

|                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                             |                                                                                     |                                                                                    |                                                           |                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------|
| <b>Prüfbericht-Nr.:</b><br>Test report no.:                                                                                                                                                                                                                                                                                                                                                               | <b>60431071-003 Appendix 1</b>                                              | <b>Auftrags-Nr.:</b><br>Order no.:                                                  | 23870469 030                                                                       | Seite 1 von 12<br>Page 1 of 12                            |                                                                        |
| <b>Kunden-Referenz-Nr.:</b><br>Client reference no.:                                                                                                                                                                                                                                                                                                                                                      | 1288983                                                                     | <b>Auftragsdatum:</b><br>Order date:                                                | 2020.11.29                                                                         |                                                           |                                                                        |
| <b>Auftraggeber:</b><br>Client:                                                                                                                                                                                                                                                                                                                                                                           | IKEA of Sweden AB                                                           |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Prüfgegenstand:</b><br>Test item:                                                                                                                                                                                                                                                                                                                                                                      | BHub for smart products                                                     |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Bezeichnung / Typ-Nr.:</b><br>Identification / Type no.:                                                                                                                                                                                                                                                                                                                                               | DIRIGERA / E2003 / FCC ID: FHO-E2003                                        |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Auftrags-Inhalt:</b><br>Order content:                                                                                                                                                                                                                                                                                                                                                                 | Accredited testing according to FCC Part 15C                                |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Prüfgrundlage:</b><br>Test specification:                                                                                                                                                                                                                                                                                                                                                              | FCC 47 CFR Part 15.247 with parts 15.207 & 15.209<br>ANSI C63.10: 2013      |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Wareneingangsdatum:</b><br>Date of sample receipt:                                                                                                                                                                                                                                                                                                                                                     | 2020.11.30                                                                  |  |                                                                                    |                                                           |                                                                        |
| <b>Prüfmuster-Nr.:</b><br>Test sample no.:                                                                                                                                                                                                                                                                                                                                                                | See section 2.3                                                             |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Prüfzeitraum:</b><br>Testing period:                                                                                                                                                                                                                                                                                                                                                                   | 2020.12.02 - 2021.01.20                                                     |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Ort der Prüfung:</b><br>Place of testing:                                                                                                                                                                                                                                                                                                                                                              | Lund, Sweden                                                                |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Prüflaboratorium:</b><br>Testing laboratory:                                                                                                                                                                                                                                                                                                                                                           | TÜV Rheinland Sweden                                                        |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Prüfergebnis*:</b><br>Test result*:                                                                                                                                                                                                                                                                                                                                                                    | Pass                                                                        |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>überprüft von:</b><br>reviewed by:                                                                                                                                                                                                                                                                                                                                                                     | <b>genehmigt von:</b><br>authorized by:                                     |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Datum: 2021.12.06</b><br>Date:                                                                                                                                                                                                                                                                                                                                                                         | <b>Datum: 2021.12.06</b><br>Date:                                           |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Stellung / Position:</b>                                                                                                                                                                                                                                                                                                                                                                               | Senior Technical Expert                                                     | <b>Stellung / Position:</b>                                                         | Lab Manager                                                                        |                                                           |                                                                        |
| <b>Sonstiges / Other:</b>                                                                                                                                                                                                                                                                                                                                                                                 | This report contains measurements for the WLAN 2.4GHz radio interface only  |                                                                                     |                                                                                    |                                                           |                                                                        |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br>Condition of the test item at delivery:                                                                                                                                                                                                                                                                                                           | Prüfmuster vollständig und unbeschädigt<br>Test item complete and undamaged |                                                                                     |                                                                                    |                                                           |                                                                        |
| * Legende:                                                                                                                                                                                                                                                                                                                                                                                                | 1 = sehr gut<br>P(ass) = entspricht o.g. Prüfgrundlage(n)                   | 2 = gut<br>F(ail) = entspricht nicht o.g. Prüfgrundlage(n)                          | 3 = befriedigend<br>3 = satisfactory<br>F(ail) = failed a.m. test specification(s) | 4 = ausreichend<br>4 = sufficient<br>N/A = not applicable | 5 = mangelhaft<br>N/T = nicht getestet<br>5 = poor<br>N/T = not tested |
| * Legend:                                                                                                                                                                                                                                                                                                                                                                                                 | 1 = very good<br>P(ass) = passed a.m. test specification(s)                 | 2 = good                                                                            | 3 = satisfactory<br>F(ail) = failed a.m. test specification(s)                     | 4 = sufficient<br>N/A = not applicable                    | 5 = poor<br>N/T = not tested                                           |
| <p><b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b><br/> <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts.</i></p> |                                                                             |                                                                                     |                                                                                    |                                                           |                                                                        |

## Revision History60431071-003 Appendix 160431071-003 Appendix 1

| REVISION                                                       | DATE       | REMARKS                                      | AUTHOR          |
|----------------------------------------------------------------|------------|----------------------------------------------|-----------------|
| 001                                                            | 2021.04.23 | First Release                                | Niall Forrester |
| 002                                                            | 2021.08.29 | Corrected gain figures, updated module name. | Niall Forrester |
| 003                                                            | 2021.12.06 | Replaced gain with module figure             | Niall Forrester |
| Note: Latest revision report will replace all previous reports |            |                                              |                 |
| This report based on FCC Part 15.247 Template version 1.2      |            |                                              |                 |

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## 1. GENERAL INFORMATION

### 1.1 Test Site

|                                     |                         |
|-------------------------------------|-------------------------|
| Test Facility:                      | TÜV Rheinland Sweden AB |
| Address:                            | Mobilvägen 10           |
|                                     | 223 62 Lund             |
|                                     | Sweden                  |
|                                     |                         |
| Swedac Registration Number:         | 10325                   |
| FCC Test Firm Registration Number:  | 517458                  |
| ISED Test Site Registration Number: | 24753                   |

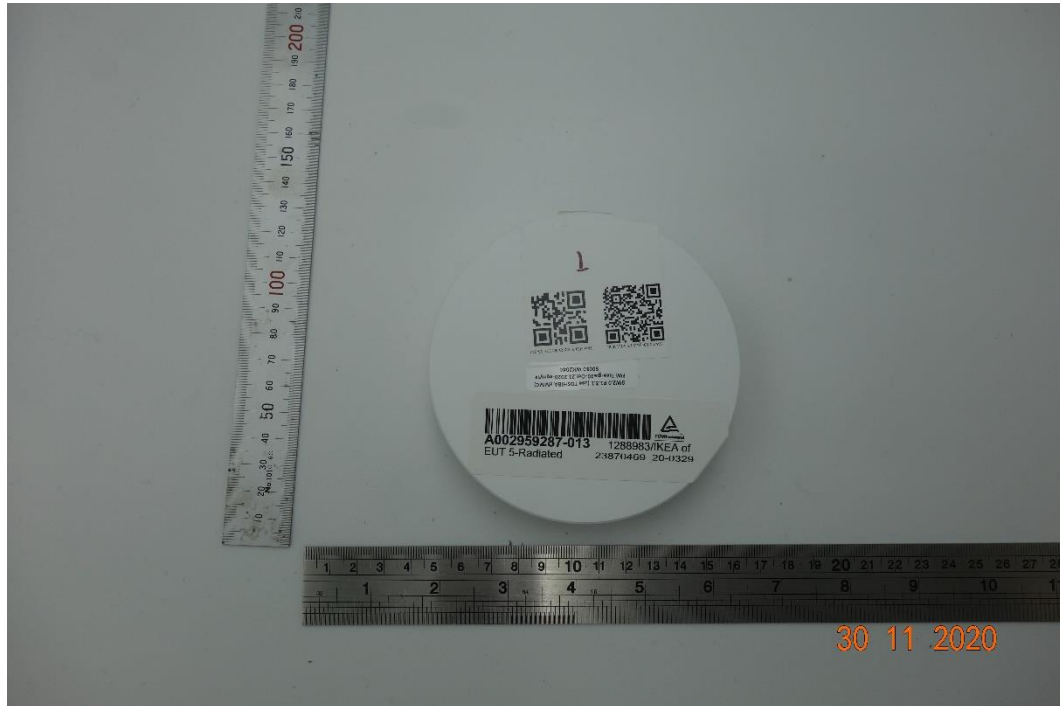
### 1.2 Client Information

|                            |                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------|
| Company Name:              | IKEA                                                                                        |
| Address:                   | Tulpanvägen 8                                                                               |
|                            | 343 34 Älmhult                                                                              |
|                            | Sweden                                                                                      |
|                            |                                                                                             |
| Contact Person:            | Jeton Salihu                                                                                |
| Contact e-Mail / Telephone | <a href="mailto:Jeton.saliu@inter.ikea.com">Jeton.saliu@inter.ikea.com</a><br>+46 701443175 |

## 2. Photographs

### 2.1 Photographs of the EUT

Top View



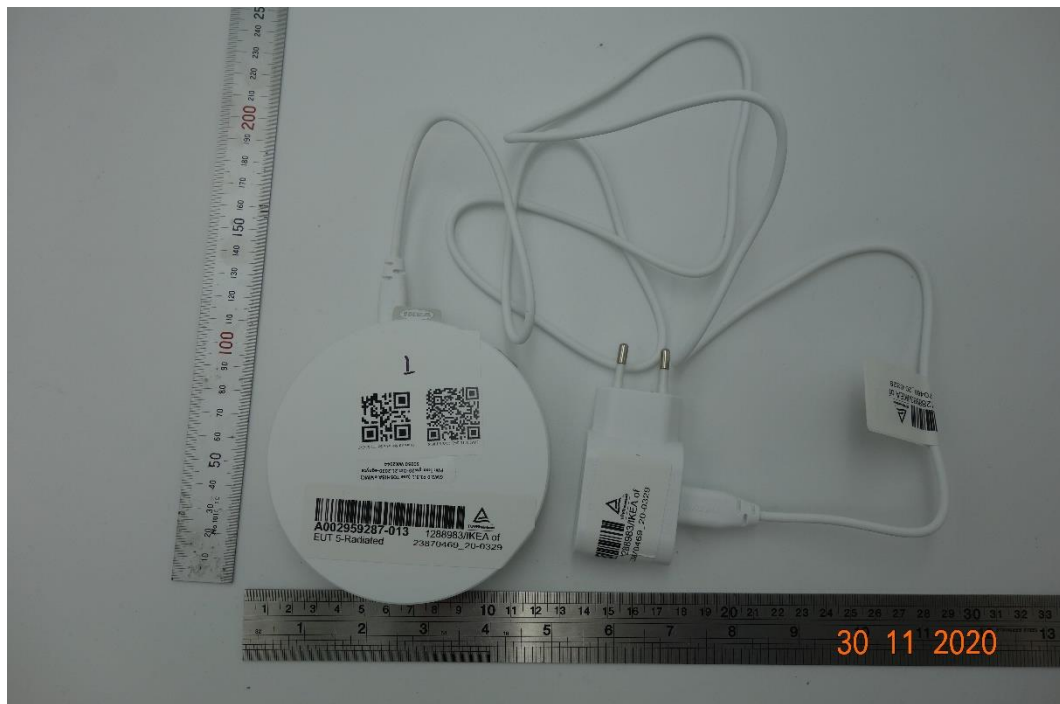
Side View



**Bottom View**

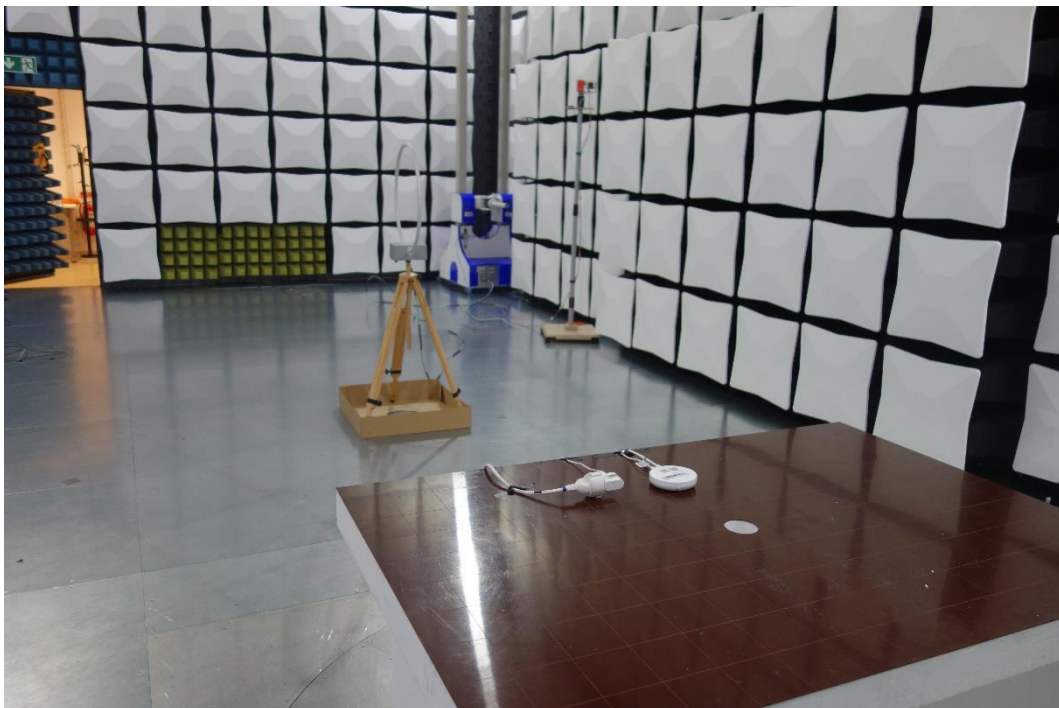
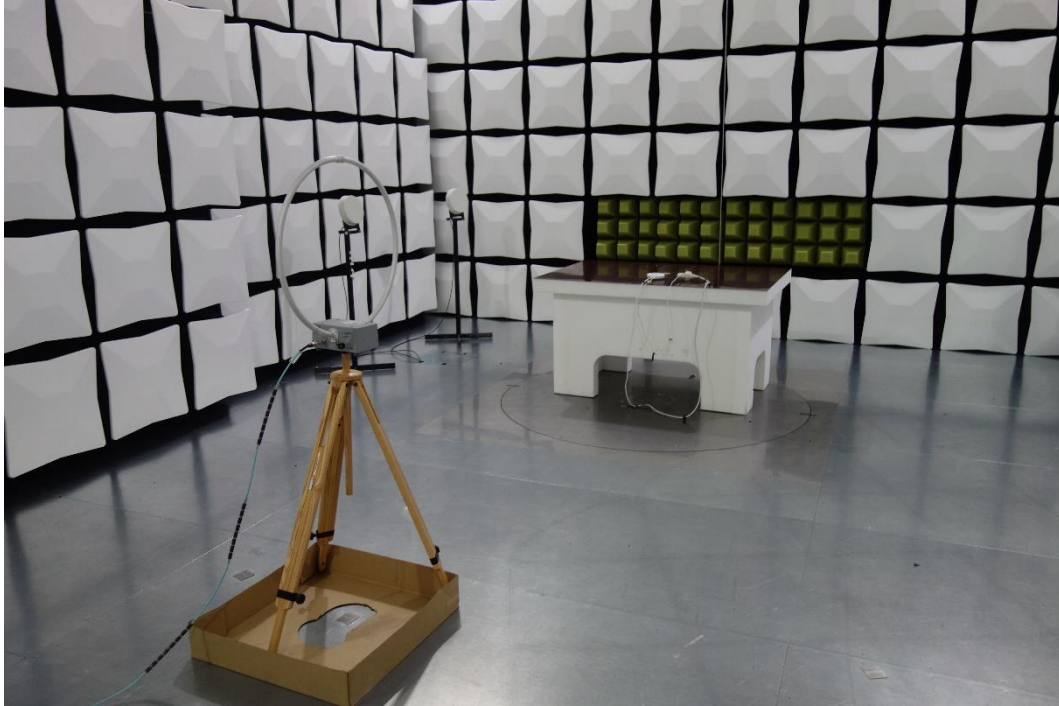


**Device with Power Supply and USB Cable**



## 2.2 Test Setup Photographs: Radiated Emission 9 kHz – 30 MHz

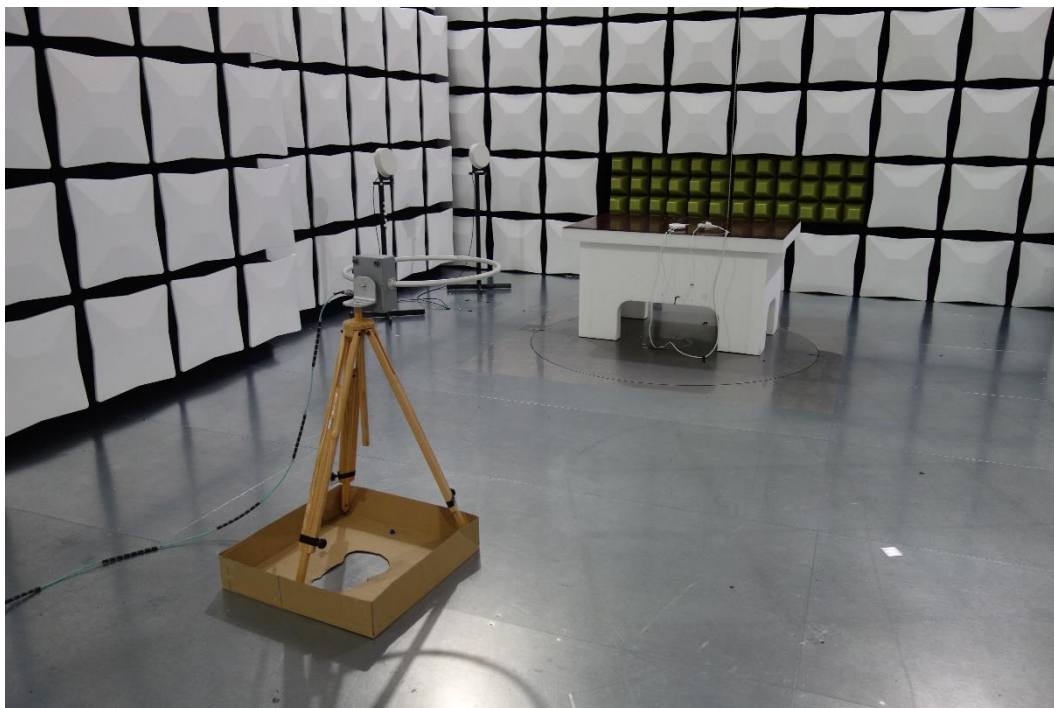
### Loop Antenna Parallel to Axis



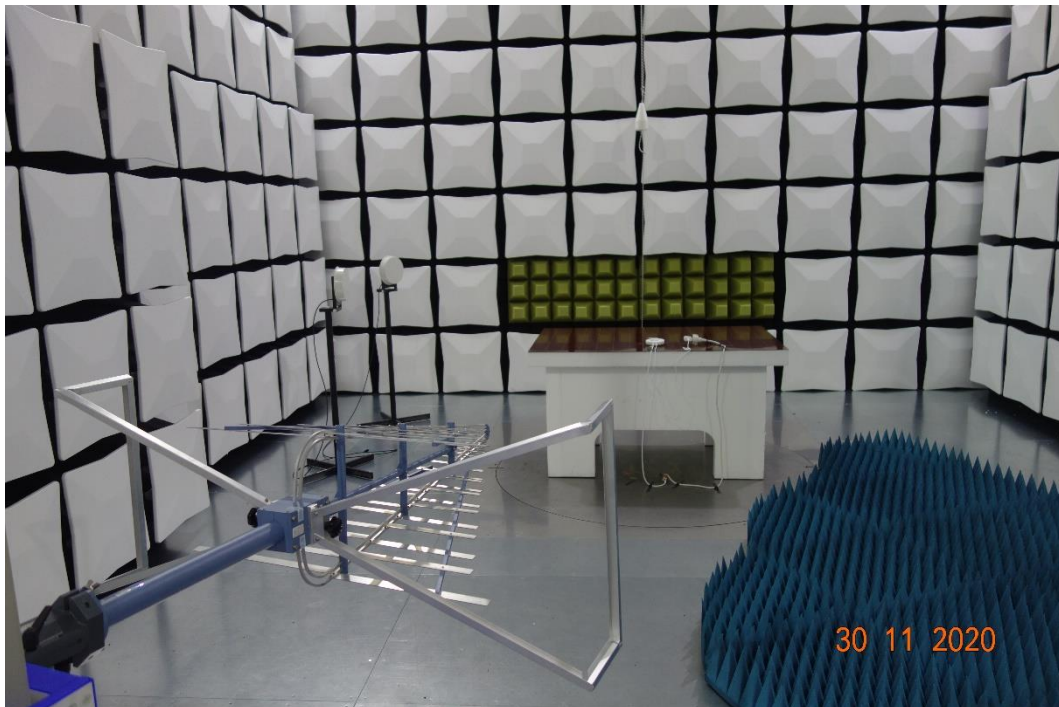
**Loop Antenna Perpendicular to Axis**



**Loop Antenna Parallel to Floor**



## 2.3 Test Setup Photographs: Radiated Emission 30 MHz – 1 GHz



## 2.4 Test Setup Photographs: Radiated Emissions 1 GHz – 18 GHz



## 2.5 Test Setup Photographs: Radiated Emissions 18 GHz – 40 GHz



## 2.6 Test Setup Photographs: Conducted Emissions

