



FCC Test Report

Report No: FCS202408191H01

Issued for

Applicant:	RTT Europe DOO Novi Sad
Address:	Vase Stajica br.18, apartment 8, Novi Sad, Republic of Serbia, 21000
Product Name:	Personal Tag
Brand Name:	N/A
Model Name:	PROD TAG 210
FCC ID:	2BLSS-PRODTAG210
Test Standard:	FCC 47CFR §2.1093
Issued By: Flux Compliance Service Laboratory Add: Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan	

**TEST RESULT CERTIFICATION**

Applicant's Name..... : RTT Europe DOO Novi Sad
Address : Vase Stajica br.18, apartment 8, Novi Sad, Republic of Serbia, 21000
Manufacture's Name..... : RTT Europe DOO Novi Sad
Address : Vase Stajica br.18, apartment 8, Novi Sad, Republic of Serbia, 21000

Product Description

Product Name : Personal Tag
Brand Name : N/A
Model Name : PROD TAG 210
Series Model : N/A
Test Standards : FCC 47CFR §2.1093
447498 D01 Interim General RF Exposure Guidance v06

This device described above has been tested by Flux Compliance Service Laboratory, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test..... :

Date (s) of performance of tests.: Aug.05, 2024 ~ Aug.13, 2024

Date of Issue..... : Oct.24, 2024

Test Result : Pass

Tested by

:

Scott Shen

(Scott Shen)

Reviewed by

:

Duke Qian

(Duke Qian)

Approved by

:

Jack Wang

(Jack Wang)





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Revision History

Rev.	Issue Date	Contents
00	Oct.24, 2024	Initial Issue

1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Personal Tag	
Brand	N/A	
Model Number	PROD TAG 210	
Series Model(s)	N/A	
Model Difference	N/A	
Product Description	The EUT is Personal Tag	
	Operation Frequency:	BLE: 2402~2480 MHz UHF: 922 MHz UWB: 6489.6 MHz
	Modulation Type:	BLE: GFSK UHF: GFSK UWB: FSK
	Antenna gain:	BLE: 0.5 dBi UHF: 0.75 dBi UWB: 3 dBi
	Antenna Designation:	BLE: Chip antenna UHF: Chip antenna UWB: Chip antenna
Power Supply	Input: DC 5V from wireless charger	
Battery	Rated Voltage: DC 3.7V Capacity: 560mAh	
Hardware version number	N/A	
Software version number	N/A	



1.2 TEST FACTORY

Company Name:	Flux Compliance Service Laboratory
Address:	Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan
FCC Test Firm Registration Number: 514908 Designation number: CN0127 A2LA accreditation number: 5545.01 ISED Number: 25801 CAB ID : CN0097	

2. FCC 47CFR §2.1093 REQUIREMENT

2.1 TEST STANDARDS

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1093 RF exposure requirement

KDB447498 v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

2.2 LIMIT

According to KDB447498 D01 General RF Exposure Guidance v06 Section 4.3.1 Standalone SAR test exclusion considerations: "Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.²² The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander (see 5) of section 4.1). To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, typically in the SAR measurement or SAR analysis report, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting is required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for the SAR test exclusion. When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions; for example, handheld PTT two-way radios, handsets, laptops & tablets etc.²³ "

$$\left[\frac{\text{[(max. power of channel, including tune-up tolerance, mW)]}}{\text{[(min. test separation distance, mm)]}} \cdot [\sqrt{f \text{ (GHz)}}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where:} \right.$$

- 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
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

2.3 TEST RESULT

Turn up

Mode	Detector	Turn up Power
BLE	PEAK	4±1dBm
UHF	PEAK	-22±1dBm
UWB	PEAK	-46±1dBm

Note: $E(\text{dBuV/m})@3\text{m} = P(\text{dBm EIRP}) + 95.2$;

$E(\text{dBuV/m})@1\text{m} = E(\text{dBuV/m})@3\text{m} + 20 \cdot \log(3/1)$

Band/Mode	F (GHz)	Antenna Distance (mm)	RF output power including tune up		SAR Test Exclusion Threshold	Ratio
			dBm	mW		
BLE	2.48	5	5	3.16228	$0.99599 < 3$	0.331997
UHF	0.922	5	-21	0.00794	$0.00153 < 3$	0.000508
UWB	6.4896	5	-45	0.00003	$0.00001 < 3$	0.000004

Multiple transmission:

$\text{BLE} + \text{UHF} + \text{UWB} = 0.3325 < 1$

Results: PASS, no SAR test required.

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