

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: P640455

Luminaire Tested: GWS-SA5D-830-U-SL3-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640455
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-34)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5D-830-U-SL3-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19328.1 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

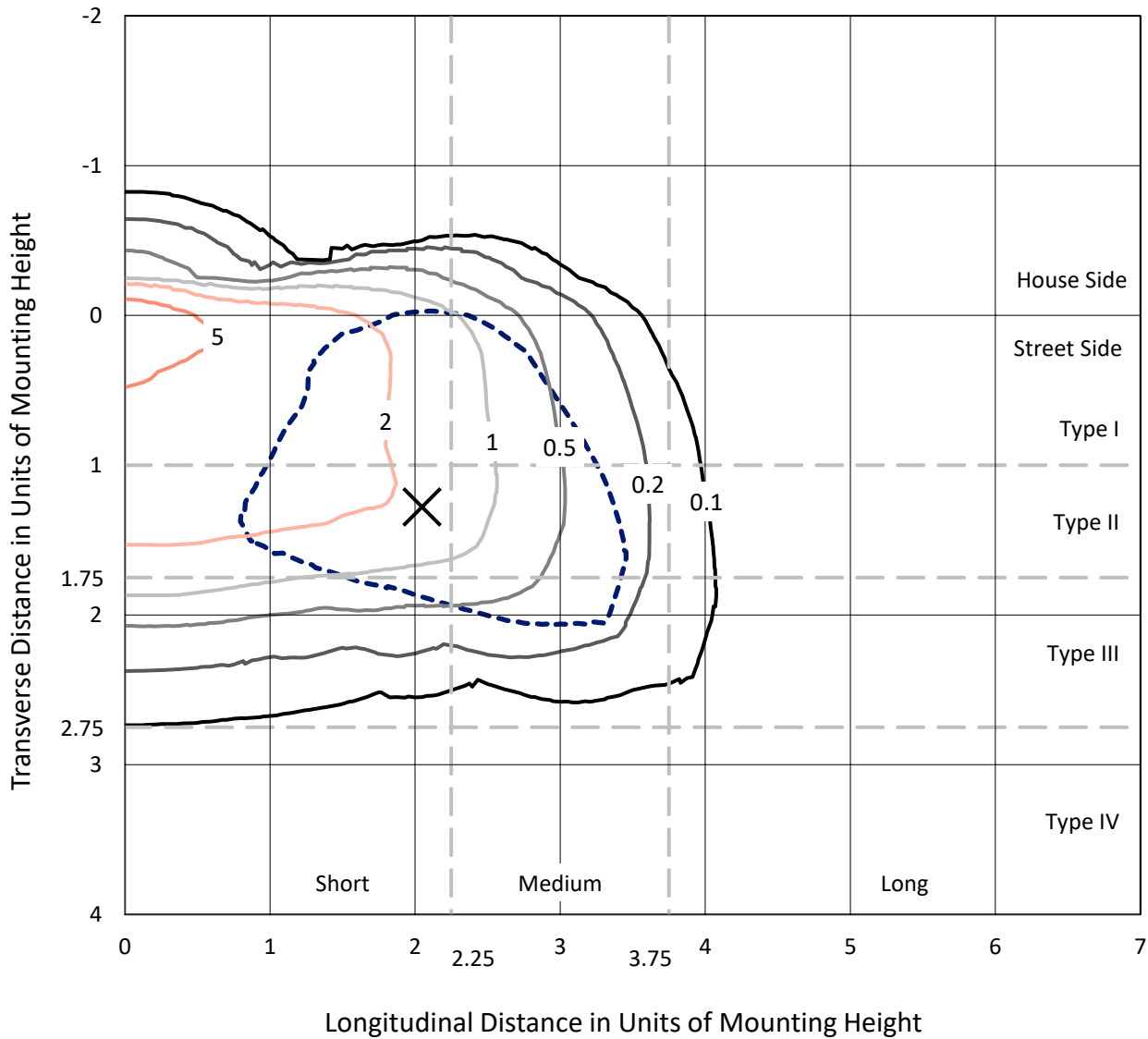
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P640455
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Iso-Footcandle Lines of Horizontal Illumination

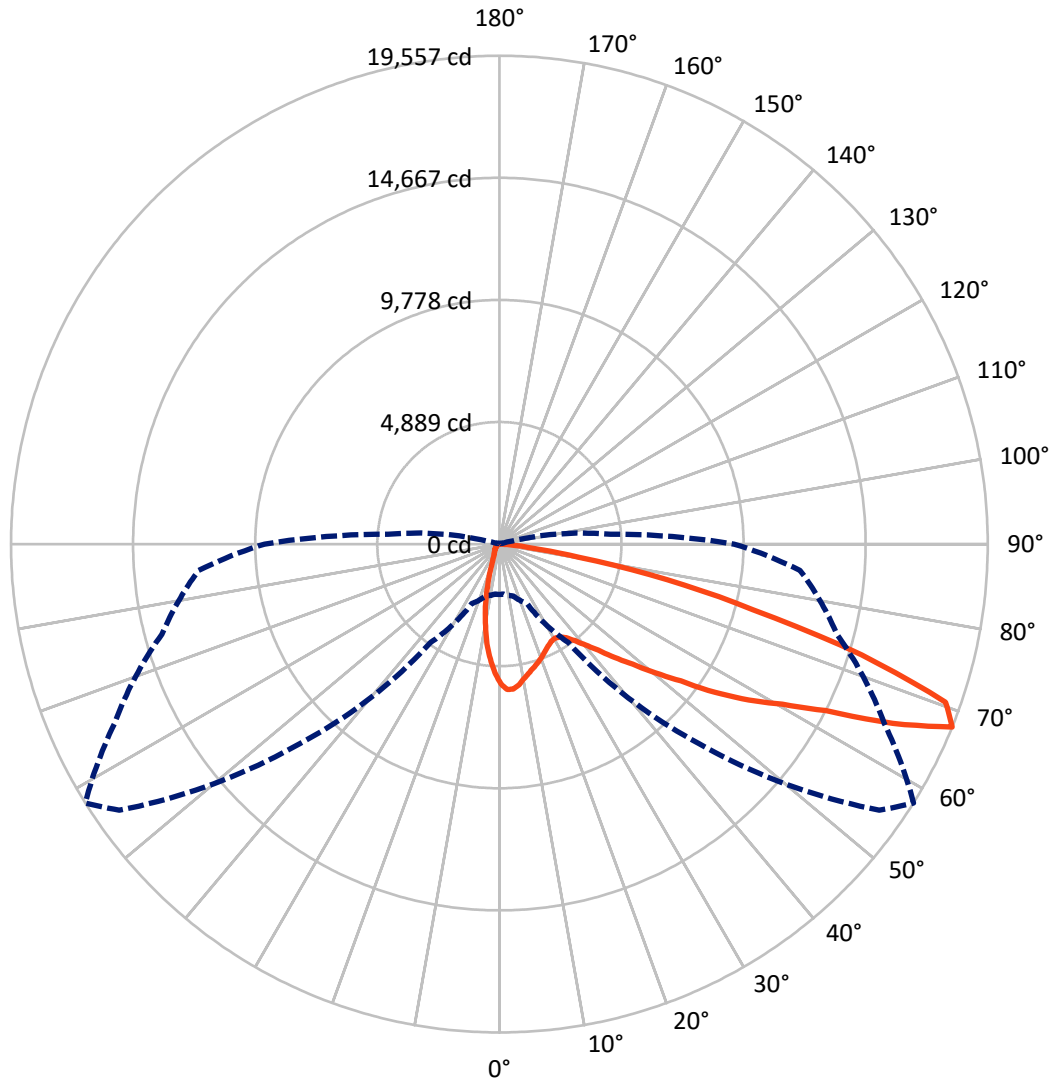
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
 Type III - Short - N/A

REPORT NUMBER: P640455
CATALOG NUMBER: GWS-SA5D-830-U-SL3-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P640455
 CATALOG NUMBER: GWS-SA5D-830-U-SL3-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1888.2	0.0	1888.2
	% Fixture	9.8	0.0	9.8
Street Side	Lumens	17439.9	0.0	17439.9
	% Fixture	90.2	0.0	90.2
Total	Lumens	19328.1	0.0	19328.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.0	2.3
10°-20°	943.1	4.9
20°-30°	1271.8	6.6
30°-40°	1787.1	9.2
40°-50°	2760.0	14.3
50°-60°	4413.6	22.8
60°-70°	5226.0	27.0
70°-80°	2311.9	12.0
80°-90°	161.6	0.8
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°	19328.1	100.0
0°-180°	19328.1	100.0

Coefficient of Utilization



REPORT NUMBER: P640455

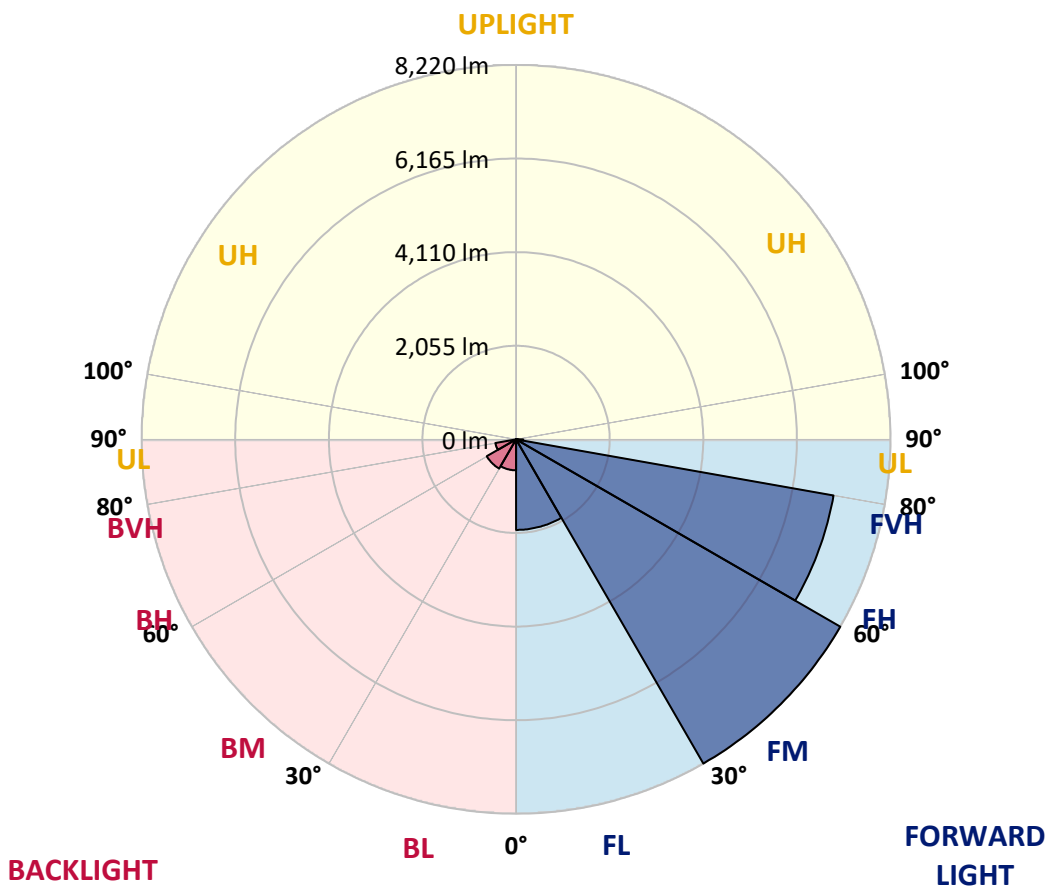
CATALOG NUMBER: GWS-SA5D-830-U-SL3-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1988.4	10.3			
FM (30°-60°)	8219.8	42.5			
FH (60°-80°)	7076.9	36.6			G3/7500
FVH (80°-90°)	154.7	0.8			G2/225
BL (0°-30°)	679.5	3.5	B2/1000		
BM (30°-60°)	740.9	3.8	B1/1000		
BH (60°-80°)	461.0	2.4	B1/500		G1/500
BVH (80°-90°)	6.9	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-G3

Type III Short





REPORT NUMBER: P640455

CATALOG NUMBER: GWS-SA5D-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1
2.5°	5864.2	5874.5	5888.2	5905.3	5901.9	5886.5	5867.7	5824.9	5797.5	5712.0	5607.6
5°	5676.1	5674.4	5708.6	5741.1	5799.2	5830.0	5872.8	5833.4	5819.8	5717.1	5547.8
7.5°	5308.3	5327.1	5366.4	5417.7	5501.6	5592.2	5694.9	5682.9	5724.0	5655.5	5445.1
10°	4947.3	4937.0	4998.6	5075.6	5203.9	5320.2	5469.1	5467.4	5575.1	5568.3	5328.8
12.5°	4630.8	4629.1	4677.0	4764.3	4914.8	5077.3	5279.2	5284.3	5417.7	5472.5	5229.6
15°	4364.0	4367.4	4413.6	4504.2	4659.9	4858.4	5092.7	5135.5	5286.0	5397.2	5132.1
17.5°	4174.1	4175.8	4203.2	4281.9	4434.1	4646.2	4928.5	4986.7	5180.0	5340.8	5053.4
20°	4086.8	4080.0	4085.1	4124.5	4242.5	4435.8	4760.8	4836.1	5082.5	5301.4	4981.5
22.5°	4098.8	4088.5	4064.6	4059.5	4112.5	4259.6	4582.9	4675.3	4976.4	5277.5	4916.5
25°	4204.9	4182.6	4148.4	4097.1	4076.6	4150.1	4427.3	4523.1	4877.2	5279.2	4866.9
27.5°	4367.4	4343.4	4300.7	4232.2	4151.8	4121.0	4321.2	4411.9	4807.0	5318.5	4843.0
30°	4574.4	4555.6	4514.5	4432.4	4324.6	4198.0	4299.0	4374.2	4772.8	5398.9	4853.2
32.5°	4819.0	4805.3	4771.1	4695.8	4572.7	4379.4	4374.2	4432.4	4800.2	5515.3	4892.6
35°	5055.1	5060.2	5061.9	5020.9	4889.1	4654.8	4581.2	4601.7	4913.1	5689.7	4981.5
37.5°	5310.0	5298.0	5359.6	5388.7	5262.1	5012.3	4901.1	4902.8	5128.6	5948.1	5149.2
40°	5503.3	5506.7	5640.1	5759.9	5706.9	5465.6	5306.6	5304.8	5460.5	6302.2	5419.5
42.5°	5684.6	5706.9	5903.6	6108.9	6182.4	5968.6	5854.0	5811.2	5925.8	6781.2	5824.9
45°	5877.9	5910.4	6185.8	6478.4	6671.7	6545.1	6454.4	6471.5	6485.2	7338.9	6370.6
47.5°	6103.7	6124.3	6464.7	6877.0	7237.9	7205.4	7210.5	7190.0	7183.2	8041.9	7092.5
50°	6377.4	6425.3	6817.1	7309.8	7802.4	8018.0	8089.8	8098.4	7987.2	8808.3	7840.1
52.5°	6959.1	7017.2	7352.5	7783.6	8418.3	8871.6	9164.2	9106.0	8934.9	9550.8	8659.5
55°	7645.1	7689.5	8012.9	8459.4	9171.0	9807.4	10501.9	10478.0	10058.8	10332.6	9333.5
57.5°	7710.1	7759.7	8260.9	8945.2	10137.5	10963.8	11694.3	11771.2	11157.1	10886.8	9935.7
60°	6979.6	7080.5	7764.8	8685.2	10507.0	12518.8	13001.2	13016.6	11962.8	11449.6	10671.3
62.5°	5593.9	5641.8	6331.3	7532.2	9937.4	13425.5	14997.6	14672.6	12997.8	12320.4	11836.2
65°	2932.1	3127.1	3727.6	5056.8	8059.0	13109.0	17399.4	17310.4	14859.0	13567.5	12742.9
67.5°	2011.8	2010.1	2152.0	2636.2	4805.3	11287.1	18578.1	19556.6	17011.1	13995.1	12086.0
70°	1531.1	1536.2	1662.8	1977.6	2489.1	7513.3	17284.8	18957.8	17411.4	12707.0	9774.9
72.5°	1016.1	1026.4	1236.8	1597.8	1987.8	3683.1	13432.3	15168.7	14650.3	10206.0	6880.4
75°	607.3	615.8	766.4	1161.6	1767.1	2061.4	8534.6	10486.5	10084.5	7034.3	3688.2
77.5°	249.8	256.6	393.5	723.6	1293.3	1601.2	4719.8	6861.6	6040.4	2797.0	1007.6
80°	104.4	107.8	189.9	506.4	932.3	1004.2	2186.3	3224.6	2475.4	602.2	307.9
82.5°	37.6	39.3	70.1	278.8	579.9	756.1	1103.4	1274.5	698.0	196.7	165.9
85°	1.7	1.7	17.1	94.1	220.7	213.8	631.2	610.7	230.9	82.1	99.2
87.5°	0.0	0.0	1.7	1.7	3.4	8.6	59.9	106.1	49.6	20.5	42.8
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: P640455

CATALOG NUMBER: GWS-SA5D-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1	5575.1
2.5°	5539.2	5448.5	5349.3	5256.9	5109.8	5022.6	4914.8	4866.9	4798.5	4781.4	4791.6
5°	5426.3	5270.6	5032.8	4817.3	4538.5	4314.4	4088.5	3992.7	3869.6	3787.5	3753.2
7.5°	5267.2	5063.6	4692.4	4300.7	3917.5	3508.6	3197.3	2992.0	2805.5	2702.9	2682.4
10°	5106.4	4841.2	4309.2	3748.1	3154.5	2665.3	2244.4	1933.1	1679.9	1565.3	1476.3
12.5°	4940.5	4610.3	3919.2	3187.0	2497.6	1830.4	1310.4	1007.6	826.3	754.4	766.4
15°	4788.2	4387.9	3532.6	2625.9	1758.6	1105.1	723.6	610.7	567.9	554.3	552.6
17.5°	4642.8	4177.5	3147.7	2080.2	1159.8	677.4	554.3	526.9	514.9	508.1	508.1
20°	4511.1	3975.6	2771.3	1567.0	749.3	537.2	501.2	487.5	477.3	472.1	472.1
22.5°	4387.9	3780.6	2403.5	1108.5	552.6	482.4	460.2	446.5	434.5	427.7	427.7
25°	4276.7	3604.4	2052.8	763.0	475.6	441.4	417.4	402.0	381.5	369.5	369.5
27.5°	4196.3	3447.0	1715.8	556.0	429.4	396.9	369.5	349.0	326.7	313.1	309.6
30°	4148.4	3313.6	1375.4	456.8	386.6	354.1	323.3	297.7	272.0	258.3	256.6
32.5°	4121.0	3190.4	1064.0	398.6	350.7	313.1	278.8	251.5	225.8	210.4	208.7
35°	4131.3	3094.6	797.2	359.2	316.5	277.1	239.5	212.1	189.9	176.2	172.8
37.5°	4220.3	3051.9	598.7	328.5	287.4	246.3	207.0	181.3	160.8	150.5	148.8
40°	4393.0	3060.4	470.4	304.5	263.4	215.5	177.9	154.0	138.6	130.0	128.3
42.5°	4661.6	3132.3	388.3	284.0	237.8	188.2	154.0	135.1	119.7	111.2	109.5
45°	5061.9	3281.1	338.7	260.0	210.4	162.5	133.4	116.3	102.6	92.4	90.7
47.5°	5641.8	3539.4	306.2	237.8	186.5	140.3	114.6	97.5	85.5	77.0	75.3
50°	6259.4	3849.0	278.8	215.5	165.9	121.5	97.5	80.4	70.1	61.6	59.9
52.5°	6918.0	4182.6	258.3	195.0	147.1	104.4	82.1	66.7	56.5	47.9	46.2
55°	7551.0	4517.9	234.4	181.3	124.9	89.0	68.4	54.7	44.5	37.6	37.6
57.5°	8166.8	4825.8	208.7	159.1	102.6	75.3	56.5	44.5	35.9	30.8	29.1
60°	8902.4	5251.8	179.6	135.1	85.5	63.3	46.2	35.9	29.1	23.9	23.9
62.5°	9995.5	5694.9	154.0	112.9	71.8	53.0	37.6	29.1	23.9	20.5	18.8
65°	10353.1	5455.4	130.0	92.4	58.2	42.8	30.8	25.7	20.5	18.8	17.1
67.5°	9398.5	4471.7	107.8	75.3	47.9	35.9	27.4	22.2	18.8	17.1	15.4
70°	7333.7	3173.3	83.8	56.5	39.3	29.1	23.9	20.5	17.1	15.4	15.4
72.5°	4988.4	1876.6	66.7	42.8	32.5	25.7	20.5	18.8	17.1	15.4	13.7
75°	2456.5	667.2	51.3	32.5	25.7	22.2	18.8	17.1	15.4	13.7	13.7
77.5°	662.0	184.8	39.3	25.7	20.5	17.1	17.1	17.1	15.4	12.0	12.0
80°	224.1	77.0	29.1	18.8	17.1	13.7	12.0	15.4	13.7	12.0	10.3
82.5°	123.2	37.6	20.5	15.4	12.0	10.3	10.3	10.3	10.3	8.6	8.6
85°	78.7	20.5	13.7	12.0	12.0	8.6	6.8	6.8	5.1	5.1	5.1
87.5°	35.9	12.0	12.0	10.3	10.3	8.6	5.1	3.4	1.7	1.7	1.7
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

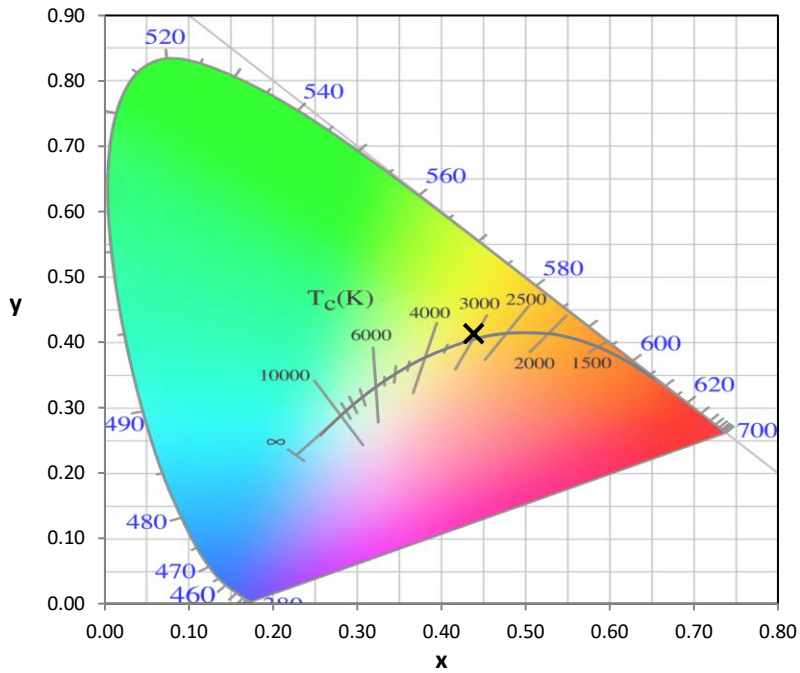
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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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



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			

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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)