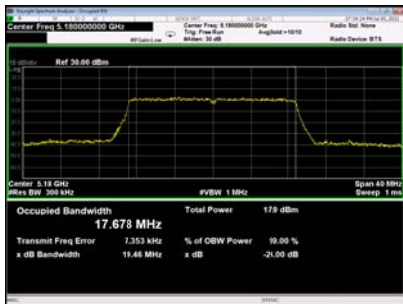


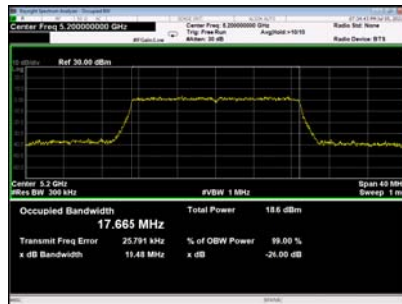
UNII-1_TX AC (VHT20) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
36	5180	19.46	17.678
40	5200	19.48	17.665
48	5240	19.60	17.672

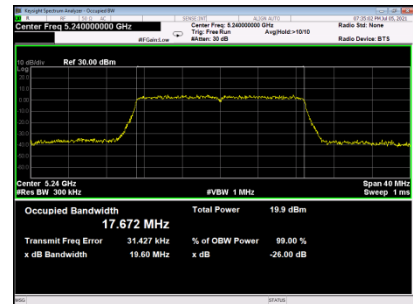
CH36



CH40



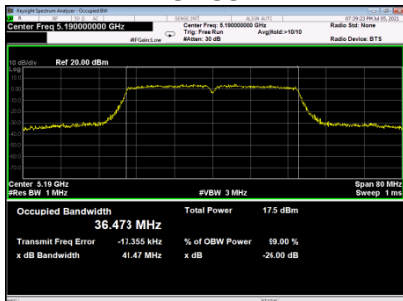
CH48



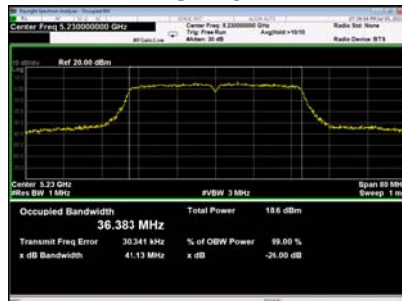
UNII-1_TX AC (VHT40) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
38	5190	41.47	36.473
46	5230	41.13	36.383

CH38



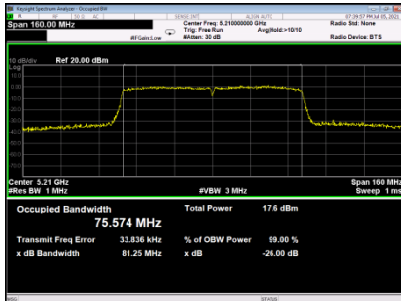
CH46



UNII-1_TX AC (VHT80) Mode

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Emission Bandwidth (MHz)
42	5210	81.25	75.574

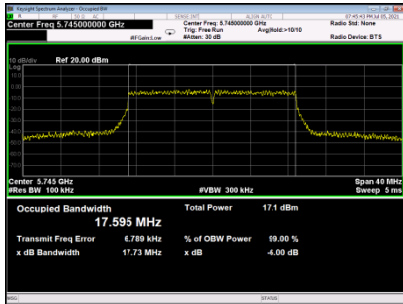
CH42



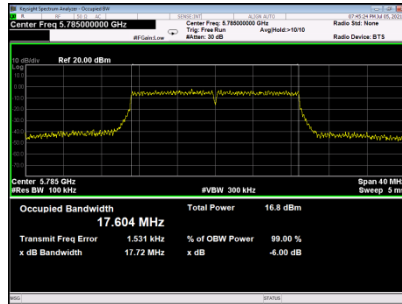
UNII-3_TX AC (VHT20) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
149	5745	17.73	17.677	500	PASS
157	5785	17.72	17.664	500	PASS
165	5825	17.74	17.702	500	PASS

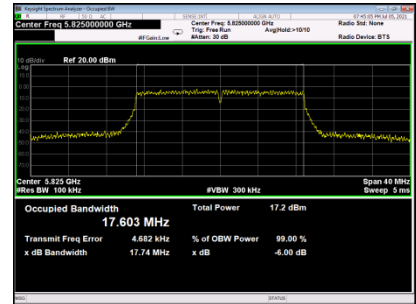
CH149



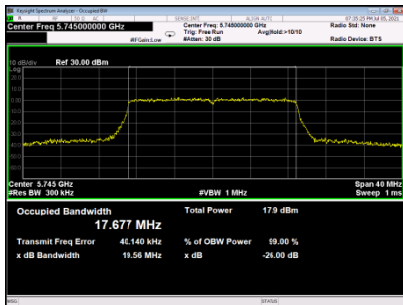
6 dB Bandwidth
CH157



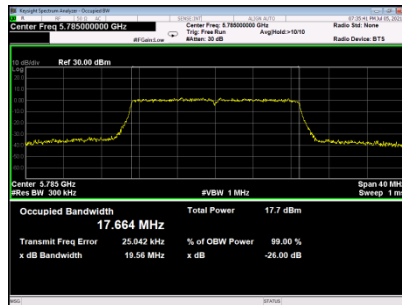
CH165



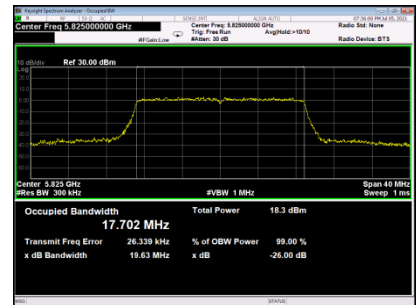
CH149



99% Emission Bandwidth
CH157



CH165

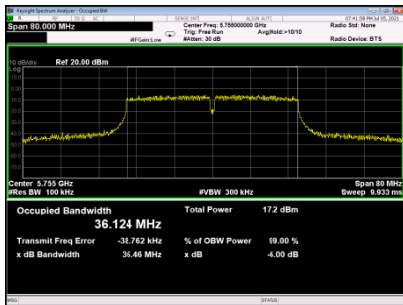


UNII-3_TX AC (VHT40) Mode

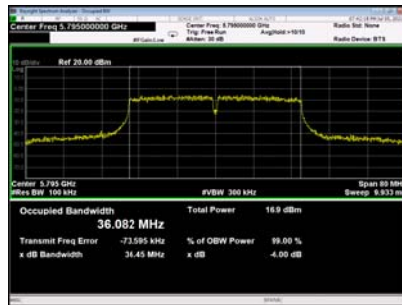
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
151	5755	36.46	36.409	500	PASS
159	5795	36.45	36.436	500	PASS

6 dB Bandwidth

CH151

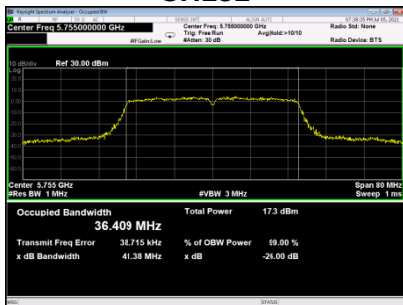


CH159

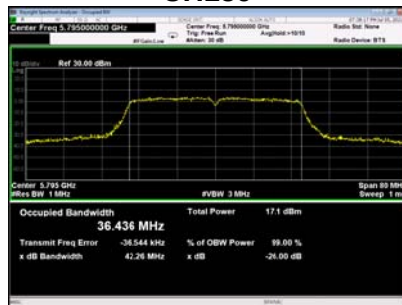


99% Emission Bandwidth

CH151



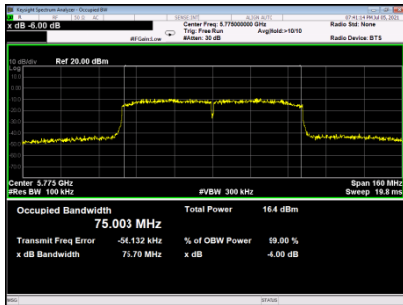
CH159



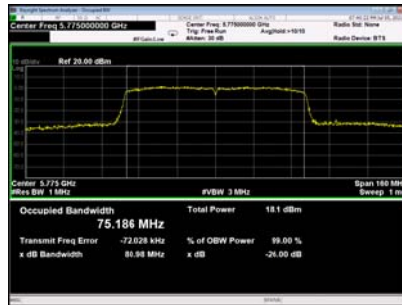
UNII-3_TX AC (VHT80) Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Emission Bandwidth(MHz)	6dB Bandwidth Min. Limit(kHz)	Result
155	5775	75.70	75.186	500	PASS

**6 dB Bandwidth
CH155**



**99% Emission Bandwidth
CH155**



7. MAXIMUM OUTPUT POWER TEST

7.1. LIMIT

FCC Part15, Subpart E (15.407)&RSS-247			
Section	Test Item	Limit	Frequency Range (MHz)
RSS-247 6.2.1.1	EIRP Output Power	not exceed 200 mW or $10 + 10 \log B$, dBm, whichever power is less	5150-5250
15.407(a)	Maximum Output Power	AP device: 1 Watt (30dBm) Client device: 250mW (24dBm)	5150-5250
15.407(a) RSS-247 6.2.4.1	Maximum Output Power	1 Watt (30dBm)	5725-5850

Note:

- For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- B is the 99% emission bandwidth in megahertz.

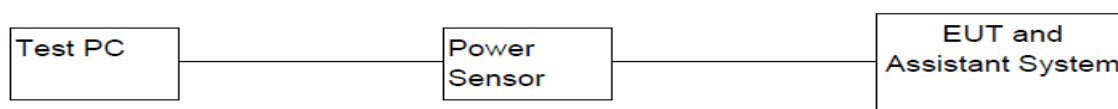
7.2. TEST PROCEDURE AND SETTING

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- Test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- EIRP Power=Output Power+Directional Gain
MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=4dBi+4dBi=7.01dBi

7.3. MEASUREMENT INSTRUMENTS LIST

Item	Equipment	Manufacturer	Model No.	Serial No.	Calibrated until
1	Power Sensor	KEYSIGHT	U2021XA	MY55240009	05/23/2022
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Micable	C10-01-01-1	100309	N/A
4	Test Software	KEYSIGHT	Power Panel	V3.11	N/A

7.4. TEST SETUP



7.5. EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6. TEST RESULTS

UNII-1_TX A Mode_Ant 1 For FCC

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	14.49	0.00	14.49	24.00	0.25	PASS
40	5200	14.92	0.00	14.92	24.00	0.25	PASS
48	5240	14.88	0.00	14.88	24.00	0.25	PASS

UNII-1_TX A Mode_Ant 2For FCC

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	14.56	0.00	14.56	24.00	0.25	PASS
40	5200	14.81	0.00	14.81	24.00	0.25	PASS
48	5240	14.94	0.00	14.94	24.00	0.25	PASS

UNII-1_TX A Mode_Ant 1 For IC

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	EIRP + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	18.49	0.00	18.49	23.00	0.2	PASS
40	5200	18.92	0.00	18.92	23.00	0.2	PASS
48	5240	18.88	0.00	18.88	23.00	0.2	PASS

UNII-1_TX A Mode_Ant 2 For IC

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	EIRP + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	18.56	0.00	18.56	23.00	0.2	PASS
40	5200	18.81	0.00	18.81	23.00	0.2	PASS
48	5240	18.94	0.00	18.94	23.00	0.2	PASS

UNII-1_TX N (HT20) Mode _Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	10.87	0.00	10.87	24.00	0.25	PASS
40	5200	10.64	0.00	10.64	24.00	0.25	PASS
48	5240	10.71	0.00	10.71	24.00	0.25	PASS

UNII-1_TX N (HT20) Mode _Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	10.59	0.00	10.59	24.00	0.25	PASS
40	5200	10.77	0.00	10.77	24.00	0.25	PASS
48	5240	10.82	0.00	10.82	24.00	0.25	PASS

UNII-1_TX N (HT20) Mode _Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	13.74	24.00	0.25	PASS
40	5200	13.72	24.00	0.25	PASS
48	5240	13.78	24.00	0.25	PASS

UNII-1_TX N (HT20) Mode _Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	20.75	23.00	0.2	PASS
40	5200	20.73	23.00	0.2	PASS
48	5240	20.79	23.00	0.2	PASS

EIRP Power=Output Power+Directional Gain

MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=4dBi+4dBi=7.01dBi

UNII-1_TX N (HT40) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	12.22	0.00	12.22	24.00	0.25	PASS
46	5230	12.31	0.00	12.31	24.00	0.25	PASS

UNII-1_TX N (HT40) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	12.18	0.00	12.18	24.00	0.25	PASS
46	5230	12.09	0.00	12.09	24.00	0.25	PASS

UNII-1_TX N (HT40) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	15.21	24.00	0.25	PASS
46	5230	15.21	24.00	0.25	PASS

UNII-1_TX N (HT40) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	22.22	23.00	0.2	PASS
46	5230	22.22	23.00	0.2	PASS

EIRP Power=Output Power+Directional Gain

MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=4dBi+4dBi=7.01dBi

UNII-3_TX A Mode_Ant1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	14.86	0	14.86	30.00	1.00	PASS
157	5785	14.57	0	14.57	30.00	1.00	PASS
165	5825	14.73	0	14.73	30.00	1.00	PASS

UNII-3_TX A Mode_Ant2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	14.82	0	14.82	30.00	1.00	PASS
157	5785	14.76	0	14.76	30.00	1.00	PASS
165	5825	14.68	0	14.68	30.00	1.00	PASS

UNII-3_TX N (HT20) Mode_Ant1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	14.62	0.00	14.62	30.00	1.00	PASS
157	5785	14.91	0.00	14.91	30.00	1.00	PASS
165	5825	14.36	0.00	14.36	30.00	1.00	PASS

UNII-3_TX N (HT20) Mode_Ant 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	14.52	0.00	14.52	30.00	1.00	PASS
157	5785	14.88	0.00	14.88	30.00	1.00	PASS
165	5825	14.76	0.00	14.76	30.00	1.00	PASS

UNII-3_TX N (HT20) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	17.58	30.00	1.00	PASS
157	5785	17.91	30.00	1.00	PASS
165	5825	17.57	30.00	1.00	PASS

UNII-3_TX N (HT40) Mode_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	14.60	0.00	14.60	30.00	1.00	PASS
159	5795	14.50	0.00	14.50	30.00	1.00	PASS

UNII-3_TX N (HT40) Mode_Ant 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	14.66	0.00	14.66	30.00	1.00	PASS
159	5795	14.58	0.00	14.58	30.00	1.00	PASS

UNII-3_TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	17.64	30.00	1.00	PASS
159	5795	17.55	30.00	1.00	PASS

UNII-1_TX AC (VHT20) Mode_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	10.98	0.00	10.98	24.00	0.25	PASS
40	5200	10.82	0.00	10.82	24.00	0.25	PASS
48	5240	10.40	0.00	10.40	24.00	0.25	PASS

UNII-1_TX AC (VHT20) Mode_Ant 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	10.54	0.00	10.54	24.00	0.25	PASS
40	5200	10.78	0.00	10.78	24.00	0.25	PASS
48	5240	10.66	0.00	10.66	24.00	0.25	PASS

UNII-1_TX AC (VHT20) Mode_Total For FCC

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	13.78	24.00	0.25	PASS
40	5200	13.81	24.00	0.25	PASS
48	5240	13.54	24.00	0.25	PASS

UNII-1_TX AC (VHT20) Mode_Total For IC

Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
36	5180	20.79	23.00	0.2	PASS
40	5200	20.82	23.00	0.2	PASS
48	5240	20.55	23.00	0.2	PASS

EIRP Power=Output Power+Directional Gain

MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=4dBi+4dBi=7.01dBi

UNII-1_TX AC (VHT40) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	12.55	0.00	12.55	24.00	0.25	PASS
46	5230	12.76	0.00	12.76	24.00	0.25	PASS

UNII-1_TX AC (VHT40) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	12.52	0.00	12.52	24.00	0.25	PASS
46	5230	12.68	0.00	12.68	24.00	0.25	PASS

UNII-1_TX AC (VHT40) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	15.55	24.00	0.25	PASS
46	5230	15.73	24.00	0.25	PASS

UNII-1_TX AC (VHT40) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm))	Max. Limit (dBm)	Max. Limit (W)	Result
38	5190	22.56	23.00	0.2	PASS
46	5230	22.74	23.00	0.2	PASS

EIRP Power=Output Power+Directional Gain

MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=4dBi+4dBi=7.01dBi

UNII-1_TX AC (VHT80) Mode_Ant 1							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	12.45	0.00	12.45	24.00	0.25	PASS

UNII-1_TX AC (VHT80) Mode_Ant 2							
Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	12.55	0.00	12.55	24.00	0.25	PASS

UNII-1_TX AC (VHT80) Mode_Total For FCC					
Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	15.51	24.00	0.25	PASS

UNII-1_TX AC (VHT80) Mode_Total For IC					
Channel	Frequency (MHz)	EIRP Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
42	5210	22.52	23.00	0.2	PASS

EIRP Power=Output Power+Directional Gain

MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=4dBi+4dBi=7.01dBi

UNII-3_TX AC (VHT20) Mode_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	12.55	0.00	12.55	30.00	1.00	PASS
157	5785	12.30	0.00	12.30	30.00	1.00	PASS
165	5825	12.56	0.00	12.56	30.00	1.00	PASS

UNII-3_TX AC (VHT20) Mode_Ant 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	12.41	0.00	12.41	30.00	1.00	PASS
157	5785	12.35	0.00	12.35	30.00	1.00	PASS
165	5825	12.63	0.00	12.63	30.00	1.00	PASS

UNII-3_TX AC (VHT20) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
149	5745	15.49	30.00	1.00	PASS
157	5785	15.34	30.00	1.00	PASS
165	5825	15.61	30.00	1.00	PASS

UNII-3_TX AC (VHT40) Mode_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	12.87	0.00	12.87	30.00	1.00	PASS
159	5795	12.44	0.00	12.44	30.00	1.00	PASS

UNII-3_TX AC (VHT40) Mode_Ant 2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	12.63	0.00	12.63	30.00	1.00	PASS
159	5795	12.34	0.00	12.34	30.00	1.00	PASS

UNII-3_TX AC (VHT40) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
151	5755	15.76	30.00	1.00	PASS
159	5795	15.40	30.00	1.00	PASS

UNII-3_TX AC (VHT80) Mode_Ant 1

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	12.45	0.00	12.45	30.00	1.00	PASS

UNII-3_TX AC (VHT80) Mode_Ant2

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	Output Power + Duty Factor (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	12.55	0.00	12.55	30.00	1.00	PASS

UNII-3_TX AC (VHT80) Mode_Total

Channel	Frequency (MHz)	Output Power (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
155	5775	15.51	30.00	1.00	PASS

8. POWER SPECTRAL DENSITY TEST

8.1. LIMIT

FCC Part15, Subpart E (15.407)&RSS-247			
Section	Test Item	Limit	Frequency Range (MHz)
RSS-247 6.2.1.2	EIRP Power Spectral Density	10dBm/MHz	5150-5250
15.407(a)	Power Spectral Density	AP device:17dBm/MHz Client device:11dBm/MHz	5150-5250
15.407(a) RSS-247 6.2.4.2	Power Spectral Density	30dBm/500kHz	5725-5850

8.2. TEST PROCEDURE AND SETTING

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1MHz.
VBW	≥ 3MHz.
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

Note:

- For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 1MHz and VBW at 3MHz if the spectrum analyzer does not have 500kHz RBW.
- The value measured with RBW=1MHz is to be added with $10\log(500\text{kHz}/1\text{MHz})$ which is -3dB. For example, if the measured value is +10dBm using RBW=1MHz (that is +10dBm/MHz), then the converted value will be +7dBm/500kHz.
- EIRP Power Spectral Density = Power Spectral Density+Antenna Gain
MIMO Directional Gain=Ant 1 Gain+Ant 2 Gain=3dBi+3dBi=6.01dBi

8.3. MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2022/05/23
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A

8.4. TEST SETUP



8.5.EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6. TEST RESULTS

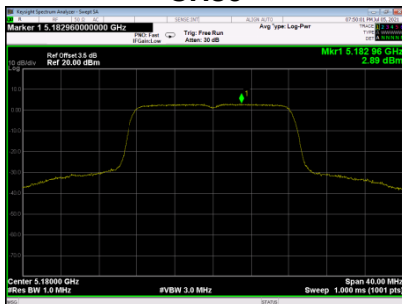
UNII-1_TX A Mode_Ant 1 For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	2.89	0.00	2.89	11.00	PASS
40	5200	3.31	0.00	3.31	11.00	PASS
48	5240	3.40	0.00	3.40	11.00	PASS

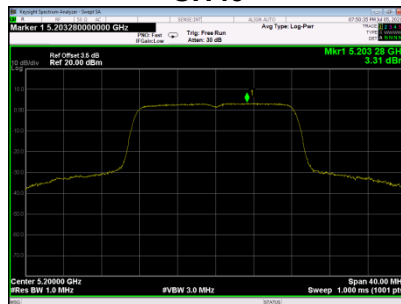
UNII-1_TX A Mode_Ant 1 For IC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	EIRP Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	6.89	0.00	6.89	10.00	PASS
40	5200	7.31	0.00	7.31	10.00	PASS
48	5240	7.40	0.00	7.40	10.00	PASS

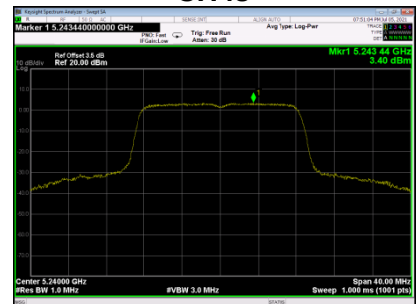
CH36



CH40



CH48



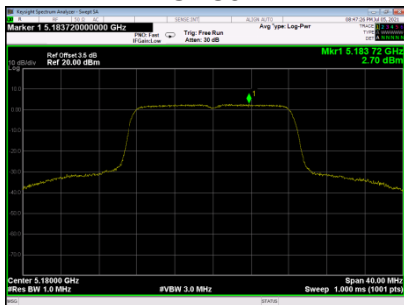
UNII-1_TX A Mode_Ant2 For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	2.70	0.00	2.70	11.00	PASS
40	5200	3.03	0.00	3.03	11.00	PASS
48	5240	2.72	0.00	2.72	11.00	PASS

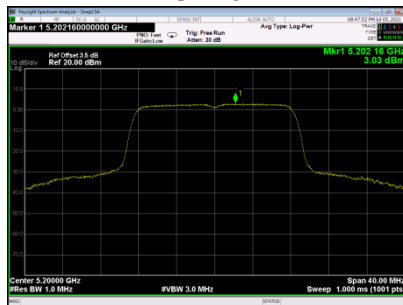
UNII-1_TX A Mode_Ant2 For IC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	EIRP Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	6.70	0.00	6.70	10.00	PASS
40	5200	7.03	0.00	7.03	10.00	PASS
48	5240	6.72	0.00	6.72	10.00	PASS

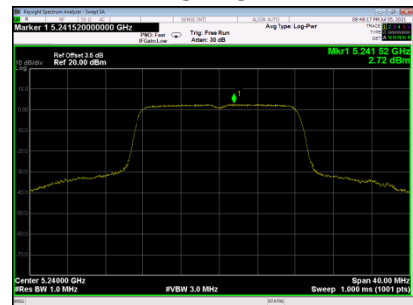
CH36



CH40



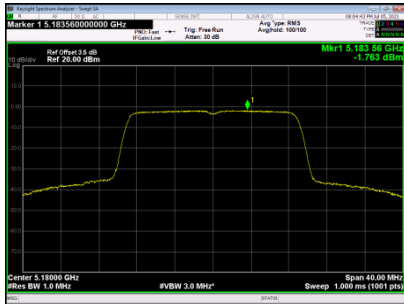
CH48



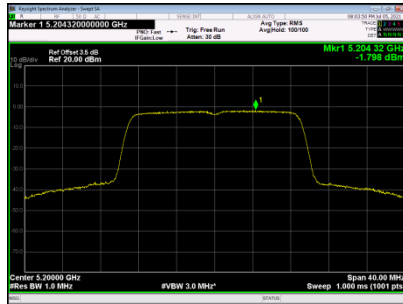
UNII-1_TX N (HT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	-1.763	0.00	-1.763	11.00	PASS
40	5200	-1.798	0.00	-1.798	11.00	PASS
48	5240	-1.144	0.00	-1.144	11.00	PASS

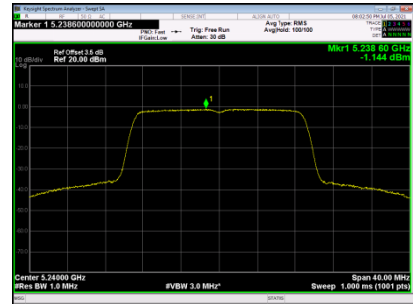
CH36



CH40



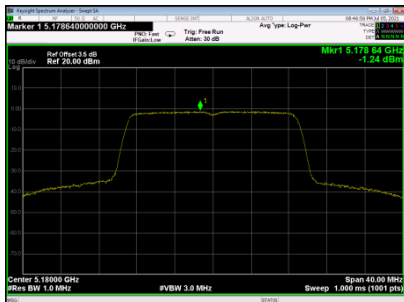
CH48



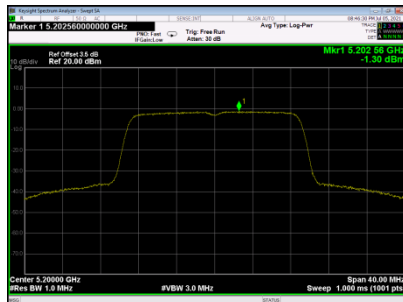
UNII-1_TX N (HT20) Mode_Ant 2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	-1.24	0.00	-1.24	11.00	PASS
40	5200	-1.30	0.00	-1.30	11.00	PASS
48	5240	-1.10	0.00	-1.10	11.00	PASS

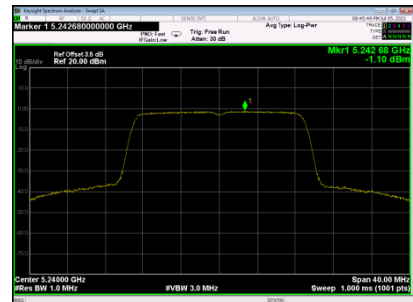
CH36



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UNII-1_TX N (HT20) Mode_Total For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	1.517	11.00	PASS
40	5200	1.468	11.00	PASS
48	5240	1.888	11.00	PASS

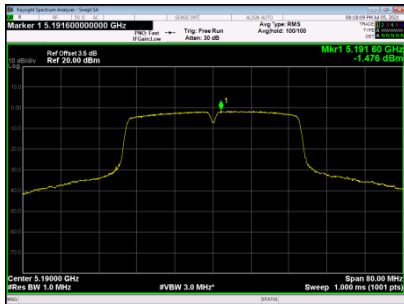
UNII-1_TX N (HT20) Mode_Total For IC

Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	8.527	10.00	PASS
40	5200	8.478	10.00	PASS
48	5240	8.898	10.00	PASS

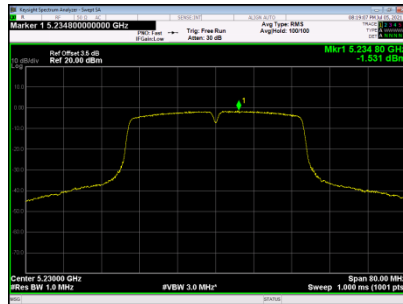
UNII-1_TX N (HT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-1.476	0.00	-1.476	11.00	PASS
46	5230	-1.531	0.00	-1.531	11.00	PASS

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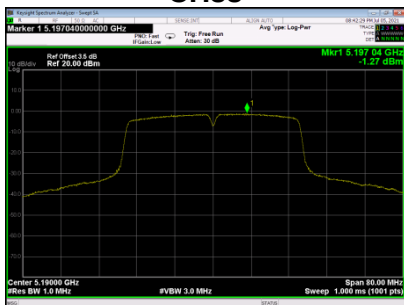
CH46



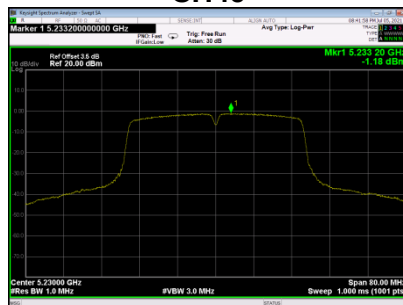
UNII-1_TX N (HT40) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-1.27	0.00	-1.27	11.00	PASS
46	5230	-1.18	0.00	-1.18	11.00	PASS

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UNII-1_TX N (HT40) Mode_Total For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	1.639	11.00	PASS
46	5230	1.658	11.00	PASS

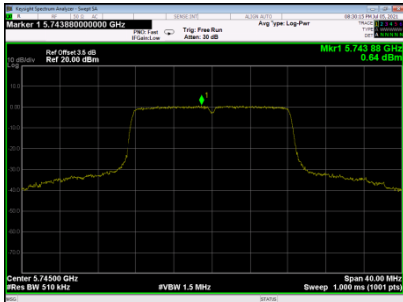
UNII-1_TX N (HT40) Mode_Total For IC

Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	8.649	10.00	PASS
46	5230	8.668	10.00	PASS

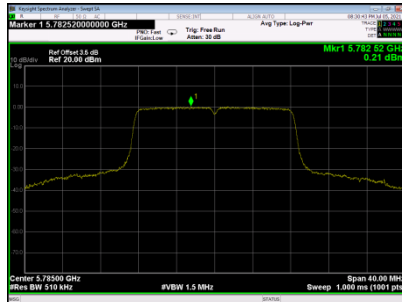
UNII-3_TX A Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	0.64	0.00	0.64	30.00	PASS
157	5785	0.21	0.00	0.21	30.00	PASS
165	5825	0.39	0.00	0.39	30.00	PASS

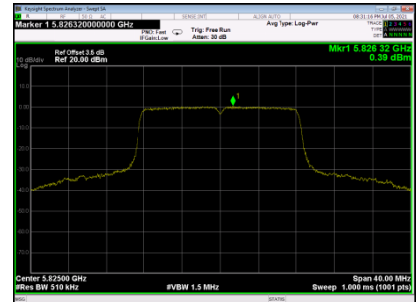
CH149



CH157



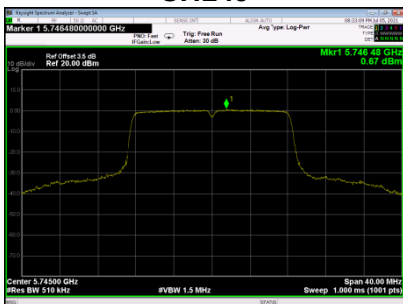
CH165



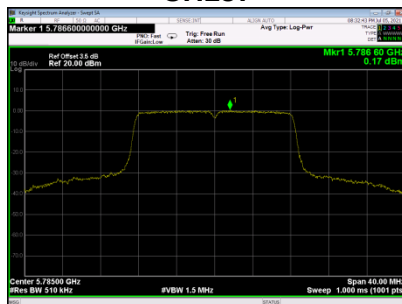
UNII-3_TX A Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	0.67	0.00	0.67	30.00	PASS
157	5785	0.17	0.00	0.17	30.00	PASS
165	5825	0.16	0.00	0.16	30.00	PASS

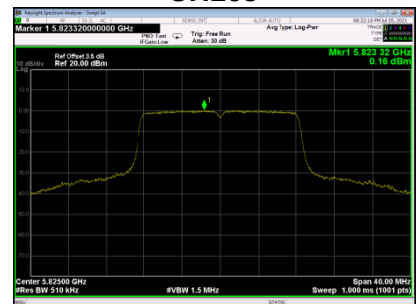
CH149



CH157



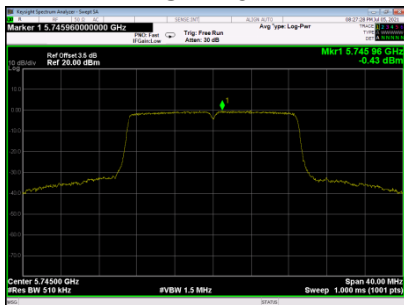
CH165



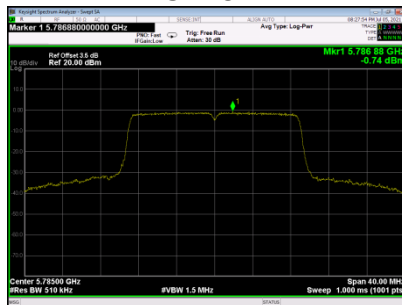
UNII-3_TX N (HT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-0.43	0.00	-0.43	30.00	PASS
157	5785	-0.74	0.00	-0.74	30.00	PASS
165	5825	-0.87	0.00	-0.87	30.00	PASS

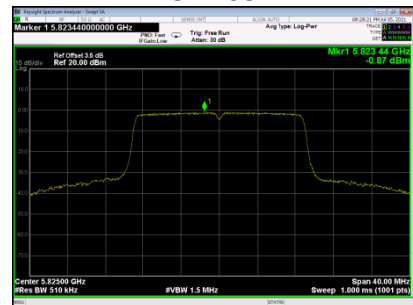
CH149



CH157



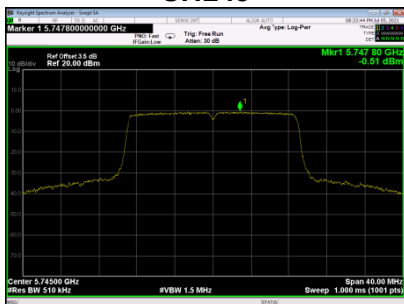
CH165



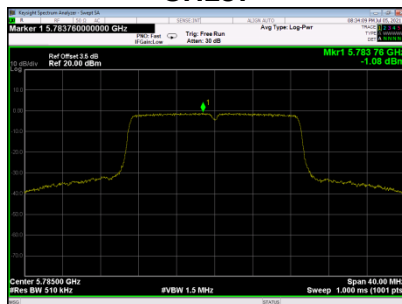
UNII-3_TX N (HT20) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-0.51	0.00	-0.51	30.00	PASS
157	5785	-1.08	0.00	-1.08	30.00	PASS
165	5825	-1.21	0.00	-1.21	30.00	PASS

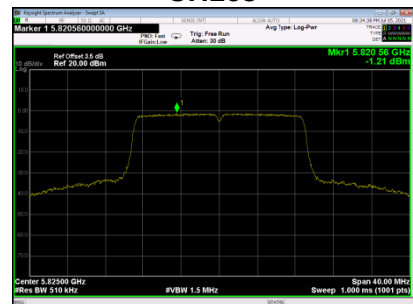
CH149



CH157



CH165



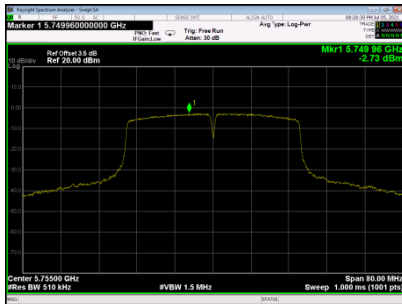
UNII-3_TX N (HT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	2.540	30.00	PASS
157	5785	2.104	30.00	PASS
165	5825	1.974	30.00	PASS

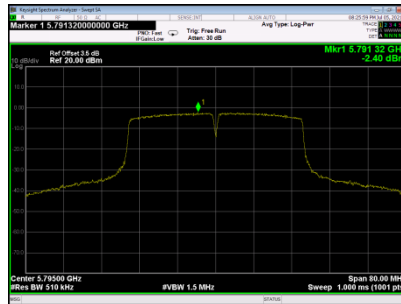
UNII-3_TX N (HT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-2.73	0.00	-2.73	30.00	PASS
159	5795	-2.40	0.00	-2.40	30.00	PASS

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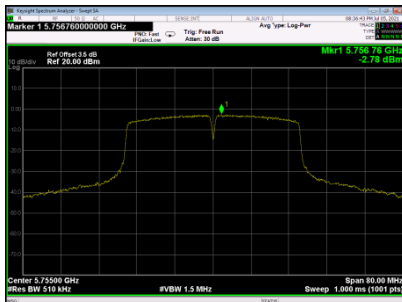
CH159



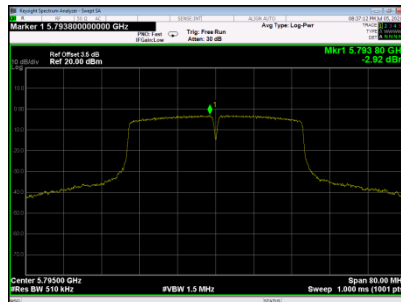
UNII-3_TX N (HT40) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-2.78	0.00	-2.78	30.00	PASS
159	5795	-2.92	0.00	-2.92	30.00	PASS

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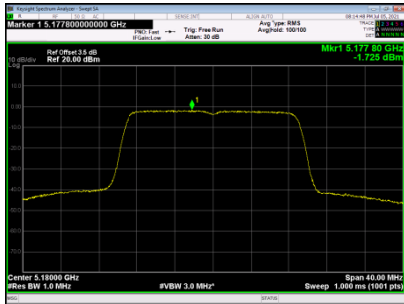
UNII-3_TX N (HT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	0.255	30.00	PASS
159	5795	0.358	30.00	PASS

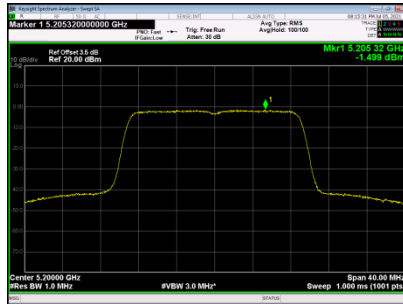
UNII-1_TX AC (VHT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	-1.725	0.00	-1.725	11.00	PASS
40	5200	-1.499	0.00	-1.499	11.00	PASS
48	5240	-1.663	0.00	-1.663	11.00	PASS

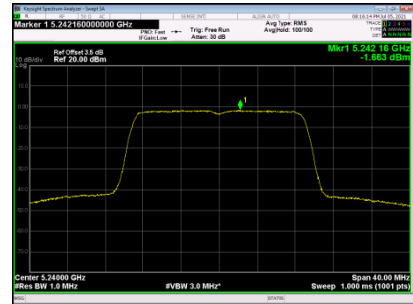
CH36



CH40



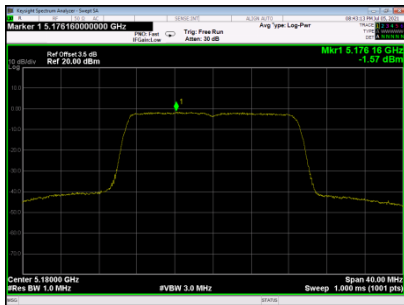
CH48



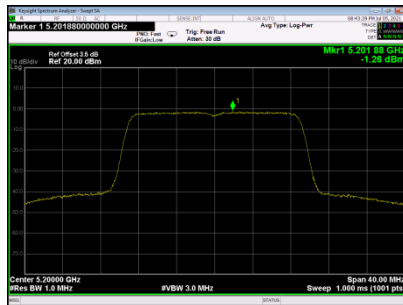
UNII-1_TX AC (VHT20) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	-1.57	0.00	-1.57	11.00	PASS
40	5200	-1.26	0.00	-1.26	11.00	PASS
48	5240	-1.31	0.00	-1.31	11.00	PASS

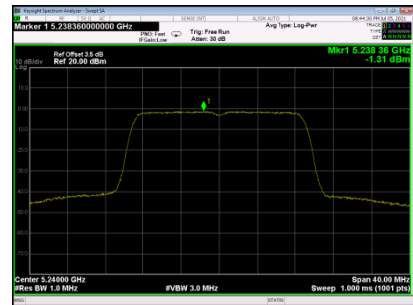
CH36



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UNII-1_TX AC (VHT20) Mode_Total For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	1.363	11.00	PASS
40	5200	1.632	11.00	PASS
48	5240	1.527	11.00	PASS

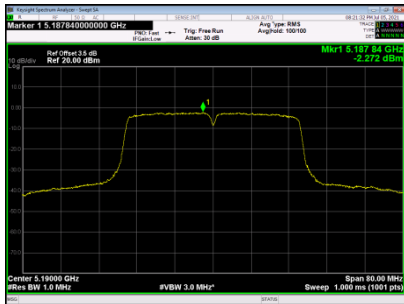
UNII-1_TX AC (VHT20) Mode_Total For IC

Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180	8.373	10.00	PASS
40	5200	8.642	10.00	PASS
48	5240	8.537	10.00	PASS

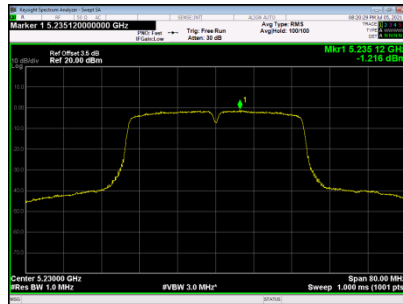
UNII-1_TX AC (VHT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-2.272	0.00	-2.272	11.00	PASS
46	5230	-1.216	0.00	-1.216	11.00	PASS

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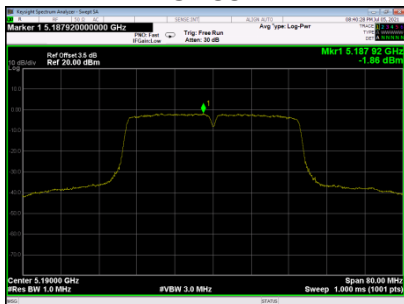
CH46



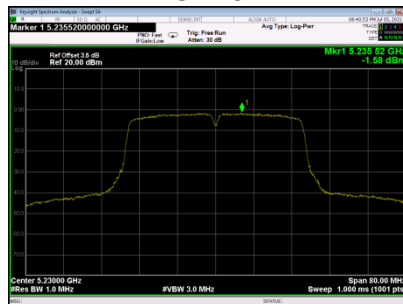
UNII-1_TX AC (VHT40) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	-1.86	0.00	-1.86	11.00	PASS
46	5230	-1.58	0.00	-1.58	11.00	PASS

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UNII-1_TX AC (VHT40) Mode_Total For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	0.949	11.00	PASS
46	5230	1.616	11.00	PASS

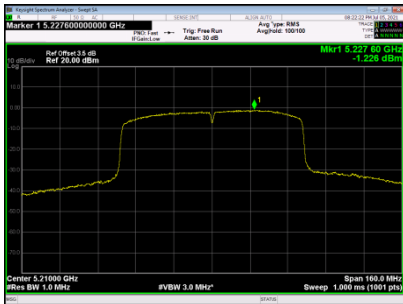
UNII-1_TX AC (VHT40) Mode_Total For IC

Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190	7.959	10.00	PASS
46	5230	8.626	10.00	PASS

UNII-1_TX AC (VHT80) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	-1.225	0.00	-1.225	11.00	PASS

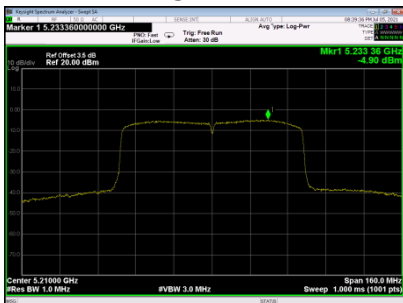
CH42



UNII-1_TX AC (VHT80) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	-4.90	0.00	-4.90	11.00	PASS

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UNII-1_TX AC (VHT80) Mode_Total For FCC

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	0.325	11.00	PASS

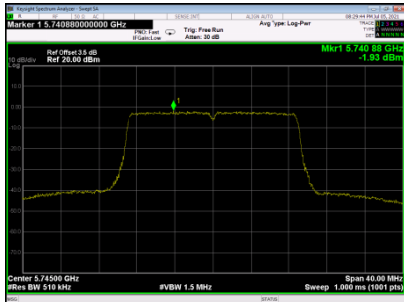
UNII-1_TX AC (VHT80) Mode_Total For IC

Channel	Frequency (MHz)	EIRP Power Spectral Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210	7.335	10.00	PASS

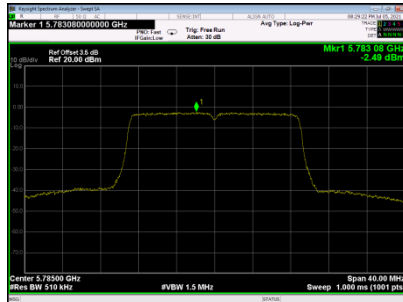
UNII-3_TX AC (VHT20) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-1.93	0.00	-1.93	30.00	PASS
157	5785	-2.49	0.00	-2.49	30.00	PASS
165	5825	-2.297	0.00	-2.297	30.00	PASS

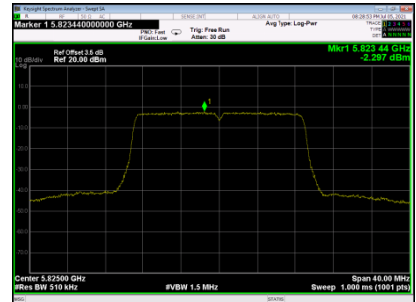
CH149



CH157



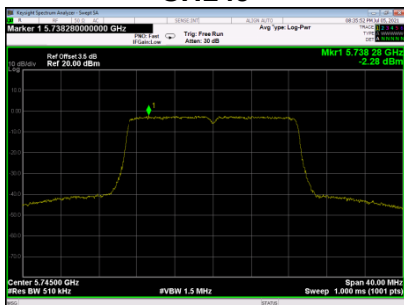
CH165



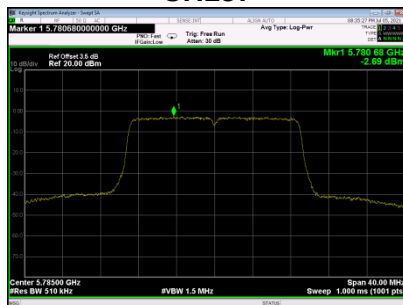
UNII-3_TX AC (VHT20) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	-2.28	0.00	-2.28	30.00	PASS
157	5785	-2.69	0.00	-2.69	30.00	PASS
165	5825	-2.40	0.00	-2.40	30.00	PASS

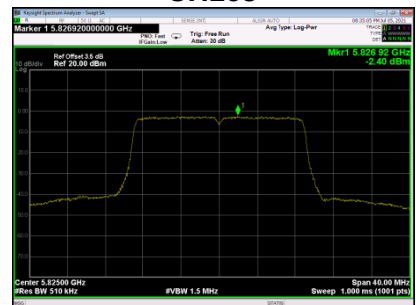
CH149



CH157



CH165



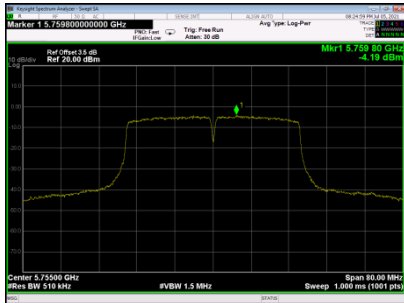
UNII-3_TX AC (VHT20) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
149	5745	0.909	30.00	PASS
157	5785	0.421	30.00	PASS
165	5825	0.662	30.00	PASS

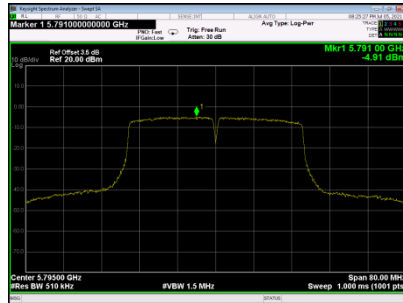
UNII-3_TX AC (VHT40) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-4.19	0.00	-4.19	30.00	PASS
159	5795	-4.91	0.00	-4.91	30.00	PASS

CH151



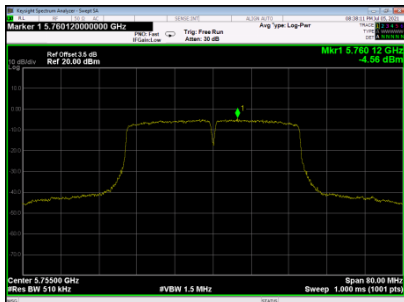
CH159



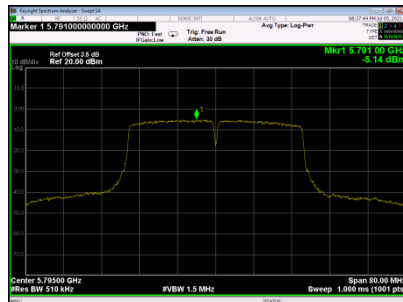
UNII-3_TX AC (VHT40) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-4.56	0.00	-4.56	30.00	PASS
159	5795	-5.14	0.00	-5.14	30.00	PASS

CH151



CH159



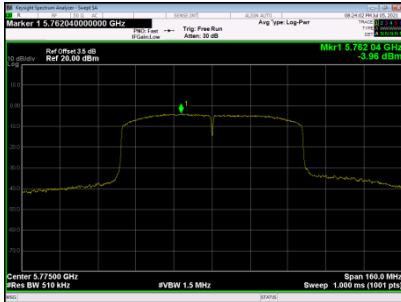
UNII-3_TX AC (VHT40) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
151	5755	-1.361	30.00	PASS
159	5795	-2.013	30.00	PASS

UNII-3_TX AC (VHT80) Mode_Ant 1

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
155	5775	-3.96	0.00	-3.96	30.00	PASS

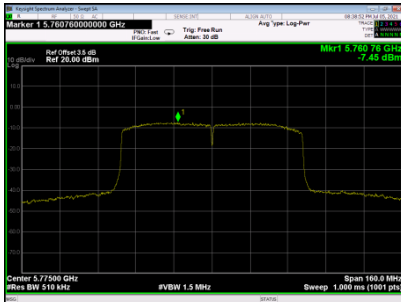
CH155



UNII-3_TX AC (VHT80) Mode_Ant2

Channel	Frequency (MHz)	Power Spectral Density (dBm/500 kHz)	Duty Factor	Power Spectral Density + Duty Factor (dBm/500 kHz)	Max. Limit (dBm/500 kHz)	Result
155	5775	-7.45	0.00	-7.45	30.00	PASS

CH155



UNII-3_TX AC (VHT80) Mode_Total

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Max. Limit (dBm/500 kHz)	Result
155	5775	-2.353	30.00	PASS

9..FREQUENCY STABILITY MEASUREMENT

9.1.LIMIT

FCC Part15, Subpart E (15.407)&RSS-GEN			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(g) RSS-GEN 6.11	Frequency Stability	Specified in the user's manual	5150-5250
			5725-5850

9.2.TEST PROCEDURE AND SETTING

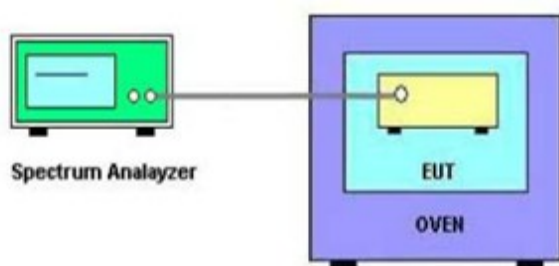
- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10kHz
Sweep Time	Auto

9.3.MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum analyzer	KEYSIGHT	N9010A	MY55150427	2022/05/23
2	Attenuator	Mini-Circuits	BW-S10W2	101109	N/A
3	RF Cable	Mi-cable	C10-01-01-1	100309	N/A
4	Temperature conditioning	Guan Jian.HTH1000	-20-130°C	GJ1000-10D001	N/A
5	DC Power Supply	G.KE	IPR-10010D	010931954	N/A

9.4.TEST SETUP



9.5.EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

9.6. TEST RESULTS

Temperature vs. Frequency Stability-UNII-1		
Voltage	Temperature	Measurement Frequency (MHz)
5V	(°C)	5180
	-20	5180.0015
	25	5180.0015
	50	5180.0014
3.5V	25	5180.0014
Max. Deviation (MHz)		0.0016
Max. Deviation (ppm)		0.31

Temperature vs. Frequency Stability-UNII-3		
Voltage	Temperature	Measurement Frequency (MHz)
5V	(°C)	5745
	-20	5745.0021
	25	5745.0025
	50	5745.0018
3.5V	25	5745.0019
Max. Deviation (MHz)		0.0025
Max. Deviation (ppm)		0.44

Note: 3.5V is the end point voltage, and products below 3.5V will cease working.

END OF TEST REPORT