52	MCS0	1.500	1.570	0.955	0.20
		MCS1	1.460	1.530	0.954	0.20
		MCS2	1.895	1.965	0.964	0.16
		MCS3	1.435	1.505	0.953	0.21
		MCS4	0.966	1.038	0.931	0.31
		MCS5	0.741	0.813	0.911	0.40
		MCS6	0.660	0.732	0.902	0.45
		MCS7	0.600	0.675	0.889	0.51
		MCS8	0.506	0.580	0.872	0.59
		MCS9	0.460	0.536	0.858	0.66
		MCS10	0.426	0.488	0.873	0.59
	MCS11	0.394	0.454	0.868	0.62	
	106	MCS0	1.377	1.443	0.954	0.20
		MCS1	1.359	1.425	0.954	0.21
		MCS2	1.782	1.845	0.966	0.15
		MCS3	1.344	1.413	0.951	0.22
		MCS4	0.915	0.978	0.936	0.29
		MCS5	0.702	0.762	0.921	0.36
		MCS6	0.622	0.690	0.901	0.45



Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS7	0.576	0.638	0.903	0.44
MCS8	0.482	0.544	0.886	0.53		
MCS9	0.442	0.508	0.870	0.60		
MCS10	0.402	0.464	0.866	0.62		
MCS11	0.362	0.426	0.850	0.71		
242	MCS0	1.209	1.254	0.964	0.16	
	MCS1	1.203	1.248	0.964	0.16	
	MCS2	1.572	1.617	0.972	0.12	
	MCS3	1.200	1.245	0.964	0.16	
	MCS4	0.825	0.870	0.948	0.23	
	MCS5	0.633	0.678	0.934	0.30	
	MCS6	0.570	0.616	0.925	0.34	
	MCS7	0.524	0.568	0.923	0.35	
	MCS8	0.448	0.492	0.911	0.41	
	MCS9	0.412	0.456	0.904	0.44	
	MCS10	0.372	0.416	0.894	0.49	
	MCS11	0.344	0.388	0.887	0.52	
484	MCS0	1.200	1.245	0.964	0.16	
	MCS1	1.200	1.245	0.964	0.16	
	MCS2	1.570	1.615	0.972	0.12	
	MCS3	1.195	1.240	0.964	0.16	
	MCS4	0.820	0.864	0.949	0.23	
	MCS5	0.636	0.680	0.935	0.29	
	MCS6	0.572	0.616	0.929	0.32	
	MCS7	0.524	0.568	0.923	0.35	
	MCS8	0.448	0.492	0.911	0.41	
	MCS9	0.412	0.456	0.904	0.44	
	MCS10	0.373	0.417	0.893	0.49	
	MCS11	0.344	0.388	0.886	0.53	



802.11ax(HE80)

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (HE80)	26	MCS0	1.580	1.650	0.958	0.19
		MCS1	1.495	1.575	0.949	0.23
		MCS2	1.920	1.990	0.965	0.16
		MCS3	1.460	1.525	0.957	0.19
		MCS4	0.987	1.065	0.927	0.33
		MCS5	0.753	0.825	0.913	0.40
		MCS6	0.675	0.744	0.907	0.42
		MCS7	0.615	0.684	0.899	0.46
		MCS8	0.519	0.591	0.878	0.56
		MCS9	0.474	0.562	0.843	0.74
		MCS10	0.422	0.492	0.858	0.67
	MCS11	0.390	0.460	0.848	0.72	
	52	MCS0	1.505	1.565	0.962	0.17
		MCS1	1.465	1.525	0.961	0.17
		MCS2	1.895	1.965	0.964	0.16
		MCS3	1.435	1.505	0.953	0.21
		MCS4	0.972	1.041	0.934	0.30
		MCS5	0.744	0.813	0.915	0.39
		MCS6	0.663	0.732	0.906	0.43
		MCS7	0.606	0.675	0.898	0.47
		MCS8	0.512	0.580	0.883	0.54
		MCS9	0.468	0.536	0.873	0.59
		MCS10	0.418	0.490	0.853	0.69
	MCS11	0.396	0.458	0.865	0.63	
	106	MCS0	1.400	1.445	0.969	0.14
		MCS1	1.380	1.425	0.968	0.14
		MCS2	1.800	1.845	0.976	0.11
		MCS3	1.365	1.410	0.968	0.14
		MCS4	0.936	0.981	0.954	0.20
		MCS5	0.720	0.762	0.945	0.25
		MCS6	0.648	0.693	0.935	0.29



Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS7	0.591	0.636	0.929	0.32
		MCS8	0.504	0.548	0.920	0.36
		MCS9	0.464	0.508	0.913	0.39
		MCS10	0.418	0.464	0.901	0.45
		MCS11	0.383	0.428	0.896	0.48
	242	MCS0	1.209	1.254	0.964	0.16
		MCS1	1.203	1.248	0.964	0.16
		MCS2	1.572	1.617	0.972	0.12
		MCS3	1.200	1.245	0.964	0.16
		MCS4	0.822	0.867	0.948	0.23
		MCS5	0.636	0.681	0.934	0.30
		MCS6	0.572	0.616	0.929	0.32
		MCS7	0.524	0.568	0.923	0.35
		MCS8	0.446	0.492	0.907	0.43
		MCS9	0.410	0.456	0.899	0.46
		MCS10	0.372	0.416	0.894	0.49
	MCS11	0.342	0.388	0.881	0.55	
	484	MCS0	1.206	1.248	0.966	0.15
		MCS1	1.200	1.242	0.966	0.15
		MCS2	1.572	1.617	0.972	0.12
		MCS3	1.194	1.239	0.964	0.16
		MCS4	0.819	0.864	0.948	0.23
		MCS5	0.636	0.678	0.938	0.28
		MCS6	0.570	0.615	0.927	0.33
		MCS7	0.572	0.616	0.929	0.32
		MCS8	0.448	0.492	0.911	0.41
		MCS9	0.412	0.456	0.904	0.44
		MCS10	0.372	0.416	0.894	0.49
	MCS11	0.345	0.388	0.889	0.51	
	996	MCS0	1.149	1.191	0.965	0.16
		MCS1	1.143	1.188	0.962	0.17
		MCS2	0.786	0.832	0.945	0.25
		MCS3	0.612	0.656	0.933	0.30



Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS4	0.430	0.476	0.903	0.44
		MCS5	0.344	0.388	0.886	0.53
		MCS6	0.311	0.356	0.875	0.58
		MCS7	0.288	0.332	0.867	0.62
		MCS8	0.252	0.296	0.851	0.70
		MCS9	0.235	0.280	0.839	0.76
		MCS10	0.216	0.260	0.829	0.81
		MCS11	0.204	0.248	0.823	0.85



Mode	BW	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (SU)	BW 20	MCS0	0.331	0.517	0.641	1.93
		MCS1	0.310	0.526	0.589	2.30
		MCS2	0.384	0.646	0.594	2.26
		MCS3	0.306	0.540	0.567	2.47
		MCS4	0.225	0.459	0.492	3.08
		MCS5	0.189	0.422	0.447	3.49
		MCS6	0.173	0.408	0.425	3.72
		MCS7	0.167	0.400	0.418	3.79
		MCS8	0.146	0.380	0.383	4.17
		MCS9	0.144	0.376	0.384	4.16
		MCS10	0.129	0.363	0.354	4.50
	MCS11	0.125	0.359	0.348	4.58	
	BW 40	MCS0	0.309	0.526	0.587	2.31
		MCS1	0.306	0.540	0.567	2.47
		MCS2	0.383	0.644	0.595	2.25
		MCS3	0.307	0.567	0.541	2.67
		MCS4	0.224	0.485	0.462	3.35
		MCS5	0.189	0.448	0.421	3.75
		MCS6	0.175	0.436	0.401	3.96
		MCS7	0.163	0.423	0.384	4.16
		MCS8	0.147	0.408	0.361	4.43
		MCS9	0.140	0.399	0.350	4.56
		MCS10	0.129	0.390	0.331	4.81
	MCS11	0.123	0.382	0.321	4.93	
	BW 80	MCS0	0.298	0.529	0.562	2.50
		MCS1	0.296	0.583	0.508	2.94
		MCS2	0.370	0.702	0.527	2.78
		MCS3	0.296	0.628	0.471	3.27
		MCS4	0.216	0.548	0.394	4.04
		MCS5	0.180	0.512	0.352	4.54
		MCS6	0.166	0.498	0.333	4.77
		MCS7	0.156	0.488	0.320	4.95



Mode	BW	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS8	0.144	0.476	0.303	5.19
		MCS9	0.136	0.468	0.291	5.37
		MCS10	0.126	0.456	0.276	5.59
		MCS11	0.120	0.452	0.265	5.76

## 10.2 26DB BANDWIDTH

### 10.2.1 Ant1

Straddle channel data in the table below are for reporting purposes only.

Straddle channel data were added in section 10.6.1.

#### 802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	26dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	20.52	20.41	21.06	-	-
			Mid	18.21	18.28	-	23.66	22.87
			High	20.53	20.66	22.52	-	-
	5200	40	Low	20.85	20.93	20.82	-	-
			Mid	18.15	18.27	-	22.78	23.10
			High	20.38	22.30	21.49	-	-
	5240	48	Low	19.05	19.21	19.20	-	-
			Mid	18.08	18.28	-	19.87	19.83
			High	19.14	19.29	19.40	-	-
UNII 2A	5260	52	Low	20.74	20.51	20.87	-	-
			Mid	18.17	18.39	-	24.64	25.38
			High	20.28	20.88	22.47	-	-
	5280	60	Low	20.23	20.41	21.48	-	-
			Mid	18.13	18.27	-	22.55	23.62
			High	20.84	22.20	20.64	-	-
	5320	64	Low	20.56	21.35	21.17	-	-
			Mid	18.04	18.44	-	25.53	22.25
			High	20.42	21.78	20.50	-	-
UNII 2C	5500	100	Low	20.23	20.55	20.48	-	-
			Mid	18.12	18.34	-	22.35	22.36
			High	20.42	22.04	21.20	-	-
	5580	116	Low	20.43	20.13	20.56	-	-
			Mid	18.07	19.22	-	28.74	22.42
			High	20.50	21.86	20.87	-	-
	5720	144	Low	20.69	20.89	21.03	-	-



HE20	Frequency [MHz]	Channel No.	RU Index	26dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Mid	18.18	18.31	-	21.91	24.16
			High	20.45	21.87	22.25	-	-
			Low	20.23	20.63	20.46	-	-
	5785	157	Mid	18.12	18.40	-	25.36	26.69
			High	20.42	20.32	23.66	-	-
			Low	20.55	20.74	20.71	-	-
	5825	165	Mid	18.11	18.36	-	25.81	24.66
			High	20.69	20.62	22.04	-	-
			Low	20.53	20.41	20.72	-	-
			Mid	18.03	18.24	-	23.52	23.16
			High	20.44	20.87	21.54	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	26dB BW(MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	18.93	18.94	19.22	39.39	-	-
			Mid	21.69	23.27	24.01	-	39.32	39.39
			High	18.89	18.93	19.27	39.48	-	-
	5230	46	Low	18.94	18.92	19.16	39.16	-	-
			Mid	22.06	22.81	22.40	-	38.95	39.49
			High	18.84	19.20	19.09	39.01	-	-
UNII 2A	5270	54	Low	18.93	18.97	19.23	39.19	-	-
			Mid	21.71	23.43	23.34	-	39.24	39.39
			High	18.94	19.02	19.05	39.05	-	-
	5310	62	Low	18.82	18.98	19.20	39.30	-	-
			Mid	22.34	22.93	22.89	-	39.37	39.37
			High	18.91	18.94	19.44	38.99	-	-
UNII 2C	5510	102	Low	18.88	19.08	19.26	39.25	-	-
			Mid	22.69	22.03	23.24	-	39.23	39.33
			High	18.91	19.01	19.31	39.33	-	-
	5550	110	Low	18.87	19.08	19.18	39.14	-	-
			Mid	21.52	22.50	22.91	-	39.44	39.22
			High	18.88	19.23	19.04	39.04	-	-
	5710	142	Low	18.91	19.06	19.21	39.26	-	-
			Mid	22.24	22.90	23.06	-	39.43	39.26
			High	18.85	19.11	19.14	39.43	-	-
UNII 3	5755	151	Low	18.88	19.07	19.19	38.87	-	-
			Mid	19.06	22.64	22.98	-	39.31	39.43
			High	19.06	19.07	19.30	39.30	-	-
	5795	159	Low	18.93	19.08	19.24	39.20	-	-
			Mid	22.04	23.43	23.41	-	39.50	39.25
			High	19.02	19.47	19.34	39.37	-	-



802.11ax(HE80)

HE80	Freq. [MHz]	Channel No.	RU Index	26dB BW (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	19.29	19.36	20.68	26.03	79.48	-	-
			Mid	21.91	24.28	22.33	43.13	-	79.92	80.06
			High	19.08	19.61	19.95	25.30	79.88	-	-
UNII 2A	5290	58	Low	19.35	19.65	20.53	25.64	79.63	-	-
			Mid	22.02	23.05	24.11	43.86	-	80.02	80.05
			High	19.25	19.01	19.71	23.89	79.77	-	-
UNII 2C	5530	106	Low	19.37	19.62	20.66	26.62	79.85	-	-
			Mid	22.75	24.19	23.82	44.99	-	79.92	80.16
			High	18.82	19.48	20.27	25.24	79.93	-	-
	5690	138	Low	19.14	19.69	20.64	26.03	79.59	-	-
			Mid	21.74	22.70	24.17	43.28	-	79.97	79.89
			High	19.09	19.50	20.08	27.10	79.48	-	-
UNII 3	5775	155	Low	19.50	19.88	20.06	24.77	79.47	-	-
			Mid	21.29	23.22	24.54	44.07	-	79.95	79.98
			High	19.18	19.43	19.69	25.52	79.75	-	-

### 10.2.2 Ant2

Straddle channel data in the table below are for reporting purposes only.

Straddle channel data were added in section 10.6.1.

#### 802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	26dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	20.52	20.29	20.66	-	-
			Mid	18.21	18.21	-	22.16	22.98
			High	20.53	20.12	21.05	-	-
	5200	40	Low	20.85	20.23	20.92	-	-
			Mid	18.15	18.18	-	23.73	23.70
			High	20.38	20.00	20.91	-	-
	5240	48	Low	19.05	19.01	19.03	-	-
			Mid	18.08	17.98	-	19.83	19.91
			High	19.14	19.17	19.30	-	-
UNII 2a	5260	52	Low	20.74	20.34	20.23	-	-
			Mid	18.17	18.19	-	23.31	21.71
			High	20.28	20.29	20.99	-	-
	5280	60	Low	20.23	20.23	20.28	-	-
			Mid	18.13	18.20	-	22.64	24.15
			High	20.84	20.24	20.38	-	-
	5320	64	Low	20.56	19.79	20.18	-	-
			Mid	18.04	18.18	-	22.95	25.83
			High	20.42	20.58	20.85	-	-
UNII 2c	5500	100	Low	20.23	19.98	20.48	-	-
			Mid	18.12	18.14	-	21.52	21.90
			High	20.42	20.23	20.61	-	-
	5580	116	Low	20.43	20.02	20.86	-	-
			Mid	18.07	18.20	-	22.50	23.14
			High	20.50	20.27	20.18	-	-
	5720	144	Low	20.69	20.22	20.92	-	-
			Mid	18.18	18.19	-	24.94	24.67
			High	20.45	20.97	20.52	-	-



HE20	Frequency [MHz]	Channel No.	RU Index	26dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	20.23	20.44	21.28	-	-
			Mid	18.12	18.08	-	29.94	23.19
			High	20.42	21.03	20.60	-	-
	5785	157	Low	20.55	19.97	20.25	-	-
			Mid	18.11	18.18	-	22.53	23.64
			High	20.69	20.29	20.50	-	-
	5825	165	Low	20.53	20.20	20.68	-	-
			Mid	18.03	18.19	-	22.49	25.20
			High	20.44	20.29	20.88	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	26dB BW(MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	18.93	18.82	19.24	39.29	-	-
			Mid	21.69	22.11	22.16	-	39.39	39.51
			High	18.89	19.03	18.80	39.23	-	-
	5230	46	Low	18.94	19.11	19.13	39.01	-	-
			Mid	22.06	21.92	22.27	-	39.36	39.37
			High	18.84	19.00	18.97	38.88	-	-
UNII 2a	5270	54	Low	18.93	18.95	19.32	39.52	-	-
			Mid	21.71	21.87	22.37	-	39.45	39.47
			High	18.94	19.02	18.85	38.90	-	-
	5310	62	Low	18.82	18.84	19.35	39.12	-	-
			Mid	22.34	22.24	23.09	-	39.40	39.43
			High	18.91	18.95	18.91	38.73	-	-
UNII 2c	5510	102	Low	18.88	19.20	19.11	38.96	-	-
			Mid	22.69	22.03	22.82	-	39.51	39.32
			High	18.91	19.07	18.82	39.01	-	-
	5550	110	Low	18.87	19.04	19.09	39.21	-	-
			Mid	21.52	22.46	21.46	-	39.23	39.31
			High	18.88	18.95	19.03	37.78	-	-
	5710	142	Low	18.91	19.00	19.07	39.27	-	-
			Mid	22.24	21.98	22.27	-	39.47	39.50
			High	18.85	19.06	18.89	39.17	-	-
UNII 3	5755	151	Low	18.88	18.97	19.06	39.17	-	-
			Mid	22.40	21.54	22.19	-	39.31	39.35
			High	19.06	18.83	18.88	38.77	-	-
	5795	159	Low	18.93	19.12	19.26	39.13	-	-
			Mid	22.04	22.11	22.59	-	39.32	39.42
			High	19.02	18.96	19.08	39.03	-	-



802.11ax(HE80)

HE80	Freq. [MHz]	Channel No.	RU Index	26dB BW (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	19.29	19.10	19.99	23.52	79.82	-	-
			Mid	21.91	21.94	22.71	42.03	-	79.93	79.93
			High	19.08	18.85	19.15	24.21	79.59	-	-
UNII 2a	5290	58	Low	19.35	19.39	20.07	22.96	79.86	-	-
			Mid	22.02	21.49	21.73	42.71	-	79.81	80.16
			High	19.25	19.18	19.16	24.35	79.12	-	-
UNII 2c	5530	106	Low	19.39	19.18	19.80	24.76	79.62	-	-
			Mid	21.74	21.27	22.01	41.58	-	79.98	79.87
			High	18.82	19.03	19.25	23.45	79.36	-	-
	5690	138	Low	19.14	19.16	19.77	24.67	79.80	-	-
			Mid	21.74	21.84	22.40	41.85	-	79.71	79.78
			High	19.09	18.94	19.12	25.19	79.51	-	-
UNII 3	5775	155	Low	19.50	19.28	20.07	23.46	79.40	-	-
			Mid	21.29	21.66	23.09	42.50	-	79.72	79.89
			High	19.18	19.05	19.05	24.21	79.37	-	-

### 10.3 6DB BANDWIDTH

#### 10.3.1 Ant1

##### 802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	6dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	2.152	17.11	17.17	-	-
			Mid	2.717	15.10	-	18.90	18.73
			High	2.146	17.05	17.15	-	-
	5785	157	Low	2.154	17.09	17.18	-	-
			Mid	2.692	15.10	-	18.95	18.03
			High	2.120	17.07	17.17	-	-
	5825	165	Low	2.139	17.10	17.16	-	-
			Mid	2.713	15.12	-	18.89	18.48
			High	2.157	17.11	17.19	-	-

# Limit : > 0.5 MHz

##### 802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	6dB BW(MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 3	5755	151	Low	2.164	16.66	16.67	18.80	-	-
			Mid	2.108	17.35	17.38	-	35.10	35.18
			High	2.106	16.64	16.61	18.90	-	-
	5795	159	Low	2.139	16.66	16.67	18.82	-	-
			Mid	2.132	17.39	17.41	-	35.09	35.13
			High	2.151	16.58	16.69	18.85	-	-

# Limit : > 0.5 MHz



802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	6dB BW (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 3	5775	155	Low	2.183	16.73	16.74	18.90	37.79	-	-
			Mid	2.190	16.30	16.36	36.49	-	75.21	75.18
			High	2.168	16.65	16.69	18.81	37.84	-	-

# Limit : > 0.5 MHz

10.3.2 Ant2

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	6dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	2.131	17.04	17.16	-	-
			Mid	2.702	15.07	-	18.84	18.61
			High	2.151	17.10	17.20	-	-
	5785	157	Low	2.149	17.06	17.19	-	-
			Mid	2.702	13.82	-	18.90	18.47
			High	2.162	17.13	17.18	-	-
	5825	165	Low	2.124	17.04	17.17	-	-
			Mid	2.697	13.81	-	18.97	18.77
			High	2.145	17.05	17.08	-	-

# Limit : > 0.5 MHz

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	6dB BW(MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 3	5755	151	Low	2.176	16.67	16.68	18.83	-	-
			Mid	2.158	17.32	17.37	-	32.71	35.17
			High	2.163	16.68	16.70	18.86	-	-
	5795	159	Low	2.167	16.63	16.65	18.88	-	-
			Mid	2.156	17.32	17.39	-	36.58	35.15
			High	2.153	16.58	16.64	18.90	-	-

# Limit : > 0.5 MHz

802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	6dB BW (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 3	5775	155	Low	2.204	16.62	16.70	18.87	37.77	-	-
			Mid	2.205	16.30	16.35	36.41	-	73.94	75.18
			High	2.131	15.40	16.70	18.83	37.82	-	-

# Limit : > 0.5 MHz



### 10.4 OUTPUT POWER MEASUREMENT

#### Power Level Setting

802.11ax(HE20)		Frequency [MHz]	Channel No.	26 T	52T	106T	242 T	SU
UNII 1	Low	5180	36	5	5	5	9.5	9.5
	Mid	5200	40					
	High	5240	48					
UNII 2A	Low	5260	52	7	7	7		9
	Mid	5280	60	8	8	8		
	High	5320	64					
UNII 2C	Low	5500	100	9	9	9	10.5	10
	Mid	5580	116					
	High	5720	144					
UNII 3	Low	5745	149	7	7	7	10	9
	Mid	5785	157	6.5	6.5	6.5	9.5	
	High	5825	165				10	

802.11ax(HE40)		Frequency [MHz]	Channel No.	26 T	52T	106T	242 T	484T	SU
UNII 1	Low	5190	38	4.5	4.5	4.5	4.5	10	10.5
	High	5230	46						
UNII 2A	Low	5270	54	8	8	8	8	10.5	
	High	5310	62						
UNII 2C	Low	5510	102	9.5	9.5	9.5	9.5	10.5	11
	Mid	5550	110						
	High	5710	142	9	9	9	9		
UNII 3	Low	5755	151	8	8	8	8	10	10.5
	High	5795	159	7.5	7.5	7.5	7.5		



802.11ax(HE80)		Frequency [MHz]	Channel No.	26 T	52T	106 T	242 T	484T	996T	SU
UNII 1	Mid	5210	42	4.5	4.5	4.5	4.5	4.5	8	7
UNII 2A	Mid	5290	58	8.5	8.5	8.5	8.5	8.5	10.5	10.5
UNII 2C	Low	5530	106	9	9	9	9	9	11	11
	High	5690	138						10.5	10.5
UNII 3	Mid	5775	155	11	11	11	11	11		

10.4.1 Ant1

Straddle channel data in the table below are for reporting purposes only.  
Straddle channel data were added in section 10.6.3.

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total Power (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	6.91	7.63	7.54	-	-
			Mid	7.53	7.62	-	12.03	11.64
			High	7.33	7.71	7.62	-	-
	5200	40	Low	7.28	7.76	7.51	-	-
			Mid	7.35	7.79	-	12.03	11.74
			High	7.29	7.75	7.65	-	-
	5240	48	Low	6.30	6.98	6.95	-	-
			Mid	6.69	6.95	-	12.22	12.07
			High	6.73	7.25	7.15	-	-
UNII 2A	5260	52	Low	9.53	9.92	9.78	-	-
			Mid	9.64	10.15	-	12.31	11.80
			High	9.75	10.18	9.94	-	-
	5280	60	Low	10.50	11.03	10.85	-	-
			Mid	10.87	11.12	-	12.46	11.71
			High	10.76	11.18	11.02	-	-
	5320	64	Low	10.86	11.11	11.05	-	-
			Mid	10.94	10.97	-	12.40	11.81
			High	10.98	11.14	11.10	-	-



HE20	Frequency [MHz]	Channel No.	RU Index	Total Power (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 2C	5500	100	Low	10.84	11.69	11.73	-	-
			Mid	10.93	11.87	-	13.19	12.43
			High	11.23	11.93	11.80	-	-
	5580	116	Low	10.55	11.40	11.47	-	-
			Mid	10.87	11.49	-	12.77	12.40
			High	10.89	11.53	11.47	-	-
	5720	144	Low	9.41	9.99	9.86	-	-
			Mid	9.52	10.04	-	12.64	11.78
			High	9.38	9.96	9.89	-	-
UNII 3	5745	149	Low	9.28	9.82	9.83	-	-
			Mid	9.31	9.92	-	12.12	11.77
			High	9.26	9.94	9.92	-	-
	5785	157	Low	8.78	9.27	9.15	-	-
			Mid	8.38	9.43	-	12.48	11.71
			High	8.35	9.28	9.30	-	-
	5825	165	Low	9.19	10.46	10.59	-	-
			Mid	9.31	10.60	-	12.44	11.61
			High	9.20	10.65	10.66	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total Power(dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	5.81	6.35	6.58	6.46	-	-
			Mid	5.86	6.52	6.81	-	12.45	12.87
			High	6.12	6.44	6.63	6.46	-	-
	5230	46	Low	6.03	6.41	6.59	6.64	-	-
			Mid	6.70	6.87	6.75	-	12.61	13.04
			High	6.71	6.64	6.86	6.76	-	-
UNII 2a	5270	54	Low	10.20	10.13	10.35	10.42	-	-
			Mid	10.75	10.56	10.56	-	12.67	12.97
			High	10.23	10.39	10.54	10.46	-	-
	5310	62	Low	10.24	10.37	10.47	10.51	-	-
			Mid	10.66	10.57	10.70	-	12.84	12.95
			High	10.41	10.50	10.51	10.49	-	-
UNII 2c	5510	102	Low	10.52	11.60	11.68	12.73	-	-
			Mid	10.74	11.94	11.92	-	13.08	13.17
			High	10.32	11.72	11.77	12.71	-	-
	5550	110	Low	10.77	11.75	11.49	12.91	-	-
			Mid	11.05	12.07	11.88	-	13.10	13.30
			High	11.10	11.80	11.75	12.90	-	-
	5710	142	Low	10.79	11.17	11.22	11.36	-	-
			Mid	11.31	11.52	11.27	-	12.53	13.00
			High	11.03	11.36	11.12	11.43	-	-
UNII 3	5755	151	Low	9.67	10.03	10.09	10.50	-	-
			Mid	9.43	10.40	10.40	-	12.50	12.89
			High	9.01	10.11	10.13	10.48	-	-
	5795	159	Low	8.52	9.51	9.66	9.86	-	-
			Mid	8.78	9.69	9.72	-	12.30	12.57
			High	8.42	9.45	9.51	9.73	-	-



802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	Total Power (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	5.88	6.45	6.45	6.40	6.39	-	-
			Mid	6.03	6.50	6.53	6.50	-	10.26	9.36
			High	6.64	6.82	6.80	6.63	6.50	-	-
UNII 2a	5290	58	Low	10.45	10.67	10.69	10.60	10.51	-	-
			Mid	11.07	10.87	10.48	10.68	-	12.88	12.92
			High	10.97	11.06	10.81	10.82	10.71	-	-
UNII 2c	5530	106	Low	10.87	10.98	10.96	11.03	10.93	-	-
			Mid	10.61	11.12	11.17	11.07	-	13.16	13.21
			High	10.50	11.34	11.14	10.81	11.04	-	-
	5690	138	Low	10.70	10.73	10.59	10.68	10.62	-	-
			Mid	11.05	10.75	10.66	10.67	-	12.19	12.95
			High	10.84	10.81	10.66	10.68	10.70	-	-
UNII 3	5775	155	Low	11.85	12.53	12.35	12.47	12.56	-	-
			Mid	12.34	12.68	12.53	12.40	-	12.27	12.76
			High	12.52	12.61	12.58	12.58	12.66	-	-

10.4.2 Ant2

Straddle channel data in the table below are for reporting purposes only.  
Straddle channel data were added in section 10.6.3.

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total Power (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	6.92	7.54	7.75	-	-
			Mid	7.34	7.68	-	12.30	11.86
			High	7.21	7.55	7.84	-	-
	5200	40	Low	7.21	7.73	8.08	-	-
			Mid	7.14	7.43	-	12.49	11.98
			High	7.22	7.74	8.02	-	-
	5240	48	Low	6.09	6.83	7.18	-	-
			Mid	6.45	6.99	-	12.57	11.89
			High	6.45	7.21	7.52	-	-
UNII 2A	5260	52	Low	9.29	9.93	10.20	-	-
			Mid	9.50	10.20	-	12.68	11.58
			High	9.48	10.13	10.38	-	-
	5280	60	Low	10.52	10.68	11.29	-	-
			Mid	10.77	10.92	-	12.65	11.53
			High	10.73	11.07	11.46	-	-
	5320	64	Low	10.98	10.89	11.37	-	-
			Mid	10.85	10.87	-	12.67	11.46
			High	10.81	10.98	11.41	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	Total Power (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 2C	5500	100	Low	10.85	10.45	10.55	-	-
			Mid	11.82	10.64	-	12.24	11.08
			High	10.85	10.58	10.58	-	-
	5580	116	Low	10.59	11.01	10.85	-	-
			Mid	10.75	11.07	-	12.32	11.90
			High	10.92	10.76	10.85	-	-
	5720	144	Low	8.99	9.57	9.62	-	-
			Mid	9.57	9.61	-	12.52	11.37
			High	9.43	9.68	9.74	-	-
UNII 3	5745	149	Low	9.35	9.62	9.66	-	-
			Mid	9.25	9.60	-	12.24	11.53
			High	9.18	9.75	9.71	-	-
	5785	157	Low	8.80	8.97	8.94	-	-
			Mid	8.59	9.74	-	12.78	11.46
			High	8.39	9.11	8.96	-	-
	5825	165	Low	9.30	10.22	10.14	-	-
			Mid	9.54	10.56	-	12.49	11.23
			High	9.56	10.48	10.27	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total Power(dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	5.18	6.66	6.73	6.68	-	-
			Mid	5.46	6.92	6.91	-	12.58	12.67
			High	6.15	6.82	6.82	6.73	-	-
	5230	46	Low	6.23	7.00	6.77	6.83	-	-
			Mid	6.52	7.26	7.14	-	12.74	12.82
			High	6.60	7.33	7.07	6.96	-	-
UNII 2a	5270	54	Low	10.21	10.74	10.70	10.67	-	-
			Mid	10.65	11.01	10.97	-	12.61	12.66
			High	10.27	10.84	10.75	10.70	-	-
	5310	62	Low	10.16	10.82	10.63	10.71	-	-
			Mid	10.39	11.08	10.90	-	12.54	12.63
			High	10.36	10.83	10.79	10.72	-	-
UNII 2c	5510	102	Low	9.80	10.53	10.47	10.63	-	-
			Mid	10.45	10.74	10.63	-	11.49	11.62
			High	10.28	10.63	10.57	10.57	-	-
	5550	110	Low	10.32	10.54	10.42	10.58	-	-
			Mid	10.82	10.94	10.79	-	11.57	11.93
			High	10.34	10.74	10.61	10.62	-	-
	5710	142	Low	10.66	11.09	11.09	11.17	-	-
			Mid	10.73	11.36	11.34	-	12.19	12.44
			High	10.48	11.26	11.17	11.15	-	-
UNII 3	5755	151	Low	9.20	10.01	10.15	10.22	-	-
			Mid	9.39	10.50	10.56	-	12.08	12.39
			High	9.13	10.08	10.20	10.20	-	-
	5795	159	Low	8.31	9.57	9.61	9.54	-	-
			Mid	8.57	9.75	9.80	-	12.17	12.28
			High	8.28	9.41	9.42	9.34	-	-



802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	Total Power (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	6.20	6.56	6.67	6.63	6.89	-	-
			Mid	6.50	6.61	6.71	6.67	-	10.41	9.48
			High	6.41	6.99	6.93	6.80	7.07	-	-
UNII 2a	5290	58	Low	10.60	10.90	11.04	10.85	11.02	-	-
			Mid	10.86	11.02	11.05	10.93	-	13.15	12.76
			High	10.66	11.03	11.11	11.03	11.22	-	-
UNII 2c	5530	106	Low	10.12	9.85	9.78	9.81	9.76	-	-
			Mid	9.74	9.94	9.84	9.86	-	12.05	11.96
			High	10.12	10.90	9.97	10.03	20.00	-	-
	5690	138	Low	11.10	10.61	10.54	10.43	10.54	-	-
			Mid	11.01	10.58	10.53	10.47	-	12.21	12.70
			High	10.67	10.67	10.60	10.41	10.59	-	-
UNII 3	5775	155	Low	11.84	12.55	12.41	12.26	12.49	-	-
			Mid	11.99	12.60	12.46	12.24	-	11.76	12.55
			High	11.81	12.53	12.45	12.37	12.58	-	-

10.4.3 Ant1+Ant2

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total Power (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	9.93	10.60	10.65	-	-
			Mid	10.45	10.66	-	15.18	14.76
			High	10.28	10.64	10.74	-	-
	5200	40	Low	10.26	10.76	10.81	-	-
			Mid	10.26	10.63	-	15.27	14.87
			High	10.27	10.76	10.85	-	-
	5240	48	Low	9.18	9.92	10.07	-	-
			Mid	9.58	9.98	-	15.41	14.99
			High	9.59	10.24	10.35	-	-
UNII 2A	5260	52	Low	12.41	12.94	13.00	-	-
			Mid	12.58	13.19	-	15.51	14.70
			High	12.63	13.17	13.17	-	-
	5280	60	Low	13.51	13.87	14.08	-	-
			Mid	13.83	14.03	-	15.56	14.63
			High	13.76	14.14	14.25	-	-
	5320	64	Low	13.93	14.01	14.22	-	-
			Mid	13.91	13.93	-	15.55	14.65
			High	13.91	14.07	14.27	-	-
UNII 2C	5500	100	Low	13.86	14.13	14.19	-	-
			Mid	13.99	14.31	-	15.75	14.82
			High	14.05	14.32	14.24	-	-
	5580	116	Low	13.58	14.22	14.18	-	-
			Mid	13.82	14.30	-	15.56	15.17
			High	13.92	14.17	14.18	-	-
	5720	144	Low	12.22	12.80	12.75	-	-
			Mid	12.56	12.84	-	15.59	14.59
			High	12.42	12.84	12.82	-	-



HE20	Frequency [MHz]	Channel No.	RU Index	Total Power (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	12.33	12.73	12.75	-	-
			Mid	12.29	12.78	-	15.19	14.66
			High	12.23	12.86	12.82	-	-
	5785	157	Low	11.80	12.14	12.05	-	-
			Mid	11.50	12.60	-	15.64	14.60
			High	11.37	12.21	12.14	-	-
	5825	165	Low	12.26	13.35	13.38	-	-
			Mid	12.44	13.59	-	15.47	14.43
			High	12.39	13.58	13.48	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total Power(dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	8.51	9.52	9.67	9.58	-	-
			Mid	8.67	9.73	9.87	-	15.53	15.78
			High	9.14	9.64	9.74	9.61	-	-
	5230	46	Low	9.14	9.72	9.69	9.75	-	-
			Mid	9.62	10.08	9.96	-	15.69	15.95
			High	9.66	10.01	9.98	9.87	-	-
UNII 2a	5270	54	Low	13.21	13.46	13.54	13.56	-	-
			Mid	13.71	13.80	13.78	-	15.65	15.83
			High	13.26	13.63	13.66	13.59	-	-
	5310	62	Low	13.21	13.61	13.56	13.62	-	-
			Mid	13.54	13.84	13.81	-	15.70	15.79
			High	13.39	13.68	13.67	13.62	-	-
UNII 2c	5510	102	Low	13.18	14.11	14.13	14.81	-	-
			Mid	13.61	14.39	14.34	-	15.37	15.46
			High	13.31	14.22	14.22	14.78	-	-
	5550	110	Low	13.56	14.20	14.00	14.91	-	-
			Mid	13.95	14.55	14.38	-	15.41	15.68
			High	13.75	14.31	14.23	14.92	-	-
	5710	142	Low	13.73	14.14	14.17	14.28	-	-
			Mid	14.04	14.45	14.32	-	15.37	15.74
			High	13.77	14.32	14.16	14.30	-	-
UNII 3	5755	151	Low	12.45	13.03	13.13	13.37	-	-
			Mid	12.42	13.46	13.49	-	15.31	15.65
			High	12.08	13.10	13.18	13.35	-	-
	5795	159	Low	11.42	12.55	12.65	12.71	-	-
			Mid	11.68	12.73	12.77	-	15.22	15.42
			High	11.36	12.44	12.48	12.55	-	-



802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	Total Power (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	9.05	9.52	9.57	9.53	9.66	-	-
			Mid	9.27	9.57	9.63	9.59	-	13.34	12.43
			High	9.54	9.92	9.87	9.72	9.80	-	-
UNII 2a	5290	58	Low	13.53	13.80	13.88	13.74	13.78	-	-
			Mid	13.97	13.96	13.78	13.82	-	16.02	15.85
			High	13.83	14.06	13.97	13.94	13.98	-	-
UNII 2c	5530	106	Low	13.52	13.46	13.42	13.47	13.39	-	-
			Mid	13.16	13.58	13.56	13.52	-	15.65	15.64
			High	13.32	14.14	13.60	13.45	20.52	-	-
	5690	138	Low	13.91	13.68	13.57	13.57	13.59	-	-
			Mid	14.04	13.68	13.60	13.58	-	15.20	15.83
			High	13.76	13.75	13.64	13.56	13.65	-	-
UNII 3	5775	155	Low	14.85	15.55	15.39	15.38	15.53	-	-
			Mid	15.18	15.65	15.50	15.33	-	15.03	15.62
			High	15.19	15.58	15.52	15.49	15.63	-	-

## 10.5 POWER SPECTRAL DENSITY

### 10.5.1 Ant1

#### 802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	3.224	2.272	-0.610	-	-
			Mid	2.354	2.549	-	1.127	0.378
			High	3.265	2.544	-0.466	-	-
	5200	40	Low	3.413	2.221	-0.796	-	-
			Mid	2.742	2.570	-	1.041	0.727
			High	3.445	2.570	-0.461	-	-
	5240	48	Low	2.922	1.399	-1.280	-	-
			Mid	2.470	1.411	-	1.340	0.443
			High	3.403	1.907	-1.107	-	-
UNII 2A	5260	52	Low	6.876	4.237	1.283	-	-
			Mid	6.153	4.655	-	1.465	0.580
			High	6.753	4.480	1.664	-	-
	5300	60	Low	8.102	5.721	2.605	-	-
			Mid	6.889	5.967	-	1.620	0.564
			High	7.947	5.994	2.863	-	-
	5320	64	Low	8.379	5.615	2.556	-	-
			Mid	7.733	5.912	-	1.538	0.805
			High	8.297	5.954	2.944	-	-
UNII 2C	5500	100	Low	8.301	6.372	3.365	-	-
			Mid	7.375	6.730	-	2.468	1.526
			High	8.231	6.669	3.373	-	-
	5580	116	Low	7.511	5.956	3.036	-	-
			Mid	6.668	6.376	-	1.921	0.446
			High	7.806	6.365	3.031	-	-
	5720	144	Low	6.930	4.055	1.611	-	-
			Mid	6.024	4.451	-	1.580	0.812
			High	7.164	4.485	1.592	-	-



HE20	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	4.462	1.744	-1.172	-	-
			Mid	3.939	1.904	-	-1.453	-2.373
			High	4.243	2.121	-1.205	-	-
	5785	157	Low	3.328	0.697	-2.183	-	-
			Mid	3.646	1.055	-	-1.349	-2.582
			High	3.478	1.132	-1.846	-	-
	5825	165	Low	4.849	2.064	-0.690	-	-
			Mid	4.918	2.074	-	-1.274	-2.867
			High	4.818	2.307	-0.550	-	-

# Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz

Limit(UNII 3) : 30.0 dBm/500kHz

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	2.890	0.964	-1.689	-4.932	-	-
			Mid	3.229	1.567	-1.647	-	-0.686	0.466
			High	3.532	1.388	-1.583	-5.282	-	-
	5230	46	Low	2.964	1.325	-1.551	-4.874	-	-
			Mid	3.365	1.692	-1.363	-	-0.226	0.430
			High	3.405	1.823	-1.365	-5.041	-	-
UNII 2A	5270	54	Low	7.307	5.096	2.284	-1.329	-	-
			Mid	7.930	5.432	2.485	-	-0.518	0.883
			High	8.069	5.195	2.354	-1.237	-	-
	5310	62	Low	7.927	4.985	2.409	-1.247	-	-
			Mid	8.152	5.301	2.438	-	-0.295	0.438
			High	7.765	5.104	2.400	-1.275	-	-
UNII 2C	5510	102	Low	8.337	6.445	3.347	-0.226	-	-
			Mid	8.312	6.613	3.309	-	-0.128	0.916
			High	8.231	6.377	3.418	0.002	-	-
	5550	110	Low	8.093	6.414	3.606	-0.154	-	-
			Mid	8.328	6.878	3.384	-	0.013	1.212
			High	8.282	6.295	3.385	-0.109	-	-
	5710	142	Low	7.919	5.962	3.058	-0.830	-	-
			Mid	8.076	6.285	3.037	-	-0.333	0.621
			High	7.801	6.212	2.867	-0.949	-	-
UNII 3	5755	151	Low	5.186	2.258	-0.464	-4.633	-	-
			Mid	5.154	2.546	-0.954	-	-2.896	-2.100
			High	4.777	2.201	-1.163	-4.821	-	-
	5795	159	Low	4.512	1.541	-1.200	-5.006	-	-
			Mid	4.704	1.693	-1.477	-	-3.211	-3.155
			High	3.968	1.281	-1.757	-5.459	-	-

# Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz

Limit(UNII 3) : 30.0 dBm/500kHz



**802.11ax(HE80)**

HE80	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	2.871	1.169	-2.288	-5.413	-8.446	-	-
			Mid	3.062	1.302	-2.146	-5.371	-	-5.940	-7.163
			High	3.394	1.345	-1.732	-4.802	-7.874	-	-
UNII 2A	5290	58	Low	7.620	5.421	2.077	-0.848	-4.076	-	-
			Mid	8.255	5.346	2.149	-0.813	-	-3.047	-3.171
			High	8.322	5.188	2.393	-0.709	-3.923	-	-
UNII 2C	5530	106	Low	8.629	5.424	2.125	-0.708	-3.850	-	-
			Mid	7.363	5.508	2.635	-0.823	-	-2.753	-3.178
			High	7.964	5.834	2.530	-0.374	-3.712	-	-
	5690	138	Low	7.487	5.982	2.560	-0.719	-3.563	-	-
			Mid	7.737	5.880	2.777	-0.539	-	-3.186	-3.575
			High	7.940	6.021	2.705	-0.566	-3.261	-	-
UNII 3	5775	155	Low	7.493	4.890	1.542	-1.935	-3.900	-	-
			Mid	7.522	5.190	1.558	-2.098	-	-5.904	-5.776
			High	7.681	4.626	1.751	-1.702	-4.370	-	-

# Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz

Limit(UNII 3) : 30.0 dBm/500kHz

10.5.2 Ant2

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	2.760	1.841	-1.257	-	-
			Mid	2.305	2.506	-	1.550	1.195
			High	2.954	2.481	-1.263	-	-
	5200	40	Low	2.794	1.866	-1.296	-	-
			Mid	2.358	2.524	-	1.494	1.042
			High	2.954	2.439	-1.411	-	-
	5240	48	Low	2.809	1.318	-1.531	-	-
			Mid	2.330	1.355	-	1.965	1.219
			High	2.872	1.369	-1.578	-	-
UNII 2A	5260	52	Low	7.312	4.367	1.309	-	-
			Mid	6.470	4.790	-	1.733	0.678
			High	7.154	4.440	0.975	-	-
	5300	60	Low	7.473	5.395	2.289	-	-
			Mid	6.779	5.768	-	1.801	0.283
			High	7.805	5.742	2.094	-	-
	5320	64	Low	7.267	5.454	1.742	-	-
			Mid	6.171	5.823	-	1.344	0.120
			High	7.610	5.787	2.639	-	-
UNII 2C	5500	100	Low	7.373	5.383	1.474	-	-
			Mid	6.404	5.491	-	1.081	-0.027
			High	7.335	5.047	2.048	-	-
	5580	116	Low	7.071	5.338	2.044	-	-
			Mid	6.372	5.615	-	1.495	0.814
			High	7.396	5.417	2.732	-	-
	5720	144	Low	6.924	4.174	0.743	-	-
			Mid	6.009	4.781	-	1.625	0.266
			High	6.898	4.627	1.416	-	-



HE20	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	4.013	1.435	-1.878	-	-
			Mid	4.548	1.385	-	-1.363	-2.122
			High	4.072	2.152	-1.209	-	-
	5785	157	Low	3.777	1.071	-2.434	-	-
			Mid	3.417	0.656	-	-1.273	-3.195
			High	3.612	0.950	-2.380	-	-
	5825	165	Low	4.858	1.842	-0.986	-	-
			Mid	4.143	2.055	-	-1.649	-2.442
			High	4.546	2.080	-0.767	-	-

# Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz

Limit(UNII 3) : 30.0 dBm/500kHz

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	2.710	1.305	-1.218	-5.168	-	-
			Mid	2.961	1.572	-1.431	-	-0.486	0.338
			High	2.744	1.242	-1.072	-4.717	-	-
	5230	46	Low	2.707	1.335	-1.628	-4.780	-	-
			Mid	2.811	1.883	-1.130	-	-0.118	0.458
			High	2.952	1.565	-1.173	-4.986	-	-
UNII 2A	5270	54	Low	7.383	5.262	2.271	-1.290	-	-
			Mid	7.521	5.435	2.517	-	-0.189	0.984
			High	7.488	5.227	2.362	-1.369	-	-
	5310	62	Low	7.419	2.410	2.231	-1.070	-	-
			Mid	7.788	5.740	2.498	-	-0.135	0.837
			High	7.372	5.224	2.607	-0.991	-	-
UNII 2C	5510	102	Low	7.245	5.336	2.292	-1.011	-	-
			Mid	6.934	5.565	2.477	-	-1.270	-0.346
			High	6.475	5.375	2.619	-0.968	-	-
	5550	110	Low	6.652	5.296	2.480	-1.012	-	-
			Mid	7.101	5.490	2.640	-	-0.894	-0.199
			High	6.943	5.389	2.529	-0.922	-	-
	5710	142	Low	7.432	5.729	3.220	-0.777	-	-
			Mid	7.351	5.919	3.063	-	-0.388	0.465
			High	7.226	5.995	3.032	-0.774	-	-
UNII 3	5755	151	Low	4.717	2.055	-1.089	-4.430	-	-
			Mid	5.214	2.308	-0.788	-	-3.732	-2.299
			High	4.884	2.419	-0.627	-4.654	-	-
	5795	159	Low	4.239	1.283	-1.558	-5.221	-	-
			Mid	4.298	1.592	-1.661	-	-3.476	-2.795
			High	3.964	1.393	-1.274	-5.291	-	-

# Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz

Limit(UNII 3) : 30.0 dBm/500kHz



802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	2.253	1.283	-1.782	-5.263	-7.734	-	-
			Mid	2.886	1.823	-1.693	-5.637	-	-5.724	-7.297
			High	3.005	1.298	-1.306	-4.878	-7.717	-	-
UNII 2A	5290	58	Low	7.218	5.534	2.764	-0.955	-3.405	-	-
			Mid	7.630	5.465	2.567	-1.689	-	-2.823	-2.582
			High	7.388	5.664	2.568	-0.859	-3.485	-	-
UNII 2C	5530	106	Low	7.182	4.620	1.971	-2.076	-4.424	-	-
			Mid	6.816	4.427	1.473	-2.484	-	-3.943	-3.959
			High	7.054	4.943	1.751	-1.716	-4.343	-	-
	5690	138	Low	7.168	5.700	2.665	-0.937	-3.221	-	-
			Mid	7.438	5.535	2.587	-1.656	-	-2.704	-2.978
			High	7.221	5.679	2.625	-0.921	-3.086	-	-
UNII 3	5775	155	Low	7.405	5.083	2.006	-1.733	-3.922	-	-
			Mid	7.339	4.630	1.624	-2.825	-	-5.848	-5.650
			High	7.509	4.632	1.494	-2.299	-4.052	-	-

# Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz

Limit(UNII 3) : 30.0 dBm/500kHz

10.5.3 Ant1+Ant2

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	6.009	5.073	2.088	-	-
			Mid	5.340	5.538	-	4.354	3.816
			High	6.123	5.523	2.164	-	-
	5200	40	Low	6.125	5.058	1.971	-	-
			Mid	5.565	5.558	-	4.284	3.898
			High	6.217	5.516	2.100	-	-
	5240	48	Low	5.876	4.369	1.606	-	-
			Mid	5.411	4.394	-	4.674	3.859
			High	6.156	4.657	1.674	-	-
UNII 2A	5260	52	Low	10.110	7.313	4.306	-	-
			Mid	9.325	7.734	-	4.612	3.640
			High	9.969	7.471	4.343	-	-
	5300	60	Low	10.809	8.572	5.460	-	-
			Mid	9.845	8.879	-	4.722	3.436
			High	10.887	8.881	5.505	-	-
	5320	64	Low	10.869	8.546	5.178	-	-
			Mid	10.032	8.878	-	4.453	3.486
			High	10.977	8.882	5.804	-	-
UNII 2C	5500	100	Low	10.872	8.916	5.532	-	-
			Mid	9.927	9.165	-	4.840	3.829
			High	10.816	8.944	5.771	-	-
	5580	116	Low	10.307	8.669	5.578	-	-
			Mid	9.533	9.023	-	4.724	3.644
			High	10.616	8.928	5.894	-	-
	5720	144	Low	9.937	7.126	4.209	-	-
			Mid	9.027	7.630	-	4.613	3.558
			High	10.043	7.567	4.515	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	7.254	4.603	1.499	-	-
			Mid	7.265	4.663	-	1.603	0.765
			High	7.169	5.147	1.803	-	-
	5785	157	Low	6.569	3.899	0.703	-	-
			Mid	6.543	3.871	-	1.700	0.133
			High	6.556	4.053	0.905	-	-
	5825	165	Low	7.864	4.965	2.174	-	-
			Mid	7.558	5.075	-	1.553	0.361
			High	7.695	5.206	2.353	-	-

# Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz

Limit(UNII 3) : 30.0 dBm/500kHz

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	5.812	4.148	1.564	-2.038	-	-
			Mid	6.108	4.580	1.473	-	2.425	3.413
			High	6.166	4.326	1.691	-1.980	-	-
	5230	46	Low	5.848	4.340	1.421	-1.817	-	-
			Mid	6.107	4.799	1.766	-	2.839	3.455
			High	6.195	4.706	1.743	-2.003	-	-
UNII 2A	5270	54	Low	10.356	8.190	5.288	1.701	-	-
			Mid	10.741	8.444	5.512	-	2.660	3.944
			High	10.799	8.221	5.369	1.708	-	-
	5310	62	Low	10.691	6.896	5.332	1.852	-	-
			Mid	10.984	8.536	5.479	-	2.796	3.653
			High	10.584	8.175	5.515	1.879	-	-
UNII 2C	5510	102	Low	10.836	8.936	5.862	2.409	-	-
			Mid	10.688	9.131	5.924	-	2.349	3.341
			High	10.452	8.915	6.047	2.554	-	-
	5550	110	Low	10.443	8.901	6.090	2.448	-	-
			Mid	10.768	9.250	6.039	-	2.593	3.574
			High	10.674	8.876	5.989	2.514	-	-
	5710	142	Low	10.693	8.857	6.150	2.207	-	-
			Mid	10.739	9.116	6.061	-	2.650	3.554
			High	10.534	9.115	5.961	2.149	-	-
UNII 3	5755	151	Low	7.968	5.168	2.245	-1.520	-	-
			Mid	8.195	5.439	2.140	-	-0.284	0.812
			High	7.841	5.322	2.124	-1.727	-	-
	5795	159	Low	7.388	4.424	1.635	-2.102	-	-
			Mid	7.516	4.653	1.443	-	-0.331	0.039
			High	6.977	4.348	1.502	-2.364	-	-

# Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz

Limit(UNII 3) : 30.0 dBm/500kHz



**802.11ax(HE80)**

HE80	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	5.584	4.236	0.983	-2.327	-5.065	-	-
			Mid	5.985	4.580	1.097	-2.492	-	-2.820	-4.219
			High	6.214	4.332	1.497	-1.830	-4.785	-	-
UNII 2A	5290	58	Low	10.434	8.488	5.445	2.109	-0.718	-	-
			Mid	10.964	8.416	5.374	1.781	-	0.077	0.143
			High	10.891	8.443	5.492	2.227	-0.689	-	-
UNII 2C	5530	106	Low	10.976	8.051	5.059	1.672	-1.118	-	-
			Mid	10.109	8.011	5.103	1.435	-	-0.297	-0.541
			High	10.543	8.421	5.169	2.017	-1.006	-	-
	5690	138	Low	10.341	8.853	5.624	2.183	-0.379	-	-
			Mid	10.601	8.721	5.694	1.948	-	0.072	-0.256
			High	10.606	8.863	5.676	2.270	-0.163	-	-
UNII 3	5775	155	Low	10.460	7.998	4.791	1.177	-0.901	-	-
			Mid	10.442	7.929	4.602	0.564	-	-2.866	-2.703
			High	10.606	7.639	4.635	1.020	-1.198	-	-

# Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz

Limit(UNII 3) : 30.0 dBm/500kHz

10.5.4 Ant1(IC)

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	3.274	2.322	-0.560	-	-
			Mid	2.404	2.599	-	1.177	0.428
			High	3.315	2.594	-0.416	-	-
	5200	40	Low	3.463	2.271	-0.746	-	-
			Mid	2.792	2.620	-	1.091	0.777
			High	3.495	2.620	-0.411	-	-
	5240	48	Low	2.972	1.449	-1.230	-	-
			Mid	2.520	1.461	-	1.390	0.493
			High	3.453	1.957	-1.057	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	2.94	1.014	-1.639	-4.882	-	-
			Mid	3.28	1.617	-1.597	-	-0.636	0.516
			High	3.58	1.438	-1.533	-5.232	-	-
	5230	46	Low	3.01	1.375	-1.501	-4.824	-	-
			Mid	3.42	1.742	-1.313	-	-0.176	0.480
			High	3.46	1.873	-1.315	-4.991	-	-



802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	2.921	1.219	-2.238	-5.363	-8.396	-	-
			Mid	3.112	1.352	-2.096	-5.321	-	-5.890	-7.113
			High	3.444	1.395	-1.682	-4.752	-7.824	-	-

# Limit

UNII 1 : 10.0 dBm/MHz

NOTE : Only UNII1 bands were calculated as EIRP.

10.5.5 Ant2(IC)

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	4.180	3.261	0.163	-	-
			Mid	3.725	3.926	-	2.970	2.615
			High	4.374	3.901	0.157	-	-
	5200	40	Low	4.214	3.286	0.124	-	-
			Mid	3.778	3.944	-	2.914	2.462
			High	4.374	3.859	0.009	-	-
	5240	48	Low	4.229	2.738	-0.111	-	-
			Mid	3.750	2.775	-	3.385	2.639
			High	4.292	2.789	-0.158	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	4.13	2.725	0.202	-3.748	-	-
			Mid	4.38	2.992	-0.011	-	0.934	1.758
			High	4.16	2.662	0.348	-3.297	-	-
	5230	46	Low	4.13	2.755	-0.208	-3.360	-	-
			Mid	4.23	3.303	0.290	-	1.302	1.878
			High	4.37	2.985	0.247	-3.566	-	-



802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	3.673	2.703	-0.362	-3.843	-6.314	-	-
			Mid	4.306	3.243	-0.273	-4.217	-	-4.304	-5.877
			High	4.425	2.718	0.114	-3.458	-6.297	-	-

# Limit

UNII 1 : 10.0 dBm/MHz

NOTE : Only UNII1 bands were calculated as EIRP.



10.5.6 Ant1+Ant2(IC)

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	9.779	8.843	5.858	-	-
			Mid	9.110	9.308	-	8.124	7.586
			High	9.893	9.293	5.934	-	-
	5200	40	Low	9.895	8.828	5.741	-	-
			Mid	9.335	9.328	-	8.054	7.668
			High	9.987	9.286	5.870	-	-
	5240	48	Low	9.646	8.139	5.376	-	-
			Mid	9.181	8.164	-	8.444	7.629
			High	9.926	8.427	5.444	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	9.582	7.918	5.334	1.732	-	-
			Mid	9.878	8.350	5.243	-	6.195	7.183
			High	9.936	8.096	5.461	1.790	-	-
	5230	46	Low	9.618	8.110	5.191	1.953	-	-
			Mid	9.877	8.569	5.536	-	6.609	7.225
			High	9.965	8.476	5.513	1.767	-	-



**802.11ax(HE80)**

HE80	Frequency [MHz]	Channel No.	RU Index	Total PSD (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	9.354	8.006	4.753	1.443	-1.295	-	-
			Mid	9.755	8.350	4.867	1.278	-	0.950	-0.449
			High	9.984	8.102	5.267	1.940	-1.015	-	-

# Limit

UNII 1 : 10.0 dBm/MHz

NOTE : Only UNII1 bands were calculated as EIRP.



**10.6 STRADDLE CHANNEL.**

**10.6.1 26dB Bandwidth**

**Test Note:**

1. [UNII 2C] 26dB Bandwidth = 5725MHz - Measured Frequency[MHz]
2. [UNII 3] 26dB Bandwidth = Measured Frequency[MHz] -5725MHz
3. # : 26dB bandwidth is only located in UNII 2C. Therefore 26dB bandwidth do not overlap.

**10.6.1.1 Ant1**

**802.11ax(HE20)**

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26dB BW (MHz)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	15.92	4.00
				4	13.96	4.04
				7	14.04	4.08
				8	14.12	6.00
			52 T	37	16.24	4.08
				38	14.12	4.16
				39	14.16	4.12
				40	14.12	6.48
			106 T	53	16.32	4.24
				54	14.28	6.44
			242 T	61	16.24	6.40
			SU	-	15.76	5.72



802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26dB BW (MHz)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	17.32	4.20
				16	14.12	4.12
				17	14.04	5.00
			52 T	# 37	-	-
				41	17.08	3.48
				43	14.28	4.20
				44	14.20	5.00
			106 T	# 53	-	-
				# 54	-	-
				55	18.60	4.28
				56	14.28	4.92
			242 T	# 61	-	-
				62	17.96	4.92
			484 T	65	34.84	4.84
			SU	-	34.60	4.80



802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26dB BW (MHz)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	14.36	4.60
				36	14.48	5.32
			52 T	# 37	-	-
				# 45	-	-
				51	14.36	2.92
				52	14.84	5.20
			106 T	# 53	-	-
				# 57	-	-
				59	20.00	4.12
				60	15.68	5.32
			242 T	# 61	-	-
				# 62	-	-
				63	39.20	4.48
				64	18.08	5.32
			484 T	# 65	-	-
				66	36.32	5.20
996 T	67	75.20	4.96			
SU	-	74.96	5.08			



10.6.1.2 Ant2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26dB BW (MHz)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	16.12	3.96
				4	14.16	3.96
				7	14.08	4.04
				8	14.08	5.08
			52 T	37	16.20	4.00
				38	14.20	3.96
				39	14.08	4.04
				40	14.16	5.92
			106 T	53	16.20	4.08
				54	14.04	5.60
			242 T	61	16.12	5.80
			SU	-	15.52	5.60



802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26dB BW (MHz)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	16.60	4.20
				16	14.20	4.28
				17	14.20	4.92
			52 T	# 37	-	-
				41	17.56	4.36
				43	14.28	4.52
				44	14.12	4.92
			106 T	# 53	-	-
				# 54	-	-
				55	17.72	4.52
				56	14.12	5.00
			242 T	# 61	-	-
				62	17.16	4.84
			484 T	65	34.68	4.76
			SU	-	34.60	4.84



802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26dB BW (MHz)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	14.48	4.48
				36	14.36	5.32
			52 T	# 37	-	-
				# 45	-	-
				51	14.60	4.60
				52	14.88	5.44
			106 T	# 53	-	-
				# 57	-	-
				59	19.52	4.84
				60	15.20	5.44
			242 T	# 61	-	-
				# 62	-	-
				63	39.08	4.72
				64	18.92	5.32
			484 T	# 65	-	-
66	38.72	5.32				
996 T	67	74.84	5.20			
SU	-	74.96	5.20			

### 10.6.2 6dB Bandwidth

**Test Note:**

1. 6dB Bandwidth = Measured Frequency[MHz] – 5725MHz
2. # : 6dB bandwidth is only located in UNII 2C. Therefore 6dB bandwidth do not overlap.
3. Limit : > 0.5 MHz

#### 10.6.2.1 Ant1

**802.11ax(HE20)**

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6dB BW (MHz)
					UNII 3
HE20	5720	144	26 T	# 0	-
				# 4	-
				7	2.52
				8	4.56
			52 T	# 37	-
				# 38	-
				39	2.56
				40	4.56
			106 T	# 53	-
				54	4.56
			242 T	61	4.44
			SU	-	4.24



802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6dB BW (MHz)
					UNII 3
HE40	5710	142	26 T	# 0	-
				# 9	-
				16	2.04
				17	4.12
			52 T	# 37	-
				# 41	-
				43	2.60
				44	4.06
			106 T	# 53	-
				# 54	-
				# 55	-
				56	4.12
			242 T	# 61	-
				62	4.12
			484 T	65	3.24
			SU	-	3.32



802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6dB BW (MHz)
					UNII 3
HE80	5690	138	26 T	# 0	-
				# 18	-
				35	2.08
				36	4.12
			52 T	# 37	-
				# 45	-
				51	2.68
				52	4.12
			106 T	# 53	-
				# 57	-
				59	2.68
				60	4.12
			242 T	# 61	-
				# 62	-
				63	2.68
				64	4.12
			484 T	# 65	-
				66	4.12
			996 T	67	2.68
			SU	-	2.68



10.6.2.2 Ant2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6dB BW (MHz)
					UNII 3
HE20	5720	144	26 T	# 0	-
				# 4	-
				7	2.52
				8	4.48
			52 T	# 37	-
				# 38	-
				39	2.52
				40	4.56
			106 T	# 53	-
				54	4.56
			242 T	61	4.40
			SU	-	4.28



802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6dB BW (MHz)
					UNII 3
HE40	5710	142	26 T	# 0	-
				# 9	-
				16	2.12
				17	4.12
			52 T	# 37	-
				# 41	-
				43	2.60
				44	4.12
			106 T	# 53	-
				# 54	-
				#55	-
				56	4.12
			242 T	# 61	-
				62	4.12
			484 T	65	2.92
			SU	-	3.08



802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6dB BW (MHz)
					UNII 3
HE80	5690	138	26 T	# 0	-
				# 18	-
				35	2.08
				36	4.12
			52 T	# 37	-
				# 45	-
				51	2.56
				52	4.12
			106 T	# 53	-
				# 57	-
				59	2.68
				60	4.12
			242 T	# 61	-
				# 62	-
				63	2.68
				64	4.12
			484 T	# 65	-
				66	4.12
			996 T	67	2.68
			SU	-	2.68

### 10.6.3 Output Power

**Test Note:**

- # : 26dB bandwidth is only located in UNII 2C. Therefore 26dB bandwidth do not overlap.

#### 10.6.3.1 Ant1

**802.11ax(HE20)**

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	10.13	-12.99
				4	10.13	-13.43
				7	-4.70	10.22
				8	-8.20	10.15
			52 T	37	10.15	-14.05
				38	10.21	-13.75
				39	10.21	0.24
				40	-5.91	10.21
			106 T	53	10.26	-13.04
				54	6.94	7.67
			242 T	61	12.08	6.31
			SU	-	10.81	5.00



802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	10.59	-13.50
				16	0.95	9.96
				17	-7.31	10.13
			52 T	# 37	-	-
				41	11.45	-12.91
				43	10.59	-5.47
				44	-1.42	10.03
			106 T	# 53	-	-
				# 54	-	-
				55	11.36	-13.67
				56	7.63	7.13
			242 T	# 61	-	-
				62	10.26	4.46
			484 T	65	12.51	1.10
			SU	-	12.77	1.43



802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	0.95	10.03
				36	-7.36	10.05
			52 T	# 37	-	-
				# 45	-	-
				51	10.42	-5.80
				52	-1.86	9.88
			106 T	# 53	-	-
				# 57	-	-
				59	10.58	-12.60
				60	7.39	6.83
			242 T	# 61	-	-
				# 62	-	-
				63	11.22	-15.54
				64	9.10	3.42
			484 T	# 65	-	-
				66	10.87	1.61
			996 T	67	12.58	-2.29
			SU	-	12.77	-1.97



10.6.3.2 Ant2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	9.93	-13.18
				4	9.47	-14.74
				7	-3.87	10.59
				8	-8.20	9.77
			52 T	37	9.91	-13.79
				38	9.95	-13.19
				39	10.26	0.56
				40	-5.67	9.97
			106 T	53	9.89	-13.98
				54	6.57	7.36
			242 T	61	11.80	6.09
			SU	-	10.71	4.80



802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	10.42	-13.69
				16	1.18	10.20
				17	-7.59	10.22
			52 T	# 37	-	-
				41	10.59	-12.99
				43	10.75	-5.52
				44	-1.55	10.04
			106 T	# 53	-	-
				# 54	-	-
				55	10.63	-12.89
				56	7.59	7.11
			242 T	# 61	-	-
				62	9.42	3.73
			484 T	65	12.19	0.89
			SU	-	12.00	0.79



802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	0.92	9.69
				36	-8.76	9.87
			52 T	# 37	-	-
				# 45	-	-
				51	9.97	-6.05
				52	-2.00	9.62
			106 T	# 53	-	-
				# 57	-	-
				59	10.13	-12.41
				60	7.12	6.70
			242 T	# 61	-	-
				# 62	-	-
				63	10.46	-14.70
				64	8.81	3.22
			484 T	# 65	-	-
				66	10.04	1.07
996 T	67	14.60	0.55			
SU	-	12.49	-1.58			



### 10.6.4 Power Spectral Density

**Test Note:**

1. # : 26dB bandwidth is only located in UNII 2C. Therefore 26dB bandwidth do not overlap.
2. Limit(UNII 1, 2A, 2C) : 11.0 dBm/MHz
3. Limit(UNII 3) : 30.0 dBm/500kHz

#### 10.6.4.1 Ant1

**802.11ax(HE20)**

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	7.399	-17.374
				4	6.423	-17.839
				7	-0.717	4.741
				8	-14.396	4.778
			52 T	37	4.774	-15.447
				38	4.832	-16.939
				39	5.043	1.498
				40	-4.211	1.299
			106 T	53	2.014	-19.484
				54	1.979	-1.096
			242 T	61	1.994	-1.988
			SU	-	1.586	-2.712



**802.11ax(HE40)**

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	7.580	-20.444
				16	5.183	5.241
				17	-13.552	4.834
			52 T	# 37	-	-
				41	5.933	-16.361
				43	4.820	-5.067
				44	1.342	1.858
			106 T	# 53	-	-
				# 54	-	-
				55	2.925	-17.238
				56	2.020	-1.220
			242 T	# 61	-	-
				62	-0.485	-3.865
			484 T	65	0.066	-6.866
			SU	-	0.379	-6.322



**802.11ax(HE80)**

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	3.436	4.646
				36	-14.755	4.162
			52 T	# 37	-	-
				# 45	-	-
				51	4.641	-3.649
				52	0.413	1.551
			106 T	# 53	-	-
				# 57	-	-
				59	1.842	-18.117
				60	1.425	-1.637
			242 T	# 61	-	-
				# 62	-	-
				63	-0.754	-22.085
				64	-1.941	-5.086
			484 T	# 65	-	-
66	-3.550	-6.439				
996 T	67	-3.616	-10.417			
SU	-	-3.006	-9.925			



10.6.4.2 Ant2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	7.467	-17.427
				4	6.127	-15.082
				7	-0.154	5.414
				8	-14.745	4.071
			52 T	37	4.426	-18.004
				38	4.609	-16.675
				39	5.458	1.604
				40	-3.734	1.301
			106 T	53	1.506	-16.651
				54	1.474	-1.449
			242 T	61	1.612	-2.157
			SU	-	0.722	-2.746



802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	7.766	-17.661
				16	4.380	5.230
				17	-14.636	4.660
			52 T	# 37	-	-
				41	5.239	-18.183
				43	5.041	-5.495
				44	1.299	1.918
			106 T	# 53	-	-
				# 54	-	-
				55	2.209	-17.357
				56	1.784	-1.215
			242 T	# 61	-	-
				62	-1.264	-4.588
			484 T	65	-0.640	-7.031
			SU	-	-0.707	-6.786



802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	3.623	4.263
				36	-16.194	3.994
			52 T	# 37	-	-
				# 45	-	-
				51	4.140	-3.999
				52	-0.469	1.217
			106 T	# 53	-	-
				# 57	-	-
				59	1.151	-18.306
				60	0.962	-1.796
			242 T	# 61	-	-
				# 62	-	-
				63	-1.771	-19.464
				64	-2.444	-5.490
			484 T	# 65	-	-
				66	-4.570	-7.397
			996 T	67	-1.573	-8.359
			SU	-	-2.887	-10.520

## 10.7 RADIATED SPURIOUS EMISSIONS

### 10.7.1 Basic Cable

Frequency Range : 9 kHz – 30MHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

**Note:**

1. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
2. Distance extrapolation factor =  $40 \log(\text{specific distance} / \text{test distance})$  (dB)
3. Limit line = specific Limits (dBuV) + Distance extrapolation factor

Frequency Range : Below 1 GHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

**Note:**

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode

### 10.7.2 FFC Cable

#### Frequency Range : 9 kHz – 30MHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

**Note:**

1. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
2. Distance extrapolation factor =  $40\log(\text{specific distance} / \text{test distance})$  (dB)
3. Limit line = specific Limits (dBuV) + Distance extrapolation factor

#### Frequency Range : Below 1 GHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

**Note:**

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode
2. The worst case of the basic cable only was tested.



## 10.8 RADIATED SPURIOUS EMISSIONS (Above 1 GHz)

### 10.8.1 Basic Cable

#### 1. 242 Tone RU 61

Band : UNII 1  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5180 MHz  
 Channel No. 36 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	57.87	5.09	V	62.96	68.20	5.24	PK
15540	49.96	6.67	V	56.63	73.98	17.35	PK
15540	33.44	6.67	V	40.11	53.98	13.87	AV
10360	58.11	5.09	H	63.20	68.20	5.00	PK
15540	48.24	6.67	H	54.91	73.98	19.07	PK
15540	32.58	6.67	H	39.25	53.98	14.73	AV

Band : UNII 1  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5200 MHz  
 Channel No. 40 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	54.17	4.89	V	59.06	68.20	9.14	PK
15600	47.86	5.88	V	53.74	73.98	20.24	PK
15600	34.09	5.88	V	39.97	53.98	14.01	AV
10400	55.64	4.89	H	60.53	68.20	7.67	PK
15600	46.91	5.88	H	52.79	73.98	21.19	PK
15600	33.87	5.88	H	39.75	53.98	14.23	AV



Band : UNII 1  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5240 MHz  
 Channel No. 48 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	54.07	5.35	V	59.42	68.20	8.78	PK
15720	50.33	5.19	V	55.52	73.98	18.46	PK
15720	33.98	5.19	V	39.17	53.98	14.81	AV
10480	54.52	5.35	H	59.87	68.20	8.33	PK
15720	49.93	5.19	H	55.12	73.98	18.86	PK
15720	33.28	5.19	H	38.47	53.98	15.51	AV

Band : UNII 2A  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5260 MHz  
 Channel No. 52 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	54.73	4.96	V	59.69	68.20	8.51	PK
15780	49.49	5.56	V	55.05	73.98	18.93	PK
15780	33.55	5.56	V	39.11	53.98	14.87	AV
10520	55.27	4.96	H	60.23	68.20	7.97	PK
15780	48.69	5.56	H	54.25	73.98	19.73	PK
15780	33.05	5.56	H	38.61	53.98	15.37	AV



Band : UNII 2A  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5300 MHz  
 Channel No. 60 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	54.28	5.65	V	59.93	73.98	14.05	PK
10600	40.69	5.65	V	46.34	53.98	7.64	AV
15900	47.81	6.27	V	54.08	73.98	19.90	PK
15900	33.27	6.27	V	39.54	53.98	14.44	AV
10600	55.15	5.65	H	60.80	73.98	13.18	PK
10600	41.44	5.65	H	47.09	53.98	6.89	AV
15900	47.17	6.27	H	53.44	73.98	20.54	PK
15900	33.00	6.27	H	39.27	53.98	14.71	AV

Band : UNII 2A  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5320 MHz  
 Channel No. 64 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	52.87	5.96	V	58.83	73.98	15.15	PK
10640	38.69	5.96	V	44.65	53.98	9.33	AV
15960	47.87	5.64	V	53.51	73.98	20.47	PK
15960	33.24	5.64	V	38.88	53.98	15.10	AV
10640	53.95	5.96	H	59.91	73.98	14.07	PK
10640	39.65	5.96	H	45.61	53.98	8.37	AV
15960	47.15	5.64	H	52.79	73.98	21.19	PK
15960	32.86	5.64	H	38.50	53.98	15.48	AV



Band : UNII 2C  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5500 MHz  
 Channel No. 100 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	52.82	5.30	V	58.12	73.98	15.86	PK
11000	39.04	5.30	V	44.34	53.98	9.64	AV
16500	47.37	7.79	V	55.16	68.20	13.04	PK
11000	53.67	5.30	H	58.97	73.98	15.01	PK
11000	39.70	5.30	H	45.00	53.98	8.98	AV
16500	47.24	7.79	H	55.03	68.20	13.17	PK

Band : UNII 2C  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5580 MHz  
 Channel No. 116 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	54.24	5.06	V	59.30	73.98	14.68	PK
11160	40.02	5.06	V	45.08	53.98	8.90	AV
16740	45.51	9.19	V	54.70	68.20	13.50	PK
11160	54.89	5.06	H	59.95	73.98	14.03	PK
11160	40.71	5.06	H	45.77	53.98	8.21	AV
16740	45.11	9.19	H	54.30	68.20	13.90	PK



Band : UNII 2C  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5720 MHz  
 Channel No. 144 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	54.98	5.65	V	60.63	73.98	13.35	PK
11440	40.89	5.65	V	46.54	53.98	7.44	AV
17160	46.36	9.75	V	56.11	68.20	12.09	PK
11440	56.36	5.65	H	62.01	73.98	11.97	PK
11440	42.50	5.65	H	48.15	53.98	5.83	AV
17160	45.88	9.75	H	55.63	68.20	12.57	PK

Band : UNII 3  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5745MHz  
 Channel No. 149 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	51.12	5.32	V	56.44	73.98	17.54	PK
11490	38.45	5.32	V	43.77	53.98	10.21	AV
17235	45.45	10.56	V	56.01	68.20	12.19	PK
11490	57.14	5.32	H	62.46	73.98	11.52	PK
11490	42.84	5.32	H	48.16	53.98	5.82	AV
17235	46.38	10.56	H	56.94	68.20	11.26	PK



Band : UNII 3  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5785 MHz  
 Channel No. 157 Ch

Frequency [MHz]	Reading [dBUV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBUV/m]	Limit [dBUV/m]	Margin [dB]	Measurement Type
11570	51.08	6.17	V	57.25	73.98	16.73	PK
11570	38.24	6.17	V	44.41	53.98	9.57	AV
17355	46.10	11.10	V	57.20	68.20	11.00	PK
11570	56.78	6.17	H	62.95	73.98	11.03	PK
11570	42.64	6.17	H	48.81	53.98	5.17	AV
17355	46.59	11.10	H	57.69	68.20	10.51	PK

Band : UNII 3  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5825 MHz  
 Channel No. 165 Ch

Frequency [MHz]	Reading [dBUV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBUV/m]	Limit [dBUV/m]	Margin [dB]	Measurement Type
11650	50.82	5.31	V	56.13	73.98	17.85	PK
11650	38.79	5.31	V	44.10	53.98	9.88	AV
17475	46.78	11.24	V	58.02	68.20	10.18	PK
11650	56.30	5.31	H	61.61	73.98	12.37	PK
11650	43.03	5.31	H	48.34	53.98	5.64	AV
17475	46.81	11.24	H	58.05	68.20	10.15	PK

**Note:**

All Modes of operation were investigated and the worst case configuration results are reported.

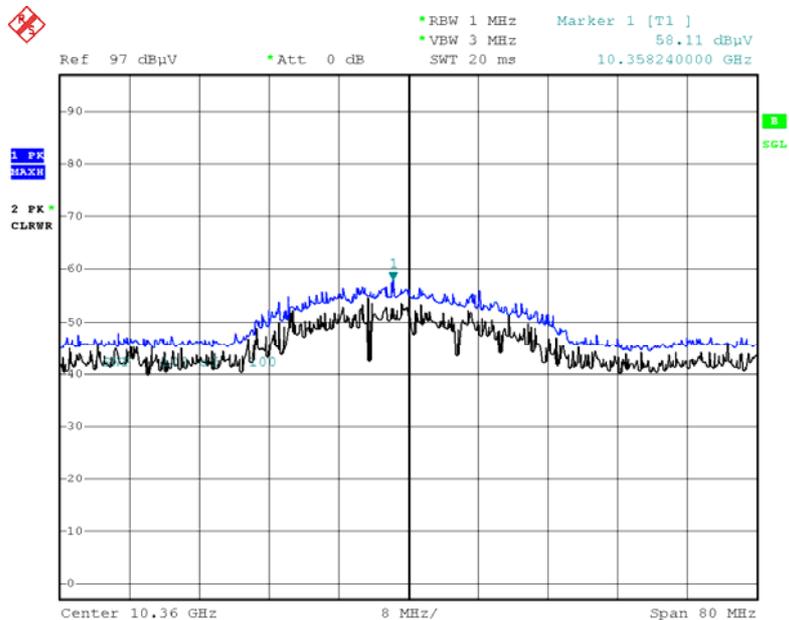
In order to simplify the report, We only have attached RSE result of worst case.

[Worst Case]

- UNII 1, 2A,2C, 3 : HE20
- HE20 : Worst case(Highest Power) : 242 T (RU 61)

▣ Test Plots

Peak Reading (802.11ax(HE20), Ch.36 2nd Harmonic, Z-H) - 242 T (RU 61)



Date: 14.AUG.2020 10:55:37

**Note:**

Only the worst case plots for Radiated Spurious Emissions.



**2. 26Tone**

-UNII 1 ~ UNII 2A. 26 Tone RU 8

-UNII 2C ~ UNII 3. 26 Tone RU 0

Band : UNII 1  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5180 MHz  
 Channel No. 36 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	59.10	5.09	V	64.19	68.20	4.01	PK
15540	46.91	6.67	V	53.58	73.98	20.40	PK
15540	33.17	6.67	V	39.84	53.98	14.14	AV
10360	60.08	5.09	H	65.17	68.20	3.03	PK
15540	45.88	6.67	H	52.55	73.98	21.43	PK
15540	33.04	6.67	H	39.71	53.98	14.27	AV

Band : UNII 1  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5200 MHz  
 Channel No. 40 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	56.28	4.89	V	61.17	68.20	7.03	PK
15600	49.56	5.88	V	55.44	73.98	18.54	PK
15600	33.31	5.88	V	39.19	53.98	14.79	AV
10400	57.06	4.89	H	61.95	68.20	6.25	PK
15600	49.30	5.88	H	55.18	73.98	18.80	PK
15600	33.02	5.88	H	38.90	53.98	15.08	AV



Band : UNII 1  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5240 MHz  
 Channel No. 48 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	54.39	5.35	V	59.74	68.20	8.46	PK
15720	47.14	5.19	V	52.33	73.98	21.65	PK
15720	33.07	5.19	V	38.26	53.98	15.72	AV
10480	55.97	5.35	H	61.32	68.20	6.88	PK
15720	46.88	5.19	H	52.07	73.98	21.91	PK
15720	32.87	5.19	H	38.06	53.98	15.92	AV

Band : UNII 2A  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5260 MHz  
 Channel No. 52 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	59.58	4.96	V	64.54	68.20	3.66	PK
15780	54.29	5.56	V	59.85	73.98	14.13	PK
15780	33.32	5.56	V	38.88	53.98	15.10	AV
10520	60.22	4.96	H	65.18	68.20	3.02	PK
15780	53.89	5.56	H	59.45	73.98	14.53	PK
15780	32.48	5.56	H	38.04	53.98	15.94	AV



Band : UNII 2A  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5300 MHz  
 Channel No. 60 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	58.36	5.65	V	64.01	73.98	9.97	PK
10600	41.99	5.65	V	47.64	53.98	6.34	AV
15900	54.75	6.27	V	61.02	73.98	12.96	PK
15900	32.95	6.27	V	39.22	53.98	14.76	AV
10600	59.86	5.65	H	65.51	73.98	8.47	PK
10600	42.14	5.65	H	47.79	53.98	6.19	AV
15900	54.14	6.27	H	60.41	73.98	13.57	PK
15900	32.18	6.27	H	38.45	53.98	15.53	AV

Band : UNII 2A  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5320 MHz  
 Channel No. 64 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	58.66	5.96	V	64.62	73.98	9.36	PK
10640	42.07	5.96	V	48.03	53.98	5.95	AV
15960	55.55	5.64	V	61.19	73.98	12.79	PK
15960	33.42	5.64	V	39.06	53.98	14.92	AV
10640	59.70	5.96	H	65.66	73.98	8.32	PK
10640	42.29	5.96	H	48.25	53.98	5.73	AV
15960	54.39	5.64	H	60.03	73.98	13.95	PK
15960	32.25	5.64	H	37.89	53.98	16.09	AV



Band : UNII 2C  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5500 MHz  
 Channel No. 100 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	58.65	5.30	V	63.95	73.98	10.03	PK
11000	42.11	5.30	V	47.41	53.98	6.57	AV
16500	50.40	7.79	V	58.19	68.20	10.01	PK
11000	59.67	5.30	H	64.97	73.98	9.01	PK
11000	42.34	5.30	H	47.64	53.98	6.34	AV
16500	49.68	7.79	H	57.47	68.20	10.73	PK

Band : UNII 2C  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5580 MHz  
 Channel No. 116 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	58.69	5.06	V	63.75	73.98	10.23	PK
11160	41.09	5.06	V	46.15	53.98	7.83	AV
16740	50.40	9.19	V	59.59	68.20	8.61	PK
11160	59.77	5.06	H	64.83	73.98	9.15	PK
11160	41.61	5.06	H	46.67	53.98	7.31	AV
16740	49.93	9.19	H	59.12	68.20	9.08	PK



Band : UNII 2C  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5720 MHz  
 Channel No. 144 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	60.66	5.65	V	66.31	73.98	7.67	PK
11440	42.44	5.65	V	48.09	53.98	5.89	AV
17160	47.00	9.75	V	56.75	68.20	11.45	PK
11440	61.25	5.65	H	66.90	73.98	7.08	PK
11440	45.31	5.65	H	50.96	53.98	3.02	AV
17160	46.85	9.75	H	56.60	68.20	11.60	PK

Band : UNII 3  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5745MHz  
 Channel No. 149 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	61.99	5.32	V	67.31	73.98	6.67	PK
11490	44.96	5.32	V	50.28	53.98	3.70	AV
17235	48.70	10.56	V	59.26	68.20	8.94	PK
11490	62.87	5.32	H	68.19	73.98	5.79	PK
11490	45.47	5.32	H	50.79	53.98	3.19	AV
17235	48.64	10.56	H	59.20	68.20	9.00	PK



Band : UNII 3  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5785 MHz  
 Channel No. 157 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	59.69	6.17	V	65.86	73.98	8.12	PK
11570	44.25	6.17	V	50.42	53.98	3.56	AV
17355	50.70	11.10	V	61.80	68.20	6.40	PK
11570	60.55	6.17	H	66.72	73.98	7.26	PK
11570	44.70	6.17	H	50.87	53.98	3.11	AV
17355	49.67	11.10	H	60.77	68.20	7.43	PK

Band : UNII 3  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5825 MHz  
 Channel No. 165 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	59.17	5.31	V	64.48	73.98	9.50	PK
11650	44.85	5.31	V	50.16	53.98	3.82	AV
17475	53.54	11.24	V	64.78	68.20	3.42	PK
11650	60.18	5.31	H	65.49	73.98	8.49	PK
11650	45.63	5.31	H	50.94	53.98	3.04	AV
17475	52.66	11.24	H	63.90	68.20	4.30	PK

**Note:**

All Modes of operation were investigated and the worst case configuration results are reported.

In order to simplify the report, We only have attached RSE result of worst case.

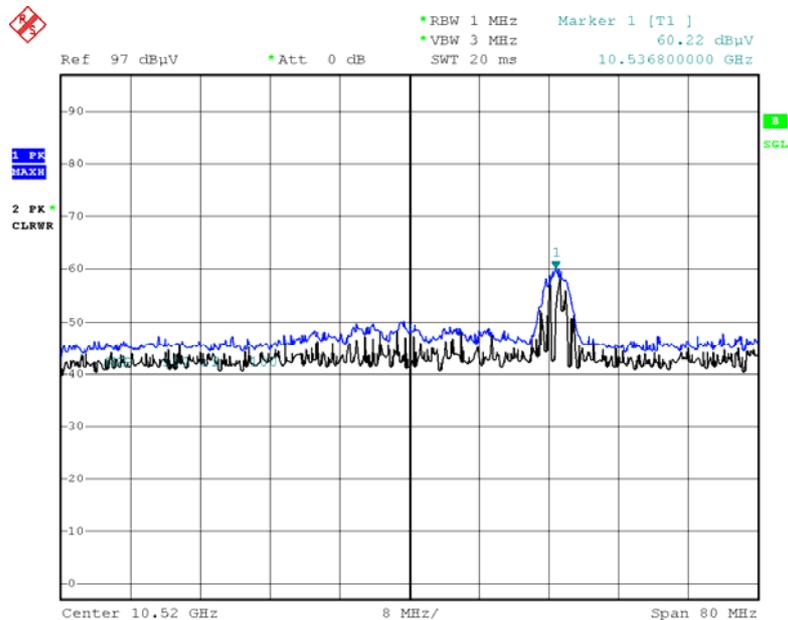
[Worst Case]

- UNII 1, 2A,2C, 3 : HE20
- HE20 : Worst case(Highest PSD) : UNII 1 ~ UNII 2A. 26 T (RU 8), UNII 2C ~ UNII 3. 26 T (RU 0)



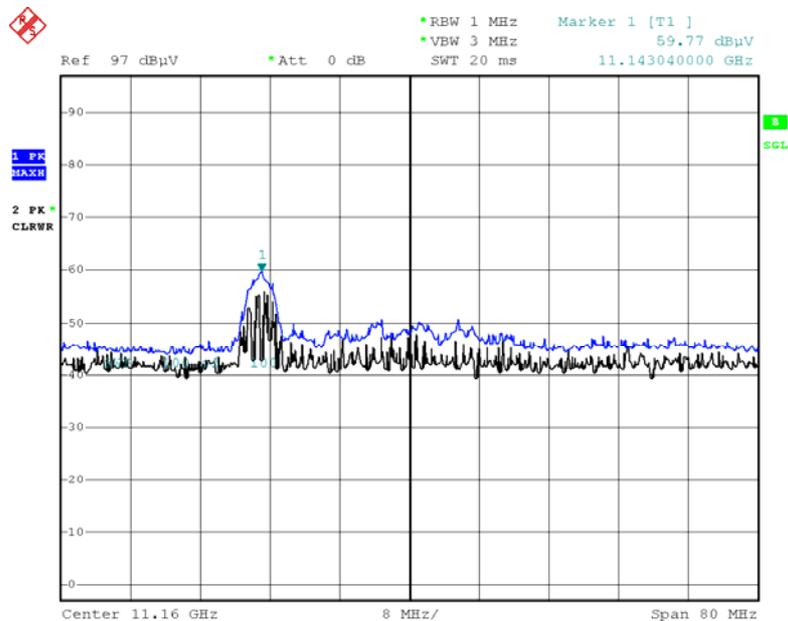
Test Plots

Peak Reading (802.11ax(HE20), Ch.52 2nd Harmonic, Z-H) - 26 T (RU 8)



Date: 20.AUG.2020 12:05:57

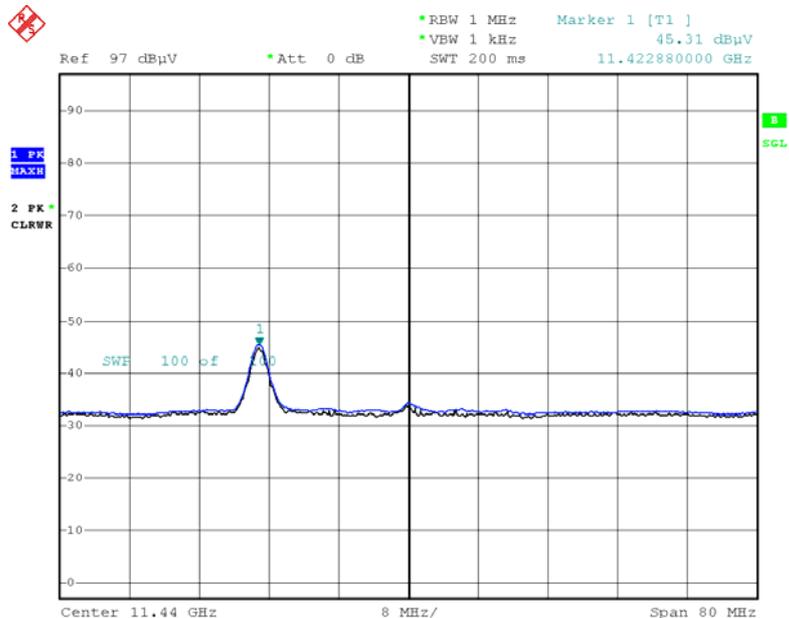
Peak Reading (802.11ax(HE20), Ch.116 2nd Harmonic, H) - 26 T (RU 0)



Date: 20.AUG.2020 13:07:04



Average Reading (802.11ax(HE20), Ch.144 2nd Harmonic, H) - 26 T (RU 0)



Date: 20.AUG.2020 15:07:51

**Note:**

Only the worst case plots for Radiated Spurious Emissions.



### 10.8.2 FFC Cable

#### 26 T\_RU 0

Band : UNII 2C  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5720 MHz  
 Channel No. 144 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	59.25	5.65	V	64.90	73.98	9.08	PK
11440	42.41	5.65	V	48.06	53.98	5.92	AV
17160	47.38	9.75	V	57.13	68.20	11.07	PK
11440	61.05	5.65	H	66.70	73.98	7.28	PK
11440	43.91	5.65	H	49.56	53.98	4.42	AV
17160	46.51	9.75	H	56.26	68.20	11.94	PK

Band : UNII 3  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5745MHz  
 Channel No. 149 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	58.48	5.32	V	63.80	73.98	10.18	PK
11490	41.67	5.32	V	46.99	53.98	6.99	AV
17235	46.37	10.56	V	56.93	68.20	11.27	PK
11490	60.09	5.32	H	65.41	73.98	8.57	PK
11490	42.97	5.32	H	48.29	53.98	5.69	AV
17235	47.19	10.56	H	57.75	68.20	10.45	PK



Band : UNII 3  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5785 MHz  
 Channel No. 157 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	58.64	6.17	V	64.81	73.98	9.17	PK
11570	41.13	6.17	V	47.30	53.98	6.68	AV
17355	47.45	11.10	V	58.55	68.20	9.65	PK
11570	59.49	6.17	H	65.66	73.98	8.32	PK
11570	41.65	6.17	H	47.82	53.98	6.16	AV
17355	47.90	11.10	H	59.00	68.20	9.20	PK

Band : UNII 3  
 Operation Mode: 802.11ax(HE20)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5825 MHz  
 Channel No. 165 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	57.64	5.31	V	62.95	73.98	11.03	PK
11650	41.87	5.31	V	47.18	53.98	6.80	AV
17475	52.00	11.24	V	63.24	68.20	4.96	PK
11650	58.37	5.31	H	63.68	73.98	10.30	PK
11650	42.41	5.31	H	47.72	53.98	6.26	AV
17475	53.32	11.24	H	64.56	68.20	3.64	PK



**26 T\_RU 0**

Band : UNII 2C  
 Operation Mode: 802.11ax(HE40)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5710 MHz  
 Channel No. 142 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11420	59.98	5.82	V	65.80	73.98	8.18	PK
11420	43.61	5.82	V	49.43	53.98	4.55	AV
17130	49.18	9.40	V	58.58	68.20	9.62	PK
11420	55.93	5.82	H	61.75	73.98	12.23	PK
11420	39.39	5.82	H	45.21	53.98	8.77	AV
17130	49.03	9.40	H	58.43	68.20	9.77	PK

**26 T\_RU 9**

Band : UNII 3  
 Operation Mode: 802.11ax(HE40)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5755MHz  
 Channel No. 151 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11510	57.03	5.13	V	62.16	73.98	11.82	PK
11510	40.64	5.13	V	45.77	53.98	8.21	AV
17265	46.74	10.43	V	57.17	68.20	11.03	PK
11510	57.87	5.13	H	63.00	73.98	10.98	PK
11510	41.85	5.13	H	46.98	53.98	7.00	AV
17265	49.11	10.43	H	59.54	68.20	8.66	PK



Band : UNII 3  
 Operation Mode: 802.11ax(HE40)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5795 MHz  
 Channel No. 159 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11590	57.66	5.46	V	63.12	73.98	10.86	PK
11590	40.23	5.46	V	45.69	53.98	8.29	AV
17385	47.27	11.19	V	58.46	68.20	9.74	PK
11590	58.27	5.46	H	63.73	73.98	10.25	PK
11590	41.40	5.46	H	46.86	53.98	7.12	AV
17385	46.92	11.19	H	58.11	68.20	10.09	PK



**26 T\_RU 0**

Band : UNII 2C  
 Operation Mode: 802.11ax(HE80)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5690 MHz  
 Channel No. 138 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11380	61.03	5.44	V	66.47	73.98	7.51	PK
11380	44.96	5.44	V	50.40	53.98	3.58	AV
17070	48.72	9.94	V	58.66	68.20	9.54	PK
11380	57.59	5.44	H	63.03	73.98	10.95	PK
11380	41.63	5.44	H	47.07	53.98	6.91	AV
17070	49.57	9.94	H	59.51	68.20	8.69	PK

**26 T\_RU 36**

Band : UNII 3  
 Operation Mode: 802.11ax(HE80)  
 Transfer MCS Index: MCS0  
 Operating Frequency 5775MHz  
 Channel No. 155 Ch

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11550	57.61	5.85	V	63.46	73.98	10.52	PK
11550	42.98	5.85	V	48.83	53.98	5.15	AV
17325	53.34	11.27	V	64.61	68.20	3.59	PK
11550	59.35	5.85	H	65.20	73.98	8.78	PK
11550	44.79	5.85	H	50.64	53.98	3.34	AV
17325	53.39	11.27	H	64.66	68.20	3.54	PK

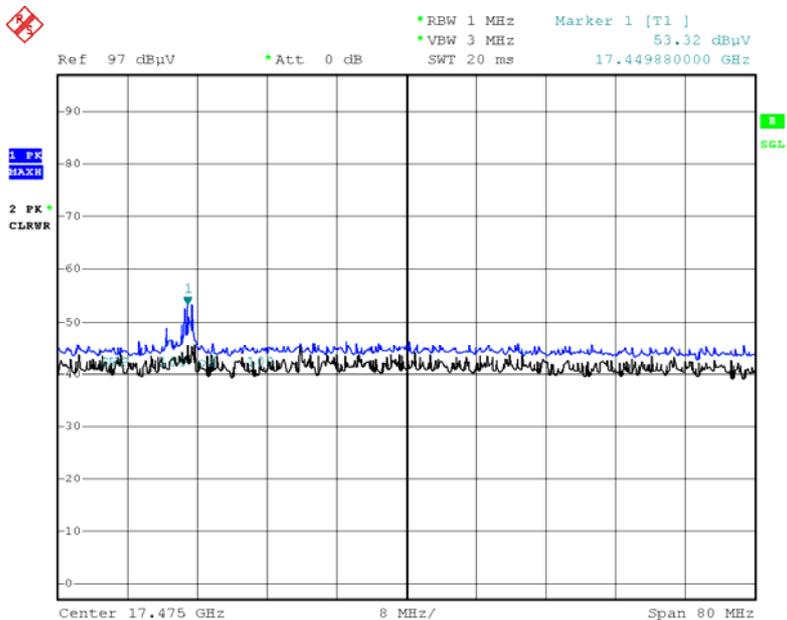
**Note:**

1. The worst case of the basic cable only was tested.



Test Plots

Peak Reading (802.11ax(HE20), Ch.165 3rd Harmonic, Y-H) - 26 T (RU 0)



Date: 2.SEP.2020 04:13:16

### 10.8.3 DBS Mode

#### Test case1

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	58.81	4.96	V	63.77	68.20	4.43	PK
15780	55.20	5.56	V	60.76	73.98	13.22	PK
15780	33.72	5.56	V	39.28	53.98	14.70	AV
10520	55.54	4.96	H	60.50	68.20	7.70	PK
15780	54.01	5.56	H	59.57	73.98	14.41	PK
15780	33.55	5.56	H	39.11	53.98	14.87	AV

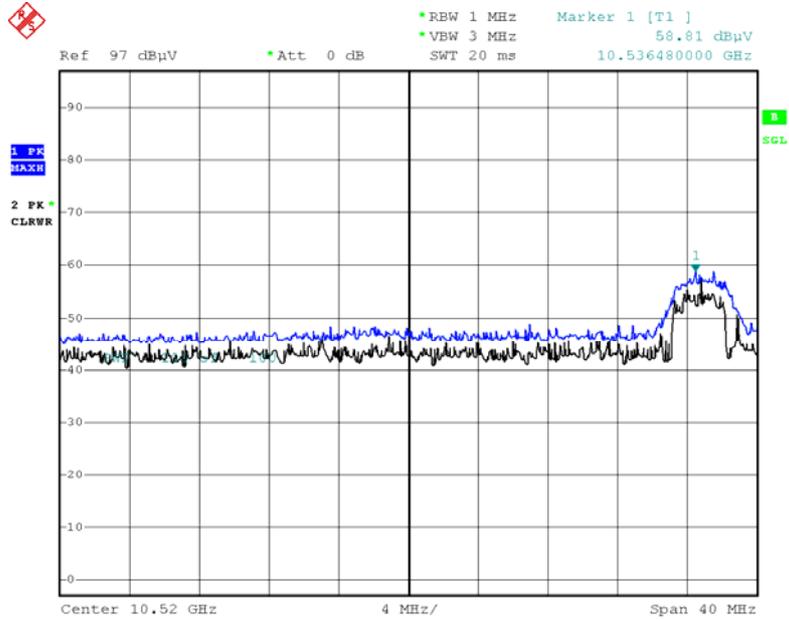
#### Test case2

Frequency [MHz]	Reading [dBuV]	AN.+CL-AMP G [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	58.42	4.96	V	63.38	68.20	4.82	PK
15780	55.22	5.56	V	60.78	73.98	13.20	PK
15780	34.08	5.56	V	39.64	53.98	14.34	AV
10520	59.55	4.96	H	64.51	68.20	3.69	PK
15780	54.29	5.56	H	59.85	73.98	14.13	PK
15780	32.87	5.56	H	38.43	53.98	15.55	AV



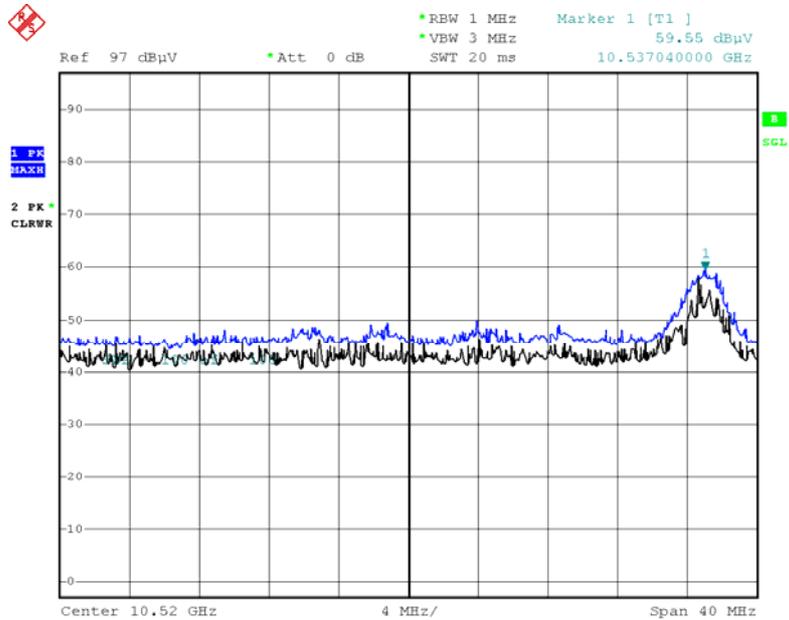
Test Plots

Peak Reading (802.11ax(HE20), Ch.52 2nd Harmonic, Z-V)\_ Test case1



Date: 31.AUG.2020 03:31:32

Peak Reading (802.11ax(HE20), Ch.52 2nd Harmonic, Z-H)\_ Test case2



Date: 31.AUG.2020 04:33:47

## 10.9 RADIATED RESTRICTED BAND EDGE

### 10.9.1 Basic Cable

#### 10.9.1.1 802.11ax(HE20)

##### 1. 242 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5180 MHz
Channel No.	36 Ch
RU offset.	61

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	48.85	12.48	H	61.33	73.98	12.65	PK
5150	34.77	12.48	H	47.25	53.98	6.73	AV
5150	48.16	12.48	V	60.64	73.98	13.34	PK
5150	34.59	12.48	V	47.07	53.98	6.91	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5320 MHz
Channel No.	64 Ch
RU offset.	61

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	46.12	12.50	H	58.62	73.98	15.36	PK
5350	33.27	12.50	H	45.77	53.98	8.21	AV
5350	46.01	12.50	V	58.51	73.98	15.47	PK
5350	33.10	12.50	V	45.60	53.98	8.38	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5500 MHz
Channel No.	100 Ch
RU offset.	61

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.25	12.89	H	58.14	73.98	15.84	PK
5460	32.31	12.89	H	45.20	53.98	8.78	AV
5470	46.00	13.00	H	59.00	68.20	9.20	PK
5460	45.21	12.89	V	58.10	73.98	15.88	PK
5460	31.58	12.89	V	44.47	53.98	9.51	AV
5470	45.37	13.00	V	58.37	68.20	9.83	PK



## 2. 26 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5180 MHz
Channel No.	36 Ch
RU offset.	0

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	47.54	12.48	H	60.02	73.98	13.96	PK
5150	34.25	12.48	H	46.73	53.98	7.25	AV
5150	46.84	12.48	V	59.32	73.98	14.66	PK
5150	33.36	12.48	V	45.84	53.98	8.14	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5320 MHz
Channel No.	64 Ch
RU offset.	8

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	46.01	12.50	H	58.51	73.98	15.47	PK
5350	32.78	12.50	H	45.28	53.98	8.70	AV
5350	45.27	12.50	V	57.77	73.98	16.21	PK
5350	31.39	12.50	V	43.89	53.98	10.09	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5500 MHz
Channel No.	100 Ch
RU offset.	0

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	47.33	12.89	H	60.22	73.98	13.76	PK
5460	34.03	12.89	H	46.92	53.98	7.06	AV
5470	47.04	13.00	H	60.04	68.20	8.16	PK
5460	46.87	12.89	V	59.76	73.98	14.22	PK
5460	33.45	12.89	V	46.34	53.98	7.64	AV
5470	46.98	13.00	V	59.98	68.20	8.22	PK



### 3. 52 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5180 MHz
Channel No.	36 Ch
RU offset.	37

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	45.36	12.48	H	57.84	73.98	16.14	PK
5150	32.69	12.48	H	45.17	53.98	8.81	AV
5150	44.78	12.48	V	57.26	73.98	16.72	PK
5150	32.15	12.48	V	44.63	53.98	9.35	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5320 MHz
Channel No.	64 Ch
RU offset.	40

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	44.95	12.50	H	57.45	73.98	16.53	PK
5350	32.35	12.50	H	44.85	53.98	9.13	AV
5350	44.14	12.50	V	56.64	73.98	17.34	PK
5350	31.69	12.50	V	44.19	53.98	9.79	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5500 MHz
Channel No.	100 Ch
RU offset.	37

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	44.88	12.89	H	57.77	73.98	16.21	PK
5460	31.71	12.89	H	44.60	53.98	9.38	AV
5470	44.96	13.00	H	57.96	68.20	10.24	PK
5460	43.99	12.89	V	56.88	73.98	17.10	PK
5460	31.07	12.89	V	43.96	53.98	10.02	AV
5470	44.24	13.00	V	57.24	68.20	10.96	PK



#### 4. 106 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5180 MHz
Channel No.	36 Ch
RU offset.	53

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	45.38	12.48	H	57.86	73.98	16.12	PK
5150	32.39	12.48	H	44.87	53.98	9.11	AV
5150	45.31	12.48	V	57.79	73.98	16.19	PK
5150	31.97	12.48	V	44.45	53.98	9.53	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5320 MHz
Channel No.	64 Ch
RU offset.	54

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	45.15	12.50	H	57.65	73.98	16.33	PK
5350	32.42	12.50	H	44.92	53.98	9.06	AV
5350	45.03	12.50	V	57.53	73.98	16.45	PK
5350	31.13	12.50	V	43.63	53.98	10.35	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5500 MHz
Channel No.	100 Ch
RU offset.	53

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	44.87	12.89	H	57.76	73.98	16.22	PK
5460	31.98	12.89	H	44.87	53.98	9.11	AV
5470	44.88	13.00	H	57.88	68.20	10.32	PK
5460	44.33	12.89	V	57.22	73.98	16.76	PK
5460	31.07	12.89	V	43.96	53.98	10.02	AV
5470	44.72	13.00	V	57.72	68.20	10.48	PK



10.9.1.2 802.11ax(HE40)

1. 484 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5190 MHz
Channel No.	38 Ch
RU offset.	65

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	50.70	12.48	H	63.18	73.98	10.80	PK
5150	36.45	12.48	H	48.93	53.98	5.05	AV
5150	49.42	12.48	V	61.90	73.98	12.08	PK
5150	35.57	12.48	V	48.05	53.98	5.93	AV

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	65

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	49.08	12.50	H	61.58	73.98	12.40	PK
5350	34.60	12.50	H	47.10	53.98	6.88	AV
5350	48.13	12.50	V	60.63	73.98	13.35	PK
5350	33.40	12.50	V	45.90	53.98	8.08	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5510 MHz
Channel No.	102 Ch
RU offset.	65

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.50	12.89	H	58.39	73.98	15.59	PK
5460	32.74	12.89	H	45.63	53.98	8.35	AV
5470	48.13	13.00	H	61.13	68.20	7.07	PK
5460	44.94	12.89	V	57.83	73.98	16.15	PK
5460	31.28	12.89	V	44.17	53.98	9.81	AV
5470	47.30	13.00	V	60.30	68.20	7.90	PK



## 2. 26 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5190 MHz
Channel No.	38 Ch
RU offset.	0

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	48.72	12.48	H	61.20	73.98	12.78	PK
5150	35.87	12.48	H	48.35	53.98	5.63	AV
5150	47.94	12.48	V	60.42	73.98	13.56	PK
5150	34.27	12.48	V	46.75	53.98	7.23	AV

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	17

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	57.99	12.50	H	70.49	73.98	3.49	PK
5350	36.37	12.50	H	48.87	53.98	5.11	AV
5350	57.10	12.50	V	69.60	73.98	4.38	PK
5350	36.14	12.50	V	48.64	53.98	5.34	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5510 MHz
Channel No.	102 Ch
RU offset.	0

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.30	12.89	H	58.19	73.98	15.79	PK
5460	31.31	12.89	H	44.20	53.98	9.78	AV
5470	43.92	13.00	H	56.92	68.20	11.28	PK
5460	44.27	12.89	V	57.16	73.98	16.82	PK
5460	31.25	12.89	V	44.14	53.98	9.84	AV
5470	43.17	13.00	V	56.17	68.20	12.03	PK



### 3. 52 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5190 MHz
Channel No.	38 Ch
RU offset.	37

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	48.13	12.48	H	60.61	73.98	13.37	PK
5150	35.97	12.48	H	48.45	53.98	5.53	AV
5150	48.03	12.48	V	60.51	73.98	13.47	PK
5150	35.28	12.48	V	47.76	53.98	6.22	AV

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	44

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	54.43	12.50	H	66.93	73.98	7.05	PK
5350	38.34	12.50	H	50.84	53.98	3.14	AV
5350	53.98	12.50	V	66.48	73.98	7.50	PK
5350	37.22	12.50	V	49.72	53.98	4.26	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5510 MHz
Channel No.	102 Ch
RU offset.	37

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	52.35	12.89	H	65.24	73.98	8.74	PK
5460	37.37	12.89	H	50.26	53.98	3.72	AV
5470	51.17	13.00	H	64.17	68.20	4.03	PK
5460	51.97	12.89	V	64.86	73.98	9.12	PK
5460	37.01	12.89	V	49.90	53.98	4.08	AV
5470	50.96	13.00	V	63.96	68.20	4.24	PK



#### 4. 106 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5190 MHz
Channel No.	38 Ch
RU offset.	53

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	45.84	12.48	H	58.32	73.98	15.66	PK
5150	32.41	12.48	H	44.89	53.98	9.09	AV
5150	45.19	12.48	V	57.67	73.98	16.31	PK
5150	31.72	12.48	V	44.20	53.98	9.78	AV

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	56

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	52.30	12.50	H	64.80	73.98	9.18	PK
5350	36.62	12.50	H	49.12	53.98	4.86	AV
5350	51.60	12.50	V	64.10	73.98	9.88	PK
5350	35.83	12.50	V	48.33	53.98	5.65	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5510 MHz
Channel No.	102 Ch
RU offset.	53

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	48.32	12.89	H	61.21	73.98	12.77	PK
5460	33.37	12.89	H	46.26	53.98	7.72	AV
5470	51.42	13.00	H	64.42	68.20	3.78	PK
5460	47.93	12.89	V	60.82	73.98	13.16	PK
5460	32.98	12.89	V	45.87	53.98	8.11	AV
5470	51.25	13.00	V	64.25	68.20	3.95	PK



### 5. 242 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5190 MHz
Channel No.	38 Ch
RU offset.	61

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	45.98	12.48	H	58.46	73.98	15.52	PK
5150	32.43	12.48	H	44.91	53.98	9.07	AV
5150	45.26	12.48	V	57.74	73.98	16.24	PK
5150	31.87	12.48	V	44.35	53.98	9.63	AV

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	62

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	46.28	12.50	H	58.78	73.98	15.20	PK
5350	33.92	12.50	H	46.42	53.98	7.56	AV
5350	46.02	12.50	V	58.52	73.98	15.46	PK
5350	32.89	12.50	V	45.39	53.98	8.59	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5510 MHz
Channel No.	102 Ch
RU offset.	61

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	45.43	12.89	H	58.32	73.98	15.66	PK
5460	32.43	12.89	H	45.32	53.98	8.66	AV
5470	47.72	13.00	H	60.72	68.20	7.48	PK
5460	44.93	12.89	V	57.82	73.98	16.16	PK
5460	31.76	12.89	V	44.65	53.98	9.33	AV
5470	47.28	13.00	V	60.28	68.20	7.92	PK



### 10.9.1.3 802.11ax(HE80)

#### 1. 996 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5210 MHz
Channel No.	42 Ch
RU offset.	97

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	51.11	12.48	H	63.59	73.98	10.39	PK
5150	38.04	12.48	H	50.52	53.98	3.46	AV
5150	49.55	12.48	V	62.03	73.98	11.95	PK
5150	37.21	12.48	V	49.69	53.98	4.29	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5290 MHz
Channel No.	58 Ch
RU offset.	97

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	50.09	12.50	H	62.59	73.98	11.39	PK
5350	37.55	12.50	H	50.05	53.98	3.93	AV
5350	49.25	12.50	V	61.75	73.98	12.23	PK
5350	36.89	12.50	V	49.39	53.98	4.59	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	97

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	50.38	12.89	H	63.27	73.98	10.71	PK
5460	35.64	12.89	H	48.53	53.98	5.45	AV
5470	50.25	13.00	H	63.25	68.20	4.95	PK
5460	49.31	12.89	V	62.20	73.98	11.78	PK
5460	34.44	12.89	V	47.33	53.98	6.65	AV
5470	50.01	13.00	V	63.01	68.20	5.19	PK



2. 26 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5210 MHz
Channel No.	42 Ch
RU offset.	0

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	50.08	12.48	H	62.56	73.98	11.42	PK
5150	33.40	12.48	H	45.88	53.98	8.10	AV
5150	49.67	12.48	V	62.15	73.98	11.83	PK
5150	32.87	12.48	V	45.35	53.98	8.63	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5290 MHz
Channel No.	58 Ch
RU offset.	36

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	55.11	12.50	H	67.61	73.98	6.37	PK
5350	35.94	12.50	H	48.44	53.98	5.54	AV
5350	54.21	12.50	V	66.71	73.98	7.27	PK
5350	34.48	12.50	V	46.98	53.98	7.00	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	0

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	57.46	12.89	H	70.35	73.98	3.63	PK
5460	36.12	12.89	H	49.01	53.98	4.97	AV
5470	44.84	13.00	H	57.84	68.20	10.36	PK
5460	57.21	12.89	V	70.10	73.98	3.88	PK
5460	35.86	12.89	V	48.75	53.98	5.23	AV
5470	43.95	13.00	V	56.95	68.20	11.25	PK



### 3. 52 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5210 MHz
Channel No.	42 Ch
RU offset.	37

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	49.80	12.48	H	62.28	73.98	11.70	PK
5150	35.12	12.48	H	47.60	53.98	6.38	AV
5150	48.99	12.48	V	61.47	73.98	12.51	PK
5150	34.28	12.48	V	46.76	53.98	7.22	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5290 MHz
Channel No.	58 Ch
RU offset.	52

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	55.80	12.50	H	68.30	73.98	5.68	PK
5350	38.44	12.50	H	50.94	53.98	3.04	AV
5350	54.76	12.50	V	67.26	73.98	6.72	PK
5350	37.56	12.50	V	50.06	53.98	3.92	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	37

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	53.38	12.89	H	66.27	73.98	7.71	PK
5460	37.49	12.89	H	50.38	53.98	3.60	AV
5470	48.45	13.00	H	61.45	68.20	6.75	PK
5460	52.88	12.89	V	65.77	73.98	8.21	PK
5460	36.21	12.89	V	49.10	53.98	4.88	AV
5470	47.96	13.00	V	60.96	68.20	7.24	PK



#### 4. 106 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5210 MHz
Channel No.	42 Ch
RU offset.	53

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	46.21	12.48	H	58.69	73.98	15.29	PK
5150	32.49	12.48	H	44.97	53.98	9.01	AV
5150	45.90	12.48	V	58.38	73.98	15.60	PK
5150	31.88	12.48	V	44.36	53.98	9.62	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5290 MHz
Channel No.	58 Ch
RU offset.	60

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	52.34	12.50	H	64.84	73.98	9.14	PK
5350	36.26	12.50	H	48.76	53.98	5.22	AV
5350	51.18	12.50	V	63.68	73.98	10.30	PK
5350	35.01	12.50	V	47.51	53.98	6.47	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	53

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	50.04	12.89	H	62.93	73.98	11.05	PK
5460	34.84	12.89	H	47.73	53.98	6.25	AV
5470	44.94	13.00	H	57.94	68.20	10.26	PK
5460	49.36	12.89	V	62.25	73.98	11.73	PK
5460	34.21	12.89	V	47.10	53.98	6.88	AV
5470	44.00	13.00	V	57.00	68.20	11.20	PK



### 5. 242 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5210 MHz
Channel No.	42 Ch
RU offset.	61

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	46.02	12.48	H	58.50	73.98	15.48	PK
5150	32.50	12.48	H	44.98	53.98	9.00	AV
5150	45.82	12.48	V	58.30	73.98	15.68	PK
5150	31.32	12.48	V	43.80	53.98	10.18	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5290 MHz
Channel No.	58 Ch
RU offset.	64

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	48.38	12.50	H	60.88	73.98	13.10	PK
5350	34.48	12.50	H	46.98	53.98	7.00	AV
5350	48.07	12.50	V	60.57	73.98	13.41	PK
5350	33.90	12.50	V	46.40	53.98	7.58	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	61

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	47.52	12.89	H	60.41	73.98	13.57	PK
5460	33.78	12.89	H	46.67	53.98	7.31	AV
5470	45.04	13.00	H	58.04	68.20	10.16	PK
5460	47.14	12.89	V	60.03	73.98	13.95	PK
5460	32.87	12.89	V	45.76	53.98	8.22	AV
5470	44.91	13.00	V	57.91	68.20	10.29	PK



6. 484 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5210 MHz
Channel No.	42 Ch
RU offset.	65

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	46.74	12.48	H	59.22	73.98	14.76	PK
5150	34.77	12.48	H	47.25	53.98	6.73	AV
5150	45.82	12.48	V	58.30	73.98	15.68	PK
5150	34.07	12.48	V	46.55	53.98	7.43	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5290 MHz
Channel No.	58 Ch
RU offset.	66

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	48.60	12.50	H	61.10	73.98	12.88	PK
5350	35.03	12.50	H	47.53	53.98	6.45	AV
5350	48.29	12.50	V	60.79	73.98	13.19	PK
5350	34.78	12.50	V	47.28	53.98	6.70	AV



Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	65

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	46.91	12.89	H	59.80	73.98	14.18	PK
5460	33.18	12.89	H	46.07	53.98	7.91	AV
5470	47.04	13.00	H	60.04	68.20	8.16	PK
5460	45.88	12.89	V	58.77	73.98	15.21	PK
5460	32.47	12.89	V	45.36	53.98	8.62	AV
5470	46.71	13.00	V	59.71	68.20	8.49	PK

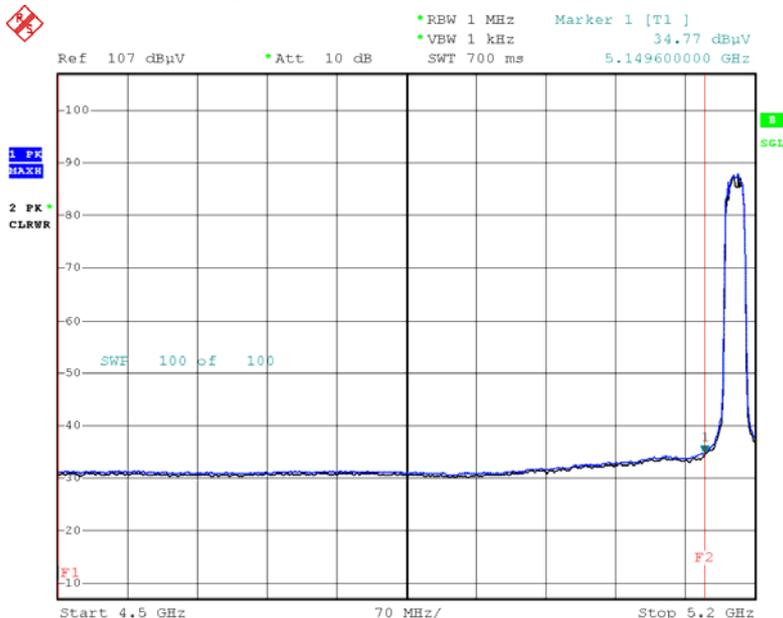
**Note:**

All Modes of operation were investigated and the worst case configuration results are reported.  
In order to simplify the report, We only have attached Bandedge result of worst case.



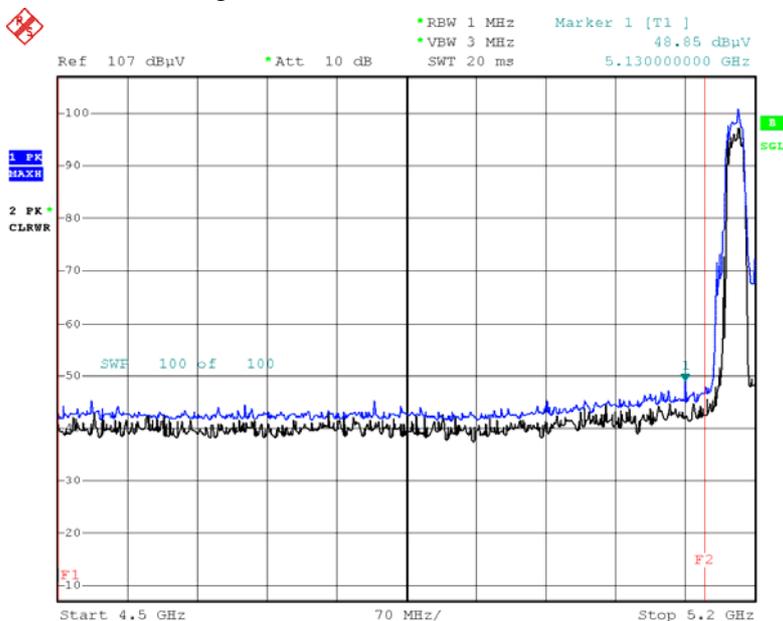
▣ Test Plots(UNII 1, 2A, 2C),

Average Reading (802.11ax(HE20), Ch.36, X-H) - 242 T (RU 61)



Date: 11.AUG.2020 13:45:47

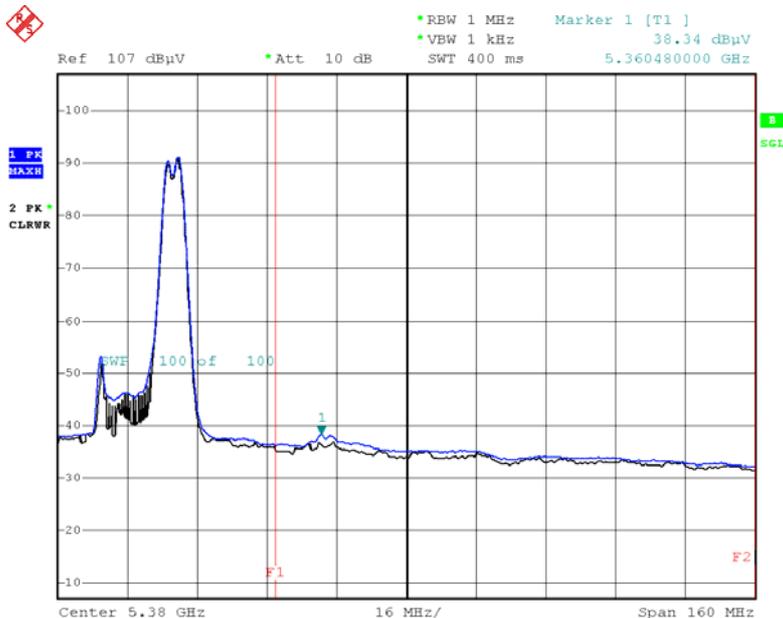
Peak Reading (802.11ax(HE20), Ch.36, X-H) - 242 T (RU 61)



Date: 11.AUG.2020 13:46:03

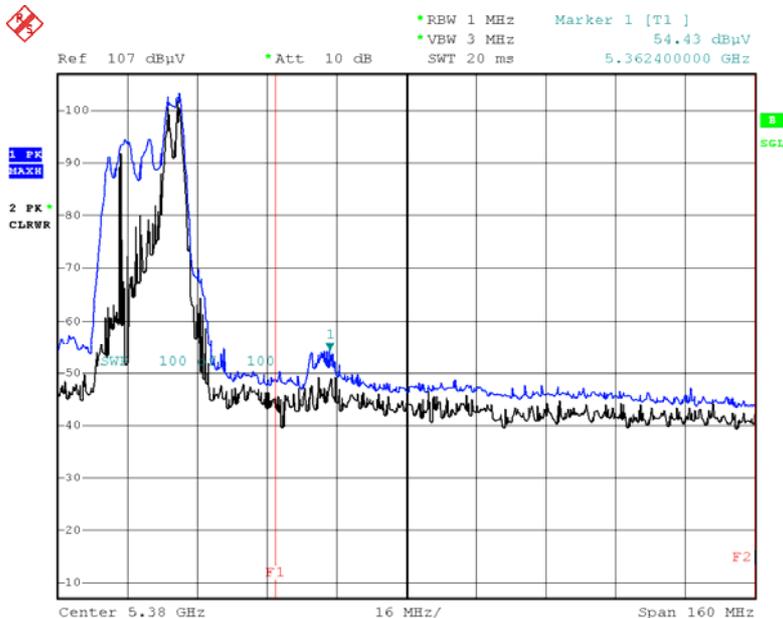


Average Reading (802.11ax(HE40), Ch.62, X-H) - 52 T (RU 44)



Date: 12.AUG.2020 02:38:46

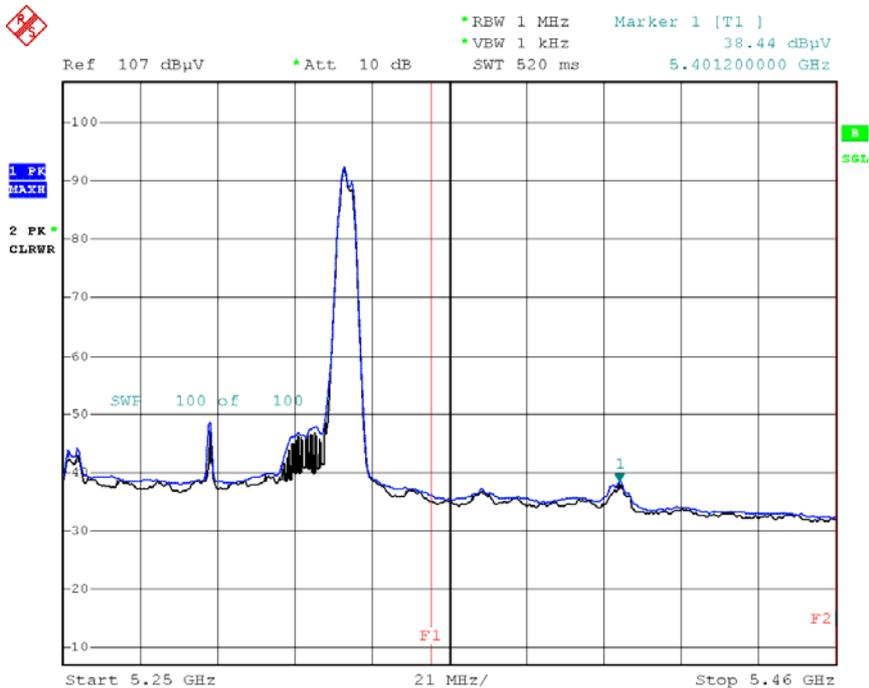
Peak Reading (802.11ax(HE40), Ch.62, X-H) - 52 T (RU 44)



Date: 12.AUG.2020 02:39:04

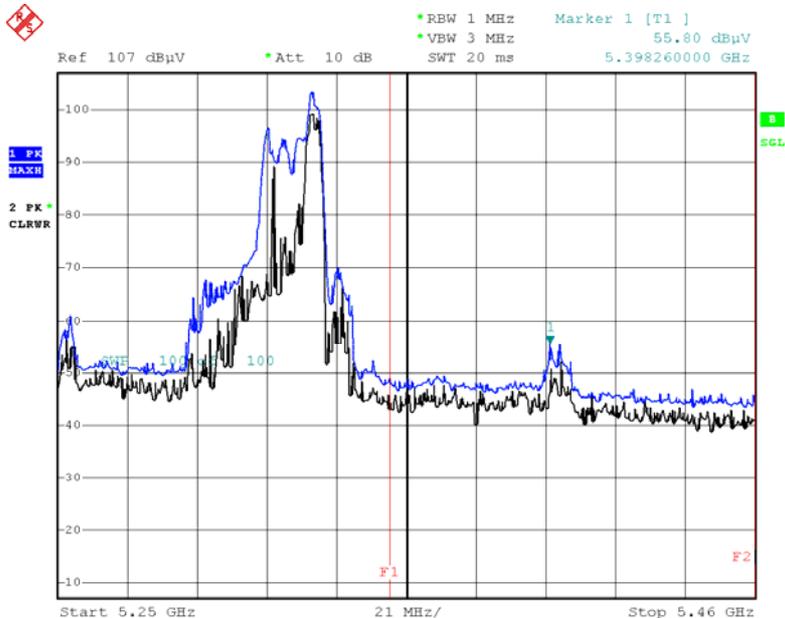


Average Reading (802.11ax(HE80), Ch.58, X-H) - 52 T (RU 52)



Date: 13.AUG.2020 02:25:23

Peak Reading (802.11ax(HE80), Ch.58, X-H) - 52 T (RU 52)



Date: 13.AUG.2020 02:25:36

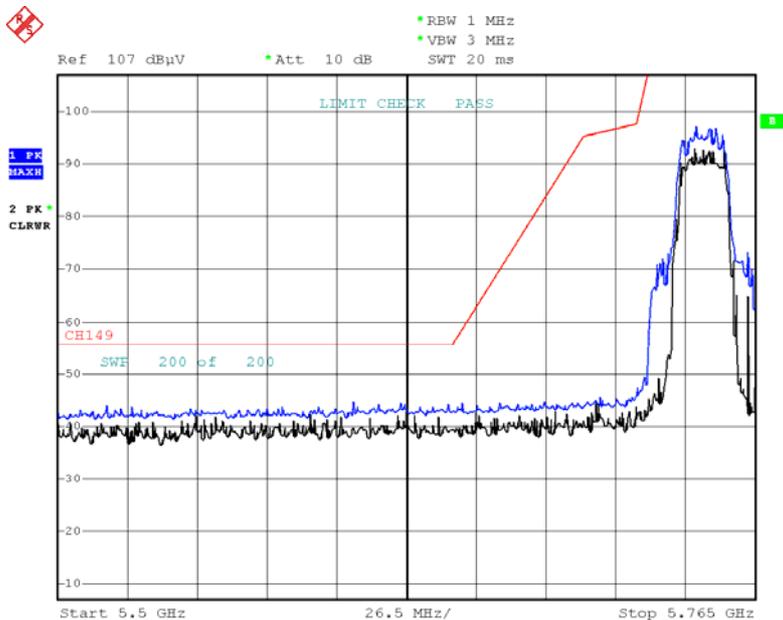
**Note:**

Only the worst case plots for Radiated Restricted Band Edge.



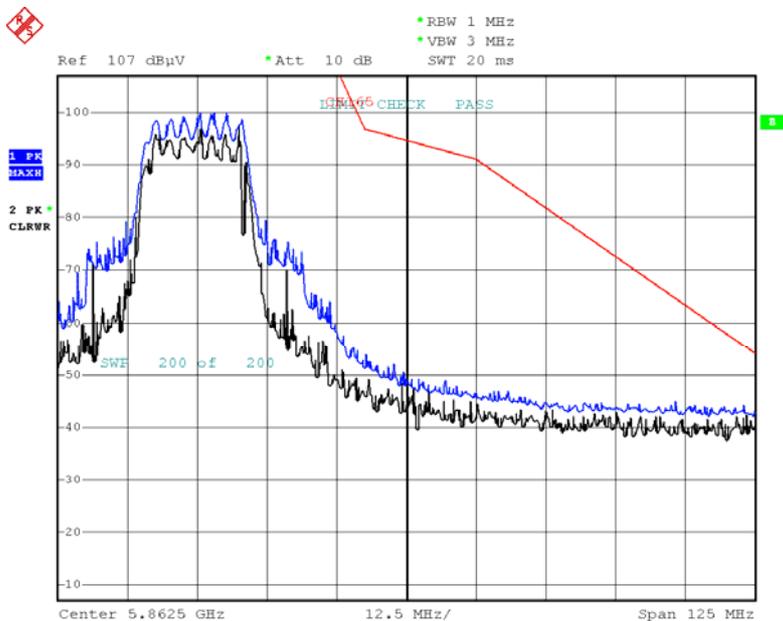
Test Plots(UNII 3)

Peak Reading (802.11ax(HE20), Ch.149, 242 T (RU 61))



Date: 11.AUG.2020 14:21:03

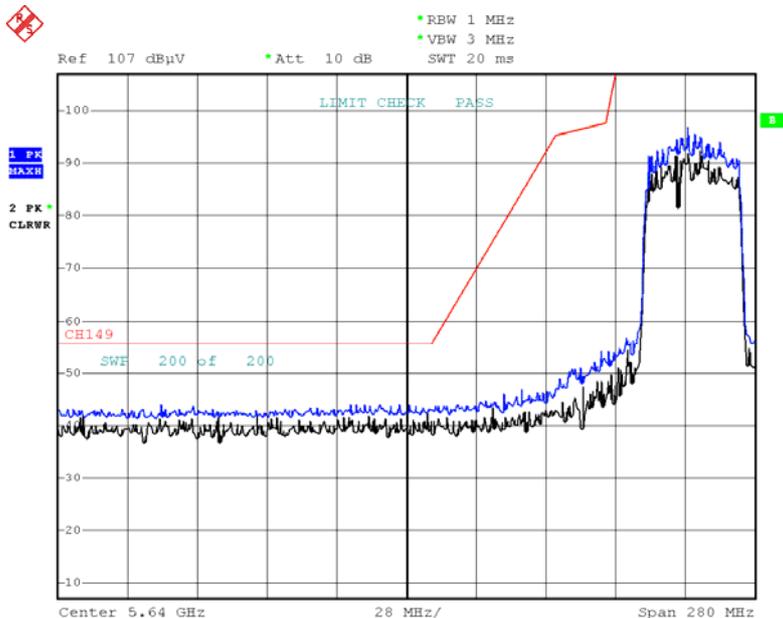
Peak Reading (802.11ax(HE20), Ch.165, 242 T (RU 61))



Date: 11.AUG.2020 14:11:26

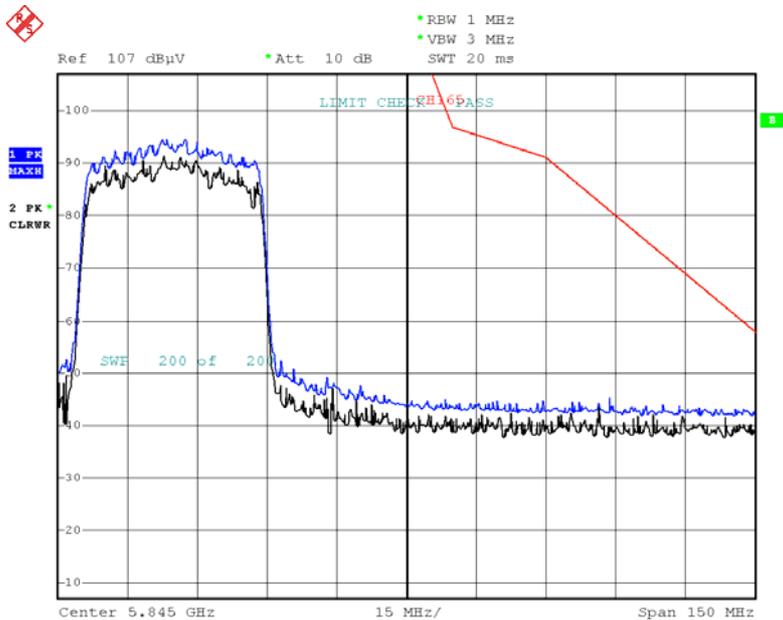


Peak Reading (802.11ax(HE40), Ch.151, 484 T (RU 65))



Date: 12.AUG.2020 05:38:25

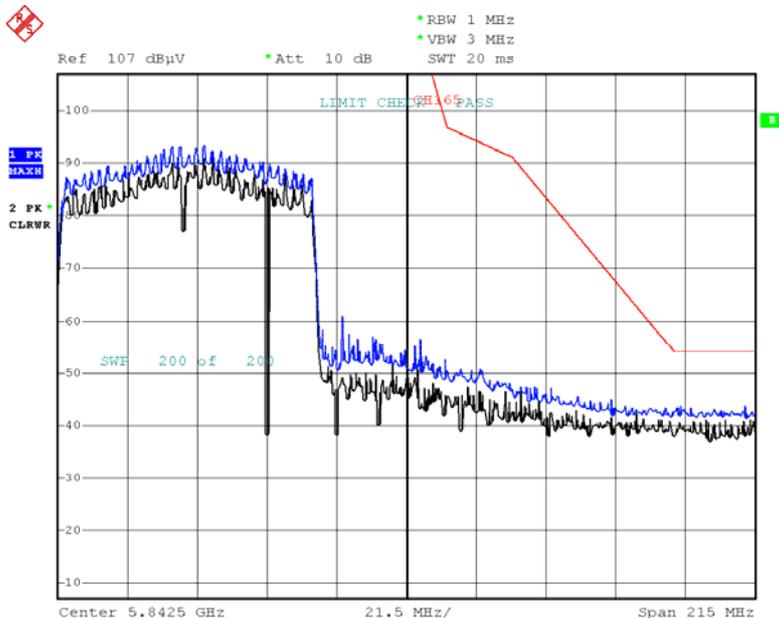
Peak Reading (802.11ax(HE40), Ch.159, 484 T (RU 65))



Date: 12.AUG.2020 05:31:52

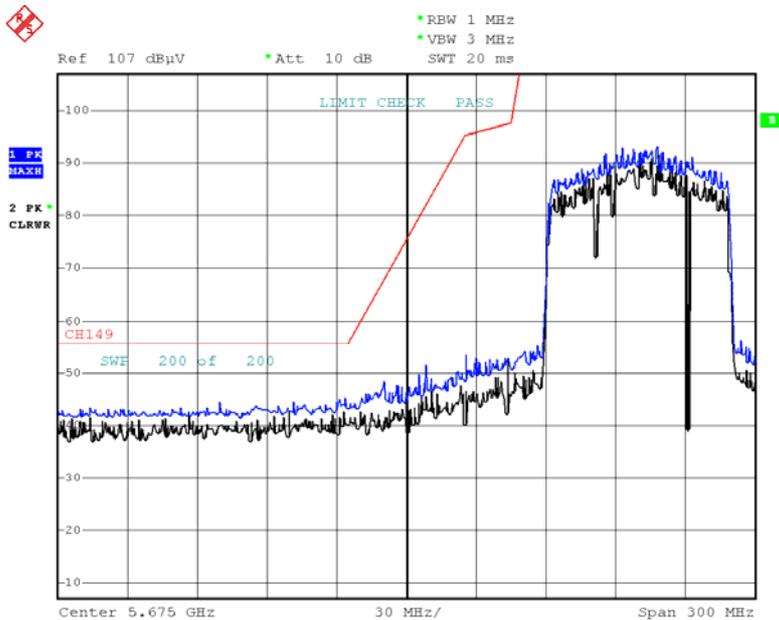


Peak Reading (802.11ax(HE80), Ch.155, 996 T (RU 67))\_1



Date: 12.AUG.2020 07:29:20

Peak Reading (802.11ax(HE80), Ch.155, 996 T (RU 67))\_2



Date: 12.AUG.2020 07:31:03



### 10.9.2 FFC Cable

#### 242 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5180 MHz
Channel No.	36 Ch
RU offset.	61

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	54.42	12.48	H	66.90	73.98	7.08	PK
5150	36.09	12.48	H	48.57	53.98	5.41	AV
5150	54.04	12.48	V	66.52	73.98	7.46	PK
5150	35.20	12.48	V	47.68	53.98	6.30	AV

#### 52 Tone

Band :	UNII 2A
Operation Mode:	802.11ax(HE40)
Transfer Rate:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	44

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	55.45	12.50	H	67.95	73.98	6.03	PK
5350	36.75	12.50	H	49.25	53.98	4.73	AV
5350	54.97	12.50	V	67.47	73.98	6.51	PK
5350	36.14	12.50	V	48.64	53.98	5.34	AV



**52 Tone**

Band :	UNII 2A
Operation Mode:	802.11ax(HE80)
Transfer Rate:	MCS0
Operating Frequency	5290 MHz
Channel No.	58 Ch
RU offset.	52

Frequency [MHz]	Reading dBuV	CL+AF+DF-AG [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	56.06	12.50	H	68.56	73.98	5.42	PK
5350	37.26	12.50	H	49.76	53.98	4.22	AV
5350	54.22	12.50	V	66.72	73.98	7.26	PK
5350	36.41	12.50	V	48.91	53.98	5.07	AV

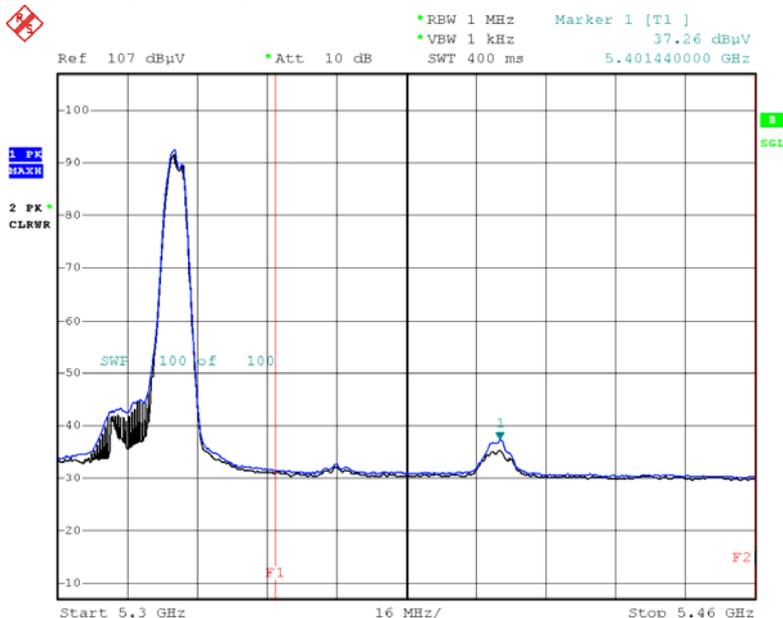
**Note:**

1. The worst case of the basic cable only was tested.



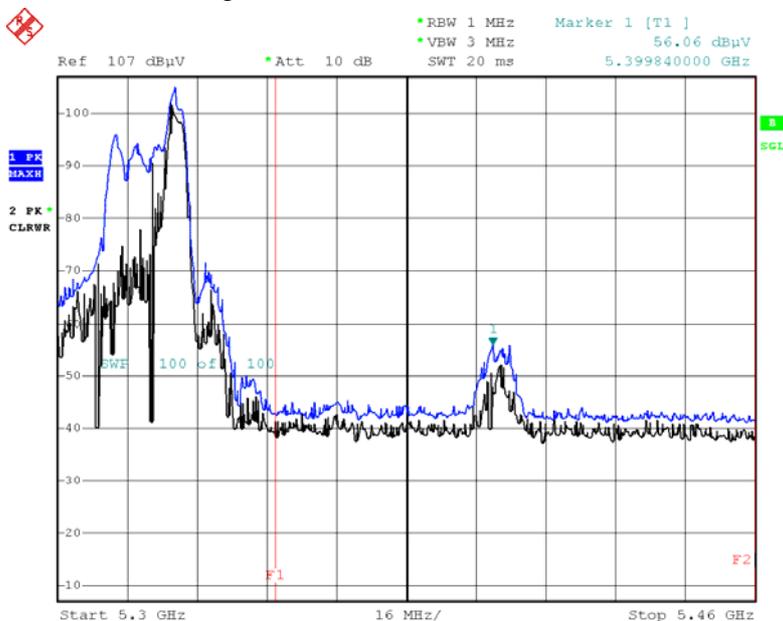
Test Plots

Average Reading (802.11ax(HE80), Ch.58, X-H) - 52 T (RU 52)



Date: 2.SEP.2020 13:13:57

Peak Reading (802.11ax(HE80), Ch.58, X-H) - 52 T (RU 52)



Date: 2.SEP.2020 13:14:13

Note:

Only the worst case plots for Radiated Restricted Band Edge.



## 10.10 RECEIVER SPURIOUS EMISSIONS

### 10.10.1 Basic Cable

#### Frequency Range : Below 1 GHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

**Note:**

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.

#### Frequency Range : Above 1 GHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							



**10.10.2 FFC Cable**

**Frequency Range : Below 1 GHz**

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

**Note:**

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.

**Frequency Range : Above 1 GHz**

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

**Note:**

1. The worst case of the basic cable only was tested.

## 11. LIST OF TEST EQUIPMENT

### Conducted Test

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Rohde & Schwarz	ENV216 / LISN	09/11/2019	Annual	102245
Rohde & Schwarz	ESCI / Test Receiver	06/05/2020	Annual	100033
ESPAC	SU-642 / Temperature Chamber	03/18/2020	Annual	0093008124
Agilent	N9020A / Signal Analyzer	05/11/2020	Annual	MY51110085
Agilent	N9030A / Signal Analyzer	05/06/2020	Annual	MY53310623
Agilent	N1911A / Power Meter	04/07/2020	Annual	MY45101406
Agilent	N1921A / Power Sensor	03/23/2020	Annual	MY55220026
Agilent	87300B / Directional Coupler	11/11/2019	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	05/25/2020	Annual	05001
Hewlett Packard	E3632A / DC Power Supply	06/12/2020	Annual	KR75303960
Weinschel	2-20 / Attenuator(20 dB)	10/08/2019	Annual	BR0592
Rohde & Schwarz	EMC32 / Software	N/A	N/A	N/A
HCT CO., LTD.	FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	N/A	N/A
Rohde & Schwarz	CBT / Bluetooth Tester	05/12/2020	Annual	100422

**Note:**

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.



**Radiated Test**

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Innco system	CO3000 / Controller(Antenna mast)	N/A	N/A	CO3000-4p
Innco system	MA4640/800-XP-EP / Antenna Position Tower	N/A	N/A	N/A
Emco	2090 / Controller	N/A	N/A	060520
Ets	Turn Table	N/A	N/A	N/A
Rohde & Schwarz	Loop Antenna	05/18/2020	Biennial	1513-175
Schwarzbeck	VULB 9160 / Hybrid Antenna	08/19/2020	Biennial	9160-3368
Schwarzbeck	VULB 9168 / Hybrid Antenna	08/02/2019	Biennial	9168-1039
Schwarzbeck	BBHA 9120D / Horn Antenna	11/18/2019	Biennial	9120D-1191
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	11/29/2019	Biennial	BBHA9170541
Rohde & Schwarz	FSP(9 kHz ~ 30 GHz) / Spectrum Analyzer	09/11/2019	Annual	836650/016
Rohde & Schwarz	FSV40-N / Spectrum Analyzer	09/26/2019	Annual	101068-SZ
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	01/21/2020	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	02/10/2020	Annual	1
CERNEX WEINSCHL	CBLU1183540B-01/Broadband Bench Top LNA 56-10 / Attenuator(10 dB)	12/24/2019	Annual	N/A
CERNEX Api tech.	CBL06185030 / Broadband Low Noise Amplifier 18B-03 / Attenuator (3 dB)	12/24/2019	Annual	N/A
Wainwright Instruments	WHKX10-2700-3000-18000-40SS / High Pass Filter	12/24/2019	Annual	N/A
Wainwright Instruments	WHKX8-6090-7000-18000-40SS / High Pass Filter	12/24/2019	Annual	N/A
T&M SYSTEM	COAXIAL ATTENUATOR / Thru	12/24/2019	Annual	N/A
CERNEX	CBL18265035 / Power Amplifier	12/26/2019	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	03/23/2020	Annual	25956
TESCOM	TC-3000C / Bluetooth Tester	03/18/2020	Annual	3000C000276

**Note:**

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
3. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5(Version : 2017).



## 12. ANNEX A\_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-2009-FI001-P