

Signify Classified - Internal  
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: P640463

Luminaire Tested: GWS-SA5D-830-U-SLR-W-GRSBK

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640463  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-42)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA5D-830-U-SLR-W-GRSBK  
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND  
SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK  
Light Source: (80) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

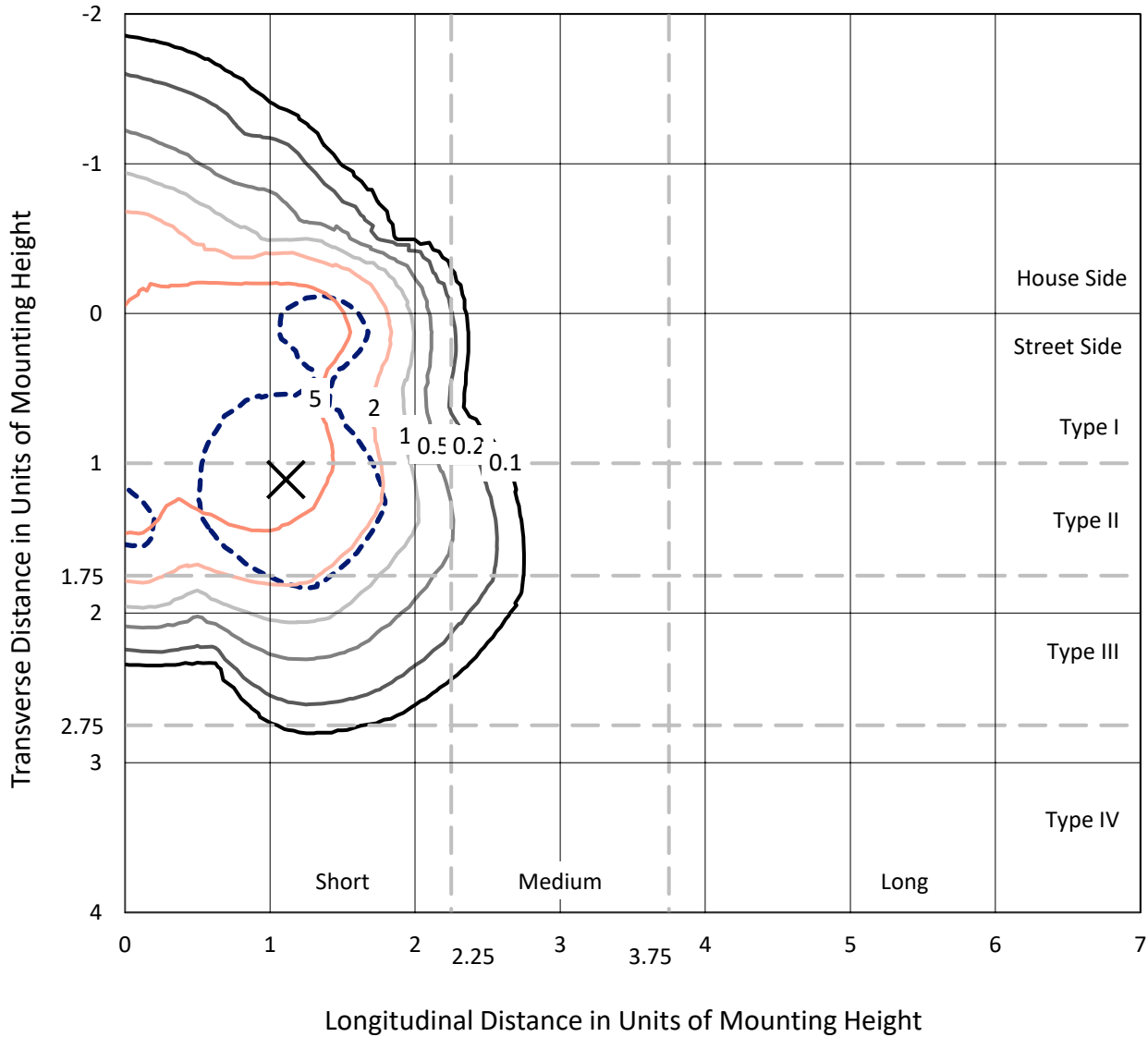
Lumens per Lamp: N/A  
Luminaire Lumens: 12731.4 lumens  
Efficiency: N/A  
Efficacy: 62.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 204.6  
Input Voltage (V): 120  
Input Current (Ain): 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



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### Iso-Footcandle Lines of Horizontal Illumination

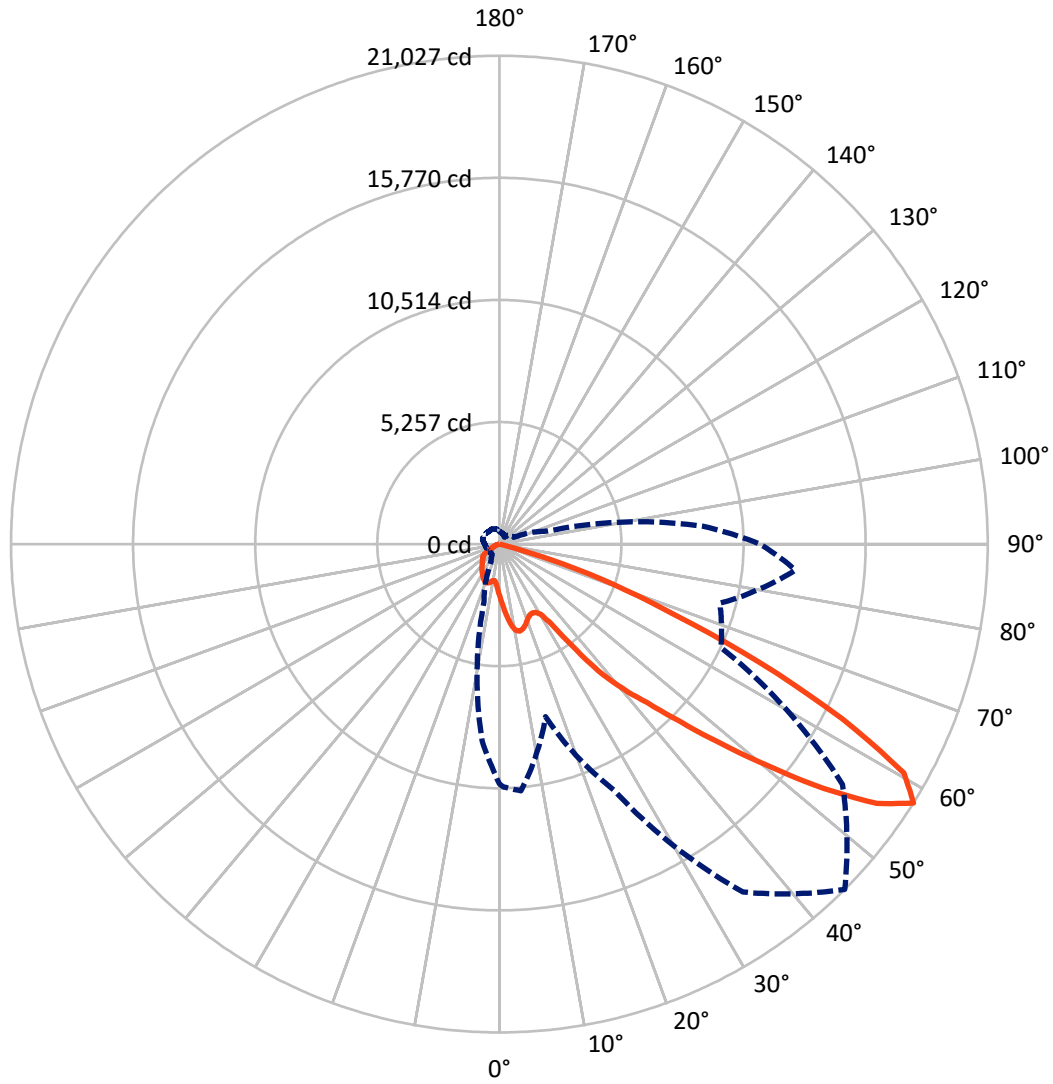
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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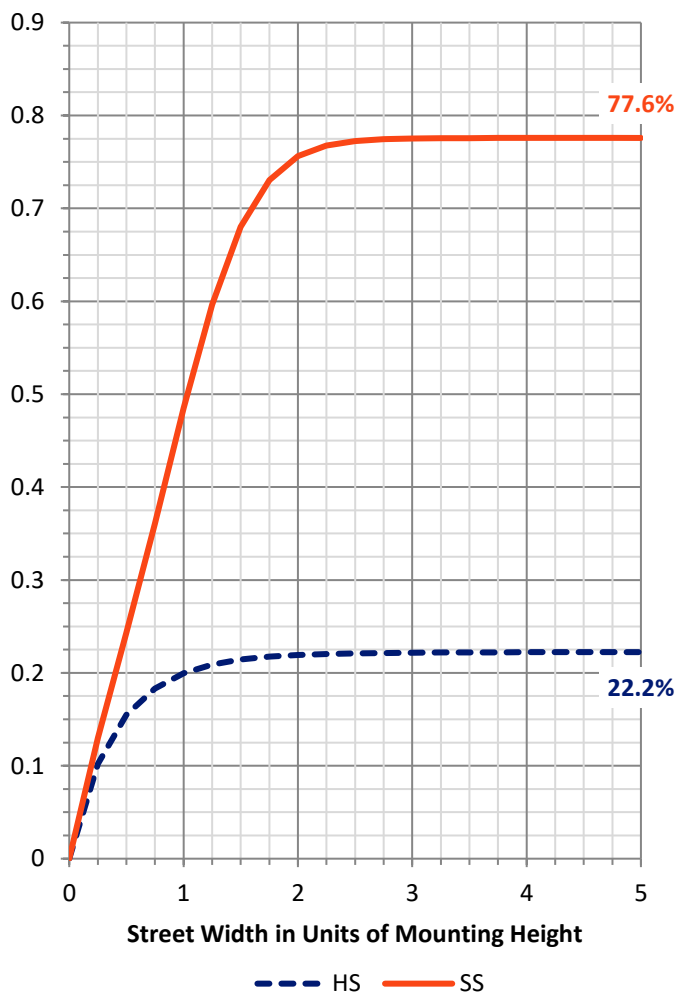
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2850.9	0.0	2850.9
	% Fixture	22.4	0.0	22.4
<b>Street Side</b>	Lumens	9880.5	0.0	9880.5
	% Fixture	77.6	0.0	77.6
<b>Total</b>	Lumens	12731.4	0.0	12731.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	220.1	1.7
10°-20°	712.1	5.6
20°-30°	1156.8	9.1
30°-40°	1787.4	14.0
40°-50°	2866.2	22.5
50°-60°	3917.3	30.8
60°-70°	1897.2	14.9
70°-80°	173.7	1.4
80°-90°	0.5	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	12731.4	100.0
0°-180°	12731.4	100.0

**Coefficient of Utilization**



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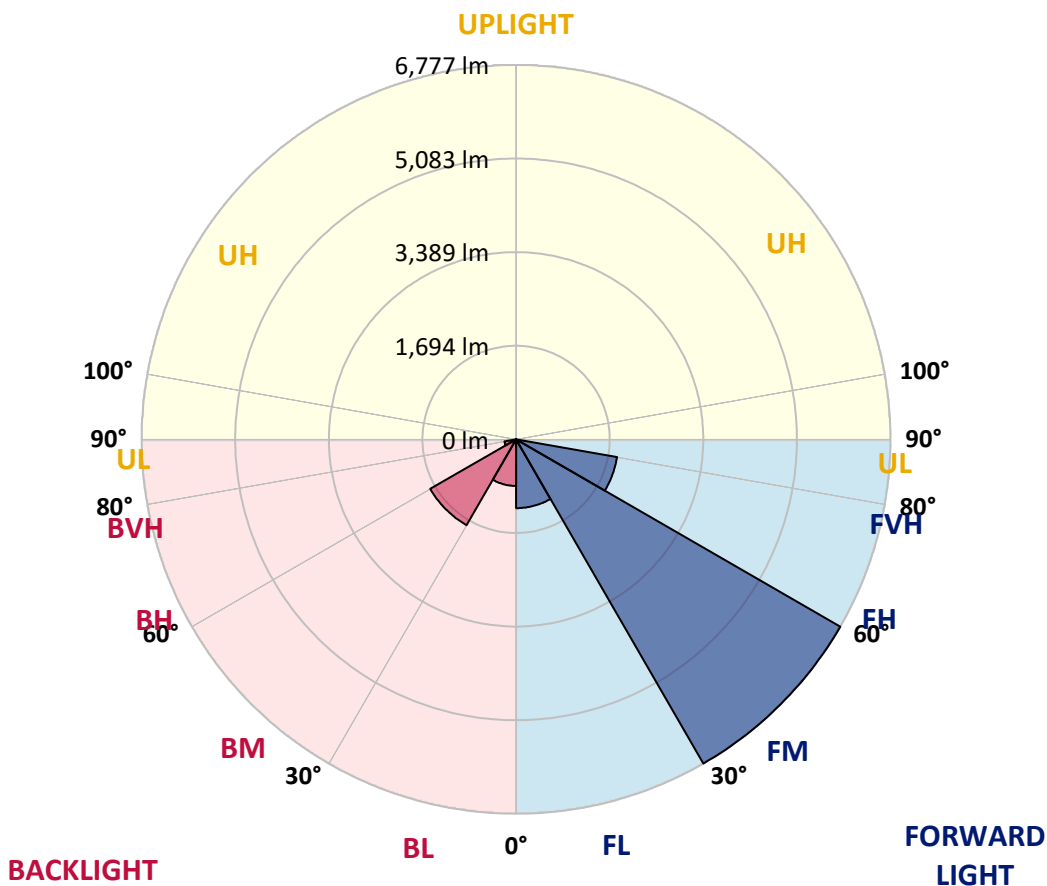
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1245.5	9.8			
FM (30°-60°)	6777.2	53.2			
FH (60°-80°)	1857.3	14.6			G2/5000
FVH (80°-90°)	0.5	0.0			G0/10
BL (0°-30°)	843.6	6.6	B2/1000		
BM (30°-60°)	1793.7	14.1	B2/2500		
BH (60°-80°)	213.7	1.7	B1/500		G1/500
BVH (80°-90°)	0.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7
2.5°	2424.2	2439.6	2465.2	2520.0	2566.1	2596.9	2610.6	2607.2	2588.4	2574.7	2547.3
5°	2684.2	2684.2	2733.8	2858.7	2954.5	3014.4	3045.2	3026.3	2988.7	2928.8	2836.4
7.5°	2911.7	2920.3	3004.1	3182.0	3327.4	3413.0	3462.6	3452.3	3385.6	3271.0	3086.2
10°	3089.6	3099.9	3211.1	3428.4	3599.4	3686.7	3760.3	3767.1	3693.5	3541.3	3329.1
12.5°	3262.4	3272.7	3389.0	3597.7	3748.3	3784.2	3849.2	3874.9	3856.1	3748.3	3527.6
15°	3448.9	3472.9	3572.1	3727.8	3791.1	3748.3	3791.1	3837.2	3900.5	3890.3	3691.8
17.5°	3632.0	3649.1	3750.0	3804.7	3734.6	3623.4	3643.9	3698.7	3842.4	3982.7	3854.4
20°	3801.3	3825.3	3909.1	3837.2	3625.1	3452.3	3454.0	3525.9	3744.9	4039.1	4020.3
22.5°	3979.2	4015.2	4075.0	3873.2	3524.2	3317.2	3325.7	3390.7	3667.9	4092.1	4208.5
25°	4211.9	4246.1	4285.5	3962.1	3491.7	3250.5	3283.0	3342.8	3667.9	4182.8	4441.1
27.5°	4526.7	4550.6	4552.3	4128.1	3548.1	3260.7	3329.1	3397.6	3777.4	4364.2	4752.5
30°	4921.9	4959.5	4909.9	4386.4	3724.3	3397.6	3498.5	3584.1	4013.5	4670.4	5211.0
32.5°	5402.6	5455.6	5388.9	4769.6	4092.1	3869.7	4052.8	4102.4	4389.8	5113.5	5731.1
35°	5967.1	6011.6	5939.8	5299.9	4951.0	4992.0	5323.9	5260.6	5146.0	5659.2	6338.4
37.5°	6586.4	6627.5	6488.9	6104.0	6220.3	6398.3	6928.6	6711.3	6341.8	6362.3	6997.0
40°	7154.4	7198.9	6981.6	6978.2	7217.7	7542.8	8182.6	7883.2	7380.2	7282.7	7614.6
42.5°	7742.9	7773.7	7577.0	7443.5	7987.6	8656.5	9333.9	8930.2	8068.0	7961.9	8387.9
45°	8582.9	8647.9	8297.2	7672.8	8680.4	9937.8	10882.2	10093.5	8536.7	8451.2	9571.7
47.5°	9818.1	9866.0	9150.9	7816.5	9325.4	11534.0	12817.0	11602.4	8949.0	8754.0	11190.1
50°	10839.4	10871.9	9936.1	7973.9	10011.4	13255.0	15022.2	13391.9	9412.6	9255.2	12700.7
52.5°	11592.1	11715.3	10967.7	8297.2	10913.0	15278.8	17463.5	15511.5	10136.3	10223.5	13953.0
55°	11747.8	11915.5	11672.5	8495.7	11706.8	17340.3	19718.3	17408.7	10858.2	10957.4	14373.8
57.5°	10324.5	10457.9	10659.8	7695.0	11687.9	18284.7	21027.0	18038.3	10529.8	9826.6	12798.2
60°	7734.4	7826.7	8192.9	5881.6	10748.7	17449.8	20007.4	16967.4	9207.3	7498.3	9751.4
62.5°	4586.6	4627.6	5091.2	3809.9	8921.6	15027.4	16592.7	14640.7	7275.9	5043.3	5972.3
65°	1760.4	1743.3	2097.4	1880.1	6560.8	11970.2	12341.5	11161.0	4992.0	2311.2	2277.0
67.5°	272.0	260.0	350.7	556.0	4732.0	8295.5	8143.2	8044.0	3127.3	538.9	470.5
70°	61.6	61.6	75.3	164.2	2891.2	4874.0	5216.1	4973.2	2001.6	114.6	61.6
72.5°	29.1	29.1	35.9	70.1	1047.0	2008.4	2340.3	2304.4	650.1	37.6	22.2
75°	10.3	12.0	12.0	15.4	63.3	104.4	239.5	171.1	41.1	0.0	0.0
77.5°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.7	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7
2.5°	2487.5	2475.5	2431.0	2371.1	2313.0	2261.6	2208.6	2145.3	2099.1	2046.1	2029.0
5°	2764.6	2689.3	2567.9	2441.3	2324.9	2225.7	2129.9	2027.3	1952.0	1876.7	1851.0
7.5°	2999.0	2887.8	2691.0	2501.1	2342.0	2201.8	2063.2	1922.9	1813.4	1724.5	1697.1
10°	3209.4	3081.1	2817.6	2583.3	2383.1	2220.6	2052.9	1876.7	1734.7	1628.6	1603.0
12.5°	3390.7	3241.9	2925.4	2644.8	2400.2	2213.7	2051.2	1910.9	1782.6	1661.2	1628.6
15°	3543.0	3378.8	3016.1	2685.9	2374.5	2128.2	1986.2	1964.0	1953.7	1820.3	1757.0
17.5°	3691.8	3507.1	3089.6	2704.7	2302.7	1977.6	1875.0	1975.9	2083.7	1996.5	1916.1
20°	3847.5	3637.1	3164.9	2708.1	2182.9	1808.3	1791.2	1950.3	2087.1	2059.8	1984.5
22.5°	4030.6	3799.6	3259.0	2706.4	2032.4	1664.6	1729.6	1900.7	2011.9	2010.1	1950.3
25°	4295.7	4004.9	3385.6	2716.7	1868.2	1553.4	1661.2	1816.8	1907.5	1904.1	1854.5
27.5°	4579.7	4249.5	3549.8	2742.4	1727.9	1488.4	1580.7	1702.2	1780.9	1777.5	1734.7
30°	4978.3	4531.8	3707.2	2744.1	1626.9	1454.1	1491.8	1575.6	1650.9	1642.3	1609.8
32.5°	5462.5	4850.0	3839.0	2646.6	1563.6	1421.6	1399.4	1442.2	1500.3	1488.4	1479.8
35°	6047.6	5228.1	3951.9	2432.7	1466.1	1356.6	1296.8	1305.3	1346.4	1353.2	1349.8
37.5°	6714.8	5678.0	4092.1	2150.4	1334.4	1262.5	1182.1	1175.3	1199.2	1221.5	1238.6
40°	7373.4	6184.4	4282.0	1864.7	1214.6	1142.8	1065.8	1048.7	1059.0	1098.3	1134.2
42.5°	8114.2	6771.2	4487.3	1620.1	1132.5	1011.1	937.5	905.0	934.1	997.4	1040.1
45°	9181.7	7594.1	4687.5	1425.1	1098.3	894.7	795.5	792.1	824.6	906.7	954.6
47.5°	10680.3	8658.2	4819.2	1272.8	1096.6	804.1	686.0	706.5	744.2	824.6	879.3
50°	12141.3	9990.9	4673.8	1156.5	1060.7	744.2	603.9	645.0	682.6	752.7	809.2
52.5°	13022.3	10707.7	4107.5	1047.0	949.5	716.8	523.5	595.3	602.2	665.5	725.4
55°	12930.0	10244.1	3146.1	877.6	785.2	677.5	439.7	537.2	540.6	588.5	639.8
57.5°	11222.6	8795.0	2160.7	711.7	590.2	559.4	362.7	453.4	485.9	514.9	552.6
60°	8363.9	6417.1	963.2	578.2	374.7	378.1	309.6	342.2	391.8	426.0	458.5
62.5°	4928.7	3691.8	391.8	347.3	207.0	237.8	249.8	249.8	280.6	306.2	326.8
65°	1863.0	1291.6	159.1	174.5	107.8	111.2	147.1	181.3	205.3	227.5	254.9
67.5°	326.8	225.8	82.1	65.0	63.3	56.5	75.3	118.0	131.7	148.8	160.8
70°	54.7	46.2	34.2	32.5	29.1	30.8	49.6	83.8	92.4	97.5	102.6
72.5°	15.4	13.7	10.3	8.6	6.8	8.6	30.8	65.0	68.4	71.9	77.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	12.0	46.2	49.6	51.3	56.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	13.7	17.1	13.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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





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**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7
2.5°	2018.7	1984.5	1965.7	1955.4	1955.4	1941.7	1926.3	1921.2	1943.4	1943.4	1981.1
5°	1818.5	1791.2	1760.4	1741.6	1712.5	1717.6	1700.5	1698.8	1721.0	1731.3	1770.6
7.5°	1680.0	1645.8	1626.9	1615.0	1599.6	1592.7	1577.3	1572.2	1584.2	1601.3	1638.9
10°	1587.6	1582.5	1580.7	1589.3	1589.3	1580.7	1567.1	1558.5	1561.9	1594.4	1637.2
12.5°	1611.5	1621.8	1625.2	1638.9	1645.8	1638.9	1628.6	1632.1	1654.3	1714.2	1777.5
15°	1715.9	1707.3	1703.9	1710.8	1715.9	1709.1	1705.6	1731.3	1808.3	1893.8	1965.7
17.5°	1827.1	1772.4	1748.4	1748.4	1751.8	1748.4	1751.8	1801.4	1926.3	2011.9	2064.9
20°	1883.6	1782.6	1745.0	1736.4	1743.3	1745.0	1757.0	1813.4	1950.3	2010.1	2022.1
22.5°	1866.4	1739.8	1697.1	1690.2	1697.1	1703.9	1715.9	1763.8	1892.1	1922.9	1917.8
25°	1780.9	1656.0	1621.8	1621.8	1637.2	1635.5	1640.6	1674.8	1780.9	1799.7	1791.2
27.5°	1673.1	1555.1	1526.0	1543.1	1556.8	1553.4	1555.1	1584.2	1662.9	1668.0	1659.4
30°	1563.6	1461.0	1433.6	1454.1	1473.0	1469.5	1471.3	1500.3	1550.0	1544.8	1532.8
32.5°	1452.4	1377.2	1356.6	1368.6	1397.7	1394.3	1401.1	1431.9	1450.7	1428.5	1414.8
35°	1349.8	1310.4	1295.0	1301.9	1324.1	1329.3	1341.2	1361.8	1361.8	1334.4	1310.4
37.5°	1254.0	1248.9	1238.6	1230.0	1250.6	1266.0	1283.1	1307.0	1272.8	1233.5	1211.2
40°	1165.0	1187.3	1173.6	1151.3	1163.3	1185.6	1219.8	1238.6	1197.5	1158.2	1120.6
42.5°	1082.9	1120.6	1115.4	1088.0	1098.3	1118.8	1158.2	1173.6	1125.7	1081.2	1045.3
45°	1004.2	1057.3	1060.7	1026.5	1036.7	1057.3	1103.4	1108.6	1047.0	999.1	973.4
47.5°	935.8	994.0	995.7	970.0	973.4	1002.5	1045.3	1047.0	976.8	932.4	899.9
50°	870.8	937.5	942.6	920.4	923.8	958.0	994.0	987.1	911.8	865.6	836.6
52.5°	792.1	882.8	894.7	884.5	898.2	925.5	947.8	923.8	836.6	790.4	764.7
55°	706.5	824.6	850.3	843.4	858.8	881.0	886.2	870.8	761.3	715.1	691.1
57.5°	607.3	679.2	723.7	710.0	721.9	744.2	759.6	747.6	665.5	629.6	609.0
60°	503.0	550.9	561.1	538.9	528.6	568.0	603.9	588.5	518.4	496.1	472.2
62.5°	367.8	422.6	429.4	400.3	388.3	431.1	461.9	446.5	369.5	345.6	326.8
65°	294.3	345.6	359.3	331.9	325.0	357.5	376.4	338.7	284.0	258.3	237.8
67.5°	193.3	234.4	270.3	268.6	254.9	265.2	251.5	220.7	181.3	167.7	154.0
70°	119.8	143.7	165.9	174.5	172.8	169.4	150.5	128.3	116.3	111.2	104.4
72.5°	92.4	116.3	133.4	138.6	140.3	135.2	119.8	99.2	87.2	80.4	75.3
75°	68.4	87.2	100.9	107.8	111.2	107.8	92.4	78.7	66.7	61.6	56.5
77.5°	24.0	29.1	35.9	39.3	37.6	35.9	32.5	32.5	25.7	24.0	20.5
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P640463

CATALOG NUMBER: GWS-SA5D-830-U-SLR-W-GRSBK

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7	2237.7
2.5°	2023.8	2054.6	2111.1	2162.4	2217.2	2273.6	2335.2	2398.5	2427.6	2424.2
5°	1830.5	1897.2	1989.6	2090.6	2203.5	2324.9	2460.1	2598.7	2658.5	2684.2
7.5°	1709.1	1803.1	1924.6	2052.9	2201.8	2374.5	2578.1	2795.4	2882.6	2911.7
10°	1724.5	1833.9	1934.9	2059.8	2218.9	2443.0	2696.2	2954.5	3057.1	3089.6
12.5°	1849.3	1873.3	1900.7	2003.3	2203.5	2494.3	2803.9	3111.9	3229.9	3262.4
15°	1962.2	1851.0	1799.7	1893.8	2148.7	2530.2	2913.4	3281.2	3411.3	3448.9
17.5°	1967.4	1799.7	1685.1	1758.7	2059.8	2545.6	3021.2	3454.0	3596.0	3632.0
20°	1904.1	1743.3	1596.1	1597.9	1938.3	2542.2	3110.2	3609.7	3768.8	3801.3
22.5°	1811.7	1676.5	1524.3	1471.3	1808.3	2535.4	3207.7	3775.7	3948.4	3979.2
25°	1709.1	1591.0	1455.9	1375.5	1678.3	2542.2	3344.5	3992.9	4182.8	4211.9
27.5°	1597.9	1496.9	1402.8	1337.8	1568.8	2567.9	3508.8	4270.1	4495.9	4526.7
30°	1481.5	1406.2	1368.6	1329.3	1500.3	2574.7	3686.7	4593.4	4879.1	4921.9
32.5°	1366.9	1325.8	1327.6	1334.4	1435.3	2526.8	3849.2	4952.7	5334.2	5402.6
35°	1260.8	1248.9	1283.1	1317.3	1341.2	2403.6	3991.2	5376.9	5897.0	5967.1
37.5°	1170.2	1180.4	1223.2	1257.4	1238.6	2229.1	4179.4	5907.3	6526.6	6586.4
40°	1082.9	1108.6	1158.2	1173.6	1159.9	2025.5	4405.2	6418.8	7072.3	7154.4
42.5°	1002.5	1021.3	1091.5	1094.9	1137.7	1818.5	4622.5	6969.7	7700.2	7742.9
45°	937.5	934.1	1005.9	1028.2	1166.7	1589.3	4834.6	7703.6	8521.3	8582.9
47.5°	874.2	870.8	887.9	988.8	1178.7	1377.2	5045.0	8777.9	9712.0	9818.1
50°	814.3	819.5	766.4	970.0	1113.7	1214.6	5140.8	9771.9	10794.9	10839.4
52.5°	761.3	742.5	650.1	908.4	975.1	1060.7	4868.8	10223.5	11465.5	11592.1
55°	686.0	581.7	535.5	737.3	769.8	925.5	3987.8	9961.8	11523.7	11747.8
57.5°	586.8	456.8	455.1	544.0	544.0	858.8	2554.2	8511.1	9931.0	10324.5
60°	451.6	354.1	376.4	378.1	349.0	626.1	1433.6	6165.6	7342.6	7734.4
62.5°	321.6	270.3	284.0	225.8	200.2	313.1	687.7	3549.8	4531.8	4586.6
65°	215.6	183.1	148.8	124.9	123.2	133.4	284.0	1283.1	1560.2	1760.4
67.5°	142.0	111.2	78.7	78.7	89.0	89.0	107.8	212.1	297.7	272.0
70°	92.4	77.0	49.6	47.9	58.2	58.2	54.7	58.2	61.6	61.6
72.5°	68.4	58.2	29.1	25.7	32.5	34.2	30.8	29.1	29.1	29.1
75°	51.3	41.1	17.1	12.0	15.4	20.5	17.1	12.0	12.0	10.3
77.5°	20.5	15.4	6.8	5.1	8.6	12.0	10.3	5.1	3.4	3.4
80°	1.7	3.4	3.4	3.4	5.1	6.8	8.6	3.4	1.7	1.7
82.5°	0.0	1.7	1.7	1.7	3.4	5.1	6.8	3.4	1.7	1.7
85°	0.0	0.0	0.0	0.0	3.4	5.1	3.4	1.7	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	1.7	5.1	3.4	1.7	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

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.

**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  
 CIE u': 0.2476  
 CIE v': 0.5251  
 Duv: 0.0034  
 CIE x: 0.4383  
 CIE y: 0.4131  
 CIE z: 0.1487  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 581  
 Purity: 55.55201  
 Rf: 81.5  
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



**Test Conditions**

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

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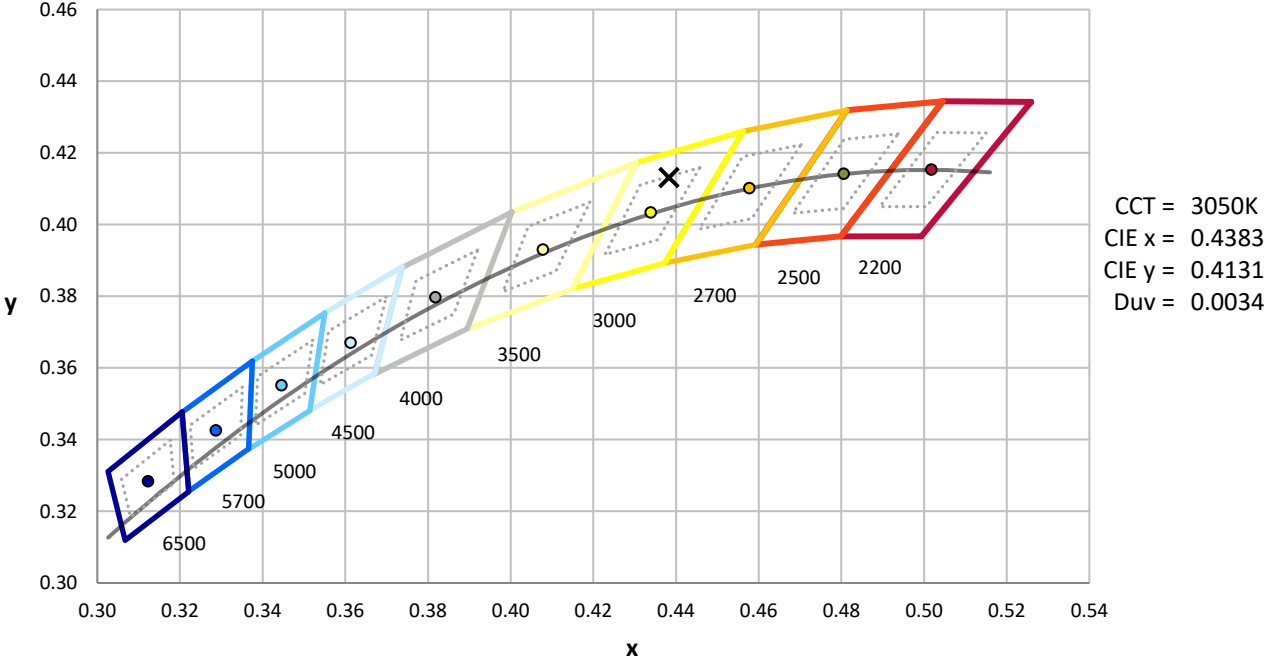
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

**Photopic Flux vs. Wavelength**



**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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

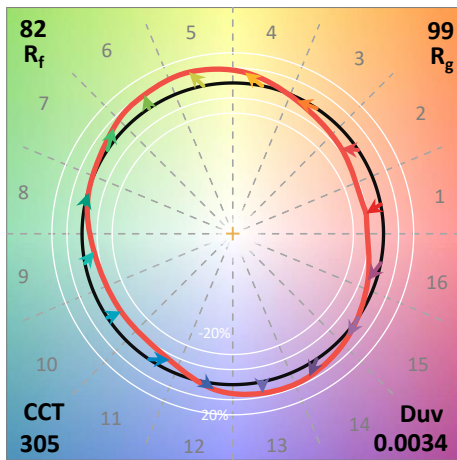
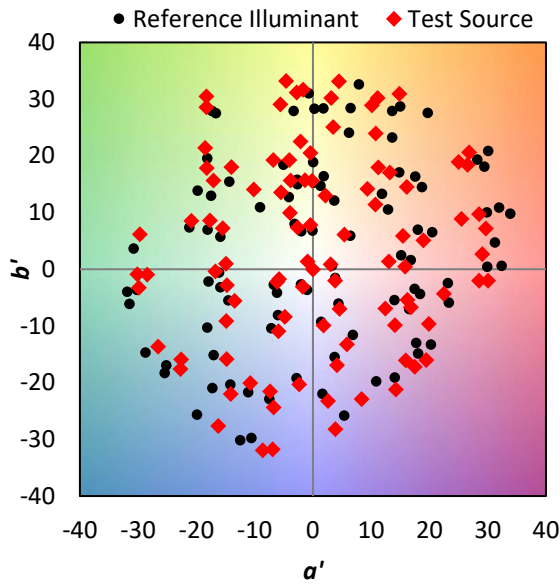
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	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			

**Summary**

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



**Color Vector Graphics**

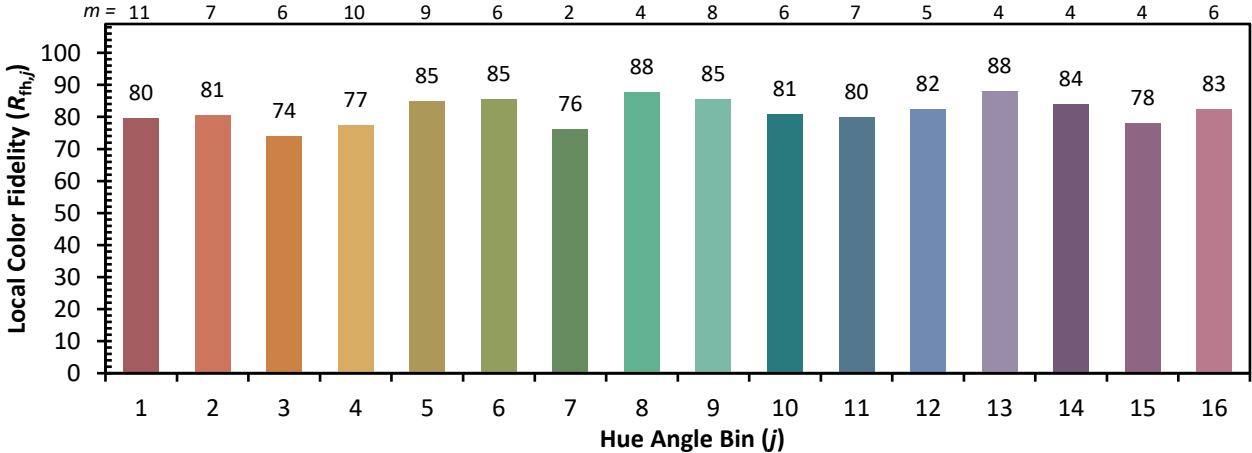


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

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	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)