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FCC UNII REPORT

Certification

Applicant Name:
SAMSUNG Electronics Co., Ltd.

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

Date of Issue:
November 05, 2021

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

Report No.: HCT-RF-2110-FC075-R1

FCC ID:	**A3LSMN980F1**
APPLICANT:	**SAMSUNG Electronics Co., Ltd.**

According to the Evaluation report, all of the data contained herein is reused from the reference FCC ID : A3LSMN981B1 report.

Model:	SM-N980F/DS
Additional Model:	SM-N980F
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.

REVIEWED BY

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

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

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

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

The above Test Report is the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA. (HCT Accreditation No.: KT197)

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2110-FC075	October 29, 2021	- First Approval Report
HCT-RF-2110-FC075-R1	November 05, 2021	- FCC ID Revised - Page 27-29 Typo - Page 55, 59, 77, 83 Added Note - Page 25, Duty Factor Data revised - Page 40-43, 26 dB Bandwidth Data revised - Page 67, 68, 70, 71, 6 dB Bandwidth Data revised - Page 112, Data revised

Table of Contents

1. GENERAL INFORMATION

EUT DESCRIPTION

Model	SM-N980F/DS	
Additional Model	SM-N980F	
EUT Type	Mobile Phone	
Power Supply	DC 3.88 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	September 27, 2021 ~ November 04, 2021	
Serial number	Radiated: UIR1409M Conducted: UIR1403M	

ANTENNA CONFIGURATIONS

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

Configurations	SISO		SDM	CDD
	Ant1	Ant2	Ant1 + Ant2	Ant1 + Ant2
802.11ax	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 2.4GHz and 5GHz bands simultaneously on each antenna.

	5GHz WIFI		2.4GHz WIFI		Test case
	Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 GHz RSDB Only	A			B	-
		A	B		-
	A		B		-
		A		B	-
2.4 GHz + 5 GHz RSDB & MIMO	A	A	B		-
	A	A		B	-
	A		B	B	-
		A	B	B	-
2.4 GHz + 5 GHz RSDB MIMO	A	A	B	B	O

Not RSDB	5GHz WIFI		2.4GHz Bluetooth	Test case
	Ant1	Ant2	Ant1	
Bluetooth + 5 GHz	O		O	-
		O	O	-
	O	O	O	O

3. Directional Gain Calculation

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

Directional gain =

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

Band	Ant Gain (dBi)		N_{ANT}/ N_{SS}	Directional Gain (dBi)
UNII 1	ANT1	-6.77	2 / 2	0.57
	ANT2	0.43		
UNII 2A	ANT1	-8.04	2 / 2	0.29
	ANT2	0.56		
UNII 2C	ANT1	-7.24	2 / 2	-1.25
	ANT2	-2.05		
UNII 3	ANT1	-6.33	2 / 2	-1.59
	ANT2	-3.16		

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)	20.70	0.117
	802.11ax (HE40)	19.85	0.097
	802.11ax (HE80)	15.83	0.038
UNII2A	802.11ax (HE20)	20.78	0.120
	802.11ax (HE40)	19.95	0.099
	802.11ax (HE80)	15.87	0.039
UNII2C	802.11ax (HE20)	20.90	0.123
	802.11ax (HE40)	19.96	0.099
	802.11ax (HE80)	18.92	0.078
UNII3	802.11ax (HE20)	20.95	0.124
	802.11ax (HE40)	19.93	0.098
	802.11ax (HE80)	18.94	0.078

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.

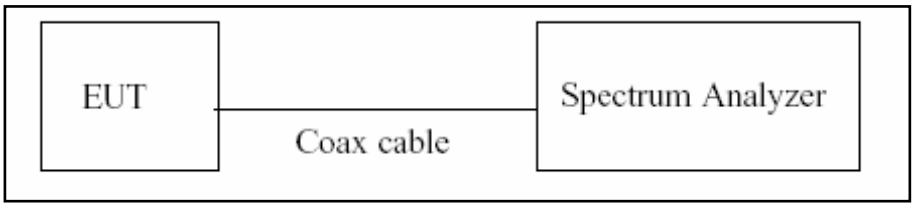
The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

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.

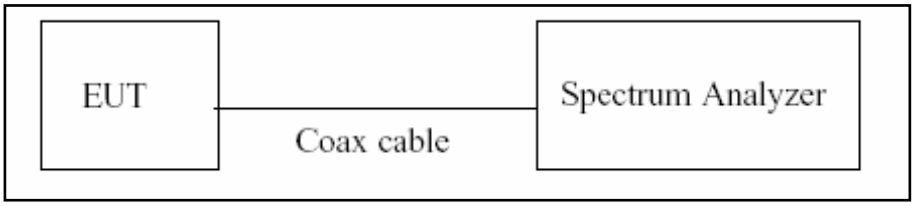
1. RBW = 8 MHz (the largest available value)
2. VBW = 8 MHz (≥ RBW)
3. SPAN = 0 Hz
4. Detector = Peak
5. Number of points in sweep > 100
6. Trace mode = Clear write
7. Measure T_{total} and T_{on}
8. Calculate Duty Cycle = T_{on}/ T_{total} and Duty Cycle Factor = 10log(1/Duty Cycle)

8.2. 6 dB Bandwidth & 26 dB Bandwidth

Limit

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

Test Configuration



Test Procedure(26 dB Bandwidth)

The transmitter output is connected to the Spectrum Analyzer.

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

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

Test Procedure (6 dB Bandwidth)

The transmitter output is connected to the Spectrum Analyzer.

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

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

Note:

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

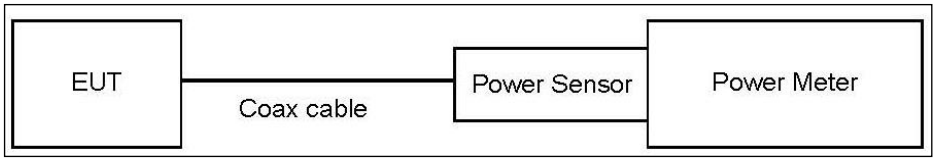
8.3. Output Power Measurement

Limit

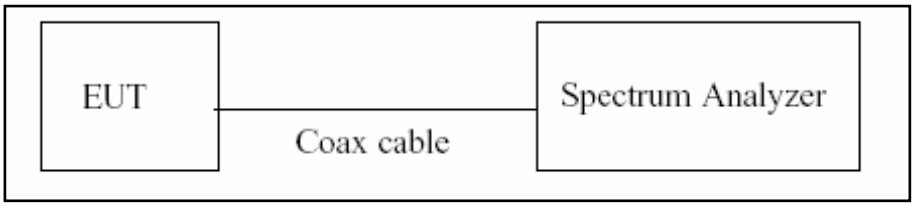
Band	Limit
UNII 1	- Master : Not exceed 1 W(=30 dBm) - Slave : Not exceed 250 mW(=23.98 dBm)
UNII 2A, 2C	Not exceed the lesser of 250 mW or 11 dBm + 10 log B, (where B is the 26 dB emission bandwidth in megahertz.)
UNII 3	Not exceed 1 W(=30 dBm)

Test Configuration

Power Meter



Spectrum Analyzer(Only Straddle Channel)



Test Procedure(Power Meter)

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

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

Test Procedure(Spectrum Analyzer)

The transmitter output is connected to the Spectrum Analyzer.

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

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

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

Sample Calculation

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

Note

1. Spectrum Measured Values are not plot data.
   The power results in plot is already including the actual values of loss for the attenuator and cable combination.
2. Spectrum offset Attenuator loss(10 dB) + Cable loss + EUT Cable Loss
   - Ant1 EUT Cable loss : 0.82 dB
3. Actual value of loss for the attenuator and cable combination is below table.

Band	Ant 1 Loss(dB)	Ant 2 Loss(dB)
UNII 1	11.55	10.73
UNII 2A	11.55	10.73
UNII 2C	11.55	10.73
UNII 3	11.55	10.73

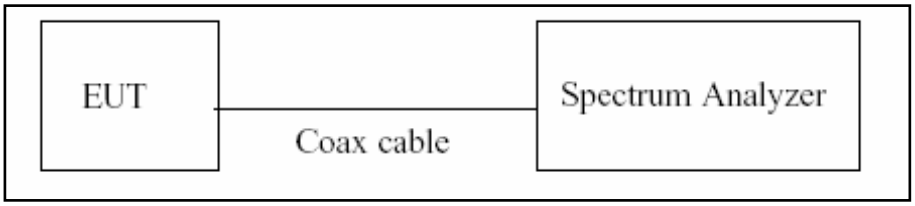
(Actual value of loss for the attenuator and cable combination)

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
   - Ant1 EUT Cable loss : 0.82 dB
3. Actual value of loss for the attenuator and cable combination is below table.

Band	Ant 1 Loss(dB)	Ant 2 Loss(dB)
UNII 1	11.55	10.73
UNII 2A	11.55	10.73
UNII 2C	11.55	10.73
UNII 3	11.55	10.73

(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 μH/50 ohms line impedance stabilization network (LISN).

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

[(a)]Decreases with the logarithm of the frequency.

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

Test Configuration

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

Test Procedure

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

Sample Calculation

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

8.6. 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.

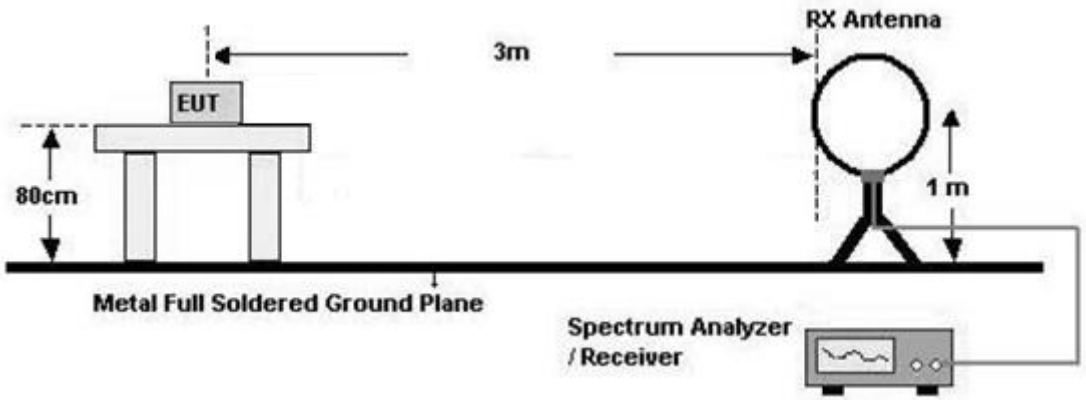
3. UNII 3: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below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

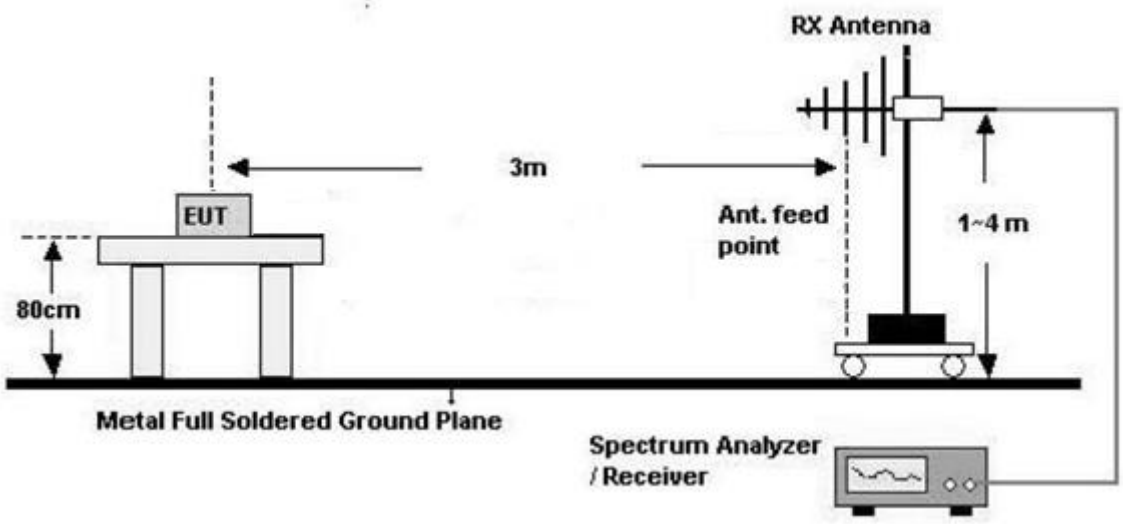
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Configuration

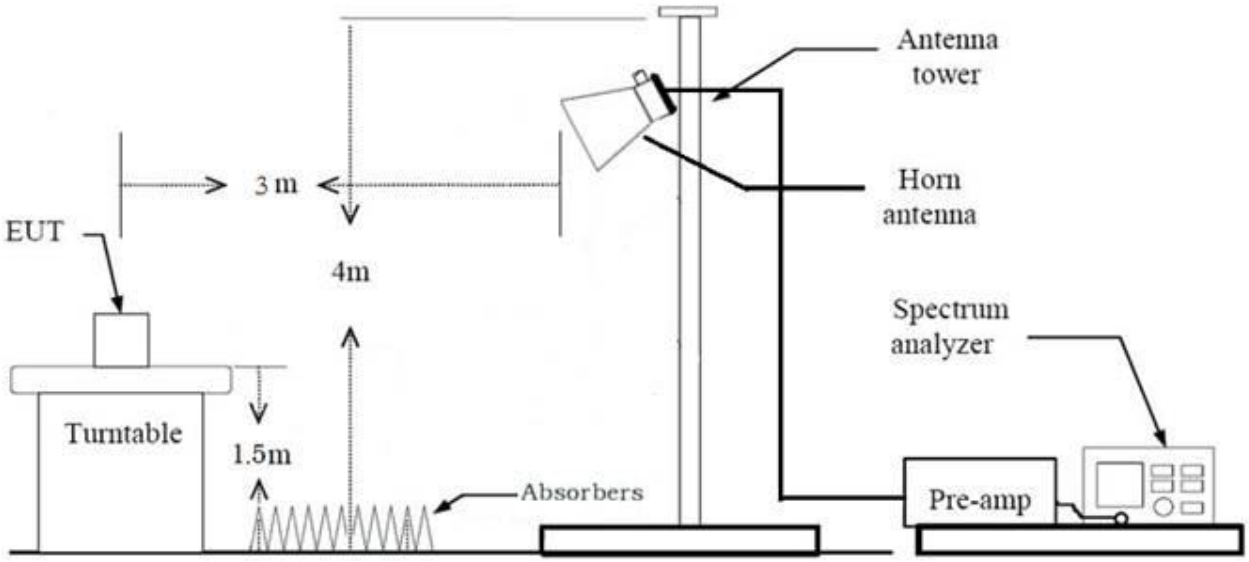
Below 30 MHz



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) = 40log(3 m/300 m) = - 80 dB
   Measurement Distance : 3 m
7. Distance Correction Factor(0.490 MHz – 30 MHz) = 40log(3 m/30 m) = - 40 dB
   Measurement Distance : 3 m
8. Spectrum Setting
   - Frequency Range = 9 kHz ~ 30 MHz
   - Detector = Peak
   - Trace = Max Hold
   - RBW = 9 kHz
   - VBW ≥ 3 x RBW
9. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L) + Distance Factor(D.F)
10. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

KDB 414788 OFS and Chamber Correlation Justification

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

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

Test Procedure of Radiated spurious emissions(Below 1 GHz)

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The EUT is placed on a turntable, which is 0.8 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 ≥ 3 x RBW
   (2) Measurement Type(Quasi-peak):
      - Measured Frequency Range : 30 MHz – 1 GHz
      - Detector = Quasi-Peak
      - RBW = 120 kHz

   ※In general, (1) is used mainly
7. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L)
8. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.

Test Procedure of Radiated spurious emissions (Above 1 GHz)

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

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

- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep Time = auto
- Trace mode = Max Hold
- Allow sweeps to continue until the trace stabilizes.

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

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

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

9. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor
10. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency
11. Distance extrapolation factor = 20log (test distance / specific distance) (dB)
12. Total = Measured Value + Antenna Factor(A.F) + Cable Loss(C.L) - Amp Gain(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 ≥ 3 MHz
- Detector = Peak
- Sweep Time = auto
- Trace mode = Max Hold
- Allow sweeps to continue until the trace stabilizes.

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

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

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

9. 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 = 20log (test distance / 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	0.083	0.191	1000
	52	MCS 0	0.963	0.163	0.377	1000
	106	MCS 0	0.927	0.330	0.779	1000
	242	MCS 0	0.856	0.677	1.666	2000
	SU	MCS 0	0.857	0.672	1.694	2000
802.11ax (HE40)	26	MCS 0	0.981	0.085	0.192	1000
	52	MCS 0	0.963	0.163	0.377	1000
	106	MCS 0	0.929	0.322	0.779	1000
	242	MCS 0	0.856	0.677	1.666	2000
	484	MCS 0	0.775	1.109	2.946	3000
	SU	MCS 0	0.771	1.132	3.013	5000
802.11ax (HE80)	26	MCS 0	0.981	0.083	0.191	1000
	52	MCS 0	0.963	0.163	0.377	1000
	106	MCS 0	0.927	0.330	0.780	1000
	242	MCS 0	0.859	0.659	1.659	2000
	484	MCS 0	0.769	1.142	2.968	3000
	996	MCS 0	0.664	1.779	4.997	5000
	SU	MCS 0	0.664	1.780	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: MCS0
2. SM-N980F/DS, SM-N980F were tested and the worst case results are reported.

(Worst case : SM-N980F/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(Resource Unit) 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 : Y,Z
   - Radiated Restricted Band Edge : Z
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. SM-N980F/DS, SM-N980F were tested and the worst case results are reported.

(Worst case : SM-N980F/DS)

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] 61 (Mid)
	[HE 20] Worst case(Highest PSD) : 26, 52T [HE 40] Worst case(Highest PSD) : 26, 52T	[HE 20] 4, 38 [HE 40] 9, 41
	[HE20] Additional Tone : 26, 106T [HE40] Additional Tone : 52,106, 484T [HE80] Additional Tone : 26, 52, 996T	[HE 20] 0, 8, 53, 54 [HE 40] 37, 44, 54, 65 [HE 80] 18, 45, 67
Bandedge	[HE 20] Worst case(Highest Power) : 242T, SU [HE 40] Worst case(Highest Power) : 484T, SU [HE 80] Worst case(Highest Power) : 996T, SU	[HE20] Low Edge: 61 High Edge: 61 [HE40] Low Edge: 65 High Edge: 65 [HE80] Low Edge: 67 High Edge: 67 SU : None
	[HE20] Additional Tone : 26, 52, 106T [HE40] Additional Tone : 26, 52, 106, 242T [HE80] Additional Tone : 26, 52, 106, 242, 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

9. Radiated Spurious Emission

- All band of operation were investigated and the worst case band results are reported.
  - Worstcase band : UNII 3

Radiated test(DBS)

1. All modes of operation were investigated and the worst case configuration results are reported.
   - Mode : Stand alone, Stand alone + External accessories(Earphone, etc)
   - Worstcase : Stand alone
2. SM-N980F/DS, SM-N980F were tested and the worst case results are reported.

(Worst case : SM-N980F/DS)

3. EUT Axis
   - Radiated Spurious Emissions : Y, Z
4. Test case

RSDB	5GHz WIFI		2.4GHz WIFI		Test case
	Ant1	Ant2	Ant1	Ant2	
2.4 GHz + 5 GHz RSDB Only	A			B	-
		A	B		-
	A		B		-
		A		B	-
2.4 GHz + 5 GHz RSDB & MIMO	A	A	B		-
	A	A		B	-
	A		B	B	-
		A	B	B	-
2.4 GHz + 5 GHz RSDB MIMO	A	A	B	B	Case2

Not RSDB	5GHz WIFI		2.4GHz Bluetooth	Test case
	Ant1	Ant2	Ant1	
Bluetooth + 5 GHz	A		B	-
		A	B	-
	A	A	B	Case1

Test Case	Description	Bluetooth Emission	5 GHz Emission
1	Antenna	Ant 1	Ant ALL
	Channel	39	151
	Data Rate	3 Mbps	MCS 0
	Mode	8DPSK: 3-DH5	802.11ax (HE40)
	Tone / RU	-	52 / 41
Test Case	**Description**	**2.4 GHz Emission**	**5 GHz Emission**
2	Antenna	Ant ALL	Ant ALL
	Channel	11	151
	Data Rate	MCS 0	MCS 0
	Mode	802.11ax (HE20)	802.11ax (HE40)
	Tone / RU	52 / 40	52 / 41

AC Power line Conducted Emissions

1. Please refer to the SM-G990E/DS [UNII] Test Report.

2. SM-N980F/DS, SM-N980F were tested and the worst case results are reported.

(Worst case : SM-N980F/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
Frequency Stability	§15.407(g) §2.1055	Maintained within the band		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)	Radiated	PASS
General Field Strength Limits(Restricted Bands and Radiated Emission Limits)	15.205, 15.407(b)(9),(10)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		PASS

Note:

1. Please refer to the SM-N980F/DS [UNII] Test Report.

10. TEST RESULT

10.1 DUTY CYCLE

802.11ax(HE20)

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (HE20)	26	MCS0	5.224	5.325	0.981	0.083
		MCS1	2.650	2.751	0.963	0.163
		MCS2	1.789	1.887	0.948	0.234
		MCS3	1.360	1.462	0.931	0.312
		MCS4	0.932	1.034	0.902	0.448
		MCS5	0.717	0.816	0.879	0.561
		MCS6	0.643	0.745	0.864	0.635
		MCS7	0.593	0.694	0.854	0.685
		MCS8	0.502	0.603	0.832	0.799
		MCS9	0.464	0.562	0.824	0.839
	52	MCS0	2.650	2.751	0.963	0.163
		MCS1	1.360	1.459	0.932	0.304
		MCS2	0.932	1.034	0.902	0.448
		MCS3	0.714	0.816	0.876	0.576
		MCS4	0.504	0.605	0.833	0.795
		MCS5	0.395	0.497	0.796	0.991
		MCS6	0.362	0.461	0.786	1.047
		MCS7	0.332	0.433	0.766	1.157
		MCS8	0.289	0.388	0.745	1.278
		MCS9	0.274	0.372	0.735	1.339
	106	MCS0	1.284	1.386	0.927	0.330
		MCS1	0.679	0.780	0.870	0.604
		MCS2	0.479	0.578	0.829	0.815
		MCS3	0.377	0.476	0.793	1.010
		MCS4	0.276	0.375	0.736	1.328
		MCS5	0.225	0.327	0.690	1.612
		MCS6	0.210	0.309	0.680	1.673
		MCS7	0.200	0.301	0.664	1.779
		MCS8	0.177	0.279	0.636	1.963
		MCS9	0.165	0.266	0.619	2.083
	242	MCS0	0.600	0.702	0.856	0.677

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS1	0.339	0.438	0.775	1.109
		MCS2	0.246	0.347	0.708	1.499
		MCS3	0.203	0.304	0.667	1.761
		MCS4	0.165	0.263	0.625	2.041
		MCS5	0.142	0.241	0.589	2.295
		MCS6	0.137	0.236	0.581	2.361
		MCS7	0.127	0.228	0.556	2.553
		MCS8	0.122	0.223	0.545	2.632
		MCS9	0.117	0.215	0.541	2.667
		MCS10	0.111	0.210	0.530	2.756
		MCS11	0.104	0.203	0.513	2.903

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	5.221	5.324	0.981	0.085
		MCS1	2.650	2.751	0.963	0.163
		MCS2	1.789	1.890	0.946	0.239
		MCS3	1.360	1.462	0.931	0.312
		MCS4	0.932	1.034	0.902	0.448
		MCS5	0.023	0.028	0.818	0.872
		MCS6	0.646	0.745	0.867	0.618
		MCS7	0.593	0.694	0.854	0.685
		MCS8	0.504	0.605	0.833	0.795
		MCS9	0.464	0.565	0.821	0.859
	52	MCS0	2.650	2.751	0.963	0.163
		MCS1	1.358	1.459	0.931	0.313
		MCS2	0.932	1.034	0.902	0.448
		MCS3	0.717	0.818	0.876	0.574
		MCS4	0.504	0.605	0.833	0.795
		MCS5	0.395	0.497	0.796	0.991
		MCS6	0.360	0.461	0.780	1.078
		MCS7	0.334	0.433	0.772	1.124
		MCS8	0.289	0.388	0.745	1.278
		MCS9	0.274	0.372	0.735	1.339
	106	MCS0	1.284	1.383	0.929	0.322
		MCS1	0.681	0.780	0.873	0.588
		MCS2	0.479	0.580	0.825	0.834
		MCS3	0.377	0.479	0.788	1.033
		MCS4	0.276	0.377	0.732	1.358
		MCS5	0.228	0.327	0.698	1.563
		MCS6	0.210	0.309	0.680	1.673
		MCS7	0.203	0.301	0.672	1.725
		MCS8	0.177	0.279	0.636	1.963
		MCS9	0.165	0.266	0.619	2.083
	242	MCS0	0.600	0.702	0.856	0.677
		MCS1	0.337	0.436	0.773	1.117
		MCS2	0.248	0.347	0.715	1.455
		MCS3	0.205	0.304	0.675	1.707

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS4	0.167	0.266	0.629	2.016
		MCS5	0.142	0.241	0.589	2.295
		MCS6	0.137	0.236	0.581	2.361
		MCS7	0.129	0.228	0.567	2.467
		MCS8	0.122	0.223	0.545	2.632
		MCS9	0.117	0.215	0.541	2.667
		MCS10	0.111	0.213	0.524	2.808
		MCS11	0.101	0.203	0.500	3.010
	484	MCS0	0.339	0.438	0.775	1.109
		MCS1	0.203	0.304	0.667	1.761
		MCS2	0.167	0.266	0.629	2.016
		MCS3	0.142	0.241	0.589	2.295
		MCS4	0.122	0.220	0.552	2.583
		MCS5	0.106	0.208	0.512	2.906
		MCS6	0.101	0.203	0.500	3.010
		MCS7	0.101	0.203	0.500	3.010
		MCS8	0.099	0.198	0.500	3.010
		MCS9	0.094	0.193	0.487	3.126
		MCS10	0.094	0.193	0.487	3.126
		MCS11	0.091	0.193	0.474	3.245

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	5.224	5.325	0.981	0.083
		MCS1	2.650	2.751	0.963	0.163
		MCS2	1.789	1.890	0.946	0.239
		MCS3	1.360	1.462	0.931	0.312
		MCS4	0.932	1.034	0.902	0.448
		MCS5	0.719	0.818	0.879	0.559
		MCS6	0.643	0.745	0.864	0.635
		MCS7	0.593	0.694	0.854	0.685
		MCS8	0.504	0.605	0.833	0.795
		MCS9	0.464	0.565	0.821	0.859
	52	MCS0	2.650	2.751	0.963	0.163
		MCS1	1.363	1.462	0.932	0.304
		MCS2	0.932	1.034	0.902	0.448
		MCS3	0.714	0.816	0.876	0.576
		MCS4	0.507	0.605	0.837	0.774
		MCS5	0.398	0.497	0.801	0.964
		MCS6	0.357	0.461	0.775	1.109
		MCS7	0.332	0.433	0.766	1.157
		MCS8	0.289	0.390	0.740	1.306
		MCS9	0.271	0.372	0.728	1.379
	106	MCS0	1.282	1.383	0.927	0.330
		MCS1	0.679	0.780	0.870	0.604
		MCS2	0.476	0.578	0.825	0.838
		MCS3	0.377	0.479	0.788	1.033
		MCS4	0.274	0.375	0.730	1.368
		MCS5	0.228	0.327	0.698	1.563
		MCS6	0.208	0.309	0.672	1.725
		MCS7	0.200	0.299	0.669	1.743
		MCS8	0.180	0.279	0.645	1.901
		MCS9	0.165	0.266	0.619	2.083
	242	MCS0	0.603	0.702	0.859	0.659
		MCS1	0.339	0.438	0.775	1.109
		MCS2	0.246	0.347	0.708	1.499

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS3	0.205	0.304	0.675	1.707
		MCS4	0.165	0.263	0.625	2.041
		MCS5	0.139	0.241	0.579	2.374
		MCS6	0.134	0.236	0.570	2.442
		MCS7	0.127	0.228	0.556	2.553
		MCS8	0.122	0.223	0.545	2.632
		MCS9	0.114	0.215	0.529	2.762
		MCS10	0.111	0.213	0.524	2.808
		MCS11	0.104	0.203	0.513	2.903
	484	MCS0	0.337	0.438	0.769	1.142
		MCS1	0.203	0.304	0.667	1.761
		MCS2	0.165	0.263	0.625	2.041
		MCS3	0.139	0.241	0.579	2.374
		MCS4	0.122	0.220	0.552	2.583
		MCS5	0.109	0.208	0.524	2.803
		MCS6	0.104	0.203	0.513	2.903
		MCS7	0.101	0.200	0.506	2.956
		MCS8	0.096	0.198	0.487	3.123
		MCS9	0.091	0.193	0.474	3.245
		MCS10	0.094	0.195	0.481	3.183
		MCS11	0.094	0.193	0.487	3.126
	996	MCS0	0.200	0.301	0.664	1.779
		MCS1	0.137	0.236	0.581	2.361
		MCS2	0.119	0.218	0.547	2.624
		MCS3	0.104	0.203	0.513	2.903
		MCS4	0.099	0.198	0.500	3.010
		MCS5	0.089	0.190	0.467	3.310
		MCS6	0.089	0.187	0.473	3.252
		MCS7	0.089	0.190	0.467	3.310
		MCS8	0.081	0.182	0.444	3.522
		MCS9	0.084	0.182	0.458	3.388
		MCS10	0.081	0.182	0.444	3.522
		MCS11	0.084	0.182	0.458	3.388

Mode	BW	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (SU)	BW 20	MCS0	0.590	0.689	0.857	0.672
		MCS1	0.329	0.428	0.769	1.139
		MCS2	0.243	0.342	0.711	1.481
		MCS3	0.198	0.299	0.661	1.798
		MCS4	0.160	0.258	0.618	2.093
		MCS5	0.137	0.236	0.581	2.361
		MCS6	0.132	0.231	0.571	2.430
		MCS7	0.122	0.220	0.552	2.583
		MCS8	0.119	0.218	0.547	2.624
		MCS9	0.111	0.210	0.530	2.756
		MCS10	0.109	0.208	0.524	2.803
		MCS11	0.099	0.200	0.494	3.066
	BW 40	MCS0	0.332	0.431	0.771	1.132
		MCS1	0.200	0.299	0.669	1.743
		MCS2	0.162	0.261	0.621	2.067
		MCS3	0.137	0.236	0.581	2.361
		MCS4	0.117	0.215	0.541	2.667
		MCS5	0.104	0.203	0.513	2.903
		MCS6	0.099	0.198	0.500	3.010
		MCS7	0.096	0.195	0.494	3.067
		MCS8	0.089	0.190	0.467	3.310
		MCS9	0.091	0.190	0.480	3.188
		MCS10	0.089	0.187	0.473	3.252
		MCS11	0.091	0.190	0.480	3.188
	BW 80	MCS0	0.195	0.294	0.664	1.780
		MCS1	0.132	0.231	0.571	2.430
		MCS2	0.114	0.213	0.536	2.711
		MCS3	0.099	0.198	0.500	3.010
		MCS4	0.091	0.193	0.474	3.245
		MCS5	0.086	0.185	0.466	3.318
		MCS6	0.086	0.185	0.466	3.318
		MCS7	0.086	0.185	0.466	3.318
		MCS8	0.079	0.177	0.443	3.537
		MCS9	0.079	0.177	0.443	3.537

Mode	BW	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS10	0.079	0.177	0.443	3.537
		MCS11	0.079	0.180	0.437	3.599

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	19.81	20.37	20.95	-	-
			Mid	19.20	19.67	-	21.61	21.66
			High	20.16	20.89	21.38	-	-
	5200	40	Low	19.86	19.82	20.88	-	-
			Mid	19.22	19.76	-	21.70	21.67
			High	20.56	20.93	20.88	-	-
	5240	48	Low	19.82	20.30	20.99	-	-
			Mid	18.86	19.89	-	21.74	21.69
			High	20.63	21.14	21.42	-	-
UNII 2A	5260	52	Low	19.83	20.35	20.98	-	-
			Mid	18.82	19.74	-	21.78	21.74
			High	20.66	21.02	21.40	-	-
	5280	56	Low	19.77	20.38	20.97	-	-
			Mid	19.20	19.85	-	21.61	21.66
			High	20.66	21.11	21.47	-	-
	5320	64	Low	19.77	20.36	20.98	-	-
			Mid	18.95	19.98	-	21.78	21.59
			High	20.33	21.16	21.39	-	-
UNII 2C	5500	100	Low	19.98	20.26	20.99	-	-
			Mid	19.21	19.85	-	21.77	21.56
			High	20.61	21.11	21.28	-	-
	5600	120	Low	20.05	20.23	20.98	-	-
			Mid	18.94	19.58	-	23.08	22.74
			High	20.50	20.90	21.30	-	-
	5720	144	Low	19.96	20.29	20.79	-	-
			Mid	18.87	19.81	-	27.47	30.09
			High	20.44	21.01	21.39	-	-

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	19.60	20.13	22.50	-	-
			Mid	19.21	19.60	-	30.70	29.39
			High	20.36	21.00	22.76	-	-
	5785	157	Low	20.02	20.24	23.10	-	-
			Mid	18.87	19.81	-	29.72	29.42
			High	20.63	21.00	23.04	-	-
	5825	165	Low	19.86	20.32	21.07	-	-
			Mid	18.74	19.74	-	29.83	29.25
			High	20.58	20.91	22.10	-	-

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	20.35	21.58	23.94	29.59	-	-
			Mid	23.43	24.06	26.19	-	40.42	40.10
			High	20.65	21.99	24.39	30.75	-	-
	5230	46	Low	20.44	21.33	22.77	30.93	-	-
			Mid	23.31	25.05	26.52	-	40.22	40.25
			High	20.45	22.01	24.29	35.44	-	-
UNII 2A	5270	54	Low	20.14	21.19	22.70	29.61	-	-
			Mid	23.47	26.34	26.23	-	40.20	40.15
			High	20.31	21.57	24.42	34.74	-	-
	5310	62	Low	20.23	21.22	23.87	30.49	-	-
			Mid	23.63	24.38	27.21	-	40.49	40.11
			High	20.75	22.02	24.40	34.03	-	-
UNII 2C	5510	102	Low	19.84	21.23	23.11	28.73	-	-
			Mid	23.92	26.17	24.78	-	40.34	40.13
			High	19.89	21.75	24.33	31.33	-	-
	5590	118	Low	19.95	20.78	22.59	28.89	-	-
			Mid	23.79	24.13	25.72	-	40.41	40.39
			High	19.89	22.10	24.32	37.33	-	-
	5710	142	Low	19.87	21.32	22.68	29.11	-	-
			Mid	23.27	24.64	25.34	-	49.34	43.04
			High	20.49	21.47	24.35	40.19	-	-
UNII 3	5755	151	Low	20.15	21.51	23.75	32.77	-	-
			Mid	23.30	23.86	25.42	-	49.55	43.32
			High	19.89	21.40	25.41	36.87	-	-
	5795	159	Low	20.14	21.09	24.17	30.91	-	-
			Mid	23.39	25.34	25.45	-	49.11	43.99
			High	20.55	22.06	26.43	38.82	-	-

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	21.52	22.32	23.71	35.41	59.44	-	-
			Mid	40.01	26.39	31.74	51.40	-	81.35	81.06
			High	22.35	24.92	27.68	34.21	58.28	-	-
UNII 2A	5290	58	Low	20.83	21.72	23.64	35.30	55.23	-	-
			Mid	40.22	25.98	29.80	51.76	-	81.44	81.59
			High	23.20	24.54	27.45	31.43	58.10	-	-
UNII 2C	5530	106	Low	20.96	21.93	24.61	31.76	54.25	-	-
			Mid	39.56	25.67	31.53	48.25	-	81.29	81.43
			High	23.10	24.09	27.33	30.72	58.88	-	-
	5610	122	Low	21.12	21.65	23.07	31.26	53.17	-	-
			Mid	41.27	28.42	30.74	48.84	-	81.43	81.50
			High	23.05	23.40	26.98	32.49	59.24	-	-
	5690	138	Low	19.73	21.55	23.35	35.10	57.16	-	-
			Mid	40.70	26.69	28.68	51.41	-	81.47	81.52
			High	22.70	24.46	28.88	33.06	58.44	-	-
UNII 3	5775	155	Low	20.51	22.36	23.26	31.75	54.15	-	-
			Mid	39.99	24.90	28.72	49.46	-	81.83	81.73
			High	22.70	23.88	27.27	37.26	62.30	-	-

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	19.71	19.77	19.93	-	-
			Mid	18.13	18.40	-	21.60	21.57
			High	19.58	20.02	20.13	-	-
	5200	40	Low	19.71	19.77	19.99	-	-
			Mid	17.99	18.42	-	21.48	21.63
			High	19.65	19.97	20.16	-	-
	5240	48	Low	19.53	19.80	20.06	-	-
			Mid	18.17	18.41	-	21.76	21.43
			High	19.82	20.11	20.29	-	-
UNII 2a	5260	52	Low	19.61	20.07	20.03	-	-
			Mid	18.15	18.49	-	21.41	21.53
			High	19.79	19.88	20.33	-	-
	5280	56	Low	19.76	19.89	19.86	-	-
			Mid	18.04	18.47	-	21.63	21.54
			High	19.74	19.77	20.08	-	-
	5320	64	Low	19.56	19.90	19.96	-	-
			Mid	18.08	18.37	-	21.37	21.49
			High	19.63	19.93	20.39	-	-
UNII 2c	5500	100	Low	19.76	19.81	19.94	-	-
			Mid	18.02	18.35	-	21.46	21.45
			High	19.73	19.89	20.12	-	-
	5600	120	Low	19.77	19.78	19.90	-	-
			Mid	18.19	18.35	-	21.64	21.69
			High	19.81	19.81	20.15	-	-
	5720	144	Low	19.59	19.79	20.02	-	-
			Mid	18.12	18.36	-	26.16	25.66
			High	19.69	19.92	20.02	-	-

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	19.75	20.00	20.51	-	-
			Mid	18.11	18.32	-	26.15	26.06
			High	19.66	19.76	20.90	-	-
	5785	157	Low	19.52	19.78	20.04	-	-
			Mid	18.23	18.31	-	24.98	26.97
			High	19.83	19.74	19.97	-	-
	5825	165	Low	19.69	19.72	20.09	-	-
			Mid	18.12	18.31	-	26.36	25.51
			High	19.74	19.89	20.90	-	-

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	20.12	20.46	26.97	-	-
			Mid	22.85	23.85	24.73	-	40.15	39.98
			High	19.30	19.37	19.59	26.19	-	-
	5230	46	Low	19.55	20.22	20.66	28.20	-	-
			Mid	22.80	24.22	26.45	-	39.90	40.05
			High	19.32	19.43	19.62	29.38	-	-
UNII 2a	5270	54	Low	19.60	20.22	20.54	28.76	-	-
			Mid	23.37	24.71	25.07	-	40.17	39.87
			High	19.30	19.28	19.46	28.94	-	-
	5310	62	Low	19.81	19.72	20.61	29.07	-	-
			Mid	22.56	23.23	24.89	-	39.84	40.02
			High	19.42	19.54	19.92	28.21	-	-
UNII 2c	5510	102	Low	19.22	19.78	20.52	26.97	-	-
			Mid	22.56	24.07	24.15	-	40.00	39.95
			High	19.18	19.37	19.65	27.73	-	-
	5590	118	Low	19.35	20.12	20.27	26.09	-	-
			Mid	22.92	23.81	24.59	-	40.07	40.13
			High	19.21	19.37	19.59	28.38	-	-
	5710	142	Low	19.39	19.78	20.62	28.14	-	-
			Mid	22.63	23.68	25.18	-	40.16	40.00
			High	19.27	19.35	19.54	27.70	-	-
UNII 3	5755	151	Low	19.44	20.03	21.48	28.77	-	-
			Mid	22.78	23.61	25.03	-	43.00	40.59
			High	19.26	19.30	20.62	30.28	-	-
	5795	159	Low	19.10	20.19	21.76	29.32	-	-
			Mid	23.24	23.08	24.24	-	39.90	42.61
			High	19.21	19.30	20.11	30.42	-	-

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	20.25	20.56	20.58	32.41	55.85	-	-
			Mid	38.76	24.90	29.09	50.98	-	81.26	81.57
			High	20.34	20.88	21.46	35.01	50.97	-	-
UNII 2a	5290	58	Low	20.32	20.55	20.62	32.15	52.66	-	-
			Mid	38.47	26.19	26.43	50.06	-	81.27	81.29
			High	20.06	20.96	21.45	33.27	51.59	-	-
UNII 2c	5530	106	Low	20.15	20.83	20.66	33.42	52.68	-	-
			Mid	38.81	24.32	29.61	46.49	-	81.40	81.15
			High	20.34	20.60	21.52	34.93	52.28	-	-
	5610	122	Low	20.21	20.52	20.65	29.76	52.84	-	-
			Mid	38.41	25.02	26.60	46.54	-	81.36	81.08
			High	20.36	20.68	20.96	32.92	56.83	-	-
	5690	138	Low	20.02	20.65	20.55	32.61	52.40	-	-
			Mid	38.32	25.19	26.70	47.17	-	81.19	81.25
			High	20.08	20.68	20.94	31.60	53.46	-	-
UNII 3	5775	155	Low	20.39	20.77	20.89	31.87	53.94	-	-
			Mid	38.55	25.77	24.56	48.42	-	81.36	81.22
			High	20.44	20.60	20.96	35.47	59.22	-	-

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	2.128	17.10	17.19	-	-
			Mid	2.697	15.07	-	19.10	19.08
			High	2.073	17.06	17.20	-	-
	5785	157	Low	2.104	12.02	17.17	-	-
			Mid	2.718	8.773	-	19.04	19.10
			High	2.036	17.01	17.19	-	-
	5825	165	Low	1.997	17.09	17.21	-	-
			Mid	2.618	15.01	-	19.03	19.06
			High	2.087	17.04	17.20	-	-

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	2.052	16.56	16.83	18.77	-	-
			Mid	2.150	13.57	17.37	-	37.79	37.88
			High	2.123	16.54	16.65	18.72	-	-
	5795	159	Low	2.110	16.59	16.84	18.71	-	-
			Mid	2.107	14.78	17.36	-	37.59	37.68
			High	2.061	16.57	16.59	18.74	-	-

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	2.164	16.55	16.82	18.89	37.74	-	-
			Mid	2.795	16.27	16.52	36.51	-	77.76	77.54
			High	2.174	16.67	16.71	18.81	37.66	-	-

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	*2.123*	17.04	17.19	-	-
			Mid	2.636	15.06	-	19.05	19.09
			High	2.156	17.07	17.20	-	-
	5785	157	Low	*2.116*	17.00	17.19	-	-
			Mid	2.657	12.54	-	19.07	18.98
			High	2.158	17.03	17.19	-	-
	5825	165	Low	2.126	17.03	17.20	-	-
			Mid	2.673	13.81	-	19.08	19.07
			High	*2.080*	17.03	17.21	-	-

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	2.133	16.57	16.55	18.58	-	-
			Mid	2.151	14.84	17.38	-	37.79	37.68
			High	*2.108*	16.58	16.63	18.68	-	-
	5795	159	Low	2.135	16.59	16.63	18.56	-	-
			Mid	2.113	4.800	17.38	-	37.48	37.35
			High	*2.101*	15.37	16.59	18.65	-	-

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	2.223	16.62	16.81	18.81	37.77	-	-
			Mid	2.792	14.99	16.51	36.50	-	77.61	77.76
			High	*2.215*	16.48	16.79	18.96	37.60	-	-

Limit : > 0.5 MHz

10.4 OUTPUT POWER MEASUREMENT

Power Level Setting

MIMO

802.11ax(HE20)	Frequency [MHz]	Channel	26T	52T	106T	242T	SU
UNII-1	5180	36	10	12	15	16	16
	5200	40	10	12	15	17	17
	5240	48	10	12	15	17	17
UNII-2A	5260	52	10	12	15	17	17
	5300	60	10	12	15	17	17
	5320	64	10	12	15	16	16
UNII-2C	5500	100	9	12	14	14	14
	5600	120	9	12	15	17	17
	5720	144	9	12	14	17	17
UNII-3	5745	149	12	14	17	17	17
	5785	157	11	14	16	17	17
	5825	165	11	13	16	17	17

802.11ax(HE40)	Frequency [MHz]	Channel	26T	52T	106T	242T	484T	SU
UNII-1	5190	38	10	12	15	16	12	12
	5230	46	9	12	15	16	16	16
UNII-2A	5270	54	9	12	15	16	16	16
	5310	62	10	12	15	16	12	12
UNII-2C	5510	102	9	12	14	14	12	12
	5590	118	9	12	15	16	16	16
	5710	142	9	11	15	16	16	16
UNII-3	5755	151	11	14	16	16	16	16
	5795	159	11	13	16	16	16	16

802.11ax(HE80)	Frequency [MHz]	Channel	26T	52T	106T	242T	484T	996T	SU
UNII-1	5210	42	10	12	12	12	12	11	11
UNII-2A	5290	58	10	12	12	12	12	11	11
UNII-2C	5530	106	10	12	12	12	12	11	11
	5610	122	9	12	15	15	15	15	15
	5690	138	10	12	15	15	15	15	15
UNII-3	5775	155	12	15	15	15	15	15	15

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	12.87	15.35	18.41	-	-
			Mid	13.13	15.59	-	19.52	19.45
			High	12.85	15.48	18.47	-	-
	5200	40	Low	12.73	15.37	18.37	-	-
			Mid	13.05	15.52	-	20.43	20.34
			High	12.89	15.47	18.43	-	-
	5240	48	Low	12.91	15.57	18.67	-	-
			Mid	13.26	15.74	-	20.70	20.61
			High	12.96	15.60	18.69	-	-
UNII 2A	5260	52	Low	12.98	15.61	18.79	-	-
			Mid	13.23	15.76	-	20.78	20.71
			High	12.93	15.52	18.72	-	-
	5280	56	Low	12.89	15.53	18.66	-	-
			Mid	13.17	15.68	-	20.69	20.60
			High	12.87	15.53	18.62	-	-
	5320	64	Low	12.90	15.54	18.60	-	-
			Mid	13.14	15.57	-	19.60	19.53
			High	12.80	15.42	18.52	-	-
UNII 2C	5500	100	Low	11.34	15.53	17.74	-	-
			Mid	11.52	15.63	-	17.70	17.64
			High	11.72	15.33	17.65	-	-
	5600	120	Low	11.51	15.66	18.81	-	-
			Mid	11.61	15.79	-	20.82	20.75
			High	11.26	15.41	18.67	-	-
	5720	144	Low	11.82	15.94	18.07	-	-
			Mid	11.96	16.08	-	20.90	20.86
			High	11.70	15.78	17.97	-	-
UNII 3	5745	149	Low	15.92	18.09	20.95	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	Sum Power (dBm)				
				26 T	52 T	106 T	242 T	SU
			Mid	16.06	18.19	-	20.93	20.85
			High	15.66	17.85	20.82	-	-
	5785	157	Low	14.82	18.04	19.78	-	-
			Mid	15.14	18.24	-	20.91	20.86
			High	14.70	17.94	19.58	-	-
	5825	165	Low	14.89	17.13	19.87	-	-
			Mid	15.36	17.41	-	20.95	20.92
			High	14.99	17.19	19.86	-	-

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	12.40	15.06	18.30	19.49	-	-
			Mid	13.22	15.76	18.87	-	15.45	15.40
			High	12.32	15.06	18.23	19.55	-	-
	5230	46	Low	10.63	15.21	18.26	19.47	-	-
			Mid	11.64	16.12	18.90	-	19.85	19.81
			High	10.81	15.42	18.44	19.57	-	-
UNII 2a	5270	54	Low	10.76	15.13	18.42	19.53	-	-
			Mid	11.53	15.82	18.90	-	19.95	19.78
			High	10.67	14.93	18.28	19.48	-	-
	5310	62	Low	12.61	15.04	18.37	19.46	-	-
			Mid	13.24	15.70	18.84	-	15.38	15.34
			High	12.36	14.82	18.16	19.44	-	-
UNII 2c	5510	102	Low	11.11	15.29	17.49	17.73	-	-
			Mid	12.08	16.21	17.89	-	15.62	15.54
			High	11.17	15.24	17.48	17.82	-	-
	5590	118	Low	11.23	15.29	18.43	19.58	-	-
			Mid	11.95	16.27	18.75	-	19.92	19.85
			High	10.97	15.23	18.36	19.68	-	-
	5710	142	Low	11.45	14.58	18.82	19.83	-	-
			Mid	12.09	15.31	19.25	-	19.96	19.84
			High	11.41	14.69	18.73	19.87	-	-
UNII 3	5755	151	Low	14.56	17.62	19.67	19.84	-	-
			Mid	15.25	18.37	19.90	-	19.89	19.86
			High	14.48	17.52	19.64	19.88	-	-
	5795	159	Low	14.29	16.50	19.52	19.88	-	-
			Mid	15.42	17.84	19.93	-	19.91	19.86
			High	14.31	16.65	19.58	19.83	-	-

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	12.36	15.07	15.21	15.50	15.55	-	-
			Mid	12.79	15.37	15.42	15.83	-	14.65	14.54
			High	12.46	15.16	15.33	15.63	15.71	-	-
UNII 2a	5290	58	Low	12.51	15.13	15.35	15.57	15.63	-	-
			Mid	13.09	15.33	15.39	15.87	-	14.64	14.52
			High	12.20	14.90	15.06	15.31	15.51	-	-
UNII 2c	5530	106	Low	12.72	15.20	15.29	16.80	15.57	-	-
			Mid	13.09	15.64	15.73	17.20	-	14.70	14.60
			High	12.58	15.00	15.23	16.94	15.75	-	-
	5610	122	Low	11.98	15.29	18.59	18.62	18.70	-	-
			Mid	12.12	15.72	18.90	18.84	-	18.70	18.67
			High	11.61	15.16	18.49	18.71	18.68	-	-
	5690	138	Low	12.90	15.29	18.60	18.60	18.76	-	-
			Mid	13.25	15.85	18.36	18.86	-	18.90	18.89
			High	12.83	15.26	18.58	18.64	18.92	-	-
UNII 3	5775	155	Low	15.27	18.53	18.63	18.68	18.92	-	-
			Mid	15.84	18.93	18.83	18.93	-	18.94	18.89
			High	15.54	18.72	18.73	18.76	18.39	-	-

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

Note:

1. See section 10.1 for duty factor.
2. 26T are Continuous wave. (Duty Cycle > 98%)
3. All data rate of operation were investigated and the worst case results are reported.

(Worst case : MCS0)

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	9.827	9.606	9.628	-	-
			Mid	9.053	9.692	-	7.284	7.230
			High	9.922	9.640	9.680	-	-
	5200	40	Low	9.328	9.537	9.590	-	-
			Mid	8.446	9.616	-	8.237	8.096
			High	9.217	9.562	9.562	-	-
	5240	48	Low	10.007	9.792	9.721	-	-
			Mid	9.247	9.862	-	8.322	8.311
			High	9.608	9.722	9.783	-	-
UNII 2A	5260	52	Low	9.964	9.881	9.767	-	-
			Mid	9.240	9.906	-	8.442	8.424
			High	9.954	9.169	9.754	-	-
	5280	56	Low	10.005	9.714	9.812	-	-
			Mid	9.146	9.930	-	8.353	8.364
			High	10.006	9.814	9.041	-	-
	5320	64	Low	9.903	9.566	9.615	-	-
			Mid	8.981	9.689	-	6.262	7.220
			High	9.781	9.388	9.593	-	-
UNII 2C	5500	100	Low	9.382	9.794	8.565	-	-
			Mid	8.548	9.832	-	5.397	5.482
			High	9.026	9.455	8.407	-	-
	5600	120	Low	9.342	9.862	9.896	-	-
			Mid	8.485	9.954	-	8.427	8.508
			High	9.215	9.656	9.687	-	-
	5720	144	Low	7.448	10.196	9.211	-	-
			Mid	6.647	10.261	-	8.674	8.708
			High	7.377	9.980	9.155	-	-
UNII 3	5745	149	Low	9.554	9.327	9.322	-	-
			Mid	9.421	9.449	-	5.929	5.962
			High	9.284	9.175	9.140	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	Total Sum PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
	5785	157	Low	9.051	9.449	8.433	-	-
			Mid	9.320	9.656	-	5.915	5.974
			High	9.047	9.339	8.434	-	-
	5825	165	Low	9.341	8.649	8.667	-	-
			Mid	9.556	8.784	-	6.188	6.313
			High	9.454	8.716	8.606	-	-

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	9.489	9.952	9.540	7.583	-	-
			Mid	10.065	10.236	9.699	-	0.541	0.566
			High	9.412	9.834	9.427	7.372	-	-
	5230	46	Low	8.481	9.179	9.520	7.516	-	-
			Mid	9.346	10.029	9.901	-	4.825	4.922
			High	8.570	9.359	9.677	7.560	-	-
UNII 2A	5270	54	Low	8.661	9.494	9.640	7.480	-	-
			Mid	9.342	10.018	9.720	-	4.932	4.988
			High	8.454	9.256	9.444	7.527	-	-
	5310	62	Low	9.532	9.390	9.593	7.405	-	-
			Mid	10.106	9.853	9.897	-	0.595	0.468
			High	9.140	9.019	9.357	7.349	-	-
UNII 2C	5510	102	Low	7.711	9.519	8.302	5.567	-	-
			Mid	8.614	10.222	8.471	-	0.705	0.784
			High	7.698	9.424	8.356	5.781	-	-
	5590	118	Low	7.652	9.578	9.617	7.472	-	-
			Mid	8.835	10.180	9.741	-	5.023	4.917
			High	7.647	9.358	9.602	7.695	-	-
	5710	142	Low	8.043	8.818	10.071	7.757	-	-
			Mid	8.742	9.430	10.373	-	5.214	5.285
			High	7.841	8.753	10.011	7.828	-	-
UNII 3	5755	151	Low	8.404	8.320	8.169	5.051	-	-
			Mid	8.703	8.784	8.405	-	2.584	2.695
			High	8.263	8.394	8.230	5.233	-	-
	5795	159	Low	7.352	7.881	8.109	5.210	-	-
			Mid	8.185	8.889	8.554	-	2.869	2.839
			High	7.522	7.853	8.214	5.453	-	-

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	9.562	9.439	6.485	3.372	0.757	-	-
			Mid	8.512	9.613	6.707	3.500	-	-3.251	-3.233
			High	9.552	9.367	6.561	3.550	0.933	-	-
UNII 2A	5290	58	Low	9.518	9.498	6.619	3.571	0.797	-	-
			Mid	8.635	9.444	6.612	3.597	-	-3.297	-3.194
			High	9.210	9.159	6.281	3.226	0.641	-	-
UNII 2C	5530	106	Low	9.913	9.556	6.477	5.554	0.663	-	-
			Mid	8.976	9.768	6.846	5.697	-	-2.889	-2.927
			High	9.788	9.394	6.593	5.671	0.998	-	-
	5610	122	Low	9.582	9.686	9.849	6.527	3.934	-	-
			Mid	8.110	9.820	10.009	6.719	-	1.165	1.223
			High	8.791	9.592	9.791	6.703	4.474	-	-
	5690	138	Low	10.231	9.820	9.884	6.728	4.044	-	-
			Mid	9.364	10.097	10.121	6.976	-	1.451	1.543
			High	10.006	9.820	9.974	6.851	4.496	-	-
UNII 3	5775	155	Low	9.899	10.212	7.189	4.051	1.469	-	-
			Mid	9.957	10.265	7.320	4.250	-	-1.191	-1.317
			High	10.174	10.260	7.411	4.124	1.653	-	-

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

Limit(UNII 3) : 30.0 dBm/500 kHz

Note:

1. See section 10.1 for duty factor.
2. 26T are Continuous wave. (Duty Cycle > 98%)
3. All data rate of operation were investigated and the worst case results are reported.

(Worst case : MCS0)

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	15.72	3.64
				4	14.72	4.08
				7	14.64	4.88
				8	14.92	5.76
			52 T	37	15.76	4.48
				38	15.40	4.64
				39	15.24	5.00
				40	15.24	5.76
			106 T	53	15.88	5.12
				54	15.56	5.92
			242 T	61	17.96	*12.24*
			SU	-	*21.72*	8.04

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	19.08	3.96
				16	15.24	4.28
				17	14.84	5.00
			52 T	# 37	-	-
				41	19.88	4.36
				43	17.00	4.60
				44	16.84	5.00
			106 T	# 53	-	-
				# 54	-	-
				55	21.96	4.68
				56	19.40	6.12
			242 T	# 61	-	-
				62	33.24	5.08
			484 T	65	*36.60*	5.16
			SU	-	36.28	*8.28*

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	16.12	4.68
				36	16.76	*5.96*
			52 T	# 37	-	-
				# 45	-	-
				51	19.48	4.68
				52	19.16	*5.96*
			106 T	# 53	-	-
				# 57	-	-
				59	26.20	5.00
				60	21.72	5.80
			242 T	# 61	-	-
				# 62	-	-
				63	48.44	5.16
				64	31.80	*5.96*
			484 T	# 65	-	-
				66	52.76	*5.96*
			996 T	67	75.96	*5.96*
			SU	-	*76.12*	5.80

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	15.80	4.04
				4	14.00	3.96
				7	14.00	4.60
				8	14.08	5.64
			52 T	37	15.68	4.12
				38	14.28	4.12
				39	14.28	4.16
				40	14.32	5.72
			106 T	53	15.76	4.16
				54	14.40	5.64
			242 T	61	*18.20*	*10.24*
			SU	-	15.96	7.04

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	19.56	4.12
				16	14.20	4.28
				17	14.28	5.08
			52 T	# 37	-	-
				41	20.12	4.44
				43	14.44	4.44
				44	14.52	*5.16*
			106 T	# 53	-	-
				# 54	-	-
				55	21.08	4.44
				56	14.60	5.00
			242 T	# 61	-	-
				62	23.96	5.00
			484 T	65	35.08	*5.16*
			SU	-	*35.24*	*5.16*

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	14.84	4.36
				52	15.16	5.80
			106 T	# 53	-	-
				# 57	-	-
				59	24.44	4.52
				60	15.32	5.64
			242 T	# 61	-	-
				# 62	-	-
				63	41.24	4.68
				64	27.80	5.64
			484 T	# 65	-	-
				66	45.08	5.80
			996 T	67	75.80	5.48
			SU	-	76.12	5.48

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	4.52
			52 T	# 37	-
				# 38	-
				39	2.56
				40	4.52
			106 T	# 53	-
				54	4.60
			242 T	61	4.52
			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	-
				44	4.04
			106 T	# 53	-
				# 54	-
				# 55	-
				56	3.96
			242 T	# 61	-
				62	3.96
			484 T	65	3.80
			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	2.60
				52	4.04
			106 T	# 53	-
				# 57	-
				# 59	-
				60	4.04
			242 T	# 61	-
				# 62	-
				# 63	-
				64	4.04
			484 T	# 65	-
				66	3.88
			996 T	67	3.40
			SU	-	3.72

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	2.52
				40	4.52
			106 T	# 53	-
				54	4.60
			242 T	61	4.48
			SU	-	4.48

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB BW (MHz)
					UNII 3
HE40	5710	142	26 T	# 0	-
				# 9	-
				16	2.12
				17	4.04
			52 T	# 37	-
				# 41	-
				# 43	-
				44	4.04
			106 T	# 53	-
				# 54	-
				# 55	-
				56	4.04
			242 T	# 61	-
				62	3.88
			484 T	65	3.88
			SU	-	3.88

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	-
				52	4.20
			106 T	# 53	-
				# 57	-
				# 59	-
				60	4.20
			242 T	# 61	-
				# 62	-
				# 63	-
				64	3.88
			484 T	# 65	-
				66	3.56
			996 T	67	3.56
			SU	-	3.72

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	9.18	-17.73
				4	9.25	-17.75
				7	-6.43	9.03
				8	-13.43	9.05
			52 T	37	13.69	-12.64
				38	13.66	-12.72
				39	13.08	3.29
				40	-3.20	13.24
			106 T	53	16.33	-6.58
				54	13.07	*13.57*
			242 T	61	*17.09*	11.86
			SU	-	17.05	11.88

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	9.45	-21.62
				16	-0.78	8.21
				17	-12.71	8.36
			52 T	# 37	-	-
				41	13.86	-12.61
				43	13.38	-3.09
				44	1.24	12.54
			106 T	# 53	-	-
				# 54	-	-
				55	16.72	-6.42
				56	13.68	*12.65*
			242 T	# 61	-	-
				62	16.50	10.09
			484 T	65	17.12	7.15
			SU	-	*17.32*	7.31

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	1.12	10.33
				36	-11.00	10.72
			52 T	# 37	-	-
				# 45	-	-
				51	13.29	-3.32
				52	1.29	*12.78*
			106 T	# 53	-	-
				# 57	-	-
				59	15.87	-7.78
				60	12.58	11.77
			242 T	# 61	-	-
				# 62	-	-
				63	*16.94*	-7.43
				64	15.36	8.95
			484 T	# 65	-	-
				66	16.19	5.71
			996 T	67	16.44	2.11
			SU	-	16.53	2.27

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	6.95	-22.00
				4	6.83	-21.80
				7	-9.14	6.51
				8	-16.60	6.67
			52 T	37	11.80	-14.74
				38	11.88	-14.13
				39	11.39	1.43
				40	-5.09	11.53
			106 T	53	15.04	-8.07
				54	11.72	*12.19*
			242 T	61	15.91	10.67
			SU	-	*15.97*	10.71

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	6.81	-24.13
				16	-3.45	5.61
				17	-15.70	5.52
			52 T	# 37	-	-
				41	11.90	-15.02
				43	11.44	-4.98
				44	-0.55	10.85
			106 T	# 53	-	-
				# 54	-	-
				55	15.21	-8.47
				56	12.08	*11.09*
			242 T	# 61	-	-
				62	14.89	8.53
			484 T	65	15.77	5.78
			SU	-	*15.80*	5.80

802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	-0.55	8.42
				36	-12.63	8.53
			52 T	# 37	-	-
				# 45	-	-
				51	11.52	-5.18
				52	-0.74	10.96
			106 T	# 53	-	-
				# 57	-	-
				59	15.16	-8.84
				60	11.82	*11.07*
			242 T	# 61	-	-
				# 62	-	-
				63	*15.59*	-8.58
				64	14.07	7.66
			484 T	# 65	-	-
				66	14.88	4.34
			996 T	67	14.97	0.82
			SU	-	14.97	0.80

Note:

1. See section 10.1 for duty factor.
2. 26T are Continuous wave. (Duty Cycle > 98%)
3. All data rate of operation were investigated and the worst case results are reported.

(Worst case : MCS0)

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	6.561	-19.271
				4	5.505	-22.178
				7	-2.500	3.799
				8	-18.484	4.050
			52 T	37	*8.266*	-18.275
				38	8.157	-16.920
				39	8.130	3.844
				40	-0.392	*5.099*
			106 T	53	7.975	-14.066
				54	7.951	4.989
			242 T	61	6.438	3.475
			SU	-	6.555	3.229

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	6.678	-22.639
				16	2.780	3.497
				17	-17.707	3.395
			52 T	# 37	-	-
				41	8.300	-17.524
				43	7.801	-6.025
				44	4.443	*4.820*
			106 T	# 53	-	-
				# 54	-	-
				55	*8.386*	-11.959
				56	7.897	4.695
			242 T	# 61	-	-
				62	5.877	2.106
			484 T	65	3.029	-0.670
			SU	-	3.378	-0.269

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	4.201	5.441
				36	-15.763	5.803
			52 T	# 37	-	-
				# 45	-	-
				51	*7.793*	-7.565
				52	3.716	5.043
			106 T	# 53	-	-
				# 57	-	-
				59	7.262	-11.968
				60	6.688	3.800
			242 T	# 61	-	-
				# 62	-	-
				63	4.852	-14.387
				64	4.384	1.242
			484 T	# 65	-	-
				66	2.323	-1.838
			996 T	67	-0.570	-5.742
			SU	-	-0.528	-5.868

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	4.533	-24.463
				4	3.044	-24.772
				7	-4.533	1.305
				8	-20.192	1.693
			52 T	37	6.224	-18.503
				38	6.435	-22.023
				39	6.337	2.946
				40	-2.397	3.393
			106 T	53	6.576	-11.217
				54	*6.702*	*3.529*
			242 T	61	5.342	2.137
			SU	-	5.332	2.456

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	4.157	-29.573
				16	0.798	0.914
				17	-19.943	0.626
			52 T	# 37	-	-
				41	6.237	-23.145
				43	6.005	-7.819
				44	3.132	3.040
			106 T	# 53	-	-
				# 54	-	-
				55	*6.779*	-12.317
				56	6.243	*3.142*
			242 T	# 61	-	-
				62	4.234	0.640
			484 T	65	1.564	-1.724
			SU	-	2.004	-2.108

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	2.056	3.341
				36	-16.581	3.684
			52 T	# 37	-	-
				# 45	-	-
				51	6.255	-8.803
				52	1.795	3.212
			106 T	# 53	-	-
				# 57	-	-
				59	*6.613*	-13.063
				60	6.223	2.980
			242 T	# 61	-	-
				# 62	-	-
				63	3.621	-15.087
				64	2.845	-0.228
			484 T	# 65	-	-
				66	1.095	-3.698
			996 T	67	-2.295	-7.060
			SU	-	-2.185	-6.786

Note:

1. See section 10.1 for duty factor.
2. 26T are Continuous wave. (Duty Cycle > 98%)
3. All data rate of operation were investigated and the worst case results are reported.

(Worst case : MCS0)

10.7 RADIATED SPURIOUS EMISSIONS (9 kHz – 1 GHz)

Frequency Range : 9 kHz – 30 MHz

Frequency	Measured Value	A.F+C.L-A.G+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 = 40log (specific distance / test distance) (dB)
3. Limit line = specific Limits (dBμV) + Distance extrapolation factor

Frequency Range : Below 1 GHz

Frequency	Measured Value	A.F+C.L-A.G+D.F	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) 26 Tone RU 4_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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10360	49.68	4.78	V	54.46	68.20	13.74	PK
15540	47.69	4.74	V	52.43	73.98	21.55	PK
15540	34.17	4.74	V	38.91	53.98	15.07	AV
10360	51.67	4.78	H	56.45	68.20	11.75	PK
15540	47.37	4.74	H	52.11	73.98	21.87	PK
15540	34.24	4.74	H	38.98	53.98	15.00	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10400	51.53	4.37	V	55.90	68.20	12.30	PK
15600	47.86	4.20	V	52.06	73.98	21.92	PK
15600	34.23	4.20	V	38.43	53.98	15.55	AV
10400	52.52	4.37	H	56.89	68.20	11.31	PK
15600	47.89	4.20	H	52.09	73.98	21.89	PK
15600	34.36	4.20	H	38.56	53.98	15.42	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10480	50.50	5.17	V	55.67	68.20	12.53	PK
15720	47.75	3.76	V	51.51	73.98	22.47	PK
15720	34.09	3.76	V	37.85	53.98	16.13	AV
10480	50.77	5.17	H	55.94	68.20	12.26	PK
15720	47.72	3.76	H	51.48	73.98	22.50	PK
15720	34.46	3.76	H	38.22	53.98	15.76	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10520	49.17	4.93	V	54.10	68.20	14.10	PK
15780	47.37	4.08	V	51.45	73.98	22.53	PK
15780	34.02	4.08	V	38.10	53.98	15.88	AV
10520	48.23	4.93	H	53.16	68.20	15.04	PK
15780	47.38	4.08	H	51.46	73.98	22.52	PK
15780	34.29	4.08	H	38.37	53.98	15.61	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10600	49.88	5.16	V	55.04	73.98	18.94	PK
10600	35.49	5.16	V	40.65	53.98	13.33	AV
15900	47.33	5.46	V	52.79	73.98	21.19	PK
15900	33.81	5.46	V	39.27	53.98	14.71	AV
10600	50.81	5.16	H	55.97	73.98	18.01	PK
10600	36.14	5.16	H	41.30	53.98	12.68	AV
15900	47.59	5.46	H	53.05	73.98	20.93	PK
15900	34.15	5.46	H	39.61	53.98	14.37	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10640	49.45	5.36	V	54.81	73.98	19.17	PK
10640	35.32	5.36	V	40.68	53.98	13.30	AV
15960	47.60	4.92	V	52.52	73.98	21.46	PK
15960	34.16	4.92	V	39.08	53.98	14.90	AV
10640	51.09	5.36	H	56.45	73.98	17.53	PK
10640	36.17	5.36	H	41.53	53.98	12.45	AV
15960	47.50	4.92	H	52.42	73.98	21.56	PK
15960	34.28	4.92	H	39.20	53.98	14.78	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11000	48.19	5.57	V	53.76	73.98	20.22	PK
11000	34.62	5.57	V	40.19	53.98	13.79	AV
16500	46.73	7.18	V	53.91	68.20	14.29	PK
11000	49.40	5.57	H	54.97	73.98	19.01	PK
11000	35.44	5.57	H	41.01	53.98	12.97	AV
16500	47.54	7.18	H	54.72	68.20	13.48	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11200	48.94	5.43	V	54.37	73.98	19.61	PK
11200	35.03	5.43	V	40.46	53.98	13.52	AV
16800	46.46	8.86	V	55.32	68.20	12.88	PK
11200	48.48	5.43	H	53.91	73.98	20.07	PK
11200	35.15	5.43	H	40.58	53.98	13.40	AV
16800	46.27	8.86	H	55.13	68.20	13.07	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 [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11440	48.38	5.08	V	53.46	73.98	20.52	PK
11440	34.91	5.08	V	39.99	53.98	13.99	AV
17160	47.16	8.92	V	56.08	68.20	12.12	PK
11440	48.19	5.08	H	53.27	73.98	20.71	PK
11440	34.63	5.08	H	39.71	53.98	14.27	AV
17160	47.52	8.92	H	56.44	68.20	11.76	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 [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11490	47.92	5.07	V	52.99	73.98	20.99	PK
11490	34.50	5.07	V	39.57	53.98	14.41	AV
17235	54.84	9.49	V	64.33	68.20	3.87	PK
11490	53.27	5.07	H	58.34	73.98	15.64	PK
11490	35.44	5.07	H	40.51	53.98	13.47	AV
17235	47.94	9.49	H	57.43	68.20	10.77	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	48.66	5.07	V	53.73	73.98	20.25	PK
11570	34.55	5.07	V	39.62	53.98	14.36	AV
17355	48.46	10.50	V	58.96	68.20	9.24	PK
11570	53.55	5.07	H	58.62	73.98	15.36	PK
11570	35.81	5.07	H	40.88	53.98	13.10	AV
17355	47.87	10.78	H	58.65	68.20	9.55	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11650	54.81	4.76	V	59.57	73.98	14.41	PK
11650	36.12	4.76	V	40.88	53.98	13.10	AV
17475	48.09	10.29	V	58.38	68.20	9.82	PK
11650	57.41	4.76	H	62.17	73.98	11.81	PK
11650	37.73	4.76	H	42.49	53.98	11.49	AV
17475	47.97	10.29	H	58.26	68.20	9.94	PK

UNII-3 Additional Tone [26 Tone RU 0_MIMO]

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

Frequency [MHz]	Measured Value [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11490	48.68	5.07	V	53.75	73.98	20.23	PK
11490	34.73	5.07	V	39.80	53.98	14.18	AV
17235	47.86	9.49	V	57.35	68.20	10.85	PK
11490	53.07	5.07	H	58.14	73.98	15.84	PK
11490	35.76	5.07	H	40.83	53.98	13.15	AV
17235	51.22	9.49	H	60.71	68.20	7.49	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	49.17	5.07	V	54.24	73.98	19.74	PK
11570	34.47	5.07	V	39.54	53.98	14.44	AV
17355	47.75	10.50	V	58.25	68.20	9.95	PK
11570	54.49	5.07	H	59.56	73.98	14.42	PK
11570	34.99	5.07	H	40.06	53.98	13.92	AV
17355	47.28	10.78	H	58.06	68.20	10.14	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11650	48.22	4.76	V	52.98	73.98	21.00	PK
11650	34.71	4.76	V	39.47	53.98	14.51	AV
17475	48.12	10.29	V	58.41	68.20	9.79	PK
11650	58.64	4.76	H	63.40	73.98	10.58	PK
11650	36.35	4.76	H	41.11	53.98	12.87	AV
17475	52.50	10.29	H	62.79	68.20	5.41	PK

UNII-3 Additional Tone [26 Tone RU 8_MIMO]

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

Frequency [MHz]	Measured Value [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11490	48.44	5.07	V	53.51	73.98	20.47	PK
11490	34.72	5.07	V	39.79	53.98	14.19	AV
17235	54.80	9.49	V	64.29	68.20	3.91	PK
11490	55.48	5.07	H	60.55	73.98	13.43	PK
11490	35.48	5.07	H	40.55	53.98	13.43	AV
17235	51.06	9.49	H	60.55	68.20	7.65	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	48.22	5.07	V	53.29	73.98	20.69	PK
11570	34.53	5.07	V	39.60	53.98	14.38	AV
17355	48.52	10.50	V	59.02	68.20	9.18	PK
11570	56.26	5.07	H	61.33	73.98	12.65	PK
11570	35.45	5.07	H	40.52	53.98	13.46	AV
17355	47.19	10.78	H	57.97	68.20	10.23	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11650	51.50	4.76	V	56.26	73.98	17.72	PK
11650	35.05	4.76	V	39.81	53.98	14.17	AV
17475	48.16	10.29	V	58.45	68.20	9.75	PK
11650	58.28	4.76	H	63.04	73.98	10.94	PK
11650	36.99	4.76	H	41.75	53.98	12.23	AV
17475	53.46	10.29	H	63.75	68.20	4.45	PK

2) 52 Tone RU 38_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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10360	52.27	4.78	V	57.05	68.20	11.15	PK
15540	47.91	4.74	V	52.65	73.98	21.33	PK
15540	34.61	4.74	V	39.35	53.98	14.63	AV
10360	54.24	4.78	H	59.02	68.20	9.18	PK
15540	47.91	4.74	H	52.65	73.98	21.33	PK
15540	34.32	4.74	H	39.06	53.98	14.92	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10400	52.80	4.37	V	57.17	68.20	11.03	PK
15600	48.14	4.20	V	52.34	73.98	21.64	PK
15600	34.30	4.20	V	38.50	53.98	15.48	AV
10400	52.62	4.37	H	56.99	68.20	11.21	PK
15600	47.99	4.20	H	52.19	73.98	21.79	PK
15600	34.58	4.20	H	38.78	53.98	15.20	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10480	51.58	5.17	V	56.75	68.20	11.45	PK
15720	47.73	3.76	V	51.49	73.98	22.49	PK
15720	34.13	3.76	V	37.89	53.98	16.09	AV
10480	51.74	5.17	H	56.91	68.20	11.29	PK
15720	47.78	3.76	H	51.54	73.98	22.44	PK
15720	34.58	3.76	H	38.34	53.98	15.64	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10520	51.35	4.93	V	56.28	68.20	11.92	PK
15780	47.15	4.08	V	51.23	73.98	22.75	PK
15780	34.06	4.08	V	38.14	53.98	15.84	AV
10520	52.36	4.93	H	57.29	68.20	10.91	PK
15780	47.39	4.08	H	51.47	73.98	22.51	PK
15780	34.27	4.08	H	38.35	53.98	15.63	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10600	50.49	5.16	V	55.65	73.98	18.33	PK
10600	36.66	5.16	V	41.82	53.98	12.16	AV
15900	47.11	5.46	V	52.57	73.98	21.41	PK
15900	33.82	5.46	V	39.28	53.98	14.70	AV
10600	51.60	5.16	H	56.76	73.98	17.22	PK
10600	37.23	5.16	H	42.39	53.98	11.59	AV
15900	47.64	5.46	H	53.10	73.98	20.88	PK
15900	34.01	5.46	H	39.47	53.98	14.51	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10640	51.04	5.36	V	56.40	73.98	17.58	PK
10640	36.84	5.36	V	42.20	53.98	11.78	AV
15960	47.86	4.92	V	52.78	73.98	21.20	PK
15960	34.10	4.92	V	39.02	53.98	14.96	AV
10640	52.40	5.36	H	57.76	73.98	16.22	PK
10640	37.95	5.36	H	43.31	53.98	10.67	AV
15960	48.13	4.92	H	53.05	73.98	20.93	PK
15960	34.35	4.92	H	39.27	53.98	14.71	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/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11000	49.18	5.57	V	54.75	73.98	19.23	PK
11000	35.18	5.57	V	40.75	53.98	13.23	AV
16500	46.98	7.18	V	54.16	68.20	14.04	PK
11000	49.66	5.57	H	55.23	73.98	18.75	PK
11000	35.50	5.57	H	41.07	53.98	12.91	AV
16500	46.96	7.18	H	54.14	68.20	14.06	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/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11200	49.51	5.43	V	54.94	73.98	19.04	PK
11200	35.65	5.43	V	41.08	53.98	12.90	AV
16800	45.94	8.86	V	54.80	68.20	13.40	PK
11200	50.35	5.43	H	55.78	73.98	18.20	PK
11200	36.39	5.43	H	41.82	53.98	12.16	AV
16800	46.65	8.86	H	55.51	68.20	12.69	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 [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11440	48.31	5.08	V	53.39	73.98	20.59	PK
11440	34.86	5.08	V	39.94	53.98	14.04	AV
17160	47.36	8.92	V	56.28	68.20	11.92	PK
11440	48.61	5.08	H	53.69	73.98	20.29	PK
11440	34.66	5.08	H	39.74	53.98	14.24	AV
17160	47.11	8.92	H	56.03	68.20	12.17	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 [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11490	48.74	5.07	V	53.81	73.98	20.17	PK
11490	34.95	5.07	V	40.02	53.98	13.96	AV
17235	50.05	9.49	V	59.54	68.20	8.66	PK
11490	53.46	5.07	H	58.53	73.98	15.45	PK
11490	36.18	5.07	H	41.25	53.98	12.73	AV
17235	50.73	9.49	H	60.22	68.20	7.98	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	50.95	5.07	V	56.02	73.98	17.96	PK
11570	34.69	5.07	V	39.76	53.98	14.22	AV
17355	49.66	10.50	V	60.16	68.20	8.04	PK
11570	55.54	5.07	H	60.61	73.98	13.37	PK
11570	36.03	5.07	H	41.10	53.98	12.88	AV
17355	48.06	10.78	H	58.84	68.20	9.36	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11650	55.55	4.76	V	60.31	73.98	13.67	PK
11650	35.76	4.76	V	40.52	53.98	13.46	AV
17475	52.59	10.29	V	62.88	68.20	5.32	PK
11650	59.52	4.76	H	64.28	73.98	9.70	PK
11650	38.22	4.76	H	42.98	53.98	11.00	AV
17475	52.86	10.29	H	63.15	68.20	5.05	PK

UNII-3 Additional Tone [106 Tone RU 53_MIMO]

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

Frequency [MHz]	Measured Value [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11490	51.46	5.07	V	56.53	73.98	17.45	PK
11490	35.11	5.07	V	40.18	53.98	13.80	AV
17235	53.62	9.49	V	63.11	68.20	5.09	PK
11490	53.80	5.07	H	58.87	73.98	15.11	PK
11490	36.85	5.07	H	41.92	53.98	12.06	AV
17235	51.80	9.49	H	61.29	68.20	6.91	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	54.68	5.07	V	59.75	73.98	14.23	PK
11570	36.48	5.07	V	41.55	53.98	12.43	AV
17355	50.76	10.50	V	61.26	68.20	6.94	PK
11570	56.35	5.07	H	61.42	73.98	12.56	PK
11570	37.48	5.07	H	42.55	53.98	11.43	AV
17355	51.38	10.78	H	62.16	68.20	6.04	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11650	58.58	4.76	V	63.34	73.98	10.64	PK
11650	39.35	4.76	V	44.11	53.98	9.87	AV
17475	50.77	10.29	V	61.06	68.20	7.14	PK
11650	58.59	4.76	H	63.35	73.98	10.63	PK
11650	39.93	4.76	H	44.69	53.98	9.29	AV
17475	52.94	10.29	H	63.23	68.20	4.97	PK

UNII-3 Additional Tone [106 Tone RU 54_MIMO]

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

Frequency [MHz]	Measured Value [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11490	51.79	5.07	V	56.86	73.98	17.12	PK
11490	35.79	5.07	V	40.86	53.98	13.12	AV
17235	50.50	9.49	V	59.99	68.20	8.21	PK
11490	57.40	5.07	H	62.47	73.98	11.51	PK
11490	37.25	5.07	H	42.32	53.98	11.66	AV
17235	51.86	9.49	H	61.35	68.20	6.85	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	56.46	5.07	V	61.53	73.98	12.45	PK
11570	37.59	5.07	V	42.66	53.98	11.32	AV
17355	52.95	10.50	V	63.45	68.20	4.75	PK
11570	56.40	5.07	H	61.47	73.98	12.51	PK
11570	38.43	5.07	H	43.50	53.98	10.48	AV
17355	50.25	10.78	H	61.03	68.20	7.17	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11650	58.09	4.76	V	62.85	73.98	11.13	PK
11650	40.06	4.76	V	44.82	53.98	9.16	AV
17475	51.92	10.29	V	62.21	68.20	5.99	PK
11650	59.20	4.76	H	63.96	73.98	10.02	PK
11650	40.14	4.76	H	44.90	53.98	9.08	AV
17475	53.60	10.29	H	63.89	68.20	4.31	PK

3) 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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10360	51.69	4.78	V	56.47	68.20	11.73	PK
15540	48.54	4.74	V	53.28	73.98	20.70	PK
15540	34.86	4.74	V	39.60	53.98	14.38	AV
10360	52.59	4.78	H	57.37	68.20	10.83	PK
15540	48.23	4.74	H	52.97	73.98	21.01	PK
15540	35.02	4.74	H	39.76	53.98	14.22	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10400	51.27	4.37	V	55.64	68.20	12.56	PK
15600	48.40	4.20	V	52.60	73.98	21.38	PK
15600	34.77	4.20	V	38.97	53.98	15.01	AV
10400	53.17	4.37	H	57.54	68.20	10.66	PK
15600	48.30	4.20	H	52.50	73.98	21.48	PK
15600	34.77	4.20	H	38.97	53.98	15.01	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10480	50.41	5.17	V	55.58	68.20	12.62	PK
15720	48.22	3.76	V	51.98	73.98	22.00	PK
15720	35.01	3.76	V	38.77	53.98	15.21	AV
10480	50.52	5.17	H	55.69	68.20	12.51	PK
15720	49.22	3.76	H	52.98	73.98	21.00	PK
15720	35.06	3.76	H	38.82	53.98	15.16	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10520	50.44	4.93	V	55.37	68.20	12.83	PK
15780	48.78	4.08	V	52.86	73.98	21.12	PK
15780	34.53	4.08	V	38.61	53.98	15.37	AV
10520	51.26	4.93	H	56.19	68.20	12.01	PK
15780	49.46	4.08	H	53.54	73.98	20.44	PK
15780	34.99	4.08	H	39.07	53.98	14.91	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10600	50.32	5.16	V	55.48	73.98	18.50	PK
10600	37.03	5.16	V	42.19	53.98	11.79	AV
15900	47.91	5.46	V	53.37	73.98	20.61	PK
15900	33.95	5.46	V	39.41	53.98	14.57	AV
10600	51.66	5.16	H	56.82	73.98	17.16	PK
10600	37.83	5.16	H	42.99	53.98	10.99	AV
15900	48.96	5.46	H	54.42	73.98	19.56	PK
15900	34.52	5.46	H	39.98	53.98	14.00	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10640	50.95	5.36	V	56.31	73.98	17.67	PK
10640	36.71	5.36	V	42.07	53.98	11.91	AV
15960	48.90	4.92	V	53.82	73.98	20.16	PK
15960	34.92	4.92	V	39.84	53.98	14.14	AV
10640	51.97	5.36	H	57.33	73.98	16.65	PK
10640	38.10	5.36	H	43.46	53.98	10.52	AV
15960	50.02	4.92	H	54.94	73.98	19.04	PK
15960	35.48	4.92	H	40.40	53.98	13.58	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11000	49.56	5.57	V	55.13	73.98	18.85	PK
11000	35.71	5.57	V	41.28	53.98	12.70	AV
16500	50.59	7.18	V	57.77	68.20	10.43	PK
11000	49.64	5.57	H	55.21	73.98	18.77	PK
11000	35.99	5.57	H	41.56	53.98	12.42	AV
16500	48.60	7.18	H	55.78	68.20	12.42	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11200	49.44	5.43	V	54.87	73.98	19.11	PK
11200	35.86	5.43	V	41.29	53.98	12.69	AV
16800	47.63	8.86	V	56.49	68.20	11.71	PK
11200	49.51	5.43	H	54.94	73.98	19.04	PK
11200	36.18	5.43	H	41.61	53.98	12.37	AV
16800	47.39	8.86	H	56.25	68.20	11.95	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 [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11440	49.08	5.08	V	54.16	73.98	19.82	PK
11440	35.15	5.08	V	40.23	53.98	13.75	AV
17160	51.64	8.92	V	60.56	68.20	7.64	PK
11440	50.54	5.08	H	55.62	73.98	18.36	PK
11440	35.79	5.08	H	40.87	53.98	13.11	AV
17160	49.87	8.92	H	58.79	68.20	9.41	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 [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11490	50.33	5.07	V	55.40	73.98	18.58	PK
11490	35.66	5.07	V	40.73	53.98	13.25	AV
17235	49.26	9.49	V	58.75	68.20	9.45	PK
11490	50.00	5.07	H	55.07	73.98	18.91	PK
11490	35.81	5.07	H	40.88	53.98	13.10	AV
17235	48.97	9.49	H	58.46	68.20	9.74	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	53.52	5.07	V	58.59	73.98	15.39	PK
11570	37.28	5.07	V	42.35	53.98	11.63	AV
17355	50.51	10.50	V	61.01	68.20	7.19	PK
11570	54.40	5.07	H	59.47	73.98	14.51	PK
11570	37.57	5.07	H	42.64	53.98	11.34	AV
17355	48.18	10.78	H	58.96	68.20	9.24	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11650	56.99	4.76	V	61.75	73.98	12.23	PK
11650	40.24	4.76	V	45.00	53.98	8.98	AV
17475	50.42	10.29	V	60.71	68.20	7.49	PK
11650	57.27	4.76	H	62.03	73.98	11.95	PK
11650	41.29	4.76	H	46.05	53.98	7.93	AV
17475	51.08	10.29	H	61.37	68.20	6.83	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10380	49.84	4.72	V	54.56	68.20	13.64	PK
15570	48.71	4.87	V	53.58	73.98	20.40	PK
15570	35.31	4.87	V	40.18	53.98	13.80	AV
10380	53.08	4.72	H	57.80	68.20	10.40	PK
15570	48.11	4.87	H	52.98	73.98	21.00	PK
15570	35.02	4.87	H	39.89	53.98	14.09	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10460	48.63	5.33	V	53.96	68.20	14.24	PK
15690	48.87	3.98	V	52.85	73.98	21.13	PK
15690	35.39	3.98	V	39.37	53.98	14.61	AV
10460	51.27	5.33	H	56.60	68.20	11.60	PK
15690	47.86	3.98	H	51.84	73.98	22.14	PK
15690	35.01	3.98	H	38.99	53.98	14.99	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10540	50.34	4.90	V	55.24	68.20	12.96	PK
15810	48.07	4.55	V	52.62	73.98	21.36	PK
15810	34.52	4.55	V	39.07	53.98	14.91	AV
10540	51.17	4.90	H	56.07	68.20	12.13	PK
15810	48.10	4.55	H	52.65	73.98	21.33	PK
15810	34.62	4.55	H	39.17	53.98	14.81	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10620	49.07	5.35	V	54.42	73.98	19.56	PK
10620	36.13	5.35	V	41.48	53.98	12.50	AV
15930	47.91	4.83	V	52.74	73.98	21.24	PK
15930	34.94	4.83	V	39.77	53.98	14.21	AV
10620	50.60	5.35	H	55.95	73.98	18.03	PK
10620	36.90	5.35	H	42.25	53.98	11.73	AV
15930	48.04	4.83	H	52.87	73.98	21.11	PK
15930	34.99	4.83	H	39.82	53.98	14.16	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11020	48.48	5.30	V	53.78	73.98	20.20	PK
11020	35.67	5.30	V	40.97	53.98	13.01	AV
16530	47.65	7.39	V	55.04	68.20	13.16	PK
11020	49.49	5.30	H	54.79	73.98	19.19	PK
11020	35.82	5.30	H	41.12	53.98	12.86	AV
16530	47.14	7.39	H	54.53	68.20	13.67	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11180	48.57	5.23	V	53.80	73.98	20.18	PK
11180	35.86	5.23	V	41.09	53.98	12.89	AV
16770	46.82	7.77	V	54.59	68.20	13.61	PK
11180	50.53	5.23	H	55.76	73.98	18.22	PK
11180	36.78	5.23	H	42.01	53.98	11.97	AV
16770	46.64	7.77	H	54.41	68.20	13.79	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11420	48.10	5.42	V	53.52	73.98	20.46	PK
11420	35.35	5.42	V	40.77	53.98	13.21	AV
17130	46.88	8.67	V	55.55	68.20	12.65	PK
11420	48.81	5.42	H	54.23	73.98	19.75	PK
11420	35.82	5.42	H	41.24	53.98	12.74	AV
17130	47.28	8.67	H	55.95	68.20	12.25	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11510	48.68	4.93	V	53.61	73.98	20.37	PK
11510	36.05	4.93	V	40.98	53.98	13.00	AV
17265	47.00	9.66	V	56.66	68.20	11.54	PK
11510	54.16	4.93	H	59.09	73.98	14.89	PK
11510	36.26	4.93	H	41.19	53.98	12.79	AV
17265	47.30	9.66	H	56.96	68.20	11.24	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11590	48.69	5.20	V	53.89	73.98	20.09	PK
11590	35.50	5.20	V	40.70	53.98	13.28	AV
17385	48.57	10.49	V	59.06	68.20	9.14	PK
11590	56.53	5.20	H	61.73	73.98	12.25	PK
11590	36.28	5.20	H	41.48	53.98	12.50	AV
17385	51.74	10.49	H	62.23	68.20	5.97	PK

2) 52 Tone RU 41_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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10380	52.85	4.72	V	57.57	68.20	10.63	PK
15570	49.53	4.87	V	54.40	73.98	19.58	PK
15570	35.94	4.87	V	40.81	53.98	13.17	AV
10380	56.25	4.72	H	60.97	68.20	7.23	PK
15570	49.86	4.87	H	54.73	73.98	19.25	PK
15570	35.56	4.87	H	40.43	53.98	13.55	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10460	51.67	5.33	V	57.00	68.20	11.20	PK
15690	50.97	3.98	V	54.95	73.98	19.03	PK
15690	36.15	3.98	V	40.13	53.98	13.85	AV
10460	53.96	5.33	H	59.29	68.20	8.91	PK
15690	52.48	3.98	H	56.46	73.98	17.52	PK
15690	36.23	3.98	H	40.21	53.98	13.77	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10540	53.70	4.90	V	58.60	68.20	9.60	PK
15810	53.24	4.55	V	57.79	73.98	16.19	PK
15810	36.37	4.55	V	40.92	53.98	13.06	AV
10540	53.74	4.90	H	58.64	68.20	9.56	PK
15810	51.54	4.55	H	56.09	73.98	17.89	PK
15810	35.82	4.55	H	40.37	53.98	13.61	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10620	52.04	5.35	V	57.39	73.98	16.59	PK
10620	39.34	5.35	V	44.69	53.98	9.29	AV
15930	53.56	4.83	V	58.39	73.98	15.59	PK
15930	36.49	4.83	V	41.32	53.98	12.66	AV
10620	53.90	5.35	H	59.25	73.98	14.73	PK
10620	40.77	5.35	H	46.12	53.98	7.86	AV
15930	50.87	4.83	H	55.70	73.98	18.28	PK
15930	36.08	4.83	H	40.91	53.98	13.07	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11020	50.28	5.30	V	55.58	73.98	18.40	PK
11020	37.41	5.30	V	42.71	53.98	11.27	AV
16530	47.68	7.39	V	55.07	68.20	13.13	PK
11020	51.61	5.30	H	56.91	73.98	17.07	PK
11020	39.04	5.30	H	44.34	53.98	9.64	AV
16530	47.26	7.39	H	54.65	68.20	13.55	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11180	49.58	5.23	V	54.81	73.98	19.17	PK
11180	37.12	5.23	V	42.35	53.98	11.63	AV
16770	53.50	7.77	V	61.27	68.20	6.93	PK
11180	52.38	5.23	H	57.61	73.98	16.37	PK
11180	39.29	5.23	H	44.52	53.98	9.46	AV
16770	50.67	7.77	H	58.44	68.20	9.76	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11420	47.83	5.42	V	53.25	73.98	20.73	PK
11420	35.41	5.42	V	40.83	53.98	13.15	AV
17130	51.45	8.67	V	60.12	68.20	8.08	PK
11420	51.97	5.42	H	57.39	73.98	16.59	PK
11420	36.79	5.42	H	42.21	53.98	11.77	AV
17130	54.56	8.67	H	63.23	68.20	4.97	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11510	50.20	4.93	V	55.13	73.98	18.85	PK
11510	36.12	4.93	V	41.05	53.98	12.93	AV
17265	55.52	9.66	V	65.18	68.20	3.02	PK
11510	56.16	4.93	H	61.09	73.98	12.89	PK
11510	37.63	4.93	H	42.56	53.98	11.42	AV
17265	52.64	9.66	H	62.30	68.20	5.90	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/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11590	52.93	5.20	V	58.13	73.98	15.85	PK
11590	36.23	5.20	V	41.43	53.98	12.55	AV
17385	51.73	10.49	V	62.22	68.20	5.98	PK
11590	59.80	5.20	H	65.00	73.98	8.98	PK
11590	38.57	5.20	H	43.77	53.98	10.21	AV
17385	53.01	10.49	H	63.50	68.20	4.70	PK

UNII-3 Additional Tone [52 Tone RU 37_MIMO]

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/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11510	48.14	4.93	V	53.07	73.98	20.91	PK
11510	35.54	4.93	V	40.47	53.98	13.51	AV
17265	47.60	9.66	V	57.26	68.20	10.94	PK
11510	54.04	4.93	H	58.97	73.98	15.01	PK
11510	36.15	4.93	H	41.08	53.98	12.90	AV
17265	46.98	9.66	H	56.64	68.20	11.56	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/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11590	48.11	5.20	V	53.31	73.98	20.67	PK
11590	35.21	5.20	V	40.41	53.98	13.57	AV
17385	48.02	10.49	V	58.51	68.20	9.69	PK
11590	56.20	5.20	H	61.40	73.98	12.58	PK
11590	36.90	5.20	H	42.10	53.98	11.88	AV
17385	48.18	10.49	H	58.67	68.20	9.53	PK

UNII-3 Additional Tone [52 Tone RU 44_MIMO]

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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11510	48.13	4.93	V	53.06	73.98	20.92	PK
11510	35.12	4.93	V	40.05	53.98	13.93	AV
17265	47.24	9.66	V	56.90	68.20	11.30	PK
11510	54.88	4.93	H	59.81	73.98	14.17	PK
11510	36.37	4.93	H	41.30	53.98	12.68	AV
17265	48.00	9.66	H	57.66	68.20	10.54	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11590	54.02	5.20	V	59.22	73.98	14.76	PK
11590	35.89	5.20	V	41.09	53.98	12.89	AV
17385	48.16	10.49	V	58.65	68.20	9.55	PK
11590	57.76	5.20	H	62.96	73.98	11.02	PK
11590	38.12	5.20	H	43.32	53.98	10.66	AV
17385	49.08	10.49	H	59.57	68.20	8.63	PK

UNII-3 Additional Tone [106 Tone RU 54_MIMO]

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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11510	48.31	-0.14	V	48.17	73.98	25.81	PK
11510	35.51	-0.14	V	35.37	53.98	18.61	AV
17265	53.96	1.61	V	55.57	68.20	12.63	PK
11510	53.44	-0.14	H	53.30	73.98	20.68	PK
11510	36.57	-0.14	H	36.43	53.98	17.55	AV
17265	51.89	1.61	H	53.50	68.20	14.70	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11590	51.86	0.07	V	51.93	73.98	22.05	PK
11590	37.03	0.07	V	37.10	53.98	16.88	AV
17385	50.03	1.69	V	51.72	68.20	16.48	PK
11590	57.95	0.07	H	58.02	73.98	15.96	PK
11590	39.31	0.07	H	39.38	53.98	14.60	AV
17385	48.19	1.69	H	49.88	68.20	18.32	PK

UNII-3 Additional Tone [484 Tone RU 65_MIMO]

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/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11510	48.46	-0.14	V	48.32	73.98	25.66	PK
11510	35.68	-0.14	V	35.54	53.98	18.44	AV
17265	49.62	1.61	V	51.23	68.20	16.97	PK
11510	48.47	-0.14	H	48.33	73.98	25.65	PK
11510	35.89	-0.14	H	35.75	53.98	18.23	AV
17265	48.60	1.61	H	50.21	68.20	17.99	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/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11590	49.10	0.07	V	49.17	73.98	24.81	PK
11590	36.01	0.07	V	36.08	53.98	17.90	AV
17385	49.99	1.69	V	51.68	68.20	16.52	PK
11590	50.65	0.07	H	50.72	73.98	23.26	PK
11590	36.46	0.07	H	36.53	53.98	17.45	AV
17385	48.45	1.69	H	50.14	68.20	18.06	PK

10.8.3 802.11ax(HE80)

1) 26 Tone RU 18_MIMO

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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11550	48.53	-0.14	V	48.39	73.98	25.59	PK
11550	37.25	-0.14	V	37.11	53.98	16.87	AV
17325	48.42	1.61	V	50.03	68.20	18.17	PK
11550	48.17	-0.14	H	48.03	73.98	25.95	PK
11550	36.77	-0.14	H	36.63	53.98	17.35	AV
17325	49.39	1.61	H	51.00	68.20	17.20	PK

2) 52 Tone RU 45_MIMO

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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11550	48.75	-0.14	V	48.61	73.98	25.37	PK
11550	37.02	-0.14	V	36.88	53.98	17.10	AV
17325	54.51	1.61	V	56.12	68.20	12.08	PK
11550	54.99	-0.14	H	54.85	73.98	19.13	PK
11550	37.66	-0.14	H	37.52	53.98	16.46	AV
17325	52.32	1.61	H	53.93	68.20	14.27	PK

UNII-3 Additional Tone [996 Tone RU 67_MIMO]

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/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11550	48.54	-0.14	V	48.40	73.98	25.58	PK
11550	36.72	-0.14	V	36.58	53.98	17.40	AV
17325	48.28	1.61	V	49.89	68.20	18.31	PK
11550	47.95	-0.14	H	47.81	73.98	26.17	PK
11550	36.41	-0.14	H	36.27	53.98	17.71	AV
17325	48.36	1.61	H	49.97	68.20	18.23	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.

[DBS Mode]

WLAN/BT Ant : 802.11ax (HE40) 52 Tone, RU 41 / ch. 151 & Bluetooth Ch. 39 (8DPSK)

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11510	58.16	4.93	V	63.09	73.98	10.89	PK
11510	37.85	4.93	V	42.78	53.98	11.20	AV
17235	51.98	9.66	V	61.64	68.20	6.56	PK
11510	58.33	4.93	H	63.26	73.98	10.72	PK
11510	38.04	4.93	H	42.97	53.98	11.01	AV
17235	52.98	9.66	H	62.64	68.20	5.56	PK

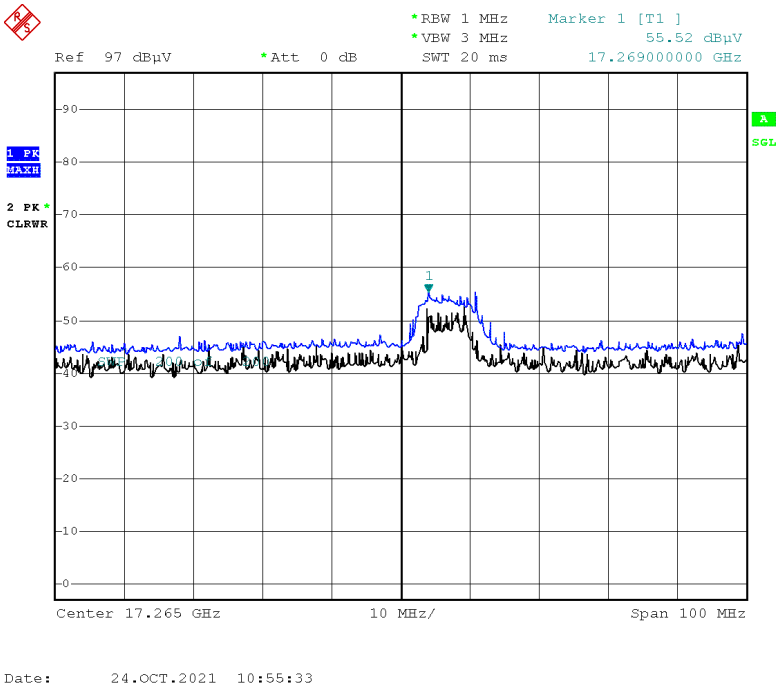
2.4 GHz MIMO 802.11ax(HE20) 52 Tone, RU 40 Ch.11 & 5 GHz MIMO 802.11ax(HE40) Ch.151 52 Tone, RU 41

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11510	54.85	4.93	V	59.78	73.98	14.20	PK
11510	36.01	4.93	V	40.94	53.98	13.04	AV
17265	50.24	9.66	V	59.90	68.20	8.30	PK
11510	55.11	4.93	H	60.04	73.98	13.94	PK
11510	36.31	4.93	H	41.24	53.98	12.74	AV
17265	50.57	9.66	H	60.23	68.20	7.97	PK

[MIMO]

▣ Test Plots_52 Tone RU 41

Peak result (802.11ax(HE40), Ch.151 3rd Harmonic, Z-V)



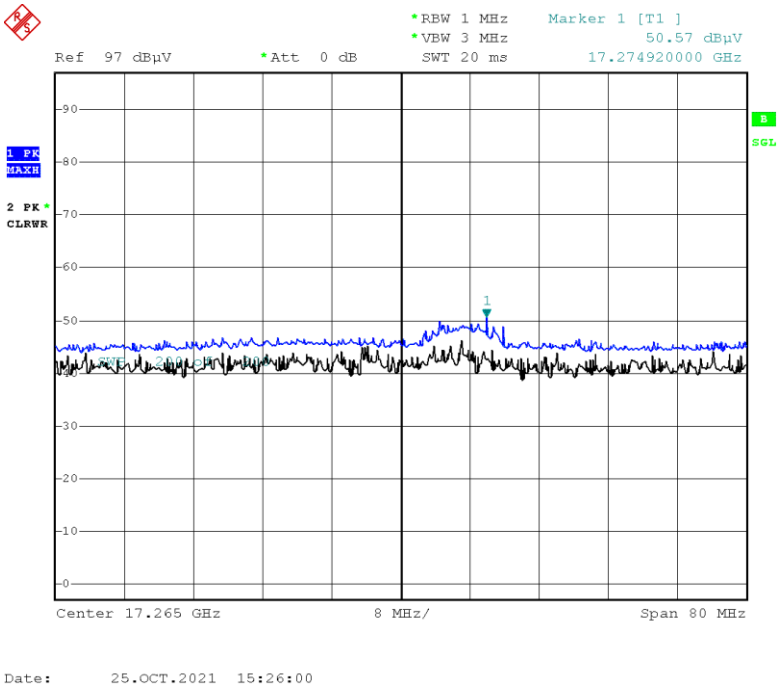
Note:

Only the worst case plots for Radiated Spurious Emissions.

▣ Test Plots (DBS)

2.4 GHz MIMO 802.11ax(HE20) 52 Tone, RU 40 Ch.11 & 5 GHz MIMO 802.11ax(HE40) Ch.151 52 Tone, RU 41

Radiated Spurious Emissions plot – Peak Result (3rd Harmonic, Z-H)



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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	44.99	12.12	H	57.11	73.98	16.87	PK
5150	31.93	12.12	H	44.05	53.98	9.93	AV
5150	44.29	12.12	V	56.41	73.98	17.57	PK
5150	31.27	12.12	V	43.39	53.98	10.59	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	44.62	12.14	H	56.76	73.98	17.22	PK
5350	31.81	12.14	H	43.95	53.98	10.03	AV
5350	43.90	12.14	V	56.04	73.98	17.94	PK
5350	30.89	12.14	V	43.03	53.98	10.95	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.04	12.67	H	57.71	73.98	16.27	PK
5460	31.29	12.67	H	43.96	53.98	10.02	AV
5470	45.32	12.70	H	58.02	68.20	10.18	PK
5460	44.82	12.67	V	57.49	73.98	16.49	PK
5460	31.07	12.67	V	43.74	53.98	10.24	AV
5470	44.09	12.70	V	56.79	68.20	11.41	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	45.25	12.12	H	57.37	73.98	16.61	PK
5150	32.91	12.12	H	45.03	53.98	8.95	AV
5150	44.28	12.12	V	56.40	73.98	17.58	PK
5150	32.17	12.12	V	44.29	53.98	9.69	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	45.76	12.14	H	57.90	73.98	16.08	PK
5350	32.39	12.14	H	44.53	53.98	9.45	AV
5350	45.24	12.14	V	57.38	73.98	16.60	PK
5350	32.06	12.14	V	44.20	53.98	9.78	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.34	12.67	H	58.01	73.98	15.97	PK
5460	31.69	12.67	H	44.36	53.98	9.62	AV
5470	45.19	12.70	H	57.89	68.20	10.31	PK
5460	45.20	12.67	V	57.87	73.98	16.11	PK
5460	30.87	12.67	V	43.54	53.98	10.44	AV
5470	44.99	12.70	V	57.69	68.20	10.51	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	49.87	12.12	H	61.99	73.98	11.99	PK
5150	33.81	12.12	H	45.93	53.98	8.05	AV
5150	49.63	12.12	V	61.75	73.98	12.23	PK
5150	32.98	12.12	V	45.10	53.98	8.88	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	51.69	12.14	H	63.83	73.98	10.15	PK
5350	34.09	12.14	H	46.23	53.98	7.75	AV
5350	50.87	12.14	V	63.01	73.98	10.97	PK
5350	33.85	12.14	V	45.99	53.98	7.99	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	48.07	12.67	H	60.74	73.98	13.24	PK
5460	35.50	12.67	H	48.17	53.98	5.81	AV
5470	51.18	12.70	H	63.88	68.20	4.32	PK
5460	47.63	12.67	V	60.30	73.98	13.68	PK
5460	35.17	12.67	V	47.84	53.98	6.14	AV
5470	50.82	12.70	V	63.52	68.20	4.68	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	53.16	12.12	H	65.28	73.98	8.70	PK
5150	38.58	12.12	H	50.70	53.98	3.28	AV
5150	52.14	12.12	V	64.26	73.98	9.72	PK
5150	38.24	12.12	V	50.36	53.98	3.62	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	52.65	12.14	H	64.79	73.98	9.19	PK
5350	38.23	12.14	H	50.37	53.98	3.61	AV
5350	51.78	12.14	V	63.92	73.98	10.06	PK
5350	38.09	12.14	V	50.23	53.98	3.75	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.56	12.67	H	58.23	73.98	15.75	PK
5460	33.04	12.67	H	45.71	53.98	8.27	AV
5470	51.55	12.70	H	64.25	68.20	3.95	PK
5460	44.86	12.67	V	57.53	73.98	16.45	PK
5460	32.91	12.67	V	45.58	53.98	8.40	AV
5470	50.70	12.70	V	63.40	68.20	4.80	PK

1.5) SU

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

Frequency [MHz]	Measured Value [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	52.13	12.12	H	64.25	73.98	9.73	PK
5150	38.69	12.12	H	50.81	53.98	3.17	AV
5150	51.99	12.12	V	64.11	73.98	9.87	PK
5150	37.25	12.12	V	49.37	53.98	4.61	AV

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

Frequency [MHz]	Measured Value [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	53.43	12.14	H	65.57	73.98	8.41	PK
5350	38.40	12.14	H	50.54	53.98	3.44	AV
5350	52.42	12.14	V	64.56	73.98	9.42	PK
5350	37.94	12.14	V	50.08	53.98	3.90	AV

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

Frequency [MHz]	Measured Value [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	46.39	12.67	H	59.06	73.98	14.92	PK
5460	33.15	12.67	H	45.82	53.98	8.16	AV
5470	51.64	12.70	H	64.34	68.20	3.86	PK
5460	45.87	12.67	V	58.54	73.98	15.44	PK
5460	32.86	12.67	V	45.53	53.98	8.45	AV
5470	50.94	12.70	V	63.64	68.20	4.56	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	44.78	12.12	H	56.90	73.98	17.08	PK
5150	32.43	12.12	H	44.55	53.98	9.43	AV
5150	43.85	12.12	V	55.97	73.98	18.01	PK
5150	31.98	12.12	V	44.10	53.98	9.88	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	44.91	12.14	H	57.05	73.98	16.93	PK
5350	32.66	12.14	H	44.80	53.98	9.18	AV
5350	44.24	12.14	V	56.38	73.98	17.60	PK
5350	31.98	12.14	V	44.12	53.98	9.86	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.64	12.67	H	57.31	73.98	16.67	PK
5460	31.97	12.67	H	44.64	53.98	9.34	AV
5470	44.65	12.70	H	57.35	68.20	10.85	PK
5460	44.28	12.67	V	56.95	73.98	17.03	PK
5460	30.77	12.67	V	43.44	53.98	10.54	AV
5470	44.39	12.70	V	57.09	68.20	11.11	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	52.40	12.12	H	64.52	73.98	9.46	PK
5150	33.00	12.12	H	45.12	53.98	8.86	AV
5150	51.27	12.12	V	63.39	73.98	10.59	PK
5150	32.25	12.12	V	44.37	53.98	9.61	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	47.38	12.14	H	59.52	73.98	14.46	PK
5350	33.10	12.14	H	45.24	53.98	8.74	AV
5350	47.09	12.14	V	59.23	73.98	14.75	PK
5350	32.26	12.14	V	44.40	53.98	9.58	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.93	12.67	H	58.60	73.98	15.38	PK
5460	32.50	12.67	H	45.17	53.98	8.81	AV
5470	46.62	12.70	H	59.32	68.20	8.88	PK
5460	45.24	12.67	V	57.91	73.98	16.07	PK
5460	31.70	12.67	V	44.37	53.98	9.61	AV
5470	46.28	12.70	V	58.98	68.20	9.22	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	54.21	12.12	H	66.33	73.98	7.65	PK
5150	34.45	12.12	H	46.57	53.98	7.41	AV
5150	53.99	12.12	V	66.11	73.98	7.87	PK
5150	34.24	12.12	V	46.36	53.98	7.62	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	53.99	12.14	H	66.13	73.98	7.85	PK
5350	34.57	12.14	H	46.71	53.98	7.27	AV
5350	52.48	12.14	V	64.62	73.98	9.36	PK
5350	33.98	12.14	V	46.12	53.98	7.86	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.70	12.67	H	58.37	73.98	15.61	PK
5460	33.11	12.67	H	45.78	53.98	8.20	AV
5470	48.32	12.70	H	61.02	68.20	7.18	PK
5460	44.38	12.67	V	57.05	73.98	16.93	PK
5460	33.05	12.67	V	45.72	53.98	8.26	AV
5470	47.69	12.70	V	60.39	68.20	7.81	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	55.38	12.12	H	67.50	73.98	6.48	PK
5150	37.75	12.12	H	49.87	53.98	4.11	AV
5150	54.91	12.12	V	67.03	73.98	6.95	PK
5150	37.39	12.12	V	49.51	53.98	4.47	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	52.22	12.14	H	64.36	73.98	9.62	PK
5350	37.15	12.14	H	49.29	53.98	4.69	AV
5350	51.37	12.14	V	63.51	73.98	10.47	PK
5350	36.92	12.14	V	49.06	53.98	4.92	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.51	12.67	H	58.18	73.98	15.80	PK
5460	33.12	12.67	H	45.79	53.98	8.19	AV
5470	52.21	12.70	H	64.91	68.20	3.29	PK
5460	44.68	12.67	V	57.35	73.98	16.63	PK
5460	32.44	12.67	V	45.11	53.98	8.87	AV
5470	51.80	12.70	V	64.50	68.20	3.70	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	52.30	12.12	H	64.42	73.98	9.56	PK
5150	36.37	12.12	H	48.49	53.98	5.49	AV
5150	51.98	12.12	V	64.10	73.98	9.88	PK
5150	35.69	12.12	V	47.81	53.98	6.17	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	50.93	12.14	H	63.07	73.98	10.91	PK
5350	35.23	12.14	H	47.37	53.98	6.61	AV
5350	50.78	12.14	V	62.92	73.98	11.06	PK
5350	34.89	12.14	V	47.03	53.98	6.95	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	49.87	12.67	H	62.54	73.98	11.44	PK
5460	33.70	12.67	H	46.37	53.98	7.61	AV
5470	52.49	12.70	H	65.19	68.20	3.01	PK
5460	48.39	12.67	V	61.06	73.98	12.92	PK
5460	33.28	12.67	V	45.95	53.98	8.03	AV
5470	51.28	12.70	V	63.98	68.20	4.22	PK

2.6) SU

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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	50.14	12.12	H	62.26	73.98	11.72	PK
5150	38.05	12.12	H	50.17	53.98	3.81	AV
5150	49.93	12.12	V	62.05	73.98	11.93	PK
5150	37.67	12.12	V	49.79	53.98	4.19	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	51.07	12.14	H	63.21	73.98	10.77	PK
5350	36.33	12.14	H	48.47	53.98	5.51	AV
5350	50.98	12.14	V	63.12	73.98	10.86	PK
5350	36.10	12.14	V	48.24	53.98	5.74	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	46.66	12.67	H	59.33	73.98	14.65	PK
5460	34.92	12.67	H	47.59	53.98	6.39	AV
5470	52.69	12.70	H	65.39	68.20	2.81	PK
5460	45.95	12.67	V	58.62	73.98	15.36	PK
5460	34.89	12.67	V	47.56	53.98	6.42	AV
5470	51.27	12.70	V	63.97	68.20	4.23	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	47.73	12.12	H	59.85	73.98	14.13	PK
5150	34.88	12.12	H	47.00	53.98	6.98	AV
5150	46.45	12.12	V	58.57	73.98	15.41	PK
5150	34.00	12.12	V	46.12	53.98	7.86	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	47.94	12.14	H	60.08	73.98	13.90	PK
5350	35.66	12.14	H	47.80	53.98	6.18	AV
5350	47.49	12.14	V	59.63	73.98	14.35	PK
5350	34.87	12.14	V	47.01	53.98	6.97	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	46.53	12.67	H	59.20	73.98	14.78	PK
5460	34.77	12.67	H	47.44	53.98	6.54	AV
5470	45.80	12.70	H	58.50	68.20	9.70	PK
5460	46.10	12.67	V	58.77	73.98	15.21	PK
5460	34.20	12.67	V	46.87	53.98	7.11	AV
5470	45.28	12.70	V	57.98	68.20	10.22	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	55.08	12.12	H	67.20	73.98	6.78	PK
5150	35.26	12.12	H	47.38	53.98	6.60	AV
5150	54.29	12.12	V	66.41	73.98	7.57	PK
5150	34.27	12.12	V	46.39	53.98	7.59	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	56.40	12.14	H	68.54	73.98	5.44	PK
5350	36.15	12.14	H	48.29	53.98	5.69	AV
5350	55.87	12.14	V	68.01	73.98	5.97	PK
5350	36.08	12.14	V	48.22	53.98	5.76	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	47.47	12.67	H	60.14	73.98	13.84	PK
5460	35.11	12.67	H	47.78	53.98	6.20	AV
5470	49.96	12.70	H	62.66	68.20	5.54	PK
5460	46.96	12.67	V	59.63	73.98	14.35	PK
5460	34.38	12.67	V	47.05	53.98	6.93	AV
5470	48.69	12.70	V	61.39	68.20	6.81	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	52.18	12.12	H	64.30	73.98	9.68	PK
5150	35.22	12.12	H	47.34	53.98	6.64	AV
5150	51.87	12.12	V	63.99	73.98	9.99	PK
5150	34.92	12.12	V	47.04	53.98	6.94	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	52.52	12.14	H	64.66	73.98	9.32	PK
5350	35.89	12.14	H	48.03	53.98	5.95	AV
5350	51.23	12.14	V	63.37	73.98	10.61	PK
5350	34.68	12.14	V	46.82	53.98	7.16	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	46.88	12.67	H	59.55	73.98	14.43	PK
5460	35.13	12.67	H	47.80	53.98	6.18	AV
5470	47.70	12.70	H	60.40	68.20	7.80	PK
5460	46.22	12.67	V	58.89	73.98	15.09	PK
5460	34.27	12.67	V	46.94	53.98	7.04	AV
5470	46.89	12.70	V	59.59	68.20	8.61	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	48.09	12.12	H	60.21	73.98	13.77	PK
5150	35.40	12.12	H	47.52	53.98	6.46	AV
5150	47.85	12.12	V	59.97	73.98	14.01	PK
5150	34.28	12.12	V	46.40	53.98	7.58	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	47.35	12.14	H	59.49	73.98	14.49	PK
5350	35.91	12.14	H	48.05	53.98	5.93	AV
5350	47.11	12.14	V	59.25	73.98	14.73	PK
5350	35.43	12.14	V	47.57	53.98	6.41	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	47.12	12.67	H	59.79	73.98	14.19	PK
5460	35.51	12.67	H	48.18	53.98	5.80	AV
5470	51.00	12.70	H	63.70	68.20	4.50	PK
5460	46.81	12.67	V	59.48	73.98	14.50	PK
5460	34.90	12.67	V	47.57	53.98	6.41	AV
5470	50.94	12.70	V	63.64	68.20	4.56	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	50.75	12.12	H	62.87	73.98	11.11	PK
5150	38.06	12.12	H	50.18	53.98	3.80	AV
5150	49.67	12.12	V	61.79	73.98	12.19	PK
5150	37.37	12.12	V	49.49	53.98	4.49	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	53.35	12.14	H	65.49	73.98	8.49	PK
5350	37.46	12.14	H	49.60	53.98	4.38	AV
5350	52.04	12.14	V	64.18	73.98	9.80	PK
5350	37.19	12.14	V	49.33	53.98	4.65	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	48.34	12.67	H	61.01	73.98	12.97	PK
5460	35.49	12.67	H	48.16	53.98	5.82	AV
5470	52.91	12.70	H	65.61	68.20	2.59	PK
5460	47.36	12.67	V	60.03	73.98	13.95	PK
5460	34.84	12.67	V	47.51	53.98	6.47	AV
5470	51.99	12.70	V	64.69	68.20	3.51	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 [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	51.35	12.12	H	63.47	73.98	10.51	PK
5150	37.46	12.12	H	49.58	53.98	4.40	AV
5150	50.75	12.12	V	62.87	73.98	11.11	PK
5150	36.87	12.12	V	48.99	53.98	4.99	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 [dBµV]	A.F+C.L-A.G+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	52.10	12.14	H	64.24	73.98	9.74	PK
5350	36.85	12.14	H	48.99	53.98	4.99	AV
5350	52.00	12.14	V	64.14	73.98	9.84	PK
5350	36.25	12.14	V	48.39	53.98	5.59	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+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	51.05	12.67	H	63.72	73.98	10.26	PK
5460	37.69	12.67	H	50.36	53.98	3.62	AV
5470	51.12	12.70	H	63.82	68.20	4.38	PK
5460	50.56	12.67	V	63.23	73.98	10.75	PK
5460	37.28	12.67	V	49.95	53.98	4.03	AV
5470	50.90	12.70	V	63.60	68.20	4.60	PK

3.7) SU

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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	49.19	12.12	H	61.31	73.98	12.67	PK
5150	37.52	12.12	H	49.64	53.98	4.34	AV
5150	48.96	12.12	V	61.08	73.98	12.90	PK
5150	36.39	12.12	V	48.51	53.98	5.47	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	49.78	12.14	H	61.92	73.98	12.06	PK
5350	36.50	12.14	H	48.64	53.98	5.34	AV
5350	49.47	12.14	V	61.61	73.98	12.37	PK
5350	36.17	12.14	V	48.31	53.98	5.67	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/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	49.76	12.67	H	62.43	73.98	11.55	PK
5460	37.26	12.67	H	49.93	53.98	4.05	AV
5470	52.02	12.70	H	64.72	68.20	3.48	PK
5460	49.37	12.67	V	62.04	73.98	11.94	PK
5460	36.96	12.67	V	49.63	53.98	4.35	AV
5470	51.85	12.70	V	64.55	68.20	3.65	PK

Note:

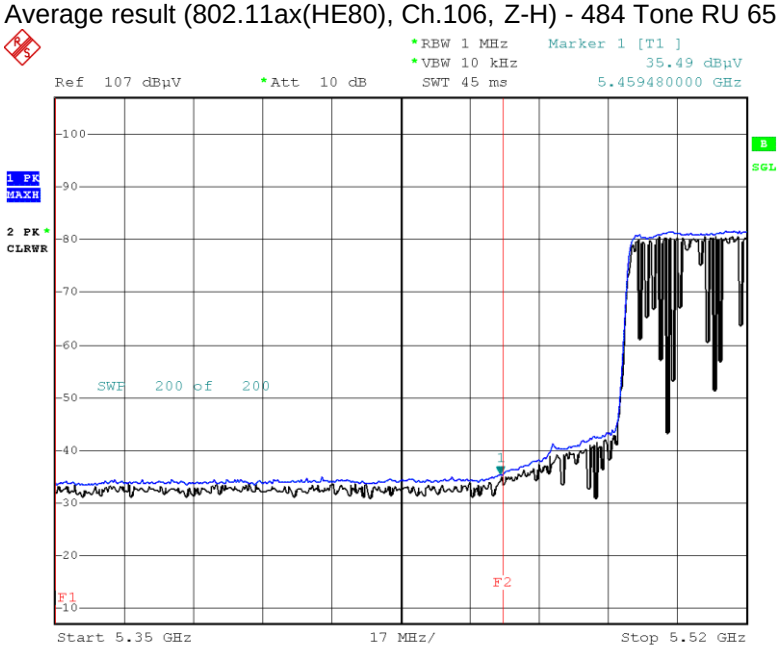
All Modes of operation were investigated and the worst case configuration results are reported.

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

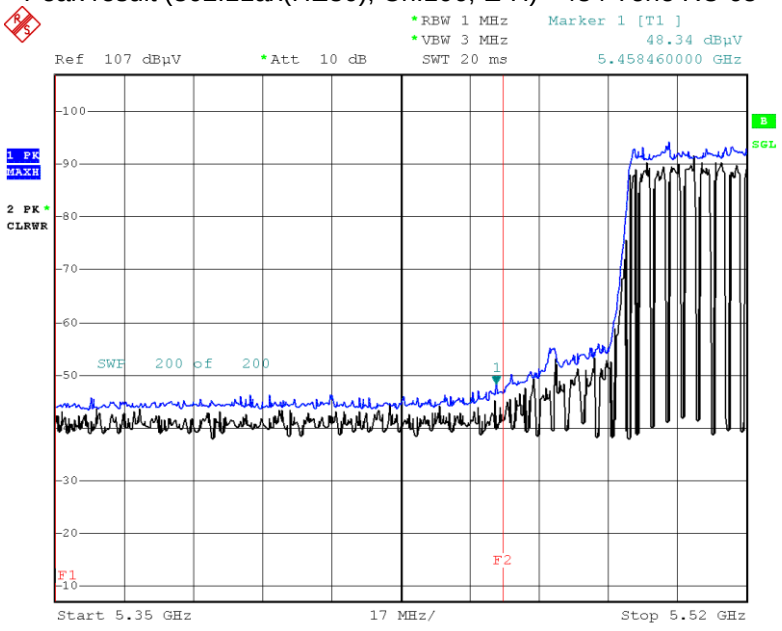
▣ Test Plots(UNII 1, 2A, 2C),

[MIMO]

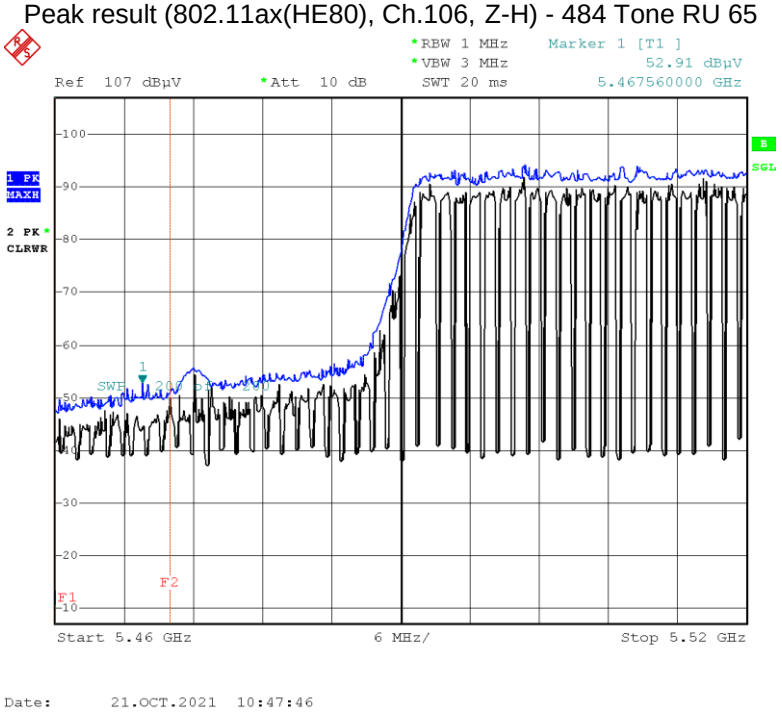
Average result (802.11ax(HE80), Ch.106, Z-H) - 484 Tone RU 65



Peak result (802.11ax(HE80), Ch.106, Z-H) - 484 Tone RU 65



Peak result (802.11ax(HE80), Ch.106, Z-H) - 484 Tone RU 65



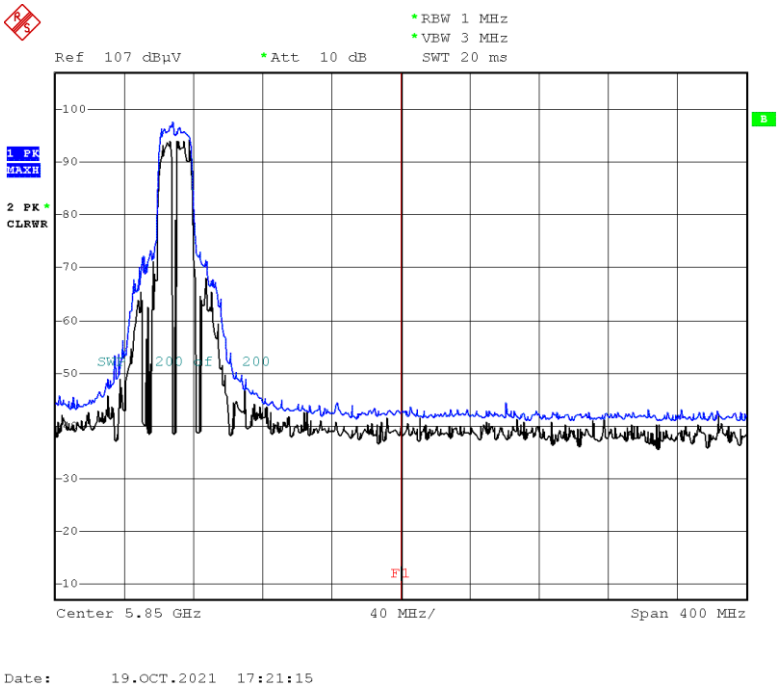
Note:

Only the worst case plots for Radiated Restricted Band Edge.

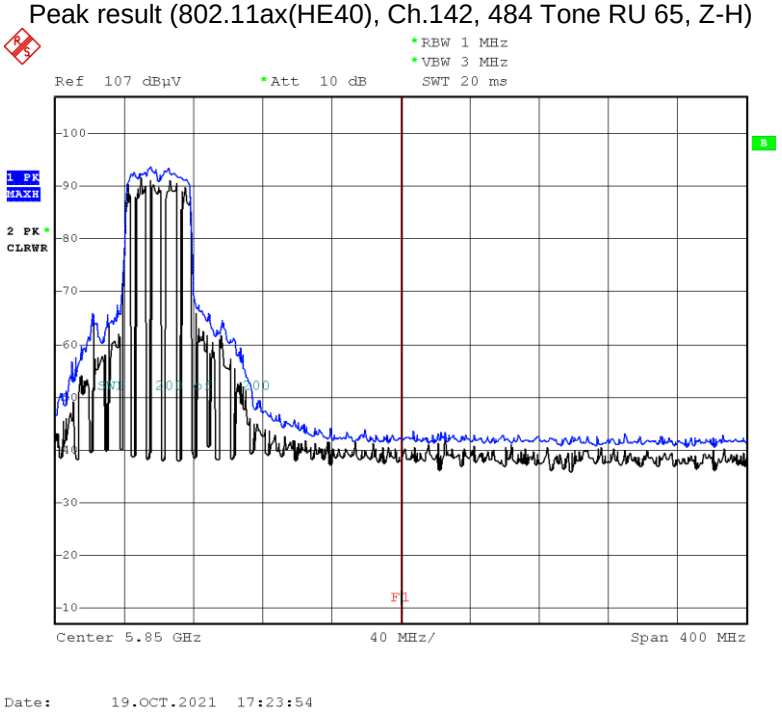
▣ Test Plots(Staraddle Channel)

[MIMO]

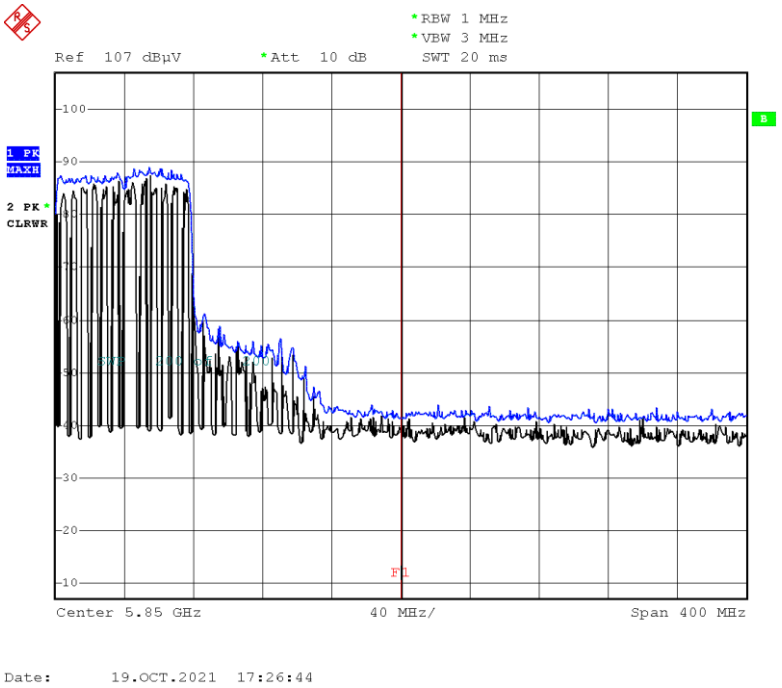
Peak result (802.11ax(HE20), Ch.144, 242 Tone RU 61, Z-H)



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



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



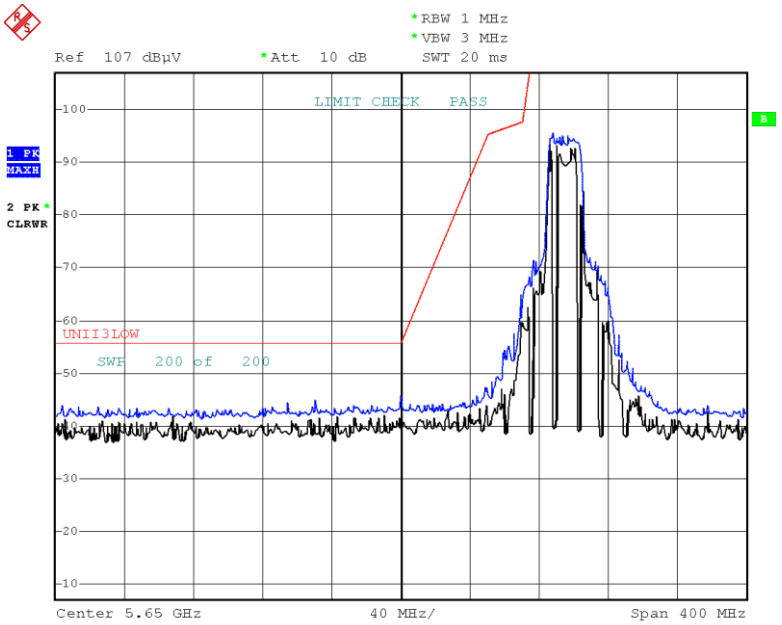
Note :

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)

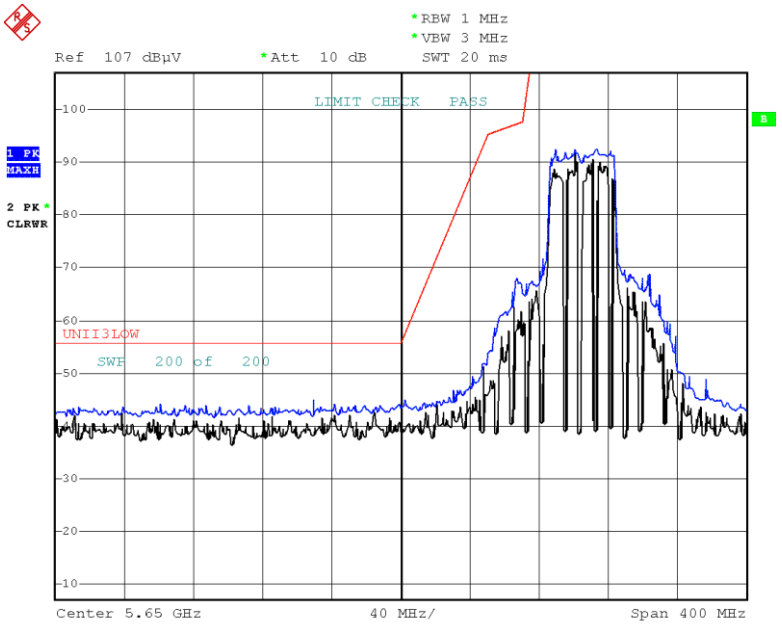
▣ Test Plots(UNII 3)

[MIMO]

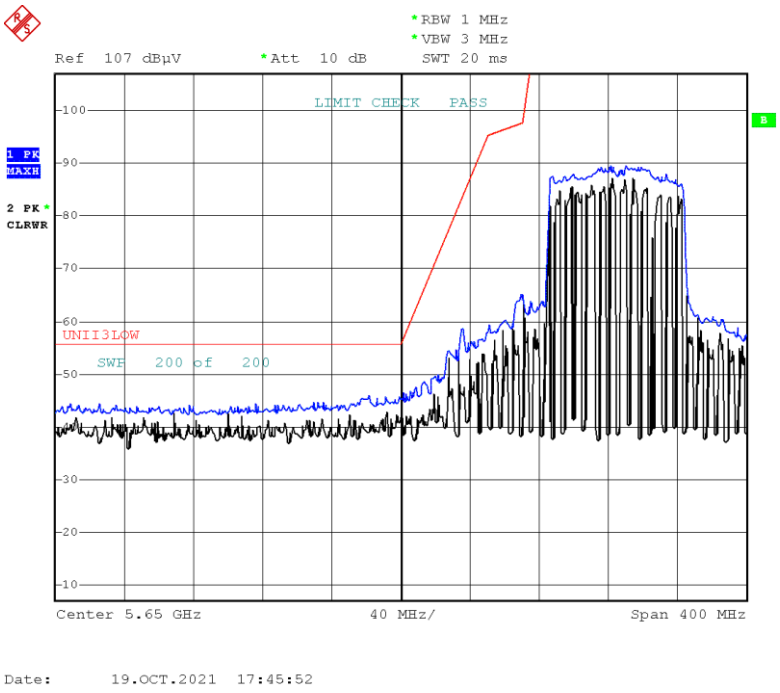
Peak result (802.11ax(HE20), Ch.149, 242 Tone RU 61, Z-H)



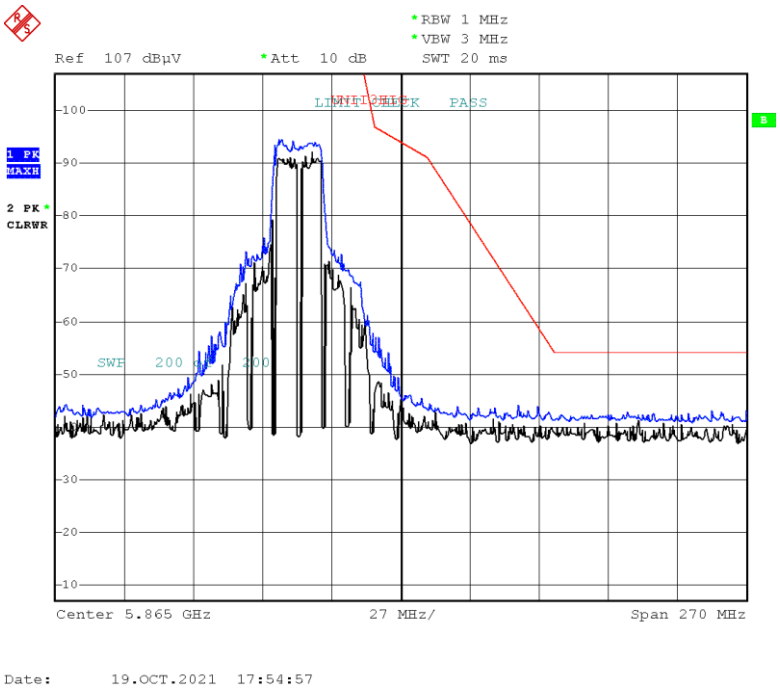
Peak result (802.11ax(HE40), Ch.151, 484 Tone RU 65, Z-H)



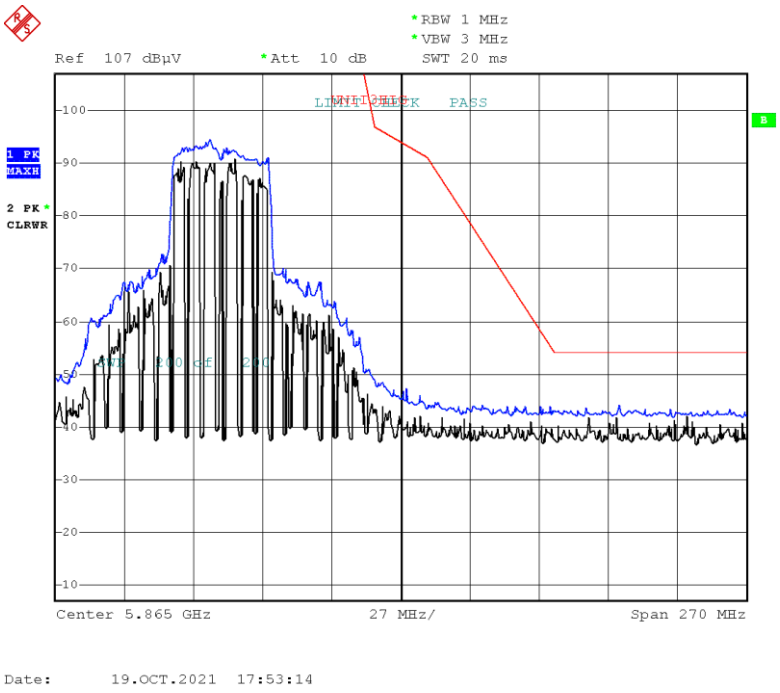
Peak result (802.11ax(HE80), Ch.155, 996 Tone RU 67, Z-H)



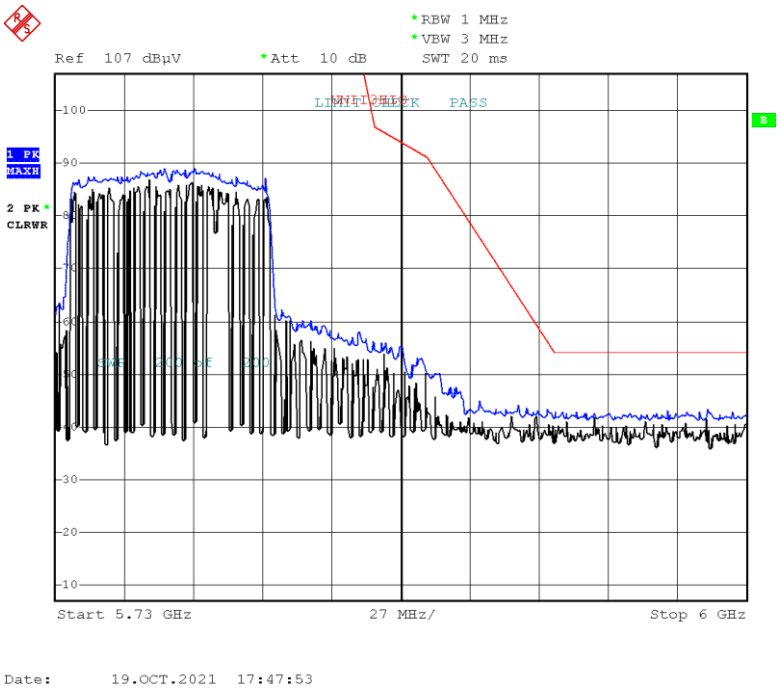
Peak result (802.11ax(HE20), Ch.165, 242 Tone RU 61, Z-H)



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



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



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
Test Receiver	ESCI	Rohde & Schwarz	100033	06/15/2022	Annual
Temperature Chamber	SU-642	ESPAC	0093008124	03/15/2022	Annual
Signal Analyzer	N9020A	Agilent	MY47380318	01/28/2022	Annual
Signal Analyzer	N9030A	Agilent	MY55410508	09/07/2022	Annual
Power Meter	N1911A	Agilent	MY45100523	04/08/2022	Annual
Power Sensor	N1921A	Agilent	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	KR75303960	06/10/2022	Annual
Attenuator (10 dB)	5910-N-50-010	H+S	00801	10/28/2021	Annual
Software	EMC32	Rohde & Schwarz	N/A	N/A	N/A
FCC WLAN&BT&BLE Conducted Test Software v3.0	FCC WLAN&BT&BLE Conducted Test Software v3.0	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	2090	Emco	060520	N/A	N/A
Turn Table	Turn Table	Ets	N/A	N/A	N/A
Loop Antenna	Loop Antenna	Rohde & Schwarz	1513-333	03/19/2022	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	9168-0895	09/04/2022	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	9120D-1191	11/18/2021	Biennial
Horn Antenna (15 GHz ~ 40 GHz)	BBHA9170	Schwarzbeck	BBHA9170541	11/29/2021	Biennial
Spectrum Analyzer	FSP (9 kHz ~ 30 GHz)	Rohde & Schwarz	836650/016	09/13/2022	Annual
Spectrum Analyzer	FSV40-N	Rohde & Schwarz	101068-SZ	09/15/2022	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
Attenuator (10 dB) 56-10	CBLU1183540B-01 56-10	CERNEX WEINSCHEL	N/A	12/23/2021	Annual
Broadband Low Noise Amplifier Attenuator (3 dB)	CBL06185030 18B-03	CERNEX Api tech.	N/A	12/23/2021	Annual
High Pass Filter	WHKX10-2700-3000-18000-40SS	Wainwright Instruments	N/A	12/23/2021	Annual
High Pass Filter	WHKX8-6090-7000-18000-40SS	Wainwright Instruments	N/A	12/23/2021	Annual
Thru	COAXIAL ATTENUATOR	T&M SYSTEM	N/A	12/23/2021	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-2110-FC075-P