

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P1068080

Luminaire Tested: **NAV-SA5D-830-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068080
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA5D-830-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 1200mA 5xLight Square PACKAGE
80CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (70) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20897.9 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G4

Input Watts (W): 269.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

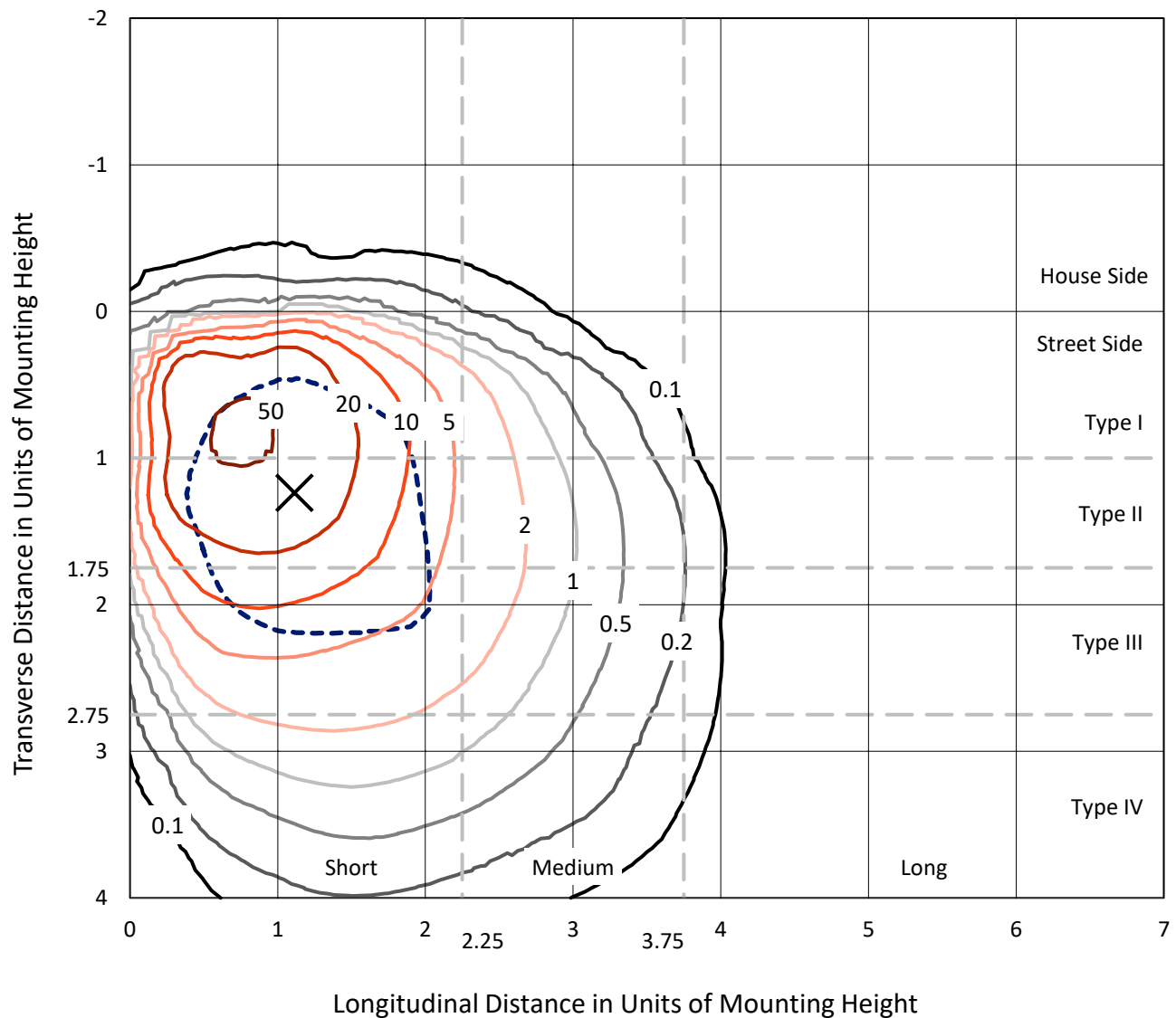


REPORT NUMBER: P1068080

CATALOG NUMBER: NAV-SA5D-830-U-LBC

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

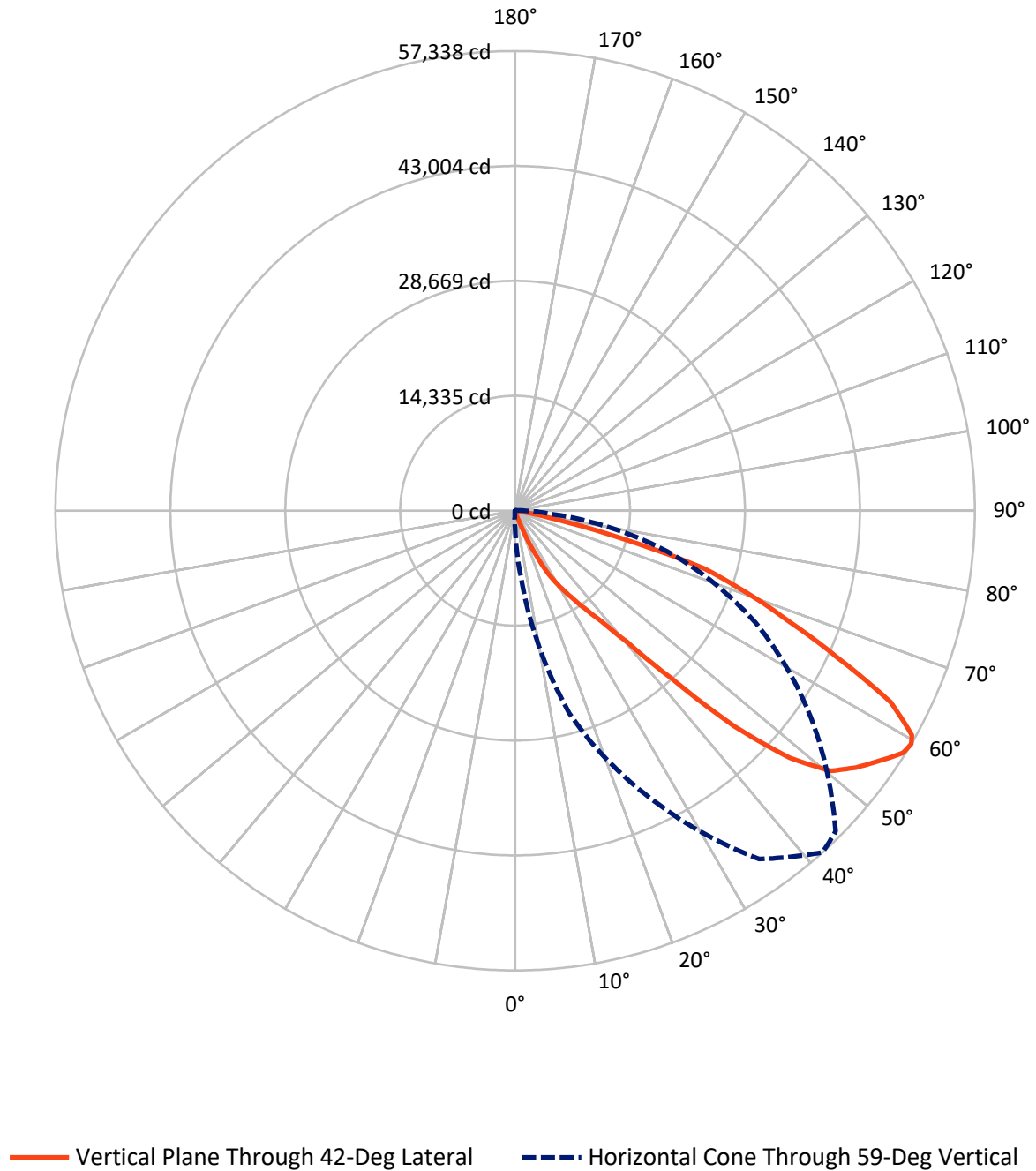


Based on 15 foot mounting height. Maximum calculated value = 62.1 fc
 Type III - Short - N/A

REPORT NUMBER: P1068080

CATALOG NUMBER: NAV-SA5D-830-U-LBC

Luminous Intensity Polar Plot



REPORT NUMBER: P1068080

CATALOG NUMBER: NAV-SA5D-830-U-LBC

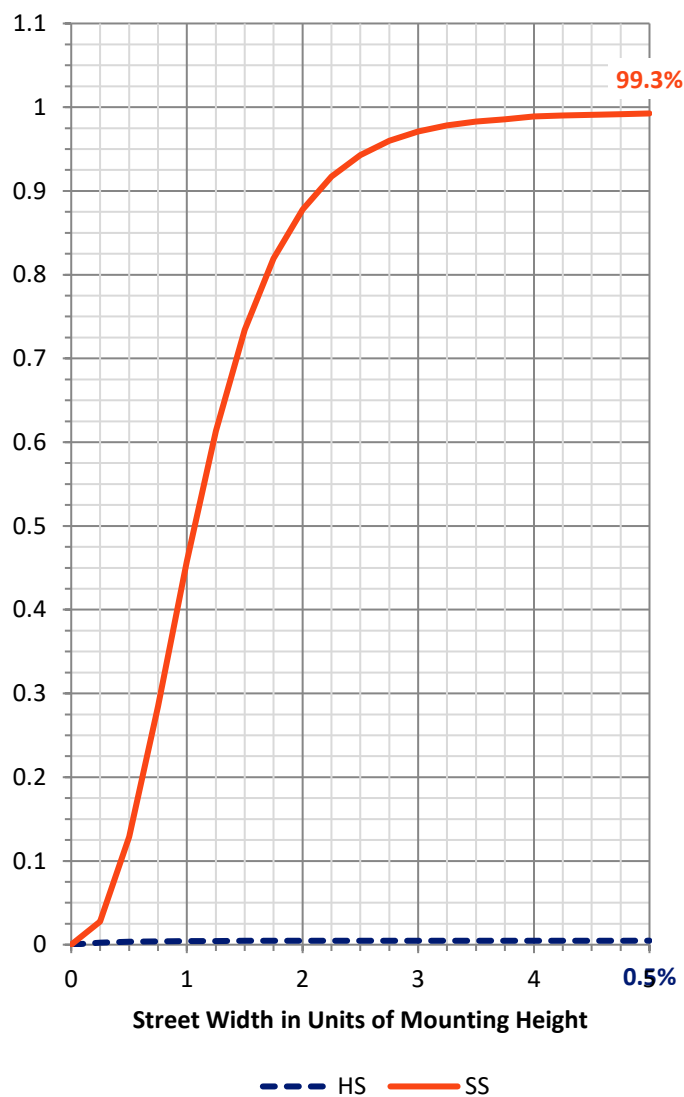
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	100.7	0.0	100.7
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	20797.2	0.0	20797.2
	% Fixture	99.5	0.0	99.5
Total	Lumens	20897.9	0.0	20897.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.1	0.0
10°-20°	30.5	0.1
20°-30°	389.8	1.9
30°-40°	1314.2	6.3
40°-50°	3969.5	19.0
50°-60°	7007.1	33.5
60°-70°	6169.9	29.5
70°-80°	1963.9	9.4
80°-90°	47.0	0.2
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°	20897.9	100.0
0°-180°	20897.9	100.0



REPORT NUMBER: P1068080

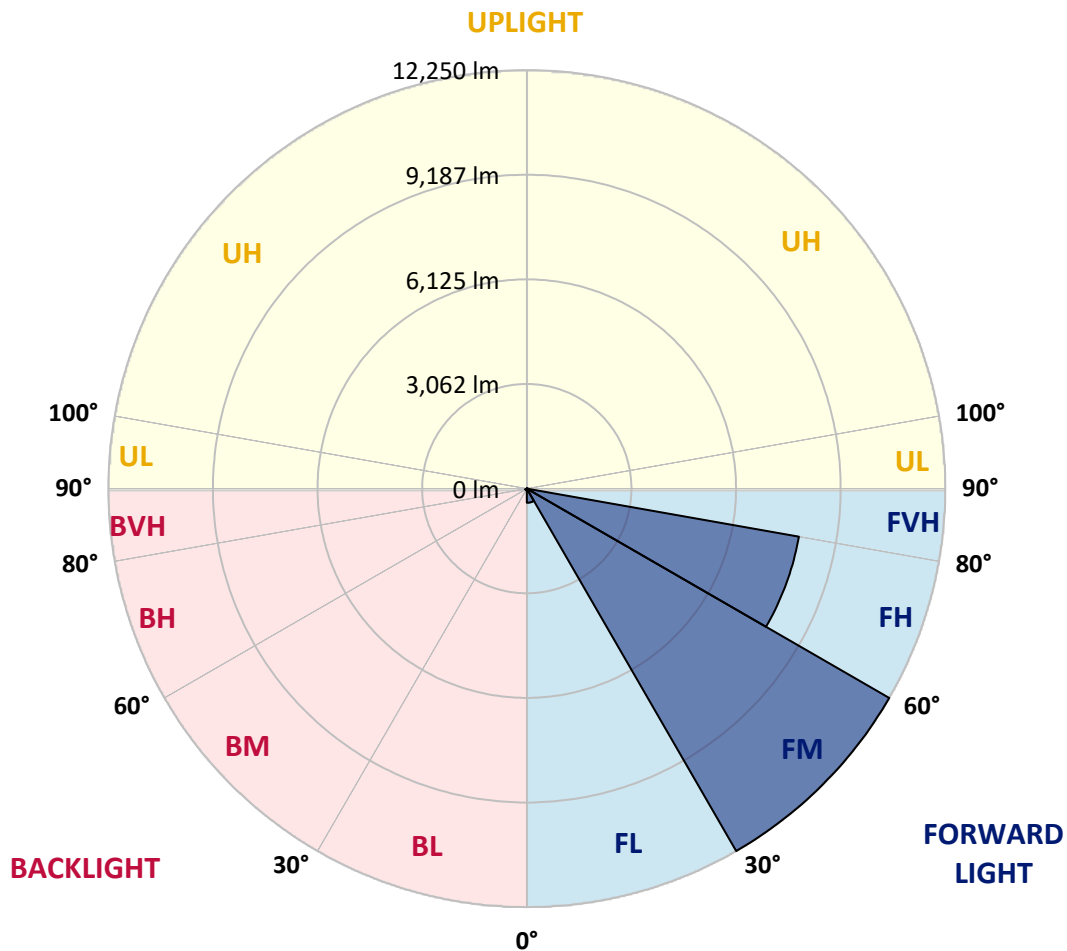
CATALOG NUMBER: NAV-SA5D-830-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	415.2	2.0			
FM	(30°-60°)	12249.6	58.6			
FH	(60°-80°)	8087.7	38.7			G4/12000
FVH	(80°-90°)	44.7	0.2			G1/100
BL	(0°-30°)	11.2	0.1	B0/110		
BM	(30°-60°)	41.1	0.2	B0/220		
BH	(60°-80°)	46.1	0.2	B0/110		G0/110
BVH	(80°-90°)	2.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G4

Type III Short





REPORT NUMBER: P1068080

CATALOG NUMBER: NAV-SA5D-830-U-LBC

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0
2.5°	91.7	91.7	85.2	78.6	72.1	65.5	65.5	65.5	59.0	59.0	52.4
5°	104.8	104.8	98.3	91.7	91.7	85.2	85.2	78.6	72.1	72.1	65.5
7.5°	111.4	111.4	111.4	111.4	104.8	104.8	104.8	98.3	91.7	85.2	78.6
10°	117.9	124.5	131.0	131.0	131.0	131.0	131.0	124.5	111.4	104.8	91.7
12.5°	131.0	137.6	150.7	163.8	163.8	170.4	163.8	157.3	144.1	124.5	104.8
15°	144.1	157.3	176.9	203.1	229.3	235.9	235.9	216.2	190.0	150.7	124.5
17.5°	163.8	183.5	235.9	321.1	412.8	484.9	484.9	432.4	301.4	196.6	144.1
20°	176.9	216.2	380.0	773.2	1179.4	1480.8	1421.8	1258.0	674.9	308.0	157.3
22.5°	196.6	275.2	805.9	2031.2	3145.0	3695.4	3564.4	2706.0	1513.6	550.4	190.0
25°	222.8	399.7	1598.7	3806.8	5844.5	6440.8	6355.6	5051.7	2758.5	923.9	242.4
27.5°	275.2	589.7	2561.9	5772.5	8622.7	9133.7	9101.0	7397.4	4409.6	1487.3	314.5
30°	347.3	858.3	3800.3	7843.0	10463.8	10981.5	10817.6	9114.1	5949.4	2273.6	406.2
32.5°	432.4	1199.0	4920.7	9369.6	12160.8	12842.3	12645.7	10608.0	7187.7	2941.9	602.8
35°	563.5	1533.2	6028.0	10719.4	14119.9	14984.8	14657.2	12147.7	8255.7	3695.4	727.3
37.5°	629.0	1729.8	7043.6	12187.1	16321.5	17500.9	17251.9	14093.7	9343.4	4658.6	891.1
40°	635.6	1965.7	8098.5	14100.3	19433.8	21537.0	21091.5	17435.3	11368.0	5897.0	1146.6
42.5°	655.2	2319.5	9467.9	17363.3	25546.9	28567.5	28063.0	23581.3	15961.1	8380.2	1624.9
45°	746.9	2987.8	12259.1	23463.3	33940.3	38369.6	37786.4	32145.0	22375.7	13051.9	2771.6
47.5°	1068.0	4494.8	17153.6	30048.3	42523.6	46055.3	45911.1	38893.7	28187.5	17841.6	4697.9
50°	1716.7	6899.4	22723.0	35584.9	47988.2	51021.8	50661.4	41711.2	31502.9	21111.1	6021.5
52.5°	2293.3	9199.3	26221.8	37622.6	49619.6	53236.4	52797.4	42739.9	32374.3	22074.3	6388.4
55°	2437.4	10031.4	27263.6	38251.6	50700.8	55110.4	54474.8	43427.8	32485.7	21386.3	5779.0
57.5°	2365.3	9245.1	26588.7	38867.5	52207.8	57036.7	56191.5	44771.0	32859.2	20220.0	4809.3
59°	2240.8	8275.4	26169.4	39358.9	53039.9	57338.1	56545.3	45065.9	33108.2	19689.3	4219.6
60°	2096.7	7620.2	25841.8	39680.0	52987.5	56866.4	56047.3	44928.3	33206.4	19230.6	3937.9
62.5°	1618.4	6080.4	25370.0	39450.7	49678.6	52561.6	52096.4	41560.5	31765.0	17763.0	3105.7
65°	1258.0	4652.0	23640.3	35185.2	42274.7	44214.1	44069.9	35191.7	26732.9	15312.4	2240.8
67.5°	995.9	3394.0	19990.7	28495.4	34012.4	36770.8	36666.0	28567.5	20292.1	11702.2	1611.8
70°	812.5	2417.8	13707.2	21484.6	27204.6	30677.3	30526.6	22991.6	15037.2	7423.6	1172.8
72.5°	688.0	1546.3	8314.7	16197.0	22703.3	24688.6	24249.6	18549.2	10935.6	4042.7	930.4
75°	583.1	950.1	4121.3	10096.9	13523.7	13510.6	13071.6	9821.7	5870.8	1978.8	740.4
77.5°	471.8	668.3	1618.4	2771.6	4265.5	5281.1	5195.9	3479.2	1756.0	576.6	458.7
80°	308.0	314.5	432.4	760.1	1172.8	1297.3	1474.2	1061.5	511.1	275.2	190.0
82.5°	137.6	150.7	196.6	249.0	249.0	229.3	203.1	150.7	111.4	91.7	45.9
85°	32.8	45.9	32.8	39.3	32.8	26.2	26.2	13.1	0.0	0.0	0.0
87.5°	6.6	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



REPORT NUMBER: P1068080

CATALOG NUMBER: NAV-SA5D-830-U-LBC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0
2.5°	52.4	52.4	52.4	45.9	45.9	45.9	39.3	39.3	39.3	32.8	32.8
5°	65.5	59.0	52.4	52.4	45.9	45.9	39.3	32.8	32.8	32.8	26.2
7.5°	72.1	65.5	59.0	52.4	45.9	39.3	39.3	32.8	26.2	26.2	26.2
10°	85.2	78.6	65.5	52.4	45.9	39.3	32.8	32.8	26.2	19.7	19.7
12.5°	98.3	85.2	72.1	59.0	45.9	39.3	32.8	32.8	26.2	19.7	13.1
15°	111.4	98.3	78.6	59.0	45.9	39.3	32.8	32.8	19.7	13.1	6.6
17.5°	124.5	104.8	78.6	65.5	45.9	39.3	32.8	26.2	13.1	6.6	0.0
20°	131.0	111.4	85.2	65.5	45.9	39.3	32.8	19.7	6.6	0.0	0.0
22.5°	144.1	124.5	91.7	65.5	45.9	32.8	19.7	6.6	0.0	0.0	0.0
25°	170.4	131.0	91.7	65.5	45.9	32.8	13.1	0.0	0.0	0.0	0.0
27.5°	190.0	144.1	91.7	65.5	45.9	26.2	6.6	0.0	0.0	0.0	0.0
30°	222.8	157.3	98.3	65.5	45.9	19.7	6.6	0.0	0.0	0.0	0.0
32.5°	275.2	170.4	98.3	65.5	39.3	19.7	0.0	0.0	0.0	0.0	0.0
35°	334.2	196.6	98.3	65.5	39.3	19.7	0.0	0.0	0.0	0.0	0.0
37.5°	340.7	209.7	98.3	65.5	39.3	13.1	0.0	0.0	0.0	0.0	0.0
40°	353.8	196.6	104.8	65.5	39.3	13.1	0.0	0.0	0.0	0.0	0.0
42.5°	406.2	183.5	111.4	65.5	39.3	13.1	0.0	0.0	0.0	0.0	0.0
45°	602.8	190.0	111.4	72.1	39.3	19.7	0.0	0.0	0.0	0.0	0.0
47.5°	1048.3	196.6	104.8	72.1	39.3	19.7	0.0	0.0	0.0	0.0	0.0
50°	1343.2	229.3	104.8	78.6	45.9	13.1	0.0	0.0	0.0	0.0	0.0
52.5°	1428.4	268.6	104.8	85.2	59.0	6.6	0.0	0.0	0.0	0.0	0.0
55°	1389.1	314.5	111.4	91.7	72.1	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	1284.2	340.7	117.9	98.3	78.6	0.0	0.0	0.0	0.0	0.0	0.0
59°	1172.8	360.4	137.6	104.8	78.6	0.0	0.0	0.0	0.0	0.0	0.0
60°	1081.1	380.0	144.1	111.4	78.6	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	871.4	406.2	157.3	131.0	65.5	0.0	0.0	0.0	0.0	0.0	0.0
65°	760.1	425.9	163.8	144.1	59.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	694.5	439.0	176.9	150.7	52.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	642.1	432.4	190.0	144.1	45.9	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	583.1	412.8	229.3	131.0	39.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	524.2	373.5	249.0	117.9	26.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	380.0	314.5	229.3	104.8	13.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	163.8	170.4	163.8	78.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	32.8	39.3	32.8	19.7	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



REPORT NUMBER: P1068080

CATALOG NUMBER: NAV-SA5D-830-U-LBC

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0
2.5°	32.8	32.8	32.8	32.8	39.3	39.3	52.4	65.5	78.6	85.2	85.2
5°	26.2	26.2	26.2	26.2	26.2	32.8	39.3	52.4	72.1	78.6	78.6
7.5°	19.7	19.7	19.7	19.7	19.7	19.7	32.8	45.9	65.5	72.1	78.6
10°	19.7	13.1	13.1	6.6	6.6	13.1	19.7	39.3	59.0	65.5	72.1
12.5°	13.1	6.6	6.6	0.0	0.0	6.6	13.1	32.8	52.4	59.0	65.5
15°	6.6	0.0	0.0	0.0	0.0	0.0	6.6	26.2	45.9	52.4	65.5
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.7	39.3	52.4	59.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	32.8	45.9	52.4
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	26.2	39.3	45.9
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.7	26.2	32.8
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	19.7	26.2
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	19.7	26.2
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1	19.7
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1	19.7
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1	13.1
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	13.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
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: P1068080

CATALOG NUMBER: NAV-SA5D-830-U-LBC

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	318°	325°	335°	345°	355°	360°
0°	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0
2.5°	91.7	91.7	85.2	78.6	78.6	78.6	85.2	91.7	91.7	91.7
5°	85.2	85.2	78.6	78.6	78.6	78.6	85.2	98.3	104.8	104.8
7.5°	85.2	85.2	78.6	78.6	78.6	78.6	85.2	98.3	104.8	111.4
10°	78.6	78.6	78.6	78.6	72.1	78.6	85.2	98.3	117.9	117.9
12.5°	78.6	78.6	78.6	78.6	72.1	78.6	91.7	104.8	124.5	131.0
15°	78.6	78.6	78.6	72.1	72.1	78.6	91.7	111.4	131.0	144.1
17.5°	72.1	78.6	78.6	72.1	72.1	78.6	91.7	111.4	144.1	163.8
20°	65.5	72.1	78.6	72.1	72.1	72.1	91.7	111.4	150.7	176.9
22.5°	59.0	65.5	72.1	72.1	65.5	72.1	91.7	117.9	163.8	196.6
25°	52.4	59.0	59.0	65.5	65.5	72.1	91.7	117.9	170.4	222.8
27.5°	39.3	45.9	52.4	59.0	59.0	72.1	91.7	124.5	183.5	275.2
30°	32.8	39.3	45.9	52.4	59.0	72.1	91.7	124.5	196.6	347.3
32.5°	32.8	39.3	45.9	52.4	59.0	65.5	91.7	131.0	216.2	432.4
35°	26.2	32.8	39.3	52.4	52.4	65.5	91.7	131.0	235.9	563.5
37.5°	26.2	32.8	39.3	52.4	52.4	65.5	91.7	131.0	288.3	629.0
40°	19.7	26.2	32.8	52.4	52.4	65.5	98.3	137.6	294.8	635.6
42.5°	19.7	26.2	32.8	45.9	52.4	65.5	98.3	137.6	275.2	655.2
45°	19.7	26.2	32.8	52.4	59.0	72.1	98.3	144.1	268.6	746.9
47.5°	19.7	26.2	32.8	52.4	65.5	72.1	98.3	144.1	275.2	1068.0
50°	19.7	26.2	32.8	52.4	72.1	72.1	98.3	144.1	301.4	1716.7
52.5°	13.1	19.7	26.2	45.9	59.0	78.6	104.8	137.6	321.1	2293.3
55°	13.1	13.1	19.7	39.3	52.4	85.2	111.4	137.6	373.5	2437.4
57.5°	13.1	13.1	19.7	32.8	45.9	91.7	117.9	137.6	432.4	2365.3
59°	13.1	13.1	13.1	26.2	39.3	91.7	117.9	144.1	439.0	2240.8
60°	13.1	13.1	13.1	26.2	39.3	91.7	124.5	150.7	445.5	2096.7
62.5°	6.6	6.6	6.6	26.2	32.8	91.7	137.6	183.5	458.7	1618.4
65°	13.1	13.1	6.6	19.7	32.8	78.6	157.3	196.6	465.2	1258.0
67.5°	13.1	13.1	13.1	26.2	32.8	78.6	163.8	203.1	465.2	995.9
70°	13.1	13.1	13.1	26.2	39.3	78.6	163.8	209.7	458.7	812.5
72.5°	13.1	13.1	13.1	26.2	39.3	72.1	150.7	216.2	439.0	688.0
75°	13.1	13.1	13.1	19.7	32.8	65.5	144.1	235.9	399.7	583.1
77.5°	13.1	13.1	13.1	13.1	26.2	52.4	131.0	262.1	353.8	471.8
80°	19.7	13.1	13.1	13.1	19.7	45.9	124.5	255.5	294.8	308.0
82.5°	19.7	13.1	13.1	6.6	13.1	32.8	98.3	196.6	150.7	137.6
85°	13.1	13.1	13.1	6.6	6.6	19.7	45.9	59.0	45.9	32.8
87.5°	13.1	13.1	13.1	6.6	6.6	6.6	6.6	6.6	6.6	6.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-9

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-830-U-5WQ

Data in this report applies to families of products including GSS-SB1A-830-U-5WQ

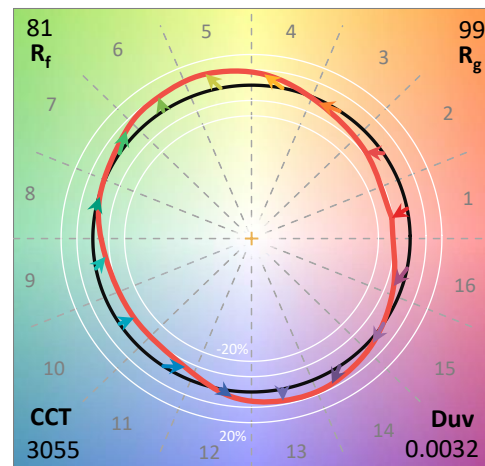
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/15/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGraw-Edison
 Catalog Number: **GSS-SB1A-830-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI
 3000K CCT 26 LEDS

Spectral Parameters

CCT (K): 3055
 CIE u' : 0.2475
 CIE v' : 0.5247
 Duv: 0.0032
 CIE x: 0.4377
 CIE y: 0.4124
 CIE z: 0.1499
 Peak Wavelength (nm): 604
 Dominant Wavelength (nm): 581
 Purity: 55.16339
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 80.9
 R1: 79.5
 R2: 85.6
 R3: 92.1
 R4: 82.4
 R5: 78.9
 R6: 81.7
 R7: 85.1
 R8: 61.9
 R9: 6.8
 R10: 67.1
 R11: 82.5
 R12: 63.4
 R13: 80.2
 R14: 95.1
 R15: 71.7



Test Conditions

Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-9

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: SP1-2407-184-9

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: SP1-2407-184-9

Photopic Flux vs. Wavelength

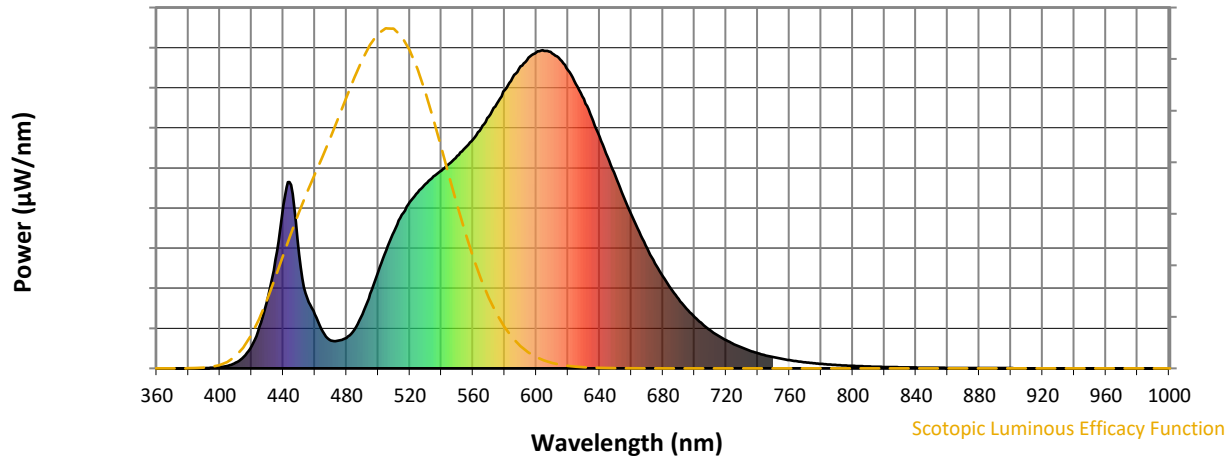


Photopic Lumens: NR

λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-9

Scotopic Flux vs. Wavelength



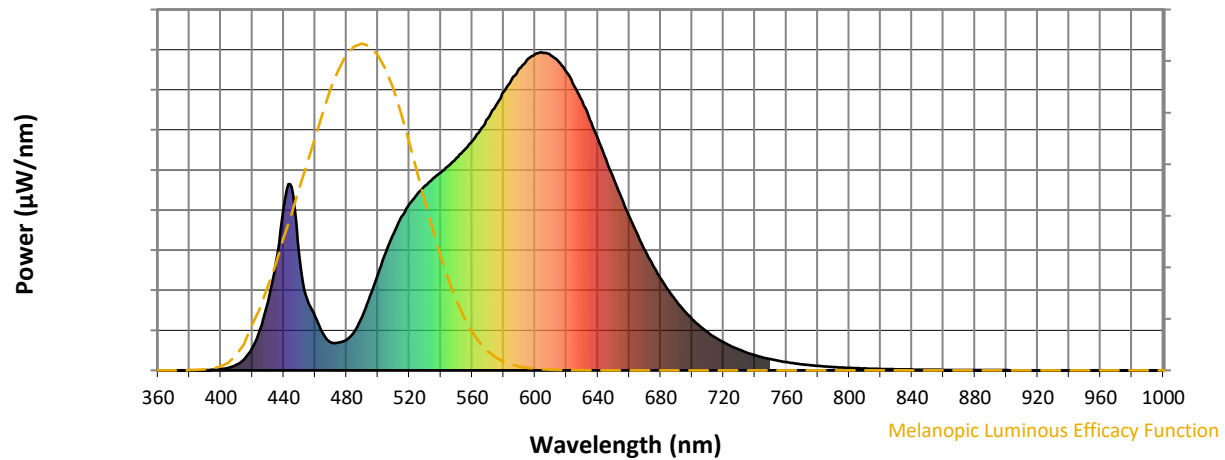
Scotopic Lumens: NR

S/P: 1.28

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	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.33

λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-9

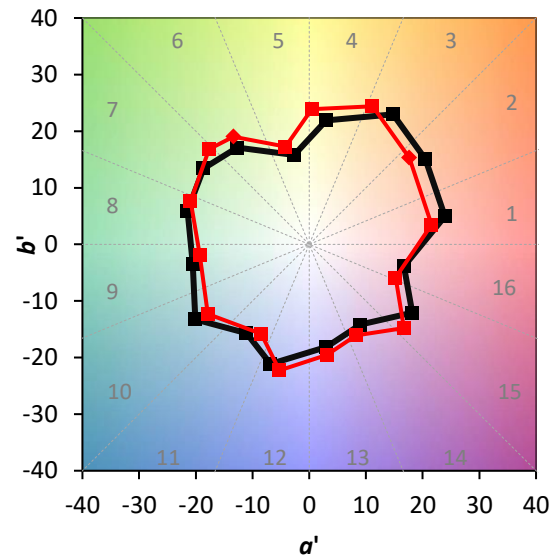
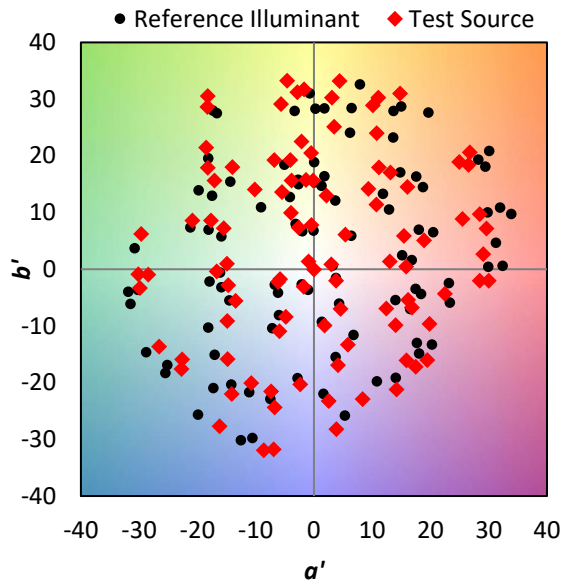
TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 80.9$
 $R_9 = 6.8$

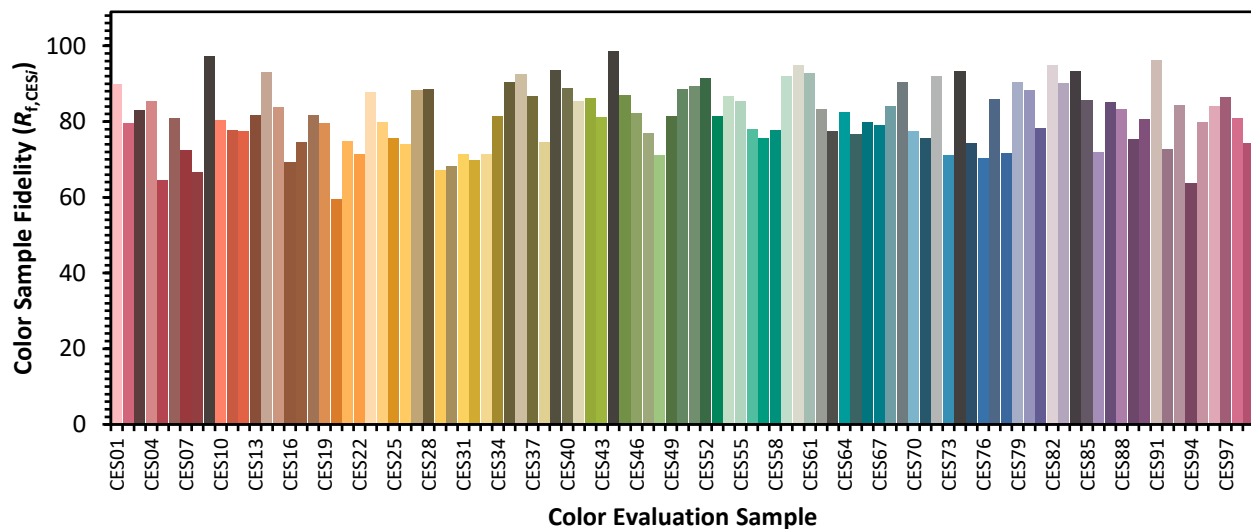


Color Vector Graphics

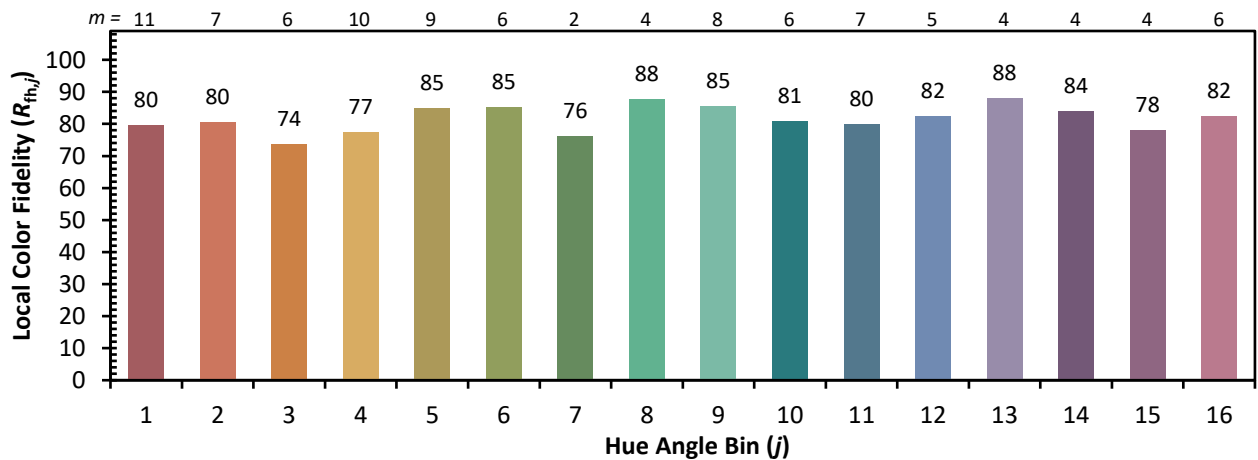
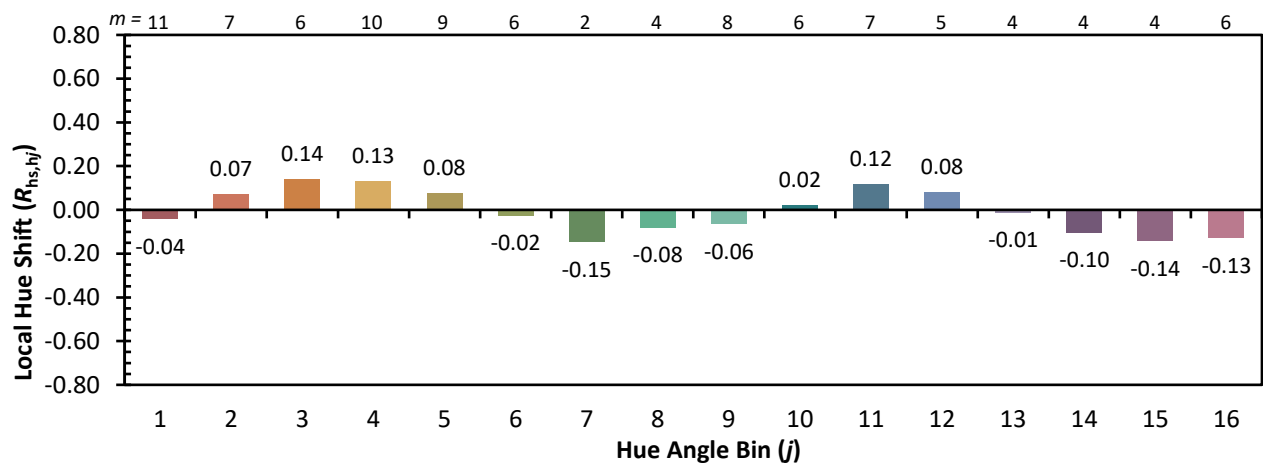


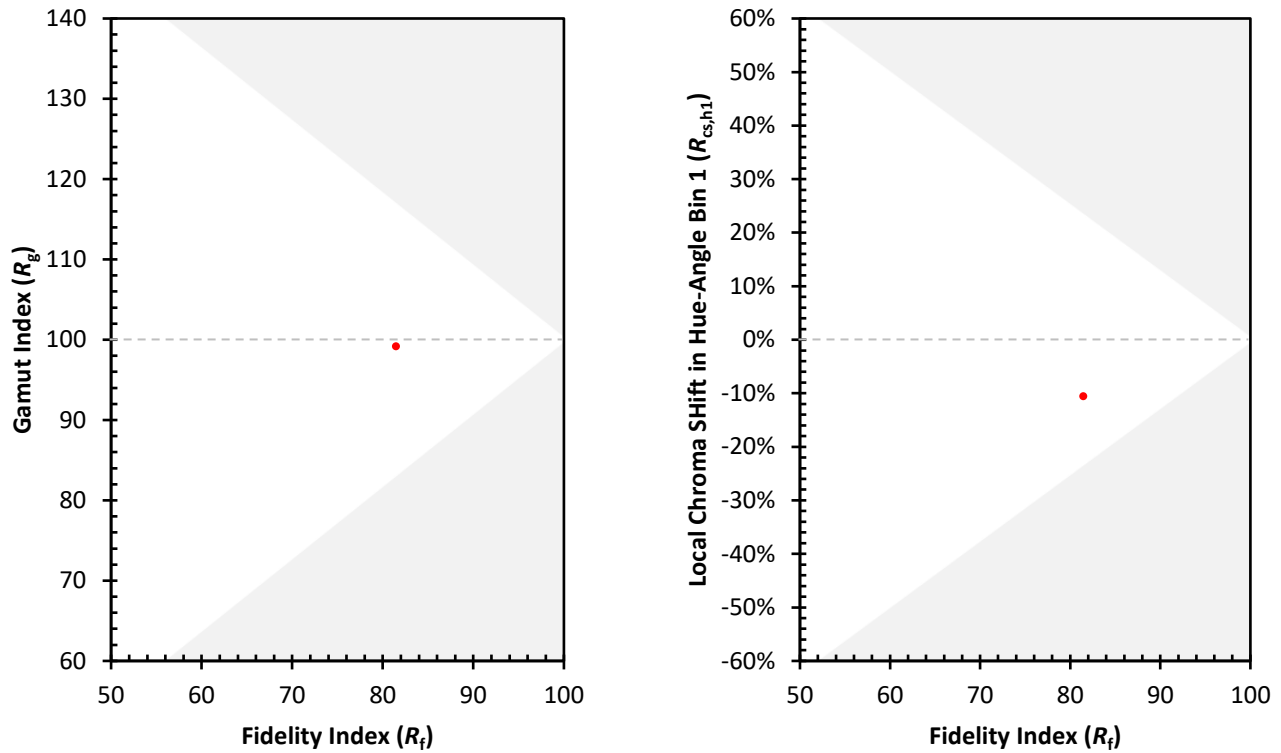
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 91	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 = 93
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 = 90	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 77	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)