



FCC RF Test Report

APPLICANT : Technicolor Connected Home USA LLC
EQUIPMENT : DOCSIS 3.1 Residential Voice Gateway
BRAND NAME : Technicolor
MODEL NAME : CGA437TTCH4; CGA437TXXXXX (where X can be alphanumeric, -, or blank)
FCC ID : G95-CGA437T
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure
TEST DATE(S) : Oct. 27, 2022 ~ Dec. 07, 2022

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

This report contains data that were produced under subcontract by Sporton International Inc. (ShenZhen).

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia



Approved by: Jason Jia

Sporton International Inc. (Kunshan)

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China**



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SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 & 15.403(i)	26dB & 99% Bandwidth	-	Report only	-
3.2	15.407(a)	Maximum Conducted Output Power	≤ 24 dBm	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 11 dBm/MHz	Pass	-
3.4	15.407(b)	Unwanted Emissions	15.407(b) & 15.209(a)	Pass	Under limit 0.55 dB at 5350.200 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 4.08 dB at 0.499 MHz
3.6	15.203 & 15.407(a)	Antenna Requirement	15.203 & 15.407(a)	Pass	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



1 General Description

1.1 Applicant

Technicolor Connected Home USA LLC
4855 Peachtree Industrial Blvd. Suite 200 Norcross, Georgia 30092

1.2 Manufacturer

Technicolor Connected Home USA LLC
4855 Peachtree Industrial Blvd. Suite 200 Norcross, Georgia 30092

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	DOCSIS 3.1 Residential Voice Gateway
Brand Name	Technicolor
Model Name	CGA437TTCH4; CGA437TXXXXX (where X can be alphanumeric, -, or blank)
FCC ID	G95-CGA437T
SN Code	Conducted: CGA437TTCH3 lab2c067 Radiation: CGA437TTCH3lab2A128 Conduction: CGA437TTCH4lab2B030
HW Version	1.0.0
SW Version	RG21.3-CGA437TTCH3-TCH_CORE-21.2P1_WLAN
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5250 MHz ~ 5350 MHz 5470 MHz ~ 5725 MHz
Maximum Output Power to Antenna	<p><MIMO Ant.1+2+3+4> <5250 MHz ~ 5350 MHz> 802.11a : 19.61 dBm / 0.0914 W 802.11n HT20 : 22.67 dBm / 0.1849 W 802.11n HT40 : 23.27 dBm / 0.2118 W 802.11ac VHT20 : 22.59 dBm / 0.1816 W 802.11ac VHT40 : 23.13 dBm / 0.2056 W 802.11ac VHT80 : 22.99 dBm / 0.1991 W 802.11ac VHT160 : 21.96 dBm / 0.1570 W 802.11ax HE20 : 22.95 dBm / 0.1972 W 802.11ax HE40 : 23.47 dBm / 0.2223 W 802.11ax HE80 : 23.41 dBm / 0.2193 W 802.11ax HE160 : 22.59 dBm / 0.1816 W</p> <p><5470 MHz ~ 5725 MHz > 802.11a : 19.89 dBm / 0.0975 W 802.11n HT20 : 22.58 dBm / 0.1811 W 802.11n HT40 : 23.13 dBm / 0.2056 W 802.11ac VHT20 : 22.50 dBm / 0.1778 W 802.11ac VHT40 : 23.03 dBm / 0.2009 W 802.11ac VHT80 : 23.04 dBm / 0.2014 W 802.11ac VHT160 : 22.71 dBm / 0.1866 W 802.11ax HE20 : 22.86 dBm / 0.1932 W 802.11ax HE40 : 23.48 dBm / 0.2228 W 802.11ax HE80 : 23.47 dBm / 0.2223 W 802.11ax HE160 : 23.11 dBm / 0.2046 W</p>
99% Occupied Bandwidth	<p><MIMO Ant.1+2+3+4> <5250 MHz ~ 5350 MHz> 802.11a : 17.18 MHz 802.11ax HE20 : 19.18 MHz 802.11ax HE40 : 38.06 MHz 802.11ax HE80 : 77.32 MHz 802.11ax HE160 : 156.80 MHz</p> <p><5470 MHz ~ 5725 MHz > 802.11a : 17.13 MHz 802.11ax HE20 : 19.18 MHz 802.11ax HE40 : 38.16 MHz 802.11ax HE80 : 77.32 MHz 802.11ax HE160 : 156.56 MHz</p>
Antenna Type	Murphy Antenna
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) 802.11ax: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)



Antenna Function Description		Ant. 1	Ant. 2	Ant. 3	Ant. 4
	802.11 a/n/ac/ax SISO	V	V	V	V
	802.11 a/n/ac/ax CDD 1S4T	V	V	V	V
	802.11 n/ac/ax Tx Beamforming 1S4T	V	V	V	V
	802.11 n/ac/ax SDM 4S4T	V	V	V	V

Note:

1. For SISO&MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power.
2. For 802.11n HT20 / ac VHT20 / ax HE20 and 802.11n HT40 / ac VHT40 / ax HE40 and 802.11 ac VHT80 / ax HE80 mode, the whole testing have assessed only 802.11ax HE20/HE40/HE80 by referring to their maximum conducted power.
3. The device does not support partial RU tone for 802.11ax mode
4. The device supports 1S4T(CDD&TXBF) and 4S4T(SDM) mode; 1S4T: NSS=1, MIMO 4Tx; 4S4T: NSS=4, MIMO 4Tx.
5. Please refer to the antenna report for the maximum Single antenna gain and CDD (Cyclic Delay Diversity) directional gain and TXBF (Tx Beamforming) directional gain and SDM (Space Division Multiplexing) directional gain.

Frequency Band	Max Single Antenna gain (dBi)				CDD DG (dBi)		TXBF DG (dBi)		SDM DG (dBi)	
	ANT1	ANT2	ANT3	ANT4	For Power	For PSD	For Power	For PSD	For Power	For PSD
5GHz UNII-2A	3.80	4.34	3.72	4.43	4.43	7.79	7.79	7.79	2.08	2.08
5GHz UNII-2C	3.22	5.14	4.83	3.76	5.14	8.28	8.28	8.28	2.29	2.29

Straddle Band / Freq.	Max Single Antenna gain (dBi)				CDD DG (dBi)		TXBF DG (dBi)		SDM DG (dBi)	
	ANT1	ANT2	ANT3	ANT4	For Power	For PSD	For Power	For PSD	For Power	For PSD
CH50 5250MHz	3.95	4.34	3.72	4.50	4.50	7.79	7.79	7.79	2.08	2.08

1.5 Modification of EUT

No modifications are made to the EUT during all test items.



1.6 Specification of Accessory

Specification of Accessory				
AC Adapter 1	Brand Name	HONOTO	Model Name	ADS-50FKI-12 12048EPCU-L
AC Adapter 2	Brand Name	HONOTO	Model Name	ADS-50FKI-12 12048EPG

1.7 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CO01-KS 03CH05-KS	CN1257	314309

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ	CN1256	421272

Test data subcontracted: conducted test cases in section 3 of this report.

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH05-KS	AUDIX	E3	6.2009-8-24
2.	CO01-KS	AUDIX	E3	6.2009-8-24



1.9 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz U-NII-2A	50 ²	5250	58 [#]	5290
	52	5260	60	5300
	54 [*]	5270	62 [*]	5310
	56	5280	64	5320

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470- 5725 MHz U-NII-2C	100	5500	114 ²	5570
	102 [*]	5510	116	5580
	104	5520	132	5660
	106 [#]	5530	134 [*]	5670
	108	5540	136	5680
	110 [*]	5550	140	5700
	112	5560		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
TDWR Channel	118 [*]	5590	124	5620
	120	5600	126 [*]	5630
	122 [#]	5610	128	5640

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	138 [#]	5690	144	5720
	142 [*]	5710		

Note:

1. The above Frequency and Channel in "*" were 802.11n HT40 and 802.11ac VHT40 and 802.11ax HE40.



- 2. The above Frequency and Channel in "#1" were 802.11ac VHT80 and 802.11ax HE80.
- 3. The above Frequency and Channel in "#2" were 802.11ac VHT160 and 802.11ax HE160.

2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

MIMO Mode

Modulation	Data Rate
802.11a CDD 1S4T	6 Mbps
802.11ax HE20 CDD 1S4T	MCS0
802.11ax HE40 CDD 1S4T	MCS0
802.11ax HE80 CDD 1S4T	MCS0
802.11ax HE160 CDD 1S4T	MCS0
802.11ax HE20 SDM 4S4T	MCS0
802.11ax HE40 SDM 4S4T	MCS0
802.11ax HE80 SDM 4S4T	MCS0
802.11ax HE160 SDM 4S4T	MCS0
802.11ax HE20 TX BF 1S4T	MCS0
802.11ax HE40 TX BF 1S4T	MCS0
802.11ax HE80 TX BF 1S4T	MCS0
802.11ax HE160 TX BF 1S4T	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN Link(5G) + Power From Adapter 1
Remark: For Radiated Test Cases, The tests were performance with Adapter 1.	



Ch. #		U-NII-2A	U-NII-2C
		802.11a	802.11a
L	Low	52	100
M	Middle	60	116
H	High	64	140
Straddle		-	144

Ch. #		U-NII-2A	U-NII-2C
		802.11ax HE20	802.11ax HE20
L	Low	52	100
M	Middle	60	116
H	High	64	140
Straddle		-	144

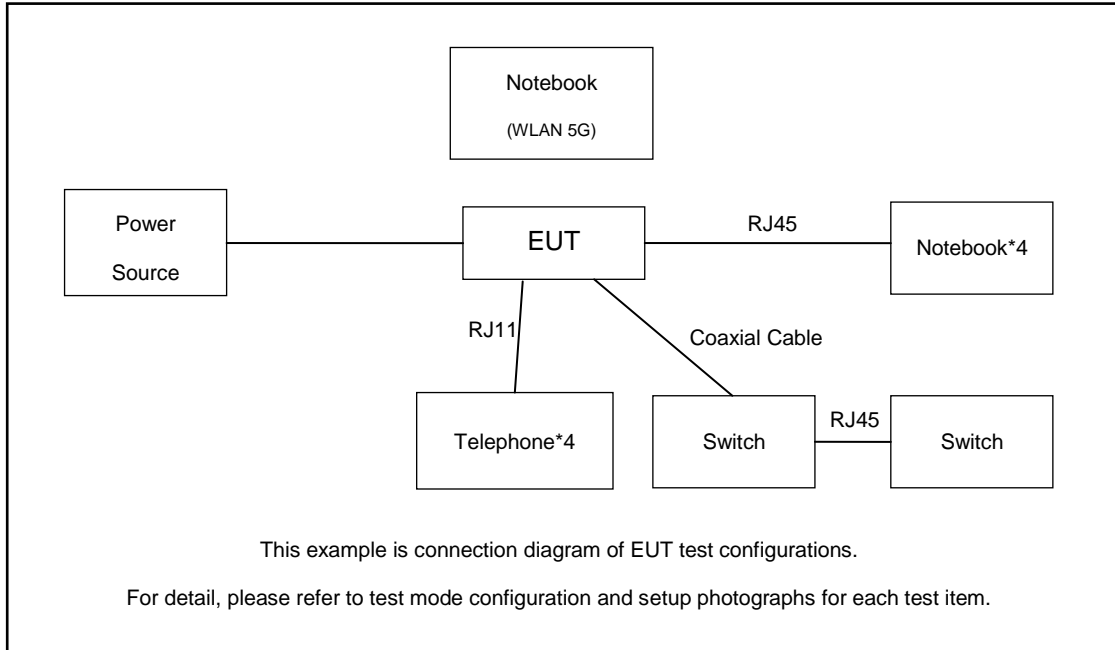
Ch. #		U-NII-2A	U-NII-2C
		802.11ax HE40	802.11ax HE40
L	Low	54	102
M	Middle	-	110
H	High	62	134
Straddle		-	142

Ch. #		U-NII-2A	U-NII-2C
		802.11ax HE80	802.11ax HE80
L	Low	-	106
M	Middle	58	-
H	High	-	122
Straddle		-	138

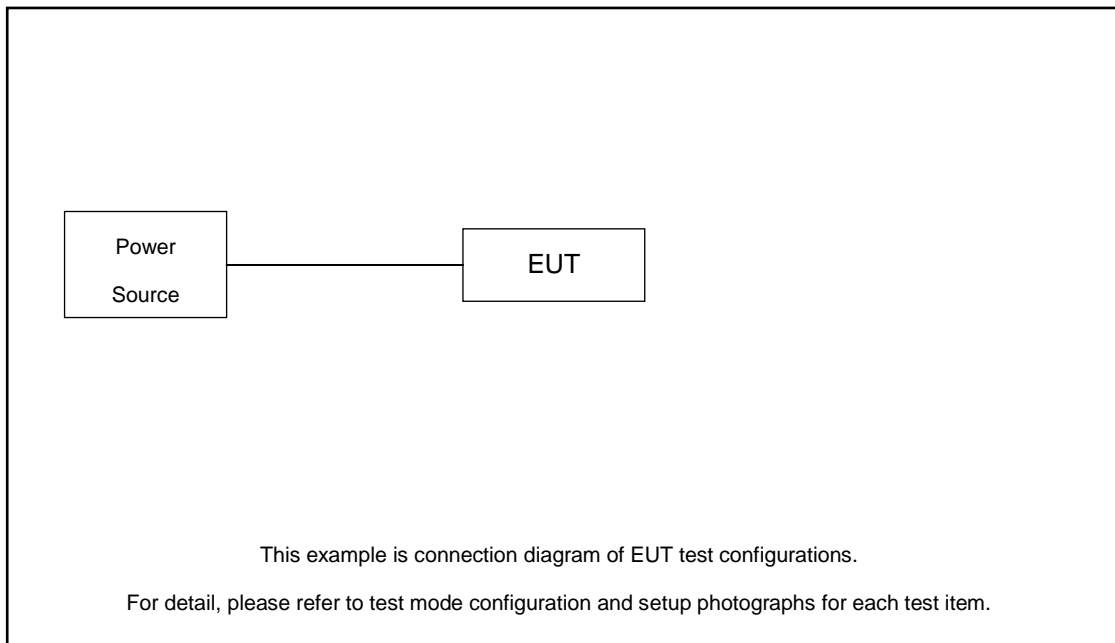
Ch. #		U-NII-2A	U-NII-2C
		802.11ax HE160	802.11ax HE160
L	Low	-	-
M	Middle	50	114
H	High	-	-
Straddle		-	-

2.3 Connection Diagram of Test System

For Conducted Emission:



For Radiated Emission:



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook*4	Lenovo	G480	QDS-BRCM1050I	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
2.	Notebook	Acer	N20C5	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
3.	Telephone*4	bubugao	HCD007(6082)TSD	N/A	N/A	N/A
4.	Switch	CISCO	NPE-G2	N/A	N/A	N/A
5.	RJ45 Cable	N/A	N/A	N/A	N/A	N/A
6.	RJ11 Cable	N/A	N/A	N/A	N/A	N/A
7.	U disk	N/A	N/A	N/A	N/A	N/A

2.5 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuous transmit.

For AC power line conducted emissions, the EUT was set to connect with the Notebook under large package sizes transmission.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 2.7 dB and 10dB attenuator.

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 2.7 + 10 = 12.7 \text{ (dB)}
 \end{aligned}$$

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

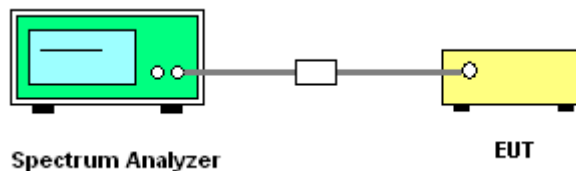
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak 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%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1% to 5% of the OBW and set the Video bandwidth (VBW) $\geq 3 * RBW$.
8. Measure and record the results in the test report.

3.1.4 Test Setup

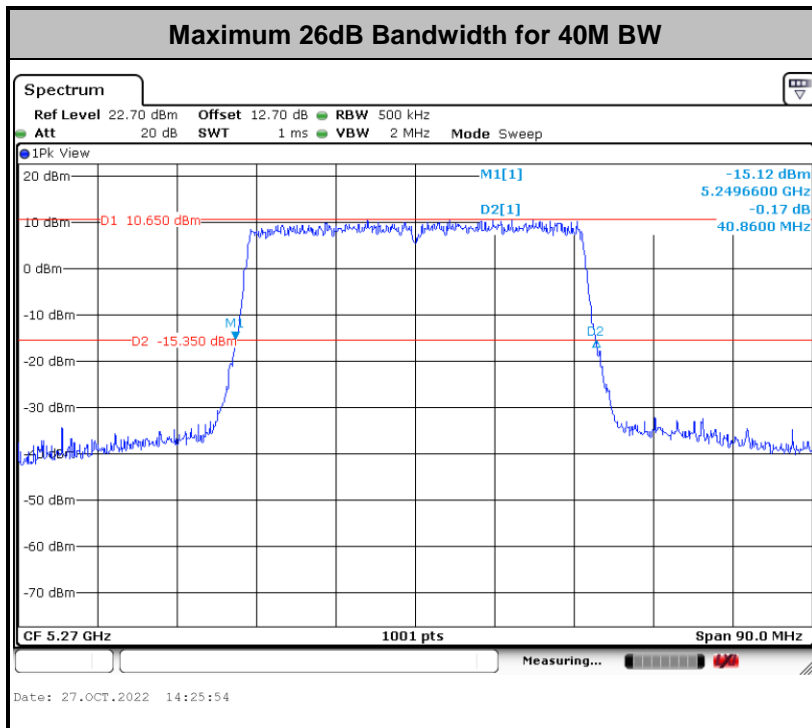
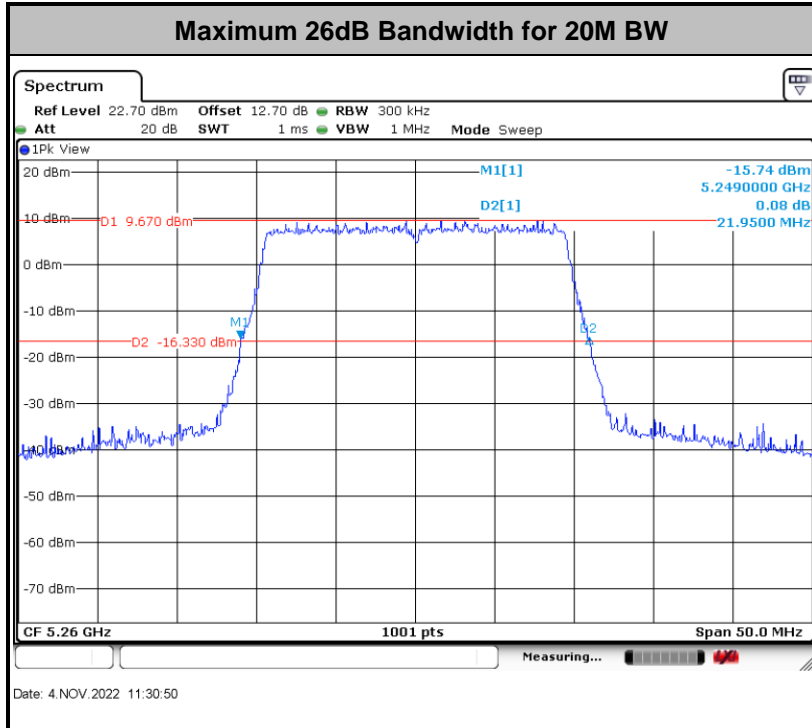


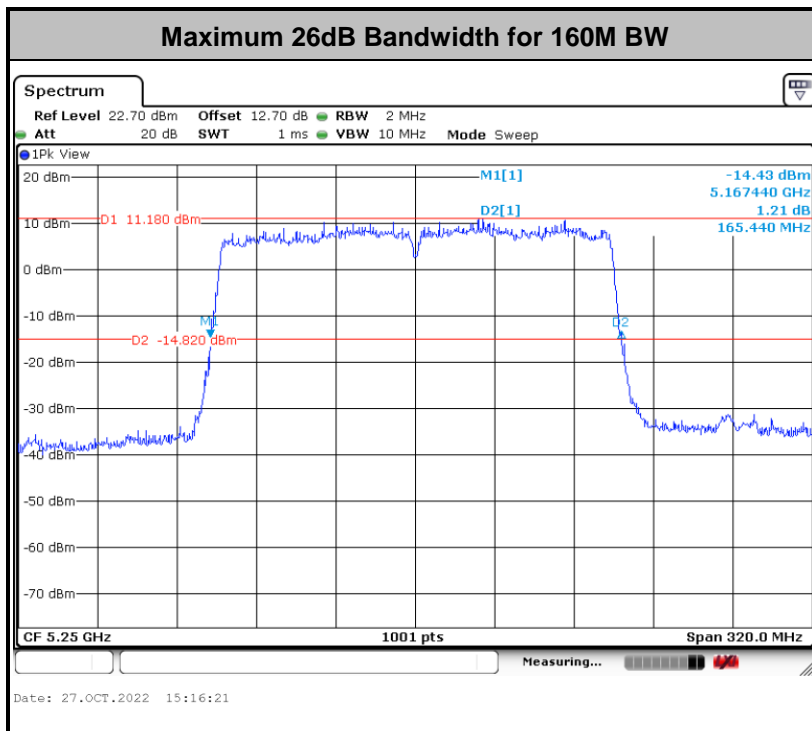
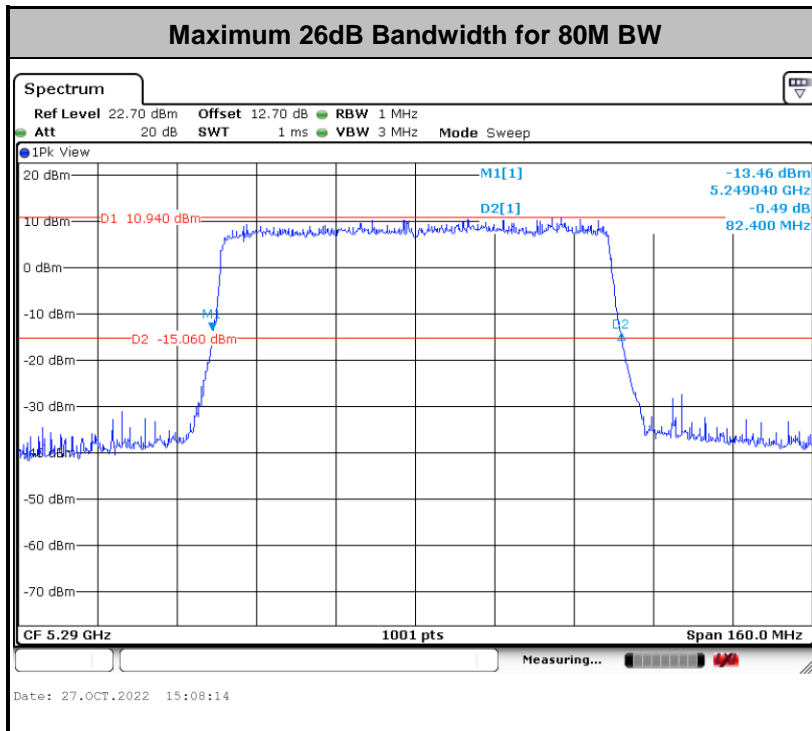


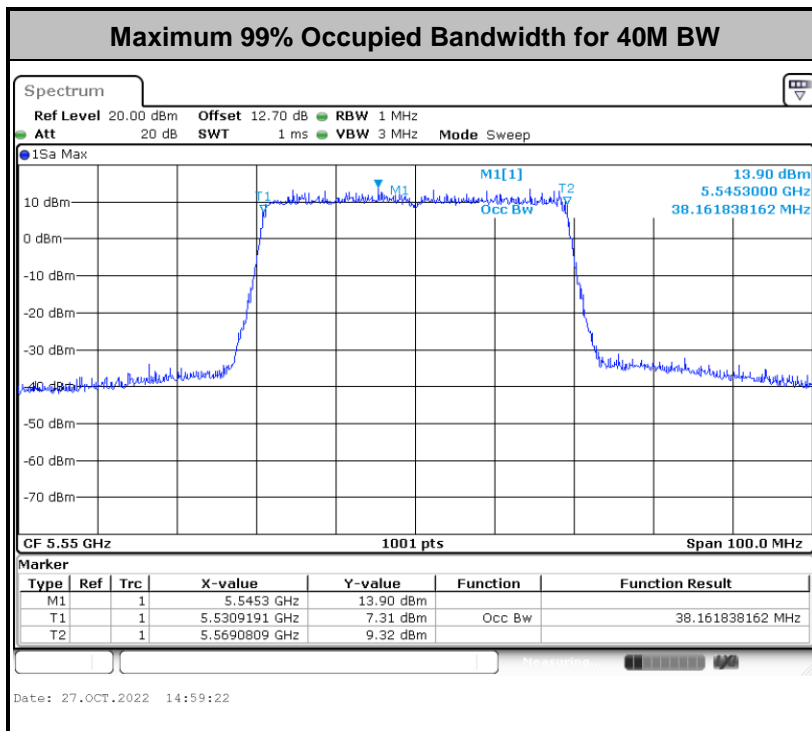
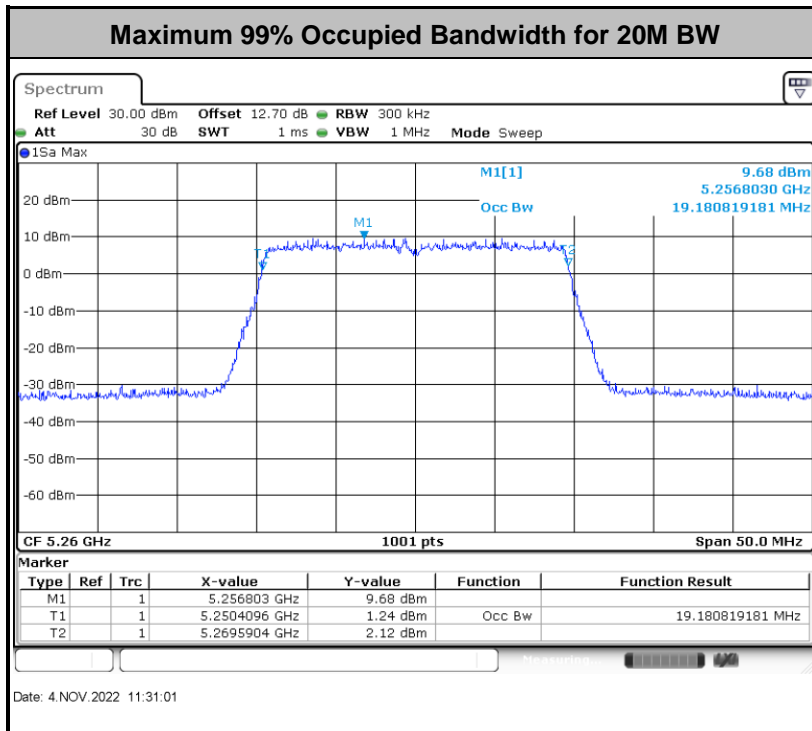
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

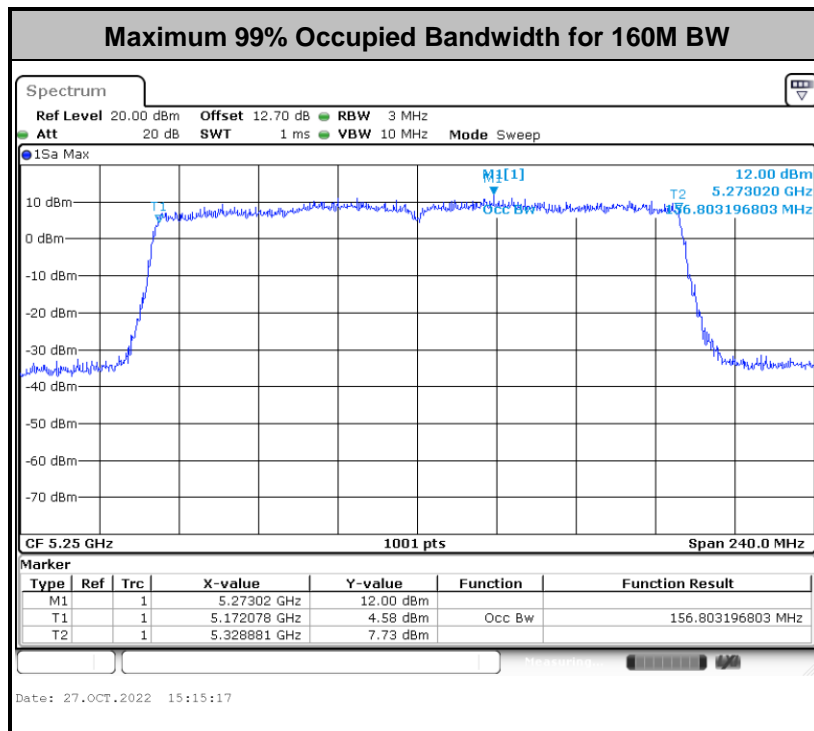
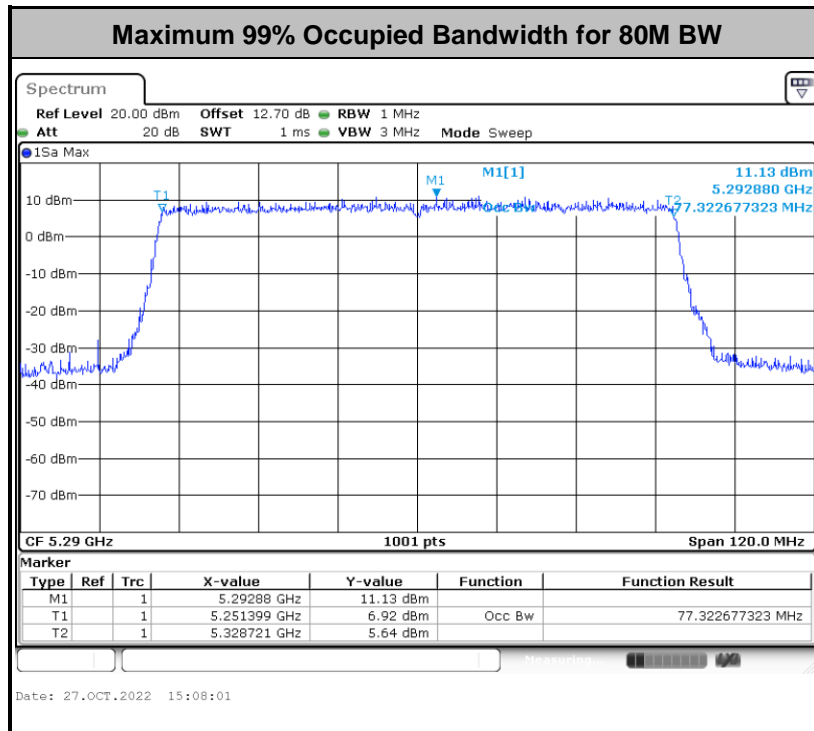
Please refer to Appendix A.

<CDD 1S4T Mode>





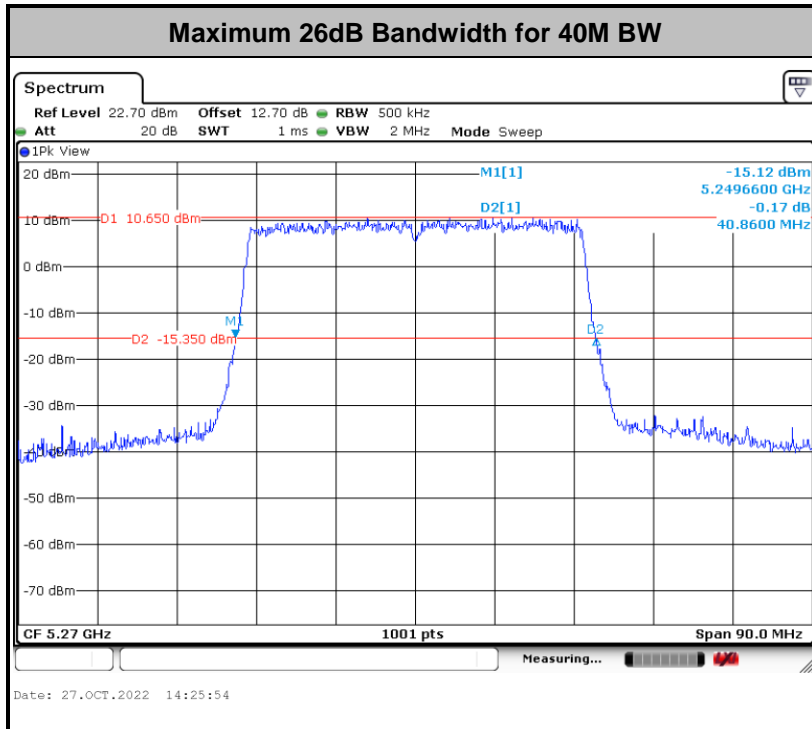
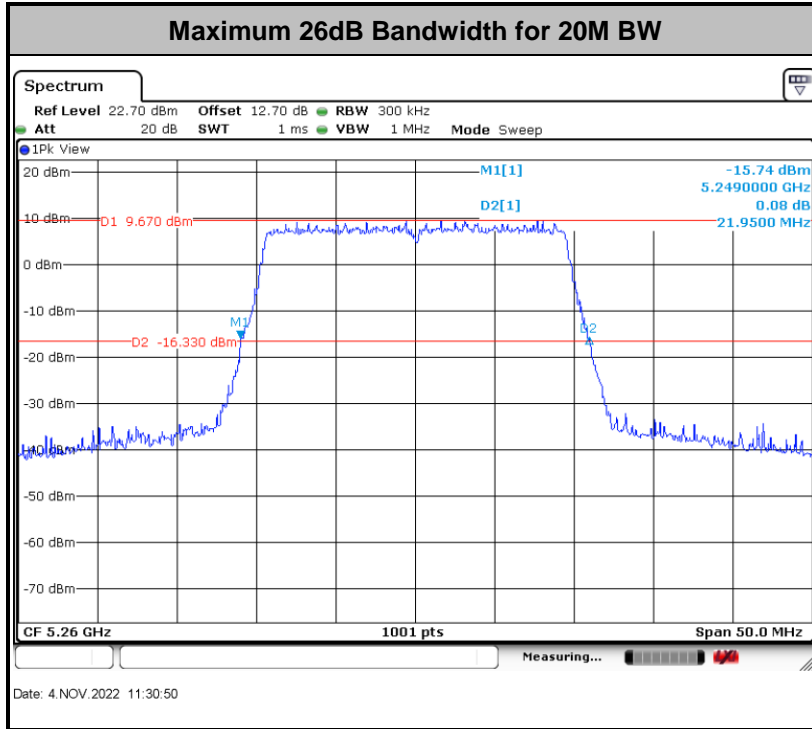


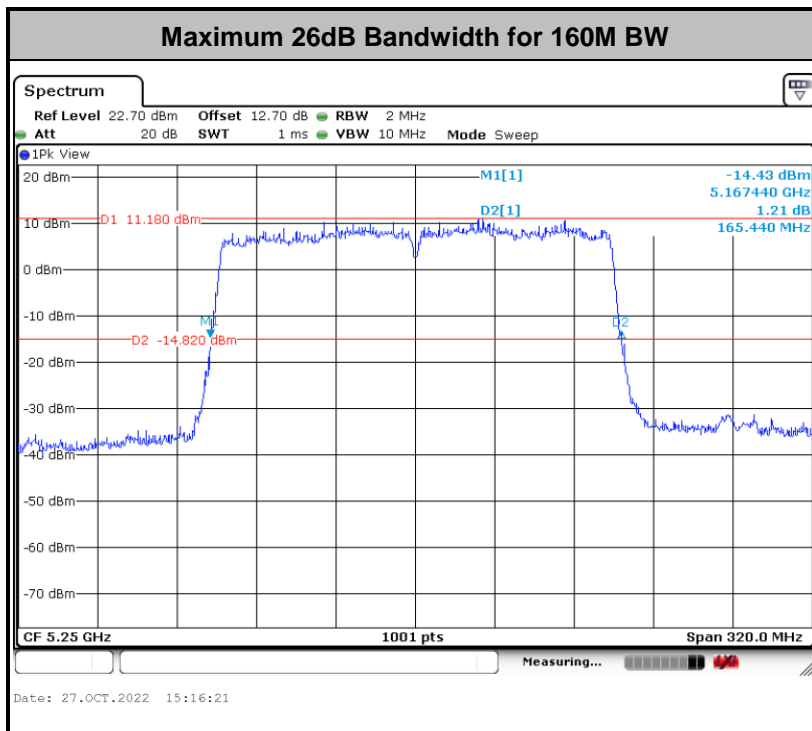
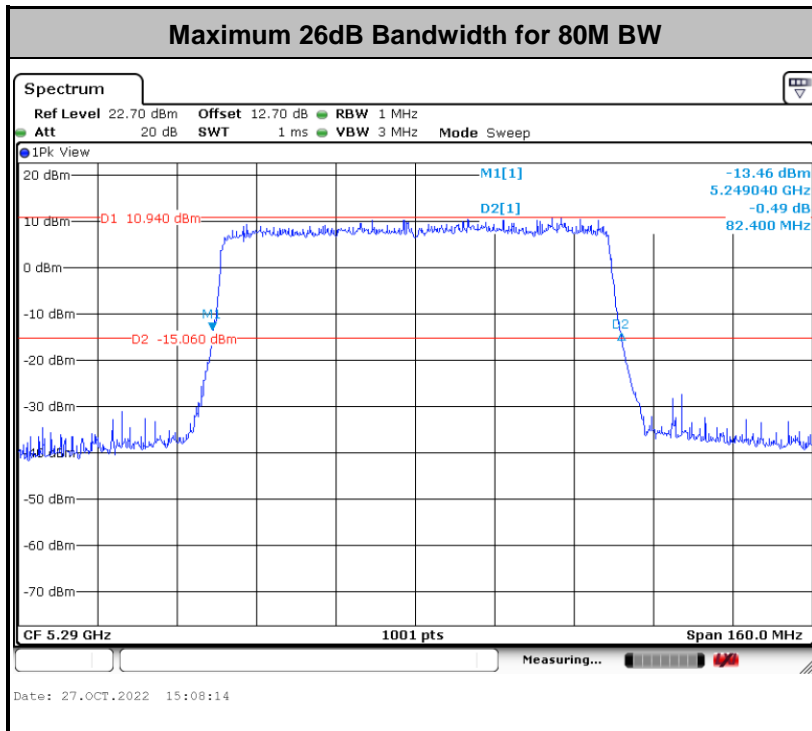


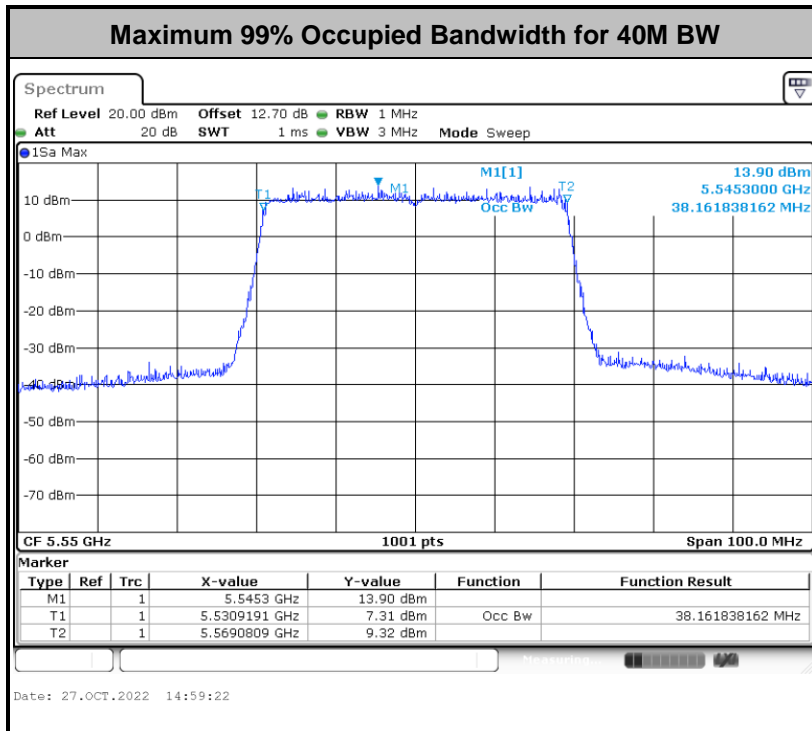
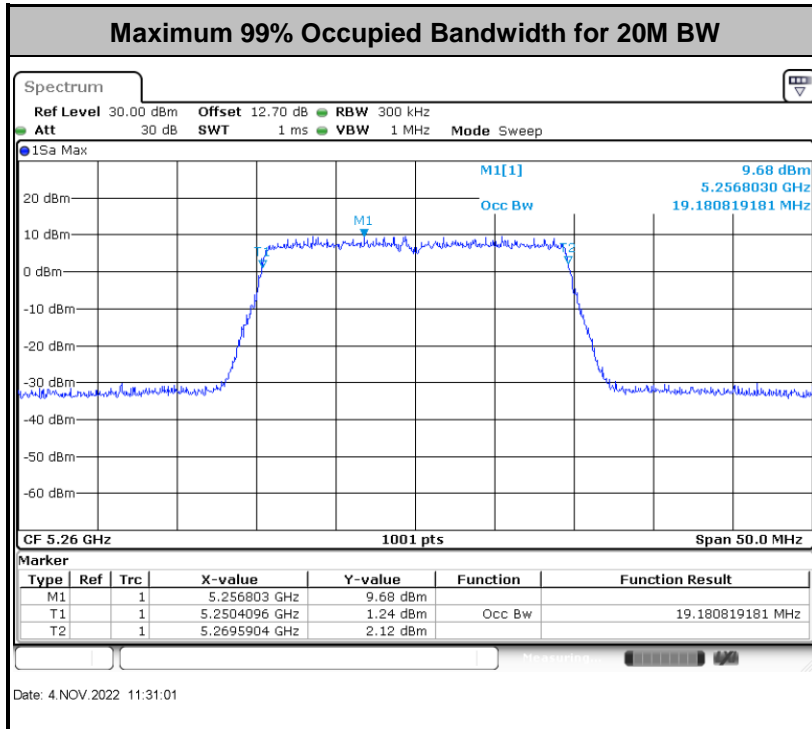
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

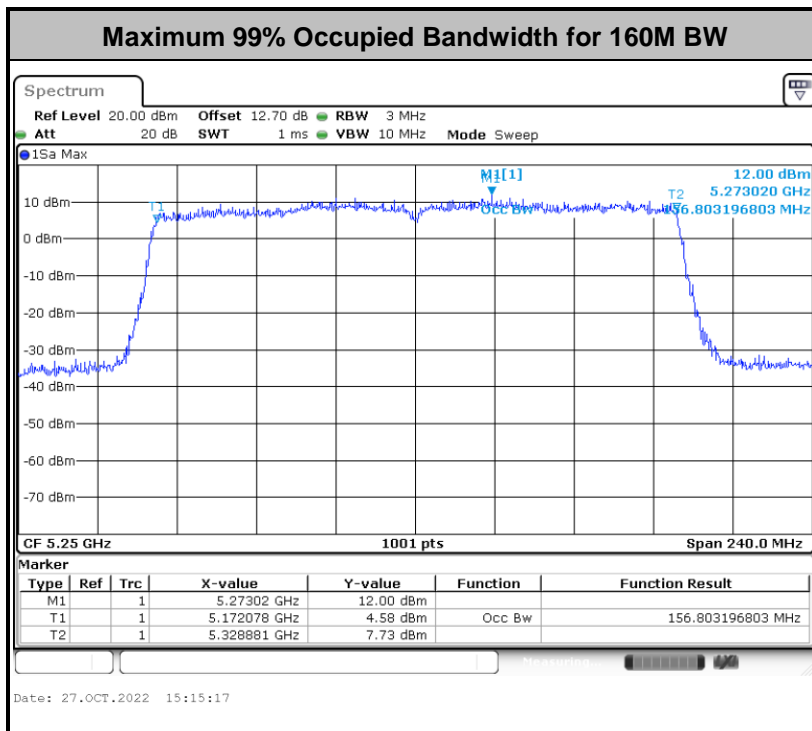
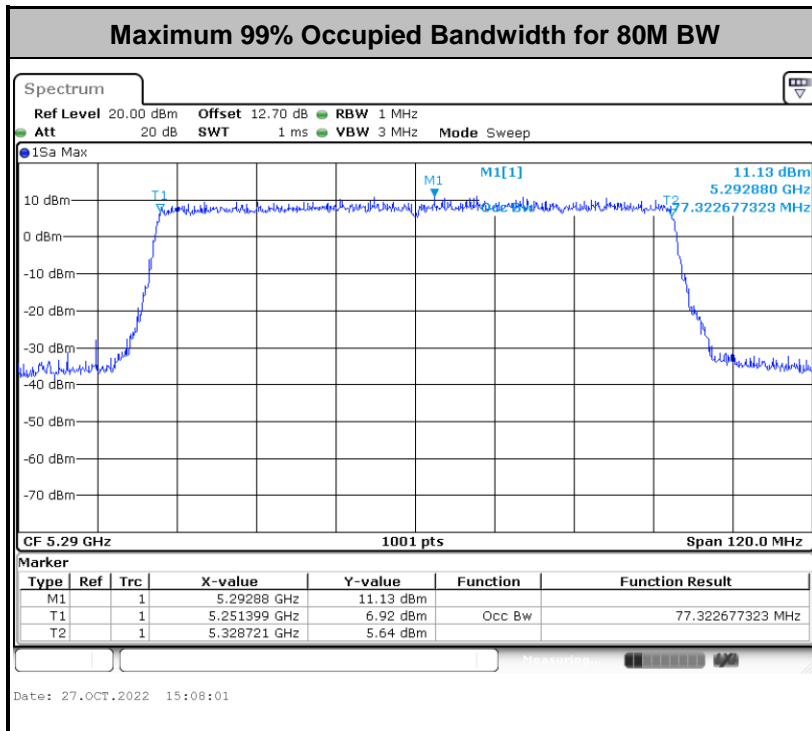


<SDM 4S4T Mode>





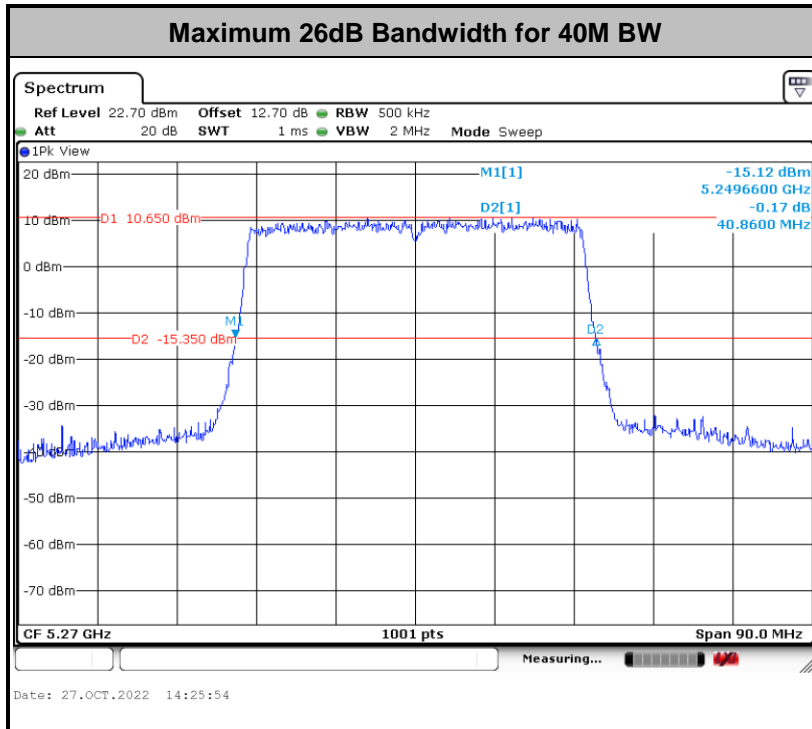
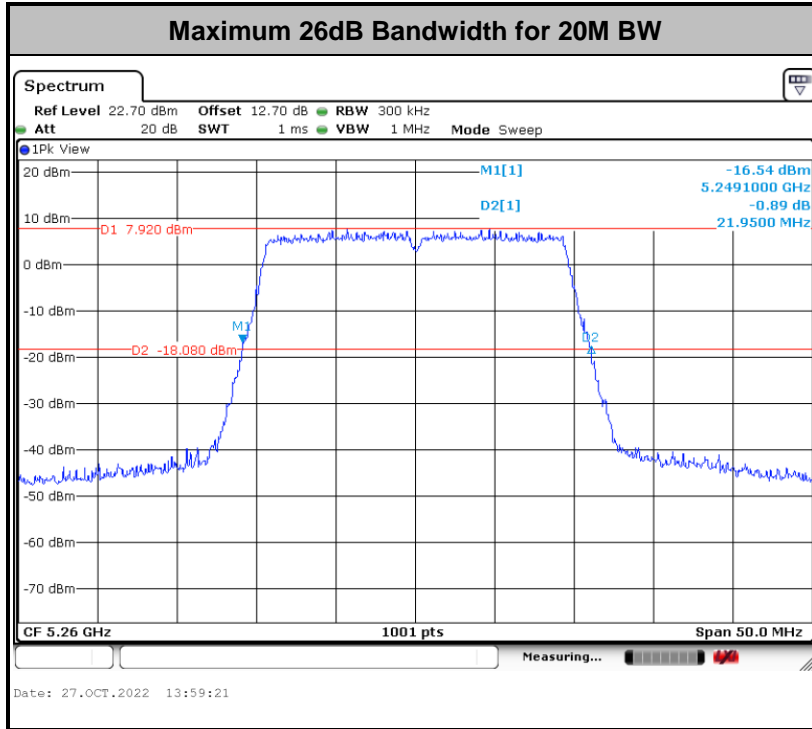


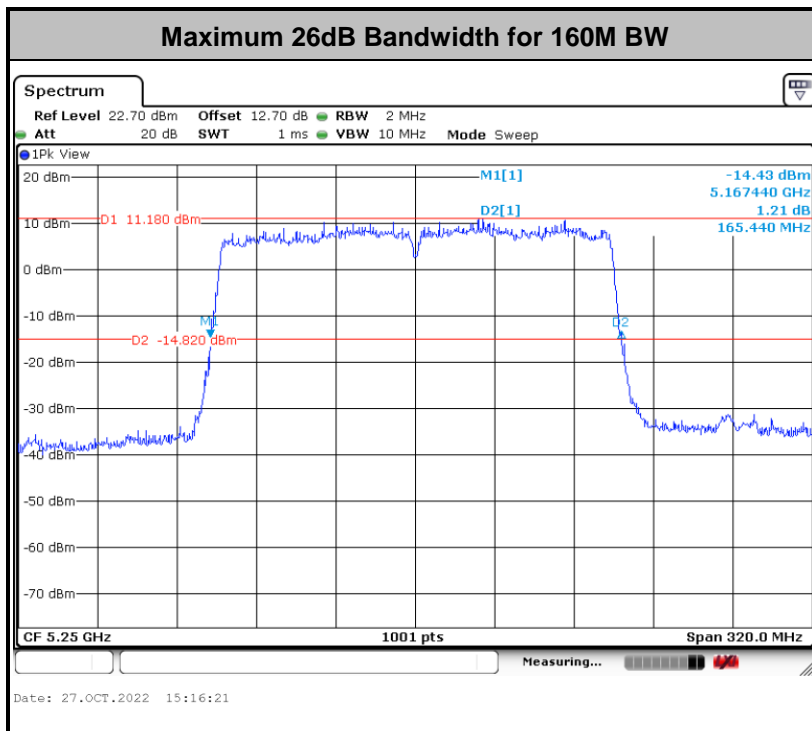
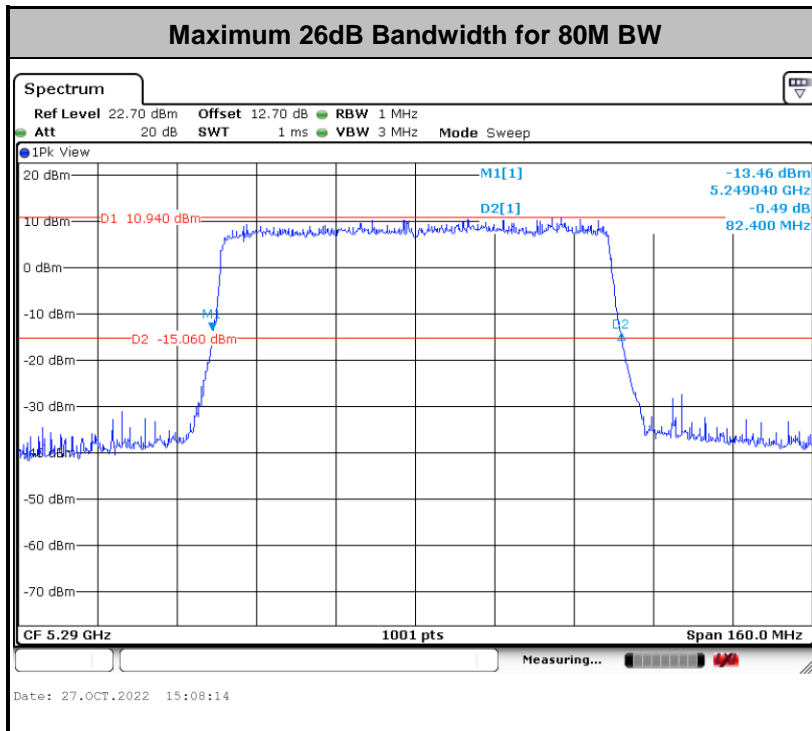


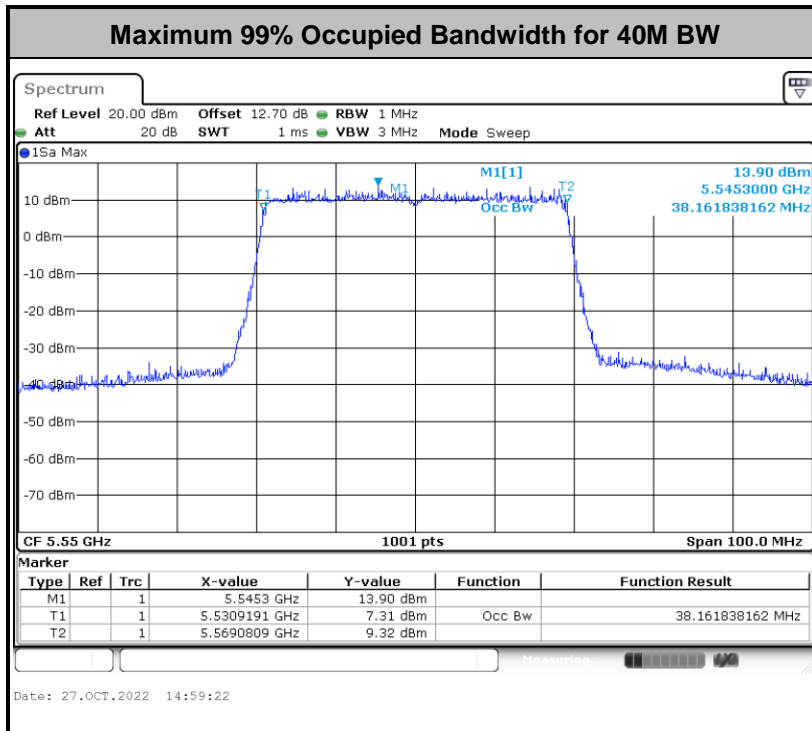
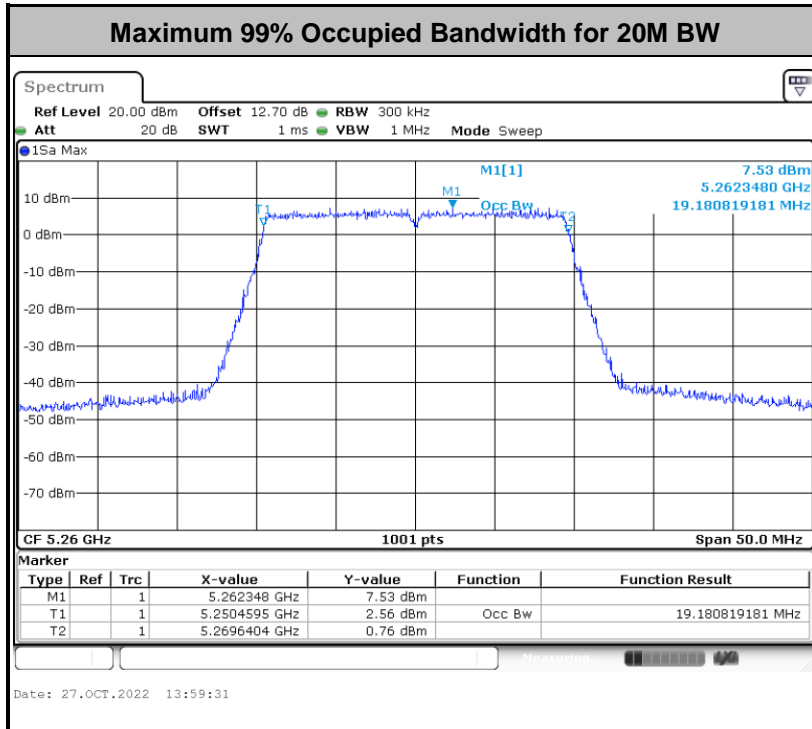
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

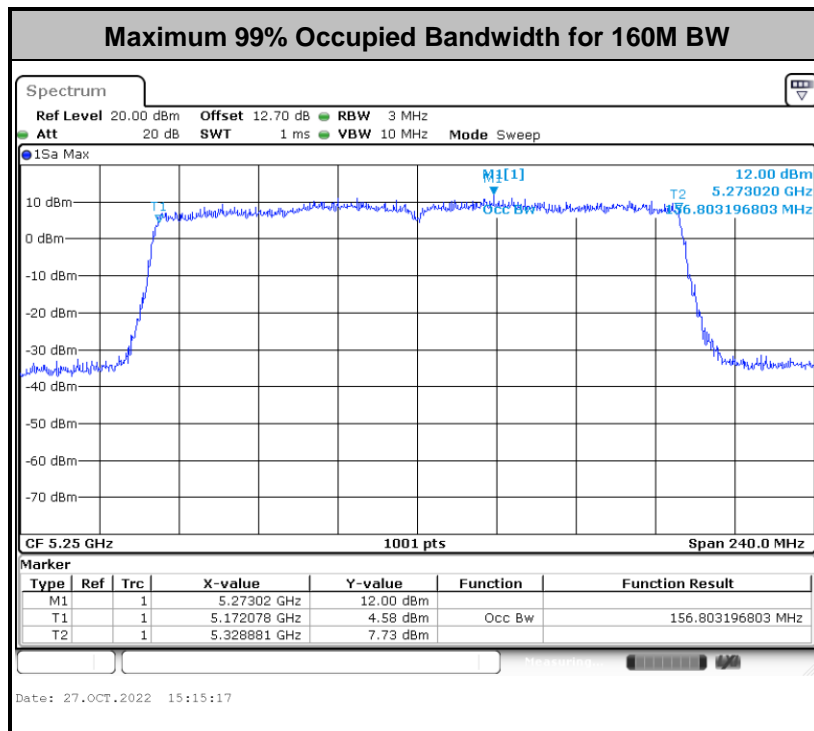
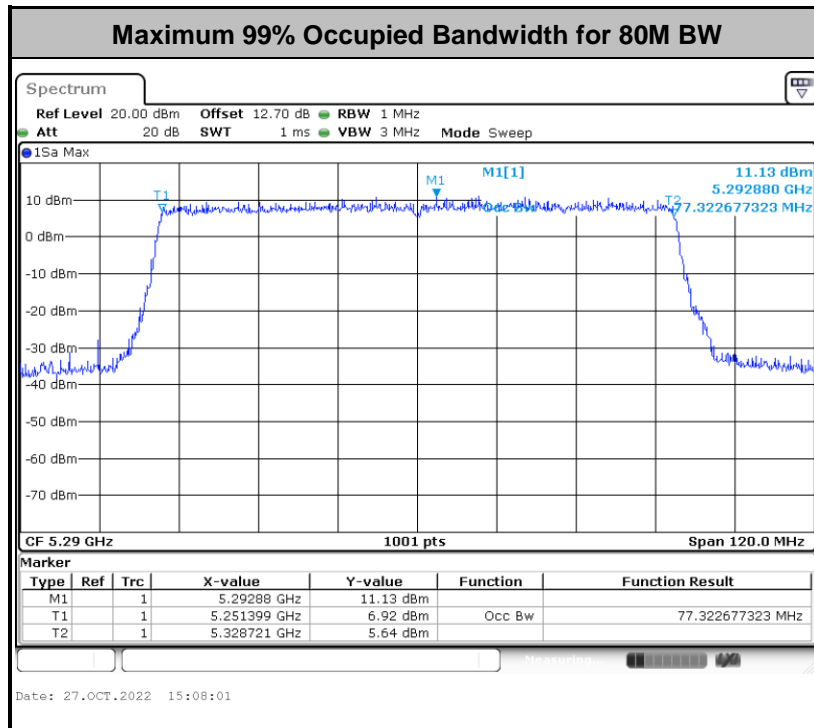


<TXBF Modes>









Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.25–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm +10 log 10 B, where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x is the duty cycle.
4. For MIMO mode, the measure-and-sum technique should be used for measuring the in-band transmit power of a device.

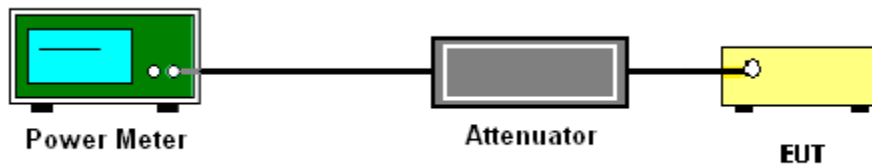
<TXBF Modes>

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 for TXBF modes.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

3.2.4 Test Setup**3.2.5 Test Result of Maximum Conducted Output Power**

Please refer to Appendix A.



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.25–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section F) Maximum power spectral density.

Method SA-2

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW \geq 3 MHz.
- Number of points in sweep \geq 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- 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. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

<TXBF Modes>

Method SA-3

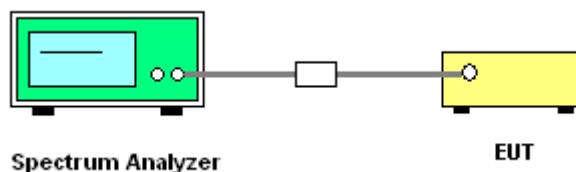
(power averaging (rms) detection with max hold):

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW \geq 3 MHz
 - Number of points in sweep \geq 2 Span / RBW.
 - Sweep time \leq (number of points in sweep) \times T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
 - Detector = power averaging (rms).
 - Trace mode = max hold.
 - Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
 3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (a): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is the bin-by-bin summation to obtain the combined spectrum. For the device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

3.3.4 Test Setup

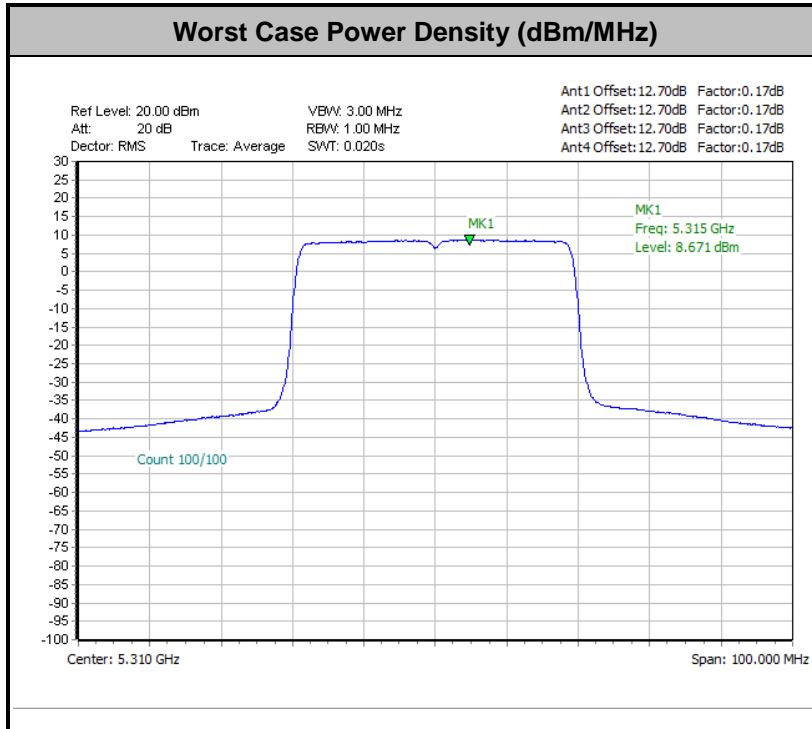




3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

<CDD 1S4T Modes>



Note: Average Power Density (dB) = Measured value+ Duty Factor



3.4 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.4.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5725 MHz band: all emissions outside of the 5470-5725 MHz band shall not exceed an EIRP of -27 dBm/MHz.

- (2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table,

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

EIRP (dBm)	Field Strength at 3m (dBµV/m)
- 27	68.3

Note: The following formula is used to convert the EIRP to field strength.

$$EIRP = E_{Meas} + 20\log(d_{Meas}) - 104.7$$

where

EIRP is the equivalent isotropically radiated power, in dBm

E_{Meas} is the field strength of the emission at the measurement distance, in dBµV/m

d_{Meas} is the measurement distance, in m



- (3) ANSI C63.10-2013 clause 12.7.3 note 97

As specified by regulatory requirements, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit. However, an out-of-band emission that complies with both the average and peak general regulatory limits is not required to satisfy the peak emission limit.

3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW \geq 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

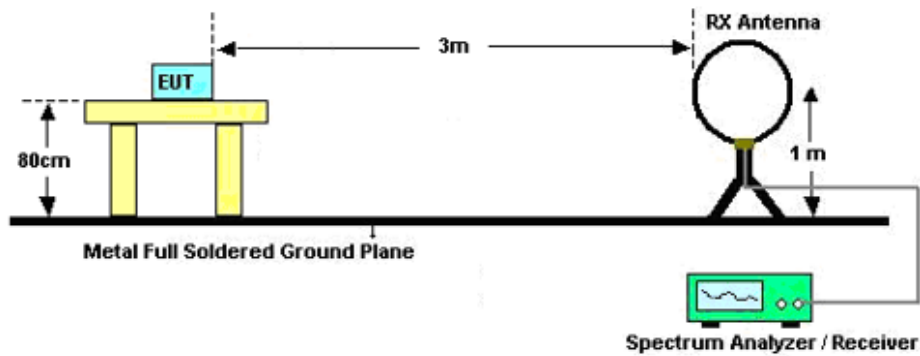
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the

antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.

6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

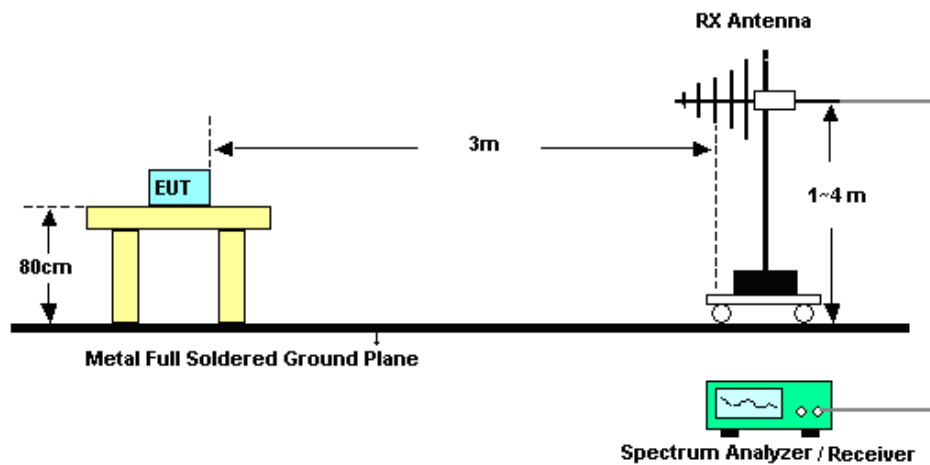
3.4.4 Test Setup

For radiated emissions below 30MHz

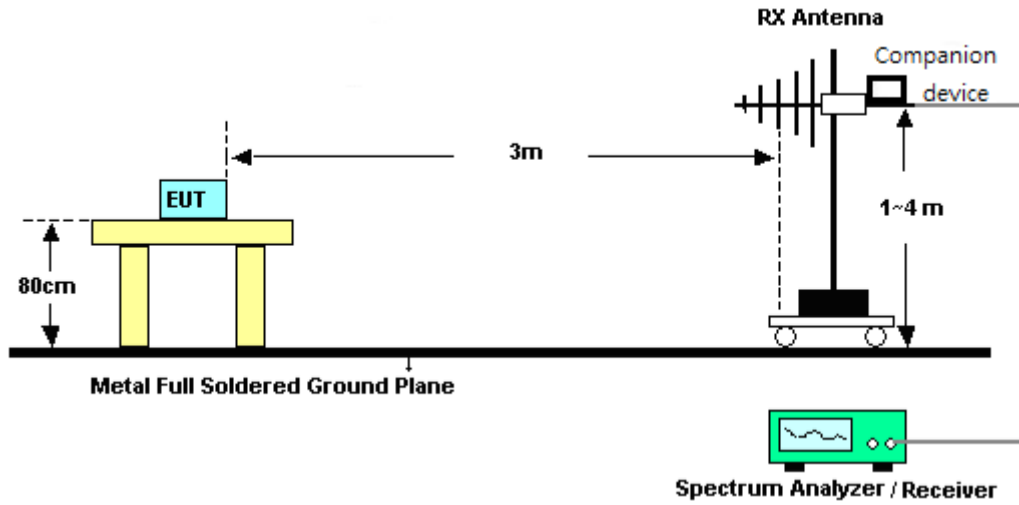


For radiated emissions from 30MHz to 1GHz

<CDD Mode>

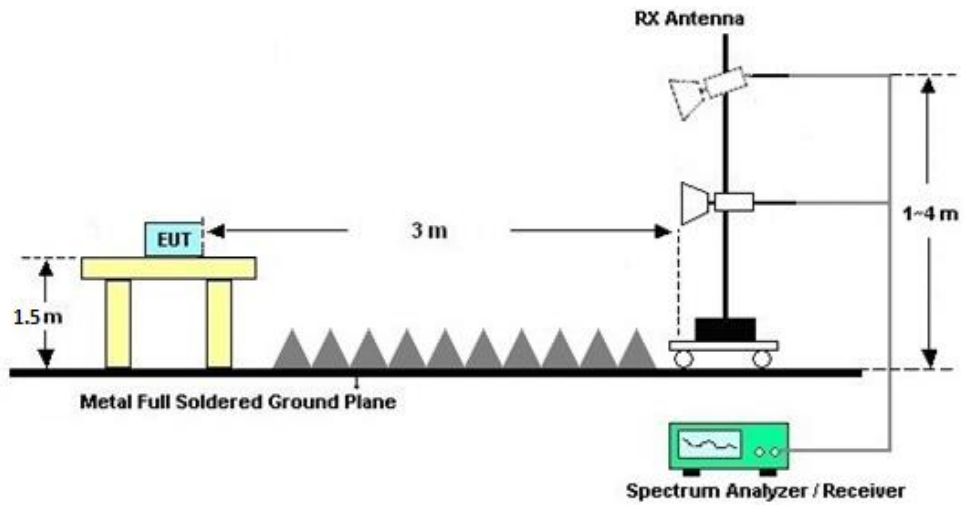


<TXBF Modes>

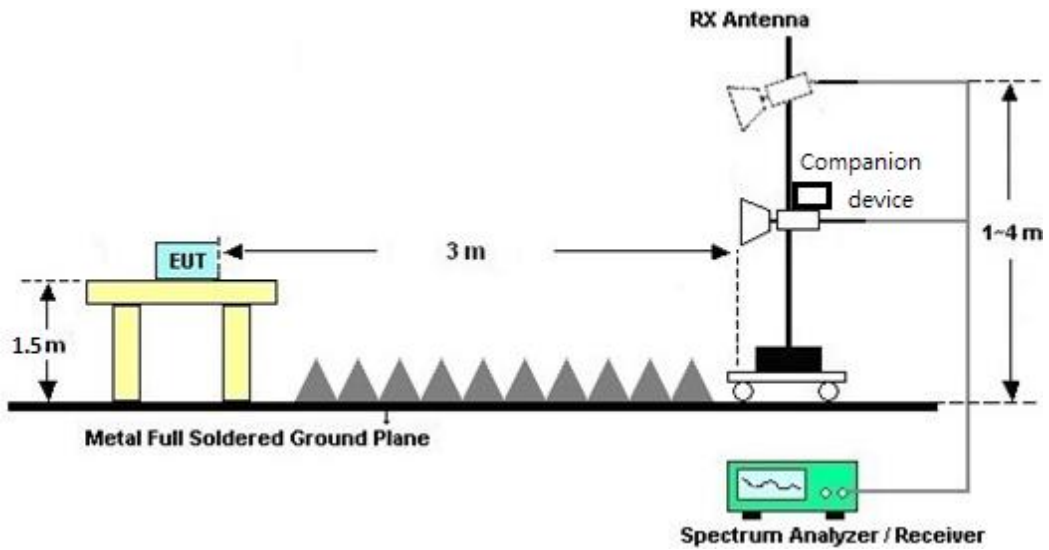


For radiated emissions above 1GHz

<CDD Mode>



<TXBF Modes>



3.4.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.4.7 Duty Cycle

Please refer to Appendix D.

3.4.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic or 40GHz, whichever is lower)

Please refer to Appendix C.



3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment 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.

Frequency of emission (MHz)	Conducted limit (dBµV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

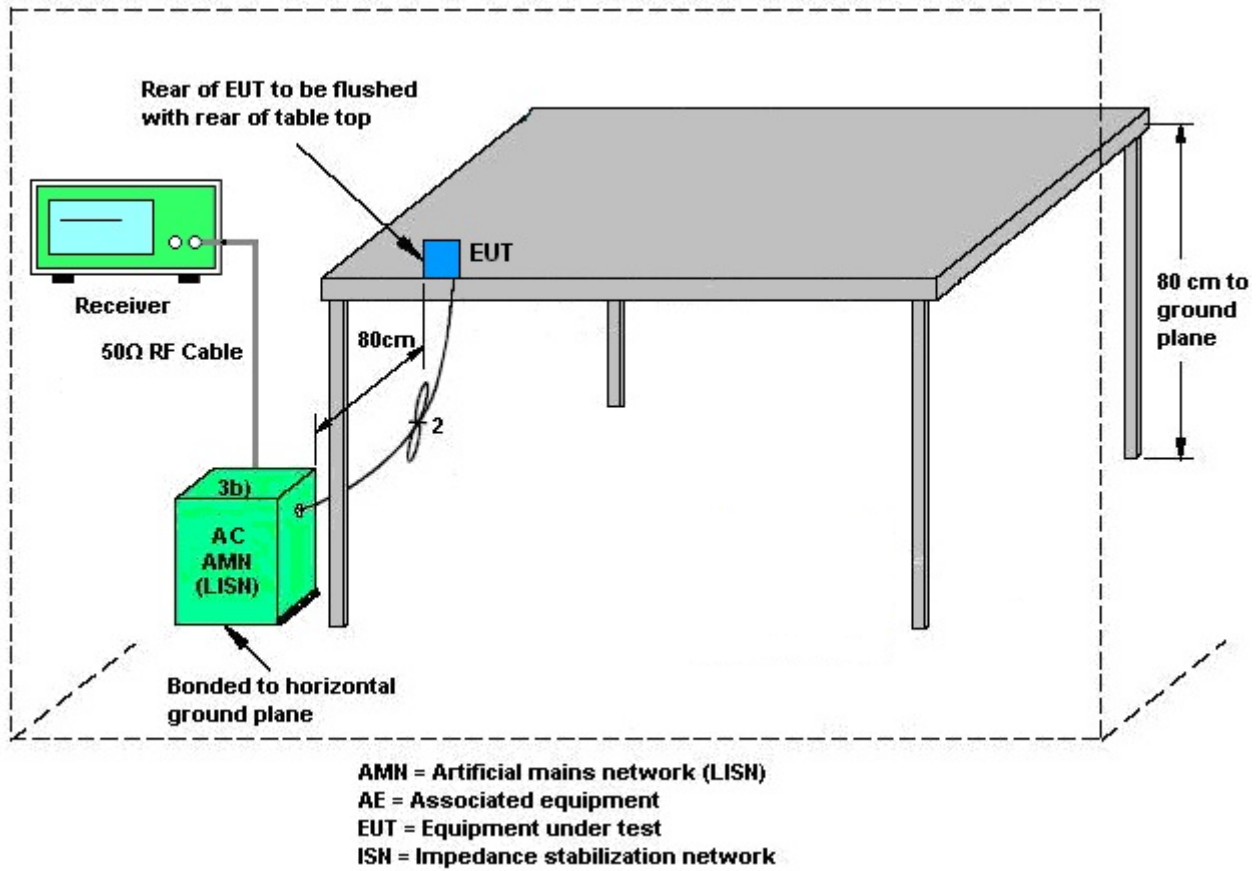
3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Antenna Requirements

3.6.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.6.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

The EUT supports CDD for 802.11b/g/n/ac/ax modes

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii).

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

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi

<For TXBF Mode>

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For TXBF transmissions, directional gain is calculated as

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



where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the k th antenna is being fed by spatial stream j , or zero if it is not;

G_k is the gain in dBi of the k th antenna.

The EUT supports beamforming for 802.11n/ac/ax modes.

The directional gain calculation is following F)2)e)ii).

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

<For SDM Mode>

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)d)ii)

Directional gain = $10 \log[(10^{G/10} + 10^{G2/10} + \dots + 10^{GN/10})/N_{ANT}]$ dBi

The EUT supports SDM for 802.11n/ac/ax modes.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi

The directional gain “DG” is as following table.

Frequency Band	Max Single Antenna gain (dBi)				CDD DG (dBi)		TXBF DG (dBi)		SDM DG (dBi)	
	ANT1	ANT2	ANT3	ANT4	For Power	For PSD	For Power	For PSD	For Power	For PSD
5GHz UNII-2A	3.80	4.34	3.72	4.43	4.43	7.79	7.79	7.79	2.08	2.08
5GHz UNII-2C	3.22	5.14	4.83	3.76	5.14	8.28	8.28	8.28	2.29	2.29

Straddle Band / Freq.	Max Single Antenna gain (dBi)				CDD DG (dBi)		TXBF DG (dBi)		SDM DG (dBi)	
	ANT1	ANT2	ANT3	ANT4	For Power	For PSD	For Power	For PSD	For Power	For PSD
CH50 5250MHz	3.95	4.34	3.72	4.50	4.50	7.79	7.79	7.79	2.08	2.08

Note:

1. Please refer to the antenna report for the maximum Single antenna gain and CDD (Cyclic Delay Diversity) directional gain and TXBF (Tx Beamforming) directional gain and SDM (Space Division Multiplexing) directional gain.
2. The device supports 1S4T(CDD&TXBF) and 4S4T(SDM) mode;
1S4T: NSS=1, MIMO 4Tx; 4S4T: NSS=4, MIMO 4Tx



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 07, 2022	Oct. 27, 2022~Nov. 04, 2022	Apr. 08, 2023	Conducted (TH01-SZ)
Pulse Power Sensor	Anritsu	MA2411B	1339473	30MHz~40GHz	Dec. 28, 2021	Oct. 27, 2022~Nov. 04, 2022	Dec. 27, 2022	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1542004	50MHz Bandwidth	Dec. 28, 2021	Oct. 27, 2022~Nov. 04, 2022	Dec. 27, 2022	Conducted (TH01-SZ)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 13, 2022	Dec. 07, 2022	Oct. 12, 2023	Radiation (03CH05-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44G,MAX 30dB	Mar. 24, 2022	Dec. 07, 2022	Mar. 23, 2023	Radiation (03CH05-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 16, 2022	Dec. 07, 2022	Oct. 15, 2023	Radiation (03CH05-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz~1GHz	May 24, 2022	Dec. 07, 2022	May 23, 2023	Radiation (03CH05-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218642	1GHz~18GHz	Apr. 18, 2022	Dec. 07, 2022	Apr. 17, 2023	Radiation (03CH05-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 05, 2022	Dec. 07, 2022	Jan. 04, 2023	Radiation (03CH05-KS)
Amplifier	SONOMA	310N	380826	9KHz~1GHz	Jul. 11, 2022	Dec. 07, 2022	Jul. 10, 2023	Radiation (03CH05-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 05, 2022	Dec. 07, 2022	Jan. 04, 2023	Radiation (03CH05-KS)
high gain Amplifier	EM	EM01G18GA	060839	1Ghz~18Ghz	Oct. 12, 2022	Dec. 07, 2022	Oct. 11, 2023	Radiation (03CH05-KS)
Amplifier	EM	EM01G18GA	060833	1Ghz~18Ghz	Jan. 05, 2022	Dec. 07, 2022	Jan. 04, 2023	Radiation (03CH05-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 07, 2022	NCR	Radiation (03CH05-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 07, 2022	NCR	Radiation (03CH05-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 07, 2022	NCR	Radiation (03CH05-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	May 24, 2022	Nov. 23, 2022	May 23, 2023	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2022	Nov. 23, 2022	Oct. 12, 2023	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	May 24, 2022	Nov. 23, 2022	May 23, 2023	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP00000811	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2022	Nov. 23, 2022	Oct. 11, 2023	Conduction (CO01-KS)

NCR: No Calibration Required



5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	±1.34 dB
Conducted Emissions	±1.34 dB
Occupied Channel Bandwidth	±0.12 %
Conducted Power Spectral Density	±1.32 dB

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.78dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0dB
---	-------

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0dB
---	-------

----- THE END -----



Appendix A. Conducted Test Results

TEST RESULTS DATA
Average Power Table

UNII-2A															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Ant	Average Conducted Power with Duty Factor (dB)					FCC Power Limit (dBm)	DG (dBi)	FCC EIRP Power (dBm)	FCC EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	Ant 3	Ant 4	SUM					
HT20	MCS0	4	52	5260	1+2+3+4	14.11	14.18	14.02	14.17	20.14	23.98	4.43	24.57	30.00	Pass
HT20	MCS0	4	60	5300	1+2+3+4	14.15	14.17	14.17	14.13	20.18	23.98	4.43	24.61	30.00	Pass
HT20	MCS0	4	64	5320	1+2+3+4	14.11	14.13	14.15	14.14	20.15	23.98	4.43	24.58	30.00	Pass
HT40	MCS0	4	54	5270	1+2+3+4	17.22	17.22	16.95	17.12	23.15	23.98	4.43	27.58	30.00	Pass
HT40	MCS0	4	62	5310	1+2+3+4	17.33	17.33	16.97	17.34	23.27	23.98	4.43	27.70	30.00	Pass
VHT20	MCS0	4	52	5260	1+2+3+4	14.02	14.09	13.94	14.08	20.05	23.98	4.43	24.48	30.00	Pass
VHT20	MCS0	4	60	5300	1+2+3+4	14.06	14.08	14.09	14.04	20.09	23.98	4.43	24.52	30.00	Pass
VHT20	MCS0	4	64	5320	1+2+3+4	14.02	14.04	14.07	14.05	20.07	23.98	4.43	24.50	30.00	Pass
VHT40	MCS0	4	54	5270	1+2+3+4	17.13	17.05	16.77	16.92	22.99	23.98	4.43	27.42	30.00	Pass
VHT40	MCS0	4	62	5310	1+2+3+4	17.27	17.17	16.79	17.19	23.13	23.98	4.43	27.56	30.00	Pass
VHT80	MCS0	4	58	5290	1+2+3+4	17.00	17.05	16.93	16.88	22.99	23.98	4.43	27.42	30.00	Pass
VHT160	MCS0	4	50	5250	1+2+3+4	16.24	15.83	15.74	15.93	21.96	23.98	4.50	26.46	30.00	Pass

Setting
4Tx
13.5
13.5
13.5
16
16
13.5
13.5
13.5
16
16
16
16
15.5

TEST RESULTS DATA
26dB and 99% OBW

UNII-2A													
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	26 dB Bandwidth (MHz)				FCC 26dB Bandwidth Power Limit (dBm)				Note
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	
11a	6Mbps	4	52	5260	21.70	21.45	21.55	21.60	23.98	23.98	23.98	23.98	
11a	6Mbps	4	60	5300	21.65	21.65	21.55	21.50	23.98	23.98	23.98	23.98	
11a	6Mbps	4	64	5320	21.70	21.65	21.60	21.55	23.98	23.98	23.98	23.98	
HE20	MCS0	4	52	5260	21.85	21.95	21.75	21.60	23.98	23.98	23.98	23.98	
HE20	MCS0	4	60	5300	21.75	21.85	21.70	21.70	23.98	23.98	23.98	23.98	
HE20	MCS0	4	64	5320	21.95	21.75	21.85	21.70	23.98	23.98	23.98	23.98	
HE40	MCS0	4	54	5270	40.86	40.68	40.68	40.59	23.98	23.98	23.98	23.98	
HE40	MCS0	4	62	5310	40.86	40.50	40.50	40.50	23.98	23.98	23.98	23.98	
HE80	MCS0	4	58	5290	82.40	82.24	81.92	82.08	23.98	23.98	23.98	23.98	
HE160	MCS0	4	50	5250	165.44	165.12	165.44	165.12	23.98	23.98	23.98	23.98	

UNII-2A																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)				IC 99% Bandwidth Power Limit (dBm)				IC 99% Bandwidth EIRP Limit (dBm)			
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4
11a	6Mbps	4	52	5260	17.13	17.18	16.93	16.93	23.34	23.35	23.29	23.29	29.34	29.35	29.29	29.29
11a	6Mbps	4	60	5300	17.08	17.08	17.03	16.93	23.33	23.33	23.31	23.29	29.33	29.33	29.31	29.29
11a	6Mbps	4	64	5320	17.13	17.03	16.98	16.98	23.34	23.31	23.30	23.30	29.34	29.31	29.30	29.30
HE20	MCS0	4	52	5260	19.13	19.18	19.08	19.18	23.82	23.83	23.81	23.83	29.82	29.83	29.81	29.83
HE20	MCS0	4	60	5300	19.13	19.08	19.18	19.13	23.82	23.81	23.83	23.82	29.82	29.81	29.83	29.82
HE20	MCS0	4	64	5320	19.18	19.13	19.13	19.08	23.83	23.82	23.82	23.81	29.83	29.82	29.82	29.81
HE40	MCS0	4	54	5270	37.96	38.06	37.96	37.86	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	62	5310	37.96	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	58	5290	77.20	77.32	77.32	77.20	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE160	MCS0	4	50	5250	156.56	156.56	156.56	156.80	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00

TEST RESULTS DATA
Average Power Table

UNII-2A															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Ant	Average Conducted Power with Duty Factor (dB)					FCC Power Limit (dBm)	DG (dBi)	FCC EIRP Power (dBm)	FCC EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	Ant 3	Ant 4	SUM					
11a	6Mbps	4	52	5260	1+2+3+4	13.49	13.64	13.45	13.22	19.47	23.98	4.43	23.90	30.00	Pass
11a	6Mbps	4	60	5300	1+2+3+4	13.74	13.84	13.56	13.19	19.61	23.98	4.43	24.04	30.00	Pass
11a	6Mbps	4	64	5320	1+2+3+4	13.63	13.85	13.64	13.09	19.58	23.98	4.43	24.01	30.00	Pass
HE20	MCS0	4	52	5260	1+2+3+4	14.42	14.49	14.30	14.46	20.44	23.98	4.43	24.87	30.00	Pass
HE20	MCS0	4	60	5300	1+2+3+4	14.46	14.48	14.45	14.42	20.47	23.98	4.43	24.90	30.00	Pass
HE20	MCS0	4	64	5320	1+2+3+4	14.42	14.44	14.43	14.43	20.45	23.98	4.43	24.88	30.00	Pass
HE40	MCS0	4	54	5270	1+2+3+4	17.60	17.48	17.23	17.38	23.45	23.98	4.43	27.88	30.00	Pass
HE40	MCS0	4	62	5310	1+2+3+4	17.65	17.49	17.25	17.40	23.47	23.98	4.43	27.90	30.00	Pass
HE80	MCS0	4	58	5290	1+2+3+4	17.43	17.46	17.36	17.31	23.41	23.98	4.43	27.84	30.00	Pass
HE160	MCS0	4	50	5250	1+2+3+4	16.61	16.58	16.49	16.59	22.59	23.98	4.50	27.09	30.00	Pass

Setting
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TEST RESULTS DATA
Power Spectral Density

UNII-2A														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Ant	Duty Factor (dB)				Average PSD with Duty Factor (dBm/MHz)	PSD Limit (dBm/MHz)	DG (dBi)		Pass /Fail
						Ant 1	Ant 2	Ant 3	Ant 4					
11a	6Mbps	4	52	5260	1+2+3+4	0.23	0.23	0.23	0.21	8.29	9.21	7.79		Pass
11a	6Mbps	4	60	5300	1+2+3+4	0.23	0.23	0.23	0.21	8.25	9.21	7.79		Pass
11a	6Mbps	4	64	5320	1+2+3+4	0.23	0.23	0.23	0.21	8.28	9.21	7.79		Pass
HE20	MCS0	4	52	5260	1+2+3+4	0.10	0.10	0.08	0.08	8.52	9.21	7.79		Pass
HE20	MCS0	4	60	5300	1+2+3+4	0.10	0.10	0.08	0.08	8.56	9.21	7.79		Pass
HE20	MCS0	4	64	5320	1+2+3+4	0.10	0.10	0.08	0.08	8.58	9.21	7.79		Pass
HE40	MCS0	4	54	5270	1+2+3+4	0.17	0.17	0.17	0.17	8.52	9.21	7.79		Pass
HE40	MCS0	4	62	5310	1+2+3+4	0.17	0.17	0.17	0.17	8.67	9.21	7.79		Pass
HE80	MCS0	4	58	5290	1+2+3+4	0.34	0.32	0.34	0.34	5.62	9.21	7.79		Pass
HE160	MCS0	4	50	5250	1+2+3+4	0.54	0.54	0.54	0.51	2.38	9.21	7.79		Pass

TEST RESULTS DATA
26dB and 99% OBW

UNII-2C													
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	26 dB Bandwidth (MHz)				FCC 26dB Bandwidth Power Limit (dBm)				Note
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	
11a	6Mbps	4	100	5500	21.65	21.70	21.55	21.60	23.98	23.98	23.98	23.98	
11a	6Mbps	4	116	5580	21.75	21.70	21.60	21.45	23.98	23.98	23.98	23.98	
11a	6Mbps	4	140	5700	21.75	21.85	21.50	21.70	23.98	23.98	23.98	23.98	
11a	6Mbps	4	144	5720	21.70	21.70	21.50	21.45	23.98	23.98	23.98	23.98	
HE20	MCS0	4	100	5500	21.80	21.70	21.70	21.80	23.98	23.98	23.98	23.98	
HE20	MCS0	4	116	5580	21.90	21.60	21.85	21.70	23.98	23.98	23.98	23.98	
HE20	MCS0	4	140	5700	21.80	21.50	21.80	21.55	23.98	23.98	23.98	23.98	
HE20	MCS0	4	144	5720	21.80	21.60	21.70	21.75	23.98	23.98	23.98	23.98	
HE40	MCS0	4	102	5510	40.59	40.68	40.50	40.50	23.98	23.98	23.98	23.98	
HE40	MCS0	4	110	5550	40.68	40.50	40.41	40.50	23.98	23.98	23.98	23.98	
HE40	MCS0	4	134	5670	40.77	40.59	40.23	40.86	23.98	23.98	23.98	23.98	
HE40	MCS0	4	142	5710	40.77	40.68	40.41	40.59	23.98	23.98	23.98	23.98	
HE80	MCS0	4	106	5530	82.40	82.24	81.76	81.92	23.98	23.98	23.98	23.98	
HE80	MCS0	4	122	5610	82.08	82.08	81.92	81.76	23.98	23.98	23.98	23.98	
HE80	MCS0	4	138	5690	82.40	82.24	81.60	82.40	23.98	23.98	23.98	23.98	
HE160	MCS0	4	114	5570	165.12	164.48	164.80	164.80	23.98	23.98	23.98	23.98	

UNII-2C																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)				IC 99% Bandwidth Power Limit (dBm)				IC 99% Bandwidth EIRP Limit (dBm)			
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4
11a	6Mbps	4	100	5500	17.08	17.13	16.93	16.98	23.33	23.34	23.29	23.30	29.33	29.34	29.29	29.30
11a	6Mbps	4	116	5580	17.08	17.08	16.88	16.88	23.33	23.33	23.27	23.27	29.33	29.33	29.27	29.27
11a	6Mbps	4	140	5700	17.13	17.08	17.03	16.93	23.34	23.33	23.31	23.29	29.34	29.33	29.31	29.29
11a	6Mbps	4	144	5720	17.13	17.08	16.98	16.93	23.34	23.33	23.30	23.29	29.34	29.33	29.30	29.29
HE20	MCS0	4	100	5500	19.18	19.13	19.18	19.08	23.83	23.82	23.83	23.81	29.83	29.82	29.83	29.81
HE20	MCS0	4	116	5580	19.18	19.13	19.18	19.13	23.83	23.82	23.83	23.82	29.83	29.82	29.83	29.82
HE20	MCS0	4	140	5700	19.18	19.13	19.18	19.13	23.83	23.82	23.83	23.82	29.83	29.82	29.83	29.82
HE20	MCS0	4	144	5720	19.18	19.08	19.18	19.13	23.83	23.81	23.83	23.82	29.83	29.81	29.83	29.82
HE40	MCS0	4	102	5510	37.96	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	110	5550	37.86	37.96	38.16	37.86	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	134	5670	37.86	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	142	5710	38.06	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	106	5530	77.20	77.32	77.32	77.20	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	122	5610	77.32	77.32	77.20	77.32	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	138	5690	77.20	77.20	77.32	77.20	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE160	MCS0	4	114	5570	156.56	156.56	156.56	156.32	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00

TEST RESULTS DATA
Average Power Table

UNII-2C																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Ant	Average Conducted Power with Duty Factor (dB)					FCC Power Limit (dBm)	DG (dBi)	FCC EIRP Power (dBm)	FCC EIRP Power Limit (dBm)	Pass/Fail	Setting
						Ant 1	Ant 2	Ant 3	Ant 4	SUM						
11a	6Mbps	4	100	5500	1+2+3+4	13.78	13.85	13.89	13.82	19.86	23.98	5.14	25.00	30.00	Pass	4Tx
11a	6Mbps	4	116	5580	1+2+3+4	13.81	13.97	13.82	13.87	19.89	23.98	5.14	25.03	30.00	Pass	13
11a	6Mbps	4	140	5700	1+2+3+4	13.78	13.56	13.87	13.46	19.69	23.98	5.14	24.83	30.00	Pass	13
11a	6Mbps	4	144	5720	1+2+3+4	13.70	13.60	13.84	13.46	19.67	23.98	5.14	24.81	30.00	Pass	13
HE20	MCS0	4	100	5500	1+2+3+4	13.97	14.00	13.98	13.95	20.00	23.98	5.14	25.14	30.00	Pass	13
HE20	MCS0	4	116	5580	1+2+3+4	13.95	13.93	13.93	13.99	19.97	23.98	5.14	25.11	30.00	Pass	13
HE20	MCS0	4	140	5700	1+2+3+4	13.92	13.97	13.99	13.92	19.97	23.98	5.14	25.11	30.00	Pass	13
HE20	MCS0	4	144	5720	1+2+3+4	13.98	13.99	13.95	13.82	19.96	23.98	5.14	25.10	30.00	Pass	13
HE40	MCS0	4	102	5510	1+2+3+4	17.47	17.42	17.52	17.38	23.47	23.98	5.14	28.61	30.00	Pass	16
HE40	MCS0	4	110	5550	1+2+3+4	17.29	17.39	17.33	17.28	23.34	23.98	5.14	28.48	30.00	Pass	16
HE40	MCS0	4	134	5670	1+2+3+4	17.47	17.46	17.68	17.20	23.48	23.98	5.14	28.62	30.00	Pass	16
HE40	MCS0	4	142	5710	1+2+3+4	17.35	17.39	17.65	17.16	23.41	23.98	5.14	28.55	30.00	Pass	16
HE80	MCS0	4	106	5530	1+2+3+4	17.35	17.17	17.33	17.12	23.26	23.98	5.14	28.40	30.00	Pass	16
HE80	MCS0	4	122	5610	1+2+3+4	17.46	17.33	17.75	17.23	23.47	23.98	5.14	28.61	30.00	Pass	16
HE80	MCS0	4	138	5690	1+2+3+4	17.42	17.30	17.55	16.96	23.33	23.98	5.14	28.47	30.00	Pass	16
HE160	MCS0	4	114	5570	1+2+3+4	17.21	16.99	16.90	17.23	23.11	23.98	5.14	28.25	30.00	Pass	16

TEST RESULTS DATA
Power Spectral Density

UNII-2C														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Ant	Duty Factor (dB)				Average PSD with Duty Factor (dBm/MHz)	PSD Limit (dBm/MHz)	DG (dBi)		Pass /Fail
						Ant 1	Ant 2	Ant 3	Ant 4					
11a	6Mbps	4	100	5500	1+2+3+4	0.23	0.23	0.23	0.21	8.06	8.72	8.28		Pass
11a	6Mbps	4	116	5580	1+2+3+4	0.23	0.23	0.23	0.21	7.91	8.72	8.28		Pass
11a	6Mbps	4	140	5700	1+2+3+4	0.23	0.23	0.23	0.21	8.00	8.72	8.28		Pass
11a	6Mbps	4	144	5720	1+2+3+4	0.23	0.23	0.23	0.21	8.06	8.72	8.28		Pass
HE20	MCS0	4	100	5500	1+2+3+4	0.10	0.10	0.08	0.08	8.17	8.72	8.28		Pass
HE20	MCS0	4	116	5580	1+2+3+4	0.10	0.10	0.08	0.08	8.11	8.72	8.28		Pass
HE20	MCS0	4	140	5700	1+2+3+4	0.10	0.10	0.08	0.08	7.86	8.72	8.28		Pass
HE20	MCS0	4	144	5720	1+2+3+4	0.10	0.10	0.08	0.08	7.83	8.72	8.28		Pass
HE40	MCS0	4	102	5510	1+2+3+4	0.17	0.17	0.17	0.17	7.65	8.72	8.28		Pass
HE40	MCS0	4	110	5550	1+2+3+4	0.17	0.17	0.17	0.17	8.17	8.72	8.28		Pass
HE40	MCS0	4	134	5670	1+2+3+4	0.17	0.17	0.17	0.17	8.07	8.72	8.28		Pass
HE40	MCS0	4	142	5710	1+2+3+4	0.17	0.17	0.17	0.17	7.96	8.72	8.28		Pass
HE80	MCS0	4	106	5530	1+2+3+4	0.34	0.32	0.34	0.34	5.32	8.72	8.28		Pass
HE80	MCS0	4	122	5610	1+2+3+4	0.34	0.32	0.34	0.34	5.65	8.72	8.28		Pass
HE80	MCS0	4	138	5690	1+2+3+4	0.34	0.32	0.34	0.34	5.41	8.72	8.28		Pass
HE160	MCS0	4	114	5570	1+2+3+4	0.54	0.54	0.54	0.51	2.75	8.72	8.28		Pass

TEST RESULTS DATA
Average Power Table

UNII-2A															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Ant	Average Conducted Power with Duty Factor (dB)					FCC Power Limit (dBm)	DG (dBi)	FCC EIRP Power (dBm)	FCC EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	Ant 3	Ant 4	SUM					
HT20	MCS0	4	52	5260	1+2+3+4	16.36	16.72	16.31	16.66	22.54	23.98	2.08	24.62	30.00	Pass
HT20	MCS0	4	60	5300	1+2+3+4	16.48	16.79	16.56	16.75	22.67	23.98	2.08	24.75	30.00	Pass
HT20	MCS0	4	64	5320	1+2+3+4	16.35	16.80	16.48	16.83	22.64	23.98	2.08	24.72	30.00	Pass
HT40	MCS0	4	54	5270	1+2+3+4	17.22	17.22	16.95	17.12	23.15	23.98	2.08	25.23	30.00	Pass
HT40	MCS0	4	62	5310	1+2+3+4	17.33	17.33	16.97	17.34	23.26	23.98	2.08	25.34	30.00	Pass
VHT20	MCS0	4	52	5260	1+2+3+4	16.28	16.64	16.24	16.58	22.46	23.98	2.08	24.54	30.00	Pass
VHT20	MCS0	4	60	5300	1+2+3+4	16.40	16.71	16.49	16.67	22.59	23.98	2.08	24.67	30.00	Pass
VHT20	MCS0	4	64	5320	1+2+3+4	16.27	16.72	16.41	16.75	22.57	23.98	2.08	24.65	30.00	Pass
VHT40	MCS0	4	54	5270	1+2+3+4	17.13	17.05	16.77	16.92	22.99	23.98	2.08	25.07	30.00	Pass
VHT40	MCS0	4	62	5310	1+2+3+4	17.27	17.17	16.79	17.19	23.13	23.98	2.08	25.21	30.00	Pass
VHT80	MCS0	4	58	5290	1+2+3+4	16.49	16.38	16.59	16.44	22.49	23.98	2.08	24.57	30.00	Pass
VHT160	MCS0	4	50	5250	1+2+3+4	15.52	15.25	15.19	15.13	21.30	23.98	2.08	23.38	30.00	Pass

Setting
4Tx
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TEST RESULTS DATA
26dB and 99% OBW

UNII-2A													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	26 dB Bandwidth (MHz)				FCC 26dB Bandwidth Power Limit (dBm)				Note
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	
HE20	MCS0	4	52	5260	21.85	21.95	21.75	21.60	23.98	23.98	23.98	23.98	
HE20	MCS0	4	60	5300	21.75	21.85	21.70	21.70	23.98	23.98	23.98	23.98	
HE20	MCS0	4	64	5320	21.95	21.75	21.85	21.70	23.98	23.98	23.98	23.98	
HE40	MCS0	4	54	5270	40.86	40.68	40.68	40.59	23.98	23.98	23.98	23.98	
HE40	MCS0	4	62	5310	40.86	40.50	40.50	40.50	23.98	23.98	23.98	23.98	
HE80	MCS0	4	58	5290	82.40	82.24	81.92	82.08	23.98	23.98	23.98	23.98	
HE160	MCS0	4	50	5250	165.44	165.12	165.44	165.12	23.98	23.98	23.98	23.98	

UNII-2A																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)				IC 99% Bandwidth Power Limit (dBm)				IC 99% Bandwidth EIRP Limit (dBm)			
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4
HE20	MCS0	4	52	5260	19.13	19.18	19.08	19.18	23.82	23.83	23.81	23.83	29.82	29.83	29.81	29.83
HE20	MCS0	4	60	5300	19.13	19.08	19.18	19.13	23.82	23.81	23.83	23.82	29.82	29.81	29.83	29.82
HE20	MCS0	4	64	5320	19.18	19.13	19.13	19.08	23.83	23.82	23.82	23.81	29.83	29.82	29.82	29.81
HE40	MCS0	4	54	5270	37.96	38.06	37.96	37.86	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	62	5310	37.96	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	58	5290	77.20	77.32	77.32	77.20	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE160	MCS0	4	50	5250	156.56	156.56	156.56	156.80	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00

TEST RESULTS DATA
Average Power Table

UNII-2A															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Ant	Average Conducted Power with Duty Factor (dB)					FCC Power Limit (dBm)	DG (dBi)	FCC EIRP Power (dBm)	FCC EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	Ant 3	Ant 4	SUM					
HE20	MCS0	4	52	5260	1+2+3+4	16.65	17.01	16.57	16.93	22.82	23.98	2.08	24.90	30.00	Pass
HE20	MCS0	4	60	5300	1+2+3+4	16.77	17.08	16.82	17.02	22.95	23.98	2.08	25.03	30.00	Pass
HE20	MCS0	4	64	5320	1+2+3+4	16.64	17.09	16.74	17.10	22.92	23.98	2.08	25.00	30.00	Pass
HE40	MCS0	4	54	5270	1+2+3+4	17.60	17.48	17.23	17.38	23.44	23.98	2.08	25.52	30.00	Pass
HE40	MCS0	4	62	5310	1+2+3+4	17.65	17.49	17.25	17.40	23.47	23.98	2.08	25.55	30.00	Pass
HE80	MCS0	4	58	5290	1+2+3+4	16.66	16.62	16.85	16.63	22.71	23.98	2.08	24.79	30.00	Pass
HE160	MCS0	4	50	5250	1+2+3+4	15.66	15.41	15.48	15.21	21.46	23.98	2.08	23.54	30.00	Pass

Setting
4Tx
15.5
15.5
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16
15.5
14.5

TEST RESULTS DATA
Power Spectral Density

UNII-2A														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Ant	Duty Factor (dB)				Average PSD with Duty Factor (dBm/MHz)	PSD Limit (dBm/MHz)	DG (dBi)		Pass /Fail
						Ant 1	Ant 2	Ant 3	Ant 4					
HE20	MCS0	4	52	5260	1+2+3+4	0.10	0.10	0.08	0.08	10.16	11.00	2.08		Pass
HE20	MCS0	4	60	5300	1+2+3+4	0.10	0.10	0.08	0.08	10.27	11.00	2.08		Pass
HE20	MCS0	4	64	5320	1+2+3+4	0.10	0.10	0.08	0.08	10.35	11.00	2.08		Pass
HE40	MCS0	4	54	5270	1+2+3+4	0.17	0.17	0.17	0.17	8.52	11.00	2.08		Pass
HE40	MCS0	4	62	5310	1+2+3+4	0.17	0.17	0.17	0.17	8.67	11.00	2.08		Pass
HE80	MCS0	4	58	5290	1+2+3+4	0.34	0.32	0.34	0.34	4.25	11.00	2.08		Pass
HE160	MCS0	4	50	5250	1+2+3+4	0.54	0.54	0.54	0.51	0.64	11.00	2.08		Pass

TEST RESULTS DATA
26dB and 99% OBW

UNII-2C													
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	26 dB Bandwidth (MHz)				FCC 26dB Bandwidth Power Limit (dBm)				Note
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	
HE20	MCS0	4	100	5500	21.80	21.70	21.70	21.80	23.98	23.98	23.98	23.98	
HE20	MCS0	4	116	5580	21.90	21.60	21.85	21.70	23.98	23.98	23.98	23.98	
HE20	MCS0	4	140	5700	21.80	21.50	21.80	21.55	23.98	23.98	23.98	23.98	
HE20	MCS0	4	144	5720	21.80	21.60	21.70	21.75	23.98	23.98	23.98	23.98	
HE40	MCS0	4	102	5510	40.59	40.68	40.50	40.50	23.98	23.98	23.98	23.98	
HE40	MCS0	4	110	5550	40.68	40.50	40.41	40.50	23.98	23.98	23.98	23.98	
HE40	MCS0	4	134	5670	40.77	40.59	40.23	40.86	23.98	23.98	23.98	23.98	
HE40	MCS0	4	142	5710	40.77	40.68	40.41	40.59	23.98	23.98	23.98	23.98	
HE80	MCS0	4	106	5530	82.40	82.24	81.76	81.92	23.98	23.98	23.98	23.98	
HE80	MCS0	4	122	5610	82.08	82.08	81.92	81.76	23.98	23.98	23.98	23.98	
HE80	MCS0	4	138	5690	82.40	82.24	81.60	82.40	23.98	23.98	23.98	23.98	
HE160	MCS0	4	114	5570	165.12	164.48	164.80	164.80	23.98	23.98	23.98	23.98	

UNII-2C																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)				IC 99% Bandwidth Power Limit (dBm)				IC 99% Bandwidth EIRP Limit (dBm)			
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4
HE20	MCS0	4	100	5500	19.18	19.13	19.18	19.08	23.83	23.82	23.83	23.81	29.83	29.82	29.83	29.81
HE20	MCS0	4	116	5580	19.18	19.13	19.18	19.13	23.83	23.82	23.83	23.82	29.83	29.82	29.83	29.82
HE20	MCS0	4	140	5700	19.18	19.13	19.18	19.13	23.83	23.82	23.83	23.82	29.83	29.82	29.83	29.82
HE20	MCS0	4	144	5720	19.18	19.08	19.18	19.13	23.83	23.81	23.83	23.82	29.83	29.81	29.83	29.82
HE40	MCS0	4	102	5510	37.96	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	110	5550	37.86	37.96	38.16	37.86	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	134	5670	37.86	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	142	5710	38.06	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	106	5530	77.20	77.32	77.32	77.20	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	122	5610	77.32	77.32	77.20	77.32	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	138	5690	77.20	77.20	77.32	77.20	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE160	MCS0	4	114	5570	156.56	156.56	156.56	156.32	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00

TEST RESULTS DATA
Power Spectral Density

UNII-2C														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Ant	Duty Factor (dB)				Average PSD with Duty Factor (dBm/MHz)	PSD Limit (dBm/MHz)	DG (dBi)		Pass /Fail
						Ant 1	Ant 2	Ant 3	Ant 4					
HE20	MCS0	4	100	5500	1+2+3+4	0.10	0.10	0.08	0.08	10.18	11.00	2.29		Pass
HE20	MCS0	4	116	5580	1+2+3+4	0.10	0.10	0.08	0.08	10.44	11.00	2.29		Pass
HE20	MCS0	4	140	5700	1+2+3+4	0.10	0.10	0.08	0.08	10.22	11.00	2.29		Pass
HE20	MCS0	4	144	5720	1+2+3+4	0.10	0.10	0.08	0.08	10.08	11.00	2.29		Pass
HE40	MCS0	4	102	5510	1+2+3+4	0.17	0.17	0.17	0.17	7.65	11.00	2.29		Pass
HE40	MCS0	4	110	5550	1+2+3+4	0.17	0.17	0.17	0.17	8.17	11.00	2.29		Pass
HE40	MCS0	4	134	5670	1+2+3+4	0.17	0.17	0.17	0.17	8.07	11.00	2.29		Pass
HE40	MCS0	4	142	5710	1+2+3+4	0.17	0.17	0.17	0.17	7.96	11.00	2.29		Pass
HE80	MCS0	4	106	5530	1+2+3+4	0.34	0.32	0.34	0.34	5.32	11.00	2.29		Pass
HE80	MCS0	4	122	5610	1+2+3+4	0.34	0.32	0.34	0.34	5.65	11.00	2.29		Pass
HE80	MCS0	4	138	5690	1+2+3+4	0.34	0.32	0.34	0.34	5.41	11.00	2.29		Pass
HE160	MCS0	4	114	5570	1+2+3+4	0.54	0.54	0.54	0.51	1.51	11.00	2.29		Pass

TEST RESULTS DATA
Average Power Table

UNII-2A															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Ant	Average Conducted Power with Duty Factor (dB)					FCC Power Limit (dBm)	DG (dBi)	FCC EIRP Power (dBm)	FCC EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	Ant 3	Ant 4	SUM					
HT20	MCS0	4	52	5260	1+2+3+4	14.11	14.18	14.02	14.17	20.14	22.19	7.79	27.93	30.00	Pass
HT20	MCS0	4	60	5300	1+2+3+4	14.15	14.17	14.17	14.13	20.18	22.19	7.79	27.97	30.00	Pass
HT20	MCS0	4	64	5320	1+2+3+4	14.11	14.13	14.15	14.14	20.15	22.19	7.79	27.94	30.00	Pass
HT40	MCS0	4	54	5270	1+2+3+4	14.22	14.22	15.36	15.79	20.97	22.19	7.79	28.76	30.00	Pass
HT40	MCS0	4	62	5310	1+2+3+4	15.54	15.54	15.30	15.78	21.56	22.19	7.79	29.35	30.00	Pass
VHT20	MCS0	4	52	5260	1+2+3+4	14.02	14.09	13.94	14.08	20.06	22.19	7.79	27.85	30.00	Pass
VHT20	MCS0	4	60	5300	1+2+3+4	14.06	14.08	14.09	14.04	20.09	22.19	7.79	27.88	30.00	Pass
VHT20	MCS0	4	64	5320	1+2+3+4	14.02	14.04	14.07	14.05	20.07	22.19	7.79	27.86	30.00	Pass
VHT40	MCS0	4	54	5270	1+2+3+4	15.47	14.11	15.33	15.68	21.21	22.19	7.79	29.00	30.00	Pass
VHT40	MCS0	4	62	5310	1+2+3+4	15.47	15.48	15.26	15.72	21.51	22.19	7.79	29.30	30.00	Pass
VHT80	MCS0	4	58	5290	1+2+3+4	13.86	13.88	13.99	14.12	19.98	22.19	7.79	27.77	30.00	Pass
VHT160	MCS0	4	50	5250	1+2+3+4	14.66	14.62	14.55	14.77	20.67	22.19	7.79	28.46	30.00	Pass

Setting
4Tx
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TEST RESULTS DATA
26dB and 99% OBW

UNII-2A													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	26 dB Bandwidth (MHz)				FCC 26dB Bandwidth Power Limit (dBm)				Note
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	
HE20	MCS0	4	52	5260	21.95	21.85	21.75	21.70	23.98	23.98	23.98	23.98	
HE20	MCS0	4	60	5300	21.85	21.75	21.90	21.80	23.98	23.98	23.98	23.98	
HE20	MCS0	4	64	5320	21.90	21.45	21.90	21.65	23.98	23.98	23.98	23.98	
HE40	MCS0	4	54	5270	40.86	40.68	40.68	40.59	23.98	23.98	23.98	23.98	
HE40	MCS0	4	62	5310	40.86	40.50	40.50	40.50	23.98	23.98	23.98	23.98	
HE80	MCS0	4	58	5290	82.40	82.24	81.92	82.08	23.98	23.98	23.98	23.98	
HE160	MCS0	4	50	5250	165.44	165.12	165.44	165.12	23.98	23.98	23.98	23.98	

UNII-2A																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)				IC 99% Bandwidth Power Limit (dBm)				IC 99% Bandwidth EIRP Limit (dBm)			
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4
HE20	MCS0	4	52	5260	19.18	19.18	19.13	19.18	23.83	23.83	23.82	23.83	29.83	29.83	29.82	29.83
HE20	MCS0	4	60	5300	19.13	19.08	19.13	19.13	23.82	23.81	23.82	23.82	29.82	29.81	29.82	29.82
HE20	MCS0	4	64	5320	19.18	19.13	19.13	19.08	23.83	23.82	23.82	23.81	29.83	29.82	29.82	29.81
HE40	MCS0	4	54	5270	37.96	38.06	37.96	37.86	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	62	5310	37.96	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	58	5290	77.20	77.32	77.32	77.20	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE160	MCS0	4	50	5250	156.56	156.56	156.56	156.80	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00

TEST RESULTS DATA
Average Power Table

UNII-2A															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Ant	Average Conducted Power with Duty Factor (dB)					FCC Power Limit (dBm)	DG (dBi)	FCC EIRP Power (dBm)	FCC EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	Ant 3	Ant 4	SUM					
HE20	MCS0	4	52	5260	1+2+3+4	14.42	14.49	14.30	14.46	20.44	22.19	7.79	28.23	30.00	Pass
HE20	MCS0	4	60	5300	1+2+3+4	14.46	14.48	14.45	14.42	20.48	22.19	7.79	28.27	30.00	Pass
HE20	MCS0	4	64	5320	1+2+3+4	14.42	14.44	14.43	14.43	20.45	22.19	7.79	28.24	30.00	Pass
HE40	MCS0	4	54	5270	1+2+3+4	15.63	14.35	15.49	15.87	21.39	22.19	7.79	29.18	30.00	Pass
HE40	MCS0	4	62	5310	1+2+3+4	15.65	15.66	15.47	15.87	21.68	22.19	7.79	29.47	30.00	Pass
HE80	MCS0	4	58	5290	1+2+3+4	14.06	14.06	14.20	14.32	20.18	22.19	7.79	27.97	30.00	Pass
HE160	MCS0	4	50	5250	1+2+3+4	14.85	14.73	14.65	14.86	20.79	22.19	7.79	28.58	30.00	Pass

Setting
4Tx
13.5
13.5
13.5
14.5
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14

TEST RESULTS DATA
Power Spectral Density

UNII-2A														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Ant	Duty Factor (dB)				Average PSD with Duty Factor (dBm/MHz)	PSD Limit (dBm/MHz)	DG (dBi)		Pass /Fail
						Ant 1	Ant 2	Ant 3	Ant 4					
HE20	MCS0	4	52	5260	1+2+3+4	0.10	0.10	0.08	0.08	8.52	9.21	7.79		Pass
HE20	MCS0	4	60	5300	1+2+3+4	0.10	0.10	0.08	0.08	8.56	9.21	7.79		Pass
HE20	MCS0	4	64	5320	1+2+3+4	0.10	0.10	0.08	0.08	8.58	9.21	7.79		Pass
HE40	MCS0	4	54	5270	1+2+3+4	0.17	0.17	0.17	0.17	6.80	9.21	7.79		Pass
HE40	MCS0	4	62	5310	1+2+3+4	0.17	0.17	0.17	0.17	6.90	9.21	7.79		Pass
HE80	MCS0	4	58	5290	1+2+3+4	0.34	0.32	0.34	0.34	2.61	9.21	7.79		Pass
HE160	MCS0	4	50	5250	1+2+3+4	0.54	0.54	0.54	0.51	0.88	9.21	7.79		Pass

TEST RESULTS DATA
26dB and 99% OBW

UNII-2C													
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	26 dB Bandwidth (MHz)				FCC 26dB Bandwidth Power Limit (dBm)				Note
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	
HE20	MCS0	4	100	5500	21.85	21.60	21.90	21.80	23.98	23.98	23.98	23.98	
HE20	MCS0	4	116	5580	21.75	21.60	21.65	21.70	23.98	23.98	23.98	23.98	
HE20	MCS0	4	140	5700	21.80	21.70	21.65	21.80	23.98	23.98	23.98	23.98	
HE20	MCS0	4	144	5720	21.95	21.55	21.75	21.75	23.98	23.98	23.98	23.98	
HE40	MCS0	4	102	5510	40.59	40.68	40.50	40.50	23.98	23.98	23.98	23.98	
HE40	MCS0	4	110	5550	40.68	40.50	40.41	40.50	23.98	23.98	23.98	23.98	
HE40	MCS0	4	134	5670	40.77	40.59	40.23	40.86	23.98	23.98	23.98	23.98	
HE40	MCS0	4	142	5710	40.77	40.68	40.41	40.59	23.98	23.98	23.98	23.98	
HE80	MCS0	4	106	5530	82.40	82.24	81.76	81.92	23.98	23.98	23.98	23.98	
HE80	MCS0	4	122	5610	82.08	82.08	81.92	81.76	23.98	23.98	23.98	23.98	
HE80	MCS0	4	138	5690	82.40	82.24	81.60	82.40	23.98	23.98	23.98	23.98	
HE160	MCS0	4	114	5570	165.12	164.48	164.80	164.80	23.98	23.98	23.98	23.98	

UNII-2C																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)				IC 99% Bandwidth Power Limit (dBm)				IC 99% Bandwidth EIRP Limit (dBm)			
					Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4	Ant 1	Ant 2	Ant 3	Ant 4
HE20	MCS0	4	100	5500	19.18	19.18	19.13	19.13	23.83	23.83	23.82	23.82	29.83	29.83	29.82	29.82
HE20	MCS0	4	116	5580	19.13	19.13	19.13	19.13	23.82	23.82	23.82	23.82	29.82	29.82	29.82	29.82
HE20	MCS0	4	140	5700	19.18	19.13	19.13	19.13	23.83	23.82	23.82	23.82	29.83	29.82	29.82	29.82
HE20	MCS0	4	144	5720	19.18	19.08	19.18	19.13	23.83	23.81	23.83	23.82	29.83	29.81	29.83	29.82
HE40	MCS0	4	102	5510	37.96	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	110	5550	37.86	37.96	38.16	37.86	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	134	5670	37.86	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE40	MCS0	4	142	5710	38.06	37.96	37.96	37.96	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	106	5530	77.20	77.32	77.32	77.20	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	122	5610	77.32	77.32	77.20	77.32	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE80	MCS0	4	138	5690	77.20	77.20	77.32	77.20	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00
HE160	MCS0	4	114	5570	156.56	156.56	156.56	156.32	23.98	23.98	23.98	23.98	30.00	30.00	30.00	30.00

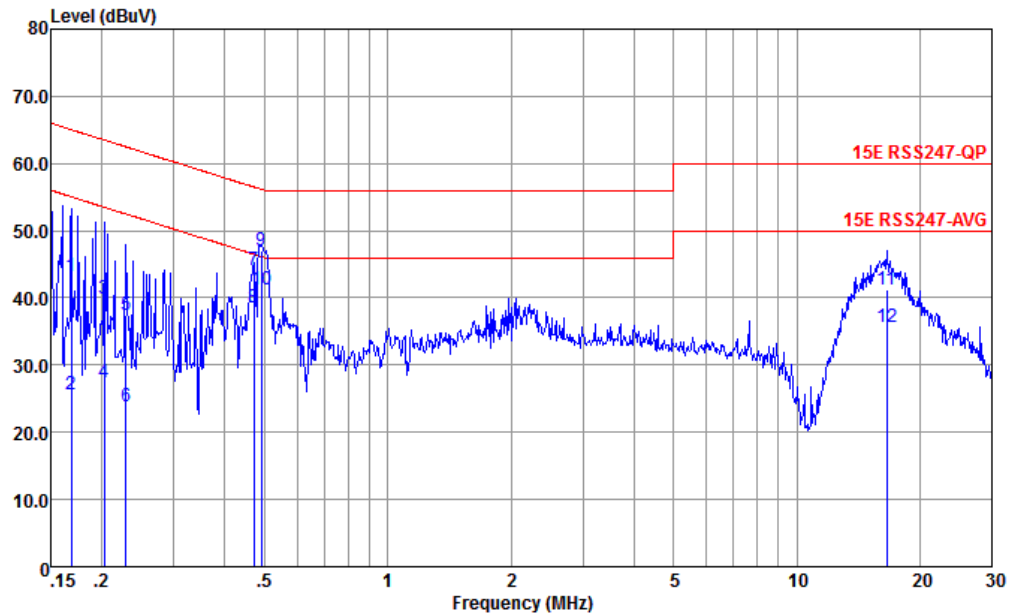
TEST RESULTS DATA
Power Spectral Density

Band III														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Ant	Duty Factor (dB)				Average PSD with Duty Factor (dBm/MHz)	PSD Limit (dBm/MHz)	DG (dBi)		Pass /Fail
						Ant 1	Ant 2	Ant 3	Ant 4					
HE20	MCS0	4	100	5500	1+2+3+4	0.10	0.10	0.08	0.08	8.17	8.72	8.28		Pass
HE20	MCS0	4	116	5580	1+2+3+4	0.10	0.10	0.08	0.08	8.11	8.72	8.28		Pass
HE20	MCS0	4	140	5700	1+2+3+4	0.10	0.10	0.08	0.08	7.86	8.72	8.28		Pass
HE20	MCS0	4	144	5720	1+2+3+4	0.10	0.10	0.08	0.08	7.83	8.72	8.28		Pass
HE40	MCS0	4	102	5510	1+2+3+4	0.17	0.17	0.17	0.17	6.18	8.72	8.28		Pass
HE40	MCS0	4	110	5550	1+2+3+4	0.17	0.17	0.17	0.17	6.04	8.72	8.28		Pass
HE40	MCS0	4	134	5670	1+2+3+4	0.17	0.17	0.17	0.17	6.33	8.72	8.28		Pass
HE40	MCS0	4	142	5710	1+2+3+4	0.17	0.17	0.17	0.17	6.21	8.72	8.28		Pass
HE80	MCS0	4	106	5530	1+2+3+4	0.34	0.32	0.34	0.34	3.53	8.72	8.28		Pass
HE80	MCS0	4	122	5610	1+2+3+4	0.34	0.32	0.34	0.34	3.46	8.72	8.28		Pass
HE80	MCS0	4	138	5690	1+2+3+4	0.34	0.32	0.34	0.34	3.36	8.72	8.28		Pass
HE160	MCS0	4	114	5570	1+2+3+4	0.54	0.54	0.54	0.51	1.21	8.72	8.28		Pass



Appendix B. AC Conducted Emission Test Results

Test Engineer :	Amos Zhang	Temperature :	25.3~26.2°C
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

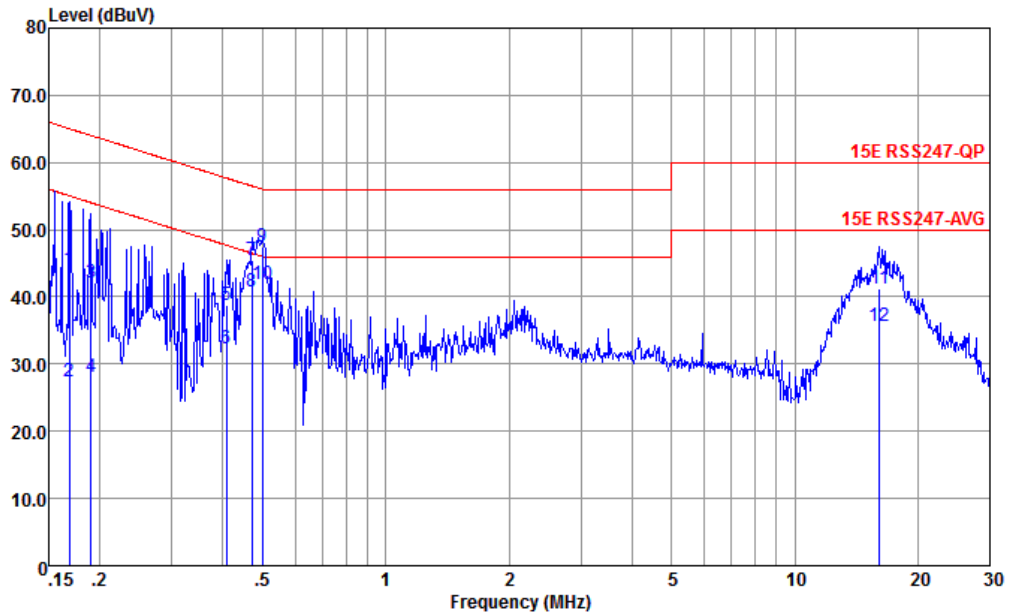


Site : CO01-KS
 Condition : 15E RSS247-QP LISN-060105-LINE LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.169	43.28	-21.75	65.03	32.80	0.05	10.43	QP
2	0.169	25.58	-29.45	55.03	15.10	0.05	10.43	Average
3	0.203	39.94	-23.55	63.49	29.50	0.02	10.42	QP
4	0.203	27.34	-26.15	53.49	16.90	0.02	10.42	Average
5	0.229	37.33	-25.15	62.48	26.90	0.03	10.40	QP
6	0.229	23.93	-28.55	52.48	13.50	0.03	10.40	Average
7	0.471	44.11	-12.38	56.49	33.90	-0.02	10.23	QP
8	0.471	38.51	-7.98	46.49	28.30	-0.02	10.23	Average
9	0.491	47.09	-9.05	56.14	36.90	-0.03	10.22	QP
10 *	0.491	41.29	-4.85	46.14	31.10	-0.03	10.22	Average
11	16.573	41.22	-18.78	60.00	30.20	-0.25	11.27	QP
12	16.573	35.65	-14.35	50.00	24.63	-0.25	11.27	Average



Test Engineer :	Amos Zhang	Temperature :	25.3~26.2°C
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
 Condition : 15E RSS247-QP LISN-060105-NEUTRAL NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.169	44.06	-20.97	65.03	33.59	0.04	10.43	QP
2	0.169	27.36	-27.67	55.03	16.89	0.04	10.43	Average
3	0.190	42.07	-21.95	64.02	31.60	0.05	10.42	QP
4	0.190	27.97	-26.05	54.02	17.50	0.05	10.42	Average
5	0.408	38.82	-18.86	57.68	28.60	-0.07	10.29	QP
6	0.408	32.32	-15.36	47.68	22.10	-0.07	10.29	Average
7	0.471	45.36	-11.13	56.49	35.21	-0.08	10.23	QP
8	0.471	40.76	-5.73	46.49	30.61	-0.08	10.23	Average
9	0.499	47.43	-8.58	56.01	37.30	-0.08	10.21	QP
10 *	0.499	41.93	-4.08	46.01	31.80	-0.08	10.21	Average
11	16.140	41.25	-18.75	60.00	30.20	-0.21	11.26	QP
12	16.140	35.65	-14.35	50.00	24.60	-0.21	11.26	Average

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



Appendix C. Radiated Spurious Emission

Test Engineer :	Carry Xu	Temperature :	22~23°C
		Relative Humidity :	41~42%

Note: All modes had been tested and only the worst channel test data of each bandwidth shown in the report

CDD 1S4T

UNII-2A 5250~5350MHz WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
CDD 1S4T 802.11a CH 64 5320MHz		5352.3	59.22	-14.78	74	50.41	34.58	10.75	36.52	241	129	P	H
		5353.7	45.9	-8.1	54	37.09	34.58	10.75	36.52	241	129	A	H
		5314	114.28	-	-	105.56	34.55	10.73	36.56	241	129	P	H
		5314	107.09	-	-	98.37	34.55	10.73	36.56	241	129	A	H
		5350.1	60.92	-13.08	74	52.11	34.58	10.75	36.52	287	8	P	V
		5352.4	47.92	-6.08	54	39.11	34.58	10.75	36.52	287	8	A	V
		5326	116.09	-	-	107.36	34.55	10.74	36.56	287	8	P	V
		5326	108.74	-	-	100.01	34.55	10.74	36.56	287	8	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz WIFI 802.11a (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
CDD 1S4T 802.11a CH 64 5320MHz		10641	49.29	-24.71	74	62.83	37.58	15.7	66.82	300	0	P	H
		10641	49.06	-24.94	74	62.6	37.58	15.7	66.82	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2A 5250~5350MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant., Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11ax HE20 Full CH 64 5320MHz and 5320MHz.

UNII-2A 5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

Table with 14 columns: WIFI Ant., Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11ax HE20 Full CH 64 5320MHz and 10641.



UNII-2A 5250~5350MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		5137.92	54.68	-19.32	74	46.41	34.41	10.6	36.74	250	126	P	H
		5149.6	42.97	-11.03	54	34.68	34.42	10.6	36.73	250	126	A	H
		5314	113.55	-	-	104.83	34.55	10.73	36.56	250	126	P	H
		5314	102.94	-	-	94.22	34.55	10.73	36.56	250	126	A	H
		5352.2	67.57	-6.43	74	58.76	34.58	10.75	36.52	250	126	P	H
		5352	51.84	-2.16	54	43.03	34.58	10.75	36.52	250	126	A	H
		5146.72	53.11	-20.89	74	44.82	34.42	10.6	36.73	332	360	P	V
		5148	41.84	-12.16	54	33.55	34.42	10.6	36.73	332	360	A	V
		5326	113.69	-	-	104.96	34.55	10.74	36.56	332	360	P	V
		5326	105.41	-	-	96.68	34.55	10.74	36.56	332	360	A	V
	5353.6	68.42	-5.58	74	59.61	34.58	10.75	36.52	332	360	P	V	
	5353.9	53.36	-0.64	54	44.55	34.58	10.75	36.52	332	360	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz
WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		10619	45.44	-28.56	74	59.02	37.57	15.69	66.84	300	0	P	H
		10619	46.49	-27.51	74	60.07	37.57	15.69	66.84	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2A 5250~5350MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 58 5290MHz		5142.24	54.66	-19.34	74	46.37	34.42	10.6	36.73	247	119	P	H
		5146.88	44.94	-9.06	54	36.65	34.42	10.6	36.73	247	119	A	H
		5254	108.18	-	-	99.61	34.5	10.69	36.62	247	119	P	H
		5254	99.72	-	-	91.15	34.5	10.69	36.62	247	119	A	H
		5366.9	64.17	-9.83	74	55.33	34.59	10.76	36.51	247	119	P	H
		5351.9	52.12	-1.88	54	43.31	34.58	10.75	36.52	247	119	A	H
		5144.8	53.13	-20.87	74	44.84	34.42	10.6	36.73	317	0	P	V
		5148.48	43.21	-10.79	54	34.92	34.42	10.6	36.73	317	0	A	V
		5290	110.57	-	-	101.92	34.53	10.71	36.59	317	0	P	V
		5290	101.61	-	-	92.96	34.53	10.71	36.59	317	0	A	V
		5363.8	67.3	-6.7	74	58.46	34.59	10.76	36.51	317	0	P	V
	5354.1	53.29	-0.71	54	44.48	34.58	10.75	36.52	317	0	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 58 5290MHz		10575	44.13	-24.17	68.3	57.83	37.54	15.65	66.89	300	0	P	H
		10575	44.58	-23.72	68.3	58.28	37.54	15.65	66.89	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2A 5250~5350MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		5131.36	62.02	-11.98	74	53.77	34.41	10.58	36.74	241	114	P	H
		5141.44	50.43	-3.57	54	42.14	34.42	10.6	36.73	241	114	A	H
		5248	104.6	-	-	96.03	34.5	10.69	36.62	241	114	P	H
		5248	95.94	-	-	87.37	34.5	10.69	36.62	241	114	A	H
		5382	58.69	-15.31	74	49.8	34.61	10.77	36.49	241	114	P	H
		5382.5	50.63	-3.37	54	41.74	34.61	10.77	36.49	241	114	A	H
		5147.04	60.09	-13.91	74	51.8	34.42	10.6	36.73	336	0	P	V
		5148.96	49.51	-4.49	54	41.22	34.42	10.6	36.73	336	0	A	V
		5308	106.6	-	-	97.9	34.54	10.73	36.57	336	0	P	V
		5308	98.34	-	-	89.64	34.54	10.73	36.57	336	0	A	V
	5377.5	61.09	-12.91	74	52.21	34.61	10.76	36.49	336	0	P	V	
	5359.1	52.61	-1.39	54	43.8	34.58	10.75	36.52	336	0	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		10498	44.75	-23.55	68.3	58.62	37.5	15.58	66.95	300	0	P	H
		10498	44.82	-23.48	68.3	58.69	37.5	15.58	66.95	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. CDD 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 140 5700MHz		5725.8	63.61	-4.69	68.3	54.06	34.97	11.18	36.6	274	69	P	H
		5698	114.3	-	-	104.8	34.93	11.13	36.56	274	69	P	H
		5698	106.71	-	-	97.21	34.93	11.13	36.56	274	69	A	H
		5725.32	66	-2.3	68.3	56.45	34.97	11.18	36.6	308	5	P	V
		5692	116.75	-	-	107.25	34.93	11.13	36.56	308	5	P	V
		5692	109.28	-	-	99.78	34.93	11.13	36.56	308	5	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. CDD 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 140 5700MHz		11400	50.73	-23.27	74	62.8	38.12	16.29	66.48	300	0	P	H
		11400	53.77	-20.23	74	65.84	38.12	16.29	66.48	128	255	P	V
		11400	42.34	-11.66	54	54.41	38.12	16.29	66.48	128	255	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C - 5470~5725MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. CDD 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 140 5700MHz		5728.52	63.1	-5.2	68.3	53.55	34.97	11.18	36.6	315	305	P	H
		5698	116.1	-	-	106.6	34.93	11.13	36.56	315	305	P	H
		5698	106.43	-	-	96.93	34.93	11.13	36.56	315	305	A	H
		5728.84	66.94	-1.36	68.3	57.39	34.97	11.18	36.6	318	360	P	V
		5704	118.24	-	-	108.71	34.95	11.16	36.58	318	360	P	V
		5704	108.63	-	-	99.1	34.95	11.16	36.58	318	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz

WIFI 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. CDD 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 140 5700MHz		11400	48.93	-25.07	74	61	38.12	16.29	66.48	300	0	P	H
		11400	49.79	-24.21	74	61.86	38.12	16.29	66.48	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C 5470~5725MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 102 5510MHz		5458.64	55.87	-18.13	74	46.78	34.66	10.85	36.42	174	96	P	H
		5468.88	61.22	-7.08	68.3	52.1	34.67	10.85	36.4	174	96	P	H
		5459.12	47.54	-6.46	54	38.45	34.66	10.85	36.42	174	96	A	H
		5506	112.71	-	-	103.49	34.7	10.89	36.37	174	96	P	H
		5506	102.76	-	-	93.54	34.7	10.89	36.37	174	96	A	H
		5738.44	53.08	-15.22	68.3	43.53	34.99	11.18	36.62	174	96	P	H
		5459.6	57.71	-16.29	74	48.62	34.66	10.85	36.42	308	360	P	V
		5469.52	67.08	-1.22	68.3	57.96	34.67	10.85	36.4	308	360	P	V
		5458.96	48.51	-5.49	54	39.42	34.66	10.85	36.42	308	360	A	V
		5506	114.59	-	-	105.37	34.7	10.89	36.37	308	360	P	V
	5506	106.06	-	-	96.84	34.7	10.89	36.37	308	360	A	V	
	5755.24	55.11	-13.19	68.3	45.52	35.01	11.21	36.63	308	360	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 102 5510MHz		11015	46.1	-27.9	74	58.73	37.81	16.05	66.49	300	0	P	H
		11015	46.67	-27.33	74	59.3	37.81	16.05	66.49	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C 5470~5725MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 106 5530MHz		5459.28	59.52	-14.48	74	50.43	34.66	10.85	36.42	177	96	P	H
		5469.2	62.66	-5.64	68.3	53.54	34.67	10.85	36.4	177	96	P	H
		5458.96	49.41	-4.59	54	40.32	34.66	10.85	36.42	177	96	A	H
		5518	108.73	-	-	99.49	34.72	10.91	36.39	177	96	P	H
		5518	99.78	-	-	90.54	34.72	10.91	36.39	177	96	A	H
		5730.12	53.54	-14.76	68.3	43.99	34.97	11.18	36.6	177	96	P	H
		5445.04	65.05	-8.95	74	56.02	34.65	10.82	36.44	314	360	P	V
		5466.64	66.73	-1.57	68.3	57.61	34.67	10.85	36.4	314	360	P	V
		5459.44	51.66	-2.34	54	42.57	34.66	10.85	36.42	314	360	A	V
		5554	111.05	-	-	101.75	34.76	10.96	36.42	314	360	P	V
	5554	103.55	-	-	94.25	34.76	10.96	36.42	314	360	A	V	
	5725.96	56.55	-11.75	68.3	47	34.97	11.18	36.6	314	360	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 106 5530MHz		11059	44.13	-29.87	74	56.69	37.85	16.08	66.49	300	0	P	H
		11059	44.2	-29.8	74	56.76	37.85	16.08	66.49	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C 5470~5725MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 114 5570MHz		5381.68	54.97	-19.03	74	46.08	34.61	10.77	36.49	375	305	P	H
		5466.16	54.27	-14.03	68.3	45.15	34.67	10.85	36.4	375	305	P	H
		5426.8	46.22	-7.78	54	37.24	34.63	10.8	36.45	375	305	A	H
		5590	103.79	-	-	94.45	34.8	11	36.46	375	305	P	H
		5590	95.74	-	-	86.4	34.8	11	36.46	375	305	A	H
		5727.72	58	-10.3	68.3	48.45	34.97	11.18	36.6	375	305	P	H
		5460	60.54	-13.46	74	51.45	34.66	10.85	36.42	313	1	P	V
		5462.32	61.65	-6.65	68.3	52.56	34.66	10.85	36.42	313	1	P	V
		5458.64	52.16	-1.84	54	43.07	34.66	10.85	36.42	313	1	A	V
		5632	107.21	-	-	97.81	34.84	11.05	36.49	313	1	P	V
	5632	99.19	-	-	89.79	34.84	11.05	36.49	313	1	A	V	
	5727.16	59.03	-9.27	68.3	49.48	34.97	11.18	36.6	313	1	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 114 5570MHz		8353	50.51	-23.49	74	67.56	36.27	13.77	67.09	323	69	P	H
		11136	44.92	-29.08	74	57.65	38.01	16.12	66.86	300	0	P	H
		11136	44.16	-29.84	74	56.62	37.91	16.12	66.49	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



SDM 4S4T

UNII-2A - 5250~5350MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. SDM 4S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz		5352.3	60.46	-13.54	74	51.86	34.52	10.75	36.67	205	310	P	H
		5350.3	50.77	-3.23	54	42.17	34.52	10.75	36.67	205	310	A	H
		5314	115.12	-	-	106.65	34.47	10.73	36.73	205	310	P	H
		5314	105.22	-	-	96.75	34.47	10.73	36.73	205	310	A	H
		5352.5	65.88	-8.12	74	57.28	34.52	10.75	36.67	258	187	P	V
		5350.5	51.05	-2.95	54	42.45	34.52	10.75	36.67	258	187	A	V
		5326	115.78	-	-	107.3	34.47	10.74	36.73	258	187	P	V
		5326	105.97	-	-	97.49	34.47	10.74	36.73	258	187	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. SDM 4S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz		10641	46.24	-27.76	74	59.93	37.65	15.7	67.04	300	0	P	H
		10641	47.9	-26.1	74	61.59	37.65	15.7	67.04	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2A 5250~5350MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		5148.16	52.44	-21.56	74	44.67	34.22	10.6	37.05	206	288	P	H
		5142.4	42.56	-11.44	54	34.79	34.22	10.6	37.05	206	288	A	H
		5320	110.9	-	-	102.43	34.47	10.73	36.73	206	288	P	H
		5320	101.2	-	-	92.73	34.47	10.73	36.73	206	288	A	H
		5353.1	60.63	-13.37	74	52.03	34.52	10.75	36.67	206	288	P	H
		5350.6	52.24	-1.76	54	43.64	34.52	10.75	36.67	206	288	A	H
		5119.04	51.14	-22.86	74	43.51	34.17	10.58	37.12	345	181	P	V
		5120.16	41.28	-12.72	54	33.65	34.17	10.58	37.12	345	181	A	V
		5320	111.9	-	-	103.43	34.47	10.73	36.73	345	181	P	V
		5320	102.85	-	-	94.38	34.47	10.73	36.73	345	181	A	V
	5354.3	65.88	-8.12	74	57.28	34.52	10.75	36.67	345	181	P	V	
	5350.2	53.45	-0.55	54	44.85	34.52	10.75	36.67	345	181	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz
WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		10619	45.25	-28.75	74	58.97	37.64	15.69	67.05	300	0	P	H
		10619	45.45	-28.55	74	59.17	37.64	15.69	67.05	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2A 5250~5350MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 58 5290MHz		5149.44	54.58	-19.42	74	46.81	34.22	10.6	37.05	216	288	P	H
		5149.92	44.82	-9.18	54	37.05	34.22	10.6	37.05	216	288	A	H
		5260	107.57	-	-	99.31	34.4	10.69	36.83	216	288	P	H
		5260	99.71	-	-	91.45	34.4	10.69	36.83	216	288	A	H
		5354.4	61.72	-12.28	74	53.12	34.52	10.75	36.67	216	288	P	H
		5361.2	52.88	-1.12	54	44.2	34.55	10.76	36.63	216	288	A	H
		5145.28	51.82	-22.18	74	44.05	34.22	10.6	37.05	362	181	P	V
		5148.16	42.7	-11.3	54	34.93	34.22	10.6	37.05	362	181	A	V
		5320	108.8	-	-	100.33	34.47	10.73	36.73	362	181	P	V
		5320	101.07	-	-	92.6	34.47	10.73	36.73	362	181	A	V
	5351.2	65.14	-8.86	74	56.54	34.52	10.75	36.67	362	181	P	V	
	5358.7	52.85	-1.15	54	44.25	34.52	10.75	36.67	362	181	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 58 5290MHz		10575	44.74	-23.56	68.3	58.55	37.6	15.65	67.06	300	0	P	H
		10575	45.16	-23.14	68.3	58.97	37.6	15.65	67.06	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2A 5250~5350MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		5142.72	58.51	-15.49	74	50.74	34.22	10.6	37.05	232	292	P	H
		5142.24	49.3	-4.7	54	41.53	34.22	10.6	37.05	232	292	A	H
		5284	105.44	-	-	97.12	34.42	10.7	36.8	232	292	P	H
		5284	95.2	-	-	86.88	34.42	10.7	36.8	232	292	A	H
		5382.2	59.13	-14.87	74	50.39	34.57	10.77	36.6	232	292	P	H
		5382.4	50.03	-3.97	54	41.29	34.57	10.77	36.6	232	292	A	H
		5144	56	-18	74	48.23	34.22	10.6	37.05	333	190	P	V
		5133.92	47.36	-6.64	54	39.64	34.2	10.6	37.08	333	190	A	V
		5278	104.79	-	-	96.47	34.42	10.7	36.8	333	190	P	V
		5278	96.37	-	-	88.05	34.42	10.7	36.8	333	190	A	V
		5377	59.5	-14.5	74	50.82	34.55	10.76	36.63	333	190	P	V
	5376.2	53.12	-0.88	54	44.44	34.55	10.76	36.63	333	190	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		10498	44.6	-23.7	68.3	58.55	37.56	15.58	67.09	300	0	P	H
		10498	45.18	-23.12	68.3	59.13	37.56	15.58	67.09	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C - 5470~5725MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. SDM 4S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 140 5700MHz		5725.8	66.3	-2	68.3	58.07	34.68	11.18	37.63	140	271	P	H
		5704	113.81	-	-	105.34	34.64	11.16	37.33	140	271	P	H
		5704	103.33	-	-	94.86	34.64	11.16	37.33	140	271	A	H
		5725.56	66.82	-1.48	68.3	58.59	34.68	11.18	37.63	301	182	P	V
		5698	114.55	-	-	105.86	34.59	11.13	37.03	301	182	P	V
		5698	105.14	-	-	96.45	34.59	11.13	37.03	301	182	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz

WIFI 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. SDM 4S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 140 5700MHz		11400	48.6	-25.4	74	60.85	38.23	16.29	66.77	300	0	P	H
		11400	49.03	-24.97	74	61.28	38.23	16.29	66.77	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C 5470~5725MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 102 5510MHz		5458	57.28	-16.72	74	48.32	34.58	10.85	36.47	226	101	P	H
		5467.28	62.54	-5.76	68.3	53.56	34.57	10.85	36.44	226	101	P	H
		5459.6	49.87	-4.13	54	40.91	34.58	10.85	36.47	226	101	A	H
		5518	111.3	-	-	102.19	34.55	10.91	36.35	226	101	P	H
		5518	102.66	-	-	93.55	34.55	10.91	36.35	226	101	A	H
		5726.12	52.89	-15.41	68.3	44.66	34.68	11.18	37.63	226	101	P	H
		5455.92	59.32	-14.68	74	50.36	34.58	10.85	36.47	354	159	P	V
		5466.96	66.55	-1.75	68.3	57.57	34.57	10.85	36.44	354	159	P	V
		5459.76	51.02	-2.98	54	42.06	34.58	10.85	36.47	354	159	A	V
		5506	112.89	-	-	103.82	34.56	10.89	36.38	354	159	P	V
	5506	103.41	-	-	94.34	34.56	10.89	36.38	354	159	A	V	
	5757.24	53.26	-15.04	68.3	45.52	34.77	11.21	38.24	354	159	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz
WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 102 5510MHz		11015	46.32	-27.68	74	59.27	37.91	16.05	66.91	300	0	P	H
		11015	47.75	-26.25	74	60.7	37.91	16.05	66.91	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C 5470~5725MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 106 5530MHz		5457.68	59.37	-14.63	74	50.41	34.58	10.85	36.47	121	278	P	H
		5462.96	61.66	-6.64	68.3	52.68	34.57	10.85	36.44	121	278	P	H
		5453.52	52.59	-1.41	54	43.66	34.58	10.82	36.47	121	278	A	H
		5536	107.87	-	-	98.7	34.55	10.93	36.31	121	278	P	H
		5536	99.98	-	-	90.81	34.55	10.93	36.31	121	278	A	H
		5753	52.78	-15.52	68.3	45.04	34.77	11.21	38.24	121	278	P	H
		5459.44	60.93	-13.07	74	51.97	34.58	10.85	36.47	400	177	P	V
		5467.28	61.33	-6.97	68.3	52.35	34.57	10.85	36.44	400	177	P	V
		5457.68	52.84	-1.16	54	43.88	34.58	10.85	36.47	400	177	A	V
		5518	106.98	-	-	97.87	34.55	10.91	36.35	400	177	P	V
	5518	99.23	-	-	90.12	34.55	10.91	36.35	400	177	A	V	
	5754.84	52.33	-15.97	68.3	44.59	34.77	11.21	38.24	400	177	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 106 5530MHz		11059	46.01	-27.99	74	58.87	37.95	16.08	66.89	300	0	P	H
		11059	45.87	-28.13	74	58.73	37.95	16.08	66.89	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C 5470~5725MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 114 5570MHz		5458.96	56.86	-17.14	74	47.9	34.58	10.85	36.47	199	95	P	H
		5463.76	56.46	-11.84	68.3	47.48	34.57	10.85	36.44	199	95	P	H
		5458.96	48.7	-5.3	54	39.74	34.58	10.85	36.47	199	95	A	H
		5584	103.09	-	-	93.8	34.53	10.98	36.22	199	95	P	H
		5584	95.71	-	-	86.42	34.53	10.98	36.22	199	95	A	H
		5731.64	55.51	-12.79	68.3	47.28	34.68	11.18	37.63	199	95	P	H
		5457.68	59.35	-14.65	74	50.39	34.58	10.85	36.47	300	177	P	V
		5467.12	58.77	-9.53	68.3	49.79	34.57	10.85	36.44	300	177	P	V
		5457.52	52.68	-1.32	54	43.72	34.58	10.85	36.47	300	177	A	V
		5578	104.3	-	-	95.04	34.53	10.98	36.25	300	177	P	V
	5578	97.81	-	-	88.55	34.53	10.98	36.25	300	177	A	V	
	5726.04	61.8	-6.5	68.3	53.57	34.68	11.18	37.63	300	177	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 114 5570MHz		11136	45.06	-28.94	74	57.79	38.01	16.12	66.86	300	0	P	H
		11136	45.23	-28.77	74	57.96	38.01	16.12	66.86	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



TX-BF 1S4T mode

UNII-2A - 5250~5350MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz		5351.2	64.87	-9.13	74	56.06	34.58	10.75	36.52	178	263	P	H
		5350.6	50.97	-3.03	54	42.37	34.52	10.75	36.67	178	263	A	H
		5326	117.46	-	-	108.73	34.55	10.74	36.56	178	263	P	H
		5326	106.26	-	-	97.53	34.55	10.74	36.56	178	263	A	H
		5350.9	64.47	-9.53	74	55.66	34.58	10.75	36.52	177	144	P	V
		5350.9	51.49	-2.51	54	42.68	34.58	10.75	36.52	177	144	A	V
		5326	117.95	-	-	109.22	34.55	10.74	36.56	177	144	P	V
		5326	108.18	-	-	99.45	34.55	10.74	36.56	177	144	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz		10641	46.04	-27.96	74	59.58	37.58	15.7	66.82	300	0	P	H
		10641	51.12	-22.88	74	64.66	37.58	15.7	66.82	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		5117.6	53.26	-20.74	74	45.27	34.17	10.58	36.76	300	77	P	H
		5149.12	43.34	-10.66	54	35.25	34.22	10.6	36.73	300	77	A	H
		5308	115.57	-	-	106.96	34.45	10.73	36.57	300	77	P	H
		5308	107.01	-	-	98.4	34.45	10.73	36.57	300	77	A	H
		5350	72.89	-1.11	74	64.14	34.52	10.75	36.52	300	77	P	H
		5351.9	53.44	-0.56	54	44.69	34.52	10.75	36.52	300	77	A	H
		5106.72	53.2	-20.8	74	45.23	34.17	10.56	36.76	300	98	P	V
		5149.28	43.04	-10.96	54	34.95	34.22	10.6	36.73	300	98	A	V
		5290	114.39	-	-	105.85	34.42	10.71	36.59	300	98	P	V
		5290	105.76	-	-	97.22	34.42	10.71	36.59	300	98	A	V
	5352	68.04	-5.96	74	59.29	34.52	10.75	36.52	300	98	P	V	
	5350.5	49.79	-4.21	54	41.04	34.52	10.75	36.52	300	98	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		10619	46.74	-27.26	74	60.32	37.57	15.69	66.84	300	0	P	H
		10619	46.6	-27.4	74	60.18	37.57	15.69	66.84	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2A 5250~5350MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant., Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Contains 11 data rows and a Remark section.

UNII-2A 5250~5350MHz
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

Table with 14 columns: WIFI Ant., Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Contains 2 data rows and a Remark section.



UNII-2A 5250~5350MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		5138.56	62.66	-11.34	74	54.39	34.41	10.6	36.74	209	246	P	H
		5148.16	52.22	-1.78	54	43.93	34.42	10.6	36.73	209	246	A	H
		5188	105.28	-	-	96.88	34.45	10.64	36.69	209	246	P	H
		5188	95.81	-	-	87.41	34.45	10.64	36.69	209	246	A	H
		5374	64.69	-9.31	74	55.85	34.59	10.76	36.51	209	246	P	H
		5375.3	48.15	-5.85	54	39.31	34.59	10.76	36.51	209	246	A	H
		5143.2	61	-13	74	52.71	34.42	10.6	36.73	208	144	P	V
		5147.52	51.97	-2.03	54	44.2	34.22	10.6	37.05	208	144	A	V
		5266	108.42	-	-	99.82	34.51	10.7	36.61	208	144	P	V
		5266	98.65	-	-	90.05	34.51	10.7	36.61	208	144	A	V
	5359.3	58.53	-15.47	74	49.72	34.58	10.75	36.52	208	144	P	V	
	5352.9	48.92	-5.08	54	40.11	34.58	10.75	36.52	208	144	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A 5250~5350MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		10498	44.91	-23.39	68.3	58.78	37.5	15.58	66.95	300	0	P	H
		10498	44.57	-23.73	68.3	58.44	37.5	15.58	66.95	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C - 5470~5725MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 140 5700MHz		5725.88	67.51	-0.79	68.3	58.25	34.68	11.18	36.6	100	301	P	H
		5698	115.04	-	-	105.88	34.59	11.13	36.56	100	301	P	H
		5698	106.39	-	-	97.23	34.59	11.13	36.56	100	301	A	H
		5725.64	67.61	-0.69	68.3	58.35	34.68	11.18	36.6	321	13	P	V
		5704	117.34	-	-	108.12	34.64	11.16	36.58	321	13	P	V
		5704	108.73	-	-	99.51	34.64	11.16	36.58	321	13	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz

WIFI 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 140 5700MHz		11400	47.93	-26.07	74	60	38.12	16.29	66.48	300	0	P	H
		11400	48.79	-25.21	74	60.86	38.12	16.29	66.48	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C 5470~5725MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 134 5670MHz		5445.04	54.84	-19.16	74	45.81	34.65	10.82	36.44	219	279	P	H
		5464.88	53.69	-14.61	68.3	44.57	34.67	10.85	36.4	219	279	P	H
		5454.32	44.47	-9.53	54	35.41	34.66	10.82	36.42	219	279	A	H
		5650	115.43	-	-	105.99	34.89	11.08	36.53	219	279	P	H
		5650	106.76	-	-	97.32	34.89	11.08	36.53	219	279	A	H
		5726.52	65.99	-2.31	68.3	56.44	34.97	11.18	36.6	219	279	P	H
		5458.48	55.7	-18.3	74	46.61	34.66	10.85	36.42	307	341	P	V
		5467.28	55.02	-13.28	68.3	45.9	34.67	10.85	36.4	307	341	P	V
		5459.12	45.93	-8.07	54	36.84	34.66	10.85	36.42	307	341	A	V
		5656	118.21	-	-	108.77	34.89	11.08	36.53	307	341	P	V
	5656	109.67	-	-	100.23	34.89	11.08	36.53	307	341	A	V	
	5725.08	66.69	-1.61	68.3	57.14	34.97	11.18	36.6	307	341	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz
WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 134 5670MHz		11345	46.44	-27.56	74	58.58	38.08	16.26	66.48	300	0	P	H
		11345	46.92	-27.08	74	59.06	38.08	16.26	66.48	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C 5470~5725MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 106 5530MHz		5458.8	65.56	-8.44	74	56.47	34.66	10.85	36.42	225	275	P	H
		5468.08	64.25	-4.05	68.3	55.13	34.67	10.85	36.4	225	275	P	H
		5459.76	51.66	-2.34	54	42.7	34.58	10.85	36.47	225	275	A	H
		5524	109.99	-	-	100.75	34.72	10.91	36.39	225	275	P	H
		5524	100.57	-	-	91.33	34.72	10.91	36.39	225	275	A	H
		5731.96	54.56	-13.74	68.3	45.01	34.97	11.18	36.6	225	275	P	H
		5458	59.99	-14.01	74	50.9	34.66	10.85	36.42	272	220	P	V
		5469.68	59.91	-8.39	68.3	50.79	34.67	10.85	36.4	272	220	P	V
		5458.8	47.82	-6.18	54	38.73	34.66	10.85	36.42	272	220	A	V
		5530	109.66	-	-	100.42	34.72	10.91	36.39	272	220	P	V
	5530	100.14	-	-	90.9	34.72	10.91	36.39	272	220	A	V	
	5747.56	54.36	-13.94	68.3	44.78	34.99	11.21	36.62	272	220	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 106 5530MHz		11059	45.29	-28.71	74	57.85	37.85	16.08	66.49	300	0	P	H
		11059	45.45	-28.55	74	58.01	37.85	16.08	66.49	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C 5470~5725MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 114 5570MHz		5458.96	56.86	-17.14	74	47.9	34.58	10.85	36.47	199	95	P	H
		5463.76	56.46	-11.84	68.3	47.48	34.57	10.85	36.44	199	95	P	H
		5458.96	48.7	-5.3	54	39.74	34.58	10.85	36.47	199	95	A	H
		5584	103.09	-	-	93.8	34.53	10.98	36.22	199	95	P	H
		5584	95.71	-	-	86.42	34.53	10.98	36.22	199	95	A	H
		5731.64	55.51	-12.79	68.3	47.28	34.68	11.18	37.63	199	95	P	H
		5457.68	59.35	-14.65	74	50.39	34.58	10.85	36.47	300	177	P	V
		5467.12	58.77	-9.53	68.3	49.79	34.57	10.85	36.44	300	177	P	V
		5457.52	52.68	-1.32	54	43.72	34.58	10.85	36.47	300	177	A	V
		5578	104.3	-	-	95.04	34.53	10.98	36.25	300	177	P	V
	5578	97.81	-	-	88.55	34.53	10.98	36.25	300	177	A	V	
	5726.04	61.8	-6.5	68.3	53.57	34.68	11.18	37.63	300	177	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C 5470~5725MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant. BF 1S4T	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 114 5570MHz		11136	44.43	-29.57	74	56.89	37.91	16.12	66.49	300	0	P	H
		11136	44.42	-29.58	74	56.88	37.91	16.12	66.49	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

WIFI 802.11ax HE80 Full (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
SDM 4S4T		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE80 Full LF		86.26	25.71	-14.29	40	42.74	14.39	1.41	32.83	-	-	P	H
		184.23	23.47	-20.03	43.5	38.51	15.73	2.06	32.83	-	-	P	H
		300.63	26.51	-19.49	46	37.35	19.34	2.64	32.82	-	-	P	H
		513.06	32.2	-13.8	46	37.72	23.99	3.46	32.97	-	-	P	H
		527.61	33.38	-12.62	46	38.46	24.43	3.51	33.02	-	-	P	H
		538.28	32.48	-13.52	46	37.25	24.76	3.54	33.07	-	-	P	H
		48.43	34.51	-5.49	40	51.35	15.04	1.05	32.93	124	36	P	V
		139.61	29.68	-13.82	43.5	44.15	16.56	1.8	32.83	-	-	P	V
		254.07	24.62	-21.38	46	36.46	18.49	2.44	32.77	-	-	P	V
		511.12	39.86	-6.14	46	45.44	23.93	3.45	32.96	-	-	P	V
		541.19	38.34	-7.66	46	43.02	24.85	3.55	33.08	-	-	P	V
		624.61	30.56	-15.44	46	34.68	25.08	3.81	33.01	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Note symbol

	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
CDD 1S4T		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
802.11b CH 01 2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
= 55.45 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

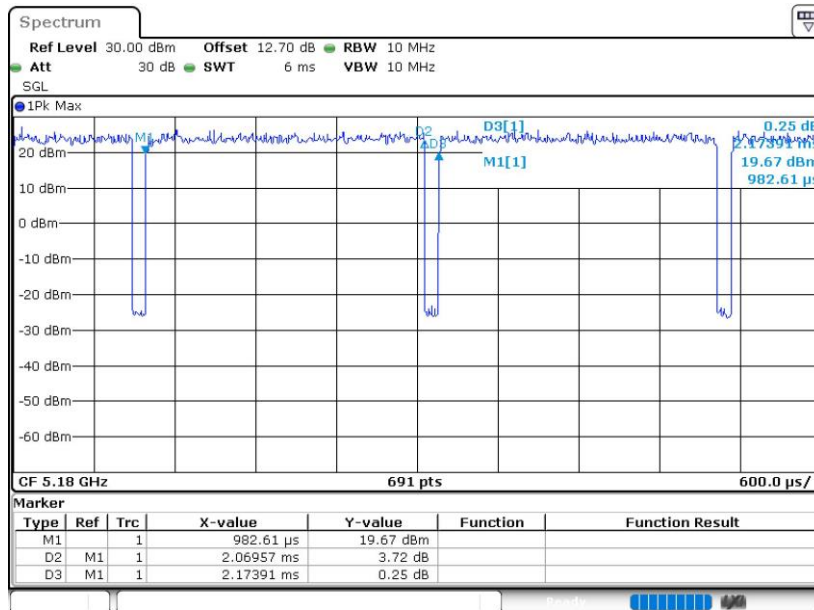
Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix D. Duty Cycle Plots

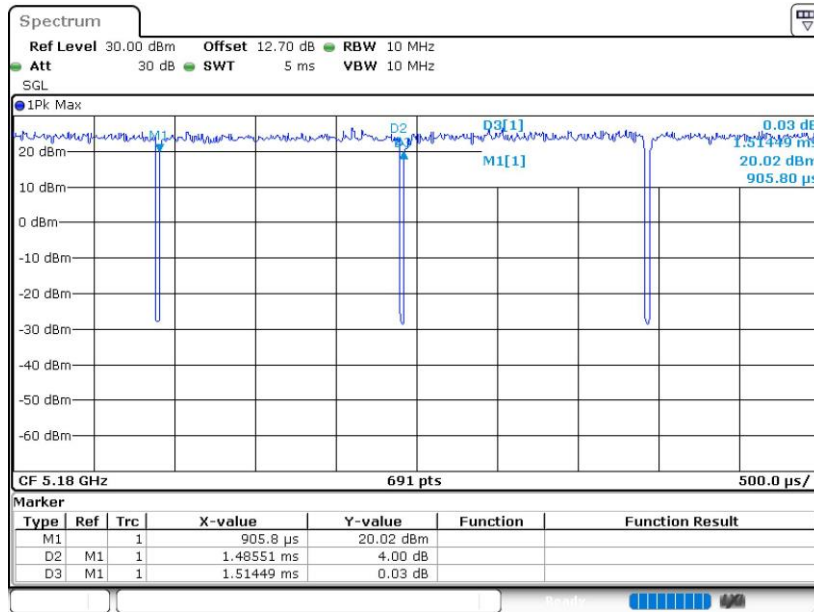
Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1+2+3+4	802.11a	95.20	2.070	0.483	0.51kHz
1+2+3+4	802.11ax HE20	98.09	-	-	10Hz
1+2+3+4	802.11ax HE40	96.22	0.774	1.292	1.5kHz
1+2+3+4	802.11ax HE80	92.96	0.402	2.487	2.7kHz
1+2+3+4	802.11ax HE160	88.40	0.232	4.313	4.7kHz

802.11a

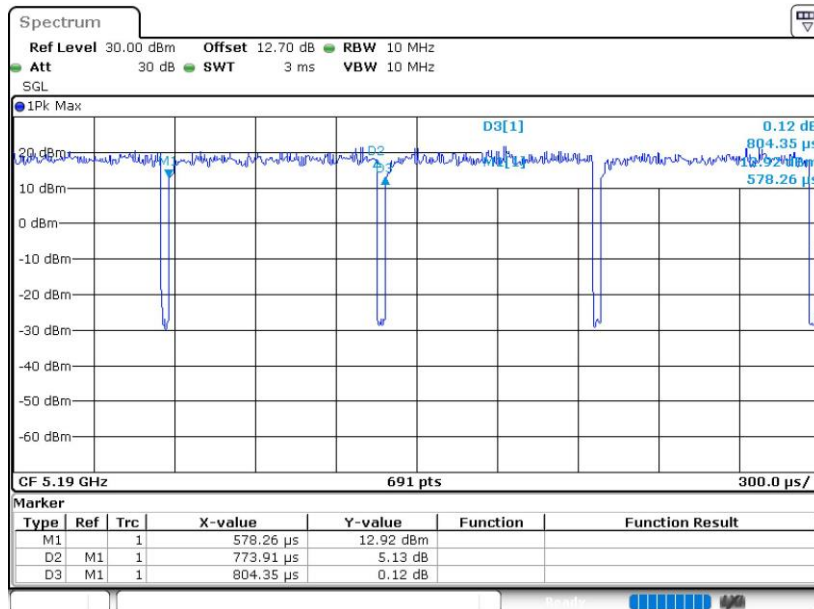




802.11ax HE20

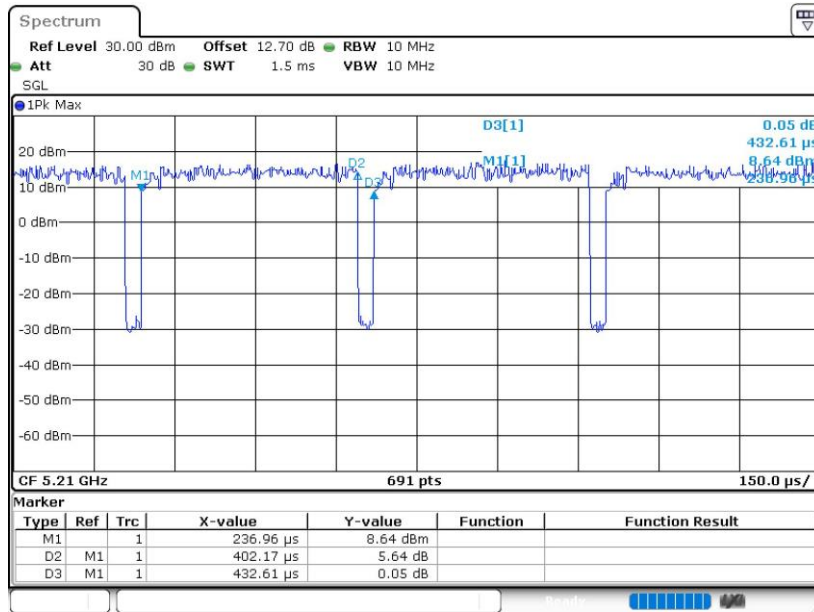


802.11ax HE40





802.11ax HE80



802.11ax HE160

