74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA
TEL: +82-31-645-6300 FAX: +82-31-645-6401

FCC UNII REPORT

Certification

Applicant Name:
SAMSUNG Electronics Co., Ltd.

Address:
129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea

Date of Issue:
March 07, 2023

Test Site/Location:
74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA

Report No.: HCT-RF-2302-FC022-R1

FCC ID:	**A3LSMA546JPN**
APPLICANT:	**SAMSUNG Electronics Co., Ltd.**

Model:	SC-53D
Additional Model:	SCG21
EUT Type:	Mobile Phone
Modulation type	OFDMA,OFDM
FCC Classification:	Unlicensed National Information Infrastructure(NII)
FCC Rule Part(s):	Part 15.407

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 Rules under normal use and maintenance.

REVIEWED BY

Report prepared by : Jin Gwan Lee
Engineer of Telecommunication Testing Center

Report approved by : Jong Seok Lee
Manager of Telecommunication Testing Center

This test results were applied only to the test methods required by the standard.

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. (HCT Accreditation No.: KT197)

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2302-FC022	February 27, 2023	- First Approval Report
HCT-RF-2302-FC022-R1	March 07, 2023	- Revised 'RSDB' to 'Simultaneous Transmission'

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1. GENERAL INFORMATION

EUT DESCRIPTION

Model	SC-53D	
Additional Model	SCG21	
EUT Type	Mobile Phone	
Power Supply	DC 3.85 V	
Modulation Type	OFDMA,OFDM	
Frequency Range (MHz)	U-NII-1	20 MHz BW : 5180 - 5240 40 MHz BW : 5190 - 5230 80 MHz BW : 5210
	U-NII-2A	20 MHz BW : 5260 - 5320 40 MHz BW : 5270 - 5310 80 MHz BW : 5290
	U-NII-2C	20 MHz BW : 5500 - 5720 40 MHz BW : 5510 - 5710 80 MHz BW : 5530 – 5690
	U-NII-3	20 MHz BW : 5745 - 5825 40 MHz BW : 5755 - 5795 80 MHz BW : 5775
Straddle channel	Supported	
TDWR Band	Supported	
Dynamic Frequency Selection	Slave without radar detection	
Date(s) of Tests	February 01, 2023 ~ February 27, 2023	
Serial number	Radiated: R3CTC0EE5DJ Conducted: R3CTC0EE5PR	

ANTENNA CONFIGURATIONS

1. Antenna configuration

Configurations	SISO		MIMO	
	Ant.1	Ant.2	CDD	SDM
802.11ax	X	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

(5) SISO test was performed for the MIMO test result.

2.This device supports simultaneous transmission operation, which allows for two channels to operate independent of one another in the 2.4 GHz and 5 GHz bands simultaneously on each antenna.

Simultaneous Transmission Scenario	5 GHz WiFi Ant.1	5 GHz WiFi Ant.2	Bluetooth Ant.1
5 GHz WiFi Ant.2 + Bluetooth Ant.1		on	on
5 GHz WiFi MIMO + Bluetooth Ant.1	on	on	on

3. Directional Gain Calculation

According to KDB 662911 D01 Multiple Transmitter Output v02r01 F) 2) e) (iii), f) ii)

$$\text{Directional gain(SDM)} = G_{max} + 10 \cdot \log(N_{ANT}/N_{ss}),$$

$$\text{Directional Gain(CDD)} = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\{\sum_{k=1}^{N_{ANT}} g_{j,k}\}^2}{N_{ANT}}\right]$$

Band	Ant Gain (dBi)		N_{ANT}/N_{ss}	Directional Gain (dBi)	
				SDM	CDD
UNII 1	ANT1	-7.43	2 / 2	-6.93	-4.17
	ANT2	-6.93			
UNII 2A	ANT1	-7.30	2 / 2	-6.00	-3.62
	ANT2	-6.00			
UNII 2C	ANT1	-6.10	2 / 2	-6.10	-3.11
	ANT2	-6.14			
UNII 3	ANT1	-6.10	2 / 2	-6.03	-3.05
	ANT2	-6.03			

Note

According to Ansi C63.10-2013 section 14.4.3, the directional gain is calculated using the formula, where G_N is the gain of the nth antenna and N_{ANT} is the total number of antennas used.

Directional gain(SDM) = $G_{max} + 10 \cdot \log(N_{ANT}/N_{ss})$,

Directional Gain(CDD) = $10 \cdot \log(((10^{(\text{ANT1 Gain}/20)}+10^{(\text{ANT2 Gain}/20)})^2)/2)$ dBi

Sample MIMO Calculation:

Ex) Ant 1 : 11.58 dBm Ant 2 : 12.08 dBm

Ant. 1 + Ant. 2 = MIMO

(11.58 dBm + 12.08 dBm) = (14.387 mW + 16.143 mW) = 30.53 mW = 14.88 dBm

2. MAXIMUM OUTPUT POWER

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

Band	Mode	SISO(Ant. 2)		MIMO	
		(dBm)	(W)	(dBm)	(W)
UNII1	802.11ax (HE20)	16.44	0.044	19.25	0.084
	802.11ax (HE40)	14.31	0.027	17.12	0.051
	802.11ax (HE80)	11.96	0.016	14.63	0.029
UNII2A	802.11ax (HE20)	16.21	0.042	19.15	0.082
	802.11ax (HE40)	14.01	0.025	17.09	0.051
	802.11ax (HE80)	11.72	0.015	14.45	0.028
UNII2C	802.11ax (HE20)	16.10	0.041	19.59	0.091
	802.11ax (HE40)	13.91	0.025	17.60	0.057
	802.11ax (HE80)	11.52	0.014	14.91	0.031
UNII3	802.11ax (HE20)	16.09	0.041	19.86	0.097
	802.11ax (HE40)	14.00	0.025	17.54	0.057
	802.11ax (HE80)	11.32	0.014	14.82	0.030

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.

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 1 GHz. Above 1 GHz 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

5.1 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).

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."

6. ANTENNA REQUIREMENTS

According to FCC 47 CFR §15.203, §15.407:

"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.

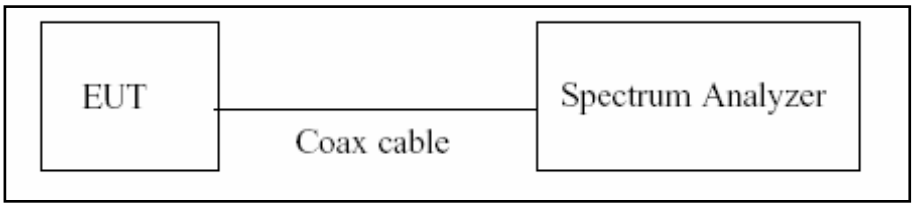
The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.90 (Confidence level about 95 %, *k*=2)
Radiated Disturbance (9 kHz ~ 30 MHz)	4.14 (Confidence level about 95 %, *k*=2)
Radiated Disturbance (30 MHz ~ 1 GHz)	5.82 (Confidence level about 95 %, *k*=2)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.74 (Confidence level about 95 %, *k*=2)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.76 (Confidence level about 95 %, *k*=2)
Radiated Disturbance (Above 40 GHz)	5.52 (Confidence level about 95 %, *k*=2)

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.

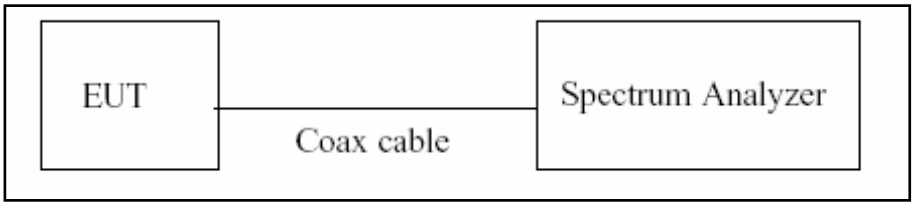
1. RBW = 8 MHz (the largest available value)
2. VBW = 8 MHz (≥ RBW)
3. SPAN = 0 Hz
4. Detector = Peak
5. Number of points in sweep > 100
6. Trace mode = Clear write
7. Measure T_{total} and T_{on}
8. Calculate Duty Cycle = T_{on}/ T_{total} and Duty Cycle Factor = 10log(1/Duty Cycle)

8.2. 6 dB Bandwidth & 26 dB 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(26 dB 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 (6 dB 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 ≥ 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 lever 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.

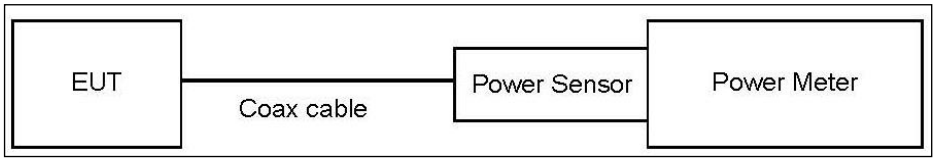
8.3. Output Power Measurement

Limit

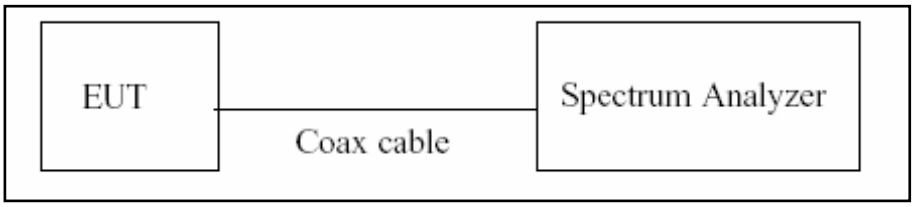
Band	Limit
UNII 1	- Master : Not exceed 1 W(=30 dBm) - Slave : Not exceed 250 mW(=23.98 dBm)
UNII 2A, 2C	Not exceed the lesser of 250 mW or 11 dBm + 10 log B, (where B is the 26 dB emission bandwidth in megahertz.)
UNII 3	Not exceed 1 W(=30 dBm)

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 ≥ 3 MHz.
5. Number of points in sweep ≥ 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 10log(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) = Measured Value(dBm) + ATT loss(dB) + Cable loss(dB) + Duty Cycle Factor(dB)

Note

1. Spectrum Measured 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 + Cable loss
3. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1	11.87
UNII 2A	11.87
UNII 2C	11.87
UNII 3	11.87

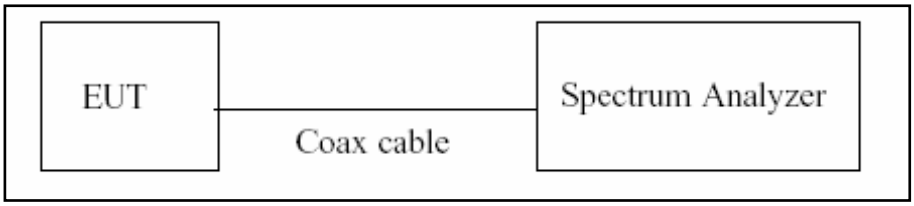
(Actual value of loss for the attenuator and cable combination)

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 ≥ 3 MHz
4. Number of points in sweep ≥ 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) = Measured Value(dBm) + ATT loss(dB) + Cable loss(dB) + Duty Cycle Factor(dB)

Note

1. Spectrum Measured 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. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1	11.87
UNII 2A	11.87
UNII 2C	11.87
UNII 3	11.87

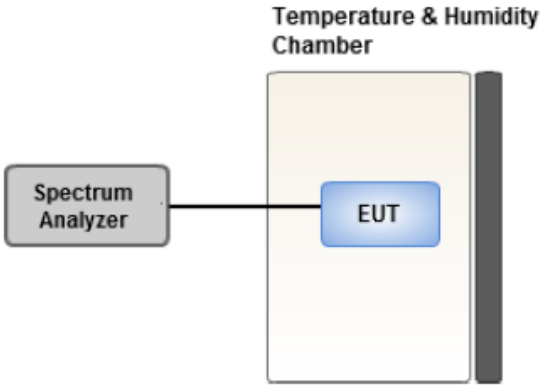
(Actual value of loss for the attenuator and cable combination)

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 ℃ and 50 ℃.
2. The temperature was incremented by 10 ℃ 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 μH/50 ohms line impedance stabilization network (LISN).

Frequency Range (MHz)	Limits (dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56[(a)]	56 to 46[(a)]
0.50 to 5	56	46
5 to 30	60	50

[(a)]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) = Measured Value + Correction Factor

8.7. Radiated Test

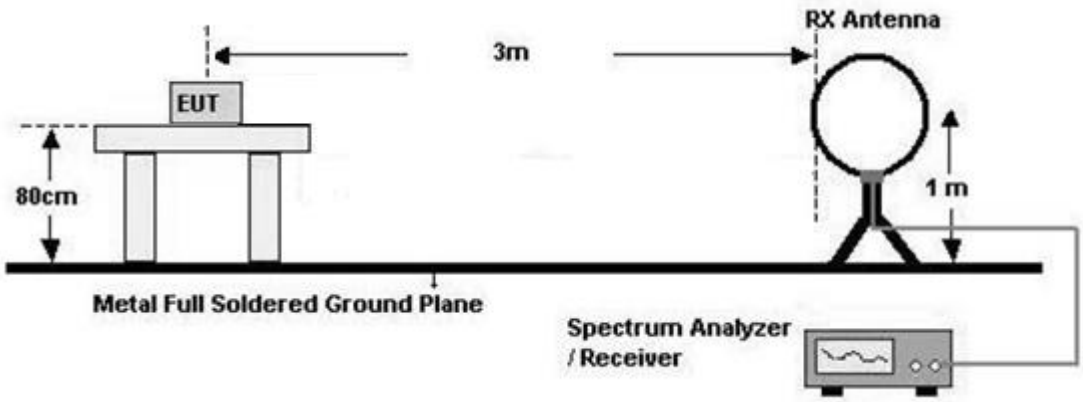
Limit

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.

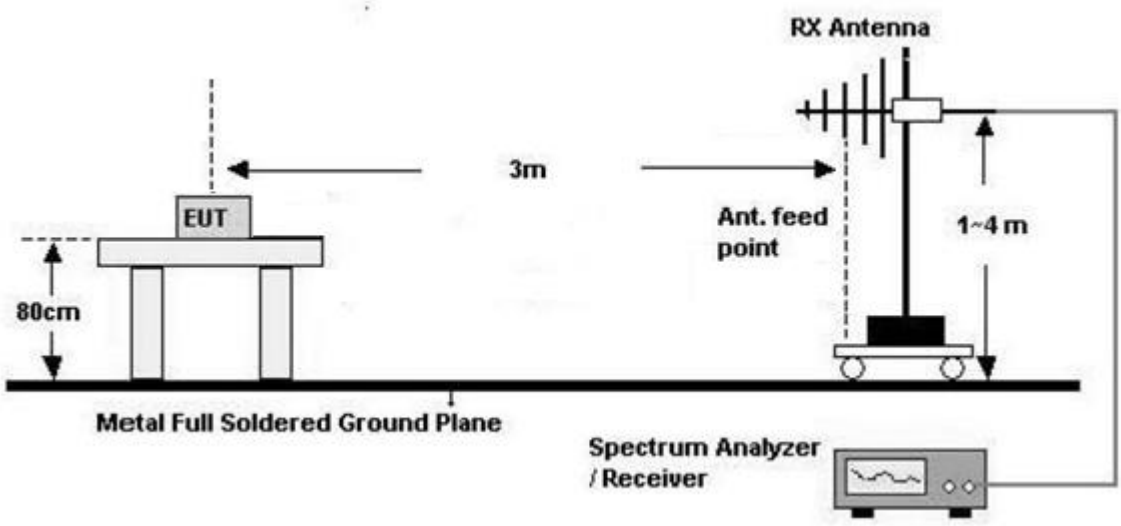
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Configuration

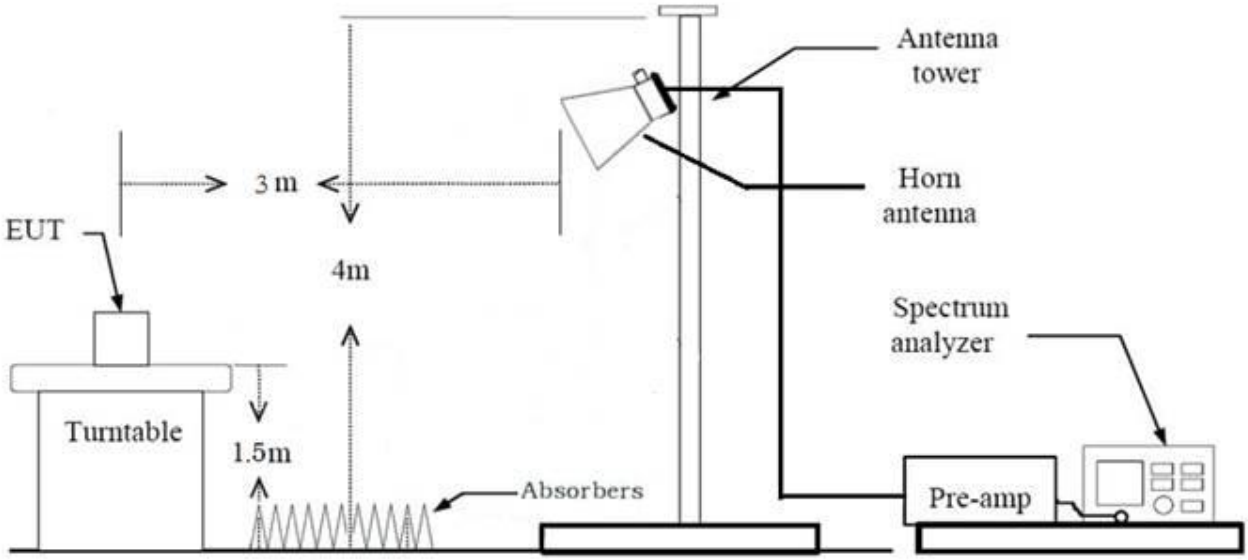
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



Test Procedure of Radiated spurious emissions(Below30 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 3 m 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) =40log(3 m/300 m)= - 80 dB
   Measurement Distance : 3 m
7. Distance Correction Factor(0.490 MHz – 30 MHz) =40log(3 m/30 m)= - 40 dB
   Measurement Distance : 3 m
8. Spectrum Setting
   - Frequency Range = 9 kHz ~ 30 MHz
   - Detector = Peak
   - Trace = Max Hold
   - RBW = 9 kHz
   - VBW ≥ 3 x RBW

9.Total = Measured 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 1 GHz)

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 3 m from the EUT, which is varied from 1 m to 4 m 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 = Max Hold
      - RBW = 100 kHz
      - VBW ≥ 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 = Measured 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 1 m to 4 m 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 ≥ 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.d in KDB 789033 v02r01):

- RBW = 1 MHz
- VBW(Duty cycle ≥ 98 percent) = VBW ≤ RBW/100(i.e., 10 kHz) but not less than 10 Hz.
- VBW(Duty cycle is < 98 percent) = VBW ≥ 1/T, where T is the minimum transmission duration.
- The analyzer is set to linear detector mode.
- Detector = Peak.
- Sweep time = auto.
- Trace mode = Max Hold.
- Allow Max Hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of 1/x, where x is the duty cycle.

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 = 20log (test distance / specific distance) (dB)
12. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(A.G) + 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	MCS0	0.977	0.100	0.180	1 000
	52	MCS0	0.975	0.111	0.195	1 000
	106	MCS0	0.957	0.190	0.410	1 000
	242	MCS0	0.910	0.410	0.910	1 000
802.11ax (HE40)	26	MCS0	0.979	0.091	0.180	1 000
	52	MCS0	0.979	0.093	0.195	1 000
	106	MCS0	0.961	0.172	0.410	1 000
	242	MCS0	0.910	0.410	0.910	1 000
	484	MCS0	0.842	0.747	1.724	3 000
802.11ax (HE80)	26	MCS0	0.979	0.094	0.180	1 000
	52	MCS0	0.979	0.093	0.195	1 000
	106	MCS0	0.965	0.155	0.410	1 000
	242	MCS0	0.912	0.401	0.910	1 000
	484	MCS0	0.842	0.747	1.724	3 000
	996	MCS0	0.738	1.321	3.262	10 000
802.11ax (SU)	BW 20	MCS0	0.904	0.439	0.914	1 000
	BW 40	MCS0	0.828	0.817	1.739	3 000
	BW 80	MCS0	0.723	1.409	3.289	10 000

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 1 m to 4 m 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 ≥ 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(Duty cycle ≥ 98 %) = VBW ≤ RBW/100(i.e., 10 kHz) but not less than 10 Hz.
   - VBW(Duty cycle is < 98 %) = VBW ≥ 1/T, where T is the minimum transmission duration.
   - The analyzer is set to linear detector mode.
   - Detector = Peak.
   - Sweep time = auto.
   - Trace mode = max hold.
   - Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 % duty cycle. For lower duty cycles, increase the minimym number of traces by a factor of 1/x, where x is the duty cycle.
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 = 20log (test distance / specific distance) (dB)

11. Measured Frequency Range :

- 4 500 MHz ~ 5 150 MHz
- 5 350 MHz ~ 5 460 MHz
- 5 460 MHz ~ 5 470 MHz
- (75 MHz or more below the 5 725 MHz) ~ 5 725 MHz
- 5 850 MHz ~ (75 MHz or more above the 5 850 MHz)
- Measurement Result

1) Total(Measurement Type : Peak)

= Measured value + Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F) – Amp Gain(A.G)

2) Total(Measurement Type : Average, Duty cycle ≥ 98 %)

= Measured value + Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F) – Amp Gain(A.G)

3) Total(Measurement Type : Average, Duty cycle < 98 %)

= Measured value + Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F) – Amp Gain(A.G) + Duty Cycle Factor

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	-

8.9. Worst case configuration and mode

Conducted test

1. All data rate of operation were investigated and the worst case results are reported.
   (Worst case HE20, HE40, HE80: MCS0)
2. SC-53D, SCG21 were tested and the worst case results are reported.

(Worst case : SC-53D)

Radiated test

1. All modes of operation were investigated and the worst case configuration results are reported.
   - Mode : Stand alone, Stand alone + External accessories(Earphone, etc)
   - Worstcase : Stand alone
2. EUT Axis
   - Radiated Spurious Emissions : Z
   - Radiated Restricted Band Edge : Y
3. All data rate of operation were investigated and the worst case results are reported.
   (Worst case : MCS0)
4. All Antenna of operation were investigated and the worst case results are reported
   - Mode : SISO(Ant. 2), MIMO(SDM), MIMO(CDD)
   - Worstcase : MIMO(CDD)
5. 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
6. All mode(Tone, RU Offset) of operation were investigated and the worst case configuration
   results are reported

TEST	TONE	RU OFFSET
RSE	[HE20] WORST CASE(HIGHEST POWER) : SU	None
Band-Edge (UNII1,2A,2C)	[HE20] WORST CASE(HIGHEST POWER) : SU	None
	[HE40] WORST CASE(HIGHEST POWER) : SU	None
	[HE80] WORST CASE(HIGHEST POWER) : SU	None
	[HE20] ADDITIONAL TONE : 26T, 52T,106T, 242T [HE40] ADDITIONAL TONE : 26T, 52T, 106T, 242T, 484T [HE80] ADDITIONAL TONE : 26T, 52T, 106T, 242T, 484T, 996T	[HE20] Low Edge : 0, 37, 53, 61 High Edge : 8, 40, 54, 61 [HE40] Low Edge : 0, 37, 53, 61, 63 High Edge : 17, 44, 56, 62, 63 [HE80] Low Edge : 0, 36, 37, 52, 53, 61, 64, 65, 67 High Edge : 0, 36, 37, 52, 60, 61, 64, 66, 67
Band-Edge (Straddle, UNII3)	[HE 20] Worst case(Highest Power) : SU	None
	[HE 40] Worst case(Highest Power) : SU	None
	[HE 80] Worst case(Highest Power) : SU	None

7. SC-53D, SCG21 were tested and the worst case results are reported.

(Worst case : SC-53D)

Radiated test(Simultaneous Transmission)

1. All modes of operation were investigated and the worst case configuration results are reported.
   - Mode : Stand alone, Stand alone + External accessories(Earphone., etc)
   - Worstcase : Stand alone
2. EUT Axis
   - Radiated Spurious Emissions : Z
3. All of Simultaneous Transmission Scenario were investigated and the worst case configuration results are reported.
   - Worst case : 5 GHz WiFi MIMO + Bluetooth Ant.1

Simultaneous Transmission Scenario	5 GHz WiFi Ant.1	5 GHz WiFi Ant.2	Bluetooth Ant.1
5 GHz WiFi Ant.2 + Bluetooth Ant.1		on	on
5 GHz WiFi MIMO + Bluetooth Ant.1	on	on	on

4. The following tables show the worst case configurations determined during testing.

Description	Bluetooth Emission	5 GHz Emission
Antenna	WIFI/BT	WIFI/BT
Channel	0	157
Data Rate	1 Mbps	MCS0
Mode	GFSK: DH5	802.11ax (HE20) / SU

Note : WLAN 5 GHz Simultaneous Transmission Data refer to [BT] Test Report.

5. SC-53D, SCG21 were tested and the worst case results are reported.

(Worst case : SC-53D)

AC Power line Conducted Emissions

1. Please refer to the SC-53D [UNII] Test Report.

2. SC-53D, SCG21 were tested and the worst case results are reported.

(Worst case : SC-53D)

9. SUMMARY OF TEST RESULTS

Test Description	FCC Part Section(s)	Test Limit	Test Condition	Test Result
26 dB Bandwidth	§15.407	N/A	Conducted	PASS
6 dB Bandwidth	§15.407(e)	>500 kHz (5725-5850 MHz)(UNII-3)		PASS
Maximum Conducted Output Power	§15.407(a)(1),(2),(3)	< 250 mW(5150-5250 MHz) < 250 mW or 11+10log$_{10}$ (BW) dBm (5250-5350 MHz) < 250 mW or 11+10log$_{10}$ (BW) dBm (5470-5725 MHz) <1 W (5725-5850 MHz)		PASS
Maximum Power Spectral Density	§15.407(a)(1),(2),(3)	<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
AC Conducted Emissions 150 kHz-30 MHz	15.207 15.407(b)(9)	<FCC 15.207 limits		PASS (Note.1)
Frequency Stability	§15.407(g) §2.1055	Maintained within the band		PASS (Note.1)
Undesirable Emissions	§15.407(b) (1),(2),(3),(4)	<-27 dBm/MHz EIRP (UNII1, 2A, 2C)	Radiated	PASS
General Field Strength Limits(Restricted Bands and Radiated Emission Limits)	15.205, 15.407(b)(9),(10)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		PASS

Note:

1. Please refer to the SC-53D [UNII] Test Report.

10. TEST RESULT

10.1 DUTY CYCLE

Mode	Tone	Worst Data rate (Mbps)	T_{on} (ms)	T_{total} (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (HE20)	26	MCS0	5.548	5.677	0.977	0.100
	52	MCS0	5.134	5.267	0.975	0.111
	106	MCS0	2.440	2.549	0.957	0.190
	242	MCS0	1.099	1.208	0.910	0.410
802.11ax (HE40)	26	MCS0	5.548	5.666	0.979	0.091
	52	MCS0	5.133	5.244	0.979	0.093
	106	MCS0	2.440	2.538	0.961	0.172
	242	MCS0	1.099	1.208	0.910	0.410
	484	MCS0	0.580	0.689	0.842	0.747
802.11ax (HE80)	26	MCS0	5.548	5.670	0.979	0.094
	52	MCS0	5.133	5.244	0.979	0.093
	106	MCS0	2.440	2.528	0.965	0.155
	242	MCS0	1.099	1.206	0.912	0.401
	484	MCS0	0.580	0.689	0.842	0.747
	996	MCS0	0.307	0.415	0.738	1.321
802.11ax (SU)	BW 20	MCS0	1.094	1.211	0.904	0.439
	BW 40	MCS0	0.575	0.694	0.828	0.817
	BW 80	MCS0	0.304	0.421	0.723	1.409

Note:

1. Duty Cycle Factor = 10·log(1/Duty Cycle). where, Duty Cycle = T_{on} / T_{total}

10.2 26 dB BANDWIDTH& 99% BANDWIDTH

Note :

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

Straddle channel data were added in section 10.6.1.

10.2.1 Ant. 1

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BandWidth (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	22.26	22.42	23.83	-	-
			Mid	18.53	19.16	-	38.33	36.76
			High	22.17	22.27	23.05	-	-
	5200	40	Low	22.70	22.80	23.50	-	-
			Mid	18.66	19.39	-	37.87	38.15
			High	22.32	22.24	23.50	-	-
	5240	48	Low	22.23	23.23	23.65	-	-
			Mid	18.36	19.10	-	38.83	38.69
			High	21.95	22.61	23.25	-	-
UNII 2A	5260	52	Low	22.71	23.17	23.77	-	-
			Mid	18.55	19.33	-	36.98	36.77
			High	22.08	22.18	23.20	-	-
	5280	56	Low	22.59	23.54	23.63	-	-
			Mid	18.48	19.14	-	38.80	37.83
			High	22.23	22.17	23.15	-	-
	5320	64	Low	22.34	22.81	23.54	-	-
			Mid	18.64	19.19	-	37.47	36.98
			High	22.10	22.70	23.30	-	-
UNII 2C	5500	100	Low	22.05	22.71	23.54	-	-
			Mid	18.65	19.18	-	37.48	37.07
			High	22.14	22.67	23.28	-	-
	5600	120	Low	22.31	23.34	23.77	-	-
			Mid	18.61	19.16	-	37.62	38.04
			High	22.29	22.31	23.11	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BandWidth (MHz)				
				26 T	52 T	106 T	242 T	SU
	5720	144	Low	22.48	22.78	23.85	-	-
			Mid	18.66	18.97	-	36.33	37.44
			High	22.16	22.55	23.01	-	-
UNII 3	5745	149	Low	22.09	23.98	23.76	-	-
			Mid	18.66	19.13	-	37.16	37.53
			High	22.12	22.02	23.15	-	-
	5785	157	Low	22.33	23.59	24.63	-	-
			Mid	18.54	19.69	-	37.60	37.03
			High	21.93	22.20	23.28	-	-
	5825	165	Low	22.46	22.84	24.86	-	-
			Mid	18.58	19.61	-	37.95	38.90
			High	21.81	22.41	23.32	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	26 dB BandWidth (MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	21.54	23.29	22.87	26.54	-	-
			Mid	22.79	23.08	23.24	-	45.48	44.73
			High	21.51	22.03	23.17	26.17	-	-
	5230	46	Low	21.96	22.50	22.44	25.97	-	-
			Mid	22.53	23.13	24.10	-	45.74	45.30
			High	22.47	22.61	23.08	26.16	-	-
UNII 2A	5270	54	Low	22.36	21.99	22.57	26.20	-	-
			Mid	22.90	22.94	23.55	-	46.11	45.88
			High	21.78	22.78	23.24	25.83	-	-
	5310	62	Low	21.92	22.05	22.76	26.36	-	-
			Mid	22.91	22.80	23.44	-	45.19	45.85
			High	21.61	22.28	22.60	26.98	-	-
UNII 2C	5510	102	Low	21.97	23.19	22.92	26.80	-	-
			Mid	22.85	22.83	24.03	-	46.09	45.81
			High	21.86	22.10	22.50	26.02	-	-
	5590	118	Low	22.19	22.14	22.76	26.41	-	-
			Mid	23.10	22.70	24.14	-	48.09	46.20
			High	22.01	22.16	22.65	26.27	-	-
	5710	142	Low	21.79	22.21	22.71	26.76	-	-
			Mid	22.55	22.70	23.73	-	45.47	45.48
			High	21.71	21.99	23.02	26.45	-	-
UNII 3	5755	151	Low	22.21	22.11	22.75	26.42	-	-
			Mid	22.17	22.83	23.58	-	45.44	45.51
			High	21.72	22.42	23.79	26.40	-	-
	5795	159	Low	22.12	22.63	22.73	26.31	-	-
			Mid	22.43	23.17	24.16	-	47.10	46.40
			High	22.06	22.27	23.11	26.59	-	-

802.11ax(HE80)

HE80	Freq. [MHz]	Channel No.	RU Index	26 dB BandWidth (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	22.80	23.18	23.96	28.07	47.11	-	-
			Mid	38.62	22.70	23.46	44.51	-	87.16	86.84
			High	22.78	23.44	24.26	27.83	45.90	-	-
UNII 2A	5290	58	Low	23.26	23.68	24.17	28.02	46.89	-	-
			Mid	38.81	22.82	22.98	44.04	-	87.18	86.39
			High	22.82	23.27	24.00	26.93	46.15	-	-
UNII 2C	5530	106	Low	23.14	24.93	23.71	27.78	46.73	-	-
			Mid	38.60	22.88	23.00	43.70	-	86.81	86.91
			High	23.10	23.37	24.24	27.71	45.81	-	-
	5610	122	Low	23.53	23.53	23.96	29.00	47.13	-	-
			Mid	38.65	22.65	23.44	44.20	-	86.89	87.94
			High	22.55	23.60	24.15	27.82	46.81	-	-
	5690	138	Low	23.26	23.45	24.15	27.56	46.03	-	-
			Mid	38.69	22.72	23.41	43.58	-	86.86	86.84
			High	23.65	23.35	24.67	27.82	46.37	-	-
UNII 3	5775	155	Low	22.95	23.06	23.08	28.10	46.74	-	-
			Mid	38.67	22.78	23.53	43.54	-	86.30	86.64
			High	22.26	23.21	24.17	27.23	46.99	-	-

99% BANDWIDTH

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	99% BANDWIDTH (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	19.573	19.122	18.661	-	-
			Mid	17.071	17.048	-	19.924	19.930
			High	19.633	18.972	18.629	-	-
	5200	40	Low	19.617	19.171	18.668	-	-
			Mid	17.047	16.987	-	19.879	19.893
			High	19.656	19.004	18.668	-	-
	5240	48	Low	19.610	19.060	18.636	-	-
			Mid	16.989	17.053	-	19.838	19.910
			High	19.680	18.944	18.615	-	-
UNII 2A	5260	52	Low	19.629	19.043	18.673	-	-
			Mid	17.049	17.069	-	19.896	19.955
			High	19.624	18.948	18.636	-	-
	5280	56	Low	19.693	19.049	18.677	-	-
			Mid	17.027	17.048	-	19.868	19.901
			High	19.690	19.033	18.641	-	-
	5320	64	Low	19.608	19.096	18.647	-	-
			Mid	17.029	17.109	-	19.877	19.963
			High	19.668	19.020	18.668	-	-
UNII 2C	5500	100	Low	19.643	19.054	18.653	-	-
			Mid	16.985	17.036	-	19.873	19.924
			High	19.729	19.042	18.551	-	-
	5600	120	Low	19.600	19.116	18.663	-	-
			Mid	17.034	17.053	-	19.839	19.876
			High	19.744	18.923	18.607	-	-
	5720	144	Low	19.687	19.041	18.702	-	-
			Mid	17.073	17.008	-	19.856	19.955
			High	19.693	19.130	18.577	-	-
UNII 3	5745	149	Low	19.621	19.142	18.709	-	-
			Mid	17.052	17.067	-	19.900	19.995
			High	19.682	18.977	18.559	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	99% BANDWIDTH (MHz)				
				26 T	52 T	106 T	242 T	SU
	5785	157	Low	19.701	19.101	18.652	-	-
			Mid	17.047	17.099	-	19.919	19.941
			High	19.649	18.952	18.620	-	-
	5825	165	Low	19.707	19.248	18.688	-	-
			Mid	16.984	17.110	-	19.892	19.992
			High	19.667	19.036	18.629	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	99% BANDWIDTH (MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	19.457	18.789	18.225	19.377	-	-
			Mid	20.170	19.566	19.022	-	38.217	38.124
			High	19.540	18.894	18.232	19.509	-	-
	5230	46	Low	19.483	18.871	18.205	19.410	-	-
			Mid	20.259	19.581	18.978	-	38.127	38.154
			High	19.499	18.709	18.274	19.422	-	-
UNII 2A	5270	54	Low	19.440	18.679	18.180	19.434	-	-
			Mid	20.408	19.597	19.000	-	38.134	38.136
			High	19.395	18.699	18.323	19.469	-	-
	5310	62	Low	19.489	18.707	18.198	19.389	-	-
			Mid	20.353	19.464	19.028	-	38.240	38.167
			High	19.376	18.747	18.279	19.500	-	-
UNII 2C	5510	102	Low	19.438	18.819	18.195	19.451	-	-
			Mid	20.126	19.534	19.130	-	38.202	38.170
			High	19.653	18.757	18.300	19.430	-	-
	5590	118	Low	19.363	18.776	18.182	19.440	-	-
			Mid	20.230	19.563	19.006	-	38.184	38.179
			High	19.508	18.856	18.356	19.452	-	-
	5710	142	Low	19.478	18.800	18.190	19.536	-	-
			Mid	20.350	19.471	19.157	-	38.196	38.133
			High	19.588	18.758	18.245	19.476	-	-
UNII 3	5755	151	Low	19.506	18.831	18.271	19.513	-	-
			Mid	20.147	19.518	18.973	-	38.168	38.176
			High	19.453	18.966	18.468	19.522	-	-
	5795	159	Low	19.376	18.926	18.284	19.549	-	-
			Mid	20.391	19.785	19.077	-	38.214	38.221
			High	19.525	19.079	18.324	19.615	-	-

802.11ax(HE80)

HE80	Freq. [MHz]	Channel No.	RU Index	99% BANDWIDTH (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	20.332	19.707	18.774	20.463	38.312	-	-
			Mid	36.173	19.137	18.438	37.511	-	77.858	77.897
			High	20.139	19.400	19.205	20.467	38.246	-	-
UNII 2A	5290	58	Low	20.388	19.869	19.074	20.380	38.379	-	-
			Mid	36.082	19.326	18.556	37.604	-	77.854	77.903
			High	20.242	19.415	19.012	20.480	38.405	-	-
UNII 2C	5530	106	Low	20.354	19.728	18.966	20.404	38.265	-	-
			Mid	36.073	19.163	18.571	37.531	-	77.925	77.825
			High	20.159	19.596	18.972	20.431	38.230	-	-
	5610	122	Low	20.542	19.830	18.914	20.632	38.332	-	-
			Mid	36.068	19.037	18.471	37.580	-	77.918	77.978
			High	20.038	19.598	19.139	20.479	38.269	-	-
	5690	138	Low	20.540	19.360	18.886	20.374	38.224	-	-
			Mid	36.101	19.002	18.520	37.440	-	77.934	77.799
			High	20.405	19.766	19.071	20.365	38.159	-	-
UNII 3	5775	155	Low	20.319	19.789	18.958	20.419	38.270	-	-
			Mid	36.108	19.136	18.540	37.469	-	77.863	77.909
			High	20.188	19.542	18.962	20.438	38.385	-	-

10.2.2 Ant. 2

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BandWidth (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	22.74	23.29	23.94	-	-
			Mid	18.65	19.11	-	38.54	38.94
			High	22.34	22.21	23.14	-	-
	5200	40	Low	22.61	23.14	23.55	-	-
			Mid	18.52	19.06	-	37.89	38.35
			High	22.11	22.38	23.55	-	-
	5240	48	Low	22.31	23.24	23.49	-	-
			Mid	18.65	19.14	-	35.87	37.99
			High	22.30	22.13	23.50	-	-
UNII 2A	5260	52	Low	22.23	22.87	23.75	-	-
			Mid	18.58	19.15	-	37.51	39.12
			High	22.19	22.57	23.34	-	-
	5280	56	Low	22.47	23.14	24.13	-	-
			Mid	18.58	18.93	-	38.95	38.16
			High	22.16	22.38	23.62	-	-
	5320	64	Low	22.36	22.98	24.04	-	-
			Mid	18.63	19.15	-	36.74	37.28
			High	22.15	22.75	22.83	-	-
UNII 2C	5500	100	Low	22.48	23.02	23.61	-	-
			Mid	18.59	18.99	-	37.19	36.47
			High	22.18	22.91	23.55	-	-
	5600	120	Low	22.11	22.96	24.02	-	-
			Mid	18.47	19.11	-	35.75	36.66
			High	22.23	22.65	23.37	-	-
	5720	144	Low	22.65	22.88	23.62	-	-
			Mid	18.65	18.96	-	38.93	38.02
			High	22.24	22.52	23.26	-	-
UNII 3	5745	149	Low	22.16	22.88	24.07	-	-
			Mid	18.57	19.02	-	36.35	36.80
			High	22.34	22.61	23.17	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BandWidth (MHz)				
				26 T	52 T	106 T	242 T	SU
	5785	157	Low	22.23	23.17	23.65	-	-
			Mid	18.52	19.14	-	36.88	37.44
			High	22.20	22.82	23.11	-	-
	5825	165	Low	22.53	22.57	23.30	-	-
			Mid	18.68	19.19	-	36.44	37.23
			High	22.43	22.28	23.31	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	26 dB BandWidth (MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	21.94	22.21	22.93	26.24	-	-
			Mid	22.81	23.23	23.58	-	45.89	45.86
			High	21.65	22.34	22.64	26.45	-	-
	5230	46	Low	21.87	23.00	23.11	26.53	-	-
			Mid	22.57	22.84	23.61	-	45.25	45.05
			High	21.84	22.11	22.70	25.81	-	-
UNII 2A	5270	54	Low	21.81	22.34	23.09	26.67	-	-
			Mid	22.38	23.40	23.39	-	45.34	45.67
			High	21.62	21.84	23.06	26.33	-	-
	5310	62	Low	21.59	22.61	22.87	26.15	-	-
			Mid	22.27	23.62	23.83	-	45.27	45.39
			High	21.96	22.43	22.41	26.00	-	-
UNII 2C	5510	102	Low	21.59	21.85	23.07	26.55	-	-
			Mid	22.36	23.41	24.87	-	45.60	45.45
			High	21.50	22.07	22.88	26.80	-	-
	5590	118	Low	21.93	22.20	22.54	26.11	-	-
			Mid	22.44	23.32	24.18	-	45.45	45.70
			High	21.77	22.14	22.80	26.64	-	-
	5710	142	Low	21.97	22.12	23.01	25.67	-	-
			Mid	22.64	23.48	23.76	-	45.40	45.81
			High	21.62	22.37	22.97	26.01	-	-
UNII 3	5755	151	Low	21.88	22.09	22.53	25.96	-	-
			Mid	22.57	22.90	23.65	-	45.47	45.83
			High	21.59	22.46	22.83	25.84	-	-
	5795	159	Low	22.11	21.94	22.57	26.65	-	-
			Mid	23.00	23.33	24.76	-	45.69	45.47
			High	21.74	22.51	22.77	26.16	-	-

802.11ax(HE80)

HE80	Freq. [MHz]	Channel No.	RU Index	26 dB BandWidth (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	22.51	23.12	24.18	27.88	46.21	-	-
			Mid	38.69	23.21	23.42	43.66	-	86.88	86.56
			High	23.18	23.53	23.87	28.16	46.23	-	-
UNII 2A	5290	58	Low	22.97	23.64	23.43	27.45	46.02	-	-
			Mid	38.67	22.54	23.65	43.52	-	87.47	87.78
			High	23.54	23.15	24.22	28.02	46.87	-	-
UNII 2C	5530	106	Low	22.85	23.32	23.18	27.78	46.45	-	-
			Mid	38.59	23.16	23.54	43.21	-	86.80	86.92
			High	22.35	23.87	23.51	27.52	45.68	-	-
	5610	122	Low	23.18	23.46	23.72	27.62	45.96	-	-
			Mid	38.75	23.08	23.52	43.78	-	87.50	86.84
			High	22.51	23.55	23.01	28.04	47.13	-	-
	5690	138	Low	23.25	23.60	23.96	27.60	46.39	-	-
			Mid	38.81	22.76	23.53	43.21	-	86.90	86.72
			High	22.79	23.11	24.49	27.26	46.29	-	-
UNII 3	5775	155	Low	22.89	23.01	23.68	27.03	46.97	-	-
			Mid	38.71	22.73	23.45	43.25	-	87.20	86.18
			High	22.68	23.30	25.21	28.01	46.72	-	-

99% BANDWIDTH

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	99% BANDWIDTH (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	19.718	19.065	18.705	-	-
			Mid	17.051	17.044	-	19.883	20.047
			High	19.638	19.050	18.594	-	-
	5200	40	Low	19.658	19.130	18.666	-	-
			Mid	17.063	16.983	-	19.917	20.045
			High	19.765	19.011	18.666	-	-
	5240	48	Low	19.580	19.118	18.652	-	-
			Mid	17.091	17.083	-	19.962	20.061
			High	19.746	18.940	18.650	-	-
UNII 2A	5260	52	Low	19.680	19.108	18.670	-	-
			Mid	17.073	17.060	-	19.905	20.076
			High	19.673	18.959	18.674	-	-
	5280	56	Low	19.735	19.076	18.716	-	-
			Mid	17.054	17.075	-	19.902	19.974
			High	19.691	19.043	18.613	-	-
	5320	64	Low	19.661	19.103	18.723	-	-
			Mid	17.046	17.100	-	19.822	20.012
			High	19.740	19.040	18.576	-	-
UNII 2C	5500	100	Low	19.689	19.083	18.706	-	-
			Mid	17.006	17.015	-	19.895	19.885
			High	19.812	19.074	18.648	-	-
	5600	120	Low	19.609	19.073	18.658	-	-
			Mid	17.083	17.034	-	19.926	19.875
			High	19.780	19.040	18.607	-	-
	5720	144	Low	19.561	19.111	18.630	-	-
			Mid	17.020	17.076	-	19.943	19.911
			High	19.674	19.048	18.583	-	-
UNII 3	5745	149	Low	19.704	19.075	18.689	-	-
			Mid	17.074	17.017	-	19.922	19.958
			High	19.651	18.951	18.652	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	99% BANDWIDTH (MHz)				
				26 T	52 T	106 T	242 T	SU
	5785	157	Low	19.695	19.125	18.635	-	-
			Mid	17.025	17.086	-	19.955	19.914
			High	19.612	19.066	18.634	-	-
	5825	165	Low	19.664	19.083	18.689	-	-
			Mid	17.022	17.057	-	19.923	19.946
			High	19.700	19.059	18.639	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	99% BANDWIDTH (MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	19.562	18.734	18.199	19.504	-	-
			Mid	20.395	19.575	19.113	-	38.192	38.151
			High	19.486	18.809	18.324	19.433	-	-
	5230	46	Low	19.508	18.695	18.194	19.395	-	-
			Mid	20.231	19.414	18.978	-	38.131	38.173
			High	19.507	18.821	18.310	19.428	-	-
UNII 2A	5270	54	Low	19.423	18.723	18.151	19.413	-	-
			Mid	20.223	19.577	18.979	-	38.270	38.132
			High	19.382	18.847	18.259	19.465	-	-
	5310	62	Low	19.429	18.762	18.214	19.411	-	-
			Mid	20.326	19.525	19.057	-	38.204	38.203
			High	19.407	18.807	18.253	19.467	-	-
UNII 2C	5510	102	Low	19.539	18.697	18.235	19.475	-	-
			Mid	20.196	19.458	19.022	-	38.163	38.147
			High	19.427	18.826	18.259	19.488	-	-
	5590	118	Low	19.456	18.787	18.278	19.418	-	-
			Mid	20.176	19.488	19.114	-	38.180	38.163
			High	19.410	18.871	18.251	19.481	-	-
	5710	142	Low	19.399	18.721	18.166	19.427	-	-
			Mid	20.377	19.474	19.097	-	38.151	38.135
			High	19.347	18.730	18.258	19.466	-	-
UNII 3	5755	151	Low	19.538	18.873	18.179	19.458	-	-
			Mid	20.255	19.564	19.086	-	38.146	38.145
			High	19.297	18.803	18.359	19.429	-	-
	5795	159	Low	19.497	18.659	18.211	19.433	-	-
			Mid	20.213	19.515	18.971	-	38.178	38.109
			High	19.492	18.898	18.283	19.424	-	-

802.11ax(HE80)

HE80	Freq. [MHz]	Channel No.	RU Index	99% BANDWIDTH (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	20.391	19.618	18.970	20.437	38.420	-	-
			Mid	36.126	19.170	18.399	37.622	-	77.906	77.869
			High	20.393	19.462	18.953	20.421	38.374	-	-
UNII 2A	5290	58	Low	20.367	19.696	18.856	20.409	38.268	-	-
			Mid	36.119	19.081	18.525	37.583	-	77.916	77.912
			High	20.574	19.535	19.092	20.508	38.384	-	-
UNII 2C	5530	106	Low	20.433	19.440	18.853	20.323	38.308	-	-
			Mid	36.172	19.139	18.420	37.549	-	77.897	77.908
			High	20.216	19.523	19.016	20.373	38.382	-	-
	5610	122	Low	20.474	19.644	18.879	20.325	38.250	-	-
			Mid	36.113	19.199	18.535	37.550	-	77.874	77.845
			High	20.224	19.757	18.985	20.500	38.362	-	-
	5690	138	Low	20.451	19.442	19.007	20.368	38.314	-	-
			Mid	36.139	19.041	18.575	37.507	-	77.909	77.821
			High	20.414	19.760	19.034	20.485	38.364	-	-
UNII 3	5775	155	Low	20.306	19.461	19.088	20.513	38.289	-	-
			Mid	36.015	19.219	18.652	37.505	-	77.792	77.866
			High	20.405	19.670	19.091	20.318	38.300	-	-

10.3 6 dB BANDWIDTH

10.3.1 Ant. 1

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	6 dB BandWidth (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	2.084	17.04	17.21	-	-
			Mid	2.664	15.06	-	19.63	19.61
			High	2.088	17.05	17.20	-	-
	5785	157	Low	2.099	4.146	17.18	-	-
			Mid	2.694	4.108	-	19.50	19.46
			High	2.101	17.06	17.19	-	-
	5825	165	Low	2.097	17.06	17.21	-	-
			Mid	2.684	12.86	-	19.49	19.65
			High	2.121	4.542	17.23	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	6 dB BandWidth (MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 3	5755	151	Low	2.136	16.63	16.69	18.94	-	-
			Mid	2.110	16.06	17.37	-	38.21	38.22
			High	2.160	15.40	16.67	18.93	-	-
	5795	159	Low	2.139	16.62	16.66	18.93	-	-
			Mid	2.111	17.29	17.39	-	38.24	38.24
			High	2.177	16.60	16.68	18.92	-	-

802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	6 dB BandWidth (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 3	5775	155	Low	2.258	14.21	16.85	18.99	37.89	-	-
			Mid	2.806	16.24	16.51	36.51	-	78.29	78.27
			High	2.270	5.368	16.84	18.99	37.97	-	-

10.3.2 Ant. 2

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	6 dB BandWidth (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	2.118	14.57	17.21	-	-
			Mid	2.705	10.05	-	19.46	19.58
			High	2.115	17.07	17.21	-	-
	5785	157	Low	2.098	4.138	17.19	-	-
			Mid	2.679	12.52	-	19.65	19.63
			High	2.072	17.02	17.16	-	-
	5825	165	Low	2.123	4.114	17.20	-	-
			Mid	2.709	15.05	-	19.62	19.59
			High	2.075	17.10	17.21	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	6 dB BandWidth (MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 3	5755	151	Low	2.149	12.87	16.68	18.95	-	-
			Mid	2.134	11.07	17.37	-	38.24	38.24
			High	2.180	7.787	16.68	18.93	-	-
	5795	159	Low	2.136	10.36	16.68	18.95	-	-
			Mid	2.131	17.30	17.37	-	38.23	38.22
			High	2.160	16.60	16.70	18.93	-	-

802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	6 dB BandWidth (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 3	5775	155	Low	2.229	14.19	16.86	18.97	37.90	-	-
			Mid	2.775	13.82	16.48	36.53	-	78.26	78.29
			High	2.255	16.69	16.84	19.01	37.98	-	-

10.4 OUTPUT POWER MEASUREMENT

Note:

1. Straddle channel data in the table below are for reporting purposes only and added in section 10.6.3.
2. The Output Power Limit was as follows.

   UNII 1 : 23.98 dBm

   UNII 2A, 2C : 23.98 dBm or 11 dBm + 10 log B, (where B is the 26 dB emission bandwidth in megahertz.)

   UNII 3 : 30.00 dBm
3. MIMO Power = 10·log((10^(Ant. 1 power /10))+(10^(Ant. 2 power /10)))

10.4.1 Ant. 1

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)				
					26 T	52 T	106 T	242 T	SU
Max Output Power (dBm)	UNII 1	5180	36	Low	8.80	8.84	8.90	-	-
				Mid	8.51	8.64	-	8.63	15.83
				High	8.35	8.36	8.34	-	-
		5200	40	Low	9.09	9.08	8.61	-	-
				Mid	8.75	8.85	-	8.87	16.01
				High	8.61	8.72	8.66	-	-
		5240	48	Low	9.06	9.30	9.11	-	-
				Mid	8.82	9.00	-	9.12	16.03
				High	8.64	8.73	8.75	-	-
	UNII 2a	5260	52	Low	9.31	9.08	9.07	-	-
				Mid	8.89	8.98	-	8.73	16.06
				High	8.43	8.38	8.58	-	-
		5280	56	Low	9.09	9.01	8.95	-	-
				Mid	8.65	8.83	-	8.82	15.72
				High	8.27	8.44	8.56	-	-
		5320	64	Low	9.25	9.21	9.00	-	-
				Mid	9.02	9.15	-	9.07	15.89
				High	8.95	8.99	8.90	-	-
	UNII 2c	5500	100	Low	9.05	9.11	8.98	-	-
				Mid	8.91	9.28	-	8.96	16.09
				High	8.78	8.77	8.85	-	-
		5600	120	Low	9.82	9.79	9.70	-	-
				Mid	9.71	9.72	-	9.73	16.56
				High	9.65	9.72	9.56	-	-

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)				
					26 T	52 T	106 T	242 T	SU
		5720	144	Low	10.09	10.06	10.00	-	-
				Mid	9.90	9.88	-	10.06	17.02
				High	9.95	9.94	9.91	-	-
	UNII 3	5745	149	Low	9.72	10.03	9.91	-	-
				Mid	9.88	9.89	-	9.91	16.89
				High	9.82	9.89	9.89	-	-
		5785	157	Low	10.37	10.25	10.24	-	-
				Mid	10.20	10.32	-	10.29	17.19
				High	10.10	10.21	10.08	-	-
		5825	165	Low	10.54	10.70	10.01	-	-
				Mid	10.69	10.73	-	10.39	17.49
				High	10.68	10.52	10.29	-	-

HE40		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)					
					26 T	52 T	106 T	242 T	484 T	SU
Max Output Power (dBm)	UNII 1	5190	38	Low	9.09	9.27	9.24	9.07	-	-
				Mid	8.62	8.65	8.70	-	8.96	13.86
				High	8.12	8.09	8.27	8.47	-	-
		5230	46	Low	9.57	9.44	9.49	9.26	-	-
				Mid	8.73	8.77	8.94	-	9.10	13.90
				High	8.37	8.27	8.43	8.46	-	-
	UNII 2a	5270	54	Low	9.41	9.67	9.68	9.28	-	-
				Mid	8.95	8.77	8.97	-	9.07	14.15
				High	8.24	8.24	8.44	8.65	-	-
		5310	62	Low	9.47	9.31	9.19	9.08	-	-
				Mid	8.71	8.47	8.62	-	8.82	13.94
				High	8.24	8.15	8.07	8.45	-	-
	UNII 2c	5510	102	Low	9.43	9.36	9.34	9.36	-	-
				Mid	9.01	9.03	9.11	-	9.33	13.90
				High	9.21	9.22	9.19	9.30	-	-
		5590	118	Low	9.98	10.04	9.91	10.19	-	-
				Mid	9.85	9.81	10.13	-	10.20	14.70
				High	9.99	9.86	10.14	9.76	-	-
		5710	142	Low	10.40	10.40	10.39	10.39	-	-
				Mid	10.13	10.21	10.20	-	10.37	15.34
				High	10.16	10.20	10.21	10.34	-	-
	UNII 3	5755	151	Low	10.24	10.20	10.20	10.16	-	-
				Mid	10.00	9.91	10.01	-	10.04	15.04
				High	9.96	10.01	10.00	10.05	-	-
		5795	159	Low	10.24	10.20	10.42	10.42	-	-
				Mid	9.91	9.93	10.19	-	10.08	15.00
				High	9.87	9.96	10.17	10.23	-	-

HE80		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)						
					26 T	52 T	106 T	242 T	484 T	996 T	SU
Max Output Power (dBm)	UNII 1	5210	42	Low	10.21	10.14	9.91	9.67	9.32	-	-
				Mid	8.75	8.47	8.41	8.94	-	8.87	11.25
				High	7.54	7.52	7.64	7.68	8.01	-	-
	UNII 2A	5290	58	Low	10.40	10.51	10.37	10.12	10.36	-	-
				Mid	8.80	9.51	8.68	9.45	-	9.17	11.15
				High	7.64	7.74	7.75	7.85	8.18	-	-
	UNII 2C	5530	106	Low	9.55	9.38	9.50	9.02	9.41	-	-
				Mid	9.08	8.90	9.28	9.45	-	9.40	11.73
				High	9.49	9.14	9.61	9.12	9.42	-	-
		5610	122	Low	10.20	10.01	9.97	9.99	9.97	-	-
				Mid	10.04	9.38	9.88	9.36	-	10.26	12.30
				High	10.23	9.37	10.27	10.42	10.04	-	-
		5690	138	Low	10.45	10.26	10.34	10.26	10.49	-	-
				Mid	10.14	10.31	10.11	10.25	-	10.54	12.36
				High	10.36	10.36	10.31	10.23	10.27	-	-
	UNII 3	5775	155	Low	10.24	10.31	10.32	10.16	10.23	-	-
				Mid	10.08	9.93	9.83	10.11	-	10.17	12.25
				High	10.37	10.26	10.06	9.92	10.02	-	-

10.4.2 Ant 2

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)				
					26 T	52 T	106 T	242 T	SU
Max Output Power (dBm)	UNII 1	5180	36	Low	9.08	9.01	8.76	-	-
				Mid	8.64	8.87	-	8.79	15.58
				High	8.47	8.44	8.56	-	-
		5200	40	Low	9.52	9.46	9.30	-	-
				Mid	9.31	9.31	-	9.30	16.04
				High	9.15	9.15	9.09	-	-
		5240	48	Low	9.85	9.75	9.80	-	-
				Mid	9.74	9.87	-	9.73	16.44
				High	9.67	9.80	9.64	-	-
	UNII 2A	5260	52	Low	9.49	9.18	9.23	-	-
				Mid	9.11	9.29	-	9.31	16.21
				High	9.03	9.10	9.30	-	-
		5280	56	Low	8.77	8.69	8.83	-	-
				Mid	8.64	8.68	-	8.82	15.72
				High	8.85	8.83	8.89	-	-
		5320	64	Low	9.27	9.23	9.24	-	-
				Mid	9.14	9.22	-	9.43	16.16
				High	9.47	9.29	9.30	-	-
	UNII 2C	5500	100	Low	8.77	8.59	8.74	-	-
				Mid	8.55	8.65	-	8.84	16.01
				High	8.89	8.70	8.64	-	-
		5600	120	Low	8.53	8.71	8.69	-	-
				Mid	8.68	8.68	-	8.74	15.95
				High	8.88	8.68	8.66	-	-
		5720	144	Low	9.14	9.02	8.93	-	-
				Mid	8.96	8.91	-	8.89	16.10
				High	8.89	8.82	8.75	-	-
	UNII 3	5745	149	Low	9.14	8.98	9.00	-	-
				Mid	8.81	8.90	-	8.75	16.04
				High	8.96	8.67	8.67	-	-
		5785	157	Low	8.91	9.10	9.05	-	-
				Mid	8.96	8.86	-	8.99	16.02
				High	8.98	8.92	8.89	-	-

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)				
					26 T	52 T	106 T	242 T	SU
		5825	165	Low	9.04	9.02	8.82	-	-
				Mid	8.87	8.86	-	8.91	16.09
				High	8.99	8.89	8.76	-	-

HE40		Frequency [MHz]	Channel No.	RUIndex	Max. Average Power (dBm)					
					26 T	52 T	106 T	242 T	484 T	SU
Max Output Power (dBm)	UNII 1	5190	38	Low	9.20	9.23	9.18	9.06	-	-
				Mid	8.51	8.52	8.84	-	8.98	13.81
				High	8.50	8.27	8.45	8.69	-	-
		5230	46	Low	9.47	9.58	9.61	9.68	-	-
				Mid	8.99	9.47	9.52	-	9.61	14.31
				High	9.24	9.31	9.45	9.49	-	-
	UNII 2A	5270	54	Low	9.53	9.60	9.41	9.25	-	-
				Mid	8.70	8.73	9.02	-	9.02	14.01
				High	8.35	8.32	8.38	8.70	-	-
		5310	62	Low	8.55	8.47	8.51	8.76	-	-
				Mid	8.44	8.73	8.63	-	8.94	13.74
				High	8.77	8.85	8.92	8.88	-	-
	UNII 2C	5510	102	Low	8.66	8.73	8.68	8.69	-	-
				Mid	8.85	8.62	8.54	-	8.94	13.91
				High	8.91	8.80	8.97	8.84	-	-
		5590	118	Low	8.90	8.74	8.68	8.78	-	-
				Mid	8.30	8.28	8.38	-	8.60	13.44
				High	8.01	8.03	8.15	8.29	-	-
		5710	142	Low	8.58	8.44	8.68	8.76	-	-
				Mid	8.17	8.36	8.52	-	8.69	13.68
				High	8.14	8.40	8.61	8.45	-	-
	UNII 3	5755	151	Low	8.98	8.63	8.95	8.70	-	-
				Mid	8.43	8.48	8.56	-	8.68	13.66
				High	8.51	8.41	8.40	8.56	-	-
		5795	159	Low	9.23	9.05	8.98	9.06	-	-
				Mid	8.67	8.73	8.69	-	8.93	14.00
				High	8.57	8.60	8.62	8.74	-	-

HE80		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)						
					26 T	52 T	106 T	242 T	484 T	996 T	SU
Max Output Power (dBm)	UNII 1	5210	42	Low	9.23	9.40	9.26	9.48	9.64	-	-
				Mid	9.41	9.27	9.41	9.40	-	9.80	11.96
				High	9.50	9.53	9.33	9.62	9.76	-	-
	UNII 2A	5290	58	Low	9.40	9.23	9.14	9.15	9.03	-	-
				Mid	9.34	9.08	9.01	9.17	-	9.37	11.72
				High	9.58	9.54	9.31	9.24	9.27	-	-
	UNII 2C	5530	106	Low	8.74	8.70	8.68	8.59	8.68	-	-
				Mid	8.90	8.86	9.01	8.78	-	9.25	11.52
				High	9.46	9.47	9.38	8.48	9.23	-	-
		5610	122	Low	8.64	8.42	8.59	8.55	8.66	-	-
				Mid	8.68	8.63	8.74	8.78	-	8.96	11.42
				High	9.33	9.36	9.29	9.05	8.99	-	-
		5690	138	Low	8.43	8.50	8.65	8.71	8.80	-	-
				Mid	8.68	8.63	8.55	8.72	-	8.94	11.38
				High	8.70	8.72	8.78	8.65	8.64	-	-
	UNII 3	5775	155	Low	8.94	8.72	8.72	8.75	8.57	-	-
				Mid	8.55	8.61	8.51	8.69	-	8.67	11.32
				High	8.87	8.79	8.84	8.51	8.51	-	-

10.4.3 MIMO

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)				
					26 T	52 T	106 T	242 T	SU
Max Output Power (dBm)	UNII 1	5180	36	Low	11.95	11.94	11.84	-	-
				Mid	11.59	11.77	-	11.72	18.72
				High	11.42	11.41	11.46	-	-
		5200	40	Low	12.32	12.29	11.98	-	-
				Mid	12.05	12.10	-	12.10	19.03
				High	11.90	11.95	11.89	-	-
		5240	48	Low	12.48	12.54	12.48	-	-
				Mid	12.31	12.47	-	12.45	19.25
				High	12.20	12.31	12.23	-	-
	UNII 2A	5260	52	Low	12.41	12.14	12.16	-	-
				Mid	12.01	12.15	-	12.04	19.15
				High	11.75	11.77	11.96	-	-
		5280	56	Low	11.94	11.86	11.90	-	-
				Mid	11.66	11.77	-	11.83	18.73
				High	11.58	11.65	11.74	-	-
		5320	64	Low	12.27	12.23	12.13	-	-
				Mid	12.09	12.20	-	12.26	19.04
				High	12.23	12.15	12.11	-	-
	UNII 2C	5500	100	Low	11.92	11.87	11.87	-	-
				Mid	11.74	11.99	-	11.91	19.06
				High	11.85	11.75	11.76	-	-
		5600	120	Low	12.23	12.29	12.23	-	-
				Mid	12.24	12.24	-	12.27	19.28
				High	12.29	12.24	12.14	-	-
		5720	144	Low	12.65	12.58	12.51	-	-
				Mid	12.47	12.43	-	12.52	19.59
				High	12.46	12.43	12.38	-	-
	UNII 3	5745	149	Low	12.45	12.55	12.49	-	-
				Mid	12.39	12.43	-	12.38	19.50
				High	12.42	12.33	12.33	-	-
		5785	157	Low	12.71	12.72	12.70	-	-
				Mid	12.63	12.66	-	12.70	19.65
				High	12.59	12.62	12.54	-	-

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)				
					26 T	52 T	106 T	242 T	SU
		5825	165	Low	12.86	12.95	12.47	-	-
				Mid	12.88	12.91	-	12.72	19.86
				High	12.93	12.79	12.60	-	-

HE40		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)					
					26 T	52 T	106 T	242 T	484 T	SU
Max Output Power (dBm)	UNII 1	5190	38	Low	12.16	12.26	12.22	12.08	-	-
				Mid	11.58	11.60	11.78	-	11.98	16.85
				High	11.33	11.19	11.37	11.59	-	-
		5230	46	Low	12.53	12.52	12.56	12.49	-	-
				Mid	11.87	12.15	12.25	-	12.37	17.12
				High	11.84	11.83	11.98	12.02	-	-
	UNII 2A	5270	54	Low	12.48	12.65	12.56	12.28	-	-
				Mid	11.84	11.76	12.01	-	12.05	17.09
				High	11.31	11.29	11.42	11.69	-	-
		5310	62	Low	12.05	11.92	11.88	11.93	-	-
				Mid	11.59	11.62	11.64	-	11.89	16.85
				High	11.52	11.52	11.53	11.68	-	-
	UNII 2C	5510	102	Low	12.07	12.07	12.04	12.05	-	-
				Mid	11.94	11.84	11.85	-	12.15	16.91
				High	12.07	12.03	12.09	12.09	-	-
		5590	118	Low	12.49	12.45	12.35	12.55	-	-
				Mid	12.16	12.13	12.36	-	12.48	17.12
				High	12.12	12.05	12.27	12.10	-	-
		5710	142	Low	12.60	12.54	12.63	12.66	-	-
				Mid	12.27	12.40	12.45	-	12.62	17.60
				High	12.28	12.41	12.49	12.51	-	-
	UNII 3	5755	151	Low	12.67	12.50	12.63	12.50	-	-
				Mid	12.30	12.27	12.36	-	12.42	17.41
				High	12.31	12.30	12.29	12.38	-	-
		5795	159	Low	12.78	12.68	12.77	12.80	-	-
				Mid	12.35	12.38	12.52	-	12.55	17.54
				High	12.28	12.35	12.48	12.56	-	-

HE80		Frequency [MHz]	Channel No.	RU Index	Max. Average Power (dBm)						
					26 T	52 T	106 T	242 T	484 T	996 T	SU
Max Output Power (dBm)	UNII 1	5210	42	Low	12.76	12.80	12.60	12.59	12.49	-	-
				Mid	12.11	11.90	11.94	12.19	-	12.37	14.63
				High	11.64	11.65	11.57	11.77	11.98	-	-
	UNII 2A	5290	58	Low	12.94	12.93	12.80	12.67	12.75	-	-
				Mid	12.09	12.31	11.85	12.32	-	12.28	14.45
				High	11.73	11.75	11.61	11.61	11.77	-	-
	UNII 2C	5530	106	Low	12.18	12.07	12.11	11.82	12.07	-	-
				Mid	12.01	11.89	12.15	12.14	-	12.34	14.64
				High	12.49	12.32	12.50	11.82	12.33	-	-
		5610	122	Low	12.50	12.30	12.34	12.34	12.37	-	-
				Mid	12.43	12.03	12.35	12.09	-	12.67	14.89
				High	12.82	12.38	12.81	12.80	12.55	-	-
		5690	138	Low	12.57	12.48	12.58	12.57	12.73	-	-
				Mid	12.49	12.56	12.41	12.56	-	12.82	14.91
				High	12.62	12.63	12.62	12.52	12.54	-	-
	UNII 3	5775	155	Low	12.65	12.60	12.60	12.52	12.49	-	-
				Mid	12.40	12.33	12.23	12.47	-	12.50	14.82
				High	12.70	12.60	12.50	12.28	12.34	-	-

10.5 POWER SPECTRAL DENSITY

Note :

1. The Power Spectral Density Limit was as follows.

UNII 1, 2A, 2C : 11.0 dBm/MHz

UNII 3 : 30.0 dBm/500 kHz

2. MIMO PSD = 10·log((10^(Ant. 1 PSD /10))+(10^(Ant. 2 PSD /10))

10.5.1 Ant. 1

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)				
					26 T	52 T	106 T	242 T	SU
Max Output PSD (dBm)	UNII 1	5180	36	Low	6.038	3.034	0.044	-	-
				Mid	4.507	2.827	-	-3.535	3.627
				High	5.418	2.546	-0.252	-	-
		5200	40	Low	6.228	3.156	0.022	-	-
				Mid	4.755	2.912	-	-3.370	3.903
				High	5.735	2.665	-0.475	-	-
		5240	48	Low	6.227	3.405	0.342	-	-
				Mid	4.801	3.213	-	-3.221	3.908
				High	5.629	2.780	-0.169	-	-
	UNII 2A	5260	52	Low	6.461	3.364	0.444	-	-
				Mid	4.938	3.153	-	-3.068	3.756
				High	5.659	2.750	-0.050	-	-
		5280	56	Low	6.099	3.292	0.269	-	-
				Mid	4.767	3.113	-	-3.225	3.437
				High	5.534	2.701	-0.255	-	-
		5320	64	Low	6.061	3.191	0.278	-	-
				Mid	4.887	3.117	-	-3.240	3.829
				High	5.931	3.106	0.058	-	-
	UNII 2C	5500	100	Low	6.257	3.386	0.417	-	-
				Mid	5.172	3.268	-	-3.070	3.845
				High	6.100	3.224	0.289	-	-
		5600	120	Low	6.687	3.820	0.759	-	-
				Mid	5.412	3.763	-	-2.603	4.345
				High	6.622	3.829	0.713	-	-
		5720	144	Low	7.288	4.485	1.107	-	-
				Mid	6.133	4.464	-	-2.367	4.908
				High	7.336	4.486	1.112	-	-

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)				
					26 T	52 T	106 T	242 T	SU
	UNII 3	5745	149	Low	4.319	1.388	-1.735	-	-
				Mid	4.140	1.374	-	-5.050	2.031
				High	4.383	1.441	-1.652	-	-
		5785	157	Low	4.952	2.039	-0.847	-	-
				Mid	4.660	1.919	-	-4.403	2.661
				High	4.889	1.847	-1.192	-	-
		5825	165	Low	5.347	2.300	-0.726	-	-
				Mid	5.026	2.317	-	-4.022	3.268
				High	5.462	2.512	-0.627	-	-

HE40		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)					
					26 T	52 T	106 T	242 T	484 T	SU
Max Output PSD (dBm)	UNII 1	5190	38	Low	6.307	3.589	0.274	-3.134	-	-
				Mid	5.522	2.770	-0.068	-	-5.917	-1.351
				High	5.128	2.443	-0.516	-3.973	-	-
		5230	46	Low	6.729	3.875	0.807	-2.725	-	-
				Mid	6.009	3.094	0.422	-	-5.435	-1.089
				High	5.415	2.790	-0.114	-3.399	-	-
	UNII 2A	5270	54	Low	6.596	3.735	0.755	-2.802	-	-
				Mid	5.642	2.751	0.232	-	-5.732	-1.425
				High	5.166	2.360	-0.538	-3.736	-	-
		5310	62	Low	6.588	3.590	0.678	-2.842	-	-
				Mid	5.775	2.915	0.088	-	-5.677	-1.096
				High	5.169	2.522	-0.384	-3.519	-	-
	UNII 2C	5510	102	Low	6.549	3.608	0.560	-2.911	-	-
				Mid	6.283	3.332	0.306	-	-5.815	-0.888
				High	6.366	3.533	0.523	-2.962	-	-
		5590	118	Low	7.036	4.180	1.219	-2.253	-	-
				Mid	6.910	3.976	0.980	-	-5.135	-0.425
				High	6.860	4.039	1.018	-2.399	-	-
		5710	142	Low	7.573	4.681	1.722	-1.759	-	-
				Mid	7.284	4.434	1.641	-	-4.979	0.081
				High	7.519	4.607	1.642	-1.890	-	-
	UNII 3	5755	151	Low	4.532	1.703	-1.467	-4.922	-	-
				Mid	4.455	1.428	-1.419	-	-7.746	-2.623
				High	4.548	1.732	-1.460	-4.850	-	-
		5795	159	Low	5.270	2.247	-0.809	-4.273	-	-
				Mid	4.921	1.919	-1.035	-	-7.167	-2.601
				High	5.098	2.069	-0.918	-4.411	-	-

HE80		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)						
					26 T	52 T	106 T	242 T	484 T	996 T	SU
Max Output PSD (dBm)	UNII 1	5210	42	Low	7.224	4.333	1.166	-2.284	-5.084	-	-
				Mid	4.720	2.583	-0.311	-3.208	-	-8.140	-6.892
				High	4.667	1.774	-1.293	-4.542	-6.818	-	-
	UNII 2A	5290	58	Low	7.507	4.552	1.471	-2.046	-5.069	-	-
				Mid	4.492	2.565	-0.533	-3.122	-	-7.779	-6.646
				High	4.447	1.678	-1.239	-4.741	-6.847	-	-
	UNII 2C	5530	106	Low	6.702	3.716	0.570	-2.981	-5.857	-	-
				Mid	5.264	3.411	0.523	-3.082	-	-8.570	-5.992
				High	6.600	3.669	0.599	-2.778	-5.854	-	-
		5610	122	Low	7.066	4.079	1.072	-2.394	-5.275	-	-
				Mid	5.616	3.787	1.065	-2.597	-	-7.943	-5.115
				High	7.262	4.478	1.463	-2.183	-4.974	-	-
		5690	138	Low	7.389	4.635	1.617	-1.933	-4.815	-	-
				Mid	6.160	4.480	1.349	-2.014	-	-7.770	-4.978
				High	7.300	4.550	1.418	-2.057	-4.979	-	-
	UNII 3	5775	155	Low	4.696	1.754	-1.244	-4.759	-7.621	-	-
				Mid	4.110	1.524	-1.653	-4.798	-	-10.604	-8.203
				High	4.684	1.840	-1.304	-4.846	-7.818	-	-

10.5.2 Ant. 2

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)				
					26 T	52 T	106 T	242 T	SU
Max Output PSD (dBm)	UNII 1	5180	36	Low	6.349	3.432	0.387	-	-
				Mid	4.758	3.133	-	-2.930	2.963
				High	5.653	2.826	0.075	-	-
		5200	40	Low	6.421	3.863	0.549	-	-
				Mid	5.208	3.712	-	-2.875	3.470
				High	6.373	3.712	0.469	-	-
		5240	48	Low	7.487	4.463	1.597	-	-
				Mid	6.251	4.562	-	-1.916	3.904
				High	7.343	4.574	1.600	-	-
	UNII 2A	5260	52	Low	6.947	4.205	1.063	-	-
				Mid	5.753	4.014	-	-2.257	3.854
				High	6.778	4.004	0.852	-	-
		5280	56	Low	6.239	3.393	0.285	-	-
				Mid	5.158	3.380	-	-3.091	3.108
				High	6.339	3.360	0.289	-	-
		5320	64	Low	6.650	3.750	0.686	-	-
				Mid	5.534	3.628	-	-2.642	3.330
				High	6.750	3.875	0.788	-	-
	UNII 2C	5500	100	Low	6.654	3.678	0.612	-	-
				Mid	5.366	3.586	-	-2.895	3.734
				High	6.472	3.576	0.494	-	-
		5600	120	Low	6.579	3.840	0.751	-	-
				Mid	5.524	3.843	-	-2.901	4.130
				High	6.787	3.791	0.745	-	-
		5720	144	Low	7.224	4.217	1.158	-	-
				Mid	5.817	4.144	-	-2.289	3.989
				High	7.000	4.062	1.003	-	-
	UNII 3	5745	149	Low	4.126	1.151	-1.940	-	-
				Mid	3.766	0.966	-	-5.459	0.981
				High	3.948	0.990	-2.068	-	-
		5785	157	Low	4.094	1.189	-1.865	-	-
				Mid	3.700	1.111	-	-5.294	1.231
				High	4.147	1.022	-2.029	-	-

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)				
					26 T	52 T	106 T	242 T	SU
		5825	165	Low	4.497	1.573	-1.467	-	-
				Mid	4.435	1.600	-	-4.816	1.496
				High	4.449	1.598	-1.430	-	-

HE40		Frequency [MHz]	Channel No.	RUIndex	Max. Power Spectral Density (dBm)					
					26 T	52 T	106 T	242 T	484 T	SU
Max Output PSD (dBm)	UNII 1	5190	38	Low	6.372	3.485	0.391	-2.963	-	-
				Mid	5.541	2.690	-0.119	-	-5.816	-1.924
				High	5.272	2.312	-0.600	-3.906	-	-
		5230	46	Low	6.535	3.577	0.508	-2.801	-	-
				Mid	6.438	3.552	0.549	-	-5.725	-1.232
				High	6.625	3.589	0.568	-2.713	-	-
	UNII 2A	5270	54	Low	6.363	3.660	0.629	-3.082	-	-
				Mid	5.880	3.236	0.362	-	-6.005	-1.402
				High	5.975	3.215	0.305	-3.312	-	-
		5310	62	Low	5.938	3.089	-0.227	-3.689	-	-
				Mid	5.658	2.967	-0.331	-	-6.473	-1.798
				High	6.041	3.300	-0.129	-3.501	-	-
	UNII 2C	5510	102	Low	6.075	3.222	0.328	-3.208	-	-
				Mid	5.896	2.949	-0.043	-	-6.468	-1.688
				High	6.205	3.276	0.250	-3.264	-	-
		5590	118	Low	6.377	3.538	0.536	-3.050	-	-
				Mid	5.780	3.123	0.164	-	-5.826	-1.276
				High	5.628	2.799	-0.202	-3.572	-	-
		5710	142	Low	6.405	3.527	0.566	-2.930	-	-
				Mid	6.135	3.367	0.431	-	-5.906	-1.032
				High	6.130	3.330	0.277	-3.056	-	-
	UNII 3	5755	151	Low	3.389	0.459	-2.518	-5.987	-	-
				Mid	2.987	0.051	-2.940	-	-8.922	-4.159
				High	2.846	0.044	-3.013	-6.440	-	-
		5795	159	Low	3.556	0.742	-2.314	-5.840	-	-
				Mid	3.263	0.392	-2.413	-	-8.758	-3.859
				High	3.460	0.440	-2.443	-6.042	-	-

HE80		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)						
					26 T	52 T	106 T	242 T	484 T	996 T	SU
Max Output PSD (dBm)	UNII 1	5210	42	Low	7.424	4.432	1.421	-2.147	-4.896	-	-
				Mid	4.945	3.095	0.012	-2.984	-	-7.833	-6.541
				High	5.573	2.584	-0.412	-3.864	-6.457	-	-
	UNII 2A	5290	58	Low	6.396	3.396	0.350	-2.986	-6.059	-	-
				Mid	4.635	3.017	-0.073	-3.386	-	-8.822	-6.647
				High	6.353	3.459	0.398	-2.935	-5.957	-	-
	UNII 2C	5530	106	Low	5.835	2.976	-0.233	-3.597	-6.582	-	-
				Mid	4.543	2.933	-0.078	-3.527	-	-8.835	-6.578
				High	6.594	3.698	0.643	-2.738	-5.829	-	-
		5610	122	Low	6.761	3.988	0.776	-2.648	-5.644	-	-
				Mid	4.660	2.766	-0.195	-3.269	-	-8.459	-6.616
				High	5.431	2.577	-0.557	-3.904	-6.737	-	-
		5690	138	Low	5.699	2.819	-0.227	-3.539	-6.383	-	-
				Mid	4.763	3.007	0.061	-3.382	-	-9.289	-6.812
				High	6.004	3.189	0.033	-3.324	-6.394	-	-
	UNII 3	5775	155	Low	3.741	0.769	-2.361	-5.770	-8.812	-	-
				Mid	2.840	-0.018	-3.084	-6.203	-	-11.745	-9.822
				High	2.759	-0.252	-3.273	-6.802	-9.420	-	-

10.5.3 MIMO

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)				
					26 T	52 T	106 T	242 T	SU
Max Output PSD (dBm)	UNII 1	5180	36	Low	9.207	6.248	3.229	-	-
				Mid	7.645	5.993	-	-0.211	6.318
				High	8.547	5.699	2.925	-	-
		5200	40	Low	9.336	6.534	3.303	-	-
				Mid	7.998	6.341	-	-0.105	6.703
				High	9.076	6.230	3.033	-	-
		5240	48	Low	9.913	6.977	4.025	-	-
				Mid	8.597	6.950	-	0.491	6.917
				High	9.580	6.779	3.815	-	-
	UNII 2A	5260	52	Low	9.721	6.815	3.775	-	-
				Mid	8.375	6.615	-	0.367	6.816
				High	9.265	6.432	3.434	-	-
		5280	56	Low	9.180	6.353	3.287	-	-
				Mid	7.977	6.259	-	-0.147	6.286
				High	8.965	6.053	3.036	-	-
		5320	64	Low	9.376	6.490	3.497	-	-
				Mid	8.233	6.390	-	0.080	6.597
				High	9.370	6.518	3.448	-	-
	UNII 2C	5500	100	Low	9.470	6.545	3.526	-	-
				Mid	8.280	6.440	-	0.029	6.801
				High	9.300	6.414	3.403	-	-
		5600	120	Low	9.644	6.840	3.765	-	-
				Mid	8.479	6.814	-	0.261	7.250
				High	9.716	6.820	3.739	-	-
		5720	144	Low	10.266	7.363	4.143	-	-
				Mid	8.988	7.317	-	0.683	7.483
				High	10.182	7.290	4.068	-	-
	UNII 3	5745	149	Low	7.234	4.281	1.174	-	-
				Mid	6.967	4.185	-	-2.239	4.548
				High	7.181	4.232	1.155	-	-
		5785	157	Low	7.554	4.645	1.684	-	-
				Mid	7.217	4.544	-	-1.815	5.015
				High	7.544	4.464	1.420	-	-

HE20		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)				
					26 T	52 T	106 T	242 T	SU
		5825	165	Low	7.953	4.962	1.929	-	-
				Mid	7.751	4.984	-	-1.390	5.482
				High	7.995	5.089	2.000	-	-

HE40		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)					
					26 T	52 T	106 T	242 T	484 T	SU
Max Output PSD (dBm)	UNII 1	5190	38	Low	9.350	6.548	3.344	-0.037	-	-
				Mid	8.542	5.741	2.917	-	-2.856	1.382
				High	8.211	5.389	2.453	-0.929	-	-
		5230	46	Low	9.644	6.739	3.671	0.248	-	-
				Mid	9.239	6.340	3.497	-	-2.567	1.851
				High	9.073	6.218	3.251	-0.032	-	-
	UNII 2A	5270	54	Low	9.492	6.708	3.703	0.071	-	-
				Mid	8.773	6.011	3.308	-	-2.856	1.597
				High	8.600	5.819	2.915	-0.508	-	-
		5310	62	Low	9.286	6.357	3.260	-0.234	-	-
				Mid	8.727	5.952	2.894	-	-3.046	1.578
				High	8.637	5.939	2.756	-0.499	-	-
	UNII 2C	5510	102	Low	9.329	6.430	3.456	-0.046	-	-
				Mid	9.104	6.155	3.146	-	-3.119	1.741
				High	9.297	6.417	3.399	-0.100	-	-
		5590	118	Low	9.730	6.881	3.902	0.377	-	-
				Mid	9.392	6.581	3.602	-	-2.456	2.181
				High	9.298	6.474	3.461	0.065	-	-
		5710	142	Low	10.039	7.153	4.193	0.705	-	-
				Mid	9.758	6.944	4.089	-	-2.407	2.571
				High	9.890	7.026	4.024	0.577	-	-
	UNII 3	5755	151	Low	7.009	4.136	1.050	-2.411	-	-
				Mid	6.793	3.804	0.897	-	-5.284	-0.313
				High	6.790	3.980	0.843	-2.562	-	-
		5795	159	Low	7.508	4.570	1.514	-1.976	-	-
				Mid	7.181	4.233	1.341	-	-4.879	-0.174
				High	7.366	4.341	1.397	-2.140	-	-

HE80		Frequency [MHz]	Channel No.	RU Index	Max. Power Spectral Density (dBm)						
					26 T	52 T	106 T	242 T	484 T	996 T	SU
Max Output PSD (dBm)	UNII 1	5210	42	Low	10.336	7.393	4.306	0.796	-1.978	-	-
				Mid	7.844	5.857	2.864	-0.084	-	-4.974	-3.702
				High	8.154	5.208	2.180	-1.179	-3.623	-	-
	UNII 2A	5290	58	Low	9.997	7.023	3.957	0.520	-2.525	-	-
				Mid	7.575	5.807	2.713	-0.242	-	-5.259	-3.636
				High	8.514	5.670	2.667	-0.734	-3.369	-	-
	UNII 2C	5530	106	Low	9.301	6.372	3.197	-0.268	-3.194	-	-
				Mid	7.929	6.189	3.243	-0.288	-	-5.691	-3.265
				High	9.607	6.694	3.631	0.253	-2.831	-	-
		5610	122	Low	9.927	7.044	3.937	0.491	-2.445	-	-
				Mid	8.175	6.317	3.491	0.090	-	-5.183	-2.790
				High	9.453	6.641	3.580	0.052	-2.756	-	-
		5690	138	Low	9.636	6.832	3.802	0.348	-2.518	-	-
				Mid	8.528	6.816	3.763	0.366	-	-5.454	-2.788
				High	9.711	6.933	3.791	0.366	-2.618	-	-
	UNII 3	5775	155	Low	7.255	4.300	1.244	-2.225	-5.165	-	-
				Mid	6.532	3.832	0.701	-2.433	-	-8.127	-5.927
				High	6.838	3.929	0.832	-2.704	-5.535	-	-

10.6 STRADDLE CHANNEL

10.6.1 26 dB Bandwidth

Test Note:

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

10.6.1.1 Ant. 1

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26 dB BW (MHz)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	17.80	3.96
				4	14.20	4.40
				7	14.16	5.88
				8	14.16	7.92
			52 T	37	18.16	4.80
				38	14.20	4.80
				39	14.36	4.80
				40	14.40	8.52
			106 T	53	18.12	5.36
				54	14.88	8.56
			242 T	61	22.88	13.64
			SU	-	22.72	13.36

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26 dB BW (MHz)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	18.76	4.28
				16	14.28	5.40
				17	14.44	7.40
			52 T	# 37	-	-
				41	18.52	4.36
				43	14.76	4.52
				44	14.52	7.56
			106 T	# 53	-	-
				# 54	-	-
				55	18.68	4.84
				56	15.32	7.72
			242 T	# 61	-	-
				62	18.36	7.48
			484 T	65	37.72	8.12
			SU	-	37.64	8.60

802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26 dB BW (MHz)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	14.36	6.28
				36	14.52	8.36
			52 T	# 37	-	-
				# 45	-	-
				51	14.84	5.00
				52	15.00	8.52
			106 T	# 53	-	-
				# 57	-	-
				59	19.16	5.48
				60	15.48	8.20
			242 T	# 61	-	-
				# 62	-	-
				63	38.52	6.44
				64	19.00	8.52
			484 T	# 65	-	-
				66	37.88	8.84
			996 T	67	78.52	8.52
			SU	-	78.84	8.20

10.6.1.2 Ant. 2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26 dB BW (MHz)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	17.84	4.48
				4	14.20	4.16
				7	14.20	5.88
				8	14.12	7.96
			52 T	37	18.20	4.60
				38	14.32	4.76
				39	14.40	4.44
				40	14.40	8.08
			106 T	53	18.72	5.32
				54	14.76	8.20
			242 T	61	24.04	14.48
			SU	-	23.64	13.24

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26 dB BW (MHz)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	18.76	4.28
				16	14.44	5.48
				17	14.28	7.56
			52 T	# 37	-	-
				41	18.92	4.44
				43	14.68	4.44
				44	14.68	7.48
			106 T	# 53	-	-
				# 54	-	-
				55	18.52	4.76
				56	15.08	7.72
			242 T	# 61	-	-
				62	18.36	7.80
			484 T	65	37.72	8.20
			SU	-	37.88	7.48

802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	26 dB BW (MHz)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	14.68	6.44
				36	14.52	8.20
			52 T	# 37	-	-
				# 45	-	-
				51	14.68	4.68
				52	15.00	8.52
			106 T	# 53	-	-
				# 57	-	-
				59	19.48	5.48
				60	15.64	8.84
			242 T	# 61	-	-
				# 62	-	-
				63	38.20	6.28
				64	19.96	8.68
			484 T	# 65	-	-
				66	38.04	8.04
			996 T	67	78.84	8.20
			SU	-	78.68	9.00

10.6.2 6 dB Bandwidth

Test Note:

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

10.6.2.1 Ant. 1

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB BW (MHz)
					UNII 3
HE20	5720	144	26 T	# 0	-
				# 4	-
				7	2.48
				8	4.56
			52 T	# 37	-
				# 38	-
				39	2.56
				40	4.56
			106 T	# 53	-
				54	4.64
			242 T	61	4.76
			SU	-	4.64

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB 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	2.60
				56	4.12
			242 T	# 61	-
				62	4.12
			484 T	65	4.12
			SU	-	4.12

802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB BW (MHz)
					UNII 3
HE80	5690	138	26 T	# 0	-
				# 18	-
				35	2.12
				36	4.20
			52 T	# 37	-
				# 45	-
				# 51	2.60
				52	4.20
			106 T	# 53	-
				# 57	-
				# 59	2.76
				60	4.20
			242 T	# 61	-
				# 62	-
				63	2.76
				64	4.20
			484 T	# 65	-
				66	4.20
			996 T	67	4.20
			SU	-	4.20

10.6.2.2 Ant. 2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB 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	4.60
			242 T	61	4.72
			SU	-	4.80

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB 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	2.60
				56	4.12
			242 T	# 61	-
				62	4.12
			484 T	65	4.12
			SU	-	4.12

802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB BW (MHz)
					UNII 3
HE80	5690	138	26 T	# 0	-
				# 18	-
				35	2.12
				36	4.20
			52 T	# 37	-
				# 45	-
				# 51	2.60
				52	4.20
			106 T	# 53	-
				# 57	-
				# 59	2.76
				60	4.20
			242 T	# 61	-
				# 62	-
				63	2.76
				64	4.20
			484 T	# 65	-
				66	4.20
			996 T	67	4.20
			SU	-	4.20

10.6.3 Output Power

Test Note:

1. # : 26 dB bandwidth is only located in UNII 2C. Therefore 26 dB bandwidth do not overlap.
2. Limit(UNII 2C) : 23.98 dBm or 11 dBm + 10 log B, (where B is the 26 dB emission bandwidth in megahertz.)
3. Limit(UNII 3) : 30.00 dBm

10.6.3.1 Ant. 1

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	9.97	-19.67
				4	9.85	-19.33
				7	-6.26	9.93
				8	-12.89	10.05
			52 T	37	9.95	-18.16
				38	9.84	-19.37
				39	9.47	-0.12
				40	-8.28	9.94
			106 T	53	9.89	-15.96
				54	6.41	7.30
			242 T	61	8.49	3.60
			SU	-	15.42	10.48

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	9.81	-18.94
				16	0.13	9.52
				17	-13.55	10.01
			52 T	# 37	-	-
				41	9.87	-19.25
				43	9.91	-6.39
				44	-2.47	9.92
			106 T	# 53	-	-
				# 54	-	-
				55	9.94	-15.90
				56	7.22	6.87
			242 T	# 61	-	-
				62	8.97	3.44
			484 T	65	9.61	0.49
			SU	-	14.51	5.35

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	0.42	9.82
				36	-13.43	10.31
			52 T	# 37	-	-
				# 45	-	-
				51	9.99	-6.23
				52	-2.48	9.99
			106 T	# 53	-	-
				# 57	-	-
				59	9.78	-15.46
				60	7.21	7.02
			242 T	# 61	-	-
				# 62	-	-
				63	10.02	-15.38
				64	8.92	3.57
			484 T	# 65	-	-
				66	9.53	0.66
			996 T	67	9.77	-2.61
			SU	-	12.34	-0.09

10.6.3.2 Ant. 2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	9.63	-19.91
				4	9.32	-20.06
				7	-6.83	9.21
				8	-13.43	9.31
			52 T	37	9.40	-19.68
				38	9.29	-20.03
				39	8.75	-0.89
				40	-8.95	9.21
			106 T	53	9.36	-16.42
				54	5.81	6.69
			242 T	61	8.16	3.17
			SU	-	14.82	9.80

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	8.79	-20.55
				16	-1.06	8.35
				17	-14.22	8.74
			52 T	# 37	-	-
				41	8.77	-20.17
				43	8.80	-7.53
				44	-3.75	8.63
			106 T	# 53	-	-
				# 54	-	-
				55	8.76	-16.89
				56	6.01	5.60
			242 T	# 61	-	-
				62	7.78	2.18
			484 T	65	8.45	-0.80
			SU	-	13.26	3.94

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	-0.63	8.82
				36	-14.39	9.28
			52 T	# 37	-	-
				# 45	-	-
				51	8.96	-7.28
				52	-3.53	8.99
			106 T	# 53	-	-
				# 57	-	-
				59	8.96	-16.47
				60	6.30	6.09
			242 T	# 61	-	-
				# 62	-	-
				63	9.23	-16.35
				64	8.02	2.66
			484 T	# 65	-	-
				66	8.76	-0.23
			996 T	67	8.71	-3.62
			SU	-	11.21	-1.20

10.6.4 Power Spectral Density

Test Note:

1. # : 26 dB bandwidth is only located in UNII 2C. Therefore 26 dB bandwidth do not overlap.
2. Limit(UNII 2C) : 11 dBm/ MHz
3. Limit(UNII 3) : 30 dBm/ 500 kHz

10.6.4.1 Ant. 1

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	7.289	-24.350
				4	6.051	-23.930
				7	-1.525	4.297
				8	-20.184	4.405
			52 T	37	4.250	-25.054
				38	4.228	-22.978
				39	4.217	0.954
				40	-4.379	1.464
			106 T	53	1.285	-20.480
				54	1.136	-1.679
			242 T	61	-2.539	-5.284
			SU	-	4.368	1.442

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	6.963	-23.048
				16	4.004	4.368
				17	-19.828	4.425
			52 T	# 37	-	-
				41	4.153	-24.291
				43	4.330	-8.624
				44	1.419	1.536
			106 T	# 53	-	-
				# 54	-	-
				55	1.200	-21.588
				56	1.250	-1.511
			242 T	# 61	-	-
				62	-2.169	-5.251
			484 T	65	-5.068	-8.044
			SU	-	-0.230	-3.159

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	3.341	4.638
				36	-20.424	4.651
			52 T	# 37	-	-
				# 45	-	-
				51	4.313	-9.966
				52	0.114	1.716
			106 T	# 53	-	-
				# 57	-	-
				59	0.995	-21.581
				60	1.422	-1.504
			242 T	# 61	-	-
				# 62	-	-
				63	-2.325	-22.826
				64	-2.212	-5.011
			484 T	# 65	-	-
				66	-5.170	-7.944
			996 T	67	-8.155	-10.959
			SU	-	-5.579	-8.556

10.6.4.2 Ant. 2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	6.852	-25.722
				4	5.530	-23.695
				7	-2.154	3.811
				8	-19.895	3.743
			52 T	37	3.805	-24.407
				38	3.590	-23.448
				39	3.525	0.105
				40	-5.124	0.713
			106 T	53	0.676	-23.495
				54	0.523	-2.269
			242 T	61	-2.819	-5.755
			SU	-	3.922	0.841

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	5.928	-26.492
				16	2.804	3.294
				17	-20.746	3.128
			52 T	# 37	-	-
				41	3.124	-25.708
				43	3.199	-10.018
				44	-0.081	0.261
			106 T	# 53	-	-
				# 54	-	-
				55	0.020	-24.446
				56	0.080	-2.876
			242 T	# 61	-	-
				62	-3.385	-6.375
			484 T	65	-6.189	-9.554
			SU	-	-1.404	-4.723

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	2.497	3.706
				36	-23.800	3.782
			52 T	# 37	-	-
				# 45	-	-
				51	3.284	-11.014
				52	-0.731	0.620
			106 T	# 53	-	-
				# 57	-	-
				59	0.253	-24.436
				60	0.415	-2.420
			242 T	# 61	-	-
				# 62	-	-
				63	-2.999	-22.896
				64	-3.094	-6.044
			484 T	# 65	-	-
				66	-5.920	-8.804
			996 T	67	-9.147	-12.065
			SU	-	-6.639	-9.662

10.7RADIATED SPURIOUS EMISSIONS (9 kHz – 1 GHz)

Frequency Range : 9 kHz – 30 MHz

Frequency	Measured Value	CL+AF+DF-AG	ANT. POL	Total	Limit	Margin
[MHz]	[dBμV]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]
No Critical peaks found						

Note:

1. The Measured Level 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 = 40log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dBμV) + Distance extrapolation factor

Frequency Range : Below 1 GHz

Frequency	Measured Value	A.F+C.L	ANT. POL	Total	Limit	Margin
[MHz]	[dBμV]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/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

10.8 RADIATED SPURIOUS EMISSIONS (Above 1 GHz)

10.8.1 802.11ax(HE20)(MIMO)

1) SU

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10360	48.38	5.07	V	53.45	68.20	14.75	PK
15540	49.15	5.45	V	54.60	73.98	19.38	PK
15540	33.18	5.45	V	38.63	53.98	15.35	AV
10360	49.00	5.07	H	54.07	68.20	14.13	PK
15540	49.77	5.45	H	55.22	73.98	18.76	PK
15540	33.26	5.45	H	38.71	53.98	15.27	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10400	48.93	4.05	V	52.98	68.20	15.22	PK
15600	46.27	4.10	V	50.37	73.98	23.61	PK
15600	33.10	4.10	V	37.20	53.98	16.78	AV
10400	49.03	4.05	H	53.08	68.20	15.12	PK
15600	46.99	4.10	H	51.09	73.98	22.89	PK
15600	33.31	4.10	H	37.41	53.98	16.57	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10480	49.07	4.63	V	53.70	68.20	14.50	PK
15720	46.76	3.78	V	50.54	73.98	23.44	PK
15720	32.17	3.78	V	35.95	53.98	18.03	AV
10480	49.29	4.63	H	53.92	68.20	14.28	PK
15720	46.93	3.78	H	50.71	73.98	23.27	PK
15720	33.22	3.78	H	37.00	53.98	16.98	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10520	47.92	4.81	V	52.73	68.20	15.47	PK
15780	46.63	4.11	V	50.74	73.98	23.24	PK
15780	32.88	4.11	V	36.99	53.98	16.99	AV
10520	48.30	4.81	H	53.11	68.20	15.09	PK
15780	47.99	4.11	H	52.10	73.98	21.88	PK
15780	33.09	4.11	H	37.20	53.98	16.78	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10600	48.65	4.62	V	53.27	73.98	20.71	PK
10600	35.07	4.62	V	39.69	53.98	14.29	AV
15900	47.15	5.90	V	53.05	73.98	20.93	PK
15900	32.93	5.90	V	38.83	53.98	15.15	AV
10600	48.87	4.62	H	53.49	73.98	20.49	PK
10600	35.39	4.62	H	40.01	53.98	13.97	AV
15900	46.90	5.90	H	52.80	73.98	21.18	PK
15900	32.88	5.90	H	38.78	53.98	15.20	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10640	48.96	4.49	V	53.45	73.98	20.53	PK
10640	35.12	4.49	V	39.61	53.98	14.37	AV
15960	47.57	4.80	V	52.37	73.98	21.61	PK
15960	33.25	4.80	V	38.05	53.98	15.93	AV
10640	49.41	4.49	H	53.90	73.98	20.08	PK
10640	34.93	4.49	H	39.42	53.98	14.56	AV
15960	47.55	4.80	H	52.35	73.98	21.63	PK
15960	33.31	4.80	H	38.11	53.98	15.87	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11000	47.84	4.60	V	52.44	73.98	21.54	PK
11000	34.69	4.60	V	39.29	53.98	14.69	AV
16500	47.41	7.38	V	54.79	68.20	13.41	PK
11000	48.15	4.60	H	52.75	73.98	21.23	PK
11000	34.91	4.60	H	39.51	53.98	14.47	AV
16500	47.83	7.38	H	55.21	68.20	12.99	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE20)
Transfer MCS Index:	MCS0
Operating Frequency	5600 MHz
Channel No.	120 Ch

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11200	48.75	4.92	V	53.67	73.98	20.31	PK
11200	34.95	4.92	V	39.87	53.98	14.11	AV
16800	46.72	8.76	V	55.48	68.20	12.72	PK
11200	48.63	4.92	H	53.55	73.98	20.43	PK
11200	34.73	4.92	H	39.65	53.98	14.33	AV
16800	46.80	8.76	H	55.56	68.20	12.64	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11440	47.83	4.50	V	52.33	73.98	21.65	PK
11440	34.76	4.50	V	39.26	53.98	14.72	AV
17160	46.52	8.48	V	55.00	68.20	13.20	PK
11440	48.16	4.50	H	52.66	73.98	21.32	PK
11440	34.32	4.50	H	38.82	53.98	15.16	AV
17160	46.97	8.48	H	55.45	68.20	12.75	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11490	47.81	4.17	V	51.98	73.98	22.00	PK
11490	34.09	4.17	V	38.26	53.98	15.72	AV
17235	46.17	9.67	V	55.84	68.20	12.36	PK
11490	48.37	4.17	H	52.54	73.98	21.44	PK
11490	33.96	4.17	H	38.13	53.98	15.85	AV
17235	46.51	9.67	H	56.18	68.20	12.02	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	47.41	4.99	V	52.40	73.98	21.58	PK
11570	33.83	4.99	V	38.82	53.98	15.16	AV
17355	47.15	10.60	V	57.75	68.20	10.45	PK
11570	47.63	4.99	H	52.62	73.98	21.36	PK
11570	34.14	4.99	H	39.13	53.98	14.85	AV
17355	48.02	10.60	H	58.62	68.20	9.58	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11650	48.94	4.71	V	53.65	73.98	20.33	PK
11650	35.08	4.71	V	39.79	53.98	14.19	AV
17475	47.91	10.07	V	57.98	68.20	10.22	PK
11650	48.64	4.71	H	53.35	73.98	20.63	PK
11650	34.57	4.71	H	39.28	53.98	14.70	AV
17475	48.27	10.07	H	58.34	68.20	9.86	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.

[Simultaneous Transmission Mode]

Bluetooth_Ch.0_GFSK + WLAN_5 GHz_802.11ax_HE20_Ch.157_SU_MCS0

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	46.71	4.99	V	51.70	73.98	22.28	PK
11570	33.61	4.99	V	38.60	53.98	15.38	AV
17355	45.88	10.60	V	56.48	68.20	11.72	PK
11570	46.63	4.99	H	51.62	73.98	22.36	PK
11570	33.42	4.99	H	38.41	53.98	15.57	AV
17355	45.37	10.60	H	55.97	68.20	12.23	PK

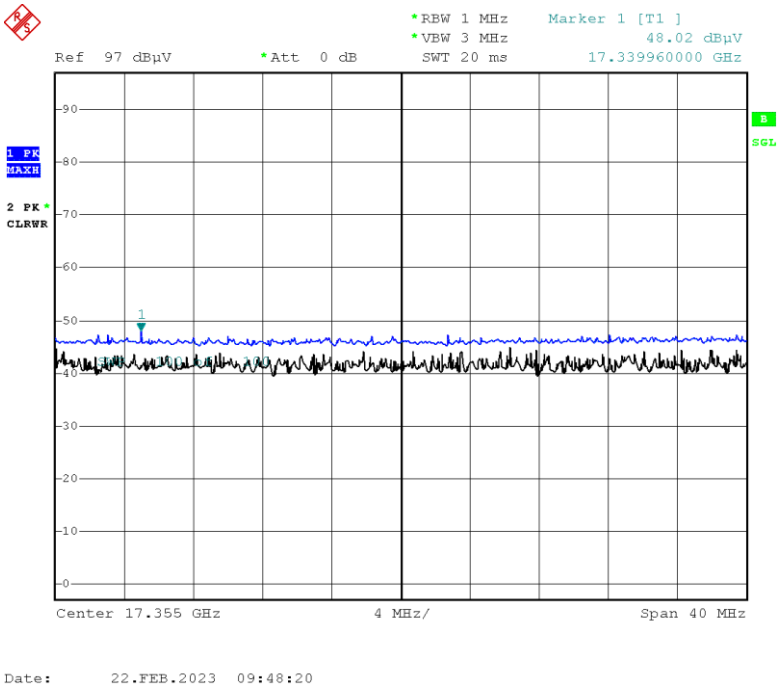
Note :

Bluetooth Simultaneous Transmission Data refer to [BT] Test Report.

▣ Test Plots

[MIMO]

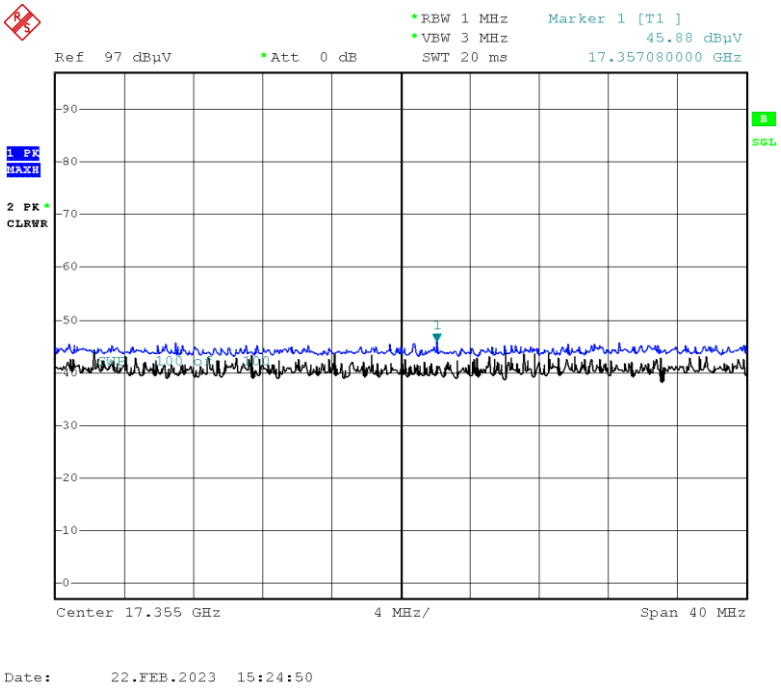
Radiated Spurious Emissions plot - Peak result (802.11ax HE20_SU, Ch.157 3rd Spurious Emission, Z-H)



[Simultaneous Transmission Mode]

Bluetooth_Ch.0_GFSK + WLAN_5 GHz_802.11ax_HE20_Ch.157_SU_MCS0

Radiated Spurious Emissions plot - Peak result (3rd Spurious Emission, Z-V)



Note:

Only the worst case plots for Radiated Spurious Emissions.

10.9 RADIATED RESTRICTED BAND EDGE

Note:

#:Integration method Used (ANSI C63.10 Section 12.7.4.4.3)

1) 802.11ax(HE20)

1.1) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	47.28	11.65	H	58.93	73.98	15.05	PK
5150	33.57	11.65	H	45.22	53.98	8.76	AV
5150	47.34	11.65	V	58.99	73.98	14.99	PK
5150	33.98	11.65	V	45.63	53.98	8.35	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	44.67	11.74	H	56.41	73.98	17.57	PK
5350	31.57	11.74	H	43.31	53.98	10.67	AV
5350	45.08	11.74	V	56.82	73.98	17.16	PK
5350	31.72	11.74	V	43.46	53.98	10.52	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.42	12.60	H	58.02	73.98	15.96	PK
5460	31.27	12.60	H	43.87	53.98	10.11	AV
5470	43.71	12.85	H	56.56	68.20	11.64	PK
5460	45.51	12.60	V	58.11	73.98	15.87	PK
5460	31.38	12.60	V	43.98	53.98	10.00	AV
5470	43.89	12.85	V	56.74	68.20	11.46	PK

1.2) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	46.28	11.65	H	57.93	73.98	16.05	PK
5150	33.72	11.65	H	45.37	53.98	8.61	AV
5150	46.66	11.65	V	58.31	73.98	15.67	PK
5150	33.74	11.65	V	45.39	53.98	8.59	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	44.72	11.74	H	56.46	73.98	17.52	PK
5350	31.63	11.74	H	43.37	53.98	10.61	AV
5350	44.84	11.74	V	56.58	73.98	17.40	PK
5350	31.82	11.74	V	43.56	53.98	10.42	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.25	12.60	H	56.84	73.98	17.14	PK
5460	31.42	12.60	H	44.02	53.98	9.96	AV
5470	44.67	12.85	H	57.52	68.20	10.68	PK
5460	44.99	12.60	V	57.59	73.98	16.39	PK
5460	31.45	12.60	V	44.05	53.98	9.93	AV
5470	44.80	12.85	V	57.65	68.20	10.55	PK

1.3) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	46.07	11.65	H	57.72	73.98	16.26	PK
5150	33.93	11.65	H	45.58	53.98	8.40	AV
5150	46.23	11.65	V	57.88	73.98	16.10	PK
5150	34.02	11.65	V	45.67	53.98	8.31	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	45.21	11.74	H	56.95	73.98	17.03	PK
5350	31.64	11.74	H	43.38	53.98	10.60	AV
5350	45.52	11.74	V	57.26	73.98	16.72	PK
5350	31.75	11.74	V	43.49	53.98	10.49	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.29	12.60	H	56.89	73.98	17.09	PK
5460	31.35	12.60	H	43.95	53.98	10.03	AV
5470	44.07	12.85	H	56.92	68.20	11.28	PK
5460	44.38	12.60	V	56.98	73.98	17.00	PK
5460	31.41	12.60	V	44.01	53.98	9.97	AV
5470	44.27	12.85	V	57.12	68.20	11.08	PK

1.4) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	46.62	11.65	H	58.27	73.98	15.71	PK
5150	33.87	11.65	H	45.52	53.98	8.46	AV
5150	46.82	11.65	V	58.47	73.98	15.51	PK
5150	34.00	11.65	V	45.65	53.98	8.33	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	45.39	11.74	H	57.13	73.98	16.85	PK
5350	31.54	11.74	H	43.28	53.98	10.70	AV
5350	45.86	11.74	V	57.60	73.98	16.38	PK
5350	31.99	11.74	V	43.73	53.98	10.25	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.81	12.60	H	57.41	73.98	16.57	PK
5460	31.29	12.60	H	43.89	53.98	10.09	AV
5470	43.43	12.85	H	56.28	68.20	11.92	PK
5460	44.98	12.60	V	57.58	73.98	16.40	PK
5460	31.49	12.60	V	44.09	53.98	9.89	AV
5470	43.84	12.85	V	56.69	68.20	11.51	PK

1.5) SU

Band :	UNII 1
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5180 MHz
Channel No.	36 Ch
RU offset.	None

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	53.75	11.65	H	65.40	73.98	8.58	PK
5150	35.48	11.65	H	47.13	53.98	6.85	AV
5150	53.88	11.65	V	65.53	73.98	8.45	PK
5150	35.87	11.65	V	47.52	53.98	6.46	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5320 MHz
Channel No.	64 Ch
RU offset.	None

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
#5350	21.10	41.76	H	62.86	73.98	11.12	PK
5350	25.99	41.76	H	67.76	73.98	6.22	PK
5350	5.00	41.76	H	46.76	53.98	7.22	AV
#5350	21.31	41.76	V	63.07	73.98	10.91	PK
5350	26.57	41.76	V	68.34	73.98	5.64	PK
5350	5.06	41.76	V	46.83	53.98	7.15	AV

Band :	UNII 2C
Operation Mode:	802.11ax(HE20)
Transfer Rate:	MCS0
Operating Frequency	5500 MHz
Channel No.	100 Ch
RU offset.	None

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	57.93	12.60	H	70.53	73.98	3.45	PK
5460	33.08	12.60	H	45.68	53.98	8.30	AV
5460	58.31	12.60	V	70.91	73.98	3.07	PK
5460	33.94	12.60	V	46.54	53.98	7.44	AV

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
#5470	20.50	42.43	H	62.93	68.20	5.27	PK
#5470	20.62	42.43	V	63.05	68.20	5.15	PK

2) 802.11ax(HE40)

2.1) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	48.02	11.65	H	59.67	73.98	14.31	PK
5150	32.48	11.65	H	44.13	53.98	9.85	AV
5150	48.40	11.65	V	60.05	73.98	13.93	PK
5150	33.00	11.65	V	44.65	53.98	9.33	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	17

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	48.75	11.74	H	60.49	73.98	13.49	PK
5350	31.08	11.74	H	42.82	53.98	11.16	AV
5350	48.89	11.74	V	60.63	73.98	13.35	PK
5350	31.55	11.74	V	43.29	53.98	10.69	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	47.40	12.60	H	60.00	73.98	13.98	PK
5460	31.11	12.60	H	43.71	53.98	10.27	AV
5470	48.17	12.85	H	61.02	68.20	7.18	PK
5460	48.00	12.60	V	60.60	73.98	13.38	PK
5460	31.48	12.60	V	44.08	53.98	9.90	AV
5470	49.02	12.85	V	61.87	68.20	6.33	PK

2.2) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	47.91	11.65	H	59.56	73.98	14.42	PK
5150	32.48	11.65	H	44.13	53.98	9.85	AV
5150	48.19	11.65	V	59.84	73.98	14.14	PK
5150	33.07	11.65	V	44.72	53.98	9.26	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	49.05	11.74	H	60.79	73.98	13.19	PK
5350	31.12	11.74	H	42.86	53.98	11.12	AV
5350	49.29	11.74	V	61.03	73.98	12.95	PK
5350	31.45	11.74	V	43.19	53.98	10.79	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	48.22	12.60	H	60.82	73.98	13.16	PK
5460	31.05	12.60	H	43.65	53.98	10.33	AV
5470	49.06	12.85	H	61.91	68.20	6.29	PK
5460	48.58	12.60	V	61.18	73.98	12.80	PK
5460	31.26	12.60	V	43.86	53.98	10.12	AV
5470	49.57	12.85	V	62.42	68.20	5.78	PK

2.3) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	47.21	11.65	H	58.86	73.98	15.12	PK
5150	32.83	11.65	H	44.48	53.98	9.50	AV
5150	47.39	11.65	V	59.04	73.98	14.94	PK
5150	33.01	11.65	V	44.66	53.98	9.32	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	56

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	49.07	11.74	H	60.81	73.98	13.17	PK
5350	31.24	11.74	H	42.98	53.98	11.00	AV
5350	49.44	11.74	V	61.18	73.98	12.80	PK
5350	31.51	11.74	V	43.25	53.98	10.73	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	47.63	12.60	H	60.23	73.98	13.75	PK
5460	30.76	12.60	H	43.36	53.98	10.62	AV
5470	48.56	12.85	H	61.41	68.20	6.79	PK
5460	48.00	12.60	V	60.60	73.98	13.38	PK
5460	31.14	12.60	V	43.74	53.98	10.24	AV
5470	48.63	12.85	V	61.48	68.20	6.72	PK

2.4) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	48.18	11.65	H	59.83	73.98	14.15	PK
5150	33.18	11.65	H	44.83	53.98	9.15	AV
5150	48.26	11.65	V	59.91	73.98	14.07	PK
5150	33.25	11.65	V	44.90	53.98	9.08	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	49.67	11.74	H	61.41	73.98	12.57	PK
5350	30.97	11.74	H	42.71	53.98	11.27	AV
5350	50.05	11.74	V	61.79	73.98	12.19	PK
5350	31.53	11.74	V	43.27	53.98	10.71	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	47.52	12.60	H	60.12	73.98	13.86	PK
5460	30.95	12.60	H	43.55	53.98	10.43	AV
5470	47.76	12.85	H	60.61	68.20	7.59	PK
5460	48.05	12.60	V	60.65	73.98	13.33	PK
5460	31.05	12.60	V	43.65	53.98	10.33	AV
5470	48.87	12.85	V	61.72	68.20	6.48	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5510 MHz
Channel No.	102 Ch
RU offset.	62

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.21	12.60	H	56.81	73.98	17.17	PK
5460	31.08	12.60	H	43.68	53.98	10.30	AV
5470	48.52	12.85	H	61.37	68.20	6.83	PK
5460	44.49	12.60	V	57.09	73.98	16.89	PK
5460	31.22	12.60	V	43.82	53.98	10.16	AV
5470	49.38	12.85	V	62.23	68.20	5.97	PK

2.5) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	55.93	11.65	H	67.58	73.98	6.40	PK
5150	33.57	11.65	H	45.22	53.98	8.76	AV
5150	56.36	11.65	V	68.01	73.98	5.97	PK
5150	34.00	11.65	V	45.65	53.98	8.33	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	65

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	54.31	11.74	H	66.05	73.98	7.93	PK
5350	32.54	11.74	H	44.28	53.98	9.70	AV
5350	54.72	11.74	V	66.46	73.98	7.52	PK
5350	32.60	11.74	V	44.34	53.98	9.64	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	51.97	12.60	H	64.57	73.98	9.41	PK
5460	31.72	12.60	H	44.32	53.98	9.66	AV
5460	52.15	12.60	V	64.75	73.98	9.23	PK
5460	31.96	12.60	V	44.56	53.98	9.42	AV

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
#5470	21.69	42.43	H	64.12	68.20	4.08	PK
#5470	22.76	42.43	V	65.19	68.20	3.01	PK

2.6) SU

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5190 MHz
Channel No.	38 Ch
RU offset.	None

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	54.19	11.65	H	65.84	73.98	8.14	PK
5150	36.07	11.65	H	47.72	53.98	6.26	AV
5150	54.50	11.65	V	66.15	73.98	7.83	PK
5150	36.14	11.65	V	47.79	53.98	6.19	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5310 MHz
Channel No.	62 Ch
RU offset.	None

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	54.27	11.74	H	66.01	73.98	7.97	PK
5350	35.78	11.74	H	47.52	53.98	6.46	AV
5350	54.34	11.74	V	66.08	73.98	7.90	PK
5350	36.08	11.74	V	47.82	53.98	6.16	AV

Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5510 MHz
Channel No.	102 Ch
RU offset.	None

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	53.49	12.60	H	66.09	73.98	7.89	PK
5460	33.08	12.60	H	45.68	53.98	8.30	AV
5460	53.85	12.60	V	66.45	73.98	7.53	PK
5460	33.33	12.60	V	45.93	53.98	8.05	AV

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
#5470	21.49	42.43	H	63.93	68.20	4.27	PK
#5470	21.96	42.43	V	64.39	68.20	3.81	PK

3) 802.11ax(HE80)

3.1) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	47.09	11.65	H	58.74	73.98	15.24	PK
5150	32.46	11.65	H	44.11	53.98	9.87	AV
5150	47.29	11.65	V	58.94	73.98	15.04	PK
5150	33.51	11.65	V	45.16	53.98	8.82	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	47.65	11.74	H	59.39	73.98	14.59	PK
5350	32.01	11.74	H	43.75	53.98	10.23	AV
5350	47.96	11.74	V	59.70	73.98	14.28	PK
5350	32.44	11.74	V	44.18	53.98	9.80	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	43.96	12.60	H	56.56	73.98	17.42	PK
5460	31.15	12.60	H	43.75	53.98	10.23	AV
5470	44.19	12.85	H	57.04	68.20	11.16	PK
5460	44.85	12.60	V	57.45	73.98	16.53	PK
5460	31.63	12.60	V	44.23	53.98	9.75	AV
5470	44.21	12.85	V	57.06	68.20	11.14	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	18

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	43.93	12.60	H	56.53	73.98	17.45	PK
5460	31.08	12.60	H	43.68	53.98	10.30	AV
5470	43.58	12.85	H	56.43	68.20	11.77	PK
5460	44.14	12.60	V	56.74	73.98	17.24	PK
5460	31.38	12.60	V	43.98	53.98	10.00	AV
5470	43.93	12.85	V	56.78	68.20	11.42	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	36

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
#5460	26.19	42.34	H	68.52	73.98	5.46	PK
#5470	19.59	42.43	H	62.02	68.20	6.18	PK
#5460	26.25	42.34	V	68.59	73.98	5.39	PK
#5470	19.64	42.43	V	62.07	68.20	6.13	PK

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	33.58	12.60	H	46.18	53.98	7.80	AV
5460	34.67	12.60	V	47.27	53.98	6.71	AV

3.2) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	45.19	11.65	H	56.84	73.98	17.14	PK
5150	32.76	11.65	H	44.41	53.98	9.57	AV
5150	45.65	11.65	V	57.30	73.98	16.68	PK
5150	33.03	11.65	V	44.68	53.98	9.30	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	44.83	11.74	H	56.57	73.98	17.41	PK
5350	31.89	11.74	H	43.63	53.98	10.35	AV
5350	45.16	11.74	V	56.90	73.98	17.08	PK
5350	32.21	11.74	V	43.95	53.98	10.03	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.97	12.60	H	57.57	73.98	16.41	PK
5460	31.28	12.60	H	43.88	53.98	10.10	AV
5470	44.02	12.85	H	56.87	68.20	11.33	PK
5460	45.05	12.60	V	57.65	73.98	16.33	PK
5460	31.44	12.60	V	44.04	53.98	9.94	AV
5470	44.19	12.85	V	57.04	68.20	11.16	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	52

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
#5460	21.52	42.34	H	63.86	73.98	10.12	PK
#5470	19.25	42.43	H	61.69	68.20	6.51	PK
#5460	21.68	42.34	V	64.01	73.98	9.97	PK
#5470	19.39	42.43	V	61.82	68.20	6.38	PK

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	33.07	12.60	H	45.67	53.98	8.31	AV
5460	33.13	12.60	V	45.73	53.98	8.25	AV

3.3) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	45.96	11.65	H	57.61	73.98	16.37	PK
5150	32.76	11.65	H	44.41	53.98	9.57	AV
5150	46.31	11.65	V	57.96	73.98	16.02	PK
5150	33.05	11.65	V	44.70	53.98	9.28	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	44.63	11.74	H	56.37	73.98	17.61	PK
5350	31.58	11.74	H	43.32	53.98	10.66	AV
5350	44.71	11.74	V	56.45	73.98	17.53	PK
5350	31.66	11.74	V	43.40	53.98	10.58	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.24	12.60	H	56.84	73.98	17.14	PK
5460	31.01	12.60	H	43.61	53.98	10.37	AV
5470	44.58	12.85	H	57.43	68.20	10.77	PK
5460	44.33	12.60	V	56.93	73.98	17.05	PK
5460	31.34	12.60	V	43.94	53.98	10.04	AV
5470	44.61	12.85	V	57.46	68.20	10.74	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	60

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
#5460	19.67	42.34	H	62.01	73.98	11.97	PK
#5470	19.23	42.43	H	61.66	68.20	6.54	PK
#5460	20.16	42.34	V	62.49	73.98	11.49	PK
#5470	19.66	42.43	V	62.09	68.20	6.11	PK

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	32.11	12.60	H	44.71	53.98	9.27	AV
5460	32.14	12.60	V	44.74	53.98	9.24	AV

3.4) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	46.78	11.65	H	58.43	73.98	15.55	PK
5150	32.75	11.65	H	44.40	53.98	9.58	AV
5150	46.92	11.65	V	58.57	73.98	15.41	PK
5150	33.19	11.65	V	44.84	53.98	9.14	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	44.07	11.74	H	55.81	73.98	18.17	PK
5350	31.59	11.74	H	43.33	53.98	10.65	AV
5350	44.69	11.74	V	56.43	73.98	17.55	PK
5350	31.72	11.74	V	43.46	53.98	10.52	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.57	12.60	H	57.17	73.98	16.81	PK
5460	31.32	12.60	H	43.92	53.98	10.06	AV
5470	44.58	12.85	H	57.43	68.20	10.77	PK
5460	44.74	12.60	V	57.34	73.98	16.64	PK
5460	31.40	12.60	V	44.00	53.98	9.98	AV
5470	44.62	12.85	V	57.47	68.20	10.73	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	64

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	51.72	12.60	H	64.32	73.98	9.66	PK
5460	31.65	12.60	H	44.25	53.98	9.73	AV
5470	46.93	12.85	H	59.78	68.20	8.42	PK
5460	52.22	12.60	V	64.82	73.98	9.16	PK
5460	31.81	12.60	V	44.41	53.98	9.57	AV
5470	47.52	12.85	V	60.37	68.20	7.83	PK

3.5) 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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	45.39	11.65	H	57.04	73.98	16.94	PK
5150	33.45	11.65	H	45.10	53.98	8.88	AV
5150	45.73	11.65	V	57.38	73.98	16.60	PK
5150	34.00	11.65	V	45.65	53.98	8.33	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	46.05	11.74	H	57.79	73.98	16.19	PK
5350	32.29	11.74	H	44.03	53.98	9.95	AV
5350	46.21	11.74	V	57.95	73.98	16.03	PK
5350	32.63	11.74	V	44.37	53.98	9.61	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]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.21	12.60	H	56.81	73.98	17.17	PK
5460	31.54	12.60	H	44.14	53.98	9.84	AV
5470	43.97	12.85	H	56.82	68.20	11.38	PK
5460	44.39	12.60	V	56.99	73.98	16.99	PK
5460	31.94	12.60	V	44.54	53.98	9.44	AV
5470	44.04	12.85	V	56.89	68.20	11.31	PK

3.6) 996 Tone

Band :	UNII 1
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5210 MHz
Channel No.	42 Ch
RU offset.	67

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	46.28	11.65	H	57.93	73.98	16.05	PK
5150	35.17	11.65	H	46.82	53.98	7.16	AV
5150	46.64	11.65	V	58.29	73.98	15.69	PK
5150	35.62	11.65	V	47.27	53.98	6.71	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5290 MHz
Channel No.	58 Ch
RU offset.	67

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	45.08	11.74	H	56.82	73.98	17.16	PK
5350	34.29	11.74	H	46.03	53.98	7.95	AV
5350	45.62	11.74	V	57.36	73.98	16.62	PK
5350	34.44	11.74	V	46.18	53.98	7.80	AV

Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	67

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.09	12.60	H	56.69	73.98	17.29	PK
5460	32.48	12.60	H	45.08	53.98	8.90	AV
5470	43.57	12.85	H	56.42	68.20	11.78	PK
5460	44.68	12.60	V	57.28	73.98	16.70	PK
5460	33.32	12.60	V	45.92	53.98	8.06	AV
5470	43.94	12.85	V	56.79	68.20	11.41	PK

3.7) SU

Band :	UNII 1
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5210 MHz
Channel No.	42 Ch
RU offset.	None

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	52.08	11.65	H	63.73	73.98	10.25	PK
5150	35.67	11.65	H	47.32	53.98	6.66	AV
5150	52.27	11.65	V	63.92	73.98	10.06	PK
5150	35.75	11.65	V	47.40	53.98	6.58	AV

Band :	UNII 2A
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5290 MHz
Channel No.	58 Ch
RU offset.	None

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	48.63	11.74	H	60.37	73.98	13.61	PK
5350	35.47	11.74	H	47.21	53.98	6.77	AV
5350	48.76	11.74	V	60.50	73.98	13.48	PK
5350	35.78	11.74	V	47.52	53.98	6.46	AV

Band :	UNII 2C
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5530 MHz
Channel No.	106 Ch
RU offset.	None

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.27	12.60	H	57.87	73.98	16.11	PK
5460	34.19	12.60	H	46.79	53.98	7.19	AV
5470	45.28	12.85	H	58.13	68.20	10.07	PK
5460	45.33	12.60	V	57.93	73.98	16.05	PK
5460	34.59	12.60	V	47.19	53.98	6.79	AV
5470	45.87	12.85	V	58.72	68.20	9.48	PK

▣ Test Plots(UNII 1, 2A, 2C),

Note:

1. Only the worst case plots for Radiated Restricted Band Edge.
2. # : Integration method Used (ANSI C63.10 Section 12.7.4.4.3)

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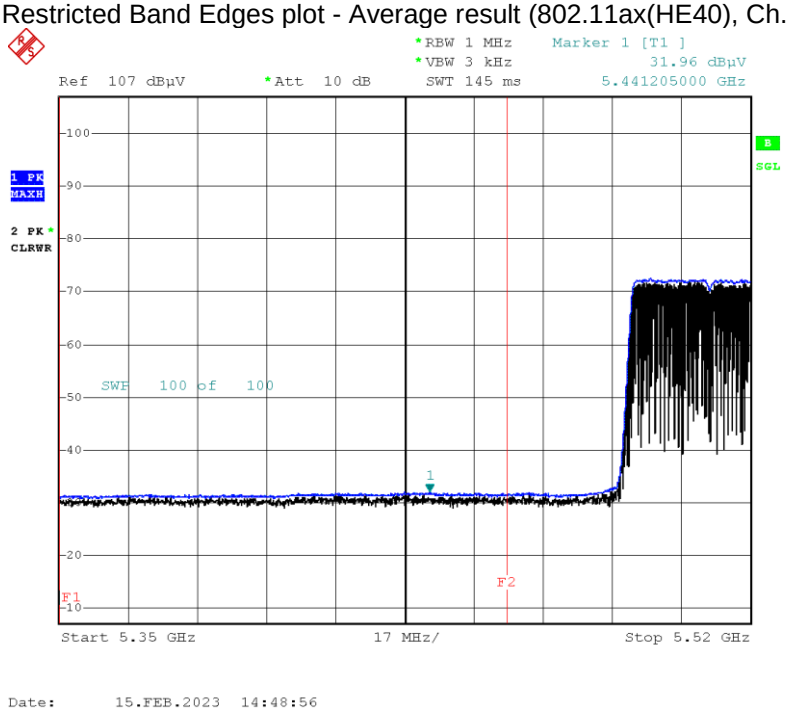
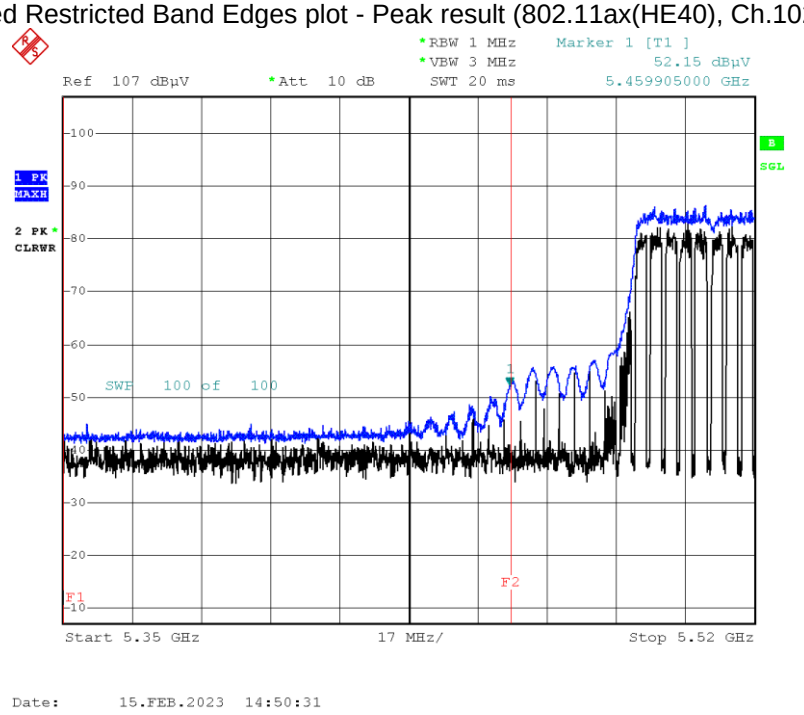
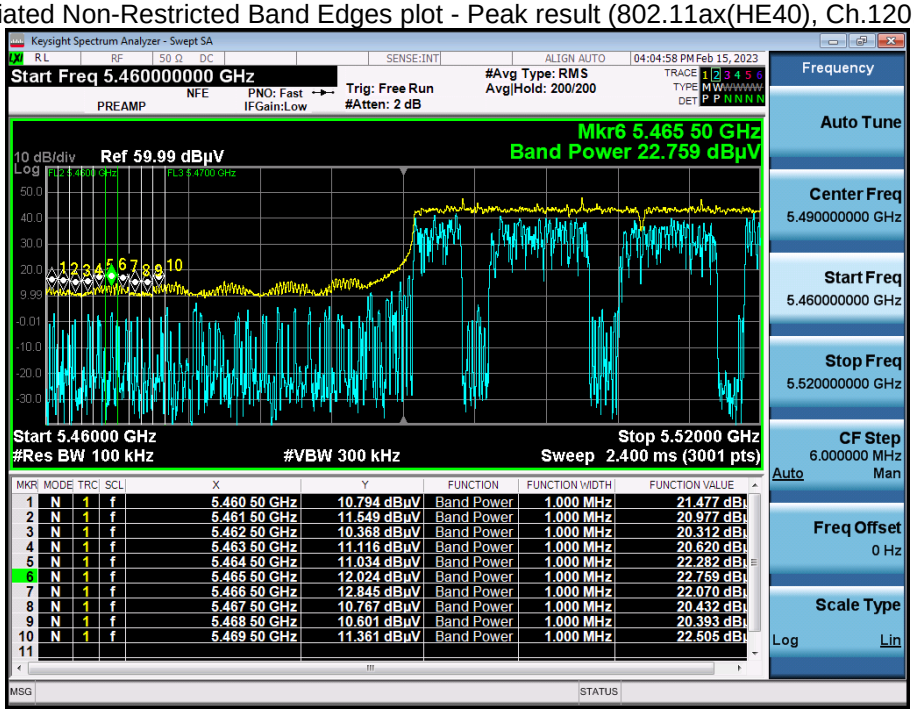
Radiated Restricted Band Edges plot - Average result (802.11ax(HE40), Ch.102, Y-V)



Radiated Restricted Band Edges plot - Peak result (802.11ax(HE40), Ch.102, Y-V)



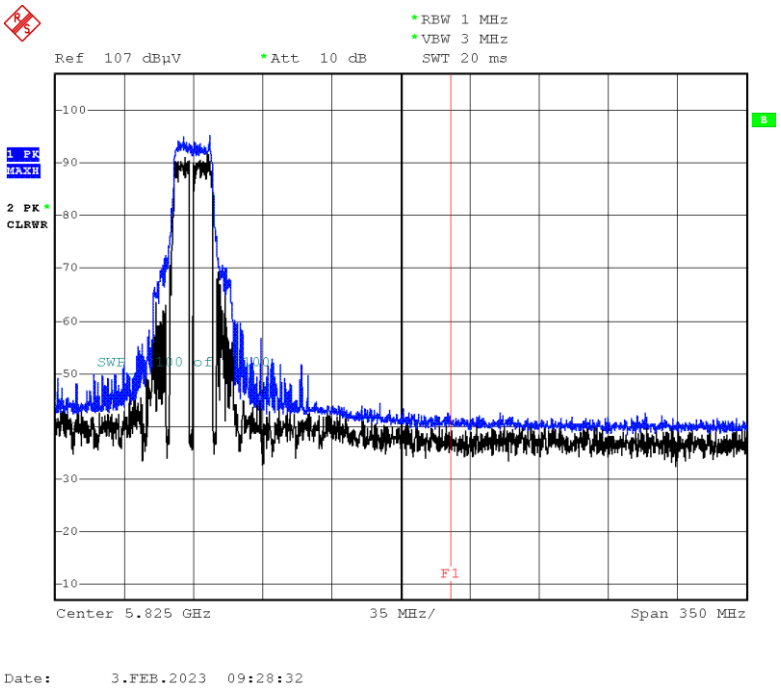
#Radiated Non-Restricted Band Edges plot - Peak result (802.11ax(HE40), Ch.120, Y-V)



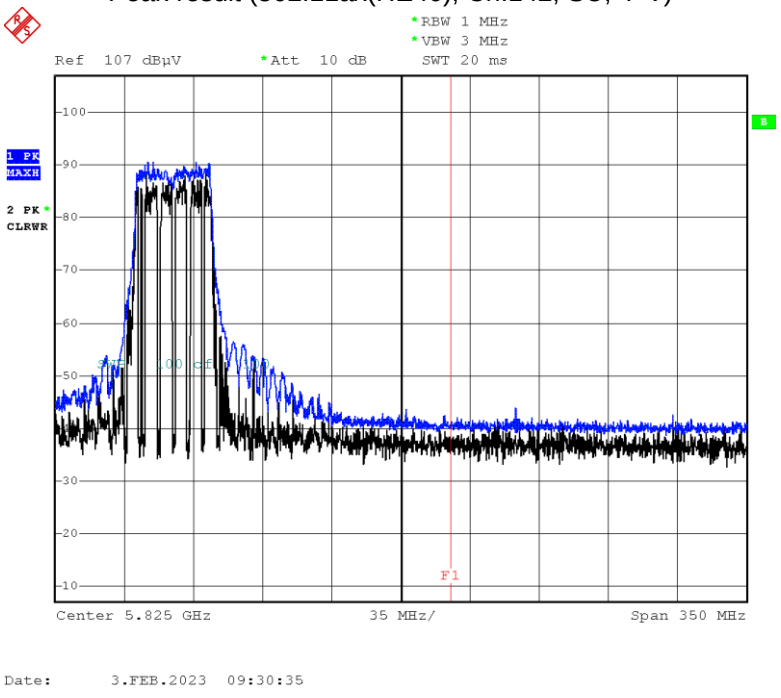
▣ Test Plots(Staraddle Channel)

[MIMO]

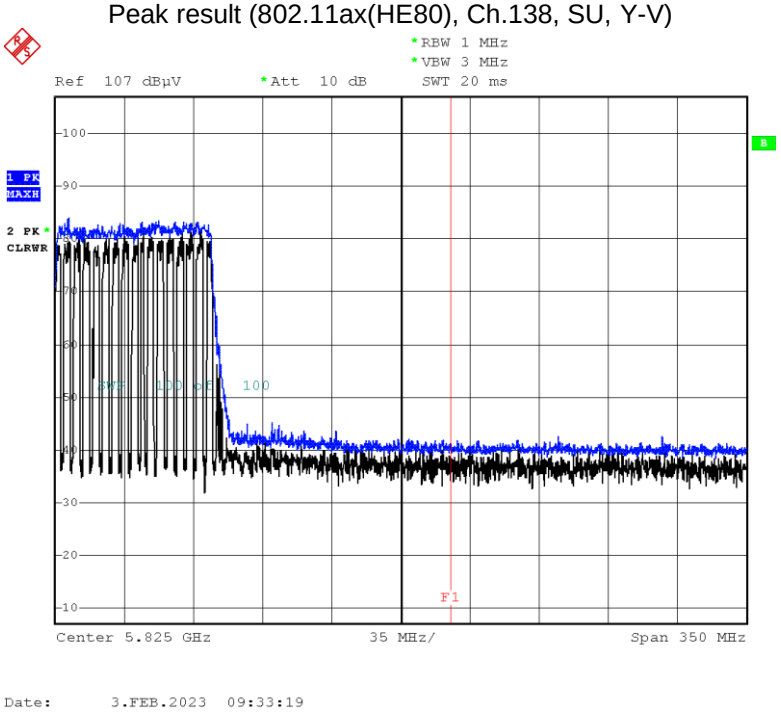
Peak result (802.11ax(HE20), Ch.144, SU, Y-V)



Peak result (802.11ax(HE40), Ch.142, SU, Y-V)



Peak result (802.11ax(HE80), Ch.138, SU, Y-V)



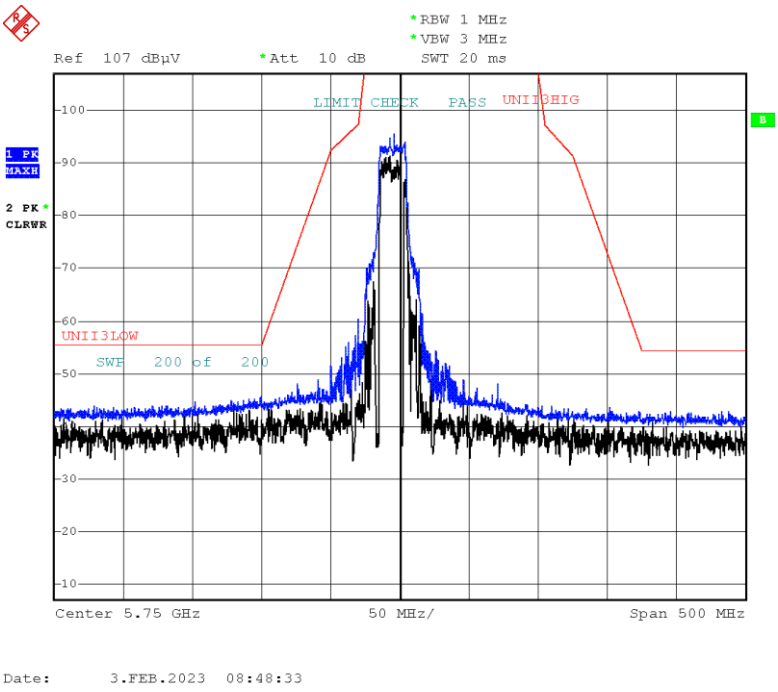
Note :

1. Only the worst case plots for Radiated Restricted Band Edge.
2. Red line : 5 850 MHz
3. Ambient Noise (Because of ambient noise, We attached only the worst plot without a data table)

▣ Test Plots(UNII 3)_Low Edge

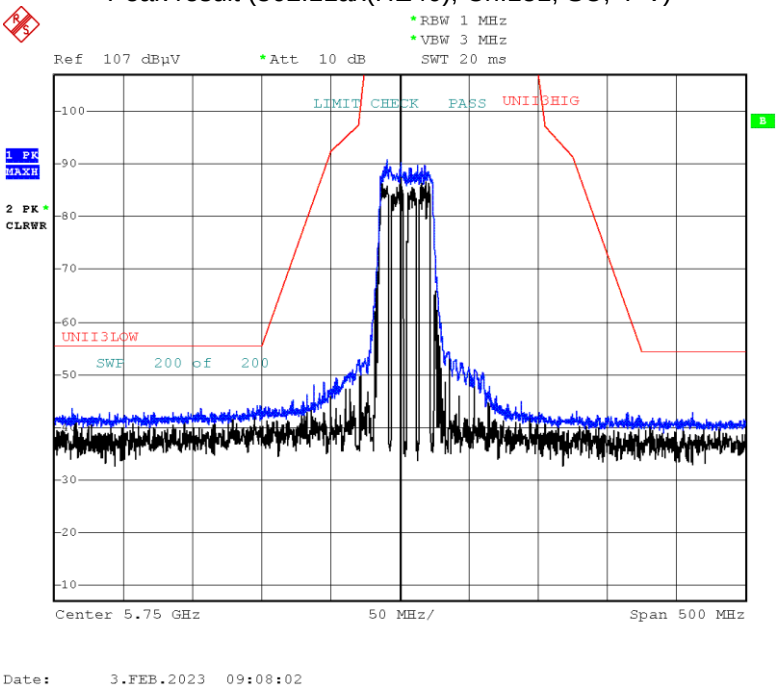
[MIMO]

Peak result (802.11ax(HE20), Ch.149, SU, Y-V)



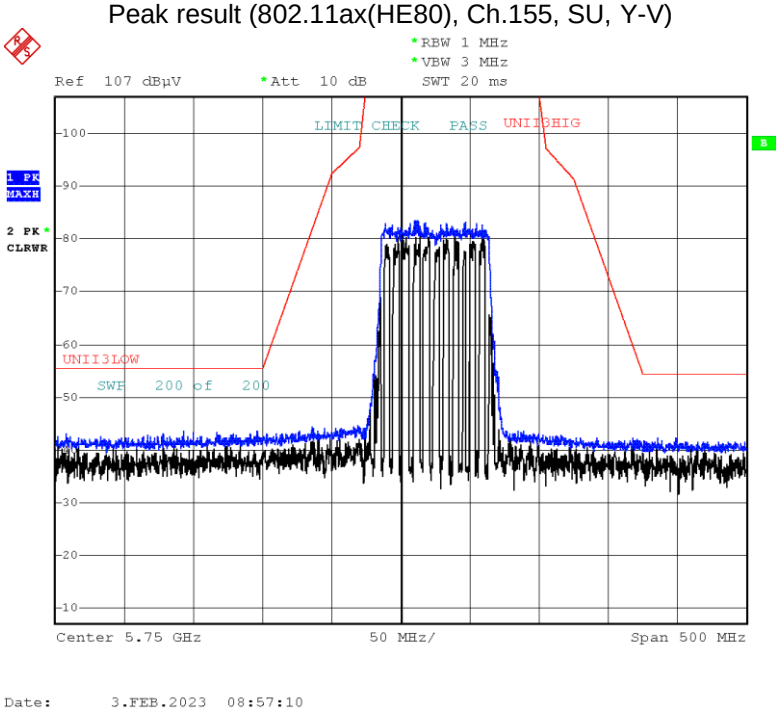
Date: 3.FEB.2023 08:48:33

Peak result (802.11ax(HE40), Ch.151, SU, Y-V)



Date: 3.FEB.2023 09:08:02

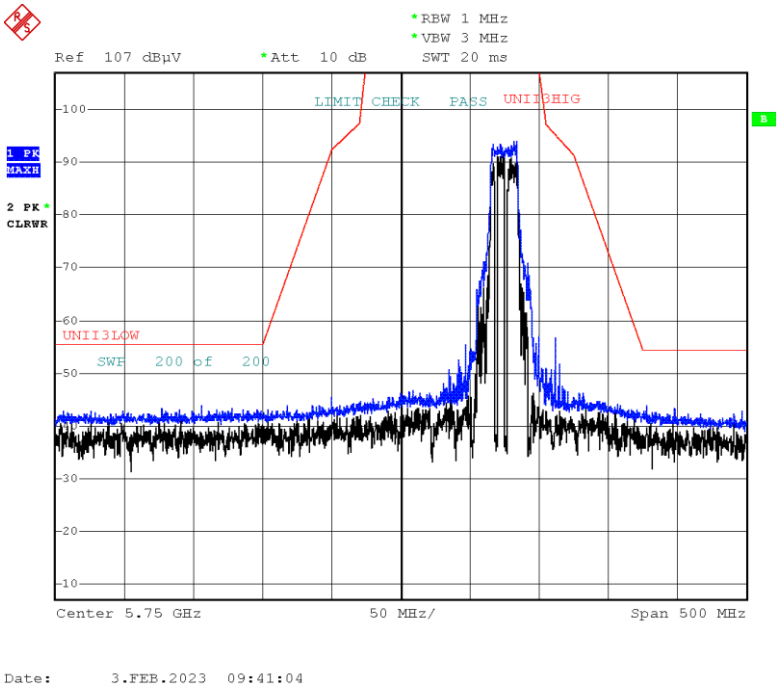
Peak result (802.11ax(HE80), Ch.155, SU, Y-V)



▣ Test Plots(UNII 3)_High Edge

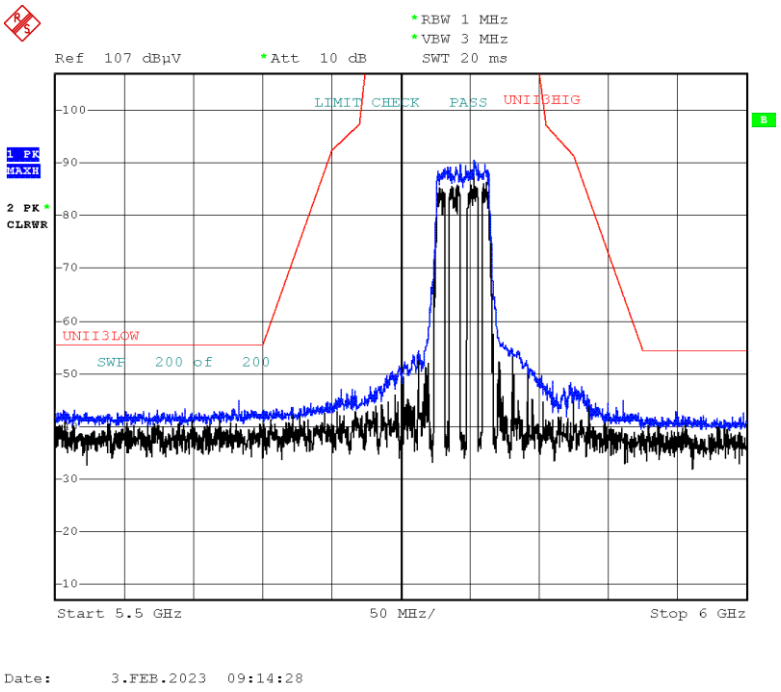
[MIMO]

Peak result (802.11ax(HE20), Ch.165, SU, Y-V)



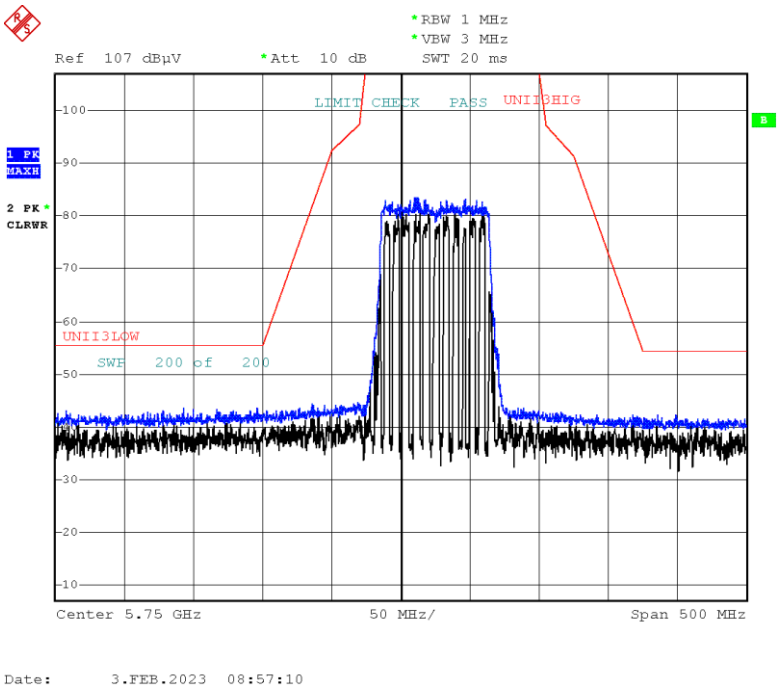
Date: 3.FEB.2023 09:41:04

Peak result (802.11ax(HE40), Ch.159, SU, Y-V)



Date: 3.FEB.2023 09:14:28

Peak result (802.11ax(HE80), Ch.155, SU, Y-V)



Note :

1. Only the worst case plots for U-NII-3 Out of Band e.i.r.p Emission.
2. U-NII-3 Low & High Band Edge RedLine is Final Test Limit about factor value compensation.

11. LIST OF TESTEQUIPMENT

Conducted Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
LISN	ENV216	Rohde & Schwarz	102245	08/22/2023	Annual
EMI Test Receiver	ESR	Rohde & Schwarz	101910	06/07/2023	Annual
Temperature Chamber	SU-642	ESPEC	0093008124	03/04/2023	Annual
Signal Analyzer	N9030A	Keysight	MY55410508	09/06/2023	Annual
Power Meter	N1911A	Agilent	MY45100523	03/24/2023	Annual
Power Sensor	N1921A	Agilent	MY57820067	03/24/2023	Annual
Directional Coupler	87300B	Agilent	3116A03621	11/02/2023	Annual
Power Splitter	11667B	Hewlett Packard	10545	02/06/2024	Annual
DC Power Supply	E3632A	Agilent	KR75305528	01/03/2024	Annual
Attenuator(10 dB)(DC-26.5 GHz)	8493C-010	Agilent	08285	06/21/2023	Annual
Attenuator(20 dB)	18N-20dB	Rohde & Schwarz	8	03/07/2023	Annual
Software	EMC32	Rohde & Schwarz	N/A	N/A	N/A
FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	HCT CO., LTD.	N/A	N/A	N/A
Bluetooth Tester	CBT	Rohde & Schwarz	100808	02/16/2024	Annual

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

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Controller(Antenna mast)	CO3000	Innco system	CO3000-4p	N/A	N/A
Antenna Position Tower	MA4640/800-XP-EP	Innco system	N/A	N/A	N/A
Controller	EM2090	Emco	060520	N/A	N/A
Turn Table	N/A	Ets	N/A	N/A	N/A
Loop Antenna	FMZB 1513	Rohde & Schwarz	1513-333	03/17/2024	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	9168-0895	08/16/2024	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	9120D-1191	11/18/2023	Biennial
Horn Antenna(15 GHz ~ 40 GHz)	BBHA9170	Schwarzbeck	BBHA9170124	04/12/2023	Biennial
Amp & Filter Bank Switch Controller	FBSM-01A	TNM system	0	N/A	N/A
Band Reject Filter	WRCJV2400/2483.5-2370/2520-60/12SS	Wainwright Instruments	2	01/05/2024	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	5	06/13/2023	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	6	06/13/2023	Annual
Band Reject Filter	WRCJV5100/5850-40/50-8EEK	Wainwright Instruments	1	02/09/2024	Annual
ATT(3 dB) + LNA2(6~18 GHz)	18B-03, CBL06185030	WEINSCHEL CERNEX	N/A	12/05/2023	Annual
ATT(10 dB) + LNA1(0.1~18 GHz)	56-10, CBLU1183540B-01	Api tech, CERNEX	N/A	12/05/2023	Annual
High Pass Filter	WHKX10-2700-3000-18000-40SS	Wainwright Instruments	N/A	12/05/2023	Annual
High Pass Filter	WHKX8-6090-7000-18000-40SS	Wainwright Instruments	N/A	12/05/2023	Annual
Thru	COAXIAL ATTENUATOR	T&M SYSTEM	N/A	12/05/2023	Annual
Power Amplifier	CBL18265035	CERNEX	22966	12/01/2023	Annual
Power Amplifier	CBL26405040	CERNEX	25956	03/11/2023	Annual
Bluetooth Tester	TC-3000C	TESCOM	3000C000175	04/05/2023	Annual
Spectrum Analyzer	FSP(9 kHz ~ 30 GHz)	Rohde & Schwarz	836650/016	09/06/2023	Annual
Spectrum Analyzer	FSV40-N(9 kHz ~ 30 GHz)	Rohde & Schwarz	101068-SZ	09/07/2023	Annual

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-2302-FC022-P