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Project Number: 11E3272-1

FCC ID Z4GK115

Prepared for:

**Kelsius**

By

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**FCC Site Registration: 92592**  
**Industry Canada Assigned Code: 8517A**

**Date**

29<sup>th</sup> December 2011

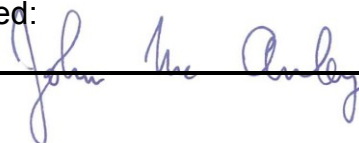
FCC EQUIPMENT AUTHORISATION  
Test Report

**EUT Description**

Wireless Sensor Module K115

Authorised:

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A handwritten signature in blue ink, appearing to read 'John McAnally', is written over a horizontal line.

**List of Exhibits**

Title Page

List of Exhibits

Exhibit A – Technical Report

Exhibit B – Photographs

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE  
WRITTEN APPROVAL OF COMPLIANCE ENGINEERING IRELAND LTD

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## **Exhibit A – Technical Report**

**Kelsius**

### **Applicant Name and Address**

The system covered under this authorisation report was designed, manufactured and assembled by Kelsius Ltd. The company's full name and mailing address is given below:

**Unit 6, Ballyconnell  
Industrial Estate, Falcarragh,  
Co Donegal,  
Ireland**

### **Model Name**

The model number for the EUT covered under this application report is:

**Wireless Sensor Module K115**

Test Setups

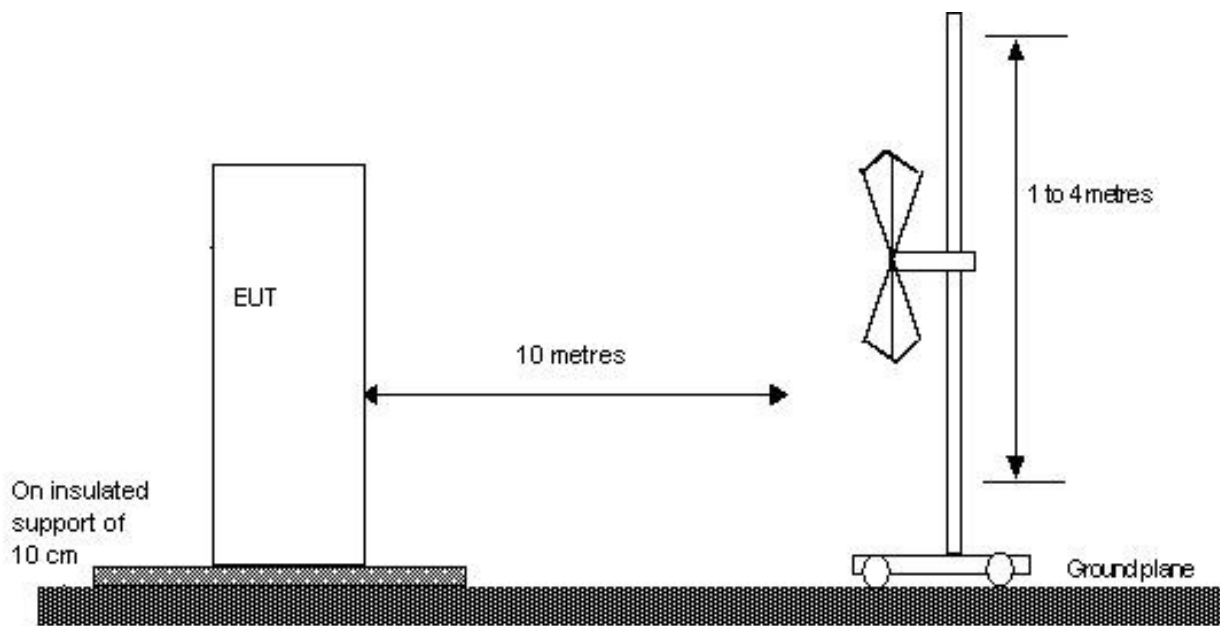
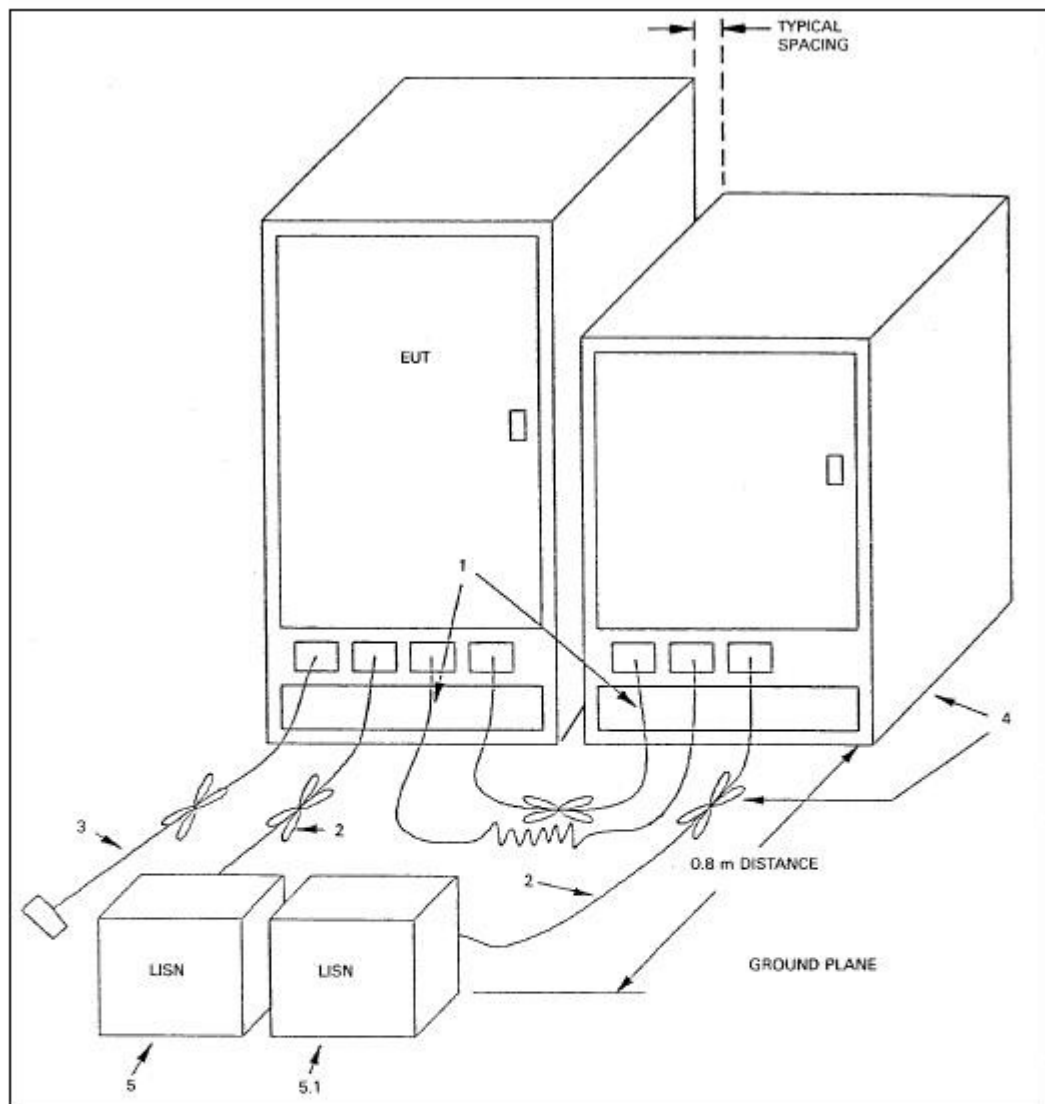


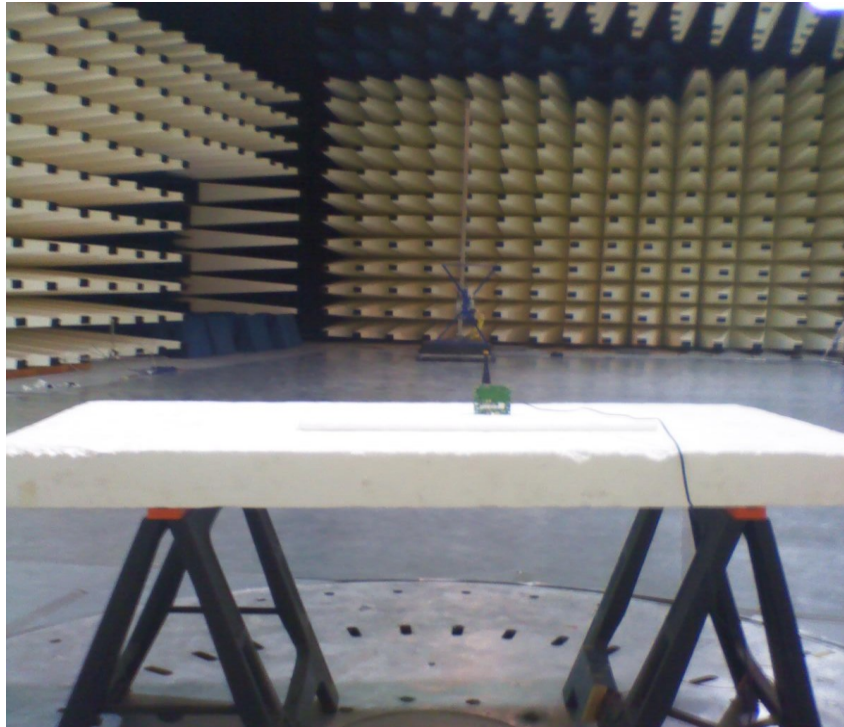
FIGURE 1: Radiated Emissions Test Setup – Test Distance 10m

**LEGEND:**

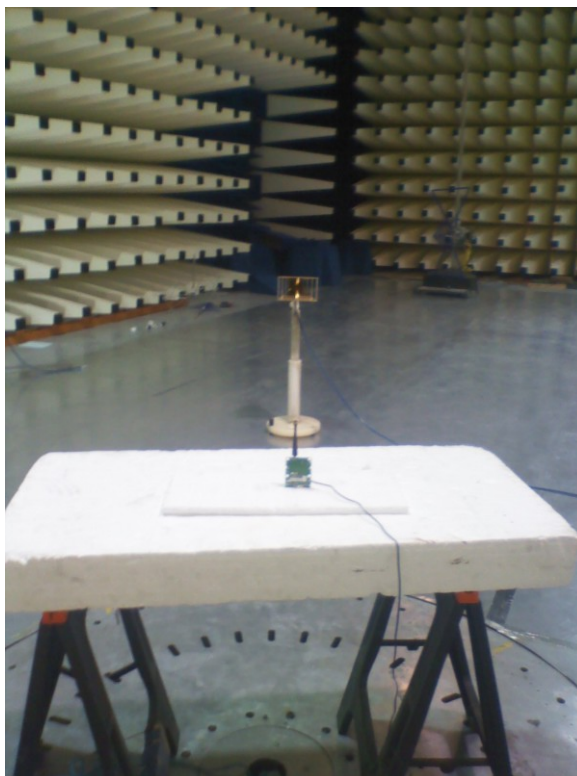
- 1) Excess I/O cables shall be bundled in the center. If bundling is not possible, the cables shall be arranged in serpentine fashion. Bundling shall not exceed 40 cm in length (see 6.1.4 and 11.2.4).
- 2) Excess power cords shall be bundled in the center or shortened to appropriate length (see 7.2.1).
- 3) I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. If bundling is not possible, the cable shall be arranged in serpentine fashion (see 6.1.4).
- 4) EUT and all cables shall be insulated, if required, from the groundplane by up to 12 mm of insulating material (see 6.1.4 and 6.2.2).
- 5) EUT connected to one LISN. LISN can be placed on top of, or immediately beneath, the groundplane.
  - 5.1) All other equipment powered from a second LISN or additional LISN(s) (see 5.2.3 and 7.2.1).
  - 5.2) Multiple outlet strip can be used for multiple power cords of non-EUT equipment.

**FIGURE 2: Conducted Emissions Test Setup**

**Exhibit B  
Test Configurations**



**Figure 1: Radiated emissions setup below 1 GHz**



**Figure 2: Radiated emissions setup above 1 GHz**



**Figure 3: Conducted emissions setup**