


RF Exposure Report

Project Number: 5088048**Offer Number: SUW-202306004868****Report Number: 5088048EMC03****Revision Level: 0****Client: Nederman Corporation****Equipment Under Test: Ventilation Monitoring System****Product Name: SAVE System****Model: SAVE****FCC ID: 2BCBB-7945167****Applicable Standards: 47 CFR §§ 2.1091****FCC KDB 447498 D01 General RF Exposure Guidance v06****FCC OET Bulletin 65****Report issued on: 30 November 2023****Result: Compliant**


FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01

This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the Federal Government.

Prepared by:


Daniel Alvarez, RF/EMC Sr. Staff Engineer

Reviewed by:


Stephen Whalen, SAR/EMC Manager

Remarks: This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. And for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/terms-e-document.aspx>.

Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful, and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for a maximum of 30 days only.

TABLE OF CONTENTS

1	GENERAL INFORMATION.....	3
1.1	CLIENT INFORMATION.....	3
1.2	TEST LABORATORY	3
1.3	GENERAL INFORMATION OF EUT	3
1.4	OPERATING MODES AND CONDITIONS	3
2	RF EXPOSURE.....	4
2.1	TEST RESULTS.....	4
2.2	TEST METHOD.....	4
2.3	SINGLE TRANSMISSION RF EXPOSURE LEVELS (mW/cm ²)	4
3	REVISION HISTORY	5

1 General Information

1.1 Client Information

Company Name: Nederman Corporation
Address: 4404-A Chesapeake Drive
City, State, Zip, Country: Charlotte, NC 28216, USA

1.2 Test Laboratory

Name: SGS North America, Inc.
Address: 620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country: Suwanee, GA 30024, USA

Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 3212.01

1.3 General Information of EUT

Equipment Under Test: Ventilation Monitoring System
Product Name: SAVE System
Model: SAVE
Serial Numbers: Not Provided

Frequency Ranges: 903 - 927 MHz (2GFSK)

Data Modes: 2GFSK

Antennas: Linear External Dipole, + 3.22 dBi
Max Conducted Output Power: 2GFSK: 8.16 dBm

**Data was not measured by SGS laboratory and therefore SGS is not responsible for accuracy. Data obtained via customer, specification sheet, previous regulatory filing or other.*

1.4 Operating Modes and Conditions

5mW power level setting was utilized for calculations.

2 RF Exposure

2.1 Test Results

Test Description	Product Specific Standard	Test Result
RF Exposure	FCC Part 1.1310	Compliant

2.2 Test Method

The formula below calculates power density.

$$S = \frac{PG}{4\pi R^2} \quad \text{Or} \quad S = \frac{EIRP}{4\pi R^2}$$

where;

S = Power density (mW/cm²)

P = Maximum sourced based average power delivered to antenna port (mW)

G = Maximum numeric power gain of antenna relative to an isotropic radiator (dBi -> linear)

R = Distance between by-stander and antenna (cm)

EIRP = Equivalent (or effective) isotropically radiated power

The limits for general population / uncontrolled exposure were used at a distance of 20cm.

2.3 Single transmission RF Exposure Levels (mW/cm²)

Band of Operation		Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density EIRP _{avg} /(4πR ²) mW/cm ²	FCC mW/cm ²	% of Limit	Verdict
Type	MHz				dBm	mW					
2GFSK	902-928	8.2	3.2	0.0	11.4	14	20	0.003	1.00	0%	Pass

3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial Release	30 November 2023