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RF Exposure Report for NFC

Test Site Information

FCC Test Site Name EMC Technologies PTY Ltd (New Zealand)

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FCC Test Site no NZ0002

Product Information

Brand Name Gallagher

Model Number C300490-T30 Multi Tech Reader

Product Proximity Card Reader

Manufacturer Gallagher Group Ltd

Country of Origin New Zealand

Serial Number 2242405015

FCC ID M5VC30049XB

IC ID 7369A-C30049XB

Antenna Internal to product

Highest oscillator frequency 27.12 MHz

Bluetooth facility Product supports bluetooth.

FCC ID of the bluetooth module QOQ-GM220P

Has the module been insltated as per manufacturer instructions Yes

Operating frequency 13.56 MHz NFC, 2.4 GHz Bluetooth

Exposure of humans to RF fields

Documents applied:

- FCC KDB 447498 D01 General RF Exposure Guidance v06
- 47 CFR § 2.1093 - Radiofrequency radiation exposure evaluation: portable devices.

As per Section 2.3.2 of § 2.1093

Evaluation of compliance with the exposure limits in § 1.1310 of this chapter, and preparation of an EA if the limits are exceeded, is necessary for portable devices having single RF sources with more than an available maximum time-averaged power of 1 mW, more than the ERP listed in Table 1 to § 1.1307(b)(3)(i)(C)

Calculation for SAR exemption:

For the Device under tests, it contains a 13.560 MHz transmitter.

As this device is fixed where normal operations would require the users hand to come close to the transmitting antenna when a card is used, a separation distance between the user and the device's radiating element of greater than 20 cm cannot be guaranteed.

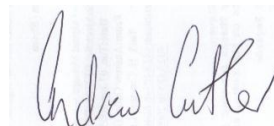
When transmitting on 13.560 MHz, a field strength of 57.8 dB μ V/m was measured at 10 metres.

The transmitter output power was calculated using the formula below:

$$\text{Power (watts)} = ((\text{field strength (V/m)} \times \text{distance (metres)})^2) / 30$$

A transmitter power of 2.0 μ W was determined.

Result: SAR exemption applied.



This document is issued with the authority of: _____

Andrew Cutler - General Manager