

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 89.4 dB $\mu$ V/m at 3 m as shown in 12\_19041501.r01\_Test report \_ FCC-IC CGDVP4011 page 10.

According to KDB 412172 D01:

$$eirp = (E \times d)^2 / 30$$

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