

Maximum Permissible Exposure Report

FCC ID: UFOOPN4000N

Report No.	:	BTL-FCCP-2-2106T009
Equipment	:	Bluetooth Barcode Scanner
Model Name	:	OPN-4000n
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 CFR Title 47, Part 2 (2.1091)
		FCC Guidelines for Human Exposure IEEE C95.1
Date of Receipt	:	2021/6/9
Date of Test	:	2021/6/9~ 2021/9/28
Issued Date	:	2022/2/7

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

Prepared by Eric Lee, Engineer σ Laborate 0659 Approved by BTL Inc. No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan Tel: +886-2-2657-3299 Fax: +886-2-2657-3331 Web: www.newbtl.com



REVISION HISTORY

Report No.	Version	Description	Issued Date
BTL-FCCP-2-2106T009	R00	Original Report.	2022/2/7



Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	OPTOELECTRO NICS CO., LTD.	2.4G PCB Antenna	PCB Layout	N/A	-0.86

Maximum RF OUTPUT POWER

Mode	Maximum Conducted Power (dBm)
ВТ	0.23

MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

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

where:

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

CALCULATED RESULT

Band	Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Pow er (dBm)	Max. Output Pow er (mW)	Pow er Density (S) (mW/cm²)	Limit of Pow er Density (S) (mW/cm²)	Result
BT	-0.86	0.8204	0.23	1.0544	0.00017217	1	Pass

Note:

1. The calculated distance is 20 cm.

End of Test Report