

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: P640459

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

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640459
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-SA5D-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: 12796.4 lumens
Efficiency: N/A
Efficacy: 62.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

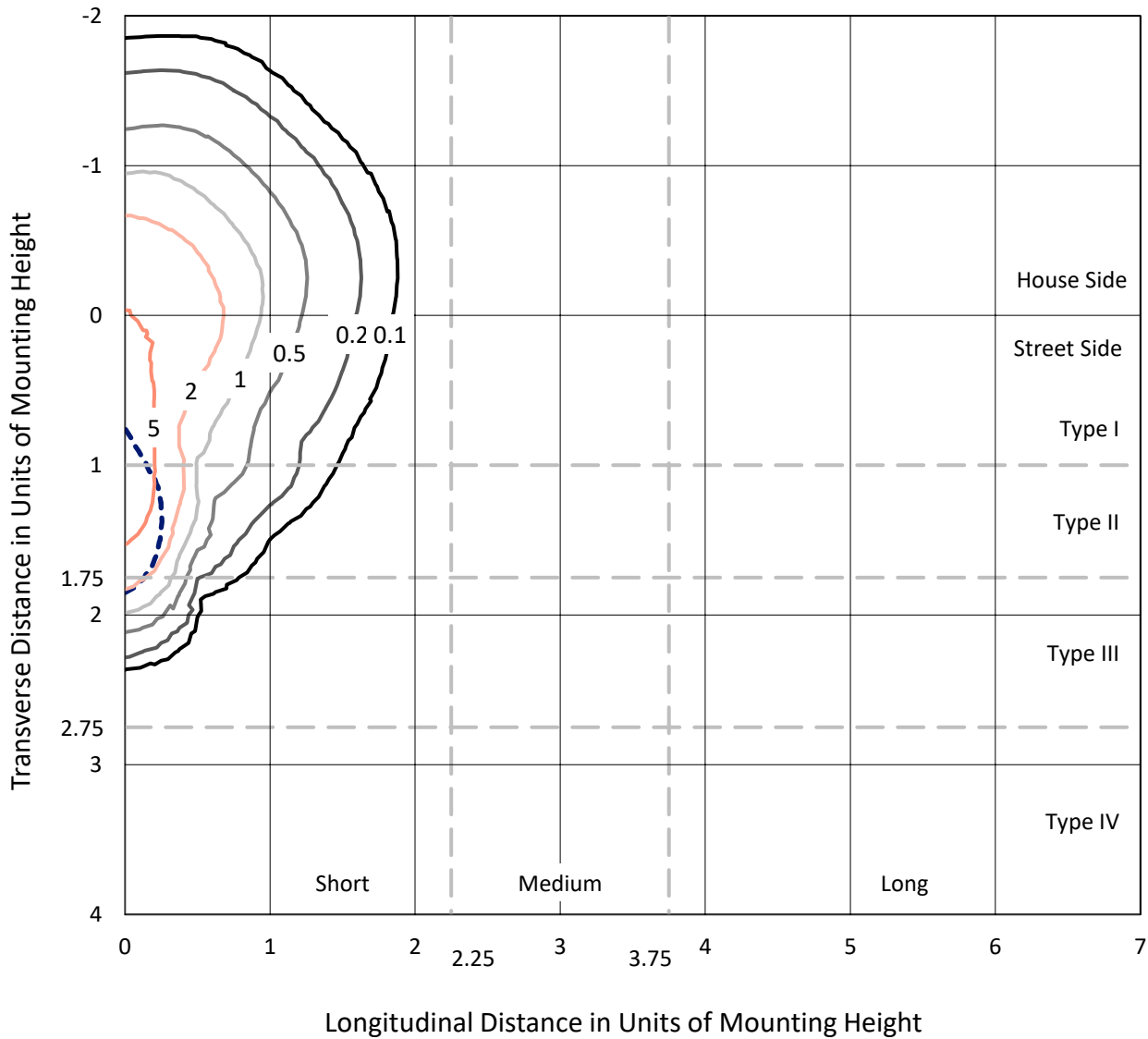
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

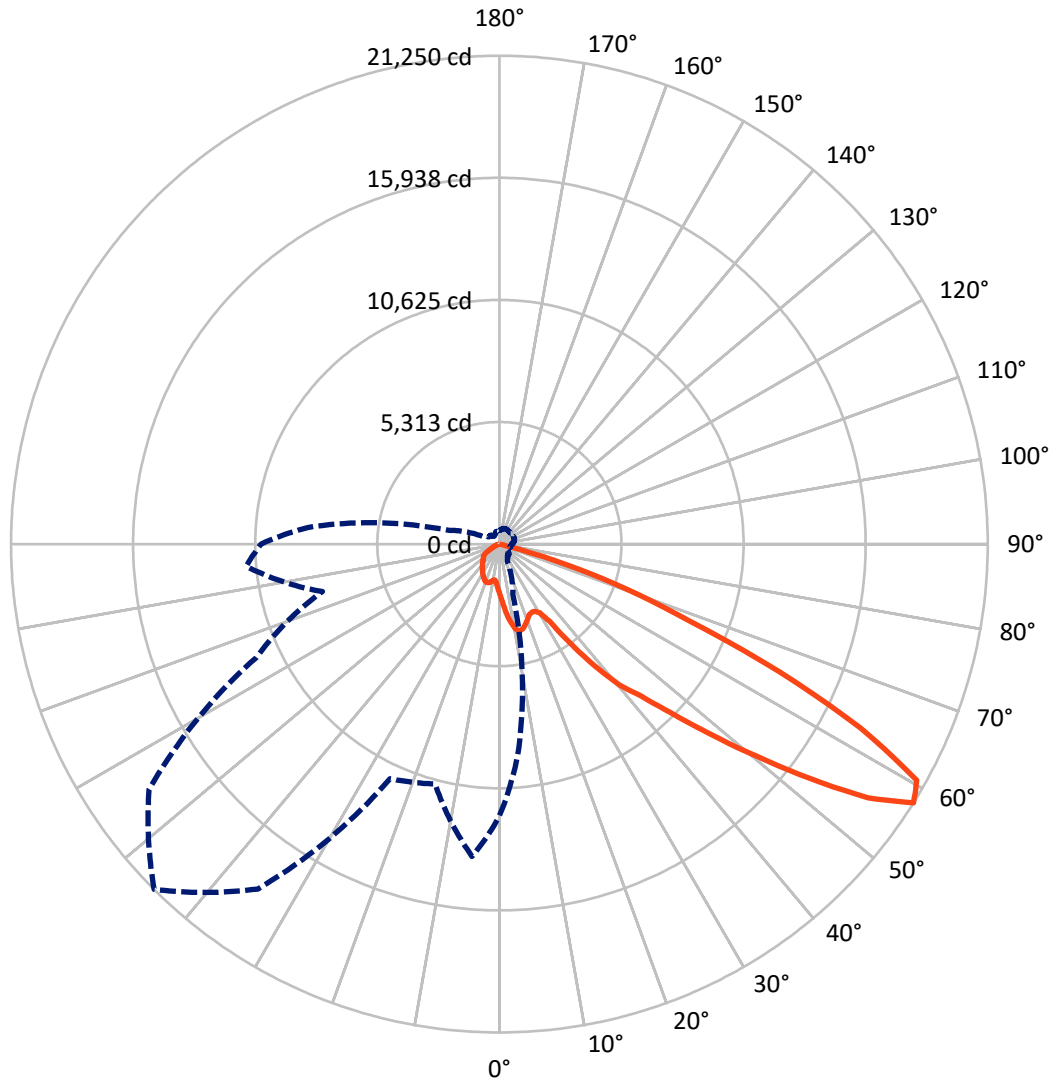
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.5 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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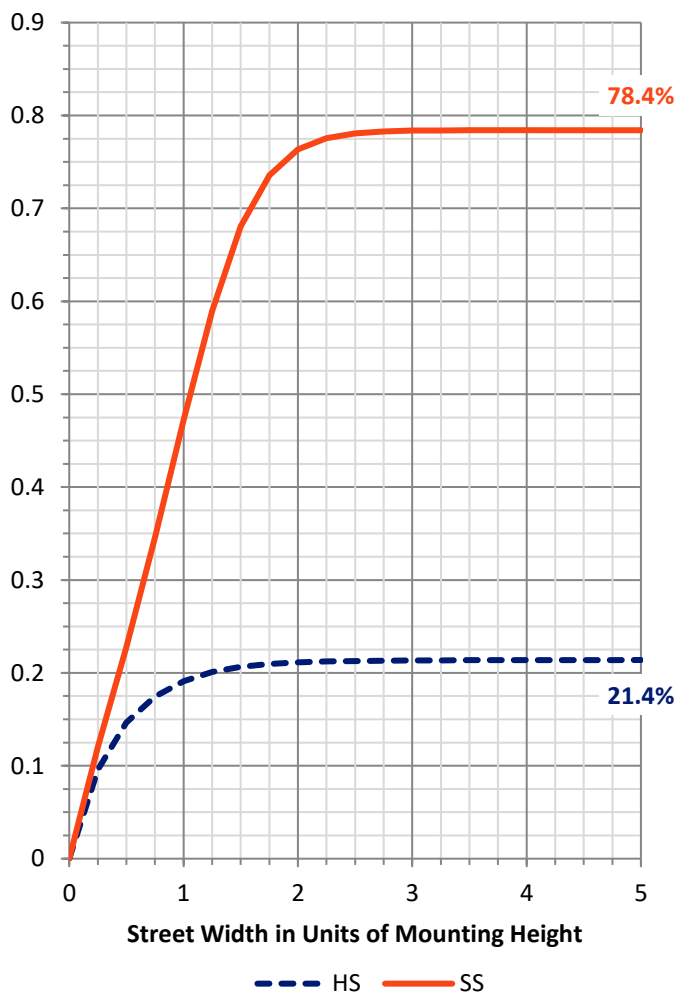
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2756.8	0.0	2756.8
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	10039.6	0.0	10039.6
	% Fixture	78.5	0.0	78.5
Total	Lumens	12796.4	0.0	12796.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.9	1.7
10°-20°	707.1	5.5
20°-30°	1147.6	9.0
30°-40°	1761.3	13.8
40°-50°	2812.9	22.0
50°-60°	3938.6	30.8
60°-70°	2019.4	15.8
70°-80°	194.4	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°	12796.4	100.0
0°-180°	12796.4	100.0

Coefficient of Utilization



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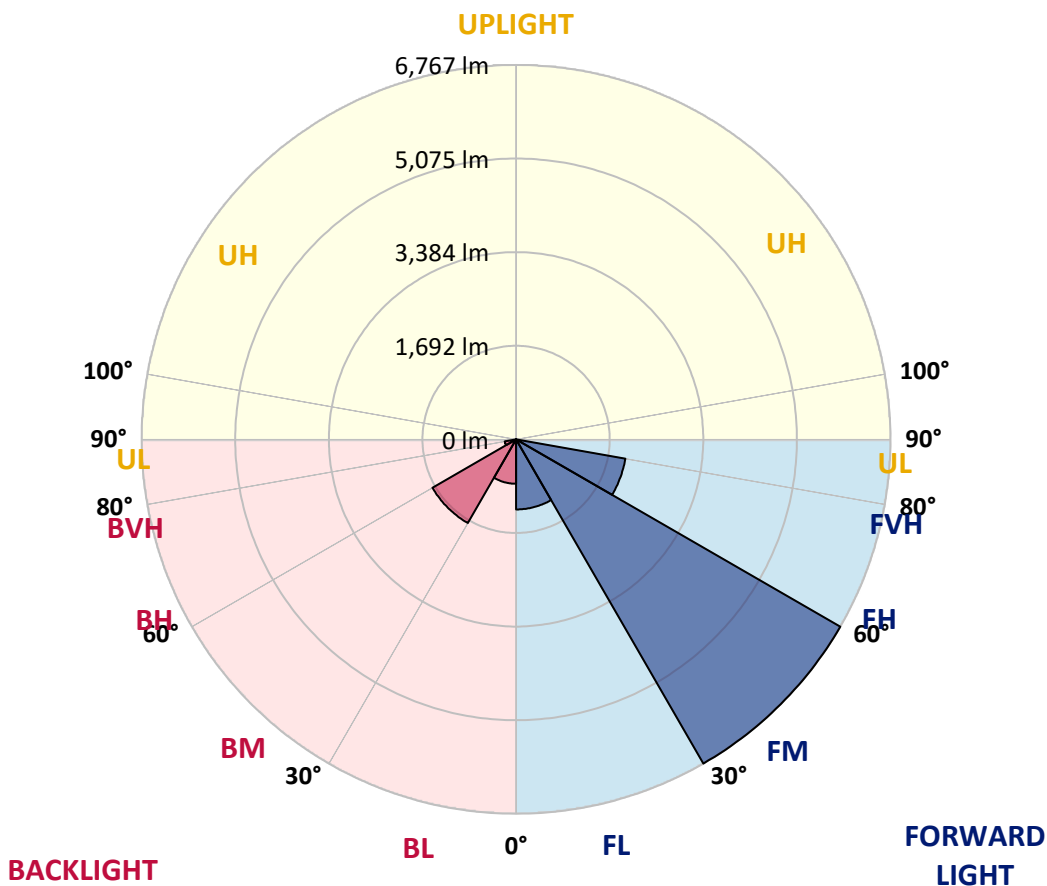
CATALOG NUMBER: GWS-SA5D-830-U-SLL-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1266.9	9.9			
FM (30°-60°)	6767.0	52.9			
FH (60°-80°)	2005.7	15.7			G2/5000
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	802.7	6.3	B2/1000		
BM (30°-60°)	1745.8	13.6	B2/2500		
BH (60°-80°)	208.2	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-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3
2.5°	2415.5	2410.4	2393.3	2335.1	2299.2	2242.7	2201.7	2148.6	2090.5	2054.5	2018.6
5°	2672.1	2658.4	2612.2	2478.8	2376.2	2265.0	2176.0	2078.5	1974.1	1905.7	1842.4
7.5°	2918.5	2897.9	2836.3	2610.5	2454.9	2295.8	2169.2	2027.2	1880.1	1777.4	1698.7
10°	3159.7	3113.5	3016.0	2738.8	2528.4	2336.8	2188.0	2025.5	1852.7	1722.7	1635.4
12.5°	3358.1	3323.9	3190.5	2860.3	2590.0	2345.4	2162.3	2011.8	1895.5	1808.2	1727.8
15°	3529.2	3491.5	3364.9	2969.8	2643.0	2311.2	2054.5	1922.8	1941.6	1975.9	1907.4
17.5°	3686.6	3647.2	3510.4	3060.4	2663.6	2227.3	1904.0	1840.7	1945.1	2073.4	2047.7
20°	3849.1	3804.6	3636.9	3134.0	2656.7	2095.6	1751.8	1770.6	1917.7	2064.8	2078.5
22.5°	4039.0	3992.8	3797.8	3228.1	2651.6	1938.2	1620.0	1709.0	1866.4	1991.3	2015.2
25°	4290.4	4235.7	4021.9	3366.7	2665.3	1794.5	1525.9	1649.1	1779.1	1892.0	1905.7
27.5°	4622.3	4552.2	4280.2	3537.7	2694.4	1681.6	1484.9	1567.0	1667.9	1768.9	1780.8
30°	5055.1	4966.2	4576.1	3686.6	2680.7	1602.9	1457.5	1484.9	1544.8	1626.9	1628.6
32.5°	5561.5	5440.0	4908.0	3814.9	2562.6	1544.8	1419.9	1401.1	1414.7	1478.0	1490.0
35°	6156.8	5999.4	5274.1	3936.3	2347.1	1431.9	1351.5	1288.2	1283.0	1313.8	1342.9
37.5°	6839.4	6651.2	5736.0	4092.0	2092.2	1313.8	1250.5	1187.2	1159.9	1175.2	1219.7
40°	7468.9	7260.2	6218.4	4280.2	1832.2	1207.8	1132.5	1067.5	1035.0	1040.1	1094.8
42.5°	8207.9	7992.4	6808.6	4526.5	1616.6	1135.9	1009.3	942.6	899.8	923.8	987.1
45°	9330.2	9085.5	7669.1	4740.3	1445.5	1118.8	901.5	807.4	786.9	828.0	903.2
47.5°	10862.9	10563.6	8851.2	4870.4	1300.1	1134.2	826.3	698.0	703.1	749.3	824.6
50°	12383.7	12060.4	10218.0	4699.3	1180.4	1103.4	788.6	612.4	644.9	686.0	754.4
52.5°	13429.0	13008.2	10883.5	4204.9	1070.9	987.1	785.2	532.0	593.6	607.3	665.5
55°	13470.0	12951.7	10543.0	3315.3	922.1	833.1	749.3	465.3	537.2	542.3	591.9
57.5°	11807.2	11338.5	9213.8	2276.9	819.4	610.7	597.0	407.1	441.4	484.1	514.9
60°	8982.9	8584.3	6890.7	1043.5	622.7	388.3	408.9	350.7	330.2	393.5	424.3
62.5°	5501.6	5246.7	4133.0	461.9	396.9	207.0	248.1	278.8	248.1	272.0	297.7
65°	2184.6	2071.7	1568.7	196.7	162.5	104.4	112.9	162.5	174.5	191.6	215.5
67.5°	379.8	359.2	263.4	87.2	66.7	63.3	54.7	75.3	106.1	118.0	136.9
70°	49.6	47.9	42.8	35.9	34.2	30.8	23.9	47.9	71.8	75.3	87.2
72.5°	12.0	10.3	10.3	8.6	10.3	3.4	3.4	25.7	51.3	53.0	61.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6	32.5	35.9	42.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3
2.5°	1989.5	1955.3	1943.4	1926.2	1904.0	1910.9	1880.1	1869.8	1885.2	1905.7	1900.6
5°	1808.2	1770.6	1744.9	1705.6	1698.7	1683.3	1673.1	1659.4	1676.5	1700.4	1705.6
7.5°	1664.5	1632.0	1606.3	1594.4	1585.8	1579.0	1558.4	1548.2	1548.2	1558.4	1567.0
10°	1602.9	1579.0	1573.8	1577.3	1590.9	1589.2	1570.4	1556.7	1539.6	1531.1	1541.3
12.5°	1688.5	1649.1	1642.3	1644.0	1661.1	1659.4	1638.8	1621.7	1618.3	1621.7	1654.2
15°	1833.9	1774.0	1729.5	1721.0	1729.5	1726.1	1710.7	1700.4	1705.6	1755.2	1809.9
17.5°	1963.9	1871.5	1791.1	1760.3	1758.6	1753.5	1738.1	1734.6	1760.3	1852.7	1933.1
20°	2001.5	1910.9	1796.2	1756.9	1748.3	1743.2	1726.1	1731.2	1763.7	1874.9	1943.4
22.5°	1951.9	1864.7	1744.9	1705.6	1698.7	1697.0	1679.9	1686.7	1714.1	1811.6	1868.1
25°	1857.8	1784.3	1659.4	1625.2	1625.2	1621.7	1606.3	1609.8	1626.9	1712.4	1767.2
27.5°	1743.2	1673.1	1568.7	1534.5	1539.6	1544.8	1525.9	1520.8	1534.5	1614.9	1647.4
30°	1611.5	1561.9	1479.8	1449.0	1447.3	1467.8	1442.1	1435.3	1454.1	1517.4	1524.2
32.5°	1483.2	1459.2	1401.1	1377.1	1378.8	1382.2	1368.6	1368.6	1385.7	1419.9	1418.2
35°	1358.3	1342.9	1332.6	1315.5	1313.8	1307.0	1307.0	1310.4	1329.2	1341.2	1318.9
37.5°	1238.5	1253.9	1265.9	1248.8	1235.1	1235.1	1235.1	1250.5	1267.6	1262.5	1224.9
40°	1132.5	1165.0	1202.6	1183.8	1151.3	1149.6	1156.4	1182.1	1207.8	1177.0	1142.7
42.5°	1041.8	1082.9	1135.9	1125.6	1089.7	1084.6	1089.7	1122.2	1142.7	1103.4	1065.8
45°	952.9	1004.2	1067.5	1067.5	1028.1	1023.0	1024.7	1067.5	1079.5	1033.3	985.4
47.5°	877.6	934.0	1000.8	1000.8	968.3	958.0	966.5	1011.0	1019.6	954.6	910.1
50°	805.7	867.3	940.9	935.8	913.5	905.0	920.4	968.3	958.0	886.1	840.0
52.5°	715.1	780.1	881.0	886.1	874.2	875.9	894.7	925.5	896.4	809.2	769.8
55°	633.0	699.7	800.6	828.0	828.0	826.3	834.8	858.8	834.8	730.5	682.6
57.5°	544.0	600.5	684.3	691.1	696.3	677.4	689.4	721.9	709.9	621.0	593.6
60°	446.5	494.4	542.3	547.4	525.2	485.8	508.1	545.7	554.3	487.5	456.8
62.5°	316.5	362.7	419.1	419.1	396.9	357.5	386.6	419.1	407.1	338.7	319.9
65°	236.1	278.8	321.6	340.4	321.6	294.2	316.5	340.4	321.6	265.2	237.8
67.5°	152.3	181.3	207.0	222.4	225.8	222.4	232.7	225.8	203.6	165.9	150.5
70°	92.4	107.8	121.5	135.1	145.4	150.5	155.7	140.3	118.0	97.5	92.4
72.5°	66.7	80.4	92.4	102.6	114.6	118.0	118.0	107.8	87.2	68.4	63.3
75°	46.2	58.2	68.4	75.3	85.5	89.0	89.0	80.4	65.0	49.6	44.5
77.5°	1.7	12.0	12.0	10.3	13.7	17.1	17.1	20.5	18.8	13.7	12.0
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3
2.5°	1910.9	1972.4	1989.5	2052.8	2109.3	2165.7	2234.2	2275.2	2336.8	2379.6	2403.5
5°	1722.7	1774.0	1835.6	1929.7	2027.2	2135.0	2265.0	2377.9	2519.9	2624.2	2658.4
7.5°	1585.8	1652.5	1724.4	1842.4	1975.9	2119.6	2302.6	2487.4	2704.6	2846.6	2937.3
10°	1560.2	1628.6	1724.4	1840.7	1981.0	2145.2	2369.3	2608.8	2880.8	3053.6	3156.2
12.5°	1683.3	1756.9	1797.9	1851.0	1957.0	2140.1	2427.5	2732.0	3051.9	3240.1	3349.5
15°	1864.7	1929.7	1863.0	1796.2	1864.7	2085.3	2460.0	2834.6	3202.4	3419.7	3532.6
17.5°	1989.5	1994.7	1849.3	1707.3	1726.1	1986.1	2472.0	2937.3	3363.2	3590.8	3708.8
20°	1977.6	1936.5	1789.4	1632.0	1573.8	1857.8	2458.3	3027.9	3525.7	3763.5	3879.9
22.5°	1885.2	1837.3	1712.4	1558.4	1445.5	1705.6	2434.3	3110.1	3674.6	3944.9	4054.4
25°	1774.0	1722.7	1620.0	1484.9	1363.4	1558.4	2415.5	3223.0	3862.8	4180.9	4266.5
27.5°	1644.0	1599.5	1512.3	1414.7	1329.2	1447.3	2410.4	3371.8	4090.3	4468.3	4528.2
30°	1517.4	1476.3	1407.9	1351.5	1315.5	1382.2	2393.3	3530.9	4362.3	4798.5	4863.5
32.5°	1395.9	1354.9	1312.1	1303.6	1305.3	1358.3	2335.1	3688.3	4685.6	5277.5	5325.4
35°	1291.6	1243.7	1226.6	1247.1	1284.7	1317.2	2170.9	3818.3	5032.9	5799.3	5838.6
37.5°	1192.4	1144.5	1142.7	1192.4	1233.4	1253.9	1977.6	3946.6	5501.6	6329.6	6379.2
40°	1101.7	1053.8	1070.9	1130.8	1163.3	1173.5	1743.2	4141.6	5997.7	6889.0	6861.6
42.5°	1024.7	975.1	985.4	1062.3	1091.4	1118.8	1527.7	4304.1	6475.0	7419.3	7410.7
45°	949.4	911.8	905.0	988.8	1014.4	1123.9	1370.3	4429.0	7089.1	8095.0	8108.7
47.5°	875.9	846.8	848.5	884.4	947.7	1149.6	1236.8	4511.1	7980.4	9165.9	8928.1
50°	809.2	786.9	805.7	764.7	905.0	1117.1	1122.2	4494.0	8976.0	10192.3	9715.1
52.5°	735.6	730.5	739.0	639.8	836.5	985.4	1014.4	4266.5	9443.1	10893.7	10621.7
55°	660.3	658.6	590.2	511.5	699.7	786.9	869.0	3560.0	9427.7	11266.7	11596.8
57.5°	571.4	557.7	448.2	417.4	544.0	547.4	792.1	2331.7	8355.1	10373.7	11058.0
60°	432.8	422.5	328.5	338.7	379.8	350.7	631.2	1161.6	6244.0	8081.3	8852.9
62.5°	299.4	285.7	244.6	261.7	244.6	200.2	386.6	574.8	3782.4	5103.0	5802.7
65°	219.0	203.6	167.6	143.7	114.6	114.6	147.1	220.7	1464.4	2169.2	2615.7
67.5°	135.1	128.3	99.2	71.8	70.1	75.3	77.0	109.5	236.1	376.4	460.2
70°	87.2	80.4	66.7	46.2	42.8	44.5	46.2	51.3	59.9	65.0	78.7
72.5°	59.9	56.5	47.9	25.7	20.5	22.2	23.9	23.9	29.1	27.4	32.5
75°	42.8	39.3	34.2	12.0	6.8	8.6	10.3	8.6	10.3	6.8	8.6
77.5°	12.0	12.0	8.6	1.7	0.0	1.7	3.4	3.4	1.7	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	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: P640459

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

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3	2174.3
2.5°	2465.1	2504.5	2519.9	2497.6	2516.4	2485.6	2473.7	2427.5	2424.1	2415.5
5°	2797.0	2885.9	2939.0	2971.5	2933.8	2892.8	2831.2	2725.1	2692.6	2672.1
7.5°	3123.7	3262.3	3353.0	3395.7	3385.5	3301.6	3190.5	3012.5	2949.2	2918.5
10°	3407.7	3577.1	3686.6	3739.6	3717.3	3643.8	3484.7	3262.3	3178.5	3159.7
12.5°	3606.2	3761.8	3837.1	3883.3	3885.0	3855.9	3705.4	3481.3	3382.1	3358.1
15°	3731.0	3797.8	3799.5	3826.8	3874.7	3939.7	3869.6	3671.2	3565.1	3529.2
17.5°	3809.7	3736.2	3660.9	3667.7	3746.4	3919.2	3991.1	3838.8	3725.9	3686.6
20°	3866.2	3633.5	3493.2	3495.0	3575.4	3837.1	4074.9	4001.3	3885.0	3849.1
22.5°	3902.1	3542.9	3342.7	3337.6	3423.1	3739.6	4151.9	4194.6	4080.0	4039.0
25°	3975.7	3500.1	3252.0	3281.1	3356.4	3708.8	4256.2	4451.2	4345.2	4290.4
27.5°	4107.4	3542.9	3243.5	3310.2	3395.7	3799.5	4437.6	4793.4	4683.9	4622.3
30°	4334.9	3703.7	3375.2	3467.6	3570.2	4037.2	4742.1	5270.7	5113.3	5055.1
32.5°	4701.0	4037.2	3782.4	3980.8	4080.0	4427.3	5198.8	5806.1	5677.8	5561.5
35°	5205.7	4798.5	4769.4	5231.3	5207.4	5166.3	5759.9	6463.0	6269.7	6156.8
37.5°	5900.2	6023.4	6238.9	6697.4	6682.0	6368.9	6497.2	7084.0	6984.8	6839.4
40°	6767.5	7029.3	7395.4	8052.3	7847.0	7453.5	7402.2	7720.4	7640.0	7468.9
42.5°	7279.0	7730.6	8428.6	9018.8	8854.6	8166.9	8108.7	8570.6	8394.4	8207.9
45°	7516.8	8302.0	9670.6	10469.5	9971.7	8640.7	8618.5	9679.1	9579.9	9330.2
47.5°	7626.3	8878.5	11124.7	12334.1	11403.5	9056.4	8976.0	11287.2	11157.2	10862.9
50°	7747.8	9674.0	12876.4	14494.7	13133.0	9526.9	9585.0	12785.8	12731.0	12383.7
52.5°	8014.6	10515.7	15033.6	16965.0	15230.3	10264.2	10630.3	14198.8	13829.3	13429.0
55°	8414.9	11432.6	17278.1	19488.3	17370.4	11254.7	11761.1	14949.8	13913.1	13470.0
57.5°	7971.9	11661.8	18607.3	21250.3	18319.9	11258.1	10804.8	13648.0	12236.6	11807.2
60°	6326.2	10849.3	18095.8	20868.8	17510.7	9997.3	8272.9	10655.9	9270.3	8982.9
62.5°	4276.7	9099.2	15930.0	17649.3	14987.4	7864.1	5376.7	6930.0	5739.4	5501.6
65°	2343.7	6788.1	12871.3	13352.0	11730.3	5493.1	2766.2	3007.4	2290.6	2184.6
67.5°	646.6	4724.9	9470.4	8858.0	8230.2	3577.1	715.1	537.2	383.2	379.8
70°	162.5	3125.4	5674.4	5848.9	5046.6	2290.6	136.9	65.0	51.3	49.6
72.5°	68.4	1344.6	2692.6	3094.7	2583.2	1060.6	49.6	18.8	15.4	12.0
75°	8.6	107.8	229.2	347.3	237.8	114.6	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

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

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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

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			

Summary

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



Color Vector Graphics

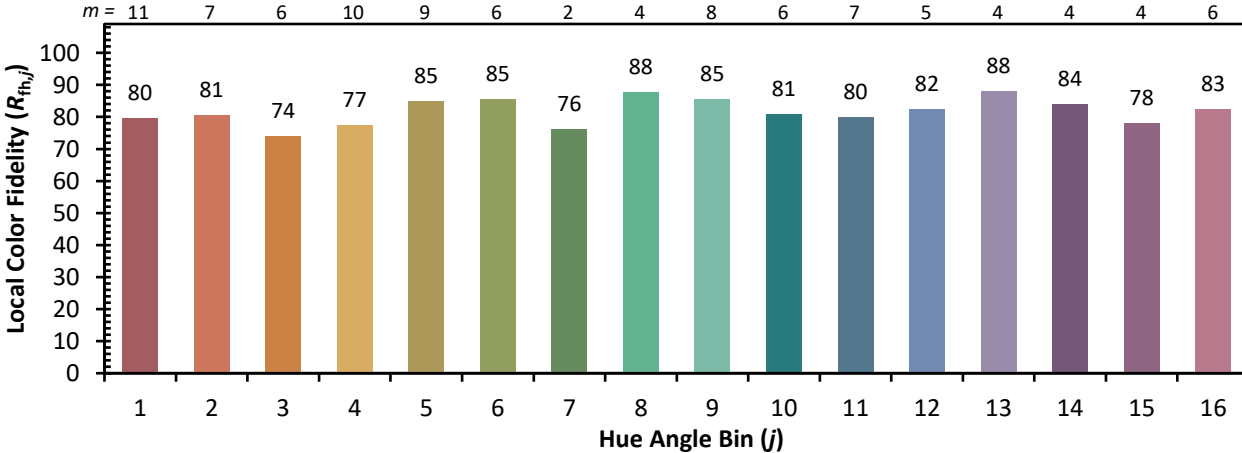


Individual Sample Fidelity Index ($R_{f,i}$)

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)