

ENGINEERING TEST SUMMARY REPORT – 447039-4TRFEMC

Applicant:
9013733 CANADA Inc. (9CI)

Product:
Broadband RF Detector

Model:
Safe and Sound Micro

Specifications:

- ◆ Field strength measurements in a radiated test configuration using the signal (antenna) substitution techniques

Date of issue: September 22, 2021

Fahar Abdul Sukkoor, EMC/RF Specialist

Tested by



Signature

Kevin Rose, Senior EMC/RF Specialist

Reviewed by



Signature



Lab locations

Company name	Nemko Canada Inc.			
Facilities	Ottawa site:	Montréal site:	Cambridge site:	Almonte site:
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Test site registration	Organization FCC/ISED	Recognition numbers and location FCC: CA2040; IC: 2040A-4 (Ottawa/Almonte); FCC: CA2041; IC: 2040G-5 (Montreal); CA0101 (Cambridge)		
Website	www.nemko.com			

Limits of responsibility

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.

This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contained in this report are within Nemko Canada's ISO/IEC 17025 accreditation.

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Section 1 Information provided by the applicant

1.1 Disclaimer

This section contains information provided by the applicant and has been utilized to support the test plan. Inaccurate information provided by the applicant can affect the validity of the results contained within this test report. Nemko accepts no responsibility for the information contained within this section and the impact it may have on the test plan and resulting measurements.

1.2 Applicant/Manufacture

Applicant name	9013733 CANADA Inc. (9CI)
Applicant address	Cambridge ON N1R 4N5
Manufacture name	Same as applicant
Manufacture address	Same as applicant

1.3 EUT information

Product	Broadband RF Detector
Model	Safe and Sound Micro
Serial number	None
Part number	None
Power requirements	Battery in nominal range as indicated by detector
Description/theory of operation	Detector measures the instantaneous peak flux density of all bands in its measurement range. Peak readings are displayed via the EUT's LED indicators illustrating increasing magnitudes of flux density.

1.4 Test report revision history

Table 1.4-1: Test report revision history

Revision #	Date of issue	Details of changes made to test report
TRF	September 23, 2021	Original report issued

Section 2 Testing data

2.1 Frequency Response Measurements

2.1.1 References and limits

- ANSI C 63.10-2013

2.1.2 Test summary

Tested by	Fahar Abdul Sukkoor	Test date	August 10, 2021
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2.1.3 Setup details

Port under test	Enclosure Port
EUT power input during test	Battery in nominal range as indicated by detector
EUT setup configuration	Table top
Test facility	Semi anechoic chamber
Measuring distance	3 m
Measurement details	Signal generator level is determined for each frequency to produce reference field strength by having the reference antenna measured using a spectrum analyzer. After the reference antenna is replaced by EUT, the signal generator levels are altered to achieve threshold levels of EUT reading (1000 $\mu\text{W}/\text{m}^2$) for each frequency set and recorded.
Baseband signal type	100% duty cycle continuous wave

2.1.5 Test data continued

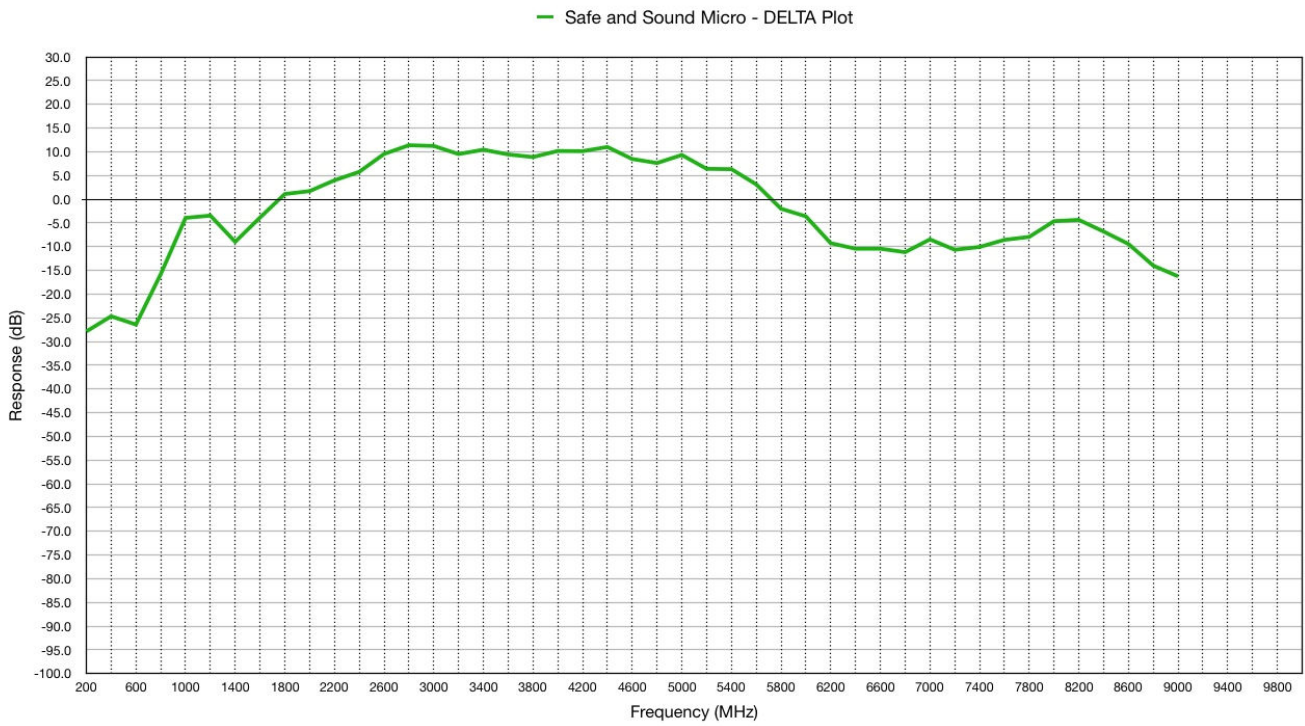


Figure 2.1-1:Delta Frequency response plot