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FCC UNII REPORT

Certification

Applicant Name:
SAMSUNG Electronics Co., Ltd.

Date of Issue:
November 12, 2021

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

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

Report No.: HCT-RF-2110-FC076-R3

FCC ID:	**A3LSMS901B**
APPLICANT:	**SAMSUNG Electronics Co., Ltd.**
Model:	SM-S901B/DS
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 : Jeong Ho Kim
Engineer of Telecommunication Testing Center

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

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

This laboratory is not accredited for the test results marked *.
The above Test Report is the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA. (HCT Accreditation No.: KT197)

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2110-FC076	October 29, 2021	- First Approval Report
HCT-RF-2110-FC076-R1	November 05, 2021	- Page.10 Typo correction - Additional Model delete
HCT-RF-2110-FC076-R2	November 11, 2021	- Revised on Page 84~85 - Page(184~192) U-NII-4 O.O.B.E(upper) Peak result added
HCT-RF-2110-FC076-R3	November 12, 2021	- Revised on Page 84~85

Table of Contents

1. GENERAL INFORMATION

EUT DESCRIPTION

Model	SM-S901B/DS	
Additional Model	-	
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
	U-NII-4	20 MHz BW : 5845 - 5885 40 MHz BW : 5835 - 5875 80 MHz BW : 5855
Straddle channel	Supported	
TDWR Band	Supported	
Dynamic Frequency Selection	Slave without radar detection	
Date(s) of Tests	September 24, 2021 ~ November 11, 2021	
Serial number	Radiated: R3CR90EYFYM Conducted: 572b4e7d6c3f7ece	

ANTENNA CONFIGURATIONS

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

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

Note:

(1) O = Support, X = Not Support

(2) SISO = Single Input Single Output

(3) SDM = Spatial Diversity Multiplexing

(4) CDD = Cyclic Delay Diversity

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

RSDB Scenario	2.4 GHz WiFi Ant.1	2.4 GHz WiFi Ant.2	5GHz WiFi Ant.1	5GHz WiFi Ant.2	Bluetooth Ant.1	Bluetooth Ant.2 (N/A)
2.4 GHz WiFi MIMO + 5GHz WiFi	On	On	On			-
2.4 GHz WiFi MIMO + 5GHz WiFi MIMO	On	On	On	On		-
2.4 GHz WiFi + 5GHz WiFi + Bluetooth		On	On		On	-
2.4 GHz WiFi + 5GHz WiFi MIMO + Bluetooth		On	On	On	On	-

Non-DBS	2.4 GHz WiFi Ant.1	2.4 GHz WiFi Ant.2	5GHz WiFi Ant.1	5GHz WiFi Ant.2	Bluetooth Ant.1	Bluetooth Ant.2 (N/A)
5GHz WiFi MIMO + Bluetooth			On	On	On	-
			On	On		-

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	-5.86	2 / 2	CDD : -2.76 SDM : -5.69
	ANT2	-5.69		
UNII 2A	ANT1	-5.78	2 / 2	CDD : -2.37 SDM : -5.01
	ANT2	-5.01		
UNII 2C	ANT1	-5.08	2 / 2	CDD : -2.38 SDM : -5.08
	ANT2	-5.72		
UNII 3	ANT1	-5.62	2 / 2	CDD : -2.51 SDM : -5.44
	ANT2	-5.44		
UNII 4	ANT1	-5.62	2 / 2	CDD : -1.88 SDM : -4.23
	ANT2	-4.23		

Band	Ant Gain (dBi)		N_{ANT}/ N_{ss}	Directional Gain (dBi)
U-NII	ANT1	-5.08	2 / 2	CDD : -1.63 SDM : -4.23
	ANT2	-4.23		

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)	17.49	0.056
	802.11ax (HE40)	18.43	0.070
	802.11ax (HE80)	17.93	0.062
UNII2A	802.11ax (HE20)	18.74	0.075
	802.11ax (HE40)	18.48	0.070
	802.11ax (HE80)	17.84	0.061
UNII2C	802.11ax (HE20)	18.33	0.068
	802.11ax (HE40)	18.12	0.065
	802.11ax (HE80)	18.06	0.064
UNII3	802.11ax (HE20)	17.88	0.061
	802.11ax (HE40)	17.71	0.059
	802.11ax (HE80)	17.55	0.057
UNII4 Conducted For inf.	802.11ax (HE20)	18.27	0.067
	802.11ax (HE40)	18.31	0.068
	802.11ax (HE80)	17.69	0.067
UNII4 EIRP	802.11ax (HE20)	16.39	0.044
	802.11ax (HE40)	16.42	0.044
	802.11ax (HE80)	15.81	0.038

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. Additionally, for U-NII-4 band, use the following measurement procedure KDB 291074 U-NII-4 5.9 Band DR01-44460

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.

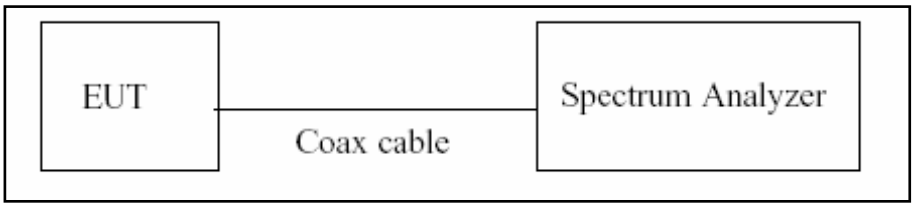
The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

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.

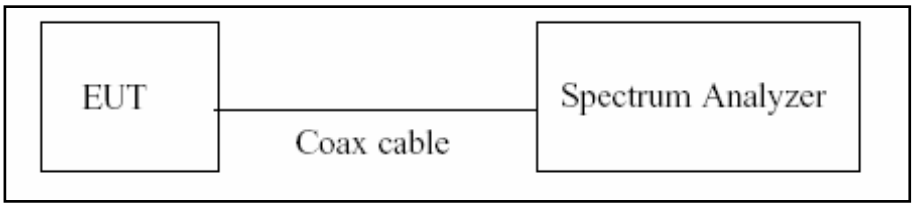
1. RBW = 8 MHz (the largest availble value)
2. VBW = 8 MHz (≥ RBW)
3. SPAN = 0 Hz
4. Detector = Peak
5. Number of points in sweep > 100
6. Trace mode = Clear write
7. Measure T_{total} and T_{on}
8. Calculate Duty Cycle = T_{on}/ T_{total} and Duty Cycle Factor = 10log(1/Duty Cycle)

8.2. 6 dB Bandwidth & 26 dB Bandwidth

Limit

Within the 5.725-5.85 GHz(NII-3) &5.85-5.925 GHz(NII-4) 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.

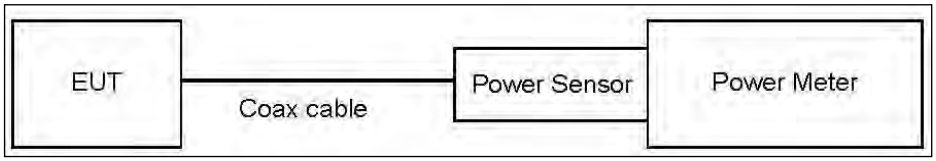
8.3. Output Power Measurement

Limit

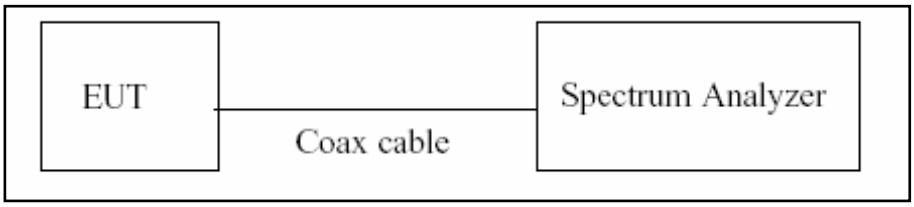
Band	Limit
UNII 1	- Master : Not exceed 1 W(=30 dBm) - Slave : Not exceed 250 mW(=23.98 dBm)
UNII 2A, 2C	Not exceed the lesser of 250 mW or 11 dBm + 10 log B, (where B is the 26 dB emission bandwidth in megahertz.)
UNII 3	Not exceed 1 W(=30 dBm)
UNII 4	EIRP 30 dBm

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(20 dB) + Cable loss + EUT Cable Loss
3. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1	20.82
UNII 2A	20.82
UNII 2C	20.82
UNII 3&4	20.82

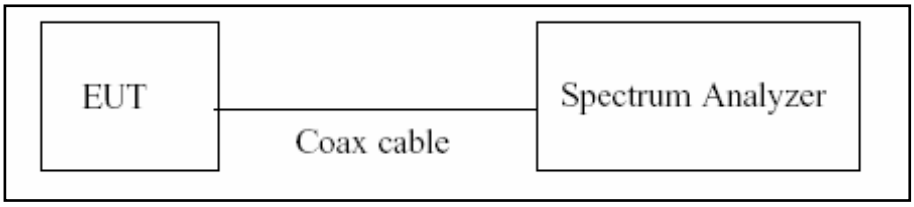
(Actual value of loss for the attenuator and cable combination)

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
UNII 4	EIRP 14 dBm/MHz

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(20 dB) + Cable loss + EUT Cable Loss
3. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1	20.82
UNII 2A	20.82
UNII 2C	20.82
UNII 3&4	20.82

(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. . UNII 4: [Low Channel O.O.B.E] measured with an Peak detector

   For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of −27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.

   [High Channel O.O.B.E] measured with an RMS detector

   For a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of −5 dBm/MHz and shall decrease linearly to an e.i.r.p. of −27 dBm/MHz at or above 5.925 GHz.

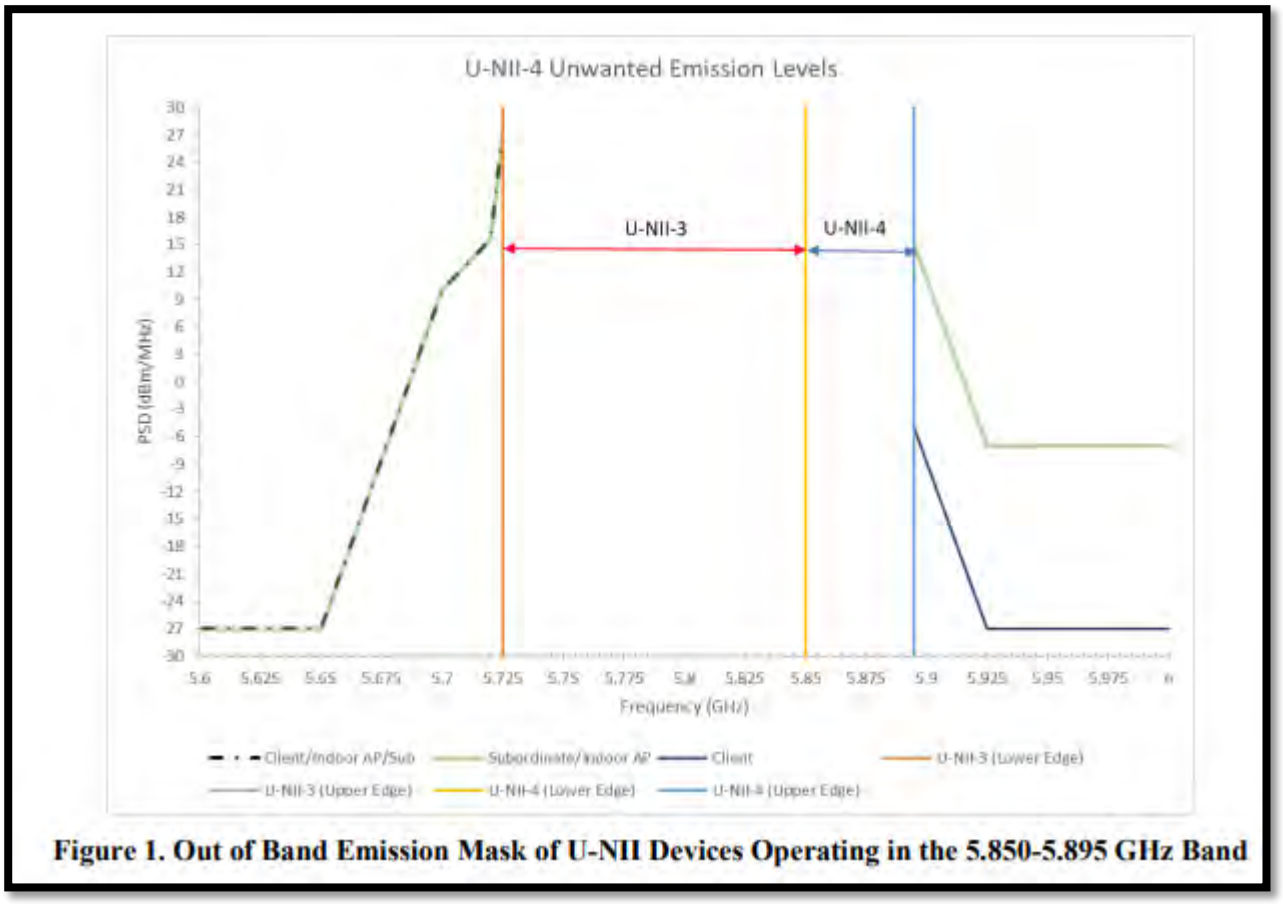


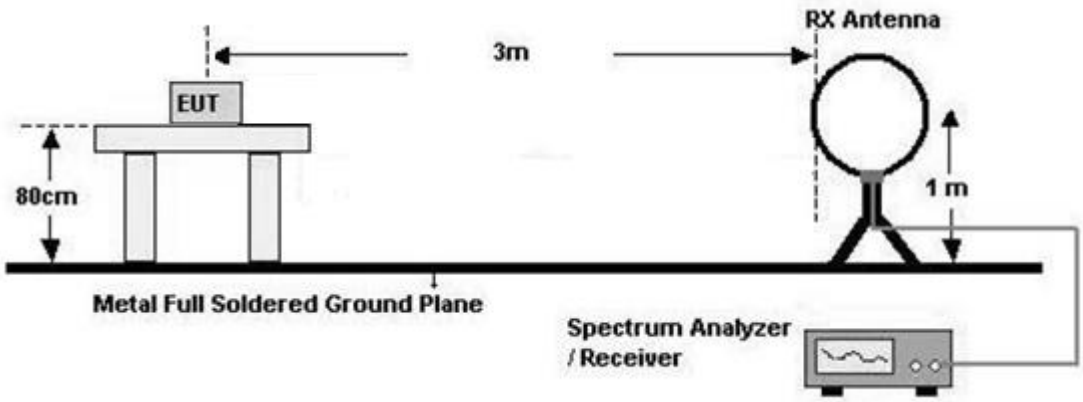
Figure 1. Out of Band Emission Mask of U-NII Devices Operating in the 5.850-5.895 GHz Band

5. 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.

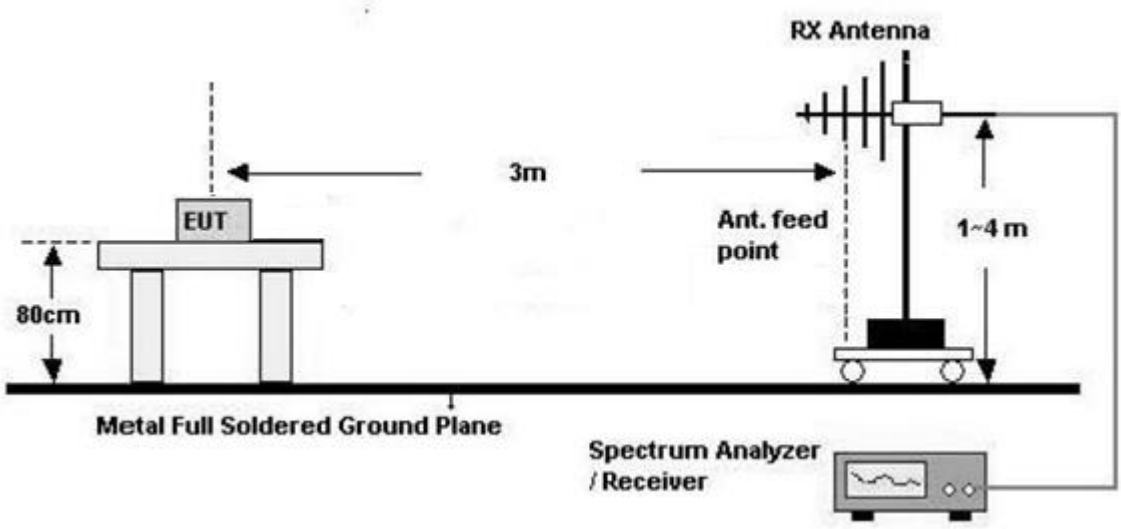
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Test Configuration

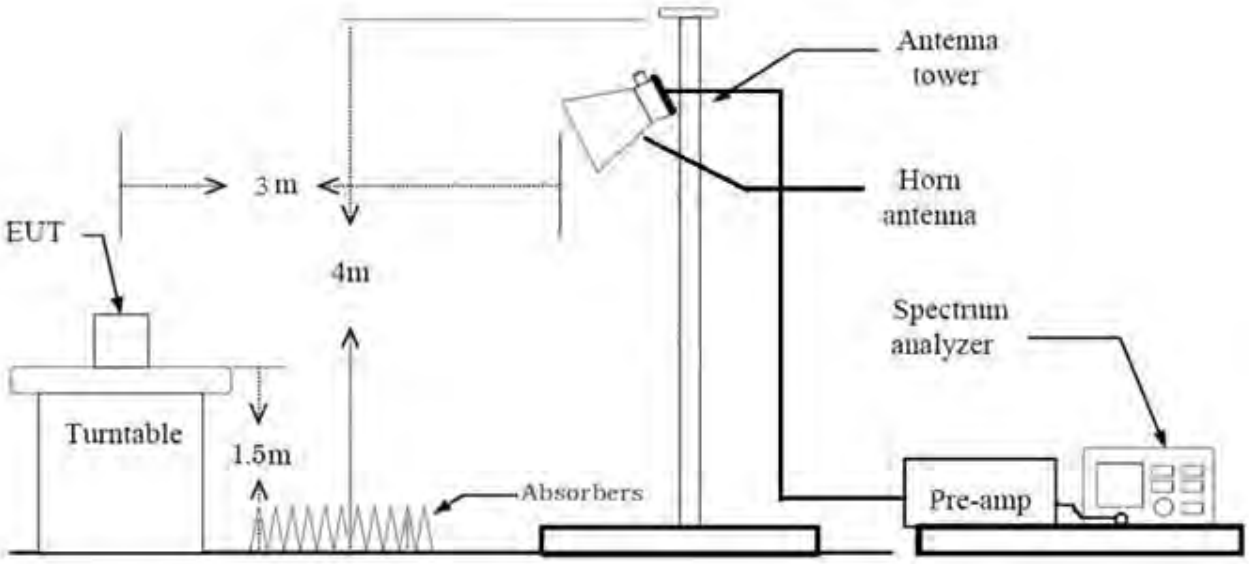
Below 30 MHz



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 minimym number of traces by a factor of 1/x, where x is the duty cycle.

9. Measurement value only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor
10. 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 minimym 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	0.993	0.03	0.385	1000
	52	MCS 0	0.993	0.03	0.386	1000
	106	MCS 0	0.993	0.03	0.411	1000
	242	MCS 0	0.993	0.03	0.419	1000
	SU	MCS 0	0.993	0.03	0.419	1000
802.11ax (HE40)	26	MCS 0	0.994	0.03	0.385	1000
	52	MCS 0	0.993	0.03	0.386	1000
	106	MCS 0	0.994	0.03	0.410	1000
	242	MCS 0	0.994	0.03	0.419	1000
	484	MCS 0	0.993	0.03	0.419	1000
	SU	MCS 0	0.994	0.03	0.419	1000
802.11ax (HE80)	26	MCS 0	0.994	0.03	0.385	1000
	52	MCS 0	0.993	0.03	0.386	1000
	106	MCS 0	0.994	0.03	0.410	1000
	242	MCS 0	0.994	0.03	0.419	1000
	484	MCS 0	0.994	0.03	0.419	1000
	996	MCS 0	0.994	0.03	0.413	1000
	SU	MCS 0	0.994	0.03	0.413	1000

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

Radiated test

1. Full RU(Resource Unit) mode and SU(Single Unit) mode have no difference in physical waveform.
   This Report has been described only Full RU mode with worst output power
2. All modes of operation were investigated and the worst case configuration results are reported.
   - Mode : Stand alone, Stand alone + External accessories(Earphone, etc)
   - Worstcase : Stand alone
3. EUT Axis
   - Radiated Spurious Emissions : 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. 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 40] Worst case(Highest Power) : 484T [HE 80] Worst case(Highest Power) : 996T	[HE 20] Mid 61 [HE 40] Mid 65 [HE 80] Mid 67
	[HE20] Additional Tone: 106T [HE40] Additional Tone: 26T [HE80] Additional Tone: 26T	[HE 20] Mid 54 [HE 40] Mid 9 [HE 80] Mid 18
Bandedge (UNII1,2A,2C)	[HE 20] Worst case(Highest Power) : 242T [HE 40] Worst case(Highest Power) : 484T [HE 80] Worst case(Highest Power) : 996T	[HE 20] Mid 61 [HE 40] Mid 65 [HE 80] Mid 67

	[HE 20] Additional Tone: 26T, 52T, 106T, SU [HE 40] Additional Tone: 26T, 52T, 106T, 242T, SU [HE 80] Additional Tone: 26T, 52T, 106T, 242T, 484T, SU	[HE20] Low Edge: 0, 37, 53 High Edge: 8, 40, 54 [HE40] Low Edge: 0, 37, 53, 61 High Edge: 17, 44, 56, 62 [HE80] Low Edge: 0, 37, 53, 61, 65 High Edge: 36, 52, 60, 64, 66
Bandedge (Straddle, UNII3)	[HE 20] Worst case(Highest Power) : 242T [HE 40] Worst case(Highest Power) : 484T [HE 80] Worst case(Highest Power) : 996T	[HE 20] Mid 61 [HE 40] Mid 65 [HE 80] Mid 67
O.O.B.E (UNII4)	Low Channel O.O.B.E [HE 20] Worst case(Highest Power) : 242T, SU [HE 40] Worst case(Highest Power) : 242T, 484T, SU [HE 80] Worst case(Highest Power) : 242T, 996T, SU High Channel O.O.B.E [HE 20/40/80] Worst case (Highest Power & steep Band mask) : ALL High Tone check (26T, 52T, 106T, 242T, 484T, 996T, SU)	[HE 20] Mid 61 [HE 40] Mid 65 [HE 80] Mid 67 [HE20] High Edge: 8, 40, 54 [HE40] High Edge: 17, 44, 56, 62 [HE80] High Edge: 36, 52, 60, 64, 66

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

RSDB Scenario	2.4 GHz WiFi Ant.1	2.4 GHz WiFi Ant.2	5GHz WiFi Ant.1	5GHz WiFi Ant.2	Bluetooth Ant.1	Bluetooth Ant.2 (N/A)
2.4 GHz WiFi MIMO + 5GHz WiFi	On	On	On			-
2.4 GHz WiFi MIMO + 5GHz WiFi MIMO	On	On	On	On		-
2.4 GHz WiFi + 5GHz WiFi + Bluetooth		On	On		On	-
5GHz WiFi MIMO + Bluetooth		On	On	On	On	-

Non-DBS	2.4 GHz WiFi Ant.1	2.4 GHz WiFi Ant.2	5GHz WiFi Ant.1	5GHz WiFi Ant.2	Bluetooth Ant.1	Bluetooth Ant.2 (N/A)
5GHz WiFi MIMO + Bluetooth			On	On	On	-
			On	On		-

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

(Worst case: The lowest margin condition the channels and modes were selected for test.)

(Test case 1,2,5,6 Result : Please refer to the SM-S901B/DS [BT, UNII, DTS] Test Report.)

Case	Description	Bluetooth Emission	5 GHz Emission
1 (DBS mode)	Antenna	Ant 1	Ant All
	Channel	78	52
	Data Rate	1 Mbps	MCS 0
	Mode	GFSK : DH5	802.11n(HT20)
Case	**Description**	**Bluetooth Emission**	**5 GHz Emission**
2 (DBS mode)	Antenna	Ant 1	Ant All
	Channel	0	36
	Data Rate	1 Mbps	6 Mbps
	Mode	GFSK : DH5	802.11a
Case	**Description**	**2.4 GHz Emission**	**5 GHz Emission**
3 (RSDB mode)	Antenna	Ant All	Ant All
	Channel	6	36
	Data Rate	MCS 0	MCS 0
	Mode	802.11ax(HE20)	802.11ax(HE20)
	Tone / RU	SU	SU
Case	**Description**	**2.4 GHz Emission**	**5 GHz Emission**
4 (RSDB mode)	Antenna	Ant All	Ant All
	Channel	1	36
	Data Rate	MCS 0	MCS 0
	Mode	802.11ax(HE20)	802.11ax(HE20)
	Tone / RU	26 / 4	36 / 4
Case	**Description**	**2.4 GHz Emission**	**5 GHz Emission**
5 (RSDB mode)	Antenna	Ant All	Ant All
	Channel	6	36
	Data Rate	1 Mbps	6 Mbps
	Mode	802.11b	802.11a
Case	**Description**	**2.4 GHz Emission**	**5 GHz Emission**
6 (RSDB mode)	Antenna	Ant All	Ant All
	Channel	1	36
	Data Rate	1 Mbps	MCS 0
	Mode	802.11b	802.11n(HT20)

AC Power line Conducted Emissions

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

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)(UNII-3) (5850-5895 MHz)(UNII-4)		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 EIRP Output Power	§15.407(a)(1)(3)(iii)	< EIRP 30dBm (5850-5925 MHz)		
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) < EIRP 14 dBm/MHz(5850-5925 MHz)		PASS
AC Conducted Emissions 150 kHz-30 MHz	15.207 15.407(b)(8)	<FCC 15.207 limits		PASS
Undesirable Emissions	§15.407(b) (1),(2),(3),(4) §15.407(b)(5)(ii),(iii)	<-27 dBm/MHz EIRP (UNII1, 2A, 2C) cf. Section 8.6 (UNII 3&4)	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

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	2.597	2.614	0.993	0.03
		MCS1	2.592	2.609	0.993	0.03
		MCS2	2.581	2.599	0.993	0.03
		MCS3	2.655	2.673	0.993	0.03
		MCS4	2.632	2.650	0.993	0.03
		MCS5	2.617	2.635	0.993	0.03
		MCS6	2.612	2.630	0.993	0.03
		MCS7	2.609	2.625	0.994	0.03
		MCS8	2.630	2.645	0.994	0.03
		MCS9	2.609	2.625	0.994	0.03
	52	MCS0	2.592	2.609	0.993	0.03
		MCS1	2.584	2.602	0.993	0.03
		MCS2	2.579	2.597	0.993	0.03
		MCS3	2.657	2.673	0.994	0.02
		MCS4	2.627	2.645	0.993	0.03
		MCS5	2.614	2.632	0.993	0.03
		MCS6	2.612	2.630	0.993	0.03
		MCS7	2.607	2.625	0.993	0.03
		MCS8	2.627	2.645	0.993	0.03
		MCS9	2.607	2.625	0.993	0.03
	106	MCS0	2.435	2.452	0.993	0.03
		MCS1	2.432	2.450	0.993	0.03
		MCS2	2.432	2.450	0.993	0.03
		MCS3	2.503	2.521	0.993	0.03
		MCS4	2.480	2.495	0.994	0.03
		MCS5	2.467	2.483	0.994	0.03
		MCS6	2.465	2.483	0.993	0.03
		MCS7	2.457	2.475	0.993	0.03
		MCS8	2.480	2.495	0.994	0.03
		MCS9	2.457	2.475	0.993	0.03
	242	MCS0	2.389	2.407	0.993	0.03

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS1	2.384	2.399	0.994	0.03
		MCS2	2.384	2.402	0.993	0.03
		MCS3	2.457	2.473	0.994	0.03
		MCS4	2.432	2.450	0.993	0.03
		MCS5	2.417	2.432	0.994	0.03
		MCS6	2.412	2.429	0.993	0.03
		MCS7	2.409	2.424	0.994	0.03
		MCS8	2.427	2.445	0.993	0.03
		MCS9	2.409	2.424	0.994	0.03
		MCS10	2.417	2.432	0.994	0.03
		MCS11	2.409	2.424	0.994	0.03

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	2.597	2.612	0.994	0.03
		MCS1	2.592	2.609	0.993	0.03
		MCS2	2.581	2.599	0.993	0.03
		MCS3	2.655	2.673	0.993	0.03
		MCS4	2.632	2.650	0.993	0.03
		MCS5	2.617	2.632	0.994	0.03
		MCS6	2.612	2.630	0.993	0.03
		MCS7	2.607	2.625	0.993	0.03
		MCS8	2.627	2.645	0.993	0.03
		MCS9	2.609	2.625	0.994	0.03
	52	MCS0	2.592	2.609	0.993	0.03
		MCS1	2.584	2.599	0.994	0.03
		MCS2	2.579	2.597	0.993	0.03
		MCS3	2.655	2.673	0.993	0.03
		MCS4	2.627	2.645	0.993	0.03
		MCS5	2.617	2.632	0.994	0.03
		MCS6	2.612	2.630	0.993	0.03
		MCS7	2.609	2.625	0.994	0.03
		MCS8	2.627	2.645	0.993	0.03
		MCS9	2.607	2.625	0.993	0.03
	106	MCS0	2.437	2.452	0.994	0.03
		MCS1	2.432	2.447	0.994	0.03
		MCS2	2.432	2.447	0.994	0.03
		MCS3	2.503	2.521	0.993	0.03
		MCS4	2.480	2.495	0.994	0.03
		MCS5	2.467	2.485	0.993	0.03
		MCS6	2.462	2.480	0.993	0.03
		MCS7	2.462	2.478	0.994	0.03
		MCS8	2.478	2.495	0.993	0.03
		MCS9	2.460	2.475	0.994	0.03
	242	MCS0	2.389	2.404	0.994	0.03
		MCS1	2.384	2.399	0.994	0.03
		MCS2	2.384	2.402	0.993	0.03
		MCS3	2.455	2.473	0.993	0.03

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS4	2.432	2.450	0.993	0.03
		MCS5	2.417	2.432	0.994	0.03
		MCS6	2.412	2.427	0.994	0.03
		MCS7	2.409	2.424	0.994	0.03
		MCS8	2.429	2.445	0.994	0.03
		MCS9	2.409	2.424	0.994	0.03
		MCS10	2.417	2.432	0.994	0.03
		MCS11	2.407	2.424	0.993	0.03
	484	MCS0	2.384	2.402	0.993	0.03
		MCS1	2.455	2.473	0.993	0.03
		MCS2	2.432	2.447	0.994	0.03
		MCS3	2.417	2.432	0.994	0.03
		MCS4	2.427	2.445	0.993	0.03
		MCS5	2.412	2.427	0.994	0.03
		MCS6	2.412	2.427	0.994	0.03
		MCS7	2.419	2.437	0.993	0.03
		MCS8	2.412	2.427	0.994	0.03
		MCS9	2.417	2.432	0.994	0.03
		MCS10	2.417	2.432	0.994	0.03
		MCS11	2.417	2.432	0.994	0.03

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	2.597	2.612	0.994	0.03
		MCS1	2.592	2.607	0.994	0.03
		MCS2	2.584	2.599	0.994	0.03
		MCS3	2.655	2.673	0.993	0.03
		MCS4	2.632	2.647	0.994	0.03
		MCS5	2.617	2.632	0.994	0.03
		MCS6	2.612	2.630	0.993	0.03
		MCS7	2.609	2.625	0.994	0.03
		MCS8	2.627	2.645	0.993	0.03
		MCS9	2.607	2.625	0.993	0.03
	52	MCS0	2.592	2.609	0.993	0.03
		MCS1	2.584	2.599	0.994	0.03
		MCS2	2.581	2.597	0.994	0.03
		MCS3	2.655	2.673	0.993	0.03
		MCS4	2.627	2.645	0.993	0.03
		MCS5	2.614	2.632	0.993	0.03
		MCS6	2.612	2.627	0.994	0.03
		MCS7	2.609	2.625	0.994	0.03
		MCS8	2.627	2.645	0.993	0.03
		MCS9	2.607	2.625	0.993	0.03
	106	MCS0	2.437	2.452	0.994	0.03
		MCS1	2.432	2.447	0.994	0.03
		MCS2	2.432	2.447	0.994	0.03
		MCS3	2.505	2.521	0.994	0.03
		MCS4	2.480	2.495	0.994	0.03
		MCS5	2.470	2.485	0.994	0.03
		MCS6	2.465	2.480	0.994	0.03
		MCS7	2.460	2.475	0.994	0.03
		MCS8	2.480	2.495	0.994	0.03
		MCS9	2.460	2.475	0.994	0.03
	242	MCS0	2.389	2.404	0.994	0.03
		MCS1	2.384	2.399	0.994	0.03
		MCS2	2.381	2.399	0.993	0.03

Mode	Tone (T)	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS3	2.457	2.473	0.994	0.03
		MCS4	2.429	2.447	0.993	0.03
		MCS5	2.414	2.432	0.993	0.03
		MCS6	2.412	2.427	0.994	0.03
		MCS7	2.409	2.424	0.994	0.03
		MCS8	2.427	2.442	0.994	0.03
		MCS9	2.407	2.422	0.994	0.03
		MCS10	2.417	2.432	0.994	0.03
		MCS11	2.409	2.424	0.994	0.03
	484	MCS0	2.384	2.399	0.994	0.03
		MCS1	2.457	2.473	0.994	0.03
		MCS2	2.432	2.447	0.994	0.03
		MCS3	2.417	2.432	0.994	0.03
		MCS4	2.427	2.445	0.993	0.03
		MCS5	2.414	2.429	0.994	0.03
		MCS6	2.412	2.429	0.993	0.03
		MCS7	2.419	2.435	0.994	0.03
		MCS8	2.414	2.429	0.994	0.03
		MCS9	2.419	2.424	0.998	0.01
		MCS10	2.414	2.432	0.993	0.03
		MCS11	2.417	2.432	0.994	0.03
	996	MCS0	2.419	2.435	0.994	0.03
		MCS1	2.414	2.432	0.993	0.03
		MCS2	2.414	2.432	0.993	0.03
		MCS3	2.412	2.427	0.994	0.03
		MCS4	2.412	2.429	0.993	0.03
		MCS5	2.412	2.427	0.994	0.03
		MCS6	2.412	2.427	0.994	0.03
		MCS7	2.412	2.427	0.994	0.03
		MCS8	2.412	2.427	0.994	0.03
		MCS9	2.407	2.424	0.993	0.03
		MCS10	2.412	2.427	0.994	0.03
		MCS11	2.412	2.427	0.994	0.03

Mode	BW	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
802.11ax (SU)	BW 20	MCS0	2.386	2.404	0.993	0.03
		MCS1	2.384	2.399	0.994	0.03
		MCS2	2.384	2.402	0.993	0.03
		MCS3	2.457	2.473	0.994	0.03
		MCS4	2.435	2.450	0.994	0.03
		MCS5	2.417	2.435	0.993	0.03
		MCS6	2.412	2.427	0.994	0.03
		MCS7	2.407	2.424	0.993	0.03
		MCS8	2.427	2.445	0.993	0.03
		MCS9	2.409	2.424	0.994	0.03
		MCS10	2.417	2.432	0.994	0.03
		MCS11	2.407	2.424	0.993	0.03
	BW 40	MCS0	2.384	2.399	0.994	0.03
		MCS1	2.457	2.473	0.994	0.03
		MCS2	2.432	2.447	0.994	0.03
		MCS3	2.417	2.432	0.994	0.03
		MCS4	2.429	2.445	0.994	0.03
		MCS5	2.414	2.429	0.994	0.03
		MCS6	2.412	2.429	0.993	0.03
		MCS7	2.422	2.437	0.994	0.03
		MCS8	2.412	2.427	0.994	0.03
		MCS9	2.414	2.432	0.993	0.03
		MCS10	2.414	2.432	0.993	0.03
		MCS11	2.417	2.432	0.994	0.03
	BW 80	MCS0	2.422	2.437	0.994	0.03
		MCS1	2.417	2.432	0.994	0.03
		MCS2	2.417	2.432	0.994	0.03
		MCS3	2.412	2.427	0.994	0.03
		MCS4	2.412	2.429	0.993	0.03
		MCS5	2.414	2.429	0.994	0.03
		MCS6	2.414	2.429	0.994	0.03
		MCS7	2.414	2.429	0.994	0.03
		MCS8	2.412	2.427	0.994	0.03
		MCS9	2.409	2.424	0.994	0.03

Mode	BW	Data Rate	On Time (ms)	Total Time (ms)	Duty Cycle	Duty Cycle Factor (dB)
		MCS10	2.412	2.427	0.994	0.03
		MCS11	2.412	2.427	0.994	0.03

Note:

Duty cycle ≥ 98% ➔ Continuous Signal

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	20.58	20.98	21.85	-	-
			Mid	18.81	19.47	-	22.31	22.35
			High	20.39	20.24	21.01	-	-
	5200	40	Low	20.51	21.17	21.94	-	-
			Mid	18.80	19.49	-	21.95	22.10
			High	20.46	20.31	21.94	-	-
	5240	48	Low	20.64	20.83	21.97	-	-
			Mid	18.56	19.37	-	22.04	22.15
			High	20.18	20.48	20.97	-	-
UNII 2A	5260	52	Low	20.62	20.78	21.70	-	-
			Mid	18.29	19.42	-	22.19	22.41
			High	20.06	20.35	20.89	-	-
	5280	56	Low	20.62	20.78	21.83	-	-
			Mid	18.76	19.37	-	22.05	22.27
			High	20.35	20.40	20.88	-	-
	5320	64	Low	20.61	20.77	21.82	-	-
			Mid	18.67	19.44	-	22.21	22.13
			High	20.22	20.53	20.95	-	-
UNII 2C	5500	100	Low	20.61	20.66	21.67	-	-
			Mid	18.62	19.27	-	22.17	22.04
			High	20.23	20.18	20.76	-	-
	5600	120	Low	20.50	20.90	21.66	-	-
			Mid	18.69	19.33	-	22.27	22.21
			High	20.28	20.44	20.81	-	-
	5720	144	Low	20.48	20.83	21.70	-	-
			Mid	18.62	19.38	-	22.17	22.30
			High	20.18	20.50	20.79	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	20.59	20.94	21.50	-	-
			Mid	18.75	19.43	-	21.98	22.17
			High	20.22	20.48	20.86	-	-
	5785	157	Low	20.70	20.97	21.60	-	-
			Mid	18.73	19.26	-	21.89	22.00
			High	20.43	20.45	20.85	-	-
	5825	165	Low	20.61	20.87	21.50	-	-
			Mid	18.64	19.38	-	22.20	22.25
			High	20.28	20.51	20.97	-	-
UNII 4	5845	169	Low	20.65	20.99	21.50	-	-
			Mid	18.81	19.35	-	21.85	22.14
			High	20.22	20.52	20.97	-	-
	5865	173	Low	20.58	21.11	21.56	-	-
			Mid	18.79	19.23	-	21.78	21.81
			High	20.33	20.43	21.56	-	-
	5885	177	Low	20.38	21.10	21.21	-	-
			Mid	18.84	19.39	-	21.78	21.71
			High	20.49	20.52	20.72	-	-

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	40.12	40.64	41.39	41.69	-	-
			Mid	38.39	38.50	38.95	-	43.61	43.38
			High	40.27	40.33	40.70	41.44	-	-
	5230	46	Low	40.53	40.49	41.45	41.38	-	-
			Mid	38.12	38.52	39.14	-	43.68	43.58
			High	40.37	40.09	40.69	40.91	-	-
UNII 2A	5270	54	Low	40.11	40.60	41.42	41.37	-	-
			Mid	38.39	38.63	39.16	-	43.60	43.03
			High	40.25	40.41	40.75	41.39	-	-
	5310	62	Low	40.35	40.50	41.19	41.31	-	-
			Mid	38.22	38.67	39.08	-	43.73	43.69
			High	40.14	40.55	40.78	41.25	-	-
UNII 2C	5510	102	Low	40.59	40.68	41.35	41.50	-	-
			Mid	38.13	38.63	38.94	-	43.29	43.53
			High	40.01	40.86	40.86	41.43	-	-
	5590	118	Low	40.55	40.64	41.02	41.50	-	-
			Mid	38.25	38.64	38.68	-	43.30	43.55
			High	40.30	40.48	40.97	41.46	-	-
	5710	142	Low	40.59	40.45	41.18	41.59	-	-
			Mid	38.29	38.55	38.92	-	43.56	43.31
			High	40.36	41.11	40.89	41.46	-	-
UNII 3	5755	151	Low	41.11	40.53	41.15	41.14	-	-
			Mid	38.33	38.67	38.89	-	43.27	43.54
			High	40.44	40.69	41.23	41.42	-	-
	5795	159	Low	40.53	40.52	41.04	41.44	-	-
			Mid	38.47	38.66	38.90	-	43.58	43.68
			High	40.46	41.30	40.72	41.46	-	-
UNII 4	5835	167	Low	40.26	40.51	41.21	41.55	-	-
			Mid	38.36	38.43	38.96	-	43.34	43.43
			High	40.23	40.57	40.77	41.40	-	-
	5875	175	Low	40.72	40.53	40.98	41.72	-	-
			Mid	38.41	38.78	38.90	-	43.41	43.62
			High	40.09	40.89	40.77	41.57	-	-

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	81.81	81.52	83.45	83.50	84.87	-	-
			Mid	78.29	78.78	79.52	80.92	-	88.07	88.53
			High	81.31	82.70	83.26	83.72	84.93	-	-
UNII 2A	5290	58	Low	81.90	81.67	83.75	83.28	85.12	-	-
			Mid	78.63	78.95	79.23	80.90	-	88.21	88.32
			High	81.42	82.05	82.59	83.53	84.98	-	-
UNII 2C	5530	106	Low	82.43	81.80	83.46	83.60	85.55	-	-
			Mid	78.63	78.72	79.44	79.72	-	88.19	87.77
			High	81.80	82.63	83.30	83.30	85.21	-	-
	5610	122	Low	82.15	81.78	83.61	83.75	86.08	-	-
			Mid	78.61	78.98	79.22	80.72	-	88.25	87.95
			High	81.37	82.38	83.24	83.41	84.79	-	-
	5690	138	Low	81.75	82.33	83.65	83.37	85.58	-	-
			Mid	78.45	78.84	80.19	80.81	-	88.10	88.35
			High	81.17	82.20	82.49	83.65	84.48	-	-
UNII 3	5775	155	Low	82.04	82.03	83.19	82.94	85.49	-	-
			Mid	78.49	79.06	79.19	80.77	-	88.35	87.89
			High	81.63	81.79	82.56	83.90	85.09	-	-
UNII 4	5855	171	Low	82.17	81.88	83.43	83.74	85.19	-	-
			Mid	78.40	78.93	79.55	80.28	-	88.27	88.12
			High	81.28	82.10	82.50	83.83	85.09	-	-

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	20.08	19.99	20.95	-	-
			Mid	18.28	18.60	-	22.30	22.14
			High	19.82	19.96	20.41	-	-
	5200	40	Low	20.04	19.90	20.88	-	-
			Mid	18.42	18.48	-	22.15	22.02
			High	19.87	19.93	20.88	-	-
	5240	48	Low	20.12	20.08	20.90	-	-
			Mid	18.38	18.49	-	22.25	22.09
			High	19.82	20.04	20.50	-	-
UNII 2A	5260	52	Low	19.83	19.97	20.68	-	-
			Mid	18.26	18.42	-	22.60	25.28
			High	19.81	20.05	20.44	-	-
	5280	56	Low	20.09	19.95	20.66	-	-
			Mid	18.36	18.52	-	22.70	25.69
			High	19.81	20.03	20.30	-	-
	5320	64	Low	20.05	20.04	20.77	-	-
			Mid	18.38	18.52	-	22.43	25.89
			High	19.97	19.95	20.49	-	-
UNII 2C	5500	100	Low	19.99	19.95	20.58	-	-
			Mid	18.45	18.65	-	22.38	25.08
			High	20.16	20.03	20.39	-	-
	5600	120	Low	20.05	20.36	20.51	-	-
			Mid	18.37	18.70	-	22.48	22.46
			High	19.88	19.87	20.27	-	-
	5720	144	Low	19.86	20.07	20.49	-	-
			Mid	18.29	18.48	-	22.09	22.16
			High	19.98	19.93	20.36	-	-
UNII 3	5745	149	Low	20.01	20.11	20.54	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	26 dB BW (MHz)				
				26 T	52 T	106 T	242 T	SU
			Mid	18.32	18.55	-	22.06	22.18
			High	19.90	19.86	20.38	-	-
	5785	157	Low	20.11	19.99	20.53	-	-
			Mid	18.37	18.58	-	21.99	21.85
			High	19.84	19.97	20.09	-	-
	5825	165	Low	19.93	19.97	20.42	-	-
			Mid	18.42	18.45	-	22.22	22.52
			High	19.78	19.97	20.20	-	-
UNII 4	5845	169	Low	20.09	19.85	20.53	-	-
			Mid	18.32	18.45	-	22.28	22.45
			High	19.91	19.91	20.64	-	-
	5865	173	Low	20.11	19.84	20.54	-	-
			Mid	18.29	18.38	-	22.48	23.14
			High	19.85	19.91	20.54	-	-
	5885	177	Low	19.93	19.83	21.30	-	-
			Mid	18.25	18.37	-	22.29	25.96
			High	19.86	19.89	20.77	-	-

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	39.77	40.78	40.94	41.11	-	-
			Mid	38.04	38.26	38.78	-	45.34	47.39
			High	40.29	40.42	41.25	41.27	-	-
	5230	46	Low	39.78	40.68	40.76	44.06	-	-
			Mid	38.07	38.20	38.57	-	45.44	45.67
			High	40.10	40.19	41.18	42.04	-	-
UNII 2A	5270	54	Low	39.84	40.58	40.69	43.97	-	-
			Mid	38.05	38.23	38.66	-	45.67	49.53
			High	40.33	40.73	41.27	42.03	-	-
	5310	62	Low	39.89	40.57	40.50	44.18	-	-
			Mid	38.11	38.26	38.79	-	47.14	49.42
			High	40.17	40.68	41.17	42.23	-	-
UNII 2C	5510	102	Low	40.19	40.81	40.68	41.39	-	-
			Mid	38.04	38.27	38.77	-	43.83	45.51
			High	40.20	40.40	41.28	41.68	-	-
	5590	118	Low	39.93	40.57	40.85	44.13	-	-
			Mid	38.02	38.41	38.79	-	45.59	49.30
			High	40.14	40.62	41.25	42.00	-	-
	5710	142	Low	39.59	40.86	41.43	41.63	-	-
			Mid	38.09	38.42	38.71	-	47.46	47.38
			High	40.05	40.21	41.39	41.50	-	-
UNII 3	5755	151	Low	39.93	40.70	40.79	41.54	-	-
			Mid	37.97	38.18	38.75	-	45.45	45.76
			High	40.36	40.68	41.16	41.29	-	-
	5795	159	Low	39.93	40.59	40.98	41.65	-	-
			Mid	38.03	38.28	38.77	-	45.86	45.72
			High	40.35	40.29	41.38	41.32	-	-
UNII 4	5835	167	Low	40.33	40.86	40.72	41.41	-	-
			Mid	38.03	38.31	38.74	-	49.42	48.98
			High	40.00	40.41	41.08	41.97	-	-
	5875	175	Low	39.85	41.00	41.33	43.54	-	-
			Mid	38.08	38.31	38.66	-	51.56	49.56
			High	40.39	40.34	40.66	41.98	-	-

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	80.67	82.35	82.53	82.89	83.12	-	-
			Mid	77.90	78.27	78.79	79.12	-	86.02	86.18
			High	81.51	82.01	83.06	83.07	84.73	-	-
UNII 2A	5290	58	Low	81.06	82.14	83.03	82.93	83.44	-	-
			Mid	78.16	78.27	78.86	79.06	-	86.41	86.95
			High	81.73	81.88	83.58	83.45	85.29	-	-
UNII 2C	5530	106	Low	81.38	82.32	82.38	82.83	83.43	-	-
			Mid	78.08	78.30	78.69	79.24	-	86.36	86.02
			High	81.37	81.85	83.47	83.18	84.74	-	-
	5610	122	Low	80.72	82.21	82.23	83.21	83.82	-	-
			Mid	78.19	78.28	78.88	79.16	-	87.14	86.71
			High	81.21	81.93	83.62	83.38	85.04	-	-
	5690	138	Low	80.75	82.10	82.28	83.26	83.52	-	-
			Mid	77.96	78.28	78.79	79.18	-	86.18	85.88
			High	81.09	81.93	83.66	83.47	85.22	-	-
UNII 3	5775	155	Low	81.21	82.14	82.16	82.73	83.14	-	-
			Mid	78.06	78.14	78.77	78.99	-	86.48	85.73
			High	81.44	82.23	83.46	83.05	84.67	-	-
UNII 4	5855	171	Low	80.87	82.24	82.26	83.08	86.62	-	-
			Mid	77.93	78.38	78.79	79.11	-	86.55	86.52
			High	81.57	82.24	83.42	83.98	84.64	-	-

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	2.142	17.10	18.11	-	-
			Mid	2.758	15.10	-	19.04	19.03
			High	2.146	17.07	17.13	-	-
	5785	157	Low	2.171	17.08	17.17	-	-
			Mid	2.759	15.11	-	19.03	19.03
			High	2.160	17.06	17.13	-	-
	5825	165	Low	2.134	17.10	17.17	-	-
			Mid	2.752	15.11	-	19.04	19.02
			High	2.145	17.05	17.12	-	-
UNII 4	5845	169	Low	2.149	17.10	17.14	-	-
			Mid	2.764	15.11	-	19.03	19.03
			High	2.149	17.08	17.15	-	-
	5865	173	Low	2.141	17.10	17.17	-	-
			Mid	2.764	15.10	-	19.03	19.03
			High	2.132	17.08	17.14	-	-
	5885	177	Low	2.139	17.07	17.17	-	-
			Mid	2.773	15.12	-	19.03	19.03
			High	2.133	17.07	17.15	-	-

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	2.141	4.211	35.33	36.86	-	-
			Mid	2.167	4.179	33.85	-	38.16	38.18
			High	2.170	4.212	36.59	36.78	-	-
	5795	159	Low	2.151	4.216	34.07	36.84	-	-
			Mid	2.159	4.170	35.07	-	38.15	38.15
			High	2.156	4.218	36.56	36.78	-	-
UNII 4	5835	167	Low	2.112	4.224	35.33	36.83	-	-
			Mid	2.172	4.227	33.79	-	38.09	38.09
			High	2.134	4.199	36.58	36.73	-	-
	5875	175	Low	2.132	4.212	34.11	36.83	-	-
			Mid	2.161	4.197	35.06	-	38.10	38.08
			High	2.136	4.202	36.58	36.78	-	-

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	2.266	4.354	8.391	76.86	76.95	-	-
			Mid	2.843	4.291	8.444	75.01	-	78.24	78.24
			High	2.267	4.325	8.467	76.84	76.98	-	-
UNII 4	5855	171	Low	2.245	4.326	8.466	76.72	76.89	-	-
			Mid	2.839	4.251	8.430	75.22	-	78.22	78.24
			High	2.265	4.324	8.442	76.88	77.03	-	-

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	2.124	17.02	17.73	-	-
			Mid	2.697	15.08	-	19.05	19.06
			High	2.111	17.07	17.19	-	-
	5785	157	Low	2.108	4.497	17.74	-	-
			Mid	2.673	15.07	-	19.10	19.07
			High	2.114	17.06	17.19	-	-
	5825	165	Low	2.123	14.55	17.18	-	-
			Mid	2.698	15.09	-	19.06	19.08
			High	2.107	17.07	17.19	-	-
UNII 4	5845	169	Low	2.107	14.55	17.72	-	-
			Mid	2.670	15.07	-	19.08	19.07
			High	2.111	17.06	17.18	-	-
	5865	173	Low	2.079	14.54	17.73	-	-
			Mid	2.665	13.83	-	19.08	19.07
			High	2.118	17.05	17.18	-	-
	5885	177	Low	2.120	16.99	17.17	-	-
			Mid	2.686	15.08	-	19.07	19.06
			High	2.119	17.07	17.19	-	-

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	2.150	4.140	36.61	36.75	-	-
			Mid	2.186	4.174	35.06	-	38.14	38.10
			High	2.169	4.175	36.59	36.75	-	-
	5795	159	Low	2.203	4.159	34.13	36.75	-	-
			Mid	2.182	4.168	35.10	-	38.16	38.16
			High	2.129	4.209	36.48	36.77	-	-
UNII 4	5835	167	Low	2.115	4.159	36.62	36.76	-	-
			Mid	2.171	4.181	35.10	-	38.16	38.13
			High	2.139	4.194	36.58	36.77	-	-
	5875	175	Low	2.154	4.131	36.62	36.76	-	-
			Mid	2.160	4.205	35.10	-	38.15	38.16
			High	2.171	4.204	36.59	36.71	-	-

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	2.309	4.239	8.477	76.66	76.85	-	-
			Mid	2.818	4.271	8.492	75.08	-	78.14	78.14
			High	2.243	4.253	8.467	76.79	76.86	-	-
UNII 4	5855	171	Low	2.294	4.245	8.516	76.73	76.87	-	-
			Mid	2.816	4.270	8.445	75.13	-	78.17	78.18
			High	2.277	4.270	8.468	76.74	76.89	-	-

Limit : > 0.5 MHz

10.4 OUTPUT POWER MEASUREMENT

Power Level Setting

MIMO

802.11ax(HE20)		Frequency [MHz]	Channel No.	26 T	52 T	106 T	242 T	SU
UNII 1	Low	5180	36	8	9	11	14	13
	Mid	5200	40	8	9	11	14	13
	High	5240	48	8	9	11	14	13
UNII 2A	Low	5260	52	9	10.5	14	15	16
	Mid	5280	56	9	10.5	14	15	16
	High	5320	64	9	10.5	14	15	16
UNII 2C	Low	5500	100	9	10.5	14	15	16
	Mid	5600	120	9	10.5	14	15	16
	High	5720	144	9	10.5	14	15	16
UNII 3	Low	5745	149	9	10.5	14	15	16
	Mid	5785	157	9	10.5	14	15	16
	High	5825	165	9	10.5	14	15	16
UNII 4	Low	5845	169	11.5	12.5	13.5	14.5	15.5
	Mid	5865	173	11.5	12.5	13.5	14.5	15.5
	High	5885	177	11.5	12.5	13.5	14.5	15.5

802.11ax(HE40)		Frequency [MHz]	Channel No.	26 T	52 T	106 T	242 T	484 T	SU
UNII 1	Low	5190	38	8	10.5	13.5	13.5	12.5	14
	High	5230	46	8	10.5	13.5	15	14	14
UNII 2A	Low	5270	54	8	10.5	13.5	15	14	15
	High	5310	62	8.5	10.5	13.5	15	14	15
UNII 2C	Low	5510	102	9	10.5	11.5	11.5	12	14
	Mid	5590	118	9	10.5	14	15	14	15
	High	5710	142	8.5	10.5	14	15	14	15
UNII 3	Low	5755	151	9	10.5	14	15	14	15
	High	5795	159	9	10.5	14	15	14	15
UNII 4	Low	5835	167	11.5	12.5	13.5	14.5	13.5	14.5
	High	5875	175	11.5	12.5	13.5	14.5	13.5	14.5

802.11ax(HE80)		Frequency [MHz]	Channel No.	26 T	52 T	106 T	242 T	484 T	996 T	SU
UNII 1	Mid	5210	42	8	10.5	13.5	14	13	12.5	13
UNII 2A	Mid	5290	58	8.5	10.5	13	13	14	12.5	14
UNII 2C	Low	5530	106	9	10.5	12	12	12	12	14
	Mid	5610	122	9	10.5	13.5	15	14	12.5	14
	High	5690	138	9	10.5	13.5	15	14	12.5	14
UNII 3	Mid	5775	155	9	10.5	13.5	15	14	12.5	14
UNII 4	Mid	5855	171	11.5	12.5	13.5	14.5	13.5	12.5	13.5

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	10.94	12.48	14.22	-	-
			Mid	11.12	12.53	-	17.35	16.25
			High	11.08	12.49	14.33	-	-
	5200	40	Low	11.63	12.42	14.30	-	-
			Mid	11.77	12.55	-	17.35	16.37
			High	11.73	12.51	14.40	-	-
	5240	48	Low	11.72	12.55	14.40	-	-
			Mid	11.83	12.65	-	17.49	16.47
			High	11.68	12.49	14.37	-	-
UNII 2A	5260	52	Low	12.60	13.80	17.27	-	-
			Mid	12.62	13.85	-	17.78	18.56
			High	12.46	13.69	17.19	-	-
	5280	56	Low	12.63	13.95	17.29	-	-
			Mid	12.69	14.02	-	17.76	18.60
			High	12.57	13.89	17.29	-	-
	5320	64	Low	12.57	13.89	17.47	-	-
			Mid	12.69	14.00	-	17.86	18.74
			High	12.61	13.85	17.50	-	-
UNII 2C	5500	100	Low	12.55	13.57	17.22	-	-
			Mid	12.58	13.65	-	17.56	18.33
			High	12.46	13.52	17.24	-	-
	5600	120	Low	12.38	13.51	16.82	-	-
			Mid	12.40	13.59	-	17.34	17.94
			High	12.31	13.45	16.79	-	-
	5720	144	Low	12.19	13.57	16.92	-	-
			Mid	12.25	13.67	-	16.87	17.85
			High	12.18	13.56	16.92	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	Sum Power (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	12.40	13.62	16.77	-	-
			Mid	12.62	13.79	-	16.87	17.88
			High	12.60	13.79	16.90	-	-
	5785	157	Low	12.14	13.34	16.63	-	-
			Mid	12.21	13.39	-	16.62	17.65
			High	12.10	13.17	16.53	-	-
	5825	165	Low	12.19	13.25	16.50	-	-
			Mid	12.28	13.38	-	16.69	17.62
			High	12.24	13.36	16.60	-	-
UNII 4 (Conducted) For inf	*5845*	*169*	*Low*	*15.07*	*15.82*	*16.61*	-	-
			Mid	*15.16*	*15.84*	-	*17.53*	*17.96*
			High	*15.07*	*15.76*	*16.58*	-	-
	5865	*173*	*Low*	*15.21*	*15.88*	*16.76*	-	-
			Mid	*15.30*	*15.97*	-	*17.77*	*17.98*
			High	*15.24*	*15.84*	*16.76*	-	-
	5885	*177*	*Low*	*15.49*	*16.28*	*17.04*	-	-
			Mid	*15.47*	*16.19*	-	*17.91*	*18.27*
			High	*15.34*	*16.26*	*16.99*	-	-
UNII 4 (EIRP)	5845	169	Low	13.19	13.94	14.73	-	-
			Mid	13.28	13.96	-	15.65	16.08
			High	13.19	13.88	14.70	-	-
	5865	173	Low	13.33	14.00	14.88	-	-
			Mid	13.42	14.09	-	15.89	16.10
			High	13.36	13.96	14.88	-	-
	5885	177	Low	13.61	14.40	15.16	-	-
			Mid	13.59	14.31	-	16.03	16.39
			High	13.46	14.38	15.11	-	-

#Note : EIRP = Conducted Power(Sum) + Ant Gain(Directional Gain)

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

(UNII 4) : EIRP 30.0 dBm/MHz

(UNII 3&4) : Worst limit 30.00 dBm ➔UNII 4 Band Antenna Gain Negative

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	11.11	14.08	17.33	17.53	-	-
			Mid	11.69	14.57	17.68	-	16.76	17.75
			High	11.40	14.33	17.58	17.66	-	-
	5230	46	Low	11.44	14.27	17.52	18.41	-	-
			Mid	12.00	14.74	17.81	-	17.94	17.89
			High	11.55	14.31	17.54	18.43	-	-
UNII 2a	5270	54	Low	12.02	14.20	17.45	18.25	-	-
			Mid	12.22	14.38	17.58	-	17.73	18.26
			High	12.36	13.98	17.25	18.13	-	-
	5310	62	Low	12.58	14.14	17.57	18.37	-	-
			Mid	12.98	14.49	17.79	-	17.91	18.48
			High	12.32	14.14	17.58	18.38	-	-
UNII 2c	5510	102	Low	12.37	14.04	15.33	15.48	-	-
			Mid	12.73	14.33	15.53	-	15.69	17.68
			High	12.39	14.04	15.33	15.45	-	-
	5590	118	Low	12.49	14.02	17.14	18.12	-	-
			Mid	12.69	14.13	17.20	-	17.16	18.04
			High	12.22	13.79	16.89	17.93	-	-
	5710	142	Low	12.73	14.36	17.33	17.81	-	-
			Mid	13.08	14.54	17.51	-	17.50	17.81
			High	12.73	14.45	17.27	17.76	-	-
UNII 3	5755	151	Low	12.49	14.10	17.04	17.60	-	-
			Mid	13.04	14.66	17.40	-	17.42	17.71
			High	12.64	14.28	17.20	17.69	-	-
	5795	159	Low	12.02	13.73	16.91	17.33	-	-
			Mid	12.23	13.90	17.10	-	16.98	17.31
			High	11.68	13.44	16.68	17.17	-	-
UNII 4 (Conducted) For inf	*5835*	*167*	*Low*	*15.01*	*16.23*	*16.89*	*17.89*	-	-
			Mid	*15.56*	*16.65*	*17.17*	-	*17.14*	*18.08*
			High	*15.10*	*16.29*	*16.95*	*18.02*	-	-
	5875	*175*	*Low*	*15.44*	*16.56*	*17.20*	*17.85*	-	-
			Mid	*15.90*	*16.93*	*17.44*	-	*17.35*	*18.30*
			High	*15.53*	*16.56*	*17.22*	*17.90*	-	-

UNII 4 (EIRP)	5835	167	Low	13.13	14.35	15.01	16.01	-	-
			Mid	13.68	14.77	15.29	-	15.26	16.20
			High	13.22	14.41	15.07	16.14	-	-
	5875	175	Low	13.56	14.68	15.32	15.97	-	-
			Mid	14.02	15.05	15.56	-	15.47	16.42
			High	13.65	14.68	15.34	16.02	-	-

#Note : EIRP = Conducted Power(Sum) + Ant Gain(Directional Gain)

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

(UNII 4) : EIRP 30.0 dBm/MHz

(UNII 3&4) : Worst limit 30.00 dBm ➔UNII 4 Band Antenna Gain Negative

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	11.97	14.06	16.98	17.59	16.74	-	-
			Mid	12.53	14.69	17.55	17.87	-	16.43	16.86
			High	12.30	14.46	17.37	17.93	17.01	-	-
UNII 2a	5290	58	Low	13.00	14.52	16.84	16.86	17.65	-	-
			Mid	13.09	14.60	16.87	16.88	-	16.36	17.84
			High	12.77	14.31	16.63	16.73	17.49	-	-
UNII 2c	5530	106	Low	12.66	13.95	15.43	15.52	15.15	-	-
			Mid	12.88	14.32	15.75	15.67	-	15.63	17.56
			High	12.48	13.87	15.38	15.58	15.25	-	-
	5610	122	Low	12.80	14.20	17.15	18.03	17.08	-	-
			Mid	12.75	14.23	17.19	18.00	-	16.19	17.13
			High	12.71	14.19	17.17	18.06	17.12	-	-
	5690	138	Low	13.04	14.40	17.40	17.84	17.59	-	-
			Mid	13.27	14.61	17.51	17.92	-	16.70	17.59
			High	13.05	14.36	17.30	17.72	17.46	-	-
UNII 3	5775	155	Low	12.51	14.02	16.84	17.33	17.22	-	-
			Mid	12.97	14.42	17.12	17.55	-	16.09	17.11
			High	12.31	13.84	16.61	17.03	16.92	-	-
UNII 4 (Conducted) For inf	*5855*	*171*	*Low*	*14.57*	*15.57*	*16.53*	*17.64*	*16.65*	-	-
			Mid	*14.72*	*15.73*	*16.69*	*17.67*	-	*15.80*	*16.67*
			High	*14.55*	*15.55*	*16.57*	*17.69*	*16.75*	-	-
UNII 4 (EIRP)	5855	171	Low	12.69	13.69	14.65	15.76	14.77	-	-
			Mid	12.84	13.85	14.81	15.79	-	13.92	14.79
			High	12.67	13.67	14.69	15.81	14.87	-	-

Note : EIRP = Conducted Power(Sum) + Ant Gain(Directional Gain)

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

(UNII 4) : EIRP 30.0 dBm/MHz

(UNII 3&4) : Worst limit 30.00 dBm ➔UNII 4 Band Antenna Gain Negative

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	8.584	7.344	5.958	-	-
			Mid	7.680	7.276	-	5.675	4.682
			High	8.702	7.245	6.144	-	-
	5200	40	Low	9.248	7.173	6.071	-	-
			Mid	8.230	7.365	-	5.706	4.746
			High	9.222	7.229	6.281	-	-
	5240	48	Low	9.247	7.329	6.132	-	-
			Mid	8.307	7.417	-	5.871	4.888
			High	9.384	7.277	6.104	-	-
UNII 2A	5260	52	Low	10.262	8.677	9.031	-	-
			Mid	9.227	8.546	-	6.139	7.121
			High	10.195	8.435	9.125	-	-
	5280	56	Low	10.374	8.835	9.316	-	-
			Mid	9.442	9.020	-	6.211	7.157
			High	10.268	8.791	9.137	-	-
	5320	64	Low	10.290	8.881	9.225	-	-
			Mid	9.244	8.752	-	6.293	7.246
			High	10.065	8.785	9.300	-	-
UNII 2C	5500	100	Low	9.995	8.531	9.013	-	-
			Mid	9.042	8.464	-	6.134	6.999
			High	9.904	8.520	9.036	-	-
	5600	120	Low	10.028	8.446	8.663	-	-
			Mid	8.959	8.510	-	6.140	6.564
			High	9.859	8.512	8.576	-	-
	5720	144	Low	10.180	8.755	8.957	-	-
			Mid	9.204	8.860	-	5.878	6.636
			High	10.125	8.781	9.024	-	-

HE20	Frequency [MHz]	Channel No.	RU Index	Total Sum PSD (dBm)				
				26 T	52 T	106 T	242 T	SU
UNII 3	5745	149	Low	7.426	5.969	6.131	-	-
			Mid	7.289	6.020	-	2.976	3.874
			High	7.521	6.060	6.169	-	-
	5785	157	Low	7.059	5.611	5.573	-	-
			Mid	6.678	5.556	-	2.589	3.520
			High	6.793	5.391	5.580	-	-
	5825	165	Low	7.105	5.628	5.703	-	-
			Mid	7.019	5.671	-	2.661	3.634
			High	7.007	5.544	5.777	-	-
UNII 4 Conducted	5845	169	Low	**# Check the Straddle PSD Result spanning U-NII3&4**				
			Mid					
			High					
	5865	173	Low	11.32	9.62	7.80	-	-
			Mid	10.48	9.63	-	5.35	5.97
			High	11.45	9.79	7.88	-	-
	5885	177	Low	11.49	9.90	8.06	-	-
			Mid	10.80	9.98	-	5.40	6.06
			High	11.66	9.92	8.13	-	-
UNII 4 PSD EIRP	5845	169	Low	**# Check the Straddle PSD Result spanning U-NII3&4**				
			Mid					
			High					
	5865	173	Low	9.439	7.743	5.919	-	-
			Mid	8.605	7.750	-	3.465	4.089
			High	9.574	7.914	6.002	-	-
	5885	177	Low	9.613	8.024	6.183	-	-
			Mid	8.921	8.104	-	3.515	4.177
			High	9.779	8.039	6.253	-	-

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

Limit(UNII 3) : 30.0 dBm/500 kHz

Limit(UNII 4) : (EIRP) 14 dBm/MHz

Note:

See also Straddle PSD result for channels 169/167/171 spanning U-NII 3&4.

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	8.529	8.886	9.160	5.829	-	-
			Mid	9.245	9.378	9.385	-	2.077	3.210
			High	8.864	9.086	9.420	5.978	-	-
	5230	46	Low	8.799	9.014	9.243	6.708	-	-
			Mid	9.328	9.484	9.478	-	3.265	3.293
			High	9.083	9.169	9.279	6.700	-	-
UNII 2A	5270	54	Low	9.456	8.941	9.188	6.665	-	-
			Mid	9.805	9.307	9.321	-	3.189	3.744
			High	9.482	8.959	9.113	6.576	-	-
	5310	62	Low	10.102	9.073	9.376	6.806	-	-
			Mid	10.394	9.272	9.572	-	3.379	3.913
			High	9.719	8.999	9.234	6.852	-	-
UNII 2C	5510	102	Low	10.007	8.885	7.141	3.765	-	-
			Mid	10.446	9.220	7.347	-	1.110	3.197
			High	10.050	8.944	7.206	3.837	-	-
	5590	118	Low	9.952	8.758	8.966	6.550	-	-
			Mid	10.326	9.193	9.057	-	2.669	3.577
			High	10.008	8.796	8.918	6.423	-	-
	5710	142	Low	10.219	9.241	9.469	6.367	-	-
			Mid	10.654	9.715	9.561	-	3.188	3.475
			High	10.423	9.379	9.531	6.445	-	-
UNII 3	5755	151	Low	7.645	6.365	6.502	3.305	-	-
			Mid	8.294	6.759	6.612	-	0.128	0.388
			High	7.699	6.381	6.397	3.452	-	-
	5795	159	Low	6.970	5.622	5.918	2.953	-	-
			Mid	7.368	5.978	5.935	-	-0.267	-0.045
			High	7.117	5.581	5.791	3.087	-	-
UNII 4 Conducted	5835	167	Low	**# Check the Straddle PSD Result spanning U-NII3&4**					
			Mid						
			High						
	5875	175	Low	11.16	9.95	8.16	5.89	-	-
			Mid	11.70	10.39	8.39	-	2.03	3.07
			High	11.85	10.17	8.23	5.87	-	-

UNII 4 PSD EIRP	5835	167	Low	# Check the Straddle PSD Result spanning U-NII3&4					
			Mid						
			High						
	5875	175	Low	9.280	8.075	6.281	4.008	-	-
			Mid	9.815	8.511	6.510	-	0.152	1.191
			High	9.970	8.288	6.354	3.988	-	-

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

Limit(UNII 3) : 30.0 dBm/500 kHz

Limit(UNII 4) : (EIRP) 14 dBm/MHz

Note:

See also Straddle PSD result for channels 169/167/171 spanning U-NII 3&4.

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	9.384	8.609	8.656	5.974	2.045	-	-
			Mid	8.610	9.369	9.189	6.157	-	-1.252	-0.959
			High	9.821	9.138	9.008	6.089	2.158	-	-
UNII 2A	5290	58	Low	10.362	9.154	8.396	4.979	3.217	-	-
			Mid	9.474	9.503	8.552	4.961	-	-1.376	0.075
			High	10.324	9.071	8.270	4.937	3.071	-	-
UNII 2C	5530	106	Low	10.067	8.662	7.315	3.900	0.900	-	-
			Mid	9.312	8.886	7.374	4.062	-	-2.048	-0.155
			High	9.855	8.482	6.997	3.679	0.835	-	-
	5610	122	Low	10.293	8.702	8.689	6.250	2.434	-	-
			Mid	9.115	8.994	8.937	6.381	-	-1.518	-0.425
			High	9.822	8.685	8.648	6.205	2.568	-	-
	5690	138	Low	9.969	8.799	8.940	5.717	2.698	-	-
			Mid	9.320	9.299	9.251	5.815	-	-1.071	-0.230
			High	10.268	9.005	8.931	5.866	2.901	-	-
UNII 3	5775	155	Low	7.024	5.910	5.612	2.556	-0.534	-	-
			Mid	6.906	6.150	5.748	2.612	-	-4.397	-3.615
			High	7.003	5.896	5.473	2.351	-0.708	-	-
UNII 4 Conducted & PSD EIRP	5855	171	Low	**# Check the Straddle PSD Result spanning U-NII3&4**						
			Mid							
			High							

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

Limit(UNII 3) : 30.0 dBm/500 kHz

Limit(UNII 4) : (EIRP) 14 dBm/MHz

Note:

See also Straddle PSD result for channels 169/167/171 spanning U-NII 3&4.

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	16.32	4.48
				4	14.32	4.48
				7	14.32	4.36
				8	14.32	6.00
			52 T	37	16.24	4.60
				38	14.64	4.76
				39	14.48	4.52
				40	14.56	6.00
			106 T	53	16.32	4.88
				54	14.76	6.04
			242 T	61	16.08	6.32
			SU	-	16.00	6.28

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	34.20	4.12
				16	34.28	4.76
				17	34.36	5.96
			52 T	# 37	-	-
				41	34.36	4.12
				43	34.36	4.12
				44	34.60	6.28
			106 T	# 53	-	-
				# 54	-	-
				55	34.60	4.36
				56	34.20	6.36
			242 T	# 61	-	-
				62	34.36	6.60
			484 T	65	37.16	6.60
			SU	-	37.24	6.44

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	74.20	5.80
				36	74.20	7.40
			52 T	# 37	-	-
				# 45	-	-
				51	74.36	4.68
				52	74.52	7.72
			106 T	# 53	-	-
				# 57	-	-
				59	74.36	4.84
				60	74.52	7.56
			242 T	# 61	-	-
				# 62	-	-
				63	75.00	5.48
				64	75.32	8.68
			484 T	# 65	-	-
				66	75.80	9.48
			996 T	67	78.68	9.48
			SU	-	78.68	10.12

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	16.04	4.28
				4	14.20	4.24
				7	14.16	4.28
				8	14.08	5.76
			52 T	37	15.64	4.24
				38	14.28	4.36
				39	14.28	4.40
				40	14.28	5.80
			106 T	53	16.08	4.40
				54	14.44	6.00
			242 T	61	16.04	6.16
			SU	-	16.04	6.16

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	34.12	4.04
				16	34.12	4.28
				17	34.12	6.12
			52 T	# 37	-	-
				41	34.28	4.12
				43	34.20	4.04
				44	34.28	6.68
			106 T	# 53	-	-
				# 54	-	-
				55	34.44	4.60
				56	34.36	6.84
			242 T	# 61	-	-
				62	35.00	6.44
			484 T	65	38.36	9.32
			SU	-	38.36	9.16

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	74.20	5.80
				36	74.20	7.56
			52 T	# 37	-	-
				# 45	-	-
				51	74.36	4.20
				52	74.36	7.72
			106 T	# 53	-	-
				# 57	-	-
				59	74.52	4.36
				60	74.68	8.68
			242 T	# 61	-	-
				# 62	-	-
				63	74.84	4.52
				64	75.00	8.84
			484 T	# 65	-	-
				66	76.28	8.84
			996 T	67	77.72	8.52
			SU	-	78.36	8.04

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	2.52
				8	4.56
			52 T	# 37	-
				# 38	-
				39	2.56
				40	4.52
			106 T	# 53	-
				54	4.56
			242 T	61	4.52
			SU	-	4.52

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB BW (MHz)
					UNII 3
HE40	5710	142	26 T	# 0	-
				# 9	-
				16	2.12
				17	4.12
			52 T	# 37	-
				# 41	-
				# 43	-0.12
				44	4.12
			106 T	# 53	-
				# 54	-
				# 55	2.60
				56	4.04
			242 T	# 61	-
				62	4.20
			484 T	65	4.12
			SU	-	4.12

802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB BW (MHz)
					UNII 3
HE80	5690	138	26 T	# 0	-
				# 18	-
				35	2.12
				36	4.20
			52 T	# 37	-
				# 45	-
				# 51	0.04
				52	4.20
			106 T	# 53	-
				# 57	-
				# 59	-6.36
				60	4.20
			242 T	# 61	-
				# 62	-
				# 63	2.60
				64	4.20
			484 T	# 65	-
				66	4.20
			996 T	67	4.20
			SU	-	4.20

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	2.52
				8	4.56
			52 T	# 37	-
				# 38	-
				39	2.52
				40	4.52
			106 T	# 53	-
				54	4.60
			242 T	61	4.56
			SU	-	4.56

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB BW (MHz)
					UNII 3
HE40	5710	142	26 T	# 0	-
				# 9	-
				16	2.12
				17	4.12
			52 T	# 37	-
				# 41	-
				# 43	-0.12
				44	4.04
			106 T	# 53	-
				# 54	-
				# 55	2.60
				56	4.04
			242 T	# 61	-
				62	4.12
			484 T	65	4.12
			SU	-	4.12

802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	6 dB BW (MHz)
					UNII 3
HE80	5690	138	26 T	# 0	-
				# 18	-
				35	2.12
				36	4.20
			52 T	# 37	-
				# 45	-
				# 51	0.04
				52	4.20
			106 T	# 53	-
				# 57	-
				# 59	-6.20
				60	4.20
			242 T	# 61	-
				# 62	-
				# 63	2.60
				64	4.20
			484 T	# 65	-
				66	4.20
			996 T	67	4.20
			SU	-	4.20

10.6.3 Output Power

Test Note:

1. # : 26 dB bandwidth is only located in UNII 2C. Therefore 26 dB bandwidth do not overlap.
2. Limit(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
3. Limit(UNII 4) : EIRP 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	10.13	-15.10
				4	10.21	-15.24
				7	-4.87	10.25
				8	-9.19	10.21
			52 T	37	11.05	-14.15
				38	11.16	-14.12
				39	10.78	1.18
				40	-5.46	11.11
			106 T	53	13.65	-12.16
				54	10.31	11.06
			242 T	61	13.17	8.19
			SU	-	14.15	9.15

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	Total Power (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	10.28	-18.83
				16	0.57	9.71
				17	-8.29	9.96
			52 T	# 37	-	-
				41	11.96	-17.01
				43	11.79	-4.64
				44	-0.04	11.63
			106 T	# 53	-	-
				# 54	-	-
				55	14.30	-14.58
				56	11.40	10.91
			242 T	# 61	-	-
				62	13.91	8.06
			484 T	65	13.72	4.41
			SU	-	14.39	5.08

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	1.31	10.58
				36	-8.16	10.95
			52 T	# 37	-	-
				# 45	-	-
				51	11.24	-4.81
				52	-0.68	11.49
			106 T	# 53	-	-
				# 57	-	-
				59	13.84	-17.24
				60	10.92	11.02
			242 T	# 61	-	-
				# 62	-	-
				63	14.60	-16.96
				64	13.51	8.15
			484 T	# 65	-	-
				66	13.43	4.49
			996 T	67	13.60	1.55
			SU	-	13.44	1.42

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	9.01	-16.03
				4	9.08	-15.76
				7	-6.05	9.07
				8	-9.95	8.97
			52 T	37	10.30	-14.49
				38	10.35	-14.66
				39	9.97	0.34
				40	-6.48	10.27
			106 T	53	14.22	-11.28
				54	10.84	11.60
			242 T	61	12.94	7.95
			SU	-	13.58	8.58

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	9.87	-18.75
				16	0.29	9.26
				17	-9.30	9.54
			52 T	# 37	-	-
				41	11.46	-17.17
				43	11.28	-5.05
				44	-0.59	10.96
			106 T	# 53	-	-
				# 54	-	-
				55	14.94	-13.38
				56	12.02	11.52
			242 T	# 61	-	-
				62	13.74	7.87
			484 T	65	14.43	5.08
			SU	-	14.18	4.86

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	-0.01	9.32
				36	-9.37	9.73
			52 T	# 37	-	-
				# 45	-	-
				51	10.70	-5.25
				52	-1.01	10.97
			106 T	# 53	-	-
				# 57	-	-
				59	13.91	-16.32
				60	11.02	10.97
			242 T	# 61	-	-
				# 62	-	-
				63	14.31	-17.02
				64	13.12	7.83
			484 T	# 65	-	-
				66	13.90	4.94
			996 T	67	12.76	0.39
			SU	-	14.29	1.90

UNII-4 EIRP MIMO

U-NII 3~4 (Ch.169 /167 /171)

Note:

- EIRP = Conducted Power + Antenna Gain
- Antenna gain negative, final result Pass

BW	Frequency [MHz]	Channel No.	Tone	RU Index	ANT1+ANT2 Power (dBm)	ANT1+ANT2 Power (dBm)	Total Sum Power (dBm)	EIRP limit (dBm)
					UNII 3	UNII 4		UNII 4
HE20	5845	169	26 T	0	13.99	-11.69	14.00	EIRP 30 dBm
				4	13.94	-11.87	13.95	
				7	-1.10	13.75	13.89	
				8	-5.59	13.69	13.74	
			52 T	37	14.84	-10.81	14.85	
				38	14.94	-11.53	14.95	
				39	14.46	4.69	14.90	
				40	-1.93	14.61	14.70	
			106 T	53	15.93	-8.99	15.95	
				54	12.48	13.09	15.81	
			242 T	61	15.75	10.63	16.91	
			SU	-	16.23	11.11	17.39	
HE40	5835	167	26 T	0	14.49	-15.28	14.49	EIRP 30 dBm
				9	14.63	-14.97	14.63	
				16	4.72	13.76	14.27	
				17	-4.27	14.08	14.14	
			52 T	37	15.63	-12.53	15.64	
				41	15.75	-13.17	15.76	
				43	15.44	-0.98	15.54	
				44	3.43	15.04	15.33	
			106 T	53	16.15	-13.53	16.16	
				54	16.30	-13.45	16.31	
				55	16.18	-13.73	16.19	
				56	13.17	12.48	15.85	
			242 T	61	17.11	-12.25	17.12	
				62	15.90	9.88	16.87	
			484 T	65	15.75	6.07	16.20	
			SU	-	16.58	6.93	17.03	

BW	Frequency [MHz]	Channel No.	Tone	RU Index	ANT1+ANT2 Power (dBm)	ANT1+ANT2 Power (dBm)	Total Sum Power (dBm)	EIRP limit (dBm)
					UNII 3	UNII 4		UNII 4
HE80	5855	171	26 T	0	14.70	-6.27	14.74	EIRP 30 dBm
				18	-6.41	14.70	14.73	
				35	-8.42	14.74	14.76	
				36	-7.20	14.60	14.63	
			52 T	37	15.74	-6.08	15.77	
				45	-5.58	15.72	15.75	
				51	-7.60	15.76	15.78	
				52	-5.97	15.60	15.63	
			106 T	53	16.67	-3.97	16.70	
				57	-5.97	16.61	16.64	
				59	-5.26	16.73	16.76	
				60	-6.37	16.55	16.57	
			242 T	61	17.69	-6.01	17.71	
				62	16.69	10.53	17.64	
				63	-6.82	17.66	17.67	
				64	-7.43	17.63	17.65	
			484 T	65	16.20	6.73	16.67	
				66	-4.77	16.66	16.70	
			996 T	67	12.20	13.25	15.77	
			SU	-	13.12	14.18	16.69	

10.6.4 Power Spectral Density

Test Note:

1. Limit(UNII 3) : 30.0 dBm/500 kHz
2. Limit(UNII 4) : PSD EIRP 14.0 dBm/MHz

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	7.541	-18.715
				4	6.429	-18.428
				7	-1.190	5.019
				8	-14.316	4.793
			52 T	37	5.553	-16.213
				38	5.829	-18.523
				39	5.761	2.010
				40	-3.118	2.853
			106 T	53	5.182	-16.442
				54	5.243	2.351
			242 T	61	2.561	0.185
			SU	-	3.401	0.261

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	7.551	-23.141
				16	4.020	4.608
				17	-18.180	4.389
			52 T	# 37	-	-
				41	6.404	-20.160
				43	6.344	-7.995
				44	3.102	3.373
			106 T	# 53	-	-
				# 54	-	-
				55	5.671	-17.773
				56	5.493	2.730
			242 T	# 61	-	-
				62	2.995	-0.218
			484 T	65	-0.585	-3.984
			SU	-	-0.125	-3.432

802.11ax(HE80)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE80	5690	138	26 T	# 0	-	-
				# 18	-	-
				35	3.820	5.196
				36	-19.737	5.025
			52 T	# 37	-	-
				# 45	-	-
				51	5.694	-9.441
				52	1.537	2.708
			106 T	# 53	-	-
				# 57	-	-
				59	5.098	-23.478
				60	5.064	2.081
			242 T	# 61	-	-
				# 62	-	-
				63	2.487	-42.638
				64	2.260	-0.718
			484 T	# 65	-	-
				66	-1.166	-4.322
			996 T	67	-4.010	-7.245
			SU	-	-4.328	-7.325

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	6.349	-18.908
				4	5.361	-18.150
				7	-2.558	3.772
				8	-16.281	3.536
			52 T	37	4.707	-17.615
				38	5.070	-18.239
				39	5.015	1.336
				40	-4.293	2.200
			106 T	53	5.661	-12.675
				54	5.844	2.821
			242 T	61	2.143	-0.520
			SU	-	2.812	-0.129

802.11ax(HE40)

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	
					UNII 2C	UNII 3
HE40	5710	142	26 T	# 0	-	-
				9	7.173	-25.293
				16	3.671	3.964
				17	-18.827	4.139
			52 T	# 37	-	-
				41	5.964	-21.175
				43	6.031	-7.672
				44	2.389	2.859
			106 T	# 53	-	-
				# 54	-	-
				55	6.313	-19.250
				56	6.370	3.000
			242 T	# 61	-	-
				62	2.750	-0.413
			484 T	65	0.040	-3.285
			SU	-	-0.188	-3.553

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	2.471	3.738
				36	-19.633	3.598
			52 T	# 37	-	-
				# 45	-	-
				51	5.250	-10.112
				52	1.029	2.315
			106 T	# 53	-	-
				# 57	-	-
				59	5.314	-21.807
				60	5.086	2.158
			242 T	# 61	-	-
				# 62	-	-
				63	2.362	-41.403
				64	2.067	-0.855
			484 T	# 65	-	-
				66	-0.731	-3.966
			996 T	67	-4.971	-8.513
			SU	-	-3.277	-6.999

UNII-4 EIRP MIMO

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	EIRP PSD (dBm)	PSD limit (dBm)	EIRP PSD limit (dBm)
					UNII 3	UNII 4	UNII 3	UNII 4
HE20	5845	169	26 T	0	8.96	-	30 dBm/500kHz	14 dBm/1MHz
				4	8.34	-		
				7	-8.12	10.01		
				8	-	9.96		
			52 T	37	6.76	-		
				38	6.82	-		
				39	6.68	6.18		
				40	-10.45	8.00		
			106 T	53	4.92	-		
				54	4.76	5.93		
			242 T	61	2.40	3.45		
			SU	-	3.03	3.90		
HE40	5835	167	26 T	0	9.09	-	30 dBm/500kHz	14 dBm/1MHz
				9	9.34	-		
				16	5.49	10.12		
				17	-	10.22		
			52 T	37	7.53	-		
				41	7.74	-		
				43	7.40	1.60		
				44	3.69	8.41		
			106 T	53	5.08	-		
				54	5.12	-		
				55	5.04	-		
				56	4.83	5.71		
			242 T	61	2.42	-		
				62	2.36	3.15		
			484 T	65	-1.27	-0.63		
			SU	-	-0.34	-0.05		
HE80	5855	171	26 T	0	9.41	-	30 dBm/500kHz	14 dBm/1MHz
				18	-	9.05		
				35	-	10.54		
				36	-	10.47		
			52 T	37	7.35	-		

BW	Frequency [MHz]	Channel No.	Tone	RU Index	PSD (dBm)	EIRP PSD (dBm)	PSD limit (dBm)	EIRP PSD limit (dBm)
					UNII 3	UNII 4	UNII 3	UNII 4
				45	-	8.76		
				51	-	8.71		
				52	-	8.81		
			106 T	53	5.58	-		
				57	-	6.62		
				59	-	6.62		
				60	-	6.48		
			242 T	61	3.13	-		
				62	3.00	3.97		
				63	-	4.26		
				64	-	3.97		
			484 T	65	-0.99	-0.16		
				66	-	-0.09		
			996 T	67	-3.41	-3.96		
			SU	-	-2.45	-3.14		

10.7 RADIATED SPURIOUS EMISSIONS (9 kHz – 1 GHz)

Frequency Range : 9 kHz – 30 MHz

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

Note:

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

Frequency Range : Below 1 GHz

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

Note:

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

10.8 RADIATED SPURIOUS EMISSIONS (Above 1 GHz)

10.8.1 802.11ax(HE20)

1) 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 Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10360	56.75	8.05	V	64.80	68.20	3.40	PK
15540	40.26	12.94	V	53.20	73.98	20.78	PK
15540	26.75	12.94	V	39.69	53.98	14.29	AV
10360	54.98	8.05	H	63.03	68.20	5.17	PK
15540	40.42	12.94	H	53.36	73.98	20.62	PK
15540	26.80	12.94	H	39.74	53.98	14.24	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10400	54.44	8.21	V	62.65	68.20	5.55	PK
15600	39.32	13.31	V	52.63	73.98	21.35	PK
15600	26.27	13.31	V	39.58	53.98	14.40	AV
10400	55.24	8.21	H	63.45	68.20	4.75	PK
15600	39.50	13.31	H	52.81	73.98	21.17	PK
15600	26.41	13.31	H	39.72	53.98	14.26	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10480	56.01	8.55	V	64.56	68.20	3.64	PK
15720	39.50	13.22	V	52.72	73.98	21.26	PK
15720	26.08	13.22	V	39.30	53.98	14.68	AV
10480	54.02	8.55	H	62.57	68.20	5.63	PK
15720	39.82	13.22	H	53.04	73.98	20.94	PK
15720	26.11	13.22	H	39.33	53.98	14.65	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10520	55.73	8.95	V	64.68	68.20	3.52	PK
15780	40.22	13.89	V	54.11	73.98	19.87	PK
15780	26.86	13.89	V	40.75	53.98	13.23	AV
10520	52.88	8.95	H	61.83	68.20	6.37	PK
15780	39.79	13.89	H	53.68	73.98	20.30	PK
15780	27.00	13.89	H	40.89	53.98	13.09	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10600	53.11	9.57	V	62.68	73.98	11.30	PK
10600	38.59	9.57	V	48.16	53.98	5.82	AV
15900	41.33	13.31	V	54.64	73.98	19.34	PK
15900	27.52	13.31	V	40.83	53.98	13.15	AV
10600	50.72	9.57	H	60.29	73.98	13.69	PK
10600	35.96	9.57	H	45.53	53.98	8.45	AV
15900	40.81	13.31	H	54.12	73.98	19.86	PK
15900	27.59	13.31	H	40.90	53.98	13.08	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10640	52.43	9.71	V	62.14	73.98	11.84	PK
10640	38.48	9.71	V	48.19	53.98	5.79	AV
15960	41.12	12.93	V	54.05	73.98	19.93	PK
15960	27.37	12.93	V	40.30	53.98	13.68	AV
10640	49.35	9.71	H	59.06	73.98	14.92	PK
10640	35.07	9.71	H	44.78	53.98	9.20	AV
15960	40.22	12.93	H	53.15	73.98	20.83	PK
15960	27.17	12.93	H	40.10	53.98	13.88	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11000	44.60	9.69	V	54.29	73.98	19.69	PK
11000	31.17	9.69	V	40.86	53.98	13.12	AV
16500	41.60	12.08	V	53.68	68.20	14.52	PK
11000	43.31	9.69	H	53.00	73.98	20.98	PK
11000	30.10	9.69	H	39.79	53.98	14.19	AV
16500	41.20	12.08	H	53.28	68.20	14.92	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11200	42.74	10.27	V	53.01	73.98	20.97	PK
11200	29.80	10.27	V	40.07	53.98	13.91	AV
16800	40.85	11.78	V	52.63	68.20	15.57	PK
11200	42.73	10.27	H	53.00	73.98	20.98	PK
11200	29.08	10.27	H	39.35	53.98	14.63	AV
16800	41.10	11.78	H	52.88	68.20	15.32	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11440	41.44	10.57	V	52.01	73.98	21.97	PK
11440	28.48	10.57	V	39.05	53.98	14.93	AV
17160	40.43	12.01	V	52.44	68.20	15.76	PK
11440	42.39	10.57	H	52.96	73.98	21.02	PK
11440	29.44	10.57	H	40.01	53.98	13.97	AV
17160	40.54	12.01	H	52.55	68.20	15.65	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11490	42.13	10.49	V	52.62	73.98	21.36	PK
11490	28.96	10.49	V	39.45	53.98	14.53	AV
17235	40.18	12.22	V	52.40	68.20	15.80	PK
11490	42.62	10.49	H	53.11	73.98	20.87	PK
11490	29.17	10.49	H	39.66	53.98	14.32	AV
17235	40.69	12.22	H	52.91	68.20	15.29	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11570	41.74	9.92	V	51.66	73.98	22.32	PK
11570	29.05	9.92	V	38.97	53.98	15.01	AV
17355	40.55	13.11	V	53.66	68.20	14.54	PK
11570	42.55	9.92	H	52.47	73.98	21.51	PK
11570	29.17	9.92	H	39.09	53.98	14.89	AV
17355	40.69	13.11	H	53.80	68.20	14.40	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11650	42.17	9.60	V	51.77	73.98	22.21	PK
11650	29.17	9.60	V	38.77	53.98	15.21	AV
17475	40.58	14.27	V	54.85	68.20	13.35	PK
11650	42.70	9.60	H	52.30	73.98	21.68	PK
11650	29.64	9.60	H	39.24	53.98	14.74	AV
17475	39.80	14.27	H	54.07	68.20	14.13	PK

2) 106 Tone RU 54_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10360	55.44	8.05	V	63.49	68.20	4.71	PK
15540	40.08	12.94	V	53.02	73.98	20.96	PK
15540	26.66	12.94	V	39.60	53.98	14.38	AV
10360	55.46	8.05	H	63.51	68.20	4.69	PK
15540	40.22	12.94	H	53.16	73.98	20.82	PK
15540	26.87	12.94	H	39.81	53.98	14.17	AV

3) 54 Tone RU 40_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10400	55.06	8.21	V	63.27	68.20	4.93	PK
15600	39.64	13.31	V	52.95	73.98	21.03	PK
15600	26.29	13.31	V	39.60	53.98	14.38	AV
10400	53.86	8.21	H	62.07	68.20	6.13	PK
15600	40.43	13.31	H	53.74	73.98	20.24	PK
15600	26.41	13.31	H	39.72	53.98	14.26	AV

4) 26 Tone RU 8_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10400	**56.74**	**8.21**	**V**	**64.95**	**68.20**	**3.25**	**PK**
15600	39.64	13.31	V	52.95	73.98	21.03	PK
15600	26.27	13.31	V	39.58	53.98	14.40	AV
10400	52.74	8.21	H	60.95	68.20	7.25	PK
15600	39.74	13.31	H	53.05	73.98	20.93	PK
15600	26.59	13.31	H	39.90	53.98	14.08	AV

10.8.2 802.11ax(HE40)

1) 464 Tone RU 65_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10380	53.40	8.19	V	61.59	68.20	6.61	PK
15570	39.52	13.31	V	52.83	73.98	21.15	PK
15570	26.46	13.31	V	39.77	53.98	14.21	AV
10380	51.50	8.19	H	59.69	68.20	8.51	PK
15570	40.22	13.31	H	53.53	73.98	20.45	PK
15570	26.62	13.31	H	39.93	53.98	14.05	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10460	53.02	8.47	V	61.49	68.20	6.71	PK
15690	39.77	13.28	V	53.05	73.98	20.93	PK
15690	26.10	13.28	V	39.38	53.98	14.60	AV
10460	50.55	8.47	H	59.02	68.20	9.18	PK
15690	40.34	13.28	H	53.62	73.98	20.36	PK
15690	26.23	13.28	H	39.51	53.98	14.47	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10540	50.13	8.96	V	59.09	68.20	9.11	PK
15810	40.43	13.42	V	53.85	73.98	20.13	PK
15810	27.16	13.42	V	40.58	53.98	13.40	AV
10540	47.91	8.96	H	56.87	68.20	11.33	PK
15810	41.15	13.42	H	54.57	73.98	19.41	PK
15810	27.32	13.42	H	40.74	53.98	13.24	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10620	48.89	9.64	V	58.53	73.98	15.45	PK
10620	35.35	9.64	V	44.99	53.98	8.99	AV
15930	40.74	12.85	V	53.59	73.98	20.39	PK
15930	27.26	12.85	V	40.11	53.98	13.87	AV
10620	46.52	9.64	H	56.16	73.98	17.82	PK
10620	32.93	9.64	H	42.57	53.98	11.41	AV
15930	40.75	12.85	H	53.60	73.98	20.38	PK
15930	27.11	12.85	H	39.96	53.98	14.02	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11020	43.22	9.60	V	52.82	73.98	21.16	PK
11020	30.02	9.60	V	39.62	53.98	14.36	AV
16530	41.41	12.02	V	53.43	68.20	14.77	PK
11020	42.46	9.60	H	52.06	73.98	21.92	PK
11020	29.23	9.60	H	38.83	53.98	15.15	AV
16530	41.93	12.02	H	53.95	68.20	14.25	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11180	41.69	10.18	V	51.87	73.98	22.11	PK
11180	28.63	10.18	V	38.81	53.98	15.17	AV
16770	40.96	11.62	V	52.58	68.20	15.62	PK
11180	41.73	10.18	H	51.91	73.98	22.07	PK
11180	28.58	10.18	H	38.76	53.98	15.22	AV
16770	41.50	11.62	H	53.12	68.20	15.08	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11420	41.46	10.53	V	51.99	73.98	21.99	PK
11420	27.98	10.53	V	38.51	53.98	15.47	AV
17130	40.54	11.60	V	52.14	68.20	16.06	PK
11420	41.96	10.53	H	52.49	73.98	21.49	PK
11420	28.71	10.53	H	39.24	53.98	14.74	AV
17130	40.71	11.60	H	52.31	68.20	15.89	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11510	42.66	10.34	V	53.00	73.98	20.98	PK
11510	28.91	10.34	V	39.25	53.98	14.73	AV
17265	40.53	12.43	V	52.96	68.20	15.24	PK
11510	42.82	10.34	H	53.16	73.98	20.82	PK
11510	29.16	10.34	H	39.50	53.98	14.48	AV
17265	40.64	12.43	H	53.07	68.20	15.13	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11590	41.79	9.75	V	51.54	73.98	22.44	PK
11590	28.68	9.75	V	38.43	53.98	15.55	AV
17385	40.59	13.20	V	53.79	68.20	14.41	PK
11590	41.72	9.75	H	51.47	73.98	22.51	PK
11590	28.53	9.75	H	38.28	53.98	15.70	AV
17385	40.06	13.20	H	53.26	68.20	14.94	PK

2) 242 Tone RU 62_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10380	56.62	8.19	V	64.81	68.20	3.39	PK
15570	39.39	13.31	V	52.70	73.98	21.28	PK
15570	26.51	13.31	V	39.82	53.98	14.16	AV
10380	54.67	8.19	H	62.86	68.20	5.34	PK
15570	40.00	13.31	H	53.31	73.98	20.67	PK
15570	26.60	13.31	H	39.91	53.98	14.07	AV

3) 106 Tone RU 56_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10380	53.21	8.19	V	61.40	68.20	6.80	PK
15570	39.46	13.31	V	52.77	73.98	21.21	PK
15570	26.38	13.31	V	39.69	53.98	14.29	AV
10380	52.71	8.19	H	60.90	68.20	7.30	PK
15570	39.89	13.31	H	53.20	73.98	20.78	PK
15570	26.60	13.31	H	39.91	53.98	14.07	AV

4) 52 Tone RU 44_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10380	49.41	8.19	V	57.60	68.20	10.60	PK
15570	39.36	13.31	V	52.67	73.98	21.31	PK
15570	26.50	13.31	V	39.81	53.98	14.17	AV
10380	47.37	8.19	H	55.56	68.20	12.64	PK
15570	41.19	13.31	H	54.50	73.98	19.48	PK
15570	26.53	13.31	H	39.84	53.98	14.14	AV

5) 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 Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10380	51.46	8.19	V	59.65	68.20	8.55	PK
15570	39.38	13.31	V	52.69	73.98	21.29	PK
15570	27.25	13.31	V	40.56	53.98	13.42	AV
10380	47.00	8.19	H	55.19	68.20	13.01	PK
15570	39.90	13.31	H	53.21	73.98	20.77	PK
15570	27.15	13.31	H	40.46	53.98	13.52	AV

6) 26 Tone RU 17_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10380	48.28	8.19	V	56.47	68.20	11.73	PK
15570	39.47	13.31	V	52.78	73.98	21.20	PK
15570	26.53	13.31	V	39.84	53.98	14.14	AV
10380	47.85	8.19	H	56.04	68.20	12.16	PK
15570	40.26	13.31	H	53.57	73.98	20.41	PK
15570	26.48	13.31	H	39.79	53.98	14.19	AV

10.8.3 802.11ax(HE80)

1) 996 Tone RU 67_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10420	49.01	8.31	V	57.32	68.20	10.88	PK
15630	39.23	13.20	V	52.43	73.98	21.55	PK
15630	26.02	13.20	V	39.22	53.98	14.76	AV
10420	46.49	8.31	H	54.80	68.20	13.40	PK
15630	40.70	13.20	H	53.90	73.98	20.08	PK
15630	26.22	13.20	H	39.42	53.98	14.56	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10580	47.03	9.39	V	56.42	68.20	11.78	PK
15870	40.64	13.57	V	54.21	73.98	19.77	PK
15870	27.58	13.57	V	41.15	53.98	12.83	AV
10580	44.67	9.39	H	54.06	68.20	14.14	PK
15870	40.96	13.57	H	54.53	73.98	19.45	PK
15870	27.52	13.57	H	41.09	53.98	12.89	AV

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11060	42.25	9.89	V	52.14	73.98	21.84	PK
11060	28.96	9.89	V	38.85	53.98	15.13	AV
16590	41.54	11.76	V	53.30	68.20	14.90	PK
11060	41.86	9.89	H	51.75	73.98	22.23	PK
11060	28.92	9.89	H	38.81	53.98	15.17	AV
16590	40.66	11.76	H	52.42	68.20	15.78	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11220	42.24	10.21	V	52.45	73.98	21.53	PK
11220	29.04	10.21	V	39.25	53.98	14.73	AV
16830	41.02	11.80	V	52.82	68.20	15.38	PK
11220	42.07	10.21	H	52.28	73.98	21.70	PK
11220	28.83	10.21	H	39.04	53.98	14.94	AV
16830	40.99	11.80	H	52.79	68.20	15.41	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11380	41.36	10.42	V	51.78	73.98	22.20	PK
11380	28.46	10.42	V	38.88	53.98	15.10	AV
17070	40.78	11.74	V	52.52	68.20	15.68	PK
11380	42.13	10.42	H	52.55	73.98	21.43	PK
11380	28.46	10.42	H	38.88	53.98	15.10	AV
17070	40.86	11.74	H	52.60	68.20	15.60	PK

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11550	41.95	9.98	V	51.93	73.98	22.05	PK
11550	28.41	9.98	V	38.39	53.98	15.59	AV
17325	40.05	12.90	V	52.95	68.20	15.25	PK
11550	41.87	9.98	H	51.85	73.98	22.13	PK
11550	28.58	9.98	H	38.56	53.98	15.42	AV
17325	40.91	12.90	H	53.81	68.20	14.39	PK

2) 484 Tone RU 66_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10420	49.63	8.31	V	57.94	68.20	10.26	PK
15630	39.51	13.20	V	52.71	73.98	21.27	PK
15630	26.08	13.20	V	39.28	53.98	14.70	AV
10420	48.98	8.31	H	57.29	68.20	10.91	PK
15630	40.69	13.20	H	53.89	73.98	20.09	PK
15630	26.30	13.20	H	39.50	53.98	14.48	AV

3) 242 Tone RU 64_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10420	50.46	8.31	V	58.77	68.20	9.43	PK
15630	39.44	13.20	V	52.64	73.98	21.34	PK
15630	26.06	13.20	V	39.26	53.98	14.72	AV
10420	48.74	8.31	H	57.05	68.20	11.15	PK
15630	39.56	13.20	H	52.76	73.98	21.22	PK
15630	26.25	13.20	H	39.45	53.98	14.53	AV

4) 106 Tone RU 60_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10420	49.55	8.31	V	57.86	68.20	10.34	PK
15630	39.19	13.20	V	52.39	73.98	21.59	PK
15630	26.09	13.20	V	39.29	53.98	14.69	AV
10420	48.08	8.31	H	56.39	68.20	11.81	PK
15630	39.27	13.20	H	52.47	73.98	21.51	PK
15630	26.31	13.20	H	39.51	53.98	14.47	AV

5) 52 Tone RU 52_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10420	46.02	8.31	V	54.33	68.20	13.87	PK
15630	39.86	13.20	V	53.06	73.98	20.92	PK
15630	26.06	13.20	V	39.26	53.98	14.72	AV
10420	44.13	8.31	H	52.44	68.20	15.76	PK
15630	39.46	13.20	H	52.66	73.98	21.32	PK
15630	26.33	13.20	H	39.53	53.98	14.45	AV

6) 26 Tone RU 36_MIMO

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

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10420	43.44	8.31	V	51.75	68.20	16.45	PK
15630	39.03	13.20	V	52.23	73.98	21.75	PK
15630	26.05	13.20	V	39.25	53.98	14.73	AV
10420	43.92	8.31	H	52.23	68.20	15.97	PK
15630	39.59	13.20	H	52.79	73.98	21.19	PK
15630	26.26	13.20	H	39.46	53.98	14.52	AV

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.

10.9 UNII4 Band

10.9.1 802.11ax(HE20)

Band :	UNII 4
Operation Mode:	802.11ax(HE20)
Transfer MCS Index:	MCS0
Operating Frequency	5845 MHz
Channel No.	169 Ch

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11690	44.92	9.68	V	54.60	73.98	19.38	PK
11690	30.85	9.68	V	40.53	53.98	13.45	AV
17535	40.55	14.59	V	55.14	68.20	13.06	PK
11690	46.13	9.68	H	55.81	73.98	18.17	PK
11690	31.01	9.68	H	40.69	53.98	13.29	AV
17535	40.79	14.59	H	55.38	68.20	12.82	PK

Band :	UNII 4
Operation Mode:	802.11ax(HE20)
Transfer MCS Index:	MCS0
Operating Frequency	5865 MHz
Channel No.	173 Ch

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11730	45.85	9.63	V	55.48	73.98	18.50	PK
11730	31.51	9.63	V	41.14	53.98	12.84	AV
17595	40.16	14.80	V	54.96	68.20	13.24	PK
11730	46.75	9.63	H	56.38	73.98	17.60	PK
11730	31.76	9.63	H	41.39	53.98	12.59	AV
17595	40.62	14.80	H	55.42	68.20	12.78	PK

Band :	UNII 4
Operation Mode:	802.11ax(HE20)
Transfer MCS Index:	MCS0
Operating Frequency	5885 MHz
Channel No.	177 Ch

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11770	45.22	9.47	V	54.69	73.98	19.29	PK
11770	31.19	9.47	V	40.66	53.98	13.32	AV
17655	40.11	15.23	V	55.34	68.20	12.86	PK
11770	46.29	9.47	H	55.76	73.98	18.22	PK
11770	31.58	9.47	H	41.05	53.98	12.93	AV
17655	40.28	15.23	H	55.51	68.20	12.69	PK

10.9.2 802.11ax(HE40)

Band :	UNII 4
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5835 MHz
Channel No.	167 Ch

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11670	46.79	10.34	V	57.13	73.98	16.85	PK
11670	31.55	10.34	V	41.89	53.98	12.09	AV
17505	40.49	12.43	V	52.92	68.20	15.28	PK
11670	46.58	10.34	H	56.92	73.98	17.06	PK
11670	31.42	10.34	H	41.76	53.98	12.22	AV
17505	40.60	12.43	H	53.03	68.20	15.17	PK

Band :	UNII 4
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5875 MHz
Channel No.	175 Ch

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11750	46.89	9.75	V	56.64	73.98	17.34	PK
11750	31.45	9.75	V	41.20	53.98	12.78	AV
17625	40.33	13.20	V	53.53	68.20	14.67	PK
11750	46.25	9.75	H	56.00	73.98	17.98	PK
11750	30.98	9.75	H	40.73	53.98	13.25	AV
17625	40.67	13.20	H	53.87	68.20	14.33	PK

10.9.3 802.11ax(HE80)

Band :	UNII 4
Operation Mode:	802.11ax(HE80)
Transfer MCS Index:	MCS0
Operating Frequency	5855 MHz
Channel No.	171 Ch

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
11710	43.80	9.98	V	53.78	73.98	20.20	PK
11710	29.81	9.98	V	39.79	53.98	14.19	AV
17565	39.95	12.90	V	52.85	68.20	15.35	PK
11710	43.27	9.98	H	53.25	73.98	20.73	PK
11710	29.56	9.98	H	39.54	53.98	14.44	AV
17565	40.17	12.90	H	53.07	68.20	15.13	PK

[RSDB Mode]

Test case 3

2.4 GHz 802.11ax(HE20) SU ch.6 & 5 GHz 802.11ax(HE20) SU ch.36

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10360	53.85	8.05	V	61.90	68.20	6.30	PK
15540	40.70	12.94	V	53.64	73.98	20.34	PK
15540	26.41	12.94	V	39.35	53.98	14.63	AV
10360	53.51	8.05	H	61.56	68.20	6.64	PK
15540	40.79	12.94	H	53.73	73.98	20.25	PK
15540	26.53	12.94	H	39.47	53.98	14.51	AV

Test case 4

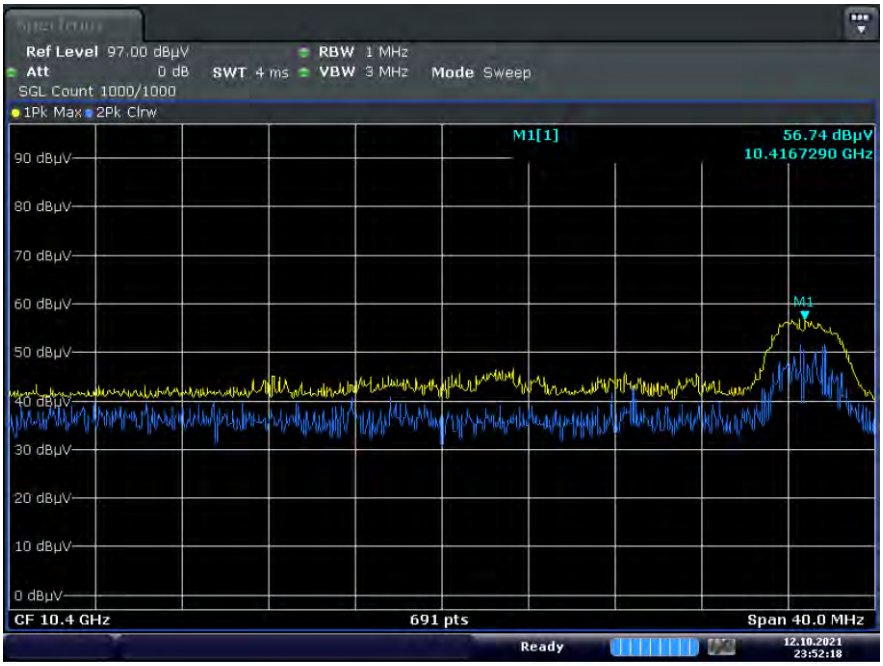
2.4 GHz 802.11ax(HE20) 26 Tone RU8 ch.1 & 5 GHz 802.11ax(HE20) 26 Tone RU4 ch.36

Frequency [MHz]	Measured Level [dBµV]	CL+AF+DF-AG [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
10360	55.59	8.05	V	63.64	68.20	4.56	PK
15540	39.88	12.94	V	52.82	73.98	21.16	PK
15540	26.42	12.94	V	39.36	53.98	14.62	AV
10360	55.07	8.05	H	63.12	68.20	5.08	PK
15540	39.34	12.94	H	52.28	73.98	21.70	PK
15540	26.34	12.94	H	39.28	53.98	14.70	AV

[MIMO]

▣ Test Plots_26 Tone RU 8

Peak result (802.11ax(HE20), Ch.40 2nd Harmonic, Y-V)

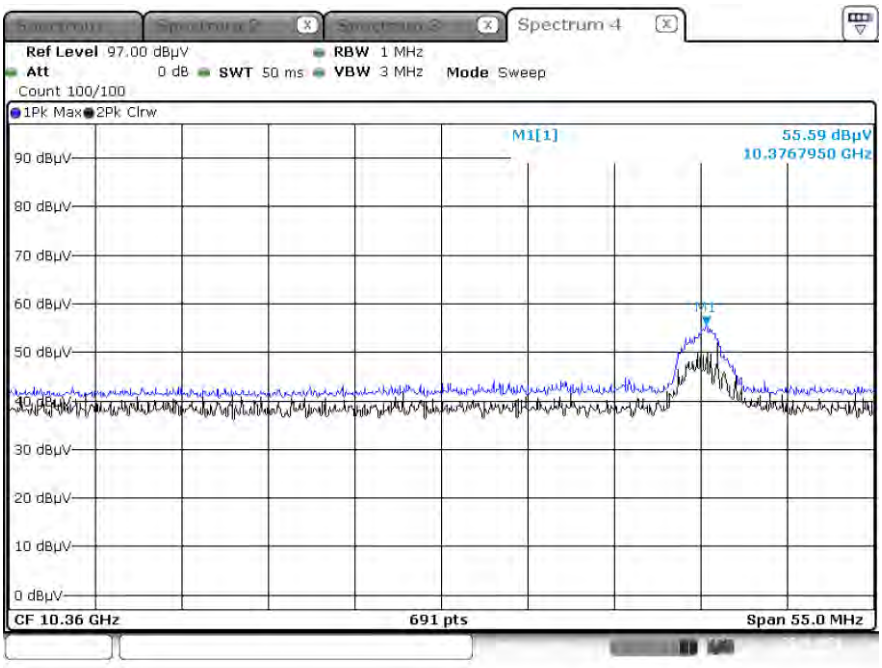


Note:

Only the worst case plots for Radiated Spurious Emissions.

[DBS]

Radiated Spurious Emissions plot – Peak Result (Test case 4_ Z-H_2nd Harmonic)



Note: Plot of worst case are only reported.

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 Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	43.71	9.11	H	52.82	73.98	21.16	PK
5150	30.47	9.11	H	39.58	53.98	14.40	AV
5150	42.52	9.11	V	51.63	73.98	22.35	PK
5150	30.35	9.11	V	39.46	53.98	14.52	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	44.12	8.71	H	52.83	73.98	21.15	PK
5350	30.96	8.71	H	39.67	53.98	14.31	AV
5350	43.85	8.71	V	52.56	73.98	21.42	PK
5350	30.71	8.71	V	39.42	53.98	14.56	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	42.12	9.30	H	51.42	73.98	22.56	PK
5460	30.49	9.30	H	39.79	53.98	14.19	AV
5470	43.51	9.34	H	52.85	68.20	15.35	PK
5460	42.03	9.30	V	51.33	73.98	22.65	PK
5460	30.42	9.30	V	39.72	53.98	14.26	AV
5470	42.98	9.34	V	52.32	68.20	15.88	PK

1.2) 52 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	41.99	9.11	H	51.10	73.98	22.88	PK
5150	30.58	9.11	H	39.69	53.98	14.29	AV
5150	41.66	9.11	V	50.77	73.98	23.21	PK
5150	30.24	9.11	V	39.35	53.98	14.63	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	43.91	8.71	H	52.62	73.98	21.36	PK
5350	30.92	8.71	H	39.63	53.98	14.35	AV
5350	43.57	8.71	V	52.28	73.98	21.70	PK
5350	30.88	8.71	V	39.59	53.98	14.39	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	43.17	9.30	H	52.47	73.98	21.51	PK
5460	30.71	9.30	H	40.01	53.98	13.97	AV
5470	44.11	9.34	H	53.45	68.20	14.75	PK
5460	42.52	9.30	V	51.82	73.98	22.16	PK
5460	30.65	9.30	V	39.95	53.98	14.03	AV
5470	42.56	9.34	V	51.90	68.20	16.30	PK

1.3) 106 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	43.75	9.11	H	52.86	73.98	21.12	PK
5150	30.84	9.11	H	39.95	53.98	14.03	AV
5150	42.99	9.11	V	52.10	73.98	21.88	PK
5150	30.73	9.11	V	39.84	53.98	14.14	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	45.97	8.71	H	54.68	73.98	19.30	PK
5350	30.93	8.71	H	39.64	53.98	14.34	AV
5350	44.76	8.71	V	53.47	73.98	20.51	PK
5350	30.85	8.71	V	39.56	53.98	14.42	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.74	9.30	H	54.04	73.98	19.94	PK
5460	30.62	9.30	H	39.92	53.98	14.06	AV
5470	48.81	9.34	H	58.15	68.20	10.05	PK
5460	43.10	9.30	V	52.40	73.98	21.58	PK
5460	30.48	9.30	V	39.78	53.98	14.20	AV
5470	48.68	9.34	V	58.02	68.20	10.18	PK

1.4) 242 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	50.84	9.11	H	59.95	73.98	14.03	PK
5150	32.27	9.11	H	41.38	53.98	12.60	AV
5150	50.21	9.11	V	59.32	73.98	14.66	PK
5150	31.92	9.11	V	41.03	53.98	12.95	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	55.01	8.71	H	63.72	73.98	10.26	PK
5350	32.62	8.71	H	41.33	53.98	12.65	AV
5350	54.98	8.71	V	63.69	73.98	10.29	PK
5350	32.12	8.71	V	40.83	53.98	13.15	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	50.67	9.30	H	59.97	73.98	14.01	PK
5460	30.84	9.30	H	40.14	53.98	13.84	AV
5470	55.62	9.34	H	64.96	68.20	3.24	PK
5460	50.05	9.30	V	59.35	73.98	14.63	PK
5460	30.79	9.30	V	40.09	53.98	13.89	AV
5470	52.89	9.34	V	62.23	68.20	5.97	PK

1.5) SU

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	50.33	9.11	H	59.44	73.98	14.54	PK
5150	33.26	9.11	H	42.37	53.98	11.61	AV
5150	49.31	9.11	V	58.42	73.98	15.56	PK
5150	32.61	9.11	V	41.72	53.98	12.26	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	46.64	8.71	H	55.35	73.98	18.63	PK
5350	32.65	8.71	H	41.36	53.98	12.62	AV
5350	45.78	8.71	V	54.49	73.98	19.49	PK
5350	32.48	8.71	V	41.19	53.98	12.79	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.54	9.30	H	54.84	73.98	19.14	PK
5460	31.07	9.30	H	40.37	53.98	13.61	AV
5470	55.57	9.34	H	64.91	68.20	3.29	PK
5460	45.25	9.30	V	54.55	73.98	19.43	PK
5460	31.03	9.30	V	40.33	53.98	13.65	AV
5470	54.43	9.34	V	63.77	68.20	4.43	PK

2) 802.11ax(HE40)

2.1) 26 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	51.57	9.11	H	60.68	73.98	13.30	PK
5150	30.61	9.11	H	39.72	53.98	14.26	AV
5150	49.17	9.11	V	58.28	73.98	15.70	PK
5150	30.47	9.11	V	39.58	53.98	14.40	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	42.84	8.71	H	51.55	73.98	22.43	PK
5350	30.92	8.71	H	39.63	53.98	14.35	AV
5350	42.69	8.71	V	51.40	73.98	22.58	PK
5350	30.79	8.71	V	39.50	53.98	14.48	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	42.04	9.30	H	51.34	73.98	22.64	PK
5460	30.51	9.30	H	39.81	53.98	14.17	AV
5470	44.43	9.34	H	53.77	68.20	14.43	PK
5460	41.32	9.30	V	50.62	73.98	23.36	PK
5460	30.48	9.30	V	39.78	53.98	14.20	AV
5470	43.99	9.34	V	53.33	68.20	14.87	PK

2.2) 52 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	55.25	9.11	H	64.36	73.98	9.62	PK
5150	31.35	9.11	H	40.46	53.98	13.52	AV
5150	54.84	9.11	V	63.95	73.98	10.03	PK
5150	30.91	9.11	V	40.02	53.98	13.96	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	44.30	8.71	H	53.01	73.98	20.97	PK
5350	31.16	8.71	H	39.87	53.98	14.11	AV
5350	43.52	8.71	V	52.23	73.98	21.75	PK
5350	30.98	8.71	V	39.69	53.98	14.29	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	43.94	9.30	H	53.24	73.98	20.74	PK
5460	30.55	9.30	H	39.85	53.98	14.13	AV
5470	47.91	9.34	H	57.25	68.20	10.95	PK
5460	42.67	9.30	V	51.97	73.98	22.01	PK
5460	30.45	9.30	V	39.75	53.98	14.23	AV
5470	47.26	9.34	V	56.60	68.20	11.60	PK

2.3) 106 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	61.56	9.11	H	70.67	73.98	3.31	PK
5150	32.29	9.11	H	41.40	53.98	12.58	AV
5150	60.26	9.11	V	69.37	73.98	4.61	PK
5150	31.19	9.11	V	40.30	53.98	13.68	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	58.99	8.71	H	67.70	73.98	6.28	PK
5350	32.34	8.71	H	41.05	53.98	12.93	AV
5350	58.41	8.71	V	67.12	73.98	6.86	PK
5350	31.90	8.71	V	40.61	53.98	13.37	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	48.42	9.30	H	57.72	73.98	16.26	PK
5460	30.98	9.30	H	40.28	53.98	13.70	AV
5470	54.21	9.34	H	63.55	68.20	4.65	PK
5460	47.88	9.30	V	57.18	73.98	16.80	PK
5460	30.62	9.30	V	39.92	53.98	14.06	AV
5470	53.24	9.34	V	62.58	68.20	5.62	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5550 MHz
Channel No.	110 Ch
RU offset.	53

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	42.52	9.30	H	51.82	73.98	22.16	PK
5460	30.58	9.30	H	39.88	53.98	14.10	AV
5470	45.18	9.34	H	54.52	68.20	13.68	PK
5460	42.06	9.30	V	51.36	73.98	22.62	PK
5460	30.41	9.30	V	39.71	53.98	14.27	AV
5470	43.92	9.34	V	53.26	68.20	14.94	PK

2.4) 242 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	61.22	9.11	H	70.33	73.98	3.65	PK
5150	32.79	9.11	H	41.90	53.98	12.08	AV
5150	59.66	9.11	V	68.77	73.98	5.21	PK
5150	32.54	9.11	V	41.65	53.98	12.33	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	61.70	8.71	H	70.41	73.98	3.57	PK
5350	33.26	8.71	H	41.97	53.98	12.01	AV
5350	60.89	8.71	V	69.60	73.98	4.38	PK
5350	33.01	8.71	V	41.72	53.98	12.26	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	49.29	9.30	H	58.59	73.98	15.39	PK
5460	30.78	9.30	H	40.08	53.98	13.90	AV
5470	53.47	9.34	H	62.81	68.20	5.39	PK
5460	48.24	9.30	V	57.54	73.98	16.44	PK
5460	30.62	9.30	V	39.92	53.98	14.06	AV
5470	52.35	9.34	V	61.69	68.20	6.51	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5550 MHz
Channel No.	110 Ch
RU offset.	61

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.06	9.30	H	54.36	73.98	19.62	PK
5460	30.70	9.30	H	40.00	53.98	13.98	AV
5470	46.01	9.34	H	55.35	68.20	12.85	PK
5460	44.98	9.30	V	54.28	73.98	19.70	PK
5460	30.41	9.30	V	39.71	53.98	14.27	AV
5470	45.98	9.34	V	55.32	68.20	12.88	PK

2.5) 484 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	59.84	9.11	H	68.95	73.98	5.03	PK
5150	35.19	9.11	H	44.30	53.98	9.68	AV
5150	58.34	9.11	V	67.45	73.98	6.53	PK
5150	34.88	9.11	V	43.99	53.98	9.99	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	62.23	8.71	H	70.94	73.98	3.04	PK
5350	39.84	8.71	H	48.55	53.98	5.43	AV
5350	61.37	8.71	V	70.08	73.98	3.90	PK
5350	38.73	8.71	V	47.44	53.98	6.54	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	47.51	9.30	H	56.81	73.98	17.17	PK
5460	31.79	9.30	H	41.09	53.98	12.89	AV
5470	54.39	9.34	H	63.73	68.20	4.47	PK
5460	47.22	9.30	V	56.52	73.98	17.46	PK
5460	31.51	9.30	V	40.81	53.98	13.17	AV
5470	54.05	9.34	V	63.39	68.20	4.81	PK

Band :	UNII 2C
Operation Mode:	802.11ax(HE40)
Transfer MCS Index:	MCS0
Operating Frequency	5550 MHz
Channel No.	110 Ch
RU offset.	65

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.22	9.30	H	53.52	73.98	20.46	PK
5460	30.66	9.30	H	39.96	53.98	14.02	AV
5470	44.05	9.34	H	53.39	68.20	14.81	PK
5460	43.18	9.30	V	52.48	73.98	21.50	PK
5460	30.49	9.30	V	39.79	53.98	14.19	AV
5470	45.77	9.34	V	55.11	68.20	13.09	PK

2.6) SU

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	50.54	9.11	H	59.65	73.98	14.33	PK
5150	37.08	9.11	H	46.19	53.98	7.79	AV
5150	48.28	9.11	V	57.39	73.98	16.59	PK
5150	35.39	9.11	V	44.50	53.98	9.48	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	54.09	8.71	H	62.80	73.98	11.18	PK
5350	37.96	8.71	H	46.67	53.98	7.31	AV
5350	52.21	8.71	V	60.92	73.98	13.06	PK
5350	37.75	8.71	V	46.46	53.98	7.52	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	45.11	9.30	H	54.41	73.98	19.57	PK
5460	31.62	9.30	H	40.92	53.98	13.06	AV
5470	52.21	9.34	H	61.55	68.20	6.65	PK
5460	46.50	9.30	V	55.80	73.98	18.18	PK
5460	31.82	9.30	V	41.12	53.98	12.86	AV
5470	52.59	9.34	V	61.93	68.20	6.27	PK

3) 802.11ax(HE80)

3.1) 26 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	44.21	9.11	H	53.32	73.98	20.66	PK
5150	30.71	9.11	H	39.82	53.98	14.16	AV
5150	43.86	9.11	V	52.97	73.98	21.01	PK
5150	30.44	9.11	V	39.55	53.98	14.43	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	46.14	8.71	H	54.85	73.98	19.13	PK
5350	31.42	8.71	H	40.13	53.98	13.85	AV
5350	45.82	8.71	V	54.53	73.98	19.45	PK
5350	31.17	8.71	V	39.88	53.98	14.10	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	44.47	9.30	H	53.77	73.98	20.21	PK
5460	30.54	9.30	H	39.84	53.98	14.14	AV
5470	45.72	9.34	H	55.06	68.20	13.14	PK
5460	43.72	9.30	V	53.02	73.98	20.96	PK
5460	30.38	9.30	V	39.68	53.98	14.30	AV
5470	44.85	9.34	V	54.19	68.20	14.01	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 Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	43.81	9.11	H	52.92	73.98	21.06	PK
5150	30.69	9.11	H	39.80	53.98	14.18	AV
5150	42.14	9.11	V	51.25	73.98	22.73	PK
5150	30.67	9.11	V	39.78	53.98	14.20	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	47.82	8.71	H	56.53	73.98	17.45	PK
5350	31.32	8.71	H	40.03	53.98	13.95	AV
5350	46.05	8.71	V	54.76	73.98	19.22	PK
5350	31.27	8.71	V	39.98	53.98	14.00	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	43.59	9.30	H	52.89	73.98	21.09	PK
5460	30.73	9.30	H	40.03	53.98	13.95	AV
5470	47.45	9.34	H	56.79	68.20	11.41	PK
5460	42.99	9.30	V	52.29	73.98	21.69	PK
5460	30.71	9.30	V	40.01	53.98	13.97	AV
5470	46.36	9.34	V	55.70	68.20	12.50	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 Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	60.69	9.11	H	69.80	73.98	4.18	PK
5150	31.86	9.11	H	40.97	53.98	13.01	AV
5150	60.41	9.11	V	69.52	73.98	4.46	PK
5150	30.77	9.11	V	39.88	53.98	14.10	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	59.36	8.71	H	68.07	73.98	5.91	PK
5350	32.60	8.71	H	41.31	53.98	12.67	AV
5350	59.23	8.71	V	67.94	73.98	6.04	PK
5350	32.42	8.71	V	41.13	53.98	12.85	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	50.32	9.30	H	59.62	73.98	14.36	PK
5460	31.16	9.30	H	40.46	53.98	13.52	AV
5470	55.27	9.34	H	64.61	68.20	3.59	PK
5460	49.09	9.30	V	58.39	73.98	15.59	PK
5460	30.98	9.30	V	40.28	53.98	13.70	AV
5470	54.60	9.34	V	63.94	68.20	4.26	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 Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	61.54	9.11	H	70.65	73.98	3.33	PK
5150	32.23	9.11	H	41.34	53.98	12.64	AV
5150	60.89	9.11	V	70.00	73.98	3.98	PK
5150	31.31	9.11	V	40.42	53.98	13.56	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	59.20	8.71	H	67.91	73.98	6.07	PK
5350	32.45	8.71	H	41.16	53.98	12.82	AV
5350	58.17	8.71	V	66.88	73.98	7.10	PK
5350	32.12	8.71	V	40.83	53.98	13.15	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	50.76	9.30	H	60.06	73.98	13.92	PK
5460	31.02	9.30	H	40.32	53.98	13.66	AV
5470	54.95	9.34	H	64.29	68.20	3.91	PK
5460	50.15	9.30	V	59.45	73.98	14.53	PK
5460	30.91	9.30	V	40.21	53.98	13.77	AV
5470	53.49	9.34	V	62.83	68.20	5.37	PK

3.5) 484 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	59.64	9.11	H	68.75	73.98	5.23	PK
5150	35.29	9.11	H	44.40	53.98	9.58	AV
5150	58.22	9.11	V	67.33	73.98	6.65	PK
5150	34.89	9.11	V	44.00	53.98	9.98	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	59.67	8.71	H	68.38	73.98	5.60	PK
5350	37.30	8.71	H	46.01	53.98	7.97	AV
5350	58.69	8.71	V	67.40	73.98	6.58	PK
5350	37.23	8.71	V	45.94	53.98	8.04	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	50.39	9.30	H	59.69	73.98	14.29	PK
5460	31.42	9.30	H	40.72	53.98	13.26	AV
5470	55.87	9.34	H	65.21	68.20	2.99	PK
5460	49.53	9.30	V	58.83	73.98	15.15	PK
5460	30.97	9.30	V	40.27	53.98	13.71	AV
5470	54.63	9.34	V	63.97	68.20	4.23	PK

3.6) 996 Tone

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	57.28	9.11	H	66.39	73.98	7.59	PK
5150	36.22	9.11	H	45.33	53.98	8.65	AV
5150	56.28	9.11	V	65.39	73.98	8.59	PK
5150	35.22	9.11	V	44.33	53.98	9.65	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	59.04	8.71	H	67.75	73.98	6.23	PK
5350	38.99	8.71	H	47.70	53.98	6.28	AV
5350	59.59	8.71	V	68.30	73.98	5.68	PK
5350	37.66	8.71	V	46.37	53.98	7.61	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	50.83	9.30	H	60.13	73.98	13.85	PK
5460	33.50	9.30	H	42.80	53.98	11.18	AV
5470	55.95	9.34	H	65.29	68.20	2.91	PK
5460	49.86	9.30	V	59.16	73.98	14.82	PK
5460	33.43	9.30	V	42.73	53.98	11.25	AV
5470	54.51	9.34	V	63.85	68.20	4.35	PK

3.7) SU

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5150	51.68	9.11	H	60.79	73.98	13.19	PK
5150	37.06	9.11	H	46.17	53.98	7.81	AV
5150	51.34	9.11	V	60.45	73.98	13.53	PK
5150	36.84	9.11	V	45.95	53.98	8.03	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5350	54.47	8.71	H	63.18	73.98	10.80	PK
5350	40.68	8.71	H	49.39	53.98	4.59	AV
5350	53.04	8.71	V	61.75	73.98	12.23	PK
5350	39.95	8.71	V	48.66	53.98	5.32	AV

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

Frequency [MHz]	Measured Level [dBµV]	A.F+C.L-A.G +ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Measurement Type
5460	50.04	9.30	H	59.34	73.98	14.64	PK
5460	35.83	9.30	H	45.13	53.98	8.85	AV
5470	53.99	9.34	H	63.33	68.20	4.87	PK
5460	49.34	9.30	V	58.64	73.98	15.34	PK
5460	35.06	9.30	V	44.36	53.98	9.62	AV
5470	52.98	9.34	V	62.32	68.20	5.88	PK

Note:

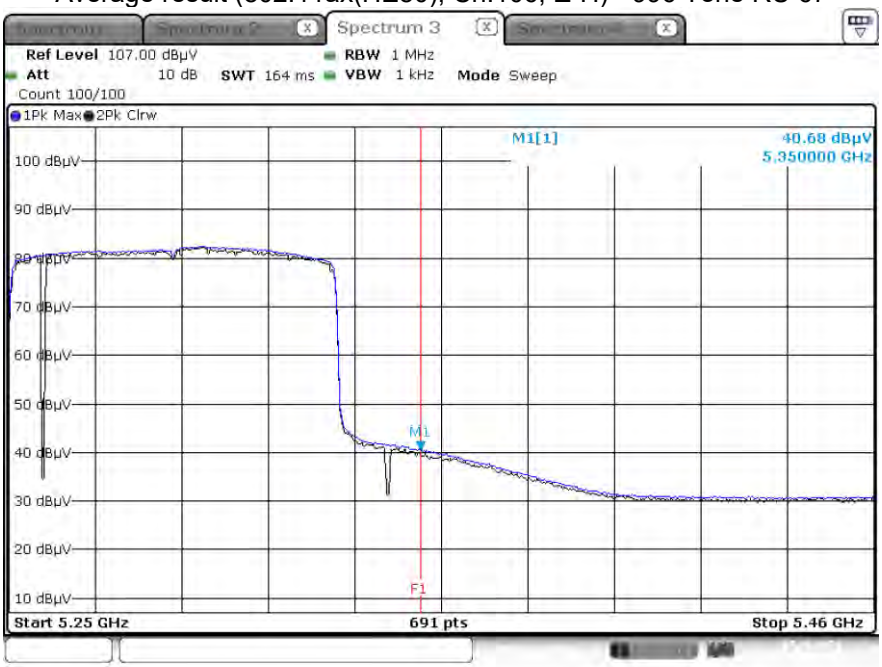
All Modes of operation were investigated and the worst case configuration results are reported.

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

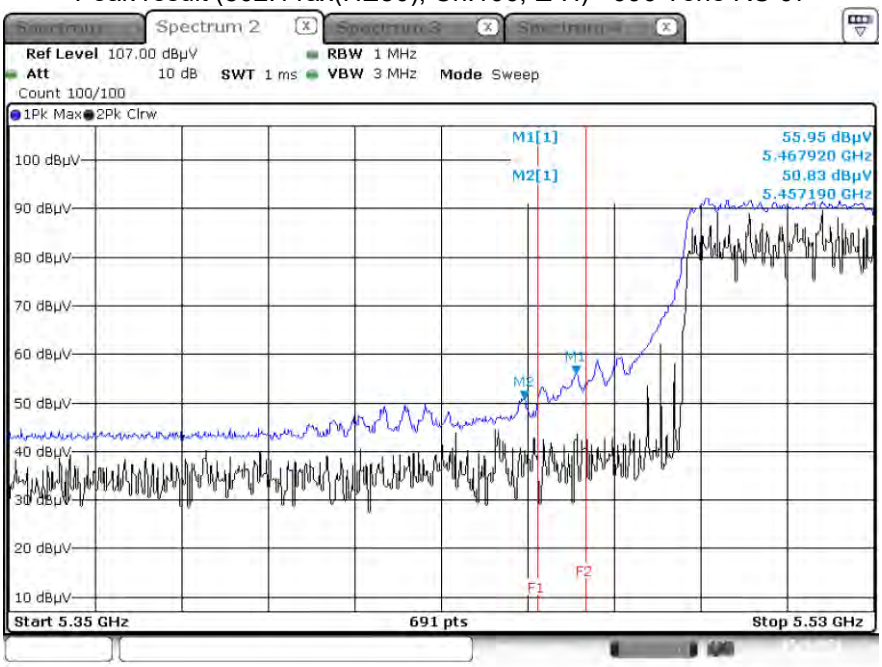
▣ Test Plots(UNII 1, 2A, 2C),

[MIMO]

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



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



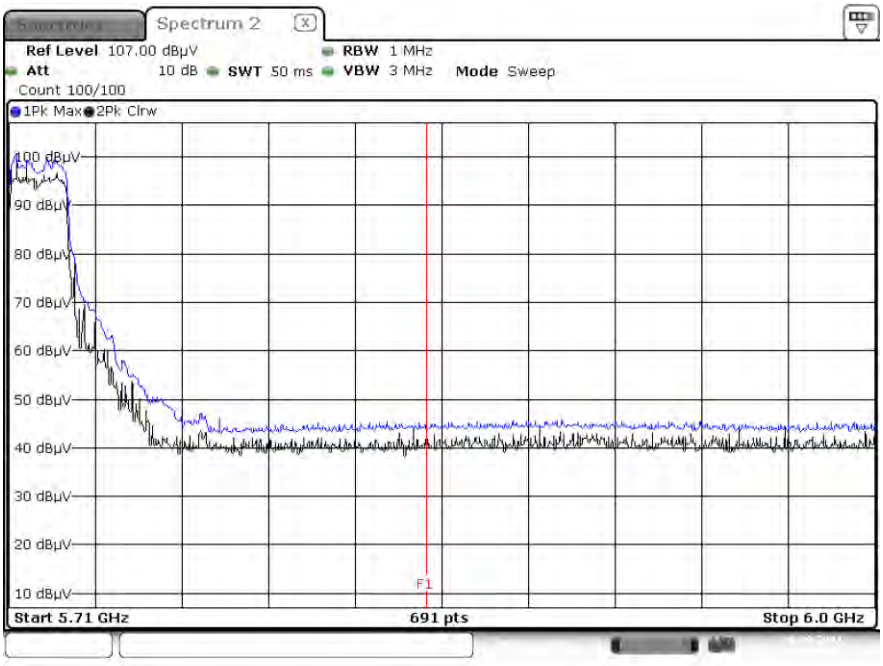
Note:

Only the worst case plots for Radiated Restricted Band Edge.

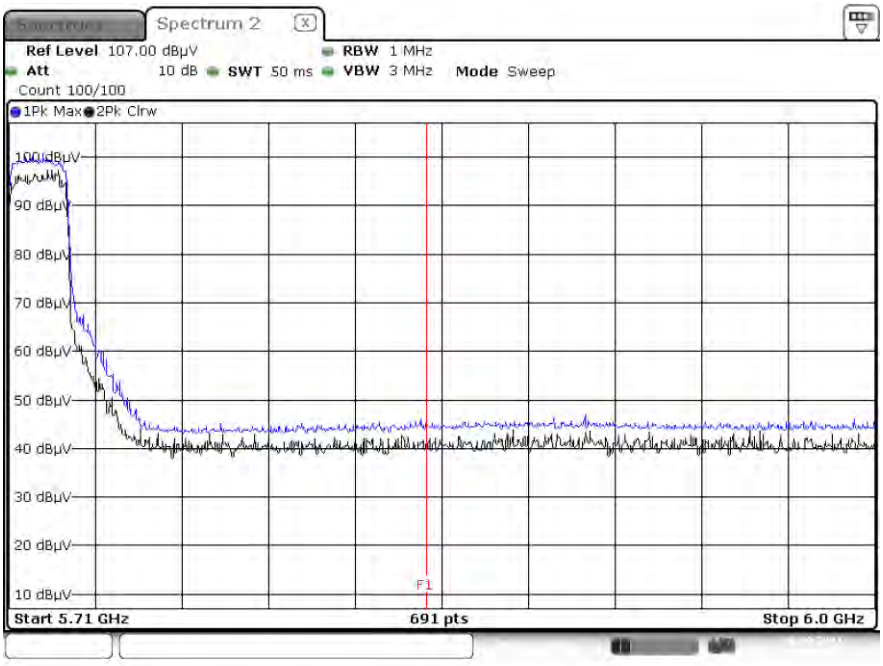
▣ Test Plots(Staraddle Channel)

[MIMO]

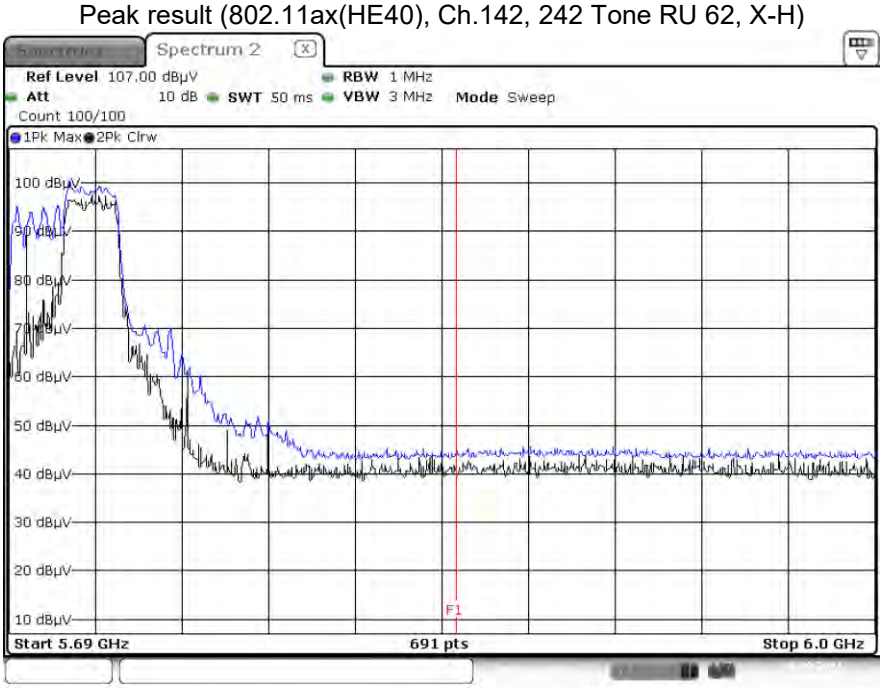
Peak result (802.11ax(HE20), Ch.144, 242 Tone RU 61, X-H)



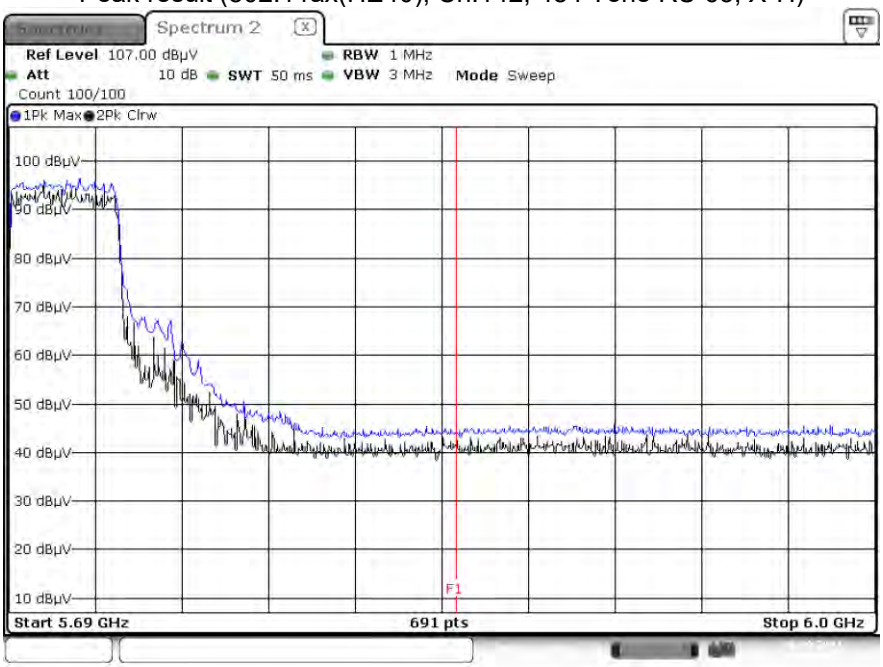
Peak result (802.11ax(HE20), Ch.144, SU, X-H)



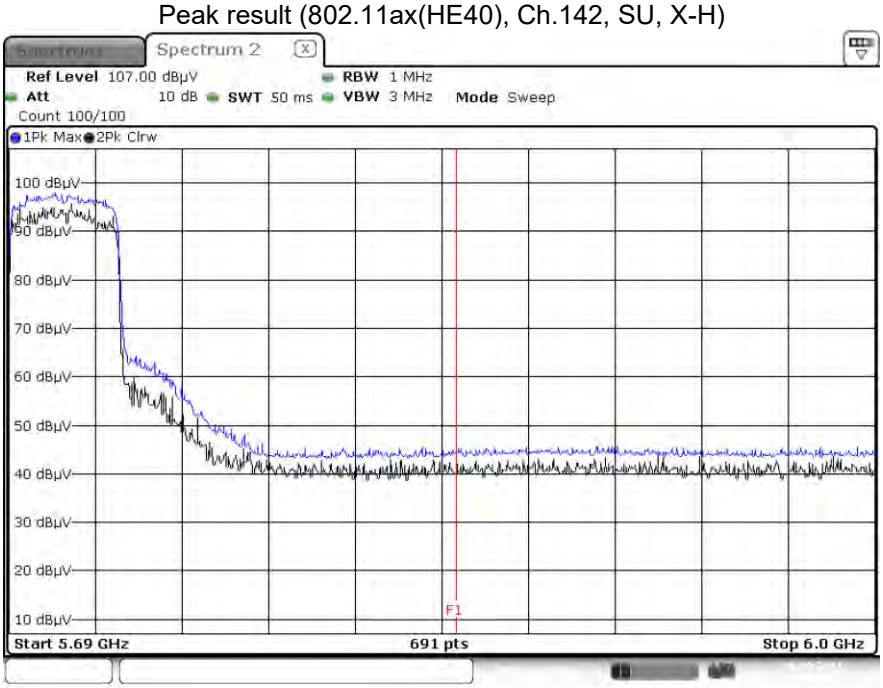
Peak result (802.11ax(HE40), Ch.142, 242 Tone RU 62, X-H)



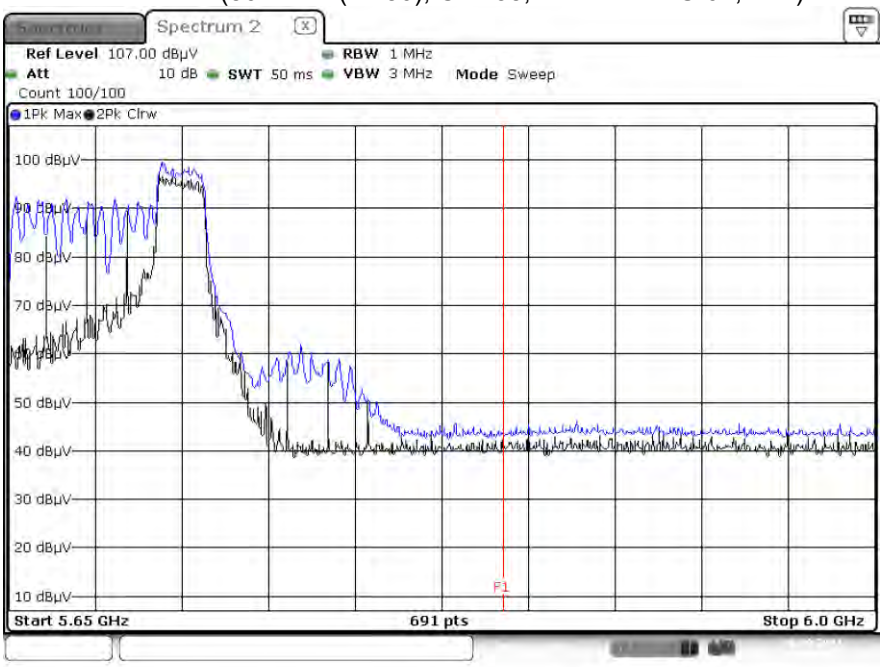
Peak result (802.11ax(HE40), Ch.142, 484 Tone RU 65, X-H)



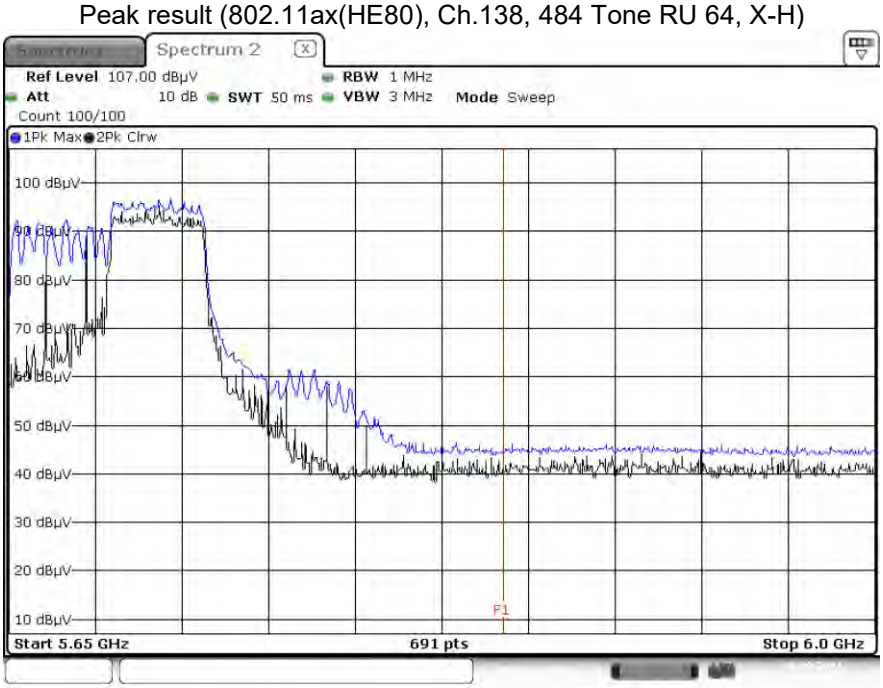
Peak result (802.11ax(HE40), Ch.142, SU, X-H)



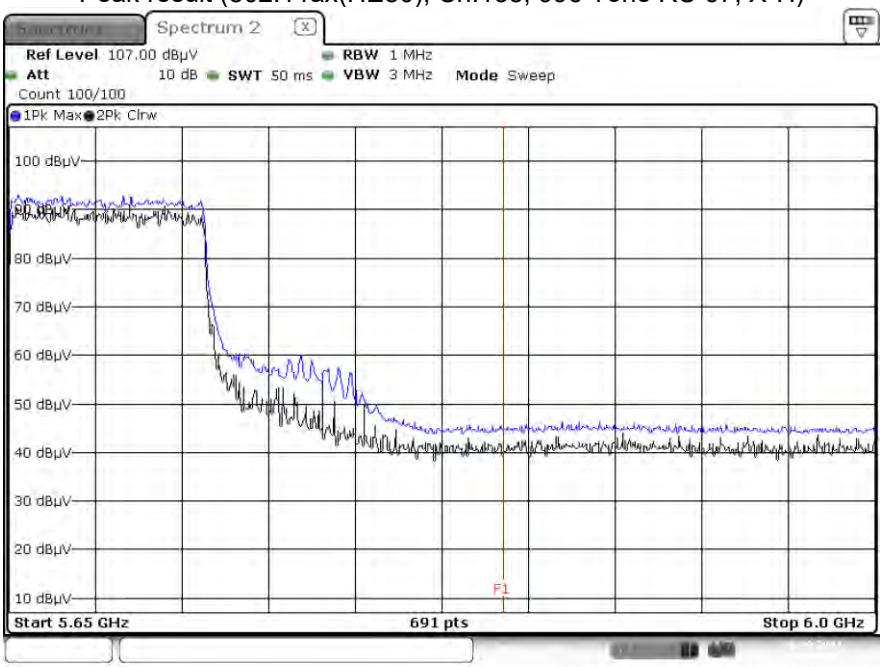
Peak result (802.11ax(HE80), Ch.138, 242 Tone RU 62, X-H)



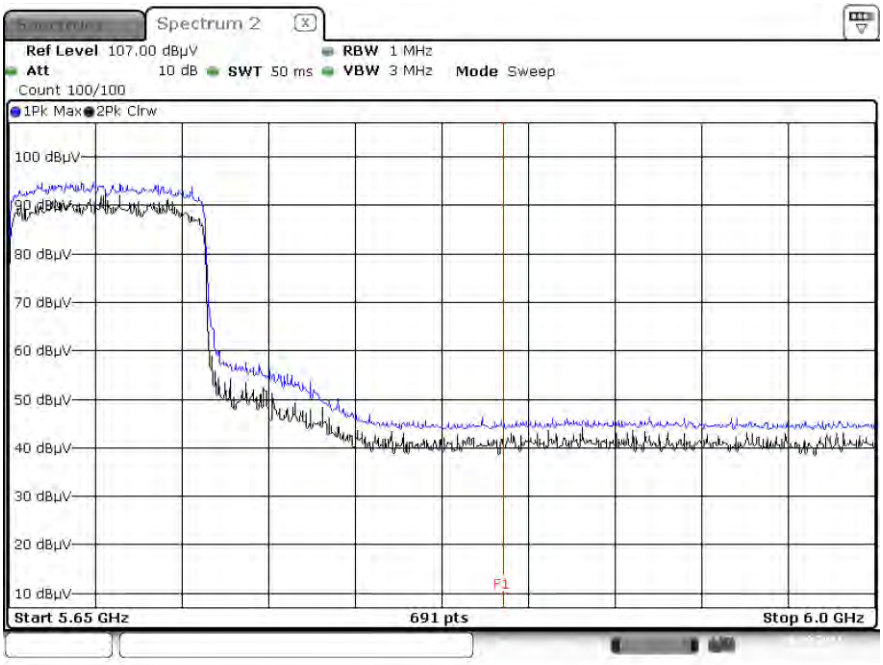
Peak result (802.11ax(HE80), Ch.138, 484 Tone RU 64, X-H)



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



Peak result (802.11ax(HE80), Ch.138, SU, X-H)



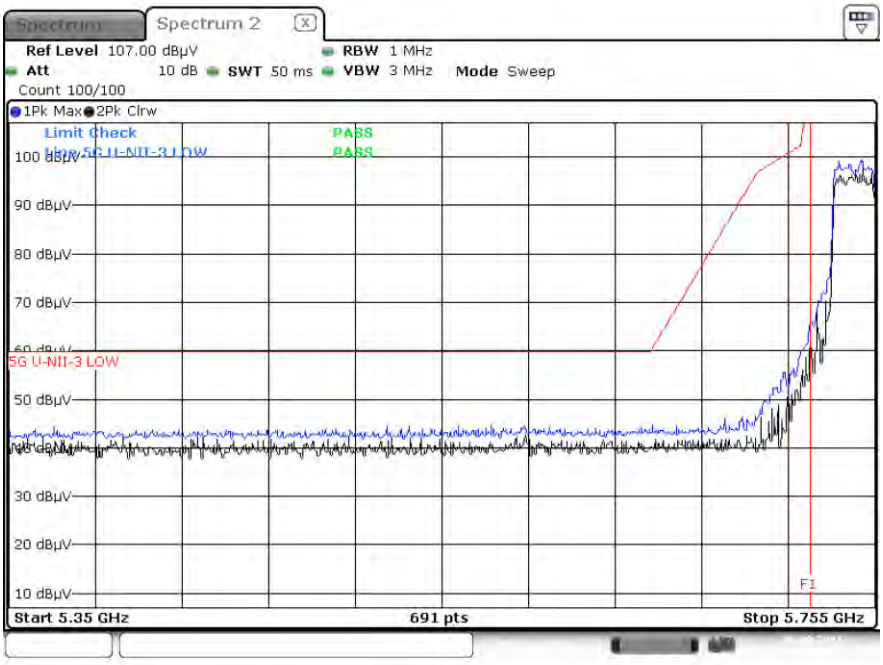
Note :

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

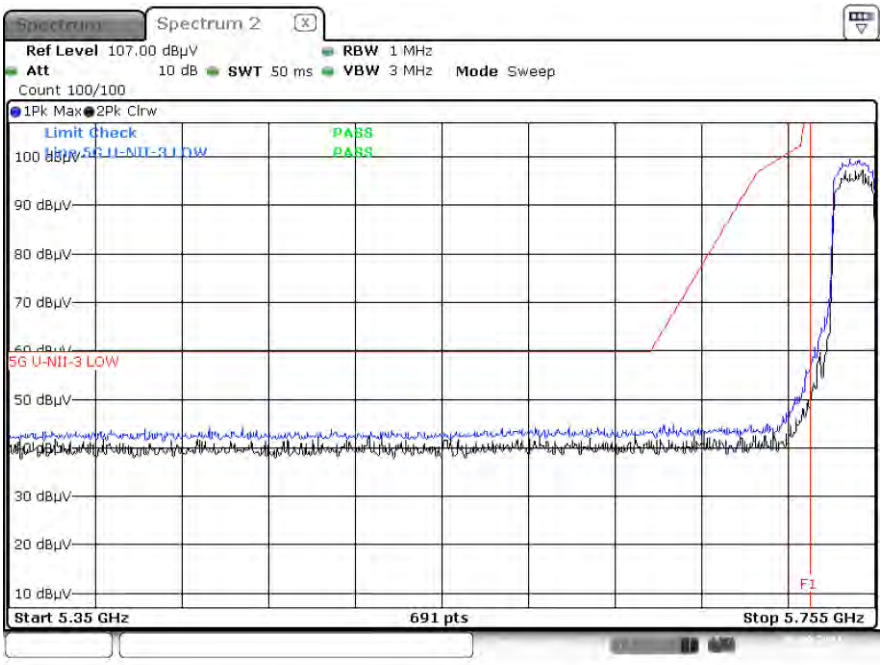
▣ Test Plots(UNII 3)

[MIMO]

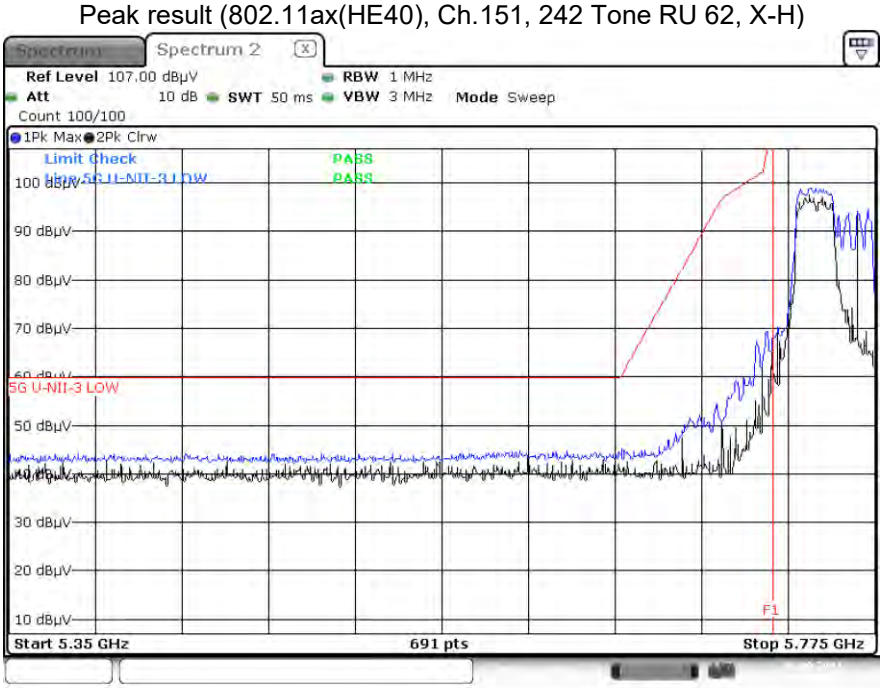
Peak result (802.11ax(HE20), Ch.149, 242 Tone RU 61, X-H)



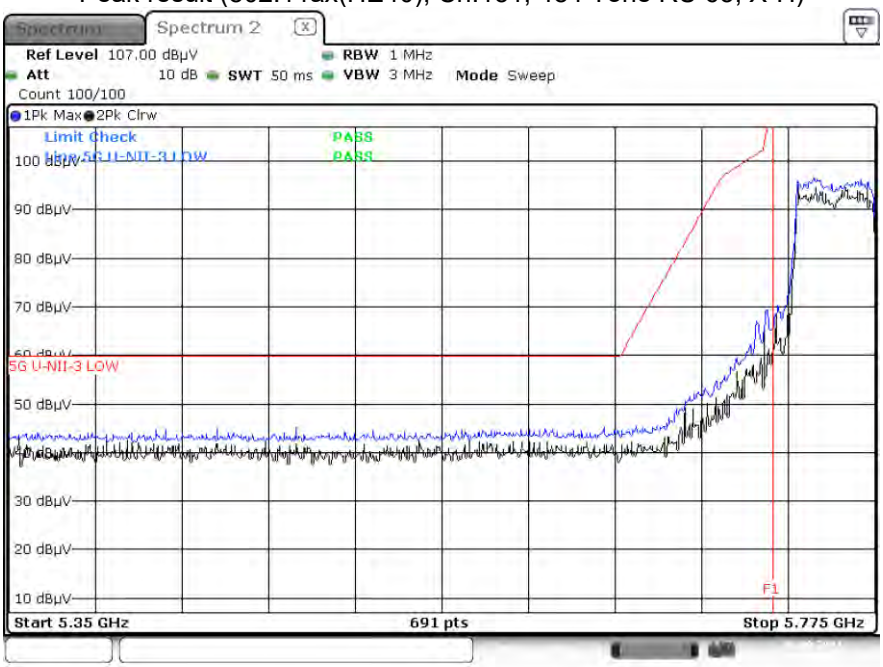
Peak result (802.11ax(HE20), Ch.149, SU, X-H)



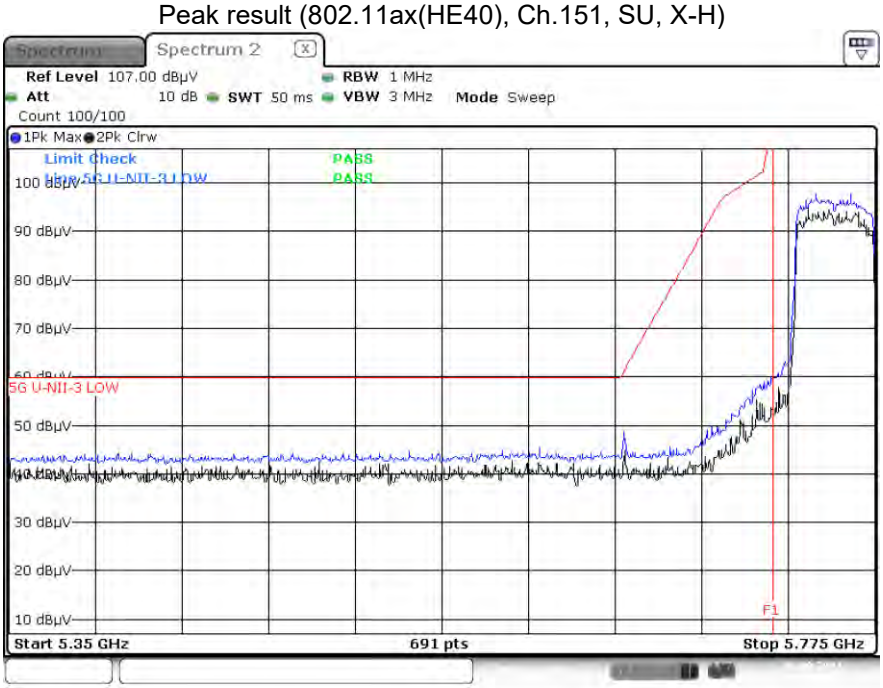
Peak result (802.11ax(HE40), Ch.151, 242 Tone RU 62, X-H)



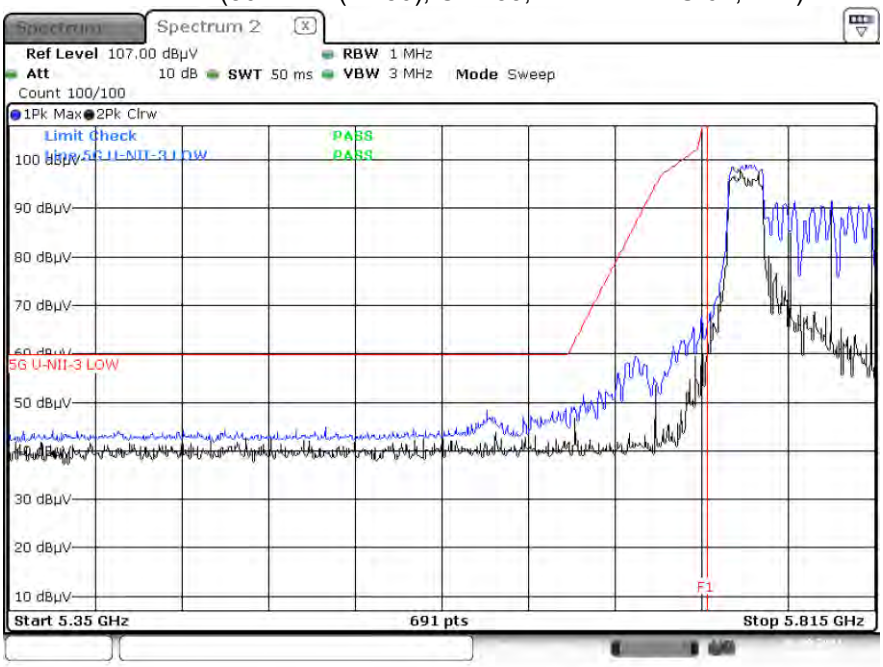
Peak result (802.11ax(HE40), Ch.151, 484 Tone RU 65, X-H)



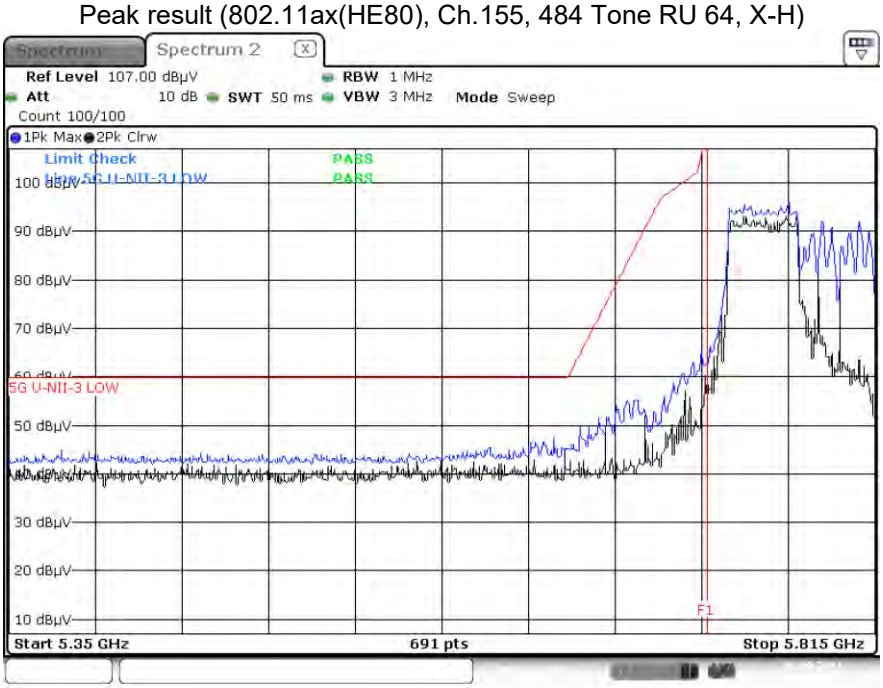
Peak result (802.11ax(HE40), Ch.151, SU, X-H)



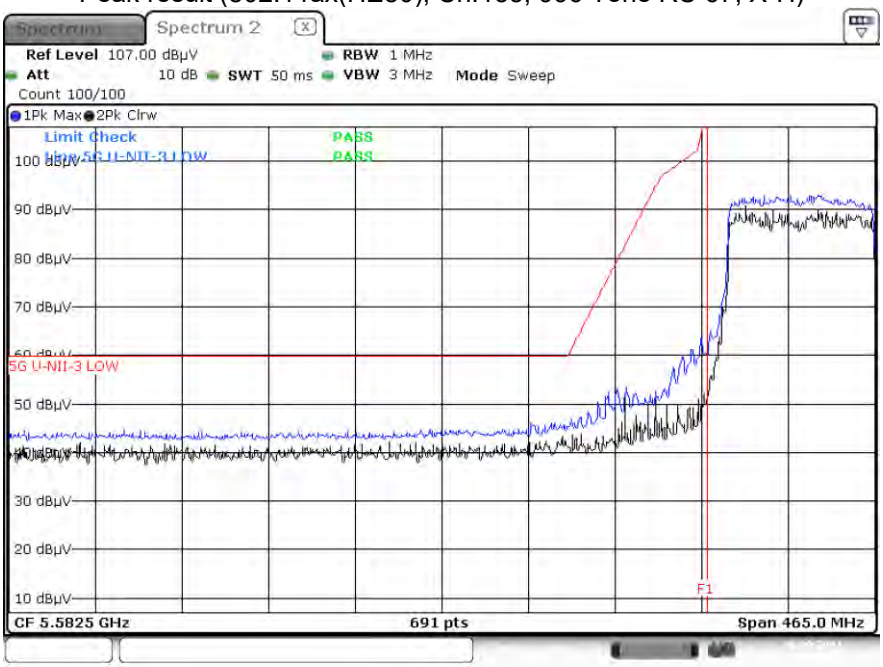
Peak result (802.11ax(HE80), Ch.155, 242 Tone RU 62, X-H)



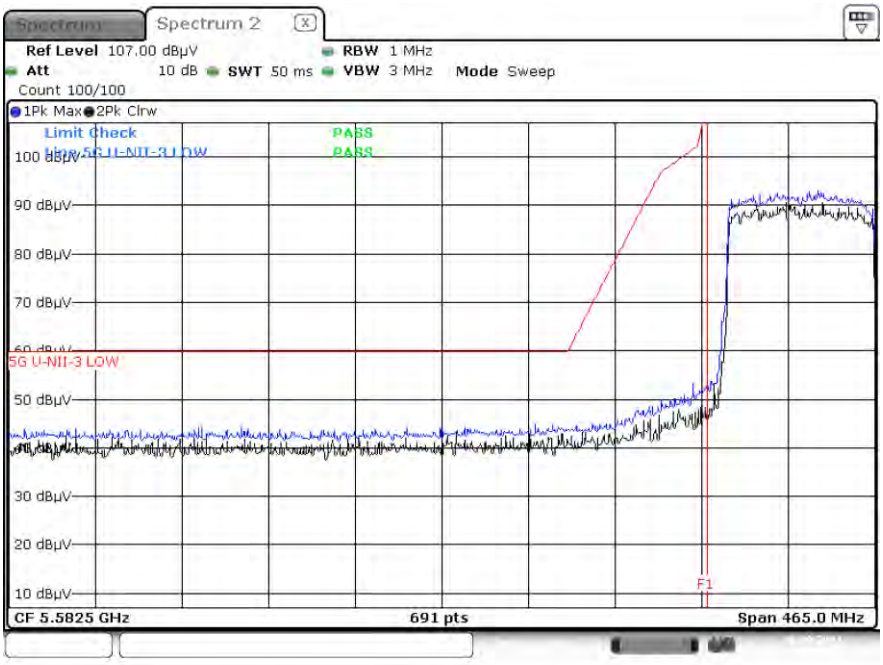
Peak result (802.11ax(HE80), Ch.155, 484 Tone RU 64, X-H)



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



Peak result (802.11ax(HE80), Ch.155, SU, X-H)



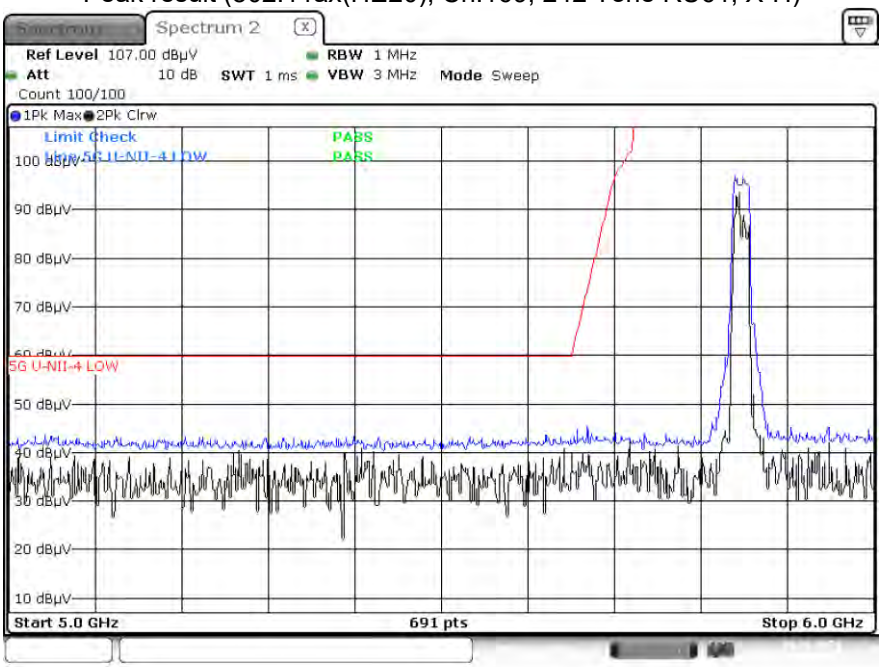
Note :

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

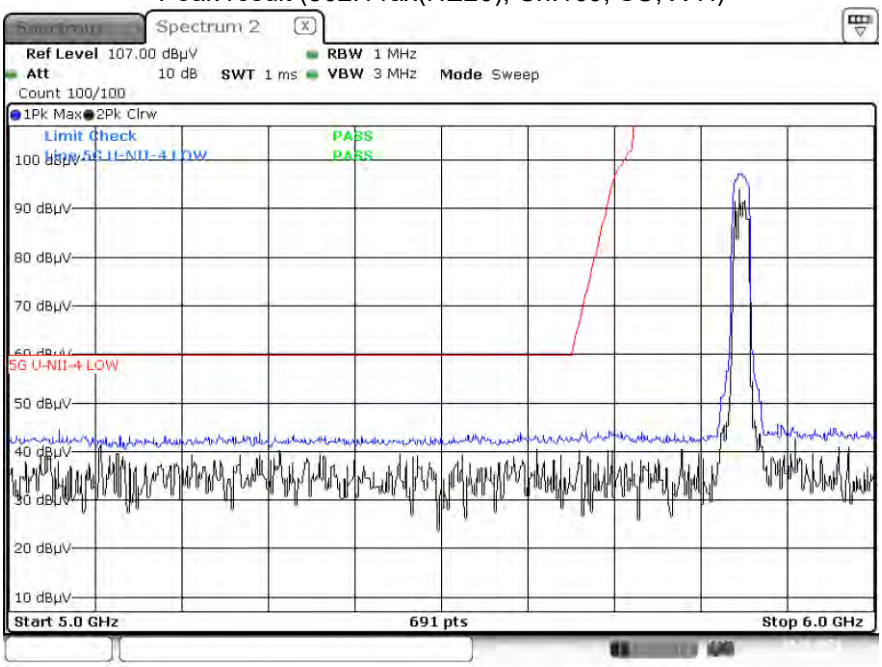
▣ Test Plots(UNII 4)

[MIMO]

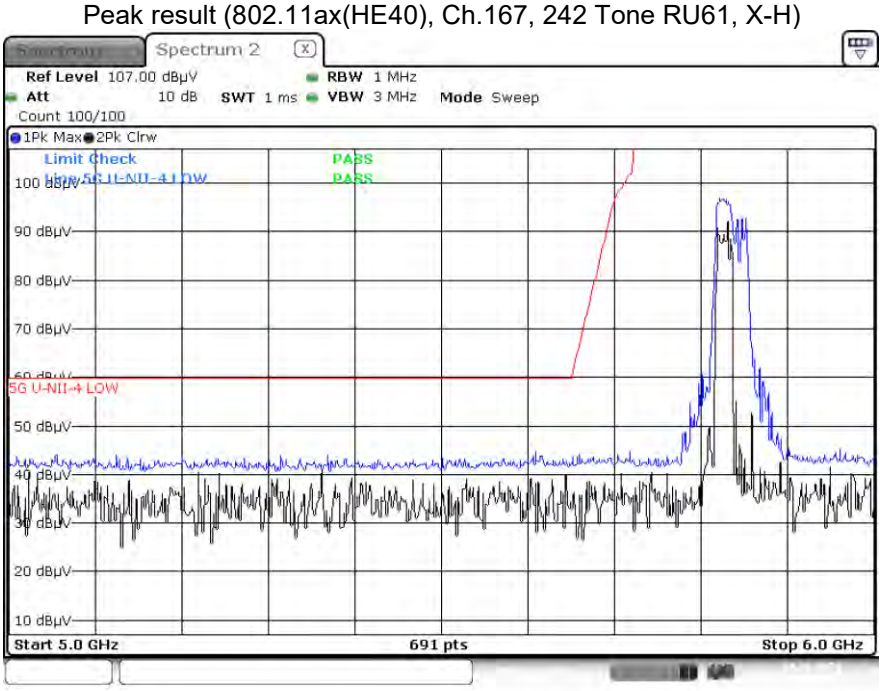
Peak result (802.11ax(HE20), Ch.169, 242 Tone RU61, X-H)



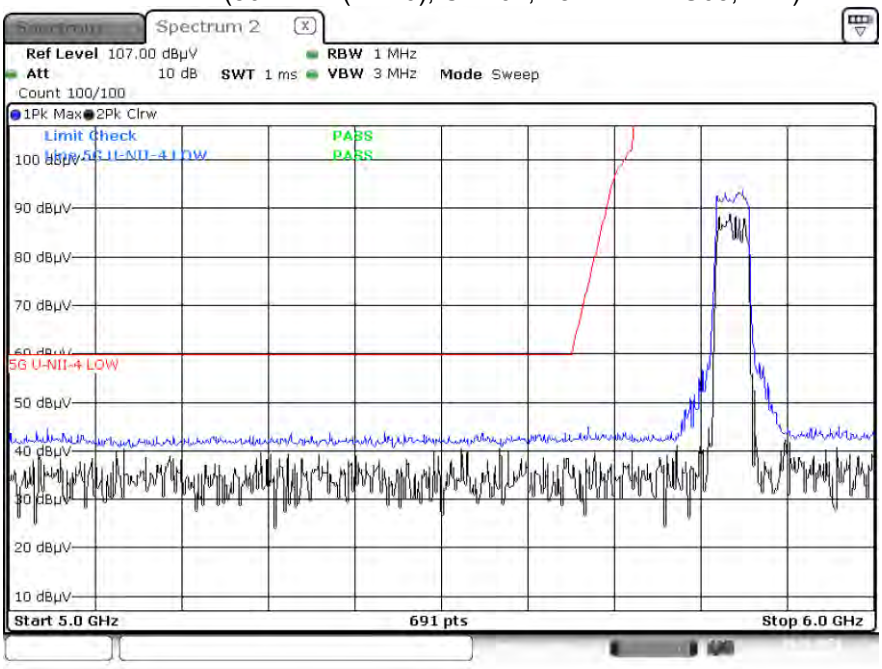
Peak result (802.11ax(HE20), Ch.169, SU, X-H)



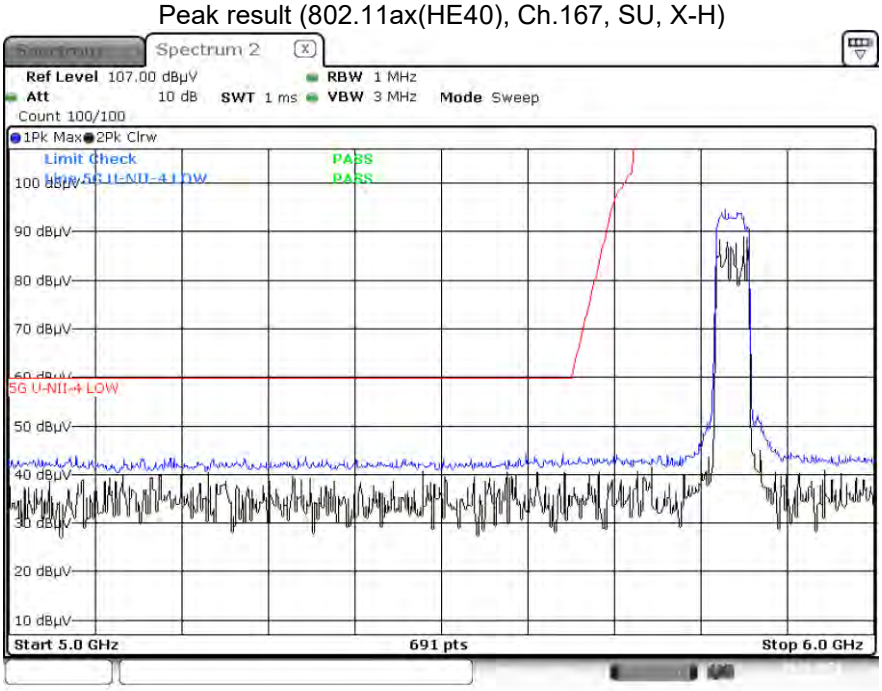
Peak result (802.11ax(HE40), Ch.167, 242 Tone RU61, X-H)



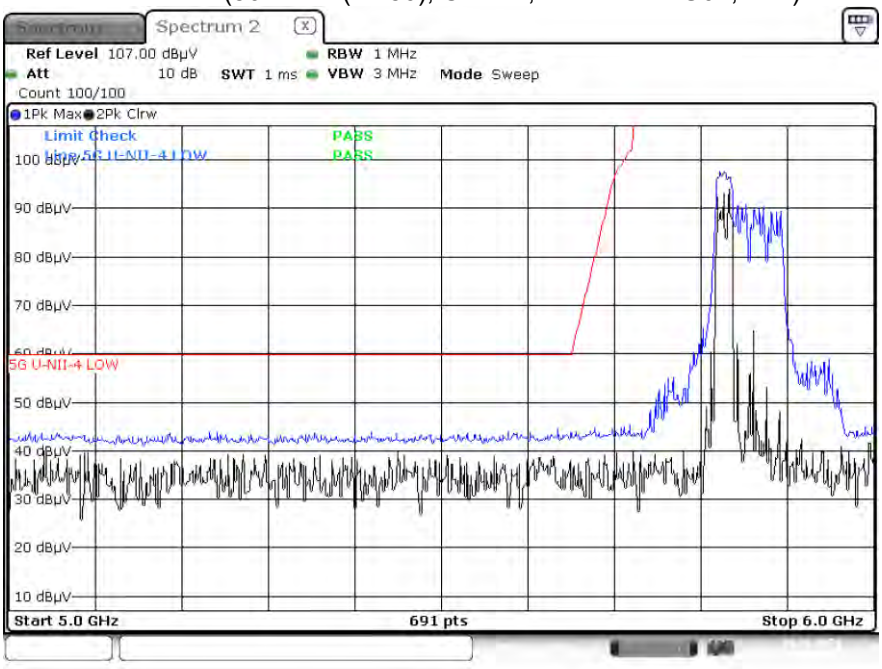
Peak result (802.11ax(HE40), Ch.167, 484 Tone RU65, X-H)



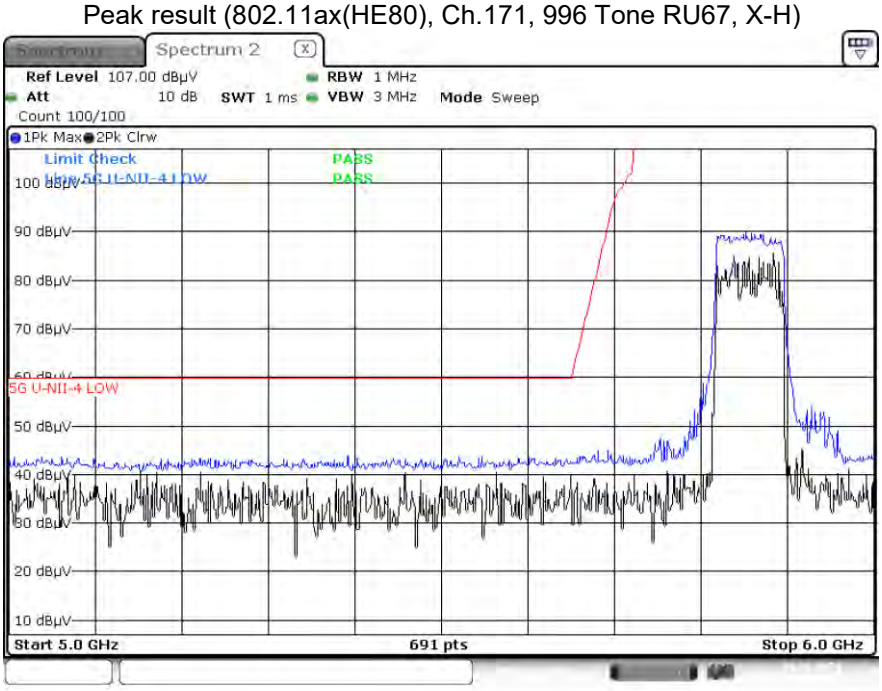
Peak result (802.11ax(HE40), Ch.167, SU, X-H)



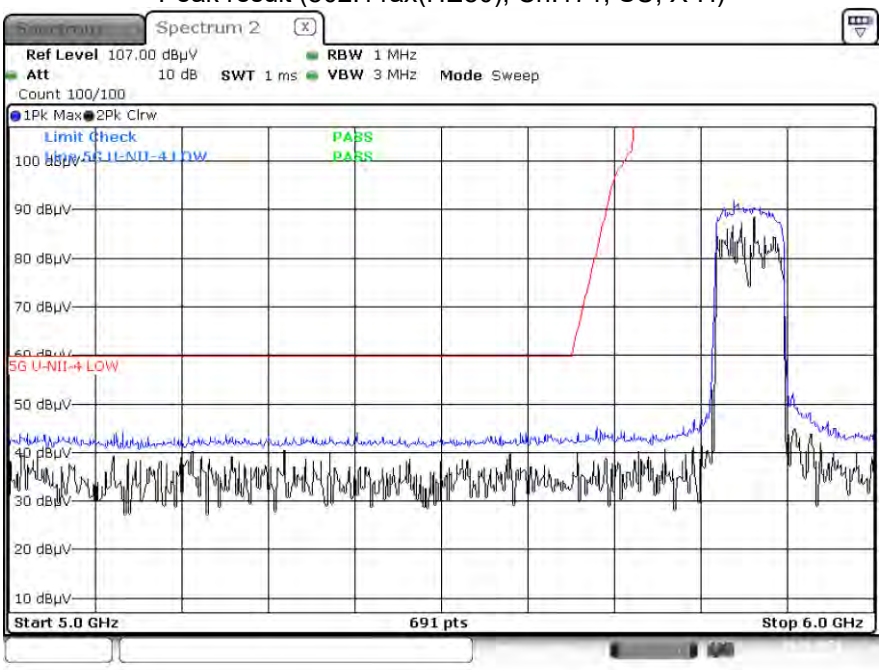
Peak result (802.11ax(HE80), Ch.171, 242 Tone RU61, X-H)



Peak result (802.11ax(HE80), Ch.171, 996 Tone RU67, X-H)

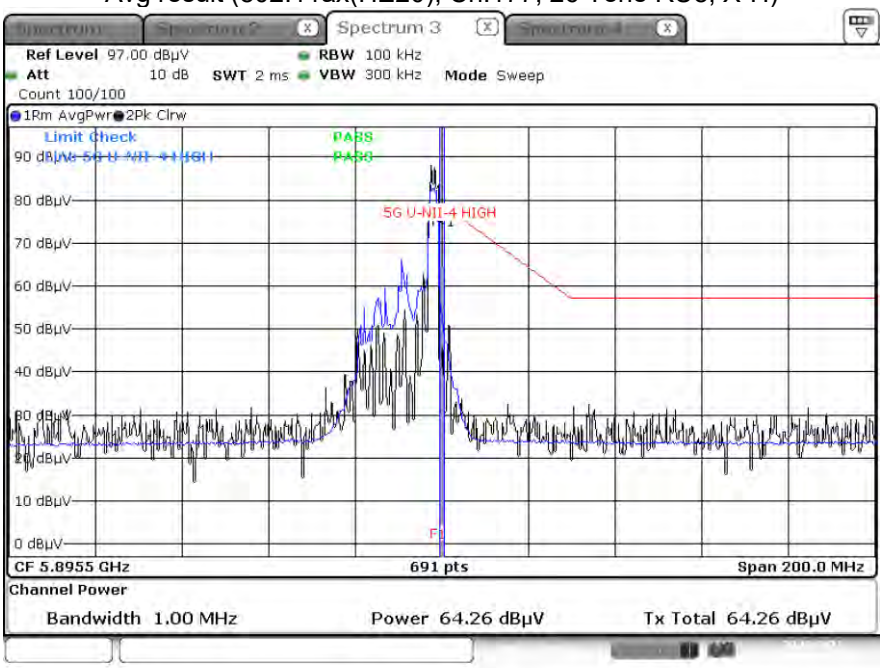


Peak result (802.11ax(HE80), Ch.171, SU, X-H)

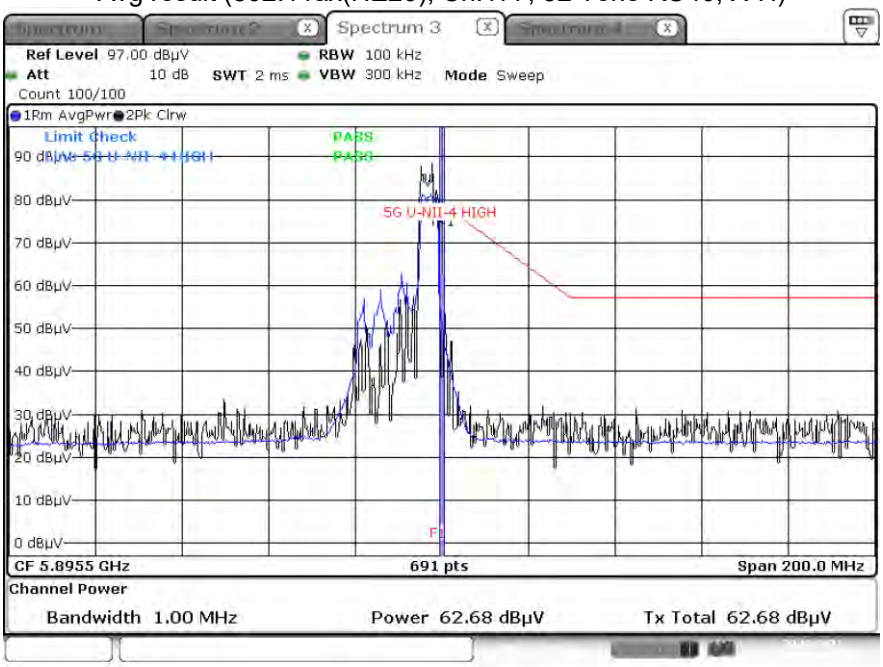


[Average result]

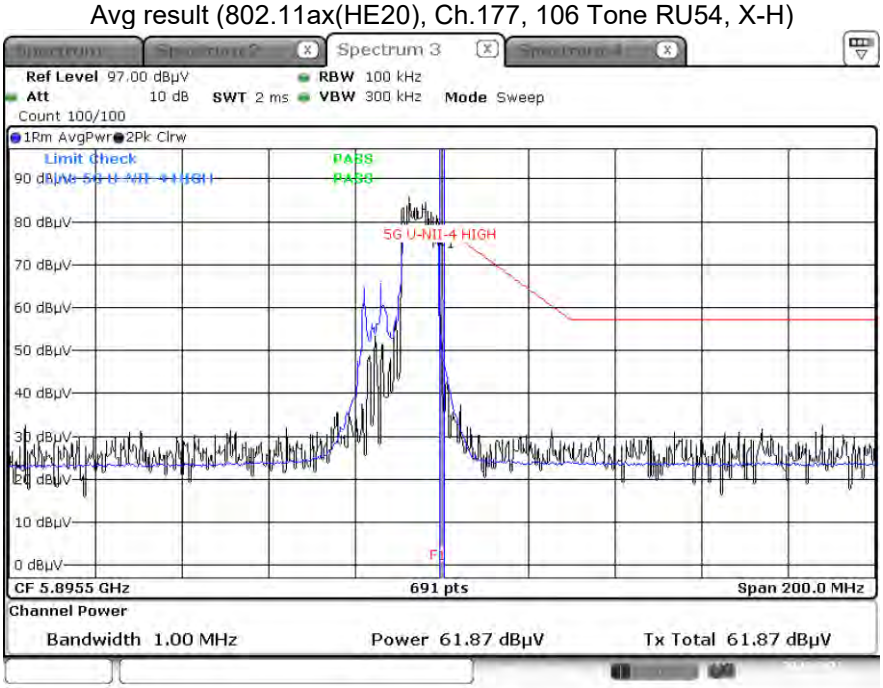
Avg result (802.11ax(HE20), Ch.177, 26 Tone RU8, X-H)



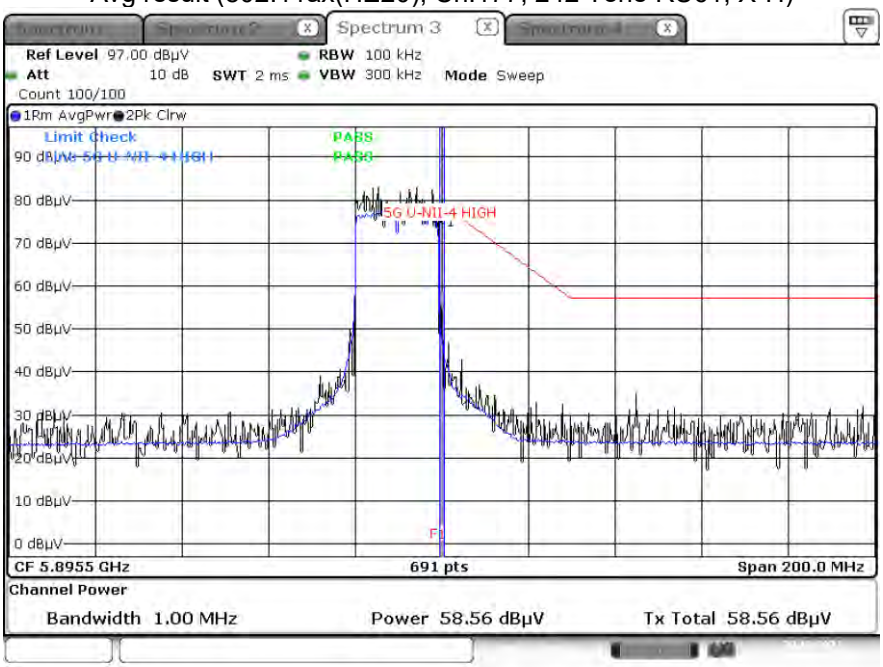
Avg result (802.11ax(HE20), Ch.177, 52 Tone RU40, X-H)



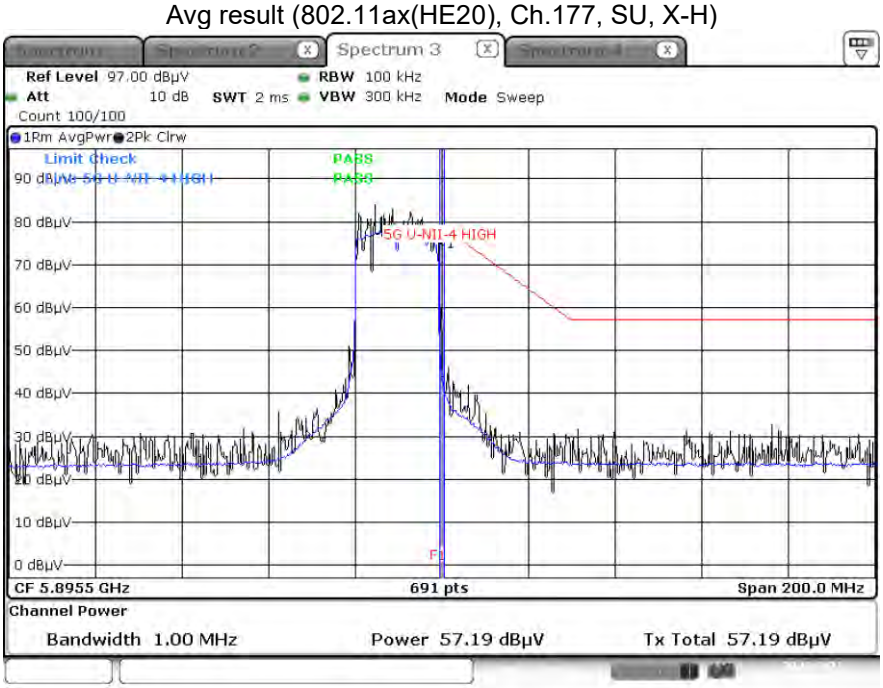
Avg result (802.11ax(HE20), Ch.177, 106 Tone RU54, X-H)



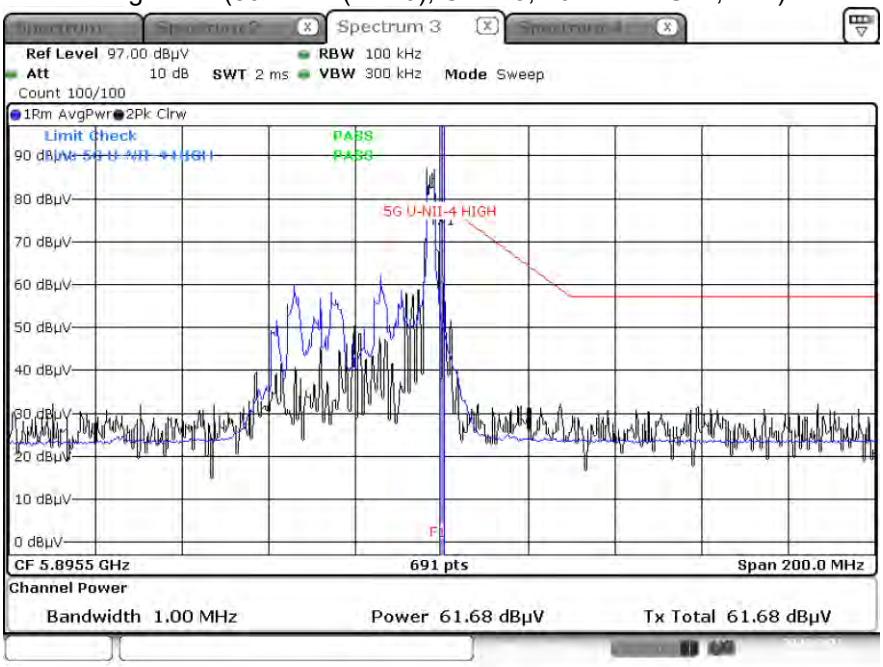
Avg result (802.11ax(HE20), Ch.177, 242 Tone RU61, X-H)



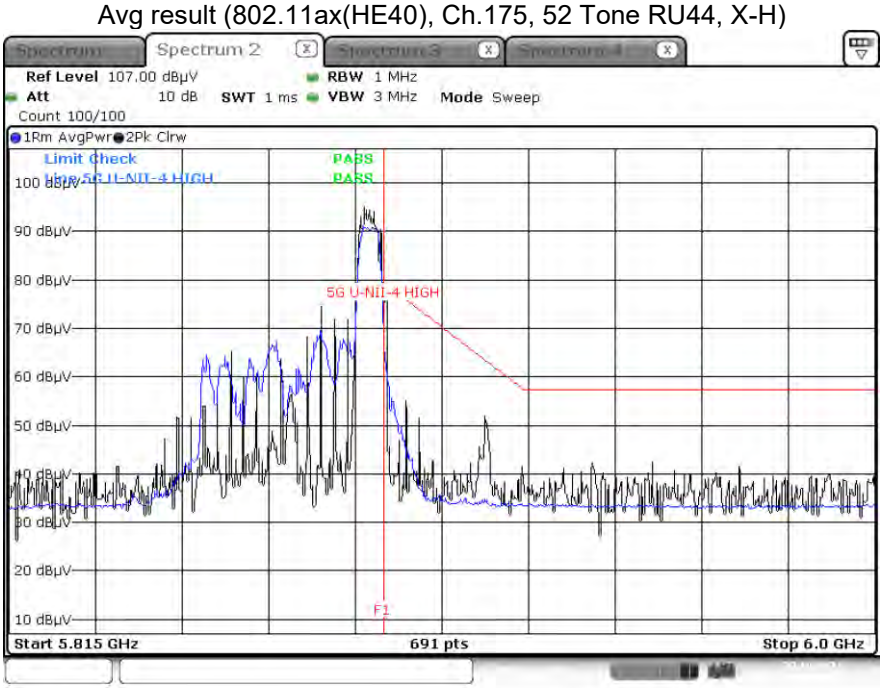
Avg result (802.11ax(HE20), Ch.177, SU, X-H)



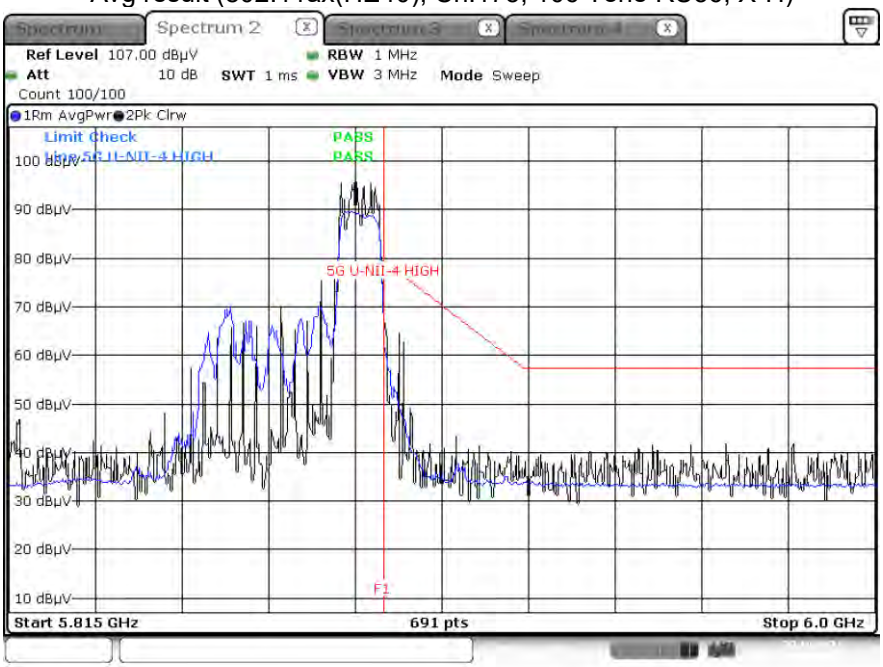
Avg result (802.11ax(HE40), Ch.175, 26 Tone RU17, X-H)



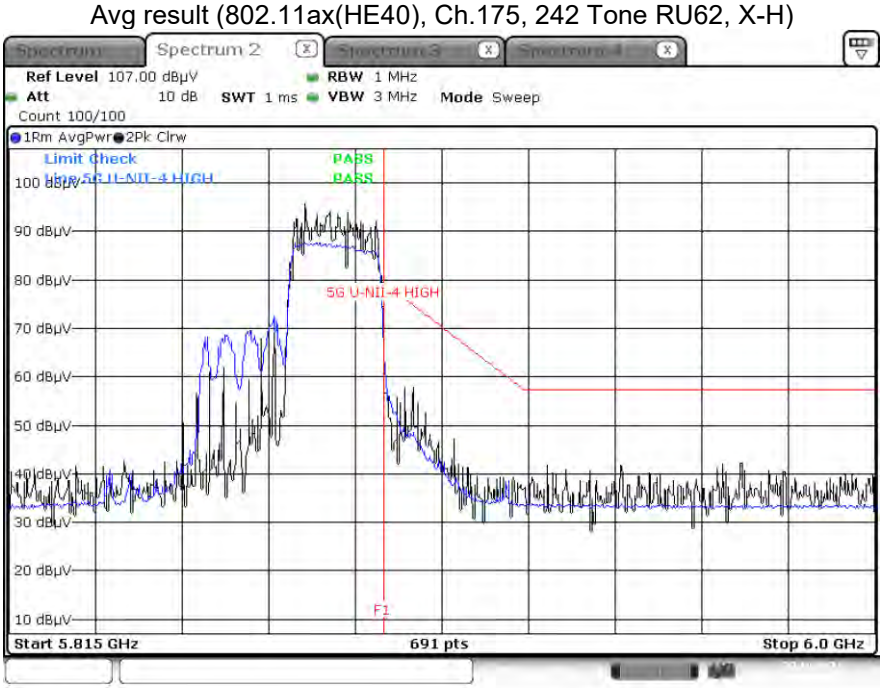
Avg result (802.11ax(HE40), Ch.175, 52 Tone RU44, X-H)



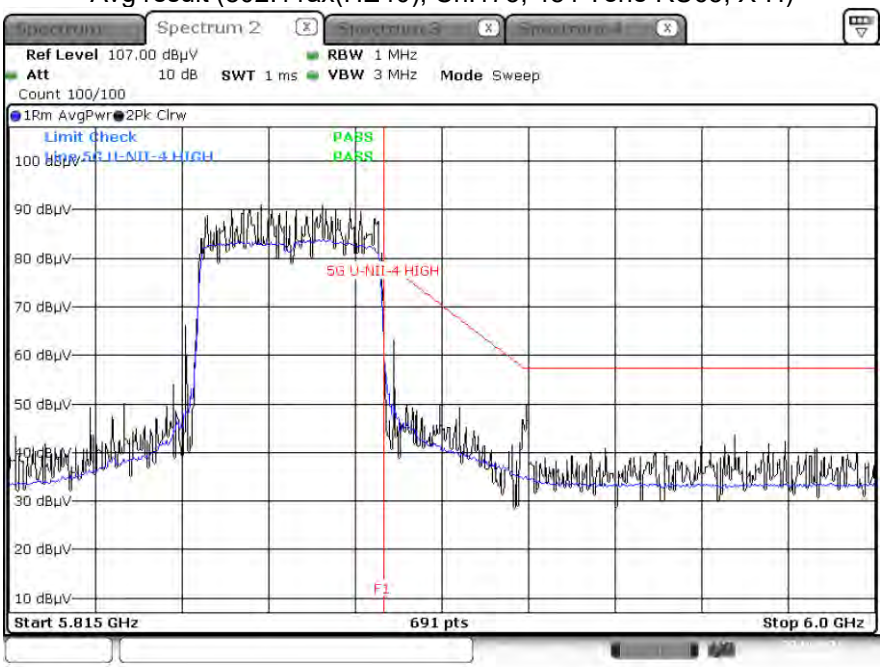
Avg result (802.11ax(HE40), Ch.175, 106 Tone RU56, X-H)



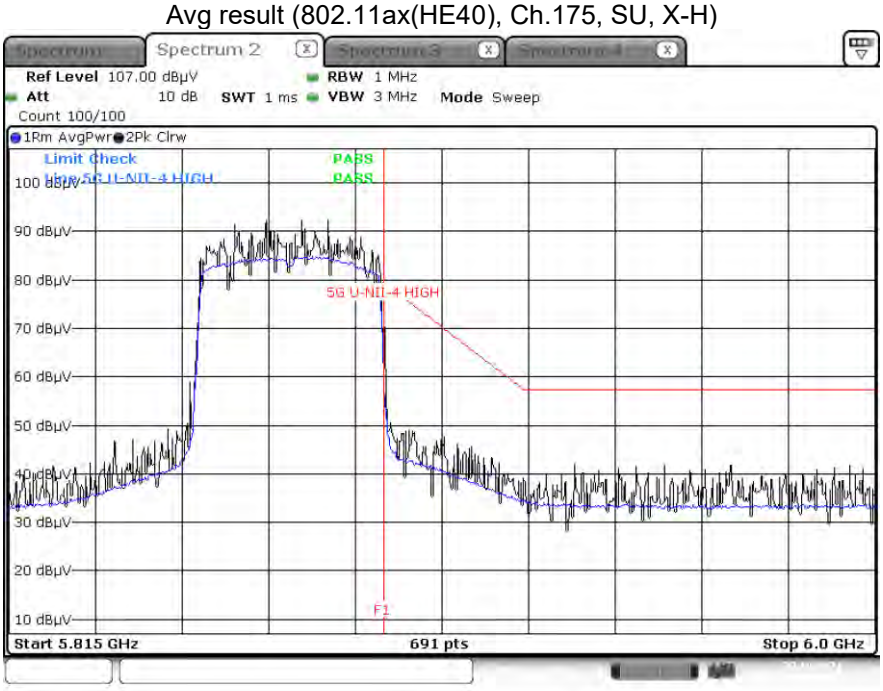
Avg result (802.11ax(HE40), Ch.175, 242 Tone RU62, X-H)



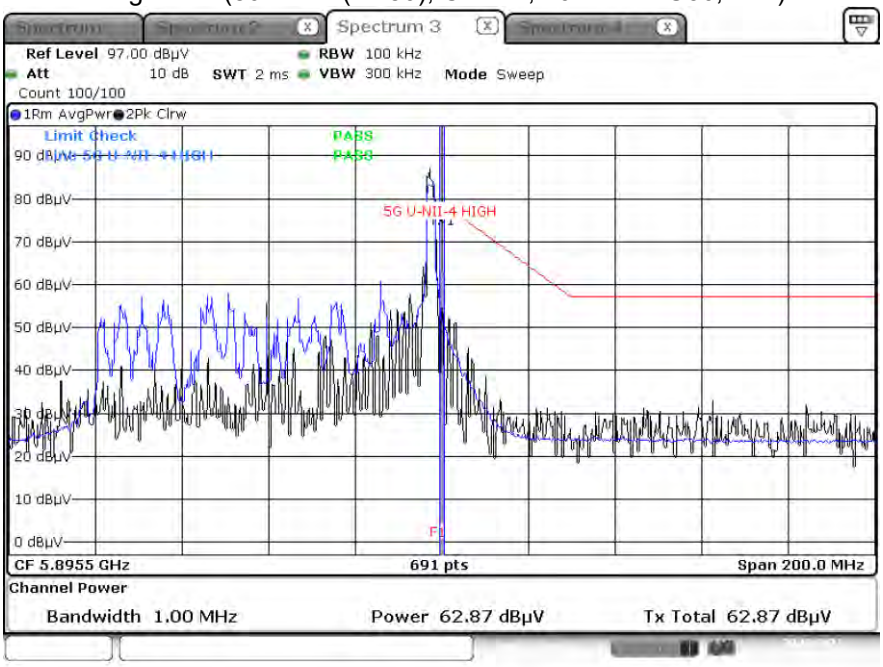
Avg result (802.11ax(HE40), Ch.175, 484 Tone RU65, X-H)



Avg result (802.11ax(HE40), Ch.175, SU, X-H)

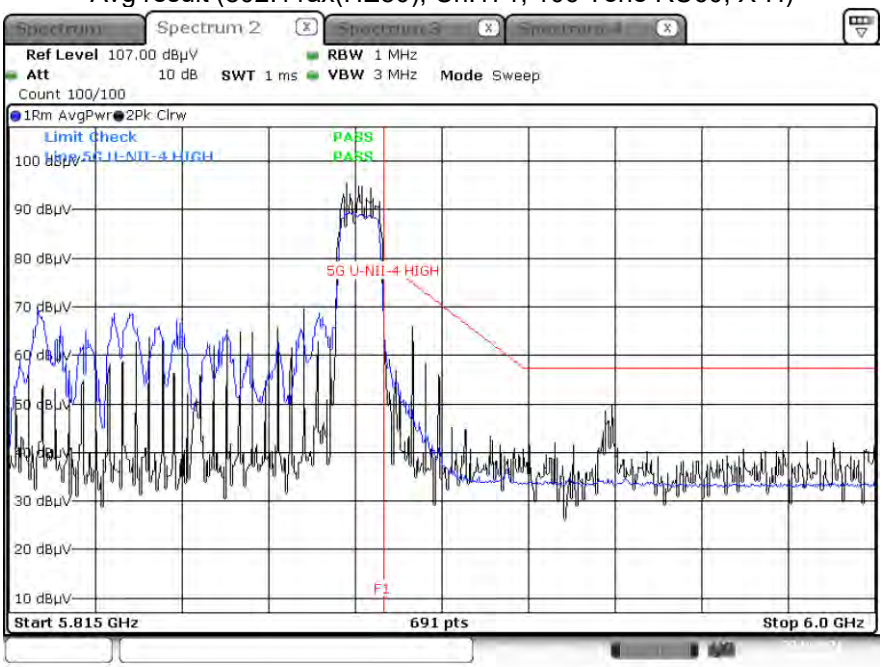


Avg result (802.11ax(HE80), Ch.171, 26 Tone RU36, X-H)

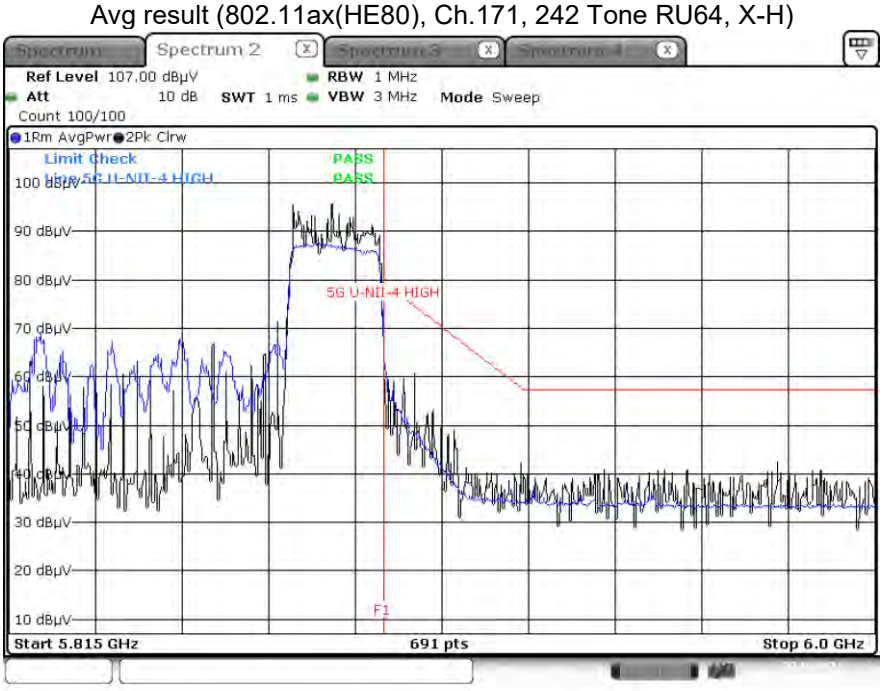


Avg result (802.11ax(HE80), Ch.171, 52 Tone RU52, X-H)

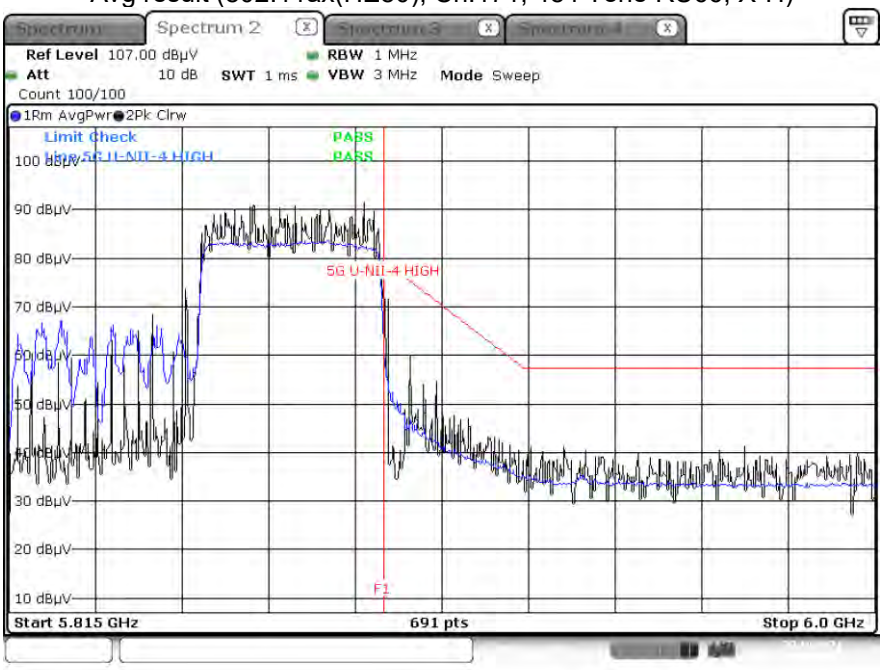
Avg result (802.11ax(HE80), Ch.171, 106 Tone RU60, X-H)



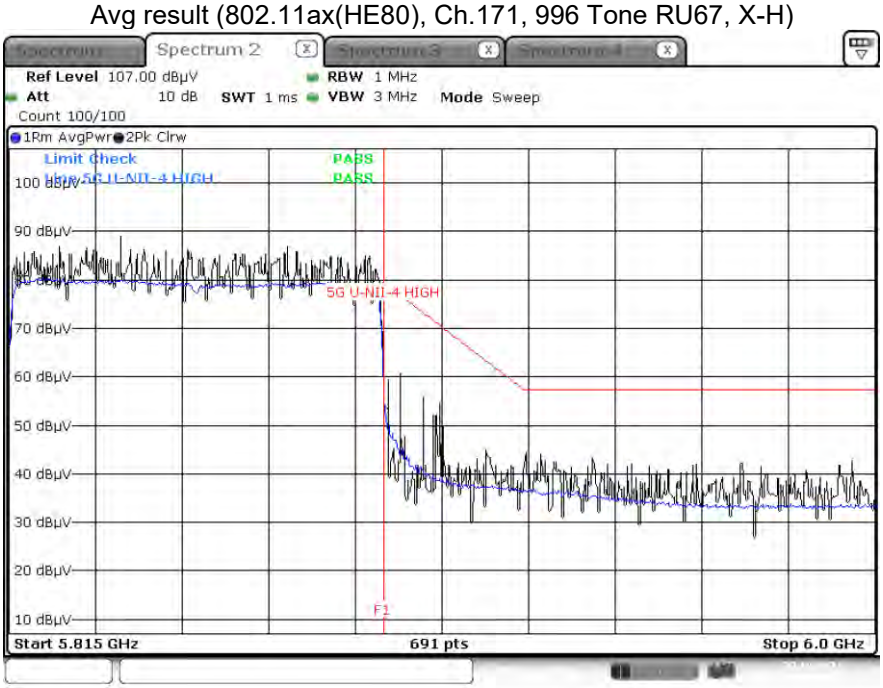
Avg result (802.11ax(HE80), Ch.171, 242 Tone RU64, X-H)



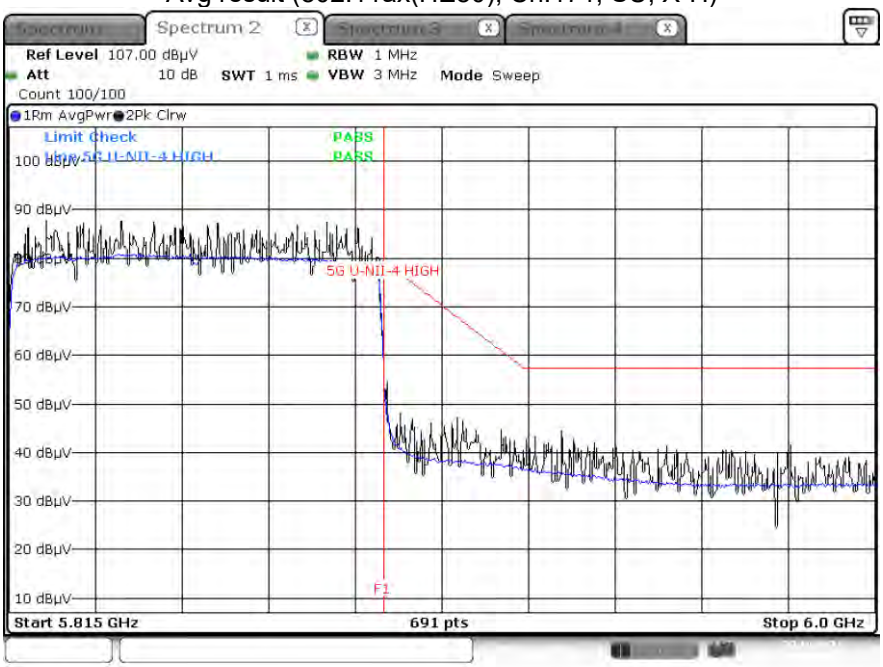
Avg result (802.11ax(HE80), Ch.171, 484 Tone RU66, X-H)



Avg result (802.11ax(HE80), Ch.171, 996 Tone RU67, X-H)



Avg result (802.11ax(HE80), Ch.171, SU, X-H)

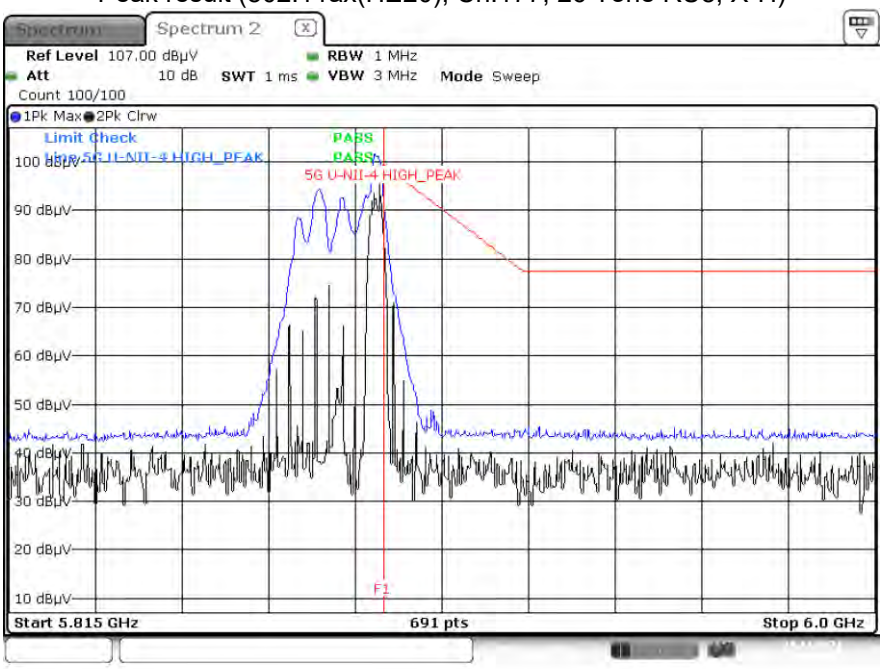


Note :

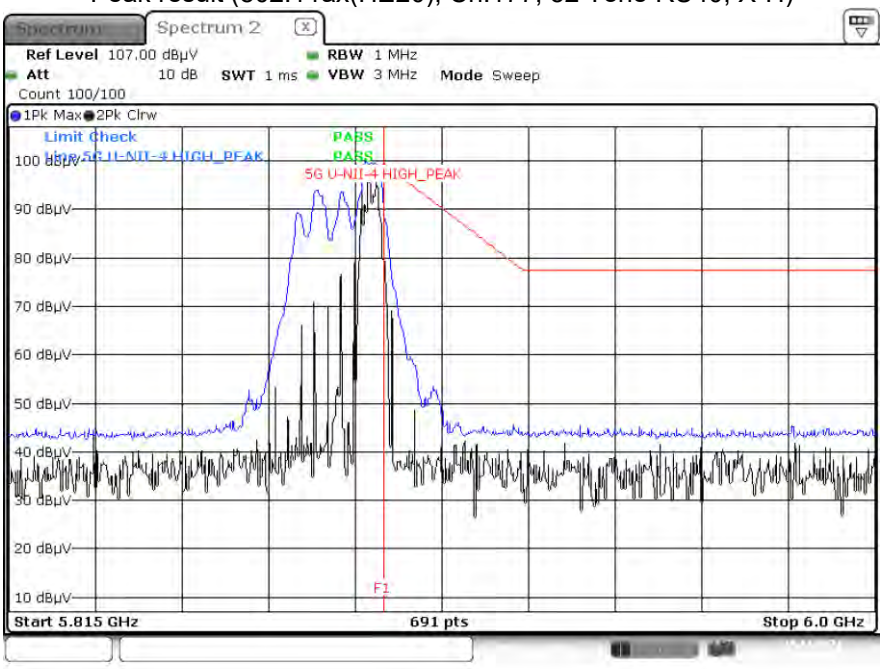
1. Only the worst case plots for U-NII-4 O.O.B.E
2. U-NII-4 Low & High O.O.B.E RedLine is Final Test Limit about factor value compensation.

[Peak result]

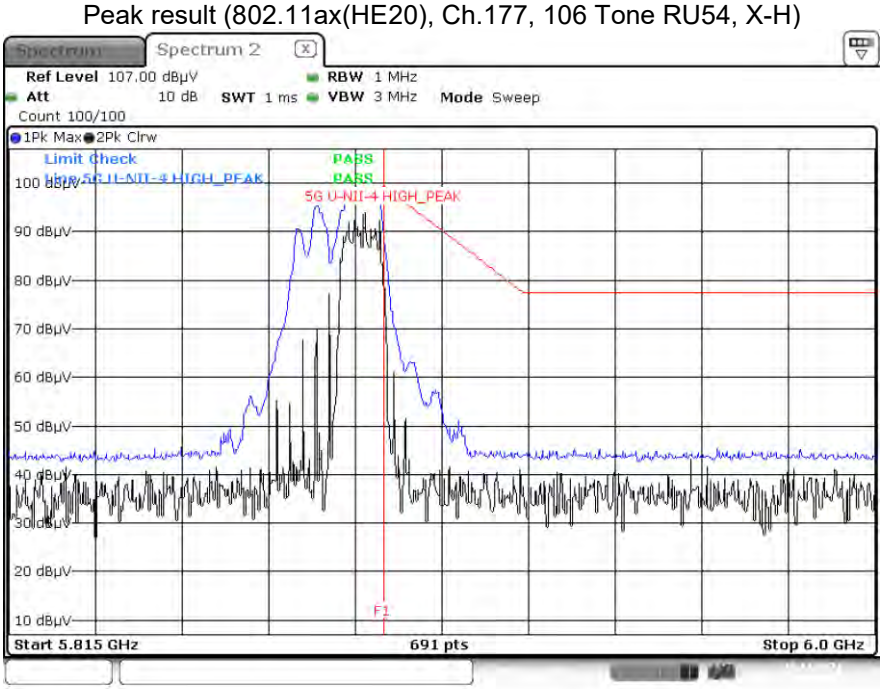
Peak result (802.11ax(HE20), Ch.177, 26 Tone RU8, X-H)



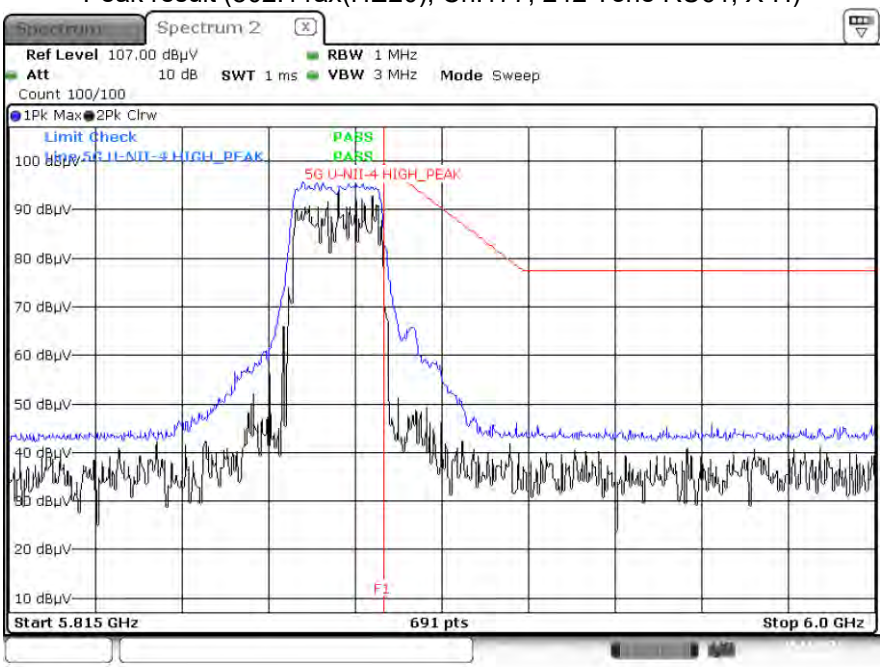
Peak result (802.11ax(HE20), Ch.177, 52 Tone RU40, X-H)



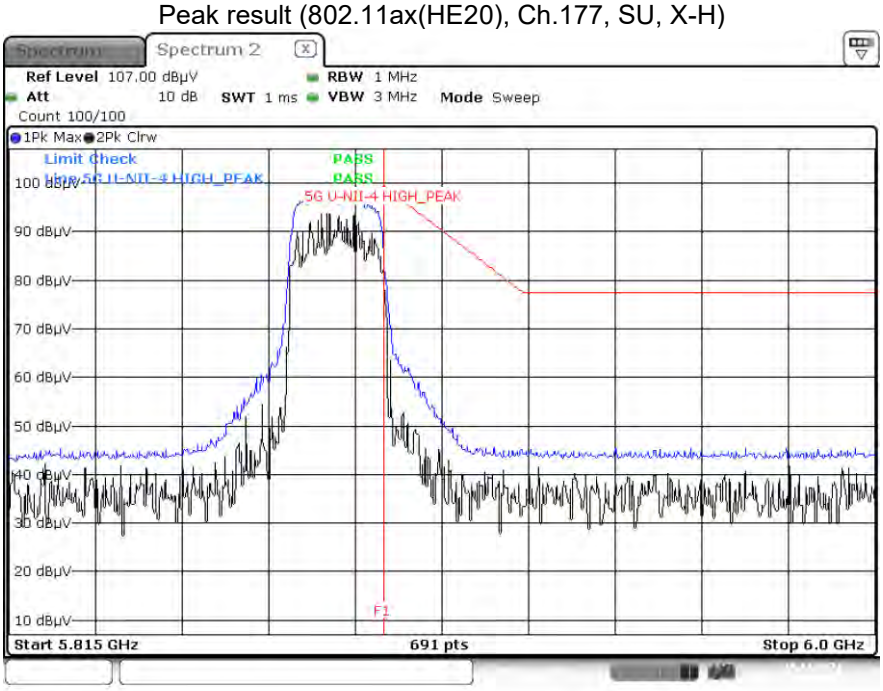
Peak result (802.11ax(HE20), Ch.177, 106 Tone RU54, X-H)



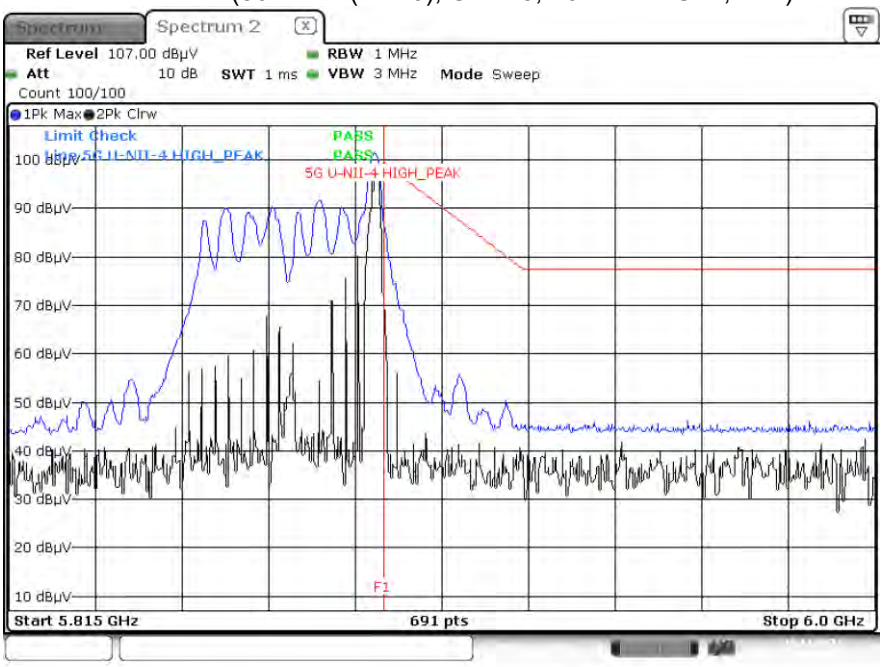
Peak result (802.11ax(HE20), Ch.177, 242 Tone RU61, X-H)



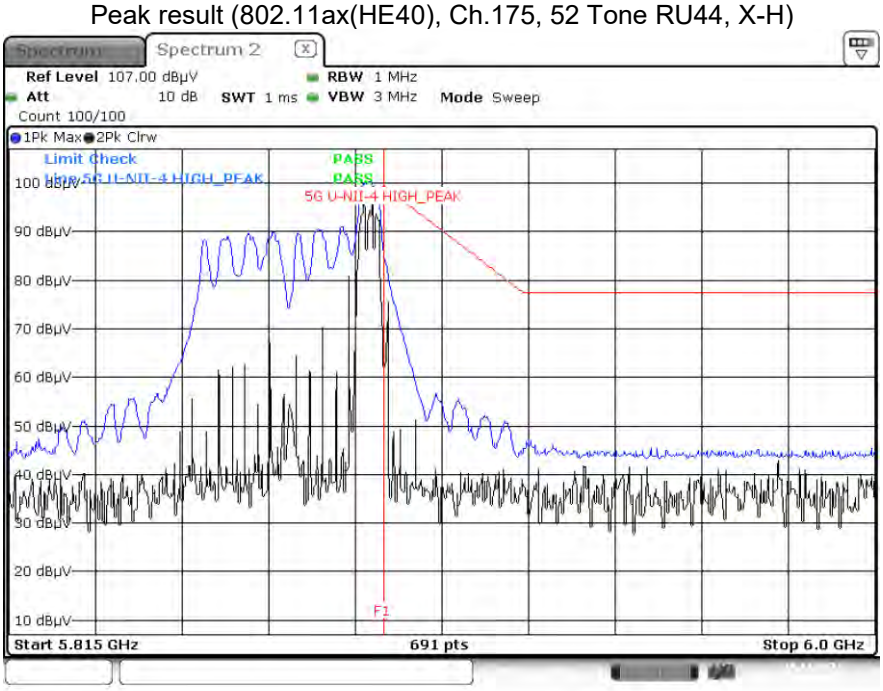
Peak result (802.11ax(HE20), Ch.177, SU, X-H)



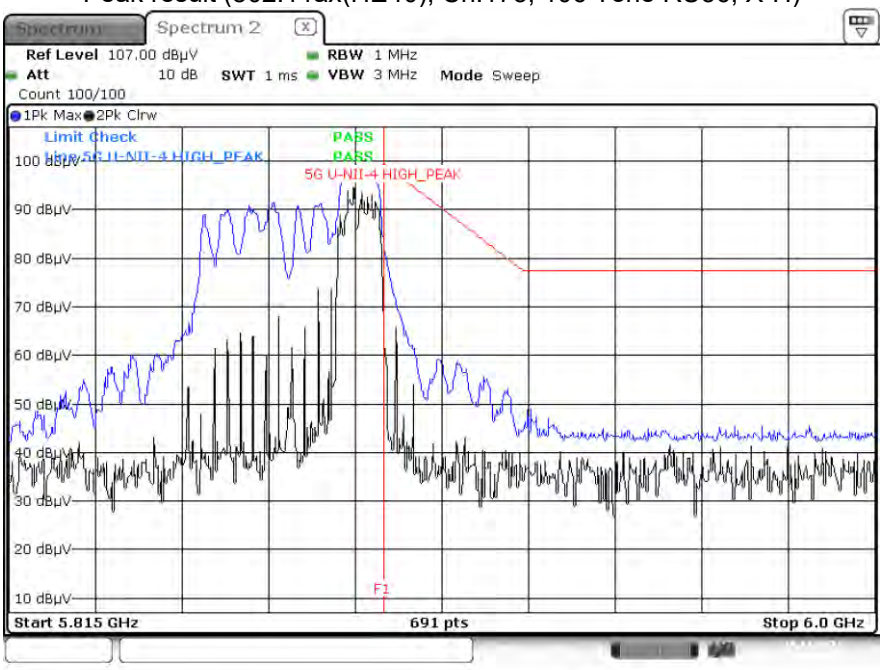
Peak result (802.11ax(HE40), Ch.175, 26 Tone RU17, X-H)



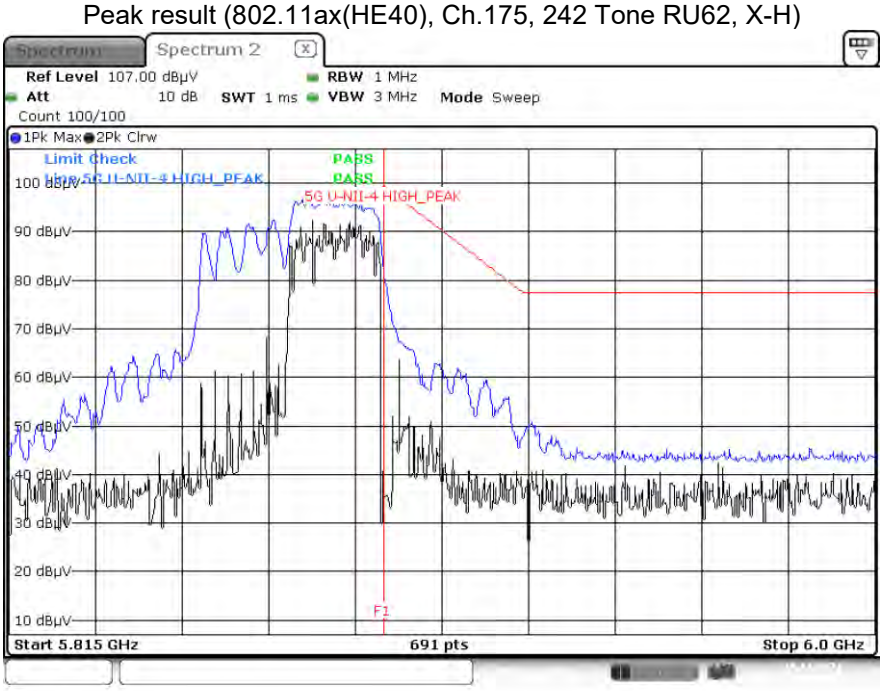
Peak result (802.11ax(HE40), Ch.175, 52 Tone RU44, X-H)



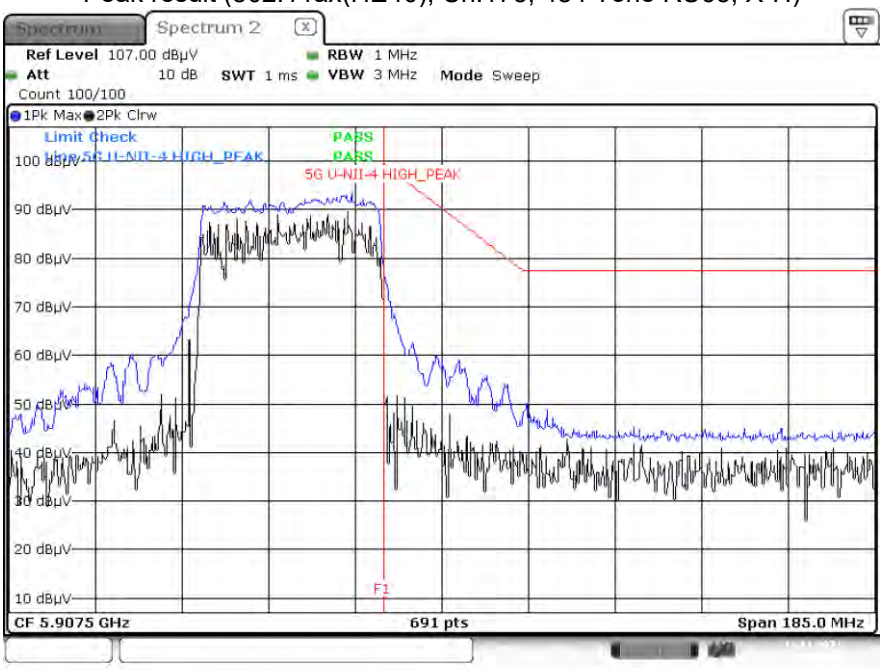
Peak result (802.11ax(HE40), Ch.175, 106 Tone RU56, X-H)



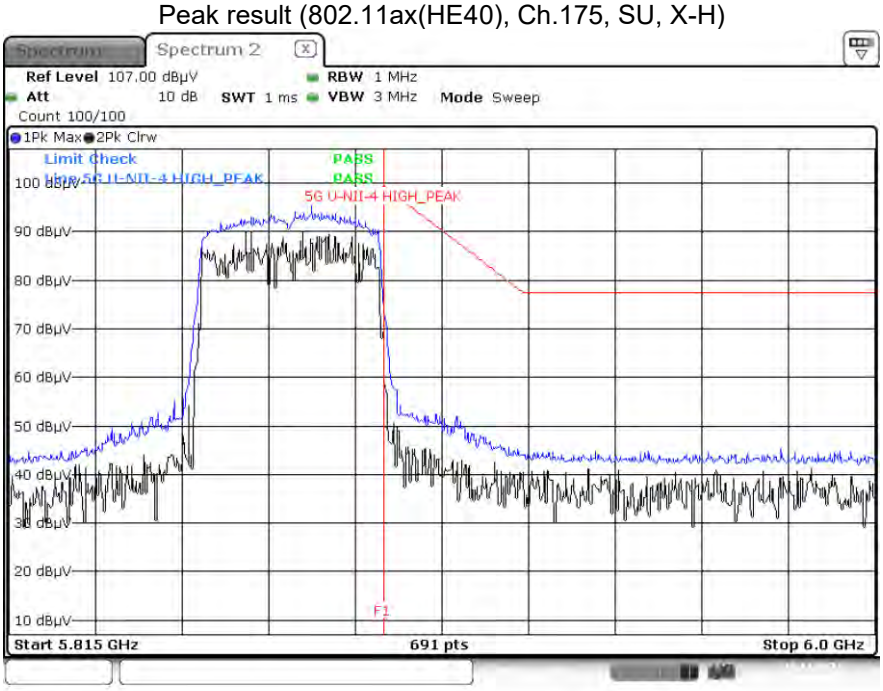
Peak result (802.11ax(HE40), Ch.175, 242 Tone RU62, X-H)



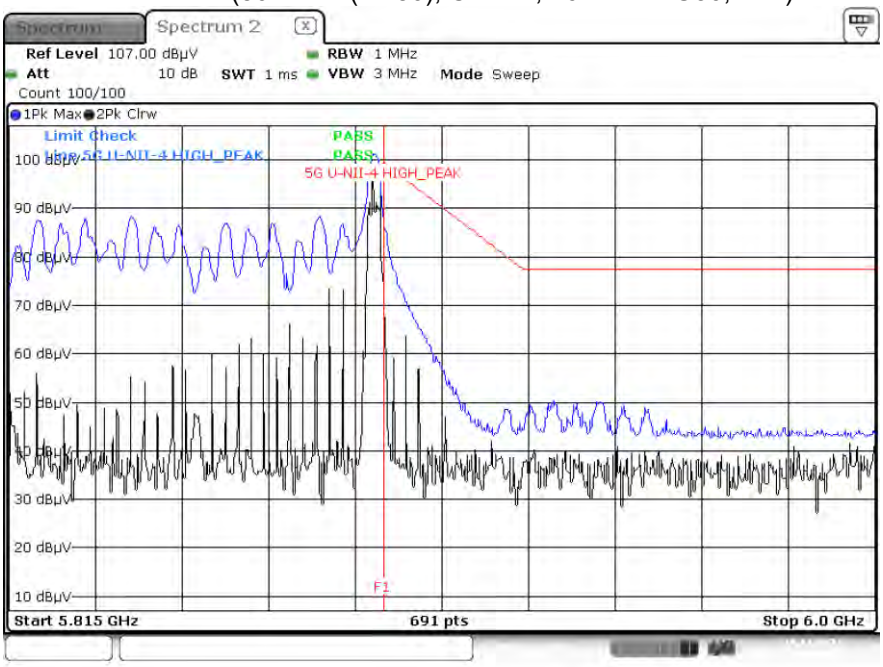
Peak result (802.11ax(HE40), Ch.175, 484 Tone RU65, X-H)



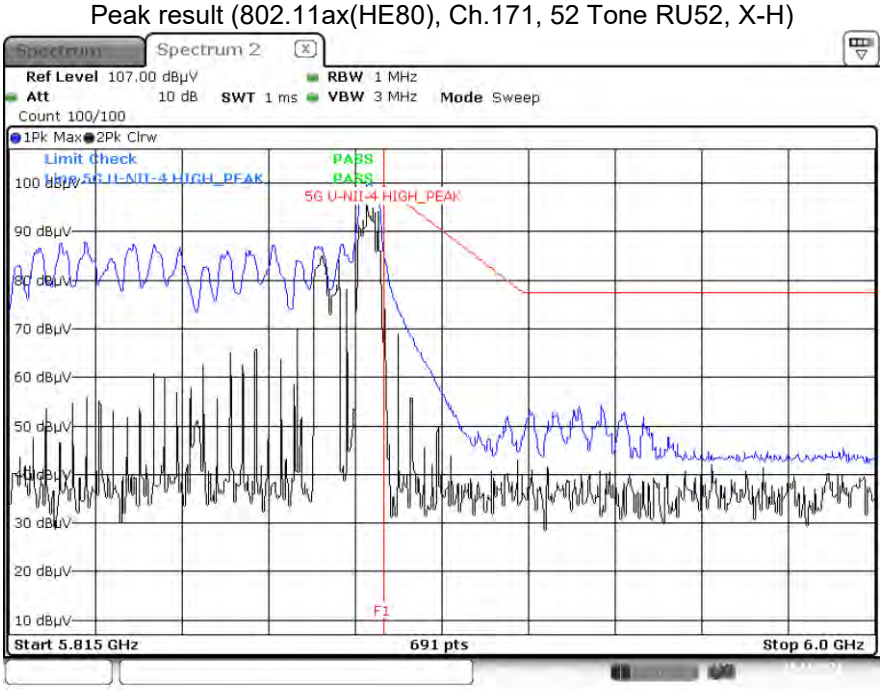
Peak result (802.11ax(HE40), Ch.175, SU, X-H)



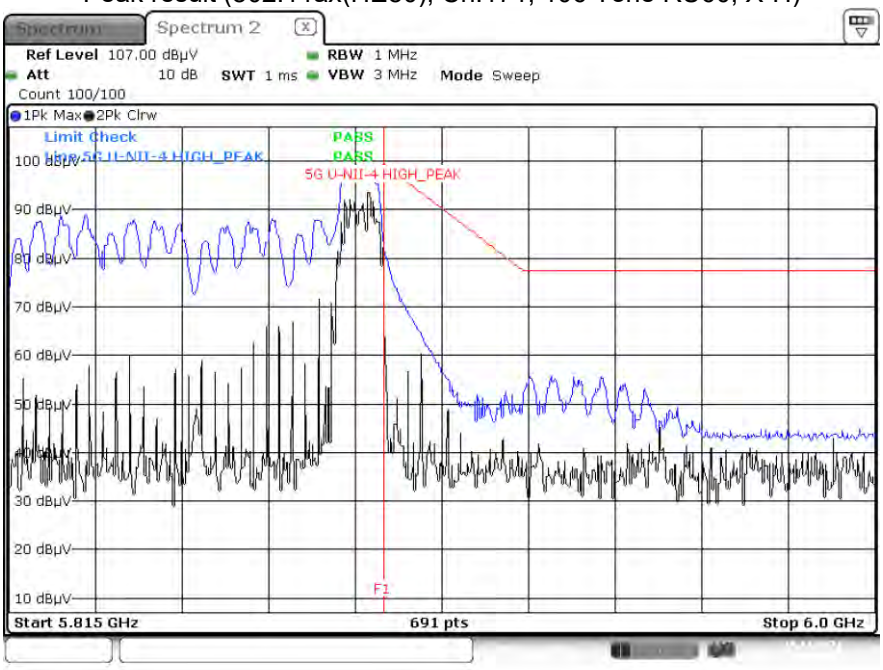
Peak result (802.11ax(HE80), Ch.171, 26 Tone RU36, X-H)



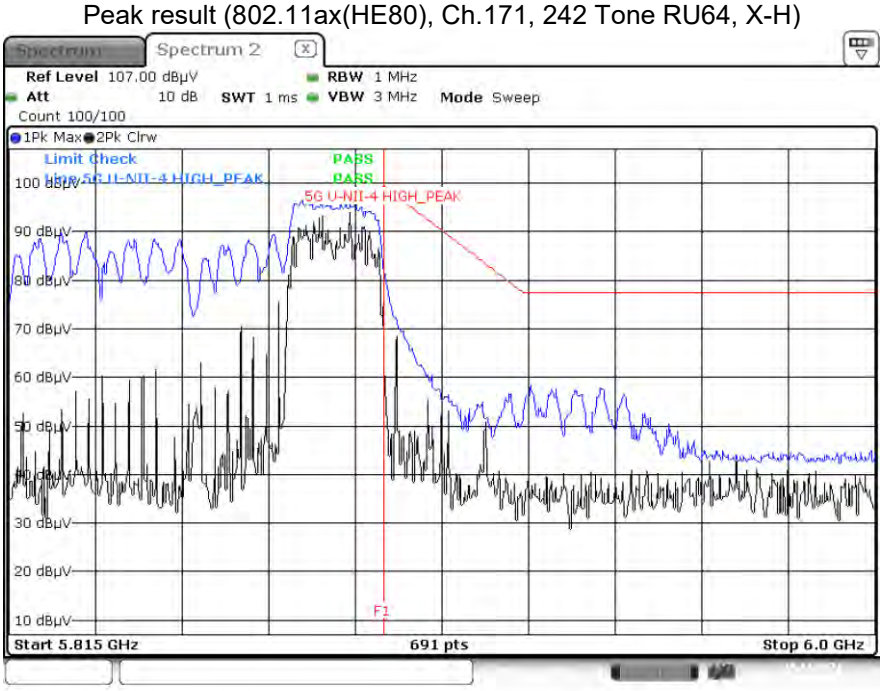
Peak result (802.11ax(HE80), Ch.171, 52 Tone RU52, X-H)



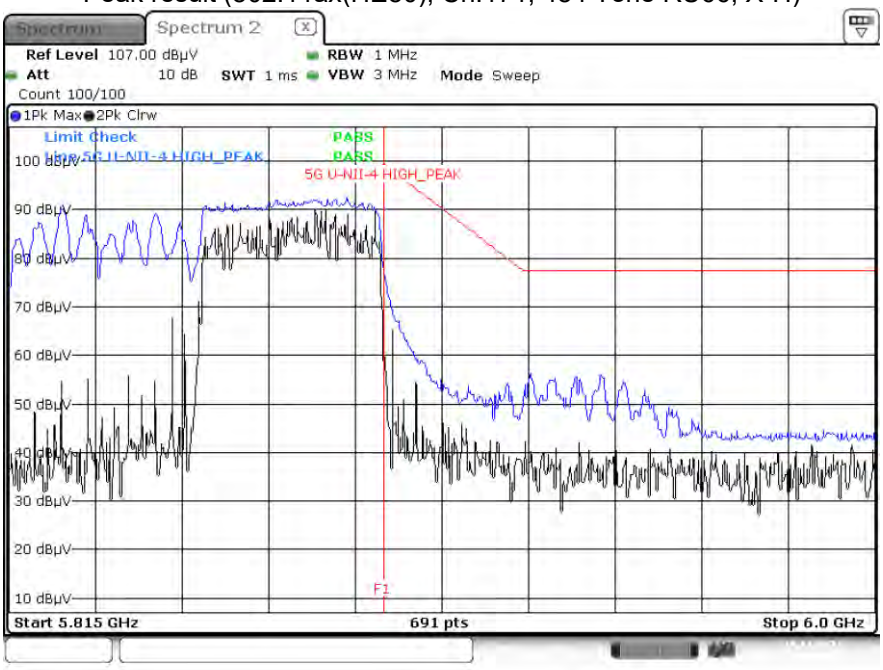
Peak result (802.11ax(HE80), Ch.171, 106 Tone RU60, X-H)



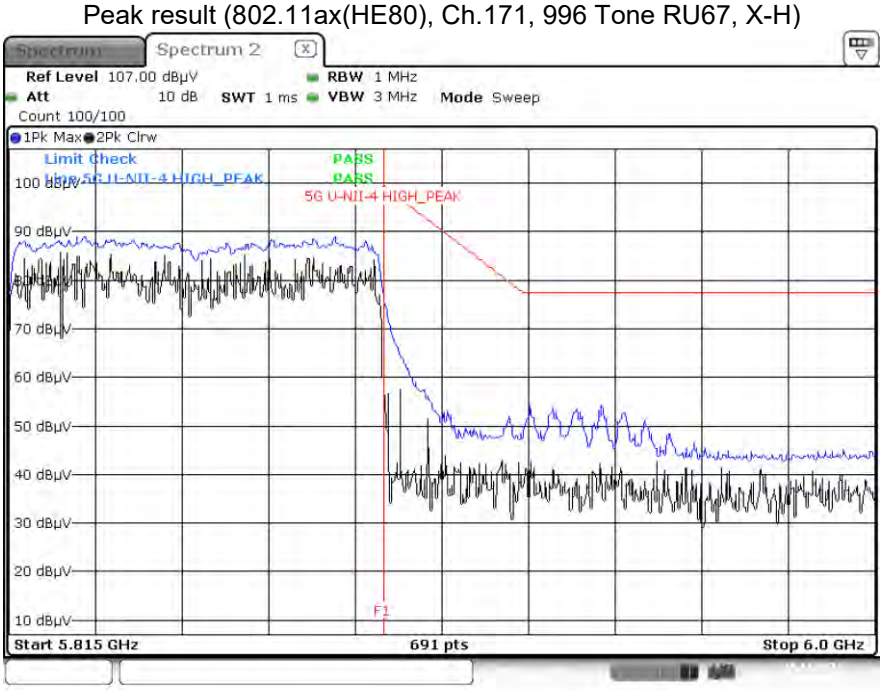
Peak result (802.11ax(HE80), Ch.171, 242 Tone RU64, X-H)



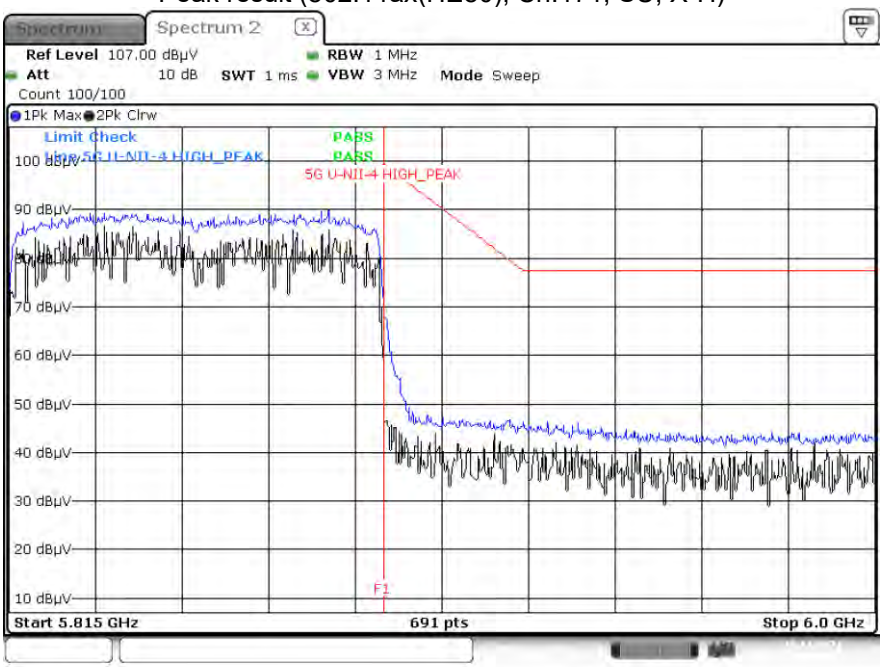
Peak result (802.11ax(HE80), Ch.171, 484 Tone RU66, X-H)



Peak result (802.11ax(HE80), Ch.171, 996 Tone RU67, X-H)



Peak result (802.11ax(HE80), Ch.171, SU, X-H)



Note :

1. Only the worst case plots for U-NII-4 O.O.B.E
2. U-NII-4 Low & High O.O.B.E RedLine is Final Test Limit(Peak) about factor value compensation.

11. LIST OF TEST EQUIPMENT

Conducted Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
LISN	ENV216	Rohde & Schwarz	102245	08/23/2022	Annual
EMI Test Receiver	ESR	Rohde & Schwarz	101910	06/17/2022	Annual
Temperature Chamber	SU-642	ESPEC	0093008124	03/15/2022	Annual
Signal Analyzer	N9030A	Agilent	MY49432108	03/09/2022	Annual
Signal Analyzer	N9030A	Agilent	US51350313	03/30/2022	Annual
Power Meter	N1911A	Agilent	MY45100523	04/08/2022	Annual
Power Sensor	N1921A	Agilent	MY57820067	04/08/2022	Annual
Power Splitter	11667B	Hewlett Packard	10545	02/09/2022	Annual
DC Power Supply	E3632A	HP	MY50360067	02/26/2022	Annual
Attenuator(10 dB)(DC-26.5 GHz)	8493C	HP	07560	06/18/2022	Annual
Attenuator(10 dB)(DC-26.5 GHz)	8493C	HP	08285	06/28/2022	Annual
Attenuator(20 dB)	18N-20dB	Rohde & Schwarz	8	03/08/2022	Annual
Software	EMC32	Rohde & Schwarz	N/A	N/A	N/A
FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	HCT CO., LTD.	N/A	N/A	N/A

Note:

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

Radiated Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Controller(Antenna mast)	CO3000	Innco system	CO3000-4p	N/A	N/A
Antenna Position Tower	MA4640/800-XP-EP	Innco system	N/A	N/A	N/A
Controller	EM1000	Audix	060520	N/A	N/A
Turn Table	N/A	Audix	N/A	N/A	N/A
Amp & Filter Bank Switch Controller	FBSM-01B	TNM system	TM19050002	N/A	N/A
Loop Antenna	1513	Schwarzbeck	1513-333	03/19/2022	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	9168-0895	09/04/2022	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	02296	05/19/2022	Biennial
Horn Antenna(15 GHz ~ 40 GHz)	BBHA9170	Schwarzbeck	BBHA9170124	04/12/2023	Biennial
Spectrum Analyzer	FSV(10 Hz ~ 40 GHz)	Rohde & Schwarz	101055	05/14/2022	Annual
Band Reject Filter	WRCJV2400/2483.5-2370/2520-60/12SS	Wainwright Instruments	2	01/06/2022	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	5	06/24/2022	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	6	06/24/2022	Annual
Power Amplifier	CBL18265035	CERNEX	22966	12/04/2021	Annual
Power Amplifier	CBL26405040	CERNEX	25956	03/23/2022	Annual
HPF(3~18GHz) + LNA1(1~18GHz)	FMSR-05B	TNM system	F6	01/20/2022	Annual
ATT(10dB) + LNA1(1~18GHz)	FMSR -05B	TNM system	None	01/20/2022	Annual
ATT(3dB) + LNA1(1~18GHz)	FMSR -05B	TNM system	None	01/20/2022	Annual
LNA1(1~18GHz)	FMSR -05B	TNM system	25540	01/20/2022	Annual
HPF(7~18GHz) + LNA2(6~18GHz)	FMSR -05B	TNM system	28550	01/20/2022	Annual
Thru(30MHz ~ 18GHz)	FMSR -05B	TNM system	None	01/20/2022	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-FC076-P