Environmental Tests on Signal Lights

For
Federal Signal
2645 Federal Signal Drive
University Park, IL 60466

P.O. Number
1316658 - ON

Date Tested
10/17/2018 – 10/19/2018

Test Personnel
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Test Specification
ISO 20653

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## 1. REPORT REVISION HISTORY

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>November 1, 2018</td>
<td>Initial release</td>
</tr>
</tbody>
</table>
2. **Introduction**

This document presents the results of a series of environmental (ENV) tests that were performed on 3 Signal Lights (hereinafter referred to as the Device Under Test (DUT)). The DUTs were identified as follows:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Serial Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part ID: Model FB2PST</td>
<td>S/N 1</td>
</tr>
<tr>
<td>Part ID: Model 27XL</td>
<td>S/N 1</td>
</tr>
<tr>
<td>Part ID: Model LP3P</td>
<td>S/N 1</td>
</tr>
</tbody>
</table>

3. **Test Specification**

The tests were performed in accordance with ISO 20653.

4. **Modifications Made to DUT and/or Deviations to Specification During Testing**

No modifications were made to the DUTs during the testing. No deviations from the specification were made during the testing.

5. **Summary**

The following ENV tests were performed and their results are shown below:

<table>
<thead>
<tr>
<th>Test Description</th>
<th>Specification Section</th>
<th>Test Results</th>
<th>S/N</th>
<th>Date Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust IP6K</td>
<td>ISO 20653 IP6K</td>
<td>Compliant</td>
<td>1, 1, 1</td>
<td>10/17/2018</td>
</tr>
<tr>
<td>Pressure Spray IPX9K</td>
<td>ISO 20653 IPX9K</td>
<td>Compliant</td>
<td>1, 1, 1</td>
<td>10/19/2018</td>
</tr>
</tbody>
</table>

6. **Operation States**

The ENV tests were performed with the DUTs operating in one or more of the test modes described below.

6.1. Unpowered

The DUTs were unpowered for the duration of the tests.

7. **Performance Monitoring**

No monitoring was required during the tests.

8. **Acceptance Criteria**

1) The DUTs shall satisfactorily withstand exposure to dust without physical damage or dust intrusion.
2) The DUTs shall satisfactorily withstand exposure to a pressurized stream of water without physical damage or water intrusion.

9. **Test Method**

The tests were performed using the referenced methods described in ISO 20653.

10. **Certification**

Elite Electronic Engineering Incorporated certifies that the information contained in this report was obtained under conditions which meet or exceed those specified in the test specifications. The data presented in this test report pertains to the DUTs at the test date as operated and monitored if required. Any electrical or mechanical modification made to the DUTs subsequent to the specified test date will serve to invalidate the data and void this certification.