

Test Report 2023-014

Version B

Issued 19 Apr 2023

Project GCL-0303

Test Setup Photographs

Primary Test Standard:

FCC Part 15.247

FCC Part 15.225

RSS-210 Issue 10 Amd 1

RSS-247 Issue 2: 2017

Garmin Compliance Lab

Garmin International

1200 E 151st Street

Olathe Kansas 66062 USA



See section 6 of this report regarding the presence or absence of accreditation logos or marks on this cover page.

1. Summary

This document contains photographs and other sensitive materials removed from GCL Test Report 2023-008 and GCL Test Report 2023-009 based on confidentiality. This report is treated as part of those reports via reference. Information about the test samples, procedures, and results are to be found in those reports.

Report Organization

For convenience of the reader, this report is organized as follows:

1. Summary
2. Test Background
3. Report History and Approval
4. Photographs Removed
5. Other Removed Material, if any
6. Test Standards Applied
7. Concluding Notes

2. Test Background

The testing reported here was performed at the Garmin Compliance Lab, an organization within Garmin International, located at 1200 E 151st St, Olathe Kansas, USA. The contact telephone number is +1.913.397.8200.

The testing was performed on behalf of Garmin's Consumer Engineering business organization, a separate organization located at 1200 E 151st St, Olathe Kansas, USA.

3. Report History and Approval

Christian Shepherd wrote this report.

This report is initially issued on 4 Apr 2023 as Version A.

Version B on 19 Apr 2023 provides revised photographs related to support table height changes in the NFC test report, GCL Test Report 2023-008.

Report Technical Review:

David Arnett
Technical Lead EMC Engineer



Report Approval:

Shruti Kohli
Manager Test and Measurement (EMC, Reliability and Calibration)



4. Test Setup Photographs

The following material is associated with GCL Test Report 2023-008. It would have appeared on or near page 12 of the test report.



Figure RE14.2: EUT test setup, front view (Antenna X Orientation)

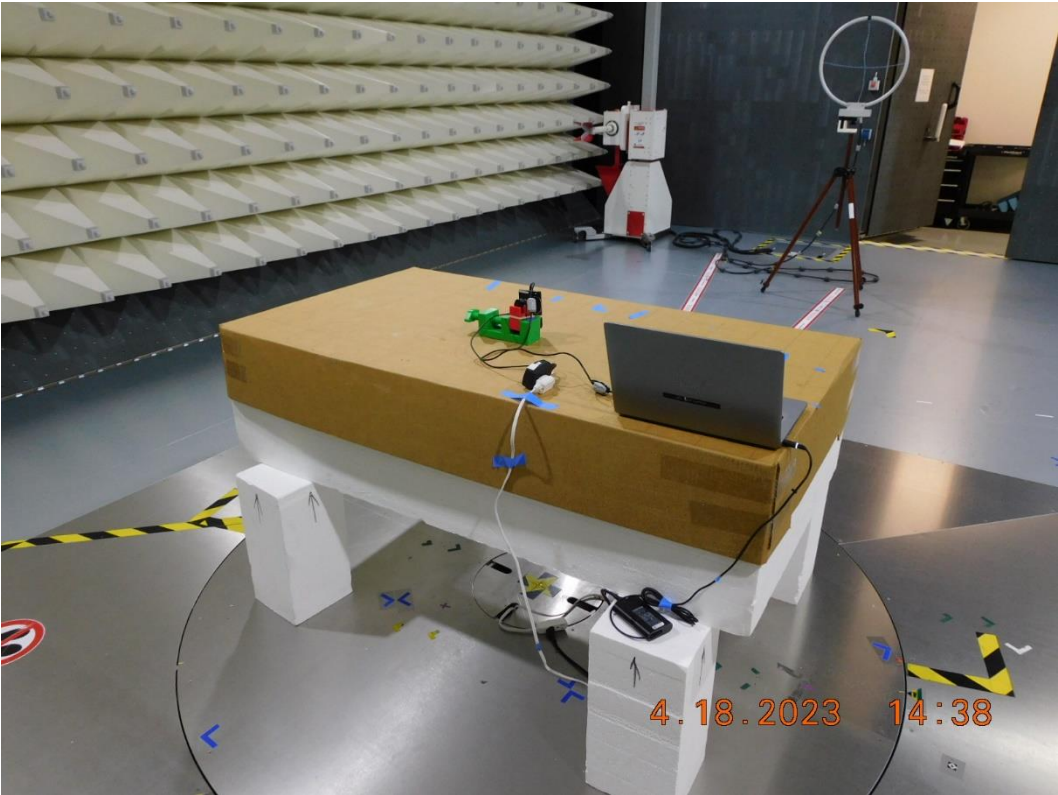


Figure RE14.3: EUT test setup, reverse view (Antenna X Orientation)

The following material is associated with GCL Test Report 2023-008. It would have appeared on or near page 15 of the test report.

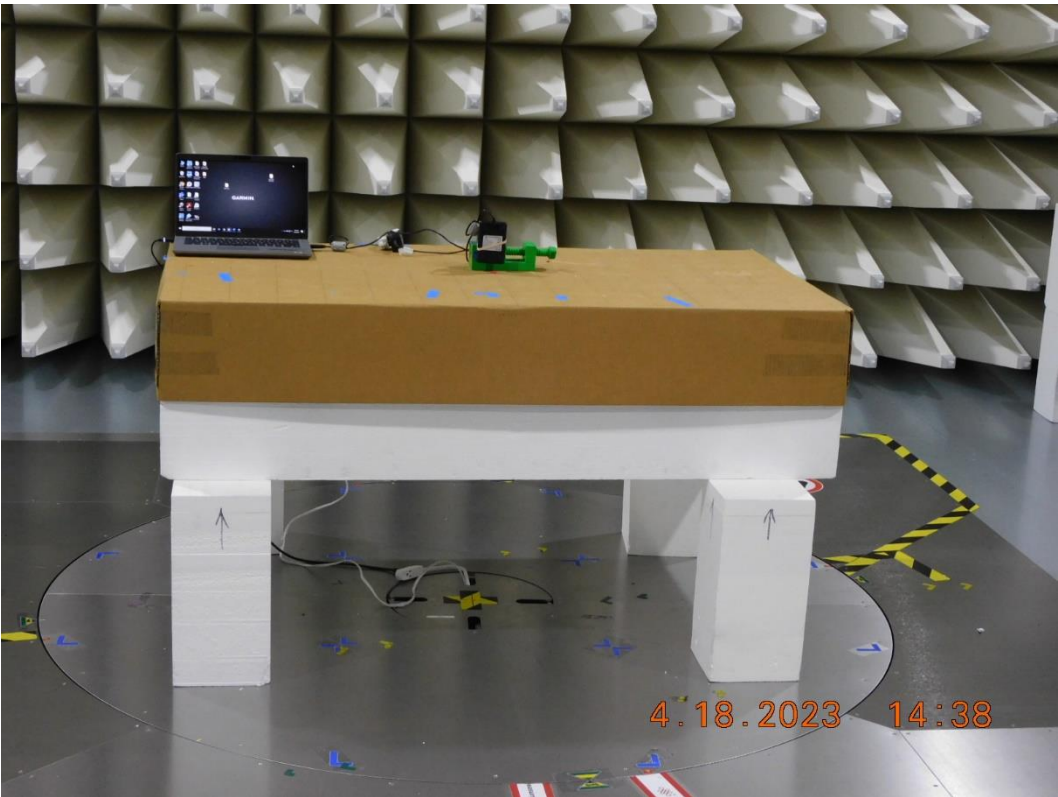


Figure RE013.2: EUT test setup, front view (Antenna X Orientation)

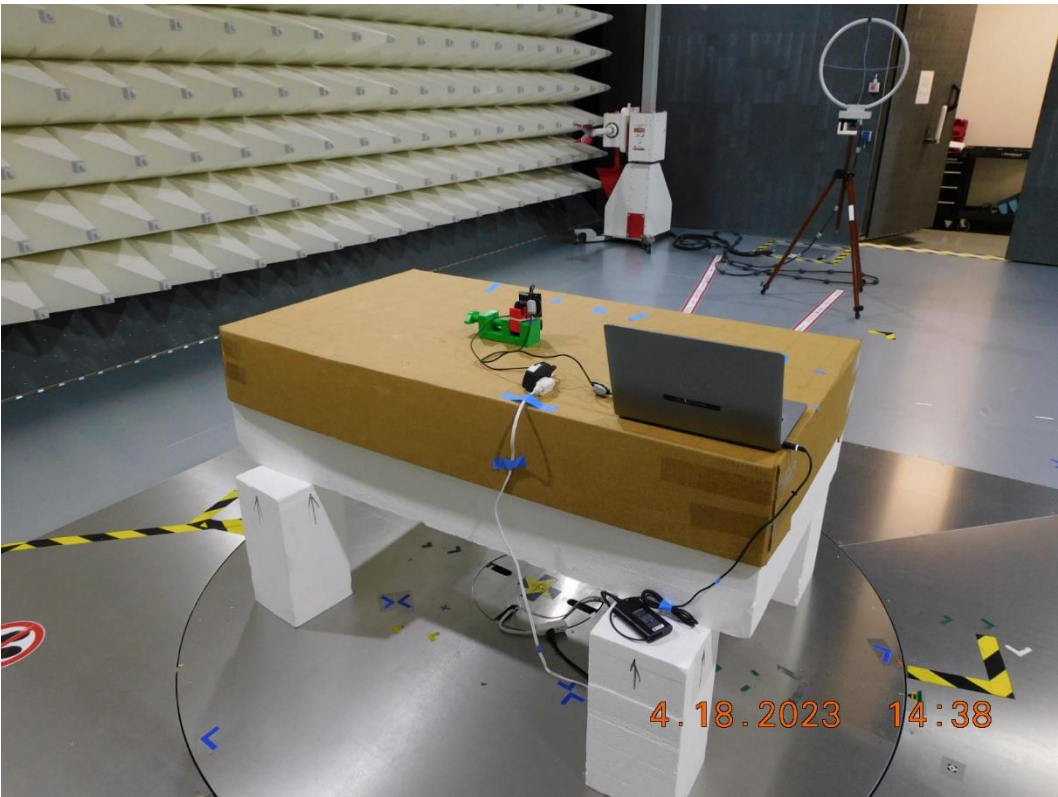


Figure RE013.3: EUT test setup, reverse view (Antenna X Orientation)

The following material is associated with GCL Test Report 2023-008. It would have appeared on or near page 18 of the test report.

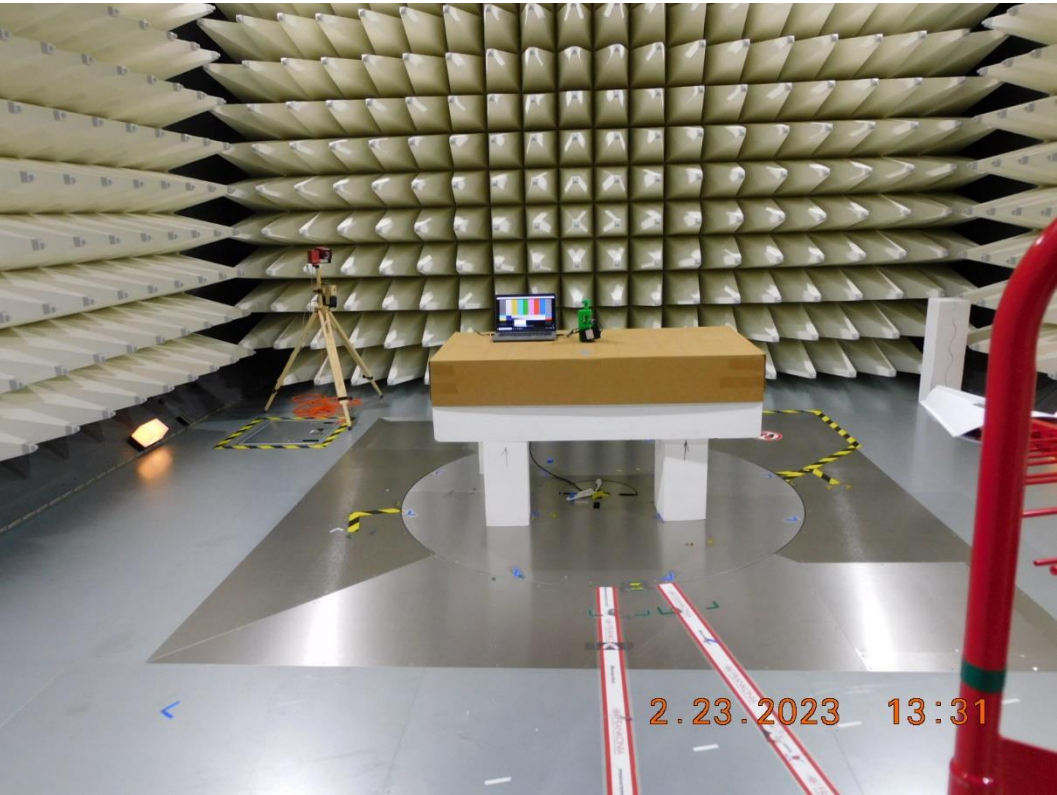


Figure RE03.2: EUT test setup, front view

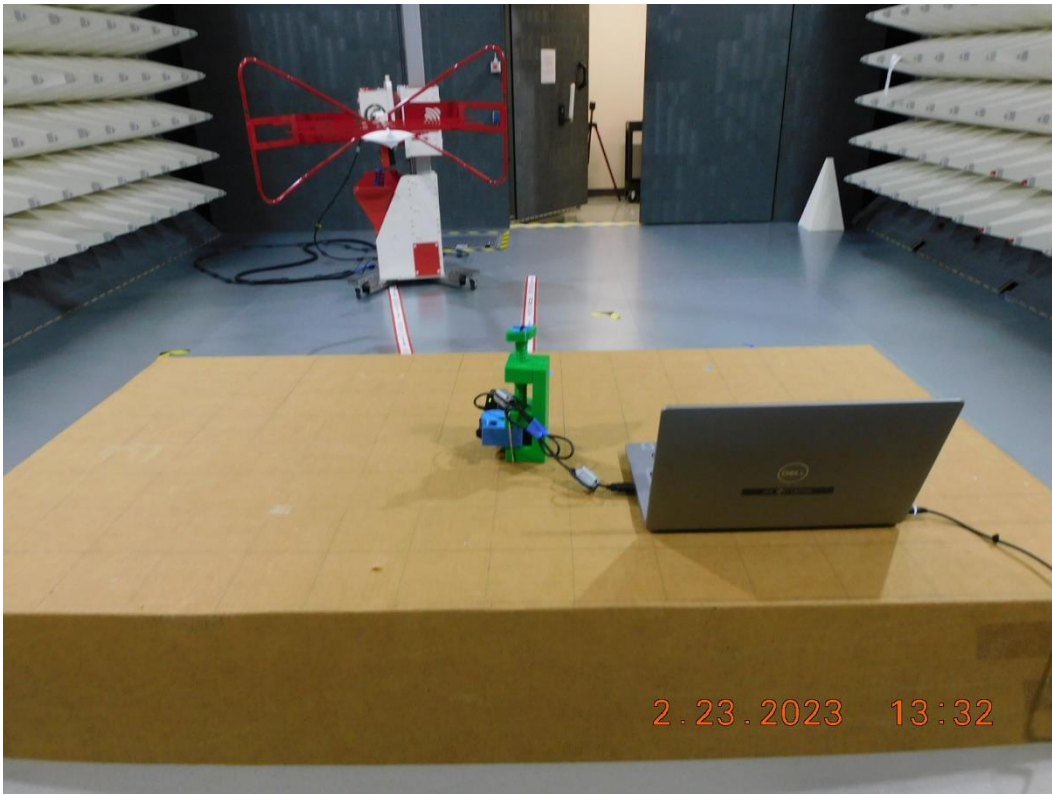


Figure RE03.3: EUT test setup, reverse view

The following material is associated with GCL Test Report 2023-008. It would have appeared on or near page 21 of the test report.

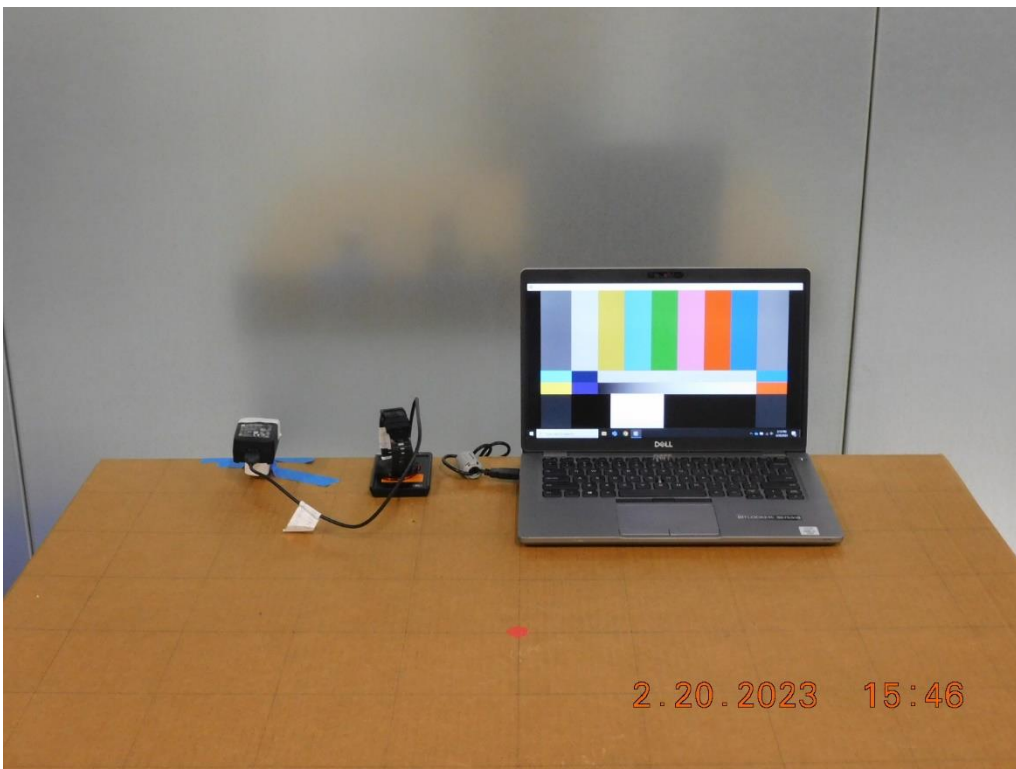


Figure CE04.2: EUT test setup

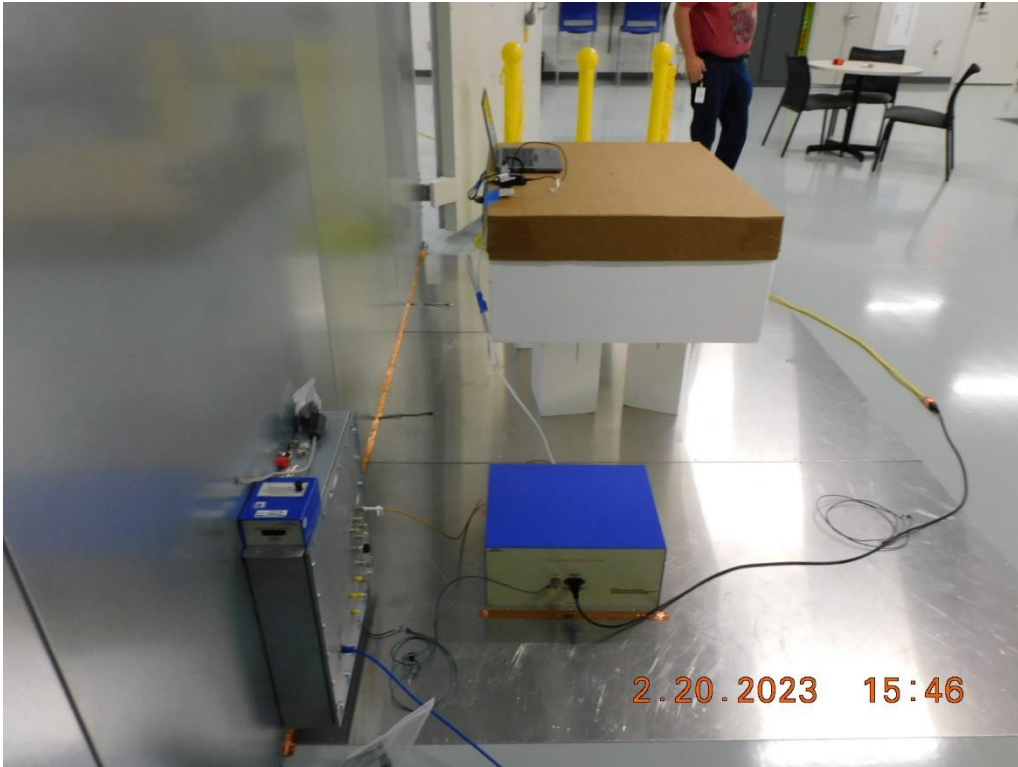


Figure CE04.3: EUT test setup

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 45 of the test report.

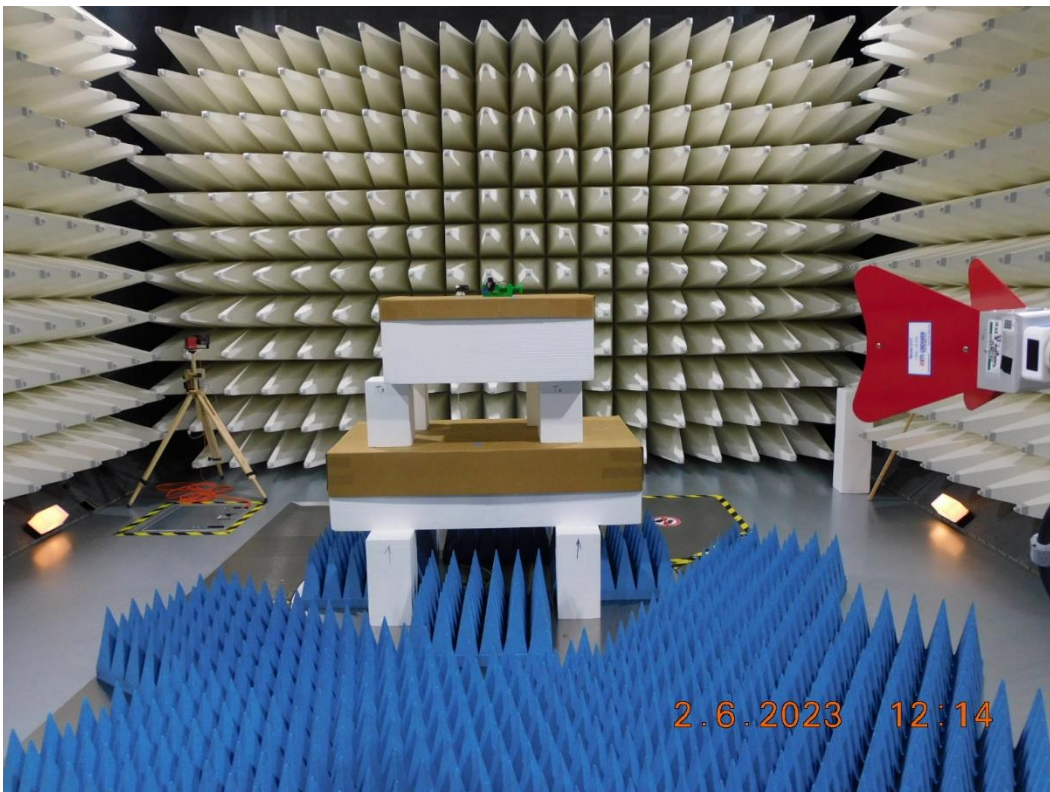


Figure RE06.5: EUT test setup, front view (Z orientation)

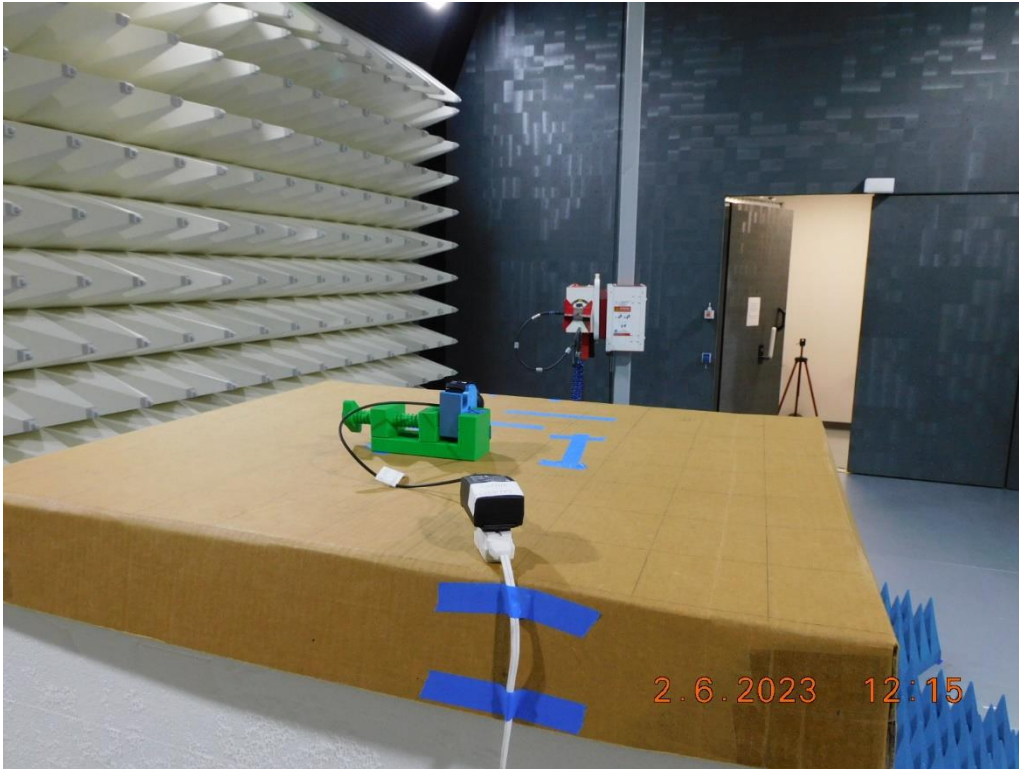


Figure RE06.6: EUT test setup, reverse view (Z orientation)

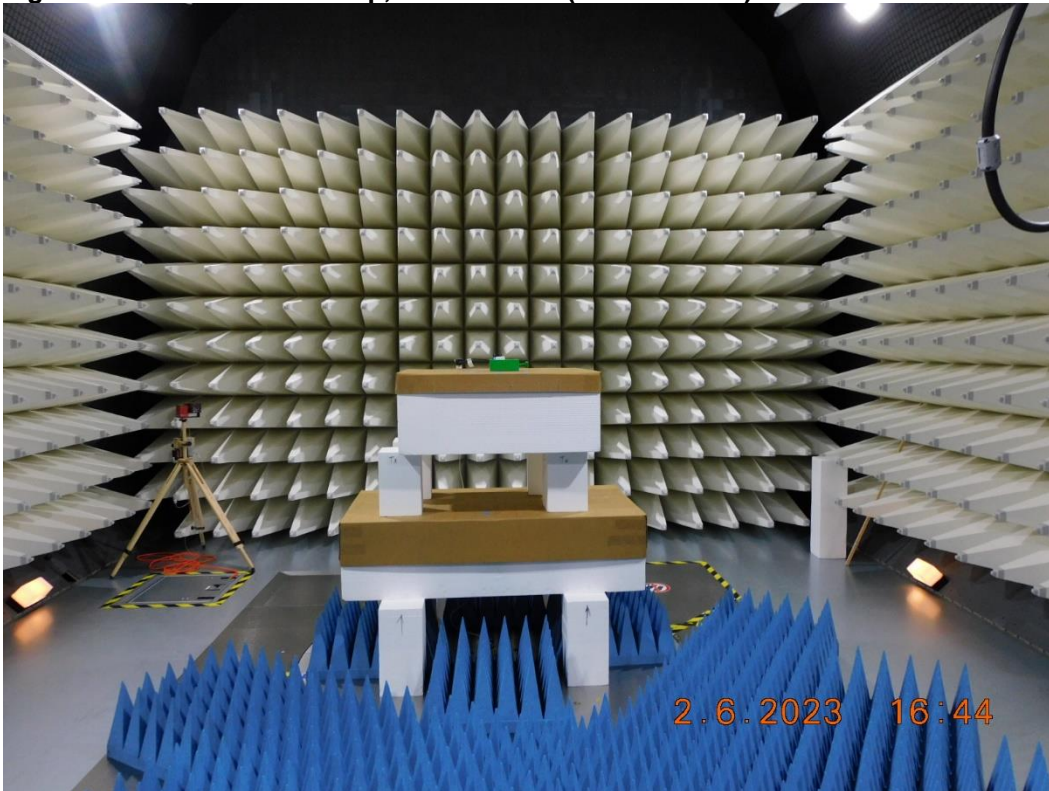


Figure RE06.7: EUT test setup, front view (Y orientation)

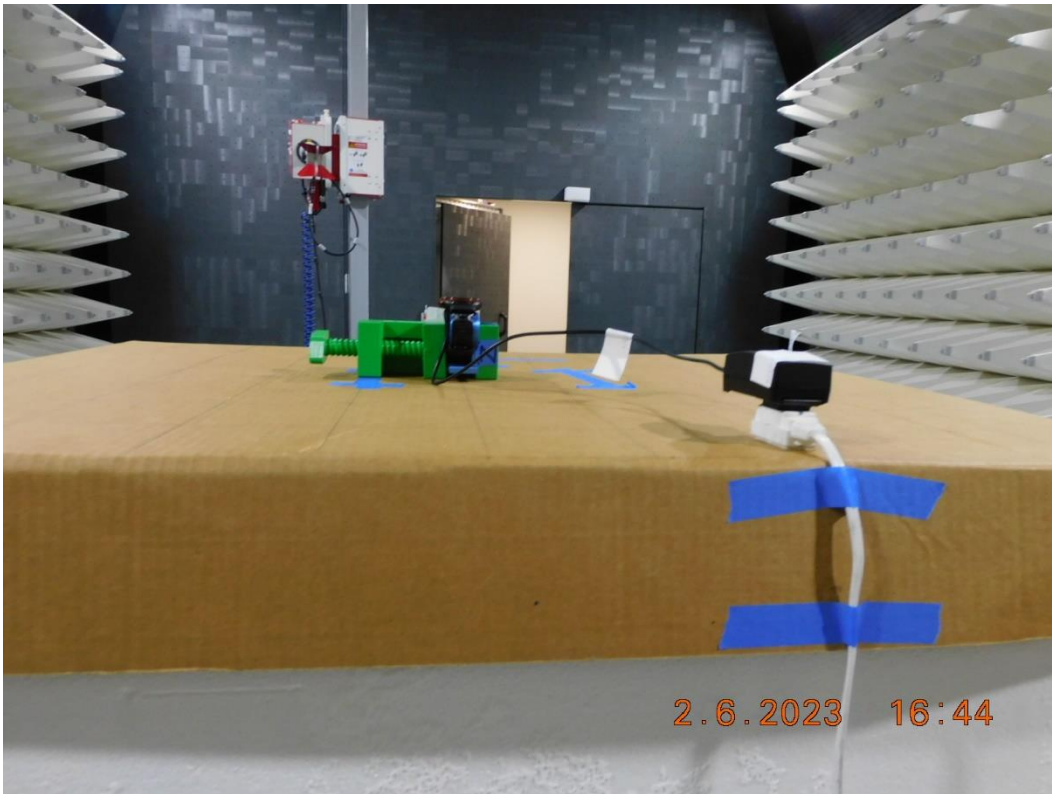


Figure RE06.8: EUT test setup, reverse view (Y orientation)

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 49 of the test report.

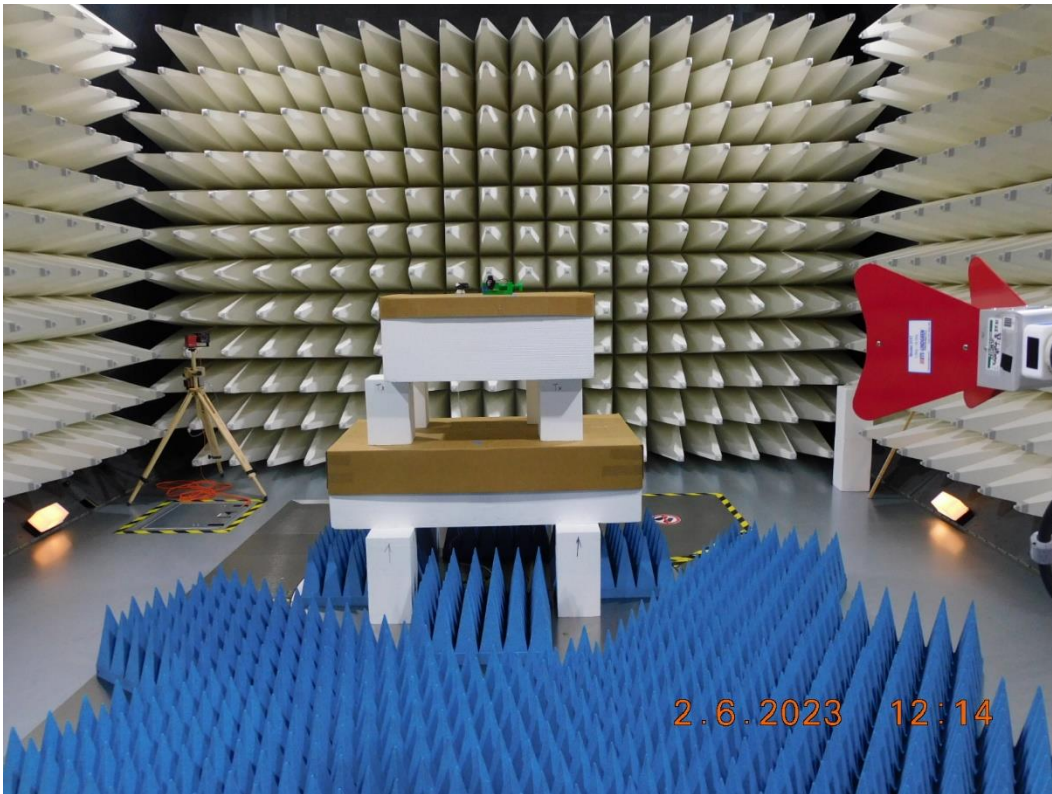


Figure RE07.3: EUT test setup, front view (Z orientation)

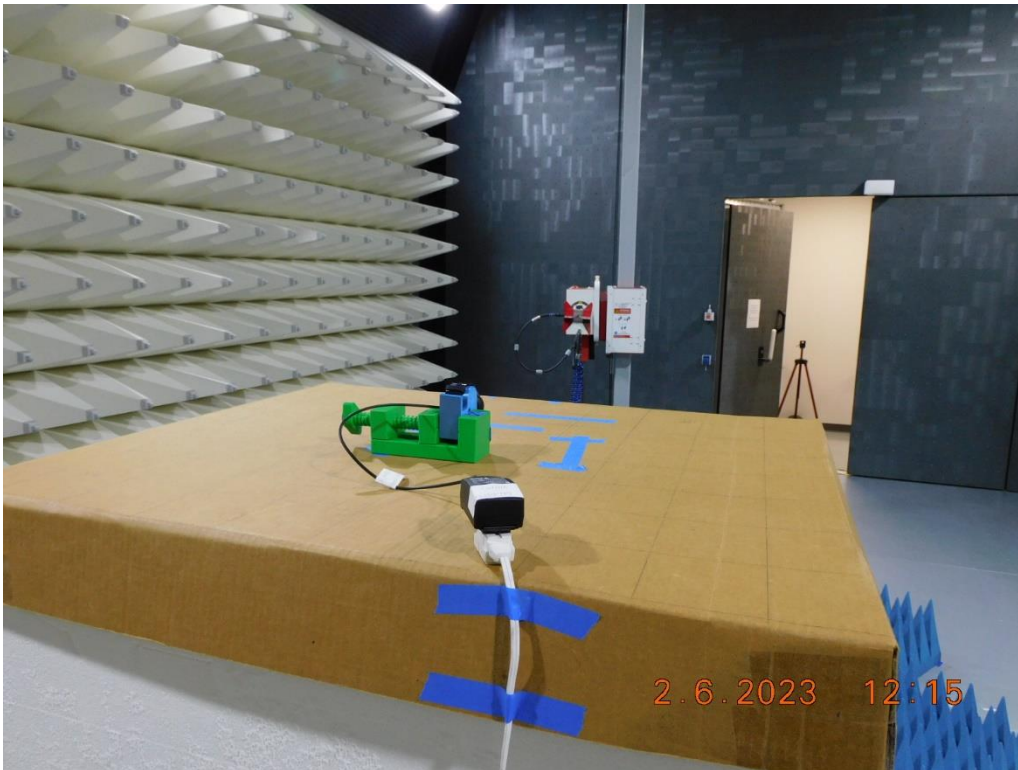


Figure RE07.4: EUT test setup, reverse view (Z orientation)

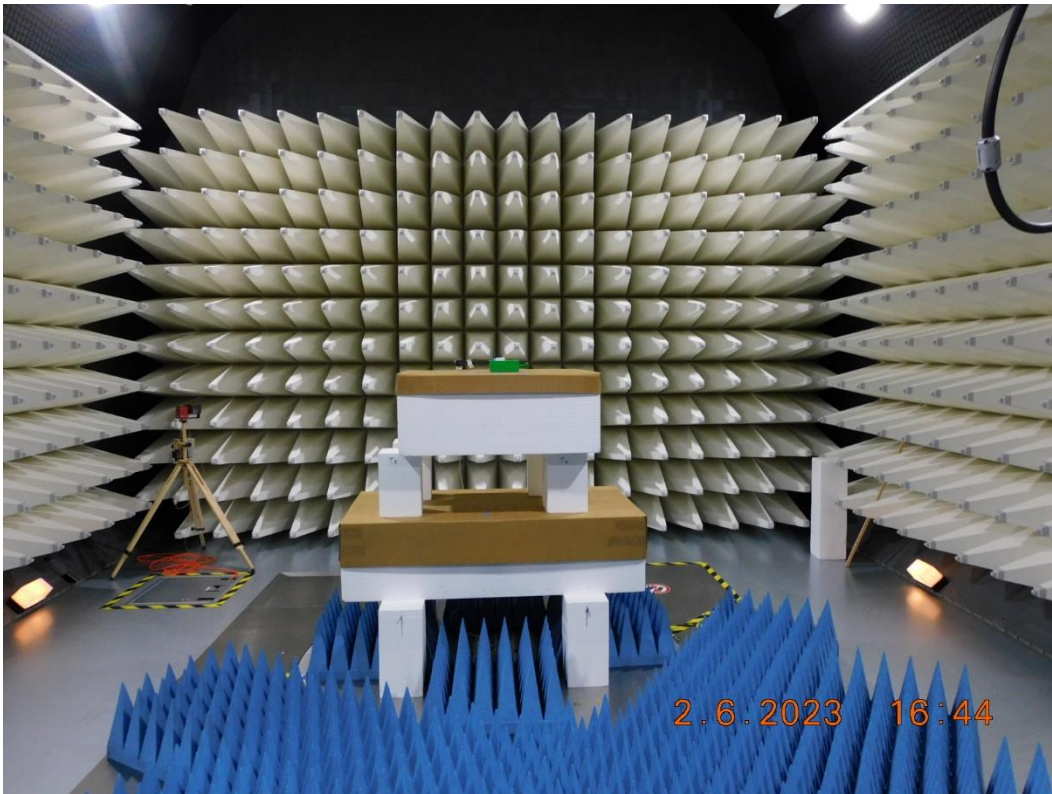


Figure RE07.5: EUT test setup, front view (Y orientation)

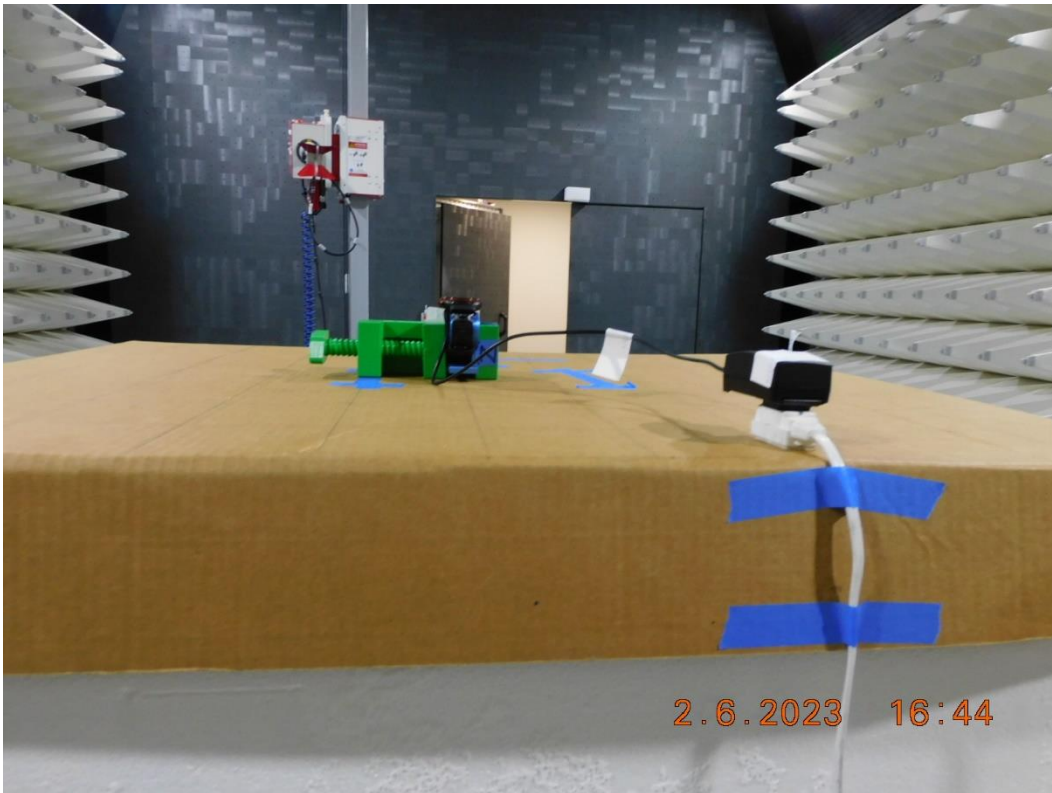


Figure RE07.6: EUT test setup, reverse view (Y orientation)

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 60 of the test report.

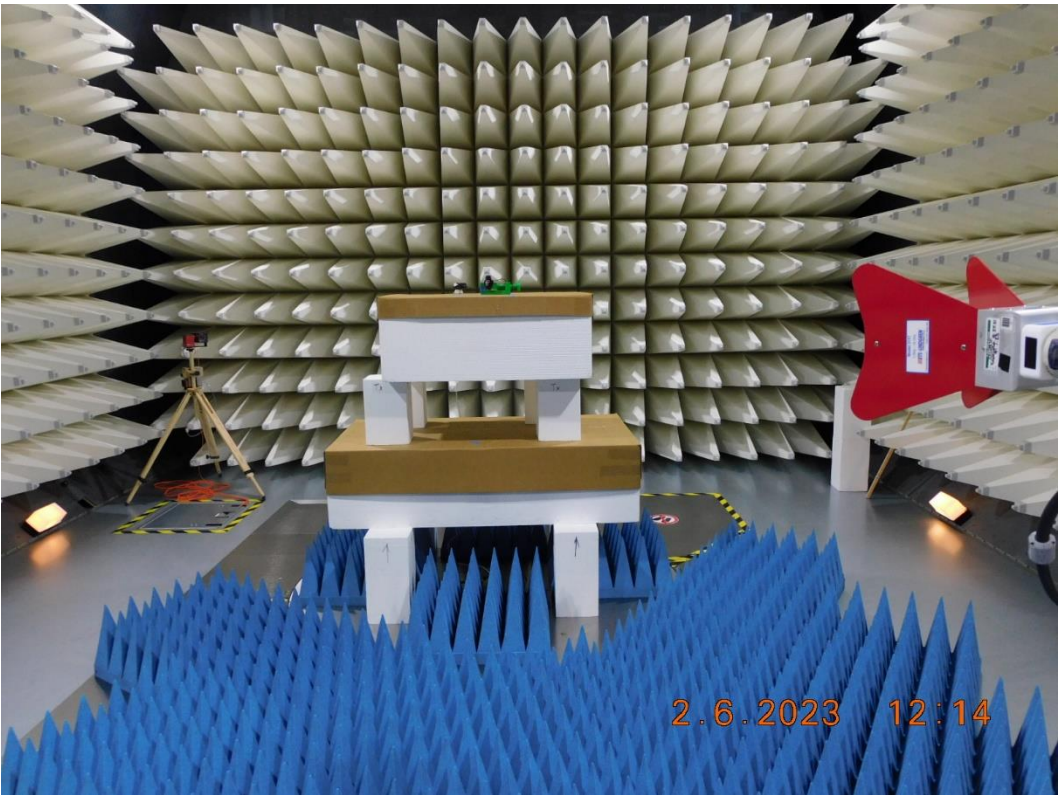


Figure RE08.11: EUT test setup, front view (Z orientation)

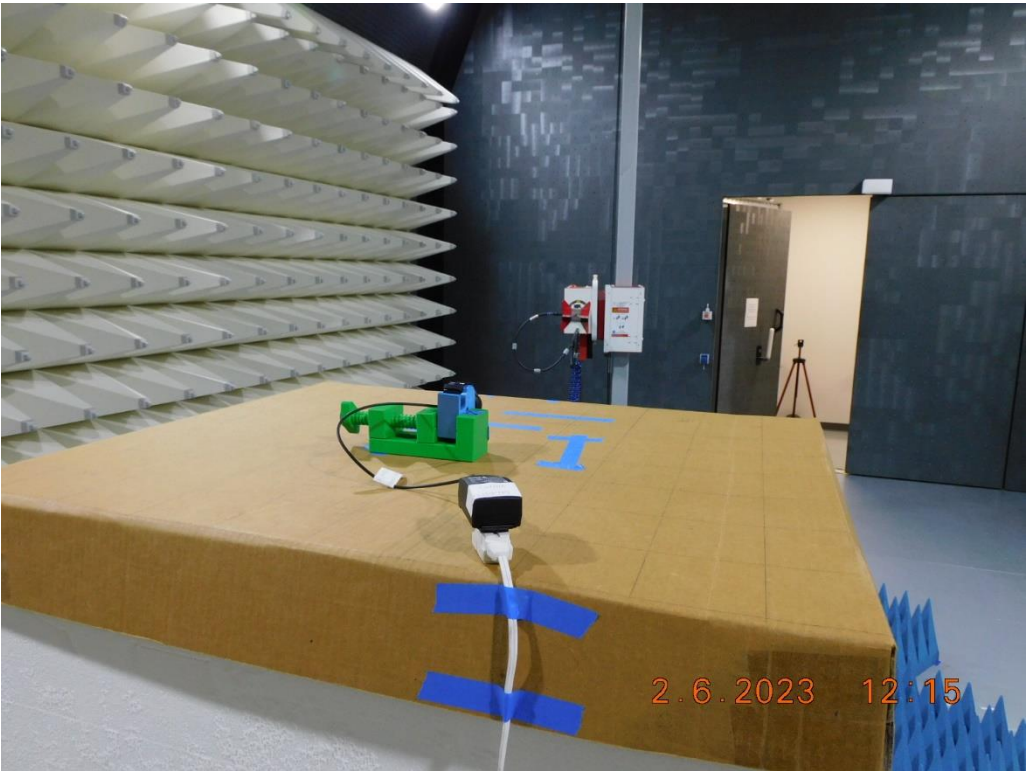


Figure RE08.12: EUT test setup, reverse view (Z orientation)

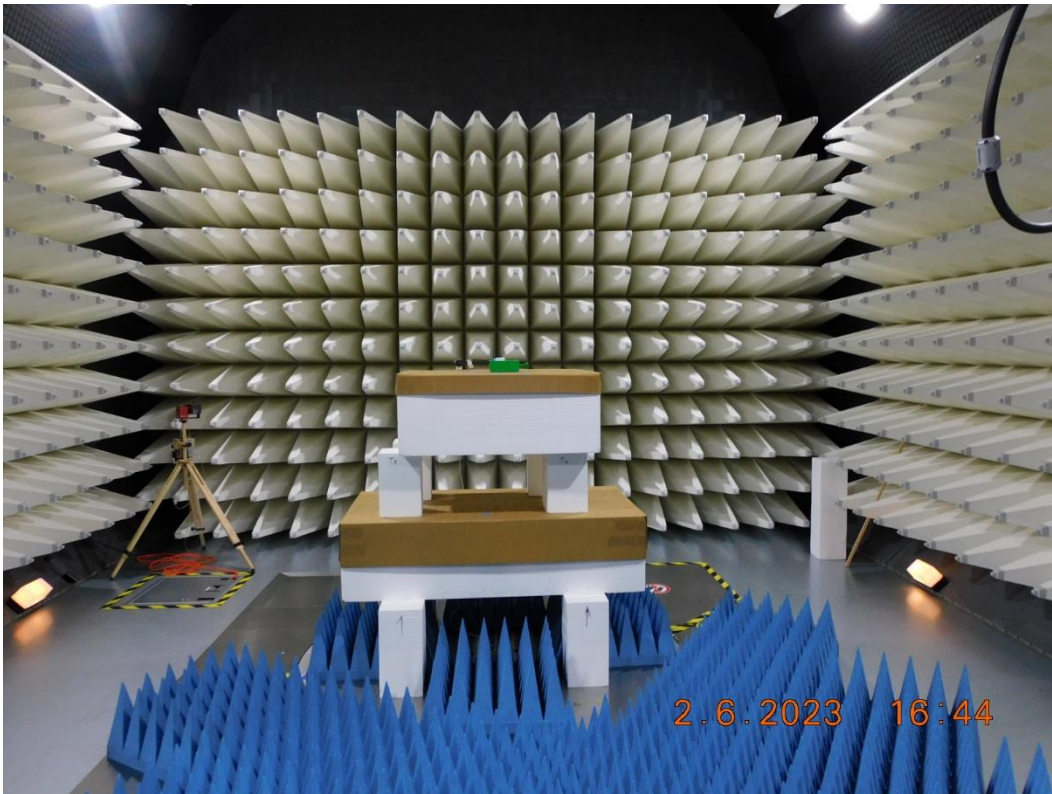


Figure RE08.13: EUT test setup, front view (Y orientation)

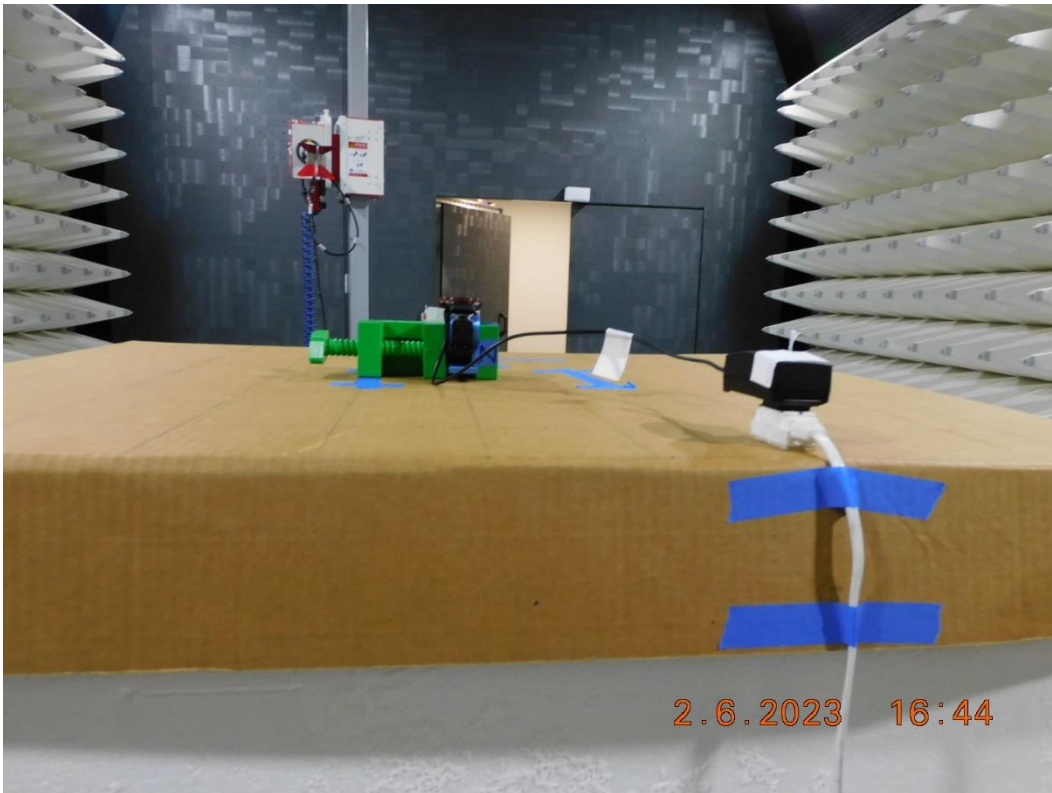


Figure RE08.14: EUT test setup, reverse view (Y orientation)

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 66 of the test report.

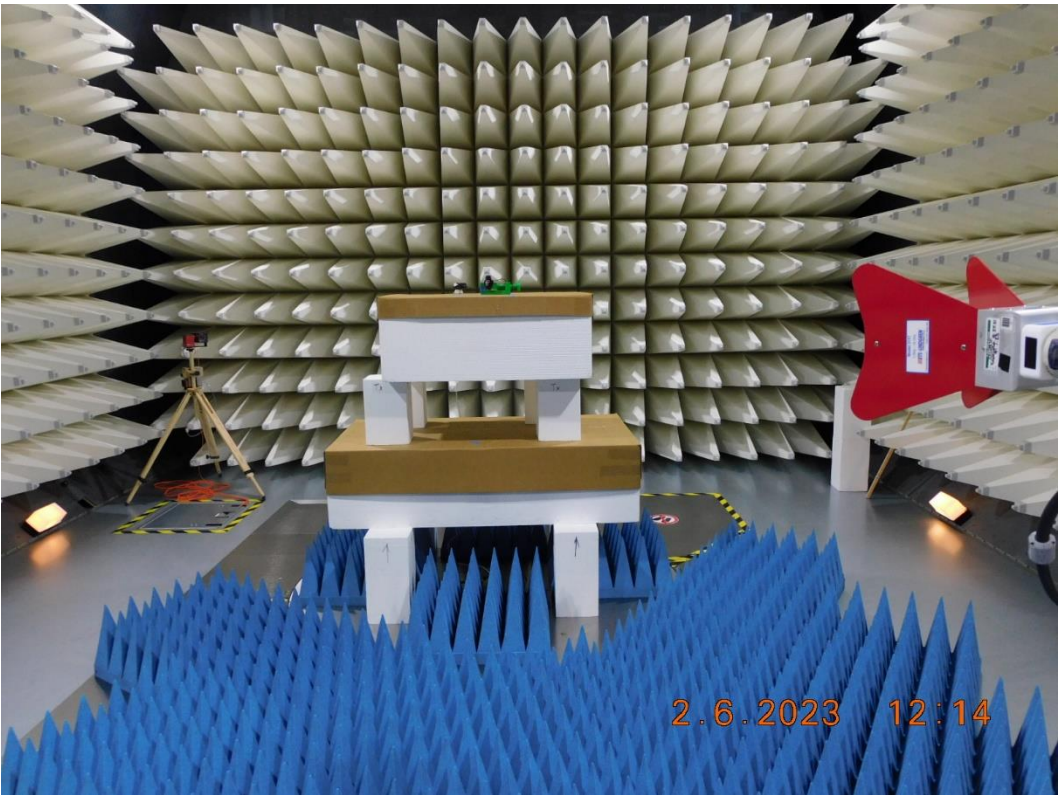


Figure RE09.5: EUT test setup, front view (Z orientation)

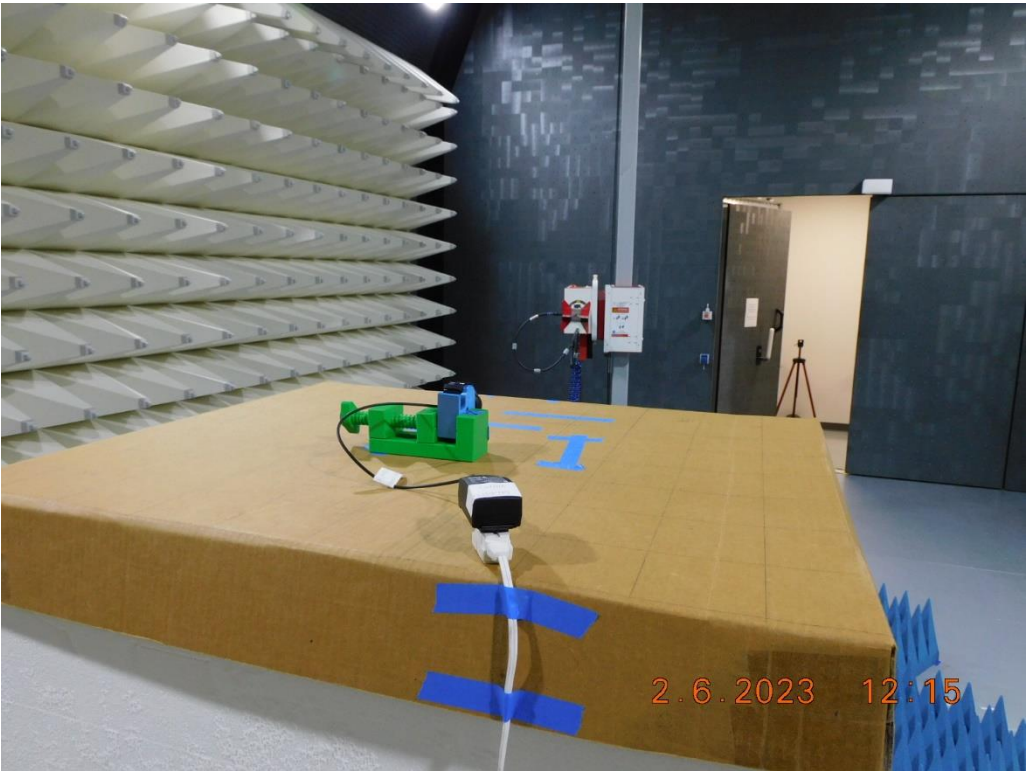


Figure RE09.6: EUT test setup, reverse view (Z orientation)

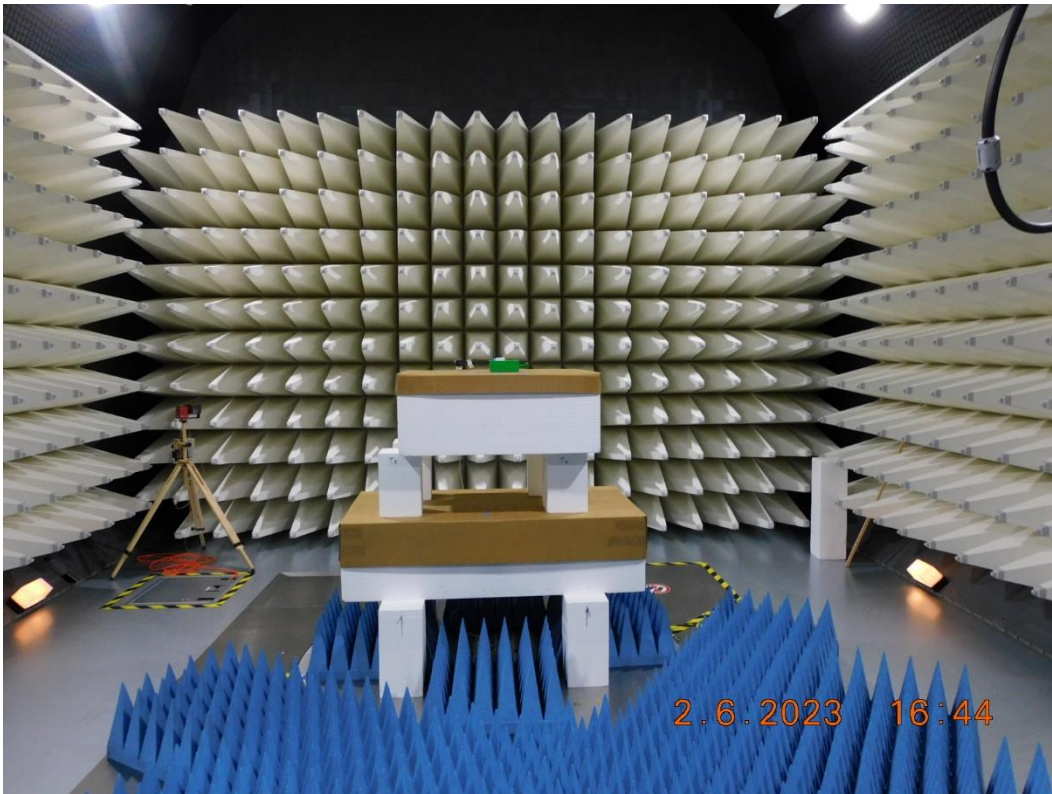


Figure RE09.7: EUT test setup, front view (Y orientation)

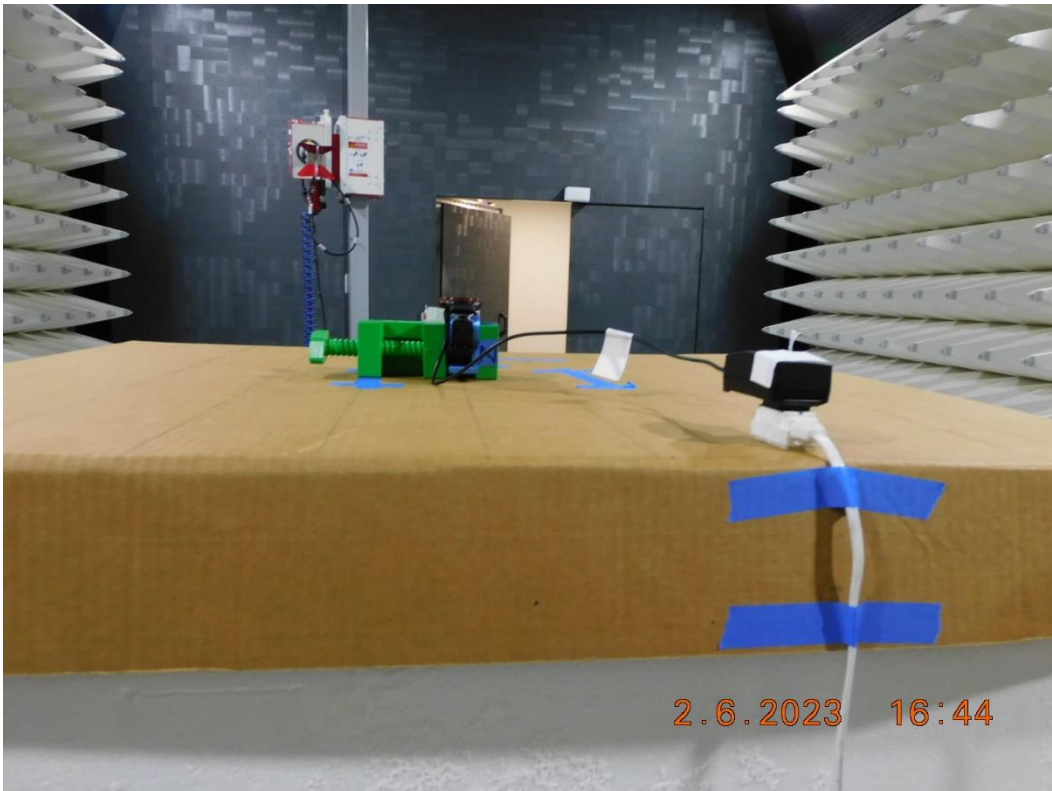


Figure RE09.8: EUT test setup, reverse view (Y orientation)

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 101 of the test report.

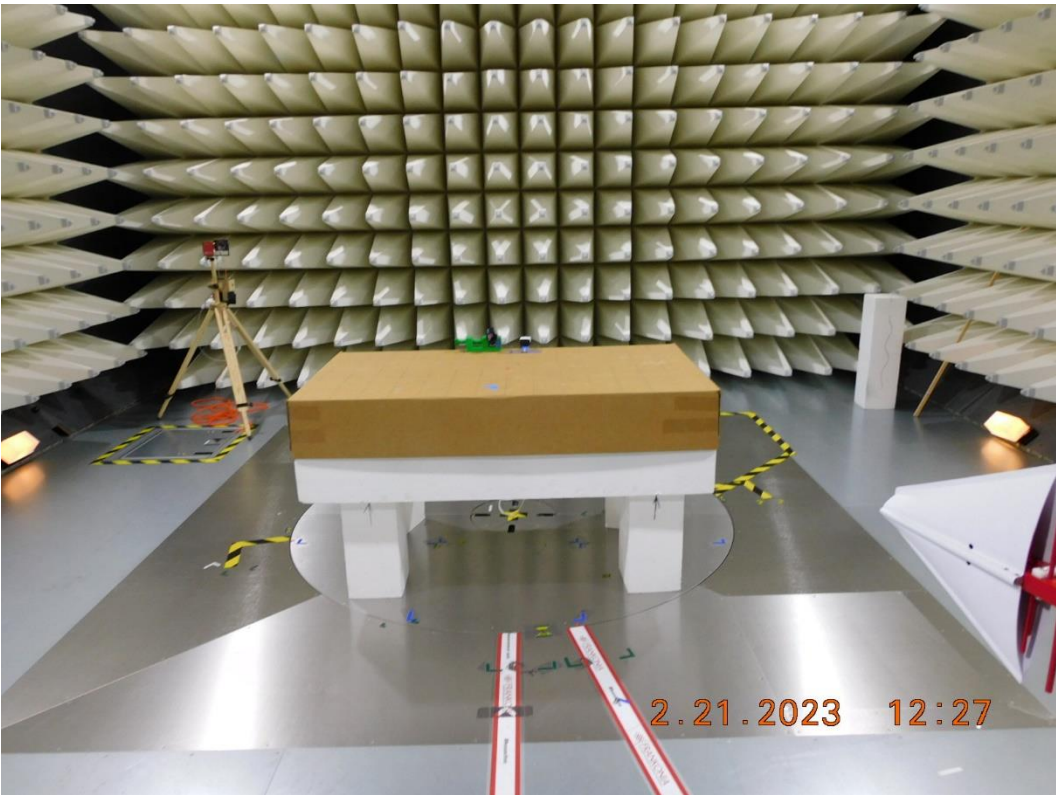


Figure RE01.3: EUT test setup, front view (1 Mbps, Z orientation)

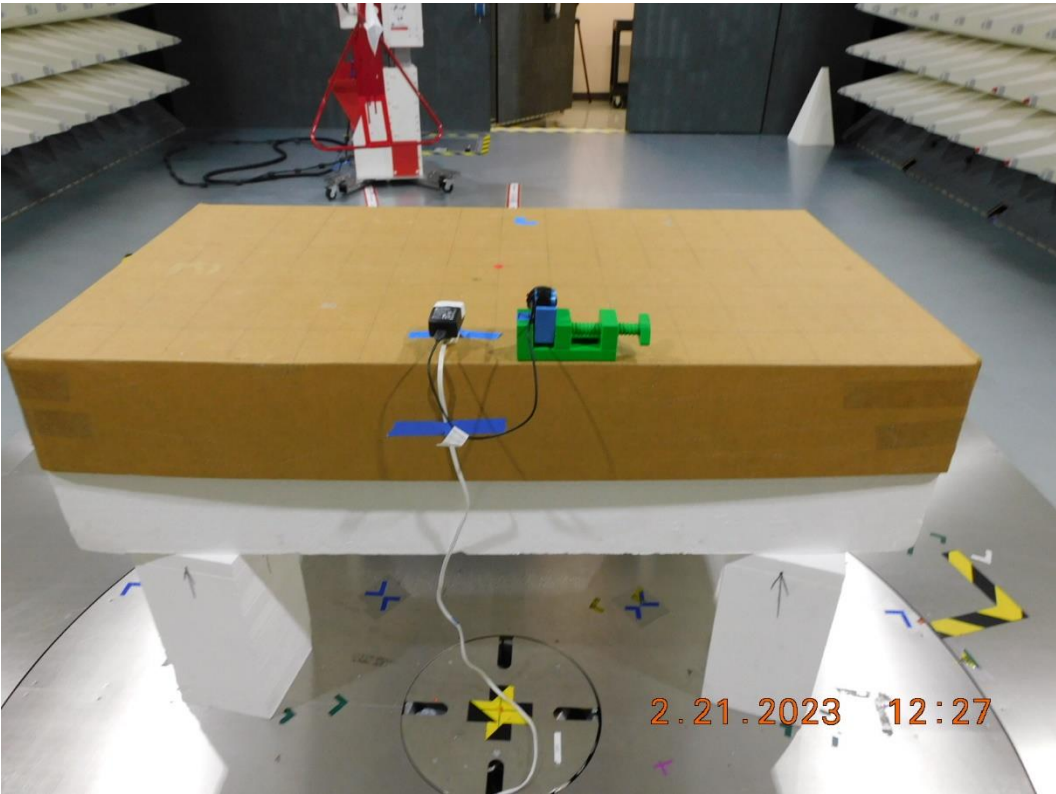


Figure RE01.4: EUT test setup, reverse view (1 Mbps, Z orientation)

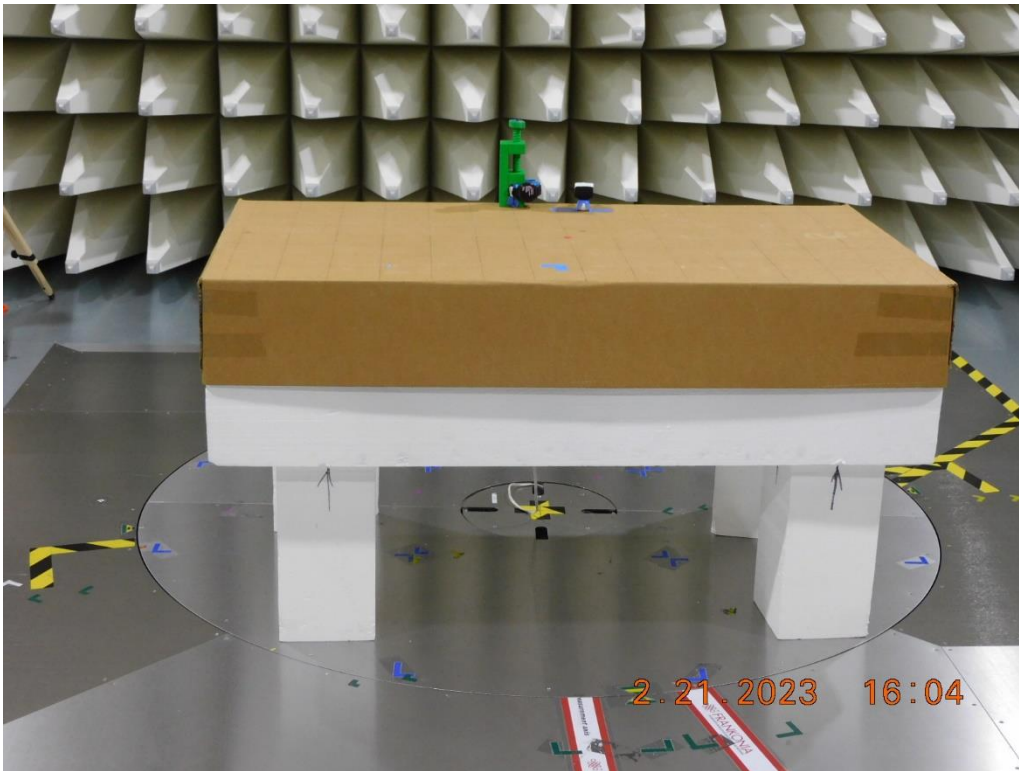


Figure RE01.5: EUT test setup, front view (2 Mbps, X orientation)

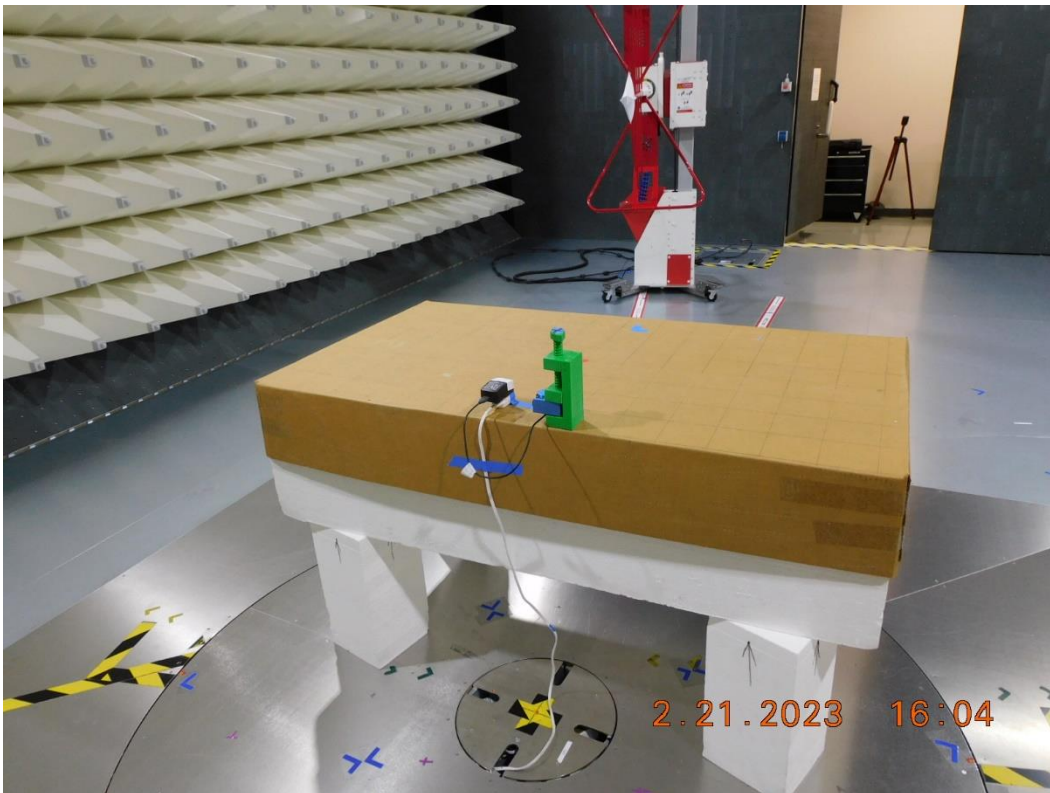


Figure RE01.6: EUT test setup, reverse view (2 Mbps, X orientation)

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 105 of the test report.

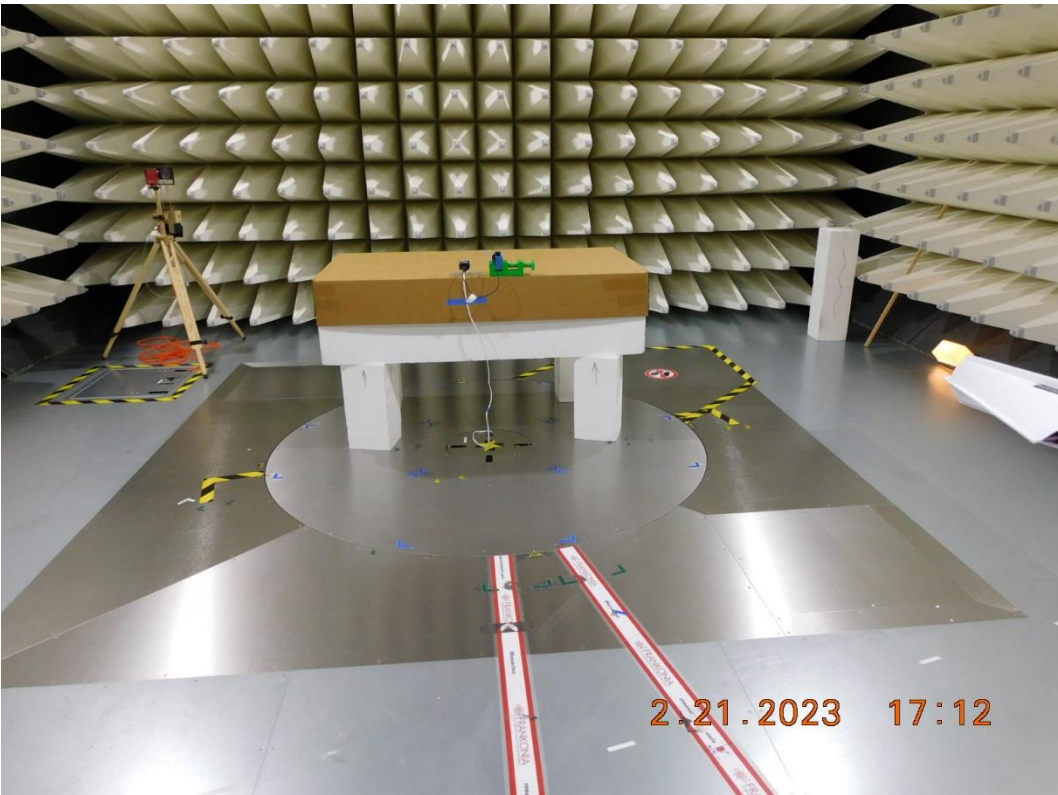


Figure RE04.2: EUT test setup, front view

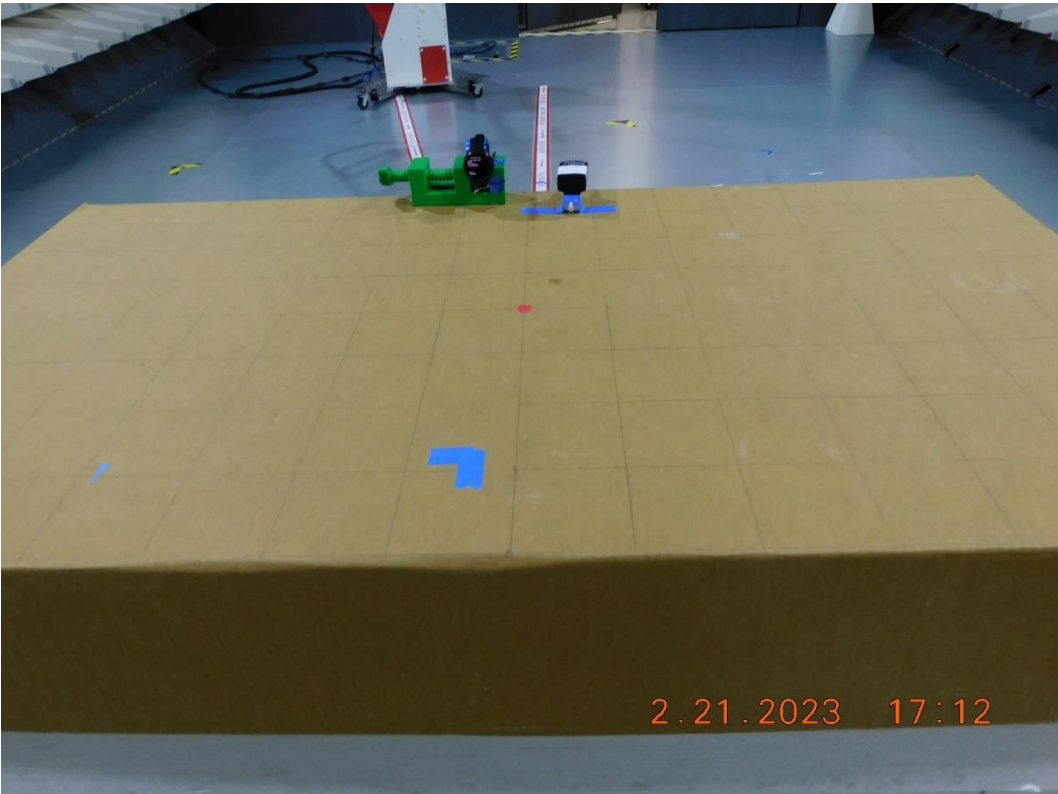


Figure RE04.3: EUT test setup, reverse view

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 108 of the test report.

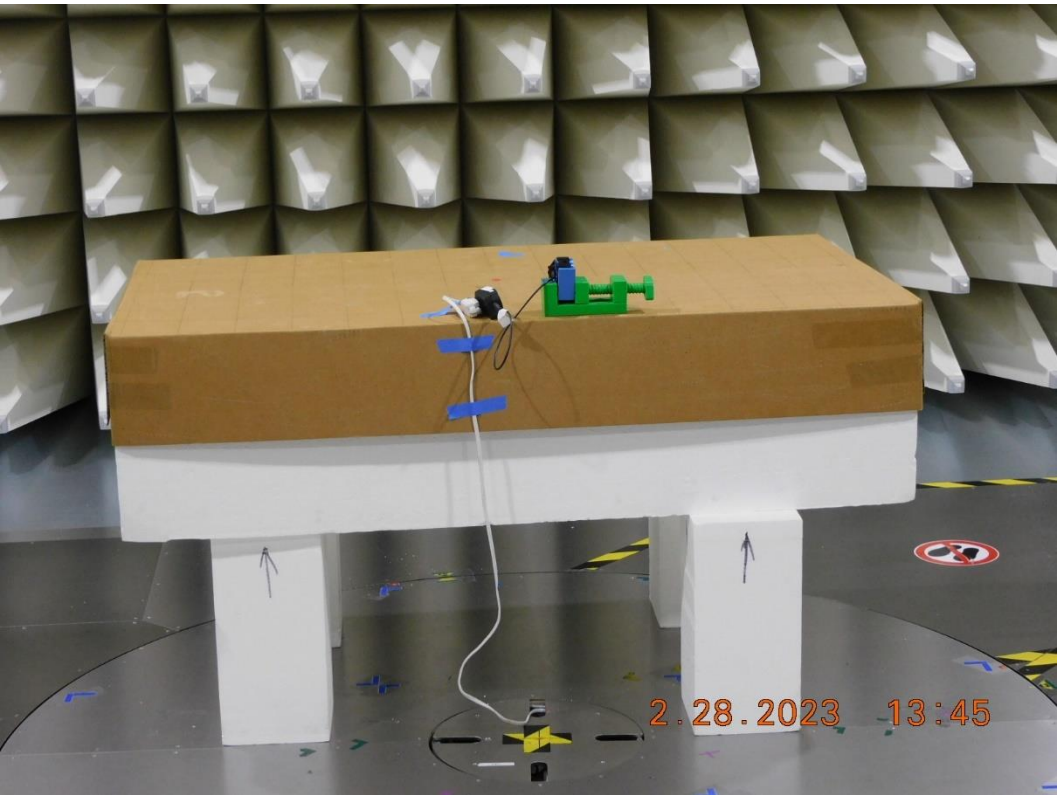


Figure RE05.2: EUT test setup, front view

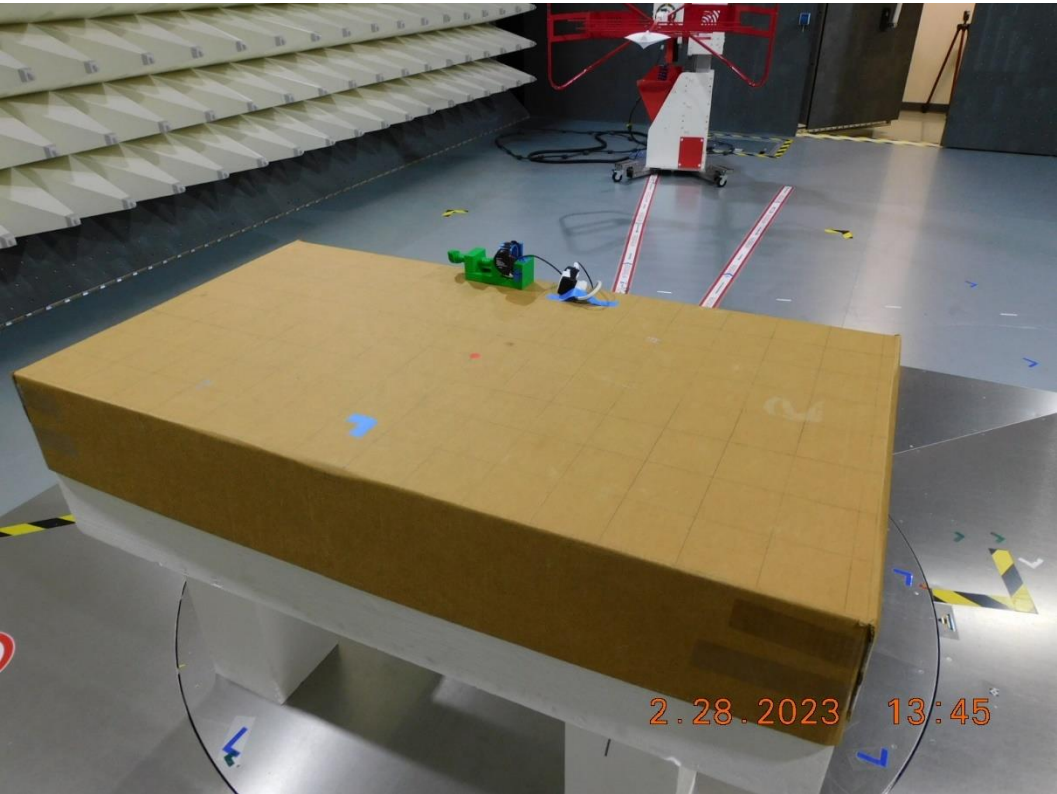


Figure RE05.3: EUT test setup, reverse view

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 111 of the test report.

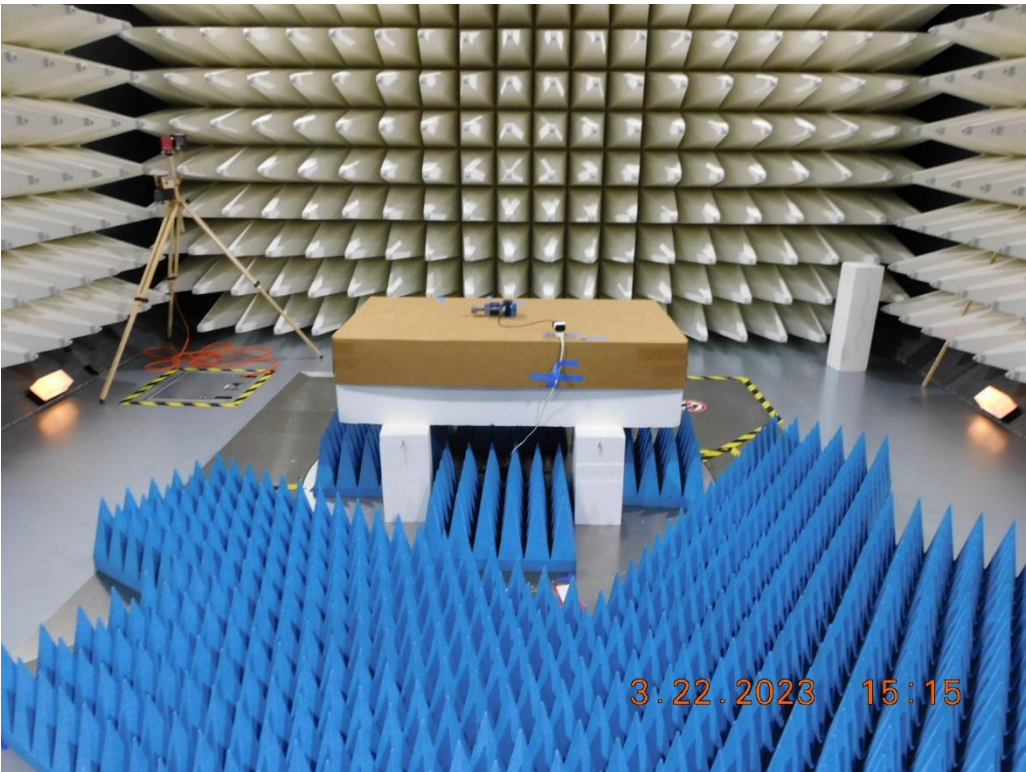


Figure RE16.4: EUT test setup, front view

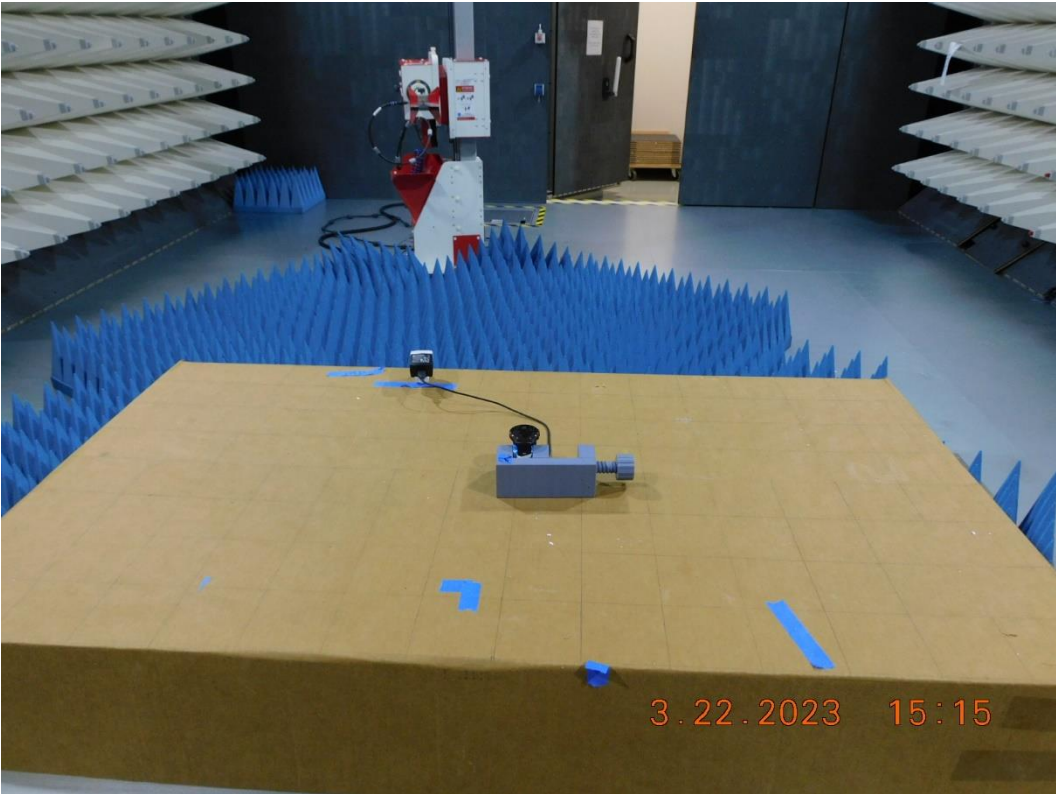


Figure RE16.5: EUT test setup, reverse view

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 115 of the test report.

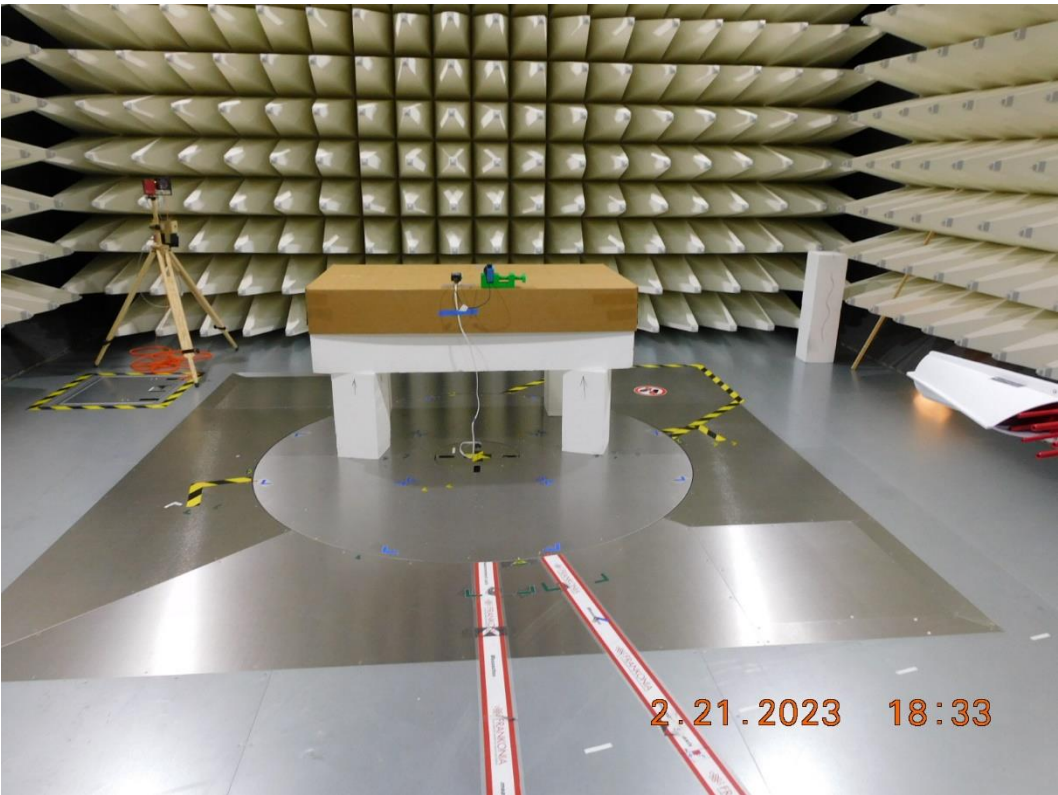


Figure RE17.6: EUT test setup, front view

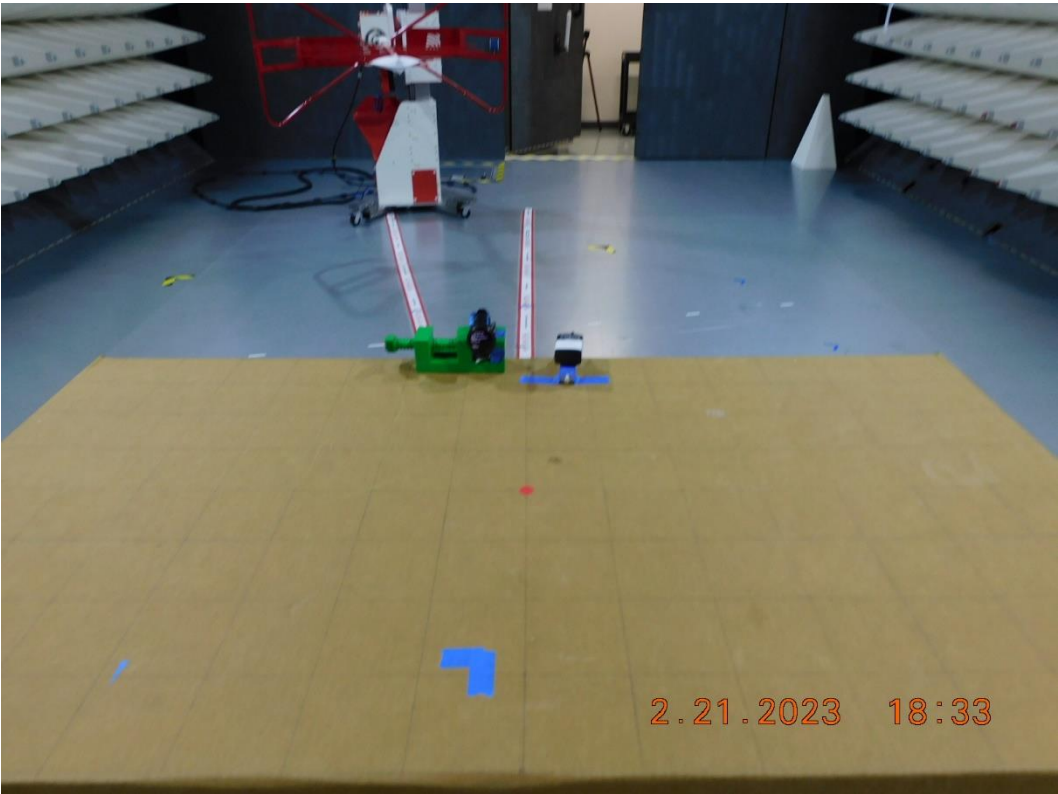


Figure RE17.7: EUT test setup, reverse view

The following material is associated with GCL Test Report 2023-009. It would have appeared on or near page 118 of the test report.

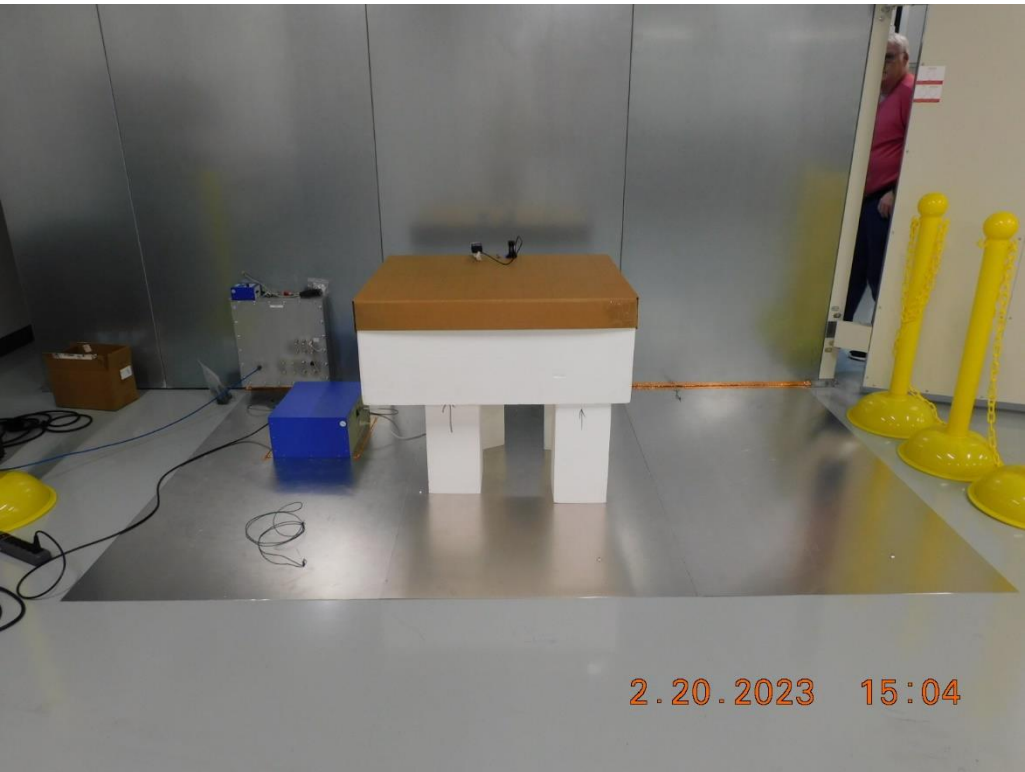


Figure CE02.2: EUT test setup

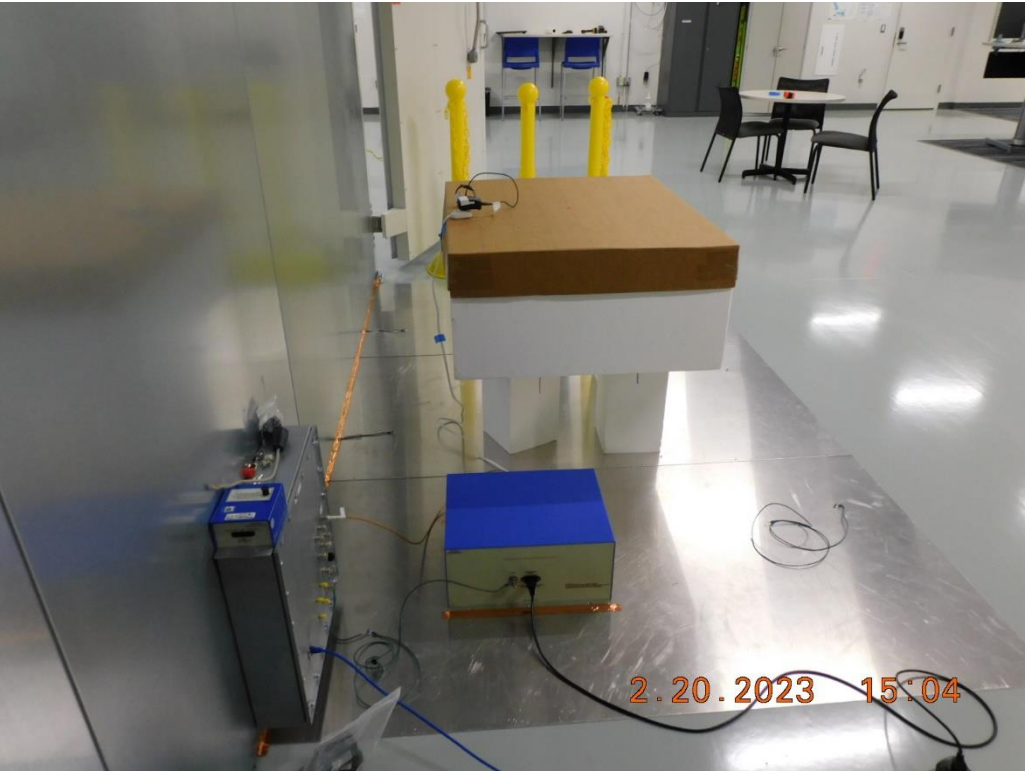


Figure CE02.3: EUT test setup

5. Other Sensitive Material, if any

None

6 Test Standards Applied

6.1. Accredited Standards

The following test or measurement standards were applied and are within the scope of the lab's accreditation. All results in this report that cite these standards are presented as Accredited results consistent with ISO/IEC 17025.

FCC Part 15.225
FCC Part 15.247
ANSI C63.4: 2014
ANSI C63.10: 2013
ICES-003 Issue 7: 2020
RSS-GEN Issue 5 Amd 2
RSS-210 Issue 10 Amd 1
RSS-247 Issue 2: 2017

6.2. Non-accredited Standards

None

6.3 Variances

Not Applicable

6.4 Laboratory Accreditation

The Garmin Compliance Lab, an organization within Garmin International, is registered with the US Federal Communication Commission as US1311. The lab is recognized by the Canada Department of Innovation, Science, and Economic Development (ISED) under CAB identifier US0233.

The Garmin Compliance Lab, an organization within Garmin International, is accredited by A2LA, Certificate No. 6162.01. The presence of the A2LA logo on the cover of this report indicates this is an accredited ISO/IEC 17025 test report. If the logo is absent, this report is not issued as an accredited report. Other marks and symbols adjacent to the A2LA logo are accreditation co-operations of which A2LA is a member under a mutual recognition agreement, and to which the Garmin Compliance Lab has been sublicensed.

7 Concluding Notes

This report stands as an integrated record of the tests performed and must be copied or distributed in its complete form. The reproduction of selected pages or sections separate from the complete report would require specific approval from the manager of the Garmin Compliance Lab.

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