

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: P631537

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

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P631537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-51)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1F-830-U-RW-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE 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: 5899.8 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B2 - U0 - G1

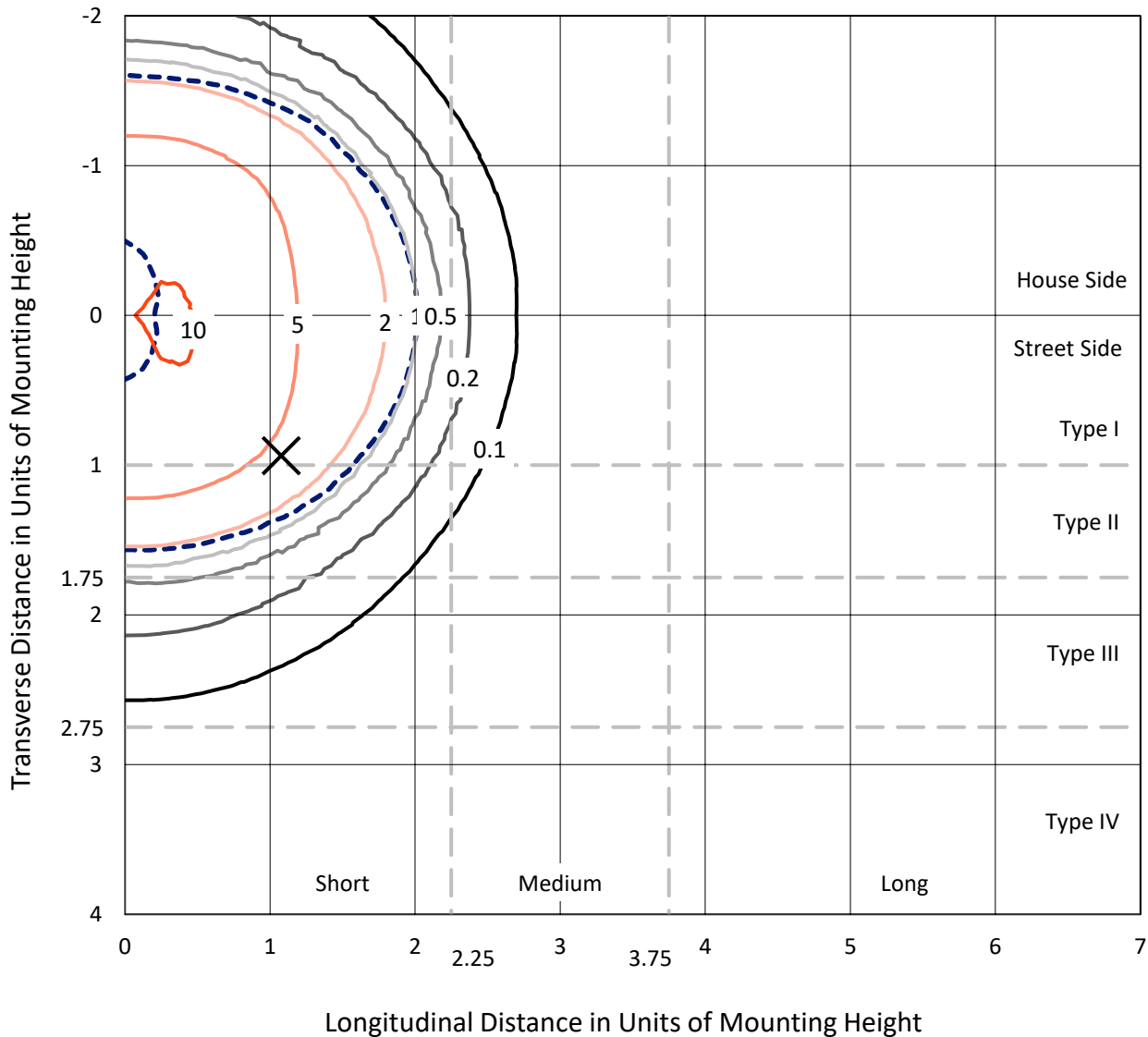
Input Watts (W): 67.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

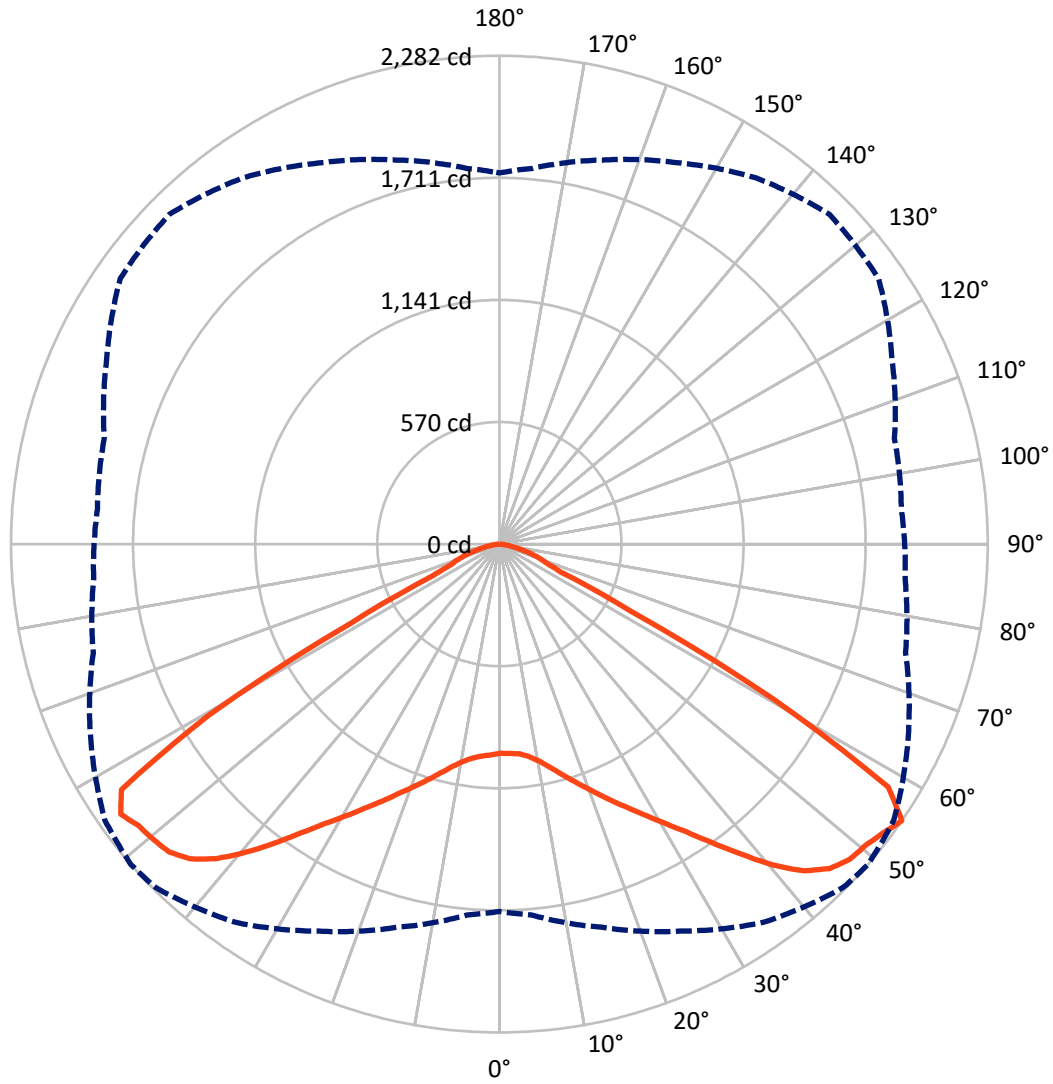
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.9 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 49-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2921.0	0.0	2921.0
	% Fixture	49.5	0.0	49.5
Street Side	Lumens	2978.8	0.0	2978.8
	% Fixture	50.5	0.0	50.5
Total	Lumens	5899.8	0.0	5899.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.3	1.6
10°-20°	314.5	5.3
20°-30°	599.0	10.2
30°-40°	1015.4	17.2
40°-50°	1528.1	25.9
50°-60°	1672.7	28.4
60°-70°	528.9	9.0
70°-80°	126.9	2.2
80°-90°	19.1	0.3
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°	5899.8	100.0
0°-180°	5899.8	100.0

Coefficient of Utilization



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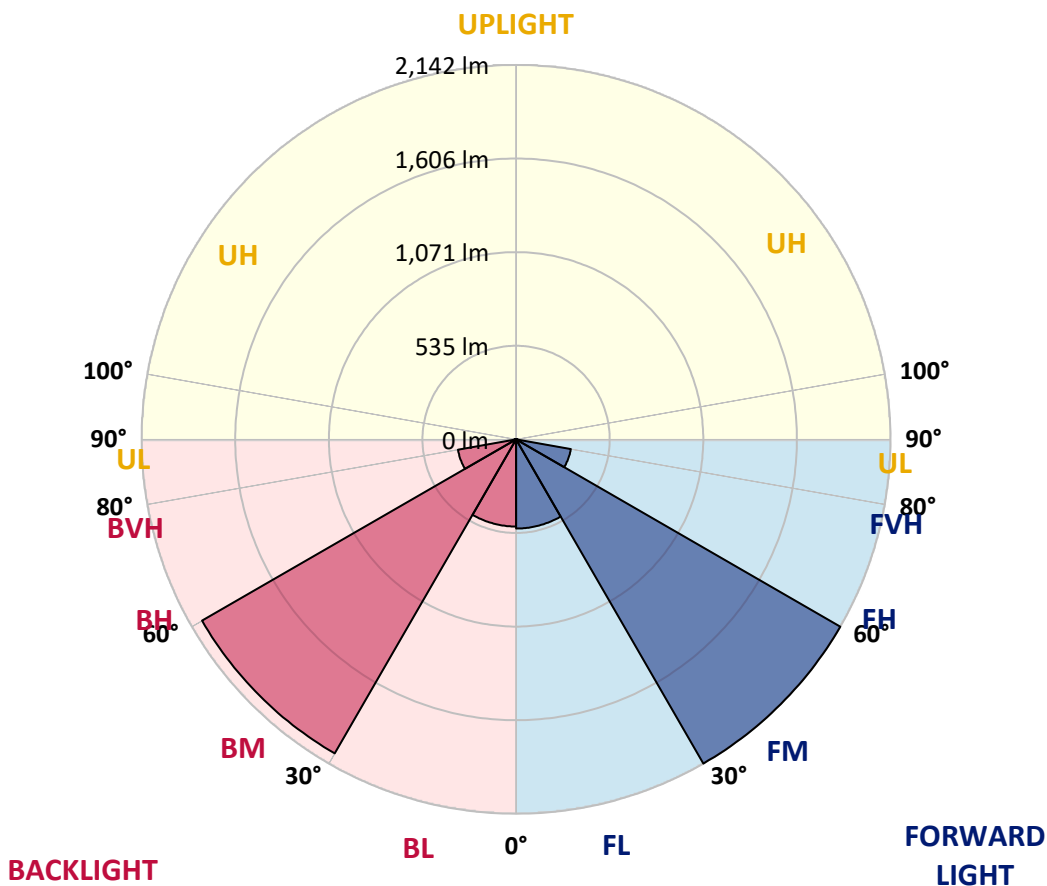
CATALOG NUMBER: GWS-SA1F-830-U-RW-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	510.1	8.6			
FM (30°-60°)	2141.8	36.3			
FH (60°-80°)	318.1	5.4			G0/660
FVH (80°-90°)	8.8	0.1			G0/10
BL (0°-30°)	498.7	8.5	B1/500		
BM (30°-60°)	2074.3	35.2	B2/2500		
BH (60°-80°)	337.7	5.7	B1/500		G0/660
BVH (80°-90°)	10.2	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	49°	55°	65°	75°	85°
0°	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3
2.5°	962.9	963.9	965.8	969.2	972.5	977.3	979.3	981.7	981.2	984.1	984.1
5°	958.1	959.6	962.5	967.3	973.0	982.1	984.5	990.3	996.0	1003.2	1005.6
7.5°	963.9	965.8	969.2	976.9	985.5	997.5	1002.3	1011.9	1022.9	1035.9	1041.2
10°	974.9	977.3	983.1	995.6	1009.5	1027.7	1032.0	1044.0	1061.8	1079.5	1090.1
12.5°	987.4	991.3	1001.8	1021.5	1042.1	1066.1	1072.8	1087.7	1106.9	1129.9	1144.3
15°	1001.8	1005.2	1021.5	1049.3	1081.5	1113.1	1120.8	1135.2	1156.8	1179.3	1199.5
17.5°	1032.0	1037.8	1057.0	1089.1	1126.6	1164.0	1172.6	1188.9	1206.2	1224.0	1243.1
20°	1073.3	1078.1	1102.6	1142.4	1186.5	1220.6	1229.2	1243.6	1251.8	1260.9	1277.2
22.5°	1114.6	1121.3	1149.1	1196.1	1247.9	1284.9	1291.6	1305.0	1299.3	1296.4	1307.0
25°	1165.9	1175.0	1202.4	1253.7	1306.5	1352.1	1357.3	1368.8	1359.3	1344.4	1343.9
27.5°	1229.7	1237.9	1266.2	1319.0	1371.2	1418.7	1428.8	1444.2	1423.1	1404.8	1391.9
30°	1305.5	1310.8	1342.0	1398.1	1451.9	1497.0	1509.9	1525.3	1509.4	1479.2	1466.2
32.5°	1393.8	1401.0	1437.0	1496.0	1544.0	1589.1	1602.0	1621.2	1603.9	1569.9	1553.6
35°	1499.8	1507.0	1544.9	1609.2	1658.2	1704.7	1713.8	1729.7	1708.1	1668.7	1655.8
37.5°	1615.0	1624.1	1672.1	1733.0	1784.3	1838.6	1839.0	1843.8	1813.1	1764.2	1749.8
40°	1744.5	1756.5	1804.5	1867.8	1929.7	1973.9	1973.4	1960.0	1908.1	1832.3	1810.3
42.5°	1872.6	1882.2	1930.7	1995.9	2057.8	2099.6	2087.1	2054.5	1979.6	1876.5	1847.2
45°	1965.2	1972.4	2023.3	2096.7	2159.5	2185.5	2162.9	2123.6	2022.3	1904.3	1861.1
47.5°	2008.9	2018.5	2069.8	2142.8	2213.8	2228.6	2201.8	2164.8	2047.3	1930.2	1872.2
50°	1985.4	1997.9	2055.9	2123.6	2203.7	2234.4	2215.2	2178.3	2073.7	1955.6	1891.8
52.5°	1924.4	1936.4	2009.9	2091.9	2182.6	2243.5	2243.0	2212.8	2103.9	1962.8	1892.8
55°	1716.2	1739.7	1853.9	1995.5	2156.7	2270.4	2281.9	2249.7	2108.7	1964.8	1902.9
57.5°	1117.0	1158.2	1266.7	1450.9	1774.3	2065.0	2142.8	2150.4	2074.1	1956.6	1904.8
60°	466.4	499.5	585.3	707.7	974.9	1320.9	1471.5	1622.7	1805.0	1871.2	1887.0
62.5°	289.8	292.7	301.3	329.1	418.4	587.3	684.2	825.7	1096.8	1327.6	1434.1
65°	261.5	262.9	264.8	262.9	267.2	287.9	313.8	363.2	473.6	588.2	724.5
67.5°	230.3	232.2	233.7	232.2	233.7	234.6	237.5	241.8	262.0	278.3	290.8
70°	186.2	189.0	191.4	190.5	196.2	196.2	199.1	202.5	212.5	224.5	233.2
72.5°	142.0	139.6	142.5	143.5	148.7	151.6	155.9	159.8	171.3	178.5	189.5
75°	92.1	89.7	94.0	96.4	103.6	107.5	111.3	115.2	123.3	128.1	138.7
77.5°	49.9	49.4	53.7	57.1	64.8	69.6	72.4	75.3	82.0	83.5	90.2
80°	28.8	28.8	31.7	34.1	38.9	44.1	47.0	49.4	54.2	55.7	58.5
82.5°	15.8	15.8	17.3	18.7	22.6	25.4	27.8	29.7	34.1	35.5	36.9
85°	7.7	7.2	8.2	9.1	10.6	12.0	13.4	14.4	17.8	18.7	20.6
87.5°	1.0	1.0	1.0	1.4	1.9	2.9	3.4	3.4	5.3	6.2	7.2
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-SA1F-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3	977.3
2.5°	986.9	980.7	984.5	986.0	986.0	984.5	978.3	976.4	973.5	969.2	969.2
5°	1009.0	1004.2	1005.2	1002.8	997.0	989.8	978.3	972.5	967.7	962.5	962.0
7.5°	1046.9	1040.7	1039.7	1030.6	1015.2	999.9	982.6	972.1	964.9	958.1	957.7
10°	1096.3	1090.6	1083.4	1065.1	1042.6	1020.0	996.5	982.1	971.6	962.0	961.5
12.5°	1151.5	1144.8	1131.4	1104.5	1076.2	1054.1	1027.2	1005.2	989.3	976.4	974.0
15°	1211.5	1201.9	1178.9	1147.2	1119.4	1095.8	1067.1	1035.4	1011.4	990.8	988.4
17.5°	1257.5	1245.1	1220.1	1190.4	1167.3	1143.8	1106.4	1066.6	1032.0	1006.1	1002.3
20°	1289.2	1279.1	1250.8	1228.7	1215.3	1194.7	1151.0	1105.9	1067.1	1034.4	1032.5
22.5°	1318.5	1306.5	1278.6	1265.7	1265.7	1251.8	1210.0	1156.8	1111.2	1073.3	1068.5
25°	1351.6	1338.6	1317.5	1316.1	1322.8	1316.6	1266.2	1209.1	1155.8	1113.1	1105.4
27.5°	1397.6	1383.2	1370.8	1379.4	1389.0	1382.3	1326.1	1259.9	1203.8	1160.6	1153.9
30°	1471.0	1453.3	1441.8	1452.3	1471.0	1451.4	1390.4	1320.4	1263.8	1216.3	1212.9
32.5°	1556.4	1536.3	1524.3	1541.1	1557.9	1527.2	1466.7	1399.6	1340.1	1290.2	1284.4
35°	1659.1	1633.7	1615.9	1638.5	1655.8	1625.5	1565.6	1501.8	1435.5	1383.7	1376.0
37.5°	1750.3	1719.6	1707.6	1739.2	1762.3	1742.6	1677.4	1617.4	1544.9	1488.3	1485.0
40°	1816.5	1786.3	1777.6	1829.9	1870.2	1865.4	1806.9	1738.3	1670.2	1604.9	1598.7
42.5°	1845.3	1824.2	1826.1	1896.6	1959.0	1989.7	1937.4	1864.0	1798.3	1730.6	1726.3
45°	1851.5	1838.6	1853.9	1942.2	2024.2	2087.1	2042.5	1981.1	1906.7	1841.4	1839.5
47.5°	1858.2	1851.0	1874.5	1968.1	2065.5	2138.4	2113.5	2050.2	1974.8	1911.0	1906.2
50°	1874.1	1871.2	1897.6	1986.3	2085.2	2152.3	2124.0	2061.2	1983.9	1921.1	1909.6
52.5°	1878.9	1874.1	1912.0	2014.6	2117.8	2151.9	2090.9	2008.9	1931.2	1861.1	1849.1
55°	1893.7	1885.1	1911.0	2025.2	2162.9	2179.7	2089.0	1966.2	1857.8	1762.3	1734.0
57.5°	1897.6	1888.0	1904.8	2007.9	2114.0	2099.1	1836.2	1586.7	1382.3	1276.2	1288.2
60°	1876.9	1879.8	1851.0	1839.5	1695.6	1497.0	1124.2	898.7	705.8	624.2	642.0
62.5°	1428.8	1440.8	1342.5	1167.3	897.7	711.5	470.7	365.6	309.5	295.1	297.5
65°	721.1	737.4	635.2	525.4	390.6	315.7	273.0	264.4	261.5	258.1	258.1
67.5°	285.5	290.3	286.4	268.2	249.5	242.8	240.9	239.9	236.5	234.6	235.1
70°	229.3	233.2	227.4	215.9	208.2	207.8	206.8	204.9	202.5	202.5	203.9
72.5°	187.1	191.0	182.8	175.6	169.8	165.5	163.1	161.7	158.3	158.3	159.8
75°	137.7	140.1	133.4	132.4	126.2	121.9	118.0	116.1	111.8	109.9	111.3
77.5°	91.6	91.2	87.8	87.8	85.4	80.1	75.8	71.5	65.7	61.9	62.9
80°	59.5	59.5	58.1	58.1	55.7	51.3	46.1	41.7	38.4	35.5	35.5
82.5°	37.9	37.4	36.9	36.5	35.5	31.2	27.3	24.5	22.1	20.2	20.6
85°	21.1	21.1	20.2	20.2	18.2	15.8	13.9	12.0	10.6	10.1	10.1
87.5°	7.2	7.2	6.7	6.7	5.8	4.3	3.4	2.9	2.4	1.9	2.4
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)