

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: P321772

Luminaire Tested: **GLEON-SA8C-830-U-T3R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321772
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA8C-830-U-T3R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34645 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

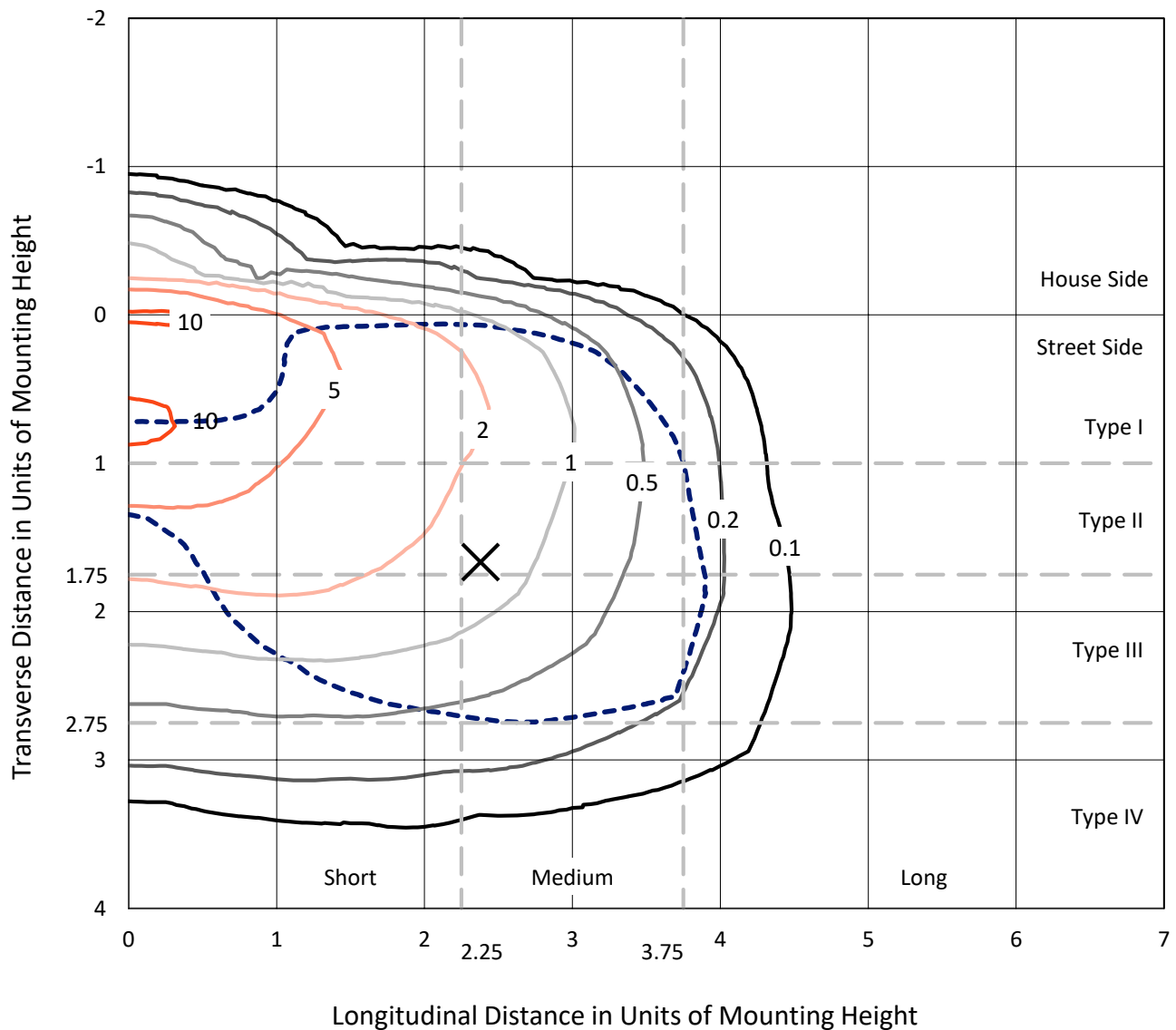
Input Watts (W): 445
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P321772
 CATALOG NUMBER: GLEON-SA8C-830-U-T3R-HSS

Iso-Footcandle Lines of Horizontal Illumination

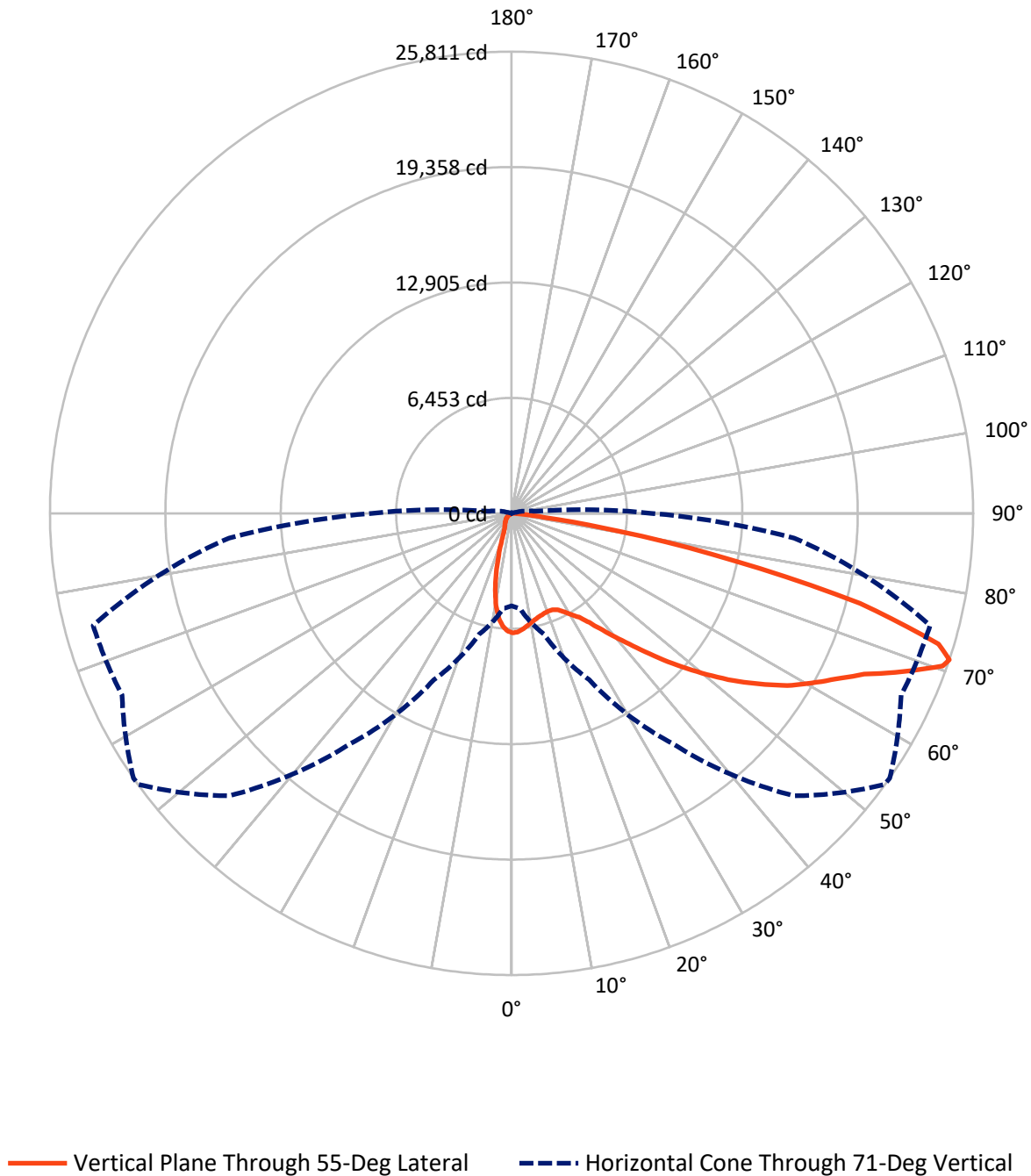
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11 fc
 Type III - Medium - N/A

REPORT NUMBER: P321772
CATALOG NUMBER: GLEON-SA8C-830-U-T3R-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P321772

CATALOG NUMBER: GLEON-SA8C-830-U-T3R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2742.9	0.0	2742.9
	% Fixture	7.9	0.0	7.9
Street Side	Lumens	31902.1	0.0	31902.1
	% Fixture	92.1	0.0	92.1
Total	Lumens	34645.0	0.0	34645.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	569.7	1.6
10°-20°	1286.1	3.7
20°-30°	2066.8	6.0
30°-40°	3511.6	10.1
40°-50°	5450.4	15.7
50°-60°	7328.0	21.2
60°-70°	8964.5	25.9
70°-80°	5241.3	15.1
80°-90°	226.6	0.7
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°	34645.0	100.0
0°-180°	34645.0	100.0

Coefficient of Utilization



REPORT NUMBER: P321772

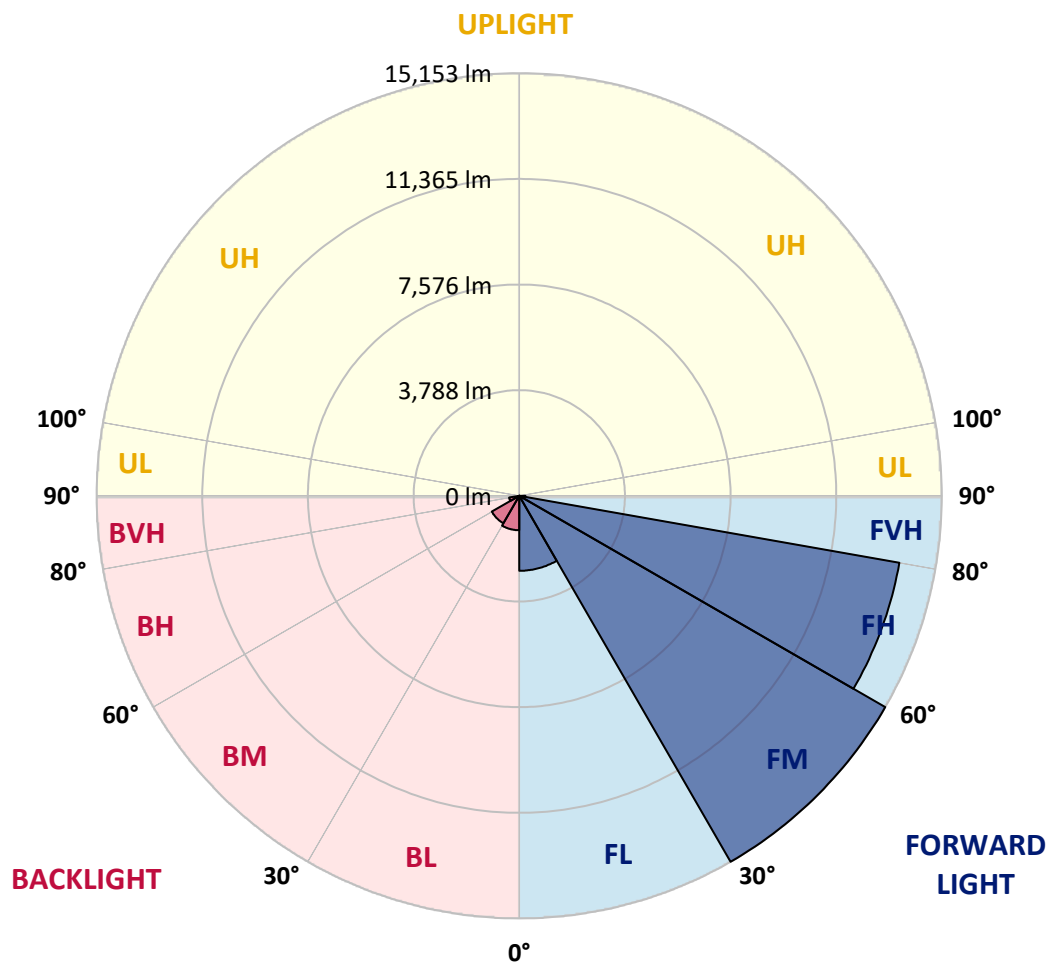
CATALOG NUMBER: GLEON-SA8C-830-U-T3R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2688.0	7.8			
FM	(30°-60°)	15152.7	43.7			
FH	(60°-80°)	13838.4	39.9			G5
FVH	(80°-90°)	223.0	0.6			G2/225
BL	(0°-30°)	1234.6	3.6	B3/2500		
BM	(30°-60°)	1137.3	3.3	B2/2500		
BH	(60°-80°)	367.5	1.1	B1/500		G1/500
BVH	(80°-90°)	3.6	0.0			G0/10
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





REPORT NUMBER: P321772

CATALOG NUMBER: GLEON-SA8C-830-U-T3R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4
2.5°	6485.4	6493.2	6521.2	6533.6	6563.2	6613.0	6637.9	6639.4	6679.9	6695.4	6707.9
5°	6026.5	6073.2	6119.8	6169.6	6259.8	6379.6	6497.8	6508.7	6639.4	6735.9	6787.2
7.5°	5631.4	5673.4	5729.4	5808.7	5936.3	6124.5	6322.1	6345.4	6592.7	6812.1	6927.2
10°	5225.3	5259.6	5340.5	5457.1	5632.9	5884.9	6150.9	6189.8	6550.7	6914.8	7117.0
12.5°	4791.3	4811.6	4909.6	5077.6	5335.8	5656.3	6006.3	6057.6	6524.3	7033.0	7341.0
15°	4461.5	4470.9	4564.2	4738.4	5034.0	5450.9	5894.3	5956.5	6530.5	7174.5	7585.2
17.5°	4377.5	4382.2	4432.0	4551.8	4813.1	5267.3	5805.6	5881.8	6549.2	7313.0	7831.0
20°	4718.2	4685.5	4634.2	4615.5	4727.5	5156.9	5752.7	5838.3	6574.1	7435.9	8051.9
22.5°	5653.1	5556.7	5343.6	5058.9	4886.2	5164.7	5766.7	5852.3	6653.4	7586.8	8307.0
25°	7040.8	6907.0	6544.5	5984.5	5446.2	5388.7	5883.4	5970.5	6807.4	7767.2	8551.3
27.5°	8619.7	8487.5	8044.1	7244.5	6326.7	5832.0	6150.9	6231.8	7036.1	7927.5	8737.9
30°	10131.8	10094.5	9571.8	8663.3	7434.3	6550.7	6496.3	6564.7	7205.7	8023.9	8885.7
32.5°	11413.6	11354.5	10934.5	10050.9	8702.2	7414.1	6902.3	6922.5	7333.2	8148.4	9078.6
35°	12602.1	12529.0	12160.3	11325.0	10002.7	8468.8	7527.7	7498.1	7611.7	8398.8	9358.6
37.5°	13639.7	13706.6	13297.5	12502.6	11169.4	9565.5	8370.8	8282.2	8047.3	8806.4	9764.7
40°	14507.8	14507.8	14294.6	13631.9	12429.4	10699.6	9324.4	9207.7	8702.2	9434.9	10279.6
42.5°	14820.4	14887.3	14966.7	14591.8	13557.3	11878.8	10386.9	10265.6	9624.7	10326.2	10929.8
45°	14839.1	14944.9	15350.9	15349.4	14576.2	13050.1	11584.7	11527.2	10806.9	11471.2	11735.6
47.5°	14576.2	14708.4	15377.4	15756.9	15383.6	14140.6	12894.6	12823.0	12196.1	12874.4	12578.8
50°	14170.2	14316.4	15094.2	15917.2	15932.7	15089.6	14274.4	14167.1	13725.3	14478.2	13449.9
52.5°	13443.7	13726.8	14840.7	15954.5	16293.6	15909.4	15587.4	15540.7	15436.5	16022.9	14143.7
55°	11889.6	12203.9	14204.4	15966.9	16628.1	16635.9	16817.9	16830.3	17040.3	17466.6	14660.2
57.5°	11155.4	11332.7	13093.7	16026.1	17124.3	17460.3	18071.7	18168.2	18493.3	18837.1	15249.8
60°	10693.4	10903.4	12546.1	15945.2	17903.7	18541.5	19233.8	19266.4	19614.9	20251.1	16047.8
62.5°	10324.7	10531.6	12200.8	15634.0	18779.5	19842.0	20369.4	20372.5	20633.8	21935.9	16954.8
65°	9414.6	9588.9	11502.3	15284.0	19358.2	21128.5	21688.5	21668.3	21881.4	23712.4	18007.9
67.5°	8098.6	8232.4	10075.8	13957.1	19140.4	22298.3	23679.7	23612.8	23354.6	25247.8	18421.7
70°	6261.4	6309.6	7941.5	11631.4	17099.4	22747.9	25604.0	25569.8	24258.4	24972.5	16905.0
71°	5175.6	5334.2	6998.8	10265.6	15732.0	22332.6	25790.7	25810.9	24031.3	24222.6	15861.2
72.5°	3005.5	3140.8	5072.9	7883.9	13356.6	20599.6	24823.1	24969.3	22970.4	22032.3	13547.9
75°	644.0	689.1	1880.8	3815.9	7347.2	14437.8	19593.1	20114.2	18722.0	14988.5	8165.5
77.5°	448.0	483.8	805.8	1731.4	2428.3	7134.1	12171.2	12759.2	11184.9	5632.9	2613.5
80°	354.7	395.1	628.5	855.6	656.5	2300.8	5701.4	6060.7	3730.4	1256.9	440.2
82.5°	197.6	234.9	490.0	462.0	252.0	437.1	1596.1	1804.5	746.7	253.6	104.2
85°	57.6	70.0	315.8	336.0	107.3	84.0	272.2	337.6	141.6	66.9	46.7
87.5°	0.0	0.0	152.5	129.1	31.1	12.4	24.9	28.0	28.0	28.0	31.1
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: P321772

CATALOG NUMBER: GLEON-SA8C-830-U-T3R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4	6681.4
2.5°	6707.9	6718.7	6679.9	6628.5	6574.1	6507.2	6437.2	6382.7	6381.2	6354.7	6328.3
5°	6790.3	6784.1	6676.7	6513.4	6320.5	6119.8	5928.5	5712.3	5640.7	5552.0	5522.5
7.5°	6942.8	6899.2	6672.1	6314.3	5891.2	5471.1	5037.1	4600.0	4413.3	4245.3	4215.7
10°	7134.1	7051.7	6642.5	6015.6	5239.3	4464.6	3809.7	3215.5	2954.1	2753.5	2744.1
12.5°	7333.2	7207.2	6560.1	5564.5	4385.3	3296.4	2541.9	1957.0	1739.2	1599.2	1611.6
15°	7541.7	7353.4	6382.7	4956.2	3413.0	2237.0	1561.8	1218.1	1130.9	1095.2	1104.5
17.5°	7754.8	7454.6	6135.4	4223.5	2453.2	1443.6	1081.2	984.7	984.7	992.5	995.6
20°	7939.9	7509.0	5771.4	3402.2	1663.0	1051.6	945.8	931.8	939.6	952.0	953.6
22.5°	8123.5	7512.1	5296.9	2569.9	1163.6	920.9	900.7	894.5	899.2	913.2	914.7
25°	8272.8	7474.8	4702.7	1827.9	928.7	868.0	858.7	855.6	858.7	875.8	875.8
27.5°	8333.5	7339.4	3977.7	1284.9	832.3	808.9	805.8	808.9	813.6	826.0	827.6
30°	8339.7	7103.0	3187.5	930.3	754.5	729.6	735.8	746.7	742.0	738.9	742.0
32.5°	8355.3	6829.2	2417.4	765.4	689.1	650.3	642.5	642.5	623.8	612.9	606.7
35°	8406.6	6507.2	1753.2	687.6	622.3	577.1	547.6	513.4	477.6	458.9	454.2
37.5°	8487.5	6169.6	1255.4	636.3	563.1	511.8	455.8	395.1	343.8	329.8	329.8
40°	8635.3	5821.2	928.7	595.8	516.5	452.7	368.7	289.3	242.7	234.9	234.9
42.5°	8868.6	5454.0	740.5	560.0	476.0	392.0	281.6	210.0	175.8	171.1	169.6
45°	9111.3	5049.6	647.1	525.8	432.5	322.0	208.5	155.6	135.3	130.7	130.7
47.5°	9354.0	4618.7	602.0	493.1	390.5	250.5	155.6	122.9	113.6	113.6	115.1
50°	9559.3	4169.1	569.4	457.4	336.0	189.8	122.9	104.2	101.1	107.3	108.9
52.5°	9610.7	3727.3	528.9	412.2	269.1	144.7	101.1	91.8	91.8	91.8	91.8
55°	9579.5	3385.0	476.0	356.2	199.1	115.1	87.1	80.9	79.3	79.3	79.3
57.5°	9685.3	3182.8	381.1	276.9	143.1	93.3	76.2	71.6	68.4	66.9	66.9
60°	9898.4	3050.6	272.2	199.1	107.3	77.8	65.3	60.7	56.0	52.9	52.9
62.5°	10181.6	2935.5	202.2	147.8	82.4	62.2	54.4	49.8	43.6	40.4	40.4
65°	10399.4	2730.1	154.0	110.4	62.2	49.8	42.0	40.4	31.1	28.0	26.4
67.5°	10066.5	2279.0	124.5	80.9	46.7	38.9	32.7	31.1	18.7	15.6	15.6
70°	8633.7	1586.7	99.6	59.1	34.2	31.1	26.4	20.2	14.0	12.4	12.4
71°	7829.5	1325.4	90.2	49.8	29.6	29.6	24.9	17.1	12.4	10.9	10.9
72.5°	6504.1	941.2	76.2	38.9	26.4	31.1	26.4	15.6	12.4	10.9	9.3
75°	3775.5	393.6	52.9	26.4	20.2	37.3	34.2	14.0	9.3	7.8	7.8
77.5°	1135.6	144.7	29.6	17.1	15.6	32.7	38.9	12.4	4.7	1.6	1.6
80°	206.9	62.2	18.7	10.9	10.9	20.2	29.6	6.2	0.0	0.0	0.0
82.5°	73.1	31.1	10.9	6.2	4.7	9.3	14.0	0.0	0.0	0.0	0.0
85°	42.0	21.8	6.2	3.1	0.0	1.6	3.1	0.0	0.0	0.0	0.0
87.5°	28.0	6.2	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

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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

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			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength



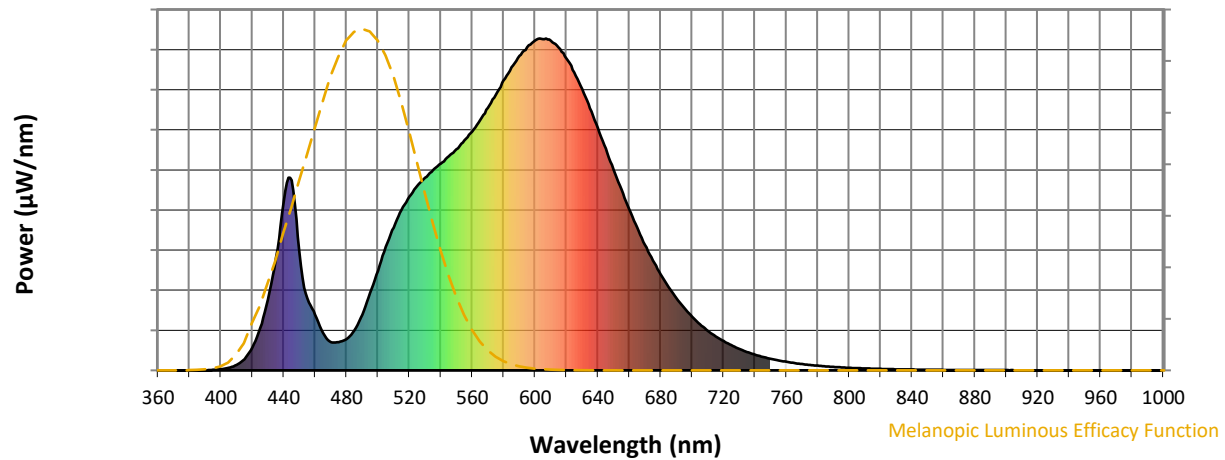
Scotopic Lumens: NR

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 ^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			

REPORT NUMBER: SP1-2408-195-9

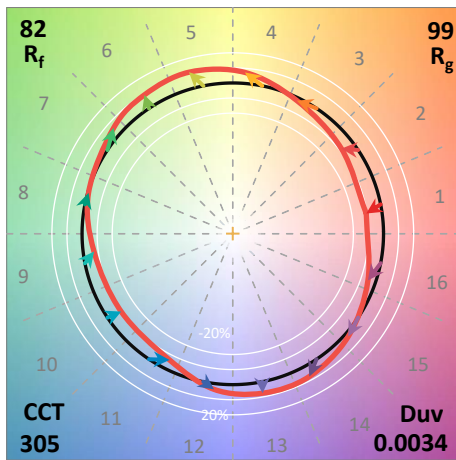
TM-30-18

Summary

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



Color Vector Graphics

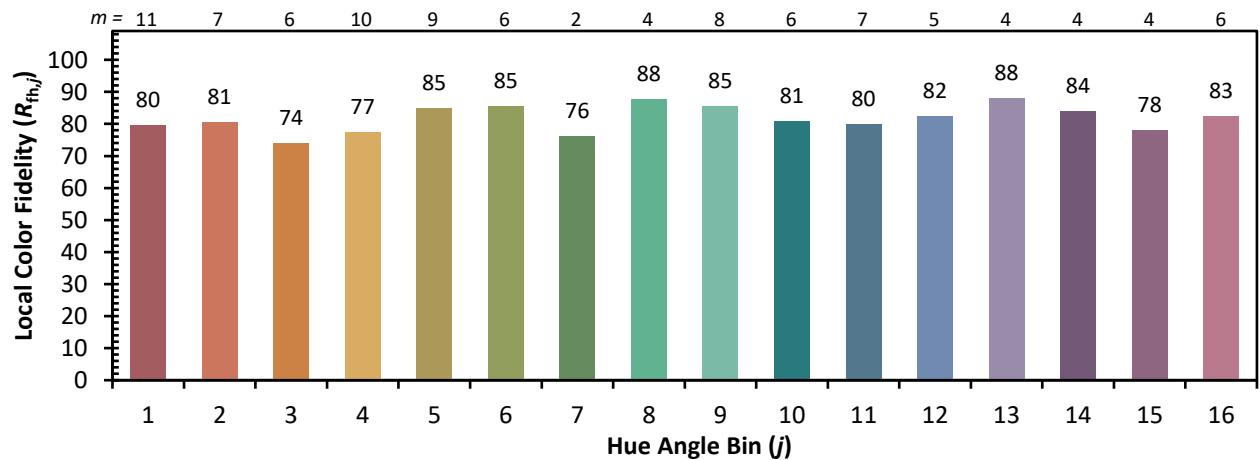
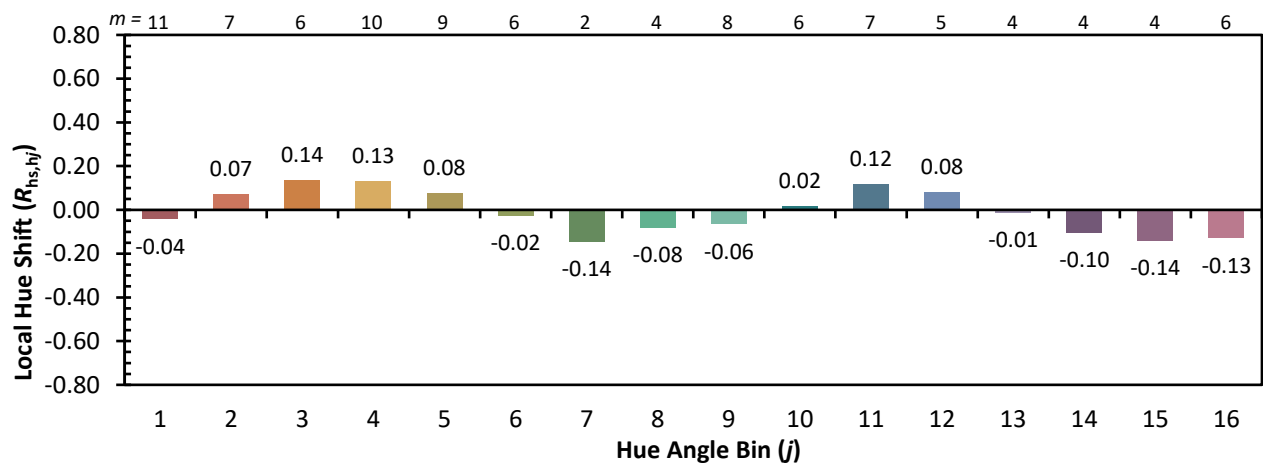
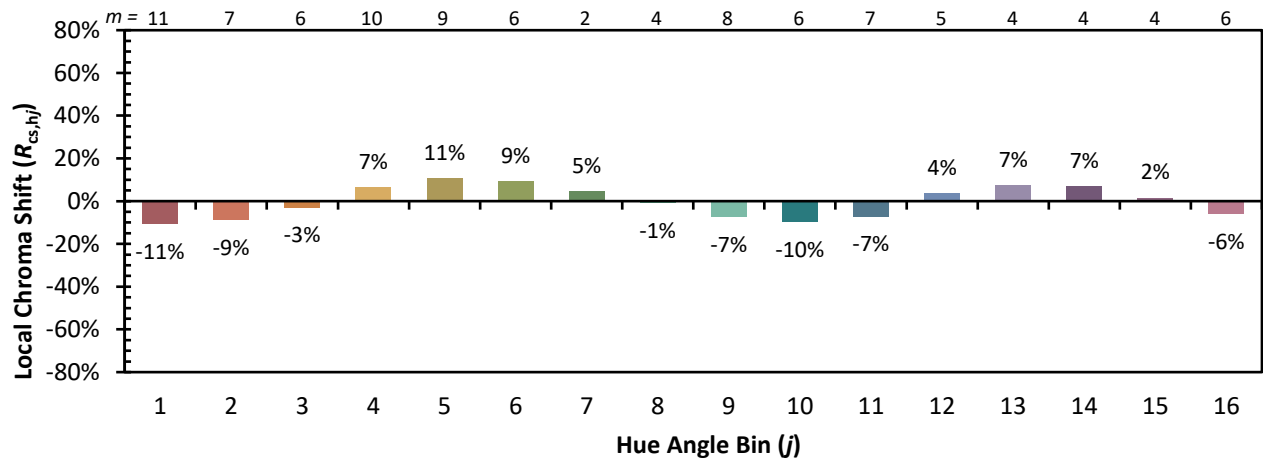


Individual Sample Fidelity Index ($R_{f,i}$)

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)