Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P318572

Luminaire Tested: **GLEON-SA8C-830-U-T3**

Issue Date: 3/3/2020

Report Generated By E0585644

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P318572
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA8C-830-U-T3
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(8) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	45055 lumens
Efficiency:	N/A
Efficacy:	101.2 lumens/watt
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B4 - U0 - G5

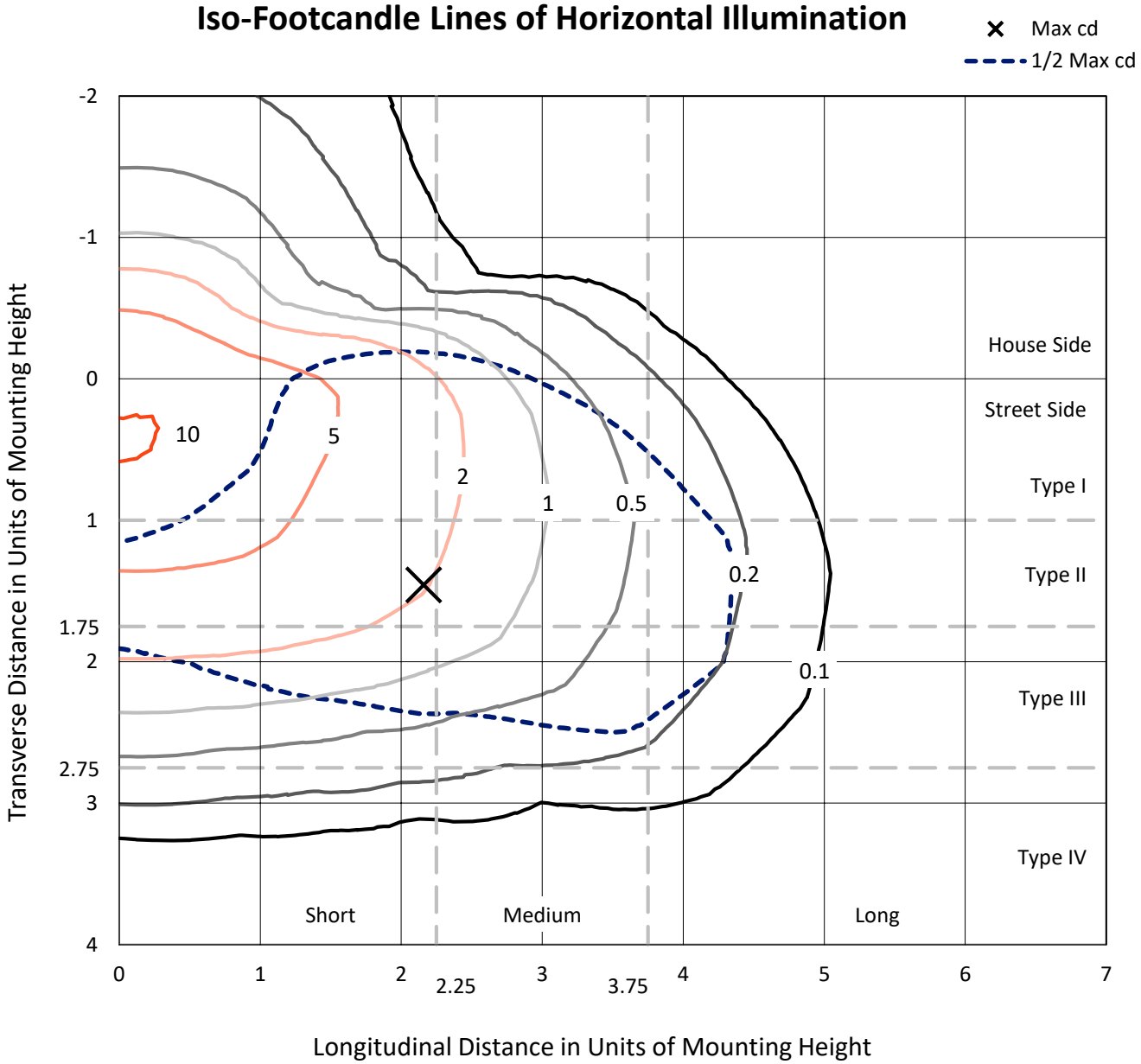
Input Watts (W):	445
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P318572
CATALOG NUMBER: GLEON-SA8C-830-U-T3

Iso-Footcandle Lines of Horizontal Illumination



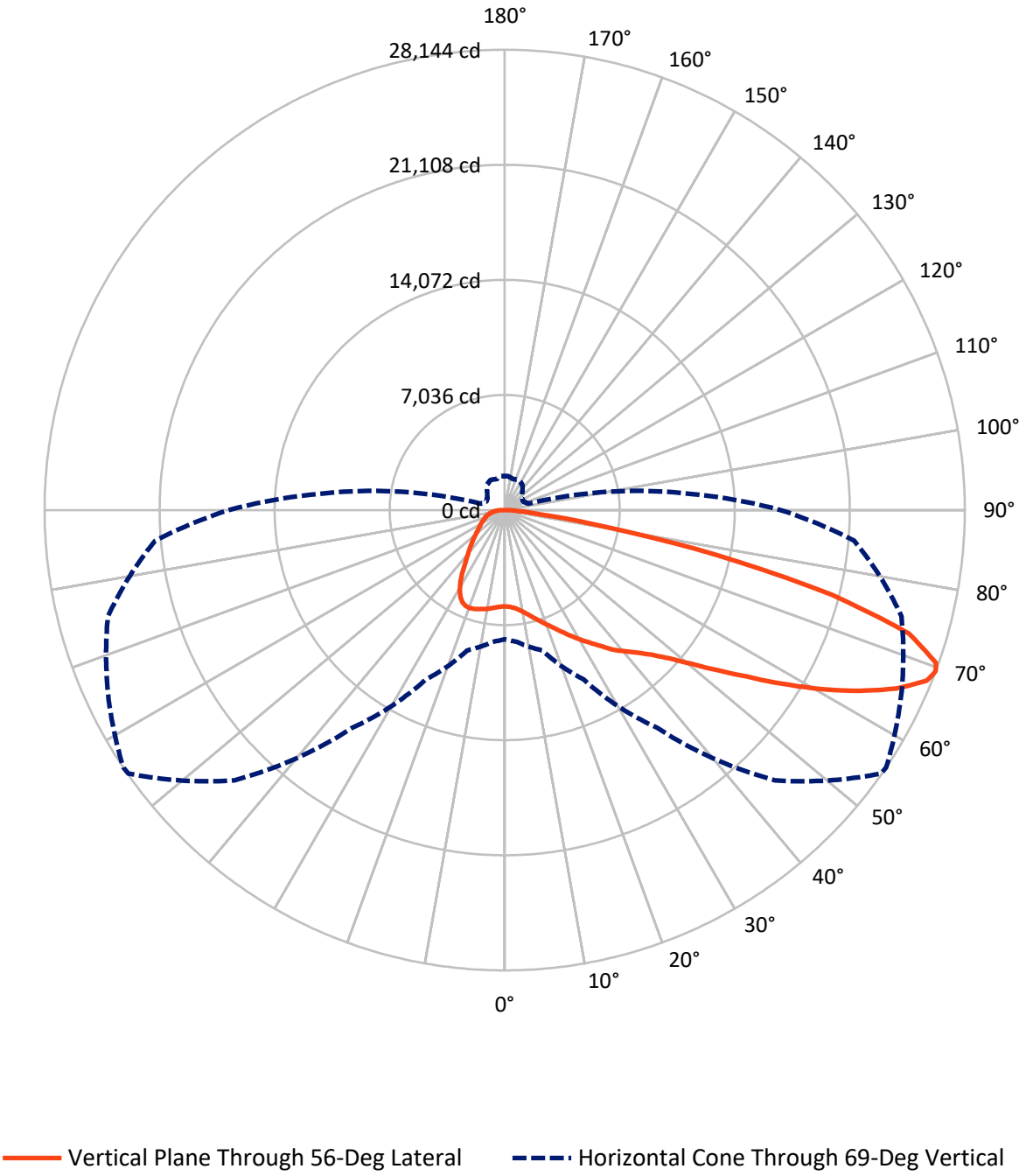
Based on 25 foot mounting height. Maximum calculated value = 10.3 fc
Type III - Short - N/A

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P318572
CATALOG NUMBER: GLEON-SA8C-830-U-T3

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

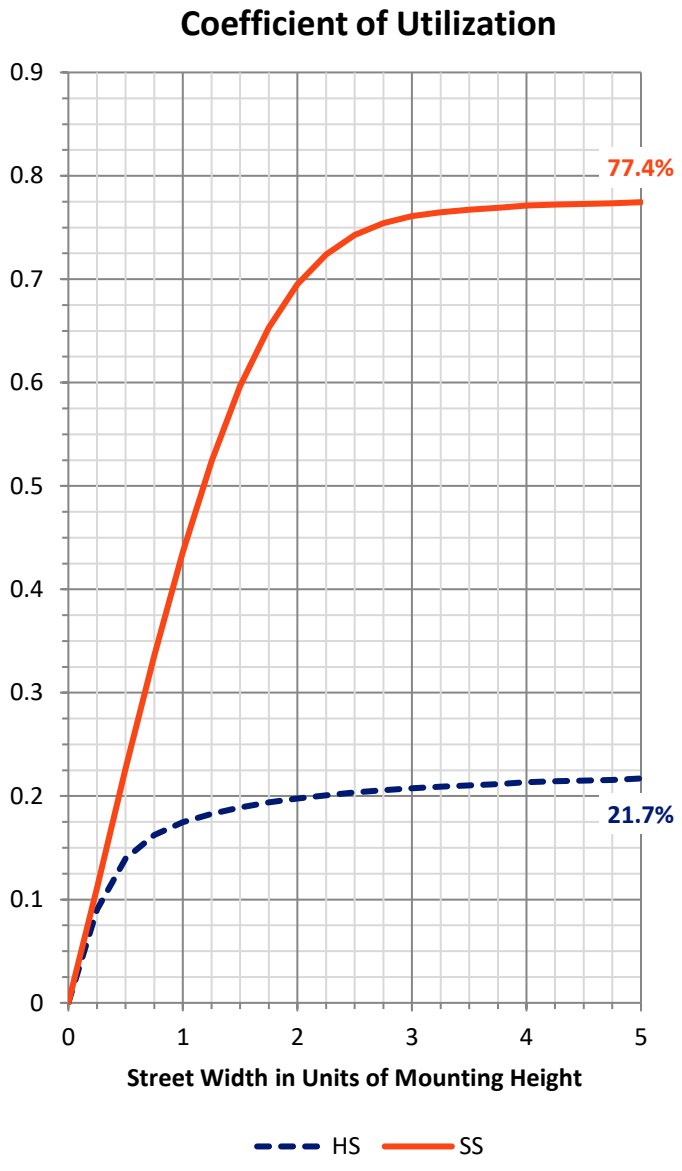
REPORT NUMBER: P318572
CATALOG NUMBER: GLEON-SA8C-830-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10033.7	0.0	10033.7
	% Fixture	22.3	0.0	22.3
Street Side	Lumens	35021.3	0.0	35021.3
	% Fixture	77.7	0.0	77.7
Total	Lumens	45055.0	0.0	45055.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	578.5	1.3
10°-20°	1860.3	4.1
20°-30°	3247.3	7.2
30°-40°	4664.7	10.4
40°-50°	6455.7	14.3
50°-60°	9458.5	21.0
60°-70°	11531.6	25.6
70°-80°	6375.4	14.2
80°-90°	883.0	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	45055.0	100.0
0°-180°	45055.0	100.0



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

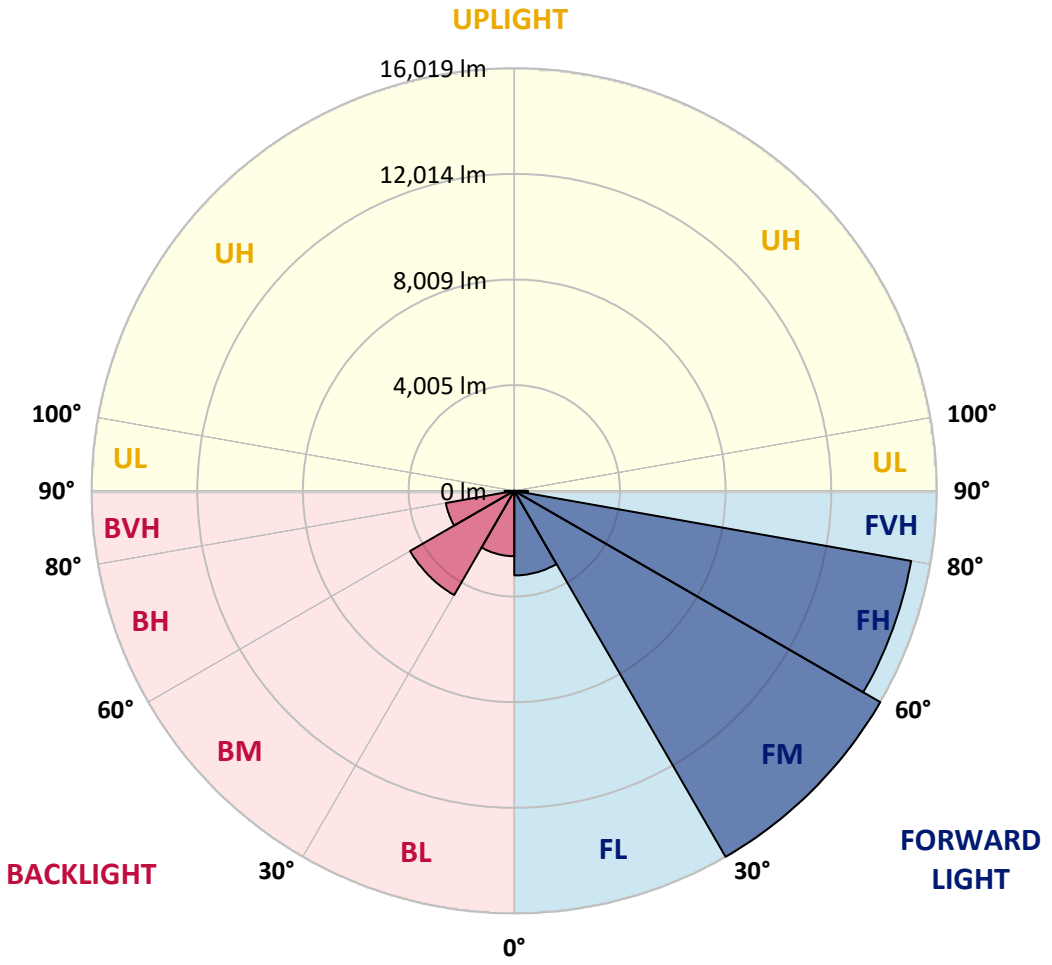
Scaled Data Report

REPORT NUMBER: P318572
CATALOG NUMBER: GLEON-SA8C-830-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	3206.6	7.1			
FM	(30°-60°)	16018.7	35.6			
FH	(60°-80°)	15275.9	33.9			G5
FVH	(80°-90°)	520.1	1.2			G4/750
BL	(0°-30°)	2479.5	5.5	B3/2500		
BM	(30°-60°)	4560.1	10.1	B3/5000		
BH	(60°-80°)	2631.2	5.8	B4/5000		G4/5000
BVH	(80°-90°)	362.9	0.8			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
Type III Short



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P318572
CATALOG NUMBER: GLEON-SA8C-830-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	5890.3	5890.3	5890.3	5890.3	5890.3	5890.3	5890.3	*5890.3*	5890.3	5890.3	5890.3
2.5°	5927.5	5933.7	5929.1	5941.5	5927.5	5936.8	5929.1	*5929.1*	5924.4	5910.4	5894.9
5°	6020.6	6033.1	6025.3	6037.7	6020.6	6023.7	6009.8	*6009.8*	5995.8	5966.3	5935.3
7.5°	6166.5	6180.5	6174.3	6186.7	6163.4	6163.4	6144.8	*6143.3*	6115.3	6067.2	6031.5
10°	6340.4	6359.0	6352.8	6371.4	6352.8	6359.0	6340.4	*6340.4*	6303.1	6234.8	6189.8
12.5°	6593.4	6616.7	6599.6	6598.0	6590.3	6602.7	6587.2	*6584.1*	6549.9	6456.8	6394.7
15°	6931.7	6956.6	6920.9	6917.8	6874.3	6869.6	6869.6	*6865.0*	6843.3	6731.5	6629.1
17.5°	7321.3	7329.1	7298.0	7248.4	7192.5	7156.8	7152.1	*7164.5*	7164.5	7034.2	6871.2
20°	7703.1	7717.1	7692.3	7636.4	7565.0	7512.2	7475.0	*7499.8*	7498.3	7343.0	7111.8
22.5°	8119.1	8151.7	8114.4	8043.0	7959.2	7900.2	7835.1	*7856.8*	7858.3	7667.4	7347.7
25°	8657.7	8628.2	8604.9	8504.0	8384.5	8324.0	8263.4	*8285.2*	8279.0	8016.7	7591.4
27.5°	9134.2	9140.4	9109.3	9002.2	8864.1	8730.6	8727.5	*8741.5*	8718.2	8379.8	7821.1
30°	9688.3	9691.4	9647.9	9551.7	9401.1	9228.9	9188.5	*9211.8*	9162.1	8724.4	8063.2
32.5°	10239.3	10254.8	10206.7	10090.3	9969.2	9759.7	9679.0	*9694.5*	9570.3	9076.7	8313.1
35°	10722.0	10743.7	10728.2	10650.6	10518.7	10338.6	10242.4	*10233.1*	10079.4	9508.2	8643.7
37.5°	11214.0	11234.2	11217.1	11151.9	11099.1	10908.2	10857.0	*10857.0*	10590.1	9949.0	9064.3
40°	11720.0	11751.0	11730.9	11640.8	11595.8	11508.9	11386.3	*11356.8*	11068.1	10478.3	9750.4
42.5°	12190.3	12230.6	12311.3	12258.6	12167.0	12179.4	11932.6	*11917.1*	11706.0	11260.6	10611.8
45°	12857.7	12916.7	13053.3	13012.9	12994.3	12926.0	12632.6	*12618.7*	12538.0	12312.9	11681.2
47.5°	13585.6	13666.3	13913.1	13920.9	14121.1	13992.3	13593.4	*13545.3*	13563.9	13573.2	12986.5
50°	14256.1	14344.6	14749.7	14940.6	15412.5	15440.4	14802.5	*14759.0*	14832.0	15046.2	14507.6
52.5°	14791.6	14903.4	15409.4	15999.2	16807.8	17037.5	16291.0	*16258.4*	16312.7	16682.1	16227.3
55°	15184.3	15305.4	15856.4	16930.4	18221.8	18626.9	18004.5	*17973.5*	18007.6	18477.9	18097.6
57.5°	15275.9	15305.4	16104.7	17557.5	19415.4	20388.5	20101.4	*20039.3*	19871.7	20281.4	20161.9
60°	14845.9	14963.9	15899.8	17777.9	20338.9	22125.3	22293.0	*22215.4*	21745.1	22080.3	21984.1
62.5°	13973.7	14184.7	15134.6	17442.6	20700.5	23544.0	24442.7	*24349.5*	23539.3	23756.6	23294.1
65°	12548.8	12638.8	13636.9	16286.3	20241.1	24452.0	26359.5	*26312.9*	25293.2	24953.3	23536.2
67.5°	10000.3	10169.4	11016.9	13869.7	18361.5	24344.9	27841.8	*27837.1*	26438.7	25397.2	22677.9
69°	*7900.2*	*8075.6*	*8882.7*	*11425.1*	*16247.5*	*23365.5*	*28090.1*	*28144.4*	*26761.5*	*25127.1*	*21451.7*
70°	6298.5	6501.8	7055.9	9623.1	14371.0	22074.1	27883.7	*27981.5*	26699.4	24681.7	20320.2
72.5°	2680.5	2845.0	3239.3	4960.5	8758.6	16483.4	25495.0	*25864.4*	25260.6	22589.4	16793.8
75°	1170.3	1221.5	1400.0	2022.4	3888.0	8971.2	19972.6	*20655.5*	21599.2	19094.1	12510.0
77.5°	856.8	878.5	976.3	1187.4	1744.6	3388.3	12843.7	*13241.1*	15577.0	13894.5	7673.6
80°	662.8	678.3	754.3	872.3	1139.2	1370.5	5857.7	*6199.1*	8758.6	7136.6	3195.8
82.5°	527.7	538.6	591.4	642.6	786.9	830.4	1944.8	*2157.4*	3233.0	1971.2	845.9
85°	490.5	502.9	521.5	468.7	504.4	487.4	841.2	*880.0*	976.3	774.5	353.9
87.5°	222.0	262.3	516.9	364.7	268.5	214.2	344.6	*360.1*	405.1	406.7	156.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	*0.0*	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P318572
CATALOG NUMBER: GLEON-SA8C-830-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5890.3	5890.3	5890.3	5890.3	5890.3	5890.3	5890.3	5890.3	5890.3	5890.3	5890.3
2.5°	5904.2	5899.6	5907.3	5888.7	5912.0	5910.4	5902.7	5905.8	5921.3	5919.8	5921.3
5°	5939.9	5936.8	5946.1	5932.2	5960.1	5969.4	5971.0	5984.9	6002.0	6006.7	6006.7
7.5°	6030.0	6030.0	6034.6	6016.0	6034.6	6033.1	6025.3	6039.3	6056.3	6057.9	6056.3
10°	6185.2	6186.7	6179.0	6130.8	6115.3	6073.4	6034.6	6036.2	6057.9	6075.0	6079.6
12.5°	6380.7	6374.5	6340.4	6251.9	6186.7	6101.4	6061.0	6059.4	6081.2	6095.1	6099.8
15°	6604.2	6587.2	6498.7	6354.3	6239.5	6155.7	6090.5	6075.0	6062.5	6047.0	6048.6
17.5°	6815.3	6776.5	6629.1	6428.8	6307.8	6196.0	6070.3	5969.4	5899.6	5859.2	5846.8
20°	7029.5	6953.5	6740.8	6498.7	6345.0	6141.7	5899.6	5694.7	5567.4	5508.4	5497.6
22.5°	7225.1	7102.5	6844.8	6571.6	6315.5	5958.6	5578.3	5280.3	5103.3	5024.2	5030.4
25°	7416.0	7245.3	6953.5	6622.9	6166.5	5635.7	5131.3	4765.0	4560.1	4471.6	4468.5
27.5°	7583.6	7389.6	7071.4	6581.0	5888.7	5176.3	4602.0	4245.0	4074.3	3998.2	3985.8
30°	7776.1	7571.2	7228.2	6421.1	5482.1	4645.5	4085.2	3833.7	3712.7	3636.6	3622.6
32.5°	8010.4	7818.0	7357.0	6130.8	4962.1	4091.4	3681.6	3506.2	3396.0	3310.7	3295.1
35°	8351.9	8143.9	7389.6	5714.9	4390.9	3653.7	3385.2	3205.1	3056.1	2945.9	2935.0
37.5°	8780.3	8552.1	7315.1	5176.3	3836.8	3369.6	3138.4	2916.4	2722.4	2567.2	2542.4
40°	9398.0	9053.5	7108.7	4555.4	3428.6	3150.8	2897.8	2644.8	2404.2	2222.6	2186.9
42.5°	10139.9	9641.7	6792.0	3937.7	3129.1	2928.8	2658.8	2345.2	2115.5	1986.7	1968.1
45°	11083.6	10253.2	6352.8	3397.6	2834.2	2706.9	2401.1	2112.4	1969.6	1875.0	1859.4
47.5°	12160.8	10939.3	5891.8	2958.3	2584.3	2498.9	2194.7	2008.4	1895.1	1820.6	1806.7
50°	13484.7	11713.8	5402.9	2598.2	2332.8	2249.0	2096.9	1951.0	1861.0	1803.6	1789.6
52.5°	14977.9	12587.6	5050.6	2314.2	2124.8	2064.3	2045.7	1920.0	1847.0	1803.6	1789.6
55°	16585.9	13477.0	4670.3	2075.2	1944.8	1961.9	2011.5	1923.1	1873.4	1820.6	1800.4
57.5°	18195.4	14395.8	4246.6	1873.4	1802.0	1885.8	1988.3	1929.3	1887.4	1836.1	1817.5
60°	19468.1	14977.9	3590.0	1704.2	1688.7	1802.0	1932.4	1882.7	1828.4	1829.9	1826.8
62.5°	20062.6	14946.8	2865.2	1553.7	1575.4	1688.7	1842.4	1809.8	1764.8	1825.3	1829.9
65°	19728.9	14201.8	2230.4	1417.1	1454.3	1570.7	1749.2	1774.1	1789.6	1906.0	1921.5
67.5°	18328.9	12752.1	1727.5	1297.6	1344.1	1490.0	1758.5	1932.4	1952.6	2075.2	2073.6
69°	*16880.8*	*11392.5*	*1500.9*	*1235.5*	*1289.8*	*1510.2*	*1879.6*	*2033.3*	*1957.2*	*2087.6*	*2069.0*
70°	15667.0	10316.9	1379.8	1193.6	1265.0	1545.9	1960.3	2031.7	1933.9	2045.7	2014.6
72.5°	12066.1	7422.2	1170.3	1116.0	1181.2	1479.2	1983.6	1986.7	1879.6	1901.3	1848.6
75°	8275.9	4690.5	1021.3	1010.4	1053.9	1333.3	1909.1	1898.2	1738.4	1707.3	1663.9
77.5°	4563.2	2382.5	867.6	909.5	939.0	1181.2	1735.3	1719.7	1587.8	1522.6	1507.1
80°	1760.1	1043.0	732.6	808.7	827.3	1022.8	1521.1	1507.1	1396.9	1313.1	1289.8
82.5°	664.3	546.3	605.3	700.0	693.8	844.3	1288.3	1280.5	1173.4	1050.8	1013.5
85°	307.3	327.5	479.6	577.4	532.4	625.5	1030.6	1044.6	914.2	768.3	768.3
87.5°	130.4	183.1	339.9	436.1	358.5	422.2	755.9	721.7	662.8	459.4	431.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

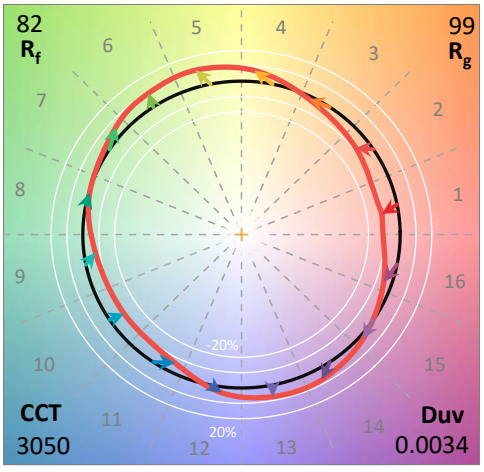
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

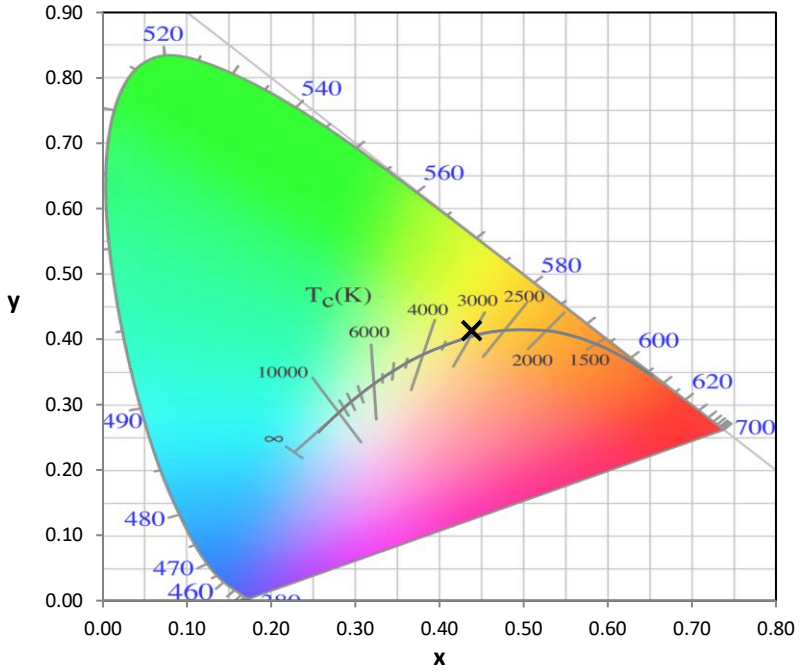
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

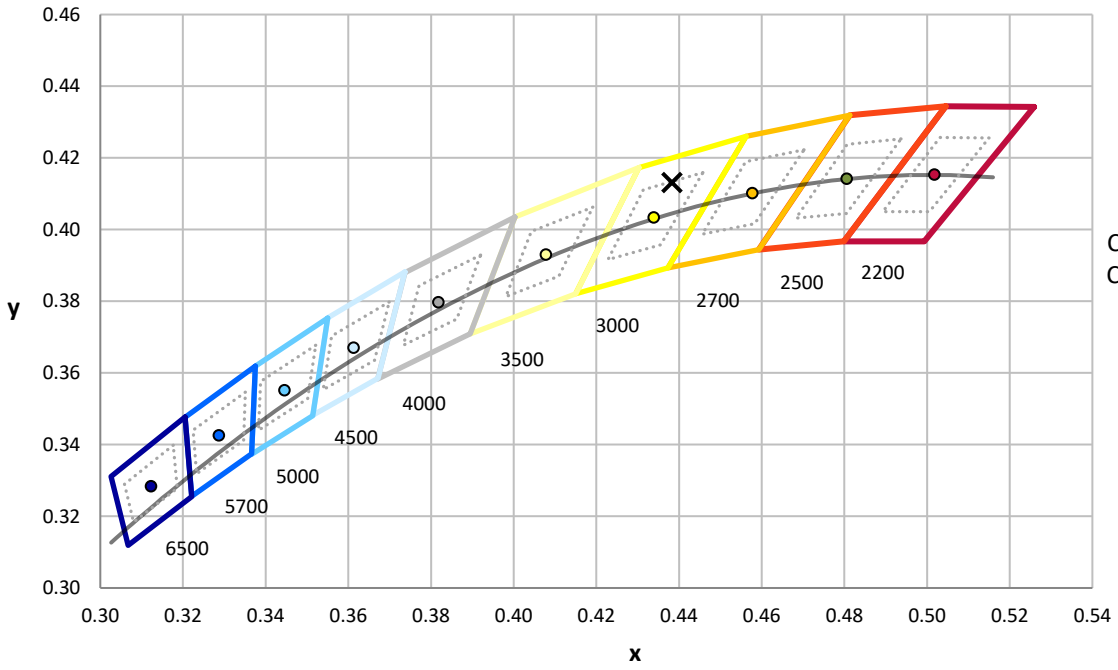
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

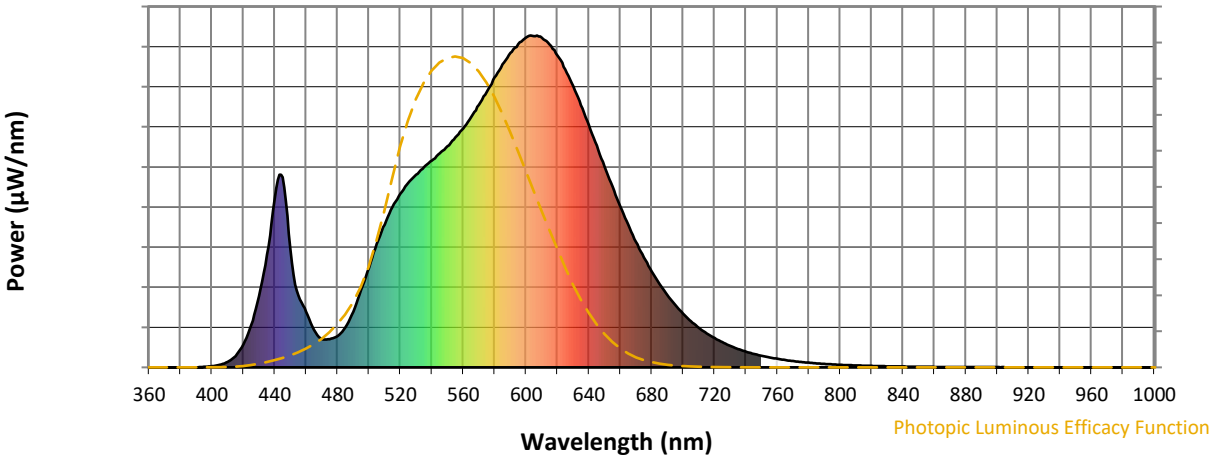


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

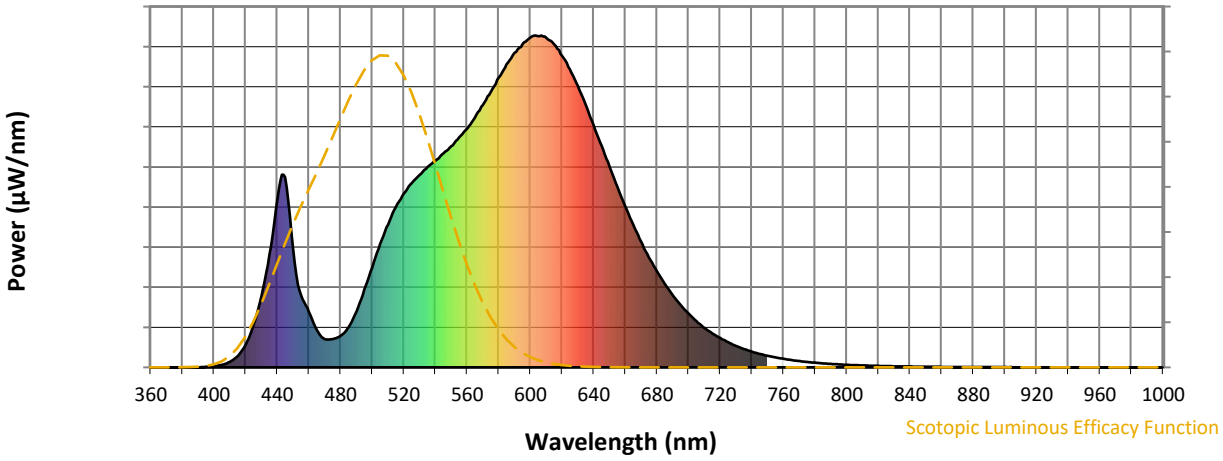


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

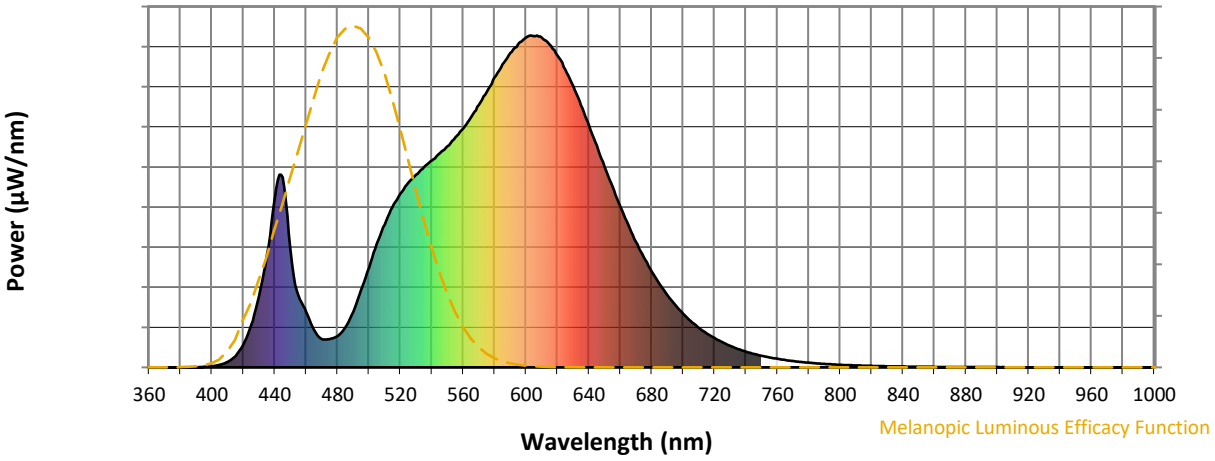


Scotopic Lumens: NR **S/P: 1.27**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

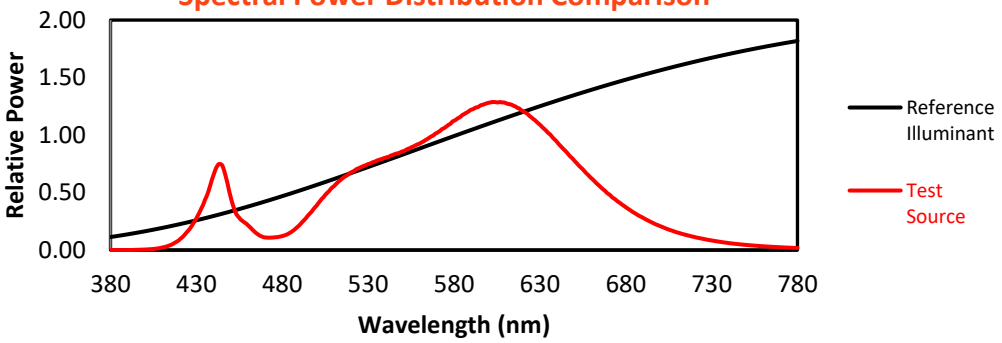
REPORT NUMBER: SP1-2408-195-9

TM-30-18

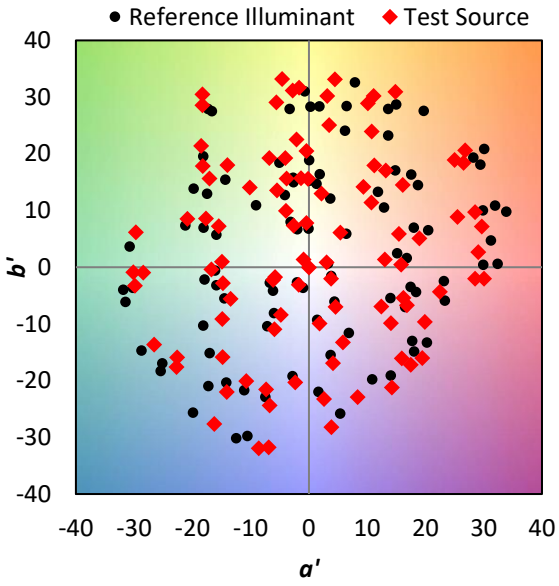
Summary

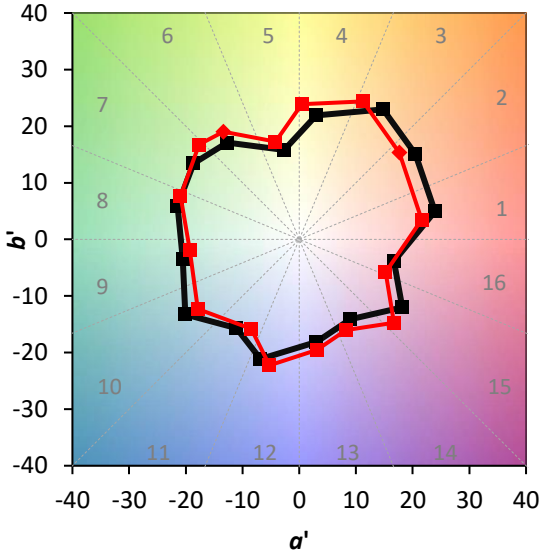
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

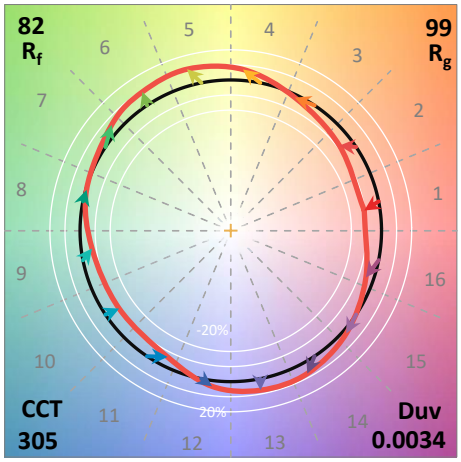
Spectral Power Distribution Comparison

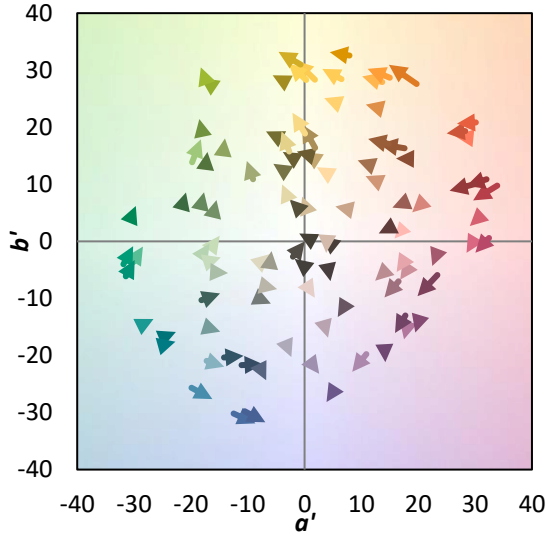


Color Vector Graphics







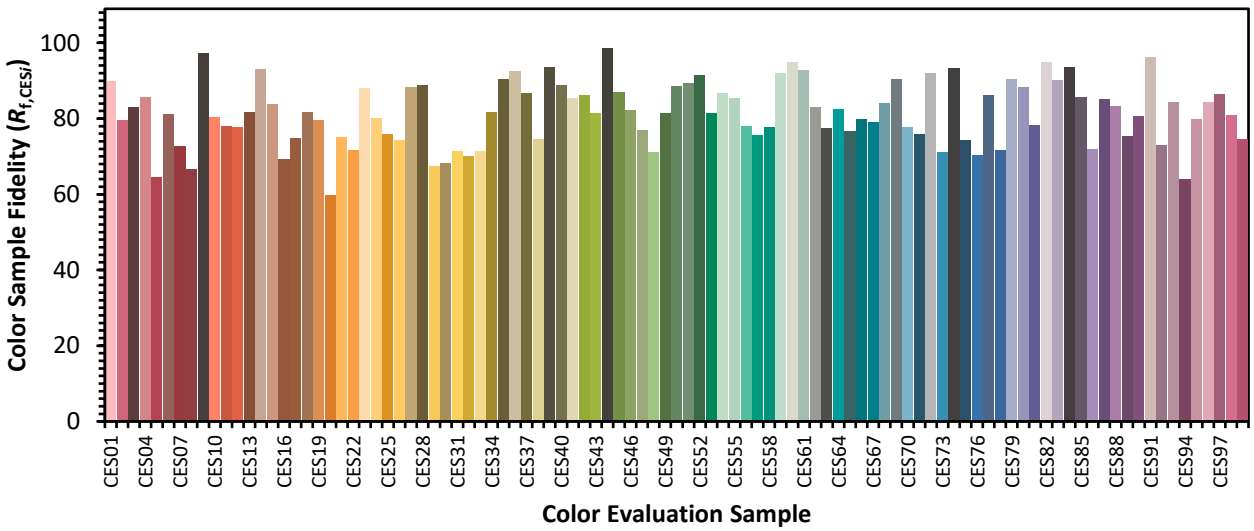


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Individual Sample Fidelity Index ($R_{f,i}$)

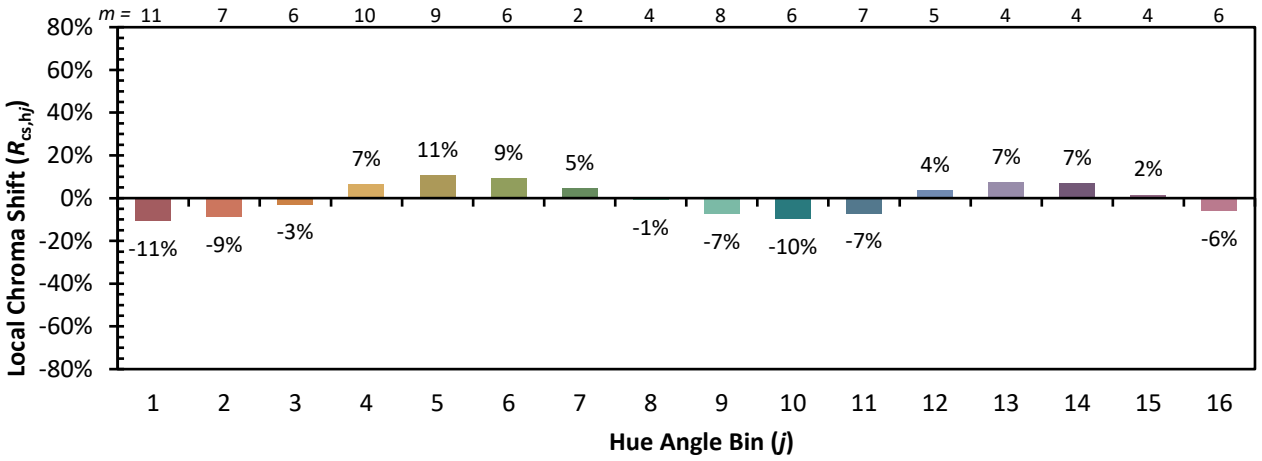
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	

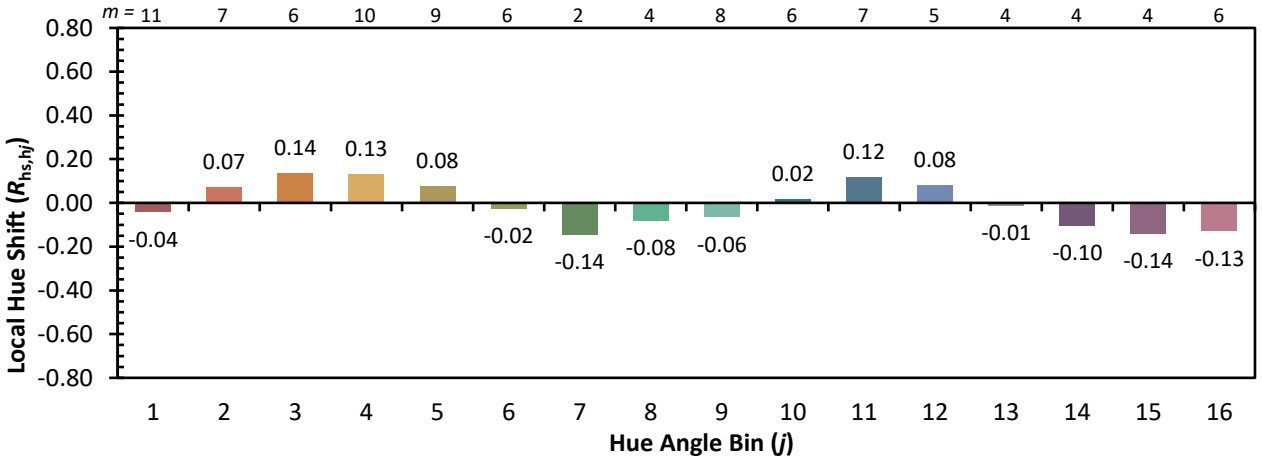


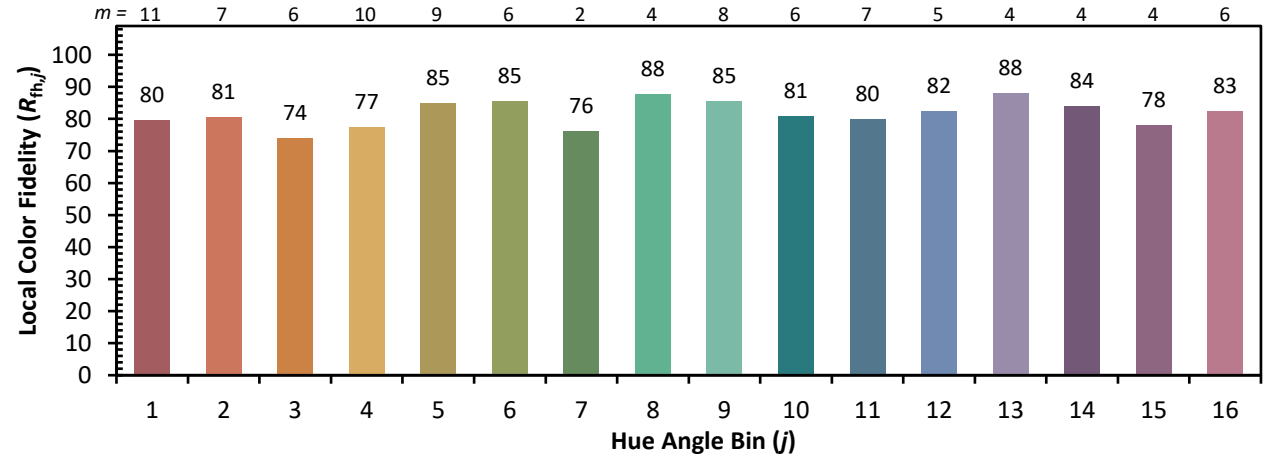
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



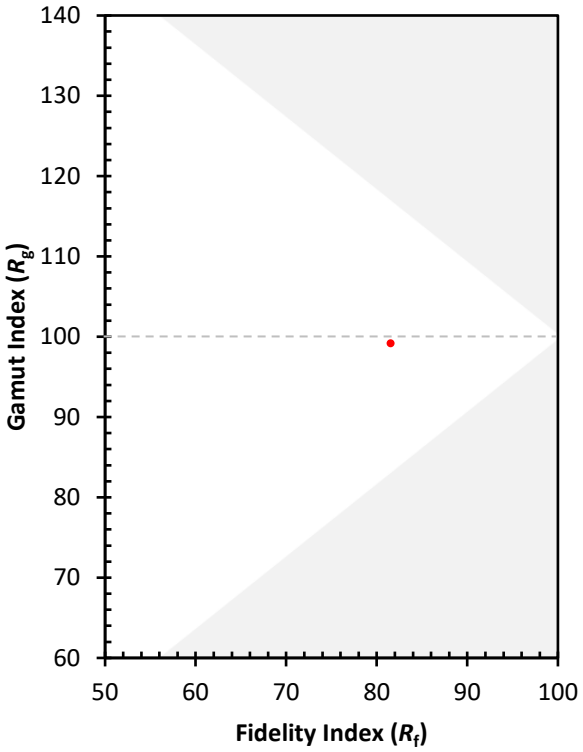


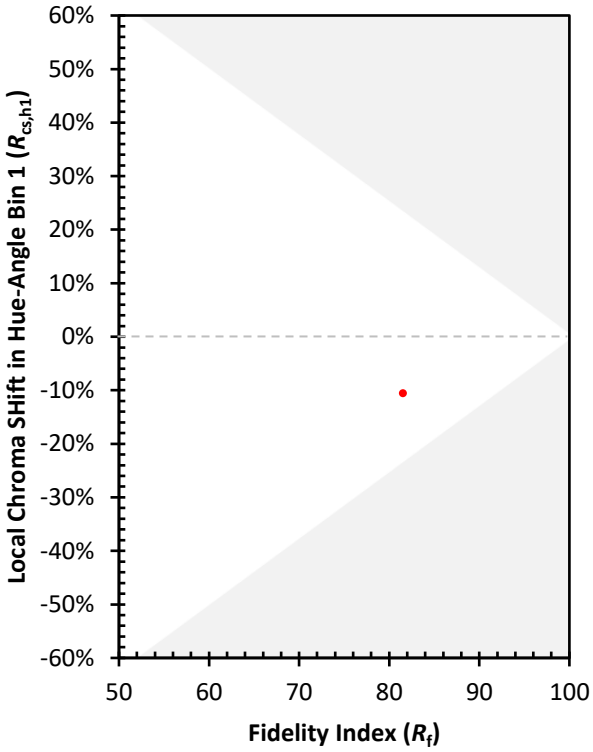


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)