

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: P635036

Luminaire Tested: GWS-SA3C-830-U-T3R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635036
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3C-830-U-T3R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9715.4 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 93
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



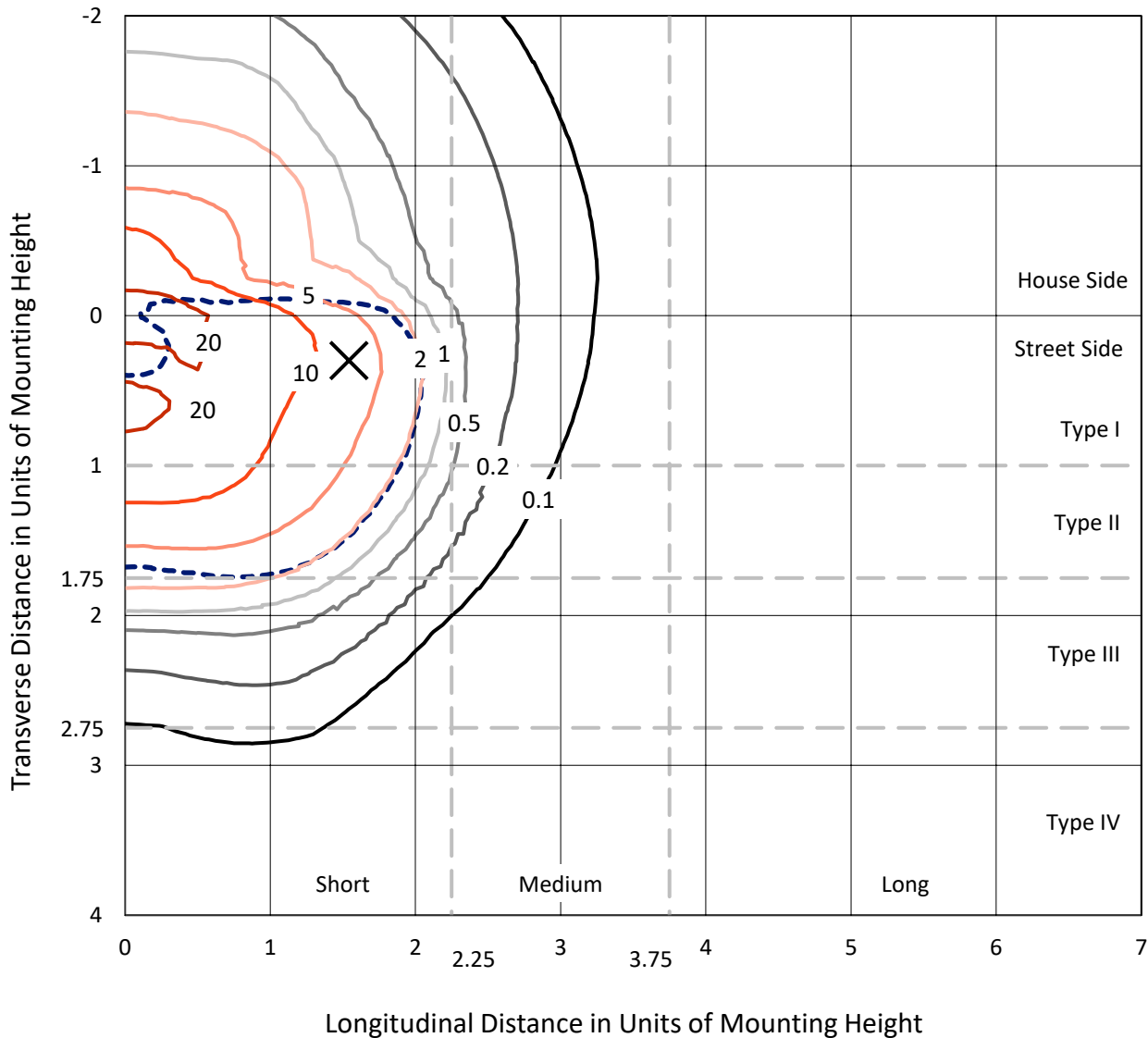
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

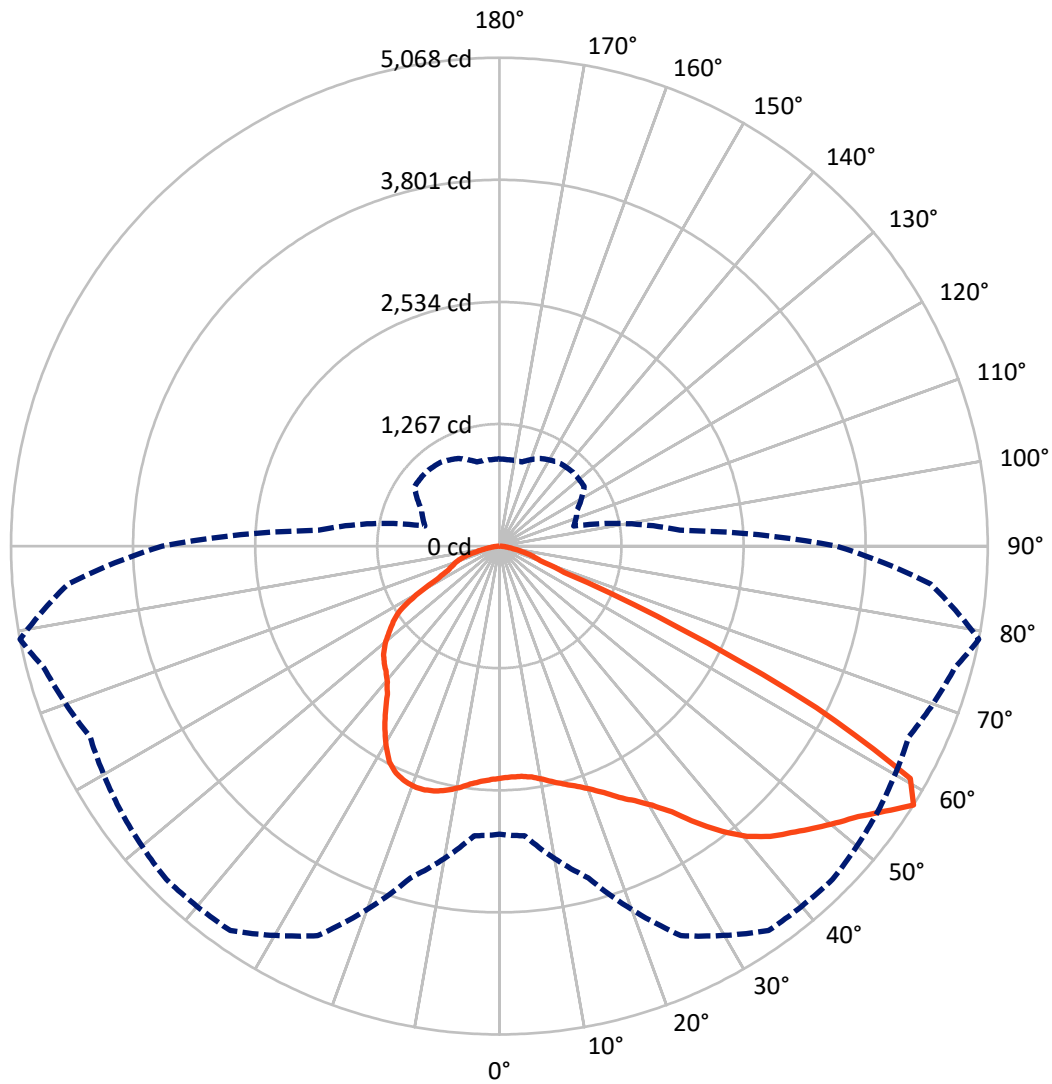


Based on 10 foot mounting height. Maximum calculated value = 24.3 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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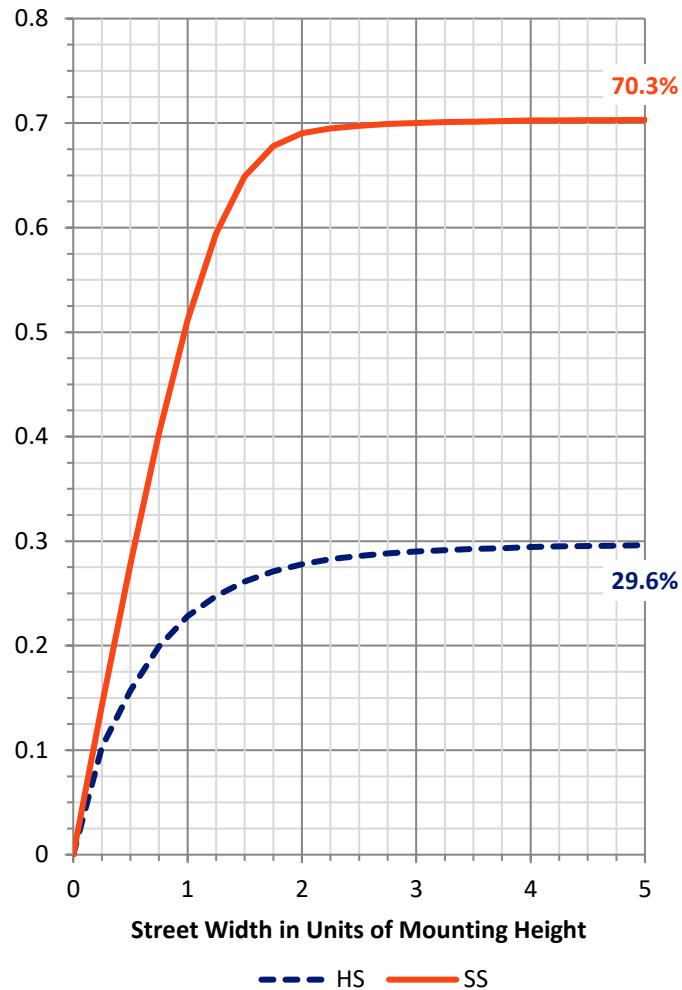
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2887.9	0.0	2887.9
	% Fixture	29.7	0.0	29.7
Street Side	Lumens	6827.5	0.0	6827.5
	% Fixture	70.3	0.0	70.3
Total	Lumens	9715.4	0.0	9715.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.0	2.3
10°-20°	619.6	6.4
20°-30°	1050.3	10.8
30°-40°	1607.7	16.5
40°-50°	2143.7	22.1
50°-60°	2475.8	25.5
60°-70°	1286.5	13.2
70°-80°	273.5	2.8
80°-90°	35.4	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°	9715.4	100.0
0°-180°	9715.4	100.0

Coefficient of Utilization



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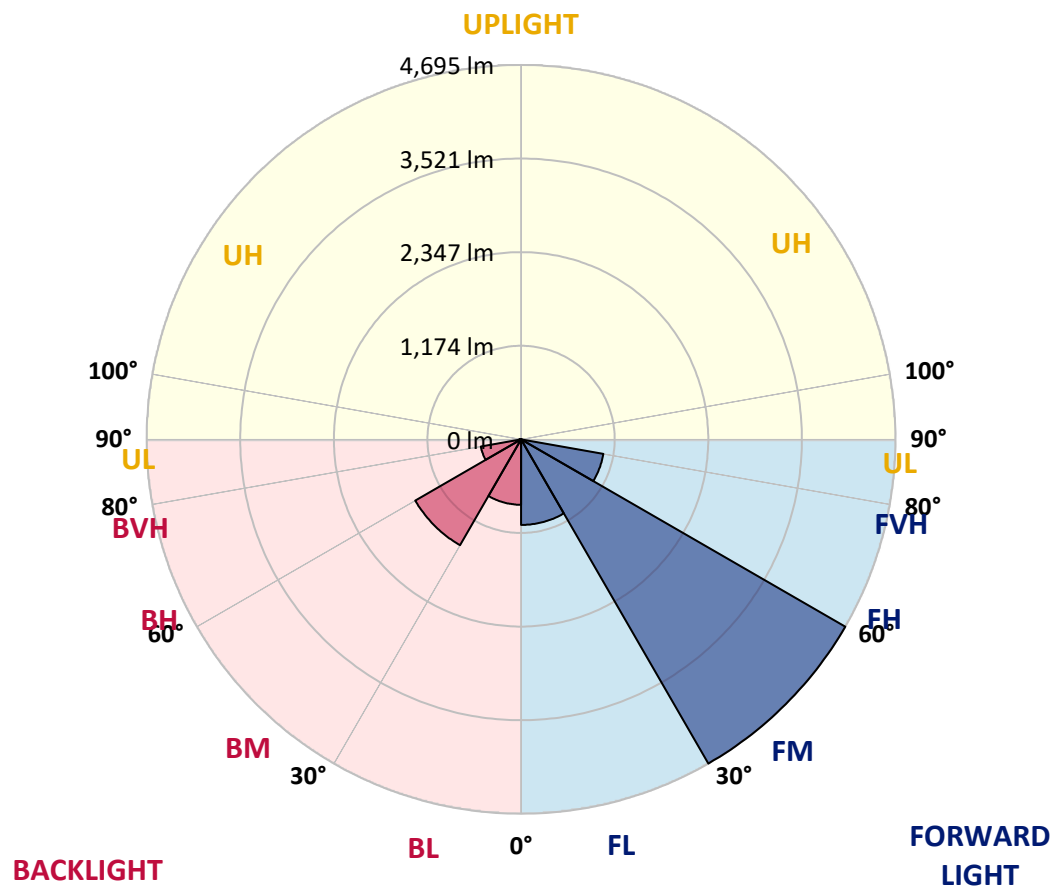
CATALOG NUMBER: GWS-SA3C-830-U-T3R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1072.8	11.0			
FM	(30°-60°)	4694.8	48.3			
FH	(60°-80°)	1047.6	10.8			G1/1800
FVH	(80°-90°)	12.3	0.1			G1/100
BL	(0°-30°)	820.1	8.4	B2/1000		
BM	(30°-60°)	1532.3	15.8	B2/2500		
BH	(60°-80°)	512.4	5.3	B2/1000		G2/1000
BVH	(80°-90°)	23.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CATALOG NUMBER: GWS-SA3C-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7
2.5°	2298.1	2293.3	2294.9	2301.3	2325.1	2342.6	2360.8	2377.5	2393.4	2398.2	2402.1
5°	2216.3	2207.5	2209.9	2220.2	2248.0	2277.4	2310.0	2349.7	2387.8	2400.6	2417.2
7.5°	2158.3	2156.7	2160.7	2176.5	2205.9	2233.7	2275.8	2332.2	2398.2	2419.6	2449.0
10°	2081.2	2078.0	2093.9	2126.5	2175.0	2219.4	2269.5	2336.2	2428.4	2460.1	2505.4
12.5°	2020.1	2018.5	2035.1	2080.4	2142.4	2213.1	2282.2	2356.9	2468.9	2512.6	2568.2
15°	2055.8	2048.7	2049.4	2081.2	2136.8	2220.2	2314.0	2394.2	2509.4	2565.0	2636.5
17.5°	2159.9	2147.2	2137.6	2143.2	2175.0	2261.5	2362.4	2444.2	2556.2	2621.4	2708.8
20°	2303.6	2296.5	2270.3	2252.8	2260.0	2336.2	2438.7	2514.9	2617.4	2690.5	2784.2
22.5°	2496.7	2479.2	2443.4	2415.6	2394.2	2453.8	2548.3	2614.2	2702.4	2778.7	2876.4
25°	2735.8	2710.4	2654.0	2610.3	2564.2	2625.4	2709.6	2759.6	2819.2	2889.9	2982.8
27.5°	2979.6	2958.2	2895.4	2836.7	2779.5	2817.6	2917.7	2946.3	2939.9	2991.6	3071.0
30°	3239.4	3212.4	3152.8	3089.3	3015.4	3040.0	3129.8	3144.1	3076.6	3119.4	3173.5
32.5°	3513.4	3487.2	3435.6	3361.7	3278.3	3287.8	3312.5	3326.0	3261.6	3286.3	3327.6
35°	3792.3	3767.6	3715.2	3642.1	3581.0	3523.0	3461.0	3515.0	3477.7	3525.4	3522.2
37.5°	4047.3	4022.6	3990.1	3933.7	3828.8	3714.4	3571.4	3638.2	3696.2	3756.5	3746.2
40°	4219.6	4203.0	4210.9	4202.2	4067.1	3840.7	3625.5	3698.5	3856.6	3959.9	3954.3
42.5°	4368.2	4351.5	4397.6	4430.9	4272.1	3957.5	3651.7	3721.6	3959.1	4120.3	4112.4
45°	4434.1	4429.3	4505.6	4611.3	4459.5	4081.4	3719.2	3769.2	4036.9	4243.5	4213.3
47.5°	4355.5	4372.1	4522.3	4701.0	4615.2	4228.4	3857.4	3870.1	4138.6	4376.9	4291.9
50°	4199.0	4235.5	4438.1	4703.4	4728.8	4394.4	4048.8	4017.1	4275.2	4519.1	4333.2
52.5°	3971.0	4009.1	4339.6	4685.1	4794.0	4586.6	4303.8	4258.6	4447.6	4661.3	4340.4
55°	3447.5	3499.1	4114.0	4643.8	4857.5	4761.4	4591.4	4499.2	4670.0	4856.7	4411.1
57.5°	2990.8	3017.8	3564.3	4460.3	4870.2	4890.1	4796.3	4686.7	4890.9	5068.0	4490.5
60°	2194.8	2201.2	2692.9	3690.6	4480.2	4815.4	4779.7	4616.8	4786.0	4898.8	4126.7
62.5°	1240.0	1240.8	1633.2	2463.3	3346.6	3924.9	3947.2	3803.4	3661.2	3694.6	2872.4
65°	465.5	509.2	745.9	1210.6	1929.5	2317.1	2409.3	2442.7	2205.9	2059.0	1540.3
67.5°	311.4	321.7	435.3	622.8	858.7	991.4	1108.9	1112.1	813.4	725.2	606.9
70°	237.5	247.8	342.4	445.6	435.3	401.9	434.5	422.6	436.9	448.8	461.5
72.5°	177.1	187.5	265.3	314.6	261.3	257.4	291.5	324.1	354.3	367.0	386.9
75°	117.6	125.5	178.7	168.4	144.6	170.8	212.9	245.5	262.9	278.0	293.1
77.5°	74.7	80.2	95.3	77.1	80.2	100.1	123.9	153.3	170.0	185.1	193.0
80°	34.2	33.4	32.6	36.5	45.3	58.8	74.7	92.1	104.9	111.2	116.0
82.5°	13.5	15.1	16.7	19.9	24.6	31.8	42.1	54.0	64.3	65.9	69.9
85°	5.6	6.4	7.1	8.7	11.1	14.3	17.5	24.6	31.0	33.4	35.7
87.5°	0.0	0.0	0.0	0.0	0.8	1.6	2.4	4.0	7.1	7.9	8.7
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7	2407.7
2.5°	2423.6	2413.3	2430.7	2442.7	2453.8	2441.9	2437.9	2427.6	2426.0	2426.0	2431.5
5°	2445.8	2438.7	2457.0	2464.1	2463.3	2437.1	2421.2	2400.6	2390.2	2390.2	2391.8
7.5°	2485.5	2481.6	2491.9	2480.8	2455.4	2402.1	2349.7	2306.0	2276.6	2261.5	2266.3
10°	2551.5	2546.7	2538.0	2496.7	2423.6	2313.2	2205.9	2126.5	2078.8	2051.8	2053.4
12.5°	2615.8	2607.9	2576.9	2485.5	2335.4	2159.9	2019.3	1930.3	1877.9	1846.1	1838.9
15°	2686.5	2665.9	2599.1	2428.4	2191.6	1972.4	1825.4	1729.3	1672.9	1653.9	1653.1
17.5°	2754.0	2717.5	2596.8	2326.7	2019.3	1776.2	1628.4	1568.9	1559.3	1568.1	1570.4
20°	2822.4	2763.6	2570.5	2186.1	1814.3	1580.8	1504.5	1529.1	1564.9	1588.7	1594.3
22.5°	2893.1	2801.7	2511.0	2005.0	1598.2	1448.9	1480.7	1534.7	1579.2	1611.0	1614.1
25°	2972.5	2837.4	2422.0	1783.3	1425.1	1412.4	1475.1	1532.3	1580.0	1616.5	1622.9
27.5°	3017.8	2838.2	2297.3	1555.4	1345.6	1398.1	1461.6	1515.6	1563.3	1603.0	1610.2
30°	3062.3	2816.8	2099.5	1370.3	1322.6	1381.4	1438.6	1488.6	1533.9	1572.8	1581.6
32.5°	3125.0	2796.9	1871.5	1263.8	1309.1	1365.5	1412.4	1456.9	1491.8	1509.3	1514.0
35°	3202.9	2771.5	1629.2	1217.8	1300.4	1352.8	1394.1	1417.9	1372.7	1363.1	1373.4
37.5°	3311.7	2747.7	1387.7	1197.9	1294.8	1348.0	1384.6	1323.4	1267.8	1245.6	1253.5
40°	3429.2	2734.2	1224.1	1182.0	1297.2	1352.8	1344.8	1254.3	1174.1	1127.2	1125.6
42.5°	3529.3	2713.5	1119.3	1171.7	1303.5	1371.1	1290.8	1193.1	1074.0	1046.2	1047.0
45°	3596.9	2661.1	1063.6	1160.6	1309.1	1375.0	1265.4	1108.9	1023.9	1006.5	1005.7
47.5°	3624.7	2565.8	1027.9	1143.1	1308.3	1342.5	1213.8	1074.0	989.0	984.2	987.4
50°	3606.4	2409.3	991.4	1108.9	1289.2	1308.3	1154.2	1043.0	965.1	991.4	1010.4
52.5°	3538.9	2206.7	947.7	1062.1	1255.1	1269.4	1124.0	1023.9	947.7	982.6	997.7
55°	3521.4	2042.3	892.1	1000.9	1204.2	1200.3	1092.2	1014.4	935.8	922.3	924.6
57.5°	3498.4	1881.8	799.9	891.3	1075.6	1081.9	1062.1	1003.3	904.8	900.8	904.8
60°	3039.2	1442.6	713.3	768.9	883.3	917.5	1027.9	982.6	854.7	838.0	837.3
62.5°	1985.1	873.8	634.7	670.4	719.7	759.4	937.3	923.0	799.9	789.6	796.7
65°	1067.6	622.8	577.5	598.9	626.0	656.1	776.9	822.2	722.9	686.3	687.1
67.5°	545.7	529.8	534.6	549.7	570.3	585.4	626.7	666.5	616.4	585.4	584.6
70°	467.1	479.8	486.9	495.7	509.2	506.8	510.8	517.9	513.9	498.9	498.1
72.5°	398.0	417.8	419.4	421.0	425.8	414.7	407.5	395.6	396.4	398.8	399.6
75°	302.7	321.7	326.5	324.1	328.9	314.6	305.0	293.1	278.8	276.4	278.0
77.5°	197.0	212.1	219.2	217.7	220.0	208.9	204.2	191.4	174.8	168.4	168.4
80°	119.2	127.9	133.5	135.0	137.4	129.5	121.5	110.4	103.3	96.1	96.1
82.5°	72.3	77.8	81.8	81.8	84.2	75.5	69.1	61.2	58.0	51.6	51.6
85°	36.5	40.5	42.1	41.3	39.7	32.6	30.2	26.2	24.6	21.4	21.4
87.5°	8.7	11.1	11.1	7.9	7.9	4.0	2.4	0.8	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

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
 R2: 85.6
 R3: 92.0
 R4: 82.6
 R5: 78.9
 R6: 81.7
 R7: 85.2
 R8: 62.0
 R9: 7.1
 R10: 67.0
 R11: 82.7
 R12: 63.2
 R13: 80.3
 R14: 95.0
 R15: 71.7



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 $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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 $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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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TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_g = 7.1$



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)