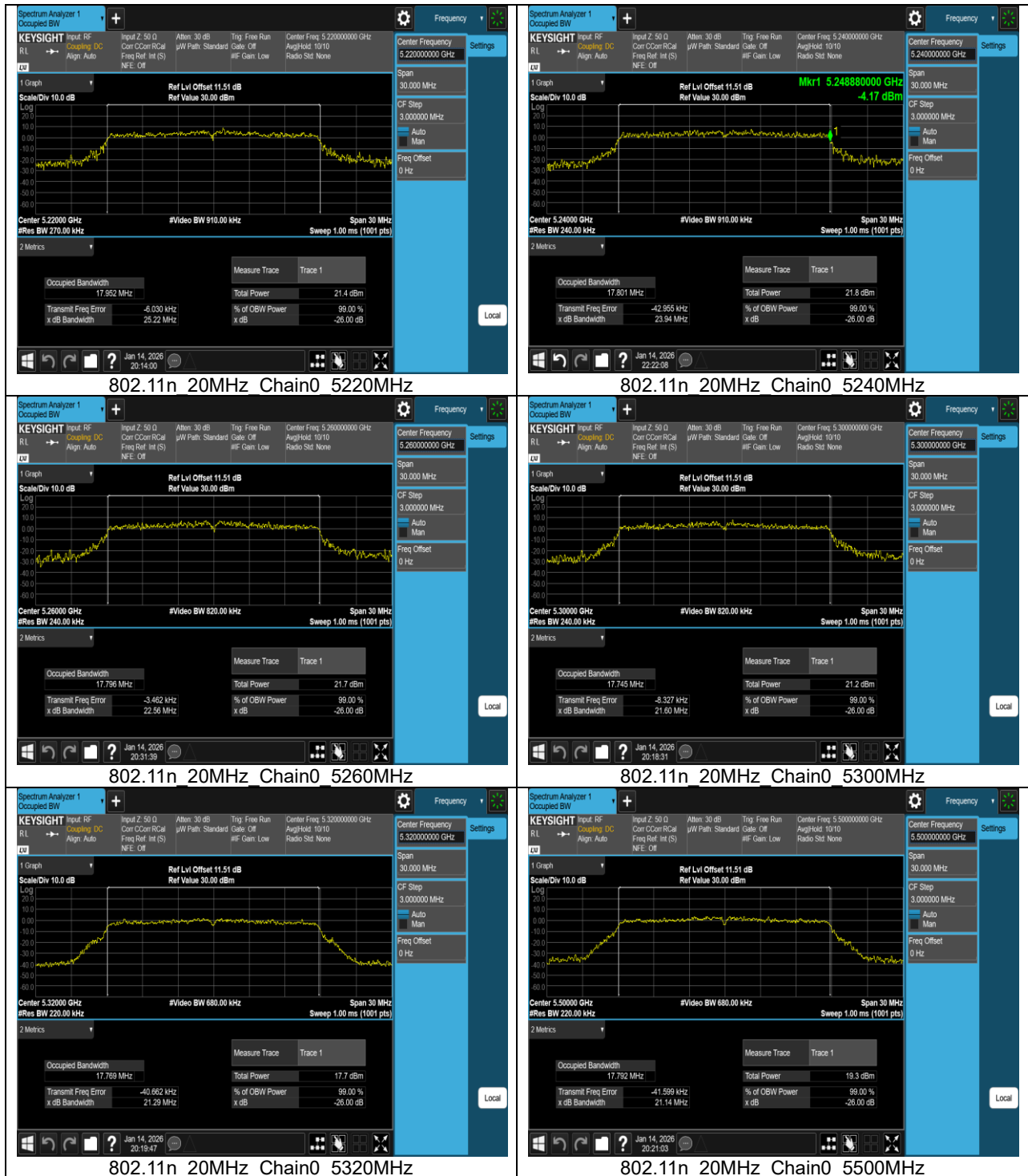
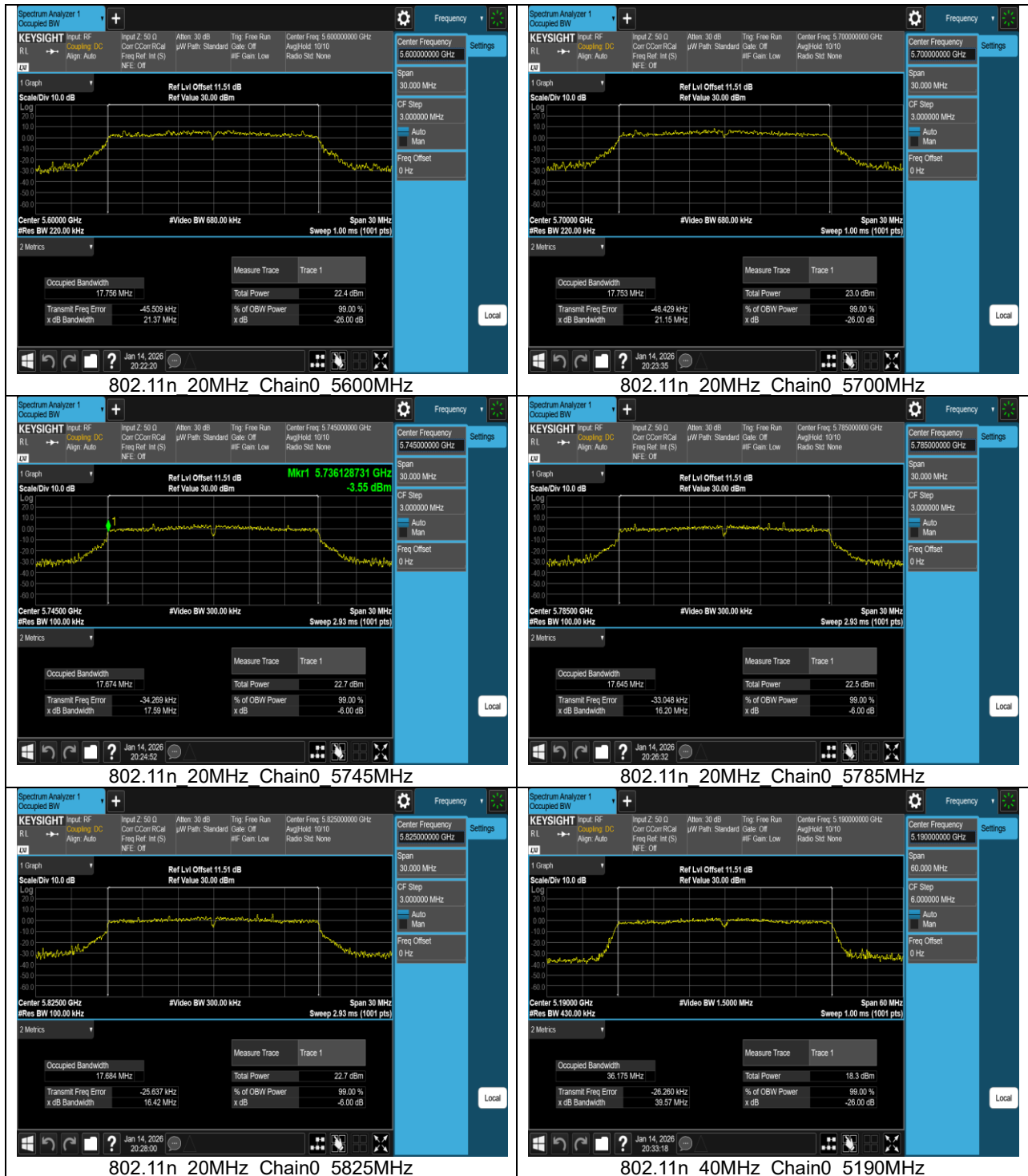
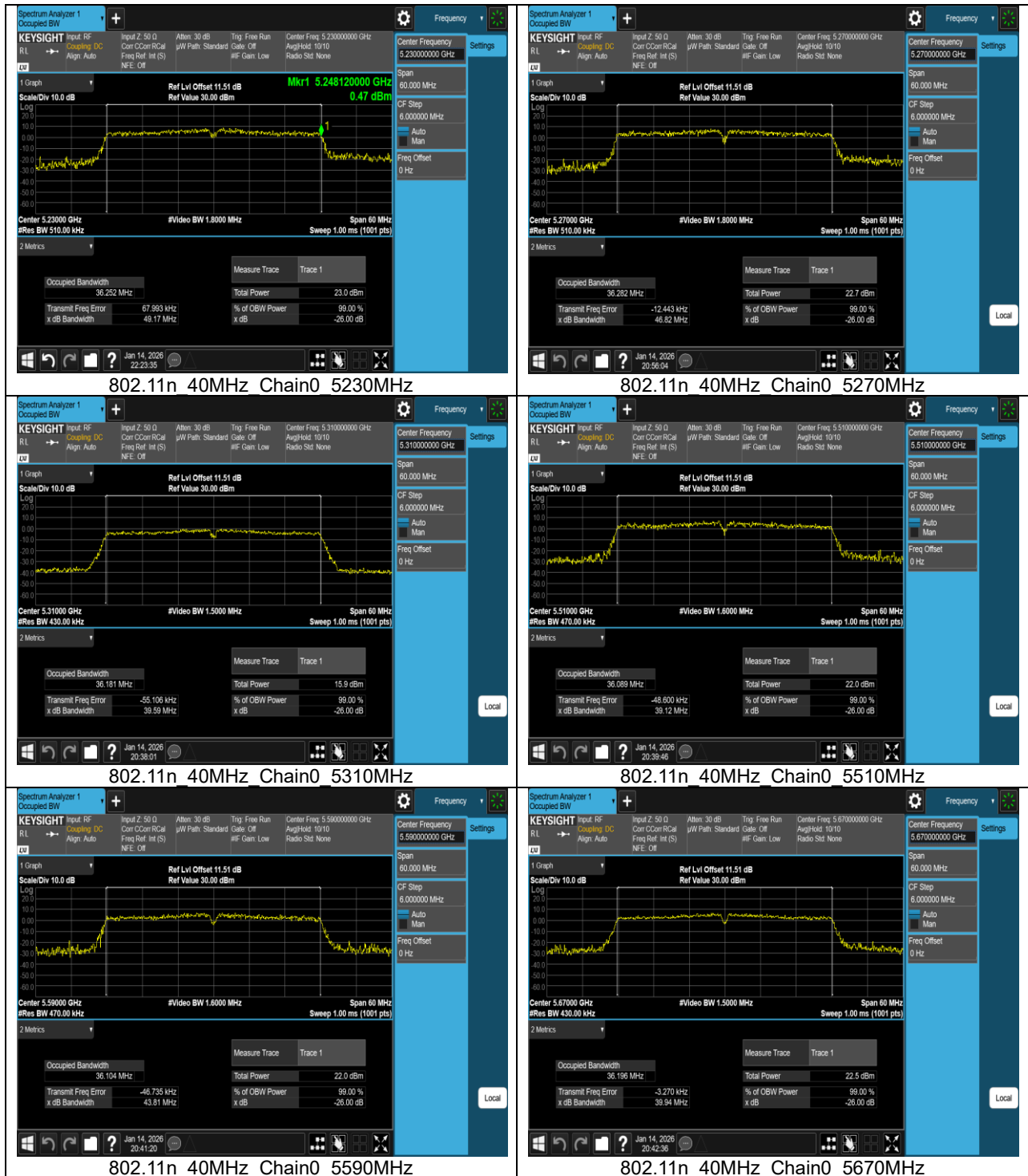
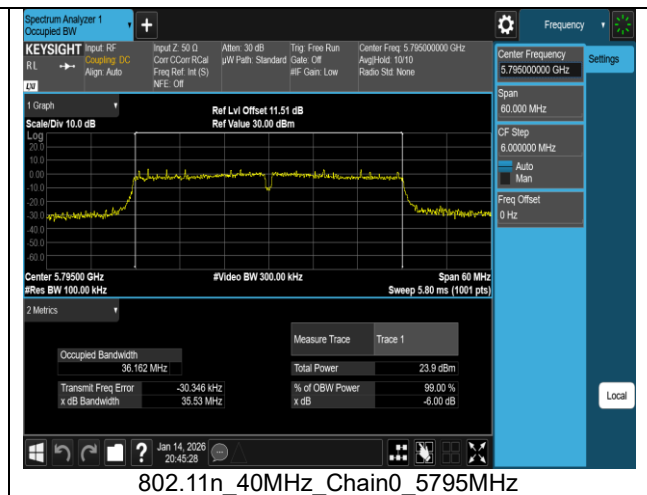
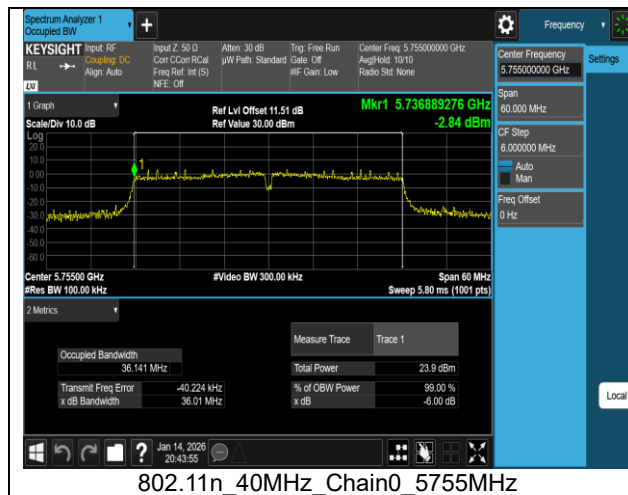










4.3 OUTPUT POWER MEASUREMENT

4.3.1 Test Limit

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

UNII-1 :

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power 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 : 24dBm ☐ Antenna with DG greater than 6 dBi : [Limit = 24 – (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)]

According to RSS-247 section 7.3.

UNII-1 :

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:

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.

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	☒ 200mW or $10 + 10 \log_{10}B$ for IC ☐ Antenna with DG greater than 6 dBi : [Limit = $30 - (DG - 6)$]
UNII-2a/2c Limit	☒ 250 mW or $11 + 10 \log_{10}B$ for IC ☐ 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 = $30 - (DG - 6)$]

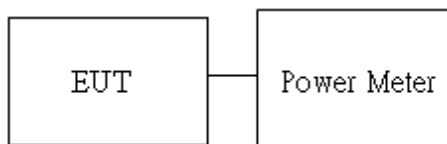
4.3.2 Test Procedure

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

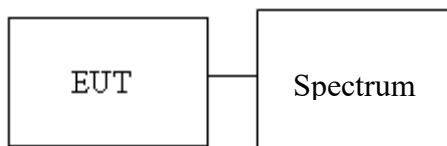
1. The EUT RF output connected to the power meter or spectrum by RF cable.
2. Setting maximum power transmit of EUT.
3. The path loss was compensated to the results for each measurement.
4. Measure and record the result of Average output power. in the test report.

4.3.3 Test Setup

For BW 20MHz and 40MHz



For BW 80MHz



4.3.4 Test Result

Temperature: 21.5 ~ 24.7°C
Humidity: 50 ~ 62% RH

Test date: January 14 ~ 29, 2026
Tested by: Marco Chan

Conducted output power-FCC :

802.11a_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	6	52	17.417	12.41	23.98	PASS
44	5220	6	71	50.348	17.02	23.98	PASS
48	5240	6	73	58.074	17.64	23.98	PASS
52	5260	6	71	51.520	17.12	23.98	PASS
60	5300	6	71	53.454	17.28	23.98	PASS
64	5320	6	51	18.923	12.77	23.98	PASS
100	5500	6	67	50.813	17.06	23.98	PASS
120	5600	6	67	52.357	17.19	23.98	PASS
140	5700	6	67	51.877	17.15	23.98	PASS
149	5745	6	71	57.674	17.61	30	PASS
157	5785	6	71	54.951	17.40	30	PASS
165	5825	6	72	58.074	17.64	30	PASS

802.11n_HT20_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	55	19.904	12.99	23.98	PASS
44	5220	MCS0	75	57.008	17.56	23.98	PASS
48	5240	MCS0	75	57.271	17.58	23.98	PASS
52	5260	MCS0	74	54.820	17.39	23.98	PASS
60	5300	MCS0	72	51.634	17.13	23.98	PASS
64	5320	MCS0	51	17.986	12.55	23.98	PASS
100	5500	MCS0	55	25.938	14.14	23.98	PASS
120	5600	MCS0	67	48.410	16.85	23.98	PASS
140	5700	MCS0	70	57.140	17.57	23.98	PASS
149	5745	MCS0	71	54.068	17.33	30	PASS
157	5785	MCS0	71	51.515	17.12	30	PASS
165	5825	MCS0	72	51.992	17.16	30	PASS

802.11ac_VHT20_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	MCS0	55	19.812	12.97	23.98	PASS
44	5220	MCS0	75	56.486	17.52	23.98	PASS
48	5240	MCS0	75	57.008	17.56	23.98	PASS
52	5260	MCS0	74	54.317	17.35	23.98	PASS
60	5300	MCS0	72	51.279	17.10	23.98	PASS
64	5320	MCS0	51	17.903	12.53	23.98	PASS
100	5500	MCS0	55	25.700	14.10	23.98	PASS
120	5600	MCS0	67	48.077	16.82	23.98	PASS
140	5700	MCS0	70	56.616	17.53	23.98	PASS
149	5745	MCS0	71	53.819	17.31	30	PASS
157	5785	MCS0	71	50.926	17.07	30	PASS
165	5825	MCS0	72	51.279	17.10	30	PASS

802.11n_HT40_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	51	17.827	12.51	23.98	PASS
46	5230	MCS0	72	58.760	17.69	23.98	PASS
54	5270	MCS0	71	55.473	17.44	23.98	PASS
62	5310	MCS0	43	10.071	10.03	23.98	PASS
102	5510	MCS0	65	49.669	16.96	23.98	PASS
118	5590	MCS0	65	48.987	16.90	23.98	PASS
134	5670	MCS0	64	47.542	16.77	23.98	PASS
151	5755	MCS0	70	62.385	17.95	30	PASS
159	5795	MCS0	71	60.545	17.82	30	PASS

802.11ac_VHT40_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	MCS0	51	17.704	12.48	23.98	PASS
46	5230	MCS0	72	58.221	17.65	23.98	PASS
54	5270	MCS0	71	55.218	17.42	23.98	PASS
62	5310	MCS0	43	10.025	10.01	23.98	PASS
102	5510	MCS0	65	49.100	16.91	23.98	PASS
118	5590	MCS0	65	48.538	16.86	23.98	PASS
134	5670	MCS0	64	47.107	16.73	23.98	PASS
151	5755	MCS0	70	61.671	17.90	30	PASS
159	5795	MCS0	71	60.267	17.80	30	PASS

802.11ac_VHT80_Ch0

CH	Frequency (MHz)	Data Rate	Power Setting	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	MCS0	50	16.269	12.11	23.98	PASS
58	5290	MCS0	47	15.644	11.94	23.98	PASS
106	5530	MCS0	60	32.089	15.06	23.98	PASS
122	5610	MCS0	71	66.276	18.21	23.98	PASS
155	5775	MCS0	73	67.976	18.32	30	PASS

Conducted output power-IC :

802.11a_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
52	5260	51.520	17.12	23.21	PASS
60	5300	53.454	17.28	23.22	PASS
64	5320	18.923	12.77	23.20	PASS
100	5500	50.813	17.06	23.21	PASS
120	5600	52.357	17.19	23.21	PASS
140	5700	51.877	17.15	23.21	PASS
149	5745	57.674	17.61	30	PASS
157	5785	54.951	17.40	30	PASS
165	5825	58.074	17.64	30	PASS

802.11n_HT20_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
52	5260	54.820	17.39	23.51	PASS
60	5300	51.634	17.13	23.5	PASS
64	5320	17.986	12.55	23.49	PASS
100	5500	25.938	14.14	23.49	PASS
120	5600	48.410	16.85	23.5	PASS
140	5700	57.140	17.57	23.49	PASS
149	5745	54.068	17.33	30	PASS
157	5785	51.515	17.12	30	PASS
165	5825	51.992	17.16	30	PASS

802.11ac_VHT20_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
52	5260	54.317	17.35	23.51	PASS
60	5300	51.279	17.10	23.5	PASS
64	5320	17.903	12.53	23.49	PASS
100	5500	25.700	14.10	23.49	PASS
120	5600	48.077	16.82	23.5	PASS
140	5700	56.616	17.53	23.49	PASS
149	5745	53.819	17.31	30	PASS
157	5785	50.926	17.07	30	PASS
165	5825	51.279	17.10	30	PASS

802.11n_HT40_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
54	5270	55.473	17.44	23.98	PASS
62	5310	10.071	10.03	23.98	PASS
102	5510	49.669	16.96	23.98	PASS
118	5590	48.987	16.90	23.98	PASS
134	5670	47.542	16.77	23.98	PASS
151	5755	62.385	17.95	30	PASS
159	5795	60.545	17.82	30	PASS

802.11ac_VHT40_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
54	5270	55.218	17.42	23.98	PASS
62	5310	10.025	10.01	23.98	PASS
102	5510	49.100	16.91	23.98	PASS
118	5590	48.538	16.86	23.98	PASS
134	5670	47.107	16.73	23.98	PASS
151	5755	61.671	17.90	30	PASS
159	5795	60.267	17.80	30	PASS

802.11ac_VHT80_Ch0

CH	Frequency (MHz)	TOTAL POWER (mW)	TOTAL POWER (dBm)	REQUIRED LIMIT (dBm)	RESULT
58	5290	15.644	11.94	23.98	PASS
106	5530	32.089	15.06	23.98	PASS
122	5610	66.276	18.21	23.98	PASS
155	5775	67.976	18.32	30	PASS

EIRP :

802.11a_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	12.41	1.72	25.882	14.13	22.2	PASS
44	5220	17.02	1.72	74.817	18.74	22.24	PASS
48	5240	17.64	1.72	86.298	19.36	22.25	PASS
52	5260	17.12	2.13	84.140	19.25	29.21	PASS
60	5300	17.28	2.13	87.297	19.41	29.22	PASS
64	5320	12.77	2.13	30.903	14.90	29.2	PASS
100	5500	17.06	1.39	69.984	18.45	29.21	PASS
120	5600	17.19	1.39	72.111	18.58	29.21	PASS
140	5700	17.15	1.39	71.450	18.54	29.21	PASS

802.11n_HT20_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	12.99	1.72	29.580	14.71	22.48	PASS
44	5220	17.56	1.72	84.723	19.28	22.52	PASS
48	5240	17.58	1.72	85.114	19.30	22.52	PASS
52	5260	17.39	2.13	89.536	19.52	29.51	PASS
60	5300	17.13	2.13	84.333	19.26	29.5	PASS
64	5320	12.55	2.13	29.376	14.68	29.49	PASS
100	5500	14.14	1.39	35.727	15.53	29.49	PASS
120	5600	16.85	1.39	66.681	18.24	29.5	PASS
140	5700	17.57	1.39	78.705	18.96	29.49	PASS

802.11ac_VHT20_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
36	5180	12.97	1.72	29.444	14.69	22.48	PASS
44	5220	17.52	1.72	83.946	19.24	22.52	PASS
48	5240	17.56	1.72	84.723	19.28	22.52	PASS
52	5260	17.35	2.13	88.716	19.48	29.51	PASS
60	5300	17.10	2.13	83.753	19.23	29.5	PASS
64	5320	12.53	2.13	29.242	14.66	29.49	PASS
100	5500	14.10	1.39	35.400	15.49	29.49	PASS
120	5600	16.82	1.39	66.222	18.21	29.5	PASS
140	5700	17.53	1.39	77.983	18.92	29.49	PASS

802.11n_HT40_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	12.51	1.72	26.485	14.23	23.01	PASS
46	5230	17.69	1.72	87.297	19.41	23.01	PASS
54	5270	17.44	2.13	90.573	19.57	30	PASS
62	5310	10.03	2.13	16.444	12.16	30	PASS
102	5510	16.96	1.39	68.391	18.35	30	PASS
118	5590	16.90	1.39	67.453	18.29	30	PASS
134	5670	16.77	1.39	65.464	18.16	30	PASS

802.11ac_VHT40_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
38	5190	12.48	1.72	26.303	14.20	23.01	PASS
46	5230	17.65	1.72	86.497	19.37	23.01	PASS
54	5270	17.42	2.13	90.157	19.55	30	PASS
62	5310	10.01	2.13	16.368	12.14	30	PASS
102	5510	16.91	1.39	67.608	18.30	30	PASS
118	5590	16.86	1.39	66.834	18.25	30	PASS
134	5670	16.73	1.39	64.863	18.12	30	PASS

802.11ac_VHT80_Ch0

CH	Frequency (MHz)	TOTAL POWER (dBm)	Antenna Gain (dBi)	EIRP (mW)	EIRP (dBm)	REQUIRED LIMIT (dBm)	RESULT
42	5210	12.11	1.72	24.155	13.83	23.01	PASS
58	5290	11.94	2.13	25.527	14.07	30	PASS
106	5530	15.06	1.39	44.157	16.45	30	PASS
122	5610	18.21	1.39	91.201	19.60	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 7.3.

UNII-1 :

FCC: 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, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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

FCC:

UNII-1 Limit	☒ Antenna not exceed 6 dBi : 11 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]

IC:

UNII-1 Limit	10dB/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

Refer to section 1.8.

4.4.4 Test Result

Temperature: 21.5 ~ 24.7°C
Humidity: 50 ~ 62% RH

Test date: January 14 ~ 29, 2026
Tested by: Marco Chan

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	2.396	0.30	2.70		11.00 dBm/MHz	-8.30
5220	7.398	0.30	7.70		11.00 dBm/MHz	-3.30
5240	7.896	0.30	8.20		11.00 dBm/MHz	-2.80
5260	7.075	0.30	7.38		11.00 dBm/MHz	-3.63
5300	7.261	0.30	7.56		11.00 dBm/MHz	-3.44
5320	2.916	0.30	3.22		11.00 dBm/MHz	-7.78
5500	7.228	0.30	7.53		11.00 dBm/MHz	-3.47
5600	6.835	0.30	7.14		11.00 dBm/MHz	-3.87
5700	7.232	0.30	7.53		11.00 dBm/MHz	-3.47
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	2.864	0.30	2.22	5.38	30.00 dBm/500kHz	-24.62
5785	2.667	0.30	2.22	5.19	30.00 dBm/500kHz	-24.81
5825	2.796	0.30	2.22	5.32	30.00 dBm/500kHz	-24.68

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	2.358	0.32	2.68		11.00 dBm/MHz	-8.32
5220	7.425	0.32	7.75		11.00 dBm/MHz	-3.26
5240	7.637	0.32	7.96		11.00 dBm/MHz	-3.04
5260	7.300	0.32	7.62		11.00 dBm/MHz	-3.38
5300	6.839	0.32	7.16		11.00 dBm/MHz	-3.84
5320	2.145	0.32	2.47		11.00 dBm/MHz	-8.54
5500	3.495	0.32	3.82		11.00 dBm/MHz	-7.19
5600	6.371	0.32	6.69		11.00 dBm/MHz	-4.31
5700	7.378	0.32	7.70		11.00 dBm/MHz	-3.30
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maxmum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5745	2.488	0.32	2.22	5.03	30.00 dBm/500kHz	-24.97
5785	2.025	0.32	2.22	4.57	30.00 dBm/500kHz	-25.44
5825	1.981	0.32	2.22	4.52	30.00 dBm/500kHz	-25.48

POWER DENSITY 802.11ac VHT80 MODE						
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Duty Factor (dB)	Maximum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5210	-4.526	1.14	-3.39		11.00 dBm/MHz	-14.39
5290	-5.334	1.14	-4.19		11.00 dBm/MHz	-15.19
5530	-2.016	1.14	-0.88		11.00 dBm/MHz	-11.88
5610	1.129	1.14	2.27		11.00 dBm/MHz	-8.73
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maximum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5775	-3.815	1.14	2.22	-0.46	30.00 dBm/500kHz	-30.46

POWER DENSITY 802.11n HT40 MODE						
Frequency (MHz)	Ch0 meas PSD (dBm/MHz)	Duty Factor (dB)	Maximum Corr'd PSD(dBm/MHz)		Limit	Margin (dB)
5190	-1.360	0.62	-0.74		11.00 dBm/MHz	-11.74
5230	4.444	0.62	5.06		11.00 dBm/MHz	-5.94
5270	3.949	0.62	4.57		11.00 dBm/MHz	-6.43
5310	-3.764	0.62	-3.14		11.00 dBm/MHz	-14.14
5510	3.712	0.62	4.33		11.00 dBm/MHz	-6.67
5590	3.363	0.62	3.98		11.00 dBm/MHz	-7.02
5670	3.174	0.62	3.79		11.00 dBm/MHz	-7.21
Frequency (MHz)	Ch0 meas PSD (dBm/300kHz)	Duty Factor (dB)	10log (500kHz/RBW) Factor(dB)	Maximum Corr'd PSD (dBm/500kHz)	Limit	Margin (dB)
5755	-0.224	0.62	2.22	2.62	30.00 dBm/500kHz	-27.38
5795	-0.686	0.62	2.22	2.15	30.00 dBm/500kHz	-27.85

EIRP spectral density:

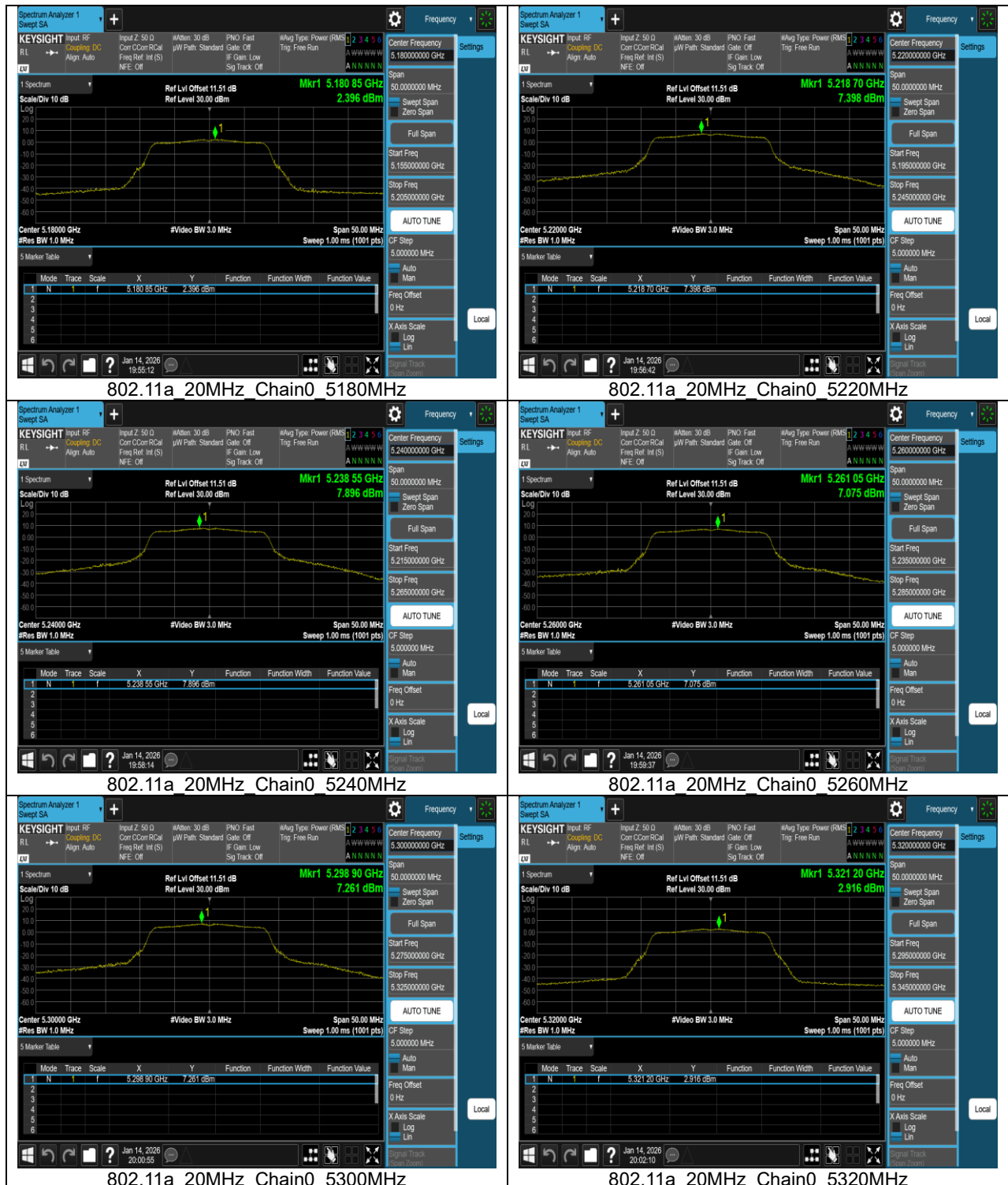
EIRP spectral density 802.11a MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5180	2.696	1.72	4.42	10	-5.58
5220	7.698	1.72	9.42	10	-0.58
5240	8.196	1.72	9.92	10	-0.08

EIRP spectral density 802.11n HT20 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5180	2.678	1.72	4.40	10	-5.60
5220	7.745	1.72	9.47	10	-0.53
5240	7.957	1.72	9.68	10	-0.32

EIRP spectral density 802.11n HT40 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5190	-0.740	1.72	0.98	10	-9.02
5230	5.064	1.72	6.78	10	-3.22

EIRP spectral density 802.11ac VHT80 MODE					
Freq. (MHz)	PSD (dBm)	Ant. Gain (dBi)	EIRP PSD (dBm)	Limit (dBm)	Margin (dB)
5210	-3.386	1.72	-1.67	10	-11.67

Test Data





802.11a_20MHz_Chain0_5500MHz



802.11a_20MHz_Chain0_5600MHz



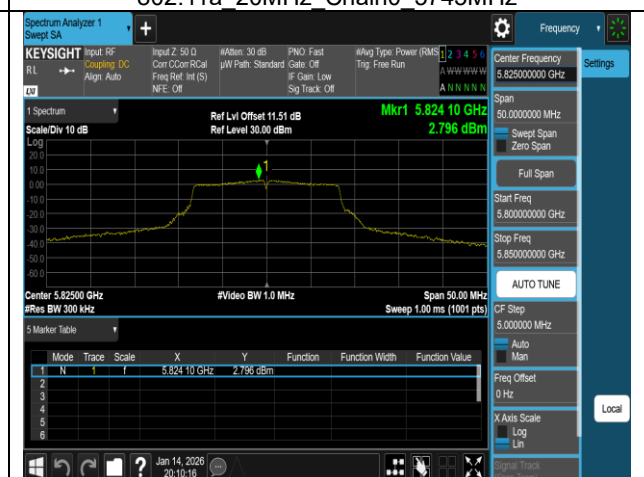
802.11a_20MHz_Chain0_5700MHz



802.11a_20MHz_Chain0_5745MHz



802.11a_20MHz_Chain0_5785MHz



802.11a_20MHz_Chain0_5825MHz



802.11n_20MHz_Chain0_5180MHz



802.11n_20MHz_Chain0_5220MHz



802.11n_20MHz_Chain0_5240MHz



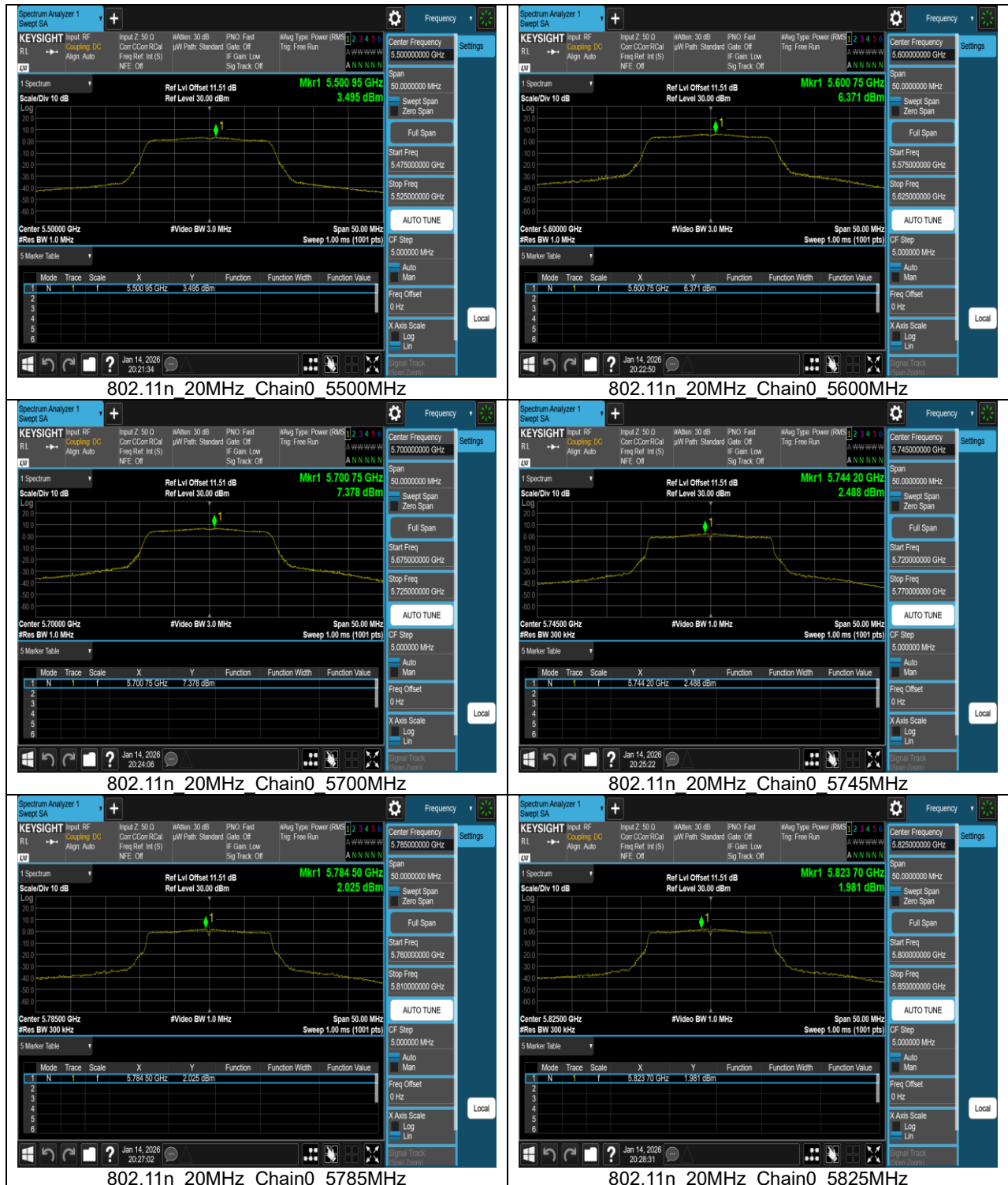
802.11n_20MHz_Chain0_5260MHz



802.11n_20MHz_Chain0_5300MHz



802.11n_20MHz_Chain0_5320MHz





802.11n 40MHz Chain0 5190MHz



802.11n 40MHz Chain0 5230MHz



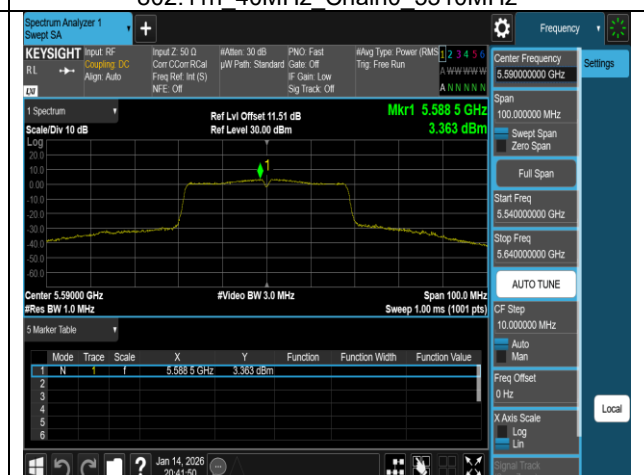
802.11n 40MHz Chain0 5270MHz



802.11n 40MHz Chain0 5310MHz



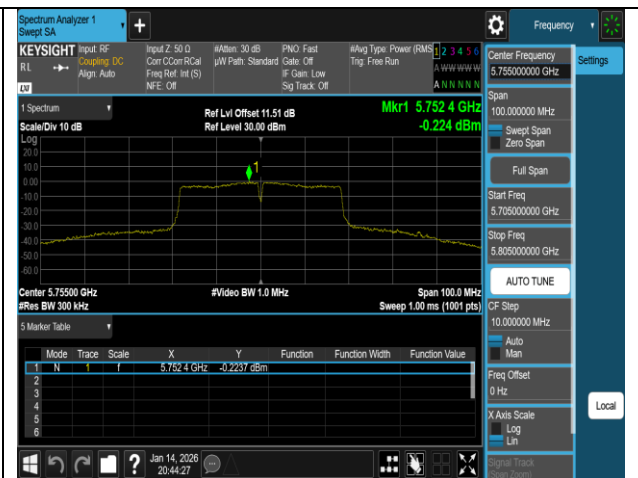
802.11n 40MHz Chain0 5510MHz



802.11n 40MHz Chain0 5590MHz



802.11n_40MHz_Chain0_5670MHz



802.11n_40MHz_Chain0_5755MHz



802.11n_40MHz_Chain0_5795MHz



802.11ac 80MHz Chain0 5210MHz



802.11ac 80MHz Chain0 5290MHz



802.11ac_80MHz_Chain0_5530MHz



802.11ac 80MHz Chain0 5610MHz



802.11ac 80MHz Chain0 5775MHz

4.5 RADIATION BANDEDGE 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 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

UNII-2a and 2c :

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

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

IC according to RSS-247 section 7.3,

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 ^(Note)

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 ^{Note}	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 C63.10-2020, ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024, 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)

Radiated emission below 30MHz is measured in a 9m*6m*6m semi-ane choic chamber, the measurements correspond to those obtained at an open-field test site. There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

5. The SA setting following :

(1) Below 30MHz :

(1.1) 9KHz-490KHz : RBW=200Hz / VBW=1kHz / Sweep=AUTO

(1.2) 490KHz-30MHz : RBW=10kHz / VBW=30kHz / Sweep=AUTO

(2) 30MHz to 1GHz : RBW = 100kHz, VBW $\geq 3 \times$ RBW, Sweep = Auto,
Detector = Peak, Trace = Max hold.

(3) Above 1GHz :

(3.1) For Peak measurement : RBW = 1MHz, VBW ≥ 3 RBW, Sweep = Auto,
Detector = Peak, Trace = Max hold.

(3.2) For Average measurement : RBW = 1MHz, VBW

·If Duty Cycle $\geq 98\%$, VBW=10Hz.

·If Duty Cycle $< 98\%$, VBW=1/T.

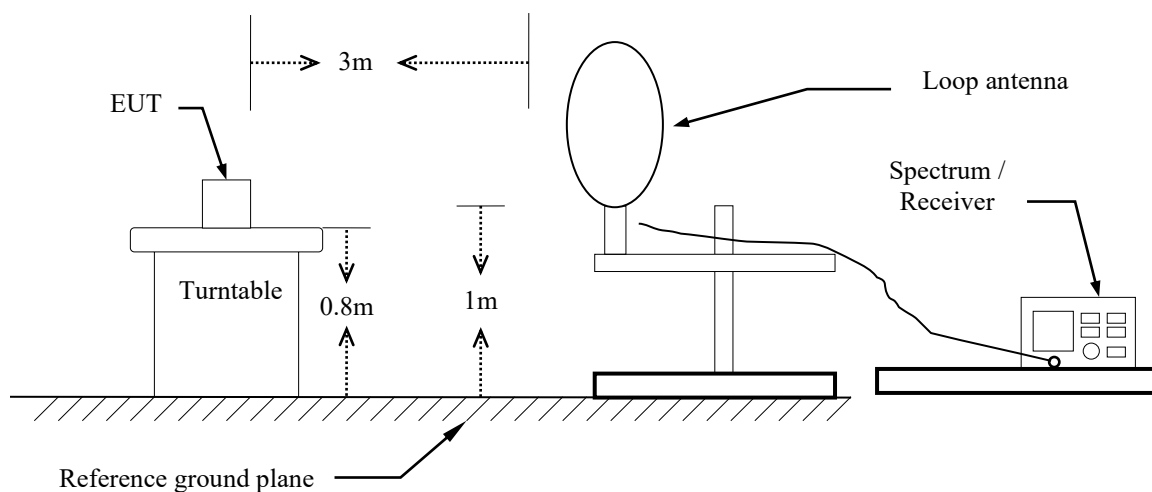
6. Data result :

Actual FS=Spectrum Reading Level + Factor

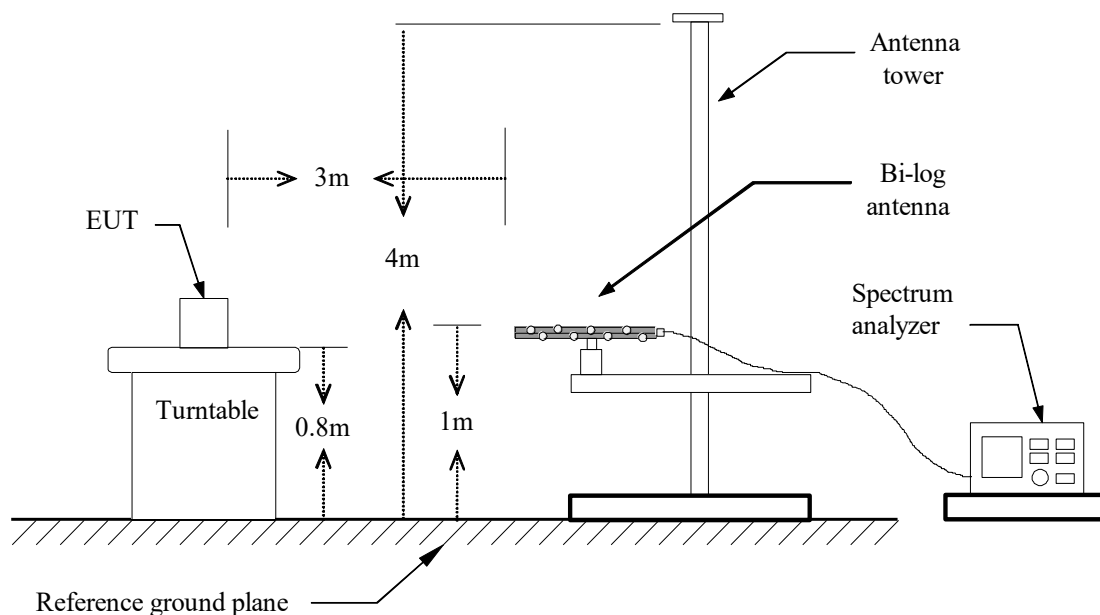
Margin=Actual FS- Limit

4.5.3 Test Setup

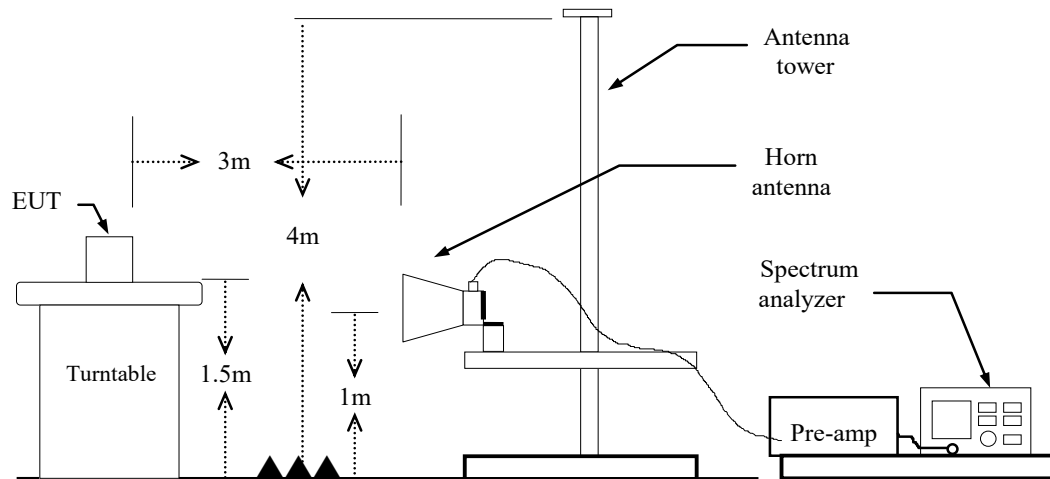
9kHz ~ 30MHz



30MHz ~ 1GHz



Above 1 GHz



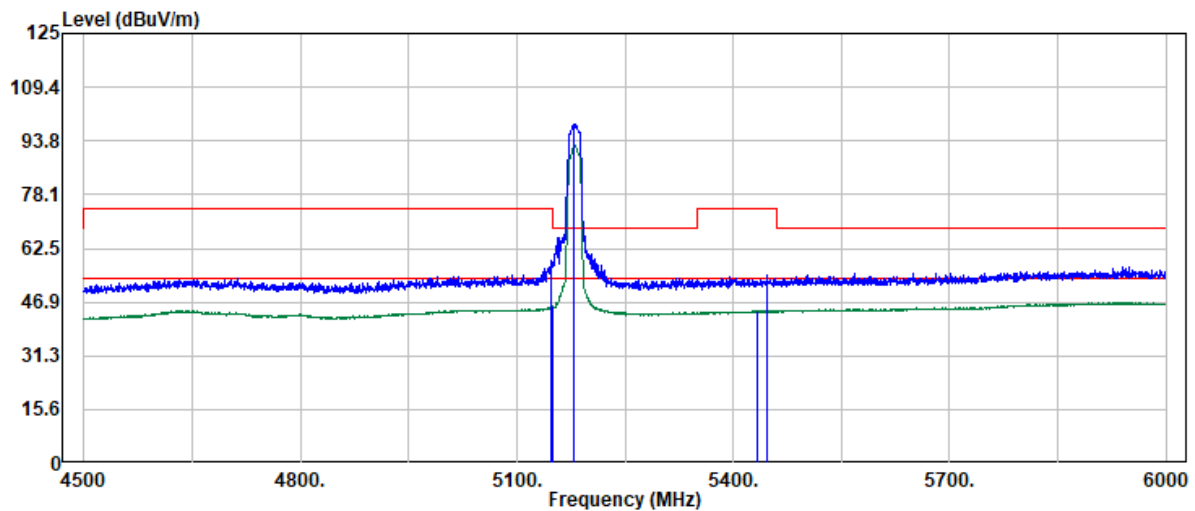
4.5.4 Test Result

Test Data

Band Edge

Project No : TM-2509000187P
Operation Band : A_Band1
Frequency : 5180 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 52

Test Date : 2026-01-19
Temp./Humi. : 25.3/52
Antenna Pol. : VERTICAL
Engineer : Tony.Chao
Test Chamber : 966A



Trace: 1

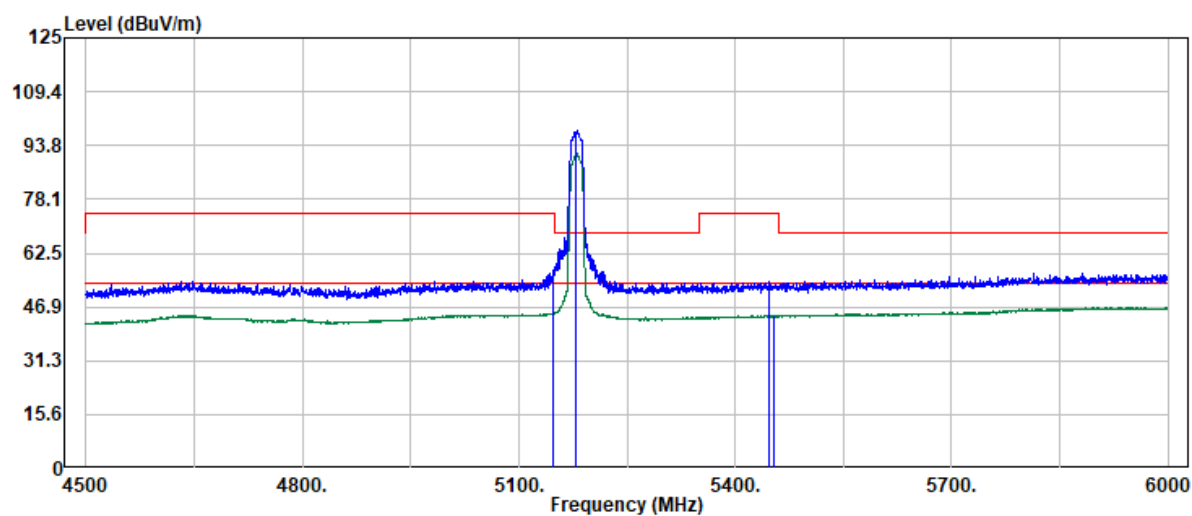
Freq	Read Level	Factor	Actual FS	Limit @3m	Margin	Detector Mode
-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
5147.78	45.48	13.68	59.16	74.00	-14.84	Peak
5149.28	31.86	13.68	45.54	54.00	-8.46	Average
5180.00	84.96	13.68	98.64	--	--	Peak
5180.00	78.69	13.68	92.37	--	--	Average
5432.69	30.62	13.94	44.56	54.00	-9.44	Average
5447.18	40.74	13.96	54.70	74.00	-19.30	Peak

Project No.: TM-2509000187P
Report No.: TMWK2509003906KR

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Rev.: 01

Project No : TM-2509000187P
Operation Band : A_Band1
Frequency : 5180 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 52

Test Date : 2026-01-19
Temp./Humi. : 25.3/52
Antenna Pol. : HORIZONTAL
Engineer : Tony.Chao
Test Chamber : 966A



Trace: 1

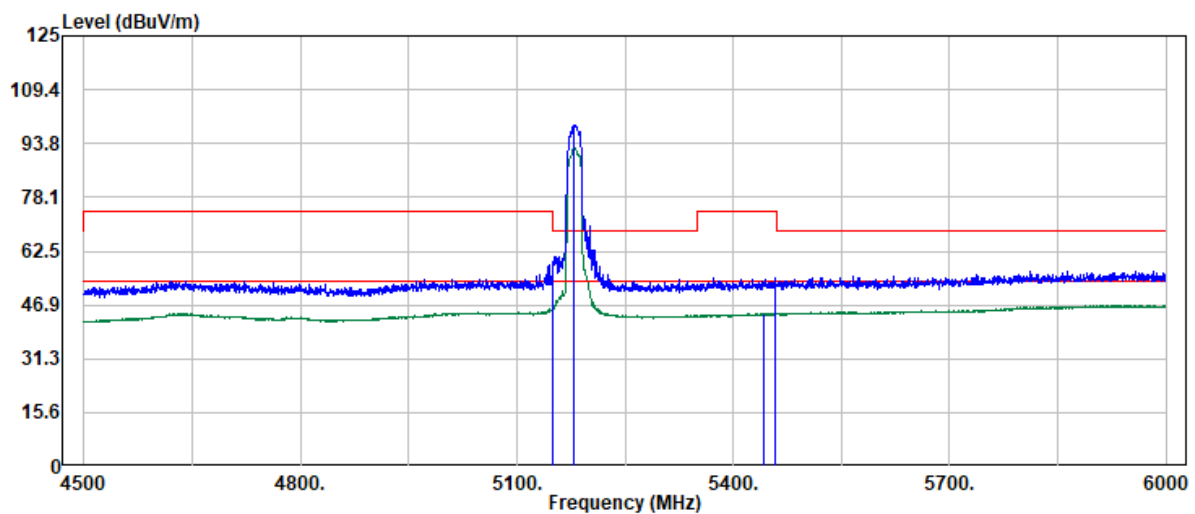
Freq	Read	Factor	Actual	Limit	Margin	Detector
MHz	Level		FS	@3m		Mode
-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
5148.28	43.79	13.68	57.47	74.00	-16.53	Peak
5148.28	31.61	13.68	45.29	54.00	-8.71	Average
5180.00	84.37	13.68	98.05	--	--	Peak
5180.00	77.69	13.68	91.37	--	--	Average
5447.68	40.19	13.97	54.16	74.00	-19.84	Peak
5452.68	30.44	13.98	44.42	54.00	-9.58	Average

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Report No.: TMWK2509003906KR

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Rev.: 01

Project No : TM-2509000187P
Operation Band : N20_Band1
Frequency : 5180 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 55

Test Date : 2026-01-19
Temp./Humi. : 25.3/52
Antenna Pol. : VERTICAL
Engineer : Tony.Chao
Test Chamber : 966A



Trace: 1

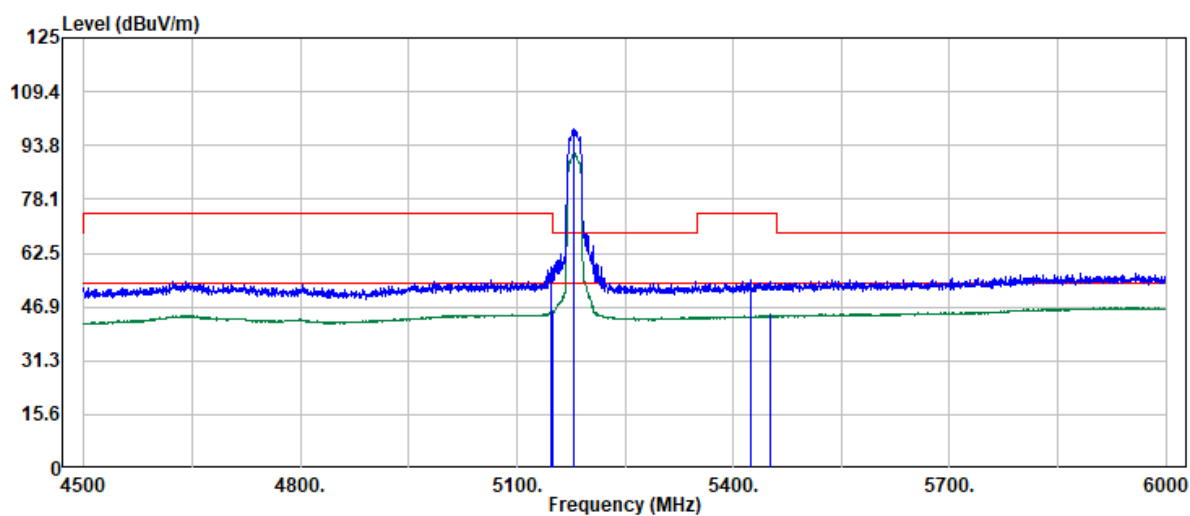
Freq	Read	Factor	Actual	Limit	Margin	Detector
-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
5149.28	45.70	13.68	59.38	74.00	-14.62	Peak
5149.78	33.36	13.68	47.04	54.00	-6.96	Average
5180.00	85.56	13.68	99.24	--	--	Peak
5180.00	78.69	13.68	92.37	--	--	Average
5442.69	30.45	13.96	44.41	54.00	-9.59	Average
5457.18	40.90	13.98	54.88	74.00	-19.12	Peak

Project No.: TM-2509000187P
Report No.: TMWK2509003906KR

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Rev.: 01

Project No : TM-2509000187P
Operation Band : N20_Band1
Frequency : 5180 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 55

Test Date : 2026-01-19
Temp./Humi. : 25.3/52
Antenna Pol. : HORIZONTAL
Engineer : Tony.Chao
Test Chamber : 966A



Trace: 1

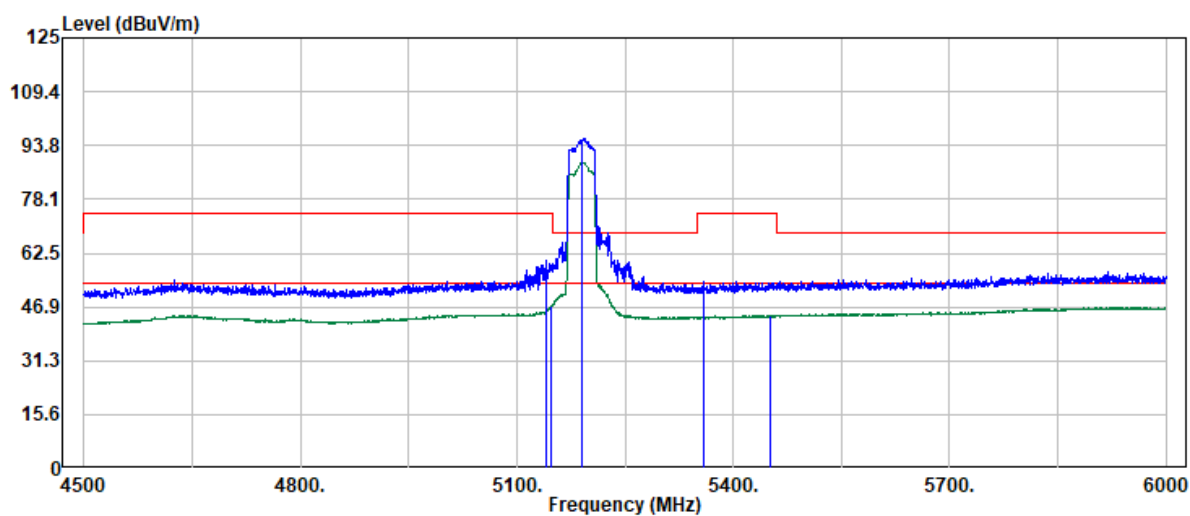
Freq	Read	Factor	Actual	Limit	Margin	Detector
-----	Level	-----	FS	@3m	-----	Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
5147.28	44.64	13.67	58.31	74.00	-15.69	Peak
5149.78	32.04	13.68	45.72	54.00	-8.28	Average
5180.00	84.68	13.68	98.36	--	--	Peak
5180.00	78.02	13.68	91.70	--	--	Average
5423.69	40.75	13.90	54.65	74.00	-19.35	Peak
5451.18	30.68	13.97	44.65	54.00	-9.35	Average

Project No.: TM-2509000187P
Report No.: TMWK2509003906KR

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Rev.: 01

Project No : TM-2509000187P
Operation Band : N40_Band1
Frequency : 5190 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 51

Test Date : 2026-01-19
Temp./Humi. : 25.3/52
Antenna Pol. : VERTICAL
Engineer : Tony.Chao
Test Chamber : 966A



Trace: 1

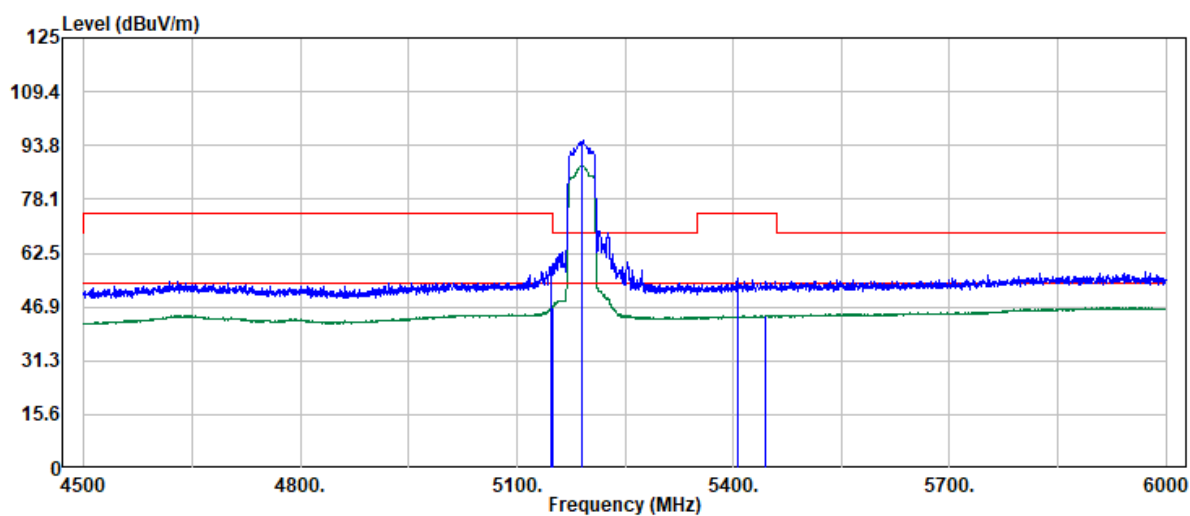
Freq	Read Level	Factor	Actual FS	Limit @3m	Margin	Detector Mode
-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
5141.79	46.54	13.66	60.20	74.00	-13.80	Peak
5148.28	33.64	13.68	47.32	54.00	-6.68	Average
5190.00	82.16	13.68	95.84	--	--	Peak
5190.00	75.02	13.68	88.70	--	--	Average
5358.21	40.32	13.87	54.19	74.00	-19.81	Peak
5452.18	30.40	13.97	44.37	54.00	-9.63	Average

Project No.: TM-2509000187P
Report No.: TMWK2509003906KR

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Rev.: 01

Project No : TM-2509000187P
Operation Band : N40_Band1
Frequency : 5190 MHz
Operation Mode : Bandedge
EUT Pol : H
Setting : 51

Test Date : 2026-01-19
Temp./Humi. : 25.3/52
Antenna Pol. : HORIZONTAL
Engineer : Tony.Chao
Test Chamber : 966A



Trace: 1

Freq	Read	Factor	Actual	Limit	Margin	Detector
-----	-----	-----	FS	@3m	-----	Mode
MHz	dBuV	dB	dBuV/m	dBuV/m	dB	PK/QP/AV
5147.78	44.92	13.68	58.60	74.00	-15.40	Peak
5149.78	33.21	13.68	46.89	54.00	-7.11	Average
5190.00	81.58	13.68	95.26	--	--	Peak
5190.00	74.24	13.68	87.92	--	--	Average
5405.70	41.29	13.86	55.15	74.00	-18.85	Peak
5445.69	30.42	13.96	44.38	54.00	-9.62	Average