

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: P635513

Luminaire Tested: GWS-SA3D-830-U-SLR-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635513
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-SA3D-830-U-SLR-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7458.1 lumens
Efficiency: N/A
Efficacy: 61.7 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

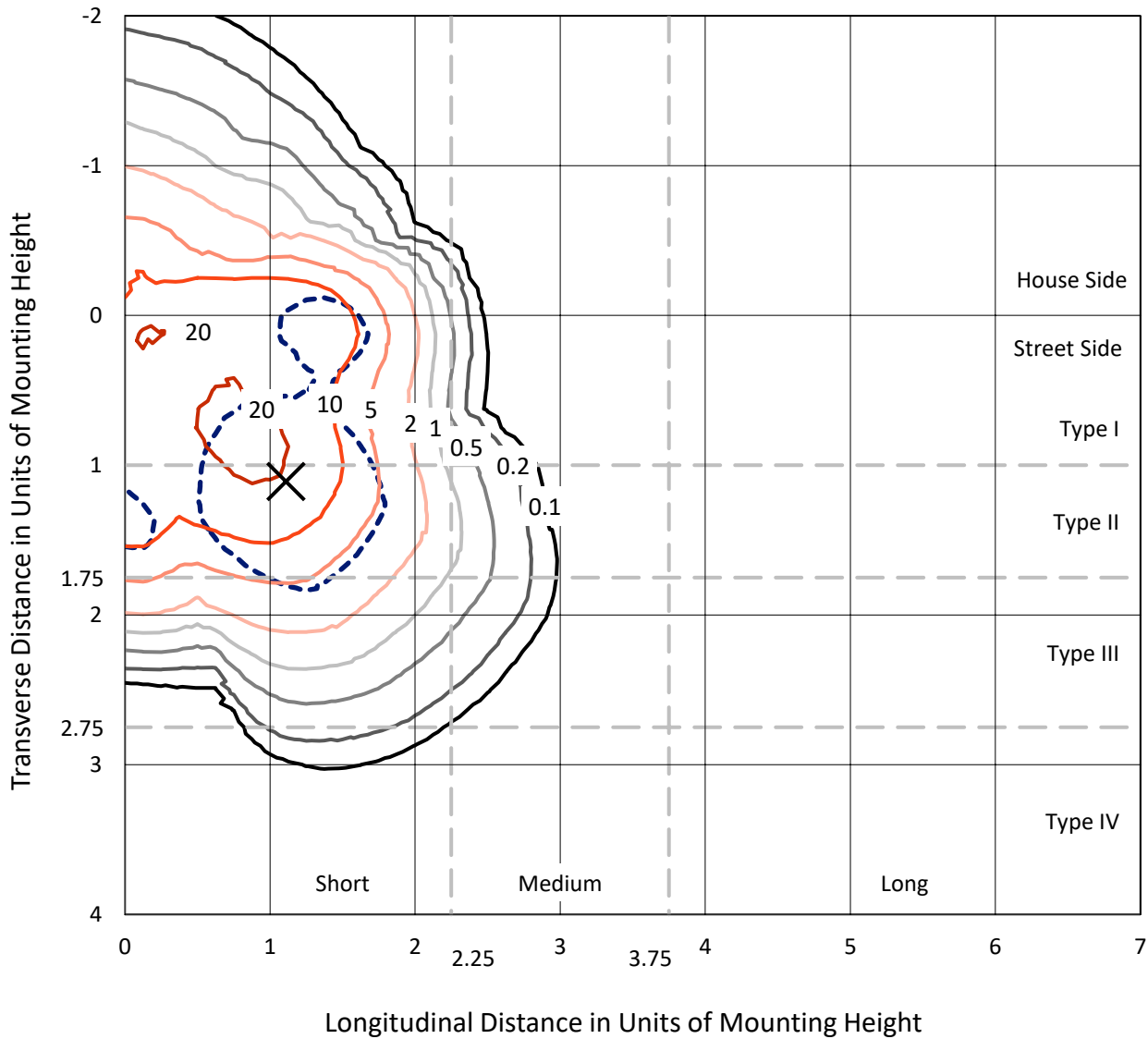
Input Watts (W): 120.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

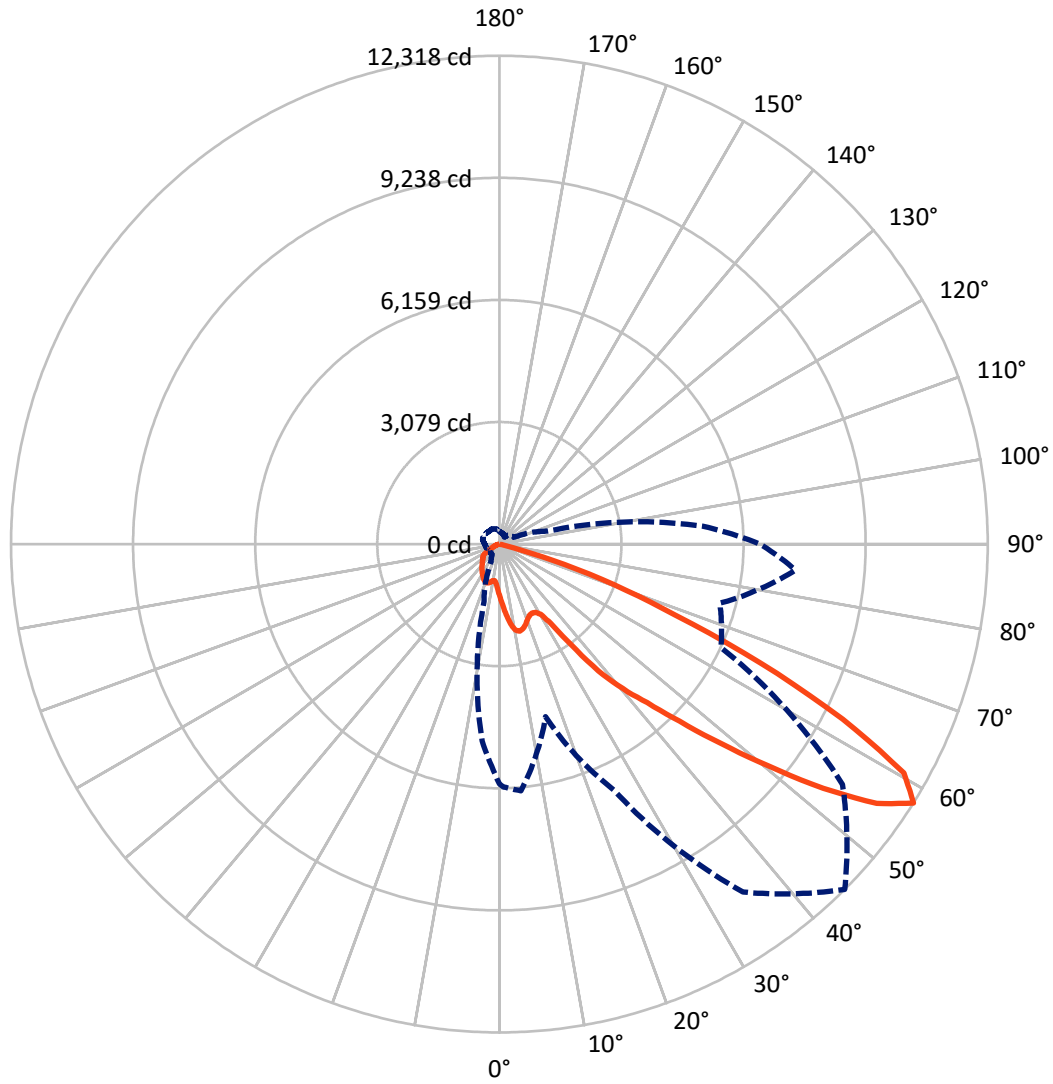
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 23.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1670.1	0.0	1670.1
	% Fixture	22.4	0.0	22.4
Street Side	Lumens	5788.0	0.0	5788.0
	% Fixture	77.6	0.0	77.6
Total	Lumens	7458.1	0.0	7458.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.0	1.7
10°-20°	417.2	5.6
20°-30°	677.7	9.1
30°-40°	1047.1	14.0
40°-50°	1679.0	22.5
50°-60°	2294.8	30.8
60°-70°	1111.4	14.9
70°-80°	101.8	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°	7458.1	100.0
0°-180°	7458.1	100.0

Coefficient of Utilization



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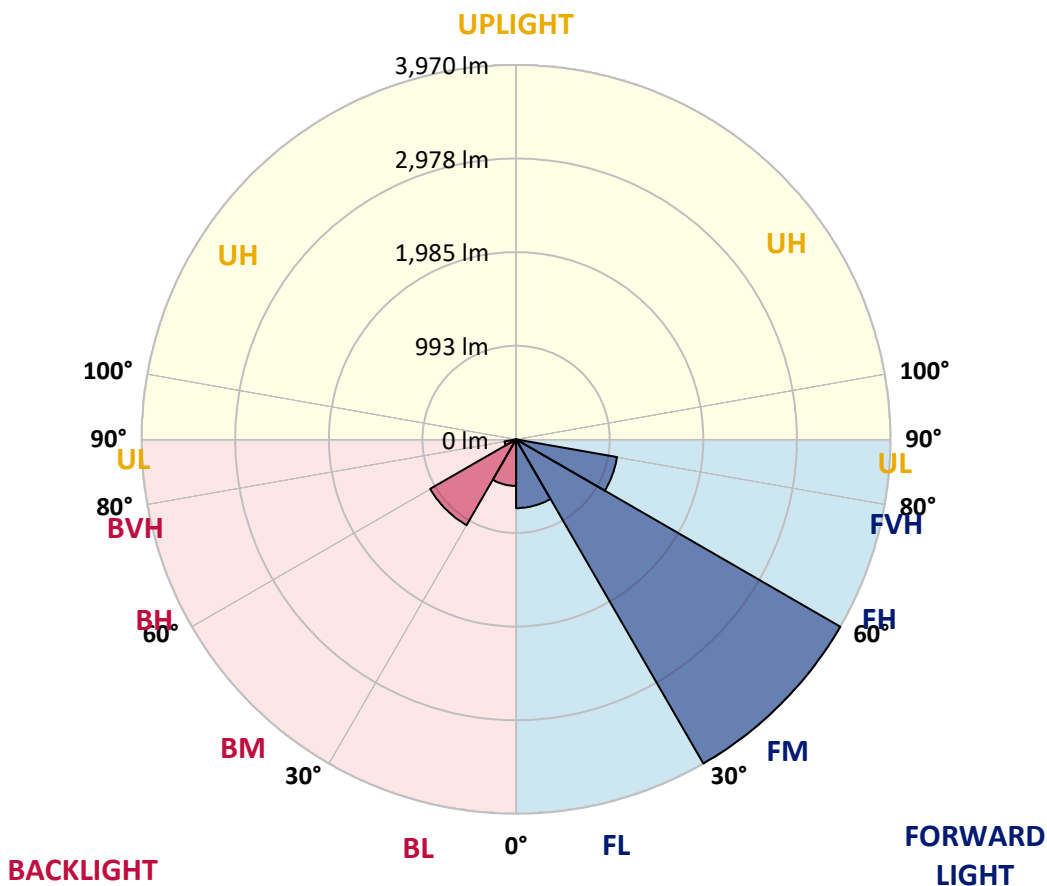
CATALOG NUMBER: GWS-SA3D-830-U-SLR-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	729.6	9.8			
FM (30°-60°)	3970.1	53.2			
FH (60°-80°)	1088.0	14.6			G1/1800
FVH (80°-90°)	0.3	0.0			G0/10
BL (0°-30°)	494.2	6.6	B1/500		
BM (30°-60°)	1050.7	14.1	B2/2500		
BH (60°-80°)	125.2	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





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8
2.5°	1420.1	1429.1	1444.1	1476.2	1503.3	1521.3	1529.3	1527.3	1516.3	1508.3	1492.2
5°	1572.4	1572.4	1601.5	1674.6	1730.8	1765.8	1783.9	1772.8	1750.8	1715.7	1661.6
7.5°	1705.7	1710.7	1759.8	1864.0	1949.2	1999.3	2028.4	2022.4	1983.3	1916.2	1807.9
10°	1809.9	1815.9	1881.1	2008.4	2108.6	2159.7	2202.8	2206.8	2163.7	2074.5	1950.2
12.5°	1911.1	1917.2	1985.3	2107.6	2195.8	2216.8	2254.9	2269.9	2258.9	2195.8	2066.5
15°	2020.4	2034.4	2092.5	2183.7	2220.8	2195.8	2220.8	2247.9	2285.0	2278.9	2162.7
17.5°	2127.6	2137.6	2196.8	2228.8	2187.7	2122.6	2134.6	2166.7	2250.9	2333.1	2257.9
20°	2226.8	2240.9	2290.0	2247.9	2123.6	2022.4	2023.4	2065.5	2193.8	2366.1	2355.1
22.5°	2331.1	2352.1	2387.2	2268.9	2064.5	1943.2	1948.2	1986.3	2148.7	2397.2	2465.3
25°	2467.3	2487.4	2510.4	2321.0	2045.4	1904.1	1923.2	1958.2	2148.7	2450.3	2601.6
27.5°	2651.7	2665.8	2666.8	2418.2	2078.5	1910.1	1950.2	1990.3	2212.8	2556.5	2784.0
30°	2883.2	2905.3	2876.2	2569.6	2181.7	1990.3	2049.4	2099.6	2351.1	2735.9	3052.6
32.5°	3164.9	3195.9	3156.8	2794.1	2397.2	2266.9	2374.1	2403.2	2571.6	2995.5	3357.3
35°	3495.6	3521.6	3479.5	3104.7	2900.3	2924.3	3118.8	3081.7	3014.5	3315.2	3713.0
37.5°	3858.4	3882.4	3801.2	3575.8	3643.9	3748.1	4058.8	3931.5	3715.1	3727.1	4098.9
40°	4191.1	4217.1	4089.9	4087.9	4228.2	4418.6	4793.4	4618.0	4323.4	4266.2	4460.7
42.5°	4535.8	4553.9	4438.6	4360.5	4679.1	5071.0	5467.9	5231.3	4726.2	4664.1	4913.6
45°	5027.9	5066.0	4860.5	4494.7	5085.0	5821.6	6374.8	5912.8	5000.8	4950.7	5607.2
47.5°	5751.5	5779.5	5360.6	4578.9	5462.8	6756.6	7508.3	6796.7	5242.4	5128.1	6555.2
50°	6349.8	6368.8	5820.6	4671.1	5864.7	7764.8	8800.1	7845.0	5514.0	5421.8	7440.1
52.5°	6790.7	6862.9	6424.9	4860.5	6392.9	8950.4	10230.2	9086.7	5937.9	5989.0	8173.7
55°	6881.9	6980.1	6837.8	4976.8	6857.9	10158.0	11551.0	10198.1	6360.8	6418.9	8420.3
57.5°	6048.1	6126.3	6244.5	4507.8	6846.8	10711.2	12317.7	10566.9	6168.4	5756.5	7497.2
60°	4530.8	4584.9	4799.4	3445.5	6296.6	10222.2	11720.4	9939.5	5393.7	4392.5	5712.4
62.5°	2686.8	2710.9	2982.5	2231.8	5226.3	8803.1	9720.1	8576.6	4262.2	2954.4	3498.6
65°	1031.2	1021.2	1228.7	1101.4	3843.3	7012.2	7229.7	6538.2	2924.3	1353.9	1333.9
67.5°	159.3	152.3	205.4	325.7	2772.0	4859.5	4770.3	4712.2	1832.0	315.7	275.6
70°	36.1	36.1	44.1	96.2	1693.7	2855.2	3055.6	2913.3	1172.5	67.1	36.1
72.5°	17.0	17.0	21.0	41.1	613.3	1176.6	1371.0	1349.9	380.8	22.0	13.0
75°	6.0	7.0	7.0	9.0	37.1	61.1	140.3	100.2	24.1	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8
2.5°	1457.2	1450.1	1424.1	1389.0	1354.9	1324.9	1293.8	1256.7	1229.7	1198.6	1188.6
5°	1619.5	1575.4	1504.3	1430.1	1362.0	1303.8	1247.7	1187.6	1143.5	1099.4	1084.4
7.5°	1756.8	1691.7	1576.4	1465.2	1372.0	1289.8	1208.6	1126.4	1062.3	1010.2	994.2
10°	1880.1	1804.9	1650.6	1513.3	1396.0	1300.8	1202.6	1099.4	1016.2	954.1	939.0
12.5°	1986.3	1899.1	1713.7	1549.4	1406.0	1296.8	1201.6	1119.4	1044.3	973.1	954.1
15°	2075.5	1979.3	1766.8	1573.4	1391.0	1246.7	1163.5	1150.5	1144.5	1066.3	1029.2
17.5°	2162.7	2054.5	1809.9	1584.4	1348.9	1158.5	1098.4	1157.5	1220.6	1169.5	1122.4
20°	2253.9	2130.6	1854.0	1586.4	1278.8	1059.3	1049.3	1142.5	1222.6	1206.6	1162.5
22.5°	2361.1	2225.8	1909.1	1585.4	1190.6	975.1	1013.2	1113.4	1178.6	1177.6	1142.5
25°	2516.5	2346.1	1983.3	1591.4	1094.4	910.0	973.1	1064.3	1117.4	1115.4	1086.4
27.5°	2682.8	2489.4	2079.5	1606.5	1012.2	871.9	926.0	997.2	1043.3	1041.3	1016.2
30°	2916.3	2654.8	2171.7	1607.5	953.1	851.8	873.9	923.0	967.1	962.1	943.0
32.5°	3199.9	2841.2	2248.9	1550.4	916.0	832.8	819.8	844.8	878.9	871.9	866.9
35°	3542.7	3062.6	2315.0	1425.1	858.9	794.7	759.6	764.7	788.7	792.7	790.7
37.5°	3933.5	3326.2	2397.2	1259.7	781.7	739.6	692.5	688.5	702.5	715.6	725.6
40°	4319.4	3622.9	2508.4	1092.4	711.5	669.5	624.4	614.3	620.3	643.4	664.4
42.5°	4753.3	3966.6	2628.7	949.1	663.4	592.3	549.2	530.1	547.2	584.3	609.3
45°	5378.7	4448.6	2746.0	834.8	643.4	524.1	466.0	464.0	483.0	531.2	559.2
47.5°	6256.6	5072.0	2823.1	745.6	642.4	471.0	401.9	413.9	435.9	483.0	515.1
50°	7112.4	5852.7	2737.9	677.5	621.3	435.9	353.8	377.8	399.9	441.0	474.0
52.5°	7628.5	6272.6	2406.2	613.3	556.2	419.9	306.7	348.8	352.8	389.8	424.9
55°	7574.4	6001.0	1843.0	514.1	460.0	396.9	257.6	314.7	316.7	344.7	374.8
57.5°	6574.2	5152.2	1265.7	416.9	345.7	327.7	212.5	265.6	284.6	301.7	323.7
60°	4899.6	3759.1	564.2	338.7	219.5	221.5	181.4	200.4	229.5	249.5	268.6
62.5°	2887.3	2162.7	229.5	203.4	121.3	139.3	146.3	146.3	164.4	179.4	191.4
65°	1091.4	756.6	93.2	102.2	63.1	65.1	86.2	106.2	120.3	133.3	149.3
67.5°	191.4	132.3	48.1	38.1	37.1	33.1	44.1	69.1	77.2	87.2	94.2
70°	32.1	27.1	20.0	19.0	17.0	18.0	29.1	49.1	54.1	57.1	60.1
72.5°	9.0	8.0	6.0	5.0	4.0	5.0	18.0	38.1	40.1	42.1	45.1
75°	0.0	0.0	0.0	0.0	0.0	0.0	7.0	27.1	29.1	30.1	33.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	8.0	10.0	8.0
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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8
2.5°	1182.6	1162.5	1151.5	1145.5	1145.5	1137.5	1128.4	1125.4	1138.5	1138.5	1160.5
5°	1065.3	1049.3	1031.2	1020.2	1003.2	1006.2	996.2	995.2	1008.2	1014.2	1037.2
7.5°	984.1	964.1	953.1	946.1	937.0	933.0	924.0	921.0	928.0	938.0	960.1
10°	930.0	927.0	926.0	931.0	931.0	926.0	918.0	913.0	915.0	934.0	959.1
12.5°	944.0	950.1	952.1	960.1	964.1	960.1	954.1	956.1	969.1	1004.2	1041.3
15°	1005.2	1000.2	998.2	1002.2	1005.2	1001.2	999.2	1014.2	1059.3	1109.4	1151.5
17.5°	1070.3	1038.3	1024.2	1024.2	1026.2	1024.2	1026.2	1055.3	1128.4	1178.6	1209.6
20°	1103.4	1044.3	1022.2	1017.2	1021.2	1022.2	1029.2	1062.3	1142.5	1177.6	1184.6
22.5°	1093.4	1019.2	994.2	990.1	994.2	998.2	1005.2	1033.2	1108.4	1126.4	1123.4
25°	1043.3	970.1	950.1	950.1	959.1	958.1	961.1	981.1	1043.3	1054.3	1049.3
27.5°	980.1	911.0	893.9	904.0	912.0	910.0	911.0	928.0	974.1	977.1	972.1
30°	916.0	855.9	839.8	851.8	862.9	860.9	861.9	878.9	908.0	905.0	897.9
32.5°	850.8	806.7	794.7	801.7	818.8	816.8	820.8	838.8	849.8	836.8	828.8
35°	790.7	767.7	758.6	762.7	775.7	778.7	785.7	797.7	797.7	781.7	767.7
37.5°	734.6	731.6	725.6	720.6	732.6	741.6	751.6	765.7	745.6	722.6	709.5
40°	682.5	695.5	687.5	674.5	681.5	694.5	714.5	725.6	701.5	678.5	656.4
42.5°	634.4	656.4	653.4	637.4	643.4	655.4	678.5	687.5	659.4	633.4	612.3
45°	588.3	619.3	621.3	601.3	607.3	619.3	646.4	649.4	613.3	585.3	570.2
47.5°	548.2	582.3	583.3	568.2	570.2	587.3	612.3	613.3	572.2	546.2	527.1
50°	510.1	549.2	552.2	539.2	541.2	561.2	582.3	578.3	534.2	507.1	490.1
52.5°	464.0	517.1	524.1	518.1	526.1	542.2	555.2	541.2	490.1	463.0	448.0
55°	413.9	483.0	498.1	494.1	503.1	516.1	519.1	510.1	446.0	418.9	404.9
57.5°	355.8	397.9	423.9	415.9	422.9	435.9	445.0	437.9	389.8	368.8	356.8
60°	294.6	322.7	328.7	315.7	309.7	332.7	353.8	344.7	303.7	290.6	276.6
62.5°	215.5	247.5	251.5	234.5	227.5	252.5	270.6	261.6	216.5	202.4	191.4
65°	172.4	202.4	210.5	194.4	190.4	209.5	220.5	198.4	166.4	151.3	139.3
67.5°	113.2	137.3	158.3	157.3	149.3	155.3	147.3	129.3	106.2	98.2	90.2
70°	70.2	84.2	97.2	102.2	101.2	99.2	88.2	75.2	68.1	65.1	61.1
72.5°	54.1	68.1	78.2	81.2	82.2	79.2	70.2	58.1	51.1	47.1	44.1
75°	40.1	51.1	59.1	63.1	65.1	63.1	54.1	46.1	39.1	36.1	33.1
77.5°	14.0	17.0	21.0	23.0	22.0	21.0	19.0	19.0	15.0	14.0	12.0
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



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CATALOG NUMBER: GWS-SA3D-830-U-SLR-W-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8	1310.8
2.5°	1185.6	1203.6	1236.7	1266.7	1298.8	1331.9	1368.0	1405.0	1422.1	1420.1
5°	1072.3	1111.4	1165.5	1224.7	1290.8	1362.0	1441.1	1522.3	1557.4	1572.4
7.5°	1001.2	1056.3	1127.4	1202.6	1289.8	1391.0	1510.3	1637.5	1688.7	1705.7
10°	1010.2	1074.3	1133.5	1206.6	1299.8	1431.1	1579.4	1730.8	1790.9	1809.9
12.5°	1083.3	1097.4	1113.4	1173.5	1290.8	1461.2	1642.6	1823.0	1892.1	1911.1
15°	1149.5	1084.4	1054.3	1109.4	1258.7	1482.2	1706.7	1922.2	1998.3	2020.4
17.5°	1152.5	1054.3	987.1	1030.2	1206.6	1491.2	1769.8	2023.4	2106.6	2127.6
20°	1115.4	1021.2	935.0	936.0	1135.5	1489.2	1821.9	2114.6	2207.8	2226.8
22.5°	1061.3	982.1	892.9	861.9	1059.3	1485.2	1879.1	2211.8	2313.0	2331.1
25°	1001.2	932.0	852.8	805.7	983.1	1489.2	1959.2	2339.1	2450.3	2467.3
27.5°	936.0	876.9	821.8	783.7	919.0	1504.3	2055.5	2501.4	2633.7	2651.7
30°	867.9	823.8	801.7	778.7	878.9	1508.3	2159.7	2690.8	2858.2	2883.2
32.5°	800.7	776.7	777.7	781.7	840.8	1480.2	2254.9	2901.3	3124.8	3164.9
35°	738.6	731.6	751.6	771.7	785.7	1408.1	2338.1	3149.8	3454.5	3495.6
37.5°	685.5	691.5	716.6	736.6	725.6	1305.8	2448.3	3460.5	3823.3	3858.4
40°	634.4	649.4	678.5	687.5	679.5	1186.6	2580.6	3760.1	4143.0	4191.1
42.5°	587.3	598.3	639.4	641.4	666.4	1065.3	2707.9	4082.8	4510.8	4535.8
45°	549.2	547.2	589.3	602.3	683.5	931.0	2832.1	4512.8	4991.8	5027.9
47.5°	512.1	510.1	520.1	579.3	690.5	806.7	2955.4	5142.1	5689.3	5751.5
50°	477.0	480.0	449.0	568.2	652.4	711.5	3011.5	5724.4	6323.7	6349.8
52.5°	446.0	434.9	380.8	532.2	571.2	621.3	2852.2	5989.0	6716.6	6790.7
55°	401.9	340.7	313.7	431.9	451.0	542.2	2336.1	5835.6	6750.6	6881.9
57.5°	343.7	267.6	266.6	318.7	318.7	503.1	1496.2	4985.8	5817.6	6048.1
60°	264.6	207.4	220.5	221.5	204.4	366.8	839.8	3611.8	4301.3	4530.8
62.5°	188.4	158.3	166.4	132.3	117.3	183.4	402.9	2079.5	2654.8	2686.8
65°	126.3	107.2	87.2	73.2	72.2	78.2	166.4	751.6	914.0	1031.2
67.5°	83.2	65.1	46.1	46.1	52.1	52.1	63.1	124.3	174.4	159.3
70°	54.1	45.1	29.1	28.1	34.1	34.1	32.1	34.1	36.1	36.1
72.5°	40.1	34.1	17.0	15.0	19.0	20.0	18.0	17.0	17.0	17.0
75°	30.1	24.1	10.0	7.0	9.0	12.0	10.0	7.0	7.0	6.0
77.5°	12.0	9.0	4.0	3.0	5.0	7.0	6.0	3.0	2.0	2.0
80°	1.0	2.0	2.0	2.0	3.0	4.0	5.0	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

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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

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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

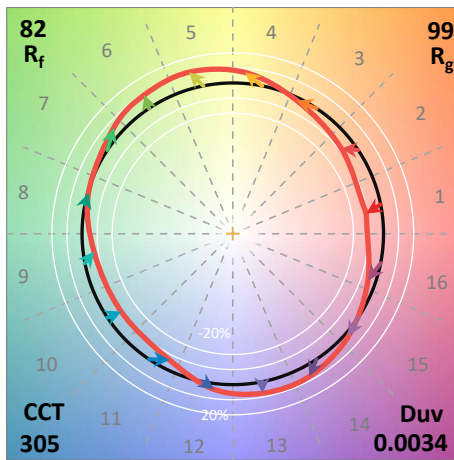
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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