

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: P634026

Luminaire Tested: GWS-SA2F-830-U-SLL-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634026
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-40)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2F-830-U-SLL-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7802.7 lumens
Efficiency: N/A
Efficacy: 62.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

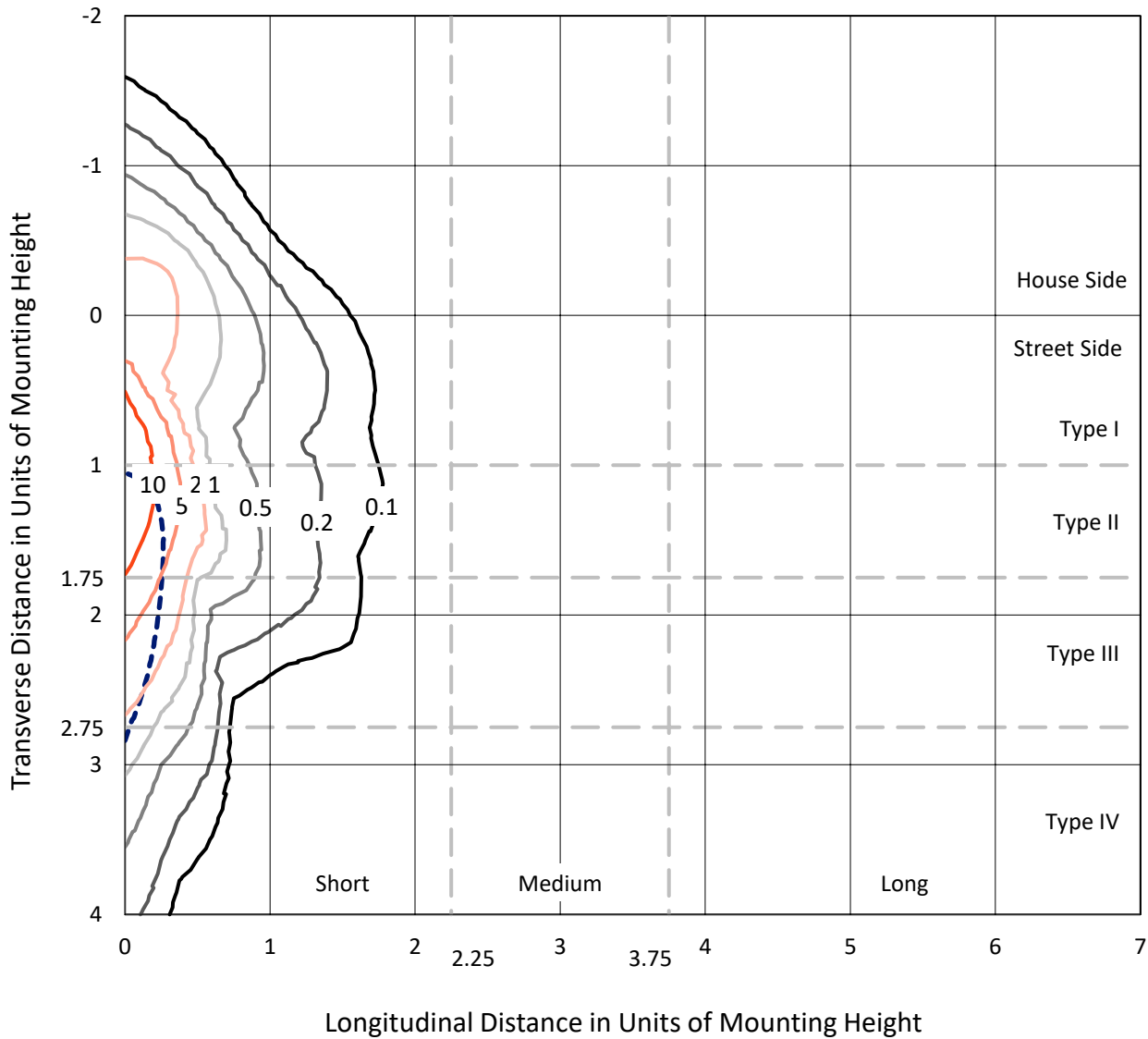
Input Watts (W): 124.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P634026
 CATALOG NUMBER: GWS-SA2F-830-U-SLL-W-HSS

Iso-Footcandle Lines of Horizontal Illumination

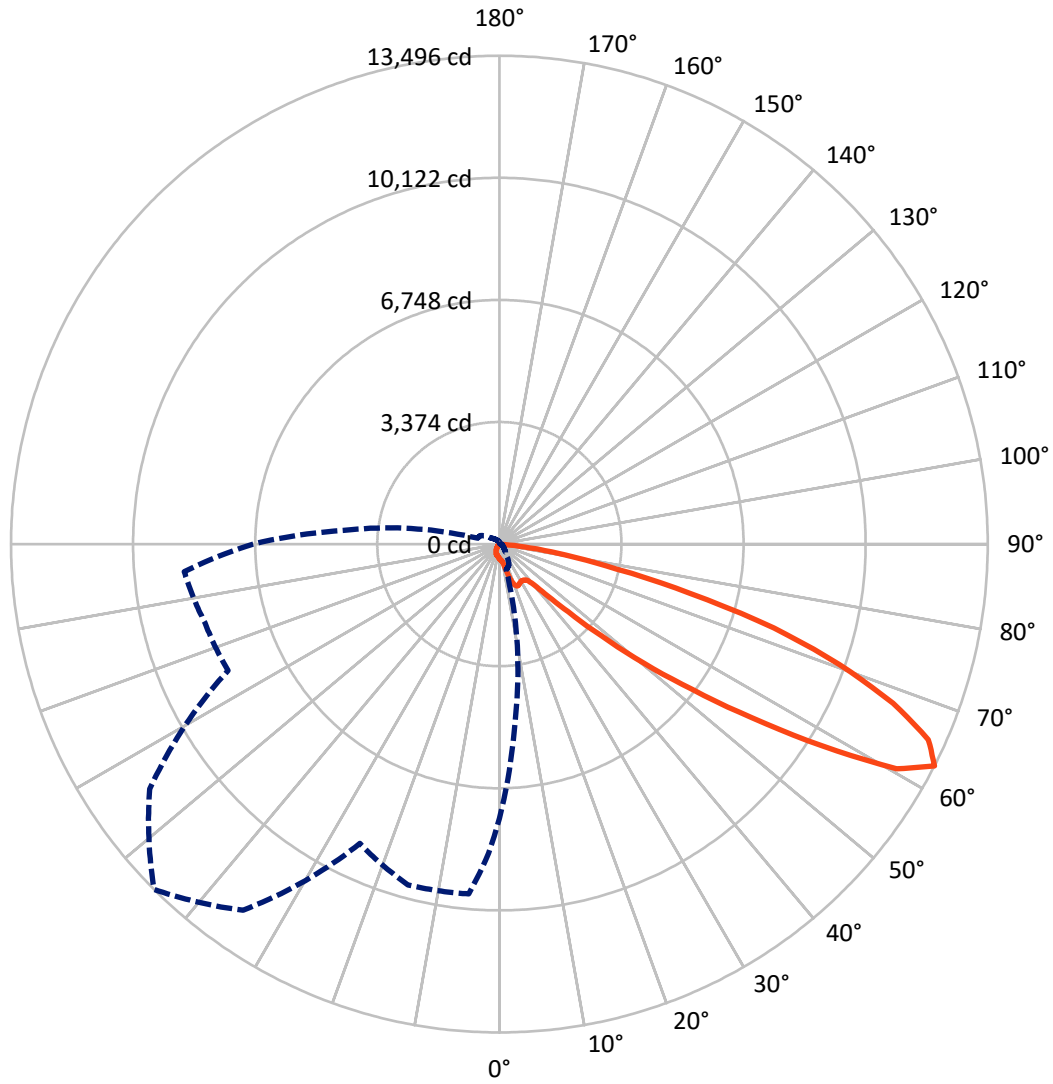
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.9 fc
 Type III - Short - N/A

REPORT NUMBER: P634026
CATALOG NUMBER: GWS-SA2F-830-U-SLL-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P634026
 CATALOG NUMBER: GWS-SA2F-830-U-SLL-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	906.6	0.0	906.6
	% Fixture	11.6	0.0	11.6
Street Side	Lumens	6896.1	0.0	6896.1
	% Fixture	88.4	0.0	88.4
Total	Lumens	7802.7	0.0	7802.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	0.4
10°-20°	119.8	1.5
20°-30°	270.6	3.5
30°-40°	466.1	6.0
40°-50°	879.3	11.3
50°-60°	1963.2	25.2
60°-70°	2625.8	33.7
70°-80°	1316.8	16.9
80°-90°	126.2	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°	7802.7	100.0
0°-180°	7802.7	100.0

Coefficient of Utilization



REPORT NUMBER: P634026

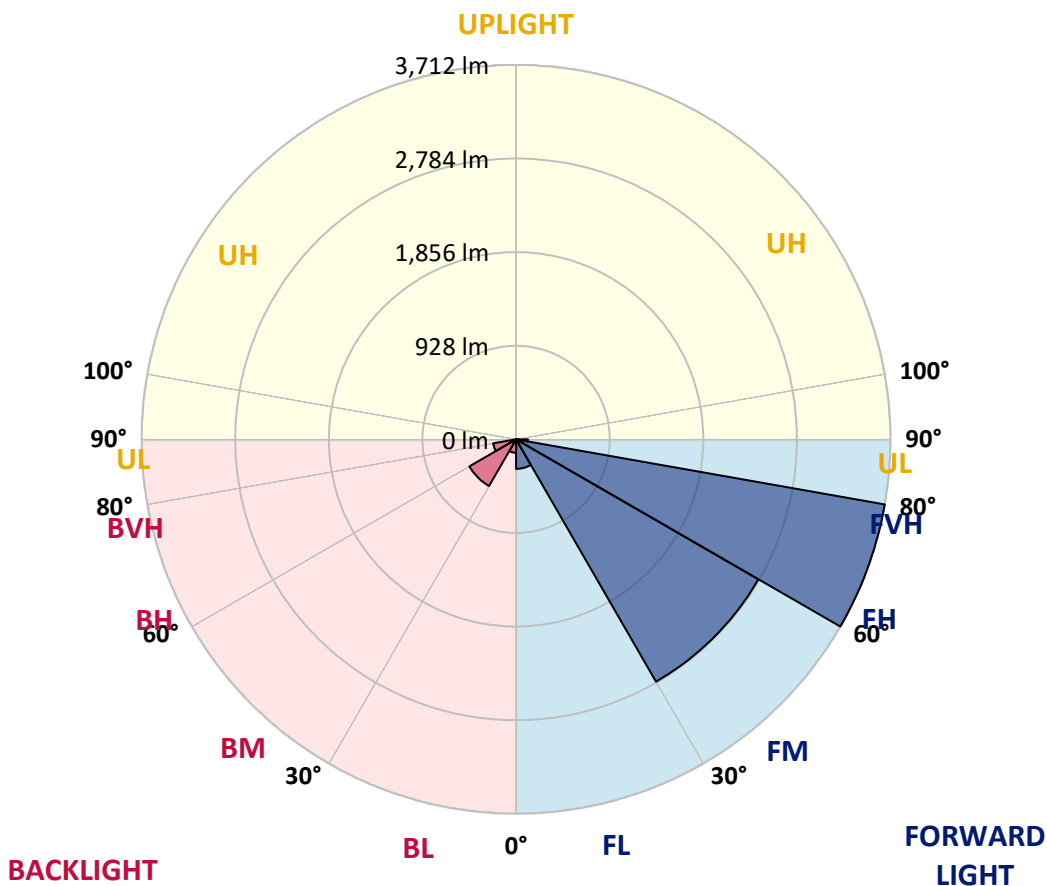
CATALOG NUMBER: GWS-SA2F-830-U-SLL-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	292.2	3.7			
FM (30°-60°)	2774.1	35.6			
FH (60°-80°)	3712.0	47.6			G2/5000
FVH (80°-90°)	117.8	1.5			G2/225
BL (0°-30°)	133.1	1.7	B1/500		
BM (30°-60°)	534.6	6.9	B1/1000		
BH (60°-80°)	230.5	3.0	B1/500		G1/500
BVH (80°-90°)	8.4	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-G2

Type III Short





REPORT NUMBER: P634026

CATALOG NUMBER: GWS-SA2F-830-U-SLL-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7
2.5°	400.0	399.1	397.3	391.7	387.1	384.3	378.8	378.8	377.9	376.0	372.3
5°	387.1	383.4	379.7	369.6	358.5	352.0	344.6	343.7	343.7	341.8	340.9
7.5°	366.8	363.1	358.5	341.8	331.7	325.2	318.7	317.8	315.0	315.0	315.0
10°	355.7	350.2	342.8	324.3	314.1	308.6	304.0	301.2	299.3	296.6	295.6
12.5°	379.7	369.6	353.8	320.6	306.7	299.3	293.8	291.9	286.4	282.7	279.9
15°	454.5	429.6	398.2	328.9	304.0	292.9	285.5	281.8	277.2	270.7	266.1
17.5°	577.4	541.4	488.7	355.7	301.2	287.3	278.1	271.6	265.2	257.8	252.2
20°	747.4	693.8	631.0	404.7	301.2	280.9	269.8	261.5	252.2	243.9	237.4
22.5°	963.6	910.0	802.9	487.8	304.9	272.5	259.6	248.5	237.4	230.0	222.7
25°	1205.7	1129.9	1030.1	588.5	315.0	261.5	247.6	236.5	226.4	217.1	208.8
27.5°	1475.4	1393.2	1260.2	731.7	337.2	250.4	234.7	224.5	215.3	206.0	194.9
30°	1724.0	1675.0	1539.2	903.6	373.2	243.0	224.5	215.3	206.0	194.0	183.9
32.5°	2022.4	1935.5	1823.7	1099.4	421.3	235.6	216.2	203.3	195.9	184.8	173.7
35°	2322.6	2248.7	2101.8	1340.5	474.9	228.2	206.0	194.0	187.5	174.6	162.6
37.5°	2632.1	2615.5	2470.5	1607.6	527.5	219.9	194.0	186.6	180.2	165.4	151.5
40°	2937.0	2906.5	2772.6	1912.4	559.9	210.6	183.9	179.2	171.8	155.2	139.5
42.5°	3229.0	3205.9	3075.6	2204.4	555.3	202.3	173.7	168.1	162.6	146.0	126.6
45°	3587.4	3549.5	3385.1	2420.6	508.1	211.6	163.5	154.3	153.4	137.7	113.6
47.5°	4258.2	4133.4	3854.4	2586.9	461.0	235.6	152.4	141.4	147.8	129.3	100.7
50°	5197.7	5050.8	4647.1	2716.2	460.1	267.0	150.6	129.3	143.2	122.9	89.6
52.5°	6142.0	5883.3	5392.7	2785.5	494.3	290.1	167.2	117.3	137.7	116.4	81.3
55°	7046.4	6509.7	5705.0	2556.4	521.1	315.0	197.7	110.9	127.5	109.0	76.7
57.5°	7908.4	7013.2	5840.8	2022.4	610.7	325.2	216.2	113.6	112.7	99.8	73.0
60°	8026.7	6989.1	5566.4	1176.1	673.5	307.7	208.8	126.6	98.9	88.7	66.5
62.5°	7579.5	6524.4	4940.9	733.6	625.5	301.2	185.7	144.1	89.6	78.5	58.2
65°	6900.5	5795.5	4119.6	473.0	474.0	334.4	162.6	141.4	84.1	69.3	49.9
67.5°	5838.9	4850.4	3245.6	316.9	267.9	285.5	142.3	97.0	82.2	59.1	38.8
70°	4261.9	3452.5	2112.9	211.6	159.8	228.2	119.2	69.3	77.6	49.0	27.7
72.5°	3115.3	2319.9	1179.8	138.6	90.5	133.0	87.8	49.9	60.1	36.0	19.4
75°	2242.3	1596.5	673.5	88.7	60.1	73.0	57.3	34.2	38.8	28.6	17.6
77.5°	1079.1	777.9	305.8	49.0	40.7	37.0	30.5	21.2	24.0	25.9	15.7
80°	40.7	30.5	23.1	24.0	25.9	16.6	13.9	11.1	13.9	17.6	8.3
82.5°	0.0	0.0	0.0	2.8	3.7	4.6	5.5	4.6	5.5	6.5	0.9
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: P634026
 CATALOG NUMBER: GWS-SA2F-830-U-SLL-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7
2.5°	375.1	373.2	375.1	376.9	378.8	380.6	377.9	379.7	381.6	376.9	378.8
5°	345.5	344.6	350.2	352.9	356.6	358.5	356.6	356.6	355.7	350.2	350.2
7.5°	319.7	320.6	325.2	331.7	336.3	339.1	337.2	336.3	333.5	325.2	325.2
10°	300.3	300.3	307.7	313.2	319.7	322.4	320.6	317.8	315.0	306.7	305.8
12.5°	284.6	284.6	290.1	299.3	306.7	310.4	309.5	305.8	301.2	292.9	291.9
15°	269.8	268.8	277.2	285.5	295.6	300.3	298.4	295.6	287.3	279.9	278.1
17.5°	255.0	254.1	261.5	272.5	283.6	290.1	289.2	282.7	275.3	266.1	264.2
20°	240.2	238.4	247.6	258.7	269.8	276.2	274.4	268.8	259.6	250.4	248.5
22.5°	225.4	224.5	231.0	240.2	250.4	255.9	255.0	250.4	241.1	232.8	232.8
25°	208.8	208.8	213.4	219.9	227.3	230.0	231.0	229.1	223.6	219.0	219.0
27.5°	194.9	192.2	194.0	195.9	199.6	204.2	204.2	206.0	206.9	205.1	206.0
30°	183.9	179.2	176.5	172.8	170.9	172.8	174.6	181.1	187.5	191.2	193.1
32.5°	170.9	165.4	158.0	147.8	141.4	139.5	145.0	157.1	169.1	177.4	182.0
35°	158.0	150.6	136.7	122.0	113.6	110.9	117.3	131.2	148.7	163.5	170.0
37.5°	145.0	134.9	115.5	97.9	88.7	86.8	93.3	108.1	128.4	148.7	157.1
40°	130.3	118.3	95.2	76.7	69.3	67.4	73.0	87.8	109.0	132.1	145.0
42.5°	115.5	100.7	76.7	61.0	53.6	53.6	61.0	72.1	91.5	116.4	132.1
45°	100.7	85.0	62.8	49.0	44.3	45.3	49.9	61.0	76.7	102.6	117.3
47.5°	86.8	73.0	51.7	40.7	37.0	37.9	43.4	52.7	65.6	88.7	104.4
50°	74.8	61.9	45.3	34.2	31.4	33.3	38.8	47.1	58.2	78.5	91.5
52.5°	67.4	55.4	41.6	29.6	27.7	29.6	35.1	42.5	52.7	69.3	82.2
55°	63.7	54.5	41.6	26.8	24.0	25.9	31.4	38.8	47.1	62.8	73.9
57.5°	62.8	56.4	44.3	24.0	20.3	22.2	27.7	35.1	43.4	57.3	66.5
60°	59.1	53.6	43.4	19.4	15.7	18.5	23.1	30.5	39.7	53.6	61.9
62.5°	51.7	47.1	37.9	15.7	12.0	13.9	19.4	26.8	36.0	49.0	58.2
65°	42.5	37.9	29.6	10.2	7.4	9.2	14.8	23.1	31.4	44.3	52.7
67.5°	31.4	26.8	20.3	6.5	3.7	6.5	12.0	19.4	28.6	39.7	48.0
70°	19.4	15.7	11.1	3.7	2.8	5.5	11.1	18.5	25.9	37.0	45.3
72.5°	11.1	7.4	4.6	1.8	2.8	5.5	11.1	18.5	24.9	35.1	42.5
75°	8.3	4.6	1.8	0.9	1.8	4.6	10.2	16.6	24.0	33.3	40.7
77.5°	5.5	2.8	0.9	0.0	0.9	3.7	9.2	15.7	22.2	31.4	38.8
80°	0.9	0.0	0.0	0.0	0.0	2.8	8.3	13.9	20.3	27.7	34.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.9	6.5	12.0	17.6	23.1	27.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	3.7	9.2	13.9	17.6	19.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2	11.1	12.9
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: P634026
 CATALOG NUMBER: GWS-SA2F-830-U-SLL-W-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7
2.5°	377.9	383.4	383.4	387.1	391.7	400.0	404.7	411.1	415.7	420.4	422.2
5°	349.2	350.2	351.1	352.9	358.5	367.7	376.0	386.2	398.2	407.4	413.0
7.5°	325.2	325.2	325.2	328.0	333.5	340.0	348.3	362.2	376.0	387.1	396.3
10°	304.9	307.7	308.6	313.2	319.7	328.0	337.2	349.2	364.9	379.7	396.3
12.5°	291.9	294.7	299.3	304.0	310.4	319.7	329.8	345.5	377.9	408.4	443.5
15°	279.9	283.6	289.2	295.6	303.0	313.2	324.3	356.6	432.4	489.7	545.1
17.5°	267.0	272.5	279.9	286.4	295.6	306.7	320.6	383.4	532.2	627.3	721.5
20°	250.4	257.8	266.1	276.2	287.3	300.3	320.6	438.8	676.3	813.0	937.7
22.5°	234.7	242.1	252.2	265.2	278.1	291.0	325.2	522.9	862.0	1034.7	1192.7
25°	221.7	231.0	241.1	252.2	267.0	281.8	336.3	641.2	1085.6	1308.2	1420.0
27.5°	209.7	220.8	231.0	240.2	253.1	269.8	361.2	799.2	1349.8	1576.1	1663.9
30°	197.7	210.6	220.8	230.0	243.0	260.5	399.1	1000.6	1643.6	1863.5	1872.7
32.5°	187.5	199.6	211.6	220.8	232.8	253.1	451.8	1236.2	1944.8	2157.3	2070.4
35°	176.5	190.3	201.4	211.6	224.5	246.7	512.8	1490.2	2248.7	2427.0	2267.2
37.5°	165.4	181.1	194.9	202.3	215.3	240.2	557.1	1755.4	2559.1	2690.3	2440.0
40°	155.2	172.8	188.5	195.9	202.3	231.9	563.6	2027.0	2874.2	2949.9	2602.6
42.5°	144.1	163.5	177.4	187.5	193.1	226.4	524.8	2256.1	3138.4	3208.6	2815.1
45°	132.1	155.2	166.3	173.7	184.8	230.0	474.9	2433.5	3440.5	3561.6	3165.2
47.5°	120.1	146.0	155.2	160.8	175.5	252.2	456.4	2551.8	3938.5	4189.8	3755.6
50°	109.0	137.7	147.8	146.9	173.7	280.9	476.7	2641.4	4686.8	4982.5	4564.9
52.5°	97.0	128.4	140.4	136.7	187.5	303.0	517.4	2712.5	5262.4	5911.9	5652.3
55°	86.8	118.3	129.3	128.4	213.4	319.7	548.8	2337.4	5500.8	6775.7	6877.4
57.5°	79.5	107.2	116.4	132.1	230.0	319.7	634.7	1659.3	5505.4	7411.4	8503.4
60°	73.0	97.0	103.5	145.0	223.6	303.0	628.2	1016.3	5073.9	7367.9	9368.1
62.5°	67.4	87.8	96.1	148.7	197.7	300.3	567.3	630.1	4327.5	6807.1	8740.8
65°	62.8	80.4	92.4	136.7	179.2	321.5	382.5	452.7	3509.8	6167.8	8021.1
67.5°	58.2	73.9	97.9	111.8	162.6	287.3	276.2	321.5	2755.0	5466.6	7360.5
70°	54.5	70.2	103.5	91.5	142.3	224.5	195.9	243.9	2109.2	4561.2	6430.2
72.5°	51.7	65.6	86.8	72.1	115.5	173.7	136.7	177.4	1378.4	3560.6	5242.1
75°	49.0	60.1	63.7	58.2	85.9	113.6	103.5	119.2	821.3	2602.6	3977.3
77.5°	48.0	56.4	51.7	47.1	58.2	67.4	78.5	80.4	401.0	1301.7	2084.3
80°	42.5	50.8	44.3	38.8	39.7	44.3	58.2	53.6	91.5	330.7	556.2
82.5°	33.3	39.7	37.0	32.3	32.3	32.3	38.8	36.0	29.6	148.7	251.3
85°	23.1	27.7	27.7	25.9	24.9	24.9	24.0	23.1	8.3	9.2	13.9
87.5°	15.7	19.4	20.3	19.4	16.6	14.8	12.9	11.1	3.7	0.0	1.8
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: P634026

CATALOG NUMBER: GWS-SA2F-830-U-SLL-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7	404.7
2.5°	428.7	431.5	431.5	427.8	425.0	417.6	410.2	402.8	401.0	400.0
5°	428.7	439.8	445.3	444.4	437.9	425.9	410.2	393.6	389.0	387.1
7.5°	422.2	443.5	460.1	462.9	450.9	429.6	401.0	376.0	369.6	366.8
10°	437.0	478.6	511.8	516.4	502.6	461.0	414.8	372.3	362.2	355.7
12.5°	516.4	584.8	625.5	644.9	618.1	565.4	488.7	413.0	389.9	379.7
15°	677.2	774.2	851.8	851.8	826.9	733.6	636.6	513.7	482.3	454.5
17.5°	883.2	1005.2	1073.5	1066.2	1028.3	962.7	846.3	669.8	606.1	577.4
20°	1117.9	1190.9	1206.6	1202.0	1185.3	1147.5	1067.1	877.7	791.8	747.4
22.5°	1321.1	1301.7	1278.6	1260.2	1255.6	1266.6	1255.6	1109.6	1042.1	963.6
25°	1458.8	1348.9	1279.6	1246.3	1262.0	1325.8	1395.1	1340.5	1287.0	1205.7
27.5°	1533.6	1343.3	1243.5	1209.4	1236.2	1326.7	1477.3	1569.7	1514.2	1475.4
30°	1574.3	1338.7	1220.4	1187.2	1227.8	1341.5	1534.6	1784.0	1785.9	1724.0
32.5°	1632.5	1368.3	1225.1	1194.6	1249.1	1385.8	1606.6	2002.0	2055.6	2022.4
35°	1698.1	1413.5	1246.3	1218.6	1286.0	1444.9	1687.0	2221.9	2333.7	2322.6
37.5°	1760.0	1464.3	1296.2	1269.4	1342.4	1495.8	1764.6	2438.1	2593.3	2632.1
40°	1824.7	1535.5	1449.6	1475.4	1516.1	1576.1	1833.9	2625.7	2878.8	2937.0
42.5°	1977.1	1782.2	1913.4	1962.3	1967.9	1844.1	1985.4	2865.9	3159.7	3229.0
45°	2317.1	2221.0	2597.0	2666.3	2630.3	2255.2	2350.3	3212.3	3552.3	3587.4
47.5°	2746.7	2791.0	3532.9	3772.2	3556.0	2740.2	2792.9	3941.3	4271.1	4258.2
50°	3247.4	3457.2	4595.4	5159.9	4642.5	3370.3	3302.9	4837.4	5237.5	5197.7
52.5°	3839.6	4231.4	5872.2	6674.1	6184.4	4078.9	4051.2	6024.6	6268.5	6142.0
55°	4585.2	4978.8	7341.1	8461.8	7765.2	4943.7	5038.8	7401.2	7448.3	7046.4
57.5°	5697.6	5953.5	9072.5	10511.9	9415.3	6118.9	6809.0	9233.3	8669.7	7908.4
60°	7717.2	7207.2	10745.6	12609.1	11170.6	7771.7	9143.6	10318.8	9076.2	8026.7
62.5°	8420.2	8271.5	11793.3	13496.0	12351.3	9128.9	9750.6	9703.5	8549.6	7579.5
65°	7355.0	8006.3	11605.8	13027.6	12199.8	8905.3	8750.1	9024.5	7956.5	6900.5
67.5°	6794.2	7383.6	10895.3	11735.1	11360.0	8146.8	7799.4	7724.6	6679.6	5838.9
70°	6228.8	6812.7	9865.2	9969.6	9795.0	6910.6	6454.2	5952.6	4992.6	4261.9
72.5°	5548.8	5870.3	8435.9	7940.7	7743.0	5427.8	5331.7	4482.7	3742.6	3115.3
75°	4839.3	4746.0	6577.1	5450.0	5597.8	4223.1	4503.0	3291.8	2742.1	2242.3
77.5°	3520.0	3450.7	4405.1	3310.3	3666.0	2766.1	2485.2	1313.8	1250.9	1079.1
80°	1964.2	2367.9	2379.0	1855.2	2314.3	1803.4	621.8	43.4	27.7	40.7
82.5°	912.8	1018.1	1289.7	860.1	1320.2	893.4	128.4	0.0	0.0	0.0
85°	295.6	432.4	362.2	126.6	319.7	302.1	21.2	0.0	0.0	0.0
87.5°	17.6	36.0	9.2	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

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

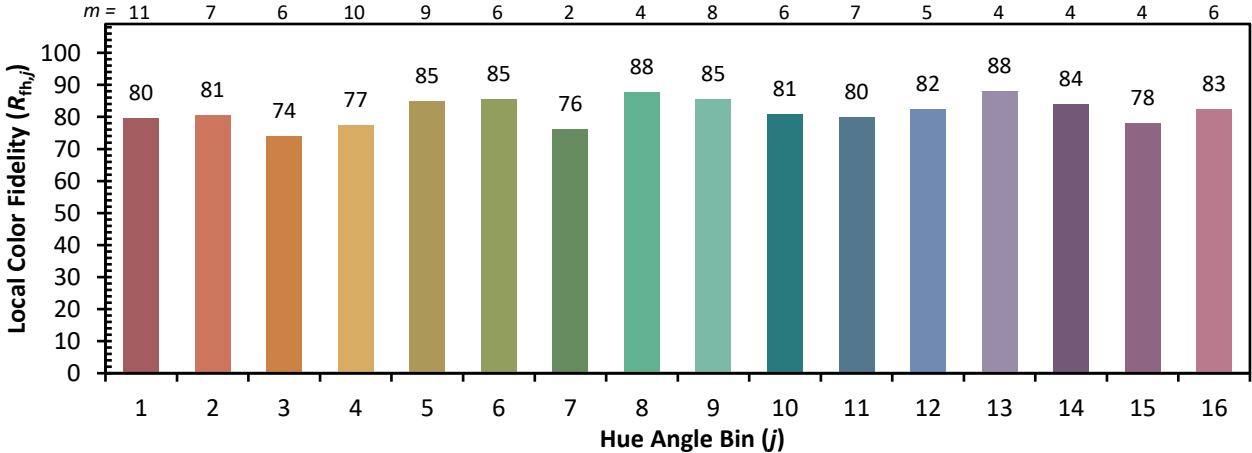


Individual Sample Fidelity Index ($R_{f,i}$)

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)