

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: P630069

Luminaire Tested: GWS-SA1C-830-U-SLR-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P630069
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-SA1C-830-U-SLR-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2987.4 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

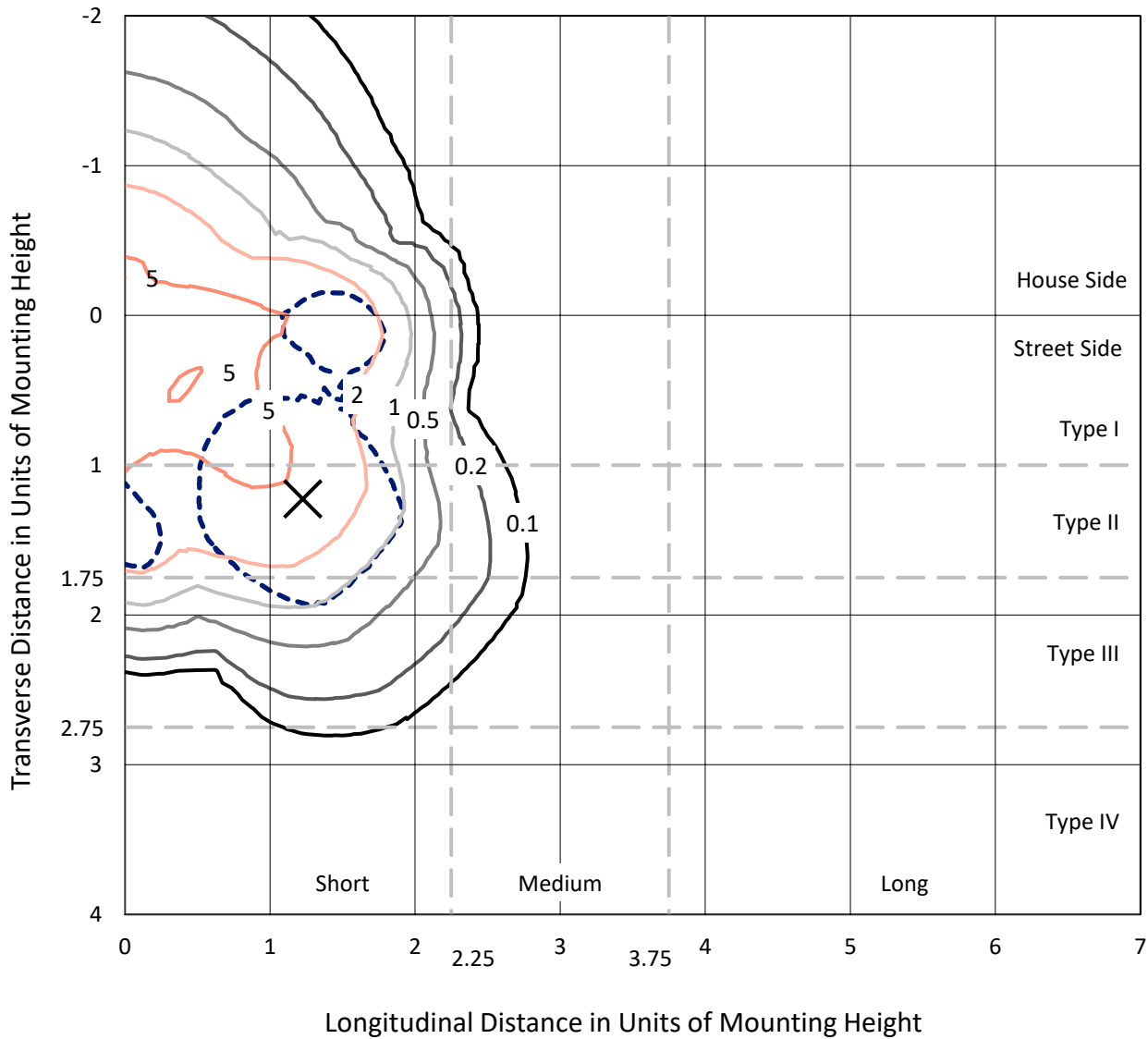
Input Watts (W): 34.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

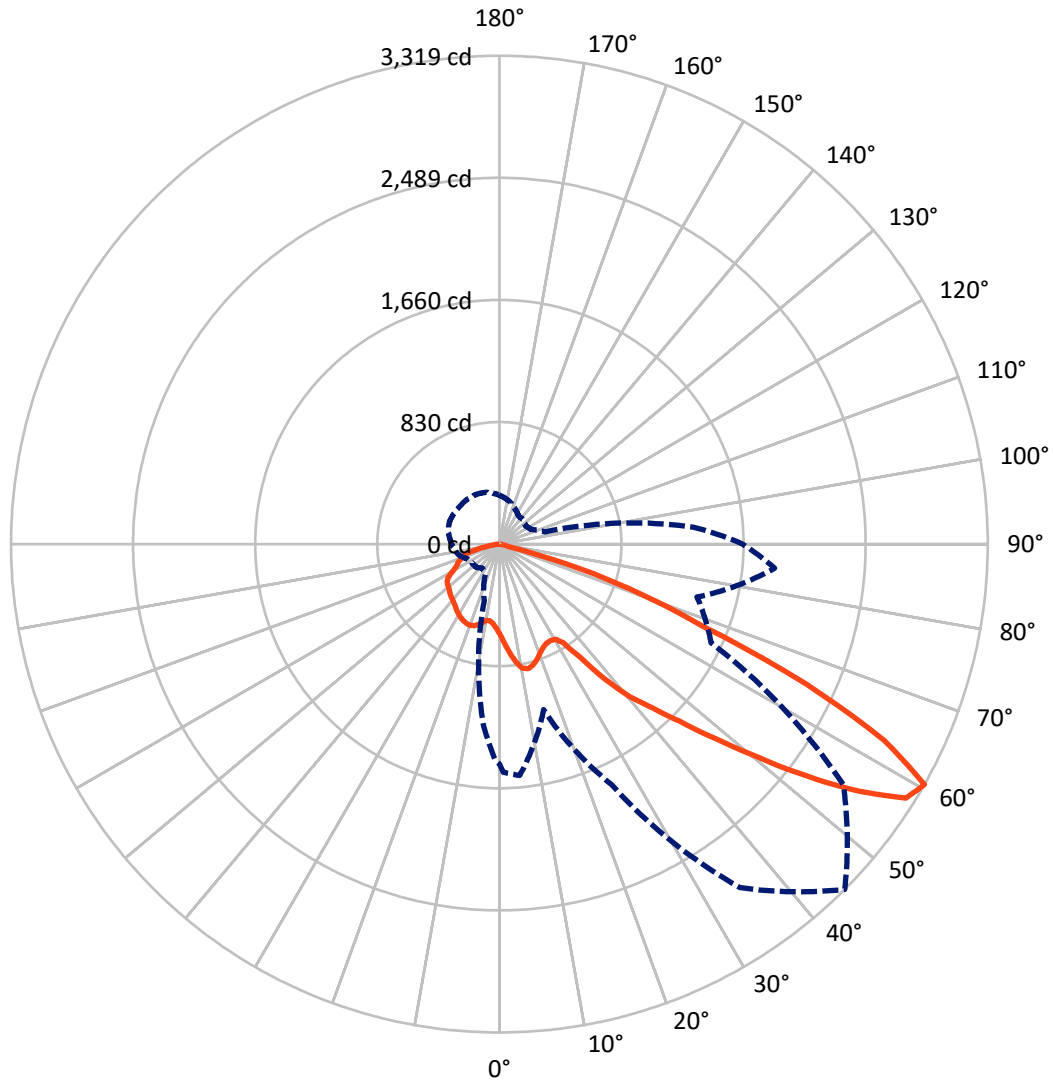
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.2 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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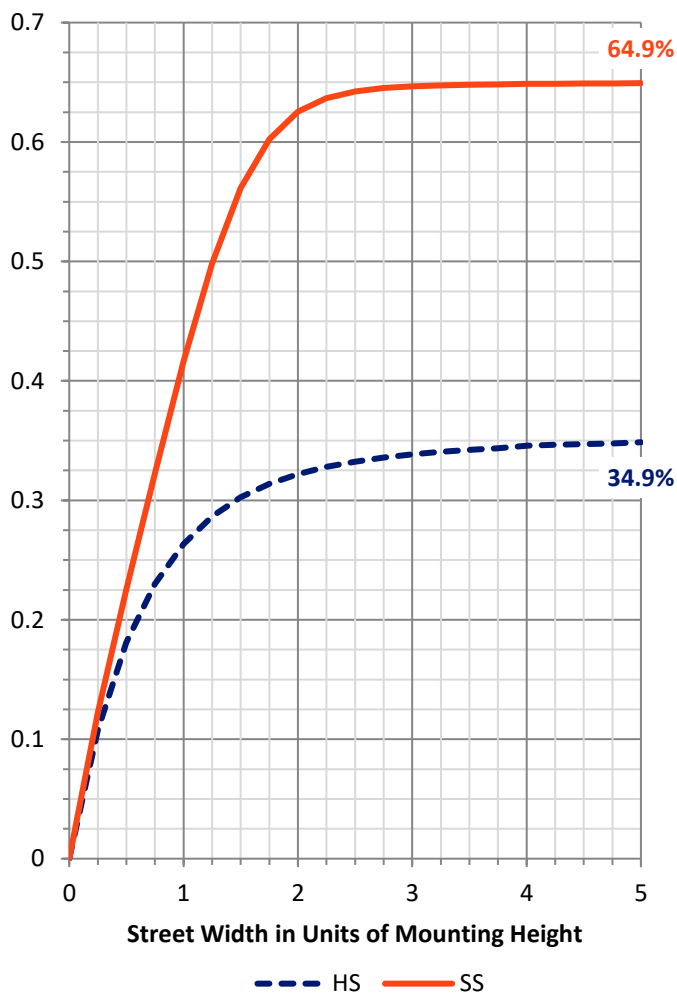
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1047.2	0.0	1047.2
	% Fixture	35.1	0.0	35.1
Street Side	Lumens	1940.2	0.0	1940.2
	% Fixture	64.9	0.0	64.9
Total	Lumens	2987.4	0.0	2987.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.9	2.0
10°-20°	189.2	6.3
20°-30°	307.4	10.3
30°-40°	433.5	14.5
40°-50°	599.0	20.1
50°-60°	771.1	25.8
60°-70°	488.6	16.4
70°-80°	125.4	4.2
80°-90°	13.4	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°	2987.4	100.0
0°-180°	2987.4	100.0

Coefficient of Utilization



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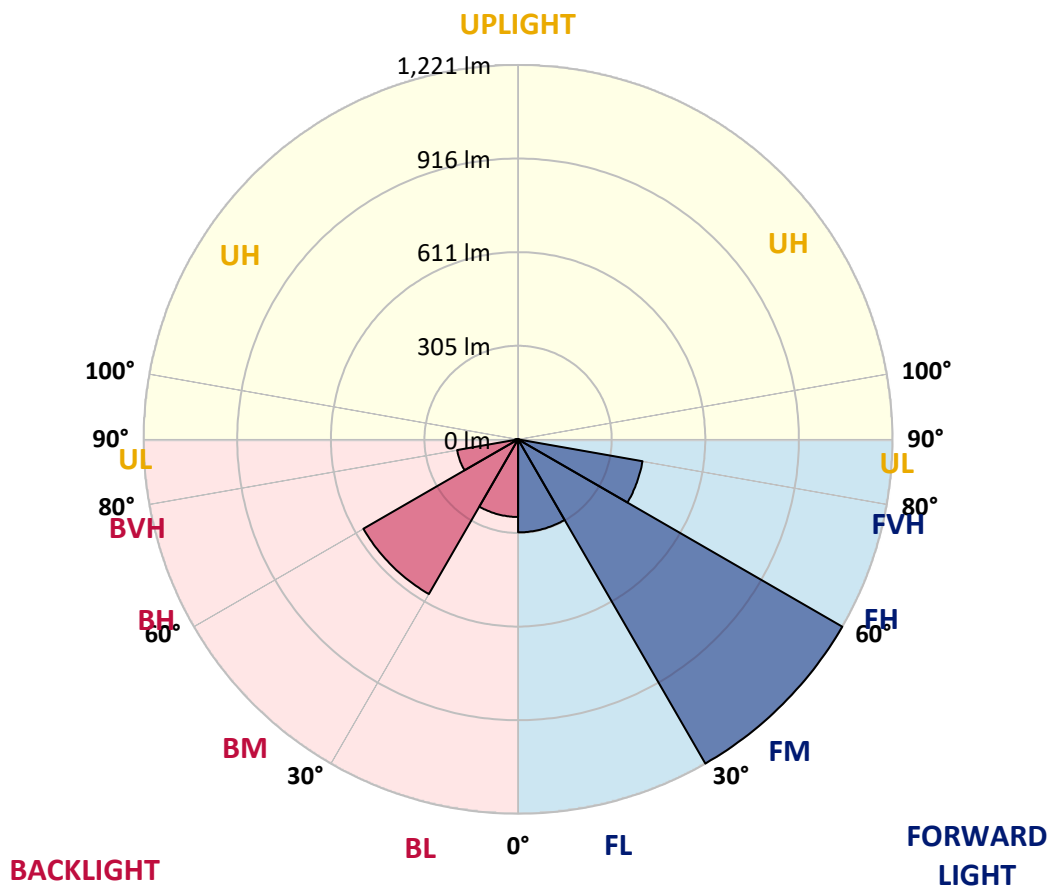
CATALOG NUMBER: GWS-SA1C-830-U-SLR-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	303.3	10.2			
FM (30°-60°)	1221.1	40.9			
FH (60°-80°)	412.2	13.8			G0/660
FVH (80°-90°)	3.6	0.1			G0/10
BL (0°-30°)	253.1	8.5	B1/500		
BM (30°-60°)	582.5	19.5	B1/1000		
BH (60°-80°)	201.8	6.8	B1/500		G1/500
BVH (80°-90°)	9.8	0.3			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7
2.5°	641.9	646.3	649.0	654.2	663.5	668.7	674.5	668.2	669.8	669.0	658.9
5°	679.9	685.1	692.3	707.6	724.8	734.4	743.4	742.1	733.6	719.4	709.2
7.5°	715.5	721.5	733.9	758.8	784.2	799.0	810.0	802.8	795.7	773.3	747.8
10°	743.4	747.0	763.7	797.1	826.7	843.4	856.8	855.1	845.3	820.1	785.9
12.5°	769.7	772.2	790.3	823.6	850.2	857.6	868.5	872.1	868.8	849.9	816.3
15°	797.9	802.6	819.3	844.7	856.8	849.1	852.9	862.8	872.1	872.1	841.2
17.5°	824.2	828.3	845.3	856.2	844.7	824.5	825.6	838.2	860.3	883.6	863.9
20°	847.5	851.3	868.0	857.6	821.2	791.6	790.8	806.1	842.0	891.0	888.2
22.5°	872.9	878.4	892.4	858.7	799.3	761.8	761.5	777.4	825.8	898.4	916.2
25°	909.1	917.5	924.7	868.3	787.5	742.4	745.9	761.0	820.6	910.4	957.5
27.5°	962.7	969.5	969.0	888.2	787.0	734.4	741.8	759.3	829.9	931.8	1001.0
30°	1020.7	1024.3	1018.5	916.2	799.6	739.3	750.3	771.1	853.5	967.1	1065.1
32.5°	1085.1	1089.4	1078.5	958.1	828.9	775.7	799.8	810.0	886.6	1018.0	1133.0
35°	1159.0	1167.5	1144.7	1013.3	915.1	908.5	943.5	930.4	957.0	1078.2	1205.5
37.5°	1236.7	1237.0	1204.4	1095.2	1084.2	1095.5	1165.5	1124.5	1106.1	1145.3	1279.4
40°	1302.7	1301.0	1250.9	1205.5	1231.5	1276.1	1360.7	1297.7	1249.6	1235.3	1340.7
42.5°	1368.6	1362.6	1312.0	1275.6	1333.1	1424.8	1520.3	1443.1	1341.5	1317.2	1401.2
45°	1453.0	1451.0	1390.0	1303.5	1424.8	1591.2	1717.9	1592.8	1396.0	1364.8	1501.9
47.5°	1589.0	1579.7	1466.1	1301.3	1510.7	1812.9	1973.0	1781.4	1434.1	1365.9	1664.5
50°	1722.0	1710.5	1557.0	1301.0	1599.4	2042.8	2274.1	2010.5	1472.9	1372.5	1829.9
52.5°	1856.4	1856.4	1706.2	1332.0	1692.5	2299.6	2622.0	2296.0	1539.2	1458.4	2033.3
55°	1936.4	1957.7	1873.9	1384.2	1801.4	2601.8	2966.1	2604.3	1641.6	1613.6	2221.0
57.5°	1834.8	1874.8	1862.7	1347.8	1865.7	2823.8	3257.9	2838.0	1692.2	1632.0	2192.8
60°	1495.1	1550.7	1578.3	1163.9	1802.2	2849.5	3319.0	2853.3	1587.6	1389.7	1878.3
62.5°	993.9	1039.6	1081.8	831.6	1560.3	2563.5	2935.5	2564.3	1325.9	1037.2	1301.3
65°	487.5	521.5	566.9	491.6	1218.9	2141.9	2288.6	2072.1	959.1	580.6	663.8
67.5°	127.6	137.1	143.4	190.8	873.2	1538.9	1492.6	1515.6	616.2	189.7	173.5
70°	66.2	66.8	66.5	78.8	590.2	978.0	1028.7	951.8	430.0	79.4	68.4
72.5°	47.4	47.6	46.8	53.1	285.0	560.3	580.6	574.3	225.3	47.1	46.8
75°	30.9	31.2	30.7	31.2	43.0	63.8	58.9	61.9	37.5	29.8	29.8
77.5°	18.3	18.6	18.3	18.9	18.3	18.3	17.0	17.0	16.1	16.1	16.4
80°	12.3	12.3	12.0	12.6	11.5	11.5	10.9	10.7	9.9	9.6	9.6
82.5°	7.4	7.7	7.4	7.4	6.8	6.8	6.3	6.0	5.2	5.2	4.9
85°	3.8	3.8	3.6	3.6	3.0	2.7	2.2	2.2	1.6	1.4	1.4
87.5°	0.5	0.5	0.3	0.3	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°	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7
2.5°	656.1	650.7	642.4	634.5	627.1	619.4	610.7	601.7	594.0	586.1	581.9
5°	695.8	684.6	663.2	644.4	627.4	613.4	598.4	585.5	573.5	563.6	558.7
7.5°	731.7	714.2	681.9	652.0	629.0	609.9	589.1	569.9	553.8	541.7	537.1
10°	764.8	744.0	701.6	663.8	637.0	615.6	590.2	564.2	542.8	526.9	523.1
12.5°	791.6	767.8	717.2	673.4	641.6	618.6	596.2	573.7	552.7	532.1	528.8
15°	815.4	787.2	728.9	679.4	640.0	610.7	591.8	589.1	589.1	565.8	559.2
17.5°	836.0	805.0	738.5	682.1	629.6	587.1	575.7	599.5	626.3	609.6	594.8
20°	859.5	822.0	746.5	682.1	610.4	557.3	556.2	596.7	636.4	636.7	621.1
22.5°	883.3	841.7	755.8	679.7	584.1	522.8	543.1	585.8	621.1	636.1	625.5
25°	921.9	869.1	770.5	677.8	553.5	499.3	531.3	571.3	601.1	617.0	610.1
27.5°	970.9	905.2	793.0	680.8	523.1	485.3	518.7	552.4	579.5	593.4	588.5
30°	1025.7	946.8	817.1	686.0	501.2	478.2	503.7	530.8	554.8	568.8	566.6
32.5°	1095.5	992.0	837.9	678.8	488.9	474.6	487.8	507.2	530.5	539.2	541.2
35°	1178.9	1041.8	853.8	650.9	477.7	470.8	470.5	482.6	499.0	513.0	514.3
37.5°	1255.9	1100.1	871.3	603.0	457.4	461.2	450.3	457.4	473.6	487.5	493.0
40°	1332.0	1159.2	895.6	542.0	430.8	439.9	427.0	431.9	444.8	463.1	471.9
42.5°	1405.9	1212.6	921.4	479.6	404.3	410.0	400.5	405.4	418.8	441.8	451.7
45°	1486.3	1284.9	941.4	420.7	381.3	378.8	371.2	378.3	398.5	423.7	435.5
47.5°	1638.5	1398.8	954.5	381.6	369.0	351.2	342.4	357.8	380.8	406.2	420.4
50°	1824.4	1563.5	950.7	356.7	358.3	322.7	319.7	340.0	364.6	391.2	406.8
52.5°	1971.7	1725.3	907.1	332.9	337.5	304.7	295.9	325.5	349.0	376.1	392.3
55°	2084.2	1779.8	773.6	304.7	303.6	291.5	273.2	310.4	333.4	358.6	376.1
57.5°	1992.5	1658.5	573.5	265.8	259.2	265.5	247.7	285.0	314.2	339.1	354.8
60°	1653.6	1322.4	319.4	235.4	216.8	232.1	229.4	258.1	293.4	319.7	333.1
62.5°	1122.6	880.6	189.4	186.1	175.7	197.6	212.1	231.0	265.8	287.1	299.7
65°	559.5	427.8	125.9	139.3	140.7	162.6	190.0	210.8	239.8	261.7	274.3
67.5°	162.3	133.0	95.8	106.5	121.3	138.8	160.7	185.3	213.5	239.5	254.3
70°	70.1	70.9	76.1	88.7	103.2	121.3	143.2	167.2	191.1	211.0	222.3
72.5°	49.5	51.5	57.2	70.1	83.8	101.0	122.9	146.2	163.4	183.7	195.4
75°	31.8	33.1	37.8	47.6	57.8	74.5	95.3	116.6	134.4	148.9	160.1
77.5°	17.5	17.8	21.6	27.4	34.2	44.9	60.2	76.9	90.1	98.3	108.4
80°	10.1	10.1	12.0	15.6	19.7	26.3	34.8	43.0	50.9	56.1	61.0
82.5°	5.5	5.5	6.3	8.5	10.7	14.5	19.4	23.5	28.5	31.2	34.5
85°	1.6	1.6	2.2	3.0	3.8	5.5	7.7	9.9	12.0	14.0	15.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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°	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7
2.5°	581.1	577.3	575.1	572.4	573.2	570.7	569.4	570.2	565.2	570.2	575.1
5°	556.8	551.3	546.9	543.4	541.7	538.4	536.5	536.5	533.5	538.4	544.4
7.5°	535.4	531.0	528.8	526.7	524.2	521.2	517.9	516.8	514.9	520.1	525.3
10°	521.2	521.7	523.1	526.1	525.6	523.6	518.7	516.0	516.0	522.0	529.9
12.5°	527.7	533.5	536.8	542.3	543.4	541.7	536.8	534.6	540.1	549.1	562.2
15°	553.2	557.0	559.8	564.2	563.9	562.5	558.7	560.3	578.4	595.9	607.7
17.5°	580.9	576.5	575.9	578.7	579.5	577.8	575.7	583.0	612.9	629.3	635.3
20°	600.8	585.8	582.5	583.6	585.8	585.0	585.0	597.0	627.9	635.6	627.9
22.5°	606.9	585.5	580.6	580.9	583.9	584.1	585.5	598.1	616.2	616.4	604.7
25°	597.3	576.7	573.2	573.7	577.3	577.0	577.6	584.7	592.6	589.3	580.6
27.5°	579.2	561.4	560.3	563.3	568.0	565.5	563.9	565.8	569.6	565.5	557.9
30°	558.7	543.6	544.2	549.9	554.8	550.7	546.6	547.7	548.0	543.6	534.9
32.5°	537.1	525.8	527.7	533.8	539.5	535.1	530.8	530.2	525.0	519.8	511.3
35°	515.4	511.1	513.5	518.4	523.4	519.8	517.1	515.4	504.2	496.5	489.4
37.5°	495.7	499.0	503.4	506.4	508.0	507.8	506.1	502.3	487.5	478.5	469.2
40°	478.2	488.3	493.0	494.4	496.8	496.3	496.0	490.5	471.1	461.5	450.8
42.5°	462.3	476.6	484.5	485.9	487.2	487.5	486.7	478.8	456.6	445.4	435.2
45°	447.0	465.6	475.7	474.4	476.3	476.3	477.1	466.7	442.3	430.8	420.2
47.5°	433.6	455.5	464.8	463.1	464.2	465.1	465.9	453.8	426.7	415.8	404.8
50°	421.3	444.5	452.5	453.0	453.0	454.9	454.7	442.9	413.6	401.8	390.9
52.5°	408.1	433.3	441.8	445.4	446.5	447.3	443.4	429.8	400.2	386.0	375.8
55°	392.8	421.8	429.5	434.1	436.3	435.8	430.6	416.6	386.5	372.3	360.8
57.5°	369.5	397.2	408.1	410.3	413.9	411.7	405.7	393.9	364.6	350.4	338.6
60°	344.1	364.1	372.8	374.7	372.0	372.8	372.0	360.8	335.3	324.1	312.1
62.5°	310.7	328.5	337.8	340.2	335.6	338.6	337.5	323.5	298.1	286.3	275.6
65°	285.5	304.9	315.9	317.3	315.9	317.3	313.4	296.4	272.4	260.3	249.4
67.5°	265.8	285.8	297.3	301.1	299.7	299.5	293.4	273.7	248.8	235.7	221.7
70°	231.8	249.4	264.1	273.5	273.5	268.3	256.8	238.4	218.4	207.2	196.3
72.5°	205.3	227.5	242.0	251.6	253.5	250.5	234.3	214.9	191.9	180.7	169.2
75°	169.2	190.8	206.4	219.0	221.4	218.2	199.5	180.4	159.0	148.1	136.6
77.5°	113.0	125.9	138.5	150.0	147.5	149.7	137.1	122.6	109.5	101.3	96.1
80°	63.8	72.3	76.1	82.4	82.4	82.4	74.2	67.3	59.9	55.3	50.1
82.5°	36.1	41.6	43.2	48.4	49.8	50.1	44.6	40.2	35.6	33.1	29.6
85°	16.7	19.7	20.0	23.0	24.1	26.3	23.8	20.8	18.1	17.0	14.8
87.5°	0.5	1.6	2.2	4.1	5.5	6.3	6.8	6.8	5.7	5.2	4.4
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7	613.7
2.5°	581.1	587.7	595.4	600.8	610.7	618.9	627.4	636.7	643.5	641.9
5°	551.8	562.8	576.7	589.6	608.0	626.6	647.1	668.2	680.5	679.9
7.5°	535.4	551.0	568.0	585.2	606.9	633.7	665.2	698.0	714.7	715.5
10°	544.2	560.9	572.4	586.9	609.6	643.3	681.0	720.5	739.6	743.4
12.5°	571.8	570.5	569.6	580.0	607.4	650.1	696.4	743.4	765.1	769.7
15°	598.1	569.9	552.9	560.0	597.5	654.5	711.4	768.6	793.0	797.9
17.5°	603.0	560.3	528.8	533.8	581.9	655.9	725.9	793.3	819.5	824.2
20°	589.3	548.0	511.3	504.5	562.2	652.3	735.0	813.8	842.5	847.5
22.5°	572.1	537.1	498.2	480.4	538.2	648.7	745.1	835.4	868.5	872.9
25°	554.0	523.1	485.9	458.8	510.8	646.5	762.1	863.9	903.9	909.1
27.5°	534.9	506.1	475.2	448.4	485.6	649.3	786.1	909.9	955.3	962.7
30°	514.3	489.2	468.3	444.8	468.3	651.7	812.7	957.0	1010.3	1020.7
32.5°	493.0	473.6	461.2	446.5	457.7	646.0	836.0	1009.8	1076.0	1085.1
35°	471.6	457.7	452.2	449.5	443.4	624.9	854.9	1063.2	1151.0	1159.0
37.5°	451.7	441.3	439.6	442.6	421.5	590.4	876.8	1131.0	1224.7	1236.7
40°	433.0	423.5	423.2	422.6	397.5	543.4	906.3	1200.0	1297.2	1302.7
42.5°	415.8	403.7	405.9	399.4	377.7	492.4	934.2	1258.9	1364.8	1368.6
45°	400.5	384.6	387.1	378.8	368.4	439.1	958.9	1328.4	1450.5	1453.0
47.5°	385.7	368.7	361.9	361.3	366.8	389.8	983.0	1462.3	1584.6	1589.0
50°	372.0	353.7	334.2	346.3	356.7	352.8	1013.1	1605.7	1723.1	1722.0
52.5°	358.9	334.8	307.1	330.4	330.4	325.5	1004.6	1692.7	1837.5	1856.4
55°	343.8	304.4	278.9	303.8	291.8	300.8	854.3	1721.2	1909.5	1936.4
57.5°	314.0	266.9	244.7	258.1	240.1	278.9	613.7	1580.0	1787.2	1834.8
60°	285.2	239.2	224.7	222.3	198.7	227.5	397.7	1237.0	1471.0	1495.1
62.5°	251.6	215.4	203.1	184.2	159.9	165.6	240.9	814.1	988.4	993.9
65°	226.1	195.2	171.6	149.2	130.8	120.2	142.3	392.5	494.1	487.5
67.5°	194.1	167.2	144.8	128.7	113.6	100.2	94.7	116.6	131.9	127.6
70°	172.7	147.0	125.4	110.0	96.1	82.7	73.1	68.7	67.3	66.2
72.5°	148.9	126.5	104.0	89.2	76.1	63.8	55.0	49.8	48.4	47.4
75°	118.8	97.7	77.2	63.2	51.7	43.0	37.2	32.8	32.0	30.9
77.5°	78.6	62.7	46.0	37.5	30.7	26.0	22.2	19.4	18.9	18.3
80°	43.2	36.1	28.2	22.7	18.3	15.9	14.5	12.9	12.6	12.3
82.5°	25.7	21.6	16.1	12.9	10.7	9.6	8.8	7.9	7.7	7.4
85°	12.9	10.1	7.1	6.0	5.5	4.9	4.9	4.1	3.8	3.8
87.5°	3.3	2.7	1.6	1.4	1.4	1.4	1.1	0.8	0.8	0.5
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



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

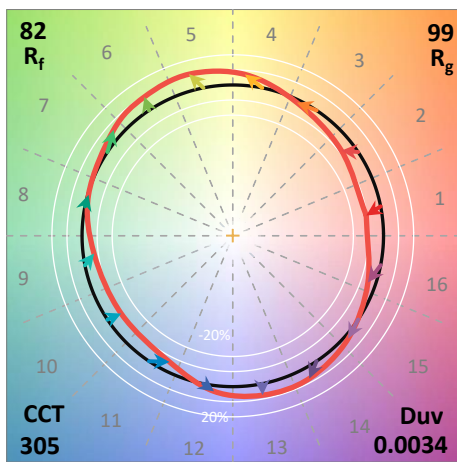
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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