

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: P631571

Luminaire Tested: GWS-SA1F-830-U-T3R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P631571
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1F-830-U-T3R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5867.7 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

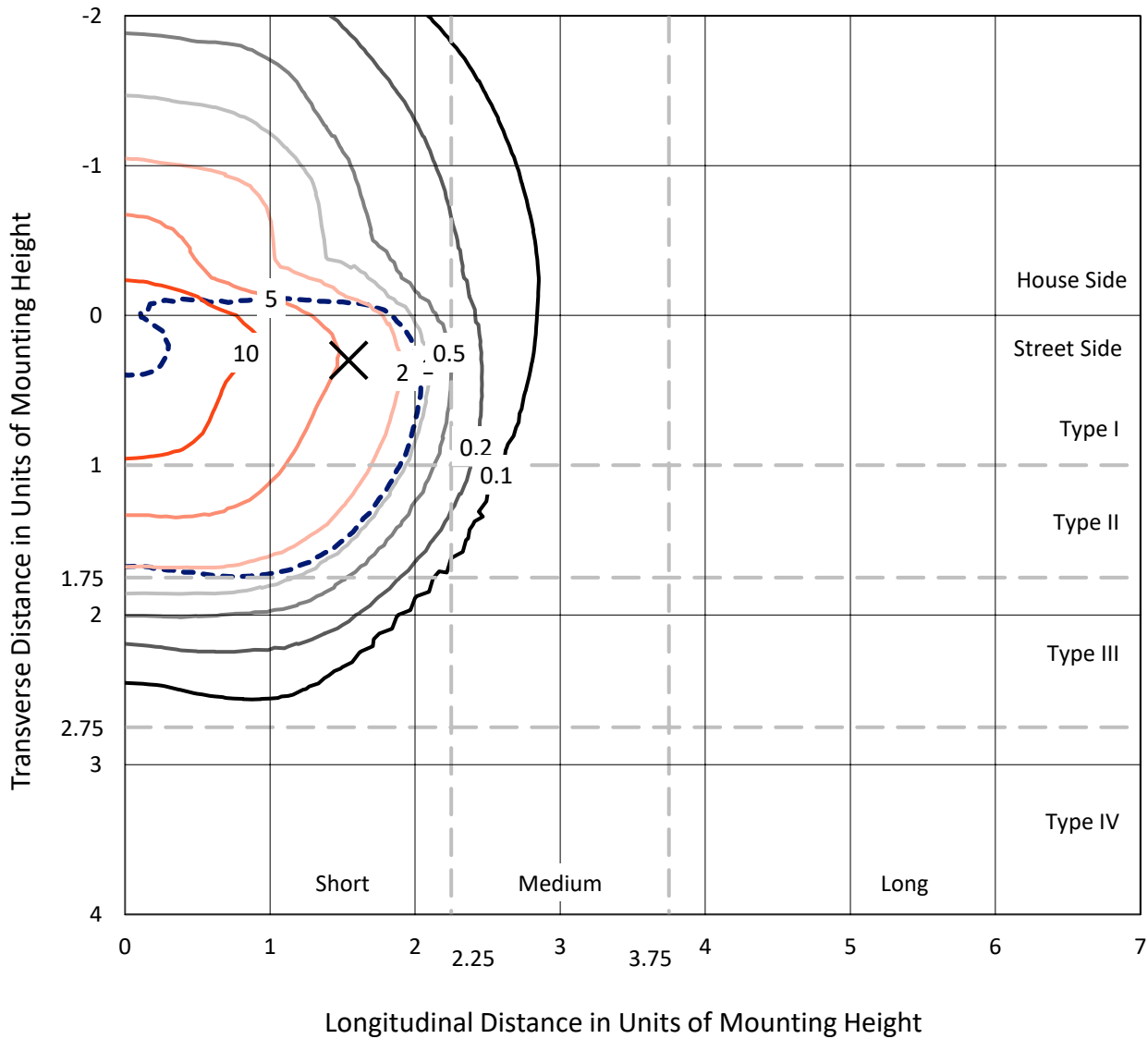
Input Watts (W): 67.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

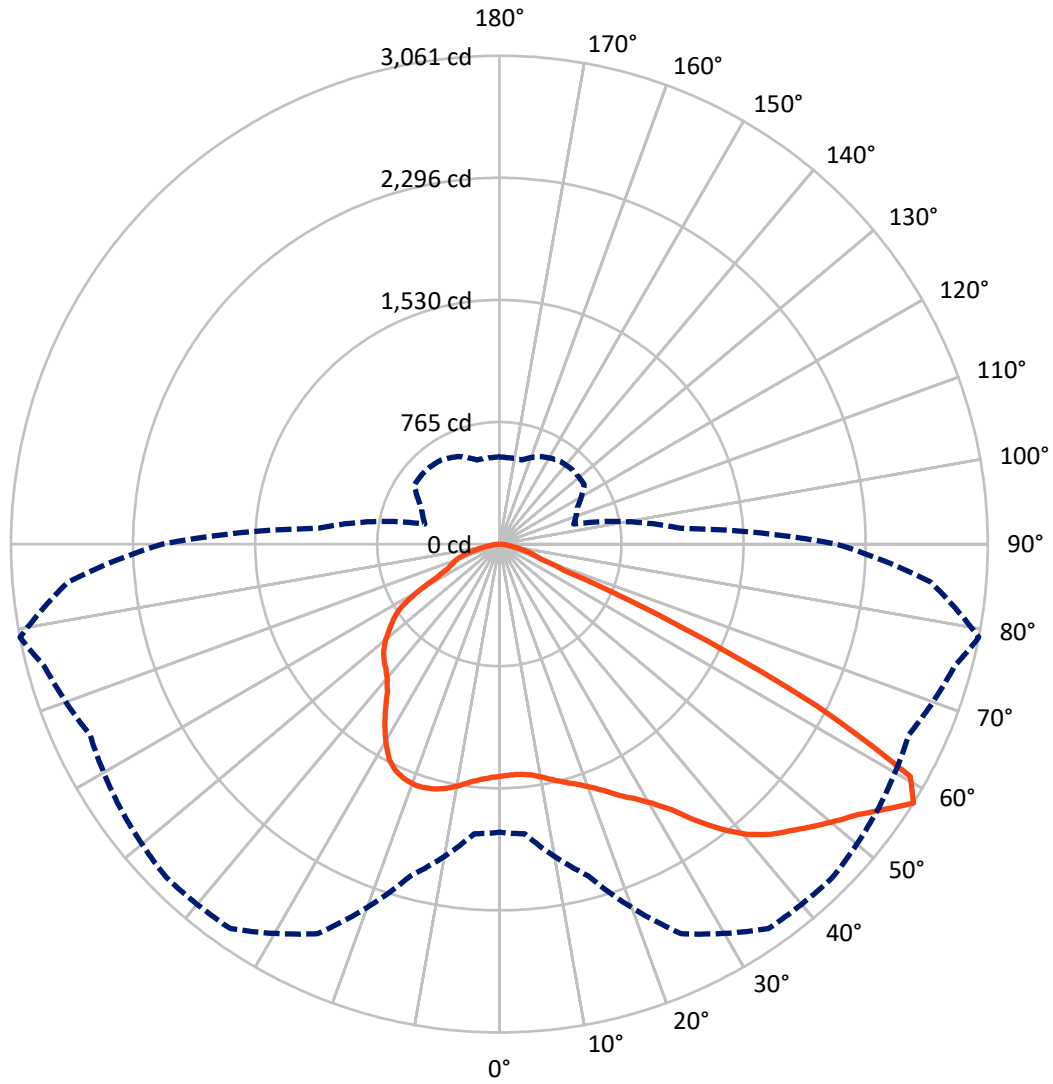
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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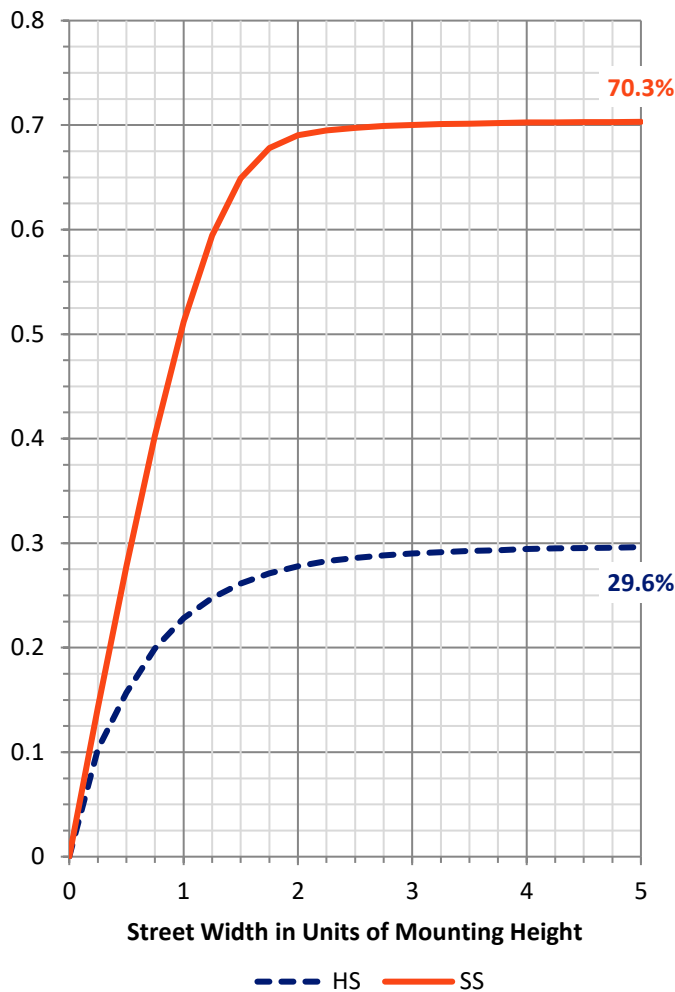
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1744.2	0.0	1744.2
	% Fixture	29.7	0.0	29.7
Street Side	Lumens	4123.5	0.0	4123.5
	% Fixture	70.3	0.0	70.3
Total	Lumens	5867.7	0.0	5867.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	2.3
10°-20°	374.2	6.4
20°-30°	634.4	10.8
30°-40°	971.0	16.5
40°-50°	1294.7	22.1
50°-60°	1495.3	25.5
60°-70°	777.0	13.2
70°-80°	165.2	2.8
80°-90°	21.4	0.4
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°	5867.7	100.0
0°-180°	5867.7	100.0

Coefficient of Utilization



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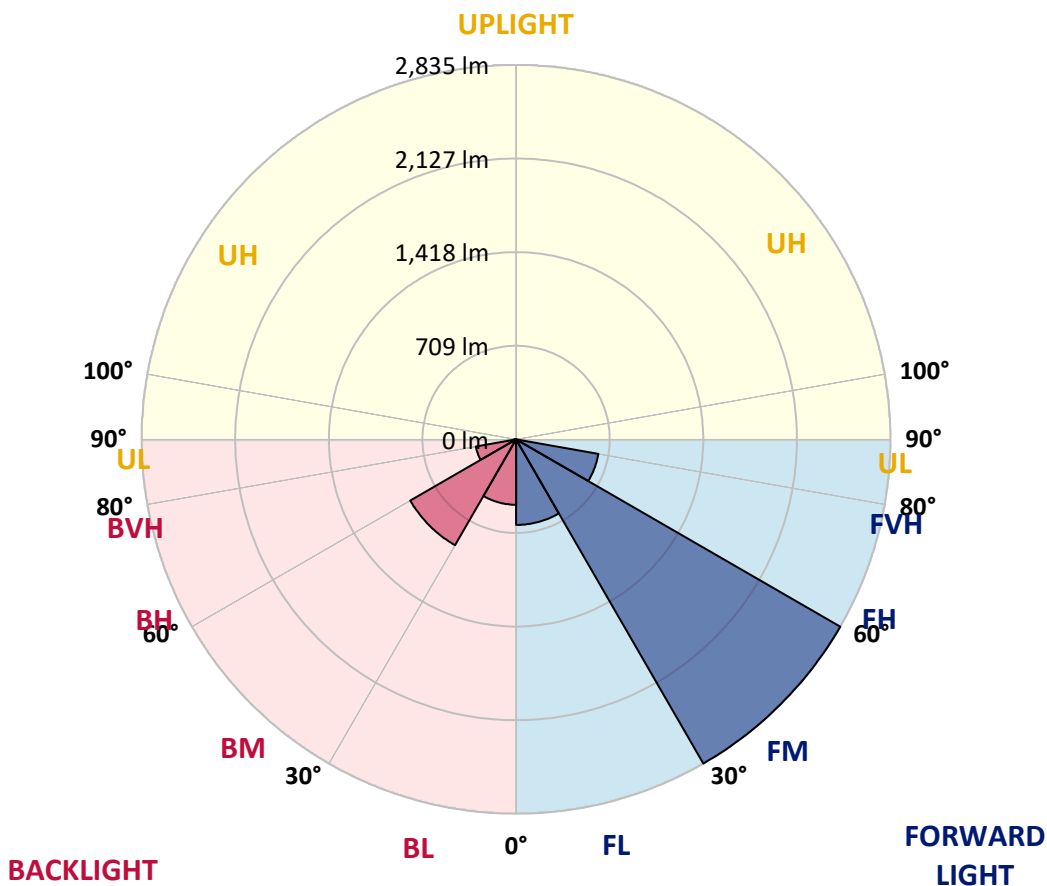
CATALOG NUMBER: GWS-SA1F-830-U-T3R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	647.9	11.0			
FM (30°-60°)	2835.4	48.3			
FH (60°-80°)	632.7	10.8			G0/660
FVH (80°-90°)	7.5	0.1			G0/10
BL (0°-30°)	495.3	8.4	B1/500		
BM (30°-60°)	925.5	15.8	B1/1000		
BH (60°-80°)	309.5	5.3	B1/500		G1/500
BVH (80°-90°)	13.9	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2
2.5°	1387.9	1385.1	1386.0	1389.9	1404.3	1414.8	1425.8	1435.9	1445.5	1448.4	1450.8
5°	1338.5	1333.3	1334.7	1340.9	1357.7	1375.5	1395.1	1419.1	1442.2	1449.8	1459.9
7.5°	1303.5	1302.5	1304.9	1314.5	1332.3	1349.1	1374.5	1408.6	1448.4	1461.3	1479.1
10°	1257.0	1255.1	1264.6	1284.3	1313.6	1340.4	1370.7	1411.0	1466.6	1485.8	1513.2
12.5°	1220.0	1219.1	1229.1	1256.5	1293.9	1336.6	1378.3	1423.4	1491.1	1517.5	1551.1
15°	1241.6	1237.3	1237.8	1257.0	1290.6	1340.9	1397.5	1446.0	1515.6	1549.1	1592.3
17.5°	1304.5	1296.8	1291.0	1294.4	1313.6	1365.9	1426.8	1476.2	1543.9	1583.2	1636.0
20°	1391.3	1387.0	1371.2	1360.6	1364.9	1411.0	1472.9	1518.9	1580.8	1624.9	1681.6
22.5°	1507.9	1497.3	1475.7	1458.9	1446.0	1482.0	1539.1	1578.9	1632.1	1678.2	1737.2
25°	1652.3	1636.9	1602.9	1576.5	1548.7	1585.6	1636.5	1666.7	1702.7	1745.4	1801.5
27.5°	1799.6	1786.6	1748.7	1713.2	1678.7	1701.7	1762.2	1779.4	1775.6	1806.8	1854.8
30°	1956.5	1940.1	1904.2	1865.8	1821.2	1836.0	1890.3	1898.9	1858.1	1884.0	1916.6
32.5°	2122.0	2106.1	2075.0	2030.3	1980.0	1985.7	2000.6	2008.8	1969.9	1984.8	2009.7
35°	2290.4	2275.5	2243.8	2199.7	2162.8	2127.7	2090.3	2122.9	2100.4	2129.2	2127.3
37.5°	2444.4	2429.5	2409.8	2375.8	2312.4	2243.4	2157.0	2197.3	2232.3	2268.8	2262.5
40°	2548.5	2538.4	2543.2	2537.9	2456.4	2319.6	2189.6	2233.8	2329.2	2391.6	2388.2
42.5°	2638.2	2628.1	2655.9	2676.1	2580.1	2390.2	2205.5	2247.7	2391.1	2488.5	2483.7
45°	2678.0	2675.1	2721.2	2785.0	2693.4	2465.0	2246.2	2276.5	2438.1	2562.9	2544.6
47.5°	2630.5	2640.6	2731.3	2839.2	2787.4	2553.8	2329.7	2337.4	2499.5	2643.5	2592.1
50°	2536.0	2558.1	2680.4	2840.7	2856.0	2654.0	2445.3	2426.1	2582.1	2729.4	2617.1
52.5°	2398.3	2421.3	2620.9	2829.6	2895.3	2770.1	2599.3	2572.0	2686.2	2815.2	2621.4
55°	2082.2	2113.3	2484.7	2804.7	2933.7	2875.7	2773.0	2717.4	2820.5	2933.3	2664.1
57.5°	1806.3	1822.6	2152.7	2693.9	2941.4	2953.4	2896.8	2830.6	2953.9	3060.9	2712.1
60°	1325.6	1329.4	1626.4	2229.0	2705.8	2908.3	2886.7	2788.4	2890.6	2958.7	2492.4
62.5°	748.9	749.4	986.4	1487.7	2021.2	2370.5	2383.9	2297.1	2211.2	2231.4	1734.8
65°	281.1	307.5	450.5	731.2	1165.3	1399.5	1455.1	1475.3	1332.3	1243.5	930.3
67.5°	188.1	194.3	262.9	376.1	518.6	598.7	669.7	671.7	491.3	438.0	366.5
70°	143.4	149.7	206.8	269.1	262.9	242.8	262.4	255.2	263.9	271.1	278.7
72.5°	107.0	113.2	160.2	190.0	157.8	155.4	176.1	195.7	214.0	221.6	233.6
75°	71.0	75.8	107.9	101.7	87.3	103.1	128.6	148.2	158.8	167.9	177.0
77.5°	45.1	48.5	57.6	46.5	48.5	60.4	74.8	92.6	102.7	111.8	116.6
80°	20.6	20.1	19.7	22.1	27.3	35.5	45.1	55.7	63.3	67.2	70.0
82.5°	8.2	9.1	10.1	12.0	14.9	19.2	25.4	32.6	38.9	39.8	42.2
85°	3.4	3.8	4.3	5.3	6.7	8.6	10.6	14.9	18.7	20.1	21.6
87.5°	0.0	0.0	0.0	0.0	0.5	1.0	1.4	2.4	4.3	4.8	5.3
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2	1454.2
2.5°	1463.7	1457.5	1468.1	1475.3	1482.0	1474.8	1472.4	1466.1	1465.2	1465.2	1468.5
5°	1477.2	1472.9	1483.9	1488.2	1487.7	1471.9	1462.3	1449.8	1443.6	1443.6	1444.6
7.5°	1501.2	1498.8	1505.0	1498.3	1482.9	1450.8	1419.1	1392.7	1375.0	1365.9	1368.8
10°	1541.0	1538.1	1532.8	1507.9	1463.7	1397.1	1332.3	1284.3	1255.5	1239.2	1240.2
12.5°	1579.8	1575.1	1556.3	1501.2	1410.5	1304.5	1219.5	1165.8	1134.2	1115.0	1110.6
15°	1622.5	1610.1	1569.8	1466.6	1323.7	1191.2	1102.5	1044.4	1010.4	998.9	998.4
17.5°	1663.3	1641.3	1568.3	1405.2	1219.5	1072.7	983.5	947.5	941.8	947.0	948.5
20°	1704.6	1669.1	1552.5	1320.3	1095.8	954.7	908.7	923.5	945.1	959.5	962.9
22.5°	1747.3	1692.1	1516.5	1210.9	965.3	875.1	894.3	926.9	953.8	973.0	974.9
25°	1795.3	1713.7	1462.8	1077.1	860.7	853.0	890.9	925.5	954.2	976.3	980.1
27.5°	1822.6	1714.2	1387.5	939.4	812.7	844.4	882.8	915.4	944.2	968.2	972.5
30°	1849.5	1701.2	1268.0	827.6	798.8	834.3	868.8	899.1	926.4	949.9	955.2
32.5°	1887.4	1689.2	1130.3	763.3	790.6	824.7	853.0	879.9	901.0	911.5	914.4
35°	1934.4	1673.9	984.0	735.5	785.4	817.0	842.0	856.4	829.0	823.3	829.5
37.5°	2000.1	1659.5	838.1	723.5	782.0	814.2	836.2	799.3	765.7	752.3	757.1
40°	2071.1	1651.3	739.3	713.9	783.4	817.0	812.2	757.5	709.1	680.8	679.8
42.5°	2131.6	1638.9	676.0	707.6	787.3	828.1	779.6	720.6	648.6	631.8	632.3
45°	2172.4	1607.2	642.4	700.9	790.6	830.5	764.3	669.7	618.4	607.9	607.4
47.5°	2189.1	1549.6	620.8	690.4	790.2	810.8	733.1	648.6	597.3	594.4	596.3
50°	2178.1	1455.1	598.7	669.7	778.7	790.2	697.1	629.9	582.9	598.7	610.3
52.5°	2137.3	1332.8	572.4	641.4	758.0	766.7	678.9	618.4	572.4	593.5	602.6
55°	2126.8	1233.5	538.8	604.5	727.3	724.9	659.7	612.7	565.2	557.0	558.4
57.5°	2112.9	1136.6	483.1	538.3	649.6	653.4	641.4	605.9	546.4	544.0	546.4
60°	1835.6	871.2	430.8	464.4	533.5	554.1	620.8	593.5	516.2	506.1	505.7
62.5°	1198.9	527.7	383.3	404.9	434.7	458.7	566.1	557.5	483.1	476.9	481.2
65°	644.8	376.1	348.8	361.7	378.1	396.3	469.2	496.6	436.6	414.5	415.0
67.5°	329.6	320.0	322.9	332.0	344.5	353.6	378.5	402.5	372.3	353.6	353.1
70°	282.1	289.8	294.1	299.4	307.5	306.1	308.5	312.8	310.4	301.3	300.8
72.5°	240.4	252.4	253.3	254.3	257.2	250.4	246.1	238.9	239.4	240.8	241.3
75°	182.8	194.3	197.2	195.7	198.6	190.0	184.2	177.0	168.4	167.0	167.9
77.5°	119.0	128.1	132.4	131.5	132.9	126.2	123.3	115.6	105.5	101.7	101.7
80°	72.0	77.2	80.6	81.6	83.0	78.2	73.4	66.7	62.4	58.1	58.1
82.5°	43.7	47.0	49.4	49.4	50.9	45.6	41.7	36.9	35.0	31.2	31.2
85°	22.1	24.5	25.4	24.9	24.0	19.7	18.2	15.8	14.9	13.0	13.0
87.5°	5.3	6.7	6.7	4.8	4.8	2.4	1.4	0.5	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



CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

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			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/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)