

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: P635537

Luminaire Tested: GWS-SA3D-830-U-T4W-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635537
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-SA3D-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: 13860 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

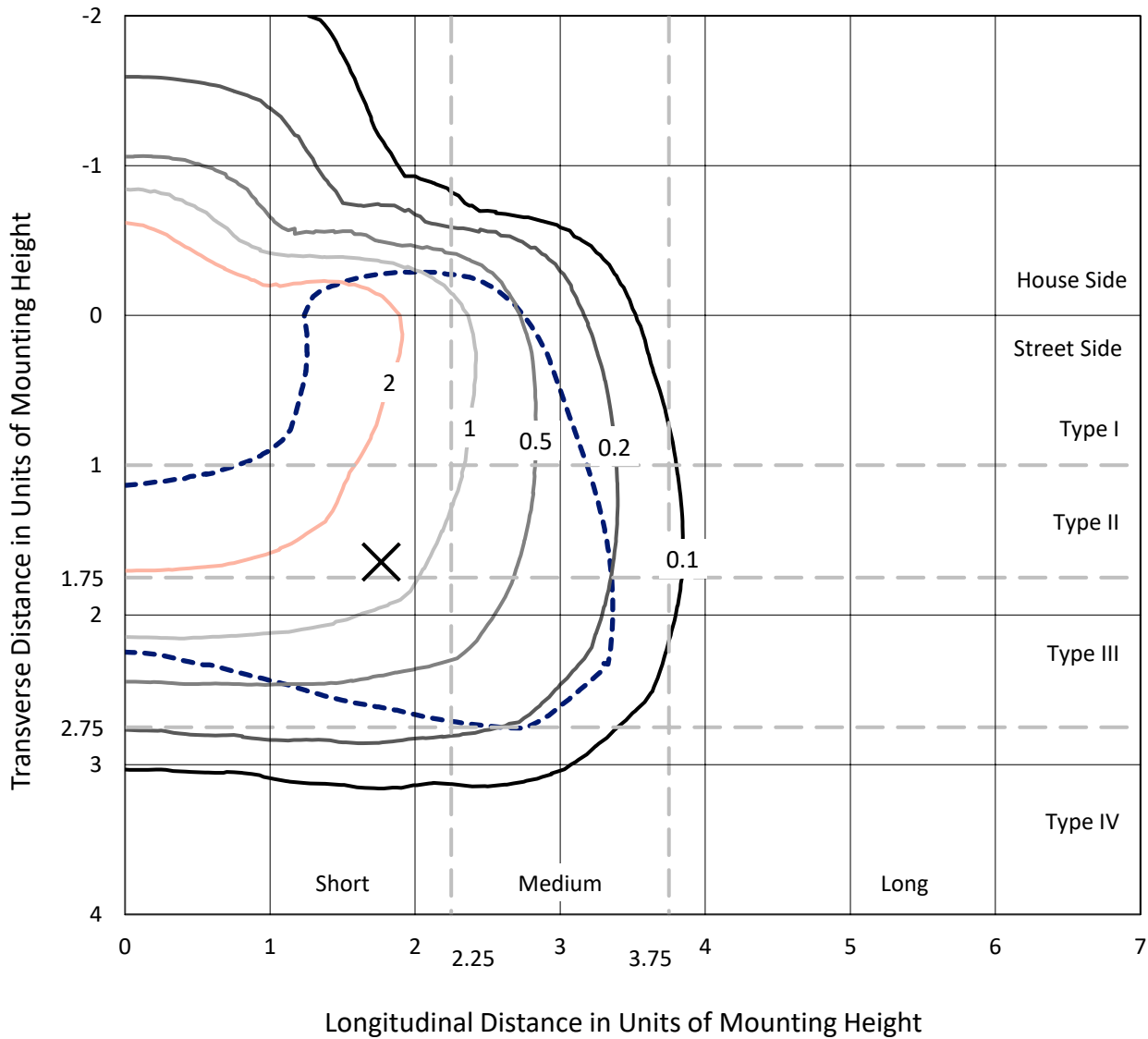
Input Watts (W): 120.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

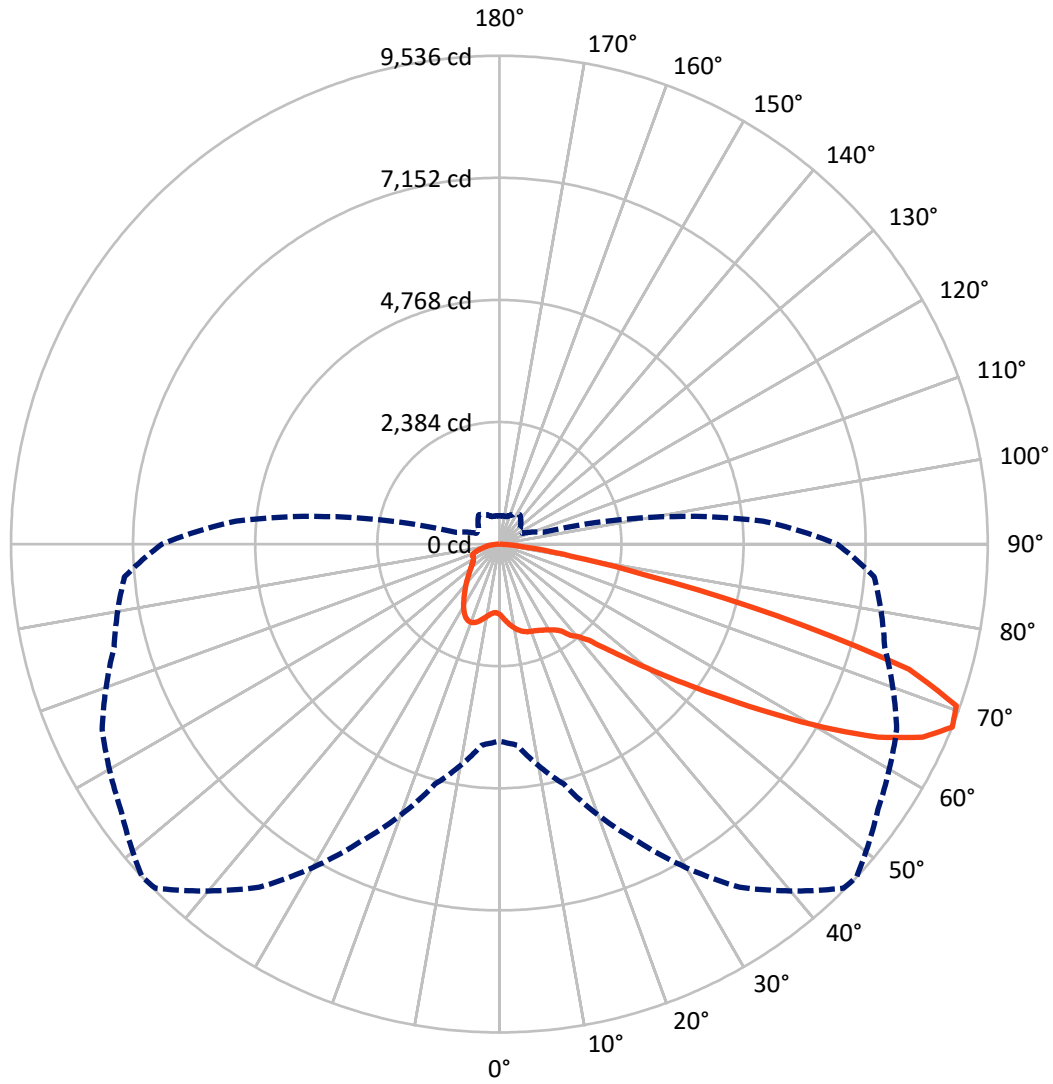
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.3 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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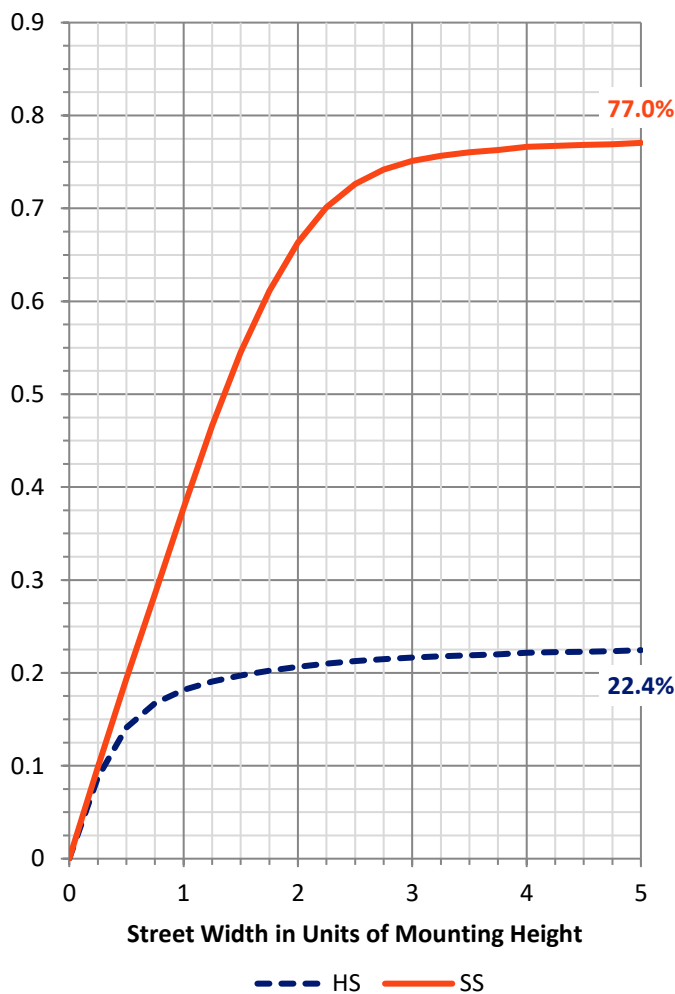
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3158.8	0.0	3158.8
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	10701.2	0.0	10701.2
	% Fixture	77.2	0.0	77.2
Total	Lumens	13860.0	0.0	13860.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	1.0
10°-20°	467.8	3.4
20°-30°	795.2	5.7
30°-40°	1164.9	8.4
40°-50°	1774.8	12.8
50°-60°	3175.5	22.9
60°-70°	4237.4	30.6
70°-80°	1916.2	13.8
80°-90°	187.7	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°	13860.0	100.0
0°-180°	13860.0	100.0

Coefficient of Utilization



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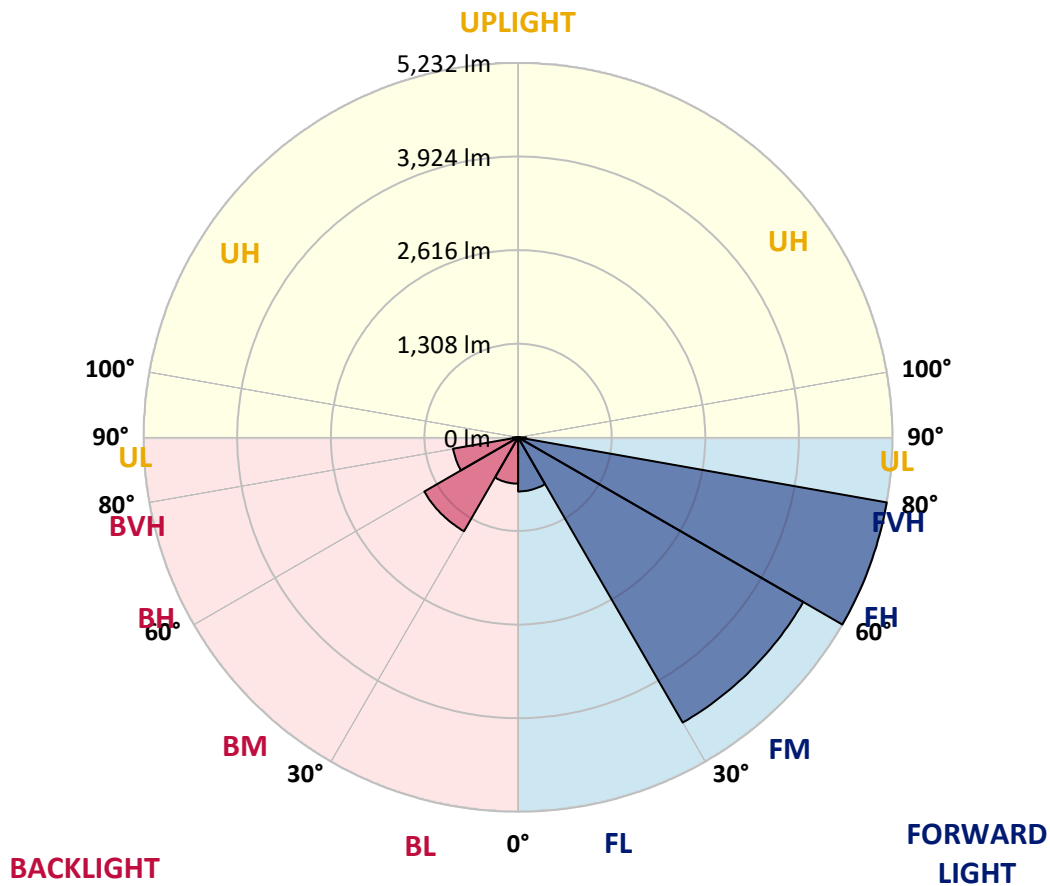
CATALOG NUMBER: GWS-SA3D-830-U-T4W-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	755.9	5.5			
FM (30°-60°)	4601.7	33.2			
FH (60°-80°)	5232.0	37.7			G3/7500
FVH (80°-90°)	111.7	0.8			G2/225
BL (0°-30°)	647.6	4.7	B2/1000		
BM (30°-60°)	1513.5	10.9	B2/2500		
BH (60°-80°)	921.6	6.6	B2/1000		G2/1000
BVH (80°-90°)	76.1	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-G3

Type III Short





REPORT NUMBER: P635537
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0
2.5°	1465.2	1470.2	1469.2	1461.2	1456.1	1447.1	1448.1	1434.1	1413.0	1399.0	1383.0
5°	1594.4	1602.5	1592.4	1579.4	1559.4	1530.3	1527.3	1495.2	1455.1	1427.1	1398.0
7.5°	1706.7	1711.7	1699.7	1677.6	1648.6	1609.5	1602.5	1564.4	1514.3	1470.2	1428.1
10°	1793.9	1799.9	1783.8	1754.8	1716.7	1677.6	1672.6	1633.5	1580.4	1528.3	1475.2
12.5°	1868.0	1870.0	1853.0	1813.9	1772.8	1732.7	1727.7	1691.7	1642.5	1589.4	1531.3
15°	1911.1	1912.1	1891.1	1848.0	1808.9	1773.8	1770.8	1739.8	1694.7	1644.5	1582.4
17.5°	1908.1	1910.1	1895.1	1857.0	1822.9	1801.9	1798.9	1778.8	1743.8	1698.7	1636.5
20°	1871.0	1873.0	1863.0	1838.0	1819.9	1813.9	1814.9	1808.9	1787.9	1750.8	1687.6
22.5°	1842.0	1845.0	1836.0	1817.9	1815.9	1829.9	1833.0	1836.0	1825.9	1792.9	1731.7
25°	1856.0	1861.0	1847.0	1821.9	1825.9	1857.0	1863.0	1873.0	1865.0	1837.0	1783.8
27.5°	1953.2	1956.2	1920.1	1869.0	1857.0	1890.1	1899.1	1915.1	1909.1	1883.1	1842.0
30°	2178.7	2176.7	2099.5	1974.3	1924.2	1937.2	1944.2	1967.2	1969.2	1952.2	1913.1
32.5°	2496.4	2486.4	2367.1	2167.7	2022.4	1990.3	1998.3	2029.4	2052.4	2034.4	1981.3
35°	2832.1	2823.1	2691.8	2458.3	2203.8	2092.5	2083.5	2107.5	2142.6	2092.5	2016.4
37.5°	3151.8	3137.8	3003.5	2714.9	2427.2	2271.9	2258.9	2234.8	2213.8	2117.6	2059.4
40°	3506.6	3490.5	3373.3	3046.6	2673.8	2409.2	2376.1	2280.9	2261.9	2200.7	2171.7
42.5°	3885.4	3885.4	3788.2	3466.5	2971.4	2605.6	2562.5	2419.2	2439.3	2399.2	2365.1
45°	4264.2	4275.2	4198.1	3889.4	3369.3	2976.4	2907.3	2703.8	2751.9	2733.9	2716.9
47.5°	4586.9	4607.9	4592.9	4321.3	3856.3	3427.4	3322.2	3110.7	3213.9	3257.0	3305.1
50°	4934.6	4957.7	4942.7	4835.4	4426.6	3973.6	3879.4	3660.9	3838.3	3967.6	4124.9
52.5°	5450.8	5483.8	5358.6	5317.5	5119.0	4593.9	4509.7	4261.2	4582.9	4797.4	5148.1
55°	5886.7	5885.7	5841.6	5935.8	5862.6	5352.5	5259.3	5033.9	5444.7	5672.2	6185.3
57.5°	6089.1	6113.2	6264.5	6531.1	6677.4	6279.5	6190.4	5959.9	6369.7	6488.0	7042.2
60°	6193.4	6223.4	6516.1	7043.2	7437.0	7291.7	7256.7	6963.0	7193.5	7179.5	7764.8
62.5°	6047.0	6107.2	6577.2	7277.7	7979.2	8308.9	8297.9	7853.9	7894.0	7756.7	8212.7
65°	5375.6	5440.7	6178.3	7160.5	8288.9	9082.6	9085.6	8660.7	8432.2	8037.3	8137.6
67.5°	3844.3	3937.5	4849.5	6406.8	8179.6	9500.5	9535.6	9026.5	8558.5	7788.8	7347.9
70°	2095.5	2163.7	2878.2	4657.0	7195.5	9400.3	9465.4	8850.1	8001.3	6737.5	5656.2
72.5°	952.1	974.1	1338.9	2555.5	4915.6	8091.5	8364.0	7898.0	6571.2	4976.7	3596.8
75°	435.9	446.0	583.3	1222.6	2568.5	5414.7	5606.1	5882.7	4572.9	3142.8	1875.0
77.5°	273.6	276.6	331.7	559.2	1280.8	2702.8	2904.3	3502.6	2677.8	1555.4	783.7
80°	161.3	164.4	206.4	302.7	601.3	1236.7	1428.1	1385.0	1258.7	671.4	356.8
82.5°	81.2	84.2	119.3	172.4	327.7	492.1	579.2	582.3	469.0	363.8	201.4
85°	29.1	30.1	39.1	68.1	139.3	162.4	181.4	221.5	229.5	211.5	97.2
87.5°	0.0	0.0	1.0	2.0	4.0	16.0	17.0	32.1	67.1	75.2	39.1
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-T4W-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0	1374.0
2.5°	1378.0	1362.9	1357.9	1352.9	1344.9	1341.9	1335.9	1329.9	1329.9	1323.9	1320.9
5°	1385.0	1364.9	1351.9	1345.9	1340.9	1343.9	1343.9	1345.9	1352.9	1348.9	1350.9
7.5°	1410.0	1387.0	1369.0	1363.9	1363.9	1376.0	1384.0	1394.0	1407.0	1409.0	1409.0
10°	1454.1	1427.1	1408.0	1405.0	1410.0	1427.1	1439.1	1451.1	1467.2	1468.2	1470.2
12.5°	1502.2	1475.2	1456.1	1460.2	1465.2	1487.2	1500.2	1510.3	1526.3	1526.3	1525.3
15°	1552.3	1522.3	1506.3	1514.3	1529.3	1554.4	1556.4	1557.4	1565.4	1563.4	1562.4
17.5°	1604.5	1572.4	1560.4	1572.4	1588.4	1600.5	1590.4	1576.4	1573.4	1569.4	1567.4
20°	1655.6	1622.5	1617.5	1626.5	1631.5	1621.5	1590.4	1564.4	1552.3	1546.3	1544.3
22.5°	1699.7	1671.6	1668.6	1668.6	1643.5	1608.5	1562.4	1527.3	1511.3	1503.2	1501.2
25°	1751.8	1725.7	1720.7	1693.7	1629.5	1565.4	1503.2	1471.2	1458.1	1454.1	1455.1
27.5°	1812.9	1794.9	1778.8	1701.7	1589.4	1489.2	1419.1	1405.0	1400.0	1405.0	1408.0
30°	1888.1	1870.0	1834.0	1691.7	1525.3	1390.0	1322.9	1321.9	1336.9	1349.9	1351.9
32.5°	1949.2	1941.2	1882.1	1659.6	1435.1	1280.8	1223.6	1227.6	1254.7	1272.7	1275.8
35°	1997.3	2010.3	1922.1	1606.5	1327.9	1177.5	1132.4	1134.4	1149.5	1174.5	1175.5
37.5°	2065.5	2109.6	1958.2	1525.3	1204.6	1088.3	1047.3	1032.2	1030.2	1037.2	1039.2
40°	2202.8	2268.9	1984.3	1407.0	1085.3	1008.2	962.1	933.0	908.0	888.9	882.9
42.5°	2410.2	2486.4	1999.3	1263.7	979.1	929.0	876.9	839.8	795.7	755.6	741.6
45°	2791.0	2816.1	1999.3	1111.4	884.9	854.8	802.7	758.6	702.5	655.4	645.4
47.5°	3400.3	3320.2	2001.3	964.1	801.7	789.7	744.6	694.5	632.4	593.3	587.3
50°	4318.3	4036.7	2042.4	841.8	732.6	734.6	701.5	646.4	590.3	561.2	556.2
52.5°	5358.6	4919.6	2152.6	751.6	674.5	689.5	671.4	618.3	568.2	543.2	538.2
55°	6336.7	5731.4	2246.8	687.5	625.3	651.4	650.4	601.3	556.2	531.1	528.1
57.5°	7168.5	6287.6	2232.8	635.4	583.3	616.3	631.4	590.3	548.2	527.1	524.1
60°	7685.6	6582.2	2033.4	587.3	551.2	591.3	620.3	587.3	552.2	547.2	548.2
62.5°	7910.1	6528.1	1650.6	551.2	530.1	579.2	632.4	608.3	589.3	601.3	608.3
65°	7561.3	6063.1	1214.6	524.1	510.1	582.3	660.4	641.4	589.3	597.3	600.3
67.5°	6593.2	5161.1	877.9	497.1	485.0	591.3	700.5	636.4	555.2	555.2	549.2
70°	4751.3	3712.0	637.4	470.0	460.0	578.2	702.5	602.3	516.1	513.1	498.1
72.5°	2859.2	2189.7	497.1	439.9	421.9	513.1	658.4	562.2	478.0	453.0	434.9
75°	1485.2	1097.4	416.9	406.9	361.8	434.9	602.3	500.1	408.9	386.8	376.8
77.5°	636.4	513.1	357.8	362.8	300.6	365.8	486.0	432.9	362.8	334.7	325.7
80°	313.7	291.6	282.6	290.6	240.5	282.6	418.9	378.8	307.7	275.6	262.6
82.5°	179.4	170.4	203.4	206.4	171.4	236.5	353.8	320.7	254.5	219.5	198.4
85°	83.2	89.2	123.3	124.3	106.2	162.4	231.5	180.4	135.3	112.2	107.2
87.5°	33.1	39.1	54.1	53.1	31.1	30.1	20.0	11.0	9.0	8.0	7.0
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)