

**ABC Marketing**

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**TEST REPORT 151002-2228441**

Report Date: 2 October 2015

Test Component: ABC Marketing 2228441 Yellow 7 LED 4-Inch Round, Rear Turn  
Signal Lamp (I) with reflex mounting flange

Devices Tested: Two (2) each submitted 4 September 2015

**Test Summary (FMVSS-108)**

Photometric Tests – Turn Signal Lamp

SAE J1395

PASSED

Mechanical Tests - SAE J575e

PASSED

Color Tests – SAE J578c

PASSED

Socket Tests – SAE J567b

NOT APPLICABLE

Dimensional Tests

NOT APPLICABLE

Signature of responsible engineer:



Gary I. Robin

## DESCRIPTION SHEET

Device Name: ABC Marketing 2228441 Yellow 7 LED 4-Inch Round, Rear Turn Signal Lamp (I) with reflex mounting flange

### MARKINGS:

Lens: "SAE DOT I P 14"  
Flange: "SAE A 06 DOT"

LENS: Material: Acrylic (Yellow)  
Shape/Dimensions: Round, 107 mm D  
Attachment Method: Vibration Weld  
Gasket: None

FLANGE: Material: Acrylic (Red)  
Shape/Dimensions: Round 135 mm  
Attachment Method: Ultrasonic Weld

HOUSING: Material: ABS  
Shape/Dimensions: Round, 109 mm D  
Electrical Attachment: Leads  
Gasket: None

BULB	FUNCTION	QUANTITY	VOLTAGE
LED	I	7	12.8

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Complies with SAE J576b requirements as specified in FMVSS 108 S6.2

## TEST RESULT SHEET

Device Name: ABC Marketing 2228441 Yellow 7 LED 4-Inch Round, Rear Turn Signal Lamp (I) with reflex mounting flange

### PHOTOMETRIC TESTS

Specification (s): FMVSS-108 (SAE J592)

Tests performed by: Gary I. Robin

Results: Meets requirements at all points for:  
SAE J1395 (Rear turn lamp)

Test distance: 100 feet

Photometry tests performed at 12.8V

### LENS AREA REQUIREMENTS

Rear turn signal light area requirements: 7500 mm<sup>2</sup> (minimum)  
7780 mm<sup>2</sup> (actual)

### BULB SOCKET REQUIREMENTS – SAE J567b

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

## TEST RESULT SHEET

Device Name: ABC Marketing 2228441 Yellow 7 LED 4-Inch Round, Rear Turn Signal Lamp (I) with reflex mounting flange

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 deterioration, displacement or rupture of components. LEDs were not damaged.

PASSED

### Moisture Test:

Lamp had 0cc of moisture accumulation inside of its cavity ( $\leq 2$ cc required). The maximum luminous intensity after external cleaning was at least 100 percent of the intensity prior to exposure.

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 2228441 Yellow 7 LED 4-Inch Round, Rear Turn Signal Lamp (I) with reflex mounting flange

Sample : #1

Test Item	Chromaticity Test per SAE J578C
Test Date	7/29/2015
Equipment	power supply, chromaticity meter
Test Conditions:	
<ol style="list-style-type: none"> <li>1. Normal ambient ( 25~30 °C)</li> <li>2. Voltage: 12.8 V.</li> </ol>	
Test Method:	
Mount specimen on fixture. Perform chromaticity test at a distance of 1.5 m using CIE fixture.	
Determined Standard:	
$Y \geq 0.39$ ( red boundary ) $Y \geq 0.79 - 0.67X$ (white boundary) $Y \leq X - 0.12$ ( green boundary )	
Test Result:	
<ol style="list-style-type: none"> <li>1. X=0.582 Y=0.412</li> </ol>	

Result: Passed SAE J578C color test

By:

Gay / Rubin

## REFLEX TEST DATA SHEET

Device Name: ABC Marketing 2228441 Yellow 7 LED 4-Inch Round, Rear Turn  
Signal Lamp (I) with reflex mounting flange

Specification: SAE J594f (Red Reflex Reflector)

Location	CP Measured	Req'd Min CP
10U V .2z	7.082	3
H 20L .2z	3.898	1.5
H V .2z	9.999	4.5
H 20R .2z	3.426	1.5
10D V .2z	7.094	3
10U V 1.5Z	0.042	0.05
H 20L 1.5Z	0.038	0.03
H V 1.5Z	0.153	0.07
H 20R 1.5Z	0.086	0.03
10D V 1.5Z	0.089	0.05

Result: Passed SAE J594f Reflex Test

By:



## PHOTOMETRIC TEST DATA SHEET

Device Name: ABC Marketing 2228441 Yellow 7 LED 4-Inch Round, Rear Turn Signal Lamp (I)  
with reflex mounting flange

Sample number: #2

Specification: SAE J1395 FMVSS 108 (Rear Turn Signal Lamp [yellow])

Location	CP Measured	Req Min CP	Req Max CP	Zone
10U 5L	70.99	27	750	1
10U 5R	75.10	27	750	5
5U 20R	23.32	15	750	5
5U 10R	76.92	50	750	4
5U V	157.09	110	750	3
5U 10L	72.81	50	750	2
5U 20L	22.65	15	750	1
H 10L	91.37	65	750	2
H 5L	141.60	130	750	3
H V	188.41	130	750	3
H 5R	191.00	130	750	3
H 10R	103.89	65	750	4
5D 20R	23.75	15	-	5
5D 10R	90.94	50	-	4
5D V	164.64	110	-	3
5D 10L	81.21	50	-	2
5D 20L	23.67	15	-	1
10D 5L	84.02	27	-	1
10D 5R	95.29	27	-	5

Zone	Candela	Req Min
1	201.33	84
2	245.39	165
3	842.73	610
4	271.75	165
5	217.46	84

Device meets requirements at all points.

Voltage: 12.8 V / Current: 0.19A

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".

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**Gary I. Robin**

*Responsible Engineer*

October 1, 2015, 2015