

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: P630064

Luminaire Tested: GWS-SA1C-830-U-SLL-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P630064
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-38)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1C-830-U-SLL-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2047.4 lumens
Efficiency: N/A
Efficacy: 60.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G0

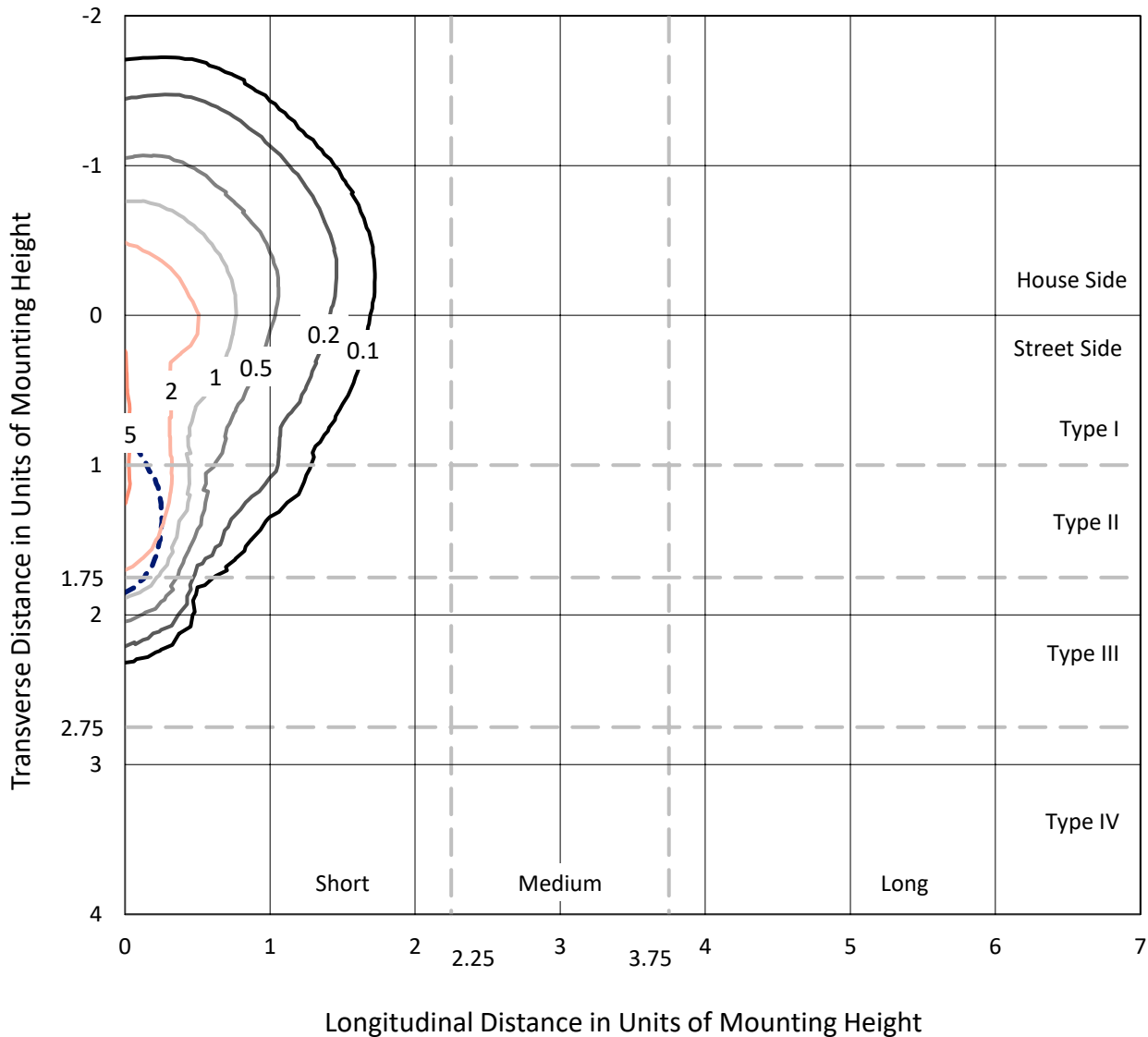
Input Watts (W): 34.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

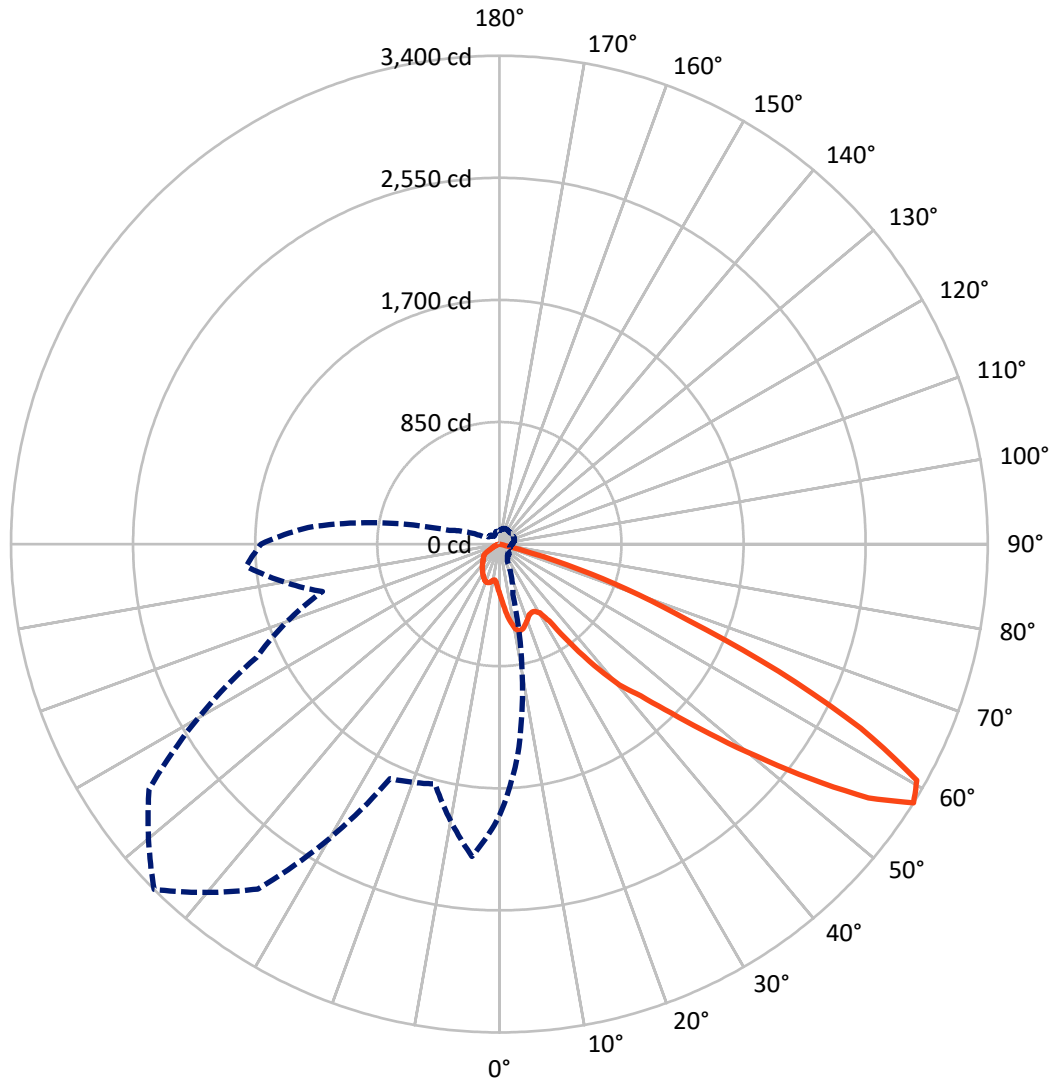
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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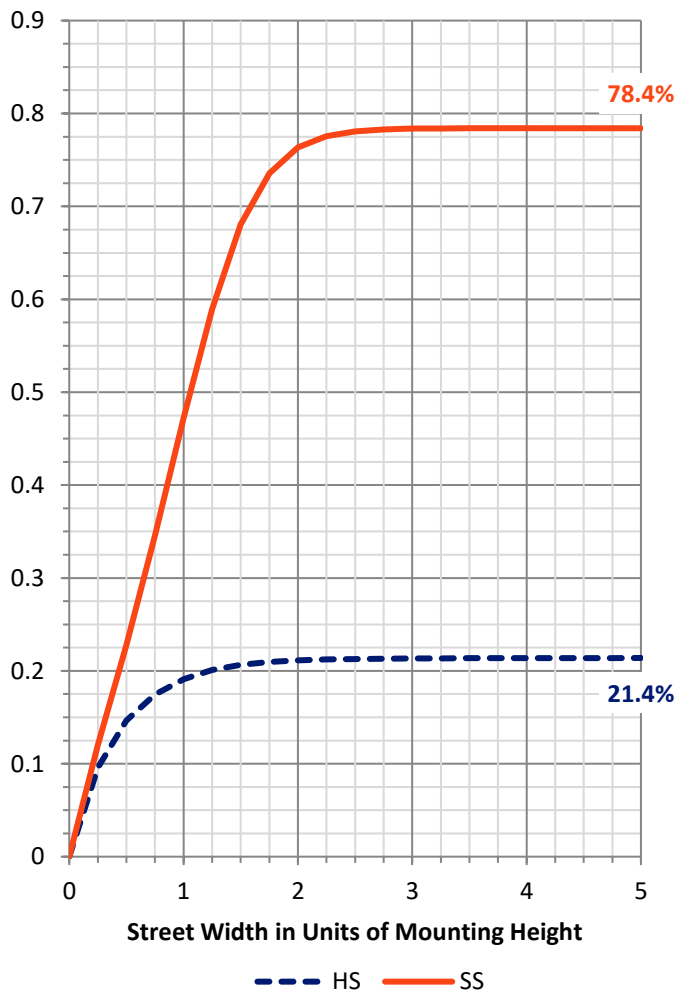
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	441.1	0.0	441.1
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	1606.3	0.0	1606.3
	% Fixture	78.5	0.0	78.5
Total	Lumens	2047.4	0.0	2047.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.4	1.7
10°-20°	113.1	5.5
20°-30°	183.6	9.0
30°-40°	281.8	13.8
40°-50°	450.1	22.0
50°-60°	630.2	30.8
60°-70°	323.1	15.8
70°-80°	31.1	1.5
80°-90°	0.0	0.0
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°	2047.4	100.0
0°-180°	2047.4	100.0

Coefficient of Utilization

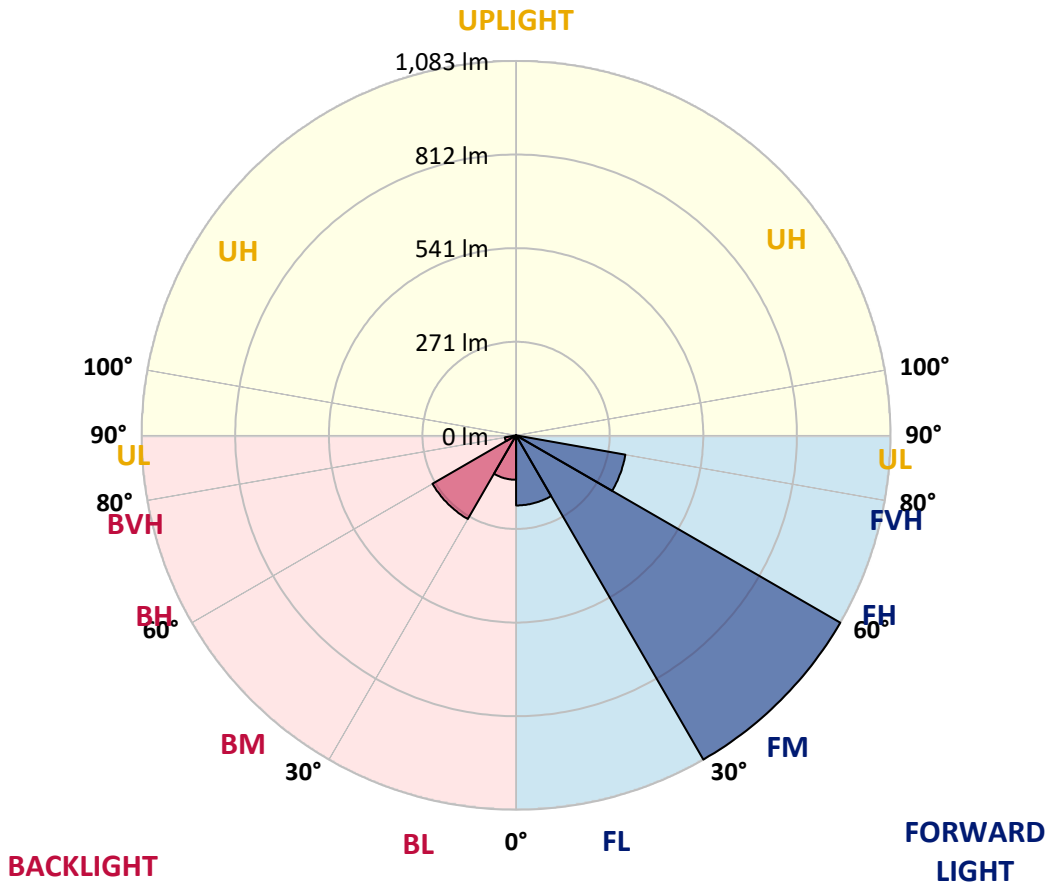


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	202.7	9.9			
FM (30°-60°)	1082.7	52.9			
FH (60°-80°)	320.9	15.7			G0/660
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	128.4	6.3	B1/500		
BM (30°-60°)	279.3	13.6	B1/1000		
BH (60°-80°)	33.3	1.6	B0/110		G0/110
BVH (80°-90°)	0.0	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-G0
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9
2.5°	386.5	385.7	382.9	373.6	367.9	358.8	352.3	343.8	334.5	328.7	323.0
5°	427.5	425.3	418.0	396.6	380.2	362.4	348.2	332.6	315.9	304.9	294.8
7.5°	466.9	463.7	453.8	417.7	392.8	367.3	347.1	324.3	300.8	284.4	271.8
10°	505.5	498.1	482.5	438.2	404.5	373.9	350.1	324.1	296.4	275.6	261.7
12.5°	537.3	531.8	510.5	457.6	414.4	375.3	346.0	321.9	303.3	289.3	276.4
15°	564.7	558.6	538.4	475.2	422.9	369.8	328.7	307.6	310.7	316.1	305.2
17.5°	589.8	583.5	561.6	489.7	426.2	356.4	304.6	294.5	311.2	331.7	327.6
20°	615.8	608.7	581.9	501.4	425.1	335.3	280.3	283.3	306.8	330.4	332.6
22.5°	646.2	638.8	607.6	516.5	424.2	310.1	259.2	273.4	298.6	318.6	322.4
25°	686.5	677.7	643.5	538.7	426.4	287.1	244.1	263.9	284.7	302.7	304.9
27.5°	739.6	728.3	684.8	566.0	431.1	269.1	237.6	250.7	266.9	283.0	284.9
30°	808.8	794.6	732.2	589.8	428.9	256.5	233.2	237.6	247.2	260.3	260.6
32.5°	889.8	870.4	785.3	610.4	410.0	247.2	227.2	224.2	226.4	236.5	238.4
35°	985.1	959.9	843.8	629.8	375.5	229.1	216.2	206.1	205.3	210.2	214.9
37.5°	1094.3	1064.2	917.7	654.7	334.7	210.2	200.1	190.0	185.6	188.0	195.2
40°	1195.0	1161.6	994.9	684.8	293.1	193.2	181.2	170.8	165.6	166.4	175.2
42.5°	1313.3	1278.8	1089.4	724.2	258.7	181.7	161.5	150.8	144.0	147.8	157.9
45°	1492.8	1453.7	1227.0	758.4	231.3	179.0	144.2	129.2	125.9	132.5	144.5
47.5°	1738.0	1690.2	1416.2	779.2	208.0	181.5	132.2	111.7	112.5	119.9	131.9
50°	1981.4	1929.6	1634.9	751.9	188.9	176.5	126.2	98.0	103.2	109.8	120.7
52.5°	2148.6	2081.3	1741.3	672.8	171.3	157.9	125.6	85.1	95.0	97.2	106.5
55°	2155.2	2072.2	1686.9	530.4	147.5	133.3	119.9	74.4	85.9	86.8	94.7
57.5°	1889.1	1814.1	1474.2	364.3	131.1	97.7	95.5	65.1	70.6	77.5	82.4
60°	1437.2	1373.5	1102.5	167.0	99.6	62.1	65.4	56.1	52.8	63.0	67.9
62.5°	880.2	839.5	661.3	73.9	63.5	33.1	39.7	44.6	39.7	43.5	47.6
65°	349.5	331.5	251.0	31.5	26.0	16.7	18.1	26.0	27.9	30.7	34.5
67.5°	60.8	57.5	42.2	14.0	10.7	10.1	8.8	12.0	17.0	18.9	21.9
70°	7.9	7.7	6.8	5.7	5.5	4.9	3.8	7.7	11.5	12.0	14.0
72.5°	1.9	1.6	1.6	1.4	1.6	0.5	0.5	4.1	8.2	8.5	9.9
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.2	5.7	6.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9
2.5°	318.3	312.8	310.9	308.2	304.6	305.7	300.8	299.2	301.6	304.9	304.1
5°	289.3	283.3	279.2	272.9	271.8	269.3	267.7	265.5	268.2	272.1	272.9
7.5°	266.3	261.1	257.0	255.1	253.7	252.6	249.3	247.7	247.7	249.3	250.7
10°	256.5	252.6	251.8	252.4	254.5	254.3	251.3	249.1	246.3	245.0	246.6
12.5°	270.2	263.9	262.8	263.0	265.8	265.5	262.2	259.5	258.9	259.5	264.7
15°	293.4	283.8	276.7	275.4	276.7	276.2	273.7	272.1	272.9	280.8	289.6
17.5°	314.2	299.4	286.6	281.6	281.4	280.6	278.1	277.5	281.6	296.4	309.3
20°	320.2	305.7	287.4	281.1	279.7	278.9	276.2	277.0	282.2	300.0	310.9
22.5°	312.3	298.3	279.2	272.9	271.8	271.5	268.8	269.9	274.3	289.9	298.9
25°	297.2	285.5	265.5	260.0	260.0	259.5	257.0	257.6	260.3	274.0	282.7
27.5°	278.9	267.7	251.0	245.5	246.3	247.2	244.1	243.3	245.5	258.4	263.6
30°	257.8	249.9	236.8	231.8	231.6	234.8	230.7	229.6	232.7	242.8	243.9
32.5°	237.3	233.5	224.2	220.3	220.6	221.2	219.0	219.0	221.7	227.2	226.9
35°	217.3	214.9	213.2	210.5	210.2	209.1	209.1	209.7	212.7	214.6	211.0
37.5°	198.2	200.6	202.5	199.8	197.6	197.6	197.6	200.1	202.8	202.0	196.0
40°	181.2	186.4	192.4	189.4	184.2	183.9	185.0	189.1	193.2	188.3	182.8
42.5°	166.7	173.3	181.7	180.1	174.4	173.5	174.4	179.6	182.8	176.5	170.5
45°	152.5	160.7	170.8	170.8	164.5	163.7	164.0	170.8	172.7	165.3	157.7
47.5°	140.4	149.4	160.1	160.1	154.9	153.3	154.6	161.8	163.1	152.7	145.6
50°	128.9	138.8	150.5	149.7	146.2	144.8	147.3	154.9	153.3	141.8	134.4
52.5°	114.4	124.8	141.0	141.8	139.9	140.1	143.1	148.1	143.4	129.5	123.2
55°	101.3	111.9	128.1	132.5	132.5	132.2	133.6	137.4	133.6	116.9	109.2
57.5°	87.0	96.1	109.5	110.6	111.4	108.4	110.3	115.5	113.6	99.4	95.0
60°	71.4	79.1	86.8	87.6	84.0	77.7	81.3	87.3	88.7	78.0	73.1
62.5°	50.6	58.0	67.1	67.1	63.5	57.2	61.9	67.1	65.1	54.2	51.2
65°	37.8	44.6	51.5	54.5	51.5	47.1	50.6	54.5	51.5	42.4	38.0
67.5°	24.4	29.0	33.1	35.6	36.1	35.6	37.2	36.1	32.6	26.5	24.1
70°	14.8	17.2	19.4	21.6	23.3	24.1	24.9	22.4	18.9	15.6	14.8
72.5°	10.7	12.9	14.8	16.4	18.3	18.9	18.9	17.2	14.0	10.9	10.1
75°	7.4	9.3	10.9	12.0	13.7	14.2	14.2	12.9	10.4	7.9	7.1
77.5°	0.3	1.9	1.9	1.6	2.2	2.7	2.7	3.3	3.0	2.2	1.9
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9
2.5°	305.7	315.6	318.3	328.5	337.5	346.5	357.5	364.0	373.9	380.7	384.6
5°	275.6	283.8	293.7	308.7	324.3	341.6	362.4	380.5	403.2	419.9	425.3
7.5°	253.7	264.4	275.9	294.8	316.1	339.1	368.4	398.0	432.7	455.5	470.0
10°	249.6	260.6	275.9	294.5	317.0	343.2	379.1	417.4	460.9	488.6	505.0
12.5°	269.3	281.1	287.7	296.2	313.1	342.4	388.4	437.1	488.3	518.4	535.9
15°	298.3	308.7	298.1	287.4	298.3	333.7	393.6	453.5	512.4	547.1	565.2
17.5°	318.3	319.1	295.9	273.2	276.2	317.8	395.5	470.0	538.1	574.5	593.4
20°	316.4	309.8	286.3	261.1	251.8	297.2	393.3	484.5	564.1	602.2	620.8
22.5°	301.6	294.0	274.0	249.3	231.3	272.9	389.5	497.6	587.9	631.2	648.7
25°	283.8	275.6	259.2	237.6	218.1	249.3	386.5	515.7	618.0	668.9	682.6
27.5°	263.0	255.9	242.0	226.4	212.7	231.6	385.7	539.5	654.4	714.9	724.5
30°	242.8	236.2	225.3	216.2	210.5	221.2	382.9	564.9	698.0	767.8	778.2
32.5°	223.3	216.8	209.9	208.6	208.8	217.3	373.6	590.1	749.7	844.4	852.1
35°	206.6	199.0	196.2	199.5	205.6	210.8	347.3	610.9	805.3	927.9	934.2
37.5°	190.8	183.1	182.8	190.8	197.3	200.6	316.4	631.4	880.2	1012.7	1020.7
40°	176.3	168.6	171.3	180.9	186.1	187.8	278.9	662.6	959.6	1102.2	1097.8
42.5°	164.0	156.0	157.7	170.0	174.6	179.0	244.4	688.7	1036.0	1187.1	1185.7
45°	151.9	145.9	144.8	158.2	162.3	179.8	219.2	708.6	1134.2	1295.2	1297.4
47.5°	140.1	135.5	135.8	141.5	151.6	183.9	197.9	721.8	1276.9	1466.5	1428.5
50°	129.5	125.9	128.9	122.3	144.8	178.7	179.6	719.0	1436.1	1630.8	1554.4
52.5°	117.7	116.9	118.2	102.4	133.8	157.7	162.3	682.6	1510.9	1743.0	1699.5
55°	105.7	105.4	94.4	81.8	111.9	125.9	139.0	569.6	1508.4	1802.6	1855.5
57.5°	91.4	89.2	71.7	66.8	87.0	87.6	126.7	373.1	1336.8	1659.8	1769.3
60°	69.2	67.6	52.6	54.2	60.8	56.1	101.0	185.8	999.0	1293.0	1416.4
62.5°	47.9	45.7	39.1	41.9	39.1	32.0	61.9	92.0	605.2	816.5	928.4
65°	35.0	32.6	26.8	23.0	18.3	18.3	23.5	35.3	234.3	347.1	418.5
67.5°	21.6	20.5	15.9	11.5	11.2	12.0	12.3	17.5	37.8	60.2	73.6
70°	14.0	12.9	10.7	7.4	6.8	7.1	7.4	8.2	9.6	10.4	12.6
72.5°	9.6	9.0	7.7	4.1	3.3	3.6	3.8	3.8	4.7	4.4	5.2
75°	6.8	6.3	5.5	1.9	1.1	1.4	1.6	1.4	1.6	1.1	1.4
77.5°	1.9	1.9	1.4	0.3	0.0	0.3	0.5	0.5	0.3	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9	347.9
2.5°	394.4	400.7	403.2	399.6	402.6	397.7	395.8	388.4	387.8	386.5
5°	447.5	461.7	470.2	475.4	469.4	462.8	453.0	436.0	430.8	427.5
7.5°	499.8	522.0	536.5	543.3	541.7	528.3	510.5	482.0	471.9	466.9
10°	545.2	572.3	589.8	598.3	594.8	583.0	557.5	522.0	508.6	505.5
12.5°	577.0	601.9	613.9	621.3	621.6	616.9	592.9	557.0	541.1	537.3
15°	597.0	607.6	607.9	612.3	619.9	630.4	619.1	587.4	570.4	564.7
17.5°	609.5	597.8	585.7	586.8	599.4	627.1	638.6	614.2	596.1	589.8
20°	618.6	581.4	558.9	559.2	572.1	613.9	652.0	640.2	621.6	615.8
22.5°	624.3	566.9	534.8	534.0	547.7	598.3	664.3	671.1	652.8	646.2
25°	636.1	560.0	520.3	525.0	537.0	593.4	681.0	712.2	695.2	686.5
27.5°	657.2	566.9	519.0	529.6	543.3	607.9	710.0	766.9	749.4	739.6
30°	693.6	592.6	540.0	554.8	571.2	646.0	758.7	843.3	818.1	808.8
32.5°	752.2	646.0	605.2	636.9	652.8	708.4	831.8	929.0	908.4	889.8
35°	832.9	767.8	763.1	837.0	833.2	826.6	921.6	1034.1	1003.1	985.1
37.5°	944.0	963.7	998.2	1071.6	1069.1	1019.0	1039.5	1133.4	1117.6	1094.3
40°	1082.8	1124.7	1183.2	1288.3	1255.5	1192.5	1184.3	1235.2	1222.4	1195.0
42.5°	1164.6	1236.9	1348.6	1443.0	1416.7	1306.7	1297.4	1371.3	1343.1	1313.3
45°	1202.7	1328.3	1547.3	1675.1	1595.4	1382.5	1378.9	1548.6	1532.8	1492.8
47.5°	1220.2	1420.5	1779.9	1973.4	1824.5	1449.0	1436.1	1805.9	1785.1	1738.0
50°	1239.6	1547.8	2060.2	2319.1	2101.3	1524.3	1533.6	2045.7	2036.9	1981.4
52.5°	1282.3	1682.5	2405.4	2714.4	2436.8	1642.3	1700.8	2271.8	2212.7	2148.6
55°	1346.4	1829.2	2764.5	3118.1	2779.2	1800.7	1881.7	2391.9	2226.1	2155.2
57.5°	1275.5	1865.9	2977.1	3400.0	2931.1	1801.3	1728.7	2183.6	1957.8	1889.1
60°	1012.2	1735.9	2895.3	3339.0	2801.7	1599.6	1323.7	1704.9	1483.2	1437.2
62.5°	684.3	1455.9	2548.8	2823.9	2398.0	1258.2	860.3	1108.8	918.3	880.2
65°	375.0	1086.1	2059.4	2136.3	1876.8	878.9	442.6	481.2	366.5	349.5
67.5°	103.5	756.0	1515.3	1417.3	1316.8	572.3	114.4	85.9	61.3	60.8
70°	26.0	500.1	907.9	935.8	807.4	366.5	21.9	10.4	8.2	7.9
72.5°	10.9	215.1	430.8	495.1	413.3	169.7	7.9	3.0	2.5	1.9
75°	1.4	17.2	36.7	55.6	38.0	18.3	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	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

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

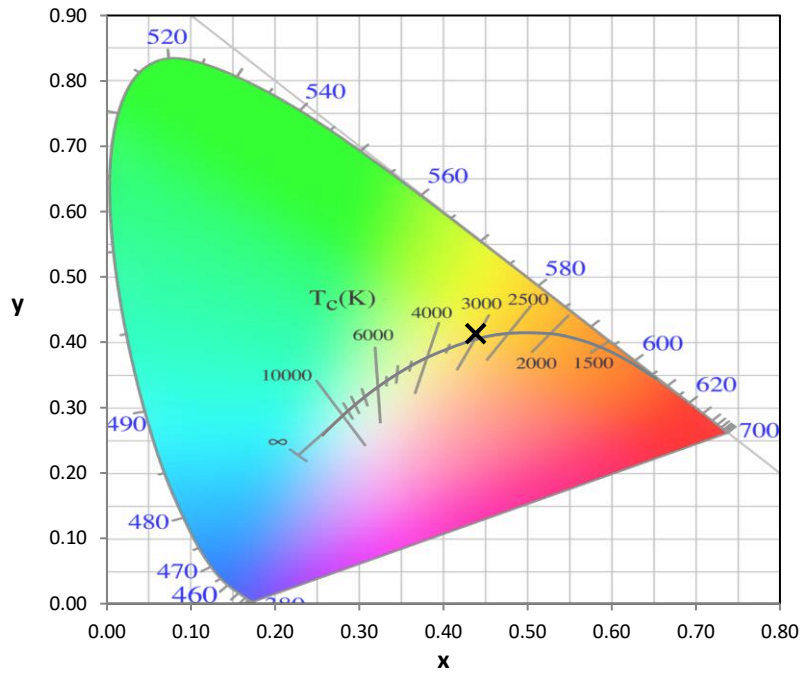
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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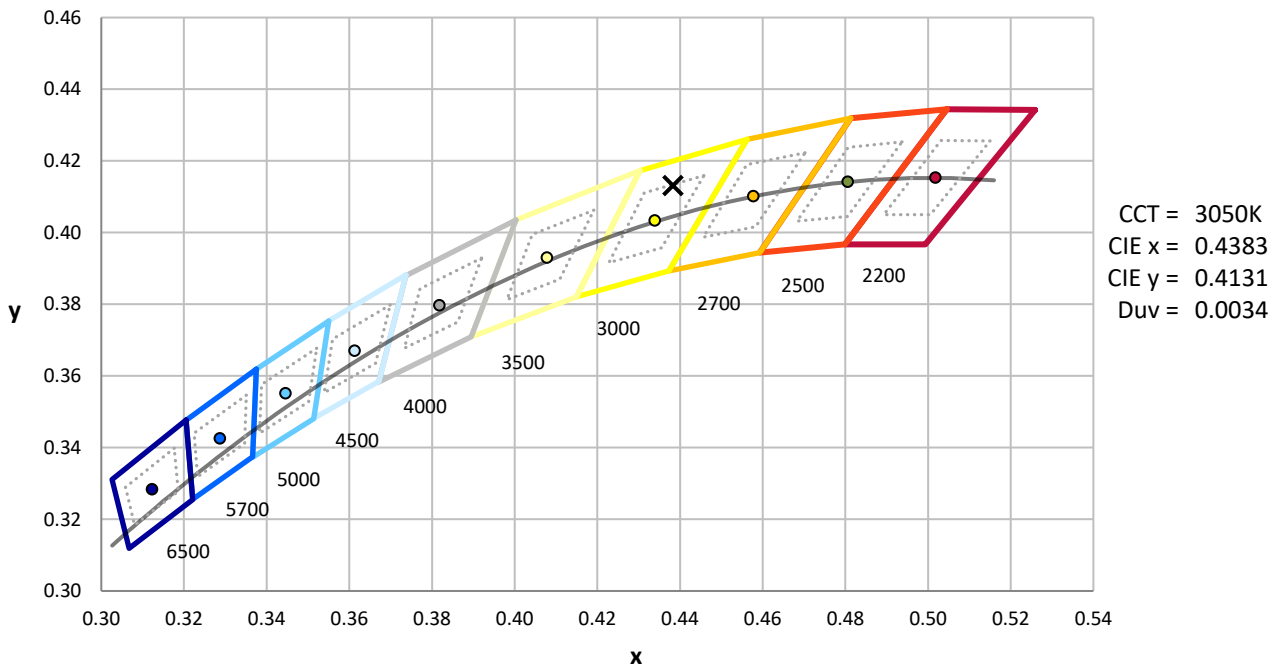
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



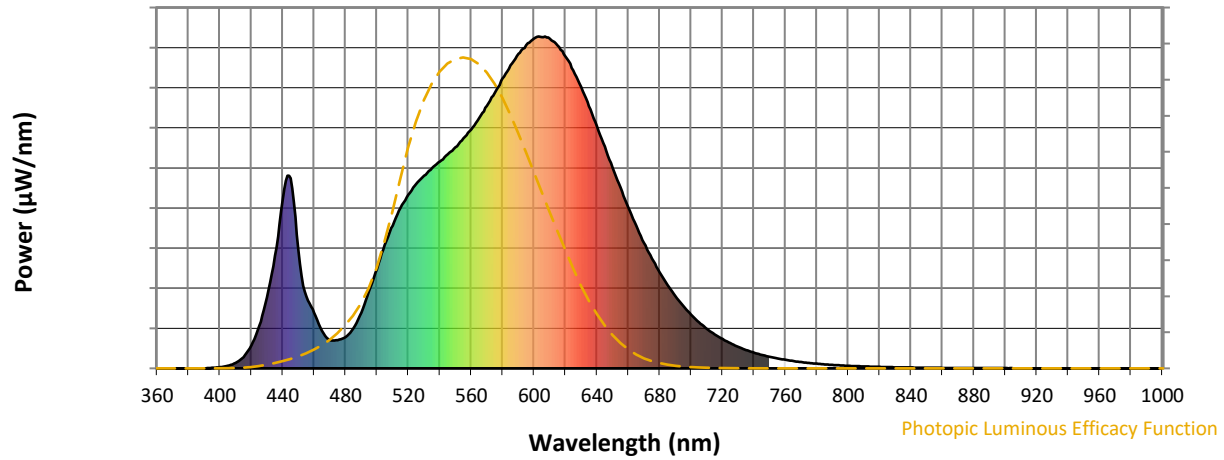
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

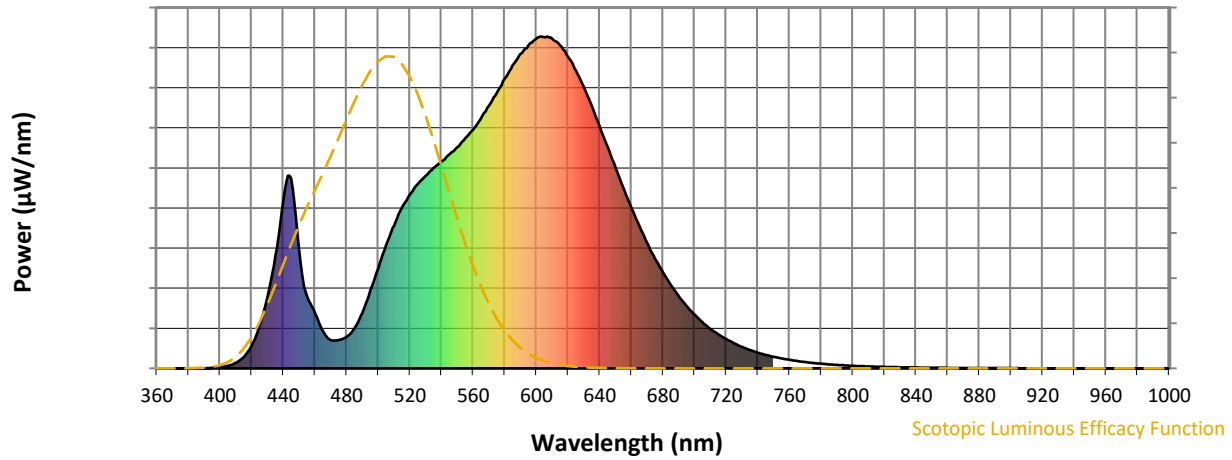


Photopic Lumens: NR

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



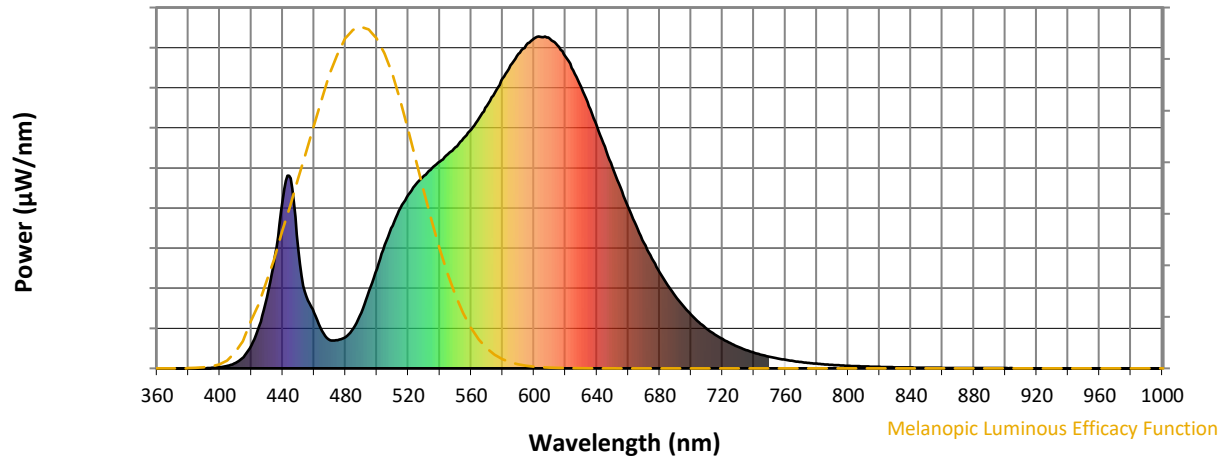
Scotopic Lumens: NR

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

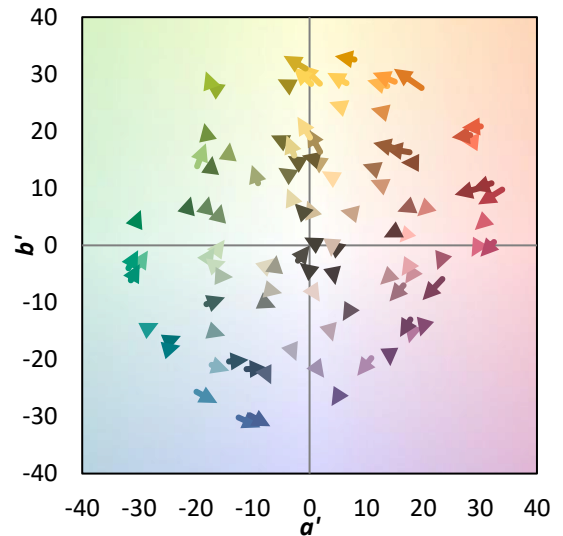
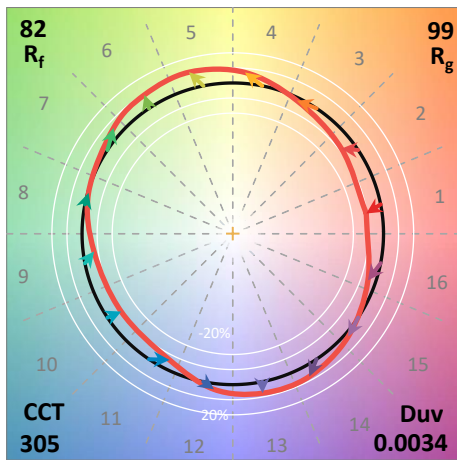
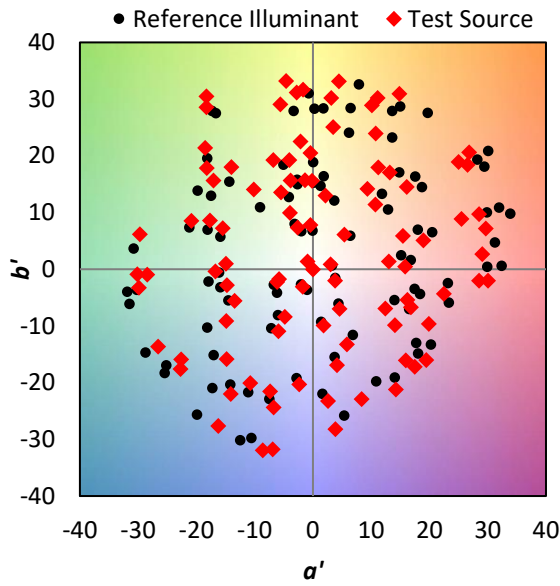
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$

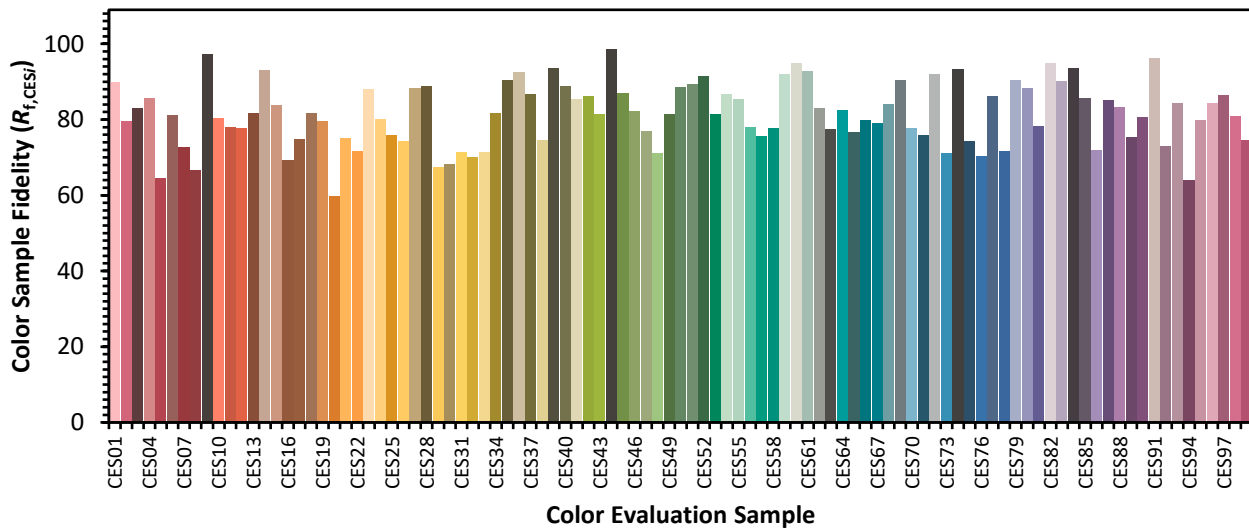


Color Vector Graphics

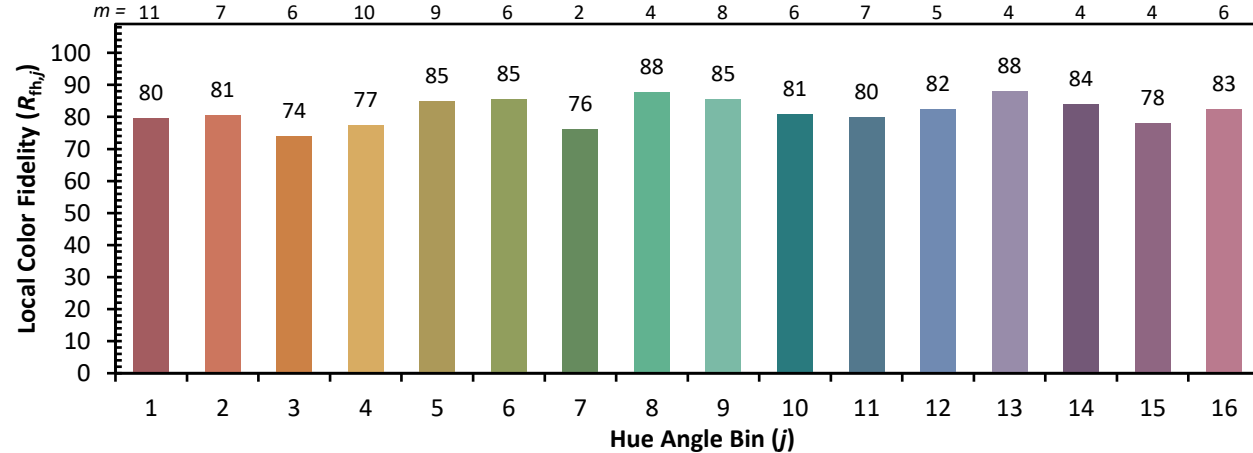
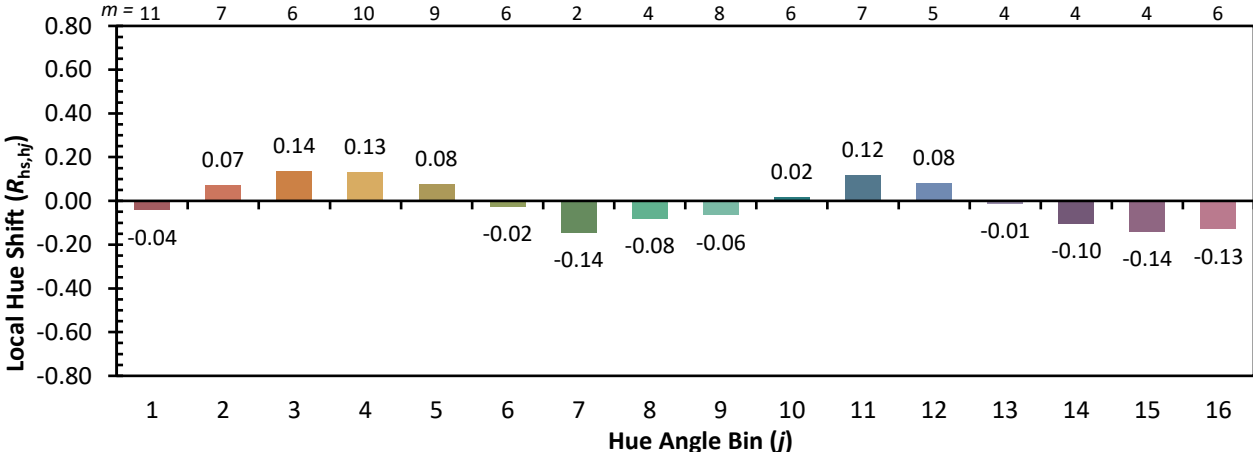
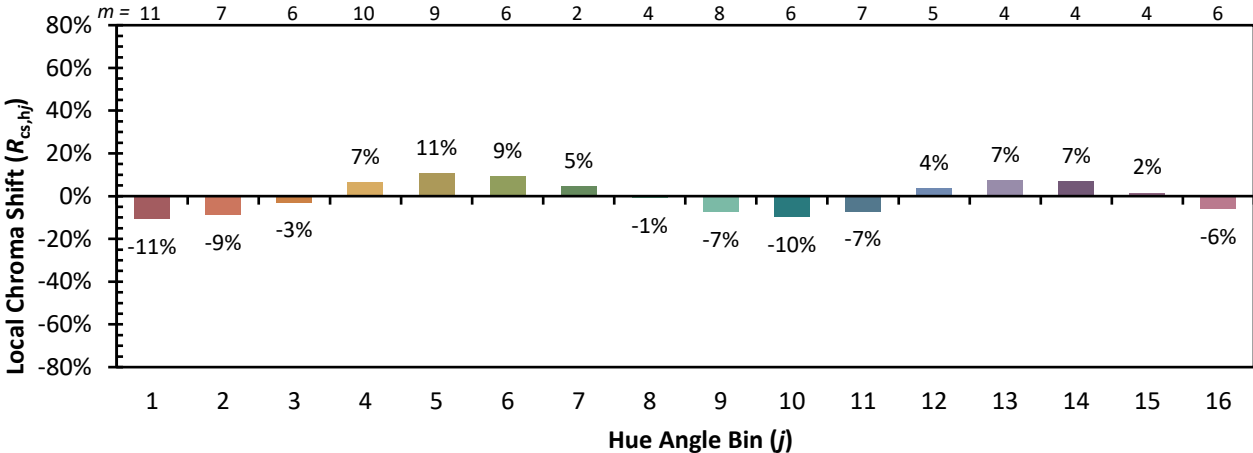


Individual Sample Fidelity Index ($R_{f,i}$)

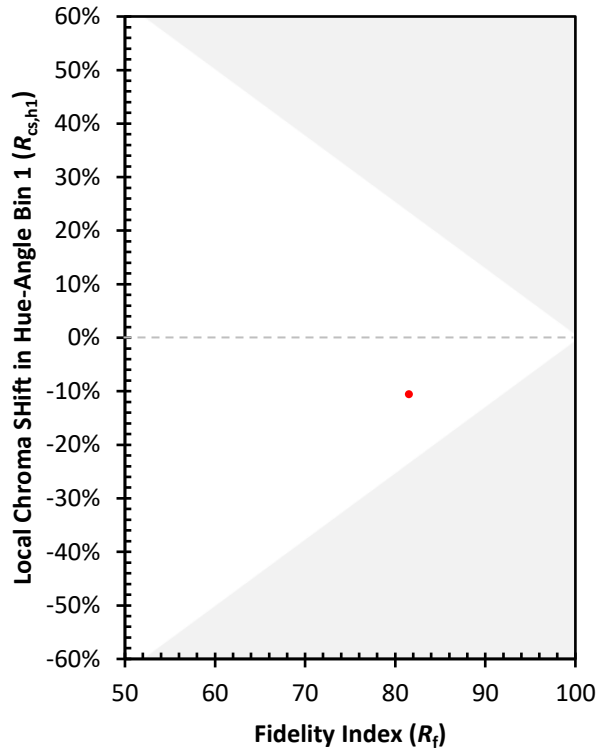
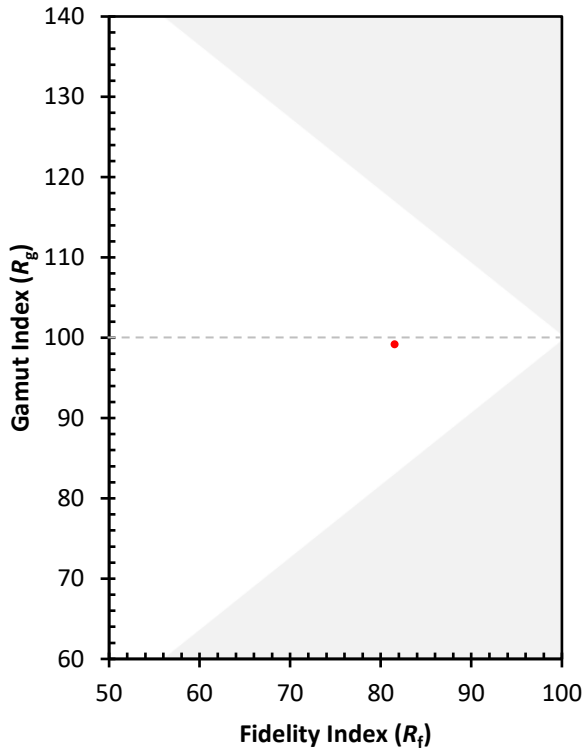
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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)