

FCC UNII REPORT

Certification

Applicant Name:

SAMSUNG Electronics Co., Ltd.

Date of Issue:

September 17, 2021

Address:

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Test Site/Location:

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Report No.: HCT-RF-2109-FC015

FCC ID:	A3LSMG990B
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APPLICANT:	SAMSUNG Electronics Co., Ltd.
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Model: SM-G990E/DS

Additional Model: SM-G990E

EUT Type: Mobile Phone

Modulation type OFDMA

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.

Report No.: HCT-RF-2109-FC015

REVIEWED BY



Report prepared by : Woong Jin Kim
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)

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Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2109-FC015	September 17, 2021	- First Approval Report

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1. GENERAL INFORMATION

EUT DESCRIPTION

Model	SM-G990E/DS	
Additional Model	SM-G990E	
EUT Type	Mobile Phone	
Power Supply	DC 4.20 V	
Modulation Type	OFDMA	
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	August 18, 2021 ~ September 10, 2021	
Serial number	Radiated: R3CR803NRAH Conducted: R3CR803NY9H	

ANTENNA CONFIGURATIONS

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

Configurations	SISO		SDM	CDD
	Ant.1	Ant.2	Ant.1 + Ant.2	Ant.1 + Ant.2
802.11ax	X	X	O	O

Note:

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

2.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.

RSDB Scenario	2.4 GHz	2.4 GHz	5 GHz	5 GHz
	WiFi Ant.1	WiFi Ant.2	WiFi Ant.1	WiFi Ant.2
2.4 GHz WiFi + 5 GHz WiFi MIMO	On		On	On
2.4 GHz WiFi + 5 GHz WiFi MIMO		On	On	On
2.4 GHz WiFi MIMO + 5 GHz WiFi MIMO	On	On	On	On

Non-DBS	5 GHz	5 GHz	Bluetooth
	WiFi Ant.1	WiFi Ant.2	Ant.1
2.4 GHz WiFi MIMO + 5 GHz WiFi MIMO + Bluetooth	On	On	On

3. Directional Gain Calculation

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

Directional gain =

$$\bullet \quad \text{DirectionalGain} = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

Band	Ant Gain (dBi)		N _{ANT} / N _{SS}	Directional Gain (dBi)
	U-NII	ANT.1		
ANT.2		-5.20	2 / 2	-0.32

2. MAXIMUM OUTPUT POWER

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

Band	Mode	SUM	
		(MIMO Ant 1 + MIMO Ant 2) Power	
		(dBm)	(W)
UNII1	802.11ax (HE20)	15.41	0.035
	802.11ax (HE40)	12.86	0.019
	802.11ax (HE80)	11.82	0.015
UNII2A	802.11ax (HE20)	15.47	0.035
	802.11ax (HE40)	13.18	0.021
	802.11ax (HE80)	11.87	0.015
UNII2C	802.11ax (HE20)	15.39	0.035
	802.11ax (HE40)	12.87	0.019
	802.11ax (HE80)	11.67	0.015
UNII3	802.11ax (HE20)	15.12	0.032
	802.11ax (HE40)	12.70	0.019
	802.11ax (HE80)	11.61	0.014

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 1.5 m 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.

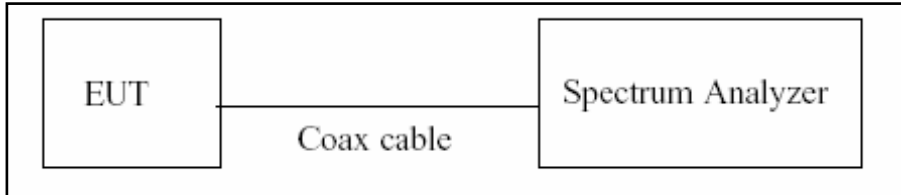
The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.82 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (9 kHz ~ 30 MHz)	3.40 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (30 MHz ~ 1 GHz)	4.80 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.70 (Confidence level about 95 %, $k=2$)
Radiated Disturbance (18 GHz ~ 40 GHz)	5.05 (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.

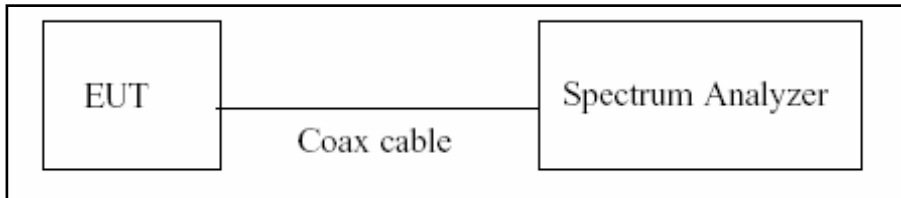
1. RBW = 8 MHz (the largest available value)
2. VBW = 8 MHz (\geq RBW)
3. SPAN = 0 Hz
4. Detector = Peak
5. Number of points in sweep > 100
6. Trace mode = Clear write
7. Measure T_{total} and T_{on}
8. Calculate Duty Cycle = T_{on} / T_{total} and Duty Cycle Factor = $10\log(1/\text{Duty Cycle})$

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

Note:

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

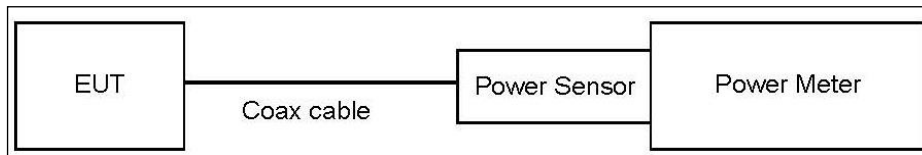
8.3. Output Power Measurement

Limit

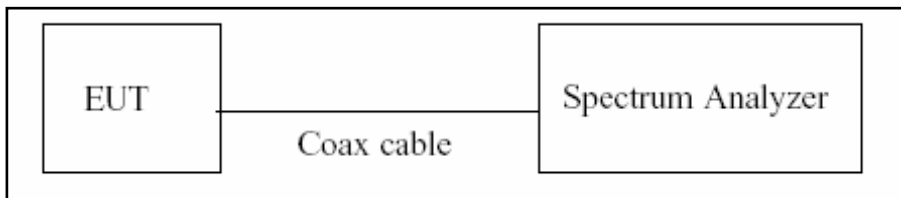
Band	Limit
UNII 1	- Master : Not exceed 1 W(=30 dBm) - Slave : Not exceed 250 mW(=23.98 dBm)
UNII 2A, 2C	Not exceed the lesser of 250 mW or 11 dBm + 10 log B, (where B is the 26 dB emission bandwidth in megahertz.)
UNII 3	Not exceed 1 W(=30 dBm)

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 $10\log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

Sample Calculation

Total Power(dBm) = 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(10 dB) + Cable loss + EUT Cable Loss
3. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1	10.98
UNII 2A	10.98
UNII 2C	10.98
UNII 3	10.98

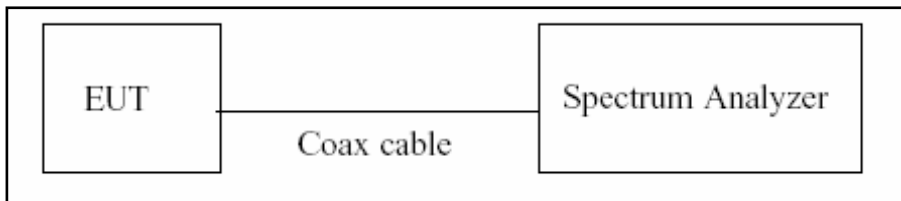
(Actual value of loss for the attenuator and cable combination)

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. Spectrum offset Attenuator loss(10 dB) + Cable loss + EUT Cable Loss

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

Band	Loss(dB)
UNII 1	10.98
UNII 2A	10.98
UNII 2C	10.98
UNII 3	10.98

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

8.5. 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 μ H/50 ohms line impedance stabilization network (LISN).

Frequency Range (MHz)	Limits (dB μ V)	
	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

8.6. 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.

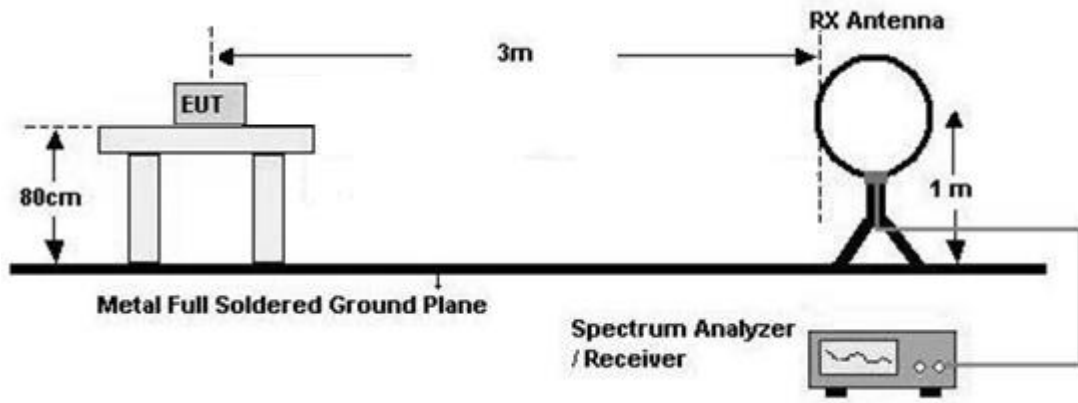
3. UNII 3: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below 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.

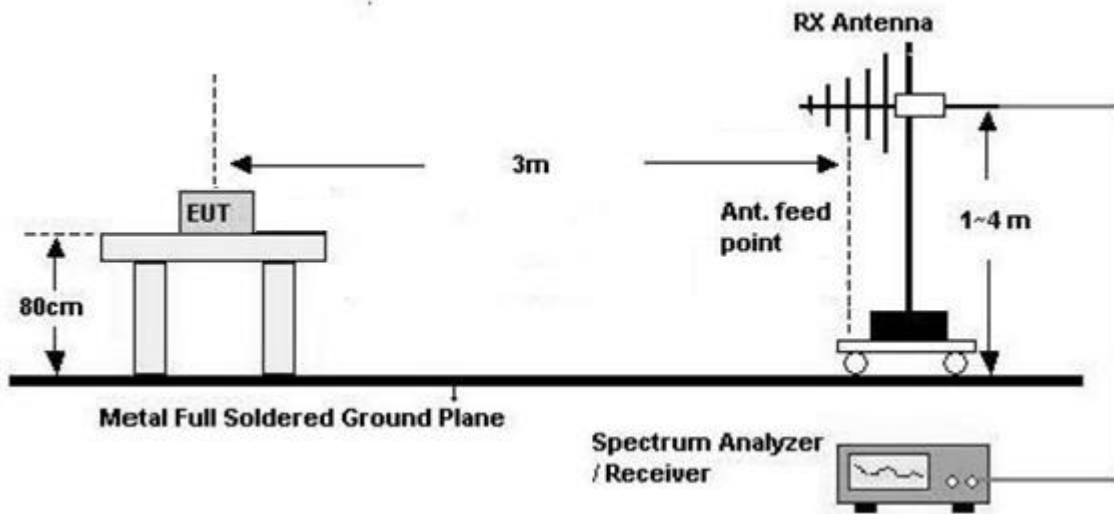
Frequency (MHz)	Field Strength (µV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Configuration

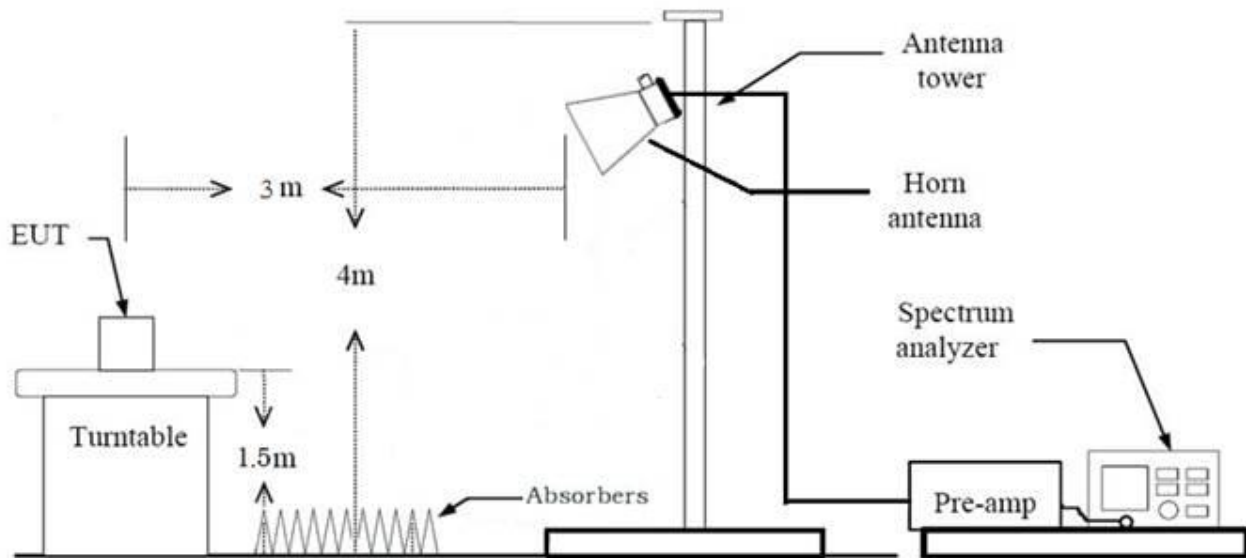
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



Test Procedure of Radiated spurious emissions(Below 30 MHz)

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The loop antenna was placed at a location 3 m from the EUT
3. The EUT is placed on a turntable, which is 0.8 m above ground plane.
4. .We have done x, y, z planes in EUT and horizontal and vertical polarization and Parallel to the ground plane in detecting antenna.
5. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
6. Distance Correction Factor(0.009 MHz – 0.490 MHz) = $40\log(3\text{ m}/300\text{ m}) = - 80\text{ dB}$
Measurement Distance : 3 m
7. Distance Correction Factor(0.490 MHz – 30 MHz) = $40\log(3\text{ m}/30\text{ m}) = - 40\text{ dB}$
Measurement Distance : 3 m
8. Spectrum Setting
 - Frequency Range = 9 kHz ~ 30 MHz
 - Detector = Peak
 - Trace = 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 0.8 m 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 \geq 3 x RBW
 - (2) Measurement Type(Quasi-peak):
 - Measured Frequency Range : 30 MHz – 1 GHz
 - Detector = Quasi-Peak
 - RBW = 120 kHz
- ※ In general, (1) is used mainly
7. Total = 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 \geq 3 MHz
- Detector = Peak
- Sweep Time = auto
- Trace mode = Max Hold
- Allow sweeps to continue until the trace stabilizes.

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

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

- RBW = 1 MHz
- VBW(Duty cycle \geq 98 percent) = VBW \leq RBW/100(i.e., 10 kHz) but not less than 10 Hz.
- VBW(Duty cycle is < 98 percent) = VBW \geq $1/T$, 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 = $20\log(\text{test distance} / \text{specific distance})$ (dB)
12. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(G) + Distance Factor(D.F)

Test Procedure of Radiated Restricted Band Edge

1. The EUT is placed on a turntable, which is 1.5 m above ground plane.
2. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
3. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
4. EUT is set 3 m away from the receiving antenna, which is varied from 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 \geq 3 MHz
- Detector = Peak
- Sweep Time = auto
- Trace mode = Max Hold
- Allow sweeps to continue until the trace stabilizes.

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

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

- RBW = 1 MHz
- VBW(Duty cycle \geq 98 percent) = $\text{VBW} \leq \text{RBW}/100$ (i.e., 10 kHz) but not less than 10 Hz.
- VBW(Duty cycle is < 98 percent) = $\text{VBW} \geq 1/T$, 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. 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)

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

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

The actual setting value of VBW

Mode	Tone	Worst Data rate (Mbps)	Duty Cycle	Duty Cycle Factor (dB)	VBW (1/T) (kHz)	The actual setting value of VBW (Hz)
802.11ax (HE20)	26	MCS 0	0.981	0.08	0.191	1000
	52	MCS 0	0.963	0.16	0.377	1000
	106	MCS 0	0.927	0.33	0.779	1000
	242	MCS 0	0.856	0.68	1.666	2000
	SU	MCS 0	0.856	0.67	1.701	2000
802.11ax (HE40)	26	MCS 0	0.981	0.08	0.191	1000
	52	MCS 0	0.964	0.16	0.377	1000
	106	MCS 0	0.927	0.33	0.780	1000
	242	MCS 0	0.856	0.68	1.666	2000
	484	MCS 0	0.769	1.14	2.968	5000
	SU	MCS 0	0.771	1.13	3.013	5000
802.11ax (HE80)	26	MCS 0	0.981	0.08	0.191	1000
	52	MCS 0	0.963	0.16	0.378	1000
	106	MCS 0	0.927	0.33	0.779	1000
	242	MCS 0	0.856	0.68	1.666	2000
	484	MCS 0	0.769	1.14	2.968	5000
	996	MCS 0	0.672	1.72	4.934	10000
	SU	MCS 0	0.664	1.78	5.126	10000

8.7. Test RU offset for Tones

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

8.8. Worst case configuration and mode

Conducted test

1. All data rate of operation were investigated and the worst case results are reported.
 - HE20, HE40, HE80
 - 26T, 52T, 106T : MCS9
 - 242T, 484T, 996T, SU: MCS11
2. SM-G990E/DS, SM-G990E were tested and the worst case results are reported.
 - (Worst case : SM-G990E/DS)

Radiated test

1. Full RU(Resource Unit) mode and SU(Single Unit) mode have no difference in physical waveform.
 - This Report has been described only Full RU mode with worst output power
2. 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
3. EUT Axis
 - Radiated Spurious Emissions : Z
 - Radiated Restricted Band Edge : X
4. All data rate of operation were investigated and the worst case results are reported.
 - (Worst case : MCS0)
5. All Antenna of operation were investigated and the worst case results are reported
 - Mode : Ant1+Ant2(SDM), Ant1+Ant2(CDD)
 - Worstcase : Ant1+Ant2(CDD)
6. All position of loop antenna were investigated and the test result is a no critical peak found at all positions.
 - Position : Horizontal, Vertical, Parallel to the ground plane
7. We were performed the RSE test in condition of co-location. There has no significant emission raised.
 - WWAN+WLAN 5 GHz+BT
8. All mode(Tone, RU Offset) of operation were investigated and the worst case configuration results are reported

Test	Tone	RU Offset
RSE	[HE 20] Worst case(Highest Power) : 242T	[HE 20] Mid 61
	[HE 40] Worst case(Highest Power) : 484T	[HE 40] Mid 65
	[HE 80] Worst case(Highest Power) : 996T	[HE 80] Mid 67
	[HE20] Additional Tone: 106T	[HE 20] Mid 54
	[HE40] Additional Tone: 26T	[HE 40] Mid 9
	[HE80] Additional Tone: 26T	[HE 80] Mid 18

Bandedge (UNII1,2A,2C)	[HE 20] Worst case(Highest Power) : 242T [HE 40] Worst case(Highest Power) : 484T [HE 80] Worst case(Highest Power) : 996T	[HE 20] Mid 61 [HE 40] Mid 65 [HE 80] Mid 67
	[HE 20] Additional Tone: 26T, 52T, 106T [HE 40] Additional Tone: 26T, 52T, 106T, 242T [HE 80] Additional Tone: 26T, 52T, 106T, 242T, 484T	[HE20] Low Edge: 0, 37, 53 High Edge: 8, 40, 54 [HE40] Low Edge: 0, 37, 53, 61 High Edge: 17, 44, 56, 62 [HE80] Low Edge: 0, 37, 53, 61, 65 High Edge: 36, 52, 60, 64, 66
Bandedge (Straddle, UNII3)	[HE 20] Worst case(Highest Power) : 242T [HE 40] Worst case(Highest Power) : 484T [HE 80] Worst case(Highest Power) : 996T	[HE 20] Mid 61 [HE 40] Mid 65 [HE 80] Mid 67

9. SM-G990E/DS, SM-G990E were tested and the worst case results are reported.

(Worst case : SM-G990E/DS)

Radiated test(DBS)

1. Please refer to the SM-G990E/DS [UNII] Test Report.
2. SM-G990E/DS, SM-G990E were tested and the worst case results are reported.
(Worst case : SM-G990E/DS)

AC Power line Conducted Emissions

1. Please refer to the SM-G990E/DS [UNII] Test Report.
2. SM-G990E/DS, SM-G990E were tested and the worst case results are reported.
(Worst case : SM-G990E/DS)

9. SUMMARY OF TEST RESULTS

Test Description	FCC Part Section(s)	Test Limit	Test Condition	Test Result
26 dB Bandwidth	§15.407 (for Power Measurement)	N/A	Conducted	PASS
6 dB Bandwidth	§15.407(e)	>500 kHz (5725-5850 MHz)		PASS
Maximum Conducted Output Power	§15.407(a)(1),(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)(8)	<FCC 15.207 limits		PASS (Note1)
Undesirable Emissions	§15.407(b) (1),(2),(3),(4)	<-27 dBm/MHz EIRP (UNII1, 2A, 2C) cf. Section 8.7 (UNII 3)		PASS
General Field Strength Limits(Restricted Bands and Radiated Emission Limits)	15.205, 15.407(b)(9),(10)	Emissions in restricted bands must meet the radiated limits detailed in 15.209	Radiated	PASS

10. TEST RESULT

10.1 DUTY CYCLE

802.11ax(HE20)

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (HE20)	26	MCS0	5.224	5.325	0.981	0.08
		MCS1	2.650	2.749	0.964	0.16
		MCS2	1.786	1.887	0.946	0.24
		MCS3	1.360	1.459	0.932	0.30
		MCS4	0.932	1.031	0.904	0.44
		MCS5	0.714	0.818	0.873	0.59
		MCS6	0.643	0.745	0.864	0.64
		MCS7	0.593	0.694	0.854	0.69
		MCS8	0.502	0.603	0.832	0.80
		MCS9	0.464	0.565	0.821	0.86
	52	MCS0	2.650	2.751	0.963	0.16
		MCS1	1.360	1.459	0.932	0.30
		MCS2	0.932	1.031	0.904	0.44
		MCS3	0.717	0.816	0.879	0.56
		MCS4	0.504	0.605	0.833	0.80
		MCS5	0.395	0.497	0.796	0.99
		MCS6	0.360	0.459	0.785	1.05
		MCS7	0.332	0.433	0.766	1.16
		MCS8	0.286	0.388	0.739	1.32
		MCS9	0.271	0.372	0.728	1.38
	106	MCS0	1.284	1.386	0.927	0.33
		MCS1	0.679	0.778	0.873	0.59
		MCS2	0.479	0.578	0.829	0.81
		MCS3	0.377	0.476	0.793	1.01
		MCS4	0.276	0.375	0.736	1.33
		MCS5	0.228	0.327	0.698	1.56
		MCS6	0.208	0.309	0.672	1.73
		MCS7	0.200	0.299	0.669	1.74
		MCS8	0.180	0.279	0.645	1.90
		MCS9	0.165	0.266	0.619	2.08
	242	MCS0	0.600	0.702	0.856	0.68

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS1	0.337	0.436	0.773	1.12
		MCS2	0.248	0.347	0.715	1.45
		MCS3	0.205	0.304	0.675	1.71
		MCS4	0.165	0.266	0.619	2.08
		MCS5	0.139	0.238	0.585	2.33
		MCS6	0.134	0.236	0.570	2.44
		MCS7	0.127	0.228	0.556	2.55
		MCS8	0.124	0.223	0.557	2.54
		MCS9	0.114	0.215	0.529	2.76
		MCS10	0.111	0.210	0.530	2.76
		MCS11	0.101	0.203	0.500	3.01

802.11ax(HE40)

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax(HE40)	26	MCS0	5.225	5.324	0.981	0.08
		MCS1	2.650	2.749	0.964	0.16
		MCS2	1.789	1.887	0.948	0.23
		MCS3	1.360	1.459	0.932	0.30
		MCS4	0.932	1.034	0.902	0.45
		MCS5	0.714	0.816	0.876	0.58
		MCS6	0.643	0.745	0.864	0.64
		MCS7	0.593	0.694	0.854	0.69
		MCS8	0.504	0.605	0.833	0.80
		MCS9	0.464	0.565	0.821	0.86
	52	MCS0	2.650	2.749	0.964	0.16
		MCS1	1.360	1.459	0.932	0.30
		MCS2	0.932	1.031	0.904	0.44
		MCS3	0.714	0.816	0.876	0.58
		MCS4	0.504	0.605	0.833	0.80
		MCS5	0.395	0.497	0.796	0.99
		MCS6	0.360	0.459	0.785	1.05
		MCS7	0.332	0.433	0.766	1.16
		MCS8	0.286	0.388	0.739	1.32
		MCS9	0.271	0.372	0.728	1.38
	106	MCS0	1.282	1.383	0.927	0.33
		MCS1	0.679	0.778	0.873	0.59
		MCS2	0.479	0.578	0.829	0.81
		MCS3	0.375	0.476	0.787	1.04
		MCS4	0.276	0.377	0.732	1.36
		MCS5	0.225	0.324	0.695	1.58
		MCS6	0.208	0.309	0.672	1.73
		MCS7	0.203	0.301	0.672	1.72
		MCS8	0.180	0.281	0.640	1.94
		MCS9	0.165	0.266	0.619	2.08
	242	MCS0	0.600	0.702	0.856	0.68
		MCS1	0.337	0.438	0.769	1.14
		MCS2	0.246	0.347	0.708	1.50
		MCS3	0.203	0.304	0.667	1.76

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS4	0.165	0.266	0.619	2.08
		MCS5	0.142	0.241	0.589	2.30
		MCS6	0.137	0.236	0.581	2.36
		MCS7	0.129	0.228	0.567	2.47
		MCS8	0.122	0.223	0.545	2.63
		MCS9	0.117	0.215	0.541	2.67
		MCS10	0.109	0.210	0.518	2.86
		MCS11	0.101	0.203	0.500	3.01
	484	MCS0	0.337	0.438	0.769	1.14
		MCS1	0.205	0.304	0.675	1.71
		MCS2	0.165	0.266	0.619	2.08
		MCS3	0.139	0.238	0.585	2.33
		MCS4	0.122	0.220	0.552	2.58
		MCS5	0.109	0.208	0.524	2.80
		MCS6	0.104	0.205	0.506	2.96
		MCS7	0.101	0.200	0.506	2.96
		MCS8	0.096	0.198	0.487	3.12
		MCS9	0.091	0.193	0.474	3.25
		MCS10	0.096	0.193	0.500	3.01
		MCS11	0.091	0.193	0.474	3.25

802.11ax(HE80)

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (HE80)	26	MCS0	5.225	5.324	0.981	0.08
		MCS1	2.650	2.751	0.963	0.16
		MCS2	1.786	1.887	0.946	0.24
		MCS3	1.358	1.459	0.931	0.31
		MCS4	0.932	1.034	0.902	0.45
		MCS5	0.717	0.816	0.879	0.56
		MCS6	0.643	0.745	0.864	0.64
		MCS7	0.593	0.694	0.854	0.69
		MCS8	0.504	0.605	0.833	0.80
		MCS9	0.464	0.565	0.821	0.86
	52	MCS0	2.647	2.749	0.963	0.16
		MCS1	1.360	1.462	0.931	0.31
		MCS2	0.932	1.034	0.902	0.45
		MCS3	0.717	0.816	0.879	0.56
		MCS4	0.504	0.605	0.833	0.80
		MCS5	0.393	0.494	0.795	1.00
		MCS6	0.360	0.461	0.780	1.08
		MCS7	0.334	0.436	0.767	1.15
		MCS8	0.286	0.390	0.734	1.34
		MCS9	0.274	0.375	0.730	1.37
	106	MCS0	1.284	1.386	0.927	0.33
		MCS1	0.679	0.780	0.870	0.60
		MCS2	0.479	0.578	0.829	0.81
		MCS3	0.375	0.476	0.787	1.04
		MCS4	0.276	0.377	0.732	1.36
		MCS5	0.225	0.327	0.690	1.61
		MCS6	0.208	0.309	0.672	1.73
		MCS7	0.203	0.301	0.672	1.72
		MCS8	0.177	0.279	0.636	1.96
		MCS9	0.167	0.266	0.629	2.02
	242	MCS0	0.600	0.702	0.856	0.68
		MCS1	0.337	0.438	0.769	1.14
		MCS2	0.248	0.350	0.710	1.49

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)	
		MCS3	0.205	0.304	0.675	1.71	
		MCS4	0.165	0.266	0.619	2.08	
		MCS5	0.142	0.241	0.589	2.30	
		MCS6	0.137	0.238	0.574	2.41	
		MCS7	0.129	0.228	0.567	2.47	
		MCS8	0.122	0.223	0.545	2.63	
		MCS9	0.114	0.215	0.529	2.76	
		MCS10	0.111	0.213	0.524	2.81	
		MCS11	0.101	0.203	0.500	3.01	
		484	MCS0	0.337	0.438	0.769	1.14
			MCS1	0.203	0.304	0.667	1.76
	MCS2		0.165	0.266	0.619	2.08	
	MCS3		0.139	0.241	0.579	2.37	
	MCS4		0.122	0.223	0.545	2.63	
	MCS5		0.106	0.208	0.512	2.91	
	MCS6		0.104	0.203	0.513	2.90	
	MCS7		0.099	0.200	0.494	3.07	
	MCS8		0.099	0.198	0.500	3.01	
	MCS9		0.091	0.193	0.474	3.25	
	MCS10		0.094	0.195	0.481	3.18	
	MCS11	0.091	0.193	0.474	3.25		
	996	MCS0	0.203	0.301	0.672	1.72	
		MCS1	0.137	0.238	0.574	2.41	
		MCS2	0.117	0.218	0.535	2.72	
		MCS3	0.104	0.203	0.513	2.90	
		MCS4	0.096	0.198	0.487	3.12	
		MCS5	0.089	0.190	0.467	3.31	
		MCS6	0.089	0.190	0.467	3.31	
		MCS7	0.089	0.190	0.467	3.31	
		MCS8	0.081	0.182	0.444	3.52	
		MCS9	0.084	0.182	0.458	3.39	
		MCS10	0.084	0.185	0.452	3.45	
	MCS11	0.086	0.185	0.466	3.32		

Mode	BW	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (SU)	BW 20	MCS0	0.588	0.687	0.856	0.67
		MCS1	0.329	0.431	0.765	1.17
		MCS2	0.243	0.342	0.711	1.48
		MCS3	0.200	0.299	0.669	1.74
		MCS4	0.160	0.261	0.612	2.13
		MCS5	0.137	0.236	0.581	2.36
		MCS6	0.132	0.231	0.571	2.43
		MCS7	0.122	0.220	0.552	2.58
		MCS8	0.117	0.215	0.541	2.67
		MCS9	0.109	0.210	0.518	2.86
		MCS10	0.109	0.208	0.524	2.80
	MCS11	0.099	0.198	0.500	3.01	
	BW 40	MCS0	0.332	0.431	0.771	1.13
		MCS1	0.200	0.299	0.669	1.74
		MCS2	0.162	0.261	0.621	2.07
		MCS3	0.134	0.236	0.570	2.44
		MCS4	0.117	0.218	0.535	2.72
		MCS5	0.104	0.203	0.513	2.90
		MCS6	0.099	0.198	0.500	3.01
		MCS7	0.096	0.195	0.494	3.07
		MCS8	0.089	0.187	0.473	3.25
		MCS9	0.089	0.187	0.473	3.25
		MCS10	0.091	0.190	0.480	3.19
	MCS11	0.089	0.190	0.467	3.31	
	BW 80	MCS0	0.195	0.294	0.664	1.78
		MCS1	0.134	0.233	0.576	2.40
		MCS2	0.117	0.213	0.548	2.62
		MCS3	0.099	0.198	0.500	3.01
		MCS4	0.091	0.190	0.480	3.19
		MCS5	0.086	0.185	0.466	3.32
		MCS6	0.084	0.185	0.452	3.45
		MCS7	0.089	0.185	0.479	3.19
		MCS8	0.079	0.177	0.443	3.54
MCS9	0.079	0.177	0.443	3.54		

Mode	BW	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS10	0.079	0.177	0.443	3.54
		MCS11	0.079	0.177	0.443	3.54

10.2 26 dB BANDWIDTH

10.2.1 MIMO Ant1

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

Straddle channel data were added in section 10.6.1.

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	19.55	20.52	20.89	-	-
			Mid	19.43	19.55	-	21.75	21.63
			High	20.16	21.06	21.43	-	-
	5200	40	Low	19.87	20.43	20.94	-	-
			Mid	18.12	19.69	-	21.61	21.69
			High	20.54	20.95	21.39	-	-
	5240	48	Low	19.58	20.21	20.97	-	-
			Mid	19.02	19.98	-	21.68	21.63
			High	20.37	20.99	21.41	-	-
UNII 2A	5260	52	Low	19.90	20.27	20.73	-	-
			Mid	19.00	19.47	-	21.50	21.62
			High	20.28	20.87	21.39	-	-
	5280	56	Low	19.79	20.04	20.87	-	-
			Mid	19.44	19.53	-	21.64	21.52
			High	20.49	20.93	21.49	-	-
	5320	64	Low	20.01	20.41	20.86	-	-
			Mid	19.00	19.62	-	21.81	21.83
			High	20.15	20.77	21.54	-	-
UNII 2C	5500	100	Low	19.38	20.34	20.99	-	-
			Mid	19.02	19.72	-	21.76	21.47
			High	20.51	21.26	21.42	-	-
	5600	120	Low	20.09	20.42	20.90	-	-
			Mid	18.90	19.37	-	21.60	21.68
			High	20.60	20.99	21.40	-	-
	5720	144	Low	20.01	20.37	20.76	-	-
			Mid	19.19	19.77	-	21.87	21.75
			High	20.52	20.98	21.45	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	20.11	20.00	20.73	-	-
			Mid	19.00	19.75	-	21.73	21.52
			High	20.62	20.86	21.47	-	-
	5785	157	Low	19.81	19.97	20.71	-	-
			Mid	18.67	19.66	-	21.80	21.48
			High	20.56	21.14	21.33	-	-
	5825	165	Low	19.94	19.97	20.79	-	-
			Mid	18.59	19.67	-	21.65	21.51
			High	20.54	20.85	21.19	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	26 dB BW(MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	19.60	20.98	24.31	29.32	-	-
			Mid	24.95	24.71	26.58	-	40.29	40.02
			High	20.08	21.22	24.11	29.46	-	-
	5230	46	Low	19.44	21.07	23.40	27.84	-	-
			Mid	22.14	26.43	27.49	-	40.33	40.17
			High	20.26	22.03	25.84	30.06	-	-
UNII 2A	5270	54	Low	20.07	21.17	22.50	28.20	-	-
			Mid	22.74	23.86	27.26	-	40.33	40.17
			High	20.10	21.99	24.37	32.96	-	-
	5310	62	Low	20.08	21.74	23.41	27.72	-	-
			Mid	22.47	25.91	26.58	-	40.21	40.05
			High	19.96	21.05	24.23	27.83	-	-
UNII 2C	5510	102	Low	19.78	20.75	21.67	28.72	-	-
			Mid	23.32	24.92	27.34	-	40.03	40.14
			High	20.47	21.88	25.21	33.87	-	-
	5590	118	Low	19.82	21.10	21.96	27.53	-	-
			Mid	23.29	24.73	25.33	-	40.19	40.08
			High	20.14	22.81	24.24	30.40	-	-
	5710	142	Low	19.63	20.90	22.54	29.70	-	-
			Mid	23.63	25.07	25.90	-	40.27	40.06
			High	20.23	21.38	25.21	36.52	-	-
UNII 3	5755	151	Low	19.98	21.22	24.33	28.91	-	-
			Mid	22.58	25.14	26.33	-	40.23	40.08
			High	19.65	21.09	24.34	29.50	-	-
	5795	159	Low	20.19	21.23	22.68	28.96	-	-
			Mid	23.57	24.16	24.85	-	40.20	40.06
			High	21.22	22.01	25.48	34.27	-	-

802.11ax(HE80)

HE80	Freq. [MHz]	Channel No.	RU Index	26 dB BW (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	20.84	22.09	25.83	32.89	54.35	-	-
			Mid	39.37	24.36	29.90	48.55	-	81.48	81.08
			High	22.06	24.21	28.19	48.63	60.29	-	-
UNII 2A	5290	58	Low	20.53	23.81	23.61	33.77	57.73	-	-
			Mid	40.13	25.97	30.96	50.28	-	81.67	81.85
			High	22.10	24.38	29.71	41.11	57.72	-	-
UNII 2C	5530	106	Low	21.81	21.29	25.01	32.81	54.52	-	-
			Mid	38.50	24.09	31.39	51.10	-	81.14	81.66
			High	20.69	25.04	28.90	48.29	62.58	-	-
	5610	122	Low	20.58	21.37	22.38	32.93	55.59	-	-
			Mid	39.06	24.49	30.85	47.40	-	81.51	81.29
			High	20.86	23.88	28.71	34.88	63.58	-	-
	5690	138	Low	20.77	21.78	24.06	34.38	57.54	-	-
			Mid	40.06	27.26	31.92	50.27	-	81.48	80.98
			High	22.17	23.30	27.29	47.31	60.26	-	-
UNII 3	5775	155	Low	20.25	22.04	24.52	40.88	56.48	-	-
			Mid	39.28	26.86	32.79	52.82	-	81.70	81.28
			High	22.85	23.35	30.09	44.32	59.97	-	-

10.2.2 MIMO Ant2

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

Straddle channel data were added in section 10.6.1.

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	19.64	19.76	19.92	-	-
			Mid	18.18	18.31	-	21.47	21.49
			High	19.74	19.88	20.01	-	-
	5200	40	Low	19.55	19.81	20.04	-	-
			Mid	18.11	18.32	-	21.47	21.36
			High	19.72	19.81	20.20	-	-
	5240	48	Low	19.66	19.79	20.02	-	-
			Mid	18.07	18.32	-	21.41	21.35
			High	19.55	19.78	20.17	-	-
UNII 2a	5260	52	Low	19.65	19.90	20.00	-	-
			Mid	18.18	18.36	-	21.39	21.48
			High	19.82	20.00	20.23	-	-
	5280	56	Low	19.62	19.77	20.14	-	-
			Mid	18.08	18.38	-	21.52	21.40
			High	19.79	19.87	20.16	-	-
	5320	64	Low	19.62	19.80	19.90	-	-
			Mid	18.22	18.30	-	21.43	21.52
			High	19.72	20.07	20.20	-	-
UNII 2c	5500	100	Low	19.59	19.89	20.04	-	-
			Mid	17.95	18.36	-	21.43	21.54
			High	19.63	19.95	20.15	-	-
	5600	120	Low	19.68	19.81	20.05	-	-
			Mid	18.10	18.33	-	21.41	21.38
			High	19.67	19.87	20.04	-	-
	5720	144	Low	19.39	19.79	19.94	-	-
			Mid	18.07	18.26	-	21.56	21.44
			High	19.60	19.98	20.27	-	-
UNII 3	5745	149	Low	19.51	19.74	20.06	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
			Mid	18.18	18.37	-	21.37	21.47
			High	19.96	19.93	20.28	-	-
	5785	157	Low	19.69	19.78	19.98	-	-
			Mid	18.14	18.39	-	21.50	21.38
			High	19.73	19.91	20.06	-	-
	5825	165	Low	19.72	19.91	20.00	-	-
			Mid	18.12	18.23	-	21.36	21.30
			High	19.82	19.77	20.23	-	-

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	26 dB BW(MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	19.26	20.09	20.27	26.64	-	-
			Mid	22.77	23.13	25.89	-	39.91	40.04
			High	18.96	19.55	19.64	27.48	-	-
	5230	46	Low	19.49	19.97	20.50	28.78	-	-
			Mid	22.23	23.74	25.81	-	39.72	40.02
			High	19.26	19.28	19.55	27.48	-	-
UNII 2a	5270	54	Low	19.21	20.02	20.46	25.72	-	-
			Mid	23.68	22.91	24.26	-	39.82	39.98
			High	19.19	19.02	19.94	28.08	-	-
	5310	62	Low	19.07	19.66	20.56	24.89	-	-
			Mid	23.78	24.37	23.40	-	39.94	40.04
			High	19.11	19.38	19.58	25.77	-	-
UNII 2c	5510	102	Low	19.57	20.09	20.18	25.69	-	-
			Mid	22.67	23.92	24.91	-	40.15	40.03
			High	19.18	19.13	19.67	25.85	-	-
	5590	118	Low	19.61	19.83	20.28	27.27	-	-
			Mid	22.58	23.87	25.34	-	40.14	39.96
			High	19.36	19.30	19.47	30.20	-	-
	5710	142	Low	19.13	19.79	20.30	27.17	-	-
			Mid	22.14	23.65	24.81	-	39.97	39.85
			High	19.24	19.58	19.49	27.15	-	-
UNII 3	5755	151	Low	19.59	20.09	20.21	26.43	-	-
			Mid	22.49	22.82	25.09	-	39.98	39.94
			High	19.21	19.30	19.74	29.73	-	-
	5795	159	Low	19.67	20.13	20.52	26.77	-	-
			Mid	21.99	23.55	26.74	-	39.96	39.85
			High	19.27	19.39	19.46	29.46	-	-

802.11ax(HE80)

HE80	Freq. [MHz]	Channel No.	RU Index	26 dB BW (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	20.22	20.35	20.68	34.98	56.06	-	-
			Mid	38.66	25.20	30.95	50.59	-	80.99	81.14
			High	20.62	20.38	21.09	31.35	55.34	-	-
UNII 2a	5290	58	Low	20.33	20.39	20.72	33.41	53.62	-	-
			Mid	38.25	23.33	26.07	47.86	-	80.82	80.92
			High	20.27	20.28	21.35	32.50	50.31	-	-
UNII 2c	5530	106	Low	20.03	20.28	20.47	33.04	48.37	-	-
			Mid	38.02	22.67	26.26	47.83	-	80.79	81.26
			High	20.27	20.13	21.12	33.34	51.86	-	-
	5610	122	Low	20.19	20.53	20.58	31.59	51.33	-	-
			Mid	38.84	25.04	25.73	47.82	-	81.17	81.08
			High	20.57	20.92	20.86	32.24	54.76	-	-
	5690	138	Low	20.27	20.29	20.58	29.52	53.78	-	-
			Mid	38.41	24.14	25.16	49.07	-	81.12	81.09
			High	20.30	20.77	20.71	33.87	54.11	-	-
UNII 3	5775	155	Low	20.00	20.33	20.59	32.89	52.62	-	-
			Mid	38.65	26.92	25.95	50.92	-	81.00	81.23
			High	20.14	20.79	21.02	36.74	56.20	-	-

10.3 6 dB BANDWIDTH

10.3.1 MIMO Ant1

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	6 dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	2.091	17.06	17.19	-	-
			Mid	2.695	8.816	-	19.12	19.13
			High	2.094	17.05	17.19	-	-
	5785	157	Low	2.101	14.55	17.19	-	-
			Mid	2.655	11.26	-	19.15	19.12
			High	2.099	15.77	17.18	-	-
	5825	165	Low	2.078	17.04	17.18	-	-
			Mid	2.698	13.83	-	19.08	19.05
			High	2.057	17.00	17.16	-	-

Limit : > 0.5 MHz

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	6 dB BW(MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 3	5755	151	Low	2.110	16.52	16.61	18.76	-	-
			Mid	2.149	12.28	17.32	-	37.45	37.68
			High	2.105	16.53	16.61	18.43	-	-
	5795	159	Low	2.080	16.52	16.59	18.72	-	-
			Mid	2.117	17.34	17.38	-	37.31	37.63
			High	2.065	15.33	16.57	18.41	-	-

Limit : > 0.5 MHz

802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	6 dB BW (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 3	5775	155	Low	2.140	16.66	16.78	18.78	37.64	-	-
			Mid	2.770	13.90	16.50	36.44	-	77.33	77.62
			High	2.144	16.47	17.81	18.78	37.58	-	-

Limit : > 0.5 MHz

10.3.2 MIMO Ant2
802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	6 dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	2.132	17.07	17.18	-	-
			Mid	2.667	13.82	-	19.11	19.02
			High	2.099	14.53	17.20	-	-
	5785	157	Low	2.093	17.00	17.19	-	-
			Mid	2.680	12.85	-	19.09	19.03
			High	2.072	15.76	17.19	-	-
	5825	165	Low	2.053	17.00	17.18	-	-
			Mid	2.685	15.04	-	19.09	19.06
			High	2.124	17.01	17.17	-	-

Limit : > 0.5 MHz

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	6 dB BW(MHz)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 3	5755	151	Low	2.024	16.58	16.59	18.56	-	-
			Mid	2.178	16.05	17.38	-	37.58	37.71
			High	2.094	16.55	16.62	18.61	-	-
	5795	159	Low	2.143	16.59	16.63	18.66	-	-
			Mid	2.144	14.848	17.35	-	37.53	37.39
			High	2.085	16.57	16.82	18.31	-	-

Limit : > 0.5 MHz

802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	6 dB BW (MHz)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 3	5775	155	Low	2.183	15.44	16.80	18.59	37.42	-	-
			Mid	2.745	13.85	16.35	36.49	-	77.28	77.48
			High	2.166	16.69	16.71	18.73	37.59	-	-

Limit : > 0.5 MHz

10.4 OUTPUT POWER MEASUREMENT

Power Level Setting

MIMO

802.11ax(HE20)		Frequency [MHz]	Channel No.	26 T	52T	106T	242 T	SU
UNII 1	Low	5180	36	6	8.5	10	11	
	Mid	5200	40					
	High	5240	48					
UNII 2A	Low	5260	52					
	Mid	5300	60					
	High	5320	64					
UNII 2C	Low	5500	100					
	Mid	5600	120					
	High	5720	144					
UNII 3	Low	5745	149					
	Mid	5785	157					
	High	5825	165					

802.11ax(HE40)		Frequency [MHz]	Channel No.	26 T	52T	106T	242 T	484T	SU
UNII 1	Low	5190	38	6	7	8	9		8.5
	High	5230	46						
UNII 2A	Low	5270	54						
	High	5310	62						
UNII 2C	Low	5510	102						
	Mid	5590	118						
	High	5710	142						
UNII 3	Low	5755	151						
	High	5795	159						

802.11ax(HE80)		Frequency [MHz]	Channel No.	26 T	52T	106T	242 T	484T	996T	SU
UNII 1	Mid	5210	42	6	7	8				7.5
UNII 2A	Mid	5290	58							
UNII 2C	Low	5530	106							
	Mid	5610	122							
	High	5690	138							
UNII 3	Mid	5775	155							

10.4.1 SUM (MIMO Ant 1 + MIMO Ant 2)

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

Straddle channel data were added in section 10.6.3.

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Sum Power (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	7.98	10.51	14.07	-	-
			Mid	8.59	10.71	-	15.15	15.07
			High	8.38	10.63	14.14	-	-
	5200	40	Low	8.09	10.45	14.12	-	-
			Mid	8.38	10.64	-	15.22	15.12
			High	8.02	10.52	14.19	-	-
	5240	48	Low	8.24	10.71	14.29	-	-
			Mid	8.69	10.88	-	15.41	15.30
			High	8.15	10.75	14.31	-	-
UNII 2A	5260	52	Low	8.57	10.88	14.35	-	-
			Mid	8.86	10.98	-	15.47	15.38
			High	8.52	10.88	14.36	-	-
	5280	56	Low	8.60	10.93	14.32	-	-
			Mid	8.89	11.19	-	15.45	15.39
			High	8.71	10.91	14.33	-	-
	5320	64	Low	8.68	10.89	14.35	-	-
			Mid	8.94	11.05	-	15.47	15.39
			High	8.61	10.91	14.36	-	-
UNII 2C	5500	100	Low	8.59	10.96	14.28	-	-
			Mid	8.83	11.08	-	15.39	15.31
			High	8.53	10.97	14.29	-	-
	5600	120	Low	8.34	10.86	14.16	-	-
			Mid	8.79	10.96	-	15.20	15.11
			High	8.20	10.78	14.17	-	-
	5720	144	Low	8.59	10.76	13.61	-	-
			Mid	8.80	10.89	-	14.78	15.14
			High	8.46	10.63	13.62	-	-
UNII 3	5745	149	Low	8.38	10.47	14.13	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	Sum Power (dBm)				
				26 T	52 T	106 T	242 T	SU
			Mid	8.76	10.58	-	15.12	14.99
			High	8.16	10.40	14.15	-	-
	5785	157	Low	8.52	10.68	14.13	-	-
			Mid	8.72	10.86	-	15.10	15.06
			High	8.35	10.52	14.16	-	-
	5825	165	Low	8.43	10.76	14.08	-	-
			Mid	8.79	10.95	-	15.10	15.04
			High	8.38	10.69	14.11	-	-

Limit

(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

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Sum Power (dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	7.53	9.18	10.81	12.45	-	-
			Mid	8.56	9.91	11.39	-	12.67	11.53
			High	7.74	9.08	10.90	12.63	-	-
	5230	46	Low	7.76	9.38	10.88	12.79	-	-
			Mid	8.75	9.96	11.41	-	12.61	11.43
			High	7.90	9.37	10.97	12.86	-	-
UNII 2a	5270	54	Low	7.95	9.70	11.06	12.97	-	-
			Mid	8.86	9.98	11.48	-	13.02	11.52
			High	7.77	9.53	10.98	12.99	-	-
	5310	62	Low	8.07	9.73	11.04	13.08	-	-
			Mid	8.84	9.90	11.60	-	13.18	11.52
			High	7.87	9.25	10.84	13.14	-	-
UNII 2c	5510	102	Low	8.05	9.26	11.24	12.78	-	-
			Mid	8.80	9.93	11.50	-	12.64	11.65
			High	8.05	9.45	11.17	12.87	-	-
	5590	118	Low	7.91	9.49	10.92	12.56	-	-
			Mid	8.78	9.98	11.30	-	12.58	11.67
			High	7.78	9.34	10.89	12.71	-	-
	5710	142	Low	7.83	9.50	10.92	12.33	-	-
			Mid	8.83	9.94	11.29	-	12.67	11.67
			High	7.66	9.19	11.02	12.59	-	-
UNII 3	5755	151	Low	7.77	9.50	10.88	12.25	-	-
			Mid	8.57	9.97	11.25	-	12.70	11.37
			High	7.72	9.23	10.86	12.46	-	-
	5795	159	Low	7.65	9.29	10.63	12.35	-	-
			Mid	8.98	9.96	11.38	-	12.44	11.22
			High	7.36	8.91	10.53	12.40	-	-

Limit

(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

802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	Sum Power (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	7.94	8.29	9.68	11.43	11.35	-	-
			Mid	8.15	8.51	9.79	11.82	-	11.27	10.37
			High	7.87	8.27	9.70	11.79	11.75	-	-
UNII 2a	5290	58	Low	8.32	8.64	9.75	11.79	11.67	-	-
			Mid	8.53	8.74	9.99	11.85	-	11.87	10.78
			High	8.08	8.47	9.60	11.80	11.68	-	-
UNII 2c	5530	106	Low	7.94	8.31	9.63	11.47	11.43	-	-
			Mid	8.67	8.90	9.83	11.67	-	11.42	10.66
			High	7.87	8.26	9.60	11.41	11.56	-	-
	5610	122	Low	7.92	8.30	9.78	11.46	11.47	-	-
			Mid	8.21	8.64	9.95	11.64	-	11.17	10.44
			High	7.70	8.16	9.57	11.27	11.49	-	-
	5690	138	Low	7.92	8.33	9.70	11.51	11.38	-	-
			Mid	8.21	8.55	9.92	11.54	-	11.27	10.29
			High	7.60	8.06	9.28	11.21	11.58	-	-
UNII 3	5775	155	Low	8.04	8.45	9.62	11.13	11.28	-	-
			Mid	8.14	8.80	9.96	11.61	-	11.05	10.28
			High	8.01	8.47	9.54	11.50	11.41	-	-

Limit

(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

10.5 POWER SPECTRAL DENSITY

10.5.1 SUM (MIMO Ant 1 + MIMO Ant 2)

802.11ax(HE20)

HE20	Frequency [MHz]	Channel No.	RU Index	Total Sum PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 1	5180	36	Low	5.382	4.733	5.074	-	-
			Mid	5.022	4.680	-	3.455	3.441
			High	5.479	5.177	5.218	-	-
	5200	40	Low	5.354	5.031	5.247	-	-
			Mid	4.570	5.116	-	3.524	3.654
			High	5.169	4.908	5.166	-	-
	5240	48	Low	5.442	4.887	5.432	-	-
			Mid	4.835	5.237	-	3.804	3.773
			High	5.302	4.864	5.468	-	-
UNII 2A	5260	52	Low	5.927	5.052	5.331	-	-
			Mid	4.938	5.410	-	4.009	3.633
			High	5.650	5.097	5.548	-	-
	5280	56	Low	6.028	5.571	5.592	-	-
			Mid	5.184	5.589	-	3.919	3.743
			High	5.608	5.327	5.359	-	-
	5320	64	Low	5.917	5.361	5.478	-	-
			Mid	4.977	5.480	-	4.076	3.688
			High	5.766	5.281	5.498	-	-
UNII 2C	5500	100	Low	5.453	5.344	4.960	-	-
			Mid	4.781	5.355	-	3.659	3.362
			High	5.097	4.936	4.987	-	-
	5600	120	Low	5.447	4.538	5.246	-	-
			Mid	4.474	5.069	-	3.611	3.222
			High	5.145	4.586	4.687	-	-
	5720	144	Low	5.523	4.746	4.863	-	-
			Mid	5.058	5.286	-	3.615	3.174
			High	5.326	4.629	4.891	-	-
UNII 3	5745	149	Low	2.626	2.083	2.280	-	-
			Mid	3.036	1.974	-	1.191	1.005
			High	2.829	1.975	2.183	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	Total Sum PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
	5785	157	Low	2.738	2.465	2.542	-	-
			Mid	2.973	2.669	-	1.394	1.241
			High	2.917	2.321	2.448	-	-
	5825	165	Low	3.211	2.263	2.845	-	-
			Mid	3.331	2.814	-	1.433	1.568
			High	3.137	2.667	2.722	-	-

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

Limit(UNII 3) : 30.0 dBm/500 kHz

802.11ax(HE40)

HE40	Frequency [MHz]	Channel No.	RU Index	Total Sum PSD (dBm)					
				26 T	52 T	106 T	242 T	484 T	SU
UNII 1	5190	38	Low	4.952	3.160	2.416	1.330	-	-
			Mid	5.612	4.208	3.017	-	-1.427	-2.616
			High	4.754	3.564	2.276	1.573	-	-
	5230	46	Low	5.333	3.532	2.431	1.625	-	-
			Mid	5.743	4.437	2.769	-	-1.541	-2.395
			High	5.103	3.657	2.313	1.428	-	-
UNII 2A	5270	54	Low	5.517	4.207	2.665	1.587	-	-
			Mid	6.320	4.753	3.072	-	-0.980	-2.096
			High	5.501	3.564	2.436	1.685	-	-
	5310	62	Low	5.630	3.745	2.539	1.759	-	-
			Mid	6.189	4.416	3.235	-	-0.857	-2.461
			High	4.833	3.551	2.560	1.683	-	-
UNII 2C	5510	102	Low	5.240	3.881	2.179	1.111	-	-
			Mid	5.682	4.399	2.857	-	-1.747	-2.658
			High	5.225	3.493	2.029	1.321	-	-
	5590	118	Low	5.172	3.356	2.131	0.904	-	-
			Mid	5.679	4.054	2.415	-	-1.520	-2.632
			High	4.508	3.642	1.918	0.993	-	-
	5710	142	Low	5.215	3.507	2.318	0.959	-	-
			Mid	6.208	4.600	2.191	-	-1.410	-2.948
			High	4.732	3.464	2.113	1.265	-	-
UNII 3	5755	151	Low	2.651	0.791	-0.551	-1.709	-	-
			Mid	3.268	1.456	-0.132	-	-4.512	-5.299
			High	2.446	0.657	-0.752	-1.314	-	-
	5795	159	Low	2.530	1.088	-0.277	-1.369	-	-
			Mid	4.006	2.034	0.720	-	-3.591	-4.611
			High	2.366	0.823	-0.612	-1.163	-	-

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

Limit(UNII 3) : 30.0 dBm/500 kHz

802.11ax(HE80)

HE80	Frequency [MHz]	Channel No.	RU Index	Total Sum PSD (dBm)						
				26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	5210	42	Low	5.417	2.900	1.345	0.274	-1.889	-	-
			Mid	4.681	3.297	1.408	0.309	-	-5.087	-6.369
			High	5.606	2.728	1.016	0.639	-2.262	-	-
UNII 2A	5290	58	Low	5.956	3.465	1.715	0.738	-2.330	-	-
			Mid	4.717	3.499	1.661	-0.327	-	-5.229	-6.176
			High	5.618	2.897	1.190	0.676	-2.255	-	-
UNII 2C	5530	106	Low	5.487	2.873	0.881	-0.193	-2.698	-	-
			Mid	4.355	3.305	1.026	-0.607	-	-5.820	-6.172
			High	4.916	2.613	1.182	-0.100	-2.169	-	-
	5610	122	Low	5.229	2.618	1.471	0.099	-2.636	-	-
			Mid	4.123	2.946	0.921	-0.692	-	-5.551	-6.456
			High	4.495	2.212	0.760	0.174	-2.864	-	-
	5690	138	Low	5.644	3.388	1.020	-0.155	-2.794	-	-
			Mid	4.151	3.032	1.186	-0.556	-	-5.899	-6.181
			High	5.088	2.723	0.972	-0.332	-2.120	-	-
UNII 3	5775	155	Low	2.538	0.104	-1.647	-2.858	-5.294	-	-
			Mid	2.345	0.232	-1.234	-3.507	-	-8.006	-8.787
			High	2.585	0.002	-2.134	-2.840	-4.801	-	-

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

Limit(UNII 3) : 30.0 dBm/500 kHz

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 MIMO Ant1

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	15.64	4.24
				4	14.84	4.24
				7	14.96	4.92
				8	14.96	5.56
			52 T	37	15.80	4.64
				38	15.40	4.68
				39	15.44	4.60
				40	15.44	5.68
			106 T	53	15.72	5.12
				54	15.68	5.84
			242 T	61	15.96	5.68
			SU	-	15.80	5.48

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	20.12	4.36
				16	15.64	4.44
				17	15.72	5.00
			52 T	# 37	-	-
				41	19.48	4.52
				43	17.56	4.60
				44	18.12	4.92
			106 T	# 53	-	-
				# 54	-	-
				55	20.44	4.76
				56	20.60	5.16
			242 T	# 61	-	-
				62	25.72	5.00
			484 T	65	35.32	5.16
			SU	-	35.24	4.92

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	19.00	5.00
				36	17.56	5.96
			52 T	# 37	-	-
				# 45	-	-
				51	19.80	4.84
				52	20.76	5.80
			106 T	# 53	-	-
				# 57	-	-
				59	23.96	4.84
				60	24.12	5.96
			242 T	# 61	-	-
				# 62	-	-
				63	52.12	5.32
				64	29.72	5.80
			484 T	# 65	-	-
				66	65.24	5.64
			996 T	67	76.12	5.64
			SU	-	75.80	5.32

10.6.1.2 MIMO Ant2

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	15.68	4.08
				4	14.24	4.08
				7	14.24	5.08
				8	14.20	5.56
			52 T	37	15.72	4.12
				38	14.32	4.12
				39	14.32	4.20
				40	14.32	5.76
			106 T	53	15.80	4.52
				54	14.96	5.72
			242 T	61	15.76	5.72
			SU	-	15.80	5.52

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	19.00	4.28
				16	14.36	4.36
				17	14.36	4.92
			52 T	# 37	-	-
				41	18.92	4.36
				43	14.52	4.44
				44	14.68	5.08
			106 T	# 53	-	-
				# 54	-	-
				55	20.36	4.60
				56	15.72	4.92
			242 T	# 61	-	-
				62	22.12	4.92
			484 T	65	35.00	4.84
			SU	-	34.92	4.84

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	15.00	4.84
				36	14.84	5.64
			52 T	# 37	-	-
				# 45	-	-
				51	15.32	4.52
				52	15.48	5.80
			106 T	# 53	-	-
				# 57	-	-
				59	23.80	4.84
				60	16.92	5.64
			242 T	# 61	-	-
				# 62	-	-
				63	43.48	4.68
				64	25.88	5.48
			484 T	# 65	-	-
				66	50.20	5.64
			996 T	67	75.64	5.48
			SU	-	75.64	5.32

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 MIMO Ant1

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	4.48
			52 T	# 37	-
				# 38	-
				39	2.52
				40	4.52
			106 T	# 53	-
				54	4.56
			242 T	61	4.56
			SU	-	4.60

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	2.04
				17	4.12
			52 T	# 37	-
				# 41	-
				# 43	2.44
				44	4.04
			106 T	# 53	-
				# 54	-
				# 55	2.60
				56	4.04
			242 T	# 61	-
				62	3.88
			484 T	65	3.64
			SU	-	3.80

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	4.04
			484 T	# 65	-
				66	3.72
			996 T	67	3.72
			SU	-	3.88

10.6.2.2 MIMO Ant2

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	4.52
			52 T	# 37	-
				# 38	-
				39	2.48
				40	4.48
			106 T	# 53	-
				54	4.60
			242 T	61	4.56
			SU	-	4.56

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	2.04
				17	4.04
			52 T	# 37	-
				# 41	-
				# 43	2.44
				44	4.04
			106 T	# 53	-
				# 54	-
				# 55	2.60
				56	3.88
			242 T	# 61	-
				62	3.80
			484 T	65	3.64
			SU	-	3.72

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	2.44
				52	4.20
			106 T	# 53	-
				# 57	-
				# 59	2.60
				60	4.04
			242 T	# 61	-
				# 62	-
				# 63	2.76
				64	4.20
			484 T	# 65	-
				66	3.88
			996 T	67	3.56
			SU	-	3.56

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(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 MIMO Ant1

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	4.00	-15.02
				4	4.58	-14.33
				7	-6.89	3.99
				8	-8.38	3.76
			52 T	37	6.85	-9.60
				38	6.69	-9.57
				39	6.39	-2.98
				40	-3.04	6.12
			106 T	53	9.83	-4.31
				54	7.06	6.61
			242 T	61	10.16	4.68
			SU	-	10.17	4.70

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	4.53	-14.81
				16	-4.48	2.66
				17	-8.59	3.01
			52 T	# 37	-	-
				41	6.00	-10.97
				43	5.47	-8.33
				44	-3.46	3.72
			106 T	# 53	-	-
				# 54	-	-
				55	7.18	-7.47
				56	4.53	2.68
			242 T	# 61	-	-
				62	7.68	1.16
			484 T	65	8.35	-1.83
			SU	-	7.07	-3.05

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	-4.14	2.21
				36	-8.56	3.12
			52 T	# 37	-	-
				# 45	-	-
				51	3.75	-10.29
				52	-4.50	2.80
			106 T	# 53	-	-
				# 57	-	-
				59	5.69	-9.14
				60	3.05	1.31
			242 T	# 61	-	-
				# 62	-	-
				63	7.84	-8.94
				64	6.27	-0.31
			484 T	# 65	-	-
				66	7.48	-3.38
			996 T	67	7.28	-7.25
			SU	-	6.53	-7.97

10.6.3.2 MIMO Ant2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	4.53	-14.09
				4	4.85	-13.67
				7	-6.45	4.51
				8	-7.75	4.43
			52 T	37	7.69	-8.80
				38	7.36	-9.01
				39	7.05	-2.36
				40	-2.54	6.70
			106 T	53	10.85	-3.29
				54	8.11	7.71
			242 T	61	10.93	5.41
			SU	-	11.00	5.46

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	5.03	-14.27
				16	-3.51	3.70
				17	-7.69	3.69
			52 T	# 37	-	-
				41	6.03	-10.80
				43	5.79	-8.11
				44	-2.73	4.48
			106 T	# 53	-	-
				# 54	-	-
				55	7.66	-7.32
				56	5.01	3.13
			242 T	# 61	-	-
				62	8.36	1.78
			484 T	65	8.82	-1.11
			SU	-	7.52	-2.39

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	-4.19	3.14
				36	-7.85	3.64
			52 T	# 37	-	-
				# 45	-	-
				51	4.61	-9.20
				52	-3.57	3.72
			106 T	# 53	-	-
				# 57	-	-
				59	6.60	-8.15
				60	4.00	2.20
			242 T	# 61	-	-
				# 62	-	-
				63	8.08	-8.40
				64	6.92	0.41
			484 T	# 65	-	-
				66	7.66	-2.83
			996 T	67	7.55	-6.91
			SU	-	6.70	-7.72

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 1, 2A, 2C) : 11.0 dBm/MHz
3. Limit(UNII 3) : 30.0 dBm/500 kHz

10.6.4.1 MIMO Ant1

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	1.302	-19.119
				4	0.990	-19.022
				7	-7.107	-1.104
				8	-16.478	-1.360
			52 T	37	1.127	-14.974
				38	1.203	-15.334
				39	1.344	-2.469
				40	-7.572	-1.859
			106 T	53	1.471	-10.298
				54	1.149	-1.254
			242 T	61	0.096	-3.179
			SU	-	0.416	-2.659

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	2.084	-20.925
				16	-2.063	-1.904
				17	-17.711	-1.721
			52 T	# 37	-	-
				41	0.776	-15.867
				43	-0.168	-12.953
				44	-4.317	-4.096
			106 T	# 53	-	-
				# 54	-	-
				55	-1.217	-13.290
				56	-1.756	-5.095
			242 T	# 61	-	-
				62	-1.994	-6.364
			484 T	65	-5.359	-9.896
			SU	-	-6.730	-10.072

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	-3.417	-2.366
				36	-16.706	-1.530
			52 T	# 37	-	-
				# 45	-	-
				51	-1.487	-15.562
				52	-5.773	-5.174
			106 T	# 53	-	-
				# 57	-	-
				59	-2.512	-16.032
				60	-3.243	-6.650
			242 T	# 61	-	-
				# 62	-	-
				63	-3.822	-14.923
				64	-4.384	-7.487
			484 T	# 65	-	-
				66	-6.238	-10.930
			996 T	67	-9.172	-13.494
			SU	-	-9.950	-14.508

10.6.4.2 MIMO Ant2

802.11ax(HE20)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE20	5720	144	26 T	0	1.918	-19.339
				4	1.503	-19.026
				7	-6.059	-0.556
				8	-15.338	-0.560
			52 T	37	1.373	-13.738
				38	1.836	-14.587
				39	1.923	-2.119
				40	-6.731	-1.361
			106 T	53	2.358	-9.435
				54	2.751	-0.765
			242 T	61	0.517	-2.224
			SU	-	0.625	-2.068

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	2.007	-19.995
				16	-0.964	-0.959
				17	-16.407	-1.044
			52 T	# 37	-	-
				41	0.625	-15.527
				43	0.269	-12.625
				44	-3.094	-2.438
			106 T	# 53	-	-
				# 54	-	-
				55	-1.087	-13.106
				56	-1.386	-4.402
			242 T	# 61	-	-
				62	-2.239	-5.389
			484 T	65	-4.828	-8.135
			SU	-	-5.839	-9.282

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	-2.808	-1.656
				36	-15.824	-1.784
			52 T	# 37	-	-
				# 45	-	-
				51	-0.774	-14.447
				52	-5.302	-3.858
			106 T	# 53	-	-
				# 57	-	-
				59	-1.819	-13.736
				60	-2.556	-5.262
			242 T	# 61	-	-
				# 62	-	-
				63	-3.759	-14.704
				64	-3.194	-7.134
			484 T	# 65	-	-
				66	-5.736	-10.090
			996 T	67	-8.609	-13.887
			SU	-	-9.712	-15.168

10.7 RADIATED SPURIOUS EMISSIONS (9 kHz – 1 GHz)

Frequency Range : 9 kHz – 30 MHz

Frequency	Measured Value	A.F+C.L+D.F	ANT. POL	Total	Limit	Margin
[MHz]	[dBμV]	[dB/m]	[H/V]	[dBμV/m]	[dBμV/m]	[dB]
No Critical peaks found						

Note:

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

1) 106 Tone RU 54_MIMO

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

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
10360	58.41	0.24	V	58.65	68.20	9.55	PK
15540	50.11	2.16	V	52.27	73.98	21.71	PK
15540	37.12	2.16	V	39.28	53.98	14.70	AV
10360	57.88	0.24	H	58.12	68.20	10.08	PK
15540	49.99	2.16	H	52.15	73.98	21.83	PK
15540	36.98	2.16	H	39.14	53.98	14.84	AV

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

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
10400	57.89	0.74	V	58.63	68.20	9.57	PK
15600	50.09	1.81	V	51.90	73.98	22.08	PK
15600	37.01	1.81	V	38.82	53.98	15.16	AV
10400	57.12	0.74	H	57.86	68.20	10.34	PK
15600	49.99	1.81	H	51.80	73.98	22.18	PK
15600	36.98	1.81	H	38.79	53.98	15.19	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10480	59.75	-0.25	V	59.50	68.20	8.70	PK
15720	50.45	1.16	V	51.61	73.98	22.37	PK
15720	37.23	1.16	V	38.39	53.98	15.59	AV
10480	59.12	-0.25	H	58.87	68.20	9.33	PK
15720	50.32	1.16	H	51.48	73.98	22.50	PK
15720	37.02	1.16	H	38.18	53.98	15.80	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10520	58.21	-0.20	V	58.01	68.20	10.19	PK
15780	51.27	1.20	V	52.47	73.98	21.51	PK
15780	38.13	1.20	V	39.33	53.98	14.65	AV
10520	57.85	-0.20	H	57.65	68.20	10.55	PK
15780	51.12	1.20	H	52.32	73.98	21.66	PK
15780	38.02	1.20	H	39.22	53.98	14.76	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10600	57.03	0.10	V	57.13	73.98	16.85	PK
10600	42.31	0.10	V	42.41	53.98	11.57	AV
15900	51.53	1.04	V	52.57	73.98	21.41	PK
15900	37.91	1.04	V	38.95	53.98	15.03	AV
10600	56.58	0.10	H	56.68	73.98	17.30	PK
10600	41.82	0.10	H	41.92	53.98	12.06	AV
15900	51.48	1.04	H	52.52	73.98	21.46	PK
15900	37.85	1.04	H	38.89	53.98	15.09	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10640	55.67	0.35	V	56.02	73.98	17.96	PK
10640	42.17	0.35	V	42.52	53.98	11.46	AV
15960	50.89	1.12	V	52.01	73.98	21.97	PK
15960	37.84	1.12	V	38.96	53.98	15.02	AV
10640	55.12	0.35	H	55.47	73.98	18.51	PK
10640	41.78	0.35	H	42.13	53.98	11.85	AV
15960	50.78	1.12	H	51.90	73.98	22.08	PK
15960	37.68	1.12	H	38.80	53.98	15.18	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11000	55.42	0.40	V	55.82	73.98	18.16	PK
11000	41.87	0.40	V	42.27	53.98	11.71	AV
16500	51.27	1.16	V	52.43	68.20	15.77	PK
11000	55.28	0.40	H	55.68	73.98	18.30	PK
11000	41.78	0.40	H	42.18	53.98	11.80	AV
16500	51.02	1.16	H	52.18	68.20	16.02	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11200	53.34	-0.40	V	52.94	73.98	21.04	PK
11200	39.56	-0.40	V	39.16	53.98	14.82	AV
16800	51.06	0.65	V	51.71	68.20	16.49	PK
11200	53.12	-0.40	H	52.72	73.98	21.26	PK
11200	39.35	-0.40	H	38.95	53.98	15.03	AV
16800	50.98	0.65	H	51.63	68.20	16.57	PK

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

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
11440	52.75	0.14	V	52.89	73.98	21.09	PK
11440	39.72	0.14	V	39.86	53.98	14.12	AV
17160	50.93	1.35	V	52.28	68.20	15.92	PK
11440	52.55	0.14	H	52.69	73.98	21.29	PK
11440	39.58	0.14	H	39.72	53.98	14.26	AV
17160	50.78	1.35	H	52.13	68.20	16.07	PK

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

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
11490	52.46	-0.14	V	52.32	73.98	21.66	PK
11490	39.49	-0.14	V	39.35	53.98	14.63	AV
17235	51.12	1.61	V	52.73	68.20	15.47	PK
11490	52.36	-0.14	H	52.22	73.98	21.76	PK
11490	39.32	-0.14	H	39.18	53.98	14.80	AV
17235	50.98	1.61	H	52.59	68.20	15.61	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11570	53.25	0.07	V	53.32	73.98	20.66	PK
11570	39.75	0.07	V	39.82	53.98	14.16	AV
17355	51.22	1.69	V	52.91	68.20	15.29	PK
11570	53.02	0.07	H	53.09	73.98	20.89	PK
11570	39.58	0.07	H	39.65	53.98	14.33	AV
17355	50.98	1.69	H	52.67	68.20	15.53	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11650	54.25	-0.70	V	53.55	73.98	20.43	PK
11650	40.06	-0.70	V	39.36	53.98	14.62	AV
17475	53.05	2.65	V	55.70	68.20	12.50	PK
11650	53.99	-0.70	H	53.29	73.98	20.69	PK
11650	39.85	-0.70	H	39.15	53.98	14.83	AV
17475	52.89	2.65	H	55.54	68.20	12.66	PK

2) 242 Tone RU 61_MIMO

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10360	56.78	0.24	V	57.02	68.20	11.18	PK
15540	50.13	2.16	V	52.29	73.98	21.69	PK
15540	37.61	2.16	V	39.77	53.98	14.21	AV
10360	55.98	0.24	H	56.22	68.20	11.98	PK
15540	49.89	2.16	H	52.05	73.98	21.93	PK
15540	37.52	2.16	H	39.68	53.98	14.30	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10400	55.57	0.74	V	56.31	68.20	11.89	PK
15600	49.86	1.81	V	51.67	73.98	22.31	PK
15600	37.56	1.81	V	39.37	53.98	14.61	AV
10400	54.96	0.74	H	55.70	68.20	12.50	PK
15600	49.55	1.81	H	51.36	73.98	22.62	PK
15600	37.48	1.81	H	39.29	53.98	14.69	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10480	57.47	-0.25	V	57.22	68.20	10.98	PK
15720	50.32	1.16	V	51.48	73.98	22.50	PK
15720	37.73	1.16	V	38.89	53.98	15.09	AV
10480	56.89	-0.25	H	56.64	68.20	11.56	PK
15720	50.02	1.16	H	51.18	73.98	22.80	PK
15720	37.68	1.16	H	38.84	53.98	15.14	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10520	56.37	-0.20	V	56.17	68.20	12.03	PK
15780	50.73	1.20	V	51.93	73.98	22.05	PK
15780	38.08	1.20	V	39.28	53.98	14.70	AV
10520	55.68	-0.20	H	55.48	68.20	12.72	PK
15780	50.55	1.20	H	51.75	73.98	22.23	PK
15780	37.98	1.20	H	39.18	53.98	14.80	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10600	57.31	0.10	V	57.41	73.98	16.57	PK
10600	43.15	0.10	V	43.25	53.98	10.73	AV
15900	51.51	1.04	V	52.55	73.98	21.43	PK
15900	38.45	1.04	V	39.49	53.98	14.49	AV
10600	56.85	0.10	H	56.95	73.98	17.03	PK
10600	42.45	0.10	H	42.55	53.98	11.43	AV
15900	51.48	1.04	H	52.52	73.98	21.46	PK
15900	38.22	1.04	H	39.26	53.98	14.72	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10640	55.15	0.35	V	55.50	73.98	18.48	PK
10640	42.71	0.35	V	43.06	53.98	10.92	AV
15960	51.19	1.12	V	52.31	73.98	21.67	PK
15960	38.23	1.12	V	39.35	53.98	14.63	AV
10640	54.58	0.35	H	54.93	73.98	19.05	PK
10640	42.12	0.35	H	42.47	53.98	11.51	AV
15960	51.02	1.12	H	52.14	73.98	21.84	PK
15960	38.12	1.12	H	39.24	53.98	14.74	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11000	54.13	0.40	V	54.53	73.98	19.45	PK
11000	41.54	0.40	V	41.94	53.98	12.04	AV
16500	51.79	1.16	V	52.95	68.20	15.25	PK
11000	54.02	0.40	H	54.42	73.98	19.56	PK
11000	41.48	0.40	H	41.88	53.98	12.10	AV
16500	51.68	1.16	H	52.84	68.20	15.36	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11200	52.65	-0.40	V	52.25	73.98	21.73	PK
11200	39.87	-0.40	V	39.47	53.98	14.51	AV
16800	50.73	0.65	V	51.38	68.20	16.82	PK
11200	52.55	-0.40	H	52.15	73.98	21.83	PK
11200	39.68	-0.40	H	39.28	53.98	14.70	AV
16800	50.55	0.65	H	51.20	68.20	17.00	PK

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

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
11440	52.84	0.14	V	52.98	73.98	21.00	PK
11440	40.38	0.14	V	40.52	53.98	13.46	AV
17160	51.19	1.35	V	52.54	68.20	15.66	PK
11440	52.68	0.14	H	52.82	73.98	21.16	PK
11440	40.12	0.14	H	40.26	53.98	13.72	AV
17160	51.02	1.35	H	52.37	68.20	15.83	PK

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

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
11490	52.58	-0.14	V	52.44	73.98	21.54	PK
11490	39.87	-0.14	V	39.73	53.98	14.25	AV
17235	51.11	1.61	V	52.72	68.20	15.48	PK
11490	52.48	-0.14	H	52.34	73.98	21.64	PK
11490	39.81	-0.14	H	39.67	53.98	14.31	AV
17235	50.98	1.61	H	52.59	68.20	15.61	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11570	52.75	0.07	V	52.82	73.98	21.16	PK
11570	39.91	0.07	V	39.98	53.98	14.00	AV
17355	51.32	1.69	V	53.01	68.20	15.19	PK
11570	52.68	0.07	H	52.75	73.98	21.23	PK
11570	39.78	0.07	H	39.85	53.98	14.13	AV
17355	51.12	1.69	H	52.81	68.20	15.39	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11650	53.03	-0.70	V	52.33	73.98	21.65	PK
11650	40.43	-0.70	V	39.73	53.98	14.25	AV
17475	53.71	2.65	V	56.36	68.20	11.84	PK
11650	52.98	-0.70	H	52.28	73.98	21.70	PK
11650	40.12	-0.70	H	39.42	53.98	14.56	AV
17475	53.55	2.65	H	56.20	68.20	12.00	PK

10.8.2 802.11ax(HE40)
1) 26 Tone RU 9_MIMO

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10380	54.57	0.88	V	55.45	68.20	12.75	PK
15570	50.78	2.21	V	52.99	73.98	20.99	PK
15570	37.13	2.21	V	39.34	53.98	14.64	AV
10380	53.98	0.88	H	54.86	68.20	13.34	PK
15570	50.55	2.21	H	52.76	73.98	21.22	PK
15570	36.98	2.21	H	39.19	53.98	14.79	AV

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5230 MHz
Channel No.	46 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10460	55.35	-0.34	V	55.01	68.20	13.19	PK
15690	50.55	1.38	V	51.93	73.98	22.05	PK
15690	37.39	1.38	V	38.77	53.98	15.21	AV
10460	55.12	-0.34	H	54.78	68.20	13.42	PK
15690	50.32	1.38	H	51.70	73.98	22.28	PK
15690	37.02	1.38	H	38.40	53.98	15.58	AV

Band : UNII 2A
 Operation Mode: 802.11ax(HE40)
 Transfer MCS Index: MCS0
 Operating Frequency 5270 MHz
 Channel No. 54 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10540	54.51	-0.05	V	54.46	68.20	13.74	PK
15810	50.91	0.97	V	51.88	73.98	22.10	PK
15810	37.78	0.97	V	38.75	53.98	15.23	AV
10540	53.99	-0.05	H	53.94	68.20	14.26	PK
15810	50.78	0.97	H	51.75	73.98	22.23	PK
15810	37.58	0.97	H	38.55	53.98	15.43	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10620	54.47	-0.07	V	54.40	73.98	19.58	PK
10620	40.36	-0.07	V	40.29	53.98	13.69	AV
15930	51.22	0.98	V	52.20	73.98	21.78	PK
15930	37.89	0.98	V	38.87	53.98	15.11	AV
10620	53.89	-0.07	H	53.82	73.98	20.16	PK
10620	39.89	-0.07	H	39.82	53.98	14.16	AV
15930	51.02	0.98	H	52.00	73.98	21.98	PK
15930	37.78	0.98	H	38.76	53.98	15.22	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11020	52.09	1.01	V	53.10	73.98	20.88	PK
11020	39.46	1.01	V	40.47	53.98	13.51	AV
16530	51.05	1.31	V	52.36	68.20	15.84	PK
11020	51.72	1.01	H	52.73	73.98	21.25	PK
11020	39.12	1.01	H	40.13	53.98	13.85	AV
16530	50.98	1.31	H	52.29	68.20	15.91	PK

Band : UNII 2C
 Operation Mode: 802.11ax(HE40)
 Transfer MCS Index: MCS0
 Operating Frequency 5590 MHz
 Channel No. 118 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11180	52.24	-0.21	V	52.03	73.98	21.95	PK
11180	39.48	-0.21	V	39.27	53.98	14.71	AV
16770	51.79	0.90	V	52.69	68.20	15.51	PK
11180	51.97	-0.21	H	51.76	73.98	22.22	PK
11180	39.22	-0.21	H	39.01	53.98	14.97	AV
16770	51.55	0.90	H	52.45	68.20	15.75	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11420	52.98	0.01	V	52.99	73.98	20.99	PK
11420	39.91	0.01	V	39.92	53.98	14.06	AV
17130	50.85	1.91	V	52.76	68.20	15.44	PK
11420	52.78	0.01	H	52.79	73.98	21.19	PK
11420	39.78	0.01	H	39.79	53.98	14.19	AV
17130	50.68	1.91	H	52.59	68.20	15.61	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11510	51.75	0.07	V	51.82	73.98	22.16	PK
11510	39.21	0.07	V	39.28	53.98	14.70	AV
17265	51.68	1.66	V	53.34	68.20	14.86	PK
11510	51.68	0.07	H	51.75	73.98	22.23	PK
11510	39.12	0.07	H	39.19	53.98	14.79	AV
17265	51.48	1.66	H	53.14	68.20	15.06	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11590	52.93	-0.40	V	52.53	73.98	21.45	PK
11590	39.69	-0.40	V	39.29	53.98	14.69	AV
17385	51.51	1.67	V	53.18	68.20	15.02	PK
11590	52.81	-0.40	H	52.41	73.98	21.57	PK
11590	36.51	-0.40	H	36.11	53.98	17.87	AV
17385	51.48	1.67	H	53.15	68.20	15.05	PK

2) 484 Tone RU 65_MIMO

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

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
10380	52.91	0.88	V	53.79	68.20	14.41	PK
15570	50.75	2.21	V	52.96	73.98	21.02	PK
15570	38.49	2.21	V	40.70	53.98	13.28	AV
10380	52.25	0.88	H	53.13	68.20	15.07	PK
15570	50.68	2.21	H	52.89	73.98	21.09	PK
15570	38.32	2.21	H	40.53	53.98	13.45	AV

Band :	UNII 1
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5230 MHz
Channel No.	46 Ch

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
10460	53.18	-0.34	V	52.84	68.20	15.36	PK
15690	51.01	1.38	V	52.39	73.98	21.59	PK
15690	38.84	1.38	V	40.22	53.98	13.76	AV
10460	52.78	-0.34	H	52.44	68.20	15.76	PK
15690	50.89	1.38	H	52.27	73.98	21.71	PK
15690	38.78	1.38	H	40.16	53.98	13.82	AV

Band : UNII 2A
 Operation Mode: 802.11ax(HE40)
 Transfer MCS Index: MCS0
 Operating Frequency 5270 MHz
 Channel No. 54 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10540	52.88	-0.05	V	52.83	68.20	15.37	PK
15810	51.12	0.97	V	52.09	73.98	21.89	PK
15810	39.19	0.97	V	40.16	53.98	13.82	AV
10540	52.01	-0.05	H	51.96	68.20	16.24	PK
15810	51.01	0.97	H	51.98	73.98	22.00	PK
15810	39.02	0.97	H	39.99	53.98	13.99	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10620	53.30	-0.07	V	53.23	73.98	20.75	PK
10620	41.20	-0.07	V	41.13	53.98	12.85	AV
15930	51.47	0.98	V	52.45	73.98	21.53	PK
15930	39.15	0.98	V	40.13	53.98	13.85	AV
10620	52.89	-0.07	H	52.82	73.98	21.16	PK
10620	40.78	-0.07	H	40.71	53.98	13.27	AV
15930	51.33	0.98	H	52.31	73.98	21.67	PK
15930	38.98	0.98	H	39.96	53.98	14.02	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11020	53.06	1.01	V	54.07	73.98	19.91	PK
11020	40.73	1.01	V	41.74	53.98	12.24	AV
16530	50.98	1.31	V	52.29	68.20	15.91	PK
11020	52.89	1.01	H	53.90	73.98	20.08	PK
11020	40.55	1.01	H	41.56	53.98	12.42	AV
16530	50.78	1.31	H	52.09	68.20	16.11	PK

Band : UNII 2C
 Operation Mode: 802.11ax(HE40)
 Transfer MCS Index: MCS0
 Operating Frequency 5590 MHz
 Channel No. 118 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11180	52.79	-0.21	V	52.58	73.98	21.40	PK
11180	40.94	-0.21	V	40.73	53.98	13.25	AV
16770	51.74	0.90	V	52.64	68.20	15.56	PK
11180	52.56	-0.21	H	52.35	73.98	21.63	PK
11180	40.85	-0.21	H	40.64	53.98	13.34	AV
16770	51.59	0.90	H	52.49	68.20	15.71	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11420	53.01	0.01	V	53.02	73.98	20.96	PK
11420	41.16	0.01	V	41.17	53.98	12.81	AV
17130	50.81	1.91	V	52.72	68.20	15.48	PK
11420	52.89	0.01	H	52.90	73.98	21.08	PK
11420	41.02	0.01	H	41.03	53.98	12.95	AV
17130	50.68	1.91	H	52.59	68.20	15.61	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11510	52.64	0.07	V	52.71	73.98	21.27	PK
11510	40.35	0.07	V	40.42	53.98	13.56	AV
17265	51.15	1.66	V	52.81	68.20	15.39	PK
11510	52.48	0.07	H	52.55	73.98	21.43	PK
11510	40.12	0.07	H	40.19	53.98	13.79	AV
17265	51.02	1.66	H	52.68	68.20	15.52	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11590	52.39	-0.40	V	51.99	73.98	21.99	PK
11590	40.67	-0.40	V	40.27	53.98	13.71	AV
17385	51.04	1.67	V	52.71	68.20	15.49	PK
11590	52.12	-0.40	H	51.72	73.98	22.26	PK
11590	40.58	-0.40	H	40.18	53.98	13.80	AV
17385	50.95	1.67	H	52.62	68.20	15.58	PK

10.8.3 802.11ax(HE80)
1) 26 Tone RU 18_MIMO

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10420	51.95	0.11	V	52.06	68.20	16.14	PK
15630	50.89	1.85	V	52.74	73.98	21.24	PK
15630	37.62	1.85	V	39.47	53.98	14.51	AV
10420	51.85	0.11	H	51.96	68.20	16.24	PK
15630	50.68	1.85	H	52.53	73.98	21.45	PK
15630	37.52	1.85	H	39.37	53.98	14.61	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10580	52.83	0.07	V	52.90	68.20	15.30	PK
15870	50.33	1.23	V	51.56	73.98	22.42	PK
15870	37.97	1.23	V	39.20	53.98	14.78	AV
10580	52.74	0.07	H	52.81	68.20	15.39	PK
15870	50.12	1.23	H	51.35	73.98	22.63	PK
15870	37.85	1.23	H	39.08	53.98	14.90	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11060	51.97	-0.33	V	51.64	73.98	22.34	PK
11060	39.73	-0.33	V	39.40	53.98	14.58	AV
16590	51.35	0.87	V	52.22	68.20	15.98	PK
11060	51.78	-0.33	H	51.45	73.98	22.53	PK
11060	39.68	-0.33	H	39.35	53.98	14.63	AV
16590	51.22	0.87	H	52.09	68.20	16.11	PK

Band : UNII 2C
 Operation Mode: 802.11ax(HE80)
 Transfer MCS Index: MCS0
 Operating Frequency 5610 MHz
 Channel No. 122 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11220	51.91	0.27	V	52.18	73.98	21.80	PK
11220	39.70	0.27	V	39.97	53.98	14.01	AV
16830	50.63	0.76	V	51.39	68.20	16.81	PK
11220	51.85	0.27	H	52.12	73.98	21.86	PK
11220	39.52	0.27	H	39.79	53.98	14.19	AV
16830	50.55	0.76	H	51.31	68.20	16.89	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11380	53.59	0.11	V	53.70	73.98	20.28	PK
11380	40.26	0.11	V	40.37	53.98	13.61	AV
17070	49.97	1.34	V	51.31	68.20	16.89	PK
11380	53.48	0.11	H	53.59	73.98	20.39	PK
11380	40.02	0.11	H	40.13	53.98	13.85	AV
17070	49.85	1.34	H	51.19	68.20	17.01	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11550	51.86	0.61	V	52.47	73.98	21.51	PK
11550	39.24	0.61	V	39.85	53.98	14.13	AV
17325	50.57	1.48	V	52.05	68.20	16.15	PK
11550	51.78	0.61	H	52.39	73.98	21.59	PK
11550	39.01	0.61	H	39.62	53.98	14.36	AV
17325	50.48	1.48	H	51.96	68.20	16.24	PK

2) 996 Tone RU 67_MIMO

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10420	52.52	0.11	V	52.63	68.20	15.57	PK
15630	50.49	1.85	V	52.34	73.98	21.64	PK
15630	39.52	1.85	V	41.37	53.98	12.61	AV
10420	52.48	0.11	H	52.59	68.20	15.61	PK
15630	50.35	1.85	H	52.20	73.98	21.78	PK
15630	39.38	1.85	H	41.23	53.98	12.75	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10580	52.49	0.07	V	52.56	68.20	15.64	PK
15870	51.08	1.23	V	52.31	73.98	21.67	PK
15870	40.07	1.23	V	41.30	53.98	12.68	AV
10580	52.31	0.07	H	52.38	68.20	15.82	PK
15870	50.89	1.23	H	52.12	73.98	21.86	PK
15870	39.99	1.23	H	41.22	53.98	12.76	AV

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11060	52.24	-0.33	V	51.91	73.98	22.07	PK
11060	41.70	-0.33	V	41.37	53.98	12.61	AV
16590	50.64	0.87	V	51.51	68.20	16.69	PK
11060	51.98	-0.33	H	51.65	73.98	22.33	PK
11060	41.55	-0.33	H	41.22	53.98	12.76	AV
16590	50.49	0.87	H	51.36	68.20	16.84	PK

Band : UNII 2C
 Operation Mode: 802.11ax(HE80)
 Transfer MCS Index: MCS0
 Operating Frequency 5610 MHz
 Channel No. 122 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11220	51.80	0.27	V	52.07	73.98	21.91	PK
11220	41.67	0.27	V	41.94	53.98	12.04	AV
16830	50.21	0.76	V	50.97	68.20	17.23	PK
11220	51.68	0.27	H	51.95	73.98	22.03	PK
11220	41.48	0.27	H	41.75	53.98	12.23	AV
16830	50.02	0.76	H	50.78	68.20	17.42	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11380	52.89	0.11	V	53.00	73.98	20.98	PK
11380	42.32	0.11	V	42.43	53.98	11.55	AV
17070	50.28	1.34	V	51.62	68.20	16.58	PK
11380	52.77	0.11	H	52.88	73.98	21.10	PK
11380	42.12	0.11	H	42.23	53.98	11.75	AV
17070	50.12	1.34	H	51.46	68.20	16.74	PK

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

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L -A.G+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11550	52.02	0.61	V	52.63	73.98	21.35	PK
11550	41.58	0.61	V	42.19	53.98	11.79	AV
17325	51.12	1.48	V	52.60	68.20	15.60	PK
11550	51.08	0.61	H	51.69	73.98	22.29	PK
11550	41.48	0.61	H	42.09	53.98	11.89	AV
17325	50.98	1.48	H	52.46	68.20	15.74	PK

Note:

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

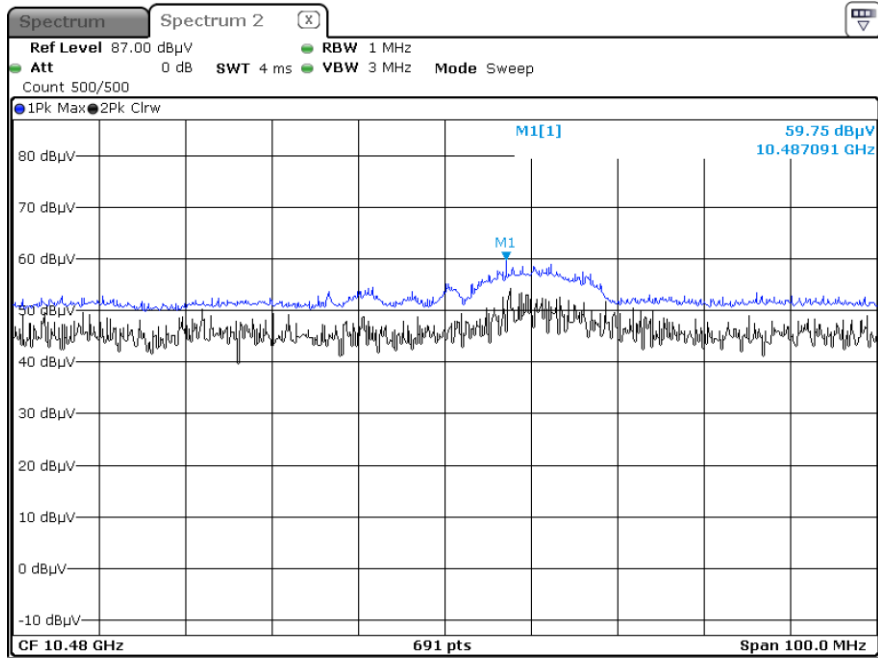
[Worst Case]

- UNII 1, 2A, 2C, 3
- HE20 : Worst case(Highest Power) & Additional Tone : 242 Tone RU 61, 106 Tone RU 54
- HE40 : Worst case(Highest Power) & Additional Tone : 484 Tone RU 65, 26 Tone RU 9
- HE80 : Worst case(Highest Power) & Additional Tone : 996 Tone RU 67, 26 Tone RU 18

[MIMO]

▣ Test Plots_106 Tone RU 54

Peak result (802.11ax(HE20), Ch.48 2nd Harmonic, Z-V)



Note:

Only the worst case plots for Radiated Spurious Emissions.

10.9 RADIATED RESTRICTED BAND EDGE

10.9.1 MIMO

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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	44.96	6.72	H	51.68	73.98	22.30	PK
5150	32.72	6.72	H	39.44	53.98	14.54	AV
5150	44.25	6.72	V	50.97	73.98	23.01	PK
5150	32.01	6.72	V	38.73	53.98	15.25	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	45.51	7.24	H	52.75	73.98	21.23	PK
5350	32.56	7.24	H	39.8	53.98	14.18	AV
5350	44.89	7.24	V	52.13	73.98	21.85	PK
5350	31.94	7.24	V	39.18	53.98	14.80	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.15	7.90	H	53.05	73.98	20.93	PK
5460	32.27	7.90	H	40.17	53.98	13.81	AV
5470	46.22	8.24	H	54.46	68.20	13.74	PK
5460	44.86	7.90	V	52.76	73.98	21.22	PK
5460	31.92	7.90	V	39.82	53.98	14.16	AV
5470	45.76	8.24	V	54	68.20	14.20	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	44.88	6.72	H	51.60	73.98	22.38	PK
5150	32.62	6.72	H	39.34	53.98	14.64	AV
5150	44.23	6.72	V	50.95	73.98	23.03	PK
5150	31.89	6.72	V	38.61	53.98	15.37	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	45.83	7.24	H	53.07	73.98	20.91	PK
5350	32.95	7.24	H	40.19	53.98	13.79	AV
5350	45.17	7.24	V	52.41	73.98	21.57	PK
5350	32.17	7.24	V	39.41	53.98	14.57	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	46.23	7.90	H	54.13	73.98	19.85	PK
5460	32.81	7.90	H	40.71	53.98	13.27	AV
5470	46.85	8.24	H	55.09	68.20	13.11	PK
5460	45.76	7.90	V	53.66	73.98	20.32	PK
5460	31.76	7.90	V	39.66	53.98	14.32	AV
5470	46.02	8.24	V	54.26	68.20	13.94	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	45.35	6.72	H	52.07	73.98	21.91	PK
5150	33.78	6.72	H	40.5	53.98	13.48	AV
5150	44.86	6.72	V	51.58	73.98	22.40	PK
5150	33.11	6.72	V	39.83	53.98	14.15	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	46.69	7.24	H	53.93	73.98	20.05	PK
5350	33.82	7.24	H	41.06	53.98	12.92	AV
5350	45.84	7.24	V	53.08	73.98	20.90	PK
5350	33.12	7.24	V	40.36	53.98	13.62	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	46.63	7.90	H	54.53	73.98	19.45	PK
5460	34.14	7.90	H	42.04	53.98	11.94	AV
5470	47.91	8.24	H	56.15	68.20	12.05	PK
5460	46.08	7.90	V	53.98	73.98	20.00	PK
5460	33.87	7.90	V	41.77	53.98	12.21	AV
5470	47.35	8.24	V	55.59	68.20	12.61	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	46.35	6.72	H	53.07	73.98	20.91	PK
5150	35.36	6.72	H	42.08	53.98	11.90	AV
5150	45.98	6.72	V	52.70	73.98	21.28	PK
5150	34.67	6.72	V	41.39	53.98	12.59	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	48.77	7.24	H	56.01	73.98	17.97	PK
5350	35.05	7.24	H	42.29	53.98	11.69	AV
5350	48.02	7.24	V	55.26	73.98	18.72	PK
5350	34.58	7.24	V	41.82	53.98	12.16	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	46.45	7.90	H	54.35	73.98	19.63	PK
5460	34.54	7.90	H	42.44	53.98	11.54	AV
5470	50.49	8.24	H	58.73	68.20	9.47	PK
5460	45.84	7.90	V	53.74	73.98	20.24	PK
5460	34.32	7.90	V	42.22	53.98	11.76	AV
5470	49.87	8.24	V	58.11	68.20	10.09	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	45.38	6.72	H	52.10	73.98	21.88	PK
5150	32.31	6.72	H	39.03	53.98	14.95	AV
5150	44.42	6.72	V	51.14	73.98	22.84	PK
5150	31.65	6.72	V	38.37	53.98	15.61	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	45.68	7.24	H	52.92	73.98	21.06	PK
5350	32.38	7.24	H	39.62	53.98	14.36	AV
5350	44.65	7.24	V	51.89	73.98	22.09	PK
5350	31.42	7.24	V	38.66	53.98	15.32	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.04	7.90	H	52.94	73.98	21.04	PK
5460	32.31	7.90	H	40.21	53.98	13.77	AV
5470	45.28	8.24	H	53.52	68.20	14.68	PK
5460	44.01	7.90	V	51.91	73.98	22.07	PK
5460	31.28	7.90	V	39.18	53.98	14.80	AV
5470	44.32	8.24	V	52.56	68.20	15.64	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	44.95	6.72	H	51.67	73.98	22.31	PK
5150	32.32	6.72	H	39.04	53.98	14.94	AV
5150	43.85	6.72	V	50.57	73.98	23.41	PK
5150	31.41	6.72	V	38.13	53.98	15.85	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	46.77	7.24	H	54.01	73.98	19.97	PK
5350	32.65	7.24	H	39.89	53.98	14.09	AV
5350	45.68	7.24	V	52.92	73.98	21.06	PK
5350	31.59	7.24	V	38.83	53.98	15.15	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.74	7.90	H	53.64	73.98	20.34	PK
5460	32.62	7.90	H	40.52	53.98	13.46	AV
5470	48.31	8.24	H	56.55	68.20	11.65	PK
5460	44.68	7.90	V	52.58	73.98	21.40	PK
5460	31.58	7.90	V	39.48	53.98	14.50	AV
5470	47.25	8.24	V	55.49	68.20	12.71	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	44.35	6.72	H	51.07	73.98	22.91	PK
5150	32.51	6.72	H	39.23	53.98	14.75	AV
5150	43.68	6.72	V	50.4	73.98	23.58	PK
5150	31.59	6.72	V	38.31	53.98	15.67	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	45.47	7.24	H	52.71	73.98	21.27	PK
5350	32.65	7.24	H	39.89	53.98	14.09	AV
5350	44.62	7.24	V	51.86	73.98	22.12	PK
5350	31.78	7.24	V	39.02	53.98	14.96	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.38	7.90	H	53.28	73.98	20.70	PK
5460	32.85	7.90	H	40.75	53.98	13.23	AV
5470	45.75	8.24	H	53.99	68.20	14.21	PK
5460	44.25	7.90	V	52.15	73.98	21.83	PK
5460	31.81	7.90	V	39.71	53.98	14.27	AV
5470	44.68	8.24	V	52.92	68.20	15.28	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	46.15	6.72	H	52.87	73.98	21.11	PK
5150	33.44	6.72	H	40.16	53.98	13.82	AV
5150	45.22	6.72	V	51.94	73.98	22.04	PK
5150	32.38	6.72	V	39.1	53.98	14.88	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	46.16	7.24	H	53.40	73.98	20.58	PK
5350	33.91	7.24	H	41.15	53.98	12.83	AV
5350	45.18	7.24	V	52.42	73.98	21.56	PK
5350	32.85	7.24	V	40.09	53.98	13.89	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.86	7.90	H	53.76	73.98	20.22	PK
5460	33.92	7.90	H	41.82	53.98	12.16	AV
5470	49.75	8.24	H	57.99	68.20	10.21	PK
5460	44.78	7.90	V	52.68	73.98	21.30	PK
5460	32.86	7.90	V	40.76	53.98	13.22	AV
5470	48.68	8.24	V	56.92	68.20	11.28	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	54.35	6.72	H	61.07	73.98	12.91	PK
5150	37.99	6.72	H	44.71	53.98	9.27	AV
5150	53.25	6.72	V	59.97	73.98	14.01	PK
5150	36.88	6.72	V	43.60	53.98	10.38	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	53.78	7.24	H	61.02	73.98	12.96	PK
5350	37.59	7.24	H	44.83	53.98	9.15	AV
5350	53.68	7.24	V	60.92	73.98	13.06	PK
5350	36.68	7.24	V	43.92	53.98	10.06	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	50.59	7.90	H	58.49	73.98	15.49	PK
5460	35.03	7.90	H	42.93	53.98	11.05	AV
5470	56.00	8.24	H	64.24	68.20	3.96	PK
5460	49.48	7.90	V	57.38	73.98	16.60	PK
5460	34.89	7.90	V	42.79	53.98	11.19	AV
5470	55.02	8.24	V	63.26	68.20	4.94	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	45.49	6.72	H	52.21	73.98	21.77	PK
5150	32.88	6.72	H	39.6	53.98	14.38	AV
5150	44.68	6.72	V	51.4	73.98	22.58	PK
5150	31.68	6.72	V	38.4	53.98	15.58	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	46.22	7.24	H	53.46	73.98	20.52	PK
5350	33.12	7.24	H	40.36	53.98	13.62	AV
5350	46.68	7.24	V	53.92	73.98	20.06	PK
5350	32.48	7.24	V	39.72	53.98	14.26	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.89	7.90	H	53.79	73.98	20.19	PK
5460	32.88	7.90	H	40.78	53.98	13.20	AV
5470	47.63	8.24	H	55.87	68.20	12.33	PK
5460	44.95	7.90	V	52.85	73.98	21.13	PK
5460	31.78	7.90	V	39.68	53.98	14.30	AV
5470	46.89	8.24	V	55.13	68.20	13.07	PK

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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	44.59	6.72	H	51.31	73.98	22.67	PK
5150	32.39	6.72	H	39.11	53.98	14.87	AV
5150	43.95	6.72	V	50.67	73.98	23.31	PK
5150	31.48	6.72	V	38.2	53.98	15.78	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	46.81	7.24	H	54.05	73.98	19.93	PK
5350	32.96	7.24	H	40.2	53.98	13.78	AV
5350	45.78	7.24	V	53.02	73.98	20.96	PK
5350	31.85	7.24	V	39.09	53.98	14.89	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.22	7.90	H	53.12	73.98	20.86	PK
5460	32.86	7.90	H	40.76	53.98	13.22	AV
5470	46.47	8.24	H	54.71	68.20	13.49	PK
5460	44.32	7.90	V	52.22	73.98	21.76	PK
5460	31.77	7.90	V	39.67	53.98	14.31	AV
5470	45.62	8.24	V	53.86	68.20	14.34	PK

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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	45.08	6.72	H	51.80	73.98	22.18	PK
5150	32.51	6.72	H	39.23	53.98	14.75	AV
5150	44.22	6.72	V	50.94	73.98	23.04	PK
5150	31.68	6.72	V	38.4	53.98	15.58	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	47.69	7.24	H	54.93	73.98	19.05	PK
5350	32.95	7.24	H	40.19	53.98	13.79	AV
5350	46.78	7.24	V	54.02	73.98	19.96	PK
5350	31.85	7.24	V	39.09	53.98	14.89	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.98	7.90	H	53.88	73.98	20.10	PK
5460	33.08	7.90	H	40.98	53.98	13.00	AV
5470	46.74	8.24	H	54.98	68.20	13.22	PK
5460	44.99	7.90	V	52.89	73.98	21.09	PK
5460	32.22	7.90	V	40.12	53.98	13.86	AV
5470	45.89	8.24	V	54.13	68.20	14.07	PK

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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	45.23	6.72	H	51.95	73.98	22.03	PK
5150	33.12	6.72	H	39.84	53.98	14.14	AV
5150	44.39	6.72	V	51.11	73.98	22.87	PK
5150	32.48	6.72	V	39.20	53.98	14.78	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	46.29	7.24	H	53.53	73.98	20.45	PK
5350	33.72	7.24	H	40.96	53.98	13.02	AV
5350	45.32	7.24	V	52.56	73.98	21.42	PK
5350	32.68	7.24	V	39.92	53.98	14.06	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.91	7.90	H	53.81	73.98	20.17	PK
5460	33.55	7.90	H	41.45	53.98	12.53	AV
5470	49.55	8.24	H	57.79	68.20	10.41	PK
5460	44.82	7.90	V	52.72	73.98	21.26	PK
5460	32.48	7.90	V	40.38	53.98	13.60	AV
5470	48.48	8.24	V	56.72	68.20	11.48	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	45.41	6.72	H	52.13	73.98	21.85	PK
5150	34.51	6.72	H	41.23	53.98	12.75	AV
5150	44.62	6.72	V	51.34	73.98	22.64	PK
5150	33.48	6.72	V	40.2	53.98	13.78	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	46.25	7.24	H	53.49	73.98	20.49	PK
5350	34.96	7.24	H	42.2	53.98	11.78	AV
5350	45.32	7.24	V	52.56	73.98	21.42	PK
5350	33.85	7.24	V	41.09	53.98	12.89	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 Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	46.27	7.90	H	54.17	73.98	19.81	PK
5460	34.13	7.90	H	42.03	53.98	11.95	AV
5470	48.59	8.24	H	56.83	68.20	11.37	PK
5460	45.39	7.90	V	53.29	73.98	20.69	PK
5460	33.22	7.90	V	41.12	53.98	12.86	AV
5470	47.62	8.24	V	55.86	68.20	12.34	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 Value [dB μ V]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
5150	48.44	6.72	H	55.16	73.98	18.82	PK
5150	36.24	6.72	H	42.96	53.98	11.02	AV
5150	47.38	6.72	V	54.1	73.98	19.88	PK
5150	35.12	6.72	V	41.84	53.98	12.14	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 Value [dB μ V]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
5350	47.51	7.24	H	54.75	73.98	19.23	PK
5350	36.42	7.24	H	43.66	53.98	10.32	AV
5350	46.69	7.24	V	53.93	73.98	20.05	PK
5350	35.48	7.24	V	42.72	53.98	11.26	AV

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

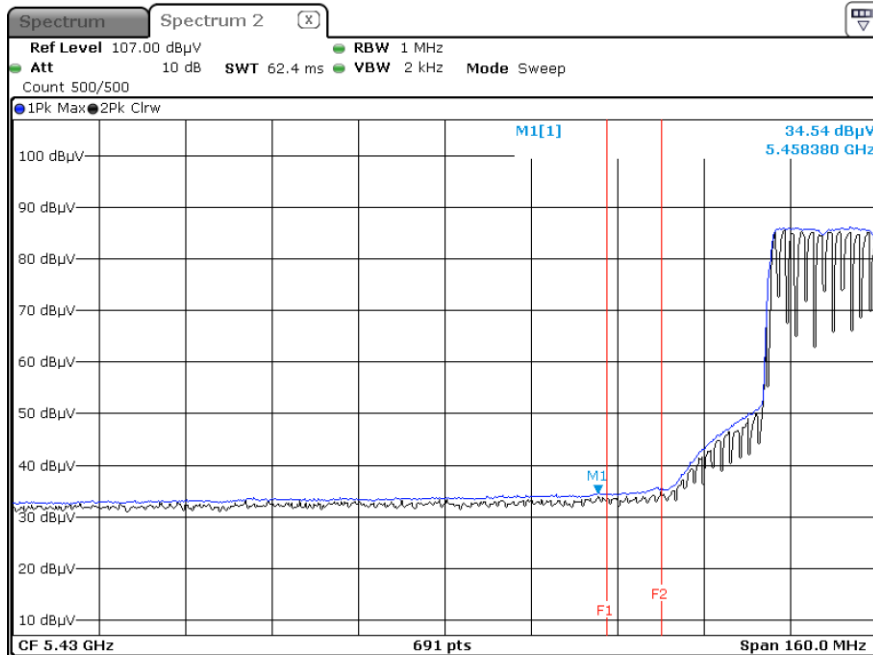
Frequency [MHz]	Measured Value [dBμV]	A.F+C.L-A.G +ATT+D.F [dB]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	48.18	7.90	H	56.08	73.98	17.90	PK
5460	36.25	7.90	H	44.15	53.98	9.83	AV
5470	49.33	8.24	H	57.57	68.20	10.63	PK
5460	47.22	7.90	V	55.12	73.98	18.86	PK
5460	35.32	7.90	V	43.22	53.98	10.76	AV
5470	48.48	8.24	V	56.72	68.20	11.48	PK

Note:

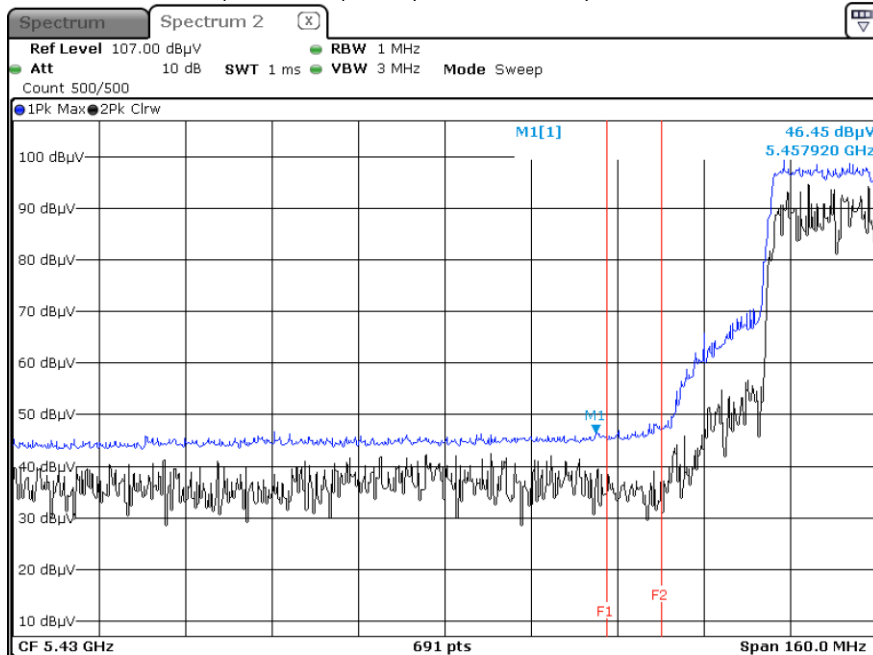
All Modes of operation were investigated and the worst case configuration results are reported.
 In order to simplify the report, We only have attached Bandedge result of worst case.

☑ Test Plots(UNII 1, 2A, 2C),
[MIMO]

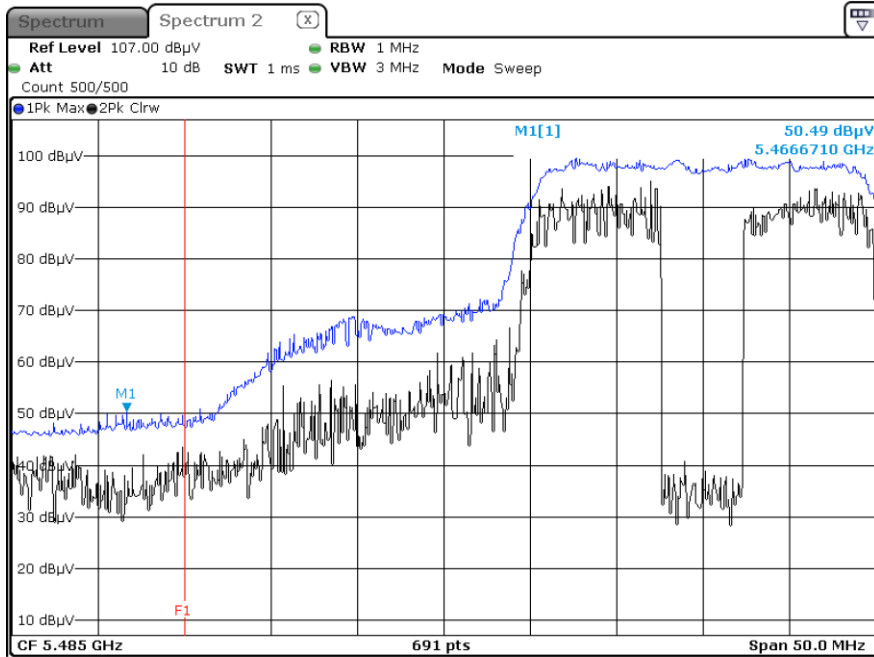
Average result (802.11ax(HE20), Ch.100, X-H) - 242 Tone RU 61



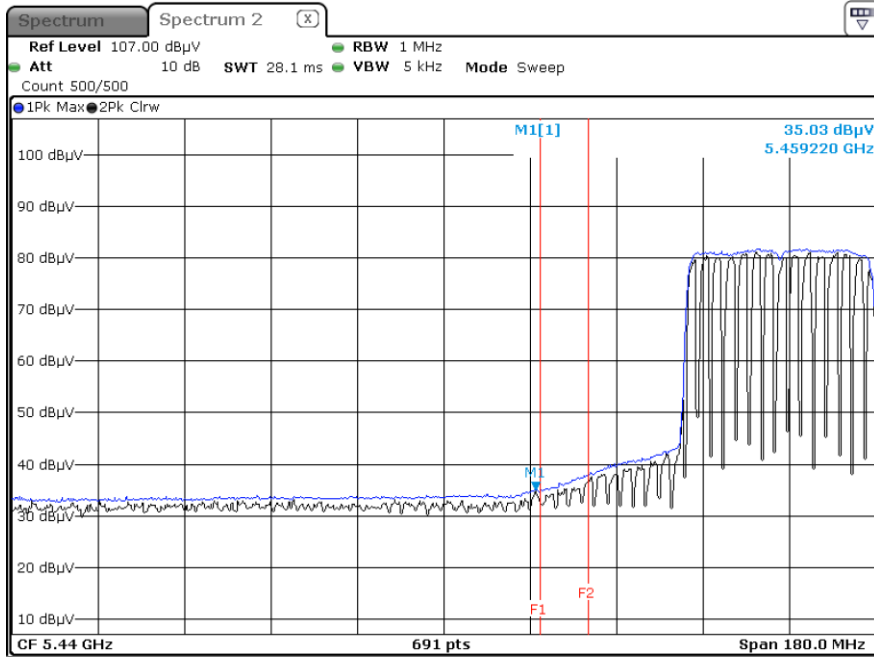
Peak result (802.11ax(HE20), Ch.100, X-H) - 242 Tone RU 61



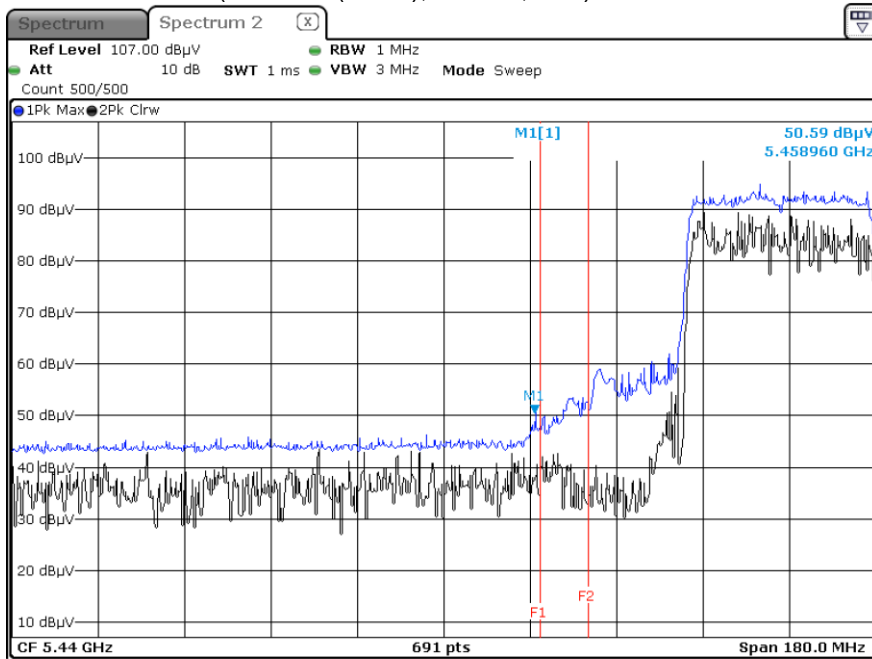
Peak result (802.11ax(HE20), Ch.100, X-H) - 242 Tone RU 61



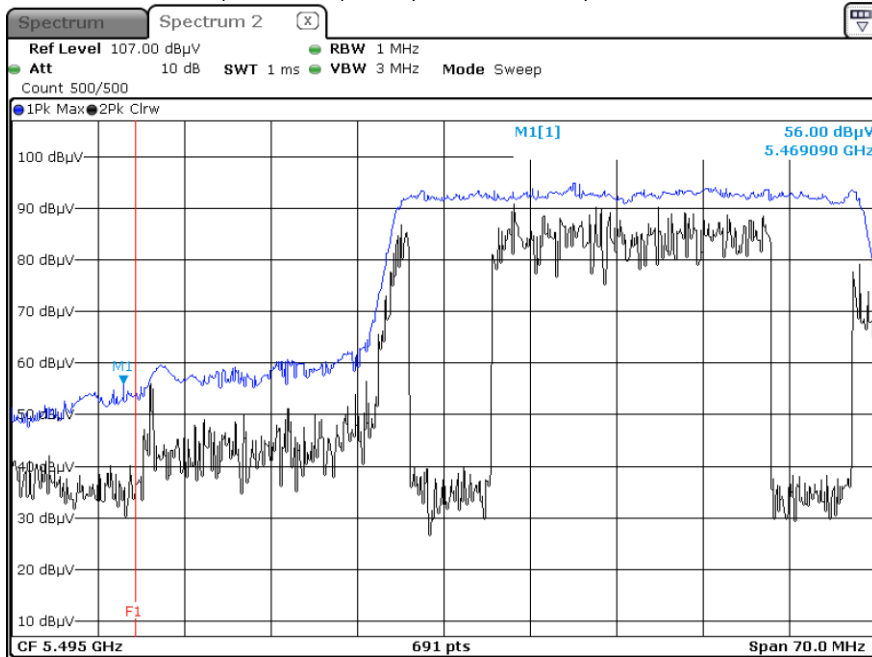
Average result (802.11ax(HE40), Ch.102, X-H) - 484 Tone RU 65



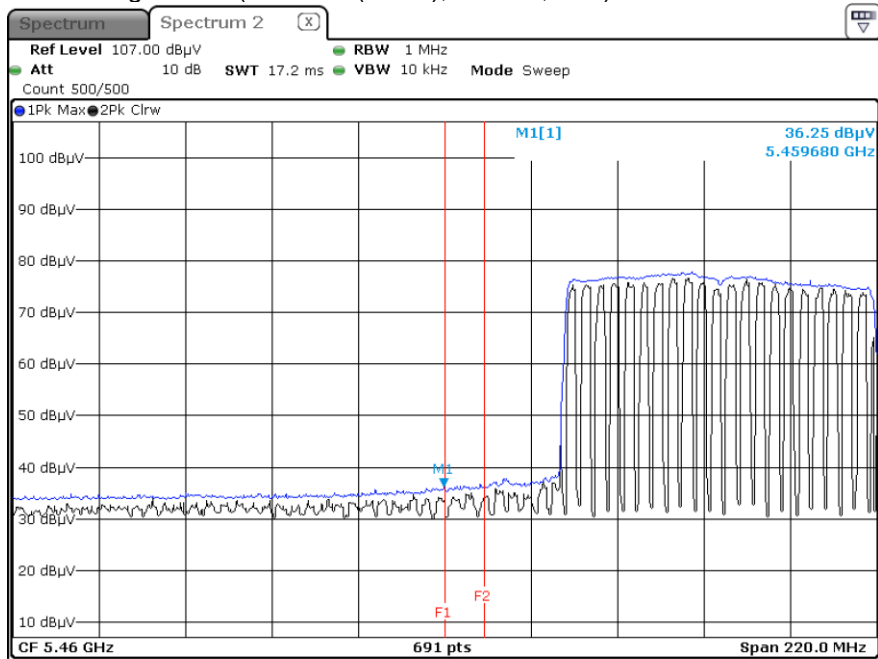
Peak result (802.11ax(HE40), Ch.102, X-H) - 484 Tone RU 65



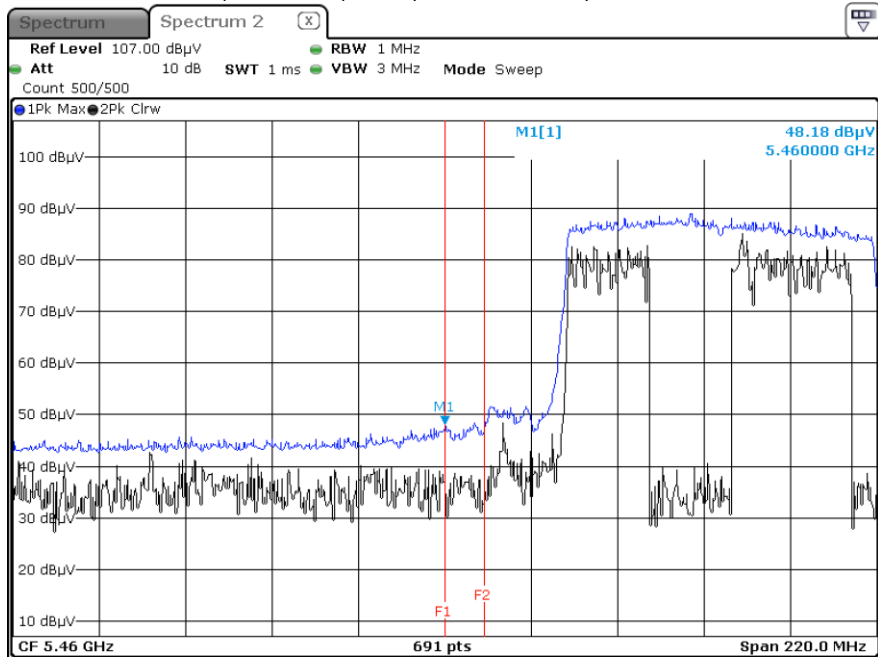
Peak result (802.11ax(HE40), Ch.102, X-H) - 484 Tone RU 65



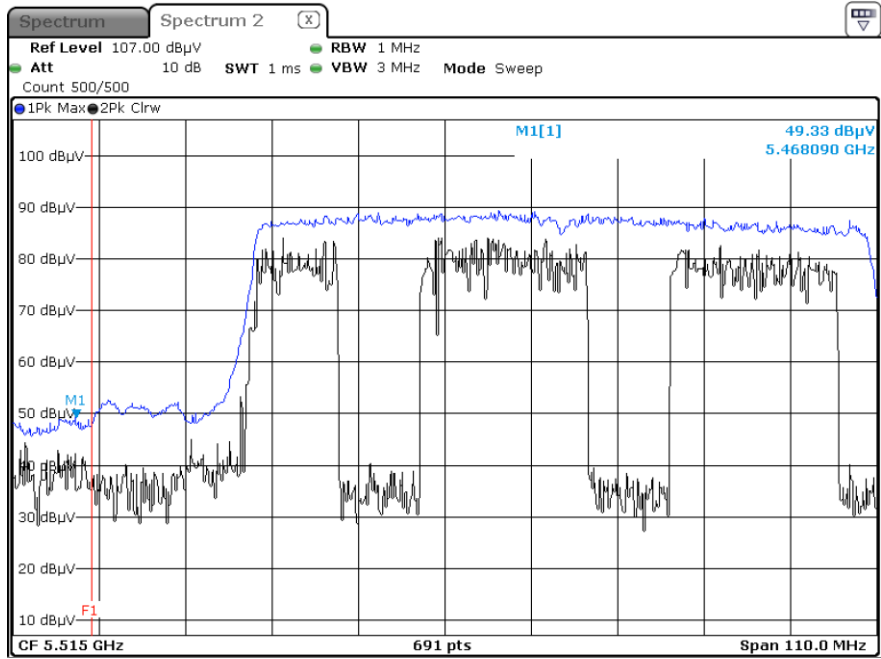
Average result (802.11ax(HE80), Ch.106, X-H) - 996 Tone RU 67



Peak result (802.11ax(HE80), Ch.106, X-H) - 996 Tone RU 67



Peak result (802.11ax(HE80), Ch.106, X-H) - 996 Tone RU 67



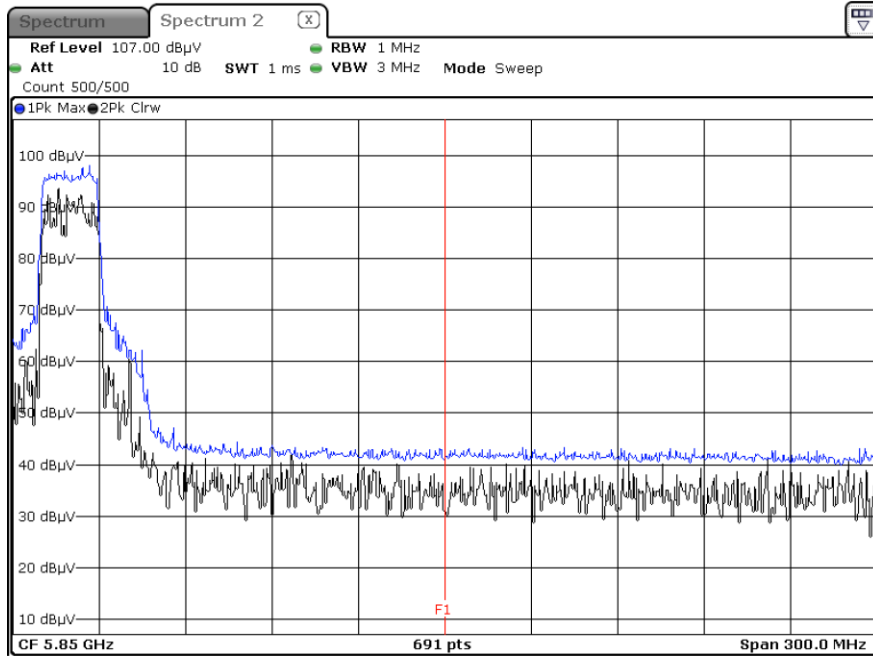
Note:

Only the worst case plots for Radiated Restricted Band Edge.

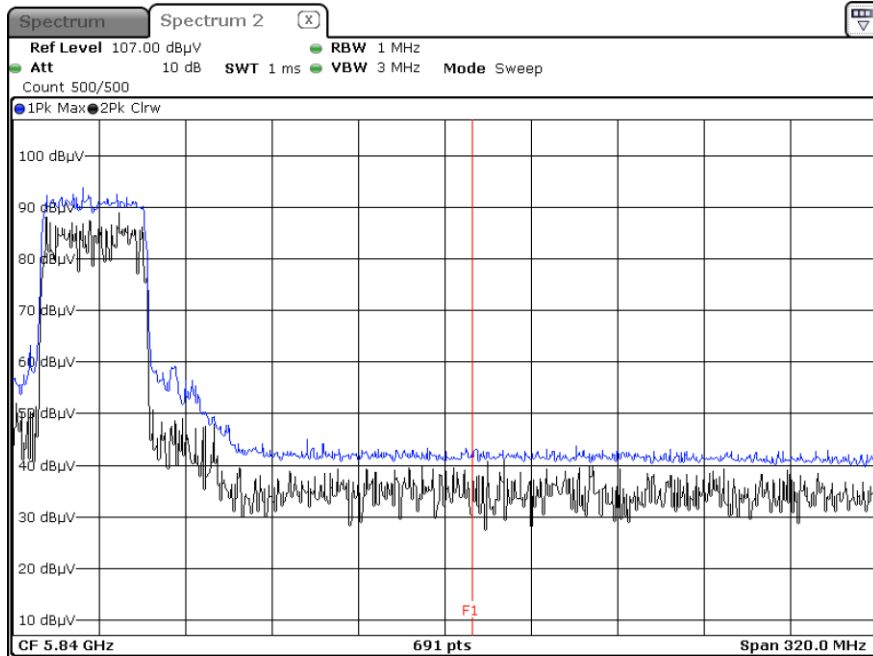
▣ Test Plots(Staraddle Channel)

[MIMO]

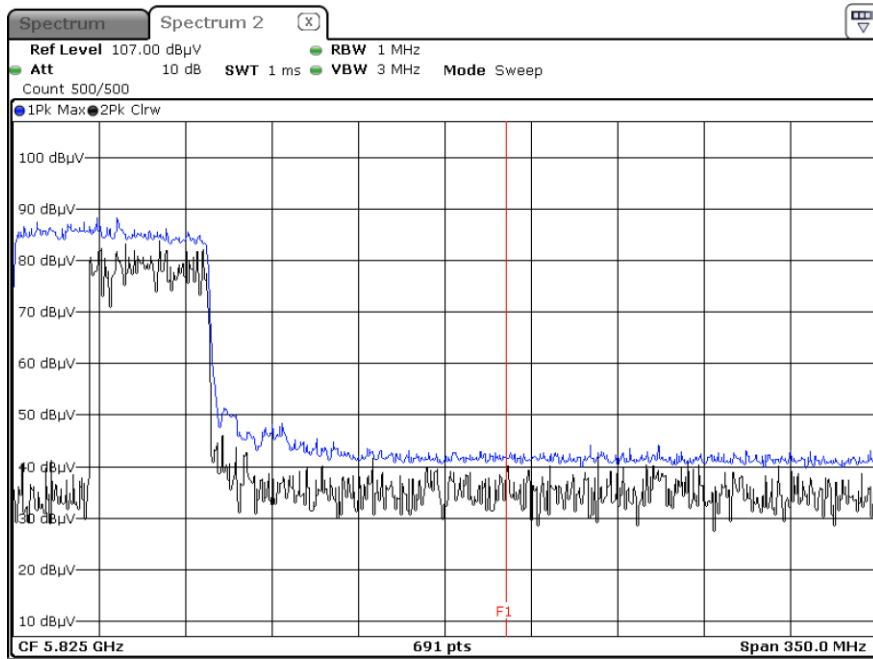
Peak result (802.11ax(HE20), Ch.144, 242 Tone RU 61, X-H)



Peak result (802.11ax(HE40), Ch.142, 484 Tone RU 65, X-H)



Peak result (802.11ax(HE80), Ch.138, 996 Tone RU 67, X-H)



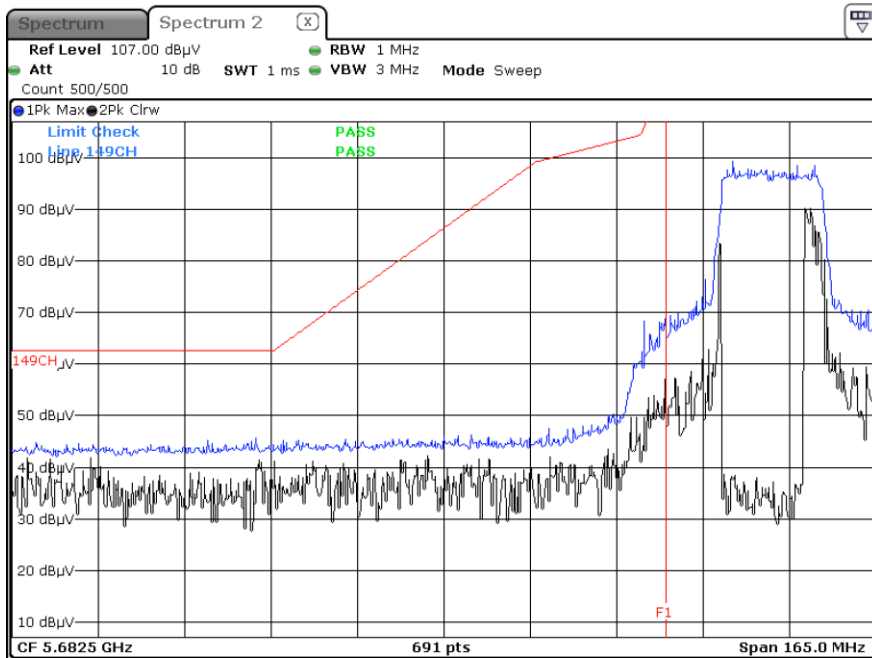
Note :

1. Only the worst case plots for Radiated Restricted Band Edge.
2. Red line : 5850 MHz
3. Ambient Noise (Because of ambient noise, We attached only the worst plot without a data table)

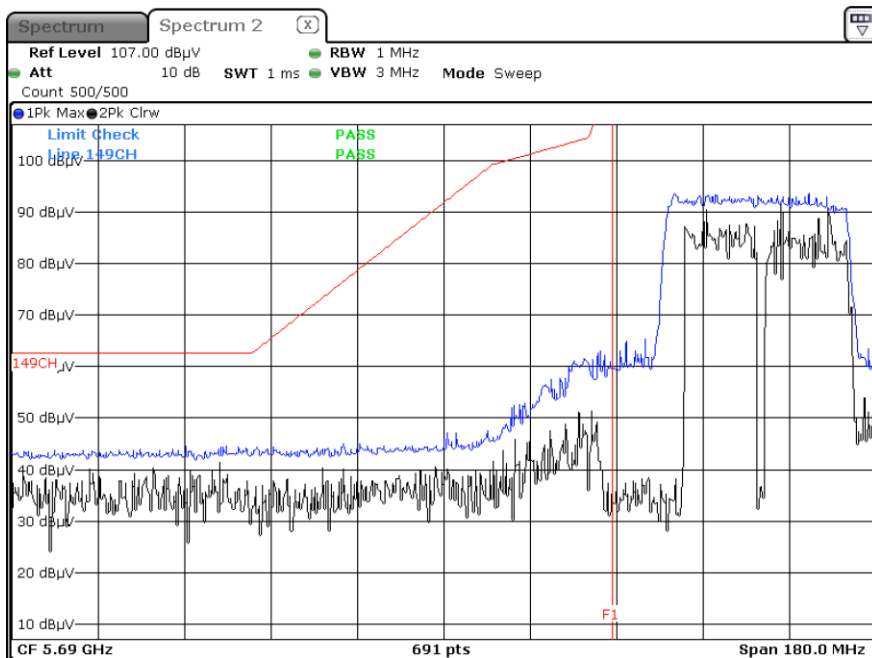
▣ Test Plots(UNII 3)

[MIMO]

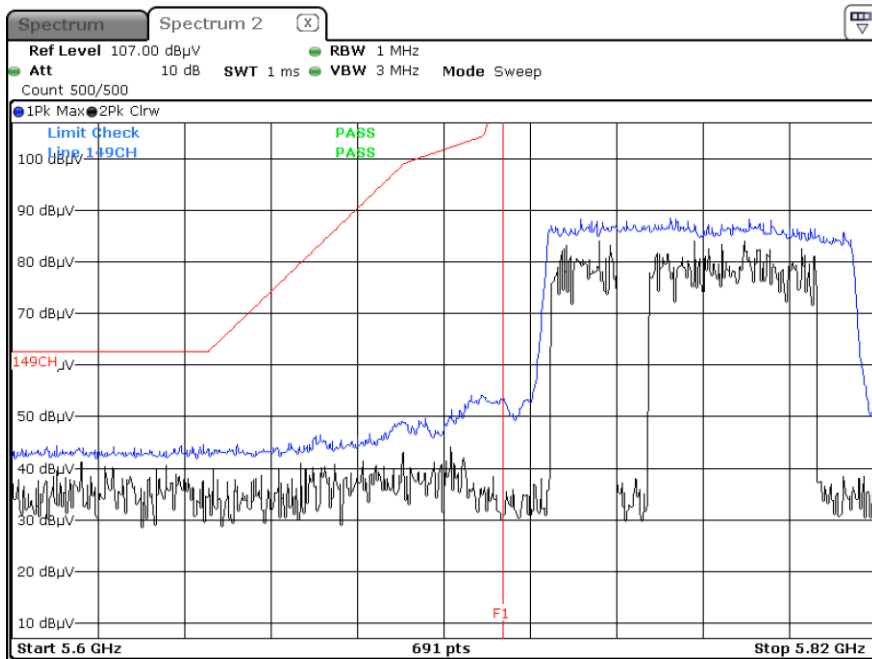
Peak result (802.11ax(HE20), Ch.149, 242 Tone RU 61, X-H)



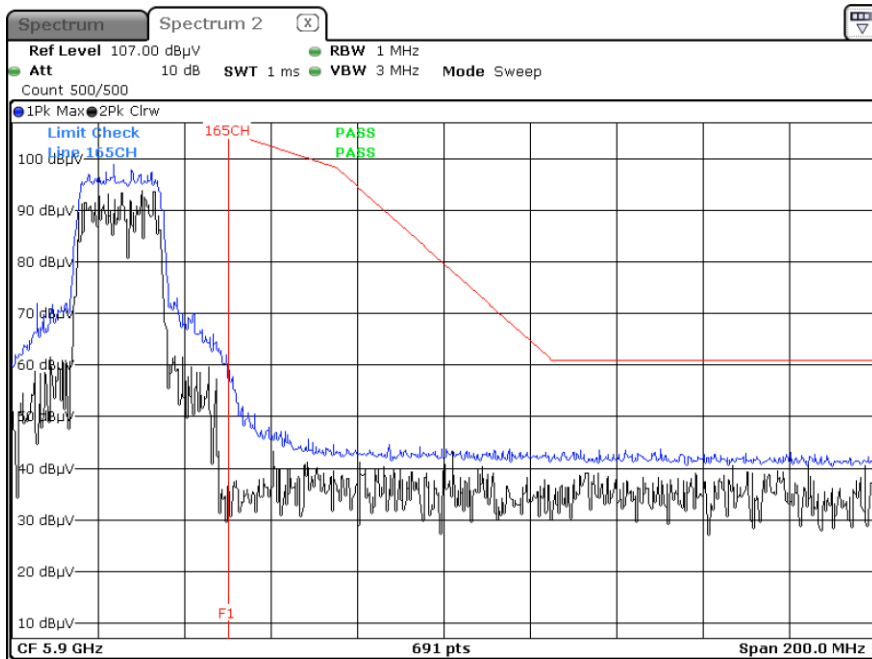
Peak result (802.11ax(HE40), Ch.151, 484 Tone RU 65, X-H)



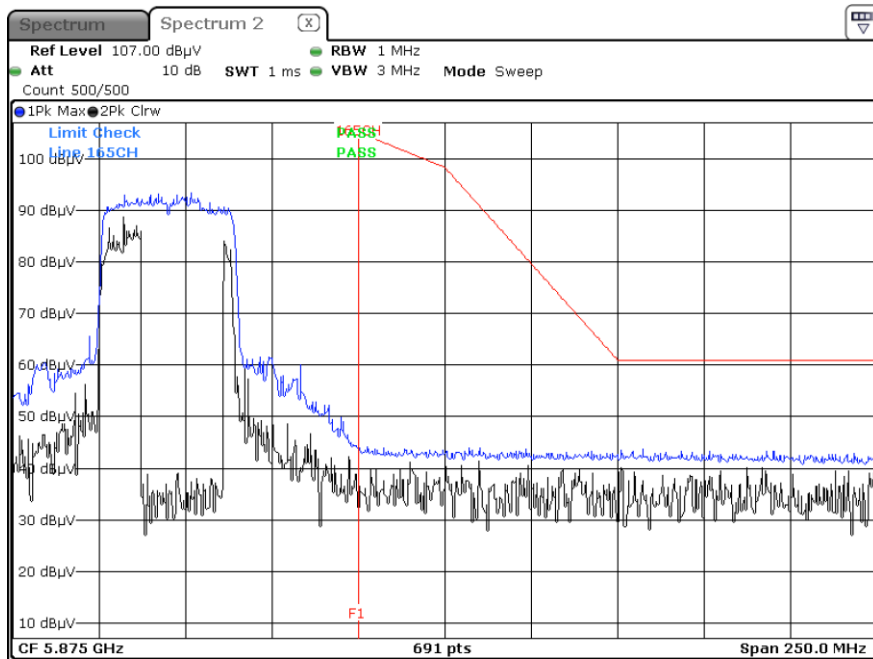
Peak result (802.11ax(HE80), Ch.155, 996 Tone RU 67, X-H)



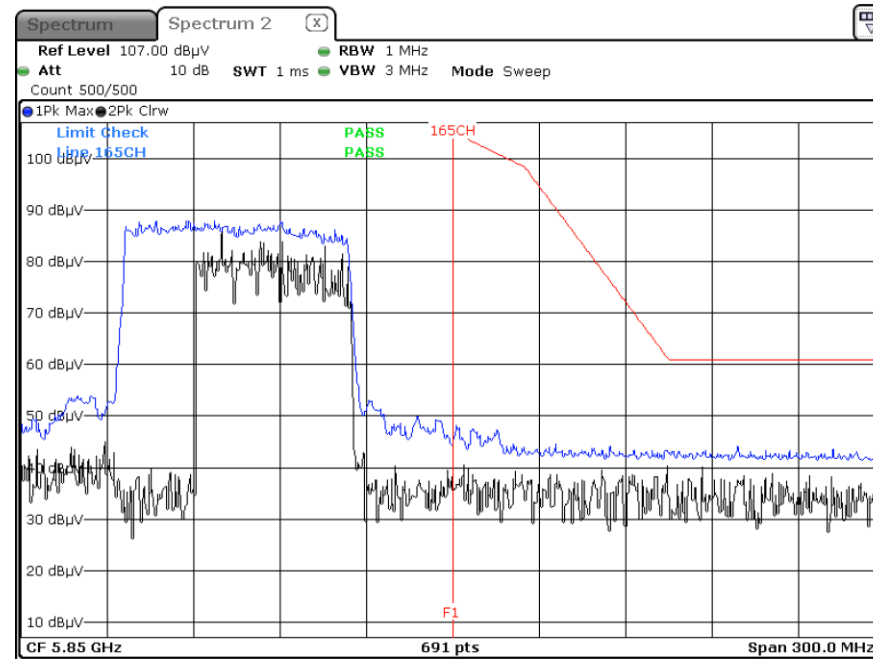
Peak result (802.11ax(HE20), Ch.165, 242 Tone RU 61, X-H)



Peak result (802.11ax(HE40), Ch.159, 484 Tone RU 65, X-H)



Peak result (802.11ax(HE80), Ch.155, 996 Tone RU 67, X-H)



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Note :

1. Only the worst case plots for Radiated Band Edge(UNII-3).

11. LIST OF TEST EQUIPMENT

Conducted Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
LISN	ENV216	Rohde & Schwarz	102245	08/23/2022	Annual
EMI Test Receiver	ESR	Rohde & Schwarz	101910	06/17/2022	Annual
Temperature Chamber	SU-642	ESPAC	0093008124	03/15/2022	Annual
Signal Analyzer	N9030A	Agilent	MY49431210	01/11/2022	Annual
Power Measurement Set	OSP 120	Rohde & Schwarz	101231	07/02/2022	Annual
BLUETOOTH TESTER	CBT	Rohde & Schwarz	100808	02/23/2022	Annual
Power Meter	N1911A	Agilent	MY45100523	04/08/2022	Annual
Power Sensor	N1921A	Keysight	MY57820067	04/08/2022	Annual
Directional Coupler	87300B	Agilent	3116A03621	11/10/2021	Annual
Power Splitter	11667B	Hewlett Packard	05001	05/20/2022	Annual
DC Power Supply	E3632A	Hewlett Packard	MY50360067	02/16/2022	Annual
Attenuator(10 dB)	8493C	Hewlett Packard	07560	06/18/2022	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

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	EM1000	Audix	060520	N/A	N/A
Turn Table	N/A	Audix	N/A	N/A	N/A
Loop Antenna	FMZB 1513	Rohde & Schwarz	1513-333	03/19/2022	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	760	02/22/2023	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	02299	05/19/2022	Biennial
Horn Antenna(15 GHz ~ 40 GHz)	BBHA9170	Schwarzbeck	BBHA9170541	11/29/2021	Biennial
Spectrum Analyzer	FSV40-N	Rohde & Schwarz	102168	07/05/2022	Annual
Signal Analyzer	N9030A	Agilent	MY49431210	01/11/2022	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	5	06/24/2022	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	6	06/24/2022	Annual
Band Reject Filter	WRCJV2400/2483.5-2370/2520-60/12SS	Wainwright Instruments	2	01/06/2022	Annual
Band Reject Filter	WRCJV5100/5850-40/50-8EEK	Wainwright Instruments	1	02/08/2022	Annual
High Pass Filter	WHK3.0/18G-10EF	Wainwright Instruments	8	02/03/2022	Annual
High Pass Filter	WHKX8-6090-7000-18000-40SS	Wainwright Instruments	25	02/03/2022	Annual
Attenuator (3 dB)	18B-03	Api tech.	1	02/03/2022	Annual
Attenuator(10 dB)	8493C-10	Agilent	08285	02/03/2022	Annual
Power Amplifier	CBLU1183540	CERNEX	22964	02/03/2022	Annual
Power Amplifier	CBL06185030	CERNEX	22965	02/03/2022	Annual
Power Amplifier	CBL18265035	CERNEX	22966	12/04/2021	Annual
Power Amplifier	CBL26405040	CERNEX	25956	03/23/2022	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-2109-FC015-P