

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: P636008

Luminaire Tested: GWS-SA3E-830-U-SLR-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P636008
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-SA3E-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: 9320.1 lumens
Efficiency: N/A
Efficacy: 58.5 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

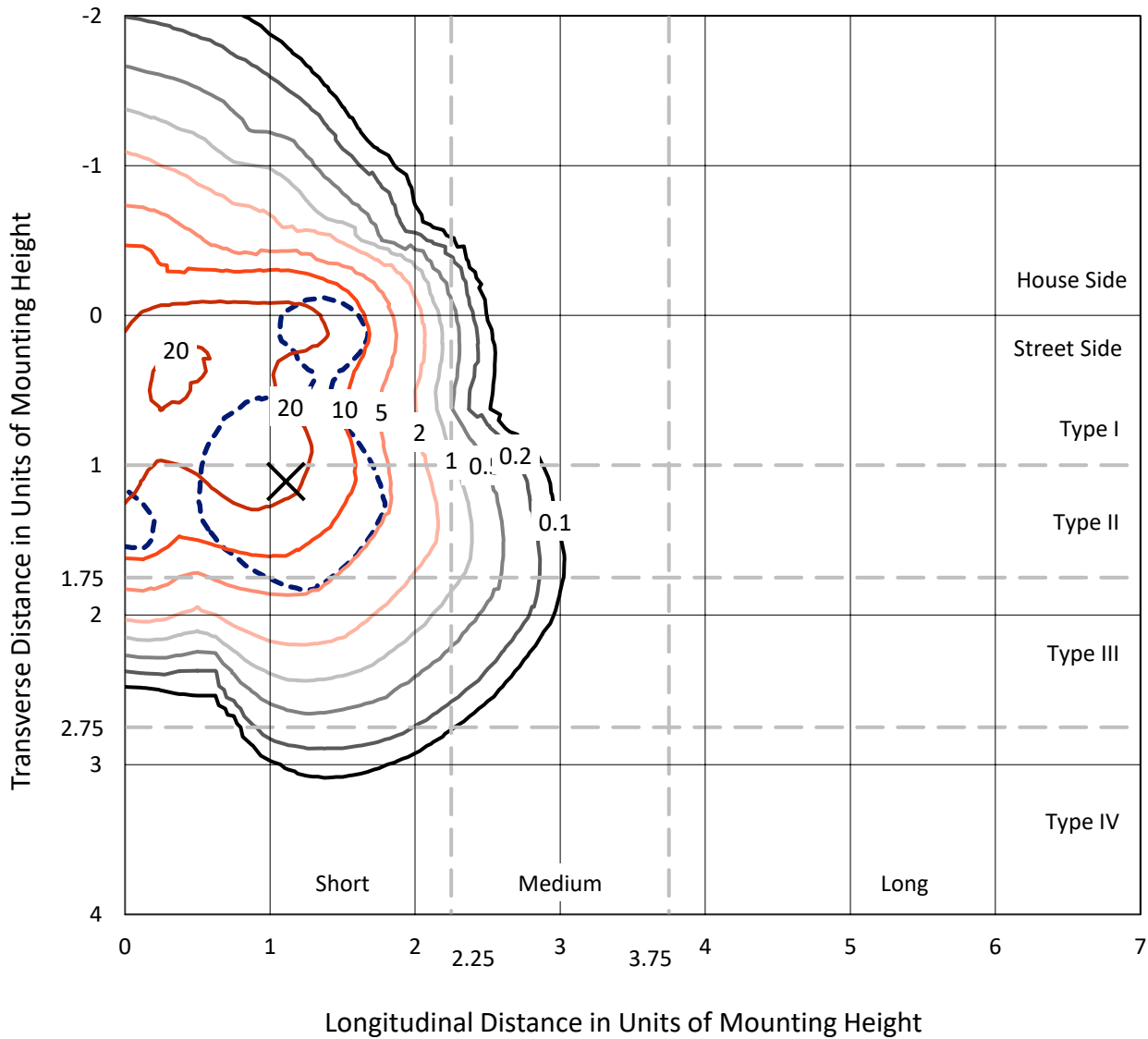
Input Watts (W): 159.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

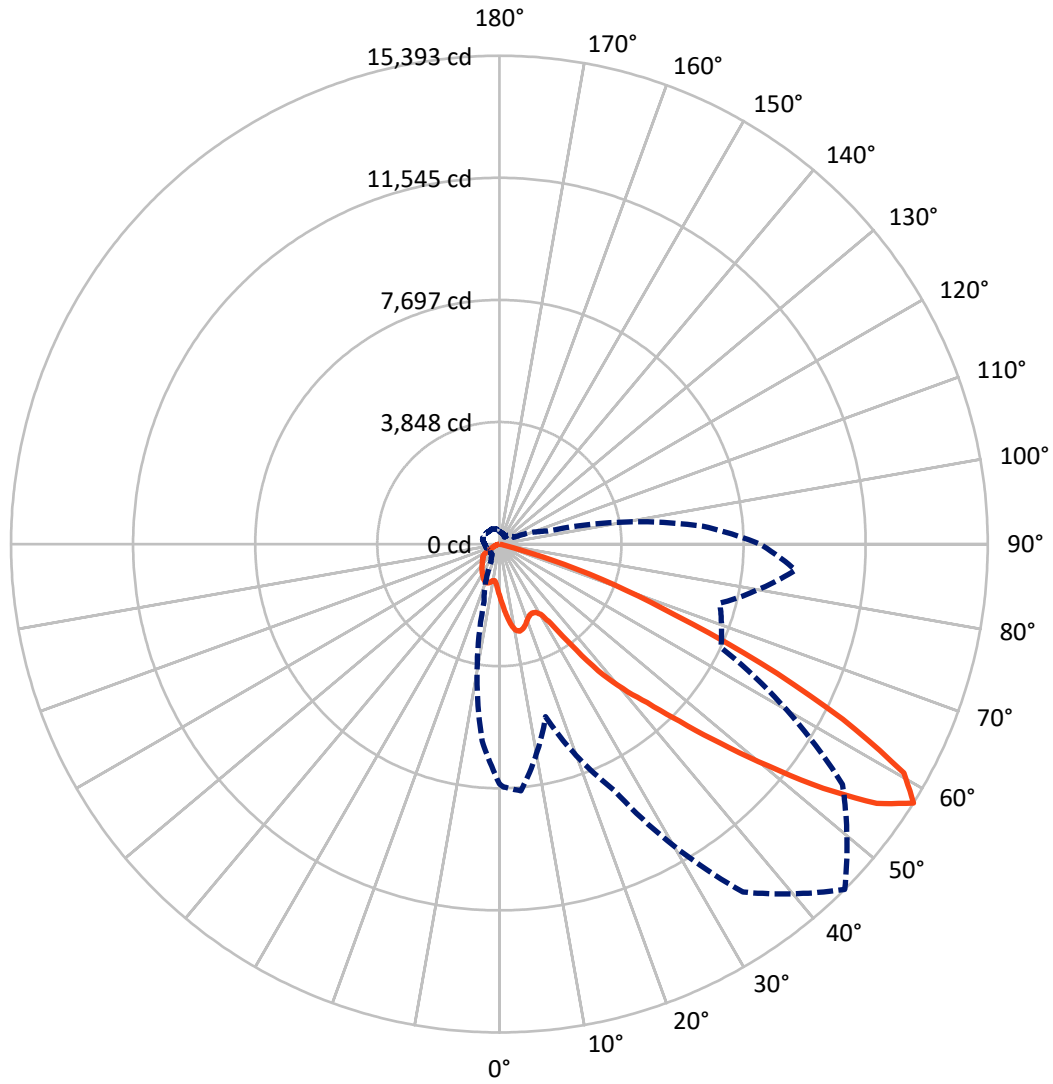
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 29.2 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	2087.0	0.0	2087.0
	% Fixture	22.4	0.0	22.4
Street Side	Lumens	7233.1	0.0	7233.1
	% Fixture	77.6	0.0	77.6
Total	Lumens	9320.1	0.0	9320.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.2	1.7
10°-20°	521.3	5.6
20°-30°	846.9	9.1
30°-40°	1308.5	14.0
40°-50°	2098.2	22.5
50°-60°	2867.7	30.8
60°-70°	1388.9	14.9
70°-80°	127.2	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°	9320.1	100.0
0°-180°	9320.1	100.0

Coefficient of Utilization



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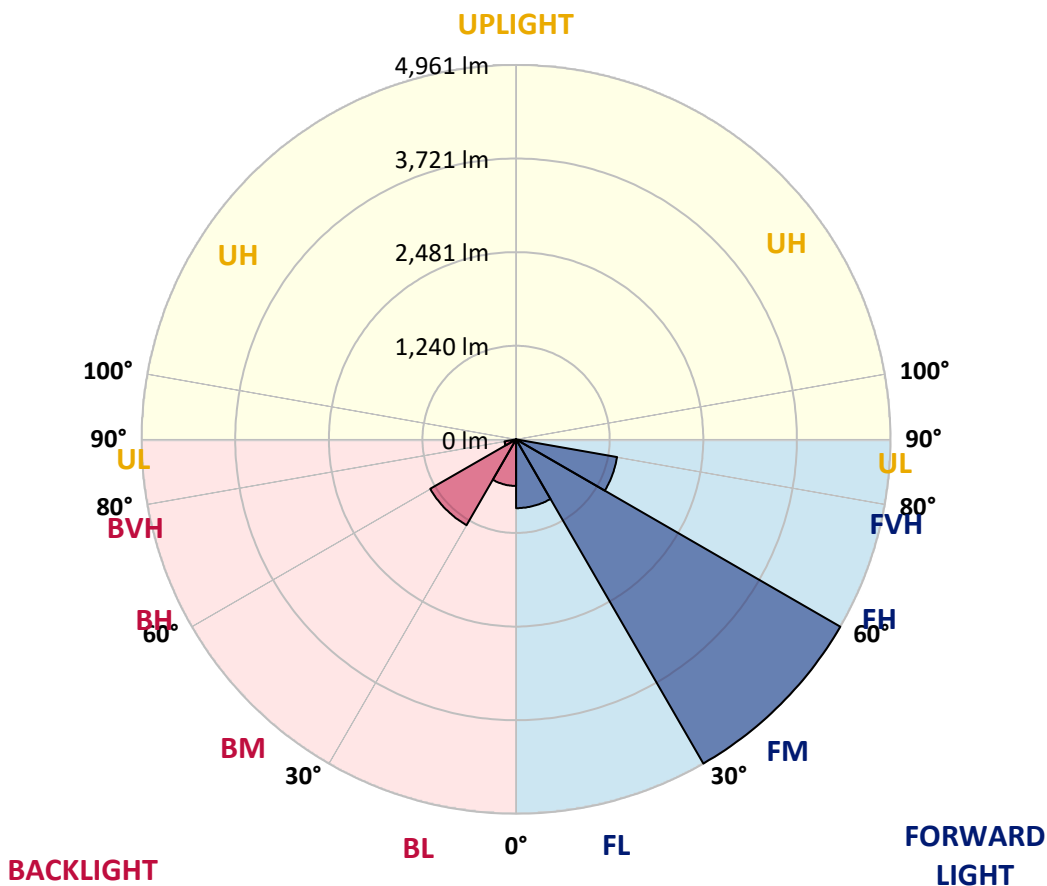
CATALOG NUMBER: GWS-SA3E-830-U-SLR-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	911.8	9.8			
FM (30°-60°)	4961.3	53.2			
FH (60°-80°)	1359.6	14.6			G1/1800
FVH (80°-90°)	0.4	0.0			G0/10
BL (0°-30°)	617.5	6.6	B2/1000		
BM (30°-60°)	1313.1	14.1	B2/2500		
BH (60°-80°)	156.4	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°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1774.6	1785.9	1804.7	1844.7	1878.6	1901.1	1911.1	1908.6	1894.8	1884.8	1864.8
5°	1965.0	1965.0	2001.3	2092.7	2162.9	2206.7	2229.2	2215.5	2187.9	2144.1	2076.4
7.5°	2131.5	2137.8	2199.2	2329.4	2435.9	2498.5	2534.8	2527.3	2478.5	2394.5	2259.3
10°	2261.8	2269.3	2350.7	2509.8	2635.0	2698.9	2752.7	2757.7	2703.9	2592.4	2437.1
12.5°	2388.3	2395.8	2481.0	2633.7	2744.0	2770.3	2817.8	2836.6	2822.9	2744.0	2582.4
15°	2524.8	2542.3	2615.0	2728.9	2775.3	2744.0	2775.3	2809.1	2855.4	2847.9	2702.6
17.5°	2658.8	2671.3	2745.2	2785.3	2733.9	2652.5	2667.6	2707.6	2812.8	2915.5	2821.6
20°	2782.8	2800.3	2861.7	2809.1	2653.8	2527.3	2528.5	2581.1	2741.5	2956.9	2943.1
22.5°	2913.0	2939.3	2983.2	2835.4	2579.9	2428.4	2434.6	2482.2	2685.1	2995.7	3080.8
25°	3083.3	3108.4	3137.2	2900.5	2556.1	2379.5	2403.3	2447.1	2685.1	3062.1	3251.2
27.5°	3313.8	3331.3	3332.6	3022.0	2597.4	2387.0	2437.1	2487.2	2765.2	3194.8	3479.1
30°	3603.1	3630.6	3594.3	3211.1	2726.4	2487.2	2561.1	2623.7	2938.1	3419.0	3814.7
32.5°	3955.0	3993.8	3945.0	3491.6	2995.7	2832.9	2966.9	3003.2	3213.6	3743.4	4195.5
35°	4368.3	4400.8	4348.2	3879.9	3624.4	3654.4	3897.4	3851.1	3767.1	4142.9	4640.1
37.5°	4821.6	4851.7	4750.3	4468.5	4553.6	4683.9	5072.1	4913.1	4642.6	4657.6	5122.2
40°	5237.4	5270.0	5110.9	5108.4	5283.8	5521.7	5990.1	5770.9	5402.7	5331.4	5574.3
42.5°	5668.3	5690.8	5546.8	5449.1	5847.3	6337.0	6833.0	6537.4	5906.2	5828.6	6140.4
45°	6283.2	6330.8	6074.0	5616.9	6354.6	7275.1	7966.4	7389.0	6249.4	6186.7	7007.0
47.5°	7187.4	7222.5	6699.0	5722.1	6826.7	8443.5	9382.8	8493.6	6551.2	6408.4	8191.8
50°	7935.1	7958.8	7273.8	5837.3	7328.9	9703.4	10997.1	9803.6	6890.6	6775.4	9297.6
52.5°	8486.1	8576.3	8029.0	6074.0	7988.9	11185.0	12784.3	11355.3	7420.3	7484.2	10214.4
55°	8600.1	8722.8	8545.0	6219.3	8570.0	12694.1	14434.9	12744.2	7948.8	8021.5	10522.5
57.5°	7558.1	7655.8	7803.6	5633.2	8556.2	13385.4	15393.0	13205.1	7708.4	7193.6	9369.0
60°	5662.0	5729.6	5997.6	4305.7	7868.7	12774.2	14646.5	12421.1	6740.3	5489.2	7138.5
62.5°	3357.6	3387.7	3727.1	2789.0	6531.1	11000.9	12146.8	10717.8	5326.4	3692.0	4372.0
65°	1288.7	1276.2	1535.4	1376.4	4802.9	8762.9	9034.6	8170.5	3654.4	1692.0	1666.9
67.5°	199.1	190.4	256.7	407.0	3464.1	6072.8	5961.3	5888.7	2289.3	394.5	344.4
70°	45.1	45.1	55.1	120.2	2116.5	3568.0	3818.5	3640.7	1465.3	83.9	45.1
72.5°	21.3	21.3	26.3	51.3	766.5	1470.3	1713.3	1687.0	475.9	27.6	16.3
75°	7.5	8.8	8.8	11.3	46.3	76.4	175.3	125.2	30.1	0.0	0.0
77.5°	2.5	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.3	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°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1821.0	1812.2	1779.6	1735.8	1693.2	1655.6	1616.8	1570.5	1536.7	1497.8	1485.3
5°	2023.8	1968.7	1879.8	1787.1	1702.0	1629.3	1559.2	1484.1	1429.0	1373.9	1355.1
7.5°	2195.4	2114.0	1970.0	1831.0	1714.5	1611.8	1510.4	1407.7	1327.5	1262.4	1242.4
10°	2349.5	2255.5	2062.7	1891.1	1744.6	1625.6	1502.9	1373.9	1269.9	1192.3	1173.5
12.5°	2482.2	2373.3	2141.6	1936.2	1757.1	1620.6	1501.6	1398.9	1305.0	1216.1	1192.3
15°	2593.7	2473.4	2207.9	1966.2	1738.3	1558.0	1454.0	1437.7	1430.2	1332.5	1286.2
17.5°	2702.6	2567.4	2261.8	1980.0	1685.7	1447.7	1372.6	1446.5	1525.4	1461.5	1402.7
20°	2816.6	2662.6	2316.9	1982.5	1598.0	1323.8	1311.2	1427.7	1527.9	1507.9	1452.8
22.5°	2950.6	2781.5	2385.8	1981.3	1487.8	1218.6	1266.2	1391.4	1472.8	1471.5	1427.7
25°	3144.7	2931.8	2478.5	1988.8	1367.6	1137.2	1216.1	1330.0	1396.4	1393.9	1357.6
27.5°	3352.6	3110.9	2598.7	2007.6	1264.9	1089.6	1157.2	1246.1	1303.7	1301.2	1269.9
30°	3644.4	3317.5	2713.9	2008.8	1191.0	1064.5	1092.1	1153.4	1208.5	1202.3	1178.5
32.5°	3998.8	3550.5	2810.3	1937.4	1144.7	1040.7	1024.4	1055.8	1098.3	1089.6	1083.3
35°	4427.1	3827.3	2893.0	1780.9	1073.3	993.1	949.3	955.6	985.6	990.6	988.1
37.5°	4915.6	4156.6	2995.7	1574.2	976.9	924.3	865.4	860.4	877.9	894.2	906.7
40°	5397.7	4527.3	3134.7	1365.1	889.2	836.6	780.2	767.7	775.2	804.0	830.3
42.5°	5940.0	4956.9	3285.0	1186.0	829.1	740.2	686.3	662.5	683.8	730.1	761.4
45°	6721.5	5559.3	3431.5	1043.2	804.0	655.0	582.4	579.9	603.6	663.8	698.8
47.5°	7818.6	6338.3	3527.9	931.8	802.8	588.6	502.2	517.2	544.8	603.6	643.7
50°	8888.1	7313.9	3421.5	846.6	776.5	544.8	442.1	472.1	499.7	551.0	592.4
52.5°	9533.1	7838.6	3007.0	766.5	695.1	524.7	383.2	435.8	440.8	487.2	531.0
55°	9465.5	7499.2	2303.1	642.5	574.8	495.9	321.9	393.2	395.8	430.8	468.4
57.5°	8215.6	6438.5	1581.8	521.0	432.1	409.5	265.5	331.9	355.7	377.0	404.5
60°	6122.9	4697.7	705.1	423.3	274.3	276.8	226.7	250.5	286.8	311.8	335.6
62.5°	3608.1	2702.6	286.8	254.2	151.5	174.1	182.8	182.8	205.4	224.2	239.2
65°	1363.8	945.5	116.5	127.7	78.9	81.4	107.7	132.8	150.3	166.6	186.6
67.5°	239.2	165.3	60.1	47.6	46.3	41.3	55.1	86.4	96.4	109.0	117.7
70°	40.1	33.8	25.0	23.8	21.3	22.5	36.3	61.4	67.6	71.4	75.1
72.5°	11.3	10.0	7.5	6.3	5.0	6.3	22.5	47.6	50.1	52.6	56.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	8.8	33.8	36.3	37.6	41.3
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	10.0	12.5	10.0
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°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1477.8	1452.8	1439.0	1431.5	1431.5	1421.4	1410.2	1406.4	1422.7	1422.7	1450.3
5°	1331.3	1311.2	1288.7	1274.9	1253.6	1257.4	1244.9	1243.6	1259.9	1267.4	1296.2
7.5°	1229.8	1204.8	1191.0	1182.2	1171.0	1166.0	1154.7	1150.9	1159.7	1172.2	1199.8
10°	1162.2	1158.4	1157.2	1163.5	1163.5	1157.2	1147.2	1140.9	1143.4	1167.2	1198.5
12.5°	1179.7	1187.3	1189.8	1199.8	1204.8	1199.8	1192.3	1194.8	1211.0	1254.9	1301.2
15°	1256.1	1249.9	1247.4	1252.4	1256.1	1251.1	1248.6	1267.4	1323.8	1386.4	1439.0
17.5°	1337.5	1297.5	1279.9	1279.9	1282.4	1279.9	1282.4	1318.8	1410.2	1472.8	1511.6
20°	1378.9	1305.0	1277.4	1271.2	1276.2	1277.4	1286.2	1327.5	1427.7	1471.5	1480.3
22.5°	1366.3	1273.7	1242.4	1237.3	1242.4	1247.4	1256.1	1291.2	1385.1	1407.7	1403.9
25°	1303.7	1212.3	1187.3	1187.3	1198.5	1197.3	1201.0	1226.1	1303.7	1317.5	1311.2
27.5°	1224.8	1138.4	1117.1	1129.6	1139.7	1137.2	1138.4	1159.7	1217.3	1221.1	1214.8
30°	1144.7	1069.5	1049.5	1064.5	1078.3	1075.8	1077.0	1098.3	1134.7	1130.9	1122.1
32.5°	1063.3	1008.2	993.1	1001.9	1023.2	1020.7	1025.7	1048.2	1062.0	1045.7	1035.7
35°	988.1	959.3	948.0	953.1	969.3	973.1	981.9	996.9	996.9	976.9	959.3
37.5°	918.0	914.2	906.7	900.5	915.5	926.8	939.3	956.8	931.8	903.0	886.7
40°	852.9	869.1	859.1	842.8	851.6	867.9	892.9	906.7	876.7	847.9	820.3
42.5°	792.8	820.3	816.5	796.5	804.0	819.1	847.9	859.1	824.1	791.5	765.2
45°	735.1	774.0	776.5	751.4	758.9	774.0	807.8	811.5	766.5	731.4	712.6
47.5°	685.0	727.6	728.9	710.1	712.6	733.9	765.2	766.5	715.1	682.5	658.7
50°	637.5	686.3	690.1	673.8	676.3	701.3	727.6	722.6	667.5	633.7	612.4
52.5°	579.9	646.2	655.0	647.5	657.5	677.5	693.8	676.3	612.4	578.6	559.8
55°	517.2	603.6	622.4	617.4	628.7	645.0	648.7	637.5	557.3	523.5	506.0
57.5°	444.6	497.2	529.8	519.7	528.5	544.8	556.1	547.3	487.2	460.9	445.8
60°	368.2	403.3	410.8	394.5	387.0	415.8	442.1	430.8	379.5	363.2	345.7
62.5°	269.3	309.3	314.3	293.1	284.3	315.6	338.1	326.9	270.5	253.0	239.2
65°	215.4	253.0	263.0	243.0	238.0	261.7	275.5	248.0	207.9	189.1	174.1
67.5°	141.5	171.6	197.9	196.6	186.6	194.1	184.1	161.6	132.8	122.7	112.7
70°	87.7	105.2	121.5	127.7	126.5	124.0	110.2	93.9	85.2	81.4	76.4
72.5°	67.6	85.2	97.7	101.4	102.7	98.9	87.7	72.6	63.9	58.9	55.1
75°	50.1	63.9	73.9	78.9	81.4	78.9	67.6	57.6	48.8	45.1	41.3
77.5°	17.5	21.3	26.3	28.8	27.6	26.3	23.8	23.8	18.8	17.5	15.0
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



REPORT NUMBER: P636008

CATALOG NUMBER: GWS-SA3E-830-U-SLR-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1	1638.1
2.5°	1481.6	1504.1	1545.4	1583.0	1623.1	1664.4	1709.5	1755.8	1777.1	1774.6
5°	1340.0	1388.9	1456.5	1530.4	1613.1	1702.0	1800.9	1902.4	1946.2	1965.0
7.5°	1251.1	1320.0	1408.9	1502.9	1611.8	1738.3	1887.3	2046.4	2110.3	2131.5
10°	1262.4	1342.5	1416.4	1507.9	1624.3	1788.4	1973.7	2162.9	2238.0	2261.8
12.5°	1353.8	1371.4	1391.4	1466.5	1613.1	1826.0	2052.6	2278.1	2364.5	2388.3
15°	1436.5	1355.1	1317.5	1386.4	1573.0	1852.3	2132.8	2402.1	2497.2	2524.8
17.5°	1440.2	1317.5	1233.6	1287.4	1507.9	1863.5	2211.7	2528.5	2632.5	2658.8
20°	1393.9	1276.2	1168.5	1169.7	1418.9	1861.0	2276.8	2642.5	2759.0	2782.8
22.5°	1326.3	1227.3	1115.9	1077.0	1323.8	1856.0	2348.2	2764.0	2890.5	2913.0
25°	1251.1	1164.7	1065.8	1006.9	1228.6	1861.0	2448.4	2923.0	3062.1	3083.3
27.5°	1169.7	1095.8	1026.9	979.4	1148.4	1879.8	2568.6	3125.9	3291.2	3313.8
30°	1084.6	1029.5	1001.9	973.1	1098.3	1884.8	2698.9	3362.6	3571.8	3603.1
32.5°	1000.6	970.6	971.8	976.9	1050.7	1849.8	2817.8	3625.6	3904.9	3955.0
35°	923.0	914.2	939.3	964.3	981.9	1759.6	2921.8	3936.2	4316.9	4368.3
37.5°	856.6	864.1	895.4	920.5	906.7	1631.8	3059.6	4324.5	4777.8	4821.6
40°	792.8	811.5	847.9	859.1	849.1	1482.8	3224.9	4698.9	5177.3	5237.4
42.5°	733.9	747.7	799.0	801.5	832.8	1331.3	3383.9	5102.2	5636.9	5668.3
45°	686.3	683.8	736.4	752.7	854.1	1163.5	3539.2	5639.4	6238.1	6283.2
47.5°	640.0	637.5	650.0	723.9	862.9	1008.2	3693.3	6425.9	7109.7	7187.4
50°	596.1	599.9	561.1	710.1	815.3	889.2	3763.4	7153.6	7902.5	7935.1
52.5°	557.3	543.5	475.9	665.0	713.9	776.5	3564.3	7484.2	8393.4	8486.1
55°	502.2	425.8	392.0	539.8	563.6	677.5	2919.3	7292.6	8436.0	8600.1
57.5°	429.6	334.4	333.1	398.3	398.3	628.7	1869.8	6230.6	7270.0	7558.1
60°	330.6	259.2	275.5	276.8	255.5	458.4	1049.5	4513.6	5375.2	5662.0
62.5°	235.4	197.9	207.9	165.3	146.5	229.2	503.5	2598.7	3317.5	3357.6
65°	157.8	134.0	109.0	91.4	90.2	97.7	207.9	939.3	1142.2	1288.7
67.5°	103.9	81.4	57.6	57.6	65.1	65.1	78.9	155.3	217.9	199.1
70°	67.6	56.4	36.3	35.1	42.6	42.6	40.1	42.6	45.1	45.1
72.5°	50.1	42.6	21.3	18.8	23.8	25.0	22.5	21.3	21.3	21.3
75°	37.6	30.1	12.5	8.8	11.3	15.0	12.5	8.8	8.8	7.5
77.5°	15.0	11.3	5.0	3.8	6.3	8.8	7.5	3.8	2.5	2.5
80°	1.3	2.5	2.5	2.5	3.8	5.0	6.3	2.5	1.3	1.3
82.5°	0.0	1.3	1.3	1.3	2.5	3.8	5.0	2.5	1.3	1.3
85°	0.0	0.0	0.0	0.0	2.5	3.8	2.5	1.3	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	1.3	3.8	2.5	1.3	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



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

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

Summary

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



Color Vector Graphics

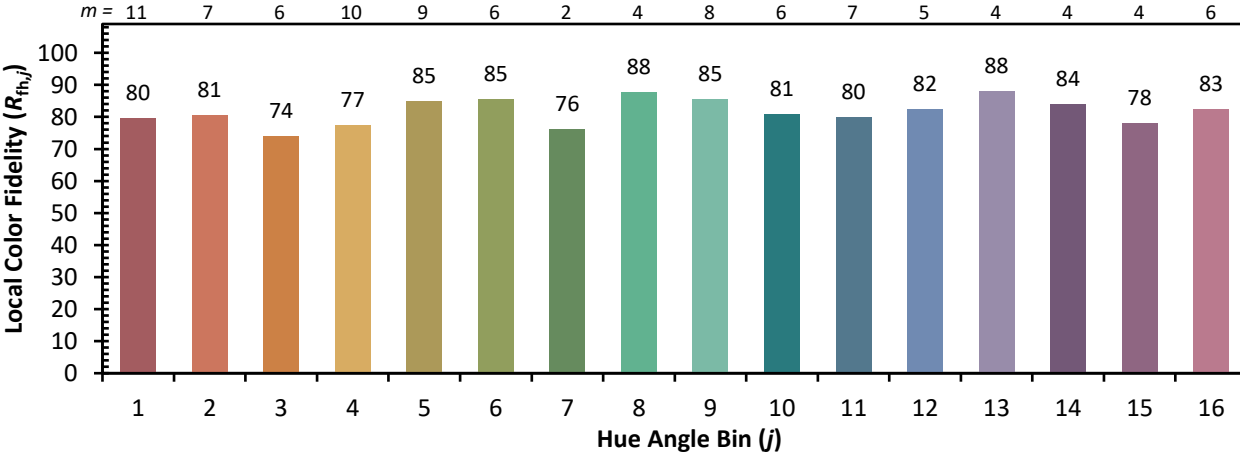


Individual Sample Fidelity Index ($R_{f,i}$)

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)