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: P321140

Luminaire Tested: **GLEON-SA6D-830-U-AFL**

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:	P321140
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA6D-830-U-AFL
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(6) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	37833 lumens
Efficiency:	N/A
Efficacy:	99.0 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

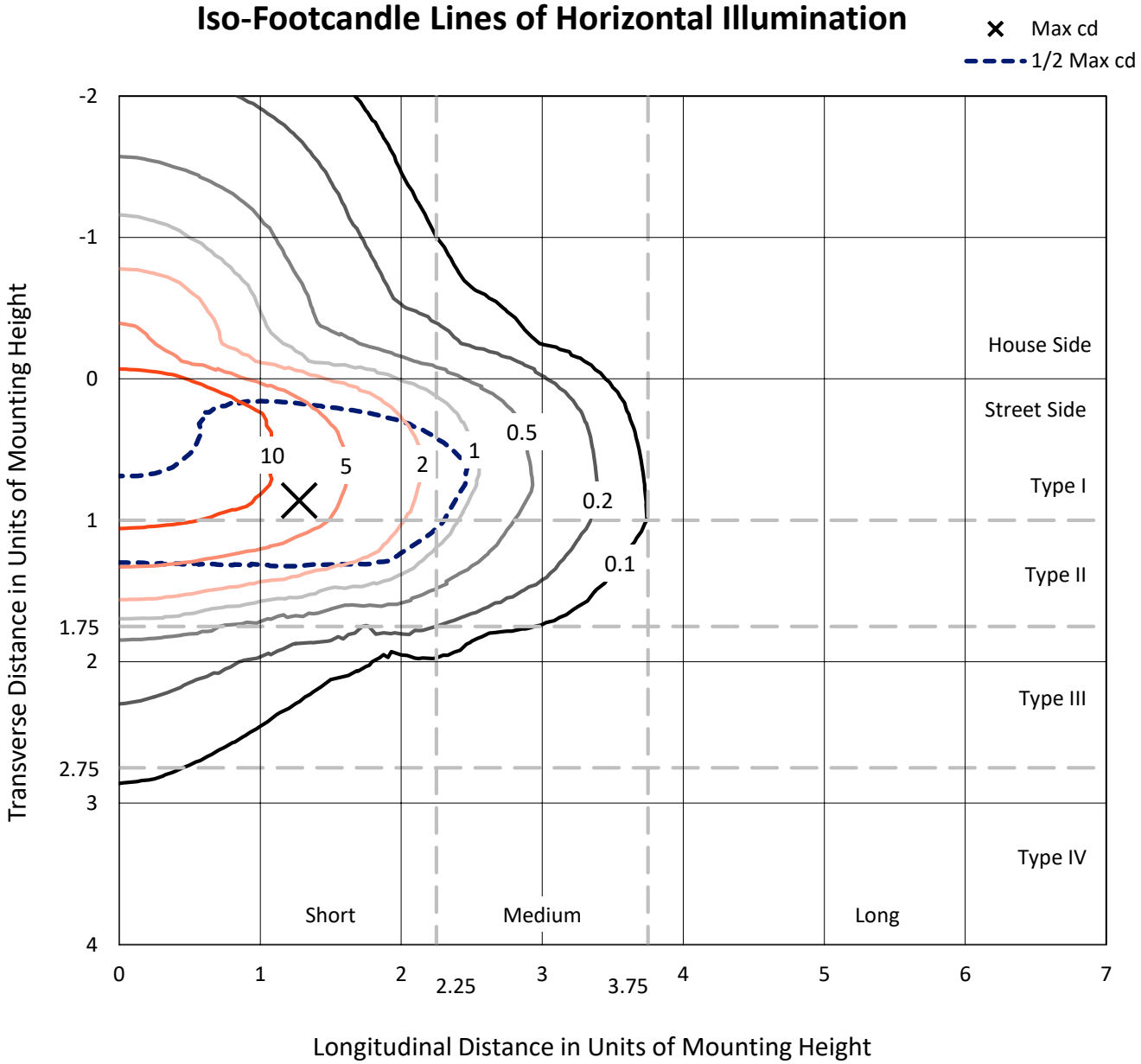
Input Watts (W):	382
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P321140
CATALOG NUMBER: GLEON-SA6D-830-U-AFL

Iso-Footcandle Lines of Horizontal Illumination



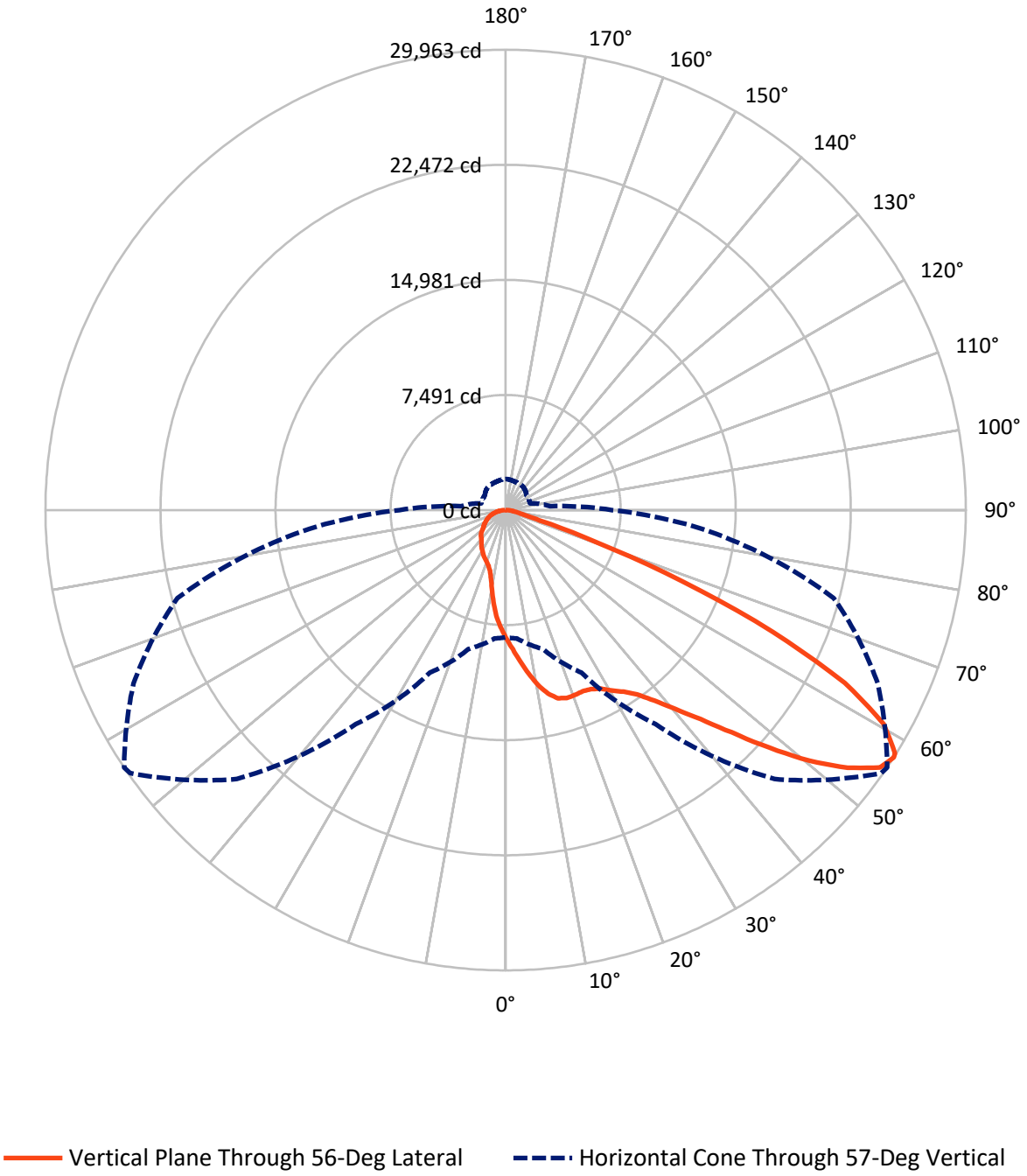
Based on 25 foot mounting height. Maximum calculated value = 18.6 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P321140
CATALOG NUMBER: GLEON-SA6D-830-U-AFL

Luminous Intensity Polar Plot



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

Scaled Data Report

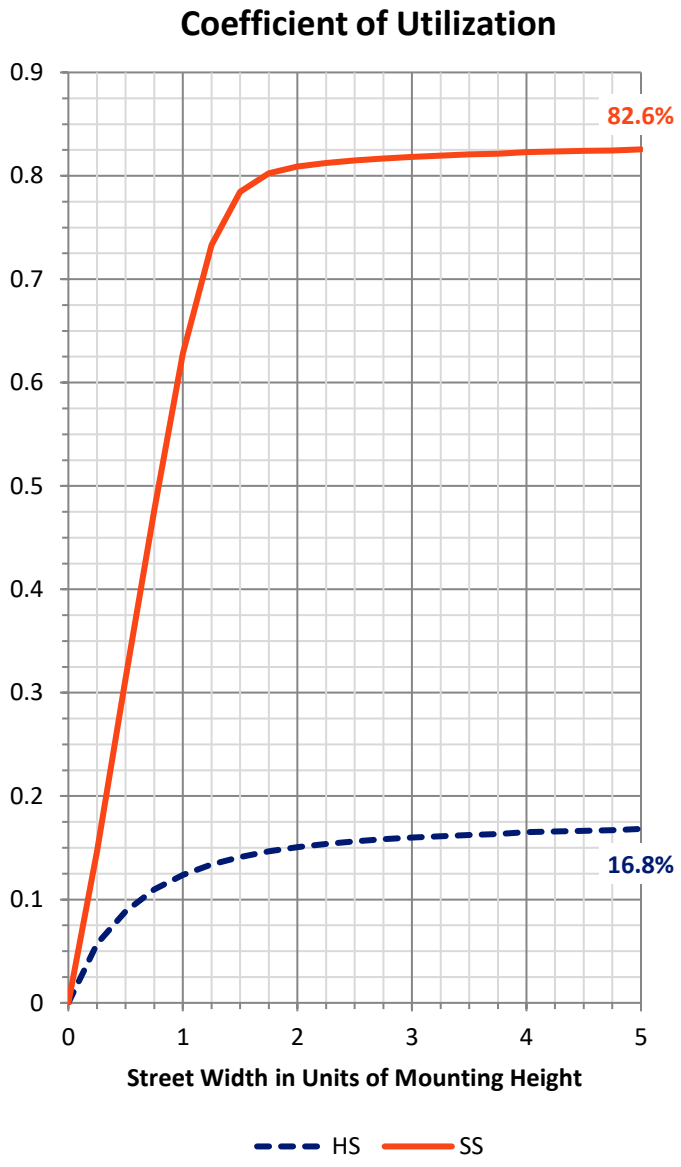
REPORT NUMBER: P321140
CATALOG NUMBER: GLEON-SA6D-830-U-AFL

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6521.6	0.0	6521.6
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	31311.4	0.0	31311.4
	% Fixture	82.8	0.0	82.8
Total	Lumens	37833.0	0.0	37833.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	801.6	2.1
10°-20°	2266.3	6.0
20°-30°	3691.3	9.8
30°-40°	5518.1	14.6
40°-50°	8369.8	22.1
50°-60°	9381.1	24.8
60°-70°	5540.8	14.6
70°-80°	1815.4	4.8
80°-90°	448.5	1.2
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°	37833.0	100.0
0°-180°	37833.0	100.0



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

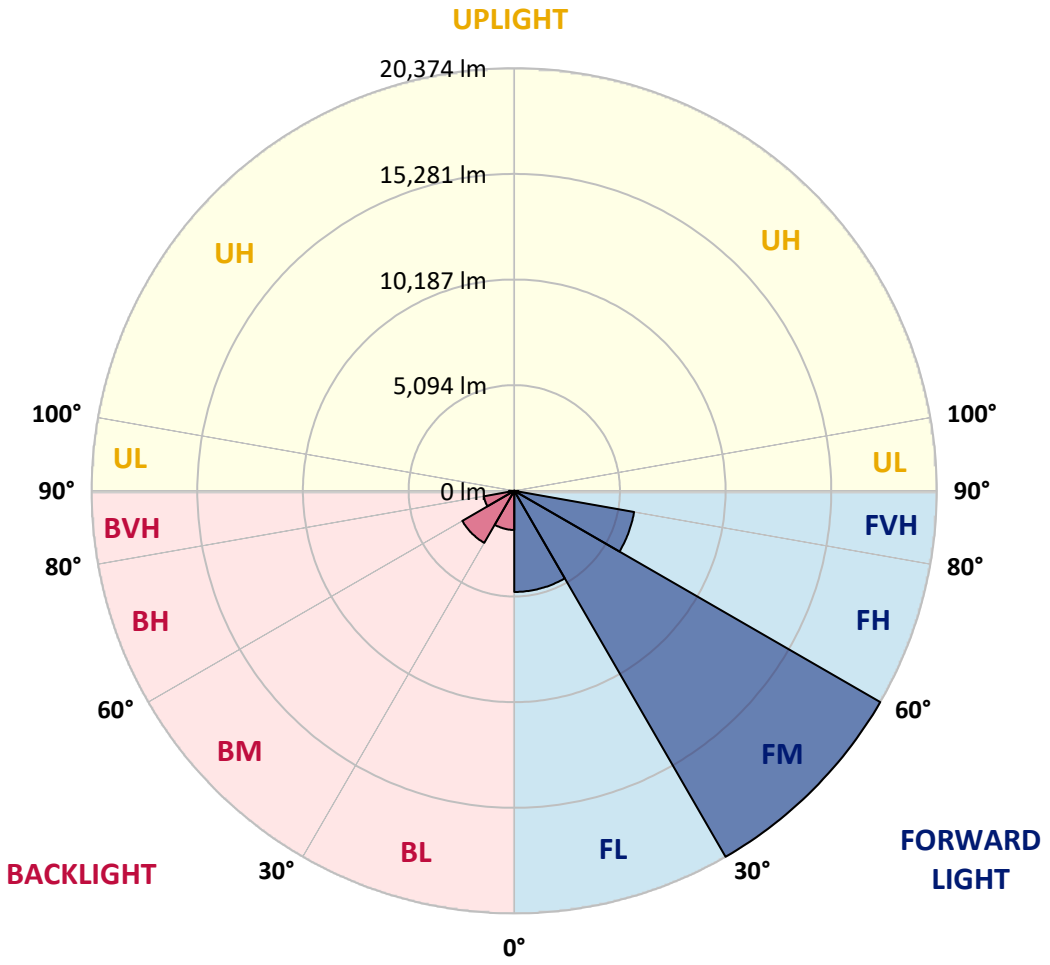
Scaled Data Report

REPORT NUMBER: P321140
CATALOG NUMBER: GLEON-SA6D-830-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	4873.5	12.9			
FM	(30°-60°)	20374.3	53.9			
FH	(60°-80°)	5866.1	15.5			G3/7500
FVH	(80°-90°)	197.5	0.5			G2/225
BL	(0°-30°)	1885.7	5.0	B3/2500		
BM	(30°-60°)	2894.7	7.7	B3/5000		
BH	(60°-80°)	1490.1	3.9	B3/2500		G3/2500
BVH	(80°-90°)	251.0	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type II Short



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

Scaled Data Report

REPORT NUMBER: P321140
CATALOG NUMBER: GLEON-SA6D-830-U-AFL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	8391.4	8391.4	8391.4	8391.4	8391.4	8391.4	8391.4	*8391.4*	8391.4	8391.4	8391.4
2.5°	9635.7	9724.1	9685.1	9549.9	9445.8	9298.9	9135.1	*9085.7*	8912.8	8719.0	8486.3
5°	11160.8	11116.6	11052.9	10842.2	10619.9	10361.2	9950.3	*9885.3*	9500.5	9062.3	8599.4
7.5°	12029.3	12025.4	11987.7	11864.2	11661.4	11323.3	10827.9	*10751.2*	10170.0	9465.3	8747.6
10°	11903.2	11894.1	11956.5	12085.2	12146.3	12076.1	11658.8	*11582.0*	10868.2	9911.3	8919.3
12.5°	11186.8	11192.0	11292.1	11562.5	11930.5	12372.6	12305.0	*12267.2*	11592.4	10415.8	9127.3
15°	10629.0	10640.7	10720.0	10955.4	11389.6	12191.8	12697.6	*12710.6*	12293.2	10972.3	9370.4
17.5°	10384.6	10409.3	10445.7	10610.8	11008.7	11831.7	12791.2	*12861.4*	12906.9	11549.5	9604.5
20°	10462.6	10486.0	10496.4	10601.7	10928.1	11613.3	12726.2	*12852.3*	13377.6	12093.0	9838.5
22.5°	10812.3	10826.6	10833.1	10860.4	11114.0	11675.7	12683.3	*12815.9*	13718.3	12580.6	10015.3
25°	11392.2	11381.8	11340.2	11305.1	11475.4	11922.7	12782.1	*12908.2*	13995.2	13022.7	10131.0
27.5°	12086.5	12073.5	11992.9	11896.7	11994.2	12307.6	13066.9	*13167.0*	14243.5	13436.1	10189.5
30°	12919.9	12886.1	12734.0	12619.6	12657.3	12884.8	13536.2	*13627.2*	14627.1	13905.5	10246.8
32.5°	13883.4	13847.0	13627.2	13437.4	13437.4	13627.2	14019.9	*14095.3*	14952.1	14436.0	10339.1
35°	15089.9	15044.4	14758.4	14439.9	14350.1	14446.4	14679.1	*14732.4*	15537.2	15104.2	10506.8
37.5°	16512.3	16451.2	16080.7	15654.2	15457.9	15452.7	15620.4	*15729.6*	16472.0	15981.9	10791.5
40°	17938.7	17895.7	17572.0	17236.6	16851.7	16728.2	16986.9	*17020.7*	17694.2	17071.4	11155.6
42.5°	19041.2	19033.4	18973.6	19017.8	18623.8	18374.2	18577.0	*18604.3*	19186.8	18250.7	11543.0
45°	19623.7	19636.7	19926.6	20568.9	20714.5	20532.5	20632.6	*20640.4*	20892.7	19440.4	11898.0
47.5°	19156.9	19224.5	19957.8	21394.5	22586.8	23191.4	23025.0	*23121.2*	22546.5	20462.3	12176.2
50°	17338.0	17421.2	18669.4	21026.6	23460.5	25764.5	25677.4	*25655.2*	23880.5	21211.2	12327.1
52.5°	15084.7	15149.8	16179.5	19114.0	22819.5	27186.9	27986.5	*27872.1*	25066.3	21771.6	12355.7
55°	11653.6	11755.0	12741.8	15296.7	20227.0	26643.4	29684.5	*29581.8*	26146.7	22065.4	12321.9
57°	*8284.8*	*8391.4*	*9371.7*	*11674.4*	*17015.5*	*24762.0*	*29853.5*	*29962.8*	*26730.5*	*22114.8*	*12359.6*
57.5°	7392.9	7502.1	8473.3	10709.6	16014.4	24082.0	29707.9	*29890.0*	26835.8	22107.0	12380.4
60°	3722.4	3764.0	4382.9	5978.3	10123.2	19469.0	27808.4	*28277.7*	26930.7	21724.8	12470.1
62.5°	2314.3	2284.4	2264.9	2753.8	4925.1	12910.8	23888.3	*24791.9*	25114.4	20799.1	12252.9
65°	2034.8	1978.9	1764.4	1725.3	2175.2	6270.8	17989.4	*19114.0*	21233.3	19340.3	11735.5
67.5°	1911.3	1856.7	1614.8	1469.2	1470.5	2486.0	11168.6	*12435.0*	16541.0	16873.8	10514.6
70°	1783.9	1734.4	1508.2	1336.6	1252.1	1376.9	5138.3	*6099.2*	10782.4	13263.2	8788.0
72.5°	1620.0	1586.2	1371.7	1194.9	1105.2	1031.0	1967.2	*2323.4*	6242.2	8907.6	6103.1
75°	1448.4	1417.2	1233.9	1064.9	955.6	811.3	1107.8	*1193.6*	3171.2	4557.1	3004.7
77.5°	1259.9	1241.7	1097.4	941.3	854.2	672.2	784.0	*825.6*	1360.0	1954.2	1506.9
80°	1002.4	1037.5	959.5	838.6	758.0	538.3	555.2	*582.5*	791.8	954.3	855.5
82.5°	652.7	713.8	751.5	681.3	624.1	423.9	399.2	*410.9*	516.2	582.5	371.9
85°	271.7	305.5	494.1	446.0	414.8	309.4	267.8	*273.0*	319.8	331.5	152.1
87.5°	120.9	128.7	217.1	204.1	175.5	106.6	114.4	*124.8*	170.3	161.2	58.5
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

Scaled Data Report

REPORT NUMBER: P321140
CATALOG NUMBER: GLEON-SA6D-830-U-AFL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8391.4	8391.4	8391.4	8391.4	8391.4	8391.4	8391.4	8391.4	8391.4	8391.4	8391.4
2.5°	8399.2	8290.0	8102.8	7896.0	7727.0	7591.8	7455.3	7361.6	7252.4	7193.9	7164.0
5°	8405.7	8191.2	7797.2	7392.9	7031.4	6701.2	6386.5	6144.7	5918.4	5796.2	5762.4
7.5°	8433.0	8110.6	7473.5	6807.8	6165.5	5579.1	5126.6	4843.2	4639.1	4548.0	4522.0
10°	8455.1	8015.6	7073.0	6087.5	5213.7	4619.6	4268.5	4109.9	4039.7	4028.0	4016.3
12.5°	8507.1	7918.1	6651.7	5336.0	4473.9	4063.1	3940.9	3930.5	3950.0	3978.6	3978.6
15°	8589.0	7821.9	6170.7	4691.1	4003.3	3858.9	3883.7	3940.9	3994.2	4038.4	4044.9
17.5°	8648.8	7703.6	5653.2	4174.9	3752.3	3791.3	3879.8	3960.4	4015.0	4057.9	4061.8
20°	8691.7	7520.3	5100.6	3780.9	3608.0	3728.9	3839.4	3911.0	3948.7	3991.6	3998.1
22.5°	8669.6	7274.5	4610.5	3498.8	3491.0	3637.9	3743.2	3829.0	3800.4	3758.8	3786.1
25°	8563.0	6936.5	4106.0	3288.2	3367.5	3515.7	3645.7	3588.5	3492.3	3474.1	3484.5
27.5°	8373.2	6504.8	3639.2	3093.1	3224.5	3402.6	3394.8	3337.6	3303.8	3280.4	3294.7
30°	8169.1	6036.8	3231.0	2922.8	3065.8	3212.8	3182.9	3181.6	3147.7	3110.0	3128.2
32.5°	7967.5	5566.1	2907.2	2782.4	2946.2	2965.7	3030.7	3050.2	2983.9	2904.6	2899.4
35°	7792.0	5121.4	2661.5	2655.0	2801.9	2804.5	2899.4	2872.1	2707.0	2625.1	2625.1
37.5°	7660.7	4678.1	2474.3	2540.6	2612.1	2679.7	2727.8	2614.7	2587.4	2541.9	2540.6
40°	7603.5	4288.0	2357.2	2453.4	2478.2	2564.0	2440.4	2484.7	2497.7	2474.3	2474.3
42.5°	7543.7	3948.7	2255.8	2387.1	2383.2	2371.5	2309.1	2366.3	2418.3	2419.6	2415.7
45°	7483.9	3656.1	2166.1	2245.4	2300.0	2173.9	2185.6	2246.7	2319.5	2345.5	2345.5
47.5°	7417.6	3424.7	2084.2	2095.9	2180.4	2095.9	2086.8	2133.6	2219.4	2261.0	2270.1
50°	7271.9	3216.7	1990.6	1964.6	1988.0	2016.6	2024.4	2046.5	2141.4	2207.7	2223.3
52.5°	7070.4	3030.7	1871.0	1843.7	1843.7	1951.6	1988.0	1994.5	2075.1	2154.4	2170.0
55°	6902.7	2912.4	1747.4	1742.2	1737.0	1882.7	1945.1	1955.5	2011.4	2073.8	2081.6
57°	*6914.4*	*2903.3*	*1652.5*	*1657.7*	*1656.4*	*1812.5*	*1904.8*	*1926.9*	*1955.5*	*2008.8*	*2017.9*
57.5°	6920.9	2909.8	1631.7	1634.3	1633.0	1793.0	1893.1	1917.8	1939.9	1995.8	2004.9
60°	7018.4	2926.7	1547.2	1518.6	1525.1	1688.9	1826.8	1858.0	1872.3	1946.4	1958.1
62.5°	6874.1	2851.3	1479.6	1410.7	1410.7	1579.7	1734.4	1783.9	1806.0	1906.1	1925.6
65°	6455.4	2639.4	1400.3	1288.5	1301.5	1470.5	1623.9	1704.5	1738.3	1863.2	1884.0
67.5°	5809.2	2393.6	1315.8	1179.3	1192.3	1356.1	1509.5	1596.6	1649.9	1816.4	1833.3
70°	4968.0	2093.3	1201.4	1063.6	1079.2	1231.3	1374.3	1473.1	1552.4	1772.2	1777.4
72.5°	3662.6	1716.2	1041.4	936.1	953.0	1085.7	1237.8	1352.2	1458.8	1661.6	1659.0
75°	2177.8	1341.8	864.6	807.4	819.1	942.6	1114.3	1253.4	1413.3	1618.7	1643.4
77.5°	1321.0	1010.2	704.7	676.1	690.4	816.5	1025.8	1174.1	1393.8	1526.4	1518.6
80°	798.3	721.6	563.0	544.8	559.1	698.2	949.1	1114.3	1218.3	1304.1	1304.1
82.5°	417.4	440.8	413.5	399.2	418.7	566.9	863.3	972.5	1076.6	924.4	863.3
85°	170.3	230.1	250.9	249.6	261.3	392.7	745.0	832.1	694.3	659.2	674.8
87.5°	57.2	97.5	122.2	105.3	110.5	247.0	516.2	401.8	477.2	332.8	315.9
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

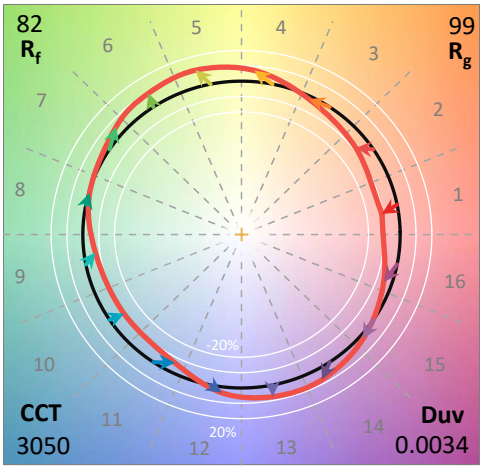
Test Information

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

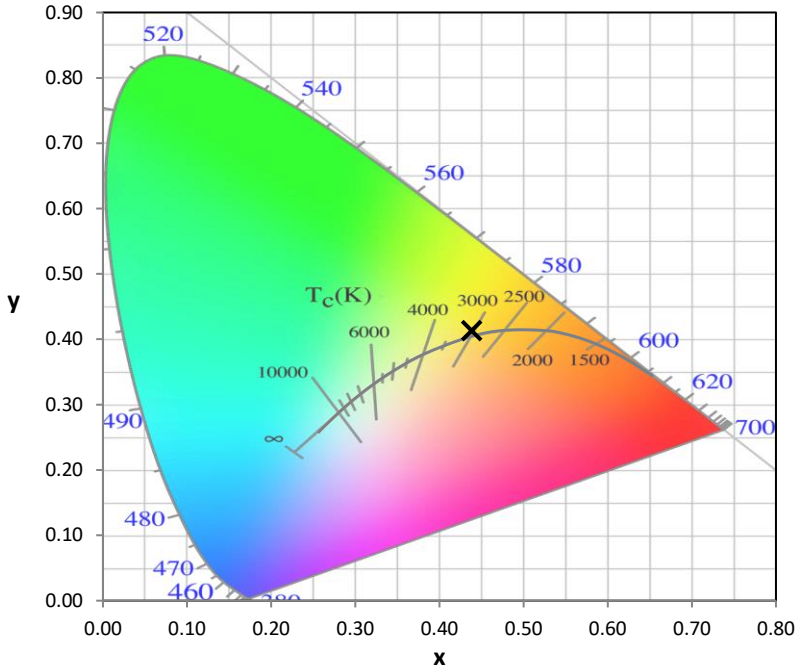
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

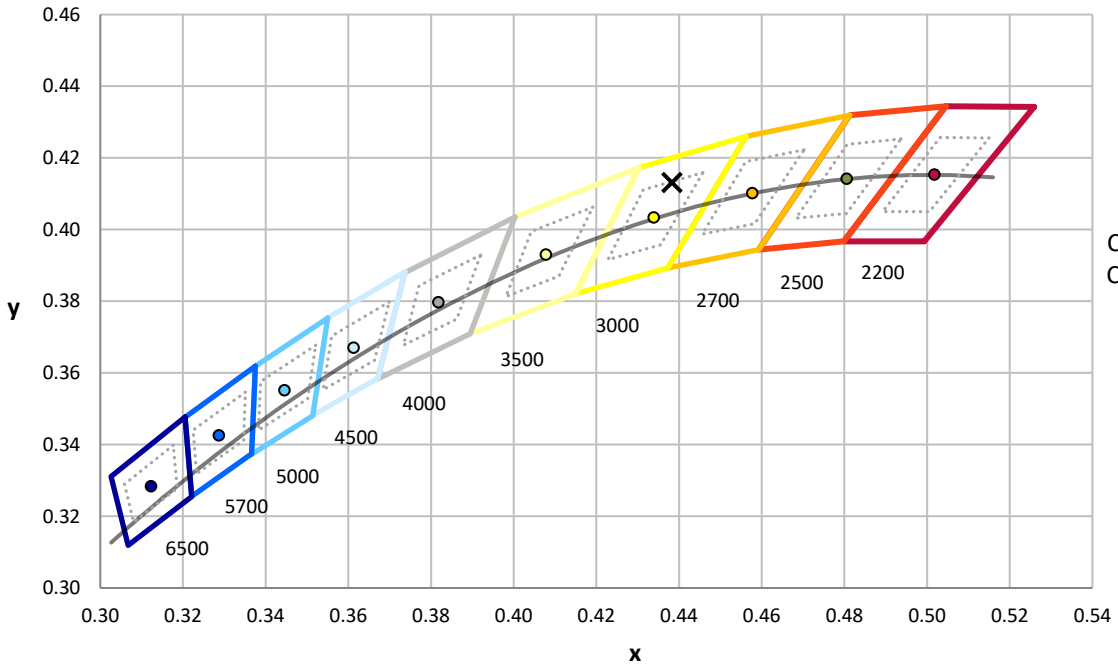
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

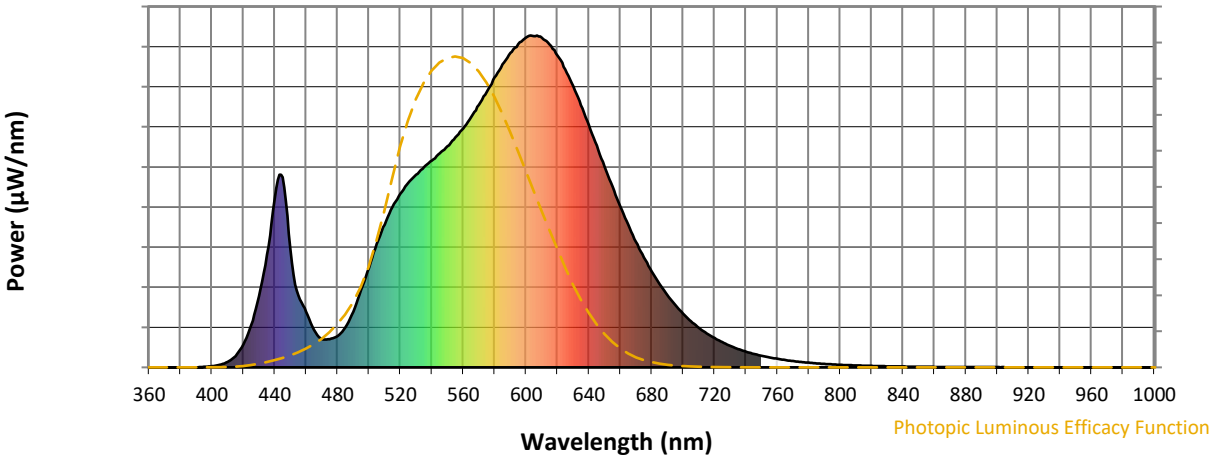


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

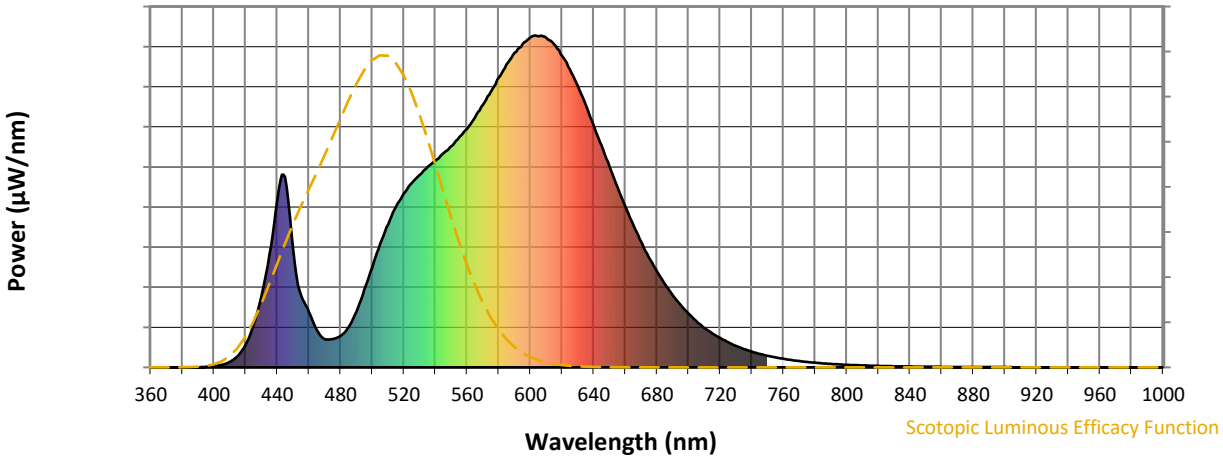


Photopic Lumens: NR

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

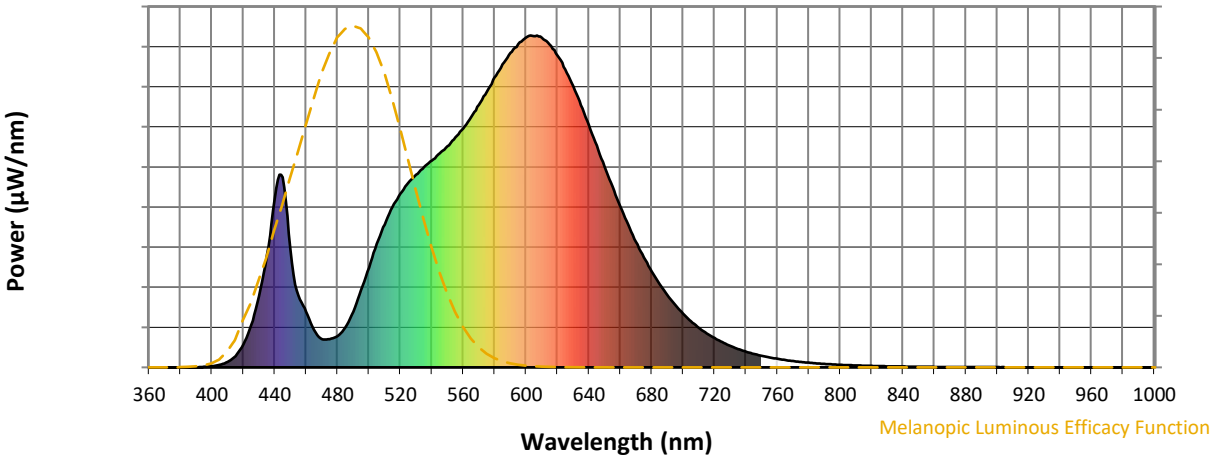


Scotopic Lumens: NR **S/P: 1.27**

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			

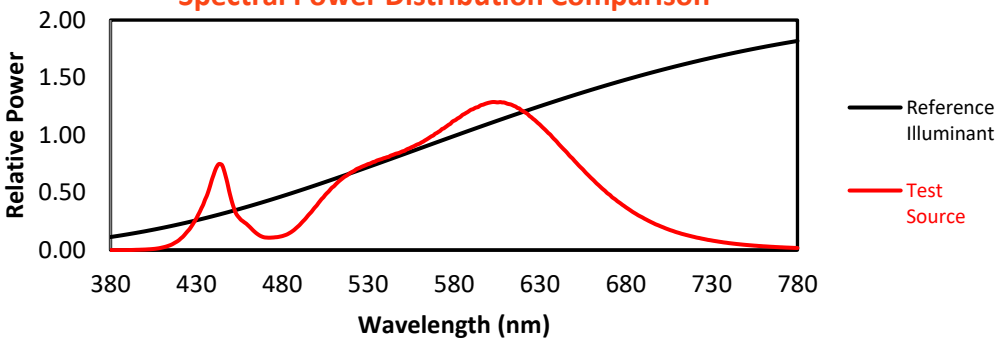
REPORT NUMBER: SP1-2408-195-9

TM-30-18

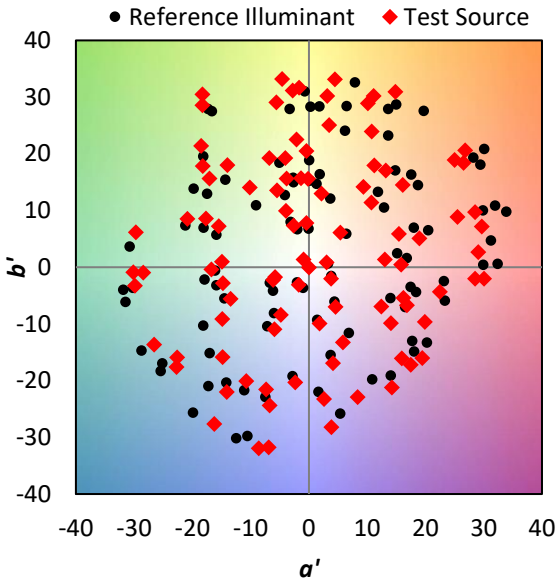
Summary

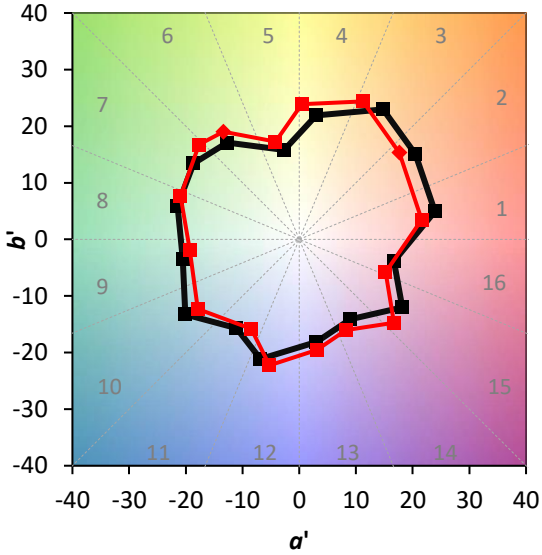
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

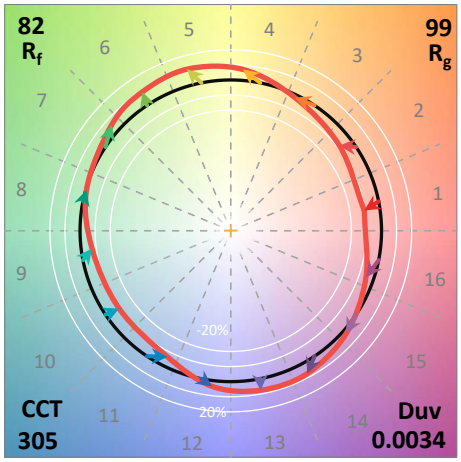
Spectral Power Distribution Comparison

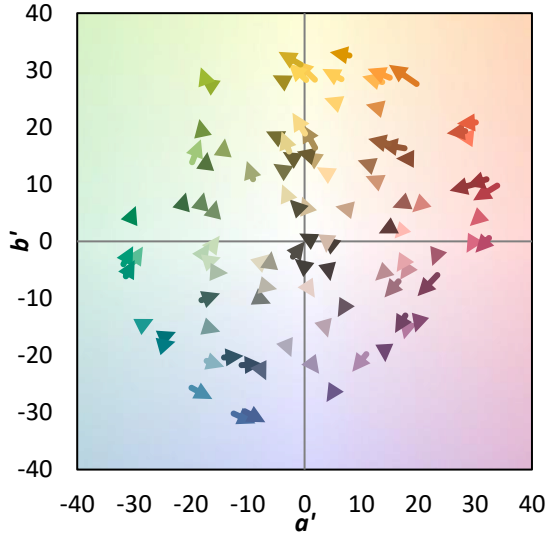


Color Vector Graphics







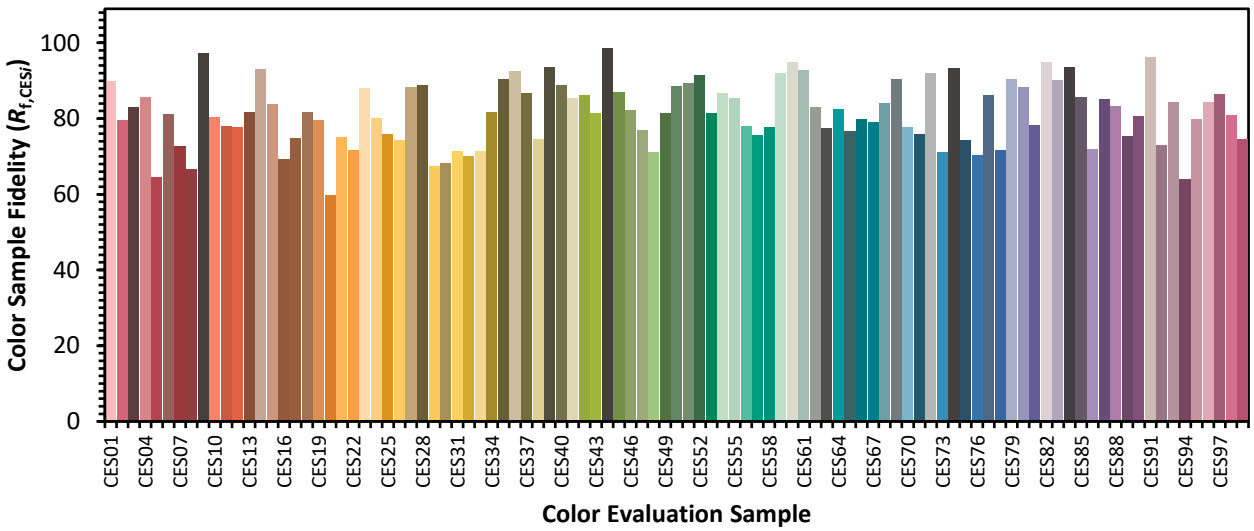


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

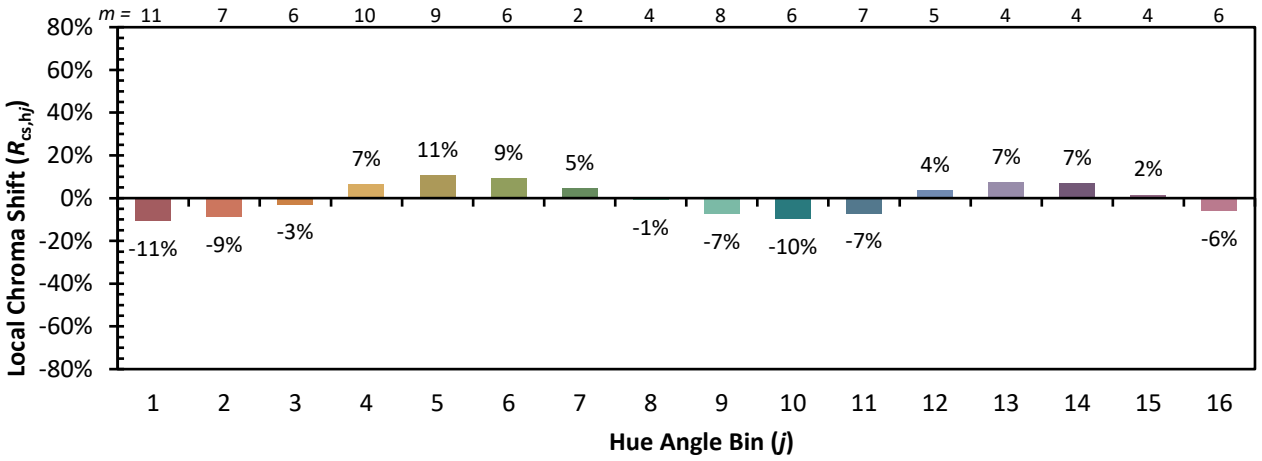
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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	

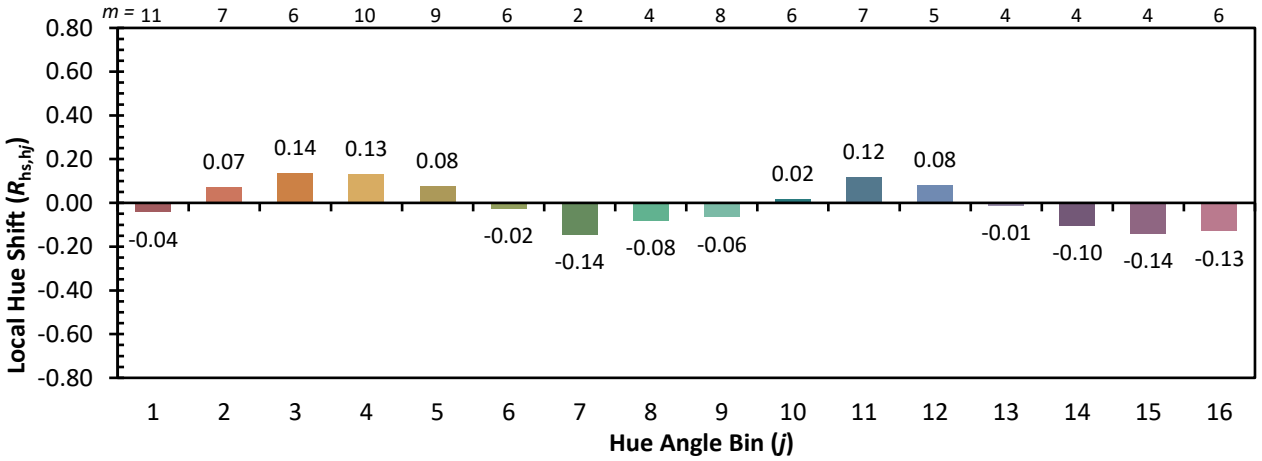


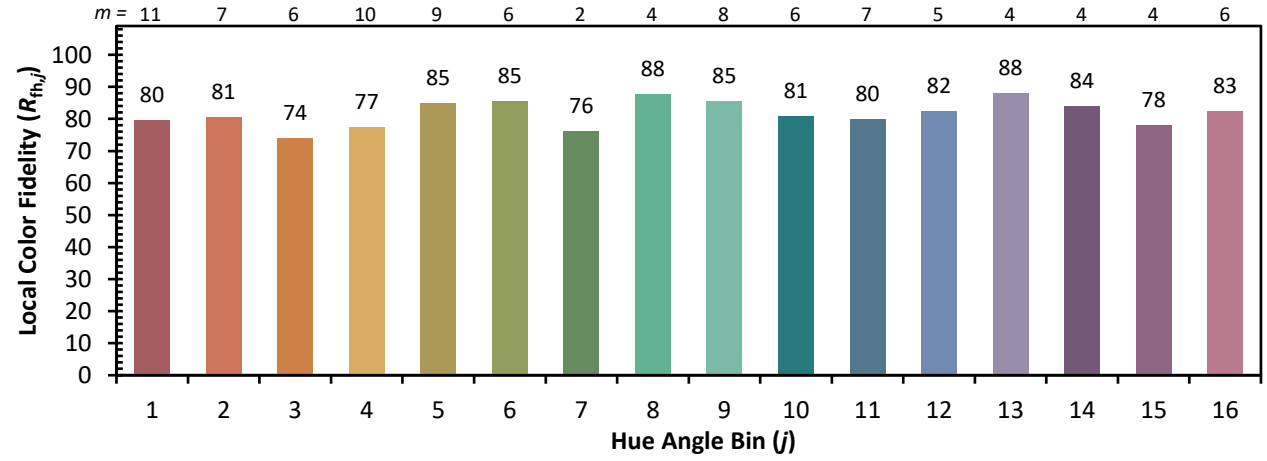
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



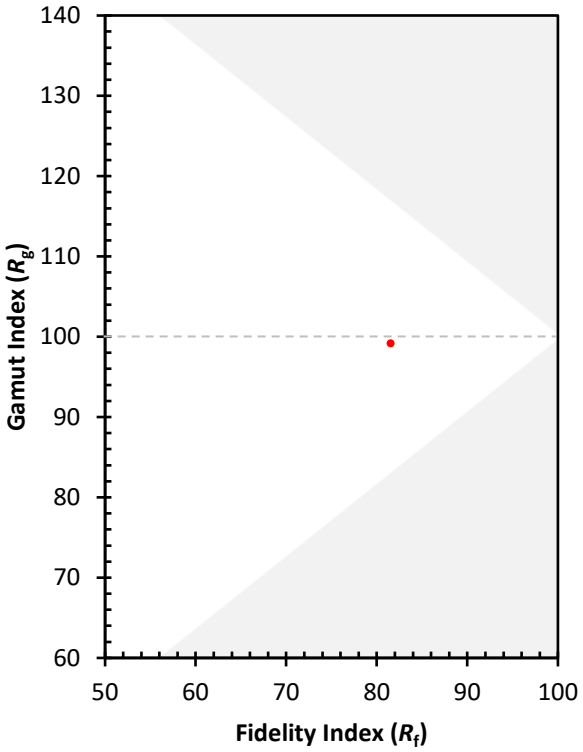


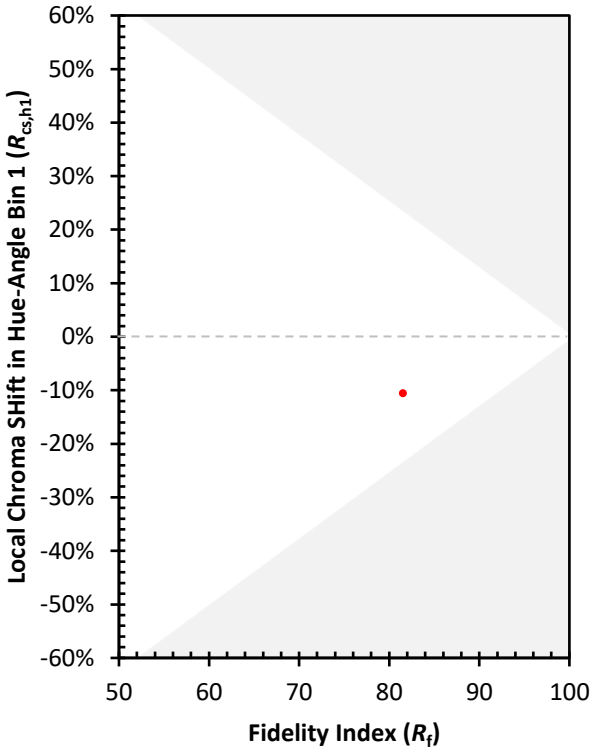


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)