

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: P635532

Luminaire Tested: GWS-SA3D-830-U-T3R-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635532
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3D-830-U-T3R-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10943.7 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

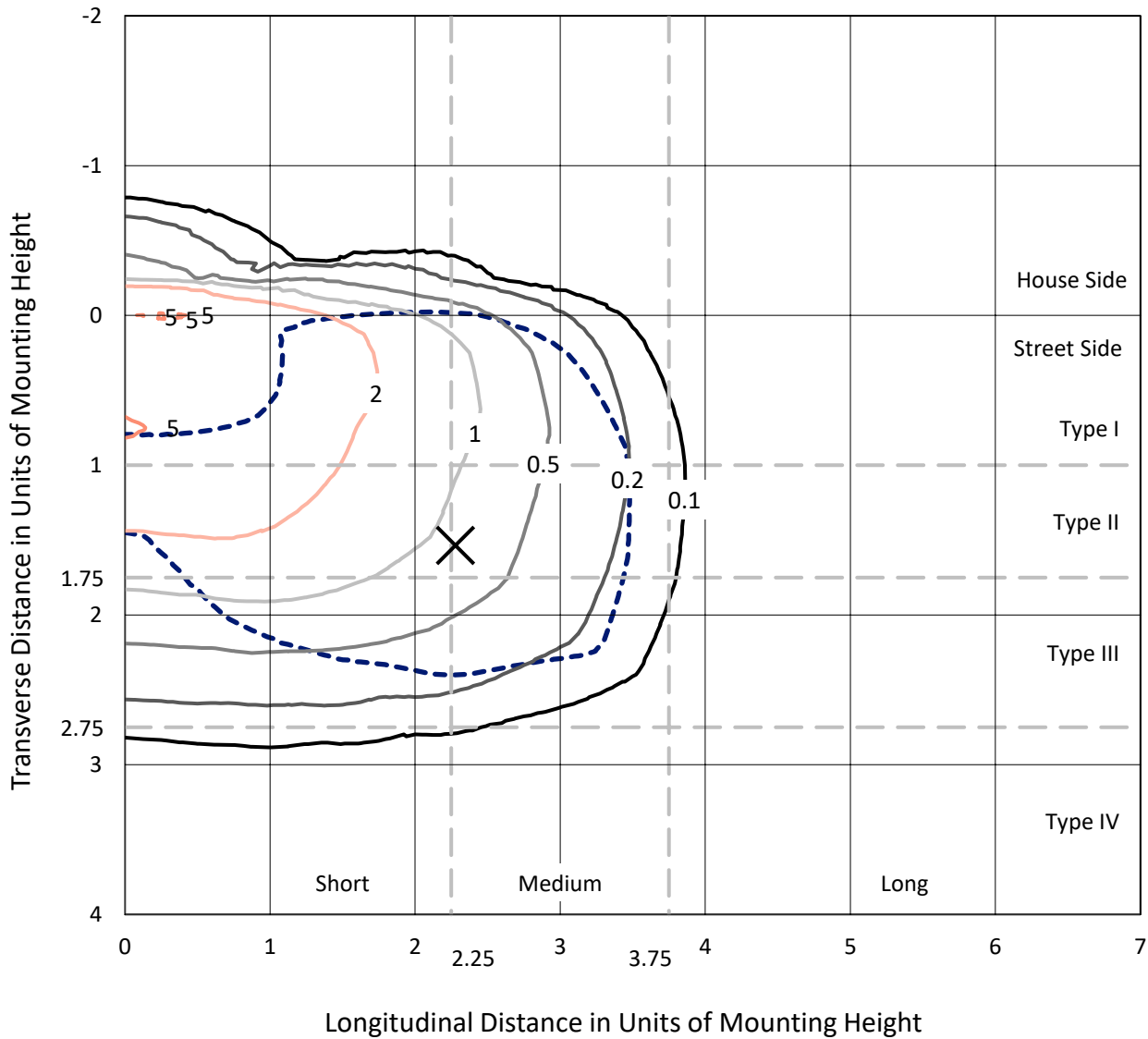
Input Watts (W): 120.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

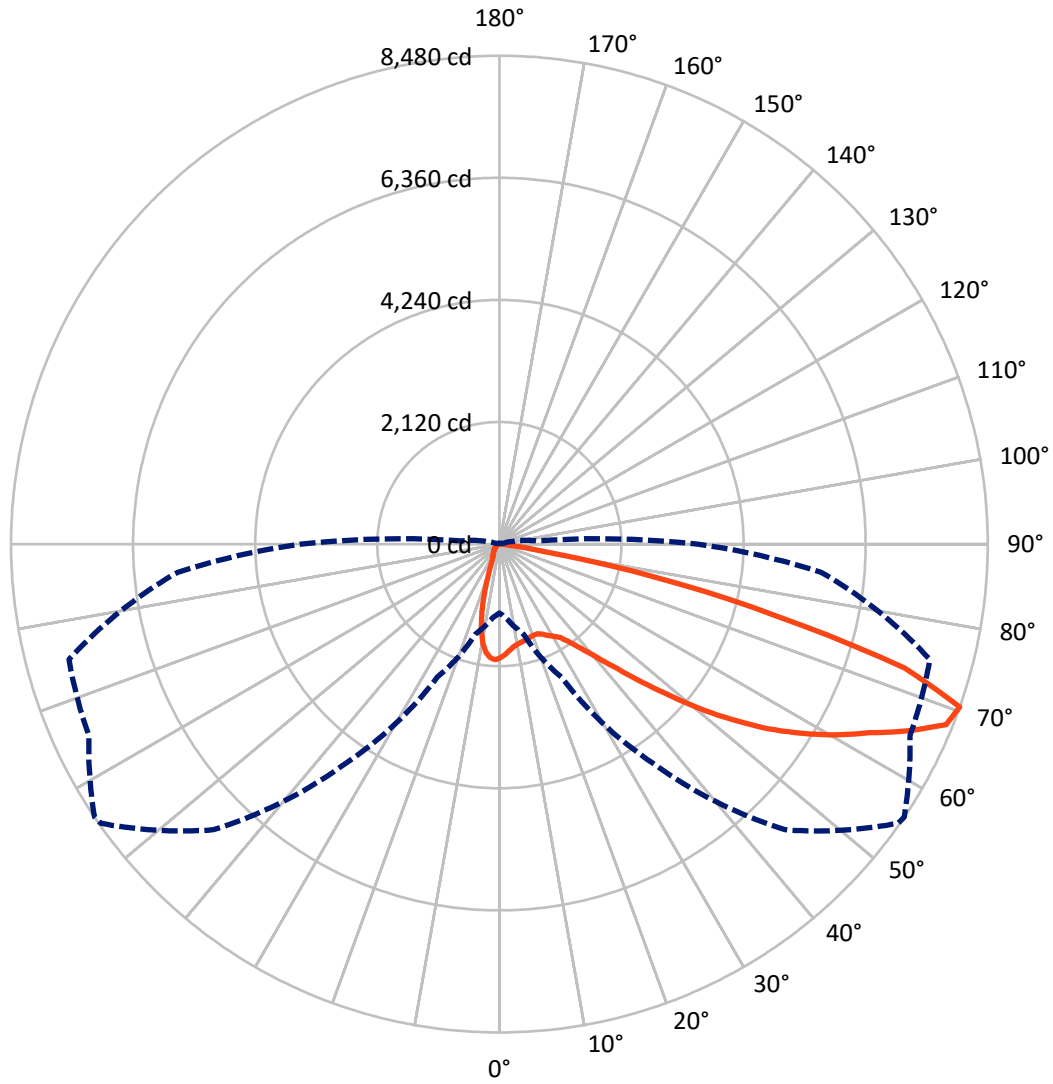
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	982.9	0.0	982.9
	% Fixture	9.0	0.0	9.0
Street Side	Lumens	9960.7	0.0	9960.7
	% Fixture	91.0	0.0	91.0
Total	Lumens	10943.7	0.0	10943.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.4	1.5
10°-20°	381.0	3.5
20°-30°	603.6	5.5
30°-40°	1040.9	9.5
40°-50°	1757.7	16.1
50°-60°	2582.6	23.6
60°-70°	3061.8	28.0
70°-80°	1305.7	11.9
80°-90°	41.0	0.4
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°	10943.7	100.0
0°-180°	10943.7	100.0

Coefficient of Utilization



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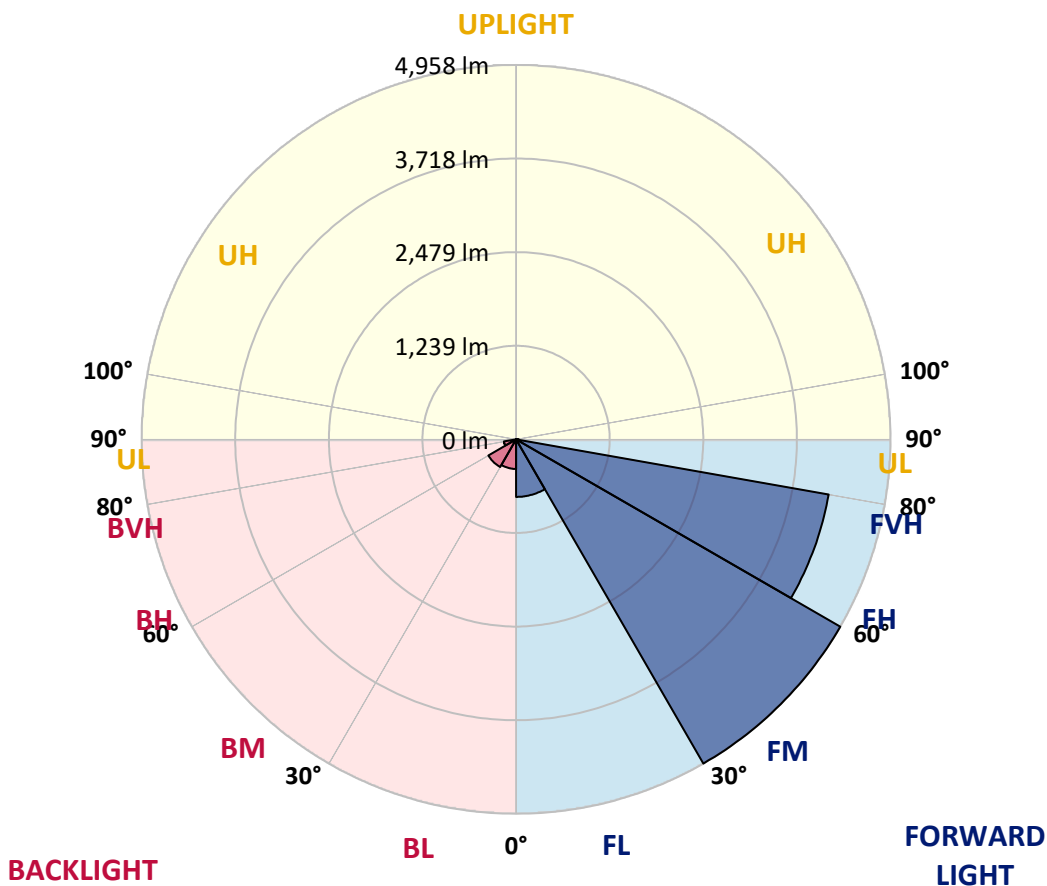
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	762.6	7.0			
FM (30°-60°)	4957.8	45.3			
FH (60°-80°)	4203.5	38.4			G2/5000
FVH (80°-90°)	36.8	0.3			G1/100
BL (0°-30°)	391.5	3.6	B1/500		
BM (30°-60°)	423.4	3.9	B1/1000		
BH (60°-80°)	163.9	1.5	B1/500		G1/500
BVH (80°-90°)	4.2	0.0			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 Medium





REPORT NUMBER: P635532

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3
2.5°	1837.0	1834.0	1836.0	1851.0	1879.1	1892.1	1914.1	1918.1	1936.2	1959.2	1968.2
5°	1717.7	1707.7	1712.7	1733.7	1765.8	1801.9	1843.0	1854.0	1899.1	1950.2	1988.3
7.5°	1608.5	1597.4	1609.5	1642.5	1687.6	1726.7	1787.9	1794.9	1867.0	1957.2	2026.4
10°	1437.1	1440.1	1464.2	1522.3	1591.4	1672.6	1754.8	1764.8	1854.0	1980.3	2087.5
12.5°	1305.8	1298.8	1324.9	1391.0	1488.2	1606.5	1729.7	1742.8	1855.0	2015.4	2165.7
15°	1244.7	1242.7	1253.7	1301.8	1396.0	1535.3	1706.7	1723.7	1868.0	2047.4	2239.8
17.5°	1246.7	1243.7	1242.7	1270.7	1340.9	1482.2	1681.6	1703.7	1879.1	2082.5	2318.0
20°	1333.9	1319.8	1294.8	1281.8	1323.9	1448.1	1664.6	1689.6	1895.1	2119.6	2401.2
22.5°	1516.3	1521.3	1454.1	1384.0	1363.9	1452.1	1662.6	1691.7	1930.2	2177.7	2503.4
25°	1881.1	1873.0	1748.8	1591.4	1482.2	1498.2	1697.7	1732.7	1999.3	2260.9	2599.6
27.5°	2338.0	2345.1	2174.7	1924.2	1695.7	1593.4	1761.8	1796.9	2079.5	2313.0	2663.7
30°	2836.1	2829.1	2646.7	2369.1	1998.3	1751.8	1825.9	1857.0	2119.6	2341.1	2729.9
32.5°	3307.1	3291.1	3110.7	2820.1	2384.1	2001.3	1914.1	1932.2	2172.7	2402.2	2819.1
35°	3709.0	3708.0	3550.7	3241.0	2781.0	2314.0	2065.5	2080.5	2271.9	2499.4	2950.4
37.5°	4123.9	4109.9	3933.5	3650.9	3188.9	2656.7	2297.0	2290.9	2428.2	2642.7	3111.7
40°	4464.6	4455.6	4320.3	4048.7	3612.8	3035.6	2577.6	2559.5	2613.6	2841.1	3336.2
42.5°	4717.2	4718.2	4676.1	4510.7	4061.8	3473.5	2930.3	2902.3	2901.3	3140.8	3632.8
45°	4908.6	4921.6	4984.8	4959.7	4591.9	3983.6	3382.3	3353.2	3304.1	3529.6	3972.6
47.5°	4997.8	5014.8	5205.2	5305.5	5055.9	4489.7	3920.5	3859.3	3763.1	4046.7	4352.4
50°	4988.8	5018.8	5284.4	5589.1	5476.8	5002.8	4506.7	4477.7	4320.3	4593.9	4728.2
52.5°	4784.3	4848.5	5289.4	5761.4	5800.5	5475.8	5113.0	5058.9	4982.8	5165.1	5081.0
55°	4229.1	4307.3	5078.0	5816.6	6053.1	5888.7	5706.3	5662.2	5535.9	5704.3	5388.6
57.5°	3927.5	3994.6	4633.0	5789.5	6267.5	6270.5	6234.5	6198.4	6094.2	6237.5	5749.4
60°	3746.1	3813.2	4395.5	5690.3	6461.9	6673.4	6730.5	6726.5	6576.2	6843.8	6172.3
62.5°	3480.5	3572.7	4148.0	5432.7	6600.2	7070.3	7242.6	7215.6	7048.2	7475.1	6591.2
65°	2944.4	3024.5	3640.9	5007.8	6519.1	7399.0	7797.8	7811.9	7618.4	8069.4	6921.9
67.5°	2064.5	2123.6	2735.9	4115.9	5967.9	7507.2	8366.1	8365.1	8035.3	8374.1	6775.6
70°	1196.6	1277.8	1616.5	2544.5	4643.0	7015.1	8451.2	8480.3	7866.0	7737.7	5607.1
72.5°	463.0	530.1	916.0	1351.9	2421.2	5373.6	7269.7	7354.9	6583.2	5968.9	3902.4
75°	138.3	154.3	430.9	719.6	972.1	2595.6	4921.6	4945.7	4515.7	3723.0	2000.3
77.5°	103.2	114.2	188.4	363.8	340.7	786.7	2546.5	2781.0	2397.2	1329.9	551.2
80°	70.2	83.2	134.3	177.4	126.3	209.5	715.5	785.7	731.6	298.6	138.3
82.5°	31.1	40.1	95.2	89.2	46.1	60.1	220.5	234.5	151.3	90.2	48.1
85°	3.0	4.0	36.1	39.1	17.0	14.0	46.1	46.1	33.1	31.1	20.0
87.5°	0.0	0.0	1.0	2.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0
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-SA3D-830-U-T3R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3	1973.3
2.5°	1991.3	1979.3	1994.3	2006.3	2009.3	1987.3	1974.3	1955.2	1951.2	1952.2	1947.2
5°	2018.4	2012.3	2023.4	2010.3	1976.3	1912.1	1857.0	1795.9	1762.8	1743.8	1741.8
7.5°	2068.5	2065.5	2053.4	1994.3	1888.1	1745.8	1608.5	1474.2	1391.0	1360.9	1355.9
10°	2142.6	2136.6	2087.5	1947.2	1720.7	1447.1	1216.6	1024.2	907.0	872.9	830.8
12.5°	2227.8	2215.8	2108.6	1846.0	1468.2	1089.4	801.7	586.3	485.0	455.0	455.0
15°	2310.0	2283.9	2096.5	1678.6	1157.5	708.5	448.0	338.7	307.7	299.6	299.6
17.5°	2394.2	2344.1	2049.4	1450.1	799.7	418.9	298.6	277.6	273.6	274.6	275.6
20°	2473.3	2395.2	1966.2	1175.5	510.1	292.6	267.6	262.6	260.6	262.6	261.6
22.5°	2559.5	2442.3	1840.0	875.9	331.7	263.6	254.5	250.5	248.5	251.5	251.5
25°	2644.7	2476.3	1672.6	589.3	263.6	245.5	240.5	236.5	234.5	235.5	235.5
27.5°	2688.8	2463.3	1453.1	375.8	236.5	227.5	222.5	217.5	214.5	213.5	214.5
30°	2718.9	2423.2	1184.6	267.6	214.5	203.4	198.4	194.4	186.4	181.4	183.4
32.5°	2766.0	2383.1	892.9	224.5	196.4	179.4	171.4	161.3	150.3	145.3	145.3
35°	2822.1	2328.0	626.4	202.4	177.4	159.3	144.3	127.3	114.2	110.2	110.2
37.5°	2896.3	2275.9	416.9	187.4	161.3	142.3	121.3	101.2	87.2	85.2	84.2
40°	3007.5	2231.8	293.6	176.4	147.3	124.3	99.2	78.2	68.1	65.1	65.1
42.5°	3151.8	2186.7	232.5	165.4	135.3	107.2	79.2	62.1	54.1	52.1	51.1
45°	3330.2	2133.6	202.4	155.3	123.3	89.2	63.1	52.1	46.1	44.1	44.1
47.5°	3523.6	2061.4	188.4	142.3	109.2	72.2	53.1	45.1	42.1	41.1	40.1
50°	3714.0	1964.2	176.4	130.3	93.2	59.1	46.1	41.1	39.1	38.1	38.1
52.5°	3880.4	1851.0	161.3	116.3	76.2	51.1	41.1	38.1	36.1	34.1	33.1
55°	4022.7	1727.7	142.3	100.2	62.1	45.1	38.1	35.1	33.1	31.1	30.1
57.5°	4206.1	1657.6	114.2	81.2	51.1	40.1	35.1	32.1	30.1	27.1	27.1
60°	4409.5	1606.5	85.2	64.1	44.1	37.1	32.1	29.1	27.1	24.1	24.1
62.5°	4572.9	1530.3	67.1	52.1	38.1	33.1	29.1	26.1	24.1	21.0	21.0
65°	4635.0	1373.0	55.1	41.1	31.1	29.1	26.1	24.1	21.0	18.0	18.0
67.5°	4354.4	1058.3	46.1	33.1	26.1	25.1	23.0	22.0	18.0	16.0	15.0
70°	3448.4	645.4	38.1	27.1	22.0	21.0	21.0	19.0	16.0	15.0	14.0
72.5°	2363.1	332.7	31.1	22.0	19.0	19.0	18.0	17.0	15.0	14.0	14.0
75°	1227.6	111.2	24.1	17.0	15.0	16.0	16.0	15.0	14.0	14.0	13.0
77.5°	351.8	50.1	18.0	13.0	12.0	12.0	13.0	13.0	13.0	12.0	12.0
80°	91.2	29.1	13.0	10.0	10.0	10.0	10.0	11.0	12.0	11.0	11.0
82.5°	37.1	16.0	9.0	8.0	8.0	8.0	8.0	9.0	10.0	10.0	10.0
85°	23.0	8.0	7.0	7.0	7.0	6.0	6.0	7.0	7.0	8.0	8.0
87.5°	14.0	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0	5.0
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



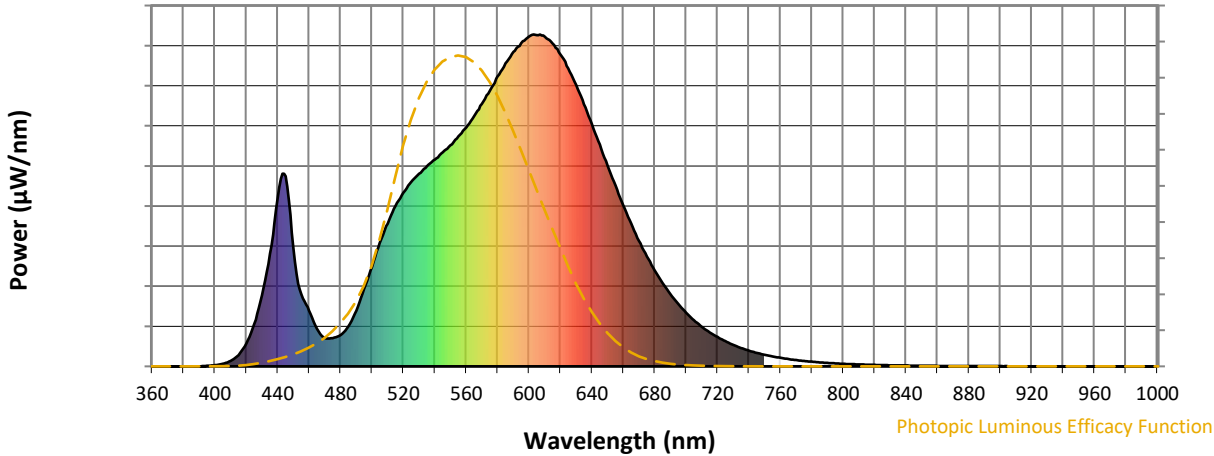
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



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



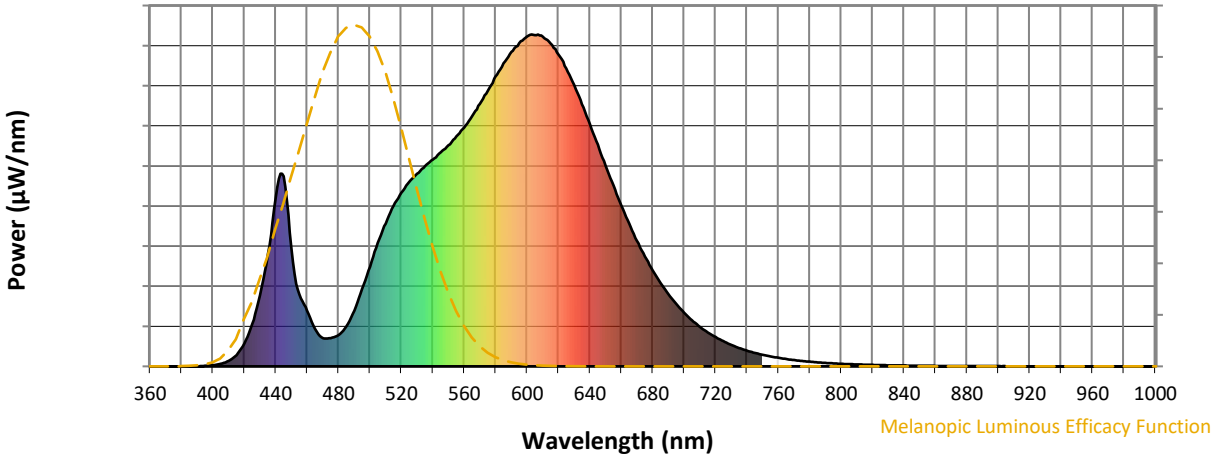
Scotopic Lumens: NR

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			

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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)