

# Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product

Product description: DUO Magnetless SPD/CAD Sensor

Model No: MLSC1

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be colocated or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the Product: DUO Magnetless SPD/CAD Sensor will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6M22012-20529-C1 and the accompanying calculations.

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Date 2021-01-18

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ZETBIKELLC

Registration number: W6M22012-20529-C-1

FCC ID: M5LMLSC1

# 3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

BLE

EIRP=1.38 dBm + (3.48 dBi [antenna gain claimed by manufacturer]) = 4.86 dBm = 3.06 mW

ANT+

EIRP = 1.24 dBm + (3.48 dBi [antenna gain claimed by manufacturer]) = 4.72 dBm = 2.96 mW

## 3.3 Exemption Limits for Routine Evaluation according to FCC KDB Publication

#### **RESULT:**

Test standard : FCC KDB Publication

447498 D01 General RF Exposure Guidance v06

According to 447498 D01 General RF Exposure Guidance v06:

SAR evaluation, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

## 3.3.1 Exemption Limits for Routine Evaluation – SAR Evaluation

SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table .

Table: SAR evaluation — Exemption limits for routine evaluation based on frequency and separation distance

BLE

| _ |      |       |       |       |       |       |                       |  |  |
|---|------|-------|-------|-------|-------|-------|-----------------------|--|--|
|   | MHz  | 5     | 10    | 15    | 20    | 25    | mm                    |  |  |
|   | 2402 | 10.09 | 19.26 | 29.35 | 38.52 | 48.52 | SAR Test<br>Exclusion |  |  |
|   | 2102 | 10.09 | 17.20 | 27.55 | 30.32 | 10.32 | Threshold (mW)        |  |  |

| MHz  | 30    | 35    | 40    | 45    | 50    | mm                                      |
|------|-------|-------|-------|-------|-------|---|
| 2402 | 57.70 | 67.79 | 77.87 | 87.05 | 97.13 | SAR Test<br>Exclusion<br>Threshold (mW) |

Output power level shall be the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time-averaged output power.

Established separation distance is 5 mm.

**BLE** 

Operating frequency band: 2402-2480 MHz

Max. output power level at 5 mm separation distance at 2402 MHz according to table is: 10.09 mW

The product is exempt from SAR Evaluation/Testing because the output power of 3.06 mW is below the exemption limit of 10.09 mW.



# Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M22012-20529-C-1

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#### ANT+

| MHz  | 5    | 10    | 15    | 20    | 25    | mm                                      |
|------|------|-------|-------|-------|-------|---|
| 2457 | 9.99 | 18.98 | 28.97 | 37.96 | 47.95 | SAR Test<br>Exclusion<br>Threshold (mW) |

| MHz  | 30    | 35    | 40    | 45    | 50    | mm                                      |
|------|-------|-------|-------|-------|-------|---|
| 2457 | 56.94 | 66.93 | 76.91 | 85.91 | 95.90 | SAR Test<br>Exclusion<br>Threshold (mW) |

Output power level shall be the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time-averaged output power.

Established separation distance is 5 mm.

ANT+

Operating frequency band: 2457 MHz

Max. output power level at 5 mm separation distance at 2457 MHz according to table is: 9.99 mW

The product is exempt from SAR Evaluation/Testing because the output power of 2.96 mW is below the exemption limit of 9.99 mW.