

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: P322743

Luminaire Tested: **GLEON-SA9D-830-U-T4FT-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322743
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GLEON-SA9D-830-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39143 lumens
Efficiency: N/A
Efficacy: 68.1 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

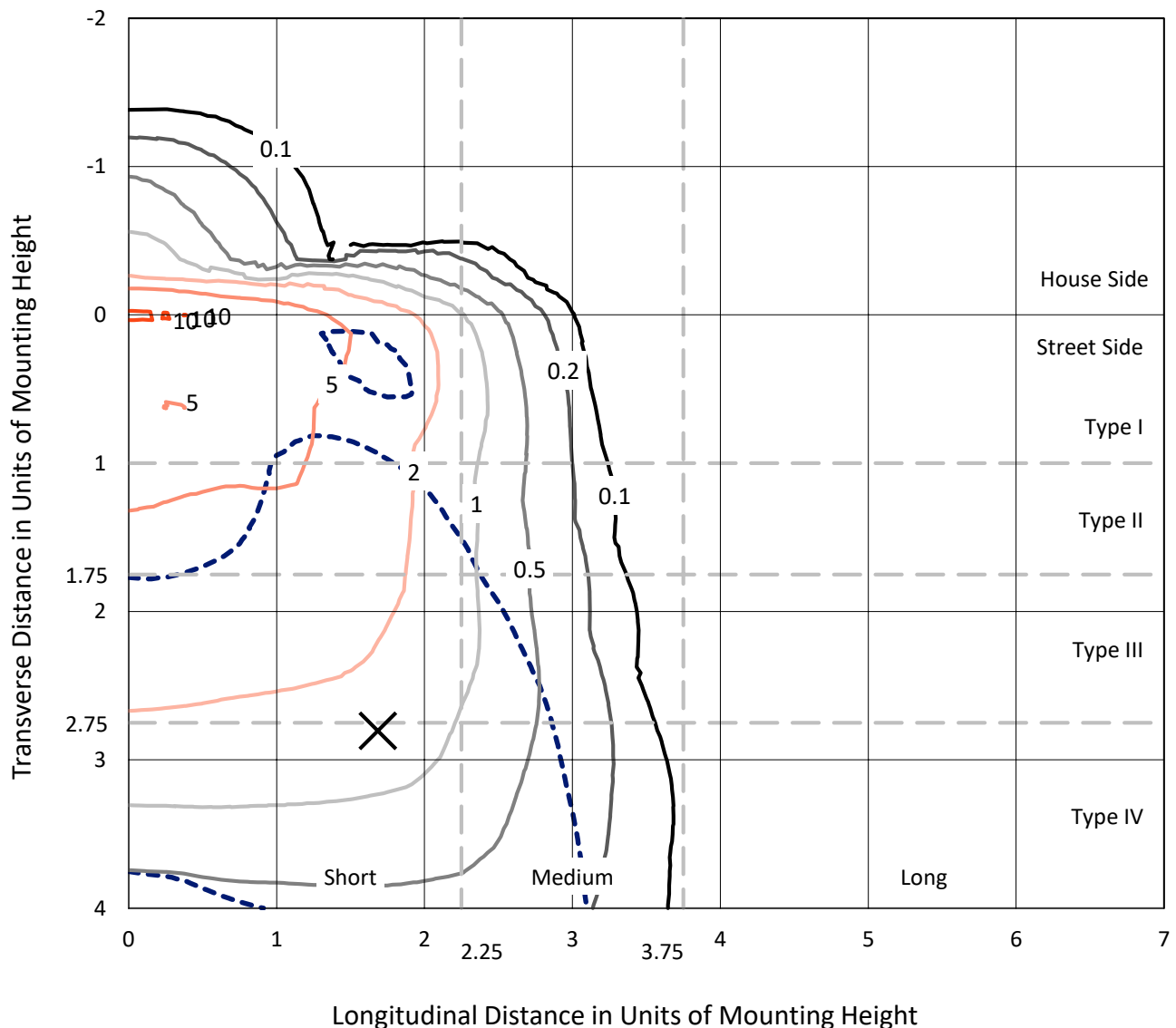
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P322743
 CATALOG NUMBER: GLEON-SA9D-830-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

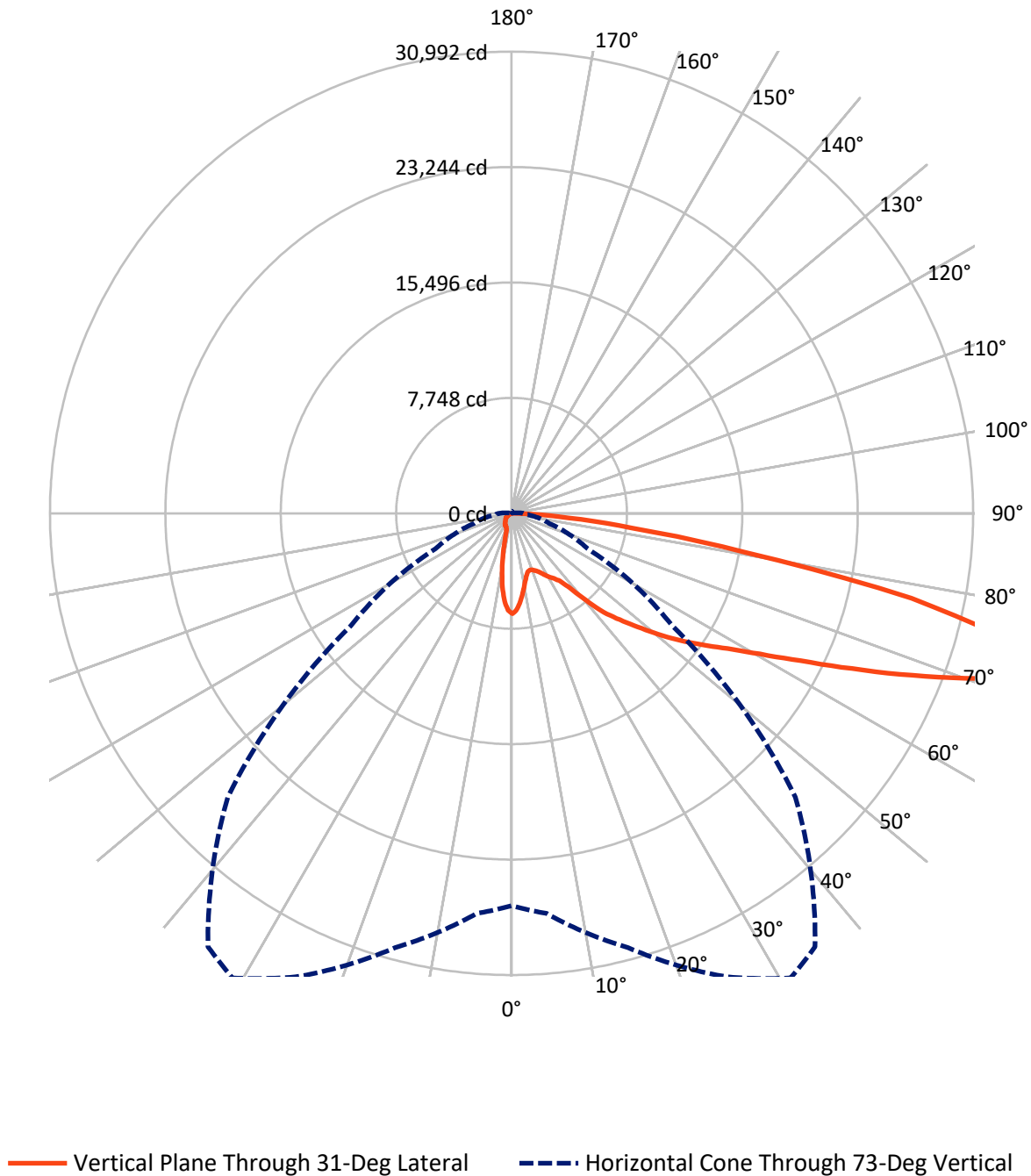
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P322743
CATALOG NUMBER: GLEON-SA9D-830-U-T4FT-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P322743
 CATALOG NUMBER: GLEON-SA9D-830-U-T4FT-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3568.0	0.0	3568.0
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	35575.0	0.0	35575.0
	% Fixture	90.9	0.0	90.9
Total	Lumens	39143.0	0.0	39143.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	558.4	1.4
10°-20°	1212.4	3.1
20°-30°	1816.6	4.6
30°-40°	2890.2	7.4
40°-50°	5161.1	13.2
50°-60°	8008.5	20.5
60°-70°	10646.2	27.2
70°-80°	8008.1	20.5
80°-90°	841.5	2.1
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°	39143.0	100.0
0°-180°	39143.0	100.0

Coefficient of Utilization



REPORT NUMBER: P322743

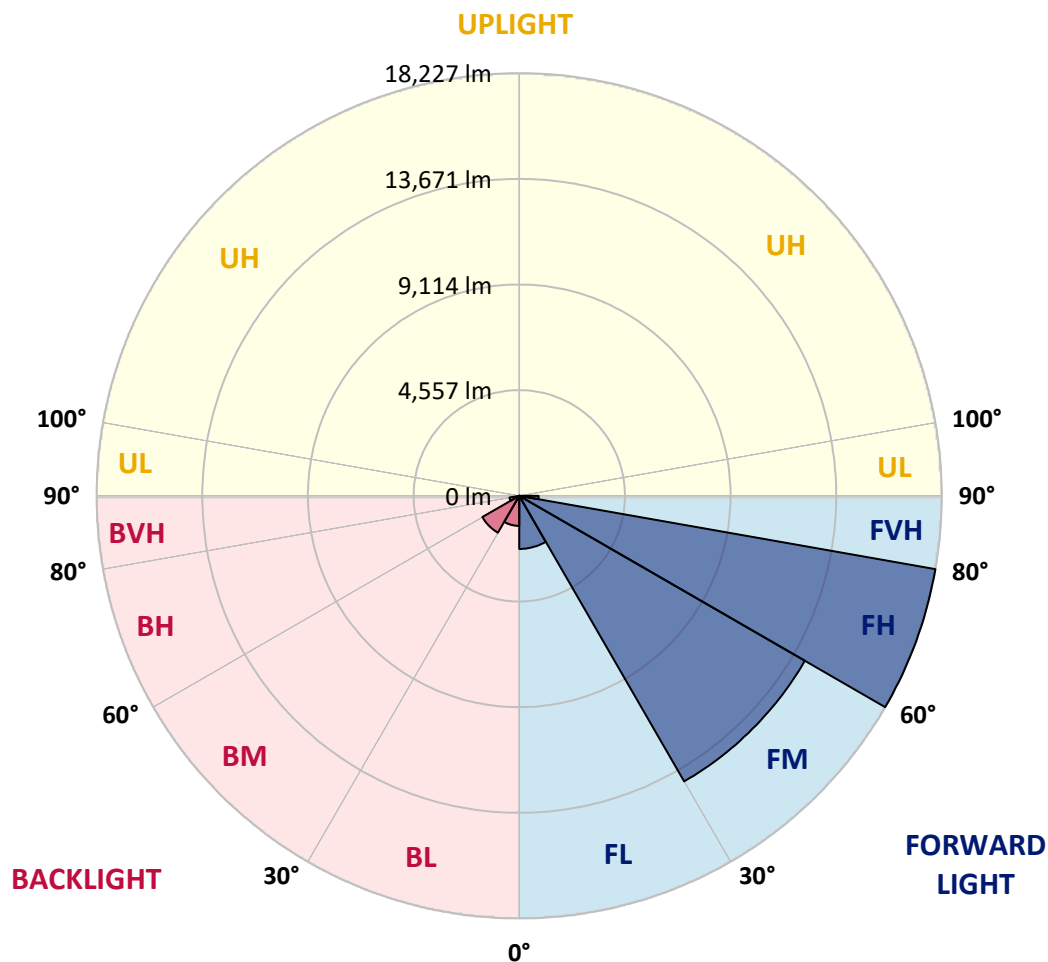
CATALOG NUMBER: GLEON-SA9D-830-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2289.9	5.9			
FM	(30°-60°)	14223.2	36.3			
FH	(60°-80°)	18227.4	46.6			G5
FVH	(80°-90°)	834.4	2.1			G5
BL	(0°-30°)	1297.5	3.3	B3/2500		
BM	(30°-60°)	1836.6	4.7	B2/2500		
BH	(60°-80°)	426.9	1.1	B1/500		G1/500
BVH	(80°-90°)	7.1	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 IV Short





REPORT NUMBER: P322743

CATALOG NUMBER: GLEON-SA9D-830-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	31°	35°	45°	55°	65°	75°	85°
0°	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6
2.5°	6382.2	6409.0	6437.7	6443.5	6491.4	6493.3	6562.2	6614.0	6665.7	6715.5	6732.7
5°	5727.1	5771.2	5822.9	5874.6	5976.1	6016.3	6184.9	6357.3	6522.0	6679.1	6755.7
7.5°	5028.0	5077.8	5150.6	5278.9	5391.9	5470.5	5736.7	6043.2	6349.6	6638.9	6805.5
10°	4390.2	4436.1	4512.7	4648.7	4823.0	4930.3	5288.5	5713.7	6163.8	6602.5	6880.2
12.5°	3984.1	4009.0	4051.1	4196.7	4353.8	4474.4	4895.8	5422.6	6010.6	6600.6	7000.9
15°	3909.4	3917.0	3882.6	3947.7	4070.3	4187.1	4614.3	5187.0	5893.8	6631.2	7157.9
17.5°	4028.1	4024.3	3909.4	3901.7	3999.4	4095.2	4476.3	5024.2	5811.4	6702.1	7361.0
20°	4208.2	4194.8	3995.6	3959.2	4062.6	4152.6	4466.8	4962.9	5780.8	6820.8	7608.1
22.5°	4447.6	4424.6	4112.4	4074.1	4185.2	4279.1	4585.5	5022.2	5807.6	6979.8	7895.4
25°	4744.5	4710.0	4313.5	4271.4	4384.4	4478.3	4798.1	5192.7	5888.0	7173.3	8259.3
27.5°	5079.7	5029.9	4635.3	4526.1	4654.5	4752.2	5081.6	5453.2	6014.4	7378.2	8705.6
30°	5395.8	5330.6	4974.4	4794.3	4951.4	5060.6	5388.1	5763.5	6217.5	7694.3	9316.6
32.5°	5713.7	5640.9	5277.0	5062.5	5204.2	5323.0	5704.1	6190.7	6598.6	8176.9	10128.8
35°	6445.4	6368.8	5922.5	5568.1	5566.2	5633.3	6146.6	6774.9	7102.4	8849.3	11098.0
37.5°	7677.0	7633.0	7207.7	6535.4	6355.4	6280.7	6750.0	7472.1	7826.4	9774.4	12191.7
40°	9025.5	8987.2	8510.2	7901.1	7627.2	7443.3	7615.7	8443.2	8849.3	10904.5	13308.4
42.5°	10548.2	10366.3	9515.8	9333.9	9088.7	8948.9	8793.7	9640.3	10105.8	12134.2	14415.5
45°	11931.2	11624.7	10521.4	10245.6	10190.1	10224.5	10310.7	11249.3	11519.4	13595.7	15518.8
47.5°	12754.8	12513.5	11666.9	11402.5	11387.2	11615.1	12266.4	13067.0	12927.2	14869.4	16489.9
50°	13538.2	13319.9	12616.9	12682.0	12752.9	13063.2	14486.4	14936.5	14212.5	16024.4	17380.6
52.5°	14172.2	13838.9	13471.2	13837.0	14185.6	14685.6	16777.2	16614.4	15124.2	16943.8	18142.9
55°	14538.1	14386.8	14564.9	14932.7	15587.7	16399.9	18939.7	18010.7	15790.8	17782.8	18650.5
57.5°	15878.9	15582.0	15936.3	16254.3	17108.6	18244.4	20791.9	19050.8	16271.5	18301.9	18767.3
60°	17501.2	17261.8	17470.6	17999.2	19152.3	20487.4	22523.5	19899.3	16522.5	18635.2	18464.7
62.5°	20083.2	19767.2	19636.9	20228.8	21757.3	23214.9	23837.5	20487.4	16466.9	18487.7	17426.5
65°	23542.5	23214.9	22632.7	23169.0	25113.1	26141.7	25306.6	20611.9	16083.8	17294.4	14802.4
67.5°	27086.0	26848.5	26350.5	27254.6	29009.1	29340.5	26860.0	20309.2	14850.3	14022.8	10458.2
70°	29426.7	29325.2	29648.9	31648.6	33213.5	33117.7	28285.1	18683.1	11574.9	8623.2	5173.6
72.5°	27739.2	28225.7	30616.1	34242.0	36153.6	35372.1	27553.4	14346.5	6615.9	3317.5	1495.9
73°	26340.9	26963.4	30181.3	34339.7	36385.4	35529.2	26938.5	13168.5	5639.0	2618.4	1133.9
75°	18324.9	19089.1	24986.7	31981.8	35301.3	33851.3	22454.5	8060.1	2612.6	1160.7	457.8
77.5°	8897.1	9462.2	13758.5	23107.7	27453.8	26448.2	13978.8	3003.4	1179.9	725.9	210.7
80°	3321.3	3692.9	5972.3	11760.7	15865.5	16281.1	6148.5	1135.8	785.3	584.2	107.3
82.5°	869.6	969.2	2202.7	5244.4	8131.0	8510.2	1938.4	572.7	574.6	480.8	65.1
85°	277.7	318.0	687.6	2354.1	3830.8	3363.5	505.7	277.7	417.6	358.2	36.4
87.5°	34.5	44.1	218.4	553.6	844.7	469.3	78.5	82.4	178.1	199.2	21.1
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: P322743

CATALOG NUMBER: GLEON-SA9D-830-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6	6734.6
2.5°	6750.0	6740.4	6742.3	6692.5	6659.9	6594.8	6527.8	6497.1	6464.6	6451.2	6464.6
5°	6784.4	6767.2	6717.4	6564.2	6401.3	6190.7	5993.4	5844.0	5656.2	5604.5	5658.2
7.5°	6838.1	6803.6	6658.0	6345.8	5983.8	5581.5	5129.5	4800.1	4530.0	4355.7	4418.9
10°	6916.6	6851.5	6558.4	6027.8	5380.4	4667.9	4026.2	3526.3	3171.9	3026.4	3020.6
12.5°	7048.8	6926.2	6435.8	5614.1	4643.0	3692.9	2852.1	2310.0	2022.7	1836.9	1833.1
15°	7194.3	7014.3	6280.7	5118.0	3784.9	2645.2	1836.9	1425.1	1239.3	1179.9	1172.2
17.5°	7372.5	7115.8	6079.6	4507.0	2886.5	1752.6	1199.1	1080.3	1072.6	1066.9	1066.9
20°	7596.6	7236.5	5821.0	3807.9	2047.6	1170.3	1019.0	1026.7	1030.5	1022.8	1024.8
22.5°	7857.1	7359.1	5512.6	3057.0	1384.9	978.8	975.0	984.5	988.4	984.5	986.4
25°	8159.7	7500.8	5137.2	2269.8	999.9	929.0	938.6	952.0	961.5	961.5	961.5
27.5°	8535.1	7673.2	4685.1	1584.1	863.9	877.3	904.1	929.0	942.4	946.2	946.2
30°	9023.6	7887.7	4143.1	1086.0	785.3	808.3	858.1	906.0	930.9	934.7	936.6
32.5°	9640.3	8129.1	3514.8	802.6	718.3	735.5	789.2	869.6	917.5	925.2	925.2
35°	10347.1	8408.7	2838.7	699.1	670.4	676.1	718.3	810.2	894.5	915.6	917.5
37.5°	11121.0	8684.5	2158.7	653.2	630.2	630.2	660.8	739.4	839.0	904.1	911.7
40°	11843.1	8851.2	1513.2	616.8	593.8	593.8	620.6	678.1	771.9	869.6	890.7
42.5°	12509.6	8908.6	1053.5	582.3	559.3	565.1	588.0	634.0	704.9	802.6	821.7
45°	13195.4	8899.1	768.1	542.1	524.8	542.1	559.3	593.8	645.5	701.0	704.9
47.5°	13712.5	8818.6	609.1	503.8	492.3	515.2	530.6	553.6	582.3	578.5	578.5
50°	14197.1	8623.2	490.3	452.0	459.7	486.5	494.2	501.8	503.8	467.4	463.5
52.5°	14564.9	8318.7	392.7	396.5	427.1	454.0	446.3	434.8	415.6	371.6	363.9
55°	14687.5	7732.6	308.4	327.5	379.3	413.7	385.0	360.1	323.7	287.3	279.7
57.5°	14465.3	6976.0	250.9	254.8	319.9	348.6	316.0	287.3	247.1	216.4	210.7
60°	13994.1	6135.1	206.9	191.5	247.1	272.0	250.9	222.2	185.8	162.8	160.9
62.5°	13059.4	5238.7	170.5	149.4	187.7	208.8	195.4	174.3	143.7	128.3	126.4
65°	11094.1	4190.9	137.9	120.7	145.6	162.8	151.3	136.0	113.0	101.5	99.6
67.5°	7744.1	2832.9	113.0	99.6	114.9	128.3	118.8	111.1	90.0	88.1	90.0
70°	3735.1	1365.7	93.9	80.4	90.0	99.6	95.8	90.0	86.2	99.6	114.9
72.5°	1070.7	457.8	74.7	67.0	72.8	78.5	82.4	80.4	93.9	120.7	139.8
73°	823.6	369.7	70.9	63.2	69.0	76.6	80.4	78.5	95.8	122.6	139.8
75°	352.4	178.1	53.6	51.7	57.5	67.0	70.9	70.9	95.8	124.5	134.1
77.5°	159.0	95.8	34.5	40.2	49.8	53.6	59.4	59.4	76.6	95.8	95.8
80°	90.0	51.7	26.8	30.6	36.4	36.4	36.4	32.6	34.5	38.3	42.1
82.5°	57.5	34.5	21.1	24.9	23.0	19.2	15.3	15.3	13.4	15.3	19.2
85°	32.6	19.2	19.2	15.3	9.6	7.7	9.6	7.7	1.9	0.0	1.9
87.5°	19.2	11.5	5.7	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 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

Scotopic Flux vs. Wavelength


Scotopic Lumens: NR
S/P: 1.27

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

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			

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)