

TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 31 of 54

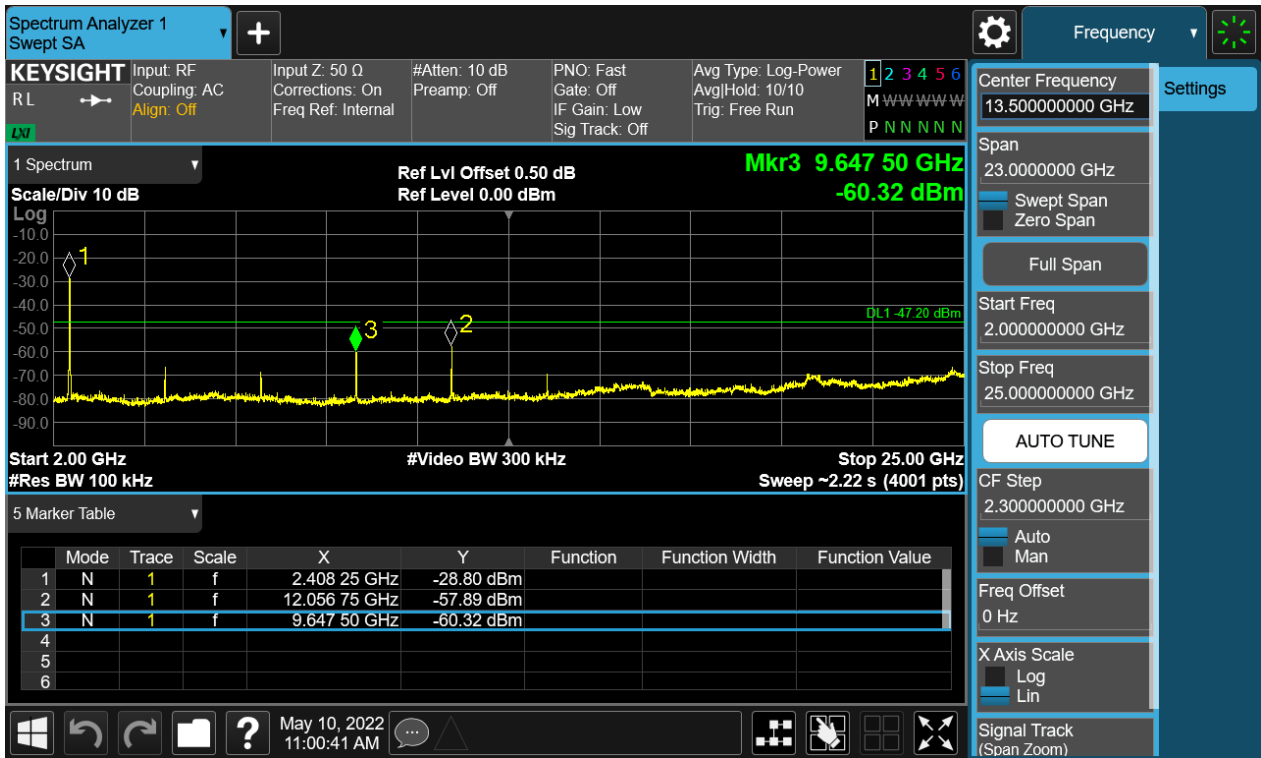
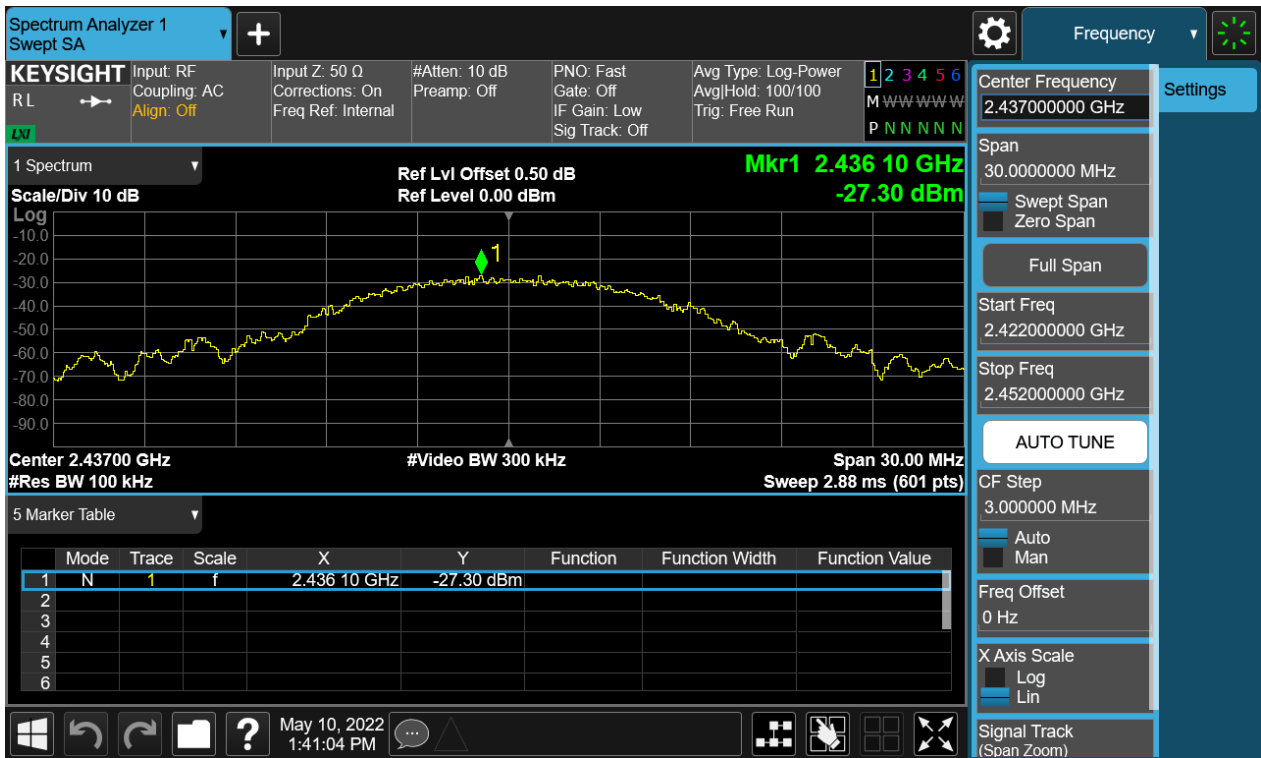


Figure 31: Conducted Spurious Emission & Authorized-band band-edge, 802.11b, 2437MHz Carrier Level



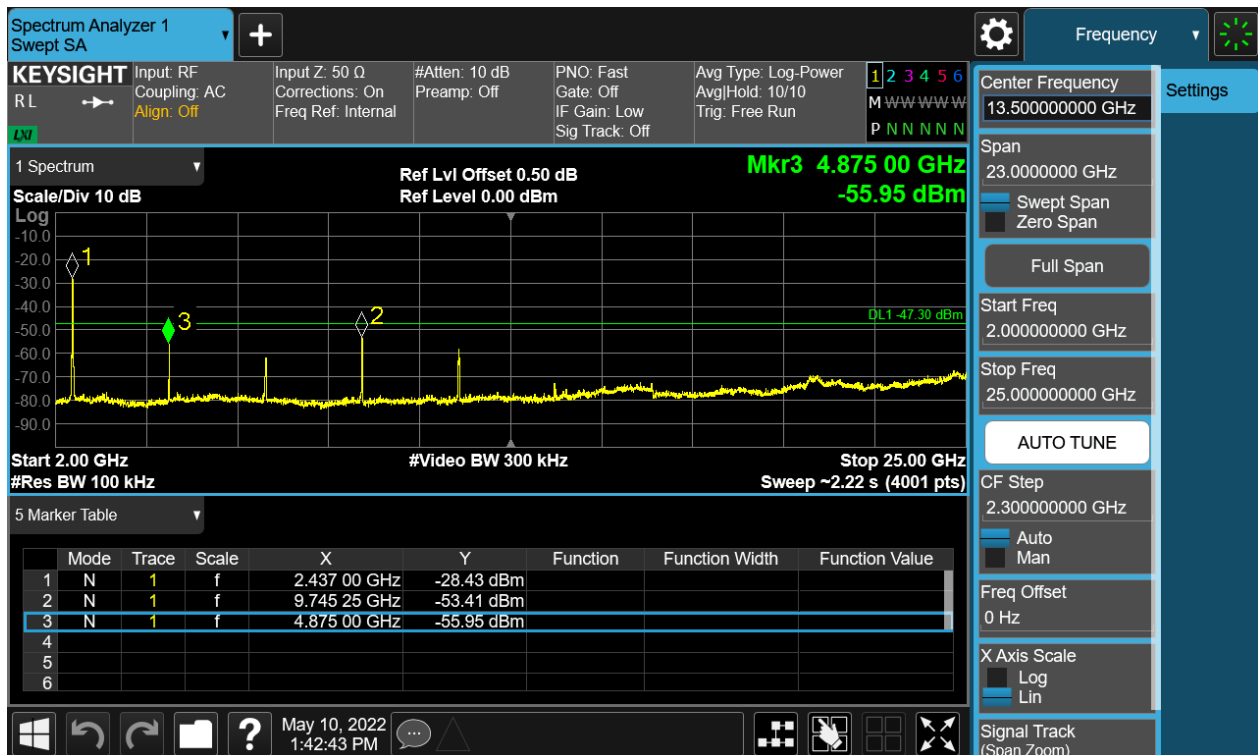
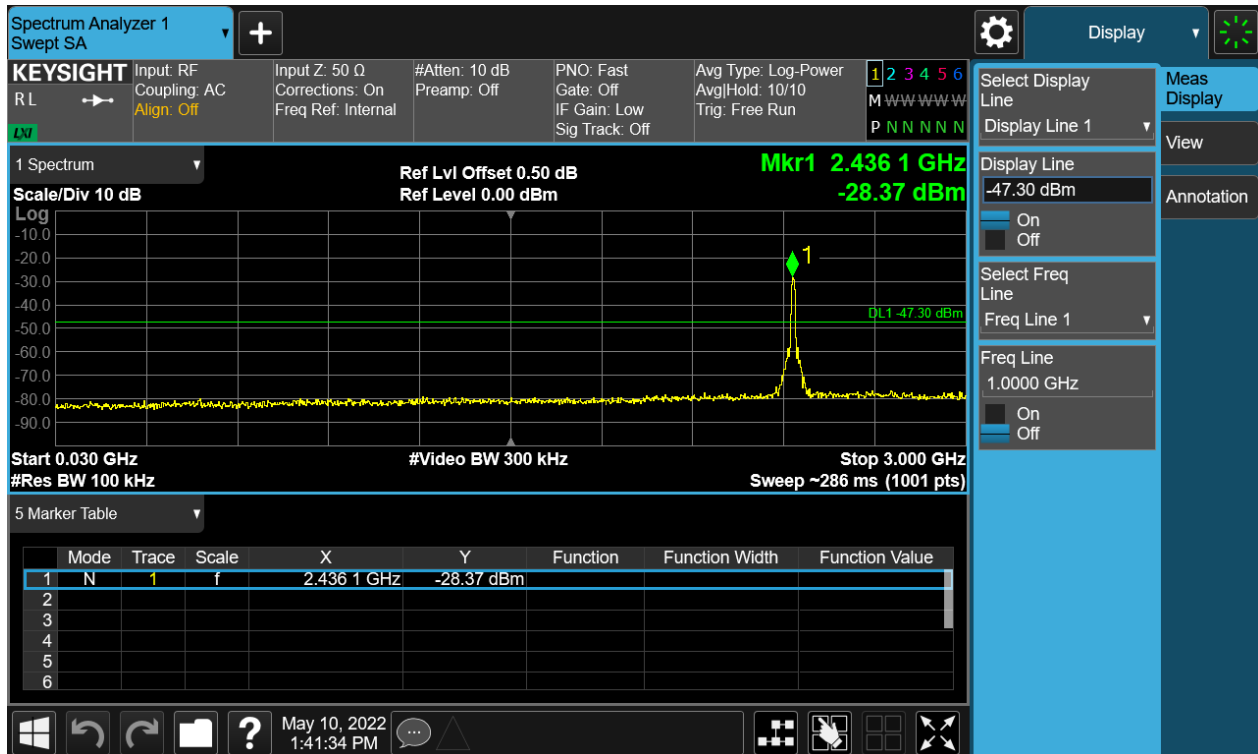
TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 32 of 54

Conducted spurious emissions 30MHz-25GHz



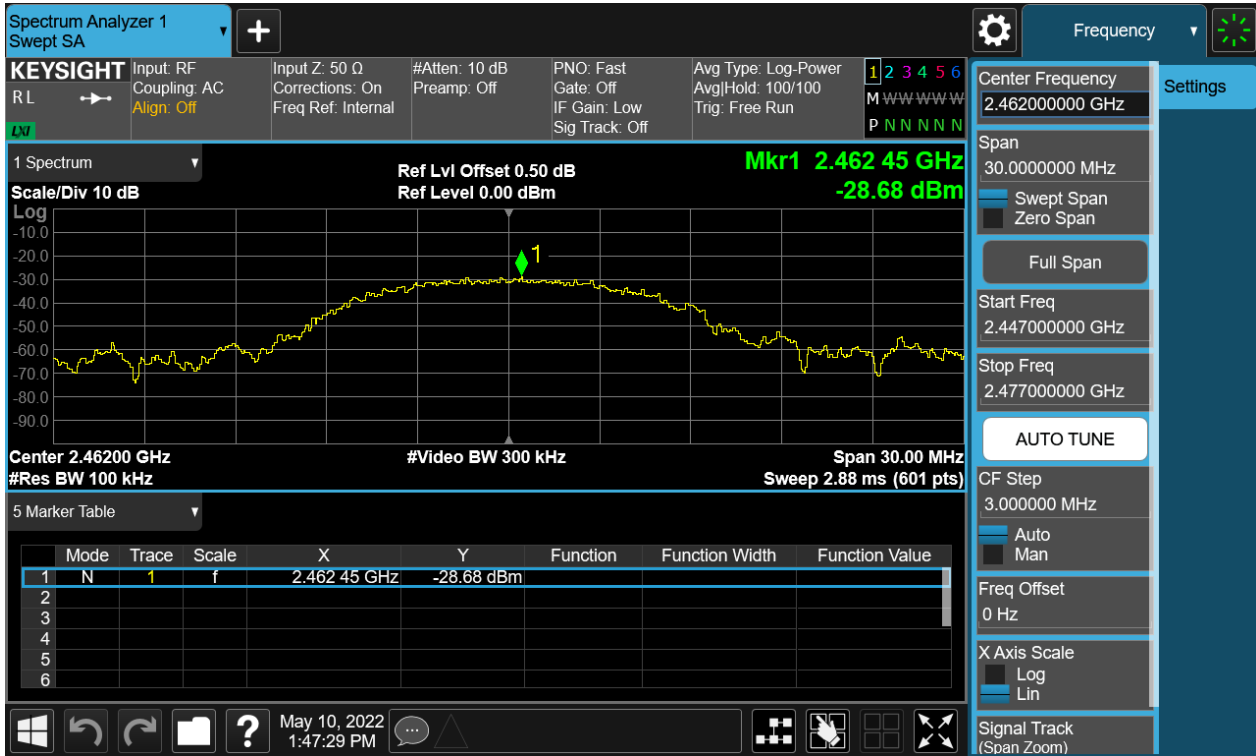
TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 33 of 54

Figure 32: Conducted Spurious Emission & Authorized-band band-edge, 802.11b, 2462MHz Carrier Level



Band Edge



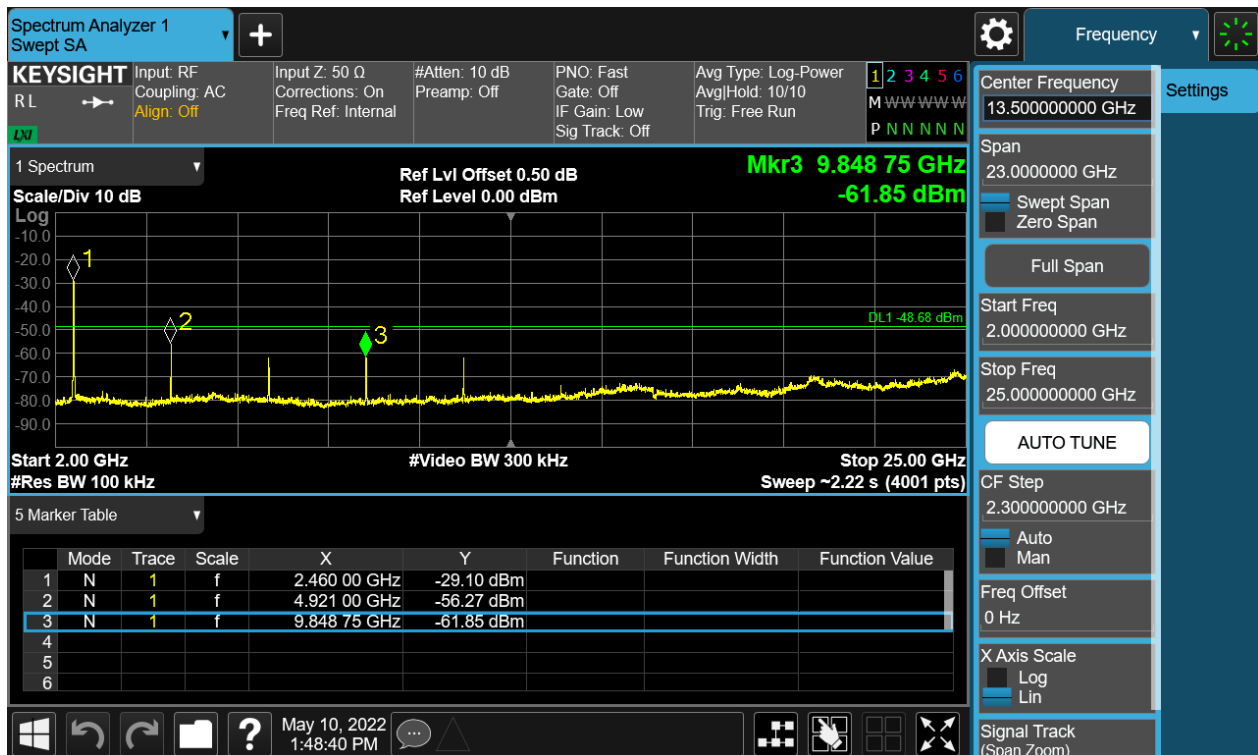
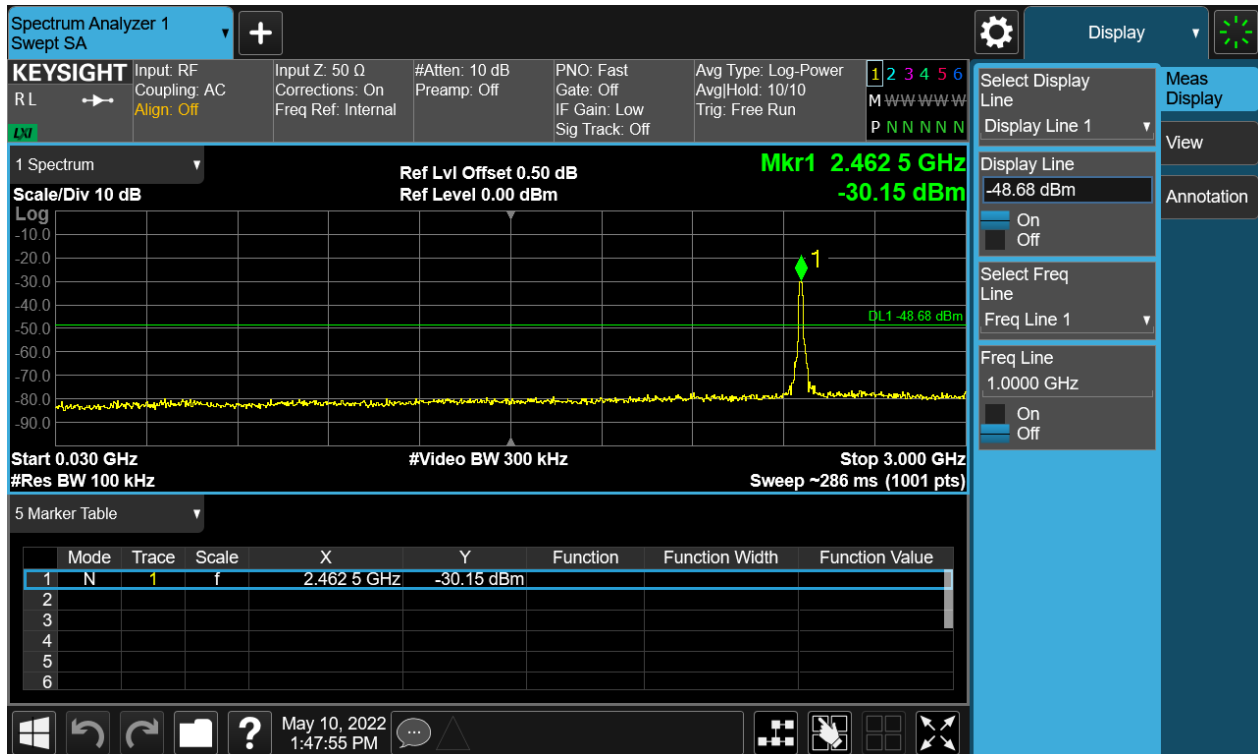
TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 34 of 54

Conducted spurious emissions 30MHz-25GHz



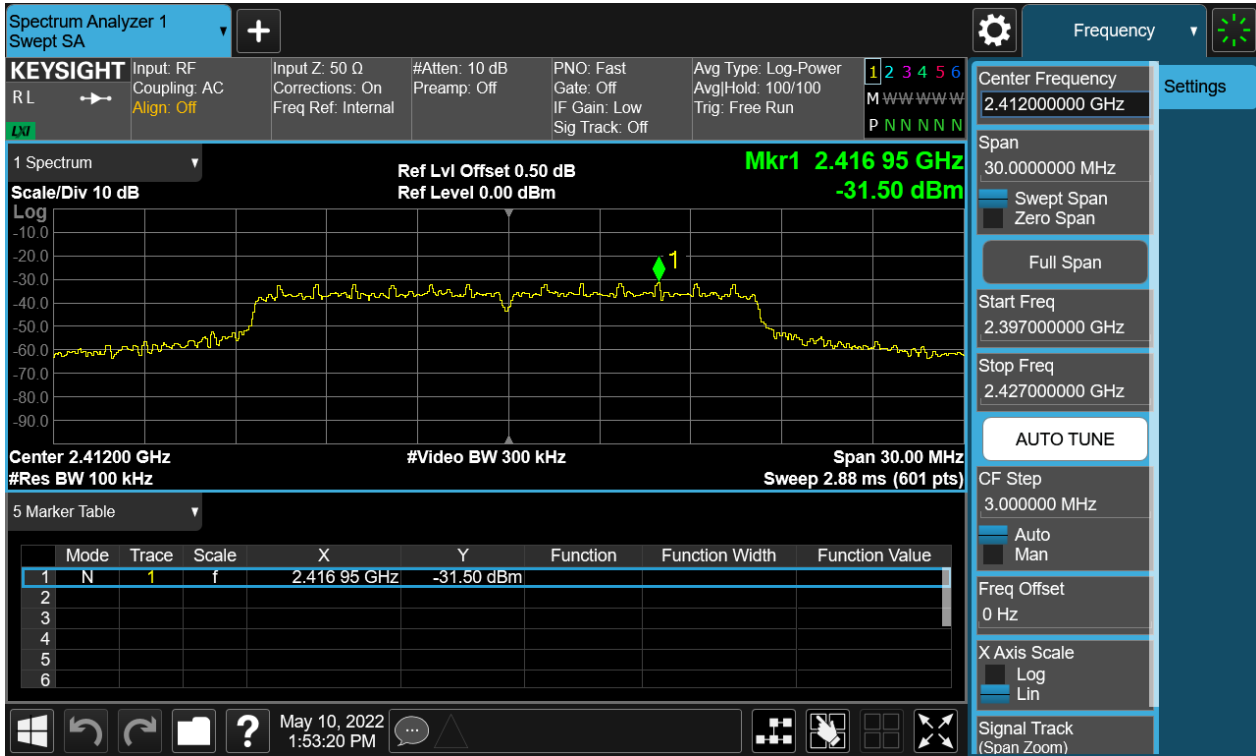
TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 35 of 54

Figure 33: Conducted Spurious Emission & Authorized-band band-edge, 802.11g, 2412MHz Carrier Level



Band Edge



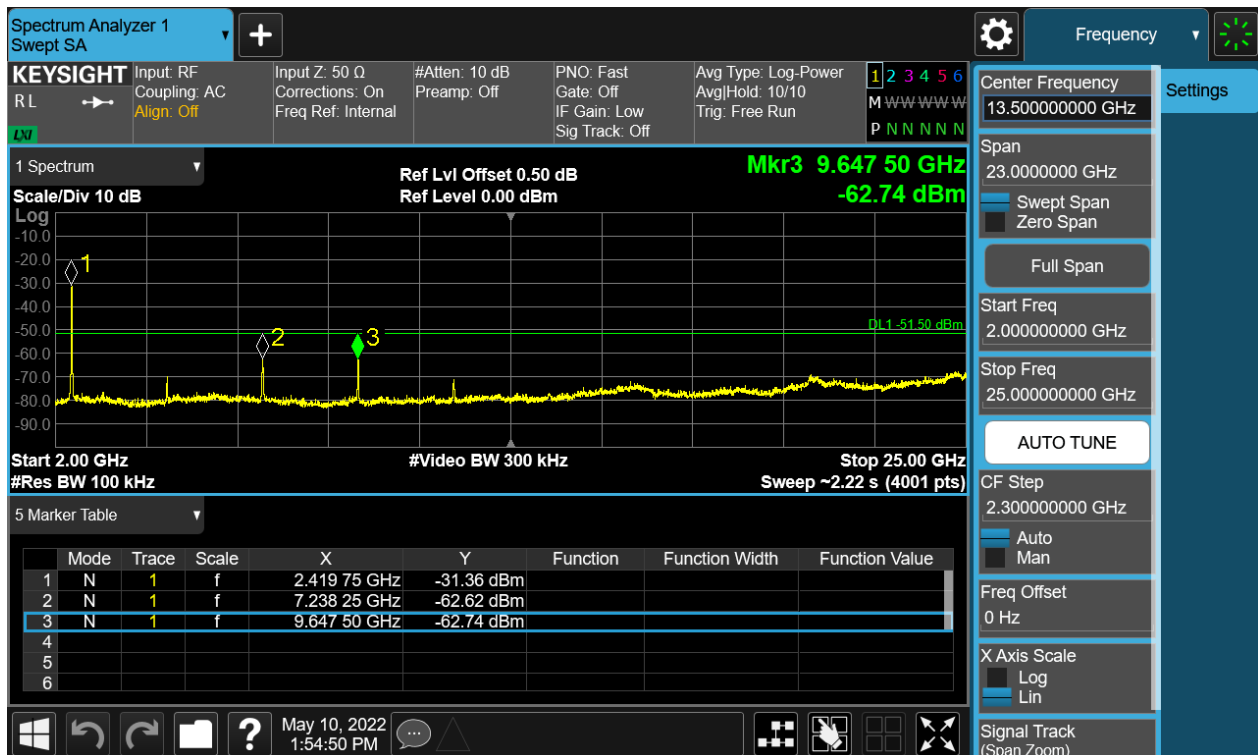
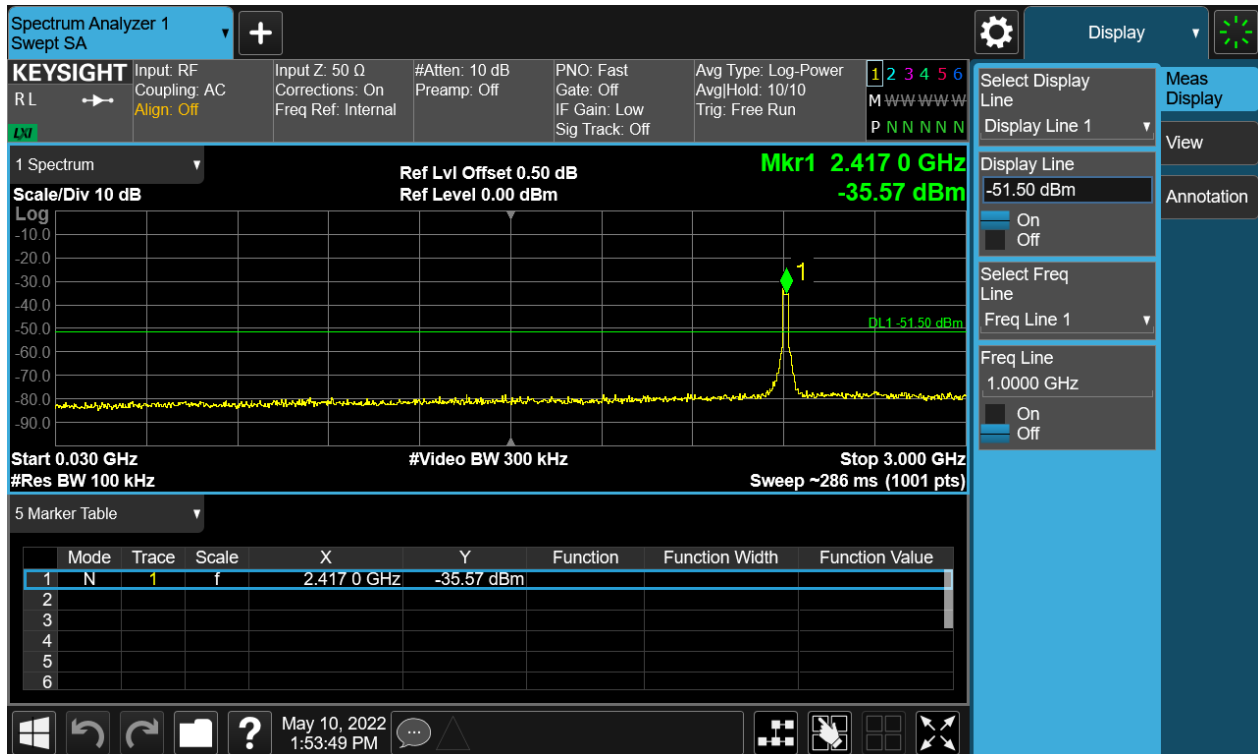
TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 36 of 54

Conducted spurious emissions 30MHz-25GHz



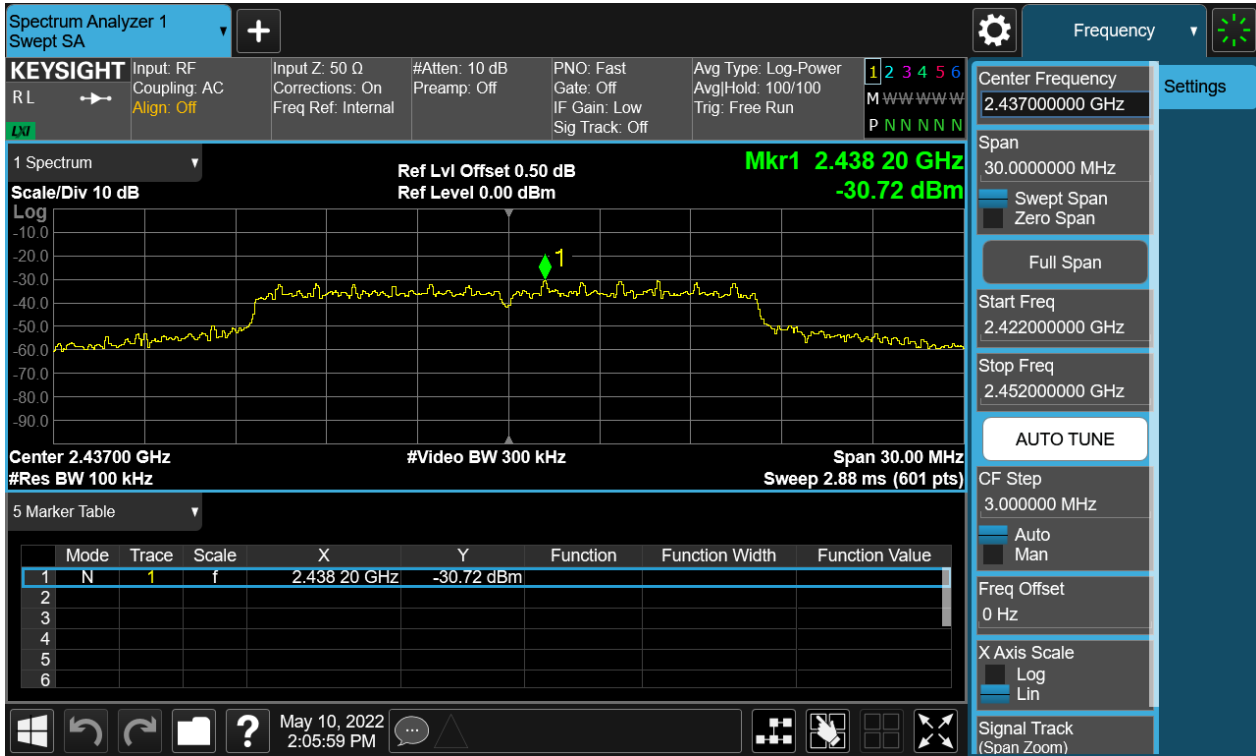
TEST REPORT

Report No.: SHE21110074-02AE

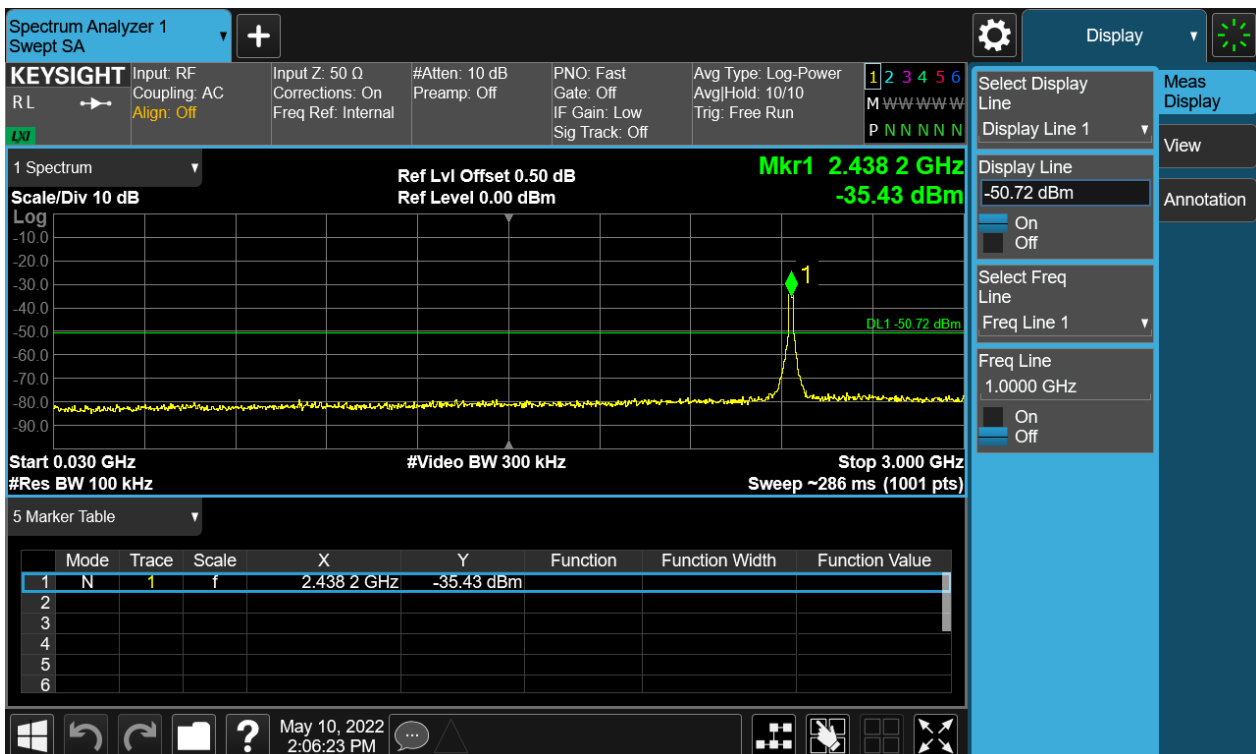
Date: 2022-06-16

Page 37 of 54

Figure 34: Conducted Spurious Emission & Authorized-band band-edge, 802.11g, 2437MHz Carrier Level



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 38 of 54

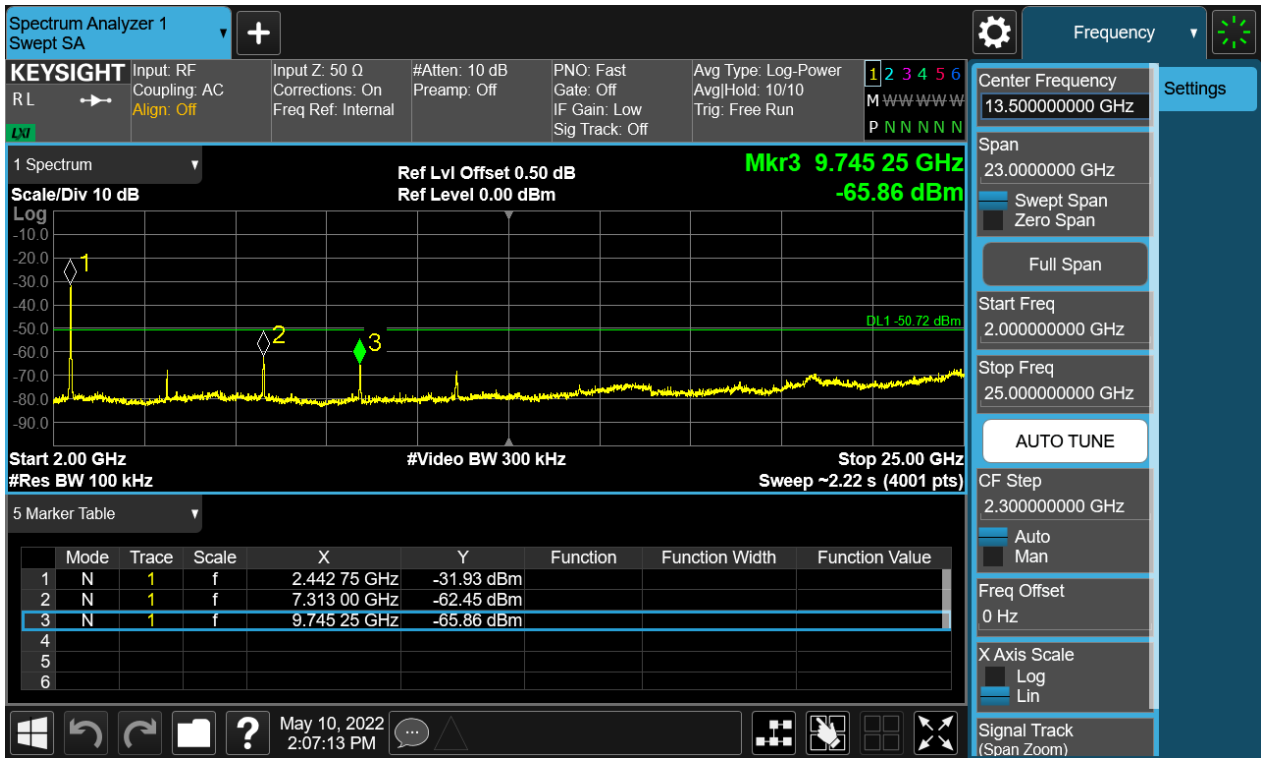
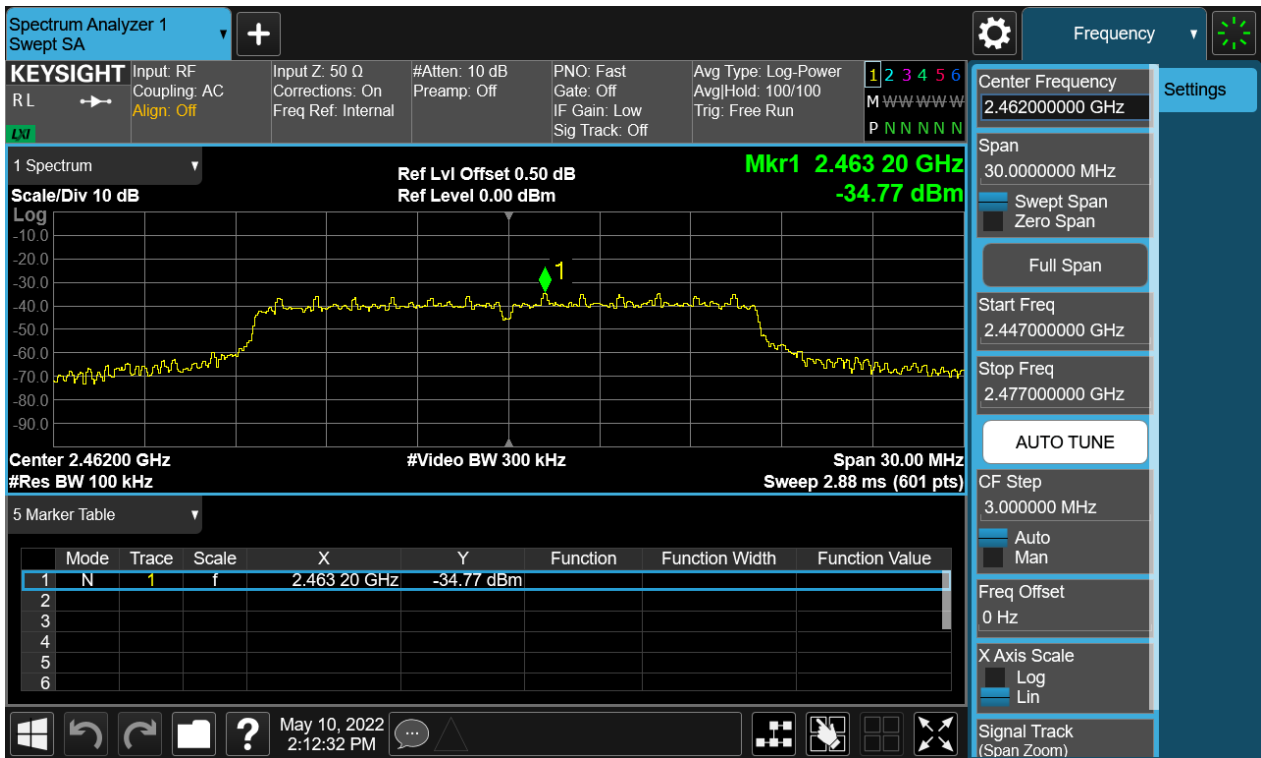


Figure 35: Conducted Spurious Emission & Authorized-band band-edge, 802.11g, 2462MHz Carrier Level



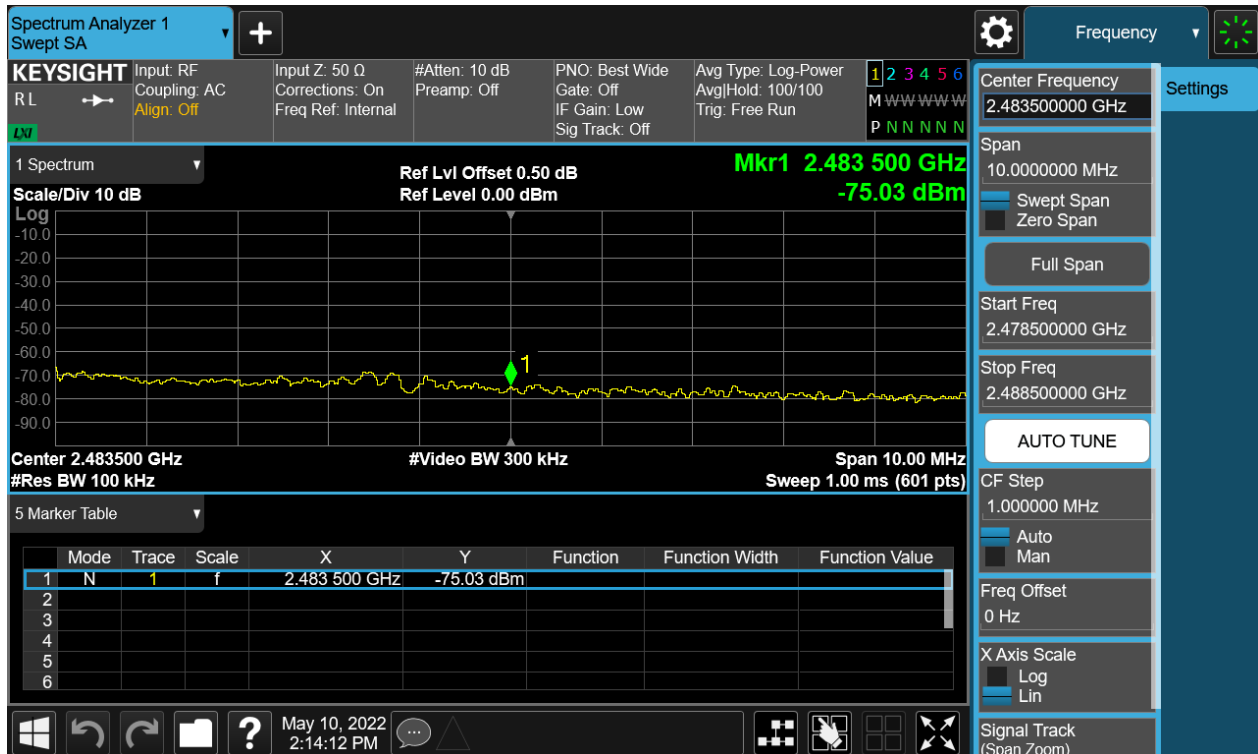
TEST REPORT

Report No.: SHE21110074-02AE

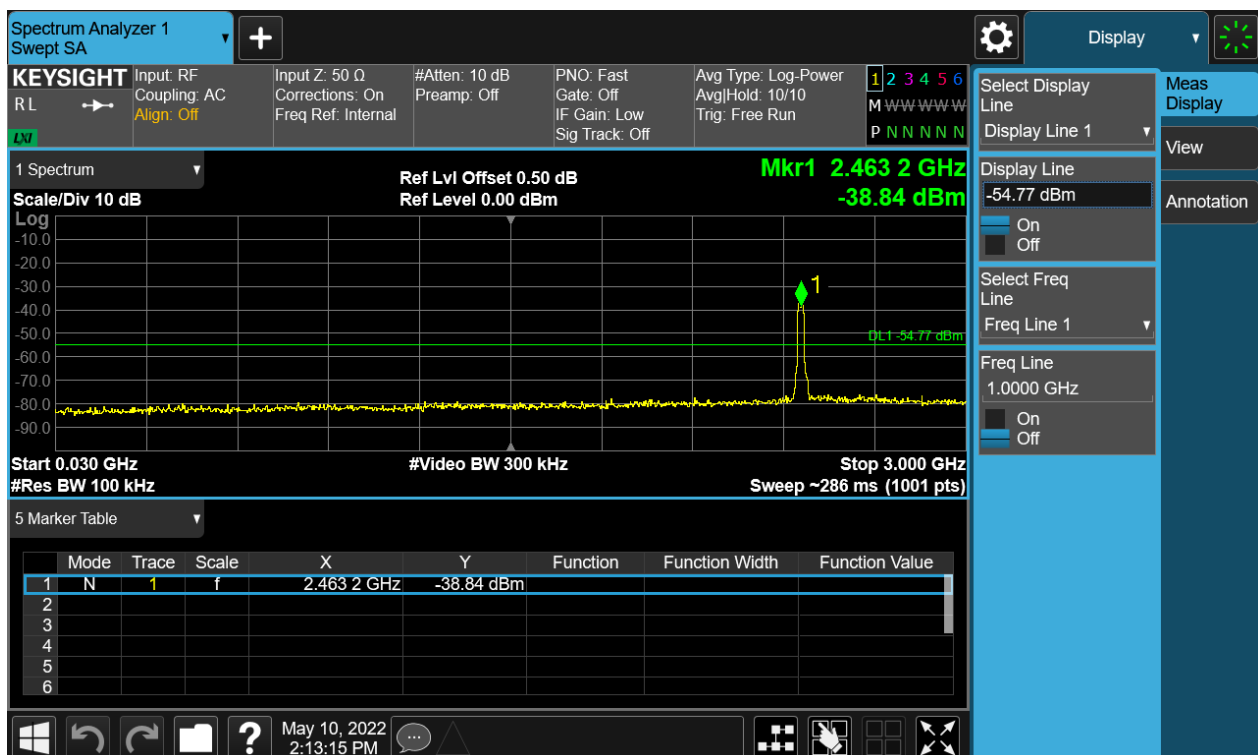
Date: 2022-06-16

Page 39 of 54

Band Edge



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 40 of 54

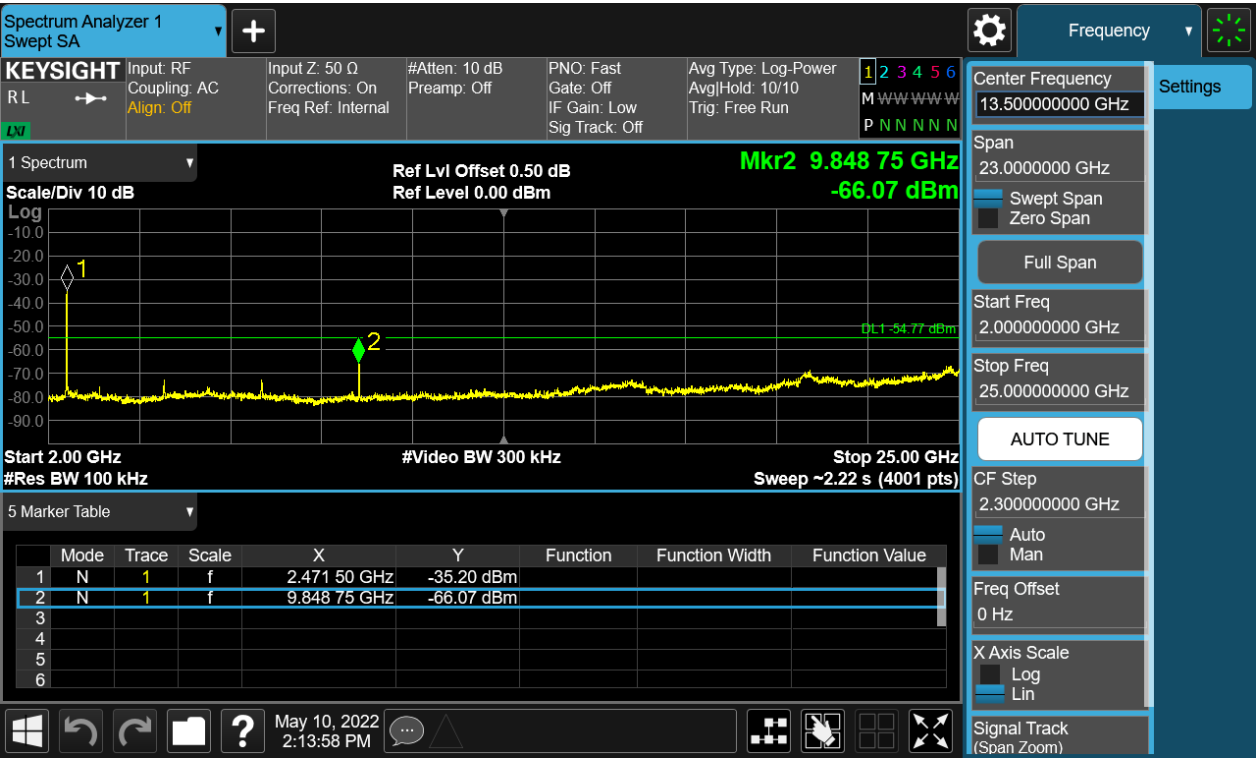
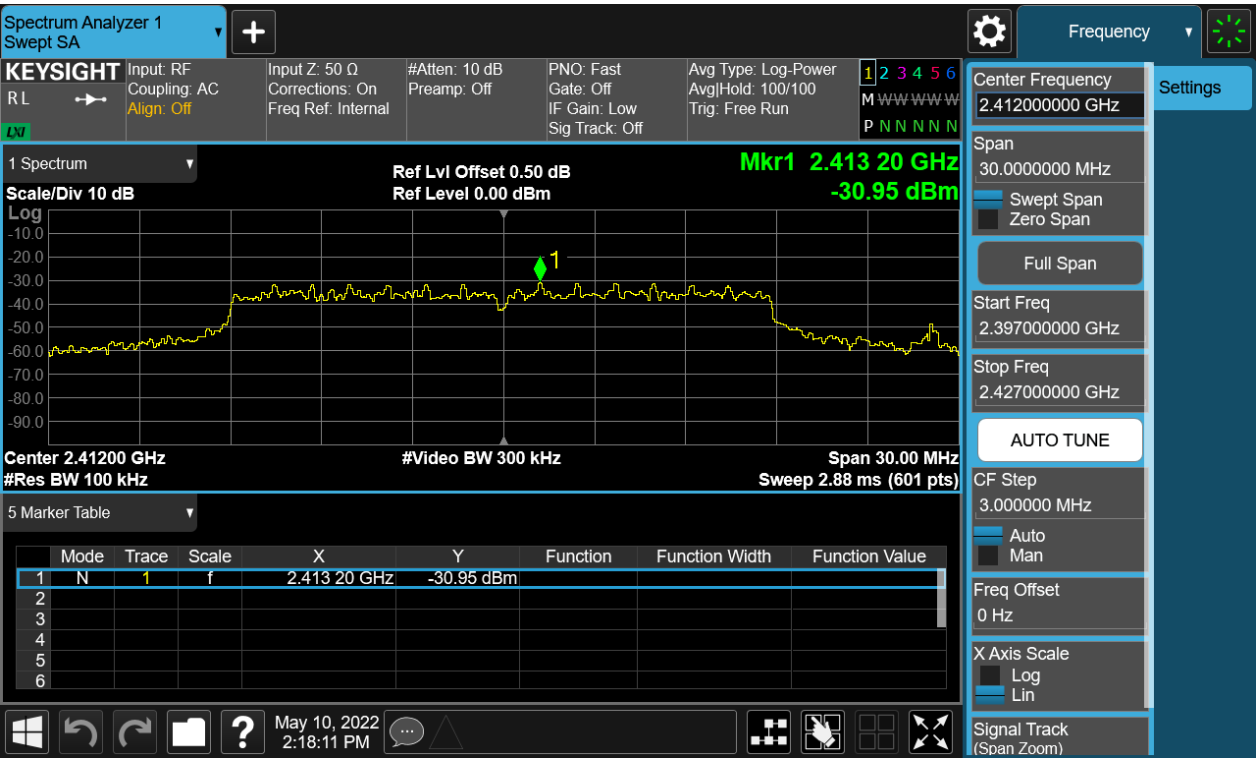


Figure 36: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2412MHz Carrier Level



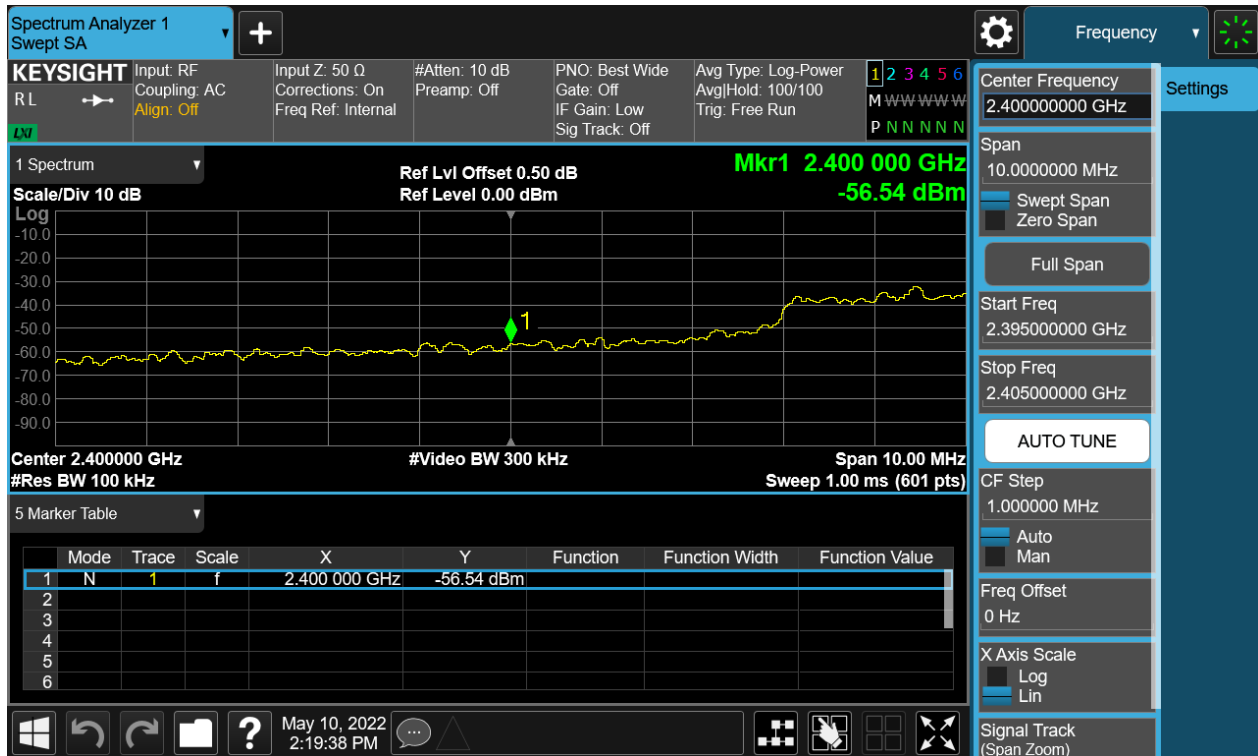
TEST REPORT

Report No.: SHE21110074-02AE

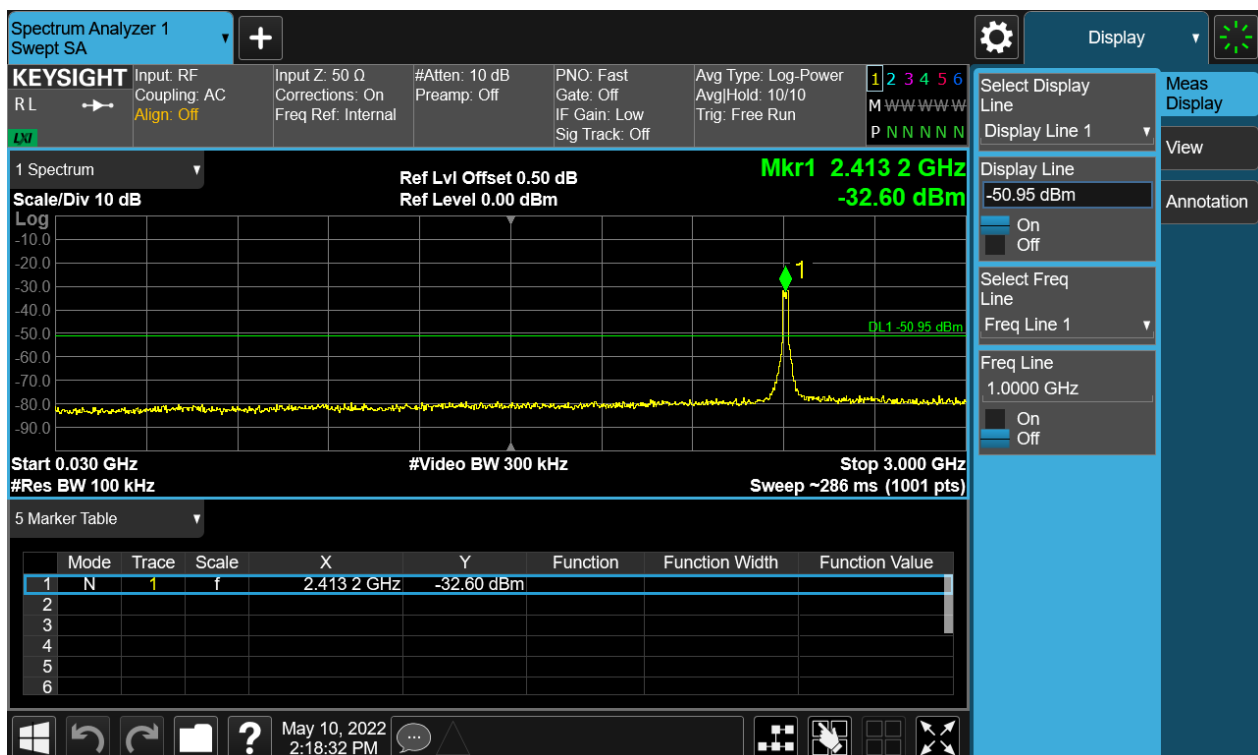
Date: 2022-06-16

Page 41 of 54

Band Edge



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE21110074-02AE Date: 2022-06-16 Page 42 of 54

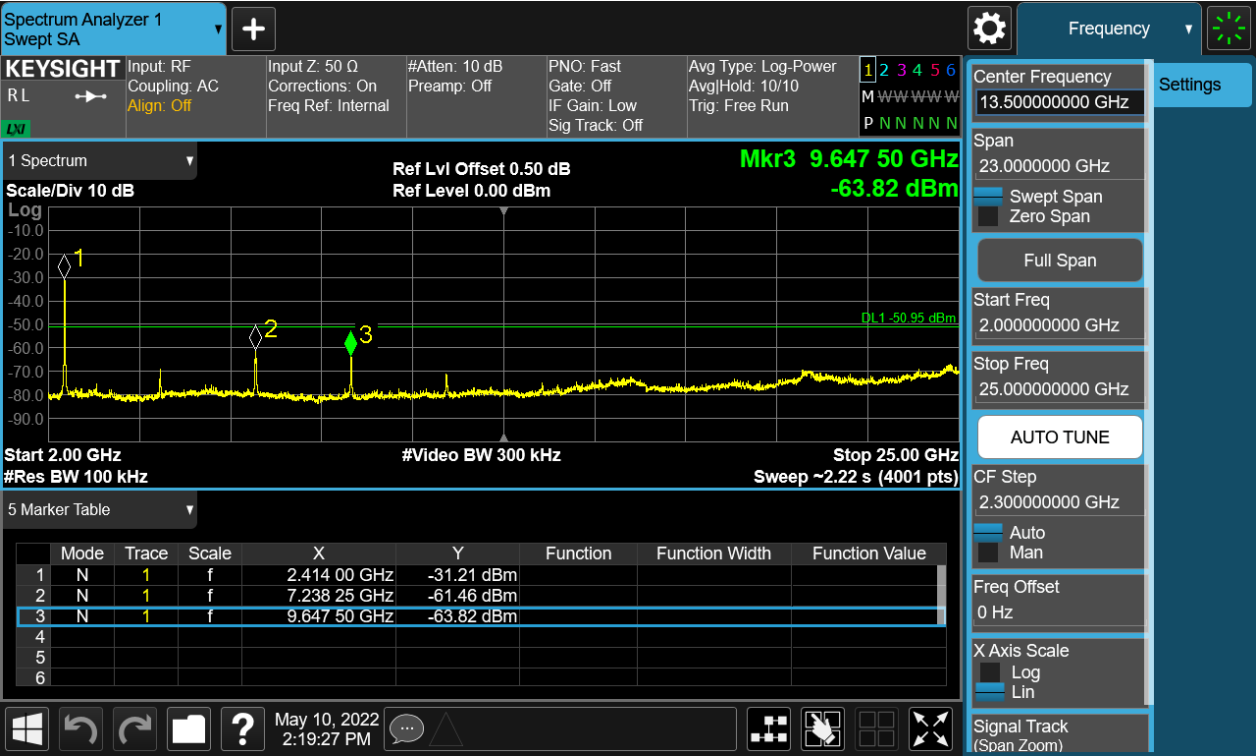
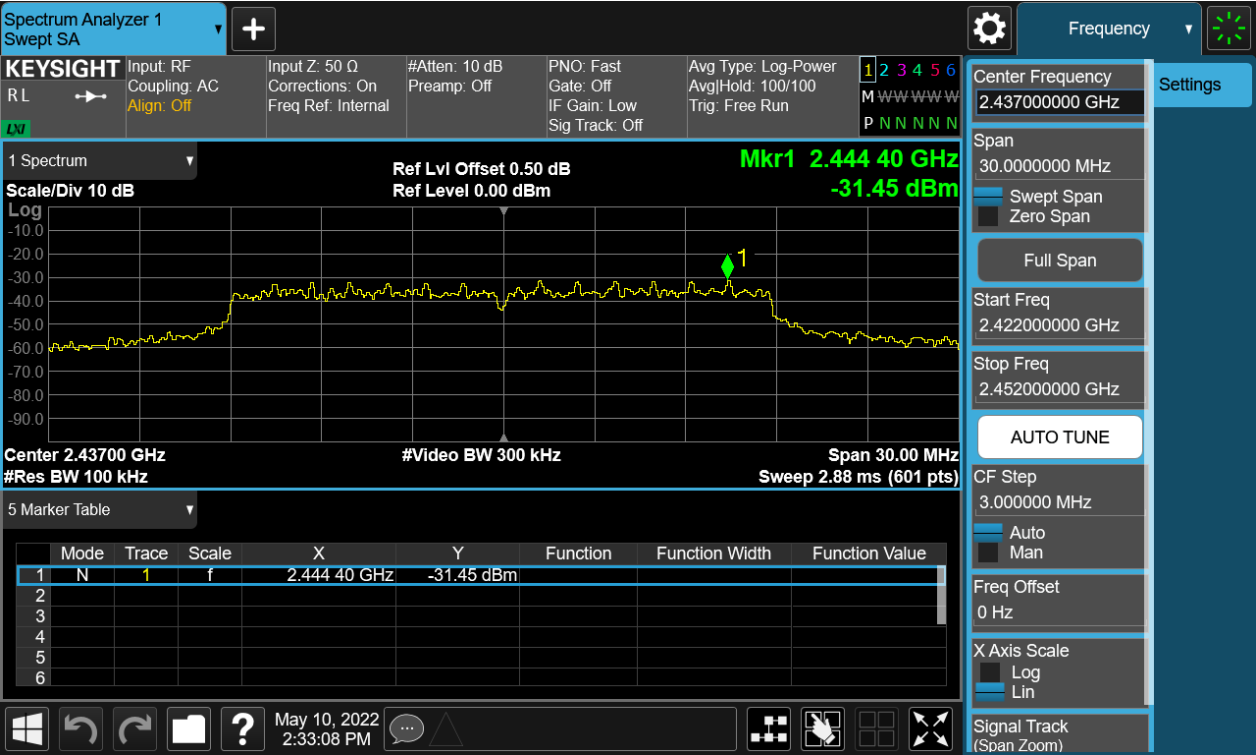


Figure 37: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2437MHz Carrier Level



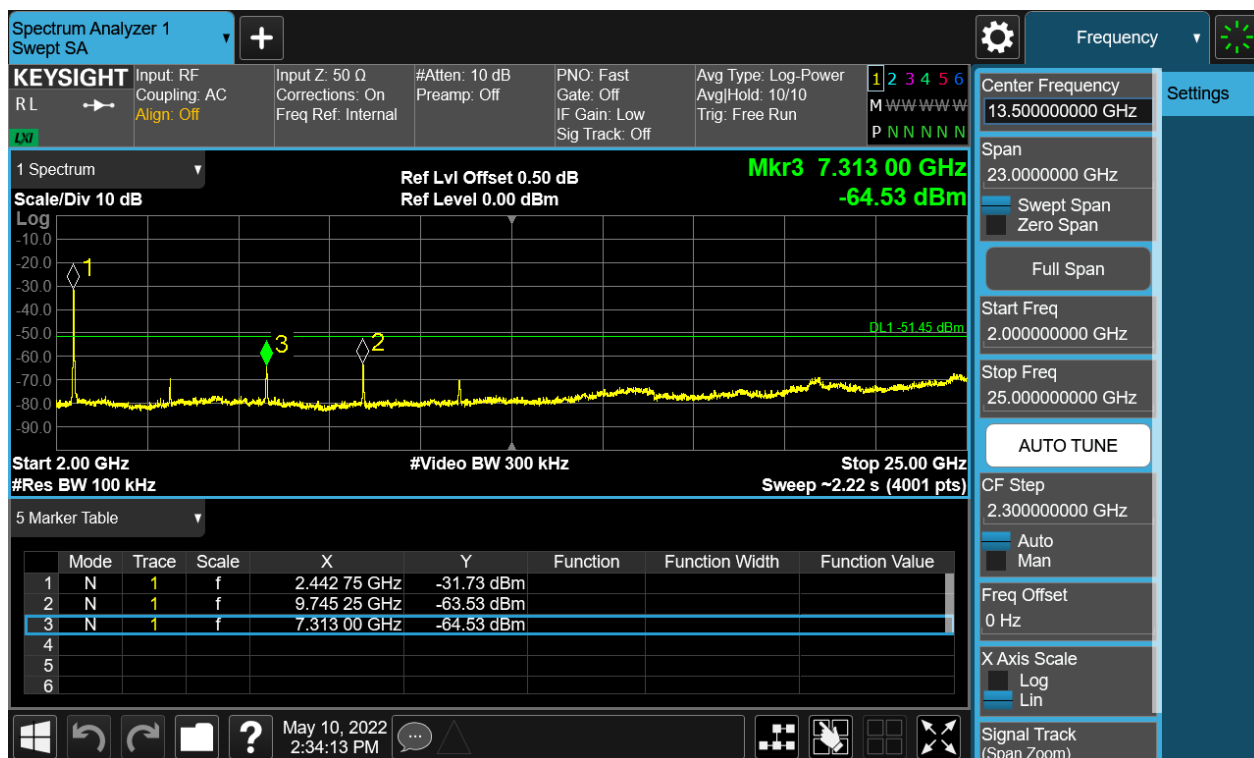
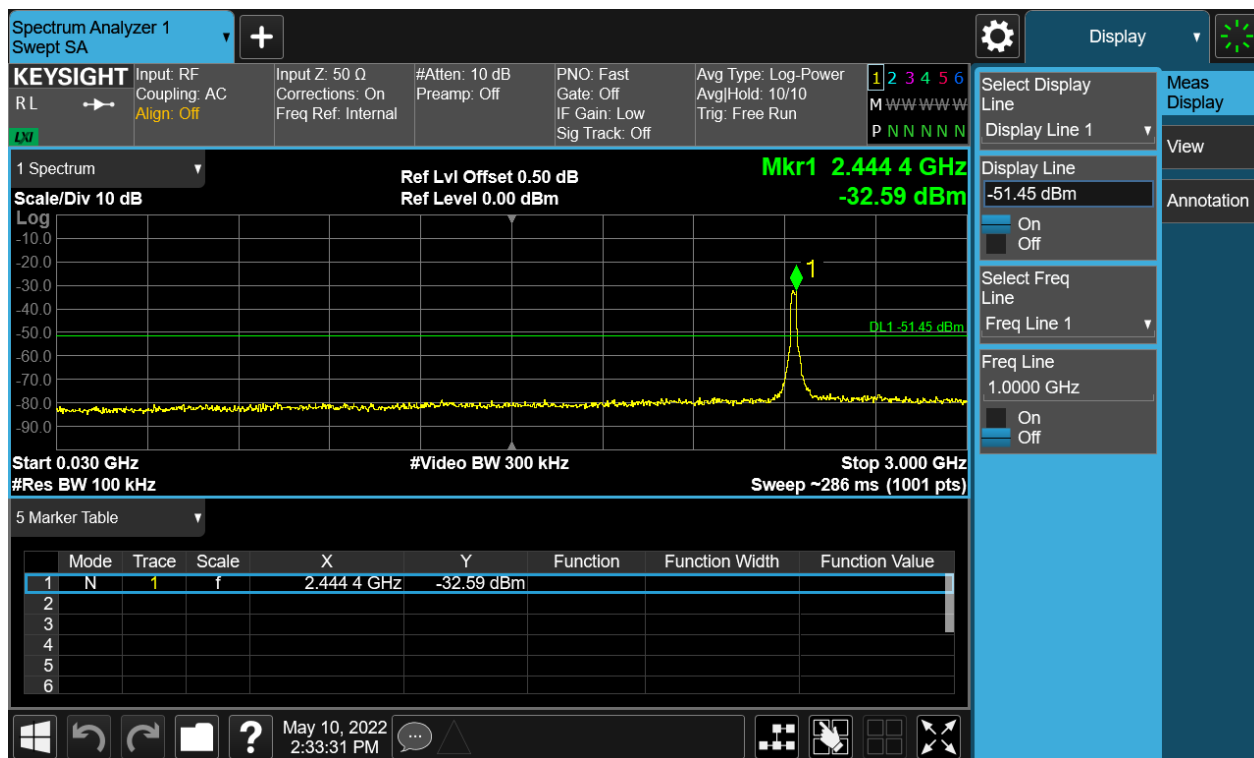
TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 43 of 54

Conducted spurious emissions 30MHz-25GHz



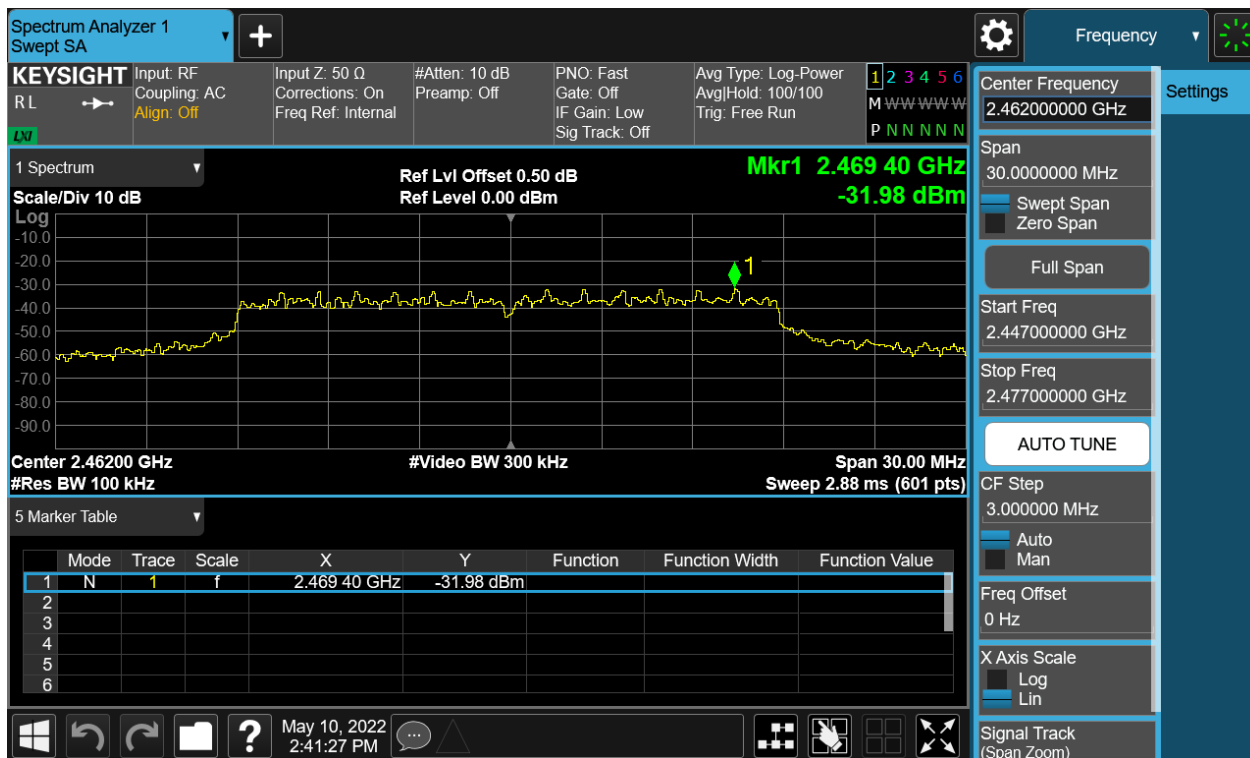
TEST REPORT

Report No.: SHE21110074-02AE

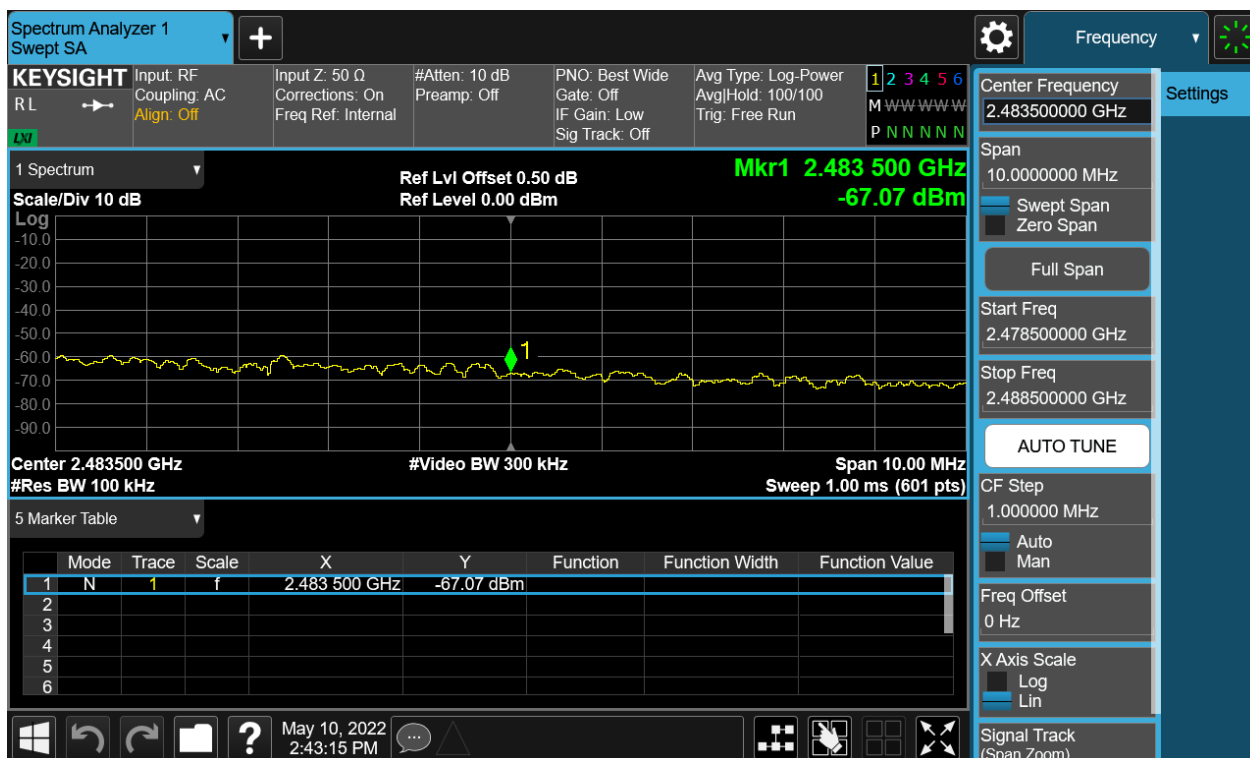
Date: 2022-06-16

Page 44 of 54

Figure 38: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2462MHz Carrier Level



Band Edge



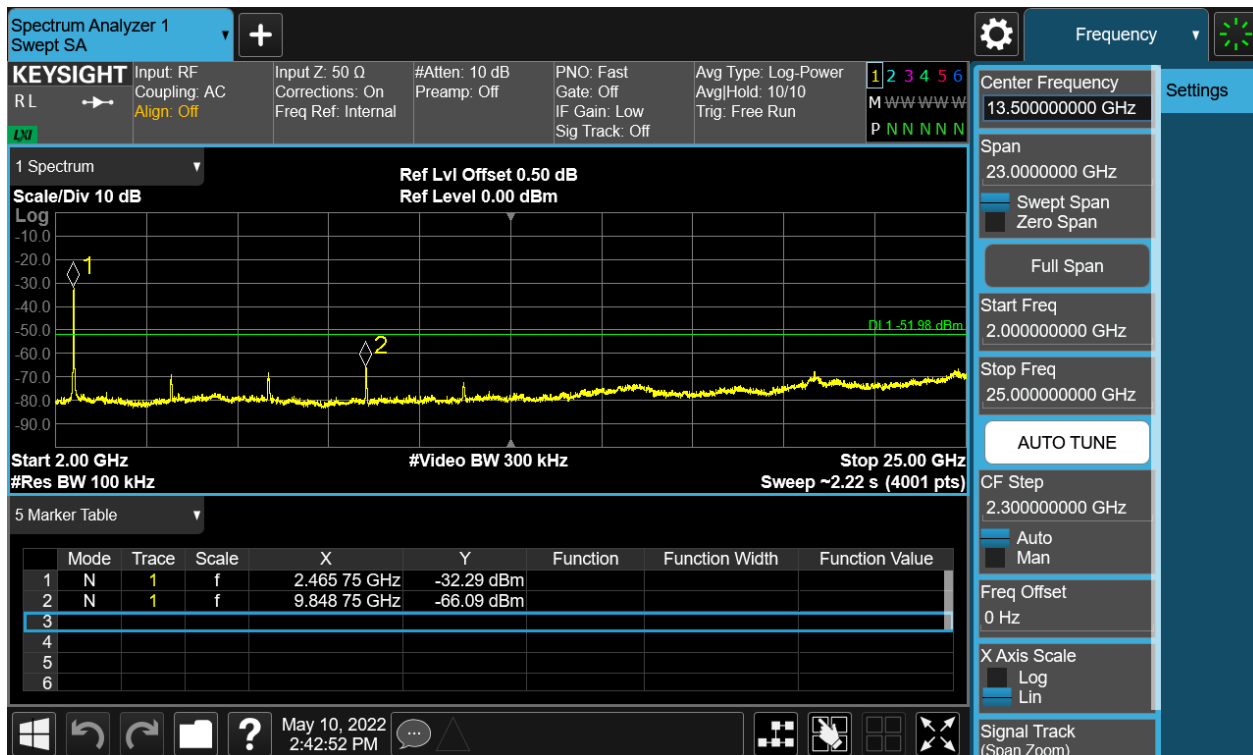
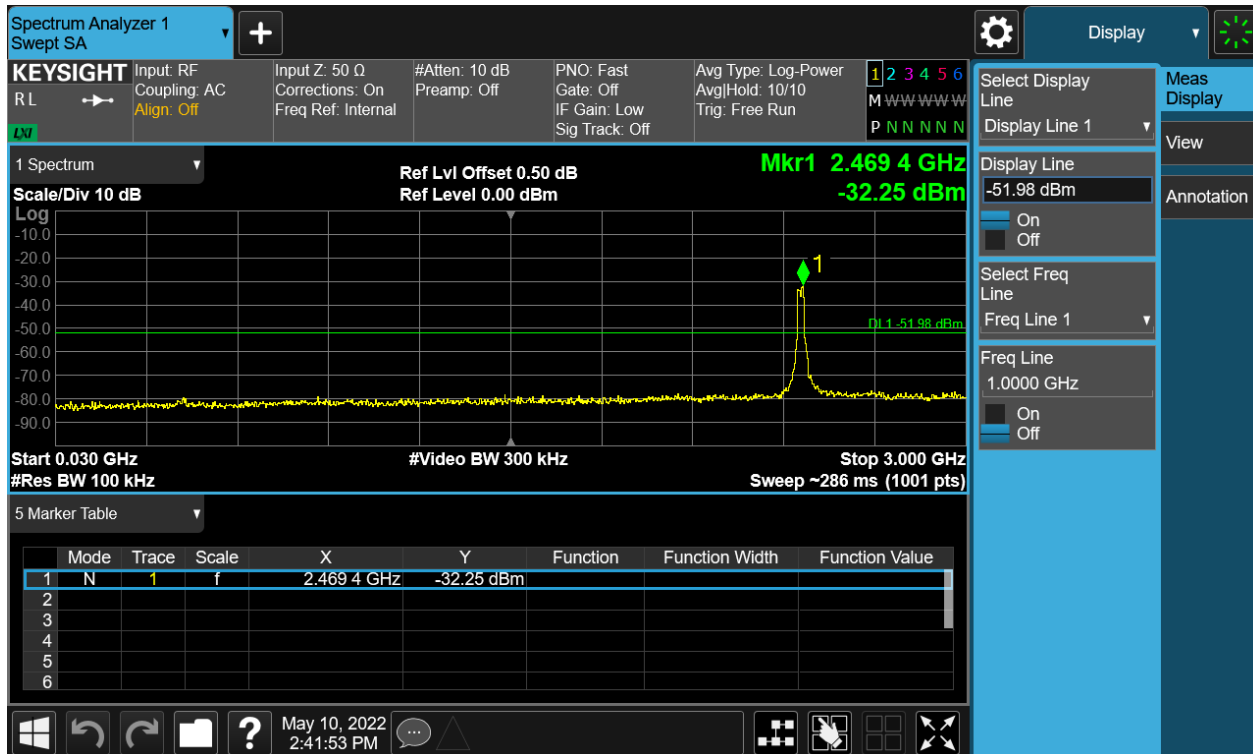
TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 45 of 54

Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 46 of 54

4.1.6 Radiated 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	: 19.8°C
Relative humidity	: 50%

Notes

Test plots please refer to the annex document "SHE21110074-02AE 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.

TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 47 of 54

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	: 19.8°C
Relative humidity	: 50%

Notes:

1. Test plots please refer to the annex document "SHE21110074-02AE DATA WIFI 2.4GHz-TX EXHIBIT A".
2. 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.

TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 48 of 54

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	: 51%

For details refer to following test plot.

TEST REPORT

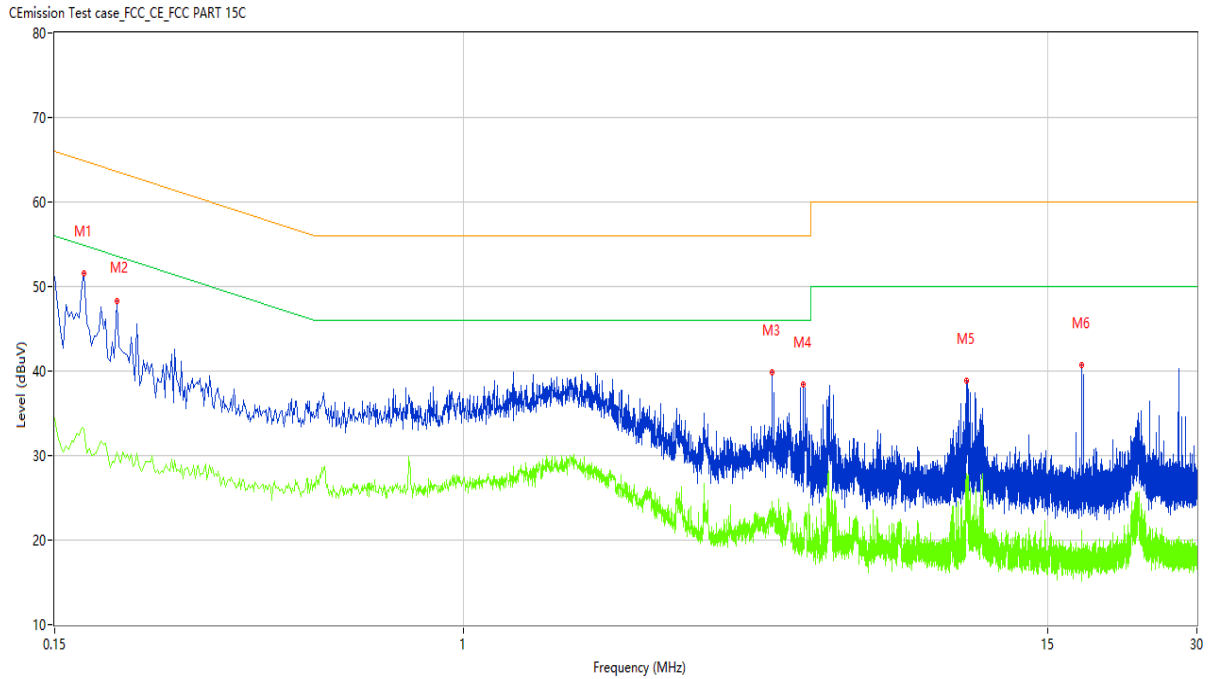
Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 49 of 54

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

Figure 39: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.172	54.62	10.25	64.86	-10.24	Peak	L	Pass
1*	0.172	46.79	10.25	64.86	-18.07	QP	L	Pass
1**	0.172	33.10	10.25	54.86	-21.76	AV	L	Pass
2	0.200	50.14	10.23	63.61	-13.47	Peak	L	Pass
2*	0.200	42.85	10.23	63.61	-20.76	QP	L	Pass
2**	0.200	30.48	10.23	53.61	-23.13	AV	L	Pass
3	4.178	32.18	10.21	56.00	-23.82	Peak	L	Pass
3*	4.178	27.12	10.21	56.00	-28.88	QP	L	Pass
3**	4.178	24.60	10.21	46.00	-21.40	AV	L	Pass
4	4.836	33.07	10.25	56.00	-22.93	Peak	L	Pass
4*	4.836	27.02	10.25	56.00	-28.98	QP	L	Pass
4**	4.836	20.21	10.25	46.00	-25.79	AV	L	Pass
5	10.286	37.60	10.37	60.00	-22.40	Peak	L	Pass
5*	10.286	30.71	10.37	60.00	-29.29	QP	L	Pass
5**	10.286	27.28	10.37	50.00	-22.72	AV	L	Pass
6	17.592	23.39	10.71	60.00	-36.61	Peak	L	Pass
6*	17.592	17.09	10.71	60.00	-42.91	QP	L	Pass
6**	17.592	21.19	10.71	50.00	-28.81	AV	L	Pass

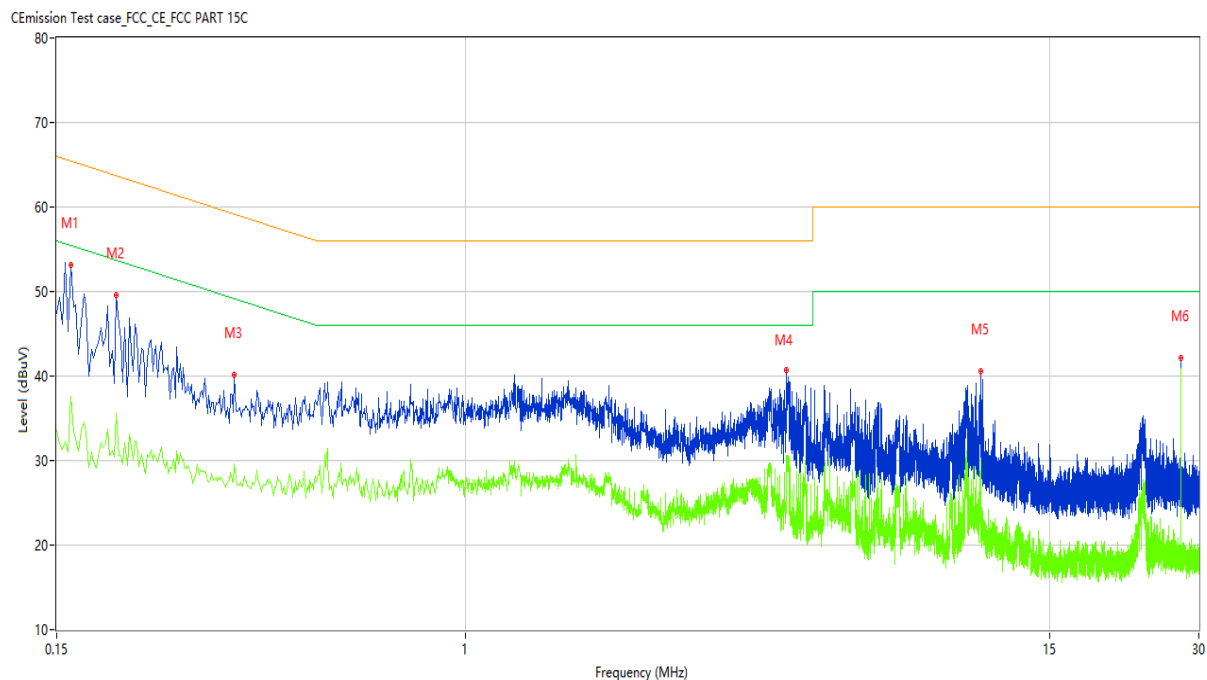
TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 50 of 54

Figure 40: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.160	57.78	10.26	65.46	-7.68	Peak	N	Pass
1*	0.160	51.13	10.26	65.46	-14.33	QP	N	Pass
1**	0.160	37.55	10.26	55.46	-17.91	AV	N	Pass
2	0.198	50.35	10.23	63.69	-13.34	Peak	N	Pass
2*	0.198	44.02	10.23	63.69	-19.67	QP	N	Pass
2**	0.198	35.58	10.23	53.69	-18.11	AV	N	Pass
3	0.342	39.86	10.23	59.15	-19.29	Peak	N	Pass
3*	0.342	31.98	10.23	59.15	-27.17	QP	N	Pass
3**	0.342	29.63	10.23	49.15	-19.52	AV	N	Pass
4	4.430	40.10	10.23	56.00	-15.90	Peak	N	Pass
4*	4.430	34.66	10.23	56.00	-21.34	QP	N	Pass
4**	4.430	30.23	10.23	46.00	-15.77	AV	N	Pass
5	10.914	40.91	10.39	60.00	-19.09	Peak	N	Pass
5*	10.914	31.73	10.39	60.00	-28.27	QP	N	Pass
5**	10.914	29.55	10.39	50.00	-20.45	AV	N	Pass
6	27.646	26.62	11.05	60.00	-33.38	Peak	N	Pass
6*	27.646	18.77	11.05	60.00	-41.23	QP	N	Pass
6**	27.646	40.83	11.05	50.00	-9.17	AV	N	Pass

TEST REPORT

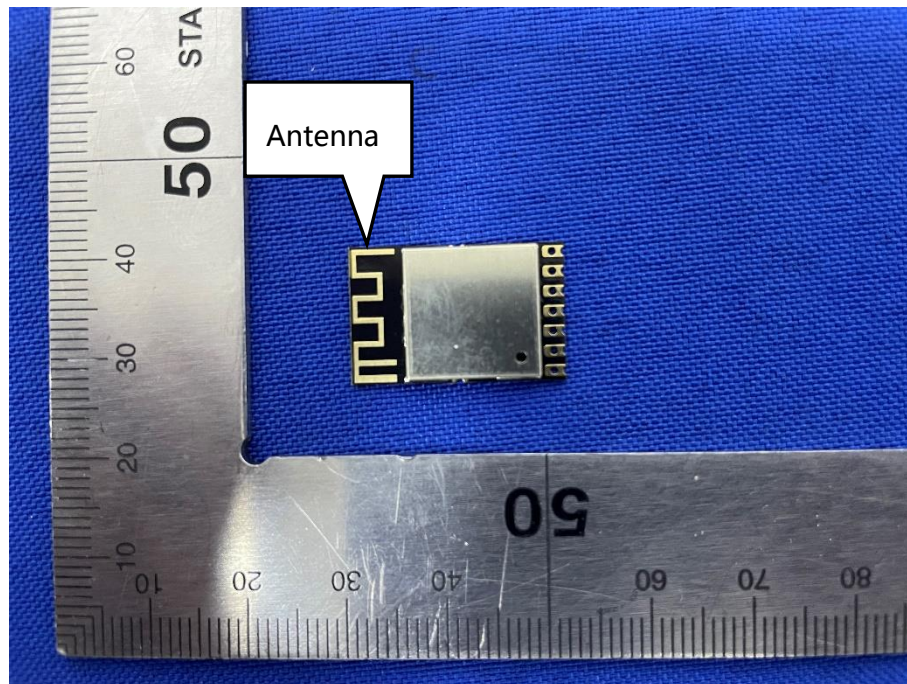
Report No.: SHE21110074-02AE

Date: 2022-06-16

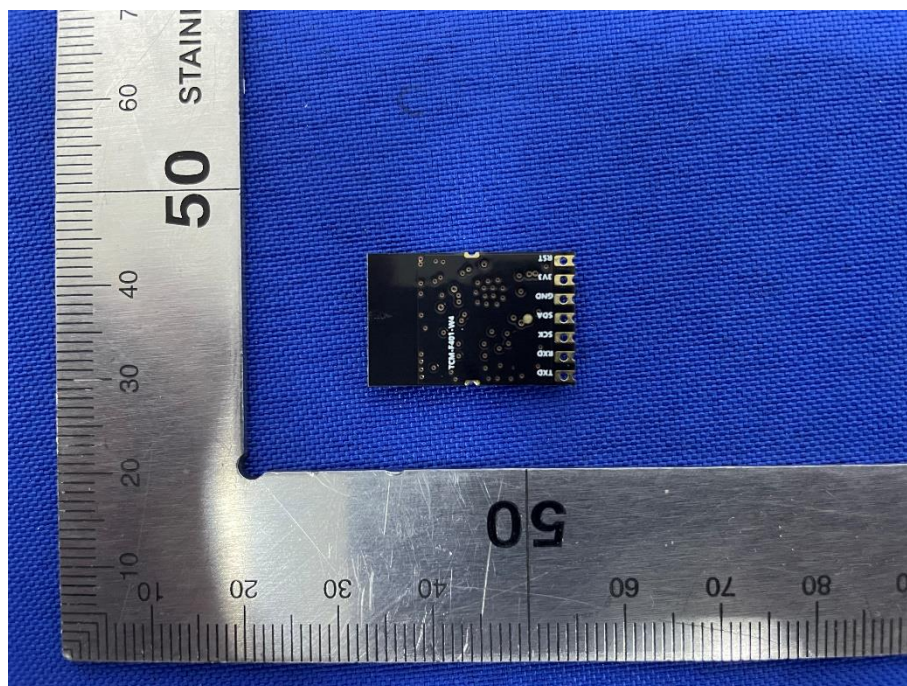
Page 51 of 54

5 Appendixes

5.1 Photographs of the Sample



Front of the sample



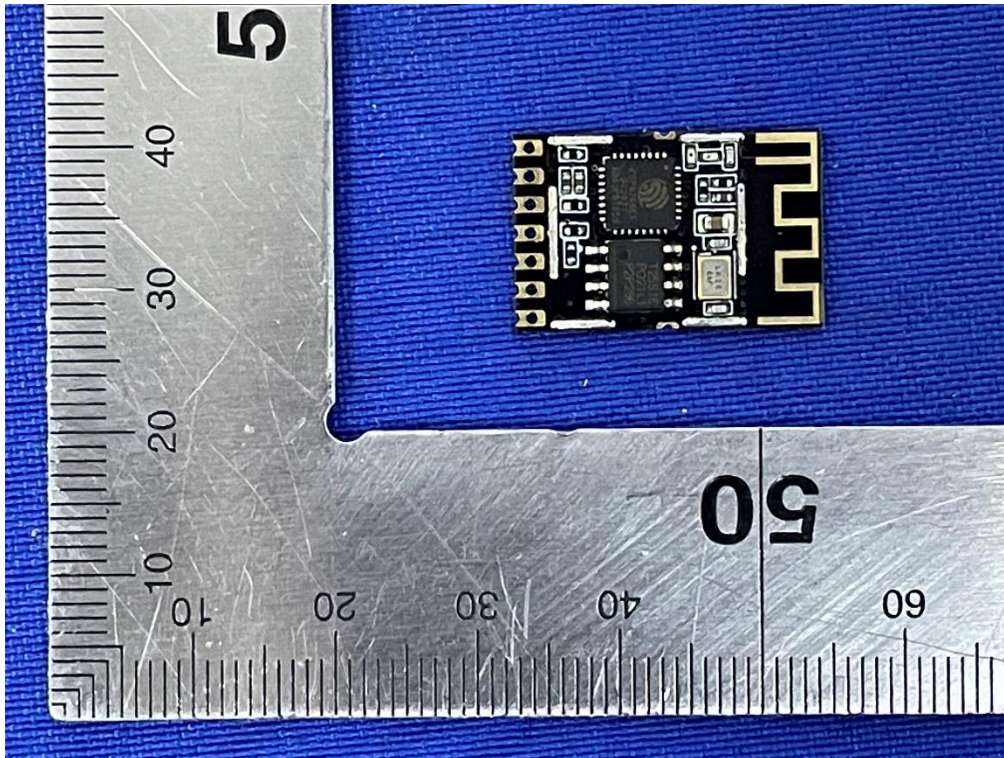
Rear of the sample

TEST REPORT

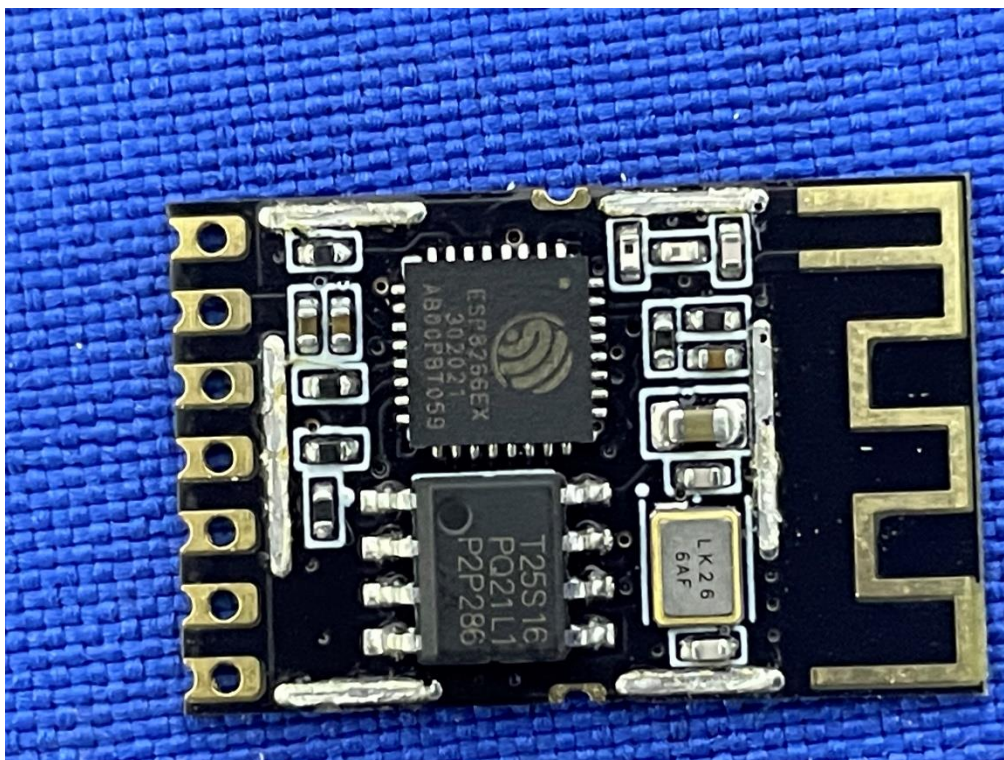
Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 52 of 54



Remove shield cover of the sample-1



Remove shield cover of the sample-2

TEST REPORT

Report No.: SHE21110074-02AE

Date: 2022-06-16

Page 53 of 54

5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



TEST REPORT

Report No.: SHE21110074-02AE

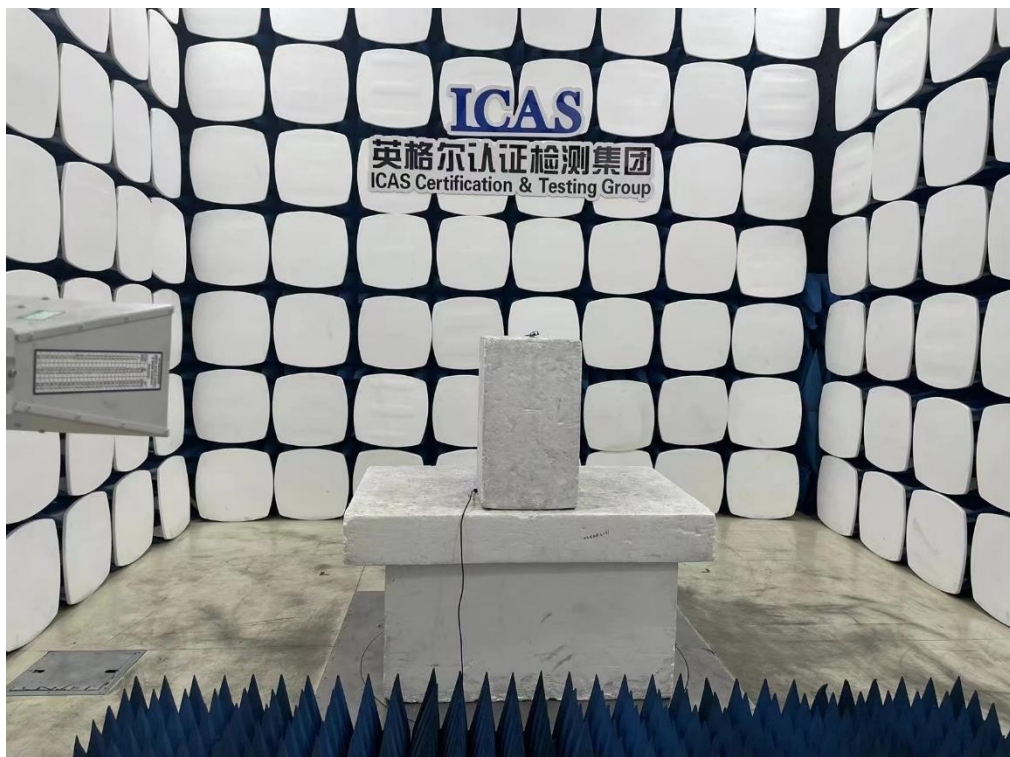
Date: 2022-06-16

Page 54 of 54

5.4 Set-up for Spurious Emissions below 1GHz



5.5 Set-up for Spurious Emissions above 1GHz



End of the report