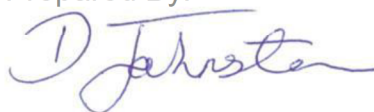


Commercial in Confidence

Test Laboratory	HORIBA MIRA Ltd
Date of Report	04/08/2017
Client	Pudsey Diamond Engineering Limited
Test Item	Flexaboll Bollard
Date of Test	06/06/2017
Test Number	T0240
Report Number	1214547-002-01
Test Type	Vehicle Impact to EN12767-2007 Non-harmful Support Structures Speed Class 50 High Speed
Number of Pages	23
Test Report Language	English

Prepared By:



Dave Johnstone
Senior Engineer

Approved By:



Rachael Kennedy
Head of Test DeliveryDate: 18th August 2017

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5.3 Description of Test Item Damage

The front face of the bollard showed some paint transfer from the impact but there was no structural damage to the bollard. The reflective decals did not delaminate from the bollard. There were a few minor scratches and scuffs from the impact.

The post-test angle and height were not measured, as it was clear the bollard had returned fully back to its original position following the test. The fixings and foundation were still intact with no visible damage or movement.

5.4 Description of Test Vehicle Damage

There was no structural damage to the vehicle during the test. The only visible damage was a broken license plate screw and some minor scuffs to the bumper paint work.

5.5 Assessment of the impact severity

5.5.1 General

Graphs of vehicle accelerations, angular velocities and severities are included in Annex B

5.5.2 Impact test acceptance criteria

Assessment of Impact Severity:	
Acceleration Severity Index (ASI):	0.0
Acceleration Severity Index Rating (ASI)	A
Energy Absorption category	50 / Non-Energy Absorbing (NE) 4
Theoretical head impact velocity (THIV): (km/h)	2.7
Post-impact head deceleration (PHD): (g)	0.3

6 General statements

The test results in this report relate only to the item tested.

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7 Approval of report

See front cover.