

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: P637517

Luminaire Tested: GWS-SA4C-830-U-T4W-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637517
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-SA4C-830-U-T4W-W
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15288.3 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

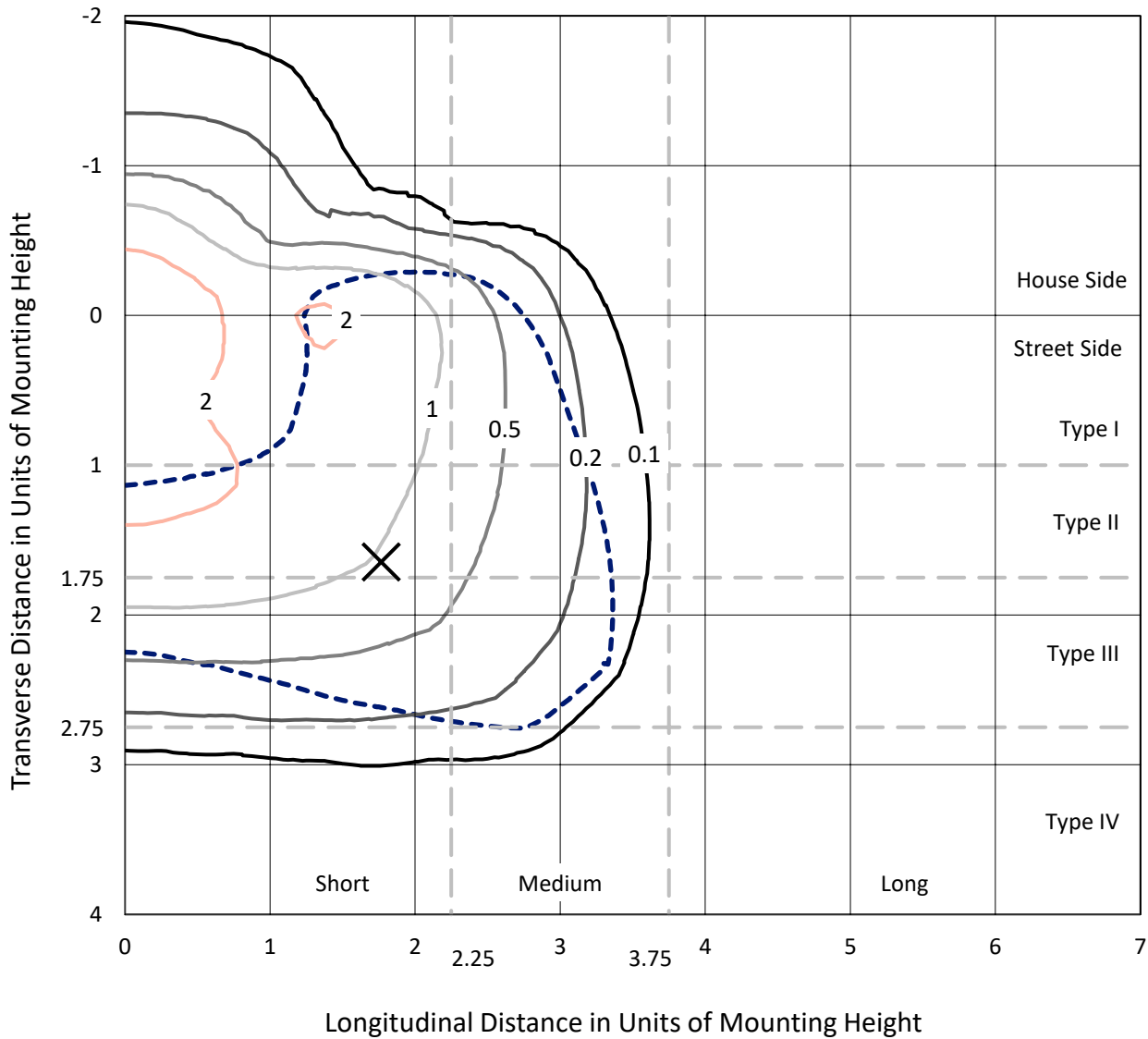
Input Watts (W): 128.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P637517
 CATALOG NUMBER: GWS-SA4C-830-U-T4W-W

Iso-Footcandle Lines of Horizontal Illumination

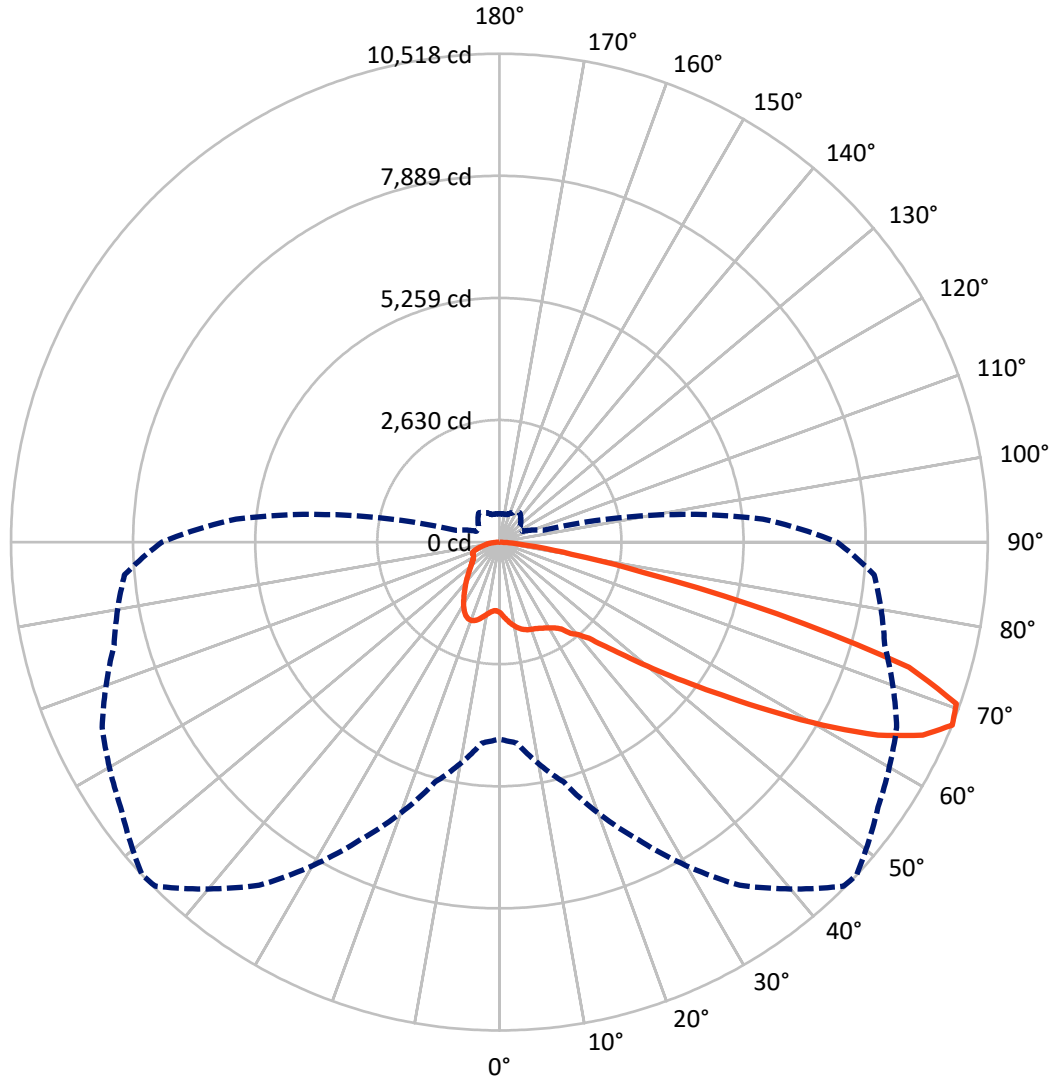
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type III - Short - N/A

REPORT NUMBER: P637517
CATALOG NUMBER: GWS-SA4C-830-U-T4W-W

Luminous Intensity Polar Plot



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

REPORT NUMBER: P637517

CATALOG NUMBER: GWS-SA4C-830-U-T4W-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3484.3	0.0	3484.3
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	11804.0	0.0	11804.0
	% Fixture	77.2	0.0	77.2
Total	Lumens	15288.3	0.0	15288.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.9	1.0
10°-20°	516.0	3.4
20°-30°	877.1	5.7
30°-40°	1284.9	8.4
40°-50°	1957.7	12.8
50°-60°	3502.8	22.9
60°-70°	4674.1	30.6
70°-80°	2113.7	13.8
80°-90°	207.1	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°	15288.3	100.0
0°-180°	15288.3	100.0

Coefficient of Utilization



REPORT NUMBER: P637517

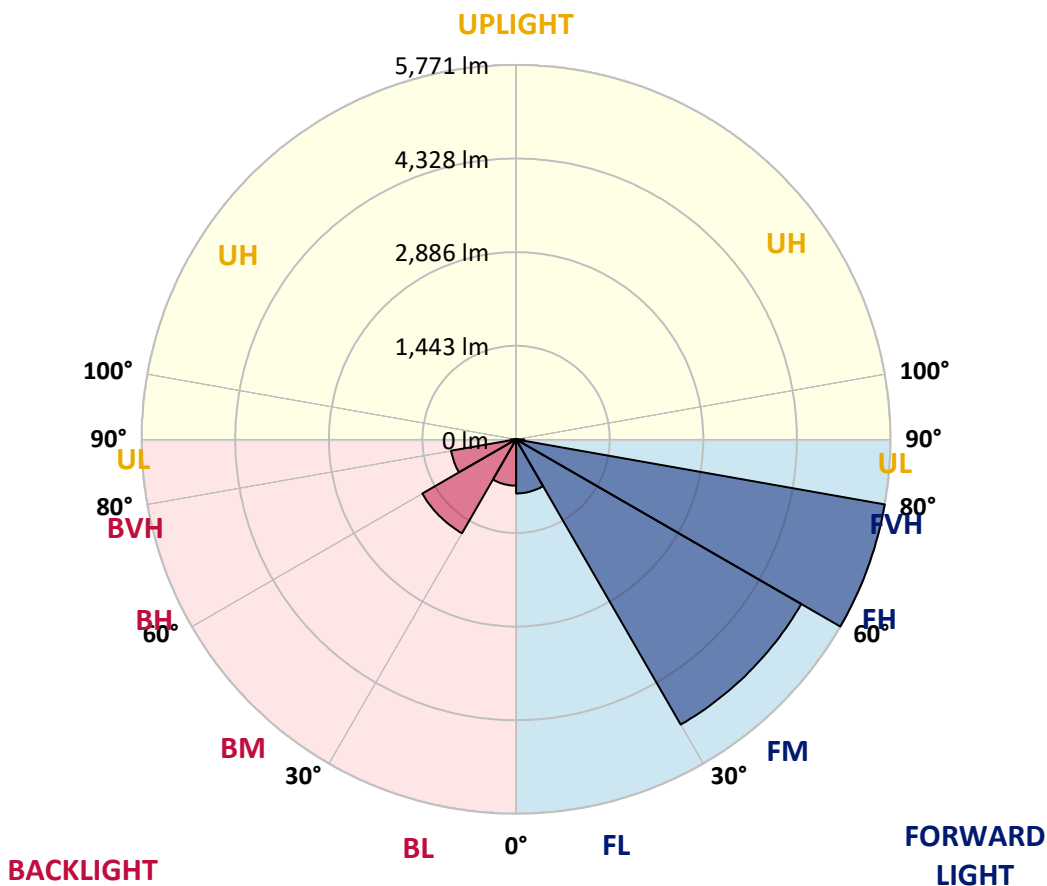
CATALOG NUMBER: GWS-SA4C-830-U-T4W-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	833.8	5.5			
FM (30°-60°)	5075.9	33.2			
FH (60°-80°)	5771.2	37.7			G3/7500
FVH (80°-90°)	123.2	0.8			G2/225
BL (0°-30°)	714.3	4.7	B2/1000		
BM (30°-60°)	1669.5	10.9	B2/2500		
BH (60°-80°)	1016.6	6.6	B3/2500		G3/2500
BVH (80°-90°)	83.9	0.5			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





REPORT NUMBER: P637517
 CATALOG NUMBER: GWS-SA4C-830-U-T4W-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6
2.5°	1616.1	1621.7	1620.6	1611.7	1606.2	1596.3	1597.4	1581.9	1558.7	1543.2	1525.5
5°	1758.8	1767.6	1756.5	1742.2	1720.1	1688.0	1684.7	1649.3	1605.1	1574.1	1542.1
7.5°	1882.6	1888.1	1874.8	1850.5	1818.4	1775.3	1767.6	1725.6	1670.3	1621.7	1575.2
10°	1978.7	1985.4	1967.7	1935.6	1893.6	1850.5	1845.0	1801.9	1743.3	1685.8	1627.2
12.5°	2060.5	2062.7	2044.0	2000.8	1955.5	1911.3	1905.8	1866.0	1811.8	1753.2	1689.1
15°	2108.1	2109.2	2086.0	2038.4	1995.3	1956.6	1953.3	1919.0	1869.3	1814.0	1745.5
17.5°	2104.8	2107.0	2090.4	2048.4	2010.8	1987.6	1984.3	1962.2	1923.5	1873.7	1805.2
20°	2063.9	2066.1	2055.0	2027.4	2007.5	2000.8	2001.9	1995.3	1972.1	1931.2	1861.6
22.5°	2031.8	2035.1	2025.2	2005.3	2003.1	2018.5	2021.8	2025.2	2014.1	1977.6	1910.2
25°	2047.3	2052.8	2037.3	2009.7	2014.1	2048.4	2055.0	2066.1	2057.2	2026.3	1967.7
27.5°	2154.5	2157.8	2118.0	2061.6	2048.4	2084.9	2094.8	2112.5	2105.9	2077.1	2031.8
30°	2403.2	2401.0	2315.9	2177.7	2122.4	2136.8	2144.5	2170.0	2172.2	2153.4	2110.3
32.5°	2753.6	2742.6	2611.0	2391.1	2230.8	2195.4	2204.2	2238.5	2263.9	2244.0	2185.4
35°	3124.0	3114.0	2969.2	2711.6	2430.9	2308.2	2298.2	2324.7	2363.4	2308.2	2224.1
37.5°	3476.6	3461.1	3313.0	2994.6	2677.4	2506.0	2491.7	2465.1	2441.9	2335.8	2271.7
40°	3867.9	3850.2	3720.9	3360.5	2949.3	2657.5	2621.0	2516.0	2495.0	2427.5	2395.5
42.5°	4285.8	4285.8	4178.6	3823.7	3277.6	2874.1	2826.6	2668.5	2690.6	2646.4	2608.8
45°	4703.6	4715.8	4630.7	4290.2	3716.5	3283.1	3206.9	2982.5	3035.5	3015.6	2996.8
47.5°	5059.6	5082.8	5066.2	4766.6	4253.7	3780.6	3664.5	3431.3	3545.1	3592.7	3645.7
50°	5443.2	5468.6	5452.0	5333.7	4882.7	4383.1	4279.1	4038.2	4233.8	4376.4	4550.0
52.5°	6012.5	6049.0	5910.8	5865.4	5646.6	5067.3	4974.5	4700.3	5055.2	5291.7	5678.6
55°	6493.3	6492.2	6443.6	6547.5	6466.8	5904.1	5801.3	5552.6	6005.8	6256.8	6822.8
57.5°	6716.6	6743.2	6910.1	7204.1	7365.5	6926.7	6828.3	6574.0	7026.2	7156.6	7767.9
60°	6831.6	6864.8	7187.6	7769.0	8203.4	8043.2	8004.5	7680.6	7934.8	7919.4	8564.9
62.5°	6670.2	6736.5	7255.0	8027.7	8801.5	9165.2	9153.0	8663.3	8707.5	8556.1	9059.1
65°	5929.6	6001.4	6815.0	7898.3	9143.1	10018.6	10021.9	9553.2	9301.1	8865.6	8976.1
67.5°	4240.5	4343.3	5349.2	7067.1	9022.6	10479.5	10518.2	9956.7	9440.4	8591.5	8105.1
70°	2311.5	2386.6	3174.8	5137.0	7937.0	10369.0	10440.9	9762.1	8825.8	7431.9	6239.1
72.5°	1050.2	1074.5	1476.9	2818.9	5422.2	8925.3	9226.0	8712.0	7248.4	5489.6	3967.4
75°	480.9	491.9	643.4	1348.6	2833.2	5972.7	6183.8	6488.9	5044.1	3466.7	2068.3
77.5°	301.8	305.1	365.9	616.8	1412.7	2981.4	3203.6	3863.5	2953.7	1715.6	864.5
80°	178.0	181.3	227.7	333.8	663.3	1364.1	1575.2	1527.7	1388.4	740.6	393.5
82.5°	89.5	92.9	131.5	190.1	361.5	542.8	638.9	642.3	517.3	401.3	222.2
85°	32.1	33.2	43.1	75.2	153.7	179.1	200.1	244.3	253.1	233.2	107.2
87.5°	0.0	0.0	1.1	2.2	4.4	17.7	18.8	35.4	74.1	82.9	43.1
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: P637517
 CATALOG NUMBER: GWS-SA4C-830-U-T4W-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6
2.5°	1520.0	1503.4	1497.9	1492.3	1483.5	1480.2	1473.5	1466.9	1466.9	1460.3	1457.0
5°	1527.7	1505.6	1491.2	1484.6	1479.1	1482.4	1482.4	1484.6	1492.3	1487.9	1490.1
7.5°	1555.4	1529.9	1510.0	1504.5	1504.5	1517.8	1526.6	1537.7	1552.0	1554.2	1554.2
10°	1604.0	1574.1	1553.1	1549.8	1555.4	1574.1	1587.4	1600.7	1618.4	1619.5	1621.7
12.5°	1657.1	1627.2	1606.2	1610.6	1616.1	1640.5	1654.8	1665.9	1683.6	1683.6	1682.5
15°	1712.3	1679.2	1661.5	1670.3	1686.9	1714.5	1716.7	1717.8	1726.7	1724.5	1723.4
17.5°	1769.8	1734.4	1721.2	1734.4	1752.1	1765.4	1754.3	1738.9	1735.5	1731.1	1728.9
20°	1826.2	1789.7	1784.2	1794.1	1799.7	1788.6	1754.3	1725.6	1712.3	1705.7	1703.5
22.5°	1874.8	1843.9	1840.6	1840.6	1812.9	1774.2	1723.4	1684.7	1667.0	1658.2	1655.9
25°	1932.3	1903.6	1898.0	1868.2	1797.4	1726.7	1658.2	1622.8	1608.4	1604.0	1605.1
27.5°	1999.7	1979.8	1962.2	1877.0	1753.2	1642.7	1565.3	1549.8	1544.3	1549.8	1553.1
30°	2082.6	2062.7	2023.0	1866.0	1682.5	1533.2	1459.2	1458.1	1474.7	1489.0	1491.2
32.5°	2150.1	2141.2	2076.0	1830.6	1583.0	1412.7	1349.7	1354.2	1384.0	1403.9	1407.2
35°	2203.1	2217.5	2120.2	1772.0	1464.7	1298.9	1249.1	1251.4	1267.9	1295.6	1296.7
37.5°	2278.3	2326.9	2160.0	1682.5	1328.7	1200.5	1155.2	1138.6	1136.4	1144.1	1146.3
40°	2429.8	2502.7	2188.8	1552.0	1197.2	1112.1	1061.2	1029.2	1001.5	980.5	973.9
42.5°	2658.6	2742.6	2205.3	1394.0	1080.0	1024.7	967.3	926.4	877.7	833.5	818.0
45°	3078.6	3106.3	2205.3	1225.9	976.1	942.9	885.5	836.8	774.9	723.0	711.9
47.5°	3750.7	3662.3	2207.6	1063.4	884.3	871.1	821.3	766.1	697.5	654.4	647.8
50°	4763.3	4452.7	2252.9	928.6	808.1	810.3	773.8	713.0	651.1	619.0	613.5
52.5°	5910.8	5426.6	2374.5	829.1	744.0	760.5	740.6	682.1	626.8	599.1	593.6
55°	6989.7	6322.0	2478.4	758.3	689.8	718.5	717.4	663.3	613.5	585.9	582.6
57.5°	7907.2	6935.5	2462.9	700.8	643.4	679.8	696.4	651.1	604.7	581.5	578.1
60°	8477.6	7260.5	2242.9	647.8	608.0	652.2	684.3	647.8	609.1	603.6	604.7
62.5°	8725.2	7200.8	1820.7	608.0	584.8	638.9	697.5	671.0	650.0	663.3	671.0
65°	8340.5	6687.9	1339.8	578.1	562.7	642.3	728.5	707.5	650.0	658.8	662.2
67.5°	7272.7	5693.0	968.4	548.3	535.0	652.2	772.7	702.0	612.4	612.4	605.8
70°	5240.9	4094.5	703.1	518.5	507.4	637.8	774.9	664.4	569.3	566.0	549.4
72.5°	3153.8	2415.4	548.3	485.3	465.4	566.0	726.3	620.2	527.3	499.7	479.8
75°	1638.3	1210.5	459.9	448.8	399.1	479.8	664.4	551.6	451.0	426.7	415.6
77.5°	702.0	566.0	394.6	400.2	331.6	403.5	536.1	477.5	400.2	369.2	359.3
80°	346.0	321.7	311.7	320.6	265.3	311.7	462.1	417.9	339.4	304.0	289.6
82.5°	197.9	187.9	224.4	227.7	189.0	260.9	390.2	353.7	280.8	242.1	218.9
85°	91.8	98.4	136.0	137.1	117.2	179.1	255.4	199.0	149.2	123.8	118.3
87.5°	36.5	43.1	59.7	58.6	34.3	33.2	22.1	12.2	9.9	8.8	7.7
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

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



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

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)