

TEST REPORT

Report No.: SHE25020026-02CE Date: 2025-03-13 Page 36 of 55

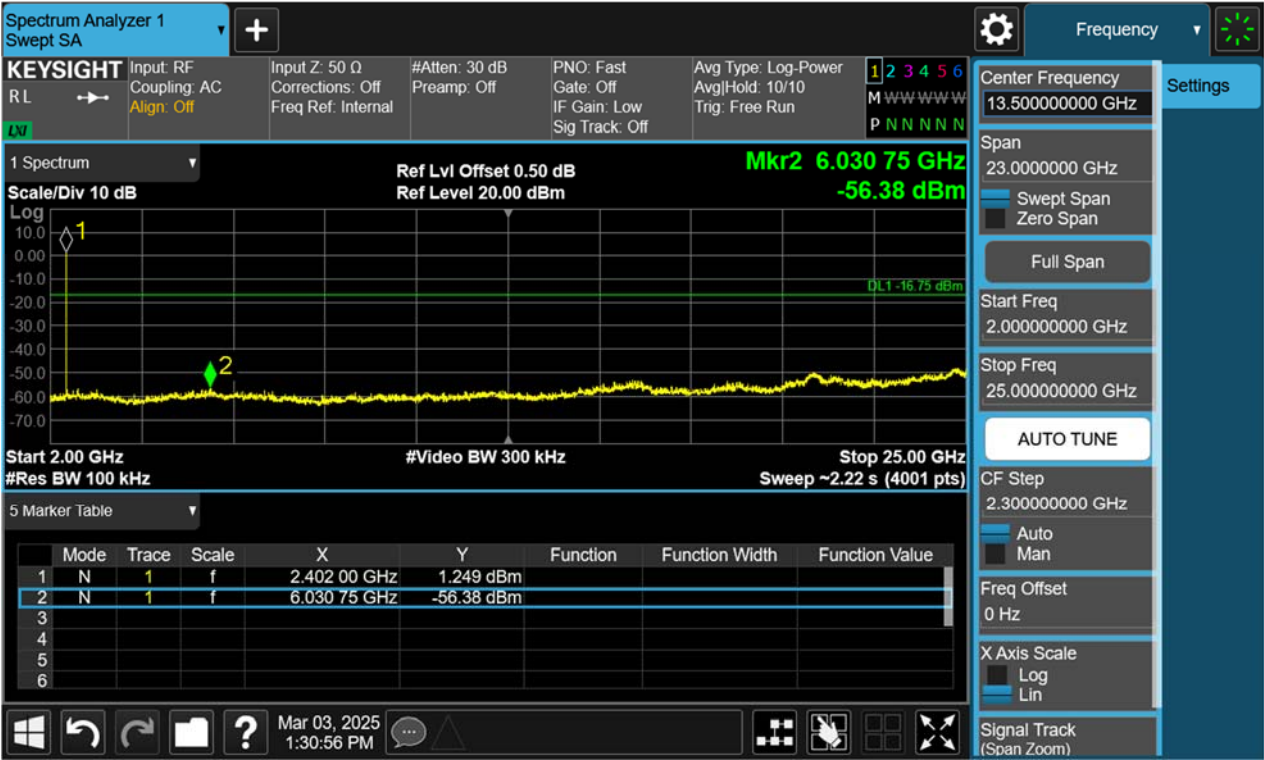
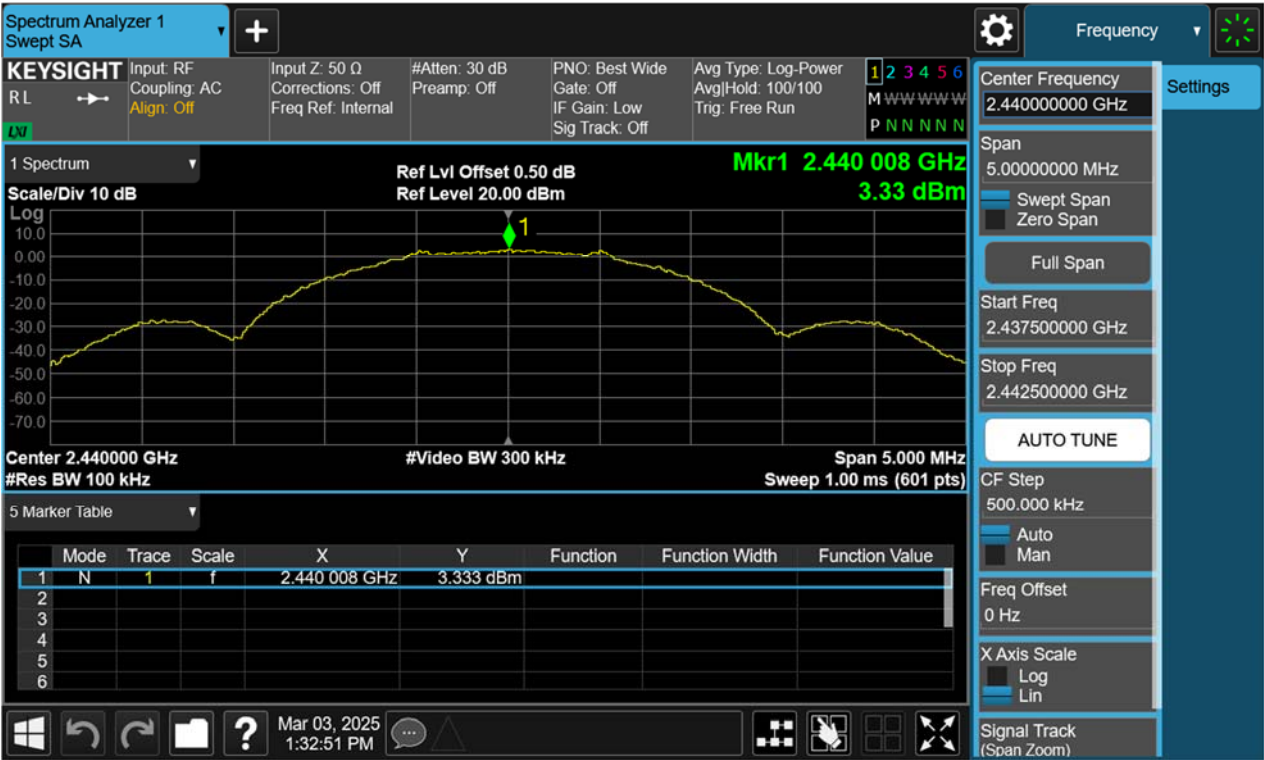


Figure 23: Conducted Spurious Emission & Authorized-band band-edge, 2440MHz, BLE-2Mbps Carrier Level



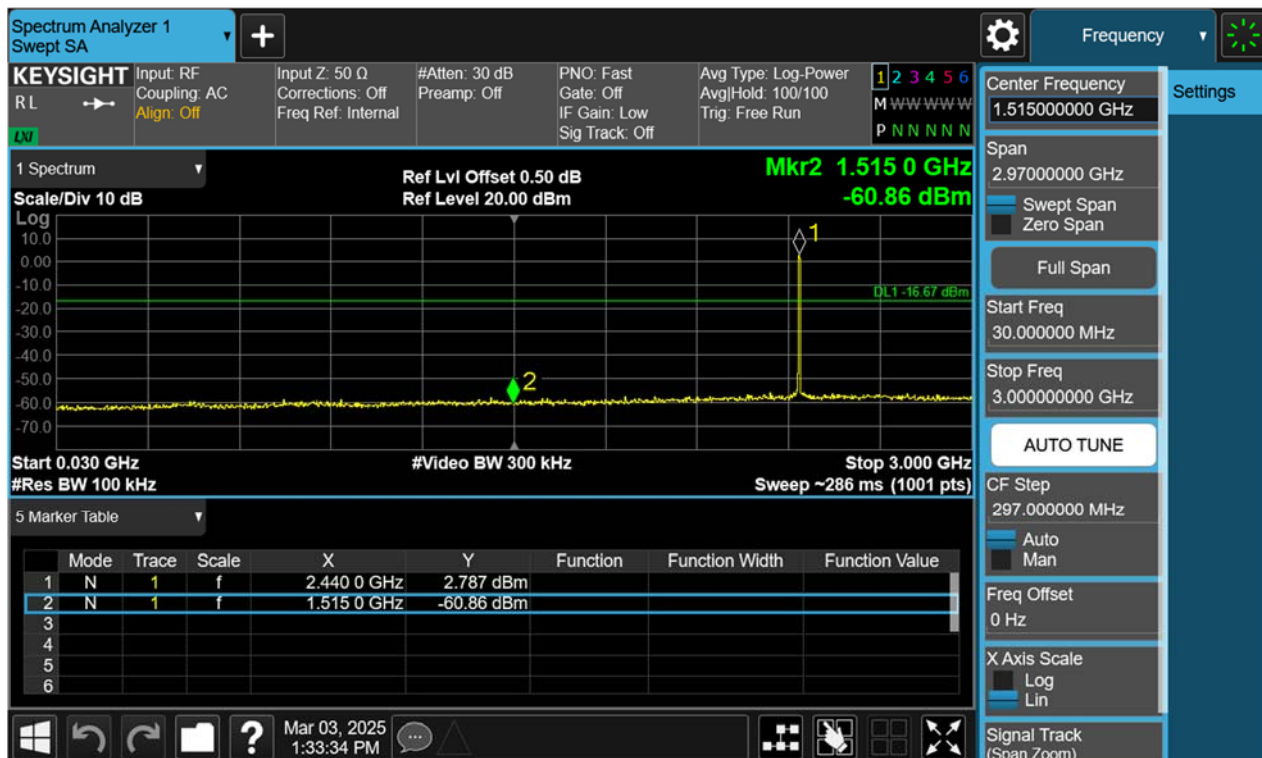
TEST REPORT

Report No.: SHE25020026-02CE

Date: 2025-03-13

Page 37 of 55

Conducted spurious emissions 30MHz-25GHz



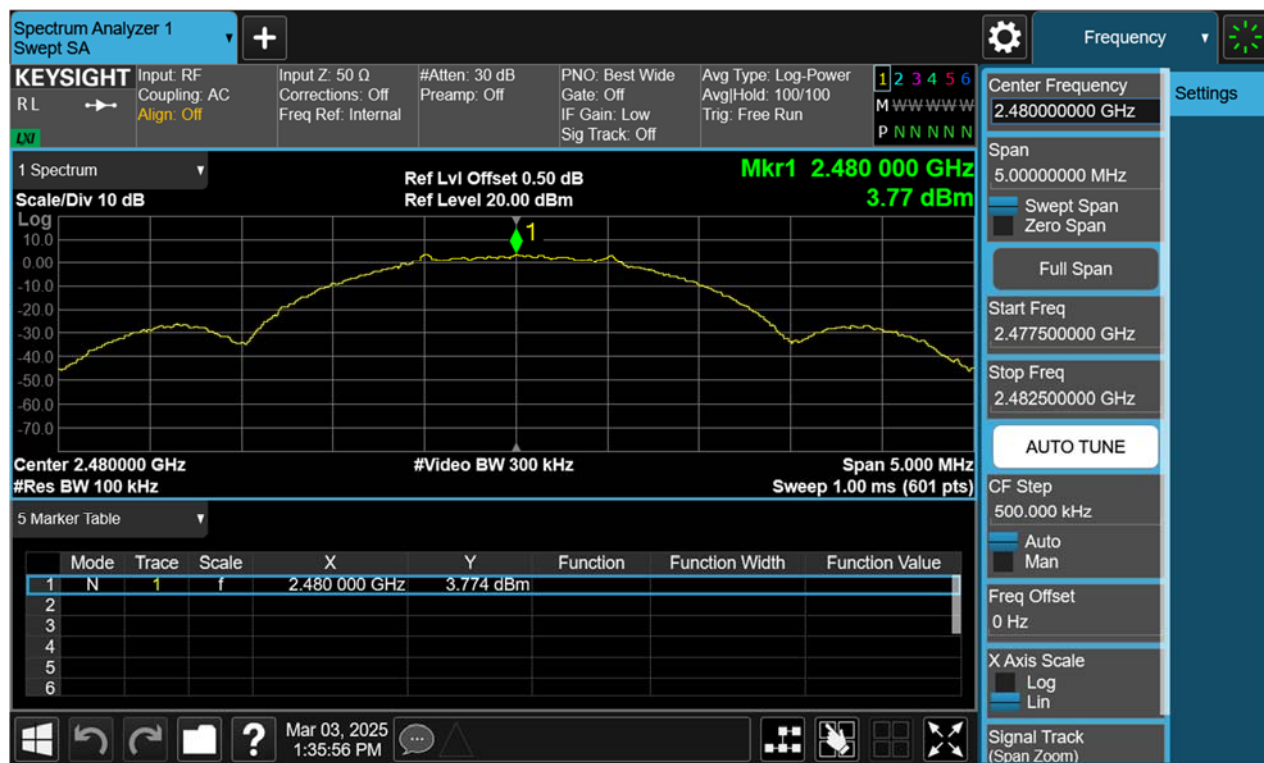
TEST REPORT

Report No.: SHE25020026-02CE

Date: 2025-03-13

Page 38 of 55

Figure 24: Conducted Spurious Emission & Authorized-band band-edge, 2480MHz, BLE-2Mbps Carrier Level



Band Edge



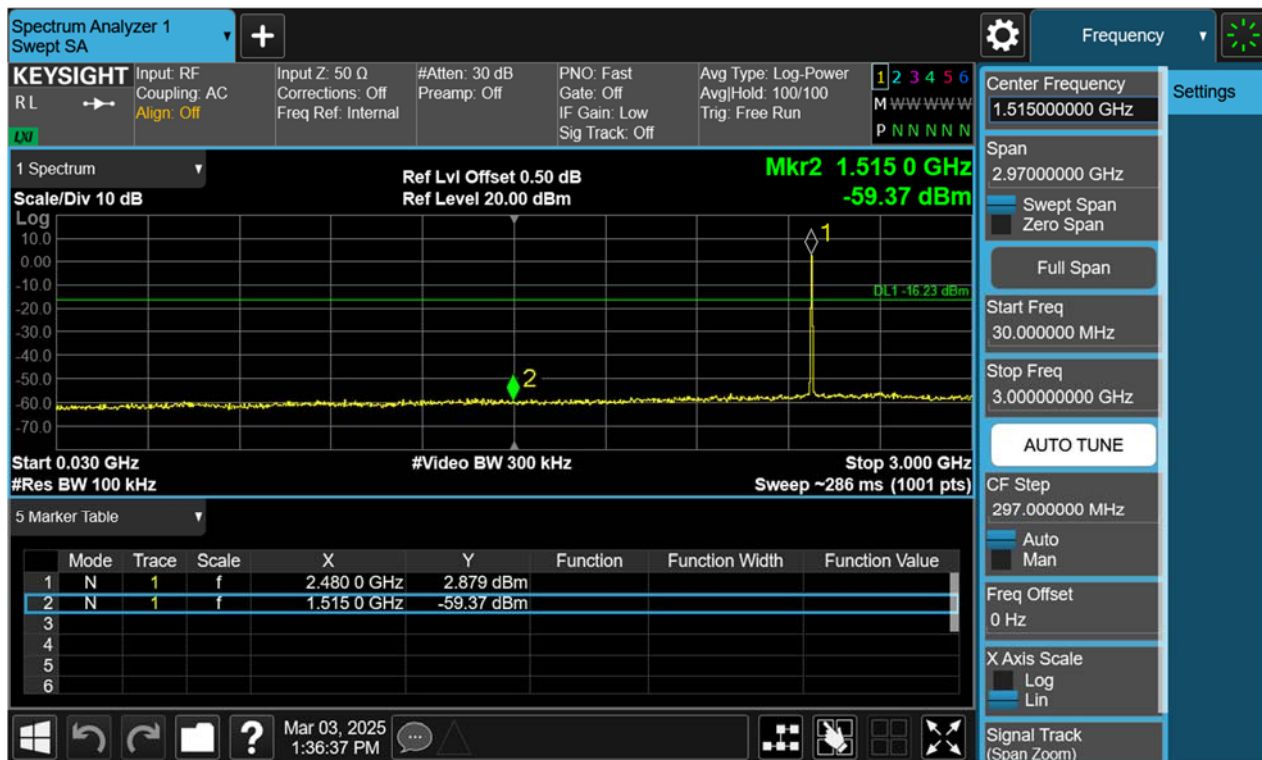
TEST REPORT

Report No.: SHE25020026-02CE

Date: 2025-03-13

Page 39 of 55

Conducted spurious emissions 30MHz-25GHz



TEST REPORT

Report No.: SHE25020026-02CE

Date: 2025-03-13

Page 40 of 55

4.1.6 Radiated Emission

RESULT:

PASS

Test standard	: FCC Part 15.247(d), 15.205, 15.209 RSS-GEN 8.9
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
Ambient temperature	: 20.2°C
Relative humidity	: 39%

Notes

Test plots please refer to the annex document "SHE25020026-02CE DATA BLE-TX EXHIBIT A of EH-MC23 Model".

Test plots please refer to the annex document "SHE25020026-02CE DATA BLE-TX EXHIBIT A of EH-MC23B Model".

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. In addition, During 30MHz to 1GHz test frequency range, only the worst mode data was reported in this report.
2. The spurious above 18GHz is noise only and 20dB below the limit. The value has no need to be reported.
3. 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.: SHE25020026-02CE

Date: 2025-03-13

Page 41 of 55

4.1.7 Band Edge (Restricted-band band-edge)

RESULT:

PASS

Test standard	: FCC Part 15.247(d), 15.205, 15.209 RSS-GEN 8.10
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
Ambient temperature	: 20.2°C
Relative humidity	: 39%

Notes

Test plots please refer to the annex document "SHE25020026-02CE DATA BLE-TX EXHIBIT A of EH-MC23 Model".

Test plots please refer to the annex document "SHE25020026-02CE DATA BLE-TX EXHIBIT A of EH-MC23B Model".

TEST REPORT

Report No.: SHE25020026-02CE

Date: 2025-03-13

Page 42 of 55

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, 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	: Connected to GND
Ambient temperature	: 20°C
Relative humidity	: 55%

For details refer to following test plot.

TEST REPORT

Report No.: SHE25020026-02CE

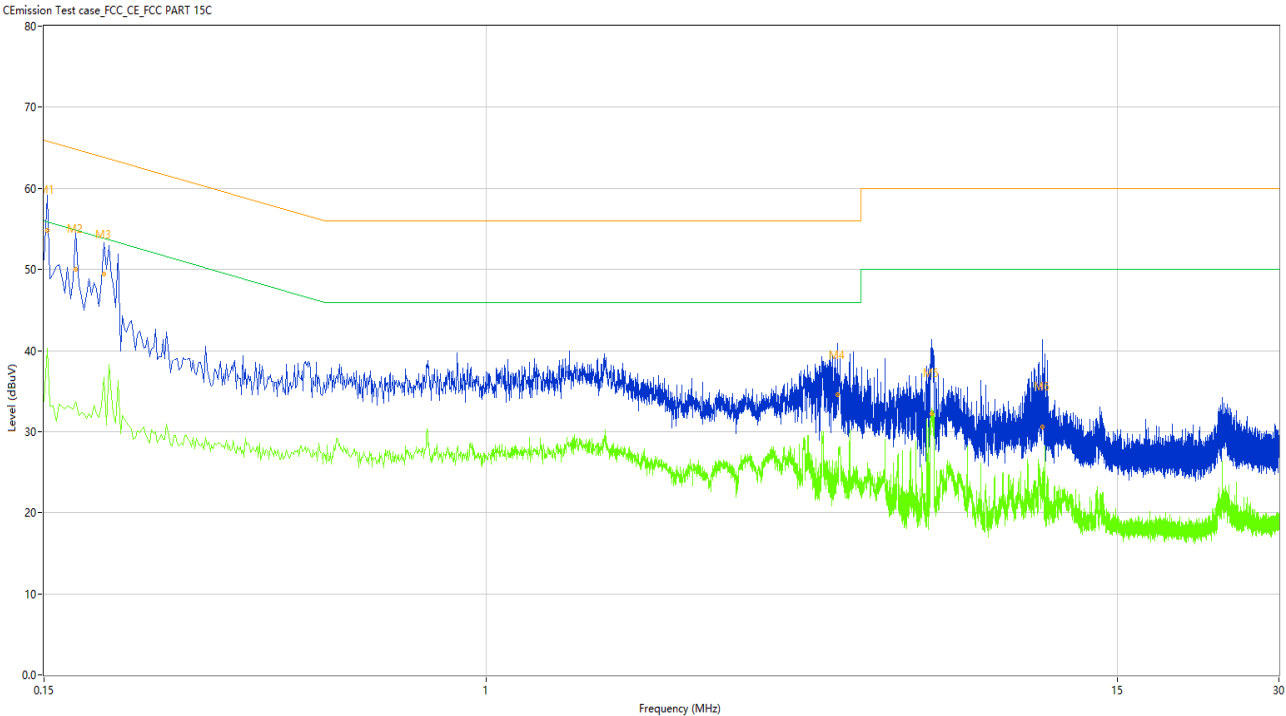
Date: 2025-03-13

Page 43 of 55

Note: The all configurations were tested respectively, but only the worst data (at low channel) shown here.

EH-MC23 Model

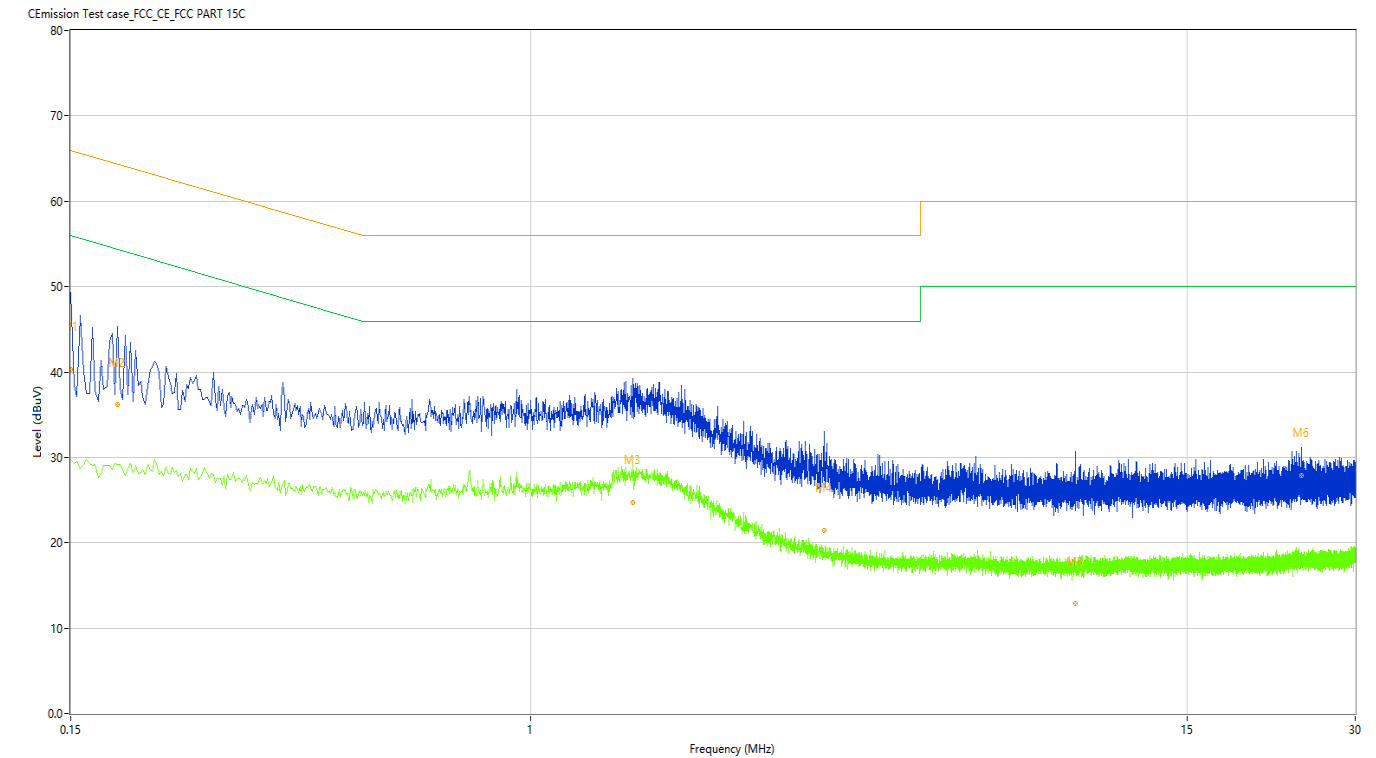
Figure 25: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	62.71	10.24	65.89	3.18	Peak	L	Pass
1*	0.152	54.89	10.24	65.89	11.00	QP	L	Pass
1**	0.152	40.41	10.24	55.89	15.48	AV	L	Pass
2	0.172	58.20	10.27	64.86	6.66	Peak	L	Pass
2*	0.172	50.05	10.27	64.86	14.81	QP	L	Pass
2**	0.172	33.63	10.27	54.86	21.23	AV	L	Pass
3	0.194	55.30	10.29	63.86	8.56	Peak	L	Pass
3*	0.194	49.53	10.29	63.86	14.33	QP	L	Pass
3**	0.194	36.57	10.29	53.86	17.29	AV	L	Pass
4	4.520	41.63	10.19	56.00	14.37	Peak	L	Pass
4*	4.520	34.55	10.19	56.00	21.45	QP	L	Pass
4**	4.520	25.54	10.19	46.00	20.46	AV	L	Pass
5	6.754	42.27	10.26	60.00	17.73	Peak	L	Pass
5*	6.754	32.17	10.26	60.00	27.83	QP	L	Pass
5**	6.754	32.14	10.26	50.00	17.86	AV	L	Pass
6	10.886	46.15	10.39	60.00	13.85	Peak	L	Pass
6*	10.886	30.48	10.39	60.00	29.52	QP	L	Pass
6**	10.886	23.72	10.39	50.00	26.28	AV	L	Pass

TEST REPORT

Figure 26: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	52.77	10.11	66.00	13.23	Peak	N	Pass
1*	0.150	40.37	10.11	66.00	25.63	QP	N	Pass
1**	0.150	29.74	10.11	56.00	26.26	AV	N	Pass
2	0.182	47.44	10.16	64.39	16.95	Peak	N	Pass
2*	0.182	36.09	10.16	64.39	28.30	QP	N	Pass
2**	0.182	29.14	10.16	54.39	25.25	AV	N	Pass
3	1.526	32.43	9.90	56.00	23.57	Peak	N	Pass
3*	1.526	24.65	9.90	56.00	31.35	QP	N	Pass
3**	1.526	29.33	9.90	46.00	16.67	AV	N	Pass
4	3.360	28.20	10.09	56.00	27.80	Peak	N	Pass
4*	3.360	21.39	10.09	56.00	34.61	QP	N	Pass
4**	3.360	18.74	10.09	46.00	27.26	AV	N	Pass
5	9.454	22.77	10.26	60.00	37.23	Peak	N	Pass
5*	9.454	12.92	10.26	60.00	47.08	QP	N	Pass
5**	9.454	18.07	10.26	50.00	31.93	AV	N	Pass
6	24.000	50.44	11.04	60.00	9.56	Peak	N	Pass
6*	24.000	27.88	11.04	60.00	32.12	QP	N	Pass
6**	24.000	18.57	11.04	50.00	31.43	AV	N	Pass

TEST REPORT

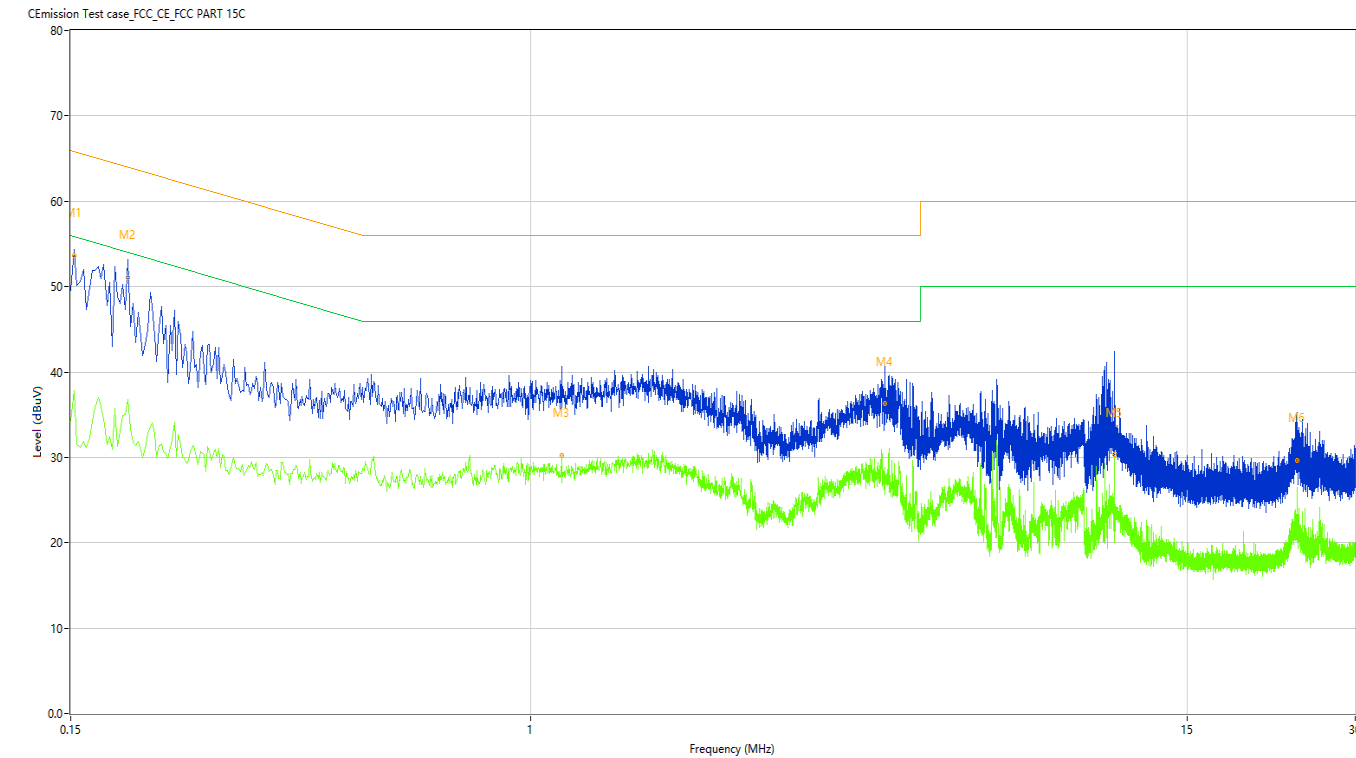
Report No.: SHE25020026-02CE

Date: 2025-03-13

Page 45 of 55

EH-MC23B Model

Figure 27: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.152	61.55	10.24	65.89	4.34	Peak	L	Pass
1*	0.152	53.70	10.24	65.89	12.19	QP	L	Pass
1**	0.152	37.79	10.24	55.89	18.10	AV	L	Pass
2	0.190	57.18	10.29	64.04	6.86	Peak	L	Pass
2*	0.190	51.10	10.29	64.04	12.94	QP	L	Pass
2**	0.190	36.74	10.29	54.04	17.30	AV	L	Pass
3	1.136	36.33	9.98	56.00	19.67	Peak	L	Pass
3*	1.136	30.14	9.98	56.00	25.86	QP	L	Pass
3**	1.136	30.00	9.98	46.00	16.00	AV	L	Pass
4	4.304	41.07	10.18	56.00	14.93	Peak	L	Pass
4*	4.304	36.28	10.18	56.00	19.72	QP	L	Pass
4**	4.304	27.84	10.18	46.00	18.16	AV	L	Pass
5	11.104	40.59	10.40	60.00	19.41	Peak	L	Pass
5*	11.104	30.28	10.40	60.00	29.72	QP	L	Pass
5**	11.104	29.91	10.40	50.00	20.09	AV	L	Pass
6	23.640	34.45	11.04	60.00	25.55	Peak	L	Pass
6*	23.640	29.57	11.04	60.00	30.43	QP	L	Pass
6**	23.640	26.41	11.04	50.00	23.59	AV	L	Pass

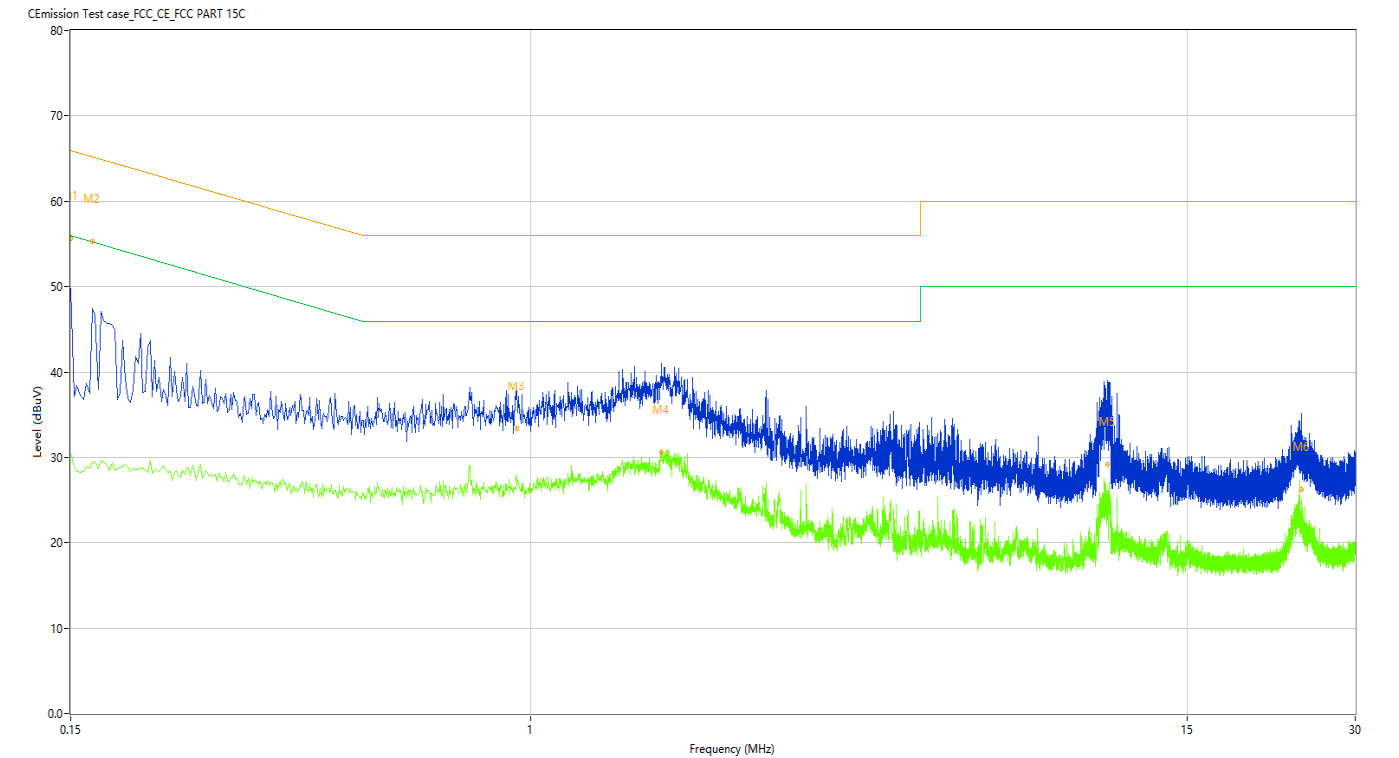
TEST REPORT

Report No.: SHE25020026-02CE

Date: 2025-03-13

Page 46 of 55

Figure 28: Conducted Emission on AC Mains, N Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.150	63.80	10.11	66.00	2.20	Peak	N	Pass
1*	0.150	55.68	10.11	66.00	10.32	QP	N	Pass
1**	0.150	30.40	10.11	56.00	25.60	AV	N	Pass
2	0.164	60.16	10.14	65.26	5.10	Peak	N	Pass
2*	0.164	55.32	10.14	65.26	9.94	QP	N	Pass
2**	0.164	29.37	10.14	55.26	25.89	AV	N	Pass
3	0.946	40.96	9.98	56.00	15.04	Peak	N	Pass
3*	0.946	33.28	9.98	56.00	22.72	QP	N	Pass
3**	0.946	27.72	9.98	46.00	18.28	AV	N	Pass
4	1.716	35.97	9.95	56.00	20.03	Peak	N	Pass
4*	1.716	30.50	9.95	56.00	25.50	QP	N	Pass
4**	1.716	30.84	9.95	46.00	15.16	AV	N	Pass
5	10.782	39.29	10.29	60.00	20.71	Peak	N	Pass
5*	10.782	29.13	10.29	60.00	30.87	QP	N	Pass
5**	10.782	26.02	10.29	50.00	23.98	AV	N	Pass
6	24.068	33.16	11.04	60.00	26.84	Peak	N	Pass
6*	24.068	26.21	11.04	60.00	33.79	QP	N	Pass
6**	24.068	25.05	11.04	50.00	24.95	AV	N	Pass

TEST REPORT

Report No.: SHE25020026-02CE

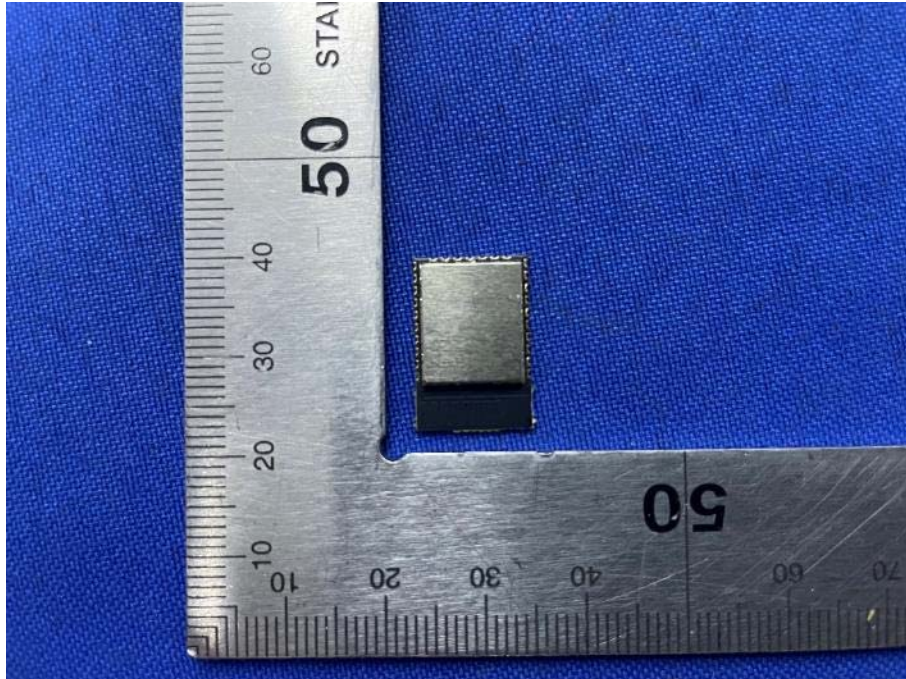
Date: 2025-03-13

Page 47 of 55

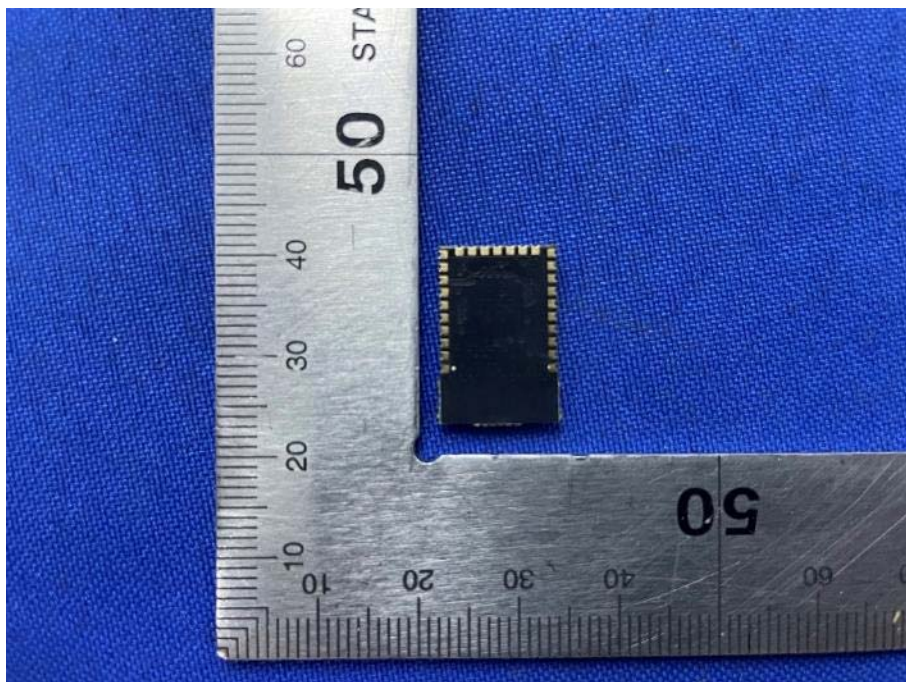
5 Appendixes

5.1 Photographs of the Sample

EH-MC23 Model

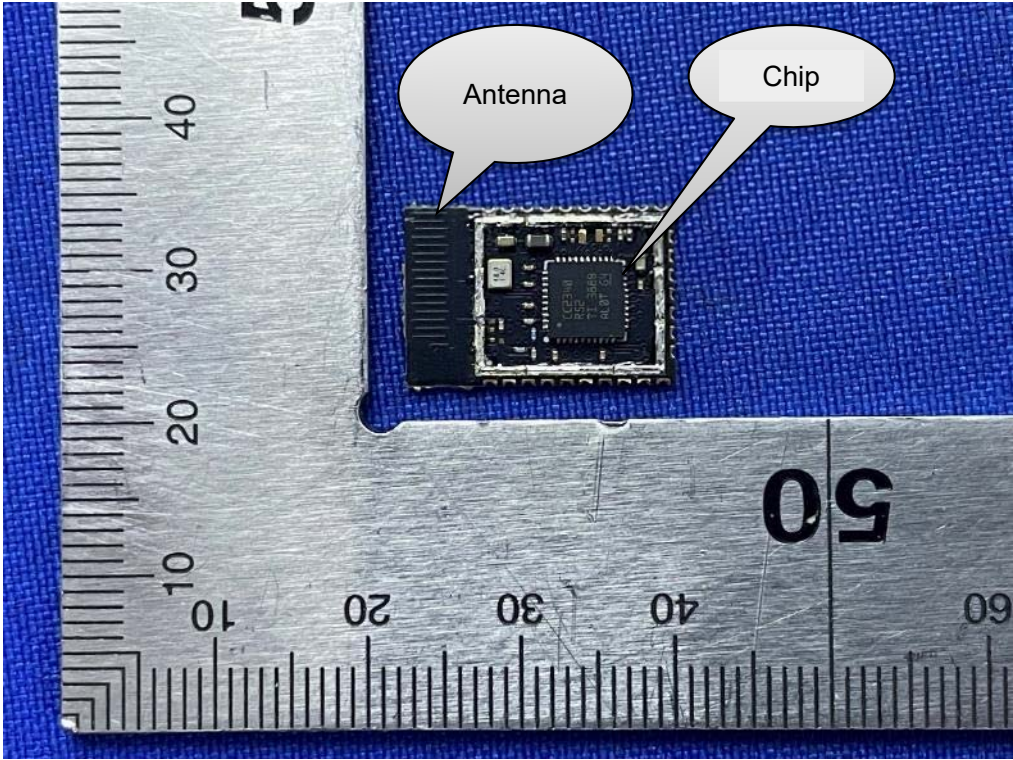


Front of the sample



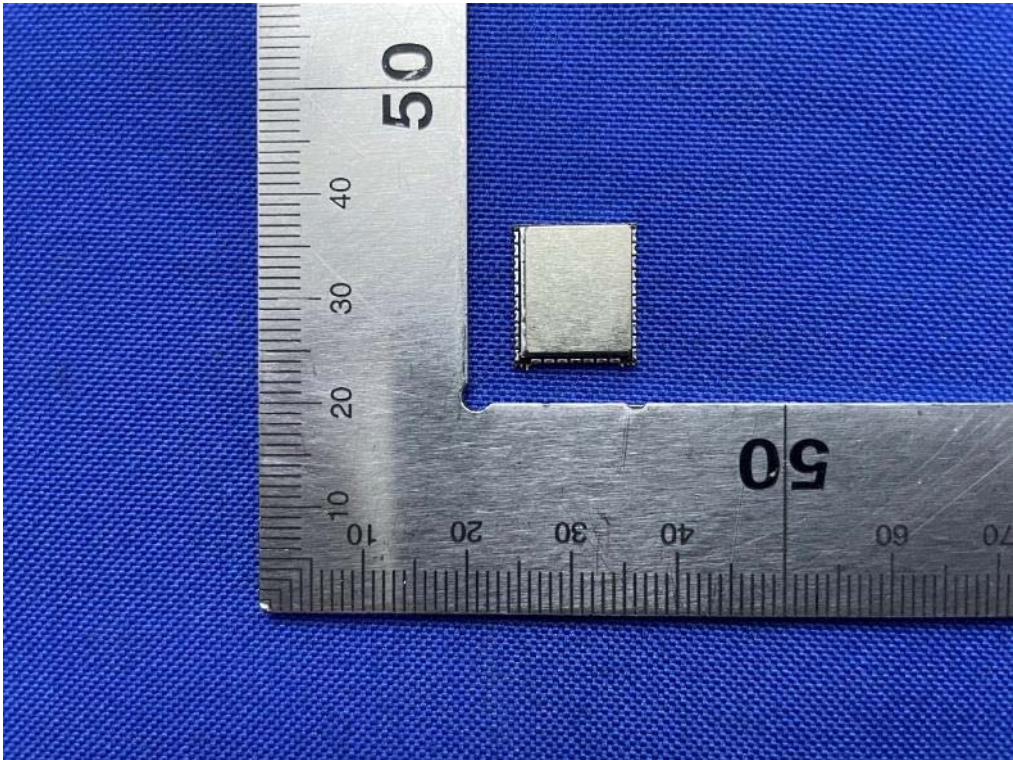
Rear of the sample

TEST REPORT



Internal of the sample

EH-MC23B Model



Front of the sample

TEST REPORT

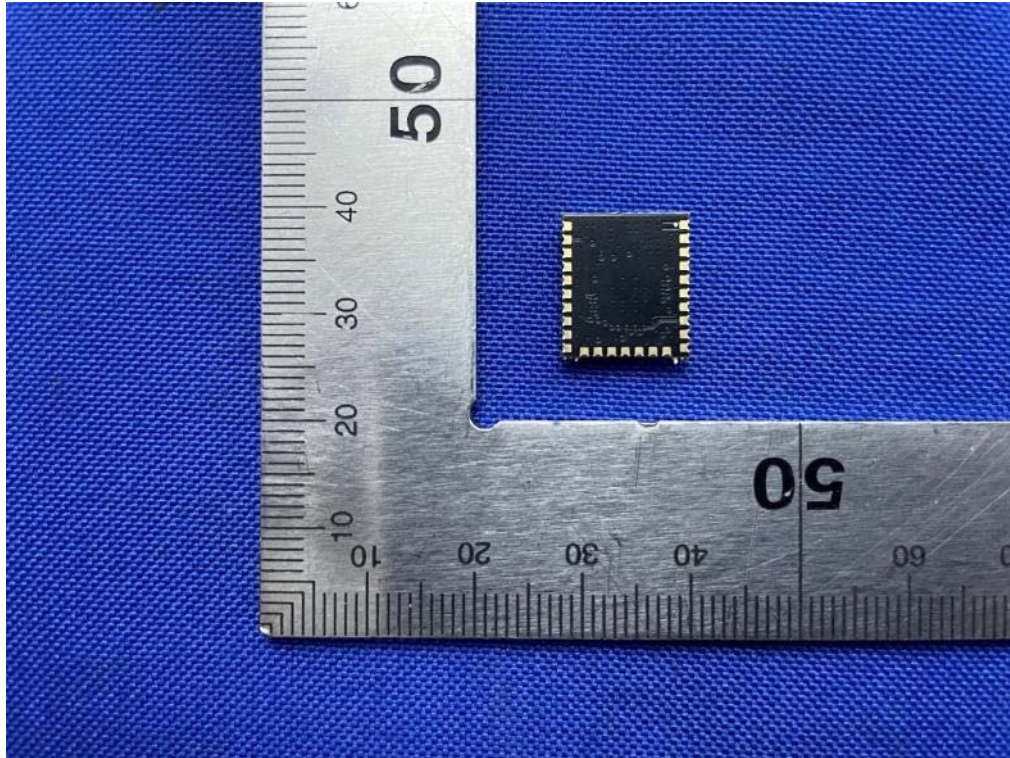
Report No.:

SHE25020026-02CE

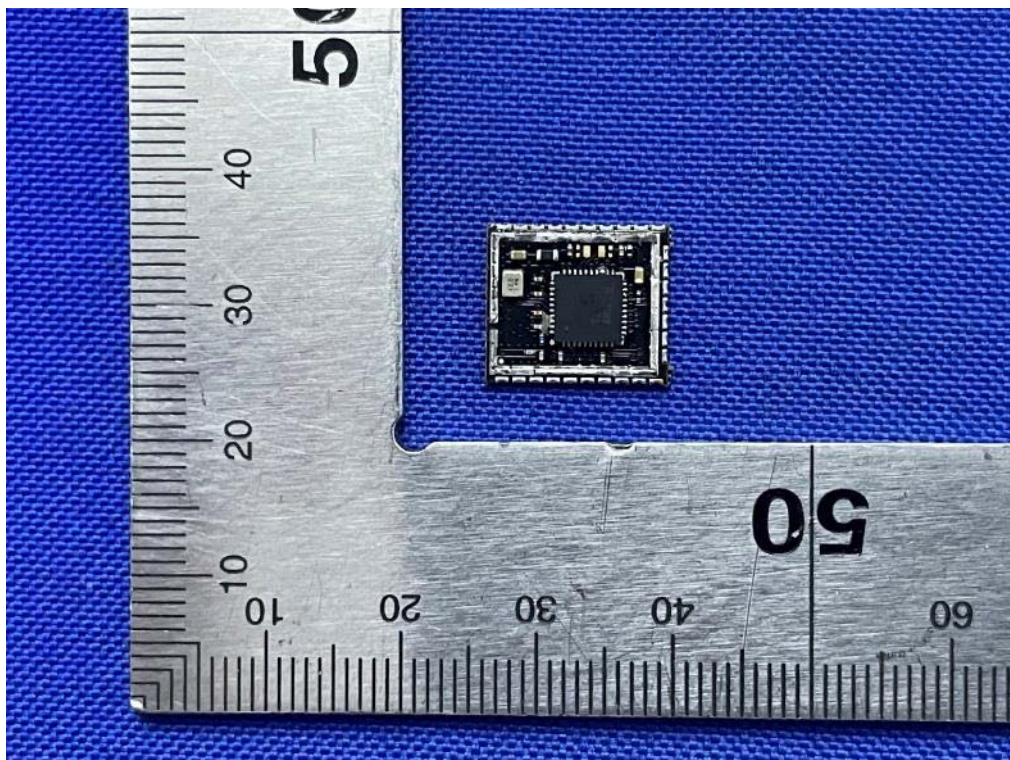
Date:

2025-03-13

Page 49 of 55

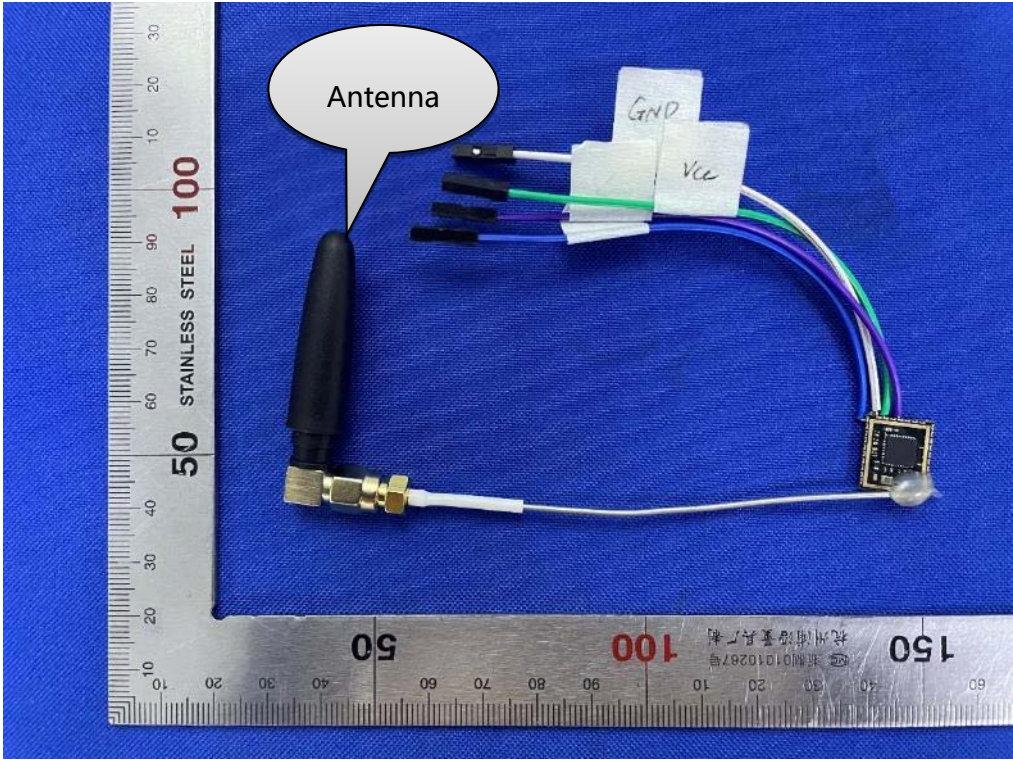


Rear of the sample

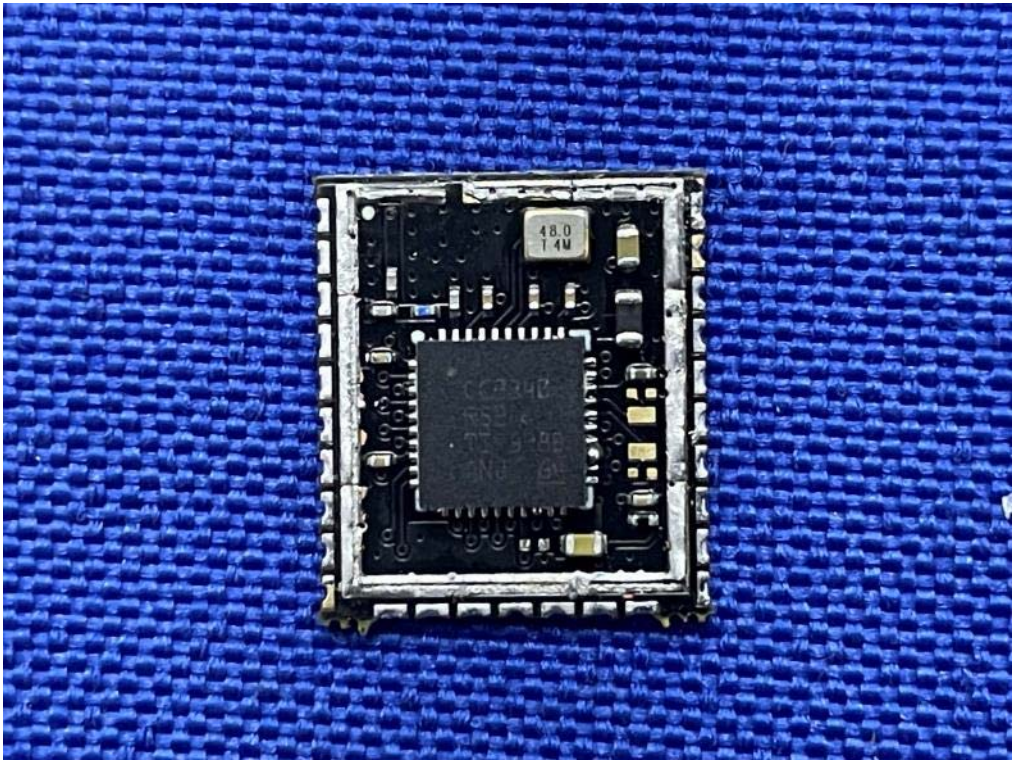


Internal of the sample

TEST REPORT



Antenna Position



Chip

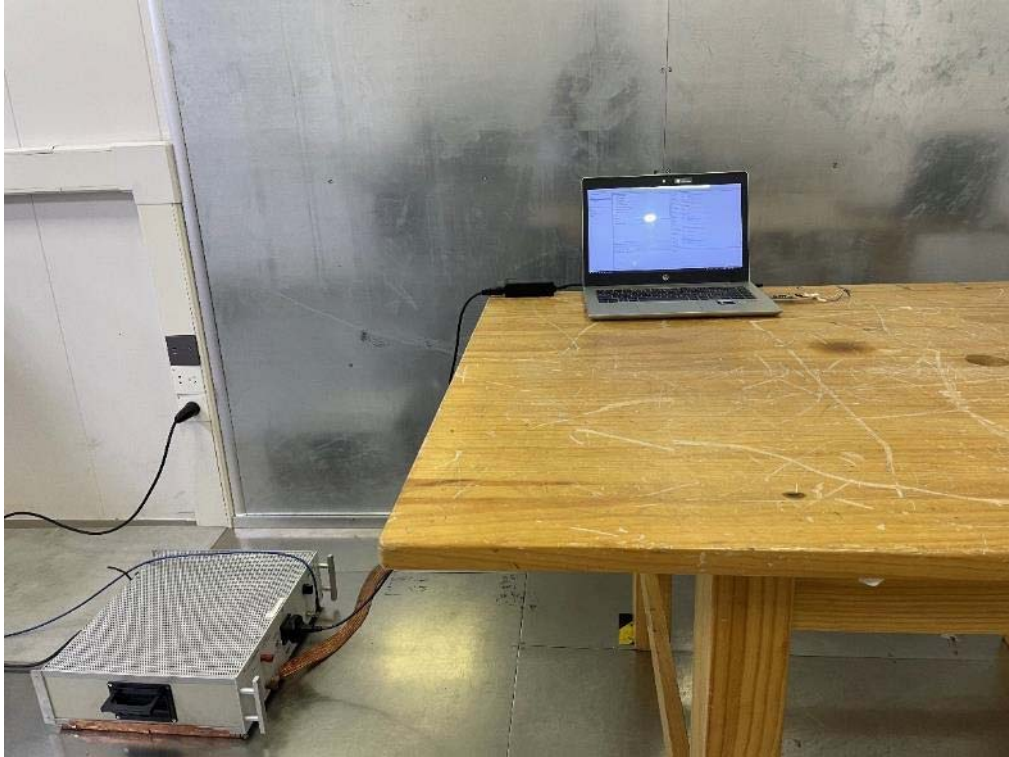
TEST REPORT

Report No.: SHE25020026-02CE

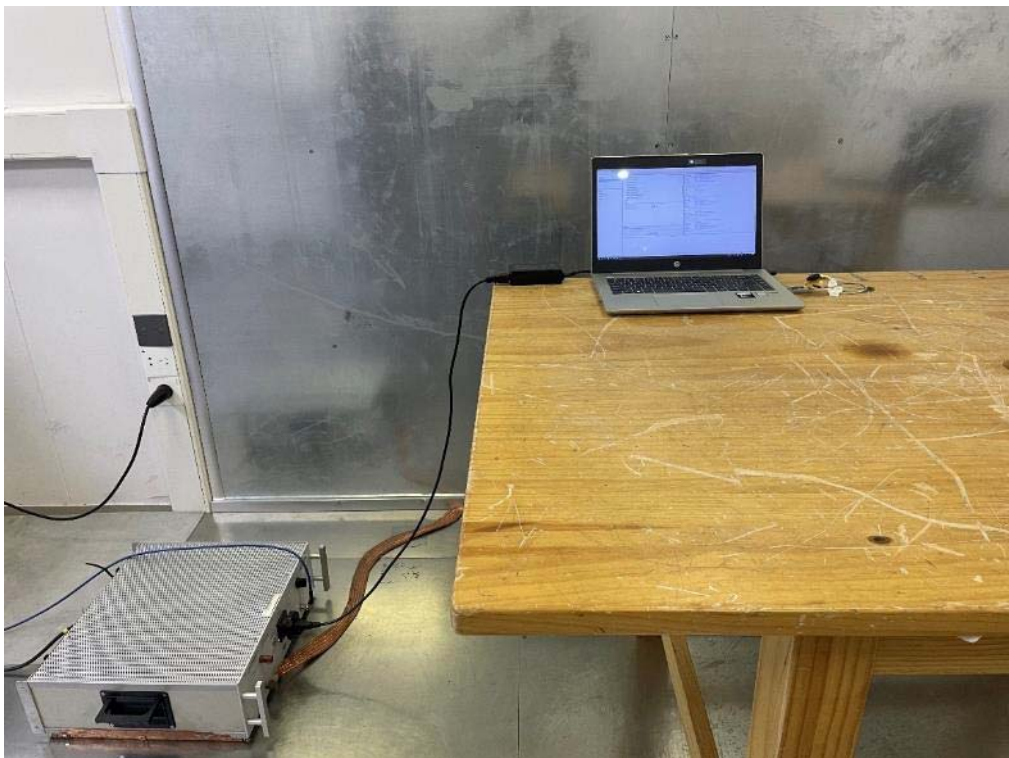
Date: 2025-03-13

Page 51 of 55

5.2 Set-up for Conducted Emissions



EH-MC23 Model



EH-MC23B Model

TEST REPORT

Report No.: SHE25020026-02CE

Date: 2025-03-13

Page 52 of 55

5.3 Set-up for Conducted RF test at Antenna Port



5.4 Set-up for Spurious Emissions below 1GHz



EH-MC23 Model

TEST REPORT

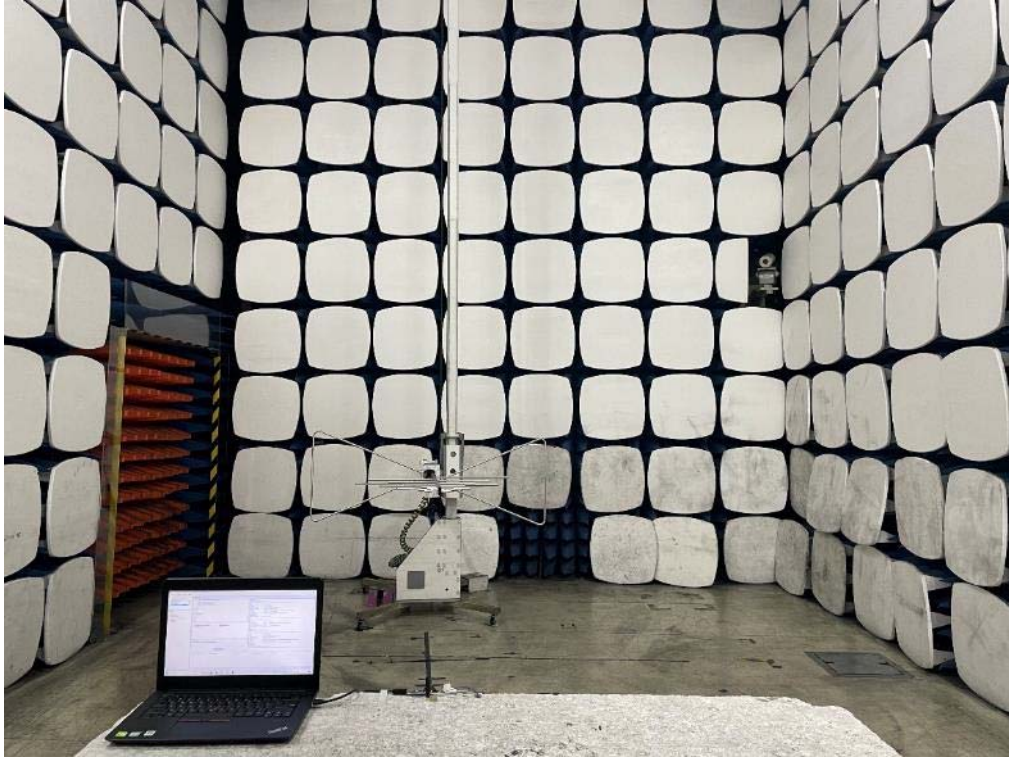
Report No.:

SHE25020026-02CE

Date:

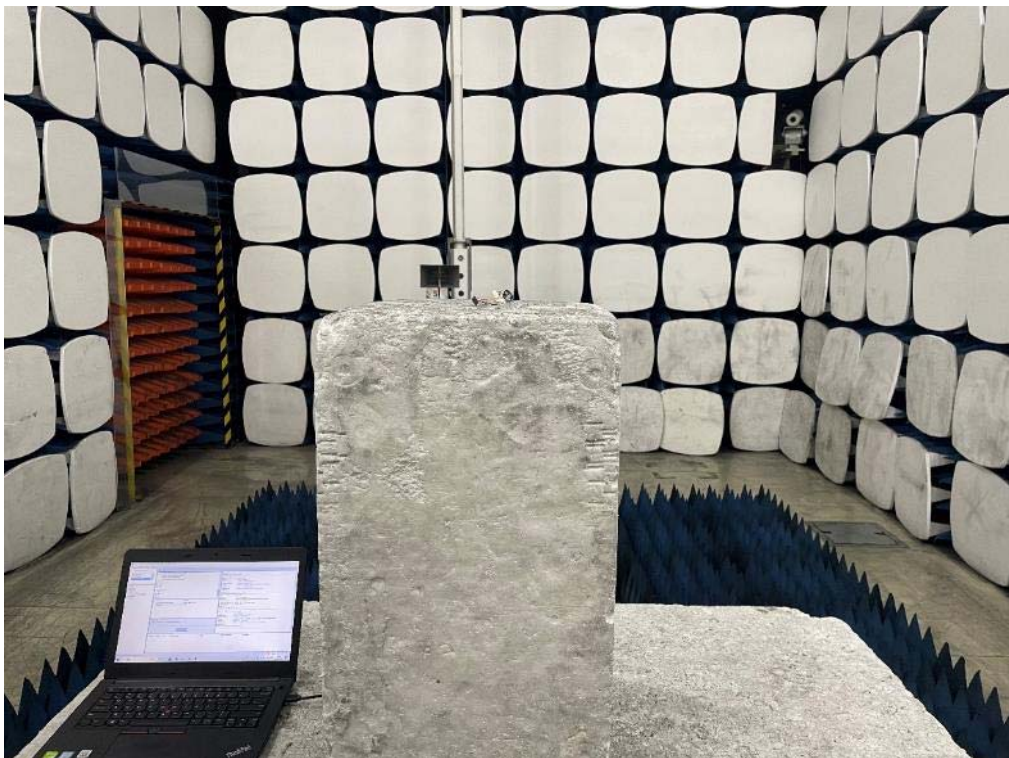
2025-03-13

Page 53 of 55



EH-MC23B Model

5.5 Set-up for Spurious Emissions above 1GHz



TEST REPORT

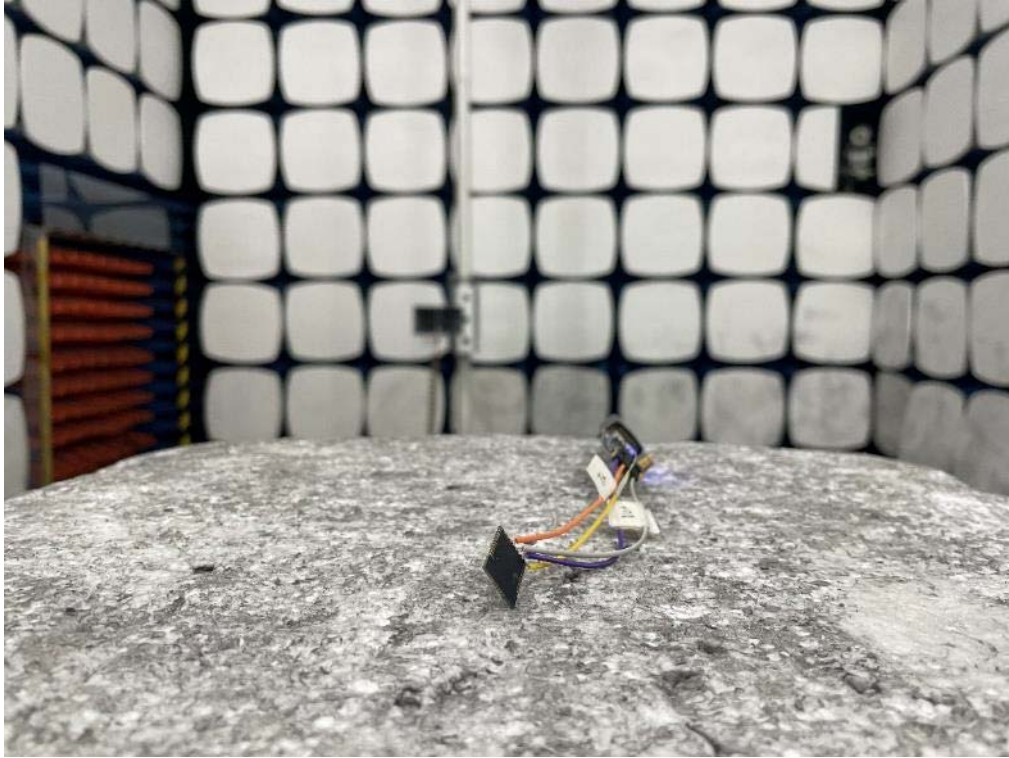
Report No.:

SHE25020026-02CE

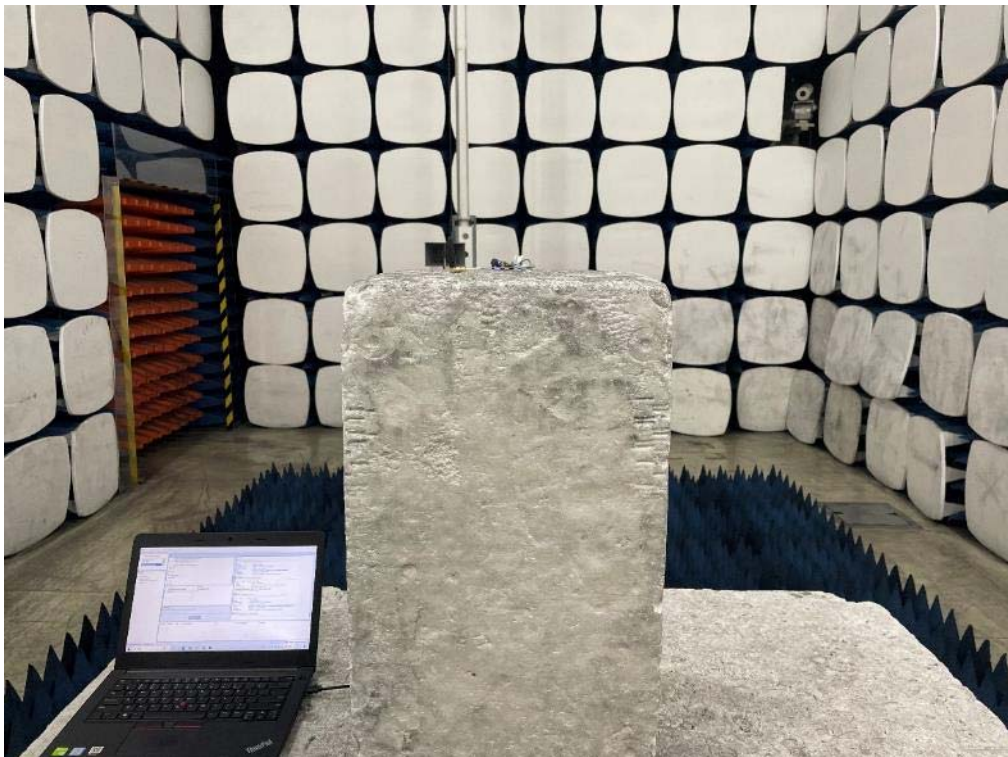
Date:

2025-03-13

Page 54 of 55



EH-MC23 Model



TEST REPORT

Report No.:

SHE25020026-02CE

Date:

2025-03-13

Page 55 of 55



EH-MC23B Model

End of the report