# RF Exposure Exemption

Applicant : Thales DIS France SAS

Product Name : Gemalto SWYS BLE Token

Trade Name : THALES THALES

Model Number : Gemalto SWYS BLE Token

Applicable Standard : 47 CFR § 2.1093

Received Date : Nov. 30, 2023

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#### Taiwan Accreditation Foundation accreditation number: 1330

#### Note

1. The test results are valid only for samples provided by customers and under the test conditions described in this report.

2.This report shall not be reproduced except in full, without the written approval of Eurofins E&E Wireless Taiwan Co., Ltd.

3. The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.

#### Approved By:





Issued Date: Feb. 07, 2024



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# **Revision History**

Rev.	Issued Date	Description	Revised by
00	Feb. 07, 2024	Initial Issue	Yiying Chiang

Issued Date: Feb. 07, 2024

## 1. General Information

# 1.1 Reference Applicable Standard

Standard	Description	Version
IEEE C95.1	American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300 KHz to 100 GHz, New York.	1992
47 CFR § 2.1093	Radiofrequency radiation exposure evaluation: portable devices.	-
47 CFR § 1.1310	Radiofrequency radiation exposure limits.	-
KDB 447498 D04	RF exposure procedures and equipment authorization policies for mobile and portable devices	v01

### 1.2 Testing Location

#### **Test Facilities**

Company Name: Eurofins E&E Wireless Taiwan Co., Ltd.

Address: No. 140-1, Changan Street, Bade District, Taoyuan City 334025, Taiwan

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#### **Test Site Location**

■ No. 140-1, Changan Street, Bade District, Taoyuan City 334025, Taiwan

☐ No. 2, Wuquan 5th Rd. Wugu Dist., New Taipei City, Taiwan

### Laboratory Accreditation

Location	TAF	FCC	ISED
No. 140-1, Changan Street, Bade District,	Accreditation No.:	Designation No.:	Company No.: 7381A
Taoyuan City 334025, Taiwan	1330	TW0010	CAB ID: TW1330
No. 2, Wuquan 5th Rd. Wugu Dist., New Taipei	Accreditation No.:	Designation No.:	Company No.: 28922
City, Taiwan	1330	TW0034	CAB ID: TW1330

# 2. Description of Equipment under Test (EUT)

Applicant	Thales DIS France SAS 6 Rue de la Verrerie, MEUDON 92197 France					
Product Name	Gemalto SWYS BLE	Gemalto SWYS BLE Token				
Trade Name	THALES THALES					
Model Number	Gemalto SWYS BLE Token					
FCC ID	MES-BLETOKEN					
Automor laformortion	Trade Name	Model No.	Туре	Gain		
Antenna Information	Thales	DA14531 PCB Antenna	PCB Antenna	5.1 dBi		

#### Note:

The above information of DUT was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

## 2.1 RF Specification

Bluetooth				
Support type:	□ BR	□ EDR	☑ BLE-1 Mbps	☐ BLE-2 Mbps

# 3. RF Exposure Limit

For devices that operate at larger distances from persons, where there are minimal RF coupling interactions between a device and the user or nearby persons, RF exposure compliance using maximum permissible exposure (MPE) limits is applied. The limits for MPE is listed as below:

	Limits for Gener	al Population / Uncont	rolled Exposure			
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time E ², H ² or S (minutes)		
0.3-1.34	614	1.63	(100)*	30		
1.34-30	824 / f	2.19 / f	(180 / f2)*	30		
30-300	27.5	0.073	0.2	30		
300-1500	-	-	F / 1,500	30		
1,500-100,000	-	- 1.0		30		
Limits for Occupational / Controlled Exposure						
Frequency Range (MHz)	Power Density (S) (mW/cm²)	Averaging Time E ², H ² or S (minutes)				
0.3-3.0	614	1.63	(100)*	6		
3.0-30	1,842 / f	4.89 / f	(900 / f2)*	6		
30-300	61.4	0.163	1.0	6		
300-1,500	-	-	F / 300	6		
			5	6		

f = frequency in MHz. \* = Plane-wave equivalent power density.

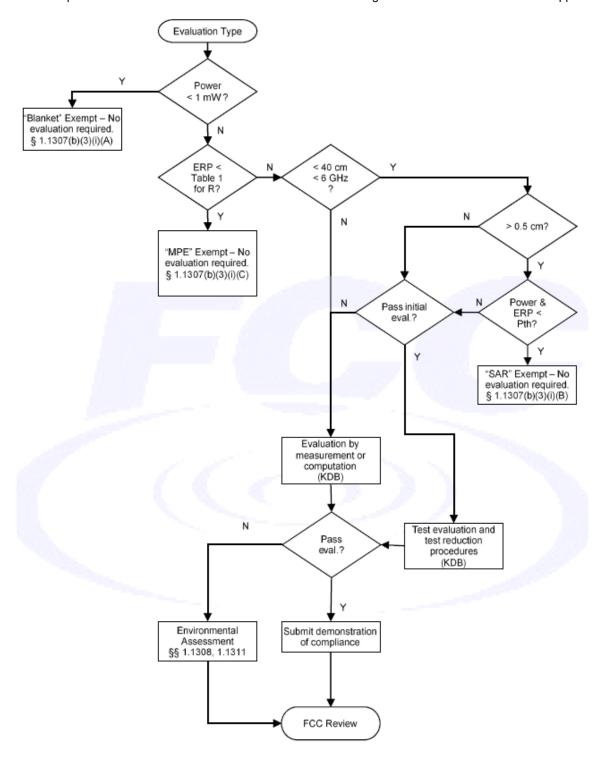


# 4. RF Exposure Assessment

#### 4.1 Exemption Evaluation

Exemption evaluation was performed according to the appendix A and B in KDB447498 D04.

The General Sequence for Determination of Procedure demonstrated in Figure A.1 of KDB447498 D04 was applied.



## 5. Maximum Transmitting Mode Evaluation

<u> </u>
Antenna transmission description
Bluetooth : 1TX (Diversity)

### 6. Result

Band	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (mW)	ANT Gain (dBi)	ERP (mW)	<§1.1307(b)(3)(i)(B)> Exemption Pth (mW)	<§1.1307(b)(3)(i)(B)> Exemption considerations
Bluetooth	2402 - 2480	0.19	1.05	-5.10	0.197	2.72	Qualified

Note:

This device is qualified for exemption under §1.1307(b)(3)(i)(B).

### 7. Conclusion

