

TEST REPORT

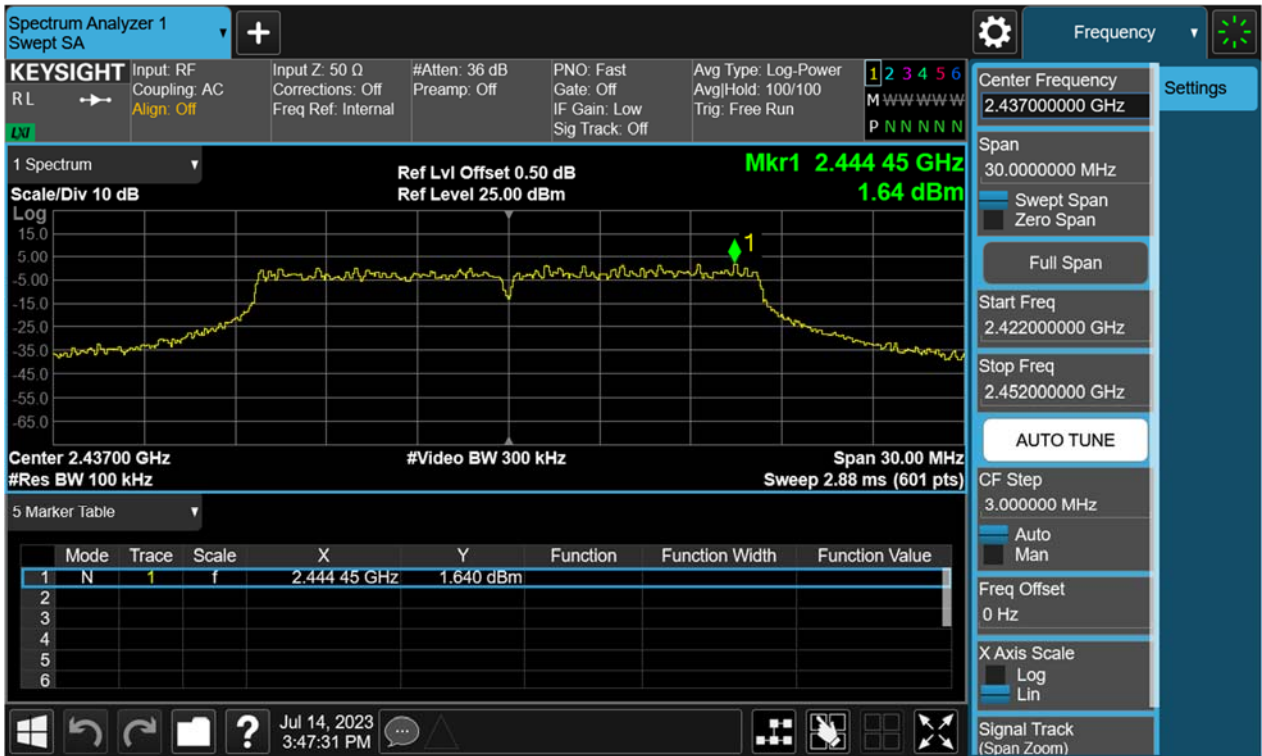
Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 35 of 61



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



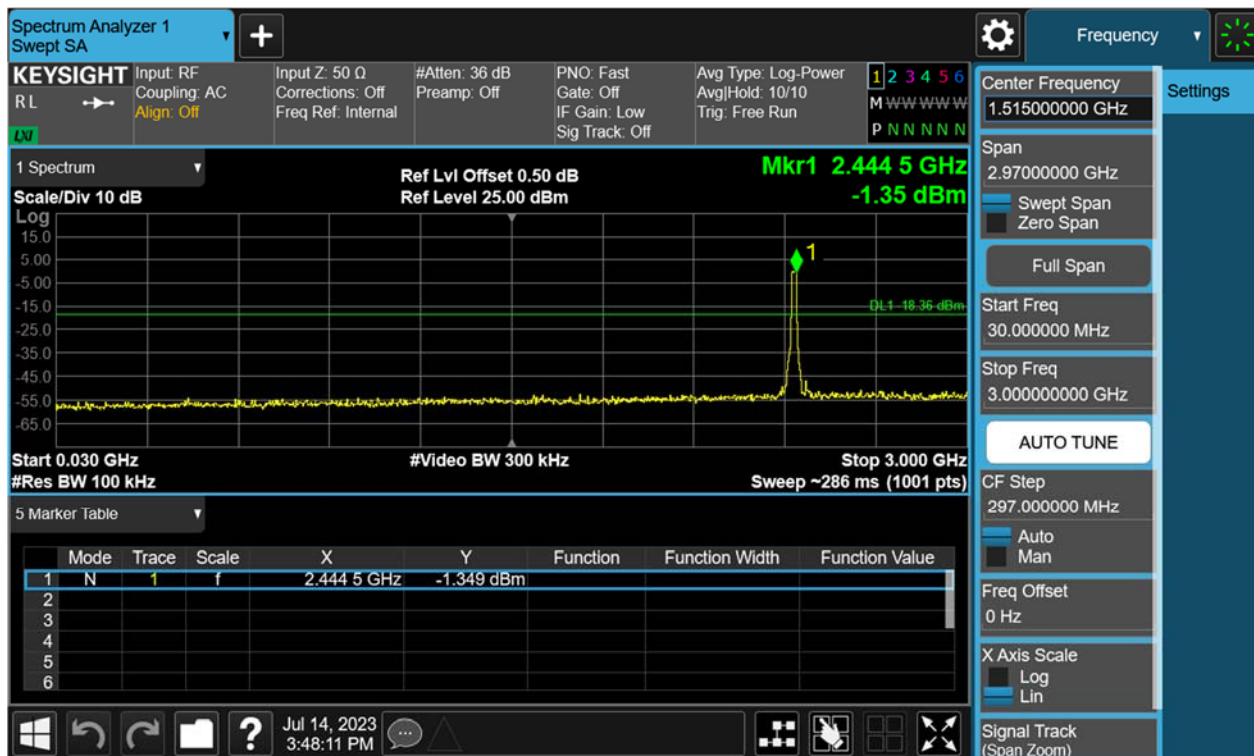
TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 36 of 61

Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 37 of 61

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



Band Edge



TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 38 of 61

Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 39 of 61

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



Band Edge



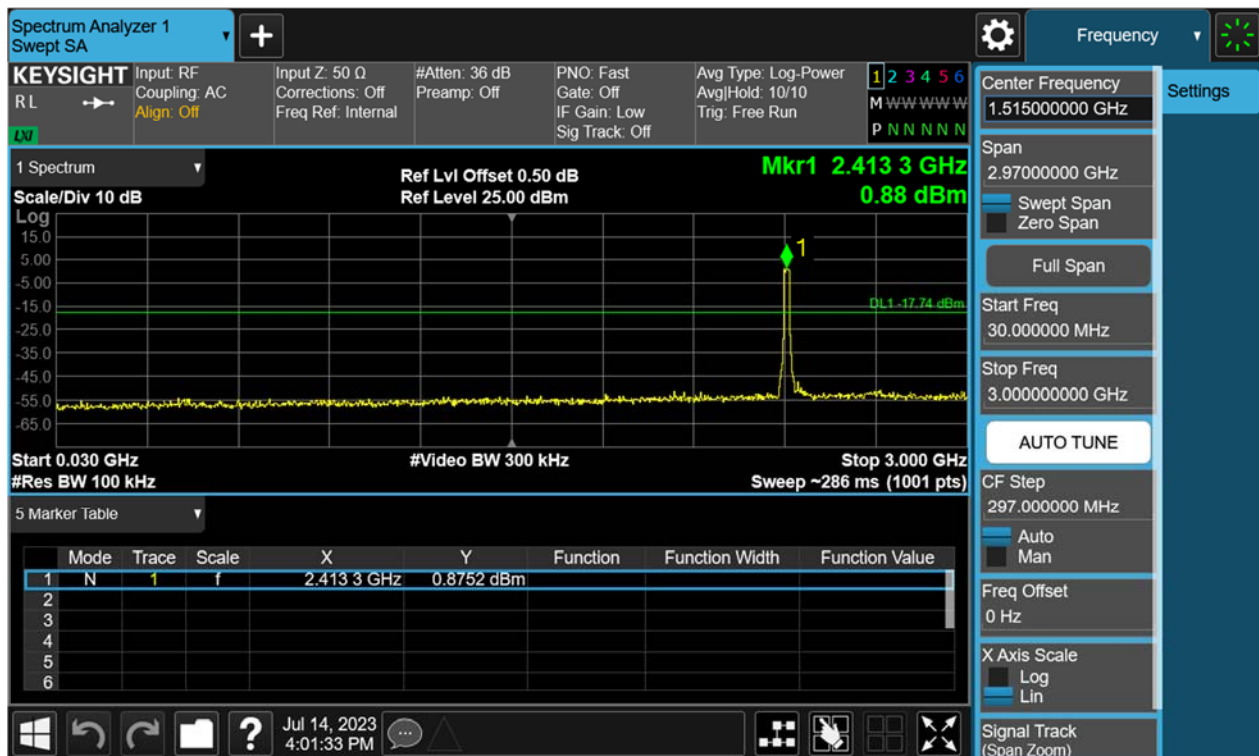
TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 40 of 61

Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE23060104-02BE

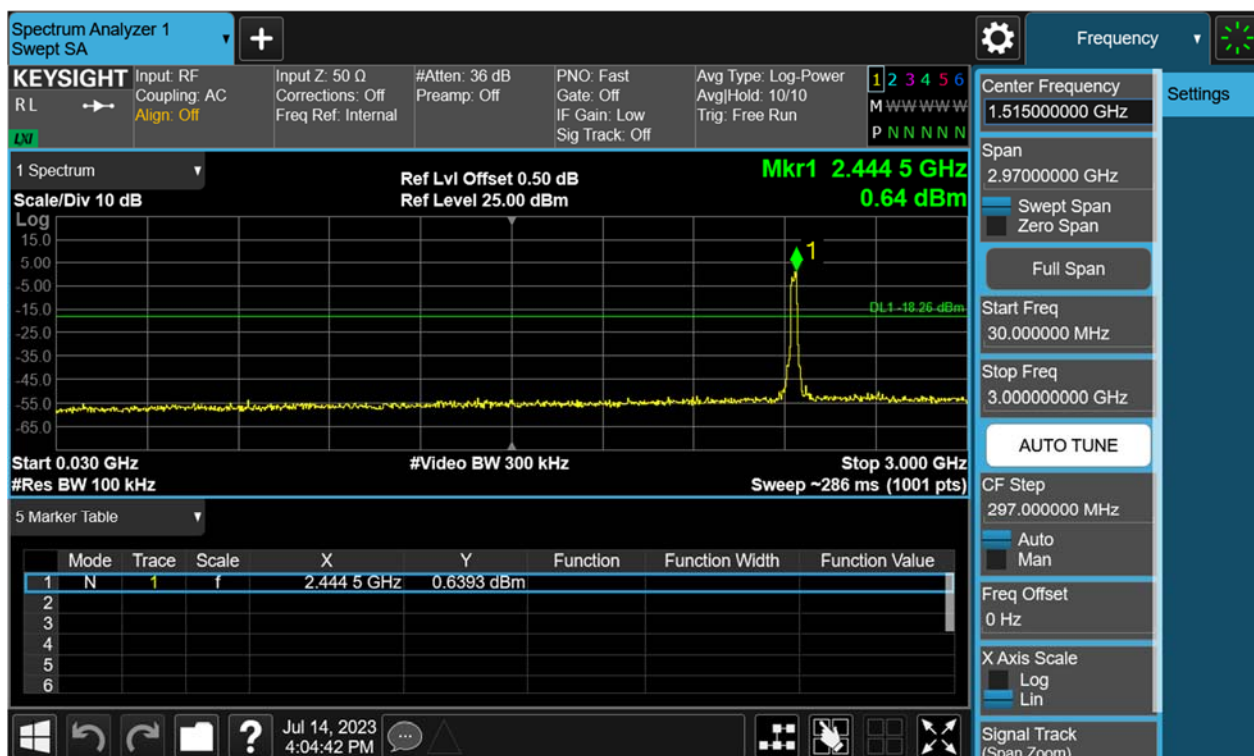
Date: 2023-08-08

Page 41 of 61

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



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 42 of 61



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



TEST REPORT

Report No.: SHE23060104-02BE

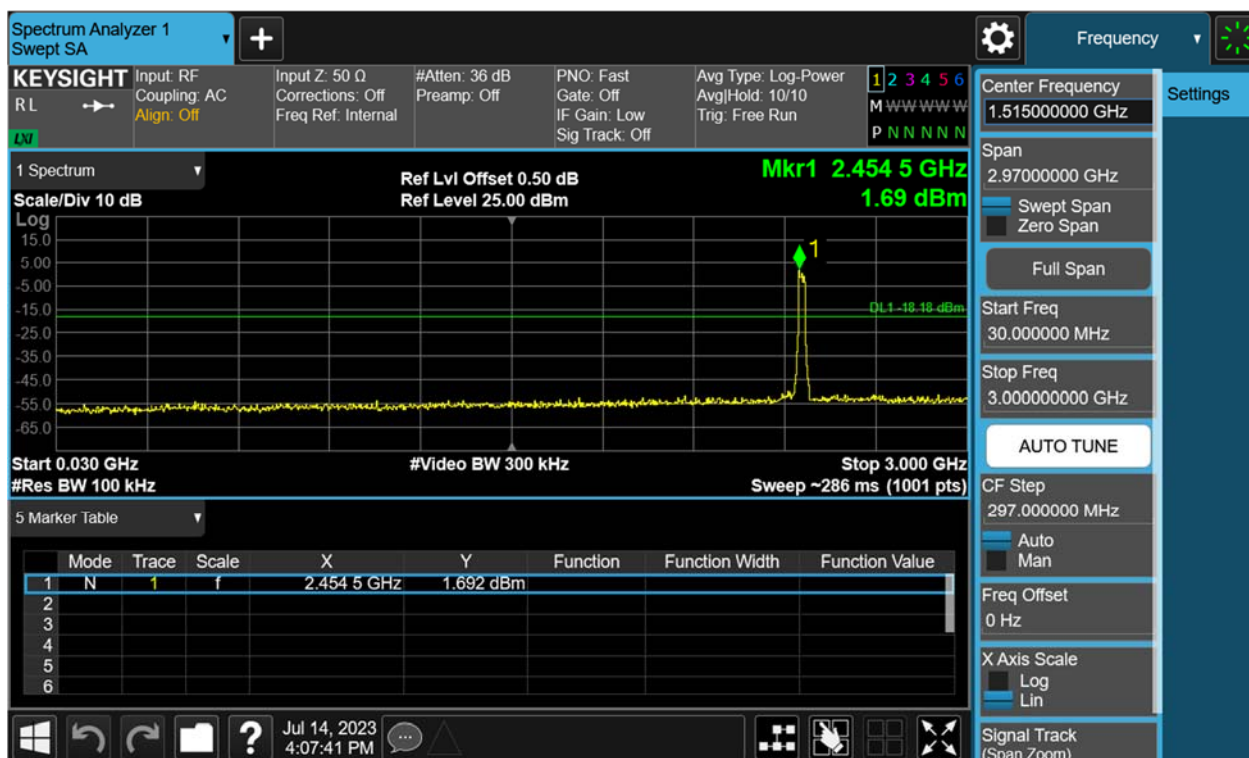
Date: 2023-08-08

Page 43 of 61

Band Edge



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

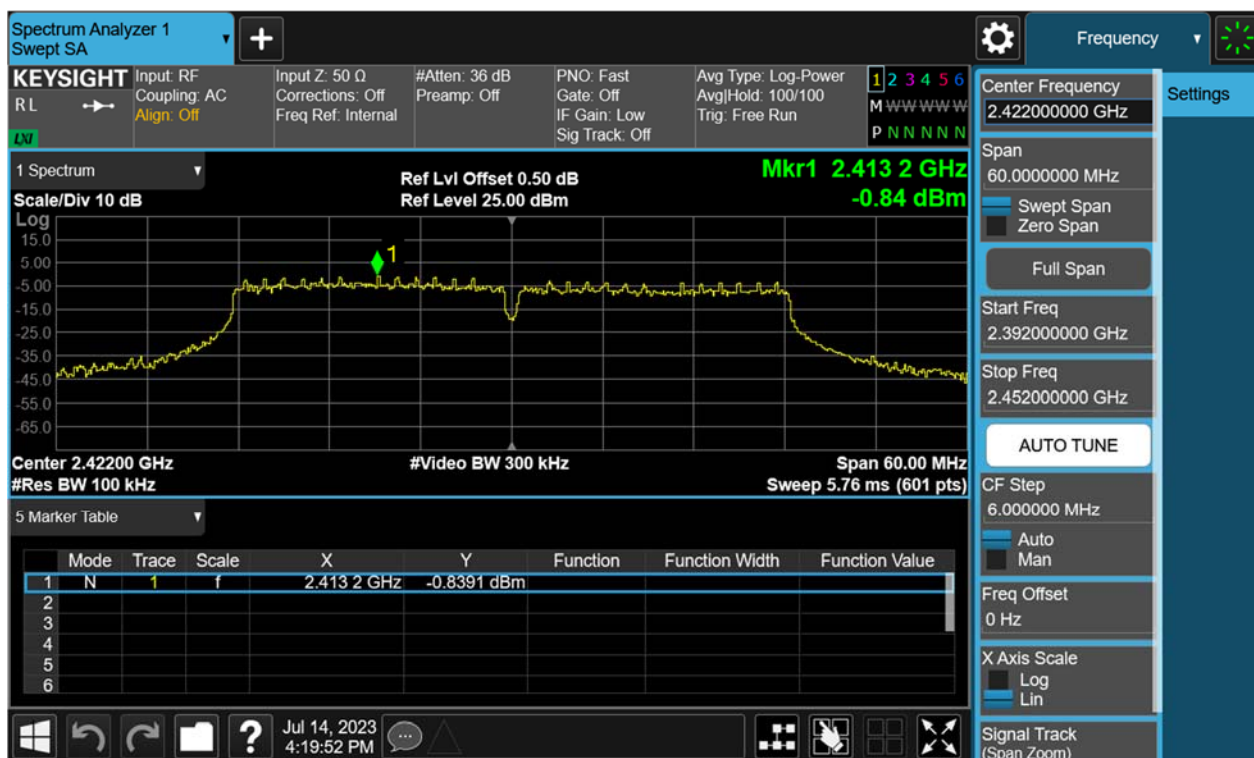
Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 44 of 61



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



TEST REPORT

Report No.: SHE23060104-02BE

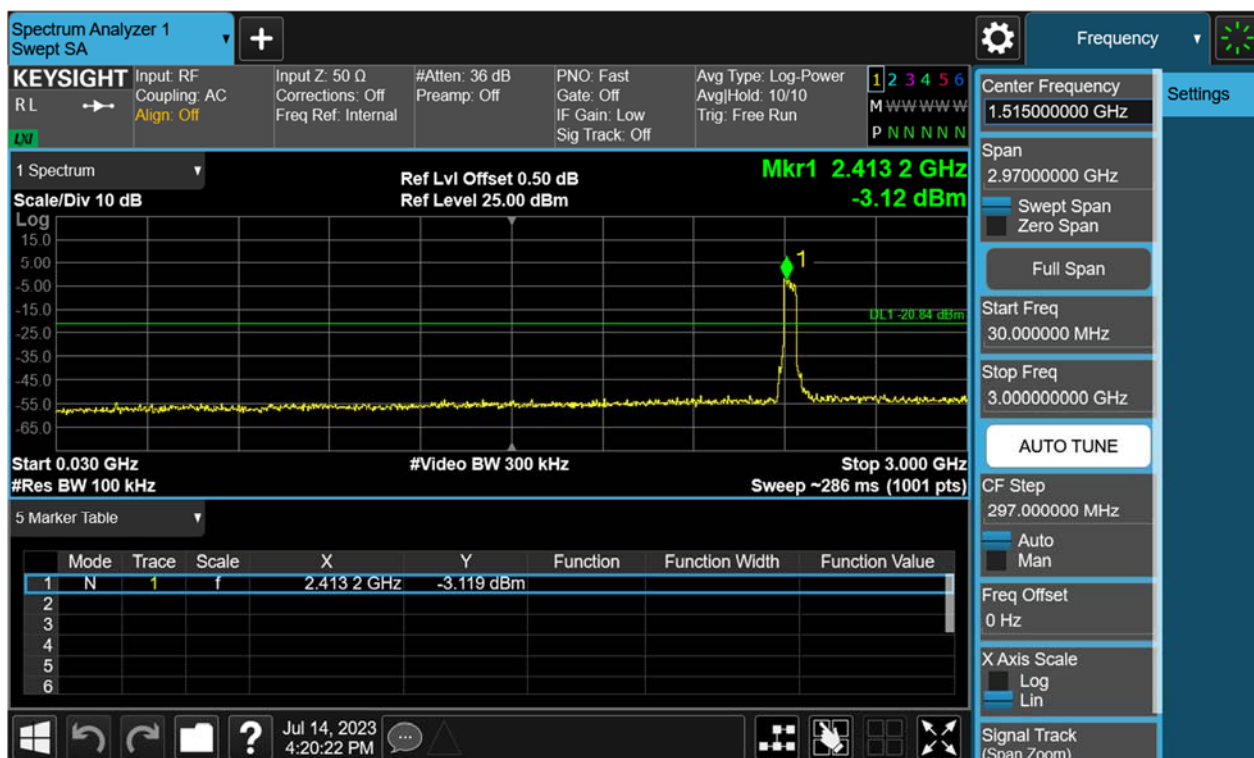
Date: 2023-08-08

Page 45 of 61

Band Edge



Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 46 of 61



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



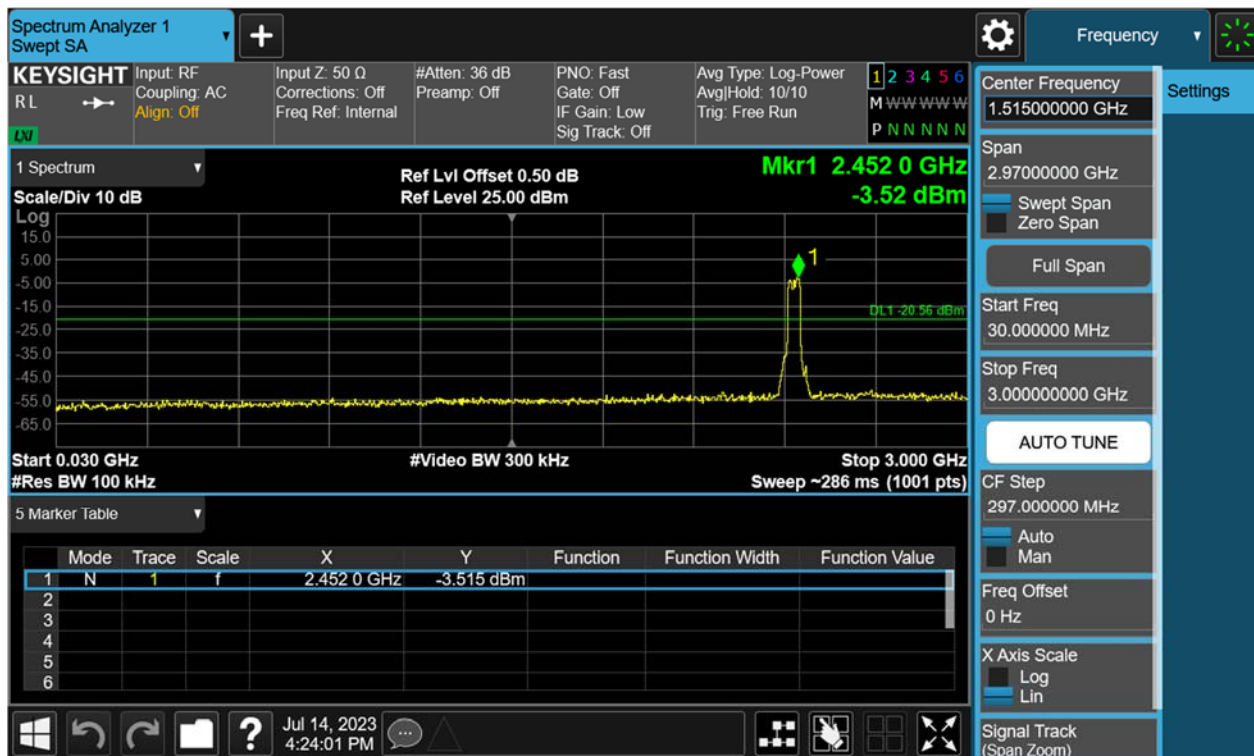
TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 47 of 61

Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 48 of 61

Band Edge

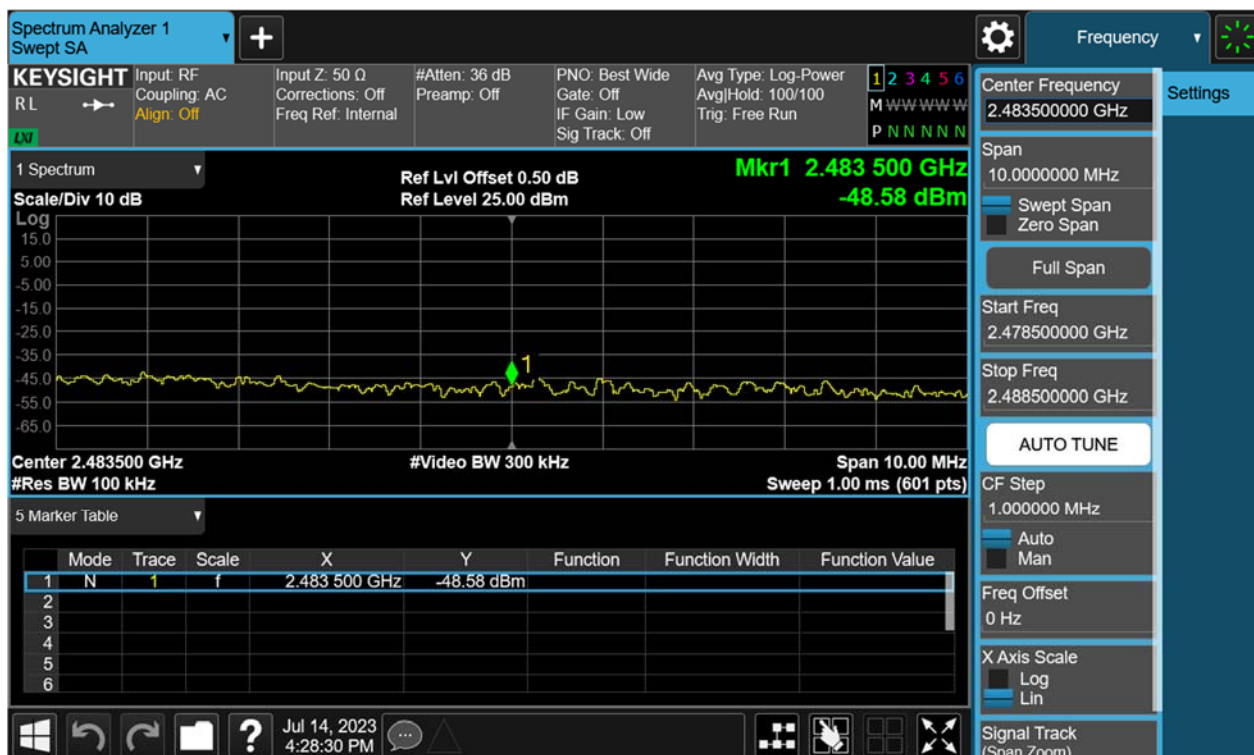
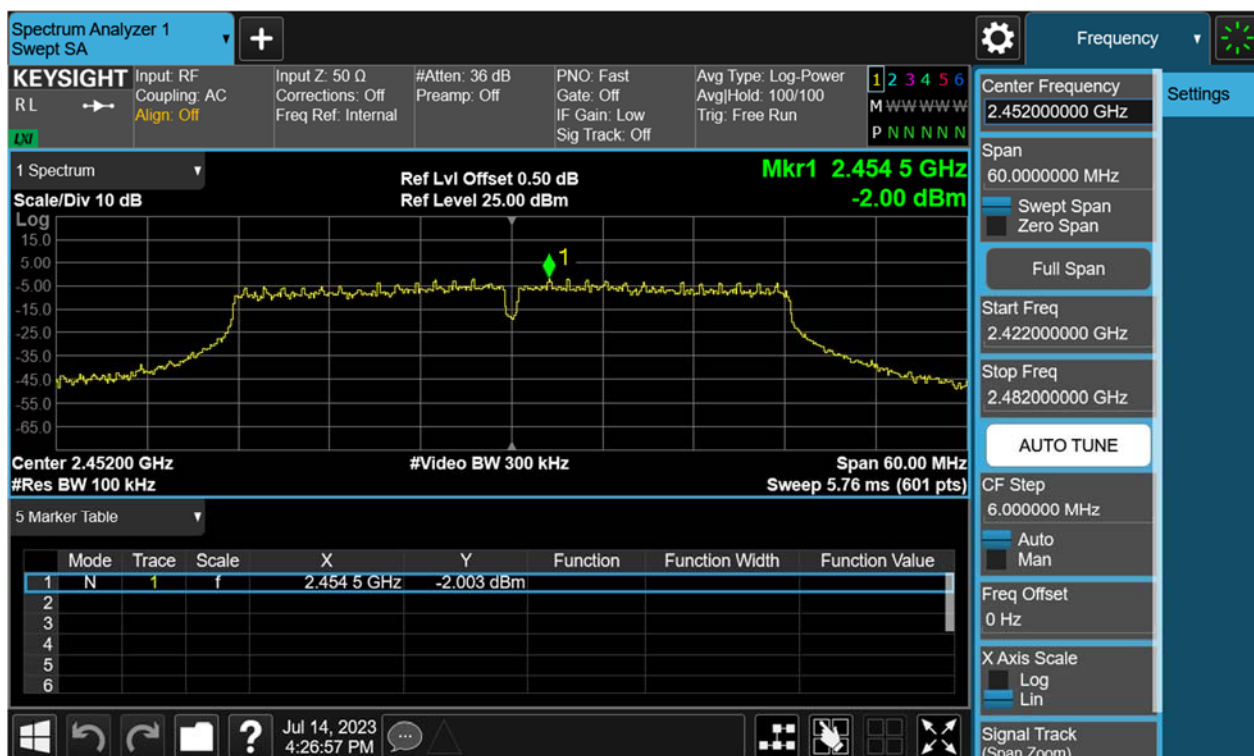


Figure 36: Conducted Spurious Emission & Authorized-band band-edge, 802.11n(HT40), 2452MHz Carrier Level



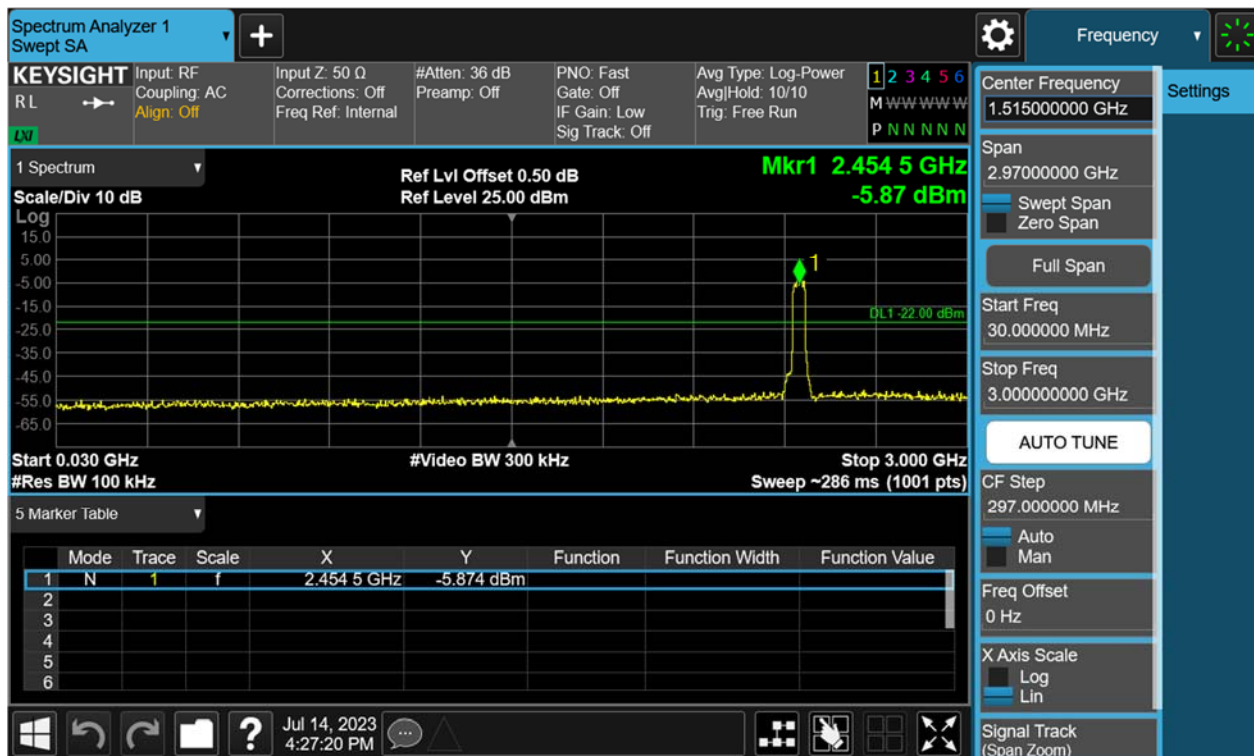
TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 49 of 61

Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 50 of 61

4.1.6 Radiated 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	: 24°C
Relative humidity	: 57%

Notes

Test plots please refer to the annex document "SHE23060104-02BE 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 low 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.: SHE23060104-02BE

Date: 2023-08-08

Page 51 of 61

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	: 22.4°C
Relative humidity	: 55%

Notes:

1. Test plots please refer to the annex document "SHE23060104-02BE 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.: SHE23060104-02BE

Date: 2023-08-08

Page 52 of 61

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	: which received AC 120V, 60Hz Power
Operation Mode	: A.1.a
Earthing	: Disconnected to GND
Ambient temperature	: 21°C
Relative humidity	: 50%

For details refer to following test plot.

TEST REPORT

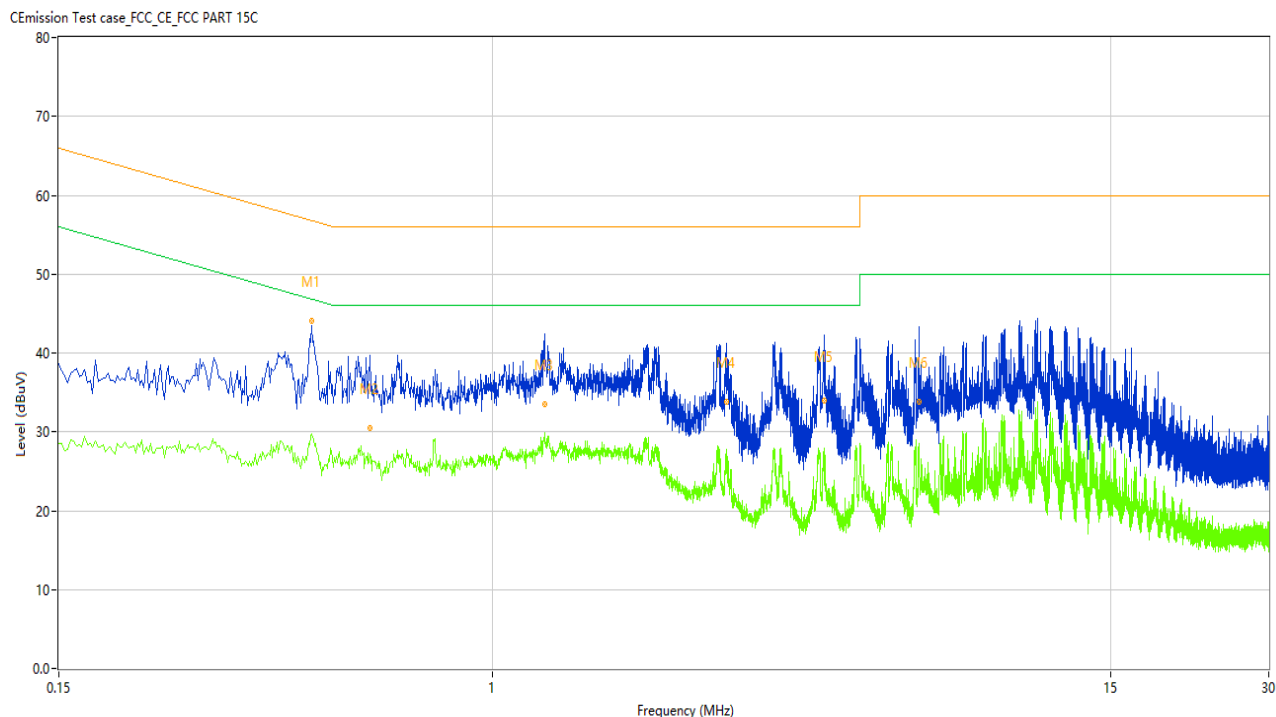
Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 53 of 61

Note: All test modes had been pre-tested, but only the 802.11b at low 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)	Margin (dB)	Detector	Line	Verdict
1	0.454	50.68	9.96	56.80	6.12	Peak	L	Pass
1*	0.454	44.09	9.96	56.80	12.71	QP	L	Pass
1**	0.454	29.81	9.96	46.80	16.99	AV	L	Pass
2	0.586	37.84	9.97	56.00	18.16	Peak	L	Pass
2*	0.586	30.50	9.97	56.00	25.50	QP	L	Pass
2**	0.586	27.19	9.97	46.00	18.81	AV	L	Pass
3	1.258	40.73	9.84	56.00	15.27	Peak	L	Pass
3*	1.258	33.50	9.84	56.00	22.50	QP	L	Pass
3**	1.258	29.84	9.84	46.00	16.16	AV	L	Pass
4	2.792	42.08	9.84	56.00	13.92	Peak	L	Pass
4*	2.792	33.87	9.84	56.00	22.13	QP	L	Pass
4**	2.792	26.24	9.84	46.00	19.76	AV	L	Pass
5	4.276	42.30	9.82	56.00	13.70	Peak	L	Pass
5*	4.276	33.97	9.82	56.00	22.03	QP	L	Pass
5**	4.276	27.93	9.82	46.00	18.07	AV	L	Pass
6	6.488	42.95	9.79	60.00	17.05	Peak	L	Pass
6*	6.488	33.82	9.79	60.00	26.18	QP	L	Pass
6**	6.488	27.79	9.79	50.00	22.21	AV	L	Pass

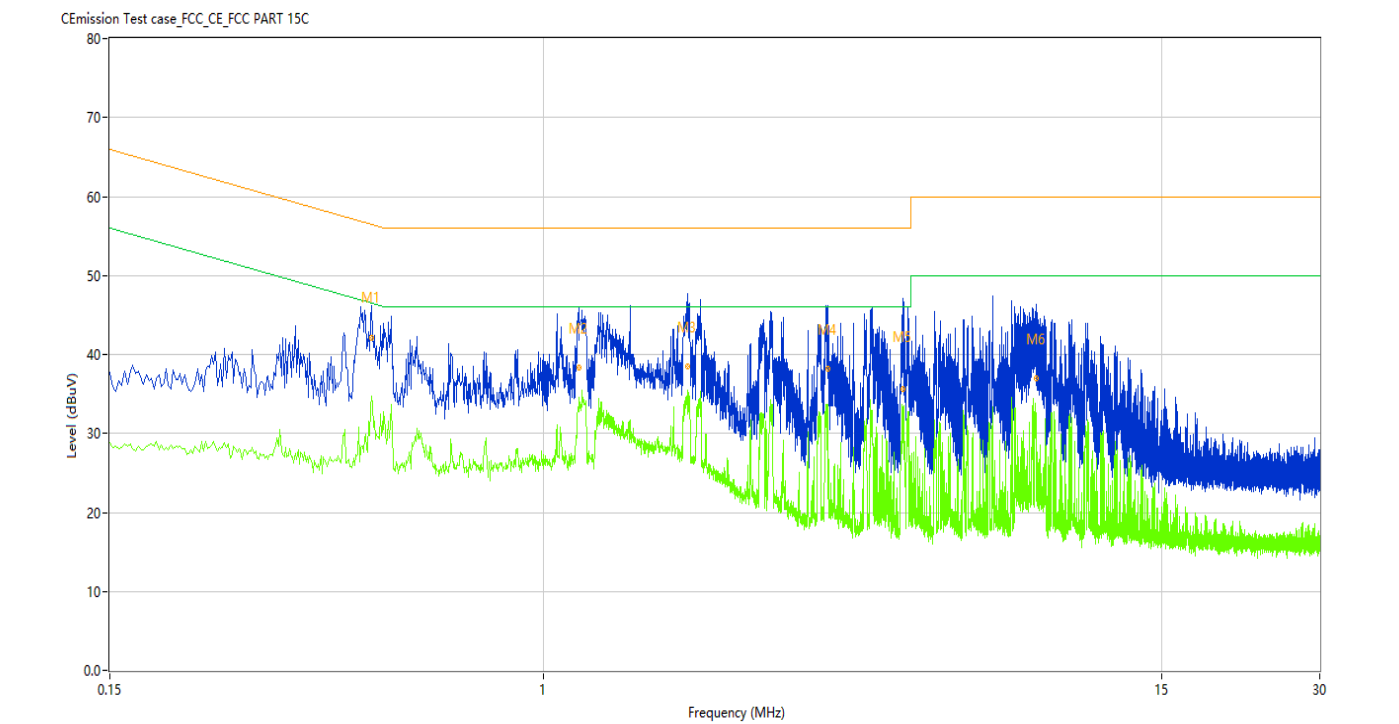
TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 54 of 61

Figure 29: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBUV)	Factor (dB)	Limit (dBUV)	Margin (dB)	Detector	Line	Verdict
1	0.472	49.52	10.07	56.48	6.96	Peak	N	Pass
1*	0.472	42.10	10.07	56.48	14.38	QP	N	Pass
1**	0.472	34.70	10.07	46.48	11.78	AV	N	Pass
2	1.170	45.71	9.95	56.00	10.29	Peak	N	Pass
2*	1.170	38.38	9.95	56.00	17.62	QP	N	Pass
2**	1.170	34.50	9.95	46.00	11.50	AV	N	Pass
3	1.882	46.21	9.94	56.00	9.79	Peak	N	Pass
3*	1.882	38.43	9.94	56.00	17.57	QP	N	Pass
3**	1.882	34.71	9.94	46.00	11.29	AV	N	Pass
4	3.486	45.13	9.90	56.00	10.87	Peak	N	Pass
4*	3.486	38.22	9.90	56.00	17.78	QP	N	Pass
4**	3.486	32.81	9.90	46.00	13.19	AV	N	Pass
5	4.838	46.26	9.75	56.00	9.74	Peak	N	Pass
5*	4.838	35.56	9.75	56.00	20.44	QP	N	Pass
5**	4.838	33.38	9.75	46.00	12.62	AV	N	Pass
6	8.666	46.16	9.80	60.00	13.84	Peak	N	Pass
6*	8.666	36.94	9.80	60.00	23.06	QP	N	Pass
6**	8.666	32.00	9.80	50.00	18.00	AV	N	Pass

TEST REPORT

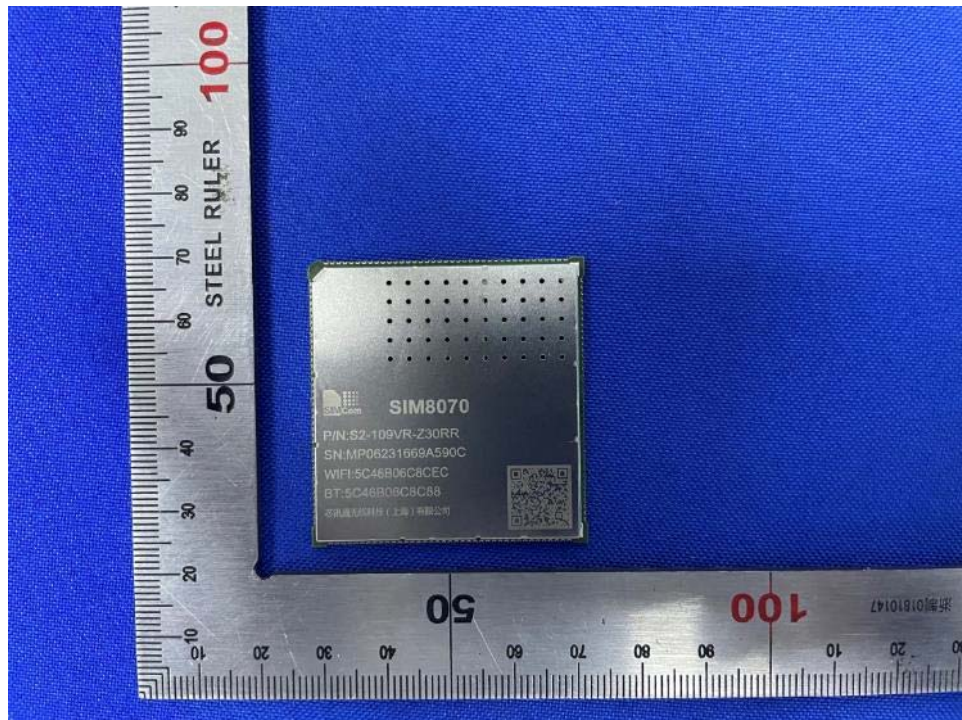
Report No.: SHE23060104-02BE

Date: 2023-08-08

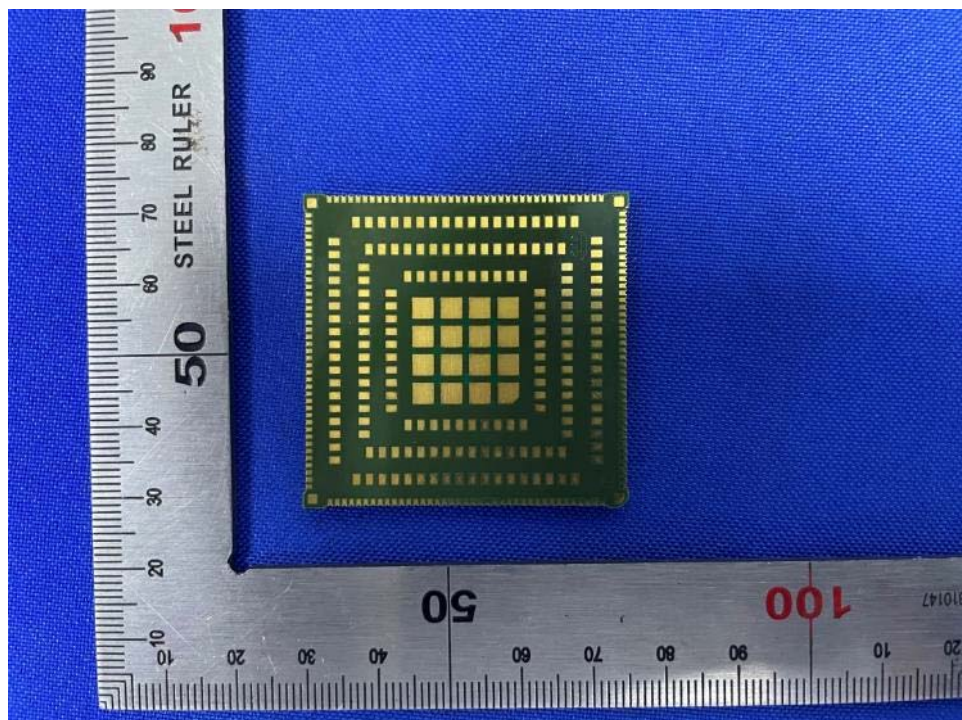
Page 55 of 61

5 Appendixes

5.1 Photographs of the Sample



Front of the sample



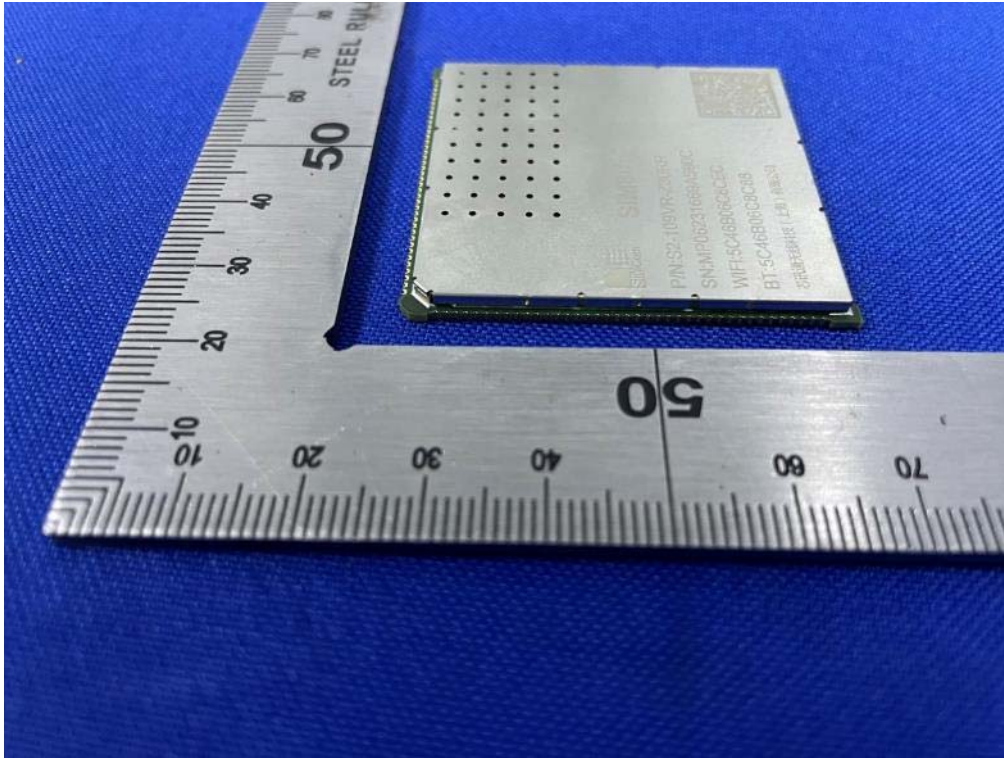
Rear of the sample

TEST REPORT

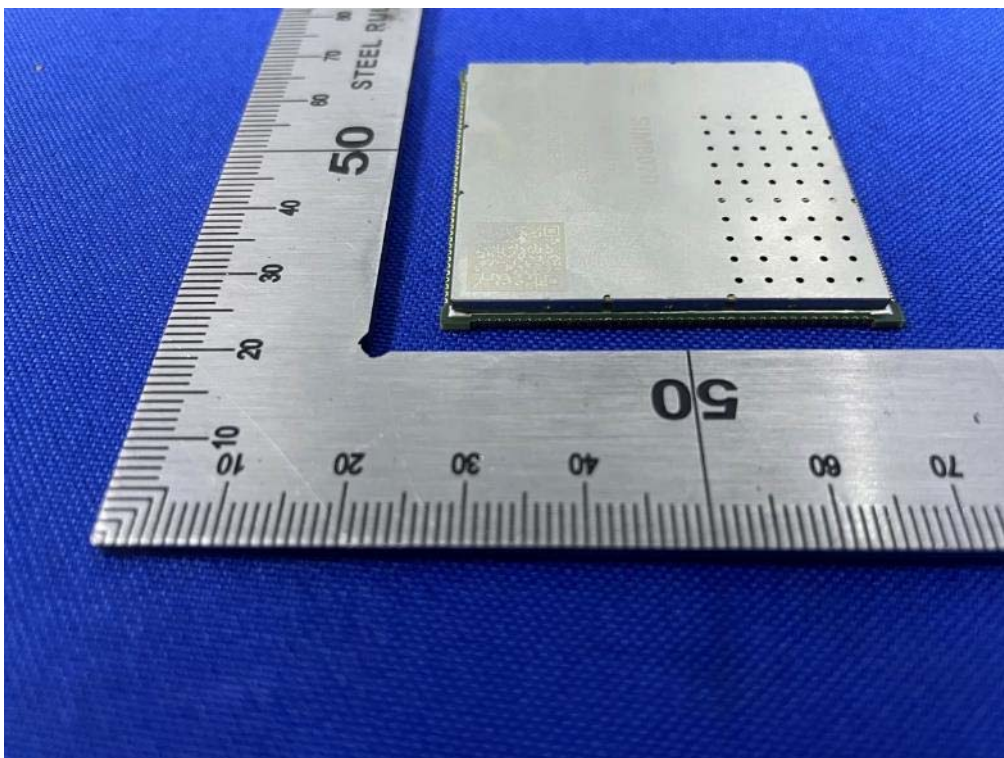
Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 56 of 61



Left of the sample



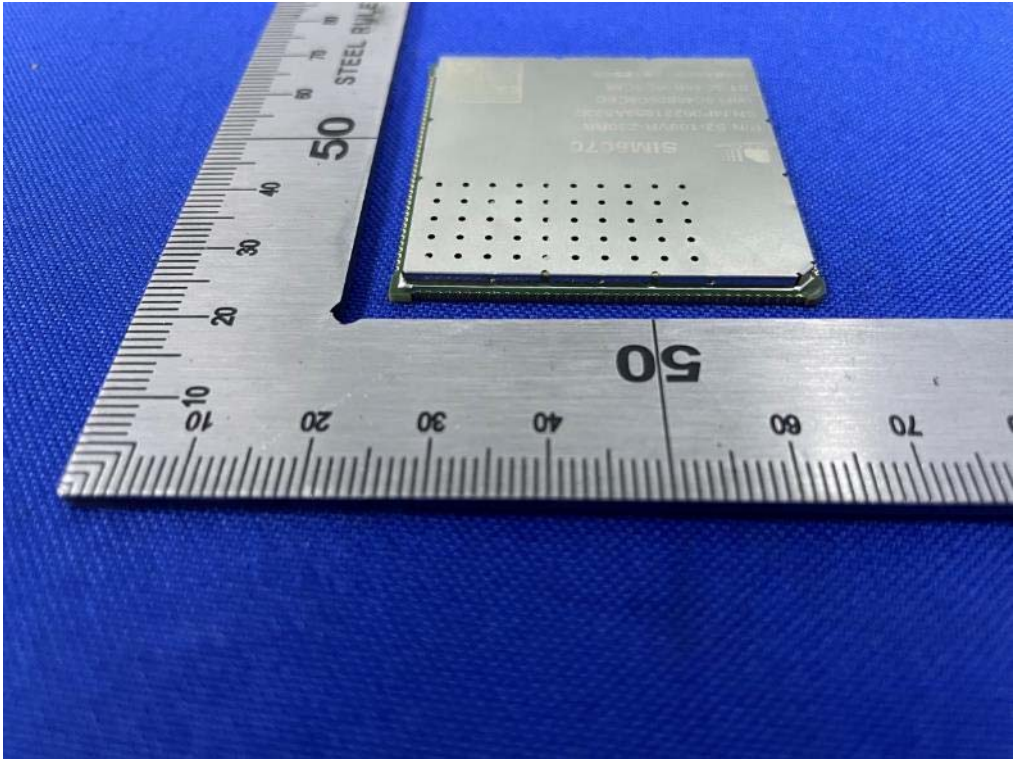
Right of the sample

TEST REPORT

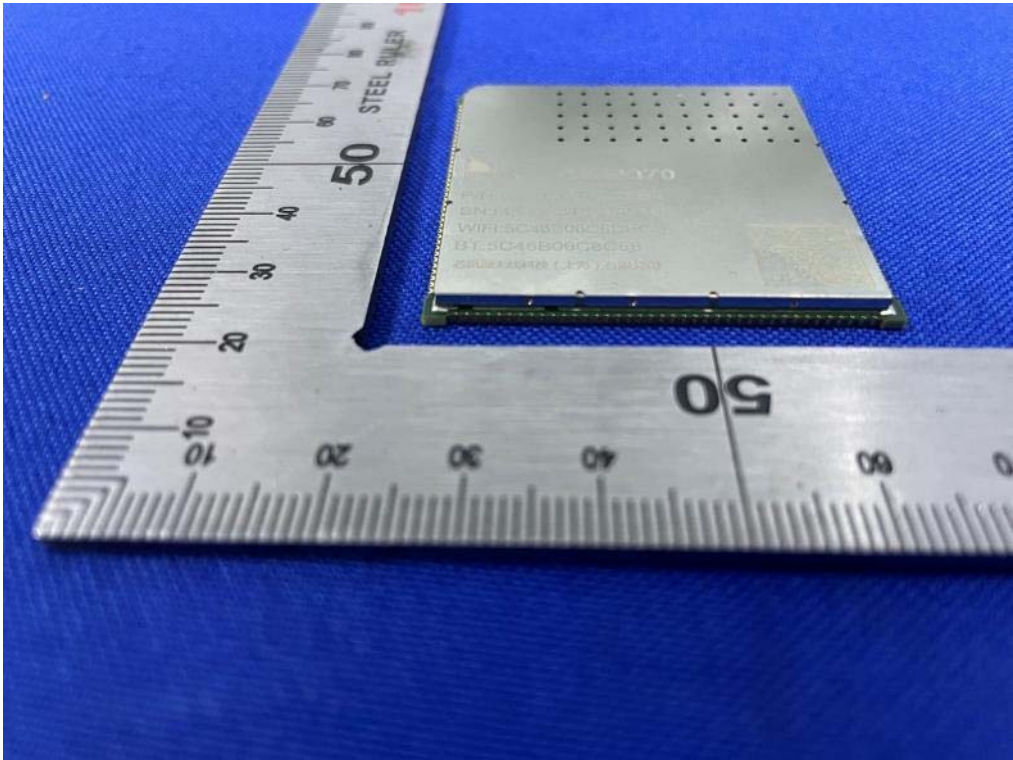
Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 57 of 61



Top of the sample



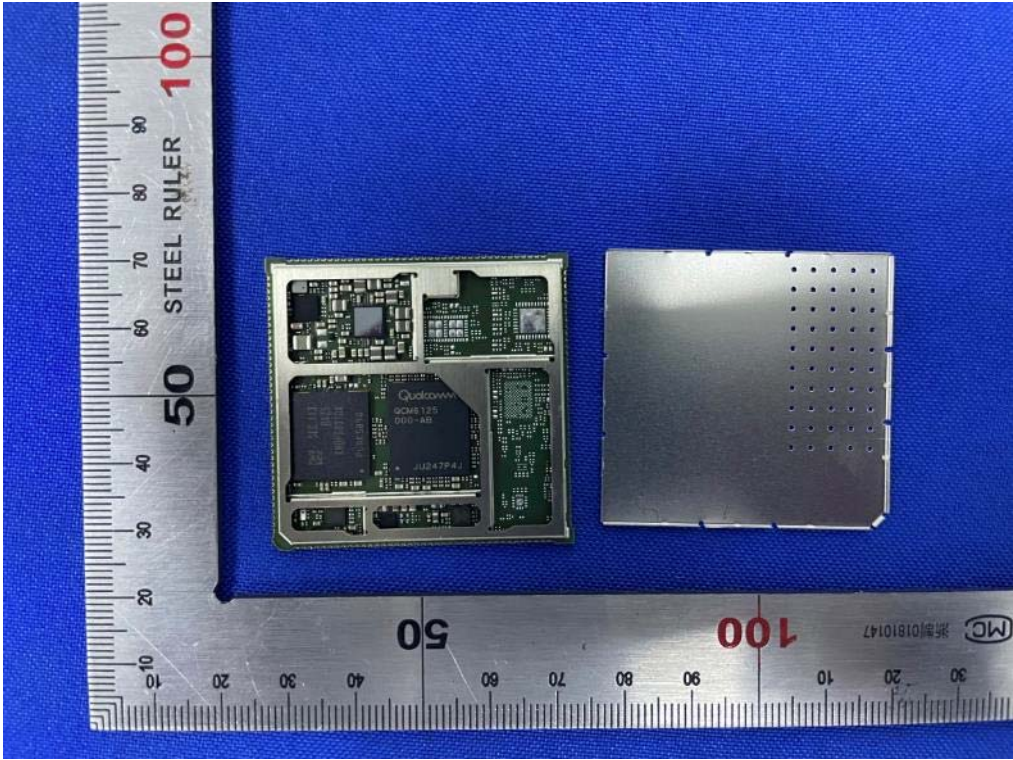
Bottom of the sample

TEST REPORT

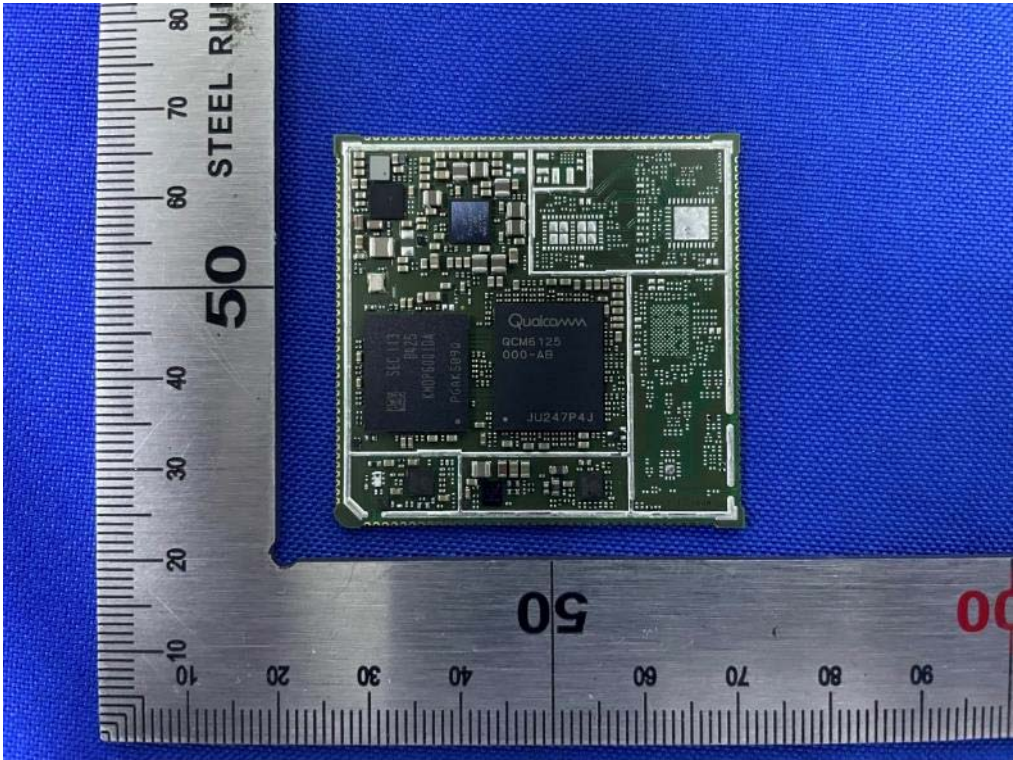
Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 58 of 61



Open of the sample



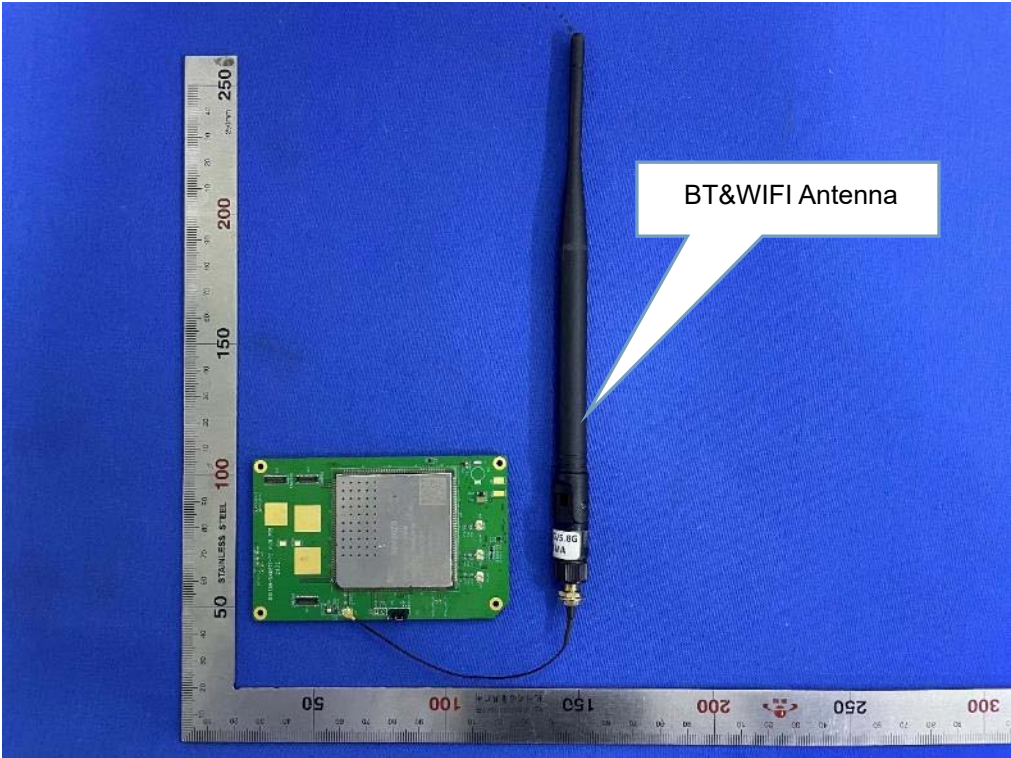
Internal-1 of the sample

TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 59 of 61



Antenna Position

TEST REPORT

Report No.: SHE23060104-02BE

Date: 2023-08-08

Page 60 of 61

5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



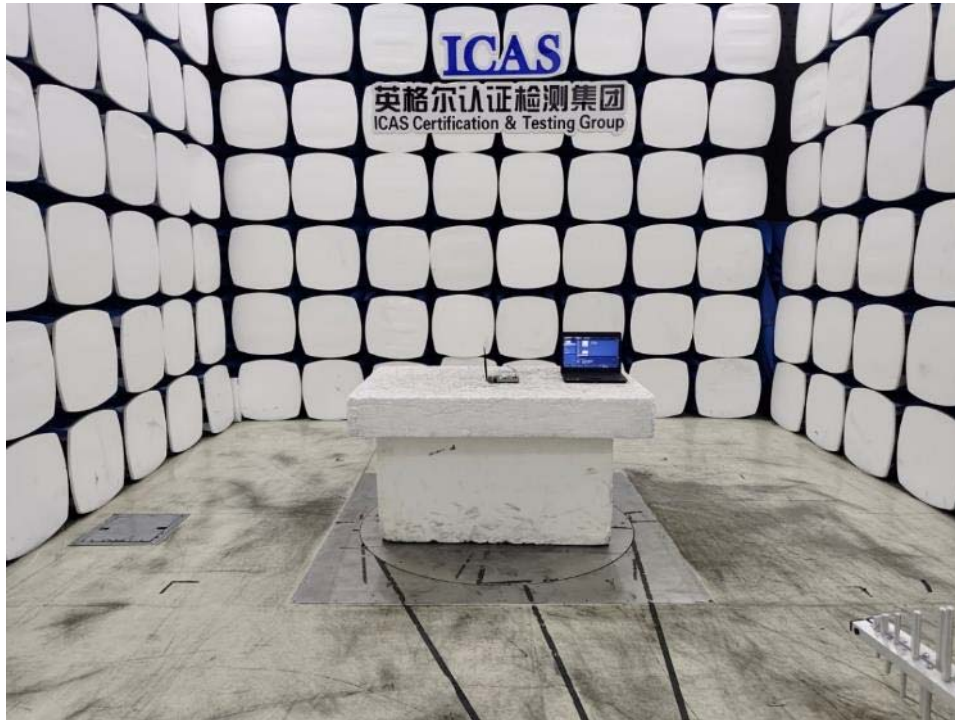
TEST REPORT

Report No.: SHE23060104-02BE

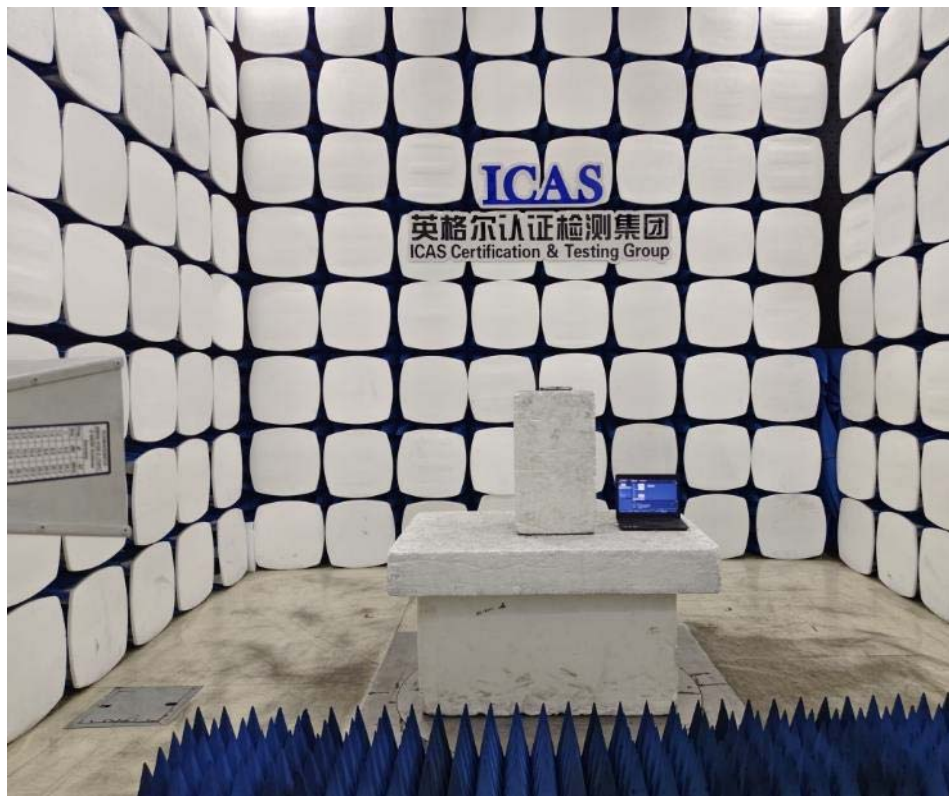
Date: 2023-08-08

Page 61 of 61

5.4 Set-up for Spurious Emissions below 1GHz



5.5 Set-up for Spurious Emissions above 1GHz



End of the report