

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: P631060

Luminaire Tested: GWS-SA1E-830-U-SLR-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P631060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-44)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1E-830-U-SLR-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3735.7 lumens
Efficiency: N/A
Efficacy: 64.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

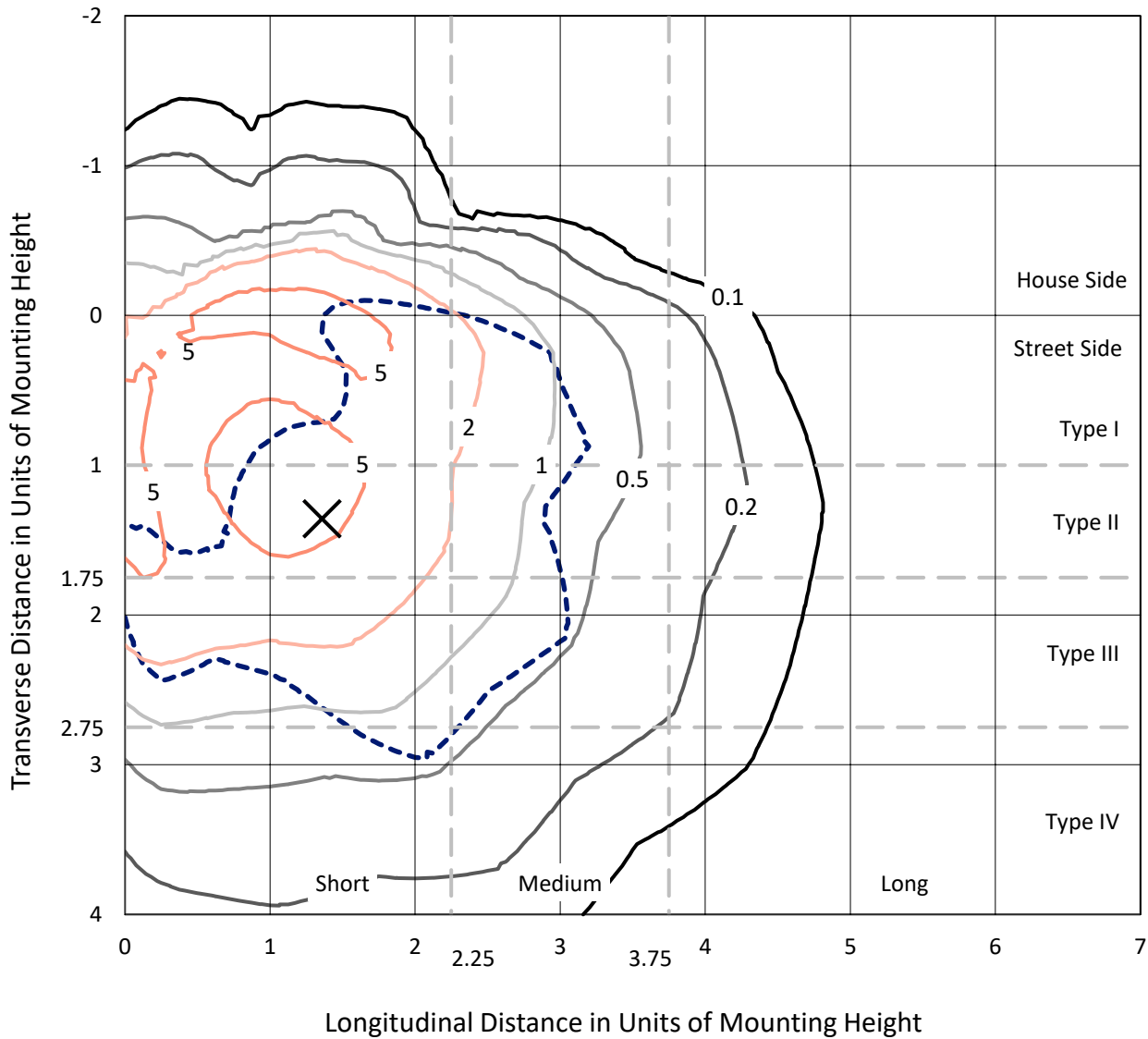
Input Watts (W): 58.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

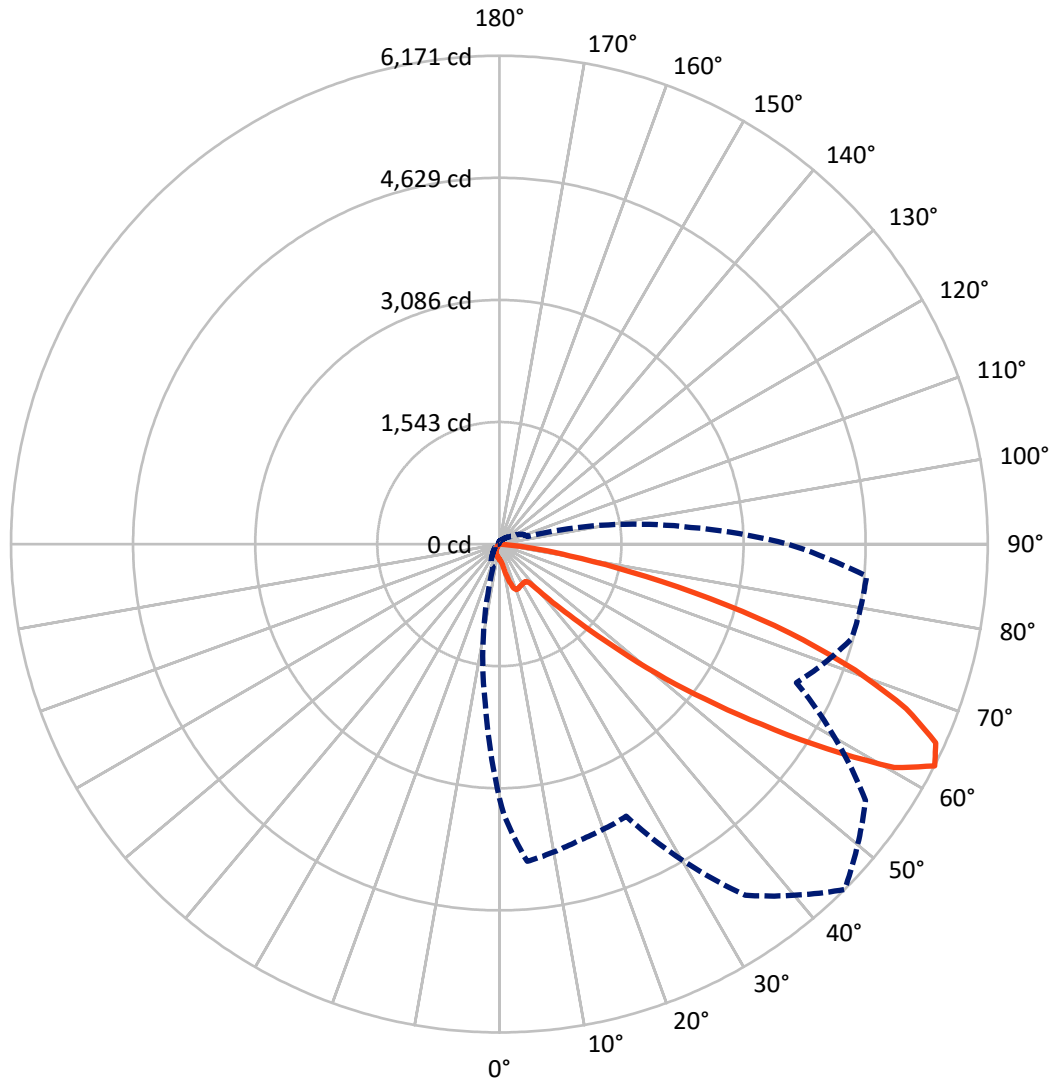
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - 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	461.0	0.0	461.0
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	3274.7	0.0	3274.7
	% Fixture	87.7	0.0	87.7
Total	Lumens	3735.7	0.0	3735.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.2	0.5
10°-20°	65.1	1.7
20°-30°	141.6	3.8
30°-40°	232.4	6.2
40°-50°	427.2	11.4
50°-60°	917.4	24.6
60°-70°	1232.3	33.0
70°-80°	641.6	17.2
80°-90°	60.8	1.6
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°	3735.7	100.0
0°-180°	3735.7	100.0

Coefficient of Utilization

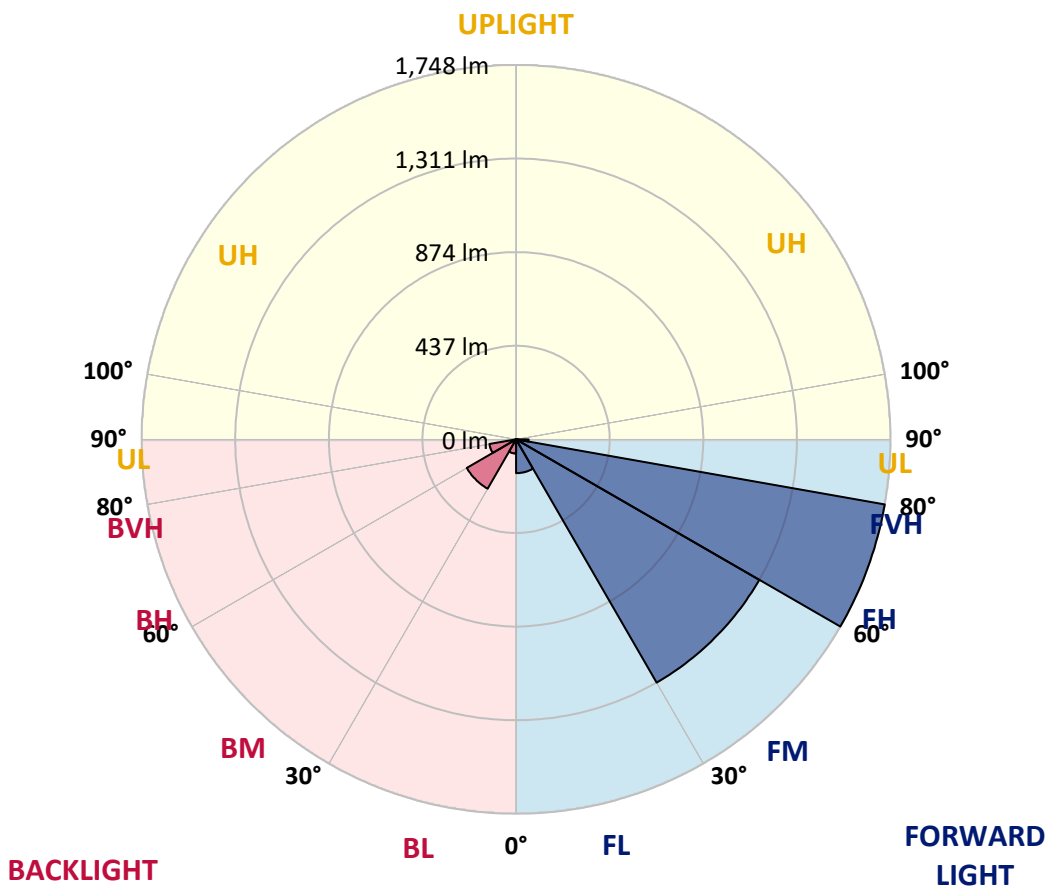


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	157.8	4.2			
FM (30°-60°)	1311.2	35.1			
FH (60°-80°)	1747.6	46.8			G1/1800
FVH (80°-90°)	58.1	1.6			G1/100
BL (0°-30°)	66.1	1.8	B0/110		
BM (30°-60°)	265.8	7.1	B1/1000		
BH (60°-80°)	126.3	3.4	B1/500		G1/500
BVH (80°-90°)	2.7	0.1			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2
2.5°	198.1	198.9	199.8	202.8	205.0	206.7	207.1	205.8	202.8	199.8	195.5
5°	192.0	192.9	195.9	204.1	212.3	218.8	220.9	219.6	212.3	202.8	192.9
7.5°	191.6	193.3	200.7	217.9	235.6	249.0	252.4	249.4	235.6	216.6	196.3
10°	207.1	210.1	220.9	252.0	284.4	308.1	317.6	304.6	282.6	248.1	214.9
12.5°	247.7	252.9	273.6	318.9	368.9	400.4	413.4	397.4	362.9	312.8	260.2
15°	311.5	319.3	350.4	418.1	477.2	505.3	509.6	500.5	460.4	405.2	334.4
17.5°	401.7	413.0	461.3	530.3	573.0	583.0	581.7	572.2	542.8	504.9	438.0
20°	509.6	523.0	570.5	627.4	631.7	620.1	613.6	608.0	598.1	591.6	539.4
22.5°	618.3	634.7	684.4	698.6	659.8	626.1	610.2	614.5	629.1	661.1	639.9
25°	726.7	742.2	788.8	750.4	672.7	616.6	596.3	606.7	641.7	710.7	737.9
27.5°	853.1	864.7	892.4	785.8	674.9	608.9	589.0	605.0	647.7	741.8	845.3
30°	984.7	991.6	978.2	795.3	667.5	597.2	581.7	605.0	658.0	762.5	926.0
32.5°	1081.4	1082.7	1039.1	796.1	663.7	587.7	574.8	602.4	668.0	779.7	1004.1
35°	1181.0	1174.6	1097.3	809.1	674.0	591.2	579.9	609.7	683.5	800.0	1072.7
37.5°	1282.0	1270.4	1162.5	830.2	700.8	628.7	621.8	647.3	708.5	828.1	1148.2
40°	1385.6	1369.6	1230.2	862.2	760.3	756.4	780.2	777.1	777.1	863.9	1225.9
42.5°	1512.0	1493.4	1330.3	952.3	899.3	986.0	1050.7	1010.6	936.4	946.3	1326.9
45°	1679.0	1663.0	1503.8	1124.9	1117.2	1316.5	1403.7	1324.3	1139.6	1136.6	1495.6
47.5°	1946.1	1943.1	1780.4	1325.2	1383.8	1737.2	1905.5	1752.8	1371.3	1338.1	1814.9
50°	2321.5	2312.4	2125.2	1559.9	1701.0	2258.5	2558.8	2304.2	1651.4	1573.3	2242.5
52.5°	2744.4	2753.9	2608.0	1816.2	2038.0	2838.5	3256.6	2936.0	1955.6	1872.3	2780.6
55°	3142.7	3197.0	3158.6	2116.1	2367.2	3478.8	4022.9	3629.0	2332.3	2263.7	3383.9
57.5°	3454.2	3607.4	3876.7	2551.9	2754.3	4227.9	4878.6	4380.2	2772.0	2899.3	4205.0
60°	3471.5	3674.3	4299.5	3463.7	3252.3	4870.4	5733.0	5114.2	3463.3	3978.5	4848.4
62.5°	3211.3	3428.8	4024.2	3878.0	3794.7	5417.1	6171.4	5649.3	4143.3	4610.7	4657.7
65°	2913.5	3133.2	3717.0	3408.0	3731.7	5393.8	6060.1	5661.8	4205.0	4180.9	4316.4
67.5°	2463.5	2660.7	3189.3	3016.7	3439.5	5133.6	5545.7	5304.9	3874.1	3910.3	3970.7
70°	1798.1	1988.0	2478.6	2487.2	3003.7	4664.6	4765.1	4731.9	3567.7	3606.1	3433.5
72.5°	1298.8	1458.9	1882.2	2039.7	2397.9	3911.6	3842.1	3970.3	3061.1	3211.7	2757.8
75°	933.8	1053.7	1380.8	1774.4	1900.8	2904.9	2750.4	3074.9	2456.1	2765.5	2073.4
77.5°	378.9	421.2	543.3	1195.3	1249.2	1954.3	1683.7	2233.5	1751.1	1817.1	1005.0
80°	15.5	17.3	22.4	617.1	856.5	1099.5	901.0	1194.0	1156.4	731.8	237.3
82.5°	1.7	1.7	3.9	177.8	375.0	606.7	424.6	687.8	585.6	310.3	107.9
85°	0.4	0.4	0.9	20.3	88.0	97.1	57.4	211.0	272.3	126.9	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	3.9	4.3	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°	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2
2.5°	195.5	193.3	190.7	188.1	186.8	183.4	182.1	181.2	180.4	180.8	180.8
5°	189.0	184.3	178.6	173.0	170.0	166.6	164.8	164.0	164.4	166.1	166.1
7.5°	188.1	179.1	167.0	159.7	156.2	153.6	151.9	151.0	151.5	153.6	154.5
10°	202.4	186.4	164.8	152.3	148.4	145.8	144.1	142.8	142.0	143.7	144.1
12.5°	233.0	211.0	175.2	151.5	144.6	141.1	139.8	137.2	135.9	136.8	137.2
15°	296.4	258.5	195.9	154.9	141.1	137.2	135.1	132.9	130.7	130.3	130.7
17.5°	379.3	324.9	227.4	163.1	138.5	133.8	130.7	127.7	124.7	124.3	123.8
20°	482.0	406.5	271.4	176.1	136.4	130.7	126.4	122.1	118.2	116.9	116.9
22.5°	575.6	504.9	327.9	192.0	133.3	126.4	121.3	116.1	111.8	109.6	109.2
25°	690.0	609.3	395.7	210.6	129.0	120.8	115.2	110.0	105.7	103.1	102.3
27.5°	805.2	719.3	472.5	234.7	123.8	115.2	110.0	105.3	100.5	97.5	96.7
30°	917.0	838.0	558.8	264.9	120.0	109.6	105.3	100.5	96.2	91.5	90.2
32.5°	1036.9	959.2	655.5	298.6	116.9	105.7	101.0	96.7	91.0	86.7	84.6
35°	1152.6	1084.4	762.0	331.4	113.9	102.3	97.1	92.8	86.7	82.0	79.0
37.5°	1269.1	1211.7	873.4	351.2	109.6	97.5	92.8	89.3	82.4	76.8	73.4
40°	1392.5	1343.3	993.8	343.0	105.7	92.3	89.8	85.9	78.1	71.6	67.3
42.5°	1528.0	1468.9	1116.3	311.5	102.3	88.0	85.4	81.6	74.2	66.5	60.8
45°	1698.4	1606.5	1216.9	264.1	104.0	83.7	78.5	77.7	70.8	60.8	53.9
47.5°	1991.4	1817.9	1295.0	233.4	115.6	79.0	72.9	75.1	67.7	55.2	47.5
50°	2439.7	2168.3	1367.9	231.3	133.3	76.8	67.7	73.4	64.7	49.6	41.9
52.5°	2866.9	2524.3	1414.5	250.3	148.9	82.4	62.6	71.2	62.6	45.7	38.0
55°	3275.6	2729.7	1331.2	264.1	163.5	99.2	58.7	67.7	60.0	43.6	36.7
57.5°	3716.1	2821.2	1048.1	292.1	173.9	113.5	59.5	62.6	56.5	42.3	36.2
60°	3847.7	2704.3	632.6	328.8	168.3	117.8	66.0	55.7	51.8	39.7	35.0
62.5°	3643.2	2426.8	373.3	299.5	163.5	111.3	75.5	51.3	47.0	36.2	32.4
65°	3337.3	2050.1	243.4	252.9	173.5	99.2	80.3	49.2	42.7	32.8	28.5
67.5°	2987.8	1651.4	170.4	149.3	160.1	89.3	67.7	48.8	38.4	27.6	23.3
70°	2516.5	1236.7	120.0	98.8	133.3	79.4	52.6	47.5	33.7	22.4	18.1
72.5°	1944.4	774.1	89.3	63.9	94.9	64.7	41.9	40.1	27.2	18.6	13.8
75°	1433.9	441.4	63.0	46.2	62.6	49.2	31.1	28.5	23.3	17.7	12.5
77.5°	748.7	220.9	39.3	35.4	35.8	30.6	22.4	20.7	21.6	17.7	11.7
80°	143.7	44.0	23.7	25.9	19.4	19.4	16.4	17.3	19.0	14.2	9.9
82.5°	60.0	9.5	12.9	14.7	12.1	13.4	13.4	13.8	13.4	10.4	7.3
85°	0.0	0.0	5.6	6.0	8.2	8.2	6.9	6.9	6.9	6.0	4.3
87.5°	0.0	0.0	0.0	0.0	0.4	1.3	2.6	3.0	3.5	2.6	1.7
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):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2
2.5°	180.4	179.5	180.8	181.7	182.5	182.5	181.7	180.8	179.5	180.8	179.5
5°	166.6	167.9	170.0	170.9	171.7	170.0	169.2	166.6	164.4	164.8	164.0
7.5°	155.8	157.1	159.7	161.4	161.4	160.5	157.9	155.3	151.9	151.9	151.5
10°	145.8	147.6	150.6	152.8	153.6	152.8	150.2	146.7	143.7	143.7	142.4
12.5°	137.7	139.8	143.3	146.3	147.1	146.3	143.7	140.2	136.8	136.8	135.9
15°	130.7	133.3	137.2	140.7	142.0	140.7	137.7	133.3	129.9	130.3	129.0
17.5°	124.3	126.4	131.6	135.5	136.8	135.5	131.6	126.0	122.5	123.4	122.5
20°	116.9	119.5	124.7	129.0	130.3	129.0	124.7	118.7	115.2	115.2	115.6
22.5°	109.2	111.8	116.9	120.0	121.7	120.4	116.1	110.5	107.0	107.0	107.4
25°	102.3	103.6	107.4	110.5	110.9	109.6	106.2	101.8	99.2	100.5	101.0
27.5°	95.8	95.8	97.5	99.2	98.8	97.5	96.2	92.8	92.3	93.6	94.9
30°	88.9	86.7	85.9	84.6	84.1	83.7	85.0	85.0	85.9	87.6	88.9
32.5°	82.8	78.5	74.7	70.8	68.6	70.3	73.8	76.8	79.8	82.4	83.7
35°	75.9	69.0	62.6	57.4	53.9	56.5	62.1	67.7	72.9	76.4	78.5
37.5°	69.0	59.1	51.3	44.9	42.3	44.4	50.5	58.3	66.0	70.3	73.4
40°	61.7	49.2	40.1	35.0	32.4	34.5	40.6	48.3	58.7	64.3	68.2
42.5°	54.4	40.6	32.4	27.2	25.9	27.2	31.9	39.7	50.9	57.8	63.0
45°	47.0	33.7	25.9	22.0	20.7	22.0	25.9	32.4	43.6	51.3	57.4
47.5°	40.6	28.5	21.6	18.1	17.3	18.6	21.6	27.2	36.7	44.4	51.3
50°	35.4	25.0	18.6	15.5	14.7	16.0	18.6	22.9	31.1	38.0	45.3
52.5°	31.9	23.3	16.4	13.4	12.9	13.8	16.0	19.4	26.3	32.4	39.3
55°	31.1	23.3	15.1	12.1	11.7	12.5	14.2	16.8	22.9	28.0	34.1
57.5°	31.9	25.0	14.2	10.4	9.9	10.8	12.5	14.7	19.8	24.2	29.8
60°	31.9	25.5	12.5	8.2	7.8	8.6	10.4	12.9	17.7	21.1	25.9
62.5°	28.9	23.3	10.4	6.5	5.6	6.5	8.6	10.8	15.5	19.0	22.9
65°	25.0	19.8	8.6	4.7	3.9	4.7	6.9	9.1	13.4	16.4	20.7
67.5°	20.3	15.1	6.5	3.5	2.6	3.5	5.2	7.3	11.2	14.2	18.6
70°	15.1	10.8	5.2	3.0	2.6	3.0	4.7	6.9	9.9	12.9	17.3
72.5°	11.2	7.3	4.3	3.0	2.2	3.0	4.3	6.5	9.5	12.5	16.4
75°	9.5	6.0	3.9	2.6	2.2	2.6	3.9	6.0	8.6	11.7	15.5
77.5°	9.1	5.6	3.5	2.2	1.7	2.2	3.5	5.2	7.8	10.8	15.1
80°	7.8	4.7	3.0	1.7	1.3	1.7	3.0	4.3	6.0	8.2	11.7
82.5°	6.0	3.9	2.2	0.9	0.4	0.9	2.2	2.6	3.9	4.7	6.9
85°	3.9	2.2	0.9	0.0	0.0	0.0	0.9	1.7	1.7	2.2	3.5
87.5°	1.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.9	1.3
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):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2	194.2
2.5°	182.1	182.5	183.4	184.7	187.7	190.3	192.9	196.3	198.1	198.1
5°	164.8	165.3	165.7	167.4	171.7	175.2	180.8	187.7	191.2	192.0
7.5°	151.5	152.3	153.2	154.5	158.8	163.5	170.9	183.8	190.3	191.6
10°	143.7	145.0	146.7	149.3	153.2	158.4	170.9	194.2	205.0	207.1
12.5°	137.7	139.8	141.5	144.6	149.3	157.5	182.5	223.5	242.5	247.7
15°	131.6	134.2	136.8	139.8	145.0	160.5	205.0	276.2	307.7	311.5
17.5°	125.6	128.6	132.0	135.5	142.0	167.9	240.3	349.1	393.1	401.7
20°	118.7	122.5	127.3	131.6	138.9	179.5	289.5	435.8	491.1	509.6
22.5°	111.3	116.1	121.7	127.3	135.5	193.7	349.1	529.0	606.3	618.3
25°	105.3	110.0	115.2	120.8	129.9	211.0	421.2	644.7	715.0	726.7
27.5°	99.7	104.4	109.2	114.3	124.3	233.4	507.9	767.7	841.0	853.1
30°	93.6	99.2	104.0	109.2	119.1	261.1	608.0	904.0	973.5	984.7
32.5°	88.5	94.1	98.8	104.0	115.2	291.3	713.3	1024.8	1081.4	1081.4
35°	84.1	90.2	93.6	100.5	112.2	310.7	813.0	1140.0	1182.8	1181.0
37.5°	79.4	86.7	89.3	94.1	108.3	312.8	906.6	1261.7	1293.2	1282.0
40°	74.7	82.4	86.3	88.9	104.0	295.2	1009.3	1373.5	1400.2	1385.6
42.5°	70.3	76.4	82.0	85.0	101.4	264.1	1091.7	1493.0	1524.9	1512.0
45°	66.0	71.2	74.7	80.3	103.1	242.5	1162.5	1632.4	1688.5	1679.0
47.5°	61.7	66.0	68.2	76.8	114.8	232.6	1205.6	1848.1	1953.9	1946.1
50°	57.0	62.1	62.1	75.9	132.0	236.0	1243.2	2160.6	2324.1	2321.5
52.5°	52.2	57.8	57.0	82.4	145.4	252.0	1285.9	2436.3	2720.7	2744.4
55°	47.5	52.6	53.5	95.4	153.2	265.8	1120.6	2552.4	3059.4	3142.7
57.5°	42.3	45.3	55.7	105.3	150.6	305.9	767.7	2573.5	3275.6	3454.2
60°	36.7	39.3	63.0	103.1	142.4	282.6	483.3	2383.6	3244.9	3471.5
62.5°	31.9	36.2	66.5	91.0	145.0	245.1	308.1	2031.5	2952.8	3211.3
65°	28.0	35.0	60.4	82.4	146.7	166.1	208.0	1652.7	2667.6	2913.5
67.5°	25.0	38.8	49.6	73.4	126.0	116.9	142.8	1284.2	2243.0	2463.5
70°	22.9	39.7	40.6	63.0	97.5	75.1	94.1	864.3	1546.1	1798.1
72.5°	20.7	29.3	30.6	50.5	63.0	45.7	60.8	494.5	1127.1	1298.8
75°	19.8	19.8	21.1	32.8	35.0	33.2	39.3	295.2	808.2	933.8
77.5°	18.6	15.1	13.4	21.1	19.0	23.7	23.3	131.2	350.4	378.9
80°	14.7	10.8	9.1	13.4	12.9	16.0	13.8	10.8	16.0	15.5
82.5°	9.1	6.9	6.5	8.2	7.3	8.2	6.5	1.7	1.7	1.7
85°	4.3	3.9	3.5	3.5	3.9	3.5	2.6	0.9	0.4	0.4
87.5°	2.2	2.2	1.7	1.3	1.7	1.7	1.3	0.4	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



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

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			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

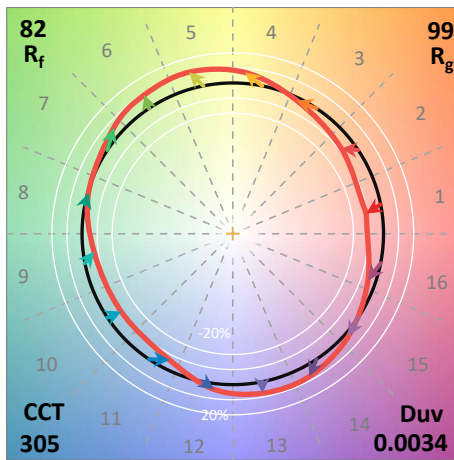
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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