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

Scaled data based on original data using

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

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P635003

Luminaire Tested: GWS-SA3C-830-U-RW-W

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

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

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P635003
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA3C-830-U-RW-W
Description:	GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source:	(48) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	11407.4 lumens
Efficiency:	N/A
Efficacy:	122.7 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification:	Type III - Short
BUG Rating:	B3 - U0 - G3

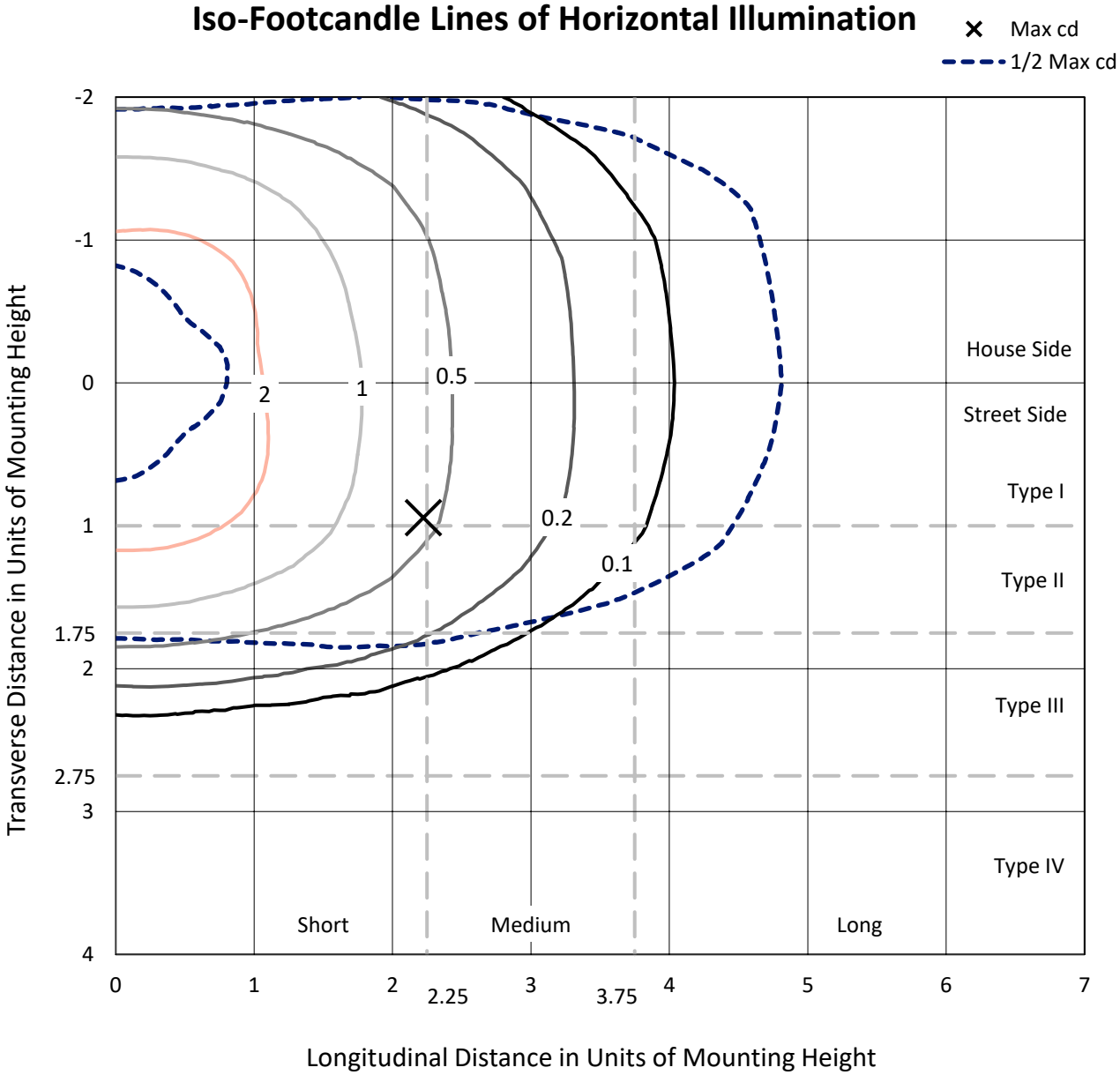
Input Watts (W):	93
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P635003
CATALOG NUMBER: GWS-SA3C-830-U-RW-W

Iso-Footcandle Lines of Horizontal Illumination



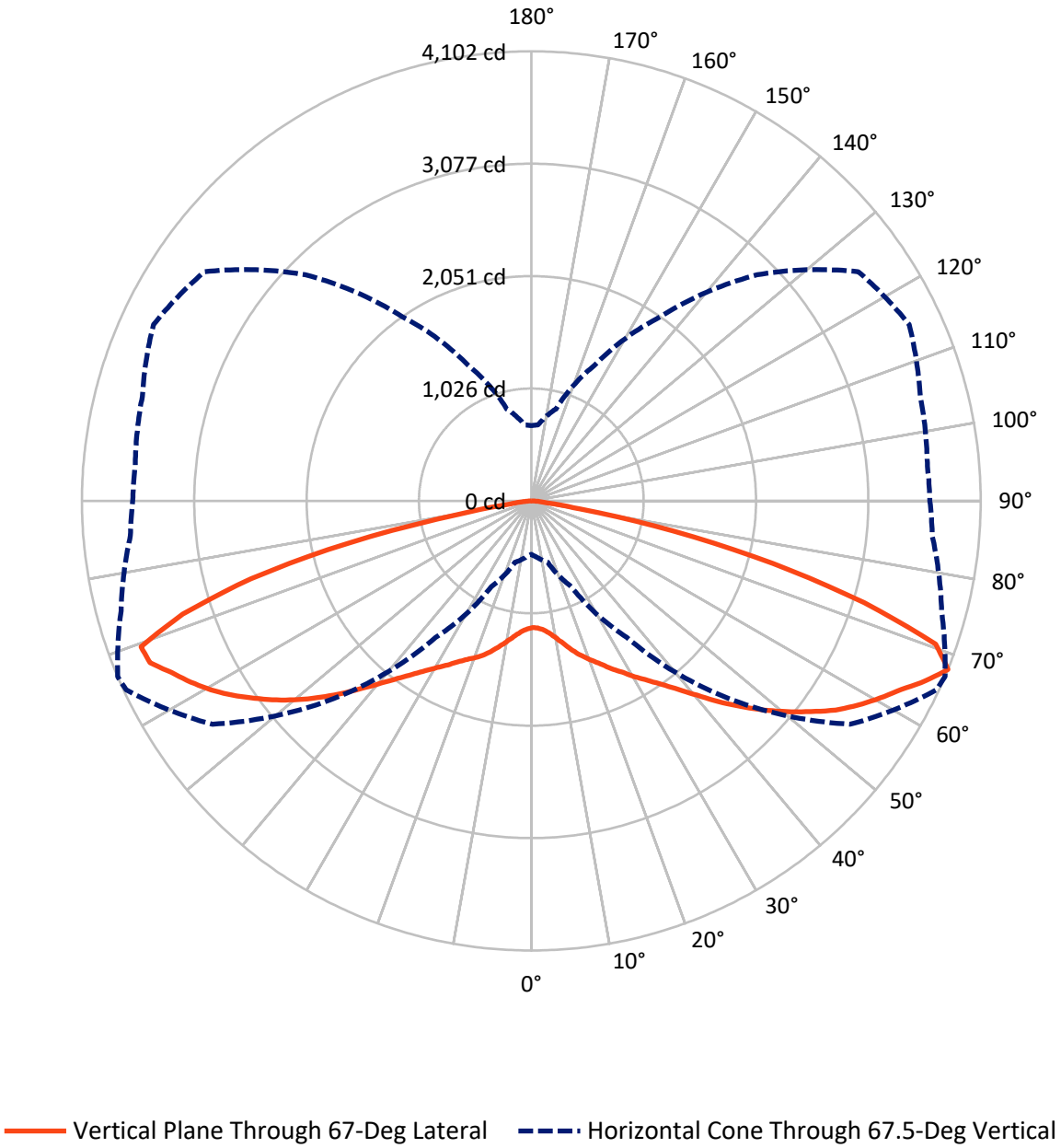
Based on 20 foot mounting height. Maximum calculated value = 3.3 fc
Type III - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P635003
CATALOG NUMBER: GWS-SA3C-830-U-RW-W

Luminous Intensity Polar Plot



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

Scaled Data Report

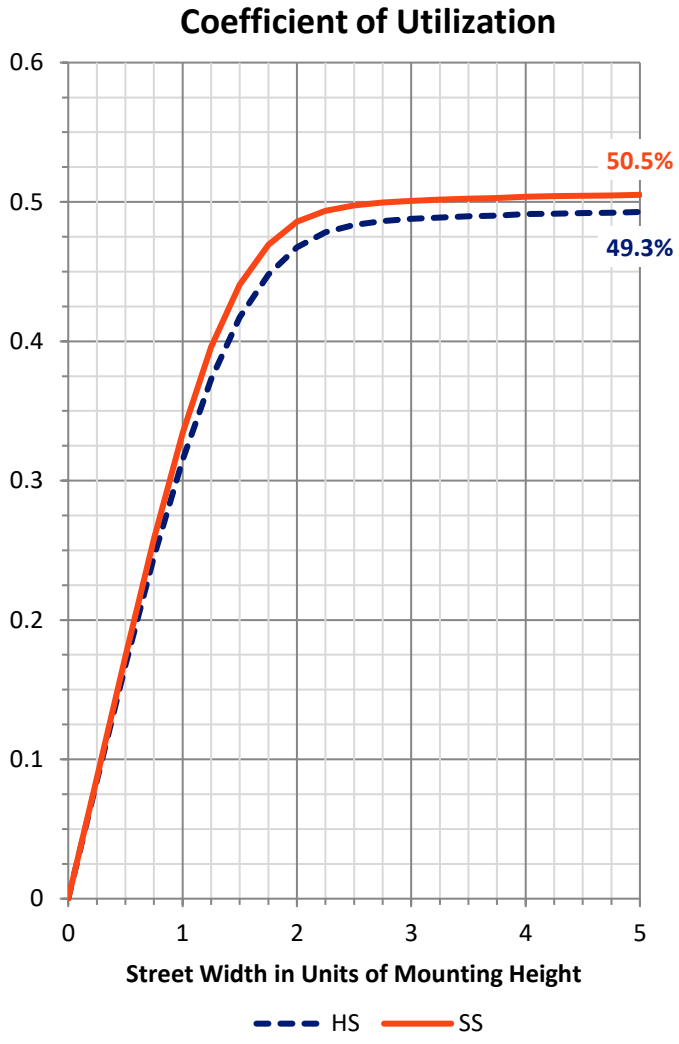
REPORT NUMBER: P635003
CATALOG NUMBER: GWS-SA3C-830-U-RW-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5640.7	0.0	5640.7
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	5766.6	0.0	5766.6
	% Fixture	50.6	0.0	50.6
Total	Lumens	11407.4	0.0	11407.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	1.0
10°-20°	382.9	3.4
20°-30°	751.2	6.6
30°-40°	1279.7	11.2
40°-50°	2055.0	18.0
50°-60°	2792.3	24.5
60°-70°	2671.0	23.4
70°-80°	1269.9	11.1
80°-90°	92.0	0.8
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°	11407.4	100.0
0°-180°	11407.4	100.0



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

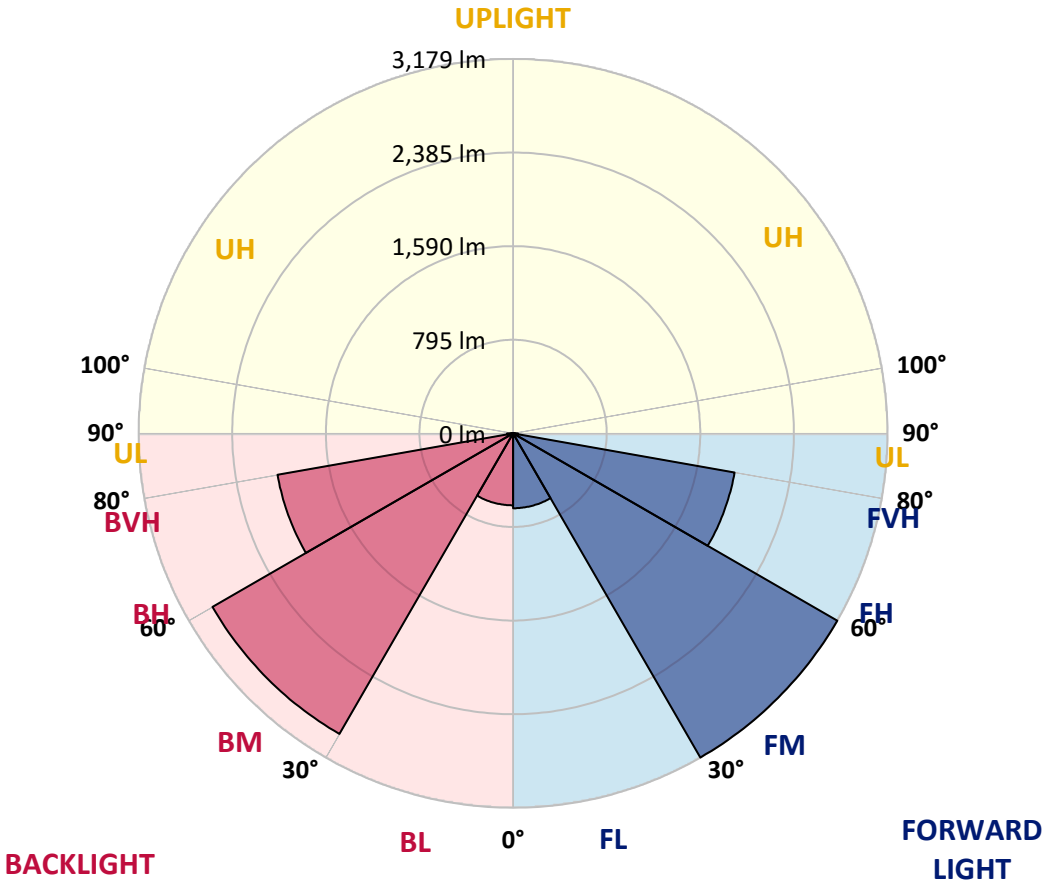
Scaled Data Report

REPORT NUMBER: P635003
CATALOG NUMBER: GWS-SA3C-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	636.0	5.6			
FM	(30°-60°)	3179.3	27.9			
FH	(60°-80°)	1909.9	16.7			G2/5000
FVH	(80°-90°)	41.4	0.4			G1/100
BL	(0°-30°)	611.3	5.4	B2/1000		
BM	(30°-60°)	2947.7	25.8	B3/5000		
BH	(60°-80°)	2031.1	17.8	B3/2500		G3/2500
BVH	(80°-90°)	50.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
Type III Short



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

Scaled Data Report

REPORT NUMBER: P635003
CATALOG NUMBER: GWS-SA3C-830-U-RW-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	*1155.1*	1155.1	1155.1
2.5°	1131.2	1132.8	1135.2	1140.0	1144.7	1151.9	1159.0	1158.2	*1161.4*	1163.8	1166.2
5°	1124.9	1126.5	1130.4	1136.8	1143.9	1155.9	1171.0	1177.3	*1182.1*	1190.8	1198.8
7.5°	1138.4	1141.6	1147.1	1155.9	1167.0	1182.1	1202.7	1213.8	*1221.0*	1236.9	1250.4
10°	1156.7	1160.6	1171.7	1188.4	1205.1	1228.1	1254.4	1271.0	*1275.8*	1296.5	1321.9
12.5°	1174.1	1178.9	1197.2	1227.4	1257.5	1288.5	1319.5	1340.2	*1341.7*	1369.6	1398.2
15°	1201.9	1205.9	1230.5	1269.5	1315.5	1358.4	1396.6	1410.9	*1417.2*	1437.1	1472.8
17.5°	1263.1	1267.9	1299.6	1341.7	1390.2	1435.5	1473.6	1485.5	*1485.5*	1502.2	1531.6
20°	1329.0	1333.8	1375.9	1429.9	1488.7	1534.8	1564.2	1553.1	*1549.1*	1553.9	1574.5
22.5°	1402.9	1411.7	1452.2	1514.9	1587.2	1643.6	1658.7	1625.3	*1614.2*	1603.1	1607.9
25°	1497.5	1507.8	1547.5	1614.2	1684.9	1744.5	1753.2	1701.6	*1695.3*	1656.3	1642.0
27.5°	1606.3	1614.2	1663.5	1729.4	1795.4	1845.4	1854.9	1791.4	*1769.9*	1715.9	1682.5
30°	1746.9	1754.0	1796.9	1862.1	1919.3	1954.2	1966.1	1878.8	*1862.1*	1779.5	1727.8
32.5°	1900.2	1903.4	1947.1	2009.8	2060.7	2094.0	2077.4	1975.7	*1951.1*	1858.1	1787.4
35°	2075.8	2075.8	2132.2	2183.0	2223.5	2233.1	2201.3	2085.3	*2056.7*	1955.8	1867.6
37.5°	2248.2	2252.9	2305.4	2365.7	2401.5	2399.9	2341.9	2214.8	*2182.2*	2072.6	1974.9
40°	2434.8	2445.2	2497.6	2565.1	2599.3	2594.5	2505.5	2364.1	*2330.8*	2201.3	2106.0
42.5°	2606.4	2623.1	2684.3	2753.4	2790.7	2787.6	2694.6	2535.7	*2503.2*	2357.0	2261.7
45°	2743.1	2760.6	2836.8	2932.9	2992.5	2987.0	2893.2	2713.7	*2674.0*	2520.6	2415.8
47.5°	2863.0	2881.3	2966.3	3068.0	3162.5	3172.1	3086.3	2893.2	*2851.1*	2696.2	2577.8
50°	2955.2	2963.9	3059.2	3170.5	3280.1	3333.3	3258.6	3073.5	*3022.7*	2869.4	2735.9
52.5°	2948.0	2959.9	3077.5	3228.5	3375.4	3462.8	3411.2	3243.5	*3194.3*	3027.5	2897.2
55°	2802.7	2814.6	2954.4	3174.4	3428.6	3557.3	3551.8	3405.6	*3369.9*	3188.7	3064.8
57.5°	2590.6	2616.8	2755.8	2993.3	3358.7	3632.8	3655.1	3553.4	*3516.0*	3346.8	3230.8
60°	2210.8	2245.8	2406.2	2714.5	3134.7	3607.4	3765.5	3678.1	*3655.1*	3493.8	3381.0
62.5°	1606.3	1631.7	1845.4	2249.8	2802.7	3426.3	3858.4	3806.8	*3789.3*	3625.7	3516.8
65°	962.0	1020.0	1191.6	1591.2	2260.9	3084.7	3807.6	3975.2	*3956.9*	3761.5	3632.8
67.5°	*487.0*	*513.2*	*580.7*	*862.7*	*1520.5*	*2552.4*	*3552.6*	*4080.1*	*4102.3*	*3877.5*	*3674.1*
70°	301.9	309.0	328.1	425.8	759.4	1677.0	2905.1	3806.8	*3915.6*	3859.2	3566.9
72.5°	242.3	243.9	247.1	265.3	364.6	784.1	1836.7	2981.4	*3177.6*	3604.2	3413.6
75°	201.0	201.8	202.6	208.1	227.2	320.1	893.7	2048.8	*2278.3*	3063.2	3164.9
77.5°	161.3	157.3	160.5	162.9	167.6	178.7	308.2	1093.1	*1325.9*	2010.6	2447.6
80°	104.9	103.3	109.6	112.0	116.8	123.9	164.4	371.0	*450.4*	731.6	778.5
82.5°	56.4	53.2	66.7	64.3	66.7	72.3	96.9	135.8	*152.5*	220.8	186.7
85°	17.5	17.5	18.3	21.4	26.2	25.4	42.1	66.7	*73.9*	94.5	69.9
87.5°	3.2	3.2	3.2	3.2	3.2	4.0	8.7	13.5	*18.3*	32.6	24.6
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: P635003
CATALOG NUMBER: GWS-SA3C-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1	1155.1
2.5°	1171.0	1163.8	1167.8	1170.2	1169.4	1167.8	1159.8	1158.2	1154.3	1147.9	1146.3
5°	1205.9	1198.0	1198.8	1196.4	1188.4	1178.1	1160.6	1151.9	1144.7	1136.8	1136.0
7.5°	1260.7	1252.0	1249.6	1238.5	1216.2	1192.4	1164.6	1148.7	1136.8	1126.5	1124.9
10°	1330.6	1321.9	1313.9	1287.7	1251.2	1219.4	1182.9	1159.8	1142.4	1129.6	1127.3
12.5°	1408.5	1401.3	1381.5	1343.3	1299.6	1262.3	1225.0	1196.4	1171.0	1151.9	1149.5
15°	1495.1	1479.2	1449.0	1399.7	1358.4	1328.2	1283.0	1244.0	1203.5	1178.1	1172.5
17.5°	1555.4	1541.9	1506.2	1458.5	1426.0	1399.7	1346.5	1290.9	1236.1	1198.8	1190.8
20°	1598.3	1584.0	1543.5	1508.6	1498.2	1476.0	1414.0	1349.7	1286.1	1240.1	1229.7
22.5°	1629.3	1614.2	1572.9	1555.4	1569.7	1565.8	1505.4	1432.3	1356.8	1302.0	1289.3
25°	1658.7	1644.4	1607.9	1614.2	1652.4	1664.3	1599.1	1514.1	1428.3	1364.0	1348.9
27.5°	1686.5	1668.2	1651.6	1686.5	1740.5	1762.8	1693.7	1597.5	1504.6	1438.7	1426.7
30°	1729.4	1708.0	1705.6	1756.4	1842.2	1861.3	1785.0	1688.9	1596.8	1530.0	1514.9
32.5°	1783.4	1763.6	1765.2	1841.4	1940.7	1956.6	1891.5	1801.7	1709.6	1642.8	1622.2
35°	1856.5	1831.9	1845.4	1939.1	2039.2	2068.6	2016.2	1941.5	1851.8	1783.4	1760.4
37.5°	1957.4	1921.7	1949.5	2048.0	2148.9	2192.6	2152.0	2096.4	2007.5	1938.3	1916.9
40°	2086.1	2056.7	2067.8	2176.7	2280.7	2333.2	2307.7	2252.9	2164.7	2092.5	2067.8
42.5°	2238.6	2209.2	2205.3	2321.2	2425.3	2504.8	2480.1	2430.1	2338.7	2256.1	2232.3
45°	2388.0	2361.0	2366.5	2484.9	2601.7	2688.3	2663.6	2604.8	2505.5	2410.2	2391.2
47.5°	2543.7	2521.4	2526.2	2651.7	2780.4	2867.0	2836.0	2764.5	2648.5	2546.9	2523.8
50°	2703.4	2677.9	2685.1	2817.0	2956.0	3037.8	2990.1	2884.5	2756.6	2657.3	2637.4
52.5°	2862.2	2832.0	2850.3	2975.0	3118.8	3184.0	3095.8	2967.9	2844.0	2745.5	2723.2
55°	3044.9	3013.2	2993.3	3126.8	3269.0	3296.0	3175.2	3025.9	2878.9	2766.9	2753.4
57.5°	3211.8	3184.8	3147.4	3280.9	3385.7	3365.9	3236.4	3010.0	2793.9	2650.1	2631.1
60°	3361.1	3338.1	3305.5	3419.1	3466.8	3422.3	3187.1	2821.7	2584.2	2434.1	2425.3
62.5°	3498.6	3473.9	3443.7	3540.7	3534.3	3431.0	2963.1	2532.6	2214.8	2053.5	2039.2
65°	3607.4	3585.1	3576.4	3652.7	3642.3	3260.2	2614.4	2059.1	1618.2	1436.3	1430.7
67.5°	*3638.4*	*3629.6*	*3676.5*	*3806.0*	*3644.7*	*2917.1*	*2050.4*	*1365.6*	*869.1*	*696.7*	*686.4*
70°	3522.4	3521.6	3655.8	3840.9	3314.3	2228.3	1209.9	615.7	436.9	387.7	381.3
72.5°	3371.4	3369.1	3475.5	3313.5	2457.9	1219.4	509.2	329.7	273.3	259.8	259.8
75°	3123.6	3117.2	3197.5	2520.6	1382.3	459.2	270.1	226.4	214.5	212.1	212.1
77.5°	2546.1	2492.8	2366.5	1557.8	482.2	225.6	178.7	177.9	170.8	170.0	170.0
80°	837.3	837.3	973.1	594.2	212.9	139.0	126.3	132.7	125.5	120.7	120.0
82.5°	136.6	188.3	267.7	170.0	115.2	86.6	77.9	82.6	86.6	69.1	69.1
85°	54.0	70.7	103.3	79.4	53.2	35.0	37.3	41.3	36.5	31.8	31.0
87.5°	20.7	25.4	36.5	19.1	11.1	6.4	4.0	4.0	3.2	3.2	3.2
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

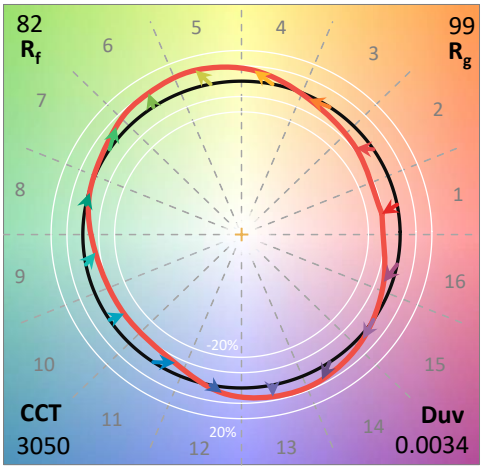
Test Information

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

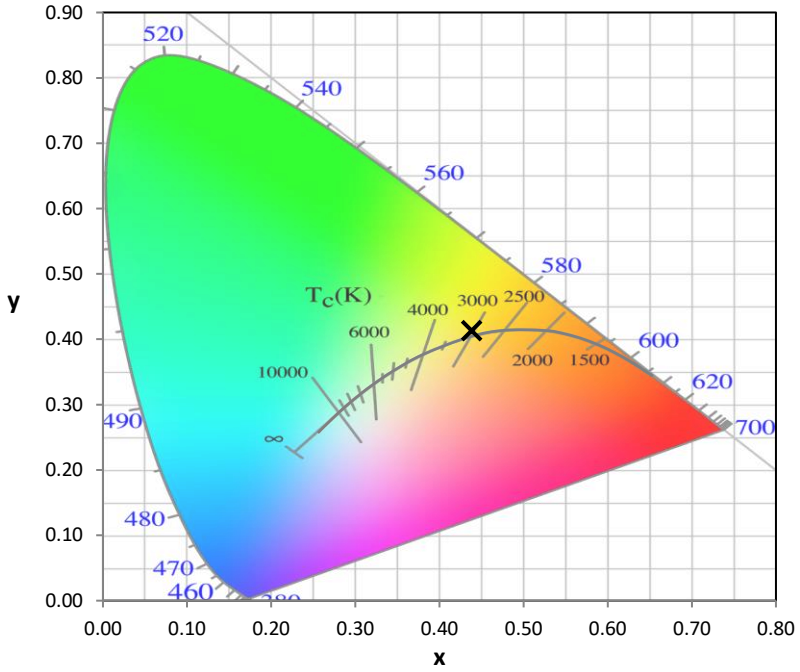
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

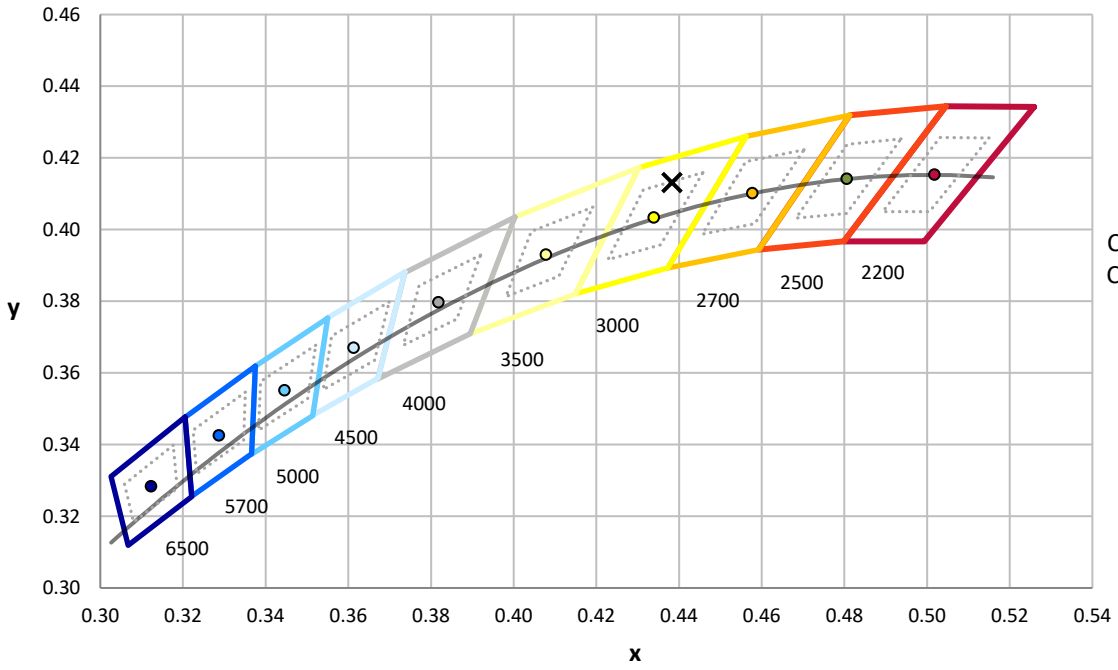
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

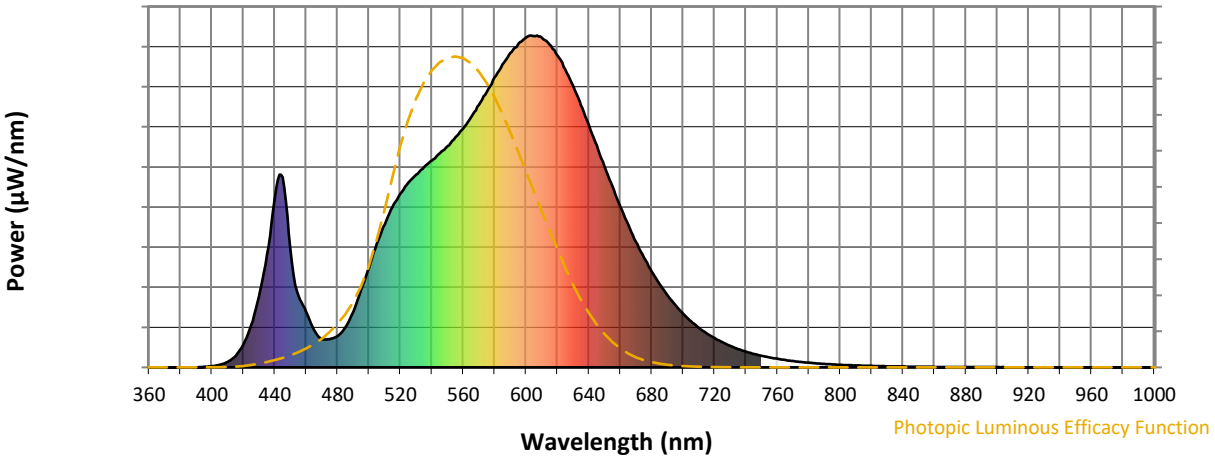


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

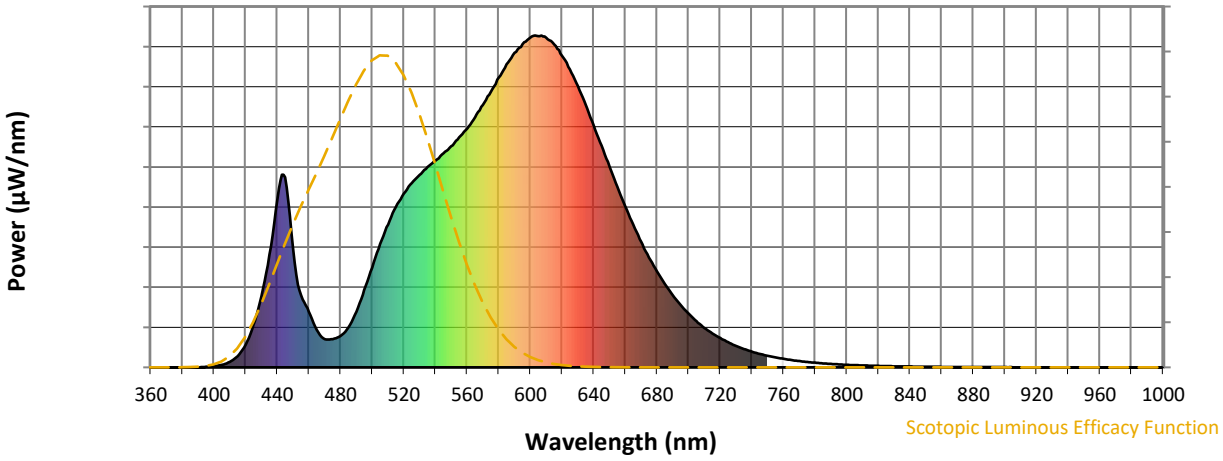


Photopic Lumens: NR

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

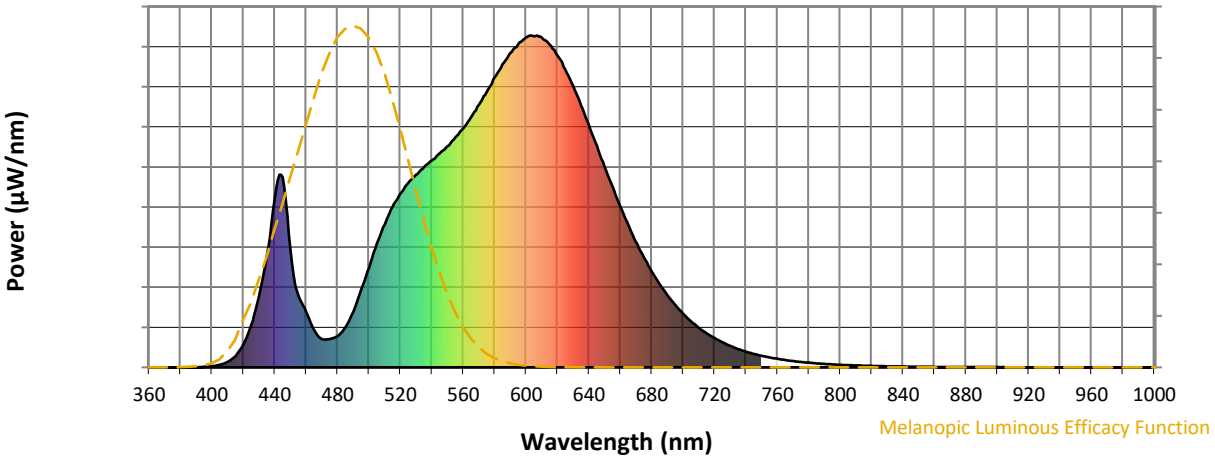


Scotopic Lumens: NR **S/P: 1.27**

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			

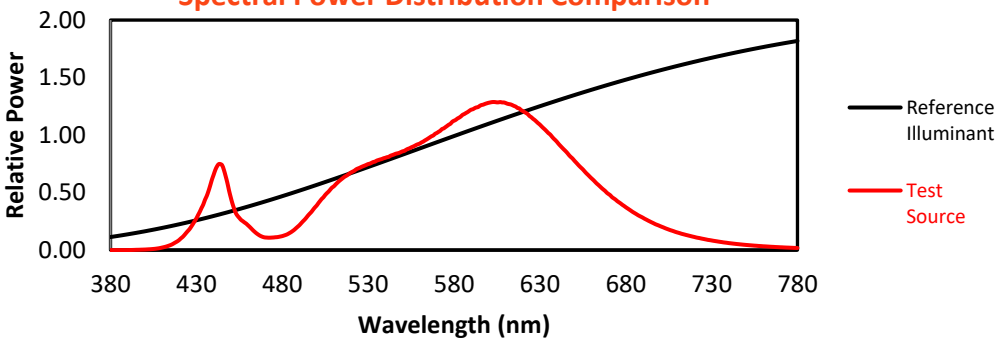
REPORT NUMBER: SP1-2408-195-9

TM-30-18

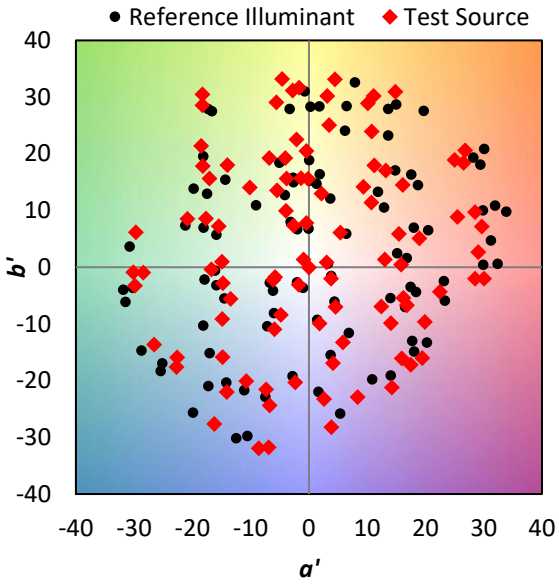
Summary

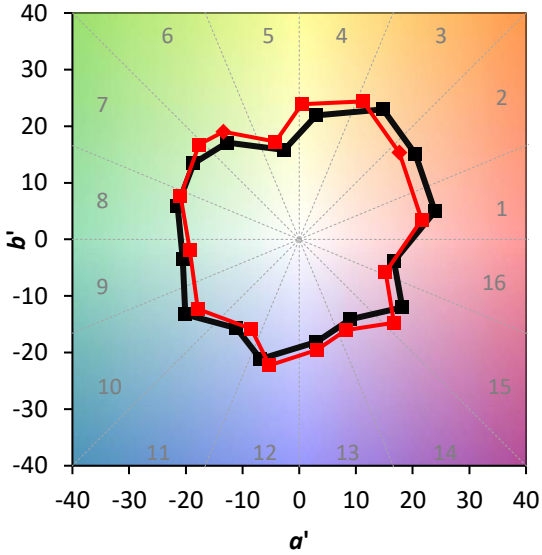
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

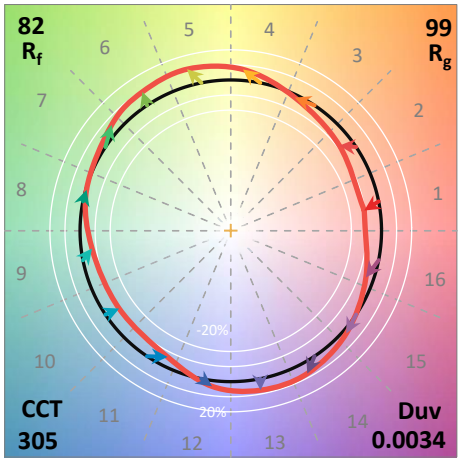
Spectral Power Distribution Comparison

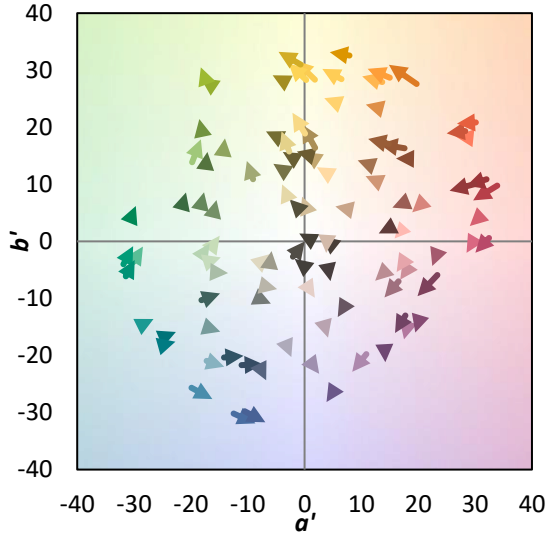


Color Vector Graphics







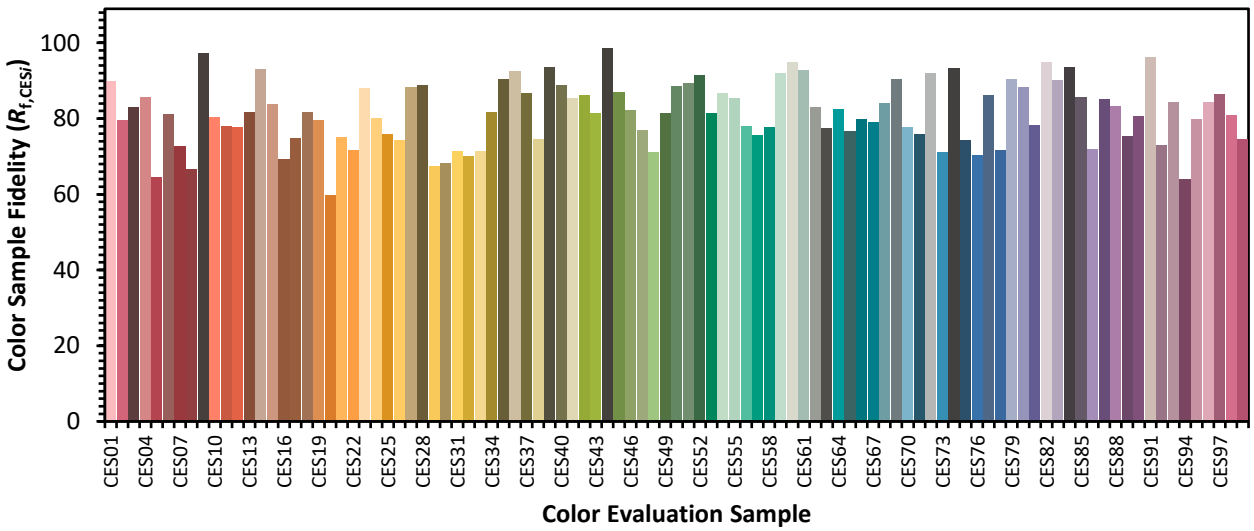


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

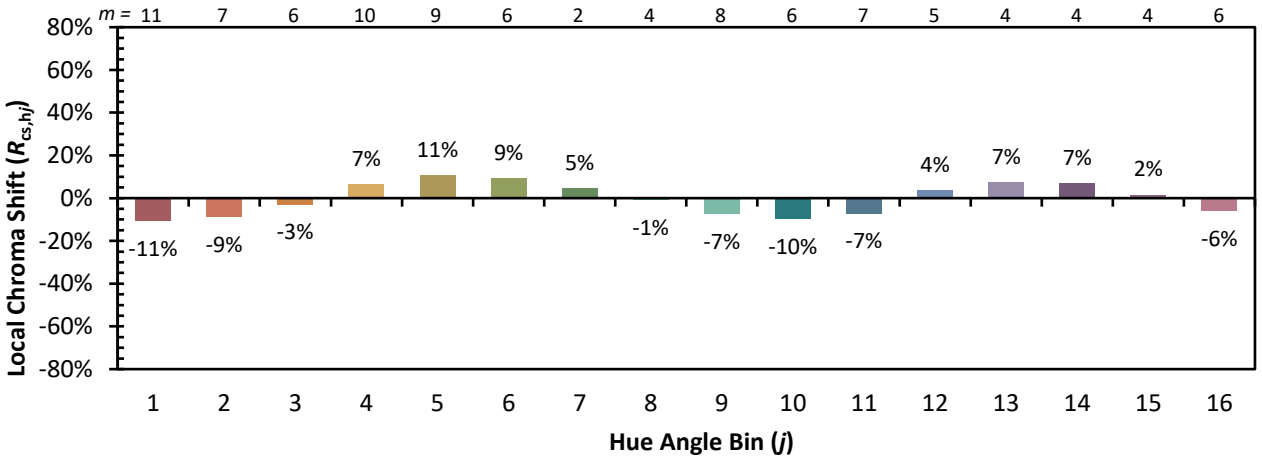
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

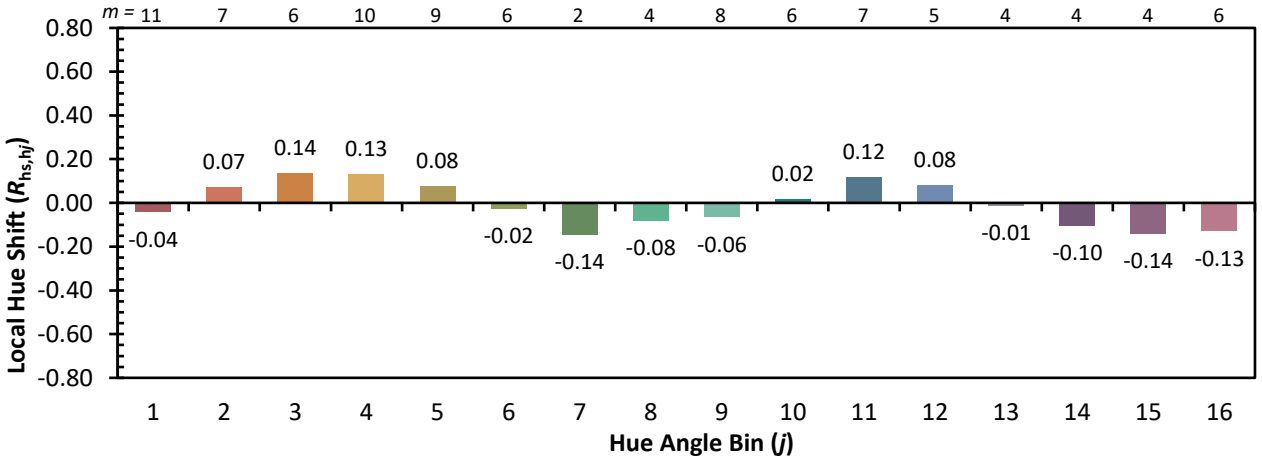


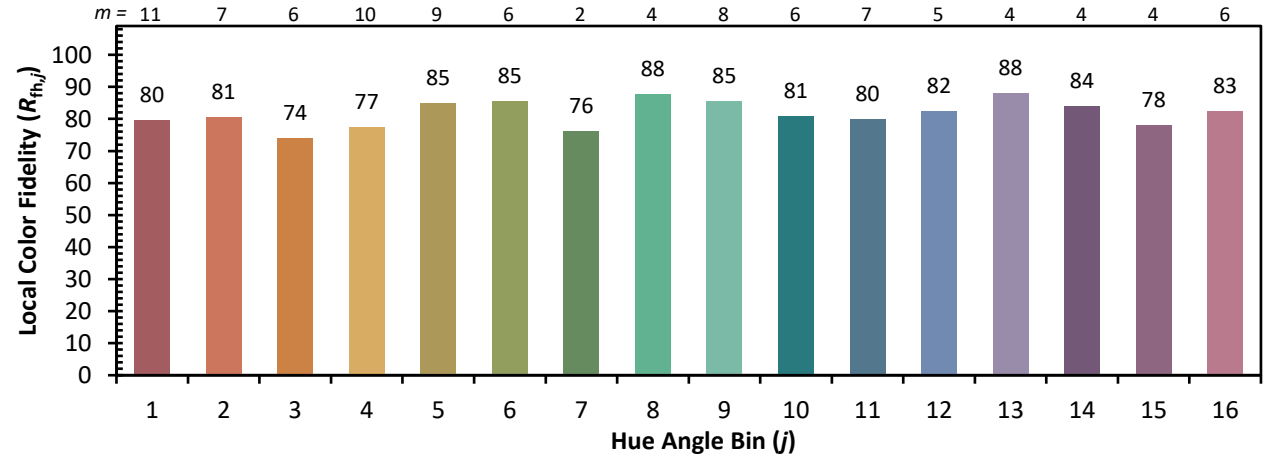
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



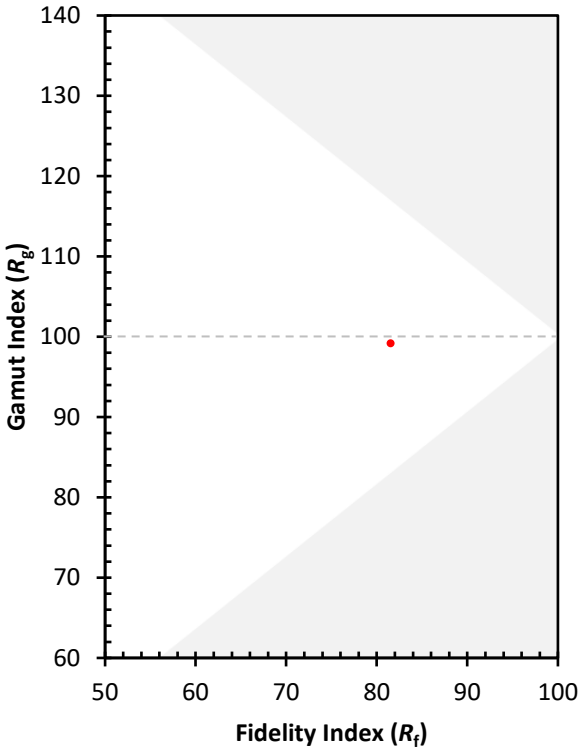


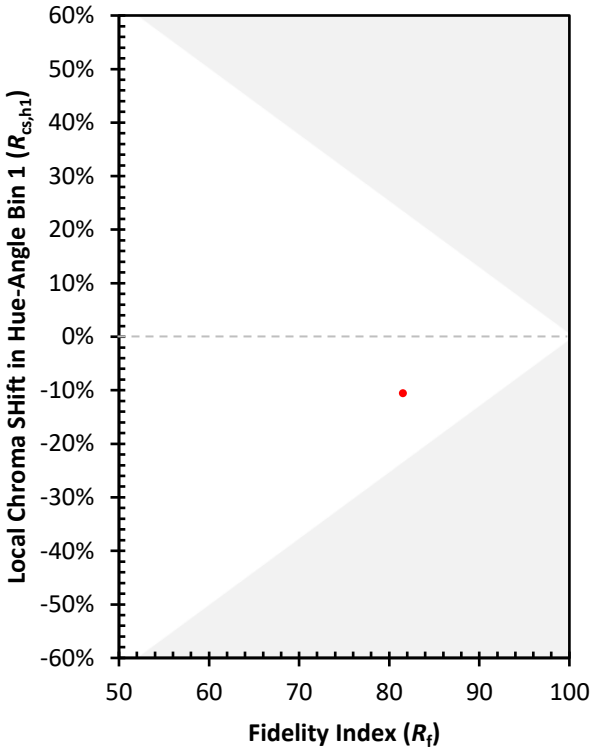


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)