

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: P635499

Luminaire Tested: GWS-SA3D-830-U-SL2-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635499
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-28)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3D-830-U-SL2-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8208.8 lumens
Efficiency: N/A
Efficacy: 68.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

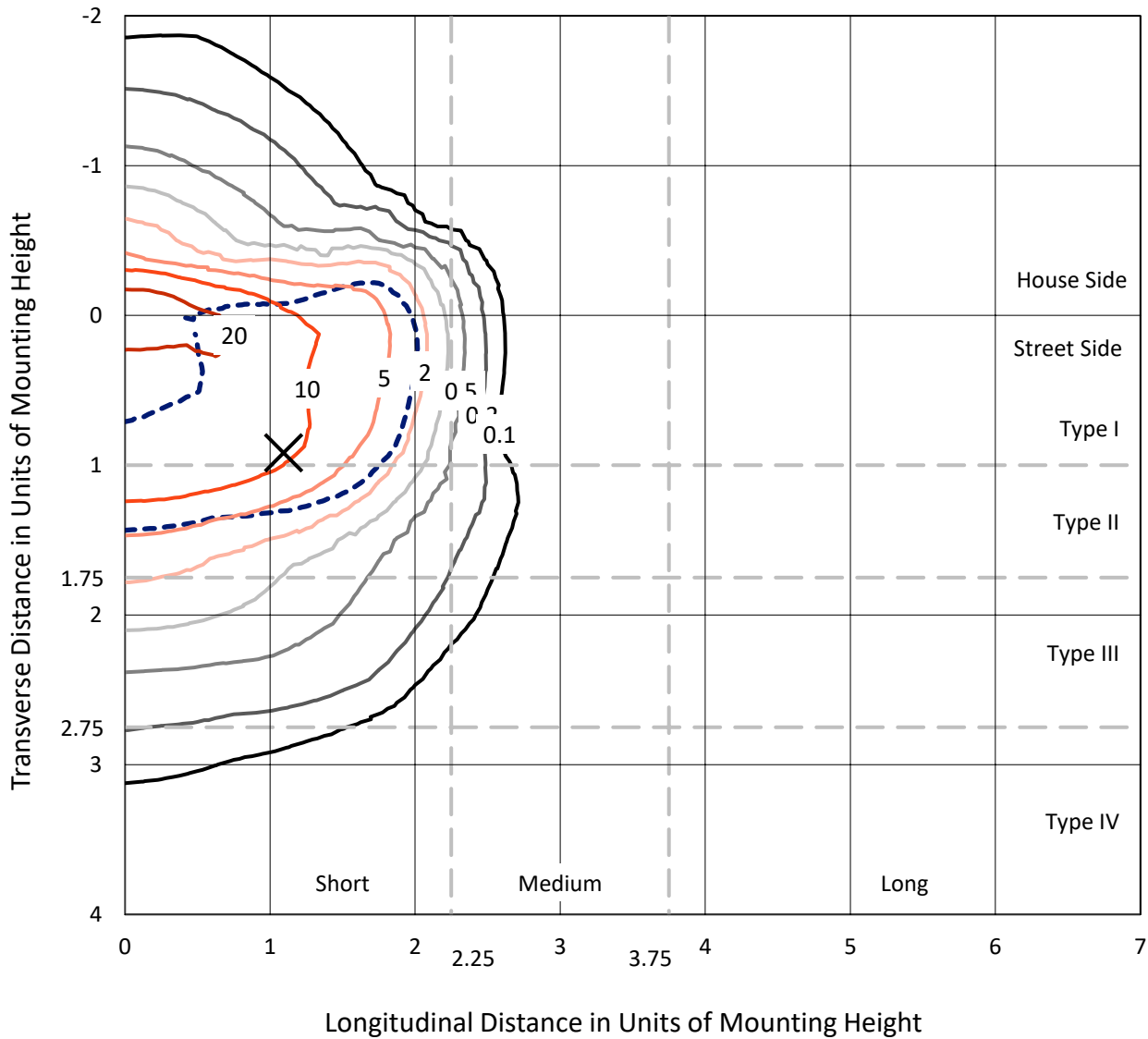
Input Watts (W): 120.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P635499
 CATALOG NUMBER: GWS-SA3D-830-U-SL2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

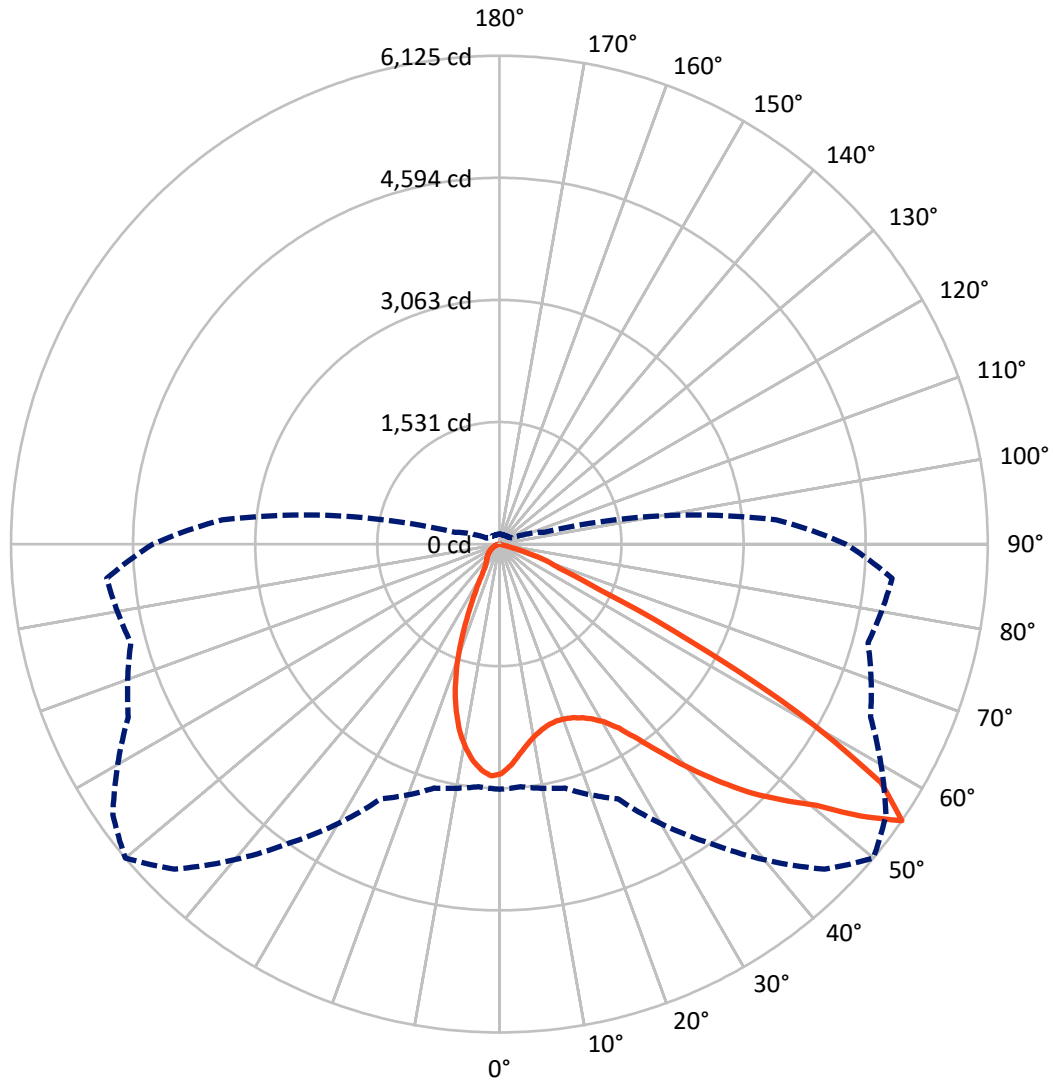
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 28.8 fc
 Type II - Short - N/A

REPORT NUMBER: P635499
CATALOG NUMBER: GWS-SA3D-830-U-SL2-W-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 50-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P635499
 CATALOG NUMBER: GWS-SA3D-830-U-SL2-W-GRSBK

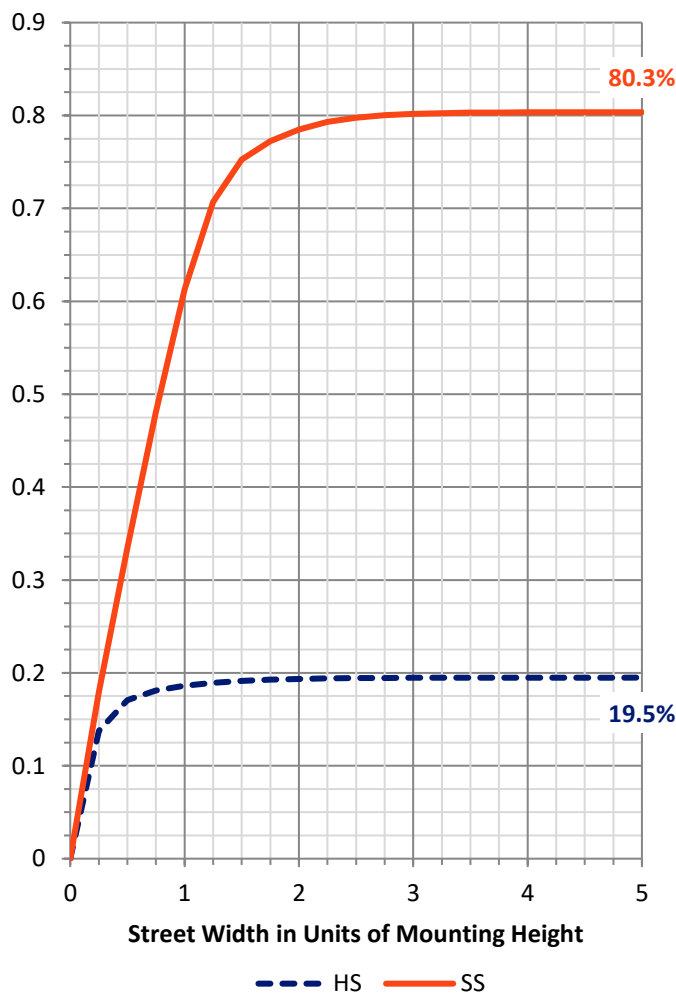
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1617.5	0.0	1617.5
	% Fixture	19.7	0.0	19.7
Street Side	Lumens	6591.3	0.0	6591.3
	% Fixture	80.3	0.0	80.3
Total	Lumens	8208.8	0.0	8208.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.9	3.1
10°-20°	622.4	7.6
20°-30°	878.0	10.7
30°-40°	1299.2	15.8
40°-50°	1874.3	22.8
50°-60°	2210.9	26.9
60°-70°	986.2	12.0
70°-80°	84.8	1.0
80°-90°	0.0	0.0
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°	8208.8	100.0
0°-180°	8208.8	100.0

Coefficient of Utilization



REPORT NUMBER: P635499

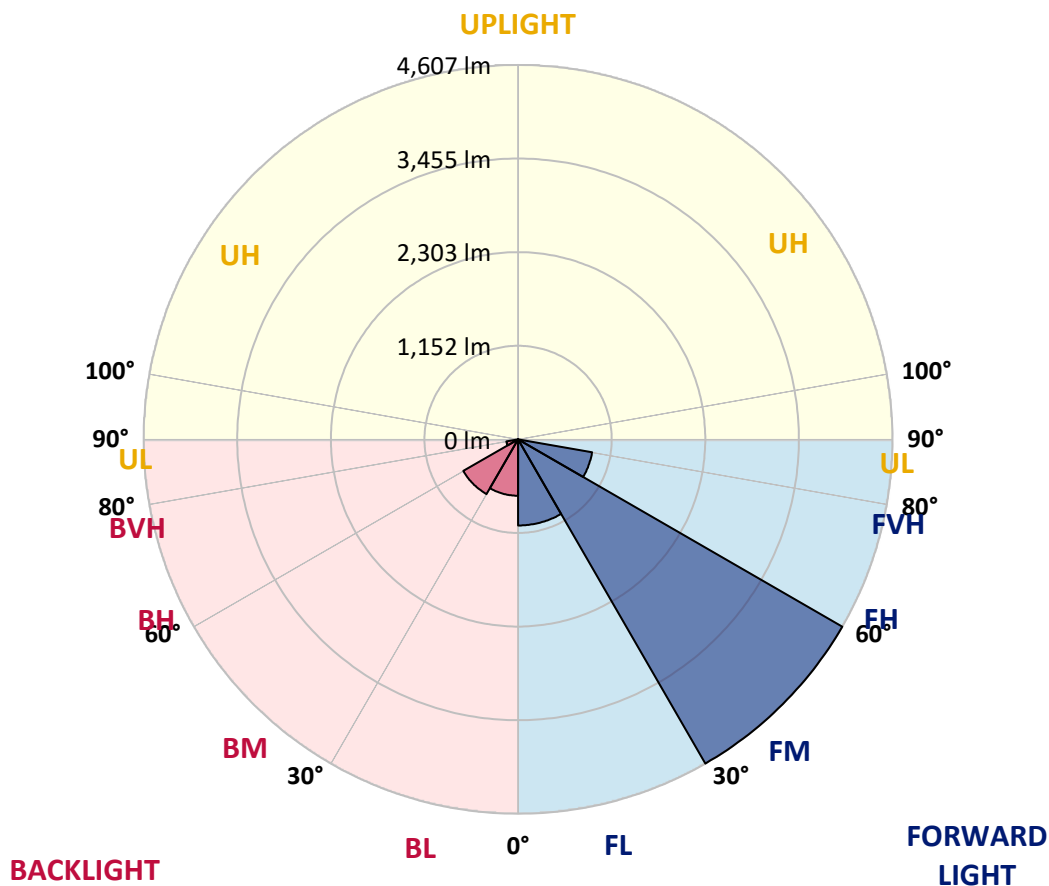
CATALOG NUMBER: GWS-SA3D-830-U-SL2-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1059.8	12.9			
FM (30°-60°)	4606.5	56.1			
FH (60°-80°)	925.0	11.3			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	693.5	8.4	B2/1000		
BM (30°-60°)	777.9	9.5	B1/1000		
BH (60°-80°)	146.0	1.8	B1/500		G1/500
BVH (80°-90°)	0.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type II Short





REPORT NUMBER: P635499
 CATALOG NUMBER: GWS-SA3D-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1
2.5°	2675.7	2677.7	2678.7	2705.7	2715.8	2755.8	2776.9	2787.9	2817.0	2851.0	2879.1
5°	2496.3	2493.3	2498.3	2532.4	2554.4	2613.5	2645.6	2667.7	2731.8	2812.0	2879.1
7.5°	2340.0	2346.0	2352.0	2389.1	2422.1	2486.3	2532.4	2565.4	2654.6	2773.9	2887.1
10°	2229.7	2229.7	2238.7	2280.8	2319.9	2399.1	2445.2	2487.3	2593.5	2739.8	2896.1
12.5°	2148.6	2149.6	2160.6	2208.7	2253.8	2336.0	2384.1	2425.1	2542.4	2705.7	2898.1
15°	2110.5	2107.5	2116.5	2167.6	2217.7	2294.9	2345.0	2385.1	2506.3	2686.7	2908.2
17.5°	2100.5	2098.4	2105.5	2155.6	2206.7	2281.8	2330.9	2371.0	2501.3	2692.7	2938.2
20°	2129.5	2125.5	2122.5	2165.6	2213.7	2287.8	2339.0	2384.1	2525.4	2725.8	2984.3
22.5°	2198.7	2198.7	2191.6	2212.7	2244.8	2311.9	2365.0	2424.1	2588.5	2791.9	3052.5
25°	2325.9	2315.9	2302.9	2311.9	2307.9	2350.0	2413.1	2495.3	2707.7	2901.1	3135.6
27.5°	2471.2	2480.3	2458.2	2459.2	2424.1	2409.1	2482.3	2606.5	2885.1	3055.5	3258.9
30°	2668.7	2661.6	2662.6	2659.6	2578.5	2507.3	2586.5	2751.8	3108.6	3291.0	3419.2
32.5°	2823.0	2833.0	2866.1	2885.1	2778.9	2664.6	2748.8	2949.2	3363.1	3559.5	3615.7
35°	2986.3	3004.4	3071.5	3133.6	3044.5	2913.2	3003.4	3210.8	3602.6	3825.1	3841.1
37.5°	3158.7	3194.8	3274.9	3384.2	3370.1	3253.9	3336.1	3518.5	3791.0	3985.4	4027.5
40°	3356.1	3391.2	3522.5	3679.8	3712.9	3686.8	3713.9	3820.1	3915.3	3992.5	4107.7
42.5°	3572.6	3620.7	3787.0	3997.5	4121.7	4144.8	4081.6	4070.6	3969.4	3912.3	4090.7
45°	3828.1	3884.2	4072.6	4345.2	4542.6	4573.7	4464.5	4323.2	4003.5	3853.2	4039.6
47.5°	4114.7	4167.8	4355.2	4682.9	4976.5	4988.6	4798.2	4570.7	4104.7	3921.3	4078.6
50°	4210.9	4244.0	4406.3	4791.2	5332.3	5424.5	5148.9	4849.3	4308.1	4121.7	4269.0
52.5°	3880.2	3893.3	4034.5	4423.4	5260.1	5852.4	5661.0	5265.2	4669.9	4427.4	4562.7
55°	3074.5	3053.5	3167.7	3524.5	4571.7	5765.2	6125.0	5918.5	5135.9	4786.1	4944.5
57.5°	2150.6	2125.5	2099.4	2341.0	3411.2	4887.4	5644.0	6009.7	5579.8	5141.9	5356.4
60°	1767.7	1743.7	1617.4	1506.2	2062.4	3509.4	4335.2	5023.6	5543.7	5123.9	5343.3
62.5°	1527.2	1513.2	1462.1	1310.8	1213.6	2003.2	2714.8	3374.2	4254.0	4023.5	4035.6
65°	1199.5	1195.5	1230.6	1246.6	1073.3	1108.3	1384.9	1753.7	2299.9	2168.6	2056.4
67.5°	819.7	810.7	876.9	1078.3	1032.2	874.9	810.7	817.7	995.1	608.3	483.0
70°	521.1	500.1	501.1	668.4	839.8	690.5	625.3	550.2	495.0	90.2	102.2
72.5°	333.7	320.7	275.6	301.6	388.8	336.7	339.7	292.6	195.4	48.1	56.1
75°	140.3	129.3	99.2	79.2	78.2	49.1	43.1	40.1	27.1	27.1	29.1
77.5°	1.0	0.0	0.0	1.0	2.0	1.0	1.0	2.0	4.0	6.0	7.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P635499
 CATALOG NUMBER: GWS-SA3D-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1	2880.1
2.5°	2896.1	2872.1	2899.1	2909.2	2908.2	2909.2	2880.1	2860.1	2859.1	2834.0	2822.0
5°	2907.2	2888.1	2908.2	2895.1	2864.1	2825.0	2772.9	2727.8	2707.7	2678.7	2664.6
7.5°	2928.2	2908.2	2905.2	2853.0	2775.9	2693.7	2601.5	2519.3	2475.2	2422.1	2425.1
10°	2943.2	2920.2	2881.1	2774.9	2646.6	2515.3	2378.0	2255.8	2178.6	2107.5	2095.4
12.5°	2949.2	2915.2	2824.0	2663.6	2483.3	2311.9	2110.5	1936.1	1815.8	1722.7	1709.6
15°	2960.3	2905.2	2750.8	2529.4	2281.8	2039.3	1782.8	1544.3	1384.9	1277.7	1286.7
17.5°	2977.3	2894.1	2668.7	2379.0	2065.4	1722.7	1375.9	1102.3	956.0	893.9	894.9
20°	3001.4	2881.1	2578.5	2213.7	1805.8	1364.9	962.0	755.6	714.5	712.5	709.5
22.5°	3033.4	2868.1	2482.3	2032.3	1498.2	956.0	640.4	576.2	593.3	626.3	632.3
25°	3071.5	2852.0	2375.0	1827.9	1162.5	627.3	480.0	470.0	511.1	555.2	565.2
27.5°	3130.6	2844.0	2252.8	1595.4	815.7	450.0	392.8	398.8	435.9	473.0	482.0
30°	3230.8	2859.1	2119.5	1334.8	524.1	358.8	340.7	349.7	369.8	388.8	396.8
32.5°	3367.1	2903.2	1990.2	1050.2	373.8	311.7	307.7	312.7	320.7	331.7	334.7
35°	3526.5	2979.3	1856.9	751.6	308.7	284.6	280.6	280.6	284.6	286.6	287.6
37.5°	3657.8	3059.5	1731.7	500.1	276.6	263.6	257.5	254.5	253.5	255.5	256.5
40°	3714.9	3092.6	1595.4	363.8	253.5	244.5	235.5	226.5	226.5	233.5	234.5
42.5°	3674.8	3055.5	1438.0	300.6	237.5	224.5	210.4	202.4	206.4	213.5	215.5
45°	3589.6	2964.3	1264.7	265.6	221.5	204.4	188.4	183.4	187.4	196.4	198.4
47.5°	3575.6	2904.2	1057.2	242.5	204.4	187.4	170.4	165.4	170.4	177.4	179.4
50°	3714.9	2956.3	826.8	222.5	188.4	169.4	155.3	150.3	153.3	157.3	159.3
52.5°	3969.4	3149.7	667.4	203.4	169.4	151.3	142.3	136.3	136.3	140.3	141.3
55°	4345.2	3487.4	576.2	181.4	147.3	137.3	129.3	123.3	123.3	125.3	126.3
57.5°	4778.1	3896.3	597.3	152.3	129.3	124.3	117.2	112.2	114.2	114.2	114.2
60°	4718.0	3866.2	639.4	128.3	114.2	112.2	106.2	104.2	109.2	105.2	103.2
62.5°	3475.4	2670.7	334.7	105.2	98.2	96.2	92.2	96.2	103.2	92.2	88.2
65°	1687.6	1292.7	134.3	86.2	83.2	81.2	79.2	85.2	89.2	72.2	68.1
67.5°	396.8	322.7	87.2	73.2	69.1	65.1	67.1	68.1	65.1	49.1	47.1
70°	103.2	101.2	68.1	61.1	55.1	51.1	51.1	50.1	43.1	31.1	29.1
72.5°	56.1	55.1	49.1	46.1	38.1	34.1	35.1	31.1	24.1	18.0	17.0
75°	28.1	30.1	28.1	26.1	21.0	19.0	19.0	17.0	12.0	7.0	7.0
77.5°	6.0	7.0	7.0	6.0	5.0	4.0	4.0	5.0	2.0	0.0	0.0
80°	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	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

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



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)