

ABC Marketing
4800 Eastland Drive
Elkhart, IN 46516
Phone (574)293-9399 Fax (574)293-5801

TEST REPORT 151110-1225952

Report Date: 10 November 2015
Test Component: ABC Marketing 1225952 11-LED
Stop/Turn and Tail Lamp (Red Lens)
Devices Tested: Three (3) each submitted 24 October 2015

Test Summary (FMVSS-108)

Photometric Tests – Stop/Turn and Tail Lamp

FMVSS-108 Stop/Turn and Tail Lamp	PASSED
SAE J585e (Tail Lamp)	PASSED
SAE J1398 (Stop Lamp > 80" Wide)	PASSED
Mechanical Tests per SAE J575e	PASSED
Vibration	PASSED
Moisture	PASSED
Thermal	PASSED
Durability	PASSED
LED Life	PASSED
Color (SAE J578c)	PASSED
Dimensional Tests	PASSED
Socket Tests per SAE J567b	Not Applicable
Dimensional Tests	PASSED

Signature of responsible engineer:



Gary I. Robin

DESCRIPTION SHEET

Device Name: ABC Marketing 1225952 11-LED
Stop/Turn and Tail Lamp (Red Lens)

Markings:

Lens: "DOT ISTP214
Housing: None

Lens Information:

Material: Polycarbonate (Red transparent)
Shape/Dimensions: 393 mm L x 31 mm W x 11mm H
Attachment Method: Vibration welded to body
Gasket: None

Housing:

Material: Polycarbonate (Black)
Shape/Dimensions: 393 mm L x 31 mm W x 17 mm H
Attachment Method: Vibration welded to lens
Gasket: 23 mm L x 20 mm W x 2 mm H

BULB	FUNCTION	QUANTITY	VOLTAGE
LED	IST	11	12.8/14V

Note: lens complies with SAE J576 JUL 91 requirements as specified in FMVSS 108.

TEST RESULT SHEET

Device Name: ABC Marketing 1225952 11-LED
Stop/Turn and Tail Lamp (Red Lens)

Photometric Tests:

Specification(s): FMVSS-108 (SAE J592e)
Tests performed by: Gary I. Robin

Results: Meets requirements at all points for:

SAE J585e (Tail Lamp)
SAE J1398 (Stop Lamp \geq 80" Wide)

LENS AREA REQUIREMENTS

The effective projected illuminated area of the stop/turn signal compartment equals 99.9 cm² (required \geq 50cm² per FMVSS 108 S5.1.1.26, \geq 75 cm² per J1395/J1398).

The minimum unobstructed projected illuminated area at 45° outboard of the stop/turn compartment exceeds 12.5cm² (required \geq 12.5cm² per SAE J586/J588/J1395/J1398).

The minimum unobstructed projected illuminated area at 45° outboard of the tail compartment exceeds 12.5cm² (required \geq 12.5cm² per SAE J585e).

Bulb socket requirements – SAE J567b:

The bulb socket requirements are not applicable because the lamp is a sealed unit.

TEST RESULT SHEET

Device Name: ABC Marketing 1225952 11-LED
Stop/Turn and Tail Lamp (Red Lens)

Mechanical tests: SAE J575e
Test performed by: Gary I. Robin
Sample: 1

Vibration test (Shock test).

There was no evidence of material physical weakness, lens or reflector rotation, displacement or rupture of components. LEDs were not damaged.

PASSED

Moisture Test:

Lamp had 0cc of moisture accumulation inside of its cavity (≤ 2 cc required).

PASSED

Dust Test:

No dust was found on the interior surfaces of the device. The maximum candlepower after external cleaning was at least 100% of the HV candlepower prior to exposure.

NOT REQUIRED

Corrosion Test:

There was no evidence of excessive corrosion which would affect the proper functioning of the device.

NOT REQUIRED

Thermal Test:

There was no evidence of reduced function from temperature or humidity.

PASSED

PASSED

Durability Test:

PASSED

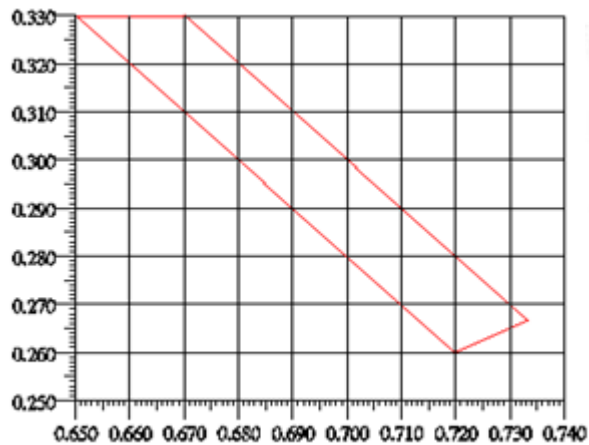
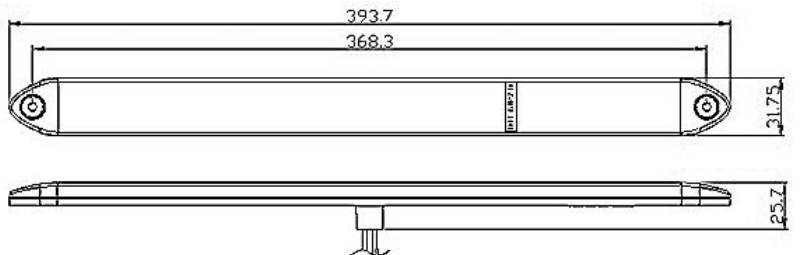
LED Life Test:

Lamp is not blinking, blackening or shutting off after 1000 hrs.

PASSED

TEST DATA SHEET

Device Name: ABC Marketing 1225952 11-LED
Stop/Turn and Tail Lamp (Red Lens)

Test Item	Chroma Test per SAE J578C
Test Date	7/1/2015
Equipment	power Supply, chroma Meter
<p>Test Condition :</p> <p>1. 23~28° C</p> <p>2. Voltage: 14.00 V.</p>	
<p>Test Method :</p> <p>Mount specimen on tooling, chroma test at a distance of 1.5 m using CIE fixture.</p>	
<p>Determined Standard :</p> <p>$Y \leq 0.33$ (yellow boundary)</p> <p>$Y \geq 0.98 - X$ (purple boundary)</p>	
<p>Test Result :</p> <p>X=0.707 Y=0.293</p>	
	

Result: PASSED SAE J578C color test

By:

Gary I. Rubin

PHOTOMETRIC TEST DATA SHEET

Device Name: ABC Marketing 1225952 11-LED
Stop/Turn and Tail Lamp (Red Lens)

Sample number: #3
Specification: SAE J585e FMVSS 108 (Tail Lamp)

Voltage: 14.00V/ Current: 0.020A

Location	CP Measured	Req Min CP	Req Max CP	Zone
10U 5L	3.82	1	25	1
10U 5R	4.10	1	25	5
5U 20R	3.60	0.7	25	5
5U 10R	9.68	2	25	4
5U V	6.59	4.5	25	3
5U 10L	3.85	2	25	2
5U 20L	2.85	0.7	25	1
H 10L	4.57	2	25	2
H 5L	5.89	5	25	3
H V	7.27	5	25	3
H 5R	7.51	5	25	3
H 10R	6.35	2	25	4
5D 20R	3.64	0.7	-	5
5D 10R	9.68	2	-	4
5D V	10.68	4.5	-	3
5D 10L	5.39	2	-	2
5D 20L	2.94	0.7	-	1
10D 5L	6.88	1	-	1
10D 5R	16.07	1	-	5

Zone	Candela	Req Min
1	16.50	3.4
2	13.82	6
3	37.95	24
4	20.28	6
5	27.42	3.4

Device meets requirements at all points.

By:

Gay Rubin

PHOTOMETRIC TEST DATA SHEET

Device Name: ABC Marketing 1225952 11-LED
Stop/Turn and Tail Lamp (Red Lens)

Sample number: #3
Specification: SAE J586 / J1398 (Stop Lamp) // SAE J588 / J1395 (Turn Signal Lamp)

Voltage: 12.80V/ Current: 0.190 A

Location	CP Measured	Req Min CP	Req Max CP	Zone
10U 5L	40.22	16	300	1
10U 5R	40.13	16	300	5
5U 20R	37.81	10	300	5
5U 10R	40.35	30	300	4
5U V	72.65	70	300	3
5U 10L	40.86	30	300	2
5U 20L	30.71	10	300	1
H 10L	49.09	40	300	2
H 5L	65.46	80	300	3
H V	76.70	80	300	3
H 5R	83.27	80	300	3
H 10R	69.44	40	300	4
5D 20R	36.40	10	300	5
5D 10R	102.77	30	300	4
5D V	109.35	70	300	3
5D 10L	53.70	30	300	2
5D 20L	29.90	10	300	1
10D 5L	66.74	16	300	1
10D 5R	156.05	16	300	5

Zone	Candela	Req Min
1	167.57	52
2	143.66	100
3	407.43	380
4	212.56	100
5	270.38	52

Device meets requirements at all points.

By:



Reviewed and approved for submittal by:

A handwritten signature in black ink that reads "Gary I. Robin". The signature is written in a cursive style with a large initial "G" and "R".

Gary I. Robin
Responsible Engineer

November 11, 2015