




Environmental Tests on Signaling Lights

For	Federal Signal Corporation 2645 Federal Signal Drive University Park, IL 60466
P.O. Number	1528984-ON
Date Tested	5/7-12/2020
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Test Specification	ISO 20653 2nd Ed Feb 2013

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1. REPORT REVISION HISTORY

Revision	Date	Description
–	May 15, 2020	Initial release
A	June 1, 2020 By Brady Powers	<ul style="list-style-type: none">– Changed report number to 2002218-01 Rev. A in the header of each page and the title page.– Changed number of samples from 3 to 2 in Section 2 Introduction.– Removed sample LHWB in Section 2 Introduction.– Section 5: Changed results of Pressure Spray IP9K to 'Compliant'.– Section 11: Removed DUT photograph of sample LHWB.– Section 12.1.4: Adjusted results to present the results of only samples CP-BG and CP-PB. The results from sample LHWB were removed. Removed photographs of sample LHWB.– Section 12.2.4: Removed photographs of sample LHWB. Changed Pressure/Temperature/Flow chart to two separate graphs. The first graph is now a pressure/flow graph with a note for the test duration and the second graph is a water temperature graph with a note for the test duration.

2. INTRODUCTION

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

Part ID: CP-BG	S/N 1
Part ID: CP-PB	S/N 1

3. TEST SPECIFICATION

The tests were performed in accordance with ISO 20653 2nd Ed Feb 2013.

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 the results are shown below:

Test Description	Specification Section	Test Results	S/N	Date Tested
IP6K Dust-Tight	ISO 20653 2nd Ed Feb 2013 Section 5 IP6K	Compliant	1, 1	5/7-8/2020
Pressure Spray IPX9K	ISO 20653 2nd Ed Feb 2013 Section 6 IPX9K	Compliant	1, 1	5/12/2020

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 throughout the testing.

7. PERFORMANCE MONITORING

The DUTs were not monitored during the testing.

8. ACCEPTANCE CRITERIA

IP6K Dust-Tight – The DUTs must satisfactorily withstand dust testing without dust intrusion.

Pressure Spray IPX9K – The DUTs must satisfactorily withstand pressure spray testing without water intrusion.

9. TEST METHOD

The tests were performed using the referenced methods described in ISO 20653 2nd Ed Feb 2013.

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, except if noted otherwise. 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.