



INDUSTRIAL TESTING LABORATORY

Report Number: 230405-12A

Page 1 of 6

TEST REPORT

Report Date: 27 April 2023

Project Name: Morimoto BAF122(7 Chip) LED Front Auxiliary Lamp

Submitted by: Morimoto Lighting
Atlanta, GA 30318

Test Laboratory: Calcoast - ITL
San Leandro, CA 94577

Number of
Devices Submitted: One (1) submitted 05 April 2023

SUMMARY

TESTS (SAE)

Photometric Tests -

The lamp was tested for photometric performance through an isoscan range of $\pm 30^\circ V / \pm 35^\circ H$.

See supplemental document "Morimoto BAF122 230405-12A.xlsx"

Color Tests - SAE J578 APR2020.....Passed

Lens Material - SAE J576 AUG2017.....Unknown

Mechanical Tests - SAE J575 APR2021.....Not Tested

Prepared and Authorized by:

Mark A. Evans
Laboratory Director

DESCRIPTION SHEET

Project Name: Morimoto BAF122 (7 Chip) LED Front Auxiliary Lamp

MARKINGS:

LENS: None
 REFLECTOR: N/A
 HOUSING: "M" logo

PARTS DESCRIPTION:

LENS:
 MATERIAL: Clear Polycarbonate with no coating (based on scratch test)
Lens material formulation, pigment, and coating must comply with SAE J576 AUG2017 requirements.

METHOD OF
 ATTACHMENT: Unknown

HOUSING:

MATERIAL: Metal
 METHOD OF
 MOUNTING: Swivel U-bracket to Vehicle
 GASKET: N/A

BULB USED:	FUNCTION	QUANTITY	TRADE NO.	VOLTAGE	MEASURED POWER	FLUX
	Y	7 LED segments	Unknown LEDs	13.2V	111W @ startup 75W @ stabilization	-

PHOTOMETRY SUMMARY SHEET

Project Name: Morimoto BAF122 (7 Chip) LED Front Auxiliary Lamp

PHOTOMETRIC TESTS

Specification(s): SAE

Tests performed by: DGC

Date: 25 April 2023

Lamp mounted on CCITL universal test fixture with fixture placed on level goniometer such that the LED Array was located at the center of rotation and center of tilt.

Lamp face aligned perpendicular to HV using a mirror and laser.

Reference detector control number: NIST P181-2

Test distance: 100 feet

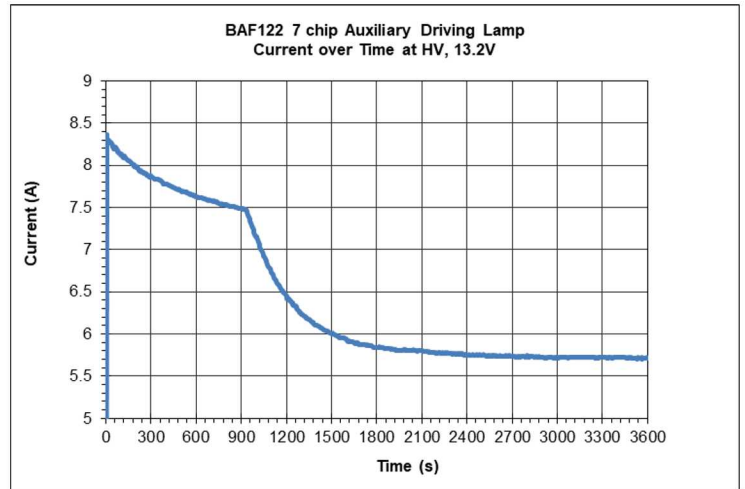
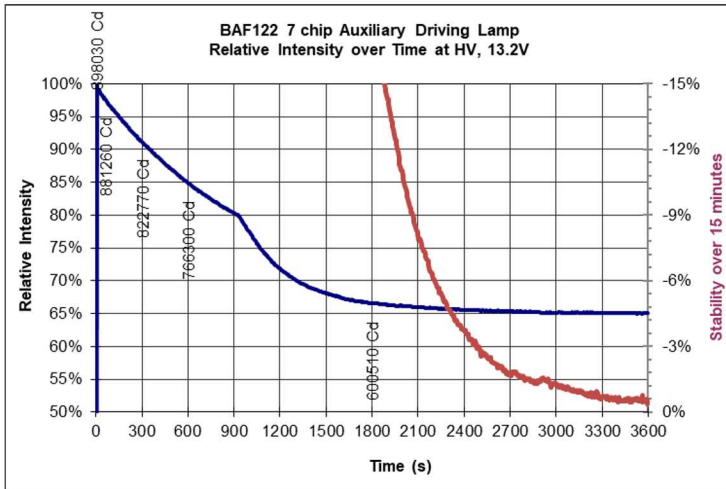
Device uses LED source.

Initial photometry samples were seasoned by the manufacturer prior to testing.

Lamp is voltage insensitive from 12.0V - 14.0V.

Photometry tests ($\pm 30^\circ V / \pm 35^\circ H$ isoscan) performed at 13.2V after stabilization.

TIMELOGS:



Sample required 45 minute stabilization period (<3%/15 min).

TEST DATA SHEET

Project Name: Morimoto BAF122(7 Chip) LED Front Auxiliary Lamp

COLOR TEST:

Requirement: SAE J578 APR2020

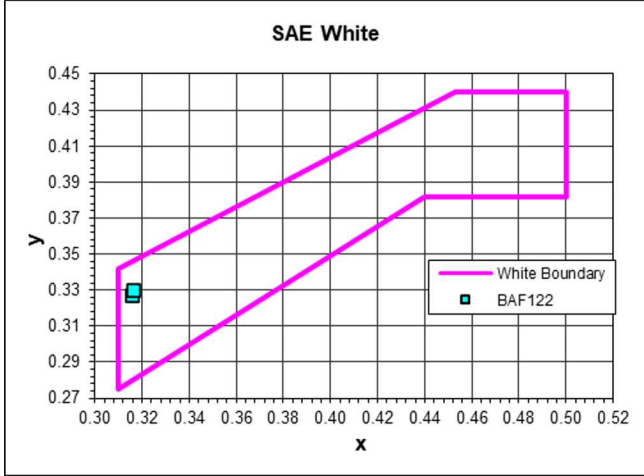
Test Method: Tristimulus Method (Average of 3 reads)

Instrument: Photo Research PR-655 Spectroradiometer with SRS-3 Target

Voltage: 13.2V

Location: H/V

Measured (x,y)				Required & Chart
Auxiliary 13.2V H/V	#1, t=0	0.3157	0.3268	$0.31 \leq x \leq 0.50$ $0.38 \leq y \leq 0.44$ $y \geq 0.75x + 0.05$ $y \leq 0.64x + 0.15$
	#1, t=30	0.3165	0.3297	



The color of the light emitted through the clear lens falls within the acceptable limits for white at all times.

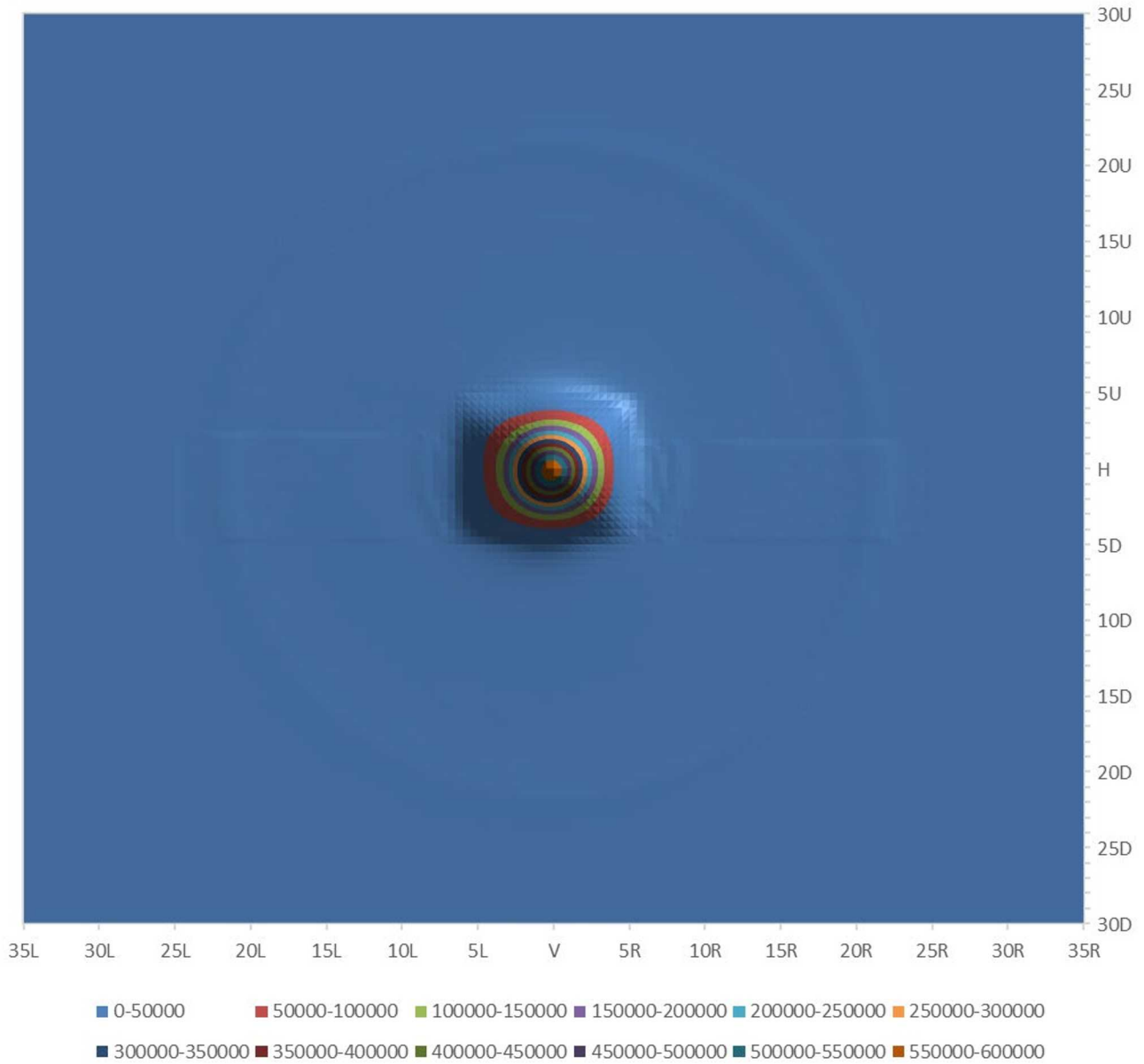
PHOTOMETRIC TEST DATA SHEET

Project Name: Morimoto BAF122 (7 Chip) LED Front Auxiliary Lamp

Sample Number: #1

ISOSCAN (Units Candela)

Intensity



Maximum = 585300.75 (located at HV) after stabilization
Multiply results by 1.305 to get performance at t = 10 minutes

PHOTOGRAPH SHEET

Project Name: Morimoto BAF122 (7 Chip) LED Front Auxiliary Lamp

