

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: P635516

Luminaire Tested: GWS-SA3D-830-U-SLR-W

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P635516  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-41)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA3D-830-U-SLR-W  
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND  
SPILL LIGHT ELIMINATOR RIGHT OPTICS  
Light Source: (48) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

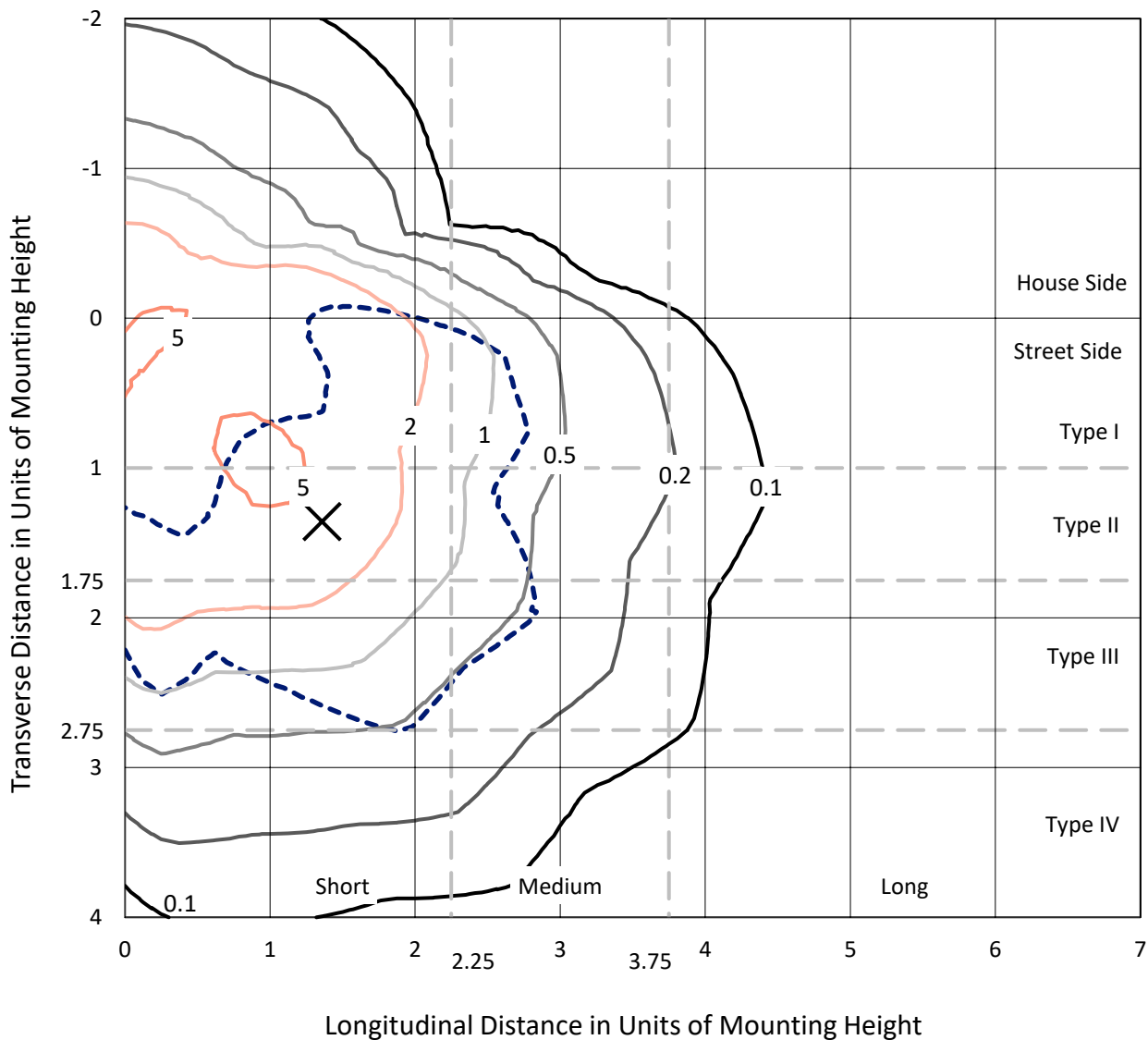
Lumens per Lamp: N/A  
Luminaire Lumens: 13236.7 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 120.8  
Input Voltage (V): 120  
Input Current (Ain): 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

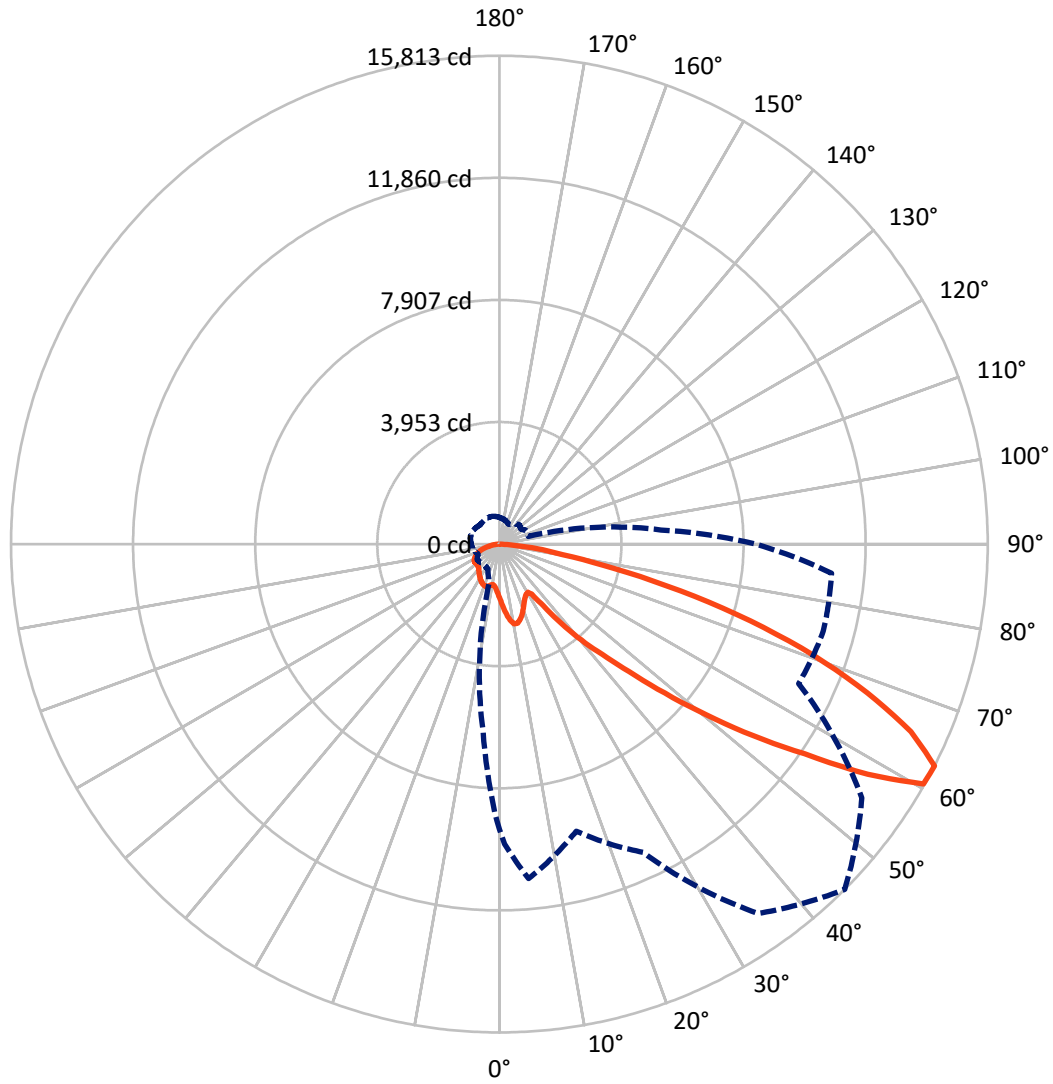
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3158.5	0.0	3158.5
	% Fixture	23.9	0.0	23.9
<b>Street Side</b>	Lumens	10078.2	0.0	10078.2
	% Fixture	76.1	0.0	76.1
<b>Total</b>	Lumens	13236.7	0.0	13236.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.6	1.3
10°-20°	537.8	4.1
20°-30°	835.4	6.3
30°-40°	1134.3	8.6
40°-50°	1797.7	13.6
50°-60°	3171.1	24.0
60°-70°	3528.4	26.7
70°-80°	1789.5	13.5
80°-90°	271.0	2.0
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°	13236.7	100.0
0°-180°	13236.7	100.0

**Coefficient of Utilization**



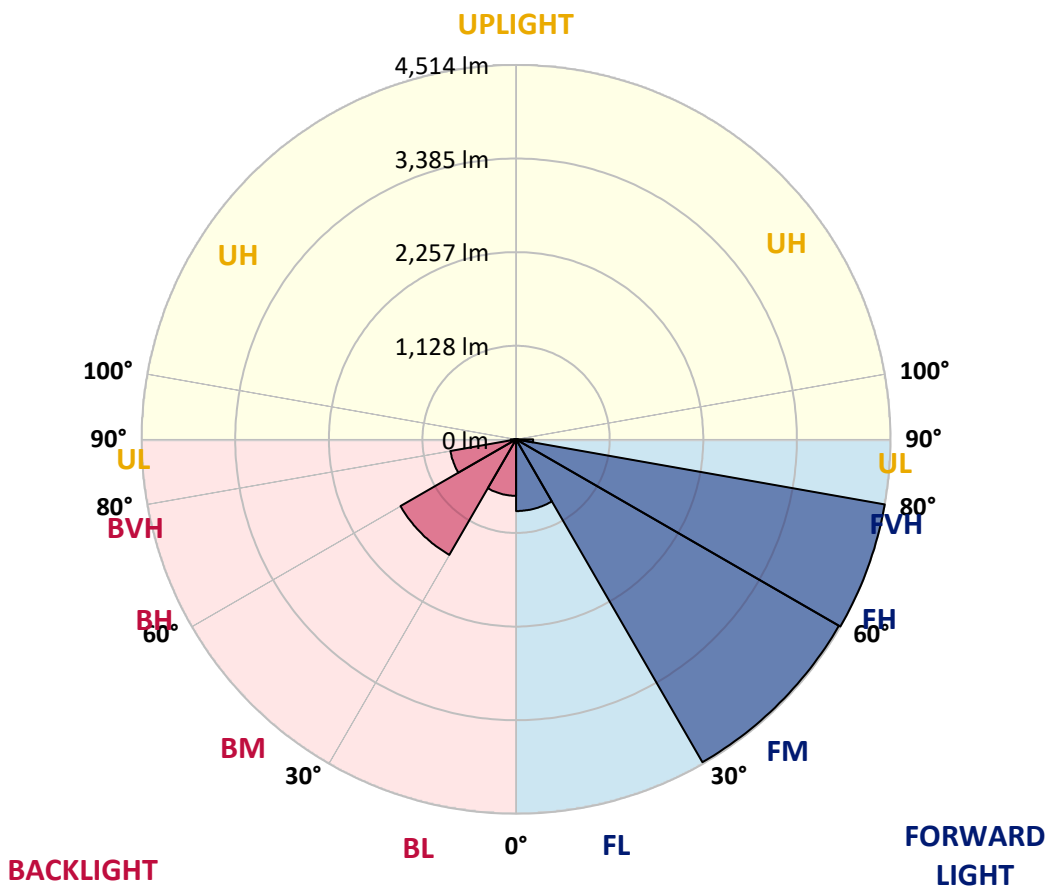
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	864.2	6.5			
FM (30°-60°)	4494.4	34.0			
FH (60°-80°)	4513.8	34.1			G2/5000
FVH (80°-90°)	205.7	1.6			G2/225
BL (0°-30°)	680.6	5.1	B2/1000		
BM (30°-60°)	1608.7	12.2	B2/2500		
BH (60°-80°)	804.0	6.1	B2/1000		G2/1000
BVH (80°-90°)	65.3	0.5			G1/100
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°	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8
2.5°	1888.1	1887.1	1906.1	1935.2	1962.2	1974.2	1994.3	1992.3	1976.3	1955.2	1948.2
5°	2036.4	2040.4	2073.5	2137.6	2208.8	2238.8	2251.8	2246.8	2217.8	2180.7	2115.6
7.5°	2170.7	2177.7	2228.8	2325.0	2413.2	2453.3	2485.3	2479.3	2437.2	2368.1	2271.9
10°	2268.9	2276.9	2338.0	2451.3	2549.5	2584.6	2625.7	2627.7	2590.6	2497.4	2399.2
12.5°	2367.1	2375.1	2432.2	2535.5	2599.6	2600.6	2624.6	2637.7	2639.7	2596.6	2498.4
15°	2469.3	2476.3	2528.4	2586.6	2583.6	2527.4	2527.4	2552.5	2607.6	2638.7	2570.5
17.5°	2556.5	2565.5	2605.6	2586.6	2497.4	2396.2	2384.1	2416.2	2512.4	2631.7	2624.6
20°	2628.7	2635.7	2657.7	2531.4	2369.1	2236.8	2213.8	2250.8	2381.1	2588.6	2665.7
22.5°	2697.8	2701.8	2689.8	2459.3	2230.8	2079.5	2051.4	2090.5	2230.8	2512.4	2700.8
25°	2780.0	2776.0	2718.9	2384.1	2104.5	1955.2	1926.1	1970.2	2116.6	2411.2	2738.9
27.5°	2875.2	2860.2	2743.9	2303.0	2007.3	1863.0	1843.0	1890.1	2026.4	2318.0	2769.0
30°	2956.4	2927.3	2747.9	2230.8	1957.2	1823.9	1811.9	1856.0	1982.3	2254.9	2807.0
32.5°	3046.6	3006.5	2771.0	2211.8	1985.3	1918.1	1934.2	1937.2	1994.3	2236.8	2864.2
35°	3175.8	3123.7	2834.1	2266.9	2273.9	2387.1	2445.3	2367.1	2175.7	2276.9	2972.4
37.5°	3371.3	3305.1	2962.4	2505.4	2870.2	3123.7	3264.0	3085.6	2726.9	2428.2	3135.7
40°	3608.8	3524.6	3126.7	2946.3	3427.4	3833.2	4082.8	3821.2	3294.1	2806.0	3365.2
42.5°	3940.5	3852.3	3445.4	3379.3	3943.5	4547.8	4873.5	4483.6	3794.2	3294.1	3733.0
45°	4518.7	4433.5	4029.7	3813.2	4547.8	5427.7	5884.7	5342.5	4302.3	3784.1	4420.5
47.5°	5587.0	5486.8	4897.5	4294.2	5237.3	6570.1	7209.5	6419.8	4830.4	4345.4	5575.0
50°	6869.8	6773.6	5986.9	4863.5	5998.9	7791.8	8680.7	7685.5	5438.7	5027.8	6955.0
52.5°	8413.1	8395.1	7541.2	5583.0	6791.6	9094.6	10313.2	9087.6	6105.1	5946.8	8518.3
55°	9804.1	9980.5	9515.5	6680.4	7815.8	10731.1	11991.8	10616.8	7009.1	7466.1	10349.3
57.5°	10553.7	11027.7	11742.3	8919.2	9305.0	12687.3	14063.3	12483.9	8562.4	9995.5	12046.9
60°	10058.6	10595.8	11890.6	10604.8	10782.2	14254.7	15772.9	14053.2	10087.7	11751.3	11950.7
62.5°	9234.9	9716.9	10868.4	9620.7	11010.7	14599.4	15813.0	14326.8	10694.0	10860.4	10795.2
65°	8257.8	8743.8	9963.4	8398.1	10284.1	13780.7	14646.5	13522.1	9604.7	9812.1	9836.2
67.5°	6960.0	7408.9	8650.6	7467.1	9374.2	12579.1	12855.7	12375.6	8845.0	9175.7	8830.0
70°	5200.2	5605.1	6701.4	6068.1	7902.0	11013.7	10790.2	10861.4	7992.2	8320.9	7375.9
72.5°	3553.6	3858.3	4798.3	4768.3	6051.0	8817.0	8505.3	9179.8	6675.4	7111.3	5623.1
75°	2485.3	2722.9	3468.5	3767.1	4573.8	6535.1	6057.0	6870.8	5213.2	5835.6	4102.8
77.5°	1525.3	1682.6	2190.7	2791.0	2942.3	4472.6	3762.1	5170.1	3660.9	4256.2	2736.9
80°	762.6	838.8	1064.3	1754.8	1951.2	2635.7	2077.5	3001.5	2477.3	2635.7	1514.3
82.5°	230.5	254.5	311.7	666.4	1011.2	1517.3	1227.6	1743.8	1352.9	1235.7	596.3
85°	61.1	69.1	86.2	197.4	354.8	544.2	414.9	844.8	648.4	456.0	224.5
87.5°	5.0	5.0	4.0	4.0	2.0	0.0	0.0	60.1	121.3	69.1	39.1
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°	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8
2.5°	1913.1	1909.1	1868.0	1838.0	1802.9	1768.8	1733.7	1702.7	1667.6	1632.5	1622.5
5°	2067.4	2039.4	1952.2	1879.0	1806.9	1743.8	1688.6	1631.5	1585.4	1540.3	1523.3
7.5°	2203.7	2154.6	2028.4	1917.1	1816.9	1738.7	1657.6	1574.4	1509.2	1445.1	1429.1
10°	2327.0	2261.9	2102.5	1962.2	1851.0	1761.8	1666.6	1555.3	1461.1	1383.0	1361.9
12.5°	2418.2	2347.1	2166.7	2005.3	1879.0	1778.8	1684.6	1586.4	1487.2	1386.0	1362.9
15°	2490.4	2416.2	2219.8	2038.4	1880.0	1750.8	1659.6	1625.5	1594.4	1495.2	1453.1
17.5°	2548.5	2470.3	2265.9	2058.4	1853.0	1665.6	1586.4	1636.5	1715.7	1653.6	1574.4
20°	2601.6	2522.4	2301.0	2072.5	1792.9	1548.3	1504.2	1610.5	1729.7	1727.7	1656.6
22.5°	2659.7	2582.6	2352.1	2080.5	1708.7	1429.1	1455.1	1572.4	1669.6	1698.7	1654.6
25°	2733.9	2665.7	2423.2	2098.5	1613.5	1346.9	1419.1	1523.3	1604.5	1611.5	1585.4
27.5°	2820.1	2769.0	2529.4	2140.6	1521.3	1304.8	1377.0	1454.1	1528.3	1531.3	1500.2
30°	2914.3	2880.2	2627.7	2175.7	1452.1	1291.8	1322.8	1385.0	1432.1	1440.1	1413.0
32.5°	3034.5	3004.5	2714.8	2152.6	1411.0	1288.8	1272.7	1304.8	1343.9	1343.9	1322.8
35°	3199.9	3157.8	2807.0	2064.4	1360.9	1276.7	1219.6	1228.6	1245.7	1248.7	1236.7
37.5°	3434.4	3365.2	2900.2	1890.1	1278.8	1233.7	1158.5	1147.5	1153.5	1161.5	1158.5
40°	3725.0	3611.8	3036.5	1680.6	1180.5	1150.5	1095.4	1074.3	1069.3	1085.3	1091.3
42.5°	4090.8	3917.4	3182.8	1485.2	1091.3	1055.3	1021.2	1003.2	995.1	1022.2	1038.2
45°	4675.1	4389.4	3323.2	1291.8	1041.2	974.1	951.0	938.0	942.0	974.1	994.1
47.5°	5684.2	5110.0	3456.4	1169.5	1037.2	916.0	887.9	890.9	901.9	936.0	960.1
50°	6961.0	6075.1	3545.6	1118.4	1049.3	880.9	843.8	859.9	876.9	910.0	938.0
52.5°	8260.8	6974.0	3439.4	1090.3	1048.3	881.9	802.7	850.8	858.8	891.9	922.0
55°	9154.7	7074.2	2971.4	1047.3	1032.2	922.0	770.7	846.8	851.8	881.9	909.0
57.5°	9495.4	6731.5	2265.9	1059.3	984.1	953.1	756.6	818.8	854.8	880.9	909.0
60°	9083.5	6085.1	1377.0	1090.3	907.0	951.0	765.6	767.7	829.8	873.9	901.9
62.5°	8306.9	5255.3	967.1	1002.2	850.8	897.9	786.7	707.5	785.7	838.8	863.9
65°	7417.0	4279.2	737.6	862.9	823.8	815.8	793.7	654.4	725.6	777.7	799.7
67.5°	6490.0	3326.2	599.3	643.4	744.6	737.6	725.6	607.3	654.4	691.5	716.5
70°	5322.5	2327.0	506.1	483.0	638.4	661.4	634.4	548.2	563.2	601.3	621.3
72.5°	3893.4	1450.1	415.9	398.9	513.1	578.2	564.2	483.0	490.1	526.1	542.2
75°	2800.0	829.8	333.7	328.7	391.8	495.1	467.0	415.9	423.9	451.0	462.0
77.5°	1779.8	462.0	257.6	264.6	280.6	369.8	398.9	355.8	355.8	371.8	380.8
80°	953.1	264.6	188.4	191.4	196.4	282.6	314.7	275.6	275.6	264.6	275.6
82.5°	388.8	152.3	129.3	120.3	131.3	193.4	220.5	175.4	183.4	165.4	169.4
85°	128.3	76.2	64.1	63.1	62.1	85.2	106.2	87.2	104.2	66.1	69.1
87.5°	17.0	14.0	8.0	6.0	7.0	3.0	6.0	7.0	7.0	5.0	5.0
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°	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8
2.5°	1615.5	1607.5	1578.4	1585.4	1580.4	1572.4	1580.4	1565.4	1577.4	1581.4	1606.5
5°	1510.2	1491.2	1463.1	1449.1	1446.1	1438.1	1439.1	1432.1	1434.1	1451.1	1479.2
7.5°	1416.0	1398.0	1376.0	1365.9	1356.9	1347.9	1346.9	1345.9	1353.9	1368.9	1396.0
10°	1347.9	1337.9	1328.9	1332.9	1328.9	1324.9	1317.8	1317.8	1330.9	1357.9	1391.0
12.5°	1347.9	1345.9	1347.9	1359.9	1358.9	1359.9	1350.9	1355.9	1392.0	1438.1	1485.2
15°	1420.1	1404.0	1404.0	1410.0	1408.0	1408.0	1408.0	1429.1	1511.3	1582.4	1632.5
17.5°	1508.2	1461.1	1441.1	1438.1	1437.1	1437.1	1441.1	1486.2	1614.5	1689.6	1718.7
20°	1569.4	1480.2	1447.1	1434.1	1435.1	1437.1	1449.1	1511.3	1652.6	1690.6	1683.6
22.5°	1580.4	1465.2	1425.1	1406.0	1409.0	1411.0	1429.1	1495.2	1600.4	1606.5	1592.4
25°	1529.3	1423.1	1380.0	1364.9	1368.9	1367.9	1384.0	1432.1	1507.2	1505.2	1497.2
27.5°	1453.1	1355.9	1323.8	1313.8	1320.8	1312.8	1317.8	1354.9	1413.0	1411.0	1408.0
30°	1375.0	1290.8	1261.7	1256.7	1265.7	1253.7	1254.7	1285.8	1325.9	1323.8	1322.8
32.5°	1296.8	1225.6	1199.6	1199.6	1208.6	1195.6	1197.6	1224.6	1251.7	1243.7	1243.7
35°	1222.6	1172.5	1151.5	1147.5	1154.5	1145.5	1149.5	1174.5	1184.5	1173.5	1166.5
37.5°	1157.5	1135.4	1114.4	1100.4	1101.4	1102.4	1114.4	1133.4	1127.4	1111.4	1102.4
40°	1097.4	1097.4	1077.3	1051.3	1048.3	1055.3	1075.3	1096.4	1079.3	1061.3	1050.3
42.5°	1054.3	1063.3	1044.2	1018.2	1012.2	1024.2	1046.3	1061.3	1041.2	1021.2	1006.2
45°	1014.2	1036.2	1023.2	994.1	986.1	1000.2	1028.2	1034.2	1007.2	988.1	977.1
47.5°	986.1	1016.2	1007.2	979.1	967.1	987.1	1016.2	1015.2	981.1	961.1	952.0
50°	966.1	1004.2	1003.2	979.1	966.1	991.1	1017.2	1004.2	967.1	946.0	937.0
52.5°	950.0	1003.2	1010.2	996.1	987.1	1009.2	1025.2	1000.2	957.1	935.0	928.0
55°	943.0	1007.2	1012.2	999.2	991.1	1011.2	1025.2	1008.2	957.1	937.0	931.0
57.5°	945.0	1002.2	1003.2	985.1	971.1	996.1	1018.2	1013.2	968.1	945.0	938.0
60°	933.0	975.1	977.1	949.0	933.0	963.1	1002.2	999.2	963.1	939.0	926.0
62.5°	892.9	930.0	931.0	904.9	881.9	925.0	968.1	967.1	934.0	910.0	894.9
65°	825.8	864.9	874.9	849.8	831.8	877.9	923.0	921.0	887.9	865.9	850.8
67.5°	742.6	784.7	803.7	786.7	779.7	821.8	863.9	862.9	835.8	814.8	801.7
70°	641.4	676.5	708.5	708.5	703.5	751.6	796.7	792.7	767.7	751.6	741.6
72.5°	557.2	584.3	594.3	604.3	619.3	669.4	707.5	710.5	692.5	684.5	692.5
75°	474.0	491.1	500.1	492.1	518.1	570.2	620.3	625.3	606.3	593.3	596.3
77.5°	389.8	408.9	417.9	399.9	397.9	464.0	525.1	536.2	520.1	500.1	506.1
80°	281.6	306.7	321.7	309.7	305.7	334.7	418.9	430.9	415.9	399.9	408.9
82.5°	172.4	186.4	190.4	202.4	227.5	239.5	269.6	309.7	298.6	284.6	309.7
85°	68.1	81.2	90.2	102.2	119.3	141.3	166.4	198.4	180.4	174.4	205.4
87.5°	4.0	1.0	0.0	2.0	17.0	33.1	71.2	98.2	82.2	88.2	106.2
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: P635516  
 CATALOG NUMBER: GWS-SA3D-830-U-SLR-W

**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8	1756.8
2.5°	1626.5	1652.6	1687.6	1716.7	1753.8	1788.8	1824.9	1861.0	1880.0	1888.1
5°	1511.3	1559.4	1615.5	1677.6	1749.8	1825.9	1903.1	1982.3	2032.4	2036.4
7.5°	1442.1	1511.3	1588.4	1666.6	1755.8	1861.0	1983.3	2105.5	2156.6	2170.7
10°	1464.2	1541.3	1602.4	1675.6	1773.8	1905.1	2049.4	2192.7	2251.8	2268.9
12.5°	1552.3	1567.4	1586.4	1653.6	1773.8	1943.2	2117.6	2287.9	2351.1	2367.1
15°	1625.5	1553.3	1519.3	1590.4	1749.8	1976.3	2189.7	2378.1	2454.3	2469.3
17.5°	1631.5	1507.2	1433.1	1497.2	1707.7	1999.3	2258.9	2478.3	2542.5	2556.5
20°	1570.4	1458.1	1361.9	1401.0	1650.6	2009.3	2309.0	2551.5	2614.6	2628.7
22.5°	1501.2	1418.1	1313.8	1311.8	1581.4	2020.3	2369.1	2620.6	2688.8	2697.8
25°	1436.1	1362.9	1274.7	1246.7	1501.2	2041.4	2450.3	2724.9	2777.0	2780.0
27.5°	1359.9	1303.8	1243.7	1216.6	1431.1	2081.5	2570.5	2849.1	2880.2	2875.2
30°	1290.8	1248.7	1221.6	1213.6	1387.0	2111.5	2684.8	2971.4	2973.4	2956.4
32.5°	1217.6	1201.6	1201.6	1227.6	1350.9	2104.5	2778.0	3090.7	3071.6	3046.6
35°	1152.5	1155.5	1176.5	1237.7	1290.8	2034.4	2867.2	3240.0	3211.9	3175.8
37.5°	1090.3	1113.4	1143.5	1202.6	1211.6	1930.2	2971.4	3451.4	3416.4	3371.3
40°	1037.2	1072.3	1107.4	1136.4	1127.4	1781.8	3116.7	3700.0	3660.9	3608.8
42.5°	995.1	1029.2	1068.3	1071.3	1074.3	1627.5	3271.0	4004.6	3997.6	3940.5
45°	968.1	990.1	1027.2	1022.2	1071.3	1457.1	3413.3	4469.6	4561.8	4518.7
47.5°	950.0	967.1	971.1	992.1	1097.4	1304.8	3596.7	5379.6	5636.1	5587.0
50°	940.0	957.1	912.0	994.1	1101.4	1206.6	3850.3	6522.0	6934.9	6869.8
52.5°	939.0	935.0	866.9	1015.2	1079.3	1146.5	3982.6	7355.8	8271.8	8413.1
55°	941.0	890.9	843.8	1021.2	1035.2	1124.4	3539.6	7756.7	9505.5	9804.1
57.5°	923.0	842.8	856.8	997.1	952.0	1183.5	2616.6	7613.4	9998.5	10553.7
60°	888.9	796.7	880.9	932.0	866.9	1082.3	1801.9	6974.0	9487.4	10058.6
62.5°	839.8	764.6	877.9	847.8	835.8	885.9	1238.7	6079.1	8676.7	9234.9
65°	784.7	738.6	830.8	766.6	773.7	681.5	875.9	5068.9	7708.6	8257.8
67.5°	725.6	722.6	761.6	682.5	653.4	540.2	638.4	4062.7	6464.9	6960.0
70°	658.4	680.5	692.5	606.3	530.1	423.9	474.0	2841.1	4769.3	5200.2
72.5°	591.3	593.3	610.3	527.1	396.9	339.7	355.8	1720.7	3240.0	3553.6
75°	523.1	504.1	520.1	428.9	295.6	278.6	274.6	1063.3	2237.8	2485.3
77.5°	450.0	428.9	407.9	322.7	237.5	215.5	210.5	596.3	1373.0	1525.3
80°	365.8	337.7	304.7	236.5	173.4	154.3	153.3	290.6	684.5	762.6
82.5°	284.6	231.5	222.5	147.3	107.2	94.2	100.2	111.2	206.4	230.5
85°	199.4	168.4	118.3	59.1	48.1	39.1	38.1	33.1	55.1	61.1
87.5°	111.2	73.2	38.1	7.0	8.0	9.0	7.0	5.0	5.0	5.0
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 <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			

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**

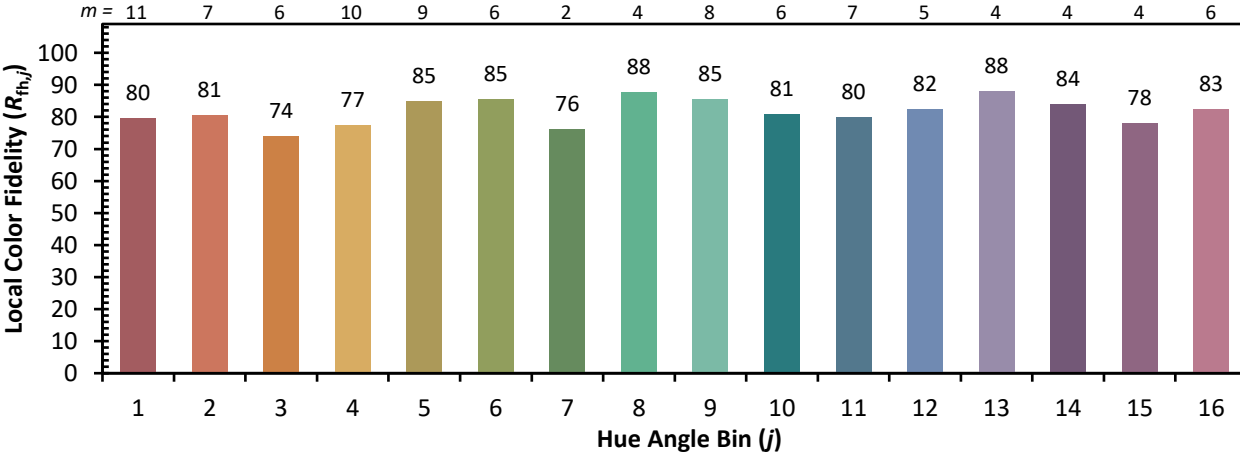


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

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)