

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: P631556

Luminaire Tested: GWS-SA1F-830-U-SLR-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P631556
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-SA1F-830-U-SLR-W
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6336.9 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

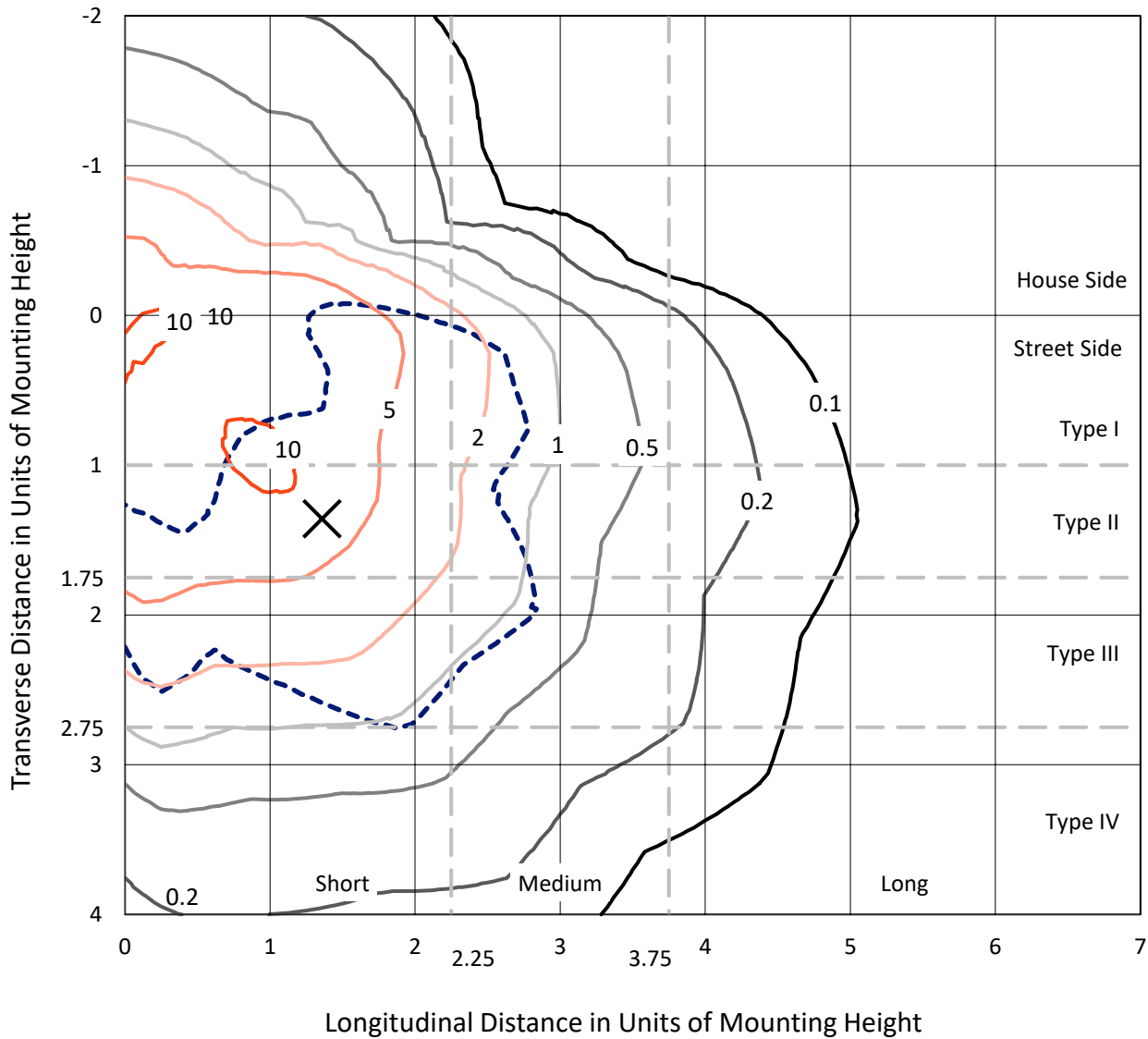
Input Watts (W): 67.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

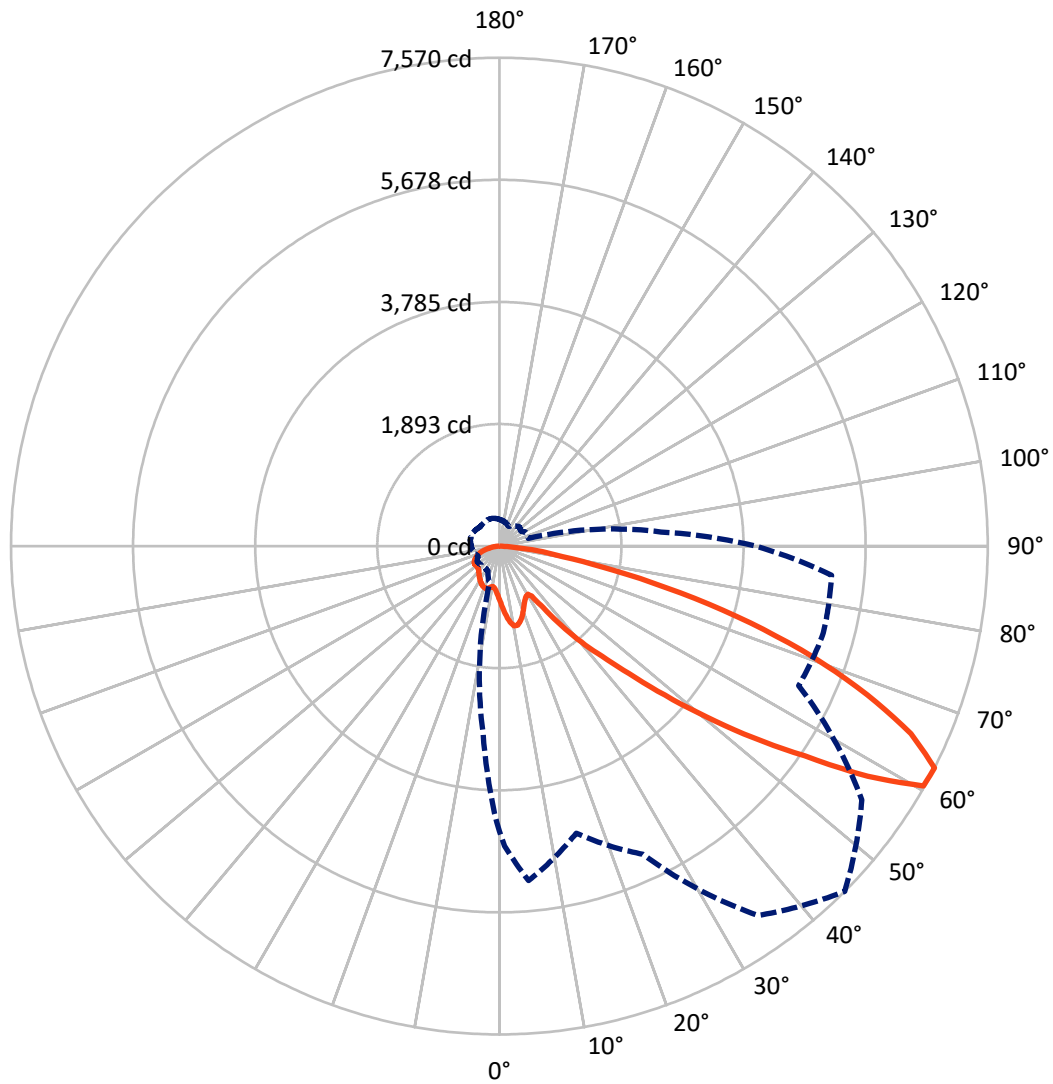
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12 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
House Side	Lumens	1512.1	0.0	1512.1
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	4824.8	0.0	4824.8
	% Fixture	76.1	0.0	76.1
Total	Lumens	6336.9	0.0	6336.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.1	1.3
10°-20°	257.5	4.1
20°-30°	399.9	6.3
30°-40°	543.0	8.6
40°-50°	860.6	13.6
50°-60°	1518.1	24.0
60°-70°	1689.2	26.7
70°-80°	856.7	13.5
80°-90°	129.7	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°	6336.9	100.0
0°-180°	6336.9	100.0

Coefficient of Utilization



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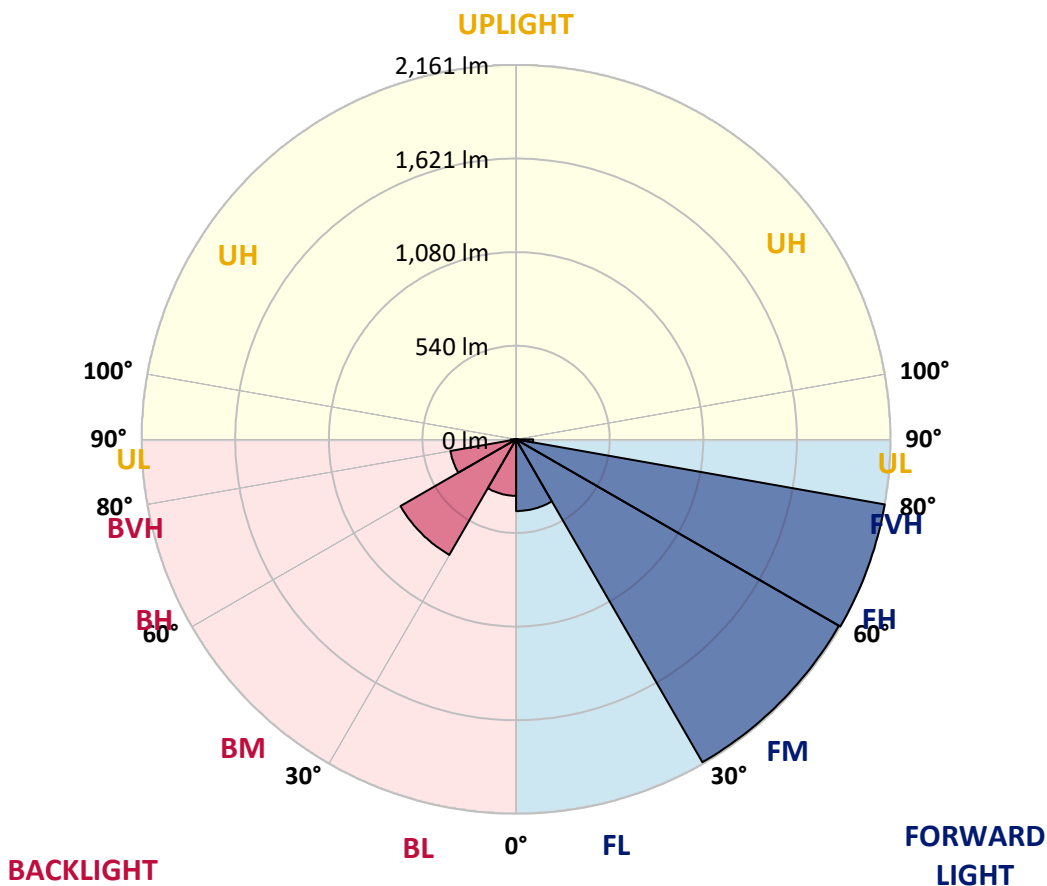
CATALOG NUMBER: GWS-SA1F-830-U-SLR-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	413.7	6.5			
FM (30°-60°)	2151.7	34.0			
FH (60°-80°)	2160.9	34.1			G2/5000
FVH (80°-90°)	98.5	1.6			G1/100
BL (0°-30°)	325.8	5.1	B1/500		
BM (30°-60°)	770.1	12.2	B1/1000		
BH (60°-80°)	384.9	6.1	B1/500		G1/500
BVH (80°-90°)	31.3	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0
2.5°	903.9	903.4	912.5	926.4	939.4	945.1	954.7	953.8	946.1	936.0	932.7
5°	974.9	976.8	992.6	1023.3	1057.4	1071.8	1078.0	1075.6	1061.7	1044.0	1012.8
7.5°	1039.2	1042.5	1067.0	1113.1	1155.3	1174.5	1189.8	1186.9	1166.8	1133.7	1087.6
10°	1086.2	1090.0	1119.3	1173.5	1220.5	1237.3	1257.0	1258.0	1240.2	1195.6	1148.6
12.5°	1133.2	1137.1	1164.4	1213.8	1244.5	1245.0	1256.5	1262.8	1263.7	1243.1	1196.1
15°	1182.2	1185.5	1210.5	1238.3	1236.8	1210.0	1210.0	1222.0	1248.4	1263.2	1230.6
17.5°	1223.9	1228.2	1247.4	1238.3	1195.6	1147.1	1141.4	1156.7	1202.8	1259.9	1256.5
20°	1258.4	1261.8	1272.3	1211.9	1134.2	1070.8	1059.8	1077.6	1139.9	1239.2	1276.2
22.5°	1291.5	1293.5	1287.7	1177.4	1068.0	995.5	982.1	1000.8	1068.0	1202.8	1293.0
25°	1330.9	1329.0	1301.6	1141.4	1007.5	936.0	922.1	943.2	1013.3	1154.3	1311.2
27.5°	1376.5	1369.3	1313.6	1102.5	961.0	891.9	882.3	904.8	970.1	1109.7	1325.6
30°	1415.3	1401.4	1315.5	1068.0	937.0	873.2	867.4	888.5	949.0	1079.5	1343.8
32.5°	1458.5	1439.3	1326.6	1058.9	950.4	918.3	926.0	927.4	954.7	1070.8	1371.2
35°	1520.4	1495.4	1356.8	1085.2	1088.6	1142.8	1170.6	1133.2	1041.6	1090.0	1423.0
37.5°	1613.9	1582.3	1418.2	1199.4	1374.1	1495.4	1562.6	1477.2	1305.5	1162.5	1501.2
40°	1727.7	1687.3	1496.9	1410.5	1640.8	1835.1	1954.6	1829.4	1577.0	1343.4	1611.1
42.5°	1886.5	1844.2	1649.4	1617.8	1887.9	2177.2	2333.1	2146.5	1816.4	1577.0	1787.1
45°	2163.3	2122.5	1929.2	1825.5	2177.2	2598.4	2817.2	2557.7	2059.7	1811.6	2116.3
47.5°	2674.7	2626.7	2344.6	2055.8	2507.3	3145.4	3451.5	3073.4	2312.5	2080.3	2669.0
50°	3288.8	3242.8	2866.1	2328.3	2871.9	3730.2	4155.8	3679.4	2603.7	2407.0	3329.6
52.5°	4027.7	4019.0	3610.3	2672.8	3251.4	4353.9	4937.3	4350.6	2922.8	2847.0	4078.0
55°	4693.6	4778.0	4555.4	3198.1	3741.7	5137.4	5740.9	5082.7	3355.5	3574.3	4954.6
57.5°	5052.5	5279.4	5621.5	4269.9	4454.7	6073.9	6732.6	5976.5	4099.2	4785.2	5767.3
60°	4815.4	5072.6	5692.5	5076.9	5161.8	6824.2	7551.1	6727.8	4829.4	5625.8	5721.3
62.5°	4421.1	4651.8	5203.1	4605.8	5271.2	6989.3	7570.3	6858.8	5119.6	5199.3	5168.1
65°	3953.3	4186.0	4769.9	4020.5	4923.4	6597.3	7011.8	6473.5	4598.1	4697.4	4708.9
67.5°	3332.0	3546.9	4141.4	3574.8	4487.8	6022.1	6154.5	5924.7	4234.4	4392.8	4227.2
70°	2489.5	2683.4	3208.2	2905.0	3783.0	5272.7	5165.7	5199.7	3826.2	3983.5	3531.1
72.5°	1701.3	1847.1	2297.1	2282.7	2896.8	4221.0	4071.8	4394.7	3195.7	3404.4	2692.0
75°	1189.8	1303.5	1660.5	1803.5	2189.7	3128.6	2899.7	3289.3	2495.8	2793.7	1964.2
77.5°	730.2	805.5	1048.8	1336.2	1408.6	2141.2	1801.1	2475.1	1752.6	2037.6	1310.3
80°	365.1	401.6	509.5	840.1	934.1	1261.8	994.6	1436.9	1186.0	1261.8	724.9
82.5°	110.3	121.9	149.2	319.0	484.1	726.4	587.7	834.8	647.7	591.6	285.5
85°	29.3	33.1	41.3	94.5	169.8	260.5	198.6	404.4	310.4	218.3	107.5
87.5°	2.4	2.4	1.9	1.9	1.0	0.0	0.0	28.8	58.1	33.1	18.7
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°	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0
2.5°	915.9	914.0	894.3	879.9	863.1	846.8	830.0	815.1	798.3	781.5	776.7
5°	989.8	976.3	934.6	899.6	865.0	834.8	808.4	781.1	759.0	737.4	729.2
7.5°	1055.0	1031.5	971.1	917.8	869.8	832.4	793.5	753.7	722.5	691.8	684.2
10°	1114.0	1082.8	1006.6	939.4	886.1	843.4	797.9	744.6	699.5	662.1	652.0
12.5°	1157.7	1123.6	1037.3	960.0	899.6	851.6	806.5	759.5	712.0	663.5	652.5
15°	1192.2	1156.7	1062.7	975.9	900.0	838.2	794.5	778.2	763.3	715.8	695.7
17.5°	1220.1	1182.6	1084.8	985.4	887.1	797.4	759.5	783.5	821.4	791.6	753.7
20°	1245.5	1207.6	1101.6	992.2	858.3	741.2	720.1	771.0	828.1	827.1	793.1
22.5°	1273.3	1236.4	1126.0	996.0	818.0	684.2	696.6	752.8	799.3	813.2	792.1
25°	1308.8	1276.2	1160.1	1004.6	772.4	644.8	679.4	729.2	768.1	771.5	759.0
27.5°	1350.1	1325.6	1210.9	1024.8	728.3	624.7	659.2	696.1	731.6	733.1	718.2
30°	1395.2	1378.9	1258.0	1041.6	695.2	618.4	633.3	663.0	685.6	689.4	676.5
32.5°	1452.7	1438.3	1299.7	1030.5	675.5	617.0	609.3	624.7	643.4	643.4	633.3
35°	1531.9	1511.8	1343.8	988.3	651.5	611.2	583.9	588.2	596.4	597.8	592.0
37.5°	1644.2	1611.1	1388.5	904.8	612.2	590.6	554.6	549.3	552.2	556.1	554.6
40°	1783.3	1729.1	1453.7	804.6	565.2	550.8	524.4	514.3	511.9	519.6	522.5
42.5°	1958.4	1875.4	1523.7	711.0	522.5	505.2	488.9	480.2	476.4	489.4	497.0
45°	2238.1	2101.4	1590.9	618.4	498.5	466.3	455.3	449.1	451.0	466.3	475.9
47.5°	2721.3	2446.3	1654.7	559.9	496.6	438.5	425.1	426.5	431.8	448.1	459.6
50°	3332.5	2908.4	1697.4	535.4	502.3	421.7	404.0	411.6	419.8	435.6	449.1
52.5°	3954.7	3338.7	1646.6	522.0	501.8	422.2	384.3	407.3	411.2	427.0	441.4
55°	4382.7	3386.7	1422.5	501.4	494.2	441.4	368.9	405.4	407.8	422.2	435.2
57.5°	4545.8	3222.6	1084.8	507.1	471.1	456.3	362.2	392.0	409.2	421.7	435.2
60°	4348.6	2913.2	659.2	522.0	434.2	455.3	366.5	367.5	397.2	418.4	431.8
62.5°	3976.8	2515.9	463.0	479.8	407.3	429.9	376.6	338.7	376.1	401.6	413.6
65°	3550.8	2048.6	353.1	413.1	394.4	390.5	380.0	313.3	347.4	372.3	382.9
67.5°	3107.0	1592.4	286.9	308.0	356.5	353.1	347.4	290.7	313.3	331.0	343.0
70°	2548.1	1114.0	242.3	231.2	305.6	316.6	303.7	262.4	269.6	287.9	297.5
72.5°	1863.9	694.2	199.1	190.9	245.6	276.8	270.1	231.2	234.6	251.9	259.6
75°	1340.5	397.2	159.8	157.4	187.6	237.0	223.6	199.1	202.9	215.9	221.2
77.5°	852.1	221.2	123.3	126.7	134.3	177.0	190.9	170.3	170.3	178.0	182.3
80°	456.3	126.7	90.2	91.6	94.0	135.3	150.6	131.9	131.9	126.7	131.9
82.5°	186.2	72.9	61.9	57.6	62.8	92.6	105.5	84.0	87.8	79.2	81.1
85°	61.4	36.5	30.7	30.2	29.7	40.8	50.9	41.7	49.9	31.7	33.1
87.5°	8.2	6.7	3.8	2.9	3.4	1.4	2.9	3.4	3.4	2.4	2.4
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°	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0
2.5°	773.4	769.6	755.6	759.0	756.6	752.8	756.6	749.4	755.2	757.1	769.1
5°	723.0	713.9	700.5	693.7	692.3	688.5	688.9	685.6	686.6	694.7	708.1
7.5°	677.9	669.3	658.7	653.9	649.6	645.3	644.8	644.3	648.2	655.4	668.3
10°	645.3	640.5	636.2	638.1	636.2	634.3	630.9	630.9	637.1	650.1	665.9
12.5°	645.3	644.3	645.3	651.0	650.6	651.0	646.7	649.1	666.4	688.5	711.0
15°	679.8	672.2	672.2	675.0	674.1	674.1	674.1	684.2	723.5	757.6	781.5
17.5°	722.1	699.5	689.9	688.5	688.0	688.0	689.9	711.5	772.9	808.9	822.8
20°	751.3	708.6	692.8	686.6	687.0	688.0	693.7	723.5	791.1	809.4	806.0
22.5°	756.6	701.4	682.2	673.1	674.6	675.5	684.2	715.8	766.2	769.1	762.4
25°	732.1	681.3	660.6	653.4	655.4	654.9	662.6	685.6	721.6	720.6	716.8
27.5°	695.7	649.1	633.8	629.0	632.3	628.5	630.9	648.6	676.5	675.5	674.1
30°	658.2	617.9	604.0	601.6	605.9	600.2	600.7	615.5	634.7	633.8	633.3
32.5°	620.8	586.8	574.3	574.3	578.6	572.4	573.3	586.3	599.2	595.4	595.4
35°	585.3	561.3	551.3	549.3	552.7	548.4	550.3	562.3	567.1	561.8	558.5
37.5°	554.1	543.6	533.5	526.8	527.3	527.7	533.5	542.6	539.7	532.1	527.7
40°	525.3	525.3	515.8	503.3	501.8	505.2	514.8	524.9	516.7	508.1	502.8
42.5°	504.7	509.0	499.9	487.4	484.6	490.3	500.9	508.1	498.5	488.9	481.7
45°	485.5	496.1	489.8	475.9	472.1	478.8	492.2	495.1	482.2	473.1	467.8
47.5°	472.1	486.5	482.2	468.7	463.0	472.6	486.5	486.0	469.7	460.1	455.8
50°	462.5	480.7	480.2	468.7	462.5	474.5	487.0	480.7	463.0	452.9	448.6
52.5°	454.8	480.2	483.6	476.9	472.6	483.1	490.8	478.8	458.2	447.6	444.3
55°	451.5	482.2	484.6	478.3	474.5	484.1	490.8	482.6	458.2	448.6	445.7
57.5°	452.4	479.8	480.2	471.6	464.9	476.9	487.4	485.0	463.5	452.4	449.1
60°	446.7	466.8	467.8	454.3	446.7	461.1	479.8	478.3	461.1	449.5	443.3
62.5°	427.5	445.2	445.7	433.2	422.2	442.8	463.5	463.0	447.1	435.6	428.4
65°	395.3	414.0	418.8	406.8	398.2	420.3	441.9	440.9	425.1	414.5	407.3
67.5°	355.5	375.7	384.8	376.6	373.3	393.4	413.6	413.1	400.1	390.1	383.8
70°	307.1	323.8	339.2	339.2	336.8	359.8	381.4	379.5	367.5	359.8	355.0
72.5°	266.8	279.7	284.5	289.3	296.5	320.5	338.7	340.2	331.5	327.7	331.5
75°	226.9	235.1	239.4	235.6	248.0	273.0	297.0	299.4	290.3	284.0	285.5
77.5°	186.6	195.7	200.1	191.4	190.5	222.1	251.4	256.7	249.0	239.4	242.3
80°	134.8	146.8	154.0	148.2	146.3	160.2	200.5	206.3	199.1	191.4	195.7
82.5°	82.5	89.2	91.2	96.9	108.9	114.7	129.1	148.2	143.0	136.3	148.2
85°	32.6	38.9	43.2	48.9	57.1	67.6	79.6	95.0	86.4	83.5	98.4
87.5°	1.9	0.5	0.0	1.0	8.2	15.8	34.1	47.0	39.3	42.2	50.9
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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 CATALOG NUMBER: GWS-SA1F-830-U-SLR-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0	841.0
2.5°	778.7	791.1	807.9	821.8	839.6	856.4	873.7	890.9	900.0	903.9
5°	723.5	746.5	773.4	803.1	837.7	874.1	911.1	949.0	973.0	974.9
7.5°	690.4	723.5	760.4	797.9	840.6	890.9	949.5	1008.0	1032.5	1039.2
10°	700.9	737.9	767.2	802.2	849.2	912.0	981.1	1049.7	1078.0	1086.2
12.5°	743.2	750.4	759.5	791.6	849.2	930.3	1013.8	1095.3	1125.5	1133.2
15°	778.2	743.6	727.3	761.4	837.7	946.1	1048.3	1138.5	1175.0	1182.2
17.5°	781.1	721.6	686.1	716.8	817.5	957.1	1081.4	1186.5	1217.2	1223.9
20°	751.8	698.1	652.0	670.7	790.2	961.9	1105.4	1221.5	1251.7	1258.4
22.5°	718.7	678.9	629.0	628.0	757.1	967.2	1134.2	1254.6	1287.2	1291.5
25°	687.5	652.5	610.3	596.8	718.7	977.3	1173.0	1304.5	1329.4	1330.9
27.5°	651.0	624.2	595.4	582.4	685.1	996.5	1230.6	1364.0	1378.9	1376.5
30°	617.9	597.8	584.8	581.0	664.0	1010.9	1285.3	1422.5	1423.5	1415.3
32.5°	582.9	575.2	575.2	587.7	646.7	1007.5	1329.9	1479.6	1470.5	1458.5
35°	551.7	553.2	563.2	592.5	617.9	973.9	1372.6	1551.1	1537.7	1520.4
37.5°	522.0	533.0	547.4	575.7	580.0	924.0	1422.5	1652.3	1635.5	1613.9
40°	496.6	513.4	530.1	544.1	539.7	853.0	1492.1	1771.3	1752.6	1727.7
42.5°	476.4	492.7	511.4	512.9	514.3	779.1	1566.0	1917.2	1913.8	1886.5
45°	463.5	474.0	491.8	489.4	512.9	697.6	1634.1	2139.8	2183.9	2163.3
47.5°	454.8	463.0	464.9	475.0	525.3	624.7	1721.9	2575.4	2698.2	2674.7
50°	450.0	458.2	436.6	475.9	527.3	577.6	1843.3	3122.3	3320.0	3288.8
52.5°	449.5	447.6	415.0	486.0	516.7	548.9	1906.6	3521.5	3960.0	4027.7
55°	450.5	426.5	404.0	488.9	495.6	538.3	1694.5	3713.4	4550.6	4693.6
57.5°	441.9	403.5	410.2	477.4	455.8	566.6	1252.7	3644.8	4786.7	5052.5
60°	425.6	381.4	421.7	446.2	415.0	518.2	862.6	3338.7	4542.0	4815.4
62.5°	402.0	366.1	420.3	405.9	400.1	424.1	593.0	2910.3	4153.8	4421.1
65°	375.7	353.6	397.7	367.0	370.4	326.2	419.3	2426.7	3690.4	3953.3
67.5°	347.4	345.9	364.6	326.7	312.8	258.6	305.6	1945.0	3095.0	3332.0
70°	315.2	325.8	331.5	290.3	253.8	202.9	226.9	1360.1	2283.2	2489.5
72.5°	283.1	284.0	292.2	252.4	190.0	162.6	170.3	823.8	1551.1	1701.3
75°	250.4	241.3	249.0	205.3	141.5	133.4	131.5	509.0	1071.3	1189.8
77.5°	215.4	205.3	195.3	154.5	113.7	103.2	100.8	285.5	657.3	730.2
80°	175.1	161.7	145.8	113.2	83.0	73.9	73.4	139.1	327.7	365.1
82.5°	136.3	110.8	106.5	70.5	51.3	45.1	48.0	53.3	98.8	110.3
85°	95.5	80.6	56.6	28.3	23.0	18.7	18.2	15.8	26.4	29.3
87.5°	53.3	35.0	18.2	3.4	3.8	4.3	3.4	2.4	2.4	2.4
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

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

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CIE 1931 Chromaticity Diagram



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



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

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

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

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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

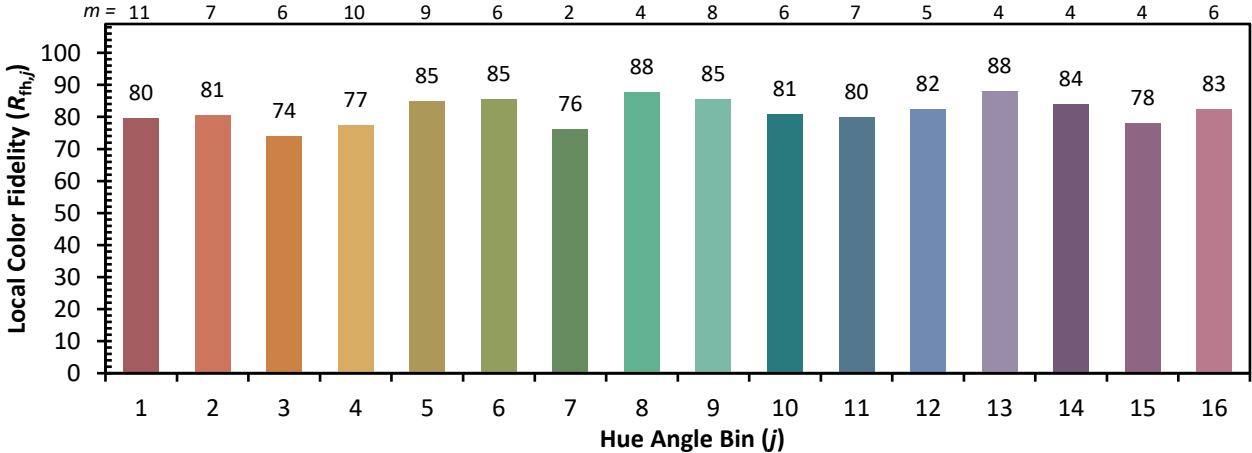


Individual Sample Fidelity Index ($R_{f,i}$)

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)