

TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 41 of 59

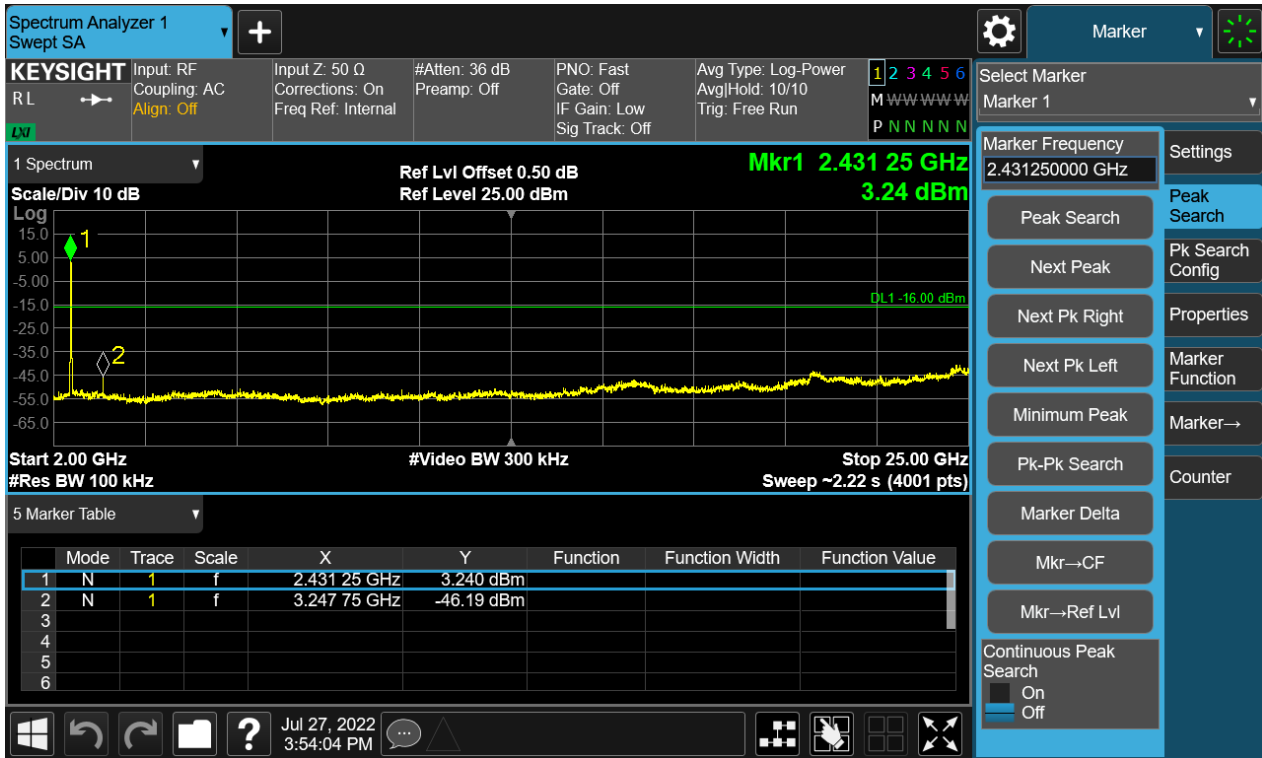
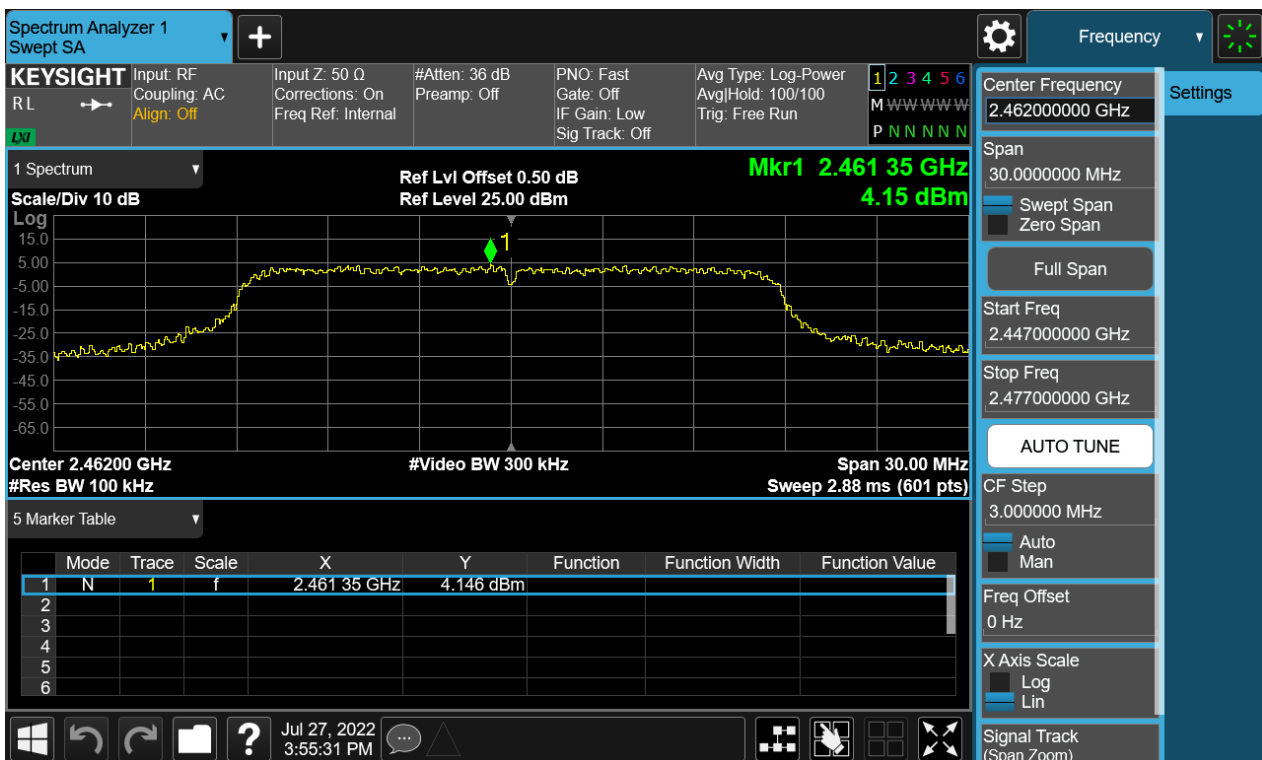


Figure 33: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT20), 2462MHz Carrier Level



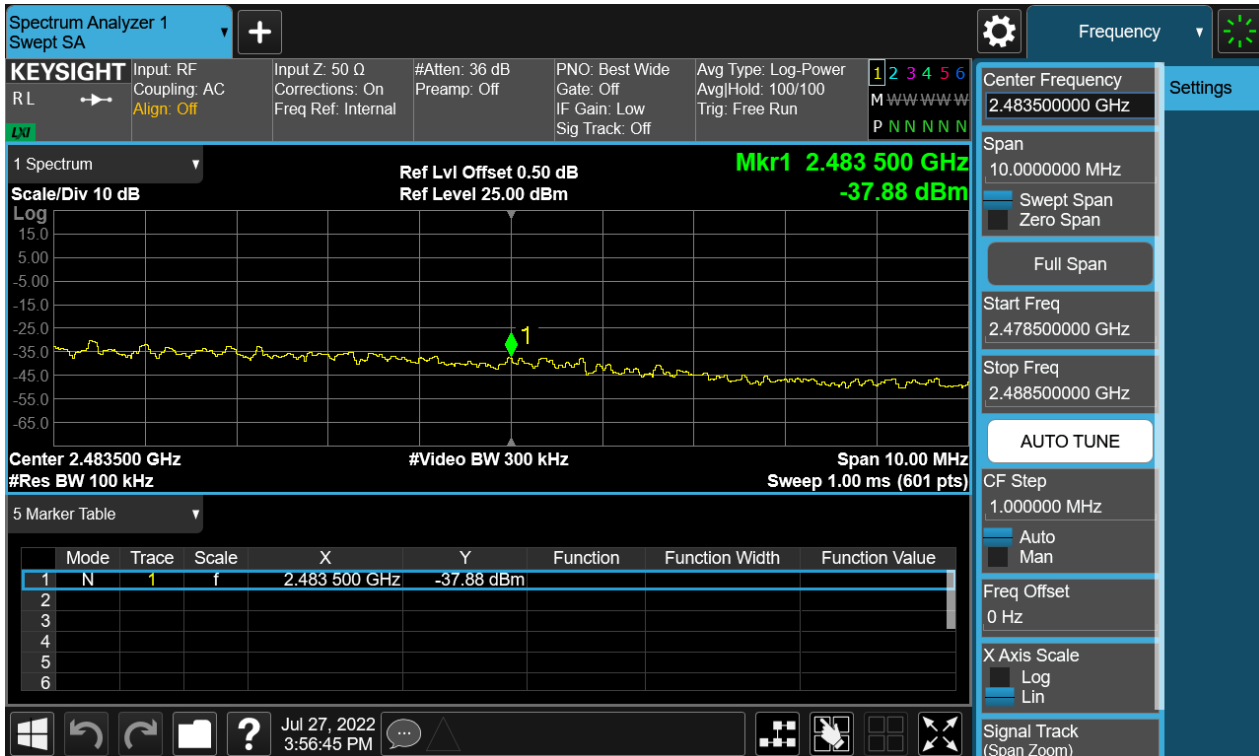
TEST REPORT

Report No.: SHE22060090-02AE

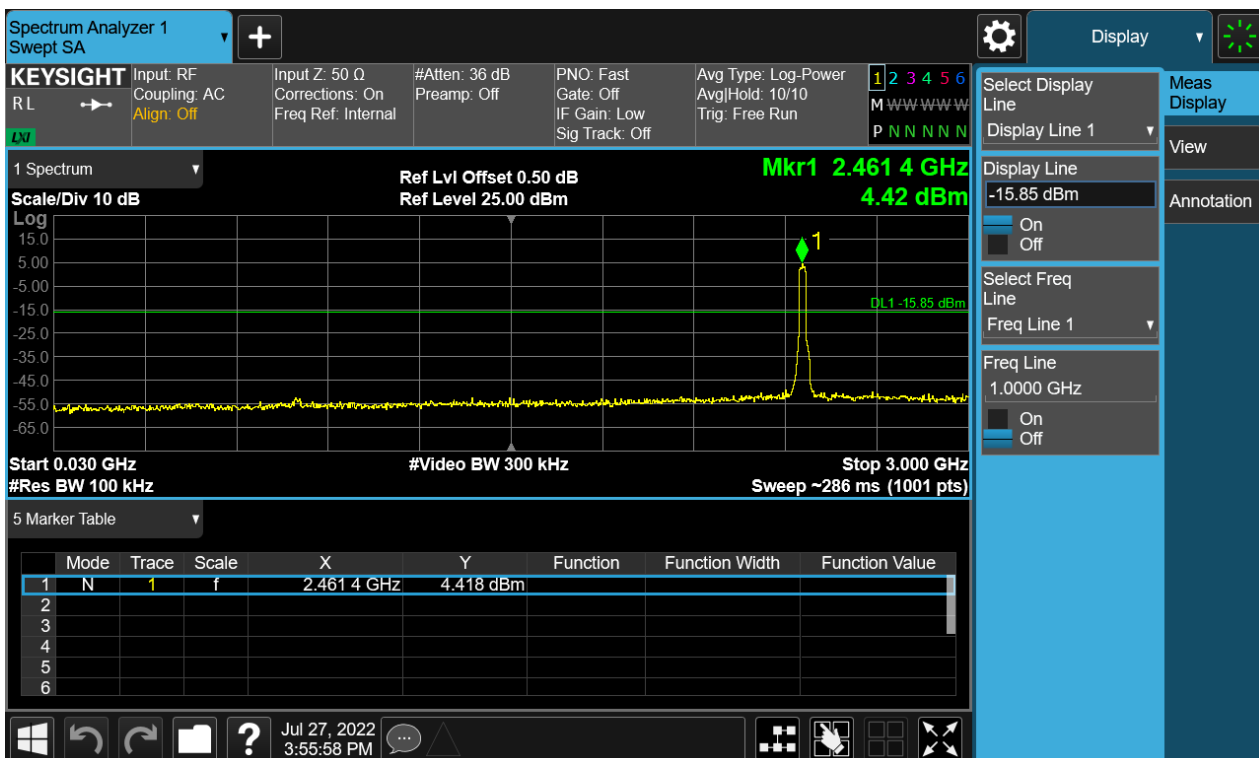
Date: 2022-08-01

Page 42 of 59

Band Edge



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

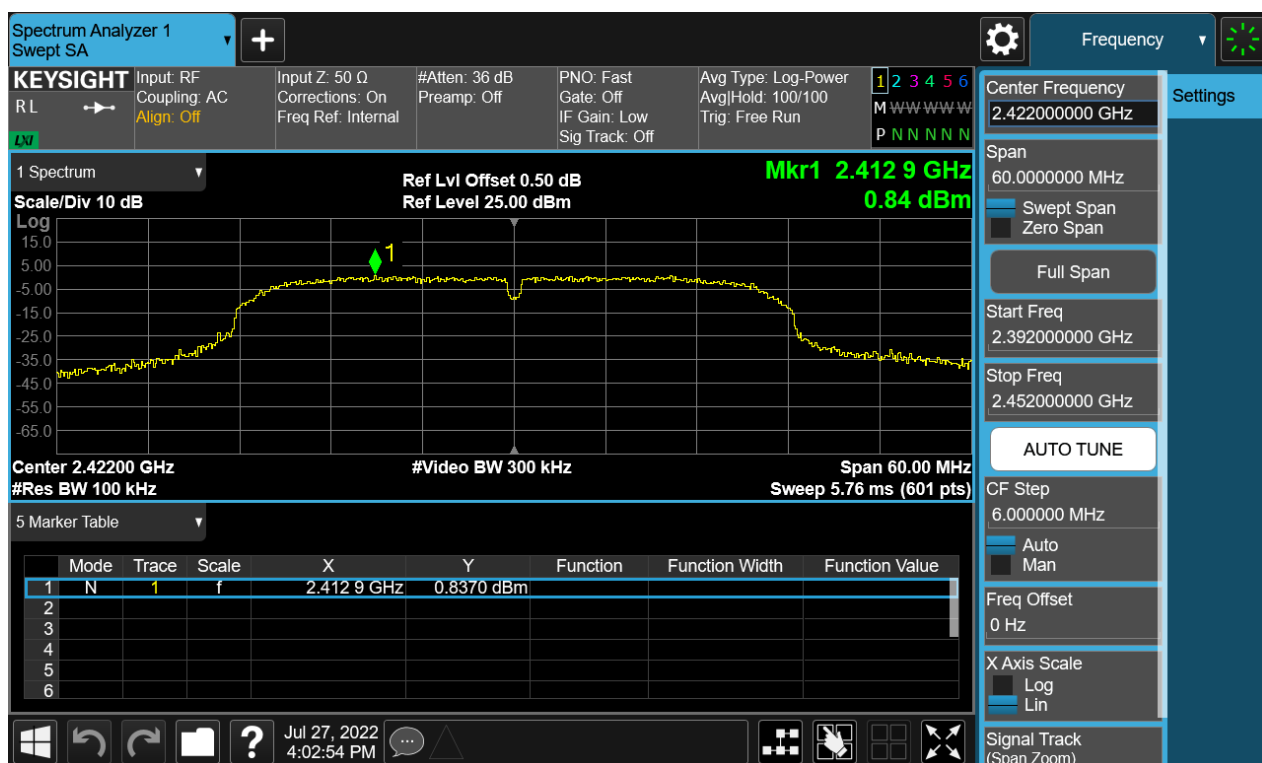
Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 43 of 59



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



TEST REPORT

Report No.: SHE22060090-02AE

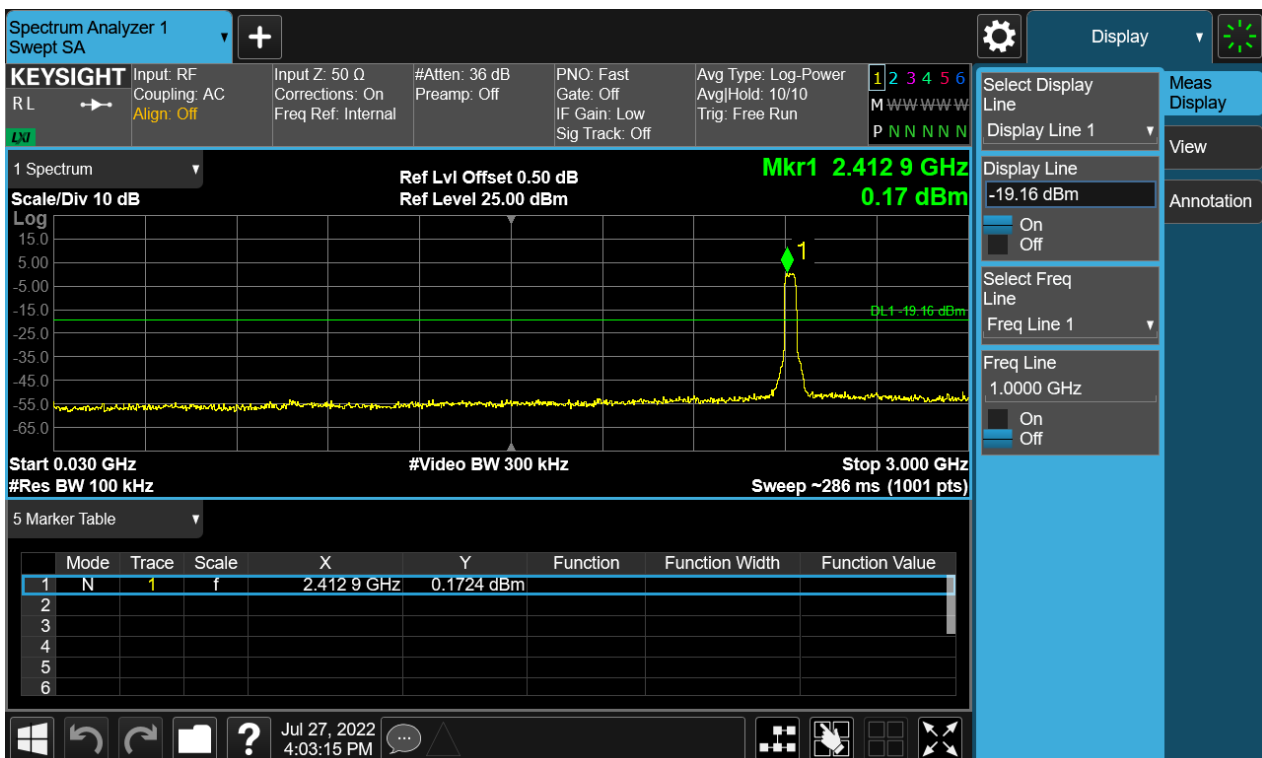
Date: 2022-08-01

Page 44 of 59

Band Edge



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 45 of 59

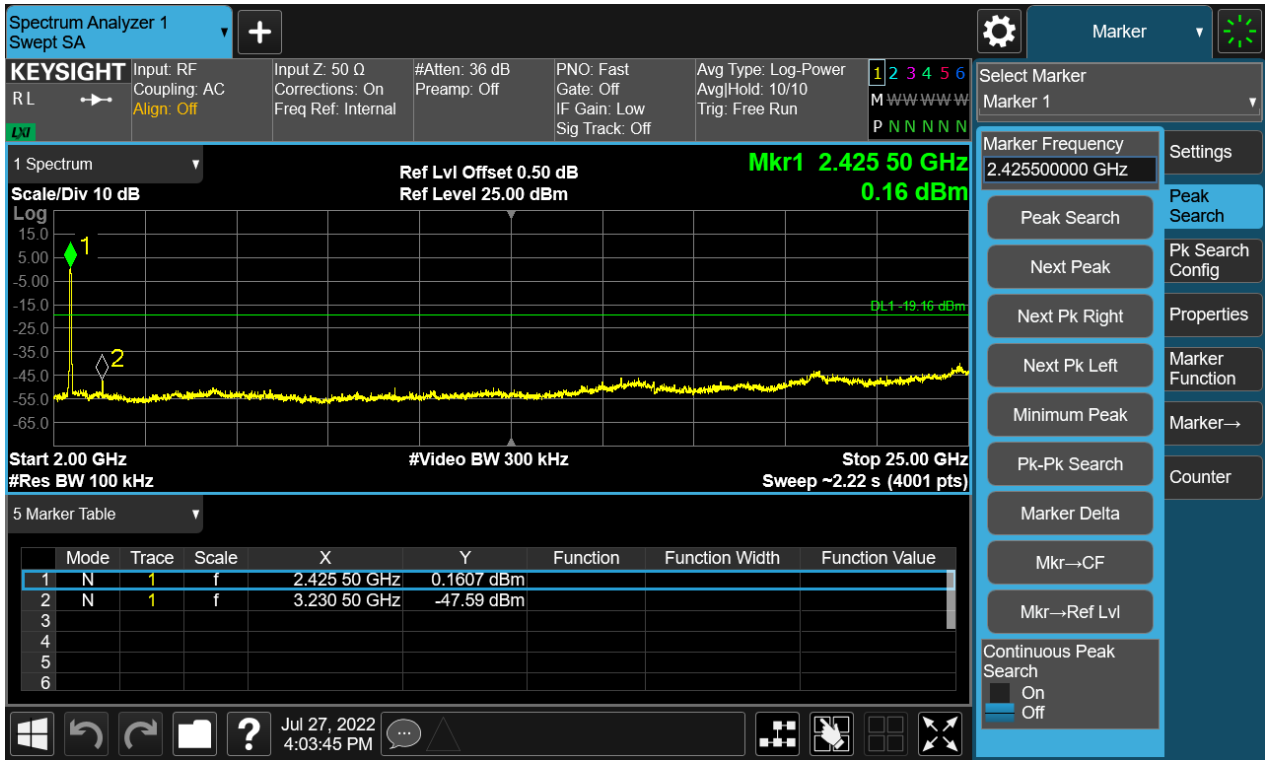
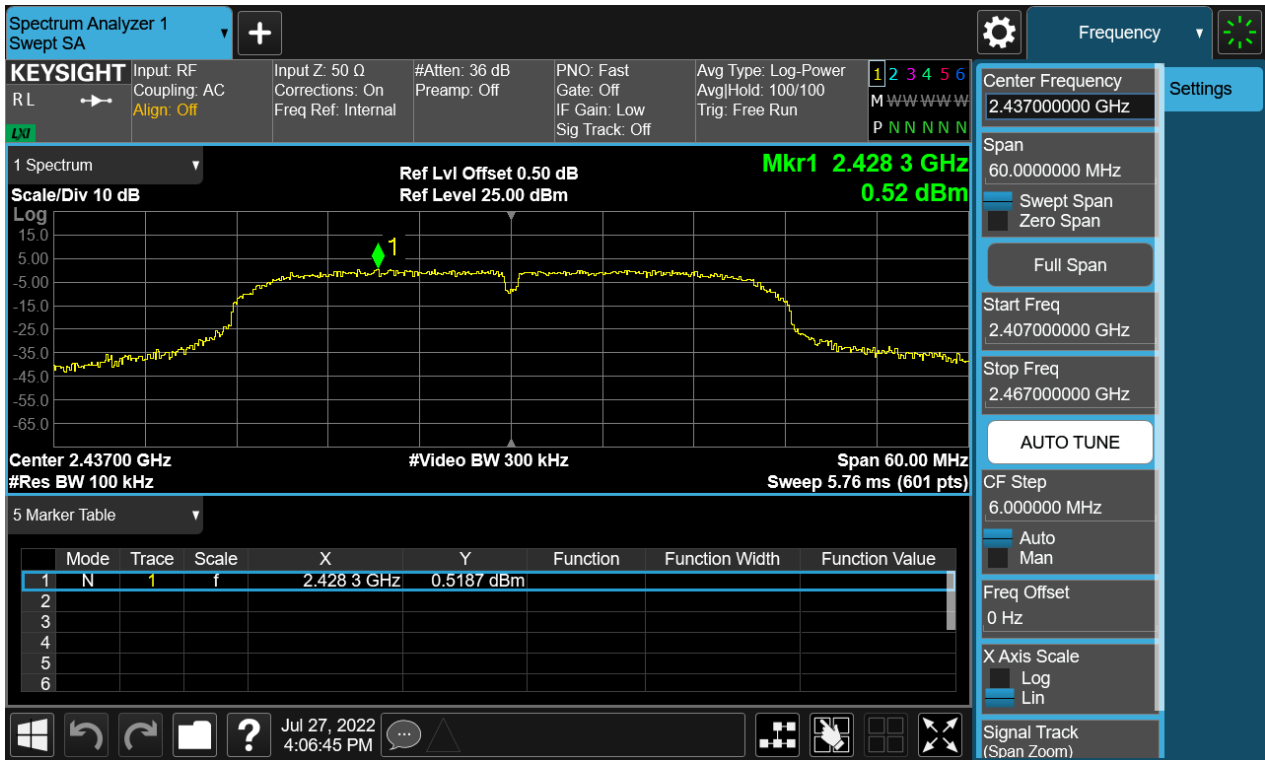


Figure 35: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2437MHz Carrier Level



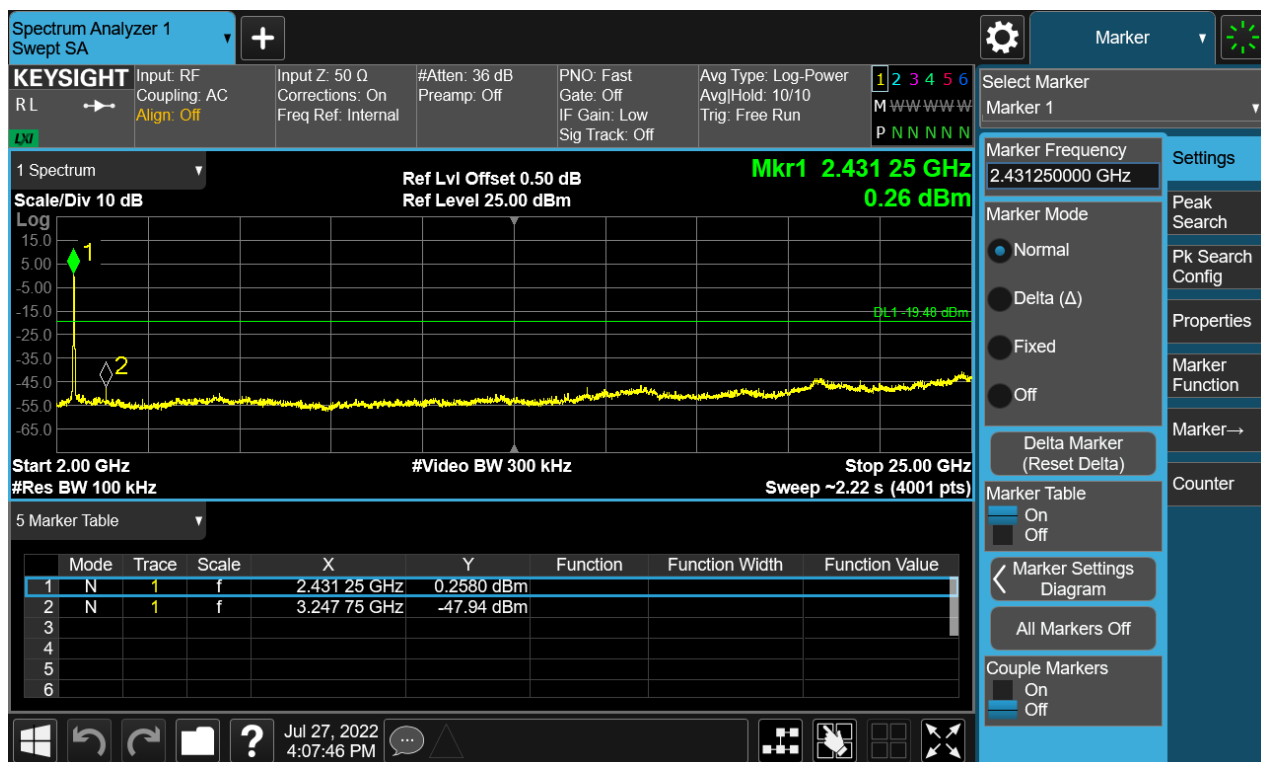
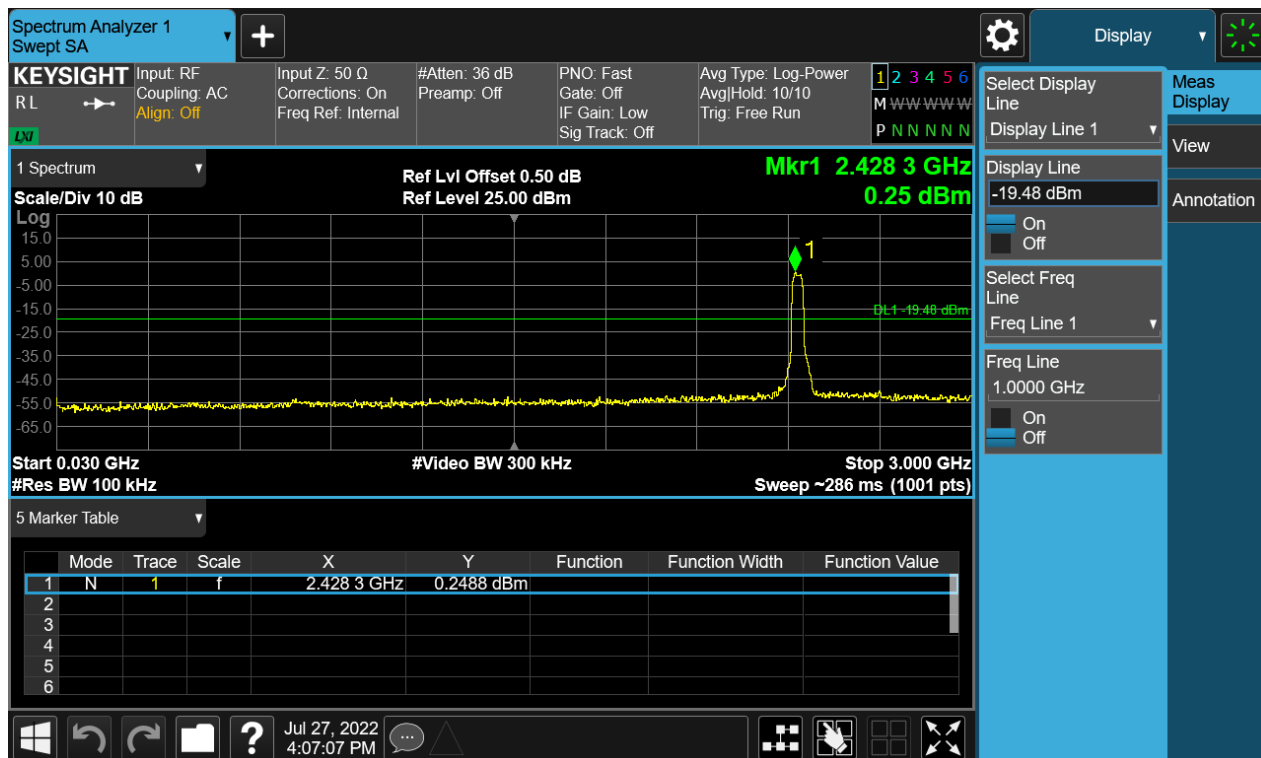
TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 46 of 59

Conducted spurious emissions 30MHz-25GHz



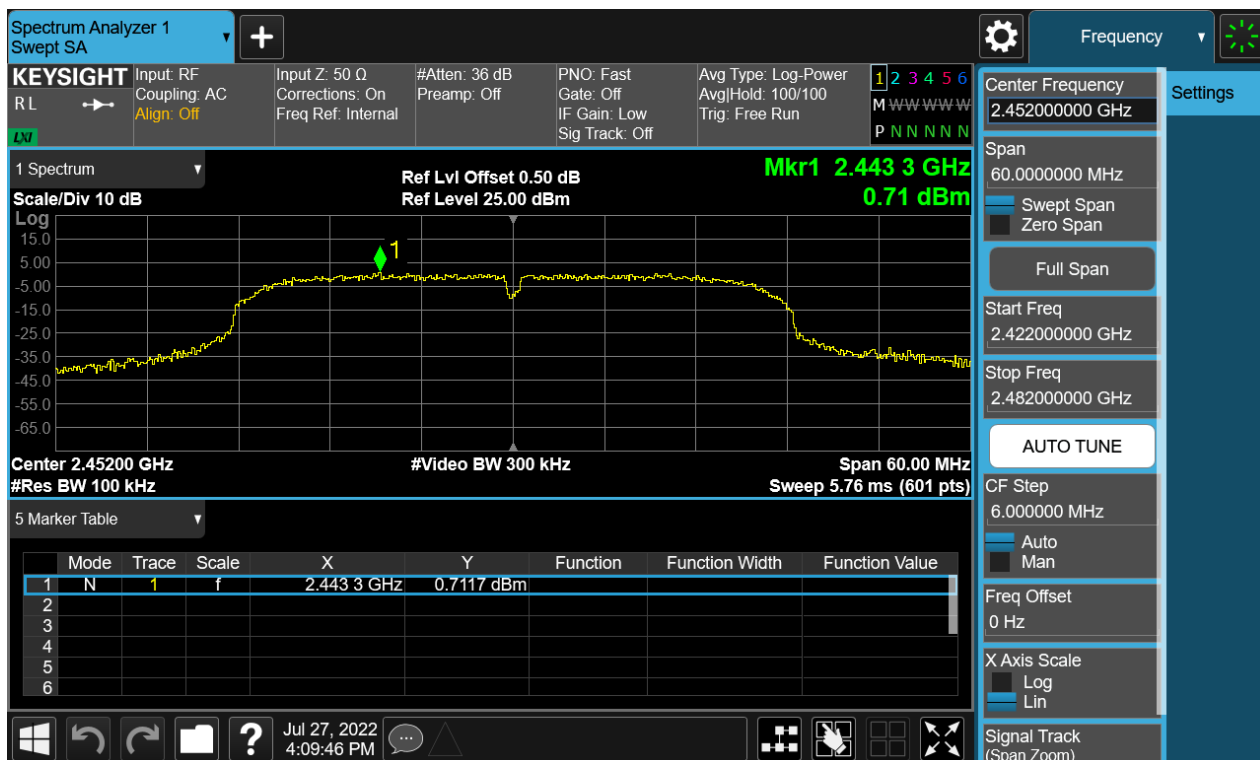
TEST REPORT

Report No.: SHE22060090-02AE

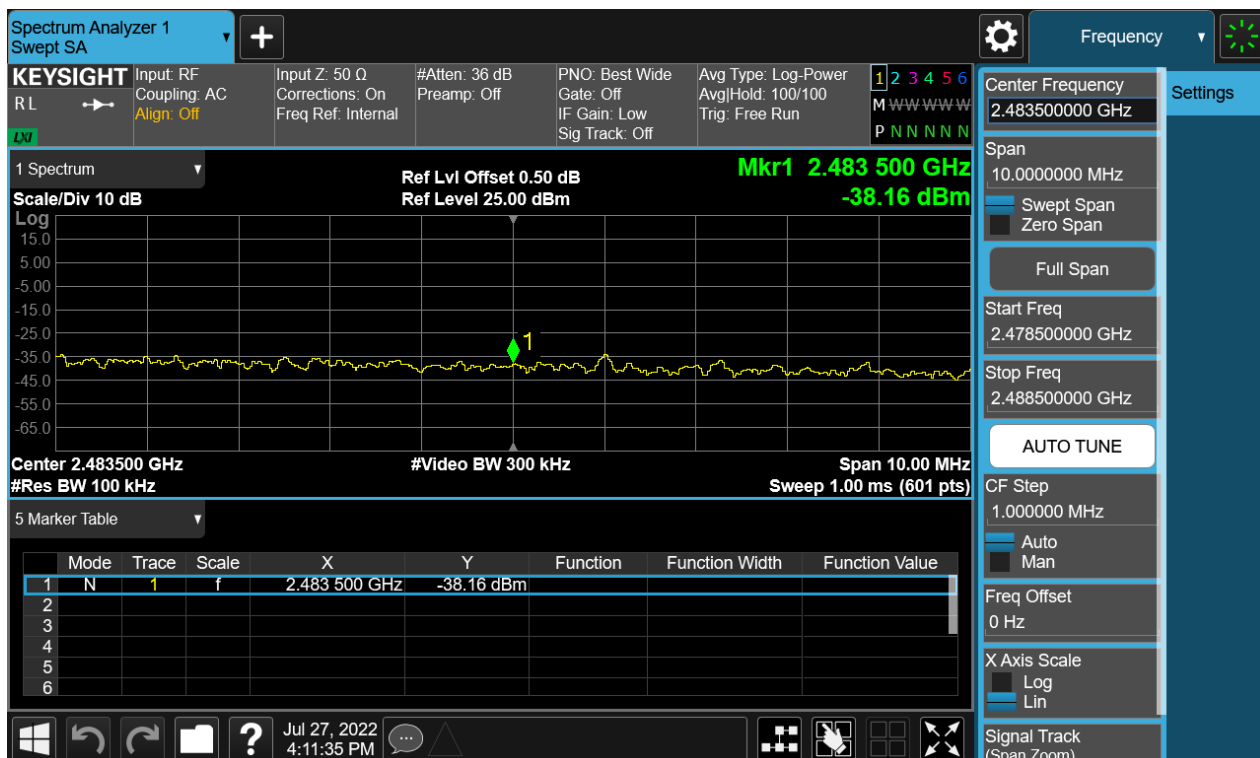
Date: 2022-08-01

Page 47 of 59

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



Band Edge



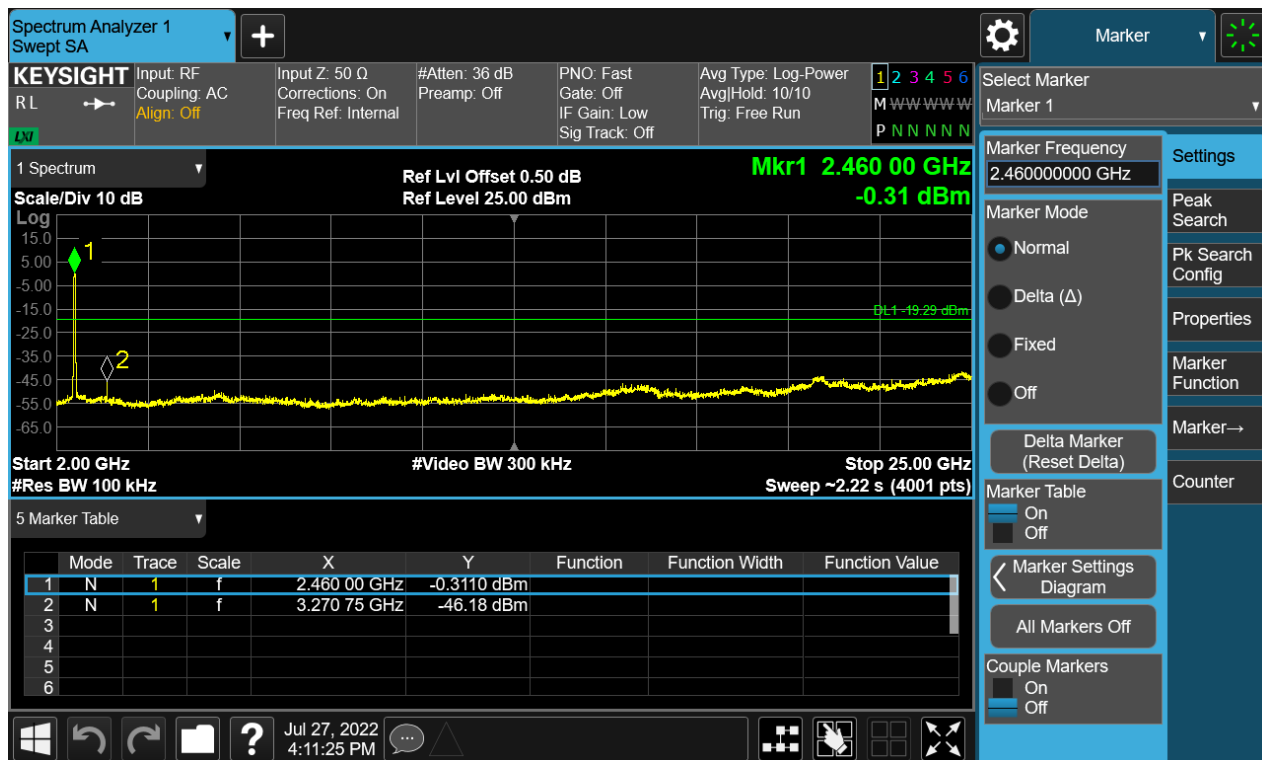
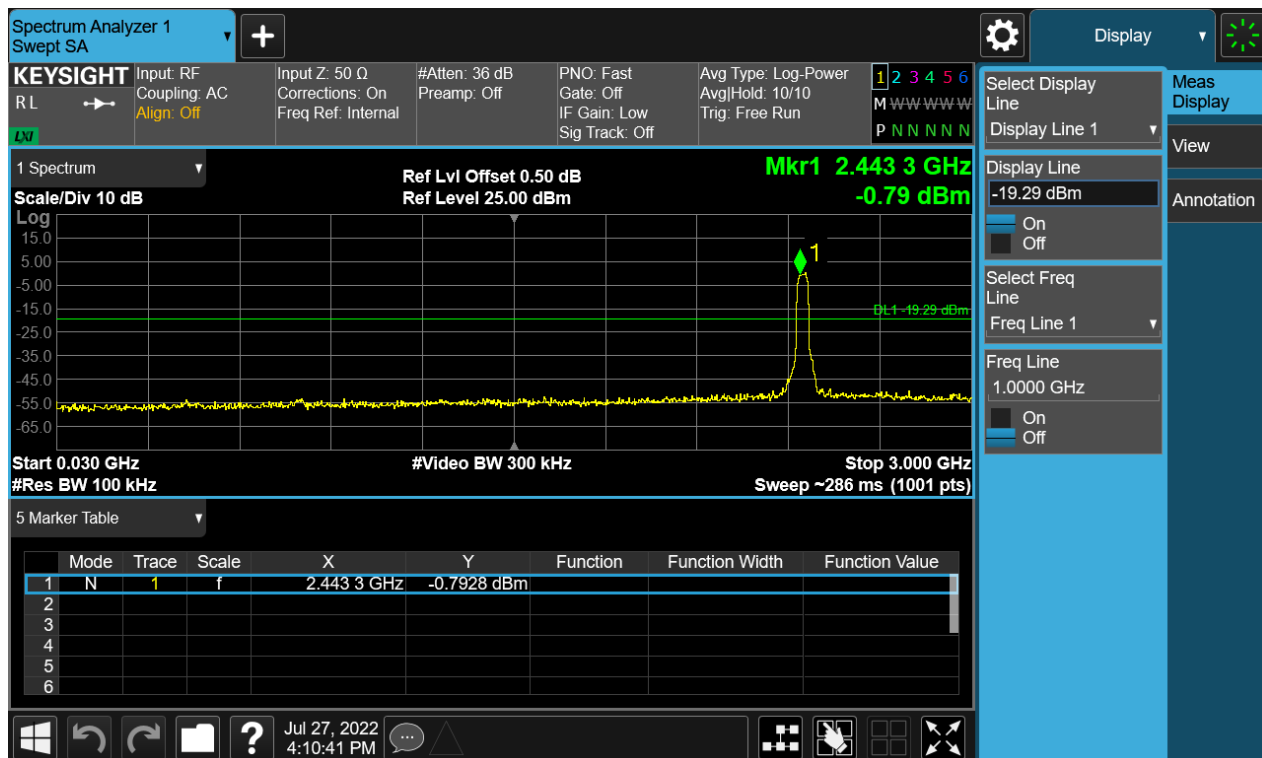
TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 48 of 59

Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 49 of 59

4.1.6 Radiated Spurious Emission

RESULT:

PASS

Test standard	: FCC Part 15.247(d), 15.205, 15.209
Requirement	: ANSI C63.10-2013, Clause 11.12 KDB 558074 D01 v05r02, Clause 8.6
Kind of test site	: 3m Semi-Anechoic Chamber

Test setup

Test Channel	: Low/Middle/High
Operation Mode	: A.1.a
Ambient temperature	: 23.1°C
Relative humidity	: 52%

Notes

Test plots please refer to the annex document "SHE22060090-02AE 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. All test modes had been pre-tested, but only the 802.11b at high channel of below 1 GHz is the worst case and recorded in the report.
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.: SHE22060090-02AE

Date: 2022-08-01

Page 50 of 59

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, Clause 11.13 KDB 558074 D01 v05r02, Clause 8.7
Kind of test site	: 3m Semi-Anechoic Chamber

Test setup

Test Channel	: Low/Middle/High
Operation Mode	: A.1.a
Ambient temperature	: 23.1°C
Relative humidity	: 52%

Notes:

1. Test plots please refer to the annex document "SHE22060090-02AE 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.: SHE22060090-02AE

Date: 2022-08-01

Page 51 of 59

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, Clause 6.2
Kind of test site	: Shielded room

Test setup

Input Voltage	: AC 120V 60Hz
Operation Mode	: A.1.a
Earthing	: Connected to GND
Ambient temperature	: 23.6°C
Relative humidity	: 57%

For details refer to following test plot.

TEST REPORT

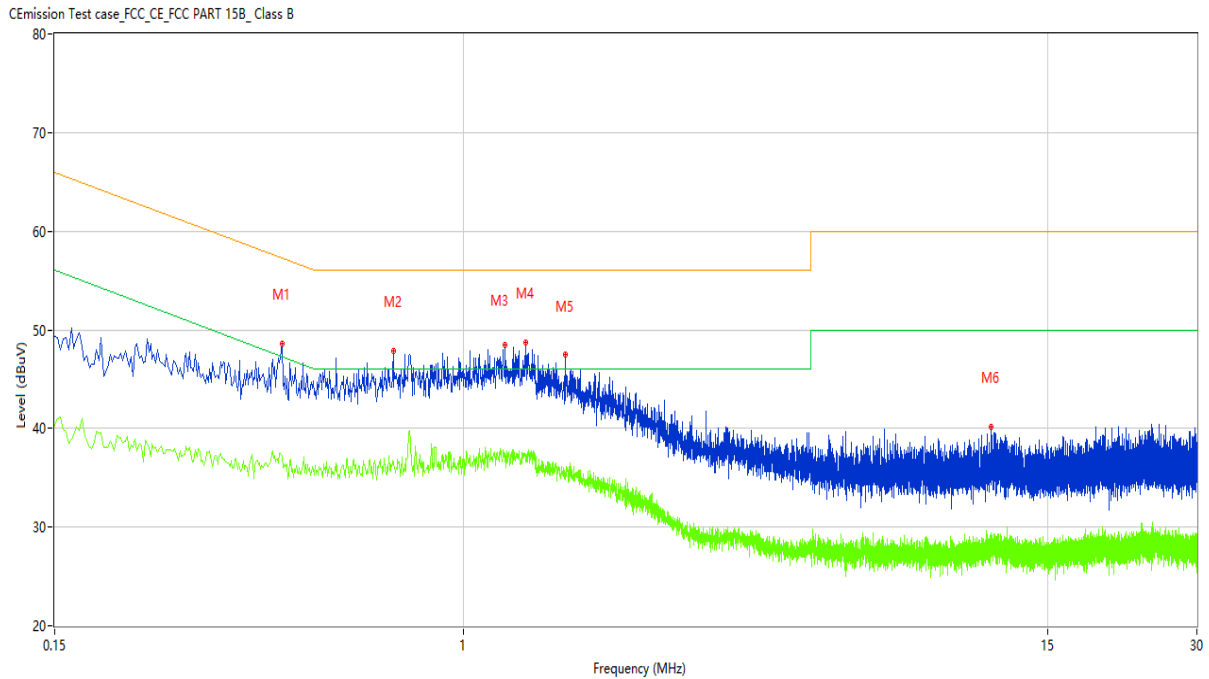
Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 52 of 59

Note: All test modes had been pre-tested, but only the 802.11b at high channel is the worst case and recorded in the report.

Figure 28: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.430	44.84	10.26	57.25	-12.41	Peak	L	Pass
1*	0.430	41.60	10.26	57.25	-15.65	QP	L	Pass
1**	0.430	37.18	10.26	47.25	-10.07	AV	L	Pass
2	0.722	41.68	10.31	56.00	-14.32	Peak	L	Pass
2*	0.722	34.18	10.31	56.00	-21.82	QP	L	Pass
2**	0.722	36.67	10.31	46.00	-9.33	AV	L	Pass
3	1.212	38.50	10.19	56.00	-17.50	Peak	L	Pass
3*	1.212	31.29	10.19	56.00	-24.71	QP	L	Pass
3**	1.212	37.49	10.19	46.00	-8.51	AV	L	Pass
4	1.336	38.40	10.19	56.00	-17.60	Peak	L	Pass
4*	1.336	29.03	10.19	56.00	-26.97	QP	L	Pass
4**	1.336	36.61	10.19	46.00	-9.39	AV	L	Pass
5	1.604	36.83	10.18	56.00	-19.17	Peak	L	Pass
5*	1.604	25.88	10.18	56.00	-30.12	QP	L	Pass
5**	1.604	34.96	10.18	46.00	-11.04	AV	L	Pass
6	11.540	33.70	10.40	60.00	-26.30	Peak	L	Pass
6*	11.540	27.95	10.40	60.00	-32.05	QP	L	Pass
6**	11.540	28.44	10.40	50.00	-21.56	AV	L	Pass

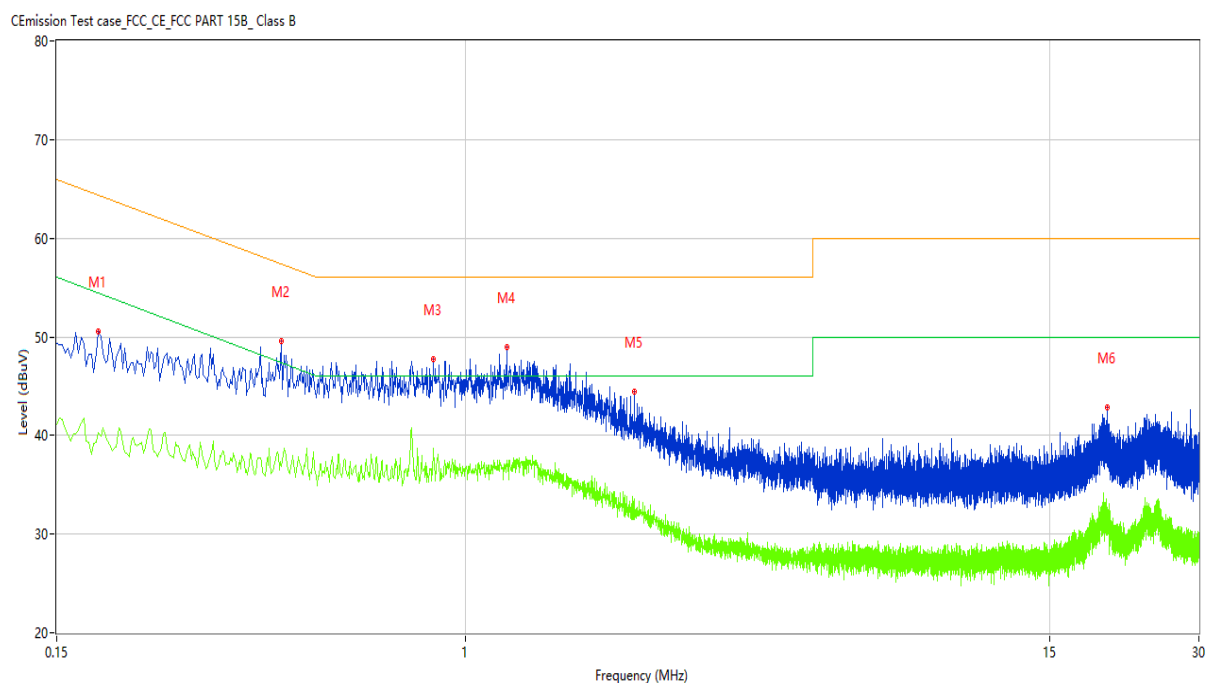
TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 53 of 59

Figure 29: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.182	44.22	10.24	64.39	-20.17	Peak	N	Pass
1*	0.182	37.96	10.24	64.39	-26.43	QP	N	Pass
1**	0.182	40.33	10.24	54.39	-14.06	AV	N	Pass
2	0.426	45.54	10.25	57.33	-11.79	Peak	N	Pass
2*	0.426	41.68	10.25	57.33	-15.65	QP	N	Pass
2**	0.426	36.87	10.25	47.33	-10.46	AV	N	Pass
3	0.860	39.77	10.30	56.00	-16.23	Peak	N	Pass
3*	0.860	35.74	10.30	56.00	-20.26	QP	N	Pass
3**	0.860	38.06	10.30	46.00	-7.94	AV	N	Pass
4	1.210	35.05	10.19	56.00	-20.95	Peak	N	Pass
4*	1.210	25.04	10.19	56.00	-30.96	QP	N	Pass
4**	1.210	37.50	10.19	46.00	-8.50	AV	N	Pass
5	2.186	33.39	10.16	56.00	-22.61	Peak	N	Pass
5*	2.186	28.97	10.16	56.00	-27.03	QP	N	Pass
5**	2.186	33.61	10.16	46.00	-12.39	AV	N	Pass
6	19.612	37.11	10.90	60.00	-22.89	Peak	N	Pass
6*	19.612	33.74	10.90	60.00	-26.26	QP	N	Pass
6**	19.612	32.57	10.90	50.00	-17.43	AV	N	Pass

TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 54 of 59

5 Appendixes

5.1 Photographs of the Sample



All of the sample



Front of the sample

TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 55 of 59



Rear of the sample



Left of the sample

TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 56 of 59



Right of the sample



Top of the sample

TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 57 of 59



Bottom of the sample

5.2 Set-up for Conducted Emission on AC Mains



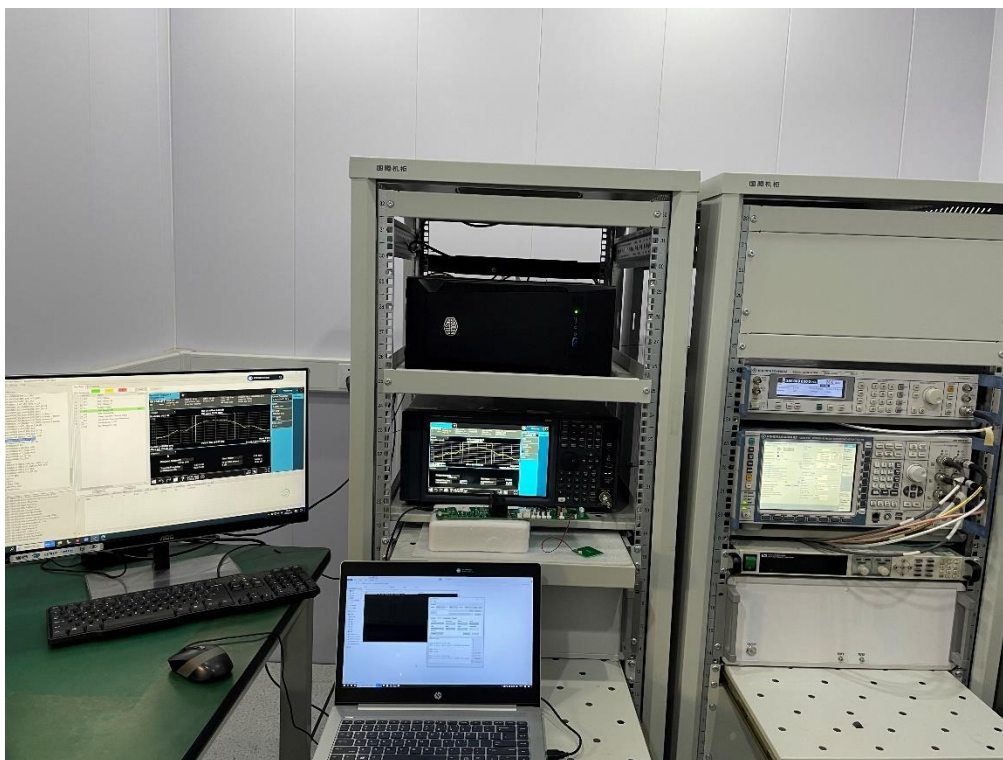
TEST REPORT

Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 58 of 59

5.3 Set-up for Conducted RF test at Antenna Port



5.4 Set-up for Radiated Spurious Emission below 1GHz 30MHz-1GHz



TEST REPORT

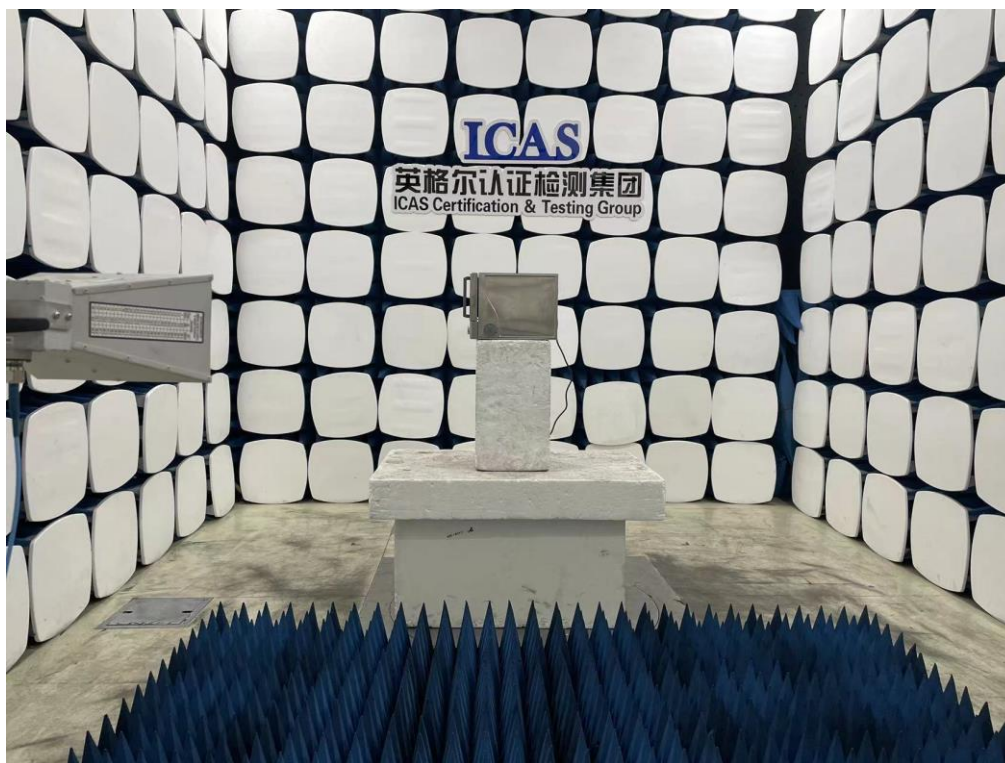
Report No.: SHE22060090-02AE

Date: 2022-08-01

Page 59 of 59

5.5 Set-up for Radiated Spurious Emission above 1GHz

1GHz-18GHz



End of the report