

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: P634524

Luminaire Tested: GWS-SA3B-830-U-SLR-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634524
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-43)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3B-830-U-SLR-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6464.8 lumens
Efficiency: N/A
Efficacy: 94.7 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): 68.3
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

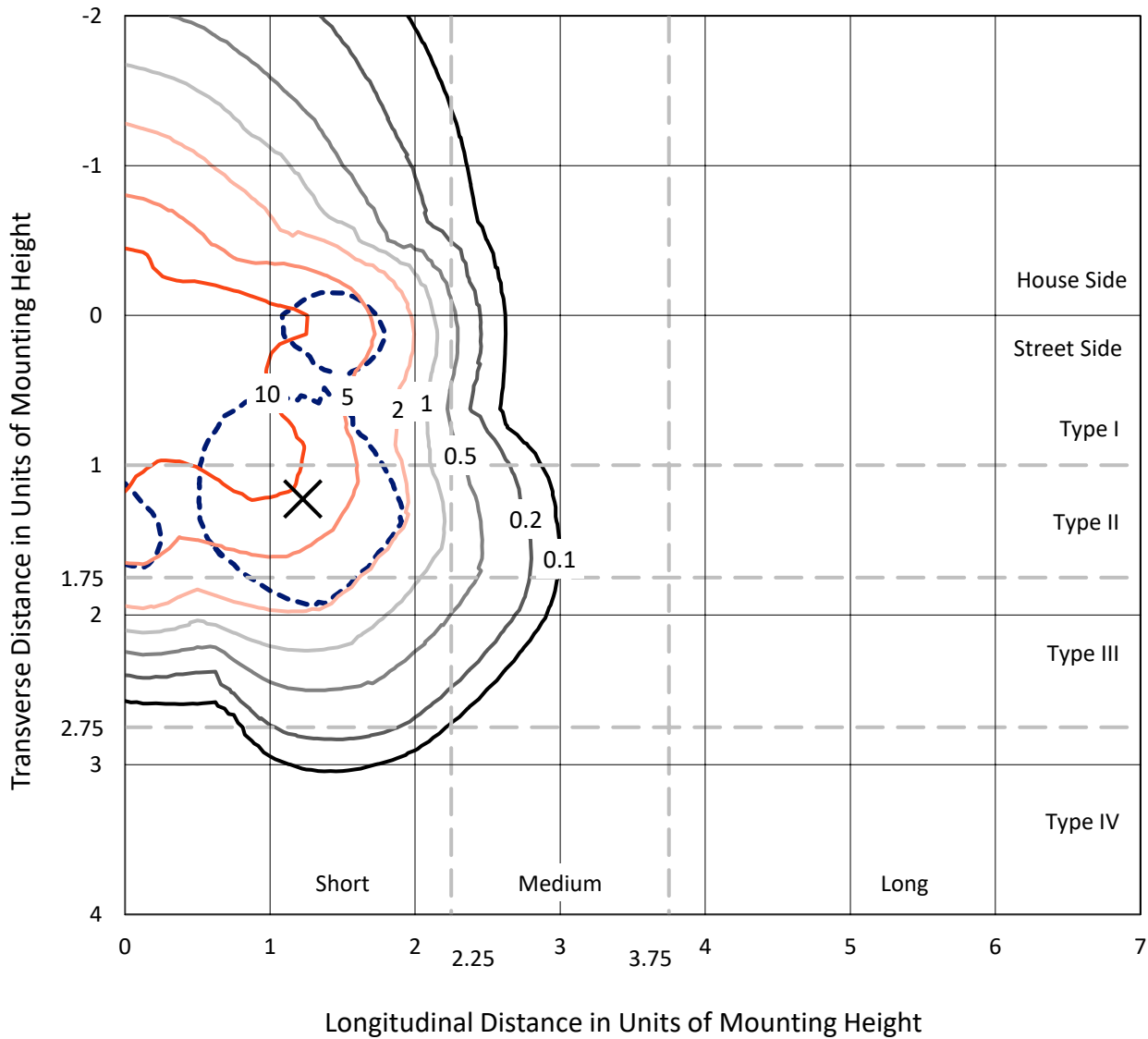


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Iso-Footcandle Lines of Horizontal Illumination

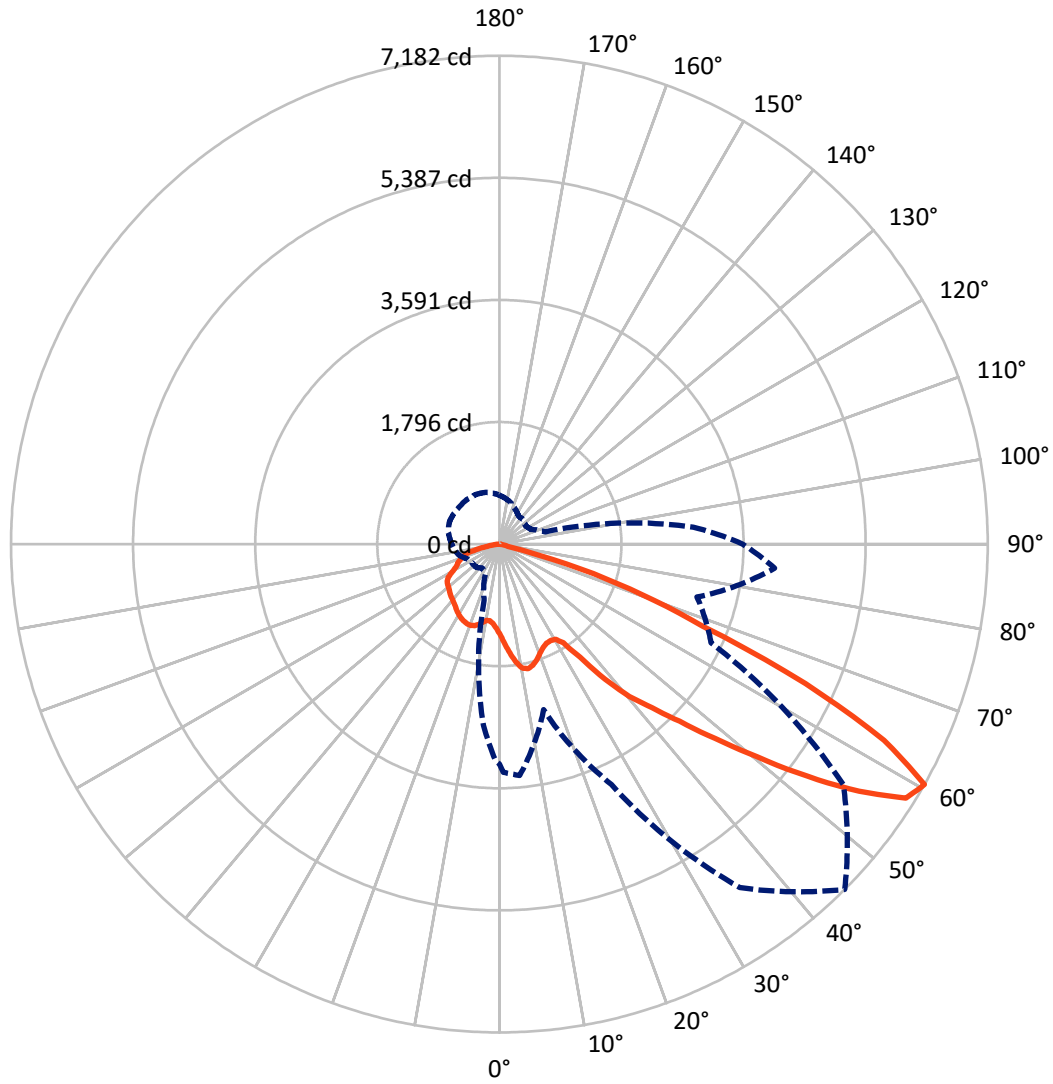
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2266.1	0.0	2266.1
	% Fixture	35.1	0.0	35.1
Street Side	Lumens	4198.7	0.0	4198.7
	% Fixture	64.9	0.0	64.9
Total	Lumens	6464.8	0.0	6464.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.6	2.0
10°-20°	409.5	6.3
20°-30°	665.1	10.3
30°-40°	938.0	14.5
40°-50°	1296.3	20.1
50°-60°	1668.7	25.8
60°-70°	1057.3	16.4
70°-80°	271.3	4.2
80°-90°	29.0	0.4
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°	6464.8	100.0
0°-180°	6464.8	100.0

Coefficient of Utilization



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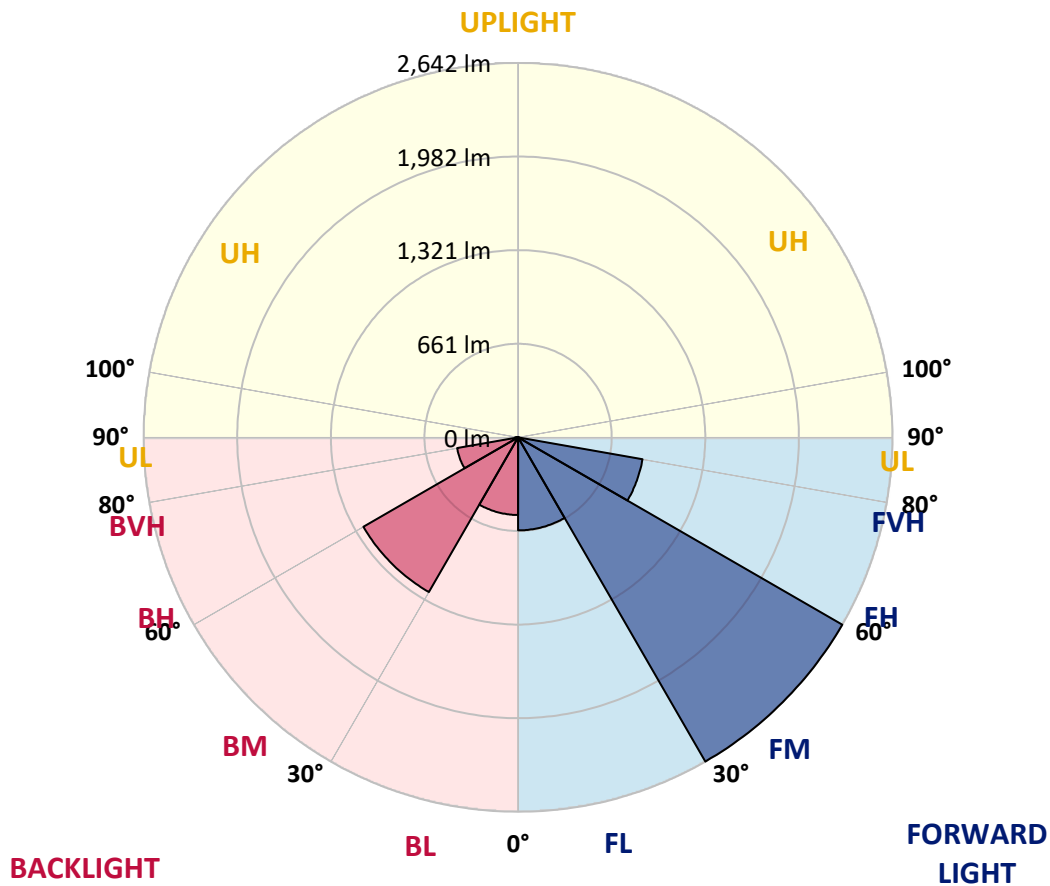
CATALOG NUMBER: GWS-SA3B-830-U-SLR-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	656.4	10.2			
FM (30°-60°)	2642.4	40.9			
FH (60°-80°)	891.9	13.8			G1/1800
FVH (80°-90°)	7.9	0.1			G0/10
BL (0°-30°)	547.7	8.5	B2/1000		
BM (30°-60°)	1260.6	19.5	B2/2500		
BH (60°-80°)	436.7	6.8	B1/500		G1/500
BVH (80°-90°)	21.1	0.3			G1/100
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°	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1
2.5°	1389.1	1398.5	1404.5	1415.7	1435.9	1447.1	1459.6	1445.9	1449.5	1447.7	1425.8
5°	1471.4	1482.7	1498.1	1531.2	1568.6	1589.3	1608.8	1605.9	1587.5	1556.7	1534.8
7.5°	1548.4	1561.4	1588.1	1642.0	1697.1	1729.1	1752.8	1737.4	1722.0	1673.4	1618.3
10°	1608.8	1616.5	1652.7	1724.9	1788.9	1825.0	1854.1	1850.5	1829.2	1774.7	1700.7
12.5°	1665.7	1671.0	1710.1	1782.4	1839.9	1855.8	1879.5	1887.2	1880.1	1839.3	1766.4
15°	1726.7	1736.8	1772.9	1828.0	1854.1	1837.5	1845.8	1867.1	1887.2	1887.2	1820.3
17.5°	1783.6	1792.5	1829.2	1852.9	1828.0	1784.2	1786.5	1813.8	1861.8	1912.1	1869.5
20°	1833.9	1842.2	1878.4	1855.8	1777.1	1713.1	1711.3	1744.5	1822.1	1928.1	1922.2
22.5°	1889.0	1900.9	1931.1	1858.2	1729.7	1648.5	1647.9	1682.3	1787.1	1944.1	1982.6
25°	1967.2	1985.6	2001.0	1878.9	1704.2	1606.5	1614.2	1646.7	1775.9	1970.2	2072.1
27.5°	2083.3	2098.1	2096.9	1922.2	1703.0	1589.3	1605.3	1643.2	1796.0	2016.4	2166.2
30°	2208.9	2216.6	2204.2	1982.6	1730.3	1600.0	1623.6	1668.7	1847.0	2092.8	2304.9
32.5°	2348.1	2357.6	2333.9	2073.2	1793.7	1678.7	1730.9	1752.8	1918.6	2203.0	2451.8
35°	2508.0	2526.4	2477.2	2192.9	1980.2	1966.0	2041.8	2013.4	2070.9	2333.3	2608.7
37.5°	2676.3	2676.9	2606.4	2370.0	2346.3	2370.6	2522.2	2433.4	2393.7	2478.4	2768.7
40°	2819.0	2815.5	2707.1	2608.7	2665.0	2761.6	2944.6	2808.4	2704.1	2673.3	2901.4
42.5°	2961.8	2948.7	2839.2	2760.4	2884.8	3083.2	3289.9	3122.9	2903.1	2850.4	3032.3
45°	3144.2	3140.1	3008.0	2820.8	3083.2	3443.4	3717.6	3446.9	3021.0	2953.5	3250.3
47.5°	3438.6	3418.5	3172.7	2816.1	3269.2	3923.2	4269.7	3855.0	3103.3	2955.9	3602.1
50°	3726.5	3701.6	3369.3	2815.5	3461.1	4420.7	4921.3	4350.8	3187.5	2970.1	3959.9
52.5°	4017.4	4017.4	3692.1	2882.4	3662.5	4976.4	5674.2	4968.7	3330.8	3156.1	4400.0
55°	4190.3	4236.5	4055.3	2995.5	3898.3	5630.3	6418.8	5635.7	3552.4	3491.9	4806.4
57.5°	3970.6	4057.0	4031.0	2916.8	4037.5	6110.7	7050.2	6141.5	3661.9	3531.6	4745.4
60°	3235.4	3355.7	3415.5	2518.7	3900.1	6166.4	7182.3	6174.7	3435.7	3007.4	4064.7
62.5°	2150.8	2249.8	2341.0	1799.6	3376.4	5547.4	6352.4	5549.2	2869.4	2244.4	2816.1
65°	1055.0	1128.4	1226.8	1063.9	2637.8	4635.2	4952.7	4484.1	2075.6	1256.4	1436.5
67.5°	276.0	296.8	310.4	412.9	1889.6	3330.2	3230.1	3279.9	1333.4	410.5	375.6
70°	143.3	144.5	143.9	170.6	1277.1	2116.5	2226.1	2059.6	930.6	171.8	148.1
72.5°	102.5	103.1	101.3	114.9	616.6	1212.6	1256.4	1242.8	487.5	101.9	101.3
75°	66.9	67.5	66.3	67.5	93.0	138.0	127.4	133.9	81.2	64.6	64.6
77.5°	39.7	40.3	39.7	40.9	39.7	39.7	36.7	36.7	34.9	34.9	35.5
80°	26.7	26.7	26.1	27.2	24.9	24.9	23.7	23.1	21.3	20.7	20.7
82.5°	16.0	16.6	16.0	16.0	14.8	14.8	13.6	13.0	11.3	11.3	10.7
85°	8.3	8.3	7.7	7.7	6.5	5.9	4.7	4.7	3.6	3.0	3.0
87.5°	1.2	1.2	0.6	0.6	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°	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1
2.5°	1419.9	1408.0	1390.3	1373.1	1357.1	1340.5	1321.5	1302.0	1285.4	1268.2	1259.3
5°	1505.8	1481.5	1435.3	1394.4	1357.7	1327.5	1294.9	1267.0	1241.0	1219.7	1209.0
7.5°	1583.4	1545.5	1475.6	1411.0	1361.2	1319.8	1274.7	1233.3	1198.3	1172.3	1162.2
10°	1655.0	1610.0	1518.2	1436.5	1378.4	1332.2	1277.1	1220.8	1174.6	1140.3	1132.0
12.5°	1713.1	1661.6	1552.0	1457.2	1388.5	1338.7	1290.1	1241.6	1196.0	1151.5	1144.4
15°	1764.6	1703.6	1577.4	1470.2	1384.9	1321.5	1280.7	1274.7	1274.7	1224.4	1210.2
17.5°	1809.1	1742.1	1598.2	1476.1	1362.4	1270.6	1245.7	1297.3	1355.3	1319.2	1287.2
20°	1860.0	1778.8	1615.4	1476.1	1321.0	1206.0	1203.7	1291.3	1377.2	1377.8	1344.1
22.5°	1911.5	1821.5	1635.5	1470.8	1264.1	1131.4	1175.2	1267.6	1344.1	1376.6	1353.5
25°	1995.1	1880.7	1667.5	1466.7	1197.7	1080.5	1149.8	1236.2	1300.8	1335.2	1320.4
27.5°	2101.1	1958.9	1716.1	1473.2	1132.0	1050.2	1122.5	1195.4	1254.0	1284.2	1273.6
30°	2219.6	2049.0	1768.2	1484.4	1084.6	1034.8	1089.9	1148.6	1200.7	1230.9	1226.2
32.5°	2370.6	2146.7	1813.2	1469.0	1057.9	1027.1	1055.6	1097.6	1148.0	1166.9	1171.1
35°	2551.3	2254.5	1847.6	1408.6	1033.7	1018.9	1018.3	1044.3	1079.9	1110.1	1113.0
37.5°	2717.7	2380.7	1885.5	1305.0	989.8	998.1	974.4	989.8	1024.8	1055.0	1066.8
40°	2882.4	2508.6	1938.2	1172.9	932.4	951.9	924.1	934.7	962.6	1002.3	1021.2
42.5°	3042.3	2624.1	1993.9	1037.8	874.9	887.3	866.6	877.3	906.3	956.1	977.4
45°	3216.5	2780.5	2037.1	910.4	825.2	819.8	803.2	818.6	862.5	917.0	942.4
47.5°	3545.8	3026.9	2065.5	825.7	798.5	760.0	741.0	774.2	824.0	879.1	909.9
50°	3948.0	3383.5	2057.2	771.8	775.4	698.4	691.9	735.7	789.0	846.5	880.2
52.5°	4266.7	3733.6	1963.1	720.3	730.4	659.3	640.3	704.3	755.3	813.9	848.8
55°	4510.2	3851.5	1674.0	659.3	656.9	630.9	591.2	671.7	721.5	776.0	813.9
57.5°	4311.8	3589.1	1241.0	575.2	561.0	574.6	536.1	616.6	680.0	733.9	767.7
60°	3578.4	2861.7	691.3	509.4	469.1	502.3	496.4	558.6	635.0	691.9	720.9
62.5°	2429.2	1905.6	409.9	402.8	380.3	427.7	459.1	499.9	575.2	621.4	648.6
65°	1210.8	925.9	272.5	301.5	304.5	351.9	411.1	456.1	518.9	566.3	593.5
67.5°	351.3	287.9	207.3	230.4	262.4	300.3	347.7	401.0	462.0	518.3	550.3
70°	151.6	153.4	164.7	191.9	223.3	262.4	309.8	361.9	413.5	456.7	481.0
72.5°	107.2	111.4	123.8	151.6	181.3	218.6	266.0	316.3	353.6	397.5	422.9
75°	68.7	71.7	81.7	103.1	125.0	161.1	206.1	252.3	290.8	322.2	346.5
77.5°	37.9	38.5	46.8	59.2	74.0	97.1	130.3	166.5	194.9	212.7	234.6
80°	21.9	21.9	26.1	33.8	42.6	56.9	75.2	93.0	110.2	121.4	132.1
82.5°	11.8	11.8	13.6	18.4	23.1	31.4	42.1	50.9	61.6	67.5	74.6
85°	3.6	3.6	4.7	6.5	8.3	11.8	16.6	21.3	26.1	30.2	34.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1
2.5°	1257.6	1249.3	1244.5	1238.6	1240.4	1235.1	1232.1	1233.9	1223.2	1233.9	1244.5
5°	1204.8	1193.0	1183.5	1175.8	1172.3	1165.2	1161.0	1161.0	1154.5	1165.2	1178.2
7.5°	1158.6	1149.2	1144.4	1139.7	1134.4	1127.8	1120.7	1118.4	1114.2	1125.5	1136.7
10°	1127.8	1129.0	1132.0	1138.5	1137.3	1133.2	1122.5	1116.6	1116.6	1129.6	1146.8
12.5°	1142.1	1154.5	1161.6	1173.5	1175.8	1172.3	1161.6	1156.9	1168.7	1188.3	1216.7
15°	1197.1	1205.4	1211.4	1220.8	1220.3	1217.3	1209.0	1212.6	1251.6	1289.6	1315.0
17.5°	1257.0	1247.5	1246.3	1252.2	1254.0	1250.5	1245.7	1261.7	1326.3	1361.8	1374.9
20°	1300.2	1267.6	1260.5	1262.9	1267.6	1265.9	1265.9	1291.9	1358.9	1375.4	1358.9
22.5°	1313.3	1267.0	1256.4	1257.0	1263.5	1264.1	1267.0	1294.3	1333.4	1334.0	1308.5
25°	1292.5	1248.1	1240.4	1241.6	1249.3	1248.7	1249.9	1265.3	1282.4	1275.3	1256.4
27.5°	1253.4	1214.9	1212.6	1219.1	1229.1	1223.8	1220.3	1224.4	1232.7	1223.8	1207.2
30°	1209.0	1176.4	1177.6	1190.0	1200.7	1191.8	1182.9	1185.3	1185.9	1176.4	1157.5
32.5°	1162.2	1137.9	1142.1	1155.1	1167.5	1158.1	1148.6	1147.4	1136.1	1124.9	1106.5
35°	1115.4	1105.9	1111.3	1121.9	1132.6	1124.9	1119.0	1115.4	1091.1	1074.5	1059.1
37.5°	1072.8	1079.9	1089.3	1095.9	1099.4	1098.8	1095.3	1087.0	1055.0	1035.4	1015.3
40°	1034.8	1056.8	1066.8	1069.8	1075.1	1073.9	1073.3	1061.5	1019.4	998.7	975.6
42.5°	1000.5	1031.3	1048.5	1051.4	1054.4	1055.0	1053.2	1036.0	988.0	963.8	941.8
45°	967.3	1007.6	1029.5	1026.6	1030.7	1030.7	1032.5	1010.0	957.2	932.4	909.3
47.5°	938.3	985.7	1005.8	1002.3	1004.6	1006.4	1008.2	982.1	923.5	899.8	876.1
50°	911.6	962.0	979.2	980.3	980.3	984.5	983.9	958.4	895.0	869.6	845.9
52.5°	883.2	937.7	956.1	963.8	966.1	967.9	959.6	930.0	866.0	835.2	813.3
55°	850.0	912.8	929.4	939.5	944.2	943.0	931.8	901.6	836.4	805.6	780.7
57.5°	799.7	859.5	883.2	887.9	895.6	890.9	877.9	852.4	789.0	758.2	732.7
60°	744.6	787.8	806.8	810.9	805.0	806.8	805.0	780.7	725.6	701.3	675.3
62.5°	672.3	710.8	731.0	736.3	726.2	732.7	730.4	700.2	645.1	619.6	596.5
65°	617.8	659.9	683.6	686.5	683.6	686.5	678.2	641.5	589.4	563.3	539.6
67.5°	575.2	618.4	643.3	651.6	648.6	648.0	635.0	592.4	538.5	510.0	479.8
70°	501.7	539.6	571.6	591.8	591.8	580.5	555.6	515.9	472.7	448.4	424.7
72.5°	444.3	492.2	523.6	544.4	548.5	542.0	507.1	465.0	415.2	391.0	366.1
75°	366.1	412.9	446.6	473.9	479.2	472.1	431.8	390.4	344.2	320.5	295.6
77.5°	244.6	272.5	299.7	324.6	319.3	324.0	296.8	265.4	236.9	219.2	207.9
80°	138.0	156.4	164.7	178.3	178.3	178.3	160.5	145.7	129.7	119.7	108.4
82.5°	78.2	90.0	93.6	104.8	107.8	108.4	96.6	87.1	77.0	71.7	64.0
85°	36.1	42.6	43.2	49.8	52.1	56.9	51.5	45.0	39.1	36.7	32.0
87.5°	1.2	3.6	4.7	8.9	11.8	13.6	14.8	14.8	12.4	11.3	9.5
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: P634524

CATALOG NUMBER: GWS-SA3B-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1	1328.1
2.5°	1257.6	1271.8	1288.4	1300.2	1321.5	1339.3	1357.7	1377.8	1392.6	1389.1
5°	1194.2	1217.9	1248.1	1275.9	1315.6	1355.9	1400.3	1445.9	1472.6	1471.4
7.5°	1158.6	1192.4	1229.1	1266.5	1313.3	1371.3	1439.4	1510.5	1546.6	1548.4
10°	1177.6	1213.7	1238.6	1270.0	1319.2	1392.0	1473.8	1559.1	1600.5	1608.8
12.5°	1237.4	1234.5	1232.7	1255.2	1314.4	1406.8	1507.0	1608.8	1655.6	1665.7
15°	1294.3	1233.3	1196.6	1212.0	1293.1	1416.3	1539.5	1663.3	1716.1	1726.7
17.5°	1305.0	1212.6	1144.4	1155.1	1259.3	1419.3	1570.9	1716.6	1773.5	1783.6
20°	1275.3	1185.9	1106.5	1091.7	1216.7	1411.6	1590.5	1761.1	1823.3	1833.9
22.5°	1238.0	1162.2	1078.1	1039.6	1164.6	1403.9	1612.4	1807.9	1879.5	1889.0
25°	1198.9	1132.0	1051.4	992.8	1105.3	1399.1	1649.1	1869.5	1956.0	1967.2
27.5°	1157.5	1095.3	1028.3	970.3	1050.8	1405.1	1701.2	1969.0	2067.3	2083.3
30°	1113.0	1058.5	1013.5	962.6	1013.5	1410.4	1758.7	2070.9	2186.4	2208.9
32.5°	1066.8	1024.8	998.1	966.1	990.4	1398.0	1809.1	2185.2	2328.5	2348.1
35°	1020.6	990.4	978.6	972.6	959.6	1352.3	1849.9	2300.7	2490.9	2508.0
37.5°	977.4	954.9	951.3	957.8	912.2	1277.7	1897.3	2447.6	2650.2	2676.3
40°	937.1	916.4	915.8	914.6	860.1	1175.8	1961.3	2596.9	2807.2	2819.0
42.5°	899.8	873.7	878.5	864.2	817.4	1065.6	2021.7	2724.2	2953.5	2961.8
45°	866.6	832.3	837.6	819.8	797.3	950.1	2075.0	2874.7	3138.9	3144.2
47.5°	834.6	797.9	783.1	781.9	793.8	843.5	2127.1	3164.4	3429.1	3438.6
50°	805.0	765.3	723.3	749.3	771.8	763.5	2192.3	3474.8	3728.9	3726.5
52.5°	776.6	724.4	664.6	715.0	715.0	704.3	2173.9	3663.1	3976.5	4017.4
55°	744.0	658.7	603.6	657.5	631.5	651.0	1848.7	3724.7	4132.3	4190.3
57.5°	679.4	577.5	529.6	558.6	519.5	603.6	1328.1	3419.1	3867.5	3970.6
60°	617.2	517.7	486.3	481.0	430.0	492.2	860.7	2676.9	3183.3	3235.4
62.5°	544.4	466.2	439.5	398.7	345.9	358.4	521.3	1761.7	2139.0	2150.8
65°	489.3	422.3	371.4	322.8	283.1	260.0	308.0	849.4	1069.2	1055.0
67.5°	420.0	361.9	313.4	278.4	245.8	216.8	205.0	252.3	285.5	276.0
70°	373.8	318.1	271.3	238.1	207.9	178.9	158.2	148.7	145.7	143.3
72.5°	322.2	273.7	225.1	193.1	164.7	138.0	119.1	107.8	104.8	102.5
75°	257.1	211.5	167.0	136.8	112.0	93.0	80.6	71.1	69.3	66.9
77.5°	170.0	135.6	99.5	81.2	66.3	56.3	48.0	42.1	40.9	39.7
80°	93.6	78.2	61.0	49.2	39.7	34.4	31.4	27.8	27.2	26.7
82.5°	55.7	46.8	34.9	27.8	23.1	20.7	19.0	17.2	16.6	16.0
85°	27.8	21.9	15.4	13.0	11.8	10.7	10.7	8.9	8.3	8.3
87.5°	7.1	5.9	3.6	3.0	3.0	3.0	2.4	1.8	1.8	1.2
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

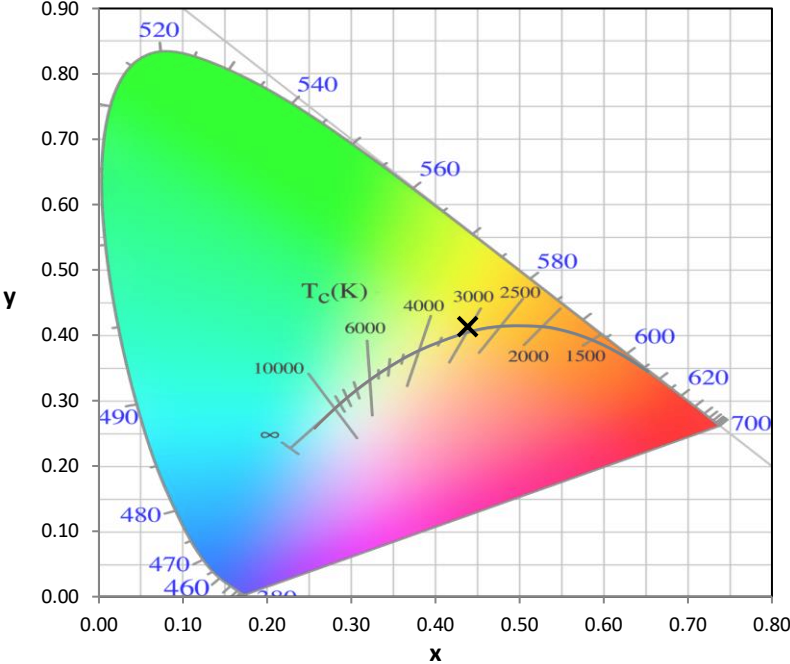
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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



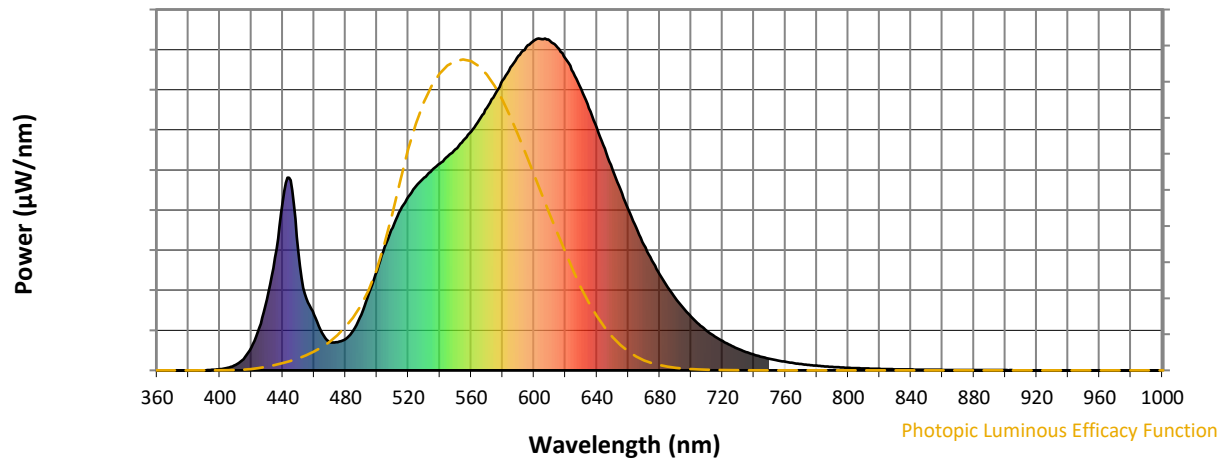
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



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			

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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



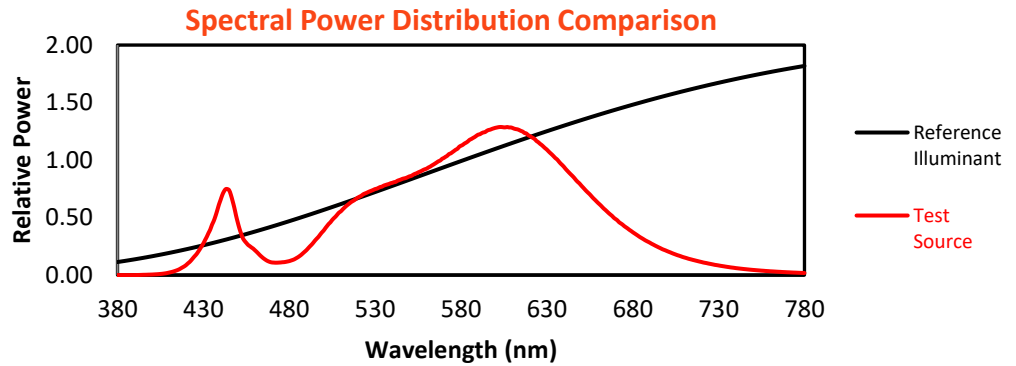
Melanopic Lumens: NR

M/P: 2.32

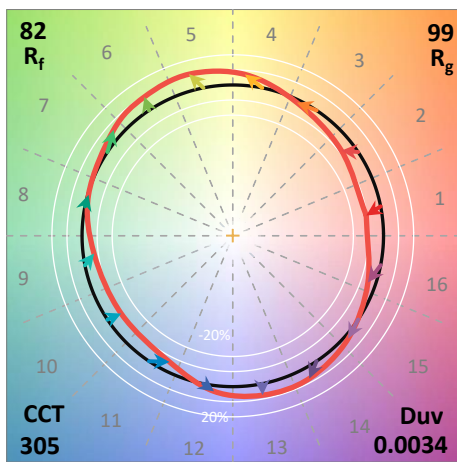
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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