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.

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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.

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

where;
S = Power density (mW/cm^2)
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/cm^2)*

Band of Operation		Conducted Power w/tolerance	Antenna Gain	Cable Loss	Average EIRP		Distance (R)	Power Density $EIRP_{Avg}/(4\pi R^2)$	FCC	% of Limit	Verdict
Type	MHz	dBm			dBm	mW	cm	mW/cm^2	mW/cm^2		
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