

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: P636520

Luminaire Tested: GWS-SA3F-830-U-T3R-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P636520
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3F-830-U-T3R-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY 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: 12182.1 lumens
Efficiency: N/A
Efficacy: 66.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

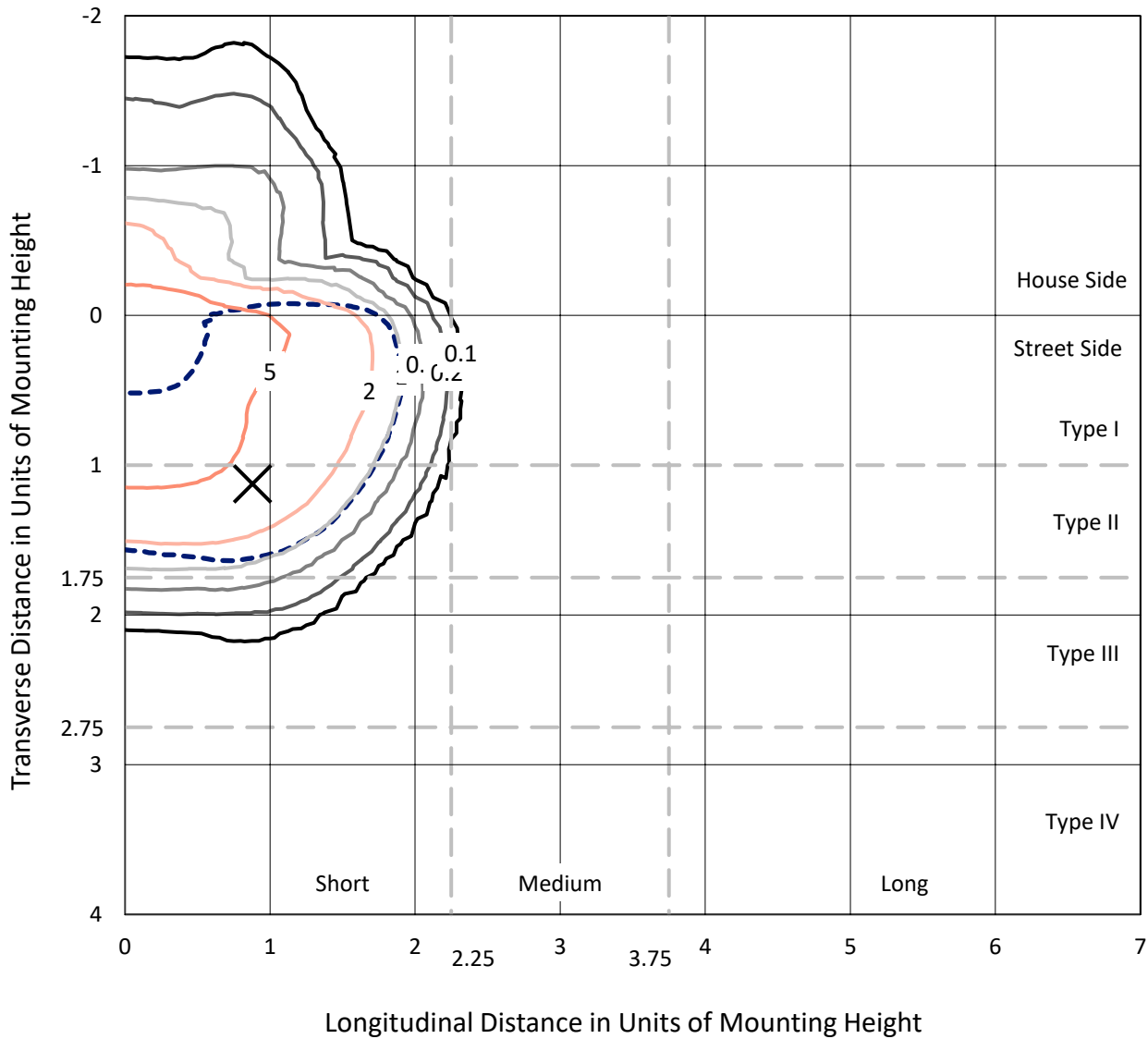
Input Watts (W): 183.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P636520
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Iso-Footcandle Lines of Horizontal Illumination

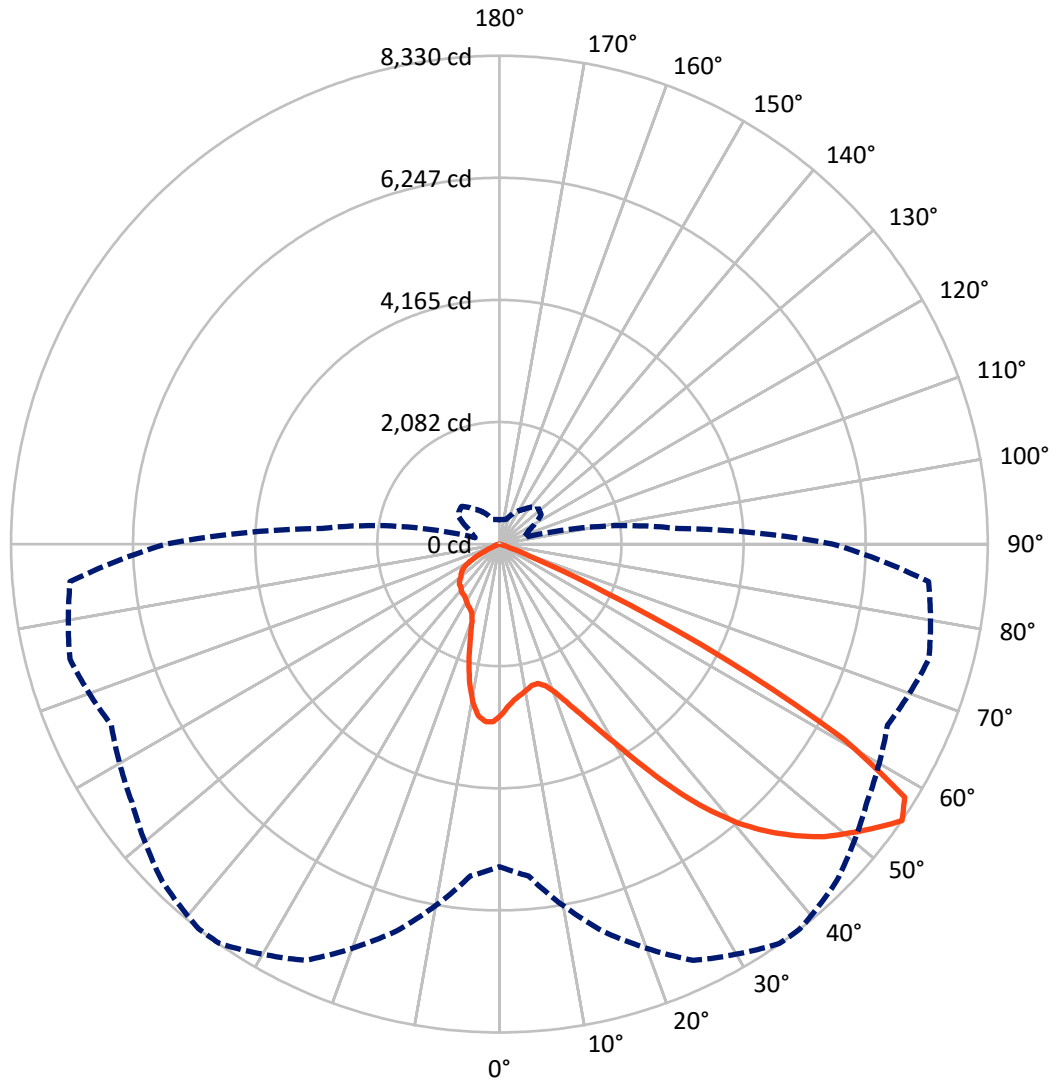
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2373.4	0.0	2373.4
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	9808.7	0.0	9808.7
	% Fixture	80.5	0.0	80.5
Total	Lumens	12182.1	0.0	12182.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.1	2.2
10°-20°	727.2	6.0
20°-30°	1247.9	10.2
30°-40°	2069.7	17.0
40°-50°	3042.6	25.0
50°-60°	3555.4	29.2
60°-70°	1205.1	9.9
70°-80°	61.6	0.5
80°-90°	2.4	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°	12182.1	100.0
0°-180°	12182.1	100.0

Coefficient of Utilization



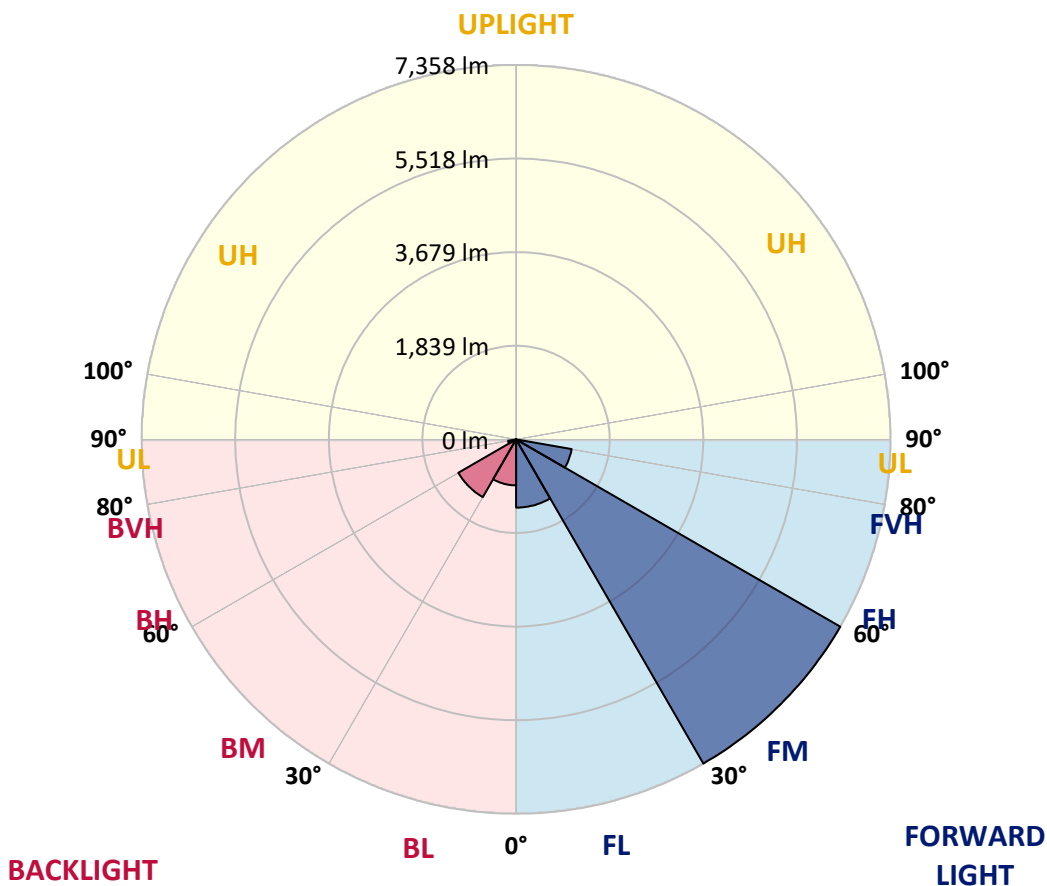
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1341.0	11.0			
FM (30°-60°)	7357.6	60.4			
FH (60°-80°)	1108.8	9.1			G1/1800
FVH (80°-90°)	1.3	0.0			G0/10
BL (0°-30°)	904.3	7.4	B2/1000		
BM (30°-60°)	1310.0	10.8	B2/2500		
BH (60°-80°)	158.0	1.3	B1/500		G1/500
BVH (80°-90°)	1.1	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4
2.5°	2720.8	2715.3	2726.4	2748.7	2769.6	2776.5	2797.4	2826.7	2844.8	2887.9	2922.8
5°	2598.3	2595.5	2606.7	2626.2	2654.0	2663.8	2695.8	2744.5	2793.3	2868.4	2942.2
7.5°	2486.9	2485.5	2502.2	2545.4	2585.8	2598.3	2637.3	2697.2	2762.6	2878.2	2986.8
10°	2340.7	2342.1	2374.1	2435.4	2509.2	2534.3	2596.9	2683.3	2768.2	2917.2	3067.6
12.5°	2293.4	2296.2	2312.9	2360.2	2441.0	2473.0	2560.7	2691.6	2800.2	2972.9	3172.0
15°	2408.9	2408.9	2395.0	2400.6	2436.8	2466.0	2557.9	2719.5	2854.5	3039.7	3275.0
17.5°	2633.1	2624.8	2590.0	2542.6	2530.1	2539.8	2613.6	2779.3	2931.1	3117.7	3392.0
20°	2936.7	2939.5	2871.2	2772.4	2693.0	2691.6	2736.2	2885.2	3041.1	3211.0	3518.7
22.5°	3304.3	3293.1	3202.6	3067.6	2929.7	2918.6	2936.7	3046.7	3199.9	3358.6	3674.7
25°	3730.4	3724.8	3596.7	3415.7	3233.3	3206.8	3206.8	3315.4	3426.8	3568.9	3861.3
27.5°	4176.0	4176.0	4052.0	3843.2	3600.9	3553.5	3546.6	3674.7	3748.5	3776.3	4018.6
30°	4634.1	4628.5	4506.0	4291.5	4032.5	3983.8	3964.3	4059.0	4111.9	4028.4	4214.9
32.5°	5099.2	5108.9	4985.0	4785.9	4554.7	4522.7	4462.8	4462.8	4506.0	4389.0	4524.1
35°	5599.0	5596.3	5498.8	5363.7	5166.0	5129.8	5030.9	4876.4	4941.8	4890.3	4951.6
37.5°	6040.4	6061.3	6014.0	5913.7	5753.6	5717.4	5554.5	5274.6	5324.7	5405.5	5459.8
40°	6488.8	6505.5	6552.9	6520.8	6318.9	6252.1	5962.5	5503.0	5558.7	5835.8	5991.7
42.5°	6928.8	6937.2	7033.3	7086.2	6816.0	6699.1	6271.6	5642.2	5700.7	6172.7	6445.7
45°	7208.7	7226.8	7385.6	7547.1	7254.7	7094.5	6540.3	5820.4	5845.5	6406.7	6781.2
47.5°	7197.6	7239.3	7537.3	7831.1	7632.0	7459.4	6863.4	6105.9	6064.1	6626.7	7002.6
50°	6973.4	7023.5	7451.0	7917.5	7903.5	7743.4	7222.6	6519.5	6388.6	6821.6	7030.5
52.5°	6508.3	6653.1	7299.2	7928.6	8122.2	8041.4	7666.8	7076.4	6827.2	7101.5	7075.0
55°	5503.0	5681.2	6838.3	7833.9	8319.9	8329.6	8133.3	7657.1	7303.4	7583.3	7349.4
57.5°	4177.4	4319.4	5263.5	6973.4	7992.7	8152.8	8314.3	7963.4	7597.2	7911.9	7413.4
60°	2517.6	2681.9	3295.9	5117.3	6455.4	6728.3	7361.9	7293.7	6852.2	6987.3	6079.4
62.5°	1020.7	1107.0	1521.9	2819.7	4063.2	4318.0	4925.1	5028.1	4919.5	4781.7	3687.2
65°	373.2	408.0	609.9	1165.5	1868.7	1962.0	2282.2	2464.6	2615.0	2226.5	1371.6
67.5°	231.1	253.4	396.8	598.8	679.5	632.2	643.3	767.2	732.4	452.5	245.1
70°	171.3	189.4	310.5	415.0	274.3	211.7	143.4	153.2	137.9	121.1	119.8
72.5°	118.4	135.1	232.5	245.1	105.8	75.2	52.9	73.8	83.5	82.2	84.9
75°	78.0	90.5	146.2	96.1	26.5	20.9	18.1	39.0	50.1	50.1	51.5
77.5°	46.0	52.9	51.5	19.5	5.6	5.6	4.2	7.0	11.1	12.5	15.3
80°	5.6	4.2	2.8	2.8	2.8	2.8	2.8	2.8	4.2	4.2	4.2
82.5°	1.4	1.4	1.4	2.8	2.8	2.8	2.8	2.8	2.8	4.2	4.2
85°	0.0	0.0	1.4	1.4	2.8	2.8	2.8	2.8	2.8	4.2	4.2
87.5°	0.0	0.0	1.4	1.4	2.8	2.8	2.8	2.8	2.8	4.2	4.2
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°	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4	2921.4
2.5°	2949.2	2939.5	2979.8	3009.1	3032.8	3043.9	3028.6	3027.2	3027.2	2996.6	2988.2
5°	2984.0	2988.2	3045.3	3070.4	3074.5	3060.6	3025.8	3002.1	2988.2	2956.2	2938.1
7.5°	3050.9	3064.8	3119.1	3114.9	3077.3	3013.3	2921.4	2850.3	2804.4	2754.3	2723.6
10°	3146.9	3173.4	3206.8	3148.3	3028.6	2865.7	2676.3	2541.2	2460.5	2403.4	2368.6
12.5°	3263.9	3290.4	3279.2	3141.4	2892.1	2601.1	2357.4	2162.5	2069.2	2017.7	1981.5
15°	3382.3	3399.0	3326.6	3057.8	2651.2	2259.9	1988.4	1794.9	1680.7	1638.9	1608.3
17.5°	3503.4	3499.2	3334.9	2893.5	2329.6	1875.6	1608.3	1476.0	1444.0	1437.0	1434.2
20°	3630.1	3592.5	3301.5	2658.2	1942.5	1495.5	1343.7	1352.1	1410.6	1438.4	1444.0
22.5°	3774.9	3680.2	3218.0	2339.3	1547.0	1246.2	1261.6	1343.7	1423.1	1460.7	1466.3
25°	3929.5	3761.0	3078.7	1929.9	1219.8	1146.0	1236.5	1331.2	1416.1	1462.1	1467.6
27.5°	4031.1	3780.5	2850.3	1517.8	1047.1	1107.0	1203.1	1293.6	1381.3	1431.4	1438.4
30°	4141.1	3772.1	2539.8	1169.7	988.6	1073.6	1157.1	1239.3	1320.0	1375.7	1381.3
32.5°	4302.7	3766.6	2161.1	949.7	965.0	1047.1	1108.4	1176.6	1232.3	1264.3	1260.2
35°	4514.3	3759.6	1719.7	856.4	951.0	1026.2	1075.0	1107.0	1045.7	1026.2	1030.4
37.5°	4785.9	3776.3	1347.9	817.4	946.9	1020.7	1062.4	970.5	875.9	839.6	834.1
40°	5086.6	3819.5	1027.6	802.1	960.8	1034.6	1015.1	863.3	746.4	675.3	660.0
42.5°	5388.8	3866.8	813.2	796.5	984.5	1073.6	937.1	785.3	609.9	569.5	563.9
45°	5613.0	3858.5	703.2	786.7	1005.3	1095.9	916.2	673.9	544.4	526.3	527.7
47.5°	5725.8	3766.6	643.3	764.5	1013.7	1073.6	864.7	628.0	499.9	519.4	536.1
50°	5665.9	3528.5	587.6	721.3	995.6	1044.3	782.6	593.2	477.6	558.4	596.0
52.5°	5593.5	3236.1	526.3	654.5	952.4	1004.0	750.5	583.4	463.7	538.9	566.7
55°	5689.6	3050.9	426.1	551.4	867.5	909.3	725.5	582.0	431.7	419.1	415.0
57.5°	5554.5	2681.9	304.9	396.8	665.6	719.9	707.4	572.3	382.9	381.5	387.1
60°	4292.9	1636.1	208.9	252.0	408.0	459.5	641.9	547.2	330.0	303.6	304.9
62.5°	2439.6	696.2	143.4	156.0	208.9	247.9	490.1	497.1	304.9	289.6	304.9
65°	849.4	249.2	111.4	104.4	115.6	132.3	281.3	384.3	277.1	250.6	253.4
67.5°	175.4	123.9	98.9	86.3	86.3	86.3	143.4	239.5	228.4	199.1	201.9
70°	111.4	105.8	86.3	73.8	71.0	65.4	82.2	132.3	157.3	144.8	146.2
72.5°	82.2	80.8	68.2	59.9	52.9	47.3	51.5	65.4	80.8	83.5	84.9
75°	50.1	51.5	44.6	37.6	33.4	29.2	30.6	30.6	30.6	27.8	30.6
77.5°	15.3	16.7	13.9	11.1	9.7	9.7	9.7	8.4	7.0	4.2	4.2
80°	4.2	4.2	4.2	4.2	4.2	2.8	2.8	1.4	1.4	0.0	0.0
82.5°	4.2	4.2	4.2	4.2	2.8	2.8	1.4	1.4	0.0	0.0	0.0
85°	4.2	4.2	4.2	4.2	2.8	2.8	1.4	1.4	0.0	0.0	0.0
87.5°	4.2	4.2	4.2	4.2	2.8	2.8	1.4	1.4	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



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

Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

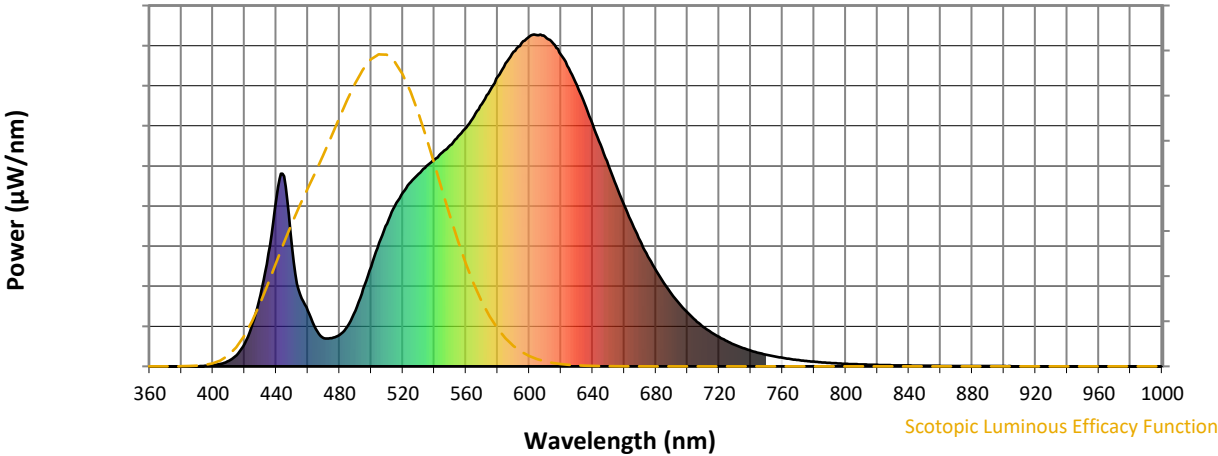


Photopic Lumens: NR

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			

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)