

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: P641458

Luminaire Tested: GWS-SA5F-830-U-T2-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P641458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-20)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5F-830-U-T2-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19694.9 lumens
Efficiency: N/A
Efficacy: 63.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

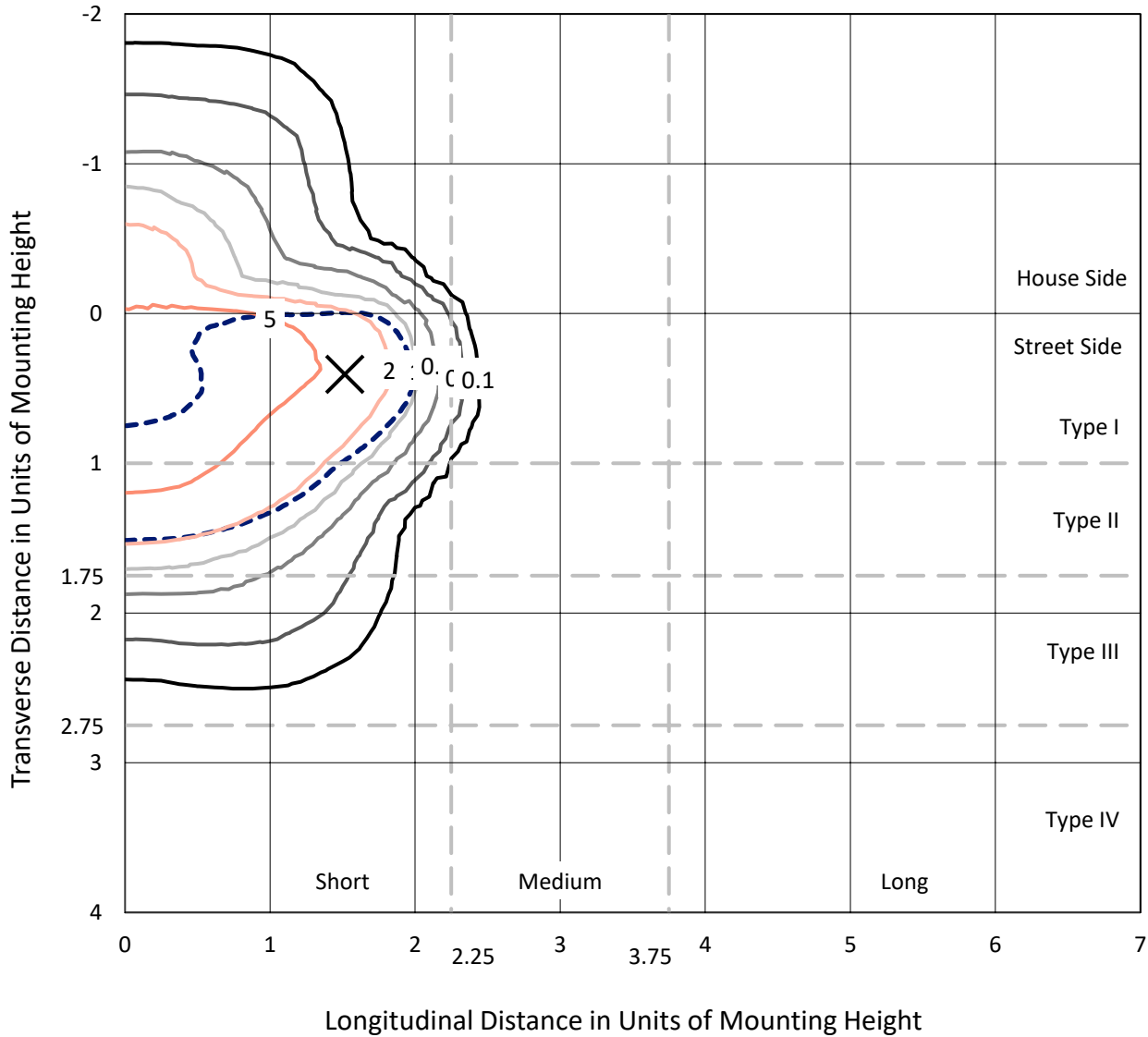
Input Watts (W): 310.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P641458
 CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

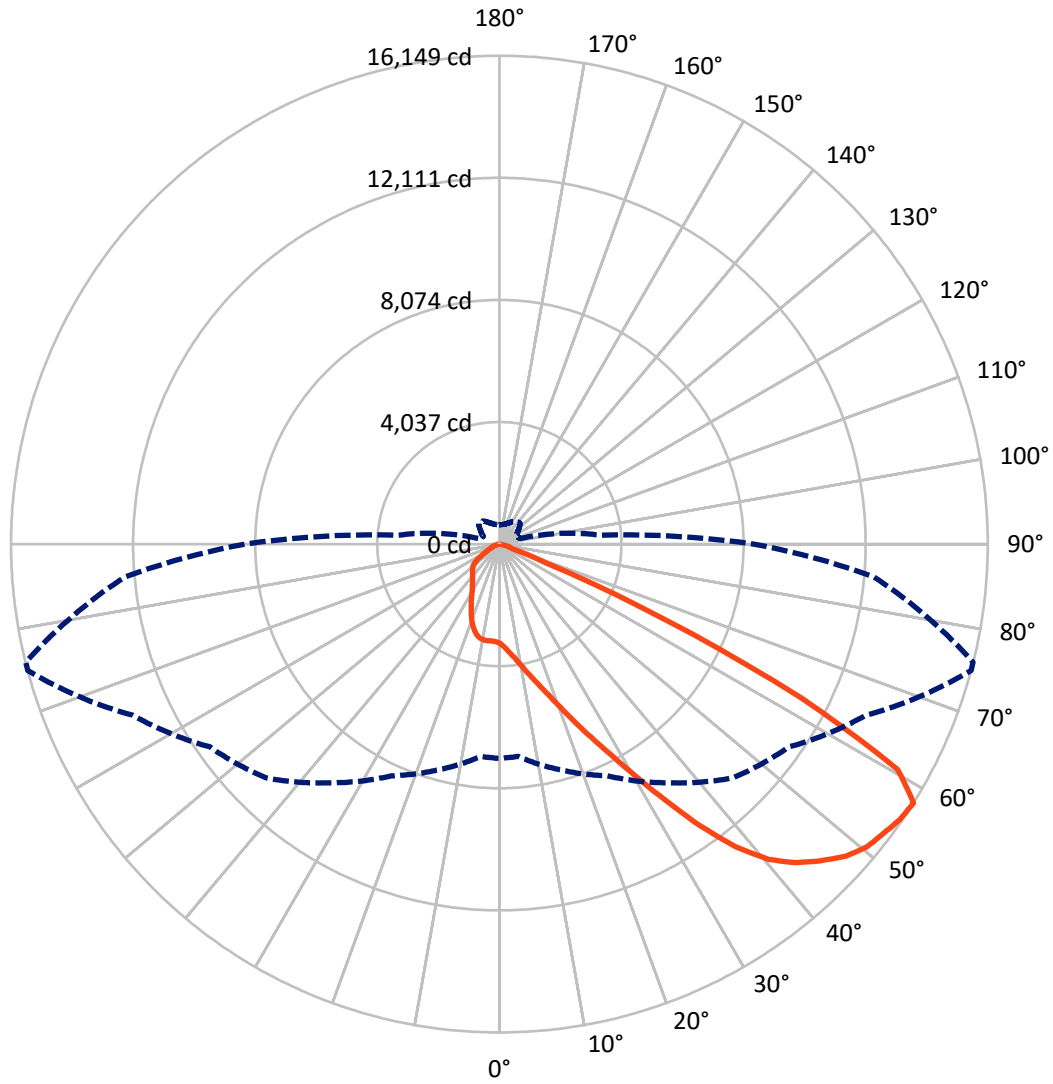
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
 Type II - Short - N/A

REPORT NUMBER: P641458
CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P641458
 CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3217.1	0.0	3217.1
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	16477.8	0.0	16477.8
	% Fixture	83.7	0.0	83.7
Total	Lumens	19694.9	0.0	19694.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	334.3	1.7
10°-20°	1085.8	5.5
20°-30°	1988.4	10.1
30°-40°	3298.9	16.8
40°-50°	5038.3	25.6
50°-60°	5661.3	28.7
60°-70°	2088.1	10.6
70°-80°	199.6	1.0
80°-90°	0.2	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°	19694.9	100.0
0°-180°	19694.9	100.0

Coefficient of Utilization



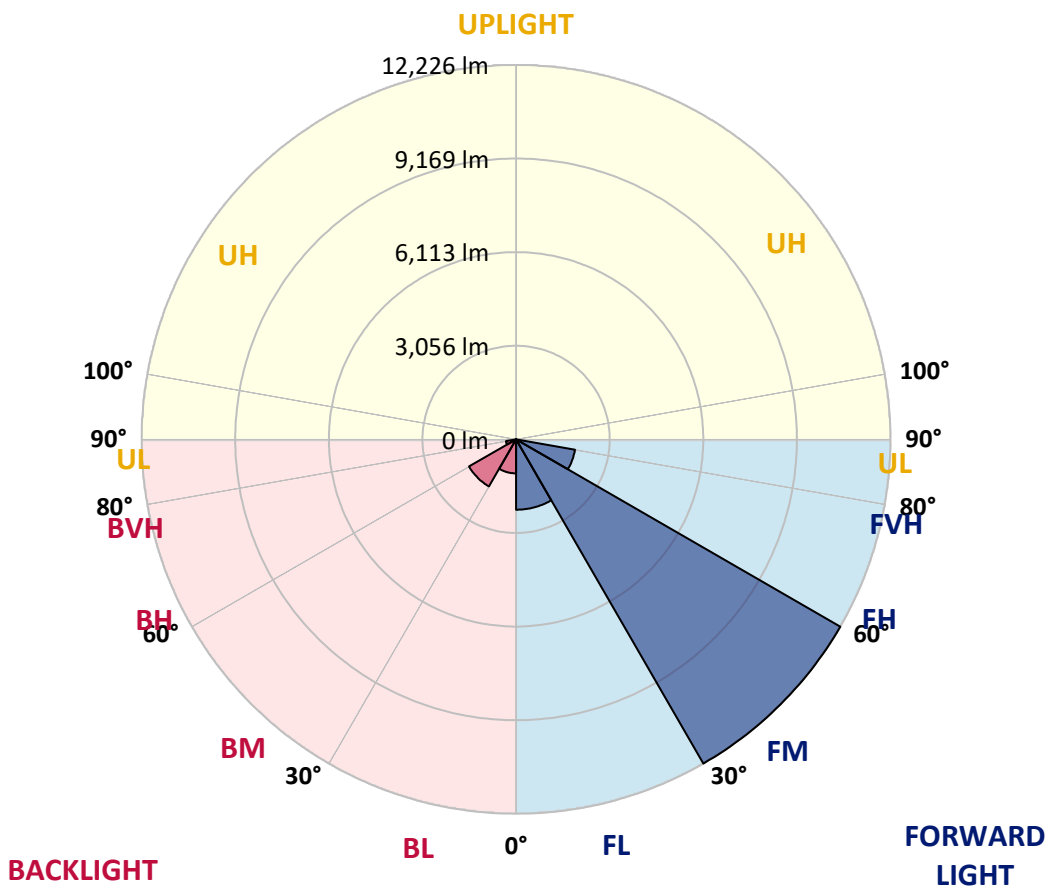
REPORT NUMBER: P641458

CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2298.4	11.7			
FM (30°-60°)	12225.7	62.1			
FH (60°-80°)	1953.7	9.9			G2/5000
FVH (80°-90°)	0.1	0.0			G0/10
BL (0°-30°)	1110.1	5.6	B3/2500		
BM (30°-60°)	1772.8	9.0	B2/2500		
BH (60°-80°)	334.1	1.7	B1/500		G1/500
BVH (80°-90°)	0.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
 Type II Short





REPORT NUMBER: P641458

CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8
2.5°	3669.9	3707.9	3696.0	3672.3	3658.0	3608.1	3577.2	3486.9	3422.7	3415.6	3356.1
5°	4133.4	4126.2	4116.7	4088.2	4064.4	3986.0	3893.3	3741.2	3605.7	3589.1	3463.1
7.5°	4387.7	4392.5	4397.2	4392.5	4375.8	4316.4	4214.2	4035.9	3829.1	3814.9	3615.2
10°	4492.3	4501.8	4525.6	4570.7	4611.1	4606.4	4547.0	4363.9	4109.6	4085.8	3817.3
12.5°	4542.2	4554.1	4592.1	4677.7	4787.0	4872.6	4882.1	4718.1	4437.6	4399.6	4057.3
15°	4611.1	4623.0	4670.6	4782.3	4941.5	5110.3	5219.6	5115.0	4801.3	4760.9	4321.2
17.5°	4642.0	4658.7	4727.6	4875.0	5081.7	5340.8	5588.0	5578.5	5231.5	5200.6	4627.8
20°	4701.4	4713.3	4775.1	4934.4	5184.0	5557.1	5973.1	6122.8	5756.8	5711.6	4998.6
22.5°	4889.2	4894.0	4922.5	5022.3	5255.3	5714.0	6365.3	6757.4	6377.1	6317.7	5414.5
25°	5195.8	5193.5	5205.3	5222.0	5393.1	5873.2	6743.2	7472.9	7087.8	7023.7	5885.1
27.5°	5585.6	5585.6	5614.2	5566.6	5635.6	6070.5	7116.4	8295.3	7915.0	7824.7	6400.9
30°	6044.4	6042.0	6108.6	6032.5	6053.9	6381.9	7518.0	9191.4	8913.3	8801.6	6995.1
32.5°	6667.1	6652.9	6728.9	6624.3	6553.0	6852.5	8007.7	10127.8	10108.8	9937.7	7741.5
35°	7453.9	7430.1	7453.9	7351.7	7223.3	7510.9	8649.4	11062.0	11435.1	11254.5	8630.4
37.5°	8235.9	8311.9	8338.1	8162.2	8057.6	8345.2	9421.9	11898.6	12702.0	12514.2	9555.0
40°	9158.1	9134.3	9224.6	9027.4	8960.8	9279.3	10177.8	12521.4	13705.0	13526.8	10377.4
42.5°	9837.9	9880.7	9992.4	9883.0	9830.7	10130.2	10812.4	12885.0	14401.5	14225.6	10964.5
45°	10653.1	10684.0	10726.8	10636.5	10581.8	10876.6	11271.1	13044.3	14931.5	14741.4	11359.1
47.5°	11535.0	11558.7	11558.7	11373.3	11197.4	11318.7	11577.7	13134.6	15418.8	15235.7	11651.4
50°	12167.2	12179.1	12283.7	12152.9	11770.3	11582.5	11718.0	13222.5	15742.0	15570.9	11746.5
52.5°	11606.3	11592.0	11936.6	12207.6	12309.8	11936.6	11960.4	13350.9	15898.9	15751.5	11822.6
55°	9773.7	9749.9	10234.8	10893.2	11794.0	12271.8	12252.8	13426.9	16072.4	15982.1	12098.3
57.5°	7085.5	7045.0	7720.1	8452.2	9633.5	10928.9	11689.4	13384.2	16148.5	16141.3	12419.1
60°	4259.4	4226.1	4863.1	5633.2	6545.9	7848.4	9110.5	11988.9	15131.2	15145.4	11584.9
62.5°	2621.7	2652.6	3227.8	3620.0	3959.9	4352.1	5081.7	8064.7	11209.3	11302.0	8140.8
65°	1763.6	1787.4	2319.8	2814.2	2814.2	2300.8	1975.2	3855.3	5980.2	5823.3	3850.5
67.5°	1183.7	1209.8	1630.5	2208.1	2291.3	1604.4	801.0	1150.4	1666.2	1616.3	953.1
70°	696.4	724.9	1086.2	1514.1	1668.6	1117.1	534.8	487.3	473.0	458.7	370.8
72.5°	311.4	323.3	553.8	770.1	703.6	470.6	377.9	389.8	368.4	361.3	301.9
75°	95.1	99.8	142.6	166.4	168.8	168.8	228.2	306.6	290.0	292.4	232.9
77.5°	23.8	23.8	38.0	35.7	19.0	16.6	42.8	68.9	71.3	64.2	47.5
80°	0.0	0.0	0.0	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4
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: P641458

CATALOG NUMBER: GWS-SA5F-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8	3284.8
2.5°	3330.0	3268.2	3227.8	3170.7	3130.3	3087.6	3049.5	3018.6	3002.0	2997.2	2999.6
5°	3406.1	3308.6	3213.5	3104.2	3028.1	2956.8	2899.8	2854.6	2833.2	2826.1	2826.1
7.5°	3522.5	3387.0	3218.3	3047.1	2918.8	2807.1	2740.5	2690.6	2671.6	2666.8	2652.6
10°	3674.6	3489.2	3211.2	2944.9	2764.3	2647.8	2600.3	2586.0	2593.2	2595.5	2593.2
12.5°	3857.7	3596.2	3166.0	2795.2	2600.3	2529.0	2533.7	2571.8	2614.6	2635.9	2640.7
15°	4052.6	3693.7	3063.8	2616.9	2460.1	2457.7	2526.6	2614.6	2697.7	2733.4	2742.9
17.5°	4271.2	3772.1	2906.9	2426.8	2338.8	2407.8	2531.4	2666.8	2778.6	2838.0	2849.9
20°	4511.3	3836.3	2707.3	2248.5	2231.9	2355.5	2526.6	2693.0	2830.9	2897.4	2909.3
22.5°	4760.9	3881.4	2476.7	2084.5	2134.4	2296.1	2481.5	2643.1	2773.8	2849.9	2859.4
25°	5046.1	3886.2	2241.4	1946.7	2044.1	2215.2	2372.1	2505.2	2614.6	2681.1	2688.2
27.5°	5295.7	3829.1	2032.2	1834.9	1960.9	2115.4	2220.0	2293.7	2369.7	2407.8	2410.1
30°	5583.3	3729.3	1834.9	1744.6	1875.4	1991.8	2044.1	2060.7	2067.9	2075.0	2065.5
32.5°	5925.5	3608.1	1687.6	1656.7	1777.9	1856.3	1870.6	1837.3	1796.9	1739.9	1725.6
35°	6346.2	3498.8	1566.4	1571.1	1670.9	1718.5	1706.6	1635.3	1556.9	1487.9	1476.0
37.5°	6802.6	3406.1	1473.7	1487.9	1554.5	1587.7	1552.1	1473.7	1438.0	1378.6	1381.0
40°	7206.7	3330.0	1390.5	1404.7	1435.6	1466.5	1409.5	1357.2	1423.7	1419.0	1423.7
42.5°	7494.3	3265.8	1319.2	1312.0	1333.4	1354.8	1312.0	1285.9	1397.6	1366.7	1383.3
45°	7663.0	3206.4	1259.7	1217.0	1250.2	1288.3	1259.7	1226.5	1264.5	1121.9	1110.0
47.5°	7777.1	3173.1	1207.5	1124.3	1183.7	1250.2	1190.8	1110.0	1055.3	931.7	922.2
50°	7789.0	3156.5	1145.7	1029.2	1105.2	1176.6	1107.6	995.9	917.5	862.8	855.7
52.5°	7850.8	3189.8	1060.1	908.0	991.2	1105.2	1057.7	946.0	839.0	791.5	782.0
55°	8126.5	3330.0	917.5	741.6	862.8	1050.6	1017.3	843.8	741.6	713.1	705.9
57.5°	8411.7	3358.5	722.6	587.1	751.1	972.1	929.4	777.2	677.4	644.1	637.0
60°	7691.6	2766.7	541.9	484.9	663.1	898.5	860.4	736.8	620.4	580.0	572.8
62.5°	5053.2	1495.1	430.2	411.2	558.6	760.6	784.4	665.5	553.8	511.0	508.7
65°	2329.3	694.0	330.4	325.6	437.3	606.1	675.0	582.3	468.2	430.2	430.2
67.5°	634.6	344.6	259.1	240.1	297.1	406.4	492.0	435.0	332.8	287.6	285.2
70°	316.1	278.1	232.9	206.8	213.9	251.9	290.0	242.4	168.8	137.9	135.5
72.5°	259.1	228.2	197.3	175.9	161.6	154.5	149.7	121.2	78.4	59.4	57.0
75°	192.5	164.0	140.2	114.1	97.5	90.3	80.8	59.4	33.3	19.0	16.6
77.5°	42.8	40.4	38.0	28.5	26.1	21.4	16.6	11.9	4.8	0.0	0.0
80°	2.4	2.4	2.4	2.4	2.4	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



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

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)