

ABC Marketing

4800 Eastland Drive Elkhart, IN 46516

Phone (574)293-9399 Fax (574)293-5801

TEST REPORT 140723-5211403

Report Date: July 23, 2014

Test Component: ABC Marketing 5211403 LED License Plate Lamp (L)

Devices Tested: Three (3) Submitted May 23, 2014

TESTS (FMVSS-108) SUMMARY

Photometric Tests: LED License Plate Lamp

SAE J587e (License Lamp (L)): PASSED

Mechanical Tests: SAE J575e: PASSED Color Tests: SAE J578c: PASSED

Socket Tests: SAE J567b: NOT APPLICABLE Dimensional Tests: SAE J567b: NOT APPLICABLE

Responsible Engineer: Gary I. Robin

DESCRIPTION SHEET

Test Component: ABC Marketing 5211403 LED License Plate Lamp (L) "DOT-(2)L-94 MARKINGS: COVER: LENS: None HOUSING: None PC (Clear) LENS: MATERIAL: COATING: None 36.5 mm x 14.9 mm SHAPE/DIMENSIONS: METHOD OF ATTACHMENT: Snap-fit GASKET: None HOUSING: MATERIAL: **Brass** SHAPE/DIMENSIONS: 38.1 mm x 32 mm METHOD OF ATTACHMENT: Surface mounted **GROMMET MATERIAL**: Black EPEM BULB QUANTITY **FUNCTION** SOURCE **VOLTAGE** USED: L 4 LED 14V

TEST RESULT SHEET

Test Component: ABC Marketing 5211403 LED License Plate Lamp (L)

PHOTOMETRIC TESTS

Specification (s): FMVSS-108 (SAE J587)

Tests performed by: Gary I. Robin

Meets requirements at all points for: SAE J587e (License Plate Lamp – L)

Test distance: 150 feet

All photometry tests performed at 14.00V

LENS AREA REQUIREMENTS

Lamp is a License Plate lamp - lens area requirements are not applicable.

BULB SOCKET REQUIREMENTS – SAE J567b

Lamp is a sealed unit- the bulb socket requirements are not applicable.

TEST RESULT SHEET

Test Component: ABC Marketing 5211403 LED License Plate Lamp (L)

MECHANICAL TESTS: SAE J575e
Tests performed by: Gary I. Robin

Sample: 3

Vibration Test (Shock test): PASSED

There was no evidence of material physical weakness, lens or reflector rotation, displacement or rupture of parts.

Moisture Test (Standard Rain Test): PASSED

The device had 0cc of moisture accumulation inside device. (\leq 2cc Required).

Dust Test: PASSED

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.

Thermal Test: PASSED

There was no evidence of inferior function by temperature & humidity.

Durability Test: PASSED

LED Life Test: PASSED

TEST DATA SHEET

Test Component: ABC Marketing 5211403 LED License Plate Lamp (L)

Test Item	Chroma Test									
	May 27, 2014									
	Power Supply, Chroma Meter									
Test Condition:										
1. Normal indoor temperature (23~28) °C										
2. Voltage: 14.0 V.										
Test Method:										
Install test lamp on tooling, test from a distance of 1.5 m using chroma test in CIE fixture										
Determined Standard:	Determined Standard:									
X>0.31 Y<0.44										
	X<0.5 Y>0.38									
Y=0.15+0.64X Y=0.05+0.75X										
Test Result:										
.X=0.350 Y=0.336										
O.400 O.300 O.350	0.400 0.450 0.500	38.2	Brown 3 White 355±6.35							
Status: OK■ NO	G[]									
Confirmed by:	Gary I. Robin	Made by:	Gary I. Robin							

PHOTOMETRIC TEST DATA SHEET

Test Component: ABC Marketing 5211403 LED License Plate Lamp (L)

Sample number: #3

Specification: SAE J587e (License Plate Lamp)

Test date: May 27, 2014

BLUB TYPE		LED			(Color		nite		
RULE		SAE J587			SIZE		300x150 mm			
Test distance	1.5M		Voltage		14V		Current		0.07A	
	A=	9.63	B=	35.64	C=	33.24	D=	11.46		
	E=	3.98	F=	11.47	G=	10.37	H=	4.52		
Luminance TEST										
Unit			Requirement			Test Value				
cd/m ²			2 ↑			3.98				
Result				OK						
•										
Ratio of maximum to minimum Luminance										
Max/Min					Ratio					
20↓					14.9					
Result				OK						
Remarks:										
Tested by: Gary I. Robin										

Reviewed and approved for submittal by:

Gary I. Robin

Responsible Engineer

Day 1 Rolini

July 23, 2014