

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: P640470

Luminaire Tested: GWS-SA5D-830-U-T2-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640470
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5D-830-U-T2-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17875.7 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G3

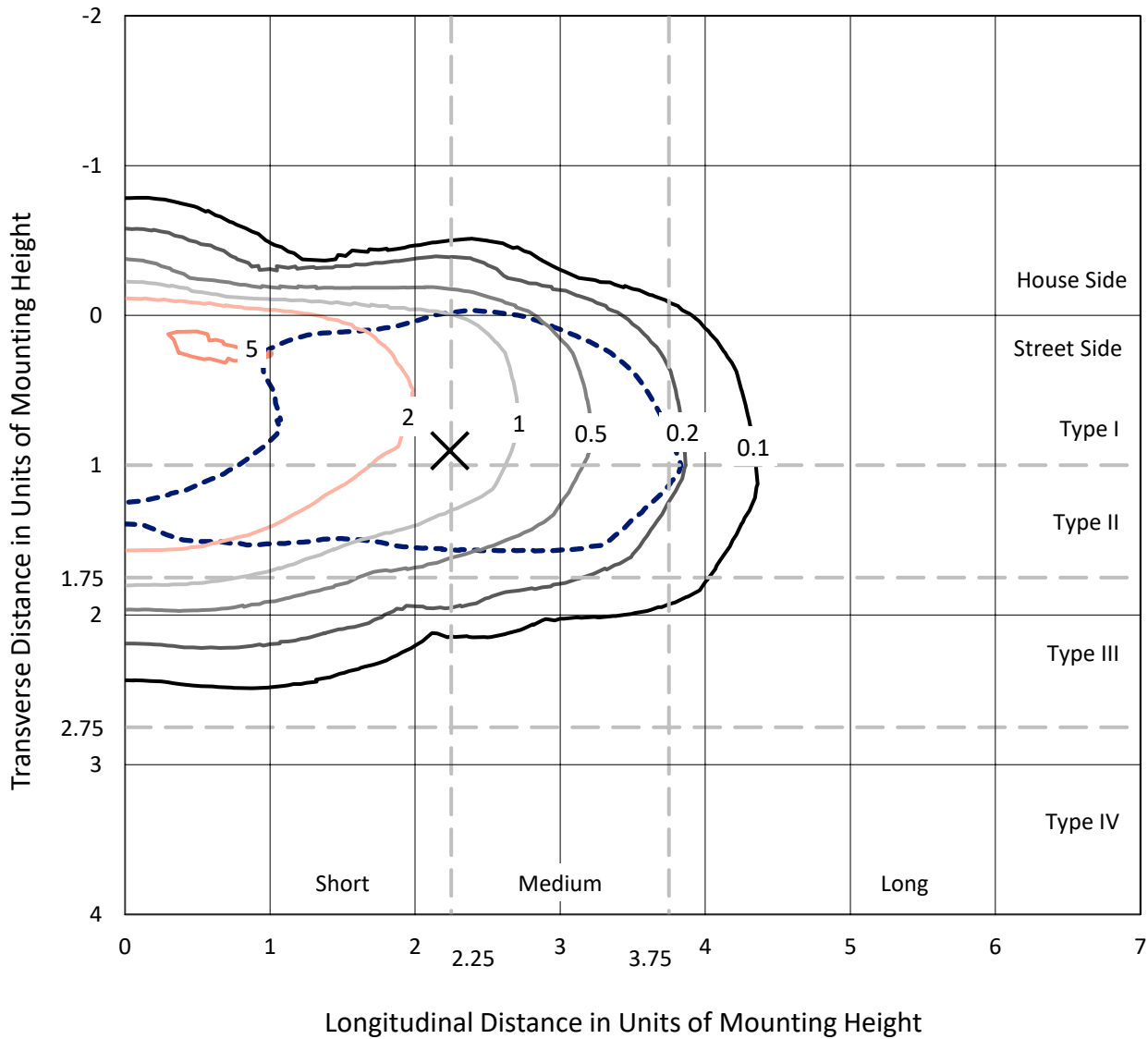
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

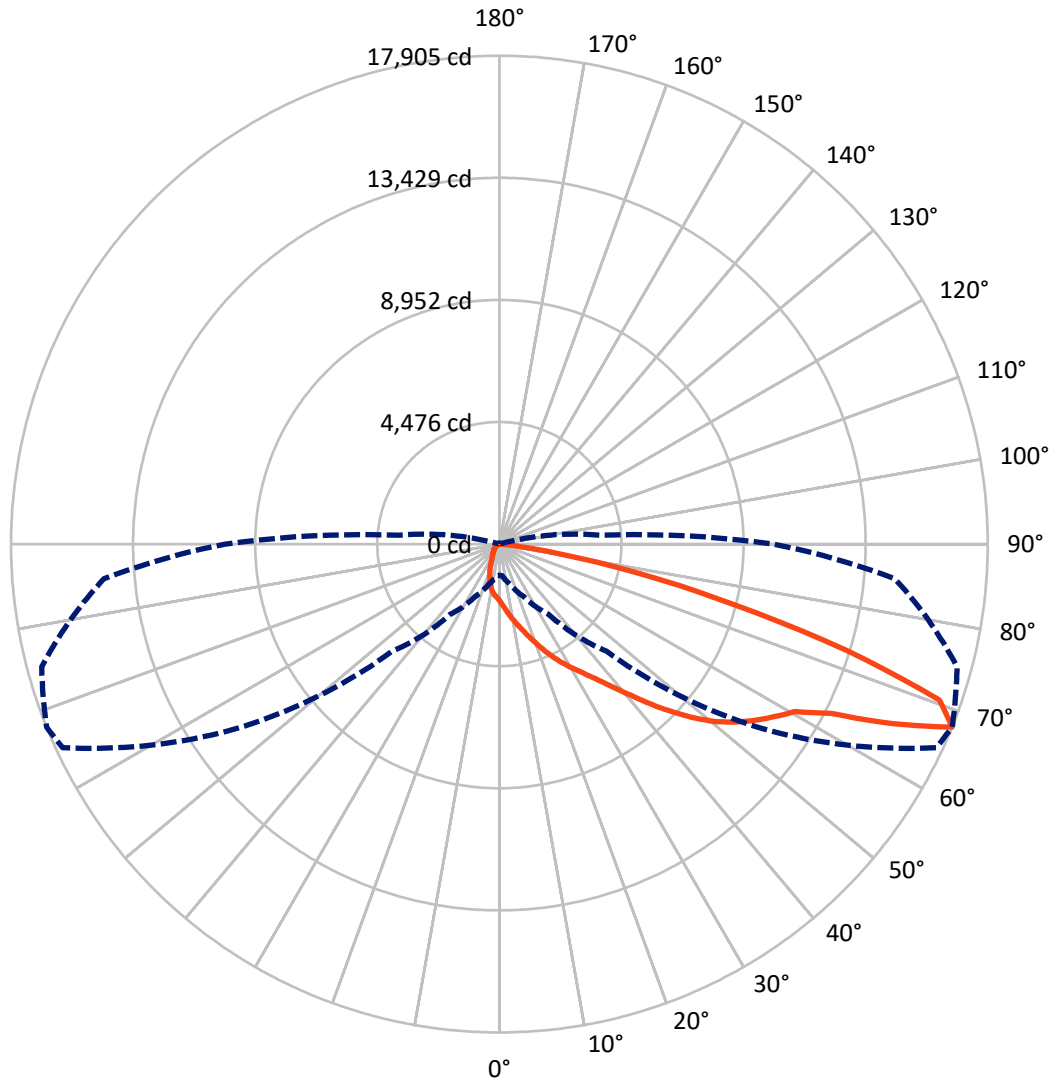
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Short - N/A

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CATALOG NUMBER: GWS-SA5D-830-U-T2-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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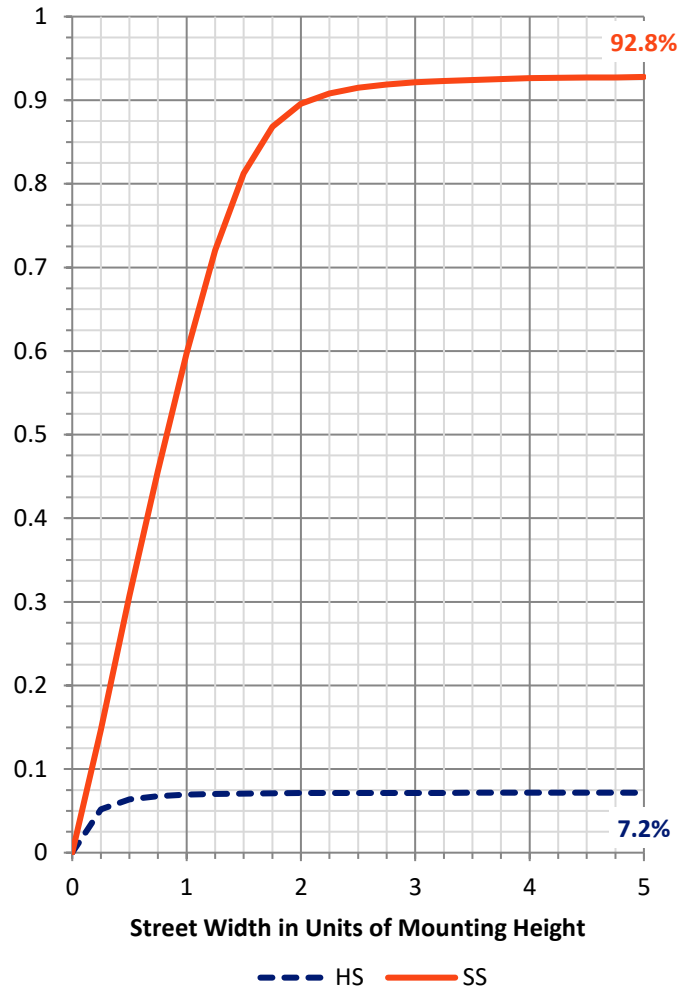
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1290.8	0.0	1290.8
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	16584.9	0.0	16584.9
	% Fixture	92.8	0.0	92.8
Total	Lumens	17875.7	0.0	17875.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.9	1.1
10°-20°	582.6	3.3
20°-30°	1001.3	5.6
30°-40°	1740.8	9.7
40°-50°	3037.6	17.0
50°-60°	4581.4	25.6
60°-70°	4594.0	25.7
70°-80°	2026.9	11.3
80°-90°	108.3	0.6
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°	17875.7	100.0
0°-180°	17875.7	100.0

Coefficient of Utilization



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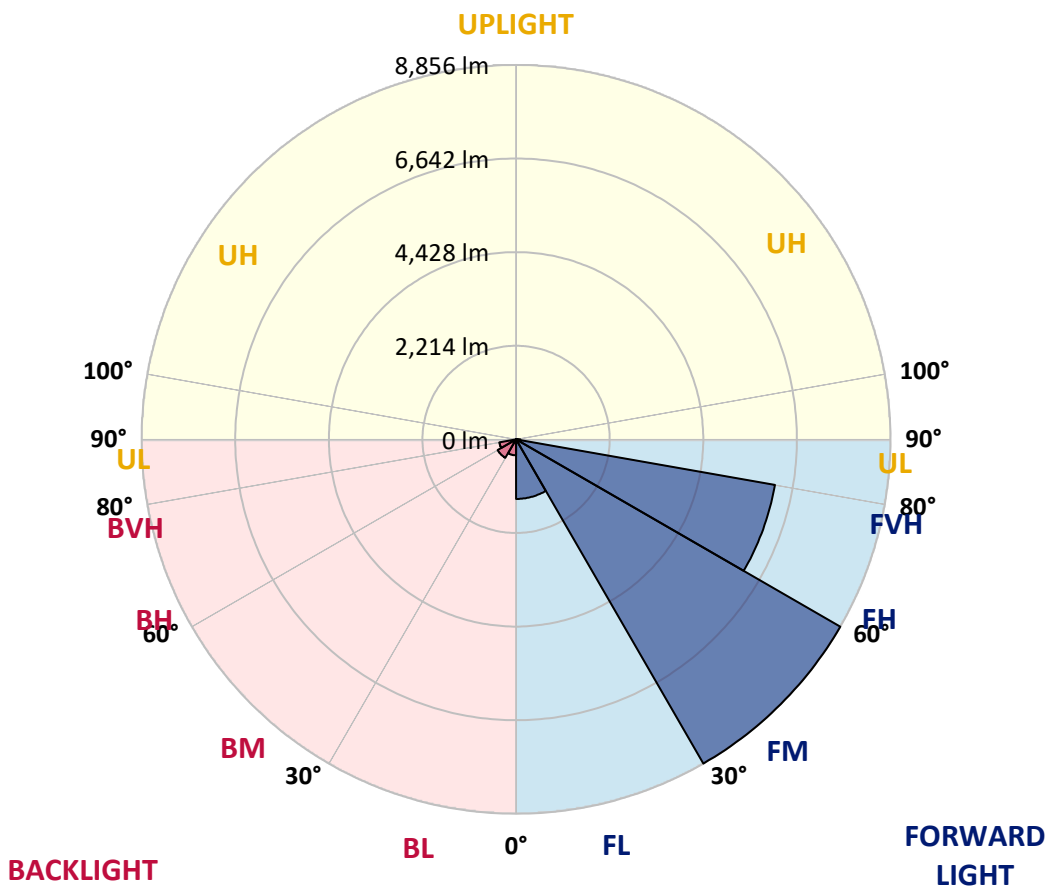
CATALOG NUMBER: GWS-SA5D-830-U-T2-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1409.1	7.9			
FM (30°-60°)	8855.6	49.5			
FH (60°-80°)	6218.0	34.8			G3/7500
FVH (80°-90°)	102.2	0.6			G2/225
BL (0°-30°)	377.6	2.1	B1/500		
BM (30°-60°)	504.2	2.8	B1/1000		
BH (60°-80°)	402.8	2.3	B1/500		G1/500
BVH (80°-90°)	6.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type II Short





REPORT NUMBER: P640470

CATALOG NUMBER: GWS-SA5D-830-U-T2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3
2.5°	2422.4	2437.8	2422.4	2425.8	2381.4	2360.8	2316.4	2254.8	2239.4	2200.0	2140.2
5°	2718.4	2732.1	2716.7	2713.3	2661.9	2624.3	2550.7	2444.7	2413.9	2336.9	2218.8
7.5°	2879.2	2887.8	2892.9	2901.4	2882.6	2851.8	2785.1	2653.4	2620.9	2496.0	2330.0
10°	2896.3	2903.1	2928.8	2980.1	3017.8	3036.6	2999.0	2877.5	2826.2	2704.7	2466.9
12.5°	2848.4	2858.7	2899.7	2985.3	3089.6	3185.4	3209.4	3103.3	3057.1	2901.4	2627.7
15°	2785.1	2793.7	2850.1	2966.4	3123.8	3300.0	3399.3	3353.1	3301.8	3139.2	2805.6
17.5°	2687.6	2699.6	2778.3	2935.7	3139.2	3390.7	3604.6	3620.0	3584.0	3407.8	3002.4
20°	2632.9	2641.4	2711.5	2874.1	3129.0	3457.4	3796.2	3941.6	3902.2	3717.5	3228.2
22.5°	2679.0	2685.9	2732.1	2858.7	3094.8	3495.1	3974.1	4263.2	4241.0	4049.4	3466.0
25°	2922.0	2944.2	2916.8	2939.1	3110.2	3515.6	4117.8	4584.8	4590.0	4396.6	3712.3
27.5°	3414.7	3385.6	3320.6	3209.4	3229.9	3570.3	4241.0	4887.6	4932.1	4735.4	3931.3
30°	3915.9	3898.8	3859.5	3686.7	3543.0	3691.8	4345.3	5197.3	5267.4	5069.0	4126.3
32.5°	4478.8	4495.9	4425.7	4218.7	3974.1	3938.2	4453.1	5491.5	5623.2	5447.0	4355.6
35°	5151.1	5156.2	5017.6	4788.4	4511.3	4345.3	4646.4	5816.6	6059.5	5929.5	4661.8
37.5°	5806.3	5837.1	5761.8	5400.9	5154.5	4851.7	4966.3	6234.0	6576.1	6524.8	5046.7
40°	6386.2	6434.1	6410.2	6061.2	5737.9	5483.0	5462.4	6723.3	7200.6	7258.7	5554.8
42.5°	6848.1	6878.9	6897.8	6649.7	6364.0	6220.3	6074.9	7291.2	7937.9	8175.7	6177.5
45°	7335.7	7346.0	7385.3	7217.7	6967.9	6979.9	6798.5	7980.7	8714.6	9191.9	6892.6
47.5°	7956.7	7990.9	7972.1	7795.9	7570.1	7705.2	7546.1	8690.6	9481.0	10276.5	7624.8
50°	8712.9	8748.8	8731.7	8526.4	8274.9	8331.4	8232.1	9380.1	10220.0	11299.5	8233.9
52.5°	9102.9	9132.0	9344.1	9436.5	9304.8	8945.5	8817.2	10137.9	10844.5	12141.2	8793.3
55°	8914.7	8935.3	9397.2	9787.2	10269.7	9910.4	9405.7	10723.0	11395.3	12798.2	9209.0
57.5°	8134.6	8245.8	8873.7	9534.0	10548.5	10863.3	10360.3	11359.4	11925.7	13254.9	9617.9
60°	6535.1	6529.9	7429.8	8615.4	10004.5	11125.0	11708.4	12219.9	12457.7	13605.6	10165.3
62.5°	3611.4	3643.9	4841.4	6403.4	8492.2	10447.6	12719.5	13706.6	13670.6	14218.1	11022.4
65°	1798.0	1863.0	2513.1	3667.9	5650.6	8634.2	12894.0	15975.0	15872.4	15660.2	12793.0
67.5°	1141.1	1166.7	1526.0	2131.6	3140.9	5549.7	11807.6	17667.0	17904.8	17371.0	14550.0
70°	739.0	781.8	1060.7	1457.6	1895.5	2860.4	8649.6	16570.4	17116.1	17182.8	13455.1
72.5°	402.0	432.8	677.5	1040.1	1368.6	1430.2	4858.5	12435.5	13313.1	14575.6	10526.3
75°	229.2	251.5	371.2	706.5	1004.2	870.8	2153.8	8324.5	8883.9	10416.8	7542.7
77.5°	138.6	157.4	208.7	343.9	629.6	581.7	814.3	5067.3	5423.1	6215.2	3958.7
80°	63.3	75.3	131.7	189.9	343.9	275.4	311.4	2362.6	2439.5	2550.7	1310.4
82.5°	29.1	34.2	59.9	112.9	195.0	159.1	119.8	545.7	768.1	727.1	333.6
85°	3.4	3.4	22.2	46.2	54.7	41.1	49.6	123.2	155.7	219.0	95.8
87.5°	0.0	0.0	1.7	1.7	3.4	5.1	10.3	15.4	22.2	35.9	24.0
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: P640470

CATALOG NUMBER: GWS-SA5D-830-U-T2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3	2080.3
2.5°	2112.8	2064.9	2022.1	1958.8	1916.0	1868.1	1835.6	1796.3	1780.9	1768.9	1751.8
5°	2160.7	2083.7	1979.3	1863.0	1767.2	1676.5	1592.7	1538.0	1490.1	1483.2	1459.3
7.5°	2239.4	2124.8	1948.5	1758.7	1596.1	1445.6	1327.5	1231.7	1183.8	1168.4	1141.1
10°	2343.7	2186.3	1902.4	1611.5	1377.2	1197.5	1064.1	956.3	881.0	853.7	833.1
12.5°	2460.1	2242.8	1828.8	1430.2	1163.3	958.0	788.7	674.0	626.1	609.0	593.6
15°	2593.5	2295.8	1712.5	1248.9	954.6	704.8	585.1	535.5	514.9	509.8	504.7
17.5°	2721.8	2330.0	1573.9	1060.7	733.9	547.4	491.0	472.2	467.0	461.9	458.5
20°	2867.2	2354.0	1411.4	882.7	569.7	463.6	436.2	422.6	412.3	402.0	400.3
22.5°	3016.1	2354.0	1235.2	708.3	477.3	415.7	384.9	359.3	340.4	330.2	326.8
25°	3158.1	2321.5	1060.7	566.3	420.8	369.5	330.2	301.1	275.4	263.5	260.0
27.5°	3259.0	2237.7	908.4	479.0	381.5	328.5	280.6	248.1	227.5	215.6	213.8
30°	3322.3	2112.8	768.1	427.7	347.3	285.7	237.8	210.4	195.0	186.5	183.1
32.5°	3370.2	1958.8	643.2	391.8	314.8	248.1	207.0	184.8	171.1	164.2	162.5
35°	3466.0	1813.4	550.9	359.3	280.6	217.3	181.3	164.2	154.0	145.4	143.7
37.5°	3599.4	1691.9	477.3	330.2	248.1	193.3	164.2	148.8	140.3	131.7	130.0
40°	3796.2	1615.0	422.6	301.1	219.0	174.5	150.5	136.9	124.9	116.3	114.6
42.5°	4099.0	1579.0	386.6	272.0	193.3	157.4	138.6	121.5	109.5	100.9	99.2
45°	4459.9	1597.8	355.8	242.9	176.2	145.4	123.2	106.1	94.1	85.5	83.8
47.5°	4846.6	1664.6	330.2	215.6	159.1	133.4	109.5	90.7	80.4	71.9	70.1
50°	5250.3	1774.1	307.9	189.9	145.4	119.8	94.1	78.7	68.4	61.6	59.9
52.5°	5601.0	1922.9	285.7	171.1	133.4	106.1	82.1	68.4	58.2	51.3	49.6
55°	5936.3	2063.2	268.6	154.0	119.8	92.4	71.9	58.2	49.6	42.8	41.1
57.5°	6300.7	2212.0	248.1	138.6	107.8	82.1	63.3	49.6	42.8	35.9	34.2
60°	6831.0	2432.7	217.3	126.6	94.1	71.9	54.7	44.5	37.6	29.1	27.4
62.5°	7595.7	2834.7	183.1	109.5	80.4	61.6	46.2	37.6	30.8	24.0	20.5
65°	9025.9	3519.0	150.5	90.7	65.0	51.3	39.3	30.8	24.0	17.1	15.4
67.5°	10055.8	3696.9	121.5	73.6	53.0	39.3	32.5	24.0	17.1	12.0	10.3
70°	8791.6	2655.1	94.1	59.9	44.5	30.8	25.7	18.8	12.0	8.6	6.8
72.5°	6624.0	1734.7	70.1	46.2	34.2	25.7	18.8	15.4	10.3	6.8	5.1
75°	4668.6	1002.5	51.3	34.2	24.0	18.8	15.4	12.0	8.6	5.1	5.1
77.5°	2393.3	414.0	35.9	24.0	17.1	12.0	10.3	6.8	6.8	5.1	3.4
80°	727.1	136.9	20.5	15.4	12.0	8.6	5.1	5.1	5.1	3.4	1.7
82.5°	165.9	44.5	12.0	12.0	8.6	6.8	5.1	1.7	1.7	0.0	0.0
85°	42.8	13.7	10.3	8.6	8.6	6.8	3.4	1.7	0.0	0.0	0.0
87.5°	15.4	8.6	8.6	8.6	6.8	5.1	3.4	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

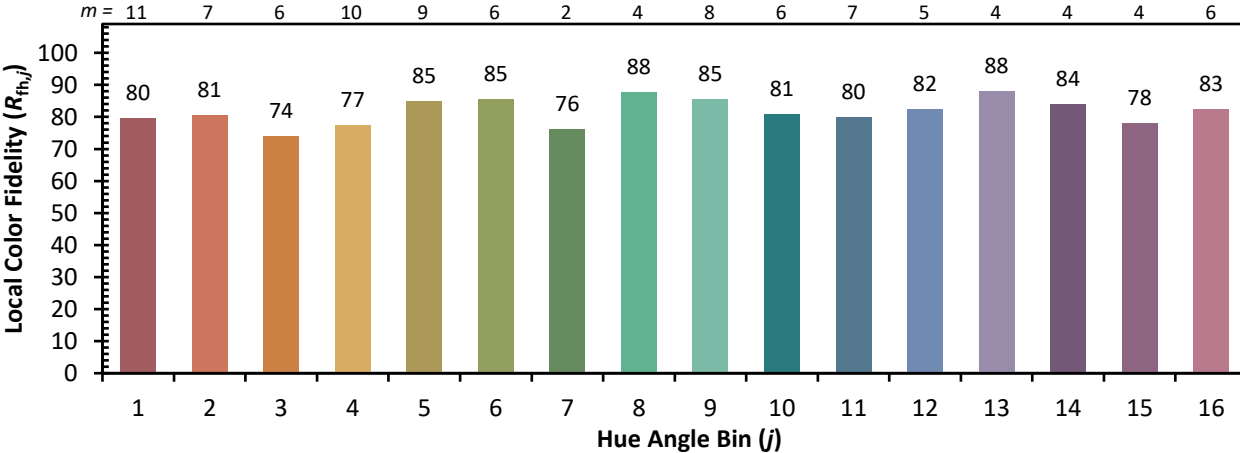


Individual Sample Fidelity Index ($R_{f,i}$)

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)