

# **RF TEST REPORT**

Product Name: Suck-O-Mat 3.0

Model Name: 5401380

FCC ID: 2A2W8-5401380

Issued For : ORION Versand GmbH & Co. KG

Schaeferweg 14 Flensburg, 24941 Germany

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China

Report Number:	LGT24A182HA02
Sample Received Date:	Feb. 26, 2024
Date of Test:	Feb. 26, 2024 – Apr. 23, 2024
Date of Issue:	Apr. 23, 2024

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# **TEST REPORT CERTIFICATION**

Applicant:	ORION Versand GmbH & Co. KG
Address:	Schaeferweg 14 Flensburg, 24941 Germany
Manufacture:	GENLUX ELECTRICAL PRODUCTS LTD
Address:	2nd Floor, No. 190 Dongfeng Road, Qingxi Town, Dongguan City, Guangdong Province
Product Name:	Suck-O-Mat 3.0
Trademark:	N/A
Model Name:	5401380
Sample Status:	Normal

APPLICABLE STANDARDS				
STANDARD	TEST RESULTS			
FCC 47CFR §2.1093 KDB 447498 D01 General RF Exposure Guidance v06	PASS			

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# **Revision History**

Rev.	Issue Date	Revisions
00	Apr. 23, 2024	Initial Issue



# **1. GENERAL INFORMATION**

## **1.1 GENERAL DESCRIPTION OF THE EUT**

Product Name:	Suck-O-Mat 3.0
Trademark:	N/A
Model Name:	5401380
Series Model:	N/A
Model Difference:	N/A
Frequency Bands:	433.94MHz
EUT Voltage	5VDC (Charging), 3.7VDC (lithium battery)
Adapter	Input: AC 100-240V, 50/60Hz, 2.5A Output: DC 12.0V, 12.5A 150.0W
Hardware Version:	N/A
Software Version:	N/A

## 1.2 TEST LABORATORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.		
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China		
	A2LA Certificate No.: 6727.01		
Accreditation Certificate	FCC Registration No.: 746540		
	CAB ID: CN0136		



## 2. FCC 47CFR §2.1093 REQUIREMENT

#### 2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in KDB 447498 D01 General RF Exposure Guidance v06 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

#### 2.2 LIMIT

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test

MHz	5	10	15	20	25	mm		
150	39	77	116	155	194			
300	27	55	82	110	137			
450	22	45	67	89	112			
835	16	33	49	66	82			
900	16	32	47	63	79	C ( D T )		
1500	12	24	37	49	61	SAR Test Exclusion		
1900	11	22	33	44	54	Threshold (mW)		
2450	10	19	29	38	48			
3600	8	16	24	32	40			
5200	7	13	20	26	33			
5400	6	13	19	26	32			
5800	6	12	19	25	31			
MHz	30	35	40	45	50	mm		
150	232	271	310	349	387			
300	164	192	219	246	274			
450	134	157	179	201	224			
835	98	115	131	148	164			
900	95	111	126	142	158	C (D T - )		
1500	73	86	98	110	122	SAR Test Exclusion		
1900	65	76	87	98	109	Exclusion Threshold (mW)		
2450	57	67	77	86	96			
3600	47	55	63	71	79			
5200	39	46	53	59	66			
5400	39	45	52	58	65			
5800	37	44	50	56	62			

Separation Distances are illustrated in the following Table.



The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq$  50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] • [ $\sqrt{f}(GHz)$ ]  $\leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR,where f(GHz) is the RF channel transmit frequency in GHz.

Power and distance are rounded to the nearest mW and mm before calculation The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.



#### 2.5 TEST RESULT

#### Turn up Result

Mode	Turn up Power		
433MHz-ASK	-14±1dBm		

#### The MPE result of worst mode:

RF Function	Frequency (MHz)	Max Turn up Power (dBm)	Max Turn up Power (mW)	Estimated SAR	Limit	Ratio	Result
ASK	433	-13.00	0.05	0.007	3	0.002	Pass

#### Note:

1. The estimated SAR  $\leq$  3.0 for 1-g SAR, Separation distance  $\leq$  5mm, complies with the exemption requirements.

\* \* \* \* \* END OF THE REPORT \* \* \* \* \*