

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: P635042

Luminaire Tested: GWS-SA3C-830-U-T4W-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-52)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3C-830-U-T4W-W
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10986.4 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

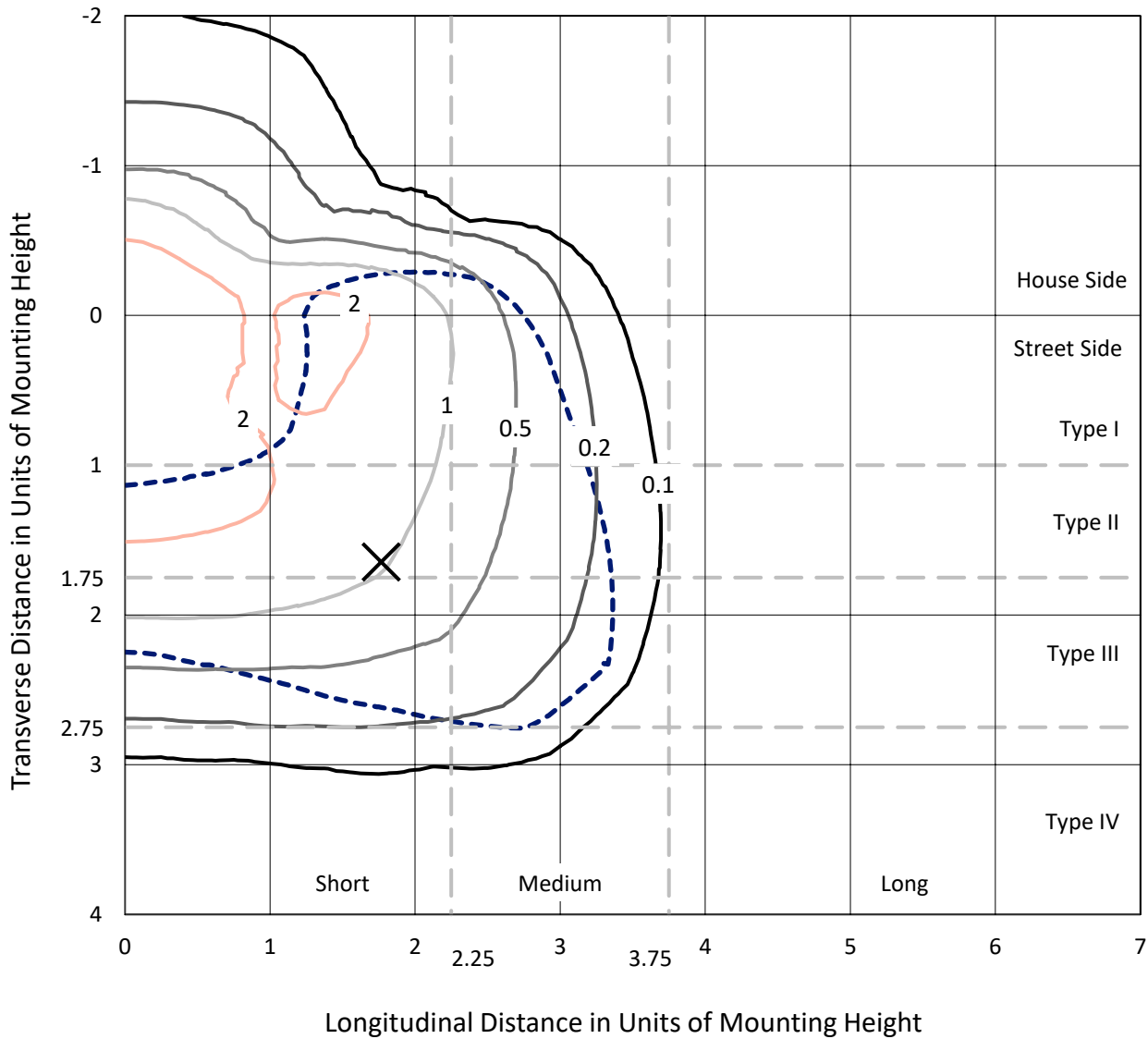
Input Watts (W): 93
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P635042
 CATALOG NUMBER: GWS-SA3C-830-U-T4W-W

Iso-Footcandle Lines of Horizontal Illumination

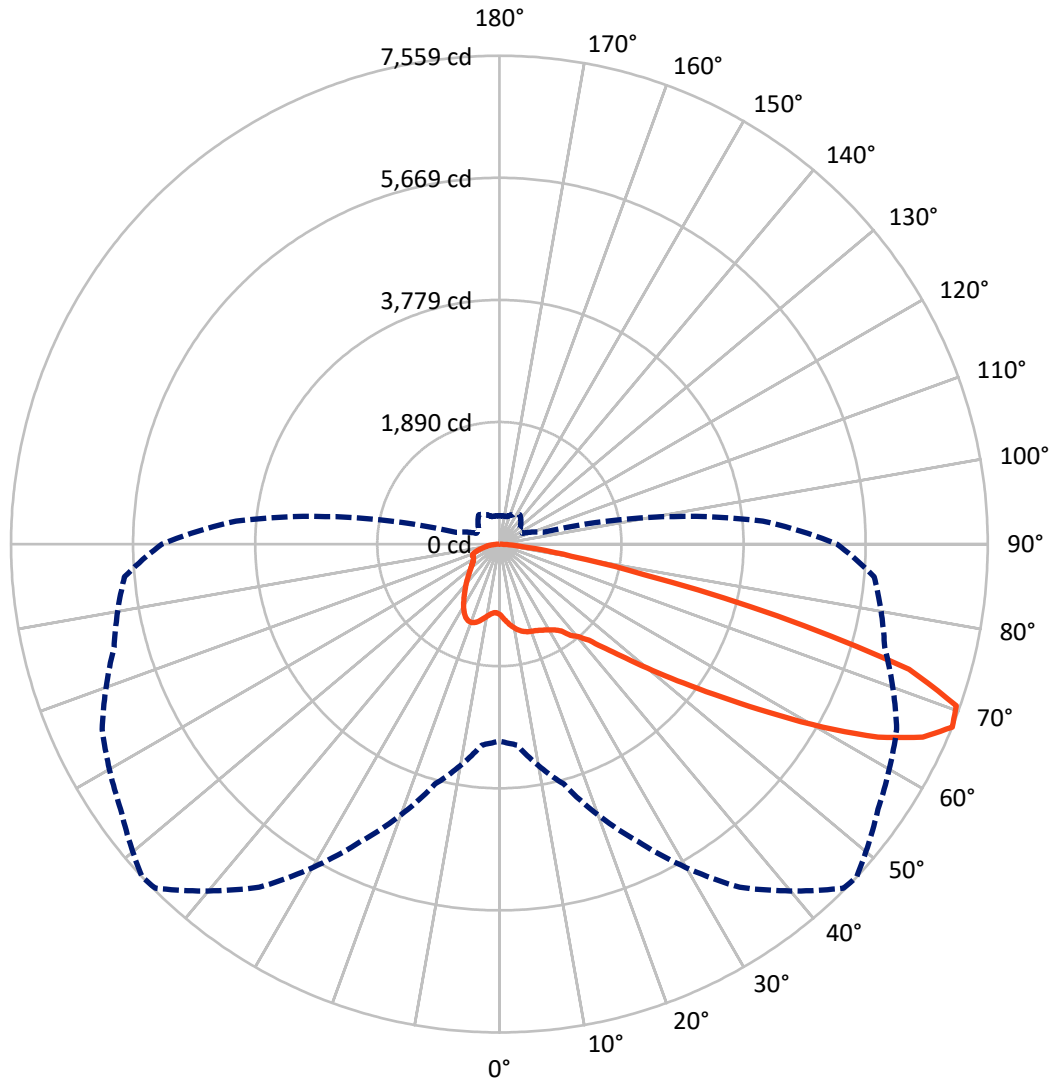
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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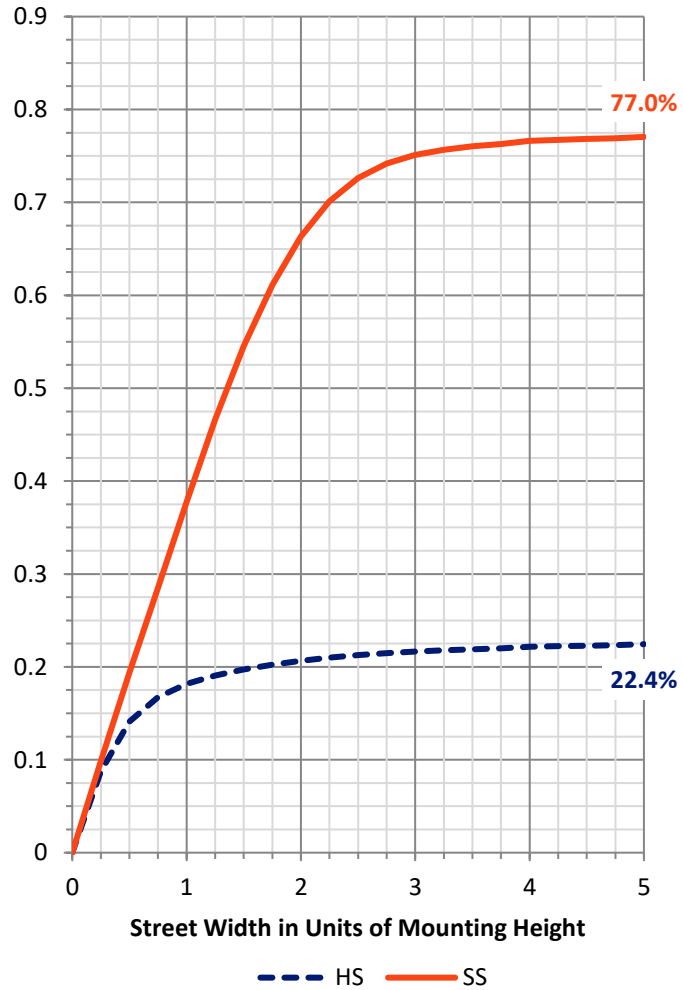
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2503.9	0.0	2503.9
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	8482.5	0.0	8482.5
	% Fixture	77.2	0.0	77.2
Total	Lumens	10986.4	0.0	10986.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.3	1.0
10°-20°	370.8	3.4
20°-30°	630.3	5.7
30°-40°	923.4	8.4
40°-50°	1406.8	12.8
50°-60°	2517.1	22.9
60°-70°	3358.8	30.6
70°-80°	1518.9	13.8
80°-90°	148.8	1.4
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°	10986.4	100.0
0°-180°	10986.4	100.0

Coefficient of Utilization



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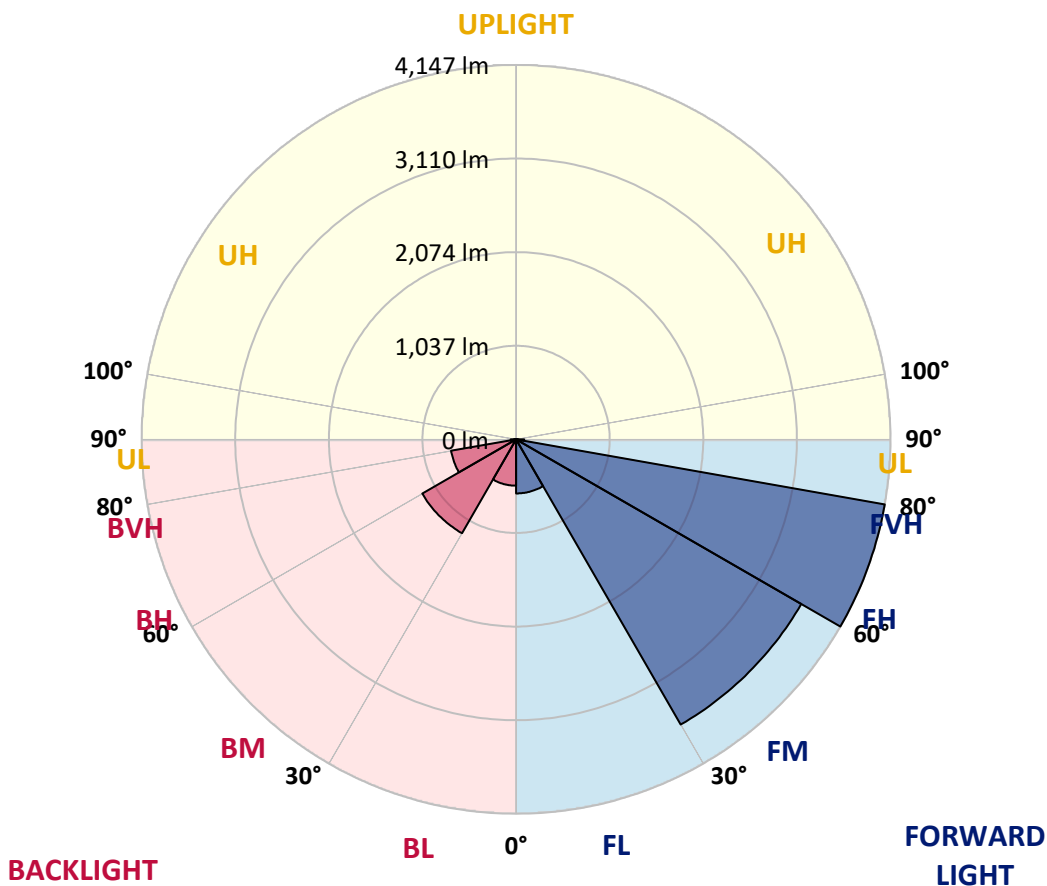
CATALOG NUMBER: GWS-SA3C-830-U-T4W-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	599.2	5.5			
FM (30°-60°)	3647.6	33.2			
FH (60°-80°)	4147.2	37.7			G2/5000
FVH (80°-90°)	88.5	0.8			G1/100
BL (0°-30°)	513.3	4.7	B2/1000		
BM (30°-60°)	1199.7	10.9	B2/2500		
BH (60°-80°)	730.6	6.6	B2/1000		G2/1000
BVH (80°-90°)	60.3	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





REPORT NUMBER: P635042
 CATALOG NUMBER: GWS-SA3C-830-U-T4W-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1
2.5°	1161.4	1165.4	1164.6	1158.2	1154.2	1147.1	1147.9	1136.8	1120.1	1109.0	1096.2
5°	1263.9	1270.2	1262.3	1251.9	1236.1	1213.0	1210.6	1185.2	1153.4	1131.2	1108.2
7.5°	1352.8	1356.8	1347.3	1329.8	1306.8	1275.8	1270.2	1240.0	1200.3	1165.4	1132.0
10°	1421.9	1426.7	1414.0	1391.0	1360.8	1329.8	1325.8	1294.8	1252.7	1211.4	1169.3
12.5°	1480.7	1482.3	1468.8	1437.8	1405.3	1373.5	1369.5	1340.9	1302.0	1259.9	1213.8
15°	1514.9	1515.7	1499.0	1464.8	1433.9	1406.1	1403.7	1379.0	1343.3	1303.6	1254.3
17.5°	1512.5	1514.1	1502.2	1472.0	1445.0	1428.3	1425.9	1410.0	1382.2	1346.5	1297.2
20°	1483.1	1484.7	1476.8	1456.9	1442.6	1437.8	1438.6	1433.9	1417.2	1387.8	1337.7
22.5°	1460.1	1462.5	1455.3	1441.0	1439.4	1450.5	1452.9	1455.3	1447.4	1421.2	1372.7
25°	1471.2	1475.2	1464.0	1444.2	1447.4	1472.0	1476.8	1484.7	1478.3	1456.1	1414.0
27.5°	1548.3	1550.6	1522.0	1481.5	1472.0	1498.2	1505.4	1518.1	1513.3	1492.6	1460.1
30°	1727.0	1725.4	1664.2	1564.9	1525.2	1535.5	1541.1	1559.4	1561.0	1547.5	1516.5
32.5°	1978.8	1970.9	1876.3	1718.3	1603.1	1577.6	1584.0	1608.6	1626.9	1612.6	1570.5
35°	2244.9	2237.8	2133.7	1948.6	1746.8	1658.7	1651.5	1670.6	1698.4	1658.7	1598.3
37.5°	2498.3	2487.2	2380.8	2152.0	1924.0	1800.9	1790.5	1771.5	1754.8	1678.5	1632.5
40°	2779.5	2766.8	2673.9	2414.9	2119.4	1909.7	1883.5	1808.0	1792.9	1744.5	1721.4
42.5°	3079.8	3079.8	3002.8	2747.8	2355.3	2065.4	2031.2	1917.6	1933.5	1901.8	1874.7
45°	3380.1	3388.8	3327.7	3083.0	2670.7	2359.3	2304.5	2143.2	2181.4	2167.1	2153.6
47.5°	3635.9	3652.6	3640.7	3425.4	3056.8	2716.8	2633.4	2465.8	2547.6	2581.7	2619.9
50°	3911.5	3929.8	3917.9	3832.9	3508.8	3149.7	3075.1	2901.9	3042.5	3145.0	3269.7
52.5°	4320.7	4346.9	4247.6	4215.0	4057.7	3641.5	3574.7	3377.7	3632.7	3802.7	4080.7
55°	4666.2	4665.4	4630.5	4705.1	4647.1	4242.8	4168.9	3990.2	4315.9	4496.2	4902.9
57.5°	4826.7	4845.7	4965.7	5177.0	5293.0	4977.6	4906.9	4724.2	5049.1	5142.8	5582.1
60°	4909.3	4933.1	5165.1	5582.9	5895.1	5779.9	5752.1	5519.4	5702.1	5691.0	6154.9
62.5°	4793.3	4841.0	5213.5	5768.8	6324.9	6586.2	6577.5	6225.6	6257.4	6148.5	6510.0
65°	4261.1	4312.7	4897.4	5675.9	6570.3	7199.5	7201.9	6865.1	6683.9	6371.0	6450.4
67.5°	3047.3	3121.1	3844.0	5078.5	6483.8	7530.8	7558.6	7155.0	6784.0	6173.9	5824.4
70°	1661.1	1715.1	2281.5	3691.5	5703.7	7451.3	7503.0	7015.2	6342.4	5340.6	4483.5
72.5°	754.7	772.1	1061.3	2025.7	3896.5	6413.9	6629.9	6260.5	5208.8	3944.9	2851.0
75°	345.6	353.5	462.3	969.1	2036.0	4292.1	4443.8	4663.0	3624.8	2491.2	1486.3
77.5°	216.9	219.2	262.9	443.3	1015.2	2142.5	2302.1	2776.4	2122.6	1232.9	621.2
80°	127.9	130.3	163.6	239.9	476.6	980.3	1132.0	1097.8	997.7	532.2	282.8
82.5°	64.3	66.7	94.5	136.6	259.8	390.0	459.2	461.5	371.8	288.4	159.7
85°	23.0	23.8	31.0	54.0	110.4	128.7	143.8	175.6	181.9	167.6	77.1
87.5°	0.0	0.0	0.8	1.6	3.2	12.7	13.5	25.4	53.2	59.6	31.0
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-SA3C-830-U-T4W-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1	1089.1
2.5°	1092.3	1080.4	1076.4	1072.4	1066.1	1063.7	1058.9	1054.1	1054.1	1049.4	1047.0
5°	1097.8	1082.0	1071.6	1066.9	1062.9	1065.3	1065.3	1066.9	1072.4	1069.2	1070.8
7.5°	1117.7	1099.4	1085.1	1081.2	1081.2	1090.7	1097.0	1105.0	1115.3	1116.9	1116.9
10°	1152.7	1131.2	1116.1	1113.7	1117.7	1131.2	1140.7	1150.3	1163.0	1163.8	1165.4
12.5°	1190.8	1169.3	1154.2	1157.4	1161.4	1178.9	1189.2	1197.1	1209.8	1209.8	1209.1
15°	1230.5	1206.7	1194.0	1200.3	1212.2	1232.1	1233.7	1234.5	1240.8	1239.2	1238.4
17.5°	1271.8	1246.4	1236.9	1246.4	1259.1	1268.6	1260.7	1249.6	1247.2	1244.0	1242.4
20°	1312.3	1286.1	1282.1	1289.3	1293.3	1285.3	1260.7	1240.0	1230.5	1225.7	1224.1
22.5°	1347.3	1325.0	1322.6	1322.6	1302.8	1275.0	1238.4	1210.6	1197.9	1191.6	1190.0
25°	1388.6	1367.9	1364.0	1342.5	1291.7	1240.8	1191.6	1166.2	1155.8	1152.7	1153.4
27.5°	1437.0	1422.7	1410.0	1348.9	1259.9	1180.5	1124.8	1113.7	1109.8	1113.7	1116.1
30°	1496.6	1482.3	1453.7	1340.9	1209.1	1101.8	1048.6	1047.8	1059.7	1070.0	1071.6
32.5°	1545.1	1538.7	1491.9	1315.5	1137.6	1015.2	969.9	973.1	994.6	1008.9	1011.3
35°	1583.2	1593.5	1523.6	1273.4	1052.6	933.4	897.7	899.2	911.2	931.0	931.8
37.5°	1637.2	1672.2	1552.2	1209.1	954.8	862.7	830.1	818.2	816.6	822.2	823.8
40°	1746.1	1798.5	1572.9	1115.3	860.3	799.1	762.6	739.6	719.7	704.6	699.9
42.5°	1910.5	1970.9	1584.8	1001.7	776.1	736.4	695.1	665.7	630.7	599.0	587.8
45°	2212.4	2232.2	1584.8	881.0	701.4	677.6	636.3	601.3	556.9	519.5	511.6
47.5°	2695.3	2631.8	1586.4	764.2	635.5	626.0	590.2	550.5	501.3	470.3	465.5
50°	3423.0	3199.8	1619.0	667.3	580.7	582.3	556.1	512.4	467.9	444.9	440.9
52.5°	4247.6	3899.6	1706.3	595.8	534.6	546.5	532.2	490.1	450.4	430.6	426.6
55°	5022.9	4543.1	1781.0	544.9	495.7	516.3	515.6	476.6	440.9	421.0	418.6
57.5°	5682.2	4984.0	1769.9	503.6	462.3	488.5	500.5	467.9	434.5	417.8	415.5
60°	6092.1	5217.5	1611.8	465.5	436.9	468.7	491.7	465.5	437.7	433.7	434.5
62.5°	6270.1	5174.6	1308.3	436.9	420.2	459.2	501.3	482.2	467.1	476.6	482.2
65°	5993.6	4806.0	962.8	415.5	404.3	461.5	523.5	508.4	467.1	473.5	475.8
67.5°	5226.2	4091.1	695.9	394.0	384.5	468.7	555.3	504.4	440.1	440.1	435.3
70°	3766.2	2942.4	505.2	372.6	364.6	458.4	556.9	477.4	409.1	406.7	394.8
72.5°	2266.4	1735.7	394.0	348.7	334.4	406.7	521.9	445.6	378.9	359.1	344.8
75°	1177.3	869.9	330.5	322.5	286.8	344.8	477.4	396.4	324.1	306.6	298.7
77.5°	504.4	406.7	283.6	287.6	238.3	290.0	385.3	343.2	287.6	265.3	258.2
80°	248.6	231.2	224.0	230.4	190.7	224.0	332.1	300.3	243.9	218.5	208.1
82.5°	142.2	135.0	161.3	163.6	135.8	187.5	280.4	254.2	201.8	174.0	157.3
85°	65.9	70.7	97.7	98.5	84.2	128.7	183.5	143.0	107.2	89.0	85.0
87.5°	26.2	31.0	42.9	42.1	24.6	23.8	15.9	8.7	7.1	6.4	5.6
90°	0.0	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			

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)