

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: P1068038

Luminaire Tested: **NAV-SA1B-827-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068038
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA1B-827-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 800mA 1xLight Square PACKAGE
80CRI 2700K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (14) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2938.7 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G1

Input Watts (W): 37.9
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

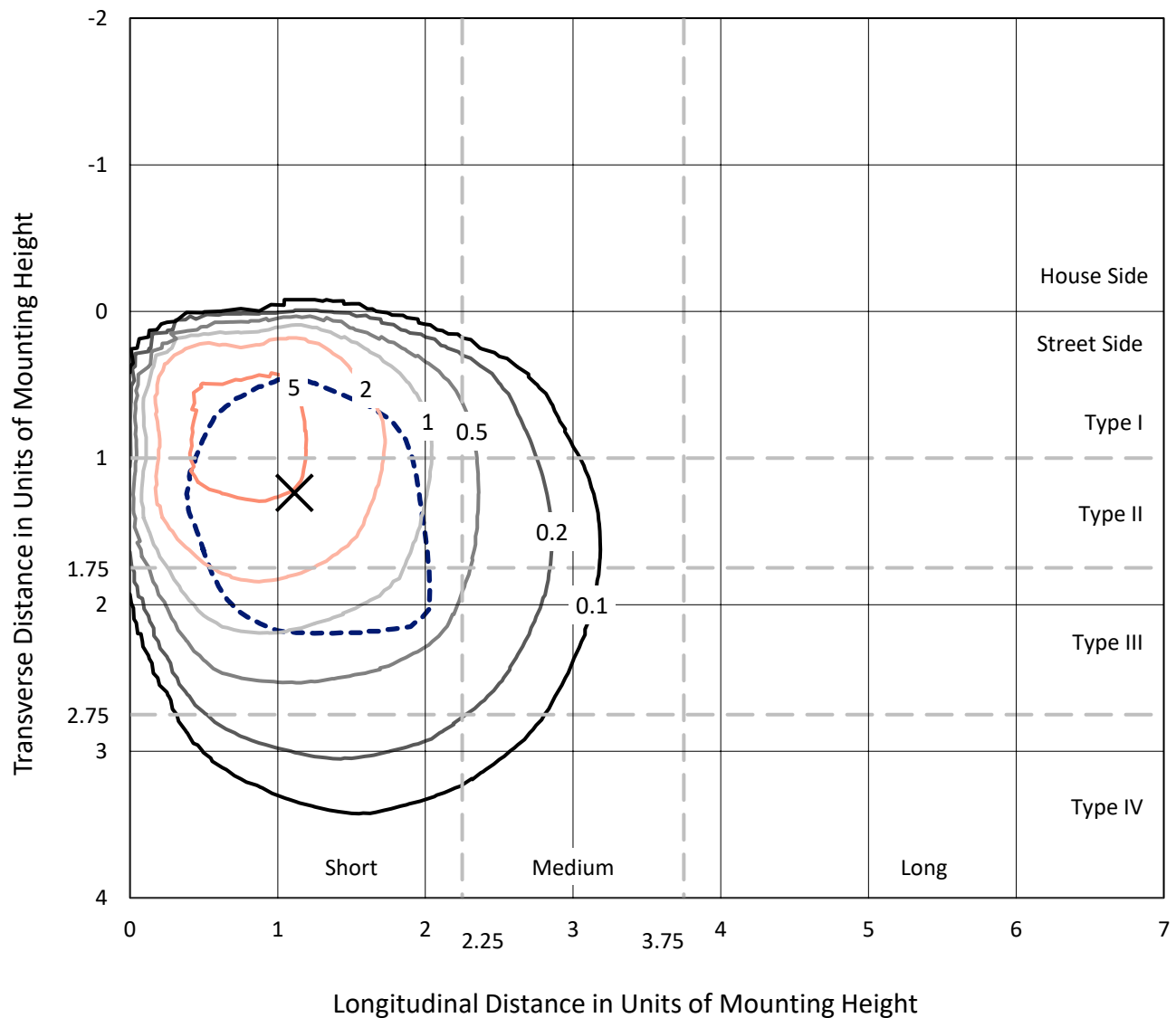


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

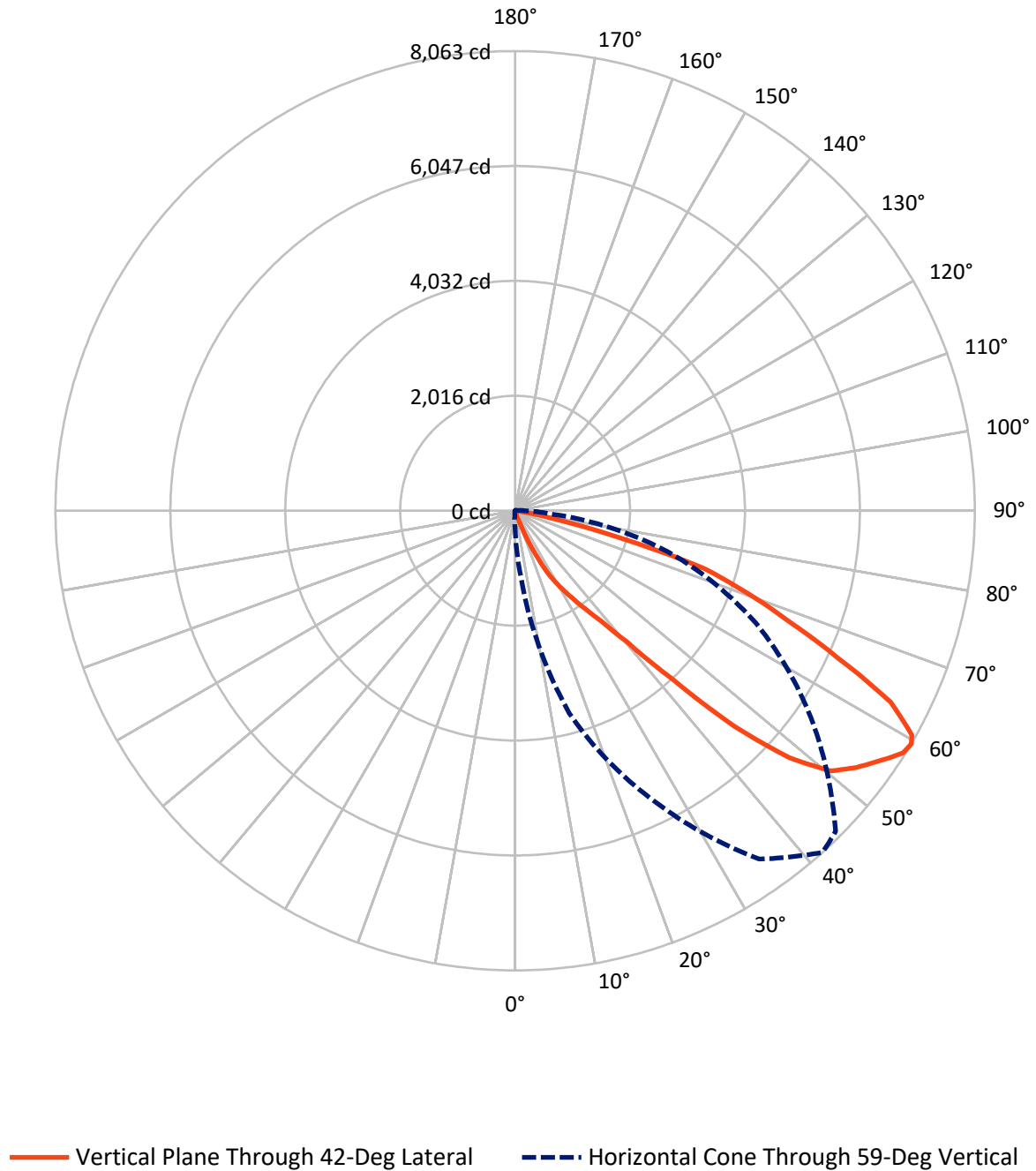


Based on 15 foot mounting height. Maximum calculated value = 8.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14.2	0.0	14.2
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	2924.6	0.0	2924.6
	% Fixture	99.5	0.0	99.5
Total	Lumens	2938.7	0.0	2938.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.9	0.0
10°-20°	4.3	0.1
20°-30°	54.8	1.9
30°-40°	184.8	6.3
40°-50°	558.2	19.0
50°-60°	985.4	33.5
60°-70°	867.6	29.5
70°-80°	276.2	9.4
80°-90°	6.6	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°	2938.7	100.0
0°-180°	2938.7	100.0



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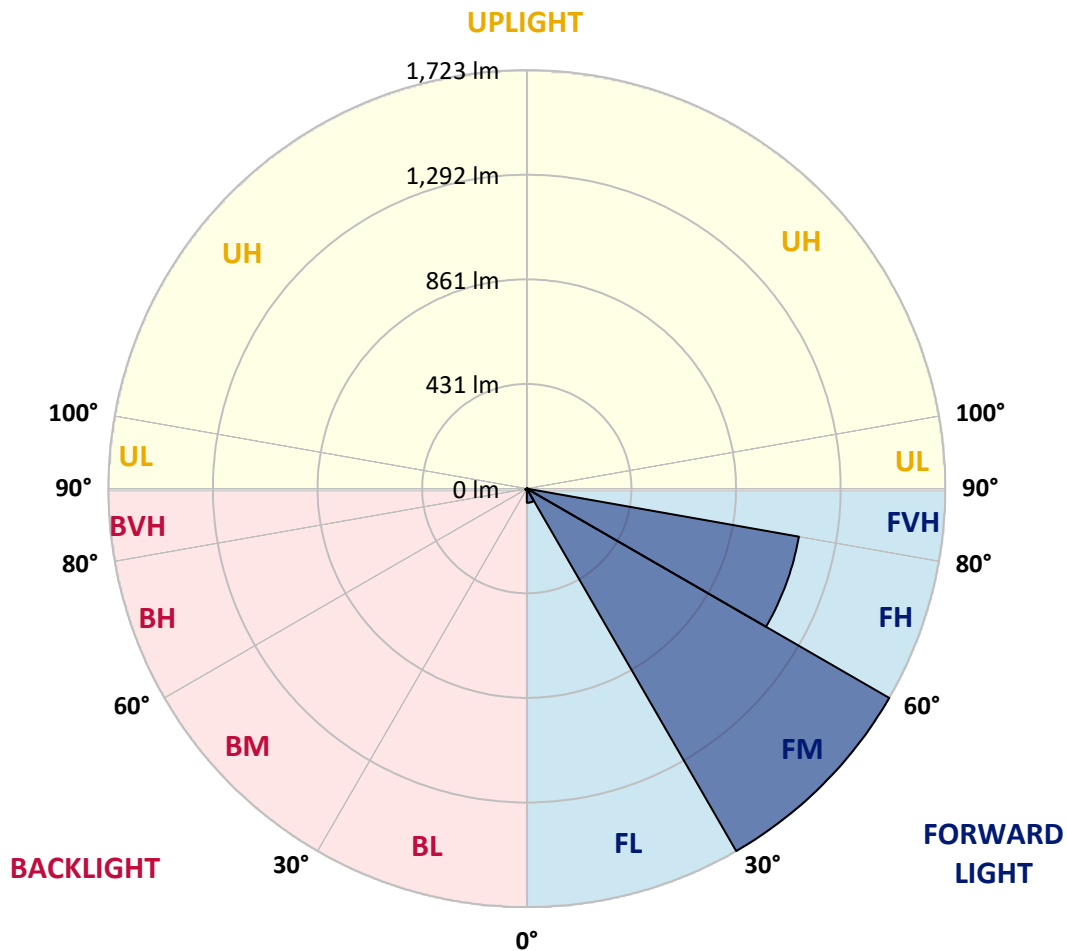
CATALOG NUMBER: NAV-SA1B-827-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	58.4	2.0			
FM	(30°-60°)	1722.6	58.6			
FH	(60°-80°)	1137.3	38.7			G1/1800
FVH	(80°-90°)	6.3	0.2			G0/10
BL	(0°-30°)	1.6	0.1	B0/110		
BM	(30°-60°)	5.8	0.2	B0/220		
BH	(60°-80°)	6.5	0.2	B0/110		G0/110
BVH	(80°-90°)	0.3	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
2.5°	12.9	12.9	12.0	11.1	10.1	9.2	9.2	9.2	8.3	8.3	7.4
5°	14.7	14.7	13.8	12.9	12.9	12.0	12.0	11.1	10.1	10.1	9.2
7.5°	15.7	15.7	15.7	15.7	14.7	14.7	14.7	13.8	12.9	12.0	11.1
10°	16.6	17.5	18.4	18.4	18.4	18.4	18.4	17.5	15.7	14.7	12.9
12.5°	18.4	19.3	21.2	23.0	23.0	24.0	23.0	22.1	20.3	17.5	14.7
15°	20.3	22.1	24.9	28.6	32.2	33.2	33.2	30.4	26.7	21.2	17.5
17.5°	23.0	25.8	33.2	45.1	58.0	68.2	68.2	60.8	42.4	27.6	20.3
20°	24.9	30.4	53.4	108.7	165.9	208.2	199.9	176.9	94.9	43.3	22.1
22.5°	27.6	38.7	113.3	285.6	442.3	519.7	501.2	380.5	212.8	77.4	26.7
25°	31.3	56.2	224.8	535.3	821.9	905.7	893.8	710.4	387.9	129.9	34.1
27.5°	38.7	82.9	360.3	811.7	1212.6	1284.4	1279.8	1040.3	620.1	209.2	44.2
30°	48.8	120.7	534.4	1102.9	1471.5	1544.3	1521.2	1281.7	836.6	319.7	57.1
32.5°	60.8	168.6	692.0	1317.6	1710.1	1805.9	1778.3	1491.7	1010.8	413.7	84.8
35°	79.2	215.6	847.7	1507.4	1985.6	2107.2	2061.2	1708.3	1161.0	519.7	102.3
37.5°	88.5	243.2	990.5	1713.8	2295.2	2461.0	2426.0	1981.9	1313.9	655.1	125.3
40°	89.4	276.4	1138.8	1982.8	2732.9	3028.6	2966.0	2451.8	1598.6	829.3	161.2
42.5°	92.1	326.2	1331.4	2441.7	3592.5	4017.3	3946.3	3316.1	2244.5	1178.5	228.5
45°	105.0	420.2	1723.9	3299.5	4772.8	5395.7	5313.7	4520.4	3146.6	1835.4	389.7
47.5°	150.2	632.1	2412.2	4225.5	5979.8	6476.5	6456.2	5469.4	3963.8	2509.0	660.6
50°	241.4	970.2	3195.4	5004.1	6748.3	7174.9	7124.2	5865.6	4430.1	2968.7	846.8
52.5°	322.5	1293.6	3687.4	5290.6	6977.7	7486.3	7424.6	6010.2	4552.6	3104.2	898.4
55°	342.8	1410.7	3833.9	5379.1	7129.7	7749.8	7660.5	6107.0	4568.3	3007.4	812.7
57.5°	332.6	1300.1	3739.0	5465.7	7341.7	8020.7	7901.9	6295.9	4620.8	2843.4	676.3
59°	315.1	1163.7	3680.0	5534.8	7458.7	8063.1	7951.6	6337.3	4655.8	2768.8	593.4
60°	294.8	1071.6	3634.0	5580.0	7451.3	7996.8	7881.6	6318.0	4669.6	2704.3	553.8
62.5°	227.6	855.1	3567.6	5547.7	6986.0	7391.4	7326.0	5844.4	4466.9	2497.9	436.7
65°	176.9	654.2	3324.4	4947.9	5944.8	6217.6	6197.3	4948.8	3759.3	2153.3	315.1
67.5°	140.1	477.3	2811.2	4007.1	4783.0	5170.9	5156.1	4017.3	2853.6	1645.6	226.7
70°	114.3	340.0	1927.6	3021.2	3825.6	4314.0	4292.8	3233.2	2114.6	1043.9	164.9
72.5°	96.7	217.4	1169.2	2277.7	3192.6	3471.8	3410.1	2608.5	1537.8	568.5	130.8
75°	82.0	133.6	579.6	1419.9	1901.8	1899.9	1838.2	1381.2	825.6	278.3	104.1
77.5°	66.3	94.0	227.6	389.7	599.8	742.6	730.7	489.3	246.9	81.1	64.5
80°	43.3	44.2	60.8	106.9	164.9	182.4	207.3	149.3	71.9	38.7	26.7
82.5°	19.3	21.2	27.6	35.0	35.0	32.2	28.6	21.2	15.7	12.9	6.4
85°	4.6	6.4	4.6	5.5	4.6	3.7	3.7	1.8	0.0	0.0	0.0
87.5°	0.9	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°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
2.5°	7.4	7.4	7.4	6.4	6.4	6.4	5.5	5.5	5.5	4.6	4.6
5°	9.2	8.3	7.4	7.4	6.4	6.4	5.5	4.6	4.6	4.6	3.7
7.5°	10.1	9.2	8.3	7.4	6.4	5.5	5.5	4.6	3.7	3.7	3.7
10°	12.0	11.1	9.2	7.4	6.4	5.5	4.6	4.6	3.7	2.8	2.8
12.5°	13.8	12.0	10.1	8.3	6.4	5.5	4.6	4.6	3.7	2.8	1.8
15°	15.7	13.8	11.1	8.3	6.4	5.5	4.6	4.6	2.8	1.8	0.9
17.5°	17.5	14.7	11.1	9.2	6.4	5.5	4.6	3.7	1.8	0.9	0.0
20°	18.4	15.7	12.0	9.2	6.4	5.5	4.6	2.8	0.9	0.0	0.0
22.5°	20.3	17.5	12.9	9.2	6.4	4.6	2.8	0.9	0.0	0.0	0.0
25°	24.0	18.4	12.9	9.2	6.4	4.6	1.8	0.0	0.0	0.0	0.0
27.5°	26.7	20.3	12.9	9.2	6.4	3.7	0.9	0.0	0.0	0.0	0.0
30°	31.3	22.1	13.8	9.2	6.4	2.8	0.9	0.0	0.0	0.0	0.0
32.5°	38.7	24.0	13.8	9.2	5.5	2.8	0.0	0.0	0.0	0.0	0.0
35°	47.0	27.6	13.8	9.2	5.5	2.8	0.0	0.0	0.0	0.0	0.0
37.5°	47.9	29.5	13.8	9.2	5.5	1.8	0.0	0.0	0.0	0.0	0.0
40°	49.8	27.6	14.7	9.2	5.5	1.8	0.0	0.0	0.0	0.0	0.0
42.5°	57.1	25.8	15.7	9.2	5.5	1.8	0.0	0.0	0.0	0.0	0.0
45°	84.8	26.7	15.7	10.1	5.5	2.8	0.0	0.0	0.0	0.0	0.0
47.5°	147.4	27.6	14.7	10.1	5.5	2.8	0.0	0.0	0.0	0.0	0.0
50°	188.9	32.2	14.7	11.1	6.4	1.8	0.0	0.0	0.0	0.0	0.0
52.5°	200.9	37.8	14.7	12.0	8.3	0.9	0.0	0.0	0.0	0.0	0.0
55°	195.3	44.2	15.7	12.9	10.1	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	180.6	47.9	16.6	13.8	11.1	0.0	0.0	0.0	0.0	0.0	0.0
59°	164.9	50.7	19.3	14.7	11.1	0.0	0.0	0.0	0.0	0.0	0.0
60°	152.0	53.4	20.3	15.7	11.1	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	122.5	57.1	22.1	18.4	9.2	0.0	0.0	0.0	0.0	0.0	0.0
65°	106.9	59.9	23.0	20.3	8.3	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	97.7	61.7	24.9	21.2	7.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	90.3	60.8	26.7	20.3	6.4	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	82.0	58.0	32.2	18.4	5.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	73.7	52.5	35.0	16.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	53.4	44.2	32.2	14.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	23.0	24.0	23.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	4.6	5.5	4.6	2.8	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°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
2.5°	4.6	4.6	4.6	4.6	5.5	5.5	7.4	9.2	11.1	12.0	12.0
5°	3.7	3.7	3.7	3.7	3.7	4.6	5.5	7.4	10.1	11.1	11.1
7.5°	2.8	2.8	2.8	2.8	2.8	2.8	4.6	6.4	9.2	10.1	11.1
10°	2.8	1.8	1.8	0.9	0.9	1.8	2.8	5.5	8.3	9.2	10.1
12.5°	1.8	0.9	0.9	0.0	0.0	0.9	1.8	4.6	7.4	8.3	9.2
15°	0.9	0.0	0.0	0.0	0.0	0.0	0.9	3.7	6.4	7.4	9.2
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.5	7.4	8.3
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	4.6	6.4	7.4
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	3.7	5.5	6.4
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	3.7	4.6
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.8	3.7
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.8	3.7
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8	2.8
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8	2.8
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8	1.8
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
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°	318°	325°	335°	345°	355°	360°
0°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
2.5°	12.9	12.9	12.0	11.1	11.1	11.1	12.0	12.9	12.9	12.9
5°	12.0	12.0	11.1	11.1	11.1	11.1	12.0	13.8	14.7	14.7
7.5°	12.0	12.0	11.1	11.1	11.1	11.1	12.0	13.8	14.7	15.7
10°	11.1	11.1	11.1	11.1	10.1	11.1	12.0	13.8	16.6	16.6
12.5°	11.1	11.1	11.1	11.1	10.1	11.1	12.9	14.7	17.5	18.4
15°	11.1	11.1	11.1	10.1	10.1	11.1	12.9	15.7	18.4	20.3
17.5°	10.1	11.1	11.1	10.1	10.1	11.1	12.9	15.7	20.3	23.0
20°	9.2	10.1	11.1	10.1	10.1	10.1	12.9	15.7	21.2	24.9
22.5°	8.3	9.2	10.1	10.1	9.2	10.1	12.9	16.6	23.0	27.6
25°	7.4	8.3	8.3	9.2	9.2	10.1	12.9	16.6	24.0	31.3
27.5°	5.5	6.4	7.4	8.3	8.3	10.1	12.9	17.5	25.8	38.7
30°	4.6	5.5	6.4	7.4	8.3	10.1	12.9	17.5	27.6	48.8
32.5°	4.6	5.5	6.4	7.4	8.3	9.2	12.9	18.4	30.4	60.8
35°	3.7	4.6	5.5	7.4	7.4	9.2	12.9	18.4	33.2	79.2
37.5°	3.7	4.6	5.5	7.4	7.4	9.2	12.9	18.4	40.5	88.5
40°	2.8	3.7	4.6	7.4	7.4	9.2	13.8	19.3	41.5	89.4
42.5°	2.8	3.7	4.6	6.4	7.4	9.2	13.8	19.3	38.7	92.1
45°	2.8	3.7	4.6	7.4	8.3	10.1	13.8	20.3	37.8	105.0
47.5°	2.8	3.7	4.6	7.4	9.2	10.1	13.8	20.3	38.7	150.2
50°	2.8	3.7	4.6	7.4	10.1	10.1	13.8	20.3	42.4	241.4
52.5°	1.8	2.8	3.7	6.4	8.3	11.1	14.7	19.3	45.1	322.5
55°	1.8	1.8	2.8	5.5	7.4	12.0	15.7	19.3	52.5	342.8
57.5°	1.8	1.8	2.8	4.6	6.4	12.9	16.6	19.3	60.8	332.6
59°	1.8	1.8	1.8	4.6	5.5	12.9	16.6	20.3	61.7	315.1
60°	1.8	1.8	1.8	3.7	5.5	12.9	17.5	21.2	62.7	294.8
62.5°	0.9	0.9	0.9	3.7	4.6	12.9	19.3	25.8	64.5	227.6
65°	1.8	1.8	0.9	2.8	4.6	11.1	22.1	27.6	65.4	176.9
67.5°	1.8	1.8	1.8	3.7	4.6	11.1	23.0	28.6	65.4	140.1
70°	1.8	1.8	1.8	3.7	5.5	11.1	23.0	29.5	64.5	114.3
72.5°	1.8	1.8	1.8	3.7	5.5	10.1	21.2	30.4	61.7	96.7
75°	1.8	1.8	1.8	2.8	4.6	9.2	20.3	33.2	56.2	82.0
77.5°	1.8	1.8	1.8	1.8	3.7	7.4	18.4	36.9	49.8	66.3
80°	2.8	1.8	1.8	1.8	2.8	6.4	17.5	35.9	41.5	43.3
82.5°	2.8	1.8	1.8	0.9	1.8	4.6	13.8	27.6	21.2	19.3
85°	1.8	1.8	1.8	0.9	0.9	2.8	6.4	8.3	6.4	4.6
87.5°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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

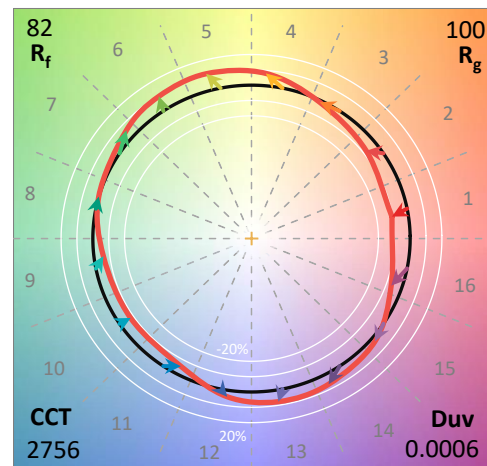
Test Information

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

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 2700K 4-step quadrangle

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			

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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

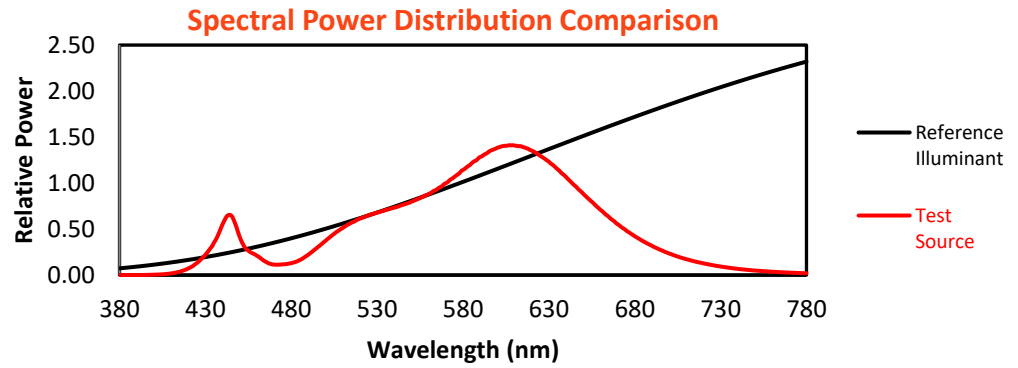
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	158	NR	620	959	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			

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TM-30-18

Summary

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

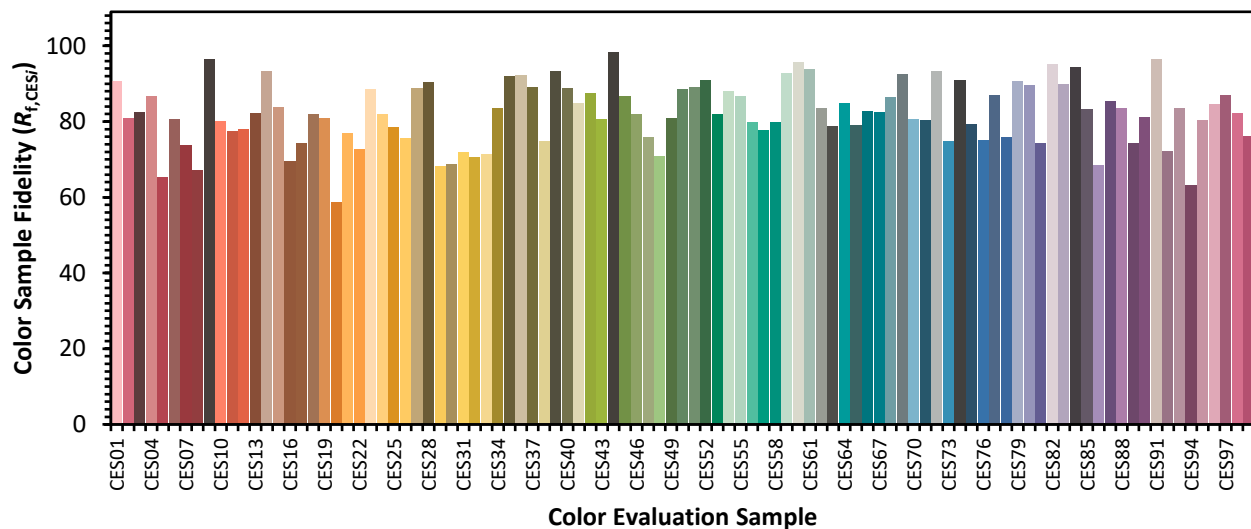


Color Vector Graphics

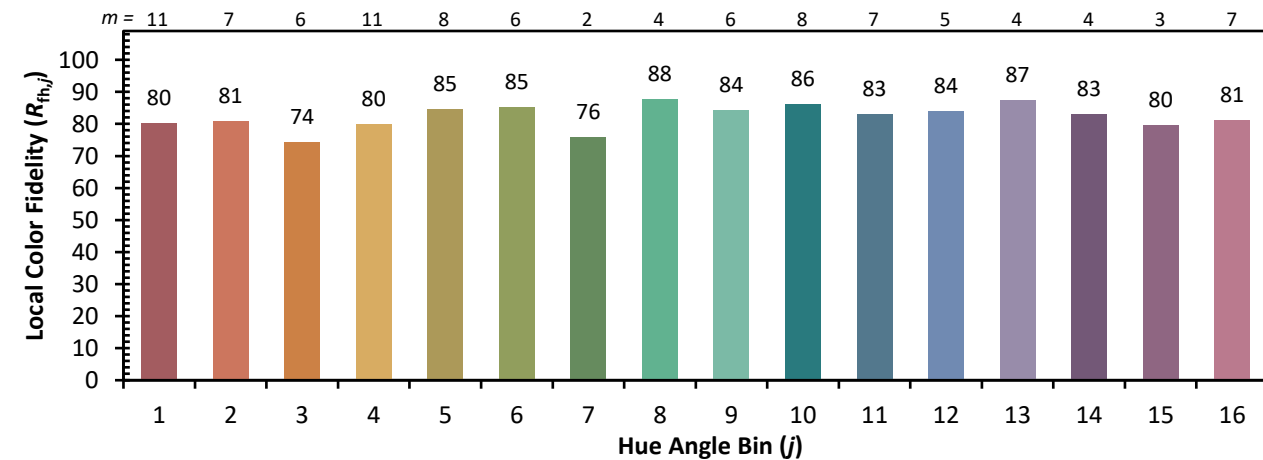


Individual Sample Fidelity Index ($R_{f,i}$)

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)