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Figure 23: Power Spectral Density, 802.11n(HT40), 2437MHz

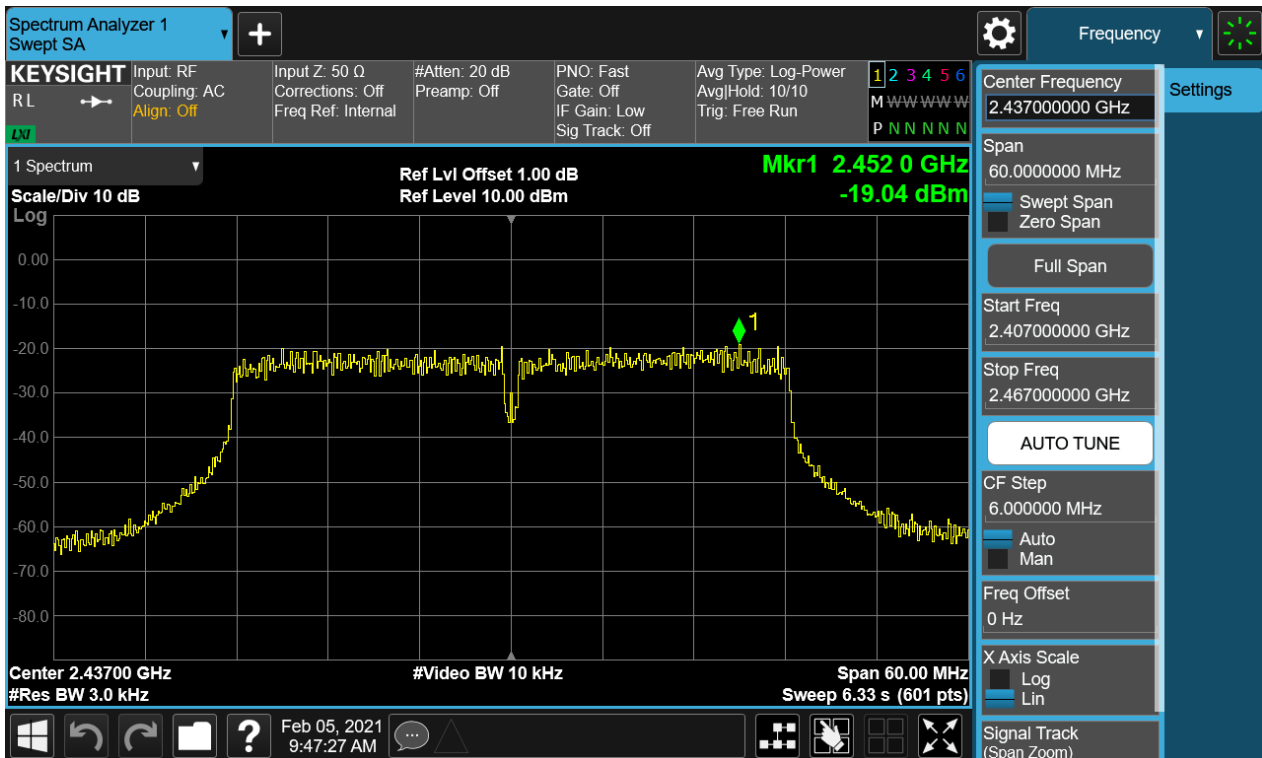
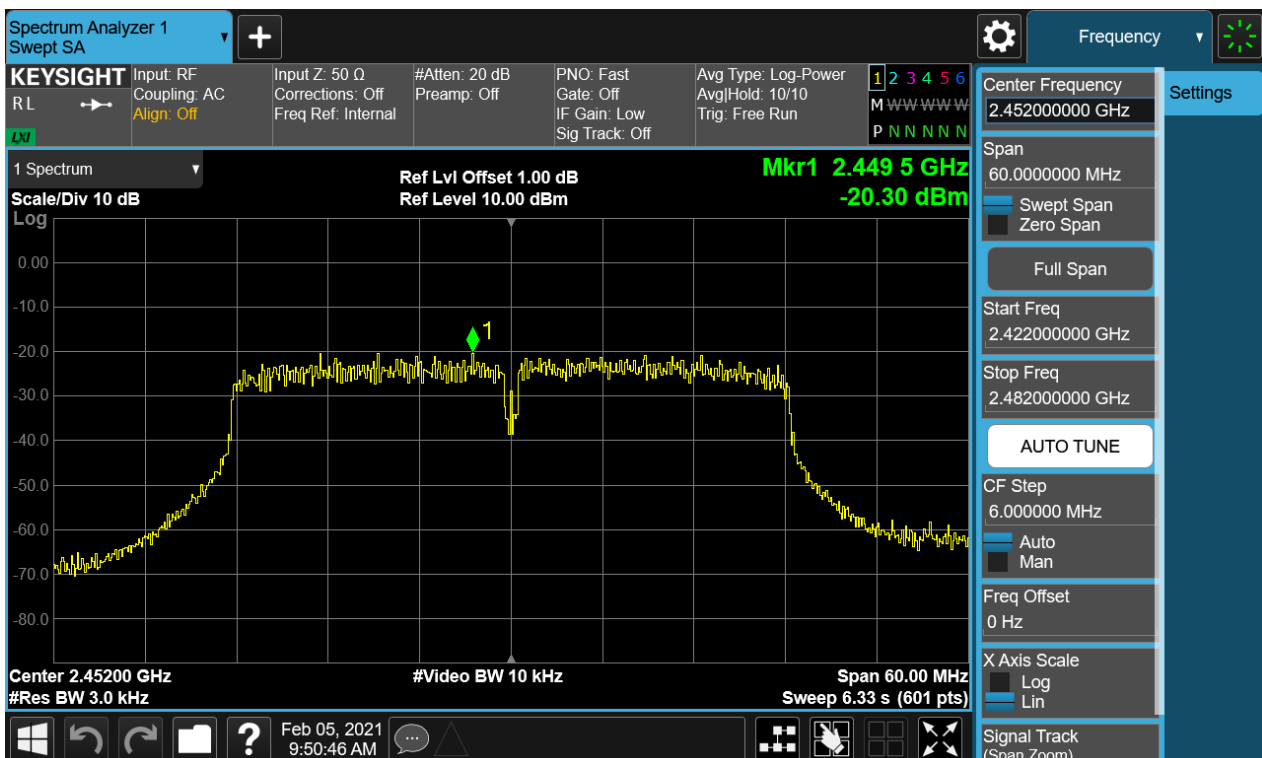


Figure 24: Power Spectral Density, 802.11n(HT40), 2452MHz



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4.1.5 Conducted Spurious Emission & Authorized-band band-edge

RESULT:

PASS

Test standard : FCC Part 15.247(d), 15.209
RSS-247 5.5
RSS-Gen 8.9

Requirement : ANSI C63.10-2013, KDB 558074

Kind of test site : Shielded room

Test setup

Test Channel : Low/Middle/High for spurious, Low/High for Band Edge

Operation Mode : A.1.a

Ambient temperature : 23°C

Relative humidity : 52%

For details refer to following test plot.

Figure 25: Conducted Spurious Emission & Authorized-band band-edge, 802.11b, 2412MHz Carrier Level



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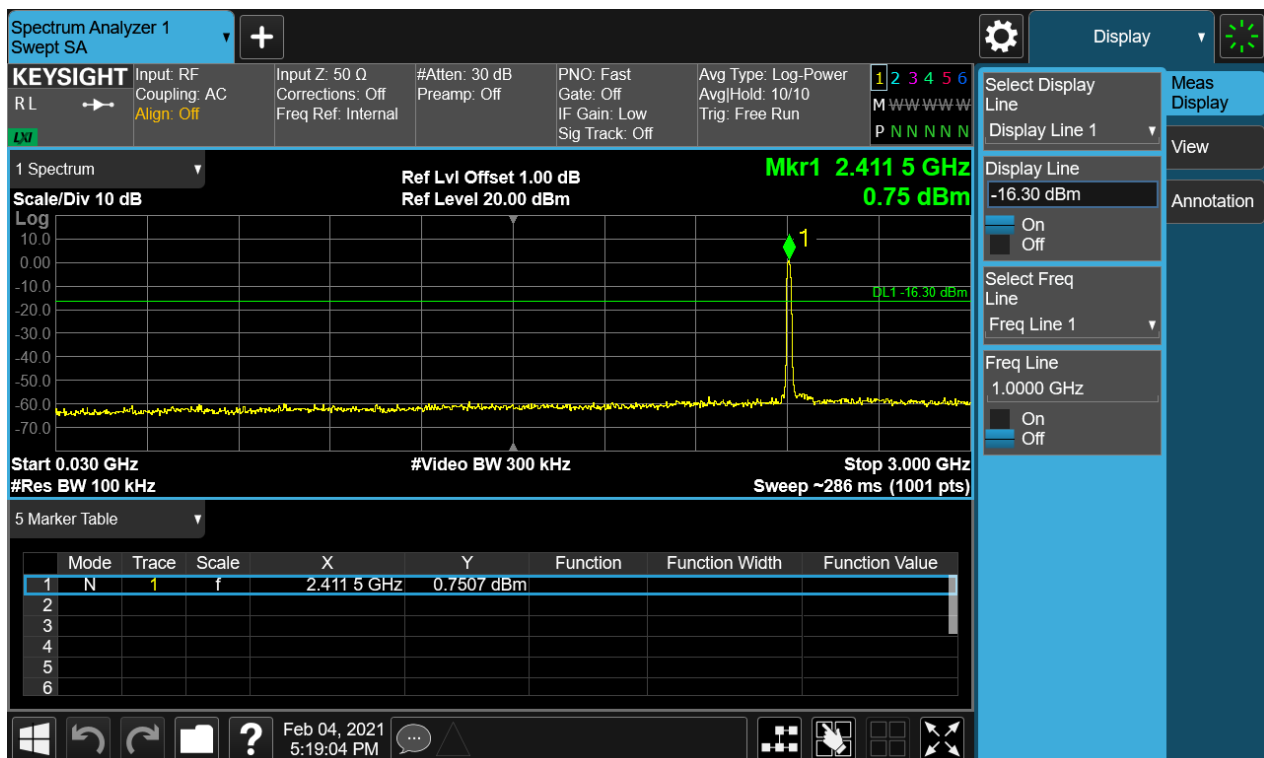
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Band Edge



Conducted spurious emissions 30MHz-25GHz



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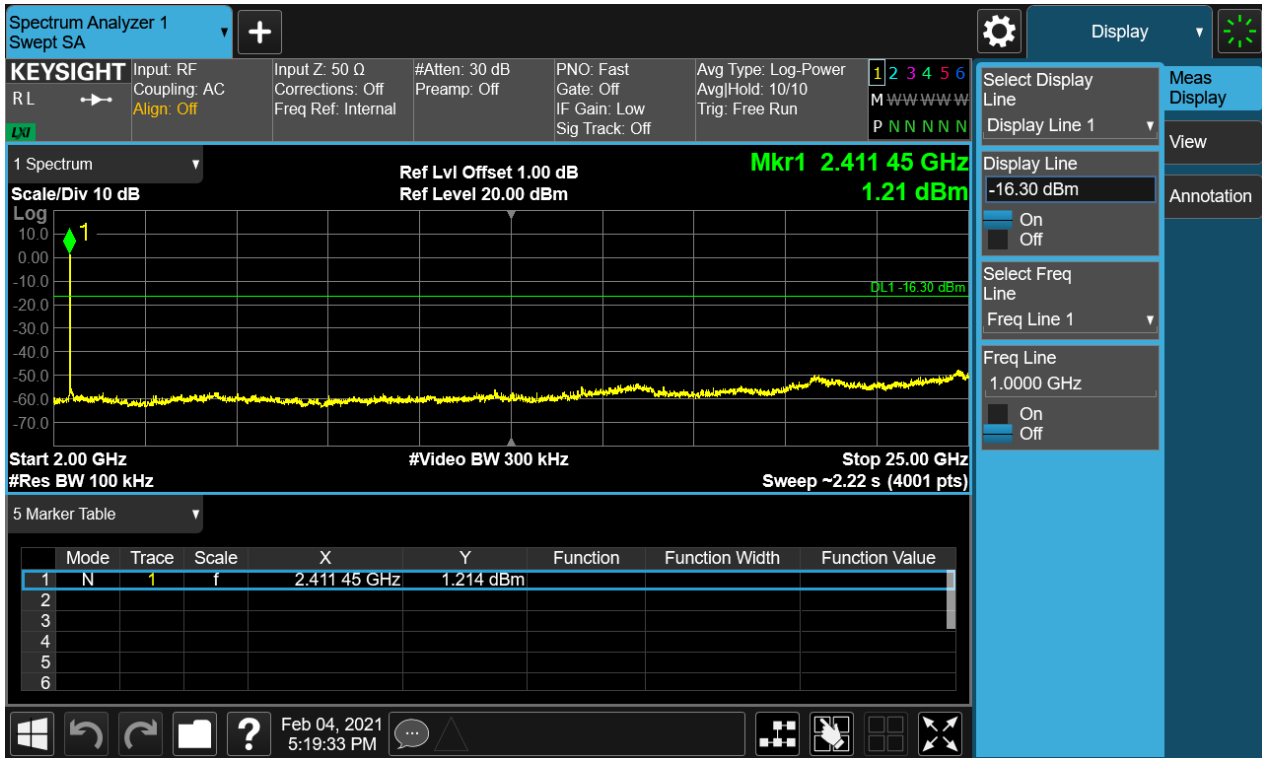
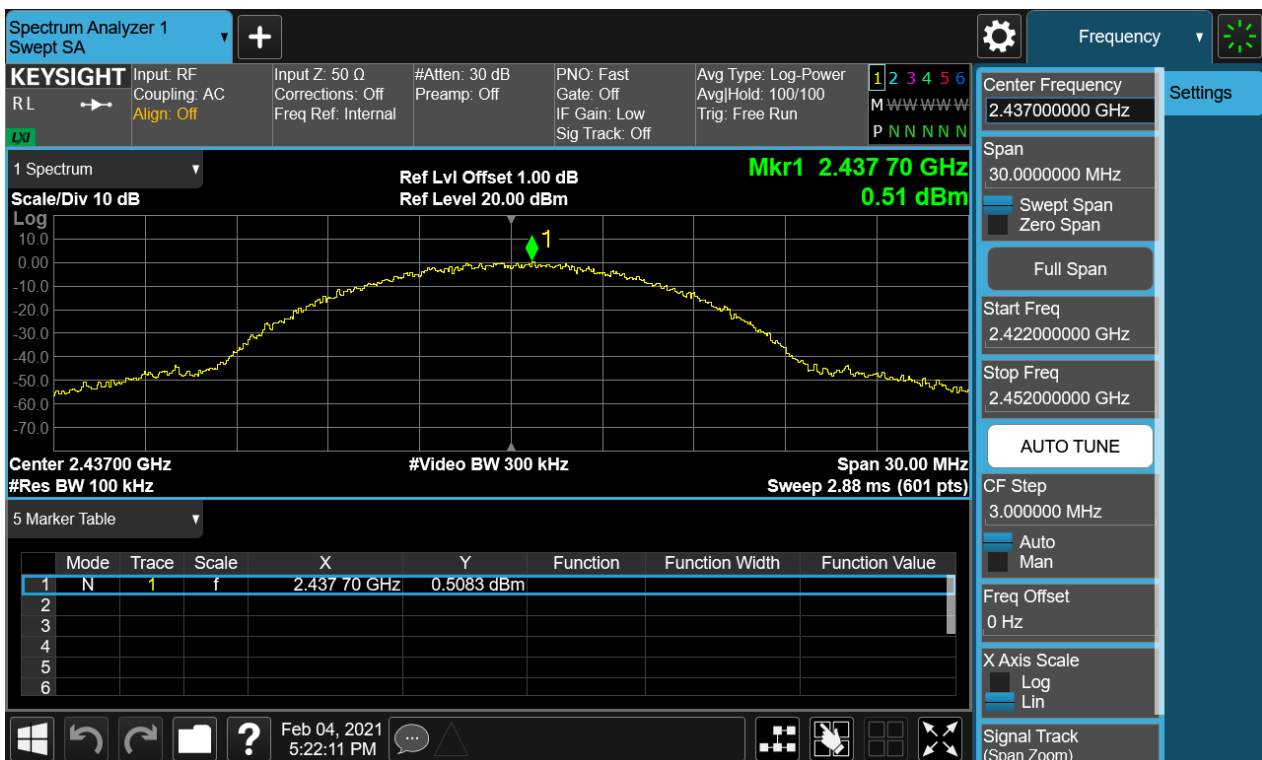


Figure 26: Conducted Spurious Emission & Authorized-band band-edge, 802.11b, 2437MHz Carrier Level



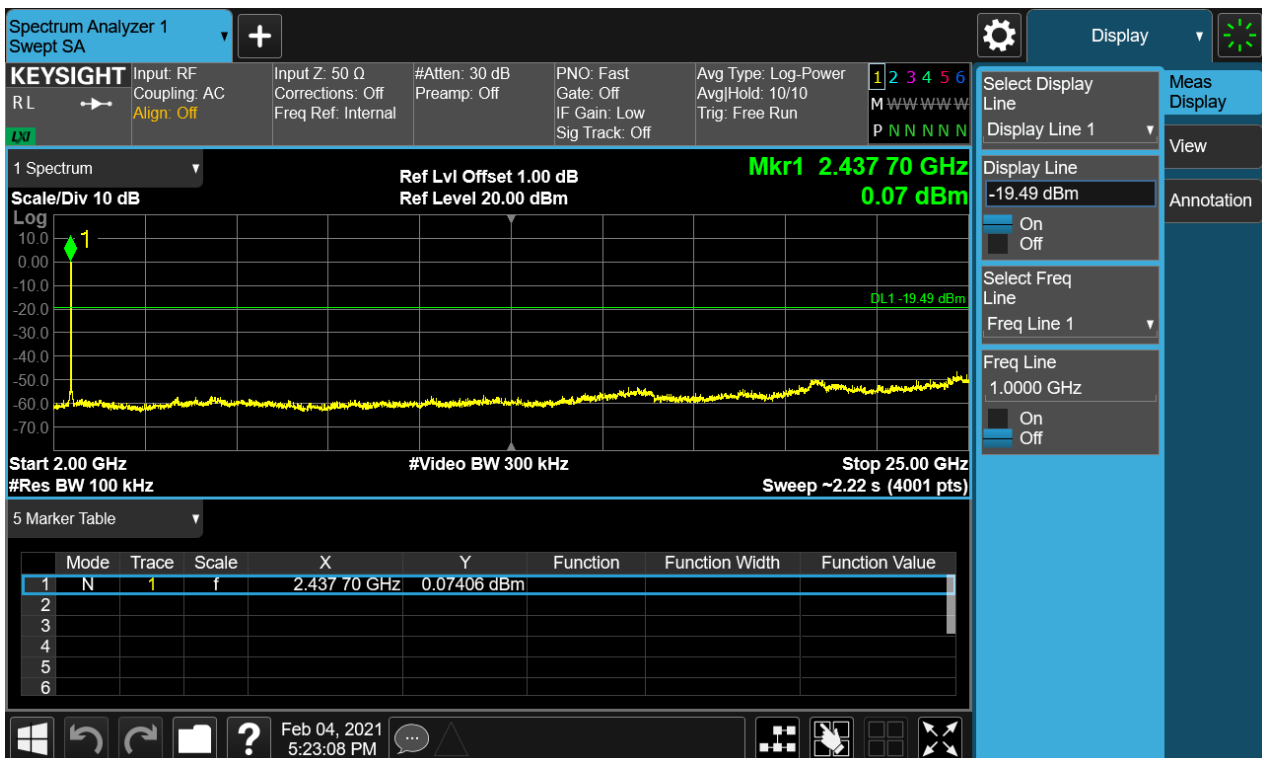
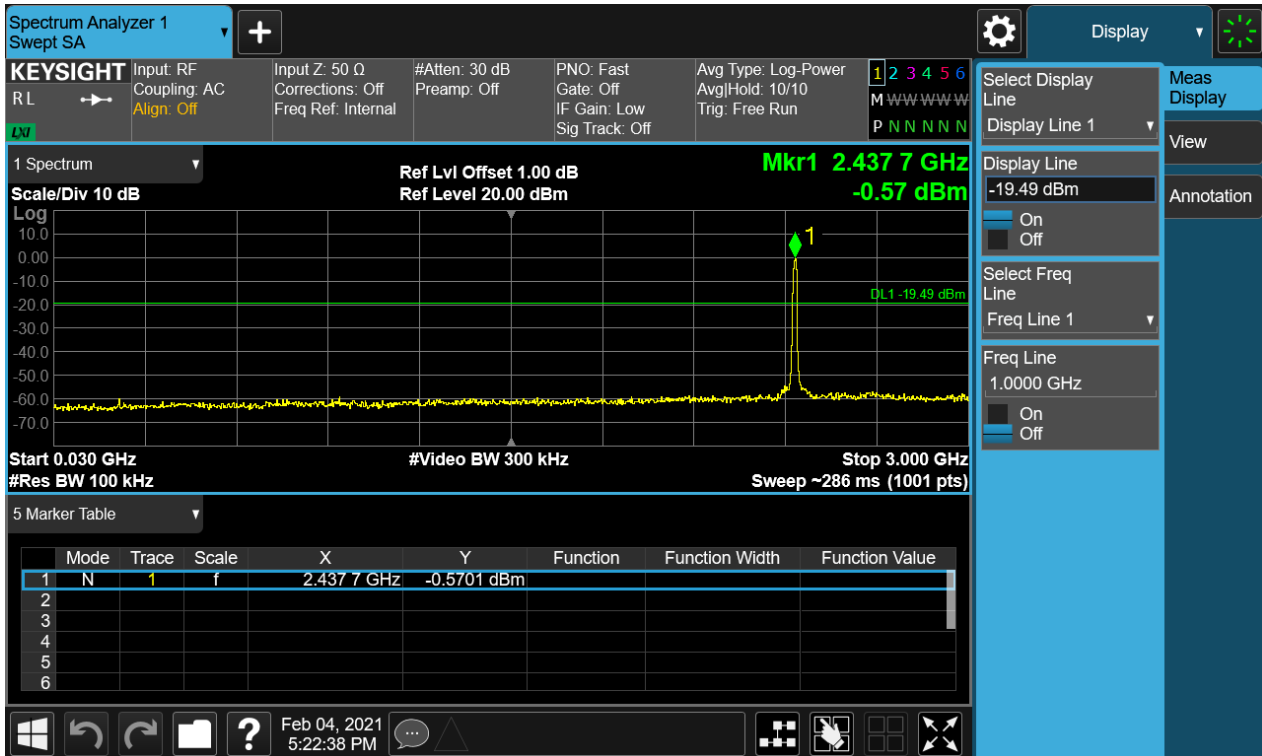
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Conducted spurious emissions 30MHz-25GHz



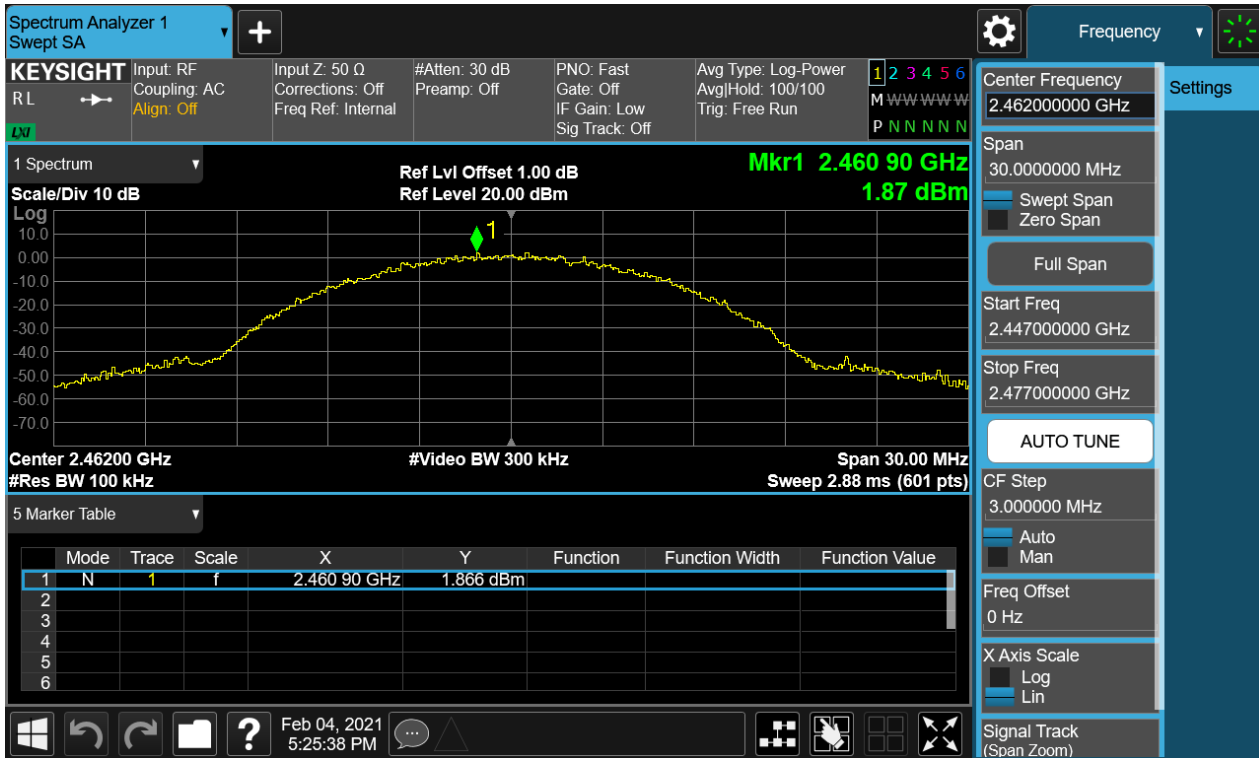
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Figure 27: Conducted Spurious Emission & Authorized-band band-edge, 802.11b, 2462MHz Carrier Level



Band Edge



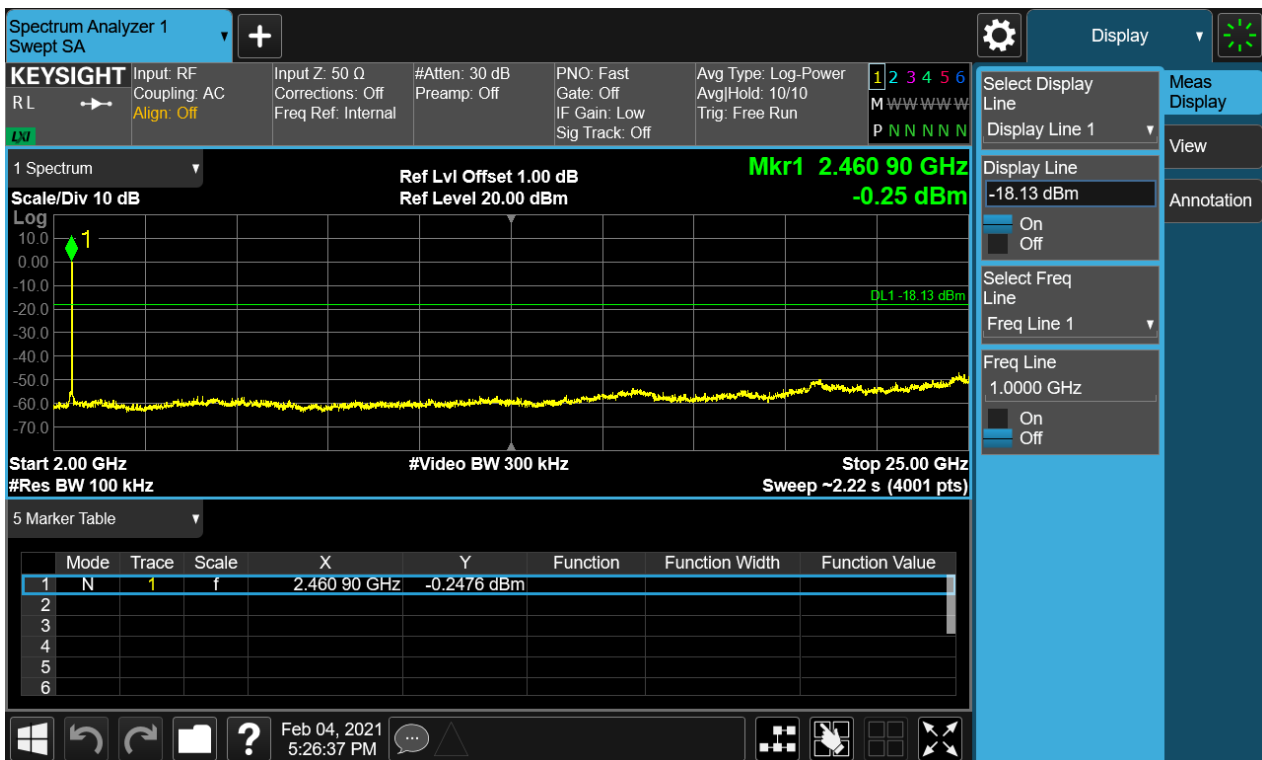
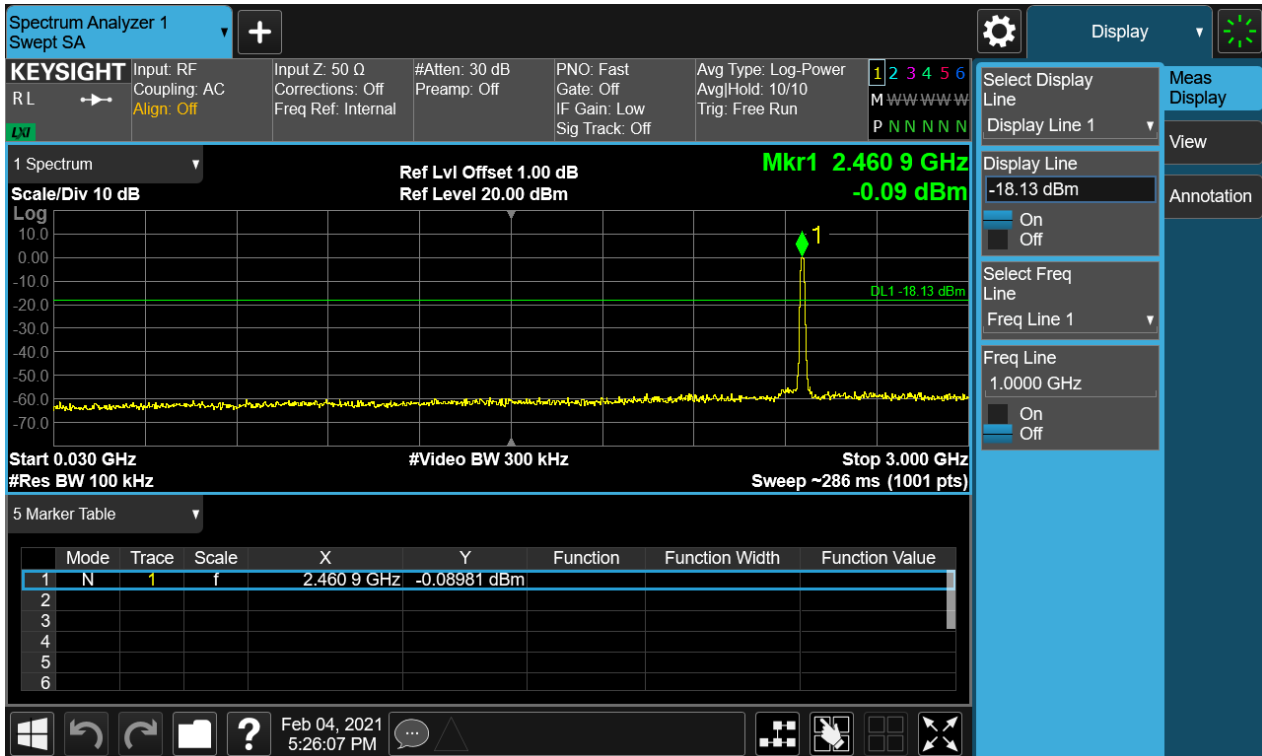
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Conducted spurious emissions 30MHz-25GHz



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



Band Edge



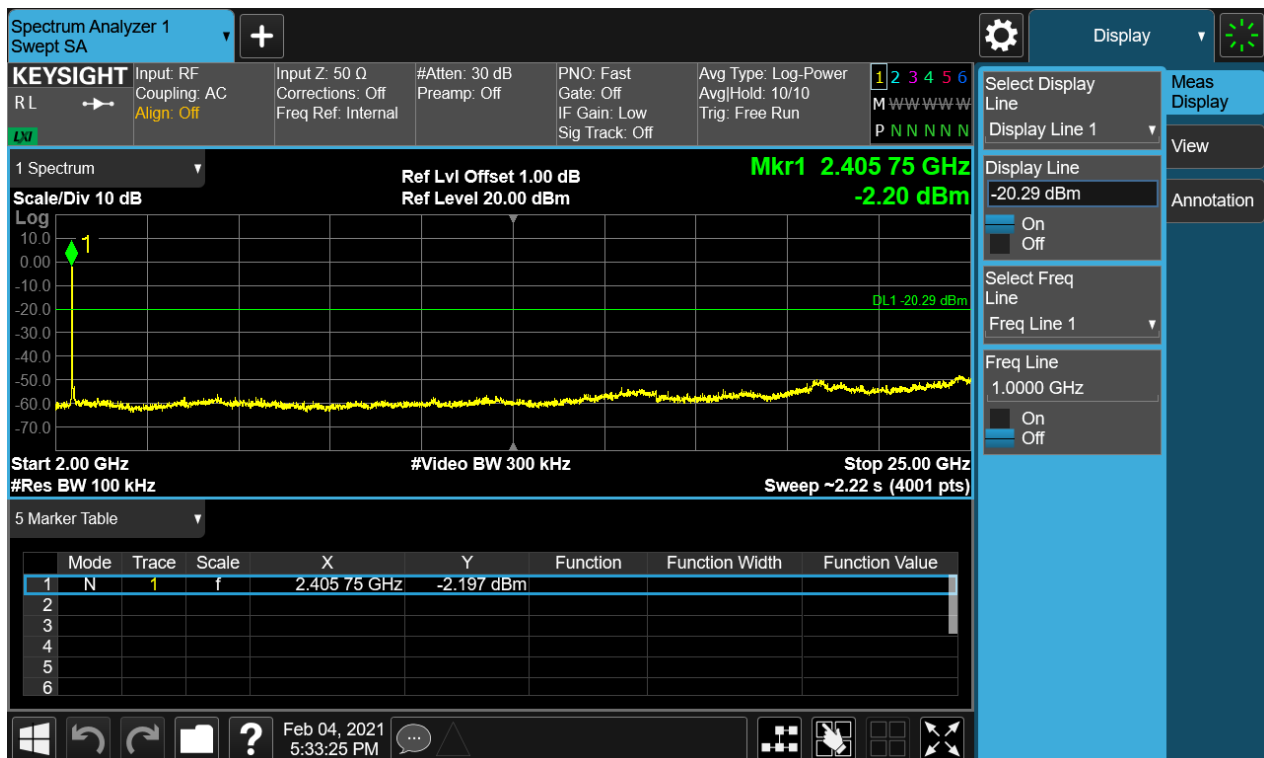
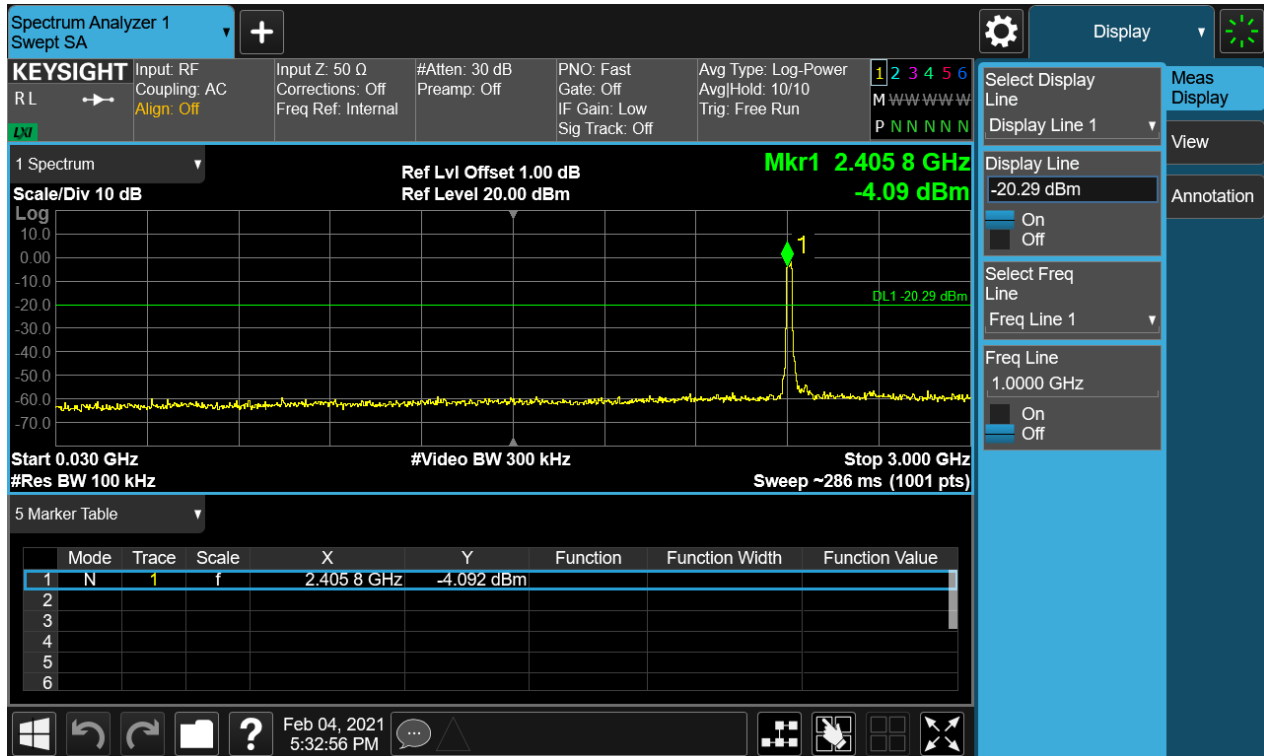
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Conducted spurious emissions 30MHz-25GHz



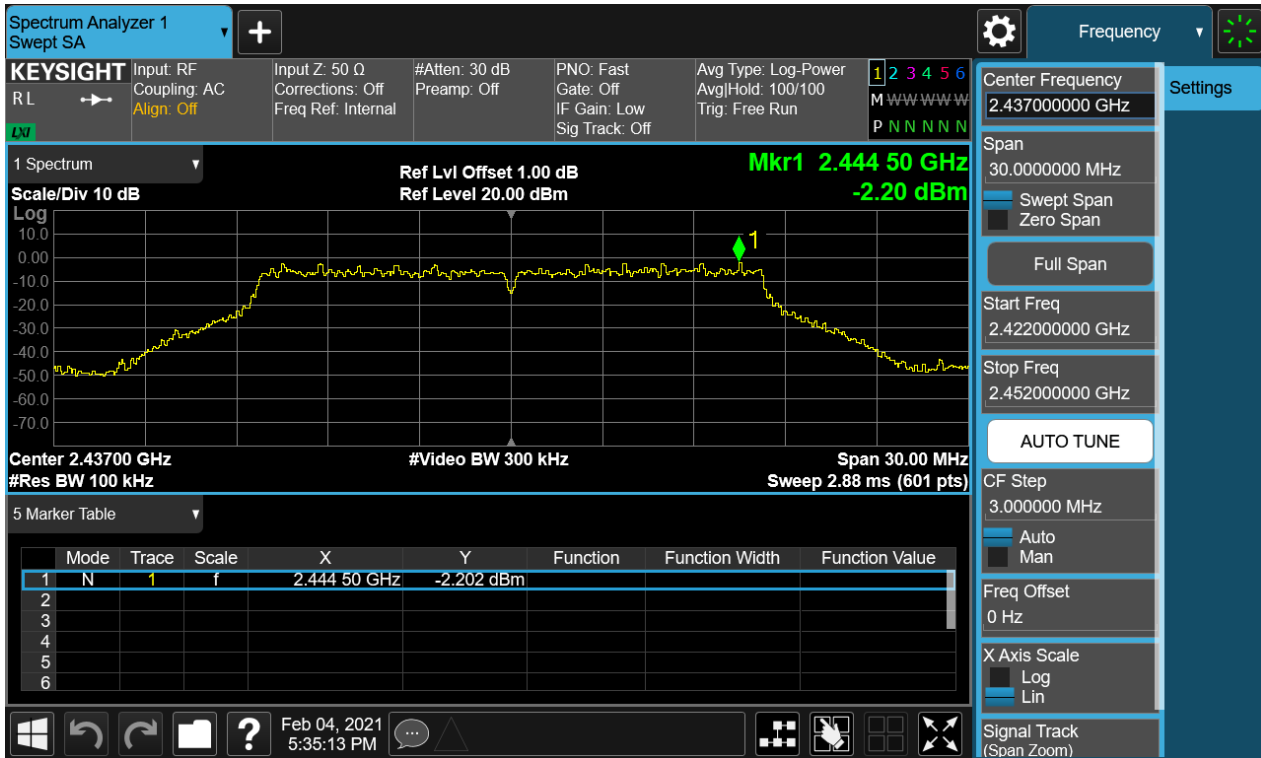
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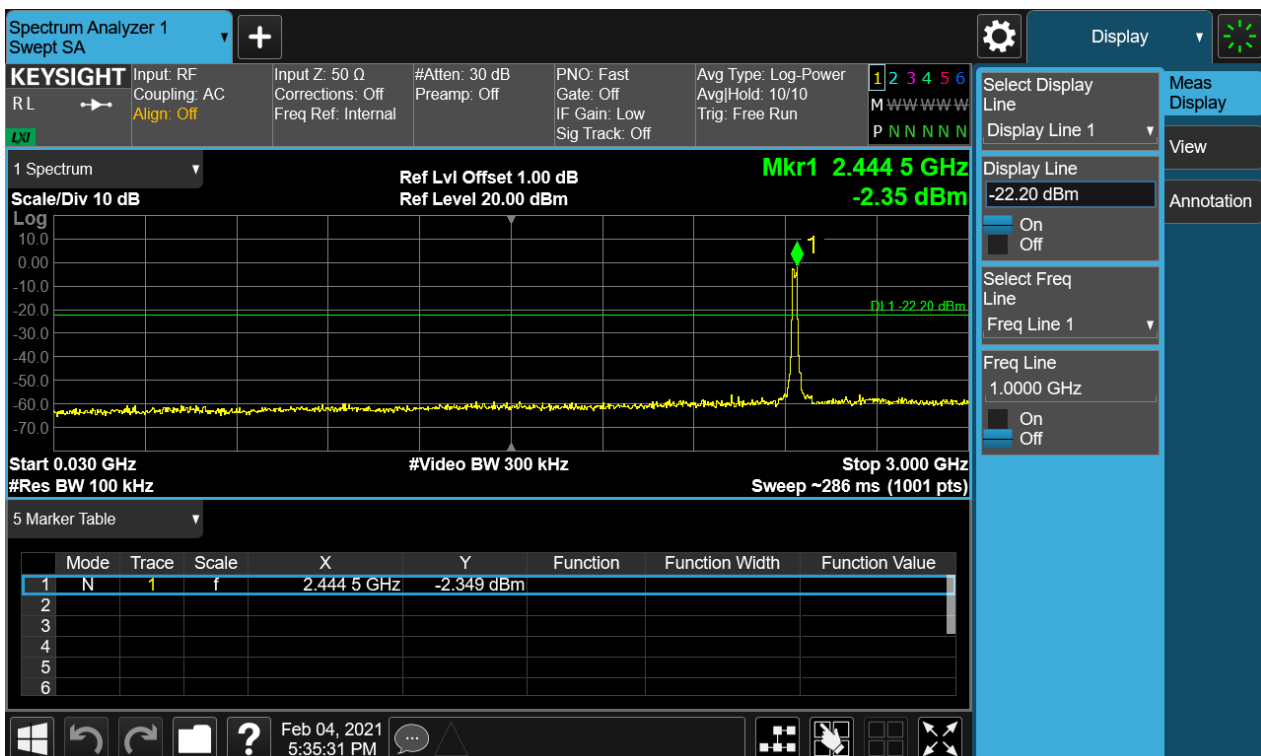
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Figure 29: Conducted Spurious Emission & Authorized-band band-edge, 802.11g, 2437MHz Carrier Level



Conducted spurious emissions 30MHz-25GHz



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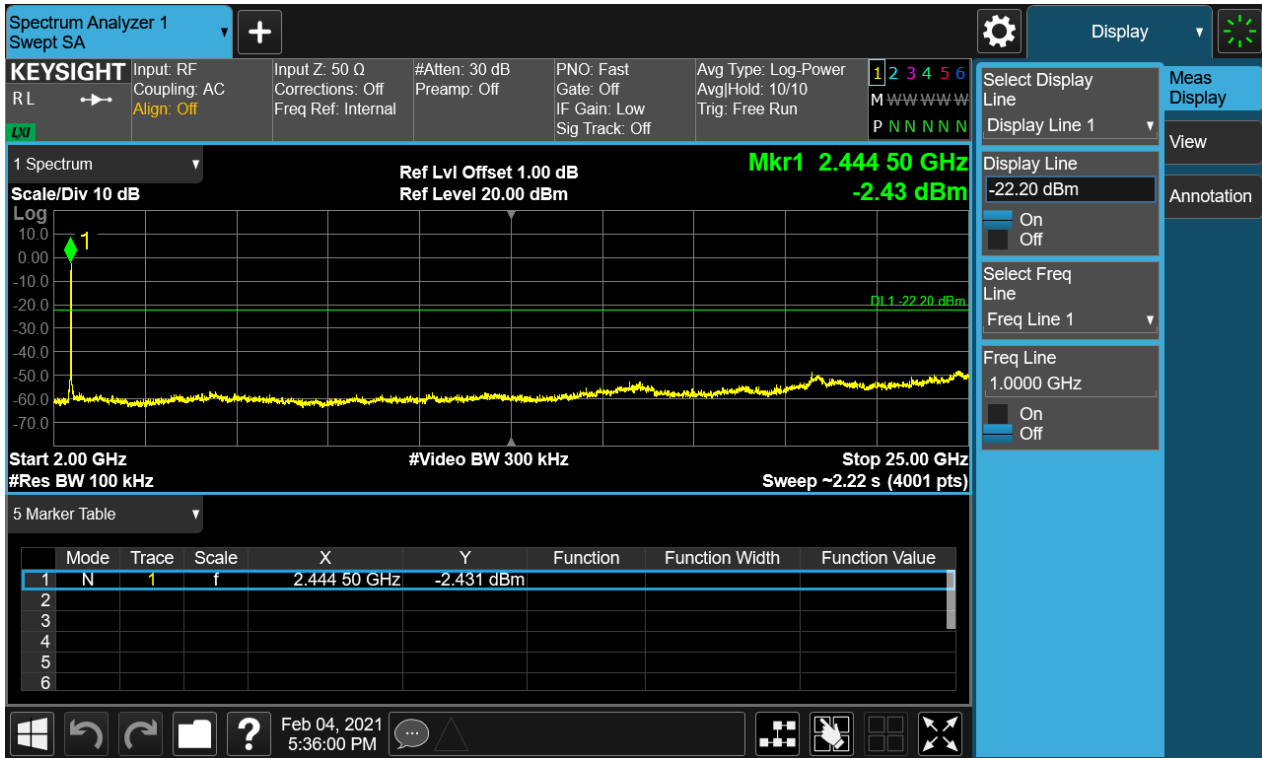


Figure 30: Conducted Spurious Emission & Authorized-band band-edge, 802.11g, 2462MHz Carrier Level



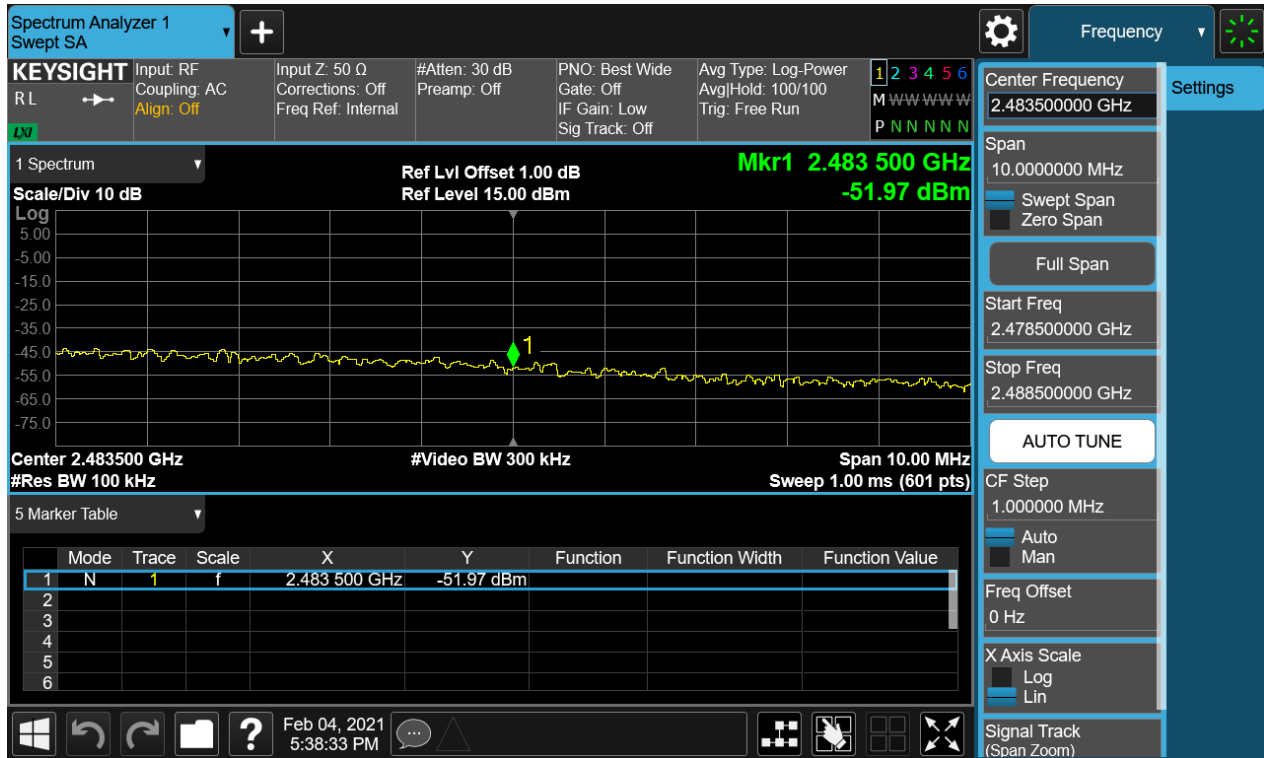
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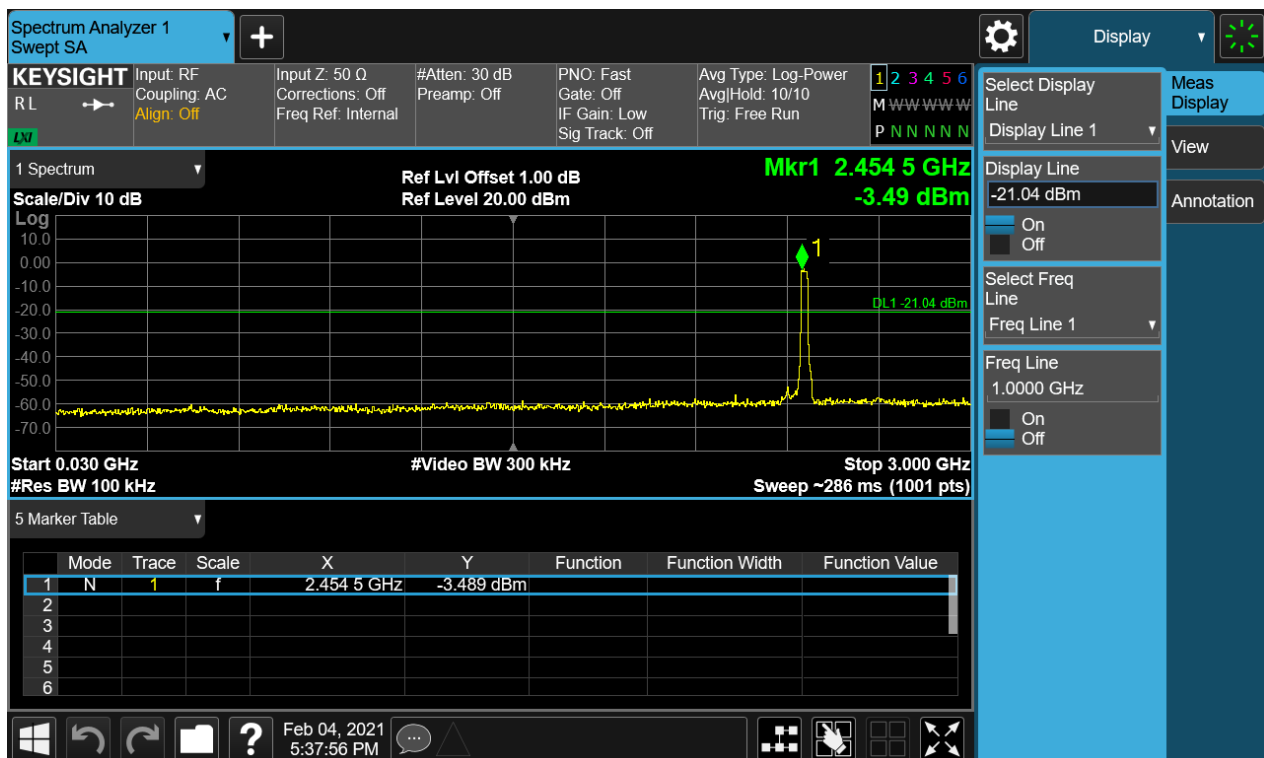
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Band Edge



Conducted spurious emissions 30MHz-25GHz



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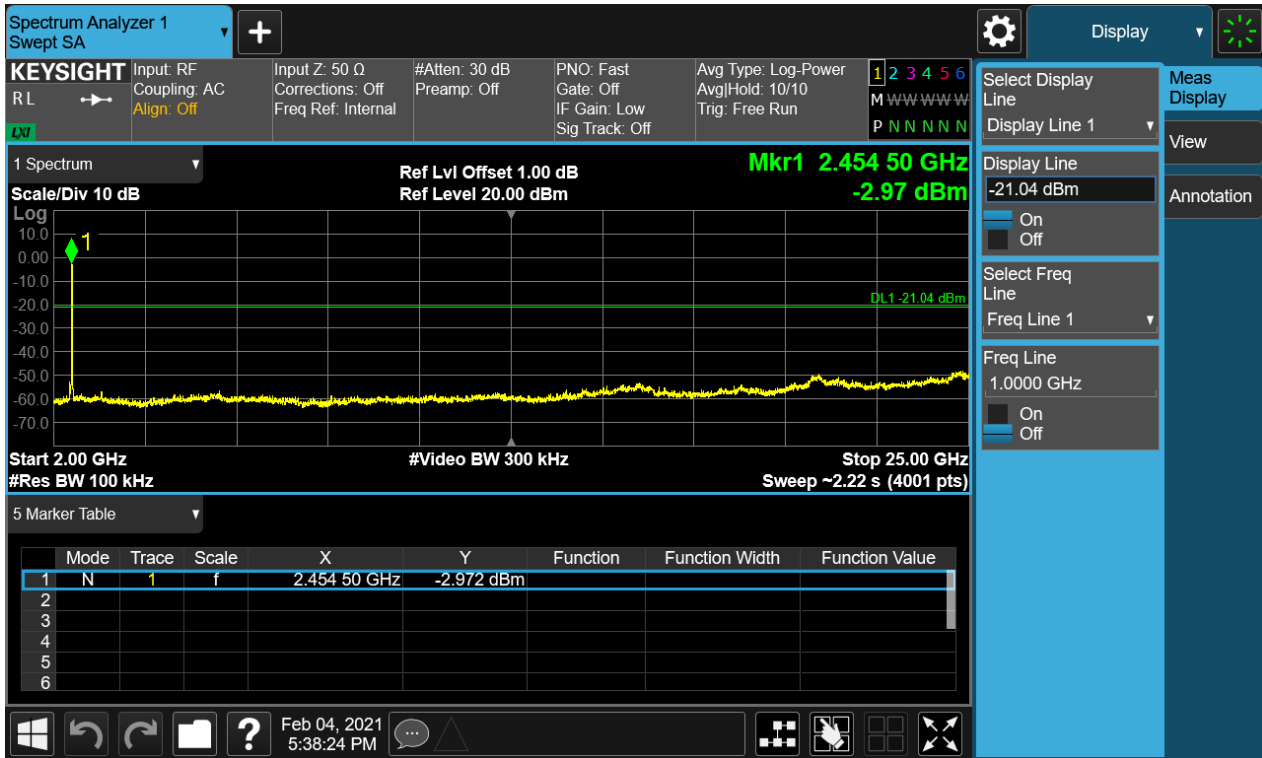
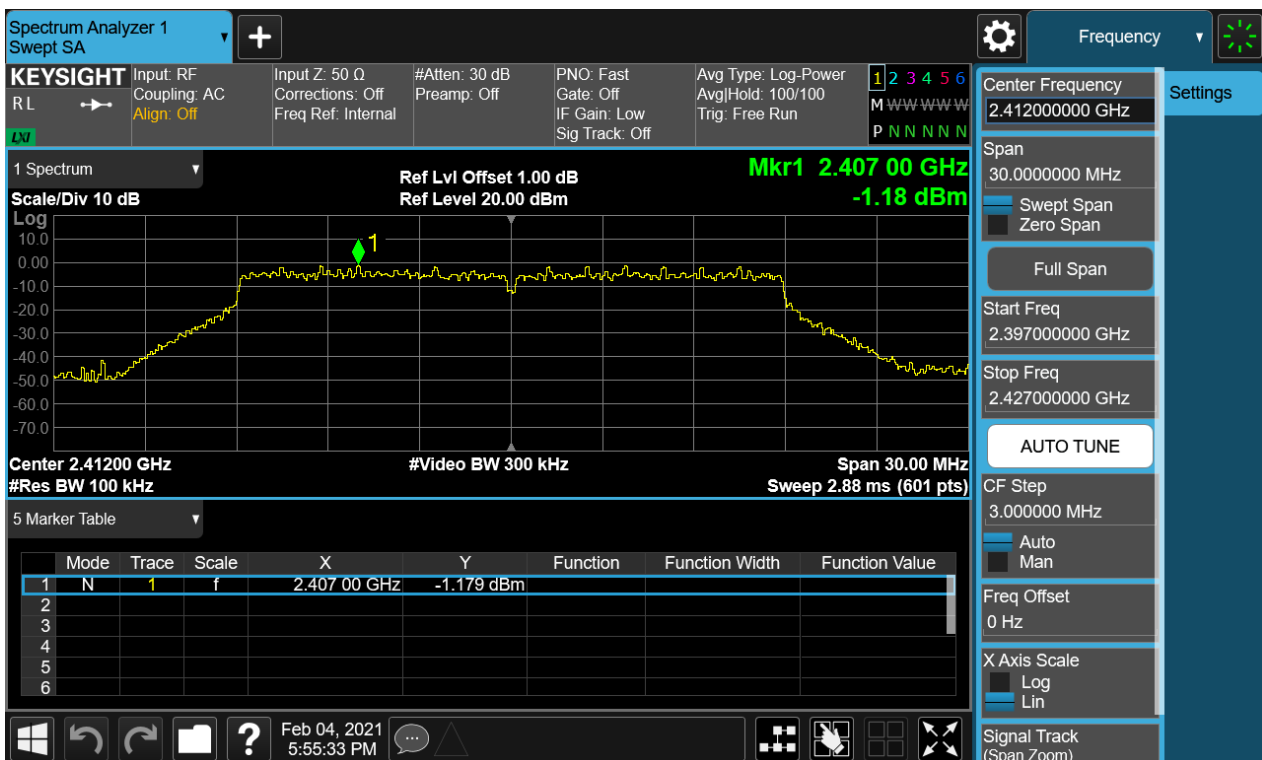


Figure 31: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2412MHz Carrier Level



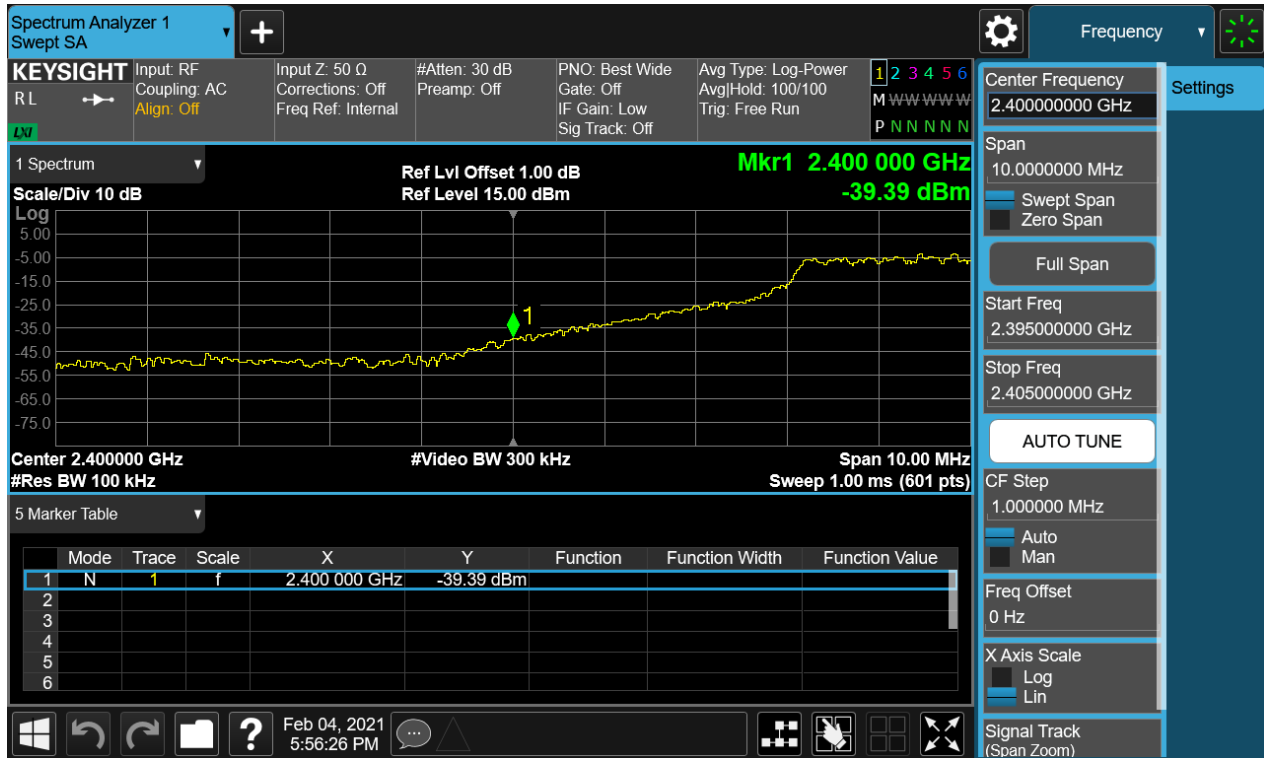
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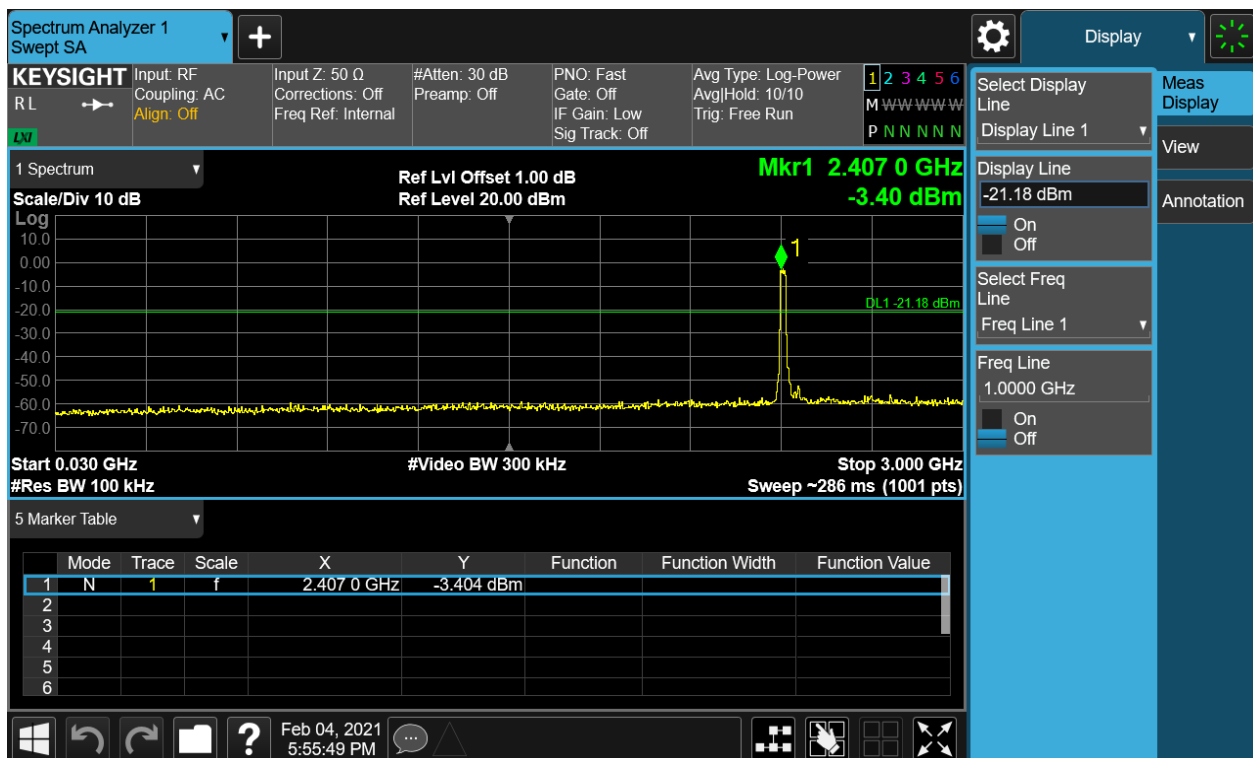
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Band Edge



Conducted spurious emissions 30MHz-25GHz



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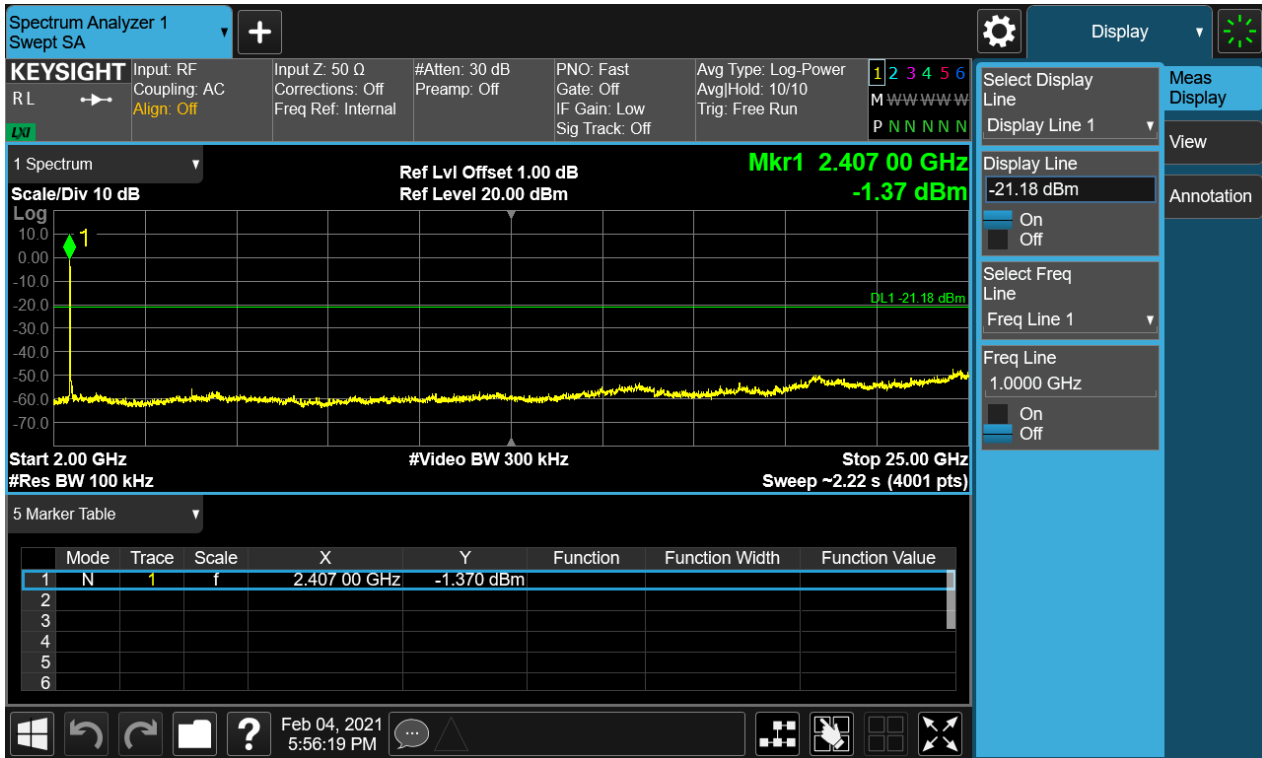


Figure 32: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2437MHz Carrier Level



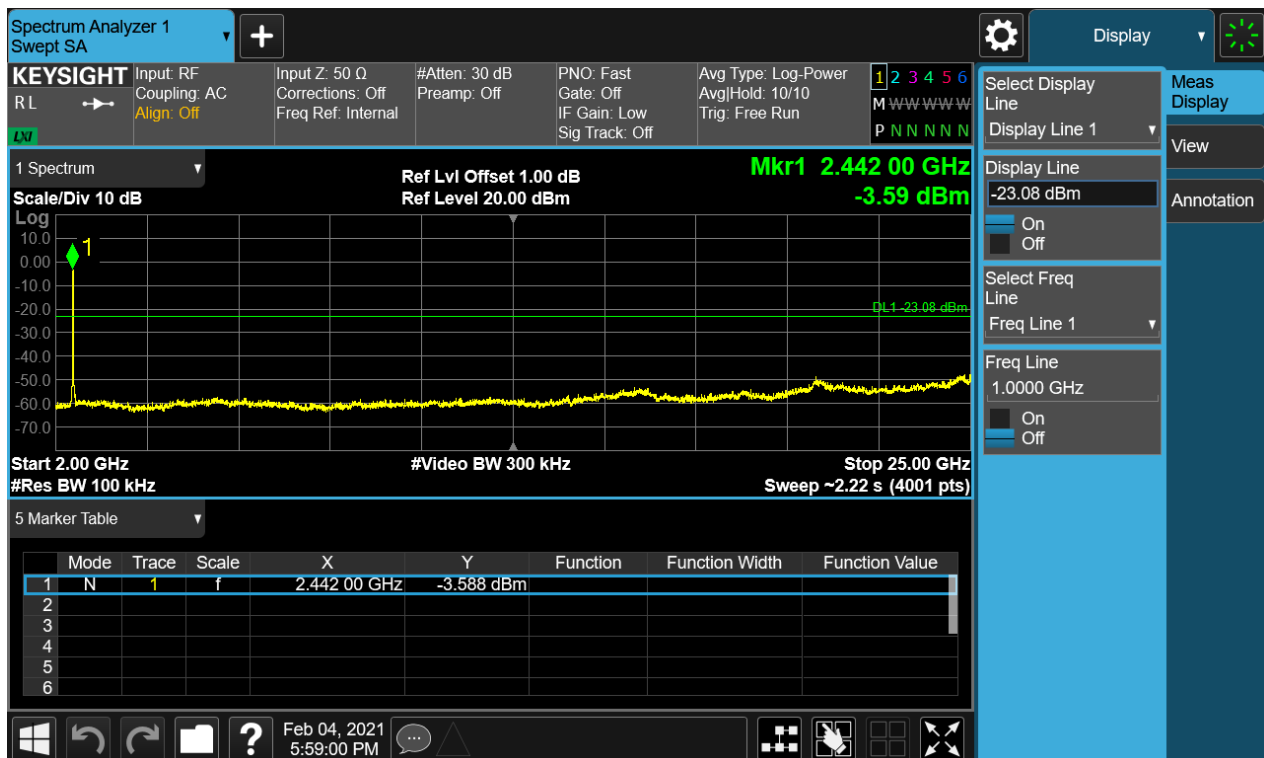
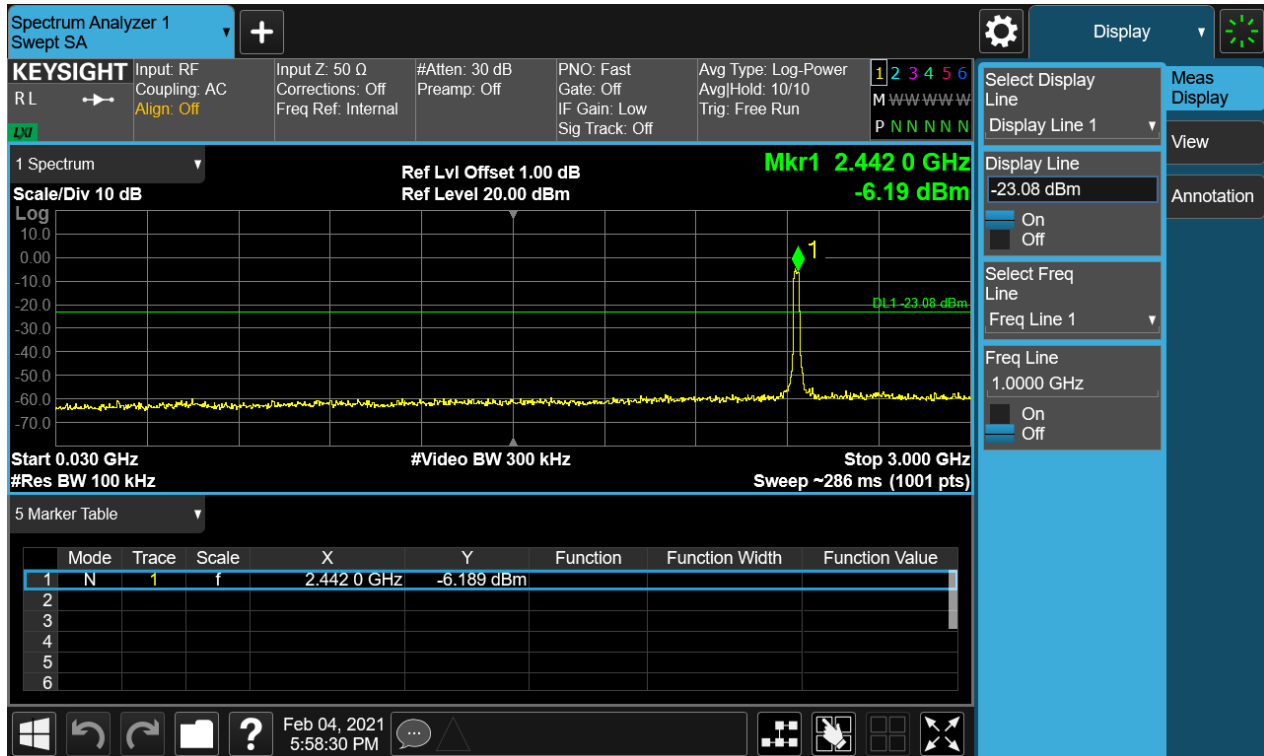
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Conducted spurious emissions 30MHz-25GHz



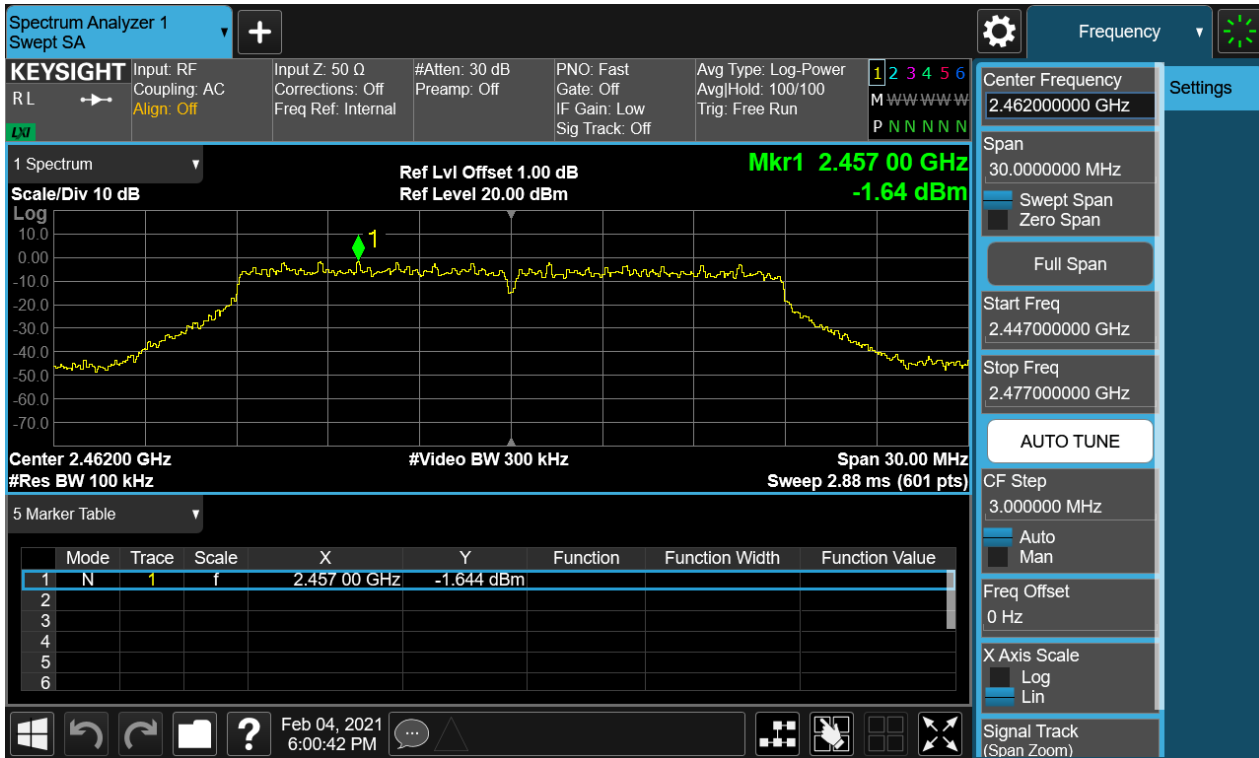
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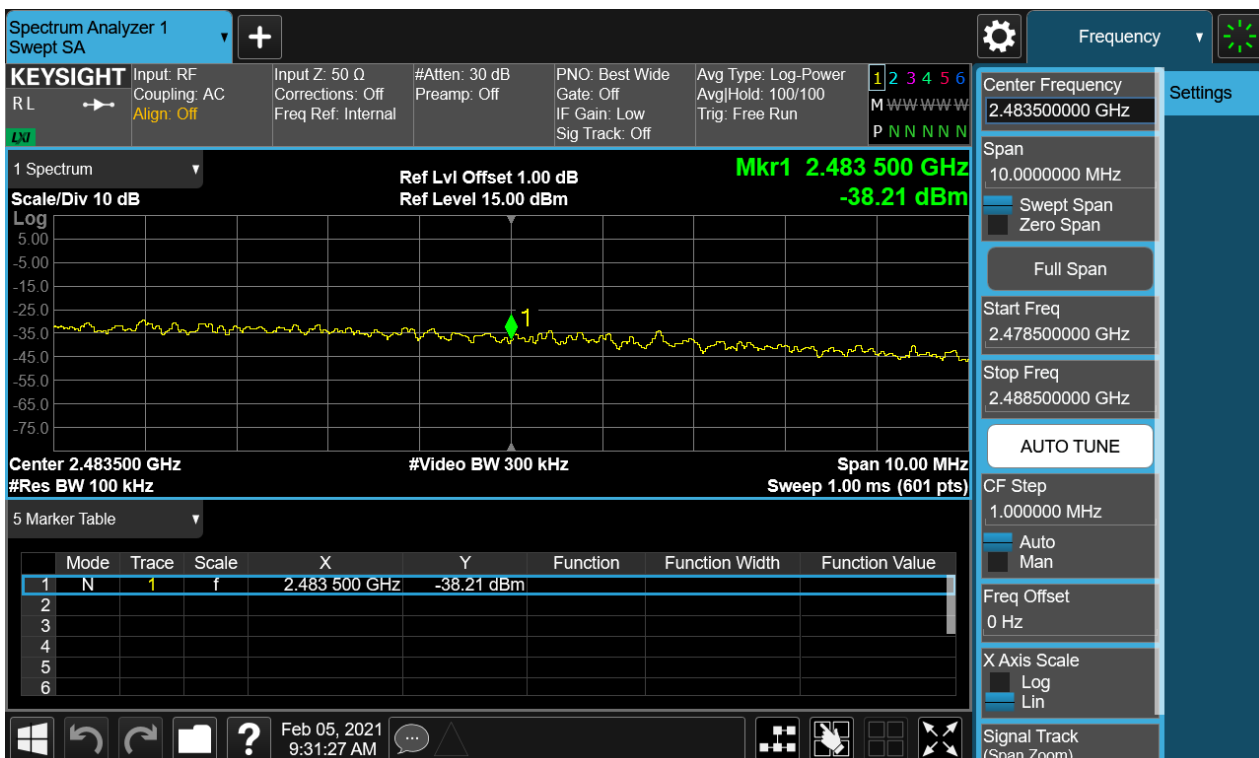
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Figure 33: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2462MHz Carrier Level



Band Edge



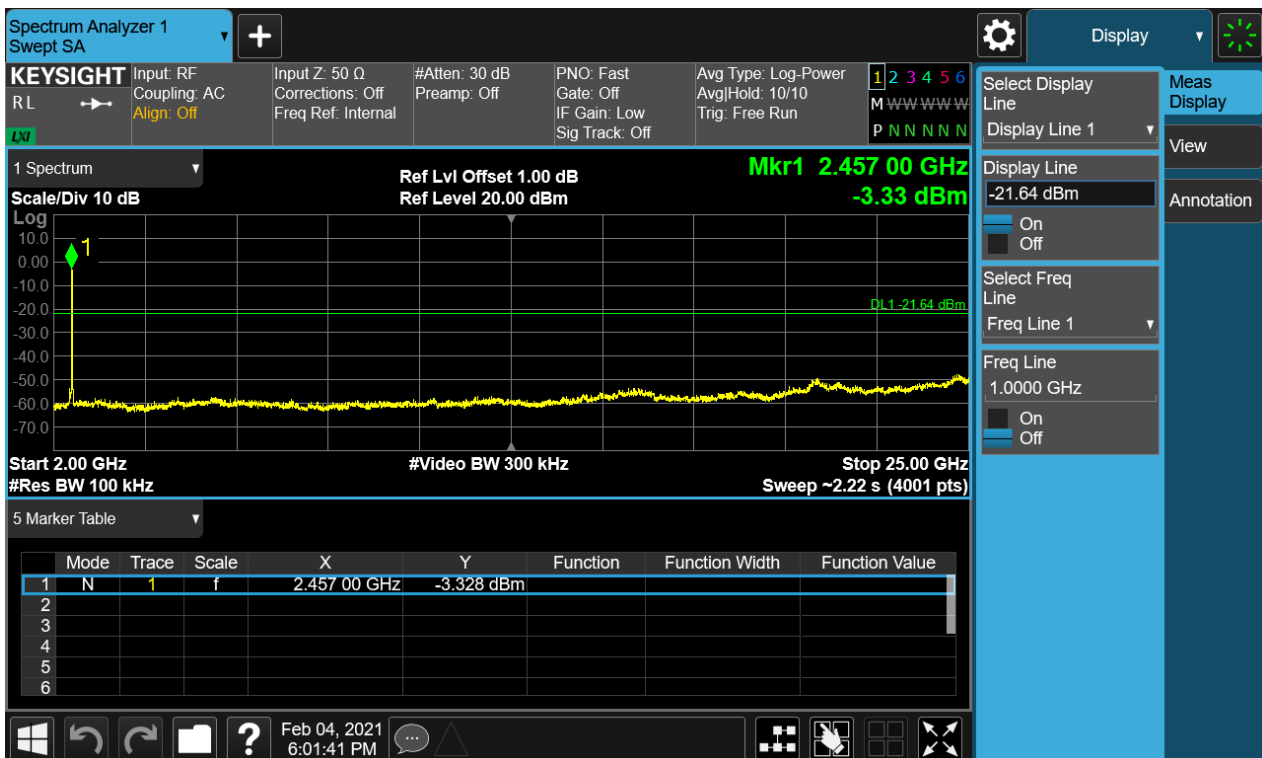
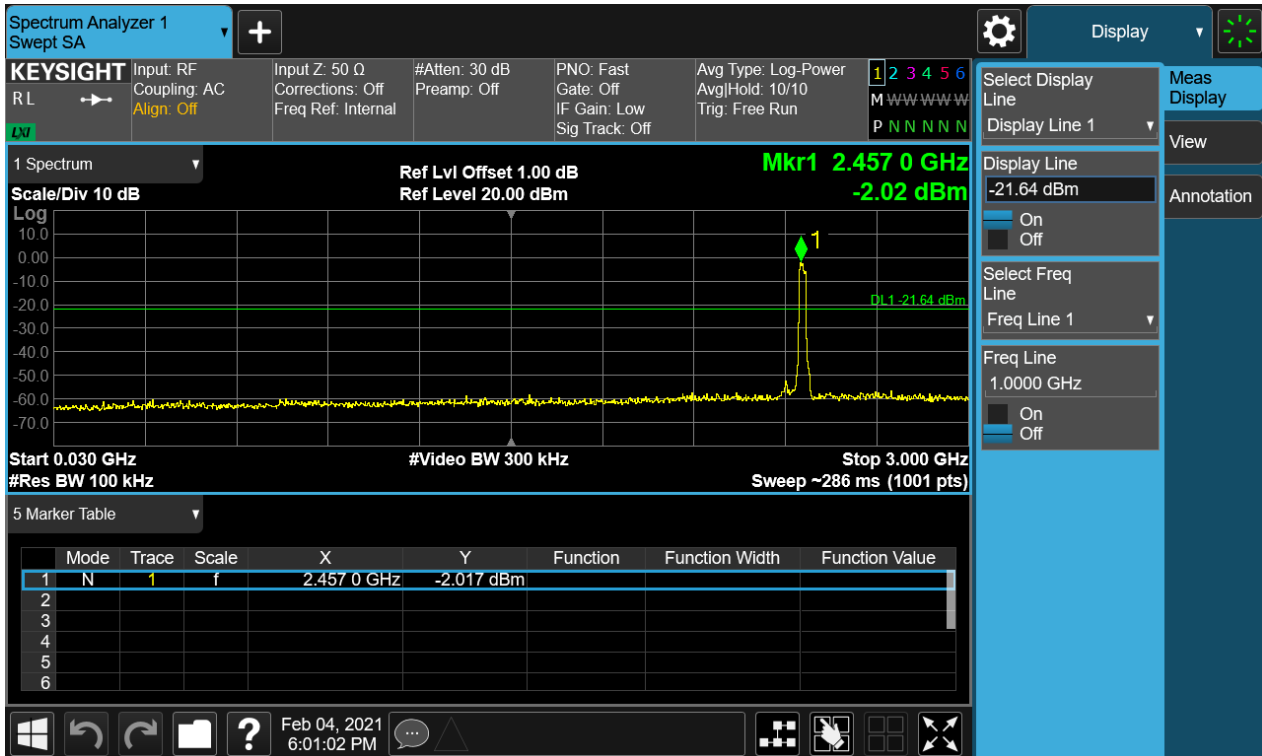
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Conducted spurious emissions 30MHz-25GHz



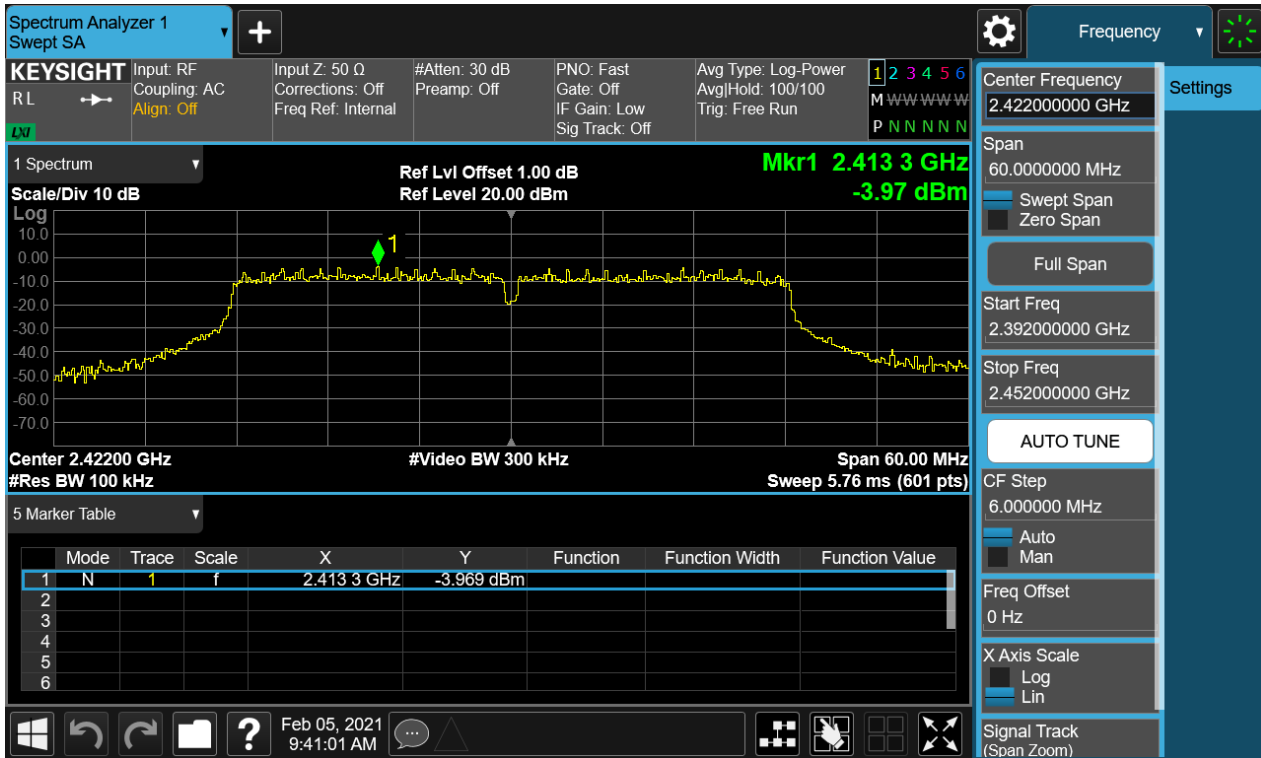
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Figure 34: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2422MHz Carrier Level



Band Edge



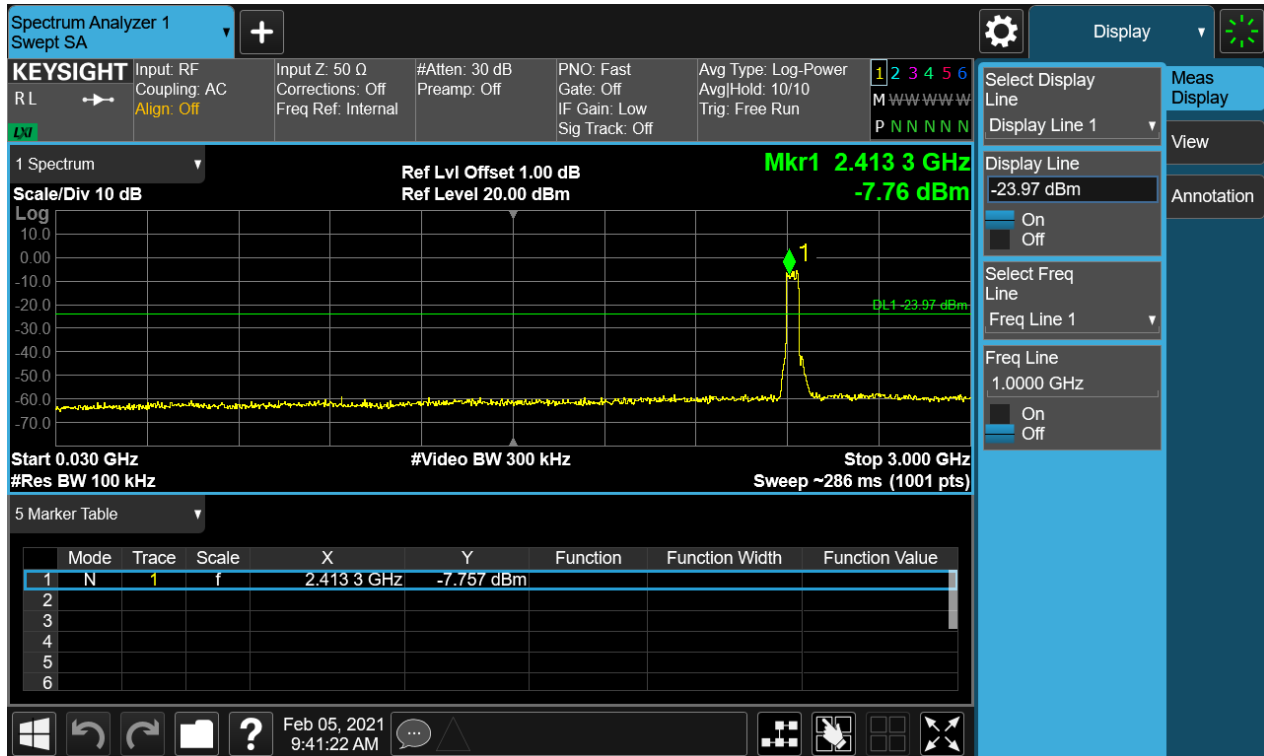
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Conducted spurious emissions 30MHz-25GHz



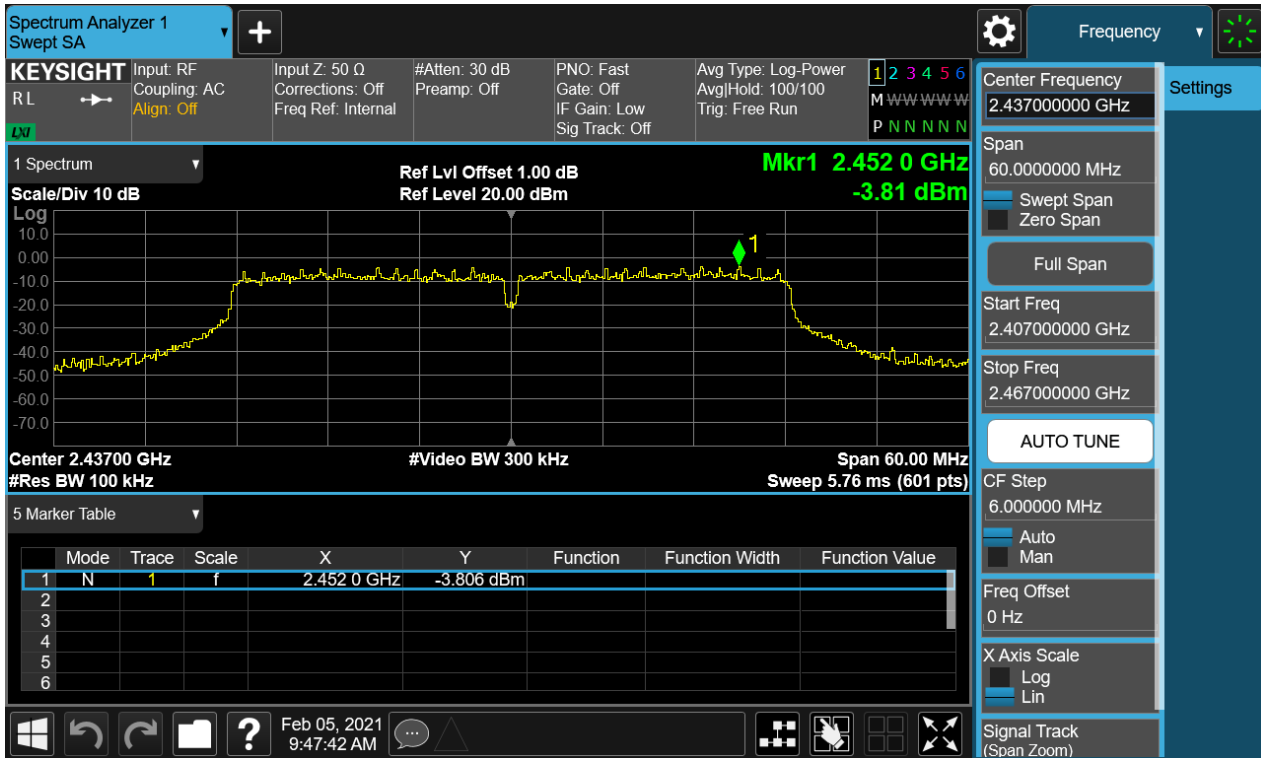
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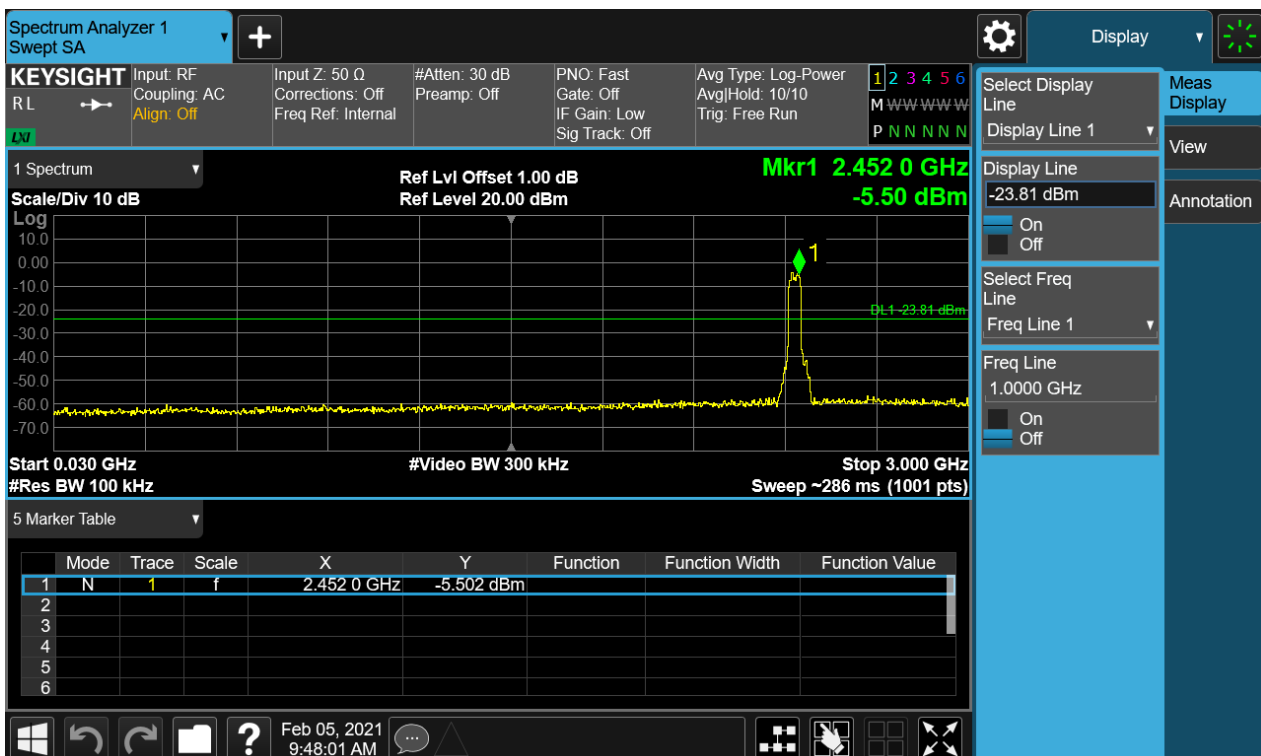
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Figure 35: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2437MHz Carrier Level



Conducted spurious emissions 30MHz-25GHz



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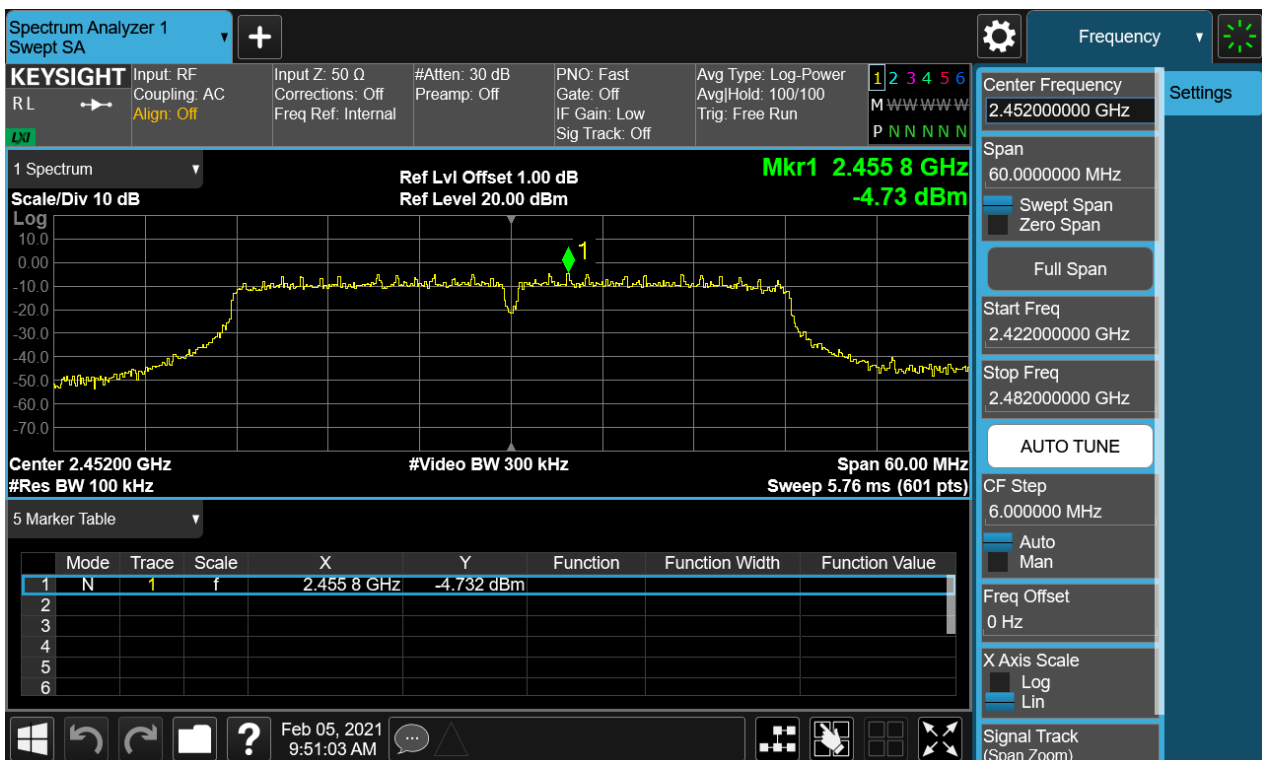
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Figure 36: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2452MHz Carrier Level



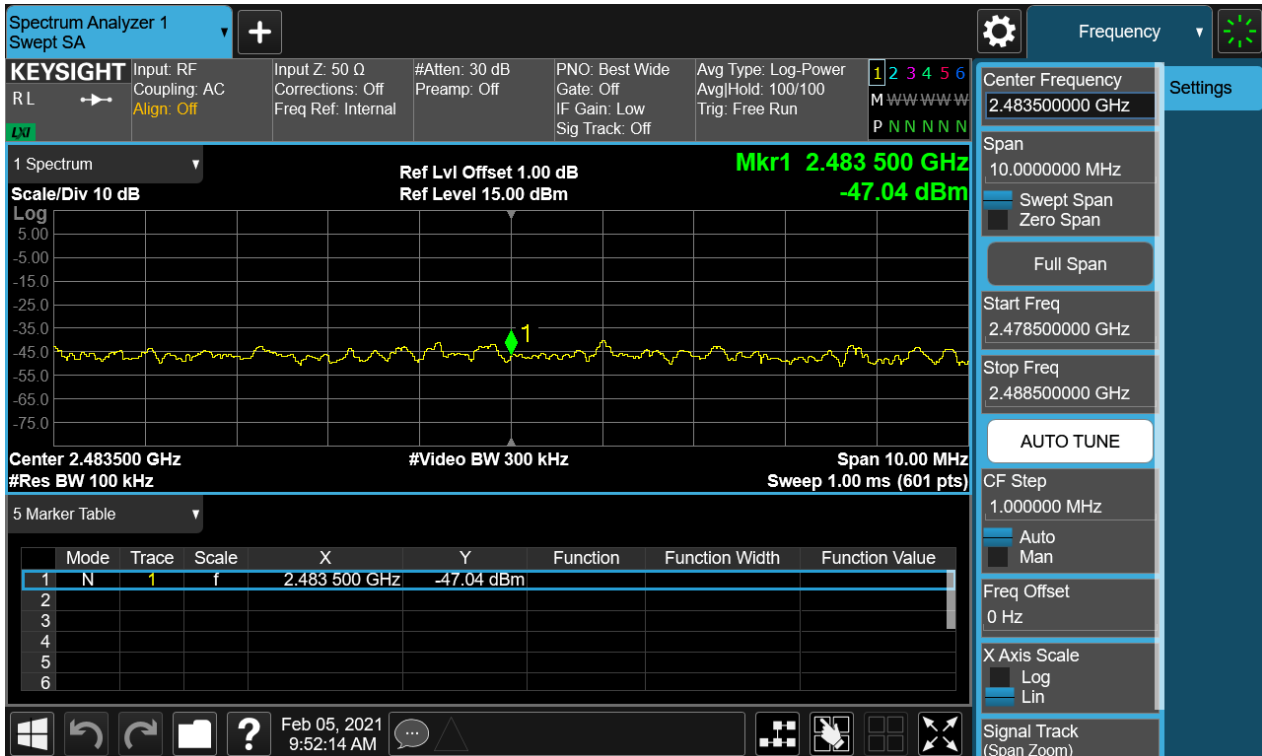
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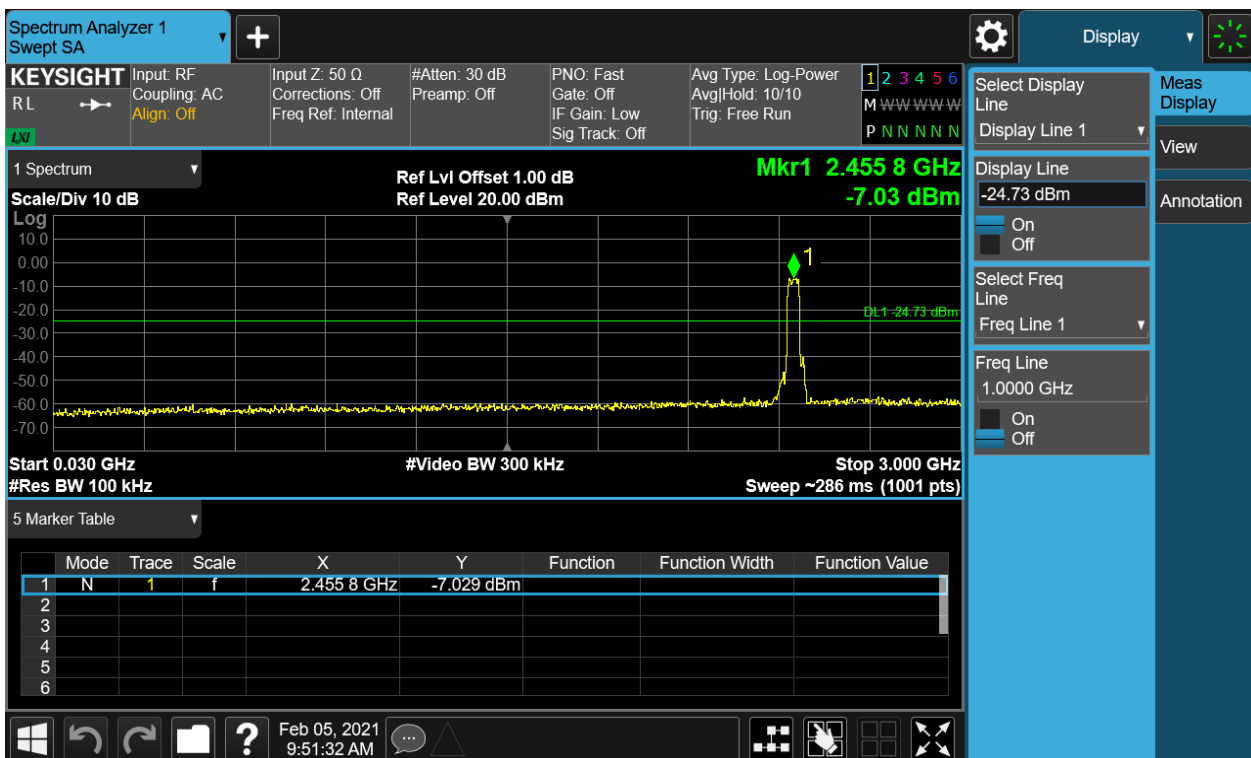
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Band Edge



Conducted spurious emissions 30MHz-25GHz

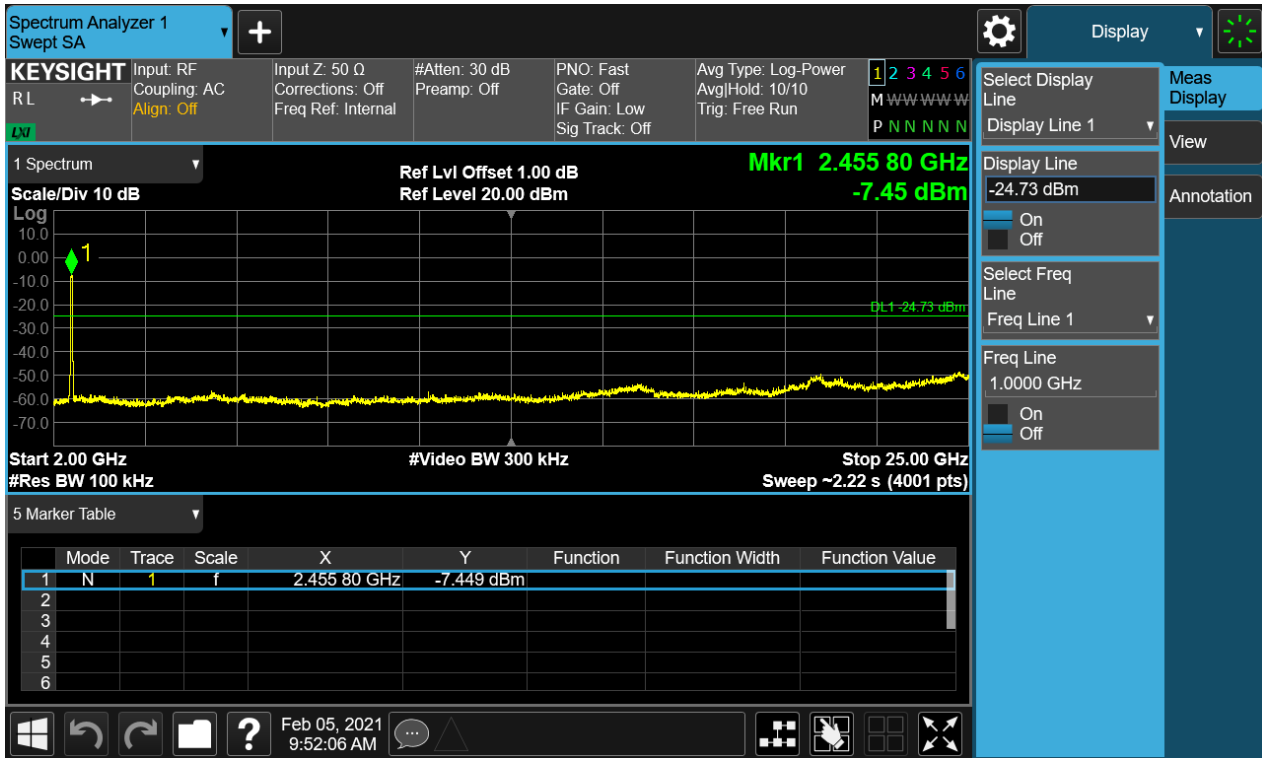


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4.1.6 Spurious Emission

RESULT:

PASS

Test standard : FCC Part 15.247(d), 15.205, 15.209
RSS-247 5.5
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 : 23°C
Relative humidity : 52%

Notes

Test plots please refer to the annex document "SHE20100017-02GE 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.

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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 RSS-247 5.5
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	: 23°C
Relative humidity	: 52%

Notes:

Test plots please refer to the annex document "SHE20100017-02GE 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) RSS-Gen 8.8
Requirement	: ANSI C63.10-2013
Kind of test site	: Shielded room

Test setup

Input Voltage	: AC 120V, 60Hz; AC 240V, 50Hz
Operation Mode	: A
Earthing	: Not Connected
Ambient temperature	: 23°C
Relative humidity	: 52%

For details refer to following test plot.

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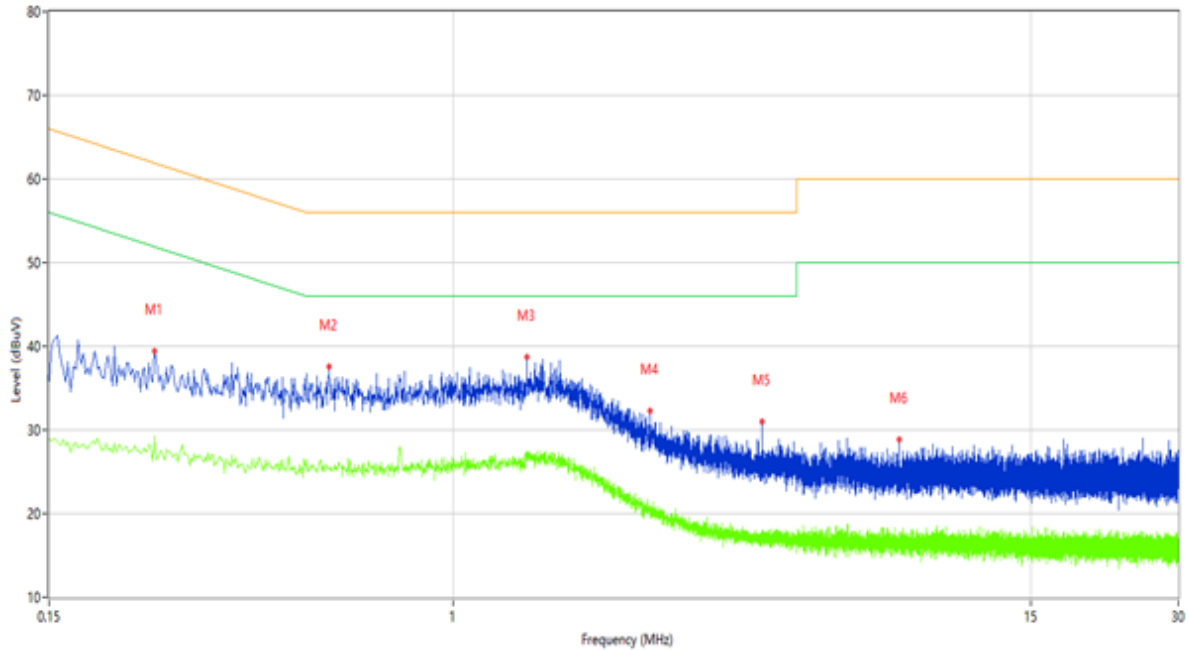
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Note: The all configurations were tested respectively, but only the worst configuration shown here.

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	0.246	43.01	9.69	61.89	-18.88	Peak	L	Pass
1*	0.246	31.29	9.69	61.89	-30.60	QP	L	Pass
1**	0.246	29.26	9.69	51.89	-22.63	AV	L	Pass
2	0.558	34.43	9.75	56.00	-21.57	Peak	L	Pass
2*	0.558	23.44	9.75	56.00	-32.56	QP	L	Pass
2**	0.558	25.42	9.75	46.00	-20.58	AV	L	Pass
3	1.412	29.65	9.67	56.00	-26.35	Peak	L	Pass
3*	1.412	22.44	9.67	56.00	-33.56	QP	L	Pass
3**	1.412	26.53	9.67	46.00	-19.47	AV	L	Pass
4	2.512	25.29	9.68	56.00	-30.71	Peak	L	Pass
4*	2.512	17.75	9.68	56.00	-38.25	QP	L	Pass
4**	2.512	20.51	9.68	46.00	-25.49	AV	L	Pass
5	4.262	26.17	9.69	56.00	-29.83	Peak	L	Pass
5*	4.262	15.04	9.69	56.00	-40.96	QP	L	Pass
5**	4.262	17.22	9.69	46.00	-28.78	AV	L	Pass
6	8.086	23.14	9.67	60.00	-36.86	Peak	L	Pass
6*	8.086	14.32	9.67	60.00	-45.68	QP	L	Pass
6**	8.086	17.19	9.67	50.00	-32.81	AV	L	Pass

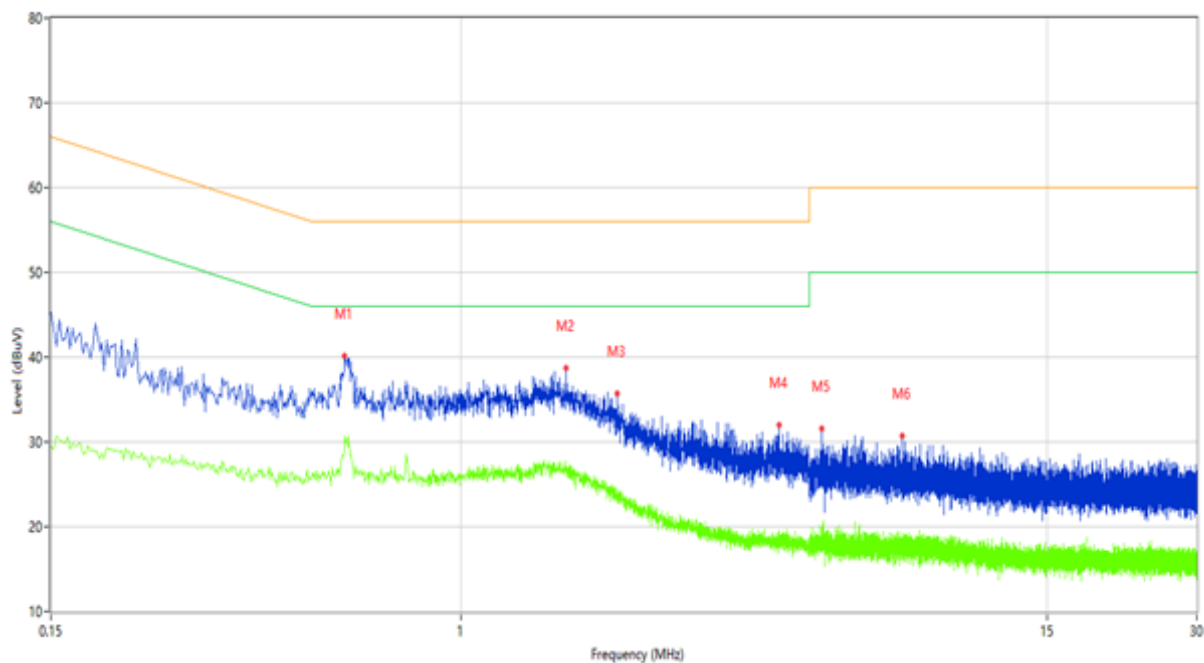
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Figure 38: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.584	39.51	9.76	56.00	-16.49	Peak	N	Pass
1*	0.584	30.14	9.76	56.00	-25.86	QP	N	Pass
1**	0.584	30.70	9.76	46.00	-15.30	AV	N	Pass
2	1.626	29.53	9.67	56.00	-26.47	Peak	N	Pass
2*	1.626	21.92	9.67	56.00	-34.08	QP	N	Pass
2**	1.626	27.77	9.67	46.00	-18.23	AV	N	Pass
3	2.058	27.67	9.68	56.00	-28.33	Peak	N	Pass
3*	2.058	20.47	9.68	56.00	-35.53	QP	N	Pass
3**	2.058	24.01	9.68	46.00	-21.99	AV	N	Pass
4	4.358	29.93	9.69	56.00	-26.07	Peak	N	Pass
4*	4.358	18.60	9.69	56.00	-37.40	QP	N	Pass
4**	4.358	19.50	9.69	46.00	-26.50	AV	N	Pass
5	5.288	28.58	9.70	60.00	-31.42	Peak	N	Pass
5*	5.288	19.19	9.70	60.00	-40.81	QP	N	Pass
5**	5.288	19.80	9.70	50.00	-30.20	AV	N	Pass
6	7.690	27.04	9.67	60.00	-32.96	Peak	N	Pass
6*	7.690	17.49	9.67	60.00	-42.51	QP	N	Pass
6**	7.690	18.48	9.67	50.00	-31.52	AV	N	Pass

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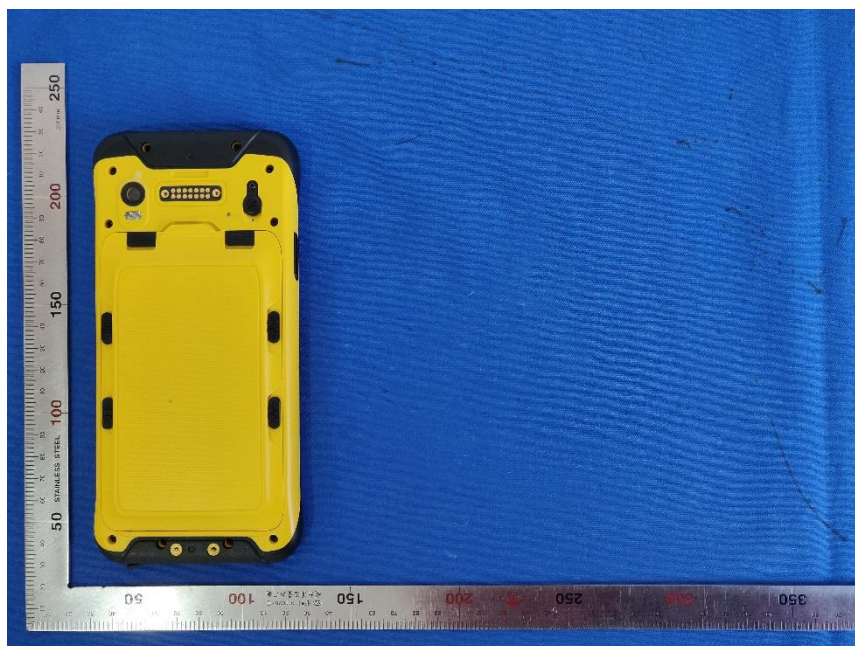
5 Appendixes

5.1 Photographs of the Sample

TDC600_2 Model



Front of the sample



Rear of the sample

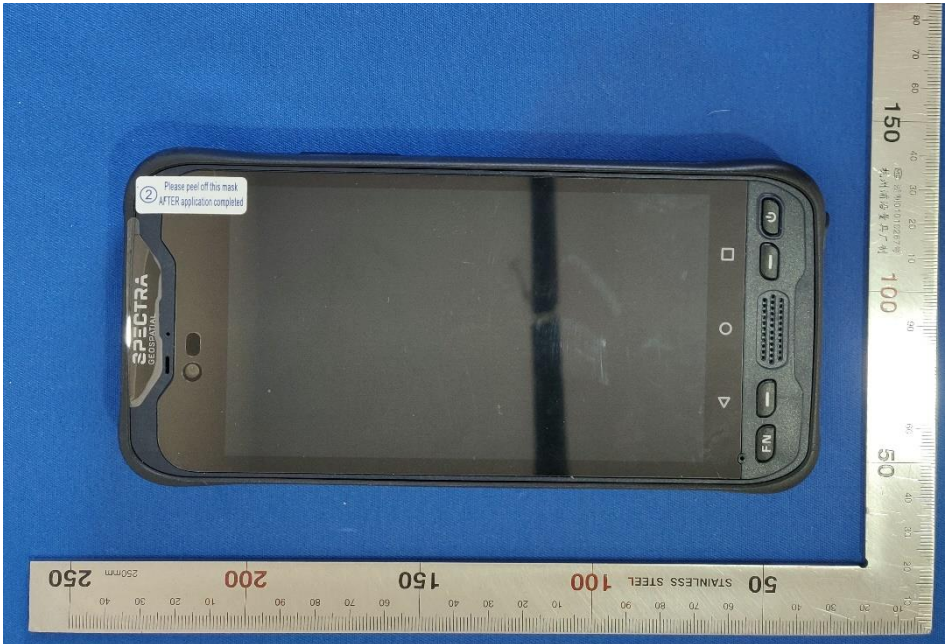
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MobileMapper60_2 Model



Front of the sample



Rear of the sample

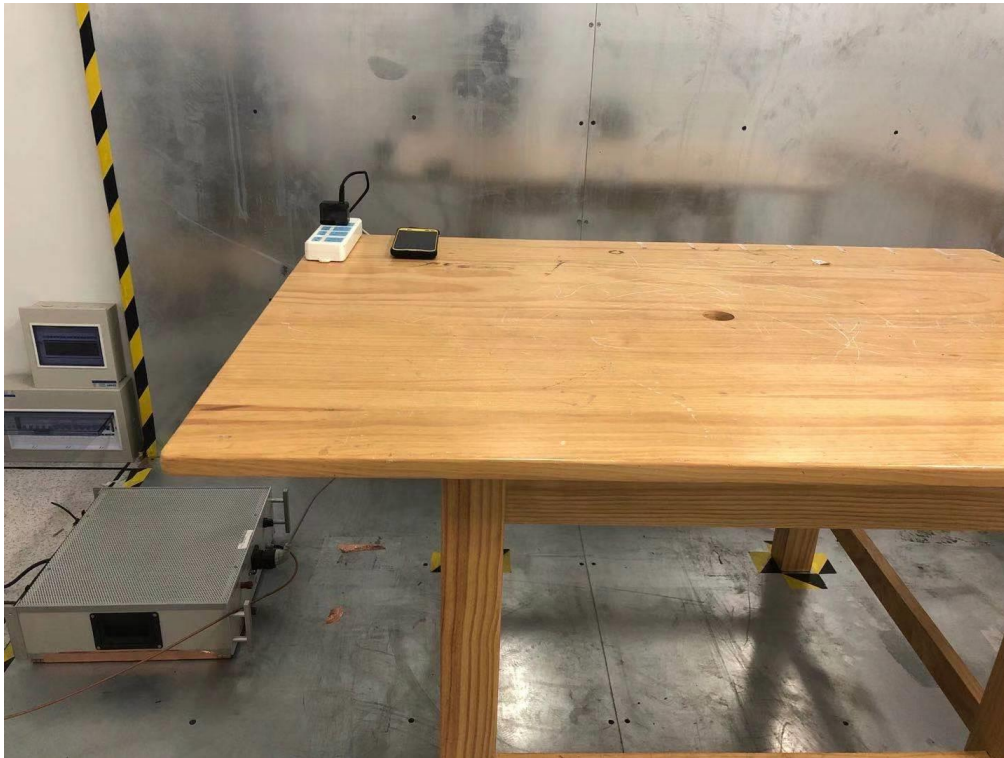
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5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



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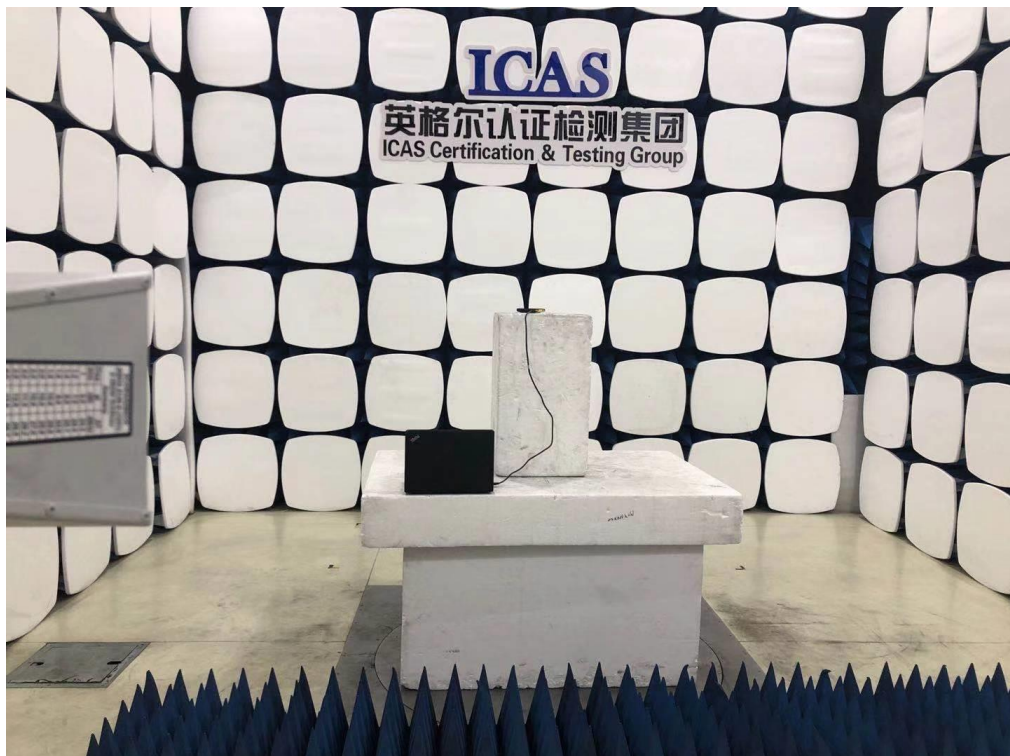
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5.4 Set-up for Spurious Emissions below 1GHz



5.5 Set-up for Spurious Emissions above 1GHz



End of the report