

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: P319832

Luminaire Tested: **GLEON-SA8A-830-U-SL3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P319832  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-22)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA8A-830-U-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29681 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G5

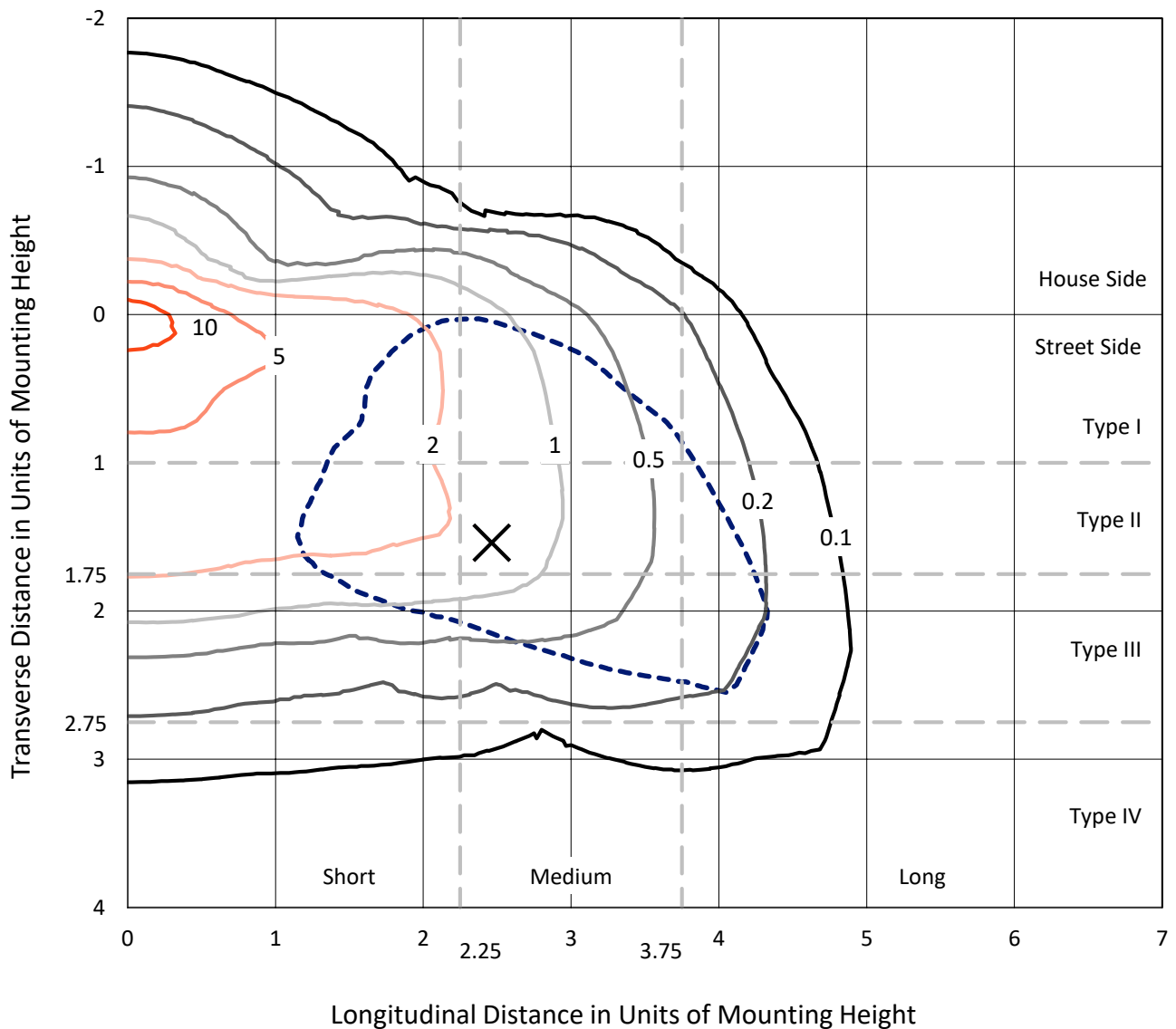
Input Watts (W): 257  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

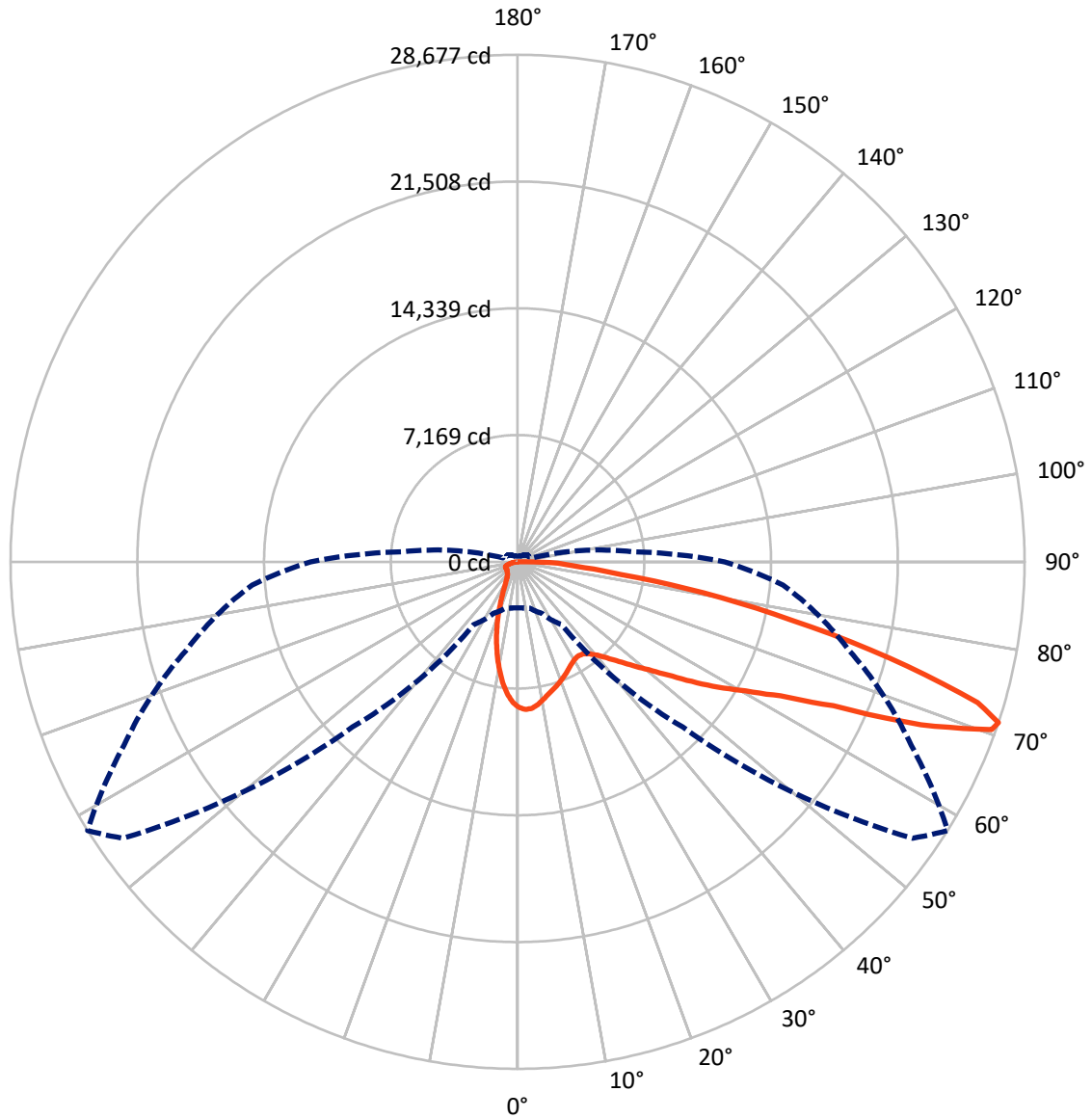
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4437.5	0.0	4437.5
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	25243.5	0.0	25243.5
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	29681.0	0.0	29681.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	709.5	2.4
10°-20°	1577.5	5.3
20°-30°	2004.9	6.8
30°-40°	2553.8	8.6
40°-50°	3621.5	12.2
50°-60°	5604.4	18.9
60°-70°	7629.6	25.7
70°-80°	5089.9	17.1
80°-90°	889.9	3.0
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°	29681.0	100.0
0°-180°	29681.0	100.0

**Coefficient of Utilization**

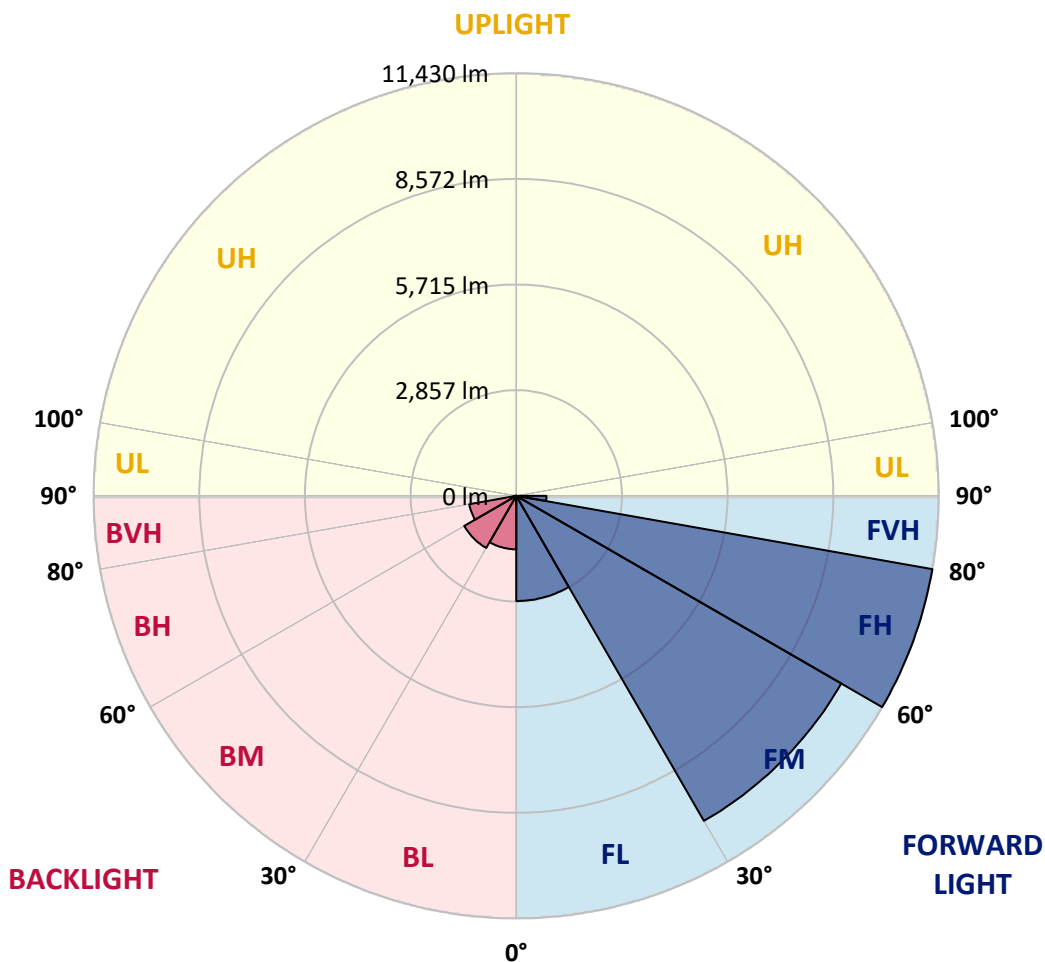


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2845.4	9.6			
FM (30°-60°)	10152.3	34.2			
FH (60°-80°)	11429.8	38.5			G4/12000
FVH (80°-90°)	815.9	2.7			G5
BL (0°-30°)	1446.5	4.9	B3/2500		
BM (30°-60°)	1627.4	5.5	B2/2500		
BH (60°-80°)	1289.7	4.3	B3/2500		G3/2500
BVH (80°-90°)	73.9	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6
2.5°	8441.8	8430.4	8434.5	8426.3	8406.6	8387.0	8358.0	8363.2	8322.9	8262.9	8188.5
5°	8282.6	8278.4	8309.4	8327.0	8341.5	8330.1	8321.8	8332.2	8273.2	8190.5	8061.3
7.5°	7948.6	7903.1	7942.4	8001.3	8057.2	8099.6	8155.4	8162.6	8125.4	8038.6	7869.0
10°	7474.0	7430.6	7488.5	7580.5	7692.2	7793.5	7906.2	7926.9	7934.1	7855.6	7649.8
12.5°	6981.9	6948.8	7006.7	7136.0	7321.0	7477.1	7657.0	7688.1	7752.2	7699.4	7447.2
15°	6541.5	6529.1	6599.4	6726.5	6939.5	7178.4	7437.9	7494.7	7603.3	7585.7	7289.0
17.5°	6161.0	6157.9	6211.7	6345.0	6580.8	6882.7	7219.7	7315.9	7477.1	7497.8	7158.7
20°	5877.7	5871.5	5908.7	6006.9	6249.9	6592.1	6984.0	7116.3	7348.9	7421.3	7024.3
22.5°	5725.7	5724.7	5725.7	5772.3	5970.8	6289.2	6754.5	6915.7	7223.8	7360.3	6875.4
25°	5699.9	5696.8	5674.0	5668.9	5781.6	6035.9	6527.0	6704.8	7104.9	7317.9	6733.8
27.5°	5767.1	5771.2	5741.2	5692.6	5715.4	5869.4	6329.5	6519.8	7009.8	7309.7	6635.6
30°	5906.7	5904.6	5878.7	5828.1	5783.6	5807.4	6188.9	6379.1	6945.7	7345.8	6568.4
32.5°	6060.7	6072.1	6066.9	6039.0	5972.8	5877.7	6146.5	6332.6	6927.1	7432.7	6539.4
35°	6245.8	6258.2	6295.4	6317.1	6239.6	6086.6	6237.5	6398.8	6980.9	7596.0	6585.9
37.5°	6421.5	6453.6	6558.0	6650.0	6583.9	6413.3	6479.4	6594.2	7147.3	7853.5	6711.0
40°	6624.2	6652.1	6822.7	7018.1	7007.8	6831.0	6869.2	6945.7	7441.0	8222.6	6937.5
42.5°	6823.7	6879.6	7126.7	7403.7	7483.4	7327.2	7388.2	7428.6	7854.5	8711.6	7332.4
45°	7089.4	7149.4	7492.7	7826.6	8012.7	7924.8	8022.0	8037.5	8374.6	9377.5	7906.2
47.5°	7491.6	7559.9	7960.0	8310.5	8594.8	8604.1	8764.3	8758.1	9023.9	10139.4	8628.9
50°	8118.2	8216.4	8544.1	8871.9	9217.2	9409.5	9623.5	9593.5	9802.4	10951.0	9461.2
52.5°	8939.1	8984.6	9227.5	9469.5	9898.5	10329.7	10636.7	10609.9	10685.3	11785.4	10406.2
55°	9790.0	9824.1	9924.4	10056.7	10633.6	11336.7	11986.0	11943.6	11752.3	12651.8	11339.8
57.5°	10555.1	10624.3	10693.6	10748.4	11373.9	12389.2	13366.2	13369.3	12910.3	13586.4	12304.4
60°	10674.0	10735.0	11193.0	11625.1	12640.4	13793.2	14843.7	14812.7	14108.6	14600.7	13379.7
62.5°	9435.3	9572.9	10337.9	11487.6	13860.4	16361.4	16728.5	16690.2	15541.5	15850.7	14631.7
65°	6761.7	6917.8	7841.1	9568.7	13269.0	19191.2	20130.0	19615.1	17495.6	17388.1	16097.8
67.5°	3900.9	3938.1	4338.2	5725.7	10103.2	19339.1	25319.1	24598.5	20530.1	19132.3	16815.3
70°	2884.6	2883.5	2978.7	3523.5	5467.3	15783.5	27787.0	28433.2	23724.8	19706.1	15801.1
71°	2608.5	2611.6	2718.1	3207.2	4330.0	13211.1	27262.8	28677.2	24566.4	19422.8	15067.0
72.5°	2231.2	2241.5	2389.3	2876.3	3642.4	9110.7	25004.8	27213.2	24965.5	18723.9	13918.3
75°	1692.5	1716.3	1921.0	2424.5	3329.2	4620.5	18351.7	21730.5	22178.1	16521.7	10342.1
77.5°	1207.6	1234.5	1466.1	2038.8	3164.8	3482.2	12289.9	15850.7	16321.1	10588.1	4664.9
80°	763.0	795.1	969.8	1622.2	2973.5	3306.4	7723.2	10654.3	8899.8	3388.1	1186.9
82.5°	447.7	472.5	601.7	1059.7	2428.6	3184.4	4544.0	5905.6	3463.6	1023.6	539.7
85°	259.5	270.9	375.3	675.1	1763.8	3005.5	3338.5	3301.2	1503.3	500.4	255.4
87.5°	121.0	134.4	222.3	352.6	979.1	2178.4	2638.5	2279.7	934.6	234.7	119.9
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: P319832  
 CATALOG NUMBER: GLEON-SA8A-830-U-SL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6	8223.6
2.5°	8152.3	8134.7	8061.3	7996.2	7927.9	7839.0	7740.8	7728.4	7668.4	7679.8	7659.1
5°	7991.0	7946.5	7769.7	7609.5	7420.3	7250.7	7066.7	6981.9	6859.9	6851.6	6820.6
7.5°	7760.4	7677.7	7403.7	7099.8	6795.8	6506.3	6219.9	6031.8	5839.5	5757.8	5750.5
10°	7500.9	7360.3	6957.1	6507.4	6069.0	5646.1	5236.7	4933.8	4660.8	4531.6	4526.4
12.5°	7254.9	7047.0	6493.9	5881.8	5282.2	4734.2	4172.8	3774.8	3432.5	3317.8	3269.2
15°	7046.0	6753.4	6043.1	5260.5	4532.6	3771.7	3132.7	2714.0	2397.6	2288.0	2267.3
17.5°	6843.4	6467.0	5581.0	4632.9	3753.0	2916.6	2276.6	1965.4	1796.9	1752.5	1751.4
20°	6641.8	6172.4	5098.1	3990.8	2999.3	2181.5	1750.4	1610.8	1553.9	1548.8	1540.5
22.5°	6413.3	5860.1	4590.5	3346.7	2340.7	1715.2	1487.8	1431.9	1424.7	1443.3	1443.3
25°	6199.2	5550.0	4075.6	2716.0	1820.7	1430.9	1328.6	1317.2	1336.8	1369.9	1373.0
27.5°	5999.7	5251.2	3573.1	2155.7	1458.8	1260.3	1217.9	1231.4	1266.5	1304.8	1305.8
30°	5835.3	4968.9	3085.2	1698.7	1232.4	1133.2	1125.9	1152.8	1191.0	1221.0	1228.3
32.5°	5708.1	4728.0	2613.7	1365.8	1084.6	1038.0	1044.2	1067.0	1090.8	1107.3	1118.7
35°	5649.2	4521.2	2178.4	1151.8	990.5	964.6	972.9	985.3	995.6	1008.1	1017.4
37.5°	5659.6	4361.0	1789.7	1018.4	927.4	914.0	914.0	914.0	914.0	920.2	921.2
40°	5755.7	4269.0	1473.3	933.6	885.0	870.5	859.2	848.8	840.6	844.7	842.6
42.5°	6001.8	4260.7	1241.7	879.8	850.9	827.1	804.4	789.9	779.6	783.7	785.8
45°	6419.5	4364.1	1085.6	841.6	818.8	782.7	753.7	738.2	731.0	744.4	746.5
47.5°	6960.2	4589.5	990.5	813.7	788.9	741.3	710.3	695.8	697.9	717.5	722.7
50°	7657.0	4955.5	945.0	796.1	768.2	706.2	674.1	661.7	667.9	695.8	702.0
52.5°	8422.1	5482.8	950.2	790.9	754.7	680.3	646.2	631.7	642.1	667.9	673.1
55°	9305.1	6116.5	1036.0	798.2	735.1	663.8	623.4	598.6	606.9	630.7	634.8
57.5°	10286.2	6842.3	1208.6	796.1	710.3	648.3	599.7	562.4	568.6	583.1	587.3
60°	11307.7	7719.1	1476.4	802.3	698.9	629.6	567.6	521.1	519.0	531.4	533.5
62.5°	12533.9	8733.3	1782.4	806.4	706.2	605.9	525.2	479.7	473.5	476.6	478.7
65°	13797.4	9467.4	1667.7	789.9	728.9	586.2	488.0	439.4	428.0	426.0	427.0
67.5°	13836.7	8680.6	1169.3	756.8	738.2	575.9	460.1	405.3	386.7	379.4	378.4
70°	12408.8	7052.2	910.9	721.7	701.0	559.3	434.2	377.4	349.5	338.1	337.1
71°	11712.0	6491.8	863.3	704.1	673.1	542.8	422.9	365.0	336.0	323.6	321.5
72.5°	10619.2	5819.8	805.4	676.2	619.3	500.4	401.2	347.4	317.4	302.9	299.8
75°	7620.9	3805.8	691.7	602.8	512.8	399.1	351.5	312.2	286.4	268.8	266.7
77.5°	2936.3	1514.7	523.2	501.4	392.9	312.2	289.5	269.8	251.2	233.7	232.6
80°	907.8	677.2	381.5	377.4	284.3	232.6	225.4	220.2	213.0	194.4	190.2
82.5°	484.9	388.7	262.6	244.0	186.1	155.1	163.4	165.4	166.5	146.8	144.7
85°	231.6	205.7	147.8	138.5	108.6	86.8	100.3	108.6	109.6	89.9	83.7
87.5°	110.6	107.5	69.3	52.7	40.3	28.9	35.2	43.4	47.6	34.1	30.0
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**

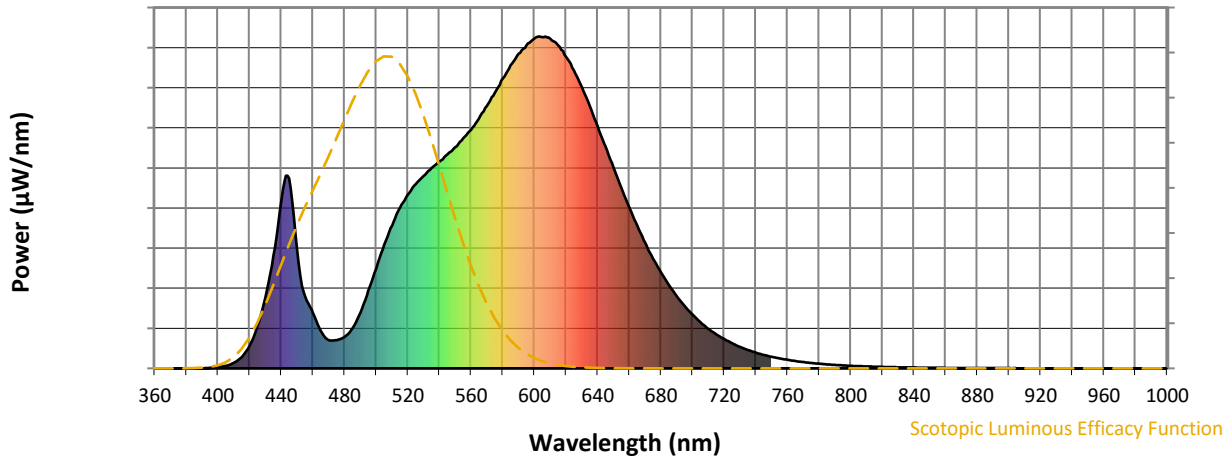


**Photopic Lumens: NR**

$\lambda$ (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**

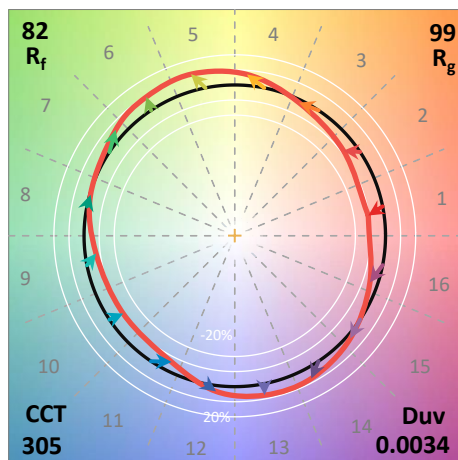
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	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)