ABC Marketing, Inc.

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

TEST REPORT 121220-321811

Report Date: 20 December 2012

Test Component: ABC Marketing 321811 Yellow 3-LED Clearance/Sidemarker/ID

lamp (P2) or Combination Clearance/Sidemarker Lamp (PC)

Devices Tested: Three (3) each submitted 06 December 2012

Test Summary (FMVSS-108)

Photometric Tests - Marker Lamp

SAE J592e (Marker Lamp- P2) PASSED SAE J592e (Marker Lamp- PC) PASSED

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

Socket Tests per SAE J567b Not Applicable Dimensional Tests Not Applicable

Day 1 Parlin

Gary I. Robin

Signature of responsible engineer:

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DESCRIPTION SHEET

Device Name: ABC Marketing 321811 Yellow 3-LED

cleararance/sidemarker/ID lamp (P2) or combination

clearance/sidemarker lamp (PC)

Markings:

Lens: "SAE PCP2 06", "TOP"

Housing: None

Lens Information:

Material: PMMA (Yellow)

Shape/Dimensions: Cylindrical, 18.8 mm Diameter x 24.4mm Deep

Attachment Method: None Gasket: None

Housing: None

BULB FUNCTION QUANTITY TRADE NO. VOLTAGE FLUX

LED P2/PC (Amber) 3 LYE6SF-BABB-46 SMD 14V N/A

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

TEST RESULT SHEET

Device Name: ABC Marketing 321811 Yellow 3-LED

cleararance/sidemarker/ID lamp (P2) or Combination

clearance/sidemarker lamp (PC)

Photometric Tests:

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

Tests performed by: Gary I. Robin

Results: Meets requirements at all points for:

SAE J592e (Marker Lamp – P2) SAE J592e (Marker Lamp – PC)

Mounting requirements:

Lamp must be mounted at a 45° angle to the vehicle longitudinal or lateral axis (i.e. at a diagonal at the corners).

Test distance: 100 feet

Photometry test voltage: 14.00V

Len 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.

TEST RESULT SHEET

Device Name: ABC Marketing 321811 Yellow 3-LED

cleararance/sidemarker/ID lamp (P2) or combination

clearance/sidemarker lamp (PC)

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

(\leq 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

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

Device Name: ABC Marketing 321811 Yellow 3-LED

cleararance/sidemarker/ID lamp (P2) or combination

clearance/sidemarker lamp (PC)

Test Item	Chroma Test per SAE J578C
Test Date	2012/12/06
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.

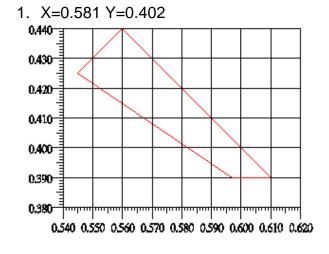
Determined Standard:

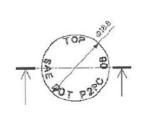
Y≥0.39 (red boundary)

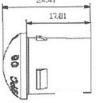
 $Y \ge 0.79 - 0.67X$ (white boundary)

Y≦X-0.12 (green boundary)

Test Result:













Result: PASSED SAE J578C color test

Day 1 Parlin

By:

PHOTOMETRIC TEST DATA SHEET

Device Name: ABC Marketing 321811 Yellow 3-LED

cleararance/sidemarker/ID lamp (P2) or Combination

clearance/sidemarker lamp (PC)

Sample number: 1

Specification:

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

SAE J592e (Yellow Combination Clearance and Sidemarker Lamp-PC)

	Measured	Required	
Location	CP	Min CP	
10U 90L	1.282	0.62	
10U 45L	2.461	0.62	
10U V	1.443	0.62	
10U 45R	1.964	0.62	
10U 90R	1.749	0.62	
H 90R	1.308	0.62	
H 45R	1.777	0.62	
HV	1.274	0.62	
H 45L	2.206	0.62	
H 90L	0.898	0.62	
10D 90L	0.798	0.62	
10D 45L	1.949	0.62	
10D V	1.125	0.62	
10D 45R	1.444	0.62	
10D 90R	0.934	0.62	

Device meets SAE J592e P2 and PC requirements at all points.

Voltage: 14V (Device tested after 30 minute warm-up)

Current: 50mA

Day 1 Parlin

Aim: Lamp mounted perpendicular to HV with "SAE" markings upright.

By:

Reviewed and approved for submittal by:

Gary I. Robin

Responsible Engineer

Day 1 Palmi

December 20, 2012