

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P637999

Luminaire Tested: GWS-SA4D-830-U-T2R-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637999
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-14)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4D-830-U-T2R-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND
TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15689.1 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 162.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



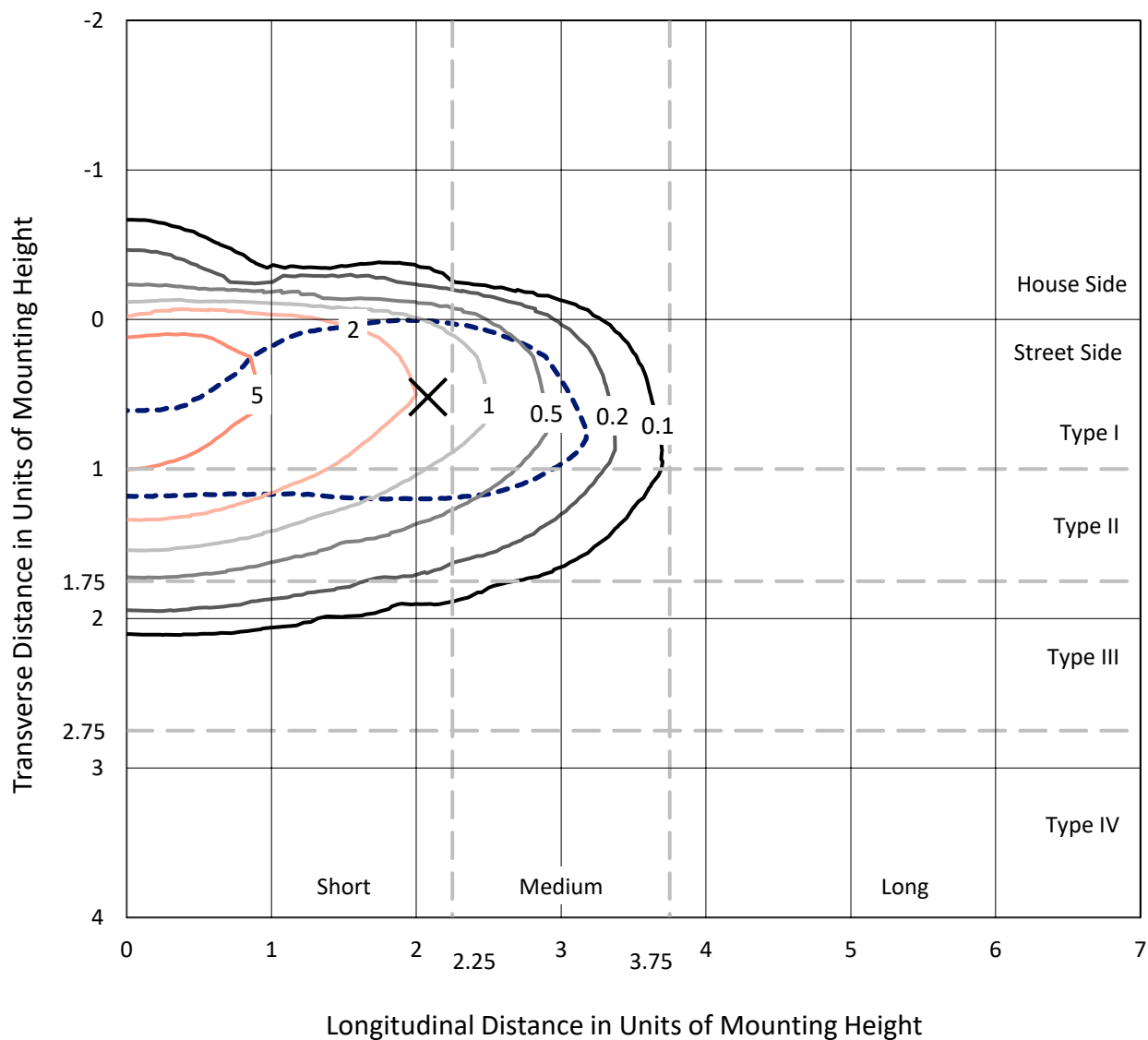
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

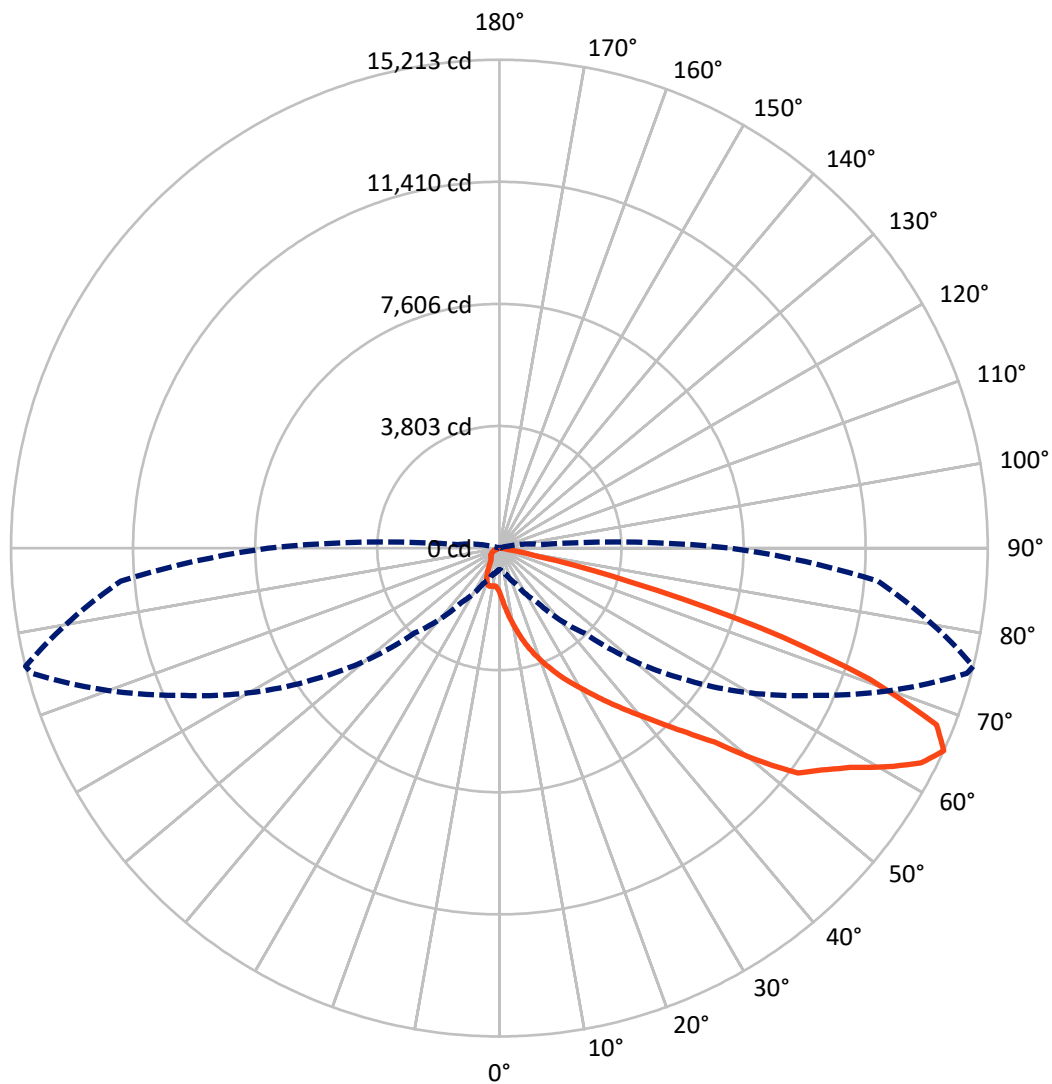


Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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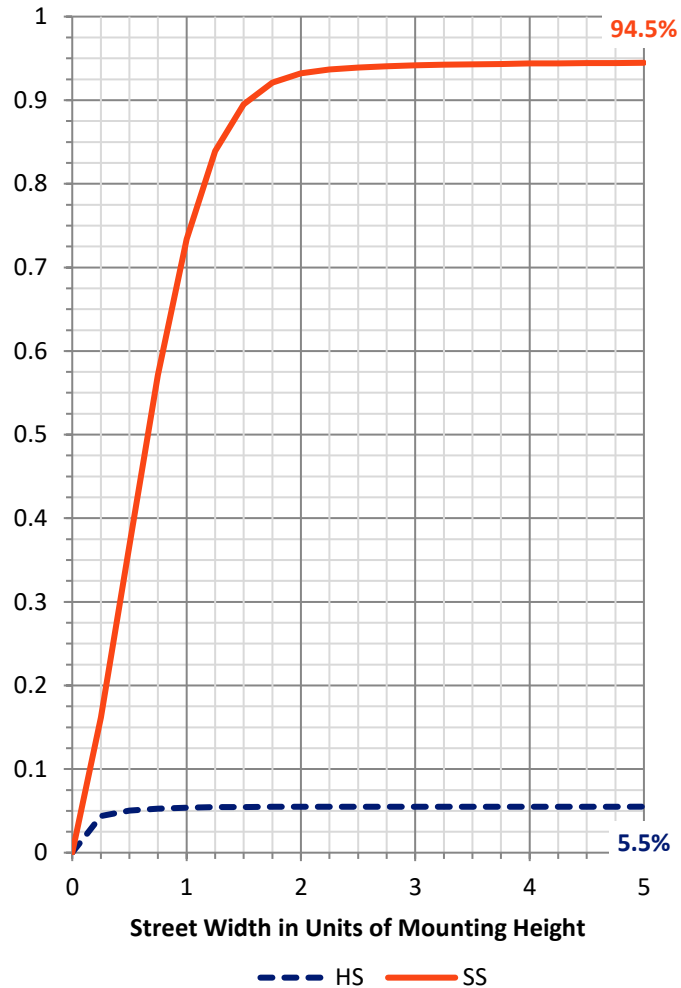
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	867.5	0.0	867.5
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	14821.6	0.0	14821.6
	% Fixture	94.5	0.0	94.5
Total	Lumens	15689.1	0.0	15689.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.0	1.1
10°-20°	641.2	4.1
20°-30°	1308.2	8.3
30°-40°	2326.6	14.8
40°-50°	3439.3	21.9
50°-60°	3937.7	25.1
60°-70°	3004.3	19.1
70°-80°	841.6	5.4
80°-90°	21.2	0.1
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°	15689.1	100.0
0°-180°	15689.1	100.0

Coefficient of Utilization



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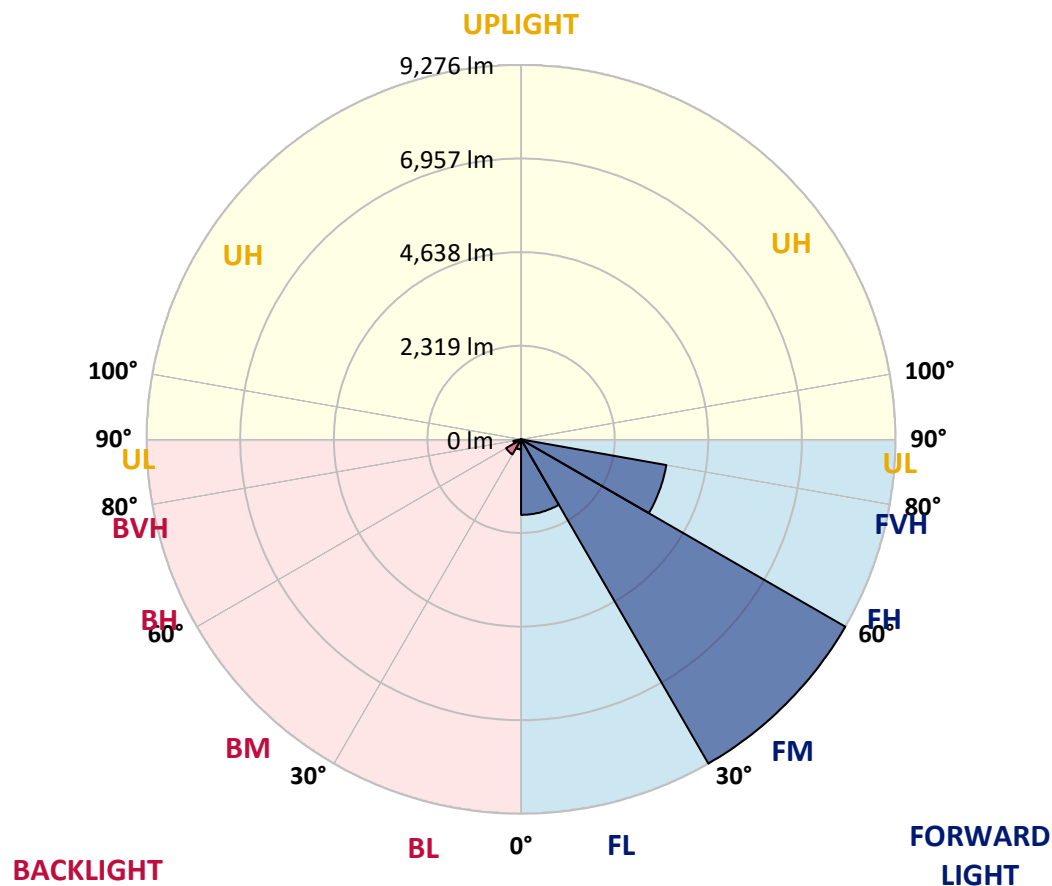
CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1870.8	11.9			
FM	(30°-60°)	9275.6	59.1			
FH	(60°-80°)	3655.2	23.3			G2/5000
FVH	(80°-90°)	20.0	0.1			G1/100
BL	(0°-30°)	247.6	1.6	B1/500		
BM	(30°-60°)	428.0	2.7	B1/1000		
BH	(60°-80°)	190.7	1.2	B1/500		G1/500
BVH	(80°-90°)	1.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



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CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1
2.5°	2140.8	2172.8	2147.7	2105.9	2025.0	1946.9	1846.5	1708.4	1598.3	1584.3	1481.1
5°	2891.1	2888.3	2833.9	2779.5	2694.4	2560.6	2358.3	2101.7	1854.9	1833.9	1602.4
7.5°	3337.4	3341.5	3310.9	3269.0	3185.3	3047.3	2836.7	2527.1	2165.9	2124.0	1768.4
10°	3712.5	3711.1	3688.8	3669.3	3594.0	3501.9	3276.0	2935.7	2500.6	2435.0	1953.9
12.5°	3994.2	4004.0	4015.2	4034.7	4002.6	3912.0	3698.6	3327.6	2839.5	2767.0	2165.9
15°	4217.4	4220.2	4262.0	4337.3	4363.8	4316.4	4122.5	3706.9	3174.2	3111.4	2409.9
17.5°	4284.3	4289.9	4361.0	4499.1	4638.6	4665.1	4518.6	4089.1	3503.3	3436.4	2647.0
20°	4425.2	4437.7	4490.7	4612.1	4787.8	4930.0	4872.9	4475.4	3832.5	3744.6	2889.7
22.5°	4868.7	4875.6	4857.5	4872.9	4963.5	5128.1	5162.9	4849.1	4170.0	4076.5	3151.9
25°	5631.5	5634.3	5507.4	5387.5	5319.1	5349.8	5426.5	5193.6	4504.7	4412.6	3395.9
27.5°	6423.7	6433.5	6281.4	6077.8	5833.8	5694.3	5672.0	5508.8	4842.2	4740.4	3637.2
30°	7169.8	7169.8	7009.4	6761.2	6434.9	6162.9	6002.5	5826.8	5203.4	5091.8	3884.1
32.5°	7840.6	7835.1	7630.1	7360.9	7038.7	6740.3	6402.8	6158.7	5605.0	5480.9	4168.6
35°	8394.3	8380.4	8147.5	7889.5	7545.0	7323.2	6946.7	6515.7	6040.2	5916.0	4461.4
37.5°	8812.7	8797.4	8584.0	8310.6	7991.3	7847.6	7532.4	6943.9	6499.0	6386.0	4786.4
40°	9040.0	9009.3	8861.5	8657.9	8390.1	8264.6	8133.5	7475.2	7038.7	6897.9	5169.9
42.5°	9107.0	9070.7	8973.1	8878.3	8716.5	8617.5	8758.3	8074.9	7631.4	7510.1	5607.8
45°	8908.9	8888.0	8879.6	8948.0	8977.3	9005.2	9352.4	8738.8	8285.5	8193.5	6158.7
47.5°	8432.0	8426.4	8500.3	8784.8	9094.4	9388.7	9998.1	9557.4	9133.5	9034.5	6928.6
50°	7550.6	7607.7	7814.1	8313.4	8932.6	9606.3	10602.0	10692.7	10505.8	10360.8	7932.7
52.5°	6172.7	6282.8	6745.9	7504.5	8394.3	9544.9	10881.0	11602.0	11793.0	11642.4	8652.3
55°	4843.6	4946.8	5359.6	6321.9	7508.7	9077.7	10893.5	11915.8	12332.8	12193.3	9139.1
57.5°	3607.9	3702.8	4077.9	4998.4	6303.8	8158.6	10595.1	12090.1	12972.9	12883.6	9907.5
60°	2358.3	2451.8	2790.7	3595.4	4889.6	6819.8	9860.1	12053.8	13844.6	13836.2	10851.7
62.5°	1308.2	1382.1	1627.5	2255.1	3412.7	5281.5	8705.3	11689.8	14688.3	14741.3	11629.9
65°	669.4	716.8	866.1	1239.8	2065.5	3744.6	7186.6	10855.8	15078.8	15212.7	11834.9
67.5°	437.9	453.3	489.5	644.3	1105.9	2355.5	5408.4	9518.4	14529.3	14685.5	11147.3
70°	355.6	368.2	389.1	429.5	570.4	1251.0	3552.1	7602.2	12140.3	12246.3	8876.9
72.5°	260.8	277.5	318.0	344.5	411.4	686.2	1847.9	4990.0	8337.1	8524.0	5578.5
75°	192.5	202.2	235.7	272.0	336.1	433.7	707.1	2623.3	4305.2	4196.5	2343.0
77.5°	115.8	122.7	150.6	174.3	239.9	270.6	246.9	969.3	1309.6	1231.5	566.2
80°	57.2	64.2	99.0	131.1	153.4	108.8	103.2	270.6	291.5	291.5	142.3
82.5°	19.5	25.1	53.0	86.5	75.3	41.8	48.8	69.7	78.1	82.3	41.8
85°	0.0	0.0	12.6	25.1	11.2	5.6	12.6	15.3	19.5	20.9	13.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	4.2	5.6	5.6
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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CATALOG NUMBER: GWS-SA4D-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1	1389.1
2.5°	1425.3	1359.8	1260.8	1171.5	1103.2	1039.0	990.2	951.1	944.2	921.9	924.6
5°	1489.5	1370.9	1188.2	1047.4	948.4	881.4	825.6	783.8	765.7	747.5	733.6
7.5°	1588.5	1417.0	1160.3	988.8	873.0	769.8	683.4	613.6	580.2	559.2	545.3
10°	1709.8	1481.1	1161.7	953.9	782.4	624.8	506.3	429.5	393.3	382.1	380.7
12.5°	1854.9	1562.0	1172.9	896.8	651.3	464.4	375.2	340.3	329.1	319.4	319.4
15°	2008.3	1652.6	1172.9	792.2	496.5	362.6	325.0	302.6	288.7	283.1	280.3
17.5°	2170.1	1737.7	1145.0	648.5	380.7	319.4	288.7	267.8	256.6	248.2	245.5
20°	2343.0	1818.6	1075.3	496.5	326.3	285.9	256.6	235.7	224.5	216.2	216.2
22.5°	2518.7	1893.9	962.3	382.1	288.7	253.8	225.9	206.4	195.2	186.9	186.9
25°	2681.9	1944.1	817.3	315.2	260.8	225.9	200.8	181.3	168.8	163.2	160.4
27.5°	2833.9	1976.2	656.9	277.5	234.3	202.2	175.7	157.6	147.8	143.6	140.9
30°	2991.5	1984.6	502.1	252.4	212.0	178.5	153.4	139.5	131.1	125.5	125.5
32.5°	3144.9	1974.8	383.5	231.5	192.5	157.6	136.7	124.1	117.1	113.0	111.6
35°	3301.1	1930.2	311.0	213.4	172.9	138.1	121.3	111.6	107.4	101.8	101.8
37.5°	3471.2	1870.2	270.6	195.2	153.4	124.1	108.8	101.8	96.2	92.0	90.7
40°	3683.2	1800.5	248.2	179.9	135.3	111.6	97.6	90.7	86.5	82.3	80.9
42.5°	3934.3	1732.1	237.1	163.2	121.3	99.0	87.9	79.5	75.3	69.7	68.3
45°	4289.9	1716.8	224.5	145.0	108.8	89.3	76.7	68.3	62.8	58.6	57.2
47.5°	4861.7	1760.0	203.6	125.5	96.2	78.1	65.5	58.6	51.6	47.4	44.6
50°	5429.3	1748.9	182.7	108.8	85.1	66.9	55.8	48.8	41.8	37.7	36.3
52.5°	5738.9	1695.9	163.2	96.2	73.9	57.2	47.4	39.0	34.9	30.7	29.3
55°	6019.2	1675.0	143.6	83.7	62.8	50.2	39.0	32.1	29.3	25.1	23.7
57.5°	6568.7	1723.8	126.9	72.5	54.4	43.2	33.5	26.5	23.7	19.5	18.1
60°	7143.3	1729.3	108.8	62.8	47.4	36.3	26.5	20.9	18.1	13.9	12.6
62.5°	7443.2	1588.5	89.3	53.0	39.0	30.7	22.3	16.7	13.9	8.4	8.4
65°	7192.1	1284.5	75.3	43.2	30.7	23.7	16.7	12.6	8.4	4.2	1.4
67.5°	6365.1	913.5	62.8	34.9	22.3	16.7	12.6	8.4	1.4	0.0	0.0
70°	4660.9	521.6	48.8	25.1	16.7	11.2	8.4	4.2	0.0	0.0	0.0
72.5°	2864.6	278.9	36.3	16.7	12.6	8.4	7.0	2.8	0.0	0.0	0.0
75°	1086.4	133.9	22.3	11.2	9.8	7.0	4.2	1.4	0.0	0.0	0.0
77.5°	294.3	65.5	12.6	8.4	7.0	4.2	2.8	0.0	0.0	0.0	0.0
80°	76.7	30.7	8.4	5.6	4.2	2.8	0.0	0.0	0.0	0.0	0.0
82.5°	26.5	13.9	4.2	4.2	2.8	1.4	0.0	0.0	0.0	0.0	0.0
85°	11.2	5.6	2.8	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.2	1.4	1.4	1.4	1.4	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
 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 ^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			

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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			

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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

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



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)