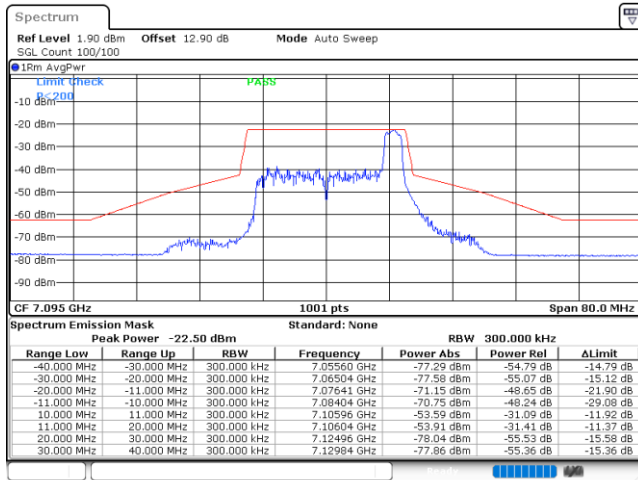


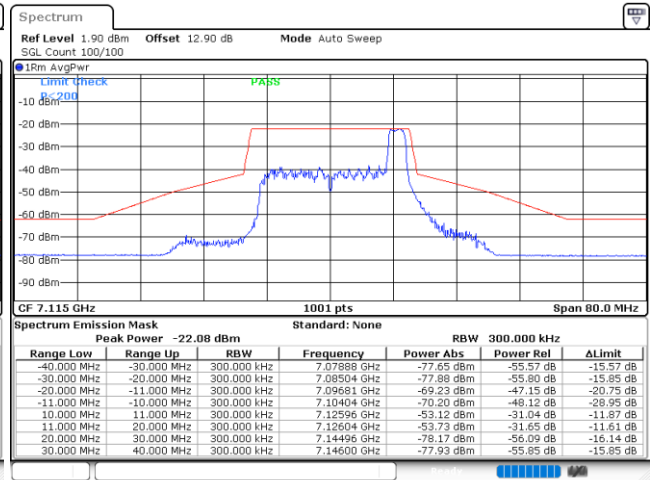


Plot on Channel 7095MHz



Date: 28 JUN 2022 23:36:43

Plot on Channel 7115MHz

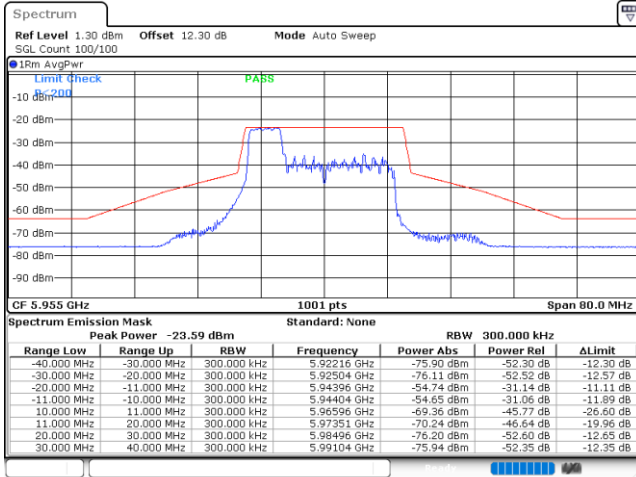


Date: 28 JUN 2022 23:44:54



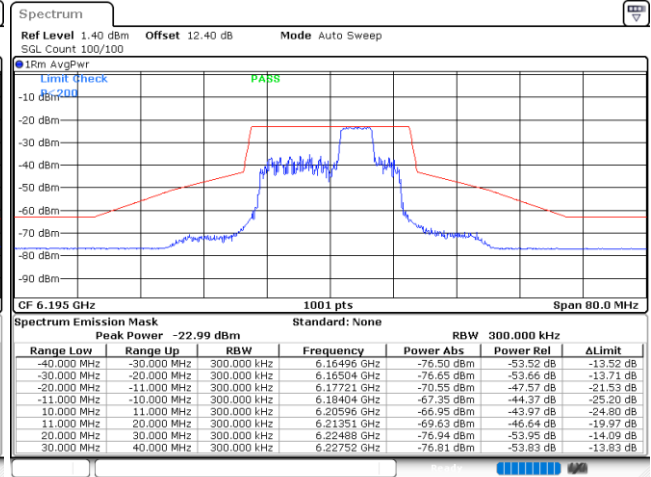
EUT Mode : 802.11ax HE20 52RU

Plot on Channel 5955MHz



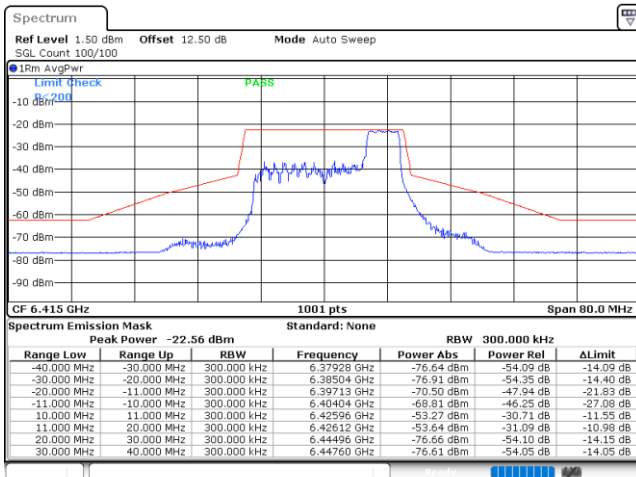
Date: 28 JUN.2022 20:40:43

Plot on Channel 6195MHz



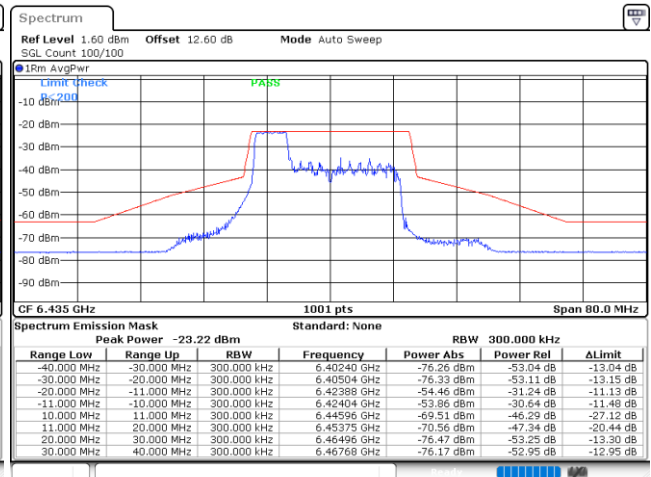
Date: 28 JUN.2022 20:54:06

Plot on Channel 6415MHz



Date: 28 JUN.2022 21:02:57

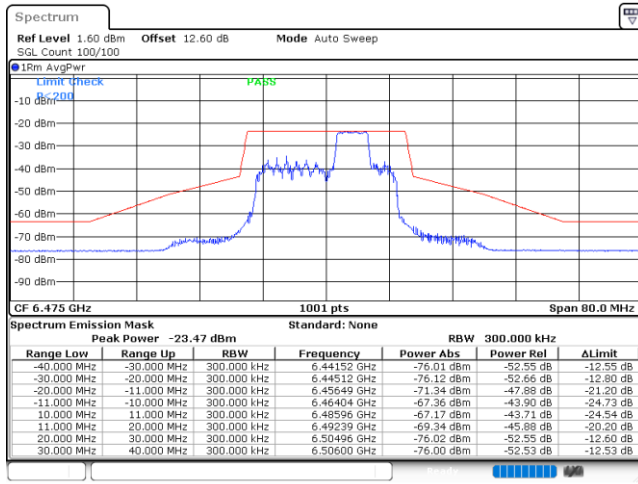
Plot on Channel 6435MHz



Date: 28 JUN.2022 21:12:14

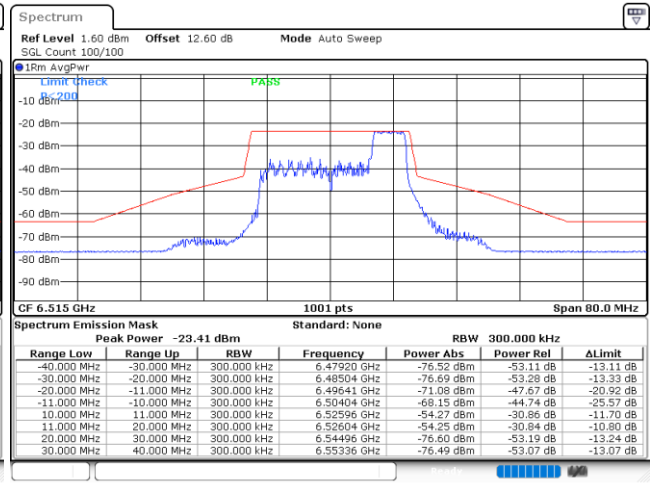


Plot on Channel 6475MHz



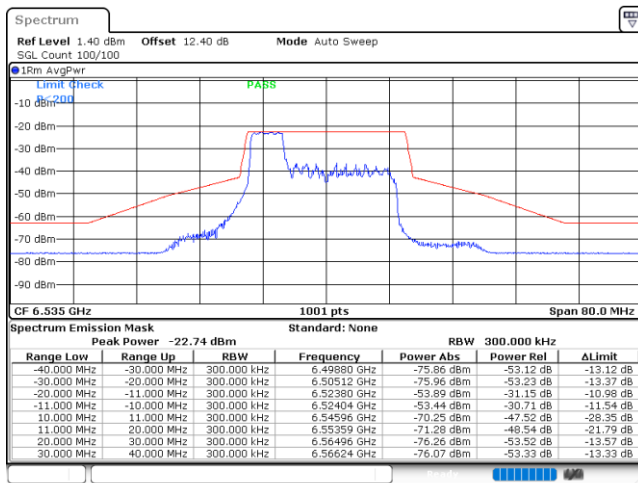
Date: 28 JUN.2022 21:30:57

Plot on Channel 6515MHz



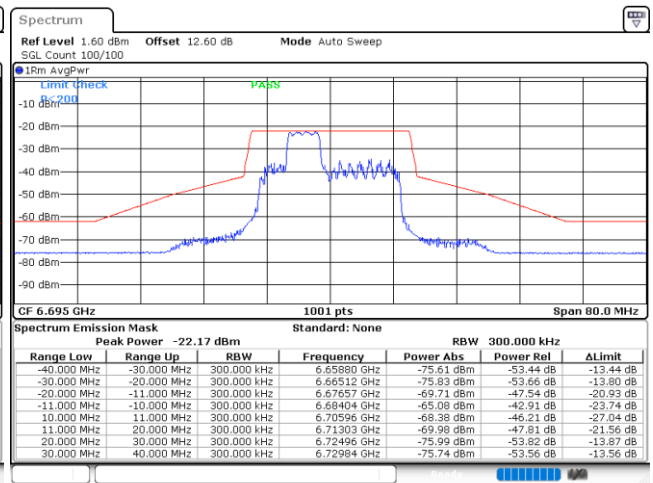
Date: 28 JUN.2022 21:45:59

Plot on Channel 6535MHz



Date: 28 JUN.2022 22:25:31

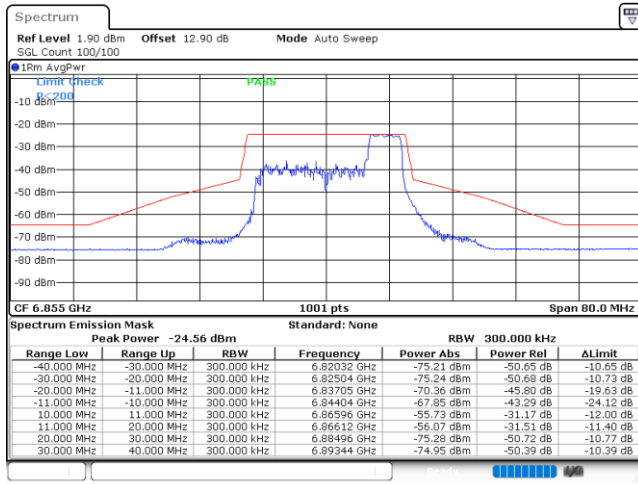
Plot on Channel 6695MHz



Date: 28 JUN.2022 22:37:29

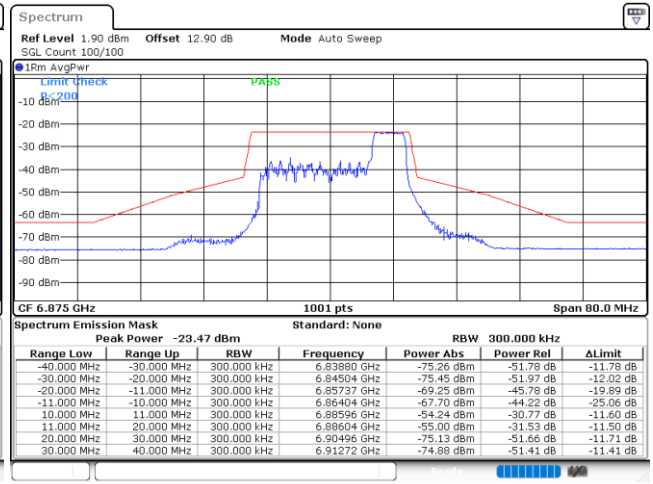


Plot on Channel 6855MHz



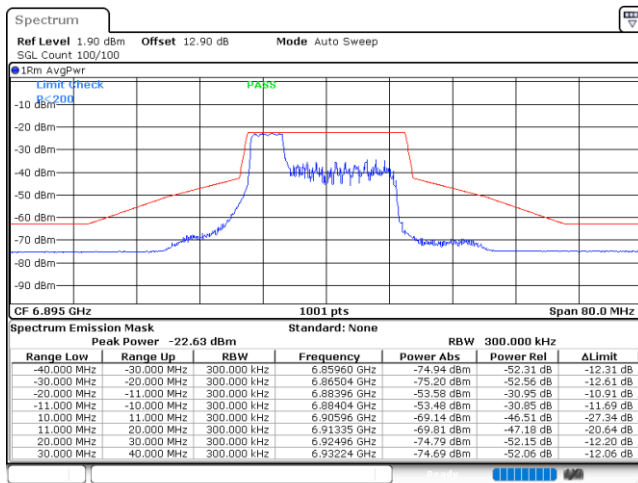
Date: 28 JUN.2022 22:49:01

Plot on Channel 6875MHz



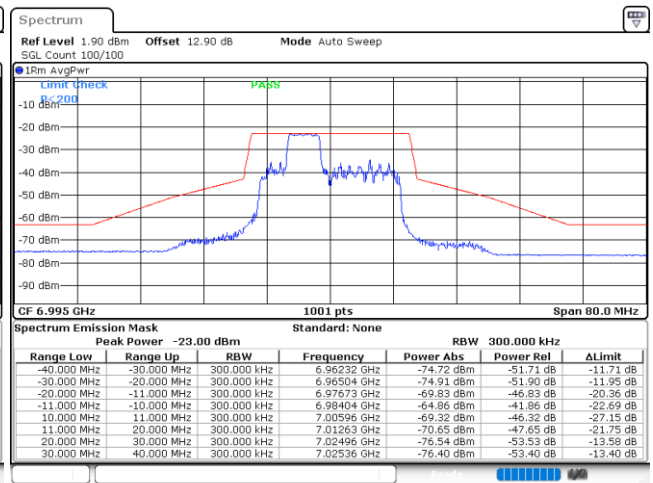
Date: 28 JUN.2022 22:58:59

Plot on Channel 6895MHz



Date: 28 JUN.2022 23:12:33

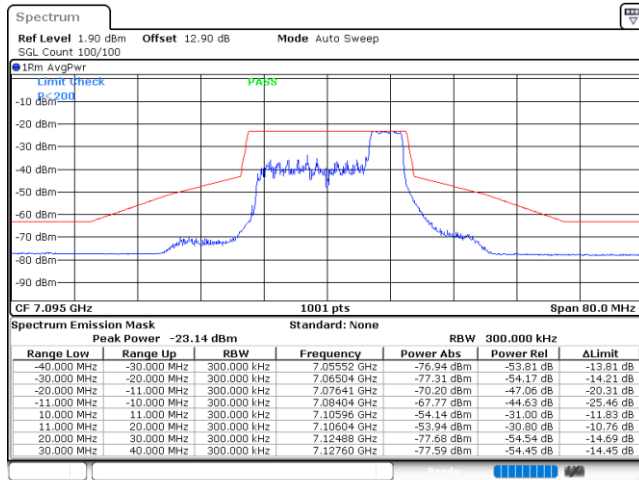
Plot on Channel 6995MHz



Date: 28 JUN.2022 23:26:48

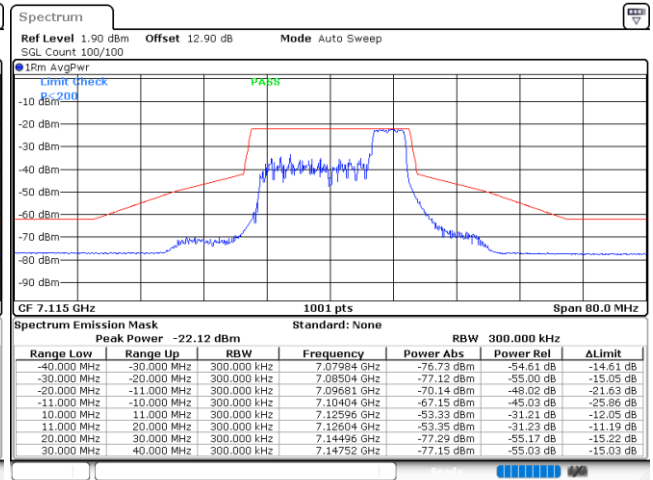


Plot on Channel 7095MHz



Date: 28 JUN.2022 23:38:06

Plot on Channel 7115MHz

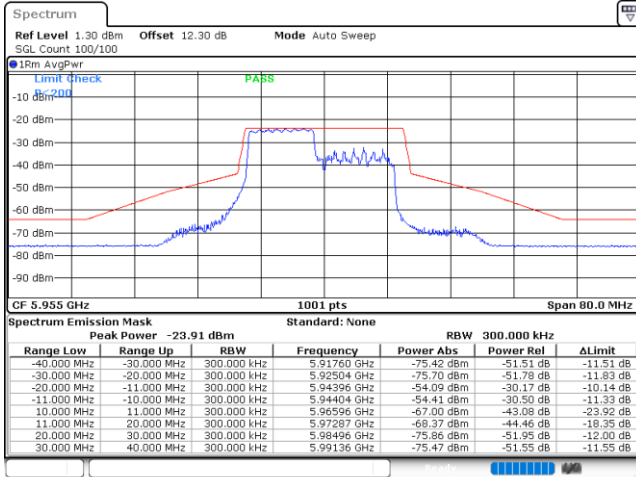


Date: 28 JUN.2022 23:51:34



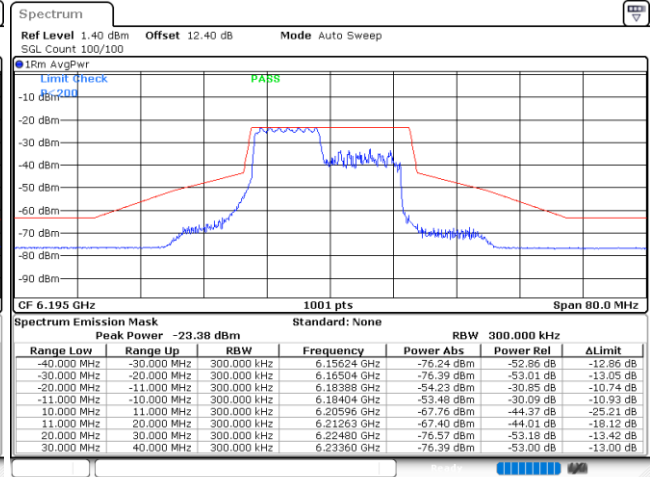
EUT Mode : 802.11ax HE20 106RU

Plot on Channel 5955MHz



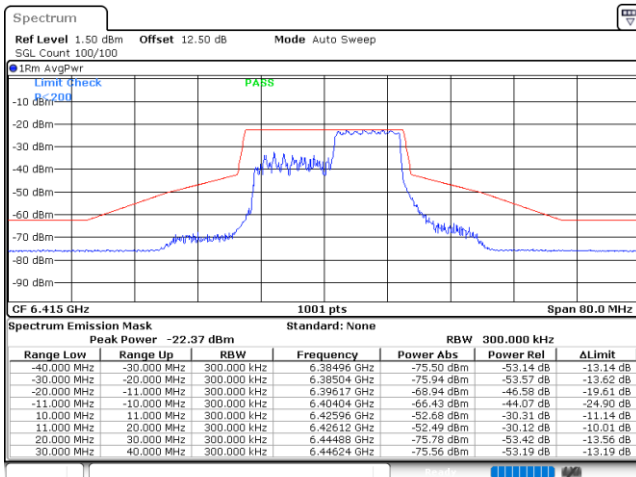
Date: 28 JUN.2022 20:44:54

Plot on Channel 6195MHz



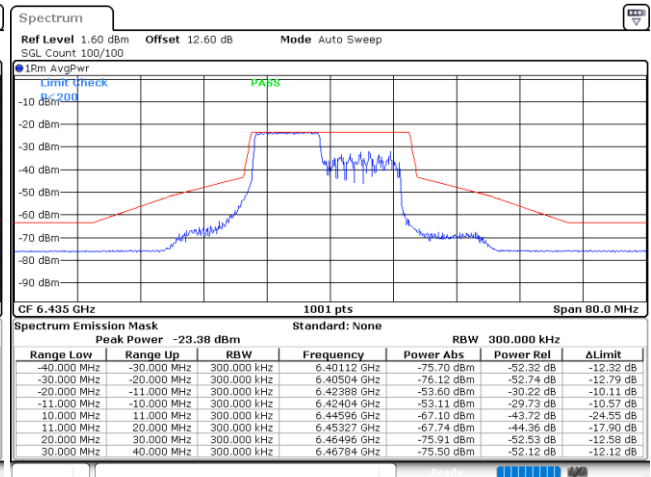
Date: 28 JUN.2022 20:55:34

Plot on Channel 6415MHz



Date: 28 JUN.2022 21:07:08

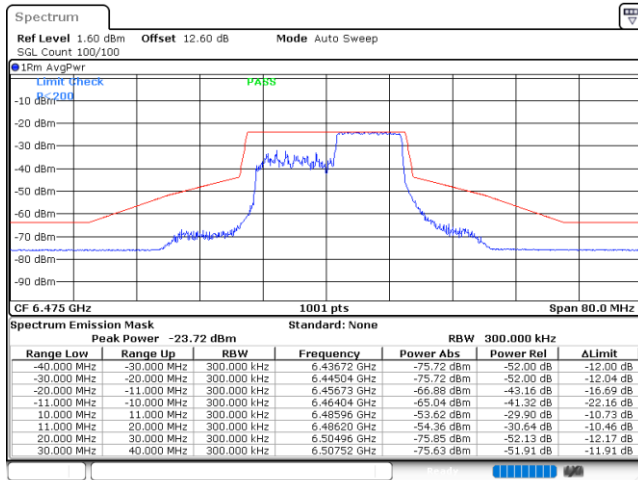
Plot on Channel 6435MHz



Date: 28 JUN.2022 21:13:18

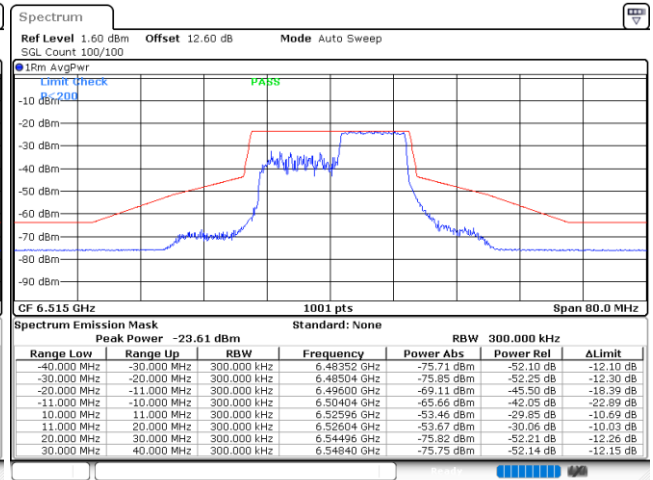


Plot on Channel 6475MHz



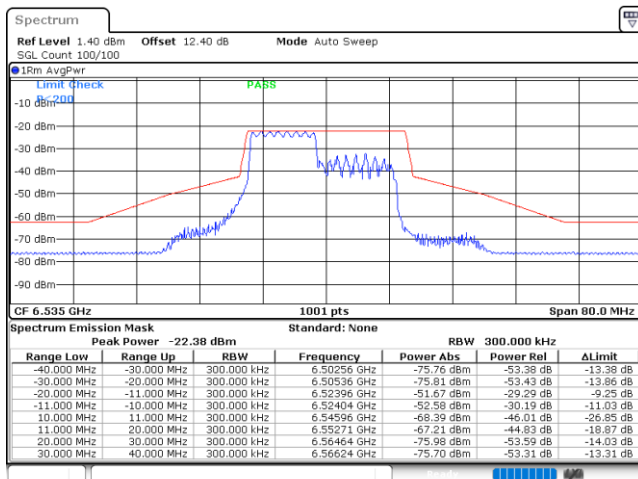
Date: 28 JUN.2022 21:35:54

Plot on Channel 6515MHz



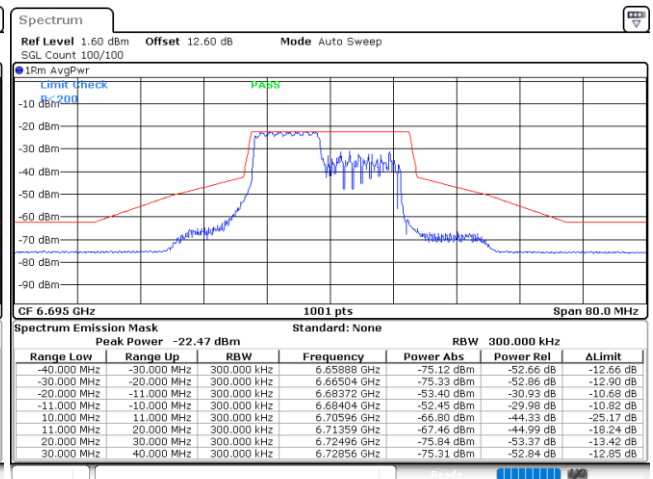
Date: 28 JUN.2022 21:48:02

Plot on Channel 6535MHz



Date: 28 JUN.2022 22:31:20

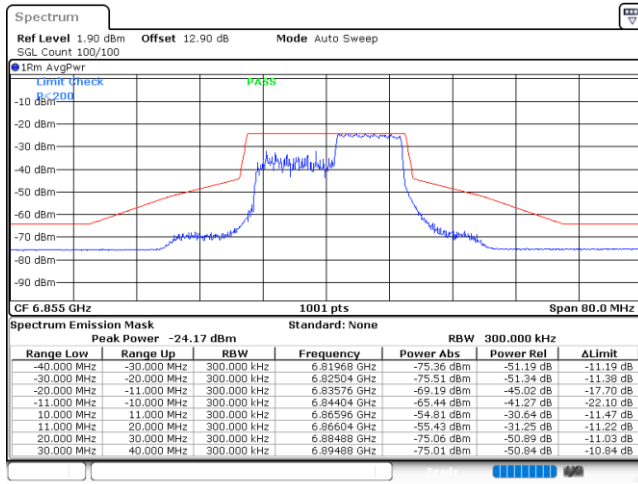
Plot on Channel 6695MHz



Date: 28 JUN.2022 22:38:44

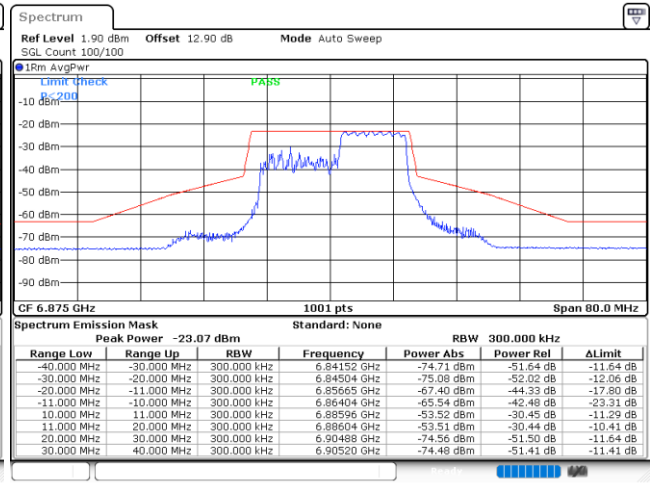


Plot on Channel 6855MHz



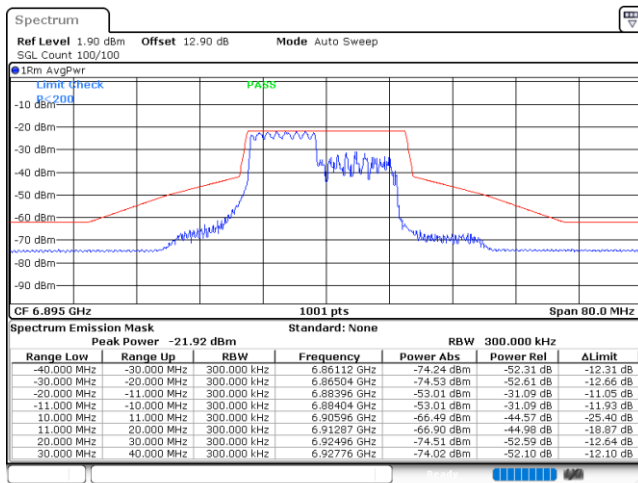
Date: 28 JUN.2022 22:52:47

Plot on Channel 6875MHz



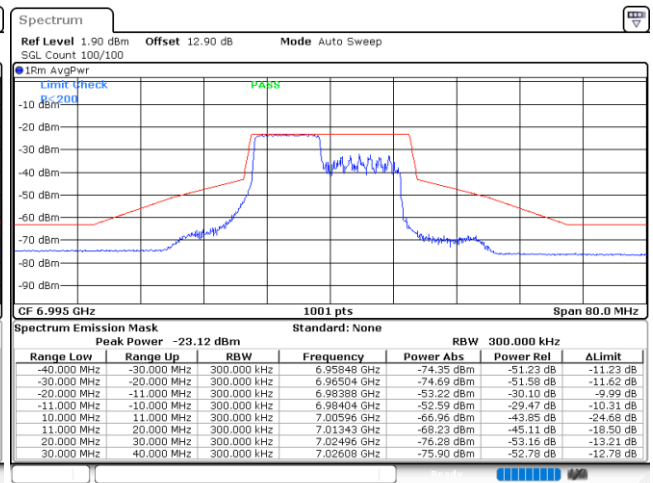
Date: 28 JUN.2022 23:02:51

Plot on Channel 6895MHz



Date: 28 JUN.2022 23:20:17

Plot on Channel 6995MHz

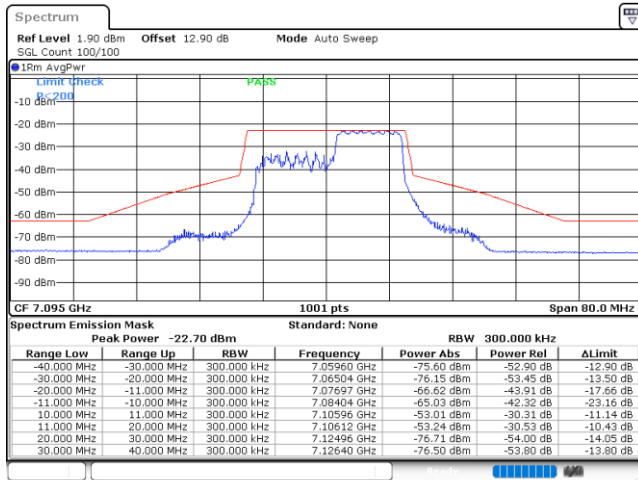


Date: 28 JUN.2022 23:32:10

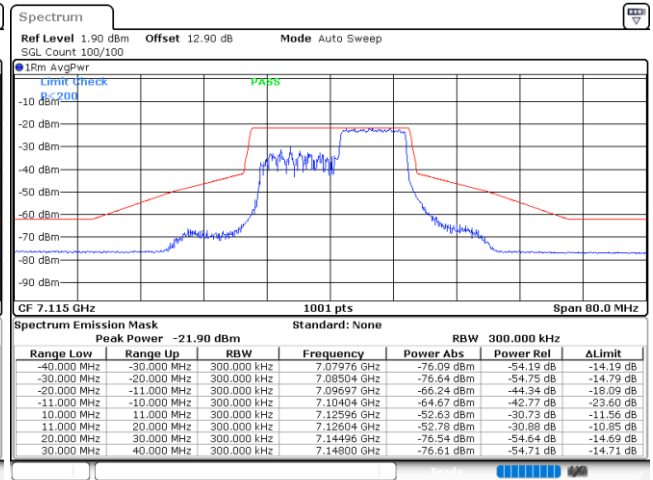


Plot on Channel 7095MHz

Plot on Channel 7115MHz



Date: 28 JUN.2022 23:43:36

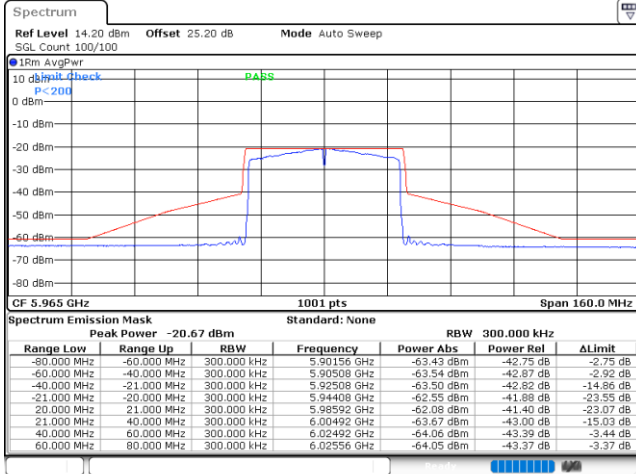


Date: 28 JUN.2022 23:53:35



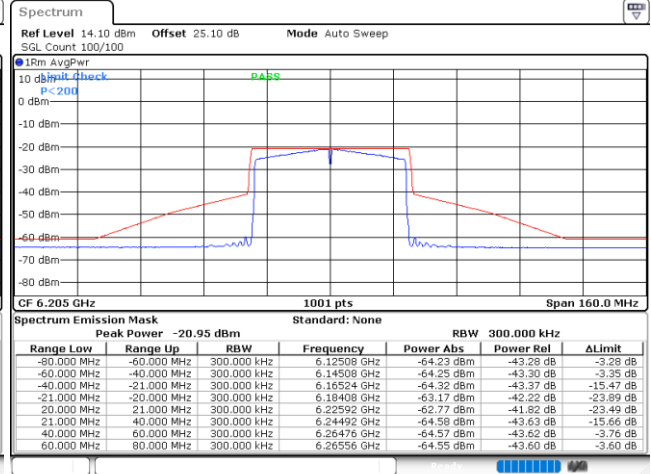
EUT Mode : 802.11ax HE40 Full RU

Plot on Channel 5965MHz



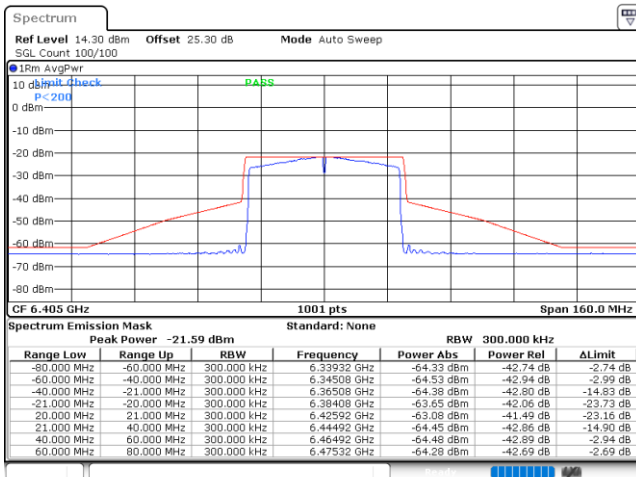
Date: 28 JUN.2022 01:12:32

Plot on Channel 6205MHz



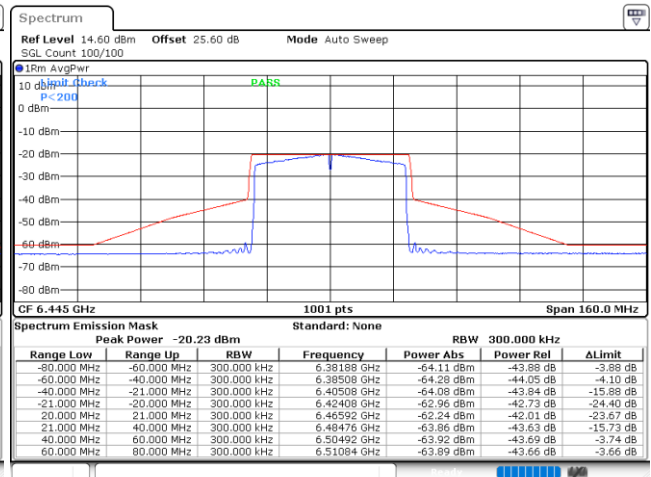
Date: 28 JUN.2022 01:15:43

Plot on Channel 6405MHz



Date: 28 JUN.2022 01:19:11

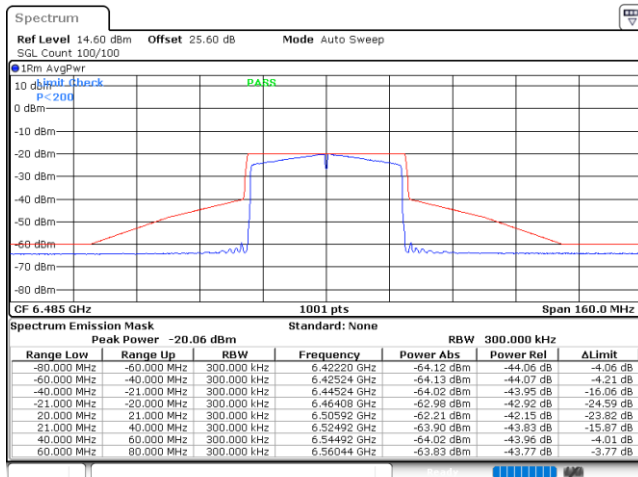
Plot on Channel 6445MHz



Date: 23 JUN.2022 21:22:25

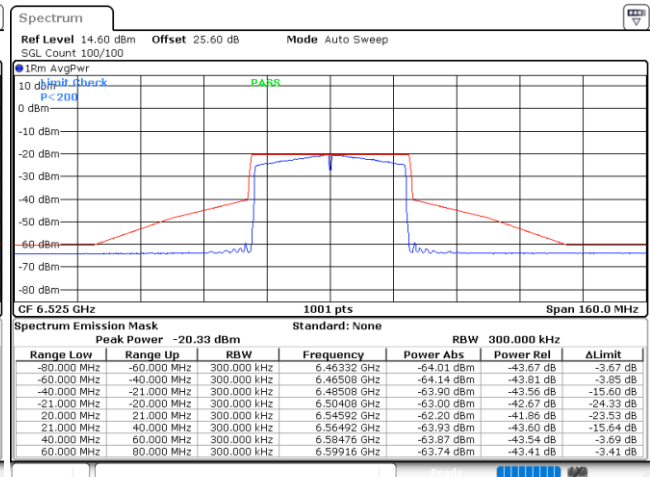


Plot on Channel 6485MHz



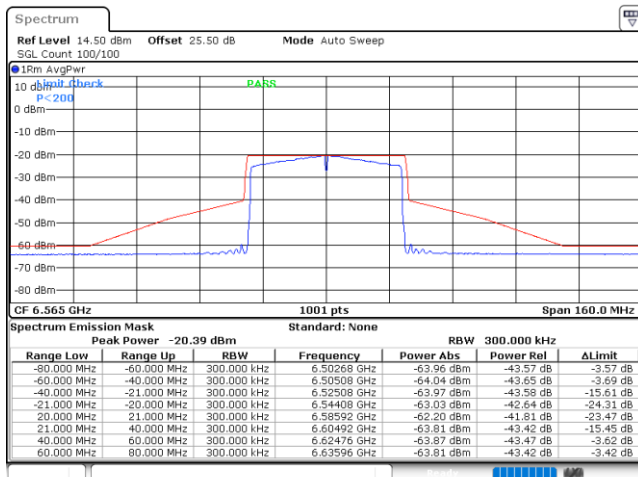
Date: 23 JUN.2022 21:26:44

Plot on Channel 6525MHz



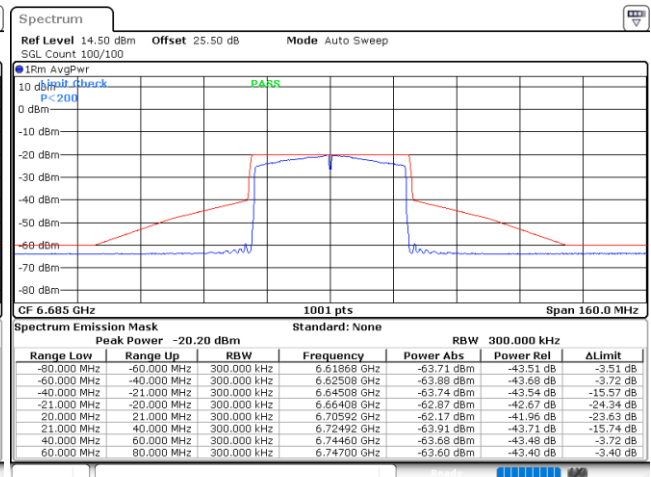
Date: 23 JUN.2022 21:30:50

Plot on Channel 6565MHz



Date: 23 JUN.2022 21:34:43

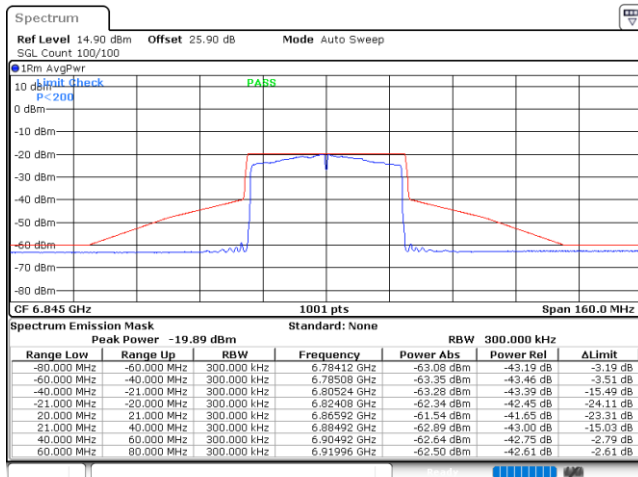
Plot on Channel 6685MHz



Date: 23 JUN.2022 21:38:49

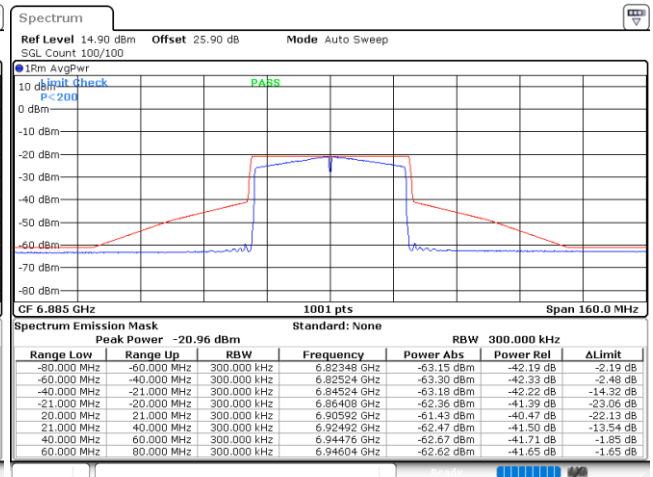


Plot on Channel 6845MHz



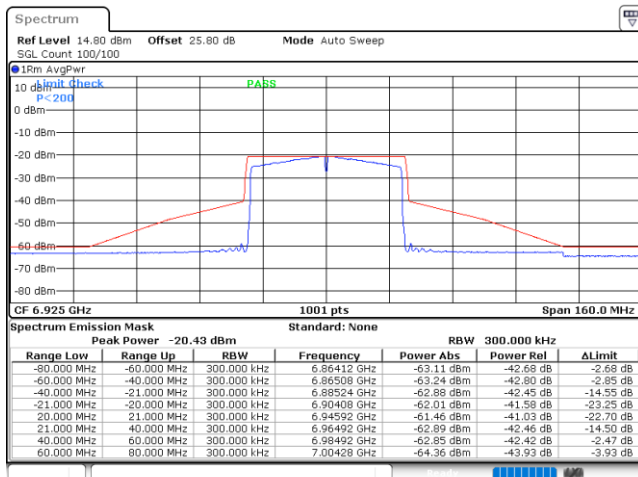
Date: 23 JUN.2022 21:42:13

Plot on Channel 6885MHz



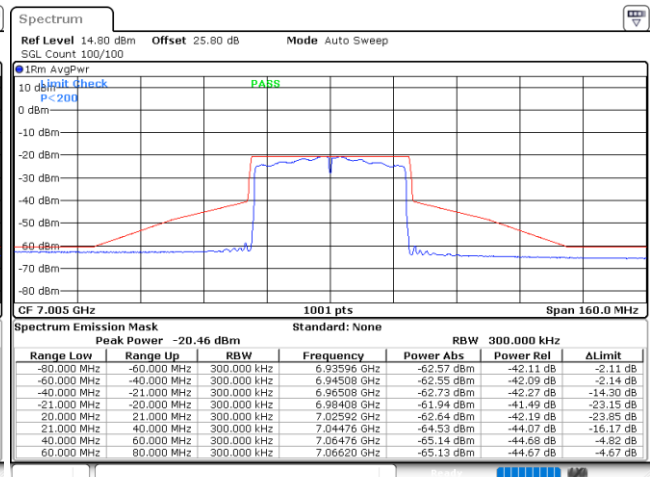
Date: 23 JUN.2022 21:46:13

Plot on Channel 6925MHz



Date: 23 JUN.2022 21:51:42

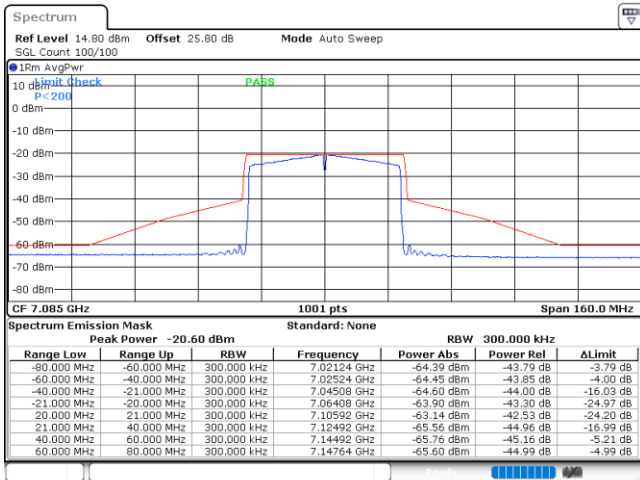
Plot on Channel 7005MHz



Date: 23 JUN.2022 21:55:10



Plot on Channel 7085MHz

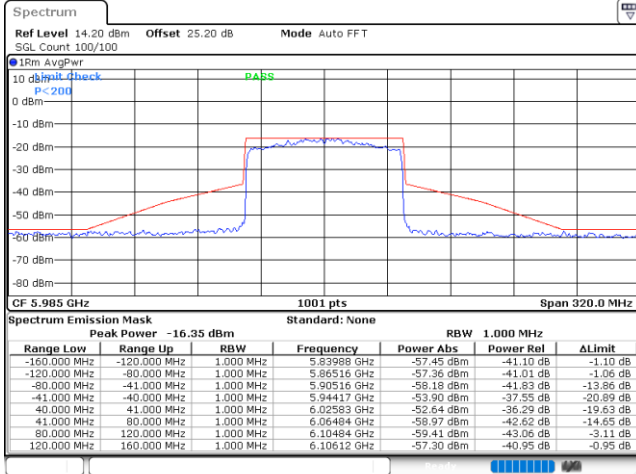


Date: 23 JUN 2022 21:59:13



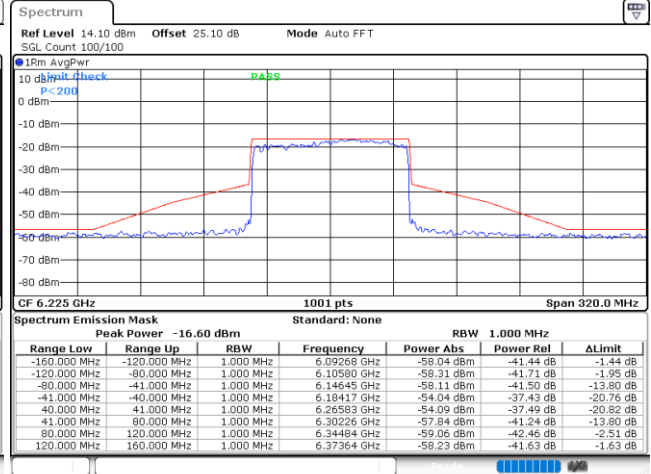
EUT Mode : 802.11ax HE80 Full RU

Plot on Channel 5985MHz



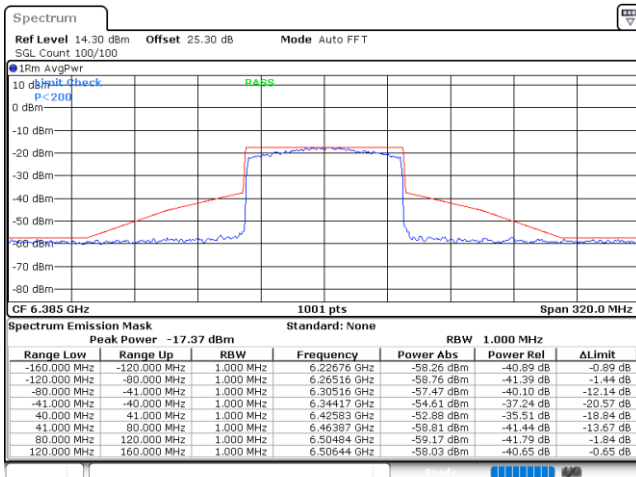
Date: 28 JUN.2022 01:24:56

Plot on Channel 6225MHz



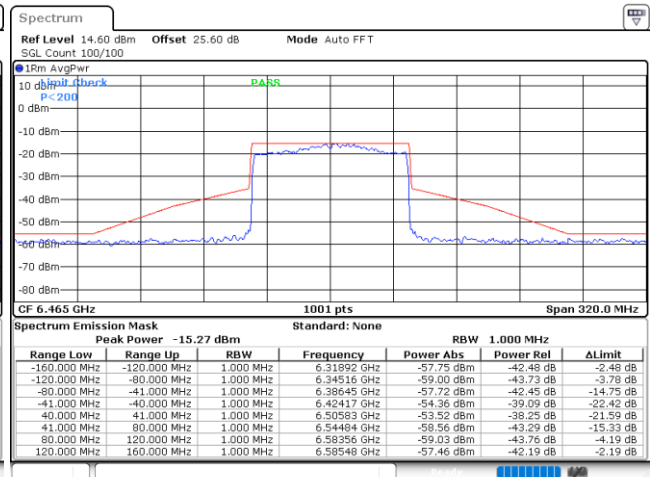
Date: 28 JUN.2022 19:30:32

Plot on Channel 6385MHz



Date: 28 JUN.2022 19:33:43

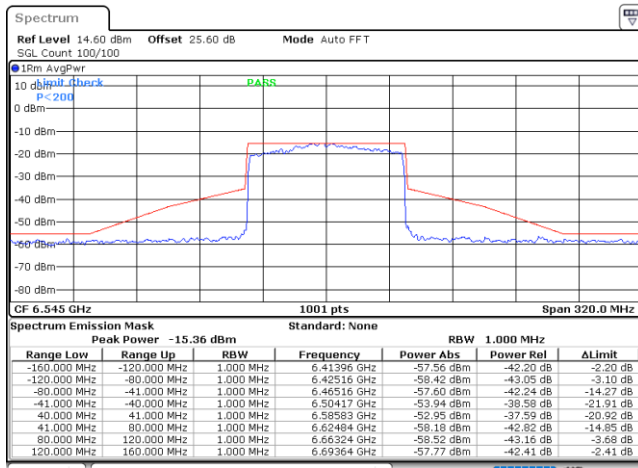
Plot on Channel 6465MHz



Date: 23 JUN.2022 23:03:14

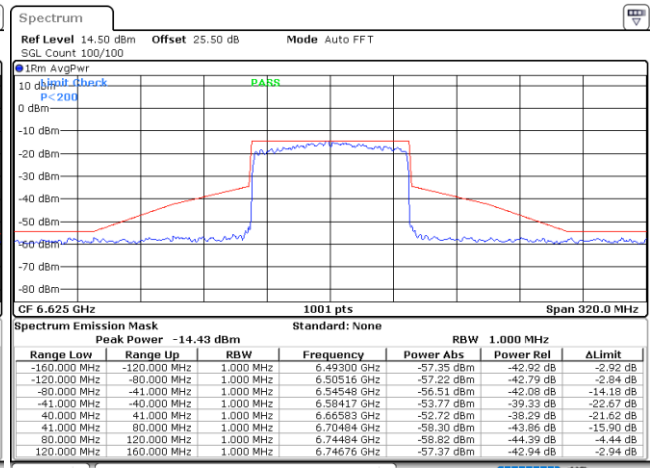


Plot on Channel 6545MHz



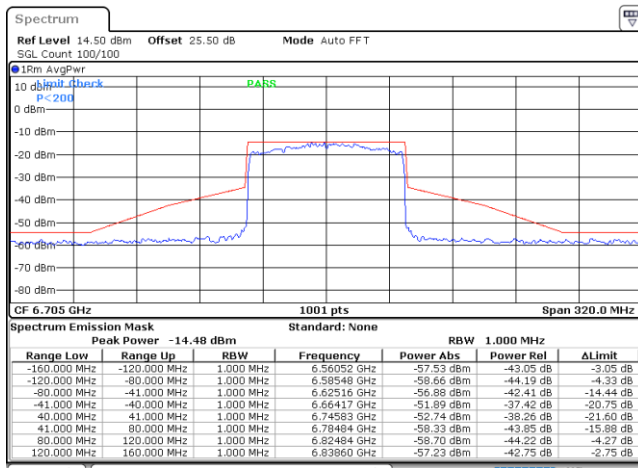
Date: 23 JUN.2022 23:12:44

Plot on Channel 6625MHz



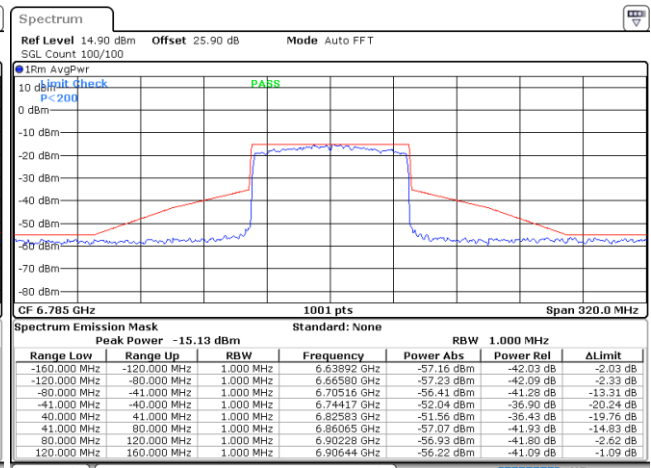
Date: 23 JUN.2022 23:18:51

Plot on Channel 6705MHz



Date: 23 JUN.2022 23:22:45

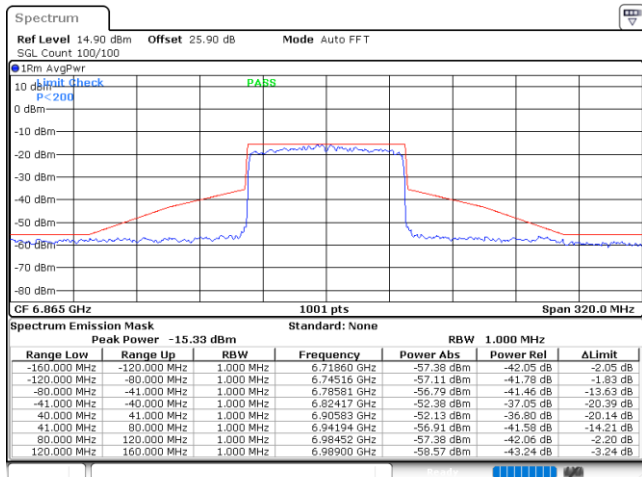
Plot on Channel 6785MHz



Date: 23 JUN.2022 23:26:26

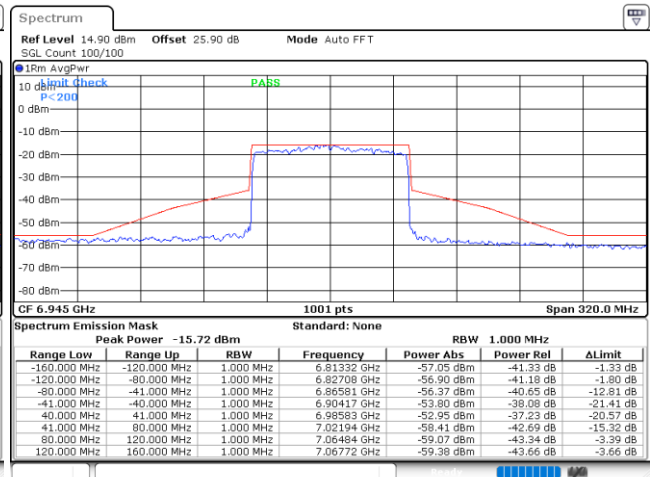


Plot on Channel 6865MHz



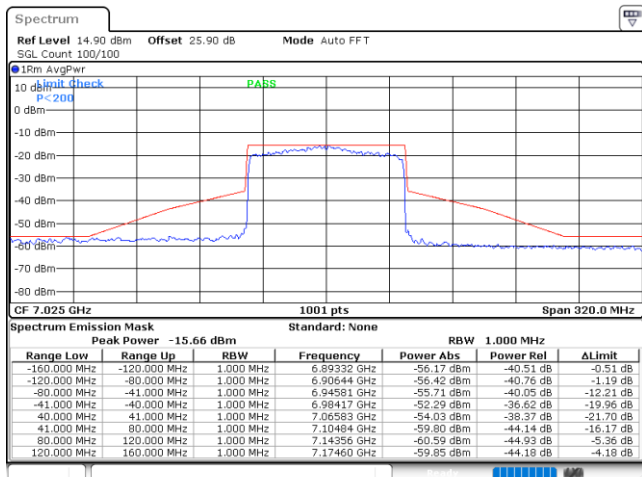
Date: 23 JUN.2022 23:30:31

Plot on Channel 6945MHz



Date: 23 JUN.2022 23:50:05

Plot on Channel 7025MHz



Date: 23 JUN.2022 23:54:49



3.5 Contention Based Protocol

3.5.1 Limit of Contention Based Protocol

<FCC 14-30 CFR 15.407>

(d)(6) Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

FCC KDB 987594 D02 U-NII 6GHz EMC Measurement v01

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel and stay off the channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain. To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

Table 1. Criteria to determine number of times detection threshold test may be performed

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Tune incumbent and EUT transmissions ($f_{c1} = f_{c2}$)
$BW_{Inc} < BW_{EUT} \leq 2BW_{Inc}$	Once	Incumbent transmission is contained within BW_{EUT}
$2BW_{Inc} < BW_{EUT} \leq 4BW_{Inc}$	Twice. Incumbent transmission is contained within BW_{EUT}	Incumbent transmission is located as closely as possible to the lower edge and upper edge, respectively, of the EUT channel
$BW_{EUT} > 4BW_{Inc}$	Three times	Incumbent transmission is located as closely as possible to the lower edge of the EUT channel, in the middle of EUT channel, and as closely as possible to the upper edge of the EUT channel

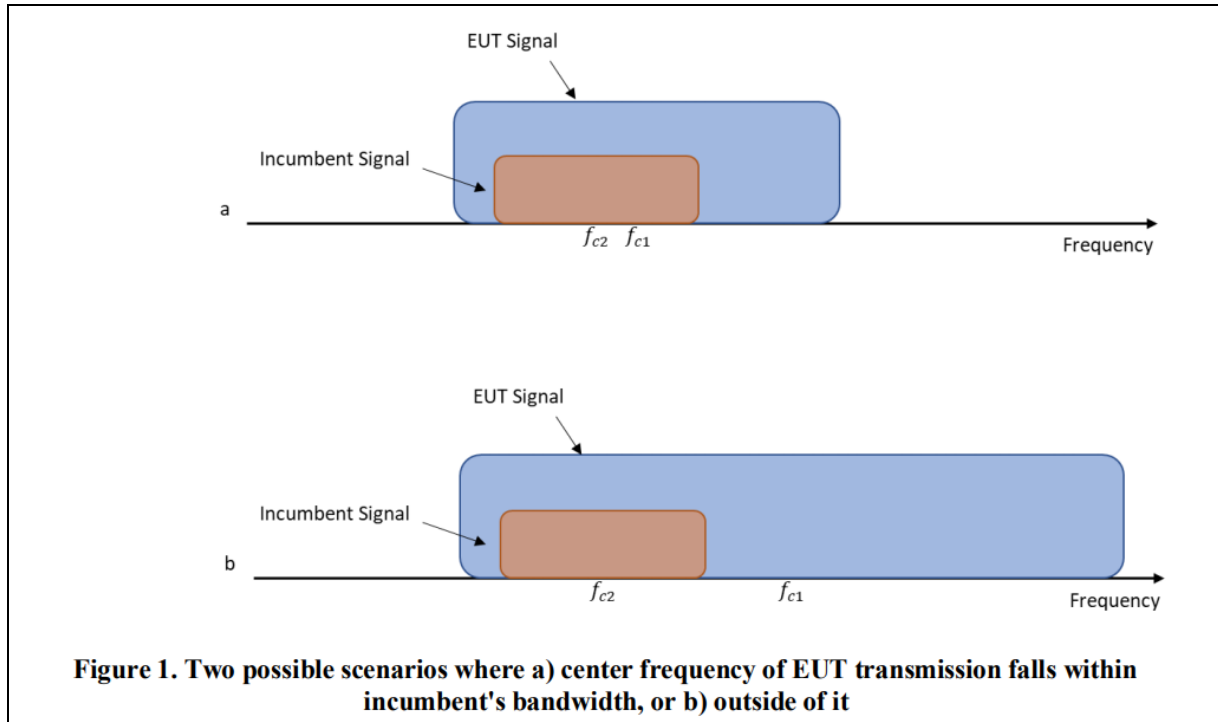
where:

BW_{EUT} : Transmission bandwidth of EUT signal

BW_{Inc} : Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal)

f_{c1} : Center frequency of EUT transmission

f_{c2} : Center frequency of simulated incumbent signal



3.5.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

The testing follows FCC KDB 987594 D02 U-NII 6GHz EMC Measurement v01.

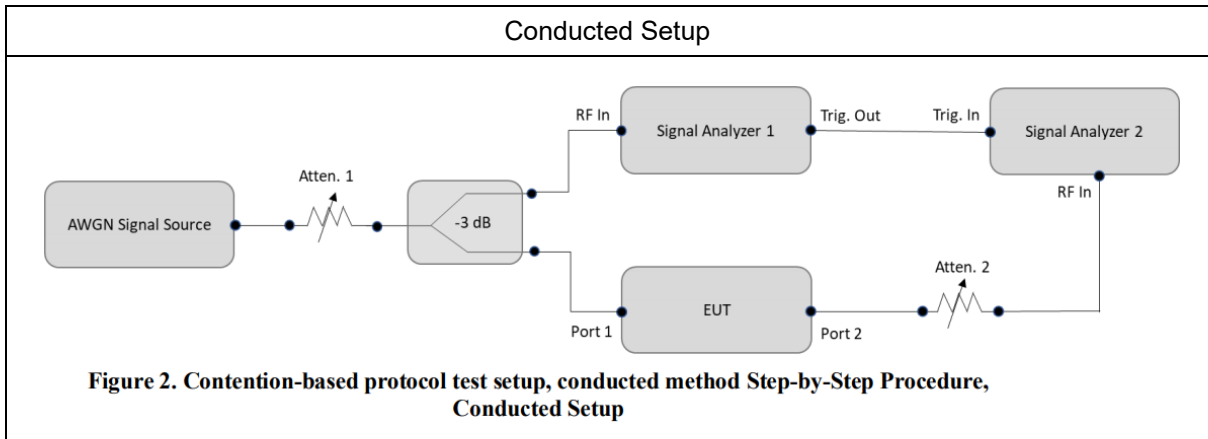
Section I) Contention Based Protocol

Conducted method Step-by-Step Procedure, Conducted Setup

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
3. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT.
4. Connect the output port of the EUT to the signal analyzer 2, as shown in test setup Figure 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
5. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
6. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
7. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in test setup Figure 2.
8. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.

9. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
10. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
11. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.
12. For the contention-based protocol test where only one channel in each supported sub-band needs to be tested. The narrowest and widest bandwidth in each channel shall be measured EUT was driven in MIMO mode, the interferer level was injected to both chains to monitor the performance, while the interferer level is determined according the lowest antenna gain among both antennas (i.e, lower interferer level).

3.5.4 Test Setup



3.5.5 Support Unit used in test configuration and system

Instrument	Brand Name	Model No.	Characteristics
WLAN AP	ASUS	GT-AXE11000	Dual Band AP
Notebook	Acer	N15C1	LAN



3.5.6 Test Summary of Contention Based Protocol Test

Test Engineer :	Leo Liu	Temperature :	23.7~25.8°C
		Relative Humidity :	45.3~50.1%

Band	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent freq. (MHz)	Injected AWGN Level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Adjusted Power (dBm)	Margin (dB)		
UNII Band 5	6135	20	6135	-64.05	100	-62	-70.64	8.64		
				Result: Stop Transmission						
				-77.05	< 90	-62	-83.64	21.64		
				Result: Minimal Operation						
				-78.05	0	-62	-84.64	22.64		
				Result: Normal Operation						
	6145	80	6110	-59.04	100	-62	-65.63	3.63		
				Result: Stop Transmission						
				-79.04	< 90	-62	-85.63	23.63		
				Result: Minimal Operation						
				-80.04	0	-62	-86.63	24.63		
				Result: Normal Operation						
			6145	80	6145	-59.62	100	-62	-66.21	4.21
						Result: Stop Transmission				
						-69.62	< 90	-62	-76.21	14.21
						Result: Minimal Operation				
						-70.62	0	-62	-77.21	15.21
						Result: Normal Operation				
6180	80	6180	-58.27	100	-62	-64.86	2.86			
			Result: Stop Transmission							
			-79.27	< 90	-62	-85.86	23.86			
			Result: Minimal Operation							
			-80.27	0	-62	-86.86	24.86			
			Result: Normal Operation							

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain 6.59 dBi.

Note 2: The antenna gain has included the cable loss.

Note 3: Margin = Regulated Threshold level - Adjusted Power.



Band	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent freq. (MHz)	Injected AWGN Level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Adjusted Power (dBm)	Margin (dB)		
UNII Band 6	6455	20	6455	-63.67	100	-62	-68.86	6.86		
				Result: Stop Transmission						
				-75.67	< 90	-62	-80.86	18.86		
				Result: Minimal Operation						
				-76.67	0	-62	-81.86	19.86		
				Result: Normal Operation						
	6465	80	6430	-57.66	100	-62	-62.85	0.85		
				Result: Stop Transmission						
				-78.66	< 90	-62	-83.85	21.85		
				Result: Minimal Operation						
				-79.66	0	-62	-84.85	22.85		
				Result: Normal Operation						
			6465	80	6465	-61.66	100	-62	-66.85	4.85
						Result: Stop Transmission				
						-68.66	< 90	-62	-73.85	11.85
						Result: Minimal Operation				
						-69.66	0	-62	-74.85	12.85
						Result: Normal Operation				
6500	80	6500	-59.72	100	-62	-64.91	2.91			
			Result: Stop Transmission							
			-78.72	< 90	-62	-83.91	21.91			
			Result: Minimal Operation							
			-79.72	0	-62	-84.91	22.91			
			Result: Normal Operation							

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain 5.19 dBi.

Note 2: The antenna gain has included the cable loss.

Note 3: Margin = Regulated Threshold level - Adjusted Power.



Band	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent freq. (MHz)	Injected AWGN Level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Adjusted Power (dBm)	Margin (dB)		
UNII Band 7	6695	20	6695	-64.02	100	-62	-69.11	7.11		
				Result: Stop Transmission						
				-76.02	< 90	-62	-81.11	19.11		
				Result: Minimal Operation						
				-77.02	0	-62	-82.11	20.11		
				Result: Normal Operation						
	6705	80	6670	-58.01	100	-62	-63.10	1.10		
				Result: Stop Transmission						
				-79.01	< 90	-62	-84.10	22.10		
				Result: Minimal Operation						
				-80.01	0	-62	-85.10	23.10		
				Result: Normal Operation						
			6705	80	6705	-59.2	100	-62	-64.29	2.29
						Result: Stop Transmission				
						-70.20	< 90	-62	-75.29	13.29
						Result: Minimal Operation				
						-71.20	0	-62	-76.29	14.29
						Result: Normal Operation				
	6740	80	6740	-60.06	100	-62	-65.15	3.15		
				Result: Stop Transmission						
				-79.06	< 90	-62	-84.15	22.15		
				Result: Minimal Operation						
				-80.06	0	-62	-85.15	23.15		
				Result: Normal Operation						

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain 5.09 dBi.

Note 2: The antenna gain has included the cable loss.

Note 3: Margin = Regulated Threshold level - Adjusted Power.



Band	Channel Freq. (MHz)	Channel BW (MHz)	Incumbent freq. (MHz)	Injected AWGN Level (dBm)	Detection Rate (%)	Regulated Threshold level (dBm)	Adjusted Power (dBm)	Margin (dB)		
UNII Band 8	7015	20	7015	-65.45	100	-62	-69.49	7.49		
				Result: Stop Transmission						
				-76.45	< 90	-62	-80.49	18.49		
				Result: Minimal Operation						
				-77.45	0	-62	-81.49	19.49		
				Result: Normal Operation						
	7025	80	6990	-59.75	100	-62	-63.79	1.79		
				Result: Stop Transmission						
				-78.75	< 90	-62	-82.79	20.79		
				Result: Minimal Operation						
				-79.75	0	-62	-83.79	21.79		
				Result: Normal Operation						
			7025	80	7025	-60.46	100	-62	-64.50	2.5
						Result: Stop Transmission				
						-69.46	< 90	-62	-73.50	11.50
						Result: Minimal Operation				
						-70.46	0	-62	-74.50	12.50
						Result: Normal Operation				
	7060	80	7060	-60.86	100	-62	-64.90	2.9		
				Result: Stop Transmission						
				-78.86	< 90	-62	-82.90	20.90		
				Result: Minimal Operation						
				-79.86	0	-62	-83.90	21.90		
				Result: Normal Operation						

Note 1: Adjusted Power = Injected AWGN Level - minimum antenna gain 4.04 dBi.

Note 2: The antenna gain has included the cable loss.

Note 3: Margin = Regulated Threshold level - Adjusted Power.



3.5.7 Test Plots of Contention Based Protocol Test

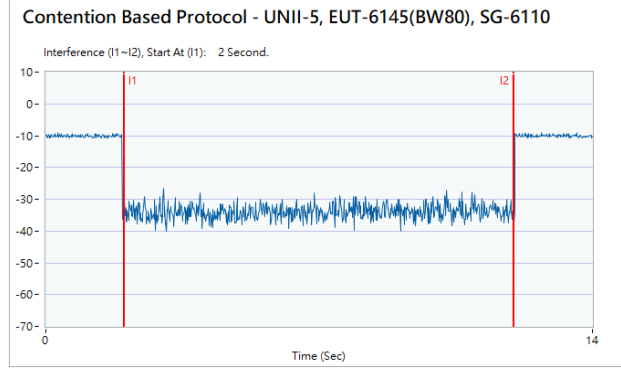
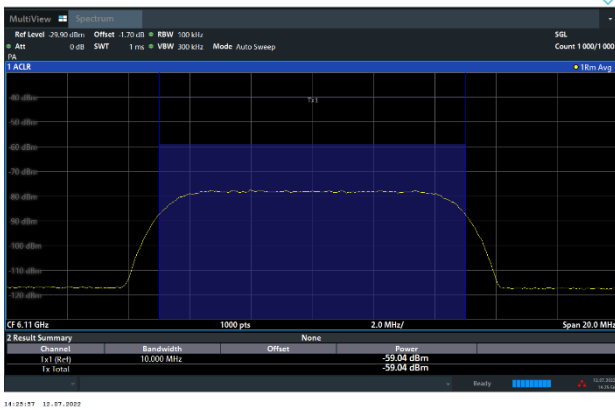
Contention Based Protocol Result Plots on U-NII 5 (AWGN Interference)	
<p>802.11ax (HE20) / 6135MHz Threshold Level (TL) = -64.05dBm</p>	<p>802.11ax (HE20) / CH37 Test result is pass due to no transmission occur.</p>
<p>802.11ax (HE20) / 6135MHz Threshold Level (TL) = -65.05dBm</p>	<p>802.11ax (HE20) / CH37 Transmit when the interferer is 1dB lower.</p>



Contention Based Protocol Result Plots on U-NII 5 (AWGN Interference)

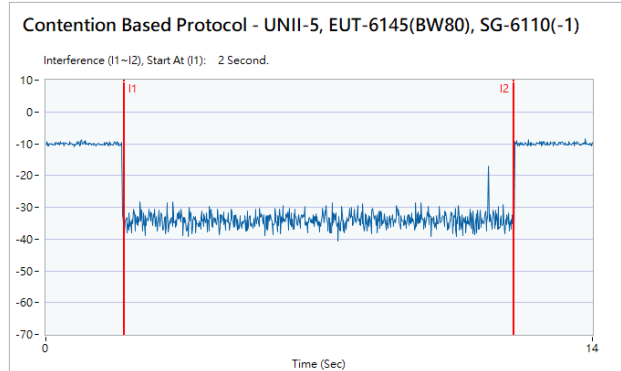
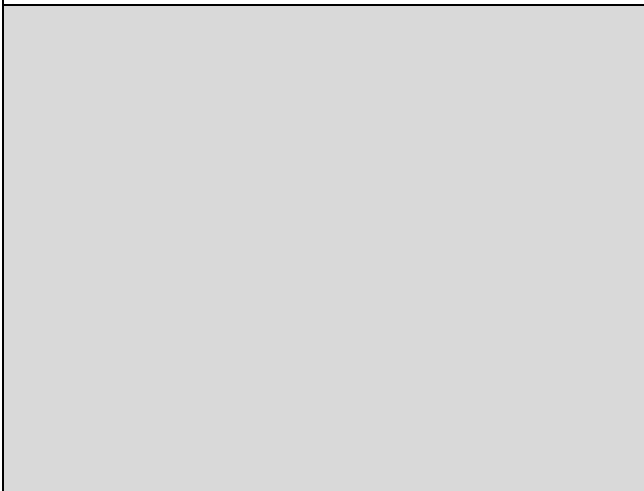
802.11ax (HE80) / 6110MHz (Lower edge)
Threshold Level (TL) = -59.04dBm

802.11ax (HE80) / CH39 (Lower edge)
Test result is pass due to no transmission occur.



802.11ax (HE80) / 6110MHz (Lower edge)
Threshold Level (TL) = -60.04dBm

802.11ax (HE80) / CH39 (Lower edge)
Transmit when the interferer is 1dB lower.



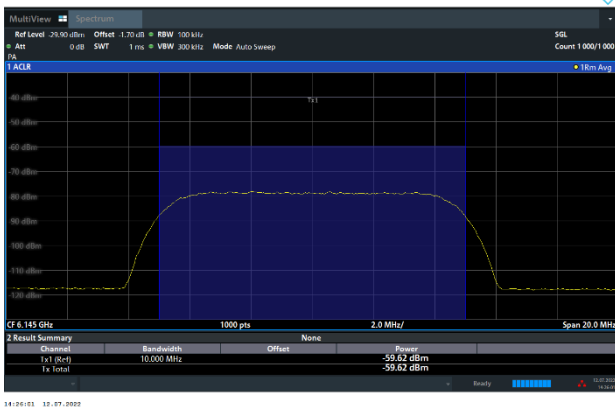


Contention Based Protocol Result Plots on U-NII 5 (AWGN Interference)

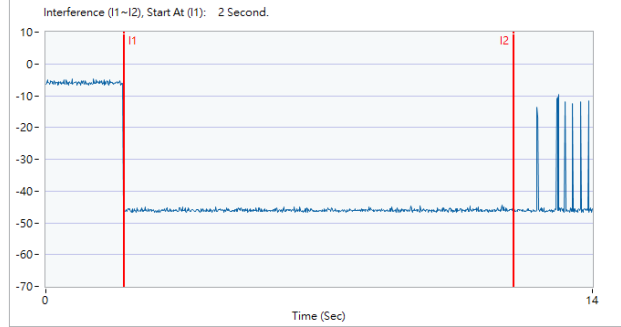
802.11ax (HE80) / 6145MHz (Middle)
Threshold Level (TL) = -59.62dBm

802.11ax (HE80) / CH39 (Middle)

Test result is pass due to no transmission occur.



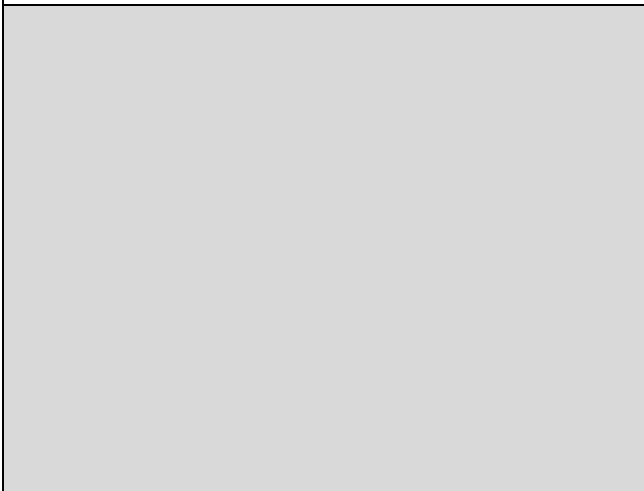
Contention Based Protocol - UNII-5, EUT-6145(BW80), SG-6145



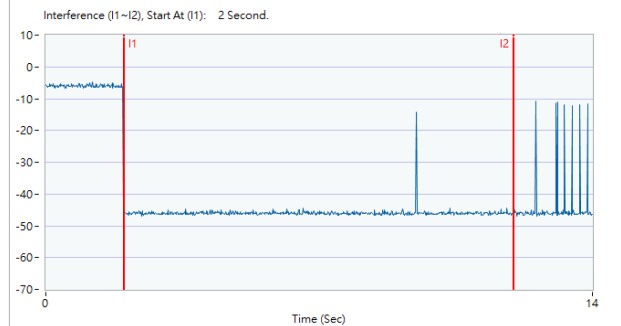
802.11ax (HE80) / 6145MHz (Middle)
Threshold Level (TL) = -60.62dBm

802.11ax (HE80) / CH39 (Middle)

Transmit when the interferer is 1dB lower.



Contention Based Protocol - UNII-5, EUT-6145(BW80), SG-6145(-1)

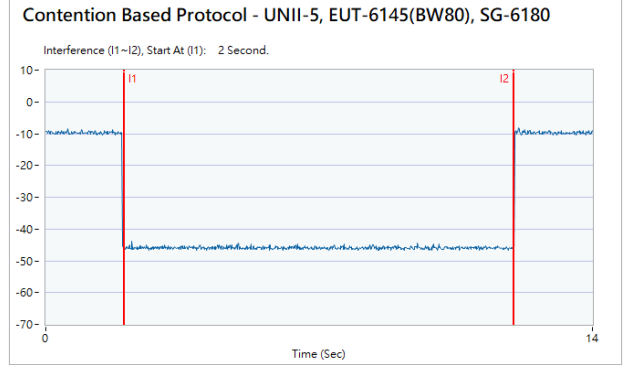
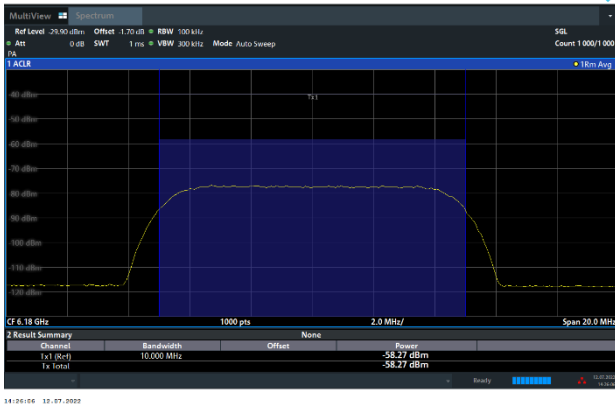




Contention Based Protocol Result Plots on U-NII 5 (AWGN Interference)

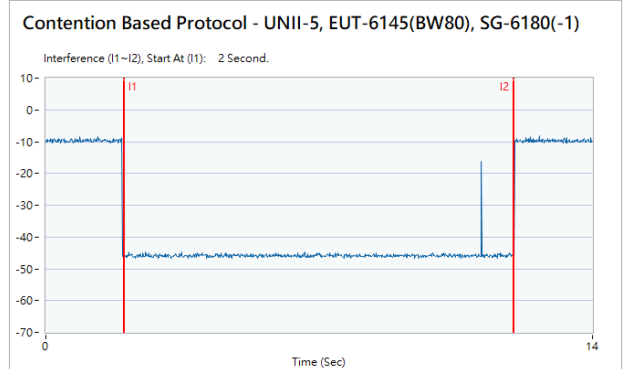
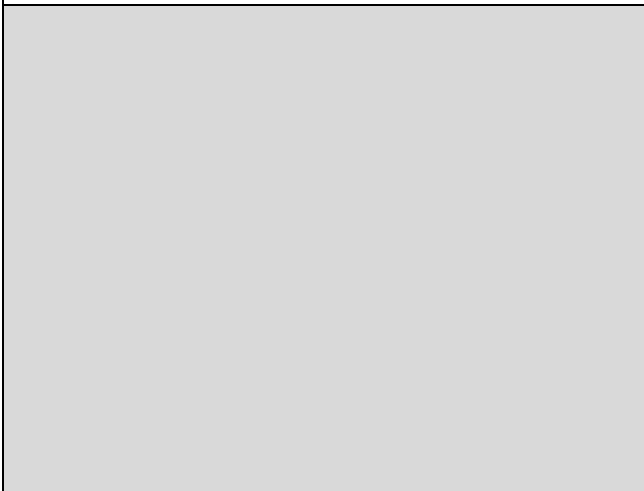
802.11ax (HE80) / 6180MHz (Upper edge)
Threshold Level (TL) = -58.27dBm

802.11ax (HE80) / CH39 (Upper edge)
Test result is pass due to no transmission occur.



802.11ax (HE80) / 6180MHz (Upper edge)
Threshold Level (TL) = -59.27dBm

802.11ax (HE80) / CH39 (Upper edge)
Transmit when the interferer is 1dB lower.

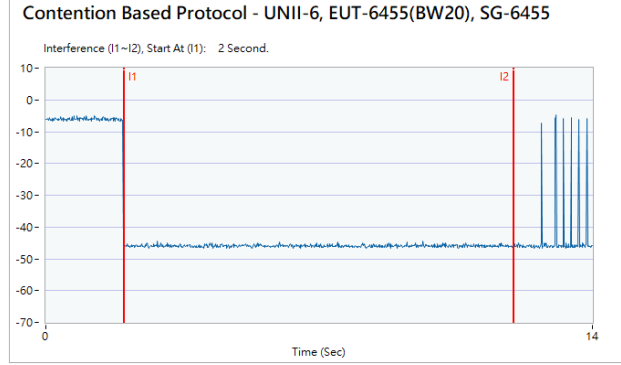
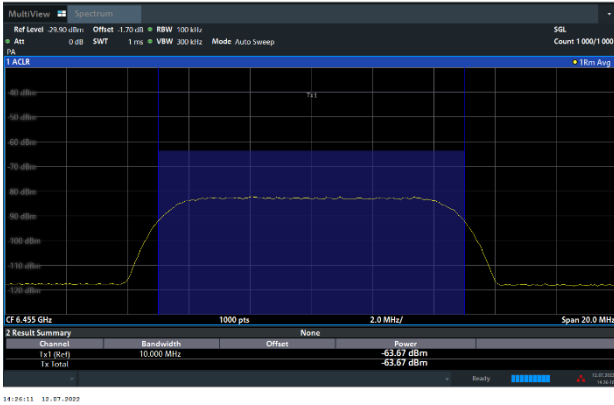




Contention Based Protocol Result Plots on U-NII 6 (AWGN Interference)

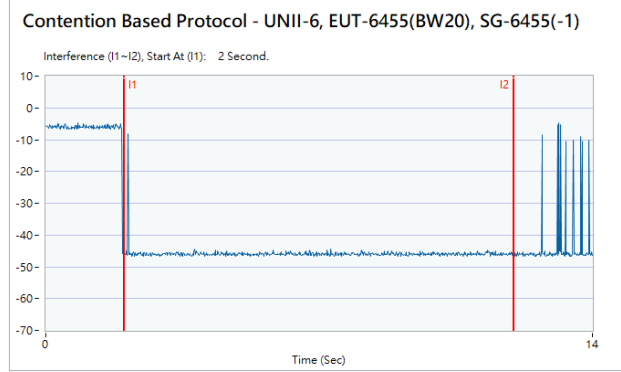
802.11ax (HE20) / 6455MHz
Threshold Level (TL) = -63.67dBm

802.11ax (HE20) / CH101
Test result is pass due to no transmission occur.



802.11ax (HE20) / 6455MHz
Threshold Level (TL) = -64.67dBm

802.11ax (HE20) / CH101
Transmit when the interferer is 1dB lower.

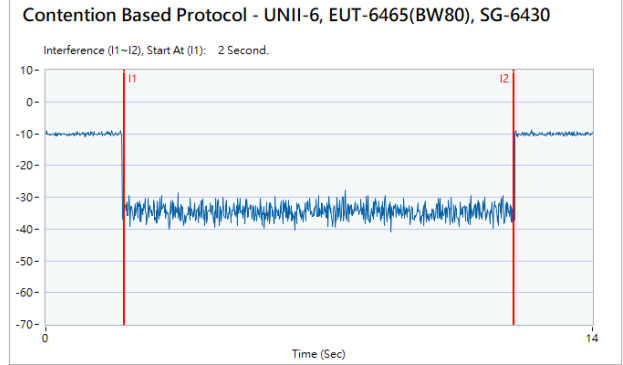
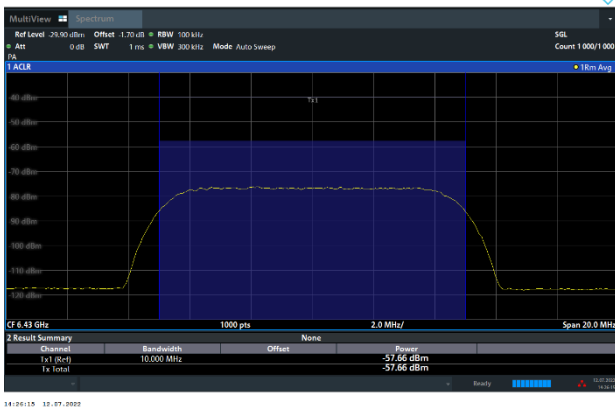




Contention Based Protocol Result Plots on U-NII 6 (AWGN Interference)

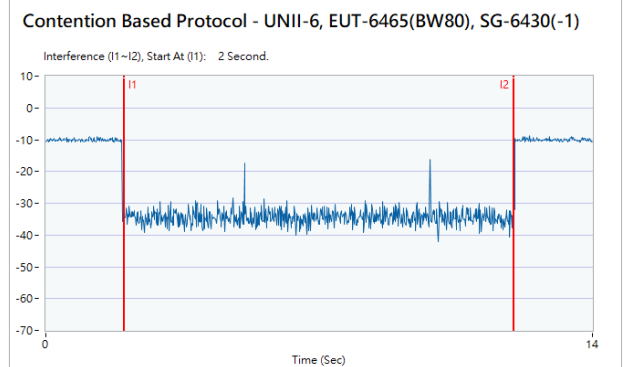
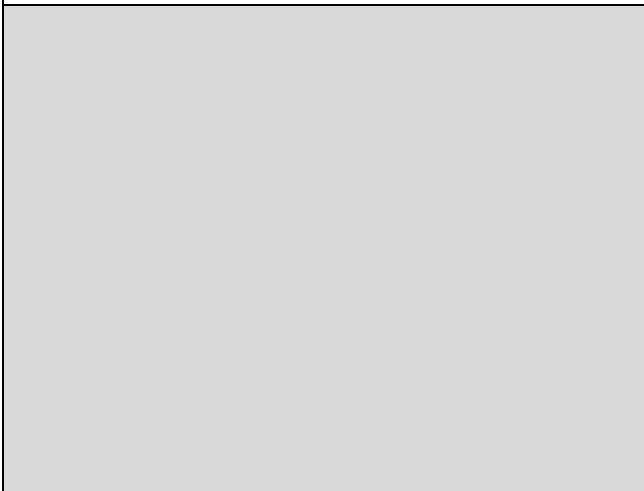
802.11ax (HE80) / 6430MHz (Lower edge)
Threshold Level (TL) = -57.66dBm

802.11ax (HE80) / CH103 (Lower edge)
Test result is pass due to no transmission occur.



802.11ax (HE80) / 6430MHz (Lower edge)
Threshold Level (TL) = -58.66dBm

802.11ax (HE80) / CH103 (Lower edge)
Transmit when the interferer is 1dB lower.



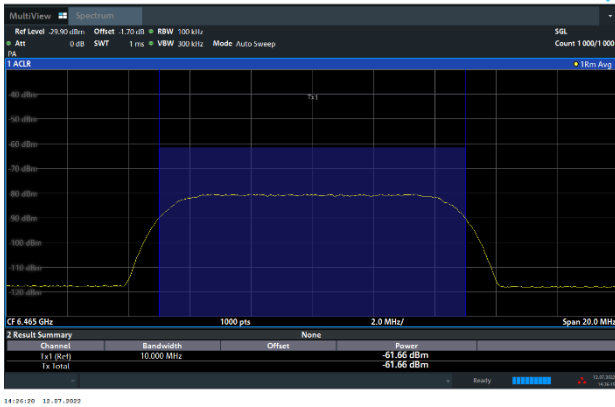


Contention Based Protocol Result Plots on U-NII 6 (AWGN Interference)

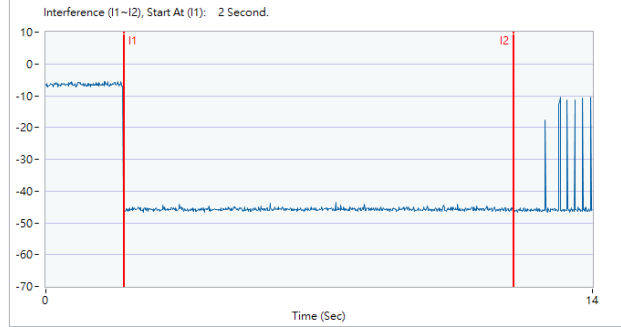
802.11ax (HE80) / 6465MHz (Middle)
Threshold Level (TL) = -61.66dBm

802.11ax (HE80) / CH103 (Middle)

Test result is pass due to no transmission occur.



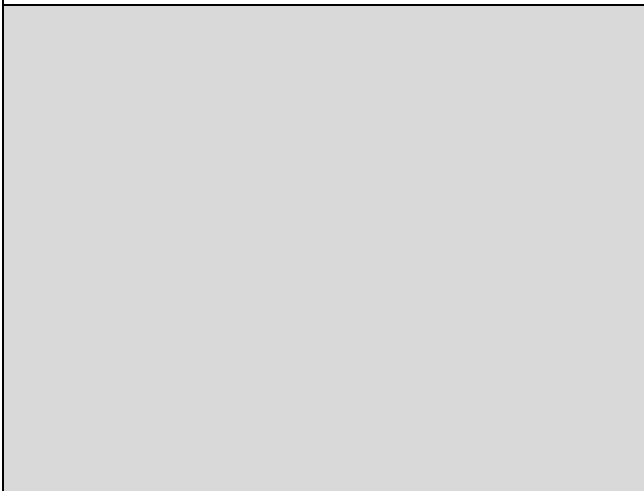
Contention Based Protocol - UNII-6, EUT-6465(BW80), SG-6465



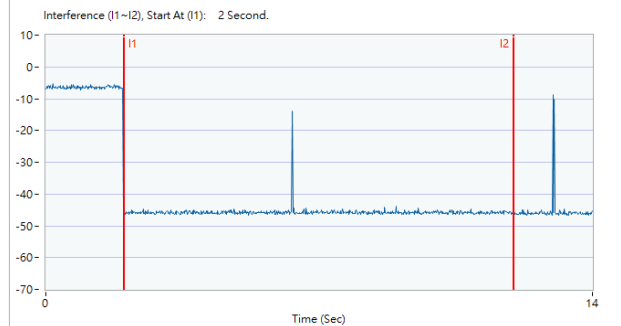
802.11ax (HE80) / 6465MHz (Middle)
Threshold Level (TL) = -62.66dBm

802.11ax (HE80) / CH103 (Middle)

Transmit when the interferer is 1dB lower.



Contention Based Protocol - UNII-6, EUT-6465(BW80), SG-6465(-1)

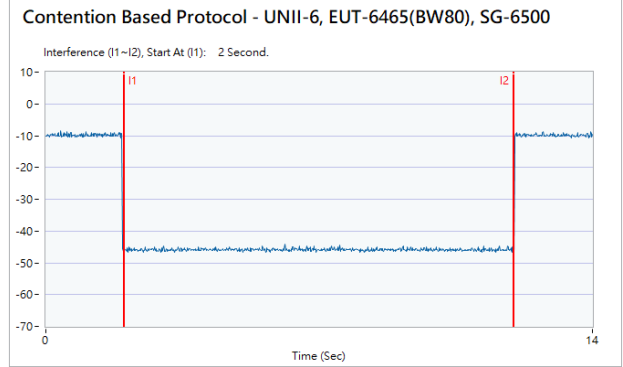
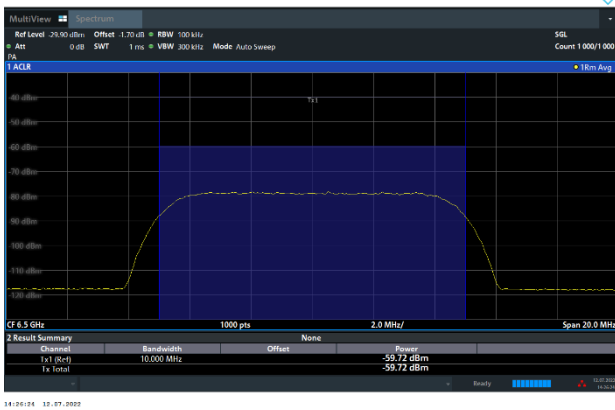




Contention Based Protocol Result Plots on U-NII 6 (AWGN Interference)

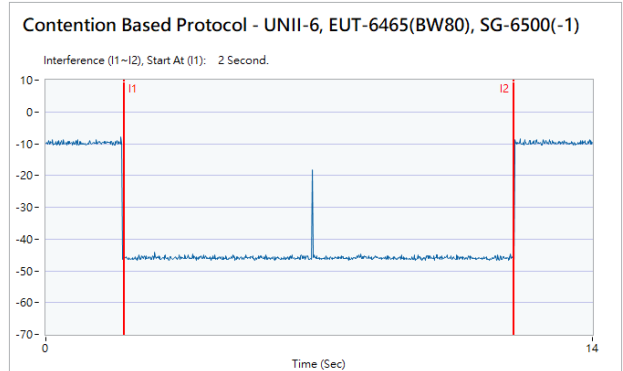
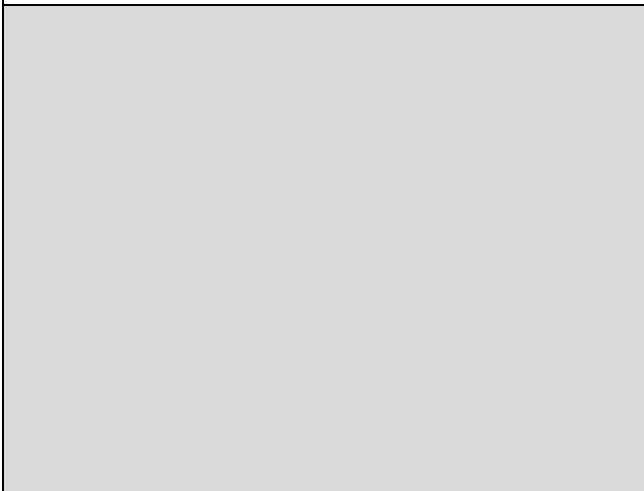
802.11ax (HE80) / 6500MHz (Upper edge)
Threshold Level (TL) = -59.72dBm

802.11ax (HE80) / CH103 (Upper edge)
Test result is pass due to no transmission occur.



802.11ax (HE80) / 6580MHz (Upper edge)
Threshold Level (TL) = -60.72dBm

802.11ax (HE80) / CH103 (Upper edge)
Transmit when the interferer is 1dB lower.

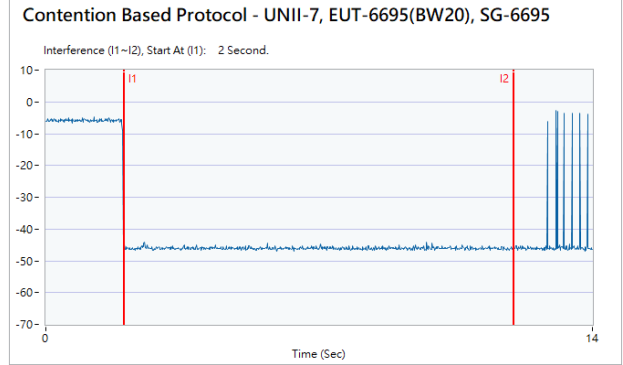
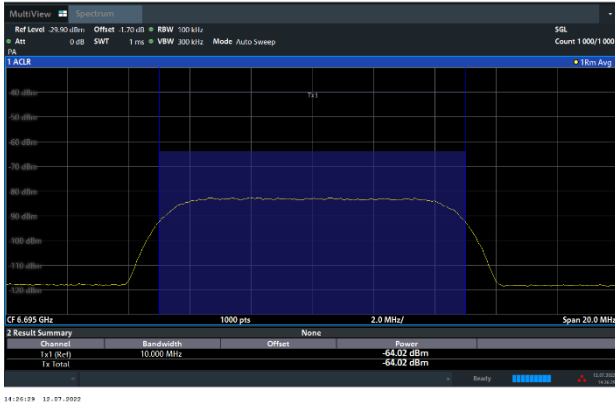




Contention Based Protocol Result Plots on U-NII 7 (AWGN Interference)

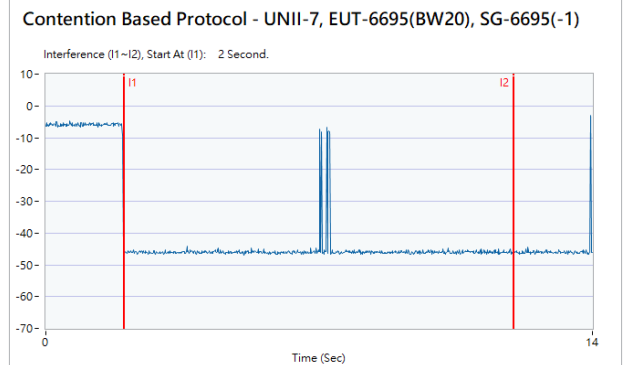
802.11ax (HE20) / 6695MHz
Threshold Level (TL) = -64.02dBm

802.11ax (HE20) / CH149
Test result is pass due to no transmission occur.



802.11ax (HE20) / 6695MHz
Threshold Level (TL) = -65.02dBm

802.11ax (HE20) / CH149
Transmit when the interferer is 1dB lower.

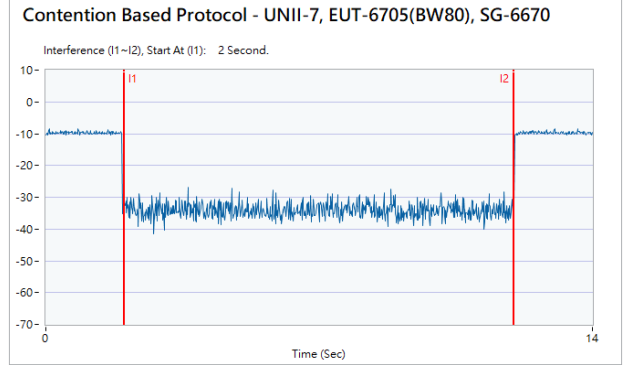
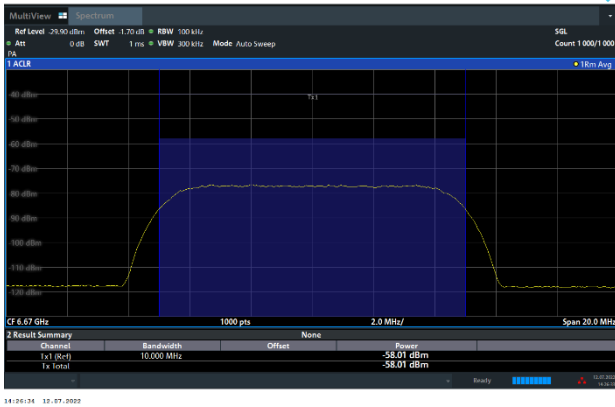




Contention Based Protocol Result Plots on U-NII 7 (AWGN Interference)

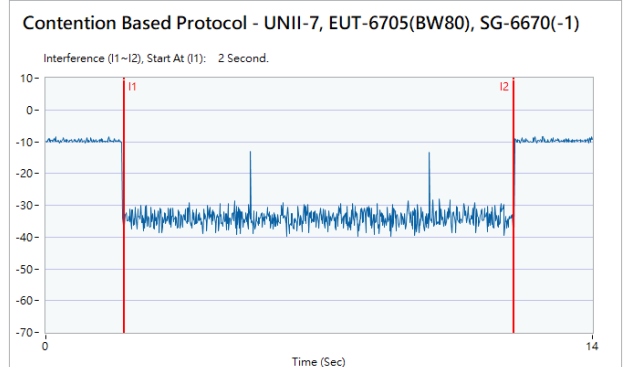
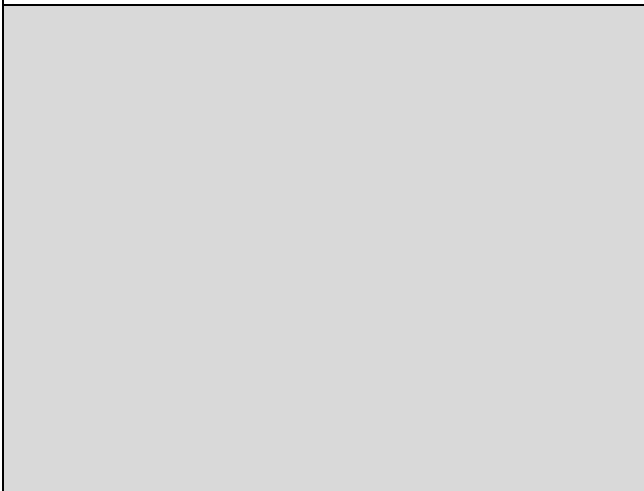
802.11ax (HE80) / 6670MHz (Lower edge)
Threshold Level (TL) = -58.01dBm

802.11ax (HE80) / CH151 (Lower edge)
Test result is pass due to no transmission occur.



802.11ax (HE80) / 6670MHz (Lower edge)
Threshold Level (TL) = -59.01dBm

802.11ax (HE80) / CH151 (Lower edge)
Transmit when the interferer is 1dB lower.



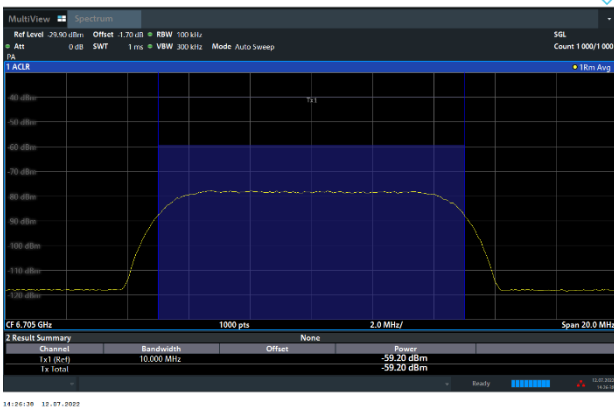


Contention Based Protocol Result Plots on U-NII 7 (AWGN Interference)

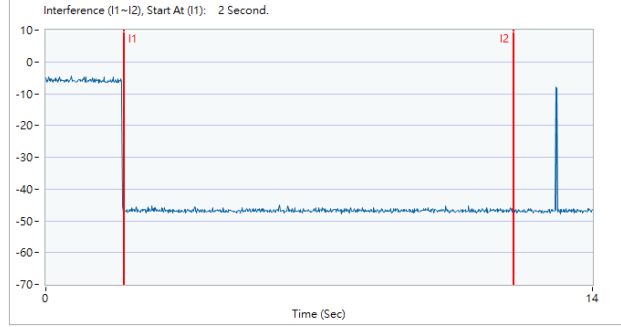
802.11ax (HE80) / 6705MHz (Middle)
Threshold Level (TL) = -59.2dBm

802.11ax (HE80) / CH143 (Middle)

Test result is pass due to no transmission occur.



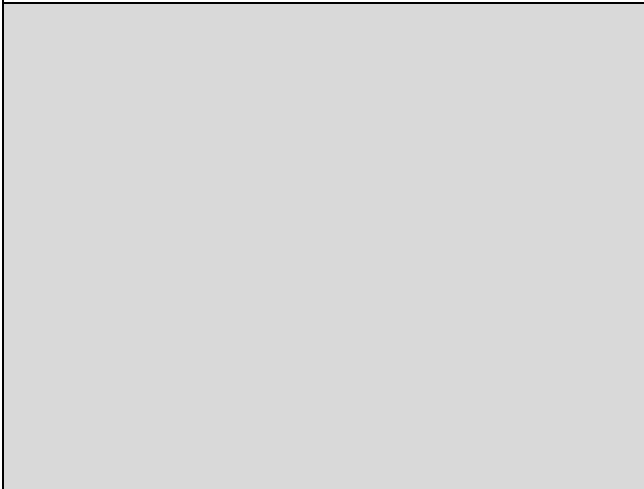
Contention Based Protocol - UNII-7, EUT-6705(BW80), SG-6705



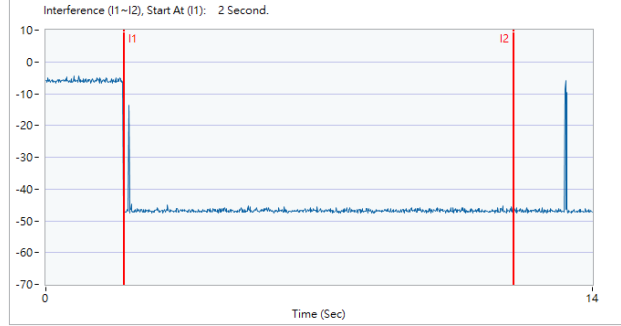
802.11ax (HE80) / 6705MHz (Middle)
Threshold Level (TL) = -60.20dBm

802.11ax (HE80) / CH143 (Middle)

Transmit when the interferer is 1dB lower.



Contention Based Protocol - UNII-7, EUT-6705(BW80), SG-6705(-1)

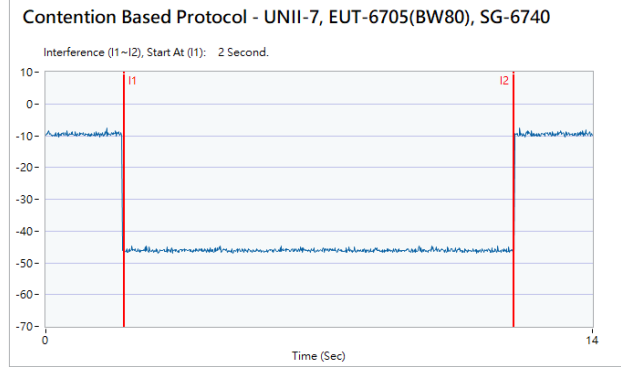
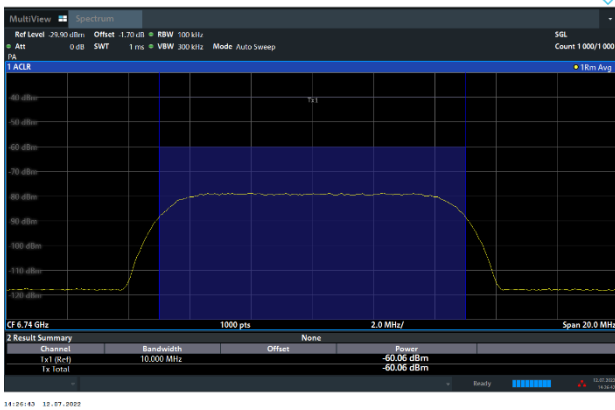




Contention Based Protocol Result Plots on U-NII 7 (AWGN Interference)

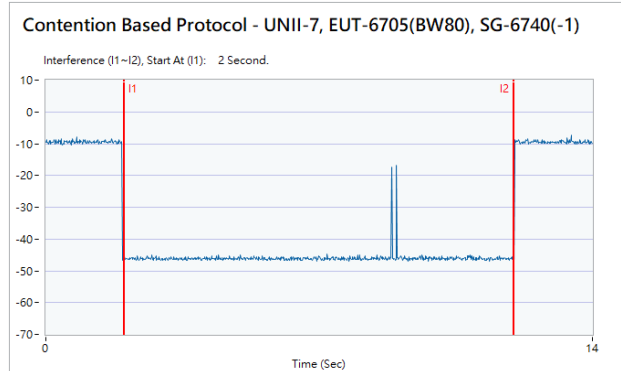
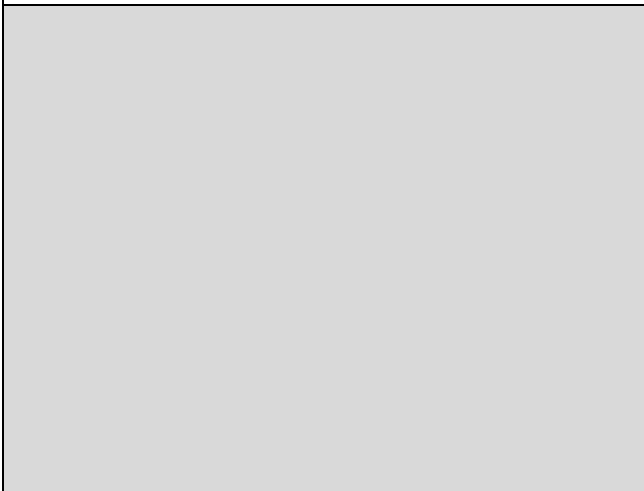
802.11ax (HE80) / 6740MHz (Upper edge)
Threshold Level (TL) = -60.06dBm

802.11ax (HE80) / CH151 (Upper edge)
Test result is pass due to no transmission occur.



802.11ax (HE80) / 6740MHz (Upper edge)
Threshold Level (TL) = -61.06dBm

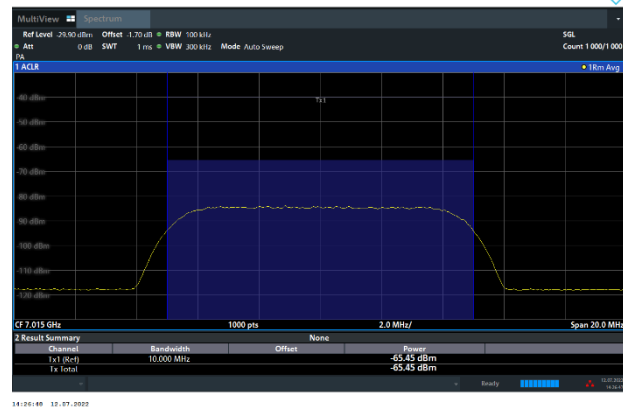
802.11ax (HE80) / CH151 (Upper edge)
Transmit when the interferer is 1dB lower.



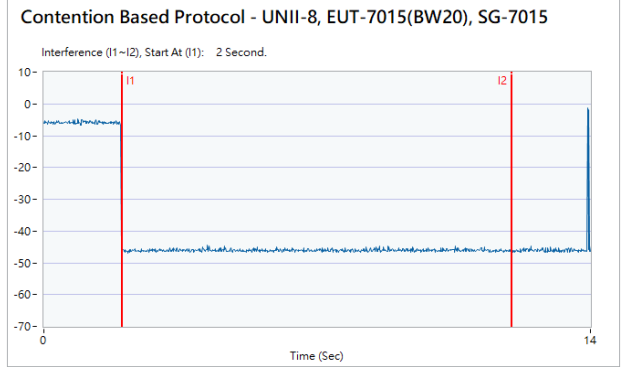


Contention Based Protocol Result Plots on U-NII 8 (AWGN Interference)

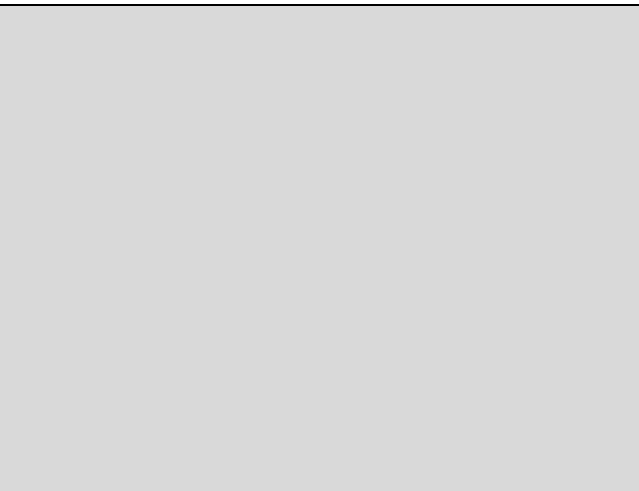
802.11ax (HE20) / 7015MHz
Threshold Level (TL) = -65.45dBm



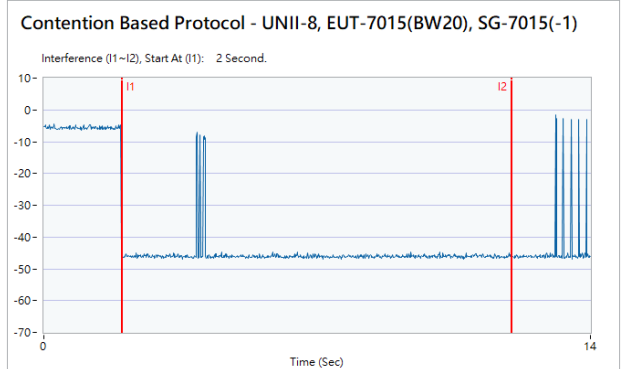
802.11ax (HE20) / CH213
Test result is pass due to no transmission occur.



802.11ax (HE20) / 7015MHz
Threshold Level (TL) = -66.45dBm



802.11ax (HE20) / CH213
Transmit when the interferer is 1dB lower.

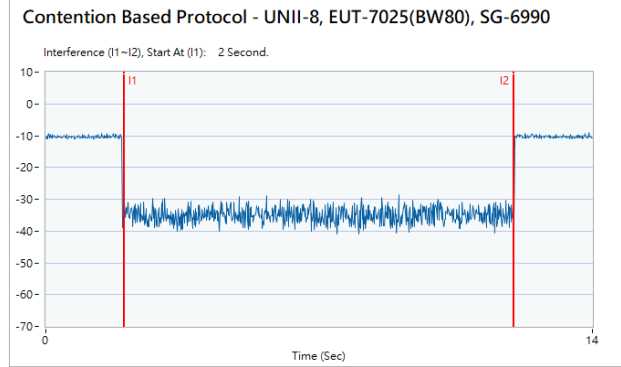
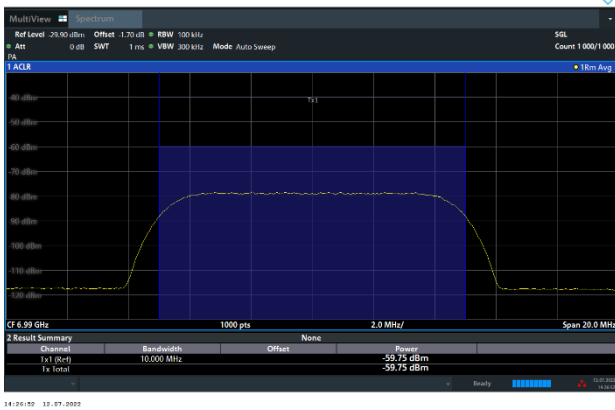




Contention Based Protocol Result Plots on U-NII 8 (AWGN Interference)

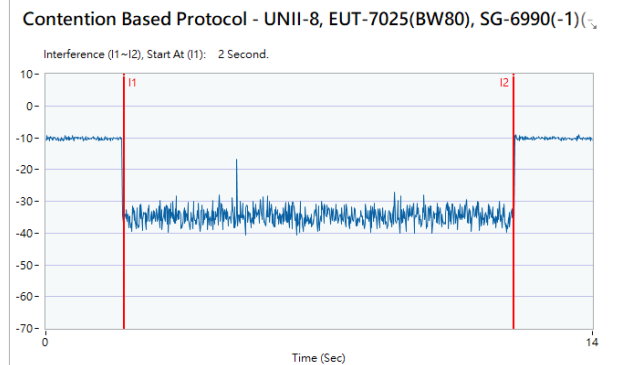
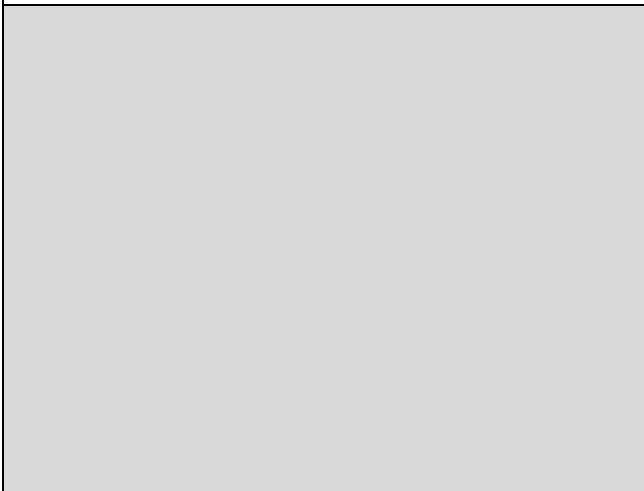
802.11ax (HE80) / 6990MHz (Lower edge)
Threshold Level (TL) = -59.75dBm

802.11ax (HE80) / CH215 (Lower edge)
Test result is pass due to no transmission occur.



802.11ax (HE80) / 6990MHz (Lower edge)
Threshold Level (TL) = -60.75dBm

802.11ax (HE80) / CH215 (Lower edge)
Transmit when the interferer is 1dB lower.



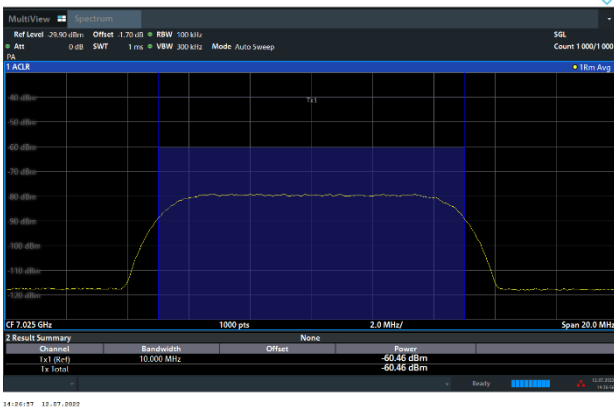


Contention Based Protocol Result Plots on U-NII 8 (AWGN Interference)

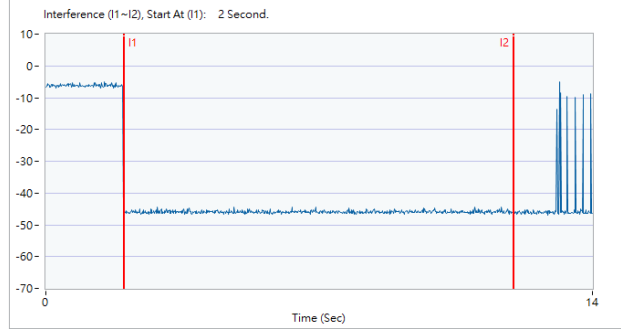
802.11ax (HE80) / 7025MHz (Middle)
Threshold Level (TL) = -60.46dBm

802.11ax (HE80) / CH215 (Middle)

Test result is pass due to no transmission occur.



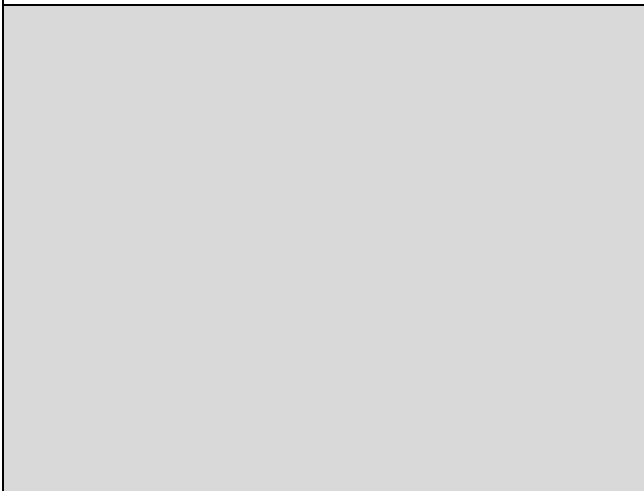
Contention Based Protocol - UNII-8, EUT-7025(BW80), SG-7025



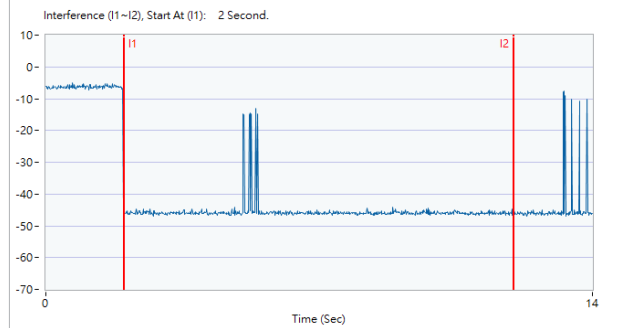
802.11ax (HE80) / 7025MHz (Middle)
Threshold Level (TL) = -61.46dBm

802.11ax (HE80) / CH215 (Middle)

Transmit when the interferer is 1dB lower.



Contention Based Protocol - UNII-8, EUT-7025(BW80), SG-7025(-1)

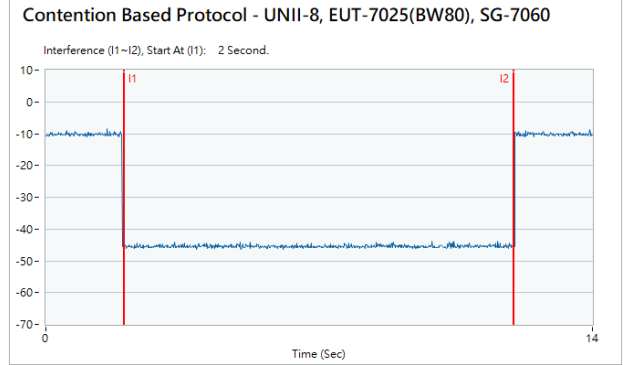
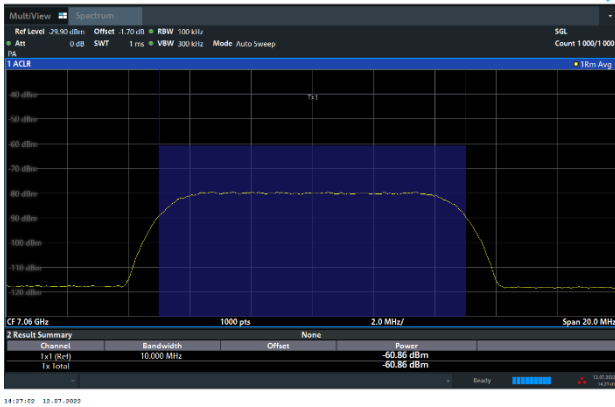




Contention Based Protocol Result Plots on U-NII 8 (AWGN Interference)

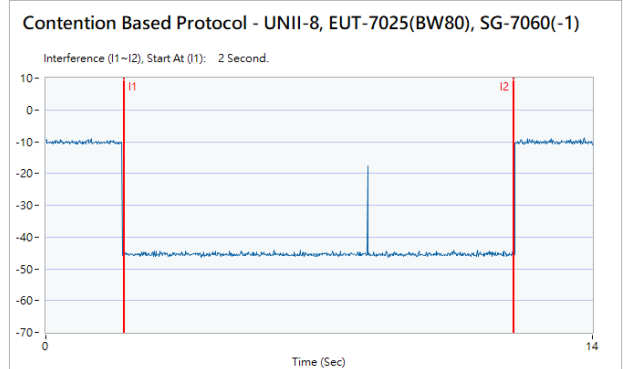
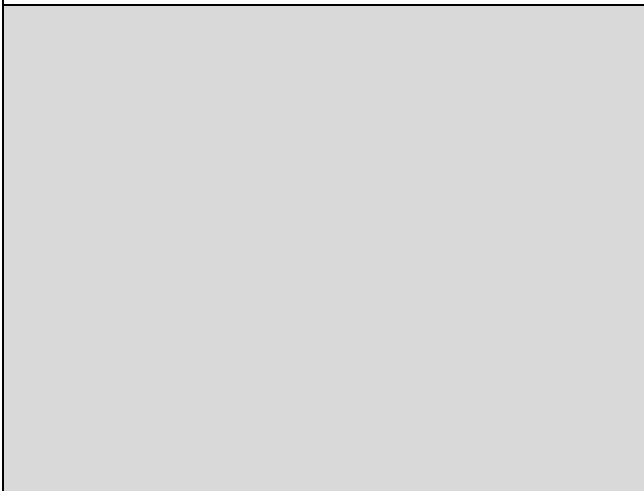
802.11ax (HE80) / 7060MHz (Upper edge)
Threshold Level (TL) = -60.86dBm

802.11ax (HE80) / CH215 (Upper edge)
Test result is pass due to no transmission occur.



802.11ax (HE80) / 7060MHz (Upper edge)
Threshold Level (TL) = -61.86dBm

802.11ax (HE80) / CH215 (Upper edge)
Transmit when the interferer is 1dB lower.





3.6 Unwanted Emissions Measurement

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

3.6.1 Limit of Unwanted Emissions

- (1) For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

EIRP (dBm)	Field Strength at 3m (dBµV/m)
- 27 (RMS)	68.3
- 7 (Peak)	88.3

According 987594 D02 U-NII 6GHz EMC Measurement v01 section G:

Unwanted emissions outside of restricted bands are measured with a RMS detector.

In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit

- (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

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

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

3.6.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.



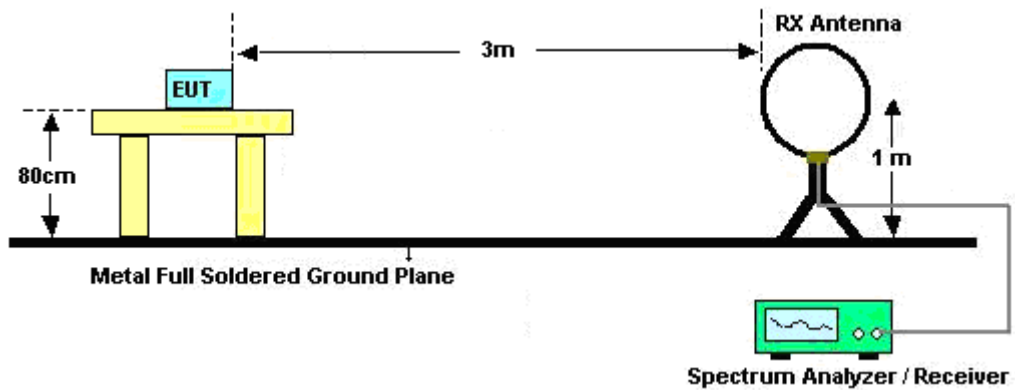
3.6.3 Test Procedures

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 is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is 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 is 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.

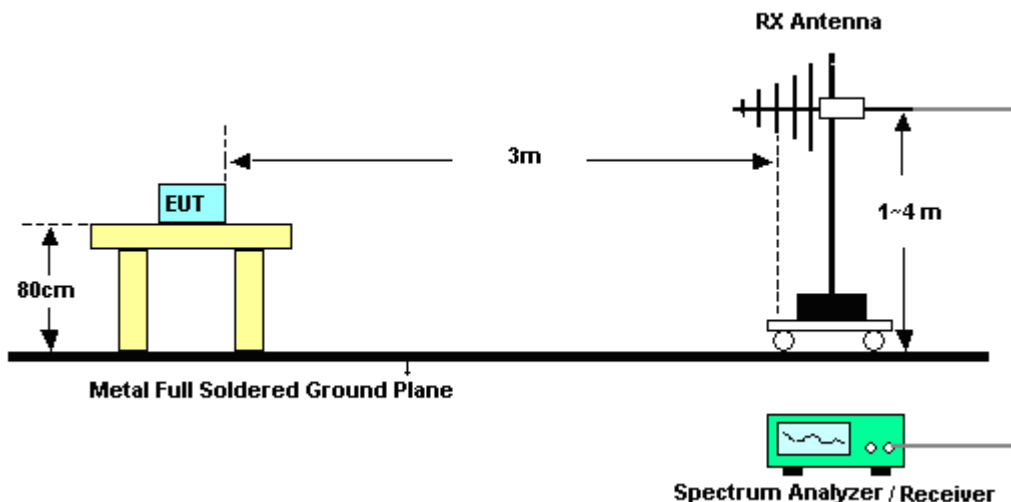
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-“.
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-“.

3.6.4 Test Setup

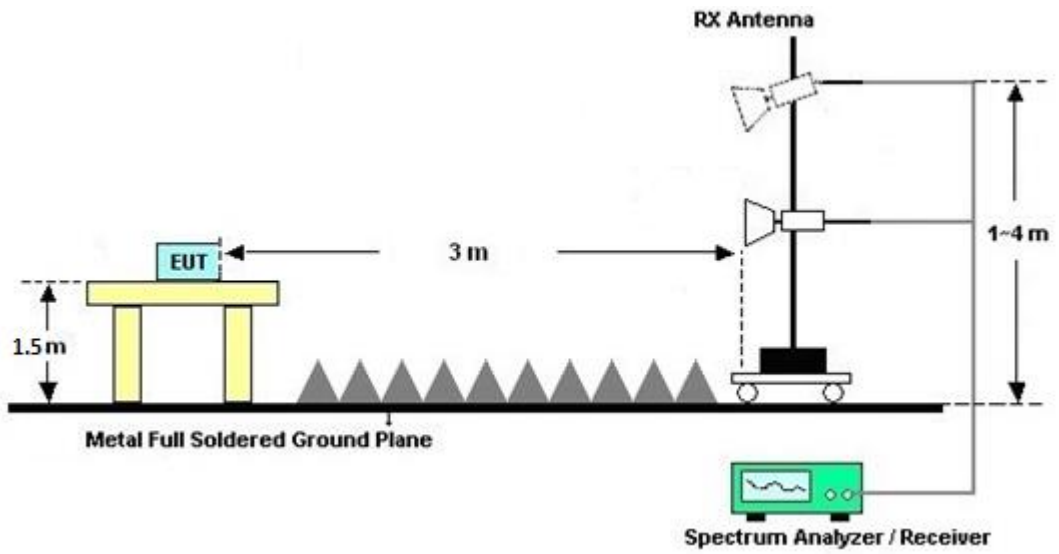
For radiated emissions below 30MHz



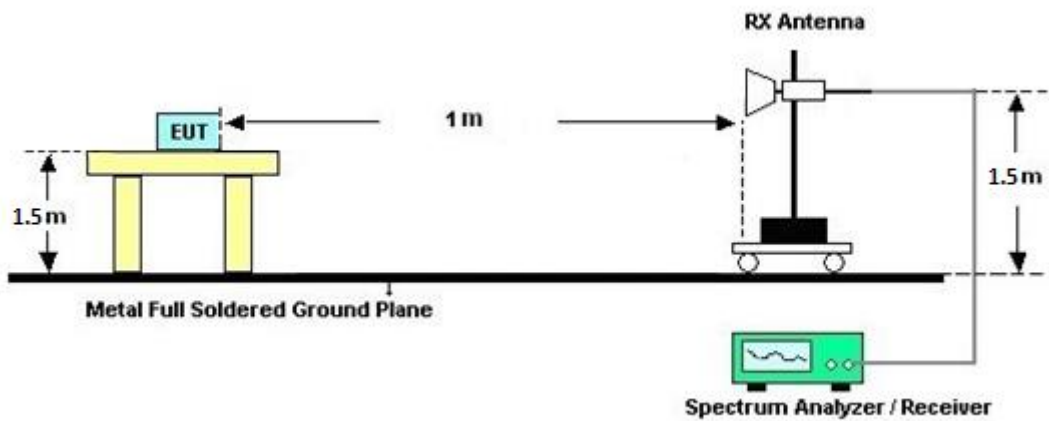
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz





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

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

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.6.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.6.7 Duty Cycle

Please refer to Appendix E.

3.6.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix C and D.



3.7 AC Conducted Emission Measurement

3.7.1 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 (dB μ V)	
	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.

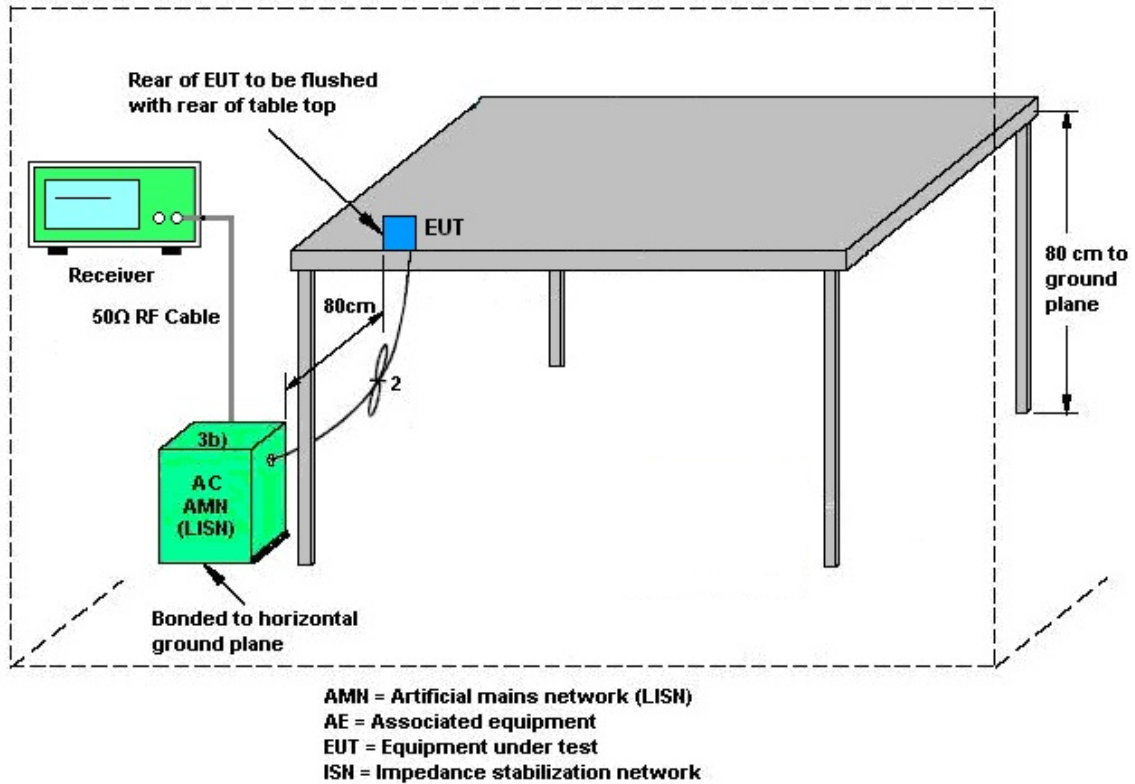
3.7.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.7.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is 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 Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.7.4 Test Setup



3.7.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.8 Antenna Requirements

3.8.1 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.8.2 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For power measurements on IEEE 802.11 devices,

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

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

G_{ANT} is set equal to the gain of the antenna having the highest gain.

For PSD measurements, the directional gain calculation follows F)2)f)ii) of KDB 662911 D01 v02r01.

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

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.

As minimum $N_{SS}=1$ is supported by EUT, the formula can be simplified as:

Directional gain = $10 \cdot \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi

Where G_1, G_2, \dots, G_N denote single antenna gain.

For example: If a device has two antenna, $G_{ANT1}= 3.6$ dBi; $G_{ANT2}=4.2$ dBi

Directional gain of power measurement = $\max(3.6, 4.2) + 0 = 4.2$ dBi

Directional gain of PSD measurement = $10 \cdot \log[(10^{3.6/20} + 10^{4.2/20})^2 / 2] = 6.92$ dBi



The directional gain of EUT is listed in the following table.

	Ant. 0	Ant. 1	DG	DG
			for	for
	(dBi)	(dBi)	Power	PSD
			(dBi)	(dBi)
5925 MHz ~ 6425 MHz	6.64	6.59	6.64	9.63
6425 MHz ~ 6525 MHz	5.19	5.26	5.26	8.24
6525 MHz ~ 6875 MHz	5.09	5.18	5.18	8.15
6875 MHz ~ 7125 MHz	5.28	4.04	5.28	7.69

Calculation example:

For the band 5925~6425MHz, the DG for PSD is derived from formula is

$$10 \times \log \left\{ \left[10^{(6.64\text{dBi} / 20)} + 10^{(6.59\text{dBi} / 20)} \right]^2 / 2 \right\}$$

= 9.63 dBi



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 07, 2022	May 31, 2022~ Jun. 20, 2022	Jan. 06, 2023	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 09, 2021	May 31, 2022~ Jun. 20, 2022	Oct. 08, 2022	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz ~ 18GHz	Mar. 10, 2022	May 31, 2022~ Jun. 20, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA9170	00993	18GHz~40GHz	Nov. 30, 2021	May 31, 2022~ Jun. 20, 2022	Nov. 29, 2022	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 10, 2021	May 31, 2022~ Jun. 20, 2022	Dec. 09, 2022	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 10, 2021	May 31, 2022~ Jun. 20, 2022	Nov. 09, 2022	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-30 3	17100018000 55007	1GHz~18GHz	Jun. 16, 2021	May 31, 2022~ Jun. 14, 2022	Jun. 15, 2022	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-30 3	17100018000 55007	1GHz~18GHz	Jun. 15, 2022	Jun 15, 2022~ Jun. 20, 2022	Jun. 14, 2023	Radiation (03CH11-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 22, 2021	May 31, 2022~ Jun. 20, 2022	Jun. 21, 2022	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 15, 2021	May 31, 2022~ Jun. 20, 2022	Oct. 14, 2022	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY55420170	20MHz~8.4GHz	Jul. 15, 2021	May 31, 2022~ Jun. 20, 2022	Jul. 14, 2022	Radiation (03CH11-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	May 31, 2022~ Jun. 20, 2022	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	May 31, 2022~ Jun. 20, 2022	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	May 31, 2022~ Jun. 20, 2022	N/A	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001053	N/A	N/A	May 31, 2022~ Jun. 20, 2022	N/A	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz-40GHz	Mar. 10, 2022	May 31, 2022~ Jun. 20, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz-30MHz	Mar. 10, 2022	May 31, 2022~ Jun. 20, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	30MHz-18GHz	Mar. 10, 2022	May 31, 2022~ Jun. 20, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	811852/4	30MHz-18GHz	Mar. 10, 2022	May 31, 2022~ Jun. 20, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-15 30-8000-40SS	SN11	1.53G Low Pass	Sep. 13, 2021	May 31, 2022~ Jun. 20, 2022	Sep. 12, 2022	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-2700 -3000-18000-6 0SS	SN3	3GHz High Pass Filter	Sep. 13, 2021	May 31, 2022~ Jun. 20, 2022	Sep. 12, 2022	Radiation (03CH11-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000- 40SS	SN3	6.75GHz High Pass Filter	Sep. 13, 2021	May 31, 2022~ Jun. 20, 2022	Sep. 12, 2022	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-900- 1000-15000-60 SS	SN12	1GHz High Pass Filter	Nov. 04, 2021	May 31, 2022~ Jun. 20, 2022	Nov. 03, 2022	Radiation (03CH11-HY)
Hygrometer	TECEPEL	DTM-303B	TP140325	N/A	Nov. 26, 2021	May 31, 2022~ Jun. 20, 2022	Nov. 25, 2022	Radiation (03CH11-HY)
Hygrometer	TECEPEL	DTM-303B	TP200880	N/A	Sep. 30, 2021	May 31, 2022~ Jun. 20, 2022	Sep. 29, 2022	Radiation (03CH11-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 17, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	Jun. 17, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	Jun. 17, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	Jun. 17, 2022	Dec. 02, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2021	Jun. 17, 2022	Nov. 15, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Jun. 17, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-FN	00691	N/A	Jul. 28, 2021	Jun. 17, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	Jun. 17, 2022	Dec. 29, 2022	Conduction (CO05-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Jun. 14, 2022~ Jun. 29, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Meter	DARE	RPR3006W #010	RPR6W-2101002(NO:123)	10MHz~8GHz	Jan. 13, 2022	Jun. 14, 2022~ Jun. 29, 2022	Jan. 12, 2023	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Jun. 14, 2022~ Jun. 29, 2022	Aug. 29, 2022	Conducted (TH05-HY)
Switch Control Mainframe	E-IUSTRUMENT	ETF-1405-0	EC1900067 (BOX7)	N/A	Aug. 12, 2021	Jun. 14, 2022~ Jun. 29, 2022	Aug. 11, 2022	Conducted (TH05-HY)
Signal Generator (Interferer)	Rohde & Schwarz	SMW200A	109425	100kHz~7.5GHz	Jan. 13, 2022	Jun. 11, 2022~ Jun. 12, 2022	Jan. 12, 2023	CBP (DF02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV3044	101104	10Hz~44GHz	Feb. 16, 2022	Jun. 11, 2022~ Jun. 12, 2022	Feb. 15, 2023	CBP (DF02-HY)
Power Divider	Woken	2Way Divider	DCMB1KW7A1	0.5GHz-18GHz	Calibration from System	Jun. 11, 2022~ Jun. 12, 2022	Calibration from System	CBP (DF02-HY)
Power Divider	Woken	2Way Divider	DCMB1KW7A2	0.5GHz-18GHz	Calibration from System	Jun. 11, 2022~ Jun. 12, 2022	Calibration from System	CBP (DF02-HY)
Coupler	MVE	MVE4816	A400014	0.5-18GHz	Calibration from System	Jun. 11, 2022~ Jun. 12, 2022	Calibration from System	CBP (DF02-HY)
Power Divider	Woken	3Way SMA Power Divder Rated to 20W	STI08-0010(#2)	2GHz-8GHz	Calibration from System	Jun. 11, 2022~ Jun. 12, 2022	Calibration from System	CBP (DF02-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.1 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.8 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.4 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.9 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Junyu Jhou	Temperature:	21~25	°C
Test Date:	2022/6/14~2022/6/29	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

U-NII-5 single antenna								
Mod.	Data Rate	NTX	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
				Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	5955	17.63	-	26.40	-	
11a	6Mbps	1	6195	17.43	-	26.50	-	
11a	6Mbps	1	6415	17.58	-	26.15	-	

U-NII-5 MIMO								
Mod.	Data Rate	NTX	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
				Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	2	5955	17.63	17.08	26.95	25.10	
11a	6Mbps	2	6195	17.48	16.98	26.70	24.80	
11a	6Mbps	2	6415	17.63	17.08	28.90	25.30	

TEST RESULTS DATA
EIRP Power Table

FCC U-NII-5 single antenna												
Mod.	Data Rate	NTX	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
				Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	5955	1.90	-	-	6.64	6.59	8.54	-	24.00	Pass
11a	6Mbps	1	6195	1.90	-		6.64	6.59	8.54	-	24.00	Pass
11a	6Mbps	1	6415	1.90	-		6.64	6.59	8.54	-	24.00	Pass

FCC U-NII-5 MIMO												
Mod.	Data Rate	NTX	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	
				Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	5955	-4.50	-3.80	-1.13	6.64		5.51	24.00	Pass	
11a	6Mbps	2	6195	-4.10	-4.50	-1.29	6.64		5.35	24.00	Pass	
11a	6Mbps	2	6415	-4.00	-4.50	-1.23	6.64		5.41	24.00	Pass	

TEST RESULTS DATA
EIRP Power Spectral Density

FCC U-NII-5 single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm)	Pass /Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	001	5955	-7.99	-	-	6.64	6.59	-1.35	-	-1.00	Pass
11a	6Mbps	1	049	6195	-7.89	-		6.64	6.59	-1.25	-	-1.00	Pass
11a	6Mbps	1	093	6415	-7.96	-		6.64	6.59	-1.32	-	-1.00	Pass

FCC U-NII-5 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail	
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	001	5955	-		-10.98	9.63	-1.35	-1.00	Pass		
11a	6Mbps	2	049	6195			-11.09	9.63	-1.47	-1.00	Pass		
11a	6Mbps	2	093	6415			-10.89	9.63	-1.26	-1.00	Pass		

TEST RESULTS DATA
26dB and 99% OBW

U-NII-6 single antenna								
Mod.	Data Rate	NTX	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
				Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	6435	17.43	-	26.50	-	
11a	6Mbps	1	6475	17.63	-	28.10	-	
11a	6Mbps	1	6515	17.58	-	28.05	-	

U-NII-6 MIMO								
Mod.	Data Rate	NTX	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
				Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	2	6435	17.43	17.13	27.15	24.90	
11a	6Mbps	2	6475	17.78	17.08	27.90	25.50	
11a	6Mbps	2	6515	17.68	17.08	27.25	25.10	

TEST RESULTS DATA
EIRP Power Table

FCC U-NII-6 single antenna												
Mod.	Data Rate	NTX	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
				Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	6435	2.80	-	-	5.19	5.26	7.99	-	24.00	Pass
11a	6Mbps	1	6475	2.80	-		5.19	5.26	7.99	-	24.00	Pass
11a	6Mbps	1	6515	2.70	-		5.19	5.26	7.89	-	24.00	Pass

FCC U-NII-6 MIMO												
Mod.	Data Rate	NTX	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	
				Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	6435	-3.50	-4.10	-0.78	5.26		4.48	24.00	Pass	
11a	6Mbps	2	6475	-3.40	-3.70	-0.54	5.26		4.72	24.00	Pass	
11a	6Mbps	2	6515	-3.50	-3.50	-0.49	5.26		4.77	24.00	Pass	

TEST RESULTS DATA
EIRP Power Spectral Density

FCC U-NII-6 single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm)	Pass /Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	097	6435	-7.11	-	-	5.19	5.26	-1.92	-	-1.00	Pass
11a	6Mbps	1	105	6475	-7.16	-		5.19	5.26	-1.97	-	-1.00	Pass
11a	6Mbps	1	113	6515	-7.19	-		5.19	5.26	-2.00	-	-1.00	Pass

FCC U-NII-6 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail	
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	097	6435	-			-10.40	8.24	-2.16	-1.00	Pass	
11a	6Mbps	2	105	6475				-10.12	8.24	-1.89	-1.00	Pass	
11a	6Mbps	2	113	6515				-10.14	8.24	-1.90	-1.00	Pass	

TEST RESULTS DATA
26dB and 99% OBW

U-NII-7 single antenna								
Mod.	Data Rate	NTX	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
				Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	6535	17.58	-	26.15	-	
11a	6Mbps	1	6695	17.58	-	28.00	-	
11a	6Mbps	1	6855	17.53	-	27.15	-	

U-NII-7 MIMO								
Mod.	Data Rate	NTX	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
				Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	2	6535	17.93	17.08	27.25	25.00	
11a	6Mbps	2	6695	17.58	17.13	28.05	25.75	
11a	6Mbps	2	6855	17.53	17.13	26.15	24.90	

Band VII straddle channel single antenna								
Mod.	Data Rate	NTX	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
				Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	6875	17.43	-	27.00	-	

Band VII straddle channel MIMO								
Mod.	Data Rate	NTX	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
				Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	2	6875	17.38	17.03	26.50	25.20	

TEST RESULTS DATA
EIRP Power Table

FCC U-NII-7 single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	117	6535	2.60	-	-	5.09	5.18	7.69	-	24.00	Pass
11a	6Mbps	1	149	6695	2.70	-		5.09	5.18	7.79	-	24.00	Pass
11a	6Mbps	1	181	6855	2.80	-		5.09	5.18	7.89	-	24.00	Pass

FCC U-NII-7 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	117	6535	-3.50	-3.50	-0.49	5.18		4.69	24.00	Pass	
11a	6Mbps	2	149	6695	-3.40	-3.40	-0.39	5.18		4.79	24.00	Pass	
11a	6Mbps	2	181	6855	-3.40	-3.40	-0.39	5.18		4.79	24.00	Pass	

FCC Band VII straddle channel single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	185	6875	2.80	-	-	5.09	5.18	7.89	-	24.00	Pass

FCC Band VII straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	185	6875	-3.40	-3.30	-0.34	5.18		4.84	24.00	Pass	

TEST RESULTS DATA
EIRP Power Spectral Density

FCC U-NII-7 single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm)	Pass /Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	117	6535	-7.17	-	-	5.09	5.18	-2.08	-	-1.00	Pass
11a	6Mbps	1	149	6695	-7.23	-		5.09	5.18	-2.14	-	-1.00	Pass
11a	6Mbps	1	181	6855	-7.25	-		5.09	5.18	-2.16	-	-1.00	Pass

FCC U-NII-7 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail	
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	117	6535	-			8.15	-2.05	-1.00	Pass		
11a	6Mbps	2	149	6695				-10.14	8.15	-1.99	-1.00	Pass	
11a	6Mbps	2	181	6855				-10.17	8.15	-2.03	-1.00	Pass	

FCC Band VII straddle channel single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm)	Pass /Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	185	6875	-7.35	-	-	5.09	5.18	-2.26	-	-1.00	Pass

FCC Band VII straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail	
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	185	6875	-			8.15	-2.17	-1.00	Pass		

TEST RESULTS DATA
26dB EBW and 99% OBW

U-NII-8 single antenna									
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
					Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	189	6895	17.28	-	26.55	-	
11a	6Mbps	1	209	6995	17.13	-	26.65	-	
11a	6Mbps	1	229	7095	17.33	-	27.35	-	
11a	6Mbps	1	233	7115	17.33	-	27.40	-	

U-NII-8 MIMO									
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
					Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	2	189	6895	17.43	17.03	27.30	24.55	
11a	6Mbps	2	209	6995	17.23	16.98	25.85	25.10	
11a	6Mbps	2	229	7095	17.28	16.98	26.80	24.40	
11a	6Mbps	2	233	7115	17.53	16.98	27.60	25.05	

TEST RESULTS DATA
EIRP Power Table

FCC U-NII-8 single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	189	6895	2.60	-	-	5.28	4.04	7.88	-	24.00	Pass
11a	6Mbps	1	209	6995	2.80	-		5.28	4.04	8.08	-	24.00	Pass
11a	6Mbps	1	229	7095	3.30	-		5.28	4.04	8.58	-	24.00	Pass
11a	6Mbps	1	233	7115	1.80	-		5.28	4.04	7.08	-	24.00	Pass

FCC U-NII-8 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	189	6895	-3.80	-4.60	-1.17	5.28		4.11	24.00	Pass	
11a	6Mbps	2	209	6995	-3.20	-3.40	-0.29	5.28		4.99	24.00	Pass	
11a	6Mbps	2	229	7095	-2.80	-2.40	0.41	5.28		5.69	24.00	Pass	
11a	6Mbps	2	233	7115	-3.00	-3.70	-0.33	5.28		4.95	24.00	Pass	

TEST RESULTS DATA
EIRP Power Spectral Density

FCC U-NII-8 single antenna													
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm)	Pass /Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	189	6895	-7.35	-	-	5.28	4.04	-2.07	-	-1.00	Pass
11a	6Mbps	1	209	6995	-7.25	-	-	5.28	4.04	-1.97	-	-1.00	Pass
11a	6Mbps	1	229	7095	-7.38	-	-	5.28	4.04	-2.10	-	-1.00	Pass
11a	6Mbps	1	233	7115	-8.47	-	-	5.28	4.04	-3.19	-	-1.00	Pass

FCC U-NII-8 MIMO													
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail	
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM			
11a	6Mbps	2	189	6895	-	-	-10.50	7.69	-2.81	-1.00	Pass		
11a	6Mbps	2	209	6995	-	-	-10.16	7.69	-2.47	-1.00	Pass		
11a	6Mbps	2	229	7095	-	-	-10.42	7.69	-2.73	-1.00	Pass		
11a	6Mbps	2	233	7115	-	-	-10.10	7.69	-2.41	-1.00	Pass		

TEST RESULTS DATA
26dB and 99% OBW

U-NII-5 MIMO									
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
					Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	2	5955	Full	19.13	19.08	29.74	22.85	
HE20	MCS0	2	6195	Full	19.13	19.08	23.50	22.70	
HE20	MCS0	2	6415	Full	19.13	19.08	26.60	22.75	
HE40	MCS0	2	5965	Full	37.76	37.56	39.60	39.51	
HE40	MCS0	2	6205	Full	37.36	37.66	39.51	39.42	
HE40	MCS0	2	6405	Full	37.76	37.56	39.51	39.15	
HE80	MCS0	2	5985	Full	76.00	76.72	80.48	80.64	
HE80	MCS0	2	6225	Full	76.36	77.08	80.48	80.80	
HE80	MCS0	2	6385	Full	77.08	76.72	80.80	80.80	

TEST RESULTS DATA
EIRP Power Table

FCC U-NII-5 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	001	5955	Full	-3.30	-3.30	-0.29	6.64		6.35	24.00	Pass
HE20	MCS0	2	001	5955	26/0	-12.00	-12.30	-9.14	6.64		-2.50	24.00	Pass
HE20	MCS0	2	001	5955	52/37	-9.20	-9.40	-6.29	6.64		0.35	24.00	Pass
HE20	MCS0	2	001	5955	106/53	-6.70	-6.80	-3.74	6.64		2.90	24.00	Pass
HE20	MCS0	2	049	6195	Full	-3.60	-3.80	-0.69	6.64		5.95	24.00	Pass
HE20	MCS0	2	049	6195	26/4	-12.10	-11.20	-8.62	6.64		-1.98	24.00	Pass
HE20	MCS0	2	049	6195	52/39	-9.40	-10.00	-6.68	6.64		-0.04	24.00	Pass
HE20	MCS0	2	049	6195	106/53	-6.50	-6.70	-3.59	6.64		3.05	24.00	Pass
HE20	MCS0	2	093	6415	Full	-3.30	-4.10	-0.67	6.64		5.97	24.00	Pass
HE20	MCS0	2	093	6415	26/8	-12.50	-13.30	-9.87	6.64		-3.23	24.00	Pass
HE20	MCS0	2	093	6415	52/40	-9.10	-11.00	-6.94	6.64		-0.30	24.00	Pass
HE20	MCS0	2	093	6415	106/54	-6.20	-7.20	-3.66	6.64		2.98	24.00	Pass
HE40	MCS0	2	003	5965	Full	-2.30	-1.20	1.30	6.64		7.94	24.00	Pass
HE40	MCS0	2	003	5965	242/61	-4.10	-2.50	-0.22	6.64		6.42	24.00	Pass
HE40	MCS0	2	051	6205	Full	-1.50	-1.40	1.56	6.64		8.20	24.00	Pass
HE40	MCS0	2	051	6205	242/61	-3.40	-3.20	-0.29	6.64		6.35	24.00	Pass
HE40	MCS0	2	091	6405	Full	-2.00	-1.60	1.21	6.64		7.85	24.00	Pass
HE40	MCS0	2	091	6405	242/62	-3.30	-3.20	-0.24	6.64		6.40	24.00	Pass
HE80	MCS0	2	007	5985	Full	1.00	1.70	4.37	6.64		11.01	24.00	Pass
HE80	MCS0	2	007	5985	484/65	-1.30	-0.30	2.24	6.64		8.88	24.00	Pass
HE80	MCS0	2	055	6225	Full	1.40	1.30	4.36	6.64		11.00	24.00	Pass
HE80	MCS0	2	055	6225	484/65	-0.90	-1.10	2.01	6.64		8.65	24.00	Pass
HE80	MCS0	2	087	6385	Full	0.70	1.00	3.86	6.64		10.50	24.00	Pass
HE80	MCS0	2	087	6385	484/66	-1.90	-0.90	1.64	6.64		8.28	24.00	Pass

TEST RESULTS DATA
EIRP Power Spectral Density

FCC U-NII-5 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	001	5955	Full			-10.77	9.63		-1.15	-1.00	Pass
HE20	MCS0	2	001	5955	26/0			-11.02	9.63		-1.39	-1.00	Pass
HE20	MCS0	2	001	5955	52/37			-11.04	9.63		-1.41	-1.00	Pass
HE20	MCS0	2	001	5955	106/53			-11.33	9.63		-1.71	-1.00	Pass
HE20	MCS0	2	049	6195	Full			-11.08	9.63		-1.45	-1.00	Pass
HE20	MCS0	2	049	6195	26/4			-11.23	9.63		-1.60	-1.00	Pass
HE20	MCS0	2	049	6195	52/39			-11.29	9.63		-1.67	-1.00	Pass
HE20	MCS0	2	049	6195	106/53			-11.13	9.63		-1.50	-1.00	Pass
HE20	MCS0	2	093	6415	Full			-10.97	9.63		-1.34	-1.00	Pass
HE20	MCS0	2	093	6415	26/8			-11.30	9.63		-1.67	-1.00	Pass
HE20	MCS0	2	093	6415	52/40			-11.16	9.63		-1.53	-1.00	Pass
HE20	MCS0	2	093	6415	106/54			-11.36	9.63		-1.74	-1.00	Pass
HE40	MCS0	2	003	5965	Full			-10.67	9.63		-1.04	-1.00	Pass
HE40	MCS0	2	003	5965	242/61			-10.97	9.63		-1.35	-1.00	Pass
HE40	MCS0	2	051	6205	Full			-10.87	9.63		-1.25	-1.00	Pass
HE40	MCS0	2	051	6205	242/61			-11.27	9.63		-1.65	-1.00	Pass
HE40	MCS0	2	091	6405	Full			-10.78	9.63		-1.15	-1.00	Pass
HE40	MCS0	2	091	6405	242/62			-10.83	9.63		-1.20	-1.00	Pass
HE80	MCS0	2	007	5985	Full			-10.86	9.63		-1.23	-1.00	Pass
HE80	MCS0	2	007	5985	484/65			-11.51	9.63		-1.88	-1.00	Pass
HE80	MCS0	2	055	6225	Full			-10.78	9.63		-1.15	-1.00	Pass
HE80	MCS0	2	055	6225	484/65			-11.20	9.63		-1.58	-1.00	Pass
HE80	MCS0	2	087	6385	Full			-10.93	9.63		-1.30	-1.00	Pass
HE80	MCS0	2	087	6385	484/66			-11.72	9.63		-2.10	-1.00	Pass

TEST RESULTS DATA
26dB and 99% OBW

U-NII-6 MIMO									
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
					Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	2	6435	Full	19.13	19.13	23.95	26.70	
HE20	MCS0	2	6475	Full	19.18	19.13	25.60	23.20	
HE20	MCS0	2	6515	Full	19.13	19.13	23.55	23.30	
HE40	MCS0	2	6445	Full	37.46	37.66	39.42	39.60	
HE40	MCS0	2	6485	Full	37.46	37.56	39.60	39.42	
HE80	MCS0	2	6465	Full	77.20	76.96	81.12	80.64	

Band VI straddle channel MIMO									
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
					Ant 0	Ant 1	Ant 0	Ant 1	
HE40	MCS0	2	6525	Full	37.56	37.66	39.42	39.51	
HE80	MCS0	2	6545	Full	77.08	76.36	80.80	80.64	

TEST RESULTS DATA
EIRP Power Table

FCC U-NII-6 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	097	6435	Full	-2.80	-3.40	-0.08	5.26		5.18	24.00	Pass
HE20	MCS0	2	097	6435	26/0	-12.10	-12.70	-9.38	5.26		-4.12	24.00	Pass
HE20	MCS0	2	097	6435	52/37	-8.90	-9.60	-6.23	5.26		-0.97	24.00	Pass
HE20	MCS0	2	097	6435	106/53	-5.70	-6.30	-2.98	5.26		2.28	24.00	Pass
HE20	MCS0	2	105	6475	Full	-3.20	-3.50	-0.34	5.26		4.92	24.00	Pass
HE20	MCS0	2	105	6475	26/4	-11.70	-11.60	-8.64	5.26		-3.38	24.00	Pass
HE20	MCS0	2	105	6475	52/39	-9.10	-9.50	-6.29	5.26		-1.03	24.00	Pass
HE20	MCS0	2	105	6475	106/54	-6.10	-6.60	-3.33	5.26		1.93	24.00	Pass
HE20	MCS0	2	113	6515	Full	-2.80	-2.90	0.16	5.26		5.42	24.00	Pass
HE20	MCS0	2	113	6515	26/8	-12.40	-11.60	-8.97	5.26		-3.71	24.00	Pass
HE20	MCS0	2	113	6515	52/40	-9.20	-8.40	-5.77	5.26		-0.51	24.00	Pass
HE20	MCS0	2	113	6515	106/54	-6.10	-5.50	-2.78	5.26		2.48	24.00	Pass
HE40	MCS0	2	099	6445	Full	-0.60	-0.80	2.31	5.26		7.57	24.00	Pass
HE40	MCS0	2	099	6445	242/61	-2.40	-2.10	0.76	5.26		6.02	24.00	Pass
HE40	MCS0	2	107	6485	Full	-0.80	-0.40	2.41	5.26		7.67	24.00	Pass
HE40	MCS0	2	107	6485	242/62	-2.40	-2.30	0.66	5.26		5.92	24.00	Pass
HE80	MCS0	2	103	6465	Full	1.80	2.00	4.91	5.26		10.17	24.00	Pass
HE80	MCS0	2	103	6465	484/65	0.70	0.60	3.66	5.26		8.92	24.00	Pass

FCC U-NII-6 straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE40	MCS0	2	115	6525	Full	-0.80	-0.70	2.26	5.26		7.52	24.00	Pass
HE40	MCS0	2	115	6525	242/62	-2.30	-2.00	0.86	5.26		6.12	24.00	Pass
HE80	MCS0	2	119	6545	Full	2.20	2.10	5.16	5.26		10.42	24.00	Pass
HE80	MCS0	2	119	6545	484/66	0.50	0.40	3.46	5.26		8.72	24.00	Pass

TEST RESULTS DATA
EIRP Power Spectral Density

U-NII-6 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	097	6435	Full			-10.35	8.24	-2.11	-1.00	Pass	
HE20	MCS0	2	097	6435	26/0			-10.51	8.24	-2.27	-1.00	Pass	
HE20	MCS0	2	097	6435	52/37			-10.82	8.24	-2.58	-1.00	Pass	
HE20	MCS0	2	097	6435	106/53			-10.49	8.24	-2.25	-1.00	Pass	
HE20	MCS0	2	105	6475	Full			-10.39	8.24	-2.15	-1.00	Pass	
HE20	MCS0	2	105	6475	26/4			-10.74	8.24	-2.51	-1.00	Pass	
HE20	MCS0	2	105	6475	52/39			-10.61	8.24	-2.38	-1.00	Pass	
HE20	MCS0	2	105	6475	106/54			-10.64	8.24	-2.41	-1.00	Pass	
HE20	MCS0	2	113	6515	Full			-10.06	8.24	-1.83	-1.00	Pass	
HE20	MCS0	2	113	6515	26/8			-10.26	8.24	-2.02	-1.00	Pass	
HE20	MCS0	2	113	6515	52/40			-10.38	8.24	-2.14	-1.00	Pass	
HE20	MCS0	2	113	6515	106/54			-10.38	8.24	-2.14	-1.00	Pass	
HE40	MCS0	2	099	6445	Full			-10.20	8.24	-1.96	-1.00	Pass	
HE40	MCS0	2	099	6445	242/61			-10.22	8.24	-1.98	-1.00	Pass	
HE40	MCS0	2	107	6485	Full			-10.17	8.24	-1.93	-1.00	Pass	
HE40	MCS0	2	107	6485	242/62			-10.37	8.24	-2.13	-1.00	Pass	
HE80	MCS0	2	103	6465	Full			-10.21	8.24	-1.97	-1.00	Pass	
HE80	MCS0	2	103	6465	484/65			-10.27	8.24	-2.03	-1.00	Pass	

FCC Band VI straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE40	MCS0	2	115	6525	Full			-10.16	8.24	-1.92	-1.00	Pass	
HE40	MCS0	2	115	6525	242/62			-10.29	8.24	-2.06	-1.00	Pass	
HE80	MCS0	2	119	6545	Full			-10.12	8.24	-1.89	-1.00	Pass	
HE80	MCS0	2	119	6545	484/66			-10.22	8.24	-1.99	-1.00	Pass	

TEST RESULTS DATA
26dB and 99% OBW

U-NII-7 MIMO									
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
					Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	2	6535	Full	19.13	19.08	24.70	23.20	
HE20	MCS0	2	6695	Full	19.18	19.13	25.25	22.60	
HE20	MCS0	2	6855	Full	19.18	19.08	22.40	23.35	
HE40	MCS0	2	6565	Full	37.36	37.56	39.51	39.42	
HE40	MCS0	2	6685	Full	37.76	37.56	39.69	39.42	
HE40	MCS0	2	6845	Full	37.76	37.66	39.51	39.51	
HE80	MCS0	2	6625	Full	77.08	76.60	80.80	80.64	
HE80	MCS0	2	6705	Full	77.08	76.84	80.96	80.64	
HE80	MCS0	2	6785	Full	76.84	76.84	80.96	80.64	

Band VII straddle channel MIMO									
Mod.	Data Rate	NTX	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
					Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	2	6875	Full	19.08	19.08	22.90	22.15	
HE40	MCS0	2	6885	Full	37.56	37.66	39.51	39.42	
HE80	MCS0	2	6865	Full	76.84	76.84	80.96	80.80	

TEST RESULTS DATA
EIRP Power Table

FCC U-NII-7 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	117	6535	Full	-2.50	-2.80	0.36	5.18		5.54	24.00	Pass
HE20	MCS0	2	117	6535	26/0	-11.90	-12.30	-9.09	5.18		-3.91	24.00	Pass
HE20	MCS0	2	117	6535	52/37	-8.70	-8.90	-5.79	5.18		-0.61	24.00	Pass
HE20	MCS0	2	117	6535	106/53	-5.60	-6.00	-2.79	5.18		2.39	24.00	Pass
HE20	MCS0	2	149	6695	Full	-2.80	-2.80	0.21	5.18		5.39	24.00	Pass
HE20	MCS0	2	149	6695	26/4	-10.70	-12.10	-8.33	5.18		-3.15	24.00	Pass
HE20	MCS0	2	149	6695	52/38	-9.00	-9.30	-6.14	5.18		-0.96	24.00	Pass
HE20	MCS0	2	149	6695	106/53	-5.80	-6.40	-3.08	5.18		2.10	24.00	Pass
HE20	MCS0	2	181	6855	Full	-2.80	-2.80	0.21	5.18		5.39	24.00	Pass
HE20	MCS0	2	181	6855	26/8	-13.00	-11.90	-9.40	5.18		-4.22	24.00	Pass
HE20	MCS0	2	181	6855	52/40	-9.20	-8.60	-5.88	5.18		-0.70	24.00	Pass
HE20	MCS0	2	181	6855	106/54	-6.50	-5.60	-3.02	5.18		2.16	24.00	Pass
HE40	MCS0	2	123	6565	Full	-0.50	-0.90	2.31	5.18		7.49	24.00	Pass
HE40	MCS0	2	123	6565	242/61	-2.30	-2.40	0.66	5.18		5.84	24.00	Pass
HE40	MCS0	2	147	6685	Full	-1.50	-0.70	1.93	5.18		7.11	24.00	Pass
HE40	MCS0	2	147	6685	242/61	-2.70	-2.30	0.51	5.18		5.69	24.00	Pass
HE40	MCS0	2	179	6845	Full	-0.80	-0.70	2.26	5.18		7.44	24.00	Pass
HE40	MCS0	2	179	6845	242/62	-3.10	-2.20	0.38	5.18		5.56	24.00	Pass
HE80	MCS0	2	135	6625	Full	2.50	2.50	5.51	5.18		10.69	24.00	Pass
HE80	MCS0	2	135	6625	484/65	0.20	0.50	3.36	5.18		8.54	24.00	Pass
HE80	MCS0	2	151	6705	Full	2.50	2.80	5.66	5.18		10.84	24.00	Pass
HE80	MCS0	2	151	6705	484/65	0.30	0.60	3.46	5.18		8.64	24.00	Pass
HE80	MCS0	2	167	6785	Full	2.60	2.70	5.66	5.18		10.84	24.00	Pass
HE80	MCS0	2	167	6785	484/66	-0.50	0.10	2.82	5.18		8.00	24.00	Pass

FCC Band VII straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	185	6875	Full	-2.80	-2.70	0.26	5.18		5.44	24.00	Pass
HE20	MCS0	2	185	6875	26/8	-13.00	-12.10	-9.52	5.18		-4.34	24.00	Pass
HE20	MCS0	2	185	6875	52/40	-8.70	-8.70	-5.69	5.18		-0.51	24.00	Pass
HE20	MCS0	2	185	6875	106/54	-6.50	-5.50	-2.96	5.18		2.22	24.00	Pass
HE40	MCS0	2	187	6885	Full	-1.40	-0.80	1.92	5.18		7.10	24.00	Pass
HE40	MCS0	2	187	6885	242/62	-2.60	-2.30	0.56	5.18		5.74	24.00	Pass
HE80	MCS0	2	183	6865	Full	2.10	2.60	5.37	5.18		10.55	24.00	Pass
HE80	MCS0	2	183	6865	484/66	0.40	0.70	3.56	5.18		8.74	24.00	Pass

TEST RESULTS DATA
EIRP Power Spectral Density

FCC U-NII-7 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	117	6535	Full			-10.12	8.15	-1.98	-1.00	Pass	
HE20	MCS0	2	117	6535	26/0			-10.61	8.15	-2.46	-1.00	Pass	
HE20	MCS0	2	117	6535	52/37			-10.60	8.15	-2.46	-1.00	Pass	
HE20	MCS0	2	117	6535	106/53			-10.45	8.15	-2.31	-1.00	Pass	
HE20	MCS0	2	149	6695	Full			-10.17	8.15	-2.03	-1.00	Pass	
HE20	MCS0	2	149	6695	26/4			-10.39	8.15	-2.24	-1.00	Pass	
HE20	MCS0	2	149	6695	52/38			-10.49	8.15	-2.34	-1.00	Pass	
HE20	MCS0	2	149	6695	106/53			-10.19	8.15	-2.04	-1.00	Pass	
HE20	MCS0	2	181	6855	Full			-10.22	8.15	-2.07	-1.00	Pass	
HE20	MCS0	2	181	6855	26/8			-10.41	8.15	-2.27	-1.00	Pass	
HE20	MCS0	2	181	6855	52/40			-10.39	8.15	-2.24	-1.00	Pass	
HE20	MCS0	2	181	6855	106/54			-10.54	8.15	-2.39	-1.00	Pass	
HE40	MCS0	2	123	6565	Full			-10.27	8.15	-2.13	-1.00	Pass	
HE40	MCS0	2	123	6565	242/61			-10.29	8.15	-2.14	-1.00	Pass	
HE40	MCS0	2	147	6685	Full			-10.21	8.15	-2.06	-1.00	Pass	
HE40	MCS0	2	147	6685	242/61			-10.53	8.15	-2.38	-1.00	Pass	
HE40	MCS0	2	179	6845	Full			-10.37	8.15	-2.22	-1.00	Pass	
HE40	MCS0	2	179	6845	242/62			-10.85	8.15	-2.70	-1.00	Pass	
HE80	MCS0	2	135	6625	Full			-10.27	8.15	-2.13	-1.00	Pass	
HE80	MCS0	2	135	6625	484/65			-10.68	8.15	-2.53	-1.00	Pass	
HE80	MCS0	2	151	6705	Full			-10.22	8.15	-2.07	-1.00	Pass	
HE80	MCS0	2	151	6705	484/65			-10.33	8.15	-2.18	-1.00	Pass	
HE80	MCS0	2	167	6785	Full			-10.09	8.15	-1.95	-1.00	Pass	
HE80	MCS0	2	167	6785	484/66			-10.47	8.15	-2.32	-1.00	Pass	

FCC Band VII straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	185	6875	Full			-10.23	8.15	-2.08	-1.00	Pass	
HE20	MCS0	2	185	6875	26/8			-10.54	8.15	-2.39	-1.00	Pass	
HE20	MCS0	2	185	6875	52/40			-10.48	8.15	-2.33	-1.00	Pass	
HE20	MCS0	2	185	6875	106/54			-10.67	8.15	-2.52	-1.00	Pass	
HE40	MCS0	2	187	6885	Full			-10.39	8.15	-2.24	-1.00	Pass	
HE40	MCS0	2	187	6885	242/62			-10.51	8.15	-2.36	-1.00	Pass	
HE80	MCS0	2	183	6865	Full			-10.27	8.15	-2.12	-1.00	Pass	
HE80	MCS0	2	183	6865	484/66			-10.46	8.15	-2.31	-1.00	Pass	

TEST RESULTS DATA
26dB EBW and 99% OBW

U-NII-8 MIMO										
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Note
						Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	2	189	6895	Full	19.13	19.08	23.20	22.35	
HE20	MCS0	2	209	6995	Full	19.03	19.03	27.89	23.80	
HE20	MCS0	2	229	7095	Full	19.08	19.03	23.90	23.60	
HE20	MCS0	2	233	7115	Full	19.08	19.08	25.80	24.20	
HE40	MCS0	2	195	6925	Full	37.66	37.66	39.42	39.42	
HE40	MCS0	2	211	7005	Full	37.56	37.56	39.42	39.42	
HE40	MCS0	2	227	7085	Full	37.36	37.56	39.51	39.51	
HE80	MCS0	2	199	6945	Full	76.48	76.84	80.64	80.32	
HE80	MCS0	2	215	7025	Full	76.36	76.72	80.48	80.48	

TEST RESULTS DATA
EIRP Power Table

U-NII-8 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	189	6895	Full	-2.60	-3.00	0.21	5.28		5.49	24.00	Pass
HE20	MCS0	2	189	6895	26/0	-12.60	-12.50	-9.54	5.28		-4.26	24.00	Pass
HE20	MCS0	2	189	6895	52/37	-9.20	-9.20	-6.19	5.28		-0.91	24.00	Pass
HE20	MCS0	2	189	6895	106/53	-6.00	-6.20	-3.09	5.28		2.19	24.00	Pass
HE20	MCS0	2	209	6995	Full	-2.80	-3.00	0.11	5.28		5.39	24.00	Pass
HE20	MCS0	2	209	6995	26/4	-12.10	-11.70	-8.89	5.28		-3.61	24.00	Pass
HE20	MCS0	2	209	6995	52/38	-9.00	-9.00	-5.99	5.28		-0.71	24.00	Pass
HE20	MCS0	2	209	6995	106/53	-6.10	-5.80	-2.94	5.28		2.34	24.00	Pass
HE20	MCS0	2	229	7095	Full	-2.60	-2.60	0.41	5.28		5.69	24.00	Pass
HE20	MCS0	2	229	7095	26/8	-12.70	-12.10	-9.38	5.28		-4.10	24.00	Pass
HE20	MCS0	2	229	7095	52/40	-9.30	-8.70	-5.98	5.28		-0.70	24.00	Pass
HE20	MCS0	2	229	7095	106/54	-6.20	-5.40	-2.77	5.28		2.51	24.00	Pass
HE20	MCS0	2	233	7115	Full	-2.50	-2.70	0.41	5.28		5.69	24.00	Pass
HE20	MCS0	2	233	7115	26/8	-11.90	-13.20	-9.49	5.28		-4.21	24.00	Pass
HE20	MCS0	2	233	7115	52/40	-8.50	-9.30	-5.87	5.28		-0.59	24.00	Pass
HE20	MCS0	2	233	7115	106/54	-5.30	-6.20	-2.72	5.28		2.56	24.00	Pass
HE40	MCS0	2	195	6925	Full	-1.00	-0.80	2.11	5.28		7.39	24.00	Pass
HE40	MCS0	2	195	6925	242/61	-2.70	-2.70	0.31	5.28		5.59	24.00	Pass
HE40	MCS0	2	211	7005	Full	-0.90	-0.40	2.37	5.28		7.65	24.00	Pass
HE40	MCS0	2	211	7005	242/62	-2.80	-2.40	0.41	5.28		5.69	24.00	Pass
HE40	MCS0	2	227	7085	Full	-1.10	-0.40	2.27	5.28		7.55	24.00	Pass
HE40	MCS0	2	227	7085	242/62	-2.00	-1.40	1.32	5.28		6.60	24.00	Pass
HE80	MCS0	2	199	6945	Full	1.70	2.00	4.86	5.28		10.14	24.00	Pass
HE80	MCS0	2	199	6945	484/65	-0.10	0.50	3.22	5.28		8.50	24.00	Pass
HE80	MCS0	2	215	7025	Full	2.00	2.00	5.01	5.28		10.29	24.00	Pass
HE80	MCS0	2	215	7025	484/66	0.30	0.50	3.41	5.28		8.69	24.00	Pass

TEST RESULTS DATA
EIRP Power Spectral Density

FCC U-NII-8 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)	EIRP Power Density Limit (dBm)	Pass /Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	SUM		
HE20	MCS0	2	189	6895	Full	-10.20	7.69	-2.51	-1.00	Pass			
HE20	MCS0	2	189	6895	26/0	-10.69	7.69	-2.99	-1.00	Pass			
HE20	MCS0	2	189	6895	52/37	-10.66	7.69	-2.97	-1.00	Pass			
HE20	MCS0	2	189	6895	106/53	-10.51	7.69	-2.82	-1.00	Pass			
HE20	MCS0	2	209	6995	Full	-10.40	7.69	-2.70	-1.00	Pass			
HE20	MCS0	2	209	6995	26/4	-10.47	7.69	-2.77	-1.00	Pass			
HE20	MCS0	2	209	6995	52/38	-10.49	7.69	-2.80	-1.00	Pass			
HE20	MCS0	2	209	6995	106/53	-10.67	7.69	-2.98	-1.00	Pass			
HE20	MCS0	2	229	7095	Full	-10.36	7.69	-2.67	-1.00	Pass			
HE20	MCS0	2	229	7095	26/8	-10.80	7.69	-3.11	-1.00	Pass			
HE20	MCS0	2	229	7095	52/40	-10.78	7.69	-3.09	-1.00	Pass			
HE20	MCS0	2	229	7095	106/54	-10.63	7.69	-2.93	-1.00	Pass			
HE20	MCS0	2	233	7115	Full	-10.42	7.69	-2.73	-1.00	Pass			
HE20	MCS0	2	233	7115	26/8	-10.65	7.69	-2.96	-1.00	Pass			
HE20	MCS0	2	233	7115	52/40	-10.75	7.69	-3.06	-1.00	Pass			
HE20	MCS0	2	233	7115	106/54	-10.84	7.69	-3.15	-1.00	Pass			
HE40	MCS0	2	195	6925	Full	-10.45	7.69	-2.76	-1.00	Pass			
HE40	MCS0	2	195	6925	242/61	-10.89	7.69	-3.20	-1.00	Pass			
HE40	MCS0	2	211	7005	Full	-10.30	7.69	-2.60	-1.00	Pass			
HE40	MCS0	2	211	7005	242/62	-10.68	7.69	-2.99	-1.00	Pass			
HE40	MCS0	2	227	7085	Full	-10.34	7.69	-2.65	-1.00	Pass			
HE40	MCS0	2	227	7085	242/62	-10.71	7.69	-3.02	-1.00	Pass			
HE80	MCS0	2	199	6945	Full	-10.50	7.69	-2.81	-1.00	Pass			
HE80	MCS0	2	199	6945	484/65	-10.94	7.69	-3.25	-1.00	Pass			
HE80	MCS0	2	215	7025	Full	-10.35	7.69	-2.66	-1.00	Pass			
HE80	MCS0	2	215	7025	484/66	-10.46	7.69	-2.76	-1.00	Pass			



Appendix B. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	Temperature :	23~26°C
		Relative Humidity :	45~55%