

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: P1068049

Luminaire Tested: **NAV-SA4A-827-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068049
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA4A-827-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 615mA 4xLight Square PACKAGE
80CRI 2700K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (56) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8986.4 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G2

Input Watts (W): 107.4
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



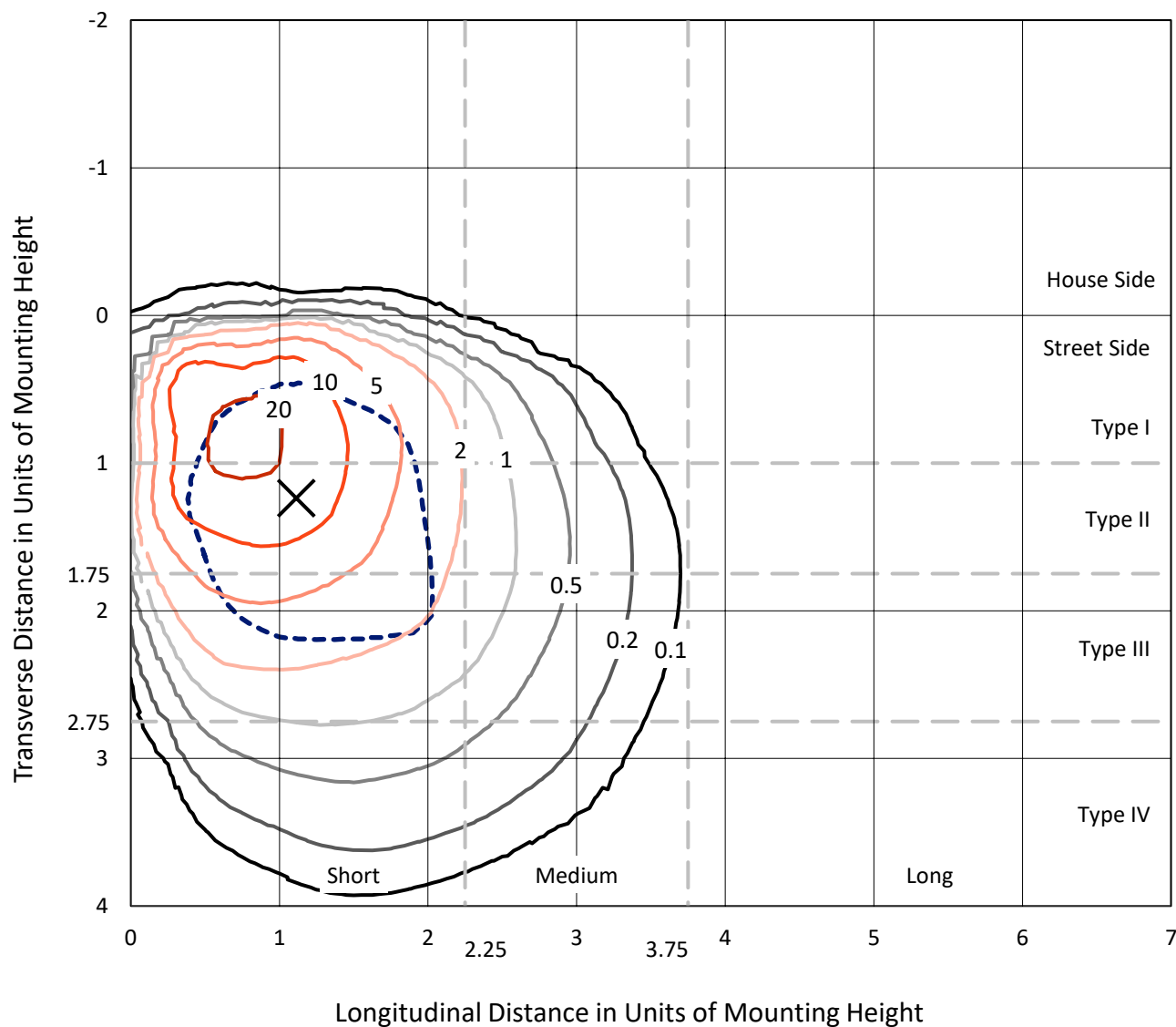
REPORT NUMBER: P1068049

CATALOG NUMBER: NAV-SA4A-827-U-LBC

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

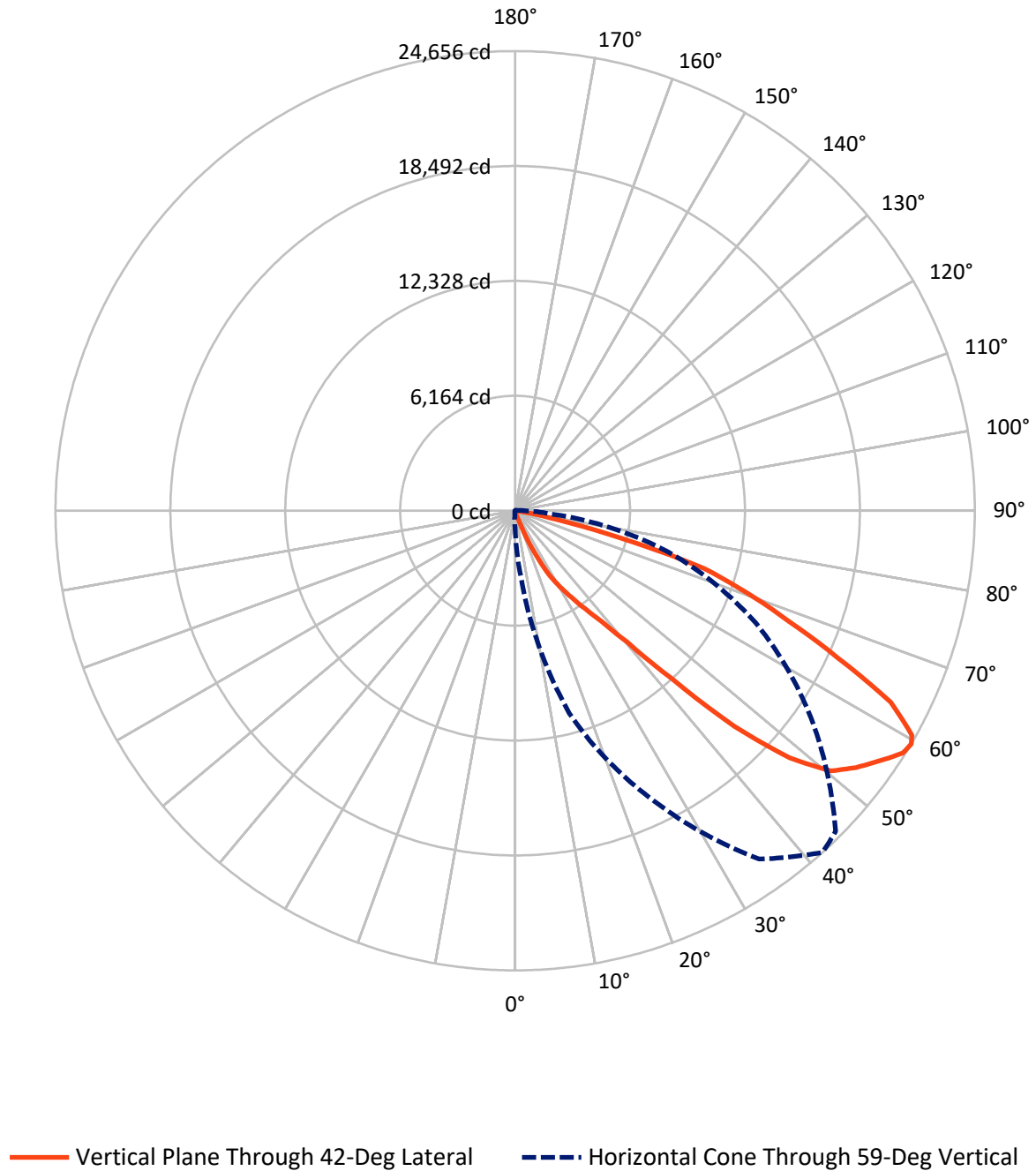


Based on 15 foot mounting height. Maximum calculated value = 26.7 fc
 Type III - Short - N/A

REPORT NUMBER: P1068049

CATALOG NUMBER: NAV-SA4A-827-U-LBC

Luminous Intensity Polar Plot



REPORT NUMBER: P1068049

CATALOG NUMBER: NAV-SA4A-827-U-LBC

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	43.3	0.0	43.3
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	8943.1	0.0	8943.1
	% Fixture	99.5	0.0	99.5
Total	Lumens	8986.4	0.0	8986.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.6	0.0
10°-20°	13.1	0.1
20°-30°	167.6	1.9
30°-40°	565.1	6.3
40°-50°	1706.9	19.0
50°-60°	3013.2	33.5
60°-70°	2653.1	29.5
70°-80°	844.5	9.4
80°-90°	20.2	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°	8986.4	100.0
0°-180°	8986.4	100.0



REPORT NUMBER: P1068049

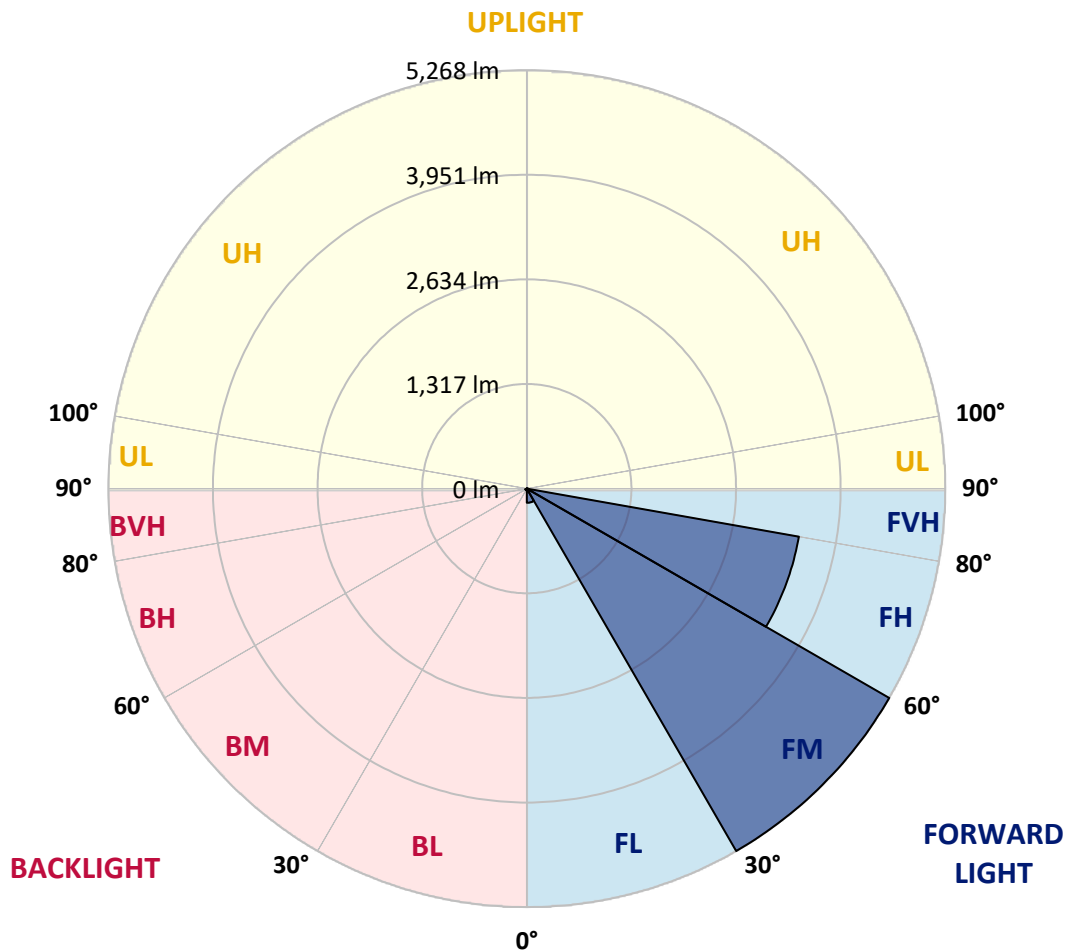
CATALOG NUMBER: NAV-SA4A-827-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	178.5	2.0			
FM	(30°-60°)	5267.6	58.6			
FH	(60°-80°)	3477.8	38.7			G2/5000
FVH	(80°-90°)	19.2	0.2			G1/100
BL	(0°-30°)	4.8	0.1	B0/110		
BM	(30°-60°)	17.7	0.2	B0/220		
BH	(60°-80°)	19.8	0.2	B0/110		G0/110
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G2

Type III Short





REPORT NUMBER: P1068049

CATALOG NUMBER: NAV-SA4A-827-U-LBC

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
2.5°	39.4	39.4	36.6	33.8	31.0	28.2	28.2	28.2	25.4	25.4	22.5
5°	45.1	45.1	42.3	39.4	39.4	36.6	36.6	33.8	31.0	31.0	28.2
7.5°	47.9	47.9	47.9	47.9	45.1	45.1	45.1	42.3	39.4	36.6	33.8
10°	50.7	53.5	56.4	56.4	56.4	56.4	56.4	53.5	47.9	45.1	39.4
12.5°	56.4	59.2	64.8	70.4	70.4	73.3	70.4	67.6	62.0	53.5	45.1
15°	62.0	67.6	76.1	87.3	98.6	101.4	101.4	93.0	81.7	64.8	53.5
17.5°	70.4	78.9	101.4	138.1	177.5	208.5	208.5	186.0	129.6	84.5	62.0
20°	76.1	93.0	163.4	332.5	507.2	636.8	611.4	541.0	290.2	132.4	67.6
22.5°	84.5	118.3	346.6	873.4	1352.4	1589.1	1532.7	1163.6	650.9	236.7	81.7
25°	95.8	171.9	687.5	1637.0	2513.3	2769.7	2733.0	2172.3	1186.2	397.3	104.2
27.5°	118.3	253.6	1101.7	2482.3	3707.9	3927.7	3913.6	3181.0	1896.2	639.6	135.2
30°	149.3	369.1	1634.2	3372.6	4499.6	4722.2	4651.8	3919.2	2558.3	977.7	174.7
32.5°	186.0	515.6	2116.0	4029.1	5229.4	5522.4	5437.9	4561.6	3090.9	1265.1	259.2
35°	242.3	659.3	2592.1	4609.5	6071.8	6443.7	6302.9	5223.7	3550.1	1589.1	312.7
37.5°	270.5	743.8	3028.9	5240.6	7018.5	7525.7	7418.6	6060.5	4017.8	2003.3	383.2
40°	273.3	845.3	3482.5	6063.4	8356.9	9261.3	9069.7	7497.5	4888.4	2535.8	493.1
42.5°	281.8	997.4	4071.4	7466.5	10985.6	12284.5	12067.6	10140.4	6863.6	3603.6	698.8
45°	321.2	1284.8	5271.6	10089.6	14594.9	16499.6	16248.8	13822.9	9621.9	5612.6	1191.8
47.5°	459.3	1932.8	7376.3	12921.3	18285.9	19804.6	19742.6	16725.0	12121.1	7672.2	2020.2
50°	738.2	2966.9	9771.3	15302.1	20635.7	21940.3	21785.3	17936.5	13546.8	9078.1	2589.3
52.5°	986.1	3955.8	11275.8	16178.4	21337.3	22892.6	22703.8	18378.9	13921.5	9492.3	2747.1
55°	1048.1	4313.7	11723.8	16448.9	21802.2	23698.4	23425.1	18674.7	13969.4	9196.5	2485.1
57.5°	1017.1	3975.6	11433.6	16713.7	22450.2	24526.8	24163.3	19252.3	14130.0	8695.0	2068.1
59°	963.6	3558.6	11253.3	16925.0	22808.1	24656.4	24315.5	19379.1	14237.1	8466.7	1814.5
60°	901.6	3276.8	11112.4	17063.1	22785.5	24453.5	24101.3	19319.9	14279.3	8269.5	1693.3
62.5°	695.9	2614.7	10909.6	16964.5	21362.7	22602.4	22402.3	17871.7	13659.5	7638.4	1335.5
65°	541.0	2000.5	10165.7	15130.2	18178.8	19012.8	18950.8	15133.1	11495.6	6584.6	963.6
67.5°	428.3	1459.5	8596.3	12253.5	14625.9	15812.1	15767.0	12284.5	8726.0	5032.1	693.1
70°	349.4	1039.7	5894.3	9238.7	11698.5	13191.8	13127.0	9886.8	6466.3	3192.3	504.3
72.5°	295.8	664.9	3575.5	6965.0	9762.8	10616.5	10427.8	7976.5	4702.5	1738.4	400.1
75°	250.8	408.5	1772.2	4341.8	5815.4	5809.8	5621.0	4223.5	2524.5	850.9	318.4
77.5°	202.9	287.4	695.9	1191.8	1834.2	2270.9	2234.3	1496.1	755.1	247.9	197.2
80°	132.4	135.2	186.0	326.8	504.3	557.9	633.9	456.4	219.8	118.3	81.7
82.5°	59.2	64.8	84.5	107.1	107.1	98.6	87.3	64.8	47.9	39.4	19.7
85°	14.1	19.7	14.1	16.9	14.1	11.3	11.3	5.6	0.0	0.0	0.0
87.5°	2.8	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: P1068049

CATALOG NUMBER: NAV-SA4A-827-U-LBC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
2.5°	22.5	22.5	22.5	19.7	19.7	19.7	16.9	16.9	16.9	14.1	14.1
5°	28.2	25.4	22.5	22.5	19.7	19.7	16.9	14.1	14.1	14.1	11.3
7.5°	31.0	28.2	25.4	22.5	19.7	16.9	16.9	14.1	11.3	11.3	11.3
10°	36.6	33.8	28.2	22.5	19.7	16.9	14.1	14.1	11.3	8.5	8.5
12.5°	42.3	36.6	31.0	25.4	19.7	16.9	14.1	14.1	11.3	8.5	5.6
15°	47.9	42.3	33.8	25.4	19.7	16.9	14.1	14.1	8.5	5.6	2.8
17.5°	53.5	45.1	33.8	28.2	19.7	16.9	14.1	11.3	5.6	2.8	0.0
20°	56.4	47.9	36.6	28.2	19.7	16.9	14.1	8.5	2.8	0.0	0.0
22.5°	62.0	53.5	39.4	28.2	19.7	14.1	8.5	2.8	0.0	0.0	0.0
25°	73.3	56.4	39.4	28.2	19.7	14.1	5.6	0.0	0.0	0.0	0.0
27.5°	81.7	62.0	39.4	28.2	19.7	11.3	2.8	0.0	0.0	0.0	0.0
30°	95.8	67.6	42.3	28.2	19.7	8.5	2.8	0.0	0.0	0.0	0.0
32.5°	118.3	73.3	42.3	28.2	16.9	8.5	0.0	0.0	0.0	0.0	0.0
35°	143.7	84.5	42.3	28.2	16.9	8.5	0.0	0.0	0.0	0.0	0.0
37.5°	146.5	90.2	42.3	28.2	16.9	5.6	0.0	0.0	0.0	0.0	0.0
40°	152.1	84.5	45.1	28.2	16.9	5.6	0.0	0.0	0.0	0.0	0.0
42.5°	174.7	78.9	47.9	28.2	16.9	5.6	0.0	0.0	0.0	0.0	0.0
45°	259.2	81.7	47.9	31.0	16.9	8.5	0.0	0.0	0.0	0.0	0.0
47.5°	450.8	84.5	45.1	31.0	16.9	8.5	0.0	0.0	0.0	0.0	0.0
50°	577.6	98.6	45.1	33.8	19.7	5.6	0.0	0.0	0.0	0.0	0.0
52.5°	614.2	115.5	45.1	36.6	25.4	2.8	0.0	0.0	0.0	0.0	0.0
55°	597.3	135.2	47.9	39.4	31.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	552.2	146.5	50.7	42.3	33.8	0.0	0.0	0.0	0.0	0.0	0.0
59°	504.3	155.0	59.2	45.1	33.8	0.0	0.0	0.0	0.0	0.0	0.0
60°	464.9	163.4	62.0	47.9	33.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	374.7	174.7	67.6	56.4	28.2	0.0	0.0	0.0	0.0	0.0	0.0
65°	326.8	183.1	70.4	62.0	25.4	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	298.7	188.8	76.1	64.8	22.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	276.1	186.0	81.7	62.0	19.7	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	250.8	177.5	98.6	56.4	16.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	225.4	160.6	107.1	50.7	11.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	163.4	135.2	98.6	45.1	5.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	70.4	73.3	70.4	33.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	14.1	16.9	14.1	8.5	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: P1068049

CATALOG NUMBER: NAV-SA4A-827-U-LBC

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
2.5°	14.1	14.1	14.1	14.1	16.9	16.9	22.5	28.2	33.8	36.6	36.6
5°	11.3	11.3	11.3	11.3	11.3	14.1	16.9	22.5	31.0	33.8	33.8
7.5°	8.5	8.5	8.5	8.5	8.5	8.5	14.1	19.7	28.2	31.0	33.8
10°	8.5	5.6	5.6	2.8	2.8	5.6	8.5	16.9	25.4	28.2	31.0
12.5°	5.6	2.8	2.8	0.0	0.0	2.8	5.6	14.1	22.5	25.4	28.2
15°	2.8	0.0	0.0	0.0	0.0	0.0	2.8	11.3	19.7	22.5	28.2
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	16.9	22.5	25.4
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	14.1	19.7	22.5
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	11.3	16.9	19.7
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	11.3	14.1
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	8.5	11.3
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	8.5	11.3
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6	8.5
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6	8.5
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6	5.6
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
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: P1068049

CATALOG NUMBER: NAV-SA4A-827-U-LBC

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	318°	325°	335°	345°	355°	360°
0°	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
2.5°	39.4	39.4	36.6	33.8	33.8	33.8	36.6	39.4	39.4	39.4
5°	36.6	36.6	33.8	33.8	33.8	33.8	36.6	42.3	45.1	45.1
7.5°	36.6	36.6	33.8	33.8	33.8	33.8	36.6	42.3	45.1	47.9
10°	33.8	33.8	33.8	33.8	31.0	33.8	36.6	42.3	50.7	50.7
12.5°	33.8	33.8	33.8	33.8	31.0	33.8	39.4	45.1	53.5	56.4
15°	33.8	33.8	33.8	31.0	31.0	33.8	39.4	47.9	56.4	62.0
17.5°	31.0	33.8	33.8	31.0	31.0	33.8	39.4	47.9	62.0	70.4
20°	28.2	31.0	33.8	31.0	31.0	31.0	39.4	47.9	64.8	76.1
22.5°	25.4	28.2	31.0	31.0	28.2	31.0	39.4	50.7	70.4	84.5
25°	22.5	25.4	25.4	28.2	28.2	31.0	39.4	50.7	73.3	95.8
27.5°	16.9	19.7	22.5	25.4	25.4	31.0	39.4	53.5	78.9	118.3
30°	14.1	16.9	19.7	22.5	25.4	31.0	39.4	53.5	84.5	149.3
32.5°	14.1	16.9	19.7	22.5	25.4	28.2	39.4	56.4	93.0	186.0
35°	11.3	14.1	16.9	22.5	22.5	28.2	39.4	56.4	101.4	242.3
37.5°	11.3	14.1	16.9	22.5	22.5	28.2	39.4	56.4	124.0	270.5
40°	8.5	11.3	14.1	22.5	22.5	28.2	42.3	59.2	126.8	273.3
42.5°	8.5	11.3	14.1	19.7	22.5	28.2	42.3	59.2	118.3	281.8
45°	8.5	11.3	14.1	22.5	25.4	31.0	42.3	62.0	115.5	321.2
47.5°	8.5	11.3	14.1	22.5	28.2	31.0	42.3	62.0	118.3	459.3
50°	8.5	11.3	14.1	22.5	31.0	31.0	42.3	62.0	129.6	738.2
52.5°	5.6	8.5	11.3	19.7	25.4	33.8	45.1	59.2	138.1	986.1
55°	5.6	5.6	8.5	16.9	22.5	36.6	47.9	59.2	160.6	1048.1
57.5°	5.6	5.6	8.5	14.1	19.7	39.4	50.7	59.2	186.0	1017.1
59°	5.6	5.6	5.6	14.1	16.9	39.4	50.7	62.0	188.8	963.6
60°	5.6	5.6	5.6	11.3	16.9	39.4	53.5	64.8	191.6	901.6
62.5°	2.8	2.8	2.8	11.3	14.1	39.4	59.2	78.9	197.2	695.9
65°	5.6	5.6	2.8	8.5	14.1	33.8	67.6	84.5	200.0	541.0
67.5°	5.6	5.6	5.6	11.3	14.1	33.8	70.4	87.3	200.0	428.3
70°	5.6	5.6	5.6	11.3	16.9	33.8	70.4	90.2	197.2	349.4
72.5°	5.6	5.6	5.6	11.3	16.9	31.0	64.8	93.0	188.8	295.8
75°	5.6	5.6	5.6	8.5	14.1	28.2	62.0	101.4	171.9	250.8
77.5°	5.6	5.6	5.6	5.6	11.3	22.5	56.4	112.7	152.1	202.9
80°	8.5	5.6	5.6	5.6	8.5	19.7	53.5	109.9	126.8	132.4
82.5°	8.5	5.6	5.6	2.8	5.6	14.1	42.3	84.5	64.8	59.2
85°	5.6	5.6	5.6	2.8	2.8	8.5	19.7	25.4	19.7	14.1
87.5°	5.6	5.6	5.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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: SP1-2407-184-8

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-827-U-5WQ

Data in this report applies to families of products including GSS-SB1A-827-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-8
 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-827-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI
 2700K CCT 26 LEDS

Spectral Parameters

CCT (K): 2756
 CIE u' : 0.2599
 CIE v' : 0.5271
 Duv: 0.0006
 CIE x: 0.4563
 CIE y: 0.4112
 CIE z: 0.1325
 Peak Wavelength (nm): 609
 Dominant Wavelength (nm): 583
 Purity: 60.41121
 R_f: 82.2
 R_g: 99.9

CRI (Ra): 82.9
 R1: 81.6
 R2: 88.8
 R3: 96.0
 R4: 83.4
 R5: 81.4
 R6: 87.0
 R7: 84.0
 R8: 60.8
 R9: 10.8
 R10: 74.8
 R11: 84.3
 R12: 72.1
 R13: 82.9
 R14: 97.3
 R15: 73.7



Test Conditions

Stabilization Time: 29M
 Operation Time: 1H 29M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-8

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: SP1-2407-184-8

Photopic Flux vs. Wavelength

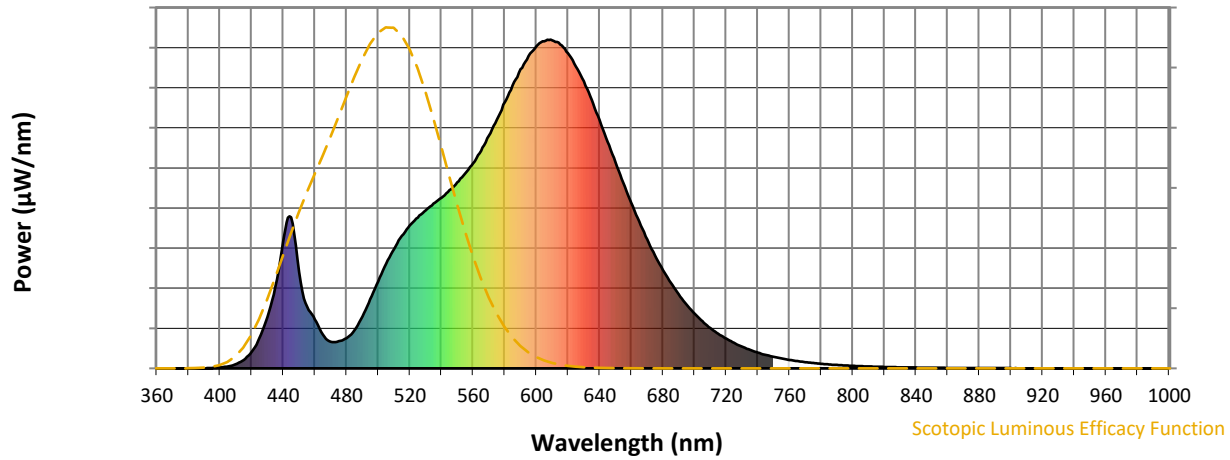


Photopic Lumens: NR

λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.2

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	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

Melanopic Flux vs. Wavelength

Melanopic Lumens: NR
M/P: 2.16

λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

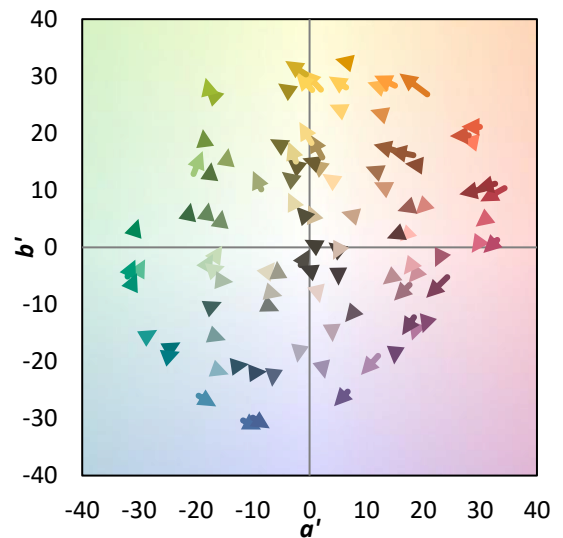
TM-30-18

Summary

$R_f = 82.2$
 $R_g = 99.9$
 $CIE R_a = 82.9$
 $R_9 = 10.8$

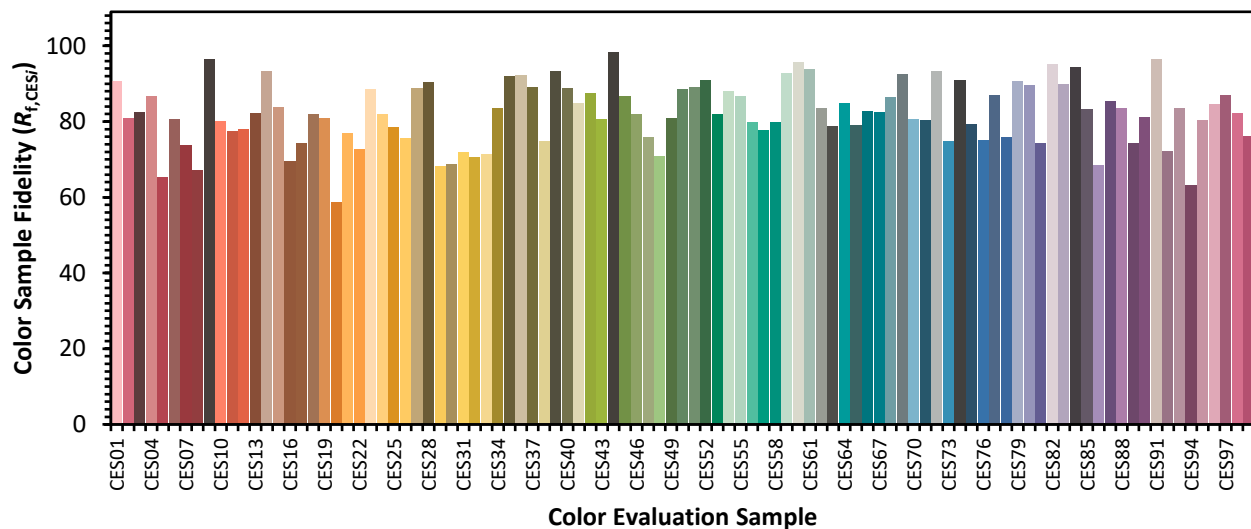


Color Vector Graphics

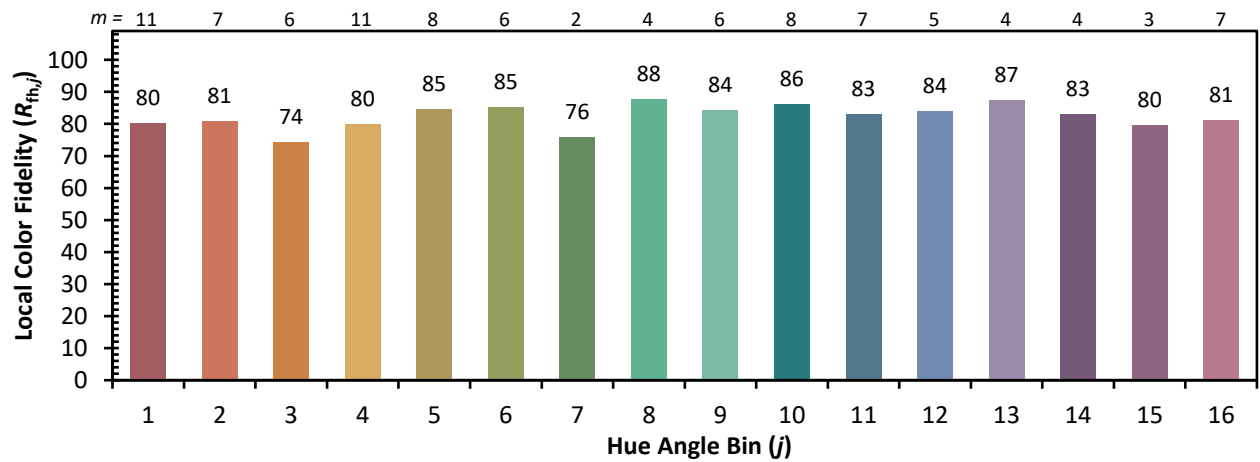
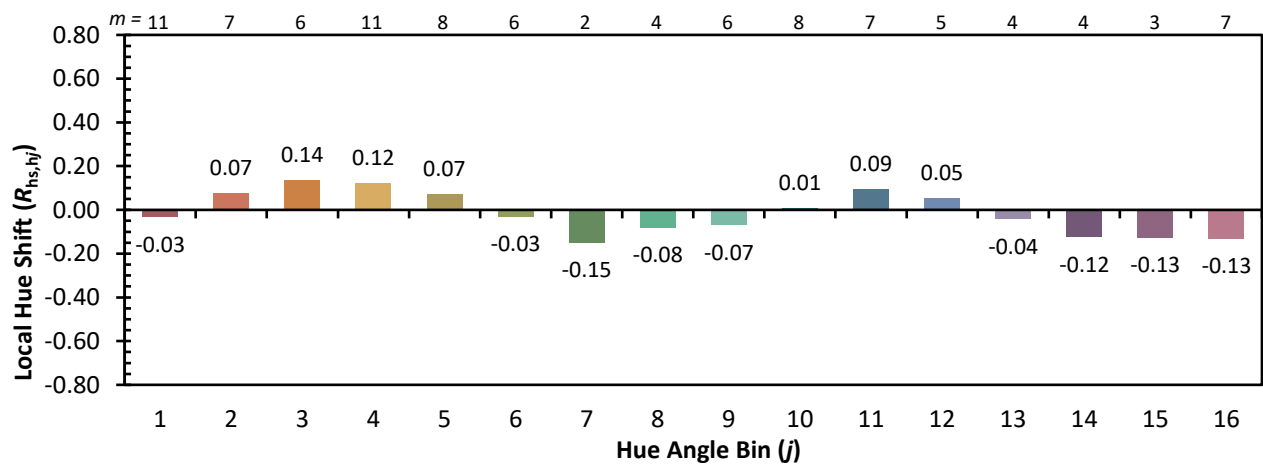
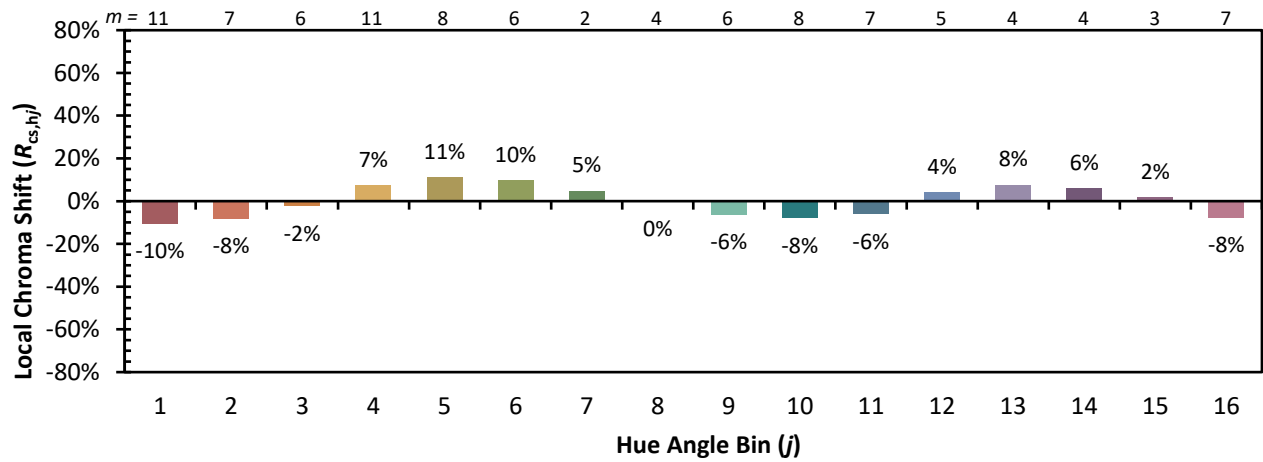


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 76	CES51 = 89	CES76 = 75
CES02 = 63	CES27 = 89	CES52 = 91	CES77 = 87
CES03 = 31	CES28 = 90	CES53 = 82	CES78 = 76
CES04 = 71	CES29 = 68	CES54 = 88	CES79 = 91
CES05 = 50	CES30 = 69	CES55 = 87	CES80 = 90
CES06 = 52	CES31 = 72	CES56 = 80	CES81 = 74
CES07 = 43	CES32 = 71	CES57 = 78	CES82 = 95
CES08 = 42	CES33 = 71	CES58 = 80	CES83 = 90
CES09 = 29	CES34 = 84	CES59 = 93	CES84 = 94
CES10 = 77	CES35 = 92	CES60 = 96	CES85 = 83
CES11 = 59	CES36 = 92	CES61 = 94	CES86 = 69
CES12 = 66	CES37 = 89	CES62 = 84	CES87 = 85
CES13 = 44	CES38 = 75	CES63 = 79	CES88 = 84
CES14 = 74	CES39 = 93	CES64 = 85	CES89 = 74
CES15 = 72	CES40 = 89	CES65 = 79	CES90 = 81
CES16 = 48	CES41 = 85	CES66 = 83	CES91 = 96
CES17 = 50	CES42 = 88	CES67 = 82	CES92 = 72
CES18 = 57	CES43 = 81	CES68 = 86	CES93 = 84
CES19 = 73	CES44 = 98	CES69 = 92	CES94 = 63
CES20 = 67	CES45 = 87	CES70 = 81	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 81	CES96 = 85
CES22 = 79	CES47 = 76	CES72 = 93	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 75	CES98 = 82
CES24 = 91	CES49 = 81	CES74 = 91	CES99 = 76
CES25 = 72	CES50 = 88	CES75 = 79	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)