

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: P639469

Luminaire Tested: GWS-SA5B-830-U-SLL-W-GRSBK

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P639469  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-38)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA5B-830-U-SLL-W-GRSBK  
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND  
SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK  
Light Source: (80) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

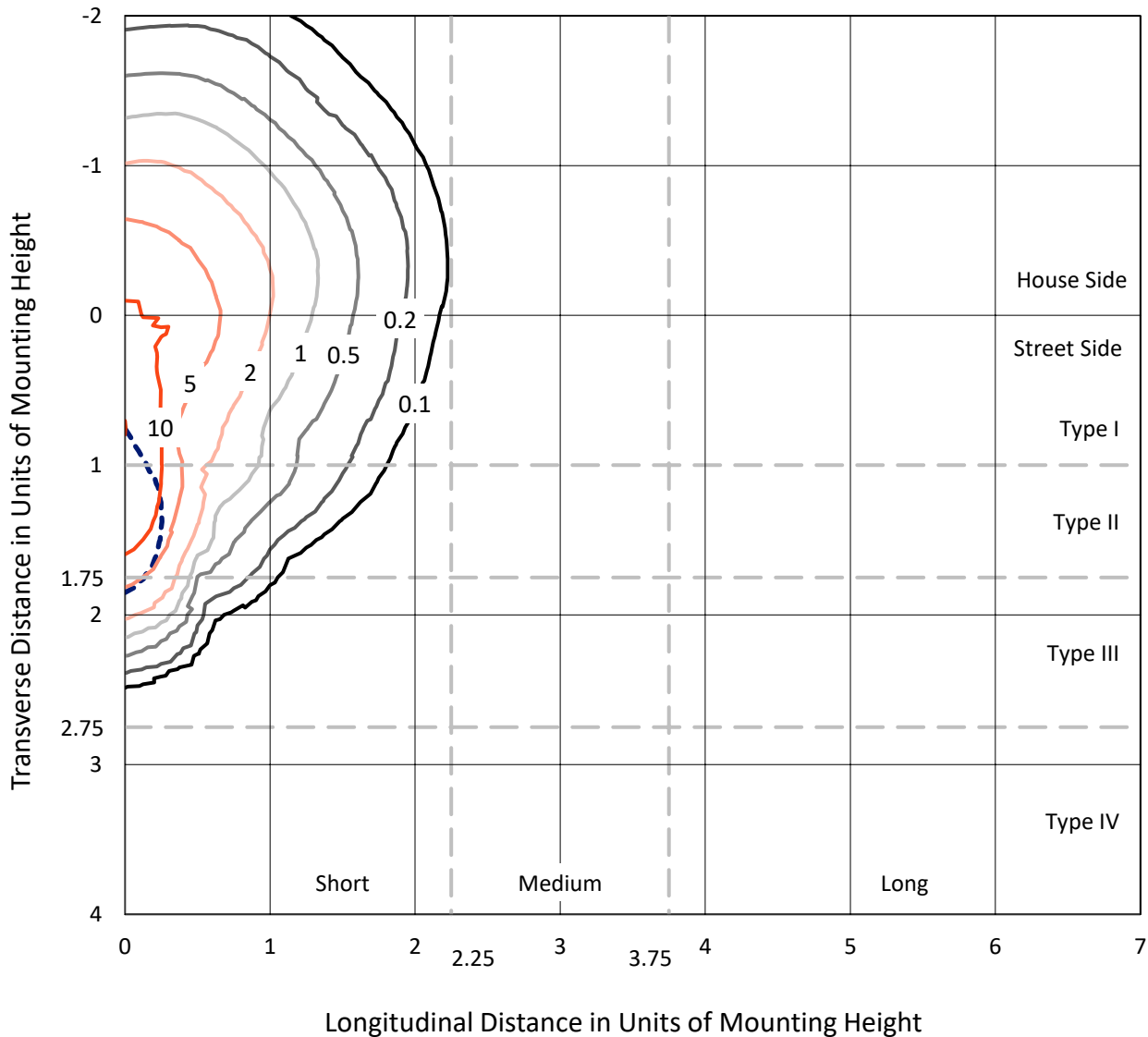
Lumens per Lamp: N/A  
Luminaire Lumens: 7563.4 lumens  
Efficiency: N/A  
Efficacy: 65.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G1  
  
Input Watts (W): 115.7  
Input Voltage (V): 120  
Input Current (Ain): 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

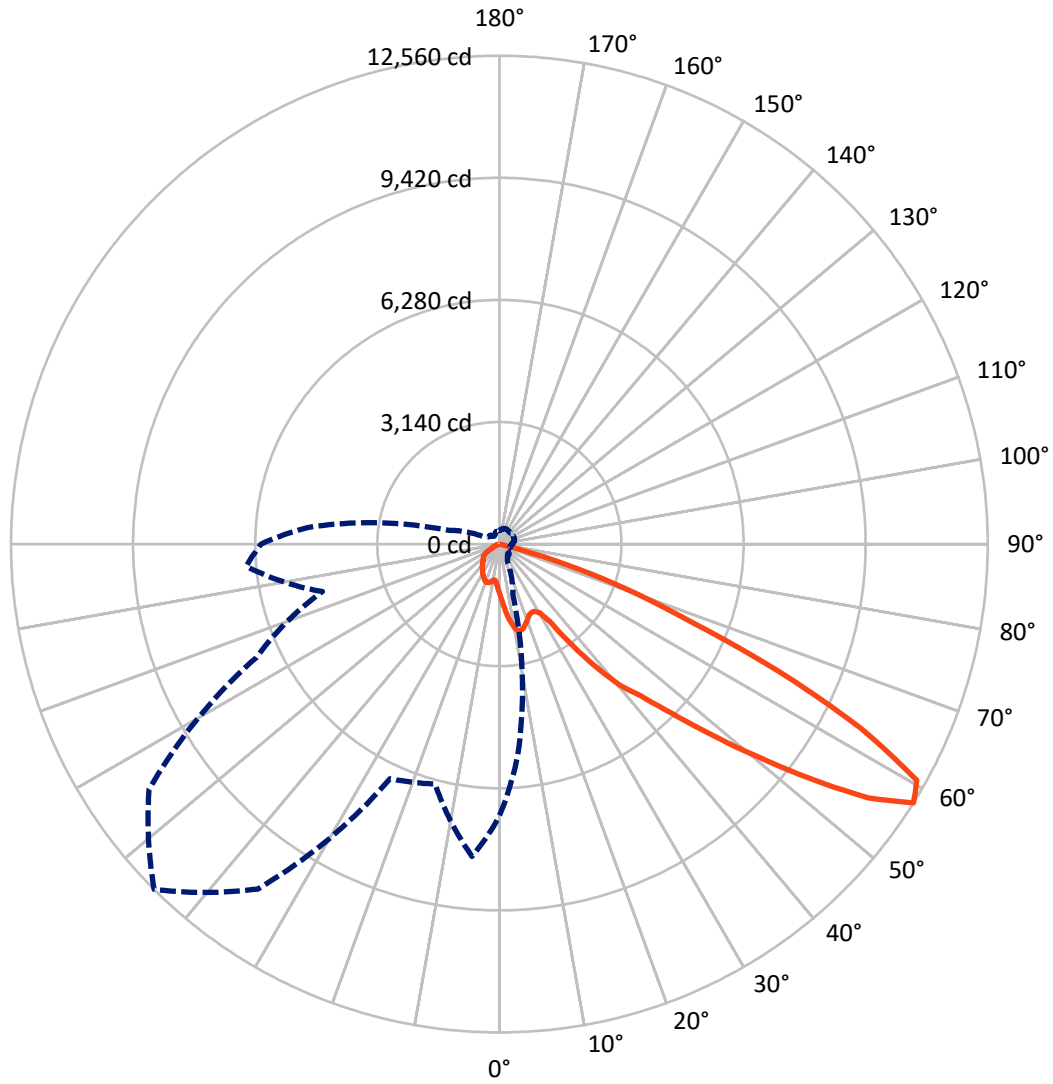
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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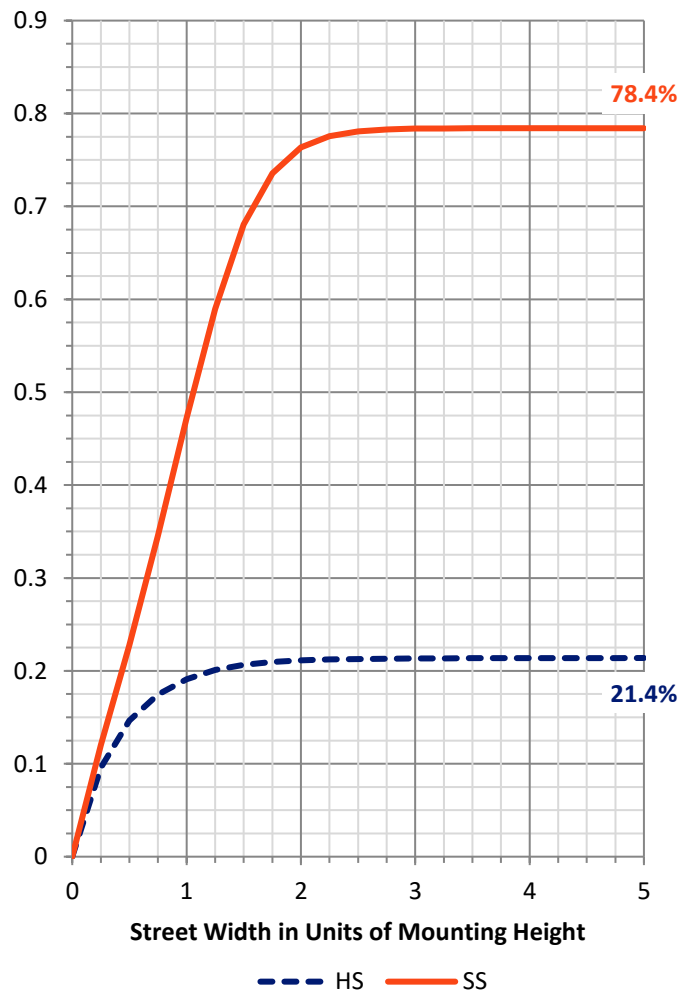
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1629.4	0.0	1629.4
	% Fixture	21.5	0.0	21.5
<b>Street Side</b>	Lumens	5934.0	0.0	5934.0
	% Fixture	78.5	0.0	78.5
<b>Total</b>	Lumens	7563.4	0.0	7563.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.0	1.7
10°-20°	418.0	5.5
20°-30°	678.3	9.0
30°-40°	1041.0	13.8
40°-50°	1662.6	22.0
50°-60°	2328.0	30.8
60°-70°	1193.6	15.8
70°-80°	114.9	1.5
80°-90°	0.0	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°	7563.4	100.0
0°-180°	7563.4	100.0

**Coefficient of Utilization**



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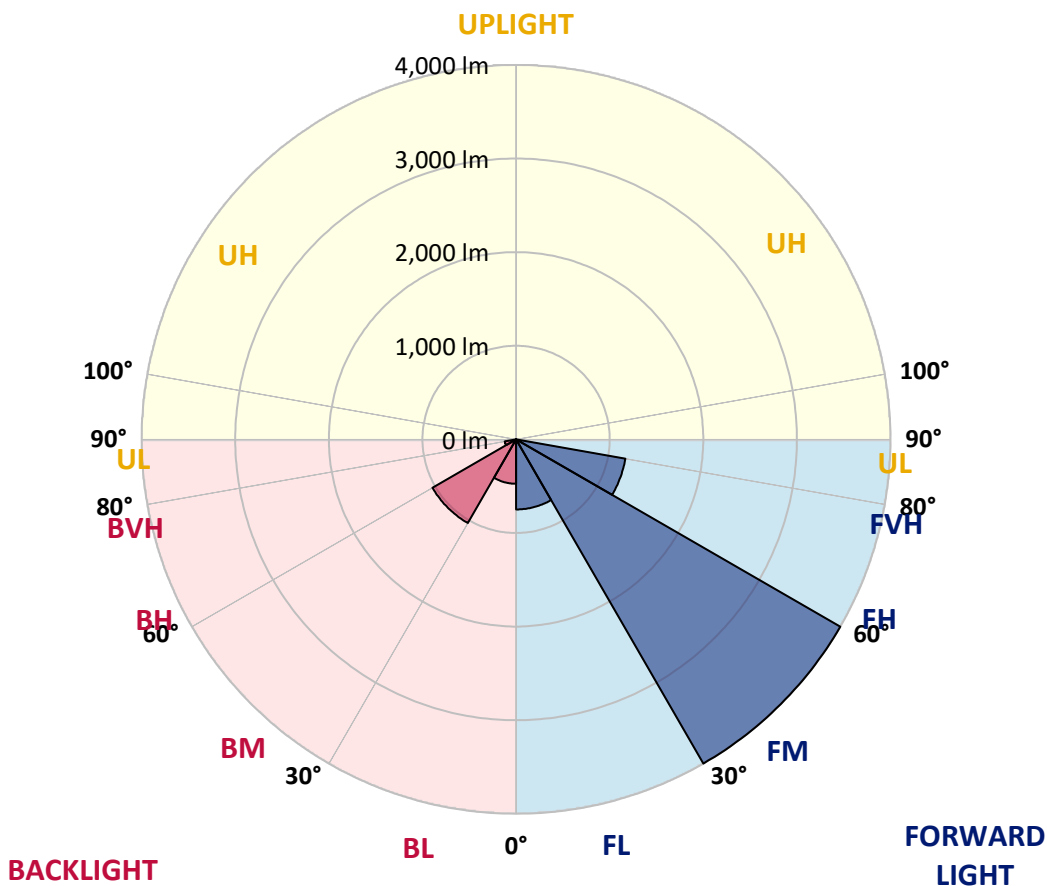
CATALOG NUMBER: GWS-SA5B-830-U-SLL-W-GRSBK

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	748.8	9.9			
FM (30°-60°)	3999.7	52.9			
FH (60°-80°)	1185.5	15.7			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	474.5	6.3	B1/500		
BM (30°-60°)	1031.9	13.6	B2/2500		
BH (60°-80°)	123.1	1.6	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-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1
2.5°	1427.7	1424.7	1414.6	1380.2	1358.9	1325.6	1301.3	1270.0	1235.6	1214.4	1193.1
5°	1579.4	1571.3	1544.0	1465.1	1404.4	1338.7	1286.1	1228.5	1166.8	1126.4	1089.0
7.5°	1725.0	1712.8	1676.4	1543.0	1451.0	1356.9	1282.1	1198.2	1111.2	1050.6	1004.0
10°	1867.5	1840.2	1782.6	1618.8	1494.4	1381.2	1293.2	1197.2	1095.0	1018.2	966.6
12.5°	1984.8	1964.6	1885.7	1690.6	1530.8	1386.2	1278.1	1189.1	1120.3	1068.8	1021.2
15°	2085.9	2063.7	1988.9	1755.3	1562.2	1366.0	1214.4	1136.5	1147.6	1167.8	1127.4
17.5°	2179.0	2155.7	2074.8	1808.9	1574.3	1316.5	1125.4	1088.0	1149.6	1225.5	1210.3
20°	2275.0	2248.7	2149.6	1852.4	1570.3	1238.6	1035.4	1046.5	1133.5	1220.4	1228.5
22.5°	2387.3	2360.0	2244.7	1908.0	1567.2	1145.6	957.5	1010.1	1103.1	1176.9	1191.1
25°	2535.9	2503.5	2377.1	1989.9	1575.3	1060.7	901.9	974.7	1051.6	1118.3	1126.4
27.5°	2732.0	2690.6	2529.8	2091.0	1592.5	993.9	877.7	926.2	985.8	1045.5	1052.6
30°	2987.9	2935.3	2704.7	2179.0	1584.4	947.4	861.5	877.7	913.0	961.6	962.6
32.5°	3287.2	3215.4	2900.9	2254.8	1514.7	913.0	839.2	828.1	836.2	873.6	880.7
35°	3639.0	3546.0	3117.3	2326.6	1387.3	846.3	798.8	761.4	758.3	776.5	793.7
37.5°	4042.5	3931.2	3390.3	2418.6	1236.6	776.5	739.1	701.7	685.5	694.6	720.9
40°	4414.6	4291.2	3675.4	2529.8	1082.9	713.9	669.4	630.9	611.7	614.8	647.1
42.5°	4851.4	4724.0	4024.3	2675.4	955.5	671.4	596.6	557.1	531.8	546.0	583.4
45°	5514.6	5370.1	4532.9	2801.8	854.4	661.3	532.9	477.2	465.1	489.4	533.9
47.5°	6420.6	6243.7	5231.5	2878.7	768.5	670.4	488.4	412.5	415.6	442.9	487.4
50°	7319.5	7128.4	6039.4	2777.5	697.7	652.2	466.1	362.0	381.2	405.5	445.9
52.5°	7937.3	7688.6	6432.7	2485.3	633.0	583.4	464.1	314.5	350.9	358.9	393.3
55°	7961.6	7655.2	6231.5	1959.6	545.0	492.4	442.9	275.0	317.5	320.5	349.8
57.5°	6978.8	6701.7	5445.9	1345.8	484.3	361.0	352.9	240.6	260.9	286.1	304.3
60°	5309.4	5073.8	4072.8	616.8	368.0	229.5	241.7	207.3	195.1	232.6	250.8
62.5°	3251.8	3101.1	2442.9	273.0	234.6	122.3	146.6	164.8	146.6	160.8	175.9
65°	1291.2	1224.5	927.2	116.3	96.1	61.7	66.7	96.1	103.1	113.2	127.4
67.5°	224.5	212.3	155.7	51.6	39.4	37.4	32.4	44.5	62.7	69.8	80.9
70°	29.3	28.3	25.3	21.2	20.2	18.2	14.2	28.3	42.5	44.5	51.6
72.5°	7.1	6.1	6.1	5.1	6.1	2.0	2.0	15.2	30.3	31.3	36.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	19.2	21.2	25.3
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1
2.5°	1175.9	1155.7	1148.6	1138.5	1125.4	1129.4	1111.2	1105.2	1114.3	1126.4	1123.4
5°	1068.8	1046.5	1031.3	1008.1	1004.0	994.9	988.9	980.8	990.9	1005.1	1008.1
7.5°	983.8	964.6	949.4	942.4	937.3	933.3	921.1	915.1	915.1	921.1	926.2
10°	947.4	933.3	930.2	932.3	940.3	939.3	928.2	920.1	910.0	905.0	911.0
12.5°	998.0	974.7	970.7	971.7	981.8	980.8	968.7	958.5	956.5	958.5	977.8
15°	1083.9	1048.5	1022.2	1017.2	1022.2	1020.2	1011.1	1005.1	1008.1	1037.4	1069.8
17.5°	1160.8	1106.2	1058.6	1040.4	1039.4	1036.4	1027.3	1025.3	1040.4	1095.0	1142.6
20°	1183.0	1129.4	1061.7	1038.4	1033.4	1030.3	1020.2	1023.3	1042.5	1108.2	1148.6
22.5°	1153.7	1102.1	1031.3	1008.1	1004.0	1003.0	992.9	997.0	1013.1	1070.8	1104.1
25°	1098.1	1054.6	980.8	960.6	960.6	958.5	949.4	951.5	961.6	1012.1	1044.5
27.5°	1030.3	988.9	927.2	907.0	910.0	913.0	901.9	898.9	907.0	954.5	973.7
30°	952.5	923.2	874.6	856.4	855.4	867.5	852.4	848.3	859.5	896.9	900.9
32.5°	876.6	862.5	828.1	814.0	815.0	817.0	808.9	808.9	819.0	839.2	838.2
35°	802.8	793.7	787.7	777.6	776.5	772.5	772.5	774.5	785.6	792.7	779.6
37.5°	732.1	741.2	748.2	738.1	730.0	730.0	730.0	739.1	749.2	746.2	724.0
40°	669.4	688.6	710.8	699.7	680.5	679.5	683.5	698.7	713.9	695.7	675.4
42.5°	615.8	640.0	671.4	665.3	644.1	641.1	644.1	663.3	675.4	652.2	629.9
45°	563.2	593.5	630.9	630.9	607.7	604.6	605.7	630.9	638.0	610.7	582.4
47.5°	518.7	552.1	591.5	591.5	572.3	566.2	571.3	597.6	602.6	564.2	537.9
50°	476.2	512.6	556.1	553.1	539.9	534.9	544.0	572.3	566.2	523.8	496.5
52.5°	422.6	461.1	520.7	523.8	516.7	517.7	528.8	547.0	529.8	478.3	455.0
55°	374.1	413.5	473.2	489.4	489.4	488.4	493.4	507.6	493.4	431.7	403.4
57.5°	321.5	354.9	404.4	408.5	411.5	400.4	407.5	426.7	419.6	367.0	350.9
60°	263.9	292.2	320.5	323.6	310.4	287.2	300.3	322.5	327.6	288.2	270.0
62.5°	187.1	214.4	247.7	247.7	234.6	211.3	228.5	247.7	240.6	200.2	189.1
65°	139.5	164.8	190.1	201.2	190.1	173.9	187.1	201.2	190.1	156.7	140.5
67.5°	90.0	107.2	122.3	131.4	133.5	131.4	137.5	133.5	120.3	98.1	89.0
70°	54.6	63.7	71.8	79.9	85.9	89.0	92.0	82.9	69.8	57.6	54.6
72.5°	39.4	47.5	54.6	60.7	67.7	69.8	69.8	63.7	51.6	40.4	37.4
75°	27.3	34.4	40.4	44.5	50.6	52.6	52.6	47.5	38.4	29.3	26.3
77.5°	1.0	7.1	7.1	6.1	8.1	10.1	10.1	12.1	11.1	8.1	7.1
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°	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1
2.5°	1129.4	1165.8	1175.9	1213.3	1246.7	1280.1	1320.5	1344.8	1381.2	1406.5	1420.6
5°	1018.2	1048.5	1084.9	1140.5	1198.2	1261.9	1338.7	1405.5	1489.4	1551.1	1571.3
7.5°	937.3	976.7	1019.2	1089.0	1167.8	1252.8	1361.0	1470.2	1598.6	1682.5	1736.1
10°	922.1	962.6	1019.2	1088.0	1170.9	1267.9	1400.4	1542.0	1702.7	1804.8	1865.5
12.5°	994.9	1038.4	1062.7	1094.0	1156.7	1264.9	1434.8	1614.8	1803.8	1915.1	1979.8
15°	1102.1	1140.5	1101.1	1061.7	1102.1	1232.6	1454.0	1675.4	1892.8	2021.2	2088.0
17.5°	1175.9	1179.0	1093.0	1009.1	1020.2	1173.9	1461.1	1736.1	1987.9	2122.3	2192.1
20°	1168.9	1144.6	1057.6	964.6	930.2	1098.1	1453.0	1789.7	2083.9	2224.5	2293.2
22.5°	1114.3	1085.9	1012.1	921.1	854.4	1008.1	1438.8	1838.2	2171.9	2331.6	2396.4
25°	1048.5	1018.2	957.5	877.7	805.9	921.1	1427.7	1905.0	2283.1	2471.2	2521.7
27.5°	971.7	945.4	893.8	836.2	785.6	855.4	1424.7	1992.9	2417.6	2641.0	2676.4
30°	896.9	872.6	832.2	798.8	777.6	817.0	1414.6	2087.0	2578.4	2836.2	2874.6
32.5°	825.1	800.8	775.5	770.5	771.5	802.8	1380.2	2180.0	2769.5	3119.3	3147.6
35°	763.4	735.1	725.0	737.1	759.4	778.6	1283.1	2256.8	2974.7	3427.7	3451.0
37.5°	704.8	676.4	675.4	704.8	729.0	741.2	1168.9	2332.7	3251.8	3741.1	3770.5
40°	651.2	622.9	633.0	668.4	687.6	693.6	1030.3	2447.9	3545.0	4071.8	4055.6
42.5°	605.7	576.3	582.4	627.9	645.1	661.3	902.9	2544.0	3827.1	4385.2	4380.2
45°	561.2	538.9	534.9	584.4	599.6	664.3	809.9	2617.8	4190.1	4784.6	4792.7
47.5°	517.7	500.5	501.5	522.7	560.2	679.5	731.0	2666.3	4716.9	5417.6	5277.0
50°	478.3	465.1	476.2	452.0	534.9	660.3	663.3	2656.2	5305.3	6024.3	5742.2
52.5°	434.8	431.7	436.8	378.2	494.4	582.4	599.6	2521.7	5581.4	6438.8	6278.0
55°	390.3	389.3	348.8	302.3	413.5	465.1	513.6	2104.1	5572.3	6659.2	6854.4
57.5°	337.7	329.6	264.9	246.7	321.5	323.6	468.1	1378.2	4938.3	6131.4	6535.9
60°	255.8	249.7	194.1	200.2	224.5	207.3	373.1	686.6	3690.6	4776.5	5232.5
62.5°	176.9	168.9	144.6	154.7	144.6	118.3	228.5	339.7	2235.6	3016.2	3429.7
65°	129.4	120.3	99.1	84.9	67.7	67.7	87.0	130.4	865.5	1282.1	1546.0
67.5°	79.9	75.8	58.6	42.5	41.5	44.5	45.5	64.7	139.5	222.4	272.0
70°	51.6	47.5	39.4	27.3	25.3	26.3	27.3	30.3	35.4	38.4	46.5
72.5°	35.4	33.4	28.3	15.2	12.1	13.1	14.2	14.2	17.2	16.2	19.2
75°	25.3	23.3	20.2	7.1	4.0	5.1	6.1	5.1	6.1	4.0	5.1
77.5°	7.1	7.1	5.1	1.0	0.0	1.0	2.0	2.0	1.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	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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CATALOG NUMBER: GWS-SA5B-830-U-SLL-W-GRSBK

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1	1285.1
2.5°	1457.0	1480.3	1489.4	1476.2	1487.4	1469.2	1462.1	1434.8	1432.8	1427.7
5°	1653.2	1705.8	1737.1	1756.3	1734.1	1709.8	1673.4	1610.7	1591.5	1579.4
7.5°	1846.3	1928.2	1981.8	2007.1	2001.0	1951.5	1885.7	1780.6	1743.2	1725.0
10°	2014.2	2114.3	2179.0	2210.3	2197.2	2153.7	2059.7	1928.2	1878.7	1867.5
12.5°	2131.4	2223.5	2267.9	2295.2	2296.3	2279.1	2190.1	2057.6	1999.0	1984.8
15°	2205.3	2244.7	2245.7	2261.9	2290.2	2328.6	2287.2	2169.9	2107.2	2085.9
17.5°	2251.8	2208.3	2163.8	2167.8	2214.4	2316.5	2358.9	2269.0	2202.2	2179.0
20°	2285.1	2147.6	2064.7	2065.7	2113.2	2267.9	2408.5	2365.0	2296.3	2275.0
22.5°	2306.4	2094.0	1975.7	1972.7	2023.3	2210.3	2454.0	2479.3	2411.5	2387.3
25°	2349.8	2068.8	1922.1	1939.3	1983.8	2192.1	2515.7	2630.9	2568.2	2535.9
27.5°	2427.7	2094.0	1917.1	1956.5	2007.1	2245.7	2622.8	2833.2	2768.4	2732.0
30°	2562.2	2189.1	1994.9	2049.5	2110.2	2386.2	2802.8	3115.3	3022.2	2987.9
32.5°	2778.6	2386.2	2235.6	2352.9	2411.5	2616.8	3072.8	3431.7	3355.9	3287.2
35°	3076.8	2836.2	2819.0	3092.0	3077.8	3053.6	3404.4	3820.0	3705.8	3639.0
37.5°	3487.4	3560.2	3687.6	3958.5	3949.4	3764.4	3840.2	4187.0	4128.4	4042.5
40°	4000.0	4154.7	4371.1	4759.3	4638.0	4405.5	4375.1	4563.2	4515.7	4414.6
42.5°	4302.3	4569.3	4981.8	5330.6	5233.6	4827.1	4792.7	5065.7	4961.6	4851.4
45°	4442.9	4907.0	5715.9	6188.1	5893.8	5107.2	5094.0	5720.9	5662.3	5514.6
47.5°	4507.6	5247.7	6575.3	7290.2	6740.1	5352.9	5305.3	6671.4	6594.5	6420.6
50°	4579.4	5717.9	7610.7	8567.2	7762.4	5630.9	5665.3	7557.1	7524.8	7319.5
52.5°	4737.1	6215.4	8885.7	10027.3	9002.0	6066.7	6283.1	8392.3	8173.9	7937.3
55°	4973.7	6757.3	10212.3	11518.7	10266.9	6652.2	6951.5	8836.2	8223.4	7961.6
57.5°	4711.8	6892.8	10998.0	12560.1	10828.1	6654.2	6386.2	8066.7	7232.5	6978.8
60°	3739.1	6412.5	10695.6	12334.7	10349.8	5909.0	4889.8	6298.3	5479.3	5309.4
62.5°	2527.8	5378.1	9415.6	10431.7	8858.4	4648.1	3178.0	4096.0	3392.3	3251.8
65°	1385.2	4012.1	7607.7	7891.8	6933.3	3246.7	1635.0	1777.5	1353.9	1291.2
67.5°	382.2	2792.7	5597.6	5235.6	4864.5	2114.3	422.6	317.5	226.5	224.5
70°	96.1	1847.3	3353.9	3457.0	2982.8	1353.9	80.9	38.4	30.3	29.3
72.5°	40.4	794.7	1591.5	1829.1	1526.8	626.9	29.3	11.1	9.1	7.1
75°	5.1	63.7	135.5	205.3	140.5	67.7	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	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
85°	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
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

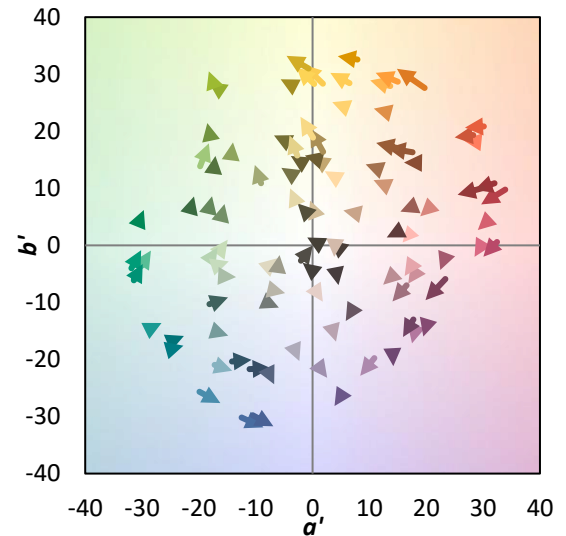
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625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

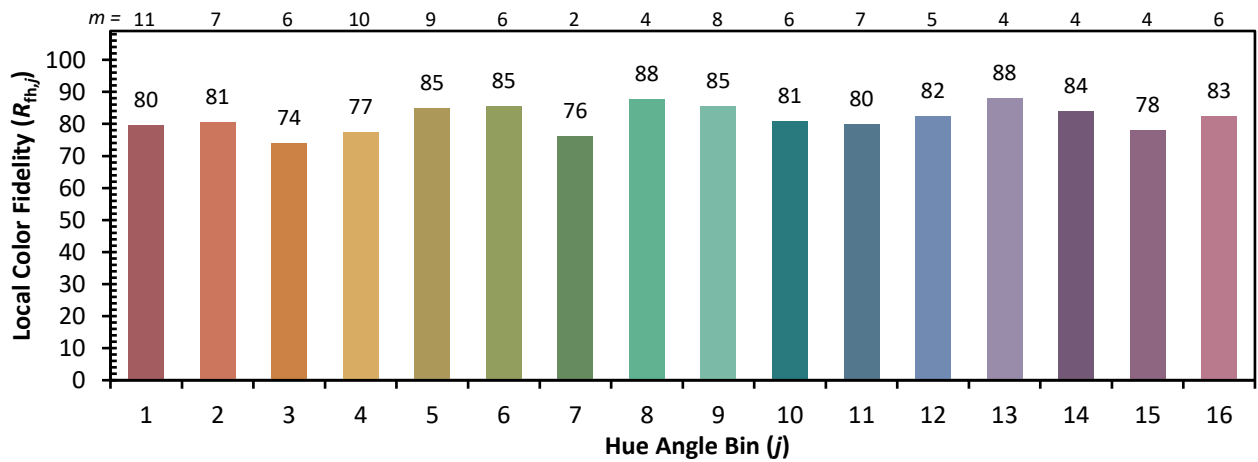
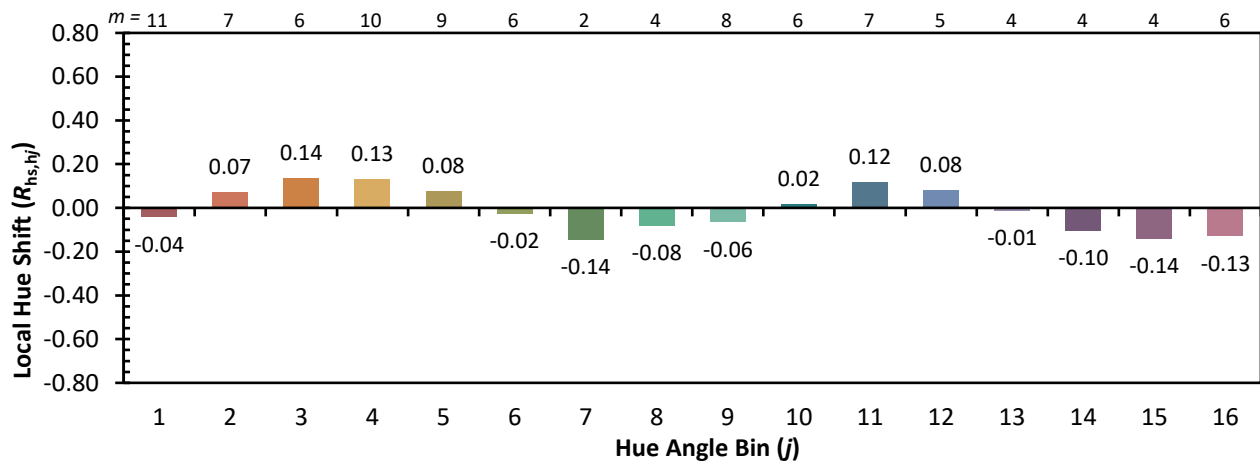
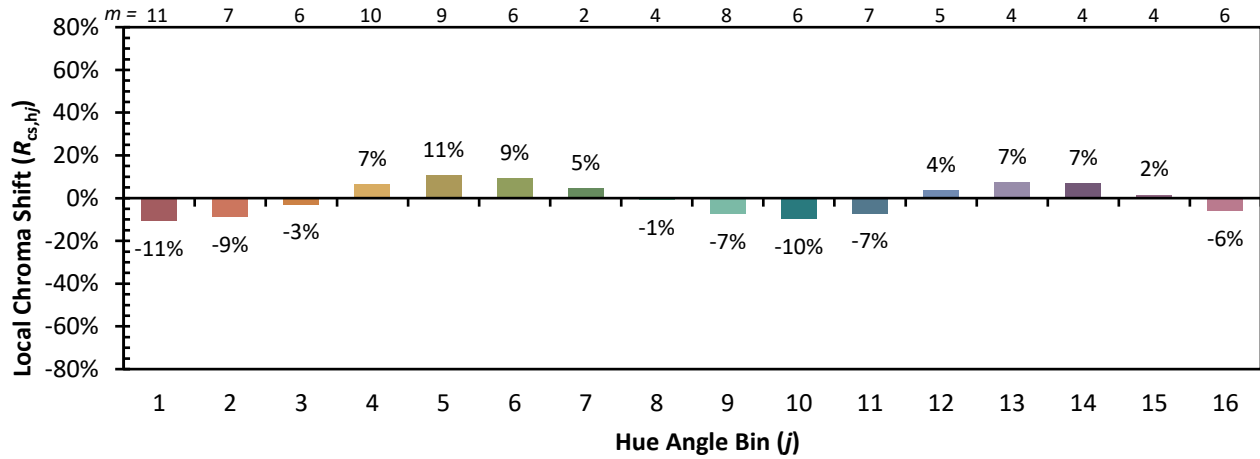


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

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)