

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: P636518

Luminaire Tested: GWS-SA3F-830-U-T3-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P636518
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3F-830-U-T3-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14259.6 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

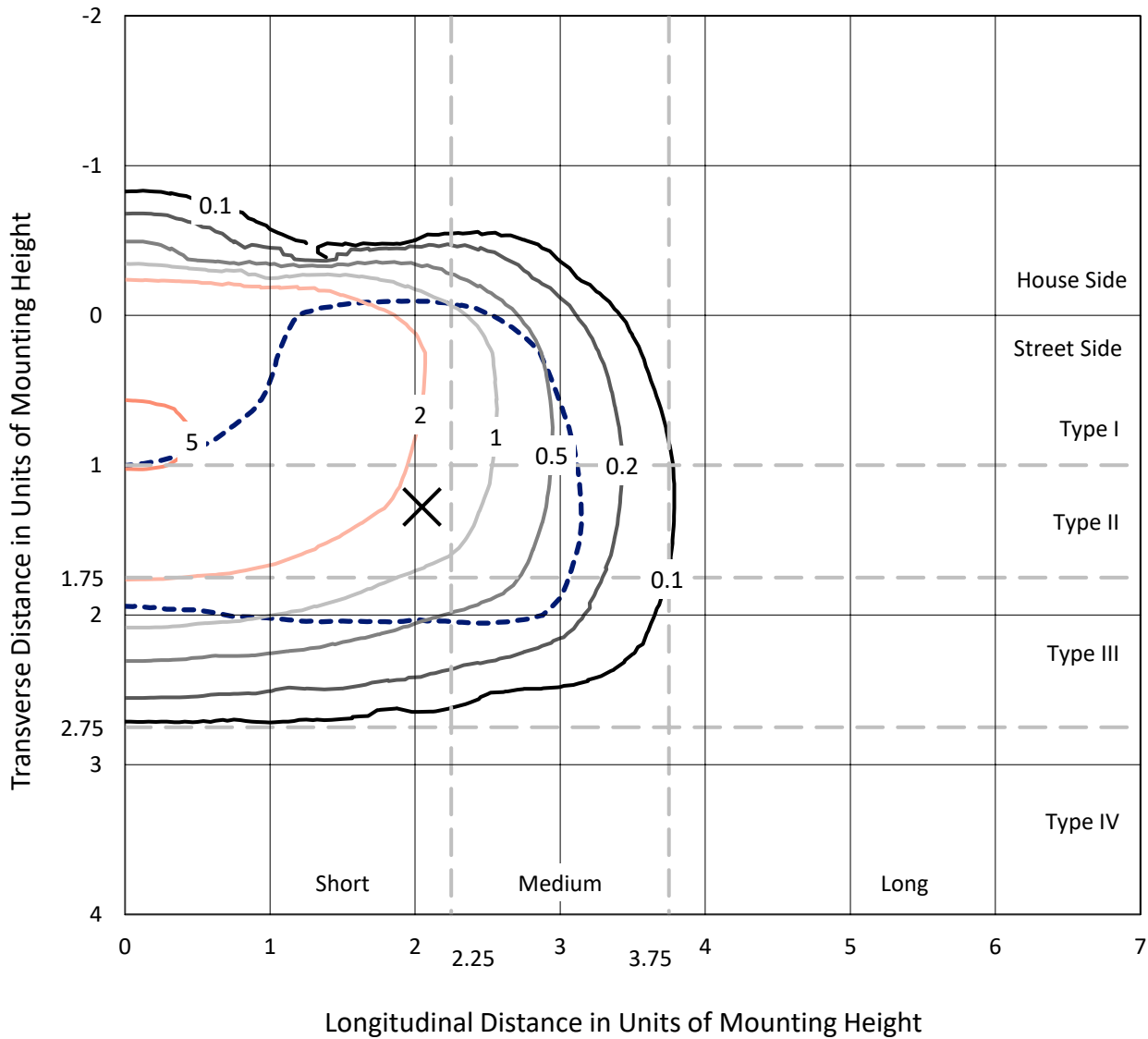
Input Watts (W): 183.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

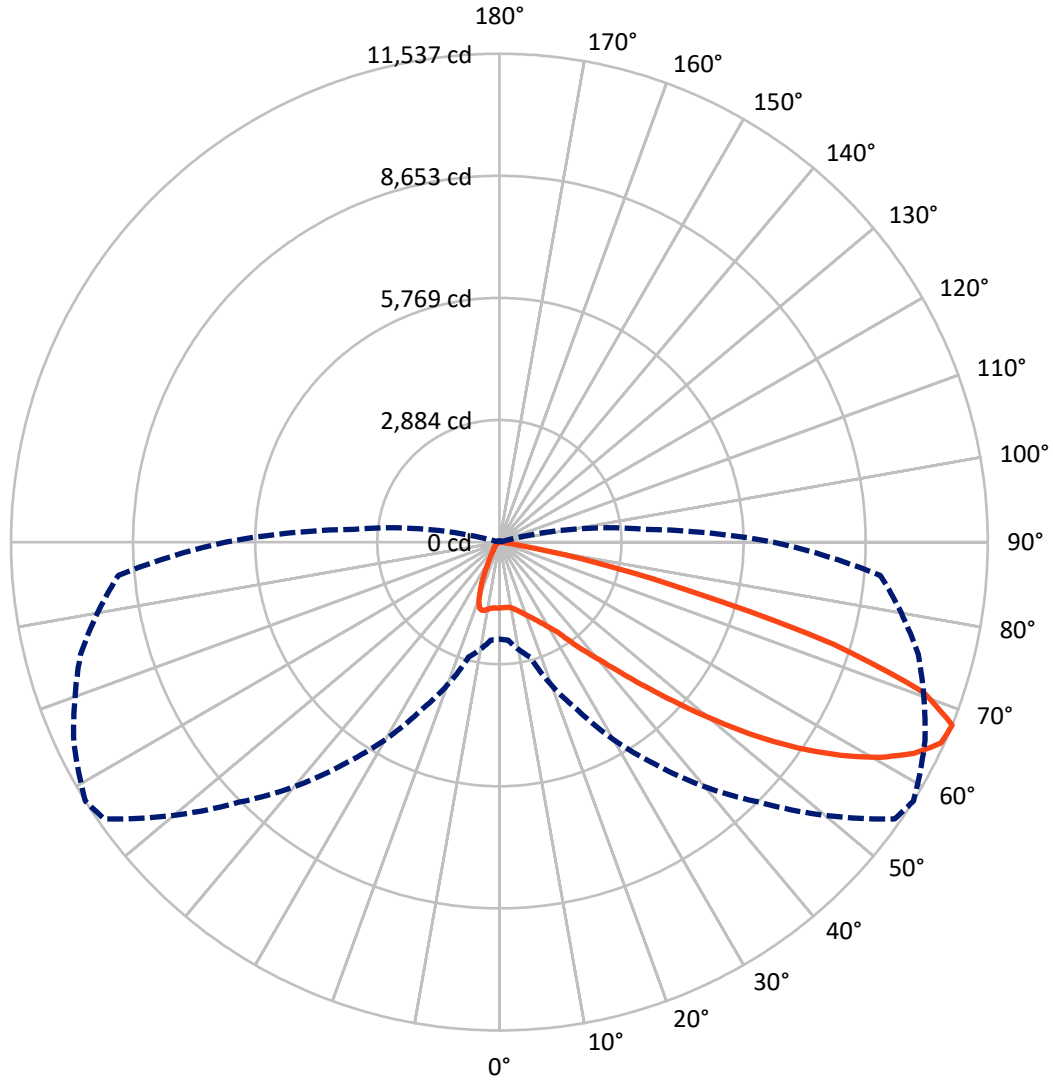
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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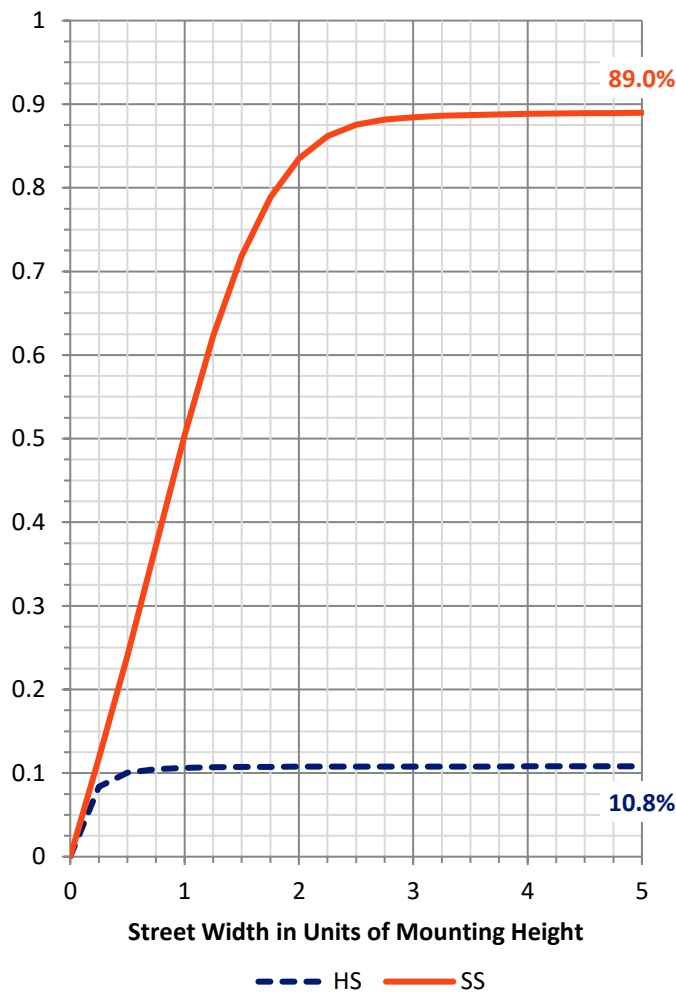
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1555.7	0.0	1555.7
	% Fixture	10.9	0.0	10.9
Street Side	Lumens	12703.9	0.0	12703.9
	% Fixture	89.1	0.0	89.1
Total	Lumens	14259.6	0.0	14259.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	1.0
10°-20°	409.8	2.9
20°-30°	715.4	5.0
30°-40°	1277.6	9.0
40°-50°	2335.2	16.4
50°-60°	3883.6	27.2
60°-70°	4218.3	29.6
70°-80°	1238.5	8.7
80°-90°	35.3	0.2
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°	14259.6	100.0
0°-180°	14259.6	100.0

Coefficient of Utilization



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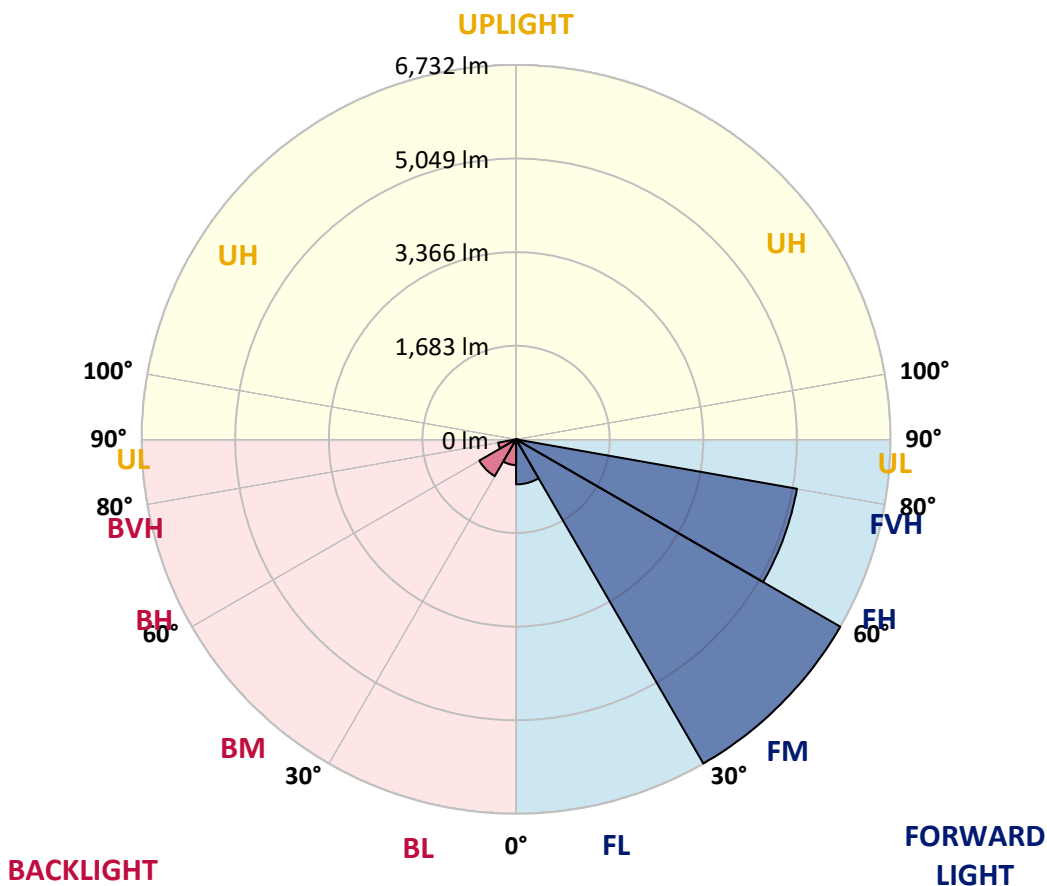
CATALOG NUMBER: GWS-SA3F-830-U-T3-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	809.7	5.7			
FM (30°-60°)	6732.3	47.2			
FH (60°-80°)	5128.4	36.0			G3/7500
FVH (80°-90°)	33.5	0.2			G1/100
BL (0°-30°)	461.5	3.2	B1/500		
BM (30°-60°)	764.1	5.4	B1/1000		
BH (60°-80°)	328.4	2.3	B1/500		G1/500
BVH (80°-90°)	1.7	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-G3

Type III Short





REPORT NUMBER: P636518

CATALOG NUMBER: GWS-SA3F-830-U-T3-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9
2.5°	1524.6	1521.8	1521.8	1533.0	1534.4	1539.9	1552.5	1553.9	1560.8	1558.0	1548.3
5°	1445.3	1446.7	1455.0	1474.5	1491.2	1512.1	1542.7	1549.7	1565.0	1573.4	1567.8
7.5°	1371.5	1372.9	1385.4	1416.0	1448.1	1489.8	1539.9	1553.9	1584.5	1606.8	1608.2
10°	1343.6	1342.2	1354.8	1389.6	1431.3	1489.8	1562.2	1580.3	1626.3	1665.3	1672.2
12.5°	1352.0	1350.6	1363.1	1395.1	1441.1	1514.9	1601.2	1626.3	1684.8	1744.6	1757.2
15°	1385.4	1384.0	1392.4	1418.8	1468.9	1545.5	1651.3	1688.9	1762.7	1835.1	1854.6
17.5°	1485.6	1478.7	1470.3	1473.1	1502.4	1581.7	1715.4	1761.3	1853.2	1939.6	1956.3
20°	1663.9	1645.8	1623.5	1594.2	1580.3	1634.6	1789.2	1842.1	1953.5	2052.3	2055.1
22.5°	1932.6	1925.6	1874.1	1789.2	1729.3	1730.7	1875.5	1936.8	2073.2	2181.8	2166.5
25°	2307.1	2303.0	2223.6	2084.4	1928.4	1875.5	1985.5	2048.2	2215.2	2330.8	2282.1
27.5°	2772.2	2742.9	2649.7	2461.7	2229.2	2063.5	2124.7	2180.4	2365.6	2474.2	2382.3
30°	3177.4	3178.8	3091.0	2894.7	2632.9	2346.1	2294.6	2343.3	2503.5	2617.6	2506.2
32.5°	3567.2	3579.7	3483.7	3306.8	3020.0	2715.1	2538.3	2546.6	2680.3	2804.2	2669.1
35°	3929.2	3939.0	3872.1	3721.8	3454.4	3100.8	2878.0	2873.8	2946.2	3072.9	2896.1
37.5°	4334.4	4344.2	4278.7	4143.7	3893.0	3542.2	3263.7	3258.1	3287.4	3390.4	3188.5
40°	4766.0	4784.1	4711.7	4597.6	4358.1	4061.5	3712.0	3661.9	3632.7	3753.8	3567.2
42.5°	5203.2	5231.1	5206.0	5091.8	4887.2	4642.1	4294.0	4216.1	4153.4	4305.2	4107.5
45°	5746.3	5779.7	5768.5	5680.8	5522.1	5323.0	4994.4	4903.9	4874.6	5015.3	4780.0
47.5°	6268.4	6304.6	6345.0	6325.5	6212.7	6120.8	5756.0	5704.5	5696.1	5846.5	5481.7
50°	6656.9	6690.3	6844.8	6956.2	7032.8	7013.3	6697.2	6620.7	6608.1	6704.2	6222.4
52.5°	6935.3	6967.4	7180.4	7528.5	7809.7	7962.9	7644.0	7627.3	7559.1	7525.7	6915.8
55°	7151.1	7195.7	7419.9	7946.2	8512.9	8852.6	8653.5	8593.6	8418.2	8226.0	7559.1
57.5°	7194.3	7212.4	7528.5	8238.6	9058.7	9608.7	9608.7	9504.2	9165.9	8899.9	8302.6
60°	6807.2	6862.9	7290.4	8214.9	9292.6	10102.9	10400.9	10328.5	9871.8	9544.6	9018.3
62.5°	5948.1	6010.8	6531.5	7648.2	9058.7	10204.6	11001.0	10989.9	10474.7	10077.9	9611.4
65°	4561.4	4607.3	5061.2	6397.9	8070.1	9813.3	11429.9	11460.5	10950.9	10430.1	9816.1
67.5°	2291.8	2323.8	2814.0	4370.6	6396.5	8686.9	11400.6	11537.1	11095.7	10243.6	9035.0
70°	800.6	832.6	1063.8	1875.5	3893.0	6633.2	10414.8	10637.6	10245.0	8744.0	6665.2
72.5°	274.3	289.6	441.4	696.2	1514.9	3932.0	7919.7	8255.3	7552.1	5870.2	3830.4
75°	155.9	165.7	236.7	377.3	634.9	1293.5	4493.1	4699.2	4402.6	3199.6	1576.1
77.5°	105.8	114.2	147.6	214.4	350.9	416.3	1832.3	2307.1	2012.0	1044.3	402.4
80°	62.7	68.2	90.5	126.7	179.6	161.5	392.6	522.1	672.5	311.9	121.1
82.5°	29.2	33.4	58.5	83.5	90.5	68.2	115.6	140.6	189.4	153.2	50.1
85°	0.0	0.0	19.5	34.8	33.4	19.5	32.0	34.8	51.5	76.6	19.5
87.5°	0.0	0.0	0.0	0.0	0.0	1.4	2.8	4.2	8.4	15.3	8.4
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°	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9	1553.9
2.5°	1559.4	1549.7	1560.8	1555.3	1560.8	1559.4	1548.3	1541.3	1541.3	1528.8	1524.6
5°	1578.9	1569.2	1572.0	1559.4	1556.7	1549.7	1535.8	1530.2	1530.2	1517.7	1513.5
7.5°	1622.1	1606.8	1604.0	1578.9	1567.8	1548.3	1523.2	1513.5	1512.1	1499.6	1495.4
10°	1690.3	1672.2	1659.7	1627.7	1595.6	1556.7	1503.7	1459.2	1434.1	1400.7	1397.9
12.5°	1773.9	1751.6	1732.1	1683.4	1630.5	1542.7	1386.8	1223.9	1123.6	1044.3	1049.8
15°	1867.2	1846.3	1815.6	1741.8	1633.2	1404.9	1079.1	828.5	705.9	640.5	637.7
17.5°	1968.8	1938.2	1888.0	1787.8	1545.5	1073.5	701.7	495.7	431.6	409.4	403.8
20°	2063.5	2025.9	1963.2	1797.5	1292.1	726.8	438.6	384.3	373.2	366.2	366.2
22.5°	2163.7	2116.4	2023.1	1722.3	960.7	465.0	373.2	360.6	352.3	342.5	341.1
25°	2265.4	2204.1	2077.4	1526.0	629.3	366.2	349.5	335.6	320.2	304.9	300.7
27.5°	2351.7	2272.3	2119.2	1233.6	403.8	330.0	318.8	295.2	274.3	257.6	254.8
30°	2454.7	2353.1	2137.3	902.2	317.5	291.0	274.3	249.2	224.2	207.5	201.9
32.5°	2592.6	2481.2	2109.4	587.6	281.3	256.2	229.7	200.5	175.4	157.3	154.6
35°	2807.0	2674.7	1981.3	374.5	254.8	221.4	189.4	158.7	137.8	123.9	121.1
37.5°	3068.8	2946.2	1771.1	281.3	228.3	192.1	154.6	125.3	110.0	100.2	97.5
40°	3457.2	3286.0	1510.7	246.4	201.9	162.9	126.7	103.0	91.9	83.5	80.8
42.5°	3961.3	3687.0	1211.4	224.2	176.8	136.5	103.0	84.9	75.2	69.6	68.2
45°	4550.2	4078.2	895.3	201.9	153.2	112.8	84.9	69.6	62.7	58.5	57.1
47.5°	5153.1	4420.7	618.2	178.2	130.9	93.3	71.0	59.9	54.3	48.7	47.3
50°	5796.4	4710.3	421.9	154.6	111.4	76.6	61.3	54.3	47.3	43.2	41.8
52.5°	6268.4	4817.6	293.8	133.7	94.7	65.4	54.3	48.7	43.2	37.6	36.2
55°	6704.2	4814.8	222.8	112.8	80.8	57.1	48.7	43.2	37.6	33.4	32.0
57.5°	7138.6	4777.2	175.4	96.1	69.6	51.5	43.2	37.6	34.8	29.2	27.8
60°	7419.9	4635.2	136.5	80.8	59.9	44.6	37.6	33.4	29.2	25.1	23.7
62.5°	7568.9	4437.4	104.4	64.0	48.7	39.0	33.4	29.2	25.1	20.9	19.5
65°	7367.0	4086.6	82.1	50.1	37.6	33.4	27.8	23.7	19.5	15.3	13.9
67.5°	6471.7	3446.1	64.0	40.4	29.2	25.1	23.7	19.5	13.9	11.1	9.7
70°	4573.9	2360.0	50.1	30.6	22.3	19.5	18.1	15.3	11.1	8.4	7.0
72.5°	2510.4	1190.5	36.2	22.3	16.7	15.3	13.9	12.5	9.7	7.0	7.0
75°	966.3	327.2	26.5	15.3	11.1	11.1	9.7	9.7	8.4	5.6	5.6
77.5°	252.0	97.5	16.7	9.7	7.0	7.0	7.0	5.6	5.6	4.2	4.2
80°	80.8	32.0	9.7	7.0	5.6	4.2	4.2	2.8	4.2	2.8	2.8
82.5°	26.5	11.1	5.6	5.6	4.2	2.8	2.8	1.4	1.4	0.0	0.0
85°	9.7	5.6	4.2	2.8	2.8	2.8	1.4	0.0	0.0	0.0	0.0
87.5°	5.6	2.8	2.8	2.8	2.8	1.4	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

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

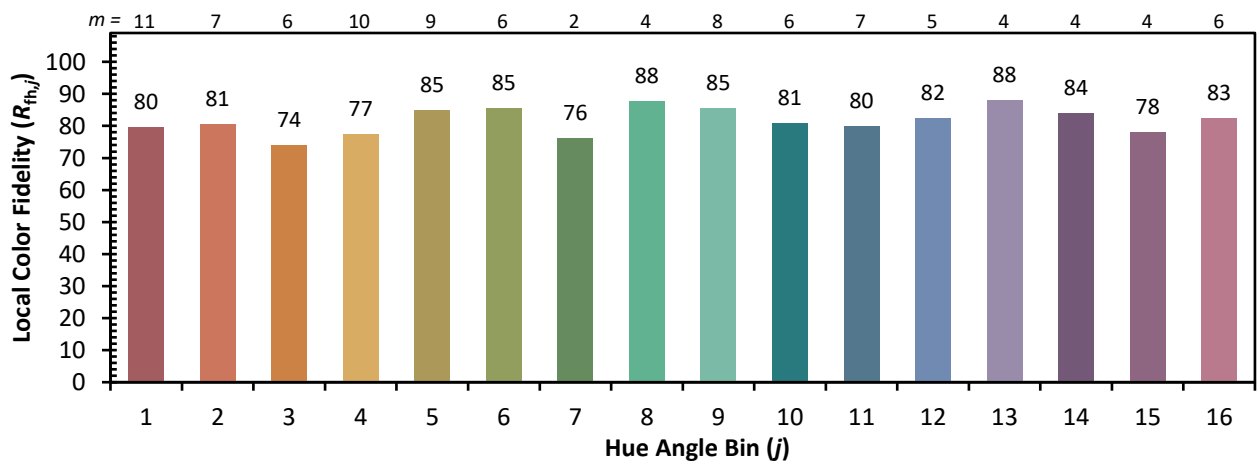
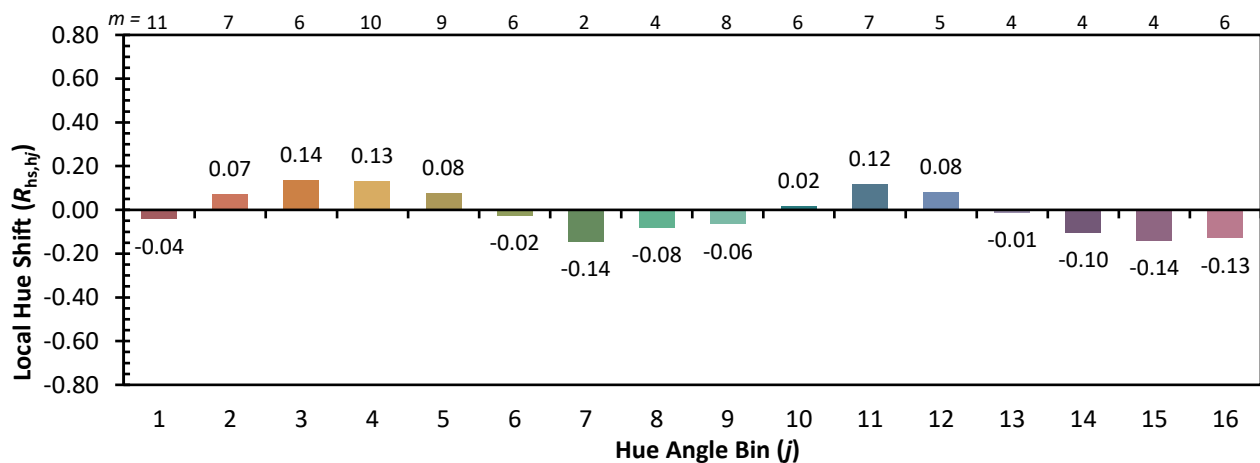
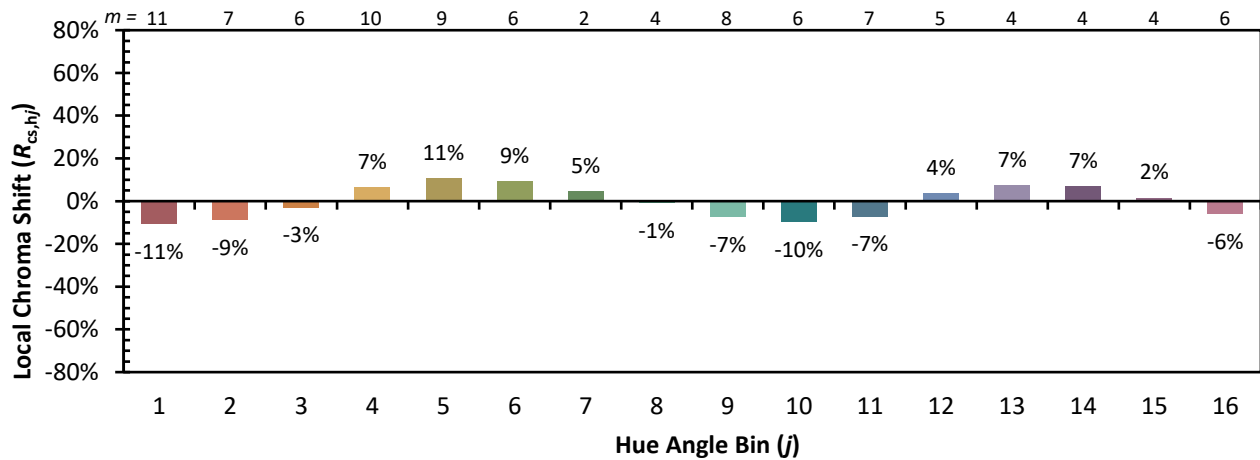


Individual Sample Fidelity Index ($R_{f,i}$)

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)