

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-08 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: P323041

Luminaire Tested: **GLEON-SA7B-830-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323041  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA7B-830-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23281 lumens  
Efficiency: N/A  
Efficacy: 78.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

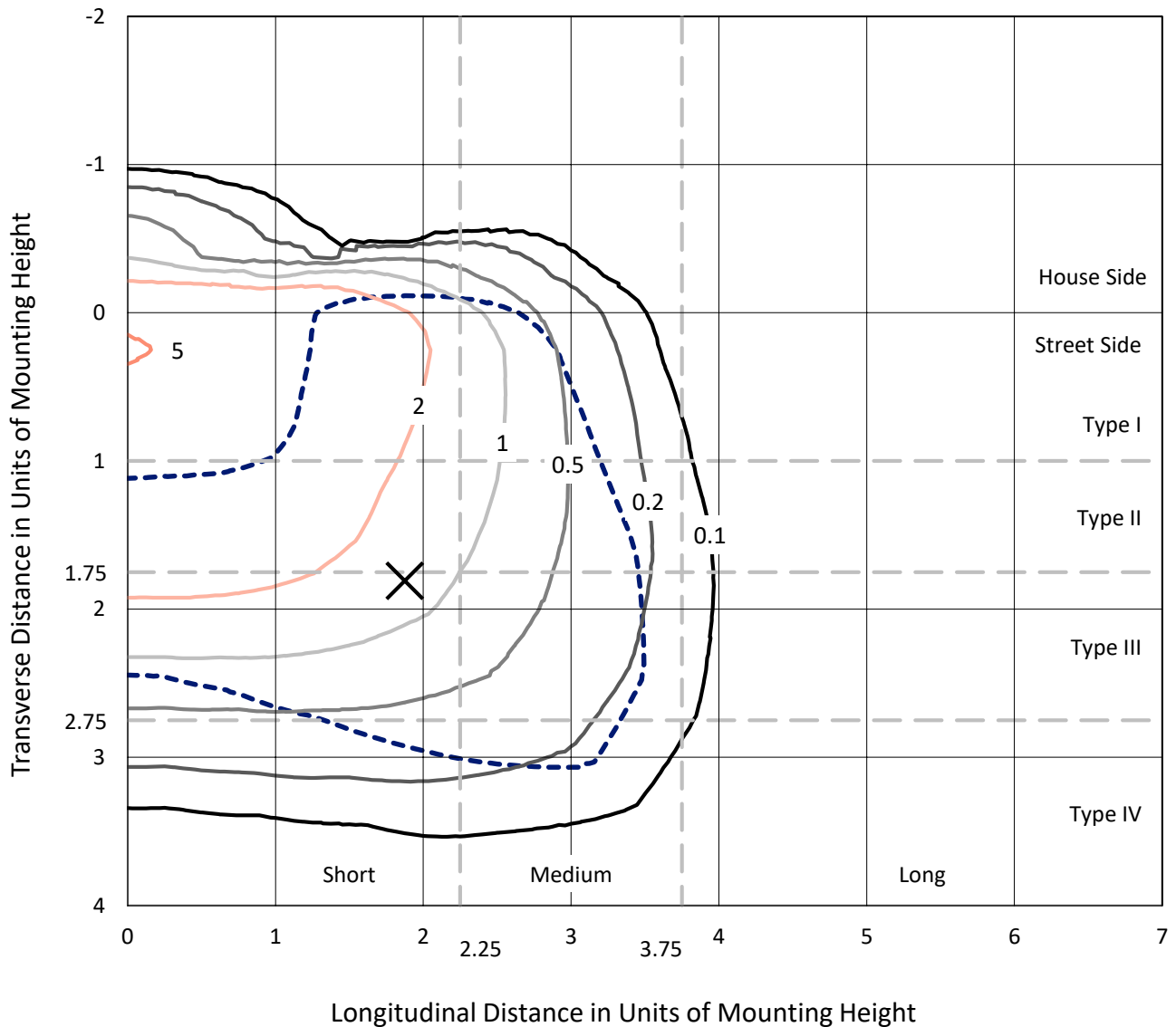
Input Watts (W): 295  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P323041  
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### Iso-Footcandle Lines of Horizontal Illumination

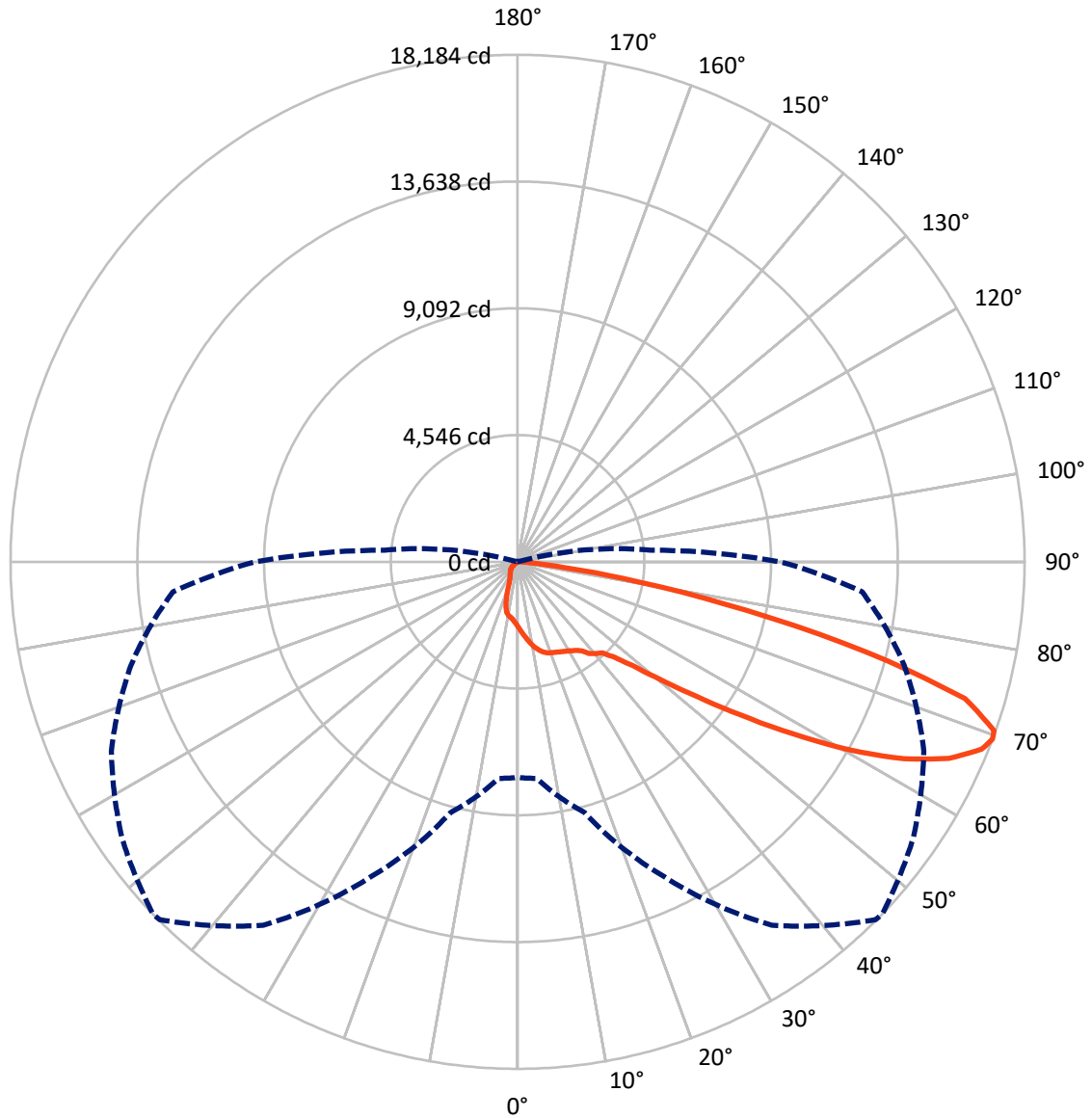
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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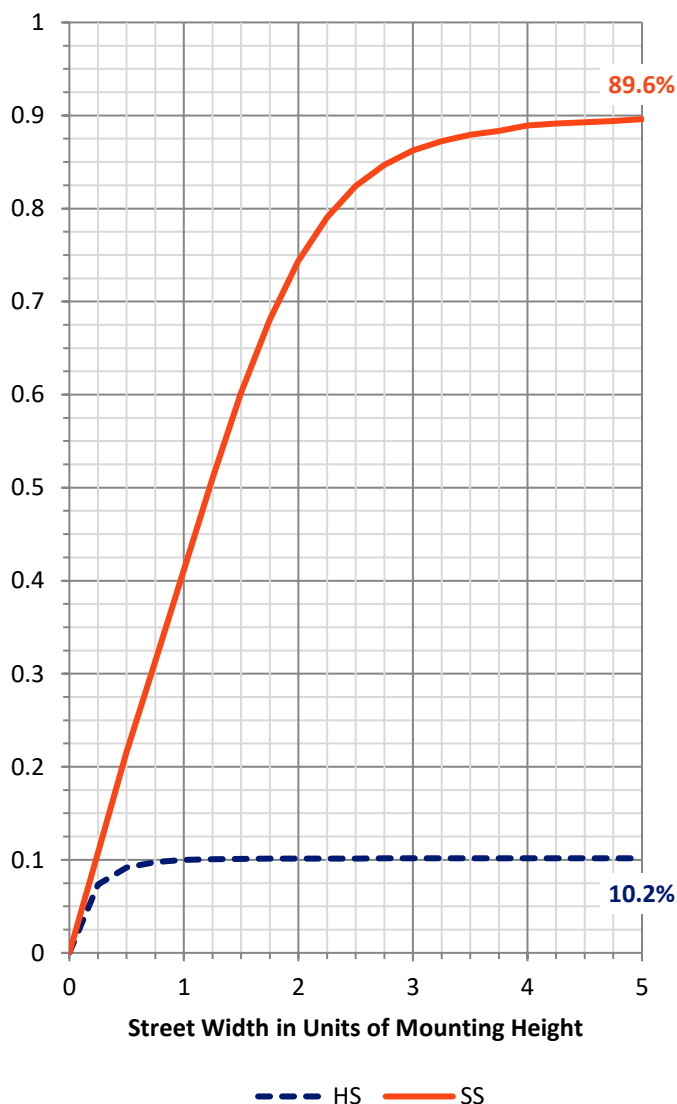
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2389.3	0.0	2389.3
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	20891.7	0.0	20891.7
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	23281.0	0.0	23281.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.2	1.0
10°-20°	704.4	3.0
20°-30°	1107.8	4.8
30°-40°	1588.5	6.8
40°-50°	2745.6	11.8
50°-60°	5424.1	23.3
60°-70°	7580.7	32.6
70°-80°	3662.3	15.7
80°-90°	235.4	1.0
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°	23281.0	100.0
0°-180°	23281.0	100.0

**Coefficient of Utilization**

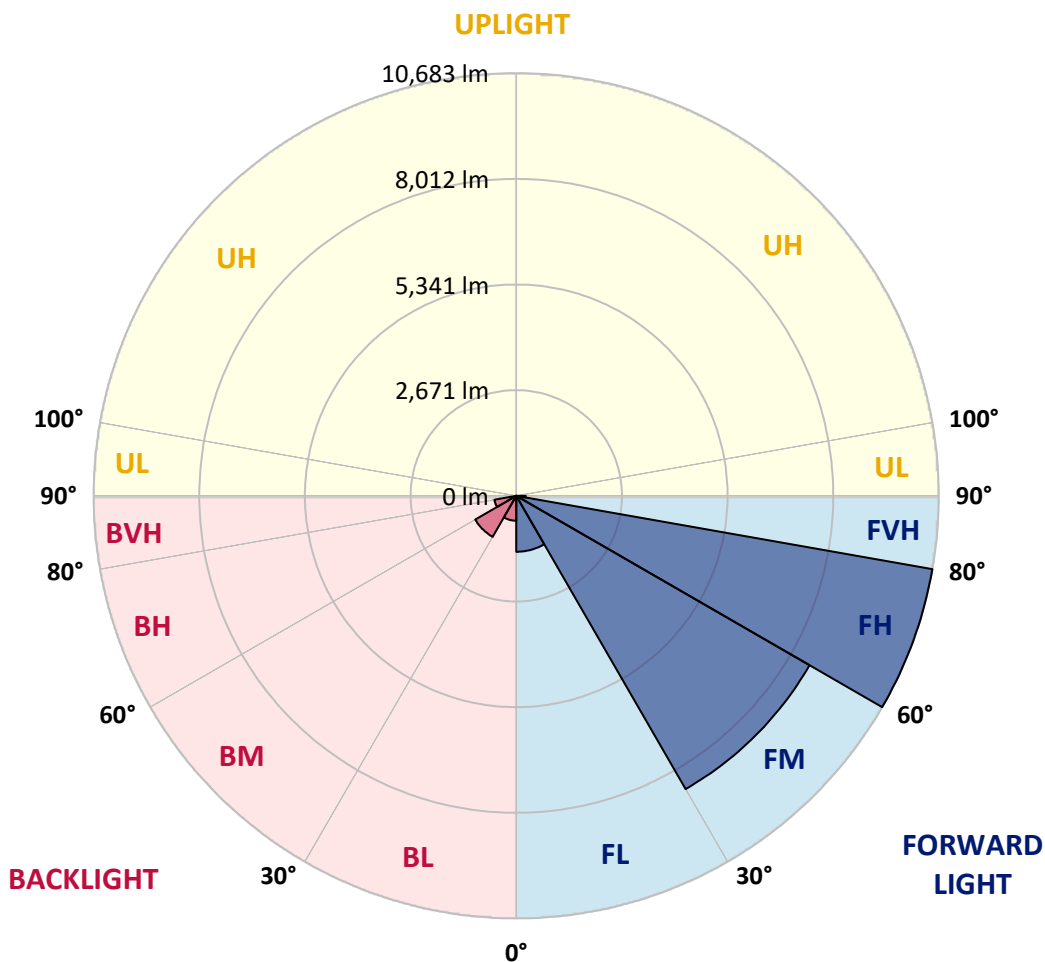


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1414.6	6.1			
FM (30°-60°)	8560.9	36.8			
FH (60°-80°)	10682.8	45.9			G4/12000
FVH (80°-90°)	233.4	1.0			G3/500
BL (0°-30°)	629.7	2.7	B2/1000		
BM (30°-60°)	1197.3	5.1	B2/2500		
BH (60°-80°)	560.2	2.4	B2/1000		G2/1000
BVH (80°-90°)	2.0	0.0			G0/10
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°	45°	46°	55°	65°	75°	85°
0°	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7
2.5°	2591.4	2588.1	2572.8	2566.3	2529.2	2507.3	2498.6	2471.3	2432.0	2392.7	2349.0
5°	2886.1	2885.0	2856.6	2829.3	2759.5	2694.0	2682.0	2618.7	2530.2	2447.3	2364.3
7.5°	3187.4	3173.2	3144.8	3092.4	2990.9	2886.1	2876.3	2786.8	2661.2	2541.2	2422.2
10°	3442.8	3434.1	3396.9	3317.3	3198.3	3079.3	3067.3	2957.0	2815.1	2667.8	2516.1
12.5°	3641.5	3634.9	3585.8	3486.5	3359.8	3236.5	3220.1	3121.9	2970.1	2805.3	2626.3
15°	3762.6	3759.3	3699.3	3593.4	3469.0	3362.0	3347.8	3261.6	3120.8	2948.3	2746.4
17.5°	3791.0	3792.1	3729.9	3622.9	3520.3	3443.9	3433.0	3367.5	3249.6	3078.2	2866.4
20°	3727.7	3740.8	3685.1	3592.3	3529.0	3488.6	3479.9	3440.6	3341.3	3179.7	2962.5
22.5°	3638.2	3644.7	3606.5	3544.3	3518.1	3525.7	3521.4	3499.5	3415.5	3267.0	3057.5
25°	3583.6	3583.6	3560.7	3508.3	3525.7	3572.7	3573.8	3569.4	3502.8	3374.0	3173.2
27.5°	3581.4	3574.9	3548.7	3509.4	3557.4	3629.4	3633.8	3663.3	3621.8	3503.9	3317.3
30°	3668.7	3661.1	3605.4	3554.1	3615.3	3692.8	3703.7	3768.1	3747.3	3644.7	3477.7
32.5°	3872.9	3845.6	3722.2	3638.2	3684.0	3776.8	3791.0	3893.6	3926.4	3818.3	3632.7
35°	4152.3	4066.1	3888.1	3797.5	3801.9	3899.1	3912.2	4062.8	4159.9	3977.7	3752.8
37.5°	4537.6	4495.1	4205.8	3963.5	3983.1	4130.5	4168.7	4332.4	4305.1	4065.0	3889.2
40°	5382.5	5315.9	5008.1	4428.5	4156.7	4318.2	4330.2	4417.6	4419.7	4262.6	4173.0
42.5°	6533.0	6505.7	6181.5	5272.2	4498.3	4443.8	4465.6	4612.9	4777.8	4679.5	4675.2
45°	7806.9	7792.7	7448.8	6392.2	5189.3	4855.3	4882.6	5080.1	5395.6	5417.4	5556.1
47.5°	8831.8	8825.3	8627.7	7642.0	6247.0	5552.8	5561.5	5771.1	6325.6	6599.6	6821.2
50°	9766.2	9797.9	9641.8	8994.5	7687.9	6645.4	6624.7	6764.4	7655.1	8103.8	8378.8
52.5°	11065.2	11109.9	10672.2	10256.3	9199.7	8001.2	7984.8	8131.0	9253.2	9589.4	9638.5
55°	12212.4	12136.0	11790.0	11669.9	11043.3	9675.6	9671.2	9800.0	10798.8	10941.8	11032.4
57.5°	12718.9	12689.4	12856.4	13131.5	12974.3	11654.6	11644.8	11546.5	12181.8	12197.1	12475.5
60°	13038.7	13074.7	13586.7	14434.8	14826.7	13784.3	13720.9	13121.7	13502.6	13468.8	13766.8
62.5°	12798.6	12869.5	13790.8	15204.4	16213.0	15643.2	15553.7	14564.7	14631.3	14514.5	14791.8
65°	11523.6	11633.9	13143.5	15059.2	16900.7	17096.1	17005.5	15838.6	15527.5	15335.4	15181.5
67.5°	9356.9	9422.4	10998.6	13796.3	16590.7	17962.8	17944.2	16955.2	16204.2	15196.7	14002.6
69°	7732.6	7797.0	9314.3	12466.7	15908.4	18148.3	18184.3	17313.3	16075.4	14354.0	12406.7
70°	6549.4	6618.1	8031.7	11327.1	15117.0	18062.1	18126.5	17279.4	15706.5	13378.2	11006.2
72.5°	3435.1	3494.1	4944.8	7803.6	12323.7	16585.2	16780.6	15818.9	13313.8	9716.0	6507.9
75°	1079.6	1113.4	1931.0	4079.2	8437.8	12895.7	12940.5	12408.9	9454.0	5344.3	2710.3
77.5°	411.5	401.7	642.9	1503.1	4265.8	8120.1	8394.1	7754.5	4961.2	1889.5	625.5
80°	221.6	222.7	334.0	622.2	1825.1	4173.0	4404.5	3758.2	1762.9	589.4	144.1
82.5°	96.1	100.4	187.7	329.7	838.3	1539.1	1654.8	1377.6	673.5	396.2	53.5
85°	20.7	22.9	90.6	179.0	341.7	432.3	453.0	446.4	429.0	307.8	20.7
87.5°	0.0	0.0	40.4	64.4	86.2	98.2	86.2	112.4	236.9	207.4	10.9
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: P323041

CATALOG NUMBER: GLEON-SA7B-830-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7	2332.7
2.5°	2334.9	2315.2	2281.4	2244.3	2218.1	2190.8	2168.9	2159.1	2148.2	2140.6	2150.4
5°	2330.5	2292.3	2226.8	2163.5	2117.6	2080.5	2050.0	2037.9	2025.9	2017.2	2016.1
7.5°	2368.7	2315.2	2214.8	2122.0	2051.0	2000.8	1959.4	1941.9	1927.7	1921.2	1915.7
10°	2441.8	2373.1	2238.8	2117.6	2025.9	1940.8	1851.3	1782.5	1737.8	1717.0	1709.4
12.5°	2536.8	2450.6	2284.6	2140.6	2007.4	1843.6	1653.7	1490.0	1384.1	1349.2	1328.4
15°	2648.1	2541.2	2344.7	2170.0	1939.7	1640.6	1318.6	1104.7	1006.4	986.8	964.9
17.5°	2755.1	2637.2	2416.7	2175.5	1791.3	1311.0	966.0	820.9	782.7	795.7	799.0
20°	2849.0	2732.2	2487.7	2127.5	1521.6	983.5	747.7	711.7	725.9	751.0	755.4
22.5°	2943.9	2823.9	2553.2	2000.8	1176.7	746.6	673.5	682.2	696.4	721.5	725.9
25°	3059.6	2935.2	2614.3	1768.3	883.1	635.3	639.7	652.8	666.9	689.9	692.1
27.5°	3192.8	3076.0	2654.7	1466.0	654.9	584.0	598.2	617.8	632.0	653.8	658.2
30°	3369.7	3261.6	2667.8	1152.7	549.1	538.1	544.7	568.7	589.4	609.1	612.4
32.5°	3535.6	3445.0	2624.1	870.0	508.7	495.6	495.6	509.8	533.8	552.3	556.7
35°	3688.4	3629.4	2484.4	636.4	478.1	456.3	445.4	445.4	460.6	475.9	480.3
37.5°	3890.3	3888.1	2258.4	507.6	448.6	423.5	400.6	383.1	377.7	381.0	383.1
40°	4236.4	4239.6	1963.7	455.2	423.5	389.7	354.8	323.1	293.6	283.8	282.7
42.5°	4776.7	4727.6	1654.8	430.1	401.7	354.8	302.4	259.8	213.9	199.8	198.7
45°	5634.6	5343.2	1327.3	407.2	378.8	315.5	250.0	192.1	155.0	144.1	144.1
47.5°	6884.5	6152.0	1028.3	382.0	348.2	270.7	188.8	138.6	113.5	108.1	109.2
50°	8176.9	6944.5	788.1	350.4	311.1	223.8	139.7	100.4	86.2	86.2	87.3
52.5°	9323.0	7525.2	614.5	316.6	265.2	175.7	105.9	78.6	72.0	71.0	72.0
55°	10396.0	7899.6	470.5	277.3	210.7	131.0	80.8	64.4	60.0	57.9	56.8
57.5°	11430.8	8085.2	352.6	223.8	152.8	95.0	64.4	54.6	50.2	46.9	45.8
60°	12119.6	7934.6	242.3	164.8	105.9	68.8	53.5	46.9	41.5	38.2	37.1
62.5°	12508.2	7523.0	156.1	119.0	75.3	51.3	42.6	39.3	31.7	28.4	28.4
65°	12351.0	6844.1	109.2	85.1	54.6	38.2	31.7	31.7	22.9	18.6	17.5
67.5°	10945.1	5782.0	83.0	63.3	39.3	28.4	24.0	27.3	14.2	8.7	8.7
69°	9416.9	4792.0	71.0	52.4	32.7	22.9	20.7	25.1	9.8	6.5	5.5
70°	8184.5	4133.7	64.4	45.8	27.3	19.6	18.6	24.0	9.8	5.5	4.4
72.5°	4896.7	2305.4	49.1	32.7	17.5	15.3	15.3	27.3	9.8	5.5	4.4
75°	1979.0	812.1	36.0	22.9	13.1	13.1	18.6	34.9	8.7	4.4	3.3
77.5°	448.6	177.9	20.7	14.2	8.7	13.1	21.8	27.3	5.5	2.2	0.0
80°	109.2	43.7	13.1	8.7	5.5	9.8	16.4	15.3	1.1	0.0	0.0
82.5°	36.0	15.3	5.5	4.4	1.1	3.3	7.6	4.4	0.0	0.0	0.0
85°	15.3	8.7	2.2	1.1	0.0	0.0	1.1	0.0	0.0	0.0	0.0
87.5°	9.8	3.3	0.0	0.0	0.0	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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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)