

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: P633557

Luminaire Tested: GWS-SA2E-830-U-T4W-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633557
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-52)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2E-830-U-T4W-W
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11491.7 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

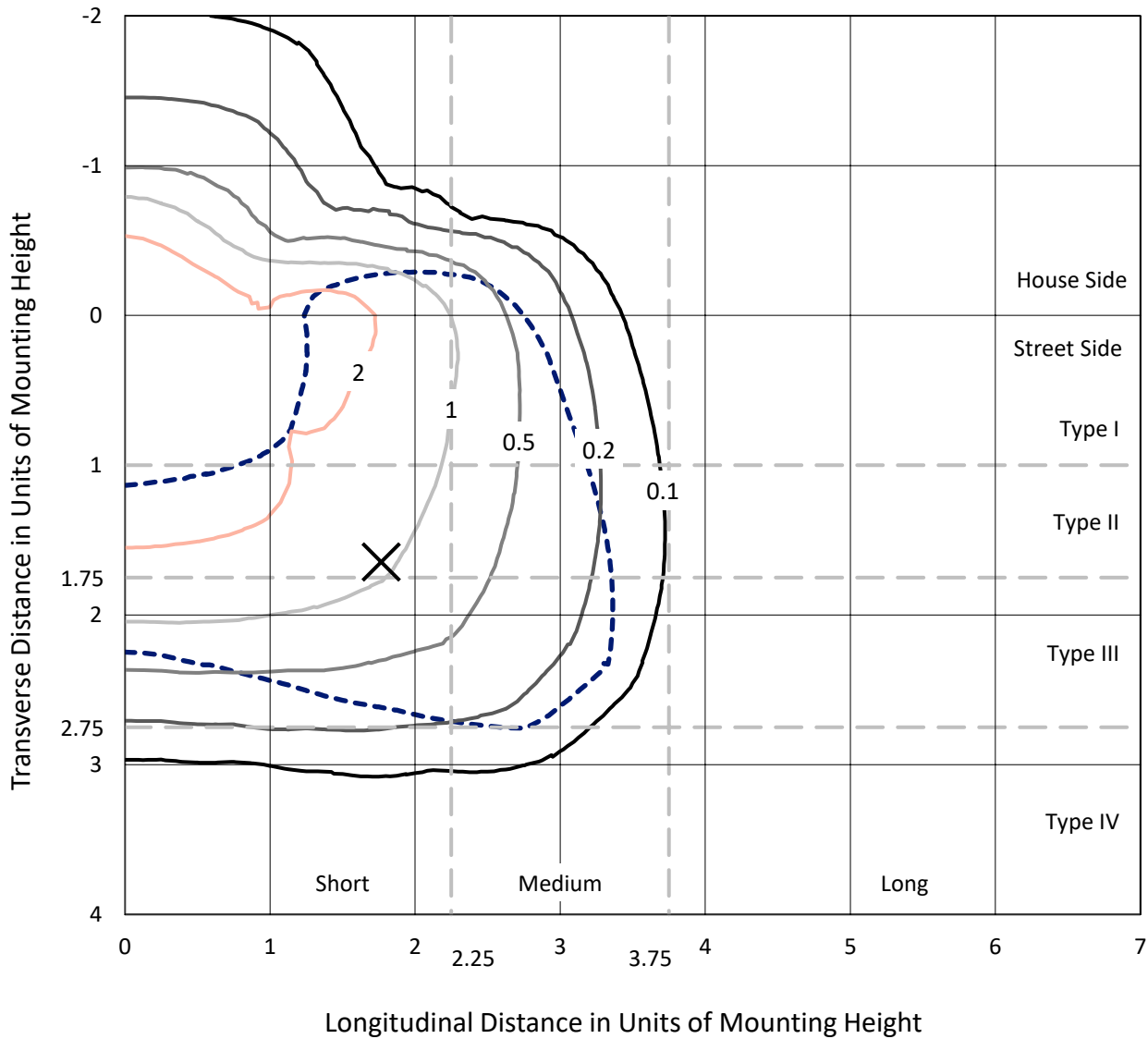
Input Watts (W): 108.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P633557
 CATALOG NUMBER: GWS-SA2E-830-U-T4W-W

Iso-Footcandle Lines of Horizontal Illumination

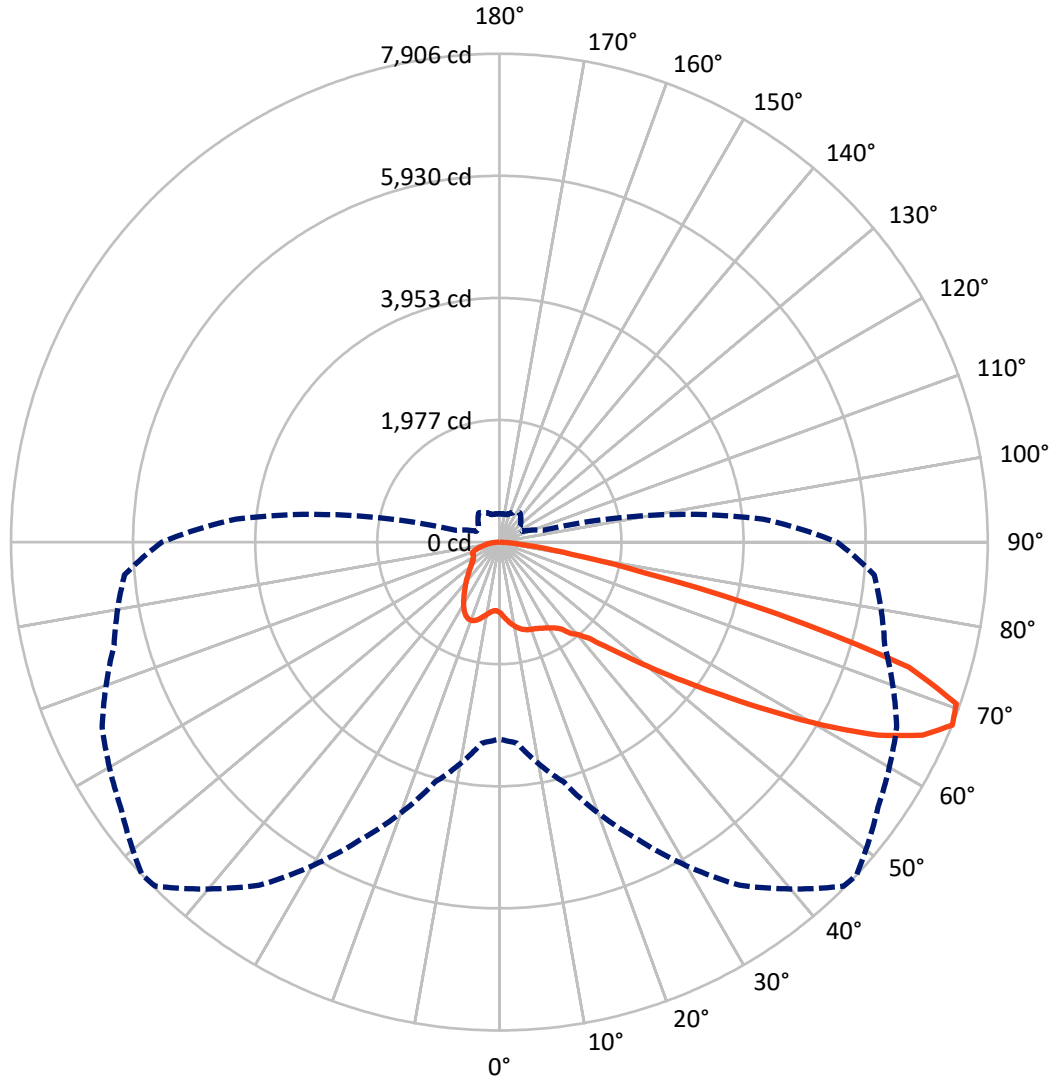
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.6 fc
 Type III - Short - N/A

REPORT NUMBER: P633557
CATALOG NUMBER: GWS-SA2E-830-U-T4W-W

Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P633557

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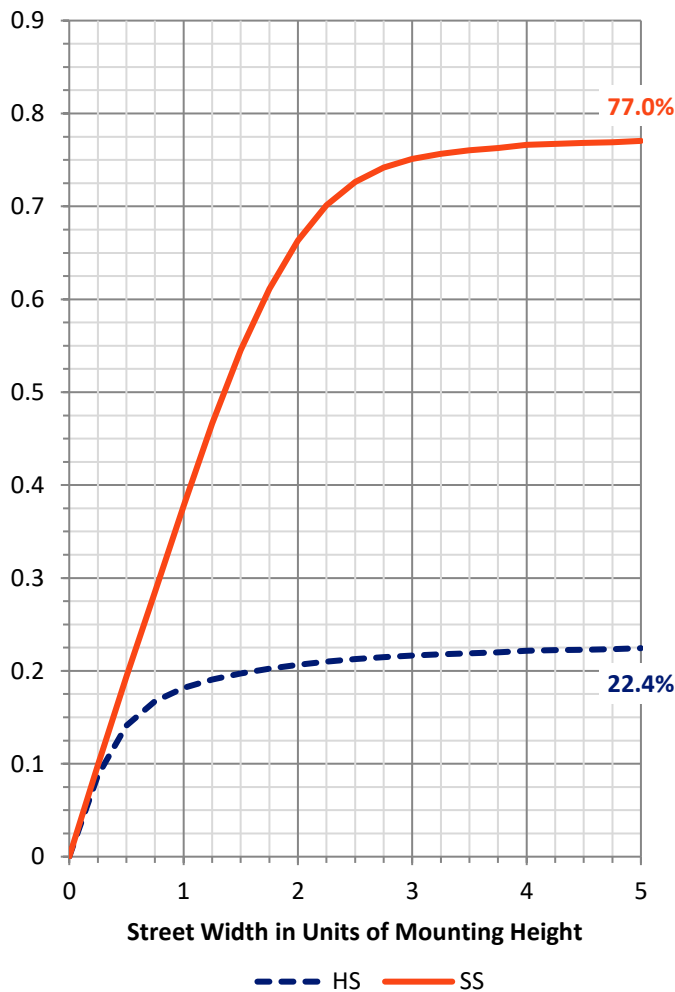
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2619.0	0.0	2619.0
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	8872.7	0.0	8872.7
	% Fixture	77.2	0.0	77.2
Total	Lumens	11491.7	0.0	11491.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	1.0
10°-20°	387.9	3.4
20°-30°	659.3	5.7
30°-40°	965.8	8.4
40°-50°	1471.5	12.8
50°-60°	2632.9	22.9
60°-70°	3513.3	30.6
70°-80°	1588.8	13.8
80°-90°	155.7	1.4
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°	11491.7	100.0
0°-180°	11491.7	100.0

Coefficient of Utilization



REPORT NUMBER: P633557

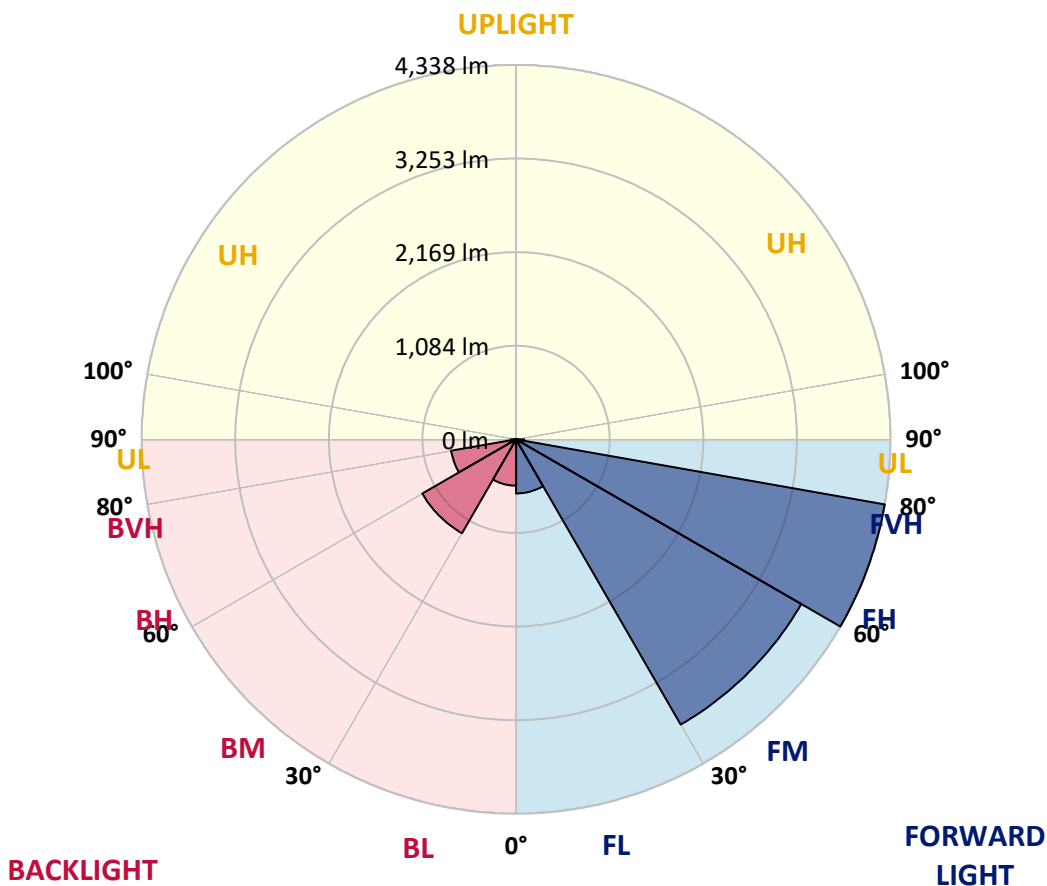
CATALOG NUMBER: GWS-SA2E-830-U-T4W-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	626.7	5.5			
FM (30°-60°)	3815.4	33.2			
FH (60°-80°)	4338.0	37.7			G2/5000
FVH (80°-90°)	92.6	0.8			G1/100
BL (0°-30°)	536.9	4.7	B2/1000		
BM (30°-60°)	1254.9	10.9	B2/2500		
BH (60°-80°)	764.1	6.6	B2/1000		G2/1000
BVH (80°-90°)	63.1	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





REPORT NUMBER: P633557
 CATALOG NUMBER: GWS-SA2E-830-U-T4W-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2
2.5°	1214.8	1219.0	1218.1	1211.5	1207.3	1199.8	1200.7	1189.0	1171.6	1160.0	1146.7
5°	1322.0	1328.6	1320.3	1309.5	1292.9	1268.8	1266.3	1239.7	1206.5	1183.2	1159.1
7.5°	1415.1	1419.2	1409.2	1391.0	1366.9	1334.5	1328.6	1297.1	1255.5	1219.0	1184.1
10°	1487.3	1492.3	1479.0	1454.9	1423.4	1391.0	1386.8	1354.4	1310.4	1267.2	1223.1
12.5°	1548.8	1550.5	1536.4	1504.0	1469.9	1436.7	1432.5	1402.6	1361.9	1317.8	1269.6
15°	1584.6	1585.4	1567.9	1532.2	1499.8	1470.7	1468.2	1442.5	1405.1	1363.5	1312.0
17.5°	1582.1	1583.7	1571.3	1539.7	1511.4	1494.0	1491.5	1474.9	1445.8	1408.4	1356.9
20°	1551.3	1553.0	1544.7	1523.9	1509.0	1504.0	1504.8	1499.8	1482.4	1451.6	1399.3
22.5°	1527.2	1529.7	1522.2	1507.3	1505.6	1517.3	1519.8	1522.2	1513.9	1486.5	1435.8
25°	1538.9	1543.0	1531.4	1510.6	1513.9	1539.7	1544.7	1553.0	1546.3	1523.1	1479.0
27.5°	1619.5	1622.0	1592.0	1549.7	1539.7	1567.1	1574.6	1587.9	1582.9	1561.3	1527.2
30°	1806.4	1804.8	1740.8	1636.9	1595.4	1606.2	1612.0	1631.1	1632.8	1618.6	1586.2
32.5°	2069.8	2061.5	1962.6	1797.3	1676.8	1650.2	1656.9	1682.6	1701.7	1686.8	1642.7
35°	2348.2	2340.7	2231.9	2038.2	1827.2	1735.0	1727.5	1747.4	1776.5	1735.0	1671.8
37.5°	2613.2	2601.6	2490.3	2251.0	2012.5	1883.7	1872.9	1853.0	1835.5	1755.7	1707.5
40°	2907.4	2894.1	2796.9	2526.0	2216.9	1997.5	1970.1	1891.2	1875.4	1824.7	1800.6
42.5°	3221.5	3221.5	3140.9	2874.2	2463.7	2160.4	2124.7	2005.8	2022.5	1989.2	1961.0
45°	3535.6	3544.7	3480.7	3224.8	2793.6	2467.8	2410.5	2241.8	2281.7	2266.7	2252.6
47.5°	3803.1	3820.6	3808.1	3582.9	3197.4	2841.7	2754.5	2579.2	2664.8	2700.5	2740.4
50°	4091.4	4110.6	4098.1	4009.2	3670.2	3294.6	3216.5	3035.4	3182.4	3289.6	3420.1
52.5°	4519.4	4546.8	4442.9	4408.9	4244.3	3808.9	3739.1	3533.1	3799.8	3977.6	4268.4
55°	4880.8	4880.0	4843.4	4921.5	4860.9	4437.9	4360.7	4173.7	4514.4	4703.0	5128.4
57.5°	5048.7	5068.6	5194.1	5415.1	5536.4	5206.5	5132.6	4941.5	5281.3	5379.4	5838.9
60°	5135.1	5160.0	5402.6	5839.7	6166.3	6045.8	6016.7	5773.2	5964.3	5952.7	6438.0
62.5°	5013.8	5063.6	5453.3	6034.1	6615.8	6889.2	6880.0	6511.9	6545.2	6431.3	6809.4
65°	4457.1	4511.1	5122.6	5936.9	6872.5	7530.6	7533.1	7180.8	6991.4	6664.0	6747.1
67.5°	3187.4	3264.7	4020.8	5312.1	6782.0	7877.1	7906.2	7484.1	7096.1	6457.9	6092.3
70°	1737.5	1794.0	2386.4	3861.3	5966.0	7794.0	7848.0	7337.9	6634.1	5586.3	4689.7
72.5°	789.4	807.7	1110.1	2118.8	4075.7	6708.8	6934.9	6548.5	5448.3	4126.3	2982.2
75°	361.5	369.8	483.6	1013.7	2129.6	4489.5	4648.2	4877.5	3791.5	2605.8	1554.7
77.5°	226.8	229.3	275.0	463.7	1061.9	2241.0	2408.0	2904.1	2220.2	1289.6	649.8
80°	133.8	136.3	171.2	250.9	498.6	1025.4	1184.1	1148.3	1043.6	556.7	295.8
82.5°	67.3	69.8	98.9	142.9	271.7	408.0	480.3	482.8	388.9	301.6	167.0
85°	24.1	24.9	32.4	56.5	115.5	134.6	150.4	183.6	190.3	175.3	80.6
87.5°	0.0	0.0	0.8	1.7	3.3	13.3	14.1	26.6	55.7	62.3	32.4
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: P633557
 CATALOG NUMBER: GWS-SA2E-830-U-T4W-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2	1139.2
2.5°	1142.5	1130.1	1125.9	1121.7	1115.1	1112.6	1107.6	1102.6	1102.6	1097.6	1095.2
5°	1148.3	1131.7	1120.9	1115.9	1111.8	1114.3	1114.3	1115.9	1121.7	1118.4	1120.1
7.5°	1169.1	1150.0	1135.0	1130.9	1130.9	1140.9	1147.5	1155.8	1166.6	1168.3	1168.3
10°	1205.7	1183.2	1167.4	1164.9	1169.1	1183.2	1193.2	1203.2	1216.5	1217.3	1219.0
12.5°	1245.5	1223.1	1207.3	1210.7	1214.8	1233.1	1243.9	1252.2	1265.5	1265.5	1264.7
15°	1287.1	1262.2	1248.9	1255.5	1268.0	1288.8	1290.4	1291.2	1297.9	1296.2	1295.4
17.5°	1330.3	1303.7	1293.7	1303.7	1317.0	1327.0	1318.7	1307.0	1304.5	1301.2	1299.6
20°	1372.7	1345.3	1341.1	1348.6	1352.7	1344.4	1318.7	1297.1	1287.1	1282.1	1280.4
22.5°	1409.2	1386.0	1383.5	1383.5	1362.7	1333.6	1295.4	1266.3	1253.0	1246.4	1244.7
25°	1452.4	1430.8	1426.7	1404.3	1351.1	1297.9	1246.4	1219.8	1209.0	1205.7	1206.5
27.5°	1503.1	1488.2	1474.9	1410.9	1317.8	1234.7	1176.6	1164.9	1160.8	1164.9	1167.4
30°	1565.5	1550.5	1520.6	1402.6	1264.7	1152.5	1096.8	1096.0	1108.4	1119.2	1120.9
32.5°	1616.1	1609.5	1560.5	1376.0	1189.9	1061.9	1014.6	1017.9	1040.3	1055.3	1057.8
35°	1656.0	1666.8	1593.7	1332.0	1101.0	976.3	938.9	940.6	953.1	973.8	974.7
37.5°	1712.5	1749.1	1623.6	1264.7	998.8	902.4	868.3	855.8	854.2	860.0	861.7
40°	1826.4	1881.2	1645.2	1166.6	899.9	835.9	797.7	773.6	752.8	737.0	732.0
42.5°	1998.4	2061.5	1657.7	1047.8	811.8	770.3	727.1	696.3	659.8	626.5	614.9
45°	2314.1	2334.9	1657.7	921.5	733.7	708.8	665.6	629.0	582.5	543.4	535.1
47.5°	2819.3	2752.8	1659.3	799.3	664.7	654.8	617.4	575.8	524.3	491.9	486.9
50°	3580.4	3346.9	1693.4	698.0	607.4	609.1	581.6	535.9	489.4	465.3	461.2
52.5°	4442.9	4079.0	1784.8	623.2	559.2	571.7	556.7	512.7	471.1	450.4	446.2
55°	5253.9	4752.0	1862.9	570.0	518.5	540.1	539.3	498.6	461.2	440.4	437.9
57.5°	5943.6	5213.2	1851.3	526.8	483.6	511.0	523.5	489.4	454.5	437.1	434.6
60°	6372.3	5457.5	1685.9	486.9	457.0	490.2	514.3	486.9	457.8	453.7	454.5
62.5°	6558.5	5412.6	1368.5	457.0	439.6	480.3	524.3	504.4	488.6	498.6	504.4
65°	6269.3	5027.1	1007.1	434.6	422.9	482.8	547.6	531.8	488.6	495.2	497.7
67.5°	5466.6	4279.2	727.9	412.1	402.2	490.2	580.8	527.6	460.3	460.3	455.3
70°	3939.4	3077.7	528.5	389.7	381.4	479.4	582.5	499.4	427.9	425.4	413.0
72.5°	2370.6	1815.6	412.1	364.8	349.8	425.4	545.9	466.1	396.3	375.6	360.6
75°	1231.4	909.9	345.7	337.4	300.0	360.6	499.4	414.6	339.0	320.7	312.4
77.5°	527.6	425.4	296.6	300.8	249.3	303.3	403.0	359.0	300.8	277.5	270.0
80°	260.1	241.8	234.3	241.0	199.4	234.3	347.3	314.1	255.1	228.5	217.7
82.5°	148.7	141.3	168.7	171.2	142.1	196.1	293.3	265.9	211.1	182.0	164.5
85°	69.0	74.0	102.2	103.0	88.1	134.6	191.9	149.6	112.2	93.1	88.9
87.5°	27.4	32.4	44.9	44.0	25.8	24.9	16.6	9.1	7.5	6.6	5.8
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

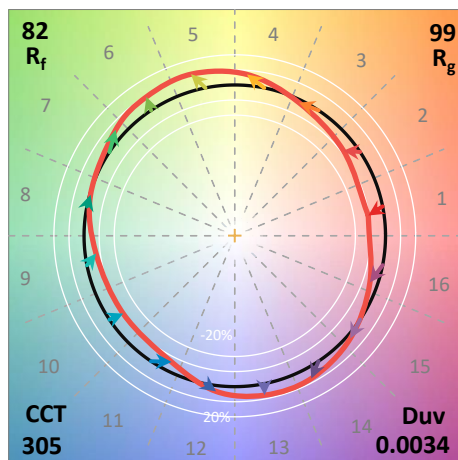
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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)