

ABC Marketing

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TEST REPORT 150610-31106

Report Date: 10 June 2015

Test Component: ABC Marketing, 31106, 4-inch round incandescent backup lamp

Devices Tested: Three (3) Submitted 4/1/2015

TEST SUMMARY (FMVSS-108)

Photometric Tests - Backup Lamp SAE J593c (Back Up Lamp)

PASSED

PASSED

Mechanical Tests - SAE J575e Color Tests - SAE J578c Socket Tests - SAE J567b Dimensional Tests (All Vehicle Types)

PASSED NOT APPLICABLE

PASSED

Signature of responsible engineer:

Say / Robin

DESCRIPTION SHEET

Device Name: ABC Marketing, 31106, 4-inch round incandescent backup lamp

MARKINGS:

LENS: "DOT IPP2RST 01"

HOUSING: "TOP", "GRND", "TAIL", "STOP&TURN", "12V"

LENS:

MATERIAL: Polycarbonate (Clear)

SHAPE/DIMENSIONS: Round, 105 mm Diameter

94 mm Min Diameter

METHOD OF ATTACHMENT: Sonic Weld to Housing

GASKET: None

HOUSING:

MATERIAL: Polycarbonate (White)

SHAPE/DIMENSIONS: Dome, 108 mm Diameter x 43 mm deep

METHOD OF ATTACHMENT: Sonic Weld to Lens. Attaches to vehicle with

grommet

GASKET: None

BULB:

FUNCTION QUANTITY TRADE NO. VOLTAGE FLUX

R 1 2057 12.8V 32 mscp

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

TEST RESULT SHEET

Device Name: ABC Marketing, 31106, 4-inch round incandescent backup lamp

PHOTOMETRIC TESTS

Specification (s): FMVSS-108 (SAE J593c)

Tests performed by: Gary I. Robin

Meets requirements at all points for:

SAE J593c (Back Up Lamp)

Test distance: 100 feet

All photometry tests performed at 12.80V after 10 minute warm-up (SAE J1889 methodology).

Lamp seasoned 10 hours prior to testing.

LENS AREA REQUIREMENTS

Lens area requirements are not applicable to backup lamps

BULB SOCKET REQUIREMENTS - SAE J567b

Lamp is sealed. Bulb socket requirements are not applicable.

TEST RESULT SHEET

Device Name: ABC Marketing, 31106, 4-inch round incandescent backup lamp

MECHANICAL TESTS: SAE J593 Test performed by: Gary I. Robin

Sample #2

Vibration Test (Shock test): PASSED

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

Moisture Test PASSED

Lamp had 0cc of moisture accumulation inside of the cavity. (\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.

Corrosion Test: PASSED

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

Thermal Test: PASSED

Durability Test: PASSED

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TEST DATA SHEET

Device Name: ABC Marketing, 31106, 4-inch round incandescent backup lamp

| Test Item | Chroma Test |
|-----------|----------------------------|
| Test Date | 5/24/15 |
| Equipment | Power Supply, Chroma Meter |

Test Condition:

1. 25~30

Normal indoor temperature 25-30

2.Voltage: 12.8 V

Test Method:

Attach lamp to tooling, test at a distance of 1.5 m, Chroma Test in CIE fixture.

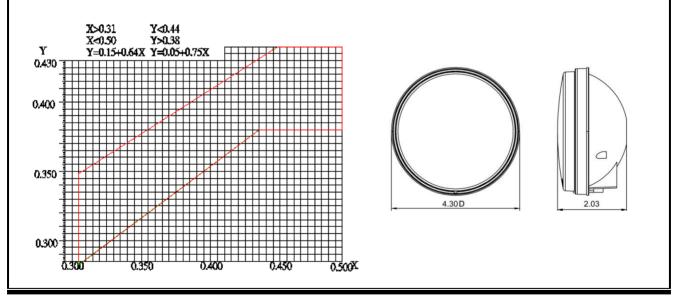
Determined Standard:

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=0.472 Y=0.417



Result: Passed SAE J578C color test

Day 1 Palmi

By:

PHOTOMETRIC TEST DATA SHEET

Device Name: ABC Marketing, 31106, 4-inch round incandescent backup lamp

Sample number: #1 / Specification: SAE J593c (Backup Lamp)

| Volts: 12.8 | Amps:2.15 | Bulb: | 2057 |
|-------------|-----------|-------|------|
|-------------|-----------|-------|------|

| Location | Measured | Min CP | Max CP | Zone |
|----------|----------|---------|---------|--------------|
| 10U 10L | 153 | 10 | 300 | 3 |
| 10U V | 169 | 15 | 300 | 3 |
| 10U 10R | 140 | 10 | 300 | 3 |
| 5U 45R | 53 | 15 | 300 | 6 |
| 5U 10R | 147 | 20 | 300 | 3 |
| 5U V | 194 | 25 | 300 | 3 |
| 5U 10L | 165 | 20 | 300 | 3 |
| 5U 45L | 65 | 15 | 300 | 1 |
| H 45L | 66 | 15 | 300 | 1 |
| H 30L | 98 | 25 | 300 | 2 |
| H 10L | 165 | 50 | 300 | 4 |
| ΗV | 210 | 80 | 300 | 4 |
| H 10R | 146 | 50 | 300 | 4 |
| H 30R | 82 | 25 | 300 | 5 |
| H 45R | 53 | 15 | 300 | 6 |
| 5D 45R | 52 | 15 | - | 6 |
| 5D 30R | 82 | 25 | - | 5 |
| 5D 10R | 139 | 50 | - | 4 |
| 5D V | 174 | 80 | - | 4 |
| 5D 10L | 157 | 50 | - | 4 |
| 5D 30L | 97 | 25 | - | 2 |
| 5D 45L | 66 | 15 | - | 1 |
| | | | | |
| Zone | Candela | Req Min | Req Max | |
| 1 | 197 | 45 | - | |
| 2 | 195 | 50 | - | |
| 3 | 968 | 100 | - | |
| 4 | 991 | 360 | - | |
| 5 | 164 | 50 | - | |
| 6 | 158 | 45 | - | - |

AIM: Mounted perpendicular to H-V. Device meets requirements at all points

Reviewed and approved for submittal by:

Day 1 Palmi

Gary I. Robin

Responsible Engineer

10 June 2015