

Groenlo, 24 October 2019

Declaration on radiation safety standard conformance

To whom it may concern:

Nedap N.V.
Parallelweg 2
7141 DC Groenlo
The Netherlands
declares that the following product:

FCC ID : CGDVP4011
Manufacturer : Nedap N.V.
Brand : NEDAP
Model : VP4011
Antenna : Integrated trace on PCB
Description : 433.6-434.2MHz active RFID Tag transmitter

has a field strength of of 89.4 dbμV/m at 3 m as shown in 12_19041501.r01_Test report _ FCC-IC CGDVP4011 page 10.

According to KDB 412172 D01:

$$e_{\text{irp}} = (E \times d)^2 / 30$$

where:

E = electric field strength in V/m,

d = measurement distance in meters (m).

Resulting in 0.26 mW

which means that the worst case prediction of power density (100% reflection) at 20 cm distance (worst case) can be calculated as follows:

$$S = \frac{EIRP}{4 * \pi * R^2} \quad (\text{power density without reflection})$$

$$S = \frac{2^2 * EIRP}{4 * \pi * R^2} \quad (\text{power density with 100\% reflection})$$

$$S = \frac{2^2 * EIRP}{4 * \pi * R^2} = 0.26 / \pi * (20)^2 = 0.21 \mu\text{W}/\text{cm}^2 \quad (\text{Limit} = 457 \mu\text{W}/\text{cm}^2)$$

Best regards,
Nedap N.V.



Anne Pieter Haytema
Quality Manager