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To: Whom it may concern

Subject: RF Exposure

FCC ID: 2AVDM-Ø2

This document describes the Maximum Permissible Exposure (MPE) evaluation performed on the NFX MUX and Antennas.

This MPE evaluation is used to verify RF Exposure compliance according to FCC Rule 1.1307(b)(3)(i)(A) stating that a single RF source is exempt if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

The NFC MUX and Antennas were fully tested in a radiated configuration as described in Test Report P23-0165-1 issued 2024-07-16 by EKTOS Testing & Reliability Services, FCC reg. No.: DK0002, ISED CAB ID: DK0001.

Four identical Antennas were connected to the NFC MUX during the testing but only one Antenna can be active at a time. The antenna type is PCB loop.

In Test Report P23-0165-1 the maximum field strength of in band emission was measured to 64.4 dB μ V/m at a distance of 3 m (Table 6 on Page 12).

This field strength can be converted to power using this formula:

 $P = (E \times d)^2 / (30 \times G)$, where

- P = Power [W]
- E = Field strength [V/m]
- d = Distance [m]
- G = Antenna gain

The antenna gain for a loop antenna is greater than 1, but for worst case evaluation it is set to 1.

 $P = (0.0016596 \times 30)^2 / (30 \times 1) = 83 \mu W$

This evaluation confirms that the NFC MUX and Antennas are compliant with the FCC Rules for RF Exposure.

If you have any questions, please contact us.

Sincerely,

John Slaaby Lattec I/S Gydevang 21 3450 Alleroed Denmark Email: jsl@lattec.com Tel: +45 4046 8207