

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: P631078

Luminaire Tested: GWS-SA1E-830-U-T3R-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P631078
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1E-830-U-T3R-W
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6119.4 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

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

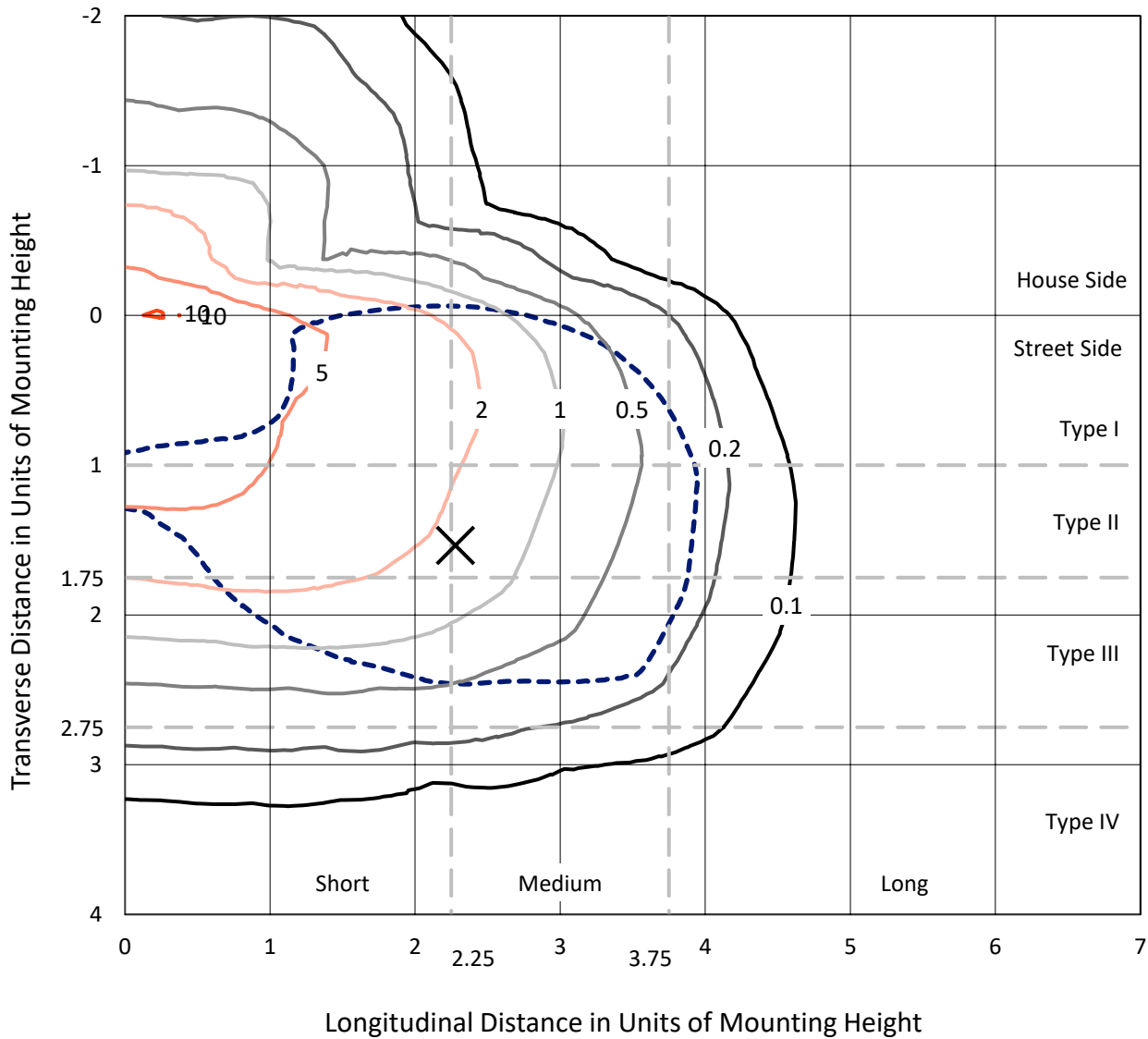


REPORT NUMBER: P631078

CATALOG NUMBER: GWS-SA1E-830-U-T3R-W

Iso-Footcandle Lines of Horizontal Illumination

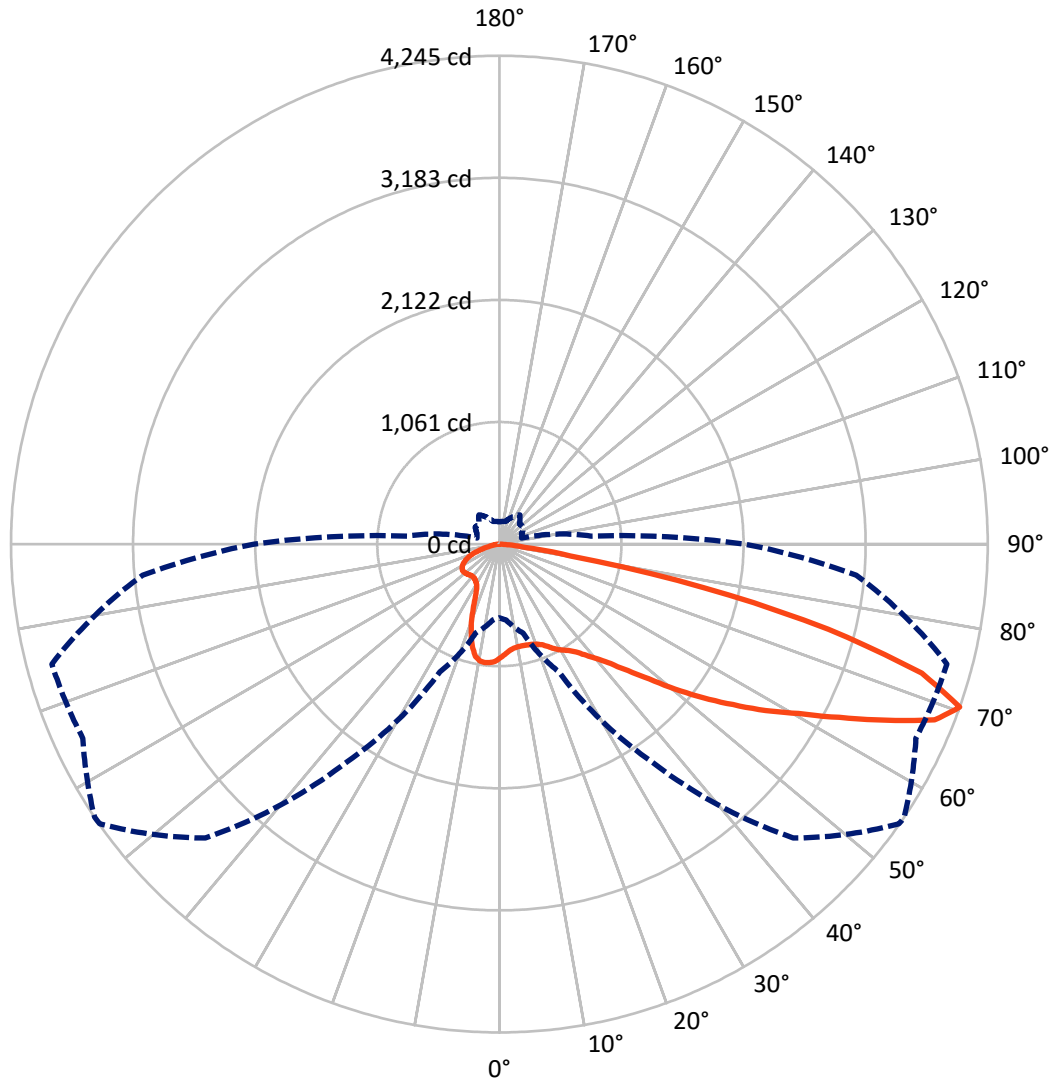
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.2 fc
 Type III - Medium - N/A

REPORT NUMBER: P631078
CATALOG NUMBER: GWS-SA1E-830-U-T3R-W

Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P631078

CATALOG NUMBER: GWS-SA1E-830-U-T3R-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1176.5	0.0	1176.5
	% Fixture	19.2	0.0	19.2
Street Side	Lumens	4942.9	0.0	4942.9
	% Fixture	80.8	0.0	80.8
Total	Lumens	6119.4	0.0	6119.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	1.5
10°-20°	247.7	4.0
20°-30°	409.5	6.7
30°-40°	612.2	10.0
40°-50°	911.0	14.9
50°-60°	1295.2	21.2
60°-70°	1604.2	26.2
70°-80°	885.8	14.5
80°-90°	62.4	1.0
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°	6119.4	100.0
0°-180°	6119.4	100.0

Coefficient of Utilization



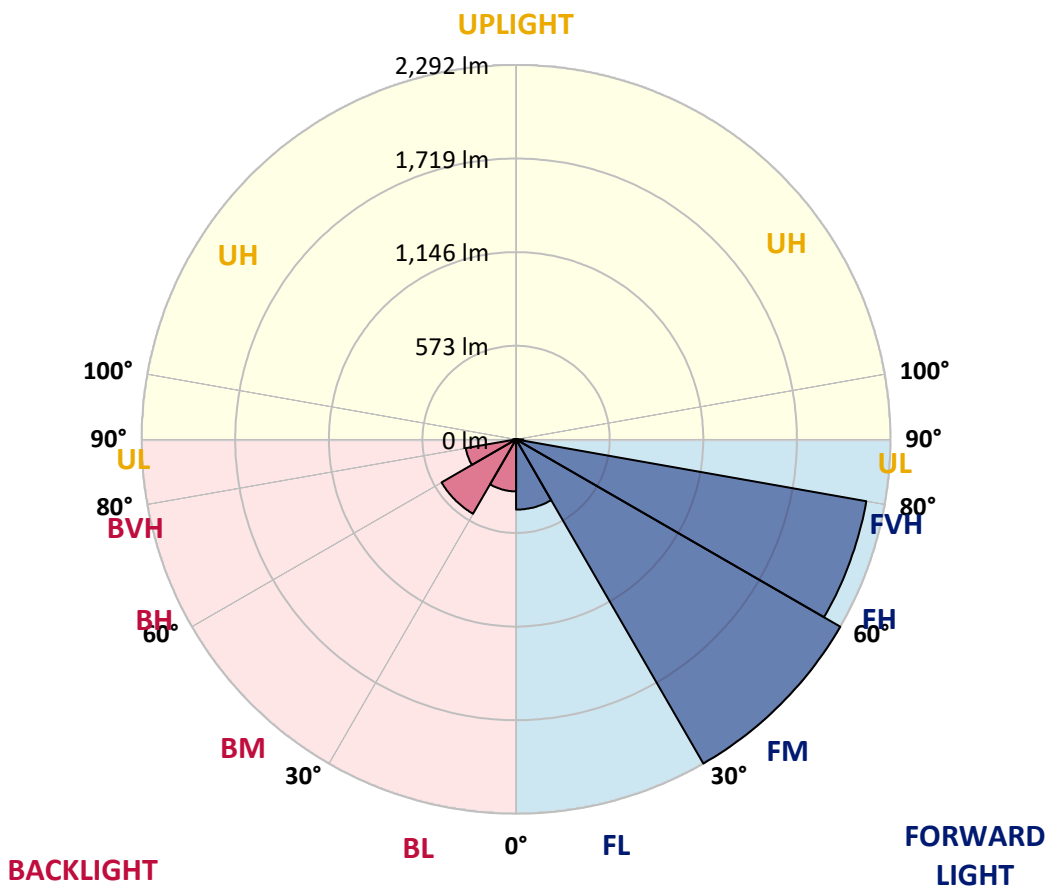
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CATALOG NUMBER: GWS-SA1E-830-U-T3R-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	430.1	7.0			
FM (30°-60°)	2292.2	37.5			
FH (60°-80°)	2177.3	35.6			G2/5000
FVH (80°-90°)	43.4	0.7			G1/100
BL (0°-30°)	318.5	5.2	B1/500		
BM (30°-60°)	526.3	8.6	B1/1000		
BH (60°-80°)	312.7	5.1	B1/500		G1/500
BVH (80°-90°)	19.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type III Medium





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 CATALOG NUMBER: GWS-SA1E-830-U-T3R-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8
2.5°	924.3	919.2	925.2	928.2	936.0	947.2	957.1	957.6	962.7	975.3	987.3
5°	882.5	879.9	881.6	890.7	898.9	913.1	928.2	929.5	944.2	968.8	992.9
7.5°	850.1	846.7	853.1	864.8	875.1	891.1	911.0	912.7	933.4	970.5	1007.6
10°	803.5	800.9	813.0	828.5	851.0	877.3	903.6	905.8	933.0	981.7	1033.5
12.5°	783.2	783.2	788.4	803.1	827.7	862.6	902.3	905.8	939.9	999.0	1066.7
15°	814.7	816.9	812.6	811.7	821.6	854.9	904.0	909.2	952.8	1016.7	1099.5
17.5°	878.2	880.3	869.1	851.4	841.5	862.2	910.5	916.1	966.6	1036.1	1134.9
20°	967.1	969.6	945.0	917.9	883.8	883.3	923.0	928.2	984.3	1057.2	1172.5
22.5°	1071.0	1072.8	1041.7	998.6	946.3	922.6	944.6	949.8	1007.2	1086.6	1213.0
25°	1191.4	1196.6	1159.1	1096.5	1025.7	976.5	980.4	986.5	1048.2	1125.9	1260.9
27.5°	1320.0	1326.5	1283.4	1214.3	1116.8	1036.1	1026.6	1031.8	1091.8	1150.0	1286.4
30°	1451.7	1456.4	1413.3	1334.3	1214.7	1103.4	1065.4	1068.5	1110.8	1161.7	1312.3
32.5°	1597.9	1594.1	1552.6	1461.6	1327.8	1184.1	1101.7	1100.8	1131.9	1185.0	1349.4
35°	1735.2	1740.8	1696.8	1596.2	1452.1	1283.8	1156.1	1152.6	1176.8	1222.9	1401.6
37.5°	1901.3	1899.6	1846.9	1738.2	1576.8	1379.2	1232.4	1226.4	1235.0	1282.1	1474.5
40°	2020.0	2032.1	1998.0	1896.6	1722.7	1496.5	1321.8	1308.4	1310.5	1355.0	1572.1
42.5°	2117.1	2128.3	2131.7	2067.0	1889.7	1641.5	1433.1	1419.7	1421.0	1484.0	1692.0
45°	2191.7	2206.8	2255.6	2236.6	2077.8	1809.0	1583.7	1569.9	1570.8	1640.7	1837.0
47.5°	2222.4	2238.8	2337.6	2382.9	2277.6	2009.2	1771.0	1750.7	1753.7	1831.0	2002.7
50°	2212.4	2234.4	2368.2	2495.5	2445.0	2212.9	1994.9	1980.7	1969.1	2081.3	2182.7
52.5°	2127.0	2151.2	2365.2	2567.2	2581.8	2405.3	2226.2	2218.0	2215.5	2347.1	2383.8
55°	1875.4	1916.0	2261.2	2586.1	2688.8	2586.6	2477.0	2463.2	2476.5	2631.9	2587.0
57.5°	1736.0	1766.2	2057.5	2565.0	2776.4	2759.2	2727.3	2728.5	2743.6	2941.3	2833.4
60°	1656.6	1692.0	1944.5	2507.2	2860.6	2968.9	2989.2	2989.2	3016.4	3274.9	3083.7
62.5°	1551.3	1587.2	1838.7	2395.8	2938.3	3215.7	3318.4	3317.1	3327.9	3632.6	3328.4
65°	1337.7	1371.0	1626.4	2220.2	2976.2	3487.6	3692.6	3688.7	3667.1	3951.1	3490.2
67.5°	971.4	1002.9	1245.8	1886.2	2839.4	3706.8	4077.9	4079.7	3950.6	4151.7	3498.8
70°	640.4	662.0	800.9	1225.1	2309.1	3612.3	4239.3	4244.5	3994.2	4026.6	3113.9
72.5°	399.6	414.7	500.1	730.6	1364.5	2859.3	3825.1	3839.3	3593.3	3538.5	2558.5
75°	265.4	275.7	332.7	425.9	631.3	1547.5	2907.6	2953.4	2880.0	2773.9	1782.6
77.5°	159.7	168.3	211.9	270.6	279.6	604.6	1697.2	1815.4	1825.8	1448.2	746.5
80°	72.9	82.9	116.9	154.5	148.9	210.6	598.5	626.1	738.8	460.0	235.6
82.5°	43.2	47.5	77.7	76.8	63.4	102.3	215.3	220.9	187.7	168.3	100.5
85°	17.3	20.3	32.8	28.9	23.3	33.2	81.1	85.0	81.6	73.4	37.1
87.5°	0.0	0.0	0.0	0.0	0.4	0.9	7.3	7.8	11.2	20.3	11.2
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: P631078
 CATALOG NUMBER: GWS-SA1E-830-U-T3R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8	987.8
2.5°	995.1	992.5	1005.5	1015.4	1019.7	1024.0	1020.1	1018.8	1018.8	1010.2	1005.9
5°	1005.9	1007.2	1024.9	1033.1	1033.1	1029.6	1019.3	1011.9	1009.3	998.1	995.1
7.5°	1026.2	1031.8	1048.2	1047.7	1035.7	1016.7	990.8	970.9	952.8	945.0	940.3
10°	1059.4	1066.7	1078.0	1059.8	1026.2	976.1	921.3	878.2	852.3	831.6	831.6
12.5°	1097.4	1104.3	1102.1	1060.3	990.8	897.1	818.2	768.5	732.3	713.3	713.3
15°	1135.3	1141.0	1117.7	1040.4	917.0	792.3	706.0	646.4	614.9	597.2	597.2
17.5°	1173.8	1173.3	1124.1	994.7	820.8	676.2	591.6	545.5	534.7	531.6	531.2
20°	1210.9	1200.9	1115.9	918.3	709.0	559.3	505.7	508.8	524.7	531.6	532.5
22.5°	1252.7	1228.1	1091.8	820.8	582.1	478.1	481.6	506.6	529.9	540.3	541.6
25°	1295.4	1251.4	1051.2	706.4	476.0	448.4	475.1	503.2	529.5	542.9	544.2
27.5°	1312.7	1251.4	982.2	573.9	419.4	435.8	465.2	492.4	520.0	535.5	538.5
30°	1326.9	1240.6	885.5	454.4	396.1	423.8	449.2	474.2	501.4	520.4	523.9
32.5°	1346.8	1231.1	768.5	381.9	385.4	412.1	429.8	450.9	475.5	488.1	486.8
35°	1370.1	1216.5	627.4	347.4	376.3	402.2	414.7	427.2	416.0	415.6	416.9
37.5°	1403.3	1203.5	504.5	331.8	370.3	395.3	405.6	378.9	363.3	356.9	354.3
40°	1451.2	1198.4	397.9	322.8	369.4	394.8	387.5	346.1	324.9	302.5	302.1
42.5°	1511.6	1194.5	328.8	318.5	372.4	404.8	362.5	324.5	280.9	271.0	270.1
45°	1589.3	1188.4	294.3	317.6	379.7	412.5	359.9	294.7	265.0	260.6	260.6
47.5°	1683.0	1178.9	278.8	317.6	387.9	409.1	352.1	288.3	257.6	262.4	265.4
50°	1790.4	1166.8	270.6	316.7	396.1	409.1	335.7	287.0	255.9	280.5	290.4
52.5°	1905.2	1153.0	265.0	313.3	401.8	409.5	336.6	291.3	257.6	284.8	293.0
55°	2032.1	1150.9	257.2	306.0	403.5	398.3	338.7	300.8	260.2	258.1	258.5
57.5°	2192.2	1176.8	251.6	295.2	396.6	375.4	343.1	307.7	257.2	257.6	260.6
60°	2359.6	1225.5	256.3	284.8	382.3	353.9	346.1	304.2	242.5	235.6	236.5
62.5°	2502.0	1262.6	260.2	280.1	361.6	334.9	343.1	296.5	234.3	232.6	236.5
65°	2561.5	1232.0	250.7	270.1	331.4	311.6	336.6	286.5	227.4	220.9	221.4
67.5°	2495.5	1088.3	232.2	248.1	297.3	281.8	326.2	273.6	217.9	210.2	208.4
70°	2131.7	799.6	200.2	213.2	255.9	246.8	310.3	256.8	202.8	197.2	193.3
72.5°	1717.9	566.2	166.1	169.6	200.7	208.0	282.7	235.6	185.6	169.6	164.0
75°	1195.8	355.6	138.5	135.1	145.0	158.8	220.5	195.5	160.1	143.3	138.1
77.5°	514.4	182.5	108.3	106.6	96.7	110.0	169.2	163.1	134.2	114.8	111.8
80°	172.2	105.7	78.1	75.1	64.3	77.2	119.1	130.3	105.3	85.0	79.8
82.5°	86.3	61.3	49.6	44.9	43.2	48.8	70.3	81.1	72.9	58.7	49.6
85°	42.3	35.0	27.2	26.8	22.4	21.1	29.3	34.5	32.8	24.2	22.9
87.5°	15.5	13.8	8.6	6.9	4.3	3.0	1.7	1.7	1.3	1.3	1.3
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)