

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: P639473

Luminaire Tested: GWS-SA5B-830-U-SLR-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639473
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-SA5B-830-U-SLR-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7525 lumens
Efficiency: N/A
Efficacy: 65.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G1

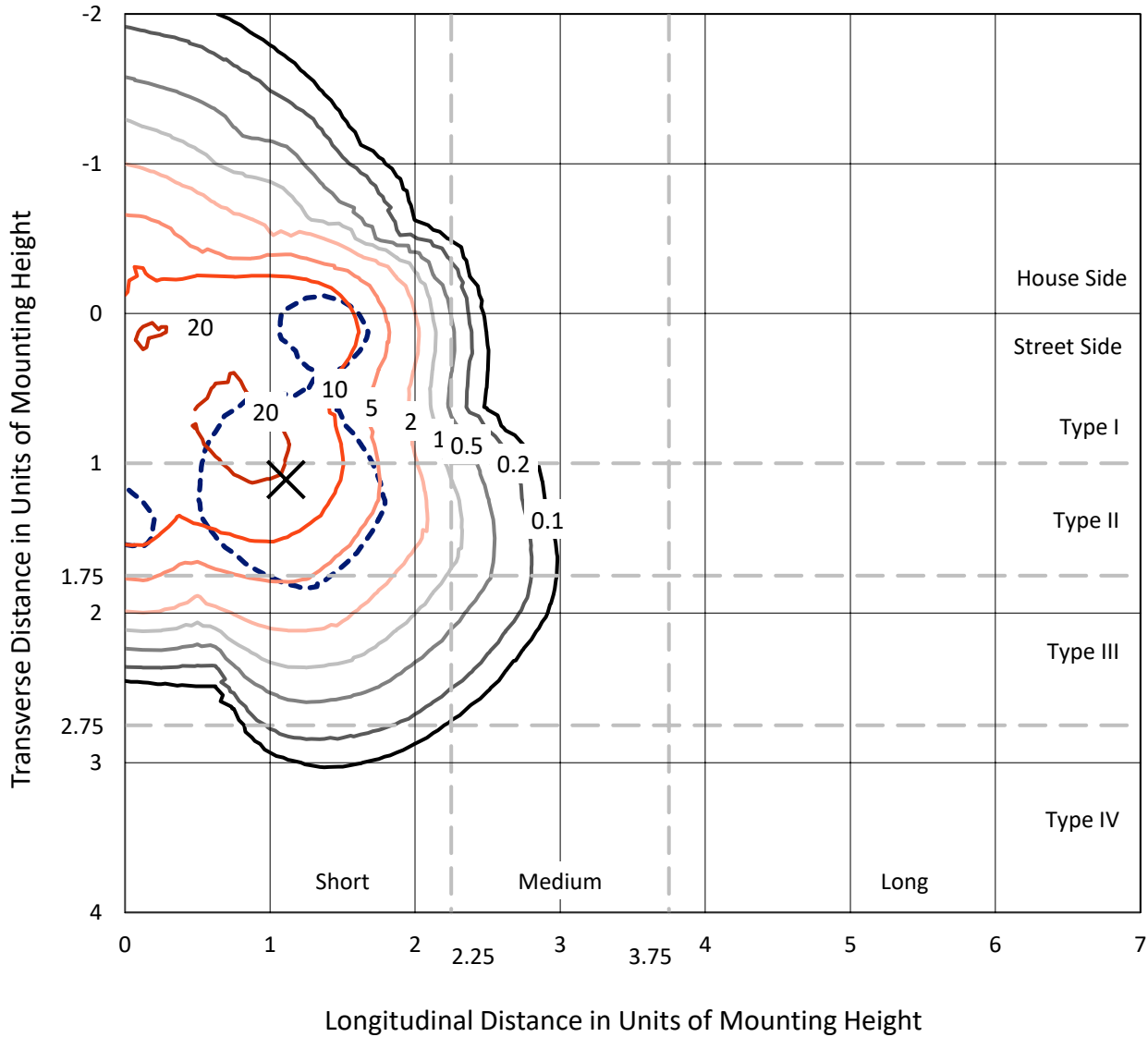
Input Watts (W): 115.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P639473
 CATALOG NUMBER: GWS-SA5B-830-U-SLR-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

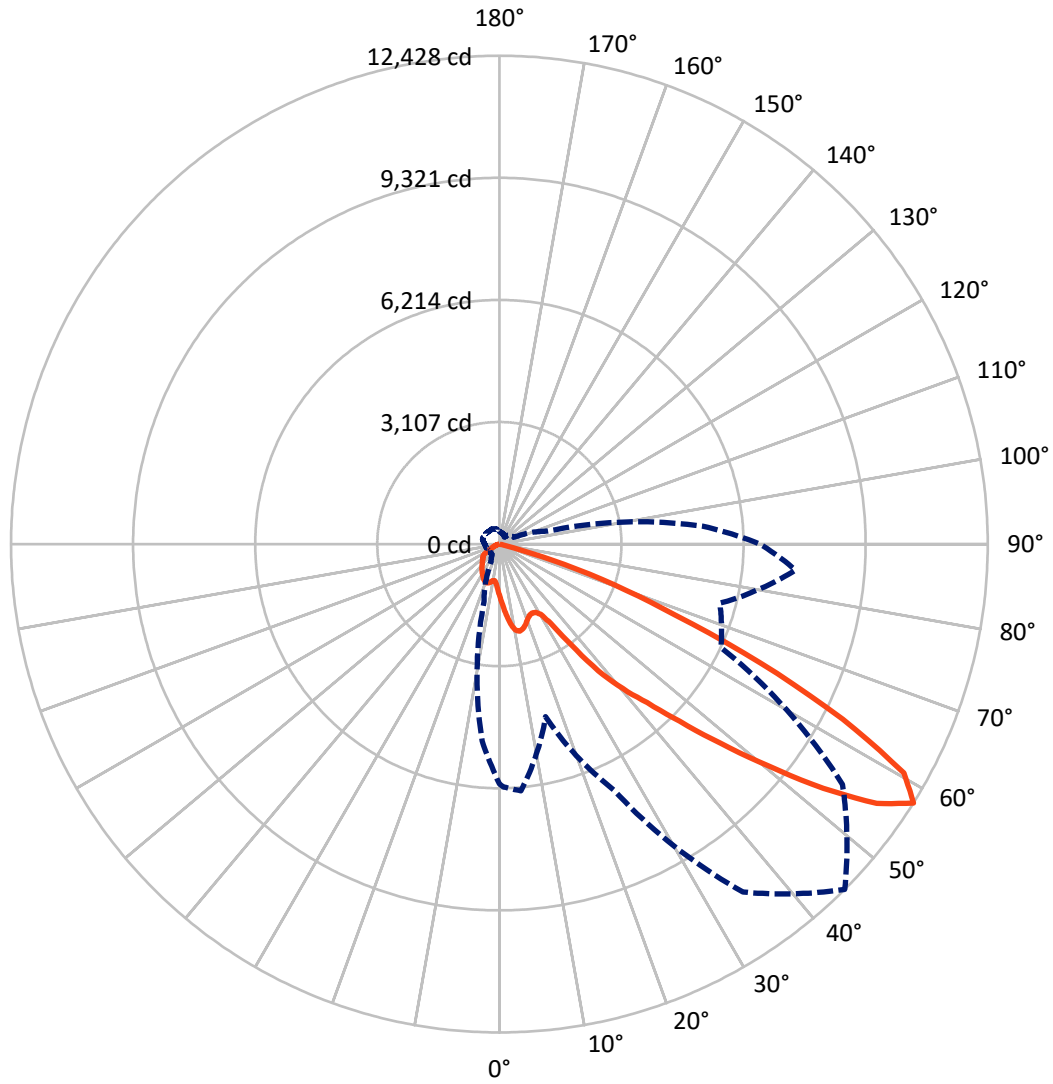
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 23.6 fc
 Type III - Short - N/A

REPORT NUMBER: P639473
CATALOG NUMBER: GWS-SA5B-830-U-SLR-W-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P639473
 CATALOG NUMBER: GWS-SA5B-830-U-SLR-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1685.0	0.0	1685.0
	% Fixture	22.4	0.0	22.4
Street Side	Lumens	5840.0	0.0	5840.0
	% Fixture	77.6	0.0	77.6
Total	Lumens	7525.0	0.0	7525.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.1	1.7
10°-20°	420.9	5.6
20°-30°	683.7	9.1
30°-40°	1056.5	14.0
40°-50°	1694.1	22.5
50°-60°	2315.3	30.8
60°-70°	1121.4	14.9
70°-80°	102.7	1.4
80°-90°	0.3	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°	7525.0	100.0
0°-180°	7525.0	100.0

Coefficient of Utilization



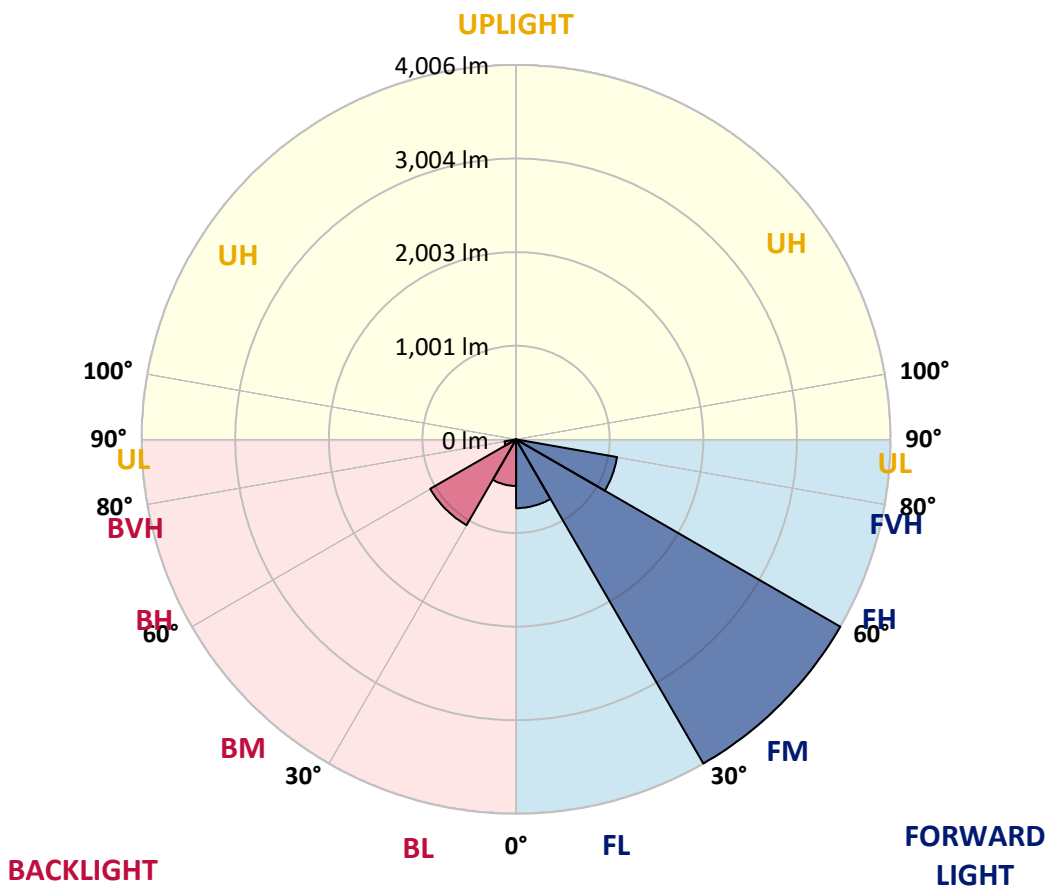
REPORT NUMBER: P639473

CATALOG NUMBER: GWS-SA5B-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°)	736.2	9.8			
FM (30°-60°)	4005.7	53.2			
FH (60°-80°)	1097.8	14.6			G1/1800
FVH (80°-90°)	0.3	0.0			G0/10
BL (0°-30°)	498.6	6.6	B1/500		
BM (30°-60°)	1060.2	14.1	B2/2500		
BH (60°-80°)	126.3	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





REPORT NUMBER: P639473

CATALOG NUMBER: GWS-SA5B-830-U-SLR-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6
2.5°	1432.8	1441.9	1457.1	1489.4	1516.7	1534.9	1543.0	1541.0	1529.9	1521.8	1505.6
5°	1586.5	1586.5	1615.8	1689.7	1746.3	1781.7	1799.9	1788.7	1766.5	1731.1	1676.5
7.5°	1721.0	1726.1	1775.6	1880.8	1966.7	2017.3	2046.6	2040.5	2001.1	1933.3	1824.1
10°	1826.2	1832.2	1898.0	2026.4	2127.5	2179.1	2222.5	2226.6	2183.1	2093.1	1967.7
12.5°	1928.3	1934.4	2003.1	2126.5	2215.5	2236.7	2275.1	2290.3	2279.2	2215.5	2085.0
15°	2038.5	2052.7	2111.3	2203.3	2240.7	2215.5	2240.7	2268.0	2305.4	2299.4	2182.1
17.5°	2146.7	2156.8	2216.5	2248.8	2207.4	2141.6	2153.8	2186.1	2271.1	2354.0	2278.1
20°	2246.8	2261.0	2310.5	2268.0	2142.7	2040.5	2041.5	2084.0	2213.4	2387.4	2376.2
22.5°	2352.0	2373.2	2408.6	2289.3	2083.0	1960.6	1965.7	2004.1	2167.9	2418.7	2487.5
25°	2489.5	2509.7	2533.0	2341.9	2063.8	1921.2	1940.4	1975.8	2167.9	2472.3	2625.0
27.5°	2675.5	2689.7	2690.7	2439.9	2097.1	1927.3	1967.7	2008.2	2232.6	2579.5	2809.0
30°	2909.1	2931.4	2902.0	2592.6	2201.3	2008.2	2067.8	2118.4	2372.2	2760.5	3080.0
32.5°	3193.2	3224.6	3185.2	2819.1	2418.7	2287.2	2395.4	2424.8	2594.6	3022.4	3387.4
35°	3526.9	3553.2	3510.8	3132.6	2926.3	2950.6	3146.7	3109.3	3041.6	3344.9	3746.4
37.5°	3893.0	3917.2	3835.3	3607.8	3676.6	3781.7	4095.2	3966.8	3748.4	3760.5	4135.7
40°	4228.7	4255.0	4126.6	4124.5	4266.1	4458.2	4836.4	4659.4	4362.2	4304.5	4500.7
42.5°	4576.5	4594.7	4478.4	4399.6	4721.1	5116.5	5516.9	5278.3	4768.6	4705.9	4957.7
45°	5073.0	5111.4	4904.1	4535.1	5130.6	5873.8	6432.0	5965.9	5045.7	4995.1	5657.4
47.5°	5803.1	5831.4	5408.7	4620.0	5511.8	6817.3	7575.6	6857.7	5289.4	5174.1	6614.0
50°	6406.7	6425.9	5872.8	4713.0	5917.3	7834.5	8879.0	7915.4	5563.4	5470.4	7506.9
52.5°	6851.6	6924.4	6482.6	4904.1	6450.2	9030.7	10321.9	9168.2	5991.1	6042.7	8247.0
55°	6943.6	7042.7	6899.2	5021.4	6919.4	10249.1	11654.6	10289.6	6417.8	6476.5	8495.8
57.5°	6102.4	6181.2	6300.5	4548.2	6908.3	10807.3	12428.2	10661.7	6223.7	5808.1	7564.5
60°	4571.5	4626.1	4842.5	3476.4	6353.1	10313.8	11825.5	10028.7	5442.1	4431.9	5763.6
62.5°	2710.9	2735.2	3009.2	2251.9	5273.2	8882.0	9807.3	8653.5	4300.5	2980.9	3530.0
65°	1040.5	1030.4	1239.7	1111.3	3877.8	7075.1	7294.5	6596.8	2950.6	1366.1	1345.9
67.5°	160.8	153.7	207.3	328.6	2796.9	4903.1	4813.1	4754.5	1848.4	318.5	278.1
70°	36.4	36.4	44.5	97.1	1708.9	2880.8	3083.0	2939.4	1183.1	67.7	36.4
72.5°	17.2	17.2	21.2	41.5	618.8	1187.1	1383.3	1362.0	384.2	22.2	13.1
75°	6.1	7.1	7.1	9.1	37.4	61.7	141.6	101.1	24.3	0.0	0.0
77.5°	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	1.0	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: P639473

CATALOG NUMBER: GWS-SA5B-830-U-SLR-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6
2.5°	1470.2	1463.2	1436.9	1401.5	1367.1	1336.8	1305.4	1268.0	1240.7	1209.3	1199.2
5°	1634.0	1589.5	1517.8	1442.9	1374.2	1315.5	1258.9	1198.2	1153.7	1109.2	1094.1
7.5°	1772.6	1706.8	1590.6	1478.3	1384.3	1301.4	1219.5	1136.5	1071.8	1019.3	1003.1
10°	1896.9	1821.1	1665.4	1526.9	1408.5	1312.5	1213.4	1109.2	1025.3	962.6	947.5
12.5°	2004.1	1916.2	1729.1	1563.3	1418.7	1308.4	1212.4	1129.5	1053.6	981.8	962.6
15°	2094.1	1997.0	1782.7	1587.5	1403.5	1257.9	1174.0	1160.8	1154.7	1075.9	1038.5
17.5°	2182.1	2072.9	1826.2	1598.6	1361.0	1168.9	1108.2	1167.9	1231.6	1180.0	1132.5
20°	2274.1	2149.7	1870.6	1600.7	1290.2	1068.8	1058.7	1152.7	1233.6	1217.4	1172.9
22.5°	2382.3	2245.8	1926.3	1599.7	1201.3	983.9	1022.3	1123.4	1189.1	1188.1	1152.7
25°	2539.0	2367.1	2001.1	1605.7	1104.2	918.1	981.8	1073.9	1127.4	1125.4	1096.1
27.5°	2706.9	2511.7	2098.2	1620.9	1021.3	879.7	934.3	1006.1	1052.6	1050.6	1025.3
30°	2942.5	2678.6	2191.2	1621.9	961.6	859.5	881.7	931.3	975.8	970.7	951.5
32.5°	3228.6	2866.6	2269.0	1564.3	924.2	840.3	827.1	852.4	886.8	879.7	874.7
35°	3574.5	3090.1	2335.8	1437.9	866.6	801.9	766.5	771.5	795.8	799.8	797.8
37.5°	3968.8	3356.0	2418.7	1271.0	788.7	746.2	698.7	694.7	708.8	722.0	732.1
40°	4358.1	3655.3	2530.9	1102.2	717.9	675.5	630.0	619.8	625.9	649.2	670.4
42.5°	4795.9	4002.2	2652.3	957.6	669.4	597.6	554.1	534.9	552.1	589.5	614.8
45°	5426.9	4488.5	2770.6	842.3	649.2	528.8	470.2	468.2	487.4	535.9	564.2
47.5°	6312.7	5117.5	2848.4	752.3	648.2	475.2	405.5	417.6	439.9	487.4	519.7
50°	7176.2	5905.2	2762.5	683.5	626.9	439.9	356.9	381.2	403.5	444.9	478.3
52.5°	7697.0	6328.9	2427.8	618.8	561.2	423.7	309.4	351.9	355.9	393.3	428.7
55°	7642.4	6054.8	1859.5	518.7	464.1	400.4	259.9	317.5	319.5	347.8	378.2
57.5°	6633.2	5198.4	1277.1	420.6	348.9	330.6	214.4	268.0	287.2	304.4	326.6
60°	4943.6	3792.9	569.3	341.8	221.4	223.5	183.0	202.2	231.6	251.8	271.0
62.5°	2913.2	2182.1	231.6	205.3	122.4	140.6	147.6	147.6	165.8	181.0	193.1
65°	1101.2	763.4	94.0	103.1	63.7	65.7	87.0	107.2	121.3	134.5	150.7
67.5°	193.1	133.5	48.5	38.4	37.4	33.4	44.5	69.8	77.9	88.0	95.0
70°	32.4	27.3	20.2	19.2	17.2	18.2	29.3	49.5	54.6	57.6	60.7
72.5°	9.1	8.1	6.1	5.1	4.0	5.1	18.2	38.4	40.4	42.5	45.5
75°	0.0	0.0	0.0	0.0	0.0	0.0	7.1	27.3	29.3	30.3	33.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	8.1	10.1	8.1
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P639473

CATALOG NUMBER: GWS-SA5B-830-U-SLR-W-GRSBK

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6
2.5°	1193.2	1172.9	1161.8	1155.8	1155.8	1147.7	1138.6	1135.5	1148.7	1148.7	1170.9
5°	1074.9	1058.7	1040.5	1029.4	1012.2	1015.2	1005.1	1004.1	1017.2	1023.3	1046.6
7.5°	993.0	972.7	961.6	954.5	945.4	941.4	932.3	929.3	936.3	946.4	968.7
10°	938.4	935.3	934.3	939.4	939.4	934.3	926.2	921.2	923.2	942.4	967.7
12.5°	952.5	958.6	960.6	968.7	972.7	968.7	962.6	964.6	977.8	1013.2	1050.6
15°	1014.2	1009.1	1007.1	1011.2	1014.2	1010.2	1008.1	1023.3	1068.8	1119.4	1161.8
17.5°	1079.9	1047.6	1033.4	1033.4	1035.4	1033.4	1035.4	1064.8	1138.6	1189.1	1220.5
20°	1113.3	1053.6	1031.4	1026.3	1030.4	1031.4	1038.5	1071.8	1152.7	1188.1	1195.2
22.5°	1103.2	1028.4	1003.1	999.0	1003.1	1007.1	1014.2	1042.5	1118.3	1136.5	1133.5
25°	1052.6	978.8	958.6	958.6	967.7	966.7	969.7	989.9	1052.6	1063.7	1058.7
27.5°	988.9	919.1	902.0	912.1	920.2	918.1	919.1	936.3	982.8	985.9	980.8
30°	924.2	863.5	847.4	859.5	870.6	868.6	869.6	886.8	916.1	913.1	906.0
32.5°	858.5	814.0	801.9	808.9	826.1	824.1	828.1	846.3	857.5	844.3	836.2
35°	797.8	774.5	765.4	769.5	782.6	785.7	792.8	804.9	804.9	788.7	774.5
37.5°	741.2	738.1	732.1	727.0	739.2	748.3	758.4	772.5	752.3	729.0	715.9
40°	688.6	701.7	693.7	680.5	687.6	700.7	721.0	732.1	707.8	684.6	662.3
42.5°	640.1	662.3	659.3	643.1	649.2	661.3	684.6	693.7	665.3	639.1	617.8
45°	593.6	624.9	626.9	606.7	612.8	624.9	652.2	655.2	618.8	590.5	575.4
47.5°	553.1	587.5	588.5	573.3	575.4	592.5	617.8	618.8	577.4	551.1	531.9
50°	514.7	554.1	557.2	544.0	546.0	566.3	587.5	583.4	538.9	511.6	494.5
52.5°	468.2	521.8	528.8	522.8	530.9	547.0	560.2	546.0	494.5	467.2	452.0
55°	417.6	487.4	502.5	498.5	507.6	520.7	523.8	514.7	450.0	422.7	408.5
57.5°	359.0	401.4	427.7	419.6	426.7	439.9	449.0	441.9	393.3	372.1	360.0
60°	297.3	325.6	331.7	318.5	312.4	335.7	356.9	347.8	306.4	293.2	279.1
62.5°	217.4	249.8	253.8	236.6	229.5	254.8	273.0	263.9	218.4	204.3	193.1
65°	173.9	204.3	212.3	196.2	192.1	211.3	222.5	200.2	167.9	152.7	140.6
67.5°	114.3	138.5	159.8	158.8	150.7	156.7	148.6	130.4	107.2	99.1	91.0
70°	70.8	84.9	98.1	103.1	102.1	100.1	89.0	75.8	68.8	65.7	61.7
72.5°	54.6	68.8	78.9	81.9	82.9	79.9	70.8	58.6	51.6	47.5	44.5
75°	40.4	51.6	59.7	63.7	65.7	63.7	54.6	46.5	39.4	36.4	33.4
77.5°	14.2	17.2	21.2	23.3	22.2	21.2	19.2	19.2	15.2	14.2	12.1
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P639473
 CATALOG NUMBER: GWS-SA5B-830-U-SLR-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6	1322.6
2.5°	1196.2	1214.4	1247.8	1278.1	1310.5	1343.8	1380.2	1417.6	1434.8	1432.8
5°	1081.9	1121.4	1176.0	1235.6	1302.4	1374.2	1454.1	1536.0	1571.3	1586.5
7.5°	1010.2	1065.8	1137.6	1213.4	1301.4	1403.5	1523.8	1652.2	1703.8	1721.0
10°	1019.3	1084.0	1143.6	1217.4	1311.5	1443.9	1593.6	1746.3	1806.9	1826.2
12.5°	1093.1	1107.2	1123.4	1184.1	1302.4	1474.3	1657.3	1839.3	1909.1	1928.3
15°	1159.8	1094.1	1063.7	1119.4	1270.0	1495.5	1722.0	1939.4	2016.3	2038.5
17.5°	1162.8	1063.7	996.0	1039.5	1217.4	1504.6	1785.7	2041.5	2125.5	2146.7
20°	1125.4	1030.4	943.4	944.4	1145.6	1502.6	1838.3	2133.6	2227.6	2246.8
22.5°	1070.8	990.9	900.9	869.6	1068.8	1498.5	1895.9	2231.6	2333.8	2352.0
25°	1010.2	940.4	860.5	813.0	991.9	1502.6	1976.8	2360.1	2472.3	2489.5
27.5°	944.4	884.8	829.2	790.7	927.2	1517.8	2073.9	2523.9	2657.3	2675.5
30°	875.7	831.2	808.9	785.7	886.8	1521.8	2179.1	2715.0	2883.8	2909.1
32.5°	807.9	783.7	784.7	788.7	848.4	1493.5	2275.1	2927.3	3152.8	3193.2
35°	745.2	738.1	758.4	778.6	792.8	1420.7	2359.0	3178.1	3485.5	3526.9
37.5°	691.6	697.7	723.0	743.2	732.1	1317.5	2470.3	3491.5	3857.6	3893.0
40°	640.1	655.2	684.6	693.7	685.6	1197.2	2603.7	3793.9	4180.1	4228.7
42.5°	592.5	603.7	645.1	647.1	672.4	1074.9	2732.2	4119.5	4551.2	4576.5
45°	554.1	552.1	594.6	607.7	689.6	939.4	2857.5	4553.3	5036.6	5073.0
47.5°	516.7	514.7	524.8	584.5	696.7	814.0	2981.9	5188.3	5740.4	5803.1
50°	481.3	484.3	453.0	573.3	658.3	717.9	3038.5	5775.8	6380.4	6406.7
52.5°	450.0	438.8	384.2	536.9	576.4	626.9	2877.8	6042.7	6776.8	6851.6
55°	405.5	343.8	316.5	435.8	455.0	547.0	2357.0	5888.0	6811.2	6943.6
57.5°	346.8	270.0	269.0	321.5	321.5	507.6	1509.7	5030.5	5869.8	6102.4
60°	266.9	209.3	222.5	223.5	206.3	370.1	847.4	3644.2	4339.9	4571.5
62.5°	190.1	159.8	167.9	133.5	118.3	185.0	406.5	2098.2	2678.6	2710.9
65°	127.4	108.2	88.0	73.8	72.8	78.9	167.9	758.4	922.2	1040.5
67.5°	83.9	65.7	46.5	46.5	52.6	52.6	63.7	125.4	175.9	160.8
70°	54.6	45.5	29.3	28.3	34.4	34.4	32.4	34.4	36.4	36.4
72.5°	40.4	34.4	17.2	15.2	19.2	20.2	18.2	17.2	17.2	17.2
75°	30.3	24.3	10.1	7.1	9.1	12.1	10.1	7.1	7.1	6.1
77.5°	12.1	9.1	4.0	3.0	5.1	7.1	6.1	3.0	2.0	2.0
80°	1.0	2.0	2.0	2.0	3.0	4.0	5.1	2.0	1.0	1.0
82.5°	0.0	1.0	1.0	1.0	2.0	3.0	4.0	2.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	2.0	3.0	2.0	1.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	1.0	3.0	2.0	1.0	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

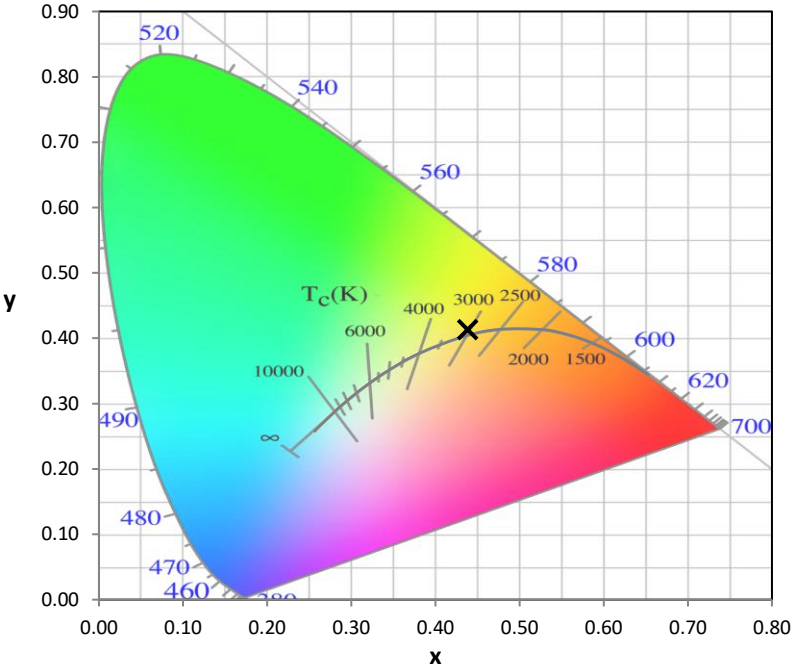
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

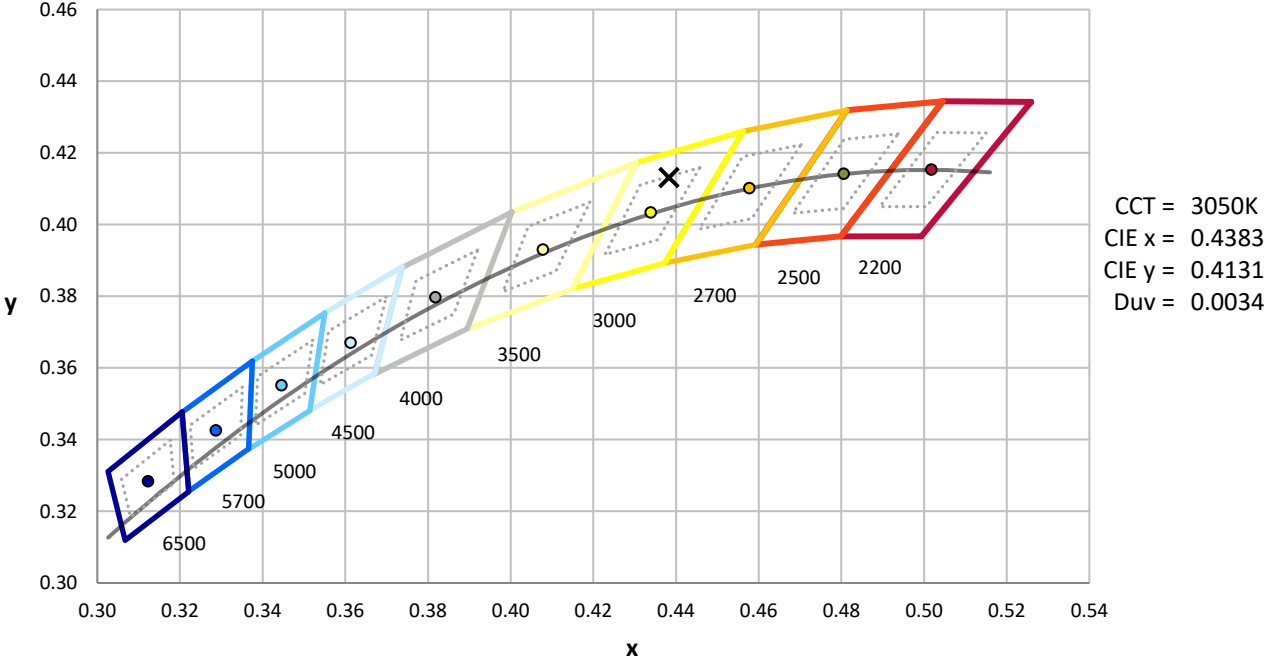
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

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)