

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: P639472

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

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639472
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5B-830-U-SLL-W
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13219.8 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

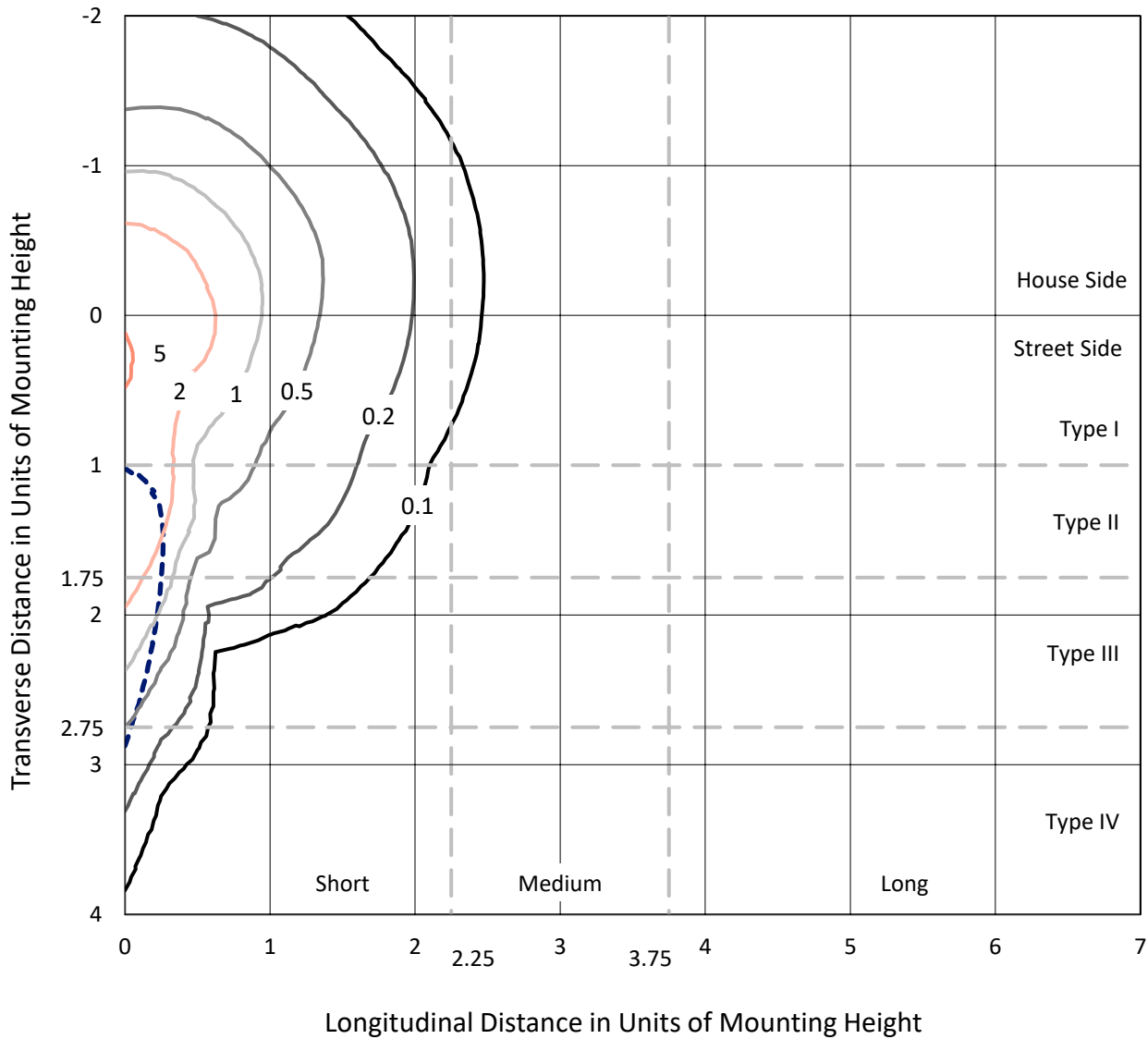
Input Watts (W): 115.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

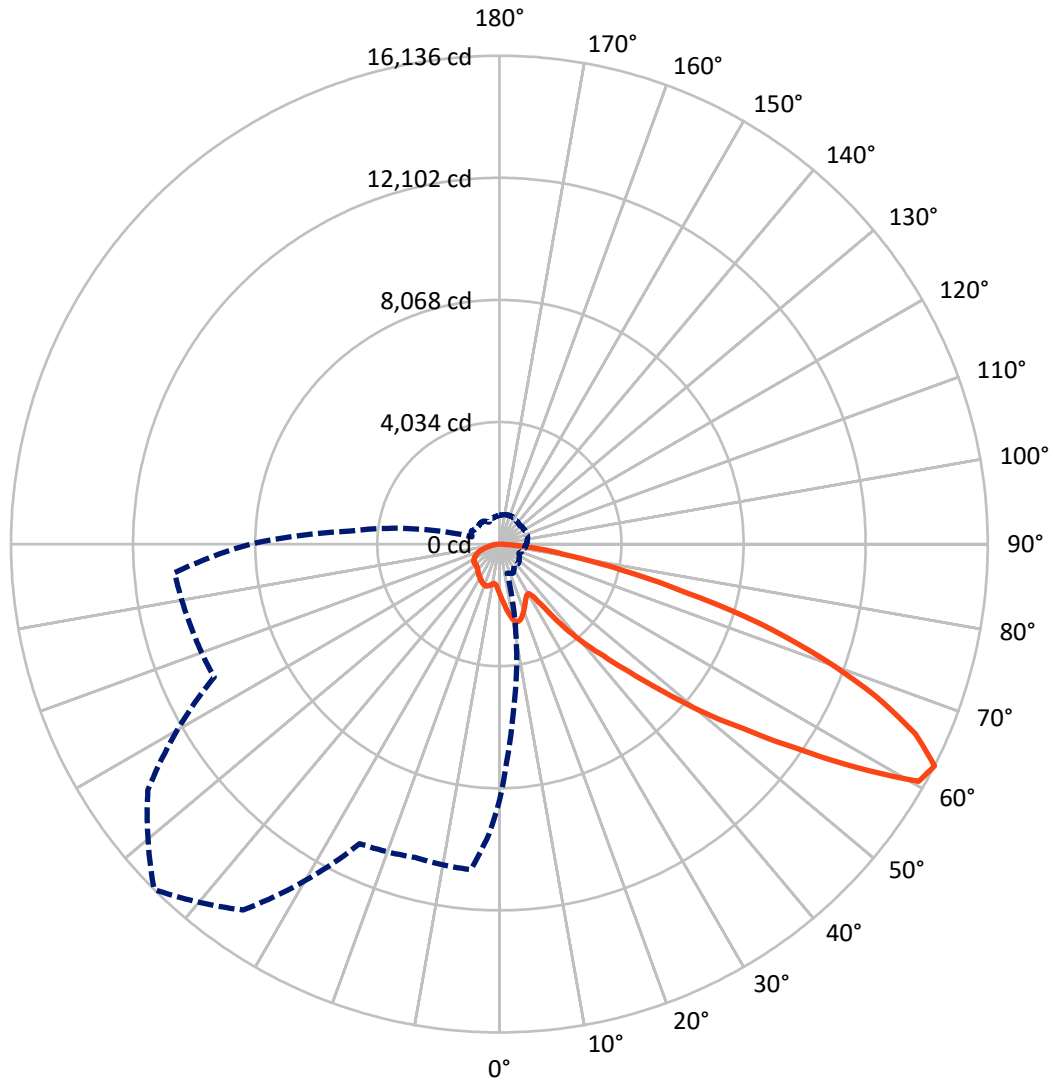
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3160.9	0.0	3160.9
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	10058.9	0.0	10058.9
	% Fixture	76.1	0.0	76.1
Total	Lumens	13219.8	0.0	13219.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.4	1.2
10°-20°	527.7	4.0
20°-30°	830.7	6.3
30°-40°	1138.7	8.6
40°-50°	1776.7	13.4
50°-60°	3063.4	23.2
60°-70°	3550.1	26.9
70°-80°	1873.9	14.2
80°-90°	296.0	2.2
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°	13219.8	100.0
0°-180°	13219.8	100.0

Coefficient of Utilization



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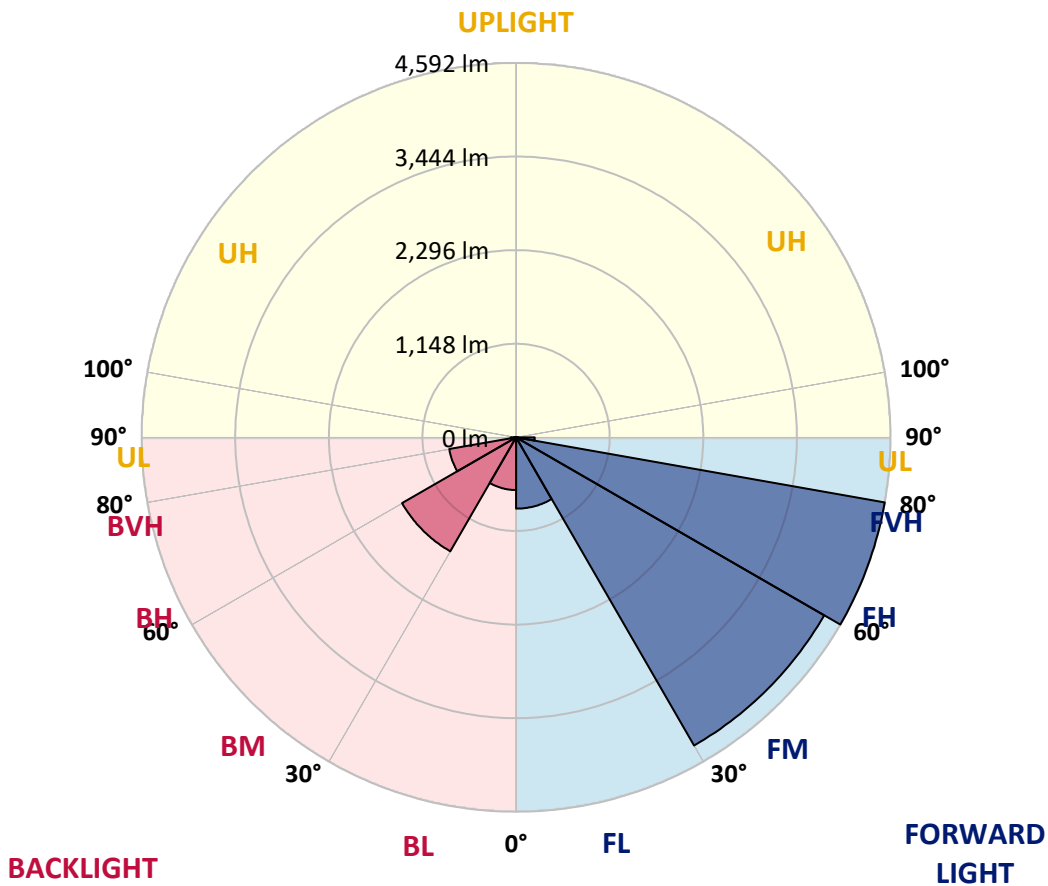
CATALOG NUMBER: GWS-SA5B-830-U-SLL-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	874.3	6.6			
FM (30°-60°)	4364.3	33.0			
FH (60°-80°)	4591.8	34.7			G2/5000
FVH (80°-90°)	228.5	1.7			G3/500
BL (0°-30°)	646.5	4.9	B2/1000		
BM (30°-60°)	1614.6	12.2	B2/2500		
BH (60°-80°)	832.3	6.3	B2/1000		G2/1000
BVH (80°-90°)	67.5	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-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2
2.5°	1790.8	1783.7	1773.6	1739.2	1718.0	1693.7	1668.5	1639.1	1605.8	1582.5	1559.3
5°	1942.5	1931.4	1907.1	1825.2	1768.6	1706.9	1655.3	1596.7	1539.0	1499.6	1460.2
7.5°	2088.1	2073.9	2036.5	1911.1	1819.1	1730.1	1652.3	1567.3	1481.4	1422.7	1376.2
10°	2233.7	2204.4	2156.9	1993.1	1871.7	1768.6	1679.6	1575.4	1461.2	1381.3	1331.7
12.5°	2344.9	2317.6	2266.1	2067.9	1924.3	1794.9	1694.7	1598.7	1501.6	1416.7	1366.1
15°	2449.1	2413.7	2355.1	2137.6	1967.8	1793.8	1664.4	1580.5	1566.3	1545.1	1479.4
17.5°	2523.9	2491.6	2430.9	2194.3	1992.0	1762.5	1580.5	1530.9	1594.6	1659.4	1596.7
20°	2589.7	2552.2	2490.6	2233.7	1997.1	1692.7	1478.4	1479.4	1579.5	1668.5	1653.3
22.5°	2645.3	2603.8	2549.2	2278.2	1995.1	1595.7	1389.4	1450.0	1550.2	1619.9	1621.9
25°	2714.0	2679.6	2634.1	2343.9	1995.1	1496.6	1324.7	1414.7	1500.6	1559.3	1557.2
27.5°	2798.0	2774.7	2737.3	2444.0	2013.3	1413.6	1288.3	1369.1	1436.9	1487.5	1486.4
30°	2892.0	2870.8	2842.4	2550.2	2044.6	1352.0	1268.0	1312.5	1362.1	1402.5	1402.5
32.5°	2988.1	2980.0	2949.6	2635.2	2020.4	1332.7	1250.8	1255.9	1282.2	1315.6	1312.5
35°	3121.5	3113.4	3075.0	2700.9	1915.2	1305.4	1223.5	1198.3	1201.3	1222.5	1229.6
37.5°	3316.7	3304.6	3247.9	2777.7	1756.4	1236.7	1179.0	1137.6	1128.5	1137.6	1150.7
40°	3552.3	3534.1	3457.2	2881.9	1573.4	1143.7	1109.3	1074.9	1059.7	1062.8	1077.9
42.5°	3847.6	3809.1	3698.9	2992.1	1392.4	1061.7	1031.4	1010.2	993.0	991.0	1020.3
45°	4326.9	4221.7	4046.8	3090.2	1239.7	1018.3	961.6	946.5	932.3	940.4	974.8
47.5°	5164.1	4970.0	4629.2	3174.1	1146.7	1019.3	906.0	889.8	888.8	905.0	943.4
50°	6314.9	6034.8	5508.9	3230.7	1098.1	1031.4	872.7	846.4	865.6	881.8	918.2
52.5°	7417.1	6989.3	6363.4	3229.7	1076.9	1033.4	881.8	805.9	865.6	869.6	904.0
55°	8358.5	7583.9	6594.0	2898.1	1046.6	1025.3	917.1	774.6	854.5	869.6	896.9
57.5°	9106.8	7962.1	6576.8	2340.9	1138.6	980.9	938.4	767.5	822.1	871.6	903.0
60°	9023.8	7789.2	6153.1	1436.9	1129.5	902.0	935.3	780.6	767.5	844.3	895.9
62.5°	8472.7	7169.3	5424.0	997.0	1060.7	856.5	885.8	803.9	716.9	804.9	861.5
65°	7701.2	6369.5	4520.0	764.5	878.7	858.5	801.9	787.7	672.4	742.2	802.9
67.5°	6680.9	5377.5	3568.5	605.7	612.8	743.2	728.1	699.7	631.0	686.6	741.2
70°	5022.6	3924.4	2455.2	487.4	464.1	620.9	654.2	629.0	590.5	606.7	664.4
72.5°	3539.2	2562.3	1344.9	386.3	358.0	477.3	568.3	564.2	521.8	533.9	590.5
75°	2630.1	1813.1	840.3	305.4	291.2	341.8	476.3	488.4	453.0	467.2	510.6
77.5°	1750.4	1174.0	467.2	226.5	226.5	249.8	354.9	411.6	385.3	396.4	426.7
80°	965.7	597.6	233.6	148.6	152.7	171.9	258.9	296.3	297.3	324.6	332.7
82.5°	305.4	190.1	104.2	87.0	81.9	98.1	166.8	212.3	198.2	252.8	232.6
85°	69.8	44.5	19.2	19.2	21.2	32.4	63.7	113.3	144.6	173.9	126.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	44.5	65.7	58.6
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°	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2
2.5°	1545.1	1524.9	1518.8	1501.6	1499.6	1483.4	1477.3	1477.3	1484.4	1484.4	1491.5
5°	1444.0	1418.7	1404.5	1384.3	1379.3	1367.1	1359.0	1360.0	1369.1	1375.2	1387.3
7.5°	1355.0	1337.8	1327.7	1318.6	1316.6	1314.5	1305.4	1304.4	1307.5	1316.6	1325.7
10°	1317.6	1305.4	1308.5	1315.6	1326.7	1332.7	1324.7	1320.6	1317.6	1323.6	1331.7
12.5°	1354.0	1341.8	1347.9	1360.0	1375.2	1381.3	1378.2	1377.2	1380.3	1403.5	1420.7
15°	1433.9	1410.6	1402.5	1407.6	1419.7	1425.8	1422.7	1426.8	1446.0	1506.7	1550.2
17.5°	1533.0	1476.3	1444.0	1434.9	1439.9	1445.0	1445.0	1455.1	1488.5	1577.5	1632.1
20°	1586.6	1512.7	1458.1	1435.9	1437.9	1443.0	1443.0	1457.1	1494.5	1589.6	1625.0
22.5°	1572.4	1504.6	1437.9	1413.6	1414.7	1418.7	1418.7	1430.8	1464.2	1548.1	1564.3
25°	1516.8	1457.1	1391.4	1370.2	1372.2	1379.3	1377.2	1384.3	1409.6	1478.4	1487.5
27.5°	1450.0	1397.5	1332.7	1316.6	1325.7	1339.8	1327.7	1328.7	1352.0	1409.6	1410.6
30°	1378.2	1334.8	1277.1	1265.0	1282.2	1289.3	1278.1	1278.1	1301.4	1340.8	1339.8
32.5°	1300.4	1273.1	1231.6	1218.5	1237.7	1248.8	1234.7	1236.7	1254.9	1281.2	1271.1
35°	1227.6	1213.4	1194.2	1185.1	1197.2	1207.4	1198.3	1202.3	1219.5	1226.6	1212.4
37.5°	1157.8	1155.8	1157.8	1157.8	1160.8	1163.9	1157.8	1167.9	1183.1	1174.0	1157.8
40°	1097.1	1105.2	1124.4	1119.4	1116.4	1119.4	1115.3	1132.5	1147.7	1131.5	1112.3
42.5°	1046.6	1061.7	1091.1	1091.1	1085.0	1087.0	1085.0	1106.2	1117.4	1095.1	1073.9
45°	1003.1	1025.3	1062.8	1067.8	1057.7	1057.7	1061.7	1088.0	1092.1	1061.7	1039.5
47.5°	972.8	1000.1	1042.5	1051.6	1036.5	1035.5	1046.6	1074.9	1074.9	1039.5	1014.2
50°	951.5	981.9	1032.4	1044.6	1029.4	1025.3	1043.5	1070.8	1064.8	1022.3	997.0
52.5°	937.4	968.7	1031.4	1048.6	1038.5	1034.4	1052.6	1071.9	1056.7	1011.2	984.9
55°	928.3	962.7	1034.4	1048.6	1037.5	1030.4	1048.6	1065.8	1057.7	1005.1	979.8
57.5°	933.3	967.7	1030.4	1037.5	1024.3	1012.2	1033.4	1057.7	1054.7	1007.1	981.9
60°	925.2	956.6	1008.2	1010.2	987.9	968.7	1000.1	1036.5	1036.5	1000.1	977.8
62.5°	887.8	919.2	964.7	966.7	941.4	920.2	956.6	1000.1	999.1	969.7	946.5
65°	826.1	855.5	907.0	912.1	886.8	864.6	902.0	942.4	945.5	919.2	898.9
67.5°	758.4	784.7	823.1	843.3	822.1	798.8	833.2	871.6	870.6	839.3	818.1
70°	677.5	701.8	737.2	754.3	741.2	719.0	750.3	770.5	761.4	746.3	732.1
72.5°	597.6	620.9	654.2	654.2	640.1	618.8	627.9	664.4	675.5	664.4	655.2
75°	513.7	533.9	557.2	562.2	530.9	492.4	534.9	566.3	579.4	574.4	563.2
77.5°	427.7	442.9	477.3	468.2	409.5	389.3	423.7	470.2	479.3	476.3	461.1
80°	329.6	338.7	375.2	356.9	311.4	298.3	313.5	349.9	351.9	341.8	322.6
82.5°	221.5	233.6	257.9	222.5	221.5	209.3	197.2	201.2	219.4	217.4	204.3
85°	113.3	119.3	142.6	133.5	114.3	99.1	94.0	100.1	90.0	81.9	70.8
87.5°	47.5	51.6	70.8	39.4	12.1	0.0	0.0	6.1	9.1	13.1	14.2
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°	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2
2.5°	1507.7	1518.8	1546.1	1580.5	1613.9	1648.2	1685.6	1708.9	1737.2	1773.6	1774.6
5°	1402.5	1427.8	1467.2	1519.8	1574.4	1637.1	1709.9	1770.6	1843.4	1901.0	1924.3
7.5°	1337.8	1374.2	1423.8	1490.5	1562.3	1640.1	1735.2	1837.3	1956.6	2033.5	2079.0
10°	1343.9	1399.5	1449.0	1505.7	1570.4	1654.3	1776.7	1912.2	2058.8	2159.9	2216.5
12.5°	1452.1	1510.7	1501.6	1498.6	1542.1	1644.2	1810.0	1988.0	2167.0	2268.1	2335.8
15°	1588.6	1610.8	1524.9	1460.2	1486.4	1607.8	1828.2	2055.7	2257.0	2380.3	2447.1
17.5°	1658.3	1613.9	1509.7	1412.6	1405.6	1552.2	1837.3	2124.5	2358.1	2481.5	2552.2
20°	1626.0	1561.3	1473.3	1381.3	1330.7	1476.3	1832.3	2179.1	2450.1	2587.6	2645.3
22.5°	1556.2	1499.6	1430.8	1342.9	1270.1	1393.4	1819.1	2233.7	2532.0	2670.5	2721.1
25°	1480.4	1437.9	1381.3	1304.4	1235.7	1320.6	1810.0	2306.5	2626.1	2758.5	2790.9
27.5°	1404.5	1373.2	1326.7	1267.0	1227.6	1270.1	1813.1	2401.6	2747.4	2872.8	2859.6
30°	1329.7	1302.4	1270.1	1243.8	1226.6	1257.9	1805.0	2502.7	2880.9	2997.2	2919.3
32.5°	1258.9	1233.6	1213.4	1217.5	1227.6	1263.0	1763.5	2594.7	3003.2	3102.3	2984.0
35°	1198.3	1172.0	1172.0	1186.1	1223.5	1245.8	1656.3	2666.5	3138.7	3237.8	3076.0
37.5°	1141.6	1118.4	1133.5	1156.8	1192.2	1199.3	1518.8	2736.3	3335.9	3428.9	3218.6
40°	1092.1	1068.8	1096.1	1125.5	1143.7	1140.6	1379.3	2833.3	3568.5	3664.5	3407.7
42.5°	1052.6	1031.4	1055.7	1093.1	1096.1	1099.2	1277.1	2926.4	3838.5	3960.8	3733.3
45°	1020.3	1005.1	1017.3	1054.7	1054.7	1101.2	1213.4	3004.2	4245.0	4461.4	4330.9
47.5°	995.0	985.9	992.0	1004.1	1024.3	1137.6	1173.0	3063.9	4985.2	5409.9	5278.4
50°	980.9	971.8	979.8	954.6	1015.2	1155.8	1159.8	3109.4	5960.9	6626.3	6463.5
52.5°	968.7	965.7	970.7	912.1	1035.5	1143.7	1149.7	3048.7	6615.2	7823.6	7984.3
55°	964.7	966.7	942.4	880.7	1059.7	1103.2	1119.4	2614.9	6793.2	8856.0	9854.0
57.5°	966.7	960.6	898.9	883.8	1060.7	1022.3	1162.9	1865.6	6534.3	9304.9	11683.3
60°	959.6	929.3	846.4	911.1	1014.2	927.3	1131.5	1216.5	5851.7	8960.1	11789.4
62.5°	928.3	883.8	800.9	926.2	931.3	870.6	1027.4	937.4	4941.7	8222.0	10766.1
65°	882.8	823.1	762.4	894.9	847.4	844.3	772.5	751.3	3974.0	7343.2	9795.4
67.5°	807.9	748.3	734.1	823.1	762.4	748.3	620.9	622.9	3171.1	6406.9	8819.6
70°	723.0	663.3	674.5	744.2	678.5	621.9	502.6	518.7	2405.6	5338.1	7504.0
72.5°	667.4	587.5	588.5	655.2	596.6	503.6	413.6	427.7	1526.9	4023.5	5966.0
75°	563.2	517.7	495.5	530.9	506.6	392.3	347.8	344.8	905.0	2883.9	4467.4
77.5°	470.2	434.8	423.7	437.8	378.2	290.2	280.1	275.0	512.7	1847.4	2927.4
80°	340.8	331.7	330.7	337.7	291.2	213.4	213.4	214.4	276.1	1003.1	1650.3
82.5°	216.4	236.6	209.3	232.6	198.2	151.7	141.6	160.8	158.8	427.7	695.7
85°	90.0	123.4	115.3	122.4	94.0	82.9	89.0	96.1	92.0	164.8	271.0
87.5°	17.2	20.2	22.2	21.2	21.2	26.3	29.3	35.4	35.4	47.5	81.9
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: P639472
 CATALOG NUMBER: GWS-SA5B-830-U-SLL-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2	1648.2
2.5°	1813.1	1842.4	1836.3	1849.5	1832.3	1838.3	1804.0	1794.9	1788.8	1790.8
5°	1999.1	2058.8	2069.9	2092.1	2077.0	2077.0	2016.3	1970.8	1954.6	1942.5
7.5°	2188.2	2274.2	2330.8	2336.9	2328.8	2312.6	2224.6	2142.7	2113.4	2088.1
10°	2356.1	2459.2	2522.9	2553.2	2538.1	2512.8	2403.6	2291.4	2256.0	2233.7
12.5°	2484.5	2575.5	2618.0	2638.2	2636.2	2627.1	2538.1	2416.7	2379.3	2344.9
15°	2567.4	2612.9	2596.7	2595.7	2609.9	2646.3	2619.0	2523.9	2480.4	2449.1
17.5°	2621.0	2577.5	2505.7	2472.4	2502.7	2588.6	2651.3	2597.7	2558.3	2523.9
20°	2640.2	2485.5	2381.3	2319.7	2355.1	2479.4	2634.1	2651.3	2618.0	2589.7
22.5°	2618.0	2373.3	2231.7	2158.9	2193.3	2341.9	2583.6	2694.8	2672.6	2645.3
25°	2563.4	2256.0	2086.1	2020.4	2057.8	2209.4	2493.6	2735.3	2736.3	2714.0
27.5°	2495.6	2147.8	1983.9	1922.3	1958.7	2100.2	2405.6	2770.7	2806.0	2798.0
30°	2426.8	2083.0	1935.4	1891.9	1919.2	2044.6	2315.6	2807.1	2877.8	2892.0
32.5°	2395.5	2114.4	2049.7	2068.9	2033.5	2077.0	2283.3	2858.6	2964.8	2988.1
35°	2437.0	2392.5	2556.3	2632.1	2506.7	2341.9	2324.7	2936.5	3087.2	3121.5
37.5°	2638.2	2988.1	3232.8	3499.7	3282.3	2919.3	2530.0	3069.0	3262.1	3316.7
40°	3076.0	3507.8	3949.7	4294.5	3965.9	3477.5	2920.3	3266.1	3502.8	3552.3
42.5°	3488.6	3995.2	4603.9	5049.9	4623.1	3933.5	3341.0	3597.8	3820.3	3847.6
45°	3893.1	4473.5	5395.7	6015.6	5436.1	4367.3	3770.7	4158.0	4325.9	4326.9
47.5°	4367.3	5012.5	6388.7	7271.4	6515.1	4847.6	4174.2	5044.8	5278.4	5164.1
50°	4934.6	5548.4	7411.0	8732.6	7830.6	5438.2	4686.9	6125.8	6444.3	6314.9
52.5°	5694.0	6138.9	8537.5	10157.4	9264.5	6110.6	5430.1	7553.6	7658.7	7417.1
55°	6762.8	6991.3	9983.5	11916.8	10865.2	6938.8	6517.1	9345.4	9051.1	8358.5
57.5°	9196.7	8340.3	11840.0	13924.0	12676.2	8443.4	8899.5	11321.3	10274.7	9106.8
60°	11233.3	9978.4	13558.0	15916.1	14228.4	10101.8	11136.2	11665.1	10229.2	9023.8
62.5°	10546.7	10396.0	14177.9	16135.5	14758.3	10917.8	10720.6	10798.5	9561.8	8472.7
65°	9253.4	9590.1	13624.7	15095.0	14170.8	10186.7	9697.3	9997.6	8798.3	7701.2
67.5°	8489.9	8737.7	12640.9	13429.6	13103.0	9396.0	8901.5	8684.1	7613.2	6680.9
70°	7709.3	7914.6	11259.6	11339.5	11437.5	8081.4	7278.5	6631.4	5674.8	5022.6
72.5°	6661.7	6672.8	9513.3	9050.1	9236.2	6324.0	5858.8	4957.9	4130.7	3539.2
75°	5588.8	5283.5	7530.3	6326.0	6699.1	4919.4	4864.8	3736.3	3115.5	2630.1
77.5°	4261.1	3904.2	5500.9	4160.0	4705.1	3276.2	3657.5	2534.0	2192.3	1750.4
80°	2860.6	2638.2	3039.6	2348.0	3078.1	2258.0	2385.4	1435.9	1244.8	965.7
82.5°	1508.7	1288.3	1878.8	1392.4	1856.5	1240.7	894.9	443.9	378.2	305.4
85°	584.5	676.5	921.2	495.5	720.0	442.9	258.9	110.2	92.0	69.8
87.5°	113.3	174.9	96.1	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

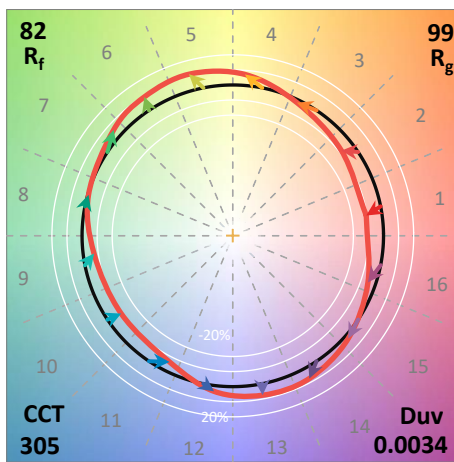
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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)