

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



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

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P633540

Luminaire Tested: GWS-SA2E-830-U-T2-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2E-830-U-T2-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8682.3 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

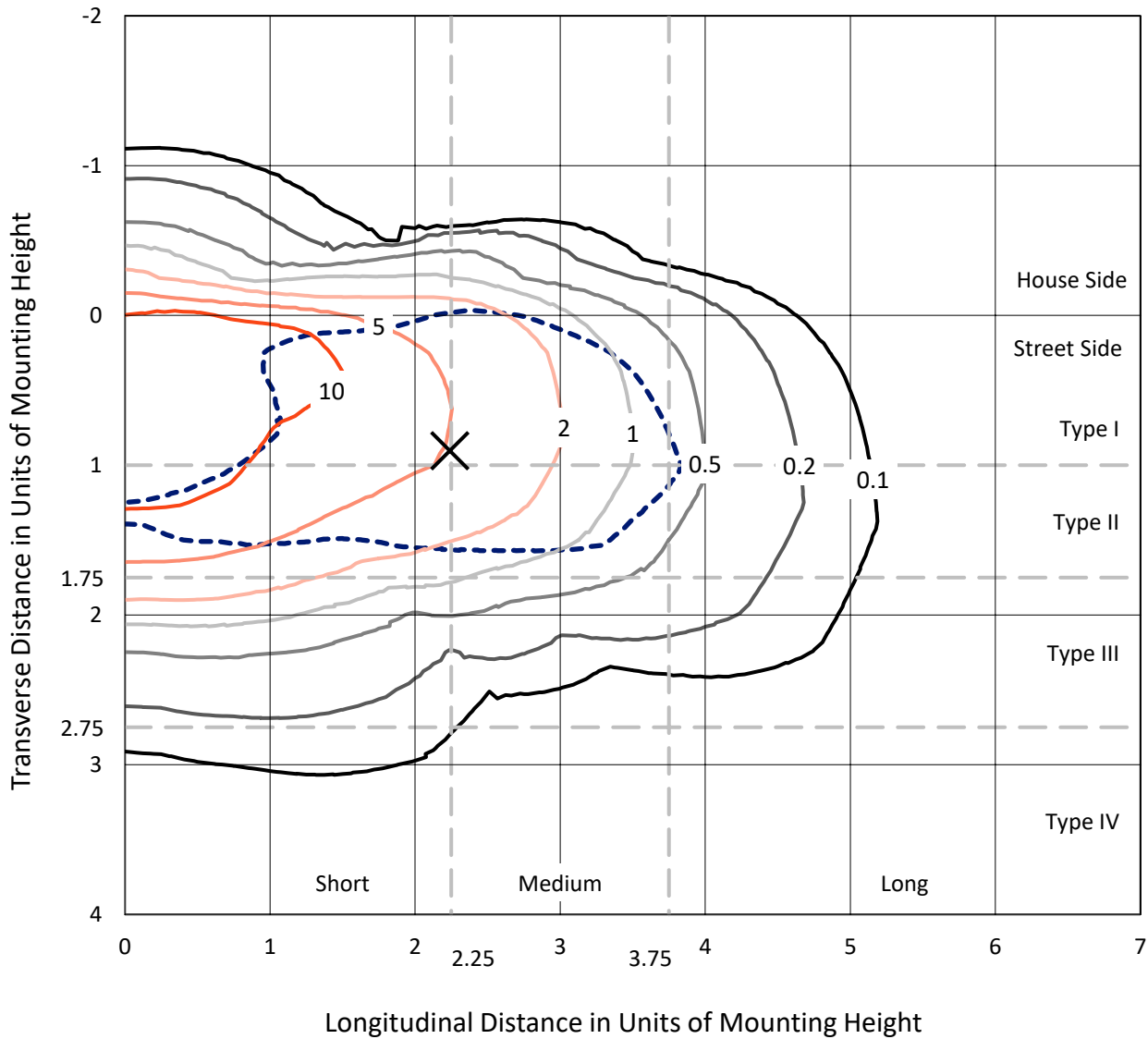
Input Watts (W): 108.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P633540
 CATALOG NUMBER: GWS-SA2E-830-U-T2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination

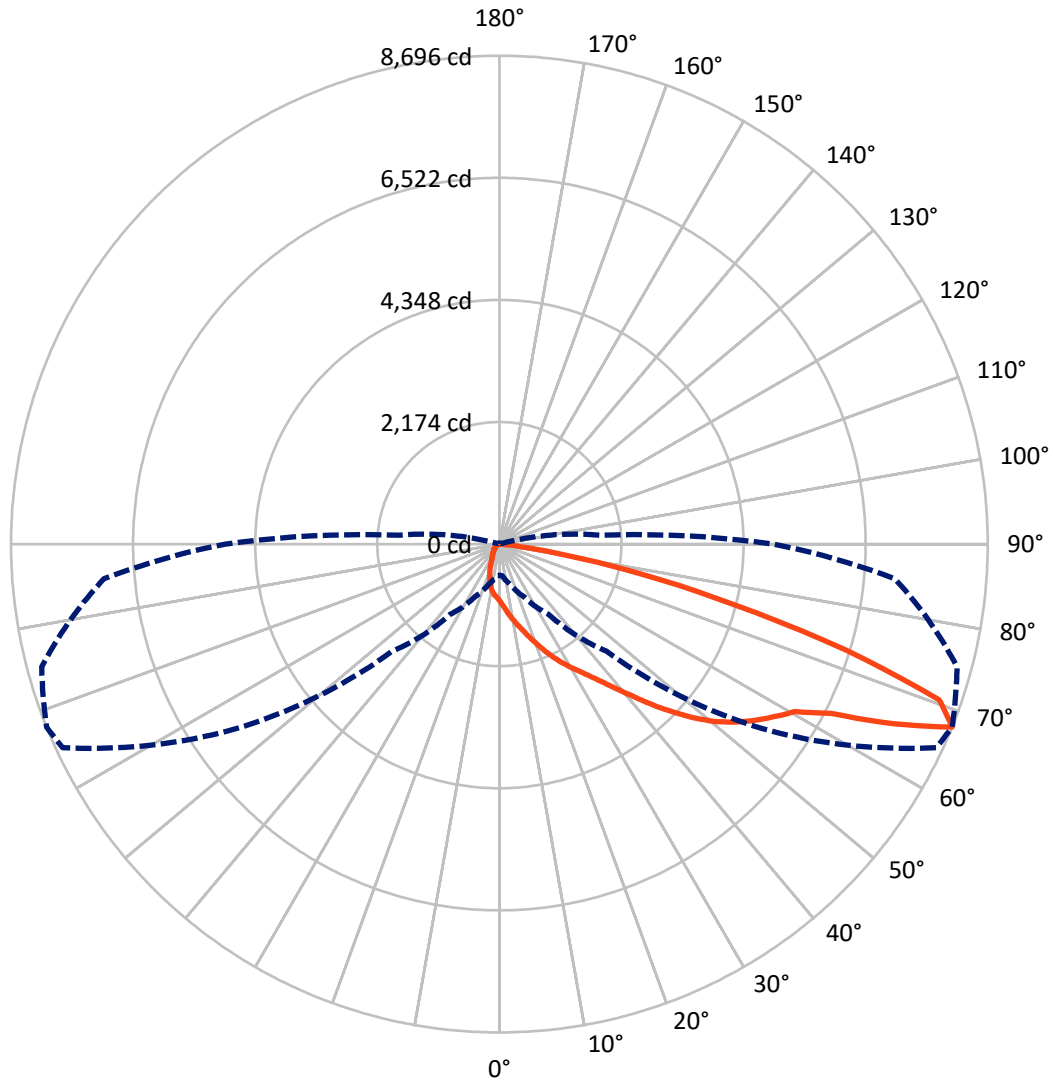
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.3 fc
 Type II - Short - N/A

REPORT NUMBER: P633540
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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P633540
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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	627.0	0.0	627.0
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	8055.3	0.0	8055.3
	% Fixture	92.8	0.0	92.8
Total	Lumens	8682.3	0.0	8682.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	1.1
10°-20°	283.0	3.3
20°-30°	486.3	5.6
30°-40°	845.5	9.7
40°-50°	1475.4	17.0
50°-60°	2225.2	25.6
60°-70°	2231.3	25.7
70°-80°	984.4	11.3
80°-90°	52.6	0.6
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°	8682.3	100.0
0°-180°	8682.3	100.0

Coefficient of Utilization



REPORT NUMBER: P633540

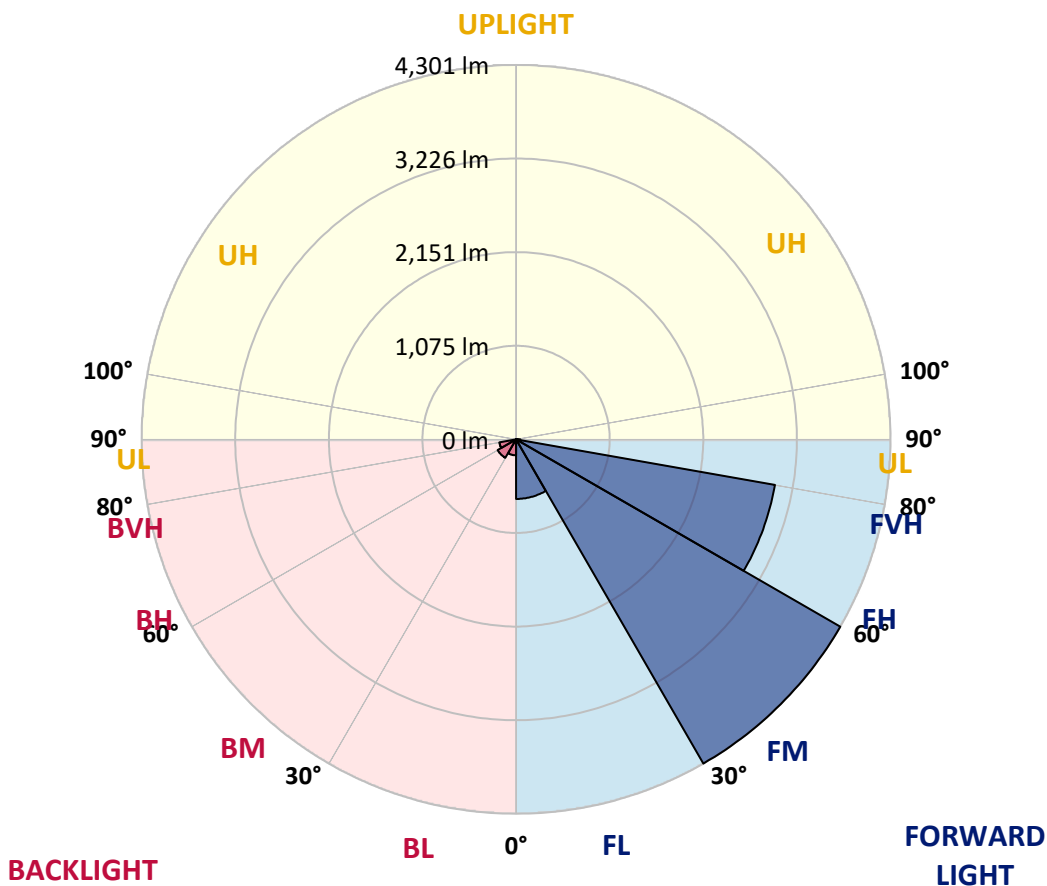
CATALOG NUMBER: GWS-SA2E-830-U-T2-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	684.4	7.9			
FM (30°-60°)	4301.2	49.5			
FH (60°-80°)	3020.1	34.8			G2/5000
FVH (80°-90°)	49.6	0.6			G1/100
BL (0°-30°)	183.4	2.1	B1/500		
BM (30°-60°)	244.9	2.8	B1/1000		
BH (60°-80°)	195.7	2.3	B1/500		G1/500
BVH (80°-90°)	3.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





REPORT NUMBER: P633540

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4
2.5°	1176.6	1184.1	1176.6	1178.2	1156.6	1146.7	1125.1	1095.2	1087.7	1068.6	1039.5
5°	1320.3	1327.0	1319.5	1317.8	1292.9	1274.6	1238.9	1187.4	1172.4	1135.0	1077.7
7.5°	1398.4	1402.6	1405.1	1409.2	1400.1	1385.1	1352.7	1288.8	1273.0	1212.3	1131.7
10°	1406.7	1410.1	1422.5	1447.5	1465.7	1474.9	1456.6	1397.6	1372.7	1313.7	1198.2
12.5°	1383.5	1388.5	1408.4	1450.0	1500.6	1547.2	1558.8	1507.3	1484.9	1409.2	1276.3
15°	1352.7	1356.9	1384.3	1440.8	1517.3	1602.8	1651.0	1628.6	1603.7	1524.7	1362.7
17.5°	1305.4	1311.2	1349.4	1425.9	1524.7	1646.9	1750.7	1758.2	1740.8	1655.2	1458.3
20°	1278.8	1282.9	1317.0	1395.9	1519.8	1679.3	1843.8	1914.4	1895.3	1805.6	1567.9
22.5°	1301.2	1304.5	1327.0	1388.5	1503.1	1697.6	1930.2	2070.7	2059.9	1966.8	1683.4
25°	1419.2	1430.0	1416.7	1427.5	1510.6	1707.5	2000.0	2226.9	2229.4	2135.5	1803.1
27.5°	1658.5	1644.4	1612.8	1558.8	1568.8	1734.1	2059.9	2373.9	2395.5	2300.0	1909.5
30°	1902.0	1893.7	1874.6	1790.6	1720.8	1793.1	2110.5	2524.3	2558.4	2462.0	2004.2
32.5°	2175.3	2183.7	2149.6	2049.0	1930.2	1912.8	2162.9	2667.3	2731.2	2645.6	2115.5
35°	2501.9	2504.4	2437.1	2325.7	2191.1	2110.5	2256.8	2825.1	2943.1	2880.0	2264.3
37.5°	2820.1	2835.1	2798.5	2623.2	2503.6	2356.5	2412.2	3027.9	3194.1	3169.1	2451.2
40°	3101.8	3125.1	3113.5	2944.0	2786.9	2663.1	2653.1	3265.5	3497.3	3525.6	2698.0
42.5°	3326.2	3341.1	3350.3	3229.8	3091.0	3021.2	2950.6	3541.4	3855.5	3971.0	3000.5
45°	3563.0	3568.0	3587.1	3505.7	3384.3	3390.2	3302.1	3876.2	4232.7	4464.5	3347.8
47.5°	3864.6	3881.2	3872.1	3786.5	3676.8	3742.5	3665.2	4221.1	4605.0	4991.3	3703.4
50°	4231.9	4249.3	4241.0	4141.3	4019.2	4046.6	3998.4	4555.9	4963.9	5488.2	3999.2
52.5°	4421.3	4435.5	4538.5	4583.4	4519.4	4344.9	4282.6	4924.0	5267.2	5897.0	4270.9
55°	4329.9	4339.9	4564.2	4753.7	4988.0	4813.5	4568.4	5208.2	5534.8	6216.1	4472.8
57.5°	3951.0	4005.0	4310.0	4630.7	5123.5	5276.3	5032.1	5517.3	5792.3	6438.0	4671.4
60°	3174.1	3171.6	3608.7	4184.5	4859.2	5403.5	5686.8	5935.3	6050.8	6608.3	4937.3
62.5°	1754.1	1769.9	2351.5	3110.1	4124.7	5074.4	6177.9	6657.3	6639.9	6905.8	5353.6
65°	873.3	904.9	1220.6	1781.5	2744.5	4193.7	6262.6	7759.1	7709.3	7606.2	6213.6
67.5°	554.2	566.7	741.2	1035.3	1525.6	2695.5	5735.0	8580.9	8696.4	8437.2	7067.0
70°	359.0	379.7	515.2	707.9	920.7	1389.3	4201.1	8048.3	8313.4	8345.8	6535.2
72.5°	195.3	210.2	329.0	505.2	664.7	694.6	2359.8	6040.0	6466.2	7079.4	5112.7
75°	111.3	122.1	180.3	343.2	487.8	422.9	1046.1	4043.3	4315.0	5059.5	3663.5
77.5°	67.3	76.4	101.4	167.0	305.8	282.5	395.5	2461.2	2634.0	3018.7	1922.7
80°	30.7	36.6	64.0	92.2	167.0	133.8	151.2	1147.5	1184.9	1238.9	636.5
82.5°	14.1	16.6	29.1	54.8	94.7	77.3	58.2	265.1	373.1	353.1	162.0
85°	1.7	1.7	10.8	22.4	26.6	19.9	24.1	59.8	75.6	106.4	46.5
87.5°	0.0	0.0	0.8	0.8	1.7	2.5	5.0	7.5	10.8	17.4	11.6
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: P633540
 CATALOG NUMBER: GWS-SA2E-830-U-T2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4	1010.4
2.5°	1026.2	1002.9	982.1	951.4	930.6	907.4	891.6	872.5	865.0	859.2	850.9
5°	1049.5	1012.1	961.4	904.9	858.3	814.3	773.6	747.0	723.7	720.4	708.8
7.5°	1087.7	1032.0	946.4	854.2	775.2	702.1	644.8	598.3	575.0	567.5	554.2
10°	1138.4	1061.9	924.0	782.7	668.9	581.6	516.8	464.5	427.9	414.6	404.7
12.5°	1194.9	1089.3	888.3	694.6	565.0	465.3	383.1	327.4	304.1	295.8	288.3
15°	1259.7	1115.1	831.8	606.6	463.7	342.3	284.2	260.1	250.1	247.6	245.1
17.5°	1322.0	1131.7	764.4	515.2	356.5	265.9	238.5	229.3	226.8	224.3	222.7
20°	1392.6	1143.3	685.5	428.8	276.7	225.2	211.9	205.2	200.3	195.3	194.4
22.5°	1464.9	1143.3	599.9	344.0	231.8	201.9	187.0	174.5	165.4	160.4	158.7
25°	1533.9	1127.6	515.2	275.0	204.4	179.5	160.4	146.2	133.8	128.0	126.3
27.5°	1582.9	1086.8	441.2	232.7	185.3	159.5	136.3	120.5	110.5	104.7	103.9
30°	1613.6	1026.2	373.1	207.7	168.7	138.8	115.5	102.2	94.7	90.6	88.9
32.5°	1636.9	951.4	312.4	190.3	152.9	120.5	100.5	89.7	83.1	79.8	78.9
35°	1683.4	880.8	267.6	174.5	136.3	105.5	88.1	79.8	74.8	70.6	69.8
37.5°	1748.3	821.8	231.8	160.4	120.5	93.9	79.8	72.3	68.1	64.0	63.1
40°	1843.8	784.4	205.2	146.2	106.4	84.8	73.1	66.5	60.7	56.5	55.7
42.5°	1990.9	766.9	187.8	132.1	93.9	76.4	67.3	59.0	53.2	49.0	48.2
45°	2166.2	776.1	172.8	118.0	85.6	70.6	59.8	51.5	45.7	41.5	40.7
47.5°	2354.0	808.5	160.4	104.7	77.3	64.8	53.2	44.0	39.1	34.9	34.1
50°	2550.1	861.7	149.6	92.2	70.6	58.2	45.7	38.2	33.2	29.9	29.1
52.5°	2720.4	934.0	138.8	83.1	64.8	51.5	39.9	33.2	28.3	24.9	24.1
55°	2883.3	1002.1	130.5	74.8	58.2	44.9	34.9	28.3	24.1	20.8	19.9
57.5°	3060.3	1074.4	120.5	67.3	52.3	39.9	30.7	24.1	20.8	17.4	16.6
60°	3317.9	1181.6	105.5	61.5	45.7	34.9	26.6	21.6	18.3	14.1	13.3
62.5°	3689.3	1376.8	88.9	53.2	39.1	29.9	22.4	18.3	15.0	11.6	10.0
65°	4383.9	1709.2	73.1	44.0	31.6	24.9	19.1	15.0	11.6	8.3	7.5
67.5°	4884.1	1795.6	59.0	35.7	25.8	19.1	15.8	11.6	8.3	5.8	5.0
70°	4270.1	1289.6	45.7	29.1	21.6	15.0	12.5	9.1	5.8	4.2	3.3
72.5°	3217.3	842.6	34.1	22.4	16.6	12.5	9.1	7.5	5.0	3.3	2.5
75°	2267.6	486.9	24.9	16.6	11.6	9.1	7.5	5.8	4.2	2.5	2.5
77.5°	1162.5	201.1	17.4	11.6	8.3	5.8	5.0	3.3	3.3	2.5	1.7
80°	353.1	66.5	10.0	7.5	5.8	4.2	2.5	2.5	2.5	1.7	0.8
82.5°	80.6	21.6	5.8	5.8	4.2	3.3	2.5	0.8	0.8	0.0	0.0
85°	20.8	6.6	5.0	4.2	4.2	3.3	1.7	0.8	0.0	0.0	0.0
87.5°	7.5	4.2	4.2	4.2	3.3	2.5	1.7	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

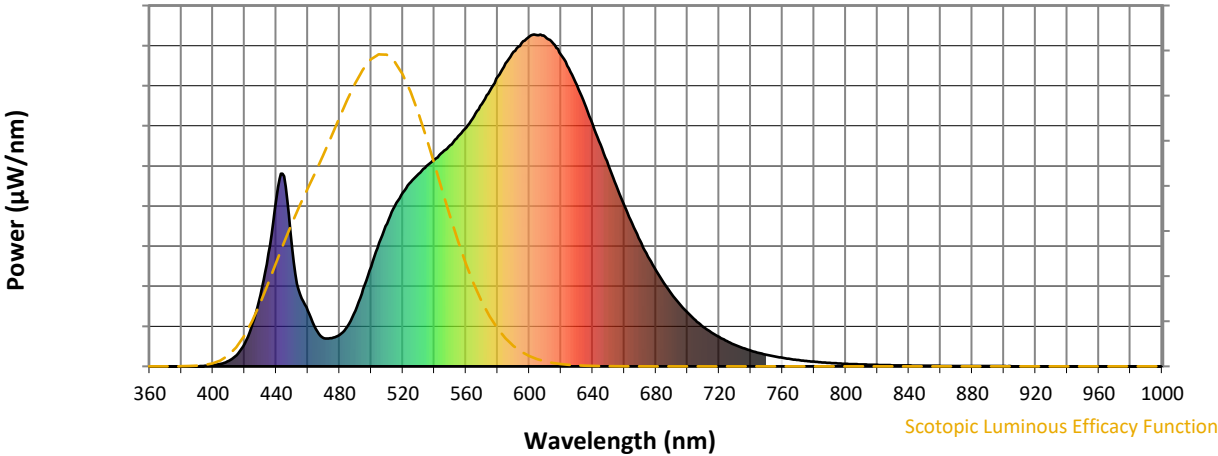


Photopic Lumens: NR

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			

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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			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

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			

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)