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: P640475

Luminaire Tested: GWS-SA5D-830-U-T2R-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:	P640475
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-11)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA5D-830-U-T2R-W
Description:	GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source:	(80) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	24333.8 lumens
Efficiency:	N/A
Efficacy:	118.9 lumens/watt
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B3 - U0 - G3

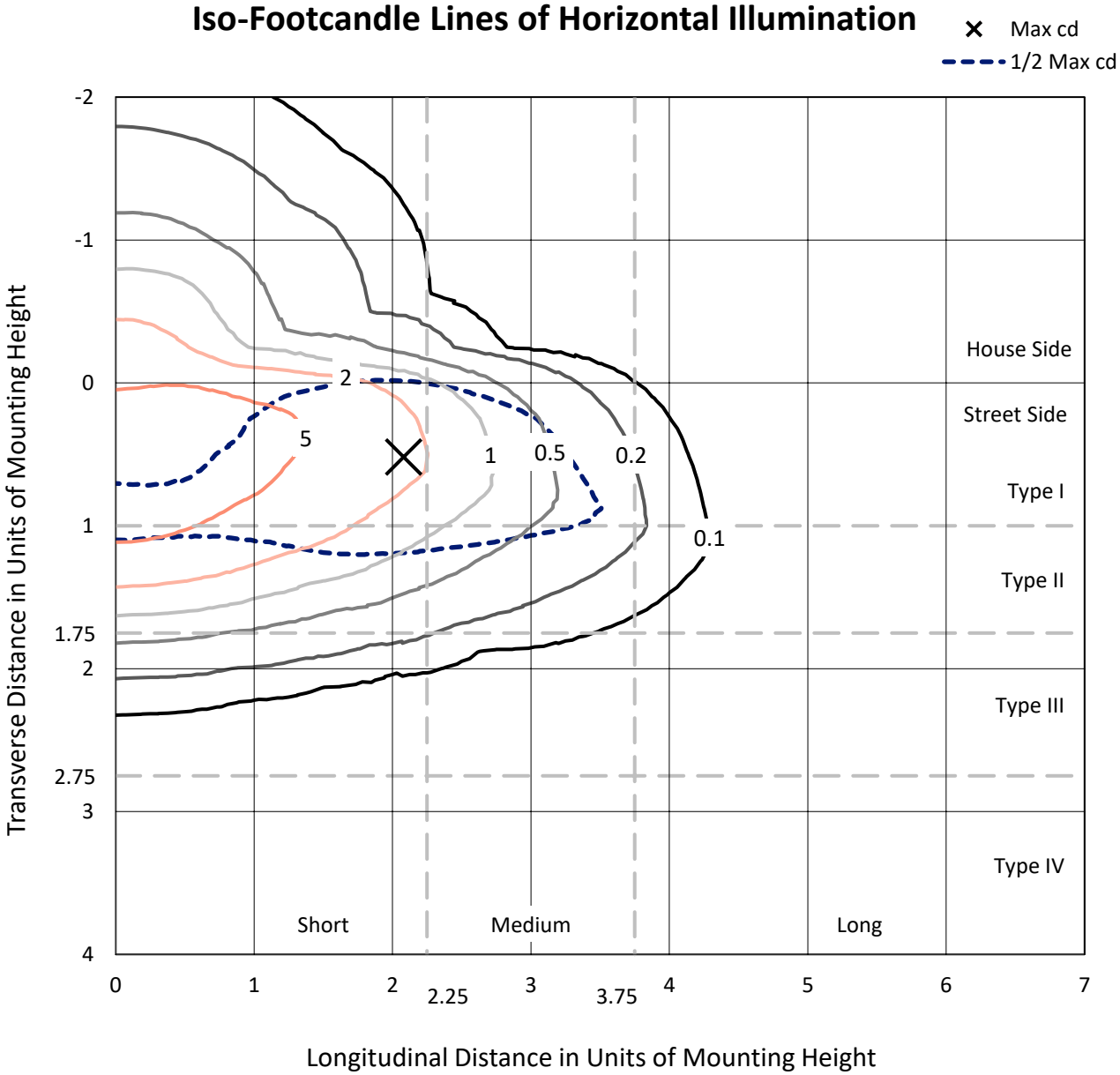
Input Watts (W):	204.6
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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

Scaled Data Report

REPORT NUMBER: P640475
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W

Iso-Footcandle Lines of Horizontal Illumination



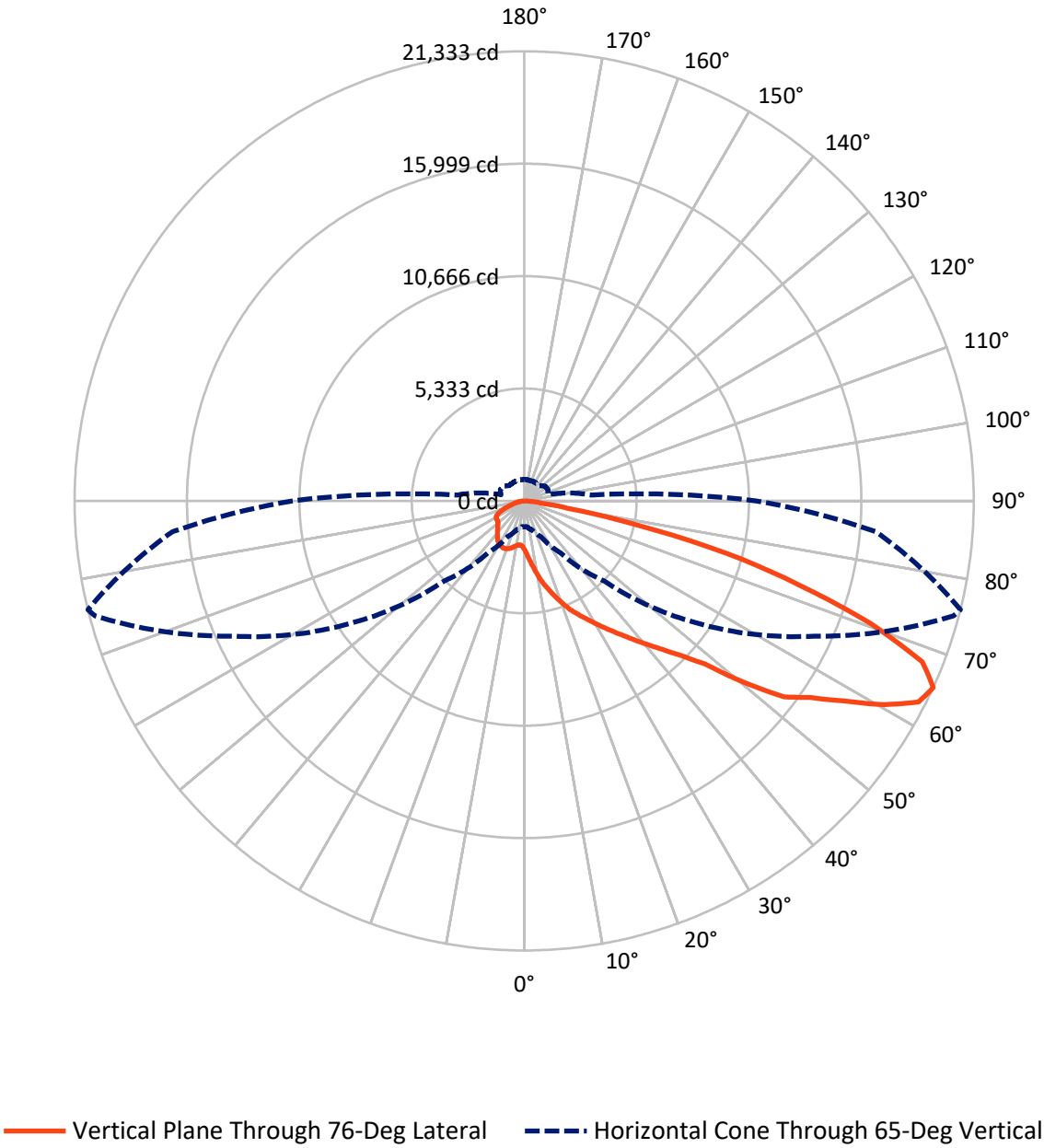
Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
Type II - Short - N/A

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

Scaled Data Report

REPORT NUMBER: P640475
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W

Luminous Intensity Polar Plot



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

Scaled Data Report

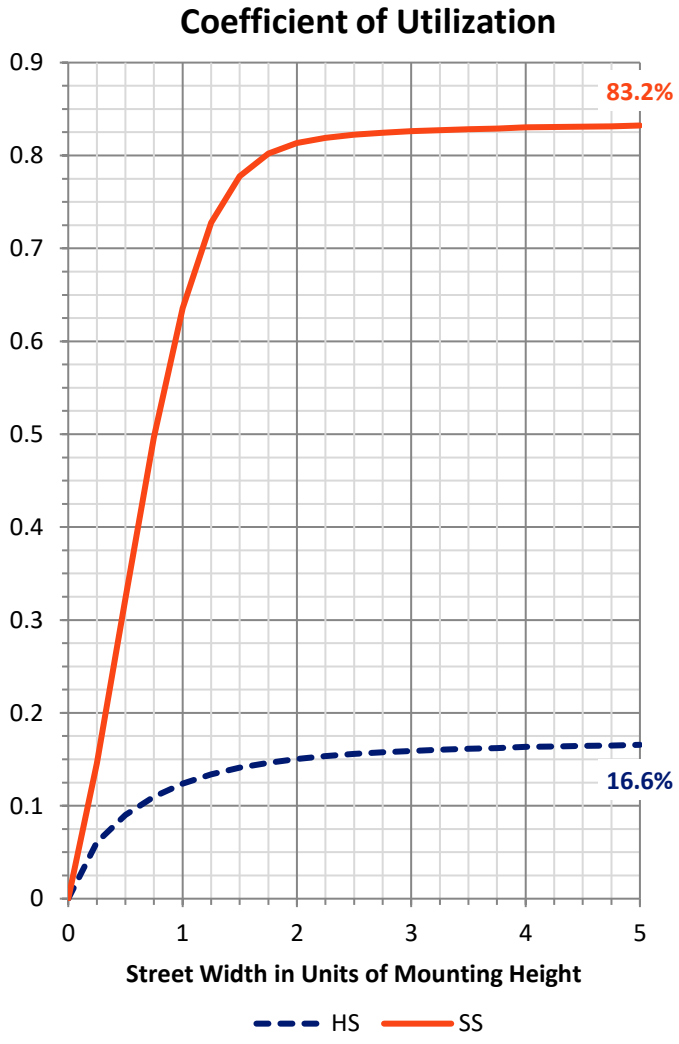
REPORT NUMBER: P640475
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4067.4	0.0	4067.4
	% Fixture	16.7	0.0	16.7
Street Side	Lumens	20266.4	0.0	20266.4
	% Fixture	83.3	0.0	83.3
Total	Lumens	24333.8	0.0	24333.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.8	1.1
10°-20°	1042.7	4.3
20°-30°	2032.2	8.4
30°-40°	3398.7	14.0
40°-50°	4866.2	20.0
50°-60°	5761.0	23.7
60°-70°	4790.3	19.7
70°-80°	1960.3	8.1
80°-90°	208.7	0.9
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°	24333.8	100.0
0°-180°	24333.8	100.0



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

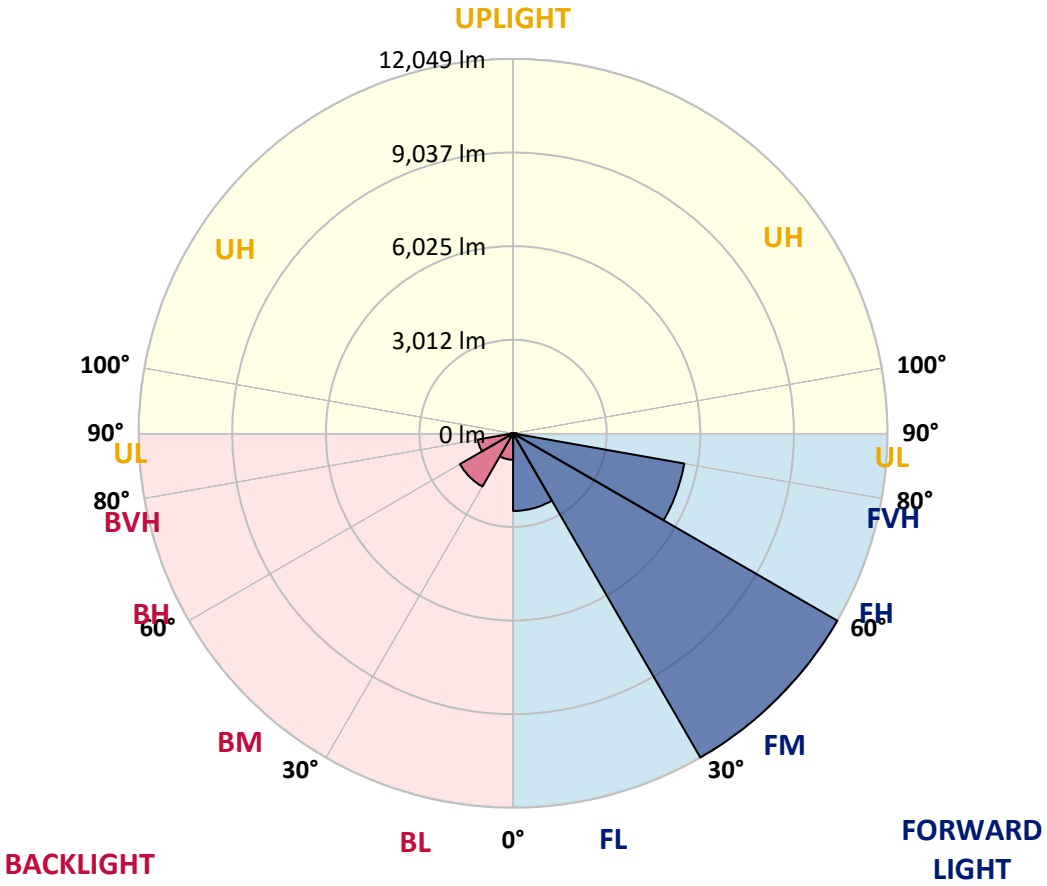
Scaled Data Report

REPORT NUMBER: P640475
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	2497.8	10.3			
FM	(30°-60°)	12049.2	49.5			
FH	(60°-80°)	5595.0	23.0			G3/7500
FVH	(80°-90°)	124.5	0.5			G2/225
BL	(0°-30°)	850.9	3.5	B2/1000		
BM	(30°-60°)	1976.7	8.1	B2/2500		
BH	(60°-80°)	1155.6	4.7	B3/2500		G3/2500
BVH	(80°-90°)	84.2	0.3			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 II Short



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

Scaled Data Report

REPORT NUMBER: P640475
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3	*2304.3*	2304.3
2.5°	3229.8	3241.8	3202.4	3188.8	3096.4	2971.5	2867.1	2709.8	2564.3	*2542.1*	2412.1
5°	4102.3	4051.0	4006.5	3977.4	3849.1	3707.1	3486.4	3190.5	2880.8	*2843.2*	2562.6
7.5°	4620.6	4612.1	4557.3	4540.2	4441.0	4299.0	4071.5	3703.7	3253.8	*3192.2*	2766.2
10°	5036.3	5031.2	5003.8	5019.2	4928.5	4790.0	4569.3	4189.5	3662.6	*3601.0*	2993.7
12.5°	5399.0	5407.5	5402.4	5458.9	5412.7	5304.9	5075.7	4658.3	4071.5	*4004.8*	3270.9
15°	5664.1	5671.0	5696.7	5819.8	5845.5	5823.2	5590.6	5118.4	4475.2	*4379.4*	3556.6
17.5°	5739.4	5753.1	5814.7	6013.1	6151.7	6244.1	6071.3	5587.2	4872.1	*4767.7*	3847.4
20°	5840.4	5855.7	5917.3	6124.3	6327.9	6538.3	6507.5	6062.7	5272.4	*5186.9*	4141.6
22.5°	6307.4	6295.4	6268.0	6367.2	6512.7	6774.4	6851.4	6519.5	5686.4	*5604.3*	4466.7
25°	7207.2	7185.0	7010.5	6919.8	6871.9	7031.0	7167.9	6935.2	6090.1	*5966.9*	4769.4
27.5°	8199.4	8187.4	7965.0	7749.5	7455.3	7386.8	7467.2	7297.9	6481.9	*6357.0*	5032.9
30°	9138.6	9102.7	8870.0	8599.7	8206.3	7912.0	7794.0	7653.7	6911.3	*6781.2*	5340.8
32.5°	9978.5	9932.4	9658.6	9359.3	8947.0	8599.7	8247.3	8031.8	7397.1	*7246.6*	5655.6
35°	10668.0	10621.8	10341.2	10023.0	9569.7	9313.1	8830.7	8442.3	7891.5	*7739.2*	6026.8
37.5°	11201.7	11158.9	10866.4	10553.3	10158.2	9954.6	9535.5	8904.2	8461.2	*8302.1*	6420.3
40°	11501.1	11470.3	11235.9	10987.9	10656.0	10479.8	10291.6	9487.6	9099.2	*8940.1*	6883.9
42.5°	11591.7	11571.2	11407.0	11278.7	11054.6	10921.1	11028.9	10173.6	9780.1	*9641.5*	7405.6
45°	11364.2	11364.2	11316.3	11381.3	11391.6	11389.9	11767.9	10948.5	10616.6	*10464.4*	8141.2
47.5°	10782.6	10820.2	10890.4	11210.3	11547.3	11829.5	12631.9	11981.8	11692.7	*11567.8*	9183.1
50°	9718.5	9821.2	10060.7	10685.1	11401.9	12120.4	13449.6	13509.4	13784.9	*13564.2*	10715.9
52.5°	8160.1	8144.7	8755.4	9645.0	10738.1	12132.3	13899.5	14857.5	15598.2	*15446.0*	11855.2
55°	6485.3	6459.6	7029.3	8255.9	9720.2	11673.9	14169.8	15475.0	16604.1	*16467.3*	12879.9
57.5°	4966.2	4933.7	5440.0	6546.9	8283.2	10700.5	14118.5	16210.6	17988.1	*17917.9*	14272.4
60°	3418.0	3378.6	3852.5	4820.8	6582.8	9212.2	13550.5	16588.7	19608.1	*19632.1*	15762.4
62.5°	2052.8	2030.6	2374.5	3125.5	4735.2	7368.0	12221.3	16359.5	20898.0	*21005.8*	16720.4
65°	*1238.6*	*1223.2*	*1425.0*	*1864.7*	*3004.0*	*5376.7*	*10171.9*	*15187.6*	*21084.5*	*21332.5*	*16742.7*
67.5°	901.5	903.3	961.4	1135.9	1751.8	3472.7	7633.2	13086.9	20112.8	*20369.4*	15687.2
70°	783.5	786.9	817.7	857.1	1058.9	1987.8	4962.8	10331.0	17240.5	*17438.9*	13157.0
72.5°	696.3	696.3	716.8	737.3	828.0	1211.2	2658.4	7220.9	13607.0	*13660.0*	10041.8
75°	612.4	607.3	617.6	627.8	718.5	846.8	1293.3	5031.2	10050.4	*9927.2*	6490.4
77.5°	487.6	482.4	484.1	494.4	576.5	605.6	655.2	3142.6	5664.1	*5346.0*	2867.1
80°	347.3	343.9	362.7	388.3	426.0	371.2	410.6	1520.8	2246.2	*2090.5*	1112.0
82.5°	207.0	213.8	242.9	263.4	294.2	232.7	265.2	508.1	795.5	*774.9*	451.6
85°	29.1	30.8	87.2	100.9	126.6	90.7	140.3	229.2	318.2	*340.4*	159.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	12.0	41.1	90.7	*92.4*	39.3
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: P640475
CATALOG NUMBER: GWS-SA5D-830-U-T2R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3	2304.3
2.5°	2345.4	2265.0	2150.4	2054.6	1974.2	1909.1	1854.4	1813.3	1801.4	1784.3	1784.3
5°	2430.9	2285.5	2080.2	1934.8	1851.0	1801.4	1767.2	1750.1	1741.5	1731.2	1726.1
7.5°	2549.0	2345.4	2068.2	1921.1	1856.1	1825.3	1803.1	1792.8	1786.0	1775.7	1775.7
10°	2711.5	2434.3	2105.9	1969.0	1917.7	1886.9	1861.2	1844.1	1828.7	1813.3	1809.9
12.5°	2887.7	2550.7	2174.3	2034.0	1979.3	1941.7	1905.7	1880.1	1861.2	1842.4	1837.3
15°	3082.7	2670.4	2247.9	2097.3	2028.9	1977.6	1934.8	1895.5	1869.8	1842.4	1839.0
17.5°	3274.3	2791.9	2309.5	2140.1	2052.8	1989.6	1928.0	1876.6	1844.1	1813.3	1804.8
20°	3503.5	2913.3	2352.2	2152.1	2047.7	1963.9	1890.3	1825.3	1789.4	1753.5	1748.3
22.5°	3713.9	3026.2	2372.7	2135.0	2008.4	1909.1	1823.6	1753.5	1714.1	1678.2	1671.4
25°	3917.5	3125.5	2364.2	2093.9	1948.5	1833.9	1744.9	1674.8	1637.1	1599.5	1589.2
27.5°	4114.2	3192.2	2330.0	2030.6	1873.2	1750.1	1664.5	1601.2	1568.7	1536.2	1522.5
30°	4307.6	3253.8	2276.9	1948.5	1777.4	1662.8	1592.7	1548.2	1515.7	1481.5	1471.2
32.5°	4502.6	3298.2	2196.5	1852.7	1679.9	1585.8	1543.1	1510.6	1476.3	1442.1	1431.9
35°	4699.3	3317.1	2099.0	1743.2	1597.8	1536.2	1520.8	1483.2	1437.0	1395.9	1382.3
37.5°	4933.7	3334.2	1977.6	1635.4	1525.9	1512.3	1508.8	1452.4	1397.6	1341.2	1325.8
40°	5215.9	3356.4	1852.7	1537.9	1467.8	1503.7	1490.0	1413.0	1303.6	1248.8	1231.7
42.5°	5561.5	3397.5	1722.7	1449.0	1425.0	1471.2	1455.8	1317.2	1243.7	1212.9	1204.3
45°	6069.6	3548.0	1592.7	1378.8	1392.5	1425.0	1401.1	1260.8	1231.7	1211.2	1200.9
47.5°	6974.5	3778.9	1479.8	1325.8	1366.9	1384.0	1291.6	1245.4	1223.2	1195.8	1183.8
50°	7915.4	3879.9	1389.1	1293.3	1337.8	1346.3	1231.7	1224.9	1209.5	1180.4	1168.4
52.5°	8551.8	3866.2	1334.4	1281.3	1313.8	1281.3	1204.3	1202.6	1192.4	1158.1	1144.5
55°	9270.3	3890.1	1310.4	1284.7	1303.6	1171.8	1170.1	1175.3	1170.1	1132.5	1125.6
57.5°	10240.3	3963.7	1298.4	1296.7	1296.7	1118.8	1137.6	1144.5	1134.2	1117.1	1112.0
60°	11172.6	3968.8	1276.2	1310.4	1291.6	1086.3	1100.0	1106.8	1094.9	1091.4	1089.7
62.5°	11523.3	3722.5	1226.6	1300.1	1271.1	1050.4	1060.6	1064.1	1052.1	1060.6	1058.9
65°	*11001.5*	*3199.0*	*1144.5*	*1250.5*	*1207.8*	*1017.9*	*1011.0*	*1019.6*	*999.1*	*1021.3*	*1023.0*
67.5°	9768.1	2542.1	1019.6	1156.4	1118.8	981.9	968.3	968.3	934.0	968.3	966.5
70°	7876.1	1796.2	836.5	1005.9	1021.3	939.2	932.3	893.0	838.2	889.6	884.4
72.5°	5970.4	1289.9	658.6	795.5	879.3	879.3	881.0	814.3	751.0	774.9	754.4
75°	3782.4	908.4	526.9	609.0	689.4	771.5	810.9	687.7	631.3	621.0	610.7
77.5°	1703.9	597.0	410.6	467.0	489.3	609.0	740.7	591.9	514.9	492.7	485.8
80°	713.4	371.2	292.5	330.2	301.1	511.5	653.5	460.2	378.1	347.3	325.0
82.5°	313.1	220.7	186.5	177.9	188.2	379.8	487.6	306.2	236.1	319.9	323.3
85°	131.7	116.3	95.8	87.2	77.0	145.4	229.2	119.7	147.1	83.8	68.4
87.5°	30.8	34.2	25.7	17.1	10.3	1.7	0.0	0.0	0.0	0.0	0.0
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

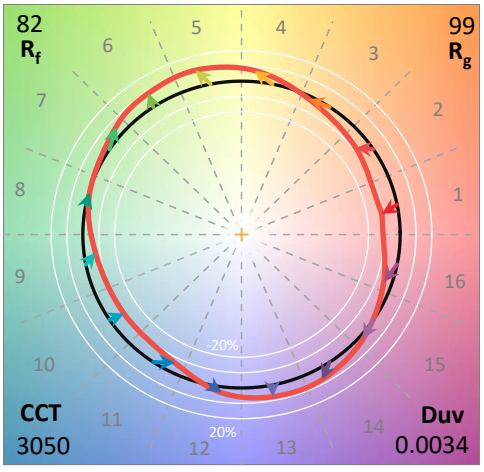
Test Information

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

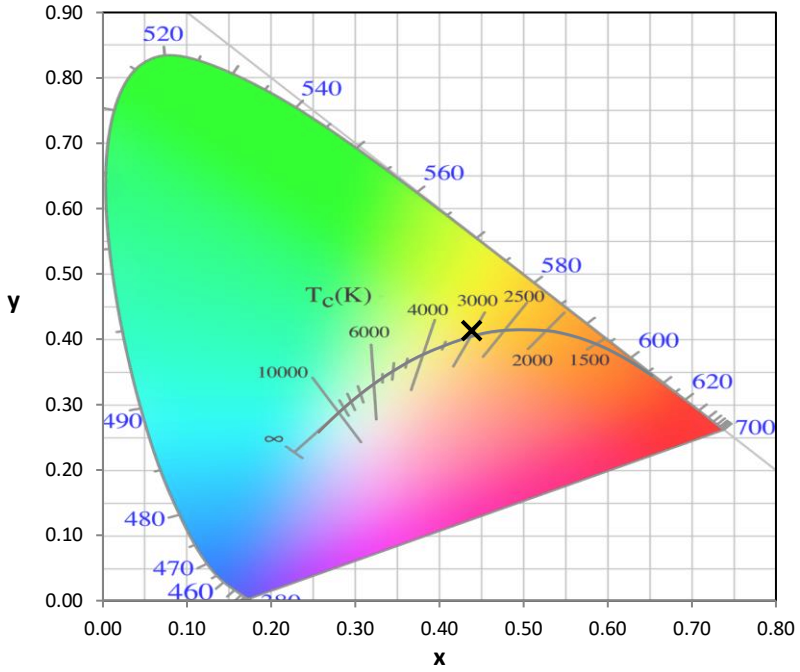
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

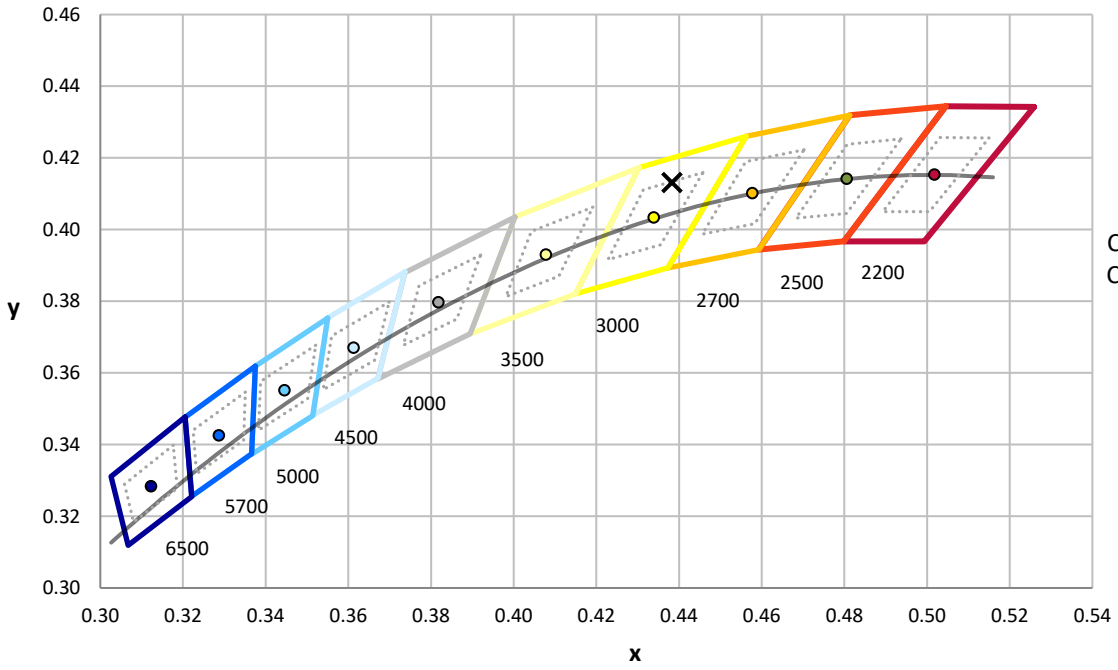
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

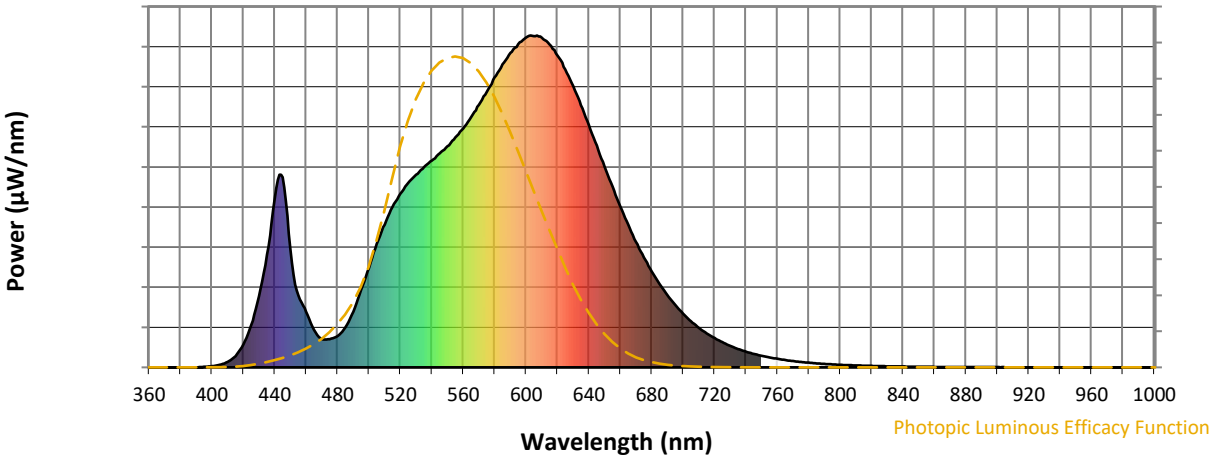


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

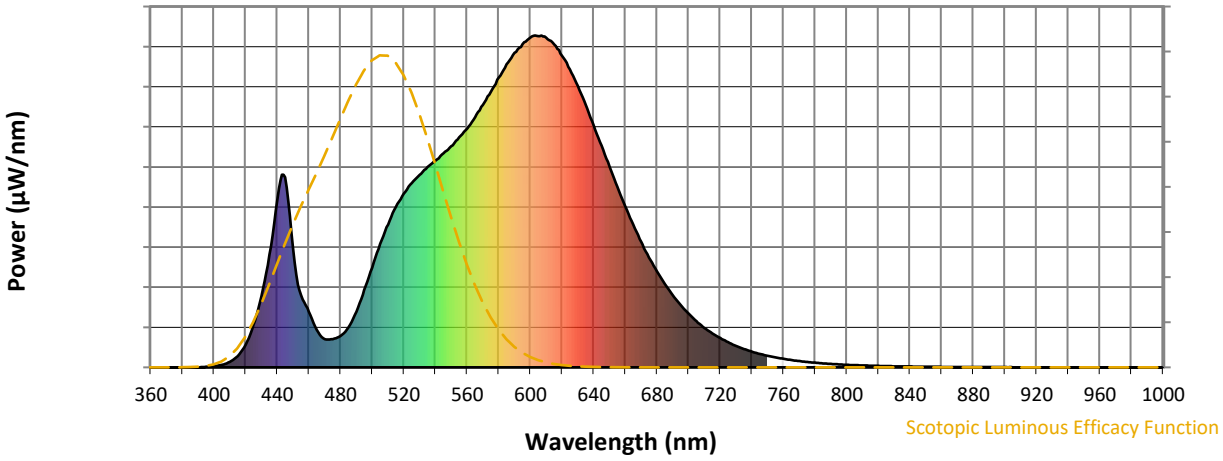


Photopic Lumens: NR

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

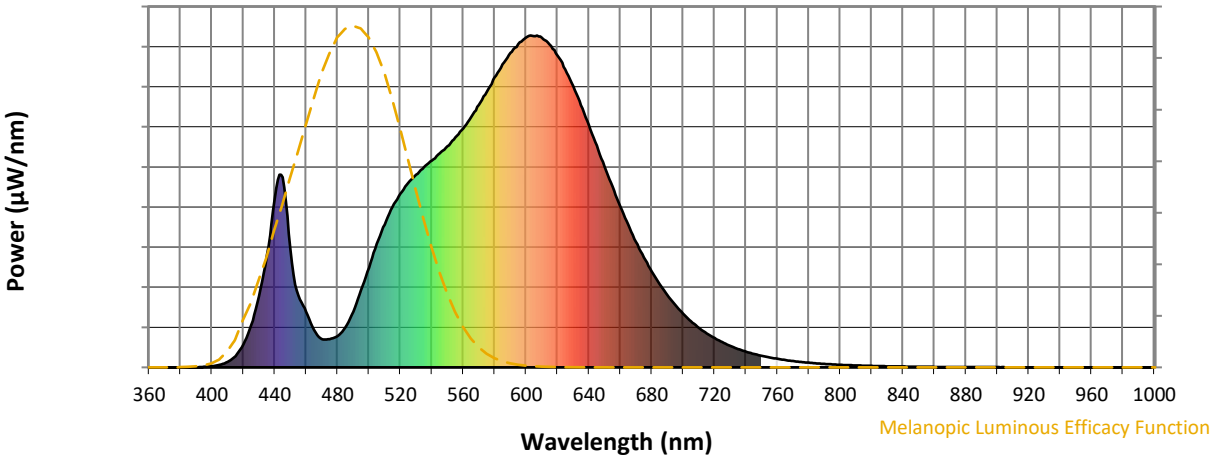


Scotopic Lumens: NR **S/P: 1.27**

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			

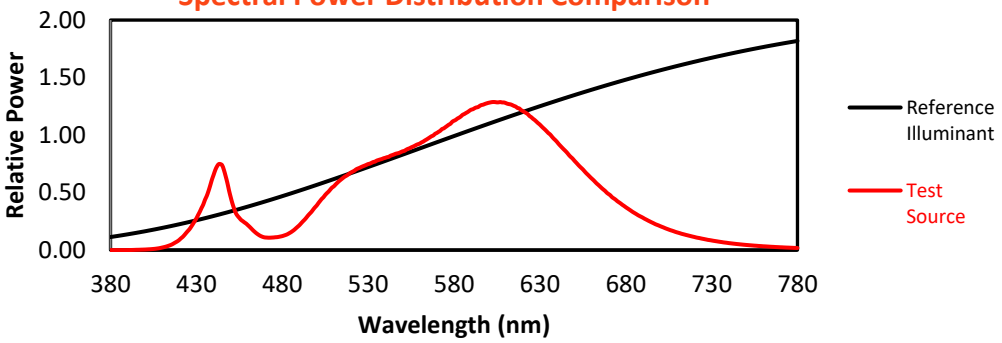
REPORT NUMBER: SP1-2408-195-9

TM-30-18

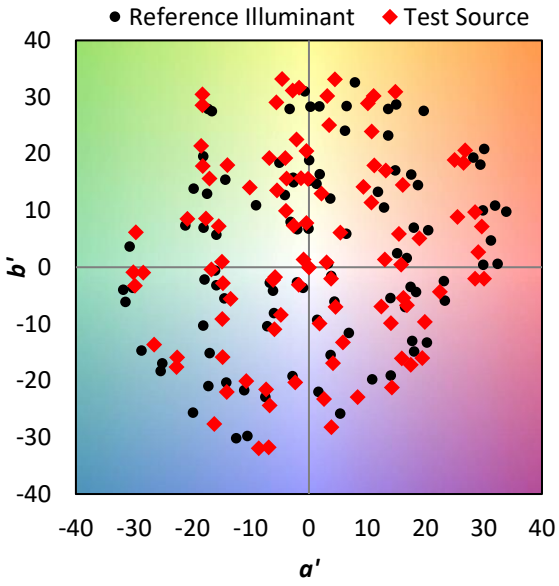
Summary

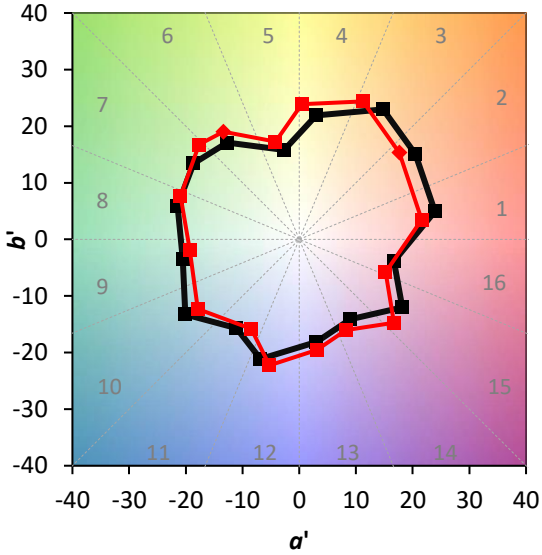
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

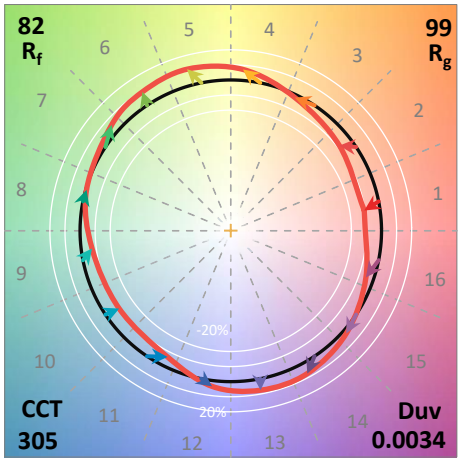
Spectral Power Distribution Comparison

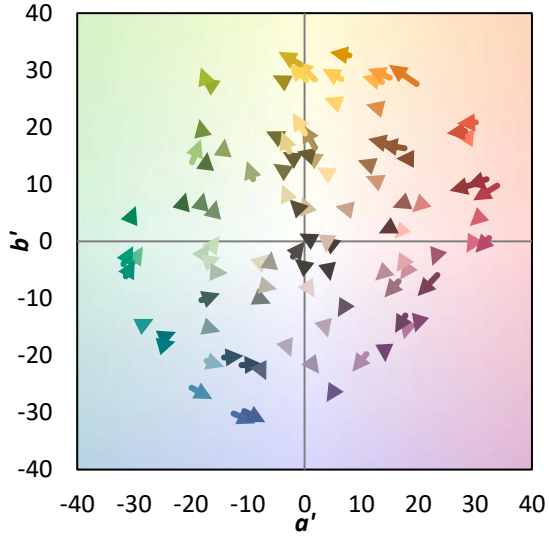


Color Vector Graphics







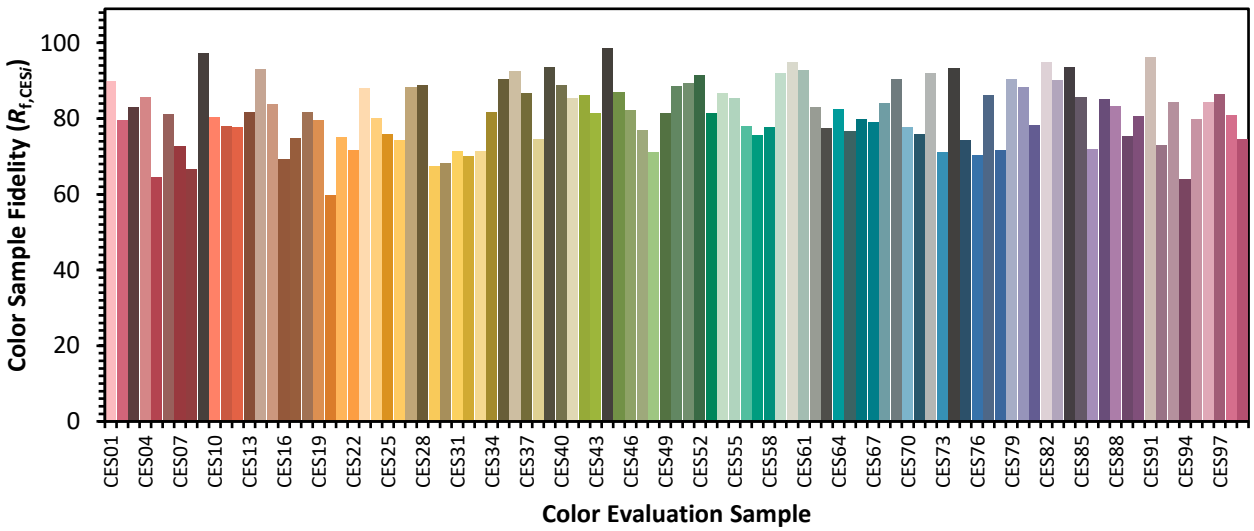


REPORT NUMBER: SP1-2408-195-9

TM-30-18

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

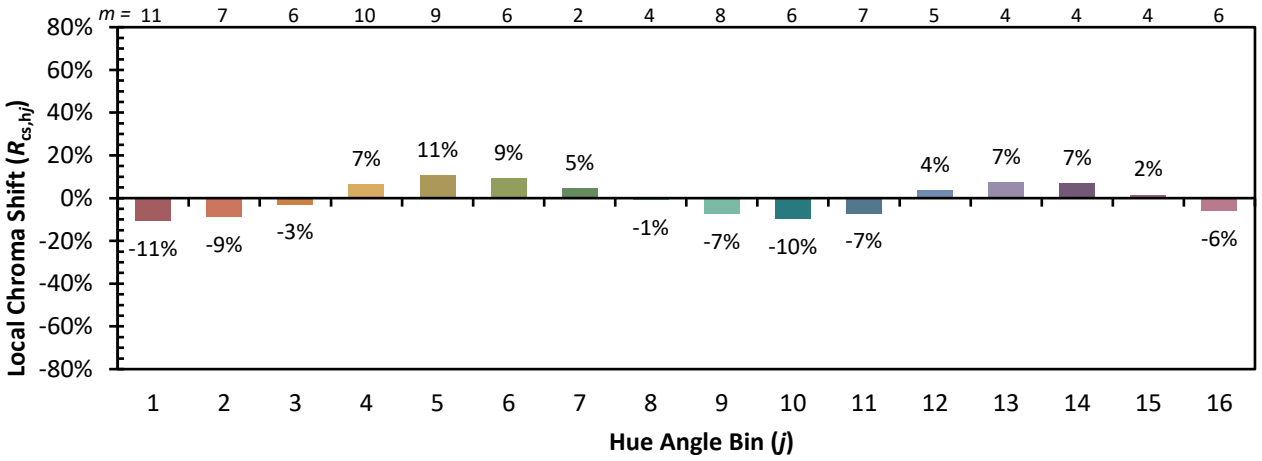
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82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

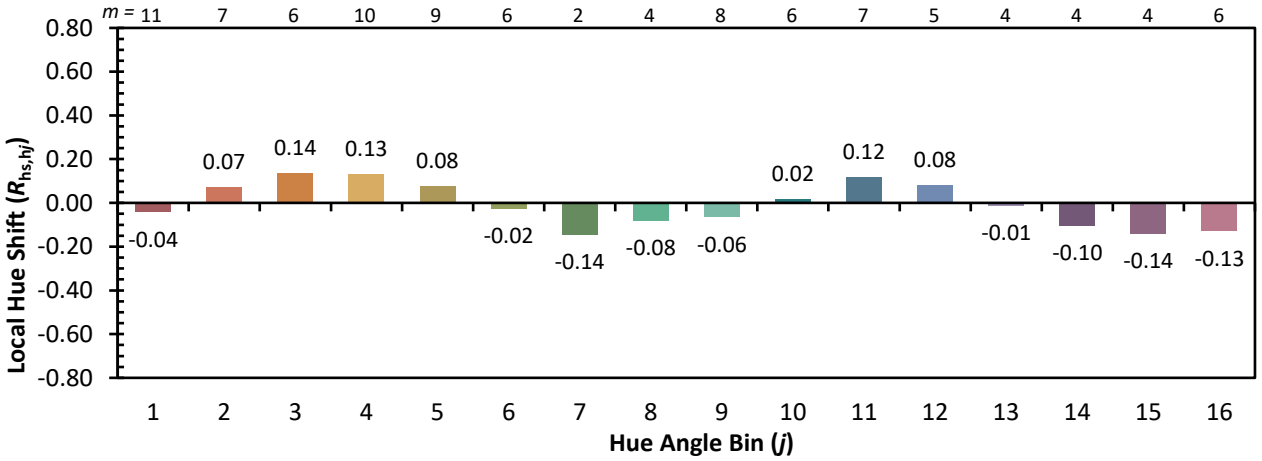


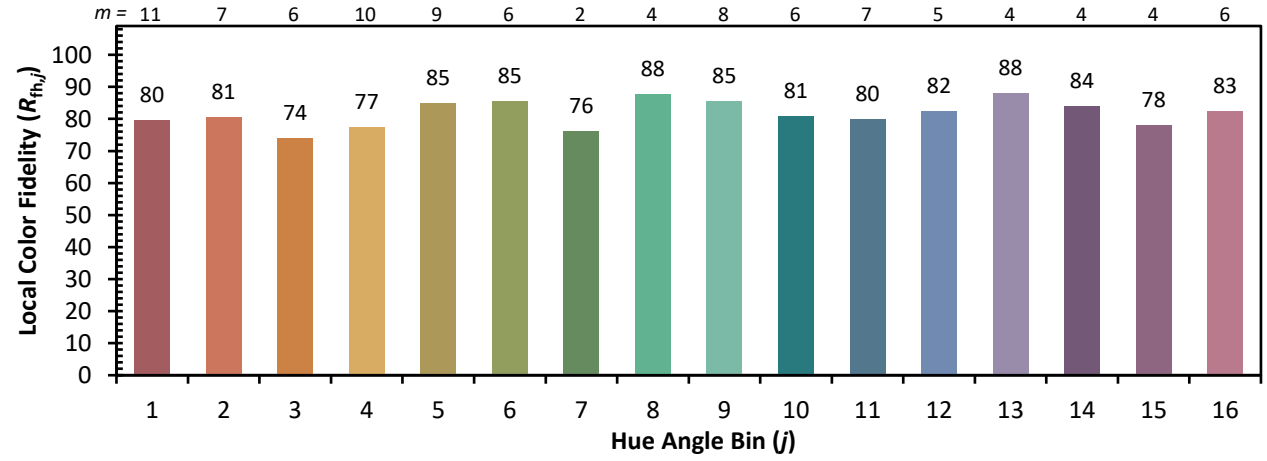
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



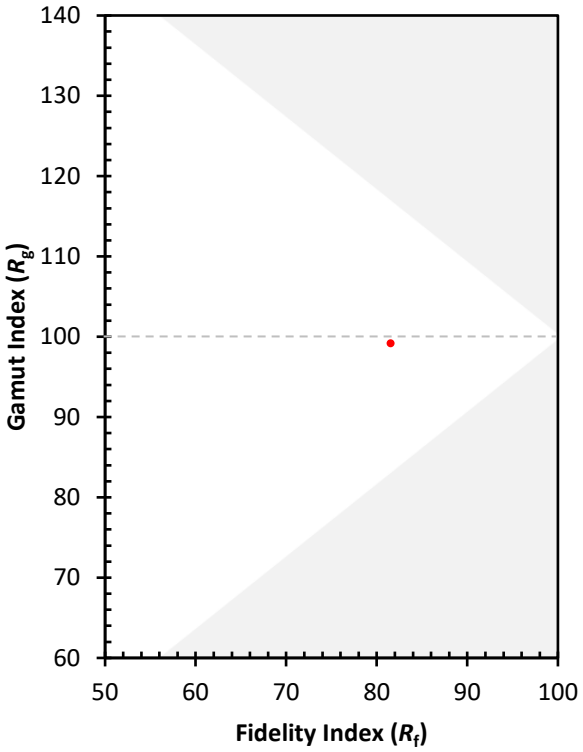


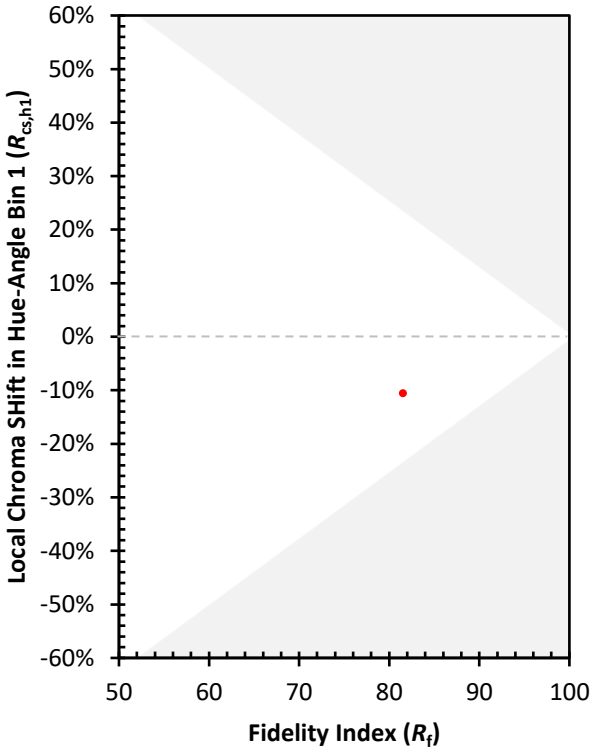


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





(END OF REPORT)