

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: P633023

Luminaire Tested: GWS-SA2D-830-U-RW-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633023
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2D-830-U-RW-W
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9548.3 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

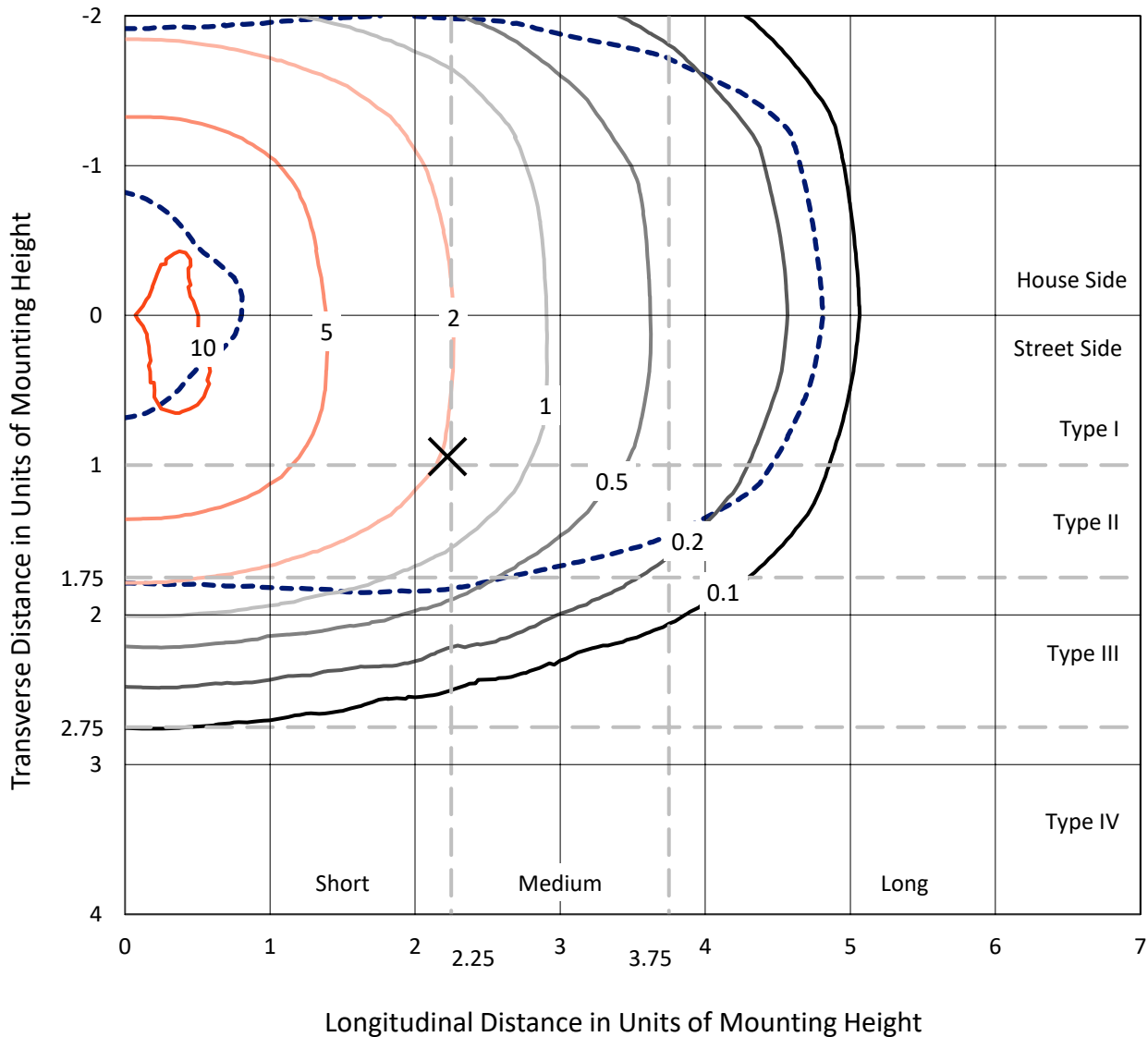
Input Watts (W): 82.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

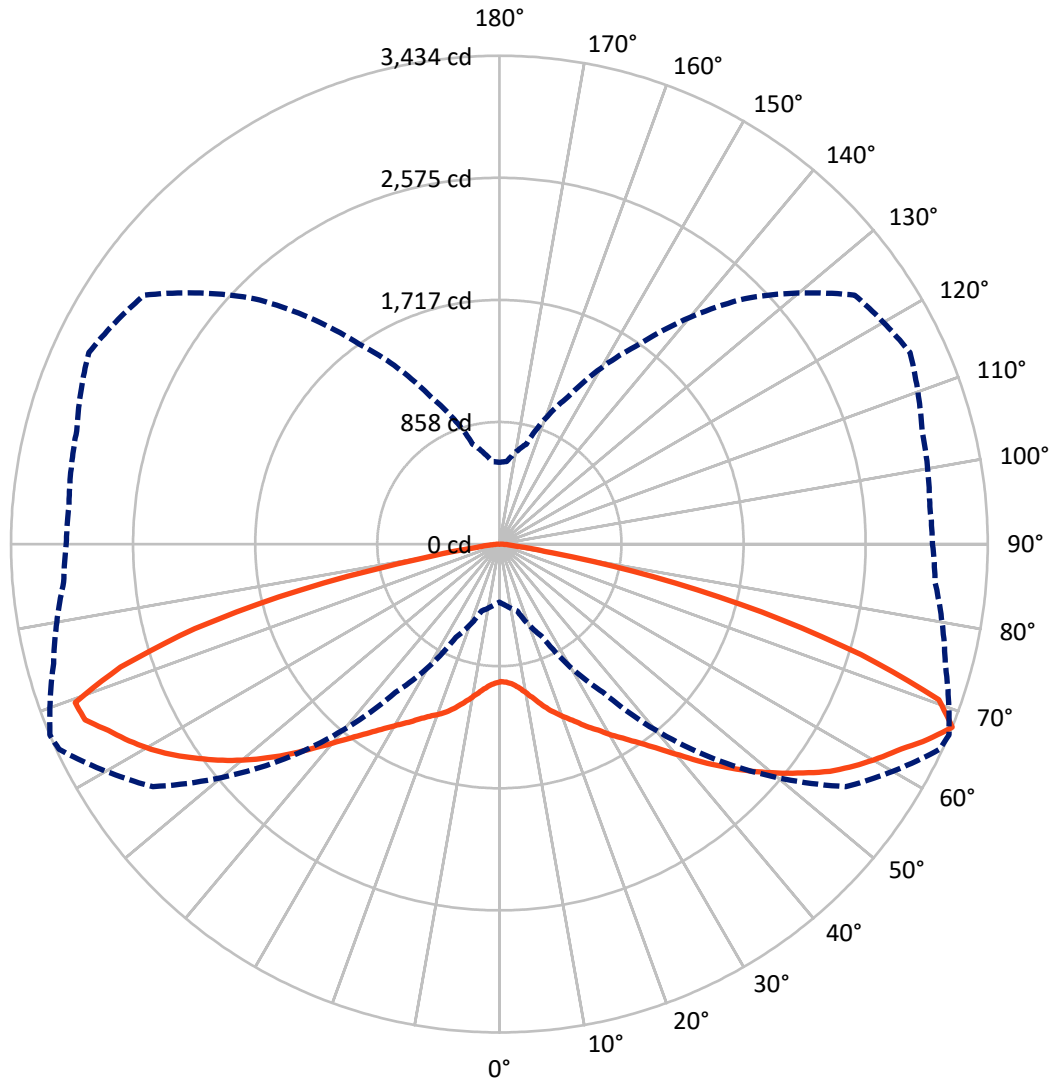
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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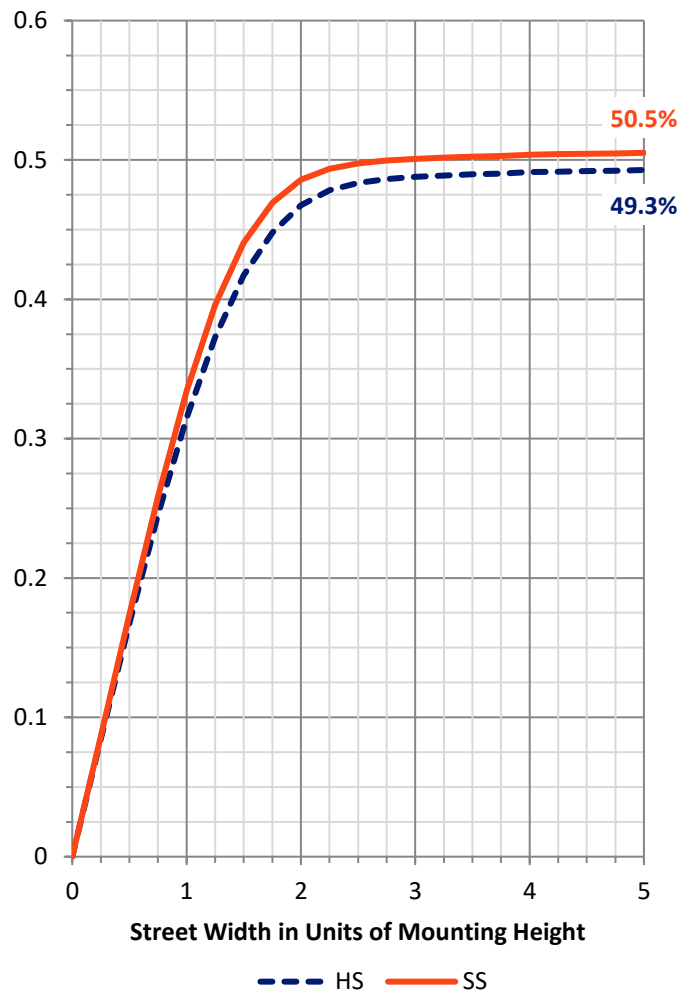
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4721.5	0.0	4721.5
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	4826.9	0.0	4826.9
	% Fixture	50.6	0.0	50.6
Total	Lumens	9548.3	0.0	9548.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.9	1.0
10°-20°	320.5	3.4
20°-30°	628.7	6.6
30°-40°	1071.2	11.2
40°-50°	1720.1	18.0
50°-60°	2337.3	24.5
60°-70°	2235.7	23.4
70°-80°	1062.9	11.1
80°-90°	77.0	0.8
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°	9548.3	100.0
0°-180°	9548.3	100.0

Coefficient of Utilization



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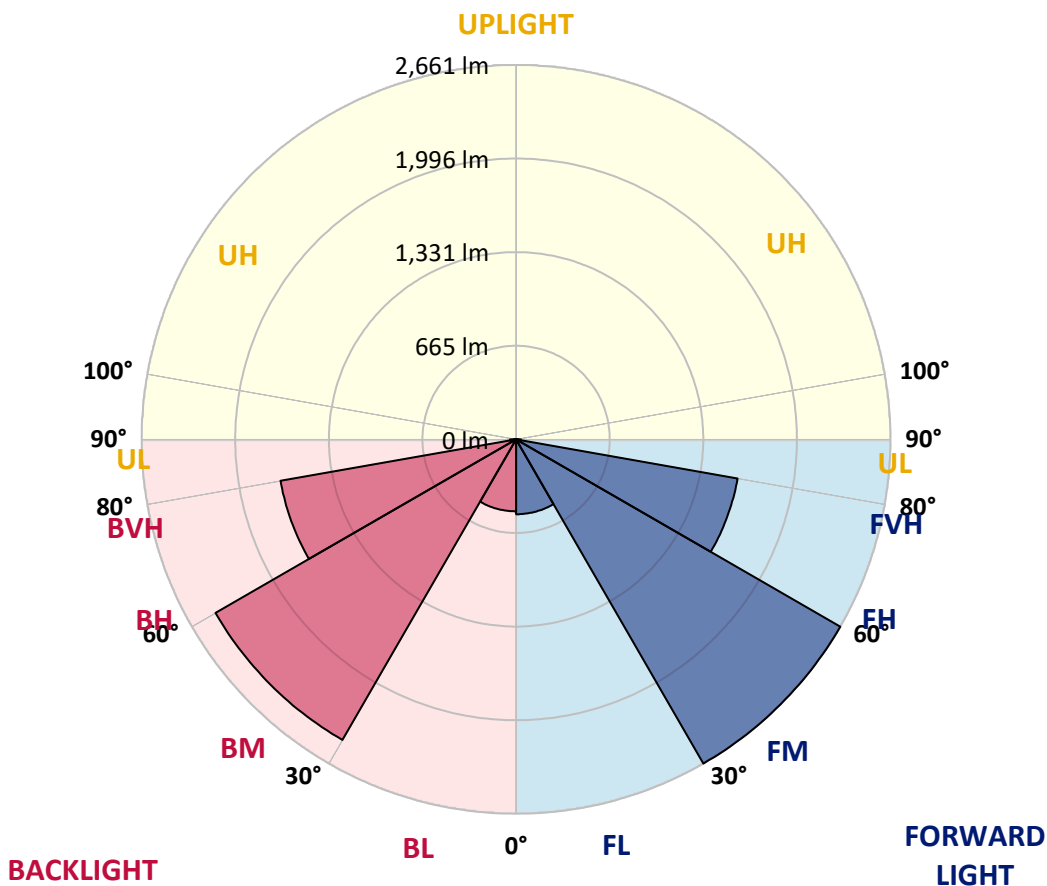
CATALOG NUMBER: GWS-SA2D-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	532.4	5.6			
FM (30°-60°)	2661.2	27.9			
FH (60°-80°)	1598.6	16.7			G1/1800
FVH (80°-90°)	34.6	0.4			G1/100
BL (0°-30°)	511.7	5.4	B2/1000		
BM (30°-60°)	2467.3	25.8	B2/2500		
BH (60°-80°)	1700.0	17.8	B3/2500		G3/2500
BVH (80°-90°)	42.4	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8
2.5°	946.9	948.2	950.2	954.2	958.2	964.2	970.1	969.5	972.1	974.1	976.1
5°	941.6	942.9	946.2	951.5	957.5	967.5	980.1	985.4	989.4	996.7	1003.4
7.5°	952.9	955.5	960.2	967.5	976.8	989.4	1006.7	1016.0	1022.0	1035.3	1046.6
10°	968.1	971.5	980.8	994.7	1008.7	1028.0	1049.9	1063.9	1067.9	1085.2	1106.5
12.5°	982.8	986.8	1002.1	1027.3	1052.6	1078.5	1104.5	1121.7	1123.1	1146.4	1170.3
15°	1006.0	1009.4	1030.0	1062.6	1101.1	1137.0	1169.0	1180.9	1186.2	1202.9	1232.8
17.5°	1057.3	1061.2	1087.8	1123.1	1163.6	1201.5	1233.5	1243.4	1243.4	1257.4	1282.0
20°	1112.4	1116.4	1151.7	1196.9	1246.1	1284.7	1309.3	1300.0	1296.6	1300.6	1317.9
22.5°	1174.3	1181.6	1215.5	1268.0	1328.5	1375.8	1388.4	1360.5	1351.2	1341.8	1345.8
25°	1253.4	1262.1	1295.3	1351.2	1410.3	1460.2	1467.5	1424.3	1419.0	1386.4	1374.4
27.5°	1344.5	1351.2	1392.4	1447.6	1502.8	1544.6	1552.6	1499.4	1481.5	1436.3	1408.3
30°	1462.2	1468.2	1504.1	1558.6	1606.5	1635.7	1645.7	1572.6	1558.6	1489.5	1446.2
32.5°	1590.5	1593.2	1629.8	1682.3	1724.8	1752.8	1738.8	1653.7	1633.1	1555.3	1496.1
35°	1737.5	1737.5	1784.7	1827.2	1861.2	1869.1	1842.5	1745.5	1721.5	1637.1	1563.3
37.5°	1881.8	1885.8	1929.6	1980.2	2010.1	2008.8	1960.2	1853.8	1826.6	1734.8	1653.0
40°	2038.0	2046.7	2090.6	2147.1	2175.7	2171.7	2097.2	1978.9	1950.9	1842.5	1762.7
42.5°	2181.7	2195.6	2246.8	2304.7	2335.9	2333.3	2255.5	2122.5	2095.2	1972.9	1893.1
45°	2296.0	2310.7	2374.5	2454.9	2504.8	2500.2	2421.7	2271.4	2238.2	2109.8	2022.1
47.5°	2396.4	2411.7	2482.9	2568.0	2647.1	2655.1	2583.3	2421.7	2386.5	2256.8	2157.7
50°	2473.6	2480.9	2560.7	2653.8	2745.5	2790.1	2727.6	2572.6	2530.1	2401.8	2290.0
52.5°	2467.6	2477.6	2576.0	2702.3	2825.3	2898.5	2855.2	2714.9	2673.7	2534.1	2425.0
55°	2345.9	2355.9	2472.9	2657.1	2869.9	2977.6	2972.9	2850.6	2820.7	2669.1	2565.3
57.5°	2168.4	2190.3	2306.7	2505.5	2811.4	3040.8	3059.4	2974.3	2943.0	2801.4	2704.3
60°	1850.5	1879.8	2014.1	2272.1	2623.8	3019.5	3151.8	3078.7	3059.4	2924.4	2830.0
62.5°	1344.5	1365.8	1544.6	1883.1	2345.9	2867.9	3229.6	3186.4	3171.8	3034.8	2943.7
65°	805.2	853.8	997.4	1331.9	1892.4	2582.0	3187.0	3327.3	3312.1	3148.5	3040.8
67.5°	407.6	429.5	486.1	722.1	1272.7	2136.4	2973.6	3415.1	3433.7	3245.6	3075.3
70°	252.7	258.7	274.6	356.4	635.7	1403.7	2431.7	3186.4	3277.5	3230.3	2985.6
72.5°	202.8	204.1	206.8	222.1	305.2	656.3	1537.3	2495.5	2659.7	3016.8	2857.2
75°	168.2	168.9	169.6	174.2	190.2	268.0	748.1	1714.9	1907.0	2564.0	2649.1
77.5°	135.0	131.7	134.3	136.3	140.3	149.6	258.0	915.0	1109.8	1683.0	2048.7
80°	87.8	86.4	91.8	93.8	97.7	103.7	137.6	310.5	377.0	612.4	651.6
82.5°	47.2	44.6	55.9	53.9	55.9	60.5	81.1	113.7	127.7	184.9	156.3
85°	14.6	14.6	15.3	18.0	21.9	21.3	35.2	55.9	61.8	79.1	58.5
87.5°	2.7	2.7	2.7	2.7	2.7	3.3	7.3	11.3	15.3	27.3	20.6
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-SA2D-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8	966.8
2.5°	980.1	974.1	977.5	979.5	978.8	977.5	970.8	969.5	966.2	960.8	959.5
5°	1009.4	1002.7	1003.4	1001.4	994.7	986.1	971.5	964.2	958.2	951.5	950.9
7.5°	1055.3	1047.9	1045.9	1036.6	1018.0	998.1	974.8	961.5	951.5	942.9	941.6
10°	1113.8	1106.5	1099.8	1077.9	1047.3	1020.7	990.1	970.8	956.2	945.5	943.5
12.5°	1178.9	1172.9	1156.3	1124.4	1087.8	1056.6	1025.3	1001.4	980.1	964.2	962.2
15°	1251.4	1238.1	1212.8	1171.6	1137.0	1111.8	1073.9	1041.3	1007.4	986.1	981.4
17.5°	1301.9	1290.6	1260.7	1220.8	1193.6	1171.6	1127.1	1080.5	1034.6	1003.4	996.7
20°	1337.9	1325.9	1292.0	1262.7	1254.1	1235.5	1183.6	1129.7	1076.5	1038.0	1029.3
22.5°	1363.8	1351.2	1316.6	1301.9	1313.9	1310.6	1260.1	1198.9	1135.7	1089.8	1079.2
25°	1388.4	1376.4	1345.8	1351.2	1383.1	1393.0	1338.5	1267.4	1195.6	1141.7	1129.1
27.5°	1411.7	1396.4	1382.4	1411.7	1456.9	1475.5	1417.6	1337.2	1259.4	1204.2	1194.2
30°	1447.6	1429.6	1427.6	1470.2	1542.0	1557.9	1494.1	1413.7	1336.5	1280.7	1268.0
32.5°	1492.8	1476.2	1477.5	1541.3	1624.4	1637.7	1583.2	1508.1	1430.9	1375.1	1357.8
35°	1554.0	1533.3	1544.6	1623.1	1706.9	1731.5	1687.6	1625.1	1550.0	1492.8	1473.5
37.5°	1638.4	1608.5	1631.8	1714.2	1798.7	1835.2	1801.3	1754.8	1680.3	1622.4	1604.5
40°	1746.1	1721.5	1730.8	1821.9	1909.0	1952.9	1931.6	1885.8	1812.0	1751.4	1730.8
42.5°	1873.8	1849.2	1845.9	1942.9	2030.1	2096.5	2075.9	2034.0	1957.6	1888.4	1868.5
45°	1998.8	1976.2	1980.8	2079.9	2177.7	2250.1	2229.5	2180.3	2097.2	2017.4	2001.5
47.5°	2129.1	2110.5	2114.5	2219.6	2327.3	2399.8	2373.8	2314.0	2216.9	2131.8	2112.5
50°	2262.8	2241.5	2247.5	2357.9	2474.2	2542.7	2502.8	2414.4	2307.3	2224.2	2207.6
52.5°	2395.8	2370.5	2385.8	2490.2	2610.5	2665.1	2591.3	2484.2	2380.5	2298.0	2279.4
55°	2548.7	2522.1	2505.5	2617.2	2736.2	2758.8	2657.8	2532.7	2409.7	2316.0	2304.7
57.5°	2688.3	2665.7	2634.5	2746.2	2834.0	2817.3	2709.0	2519.4	2338.6	2218.2	2202.3
60°	2813.3	2794.1	2766.8	2861.9	2901.8	2864.5	2667.7	2361.9	2163.0	2037.4	2030.1
62.5°	2928.4	2907.8	2882.5	2963.6	2958.3	2871.9	2480.2	2119.8	1853.8	1718.9	1706.9
65°	3019.5	3000.9	2993.5	3057.4	3048.7	2728.9	2188.3	1723.5	1354.5	1202.2	1197.6
67.5°	3045.4	3038.1	3077.3	3185.7	3050.7	2441.6	1716.2	1143.0	727.4	583.1	574.5
70°	2948.3	2947.7	3060.0	3215.0	2774.1	1865.1	1012.7	515.3	365.7	324.5	319.2
72.5°	2822.0	2820.0	2909.1	2773.5	2057.3	1020.7	426.2	275.9	228.7	217.4	217.4
75°	2614.5	2609.2	2676.4	2109.8	1157.0	384.3	226.1	189.5	179.5	177.5	177.5
77.5°	2131.1	2086.6	1980.8	1303.9	403.6	188.8	149.6	148.9	143.0	142.3	142.3
80°	700.8	700.8	814.5	497.4	178.2	116.4	105.7	111.0	105.1	101.1	100.4
82.5°	114.4	157.6	224.1	142.3	96.4	72.5	65.2	69.2	72.5	57.8	57.8
85°	45.2	59.2	86.4	66.5	44.6	29.3	31.3	34.6	30.6	26.6	25.9
87.5°	17.3	21.3	30.6	16.0	9.3	5.3	3.3	3.3	2.7	2.7	2.7
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



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)