

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: P636514

Luminaire Tested: GWS-SA3F-830-U-T2R-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P636514
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3F-830-U-T2R-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15664.5 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

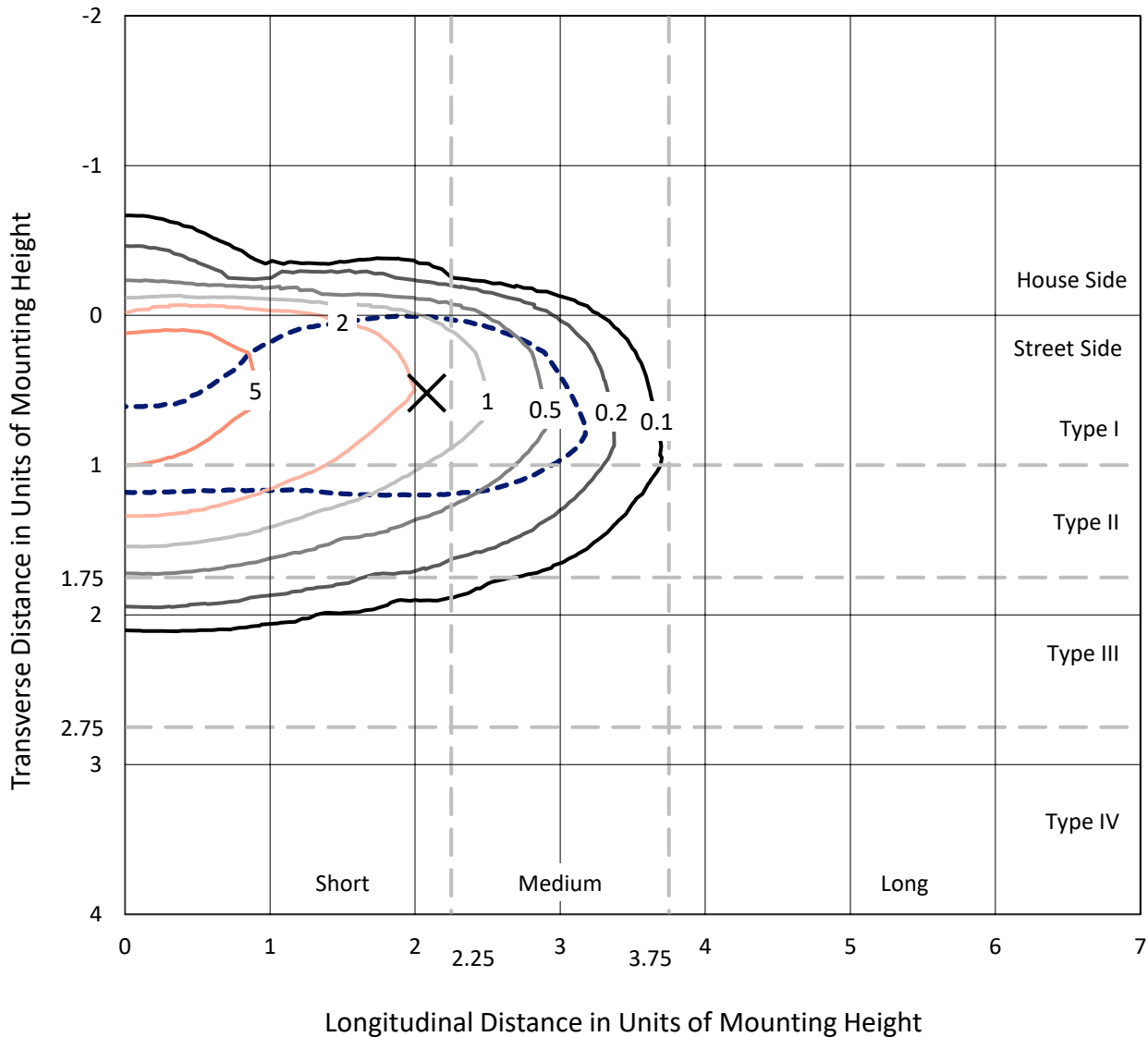
Input Watts (W): 183.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

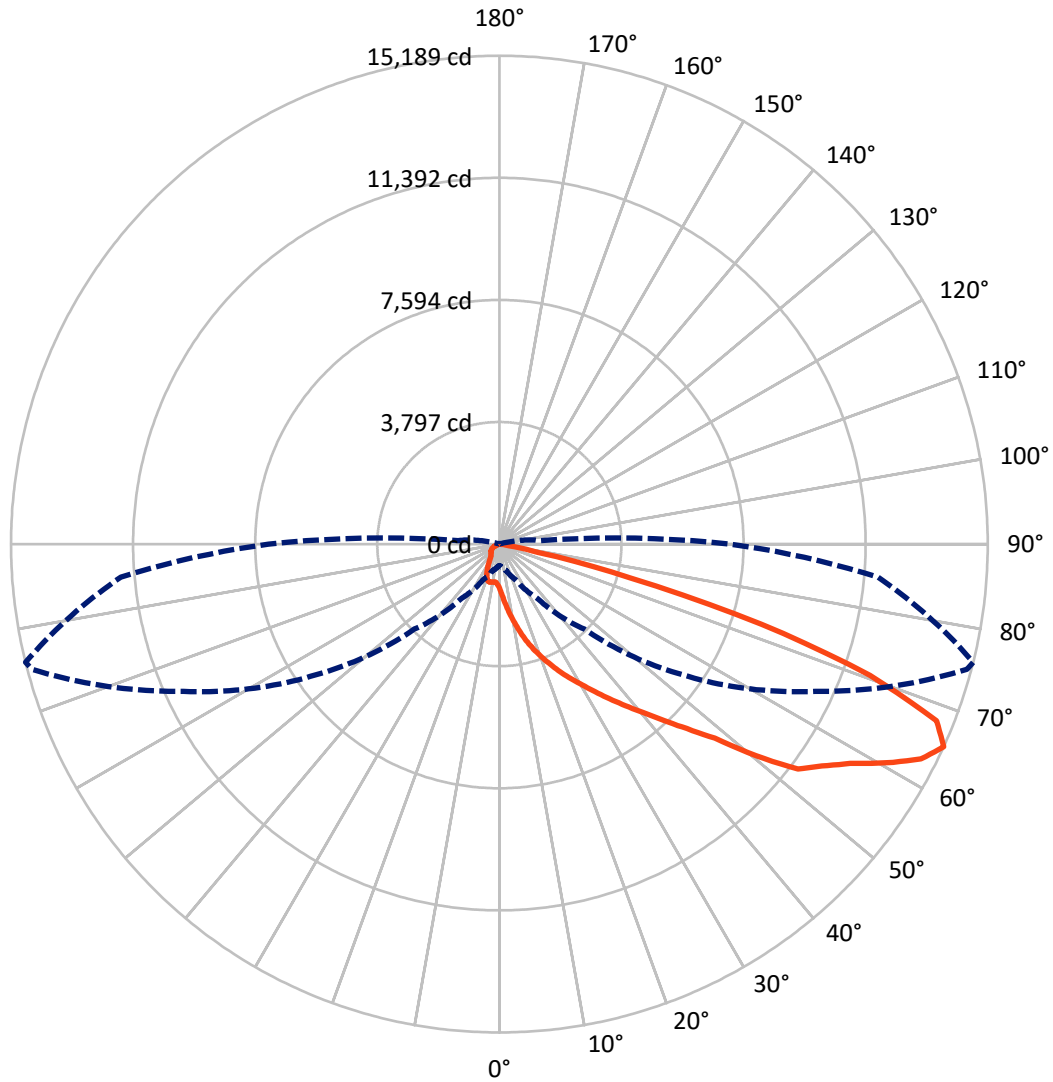
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Short - N/A

REPORT NUMBER: P636514
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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	866.2	0.0	866.2
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	14798.3	0.0	14798.3
	% Fixture	94.5	0.0	94.5
Total	Lumens	15664.5	0.0	15664.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.7	1.1
10°-20°	640.2	4.1
20°-30°	1306.1	8.3
30°-40°	2323.0	14.8
40°-50°	3433.9	21.9
50°-60°	3931.6	25.1
60°-70°	2999.6	19.1
70°-80°	840.3	5.4
80°-90°	21.2	0.1
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°	15664.5	100.0
0°-180°	15664.5	100.0

Coefficient of Utilization



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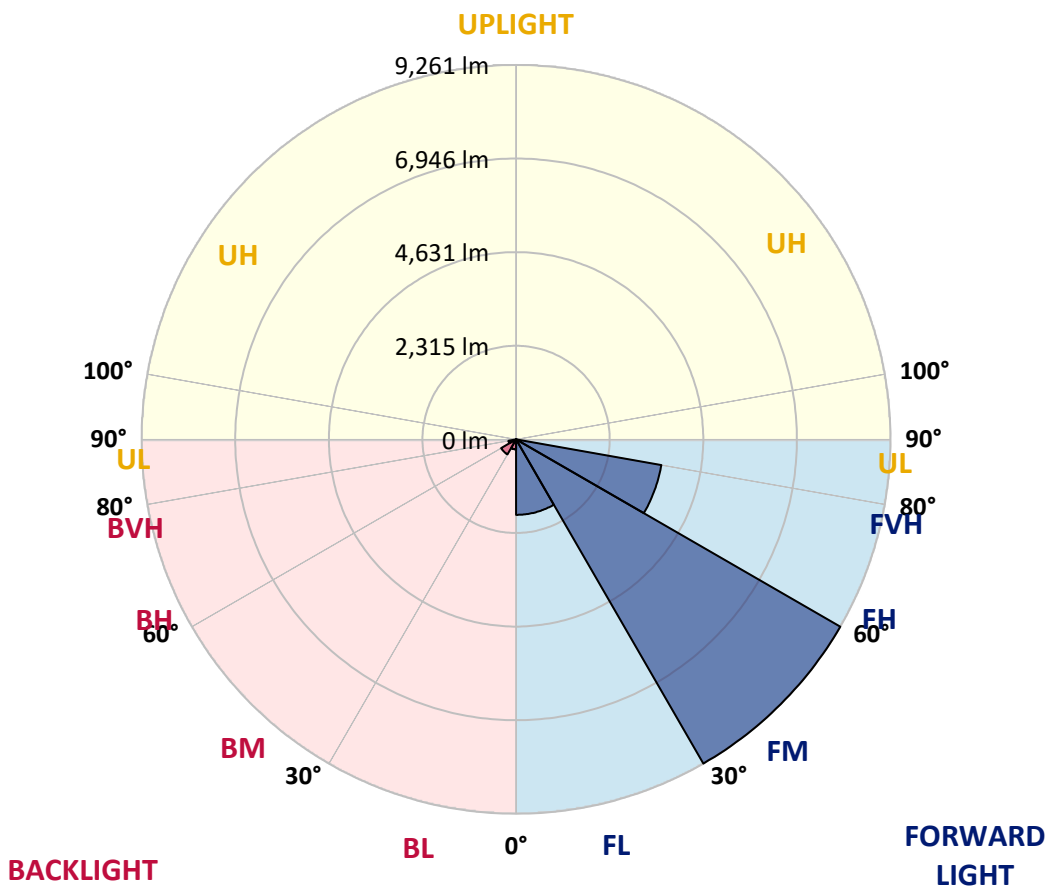
CATALOG NUMBER: GWS-SA3F-830-U-T2R-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1867.9	11.9			
FM (30°-60°)	9261.1	59.1			
FH (60°-80°)	3649.4	23.3			G2/5000
FVH (80°-90°)	19.9	0.1			G1/100
BL (0°-30°)	247.2	1.6	B1/500		
BM (30°-60°)	427.3	2.7	B1/1000		
BH (60°-80°)	190.4	1.2	B1/500		G1/500
BVH (80°-90°)	1.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





REPORT NUMBER: P636514
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9
2.5°	2137.4	2169.4	2144.4	2102.6	2021.8	1943.9	1843.6	1705.8	1595.7	1581.8	1478.8
5°	2886.5	2883.8	2829.5	2775.2	2690.2	2556.5	2354.6	2098.4	1852.0	1831.1	1599.9
7.5°	3332.1	3336.3	3305.7	3263.9	3180.4	3042.5	2832.2	2523.1	2162.5	2120.7	1765.6
10°	3706.7	3705.3	3683.0	3663.5	3588.3	3496.4	3270.9	2931.1	2496.7	2431.2	1950.8
12.5°	3988.0	3997.7	4008.9	4028.4	3996.3	3905.8	3692.8	3322.4	2835.0	2762.6	2162.5
15°	4210.8	4213.6	4255.3	4330.5	4357.0	4309.6	4116.1	3701.1	3169.2	3106.6	2406.2
17.5°	4277.6	4283.2	4354.2	4492.0	4631.3	4657.7	4511.5	4082.7	3497.8	3431.0	2642.9
20°	4418.2	4430.8	4483.7	4604.8	4780.3	4922.3	4865.2	4468.4	3826.5	3738.7	2885.2
22.5°	4861.0	4868.0	4849.9	4865.2	4955.7	5120.0	5154.8	4841.5	4163.4	4070.1	3146.9
25°	5622.7	5625.5	5498.8	5379.0	5310.8	5341.4	5418.0	5185.5	4497.6	4405.7	3390.6
27.5°	6413.6	6423.4	6271.6	6068.3	5824.6	5685.4	5663.1	5500.2	4834.6	4732.9	3631.5
30°	7158.6	7158.6	6998.5	6750.6	6424.8	6153.2	5993.1	5817.7	5195.2	5083.8	3878.0
32.5°	7828.4	7822.8	7618.1	7349.3	7027.7	6729.7	6392.7	6149.1	5596.3	5472.3	4162.0
35°	8381.2	8367.2	8134.7	7877.1	7533.2	7311.8	6935.8	6505.5	6030.7	5906.8	4454.4
37.5°	8798.9	8783.6	8570.5	8297.6	7978.7	7835.3	7520.6	6933.0	6488.8	6376.0	4778.9
40°	9025.9	8995.2	8847.6	8644.3	8377.0	8251.7	8120.8	7463.5	7027.7	6887.1	5161.8
42.5°	9092.7	9056.5	8959.0	8864.3	8702.8	8603.9	8744.6	8062.3	7619.5	7498.3	5599.0
45°	8895.0	8874.1	8865.7	8934.0	8963.2	8991.0	9337.8	8725.1	8272.5	8180.6	6149.1
47.5°	8418.7	8413.2	8487.0	8771.0	9080.2	9374.0	9982.5	9542.5	9119.2	9020.3	6917.7
50°	7538.7	7595.8	7801.9	8300.4	8918.6	9591.2	10585.4	10675.9	10489.3	10344.5	7920.3
52.5°	6163.0	6273.0	6735.3	7492.8	8381.2	9529.9	10863.9	11583.8	11774.6	11624.2	8638.8
55°	4836.0	4939.0	5351.2	6312.0	7496.9	9063.5	10876.4	11897.1	12313.4	12174.2	9124.7
57.5°	3602.3	3697.0	4071.5	4990.5	6293.9	8145.8	10578.4	12071.1	12952.6	12863.4	9892.0
60°	2354.6	2447.9	2786.3	3589.7	4881.9	6809.1	9844.6	12034.9	13822.8	13814.5	10834.6
62.5°	1306.1	1379.9	1625.0	2251.6	3407.3	5273.2	8691.7	11671.5	14665.3	14718.2	11611.6
65°	668.4	715.7	864.7	1237.9	2062.2	3738.7	7175.3	10838.8	15055.2	15188.8	11816.3
67.5°	437.2	452.5	488.7	643.3	1104.2	2351.8	5399.9	9503.5	14506.5	14662.5	11129.8
70°	355.1	367.6	388.5	428.9	569.5	1249.0	3546.6	7590.2	12121.3	12227.1	8862.9
72.5°	260.4	277.1	317.5	343.9	410.8	685.1	1845.0	4982.2	8324.1	8510.7	5569.8
75°	192.2	201.9	235.3	271.5	335.6	433.1	706.0	2619.2	4298.5	4189.9	2339.3
77.5°	115.6	122.5	150.4	174.1	239.5	270.1	246.5	967.8	1307.5	1229.5	565.3
80°	57.1	64.1	98.9	130.9	153.2	108.6	103.0	270.1	291.0	291.0	142.0
82.5°	19.5	25.1	52.9	86.3	75.2	41.8	48.7	69.6	78.0	82.2	41.8
85°	0.0	0.0	12.5	25.1	11.1	5.6	12.5	15.3	19.5	20.9	13.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.2	5.6	5.6
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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CATALOG NUMBER: GWS-SA3F-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9	1386.9
2.5°	1423.1	1357.6	1258.8	1169.7	1101.4	1037.4	988.6	949.7	942.7	920.4	923.2
5°	1487.1	1368.8	1186.4	1045.7	946.9	880.0	824.3	782.6	764.5	746.4	732.4
7.5°	1586.0	1414.7	1158.5	987.2	871.7	768.6	682.3	612.7	579.3	558.4	544.4
10°	1707.1	1478.8	1159.9	952.4	781.2	623.8	505.5	428.9	392.7	381.5	380.1
12.5°	1852.0	1559.5	1171.0	895.3	650.3	463.7	374.6	339.8	328.6	318.9	318.9
15°	2005.1	1650.1	1171.0	790.9	495.7	362.0	324.4	302.2	288.2	282.7	279.9
17.5°	2166.7	1735.0	1143.2	647.5	380.1	318.9	288.2	267.4	256.2	247.9	245.1
20°	2339.3	1815.8	1073.6	495.7	325.8	285.5	256.2	235.3	224.2	215.8	215.8
22.5°	2514.8	1890.9	960.8	381.5	288.2	253.4	225.6	206.1	194.9	186.6	186.6
25°	2677.7	1941.1	816.0	314.7	260.4	225.6	200.5	181.0	168.5	162.9	160.1
27.5°	2829.5	1973.1	655.8	277.1	233.9	201.9	175.4	157.3	147.6	143.4	140.6
30°	2986.8	1981.5	501.3	252.0	211.7	178.2	153.2	139.2	130.9	125.3	125.3
32.5°	3140.0	1971.7	382.9	231.1	192.2	157.3	136.5	123.9	117.0	112.8	111.4
35°	3295.9	1927.1	310.5	213.0	172.7	137.9	121.1	111.4	107.2	101.6	101.6
37.5°	3465.8	1867.3	270.1	194.9	153.2	123.9	108.6	101.6	96.1	91.9	90.5
40°	3677.5	1797.7	247.9	179.6	135.1	111.4	97.5	90.5	86.3	82.2	80.8
42.5°	3928.1	1729.4	236.7	162.9	121.1	98.9	87.7	79.4	75.2	69.6	68.2
45°	4283.2	1714.1	224.2	144.8	108.6	89.1	76.6	68.2	62.7	58.5	57.1
47.5°	4854.1	1757.3	203.3	125.3	96.1	78.0	65.4	58.5	51.5	47.3	44.6
50°	5420.8	1746.1	182.4	108.6	84.9	66.8	55.7	48.7	41.8	37.6	36.2
52.5°	5729.9	1693.2	162.9	96.1	73.8	57.1	47.3	39.0	34.8	30.6	29.2
55°	6009.8	1672.3	143.4	83.5	62.7	50.1	39.0	32.0	29.2	25.1	23.7
57.5°	6558.4	1721.1	126.7	72.4	54.3	43.2	33.4	26.5	23.7	19.5	18.1
60°	7132.1	1726.6	108.6	62.7	47.3	36.2	26.5	20.9	18.1	13.9	12.5
62.5°	7431.5	1586.0	89.1	52.9	39.0	30.6	22.3	16.7	13.9	8.4	8.4
65°	7180.9	1282.4	75.2	43.2	30.6	23.7	16.7	12.5	8.4	4.2	1.4
67.5°	6355.1	912.1	62.7	34.8	22.3	16.7	12.5	8.4	1.4	0.0	0.0
70°	4653.6	520.8	48.7	25.1	16.7	11.1	8.4	4.2	0.0	0.0	0.0
72.5°	2860.1	278.5	36.2	16.7	12.5	8.4	7.0	2.8	0.0	0.0	0.0
75°	1084.7	133.7	22.3	11.1	9.7	7.0	4.2	1.4	0.0	0.0	0.0
77.5°	293.8	65.4	12.5	8.4	7.0	4.2	2.8	0.0	0.0	0.0	0.0
80°	76.6	30.6	8.4	5.6	4.2	2.8	0.0	0.0	0.0	0.0	0.0
82.5°	26.5	13.9	4.2	4.2	2.8	1.4	0.0	0.0	0.0	0.0	0.0
85°	11.1	5.6	2.8	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	1.4	1.4	1.4	1.4	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

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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 ($R_{f,i}$)

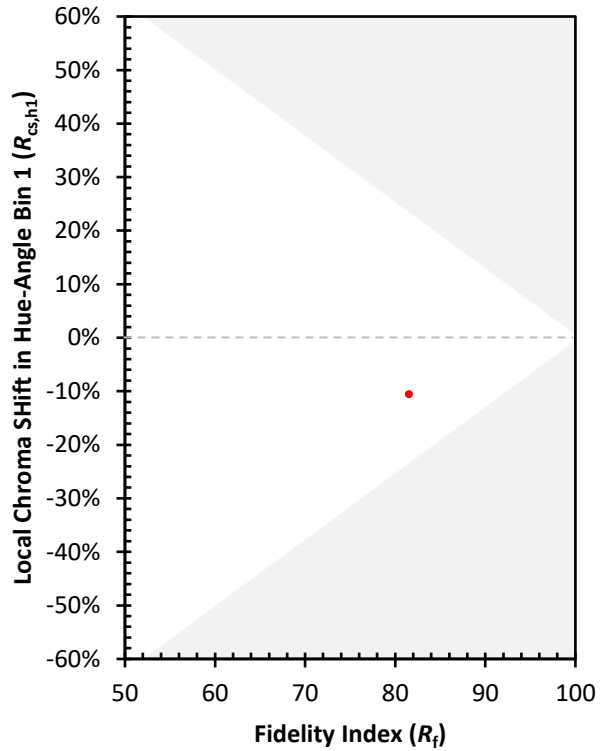
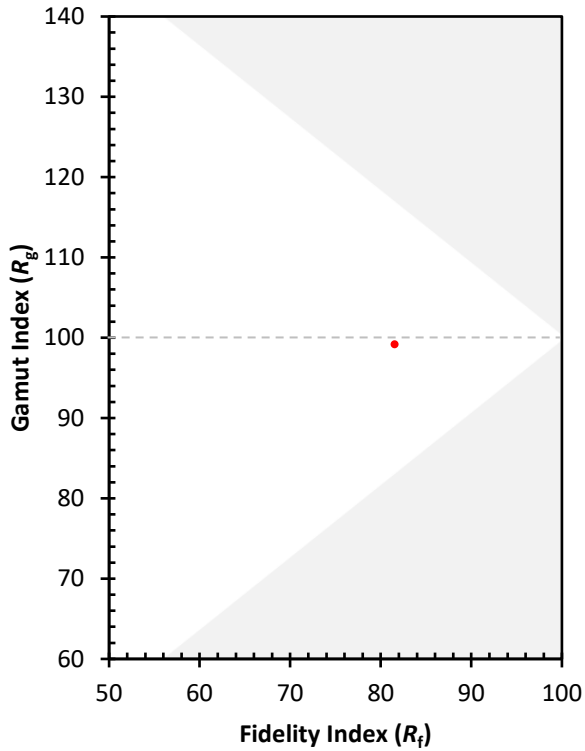
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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)