

# Test Report 2024-163

**Version A**

**Issued 26 Nov 2024**

**Project GCL-0647**

**Test Setup Photographs**

**Model Identifier: A04999**

**Primary Test Standard**

See the report(s) referenced on page 2 for the relevant standards

## Garmin Compliance Lab

Garmin International

1200 E 151<sup>st</sup> Street

Olathe Kansas 66062 USA

### Client-supplied Information

FCC ID: IPH-04999  
IC ID: 1792A-04999



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 2024-154, GCL Test Report 2024-156, and GCL Test Report 2024-158 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 core test 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. Test Setup Photographs
5. Other Removed Material, if any
6. Test Standards Applied
7. Concluding Notes

## 2. Test Background

### 2.1 The Test Lab

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

### 2.2 The Client

The testing was performed on behalf of the Garmin design group, a separate organization located at 1200 E 151<sup>st</sup> St, Olathe Kansas, USA.

## 3. Report History and Approval

This report was written by Andy Heier and initially issued on 26 Nov 2024 as Version A.

### Report Technical Review:

David Arnett  
Technical Lead EMC Engineer



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### Report Approval:

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



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#### 4. Test Setup Photographs

The photographs on the subsequent pages are drawn first from Test Report 2024-154, followed by images from Test Report 2024-156 and Test Report 2024-158

The following material would have appeared on or near page 16, 19, 20, and 23 of GCL Test Report 2024-154.

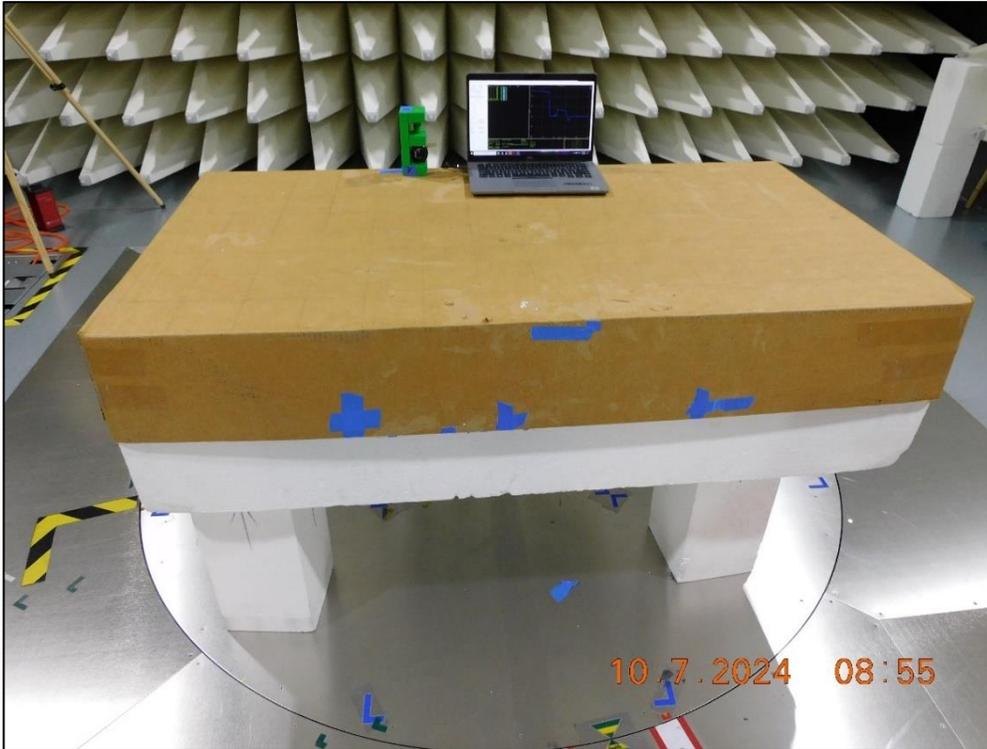


Figure RE09.2: EUT test setup, first view

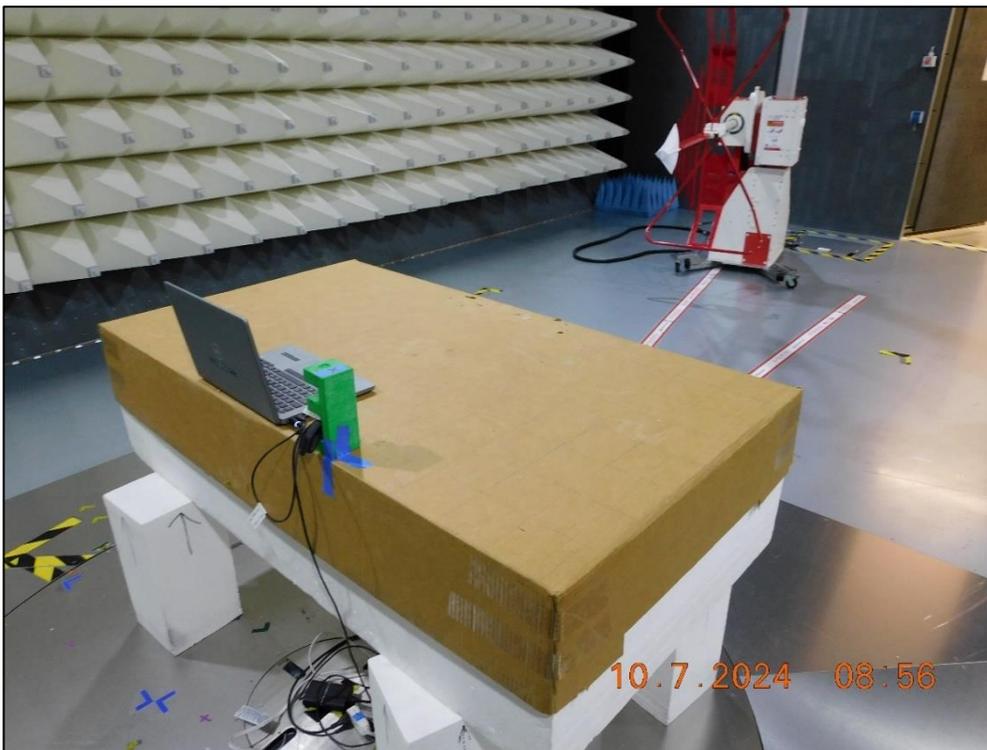


Figure RE09.3: EUT test setup, second view



Figure RE10.2: EUT test setup, first view

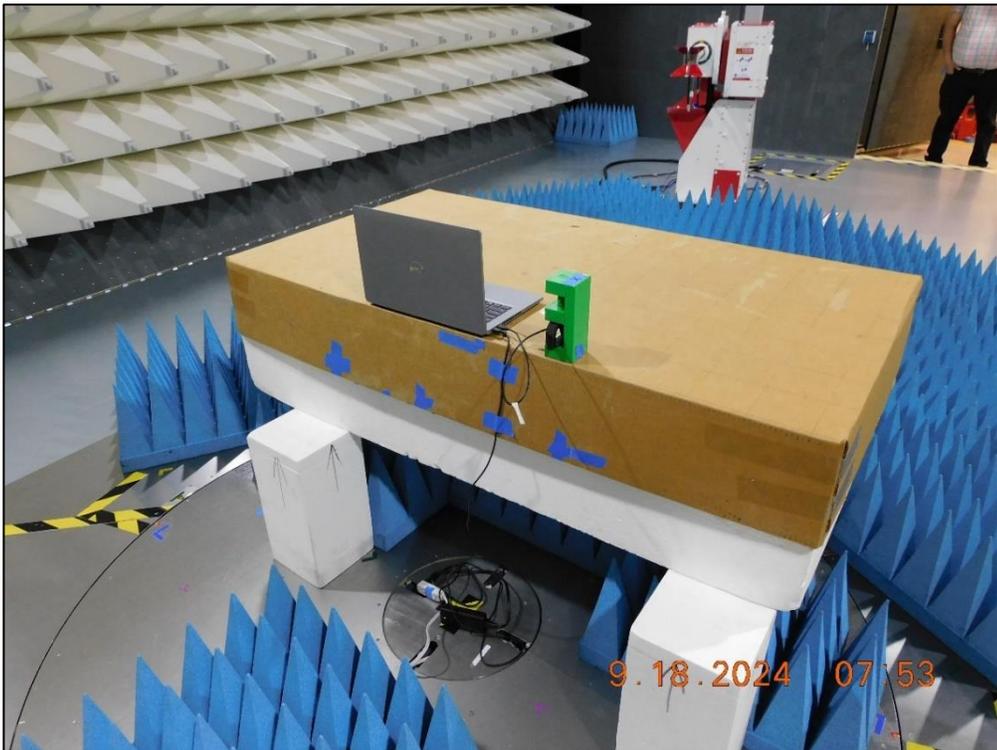


Figure RE10.3: EUT test setup, second view

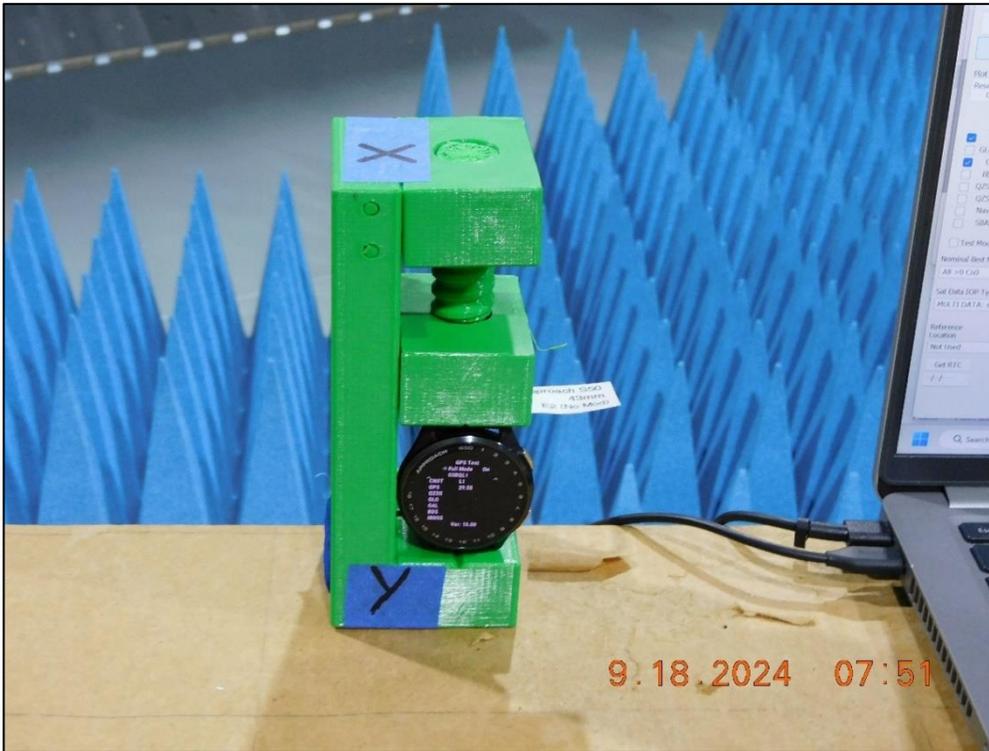


Figure RE10.3: EUT test setup, (EUT X orientation)

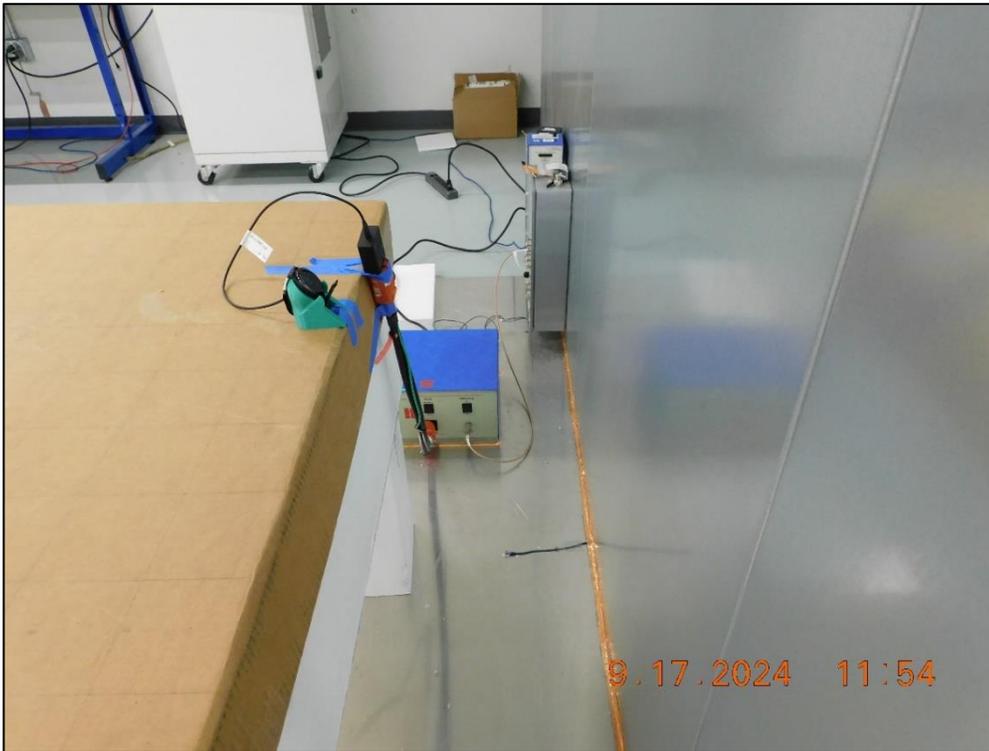


Figure CE05.2: Test setup, first view

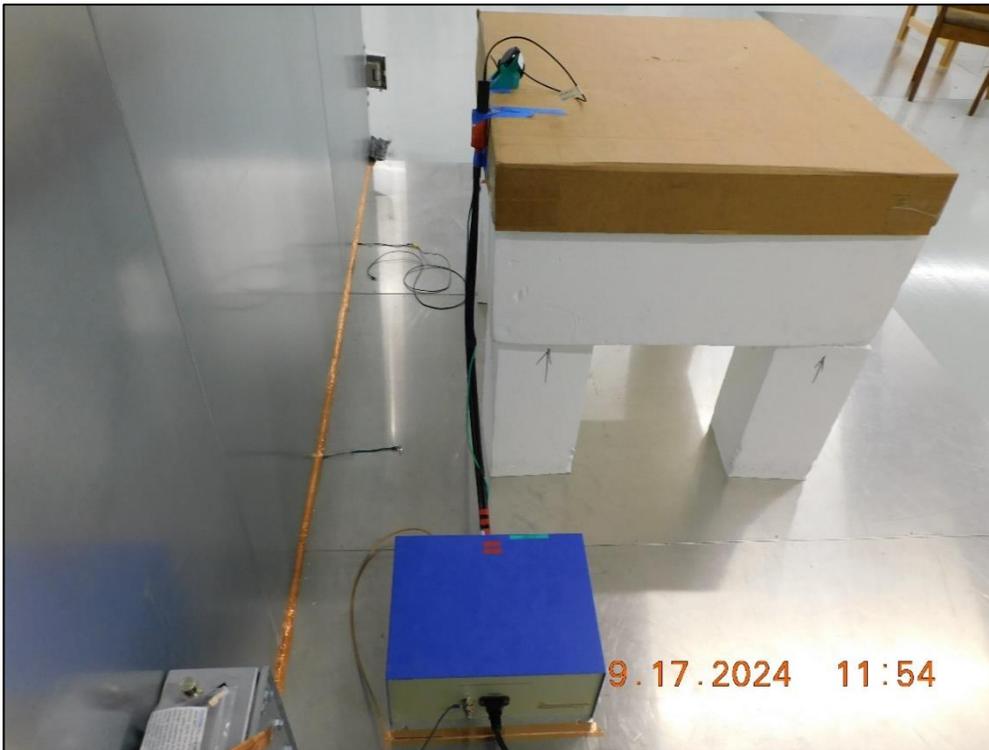


Figure CE05.3: Test setup, second view

The following material would have appeared on or near page 16, 19, 22, 23, 26, 29, and 32 of GCL Test Report 2024-156

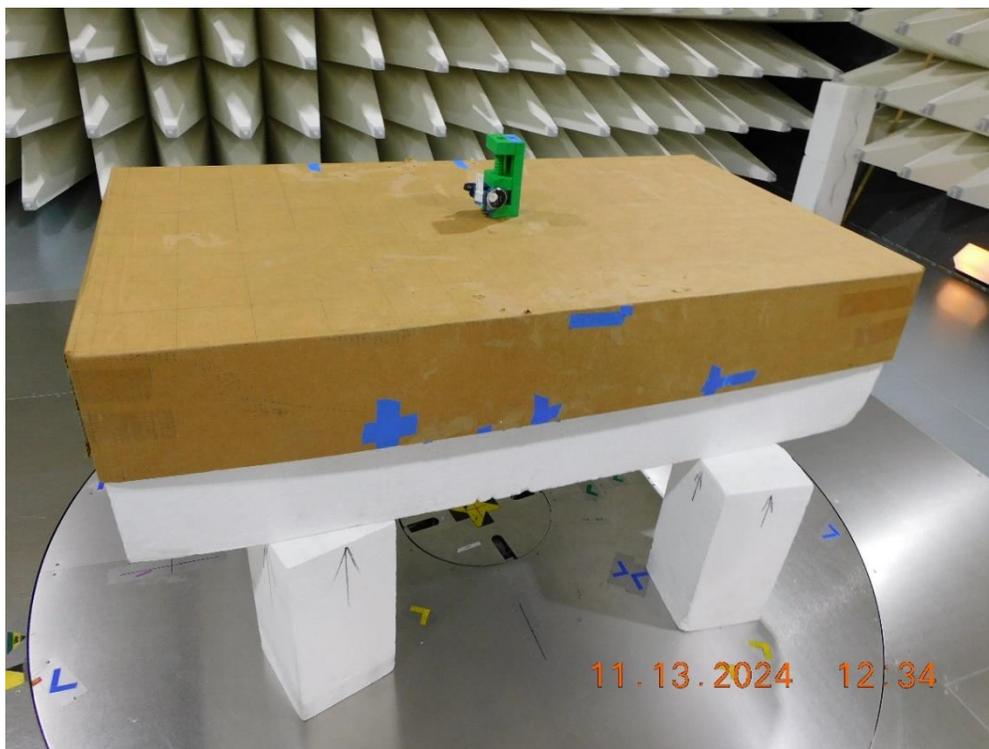


Figure RE13.2: EUT test setup, first view

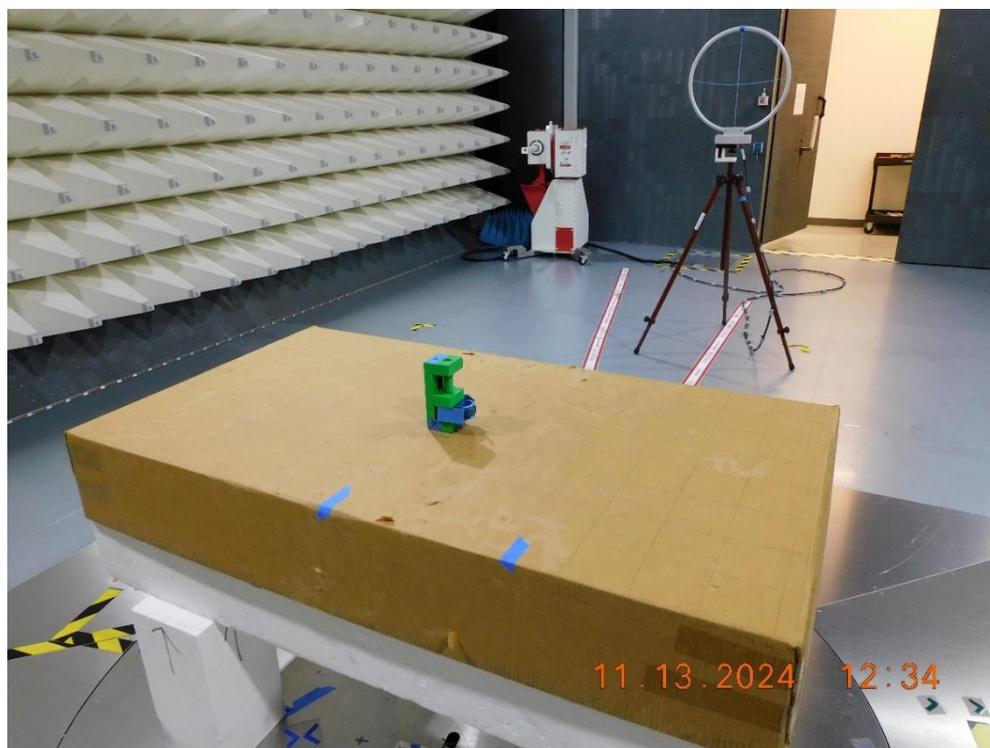


Figure RE13.3: EUT test setup, second view (Antenna X orientation)

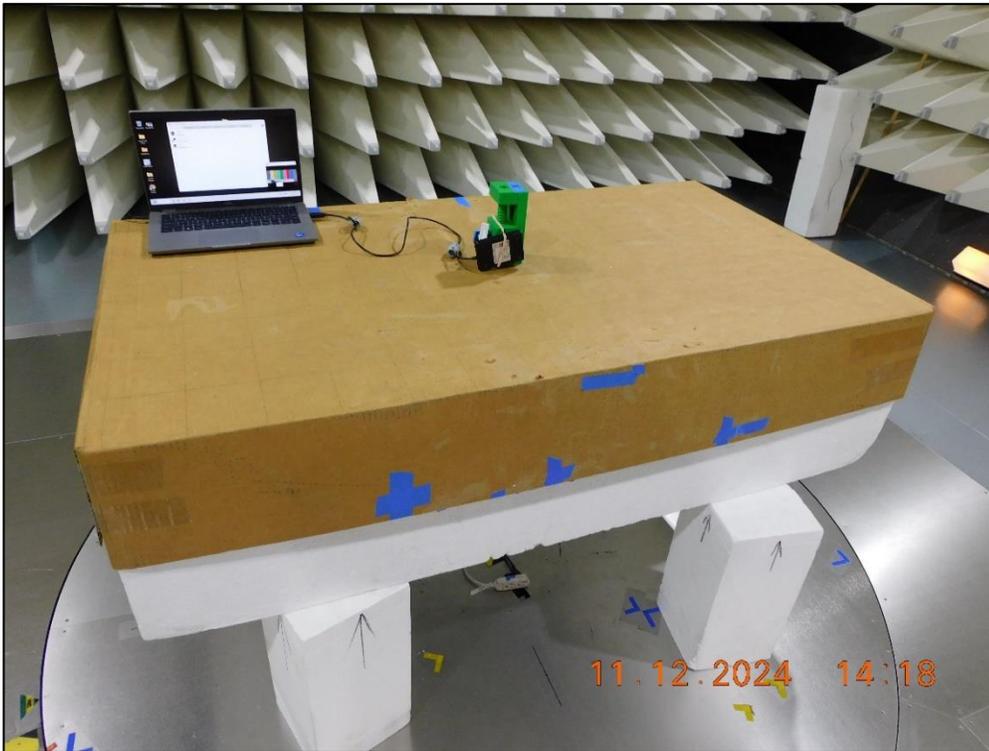


Figure RE18.2: EUT test setup, first view

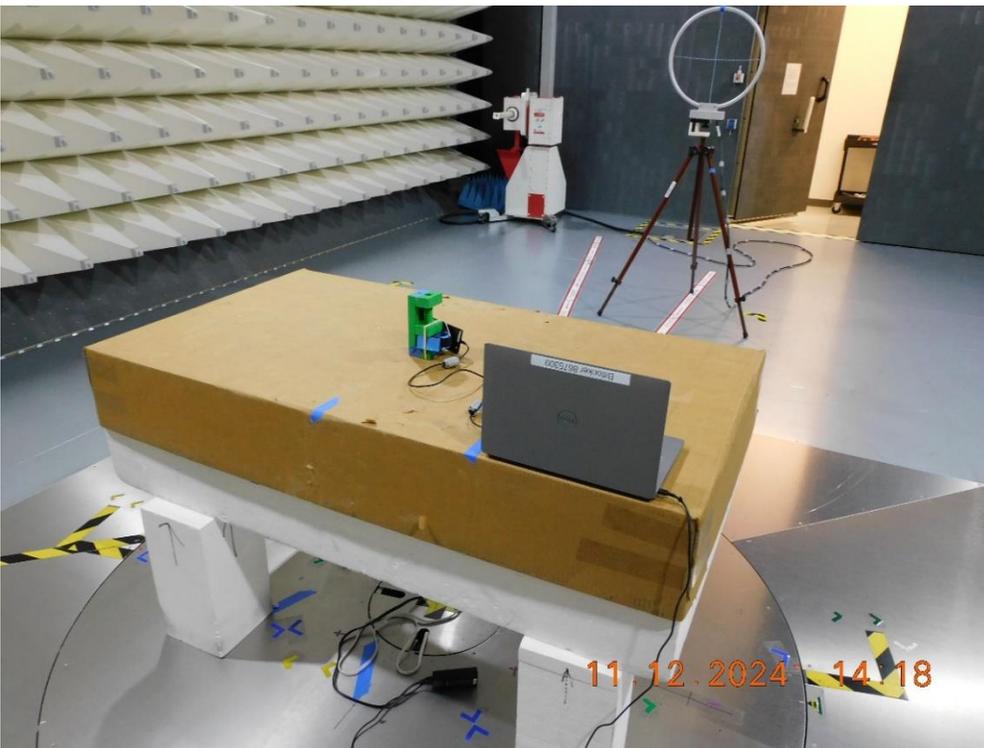


Figure RE18.3: EUT test setup, second view (Antenna X orientation)

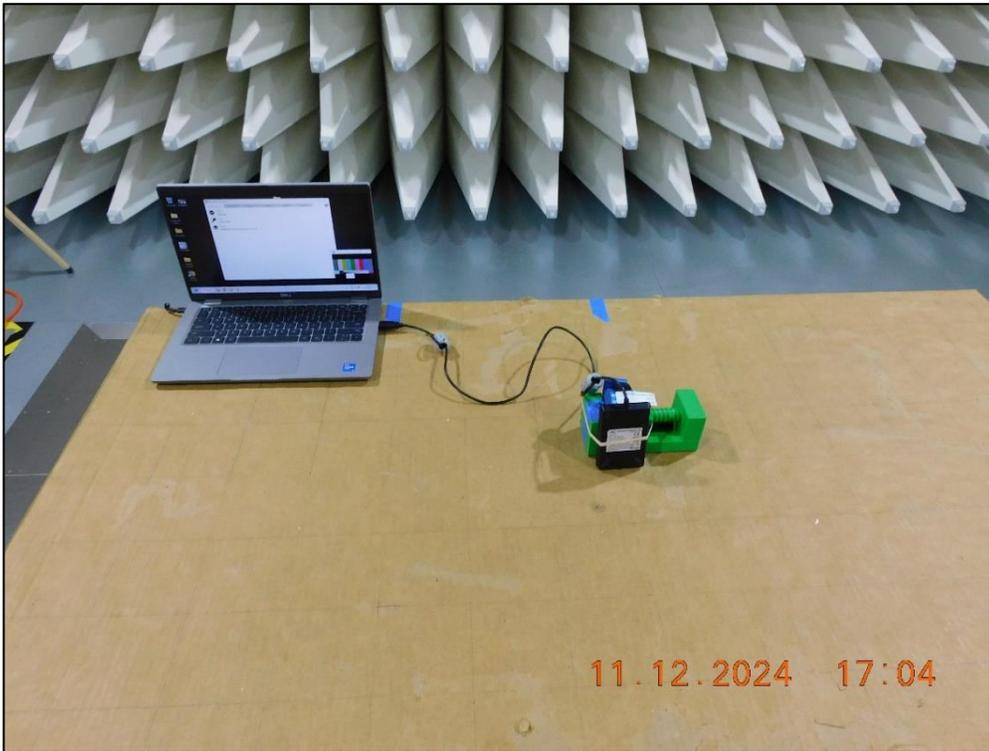


Figure RE19.2: EUT test setup, first view

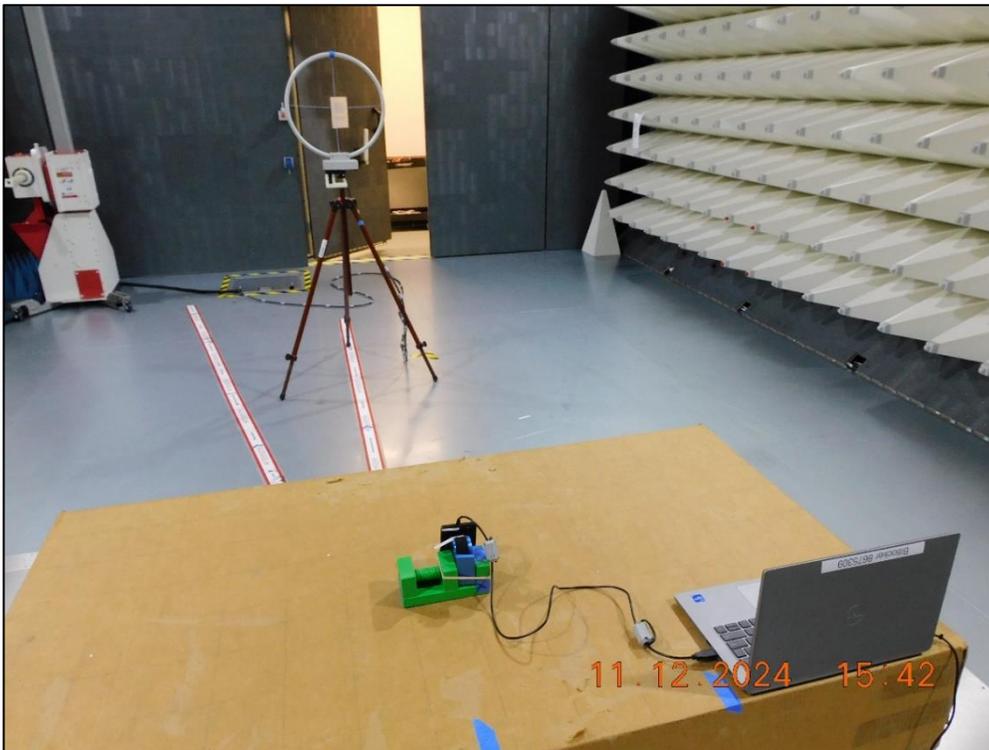


Figure RE19.3: EUT test setup, second view (Antenna X polarization)

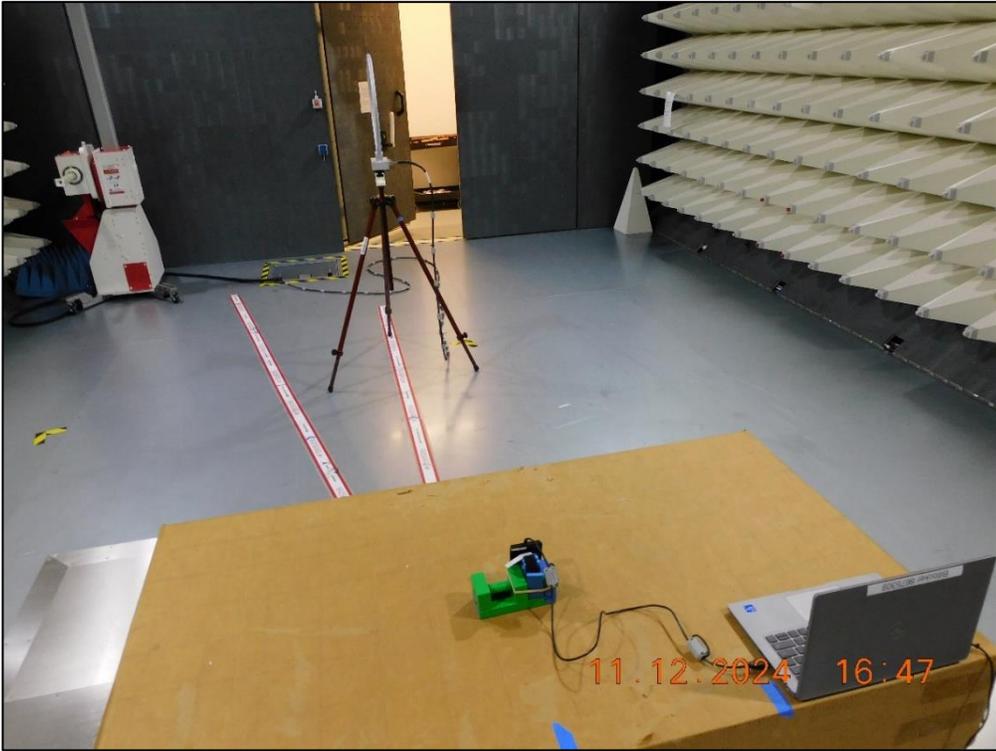


Figure RE19.4: EUT test setup, second view (Antenna Y polarization)

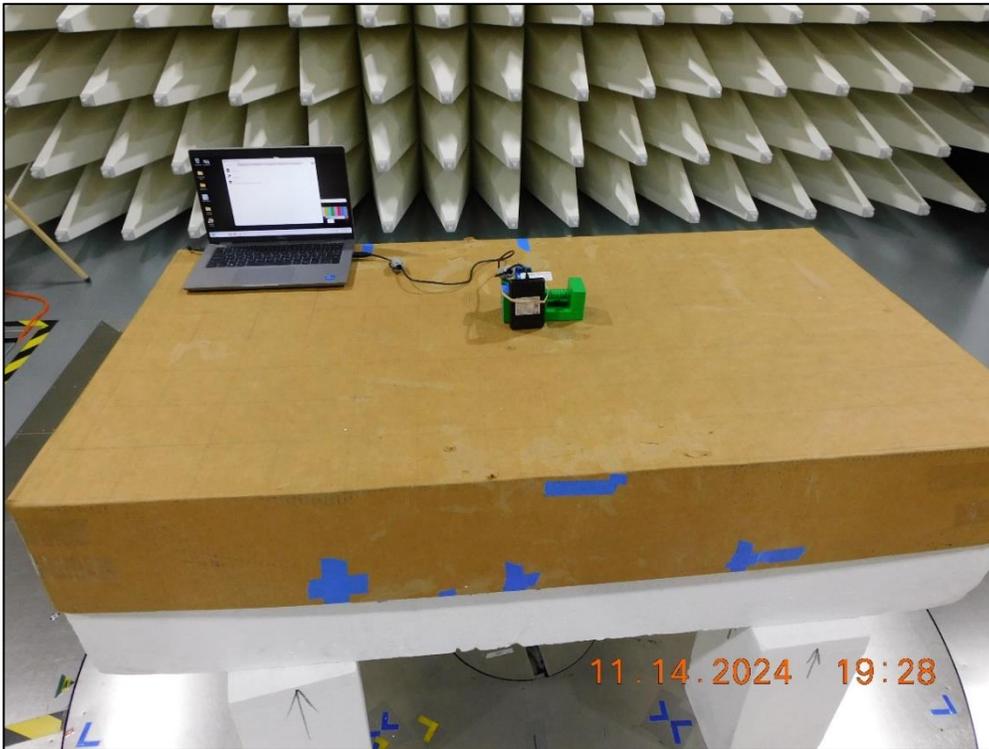


Figure RE20.2: EUT test setup, first view

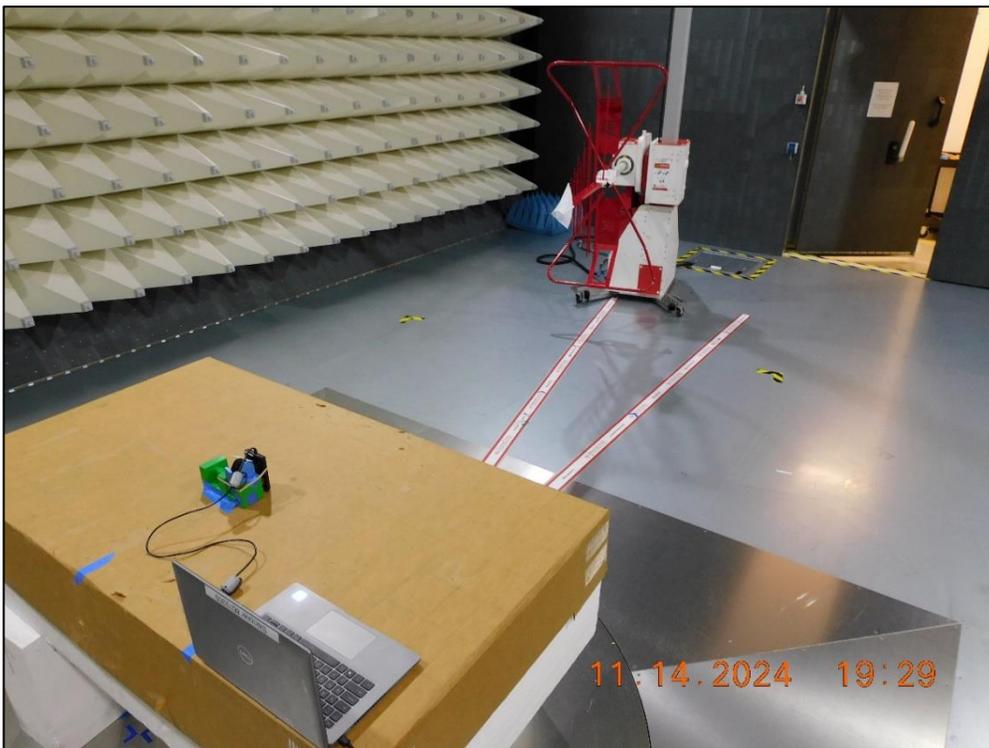


Figure RE20.3: EUT test setup, second view



Figure RE25.2: EUT test setup, first view (X orientation)



Figure RE25.3: EUT test setup, second view (X orientation)

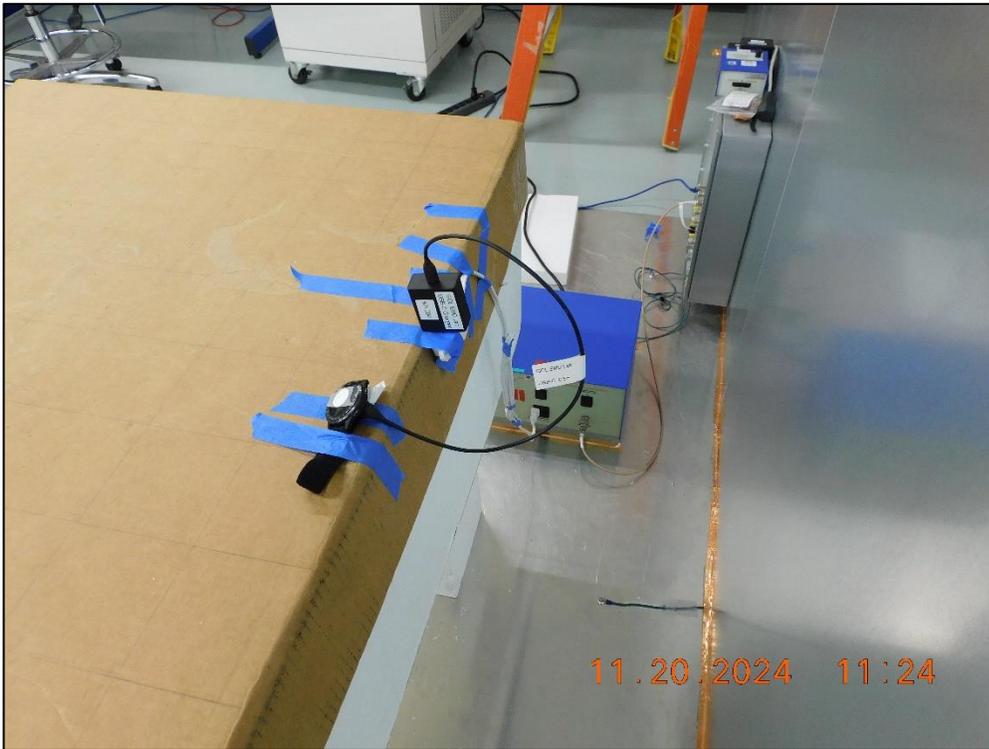


Figure CE04.2: Test setup, first view

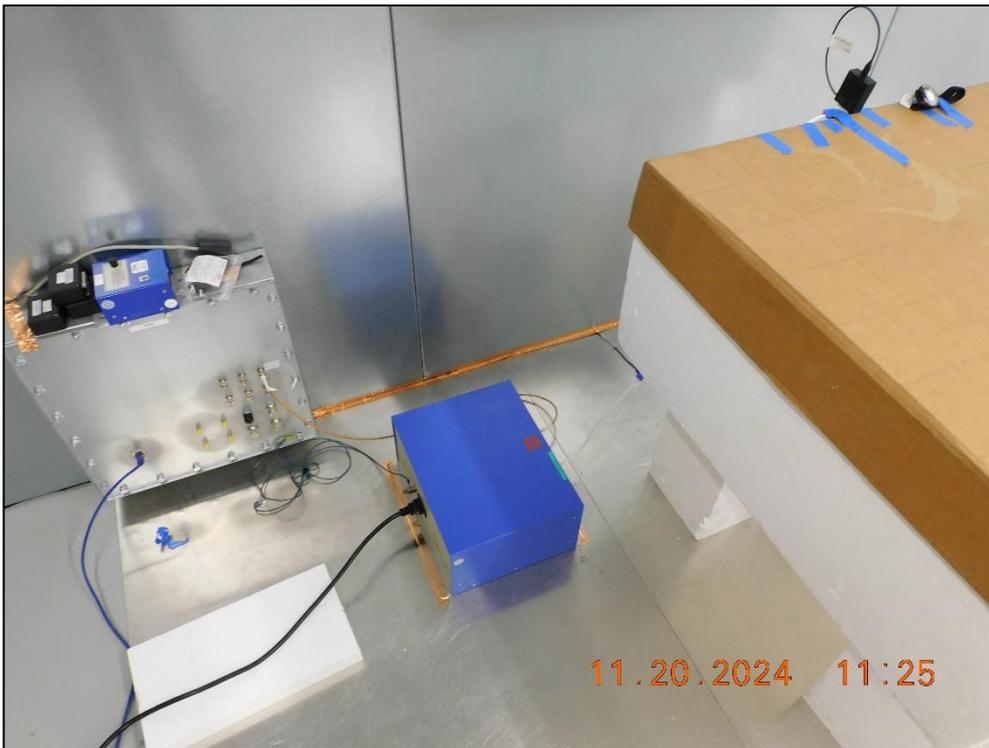


Figure CE04.3: Test setup, second view

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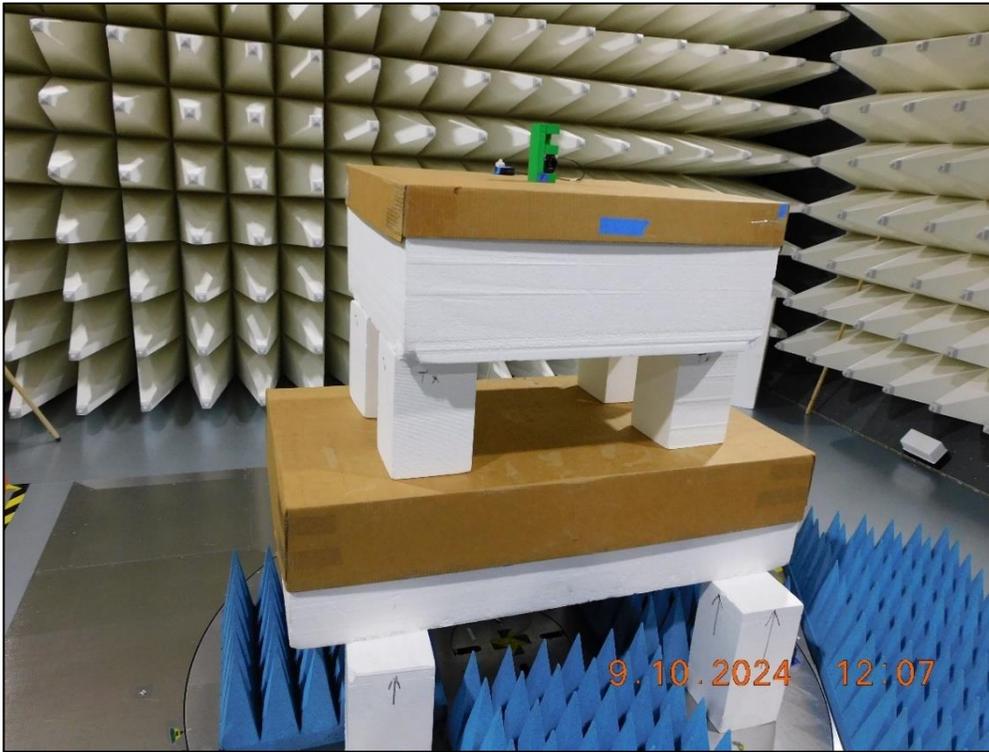


Figure RE01.16: EUT test setup, primary view

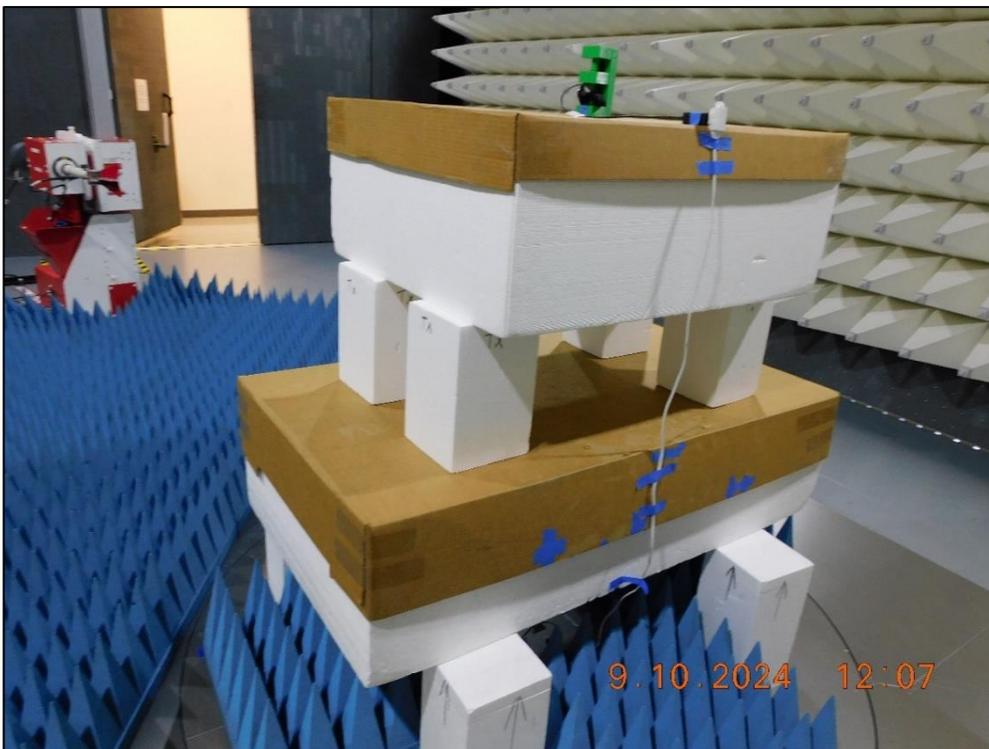


Figure RE01.17: EUT test setup, reverse view

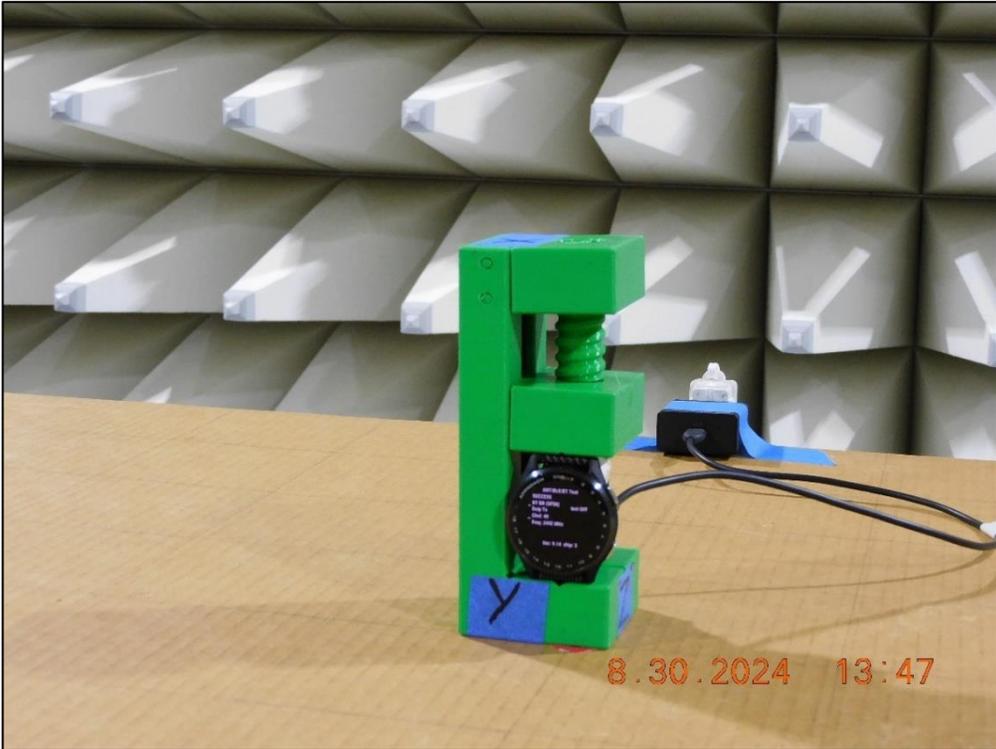


Figure RE01.18: EUT test setup, primary view ( X orientation)

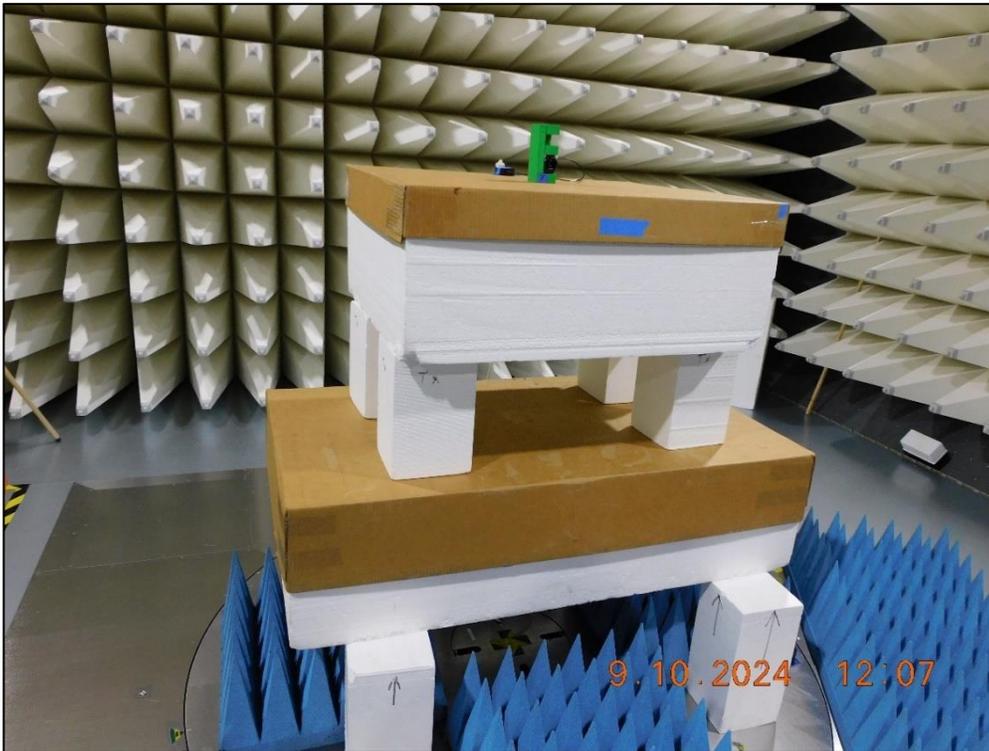


Figure RE02.3: EUT test setup, primary view

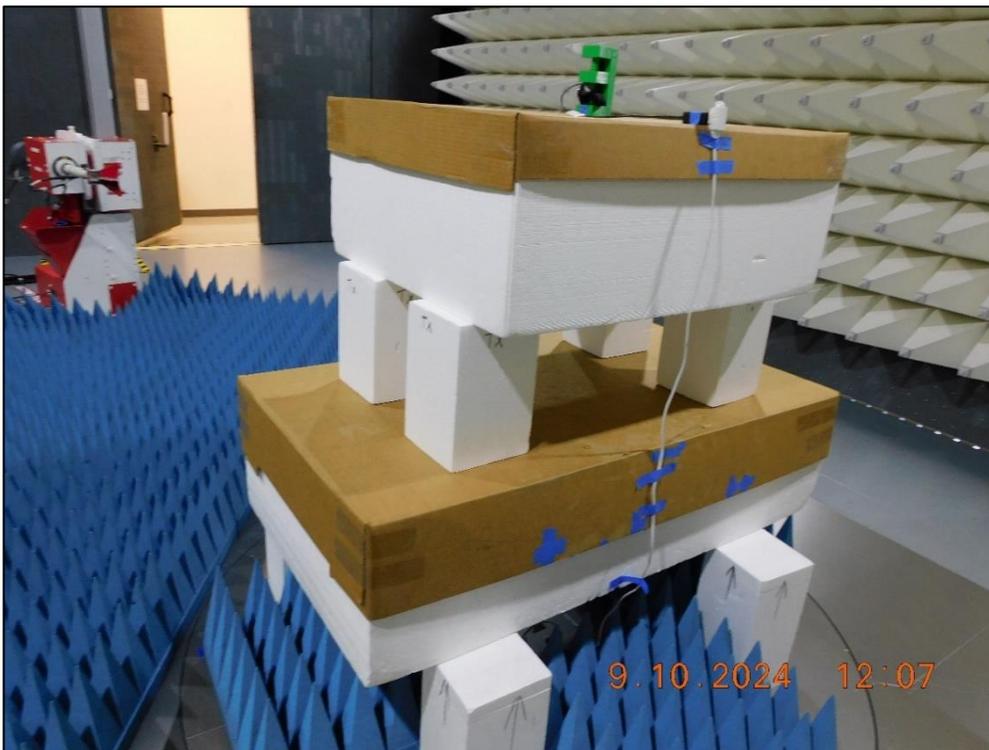


Figure RE02.4: EUT test setup, reverse view

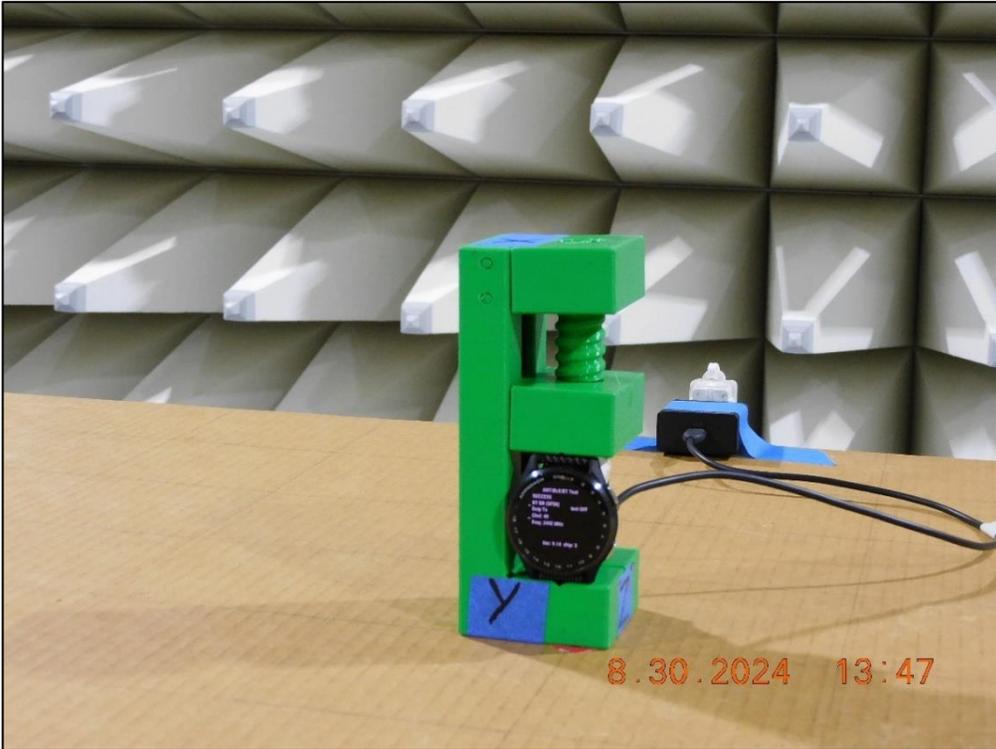


Figure RE02.5: EUT test setup, primary view ( X orientation)

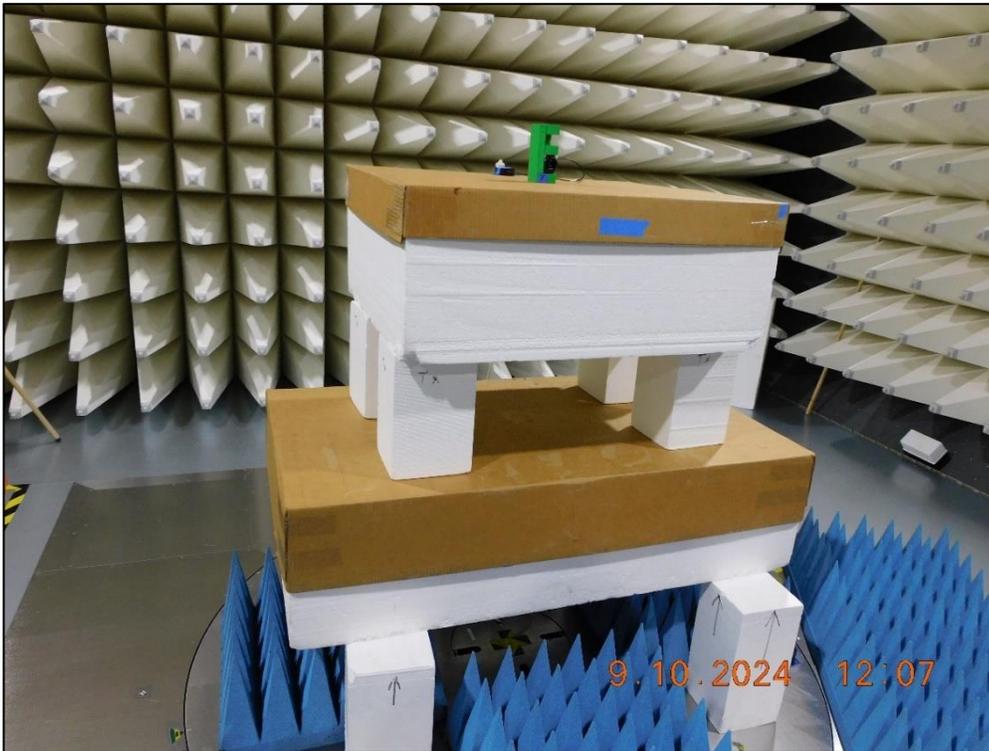


Figure RE03.5: EUT test setup, primary view

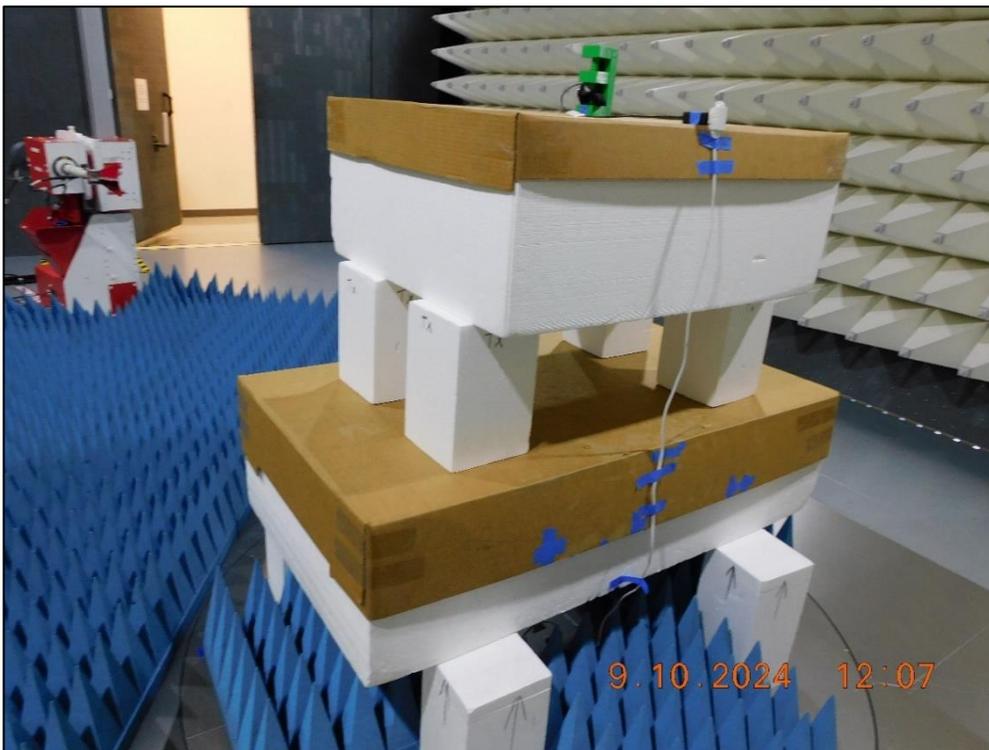


Figure RE03.6: EUT test setup, reverse view

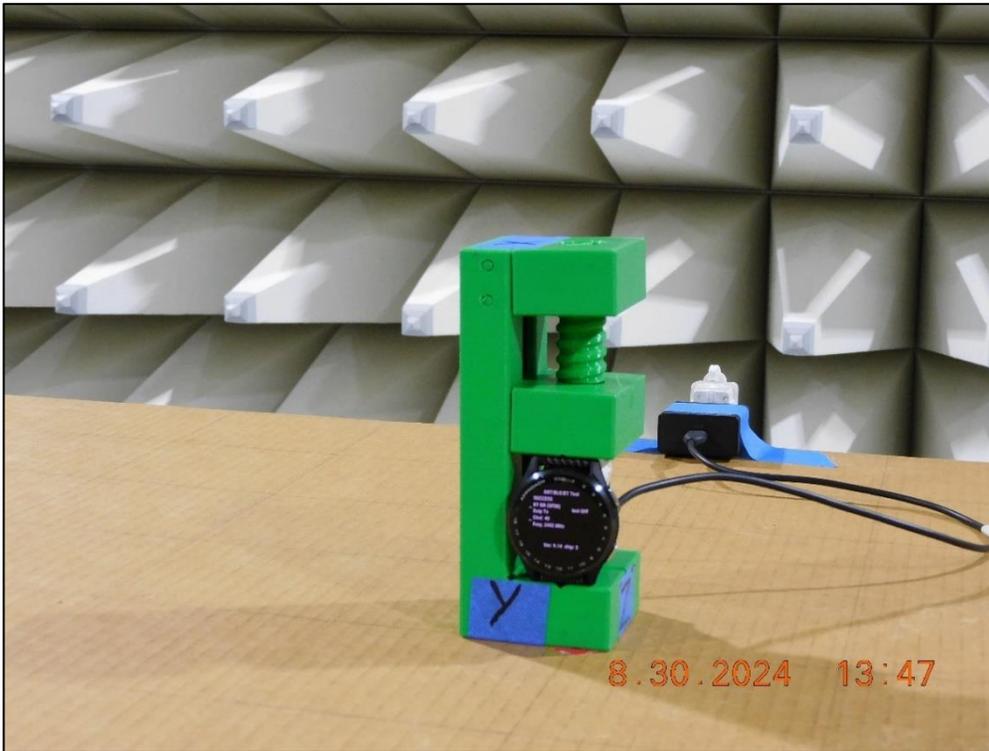


Figure RE03.7: EUT test setup, primary view ( X orientation)

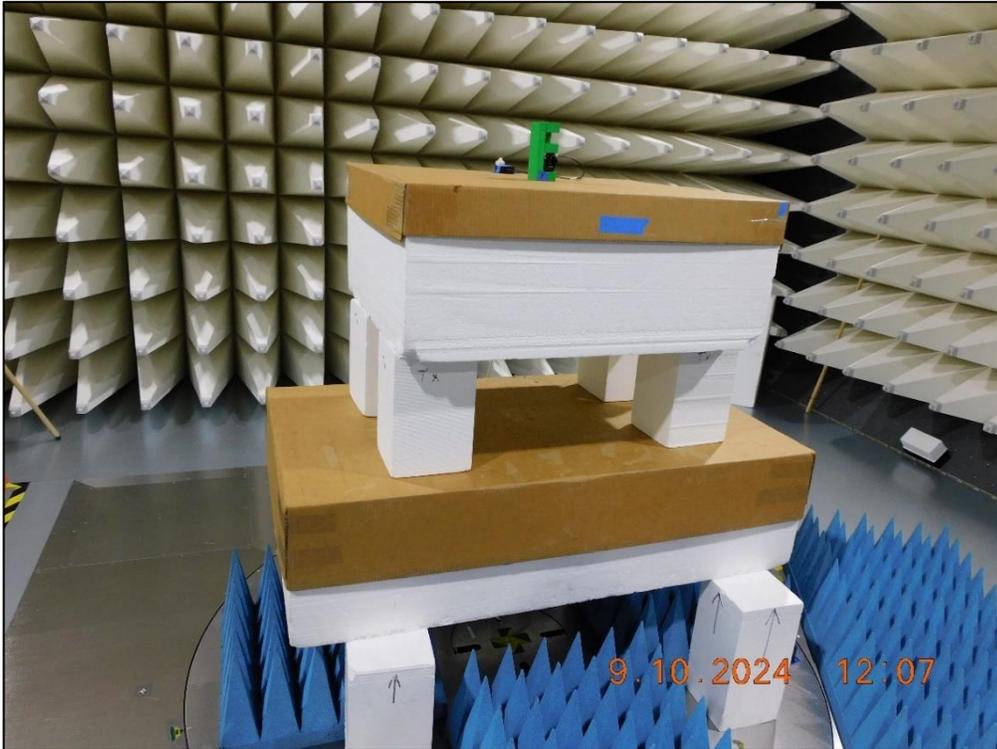


Figure RE04.3: EUT test setup, primary view

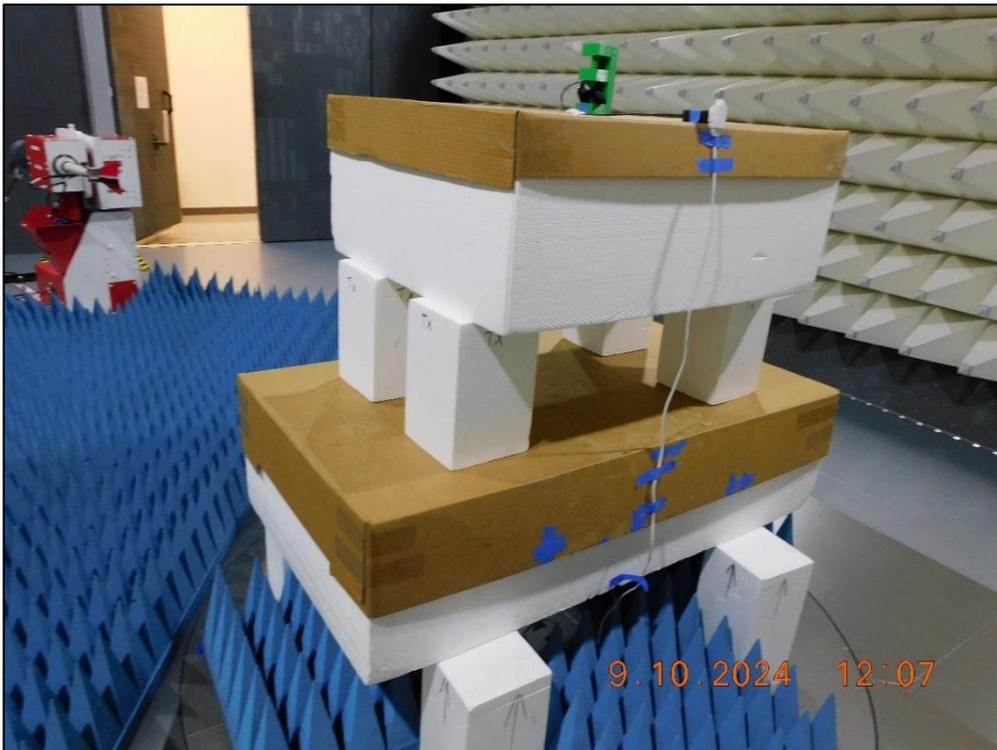


Figure RE04.4: EUT test setup, reverse view

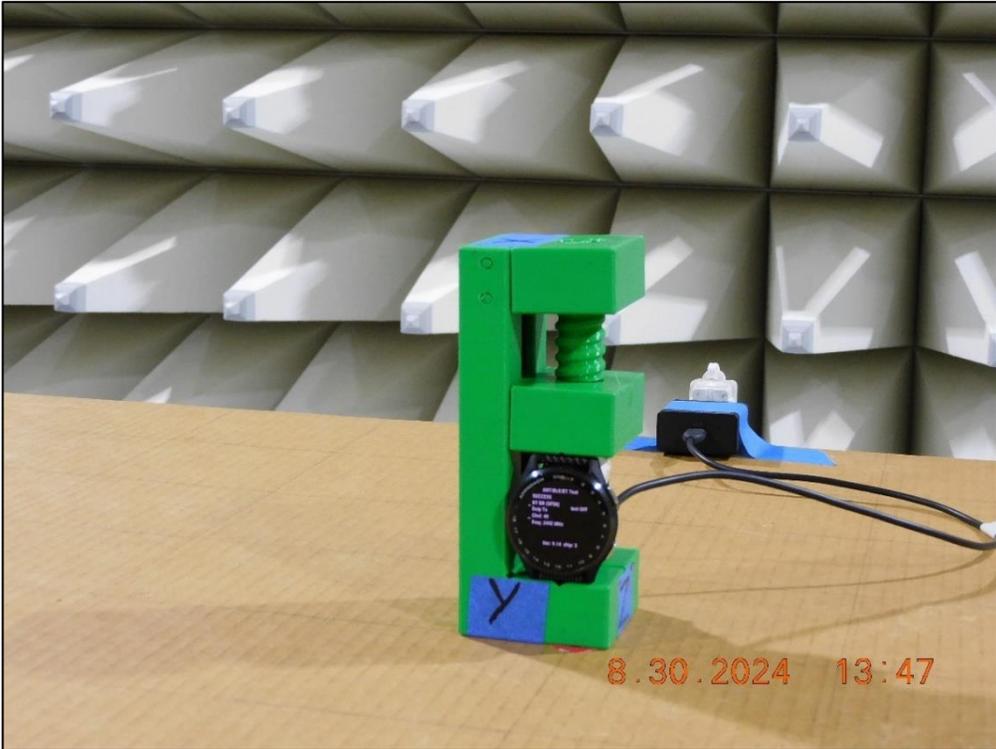


Figure RE04.5: EUT test setup, primary view ( X orientation)

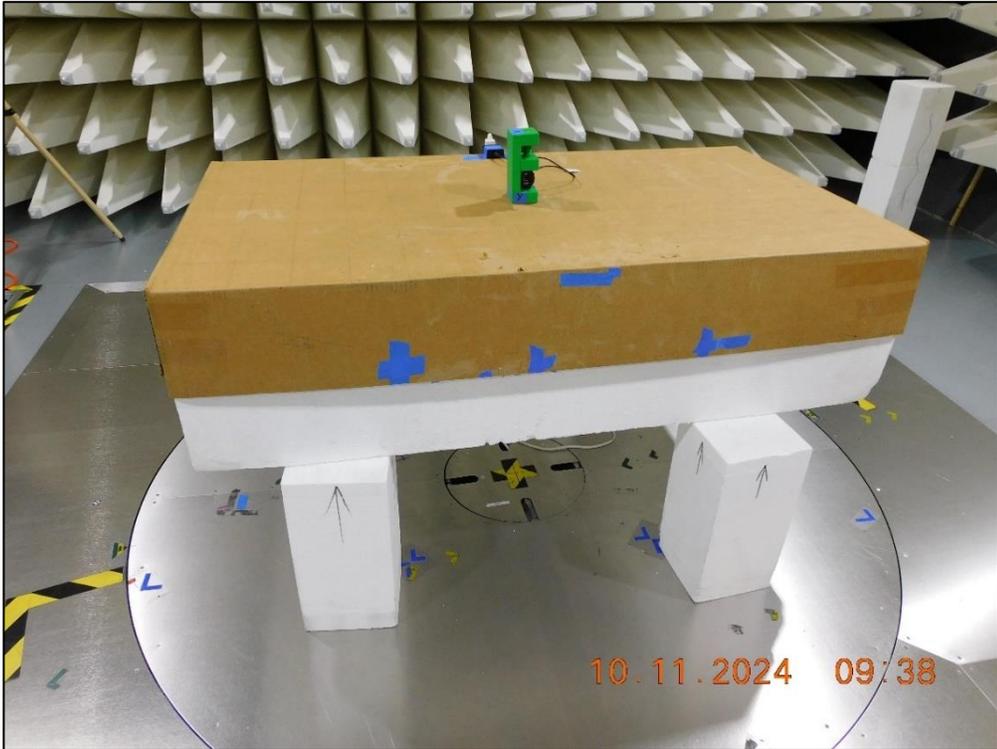


Figure RE30.2: EUT test setup, first view

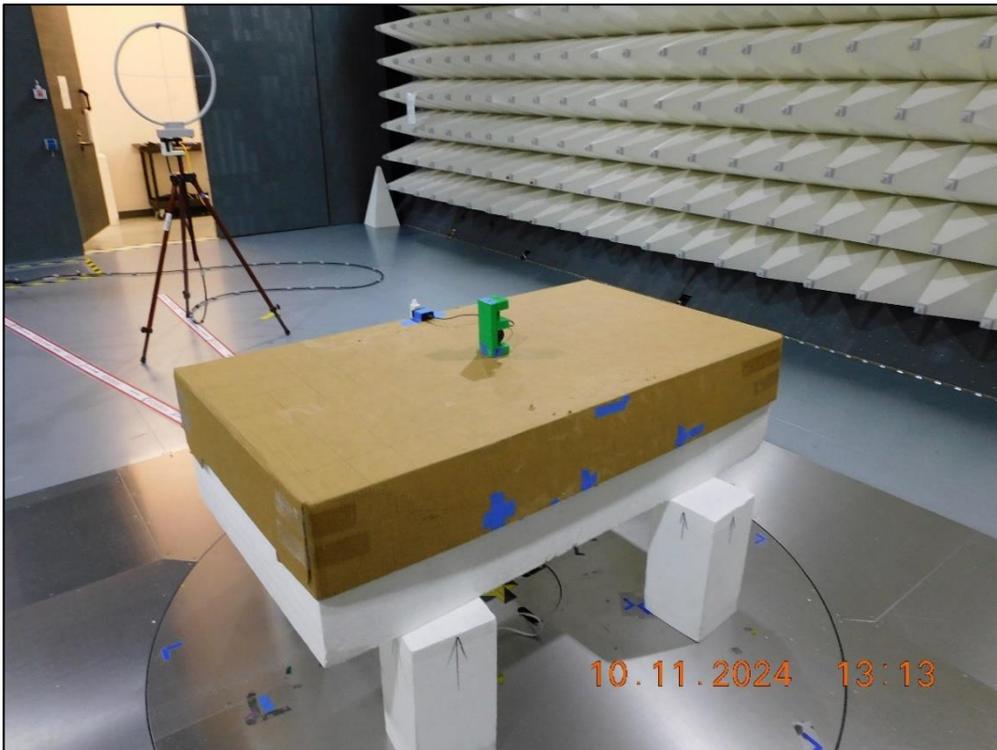


Figure RE30.3: EUT test setup, second view (X antenna Orientation)

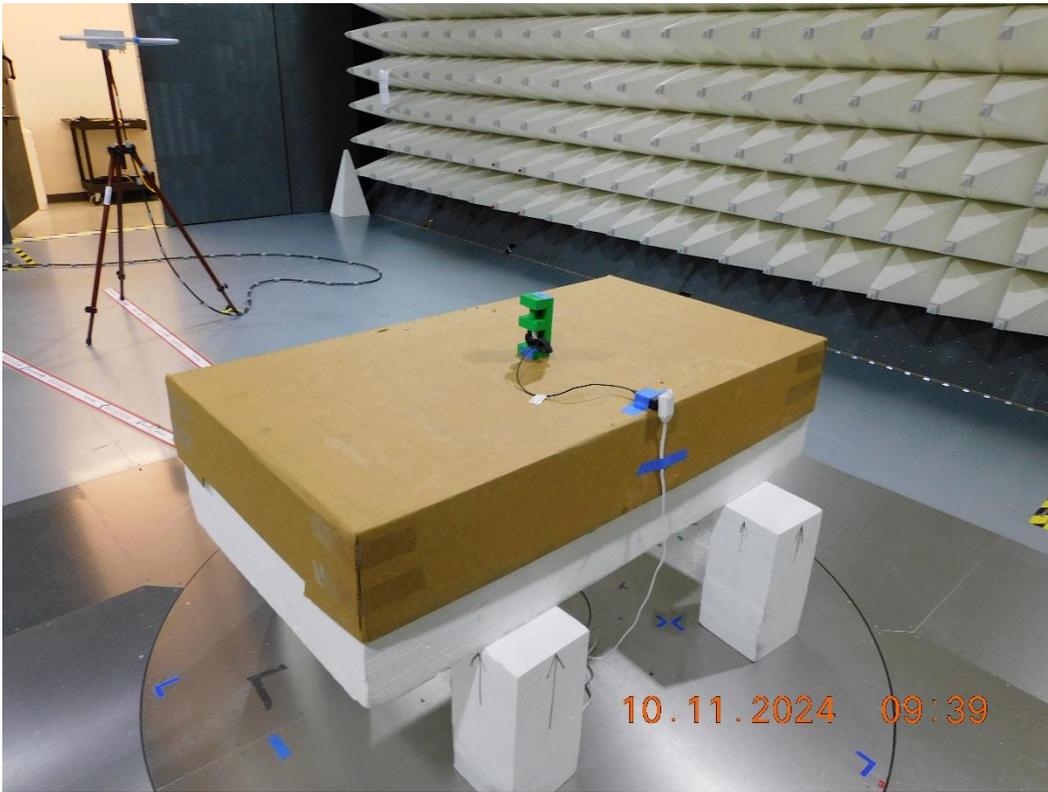


Figure RE30.4: EUT test setup, second view (Z antenna Orientation)



Figure RE31.2: EUT test setup, first view

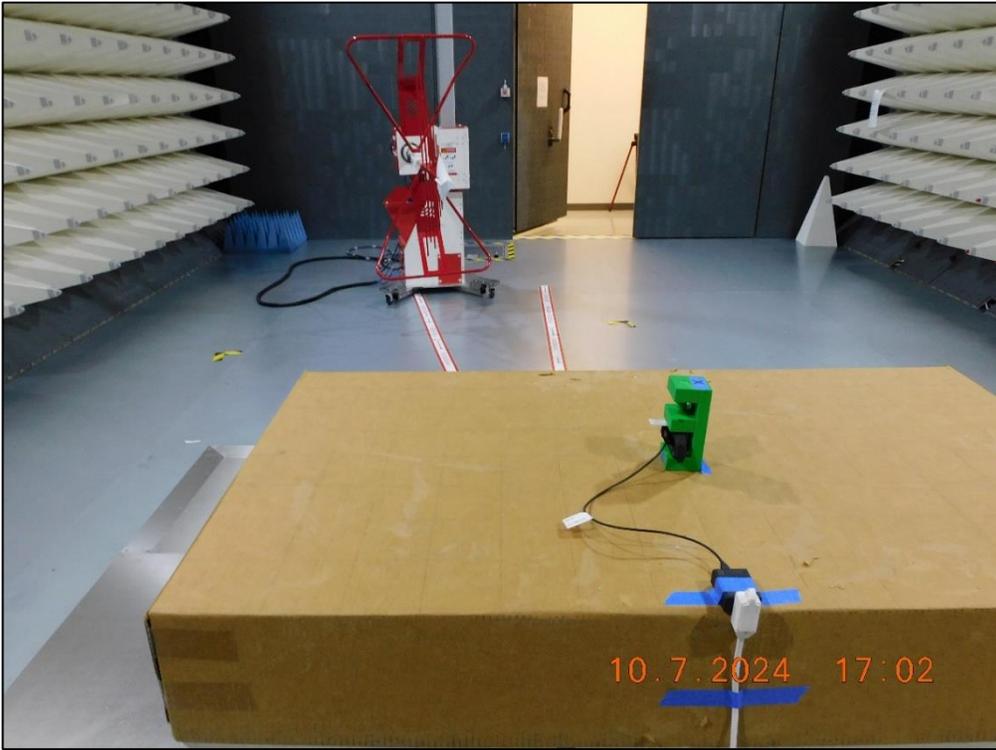


Figure RE31.3: EUT test setup, second view

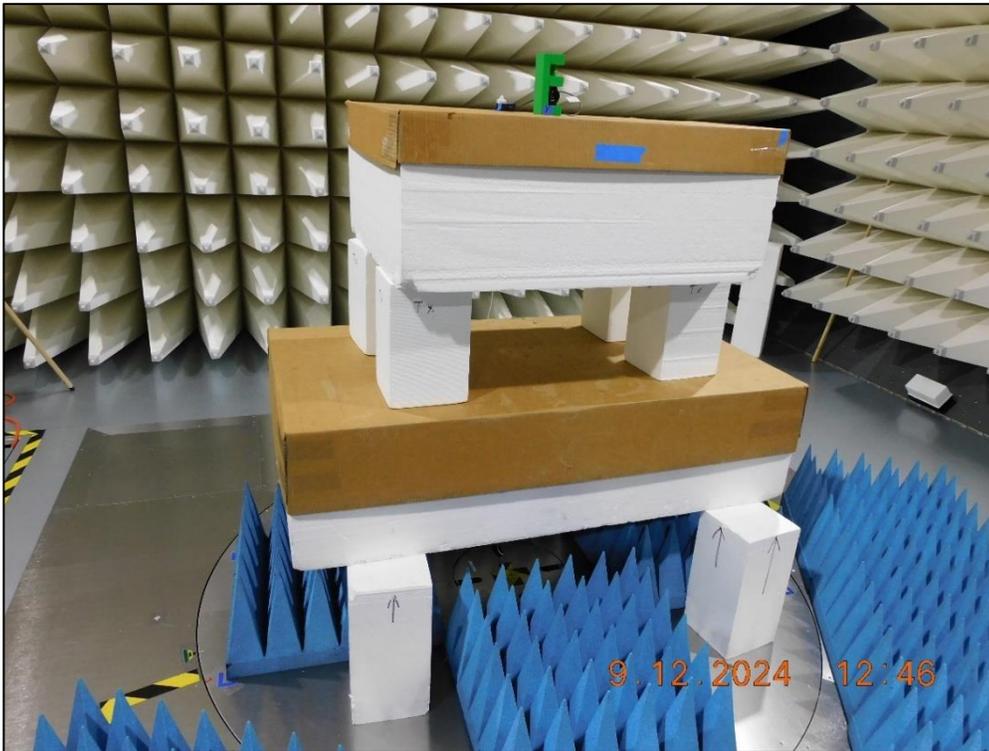


Figure RE32.5: EUT test setup, first view (EUT X Orientation)

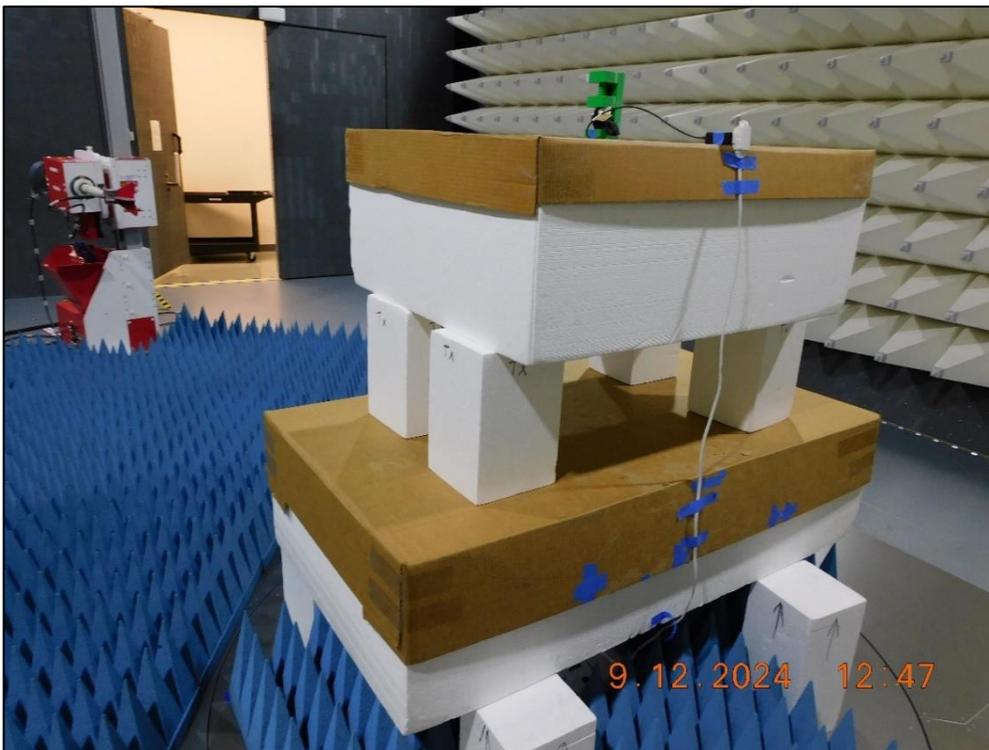


Figure RE32.6: EUT test setup, second view (EUT X Orientation)

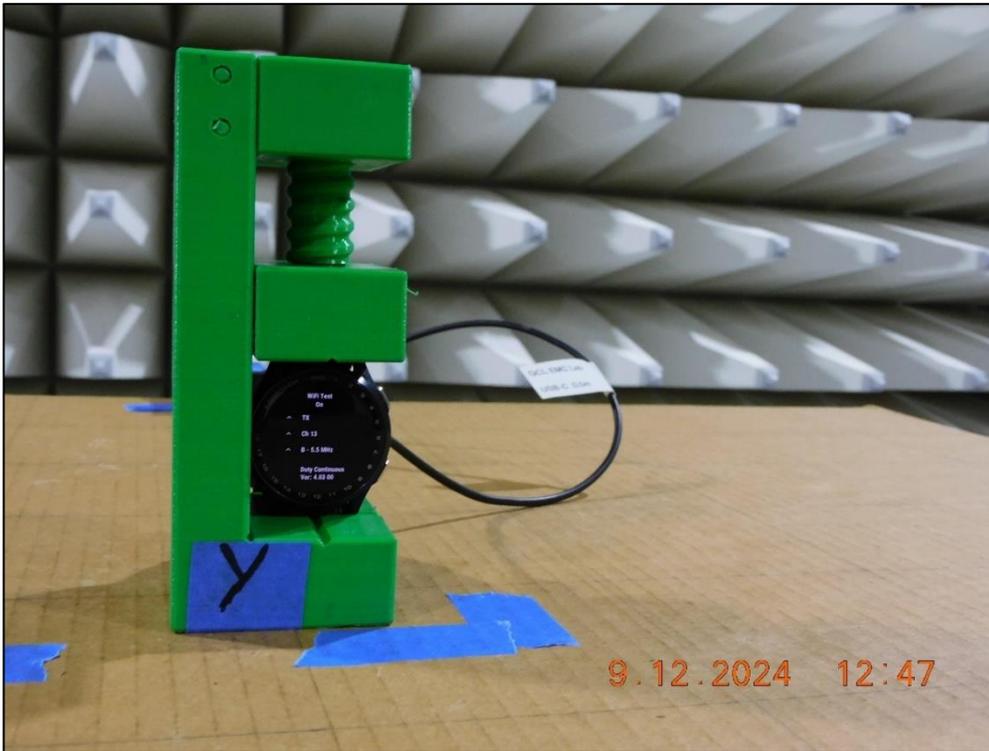


Figure RE32.7: EUT test setup, first view (EUT X Orientation)

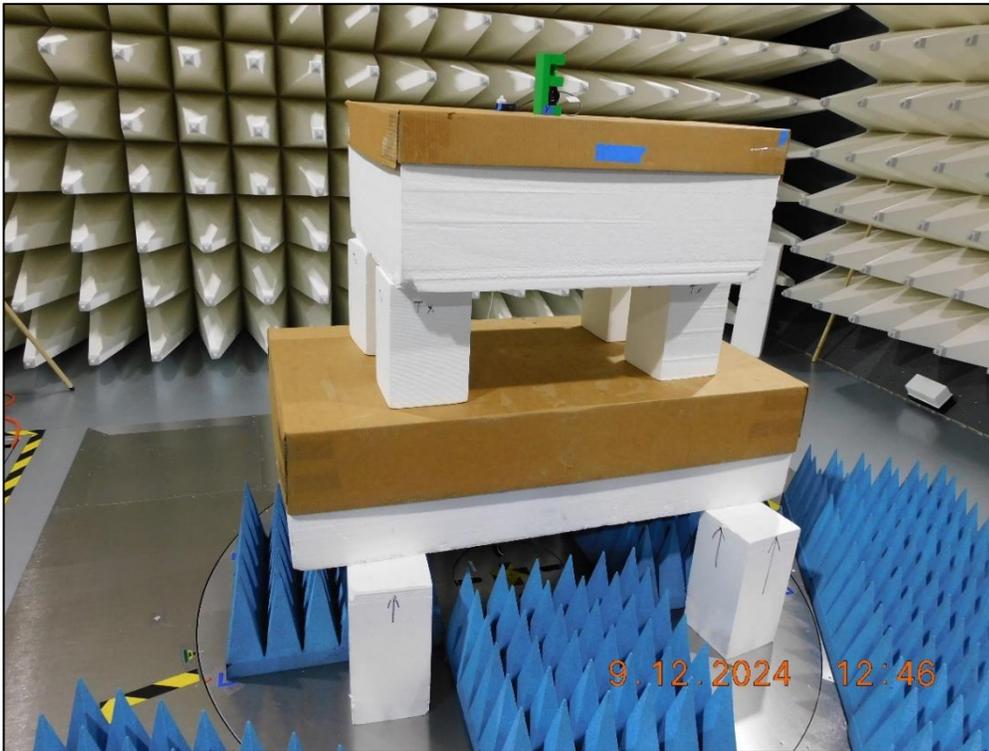


Figure RE33.5: EUT test setup, first view (EUT X Orientation)

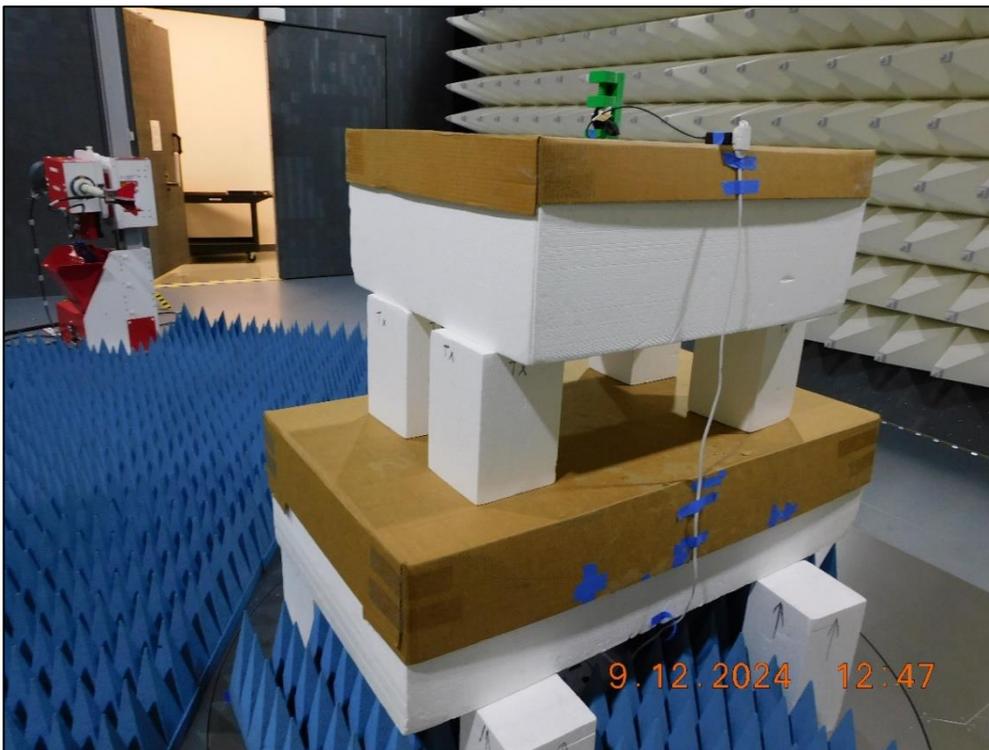


Figure RE33.6: EUT test setup, second view (EUT X Orientation)



Figure RE33.7: EUT test setup, first view (EUT X Orientation)

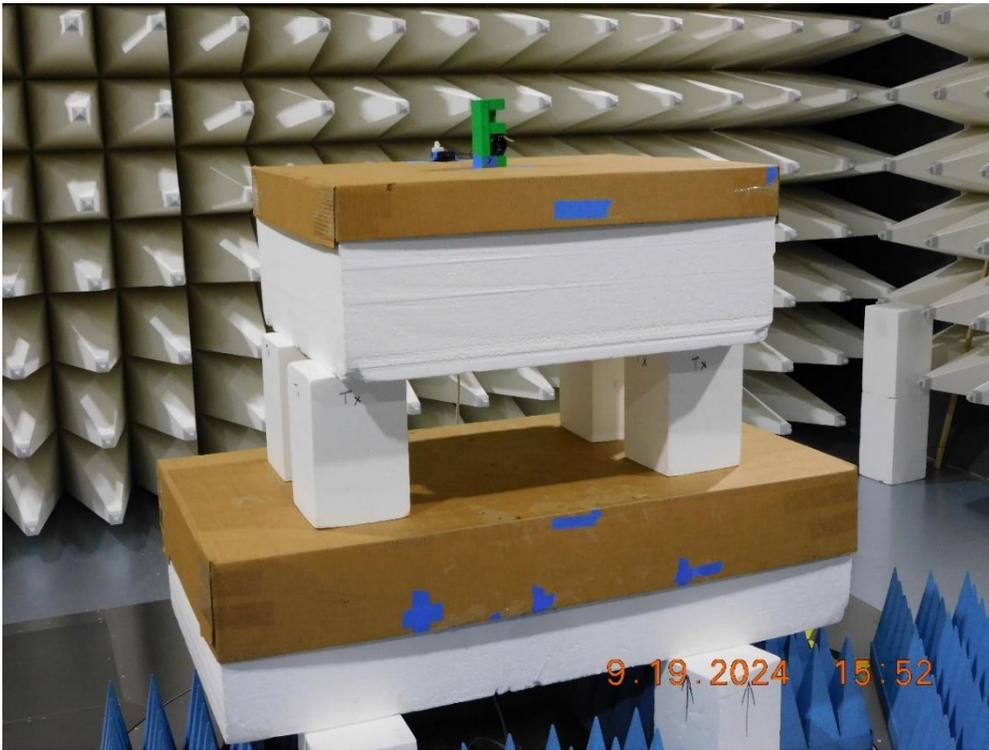


Figure RE34.2: EUT test setup, first view (X orientation)

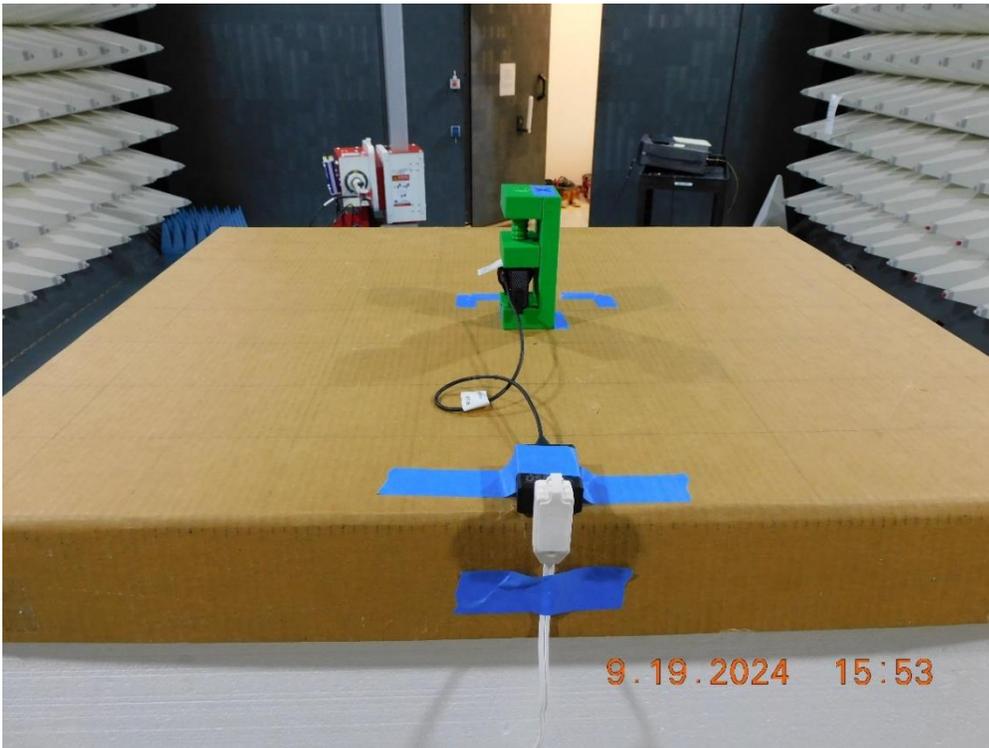


Figure RE34.3: EUT test setup, second view (X orientation)

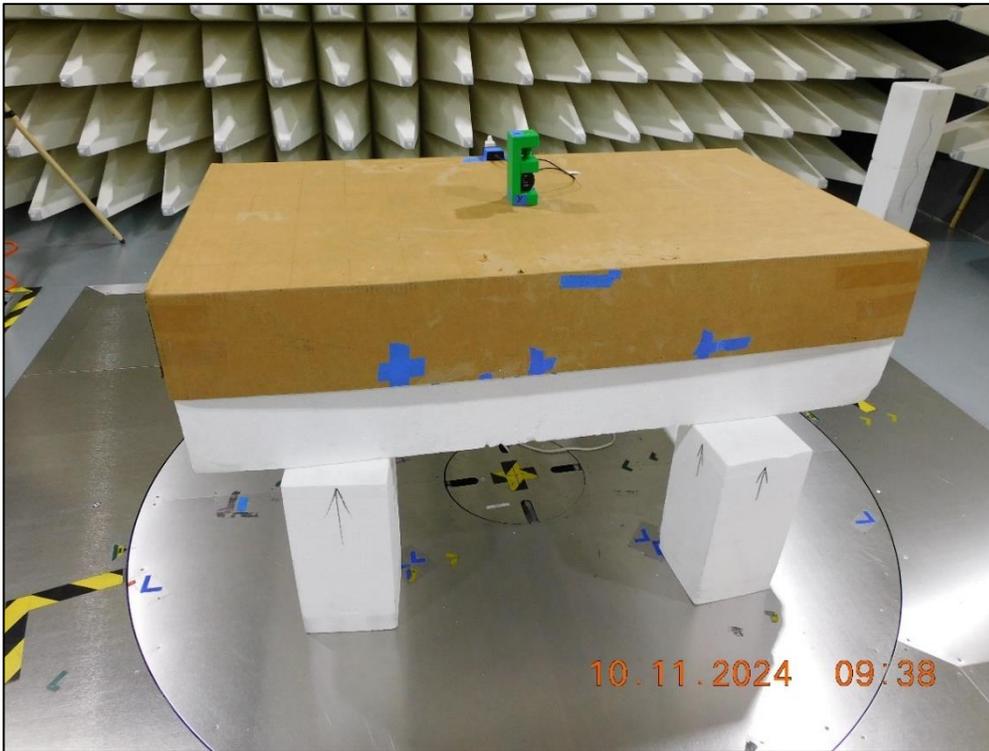


Figure RE37.2: EUT test setup, first view

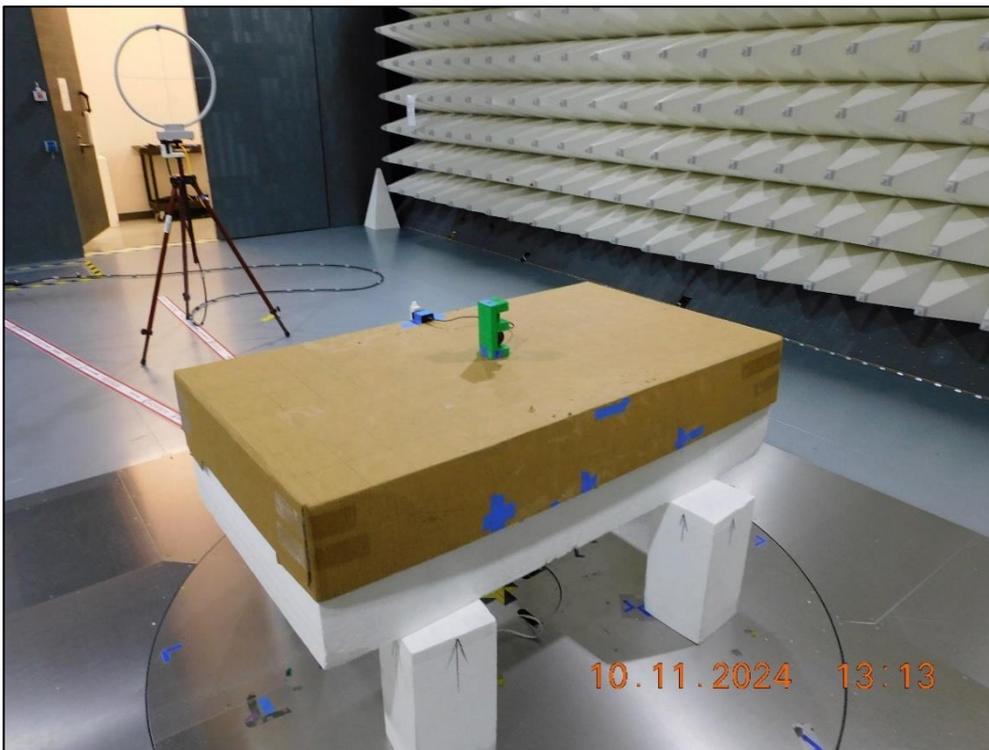


Figure RE37.3: EUT test setup, second view (X antenna Orientation)

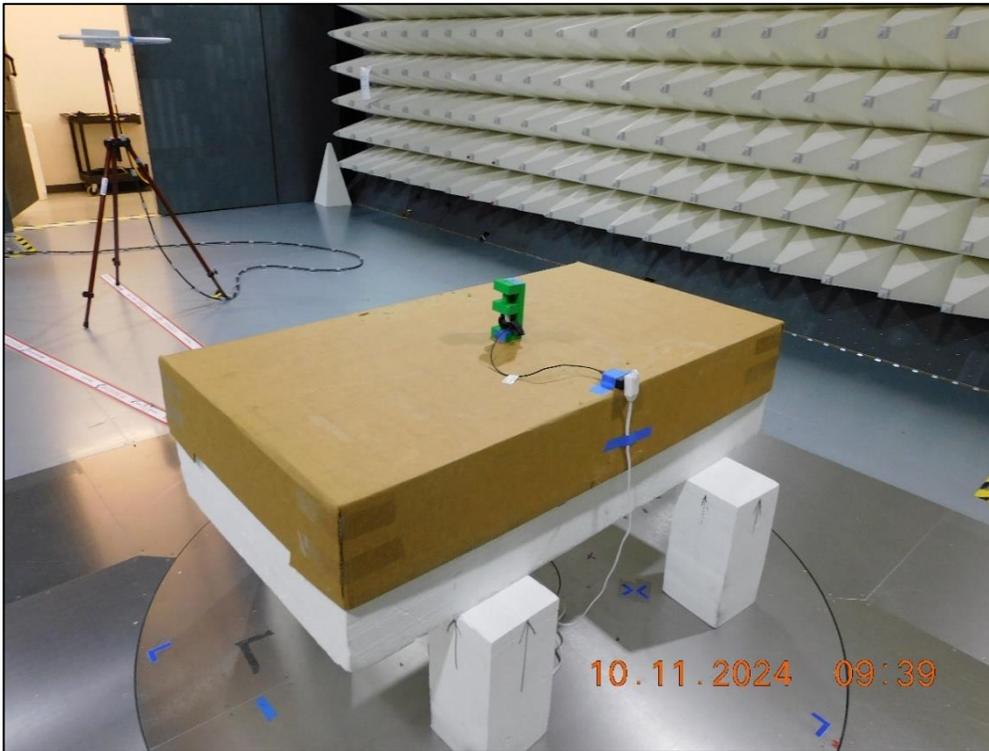


Figure RE37.4: EUT test setup, second view (Z antenna Orientation)

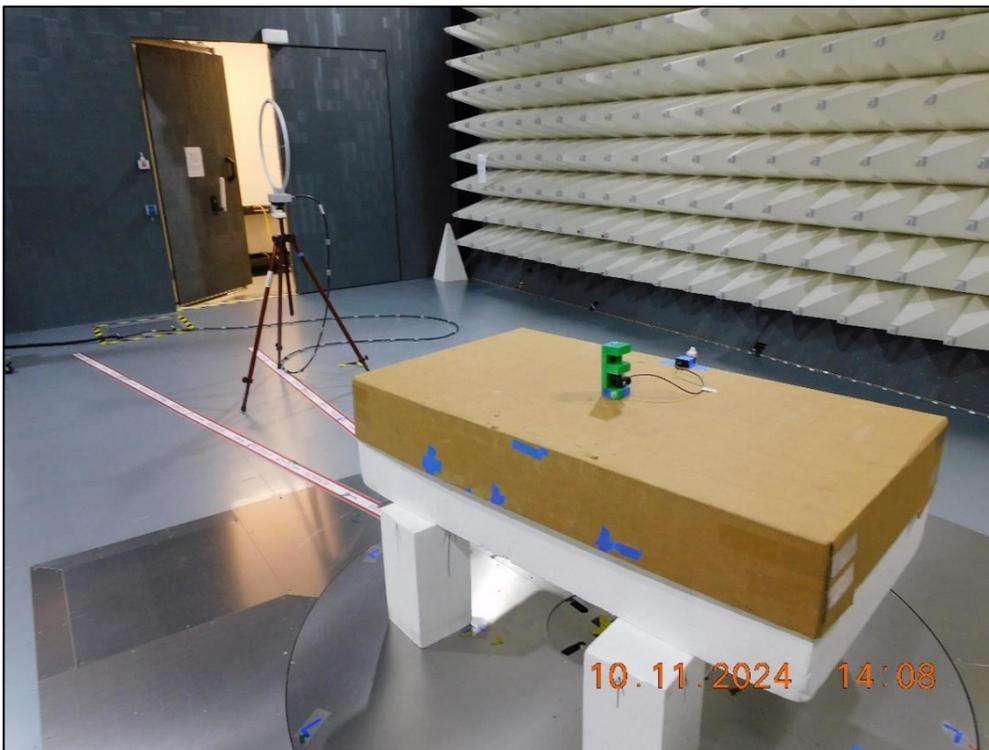


Figure RE37.4: EUT test setup, second view (Y antenna Orientation)

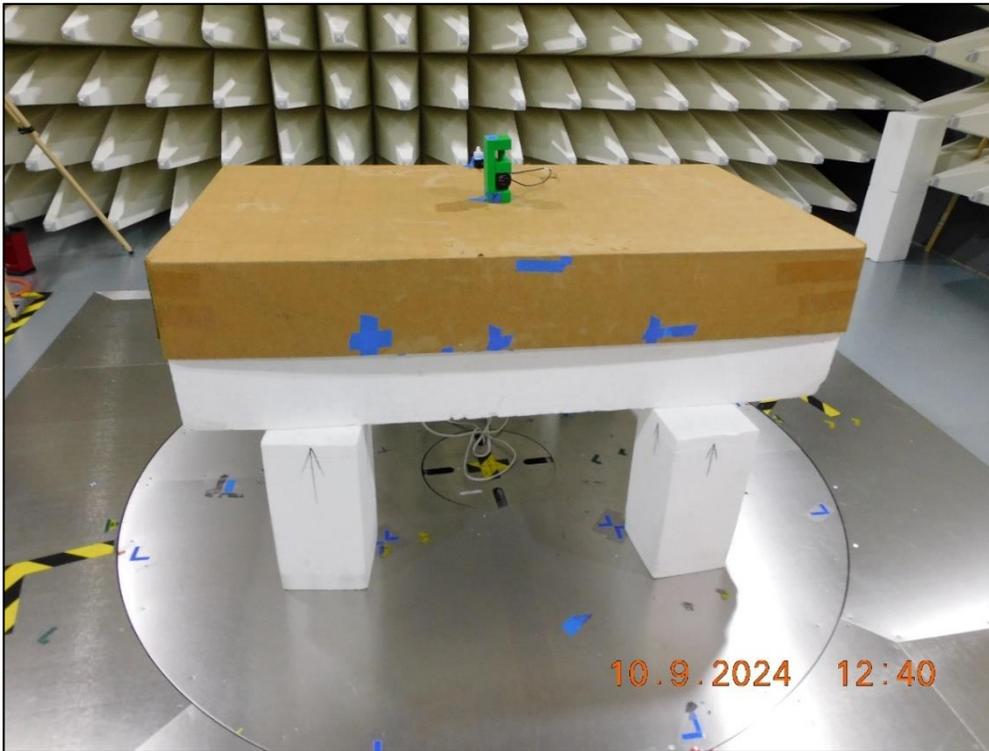


Figure RE38.2: EUT test setup, first view

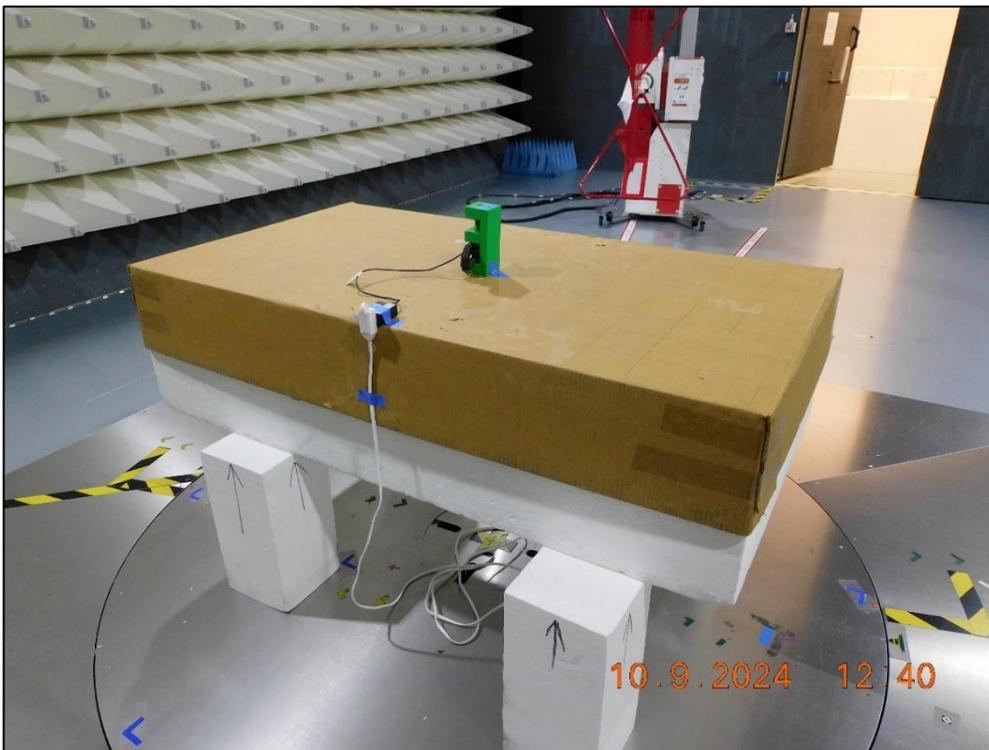


Figure RE38.3: EUT test setup, second view

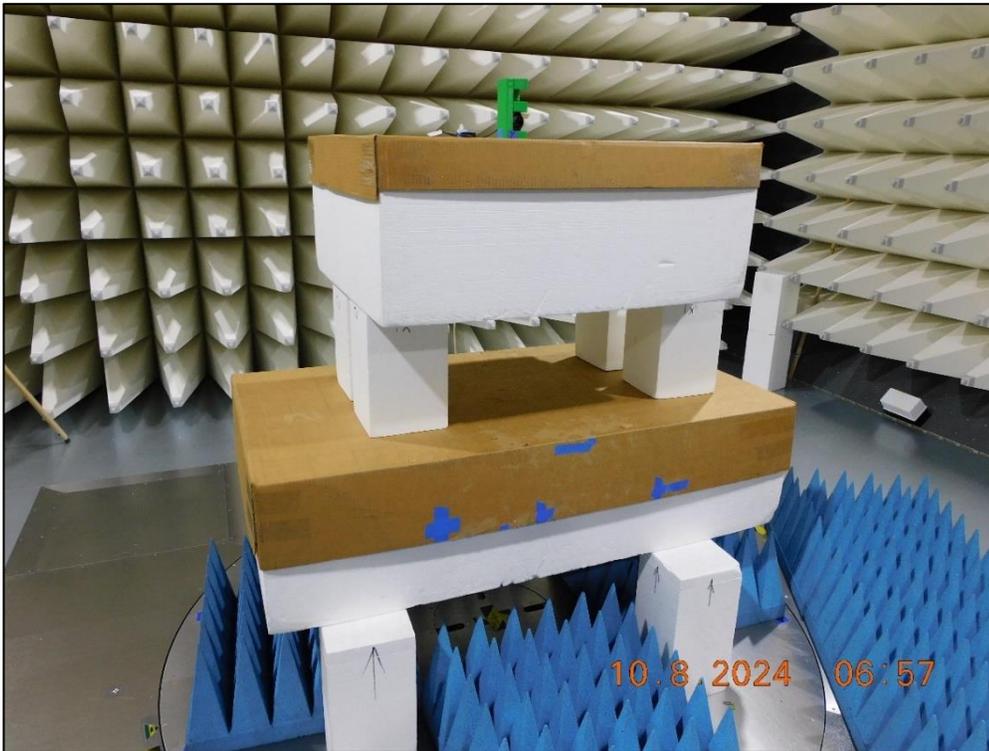


Figure RE39.4: EUT test setup, first view (BT, BR)

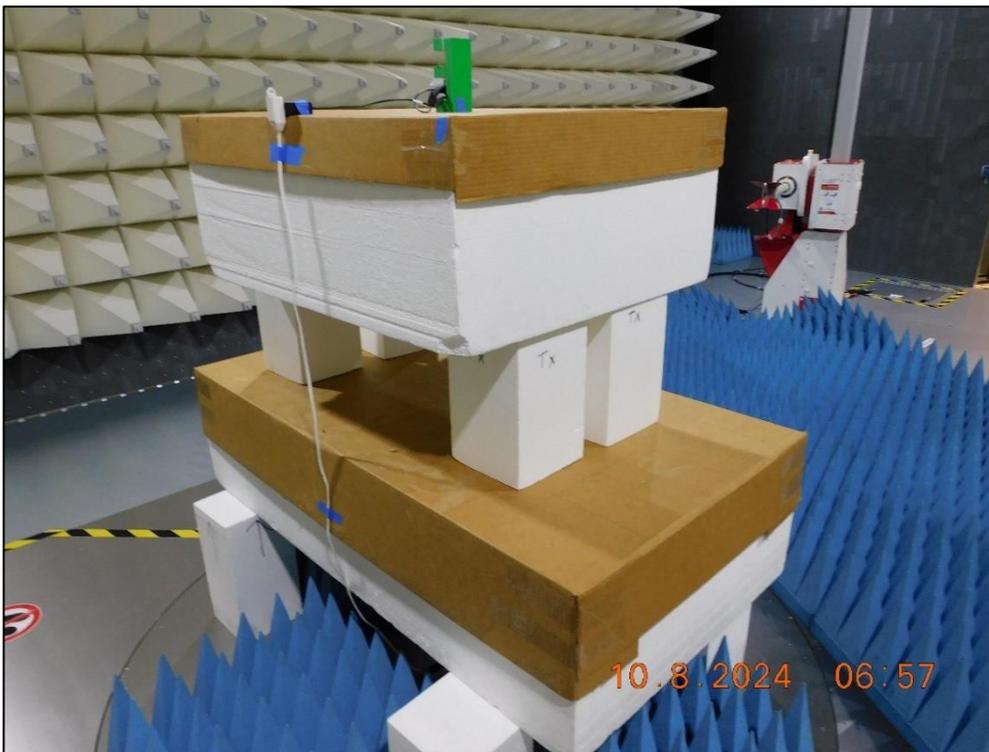


Figure RE39.5: EUT test setup, second view (BT, BR)



Figure RE39.6: EUT test setup, second view (EUT X Orientation)

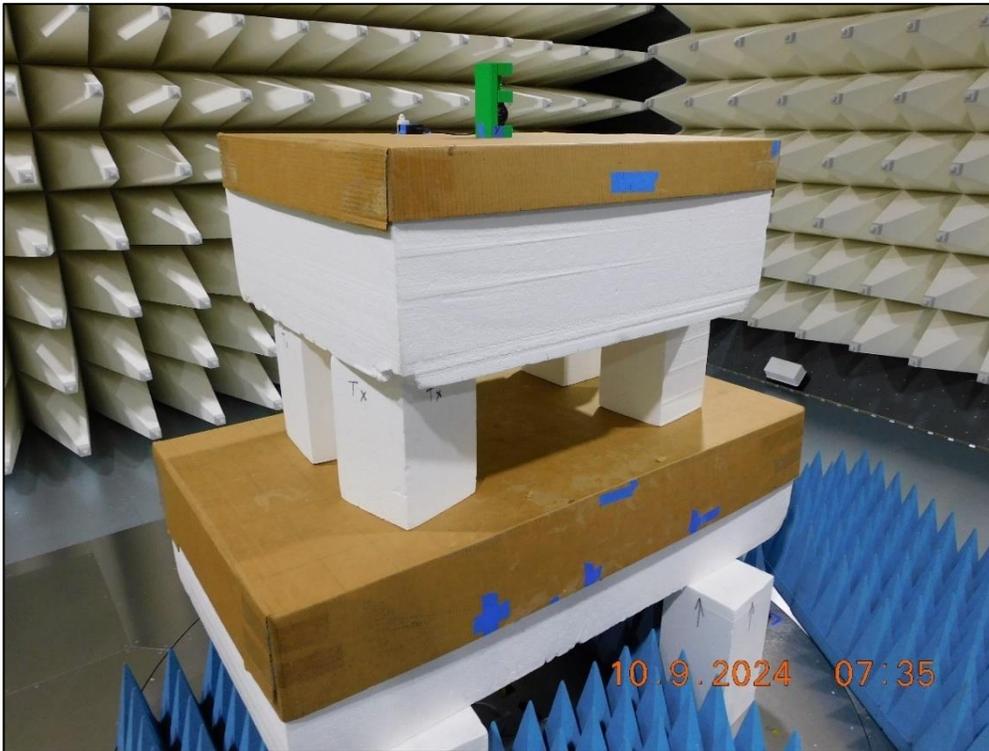


Figure RE40.2: EUT test setup, first view (X orientation)

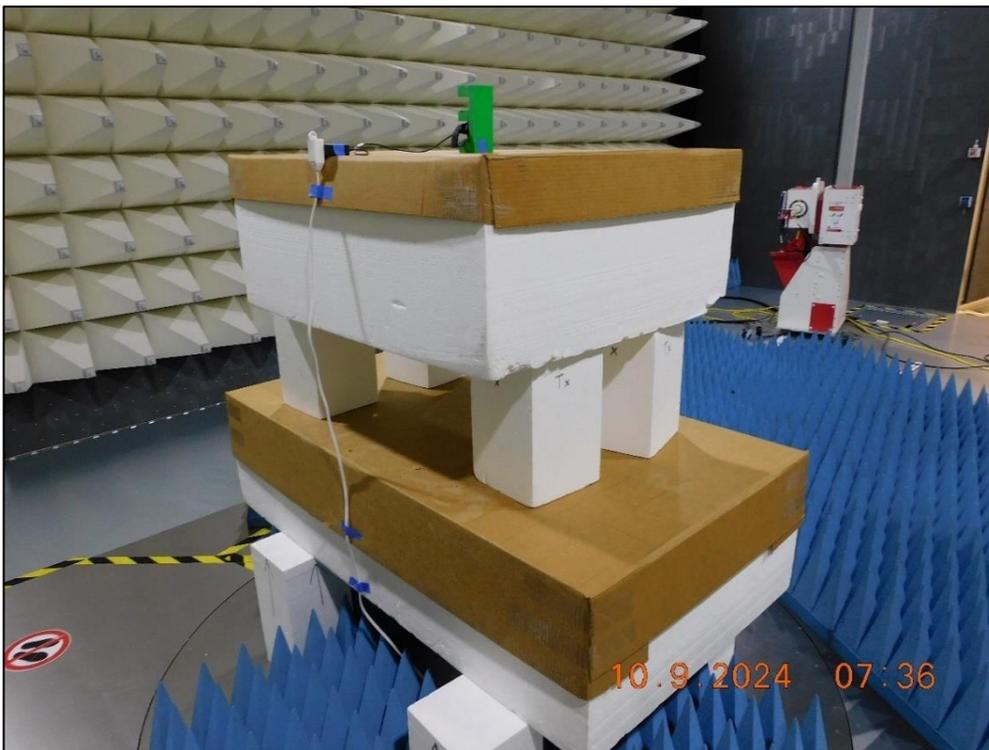


Figure RE40.3: EUT test setup, second view (X orientation)

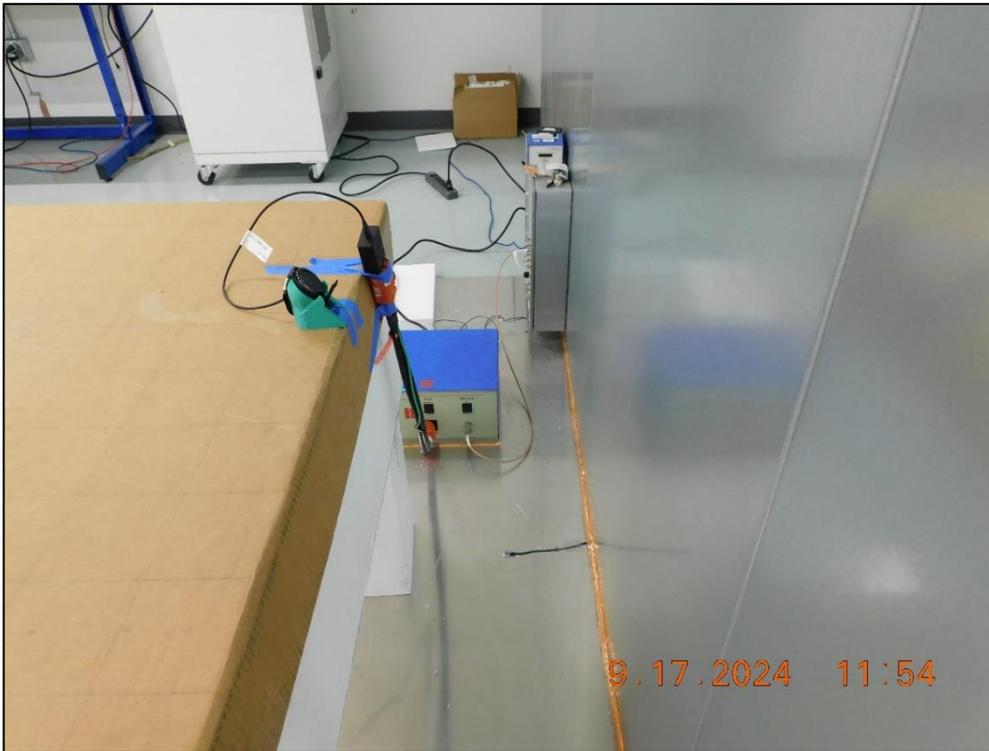


Figure CE01.2: Test setup, first view



Figure CE01.3: Test setup, second view

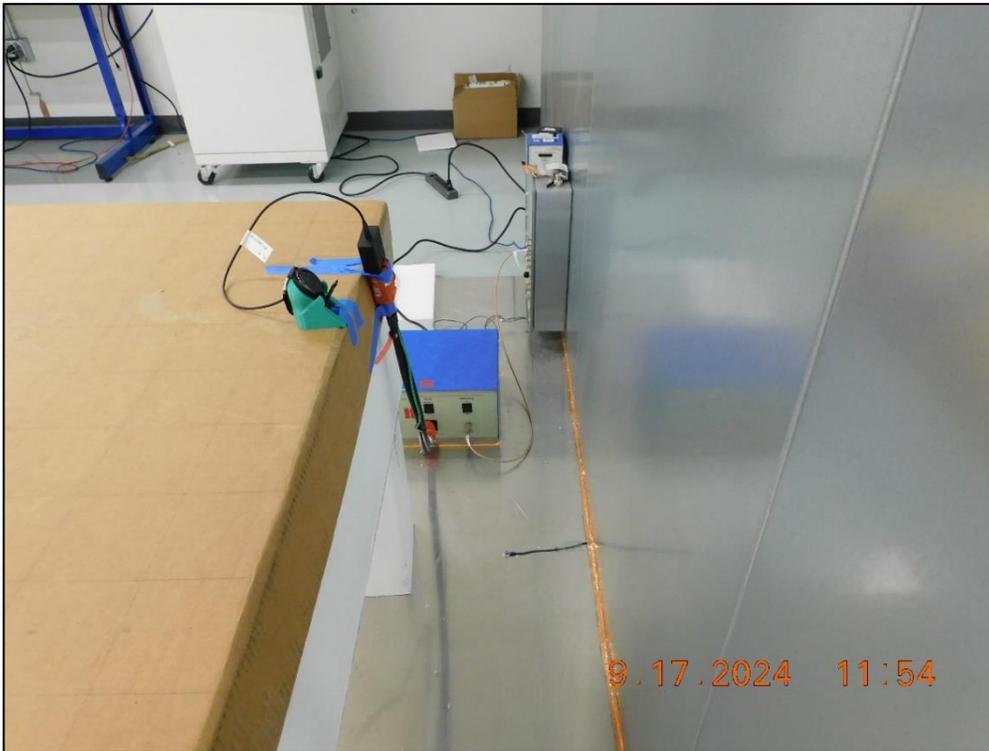


Figure CE03.2: Test setup, first view



Figure CE03.3: Test setup, second view

## 5. Other Sensitive Material, if any

None

## 6 Test Standards Applied

Each of the GCL Test Reports cited in section 1 of this report lists the standards applied. Section 6 of those reports indicates whether each test or measurement standards applied is within the scope of the lab's accreditation. To avoid editorial errors or confusion, those listings will not be repeated here.

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.

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## 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.**