

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P320158

Luminaire Tested: **GLEON-SA4B-830-U-SL4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P320158
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA4B-830-U-SL4
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17407 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

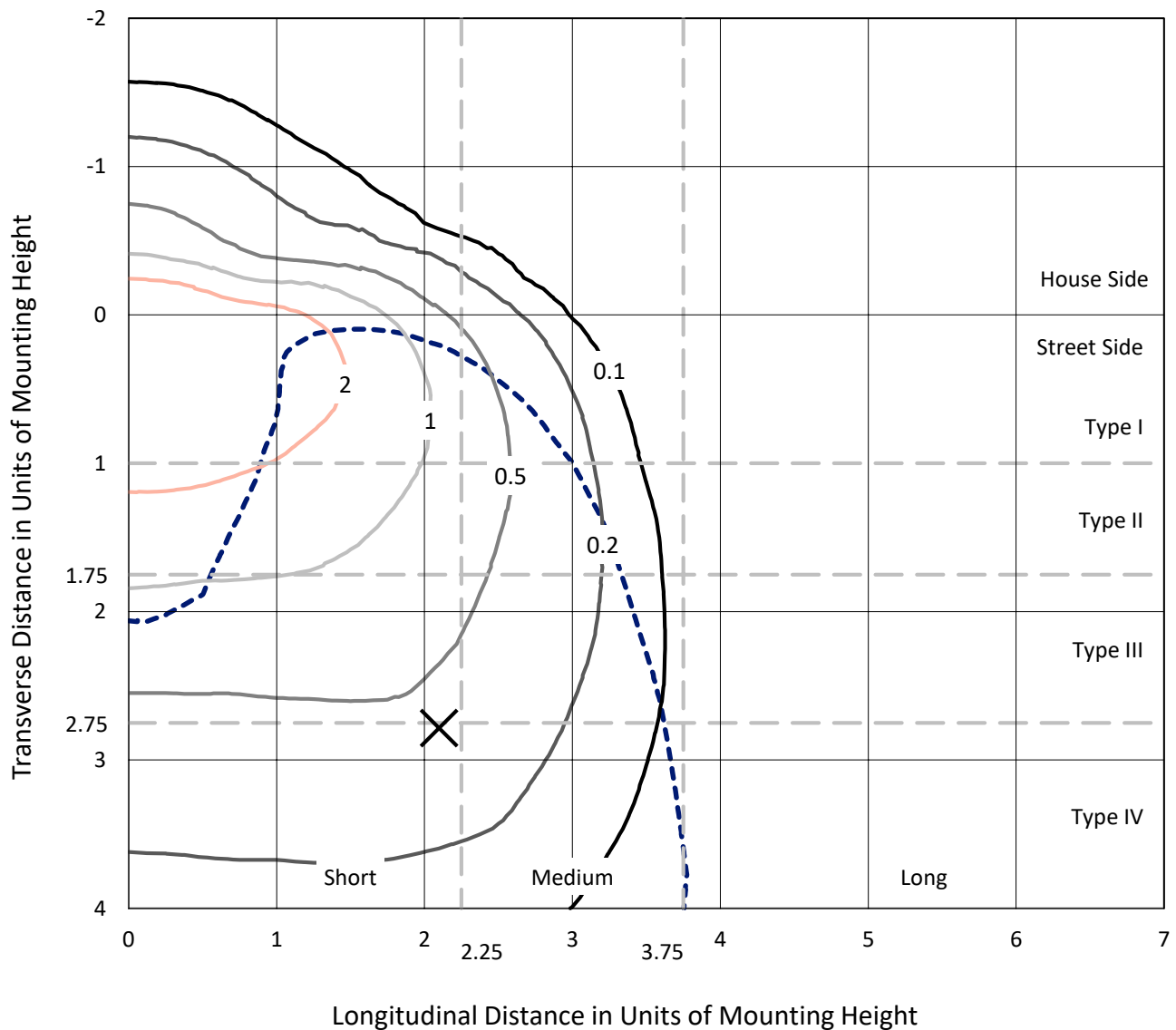
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

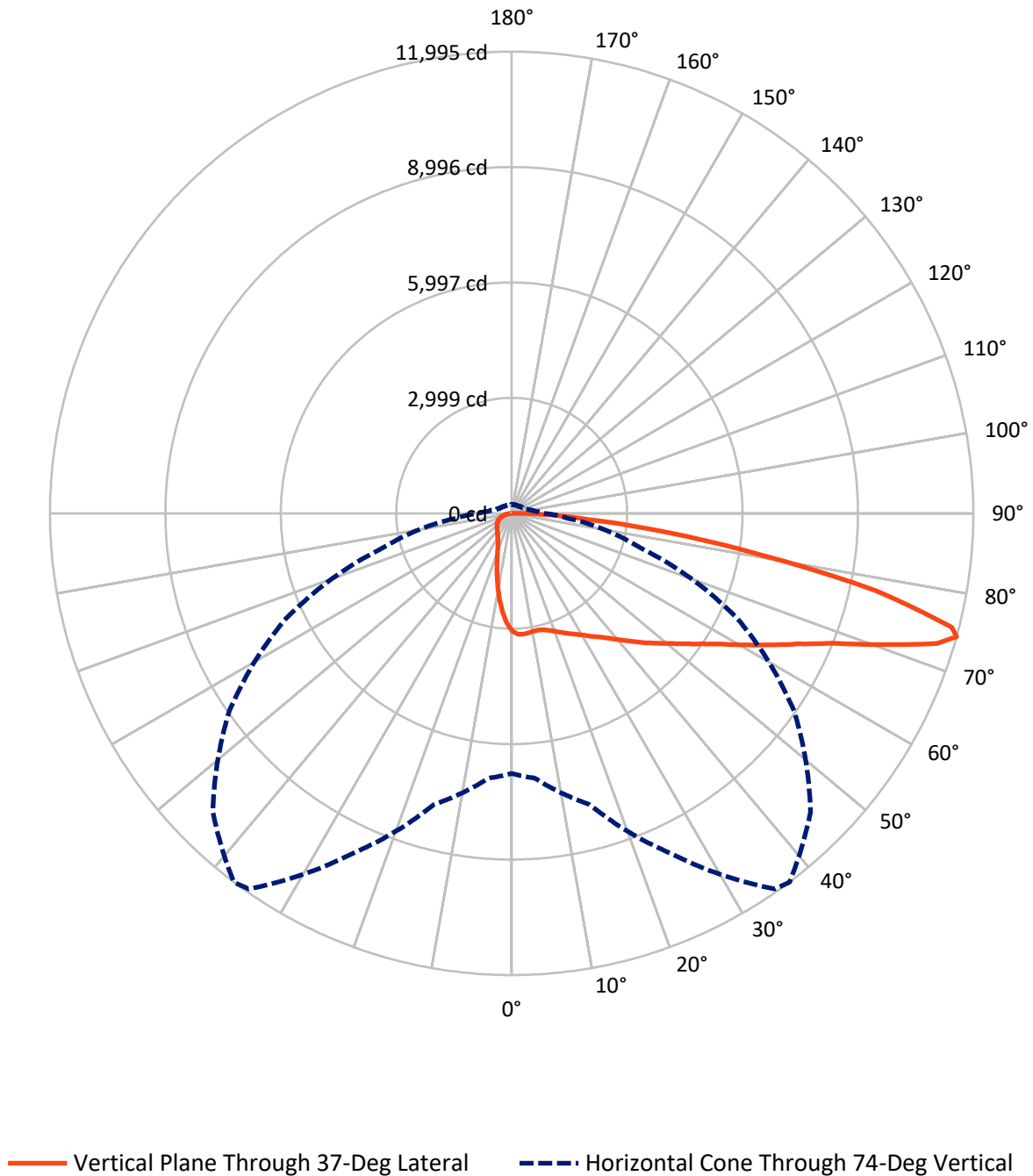
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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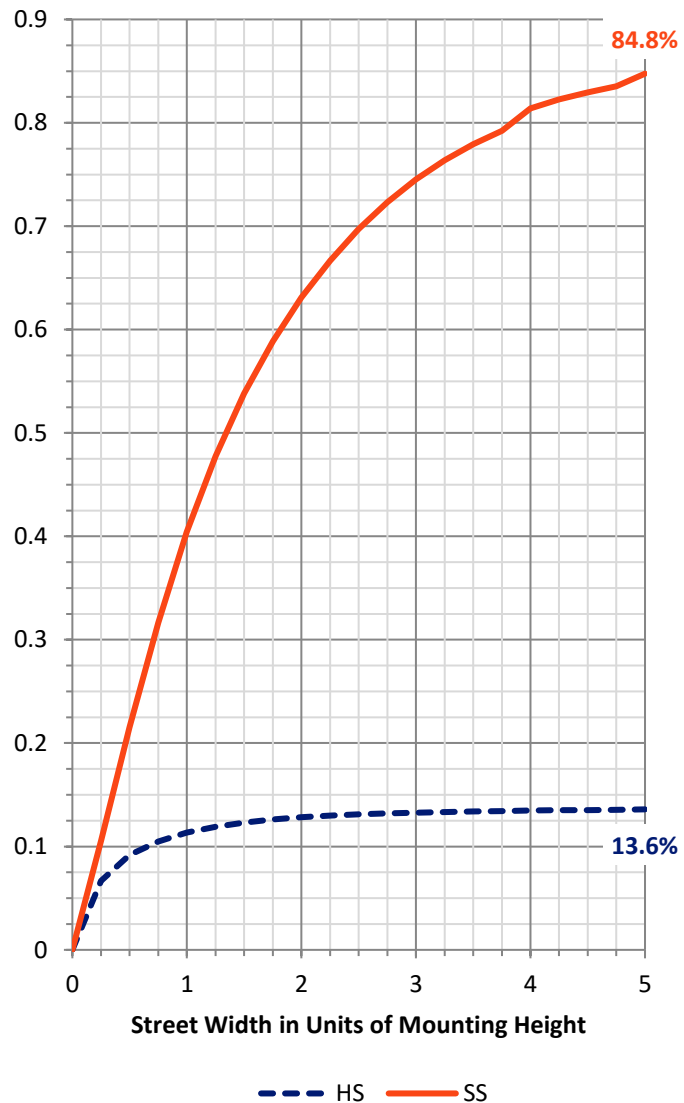
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2395.1	0.0	2395.1
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	15011.9	0.0	15011.9
	% Fixture	86.2	0.0	86.2
Total	Lumens	17407.0	0.0	17407.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.1	1.6
10°-20°	692.3	4.0
20°-30°	1066.7	6.1
30°-40°	1551.1	8.9
40°-50°	2283.0	13.1
50°-60°	3206.1	18.4
60°-70°	4057.9	23.3
70°-80°	3573.2	20.5
80°-90°	706.5	4.1
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°	17407.0	100.0
0°-180°	17407.0	100.0

Coefficient of Utilization



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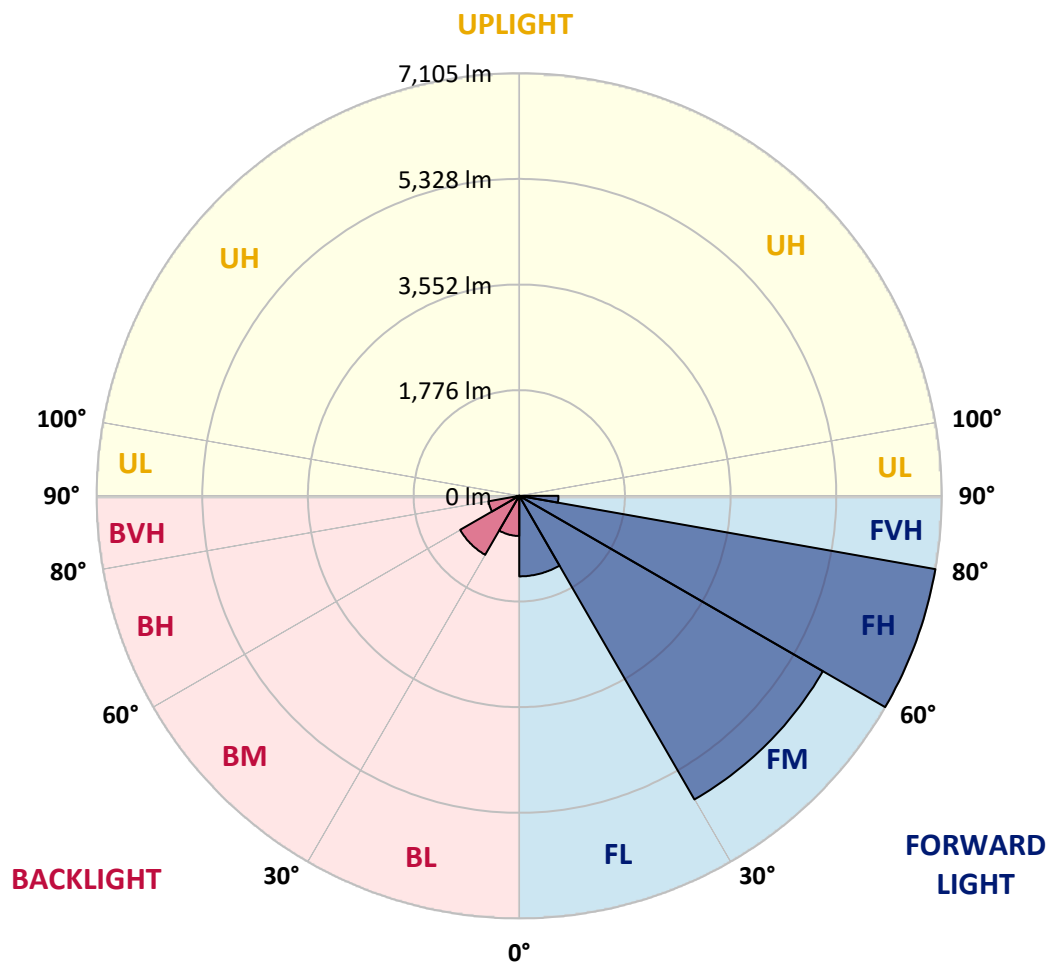
CATALOG NUMBER: GLEON-SA4B-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1354.5	7.8			
FM	(30°-60°)	5894.1	33.9			
FH	(60°-80°)	7104.7	40.8			G3/7500
FVH	(80°-90°)	658.7	3.8			G4/750
BL	(0°-30°)	674.6	3.9	B2/1000		
BM	(30°-60°)	1146.1	6.6	B2/2500		
BH	(60°-80°)	526.5	3.0	B2/1000		G2/1000
BVH	(80°-90°)	47.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0
2.5°	3171.9	3172.5	3171.9	3167.0	3155.3	3145.5	3137.6	3125.9	3100.2	3080.5	3051.1
5°	3201.9	3198.3	3195.8	3186.6	3168.2	3157.2	3141.9	3119.8	3077.5	3038.2	2990.4
7.5°	3187.8	3183.5	3178.0	3167.0	3146.1	3136.9	3115.5	3086.7	3035.8	2984.3	2915.6
10°	3144.3	3143.1	3140.6	3138.2	3120.4	3113.0	3093.4	3062.8	3012.5	2949.9	2869.6
12.5°	3095.9	3098.9	3108.7	3121.6	3113.6	3110.0	3097.7	3076.9	3025.4	2957.9	2861.0
15°	3065.2	3073.8	3100.2	3133.9	3140.6	3139.4	3136.3	3122.8	3068.3	2993.5	2880.6
17.5°	3054.8	3068.9	3119.2	3175.0	3194.6	3198.9	3200.1	3176.8	3116.1	3037.0	2900.9
20°	3073.8	3091.6	3165.2	3241.8	3273.1	3275.5	3270.0	3229.5	3161.5	3074.4	2911.9
22.5°	3131.4	3147.4	3239.3	3325.8	3361.4	3365.0	3348.5	3287.2	3209.3	3118.6	2927.2
25°	3242.4	3262.0	3354.0	3440.5	3458.9	3459.5	3435.6	3359.5	3271.8	3180.5	2960.4
27.5°	3387.1	3406.7	3489.5	3574.1	3564.3	3558.8	3526.3	3450.3	3353.4	3265.7	3019.2
30°	3548.4	3569.8	3648.3	3708.4	3685.1	3674.1	3647.7	3549.6	3466.8	3382.2	3109.4
32.5°	3715.2	3734.8	3803.5	3844.5	3815.1	3810.2	3770.3	3680.8	3614.6	3560.0	3255.3
35°	3886.2	3900.3	3967.8	3991.1	3951.8	3950.6	3939.6	3857.4	3815.7	3841.5	3467.4
37.5°	4061.0	4064.7	4122.3	4123.5	4111.9	4116.8	4128.4	4076.9	4088.6	4168.9	3743.4
40°	4216.7	4226.5	4268.2	4281.1	4301.3	4318.5	4376.8	4343.0	4433.2	4575.4	4086.7
42.5°	4332.0	4351.0	4417.8	4451.0	4516.6	4543.5	4625.7	4657.0	4838.5	5051.9	4495.1
45°	4429.5	4458.9	4566.2	4634.3	4745.3	4792.5	4910.2	5015.1	5296.5	5568.8	4924.9
47.5°	4535.0	4572.4	4706.6	4836.6	4987.5	5040.8	5254.8	5411.8	5785.2	6088.7	5330.2
50°	4690.1	4718.9	4850.1	5054.3	5242.6	5311.2	5607.4	5832.4	6281.9	6584.2	5681.6
52.5°	4906.5	4895.5	5006.5	5292.8	5545.5	5630.1	5983.9	6280.0	6785.3	7032.4	5978.3
55°	5124.2	5105.8	5183.7	5542.4	5898.6	5987.5	6398.4	6729.5	7264.2	7435.8	6205.8
57.5°	5366.4	5331.5	5397.1	5823.8	6300.9	6406.9	6862.5	7207.1	7735.1	7762.0	6350.5
60°	5616.0	5568.8	5642.3	6172.7	6811.6	6936.7	7405.8	7673.1	8179.0	8023.2	6397.1
62.5°	5834.3	5801.1	5914.6	6562.1	7387.4	7524.7	7939.2	8168.6	8616.8	8131.8	6229.1
65°	6024.9	6030.5	6226.7	6999.9	8029.4	8175.9	8551.2	8779.3	8961.4	8067.4	5836.1
67.5°	6252.4	6283.7	6618.5	7576.3	8837.5	8998.2	9441.5	9445.2	9153.9	7689.7	5062.3
70°	6584.2	6648.5	7157.5	8375.8	9986.6	10207.3	10549.5	9836.4	8883.5	6665.7	3983.1
72.5°	6878.5	6998.7	7730.8	9290.7	11387.1	11554.5	11197.6	9610.7	7753.5	4995.4	2481.5
74°	6758.9	6907.9	7835.0	9741.3	11914.4	11994.7	10978.7	8952.2	6464.6	3459.5	1442.2
75°	6501.4	6663.3	7682.9	9737.0	11847.6	11802.8	10450.2	8199.8	5324.1	2359.5	959.6
77.5°	5246.8	5417.9	6473.8	8345.2	9714.4	9672.0	8027.5	5500.7	2331.9	773.8	487.5
80°	3050.5	3181.1	4018.7	5299.6	6550.4	6627.1	5279.3	2721.8	917.3	434.7	330.5
82.5°	1355.1	1445.2	1941.3	2705.3	3953.1	4051.8	2764.8	1426.2	566.6	264.3	198.7
85°	889.1	955.9	1178.5	1288.3	1882.4	1949.9	1353.3	1110.4	374.0	145.3	145.9
87.5°	639.5	703.9	875.6	764.6	863.9	818.0	736.4	1027.7	150.2	82.8	49.1
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0	3067.0
2.5°	3038.2	3028.4	3006.3	2964.6	2941.3	2921.7	2889.2	2870.2	2861.6	2861.0	2864.7
5°	2962.8	2940.1	2883.1	2813.2	2757.4	2706.5	2643.3	2605.3	2578.4	2562.4	2566.7
7.5°	2875.1	2839.6	2750.0	2638.4	2548.9	2450.2	2352.7	2294.5	2249.1	2215.4	2221.5
10°	2815.0	2766.0	2635.4	2474.7	2325.7	2182.3	2048.0	1967.6	1903.9	1854.8	1858.5
12.5°	2794.8	2728.6	2547.7	2333.1	2124.0	1927.8	1752.4	1629.2	1563.6	1507.8	1512.1
15°	2797.9	2709.0	2474.1	2205.6	1942.5	1695.4	1482.6	1338.5	1249.6	1211.0	1211.6
17.5°	2800.3	2686.3	2396.9	2068.8	1762.8	1478.3	1247.2	1101.2	1017.2	981.7	982.3
20°	2792.3	2649.5	2301.2	1911.8	1575.2	1279.1	1055.3	931.4	867.6	840.0	840.0
22.5°	2781.9	2605.9	2193.3	1754.3	1390.0	1106.1	917.9	823.5	786.7	768.3	767.7
25°	2786.8	2573.4	2082.9	1592.4	1219.6	968.2	826.5	764.0	739.5	727.8	727.2
27.5°	2813.2	2558.1	1981.1	1431.1	1070.6	864.6	765.2	721.1	705.1	697.8	697.8
30°	2861.0	2558.1	1875.1	1293.8	946.7	787.9	718.0	688.0	676.9	672.0	672.0
32.5°	2944.4	2572.2	1772.7	1157.7	848.0	727.8	678.8	658.5	650.0	647.5	647.5
35°	3087.9	2620.0	1672.7	1028.9	768.3	678.8	641.4	629.7	623.6	623.0	624.8
37.5°	3289.6	2717.5	1578.9	933.8	711.9	638.9	610.1	600.9	597.2	600.3	602.7
40°	3543.5	2850.0	1493.7	848.0	669.0	607.0	581.3	575.1	573.3	577.6	581.3
42.5°	3850.1	3029.0	1423.8	786.1	635.9	580.1	556.8	549.4	547.6	552.5	557.4
45°	4181.8	3221.6	1374.7	740.1	610.1	559.8	535.3	527.3	523.6	526.1	531.6
47.5°	4483.5	3403.7	1355.1	707.6	585.6	542.7	516.3	506.5	500.3	499.1	503.4
50°	4737.9	3539.2	1364.3	688.0	566.0	523.6	497.9	486.9	477.7	472.1	475.2
52.5°	4923.1	3624.4	1372.9	679.4	550.6	502.8	477.7	467.2	455.0	445.8	445.8
55°	5057.4	3644.0	1353.9	672.6	539.0	480.1	455.0	445.2	432.9	422.5	421.2
57.5°	5110.1	3588.8	1283.4	662.8	531.0	458.6	431.1	423.7	413.3	401.0	400.4
60°	5039.0	3418.4	1147.2	642.0	520.6	440.9	407.1	402.2	397.3	385.7	385.1
62.5°	4753.2	3044.4	971.3	599.7	499.7	421.9	385.1	387.5	388.1	380.2	378.9
65°	4235.1	2530.5	799.6	544.5	468.5	399.2	362.4	374.0	380.8	379.5	377.7
67.5°	3482.2	1969.5	677.5	486.2	427.4	367.9	337.9	351.3	356.9	361.2	359.9
70°	2584.5	1388.8	560.4	424.9	377.7	331.1	306.0	312.7	309.0	313.9	315.8
72.5°	1440.9	833.3	456.8	363.6	326.2	288.2	270.4	269.2	261.2	261.2	261.2
74°	864.6	611.3	401.6	325.6	294.9	260.0	244.7	239.1	231.8	232.4	231.8
75°	695.3	525.5	368.5	300.5	272.9	243.4	228.1	220.7	215.2	215.2	214.6
77.5°	439.0	399.2	296.8	239.1	218.3	200.5	190.1	180.3	180.3	179.7	179.0
80°	331.7	317.6	231.2	180.9	167.4	153.9	147.2	142.9	142.9	144.7	144.1
82.5°	227.5	239.1	162.5	126.3	119.6	109.8	108.5	109.1	107.3	104.9	104.2
85°	166.2	179.7	109.8	79.7	73.0	66.8	71.7	74.2	71.1	65.6	63.2
87.5°	63.8	117.7	58.9	33.1	30.7	26.4	30.7	31.9	34.3	27.0	27.6
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
 Rf: 81.5
 Rg: 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/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 $\text{W}^\wedge/\text{nm}$	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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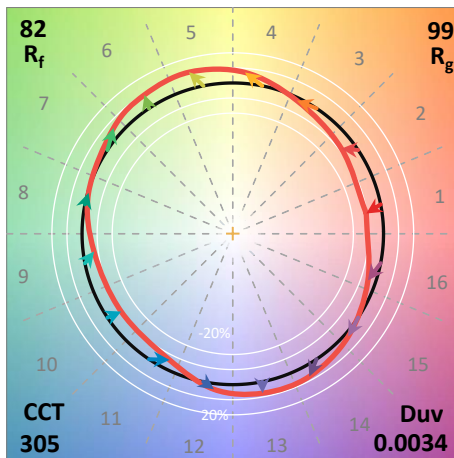
TM-30-18

Summary

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



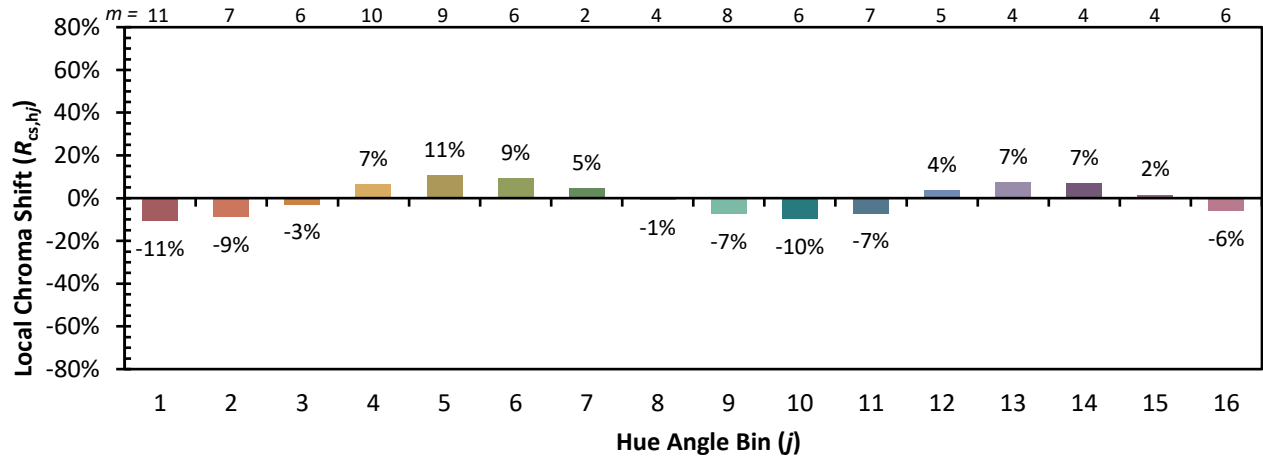
Color Vector Graphics

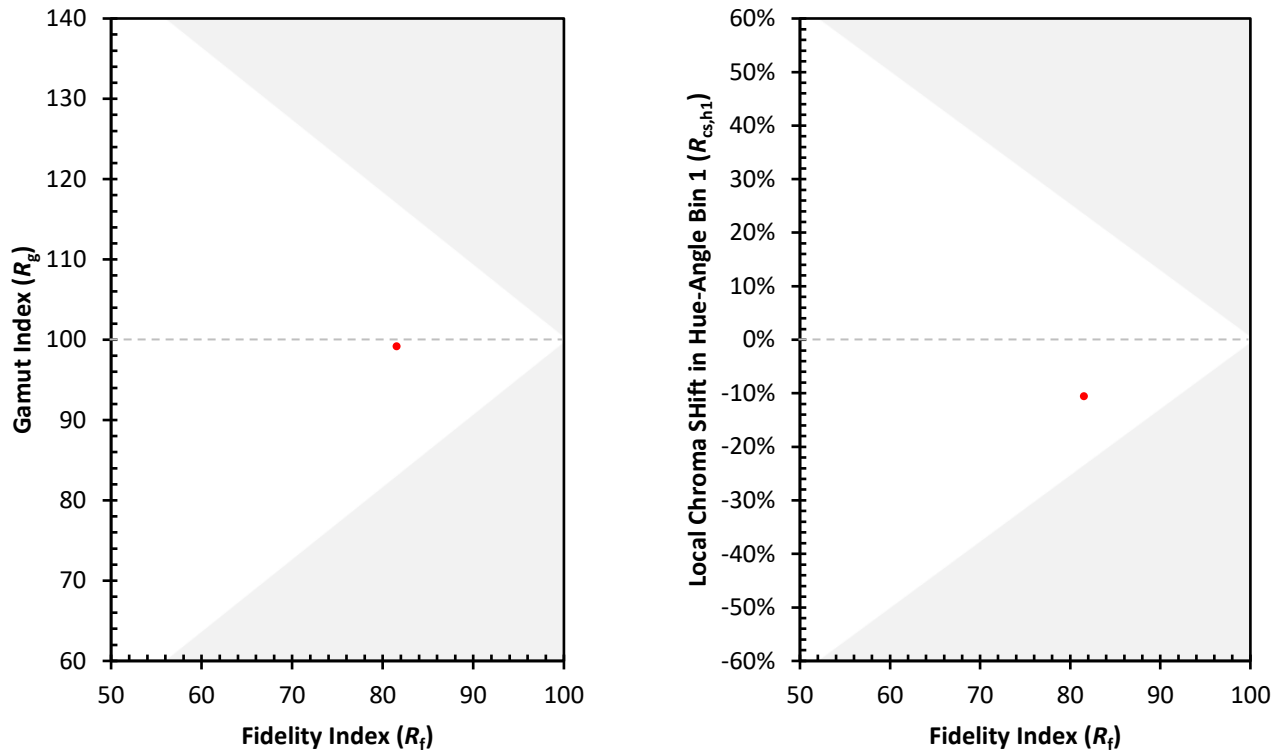


Individual Sample Fidelity Index ($R_{f,i}$)

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)