



MPE Test Report

Report No.: LDF-ESH-P25122081B-3

FCC ID: DWNTDBU25ZB

Product: TDBU 25 WF ZIGBEE HP

Model: 5183668

Received Date: May.12, 2026

Test Date: May.12 to Jun.02, 2026

Issued Date: Jun.03, 2026

Applicant: Somfy Systems Inc

Address: 121 Herrod Blvd., Dayton, NJ 08810

Manufacturer: Somfy Activités SA

Address: 50 avenue du Nouveau Monde 74300 CLUSES - FRANCE

Issued By: BUREAU VERITAS LCIE CHINA COMPANY LIMITED

Lab Address: No. 829, Xinzhuan Road, Shanghai, P.R.China (201612)



Test Lab
Cert 2343.01

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Table of Contents

Release Control Record	3
1 General Information	5
1.1 General Description of EUT	5
2 RF Exposure	7
2.1 Limits For Maximum Permissible Exposure (MPE).....	7
2.2 MPE Calculation Formula	7
2.3 MPE Calculation Formula	7
2.4 Calculation Result of Maximum Permissible Exposure.....	7



Release Control Record

Issue No.	Description	Date Issued
LDF-ESH-P25122081B-3	Original release	Jun.03, 2026

1 Certificate of Conformity

Product: TDBU 25 WF ZIGBEE HP

Brand: somfy®

Model: 5183668

Applicant: Somfy Systems Inc

Test Date: May.12 to Jun.02, 2026

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by BUREAU VERITAS LCIE CHINA COMPANY LIMITED, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

The test results in this report apply exclusively to the tested model / sample. Without written approval of BUREAU VERITAS LCIE CHINA COMPANY LIMITED, the test report shall not be reproduced except in full.

BUREAU VERITAS LCIE CHINA COMPANY LIMITED lab is not responsible for the incorrect test results caused by the incorrect information provided by the applicant (such as the maximum internal operating frequency, antenna gain, cable loss, etc.)

Prepared by :



, Date:

Jun.03, 2026

Yan ZHOU

Project Engineer

Approved by :



, Date:

Jun.03, 2026

Sean YU

RF Supervisor

2 General Information

2.1 General Description of EUT

For BLE

Product	TDBU 25 WF ZIGBEE HP
Brand	somfy®
Test Model	5183668
Power Rating	12V---;
Modulation Type	GFSK
Modulation Technology	Bluetooth Low Energy 5.0
Operating Frequency	2402MHz ~ 2480MHz
Number of Channel	40
Output Power	6.29 dBm
Antenna Type	External Antenna
Antenna Connector	--
Antenna Gain	1 dBi
Product SW/HW version	--
Radio SW/HW version	--
Test SW version	--
RF power setting in Test SW	--

Note:

1. For more details, please refer to the User's manual of the EUT.

For Zigbee

Product	TDBU 25 WF ZIGBEE HP
Brand	somfy®
Test Model	5183668
Power Rating	12V $\overline{=}$;
Modulation Type	O-QPSK
Modulation Technology	6LoWPAN
Operating Frequency	2405MHz to 2480MHz
Number of Channel	16
Output Power	15.71 dBm
Antenna Type	External Antenna
Antenna Connector	--
Antenna Gain	1 dBi
Product SW/HW version	--
Radio SW/HW version	--
Test SW version	--
RF power setting in Test SW	--

2.2 Test Facility

Laboratory Name: BUREAU VERITAS LCIE CHINA COMPANY LIMITED

Laboratory Address: No.829, Xin Zhuan Road, Song Jiang District, Shanghai, China

Test Location: No.829, Xin Zhuan Road, Song Jiang District, Shanghai, China

A2LA Lab Code: 2343.01

FCC-Recognized Accredited Testing Lab: CN1213

ISED Recognized Lab: 6392A

FCC Accredited Test Site Number: 176467

CAB identifier: CN0070

3 RF Exposure

3.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1,500	-	-	F/1500	30
1,500-100,000	-	-	1.0	30

F = Frequency in MHz

3.2 MPE Calculation Formula

Power density (S) is calculated according to the formula:

$$S = PG / (4\pi R^2)$$

Where S = power density in mW/cm²

P = transmit power in mW

G = numeric gain of transmit antenna (numeric gain=Log-1(dB antenna gain/10))

R = distance (cm)

3.3 MPE Calculation Formula

The antenna of this product, under normal use condition, is at least 20cm from the body of the user. So the device is classified as Mobile Device.

3.4 Calculation Result of Maximum Permissible Exposure

Frequency Band (MHz)	Max. Conducted output power(dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2402-2480	6.29	1	20	0.00085	1
2405-2480	15.71	1	20	0.0074	1

Conclusion:

The calculation result of MPE is less than the limit.

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