

FCC SAR Exclusion Report

FCC ID: UFOOPN4200I

Report No. : BTL-FCCP-2-2107T062
Equipment : Handheld Bluetooth 1D CCD Scanner
Model Name : OPN-4200i
Brand Name : OPTICON
Applicant : OPTOELECTRONICS Co., Ltd.
Address : 4-12-17, Tsukagoshi, Warabi-shi, Saitama Pref., 335-0002 Japan
Manufacturer : OPTOELECTRONICS Co., Ltd.
Address : 4-12-17, Tsukagoshi, Warabi-shi, Saitama Pref., 335-0002 Japan

FCC Rule Part(s) : FCC Part 2, Subpart J (§2.1093)
KDB 447498 D01 General RF Exposure Guidance v06

Date of Receipt : 2021/7/16
Date of Test : 2021/7/16~ 2021/10/13
Issued Date : 2022/3/1

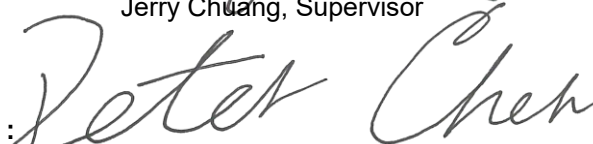
The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

Prepared by :


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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2107T062	R00	Original Report.	2022/3/1	Valid

According to KDB 447498 section 4.3.1 a), the 1-g SAR test exclusion thresholds at test separation distance ≤ 50 mm are determined by:

$$\{ [(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \} \leq 3.0$$

The maximum tune up power is -2 dBm +/- 1dB, therefore the highest tune-up powers is

$$-1.0 \text{ dBm} \quad (0.79 \text{ mW}) \quad @ \text{ 2402 MHz}$$

When the minimum test separation distance is < 50 mm, a distance of 5 mm according to e) in section 4.1 is applied to determine SAR test exclusion.

So,

$$(0.8\text{mW} / 5\text{mm}) * (2.402\text{GHz} ^{0.5}) = 0.2$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 0.2 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body.

End of Test Report