

Test Report 2022-040

Version B

Issued 27 Mar 2023

Project GCL-0305

Test Setup Photographs and Other Sensitive Materials

Primary Test Standard:

FCC Part 15.247

FCC Part 15.249

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 removed from GCL Test Report 2022-32, GCL Test Report 2022-34 and GCL Test Report 2022-35 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

Majid Farah wrote this report.

This report is initially issued on 03 Feb 2023 as Version A.

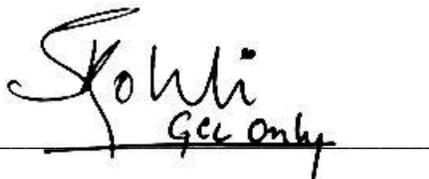
Version B issued 27 Mar 2023 to move additional material from main reports to section 5 of this report. The report title and some headings were also updated.

Report Technical Review:



David Arnett
Technical Lead EMC Engineer

Report Approval:



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

4. Test Setup Photographs

The following material is associated with GCL Test Report 2022-035. It would have appeared on or near page 25 of the test report.

Setup Photographs

The following photographs show the EUT configured and arranged in the manner in which it was measured.

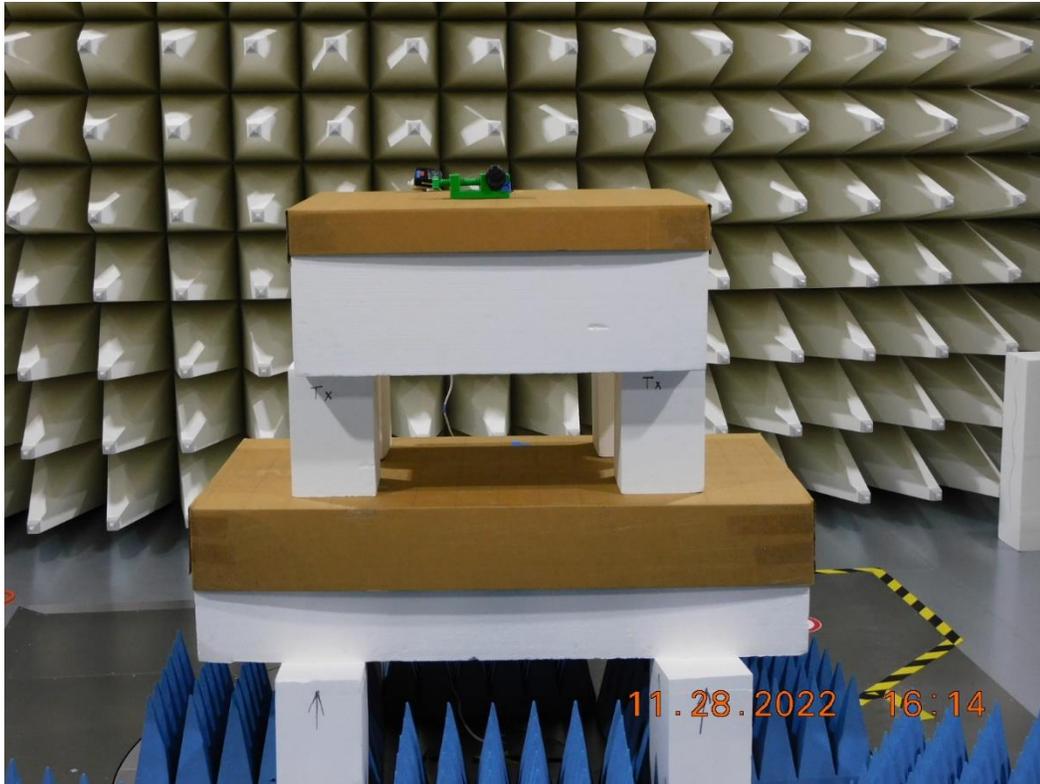


Figure RE07.3: Z orientation front of EUT



Figure RE07.4: Z orientation rear of EUT



Figure RE07.5: X orientation front of EUT

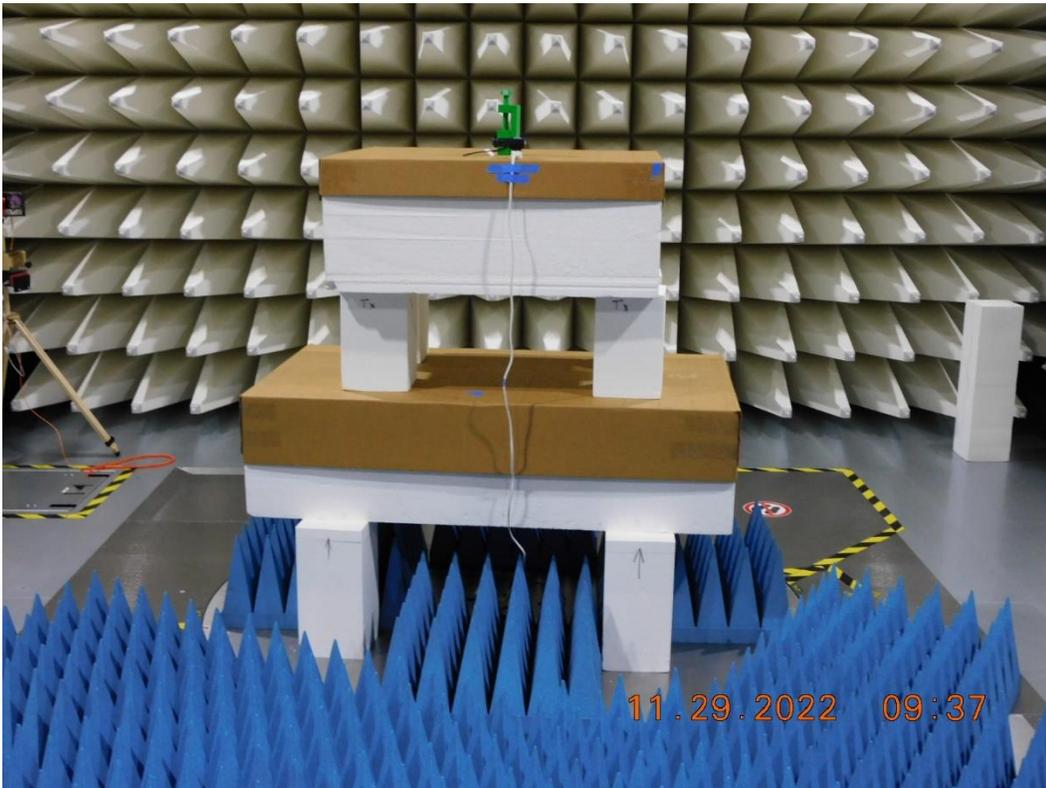


Figure RE07.6: X orientation rear of EUT

The following material is associated with GCL Test Report 2022-035. It would have appeared on or near page 30 of the test report.

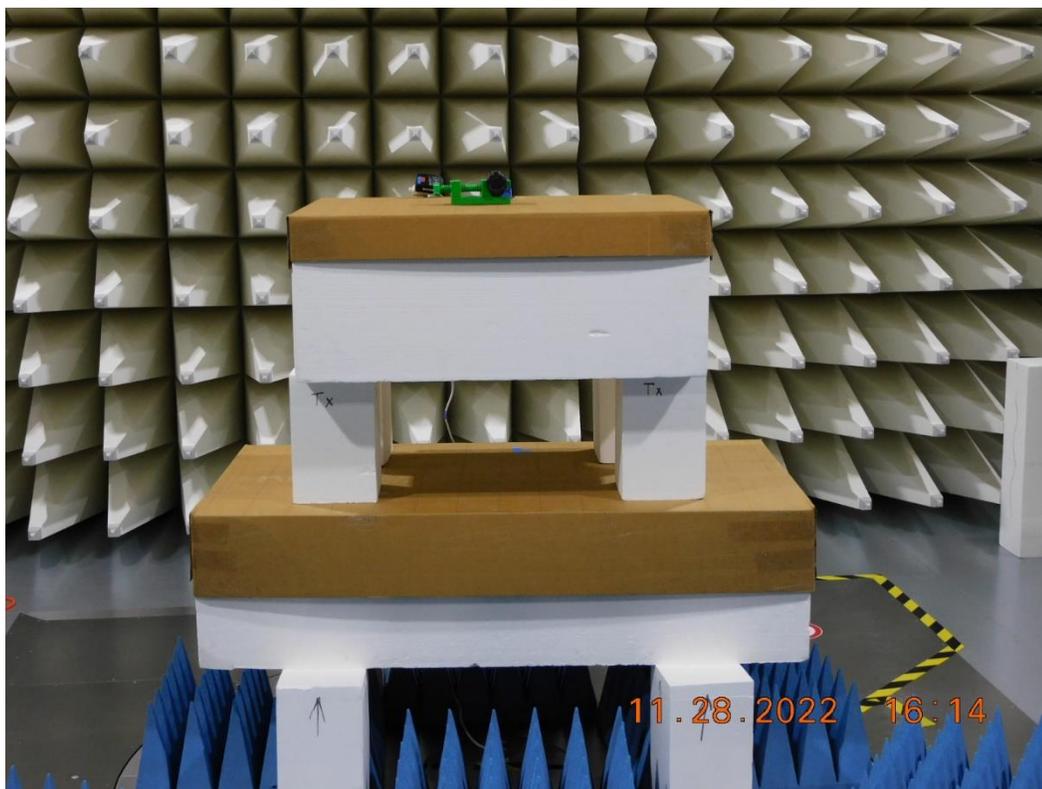


Figure RE08.3: Z orientation front of EUT



Figure RE08.4: Z orientation rear of EUT



Figure RE08.5: X orientation front of EUT

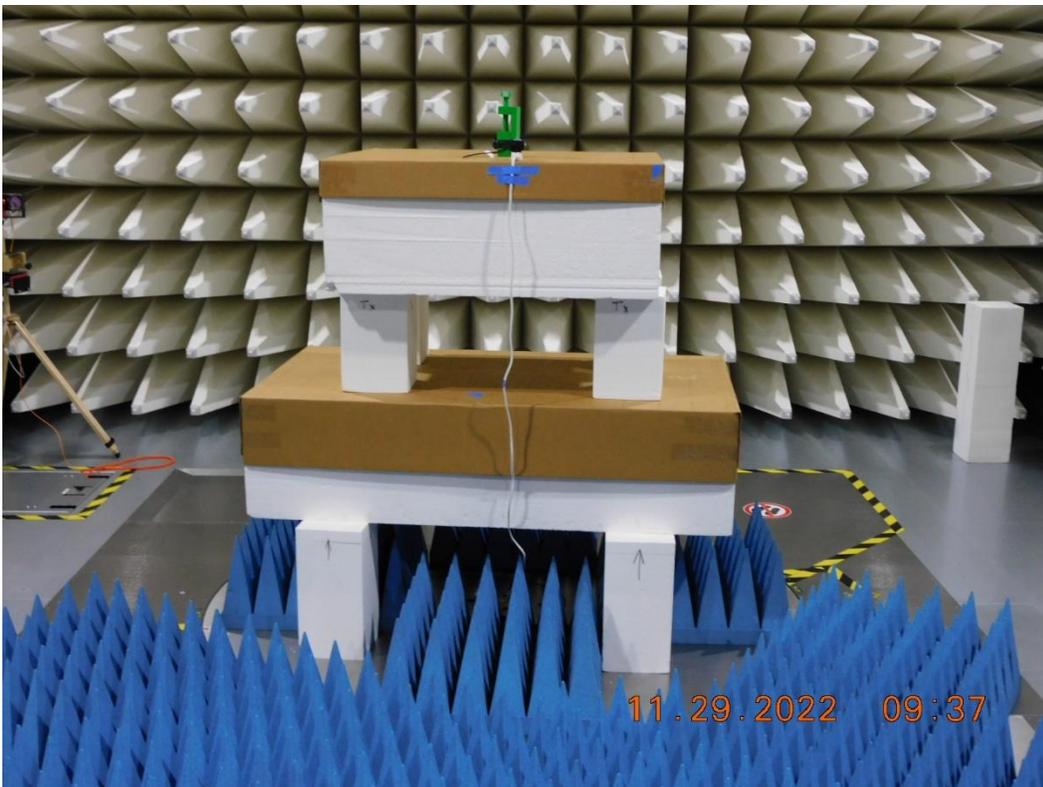


Figure RE08.6: X orientation rear of EUT

The following material is associated with GCL Test Report 2022-035. It would have appeared on or near page 48 of the test report.

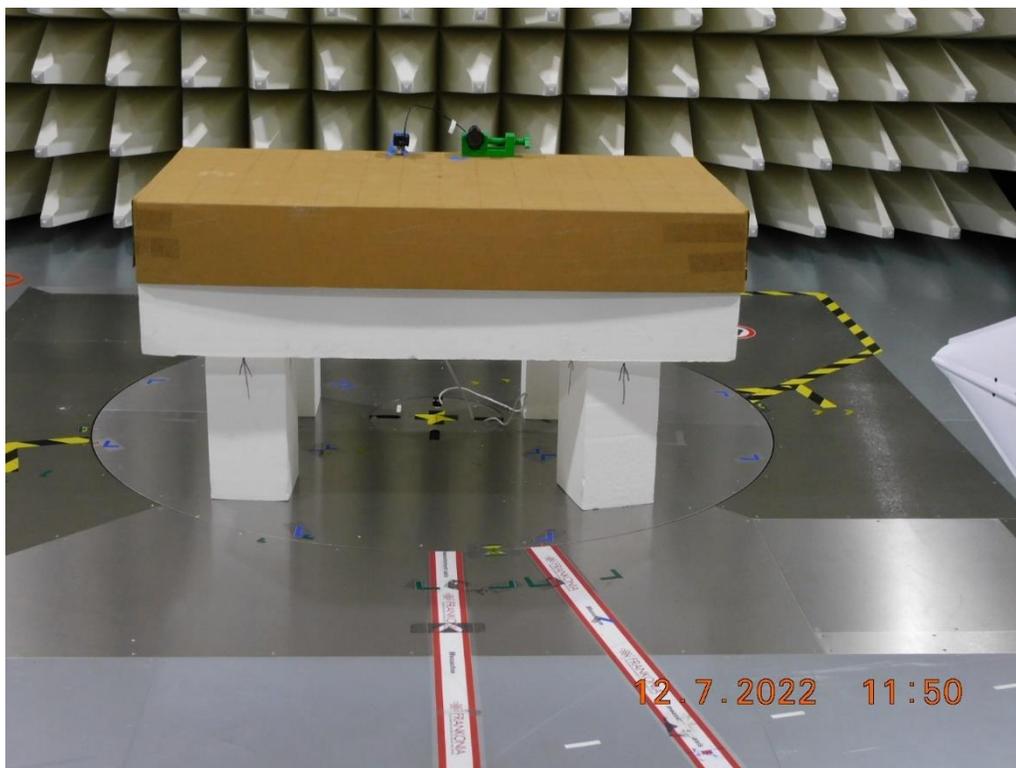


Figure RE01.2: Front EUT test setup

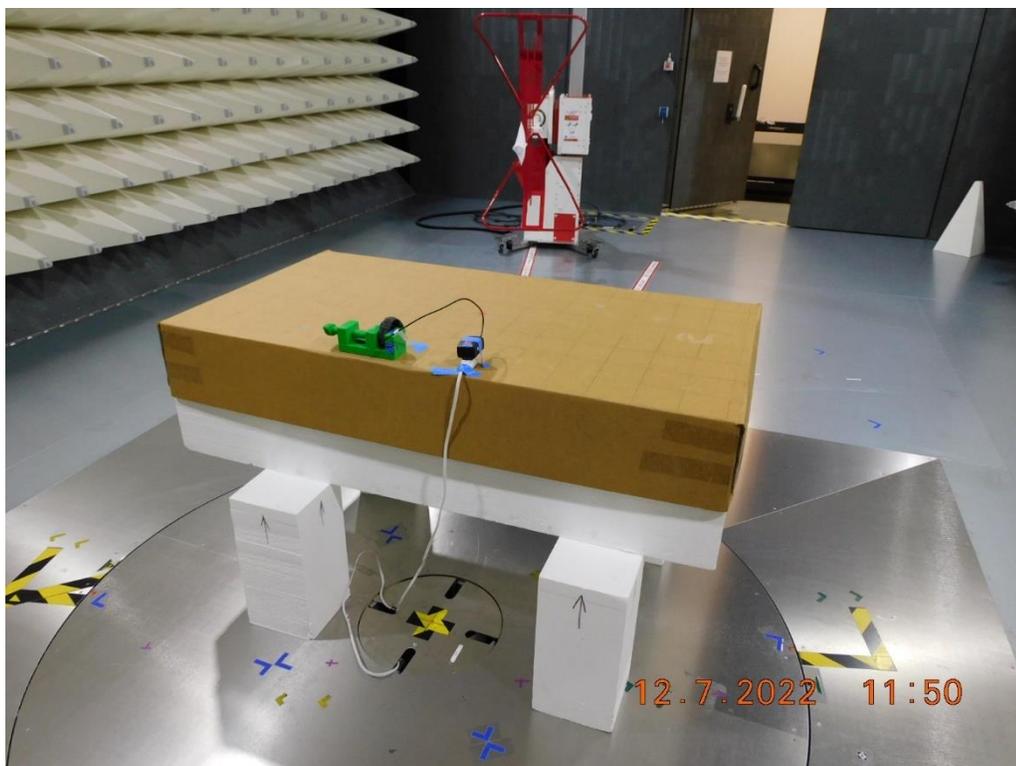


Figure RE01.3: Rear EUT test setup

The following material is associated with GCL Test Report 2022-035. It would have appeared on or near page 51 of the test report.

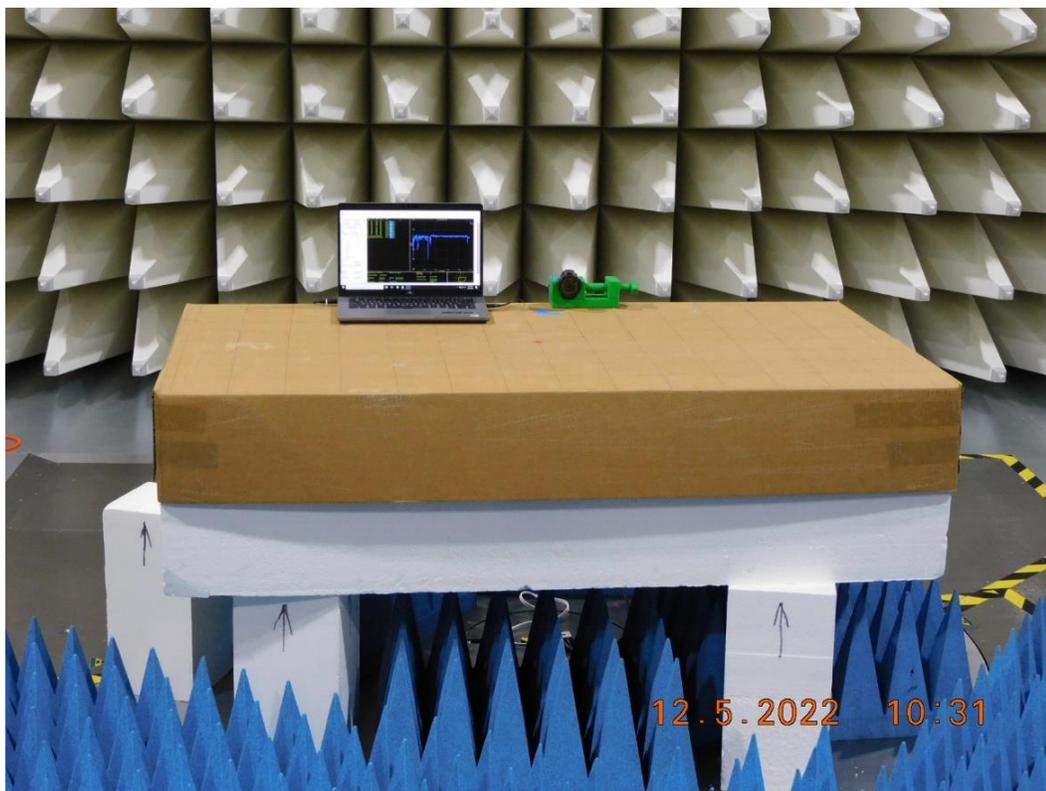


Figure RE04.2: EUT test setup front

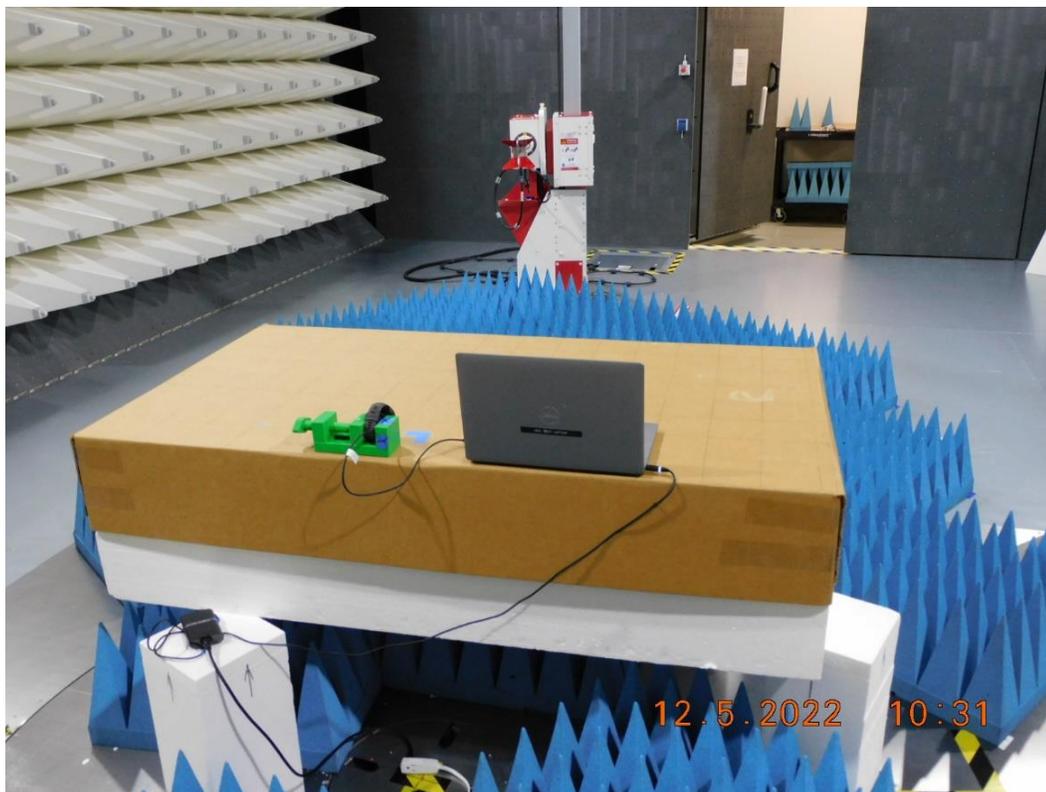


Figure RE04.3: EUT test setup back

The following material is associated with GCL Test Report 2022-035. It would have appeared on or near page 54 of the test report.

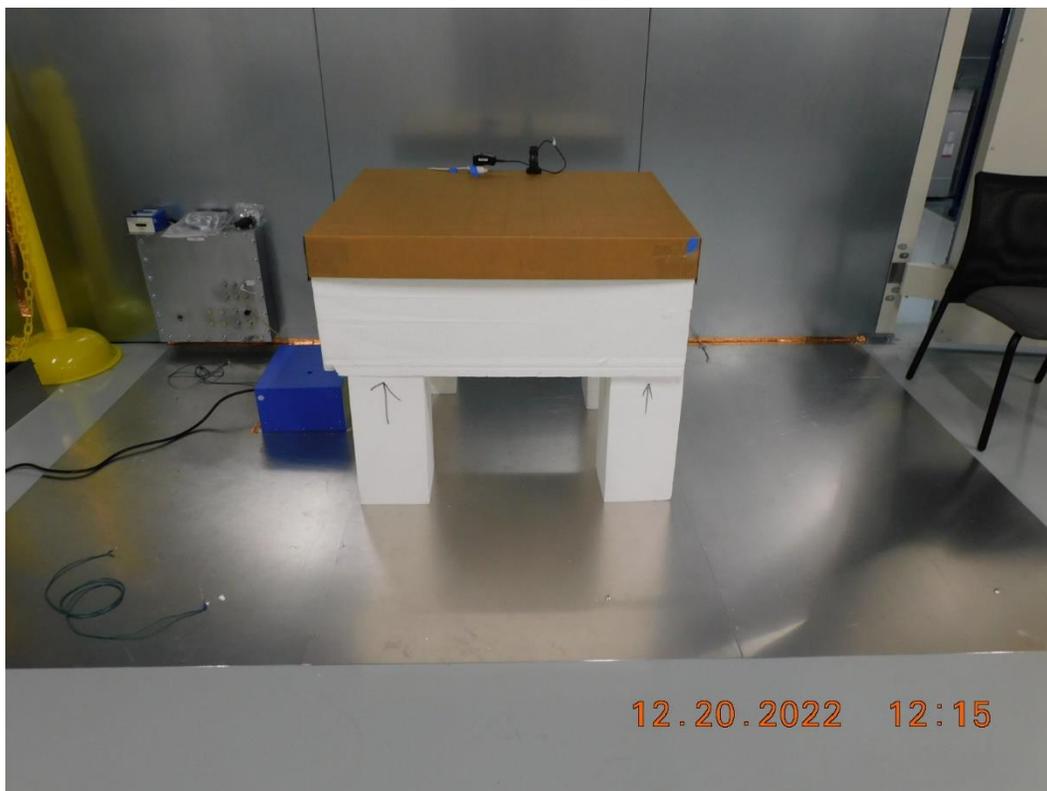


Figure CE02.2: EUT test setup (Front View)



Figure CE02.3: EUT test setup (Side View)

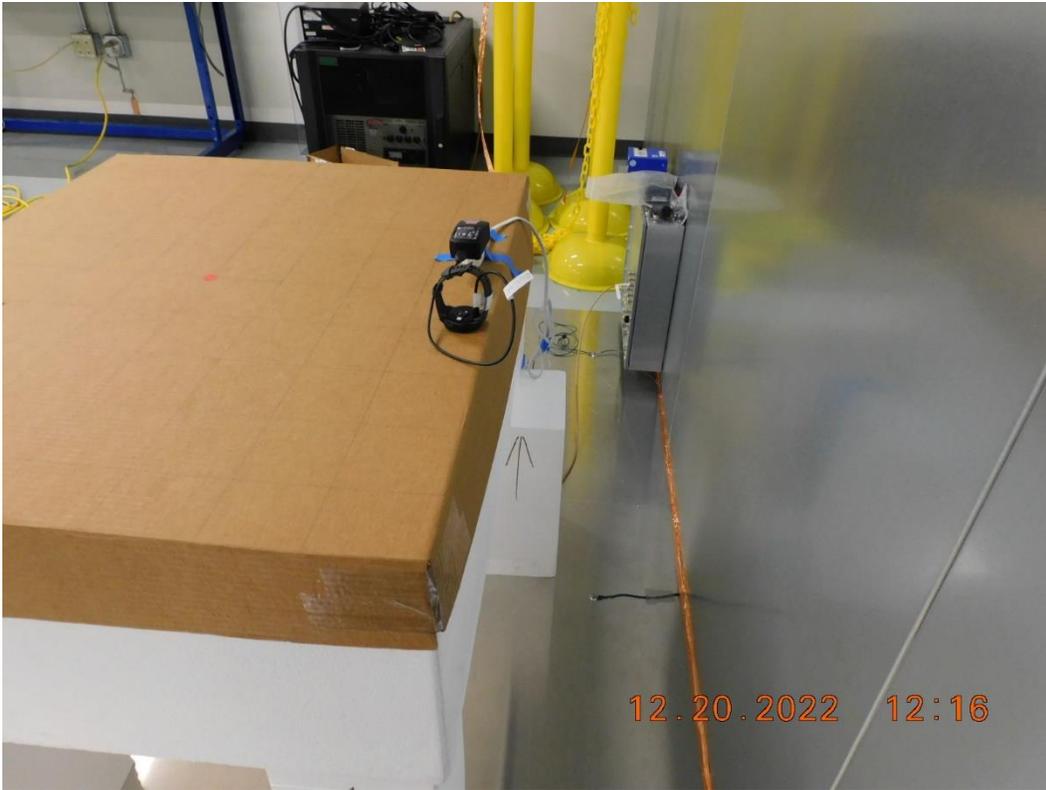


Figure CE02.4: EUT test setup (Back View)

The following material is associated with GCL Test Report 2022-032. It would have appeared on or near page 12 of the test report.

Setup Photographs

The following photographs show the EUT configured and arranged in the manner in which it was measured.

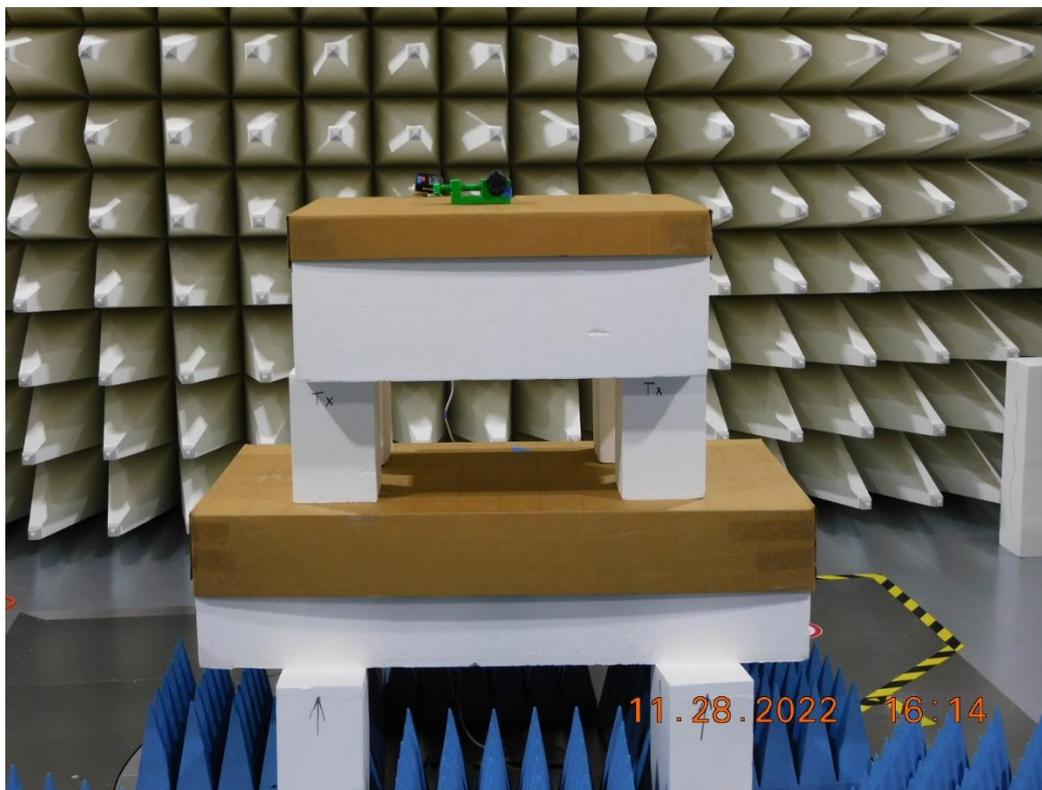


Figure RE09.3: Z orientation front of EUT



Figure RE09.4: Z orientation rear of EUT



Figure RE09.5: X orientation front of EUT

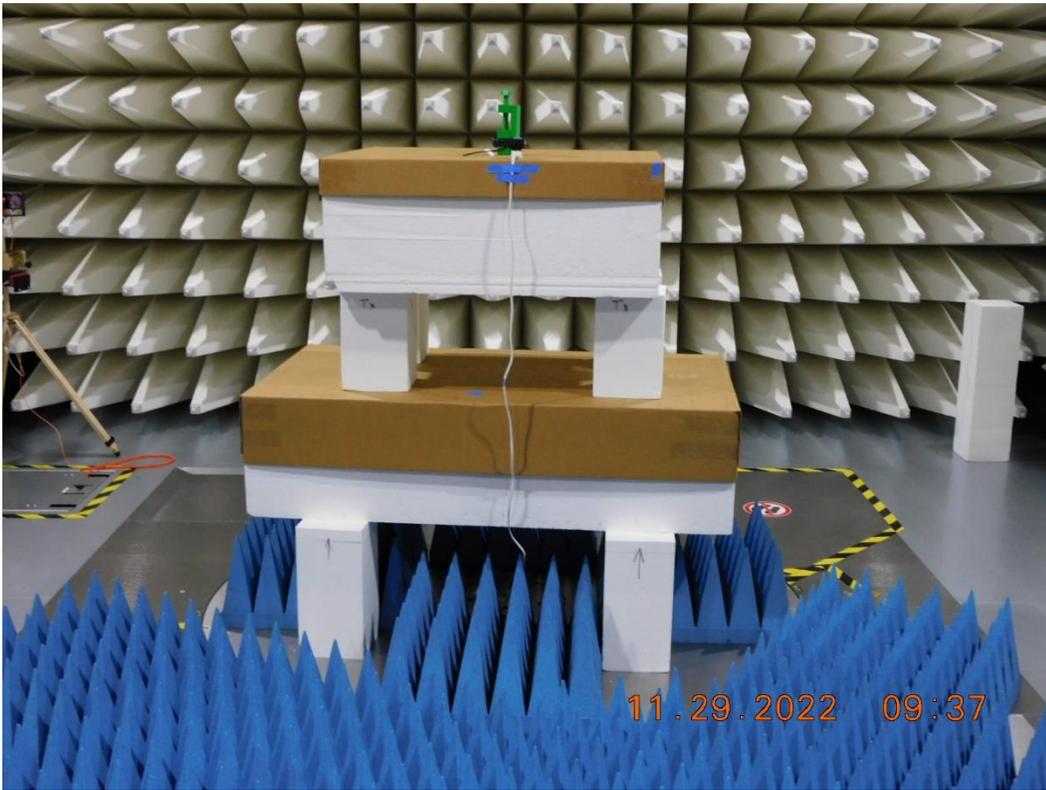


Figure RE09.6: X orientation rear of EUT

The following material is associated with GCL Test Report 2022-032. It would have appeared on or near page 17 of the test report.

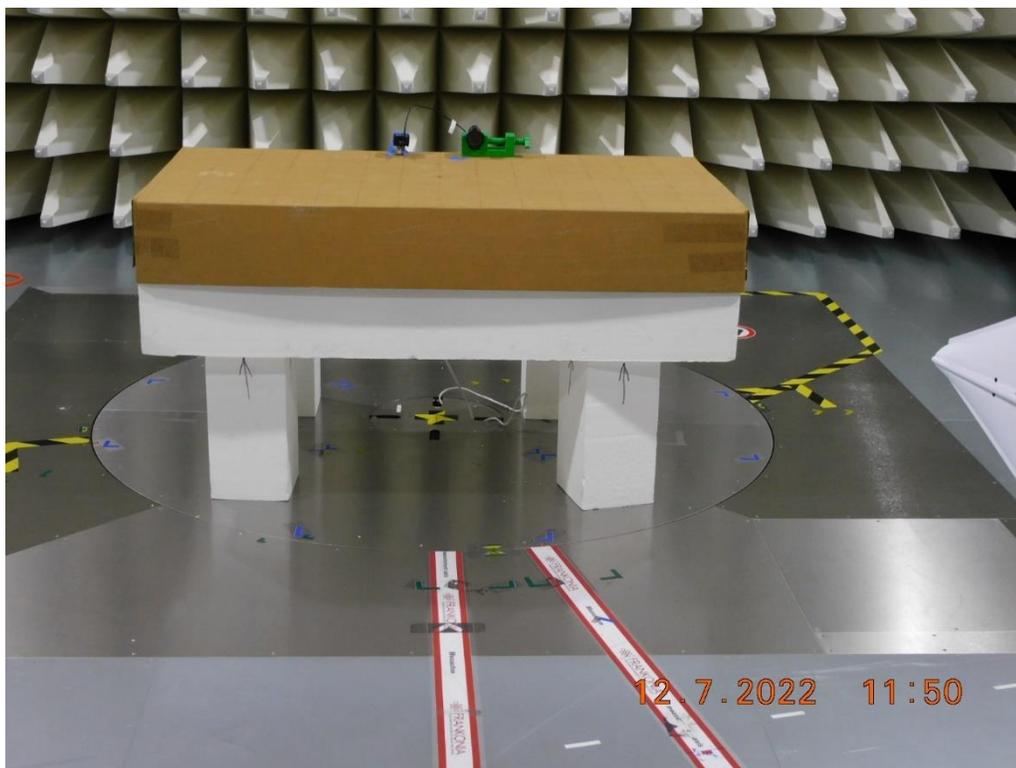


Figure RE01.2: Front EUT test setup



Figure RE01.3: Rear EUT test setup

The following material is associated with GCL Test Report 2022-032. It would have appeared on or near page 23 of the test report.

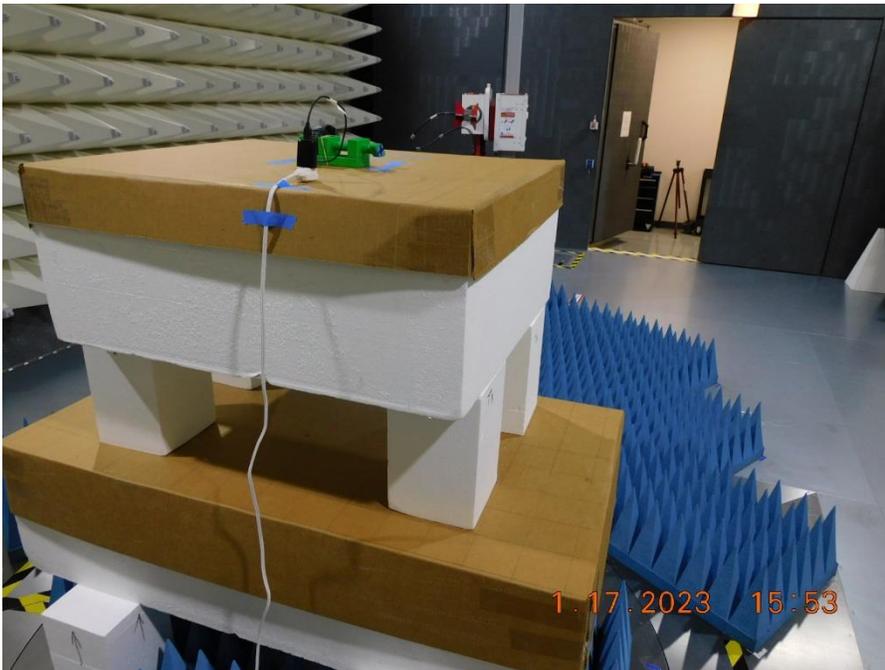


Figure RE14.7: EUT Z orientation test setup

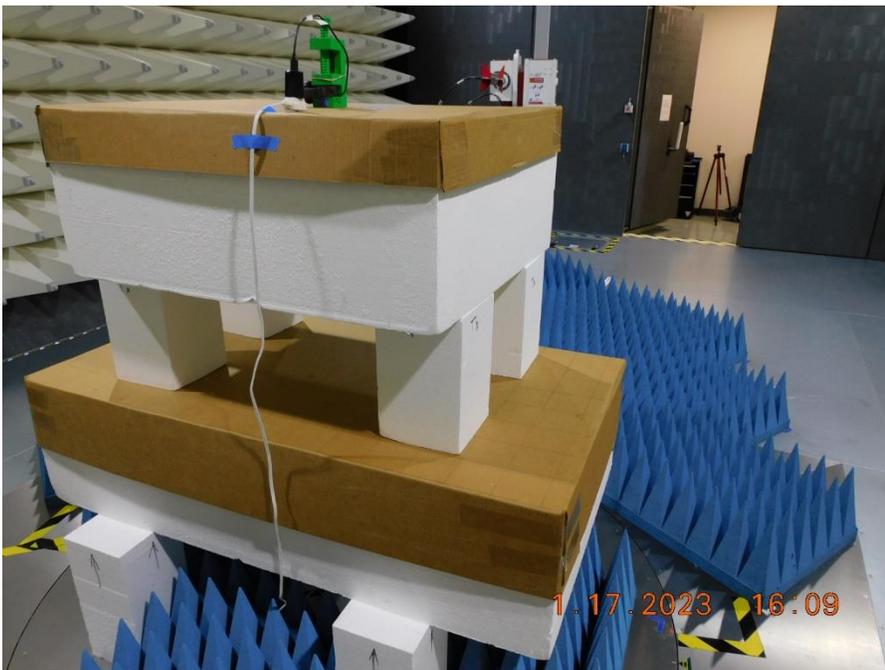


Figure RE14.8: EUT X orientation test setup

The following material is associated with GCL Test Report 2022-032. It would have appeared on or near page 28 of the test report.



Figure RE15.7: EUT Z orientation test setup

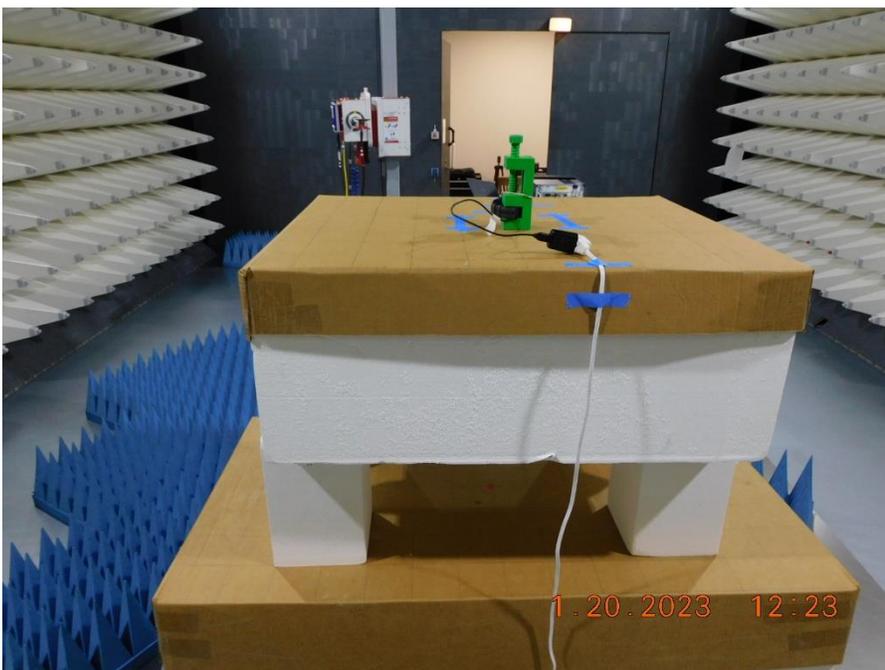


Figure RE15.8: EUT X orientation test setup

The following material is associated with GCL Test Report 2022-034. It would have appeared on or near page 12 of the test report.

Setup Photographs

The following photographs show the EUT configured and arranged in the manner in which it was measured.

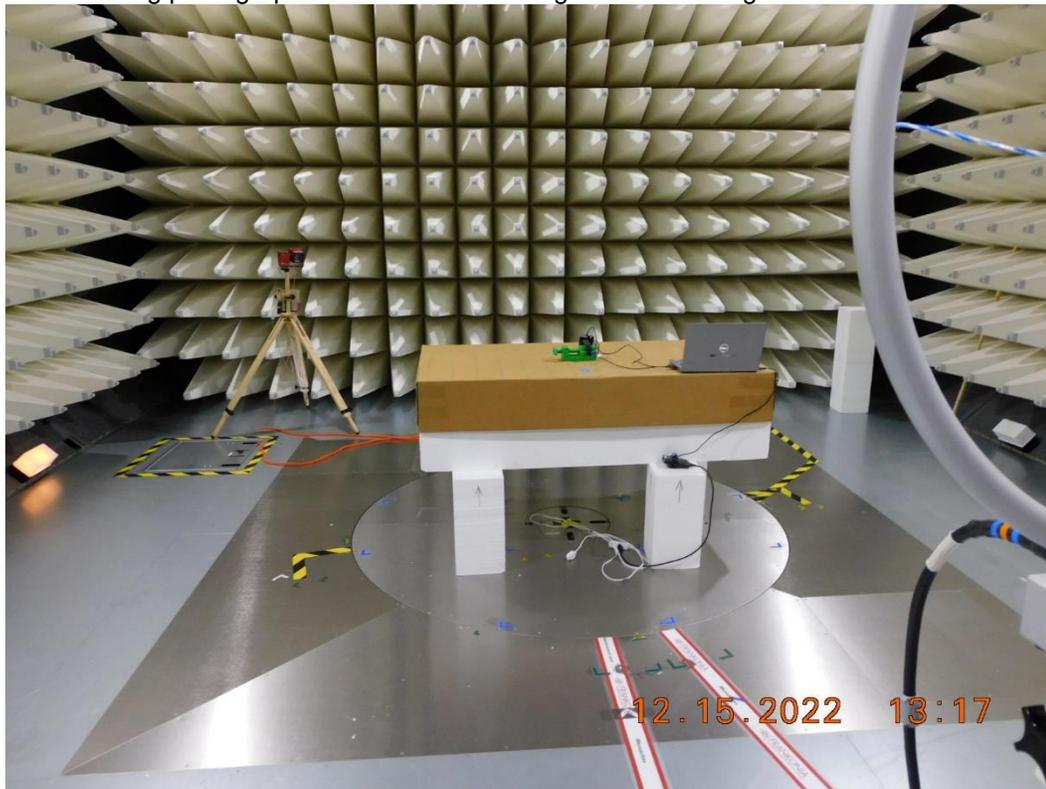


Figure RE012.3: EUT test setup (EUT Rear View, Antenna X Orientation)

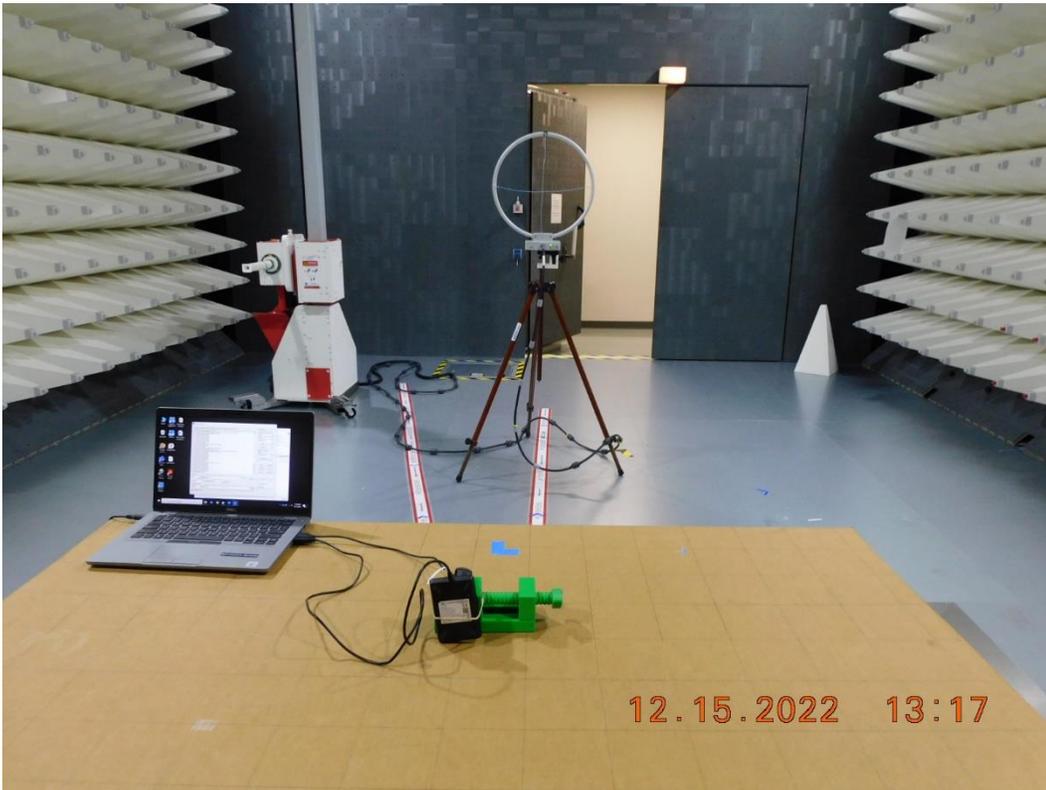


Figure RE012.4: EUT test setup (EUT Front View, Antenna X Orientation)

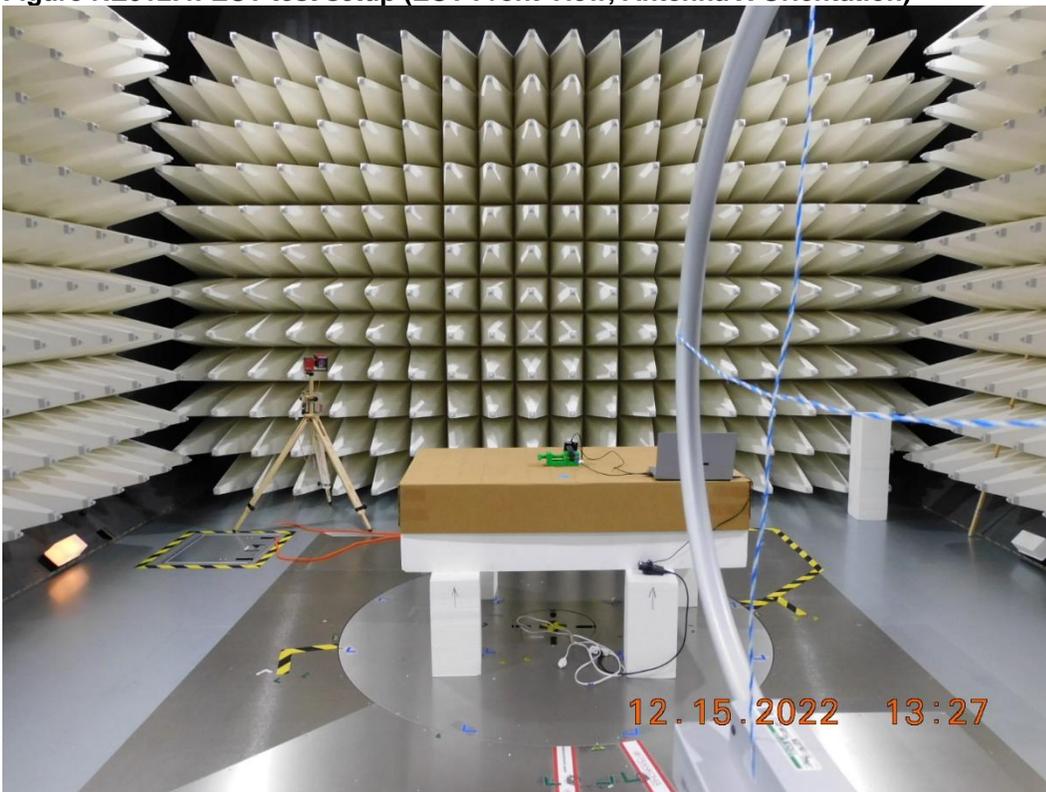


Figure RE012.5: EUT test setup (EUT Rear View, Antenna Y Orientation)

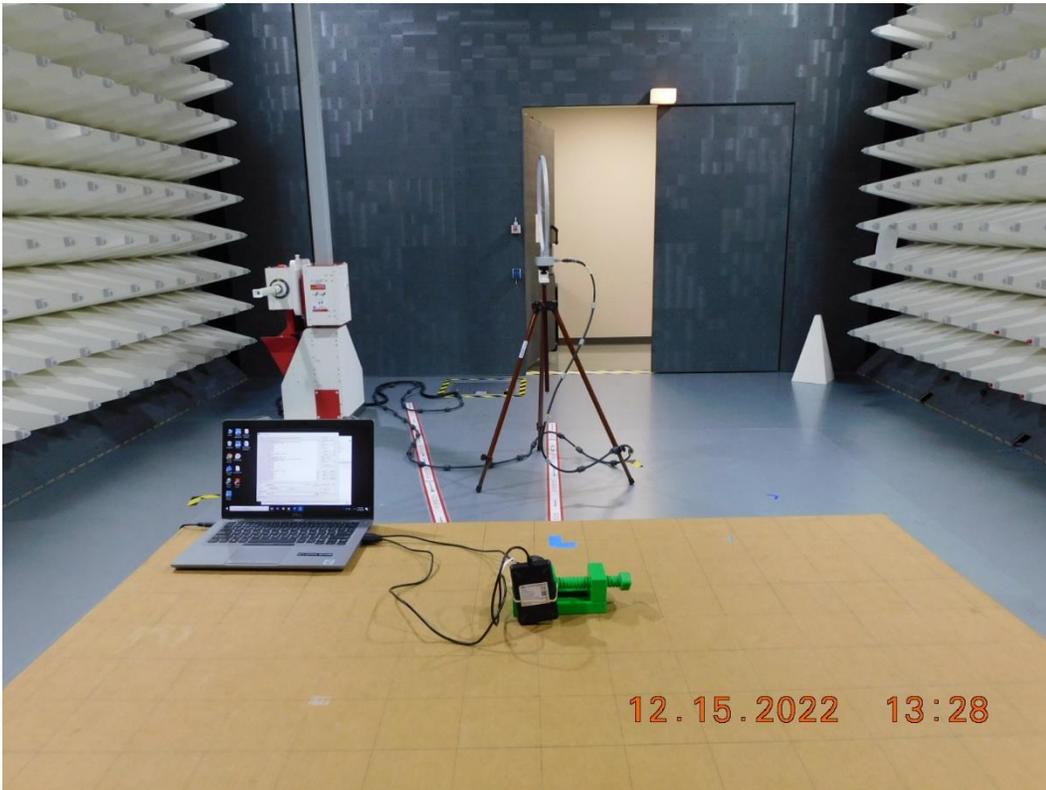


Figure RE012.6: EUT test setup (EUT Front View, Antenna Y Orientation)

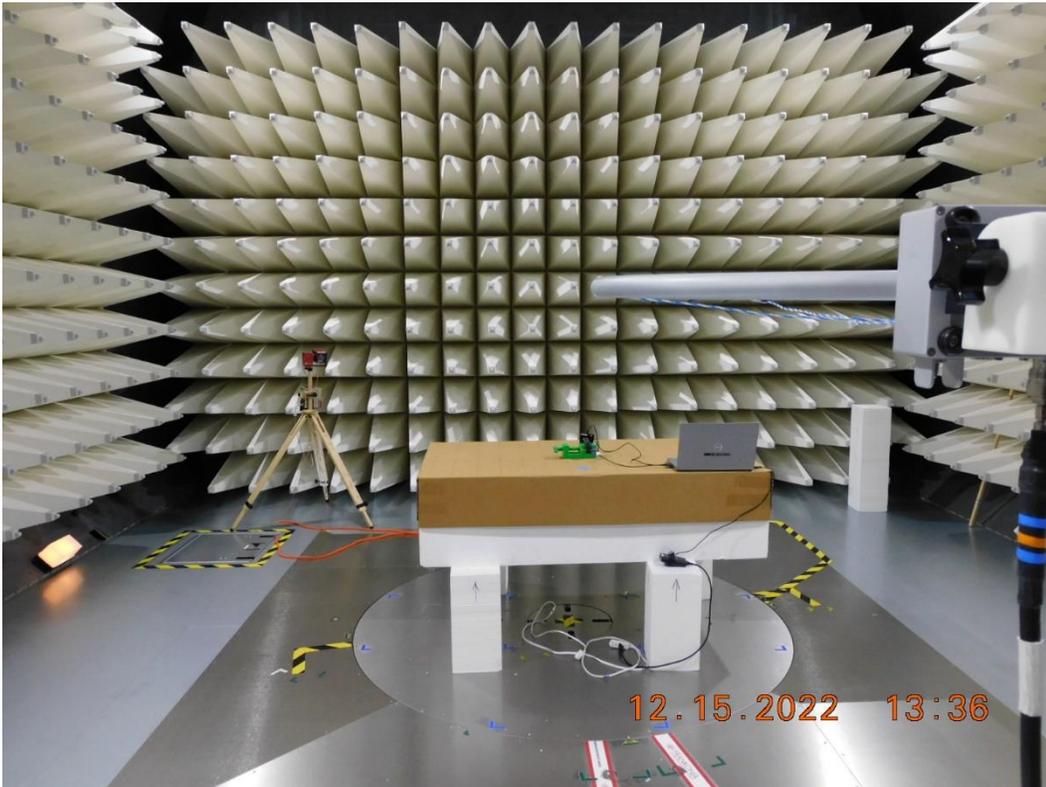


Figure RE012.7: EUT test setup (EUT Rear View, Antenna Z Orientation)

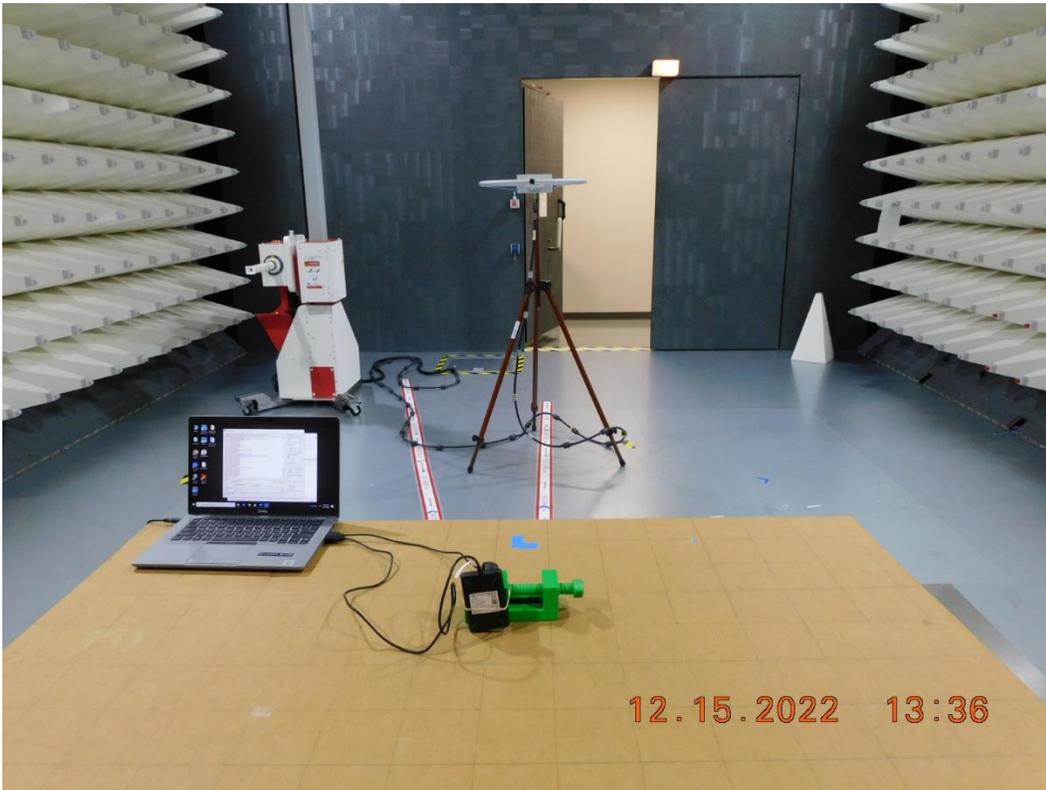


Figure RE012.8: EUT test setup (EUT Front View, Antenna Z Orientation)

The following material is associated with GCL Test Report 2022-034. It would have appeared on or near page 18 of the test report.

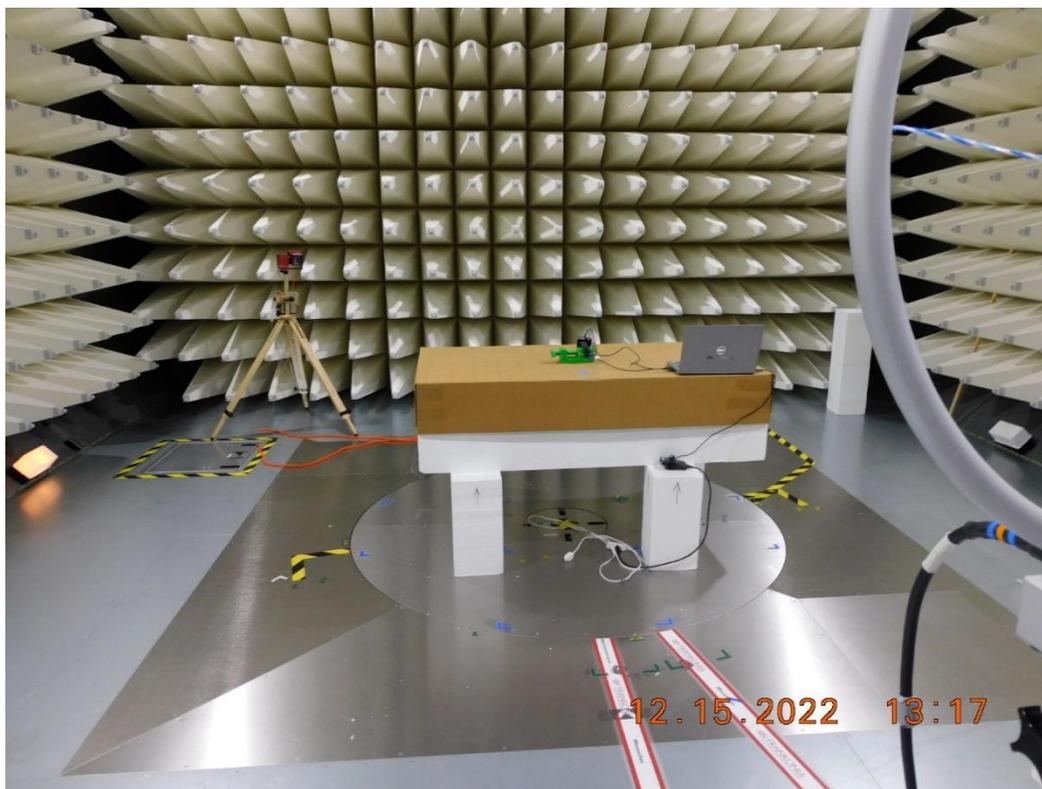


Figure RE013.3: EUT test setup (EUT Rear View, Antenna X Orientation)

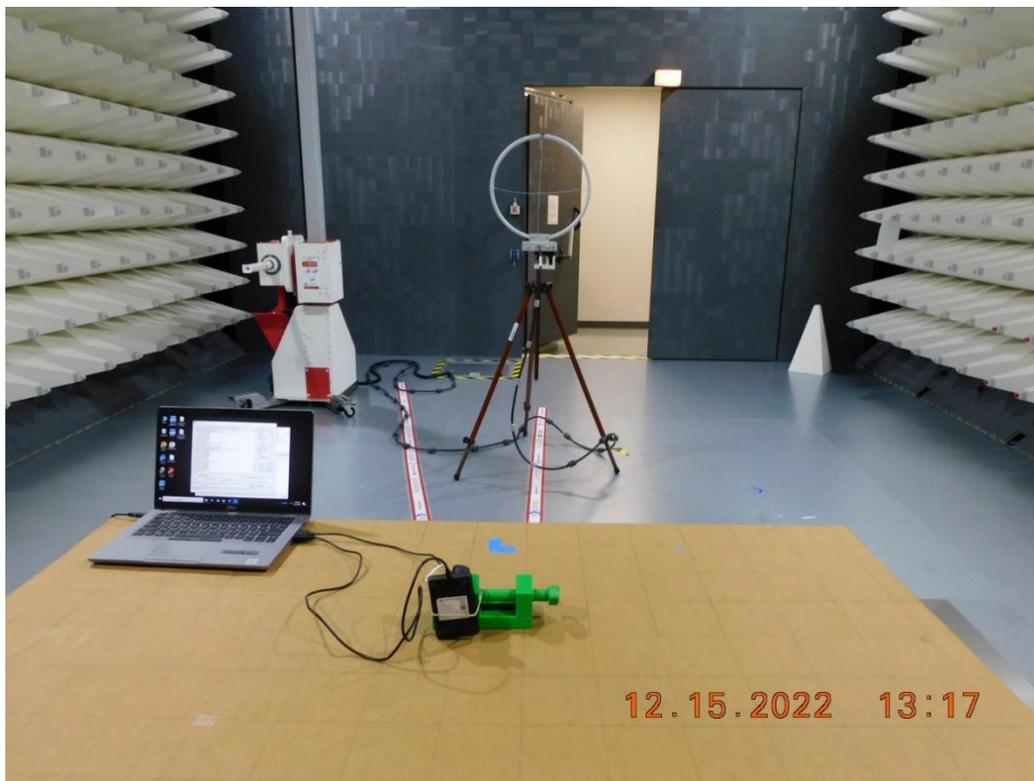


Figure RE013.4: EUT test setup (EUT Front View, Antenna X Orientation)

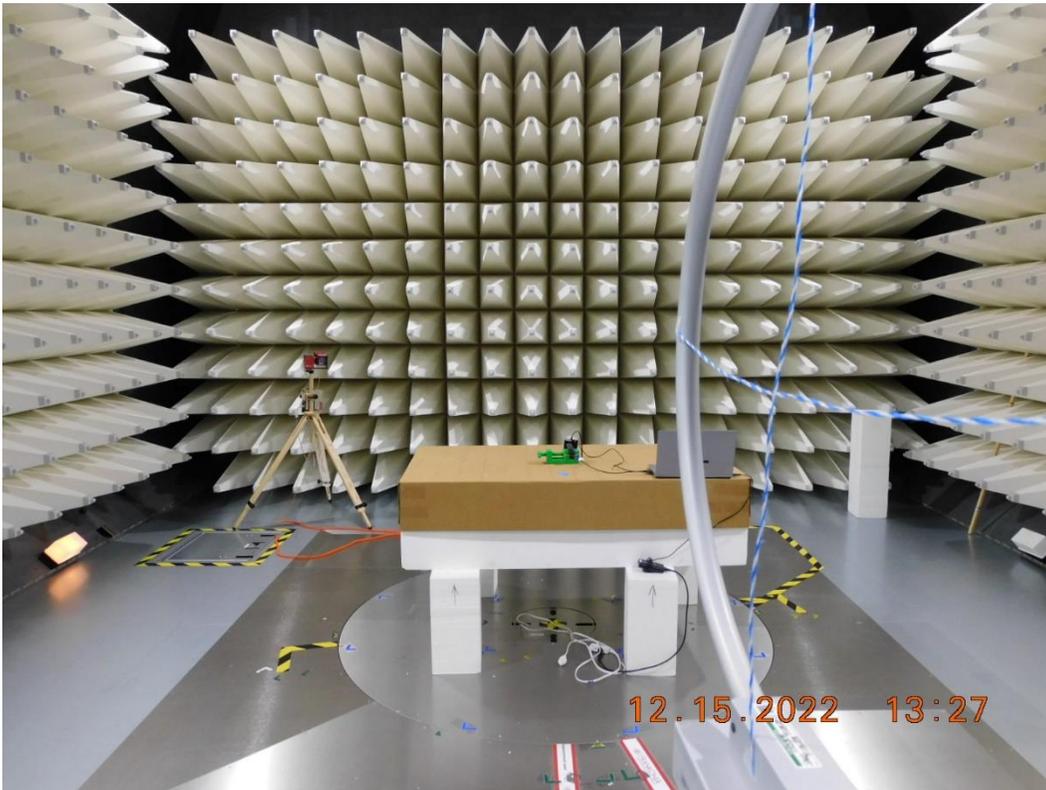


Figure RE013.5: EUT test setup (EUT Rear View, Antenna Y Orientation)

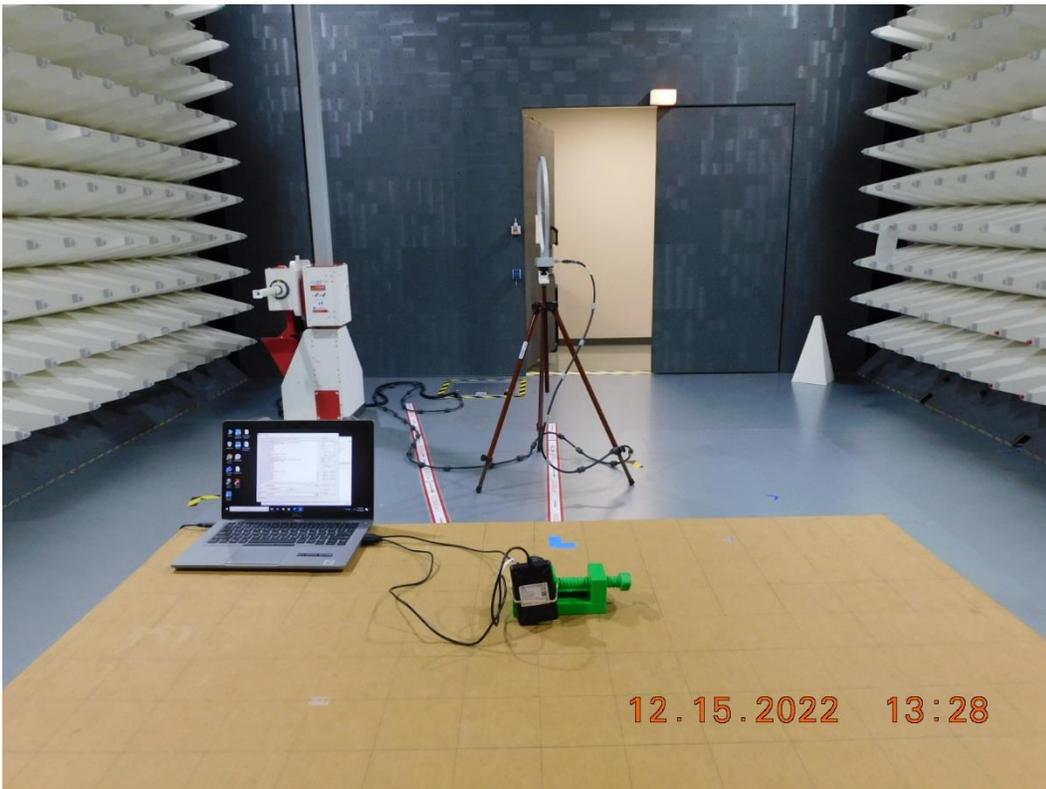


Figure RE013.6: EUT test setup (EUT Front View, Antenna Y Orientation)

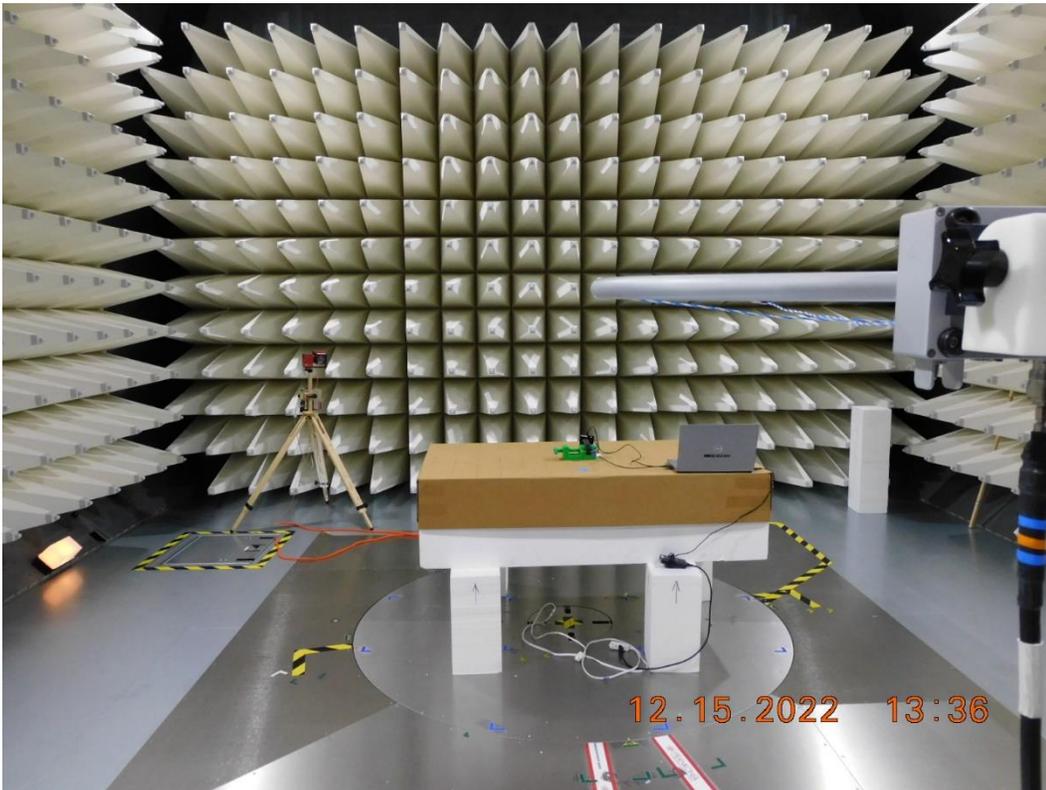


Figure RE013.7: EUT test setup (EUT Rear View, Antenna Z Orientation)

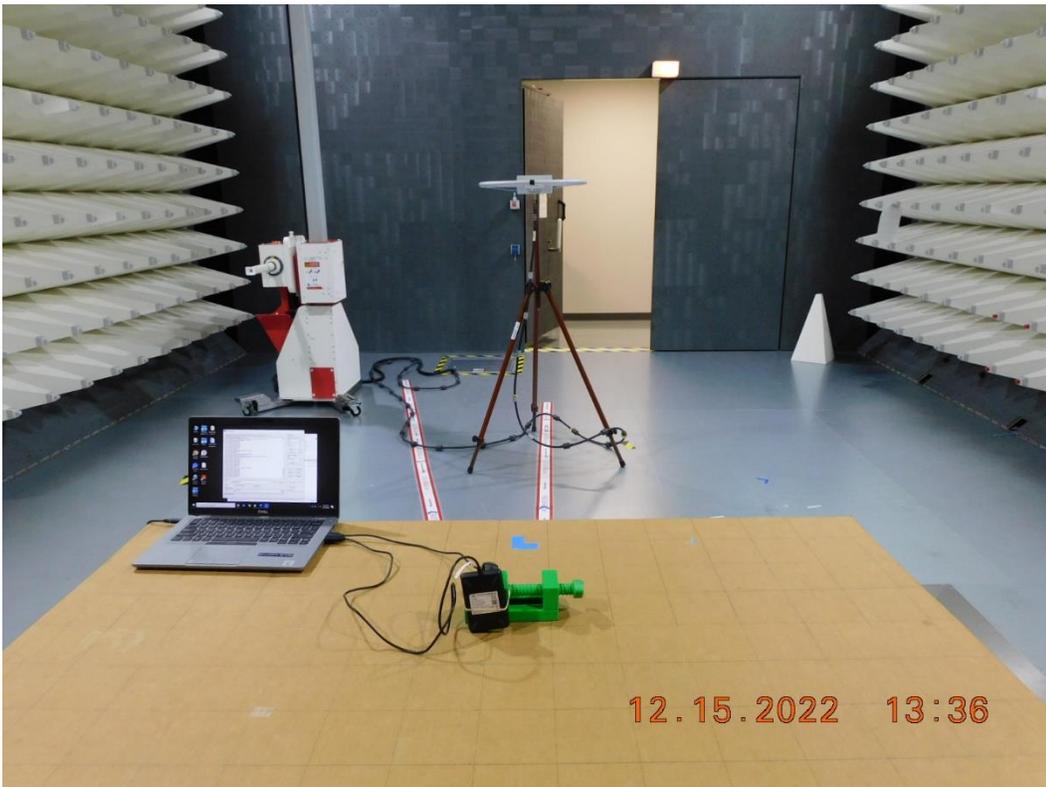


Figure RE013.8: EUT test setup (EUT Front View, Antenna Z Orientation)

The following material is associated with GCL Test Report 2022-034. It would have appeared on or near page 23 of the test report.

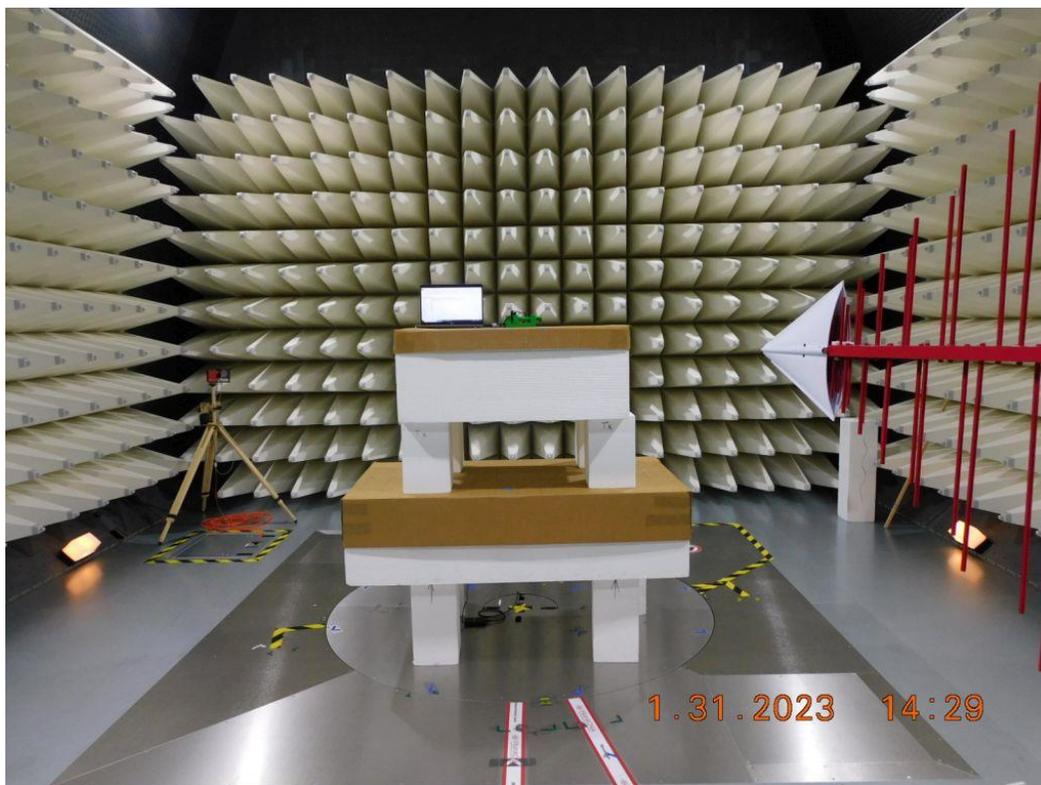


Figure RE03E.2: EUT test setup, front view

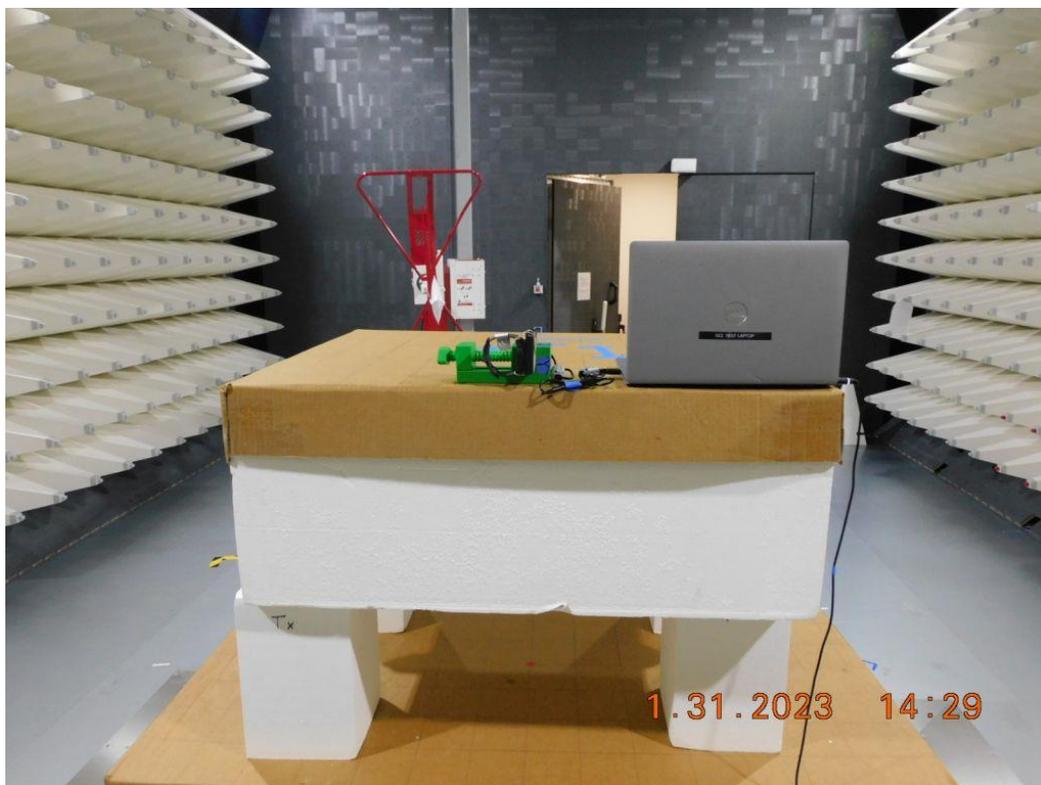


Figure RE03E.3: EUT test setup, reverse view



Figure RE03E.4: EUT test setup detail, Y orientation

5. Other Sensitive Material, if any

The following applies to the three reports previously mentioned: GCL Test Report 2022-032, GCL Test Report 2022-034, and GCL Test Report 2022-035.

In each report, the following text would have appeared in section 5.1 on or near page 4:

This product tested is a wearable device with GNSS, BLE, NFC and other connectivity/electronic features used for various activities.

In each report, the following text would have appeared in section 5.2 on or near page 4:

Primary Functions:	Charging, data transfer, motion detection, position detection, and measurements of biometric data.
Typical use location:	Body worn
Approximate dimensions	24.5 cm x 5.7 cm x 1.3 cm

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
- FCC Part 15.249
- 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.

This is the final page of the report.