

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: P639484

Luminaire Tested: GWS-SA5B-830-U-T2R-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639484
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-SA5B-830-U-T2R-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11375.4 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

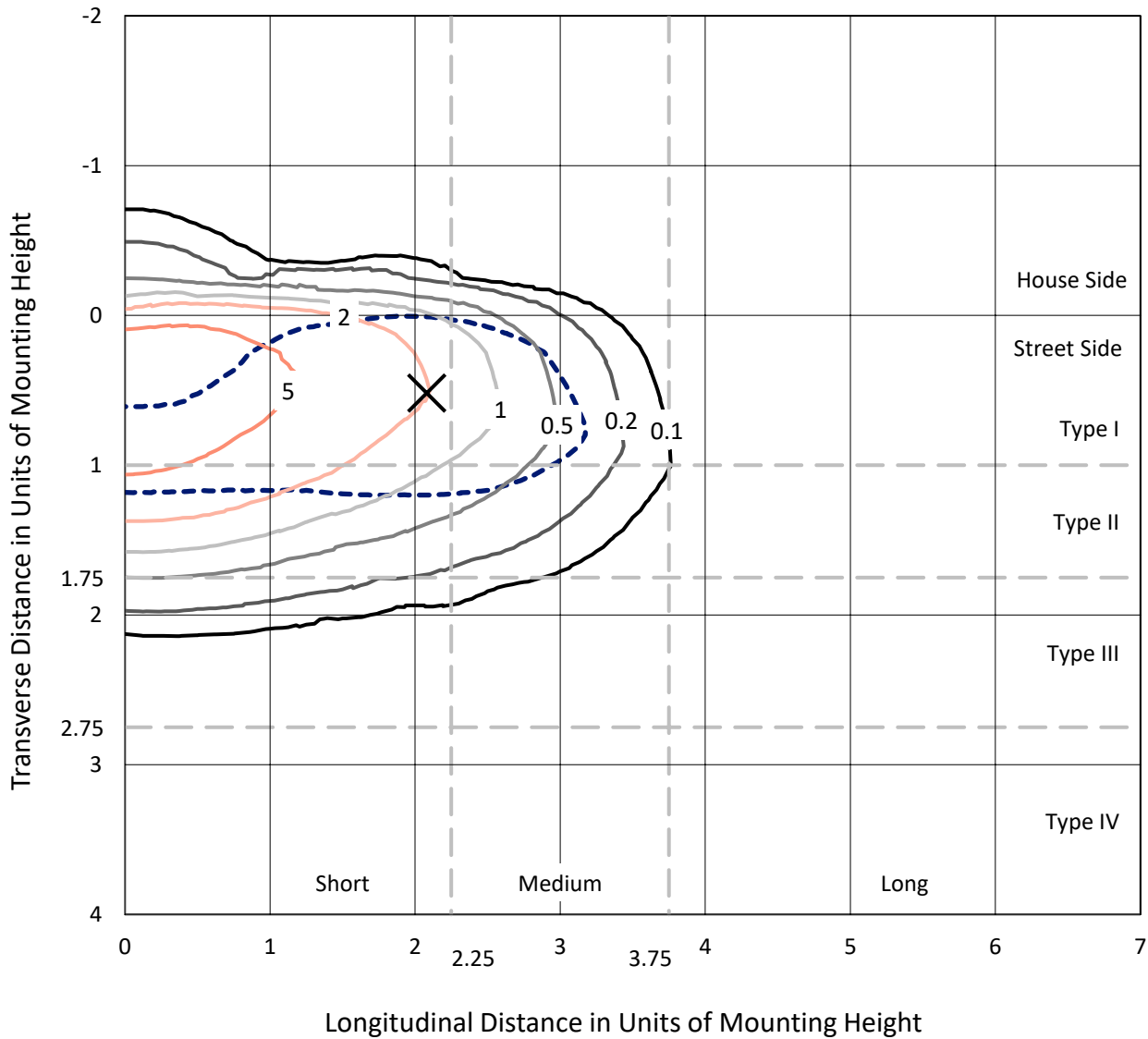
Input Watts (W): 115.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P639484
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Iso-Footcandle Lines of Horizontal Illumination

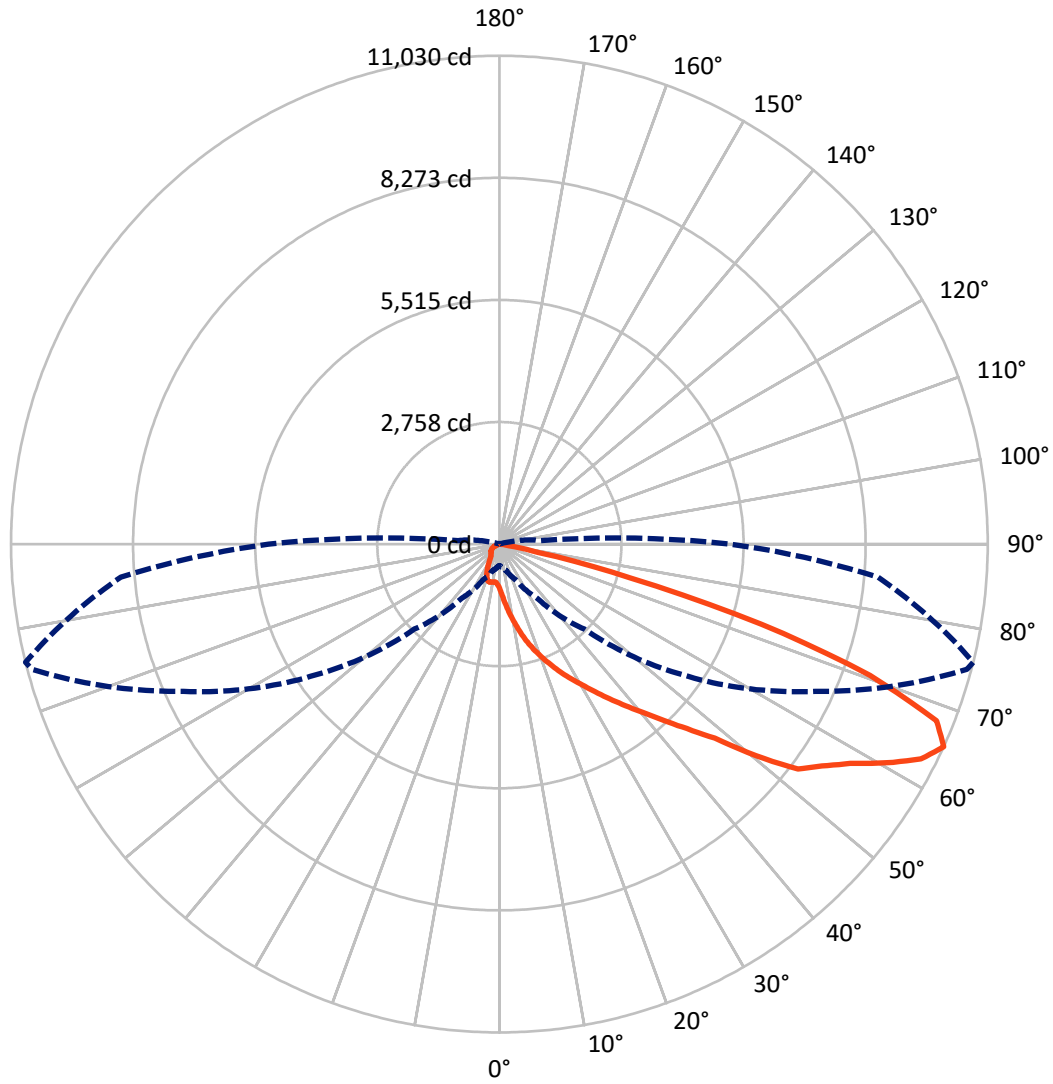
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

REPORT NUMBER: P639484
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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	629.0	0.0	629.0
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	10746.4	0.0	10746.4
	% Fixture	94.5	0.0	94.5
Total	Lumens	11375.4	0.0	11375.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.5	1.1
10°-20°	464.9	4.1
20°-30°	948.5	8.3
30°-40°	1686.9	14.8
40°-50°	2493.7	21.9
50°-60°	2855.1	25.1
60°-70°	2178.3	19.1
70°-80°	610.2	5.4
80°-90°	15.4	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°	11375.4	100.0
0°-180°	11375.4	100.0

Coefficient of Utilization



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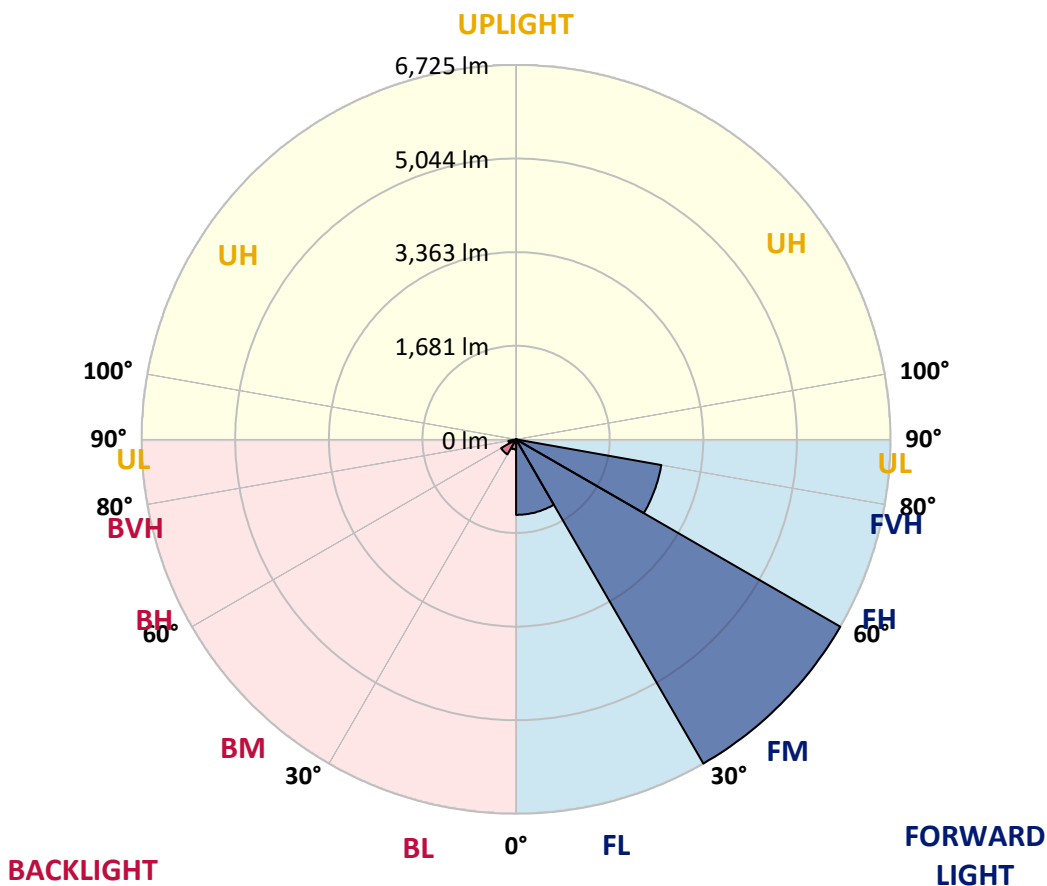
CATALOG NUMBER: GWS-SA5B-830-U-T2R-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1356.4	11.9			
FM (30°-60°)	6725.3	59.1			
FH (60°-80°)	2650.2	23.3			G2/5000
FVH (80°-90°)	14.5	0.1			G1/100
BL (0°-30°)	179.5	1.6	B1/500		
BM (30°-60°)	310.3	2.7	B1/1000		
BH (60°-80°)	138.3	1.2	B1/500		G1/500
BVH (80°-90°)	0.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1
2.5°	1552.2	1575.4	1557.2	1526.9	1468.2	1411.6	1338.8	1238.7	1158.8	1148.7	1073.9
5°	2096.2	2094.2	2054.7	2015.3	1953.6	1856.5	1709.9	1523.9	1344.9	1329.7	1161.8
7.5°	2419.8	2422.8	2400.5	2370.2	2309.5	2209.4	2056.7	1832.3	1570.4	1540.0	1282.2
10°	2691.8	2690.8	2674.6	2660.4	2605.8	2539.1	2375.3	2128.5	1813.1	1765.5	1416.7
12.5°	2896.0	2903.1	2911.2	2925.4	2902.1	2836.4	2681.7	2412.7	2058.8	2006.2	1570.4
15°	3057.8	3059.8	3090.2	3144.8	3164.0	3129.6	2989.1	2687.7	2301.5	2255.9	1747.3
17.5°	3106.4	3110.4	3162.0	3262.1	3363.2	3382.4	3276.2	2964.8	2540.1	2491.6	1919.2
20°	3208.5	3217.6	3256.0	3344.0	3471.4	3574.5	3533.1	3244.9	2778.7	2715.0	2095.2
22.5°	3530.0	3535.1	3521.9	3533.1	3598.8	3718.1	3743.4	3515.9	3023.4	2955.7	2285.3
25°	4083.2	4085.2	3993.2	3906.2	3856.7	3878.9	3934.5	3765.6	3266.1	3199.4	2462.2
27.5°	4657.5	4664.6	4554.4	4406.7	4229.8	4128.7	4112.5	3994.2	3510.8	3437.0	2637.2
30°	5198.5	5198.5	5082.2	4902.2	4665.6	4468.4	4352.1	4224.7	3772.7	3691.8	2816.1
32.5°	5684.9	5680.8	5532.2	5337.0	5103.4	4887.0	4642.3	4465.4	4063.9	3973.9	3022.4
35°	6086.3	6076.2	5907.3	5720.3	5470.5	5309.7	5036.7	4724.2	4379.4	4289.4	3234.8
37.5°	6389.7	6378.5	6223.8	6025.6	5794.1	5689.9	5461.4	5034.7	4712.1	4630.2	3470.4
40°	6554.5	6532.2	6425.1	6277.4	6083.3	5992.3	5897.2	5419.9	5103.4	5001.3	3748.5
42.5°	6603.0	6576.7	6505.9	6437.2	6319.9	6248.1	6350.2	5854.7	5533.2	5445.2	4066.0
45°	6459.4	6444.3	6438.2	6487.7	6509.0	6529.2	6781.0	6336.1	6007.4	5940.7	4465.4
47.5°	6113.6	6109.6	6163.2	6369.4	6593.9	6807.3	7249.2	6929.6	6622.2	6550.4	5023.6
50°	5474.5	5516.0	5665.7	6027.7	6476.6	6965.0	7687.0	7752.7	7617.2	7512.1	5751.6
52.5°	4475.5	4555.4	4891.1	5441.2	6086.3	6920.5	7889.2	8412.0	8550.6	8441.4	6273.4
55°	3511.8	3586.7	3886.0	4583.7	5444.2	6581.8	7898.3	8639.5	8941.9	8840.8	6626.3
57.5°	2615.9	2684.7	2956.7	3624.1	4570.5	5915.4	7682.0	8765.9	9406.0	9341.3	7183.4
60°	1709.9	1777.7	2023.4	2606.8	3545.2	4944.7	7149.1	8739.7	10038.0	10031.9	7868.0
62.5°	948.5	1002.1	1180.1	1635.1	2474.4	3829.3	6311.8	8475.7	10649.8	10688.2	8432.3
65°	485.4	519.7	627.9	898.9	1497.6	2715.0	5210.6	7871.0	10932.9	11030.0	8580.9
67.5°	317.5	328.6	354.9	467.2	801.9	1707.9	3921.4	6901.3	10534.5	10647.8	8082.4
70°	257.9	267.0	282.1	311.4	413.6	907.0	2575.5	5512.0	8802.3	8879.2	6436.2
72.5°	189.1	201.2	230.5	249.8	298.3	497.5	1339.8	3618.0	6044.8	6180.3	4044.7
75°	139.5	146.6	170.9	197.2	243.7	314.5	512.7	1902.0	3121.5	3042.6	1698.8
77.5°	83.9	89.0	109.2	126.4	173.9	196.2	179.0	702.8	949.5	892.9	410.5
80°	41.5	46.5	71.8	95.1	111.2	78.9	74.8	196.2	211.3	211.3	103.1
82.5°	14.2	18.2	38.4	62.7	54.6	30.3	35.4	50.6	56.6	59.7	30.3
85°	0.0	0.0	9.1	18.2	8.1	4.0	9.1	11.1	14.2	15.2	10.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	4.0	4.0
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-SA5B-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1	1007.1
2.5°	1033.4	985.9	914.1	849.4	799.8	753.3	717.9	689.6	684.6	668.4	670.4
5°	1079.9	994.0	861.5	759.4	687.6	639.1	598.6	568.3	555.1	542.0	531.9
7.5°	1151.7	1027.4	841.3	716.9	633.0	558.2	495.5	444.9	420.7	405.5	395.4
10°	1239.7	1073.9	842.3	691.6	567.3	453.0	367.1	311.4	285.2	277.1	276.1
12.5°	1344.9	1132.5	850.4	650.2	472.2	336.7	272.0	246.7	238.6	231.6	231.6
15°	1456.1	1198.3	850.4	574.4	360.0	262.9	235.6	219.4	209.3	205.3	203.2
17.5°	1573.4	1259.9	830.2	470.2	276.1	231.6	209.3	194.1	186.1	180.0	178.0
20°	1698.8	1318.6	779.6	360.0	236.6	207.3	186.1	170.9	162.8	156.7	156.7
22.5°	1826.2	1373.2	697.7	277.1	209.3	184.0	163.8	149.7	141.6	135.5	135.5
25°	1944.5	1409.6	592.6	228.5	189.1	163.8	145.6	131.5	122.4	118.3	116.3
27.5°	2054.7	1432.8	476.3	201.2	169.9	146.6	127.4	114.3	107.2	104.2	102.1
30°	2169.0	1438.9	364.0	183.0	153.7	129.4	111.2	101.1	95.1	91.0	91.0
32.5°	2280.2	1431.8	278.1	167.9	139.5	114.3	99.1	90.0	84.9	81.9	80.9
35°	2393.5	1399.5	225.5	154.7	125.4	100.1	88.0	80.9	77.9	73.8	73.8
37.5°	2516.8	1356.0	196.2	141.6	111.2	90.0	78.9	73.8	69.8	66.7	65.7
40°	2670.5	1305.4	180.0	130.4	98.1	80.9	70.8	65.7	62.7	59.7	58.6
42.5°	2852.5	1255.9	171.9	118.3	88.0	71.8	63.7	57.6	54.6	50.6	49.5
45°	3110.4	1244.8	162.8	105.2	78.9	64.7	55.6	49.5	45.5	42.5	41.5
47.5°	3525.0	1276.1	147.6	91.0	69.8	56.6	47.5	42.5	37.4	34.4	32.4
50°	3936.5	1268.0	132.5	78.9	61.7	48.5	40.4	35.4	30.3	27.3	26.3
52.5°	4161.0	1229.6	118.3	69.8	53.6	41.5	34.4	28.3	25.3	22.2	21.2
55°	4364.3	1214.4	104.2	60.7	45.5	36.4	28.3	23.3	21.2	18.2	17.2
57.5°	4762.7	1249.8	92.0	52.6	39.4	31.3	24.3	19.2	17.2	14.2	13.1
60°	5179.3	1253.9	78.9	45.5	34.4	26.3	19.2	15.2	13.1	10.1	9.1
62.5°	5396.7	1151.7	64.7	38.4	28.3	22.2	16.2	12.1	10.1	6.1	6.1
65°	5214.7	931.3	54.6	31.3	22.2	17.2	12.1	9.1	6.1	3.0	1.0
67.5°	4615.0	662.3	45.5	25.3	16.2	12.1	9.1	6.1	1.0	0.0	0.0
70°	3379.4	378.2	35.4	18.2	12.1	8.1	6.1	3.0	0.0	0.0	0.0
72.5°	2077.0	202.2	26.3	12.1	9.1	6.1	5.1	2.0	0.0	0.0	0.0
75°	787.7	97.1	16.2	8.1	7.1	5.1	3.0	1.0	0.0	0.0	0.0
77.5°	213.4	47.5	9.1	6.1	5.1	3.0	2.0	0.0	0.0	0.0	0.0
80°	55.6	22.2	6.1	4.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.2	10.1	3.0	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0
85°	8.1	4.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	1.0	1.0	1.0	1.0	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

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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

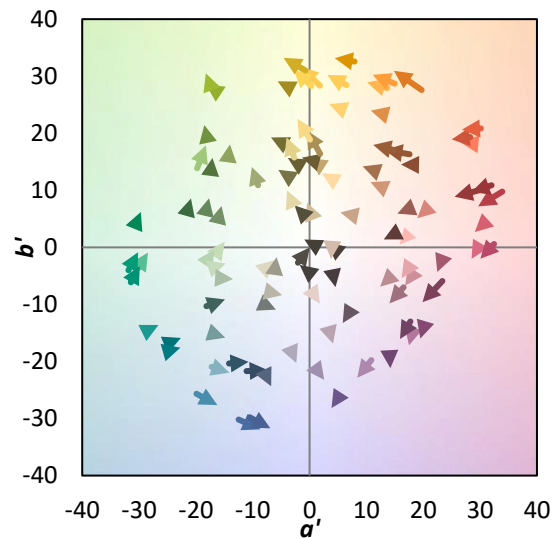
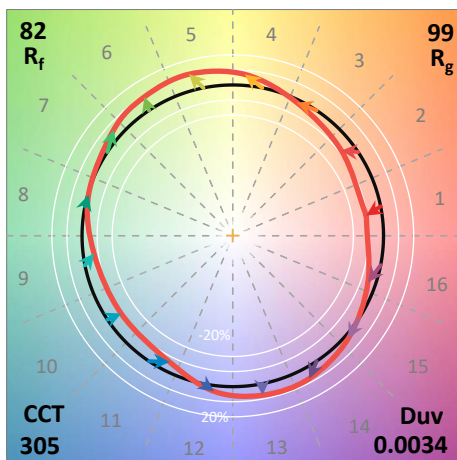
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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)