



Test Report issued under the responsibility of:



TEST REPORT
IEC 60825-1
Safety of laser products -
Part 1: Equipment classification and requirements

Report Number..... : 102254161MPK-001L
Date of issue : 2015-10-14
Total number of pages 18
Name of Testing Laboratory
preparing the Report.....: Intertek Testing Service NA Inc.
1365 Adams Count
Menlo Park CA 94025 USA

Applicant's name : Velodyne Acoustics, Inc.
Address : 345 Digital Drive
Morgan Hill, CA 95037 USA

Test specification:
Standard : IEC 60825-1:2014 (Third Edition)
Test procedure..... : CB Scheme
Non-standard test method..... : N/A

Test Report Form No..... : IEC60825_1E
Test Report Form(s) Originator : ÖVE
Master TRF : Dated 2014-07

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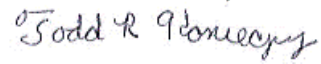
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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory.
The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test item description.....: 3D Real Time LiDAR Puck
Trade Mark.....: Velodyne
Manufacturer: Velodyne Acoustics, Inc.
345 Digital Drive
Morgan Hill, CA 95037 USA
Model/Type reference.....: VLP-16
Ratings.....: Input: 9-32 VDC, 8W
Output: 905 nm, 10mW at 28kHz, 6ns pulse width IPX67

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):		
<input checked="" type="checkbox"/>	CB Testing Laboratory:	Intertek Testing Services NA Inc.
Testing location/ address		1365 Adams Court Menlo Park, CA 94025, USA
<input type="checkbox"/>	Associated CB Testing Laboratory:	N/A
Testing location/ address		
Tested by (name, function, signature)..... :		Charles Patrick Brophy 
Approved by (name, function, signature) .. :		Todd R. Konieczny 
<hr/>		
<input type="checkbox"/>	Testing procedure: TMP/CTF Stage 1:	N/A
Testing location/ address		
Tested by (name, function, signature)..... :		
Approved by (name, function, signature) .. :		
<hr/>		
<input type="checkbox"/>	Testing procedure: WMT/CTF Stage 2:	N/A
Testing location/ address		
Tested by (name, function, signature)..... :		
Witnessed by (name, function, signature) . :		
Approved by (name, function, signature) .. :		
<hr/>		
<input type="checkbox"/>	Testing procedure: SMT/CTF Stage 3 or 4:	N/A
Testing location/ address		
Tested by (name, function, signature)..... :		
Witnessed by (name, function, signature) . :		
Approved by (name, function, signature) .. :		
Supervised by (name, function, signature) :		

List of Attachments (including a total number of pages in each attachment):

Attachment 1: National Differences for (Sweden) 1 page(s)

Attachment 2: Photos 1 page(s)

Summary of testing:**Tests performed****(name of test and test clause):**

5.2 Measurement of laser radiation

Testing location:

Intertek Testing Service NA Inc.

1365 Adams Court

Menlo Park, CA 64025 USA

Summary of compliance with National Differences:**List of countries addressed:** SE **The product fulfils the requirements of IEC60825-1:2014**

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

Laser Safety Warning



Test item particulars	
Classification of installation and use: Mobile	
Supply Connection: 9-32 Vdc, 8W	
.....:	
Possible test case verdicts:	
- test case does not apply to the test object.....: N/A	
- test object does meet the requirement.....: P (Pass)	
- test object does not meet the requirement.....: F (Fail)	
Testing:	
Date of receipt of test item: 2015-08-14	
Date (s) of performance of tests: 2015-08-17 and 2015-10-07	
General remarks:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.	
Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC 60335-1:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies): Velodyne Acoustics, Inc. 345 Digital Drive Morgan Hill, CA 95037 USA	
General product information: Small Real-time LiDAR, providing 360°, 3D distance and calibrated reflectivity measurements and supports 16 channels, ~300,000 points/sec, a 360° horizontal field of view and a 30° vertical field of view, with +/- 15° up and down.	