

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: P636489

Luminaire Tested: GWS-SA3F-830-U-SL2-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P636489
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-SA3F-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: 11405.1 lumens
Efficiency: N/A
Efficacy: 62.3 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

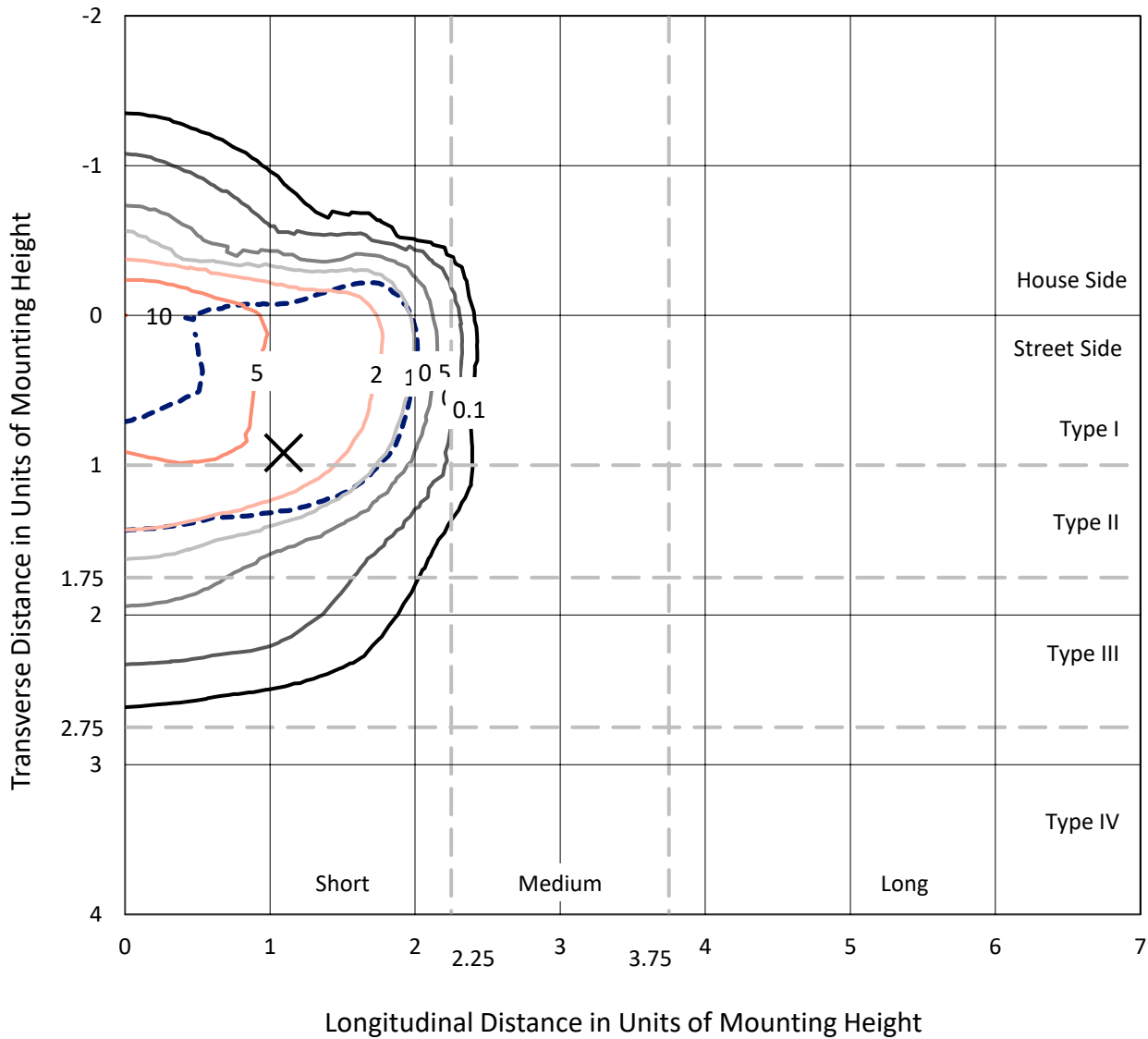
Input Watts (W): 183.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

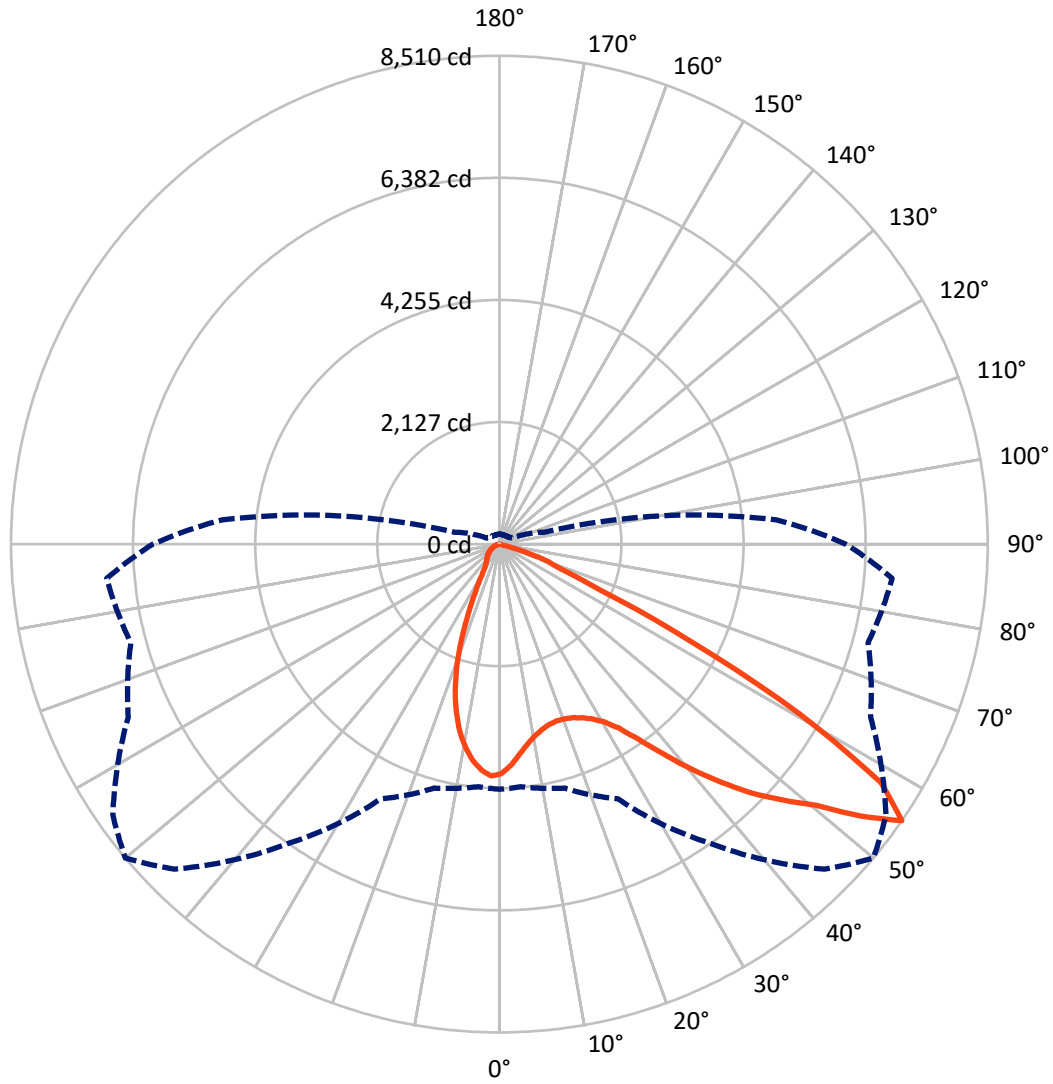
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2247.3	0.0	2247.3
	% Fixture	19.7	0.0	19.7
Street Side	Lumens	9157.8	0.0	9157.8
	% Fixture	80.3	0.0	80.3
Total	Lumens	11405.1	0.0	11405.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.4	3.1
10°-20°	864.8	7.6
20°-30°	1219.8	10.7
30°-40°	1805.1	15.8
40°-50°	2604.1	22.8
50°-60°	3071.8	26.9
60°-70°	1370.3	12.0
70°-80°	117.8	1.0
80°-90°	0.1	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°	11405.1	100.0
0°-180°	11405.1	100.0

Coefficient of Utilization



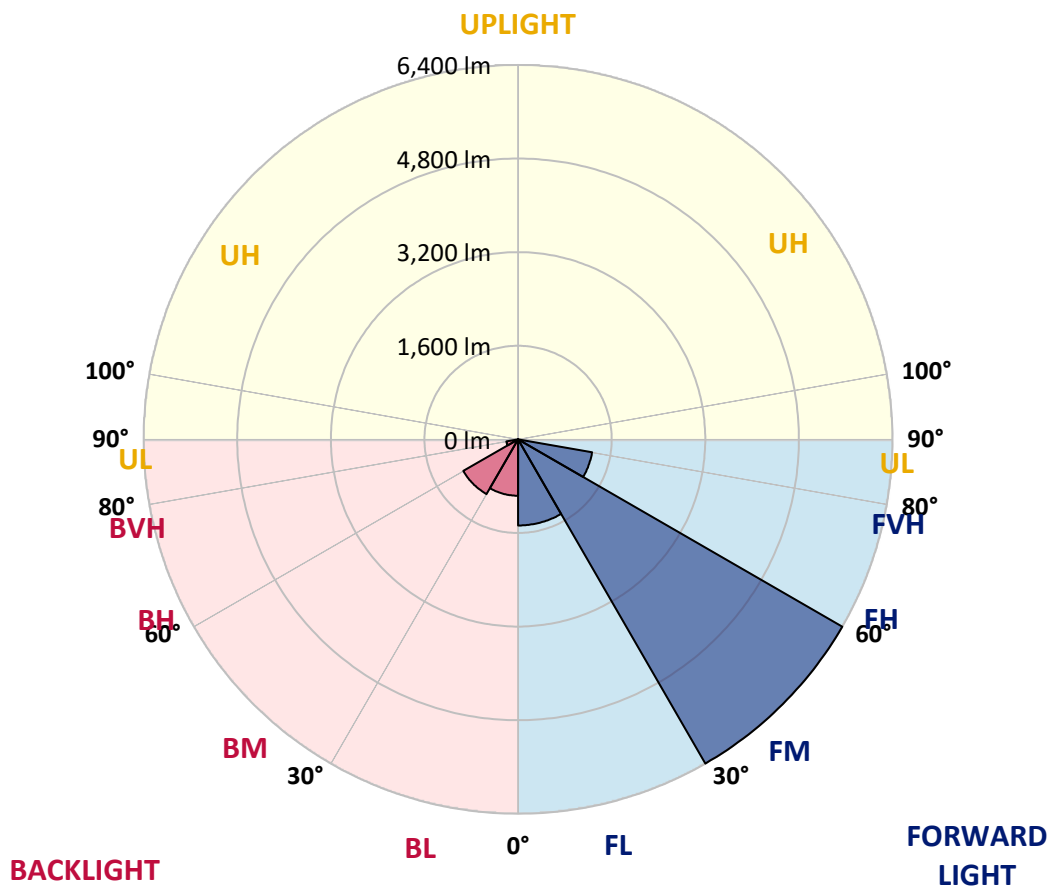
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1472.4	12.9			
FM (30°-60°)	6400.2	56.1			
FH (60°-80°)	1285.2	11.3			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	963.6	8.4	B2/1000		
BM (30°-60°)	1080.8	9.5	B2/2500		
BH (60°-80°)	202.9	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: P636489

CATALOG NUMBER: GWS-SA3F-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5
2.5°	3717.5	3720.3	3721.7	3759.3	3773.2	3828.9	3858.1	3873.4	3913.8	3961.2	4000.2
5°	3468.3	3464.1	3471.1	3518.4	3549.0	3631.2	3675.7	3706.4	3795.5	3906.9	4000.2
7.5°	3251.1	3259.4	3267.8	3319.3	3365.3	3454.4	3518.4	3564.4	3688.3	3854.0	4011.3
10°	3097.9	3097.9	3110.5	3168.9	3223.2	3333.2	3397.3	3455.8	3603.3	3806.6	4023.8
12.5°	2985.1	2986.5	3001.9	3068.7	3131.3	3245.5	3312.3	3369.4	3532.3	3759.3	4026.6
15°	2932.2	2928.1	2940.6	3011.6	3081.2	3188.4	3258.0	3313.7	3482.2	3732.8	4040.5
17.5°	2918.3	2915.5	2925.3	2994.9	3065.9	3170.3	3238.5	3294.2	3475.2	3741.2	4082.3
20°	2958.7	2953.1	2948.9	3008.8	3075.6	3178.7	3249.7	3312.3	3508.7	3787.1	4146.3
22.5°	3054.8	3054.8	3045.0	3074.3	3118.8	3212.1	3285.9	3368.0	3596.4	3879.0	4241.0
25°	3231.6	3217.7	3199.6	3212.1	3206.5	3265.0	3352.7	3466.9	3762.1	4030.8	4356.6
27.5°	3433.5	3446.0	3415.4	3416.8	3368.0	3347.2	3448.8	3621.4	4008.5	4245.2	4527.8
30°	3707.8	3698.0	3699.4	3695.2	3582.5	3483.6	3593.6	3823.3	4319.0	4572.4	4750.6
32.5°	3922.2	3936.1	3982.1	4008.5	3860.9	3702.2	3819.1	4097.6	4672.6	4945.5	5023.5
35°	4149.1	4174.2	4267.5	4353.8	4229.9	4047.5	4172.8	4461.0	5005.4	5314.5	5336.8
37.5°	4388.6	4438.7	4550.1	4701.9	4682.4	4520.9	4635.1	4888.5	5267.2	5537.3	5595.8
40°	4662.9	4711.6	4894.0	5112.6	5158.6	5122.4	5160.0	5307.5	5439.8	5547.0	5707.1
42.5°	4963.6	5030.5	5261.6	5554.0	5726.6	5758.7	5670.9	5655.6	5515.0	5435.6	5683.5
45°	5318.7	5396.7	5658.4	6037.1	6311.4	6354.6	6202.8	6006.5	5562.3	5353.5	5612.5
47.5°	5716.9	5790.7	6051.0	6506.3	6914.3	6931.0	6666.5	6350.4	5703.0	5448.2	5666.8
50°	5850.6	5896.5	6122.1	6656.7	7408.6	7536.7	7153.8	6737.5	5985.6	5726.6	5931.3
52.5°	5391.1	5409.2	5605.5	6145.7	7308.3	8131.2	7865.2	7315.3	6488.2	6151.3	6339.3
55°	4271.7	4242.4	4401.1	4896.8	6351.8	8010.0	8509.9	8223.1	7135.7	6649.7	6869.7
57.5°	2987.9	2953.1	2916.9	3252.5	4739.5	6790.4	7841.6	8349.8	7752.5	7144.0	7442.0
60°	2456.1	2422.6	2247.2	2092.7	2865.4	4875.9	6023.2	6979.7	7702.3	7119.0	7423.9
62.5°	2121.9	2102.4	2031.4	1821.2	1686.1	2783.3	3771.8	4688.0	5910.4	5590.2	5606.9
65°	1666.6	1661.0	1709.8	1732.1	1491.2	1539.9	1924.2	2436.6	3195.4	3013.0	2857.1
67.5°	1138.9	1126.4	1218.3	1498.1	1434.1	1215.5	1126.4	1136.1	1382.6	845.1	671.1
70°	724.0	694.8	696.2	928.7	1166.8	959.3	868.8	764.4	687.8	125.3	142.0
72.5°	463.6	445.5	382.9	419.1	540.2	467.8	472.0	406.6	271.5	66.8	78.0
75°	194.9	179.6	137.8	110.0	108.6	68.2	59.9	55.7	37.6	37.6	40.4
77.5°	1.4	0.0	0.0	1.4	2.8	1.4	1.4	2.8	5.6	8.4	9.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
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: P636489

CATALOG NUMBER: GWS-SA3F-830-U-SL2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5	4001.5
2.5°	4023.8	3990.4	4028.0	4041.9	4040.5	4041.9	4001.5	3973.7	3972.3	3937.5	3920.8
5°	4039.1	4012.7	4040.5	4022.4	3979.3	3925.0	3852.6	3789.9	3762.1	3721.7	3702.2
7.5°	4068.4	4040.5	4036.4	3964.0	3856.7	3742.6	3614.5	3500.3	3439.0	3365.3	3369.4
10°	4089.3	4057.2	4002.9	3855.3	3677.1	3494.7	3304.0	3134.1	3026.9	2928.1	2911.4
12.5°	4097.6	4050.3	3923.6	3700.8	3450.2	3212.1	2932.2	2690.0	2522.9	2393.4	2375.3
15°	4112.9	4036.4	3821.9	3514.2	3170.3	2833.4	2476.9	2145.6	1924.2	1775.2	1787.7
17.5°	4136.6	4021.0	3707.8	3305.4	2869.6	2393.4	1911.7	1531.6	1328.3	1242.0	1243.3
20°	4170.0	4002.9	3582.5	3075.6	2509.0	1896.3	1336.6	1049.8	992.7	989.9	985.8
22.5°	4214.6	3984.8	3448.8	2823.6	2081.5	1328.3	889.7	800.6	824.3	870.2	878.6
25°	4267.5	3962.6	3299.8	2539.6	1615.1	871.6	666.9	653.0	710.1	771.3	785.3
27.5°	4349.6	3951.4	3129.9	2216.6	1133.4	625.2	545.8	554.1	605.7	657.2	669.7
30°	4488.9	3972.3	2944.8	1854.6	728.2	498.5	473.4	485.9	513.8	540.2	551.4
32.5°	4678.2	4033.6	2765.2	1459.2	519.3	433.0	427.4	434.4	445.5	460.9	465.0
35°	4899.6	4139.4	2580.0	1044.2	428.8	395.4	389.9	389.9	395.4	398.2	399.6
37.5°	5082.0	4250.8	2405.9	694.8	384.3	366.2	357.8	353.7	352.3	355.0	356.4
40°	5161.4	4296.7	2216.6	505.4	352.3	339.7	327.2	314.7	314.7	324.4	325.8
42.5°	5105.7	4245.2	1998.0	417.7	330.0	311.9	292.4	281.2	286.8	296.6	299.3
45°	4987.3	4118.5	1757.1	369.0	307.7	284.0	261.8	254.8	260.4	272.9	275.7
47.5°	4967.8	4035.0	1468.9	336.9	284.0	260.4	236.7	229.7	236.7	246.4	249.2
50°	5161.4	4107.4	1148.7	309.1	261.8	235.3	215.8	208.8	213.0	218.6	221.4
52.5°	5515.0	4376.1	927.3	282.6	235.3	210.2	197.7	189.4	189.4	194.9	196.3
55°	6037.1	4845.3	800.6	252.0	204.7	190.7	179.6	171.3	171.3	174.0	175.4
57.5°	6638.6	5413.4	829.8	211.6	179.6	172.6	162.9	155.9	158.7	158.7	158.7
60°	6555.1	5371.6	888.3	178.2	158.7	155.9	147.6	144.8	151.8	146.2	143.4
62.5°	4828.6	3710.5	465.0	146.2	136.4	133.7	128.1	133.7	143.4	128.1	122.5
65°	2344.7	1796.1	186.6	119.7	115.6	112.8	110.0	118.3	123.9	100.2	94.7
67.5°	551.4	448.3	121.1	101.6	96.1	90.5	93.3	94.7	90.5	68.2	65.4
70°	143.4	140.6	94.7	84.9	76.6	71.0	71.0	69.6	59.9	43.2	40.4
72.5°	78.0	76.6	68.2	64.0	52.9	47.3	48.7	43.2	33.4	25.1	23.7
75°	39.0	41.8	39.0	36.2	29.2	26.5	26.5	23.7	16.7	9.7	9.7
77.5°	8.4	9.7	9.7	8.4	7.0	5.6	5.6	7.0	2.8	0.0	0.0
80°	1.4	1.4	1.4	1.4	1.4	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



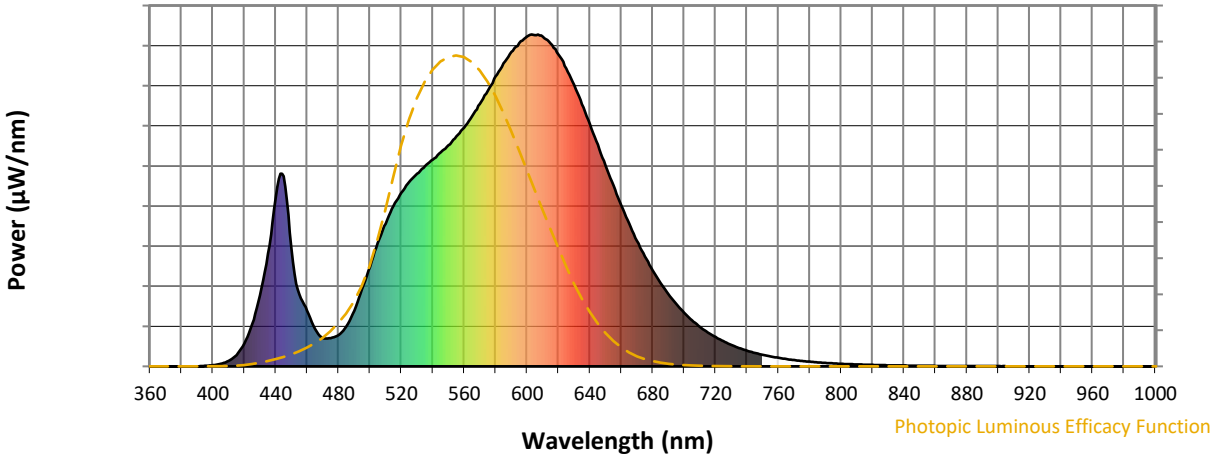
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



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)