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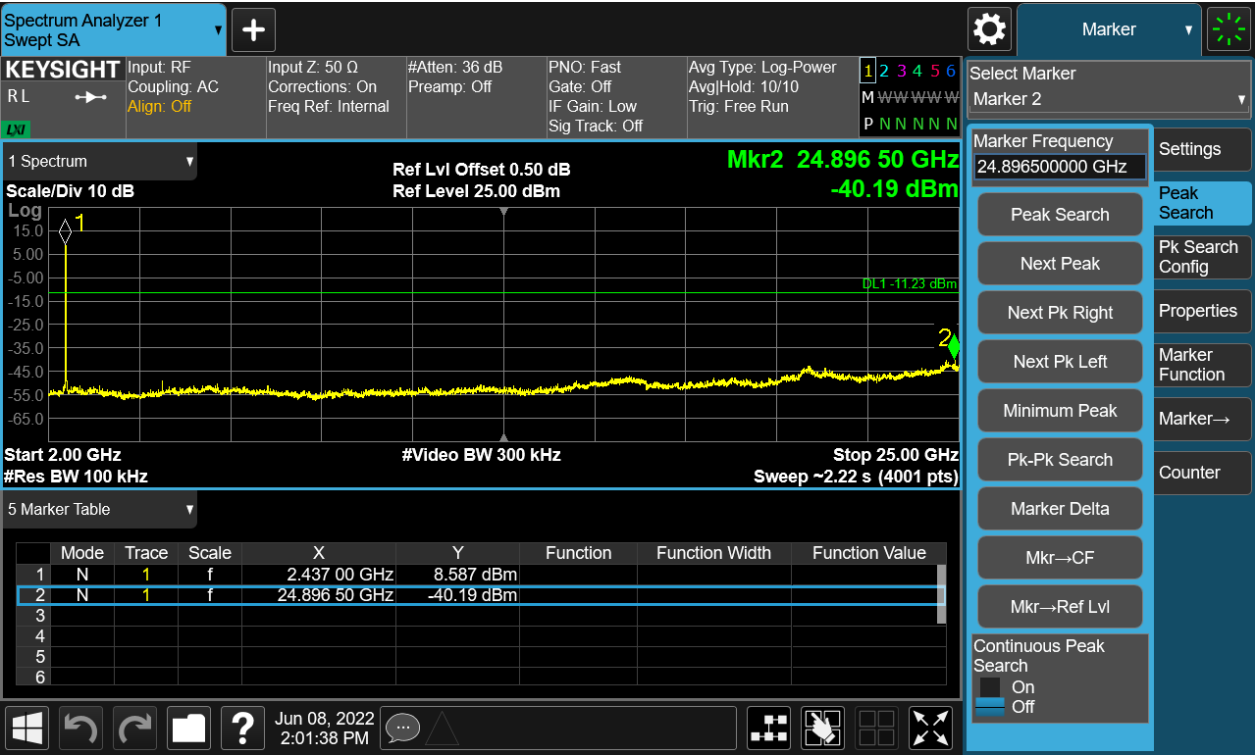
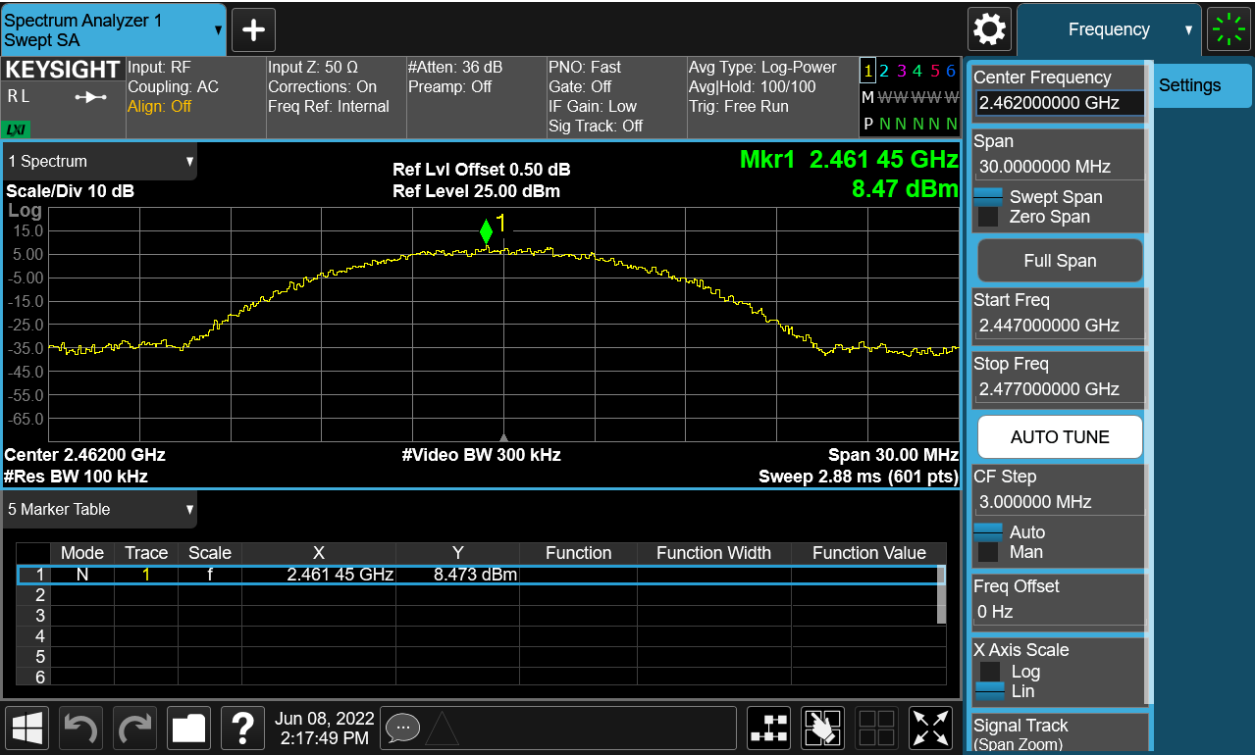


Figure 27: Conducted Spurious Emission & Authorized-band band-edge, 802.11b, 2462MHz Carrier Level



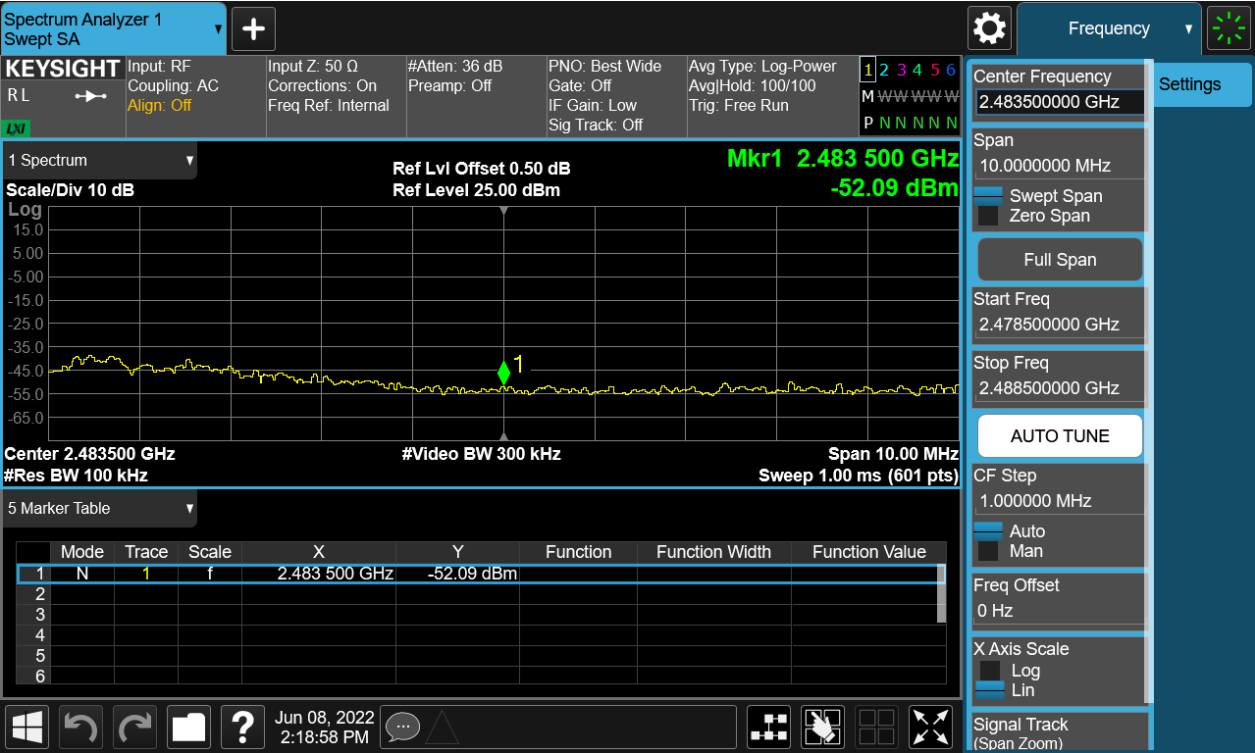
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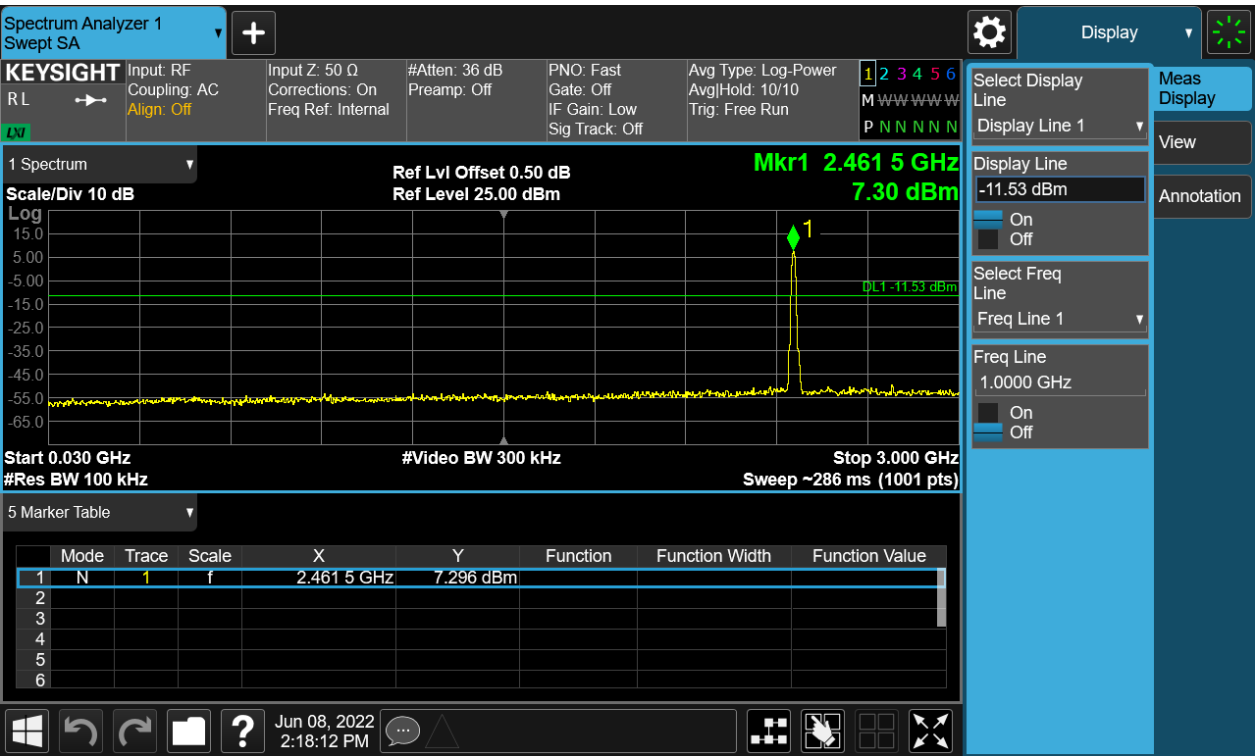
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Band Edge



Conducted spurious emissions 30MHz-25GHz



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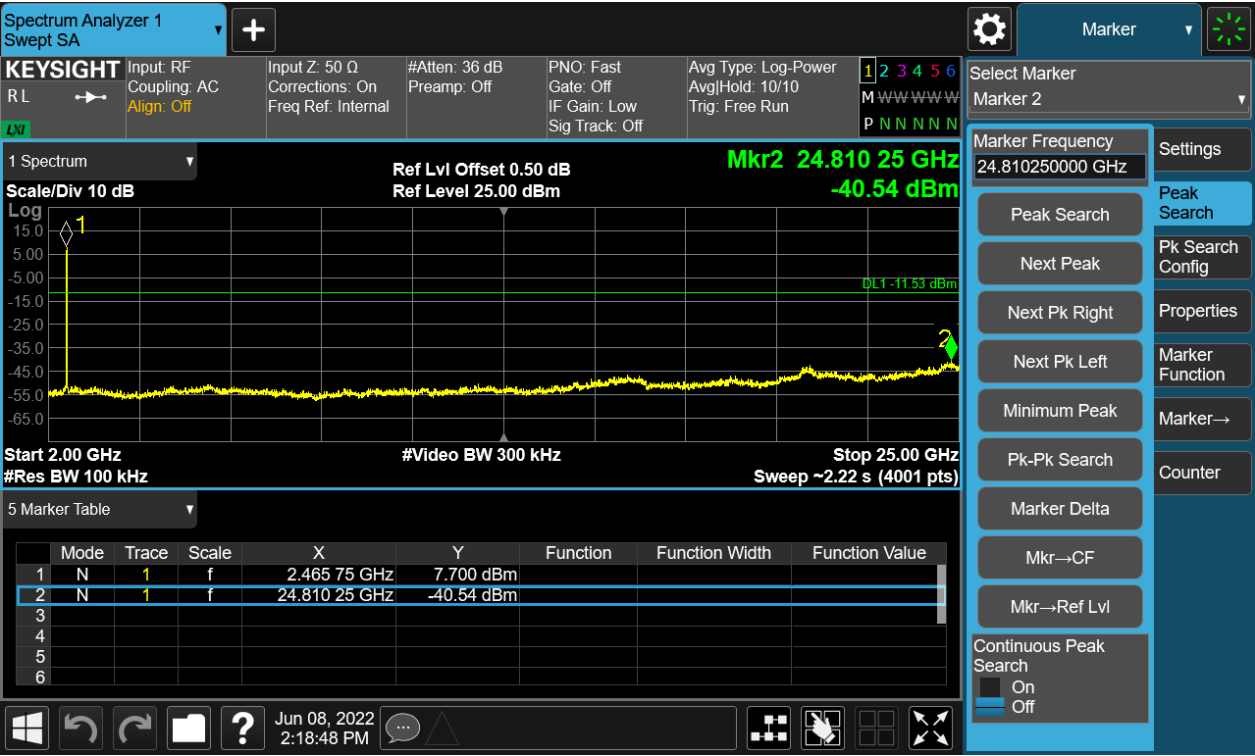
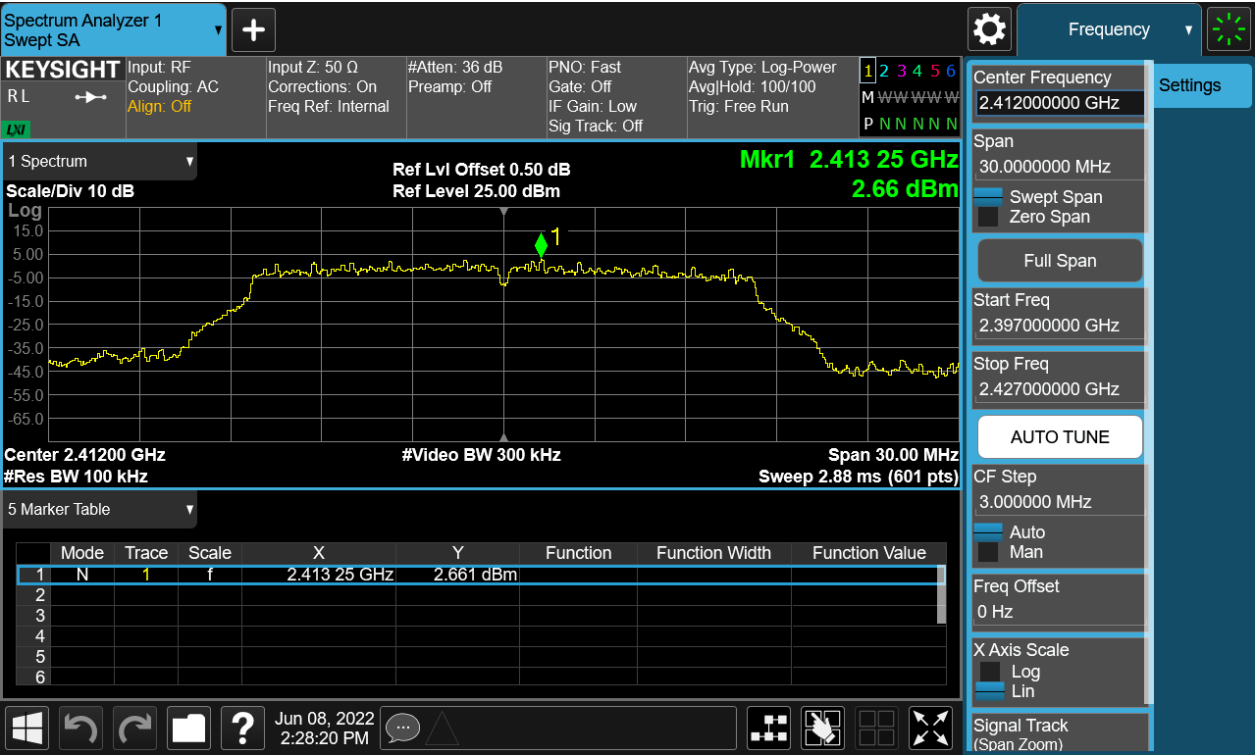


Figure 28: Conducted Spurious Emission & Authorized-band band-edge, 802.11g, 2412MHz Carrier Level



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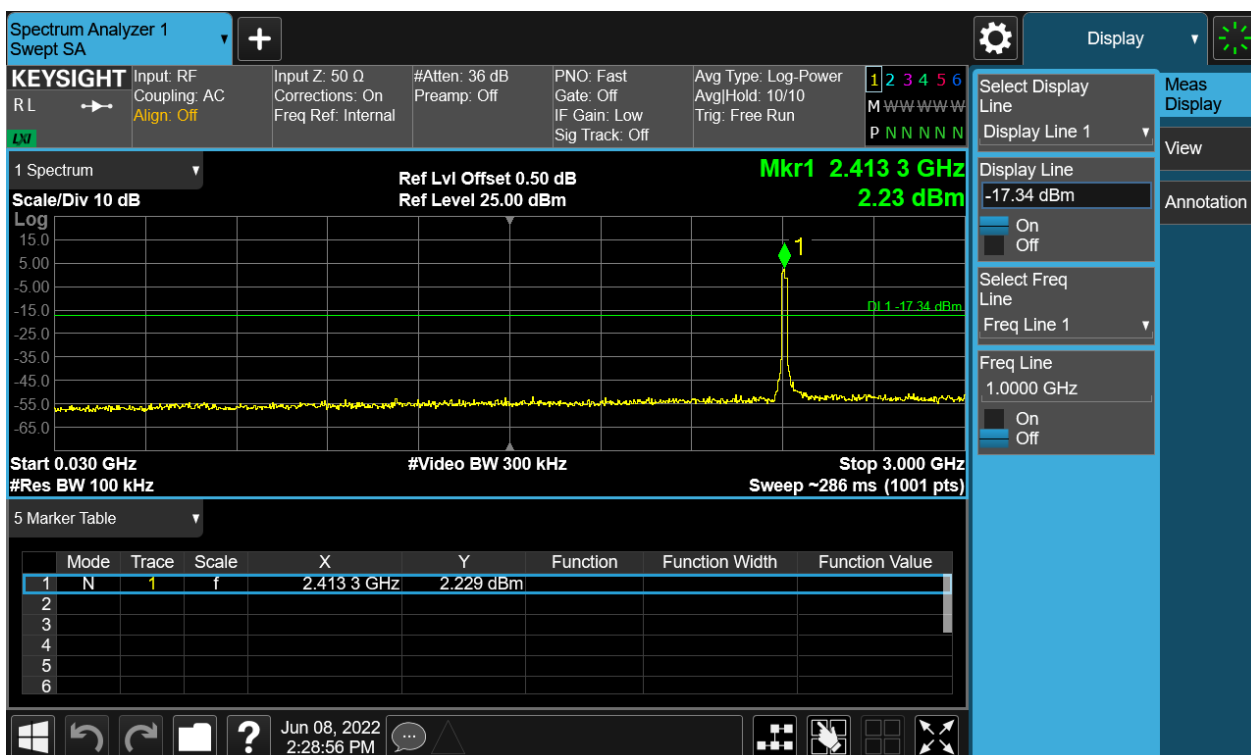
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Band Edge



Conducted spurious emissions 30MHz-25GHz



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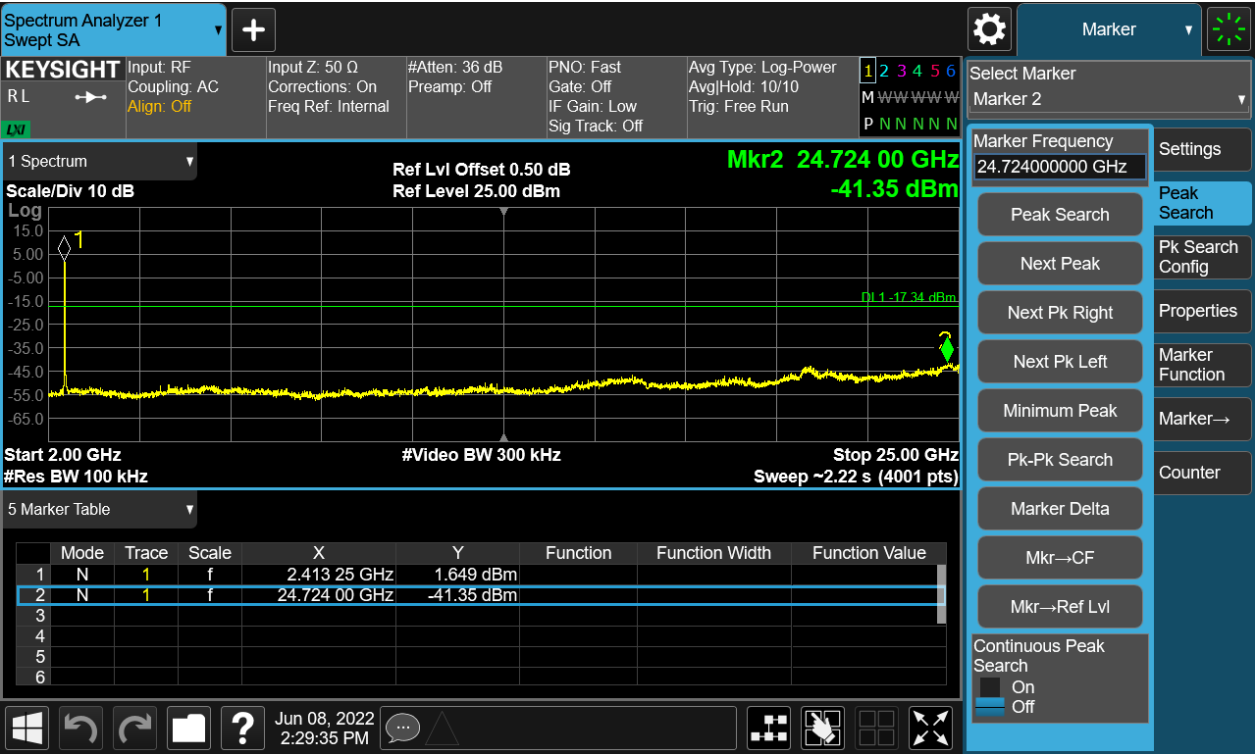
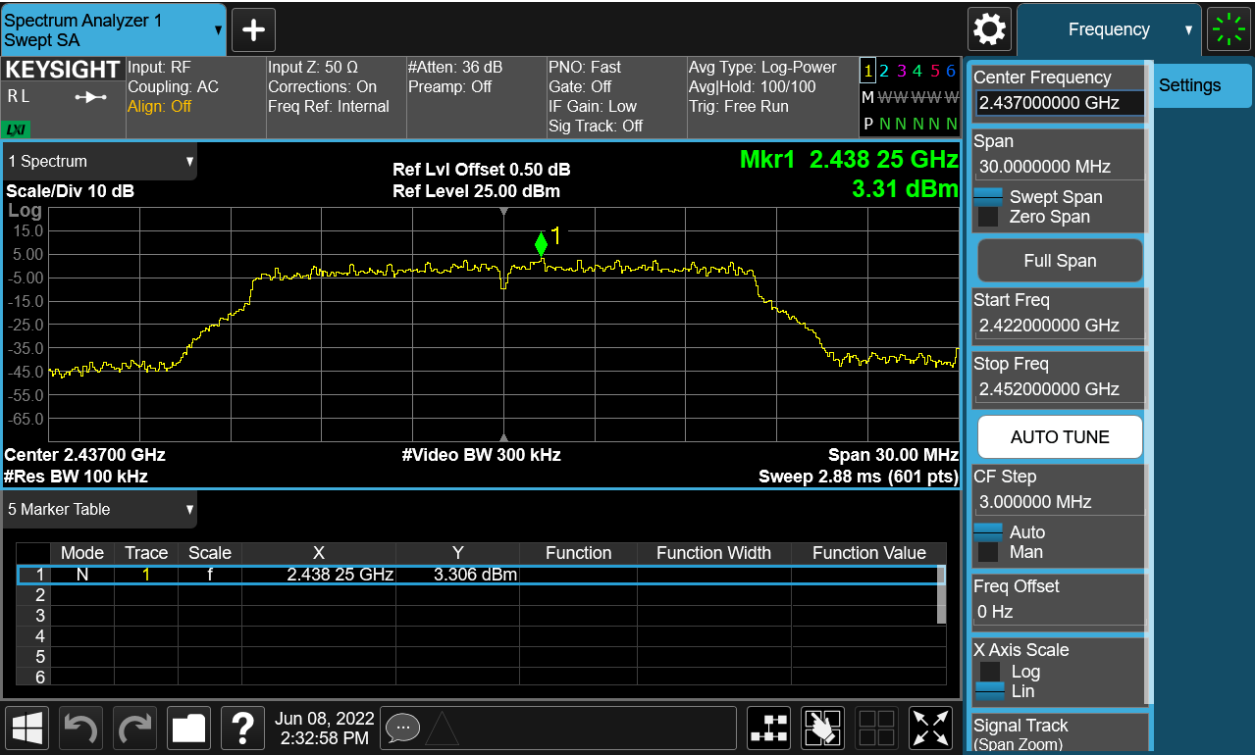


Figure 29: Conducted Spurious Emission & Authorized-band band-edge, 802.11g, 2437MHz Carrier Level



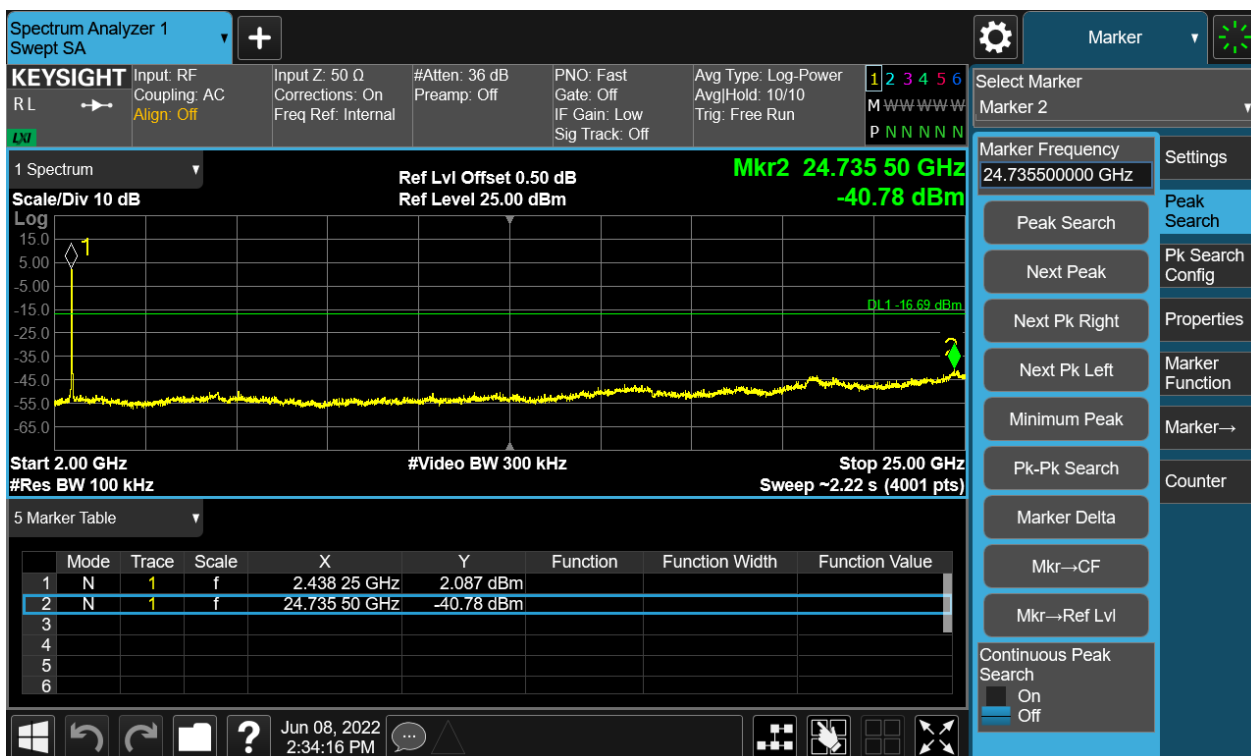
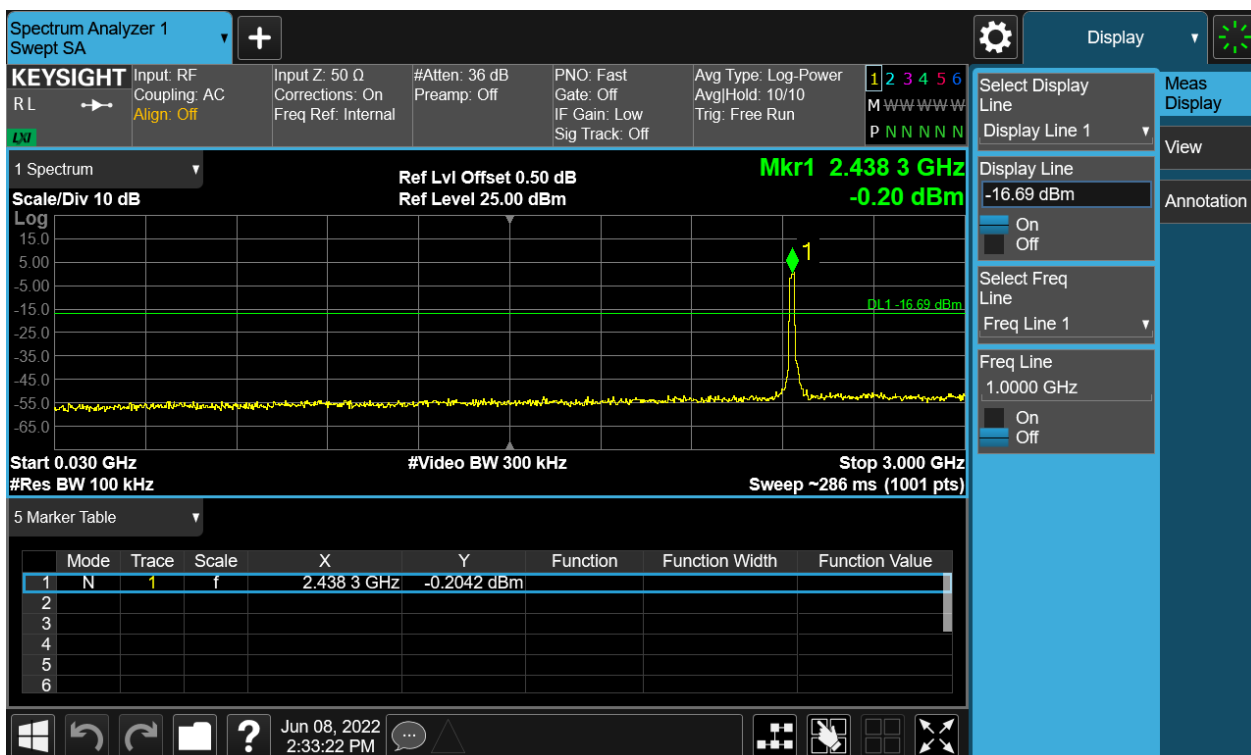
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Conducted spurious emissions 30MHz-25GHz



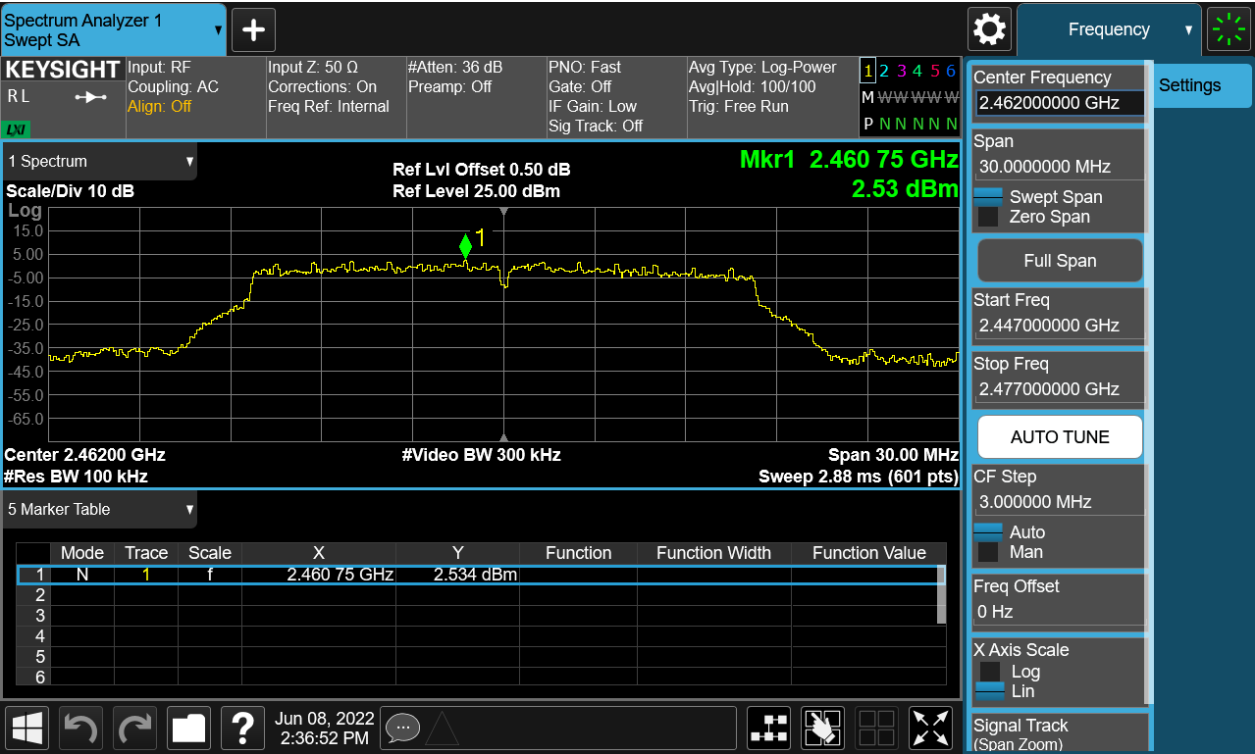
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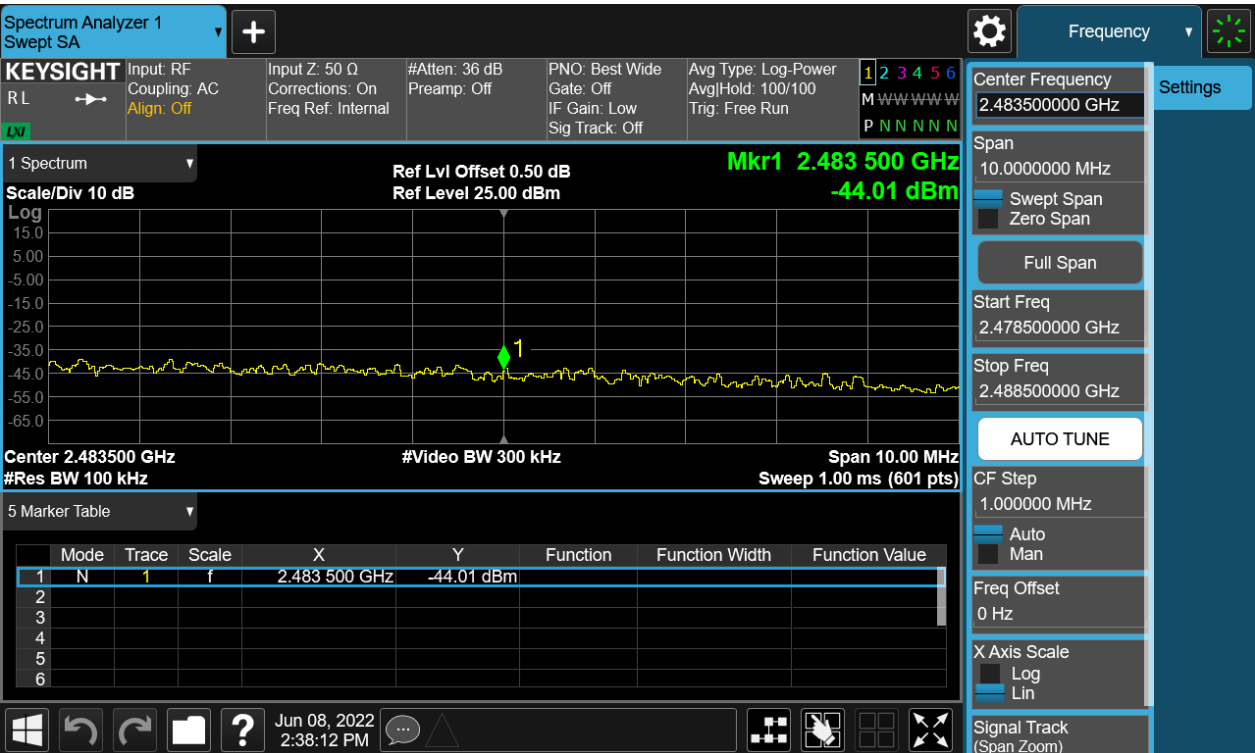
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Figure 30: Conducted Spurious Emission & Authorized-band band-edge, 802.11g, 2462MHz
Carrier Level



Band Edge



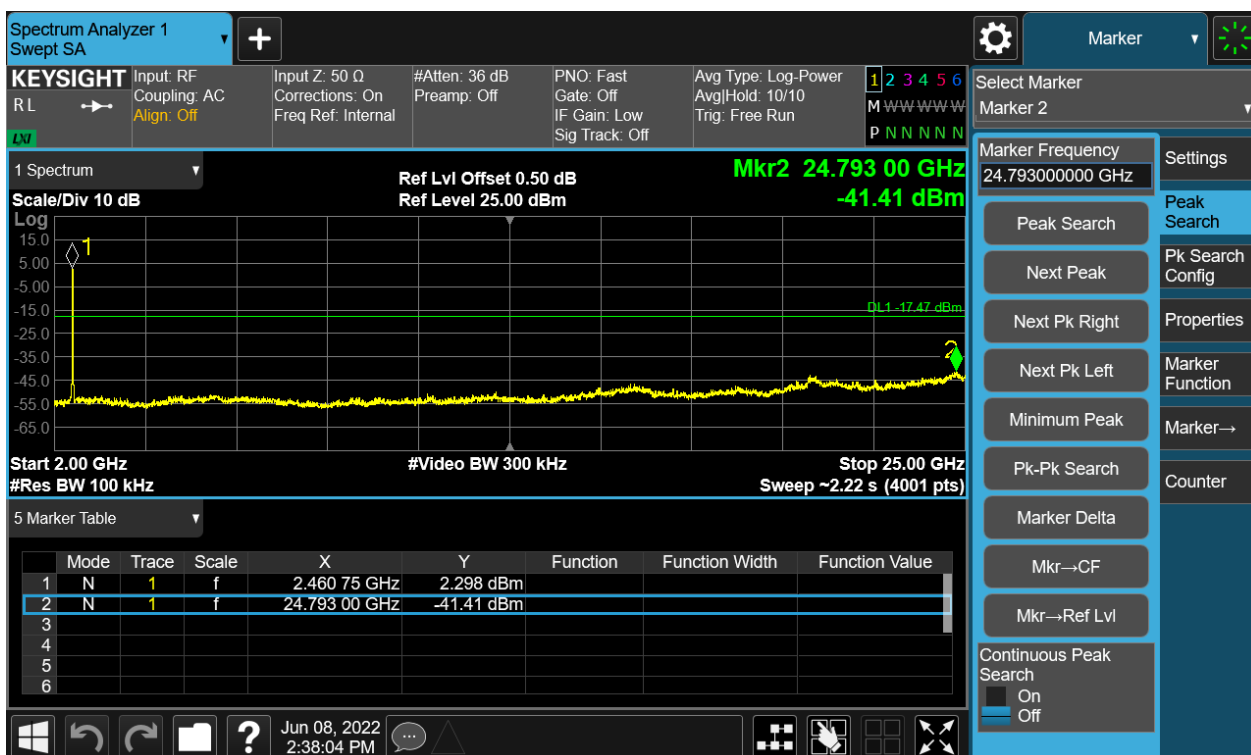
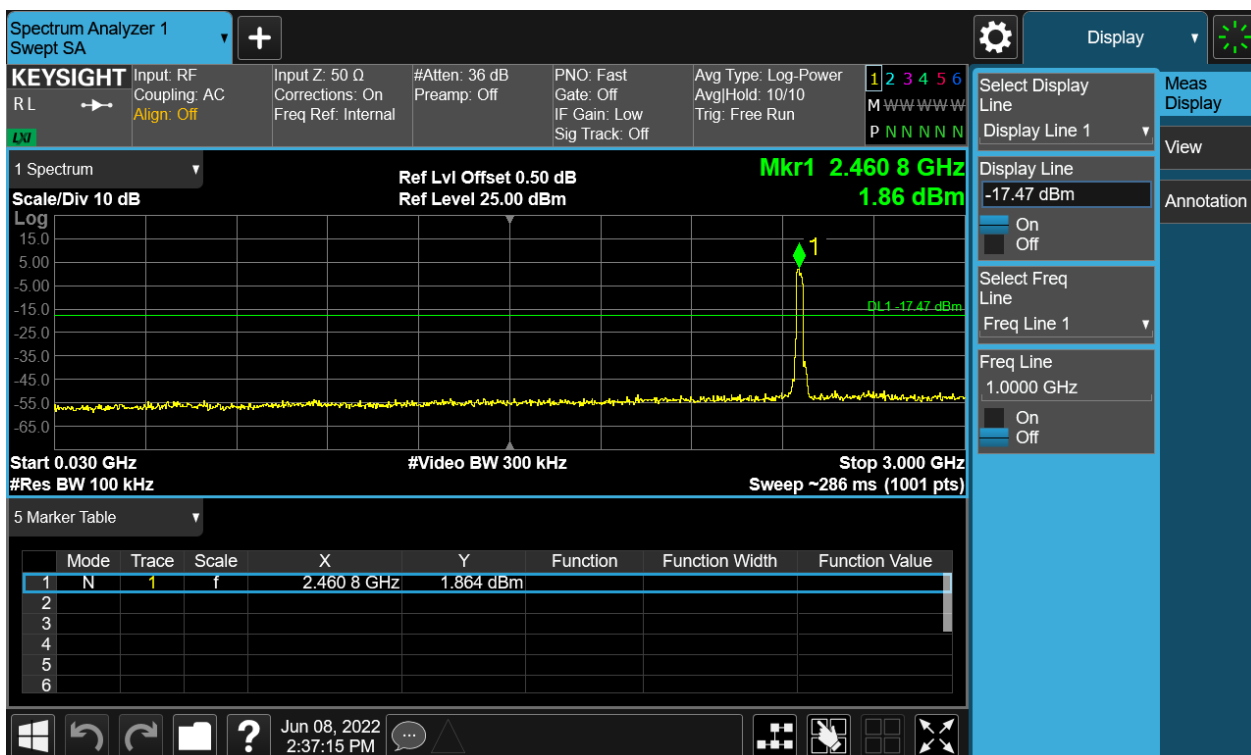
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Conducted spurious emissions 30MHz-25GHz



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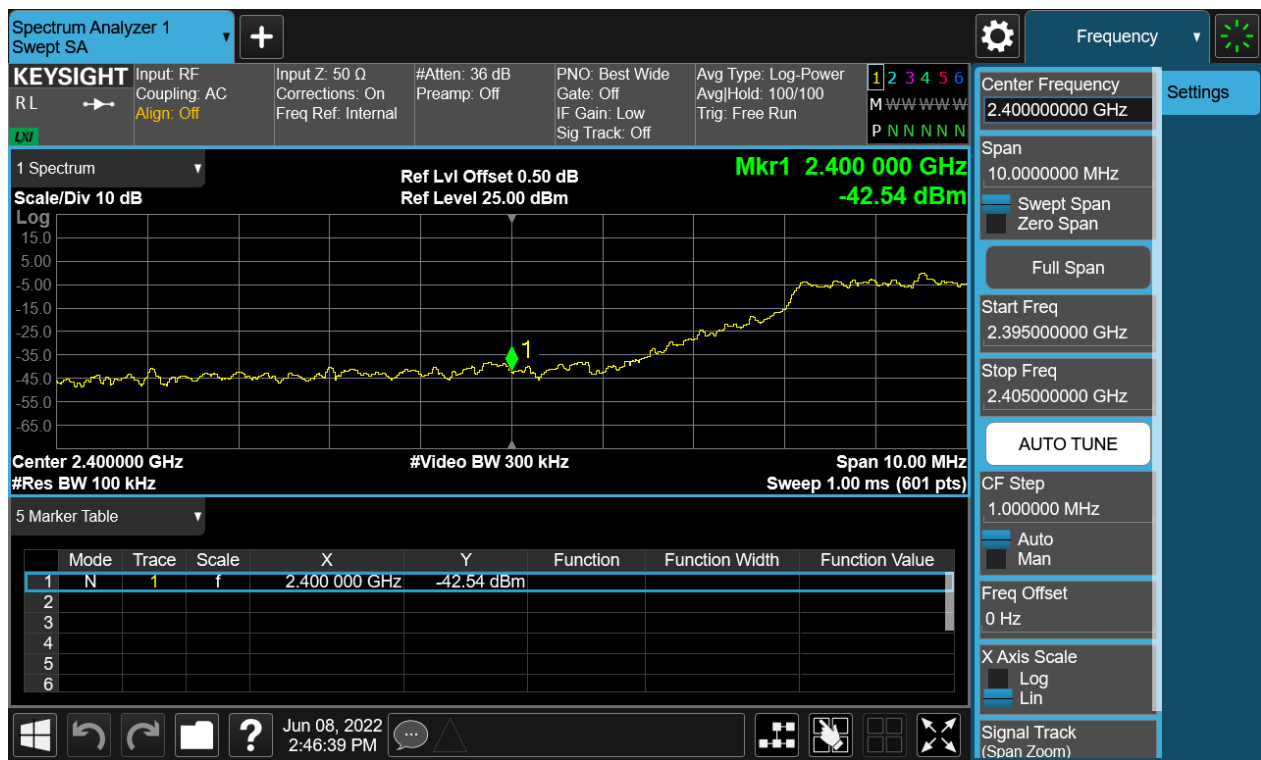
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Figure 31: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2412MHz Carrier Level



Band Edge



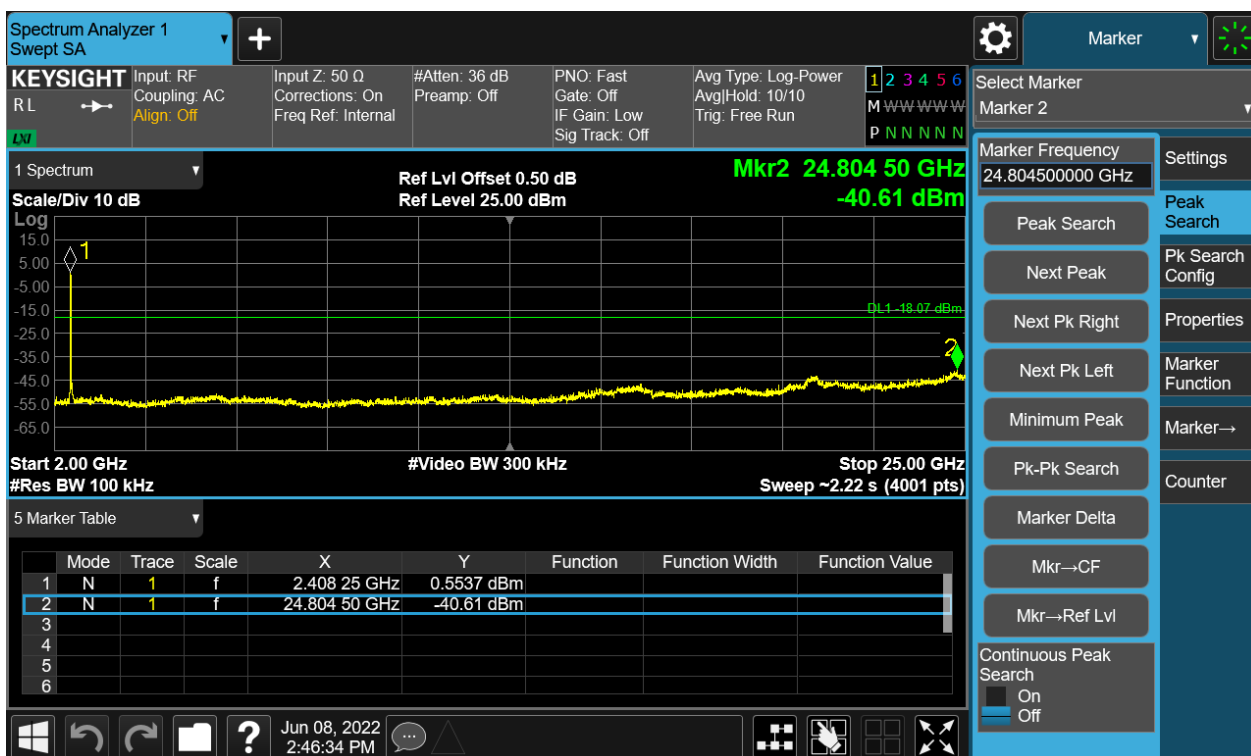
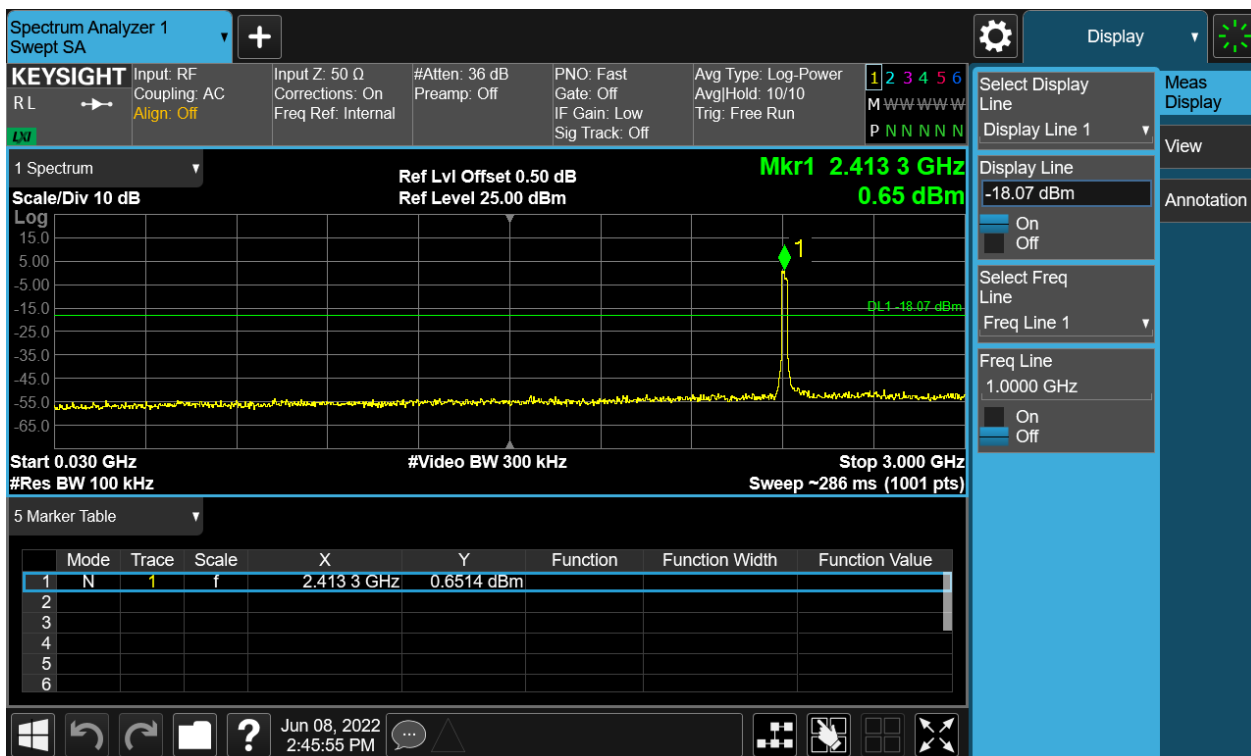
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Conducted spurious emissions 30MHz-25GHz

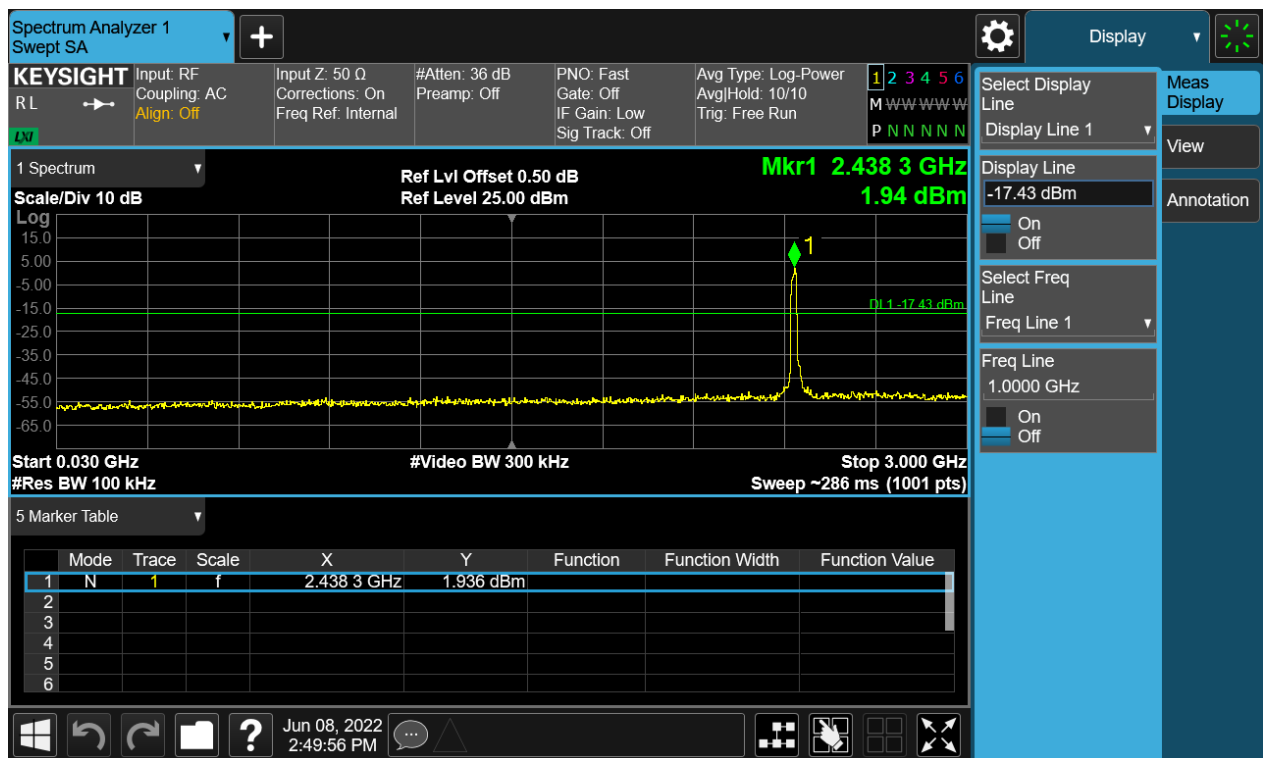


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Figure 32: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2437MHz Carrier Level



Conducted spurious emissions 30MHz-25GHz



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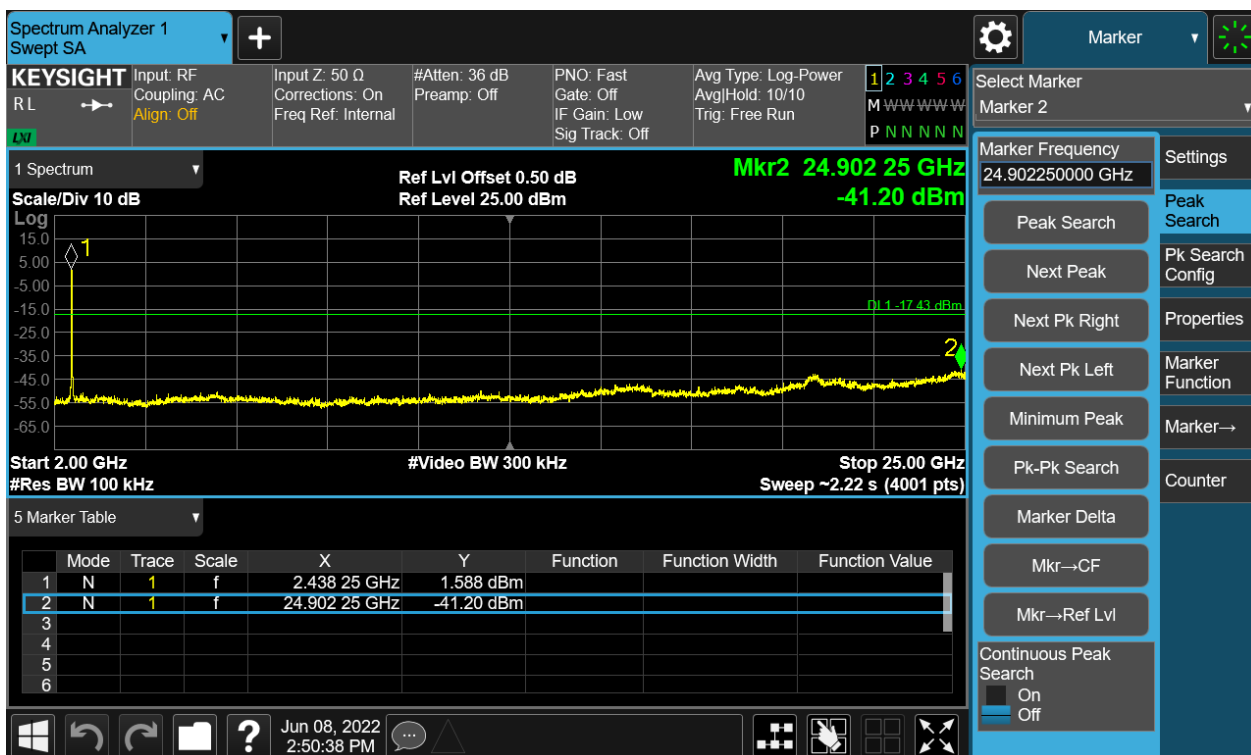
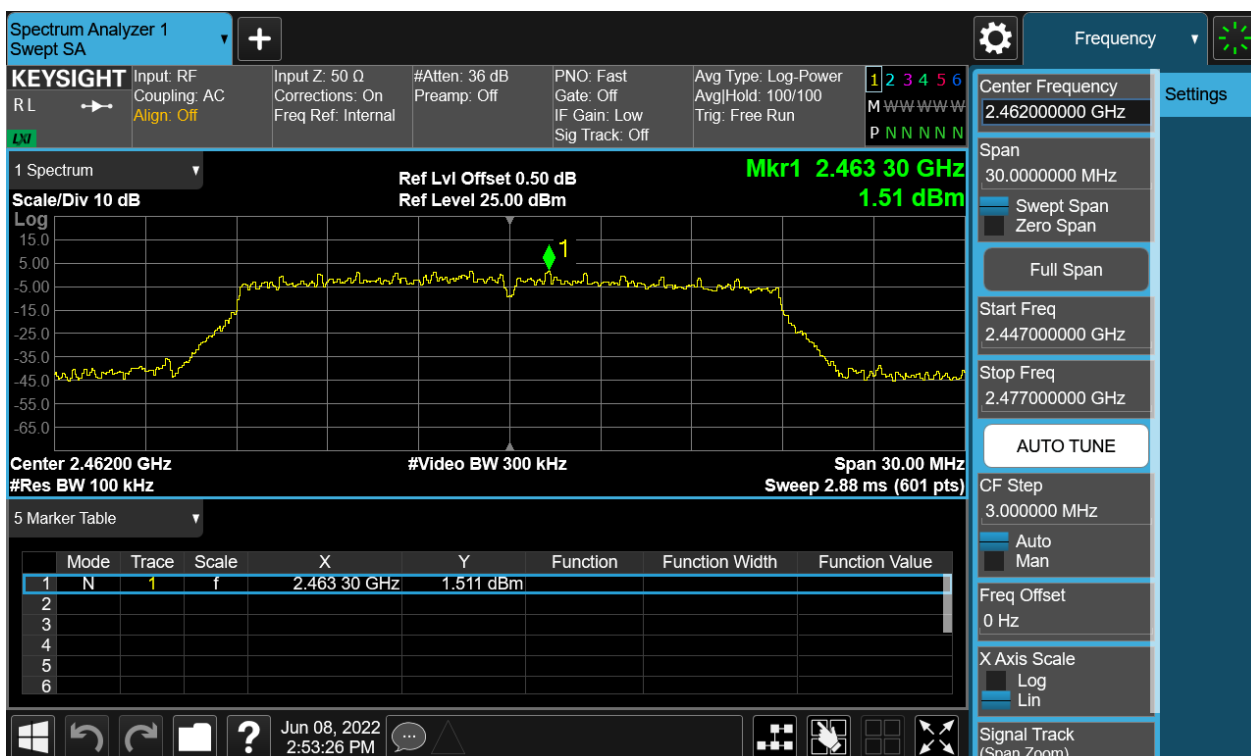


Figure 33: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2462MHz Carrier Level



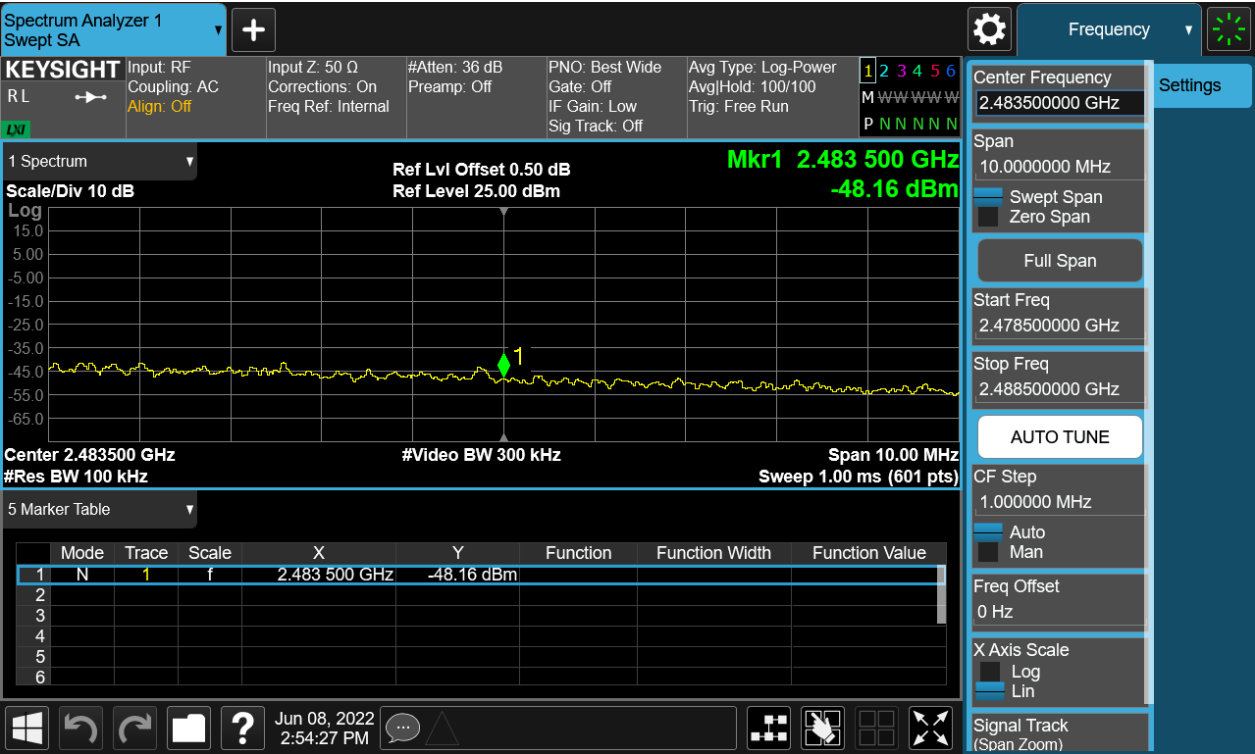
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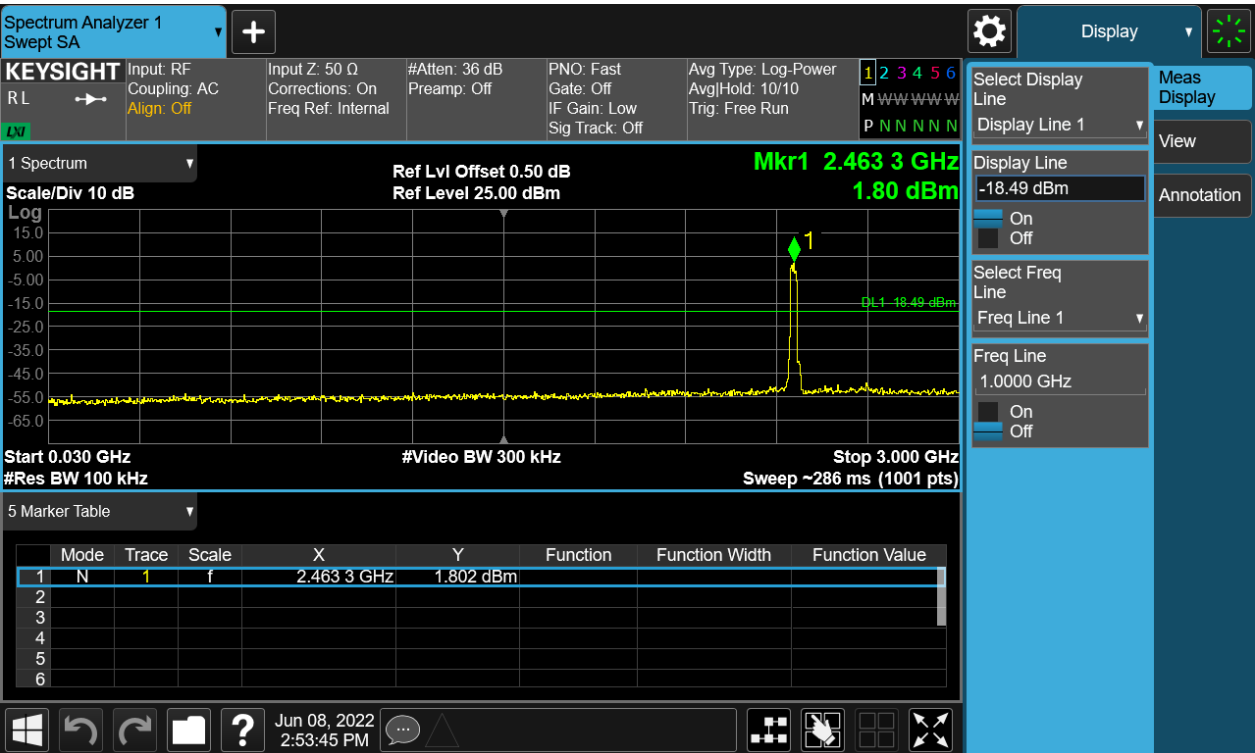
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Band Edge



Conducted spurious emissions 30MHz-25GHz



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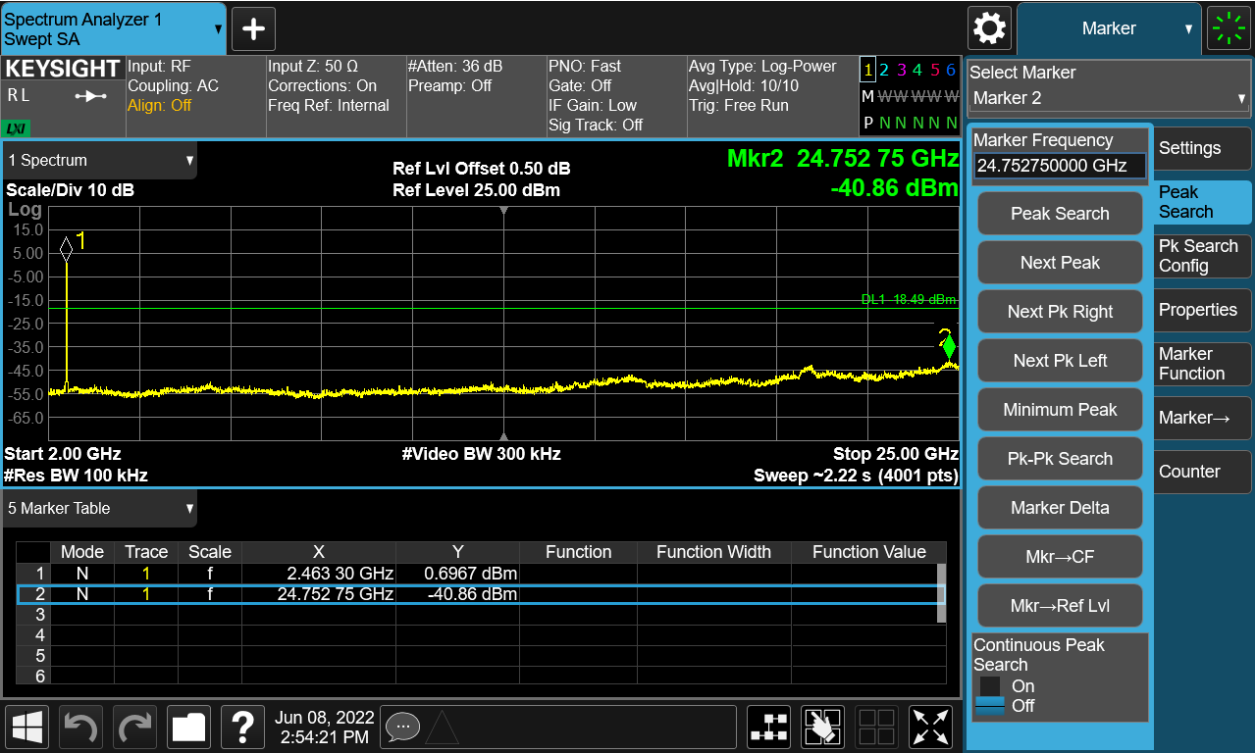
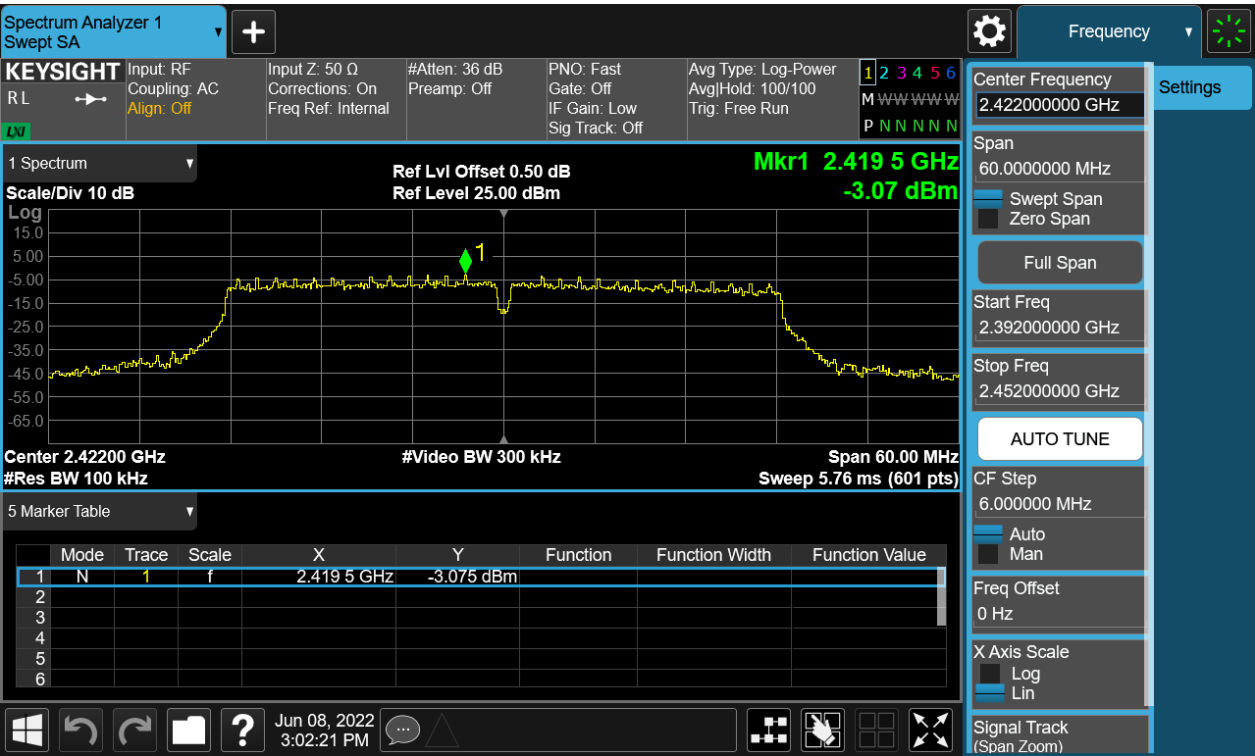


Figure 34: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2422MHz Carrier Level



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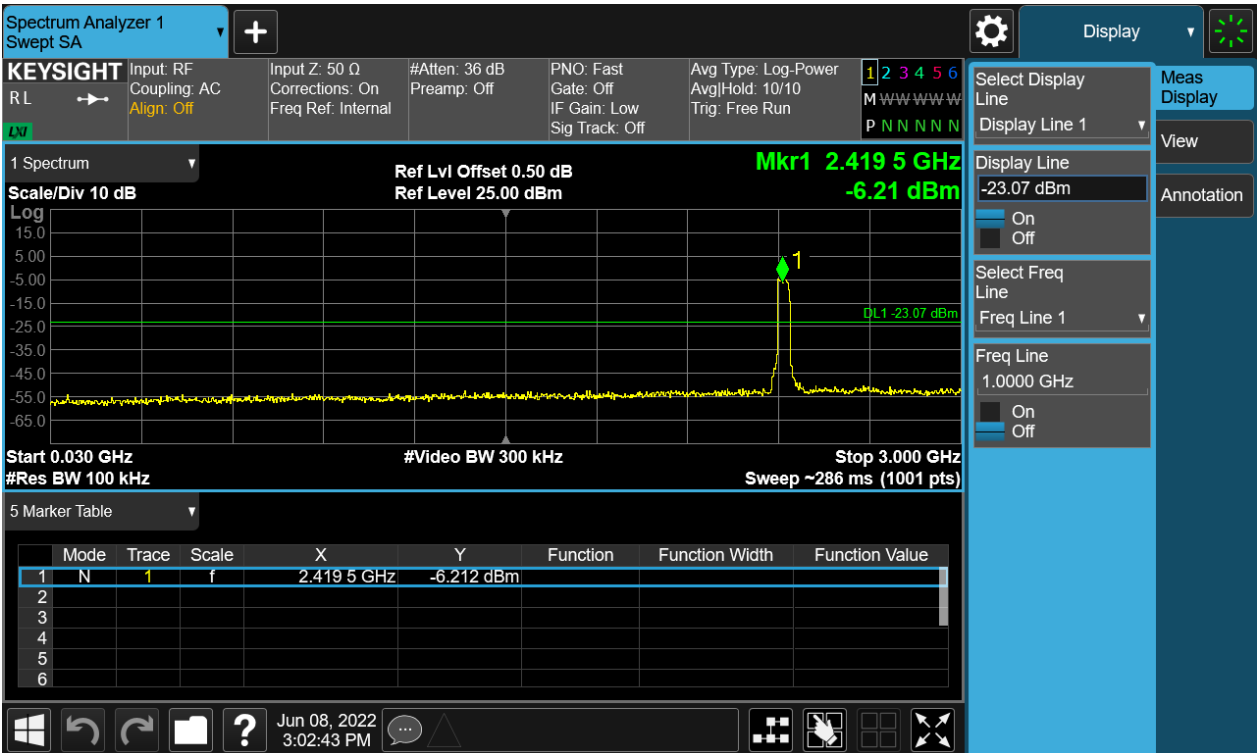
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Band Edge



Conducted spurious emissions 30MHz-25GHz



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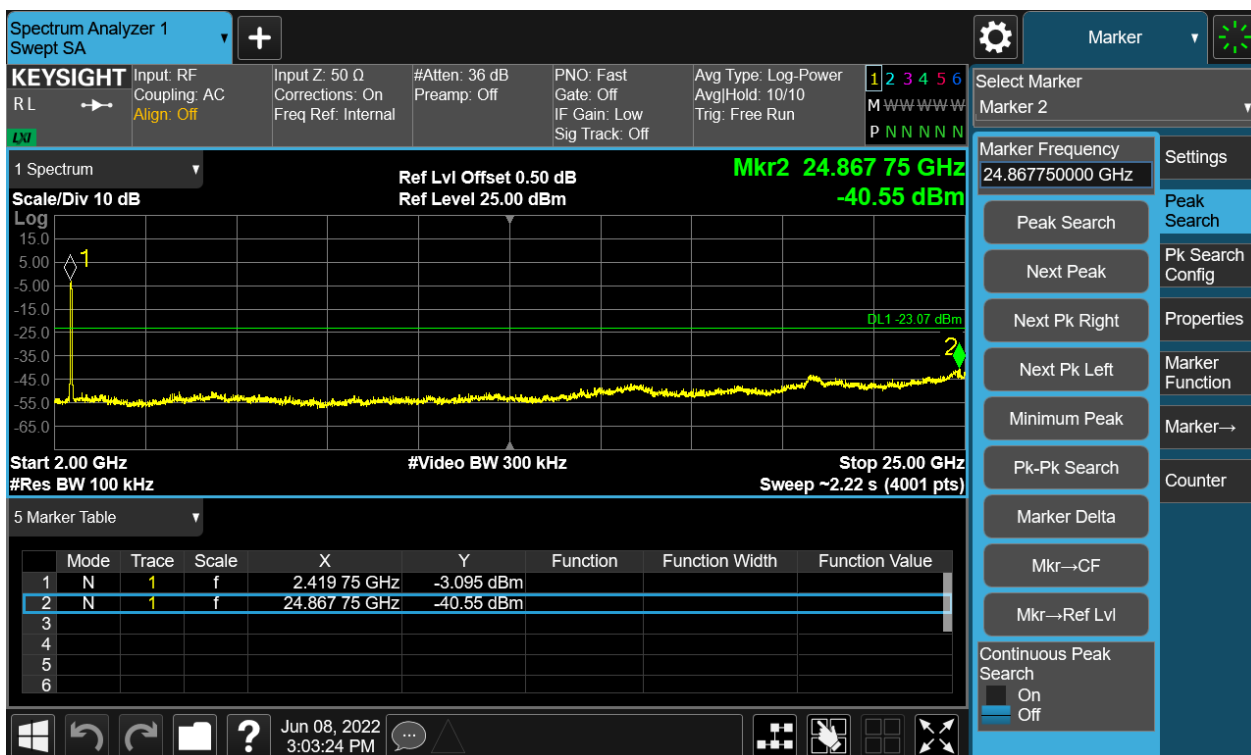
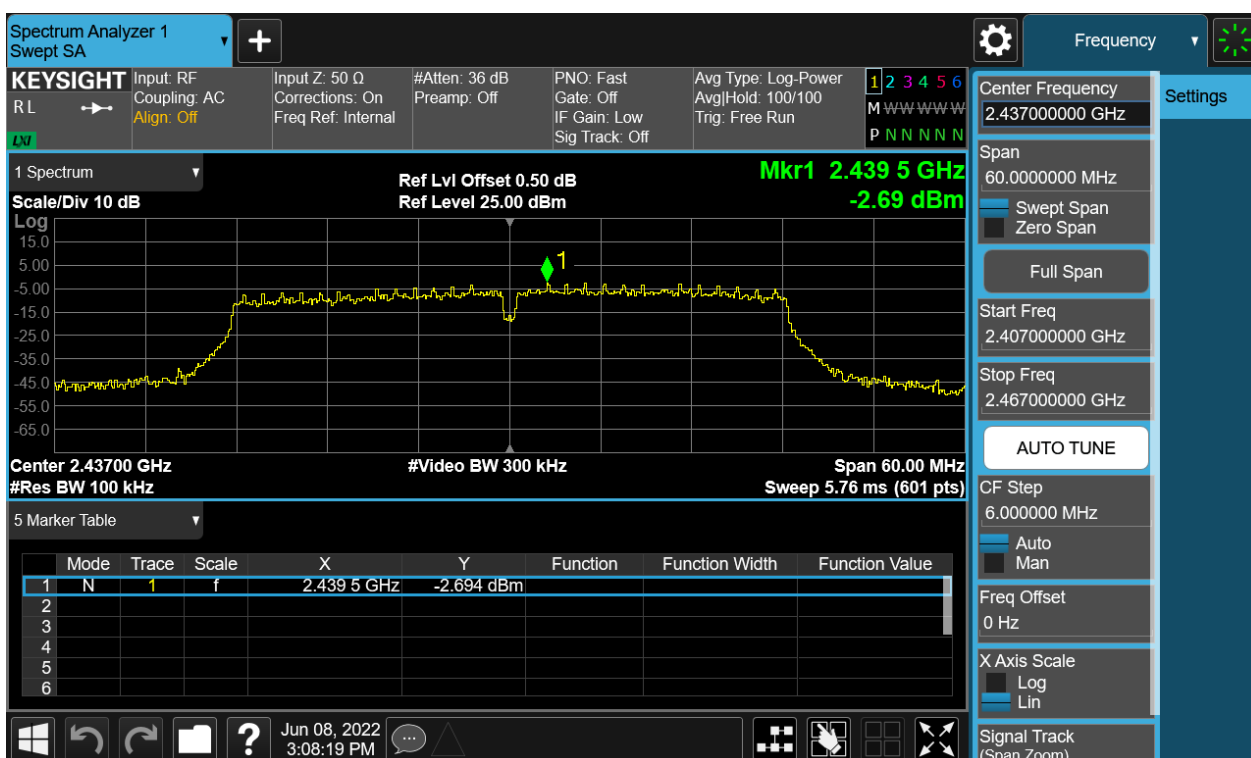


Figure 35: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2437MHz Carrier Level



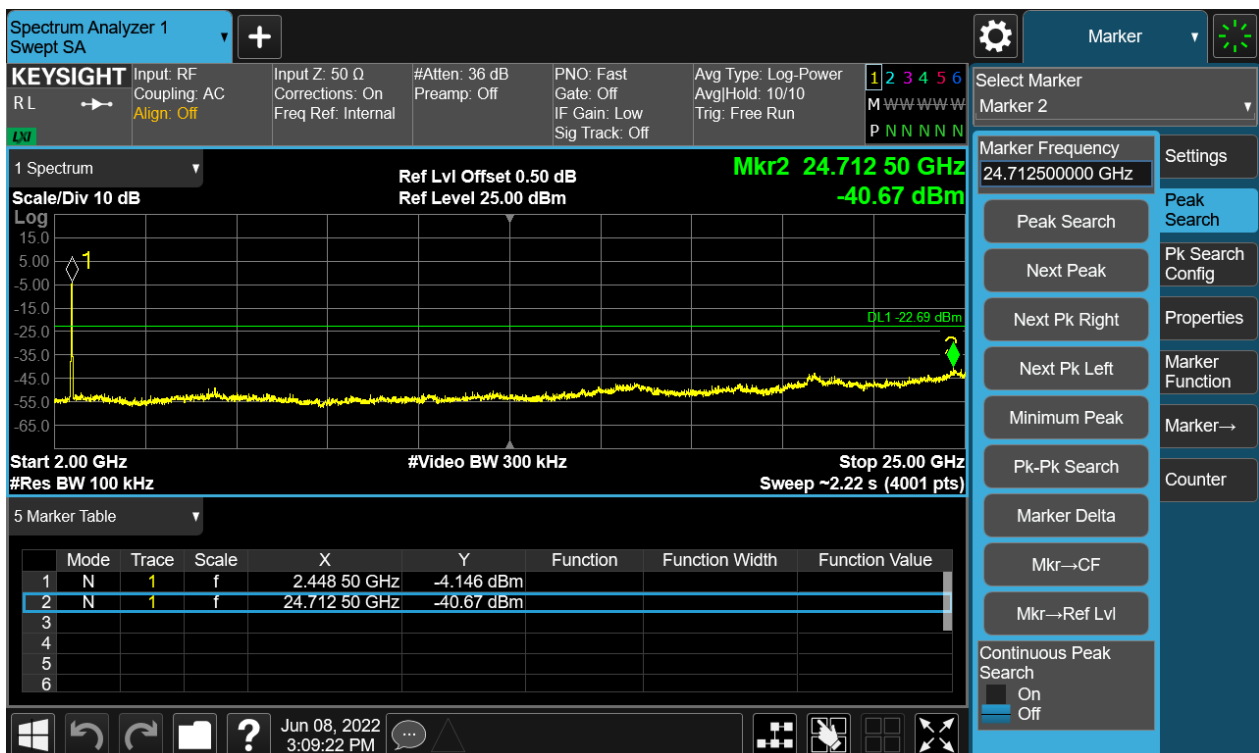
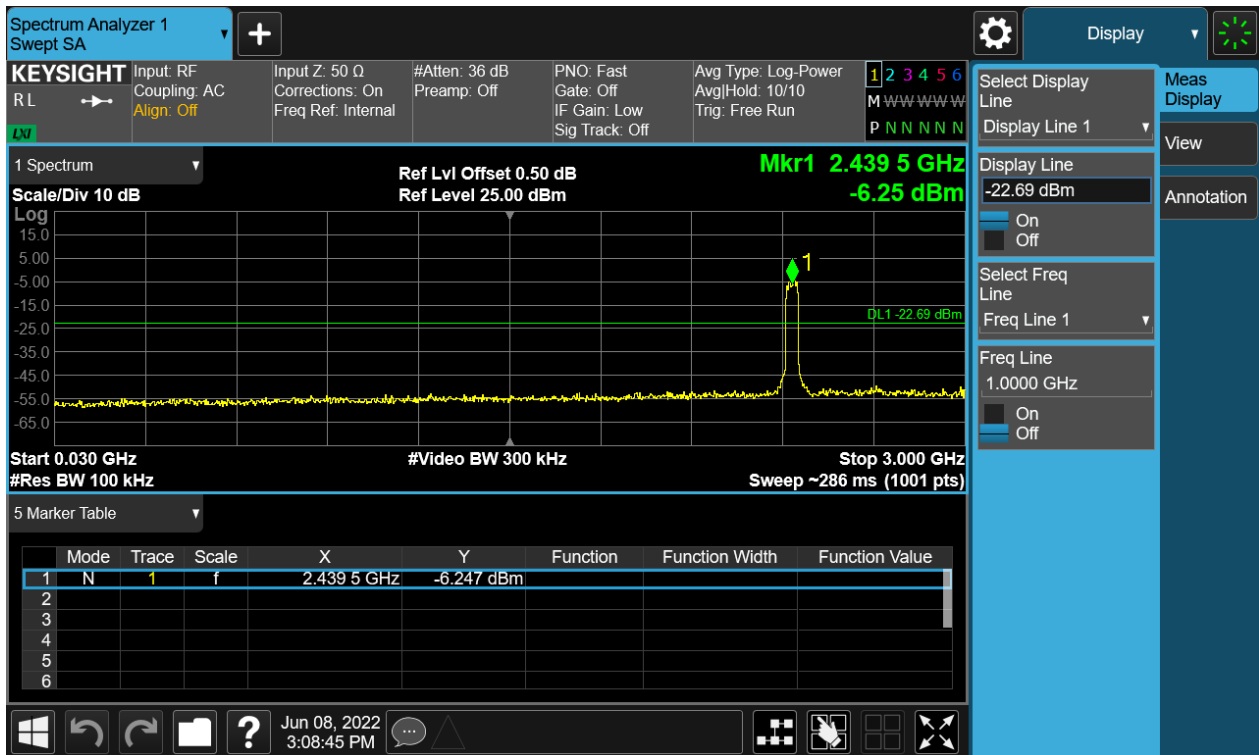
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Conducted spurious emissions 30MHz-25GHz



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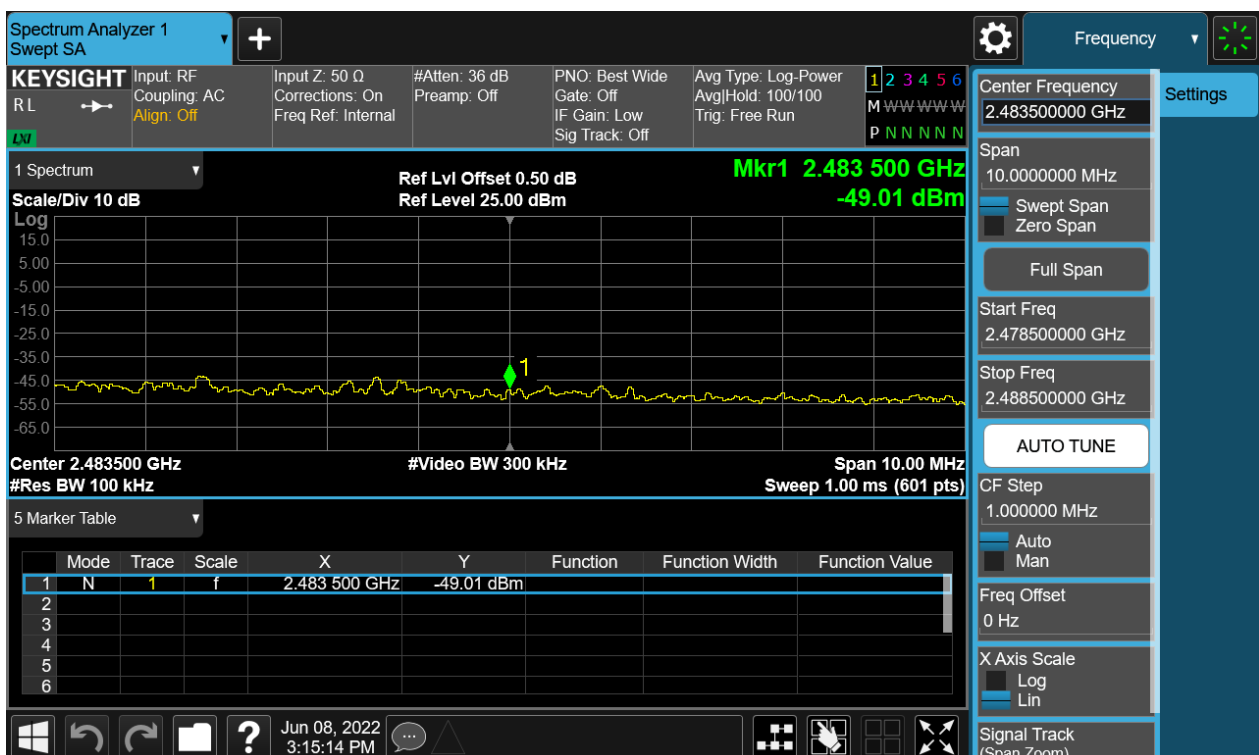
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Figure 36: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2452MHz Carrier Level



Band Edge



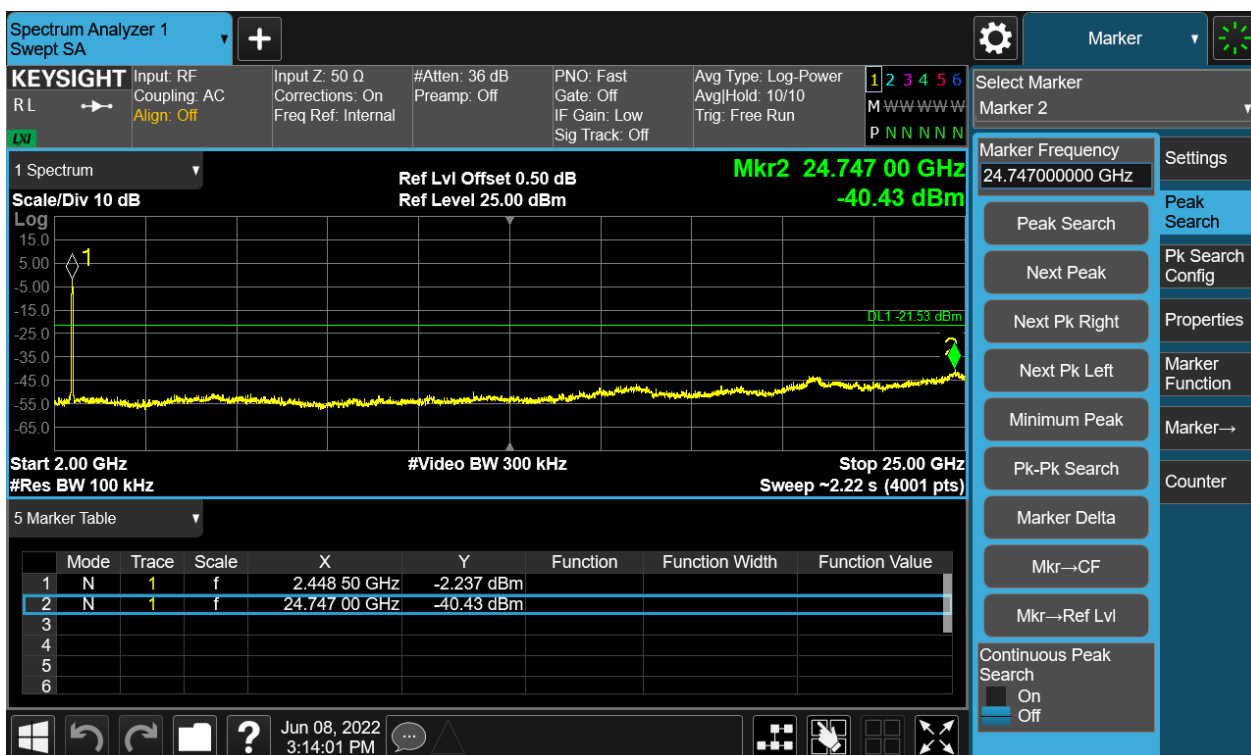
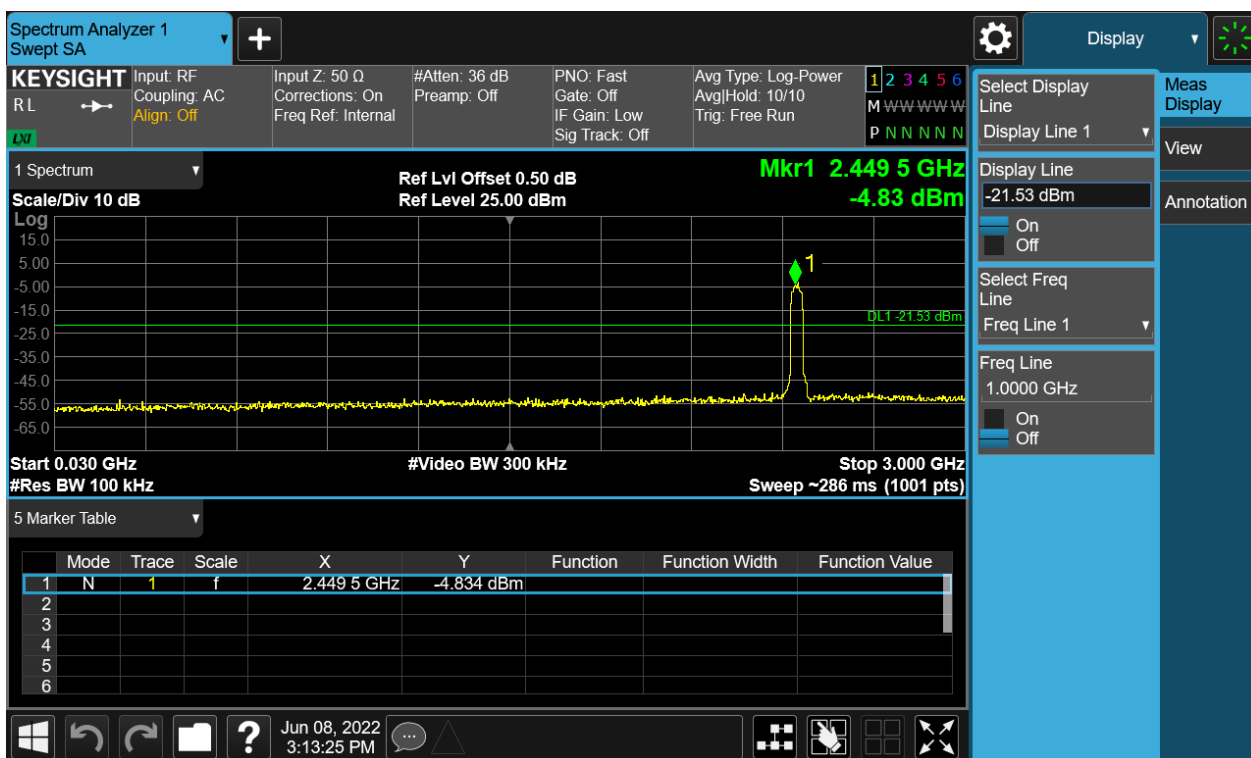
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Conducted spurious emissions 30MHz-25GHz



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4.1.6 Radiated Spurious Emission

RESULT:

PASS

Test standard	: FCC Part 15.247(d), 15.205, 15.209
Requirement	: ANSI C63.10-2013, KDB 558074
Kind of test site	: 3m Semi-Anechoic Chamber

Test setup

Test Channel	: Low/Middle/High
Operation Mode	: A
Ambient temperature	: 16.3°C
Relative humidity	: 49%

Notes

Test plots please refer to the annex document "SHH22020028-02DE DATA WIFI 2.4GHz-TX EXHIBIT A".

1. For 9 kHz ~ 30 MHz, the amplitude of spurious emissions that are attenuated by more than 20dB below the permissible. The value has no need to be reported.
2. The spurious above 18GHz is noise only and 20dB below the limit. The value has no need to be reported.
3. The EUT is working in the Normal link mode below 1 GHz.
4. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

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4.1.7 Band Edge (Restricted-band band-edge)

RESULT:

PASS

Test standard	: FCC Part 15.247(d), 15.205, 15.209
Requirement	: ANSI C63.10-2013, KDB 558074
Kind of test site	: 3m Semi-Anechoic Chamber

Test setup

Test Channel	: Low/Middle/High
Operation Mode	: A.1
Ambient temperature	: 16.3°C
Relative humidity	: 49%

Notes:

Test plots please refer to the annex document "SHH22020028-02DE DATA WIFI 2.4GHz-TX EXHIBIT A".

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4.2 Mains Emissions

4.2.1 Conducted Emission on AC Mains

RESULT:

PASS

Test standard	: FCC Part 15.207(a)
Requirement	: ANSI C63.10-2013
Kind of test site	: Shielded room

Test setup

Input Voltage	: AC 120V, 60Hz
Operation Mode	: A
Earthing	: Not Connected
Ambient temperature	: 23°C
Relative humidity	: 51%

For details refer to following test plot.

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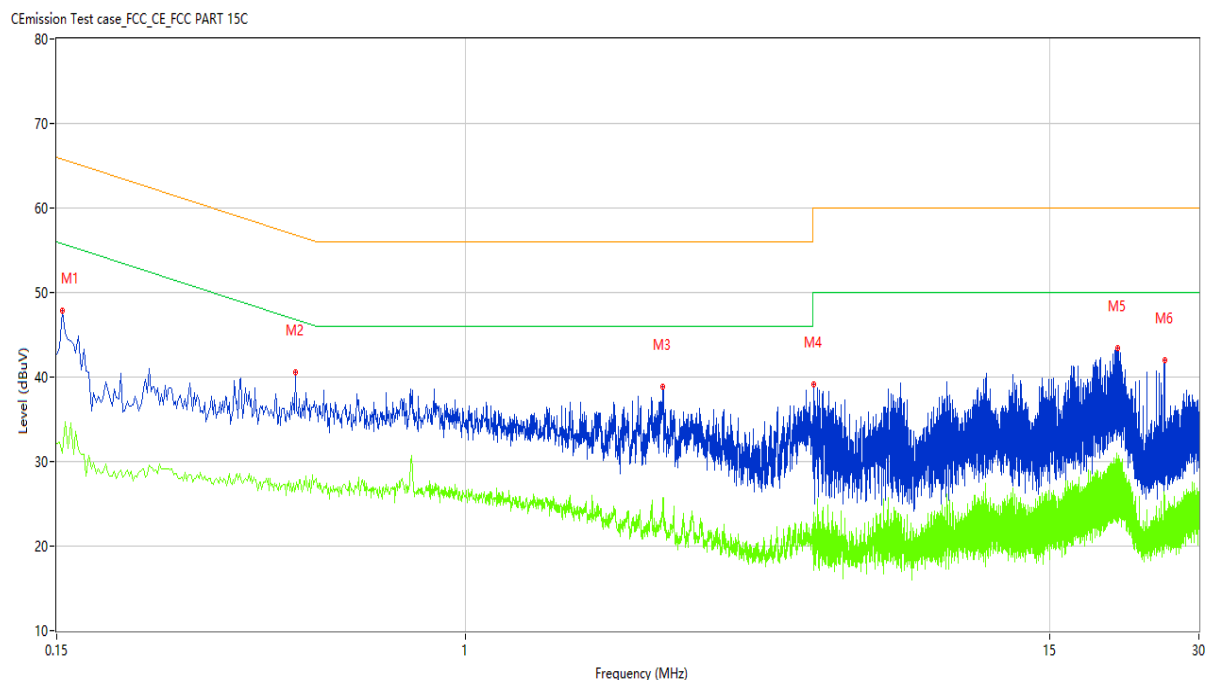
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Note: The all configurations were tested respectively, but only the worst configuration shown here.

Figure 37: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	47.44	10.26	66.00	-18.56	Peak	L	Pass
1*	0.150	39.05	10.26	66.00	-26.95	QP	L	Pass
1**	0.150	32.14	10.26	56.00	-23.86	AV	L	Pass
2	0.454	35.45	10.27	56.80	-21.35	Peak	L	Pass
2*	0.454	27.07	10.27	56.80	-29.73	QP	L	Pass
2**	0.454	26.88	10.27	46.80	-19.92	AV	L	Pass
3	2.494	38.61	10.16	56.00	-17.39	Peak	L	Pass
3*	2.494	33.32	10.16	56.00	-22.68	QP	L	Pass
3**	2.494	25.56	10.16	46.00	-20.44	AV	L	Pass
4	5.020	39.01	10.26	60.00	-20.99	Peak	L	Pass
4*	5.020	32.09	10.26	60.00	-27.91	QP	L	Pass
4**	5.020	24.03	10.26	50.00	-25.97	AV	L	Pass
5	20.552	44.22	10.96	60.00	-15.78	Peak	L	Pass
5*	20.552	34.92	10.96	60.00	-25.08	QP	L	Pass
5**	20.552	29.73	10.96	50.00	-20.27	AV	L	Pass
6	25.648	43.25	11.03	60.00	-16.75	Peak	L	Pass
6*	25.648	27.85	11.03	60.00	-32.15	QP	L	Pass
6**	25.648	25.95	11.03	50.00	-24.05	AV	L	Pass

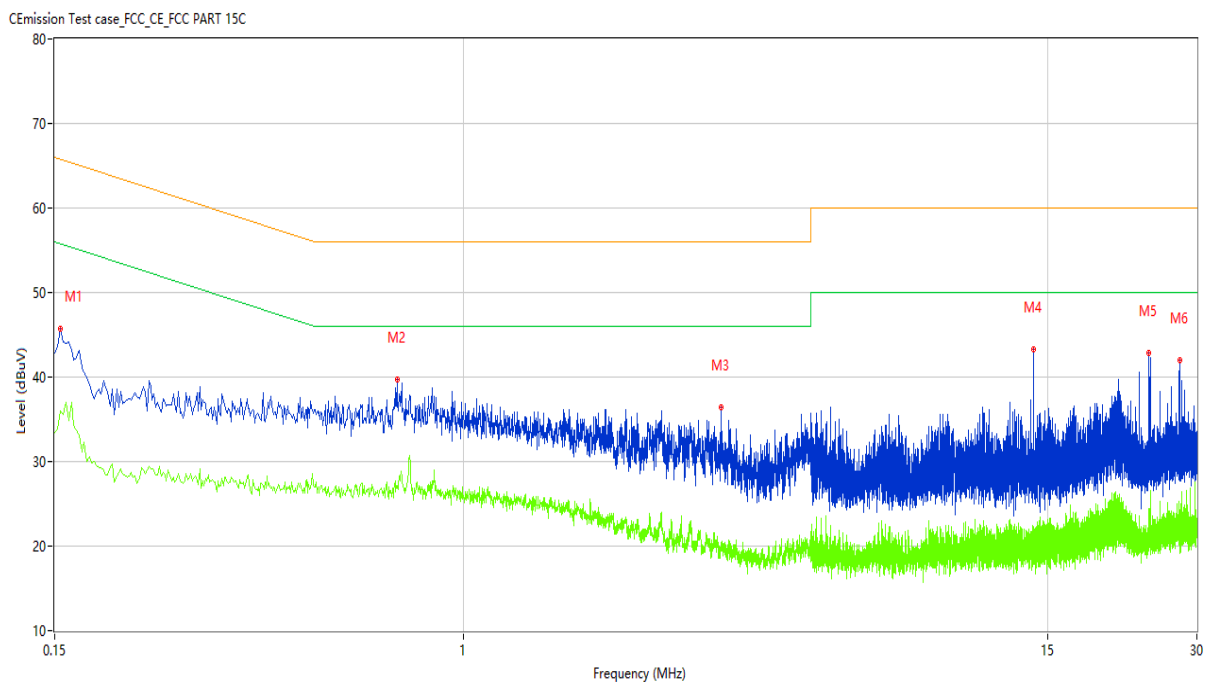
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Figure 38: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	46.45	10.26	66.00	-19.55	Peak	N	Pass
1*	0.150	39.32	10.26	66.00	-26.68	QP	N	Pass
1**	0.150	33.44	10.26	56.00	-22.56	AV	N	Pass
2	0.734	41.05	10.31	56.00	-14.95	Peak	N	Pass
2*	0.734	31.53	10.31	56.00	-24.47	QP	N	Pass
2**	0.734	27.14	10.31	46.00	-18.86	AV	N	Pass
3	3.296	36.12	10.17	56.00	-19.88	Peak	N	Pass
3*	3.296	29.07	10.17	56.00	-26.93	QP	N	Pass
3**	3.296	20.14	10.17	46.00	-25.86	AV	N	Pass
4	14.066	38.95	10.43	60.00	-21.05	Peak	N	Pass
4*	14.066	27.53	10.43	60.00	-32.47	QP	N	Pass
4**	14.066	22.09	10.43	50.00	-27.91	AV	N	Pass
5	23.992	45.54	11.01	60.00	-14.46	Peak	N	Pass
5*	23.992	29.41	11.01	60.00	-30.59	QP	N	Pass
5**	23.992	24.45	11.01	50.00	-25.55	AV	N	Pass
6	27.726	40.74	11.05	60.00	-19.26	Peak	N	Pass
6*	27.726	30.90	11.05	60.00	-29.10	QP	N	Pass
6**	27.726	23.47	11.05	50.00	-26.53	AV	N	Pass

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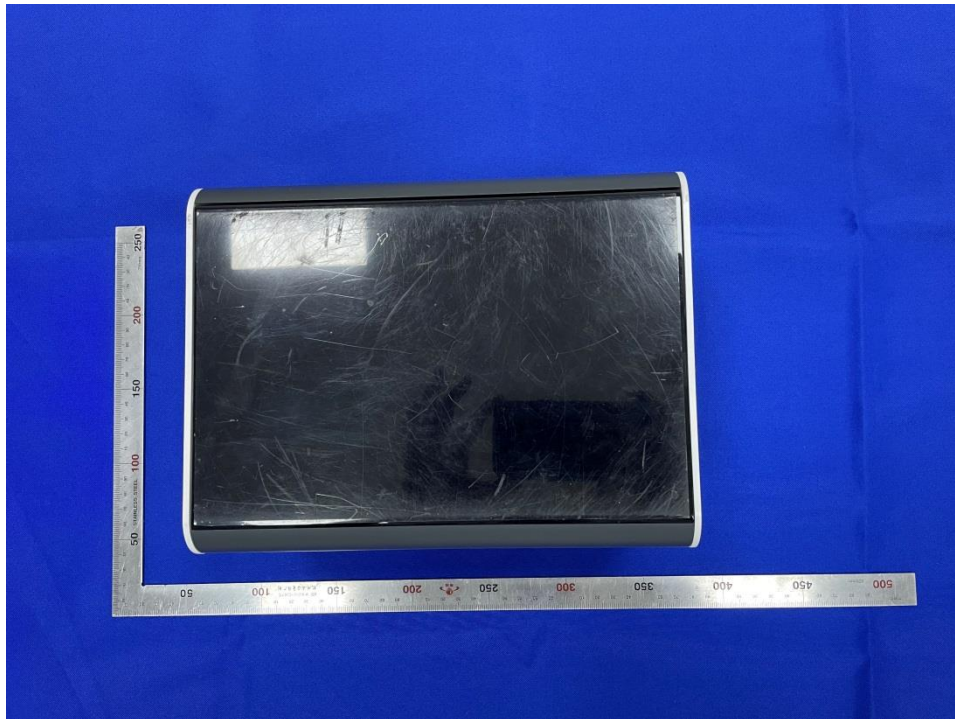
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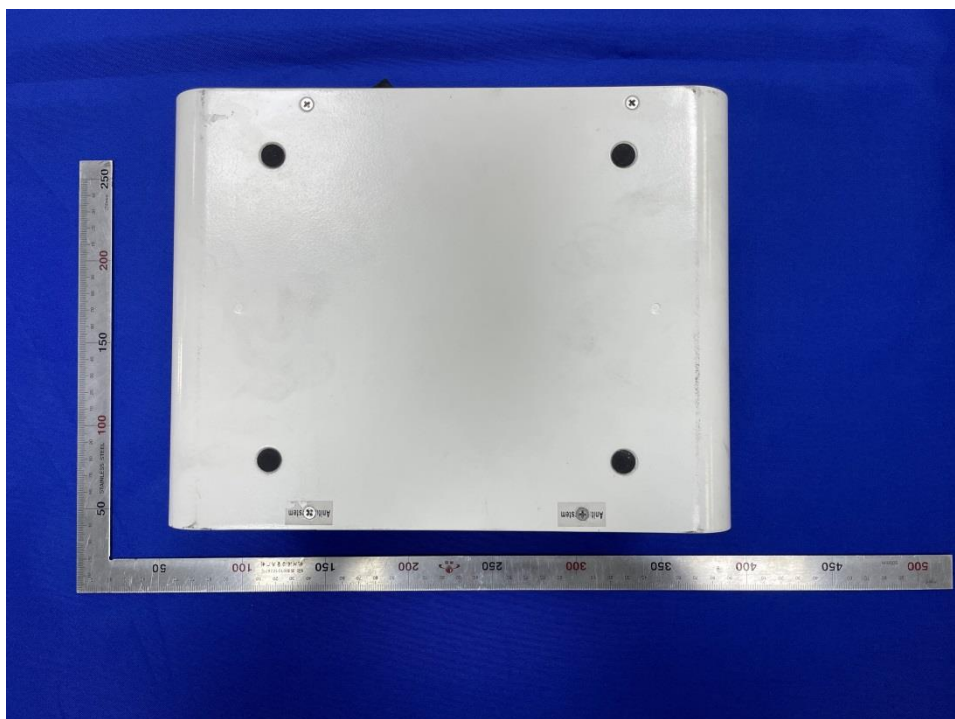
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5 Appendixes

5.1 Photographs of the Sample



Front of the sample



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Back of the sample

5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



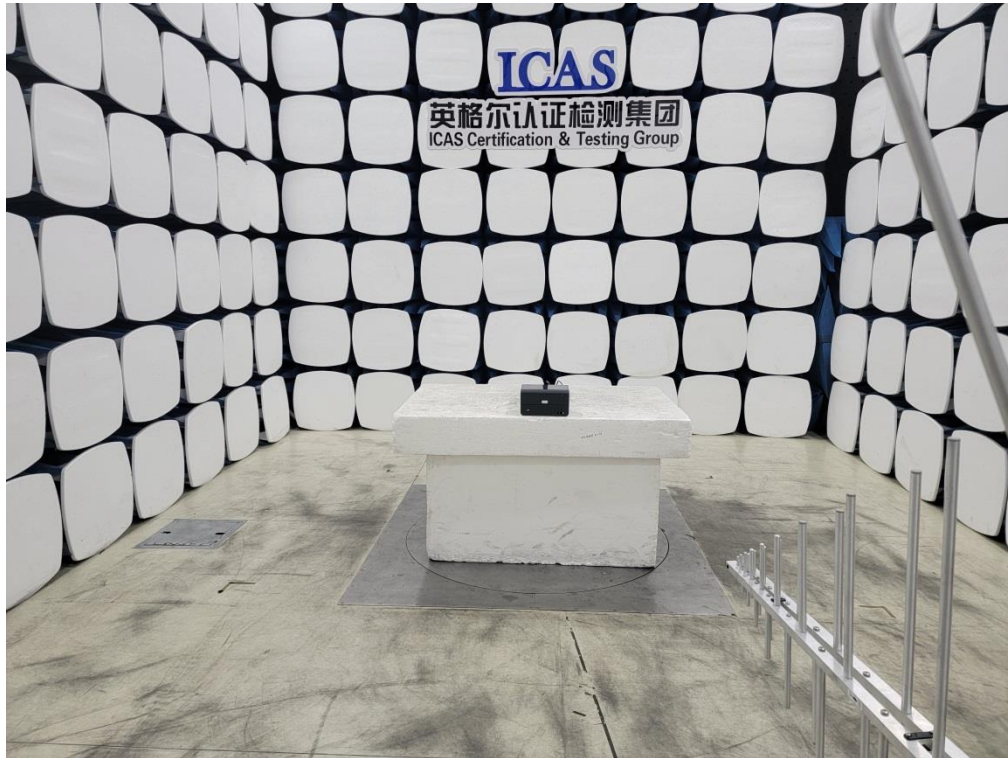
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5.4 Set-up for Spurious Emissions below 1GHz



5.5 Set-up for Spurious Emissions above 1GHz



End of the report