

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: P641469

Luminaire Tested: GWS-SA5F-830-U-T3-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P641469
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-23)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5F-830-U-T3-W
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33179.1 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

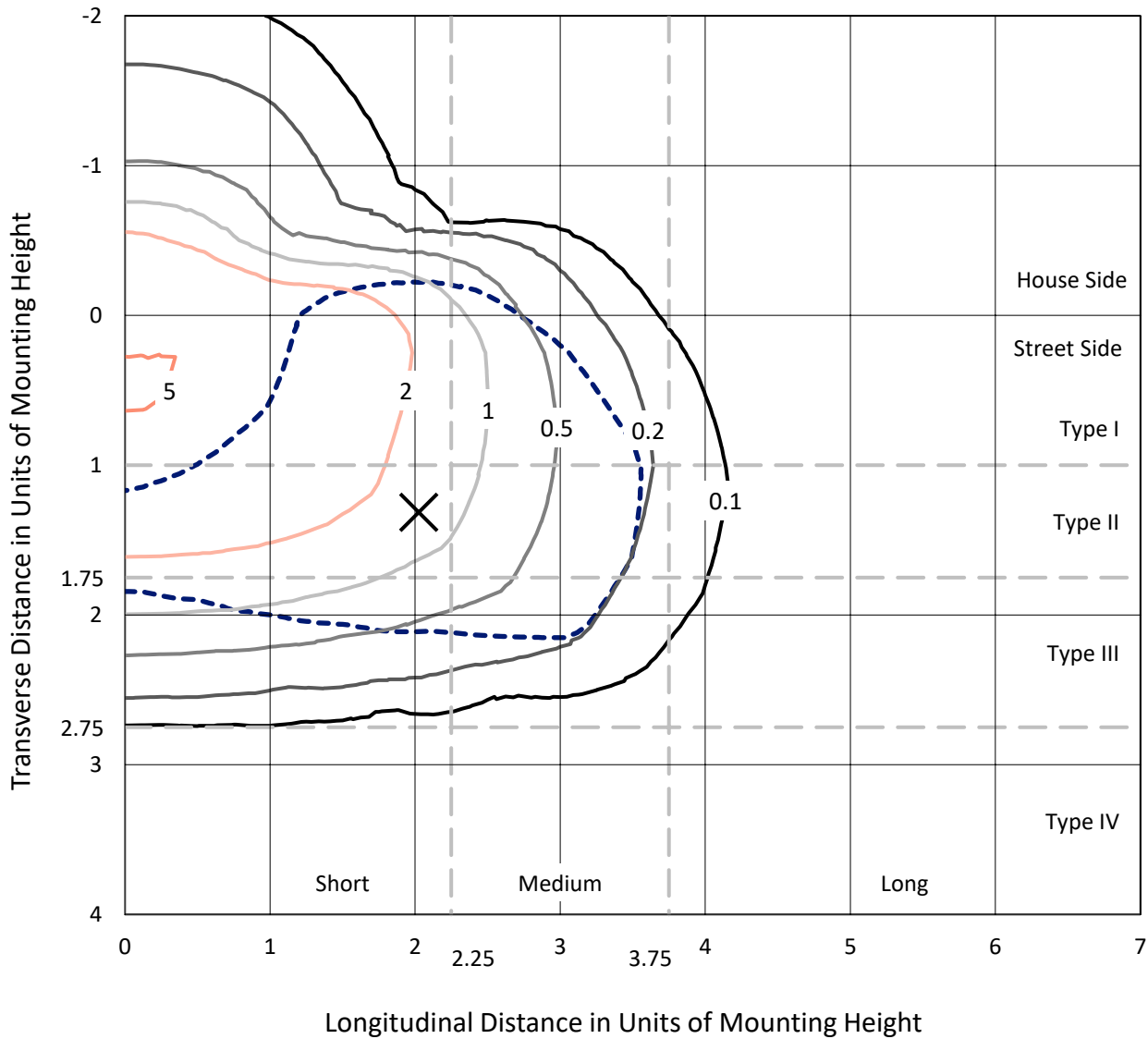
Input Watts (W): 310.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P641469
 CATALOG NUMBER: GWS-SA5F-830-U-T3-W

Iso-Footcandle Lines of Horizontal Illumination

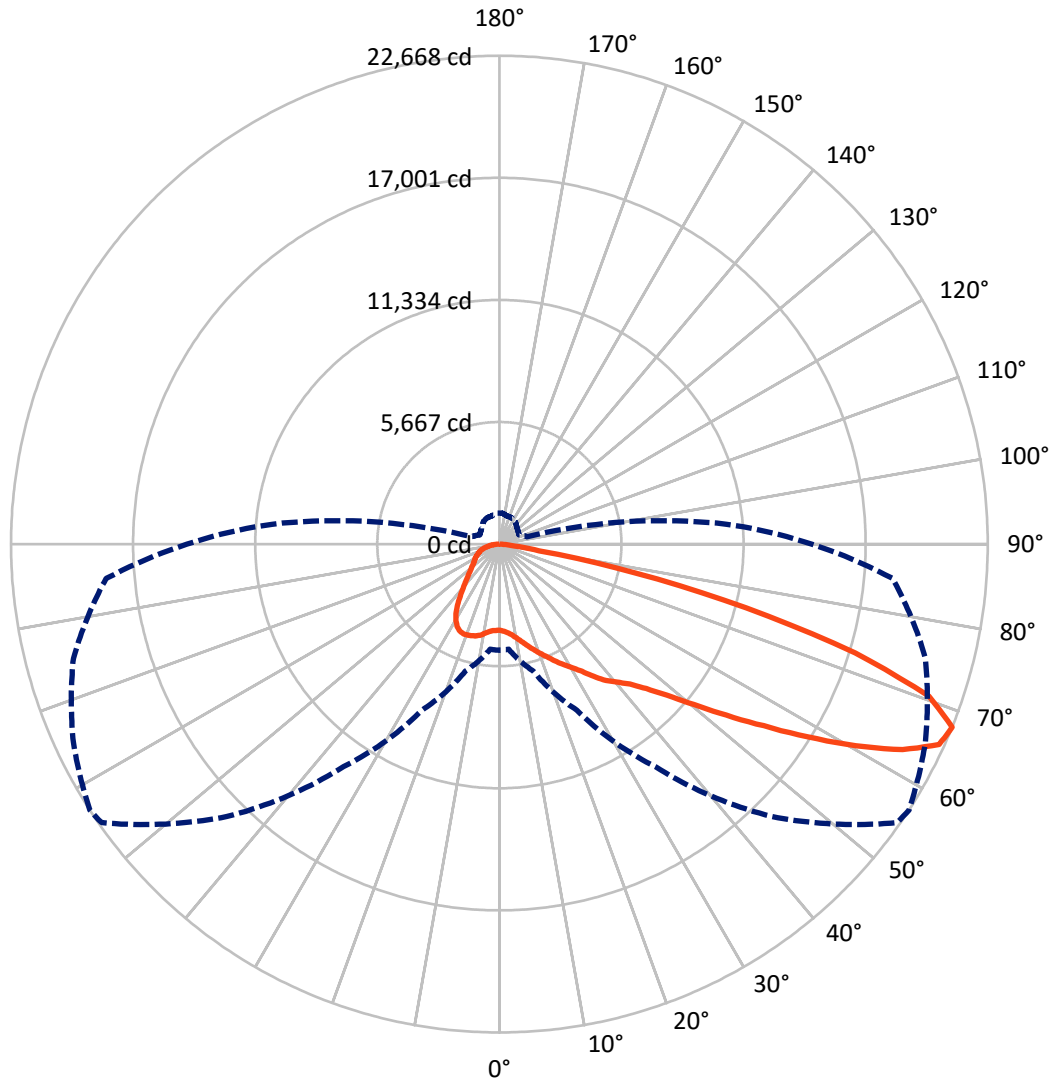
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7294.8	0.0	7294.8
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	25884.3	0.0	25884.3
	% Fixture	78.0	0.0	78.0
Total	Lumens	33179.1	0.0	33179.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	396.5	1.2
10°-20°	1312.6	4.0
20°-30°	2340.2	7.1
30°-40°	3402.3	10.3
40°-50°	4924.3	14.8
50°-60°	7706.3	23.2
60°-70°	8989.9	27.1
70°-80°	3752.8	11.3
80°-90°	354.1	1.1
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°	33179.1	100.0
0°-180°	33179.1	100.0

Coefficient of Utilization



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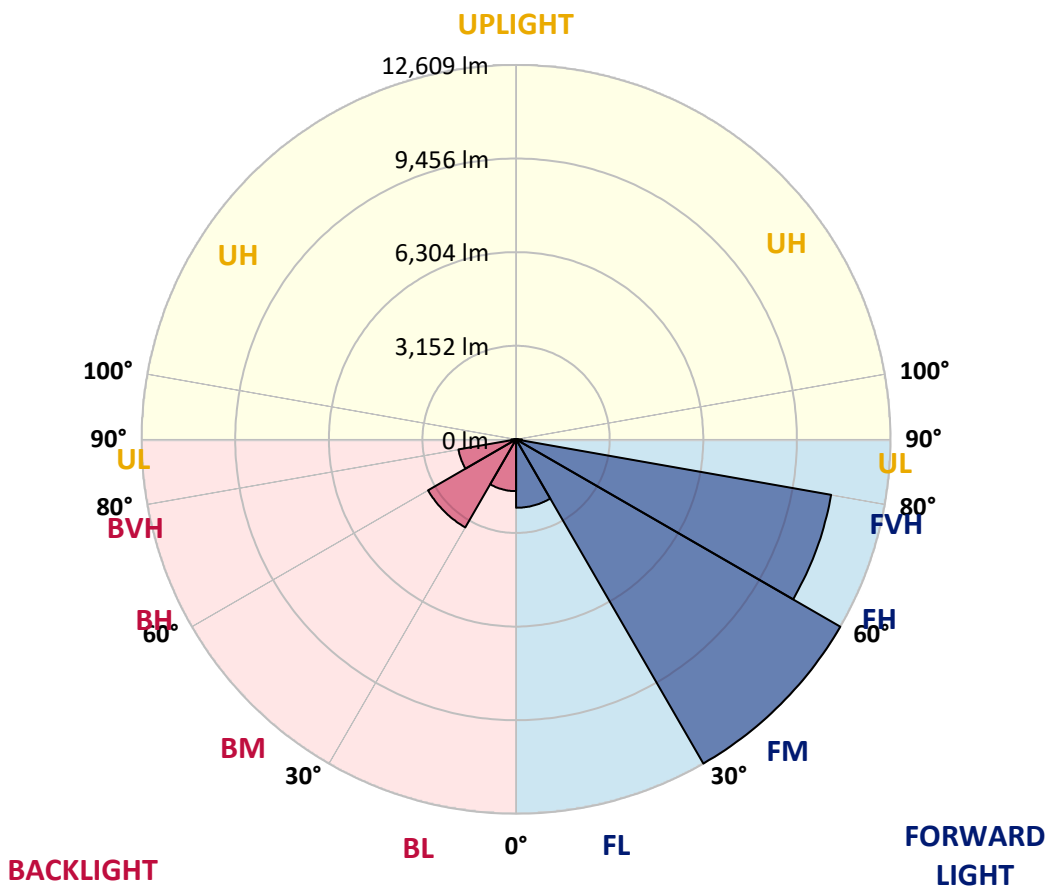
CATALOG NUMBER: GWS-SA5F-830-U-T3-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2304.6	6.9			
FM (30°-60°)	12608.5	38.0			
FH (60°-80°)	10773.8	32.5			G4/12000
FVH (80°-90°)	197.3	0.6			G2/225
BL (0°-30°)	1744.7	5.3	B3/2500		
BM (30°-60°)	3424.4	10.3	B3/5000		
BH (60°-80°)	1968.9	5.9	B3/2500		G3/2500
BVH (80°-90°)	156.8	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





REPORT NUMBER: P641469
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9
2.5°	4054.9	4050.1	4047.8	4062.0	4057.3	4054.9	4054.9	4052.5	4047.8	4028.8	4002.6
5°	4166.6	4157.1	4147.6	4159.5	4150.0	4140.5	4138.1	4133.3	4116.7	4088.2	4047.8
7.5°	4283.1	4273.6	4275.9	4283.1	4275.9	4271.2	4264.1	4259.3	4233.2	4188.0	4133.3
10°	4447.1	4447.1	4451.8	4459.0	4461.3	4454.2	4439.9	4432.8	4401.9	4344.9	4268.8
12.5°	4684.8	4680.0	4680.0	4675.3	4682.4	4675.3	4661.0	4649.1	4611.1	4537.4	4428.1
15°	4998.5	4979.5	4962.9	4932.0	4922.4	4896.3	4901.1	4893.9	4858.3	4758.4	4620.6
17.5°	5333.6	5331.3	5305.1	5243.3	5181.5	5138.7	5148.2	5145.9	5126.9	4991.4	4815.5
20°	5628.4	5640.3	5616.5	5569.0	5485.8	5404.9	5400.2	5412.1	5388.3	5252.8	5008.0
22.5°	5958.8	5949.2	5925.5	5863.7	5801.9	5716.3	5687.8	5678.3	5668.8	5514.3	5205.3
25°	6272.5	6301.0	6270.1	6213.1	6118.0	6025.3	6001.5	6011.0	5984.9	5780.5	5416.8
27.5°	6669.4	6681.3	6662.3	6583.9	6503.1	6372.3	6327.2	6327.2	6317.7	6030.1	5583.2
30°	7092.5	7125.8	7092.5	7028.3	6945.1	6757.4	6659.9	6650.4	6621.9	6286.8	5778.1
32.5°	7518.0	7541.7	7518.0	7456.2	7361.1	7197.1	7056.9	7035.5	6997.4	6567.2	5977.8
35°	7895.9	7917.3	7912.5	7926.8	7848.3	7641.6	7556.0	7546.5	7446.7	6933.3	6248.7
37.5°	8309.5	8335.6	8299.9	8328.5	8297.6	8102.7	8076.5	8029.0	7886.4	7277.9	6534.0
40°	8780.1	8803.8	8746.8	8758.7	8723.0	8613.7	8480.6	8416.4	8204.9	7651.1	6983.2
42.5°	9284.0	9338.6	9364.8	9343.4	9260.2	9198.4	8965.5	8884.7	8708.8	8323.7	7722.4
45°	10013.7	10094.5	10132.5	10077.8	10042.2	9954.2	9669.0	9571.6	9478.9	9272.1	8753.9
47.5°	10800.4	10874.1	10995.3	11019.1	11047.6	10981.0	10579.3	10484.3	10500.9	10477.1	10023.2
50°	11427.9	11489.7	11763.0	12055.4	12297.8	12316.8	11803.4	11701.2	11791.5	11867.6	11551.5
52.5°	11884.2	11938.9	12300.2	12903.9	13453.0	13859.4	13305.6	13189.1	13262.8	13433.9	13288.9
55°	12255.0	12331.1	12709.0	13636.0	14746.0	15387.7	15033.6	14886.2	14855.3	15066.8	15150.0
57.5°	12449.9	12473.7	13003.7	14208.8	15694.3	16887.5	17042.0	16875.6	16580.9	16697.3	17129.9
60°	12005.5	12045.9	12770.8	14356.2	16443.0	18375.4	19150.3	19012.4	18384.9	18449.1	18926.8
62.5°	10776.6	10833.7	11706.0	13655.0	16504.8	19368.9	21096.9	21008.9	20167.5	19820.5	19963.1
65°	8644.6	8663.6	9566.8	11919.9	15276.0	19492.5	22454.1	22432.7	21413.0	20600.1	19989.3
67.5°	4929.6	4896.3	6103.7	8502.0	12606.8	17885.8	22542.0	22668.0	21817.1	20471.8	18325.5
70°	2136.8	2141.5	2697.7	4195.1	8159.7	14456.0	20937.6	21153.9	20647.7	18335.0	14579.6
72.5°	988.8	1003.0	1243.1	1815.9	3484.5	8967.8	17072.9	17267.8	16832.8	14674.6	10607.9
75°	698.8	710.7	829.5	1041.1	1602.0	3494.0	11420.7	11829.6	12041.1	10976.3	6990.3
77.5°	530.0	546.7	606.1	722.6	988.8	1238.3	5464.4	6438.9	7670.1	6828.7	3600.9
80°	337.5	337.5	401.7	482.5	603.7	644.1	1578.2	1870.6	3753.0	2814.2	1414.2
82.5°	228.2	235.3	273.3	306.6	347.0	366.0	677.4	722.6	1083.8	957.9	582.3
85°	121.2	126.0	142.6	140.2	166.4	145.0	285.2	282.8	396.9	435.0	221.0
87.5°	0.0	0.0	2.4	2.4	4.8	7.1	30.9	33.3	83.2	133.1	73.7
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-SA5F-830-U-T3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9	3997.9
2.5°	4016.9	3988.3	4002.6	3997.9	4012.1	4012.1	3986.0	3978.8	3981.2	3952.7	3943.2
5°	4052.5	4019.2	4026.4	4016.9	4031.1	4043.0	4031.1	4031.1	4045.4	4024.0	4012.1
7.5°	4133.3	4095.3	4095.3	4083.4	4100.1	4109.6	4100.1	4114.3	4140.5	4119.1	4107.2
10°	4261.7	4216.5	4218.9	4204.6	4211.8	4207.0	4169.0	4157.1	4164.2	4145.2	4135.7
12.5°	4428.1	4366.3	4366.3	4337.7	4321.1	4271.2	4192.8	4164.2	4169.0	4152.4	4145.2
15°	4587.3	4530.3	4518.4	4461.3	4385.3	4292.6	4221.3	4202.3	4207.0	4190.4	4178.5
17.5°	4775.1	4701.4	4658.6	4554.0	4413.8	4318.7	4247.4	4202.3	4164.2	4126.2	4116.7
20°	4948.6	4855.9	4777.5	4615.8	4444.7	4314.0	4180.9	4069.2	3976.5	3926.6	3914.7
22.5°	5126.9	5008.0	4870.2	4658.6	4442.3	4228.4	3983.6	3814.8	3677.0	3603.3	3617.6
25°	5295.6	5145.9	4958.1	4699.0	4366.3	4038.3	3705.5	3453.6	3296.7	3239.6	3223.0
27.5°	5435.8	5250.5	5038.9	4680.0	4209.4	3764.9	3325.2	3044.7	2892.6	2828.4	2811.8
30°	5592.7	5383.6	5155.4	4592.1	3962.2	3382.3	2895.0	2666.8	2557.5	2495.7	2498.1
32.5°	5773.4	5554.7	5319.4	4423.3	3646.1	2968.7	2540.8	2384.0	2296.0	2234.2	2224.7
35°	6015.8	5799.5	5428.7	4169.0	3244.4	2588.4	2298.4	2170.1	2060.7	1979.9	1963.3
37.5°	6315.3	6167.9	5440.6	3829.1	2814.2	2326.9	2124.9	1987.0	1853.9	1747.0	1735.1
40°	6828.7	6659.9	5343.2	3403.6	2448.2	2158.2	1979.9	1820.7	1666.2	1547.3	1530.7
42.5°	7560.7	7213.7	5134.0	2923.5	2172.4	2025.1	1842.1	1640.0	1483.2	1400.0	1388.1
45°	8492.5	7831.7	4820.2	2471.9	1968.0	1894.3	1697.1	1485.5	1402.3	1342.9	1331.0
47.5°	9633.4	8551.9	4459.0	2120.1	1808.8	1775.5	1549.7	1433.2	1359.6	1309.6	1297.8
50°	10997.7	9469.4	4161.9	1844.4	1666.2	1637.6	1502.2	1402.3	1342.9	1302.5	1293.0
52.5°	12554.5	10489.0	4016.9	1647.2	1542.6	1514.1	1485.5	1395.2	1345.3	1314.4	1302.5
55°	14170.8	11563.4	3881.4	1495.0	1438.0	1454.6	1487.9	1419.0	1380.9	1340.5	1328.7
57.5°	15732.3	12571.1	3548.6	1376.2	1361.9	1426.1	1499.8	1442.7	1397.6	1357.2	1342.9
60°	16809.1	13122.6	2985.3	1281.1	1304.9	1390.5	1468.9	1407.1	1350.0	1333.4	1326.3
62.5°	17099.0	13056.0	2317.4	1183.7	1236.0	1312.0	1388.1	1347.7	1288.3	1314.4	1316.8
65°	16421.6	12343.0	1739.9	1088.6	1145.6	1209.8	1304.9	1288.3	1266.9	1338.2	1340.5
67.5°	14503.5	10591.2	1326.3	1005.4	1052.9	1131.4	1278.7	1347.7	1352.4	1442.7	1433.2
70°	10973.9	7912.5	1038.7	927.0	981.6	1131.4	1361.9	1392.8	1335.8	1419.0	1400.0
72.5°	7586.9	5221.9	884.2	858.0	893.7	1079.1	1359.6	1359.6	1297.8	1297.8	1262.1
75°	4713.3	3070.9	770.1	770.1	770.1	943.6	1321.5	1252.6	1143.3	1093.3	1064.8
77.5°	2326.9	1492.7	646.5	670.3	644.1	789.1	1079.1	1024.4	957.9	905.6	886.6
80°	993.5	746.3	522.9	549.1	518.2	594.2	855.7	843.8	779.6	710.7	689.3
82.5°	456.4	385.0	418.3	430.2	377.9	446.8	625.1	625.1	589.5	494.4	458.7
85°	194.9	204.4	290.0	290.0	237.7	251.9	335.1	318.5	285.2	232.9	213.9
87.5°	66.6	99.8	147.4	128.3	49.9	21.4	11.9	4.8	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			

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)