

HEALTH TEST REPORT

For

Descartes System Group Inc

Inventory control beacon tag

Test Model: BIN001-1

Prepared for : Descartes System Group Inc
Address : 105 Trafalgar Street, Floor 2 Floor 2, Nelson, New Zealand

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.
Address : Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

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Date of receipt of test sample : March 31, 2025
Number of tested samples : 2
Sample No. : A03275107-1, A03275107-2
Serial number : Prototype
Date of Test : March 31, 2025 ~ April 10, 2025
Date of Report : April 11, 2025



Shenzhen LCS Compliance Testing Laboratory Ltd.

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HEALTH TEST REPORT EN 62479: 2010 & EN 50663: 2017	
Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)	
Report Reference No.	: LCSA03275107ED
Date of Issue	: April 11, 2025
Testing Laboratory Name	: Shenzhen LCS Compliance Testing Laboratory Ltd.
Address	: Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China
Testing Location/ Procedure	: Full application of Harmonised standards ■ : Partial application of Harmonised standards □ : Other standard testing method □
Applicant's Name	: Descartes System Group Inc
Address	: 105 Trafalgar Street, Floor 2 Floor 2, Nelson, New Zealand
Test Specification	
Standard	: EN 62479: 2010 : EN 50663: 2017
Test Report Form No.	: TRF-4-E-155 A/0
TRF Originator	: Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF	: Dated 2011-03
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Test Item Description	: Inventory control beacon tag
Trade Mark	: N/A
Test Model	: BIN001-1
Ratings	: DC 3V By CR2477 Button Battery
Result	: PASS

Compiled by:

Kevin Huang/Administrator

Supervised by:

Jack Liu/ Technique principal

Approved by:

Gavin Liang/ Manager

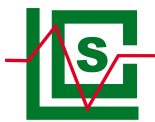


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HEALTH --TEST REPORT

Test Report No. : LCSA03275107EDApril 11, 2025
Date of issue

Test Model : BIN001-1

EUT..... : Inventory control beacon tag

Applicant..... : Descartes System Group Inc

Address..... : 105 Trafalgar Street, Floor 2 Floor 2, Nelson, New Zealand

Telephone..... : /

Fax..... : /

Manufacturer..... : Descartes System Group Inc

Address..... : 105 Trafalgar Street, Floor 2 Floor 2, Nelson, New Zealand

Telephone..... : /

Fax..... : /

Factory..... : Descartes System Group Inc

Address..... : 105 Trafalgar Street, Floor 2 Floor 2, Nelson, New Zealand

Telephone..... : /

Fax..... : /

Test Result**PASS**

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

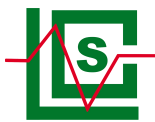


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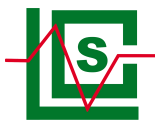
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Revision History

Report Version	Issue Date	Revision Content	Revised By
000	April 11, 2025	Initial Issue	--





1. GENERAL INFORMATION

1.1. Product Description for Equipment Under Test (EUT)

EUT : Inventory control beacon tag
Test Model : BIN001-1
Ratings : DC 3V By CR2477 Button Battery
Hardware Version : BIN001-1
Software Version : /

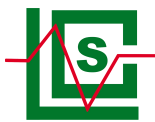
Bluetooth :

Frequency Range : 2402MHz~2480MHz
Channel Number : 40 channels for Bluetooth V5.0 (BT LE/BT 2LE)
Channel Spacing : 2MHz for Bluetooth V5.0 (BT LE/BT 2LE)
Modulation Type : GFSK for Bluetooth V5.0 (BT LE/BT 2LE)
Bluetooth Version : V5.0
Antenna Description : Internal Antenna , 3.2dBi(Max)

NFC :

Frequency Range : 13.56MHz
Modulation Type : ASK
Antenna Description : PCB Antenna, 0dBi(Max.)





1.2. Objective

According to its specifications, the EUT must comply with the requirements of the following standards:

EN 62479- Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

EN 50663- Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz).

1.3. Test Methodology

All measurements contained in this report were conducted with EN 62479: 2010 and EN 50663: 2017.

1.4. Facilities

All measurement facilities used to collect the measurement data are located at Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China .

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 32.

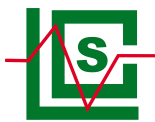
1.5. Support Equipment List

Manufacturer	Description	Model	Serial Number	Certificate
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1.6. External I/O Cable

I/O Port Description	Quantity	Cable
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1.7. Equipment

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

1.8. Laboratory Accreditations And Listings

Site
Description

EMC Lab. : NVLAP Accreditation Code is 600167-0.
FCC Designation Number is CN5024.
CAB identifier is CN0071.
CNAS Registration Number is L4595.

Name of Firm : Shenzhen LCS Compliance Testing Laboratory Ltd.

Site Location : Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China

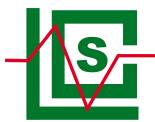


1.9. Measurement Uncertainty

Test Item		Uncertainty
Radio Frequency	:	0.9×10^{-4}
Total RF Power, Conducted	:	1.0 dB
RF Power Density, Conducted	:	1.8 dB
Spurious Emissions, Conducted	:	1.8 dB
All Emissions, Radiated	:	3.1 dB
Temperature	:	0.5°C
Humidity	:	1 %
DC And Low Frequency Voltages	:	1 %



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2. HUMAN EXPOSURE TO THE ELECTROMAGNETIC FIELDS

2.1 Test Methodology

2.1.1. General description of applied standards

According to its specifications, the EUT must comply with the requirements of the following standards:

EN 62479- Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

EN 50663- Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz).

2.1.2. Description of test modes

The EUT has been tested under its typical operating condition. Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

2.2 Test limit

If the average power emitted by apparatus operating in the frequency range 10 MHz – 300GHz is less than or equal to 20 mW and the transmitting peak power is less than 20 mW then the apparatus is deemed to comply with the basic restrictions without testing.

2.3 Test Results

Since Max. output power for Bluetooth is 1.21mW (0.81dBm According to radio test report LCSA03275107EB) less than 20mW specified in EN 62479 and EN 50663. This unit will not generate the harmful EM emission above the reference level as specified in EC Council Recommendation (1999/519/EC).

The unit complies with the EN 62479 and EN 50663 for RF exposure requirement.

No non-compliance noted.

-----THE END OF TEST REPORT-----



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