



Environmental Tests on Visual Signals

For Federal Signal
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P.O. Number 1310661 - ON
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Test Specification ISO 20653

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1. REPORT REVISION HISTORY

Revision	Date	Description
-	October 19, 2018	Initial release

2. INTRODUCTION

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

Part Number	Serial Number
Part ID: 225XL	S/N 1
Part ID: USIX	S/N 1
Part ID: G-STR	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	Pass	1, 1, 1	9/22/2018
Pressure Spray IPX9K	ISO 20653, IPX9K	Pass	1, 1, 1	9/30/2018

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

DUTs were unpowered for the duration of the testing.

7. PERFORMANCE MONITORING

The DUTs were inspected visually for damage, water or dust ingress.

8. ACCEPTANCE CRITERIA

1. There must be no damage to the DUTs or dust ingress in the samples after the completion of the Dust IP6K test.
2. There must be no damage to the DUTs or water ingress in the samples after the completion of the Pressure Spray IPX9K test.

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.