4.3 OUTPUT POWER MEASUREMENT

4.3.1 Test Limit

According to §15.407 (a)(1), 15.407(a)(2) and 15.407(a)(3)

UNII-1 :

The maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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.

UNII-2a and 2c:

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

UNII-3:

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz 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.

UNII-1 Limit	☒ Antenna not exceed 6 dBi：30dBm ☐ Antenna with DG greater than 6 dBi： [Limit = 30 – (DG – 6)]
UNII-2a/2c Limit	☒ Antenna not exceed 6 dBi：24dBm ☐ Antenna with DG greater than 6 dBi： [Limit = 24 – (DG – 6)]
UNII-3 Limit	☒ Antenna not exceed 6 dBi：30dBm ☐ Antenna with DG greater than 6 dBi： [Limit = 30 – (DG – 6)]

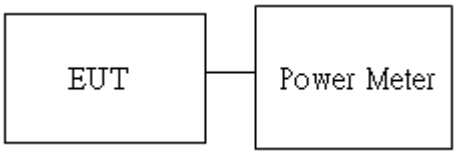
4.3.2 Test Procedure

Test method Refer as KDB 789033 D02, Section E.3.b for BW 20MHz, 40MHz and 80MHz, E.2.b for BW 160MHz.

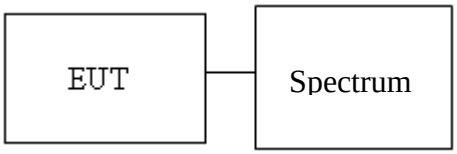
1. The EUT RF output connected to the power meter or spectrum by RF cable.
2. Setting maximum power transmit of EUT.
3. The path loss was compensated to the results for each measurement.
4. Measure and record the result of Average output power. in the test report.

4.3.3 Test Setup

For BW 20MHz ,40MHz and 80MHz



For BW 160MHz



4.3.4 Test Result

Conducted output power：

Non-Beamforming

Temperature: 22.6~24.1℃ **Test date:** March 31~June 15, 2023

Humidity: 58~68% RH **Tested by:** David Li

Test Mode: IEEE 802.11a mode

802.11a_Ch0							
CH	Frequency (MHz)	Data Rate	Power set	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	22	21.65	146.250	30	PASS
44	5220	6	22	21.82	152.088	30	PASS
48	5240	6	22	21.76	150.002	30	PASS
52	5260	6	26.5	21.04	127.085	23.98	PASS
60	5300	6	26	21.35	136.488	23.98	PASS
64	5320	6	22.5	**21.84**	152.790	23.98	PASS
100	5500	6	23	**21.85**	153.143	23.98	PASS
116	5580	6	25	21.20	131.855	23.98	PASS
140	5700	6	22	20.48	111.711	23.98	PASS
149	5745	6	24.5	22.21	166.378	30	PASS
157	5785	6	24.5	22.18	165.233	30	PASS
165	5825	6	24.5	22.53	179.100	30	PASS

802.11a_Ch1							
CH	Frequency (MHz)	Data Rate	Power set	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	20.5	20.78	119.700	30	PASS
44	5220	6	22	22.62	182.850	30	PASS
48	5240	6	22	**22.79**	190.150	30	PASS
52	5260	6	26	20.97	125.054	23.98	PASS
60	5300	6	26	21.32	135.549	23.98	PASS
64	5320	6	20.5	20.87	122.207	23.98	PASS
100	5500	6	20.5	20.59	114.577	23.98	PASS
116	5580	6	25	21.00	125.920	23.98	PASS
140	5700	6	19.5	19.02	79.817	23.98	PASS
149	5745	6	23.5	**22.60**	182.010	30	PASS
157	5785	6	23	22.59	181.592	30	PASS
165	5825	6	23	**22.60**	182.010	30	PASS

Test Mode: IEEE 802.11n HT20 mode

802.11n_HT20_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
36	5180	MCS0	20	19.69	20.56	23.35	216.272	30	PASS
44	5220	MCS0	22	21.79	22.79	**25.52**	356.451	30	PASS
48	5240	MCS0	22	21.78	22.62	25.42	348.337	30	PASS
52	5260	MCS0	18	17.78	18.18	21.18	131.220	23.98	PASS
60	5300	MCS0	19	18.45	19.06	21.96	157.036	23.98	PASS
64	5320	MCS0	19	18.48	19.07	**21.98**	157.761	23.98	PASS
100	5500	MCS0	19.5	18.64	19.43	**22.25**	167.880	23.98	PASS
116	5580	MCS0	19	18.44	18.92	21.89	154.525	23.98	PASS
140	5700	MCS0	18.5	17.13	17.85	20.70	117.490	23.98	PASS
149	5745	MCS0	24	21.74	22.63	25.41	347.536	30	PASS
157	5785	MCS0	24	21.75	22.69	25.44	349.945	30	PASS
165	5825	MCS0	24	22.04	23.08	**25.79**	379.315	30	PASS

Test Mode: IEEE 802.11ac VHT20 mode

802.11ac_VHT20_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
36	5180	MCS0	20	19.67	20.51	23.31	214.289	30	PASS
44	5220	MCS0	22	21.73	22.69	**25.43**	349.140	30	PASS
48	5240	MCS0	22	21.674	22.59	25.35	342.768	30	PASS
52	5260	MCS0	18	17.62	18.13	21.08	128.233	23.98	PASS
60	5300	MCS0	19	18.37	19.01	21.90	154.882	23.98	PASS
64	5320	MCS0	19	18.41	19.03	**21.93**	155.955	23.98	PASS
100	5500	MCS0	19.5	18.55	19.32	**22.15**	164.059	23.98	PASS
116	5580	MCS0	19	18.32	18.83	21.78	150.661	23.98	PASS
140	5700	MCS0	18.5	17.09	17.77	20.64	115.878	23.98	PASS
149	5745	MCS0	24	21.63	22.59	25.33	341.193	30	PASS
157	5785	MCS0	24	21.68	22.66	25.40	346.737	30	PASS
165	5825	MCS0	24	22.01	23.05	**25.76**	376.704	30	PASS

Note: Since DG<6dBi, there is no need to modify the limit value.

Test Mode: IEEE 802.11n HT40 mode

802.11n_HT40_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
38	5190	MCS0	17.5	17.13	18.02	20.98	125.314	30	PASS
46	5230	MCS0	22	21.69	22.84	**25.69**	370.681	30	PASS
54	5270	MCS0	20.5	20.1	20.63	**23.76**	237.684	23.98	PASS
62	5310	MCS0	18	17.49	18.07	21.17	130.918	23.98	PASS
102	5510	MCS0	18	17.12	18	20.97	125.026	23.98	PASS
110	5550	MCS0	21	20.12	20.99	**23.96**	248.886	23.98	PASS
134	5670	MCS0	20.5	19.48	19.96	23.11	204.644	23.98	PASS
151	5755	MCS0	23	20.78	21.91	**24.76**	299.226	30	PASS
159	5795	MCS0	23	20.67	21.89	24.71	295.801	30	PASS

Test Mode: IEEE 802.11ac VHT40 mode

802.11ac_VHT40_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
38	5190	MCS0	17.5	17.11	17.93	20.91	123.310	30	PASS
46	5230	MCS0	22	21.62	22.74	**25.58**	361.410	30	PASS
54	5270	MCS0	20.5	20.02	20.57	**23.67**	232.809	23.98	PASS
62	5310	MCS0	18	17.36	18.01	21.06	127.644	23.98	PASS
102	5510	MCS0	18	17.01	17.95	20.87	122.180	23.98	PASS
110	5550	MCS0	21	20.04	20.92	**23.87**	243.781	23.98	PASS
134	5670	MCS0	20.5	19.33	19.87	22.97	198.153	23.98	PASS
151	5755	MCS0	23	20.7	21.88	**24.70**	295.121	30	PASS
159	5795	MCS0	23	20.65	21.82	24.64	291.072	30	PASS

Test Mode: IEEE 802.11ac VHT80 mode

802.11ac_VHT80_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
42	5210	MCS0	14	12.73	13.69	**16.94**	49.431	30	PASS
58	5290	MCS0	15.5	13.4	13.91	**17.37**	54.576	23.98	PASS
106	5530	MCS0	16.5	14.04	14.94	18.22	66.374	23.98	PASS
122	5610	MCS0	21	19.31	19.75	**23.24**	210.863	23.98	PASS
155	5775	MCS0	21	18.47	19.66	**22.81**	190.985	30	PASS

Note: Since DG<6dBi, there is no need to modify the limit value.

Test Mode: IEEE 802.11ac VHT160 mode

802.11ac_VHT160_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
50	5250	MCS0	14	10.75	11.83	**15.05**	31.989	23.98	PASS
114	5570	MCS0	15.5	11.29	12.49	**15.66**	36.813	23.98	PASS

Test Mode: IEEE 802.11ax HE20 mode

802.11ax_HE20_2TX										
CH	Frequency (MHz)	Data Rate	RU config.	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
36	5180	MCS0	full	19.5	19.18	20.41	23.56	226.986	30	PASS
44	5220	MCS0	full	22	22.02	22.88	**26.19**	415.911	30	PASS
48	5240	MCS0	full	22	21.81	22.78	26.04	401.791	30	PASS
52	5260	MCS0	full	17.5	17.46	17.93	21.42	138.676	23.98	PASS
60	5300	MCS0	full	18.5	18.21	18.72	22.19	165.577	23.98	PASS
64	5320	MCS0	full	18.5	18.18	18.86	**22.25**	167.880	23.98	PASS
100	5500	MCS0	full	19	18.04	19.09	**22.32**	170.608	23.98	PASS
116	5580	MCS0	full	18	17.56	17.97	21.49	140.929	23.98	PASS
140	5700	MCS0	full	18	16.85	17.53	20.92	123.595	23.98	PASS
149	5745	MCS0	full	24	21.81	22.67	25.98	396.278	30	PASS
157	5785	MCS0	full	24	21.83	22.83	26.08	405.509	30	PASS
165	5825	MCS0	full	24	22.16	23.23	**26.45**	441.570	30	PASS

Test Mode: IEEE 802.11ax HE40 mode

802.11ax_HE40_2TX										
CH	Frequency (MHz)	Data Rate	RU config.	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
38	5190	MCS0	full	17	16.72	17.73	21.01	126.183	30	PASS
46	5230	MCS0	full	22	21.85	22.94	**26.18**	414.954	30	PASS
54	5270	MCS0	full	20	19.73	20.23	**23.74**	236.592	23.98	PASS
62	5310	MCS0	full	17.5	17.2	17.73	21.22	132.434	23.98	PASS
102	5510	MCS0	full	18	17.26	18.11	21.46	139.959	23.98	PASS
110	5550	MCS0	full	20.5	19.85	20.45	**23.91**	139.959	23.98	PASS
134	5670	MCS0	full	19	18.07	18.61	22.10	162.181	23.98	PASS
151	5755	MCS0	full	23	21.03	22.06	25.33	341.193	30	PASS
159	5795	MCS0	full	23.5	21.44	22.58	**25.80**	380.189	30	PASS

Note: Since DG<6dBi, there is no need to modify the limit value.

Test Mode: IEEE 802.11ax HE80 mode

802.11ax_HE80_2TX										
CH	Frequency (MHz)	Data Rate	RU config.	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
42	5210	MCS0	full	14.5	13.28	14.28	**17.57**	57.148	30	PASS
58	5290	MCS0	full	15.5	13.59	14.15	**17.64**	58.076	23.98	PASS
106	5530	MCS0	full	15.5	13.14	14.12	17.42	55.208	23.98	PASS
122	5610	MCS0	full	21	19.53	20.01	**23.53**	225.424	23.98	PASS
155	5775	MCS0	full	21	18.58	19.83	**23.01**	199.986	30	PASS

Test Mode: IEEE 802.11ax HE160 mode

802.11ax_HE160_2TX										
CH	Frequency (MHz)	Data Rate	RU config.	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
50	5250	MCS0	full	14.5	11.5	12.52	**15.83**	38.282	23.98	PASS
114	5570	MCS0	full	16	12.21	13.21	**16.53**	44.978	23.98	PASS

Note: Since DG<6dBi, there is no need to modify the limit value.

TPC

Temperature: 22.6~24.1℃ **Test date:** March 31~June 15, 2023

Humidity: 58~68% RH **Tested by:** David Li

Test mode: IEEE 802.11a mode

802.11a_Ch0						
CH	**Frequency (MHz)**	**Max POWER (dBm)**	**TPC Power (dBm)**	**Antenna Gain (dBi)**	**Max EIRP (dBm)**	**TPC EIRP (dBm)**
52	5260	21.04	15.04	2.51	23.55	17.550
60	5300	21.35	15.35	2.51	23.86	17.860
64	5320	**21.84**	15.84	2.51	**24.35**	18.350
100	5500	**21.85**	15.85	2.51	**24.36**	18.360
116	5580	21.20	15.20	2.51	23.71	17.710
140	5700	**20.48**	14.48	2.51	**22.99**	16.990

802.11a_Ch1						
CH	**Frequency (MHz)**	**Max POWER (dBm)**	**TPC Power (dBm)**	**Antenna Gain (dBi)**	**Max EIRP (dBm)**	**TPC EIRP (dBm)**
52	5260	20.97	14.97	2.420	23.39	17.390
60	5300	**21.32**	15.32	2.420	**23.74**	17.740
64	5320	20.87	14.87	2.420	23.29	17.290
100	5500	20.59	14.59	2.400	22.99	16.990
116	5580	**21.00**	15.00	2.400	**23.40**	17.400
140	5700	**19.02**	13.02	2.400	**21.42**	15.420

Test mode: IEEE 802.11n HT20 mode

802.11n_HT20_2TX						
CH	**Frequency (MHz)**	**Max POWER (dBm)**	**TPC Power (dBm)**	**Antenna Gain (dBi)**	**Max EIRP (dBm)**	**TPC EIRP (dBm)**
52	5260	21.18	15.18	5.48	26.66	20.660
60	5300	21.96	15.96	5.48	27.44	21.440
64	5320	**21.98**	15.98	5.48	**27.46**	21.460
100	5500	**22.25**	16.25	5.47	**27.72**	21.720
116	5580	21.89	15.89	5.47	27.36	21.360
140	5700	**20.70**	14.70	5.47	**26.17**	20.170

Test mode: IEEE 802.11ac VHT20 mode

802.11ac_VHT20_2TX						
CH	Frequency (MHz)	Max POWER (dBm)	TPC Power (dBm)	Antenna Gain (dBi)	Max EIRP (dBm)	TPC EIRP (dBm)
52	5260	21.08	15.08	5.48	26.56	20.560
60	5300	21.90	15.90	5.48	27.38	21.380
64	5320	**21.93**	15.93	5.48	**27.41**	21.410
100	5500	**22.15**	16.15	5.47	**27.62**	21.620
116	5580	21.78	15.78	5.47	27.25	21.250
140	5700	**20.64**	14.64	5.47	**26.11**	20.110

Test mode: IEEE 802.11n HT40 mode

802.11n_HT40_2TX						
CH	Frequency (MHz)	Max POWER (dBm)	TPC Power (dBm)	Antenna Gain (dBi)	Max EIRP (dBm)	TPC EIRP (dBm)
54	5270	**23.76**	17.76	5.48	**29.24**	23.240
62	5310	21.17	15.17	5.48	26.65	20.650
102	5510	20.97	14.97	5.47	26.44	20.440
110	5550	**23.96**	17.96	5.47	**29.43**	23.430
134	5670	**23.11**	17.11	5.47	**28.58**	22.580

Test mode: IEEE 802.11ac VHT40 mode

802.11ac_VHT40_2TX						
CH	Frequency (MHz)	Max POWER (dBm)	TPC Power (dBm)	Antenna Gain (dBi)	Max EIRP (dBm)	TPC EIRP (dBm)
54	5270	**23.67**	17.67	5.48	**29.15**	23.150
62	5310	21.06	15.06	5.48	26.54	20.540
102	5510	20.87	14.87	5.47	26.34	20.340
110	5550	**23.87**	17.87	5.47	**29.34**	23.340
134	5670	**22.97**	16.97	5.47	**28.44**	22.440

Test mode: IEEE 802.11ac VHT80 mode

802.11ac_VHT80_2TX						
CH	Frequency (MHz)	Max POWER (dBm)	TPC Power (dBm)	Antenna Gain (dBi)	Max EIRP (dBm)	TPC EIRP (dBm)
58	5290	**17.37**	11.37	5.48	**22.85**	16.850
106	5530	**18.22**	12.22	5.47	**23.69**	17.690
122	5610	**23.24**	17.24	5.47	**28.71**	22.710

Test mode: IEEE 802.11ac VHT160 mode

802.11ac_VHT160_2TX						
CH	Frequency (MHz)	Max POWER (dBm)	TPC Power (dBm)	Antenna Gain (dBi)	Max EIRP (dBm)	TPC EIRP (dBm)
50	5250	15.05	9.05	5.48	**20.53**	14.530
114	5570	**15.66**	9.66	5.47	**21.13**	15.130

Test mode: IEEE 802.11ax HE20 mode

802.11ax_HE20_2TX							
CH	Frequency (MHz)	RU config.	Max POWER (dBm)	TPC Power (dBm)	Antenna Gain (dBi)	Max EIRP (dBm)	TPC EIRP (dBm)
52	5260	full	21.42	15.42	5.48	26.90	20.900
60	5300	full	22.19	16.19	5.48	27.67	21.670
64	5320	full	22.25	16.25	5.48	27.73	21.730
100	5500	full	**22.32**	16.32	5.47	**27.79**	21.790
116	5580	full	**21.49**	15.49	5.47	**26.96**	20.960
140	5700	full	20.92	14.92	5.47	26.39	20.390

Test mode: IEEE 802.11ax HE40 mode

802.11ax_HE40_2TX							
CH	Frequency (MHz)	RU config.	Max POWER (dBm)	TPC Power (dBm)	Antenna Gain (dBi)	Max EIRP (dBm)	TPC EIRP (dBm)
54	5270	full	23.74	17.74	5.48	29.22	23.220
62	5310	full	21.22	15.22	5.48	26.70	20.700
102	5510	full	21.46	15.46	5.47	26.93	20.930
110	5550	full	**23.91**	17.91	5.47	**29.38**	23.380
134	5670	full	22.10	16.10	5.47	27.57	21.570

Test mode: IEEE 802.11ax HE80 mode

802.11ax_HE80_2TX							
CH	Frequency (MHz)	RU config.	Max POWER (dBm)	TPC Power (dBm)	Antenna Gain (dBi)	Max EIRP (dBm)	TPC EIRP (dBm)
58	5290	full	**17.64**	11.64	5.48	**23.12**	17.120
106	5530	full	**17.42**	11.42	5.47	**22.89**	16.890
122	5610	full	**23.53**	17.53	5.47	**29.00**	23.000

Test mode: IEEE 802.11ax HE160 mode

802.11ax_HE160_2TX							
CH	Frequency (MHz)	RU config.	Max POWER (dBm)	TPC Power (dBm)	Antenna Gain (dBi)	Max EIRP (dBm)	TPC EIRP (dBm)
50	5250	full	15.83	9.83	5.48	21.31	15.310
114	5570	full	**16.53**	10.53	5.47	**22.00**	16.000

Beamforming

Temperature: 21.6~24.8℃ **Test date:** March 31~June 13, 2023

Humidity: 58~68% RH **Tested by:** David Li

Test mode: IEEE 802.11n HT20 mode

802.11n_HT20_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
36	5180	MCS0	17	16.46	17.34	20.12	102.802	30	PASS
44	5220	MCS0	19	18.68	19.71	**22.42**	174.582	30	PASS
48	5240	MCS0	19	18.66	19.58	22.34	171.396	30	PASS
52	5260	MCS0	15	14.65	15.15	18.11	64.714	23.98	PASS
60	5300	MCS0	16	15.31	15.86	18.79	75.683	23.98	PASS
64	5320	MCS0	16	15.38	15.83	**18.81**	76.033	23.98	PASS
100	5500	MCS0	16.5	15.48	16.24	**19.08**	80.910	23.98	PASS
116	5580	MCS0	16.5	15.33	15.74	18.74	74.817	23.98	PASS
140	5700	MCS0	16	14.07	14.79	17.64	58.076	23.98	PASS
149	5745	MCS0	20.5	18.59	19.61	22.33	171.002	30	PASS
157	5785	MCS0	20.5	18.64	19.68	22.39	173.380	30	PASS
165	5825	MCS0	20.5	18.89	19.82	**22.58**	181.134	30	PASS

Test mode: IEEE 802.11ac VHT20 mode

802.11ac_VHT20_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
36	5180	MCS0	17	16.44	17.32	20.10	102.329	30	PASS
44	5220	MCS0	19	18.66	17.68	21.40	138.038	30	PASS
48	5240	MCS0	19	18.62	19.55	**22.31**	170.216	30	PASS
52	5260	MCS0	15	14.61	15.13	18.08	64.269	23.98	PASS
60	5300	MCS0	16	15.28	15.81	18.75	74.989	23.98	PASS
64	5320	MCS0	16	15.35	15.81	**18.78**	75.509	23.98	PASS
100	5500	MCS0	16.5	15.44	16.21	**19.04**	80.168	23.98	PASS
116	5580	MCS0	16.5	15.28	15.71	18.70	74.131	23.98	PASS
140	5700	MCS0	16	14.05	14.75	17.61	57.677	23.98	PASS
149	5745	MCS0	21	18.58	19.55	22.29	169.434	30	PASS
157	5785	MCS0	20.5	18.62	19.65	22.36	172.187	30	PASS
165	5825	MCS0	20.5	18.84	19.79	**22.54**	179.473	30	PASS

Note: Since DG<6dBi, there is no need to modify the limit value.

Test mode: IEEE 802.11n HT40 mode

802.11n_HT40_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
38	5190	MCS0	14.5	14.14	14.68	17.80	60.256	30	PASS
46	5230	MCS0	19	18.81	19.42	**22.51**	178.238	30	PASS
54	5270	MCS0	17.5	17.24	17.36	**20.68**	116.950	23.98	PASS
62	5310	MCS0	15	14.56	14.81	18.07	64.121	23.98	PASS
102	5510	MCS0	15	14.35	14.67	17.90	61.660	23.98	PASS
110	5550	MCS0	18	17.31	17.78	**20.93**	123.880	23.98	PASS
134	5670	MCS0	17.5	16.44	16.62	19.91	97.949	23.98	PASS
151	5755	MCS0	19.5	17.85	18.51	**21.58**	143.880	30	PASS
159	5795	MCS0	19.5	17.65	18.45	21.45	139.637	30	PASS

Test mode: IEEE 802.11ac VHT40 mode

802.11ac_VHT40_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
38	5190	MCS0	14	14.12	14.66	17.76	59.704	30	PASS
46	5230	MCS0	19	18.78	19.4	**22.47**	176.604	30	PASS
54	5270	MCS0	17.5	17.21	17.33	**20.64**	115.878	23.98	PASS
62	5310	MCS0	15	14.54	14.78	18.03	63.533	23.98	PASS
102	5510	MCS0	15	14.31	14.65	17.85	60.954	23.98	PASS
110	5550	MCS0	18	17.28	17.75	**20.89**	122.744	23.98	PASS
134	5670	MCS0	17.5	16.41	16.58	19.86	96.828	23.98	PASS
151	5755	MCS0	20	17.84	18.48	**21.54**	142.561	30	PASS
159	5795	MCS0	19.5	17.62	18.41	21.40	138.038	30	PASS

Note: Since DG<6dBi, there is no need to modify the limit value.

Test mode: IEEE 802.11ac VHT80 mode

802.11ac_VHT80_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
42	5210	MCS0	11	9.31	10.46	**13.63**	23.067	30	PASS
58	5290	MCS0	12.5	10	10.85	**14.15**	26.002	23.98	PASS
106	5530	MCS0	13	11.04	11.53	14.99	31.550	23.98	PASS
122	5610	MCS0	17.5	16.24	16.8	**20.23**	105.439	23.98	PASS
155	5775	MCS0	17.5	15.3	16.62	**19.71**	93.541	30	PASS

Test mode: IEEE 802.11ac VHT160 mode

802.11ac_VHT160_2TX									
CH	Frequency (MHz)	Data Rate	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
				Ch0	Ch1				
50	5250	MCS0	11.5	7.43	8.83	**11.91**	15.524	23.98	PASS
114	5570	MCS0	12	8.07	9.45	**12.54**	17.947	23.98	PASS

Test mode: IEEE 802.11ax HE20 mode

802.11ax_HE20_2TX										
CH	Frequency (MHz)	Data Rate	RU config.	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
36	5180	MCS0	full	16.5	16.31	16.93	20.35	108.393	30	PASS
44	5220	MCS0	full	19	18.98	19.89	**23.18**	207.970	30	PASS
48	5240	MCS0	full	19	18.82	19.75	23.03	200.909	30	PASS
52	5260	MCS0	full	14.5	14.63	14.76	18.41	69.343	23.98	PASS
60	5300	MCS0	full	15.5	15.22	15.42	**19.04**	80.168	23.98	PASS
64	5320	MCS0	full	15.5	15.21	15.33	18.99	79.250	23.98	PASS
100	5500	MCS0	full	16	15.39	15.79	**19.31**	85.310	23.98	PASS
116	5580	MCS0	full	15	14.78	14.52	18.37	68.707	23.98	PASS
140	5700	MCS0	full	15	13.92	14.13	17.74	59.429	23.98	PASS
149	5745	MCS0	full	21	18.74	19.71	22.97	198.153	30	PASS
157	5785	MCS0	full	20.5	18.91	19.72	23.05	201.837	30	PASS
165	5825	MCS0	full	20.5	19.21	19.95	**23.31**	214.289	30	PASS

Note: Since DG<6dBi, there is no need to modify the limit value.

Test mode: IEEE 802.11ax HE40 mode

802.11ax_HE40_2TX										
CH	Frequency (MHz)	Data Rate	RU config.	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
38	5190	MCS0	full	14	13.83	14.46	17.91	61.802	30	PASS
46	5230	MCS0	full	19	18.92	19.51	**22.98**	198.609	30	PASS
54	5270	MCS0	full	17	16.85	17.11	**20.73**	118.304	23.98	PASS
62	5310	MCS0	full	14.5	14.22	14.41	18.07	64.121	23.98	PASS
102	5510	MCS0	full	15	14.43	14.75	18.34	68.234	23.98	PASS
110	5550	MCS0	full	17	16.57	17.04	**20.56**	68.234	23.98	PASS
134	5670	MCS0	full	16	15.15	15.16	18.91	77.804	23.98	PASS
151	5755	MCS0	full	20	18.01	18.79	22.17	164.816	30	PASS
159	5795	MCS0	full	20.5	18.69	19.34	**22.78**	189.671	30	PASS

Test mode: IEEE 802.11ax HE80 mode

802.11ax_HE80_2TX										
CH	Frequency (MHz)	Data Rate	RU config.	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
42	5210	MCS0	full	12	10.17	11.36	**14.56**	28.576	30	PASS
58	5290	MCS0	full	12.5	10.14	10.98	**14.34**	27.164	23.98	PASS
106	5530	MCS0	full	12	10.08	11.04	14.34	27.164	23.98	PASS
122	5610	MCS0	full	17.5	16.45	16.77	**20.37**	108.893	23.98	PASS
155	5775	MCS0	full	17.5	15.11	16.87	**19.84**	96.383	30	PASS

Test mode: IEEE 802.11ax HE160 mode

802.11ax_HE160_2TX										
CH	Frequency (MHz)	Data Rate	RU config.	Power set	Avg. POWER (dBm)		TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
					Ch0	Ch1				
50	5250	MCS0	full	12	8.29	9.55	**12.75**	18.836	23.98	PASS
114	5570	MCS0	full	12	9.18	10.15	**13.48**	22.284	23.98	PASS

Note: Since DG<6dBi, there is no need to modify the limit value.

4.4 POWER SPECTRAL DENSITY

4.4.1 Test Limit

According to §15.407 (a)(1), 15.407(a)(2) and 15.407(a)(3)

UNII-1 :

The maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. For client devices, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

UNII-2a and 2c:

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.

UNII-3:

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz 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.

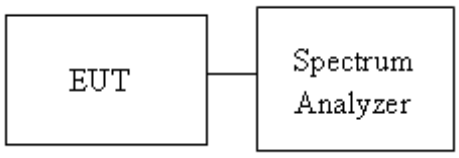
UNII-1 Limit	☒ Antenna not exceed 6 dBi：17 dBm/MHz ☐ Antenna with DG greater than 6 dBi： [Limit = 17 – (DG – 6) dBm/MHz]
UNII-2a Limit	☒ Antenna not exceed 6 dBi：11 dBm/MHz ☐ Antenna with DG greater than 6 dBi： [Limit = 11 – (DG – 6)]
UNII-2c Limit	☒ Antenna not exceed 6 dBi：11 dBm/MHz ☐ Antenna with DG greater than 6 dBi： [Limit = 11 – (DG – 6)]
UNII-3 Limit	☒ Antenna not exceed 6 dBi：30 dBm/500kHz ☐ Antenna with DG greater than 6 dBi： [Limit = 30 – (DG – 6) dBm/500kHz]

4.4.2 Test Procedure

Test method Refer as KDB 789033 D02

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. UNII-1, UNII-2a and UNII-2c, SA set RBW = 1MHz, VBW = 3MHz and Detector = RMS, to measurement Power Density.
4. UNII-3, SA set RBW = 500kHz, VBW = 2MHz and Detector = RMS, to measurement Power Density
5. The path loss and Duty Factor were compensated to the results for each measurement by SA.
6. Mark the maximum level.
7. Measure and record the result of power spectral density. in the test report.

4.4.3 Test Setup



4.4.4 Test Result

Non-Beamforming

Temperature: 22.6~24.1℃ **Test date:** March 31~June 15, 2023

Humidity: 58~68% RH **Tested by:** David Li

POWER DENSITY 802.11a MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD (dBm/MHz)		Limit (dBm/MHz)	Margin (dB)
5180	11.35	10.82	0.17	11.52		17.00	-5.48
5220	11.52	11.02	0.17	11.69		17.00	-5.31
5240	11.28	12.33	0.17	12.50		17.00	-4.50
5260	10.51	10.62	0.17	10.79		11.00	-0.21
5300	10.29	10.58	0.17	10.75		11.00	-0.25
5320	10.69	9.84	0.17	10.86		11.00	-0.14
5500	10.55	9.56	0.17	10.72		11.00	-0.28
5580	10.57	10.29	0.17	10.74		11.00	-0.26
5700	10.37	9.11	0.17	10.54		11.00	-0.46
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit (dBm/500kHz)	Margin (dB)
5745	7.22	7.33	0.17	2.22	9.72	30.00	-20.28
5785	6.59	7.82	0.17	2.22	10.21	30.00	-19.79
5825	7.02	7.43	0.17	2.22	9.82	30.00	-20.18

POWER DENSITY 802.11n HT20 MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD (dBm/MHz)		Limit (dBm/MHz)	Margin (dB)
5180	9.34	10.26	0.19	13.03		17.00	-3.97
5220	11.42	12.43	0.19	15.15		17.00	-1.85
5240	11.13	12.07	0.19	14.83		17.00	-2.17
5260	6.84	7.68	0.19	10.48		11.00	-0.52
5300	7.18	8.12	0.19	10.87		11.00	-0.13
5320	7.09	7.76	0.19	10.63		11.00	-0.37
5500	7.03	8.33	0.19	10.93		11.00	-0.07
5580	7.57	7.90	0.19	10.94		11.00	-0.06
5700	7.14	7.62	0.19	10.59		11.00	-0.41
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit (dBm/500kHz)	Margin (dB)
5745	6.56	7.61	0.19	2.22	12.54	30.00	-17.46
5785	6.54	7.70	0.19	2.22	12.58	30.00	-17.42
5825	6.67	7.56	0.19	2.22	12.56	30.00	-17.44

POWER DENSITY 802.11n HT40 MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD (dBm/MHz)		Limit (dBm/MHz)	Margin (dB)
5190	3.99	5.15	0.37	7.99		17.00	-9.01
5230	8.59	9.81	0.37	12.62		17.00	-4.38
5270	6.84	7.75	0.37	10.70		11.00	-0.30
5310	4.10	4.48	0.37	7.67		11.00	-3.33
5510	3.60	4.22	0.37	7.30		11.00	-3.70
5550	6.75	7.82	0.37	10.69		11.00	-0.31
5670	6.71	7.28	0.37	10.38		11.00	-0.62
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit (dBm/500kHz)	Margin (dB)
5755	3.46	3.82	0.37	2.22	9.24	30.00	-20.76
5795	2.84	4.24	0.37	2.22	9.19	30.00	-20.81

Note: Since DG<6dBi, there is no need to modify the limit value.

POWER DENSITY 802.11ac VHT80 MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD (dBm/MHz)		Limit (dBm/MHz)	Margin (dB)
5210	-3.43	-2.67	0.69	0.67		17.00	-16.33
5290	-2.41	-1.56	0.69	1.74		11.00	-9.26
5530	-2.68	-0.79	0.69	2.07		11.00	-8.93
5610	3.76	4.11	0.69	7.64		11.00	-3.36
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit (dBm/500kHz)	Margin (dB)
5775	-2.88	-1.33	0.69	2.22	3.88	30.00	-26.12

POWER DENSITY 802.11ac VHT160 MODE						
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)
5250	-7.50	-6.87	0.72	-3.44	11.00	-14.44
5570	-17.14	-15.93	0.72	-12.76	11.00	-23.76

Note: Since DG<6dBi, there is no need to modify the limit value.

POWER DENSITY 802.11ax HE20 MODE								
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxmum Corr'd PSD (dBm/MHz)		Limit (dBm/MHz)	Margin (dB)
5180	full	8.84	9.66	0.71	12.99		17.00	-4.01
5220	full	11.49	12.46	0.71	15.72		17.00	-1.28
5240	full	11.47	12.21	0.71	15.58		17.00	-1.42
5260	full	6.26	7.15	0.71	10.45		11.00	-0.55
5300	full	6.94	7.53	0.71	10.96		11.00	-0.04
5320	full	6.37	6.92	0.71	10.37		11.00	-0.63
5500	full	6.33	7.52	0.71	10.68		11.00	-0.32
5580	full	6.73	7.07	0.71	10.62		11.00	-0.38
5700	full	6.44	7.36	0.71	10.64		11.00	-0.36
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD (dBm/500kHz)	Limit (dBm/500kHz)	Margin (dB)
5745	full	6.67	7.58	0.71	2.22	13.09	30.00	-16.91
5785	full	6.47	7.45	0.71	2.22	12.92	30.00	-17.08
5825	full	5.80	7.24	0.71	2.22	12.52	30.00	-17.48

POWER DENSITY 802.11ax HE40 MODE								
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxmum Corr'd PSD (dBm/MHz)		Limit (dBm/MHz)	Margin (dB)
5190	full	3.16	4.53	0.74	7.65		17.00	-9.35
5230	full	9.08	10.33	0.74	13.50		17.00	-3.50
5270	full	6.43	7.17	0.74	10.57		11.00	-0.43
5310	full	3.48	4.33	0.74	7.68		11.00	-3.32
5510	full	3.32	4.48	0.74	7.69		11.00	-3.31
5550	full	6.51	7.58	0.74	10.82		11.00	-0.18
5670	full	5.28	6.19	0.74	9.51		11.00	-1.49
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD (dBm/500kHz)	Limit (dBm/500kHz)	Margin (dB)
5755	full	3.16	4.34	0.74	2.22	9.76	30.00	-20.24
5795	full	3.39	4.45	0.74	2.22	9.92	30.00	-20.08

Note: Since DG<6dBi, there is no need to modify the limit value.

POWER DENSITY 802.11ax HE80 MODE								
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxmum Corr'd PSD (dBm/MHz)		Limit (dBm/MHz)	Margin (dB)
5210	full	-2.95	-1.37	0.75	1.68		17.00	-15.32
5290	full	-1.22	-1.21	0.75	2.55		11.00	-8.45
5530	full	-2.29	-1.81	0.75	1.72		11.00	-9.28
5610	full	4.89	3.72	0.75	8.10		11.00	-2.90
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD (dBm/500kHz)	Limit (dBm/500kHz)	Margin (dB)
5775	full	-2.45	-1.03	0.75	2.22	4.30	30.00	-25.70

POWER DENSITY 802.11ax HE160 MODE							
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxmum Corr'd PSD (dBm/MHz)	Limit (dBm/MHz)	Margin (dB)
5250	full	-6.82	-6.05	0.78	-2.63	11.00	-13.63
5570	full	-16.51	-15.71	0.78	-12.30	11.00	-23.30

Note: Since DG<6dBi, there is no need to modify the limit value.

Beamforming

Temperature: 21.6~24.8℃ **Test date:** March 31~June 13, 2023

Humidity: 58~68% RH **Tested by:** David Li

POWER DENSITY 802.11n HT20 MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5180	5.71	7.00	0.19	9.60		17.00 dBm/MHz	-7.40
5220	8.62	9.55	0.19	12.31		17.00 dBm/MHz	-4.69
5240	7.41	8.97	0.19	11.46		17.00 dBm/MHz	-5.54
5260	3.47	4.37	0.19	7.14		11.00 dBm/MHz	-3.86
5300	3.86	4.75	0.19	7.53		11.00 dBm/MHz	-3.47
5320	3.76	4.74	0.19	7.47		11.00 dBm/MHz	-3.53
5500	4.56	5.27	0.19	8.13		11.00 dBm/MHz	-2.87
5580	5.07	5.45	0.19	8.47		11.00 dBm/MHz	-2.53
5700	4.28	5.57	0.19	8.17		11.00 dBm/MHz	-2.83
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5745	3.68	5.49	0.19	2.22	10.10	30.00 dBm/500kHz	-19.90
5785	4.12	5.44	0.19	2.22	10.25	30.00 dBm/500kHz	-19.75
5825	3.63	5.12	0.19	2.22	9.86	30.00 dBm/500kHz	-20.14

POWER DENSITY 802.11n HT40 MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5190	0.18	1.39	0.37	4.21		17.00 dBm/MHz	-12.79
5230	5.01	5.88	0.37	8.85		17.00 dBm/MHz	-8.15
5270	3.58	3.97	0.37	7.16		11.00 dBm/MHz	-3.84
5310	-0.22	1.21	0.37	3.93		11.00 dBm/MHz	-7.07
5510	2.27	2.92	0.37	5.99		11.00 dBm/MHz	-5.01
5550	3.41	5.52	0.37	7.97		11.00 dBm/MHz	-3.03
5670	3.58	4.66	0.37	7.53		11.00 dBm/MHz	-3.47
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5755	0.08	1.80	0.37	2.22	6.63	30.00 dBm/500kHz	-23.37
5795	-0.06	1.33	0.37	2.22	6.29	30.00 dBm/500kHz	-23.71

Note: Since DG<6dBi, there is no need to modify the limit value.

POWER DENSITY 802.11ac VHT80 MODE							
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5210	-7.76	-5.16	0.69	-2.57		17.00 dBm/MHz	-19.57
5290	-6.97	-4.95	0.69	-2.14		11.00 dBm/MHz	-13.14
5530	-5.44	-4.27	0.69	-1.12		11.00 dBm/MHz	-12.12
5610	-0.33	-0.52	0.69	3.28		11.00 dBm/MHz	-7.72
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5775	-5.54	-4.60	0.69	2.22	0.88	30.00 dBm/500kHz	-29.12

POWER DENSITY 802.11ac VHT160 MODE						
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD(dBm/MHz)	Limit	Margin (dB)
5250	-11.26	-10.00	0.72	-6.85	11.00 dBm/MHz	-17.85
5570	-11.20	-9.31	0.72	-6.42	11.00 dBm/MHz	-17.42

POWER DENSITY 802.11ax HE20 MODE								
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5180	full	5.02	6.40	0.71	9.49		17.00 dBm/MHz	-7.51
5220	full	7.77	9.21	0.71	12.27		17.00 dBm/MHz	-4.73
5240	full	7.59	8.64	0.71	11.87		17.00 dBm/MHz	-5.13
5260	full	3.08	3.71	0.71	7.12		11.00 dBm/MHz	-3.88
5300	full	3.13	3.96	0.71	7.28		11.00 dBm/MHz	-3.72
5320	full	3.28	4.18	0.71	7.47		11.00 dBm/MHz	-3.53
5500	full	3.64	4.30	0.71	7.70		11.00 dBm/MHz	-3.30
5580	full	3.47	3.80	0.71	7.36		11.00 dBm/MHz	-3.64
5700	full	3.34	4.39	0.71	7.61		11.00 dBm/MHz	-3.39
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5745	full	3.89	5.19	0.71	2.22	10.53	30.00 dBm/500kHz	-19.47
5785	full	4.74	5.14	0.71	2.22	10.89	30.00 dBm/500kHz	-19.11
5825	full	3.74	5.23	0.71	2.22	10.49	30.00 dBm/500kHz	-19.51

Note: Since DG<6dBi, there is no need to modify the limit value.

POWER DENSITY 802.11ax HE40 MODE								
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5190	full	-0.07	1.98	0.74	4.83		17.00 dBm/MHz	-12.17
5230	full	5.15	6.80	0.74	9.80		17.00 dBm/MHz	-7.20
5270	full	2.75	3.48	0.74	6.88		11.00 dBm/MHz	-4.12
5310	full	-0.32	0.66	0.74	3.95		11.00 dBm/MHz	-7.05
5510	full	0.60	1.59	0.74	4.87		11.00 dBm/MHz	-6.13
5550	full	3.09	4.04	0.74	7.34		11.00 dBm/MHz	-3.66
5670	full	2.20	3.10	0.74	6.43		11.00 dBm/MHz	-4.57
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5755	full	0.33	1.67	0.74	2.22	7.02	30.00 dBm/500kHz	-22.98
5795	full	1.70	3.07	0.74	2.22	8.41	30.00 dBm/500kHz	-21.59

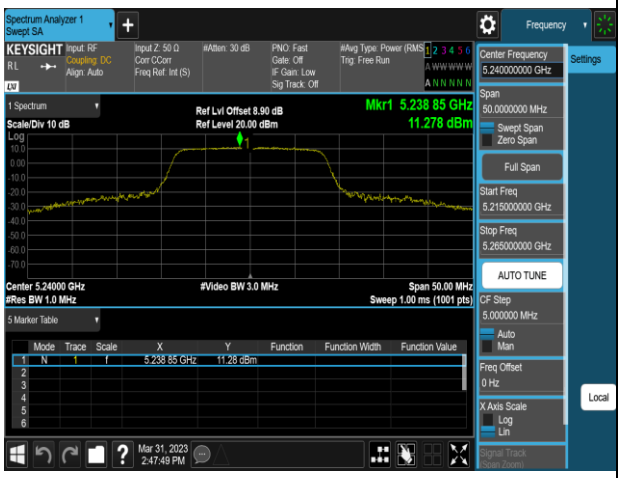
POWER DENSITY 802.11ax HE80 MODE								
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5210	full	-5.53	-5.27	0.75	-1.64		17.00 dBm/MHz	-18.64
5290	full	-5.87	-5.35	0.75	-1.84		11.00 dBm/MHz	-12.84
5530	full	-6.74	-5.37	0.75	-2.24		11.00 dBm/MHz	-13.24
5610	full	-0.31	0.69	0.75	3.98		11.00 dBm/MHz	-7.02
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/300kHz)	Ch1 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Total Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5775	full	-2.97	-2.26	0.75	2.22	3.38	30.00 dBm/500kHz	-26.62

POWER DENSITY 802.11ax HE160 MODE							
Frequency (MHz)	RU config.	Ch0 meas PSD (dBm/MHz)	Ch1 meas PSD (dBm/MHz)	Duty Factor (dB)	Total Corr'd PSD(dBm/MHz)	Limit	Margin (dB)
5250	full	-9.65	-9.73	0.78	-5.90	11.00 dBm/MHz	-16.90
5570	full	-5.60	-4.07	0.78	-0.98	11.00 dBm/MHz	-11.98

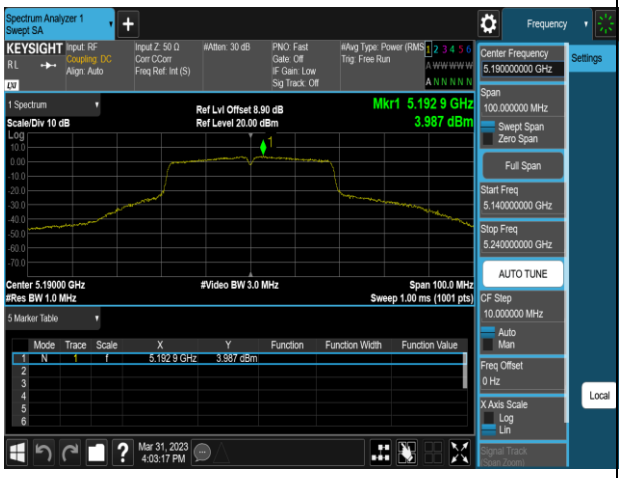
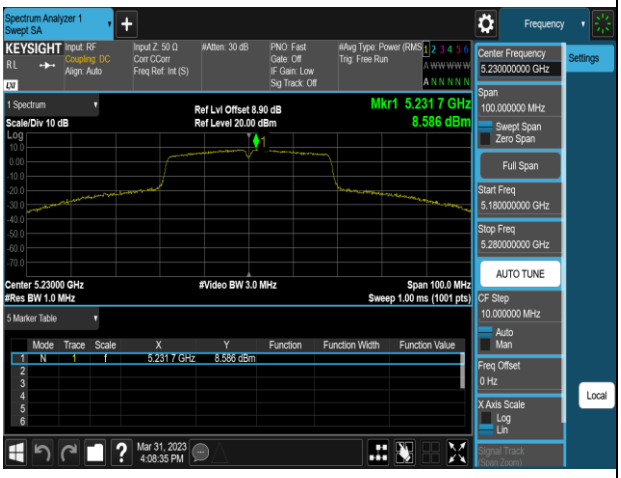
Note: Since DG<6dBi, there is no need to modify the limit value.

Test Plots: Non-Beamforming

UNII-1 Chain 0

UNII-1 IEEE 802.11a mode	
5180 MHz	5220 MHz
	
5240 MHz	
	

UNII-1 IEEE 802.11n HT20 mode	
5180 MHz	**5220 MHz**
	
5240 MHz	
	

UNII-1 IEEE 802.11n HT40 mode	
5190 MHz	**5230 MHz**
	

UNII-1 IEEE 802.11ac VHT80 mode
5210 MHz

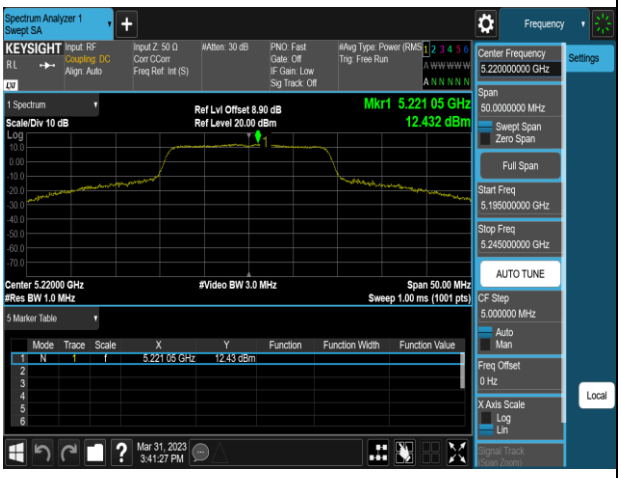

UNII-1 IEEE 802.11ax HE20 mode	
5180 MHz	5220 MHz
	
5240 MHz	
	

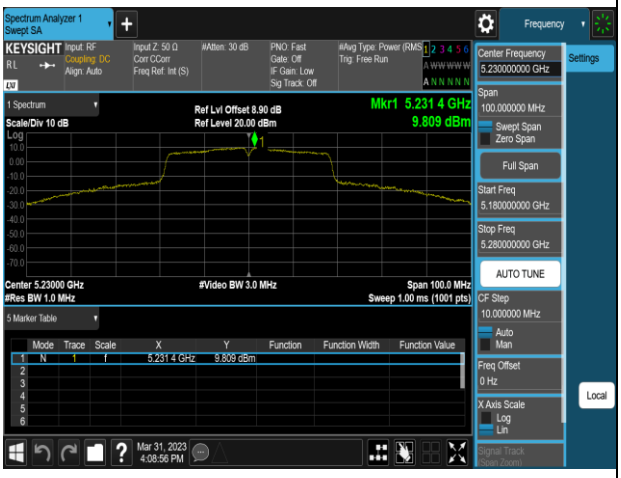
UNII-1 IEEE 802.11ax HE40 mode	
5190 MHz	5230 MHz
	

UNII-1 IEEE 802.11ax HE80 mode
5210 MHz


UNII-1 Chain 1

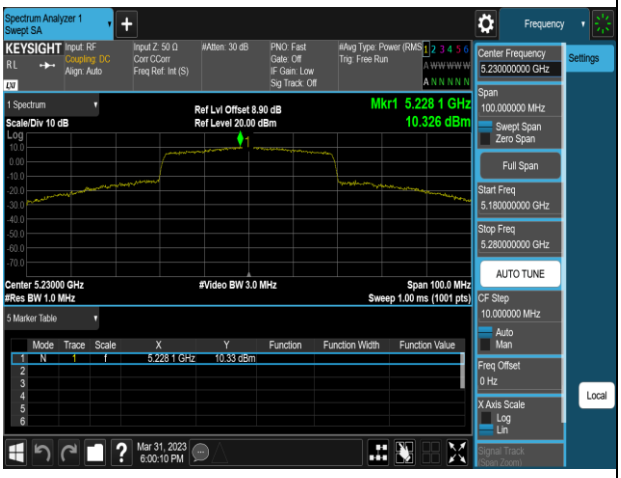
UNII-1 IEEE 802.11a mode	
5180 MHz	**5220 MHz**
	
5240 MHz	
	

UNII-1 IEEE 802.11n HT20 mode	
5180 MHz	**5220 MHz**
	
5240 MHz	
	

UNII-1 IEEE 802.11n HT40 mode	
5190 MHz	**5230 MHz**
	

UNII-1 IEEE 802.11ac VHT80 mode
5210 MHz

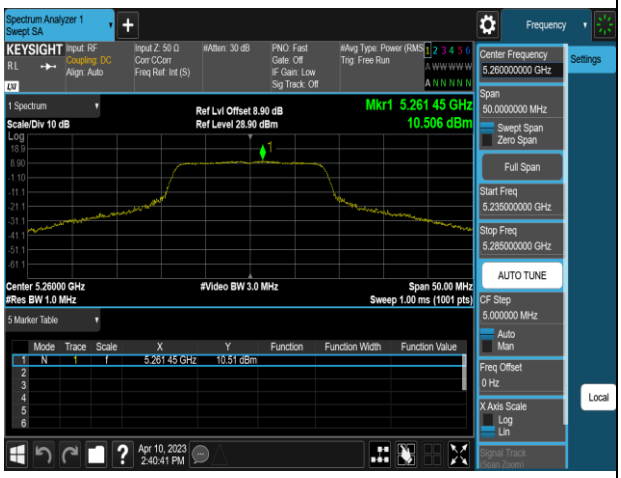

UNII-1 IEEE 802.11ax HE20 mode	
5180 MHz	5220 MHz
	
5240 MHz	
	

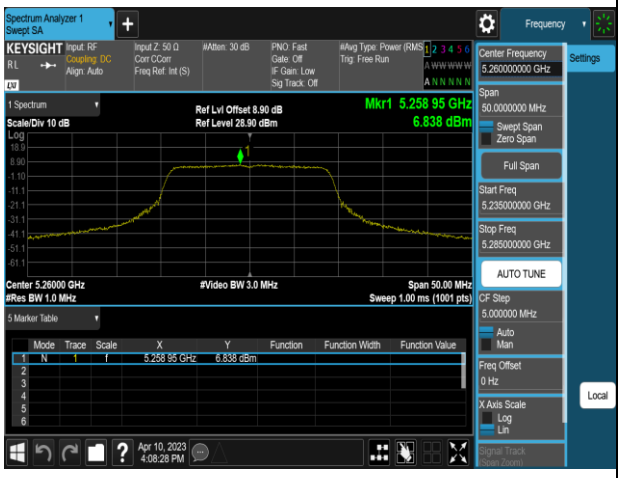
UNII-1 IEEE 802.11ax HE40 mode	
5190 MHz	5230 MHz
	

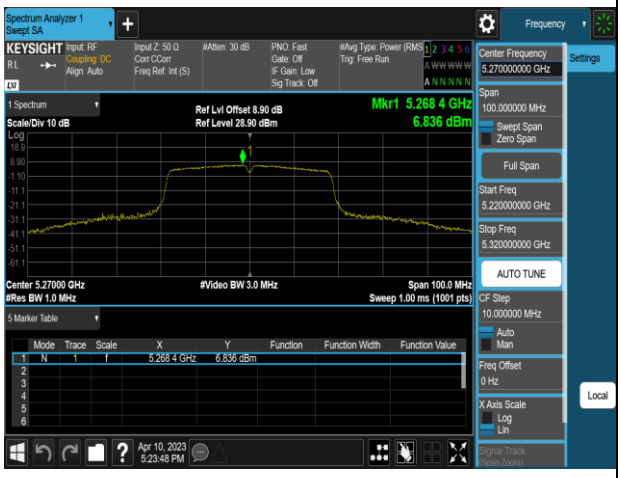
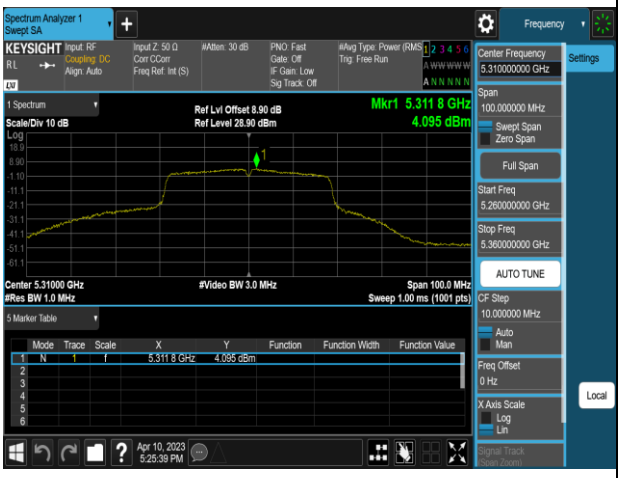
UNII-1 IEEE 802.11ax HE80 mode
5210 MHz


Test Plots: Non-Beamforming

UNII-2a Chain 0

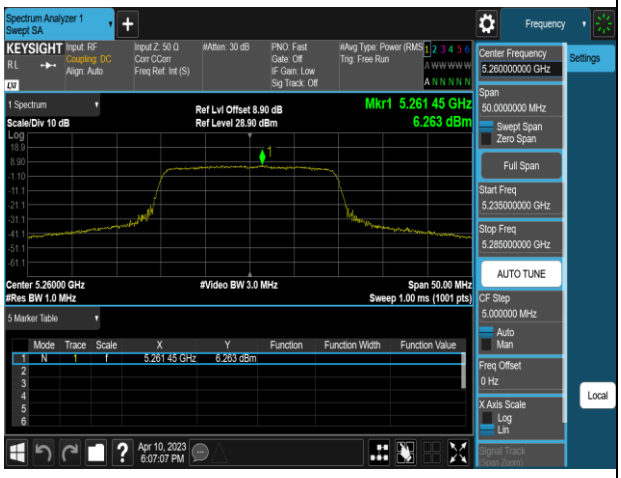
UNII-2a IEEE 802.11a mode	
5260 MHz	5300 MHz
	
5320 MHz	
	

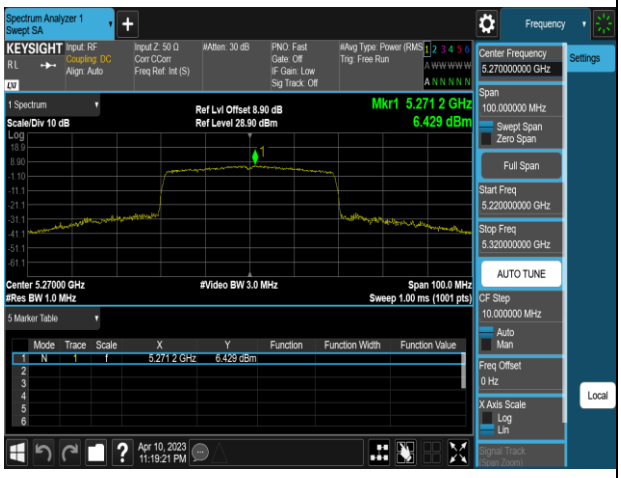
UNII-2a IEEE 802.11n HT20 mode	
5260 MHz	5300 MHz
	
5320 MHz	
	

UNII-2a IEEE 802.11n HT40 mode	
5270 MHz	5310 MHz
	

UNII-2a IEEE 802.11ac VHT80 mode
5290 MHz


UNII-2a IEEE 802.11ac VHT160 mode
5250 MHz

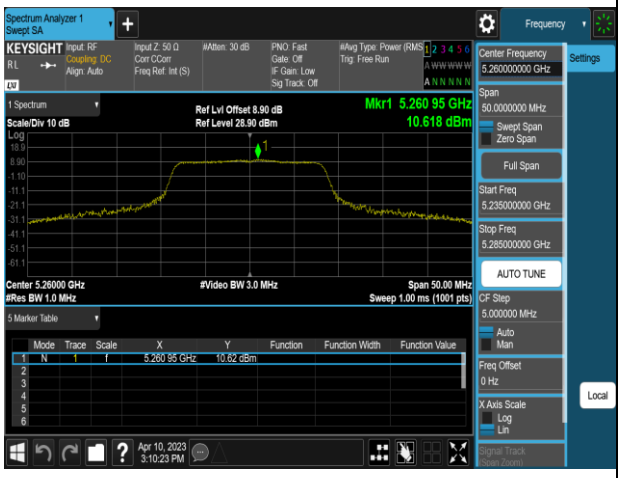

UNII-2a IEEE 802.11ax HE20 mode	
5260 MHz	5300 MHz
	
5320 MHz	
	

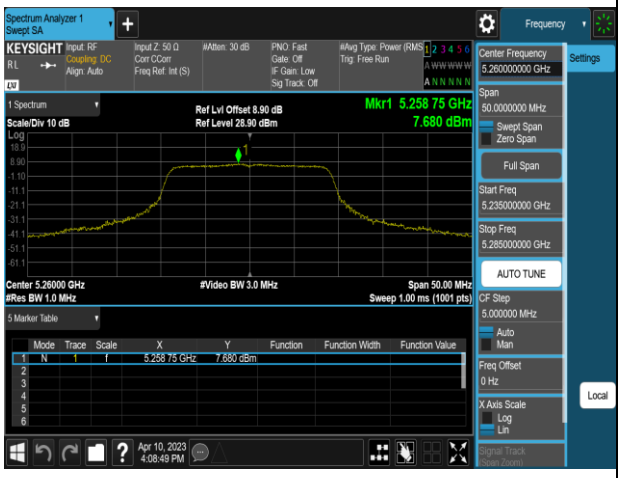
UNII-2a IEEE 802.11ax HE40 mode	
5270 MHz	5310 MHz
	

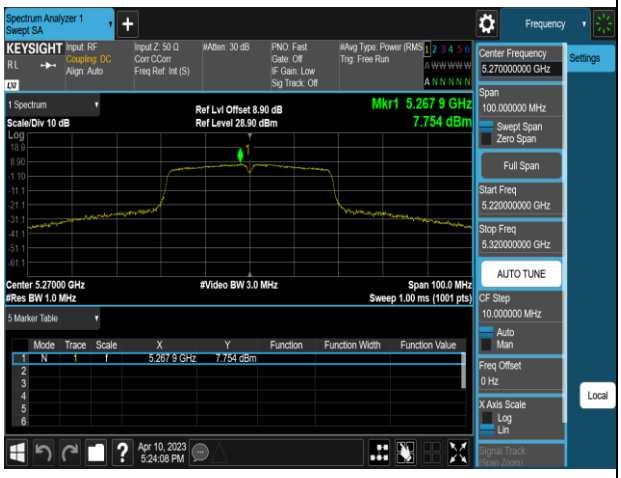
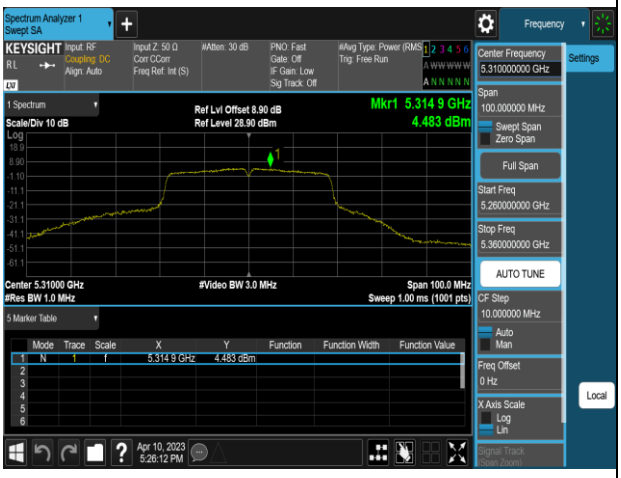
UNII-2a IEEE 802.11ax HE80 mode
5290 MHz


UNII-2a IEEE 802.11ax HE160 mode
5250 MHz


UNII-2a Chain 1

UNII-2a IEEE 802.11a mode	
5260 MHz	5300 MHz
	
5320 MHz	
	

UNII-2a IEEE 802.11n HT20 mode	
5260 MHz	5300 MHz
	
5320 MHz	
	

UNII-2a IEEE 802.11n HT40 mode	
5270 MHz	5310 MHz
	

UNII-2a IEEE 802.11ac VHT80 mode
5290 MHz


UNII-2a IEEE 802.11ac VHT160 mode
5250 MHz