

RADIO TEST REPORT – 446296APFWL

Type of assessment:

MPE Exemption report

Applicant:

SmartWave Technologies

Product:

B01-007

Model:

B01-007A

Model variant:

B01-007B

FCC ID:

2ASYW-B01007

Specifications:

- ◆ FCC 47 CFR Part 1 Subpart I, §§1.1307, 1.1310
- ◆ FCC 47 CFR Part 2 Subpart J, §2.1091
- ◆ KDB 447498 D01 General RF Exposure Guidance v06

Date of issue: August 12, 2021

Tarek Elkholy, EMC/RF Specialist

Prepared by



Signature

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SCC File Number: 15064 (Ottawa/Almonte); 151100 (Montreal); 151097 (Cambridge)

FCC MPE exemption; Date: May 2021

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Lab locations

Company name	Nemko Canada Inc.	
Facilities	<i>Cambridge site:</i> 1-130 Saltsman Drive Cambridge, Ontario Canada N3E 0B2 Tel: +1 519 650 4811	
Test site identifier	Organization Cambridge FCC: CA0101 ISED: 24676	
Website	www.nemko.com	
Limits of responsibility	Copyright notification	

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

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Section 1 Evaluation summary

1.1 MPE exemption for standalone transmission

1.1.1 References, definitions and limits

FCC §2.1091(c)

- (1) Mobile devices that operate in the Commercial Mobile Radio Services pursuant to part 20 of this chapter; the Cellular Radiotelephone Service pursuant to part 22 of this chapter; the Personal Communications Services pursuant to part 24 of this chapter; the Satellite Communications Services pursuant to part 25 of this chapter; the Miscellaneous Wireless Communications Services pursuant to part 27 of this chapter; the Upper Microwave Flexible Use Service pursuant to part 30 of this chapter; the Maritime Services (ship earth station devices only) pursuant to part 80 of this chapter; the Specialized Mobile Radio Service, and the 3650 MHz Wireless Broadband Service pursuant to part 90 of this chapter; the 76-81 GHz Band Radar Service pursuant to part 95 of this chapter; and the Citizens Broadband Radio Service pursuant to part 96 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use if:
 - (i) They operate at frequencies of 1.5 GHz or below and their effective radiated power (ERP) is 1.5 watts or more, or
 - (ii) They operate at frequencies above 1.5 GHz and their ERP is 3 watts or more.
- (2) Unlicensed personal communications service devices, unlicensed millimeter-wave devices, and unlicensed NII devices authorized under §§15.255(f), 15.257(g), 15.319(i), and 15.407(f) of this chapter are also subject to routine environmental evaluation for RF exposure prior to equipment authorization or use if their ERP is 3 watts or more or if they meet the definition of a portable device as specified in §2.1093(b) requiring evaluation under the provisions of that section.
- (3) All other mobile and unlicensed transmitting devices are categorically excluded from routine environmental evaluation for RF exposure prior to equipment authorization or use, except as specified in §§1.1307(c) and 1.1307(d) of this chapter.

1.1.2 EUT technical information

Operational frequency	2480 MHz
Antenna type	½ Wave Monopole
Antenna gain	0 dBi
Number of antennas	1
Maximum transmitter conducted power	2.6 dBm (1.8 mW)
Maximum EIRP	2.6 dBm (1.8 mW)

1.1.3 MPE exemption calculation

Fundamental transmit (prediction) frequency: 2480 MHz
Maximum measured conducted peak output power: 2.6 dBm
Cable and/or jumper loss: 0 dB
Maximum peak power at antenna input terminal: 2.6 dBm
Tx On time: 1.000 ms
Tx period time: 1.000 ms
Average factor: 100 %
num calculated average power at antenna input terminal: 1.8197009 mW
Single Antenna gain (typical): 0 dBi
Number of antennae: 1
Total system gain: 0.00 dBi
MPE exemption limit: 3.000000 W
Average EIRP at prediction frequency: 1.820 mW
0.002 W
Margin of Compliance: 32.17 dB

1.1.4 Verdict

The calculation of EIRP is below the exemption limit; therefore, the product is passing the RF Exposure exemption requirements.

End of the test report