telefication

FCC SAR Exclusion Report

Product name	:	BG-RC012-01
Applicant	:	Velux A/S
FCC ID	:	XSG831641
ISED ID	:	831679/03

Test report No. : 181100648 FCC RF exposure Ver 1.00

laboratory   *certification*   *approvals*

Laboratory information

Documentation

The test report must always be reproduced in full; reproduction of an excerpt only is subject to written approval of the testing laboratory. The documentation of the testing performed on the tested devices is archived for 10 years at Telefication Netherlands.

Testing Location

Test Site	Telefication BV
Test Site location	Edisonstraat 12a
	6902 PK Zevenaar
	The Netherlands
	Tel. +31889983600
	Fax. +31316583189

Revision History

Version	Date	Remarks	By
v1.00	21-02-2019	Release version	PvW

Table of Contents

1 General Description

1.1 Applicant

Client name:	Velux A/S
Address	Baekgaardsvej 40, SKJERN, Denmark
Zip code:	--
Telephone:	97 353511
E-mail:	Bjarne.andreasen@velux.com
Contact name:	Bjarne Ravndal Andreasen

1.2 Manufacturer

Manufacturer name:	Velux A/S
Address:	Baekgaardsvej 40, SKJERN, Denmark
Zip code:	--
Telephone:	30581588
E-mail:	j.a.m.thomsen@velux.com
Contact name:	Jens Thomsen

1.3 Tested Equipment Under Test (EUT)

Product name:	BG-RC012-01
Brand name:	Velux A/S
Product type:	Battery operated remote control
FCC ID:	XSG831641
IC ID:	8642A-831641
Model(s):	BG-RC012-01
Software version:	--
Hardware version:	831679/03

1.4   SAR Measurement Evaluation

1.4.1 SAR Testing Exclusions, Mobile use

Calculation method of RF Safety Distance:

$$PD = \frac{Pout * G}{4\pi r^2}$$

Where:
PD   = Power Density in W/m^2
Pout   = Output power in mW
G   = Gain of antenna
R   = Distance between observation point and centre of the radiator in cm

Antenna

Technology	Zigbee
Antenna type	PCB antenna
Antenna gain	1.33 dBi

Calculation results

Technology	Frequency (MHz)	Max power (mW)	Antenna gain (numeric)	Distance (cm)	Power density (mW/cm^2)	Limit (mW/cm^2)	MPE ratio	MPE ratio limit
Zigbee	2400-2483.5	11.38	1.36	20	0.003	1	0.003	≤ 1.0

1.5   Summary

Since the SAR testing for all device orientations apply SAR test exclusion per KDB 447498, SAR testing for this device is not required.