

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: P640943

Luminaire Tested: GWS-SA5E-830-U-RW-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640943
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5E-830-U-RW-W
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND
RECTANGULAR WIDE OPTICS
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

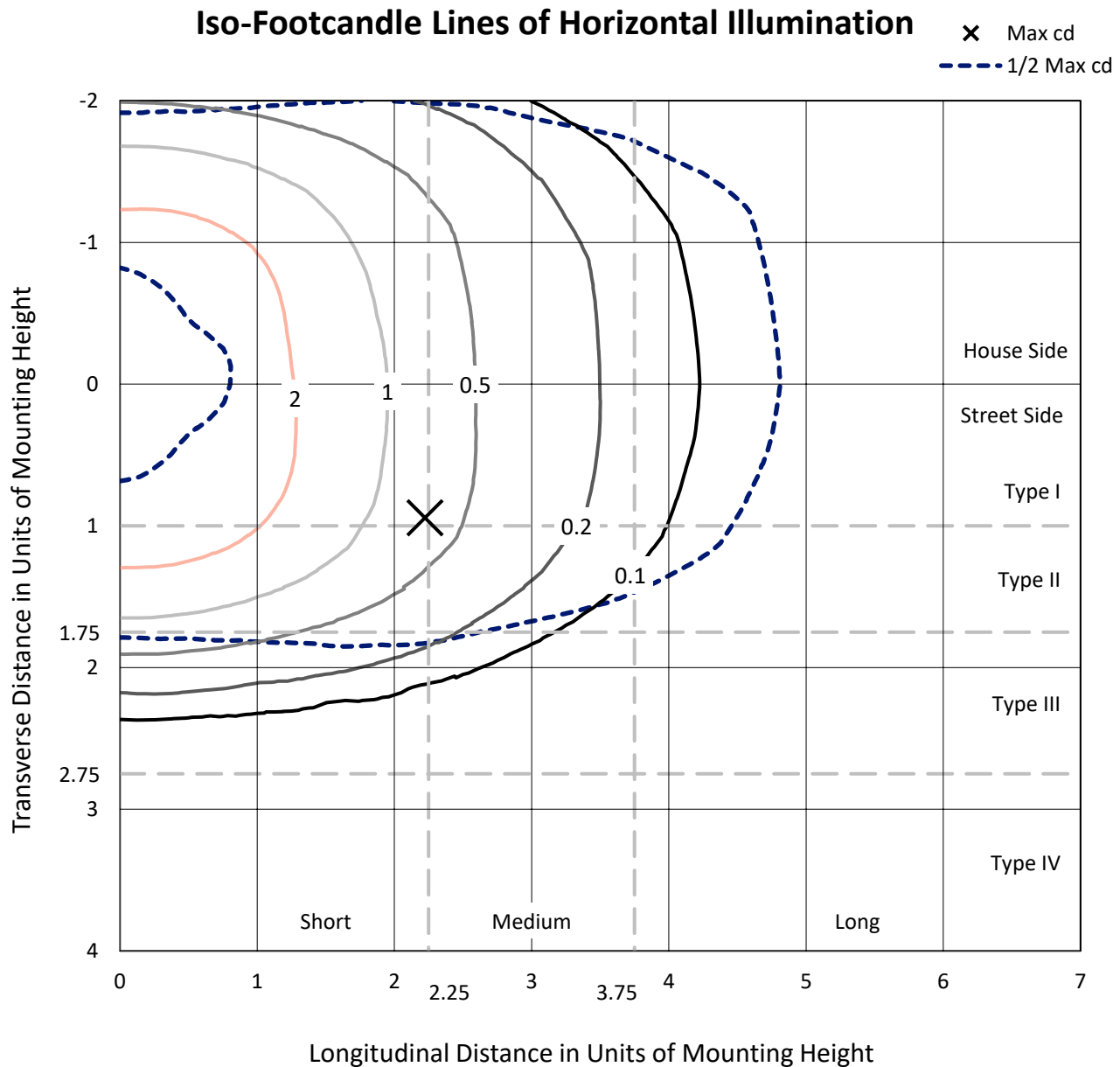
Lumens per Lamp: N/A
Luminaire Lumens: 30699.4 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U0 - G5

Input Watts (W): 269.6
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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CATALOG NUMBER: GWS-SA5E-830-U-RW-W

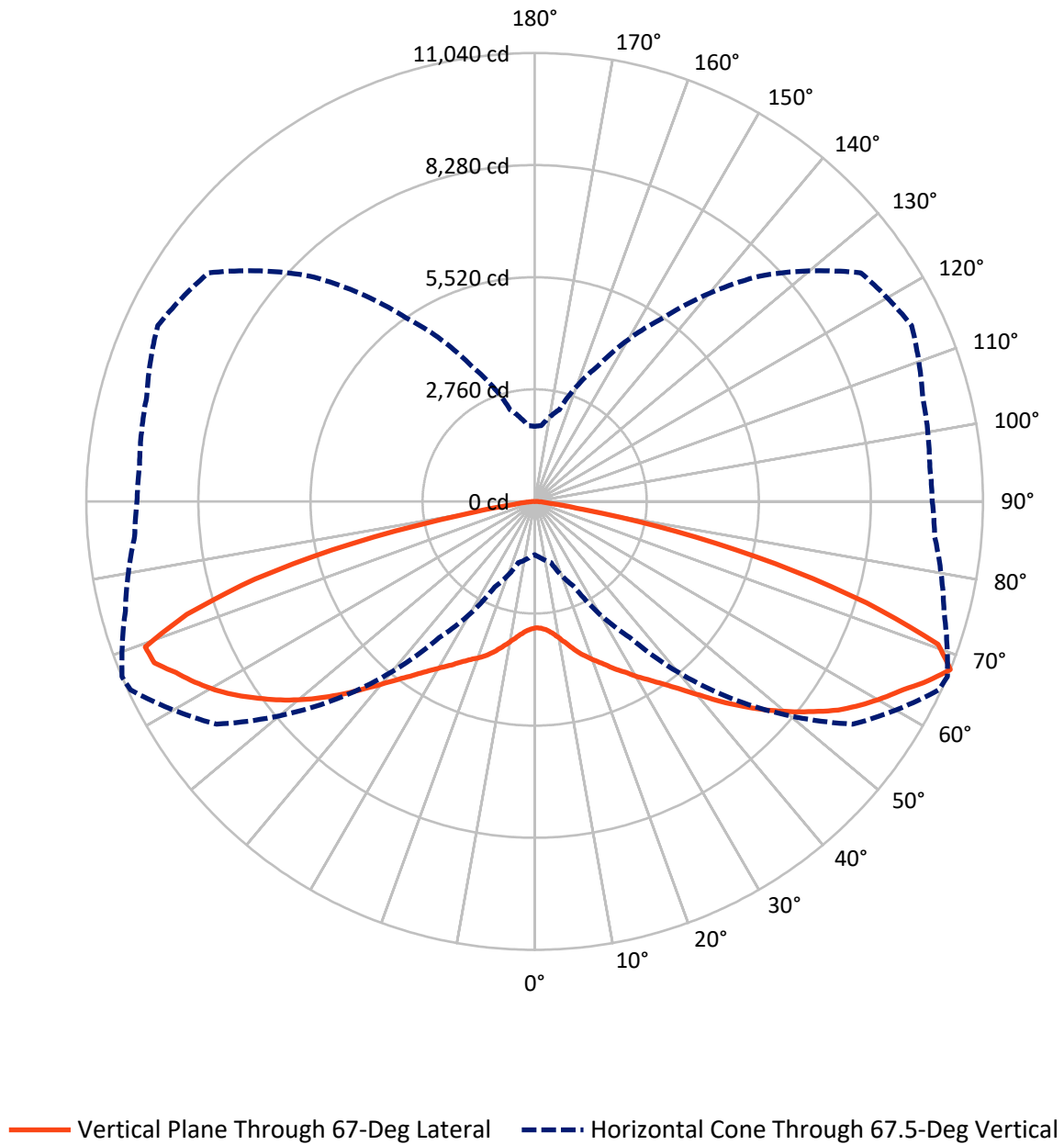


Based on 30 foot mounting height. Maximum calculated value = 4 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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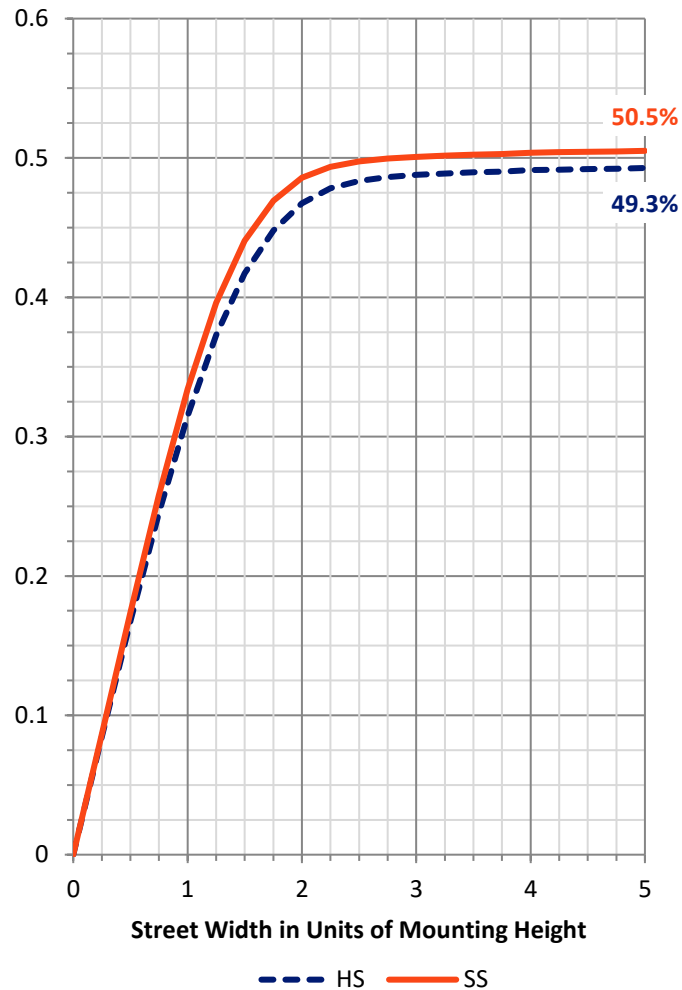
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15180.3	0.0	15180.3
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	15519.1	0.0	15519.1
	% Fixture	50.6	0.0	50.6
Total	Lumens	30699.4	0.0	30699.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.0	1.0
10°-20°	1030.3	3.4
20°-30°	2021.5	6.6
30°-40°	3444.0	11.2
40°-50°	5530.4	18.0
50°-60°	7514.7	24.5
60°-70°	7188.3	23.4
70°-80°	3417.6	11.1
80°-90°	247.7	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°	30699.4	100.0
0°-180°	30699.4	100.0

Coefficient of Utilization



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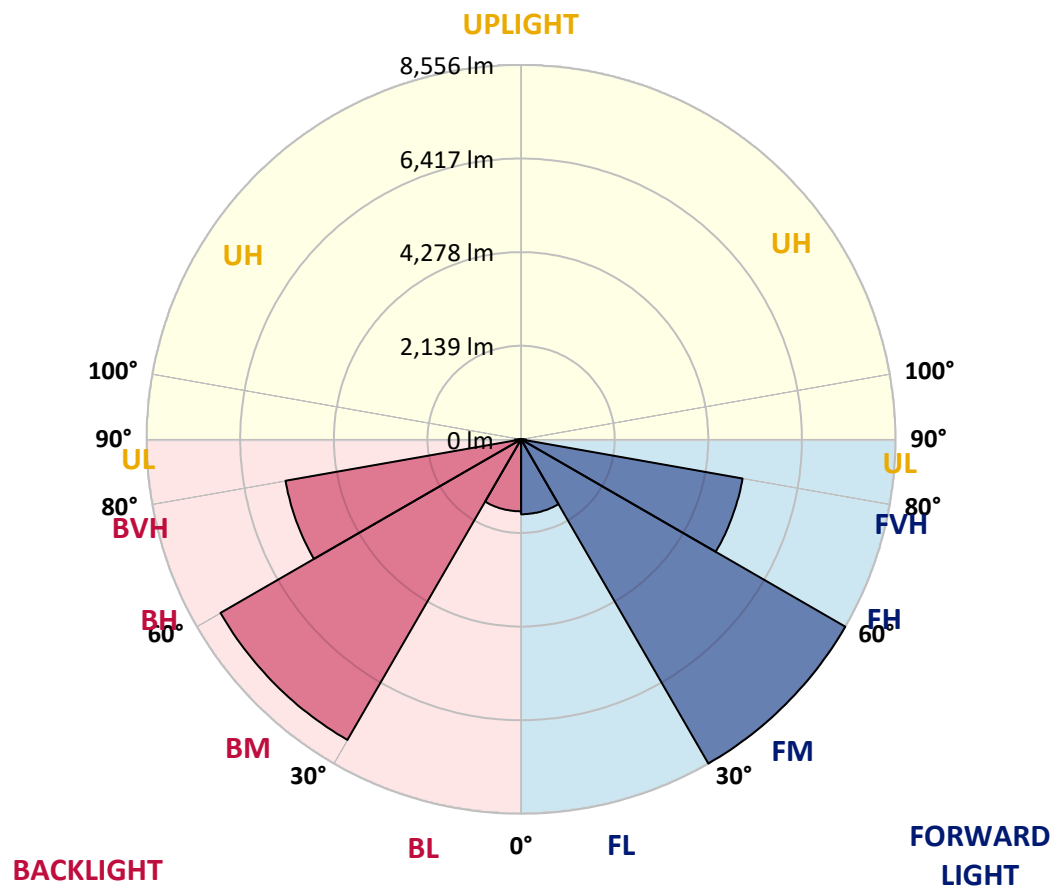
CATALOG NUMBER: GWS-SA5E-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1711.7	5.6			
FM	(30°-60°)	8556.2	27.9			
FH	(60°-80°)	5139.9	16.7			G3/7500
FVH	(80°-90°)	111.3	0.4			G2/225
BL	(0°-30°)	1645.1	5.4	B3/2500		
BM	(30°-60°)	7932.9	25.8	B4/8500		
BH	(60°-80°)	5466.0	17.8	B5		G5
BVH	(80°-90°)	136.3	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5
2.5°	3044.3	3048.6	3055.0	3067.9	3080.7	3099.9	3119.2	3117.0	3125.6	3132.0	3138.4
5°	3027.2	3031.5	3042.2	3059.3	3078.6	3110.6	3151.2	3168.3	3181.2	3204.7	3226.1
7.5°	3063.6	3072.1	3087.1	3110.6	3140.6	3181.2	3236.8	3266.7	3285.9	3328.7	3365.0
10°	3112.8	3123.5	3153.4	3198.3	3243.2	3305.2	3375.7	3420.6	3433.4	3489.0	3557.4
12.5°	3159.8	3172.6	3221.8	3303.0	3384.3	3467.7	3551.0	3606.6	3610.9	3685.7	3762.7
15°	3234.6	3245.3	3311.6	3416.3	3540.3	3655.8	3758.4	3796.9	3814.0	3867.4	3963.6
17.5°	3399.2	3412.1	3497.6	3610.9	3741.3	3863.2	3965.8	3997.8	3997.8	4042.7	4121.8
20°	3576.7	3589.5	3702.8	3848.2	4006.4	4130.4	4209.5	4179.6	4168.9	4181.7	4237.3
22.5°	3775.5	3799.0	3908.1	4076.9	4271.5	4423.3	4463.9	4374.1	4344.2	4314.3	4327.1
25°	4029.9	4057.7	4164.6	4344.2	4534.5	4694.8	4718.3	4579.4	4562.2	4457.5	4419.0
27.5°	4322.8	4344.2	4476.7	4654.2	4831.6	4966.3	4992.0	4820.9	4763.2	4617.8	4528.0
30°	4701.2	4720.5	4835.9	5011.2	5165.1	5259.2	5291.3	5056.1	5011.2	4788.9	4649.9
32.5°	5113.8	5122.4	5240.0	5408.9	5545.7	5635.5	5590.6	5316.9	5250.6	5000.5	4810.2
35°	5586.3	5586.3	5738.1	5874.9	5983.9	6009.6	5924.1	5611.9	5535.0	5263.5	5026.2
37.5°	6050.2	6063.0	6204.1	6366.6	6462.8	6458.6	6302.5	5960.4	5872.8	5577.7	5314.8
40°	6552.6	6580.4	6721.5	6903.2	6995.2	6982.3	6742.9	6362.3	6272.6	5924.1	5667.5
42.5°	7014.4	7059.3	7223.9	7409.9	7510.4	7501.8	7251.7	6824.1	6736.5	6343.1	6086.6
45°	7382.1	7429.2	7634.4	7893.1	8053.4	8038.4	7786.2	7303.0	7196.1	6783.5	6501.3
47.5°	7704.9	7754.1	7982.9	8256.5	8510.9	8536.6	8305.7	7786.2	7672.9	7256.0	6937.4
50°	7952.9	7976.5	8233.0	8532.3	8827.3	8970.6	8769.6	8271.5	8134.7	7722.0	7362.9
52.5°	7933.7	7965.8	8282.2	8688.4	9083.9	9319.0	9180.1	8729.0	8596.4	8147.5	7796.9
55°	7542.5	7574.5	7950.8	8543.0	9227.1	9573.5	9558.5	9165.1	9068.9	8581.5	8248.0
57.5°	6971.6	7042.2	7416.3	8055.6	9039.0	9776.5	9836.4	9562.8	9462.3	9006.9	8694.8
60°	5949.7	6043.8	6475.7	7305.2	8436.1	9708.1	10133.6	9898.4	9836.4	9402.4	9098.8
62.5°	4322.8	4391.2	4966.3	6054.5	7542.5	9220.7	10383.7	10244.7	10197.7	9757.3	9464.4
65°	2589.0	2745.0	3206.8	4282.2	6084.4	8301.4	10246.9	10698.0	10648.8	10122.9	9776.5
67.5°	1310.5	1381.1	1562.8	2321.7	4091.9	6869.0	9560.6	10980.2	11040.0	10435.0	9887.7
70°	812.4	831.6	882.9	1145.9	2043.8	4513.1	7818.2	10244.7	10537.6	10385.8	9599.1
72.5°	652.1	656.3	664.9	714.1	981.3	2110.1	4942.8	8023.5	8551.5	9699.6	9186.5
75°	540.9	543.0	545.2	560.1	611.4	861.6	2405.1	5513.6	6131.5	8243.7	8517.3
77.5°	434.0	423.3	431.9	438.3	451.1	481.0	829.5	2941.7	3568.1	5411.0	6586.8
80°	282.2	277.9	295.0	301.4	314.3	333.5	442.5	998.4	1212.2	1969.0	2095.1
82.5°	151.8	143.2	179.6	173.2	179.6	194.5	260.8	365.6	410.5	594.3	502.4
85°	47.0	47.0	49.2	57.7	70.6	68.4	113.3	179.6	198.8	254.4	188.1
87.5°	8.6	8.6	8.6	8.6	8.6	10.7	23.5	36.3	49.2	87.7	66.3
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-SA5E-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5	3108.5
2.5°	3151.2	3132.0	3142.7	3149.1	3147.0	3142.7	3121.3	3117.0	3106.3	3089.2	3085.0
5°	3245.3	3223.9	3226.1	3219.7	3198.3	3170.5	3123.5	3099.9	3080.7	3059.3	3057.2
7.5°	3392.8	3369.3	3362.9	3333.0	3273.1	3209.0	3134.1	3091.4	3059.3	3031.5	3027.2
10°	3581.0	3557.4	3536.1	3465.5	3367.2	3281.7	3183.3	3121.3	3074.3	3040.1	3033.7
12.5°	3790.5	3771.2	3717.8	3615.2	3497.6	3397.1	3296.6	3219.7	3151.2	3099.9	3093.5
15°	4023.5	3980.7	3899.5	3767.0	3655.8	3574.5	3452.7	3347.9	3238.9	3170.5	3155.5
17.5°	4186.0	4149.6	4053.4	3925.2	3837.5	3767.0	3623.7	3474.1	3326.5	3226.1	3204.7
20°	4301.4	4262.9	4153.9	4059.8	4032.1	3972.2	3805.4	3632.3	3461.2	3337.2	3309.4
22.5°	4384.8	4344.2	4233.0	4186.0	4224.5	4213.8	4051.3	3854.6	3651.5	3504.0	3469.8
25°	4463.9	4425.4	4327.1	4344.2	4446.8	4478.9	4303.6	4074.8	3843.9	3670.7	3630.1
27.5°	4538.7	4489.6	4444.7	4538.7	4684.1	4744.0	4558.0	4299.3	4049.2	3871.7	3839.6
30°	4654.2	4596.5	4590.0	4726.9	4957.8	5009.1	4803.8	4545.1	4297.1	4117.6	4076.9
32.5°	4799.6	4746.1	4750.4	4955.6	5222.9	5265.6	5090.3	4848.7	4600.7	4421.1	4365.6
35°	4996.2	4930.0	4966.3	5218.6	5488.0	5567.1	5426.0	5225.0	4983.4	4799.6	4737.6
37.5°	5267.7	5171.5	5246.4	5511.5	5783.0	5900.6	5791.5	5641.9	5402.4	5216.4	5158.7
40°	5614.1	5535.0	5564.9	5857.8	6137.9	6279.0	6210.6	6063.0	5825.7	5631.2	5564.9
42.5°	6024.6	5945.5	5934.8	6246.9	6527.0	6740.8	6674.5	6539.8	6293.9	6071.6	6007.5
45°	6426.5	6353.8	6368.8	6687.3	7001.6	7234.6	7168.3	7010.1	6742.9	6486.3	6435.0
47.5°	6845.5	6785.6	6798.5	7136.3	7482.6	7715.6	7632.3	7439.8	7127.7	6854.1	6792.1
50°	7275.2	7206.8	7226.1	7580.9	7955.1	8175.3	8047.0	7762.7	7418.5	7151.2	7097.8
52.5°	7702.8	7621.6	7670.7	8006.4	8393.3	8568.6	8331.3	7987.1	7653.6	7388.5	7328.7
55°	8194.5	8109.0	8055.6	8414.7	8797.4	8870.1	8545.1	8143.2	7747.7	7446.3	7409.9
57.5°	8643.5	8570.8	8470.3	8829.5	9111.7	9058.2	8709.7	8100.4	7518.9	7132.0	7080.7
60°	9045.4	8983.4	8895.7	9201.5	9329.7	9210.0	8577.2	7593.8	6954.5	6550.5	6527.0
62.5°	9415.2	9349.0	9267.7	9528.6	9511.5	9233.5	7974.3	6815.6	5960.4	5526.4	5488.0
65°	9708.1	9648.3	9624.8	9830.0	9802.2	8773.9	7035.8	5541.4	4354.9	3865.3	3850.3
67.5°	9791.5	9768.0	9894.1	10242.6	9808.6	7850.3	5517.9	3675.0	2338.8	1874.9	1847.1
70°	9479.4	9477.2	9838.5	10336.7	8919.3	5996.8	3256.0	1656.9	1175.8	1043.3	1026.2
72.5°	9073.2	9066.8	9353.2	8917.1	6614.6	3281.7	1370.4	887.2	735.4	699.1	699.1
75°	8406.2	8389.1	8605.0	6783.5	3719.9	1235.7	726.9	609.3	577.2	570.8	570.8
77.5°	6851.9	6708.7	6368.8	4192.4	1297.7	607.2	481.0	478.9	459.6	457.5	457.5
80°	2253.3	2253.3	2618.9	1599.1	573.0	374.1	339.9	357.0	337.8	325.0	322.8
82.5°	367.7	506.7	720.5	457.5	310.0	233.0	209.5	222.3	233.0	186.0	186.0
85°	145.4	190.3	277.9	213.8	143.2	94.1	100.5	111.2	98.3	85.5	83.4
87.5°	55.6	68.4	98.3	51.3	29.9	17.1	10.7	10.7	8.6	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 81.0
 R1: 79.6
 R2: 85.6
 R3: 92.0
 R4: 82.6
 R5: 78.9
 R6: 81.7
 R7: 85.2
 R8: 62.0
 R9: 7.1
 R10: 67.0
 R11: 82.7
 R12: 63.2
 R13: 80.3
 R14: 95.0
 R15: 71.7



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 ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /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 $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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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TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$



Color Vector Graphics

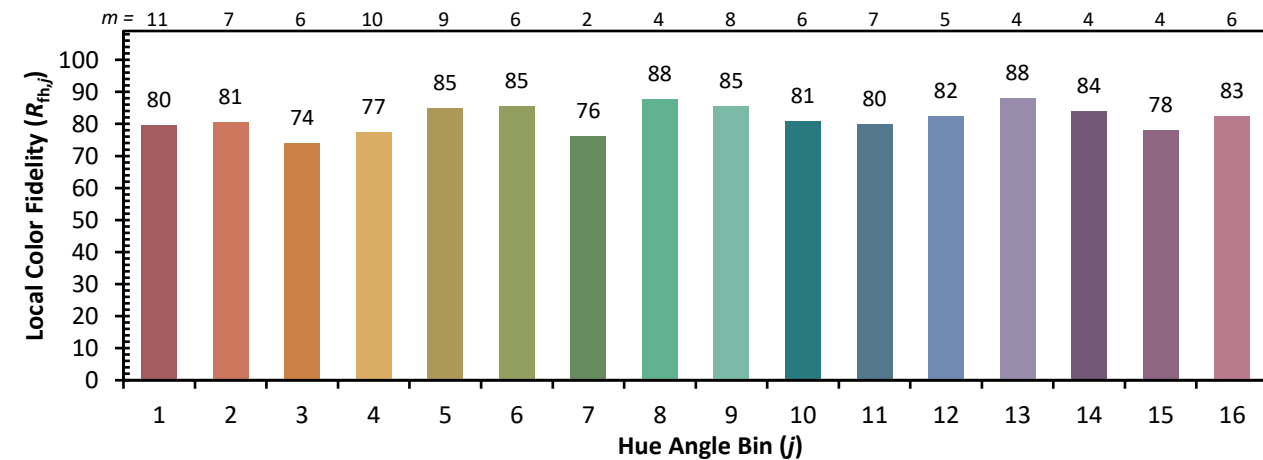


Individual Sample Fidelity Index ($R_{f,i}$)

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)