

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: P636503

Luminaire Tested: GWS-SA3F-830-U-SLR-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P636503
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-SA3F-830-U-SLR-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10362.2 lumens
Efficiency: N/A
Efficacy: 56.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G1

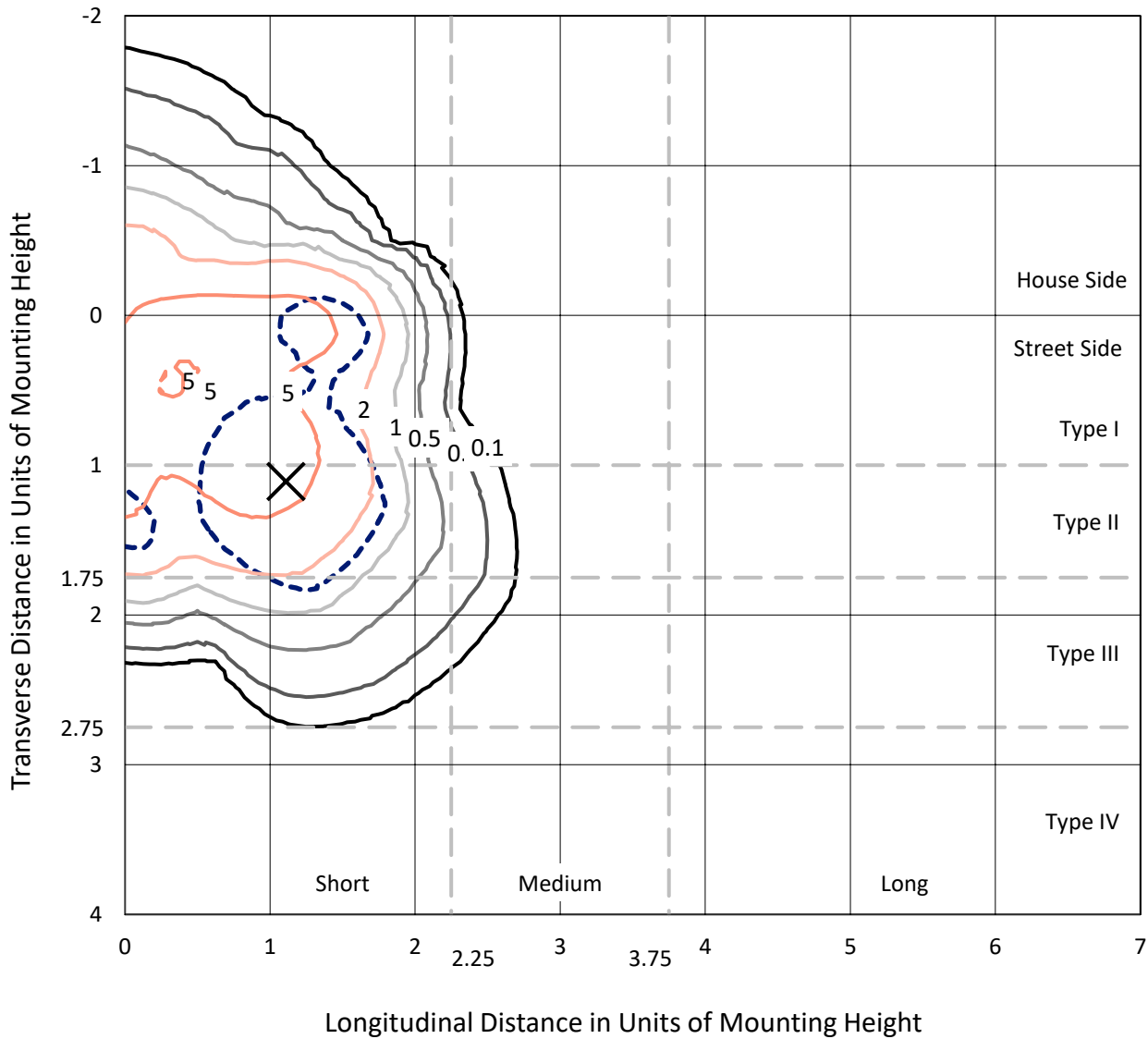
Input Watts (W): 183.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

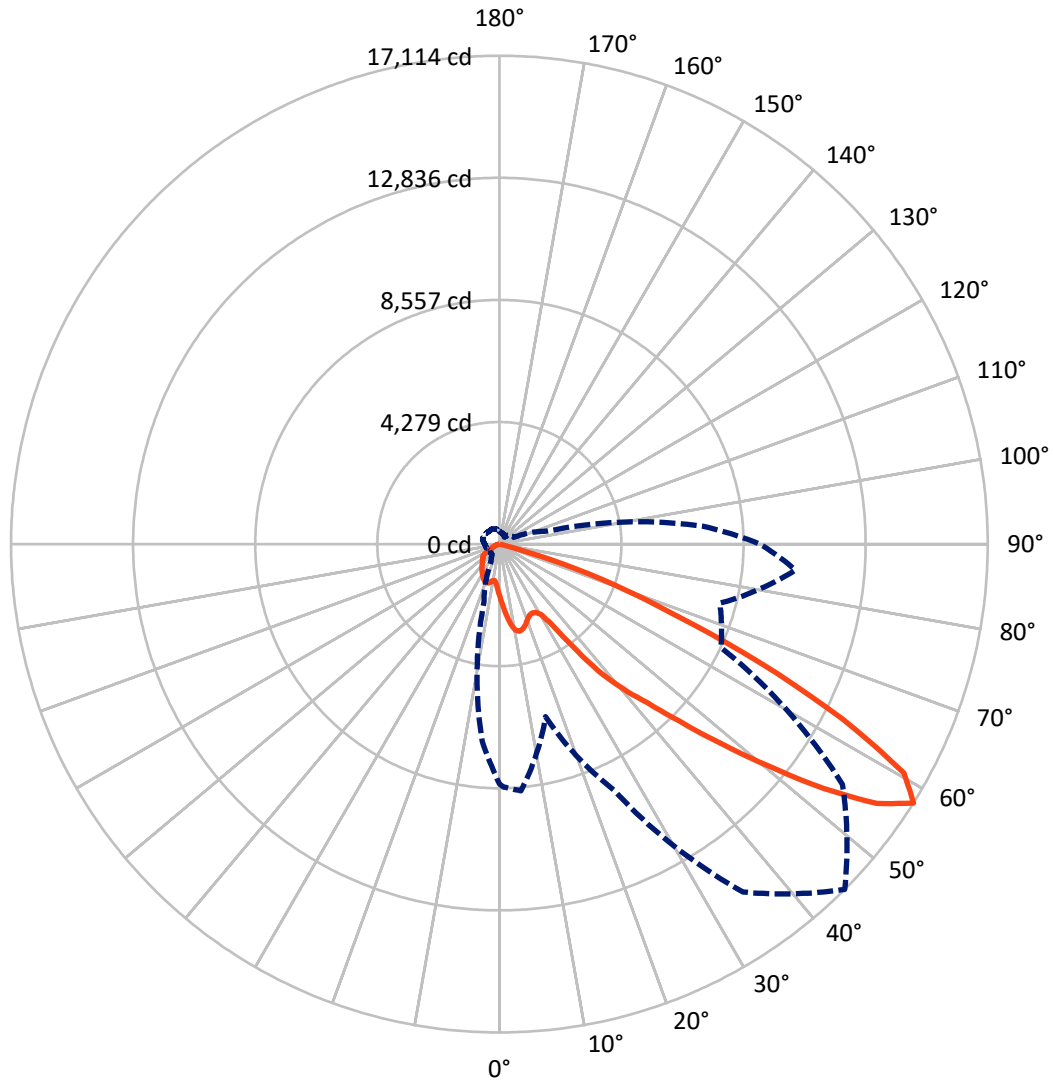
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.1 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
House Side	Lumens	2320.4	0.0	2320.4
	% Fixture	22.4	0.0	22.4
Street Side	Lumens	8041.8	0.0	8041.8
	% Fixture	77.6	0.0	77.6
Total	Lumens	10362.2	0.0	10362.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.2	1.7
10°-20°	579.6	5.6
20°-30°	941.5	9.1
30°-40°	1454.8	14.0
40°-50°	2332.8	22.5
50°-60°	3188.3	30.8
60°-70°	1544.2	14.9
70°-80°	141.4	1.4
80°-90°	0.4	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°	10362.2	100.0
0°-180°	10362.2	100.0

Coefficient of Utilization



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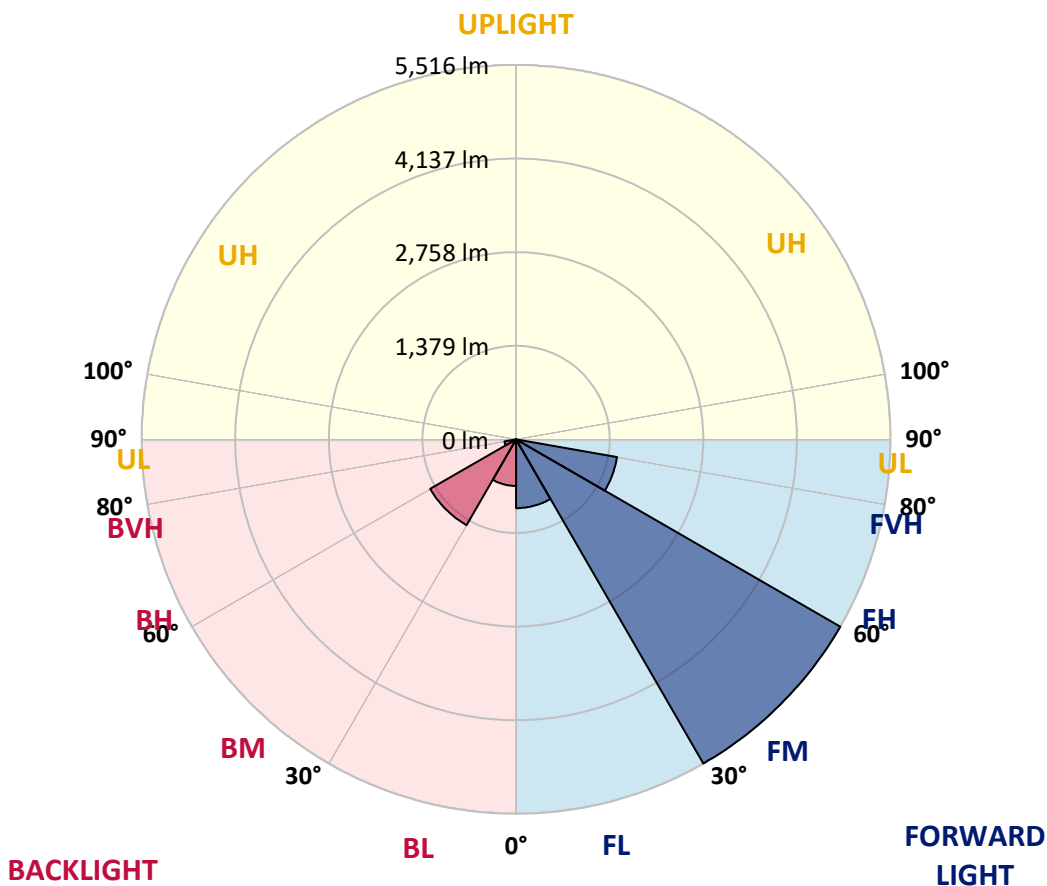
CATALOG NUMBER: GWS-SA3F-830-U-SLR-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1013.7	9.8			
FM (30°-60°)	5516.0	53.2			
FH (60°-80°)	1511.6	14.6			G1/1800
FVH (80°-90°)	0.4	0.0			G0/10
BL (0°-30°)	686.6	6.6	B2/1000		
BM (30°-60°)	1459.9	14.1	B2/2500		
BH (60°-80°)	173.9	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3
2.5°	1973.0	1985.6	2006.5	2051.0	2088.6	2113.7	2124.8	2122.0	2106.7	2095.6	2073.3
5°	2184.7	2184.7	2225.1	2326.7	2404.7	2453.4	2478.5	2463.2	2432.5	2383.8	2308.6
7.5°	2369.9	2376.8	2445.1	2589.9	2708.2	2777.9	2818.2	2809.9	2755.6	2662.3	2511.9
10°	2514.7	2523.0	2613.5	2790.4	2929.6	3000.6	3060.5	3066.1	3006.2	2882.3	2709.6
12.5°	2655.3	2663.7	2758.4	2928.2	3050.8	3080.0	3132.9	3153.8	3138.5	3050.8	2871.1
15°	2807.1	2826.6	2907.3	3034.1	3085.6	3050.8	3085.6	3123.2	3174.7	3166.3	3004.8
17.5°	2956.1	2970.0	3052.2	3096.7	3039.6	2949.1	2965.8	3010.4	3127.3	3241.5	3137.1
20°	3093.9	3113.4	3181.6	3123.2	2950.5	2809.9	2811.3	2869.8	3048.0	3287.5	3272.2
22.5°	3238.7	3268.0	3316.7	3152.4	2868.4	2699.9	2706.8	2759.7	2985.3	3330.6	3425.3
25°	3428.1	3456.0	3488.0	3224.8	2841.9	2645.6	2672.0	2720.8	2985.3	3404.4	3614.7
27.5°	3684.3	3703.8	3705.2	3359.9	2887.9	2653.9	2709.6	2765.3	3074.4	3552.0	3868.1
30°	4006.0	4036.6	3996.2	3570.1	3031.3	2765.3	2847.5	2917.1	3266.6	3801.3	4241.3
32.5°	4397.2	4440.4	4386.1	3882.0	3330.6	3149.6	3298.6	3339.0	3572.9	4161.9	4664.6
35°	4856.7	4892.9	4834.4	4313.7	4029.6	4063.0	4333.2	4281.7	4188.4	4606.1	5158.9
37.5°	5360.8	5394.2	5281.4	4968.1	5062.8	5207.6	5639.2	5462.4	5161.7	5178.4	5694.9
40°	5823.0	5859.2	5682.4	5679.6	5874.6	6139.1	6659.9	6416.2	6006.8	5927.5	6197.6
42.5°	6302.0	6327.1	6167.0	6058.4	6501.1	7045.6	7597.0	7268.4	6566.6	6480.3	6827.0
45°	6985.7	7038.6	6753.2	6244.9	7065.1	8088.5	8857.1	8215.2	6948.1	6878.5	7790.5
47.5°	7991.0	8030.0	7448.0	6361.9	7590.0	9387.6	10431.9	9443.3	7283.7	7124.9	9107.7
50°	8822.3	8848.7	8087.1	6490.0	8148.4	10788.4	12226.7	10899.8	7661.0	7532.9	10337.2
52.5°	9434.9	9535.2	8926.7	6753.2	8882.2	12435.6	14213.7	12625.0	8250.0	8321.0	11356.5
55°	9561.7	9698.1	9500.4	6914.7	9528.2	14113.4	16048.9	14169.1	8837.6	8918.4	11699.0
57.5°	8403.2	8511.8	8676.1	6263.0	9512.9	14882.0	17114.1	14681.5	8570.3	7998.0	10416.6
60°	6295.1	6370.3	6668.2	4787.1	8748.5	14202.5	16284.2	13809.9	7493.9	6102.9	7936.7
62.5°	3733.0	3766.5	4143.8	3100.9	7261.4	12230.9	13505.0	11916.2	5921.9	4104.8	4860.9
65°	1432.8	1418.9	1707.1	1530.3	5339.9	9742.7	10044.8	9084.1	4063.0	1881.1	1853.3
67.5°	221.4	211.6	285.4	452.5	3851.4	6751.8	6627.9	6547.1	2545.3	438.6	382.9
70°	50.1	50.1	61.3	133.7	2353.2	3967.0	4245.4	4047.7	1629.1	93.3	50.1
72.5°	23.7	23.7	29.2	57.1	852.2	1634.7	1904.8	1875.6	529.1	30.6	18.1
75°	8.4	9.7	9.7	12.5	51.5	84.9	194.9	139.2	33.4	0.0	0.0
77.5°	2.8	2.8	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.4	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.4	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°	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3
2.5°	2024.6	2014.8	1978.6	1929.9	1882.5	1840.8	1797.6	1746.1	1708.5	1665.3	1651.4
5°	2250.1	2188.9	2090.0	1987.0	1892.3	1811.5	1733.5	1650.0	1588.7	1527.5	1506.6
7.5°	2440.9	2350.4	2190.3	2035.7	1906.2	1792.0	1679.2	1565.1	1476.0	1403.5	1381.3
10°	2612.2	2507.7	2293.3	2102.5	1939.6	1807.3	1670.9	1527.5	1411.9	1325.6	1304.7
12.5°	2759.7	2638.6	2381.0	2152.7	1953.5	1801.8	1669.5	1555.3	1450.9	1352.0	1325.6
15°	2883.7	2750.0	2454.8	2186.1	1932.7	1732.2	1616.6	1598.5	1590.1	1481.5	1430.0
17.5°	3004.8	2854.4	2514.7	2201.4	1874.2	1609.6	1526.1	1608.2	1696.0	1624.9	1559.5
20°	3131.5	2960.3	2576.0	2204.2	1776.7	1471.8	1457.8	1587.3	1698.7	1676.5	1615.2
22.5°	3280.5	3092.5	2652.5	2202.8	1654.2	1354.8	1407.7	1547.0	1637.5	1636.1	1587.3
25°	3496.3	3259.6	2755.6	2211.1	1520.5	1264.3	1352.0	1478.7	1552.5	1549.7	1509.4
27.5°	3727.5	3458.7	2889.2	2232.0	1406.3	1211.4	1286.6	1385.4	1449.5	1446.7	1411.9
30°	4051.9	3688.5	3017.3	2233.4	1324.2	1183.5	1214.2	1282.4	1343.7	1336.7	1310.3
32.5°	4446.0	3947.5	3124.6	2154.1	1272.7	1157.1	1139.0	1173.8	1221.1	1211.4	1204.4
35°	4922.2	4255.2	3216.5	1980.0	1193.3	1104.2	1055.4	1062.4	1095.8	1101.4	1098.6
37.5°	5465.2	4621.4	3330.6	1750.3	1086.1	1027.6	962.2	956.6	976.1	994.2	1008.1
40°	6001.3	5033.5	3485.2	1517.7	988.6	930.1	867.5	853.5	861.9	893.9	923.2
42.5°	6604.2	5511.1	3652.3	1318.6	921.8	822.9	763.0	736.6	760.3	811.8	846.6
45°	7473.0	6180.9	3815.2	1159.9	893.9	728.2	647.5	644.7	671.1	738.0	777.0
47.5°	8692.8	7047.0	3922.4	1036.0	892.5	654.4	558.4	575.1	605.7	671.1	715.7
50°	9881.9	8131.7	3804.1	941.3	863.3	605.7	491.5	524.9	555.6	612.7	658.6
52.5°	10599.0	8715.1	3343.2	852.2	772.8	583.4	426.1	484.6	490.1	541.6	590.4
55°	10523.8	8337.7	2560.6	714.3	639.1	551.4	357.8	437.2	440.0	479.0	520.8
57.5°	9134.2	7158.4	1758.6	579.2	480.4	455.3	295.2	369.0	395.4	419.1	449.7
60°	6807.5	5222.9	783.9	470.6	304.9	307.7	252.0	278.5	318.9	346.7	373.2
62.5°	4011.5	3004.8	318.9	282.7	168.5	193.5	203.3	203.3	228.4	249.2	265.9
65°	1516.3	1051.3	129.5	142.0	87.7	90.5	119.7	147.6	167.1	185.2	207.5
67.5°	265.9	183.8	66.8	52.9	51.5	45.9	61.3	96.1	107.2	121.1	130.9
70°	44.6	37.6	27.8	26.5	23.7	25.1	40.4	68.2	75.2	79.4	83.5
72.5°	12.5	11.1	8.4	7.0	5.6	7.0	25.1	52.9	55.7	58.5	62.7
75°	0.0	0.0	0.0	0.0	0.0	0.0	9.7	37.6	40.4	41.8	45.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	11.1	13.9	11.1
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°	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3
2.5°	1643.0	1615.2	1599.9	1591.5	1591.5	1580.4	1567.8	1563.7	1581.8	1581.8	1612.4
5°	1480.1	1457.8	1432.8	1417.5	1393.8	1398.0	1384.1	1382.7	1400.8	1409.1	1441.1
7.5°	1367.3	1339.5	1324.2	1314.4	1301.9	1296.3	1283.8	1279.6	1289.4	1303.3	1333.9
10°	1292.2	1288.0	1286.6	1293.5	1293.5	1286.6	1275.4	1268.5	1271.3	1297.7	1332.5
12.5°	1311.6	1320.0	1322.8	1333.9	1339.5	1333.9	1325.6	1328.4	1346.5	1395.2	1446.7
15°	1396.6	1389.6	1386.8	1392.4	1396.6	1391.0	1388.2	1409.1	1471.8	1541.4	1599.9
17.5°	1487.1	1442.5	1423.0	1423.0	1425.8	1423.0	1425.8	1466.2	1567.8	1637.5	1680.6
20°	1533.0	1450.9	1420.3	1413.3	1418.9	1420.3	1430.0	1476.0	1587.3	1636.1	1645.8
22.5°	1519.1	1416.1	1381.3	1375.7	1381.3	1386.8	1396.6	1435.6	1540.0	1565.1	1560.9
25°	1449.5	1347.8	1320.0	1320.0	1332.5	1331.1	1335.3	1363.2	1449.5	1464.8	1457.8
27.5°	1361.8	1265.7	1242.0	1256.0	1267.1	1264.3	1265.7	1289.4	1353.4	1357.6	1350.6
30°	1272.7	1189.1	1166.8	1183.5	1198.9	1196.1	1197.5	1221.1	1261.5	1257.3	1247.6
32.5°	1182.2	1120.9	1104.2	1113.9	1137.6	1134.8	1140.4	1165.4	1180.8	1162.7	1151.5
35°	1098.6	1066.6	1054.1	1059.6	1077.7	1081.9	1091.6	1108.4	1108.4	1086.1	1066.6
37.5°	1020.6	1016.5	1008.1	1001.1	1017.8	1030.4	1044.3	1063.8	1036.0	1003.9	985.8
40°	948.2	966.3	955.2	937.1	946.8	964.9	992.8	1008.1	974.7	942.7	912.0
42.5°	881.4	912.0	907.8	885.6	893.9	910.6	942.7	955.2	916.2	880.0	850.8
45°	817.3	860.5	863.3	835.4	843.8	860.5	898.1	902.3	852.2	813.2	792.3
47.5°	761.6	809.0	810.4	789.5	792.3	816.0	850.8	852.2	795.1	758.9	732.4
50°	708.7	763.0	767.2	749.1	751.9	779.7	809.0	803.4	742.2	704.6	680.9
52.5°	644.7	718.5	728.2	719.9	731.0	753.3	771.4	751.9	680.9	643.3	622.4
55°	575.1	671.1	692.0	686.5	699.0	717.1	721.3	708.7	619.6	582.0	562.5
57.5°	494.3	552.8	589.0	577.8	587.6	605.7	618.2	608.5	541.6	512.4	495.7
60°	409.4	448.4	456.7	438.6	430.3	462.3	491.5	479.0	421.9	403.8	384.3
62.5°	299.4	343.9	349.5	325.8	316.1	350.9	375.9	363.4	300.8	281.3	265.9
65°	239.5	281.3	292.4	270.1	264.6	291.0	306.3	275.7	231.1	210.3	193.5
67.5°	157.3	190.8	220.0	218.6	207.5	215.8	204.7	179.6	147.6	136.5	125.3
70°	97.5	117.0	135.1	142.0	140.6	137.8	122.5	104.4	94.7	90.5	84.9
72.5°	75.2	94.7	108.6	112.8	114.2	110.0	97.5	80.8	71.0	65.4	61.3
75°	55.7	71.0	82.2	87.7	90.5	87.7	75.2	64.1	54.3	50.1	45.9
77.5°	19.5	23.7	29.2	32.0	30.6	29.2	26.5	26.5	20.9	19.5	16.7
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



REPORT NUMBER: P636503

CATALOG NUMBER: GWS-SA3F-830-U-SLR-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3	1821.3
2.5°	1647.2	1672.3	1718.2	1760.0	1804.6	1850.5	1900.6	1952.2	1975.8	1973.0
5°	1489.9	1544.2	1619.4	1701.5	1793.4	1892.3	2002.3	2115.1	2163.8	2184.7
7.5°	1391.0	1467.6	1566.5	1670.9	1792.0	1932.7	2098.4	2275.2	2346.2	2369.9
10°	1403.5	1492.7	1574.8	1676.5	1806.0	1988.4	2194.4	2404.7	2488.2	2514.7
12.5°	1505.2	1524.7	1547.0	1630.5	1793.4	2030.1	2282.2	2532.8	2628.9	2655.3
15°	1597.1	1506.6	1464.8	1541.4	1748.9	2059.4	2371.3	2670.6	2776.5	2807.1
17.5°	1601.3	1464.8	1371.5	1431.4	1676.5	2071.9	2459.0	2811.3	2926.8	2956.1
20°	1549.7	1418.9	1299.1	1300.5	1577.6	2069.1	2531.4	2938.0	3067.5	3093.9
22.5°	1474.6	1364.6	1240.6	1197.5	1471.8	2063.5	2610.8	3073.0	3213.7	3238.7
25°	1391.0	1294.9	1184.9	1119.5	1366.0	2069.1	2722.2	3249.9	3404.4	3428.1
27.5°	1300.5	1218.4	1141.8	1088.9	1276.8	2090.0	2855.8	3475.4	3659.2	3684.3
30°	1205.8	1144.6	1113.9	1081.9	1221.1	2095.6	3000.6	3738.6	3971.1	4006.0
32.5°	1112.5	1079.1	1080.5	1086.1	1168.2	2056.6	3132.9	4031.0	4341.5	4397.2
35°	1026.2	1016.5	1044.3	1072.2	1091.6	1956.3	3248.5	4376.3	4799.6	4856.7
37.5°	952.4	960.8	995.6	1023.4	1008.1	1814.3	3401.6	4808.0	5312.0	5360.8
40°	881.4	902.3	942.7	955.2	944.1	1648.6	3585.4	5224.3	5756.2	5823.0
42.5°	816.0	831.3	888.4	891.1	926.0	1480.1	3762.3	5672.7	6267.2	6302.0
45°	763.0	760.3	818.7	836.8	949.6	1293.5	3934.9	6270.0	6935.6	6985.7
47.5°	711.5	708.7	722.7	804.8	959.4	1120.9	4106.2	7144.4	7904.7	7991.0
50°	662.8	667.0	623.8	789.5	906.5	988.6	4184.2	7953.4	8786.1	8822.3
52.5°	619.6	604.3	529.1	739.4	793.7	863.3	3962.8	8321.0	9331.9	9434.9
55°	558.4	473.4	435.8	600.1	626.6	753.3	3245.7	8108.0	9379.3	9561.7
57.5°	477.6	371.8	370.4	442.8	442.8	699.0	2078.9	6927.2	8082.9	8403.2
60°	367.6	288.2	306.3	307.7	284.1	509.6	1166.8	5018.2	5976.2	6295.1
62.5°	261.8	220.0	231.1	183.8	162.9	254.8	559.7	2889.2	3688.5	3733.0
65°	175.4	149.0	121.1	101.6	100.3	108.6	231.1	1044.3	1269.9	1432.8
67.5°	115.6	90.5	64.1	64.1	72.4	72.4	87.7	172.7	242.3	221.4
70°	75.2	62.7	40.4	39.0	47.3	47.3	44.6	47.3	50.1	50.1
72.5°	55.7	47.3	23.7	20.9	26.5	27.8	25.1	23.7	23.7	23.7
75°	41.8	33.4	13.9	9.7	12.5	16.7	13.9	9.7	9.7	8.4
77.5°	16.7	12.5	5.6	4.2	7.0	9.7	8.4	4.2	2.8	2.8
80°	1.4	2.8	2.8	2.8	4.2	5.6	7.0	2.8	1.4	1.4
82.5°	0.0	1.4	1.4	1.4	2.8	4.2	5.6	2.8	1.4	1.4
85°	0.0	0.0	0.0	0.0	2.8	4.2	2.8	1.4	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	1.4	4.2	2.8	1.4	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



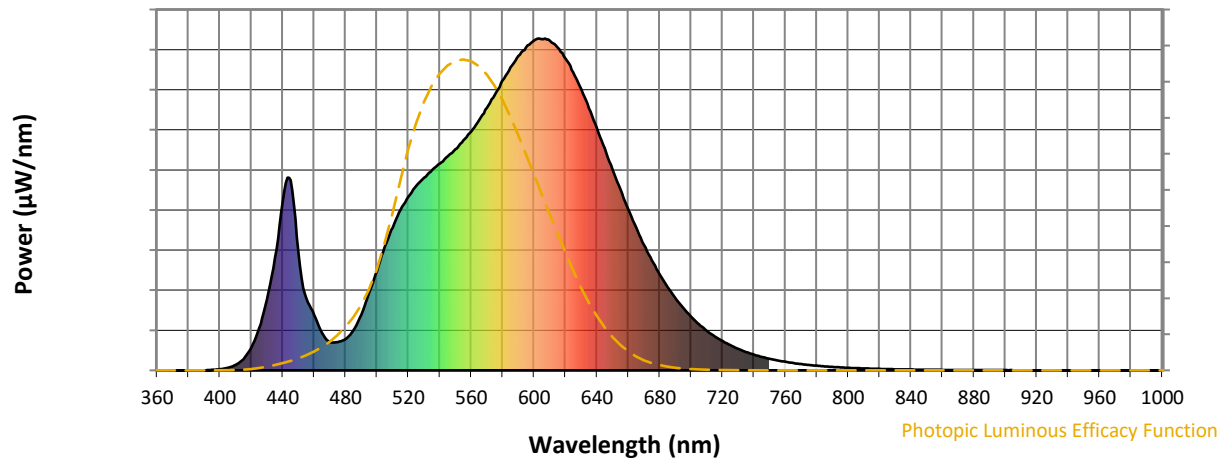
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

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



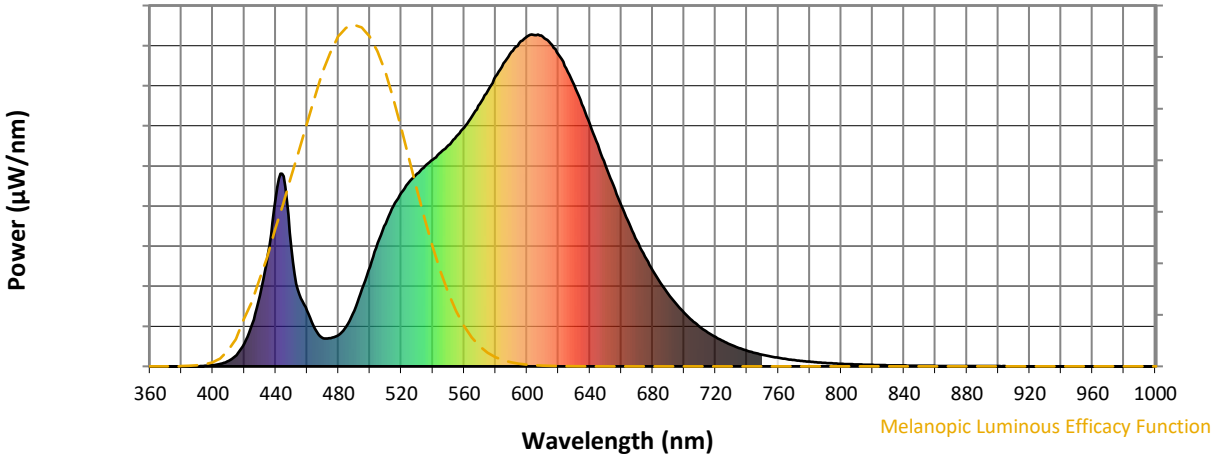
Scotopic Lumens: NR

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

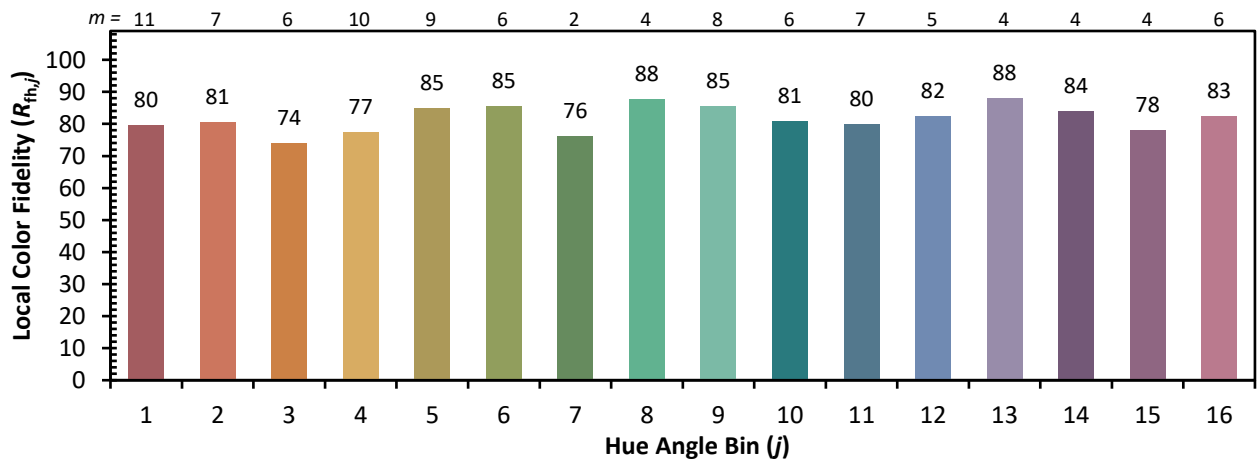
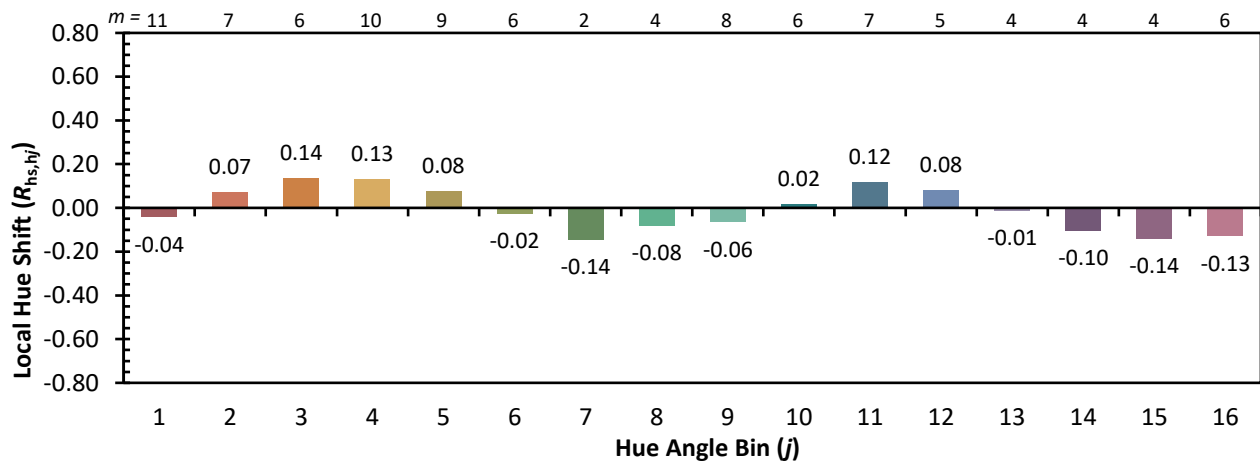
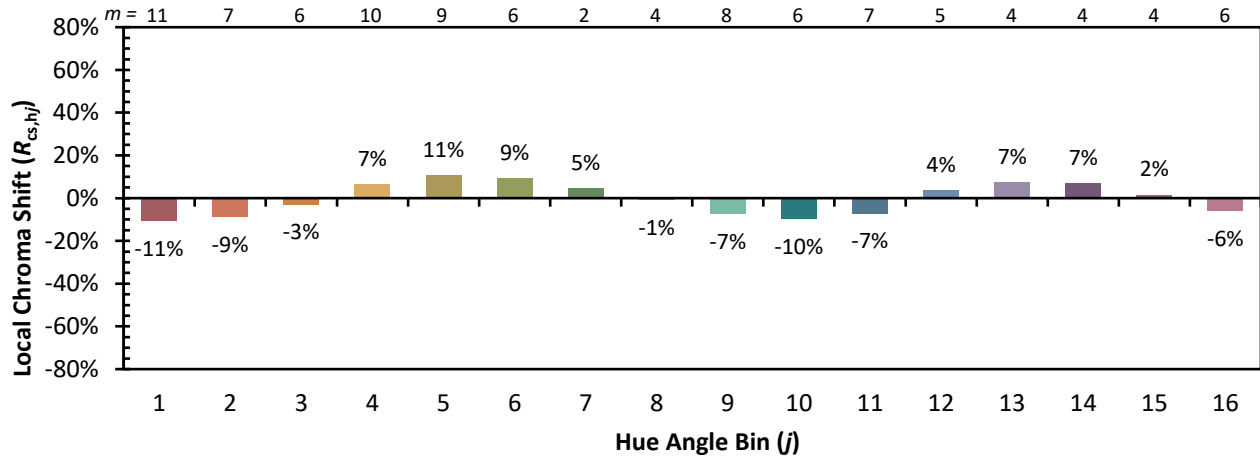


Individual Sample Fidelity Index ($R_{f,i}$)

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)