

STATEMENT ON EXPOSURE TO ELECTROMAGNETIC FIELDS

EQUIPMENT

Type of equipment: Radio module
Type: Grundfos Radiomodule 2G4
Manufacturer: Grundfos Holding A/S
By request of: Grundfos Holding A/S

STANDARD

47 CFR §1.1310 and §2.1091

REQUIREMENTS

This type of unlicensed mobile transmitting Part 15 device is categorically excluded from routine environmental evaluation for RF exposure according to §2.1091(c).

Even though there are no requirements we have calculated the power density and compared it to the general limits in §1.1310.

CALCULATIONS

Calculations of power density are made according to equation (4) in OET Bulletin 65

Maximum peak output power at antenna input terminal (dBm):	1,79	(Note 1)
Maximum antenna gain (dBi):	2	(Note 2)
<i>EIRP (dBm):</i>	3,79	
<i>EIRP (mW):</i>	2,39	
<i>Minimum separation distance (cm):</i>	20	
<i>Transmitting frequency range (MHz):</i>	2405 – 2480	

Notes:

- 1 Value from test report 1121176-2 Ed.2 issued by Intertek Semko AB
- 2 Value from Grundfos Radio Module 2G4 User Manual

A worst case calculation of the power density is as follows:

$$S = \frac{EIRP}{4 \times \pi \times r^2}$$

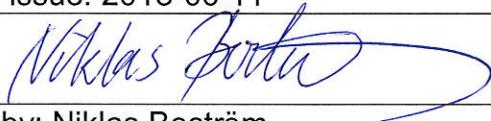
$$S = 2,39 / (4 \times \pi \times 20^2) = 0,0005 \text{ mW/cm}^2$$

The limit for General Population/Uncontrolled Exposure according to §1.1310 is a power density of 1.0 mW/cm².

The requirements are fulfilled without testing.

Intertek Semko AB, Radio& EMC

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