

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: P631043

Luminaire Tested: GWS-SA1E-830-U-RW-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P631043
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1E-830-U-RW-W
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6196.7 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

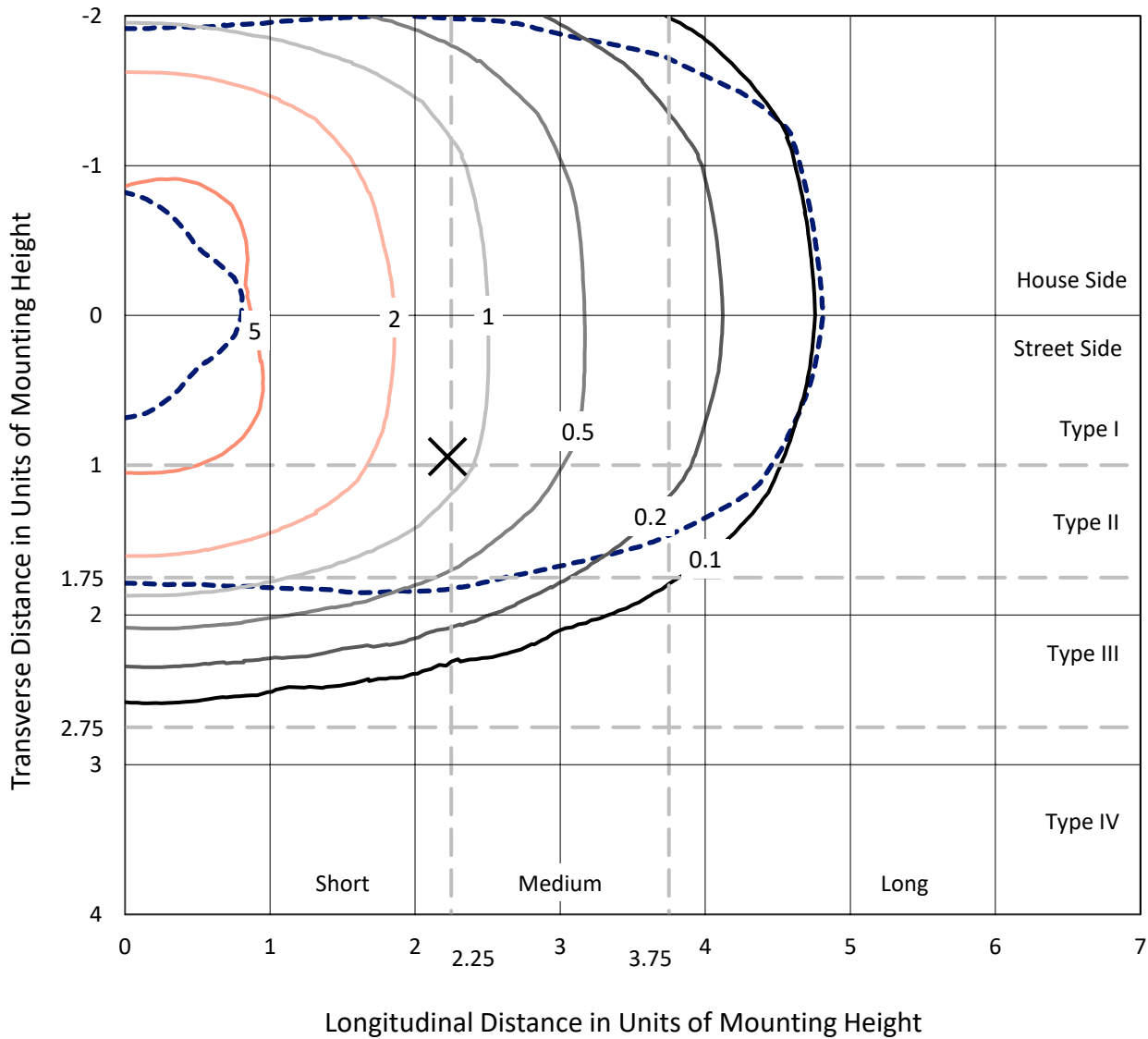
Input Watts (W): 58.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P631043
 CATALOG NUMBER: GWS-SA1E-830-U-RW-W

Iso-Footcandle Lines of Horizontal Illumination

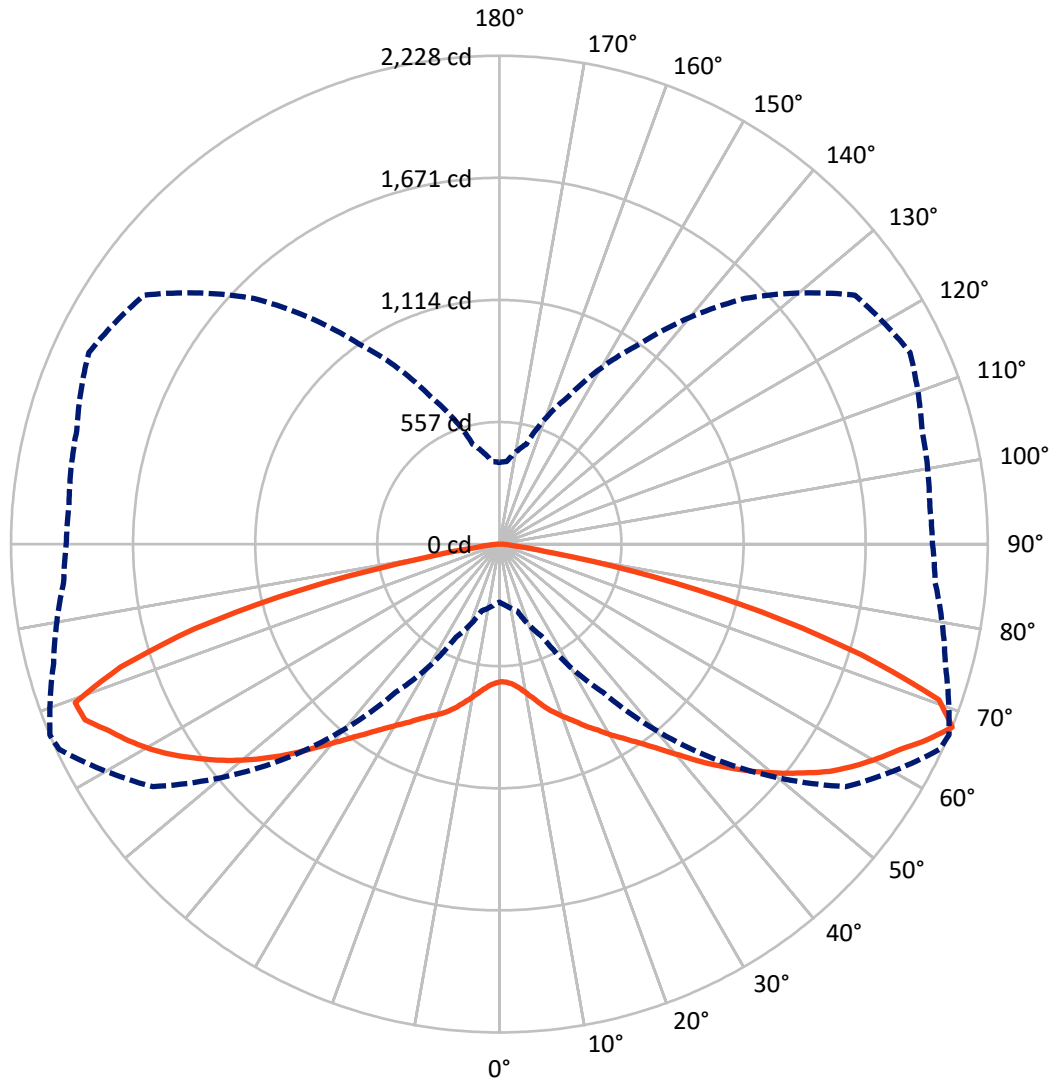
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.2 fc
 Type III - Short - N/A

REPORT NUMBER: P631043
CATALOG NUMBER: GWS-SA1E-830-U-RW-W

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P631043

CATALOG NUMBER: GWS-SA1E-830-U-RW-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3064.1	0.0	3064.1
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	3132.5	0.0	3132.5
	% Fixture	50.6	0.0	50.6
Total	Lumens	6196.7	0.0	6196.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.6	1.0
10°-20°	208.0	3.4
20°-30°	408.0	6.6
30°-40°	695.2	11.2
40°-50°	1116.3	18.0
50°-60°	1516.8	24.5
60°-70°	1451.0	23.4
70°-80°	689.8	11.1
80°-90°	50.0	0.8
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°	6196.7	100.0
0°-180°	6196.7	100.0

Coefficient of Utilization



REPORT NUMBER: P631043

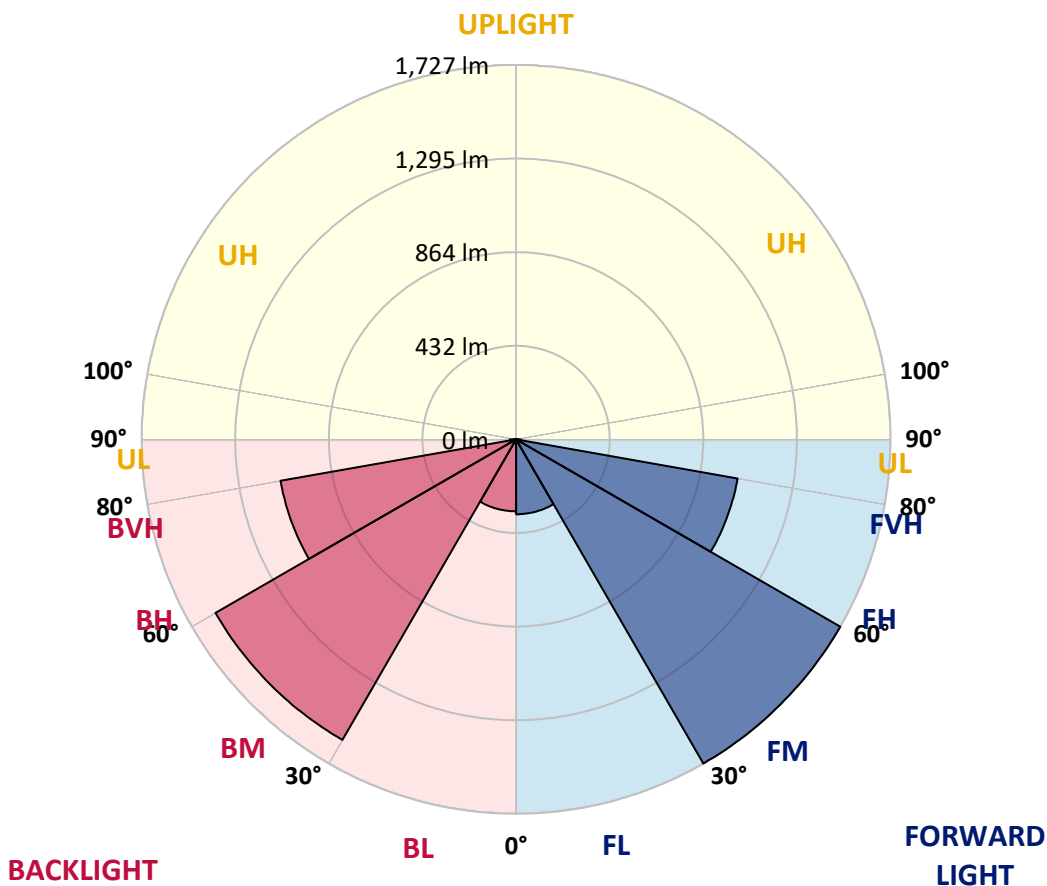
CATALOG NUMBER: GWS-SA1E-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	345.5	5.6			
FM (30°-60°)	1727.1	27.9			
FH (60°-80°)	1037.5	16.7			G1/1800
FVH (80°-90°)	22.5	0.4			G1/100
BL (0°-30°)	332.1	5.4	B1/500		
BM (30°-60°)	1601.3	25.8	B2/2500		
BH (60°-80°)	1103.3	17.8	B3/2500		G3/2500
BVH (80°-90°)	27.5	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





REPORT NUMBER: P631043
 CATALOG NUMBER: GWS-SA1E-830-U-RW-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5
2.5°	614.5	615.4	616.7	619.3	621.8	625.7	629.6	629.2	630.9	632.2	633.5
5°	611.1	611.9	614.1	617.5	621.4	627.9	636.1	639.5	642.1	646.9	651.2
7.5°	618.4	620.1	623.1	627.9	633.9	642.1	653.3	659.4	663.3	671.9	679.2
10°	628.3	630.5	636.5	645.6	654.6	667.2	681.4	690.5	693.0	704.3	718.1
12.5°	637.8	640.4	650.3	666.7	683.1	699.9	716.8	728.0	728.9	744.0	759.5
15°	652.9	655.1	668.4	689.6	714.6	737.9	758.6	766.4	769.9	780.6	800.1
17.5°	686.1	688.7	706.0	728.9	755.2	779.8	800.5	807.0	807.0	816.0	832.0
20°	722.0	724.5	747.4	776.8	808.7	833.7	849.7	843.6	841.5	844.1	855.3
22.5°	762.1	766.8	788.8	822.9	862.2	892.8	901.0	882.9	876.9	870.8	873.4
25°	813.4	819.1	840.6	876.9	915.3	947.6	952.4	924.3	920.9	899.7	892.0
27.5°	872.6	876.9	903.6	939.4	975.3	1002.5	1007.6	973.1	961.5	932.1	914.0
30°	948.9	952.8	976.1	1011.5	1042.6	1061.6	1068.0	1020.6	1011.5	966.6	938.6
32.5°	1032.2	1034.0	1057.7	1091.8	1119.4	1137.5	1128.5	1073.2	1059.8	1009.4	971.0
35°	1127.6	1127.6	1158.2	1185.9	1207.9	1213.0	1195.8	1132.8	1117.2	1062.4	1014.5
37.5°	1221.2	1223.8	1252.3	1285.1	1304.5	1303.7	1272.2	1203.1	1185.4	1125.9	1072.8
40°	1322.7	1328.3	1356.7	1393.4	1412.0	1409.4	1361.1	1284.2	1266.1	1195.8	1144.0
42.5°	1415.9	1424.9	1458.2	1495.7	1516.0	1514.3	1463.8	1377.5	1359.8	1280.4	1228.6
45°	1490.1	1499.6	1541.0	1593.2	1625.6	1622.6	1571.6	1474.1	1452.5	1369.3	1312.3
47.5°	1555.2	1565.2	1611.3	1666.6	1717.9	1723.1	1676.5	1571.6	1548.8	1464.6	1400.3
50°	1605.3	1610.1	1661.8	1722.3	1781.8	1810.7	1770.2	1669.6	1642.0	1558.7	1486.2
52.5°	1601.4	1607.9	1671.8	1753.8	1833.6	1881.1	1853.0	1762.0	1735.2	1644.6	1573.8
55°	1522.5	1528.9	1604.9	1724.4	1862.5	1932.4	1929.4	1850.0	1830.6	1732.2	1664.9
57.5°	1407.2	1421.5	1497.0	1626.0	1824.5	1973.4	1985.5	1930.3	1910.0	1818.1	1755.0
60°	1201.0	1219.9	1307.1	1474.6	1702.8	1959.6	2045.5	1998.0	1985.5	1897.9	1836.6
62.5°	872.6	886.4	1002.5	1222.1	1522.5	1861.2	2096.0	2067.9	2058.4	1969.5	1910.4
65°	522.6	554.1	647.3	864.4	1228.1	1675.6	2068.3	2159.4	2149.5	2043.3	1973.4
67.5°	264.5	278.8	315.5	468.6	826.0	1386.5	1929.8	2216.4	2228.4	2106.3	1995.8
70°	164.0	167.9	178.2	231.3	412.5	911.0	1578.1	2067.9	2127.0	2096.4	1937.6
72.5°	131.6	132.5	134.2	144.1	198.1	425.9	997.7	1619.5	1726.1	1957.9	1854.3
75°	109.2	109.6	110.0	113.1	123.4	173.9	485.5	1112.9	1237.6	1664.0	1719.2
77.5°	87.6	85.4	87.2	88.5	91.1	97.1	167.4	593.8	720.2	1092.2	1329.6
80°	57.0	56.1	59.6	60.8	63.4	67.3	89.3	201.5	244.7	397.4	422.9
82.5°	30.6	28.9	36.2	35.0	36.2	39.3	52.6	73.8	82.9	120.0	101.4
85°	9.5	9.5	9.9	11.7	14.2	13.8	22.9	36.2	40.1	51.4	38.0
87.5°	1.7	1.7	1.7	1.7	1.7	2.2	4.7	7.3	9.9	17.7	13.4
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: P631043
 CATALOG NUMBER: GWS-SA1E-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5	627.5
2.5°	636.1	632.2	634.4	635.6	635.2	634.4	630.0	629.2	627.0	623.6	622.7
5°	655.1	650.8	651.2	649.9	645.6	640.0	630.5	625.7	621.8	617.5	617.1
7.5°	684.8	680.1	678.8	672.8	660.7	647.7	632.6	624.0	617.5	611.9	611.1
10°	722.8	718.1	713.8	699.5	679.7	662.4	642.6	630.0	620.5	613.6	612.3
12.5°	765.1	761.2	750.4	729.7	706.0	685.7	665.4	649.9	636.1	625.7	624.4
15°	812.1	803.5	787.1	760.4	737.9	721.5	696.9	675.8	653.8	640.0	636.9
17.5°	844.9	837.6	818.2	792.3	774.6	760.4	731.5	701.2	671.5	651.2	646.9
20°	868.2	860.5	838.5	819.5	813.9	801.8	768.1	733.2	698.7	673.6	668.0
22.5°	885.1	876.9	854.4	844.9	852.7	850.6	817.8	778.1	737.1	707.3	700.4
25°	901.0	893.3	873.4	876.9	897.6	904.1	868.7	822.5	775.9	740.9	732.7
27.5°	916.1	906.2	897.2	916.1	945.5	957.6	920.0	867.8	817.3	781.5	775.0
30°	939.4	927.8	926.5	954.1	1000.7	1011.1	969.7	917.4	867.4	831.1	822.9
32.5°	968.8	958.0	958.9	1000.3	1054.2	1062.9	1027.5	978.7	928.7	892.4	881.2
35°	1008.5	995.1	1002.5	1053.4	1107.7	1123.7	1095.2	1054.7	1005.9	968.8	956.3
37.5°	1063.3	1043.9	1059.0	1112.5	1167.3	1191.0	1169.0	1138.8	1090.5	1052.9	1041.3
40°	1133.2	1117.2	1123.3	1182.4	1238.9	1267.4	1253.6	1223.8	1175.9	1136.7	1123.3
42.5°	1216.1	1200.1	1197.9	1260.9	1317.5	1360.6	1347.2	1320.1	1270.4	1225.6	1212.6
45°	1297.2	1282.5	1285.5	1349.8	1413.3	1460.3	1446.9	1415.0	1361.1	1309.3	1298.9
47.5°	1381.8	1369.7	1372.3	1440.5	1510.4	1557.4	1540.6	1501.7	1438.7	1383.5	1371.0
50°	1468.5	1454.7	1458.6	1530.2	1605.7	1650.2	1624.3	1566.9	1497.4	1443.5	1432.7
52.5°	1554.8	1538.4	1548.3	1616.1	1694.2	1729.6	1681.7	1612.2	1544.9	1491.4	1479.3
55°	1654.1	1636.8	1626.0	1698.5	1775.8	1790.4	1724.8	1643.7	1563.9	1503.0	1495.7
57.5°	1744.7	1730.0	1709.7	1782.2	1839.2	1828.4	1758.1	1635.1	1517.7	1439.6	1429.2
60°	1825.8	1813.3	1795.6	1857.3	1883.2	1859.0	1731.3	1532.8	1403.8	1322.2	1317.5
62.5°	1900.5	1887.1	1870.7	1923.3	1919.9	1863.8	1609.6	1375.7	1203.1	1115.5	1107.7
65°	1959.6	1947.5	1942.8	1984.2	1978.6	1771.0	1420.2	1118.5	879.0	780.2	777.2
67.5°	1976.4	1971.7	1997.1	2067.5	1979.9	1584.6	1113.8	741.8	472.1	378.5	372.8
70°	1913.4	1913.0	1985.9	2086.5	1800.4	1210.5	657.2	334.4	237.3	210.6	207.1
72.5°	1831.4	1830.1	1888.0	1799.9	1335.2	662.4	276.6	179.1	148.4	141.1	141.1
75°	1696.8	1693.3	1736.9	1369.3	750.9	249.4	146.7	123.0	116.5	115.2	115.2
77.5°	1383.1	1354.2	1285.5	846.2	261.9	122.6	97.1	96.7	92.8	92.3	92.3
80°	454.8	454.8	528.6	322.8	115.7	75.5	68.6	72.1	68.2	65.6	65.2
82.5°	74.2	102.3	145.4	92.3	62.6	47.0	42.3	44.9	47.0	37.5	37.5
85°	29.3	38.4	56.1	43.2	28.9	19.0	20.3	22.4	19.9	17.3	16.8
87.5°	11.2	13.8	19.9	10.4	6.0	3.5	2.2	2.2	1.7	1.7	1.7
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

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 [^] /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

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 [^] /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)