

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: P630574

Luminaire Tested: GWS-SA1D-830-U-T2R-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P630574
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1D-830-U-T2R-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3884.8 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G1

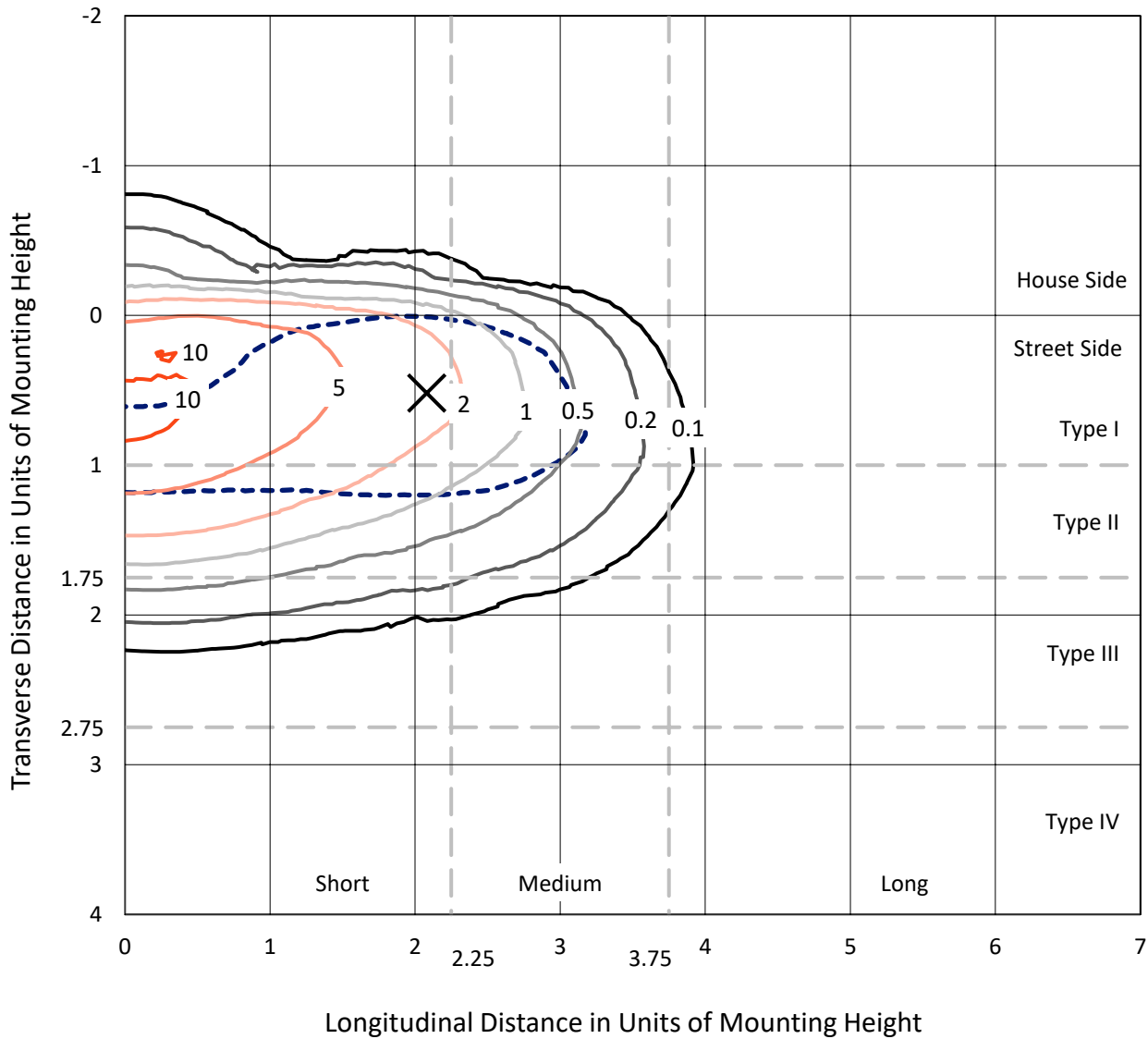
Input Watts (W): 44.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P630574
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Iso-Footcandle Lines of Horizontal Illumination

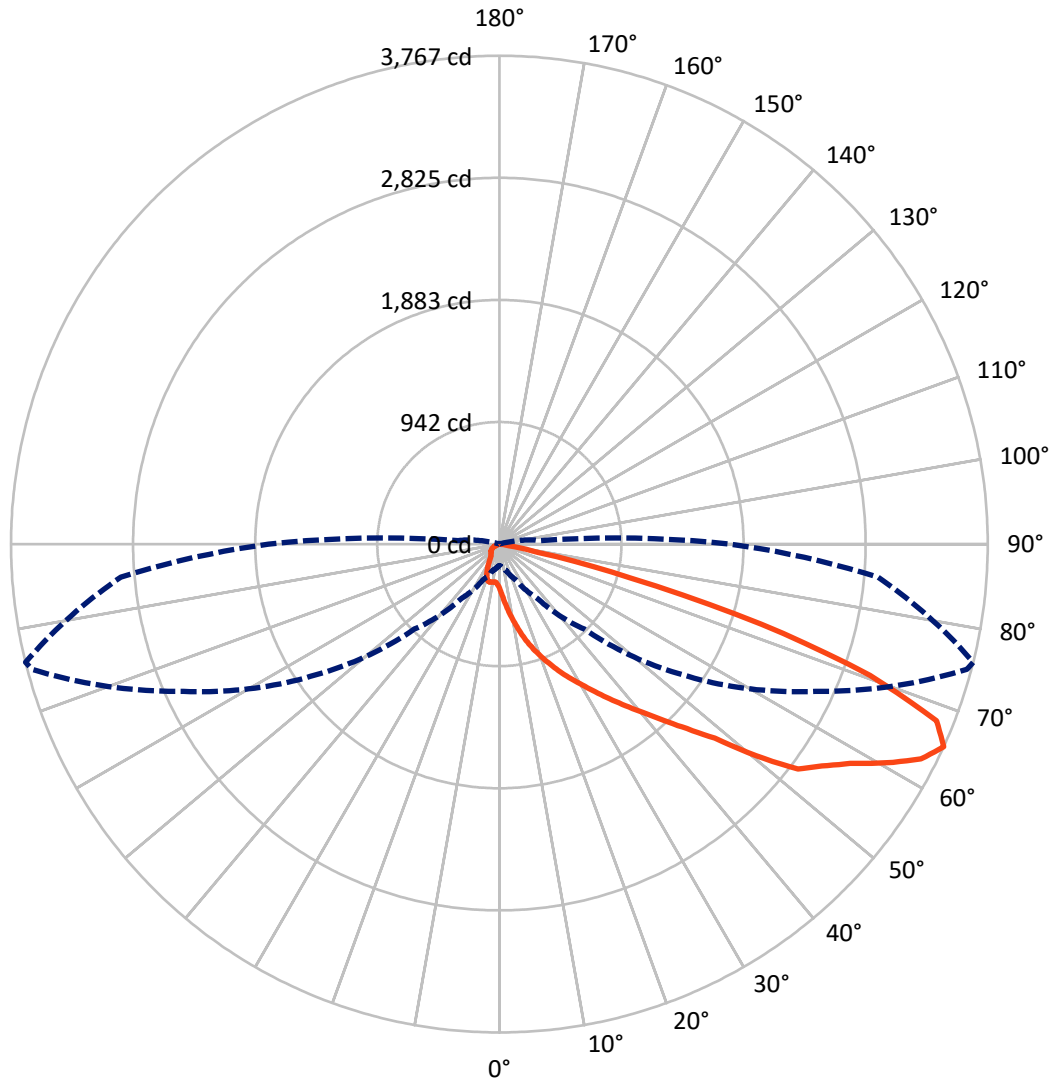
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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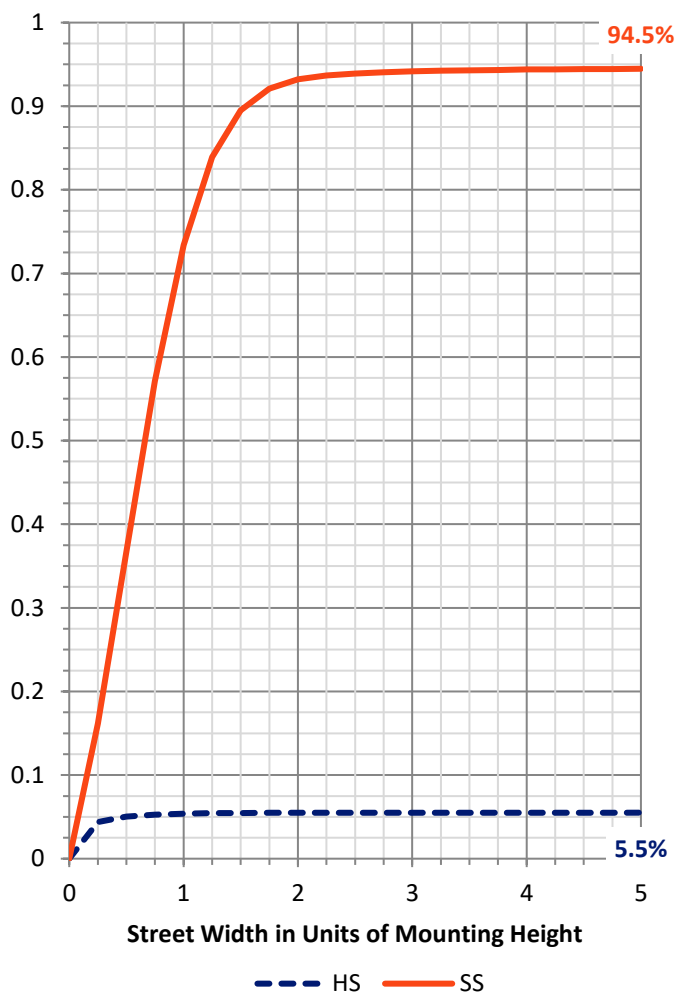
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	214.8	0.0	214.8
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	3670.0	0.0	3670.0
	% Fixture	94.5	0.0	94.5
Total	Lumens	3884.8	0.0	3884.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.8	1.1
10°-20°	158.8	4.1
20°-30°	323.9	8.3
30°-40°	576.1	14.8
40°-50°	851.6	21.9
50°-60°	975.0	25.1
60°-70°	743.9	19.1
70°-80°	208.4	5.4
80°-90°	5.2	0.1
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°	3884.8	100.0
0°-180°	3884.8	100.0

Coefficient of Utilization



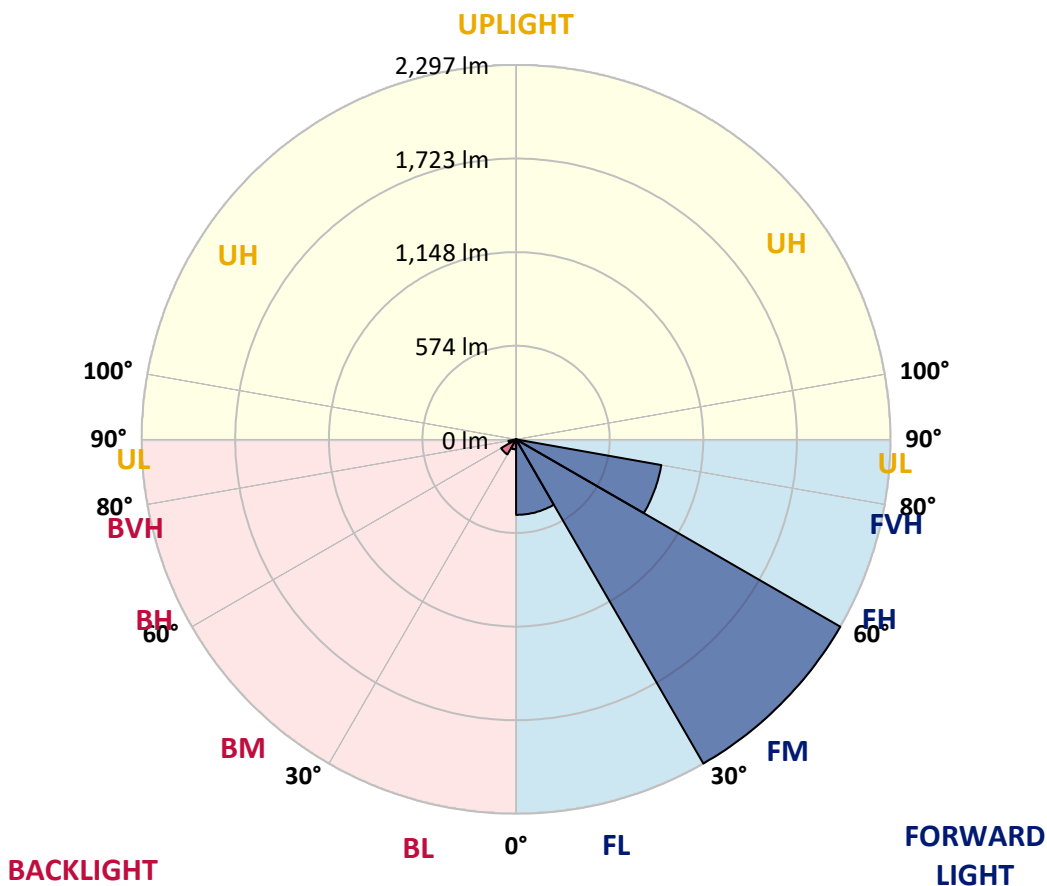
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	463.2	11.9			
FM (30°-60°)	2296.8	59.1			
FH (60°-80°)	905.1	23.3			G1/1800
FVH (80°-90°)	4.9	0.1			G0/10
BL (0°-30°)	61.3	1.6	B0/110		
BM (30°-60°)	106.0	2.7	B0/220		
BH (60°-80°)	47.2	1.2	B0/110		G0/110
BVH (80°-90°)	0.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	343.9	343.9	343.9	343.9	343.9	343.9	343.9	343.9	343.9	343.9	343.9
2.5°	530.1	538.0	531.8	521.4	501.4	482.1	457.2	423.0	395.7	392.3	366.7
5°	715.9	715.2	701.7	688.2	667.2	634.0	583.9	520.4	459.3	454.1	396.8
7.5°	826.4	827.4	819.8	809.4	788.7	754.5	702.4	625.7	536.3	525.9	437.9
10°	919.3	918.9	913.4	908.6	889.9	867.1	811.2	726.9	619.2	602.9	483.8
12.5°	989.0	991.4	994.2	999.0	991.1	968.6	915.8	824.0	703.1	685.1	536.3
15°	1044.3	1045.0	1055.3	1074.0	1080.5	1068.8	1020.8	917.9	786.0	770.4	596.7
17.5°	1060.8	1062.2	1079.8	1114.0	1148.6	1155.1	1118.9	1012.5	867.5	850.9	655.4
20°	1095.7	1098.8	1112.0	1142.0	1185.5	1220.7	1206.6	1108.2	949.0	927.2	715.5
22.5°	1205.5	1207.3	1202.8	1206.6	1229.0	1269.8	1278.4	1200.7	1032.5	1009.4	780.4
25°	1394.4	1395.1	1363.7	1334.0	1317.1	1324.7	1343.7	1286.0	1115.4	1092.6	840.9
27.5°	1590.6	1593.0	1555.4	1504.9	1444.5	1410.0	1404.4	1364.0	1199.0	1173.8	900.6
30°	1775.3	1775.3	1735.6	1674.1	1593.3	1526.0	1486.3	1442.8	1288.4	1260.8	961.7
32.5°	1941.4	1940.1	1889.3	1822.6	1742.9	1669.0	1585.4	1525.0	1387.9	1357.1	1032.2
35°	2078.5	2075.1	2017.4	1953.5	1868.2	1813.3	1720.1	1613.4	1495.6	1464.9	1104.7
37.5°	2182.1	2178.3	2125.5	2057.8	1978.7	1943.2	1865.1	1719.4	1609.2	1581.3	1185.2
40°	2238.4	2230.8	2194.2	2143.8	2077.5	2046.4	2014.0	1851.0	1742.9	1708.0	1280.1
42.5°	2255.0	2246.0	2221.8	2198.4	2158.3	2133.8	2168.7	1999.4	1889.6	1859.6	1388.6
45°	2206.0	2200.8	2198.7	2215.6	2222.9	2229.8	2315.8	2163.8	2051.6	2028.8	1525.0
47.5°	2087.9	2086.5	2104.8	2175.2	2251.9	2324.7	2475.7	2366.5	2261.6	2237.0	1715.6
50°	1869.6	1883.8	1934.9	2058.5	2211.8	2378.6	2625.2	2647.6	2601.4	2565.4	1964.2
52.5°	1528.4	1555.7	1670.4	1858.2	2078.5	2363.4	2694.2	2872.8	2920.1	2882.8	2142.4
55°	1199.3	1224.9	1327.1	1565.4	1859.2	2247.7	2697.4	2950.5	3053.7	3019.2	2262.9
57.5°	893.4	916.8	1009.7	1237.7	1560.9	2020.2	2623.5	2993.6	3212.2	3190.1	2453.2
60°	583.9	607.1	691.0	890.3	1210.7	1688.7	2441.5	2984.7	3428.1	3426.0	2687.0
62.5°	323.9	342.2	403.0	558.4	845.0	1307.8	2155.5	2894.5	3637.0	3650.1	2879.7
65°	165.8	177.5	214.4	307.0	511.4	927.2	1779.5	2688.0	3733.7	3766.8	2930.5
67.5°	108.4	112.2	121.2	159.5	273.8	583.3	1339.2	2356.9	3597.6	3636.3	2760.2
70°	88.1	91.2	96.3	106.4	141.2	309.8	879.5	1882.4	3006.1	3032.3	2198.0
72.5°	64.6	68.7	78.7	85.3	101.9	169.9	457.6	1235.6	2064.4	2110.6	1381.3
75°	47.7	50.1	58.4	67.3	83.2	107.4	175.1	649.6	1066.0	1039.1	580.2
77.5°	28.7	30.4	37.3	43.2	59.4	67.0	61.1	240.0	324.3	304.9	140.2
80°	14.2	15.9	24.5	32.5	38.0	26.9	25.6	67.0	72.2	72.2	35.2
82.5°	4.8	6.2	13.1	21.4	18.6	10.4	12.1	17.3	19.3	20.4	10.4
85°	0.0	0.0	3.1	6.2	2.8	1.4	3.1	3.8	4.8	5.2	3.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	1.4	1.4
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: P630574
 CATALOG NUMBER: GWS-SA1D-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	343.9	343.9	343.9	343.9	343.9	343.9	343.9	343.9	343.9	343.9	343.9
2.5°	352.9	336.7	312.2	290.1	273.2	257.3	245.2	235.5	233.8	228.3	229.0
5°	368.8	339.5	294.2	259.3	234.8	218.2	204.4	194.1	189.6	185.1	181.6
7.5°	393.3	350.9	287.3	244.8	216.2	190.6	169.2	151.9	143.7	138.5	135.0
10°	423.4	366.7	287.7	236.2	193.7	154.7	125.4	106.4	97.4	94.6	94.3
12.5°	459.3	386.8	290.4	222.0	161.3	115.0	92.9	84.3	81.5	79.1	79.1
15°	497.3	409.2	290.4	196.1	122.9	89.8	80.5	74.9	71.5	70.1	69.4
17.5°	537.3	430.3	283.5	160.6	94.3	79.1	71.5	66.3	63.5	61.5	60.8
20°	580.2	450.3	266.2	122.9	80.8	70.8	63.5	58.4	55.6	53.5	53.5
22.5°	623.7	469.0	238.3	94.6	71.5	62.8	55.9	51.1	48.3	46.3	46.3
25°	664.1	481.4	202.4	78.0	64.6	55.9	49.7	44.9	41.8	40.4	39.7
27.5°	701.7	489.3	162.6	68.7	58.0	50.1	43.5	39.0	36.6	35.6	34.9
30°	740.7	491.4	124.3	62.5	52.5	44.2	38.0	34.5	32.5	31.1	31.1
32.5°	778.7	489.0	95.0	57.3	47.7	39.0	33.8	30.7	29.0	28.0	27.6
35°	817.4	477.9	77.0	52.8	42.8	34.2	30.0	27.6	26.6	25.2	25.2
37.5°	859.5	463.1	67.0	48.3	38.0	30.7	26.9	25.2	23.8	22.8	22.4
40°	912.0	445.8	61.5	44.5	33.5	27.6	24.2	22.4	21.4	20.4	20.0
42.5°	974.2	428.9	58.7	40.4	30.0	24.5	21.8	19.7	18.6	17.3	16.9
45°	1062.2	425.1	55.6	35.9	26.9	22.1	19.0	16.9	15.5	14.5	14.2
47.5°	1203.8	435.8	50.4	31.1	23.8	19.3	16.2	14.5	12.8	11.7	11.1
50°	1344.4	433.0	45.2	26.9	21.1	16.6	13.8	12.1	10.4	9.3	9.0
52.5°	1421.0	419.9	40.4	23.8	18.3	14.2	11.7	9.7	8.6	7.6	7.3
55°	1490.4	414.7	35.6	20.7	15.5	12.4	9.7	7.9	7.3	6.2	5.9
57.5°	1626.5	426.8	31.4	18.0	13.5	10.7	8.3	6.6	5.9	4.8	4.5
60°	1768.8	428.2	26.9	15.5	11.7	9.0	6.6	5.2	4.5	3.5	3.1
62.5°	1843.0	393.3	22.1	13.1	9.7	7.6	5.5	4.1	3.5	2.1	2.1
65°	1780.9	318.0	18.6	10.7	7.6	5.9	4.1	3.1	2.1	1.0	0.3
67.5°	1576.1	226.2	15.5	8.6	5.5	4.1	3.1	2.1	0.3	0.0	0.0
70°	1154.1	129.2	12.1	6.2	4.1	2.8	2.1	1.0	0.0	0.0	0.0
72.5°	709.3	69.1	9.0	4.1	3.1	2.1	1.7	0.7	0.0	0.0	0.0
75°	269.0	33.2	5.5	2.8	2.4	1.7	1.0	0.3	0.0	0.0	0.0
77.5°	72.9	16.2	3.1	2.1	1.7	1.0	0.7	0.0	0.0	0.0	0.0
80°	19.0	7.6	2.1	1.4	1.0	0.7	0.0	0.0	0.0	0.0	0.0
82.5°	6.6	3.5	1.0	1.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0
85°	2.8	1.4	0.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
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)