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: P318228

Luminaire Tested: **GLEON-SA4A-830-U-T2**

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:	P318228
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-12)
Test Lab:	INNOVATION CENTER
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	McGRAW-EDISON
Catalog Number:	GLEON-SA4A-830-U-T2
Description:	GALLEON AREA AND ROADWAY LUMINAIRE
	(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source:	-
Ballast/Driver:	ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	14660 lumens
Efficiency:	N/A
Efficacy:	113.6 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type III - Medium
BUG Rating:	B2 - U0 - G3

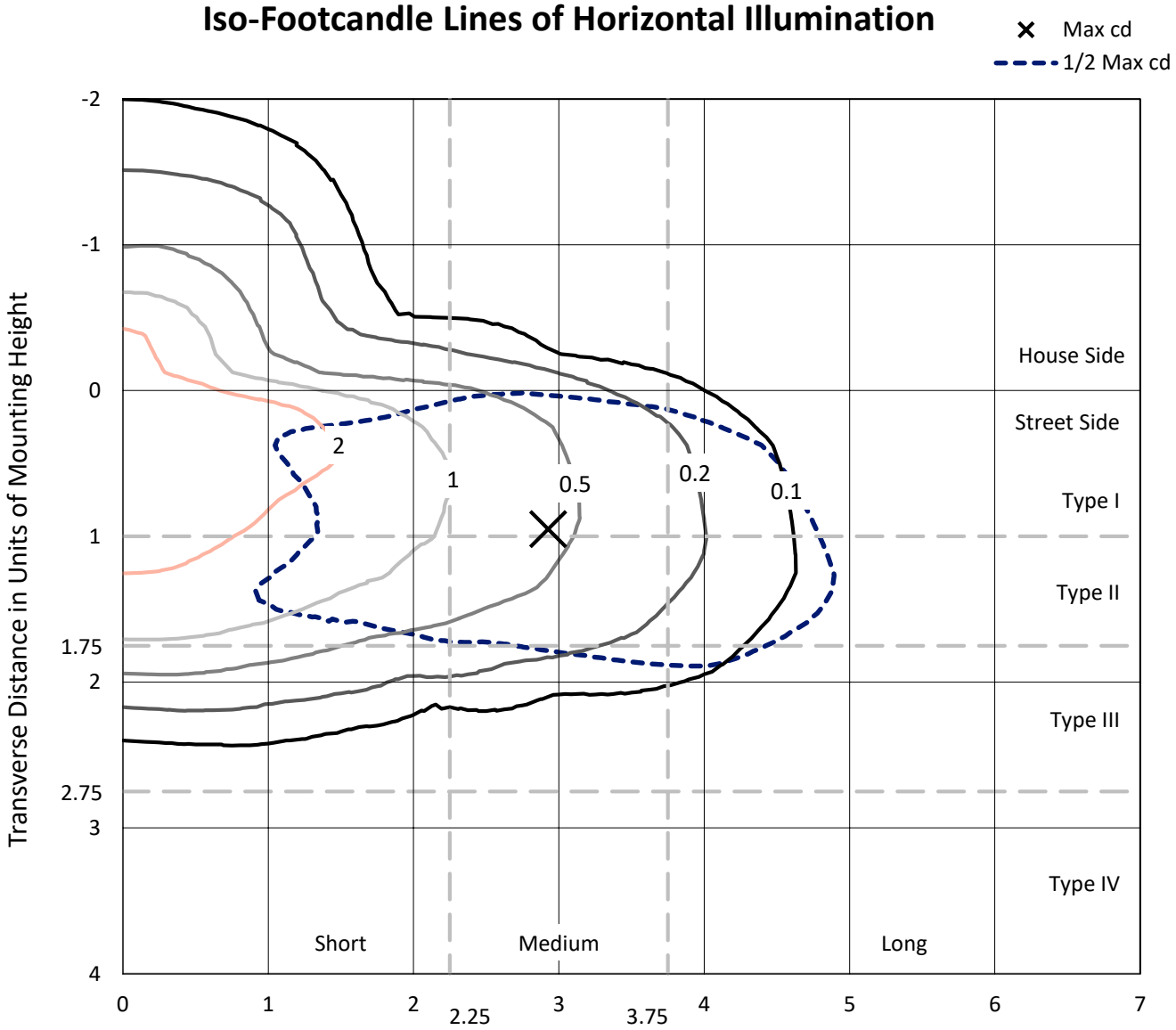
Input Watts (W):	129
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

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

Scaled Data Report

REPORT NUMBER: P318228
CATALOG NUMBER: GLEON-SA4A-830-U-T2

Iso-Footcandle Lines of Horizontal Illumination



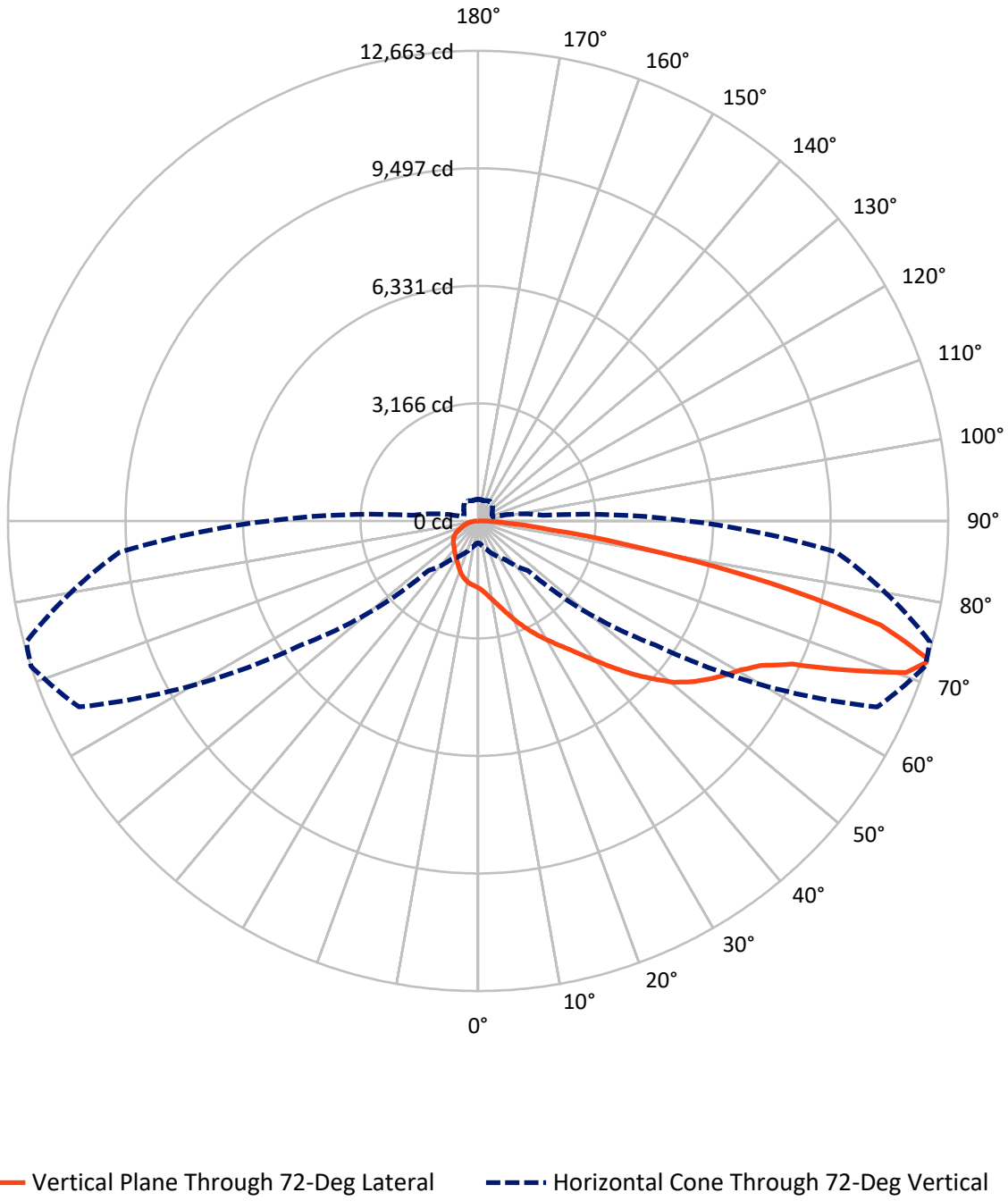
Based on 25 foot mounting height. Maximum calculated value = 4 fc
Type III - Medium - N/A

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

Scaled Data Report

REPORT NUMBER: P318228
CATALOG NUMBER: GLEON-SA4A-830-U-T2

Luminous Intensity Polar Plot



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

Scaled Data Report

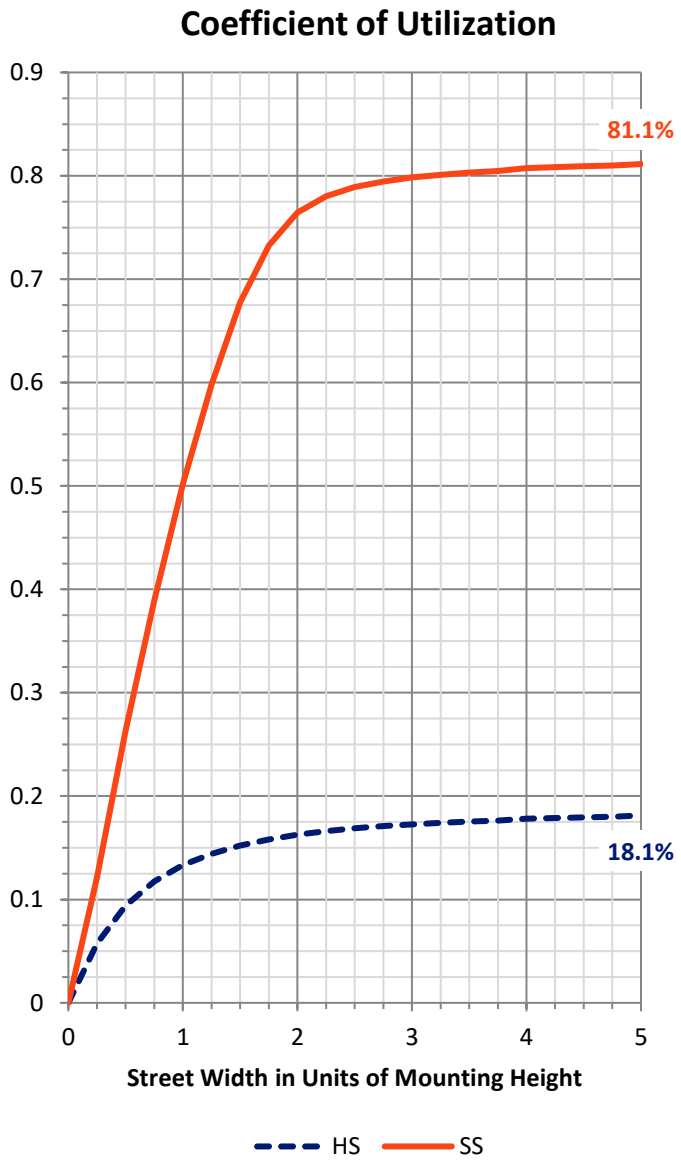
REPORT NUMBER: P318228
CATALOG NUMBER: GLEON-SA4A-830-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2719.5	0.0	2719.5
	% Fixture	18.6	0.0	18.6
Street Side	Lumens	11940.5	0.0	11940.5
	% Fixture	81.4	0.0	81.4
Total	Lumens	14660.0	0.0	14660.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.7	1.2
10°-20°	584.0	4.0
20°-30°	1023.4	7.0
30°-40°	1517.3	10.4
40°-50°	2219.2	15.1
50°-60°	3053.6	20.8
60°-70°	3399.6	23.2
70°-80°	2303.6	15.7
80°-90°	378.6	2.6
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°	14660.0	100.0
0°-180°	14660.0	100.0



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

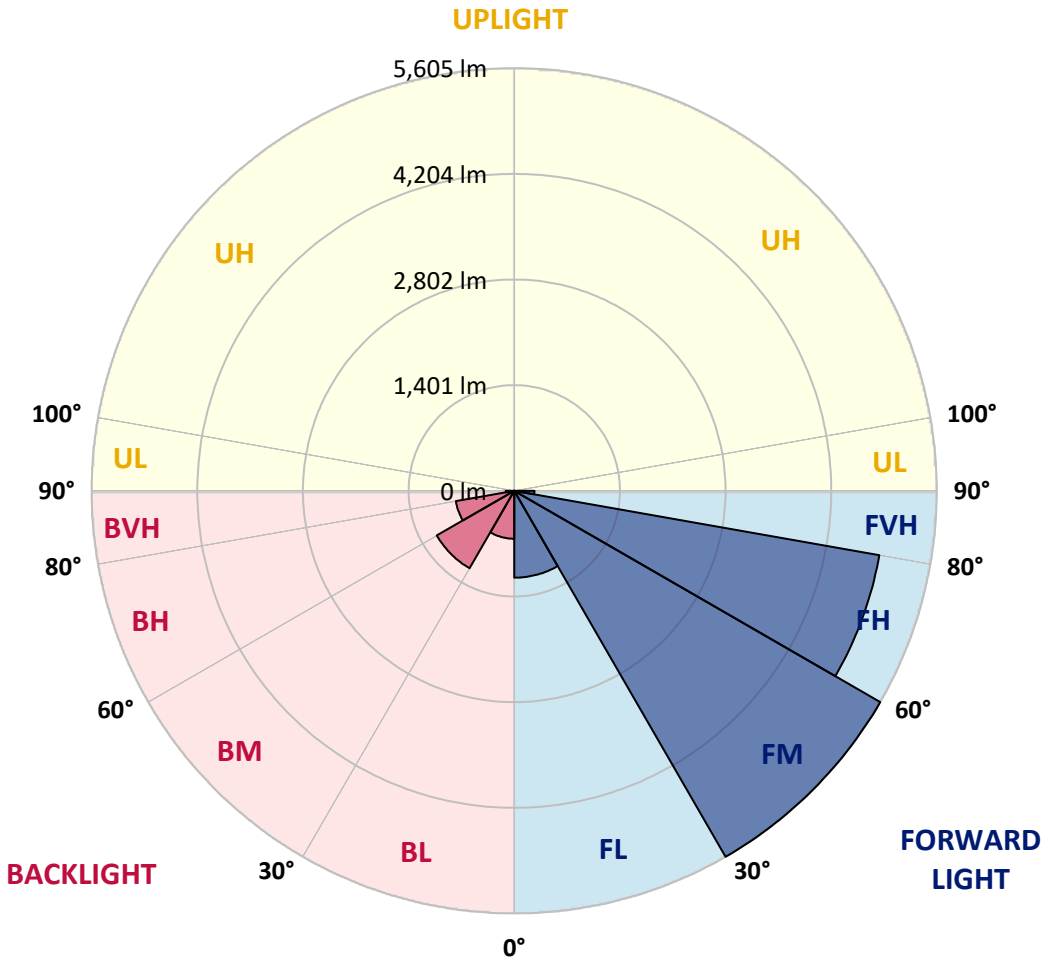
Scaled Data Report

REPORT NUMBER: P318228
CATALOG NUMBER: GLEON-SA4A-830-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1152.4	7.9			
FM	(30°-60°)	5604.7	38.2			
FH	(60°-80°)	4916.3	33.5			G2/5000
FVH	(80°-90°)	267.1	1.8			G3/500
BL	(0°-30°)	635.7	4.3	B2/1000		
BM	(30°-60°)	1185.5	8.1	B2/2500		
BH	(60°-80°)	786.8	5.4	B2/1000		G2/1000
BVH	(80°-90°)	111.5	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
Type III Medium



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

Scaled Data Report

REPORT NUMBER: P318228
CATALOG NUMBER: GLEON-SA4A-830-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	1803.6	1803.6	1803.6	1803.6	1803.6	1803.6	1803.6	1803.6	*1803.6*	1803.6	1803.6
2.5°	1992.3	1989.3	1978.7	1978.7	1958.5	1941.4	1909.1	1887.4	*1861.6*	1852.5	1822.2
5°	2185.2	2186.2	2173.1	2164.0	2134.2	2097.8	2042.8	1992.9	*1942.9*	1922.7	1860.6
7.5°	2347.2	2345.2	2341.7	2334.1	2306.3	2269.0	2194.8	2120.6	*2046.9*	2016.6	1909.6
10°	2451.2	2455.7	2458.8	2462.3	2450.7	2423.9	2353.8	2263.4	*2167.0*	2125.6	1968.1
12.5°	2503.7	2511.8	2525.9	2550.1	2569.3	2566.3	2515.3	2419.4	*2304.8*	2252.8	2041.3
15°	2534.5	2545.1	2567.3	2610.7	2664.7	2695.5	2681.9	2595.1	*2467.3*	2403.2	2130.7
17.5°	2553.7	2562.2	2596.6	2654.6	2734.9	2816.6	2852.5	2779.8	*2651.1*	2577.9	2233.1
20°	2566.8	2573.3	2616.3	2684.4	2788.4	2918.6	3018.6	3000.4	*2853.5*	2758.6	2340.1
22.5°	2596.1	2601.6	2642.5	2711.1	2826.2	2994.3	3178.6	3205.8	*3067.0*	2959.5	2454.7
25°	2677.8	2677.8	2712.2	2760.1	2868.1	3059.9	3313.9	3434.5	*3285.1*	3159.9	2560.7
27.5°	2833.8	2832.3	2844.9	2861.6	2943.3	3126.6	3434.5	3636.4	*3511.2*	3374.4	2663.7
30°	3018.6	3028.7	3030.2	3022.1	3060.5	3209.9	3546.0	3849.4	*3738.9*	3591.5	2769.2
32.5°	3256.3	3262.9	3255.3	3228.5	3223.0	3328.0	3655.6	4072.5	*3985.2*	3818.1	2865.6
35°	3558.2	3545.5	3521.8	3467.3	3415.3	3486.0	3780.8	4295.6	*4261.8*	4092.2	2998.4
37.5°	3881.7	3882.2	3853.0	3729.3	3657.6	3687.9	3953.4	4548.5	*4596.5*	4418.3	3168.5
40°	4141.2	4154.8	4173.0	4010.4	3917.6	3959.5	4173.0	4841.8	*4992.2*	4805.0	3390.1
42.5°	4322.4	4338.0	4389.5	4287.6	4191.2	4268.9	4431.4	5154.8	*5436.4*	5251.2	3649.5
45°	4514.2	4522.8	4559.1	4515.2	4453.6	4628.8	4722.7	5478.8	*5906.4*	5726.7	3939.8
47.5°	4716.1	4725.2	4762.6	4733.3	4701.0	4965.0	5026.6	5784.2	*6356.6*	6249.1	4249.7
50°	4965.5	4971.5	5006.9	4953.9	4964.0	5218.4	5298.1	6064.4	*6828.6*	6718.6	4560.6
52.5°	5305.7	5307.2	5356.2	5308.2	5260.8	5404.1	5531.8	6328.4	*7198.6*	7146.6	4871.6
55°	5572.2	5588.4	5748.9	5738.8	5711.5	5572.7	5727.2	6579.7	*7528.7*	7553.5	5201.7
57.5°	5402.1	5465.2	5790.3	6019.4	6242.6	5992.2	5991.2	6862.9	*7835.6*	7952.7	5564.6
60°	4731.3	4817.1	5296.1	5804.4	6502.5	6722.1	6539.4	7208.7	*8145.6*	8348.5	6019.4
62.5°	3379.0	3520.3	4169.4	4981.1	6146.1	7205.7	7654.9	7757.4	*8567.0*	8806.8	6610.5
65°	1708.2	1815.2	2359.3	3337.1	4910.5	6889.7	8867.4	8958.8	*9299.5*	9512.5	7520.6
67.5°	1037.8	1078.2	1343.7	1856.1	3010.5	5366.8	9263.1	10961.2	*10716.9*	10830.0	8818.4
70°	764.7	794.5	960.1	1232.7	1731.4	3149.3	8048.6	12390.2	*12229.7*	12217.1	9777.5
72°	*595.6*	*617.3*	*763.7*	*995.9*	*1266.0*	*1889.4*	*5833.7*	*11862.7*	*12662.8*	*12599.2*	*9689.7*
72.5°	564.8	584.0	717.3	937.4	1196.3	1712.7	5245.1	11506.9	*12631.5*	12602.7	9576.1
75°	444.7	458.3	531.0	724.9	936.4	971.7	2874.2	8917.4	*11205.5*	11671.4	8613.0
77.5°	368.0	370.0	408.4	527.5	729.9	687.0	1411.9	6187.0	*8023.9*	8536.3	6101.2
80°	299.8	302.4	320.5	370.0	552.2	508.3	670.3	3557.7	*4492.5*	4498.1	2901.4
82.5°	238.8	239.3	259.5	270.6	396.8	363.4	384.1	1670.3	*1963.1*	1888.4	1042.9
85°	168.1	164.6	253.4	222.1	259.5	233.2	212.0	661.3	*811.7*	776.3	326.6
87.5°	56.0	58.0	112.6	143.9	151.4	132.3	94.4	253.4	*306.4*	303.9	103.5
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: P318228
CATALOG NUMBER: GLEON-SA4A-830-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1803.6	1803.6	1803.6	1803.6	1803.6	1803.6	1803.6	1803.6	1803.6	1803.6	1803.6
2.5°	1812.6	1796.5	1772.8	1746.5	1725.8	1704.6	1689.0	1680.9	1671.8	1664.2	1673.3
5°	1831.8	1801.5	1751.1	1701.6	1665.3	1632.9	1609.7	1597.6	1586.5	1578.9	1579.9
7.5°	1863.1	1814.2	1729.4	1657.2	1606.7	1571.9	1548.1	1540.1	1533.0	1531.0	1533.5
10°	1896.4	1824.3	1700.6	1604.7	1547.1	1518.4	1507.8	1513.3	1518.4	1522.9	1528.0
12.5°	1934.3	1833.3	1658.7	1543.1	1494.1	1483.0	1493.6	1517.9	1535.5	1546.1	1552.7
15°	1983.8	1841.4	1610.2	1481.5	1448.7	1461.3	1497.2	1539.1	1569.9	1589.5	1592.6
17.5°	2029.2	1840.9	1548.1	1419.4	1411.9	1448.7	1502.7	1561.8	1603.2	1630.9	1636.5
20°	2076.1	1827.3	1476.0	1358.9	1374.5	1435.1	1505.2	1576.4	1626.4	1658.7	1666.3
22.5°	2120.1	1803.6	1396.7	1303.8	1343.2	1416.9	1495.6	1567.8	1617.8	1644.1	1652.1
25°	2149.8	1762.2	1316.5	1257.4	1315.4	1394.7	1464.4	1522.4	1559.8	1572.9	1574.9
27.5°	2165.0	1708.2	1240.7	1217.0	1286.7	1358.4	1406.3	1435.1	1445.7	1444.7	1442.6
30°	2167.0	1637.0	1175.6	1184.2	1253.4	1304.8	1327.6	1322.0	1308.4	1285.2	1287.2
32.5°	2160.4	1556.7	1121.1	1152.9	1211.0	1239.7	1240.7	1214.0	1177.6	1140.8	1130.7
35°	2162.5	1478.0	1073.2	1117.6	1159.5	1172.1	1160.5	1121.1	1071.6	1024.2	1014.1
37.5°	2184.7	1409.3	1031.8	1076.7	1102.4	1105.5	1088.8	1047.4	1011.1	964.6	960.6
40°	2237.7	1360.4	992.4	1030.8	1045.4	1046.9	1023.2	993.9	996.9	972.2	971.7
42.5°	2333.1	1339.2	957.6	982.8	991.9	994.9	976.7	958.1	984.3	968.2	962.6
45°	2456.2	1344.2	928.3	935.9	952.5	966.6	955.5	932.8	942.9	872.8	849.5
47.5°	2598.6	1376.5	905.1	895.5	924.2	951.0	933.8	899.5	863.7	794.0	780.9
50°	2765.2	1426.5	883.9	855.6	893.5	929.8	912.6	863.7	809.7	775.8	771.3
52.5°	2938.8	1487.6	862.7	811.7	854.6	913.6	905.1	855.6	789.0	755.6	749.6
55°	3135.7	1549.2	835.9	760.7	812.7	906.1	901.5	826.3	773.3	754.6	750.1
57.5°	3380.5	1619.3	800.6	707.7	773.3	878.8	864.7	808.7	757.2	743.0	741.5
60°	3699.5	1722.8	749.6	651.2	725.4	836.9	833.9	782.9	731.4	721.3	719.3
62.5°	4178.0	1893.9	679.4	594.6	671.9	765.7	793.5	748.1	704.2	703.7	704.7
65°	4920.0	2151.4	603.2	545.2	617.8	705.7	746.6	712.2	676.4	686.5	688.0
67.5°	5780.2	2364.9	528.5	496.7	562.8	648.6	704.2	676.4	639.6	665.8	666.3
70°	6066.4	2174.1	462.9	448.7	505.8	593.6	658.2	637.0	599.7	625.9	623.4
72°	*5645.4*	*1755.1*	*420.5*	*412.4*	*462.9*	*548.2*	*617.3*	*600.2*	*563.3*	*581.0*	*574.4*
72.5°	5512.7	1673.3	409.9	403.3	451.3	536.6	606.7	591.1	554.2	569.4	563.3
75°	4917.5	1453.2	352.3	353.8	393.7	480.0	547.2	542.1	504.3	505.8	503.8
77.5°	3566.7	1065.6	296.8	306.9	335.2	422.0	487.1	484.1	442.7	435.1	433.6
80°	1655.2	543.6	241.8	246.3	275.6	352.8	415.4	411.4	378.1	368.5	362.9
82.5°	566.9	258.4	181.7	184.7	213.5	284.2	360.4	357.9	330.1	311.4	299.8
85°	202.4	128.7	127.2	124.2	152.4	223.6	314.0	300.3	259.5	221.1	220.1
87.5°	65.6	55.0	65.6	65.1	88.8	151.4	228.2	194.3	188.3	156.5	153.5
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

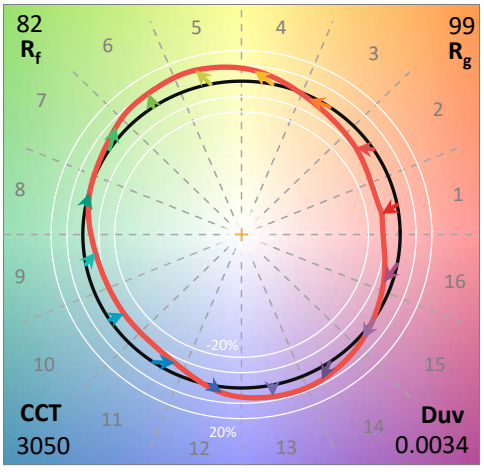
Test Information

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

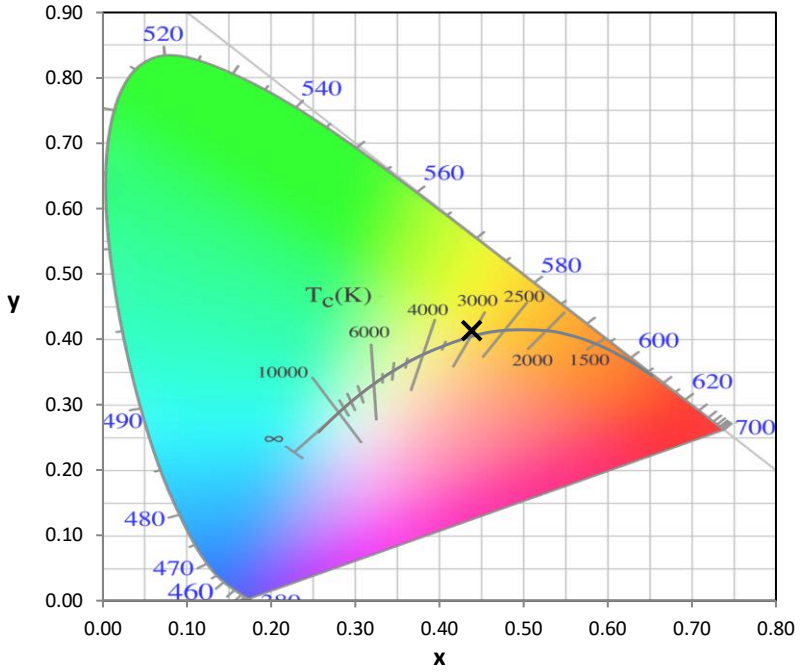
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

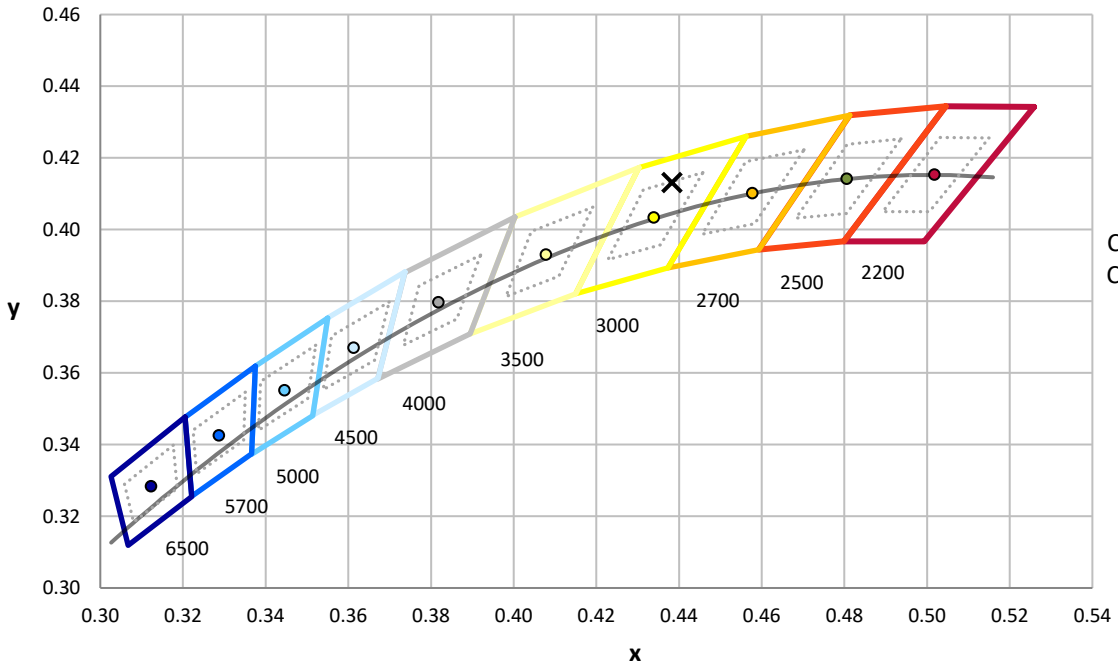
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

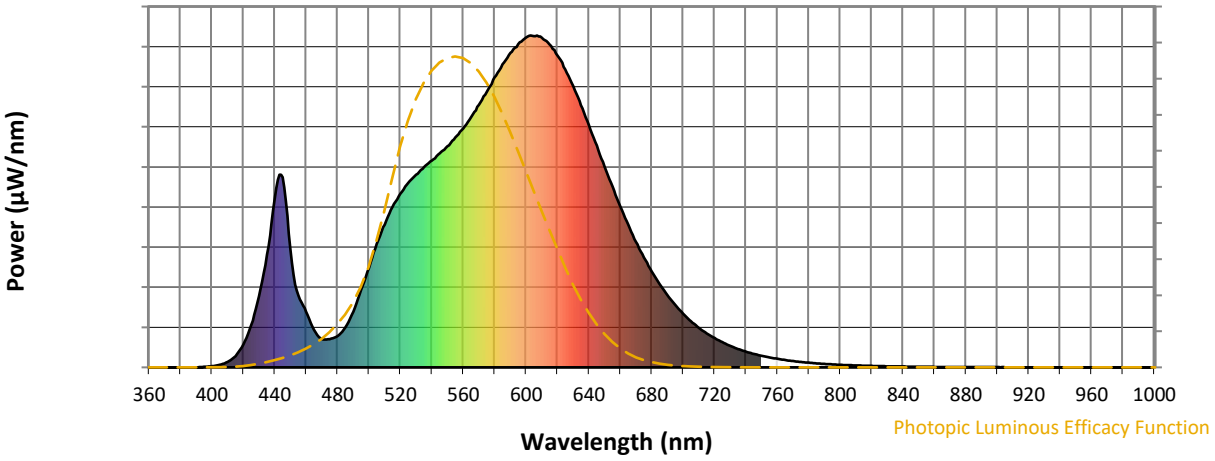


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

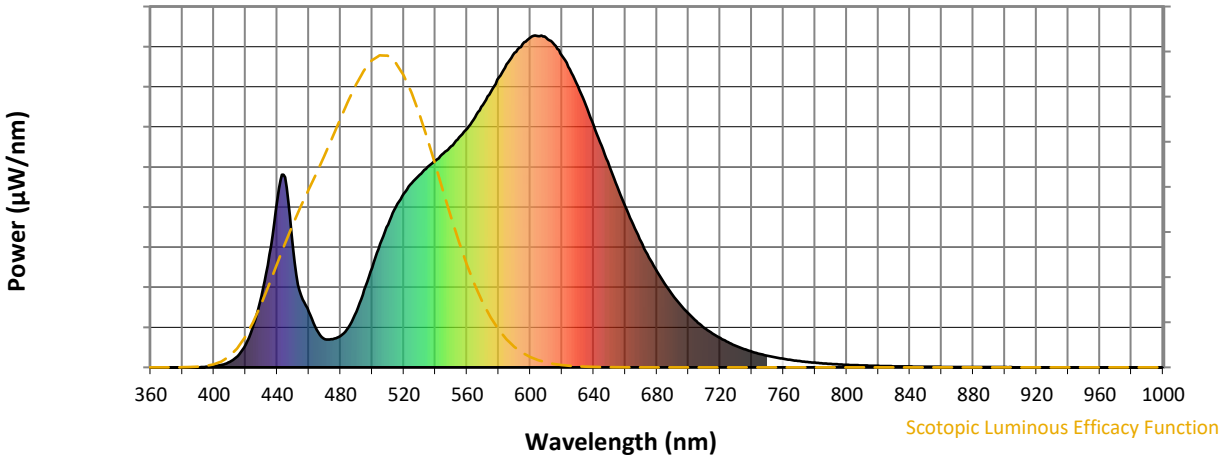


Photopic Lumens: NR

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

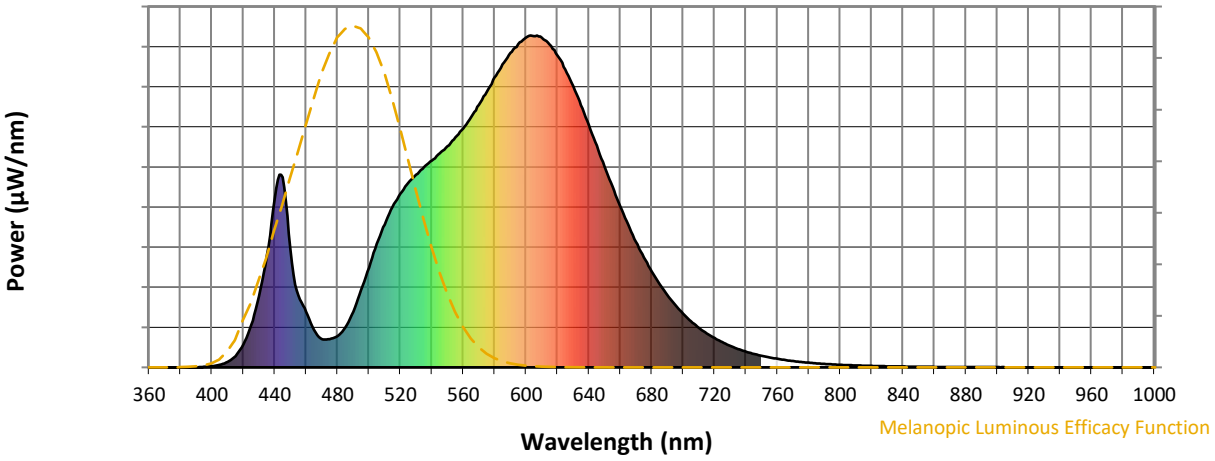


Scotopic Lumens: NR **S/P: 1.27**

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			

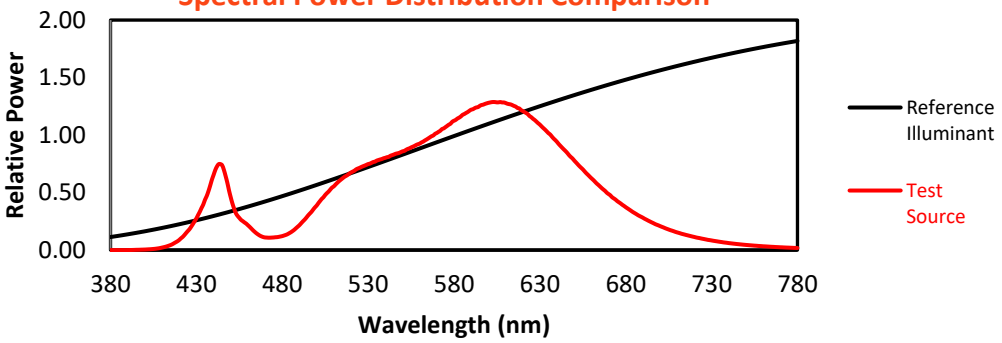
REPORT NUMBER: SP1-2408-195-9

TM-30-18

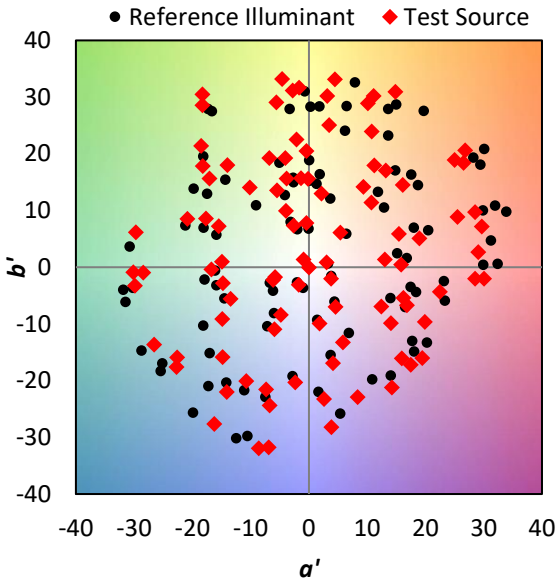
Summary

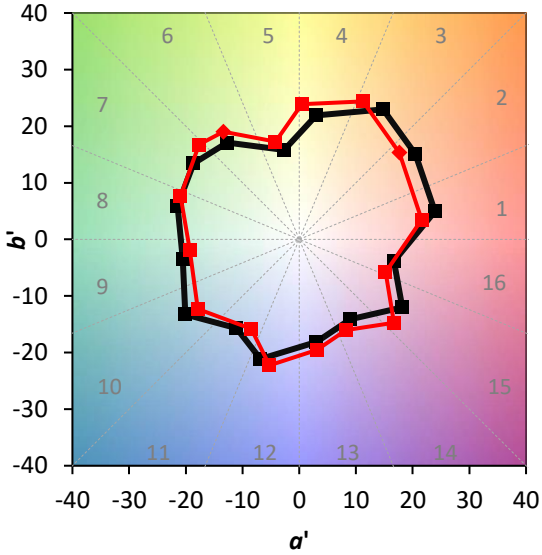
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

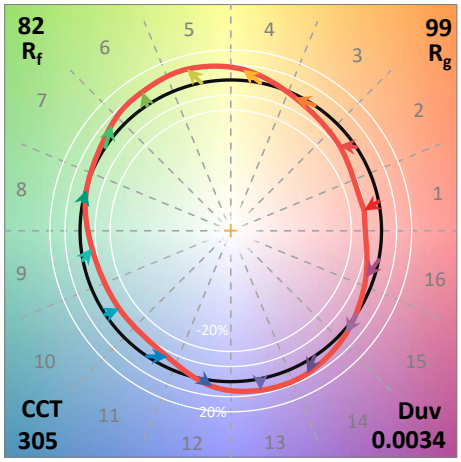
Spectral Power Distribution Comparison

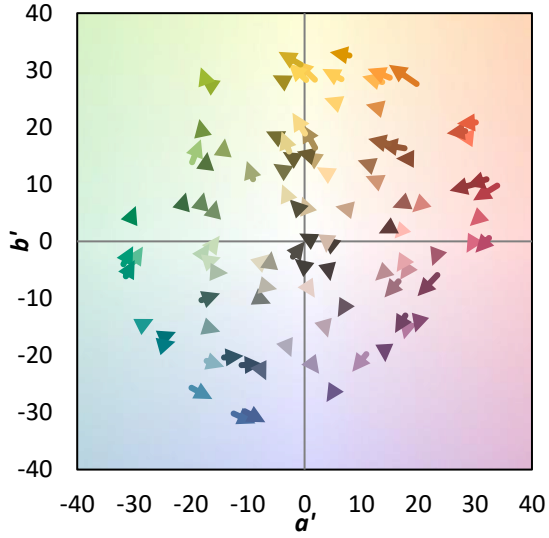


Color Vector Graphics







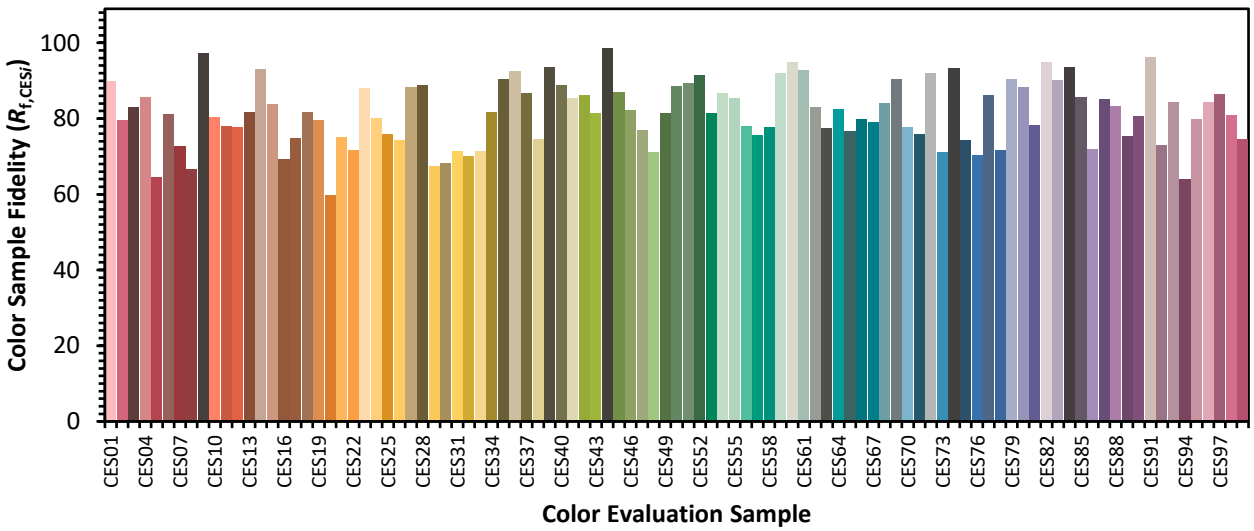


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

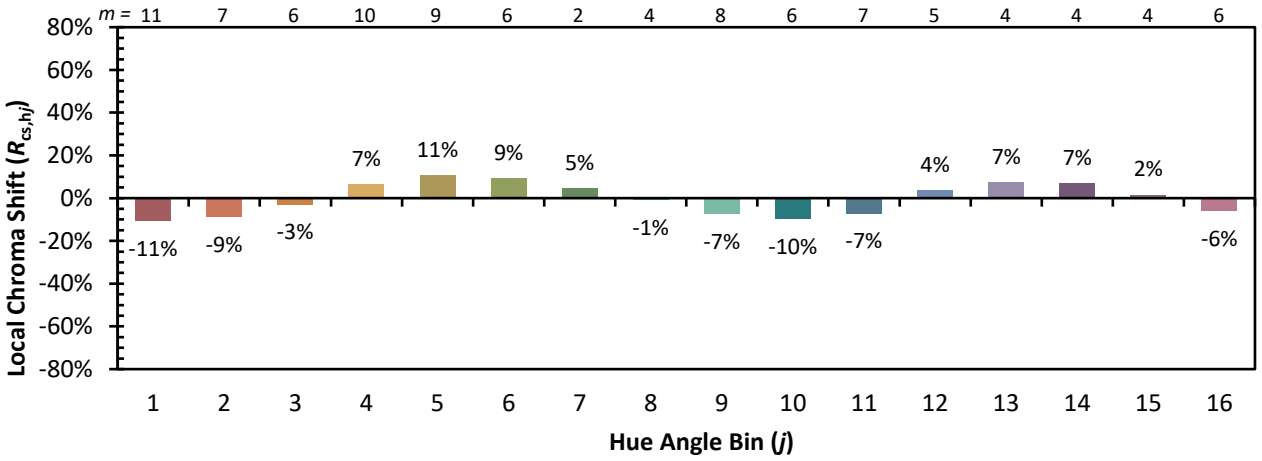
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

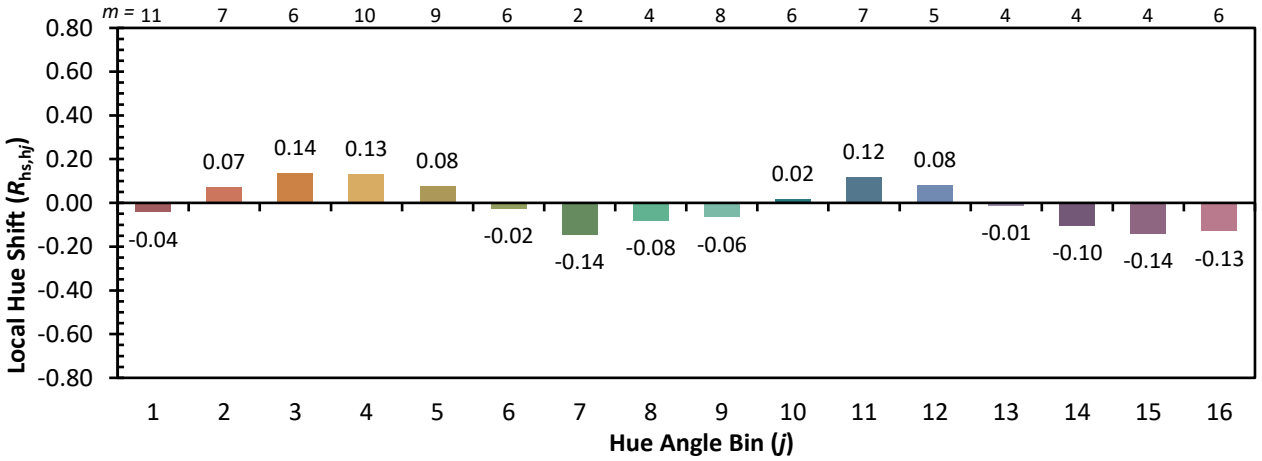


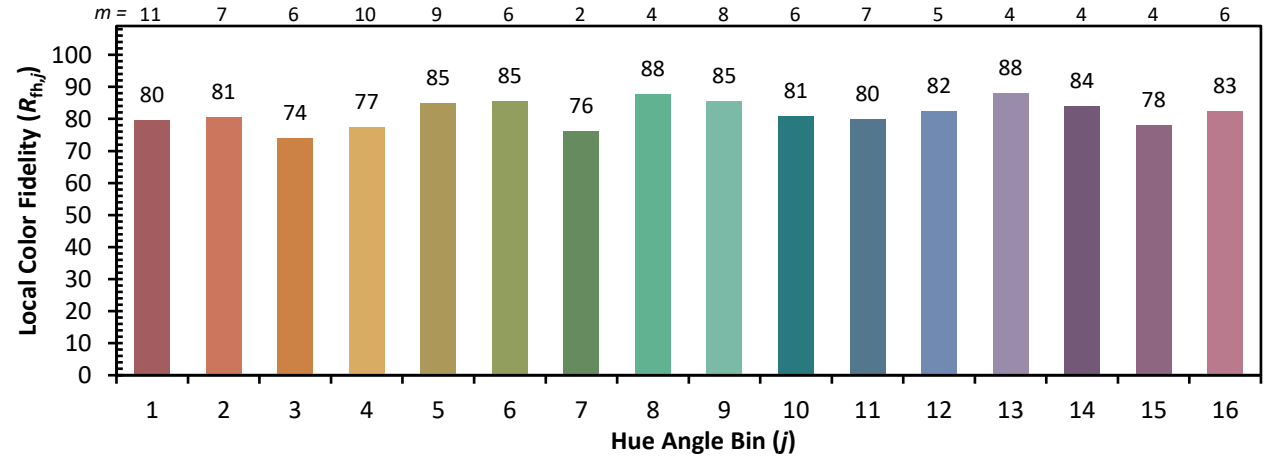
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



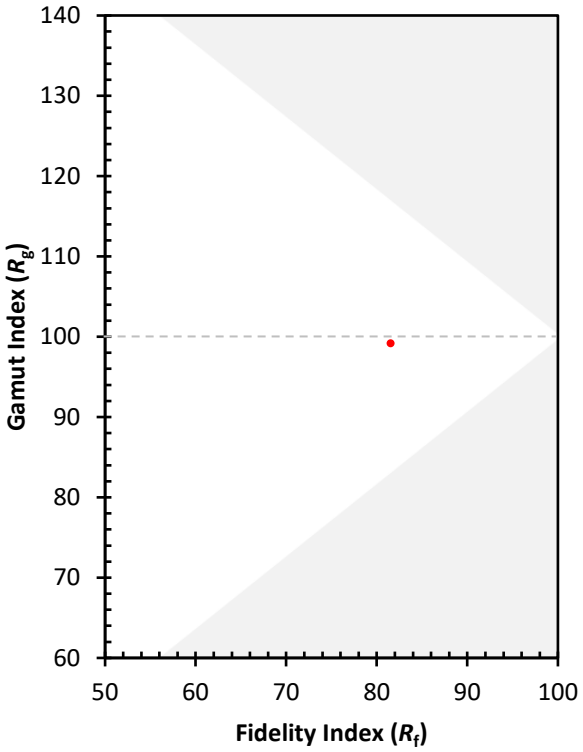


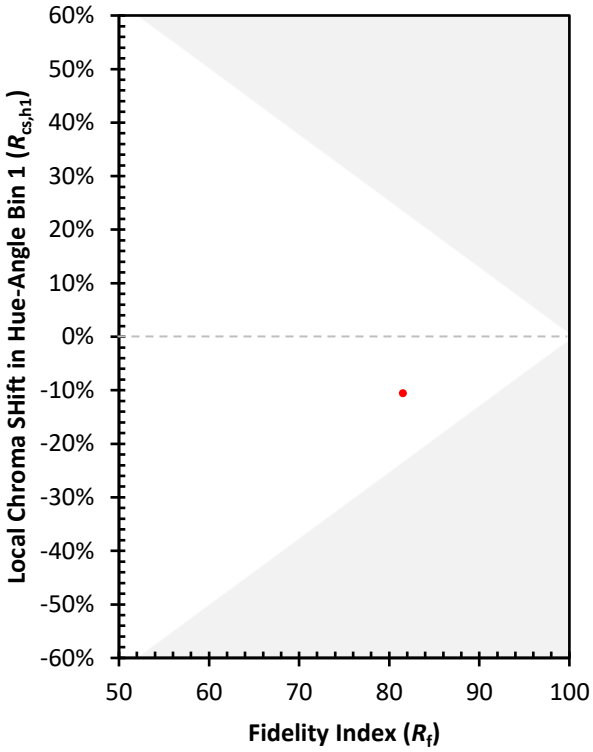


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)