



## Environmental Tests on (2) Signal Lights and (1) Siren

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For	Federal Signal 2645 Federal Signal Drive University Park, IL 60466
P.O. Number	1381638 - ON
Date Tested	4/3/2019 – 4/5/2019
Test Personnel	Alex Dolecki
Test Specification	ISO 20653

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### 1. REPORT REVISION HISTORY

Revision	Date	Description
-	April 24, 2019	Initial release

## 2. INTRODUCTION

This document presents the results of a series of environmental (ENV) tests that were performed on (2) Signal Lights and (1) Siren (hereinafter referred to as the Device Under Test (DUT)). The DUTs were identified as follows:

Part Number	Serial Number
Part ID: 302GCX	S/N 1
Part ID: 121S	S/N 1
Part ID: 371LED	S/N 1

## 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:

Test Description	Specification Section	Test Results	S/N	Date Tested
Dust IP6K	ISO 20653 IP6K	Compliant	1, 1, 1	4/3/2019
Pressure Spray IP9K	ISO 20653 IP9K	Compliant	1, 1, 1	4/4/2019 – 4/5/2019

## 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.