





# Compliance Engineering Ireland Ltd Clonross Lane, Derrockstown,

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| Project No.                | 22E910088-2a                        |
|----------------------------|-------------------------------------|
| Quotation                  | Q22-1508-1                          |
| Prepared For               | Schrader Electronics Ltd            |
|                            | Unit 10 Antrim Technology Park      |
|                            | Belfast Road                        |
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| Prepared By                | Compliance Engineering Ireland      |
|                            | Clonross Lane, Derrockstown         |
| Test Lab Address           | Dunshaughlin, Co. Meath             |
|                            | Ireland, A85XN59                    |
| Test Report By             | Michael Kirby                       |
| FCC Test Firm Registration | 409640                              |
| ISED CAB identifier        | 8517A                               |
| Date Received              | 21st Aug 2022                       |
| Issue Date                 | 26 <sup>th</sup> Aug 2022           |
| EUT Description            | Sensor 433MHz, Tyre Pressure and    |
|                            | Temperature Monitor                 |
| FCC ID                     | MRXFP4                              |
| IC ID                      | 2546A-FP4                           |
| Authorised by              | Paul Reilly                         |
| Authorised Signature:      | Pal Rug                             |

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# RF Exposure Exhibit- Technical Report

#### 1.0 Overview

# **Fixed / Mobile Application**

MPE for bystanders which are considered to be ≥20cm away from the front of the transmit antenna

# 2. Maximum Permissible Exposure FCC

# 2.1 Limits /guidelines

47 CFR Sections 1.1307, 1.1310, 2.1091 447498 D01 General RF Exposure Guidance v06

EUT Rated power is 0.01mW

#### 2.2 Results

where:  $S = \frac{PG}{4\pi R^2}$ 

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

| Prediction frequency:   |            | MHz     |
|---|------------|---------|
| Radiated Field Strength at 3m   |            | dBuV/m  |
| Power Conversion factor for antenna distance 3m                                 |            | dB      |
| EIRP Peak   |            | dBm     |
|   |            |         |
| Time Averaging Factor   | 0          | dB      |
| EIRP Peak   | -20        | dBm     |
| EIRP Peak   | 0.01000    | mW      |
|   |            |         |
| Prediction distance:  | 20         | cm      |
| MPE limit for Uncontrolled/General Population exposure at prediction frequency: | 0.29       | mW/cm^2 |
|   |            |         |
|   |            |         |
| Power density at prediction frequency:  | 0.00000199 | mW/cm^2 |
| Power density at prediction frequency:  | 0.000020   | W/m^2   |
|   | _          |         |
| Test Result: Exempt from RF exposure test                                       | Pass       |         |
|   |            |         |

#### Notes

The table above shows that for a prediction distance of 20cm, RF exposure evaluation is not required.

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### 2.0 Maximum Permissible Exposure IC

Limits for Routine Evaluation — RF Exposure Evaluation

# 2.1 Limits /guidelines

Limits for Routine Evaluation — RF Exposure Evaluation Limits as per RSS 102 Issue 5 (Mar 2015) 2.5.2

# 3.2 General population /Un-controlled Environments (IC)

where:

 $S = \frac{PG}{4\pi R^2}$ 

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

| Prediction frequency:                          | 433.92 | MHz |
|--|--------|-----|
| EIRP Peak                                      | -20    | dBm |
| Time Averaging Factor                          | 0.00   | dB  |
| Tune up factor                                 | 0      | dB  |
|  |        |     |
| EIRP Peak                                      | -20.0  | dBm |
| EIRP Peak                                      | 0.01   | mW  |
| Prediction distance:                           | 0      | cm  |
| 2.5.2 Exemption limit for Routine Evaluation : | 831.1  | mW  |
|  |        |     |
| Exempt from Routine RF Exposure Evaluation     |        |     |

The table above shows that RF exposure is exempt from routine RF exposure evaluation.

# **End of Report**