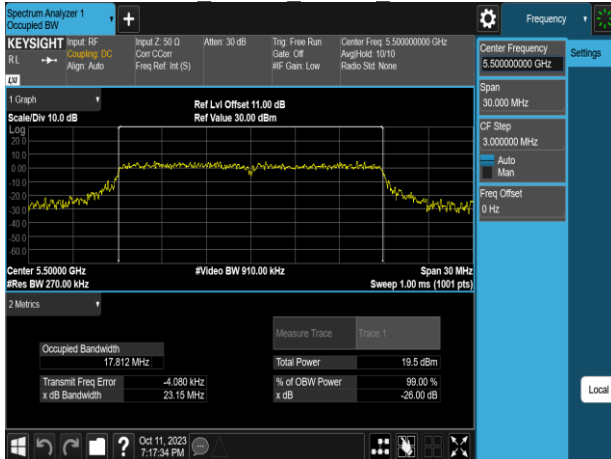
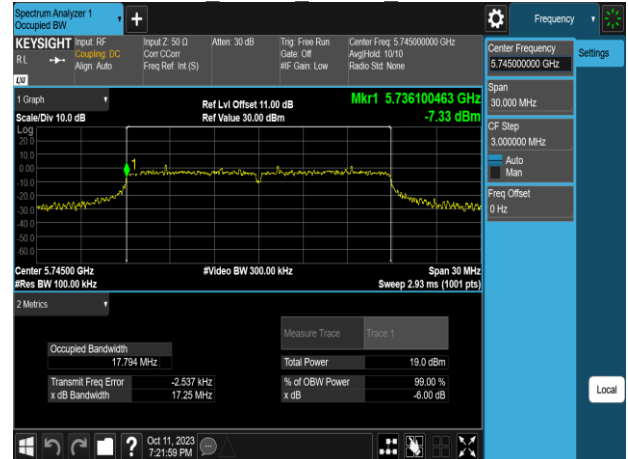


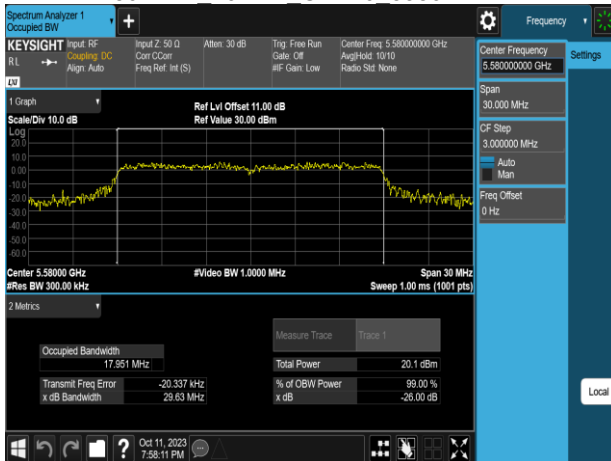
802.11n 20MHz Chain0 5500MHz



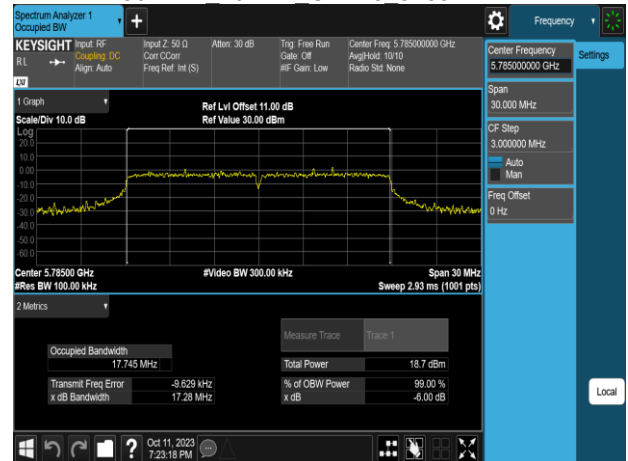
802.11n 20MHz Chain0 5745MHz



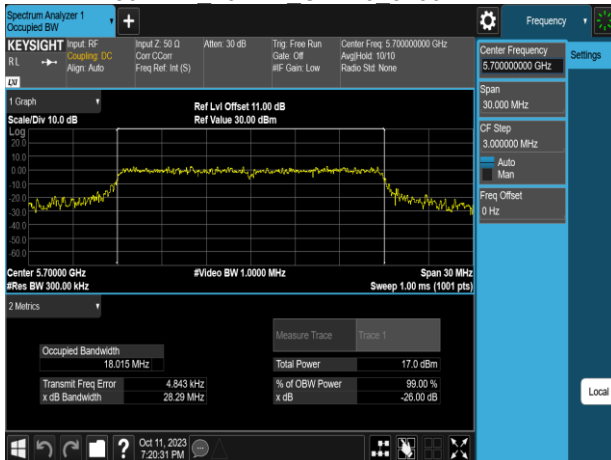
802.11n 20MHz Chain0 5580MHz



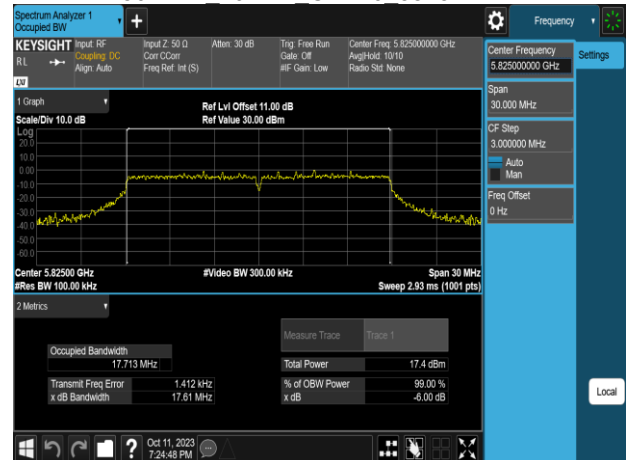
802.11n 20MHz Chain0 5785MHz



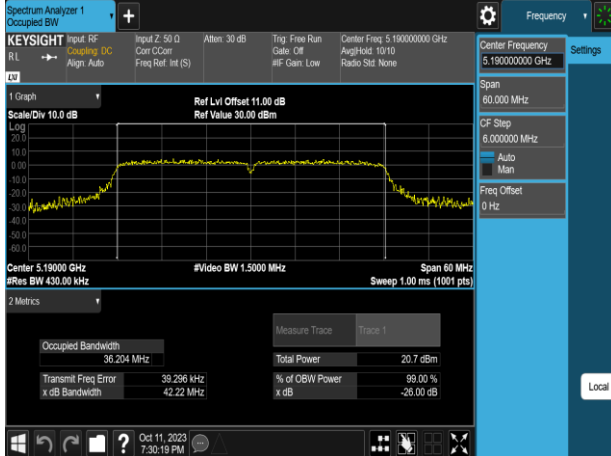
802.11n 20MHz Chain0 5700MHz



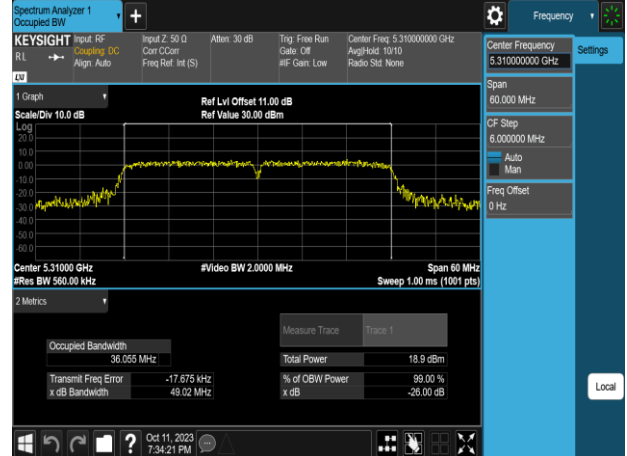
802.11n 20MHz Chain0 5825MHz



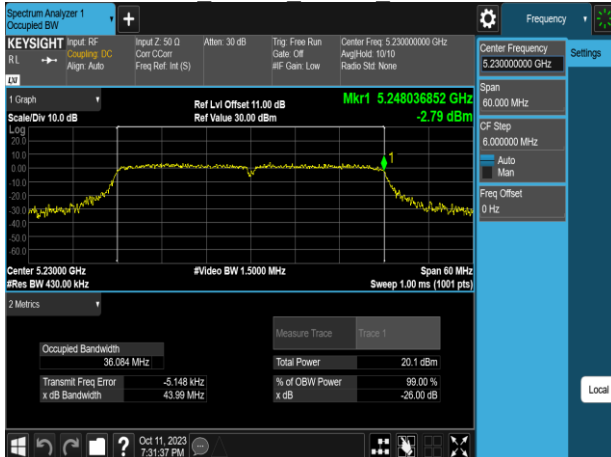
802.11n 40MHz Chain0 5190MHz



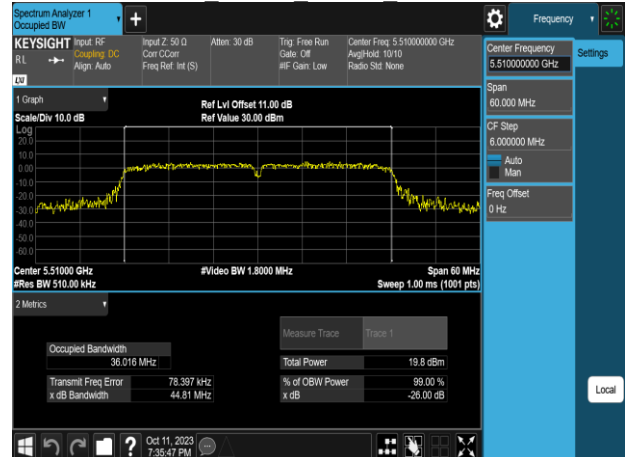
802.11n 40MHz Chain0 5310MHz



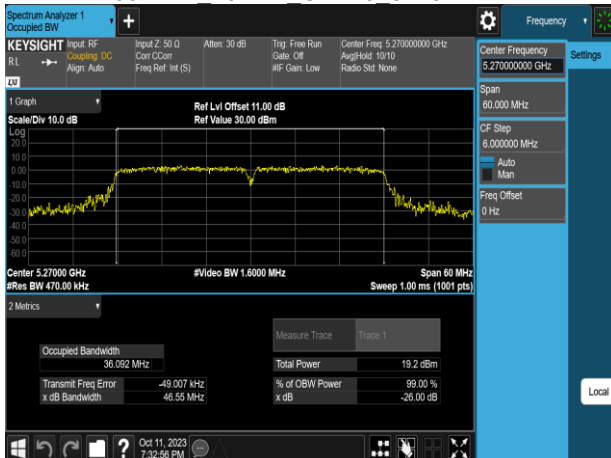
802.11n 40MHz Chain0 5230MHz



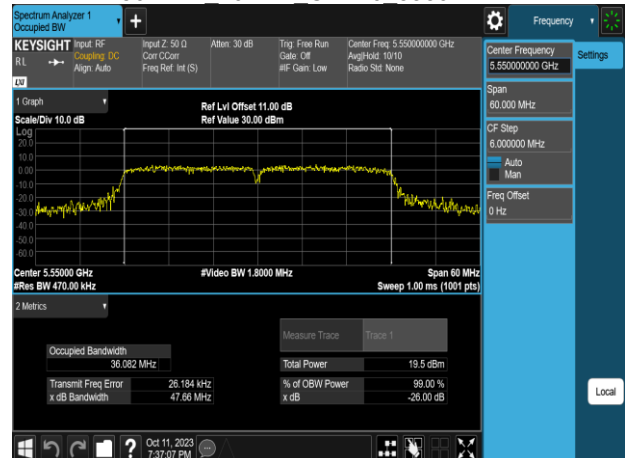
802.11n 40MHz Chain0 5510MHz



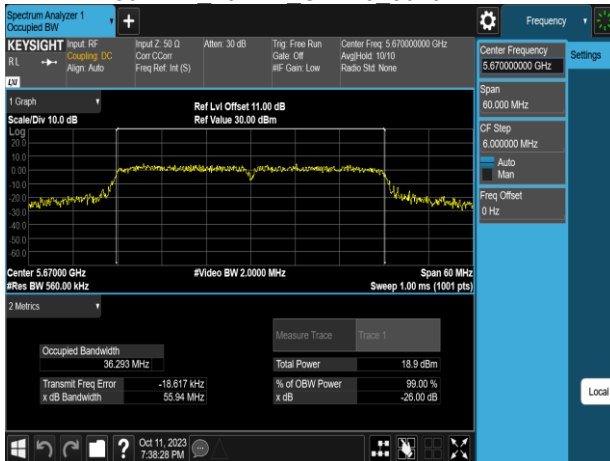
802.11n 40MHz Chain0 5270MHz



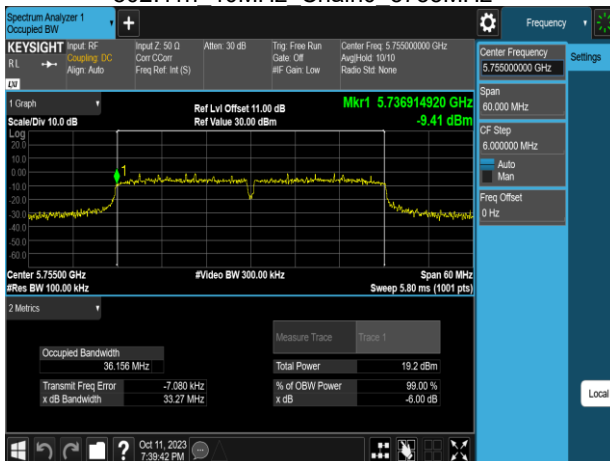
802.11n 40MHz Chain0 5550MHz



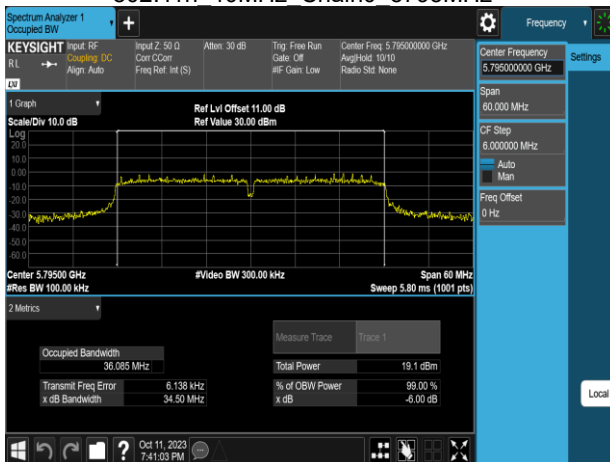
802.11n 40MHz Chain0 5670MHz

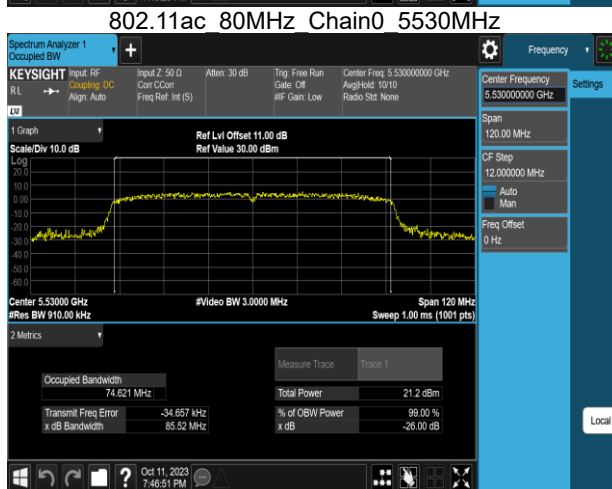
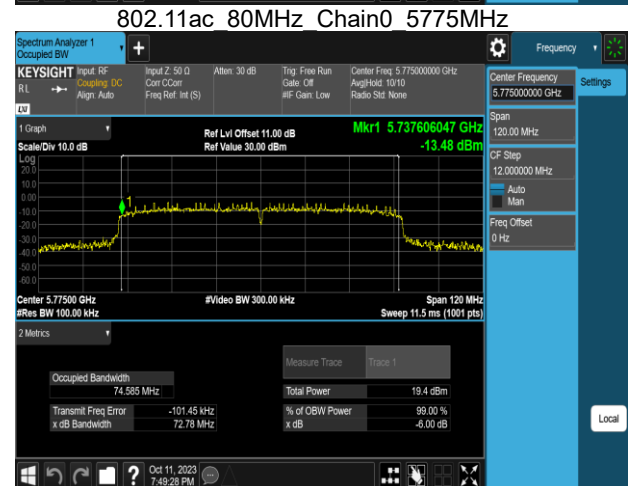
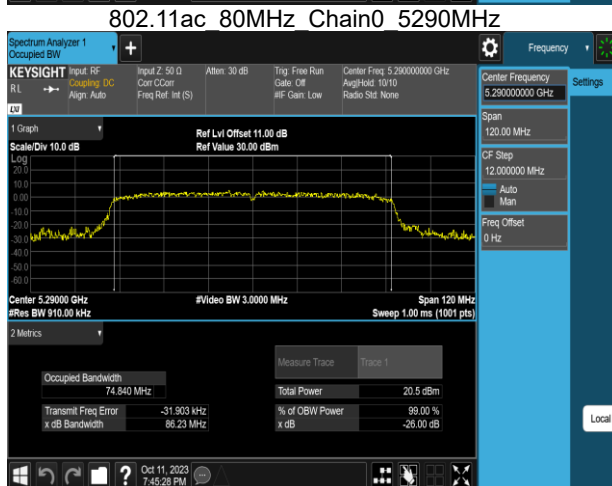
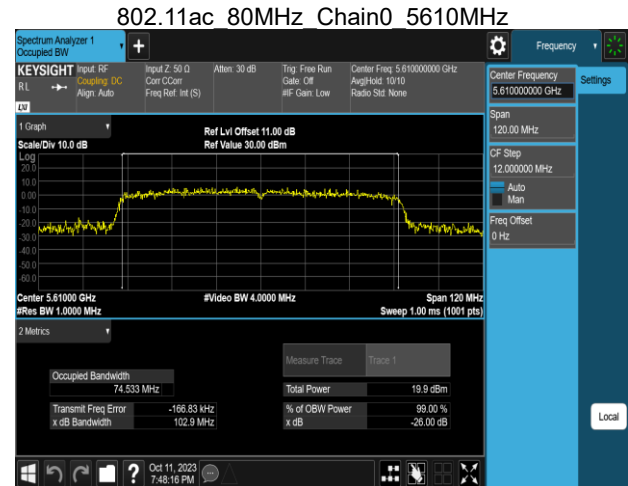
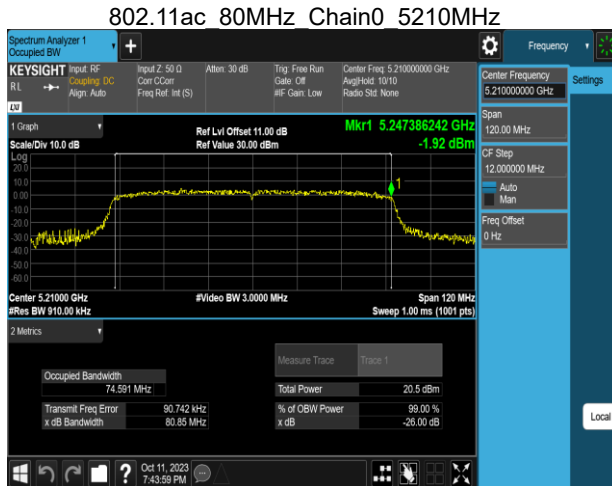


802.11n 40MHz Chain0 5755MHz



802.11n 40MHz Chain0 5795MHz





## 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) and RSS-247 section 6.2.1.1, section 6.2.2.1, section 6.2.3.1 and section 6.2.4.1

#### UNII-1 :

##### **FCC**

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(24 dBm) and The maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10} B$ , dBm, whichever power is less. B is the 99% emission bandwidth in megahertz ,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.

##### **IC**

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or  $1.76 + 10 \log_{10} B$ , dBm, whichever is less. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10} B$ , dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

**UNII-2a and 2c:****FCC**

the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , 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. and The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz. 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.

**IC**

For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or  $1.76 + 10 \log_{10} B$ , dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

**IC****UNII-2c (5470-5600 MHz and 5650-5725 MHz)**

The maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

**UNII-3:**

**FCC**

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.

**FCC**

UNII-1 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 24dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 24 – (DG – 6)]
UNII-2a/2c Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 24dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 24 – (DG – 6)]
UNII-3 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 30dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)]

**IC**

UNII-1 Limit	<input checked="" type="checkbox"/> 200mW or 10 + 10 log <sub>10</sub> B for IC <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)]
UNII-2a/2c Limit	<input checked="" type="checkbox"/> 250 mW or 11 + 10 log <sub>10</sub> B for IC <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 24 – (DG – 6)]
UNII-3 Limit	<input type="checkbox"/> Antenna not exceed 6 dBi : 30dBm <input checked="" type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)]

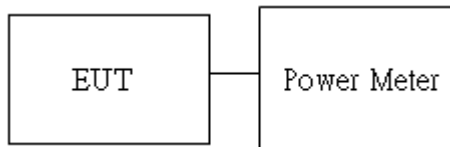
### 4.3.2 Test Procedure

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

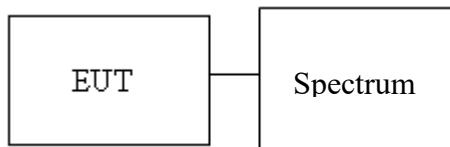
1. The EUT RF output connected to the power meter or spectrum by RF cable.
2. Setting maximum power transmit of EUT.
3. The path loss was compensated to the results for each measurement.
4. Measure and record the result of Average output power. in the test report.

### 4.3.3 Test Setup

For BW 20MHz ,40MHz and 80MHz



For BW 160MHz



### 4.3.4 Test Result

Temperature: 22.7~25.6°C

Test date: October 11 ~ 30, 2023

Humidity: 51~61% RH

Tested by: David Li

#### FCC Conducted output power :

##### 802.11a\_Ch0

CH	Frequency (MHz)	Data Rate	Power set	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	16	17.50	56.219	23.98	PASS
44	5220	6	20	<b>20.35</b>	108.364	23.98	PASS
48	5240	6	20	20.33	107.866	23.98	PASS
52	5260	6	20	<b>20.08</b>	101.832	23.98	PASS
60	5300	6	20	19.76	94.599	23.98	PASS
64	5320	6	16.5	16.61	45.802	23.98	PASS
100	5500	6	18	16.47	44.349	23.98	PASS
116	5580	6	20	<b>17.75</b>	59.551	23.98	PASS
140	5700	6	15.5	14.84	30.471	23.98	PASS
149	5745	6	20	17.09	51.155	30	PASS
157	5785	6	20	17.14	51.747	30	PASS
165	5825	6	20	<b>17.17</b>	52.106	30	PASS

802.11n\_HT20\_Ch0

CH	Frequency (MHz)	Data Rate	Power set	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	15	16.57	45.356	23.98	PASS
44	5220	MCS0	20	20.41	109.808	23.98	PASS
48	5240	MCS0	20	<b>20.43</b>	110.314	23.98	PASS
52	5260	MCS0	16	<b>17.08</b>	51.007	23.98	PASS
60	5300	MCS0	16	16.55	45.147	23.98	PASS
64	5320	MCS0	16	16.29	42.524	23.98	PASS
100	5500	MCS0	18	<b>16.48</b>	44.426	23.98	PASS
116	5580	MCS0	18	16.47	44.323	23.98	PASS
140	5700	MCS0	15	14.50	28.160	23.98	PASS
149	5745	MCS0	20	<b>17.17</b>	52.075	30	PASS
157	5785	MCS0	20	17.16	51.956	30	PASS
165	5825	MCS0	20	<b>17.17</b>	52.075	30	PASS

802.11n\_HT40\_Ch0

CH	Frequency (MHz)	Data Rate	Power set	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	14	<b>14.75</b>	29.835	23.98	PASS
46	5230	MCS0	14	14.56	28.558	23.98	PASS
54	5270	MCS0	14.5	<b>14.81</b>	30.250	23.98	PASS
62	5310	MCS0	14.5	14.33	27.085	23.98	PASS
102	5510	MCS0	16	14.23	26.469	23.98	PASS
110	5550	MCS0	17.5	15.70	37.130	23.98	PASS
134	5670	MCS0	17.5	<b>15.81</b>	38.083	23.98	PASS
151	5755	MCS0	20	16.91	49.060	30	PASS
159	5795	MCS0	20	<b>17.20</b>	52.448	30	PASS

802.11ac\_VHT20\_Ch0

CH	Frequency (MHz)	Data Rate	Power set	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	15	16.54	45.107	23.98	PASS
44	5220	MCS0	20	20.38	109.205	23.98	PASS
48	5240	MCS0	20	<b>20.40</b>	109.709	23.98	PASS
52	5260	MCS0	16	<b>17.05</b>	50.727	23.98	PASS
60	5300	MCS0	16	16.54	45.107	23.98	PASS
64	5320	MCS0	16	16.25	42.193	23.98	PASS
100	5500	MCS0	18	16.42	43.878	23.98	PASS
116	5580	MCS0	18	<b>16.46</b>	44.284	23.98	PASS
140	5700	MCS0	15	14.48	28.070	23.98	PASS
149	5745	MCS0	20	17.15	51.909	30	PASS
157	5785	MCS0	20	17.12	51.552	30	PASS
165	5825	MCS0	20	<b>17.16</b>	52.029	30	PASS

802.11ac\_VHT40\_Ch0

CH	Frequency (MHz)	Data Rate	Power set	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	14	<b>14.71</b>	29.574	23.98	PASS
46	5230	MCS0	14	14.55	28.504	23.98	PASS
54	5270	MCS0	14.5	<b>14.77</b>	29.985	23.98	PASS
62	5310	MCS0	14.5	14.32	27.034	23.98	PASS
102	5510	MCS0	16	14.21	26.358	23.98	PASS
110	5550	MCS0	17.5	15.68	36.975	23.98	PASS
134	5670	MCS0	17.5	<b>15.77</b>	37.749	23.98	PASS
151	5755	MCS0	20	16.88	48.743	30	PASS
159	5795	MCS0	20	<b>17.17</b>	52.109	30	PASS

802.11ac\_VHT80\_Ch0

CH	Frequency (MHz)	Data Rate	Power set	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	13.5	<b>13.64</b>	23.110	23.98	PASS
58	5290	MCS0	13.5	<b>13.12</b>	20.502	23.98	PASS
106	5530	MCS0	14	<b>11.87</b>	15.375	23.98	PASS
122	5610	MCS0	12.5	11.65	14.615	23.98	PASS
155	5775	MCS0	11	<b>11.34</b>	13.608	30	PASS

**IC Conducted output power :**

**802.11a\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
52	5260	14.02	25.228	23.22	PASS
60	5300	13.62	23.008	23.23	PASS
64	5320	13.44	22.074	23.22	PASS
100	5500	10.60	11.479	23.22	PASS
116	5580	10.73	11.827	23.22	PASS
140	5700	11.47	14.024	23.22	PASS
149	5745	10.75	11.882	30	PASS
157	5785	10.80	12.019	30	PASS
165	5825	10.75	11.882	30	PASS

**802.11n\_HT20\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
52	5260	14.09	25.623	23.51	PASS
60	5300	13.71	23.476	23.51	PASS
64	5320	13.54	22.575	23.5	PASS
100	5500	10.68	11.685	23.51	PASS
116	5580	10.85	12.152	23.54	PASS
140	5700	11.54	14.244	23.53	PASS
149	5745	10.80	12.012	30	PASS
157	5785	10.85	12.152	30	PASS
165	5825	10.89	12.264	30	PASS

**802.11n\_HT40\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
54	5270	14.81	30.250	23.98	PASS
62	5310	14.33	27.085	23.98	PASS
102	5510	11.35	13.637	23.98	PASS
110	5550	11.37	13.700	23.98	PASS
134	5670	11.92	15.550	23.98	PASS
151	5755	11.32	13.543	30	PASS
159	5795	11.45	13.955	30	PASS

**802.11ac\_VHT20\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
52	5260	<b>14.06</b>	<b>25.483</b>	23.51	PASS
60	5300	13.69	23.401	23.51	PASS
64	5320	13.52	22.503	23.5	PASS
100	5500	10.65	11.621	23.51	PASS
116	5580	10.81	12.057	23.54	PASS
140	5700	<b>11.48</b>	<b>14.068</b>	23.53	PASS
149	5745	10.79	12.002	30	PASS
157	5785	10.84	12.141	30	PASS
165	5825	<b>10.88</b>	<b>12.253</b>	30	PASS

**802.11ac\_VHT40\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
54	5270	<b>14.77</b>	<b>29.985</b>	23.98	PASS
62	5310	14.32	27.034	23.98	PASS
102	5510	11.33	13.580	23.98	PASS
110	5550	11.35	13.643	23.98	PASS
134	5670	<b>11.89</b>	<b>15.449</b>	23.98	PASS
151	5755	11.31	13.518	30	PASS
159	5795	<b>11.43</b>	<b>13.897</b>	30	PASS

**802.11ac\_VHT80\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	TOTAL POWER (mW)	REQUIRED LIMIT (dBm)	RESULT
58	5290	<b>13.12</b>	<b>20.502</b>	23.98	PASS
106	5530	<b>11.87</b>	<b>15.375</b>	23.98	PASS
155	5775	<b>11.34</b>	<b>13.608</b>	30	PASS

**IC EIRP :**

**802.11a\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	14.22	1.25	15.47	35.237	22.21	PASS
44	5220	13.84	1.25	15.09	32.285	22.22	PASS
48	5240	13.54	1.25	14.79	30.130	22.22	PASS
52	5260	14.02	1.25	15.27	33.651	29.22	PASS
60	5300	13.62	1.25	14.87	30.690	29.23	PASS
64	5320	13.44	1.25	14.69	29.444	29.22	PASS
100	5500	10.60	1.25	11.85	15.311	29.22	PASS
116	5580	10.73	1.25	11.98	15.776	29.22	PASS
140	5700	11.47	1.25	12.72	18.707	29.22	PASS

**802.11n\_HT20\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	14.24	1.25	15.49	35.400	22.51	PASS
44	5220	13.86	1.25	15.11	32.434	22.5	PASS
48	5240	13.61	1.25	14.86	30.620	22.52	PASS
52	5260	14.09	1.25	15.34	34.198	29.51	PASS
60	5300	13.71	1.25	14.96	31.333	29.51	PASS
64	5320	13.54	1.25	14.79	30.130	29.5	PASS
100	5500	10.68	1.25	11.93	15.596	29.51	PASS
116	5580	10.85	1.25	12.10	16.218	29.54	PASS
140	5700	11.54	1.25	12.79	19.011	29.53	PASS

**802.11n\_HT40\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
38	5190	14.64	1.25	15.89	38.815	23.01	PASS
46	5230	14.39	1.25	15.64	36.644	23.01	PASS
54	5270	14.81	1.25	16.06	40.365	30	PASS
62	5310	14.33	1.25	15.58	36.141	30	PASS
102	5510	11.35	1.25	12.60	18.197	30	PASS
110	5550	11.37	1.25	12.62	18.281	30	PASS
134	5670	11.92	1.25	13.17	20.749	30	PASS

**802.11ac\_VHT20\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
36	5180	14.22	1.25	15.47	35.237	22.51	PASS
44	5220	13.84	1.25	15.09	32.285	22.5	PASS
48	5240	13.55	1.25	14.80	30.200	22.52	PASS
52	5260	14.06	1.25	15.31	33.963	29.51	PASS
60	5300	13.69	1.25	14.94	31.189	29.51	PASS
64	5320	13.52	1.25	14.77	29.992	29.5	PASS
100	5500	10.65	1.25	11.90	15.488	29.51	PASS
116	5580	10.81	1.25	12.06	16.069	29.54	PASS
140	5700	11.48	1.25	12.73	18.750	29.53	PASS

**802.11ac\_VHT40\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
38	5190	14.60	1.25	15.85	38.459	23.01	PASS
46	5230	14.37	1.25	15.62	36.475	23.01	PASS
54	5270	14.77	1.25	16.02	39.994	30	PASS
62	5310	14.32	1.25	15.57	36.058	30	PASS
102	5510	11.33	1.25	12.58	18.113	30	PASS
110	5550	11.35	1.25	12.60	18.197	30	PASS
134	5670	11.89	1.25	13.14	20.606	30	PASS

**802.11ac\_VHT80\_Ch0**

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (mW)	REQUIRED LIMIT (dBm)	RESULT
42	5210	13.64	1.25	14.89	30.832	23.01	PASS
58	5290	13.12	1.25	14.37	27.353	30	PASS
106	5530	11.87	1.25	13.12	20.512	30	PASS

## 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) and RSS-247 section 6.2.1(1), section 6.2.2(1), section 6.2.3(1) and section 6.2.4(1)

#### UNII-1 :

**FCC:** The maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

**IC:** The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz 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 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.i.

**FCC**

UNII-1 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 11 dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 11 – (DG – 6)]
UNII-2a Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 11 dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 11 – (DG – 6)]
UNII-2c Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 11 dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 11 – (DG – 6)]
UNII-3 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 30 dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)]

**IC**

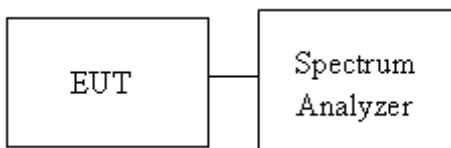
UNII-1 Limit	10dB/MHz
UNII-2a Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 11 dBm/MHz <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 11 – (DG – 6)]
UNII-2c Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 11 dBm/MHz <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 11 – (DG – 6)]
UNII-3 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 30 dBm/500kHz <input type="checkbox"/> 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 v02r01, Section F

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

Temperature: 22.7~25.6°C

Test date: October 11 ~ 30, 2023

Humidity: 51~61% RH

Tested by: David Li

POWER DENSITY 802.11a MODE						
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxmum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5180	3.596	0.59	4.19		11.00 dBm/MHz	-6.81
5220	6.573	0.59	7.16		11.00 dBm/MHz	-3.84
5240	7.038	0.59	7.63		11.00 dBm/MHz	-3.37
5260	6.762	0.59	7.35		11.00 dBm/MHz	-3.65
5300	6.807	0.59	7.40		11.00 dBm/MHz	-3.60
5320	3.277	0.59	3.87		11.00 dBm/MHz	-7.13
5500	4.055	0.59	4.65		11.00 dBm/MHz	-6.36
5580	4.170	0.59	4.76		11.00 dBm/MHz	-6.24
5700	0.504	0.59	1.09		11.00 dBm/MHz	-9.91
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5745	-0.994	0.59	2.22	1.82	30.00 dBm/500kHz	-28.18
5785	-1.162	0.59	2.22	1.65	30.00 dBm/500kHz	-28.35
5825	-1.102	0.59	2.22	1.71	30.00 dBm/500kHz	-28.29

POWER DENSITY 802.11n HT20 MODE						
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxmum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5180	2.022	0.63	2.65		11.00 dBm/MHz	-8.35
5220	6.237	0.63	6.87		11.00 dBm/MHz	-4.13
5240	6.562	0.63	7.19		11.00 dBm/MHz	-3.81
5260	3.355	0.63	3.99		11.00 dBm/MHz	-7.02
5300	3.190	0.63	3.82		11.00 dBm/MHz	-7.18
5320	2.360	0.63	2.99		11.00 dBm/MHz	-8.01
5500	2.955	0.63	3.59		11.00 dBm/MHz	-7.42
5580	2.672	0.63	3.30		11.00 dBm/MHz	-7.70
5700	0.286	0.63	0.92		11.00 dBm/MHz	-10.08
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5745	-1.200	0.63	2.22	1.65	30.00 dBm/500kHz	-28.35
5785	-1.217	0.63	2.22	1.63	30.00 dBm/500kHz	-28.37
5825	-2.079	0.63	2.22	0.77	30.00 dBm/500kHz	-29.23

POWER DENSITY 802.11n HT40 MODE						
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxmum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5190	-2.517	1.19	-1.33		11.00 dBm/MHz	-12.33
5230	-2.369	1.19	-1.18		11.00 dBm/MHz	-12.18
5270	-1.710	1.19	-0.52		11.00 dBm/MHz	-11.52
5310	-2.264	1.19	-1.07		11.00 dBm/MHz	-12.07
5510	-2.144	1.19	-0.95		11.00 dBm/MHz	-11.95
5550	-0.466	1.19	0.72		11.00 dBm/MHz	-10.28
5670	-2.103	1.19	-0.91		11.00 dBm/MHz	-11.91
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5755	-4.421	1.19	2.22	-1.01	30.00 dBm/500kHz	-31.01
5795	-4.836	1.19	2.22	-1.43	30.00 dBm/500kHz	-31.43

POWER DENSITY 802.11ac VHT80 MODE						
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Duty Factor (dB)	Maxmum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5210	-6.085	2.57	-3.52		11.00 dBm/MHz	-14.52
5290	-5.857	2.57	-3.29		11.00 dBm/MHz	-14.29
5530	-7.609	2.57	-5.04		11.00 dBm/MHz	-16.04
5610	-3.867	2.57	-1.30		11.00 dBm/MHz	-12.30
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5775	-8.019	2.57	2.22	-3.23	30.00 dBm/500kHz	-33.23

EIRP spectral density 802.11a MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5180	4.186	1.25	5.44	10	-4.56
5220	7.163	1.25	8.41	10	-1.59
5240	7.628	1.25	8.88	10	-1.12

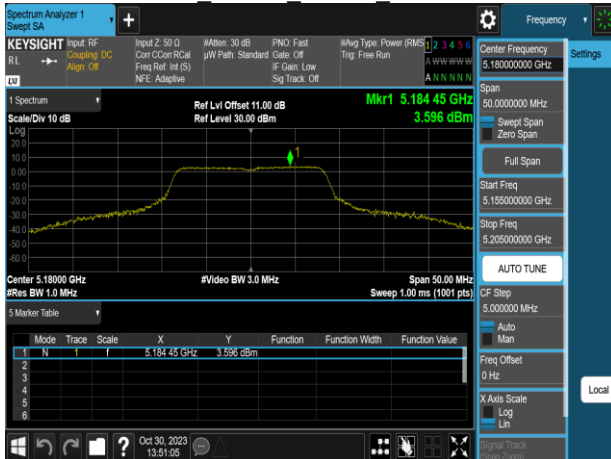
EIRP spectral density 802.11n HT20 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5180	2.652	1.25	3.90	10	-6.10
5220	6.867	1.25	8.12	10	-1.88
5240	7.192	1.25	8.44	10	-1.56

EIRP spectral density 802.11n HT40 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5190	-1.327	1.25	-0.08	10	-10.08
5230	-1.179	1.25	0.07	10	-9.93

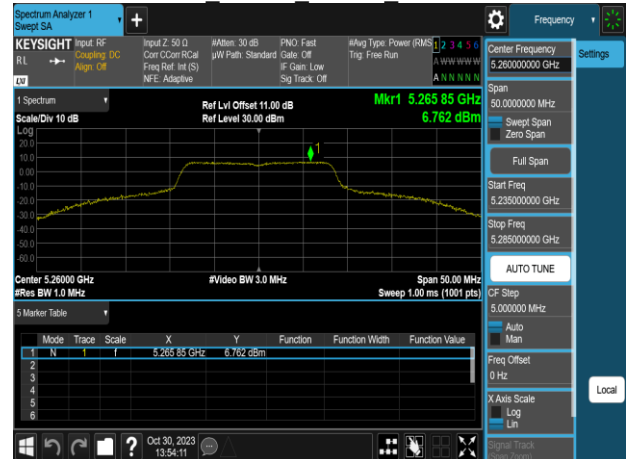
EIRP spectral density 802.11ac VHT80 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5210	-3.515	1.25	-2.27	10	-12.27

## Test Data

802.11a 20MHz Chain0 5180MHz



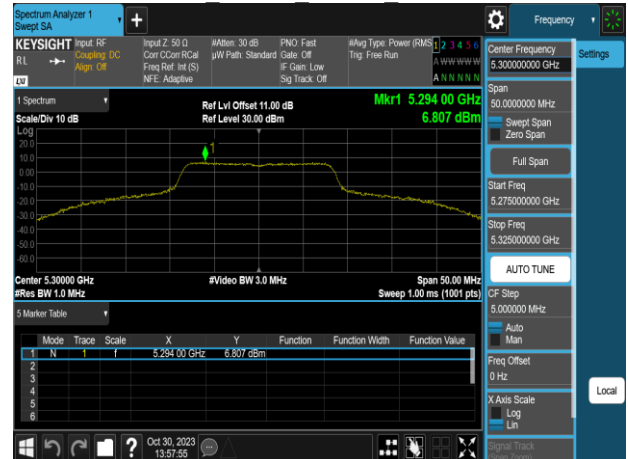
802.11a 20MHz Chain0 5260MHz



802.11a 20MHz Chain0 5220MHz



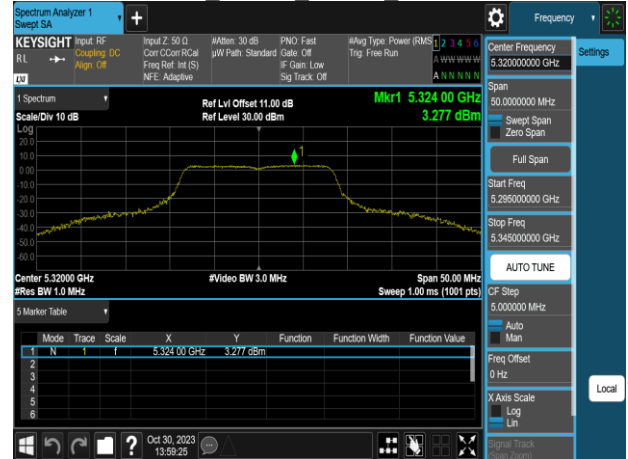
802.11a 20MHz Chain0 5300MHz



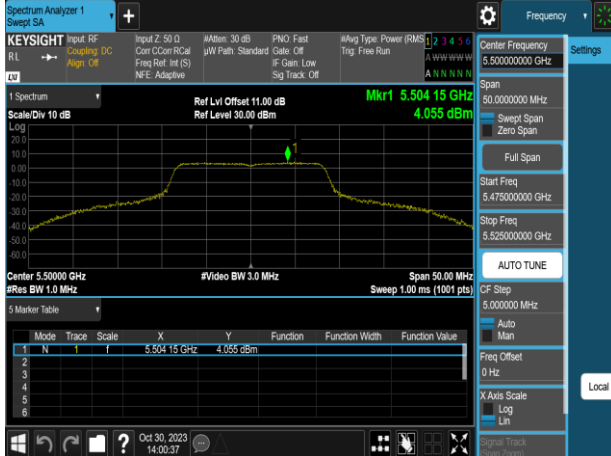
802.11a 20MHz Chain0 5240MHz



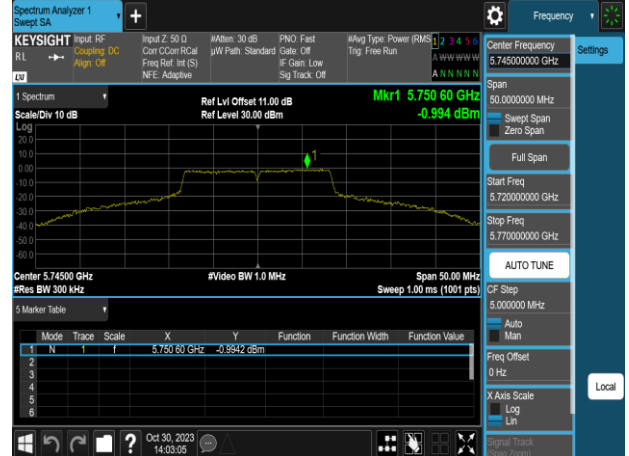
802.11a 20MHz Chain0 5320MHz



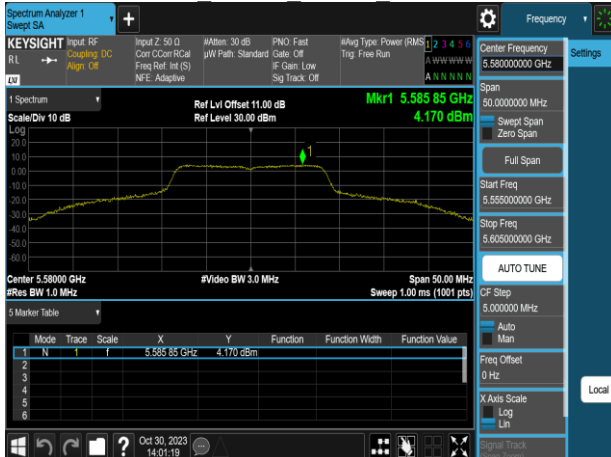
802.11a 20MHz Chain0 5500MHz



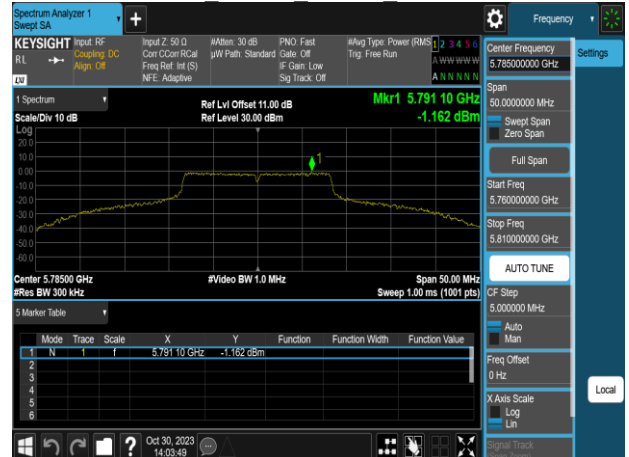
802.11a 20MHz Chain0 5745MHz



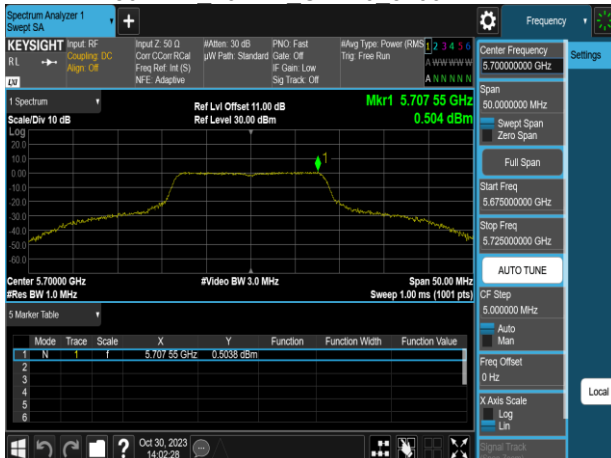
802.11a 20MHz Chain0 5580MHz



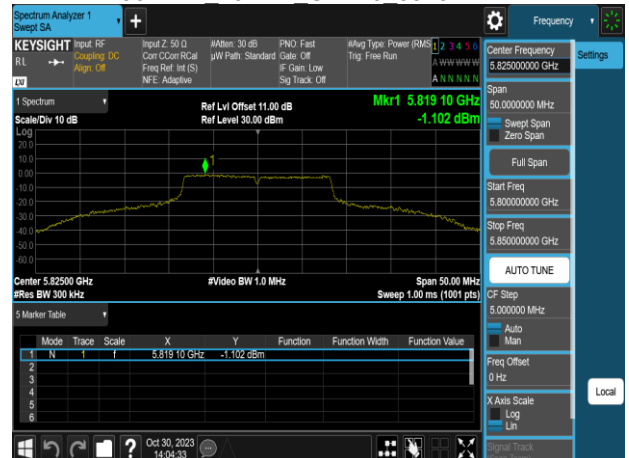
802.11a 20MHz Chain0 5785MHz



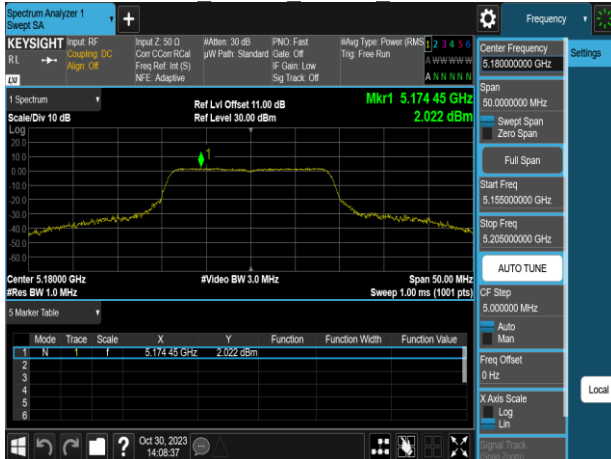
802.11a 20MHz Chain0 5700MHz



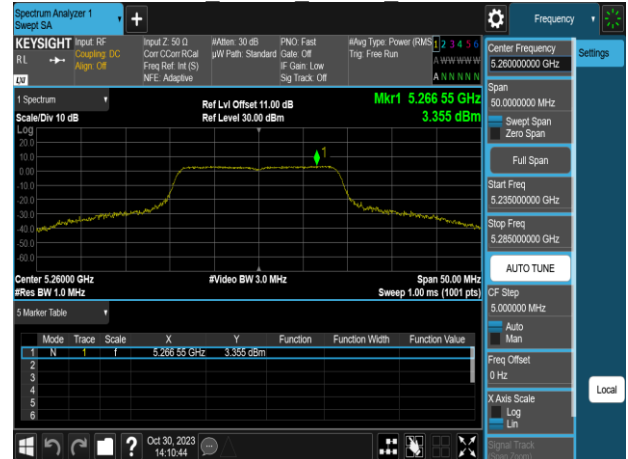
802.11a 20MHz Chain0 5825MHz



802.11n 20MHz Chain0 5180MHz



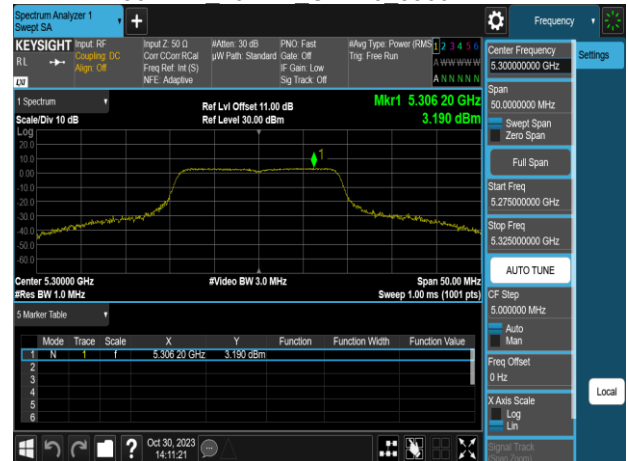
802.11n 20MHz Chain0 5260MHz



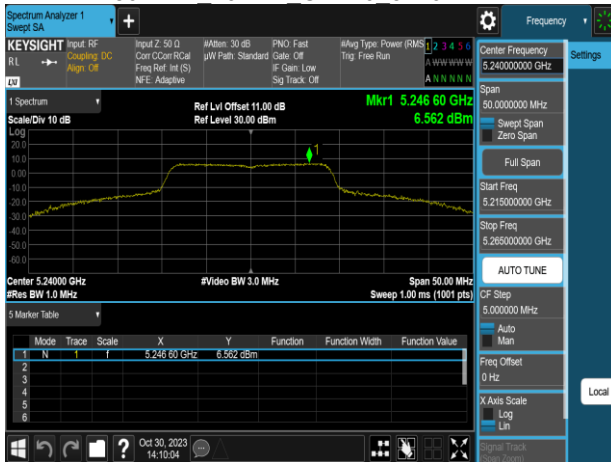
802.11n 20MHz Chain0 5220MHz



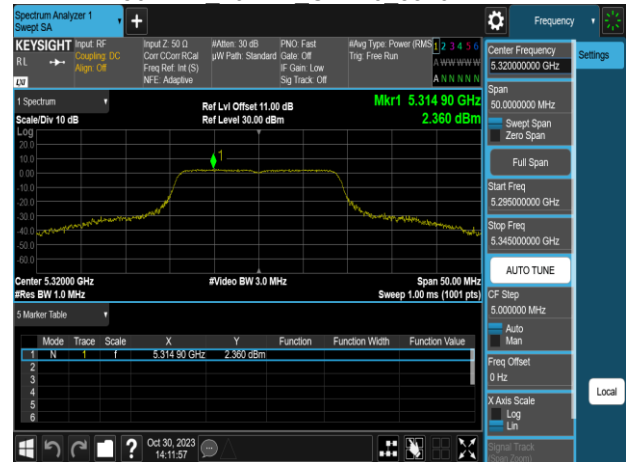
802.11n 20MHz Chain0 5300MHz



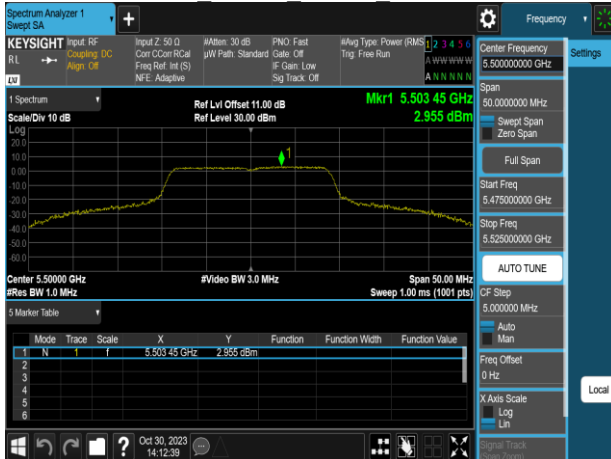
802.11n 20MHz Chain0 5240MHz



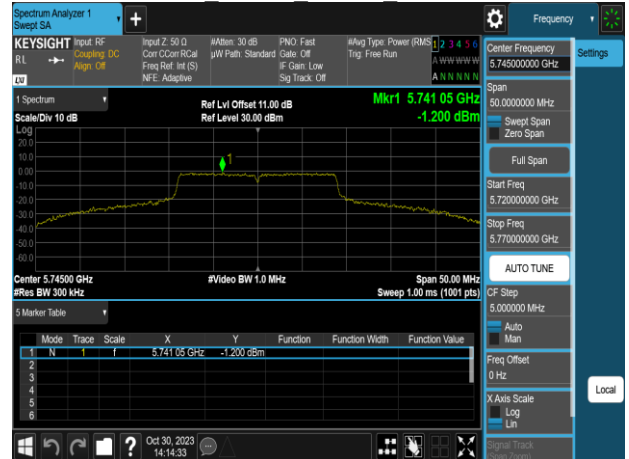
802.11n 20MHz Chain0 5320MHz



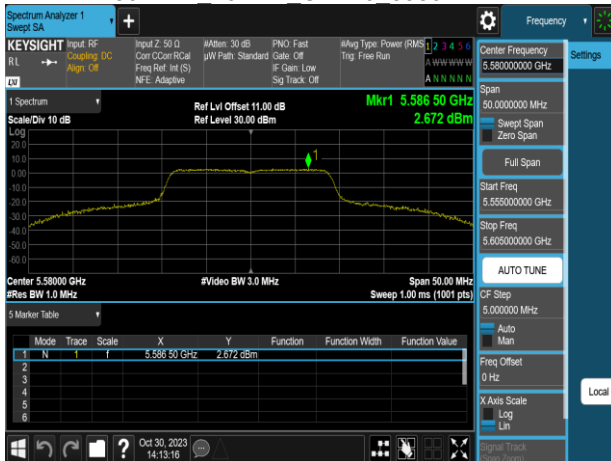
802.11n 20MHz Chain0 5500MHz



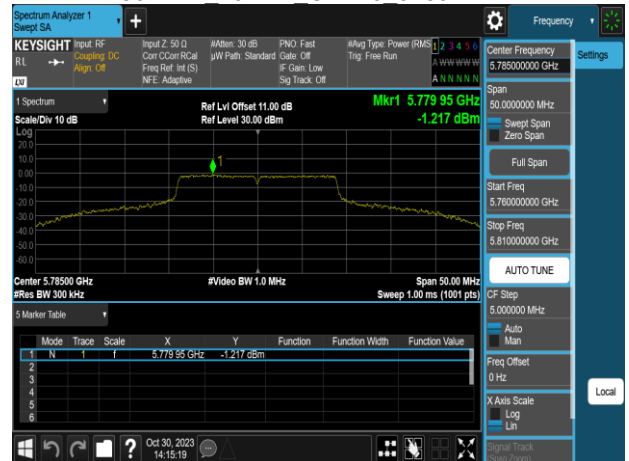
802.11n 20MHz Chain0 5745MHz



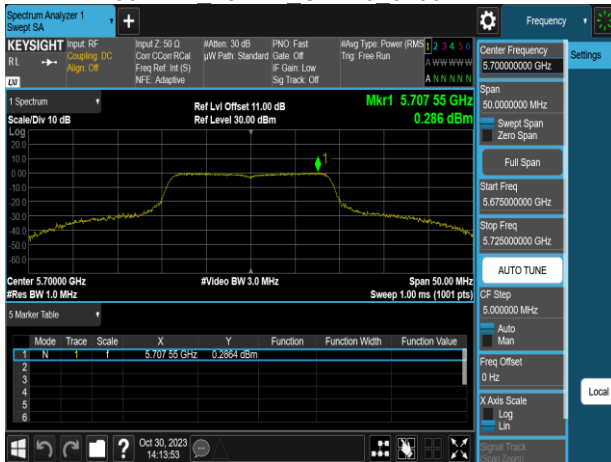
802.11n 20MHz Chain0 5580MHz



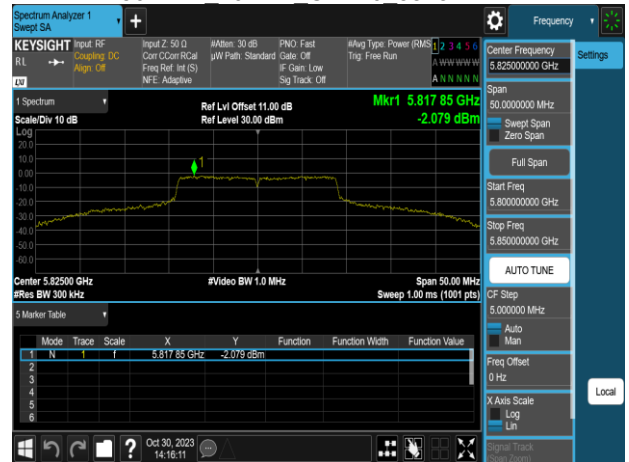
802.11n 20MHz Chain0 5785MHz



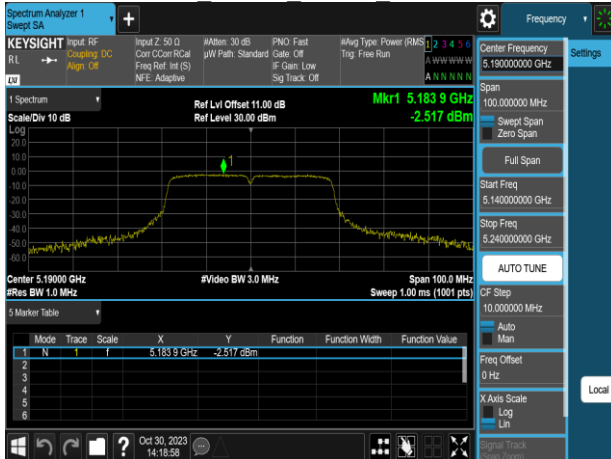
802.11n 20MHz Chain0 5700MHz



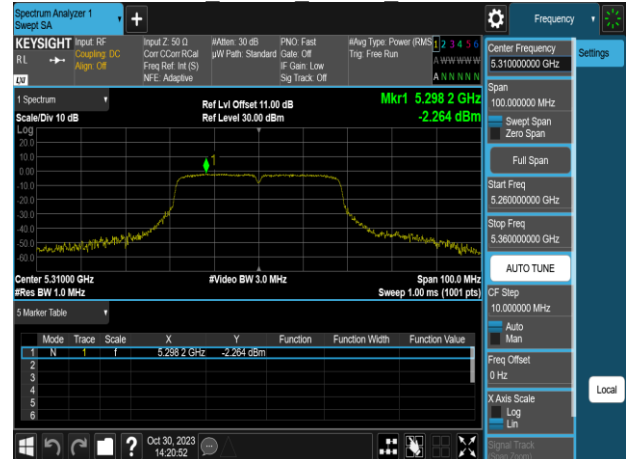
802.11n 20MHz Chain0 5825MHz



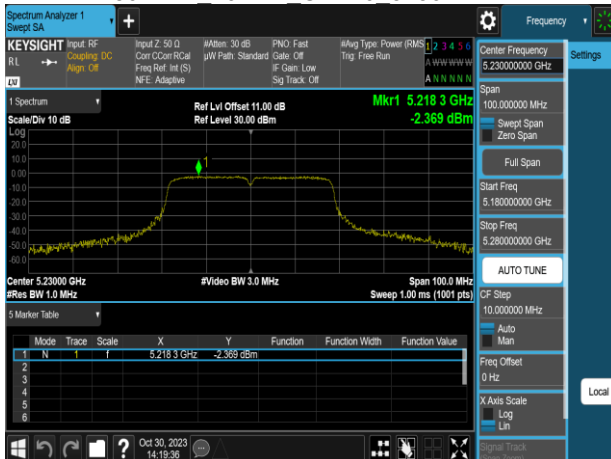
802.11n 40MHz Chain0 5190MHz



802.11n 40MHz Chain0 5310MHz



802.11n 40MHz Chain0 5230MHz



802.11n 40MHz Chain0 5510MHz



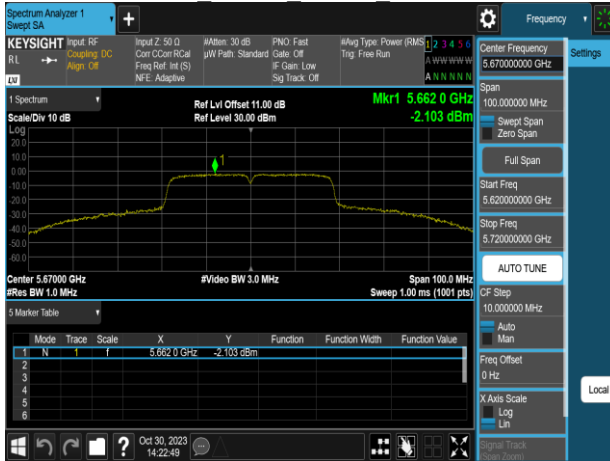
802.11n 40MHz Chain0 5270MHz



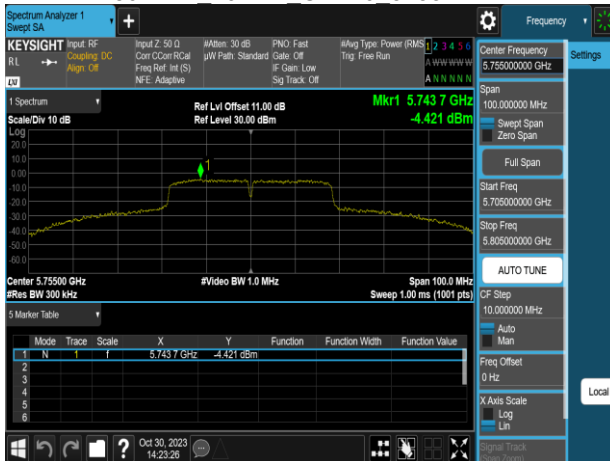
802.11n 40MHz Chain0 5550MHz



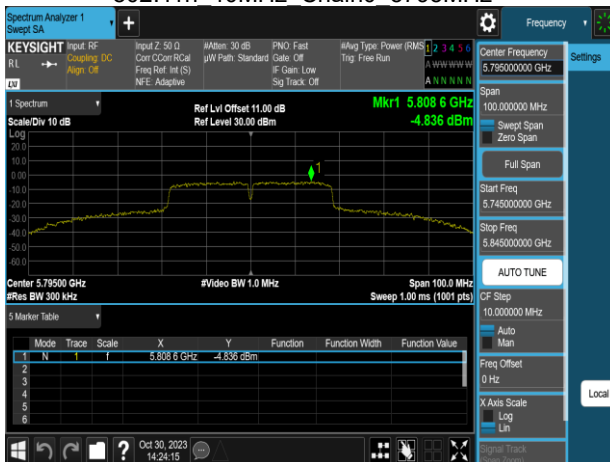
802.11n 40MHz Chain0 5670MHz



802.11n 40MHz Chain0 5755MHz



802.11n 40MHz Chain0 5795MHz





## 4.5 RADIATION BANDEGE AND SPURIOUS EMISSION

### 4.5.1 Test Limit

FCC according to §15.407, §15.209 and §15.205,

#### Below 30 MHz

Frequency	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	24,000/F (F in kHz)	30
1.705-30 MHz	30	N/A	30

#### Above 30 MHz

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

#### UNII-1 :

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz

#### UNII-2a and 2c :

For devices with operating frequencies in the band 5250-5350 MHz but having a channel bandwidth that overlaps the band 5150-5250 MHz, the devices' unwanted emission shall not exceed -27 dBm/MHz e.i.r.p. outside the band 5150-5350 MHz and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device shall be labelled "for indoor use only." Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

#### UNII-3:

All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

According to RSS-247 section 6.2.1.2, 6.2.2.2, 6.2.3.2 and 6.2.4.2

**Below 30 MHz**

Frequency	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	24,000/F (F in kHz)	30
1.705-30 MHz	30	N/A	30

**Above 30 MHz**

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

**RSS-Gen Table 3 and Table 5 – General Field Strength Limits for Transmitters and Receivers at Frequencies Above 30 MHz** <sup>(Note)</sup>

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

**Note:** Measurements for compliance with the limits in table 3 may be performed at distances other than 3 metres, in accordance with Section 6.6.

**RSS-Gen Table 6: General Field Strength Limits for Transmitters at Frequencies Below 30 MHz (Transmit)**

Frequency	Magnetic field strength (H-Field) ( $\mu\text{A/m}$ )	Measurement Distance (m)
9-490 kHz <sup>Note</sup>	6.37/F (F in kHz)	300
490-1,705 kHz	63.7/F (F in kHz)	30
1.705-30 MHz	0.08	30

**Note:** The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector..

**UNII-1 :**

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz

**UNII-2a and 2c :**

For devices with operating frequencies in the band 5250-5350 MHz but having a channel bandwidth that overlaps the band 5150-5250 MHz, the devices' unwanted emission shall not exceed -27 dBm/MHz e.i.r.p. outside the band 5150-5350 MHz and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device shall be labelled "for indoor use only." Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

**UNII-3:**

For the band 5725-5850 MHz, emissions at frequencies from the band edges to 10 MHz above or below the band edges shall not exceed -17 dBm/MHz e.i.r.p. For emissions at frequencies more than 10 MHz above or below the band edges, the emissions power shall not exceed -27 dBm/MHz

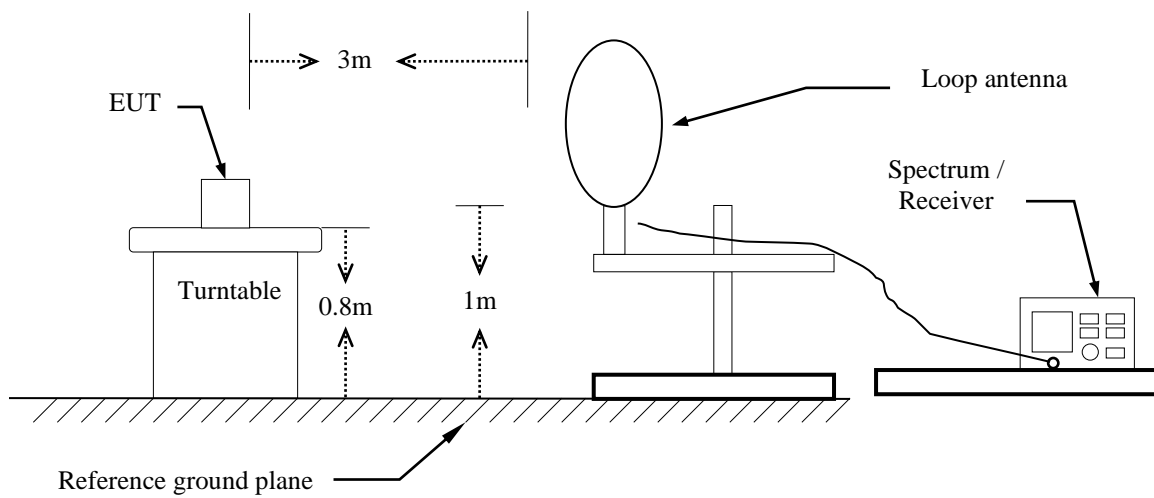
## 4.5.2 Test Procedure

Test method Refer as KDB 789033 D02.

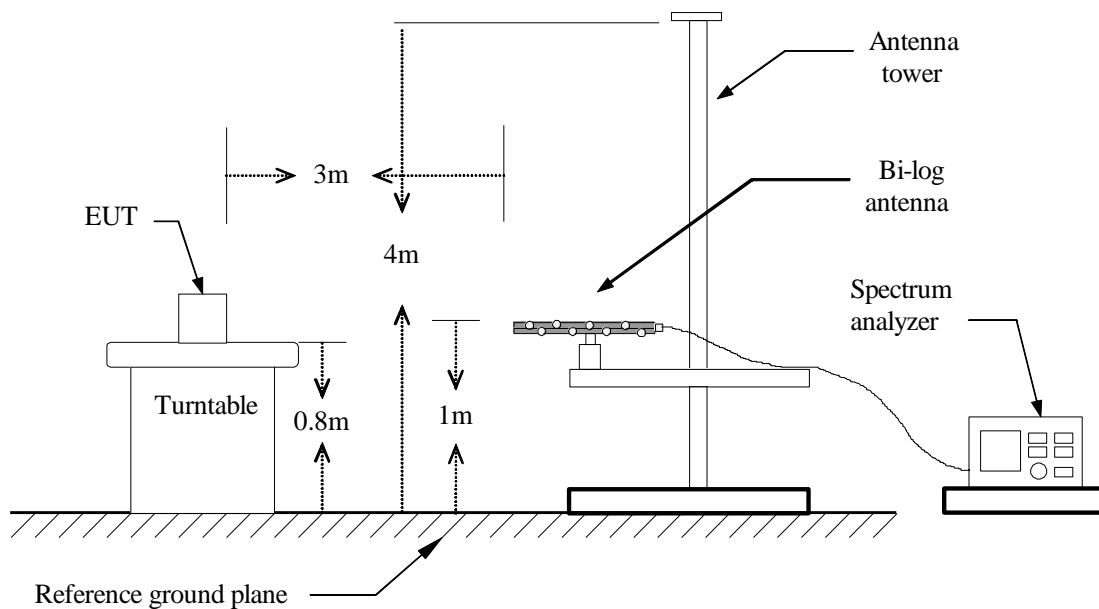
1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10: 2013, and the EUT set in a continuous mode.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT is set 3m away from the receiving antenna, which is scanned from 1m to 4m above the ground plane to find out the highest emissions. Measurement are made polarized in both the vertical and the horizontal positions with antenna.
3. Span shall wide enough to full capture the emission measured. The SA from 9kHz to 40GHz set to the low, Mid and High channels with the EUT transmit.
4. No emission found between lowest internal used/generated frequency to 30MHz (9KHz~30MHz)
5. The SA setting following :
  - (1) Below 1G : RBW = 100kHz, VBW  $\geq 3 \times$  RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
  - (2) Above 1G :
    - (2.1) For Peak measurement : RBW = 1MHz, VBW  $\geq 3$  RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
    - (2.2) For Average measurement : RBW = 1MHz, VBW
      - If Duty Cycle  $\geq 98\%$ , VBW=10Hz.
      - If Duty Cycle  $< 98\%$ , VBW=1/T.
  - (3) Data result :
    - Actual FS=Spectrum Reading Level + Factor
    - Margin=Actual FS- Limit

## 4.5.3 Test Setup

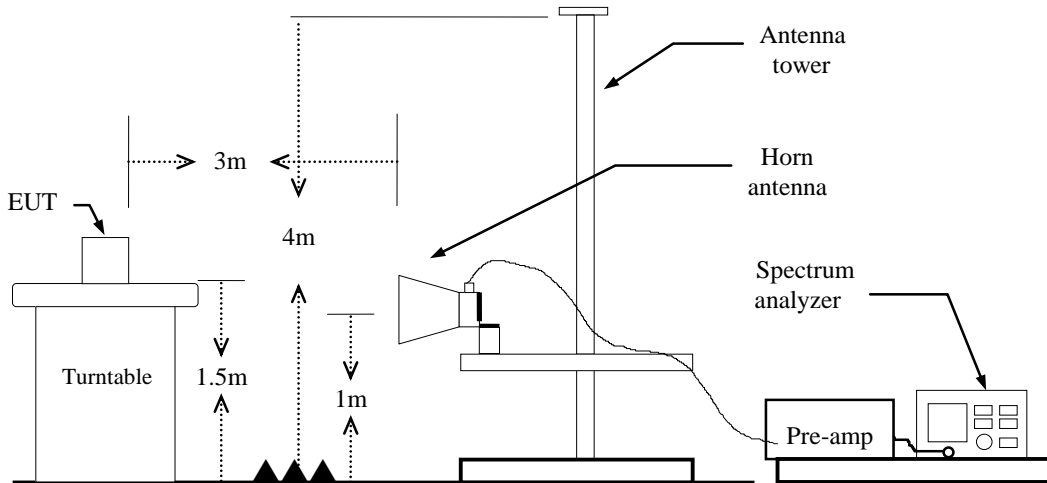
### 9kHz ~ 30MHz



### 30MHz ~ 1GHz



## Above 1 GHz

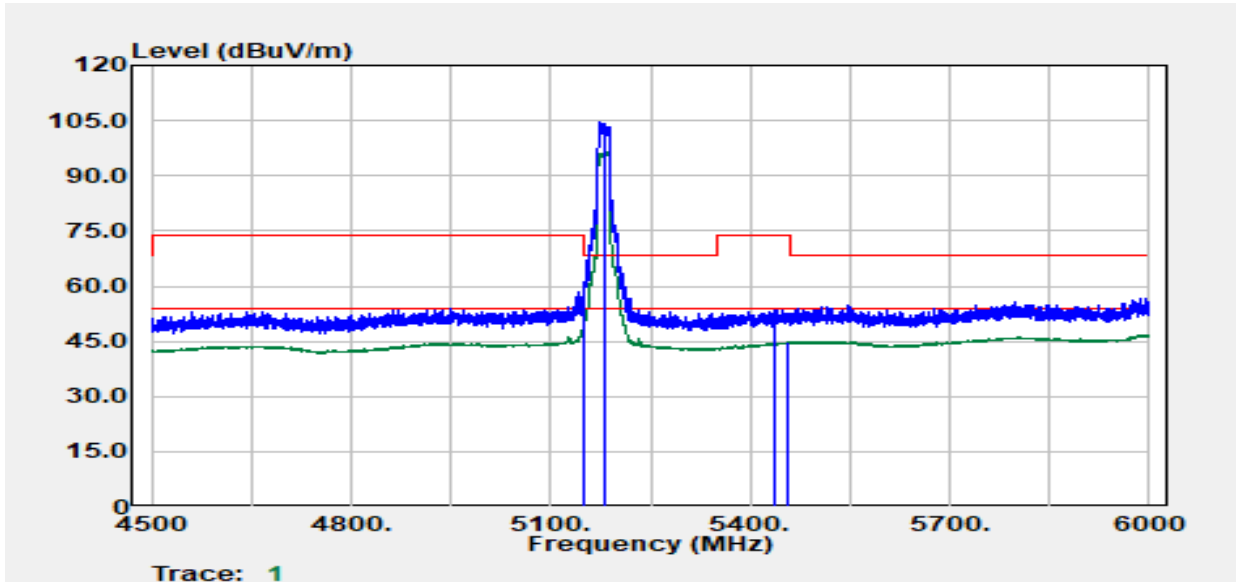


## 4.5.4 Test Result

### Test Data

#### Band Edge

Project No	:TM-2305000074P	Test Date	:2023-10-17
Operation Band	:802.11a/Band1	Temp./Humi.	:24.7/57
Frequency	:5180 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16		



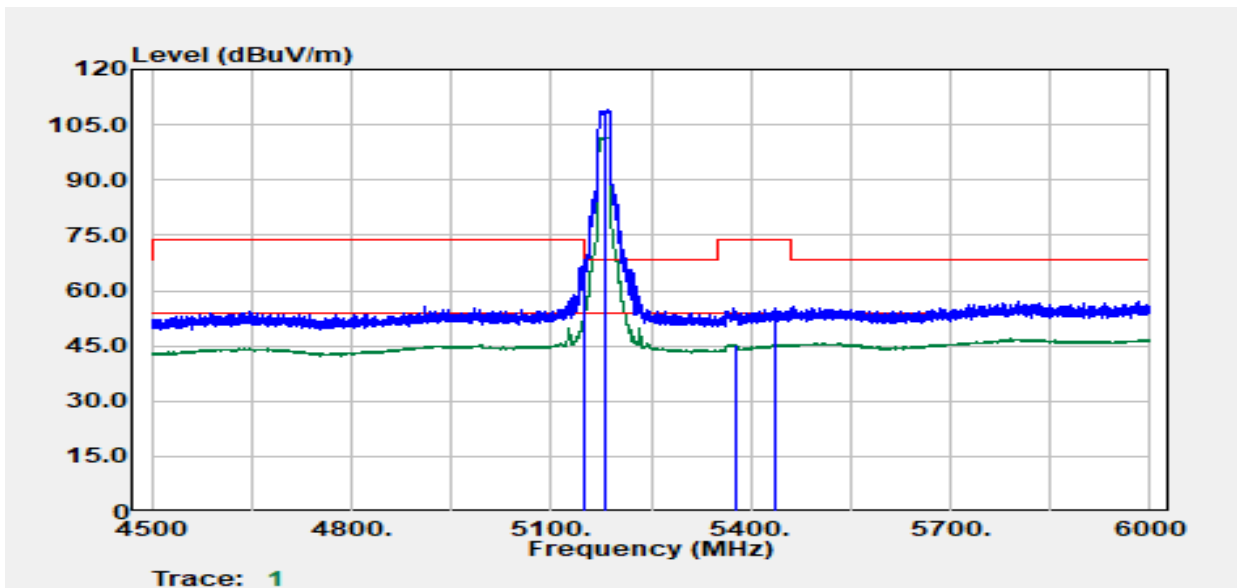
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB $\mu$ V	Factor dB	Actual FS dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB
5148.61	Peak	49.14	12.16	61.29	74.00	-12.71
5149.61	Average	37.10	12.16	49.26	54.00	-4.74
5180.00	Peak	92.33	12.10	104.43	--	--
5180.00	Average	84.13	12.10	96.23	--	--
5437.41	Peak	41.09	12.36	53.46	74.00	-20.54
5456.66	Average	32.32	12.40	44.72	54.00	-9.28

Report No.: TMWK2305001409KR

Rev.: 00

Project No :TM-2305000074P  
 Operation Band :802.11a/Band1  
 Frequency :5180 MHz  
 Operation Mode :Bandedge  
 EUT Pol :E2  
 Setting :16

Test Date :2023-10-17  
 Temp./Humi. :24.7/57  
 Antenna Pol. :HORIZONTAL  
 Engineer :Ray.Li  
 Test Chamber :966A

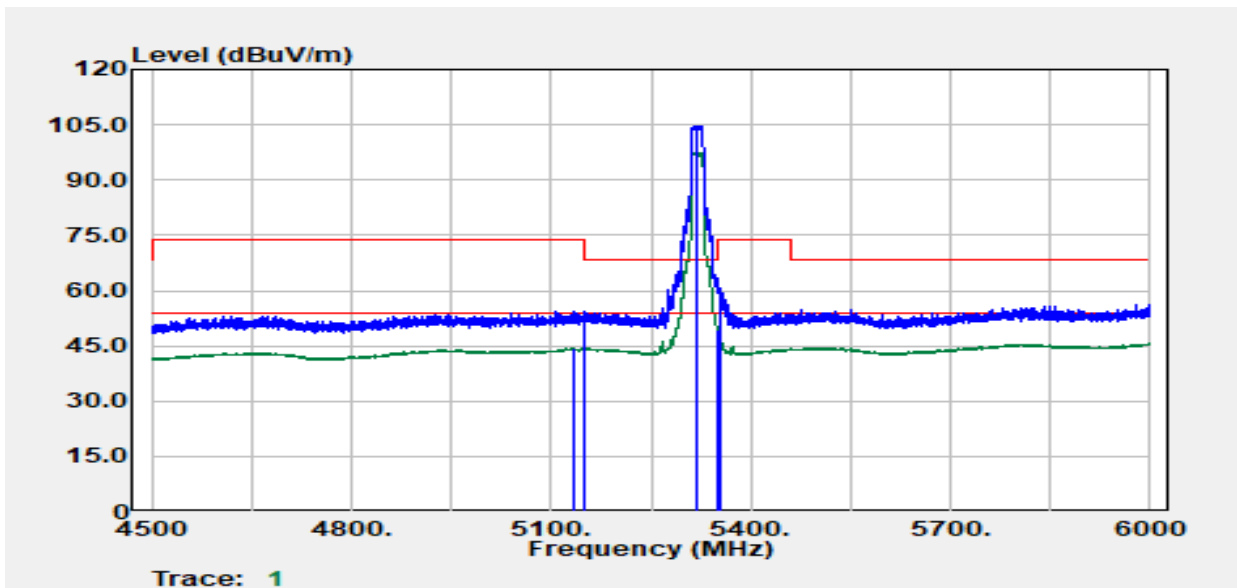


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
5149.86	Peak	55.58	12.80	68.38	74.00	-5.62
5149.86	Average	40.66	12.80	53.46	54.00	-0.54
5180.00	Peak	96.46	12.76	109.22	--	--
5180.00	Average	88.90	12.76	101.66	--	--
5378.40	Average	32.48	12.93	45.41	54.00	-8.59
5437.91	Peak	41.97	13.06	55.02	74.00	-18.98

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Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-16
Operation Band	:802.11a/Band2	Temp./Humi.	:24.7/57
Frequency	:5320 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E2	Test Chamber	: 966A
Setting	:16.5		



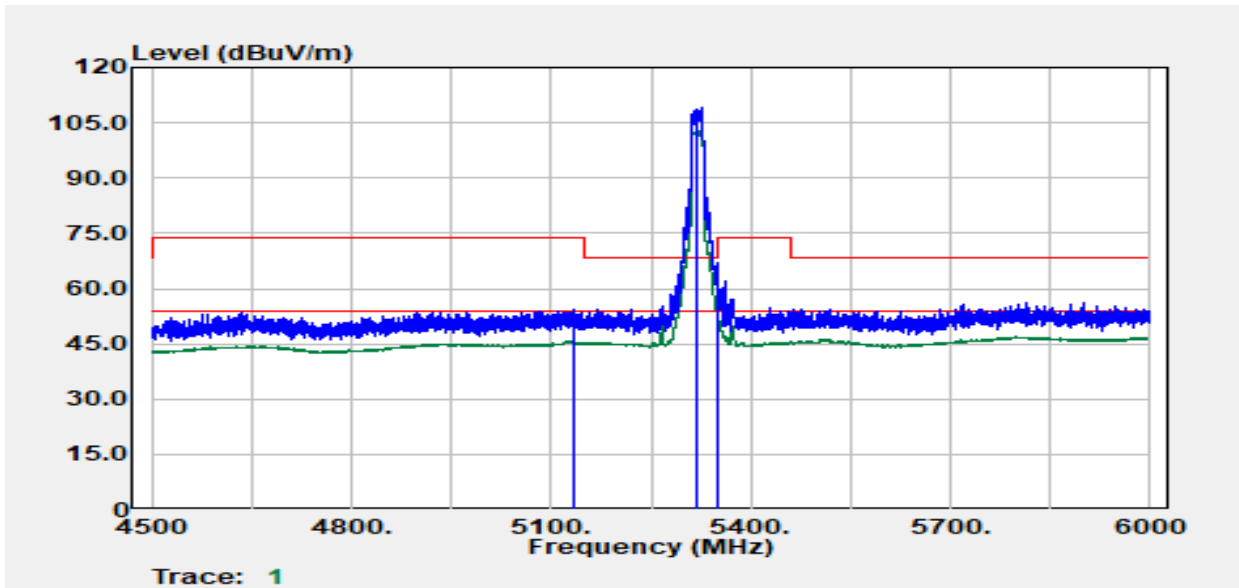
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
5135.10	Average	32.26	12.13	44.39	54.00	-9.61
5149.80	Peak	42.31	12.16	54.47	74.00	-19.53
5320.00	Peak	92.53	12.14	104.67	--	--
5320.00	Average	85.35	12.14	97.49	--	--
5350.20	Average	37.37	12.13	49.50	54.00	-4.50
5353.80	Peak	48.62	12.14	60.77	74.00	-13.23

Report No.: TMWK2305001409KR

Rev.: 00

Project No :TM-2305000074P  
 Operation Band :802.11a/Band2  
 Frequency :5320 MHz  
 Operation Mode :Bandedge  
 EUT Pol :E2  
 Setting :16.5

Test Date :2023-10-17  
 Temp./Humi. :24.7/57  
 Antenna Pol. :HORIZONTAL  
 Engineer :Ray.Li  
 Test Chamber :966A



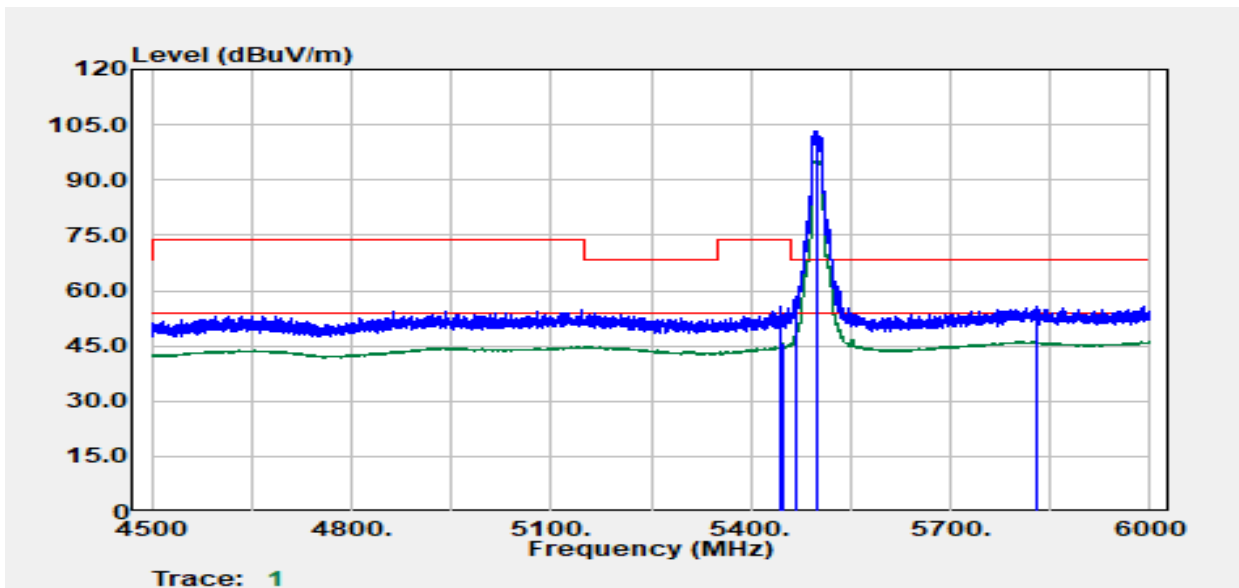
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
5133.36	Peak	41.43	12.75	54.19	74.00	-19.81
5135.36	Average	33.17	12.76	45.93	54.00	-8.07
5320.00	Peak	96.50	12.78	109.28	--	--
5320.00	Average	89.88	12.78	102.66	--	--
5349.89	Average	40.26	12.79	53.06	54.00	-0.94
5350.14	Peak	49.81	12.80	62.61	74.00	-11.39

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Rev.: 00

Project No :TM-2305000074P  
 Operation Band :802.11a/Band3  
 Frequency :5500 MHz  
 Operation Mode :Bandedge  
 EUT Pol :E2  
 Setting :18

Test Date :2023-10-17  
 Temp./Humi. :24.7/57  
 Antenna Pol. :VERTICAL  
 Engineer :Ray.Li  
 Test Chamber :966A



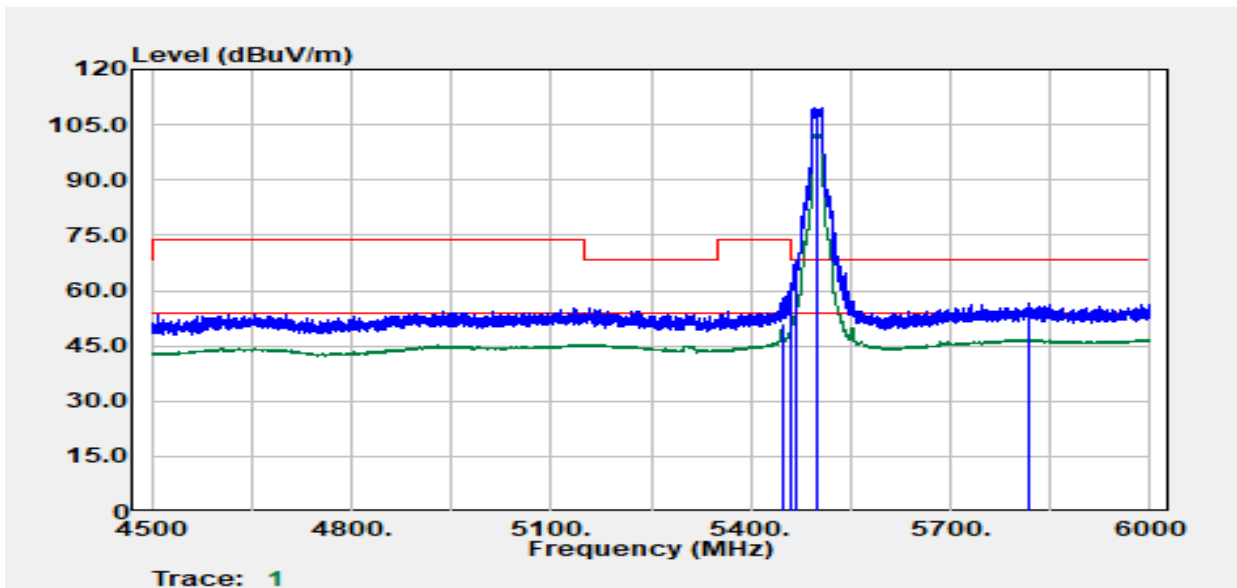
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
5446.16	Peak	43.13	12.37	55.50	74.00	-18.50
5447.91	Average	33.42	12.37	45.79	54.00	-8.21
5468.16	Peak	45.84	12.44	58.28	68.20	-9.92
5500.00	Peak	90.90	12.55	103.45	--	--
5500.00	Average	82.56	12.55	95.11	--	--
5830.97	Peak	41.69	14.07	55.76	68.20	-12.44

Report No.: TMWK2305001409KR

Rev.: 00

Project No :TM-2305000074P  
 Operation Band :802.11a/Band3  
 Frequency :5500 MHz  
 Operation Mode :Bandedge  
 EUT Pol :E2  
 Setting :18

Test Date :2023-10-17  
 Temp./Humi. :24.7/57  
 Antenna Pol. :HORIZONTAL  
 Engineer :Ray.Li  
 Test Chamber :966A

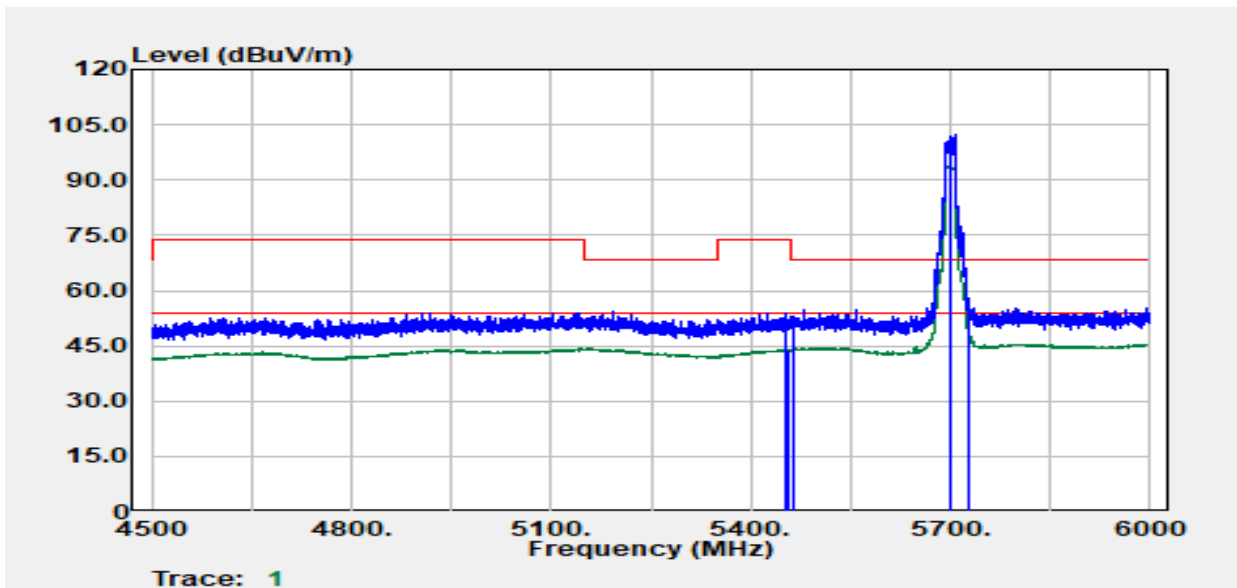


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
5447.66	Average	37.46	13.06	50.52	54.00	-3.48
5458.66	Peak	47.87	13.09	60.97	74.00	-13.03
5468.91	Peak	54.87	13.12	68.00	68.20	-0.20
5500.00	Peak	96.38	13.22	109.60	--	--
5500.00	Average	89.32	13.22	102.54	--	--
5818.47	Peak	41.89	14.88	56.78	68.20	-11.42

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Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-17
Operation Band	:802.11a/Band3	Temp./Humi.	:24.7/57
Frequency	:5700 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E2	Test Chamber	:966A
Setting	:15.5		



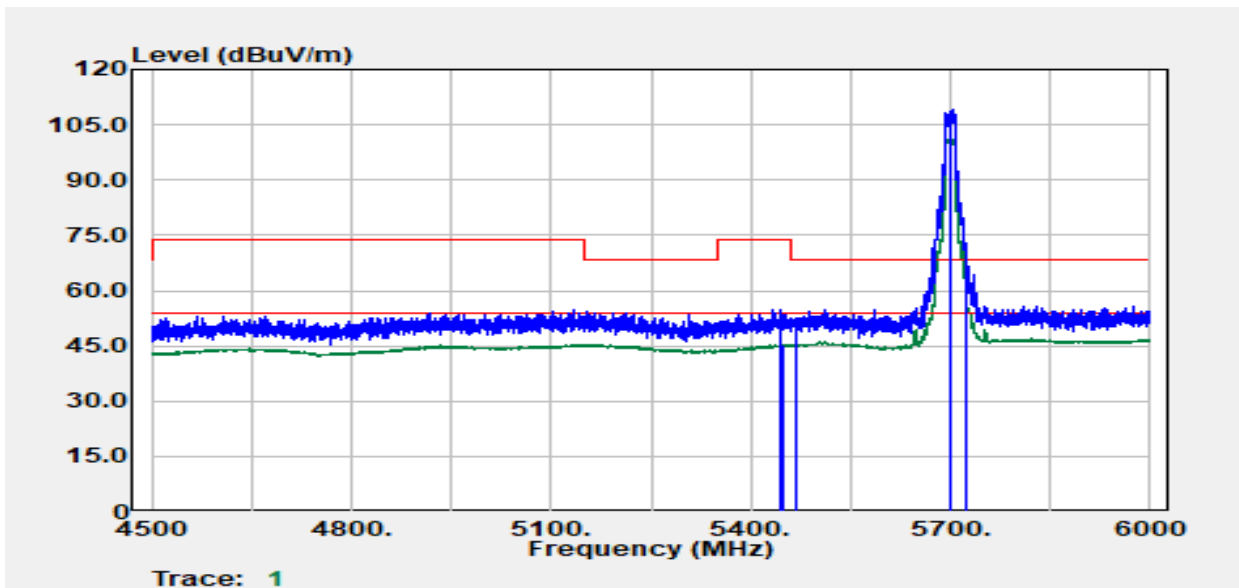
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
5453.66	Peak	41.31	12.39	53.69	74.00	-20.31
5457.30	Average	31.60	12.40	44.00	54.00	-10.00
5464.66	Peak	40.38	12.43	52.81	68.20	-15.39
5700.00	Peak	88.61	13.56	102.17	--	--
5700.00	Average	80.27	13.56	93.83	--	--
5726.21	Peak	44.05	13.70	57.75	68.20	-10.45

Report No.: TMWK2305001409KR

Rev.: 00

Project No :TM-2305000074P  
 Operation Band :802.11a/Band3  
 Frequency :5700 MHz  
 Operation Mode :Bandedge  
 EUT Pol :E2  
 Setting :15.5

Test Date :2023-10-17  
 Temp./Humi. :24.7/57  
 Antenna Pol. :HORIZONTAL  
 Engineer :Ray.Li  
 Test Chamber :966A

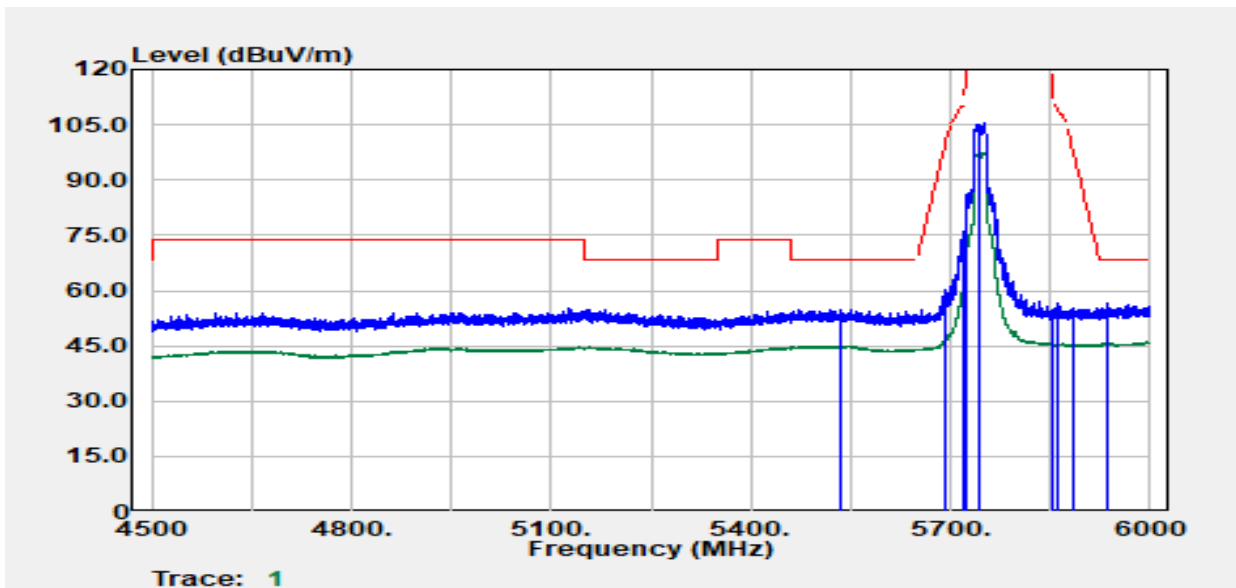


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
5443.16	Peak	41.70	13.06	54.76	74.00	-19.24
5446.66	Average	32.22	13.06	45.28	54.00	-8.72
5469.91	Peak	39.48	13.13	52.60	68.20	-15.60
5700.00	Peak	94.57	14.37	108.94	--	--
5700.00	Average	86.90	14.37	101.27	--	--
5724.95	Peak	53.22	14.49	67.71	68.20	-0.49

Report No.: TMWK2305001409KR

Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11a/Band4	Temp./Humi.	:24.7/57
Frequency	:5745 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



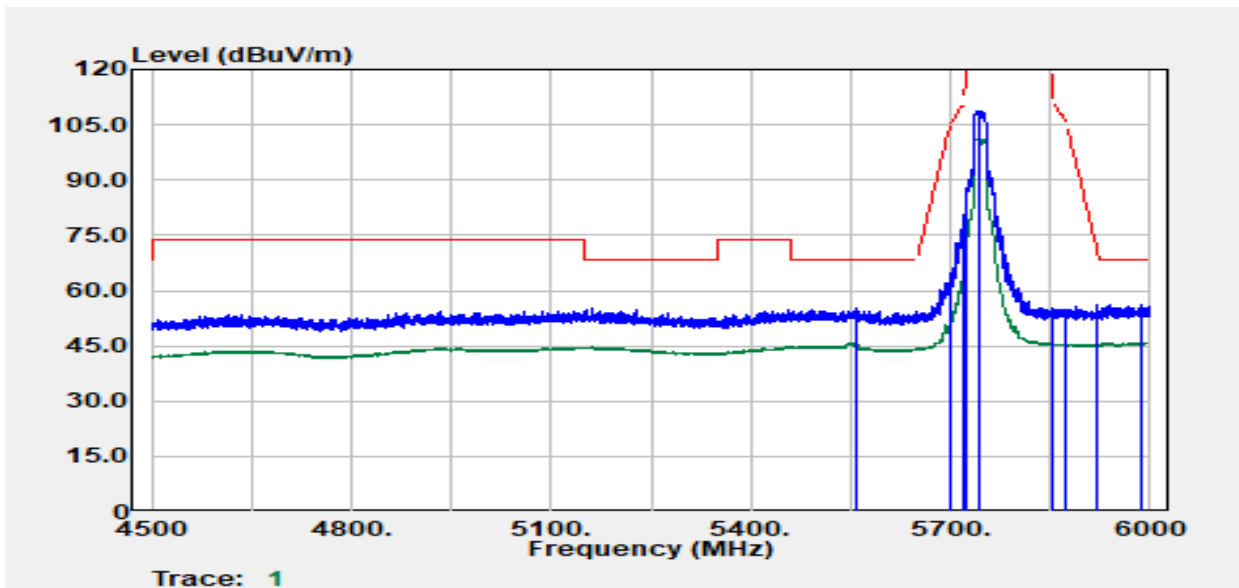
Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dB $\mu$ V	Factor dB	Actual FS dB $\mu$ V/m	Limit dB $\mu$ V/m	Margin dB
5533.50	Peak	42.16	12.79	54.95	68.20	-13.25
5690.40	Peak	46.56	13.51	60.06	98.12	-38.06
5720.10	Peak	61.85	13.66	75.52	111.03	-35.51
5723.70	Peak	70.15	13.68	83.84	119.24	-35.40
5745.00	Peak	91.68	13.79	105.48	--	--
5745.00	Average	83.68	13.79	97.47	--	--
5853.30	Peak	40.47	14.02	54.49	114.67	-60.18
5860.20	Peak	42.37	14.02	56.39	109.34	-52.95
5884.20	Peak	41.15	14.03	55.18	98.37	-43.19
5935.80	Peak	42.51	14.12	56.64	68.20	-11.56

Report No.: TMWK2305001409KR

Rev.: 00

Project No :TM-2305000074P  
 Operation Band :802.11a/Band4  
 Frequency :5745 MHz  
 Operation Mode :Bandedge  
 EUT Pol :E2  
 Setting :20

Test Date :2023-10-18  
 Temp./Humi. :24.7/57  
 Antenna Pol. :HORIZONTAL  
 Engineer :Ray.Li  
 Test Chamber :966A

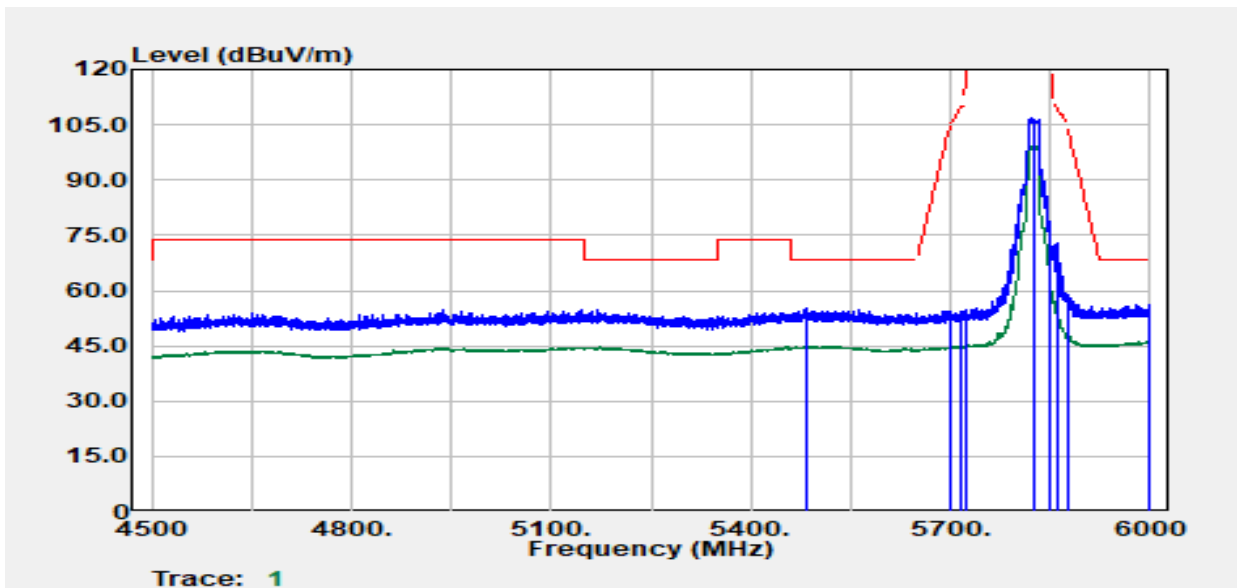


Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
5559.90	Peak	42.30	12.90	55.19	68.20	-13.01
5698.20	Peak	51.10	13.55	64.65	103.87	-39.23
5720.10	Peak	64.43	13.66	78.09	111.03	-32.94
5722.80	Peak	72.92	13.68	86.60	117.19	-30.59
5745.00	Peak	95.07	13.79	108.86	--	--
5745.00	Average	87.35	13.79	101.14	--	--
5852.10	Peak	40.87	14.02	54.89	117.41	-62.52
5871.30	Peak	40.90	14.02	54.92	106.23	-51.31
5920.50	Peak	42.10	14.08	56.18	71.52	-15.34
5986.50	Peak	42.22	14.15	56.37	68.20	-11.83

Report No.: TMWK2305001409KR

Rev.: 00

Project No	:TM-2305000074P	Test Date	:2023-10-18
Operation Band	:802.11a/Band4	Temp./Humi.	:24.7/57
Frequency	:5825 MHz	Antenna Pol.	:VERTICAL
Operation Mode	:Bandedge	Engineer	:Ray.Li
EUT Pol	:E2	Test Chamber	: 966A
Setting	:20		



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Read Level dBμV	Factor dB	Actual FS dBμV/m	Limit dBμV/m	Margin dB
5482.80	Peak	42.76	12.49	55.25	68.20	-12.95
5698.80	Peak	40.91	13.55	54.47	104.32	-49.85
5716.50	Peak	40.81	13.65	54.46	109.82	-55.36
5724.60	Peak	41.06	13.69	54.75	121.29	-66.54
5825.00	Peak	92.70	14.09	106.79	--	--
5825.00	Average	85.03	14.09	99.12	--	--
5850.60	Peak	59.91	14.02	73.93	120.83	-46.90
5859.90	Peak	59.04	14.02	73.06	109.43	-36.36
5878.20	Peak	44.72	14.03	58.75	102.82	-44.08
5997.60	Peak	42.09	14.15	56.24	68.20	-11.96