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Test report issued under the responsibility of:
EMITECH MONTPELLIER laboratory
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RF EXPOSURE TEST REPORT

KDB 447498 D01 V06
RSS-102 - Issue 6, December 2023

Company: **TELECOM DESIGN S.A.**
Address: 2 BIS RUE NULLY DE HARCOURT
33610 CANEJAN
FRANCE

Test item description: **Smartwatch**
Trade Mark: TELECOM DESIGN
Manufacturer: TELECOM DESIGN S.A.
FCC ID: 2AGMK-WTC11
IC: 21552-WTC11
Model/Type reference: TD-WTC-11/IKARYA WATCH
Ratings: 4.2Vdc to 3.7Vdc

Testing Laboratory: **EMITECH MONTPELLIER laboratory**
Address: 145 rue de Massacan
34740 VENDARGUES
FRANCE

Report Reference No: **RE-EVE-26A556-1A**
Test procedure: FCC IC Certification
Diffusion: Mr FARADI Tarik
Applicant's name: TELECOM DESIGN S.A.
Date of issue: June 4, 2026
Total number of pages: 10
Revision: 0
Compiled by: Alexis TOUZET
Approved by (+ signature): Olivier AELBRECHT (Technical Manager)



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This document is the result of testing a specimen or a sample of the product submitted. It does not imply an assessment of the conformity of
the whole manufactured products of the tested sample.*

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REVISION HISTORY:

Revision	Date	Modified pages	Modifications
0	June 4, 2026	/	Creation

1. GENERAL INFORMATION

This document submits the results of Radio tests performed on the equipment **Ikarya watch TD-WTC-11** (denominated hereafter E.U.T.: equipment under test) according to document(s) listed in §2 of this test report.

TESTING PROCEDURE AND TESTING LOCATION:					
Testing Location : EMITECH MONTPELLIER laboratory Address : 145 rue de Massacan 34740 VENDARGUES FRANCE Test procedure : FCC IC Certification Tested by : Alexis TOUZET Test supervisor : None Date of receipt of test item : N/A Date (s) of performance of tests : From February the 17 th to the 20 th of 2026					
APPLICANT'S GENERAL INFORMATION:					
Company name : TELECOM DESIGN S.A. Company address : 2 BIS RUE NULLY DE HARCOURT 33610 CANEJAN FRANCE Person(s) present during the tests : Mr FARADI Tarik Responsible : Mr FARADI Tarik					
GENERAL REMARKS:					
The information in italics is declared by the manufacturer and is under his responsibility The test results presented in this report relate only to the object tested. The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report. Throughout this report the decimal separator is point.					
POSSIBLE TEST CASE VERDICTS:					
Test case does not apply to the test object.: N/A Test case not performed. : N/P Test object does meet the requirement. : P (Pass) Test object does not meet the requirement.: F (Fail)					
DEFINITIONS AND ABBREVIATIONS:					
E.U.T.	Equipment Under Test	AE	Ancillary Equipment	Pk	Peak detector
RBW	Resolution BandWidth	VBW	Video BandWidth	QP	Quasi-peak detector
FSOATS	Free Space Open Area Test Site	FAR	Full Anechoic Room	Av	Average detector
VP	Vertical Polarization	HP	Horizontal Polarization	RMS	Root Mean Square
RF	Radio Frequency	N.T.R	Nothing To Report	N/C	Not Communicated
SAC	Semi Anechoic Chamber				

2. REFERENCE DOCUMENT(S)

NORMATIVE REFERENCES:

The following referenced documents are necessary for the application of the present test report.

FCC 47 CFR PART 15: September 2025

Code of federal regulations – Title 47 telecommunication

Part 15- Radio frequency devices

KDB 447498 D01 v06

RF exposure procedures and equipment authorization policies for mobile and portable devices.

RSS-102 - Issue 6, December 2023

Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)

RR-EVE-26A556-1A, RR-EVE-26A556-2A and RR-EVE-26A556-3A

Radio Test Report Emitech.

Although the product standard uses obsolete technical standards, the latest versions of standards achievable by the laboratory will be used for testing.

INFORMATIVE REFERENCES:

The following referenced documents are not necessary for the application of the present test report but they assist the user with regard to a particular subject area.

3. EQUIPMENT TECHNICAL DESCRIPTION

3.1. Test Conditions

Test item description.: Smartwatch
Model/Type reference.: TD-WTC-11/IKARYA WATCH
Trade Mark.: TELECOM DESIGN
Serial number (S/N).....: 2D99 FESB
2D99 FDSP
Part number (P/N).: Not communicated
Software version.....: 3574
Firmware version.....: *Not communicated*
Type of sample.....: Standard equipment
Function(s).: This wearable protection follows the senior indoors and outdoors, whether in the street, in stores or even in the forest. No need for a mobile phone or an app, communications are sent directly from the watch via the highly reliable "NbloT" network. Also, the Ikarya Watch measures and analyzes activity data to help the wearer stay in shape. It allows seniors to set daily activity goals: number of steps, distance traveled, recommended daily activity time, etc. Once the activity data has been collected, he and his loved ones can consult it from a mobile application and/or on a transmitter installed at home.
Manufacturer name.: TELECOM DESIGN S.A.
Address.: 2 BIS RUE NULLY DE HARCOURT
33610 CANEJAN
FRANCE
General product information:
N/A

3.2. E.U.T. Marking plate



3.3. E.U.T. General view



3.4. E.U.T. Mechanical and Electrical Design

Power supply.....: 5Vdc Battery charging
4.2Vdc Internal battery

Power supply range.....: 5Vdc +/- 10% for battery charging
4.2Vdc to 3.7Vdc Internal battery

Power type.: Internal Battery

Power (W).: Not communicated

Nominal current (A).: Not communicated

Dimensions (L x W x H) (m).: Not communicated

Weight (kg).....: Not communicated

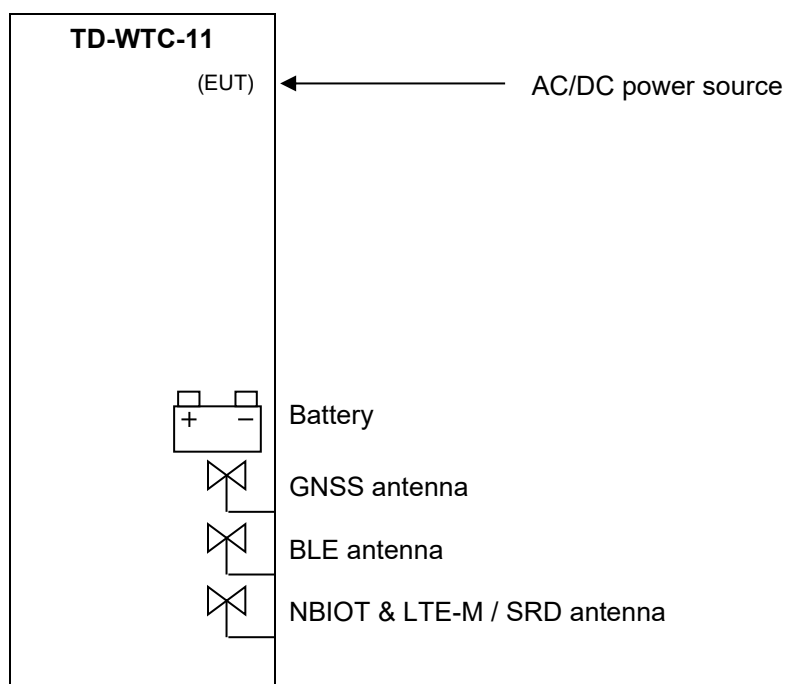
Temperature range (°C).: -10 to +55

Ground bounding strap.....: No

Comments:

N/A

3.5. E.U.T. Input/Output ports



PORT	NAME	TYPE	LENGTH	CABLE TYPE	COMMENTS
0	Main frame	N/E	N/A	Metallic & Plastic	N/A
1	AC/DC power source	AC/DC	<3m	2P	120Vac/60Hz to 5Vdc
2	Battery	DC	N/A	2P	4.2Vdc
3	GNSS antenna	RF	N/A	N/A	N/A
4	BLE antenna	RF	N/A	N/A	N/A
5	NBIOT & LTE-M / SRD antenna	RF	N/A	N/A	N/A

AC/DC : AC/DC Converter port

I/O.....: Input or Output port

N/E: Non Electrical port

AC: Alternative current port

TP: Telecommunication port

DC.....: Direct current port

RF: Radio frequency port

3.6. EUT Radio Specifications

3.6.1 LTE-M & NbloT

a) GENERAL INFORMATIONS	
According to manufacturer's declarations :	
EUT type.....	Transceiver
Technology.....	LTE-M & NbloT
Environmental profile.....	Data transmission
Temperature range.....	-20°C to +55°C
Antenna type.....	Integral
Antenna Gain	-6 dBi
Comments:	
<i>EUT includes an RF module already certified, see appropriates tests report for full testing results.</i>	
FCC ID: HSW-TY1SCDM (approval date: 09/27/2024)	
IC: 4492A-TY1SCDM (approval date: 12/02/2024)	
b) TRANSMITTER PARAMETERS (Tx)	
Frequency bands.....	LTE-M & NbloT: Band 2: 1850MHz to 1910MHz Band 3: 1710MHz to 1785MHz Band 4: 1710MHz to 1755MHz Band 5: 824MHz to 849MHz Band 8: 880MHz to 915MHz Band 12: 699MHz to 716MHz Band 13: 777MHz to 787MHz Band 28: 703MHz to 748MHz
RF Power	Not communicated
Number of channels / Separation.....	Not communicated
Modulation type	QPSK
Duty cycle.....	Not communicated
Tested frequency.....	LTE-M & NbloT: Band 2: 1880MHz Band 3: 1747.5MHz Band 4: 1732.5MHz Band 5: 836.5MHz Band 8: 897.5MHz Band 12: 707.5MHz Band 13: 782MHz Band 28: 725.5MHz

3.6.2 BLE

a) GENERAL INFORMATIONS	
According to manufacturer's declarations :	
EUT type	<i>Transmitter</i>
Technology.....	<i>BLE</i>
Environmental profile.....	<i>Data transmission</i>
Temperature range.....	<i>-20°C to +55°C</i>
Antenna type	<i>Integral</i>
Antenna Gain	<i>-10 dBi</i>
b) TRANSMITTER PARAMETERS (Tx)	
Frequency bands.....	<i>BLE : 2400 MHz to 2483.5 MHz</i>
RF Power	<i>Not communicated</i>
Number of channels / Separation	<i>40 channels / 2MHz</i>
Modulation type	<i>BLE : GFSK</i>
Duty cycle.....	<i>> 98%</i>
Tested frequency.....	<i>BLE : 2402 MHz (low channel)</i> <i>BLE : 2440 MHz (mid channel)</i> <i>BLE : 2480 MHz (high channel)</i>

3.6.3 SRD

c) GENERAL INFORMATIONS	
According to manufacturer's declarations :	
EUT type	<i>Transceiver</i>
Technology.....	<i>SRD</i>
Environmental profile.....	<i>Data transmissions</i>
Temperature range.....	<i>-20°C to +55°C</i>
Antenna type	<i>Internal</i>
Antenna Gain	<i>-6 dBi</i>
d) TRANSMITTER PARAMETERS (Tx)	
Frequency bands.....	<i>902MHz to 928MHz</i>
RF Power	<i>Not communicated</i>
Number of channels / Separation	<i>3 channels</i>
Modulation type	<i>GFSK</i>
Duty cycle.....	<i>Not communicated</i>
Tested frequency.....	<i>902.050MHz (Low channel)</i> <i>915 MHz (Mid channel)</i> <i>927.950MHz (High channel)</i>

4. RF EXPOSURE

On SRD radio transmitter maximum field strength is 93.9 dB μ V/m at 3m (see Radio test report referenced in §2)
Then we can calculate maximum EIRP = 0.01 mW (-20.73 dBm) and maximum ERP = 0.01 mW at 915.0 MHz.

For USA

In accordance with KDB 447498 D01 Appendix A, 10-g Extremity SAR exemption for FCC can be considered for a distance $\leq$ 5mm. Limits are then 2.5 times higher than 1-g SAR Test limits

Thanks to test report in §2 of this document :

Configuration	Frequency (MHz)	Max EIRP (dBm)	Max ERP (mW)	Limit ERP (mW)
SRD	915.0	-1.33	0.45	39.20
BLE	2402.0	-7.98	0.10	24.20
LTE Band 2	1880.0	12.6	11.09	27.35
LTE Band 3	1747.5	12.4	10.59	28.38
LTE Band 4	1732.5	12.6	11.09	28.50
LTE Band 5	836.5	13.2	12.74	41.00
LTE Band 8	897.5	12.8	11.61	39.58
LTE Band 12	707.5	13.3	13.03	44.58
LTE Band 13	782.0	15.4	21.13	42.40
LTE Band 28	725.5	12.3	10.35	44.03

It is therefore not necessary to carry out other specific measurements to assess human exposure to radiofrequencies when the product is used for a distance $\leq$ 5 mm from the human extremities.

For Canada

In accordance with RSS-102, Issue 6, Section 6.3., 10-g Extremity SAR exemption for FCC can be considered for a distance $\leq$ 5mm. Limits are then 2.5 times higher than 1-g SAR Test limits.

Thanks to test report in §2 of this document :

Configuration	Frequency (MHz)	Max EIRP (dBm)	Max EIRP (mW)	Limit EIRP (mW)
SRD	915.0	-1.33	0.74	40.63
BLE	2402.0	-7.98	0.16	10.65
LTE Band 2	1880.0	12.5	18.20	17.98
LTE Band 3	1747.5	12.4	17.38	21.08
LTE Band 4	1732.5	12.6	18.20	21.43
LTE Band 5	836.5	13.2	20.89	42.48
LTE Band 8	897.5	12.8	19.05	41.03
LTE Band 12	707.5	13.3	21.38	71.60
LTE Band 13	782.0	15.4	34.67	54.55
LTE Band 28	725.5	12.3	16.98	67.38

It is therefore not necessary to carry out other specific measurements to assess human exposure to radiofrequencies when the product is used for a distance $\leq$ 5 mm from the human extremities.

●●● End of test report ●●●