ABC Marketing, Inc.

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

TEST REPORT 130528-3206731

Report Date: 28 May 2013

Test Component: ABC Marketing 3206731 Yellow 1-composite LED

Clearance/Sidemarker/ID lamp (P2)

Devices Tested: Three (3) each submitted 20 May 2013

Test Summary (FMVSS-108)

Photometric Tests - Marker Lamp

SAE J592e (Marker Lamp- P2) PASSED

Mechanical Tests per SAE J575e PASSED Color Tests per SAE J578c PASSED

Socket Tests per SAE J567b Not Applicable Dimensional Tests Not Applicable

Signature of responsible engineer:

Say / Robin

DESCRIPTION SHEET

Clearance/Sidemarker/ID lamp (P2)

Markings:

Lens: "SAE DOT P2 13(cav no.) STELLAR"

Housing: None

Lens Information:

Material: PMMA (Yellow)

Shape/Dimensions: Cylindrical, 19 mm Diameter x 17 mm Deep

Attachment Method: None Gasket: None

Housing: None

BULB	FUNCTION	QUANTITY	TYPE	VOLTAGE
LED	P2 (Amber)	1 composite	SMD	14V

Lens complies with SAE J576 JUL 91 requirements as specified in FMVSS 108.

Clearance/Sidemarker/ID lamp (P2)

Photometric Tests:

Specification(s): FMVSS-108 (SAE J592e)

Tests performed by: Gary I. Robin

Results: Meets requirements at all points for:

100 feet

SAE J592e (Marker Lamp – P2)

Mounting requirements:

Test distance:

Lamp must be mounted parallel to the vehicle longitudinal or lateral axis and may be rotated to any position about the lamp axis.

be rotated to any position about the famp a

Photometry test voltage: 14.00V

Lens area requirements:

Lamp is a marker lamp.

Lens Area requirements are not applicable.

Bulb socket requirements – SAE J567b:

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

Clearance/Sidemarker/ID lamp (P2)

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

Sample: 2

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

(≦2cc 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: PASSED

There was no evidence of reduced function from

temperature or humidity. PASSED

Durability Test: PASSED

LED Life Test:

Lamp is not blinking, blackening or shutting off after

1000 hrs. PASSED

TEST DATA SHEET

Clearance/Sidemarker/ID lamp (P2)

Test Item	Chroma Test per SAE J578C		
Test Date	5/20/2013		
Equipment	power Supply, chroma Meter		

Test Condition:

- 1. 23~28° C
- 2. Voltage: 14.00 V.

Test Method:

Mount specimen on tooling, chroma test at a distance of 1.5 m using CIE fixture.

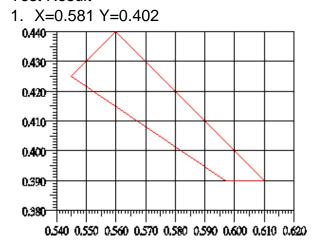
Determined Standard:

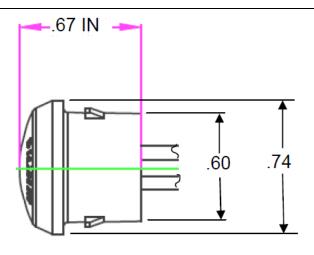
Y≧0.39 (red boundary)

 $Y \ge 0.79 - 0.67X$ (white boundary)

Y≦X-0.12 (green boundary)

Test Result:





Result: PASSED SAE J578C color test

Day 1 Palmi

By:

PHOTOMETRIC TEST DATA SHEET

Clearance/Sidemarker/ID lamp (P2)

Sample number: 1

Specification:

SAE J592e (Yellow Clearance, ID or Sidemarker Lamp (P2)

Location	Measured CP	Required Min CP	
10U 45L	1.226	0.62	
10U V	1.719	0.62	
10U 45R	1.086	0.62	
H 45R	1.149	0.62	
HV	1.641	0.62	
H 45L	0.948	0.62	
10D 45L	1.057	0.62	
10D V	1.519	0.62	
10D 45R	0.972	0.62	

Device meets SAE J592e P2 requirements at all points.

Voltage: 14.0 V (Device tested after 30 minute warm-up)

Current: 26.0 mA

Aim: Lamp mounted perpendicular to HV

By:

Reviewed and approved for submittal by:

Day 1 Parlini

Gary I. Robin

Responsible Engineer

Day 1 Palmi

May 28, 2013