

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: P1068037

Luminaire Tested: **NAV-SA1A-827-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068037
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA1A-827-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 615mA 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: 2343 lumens
Efficiency: N/A
Efficacy: 80.2 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): 29.2
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



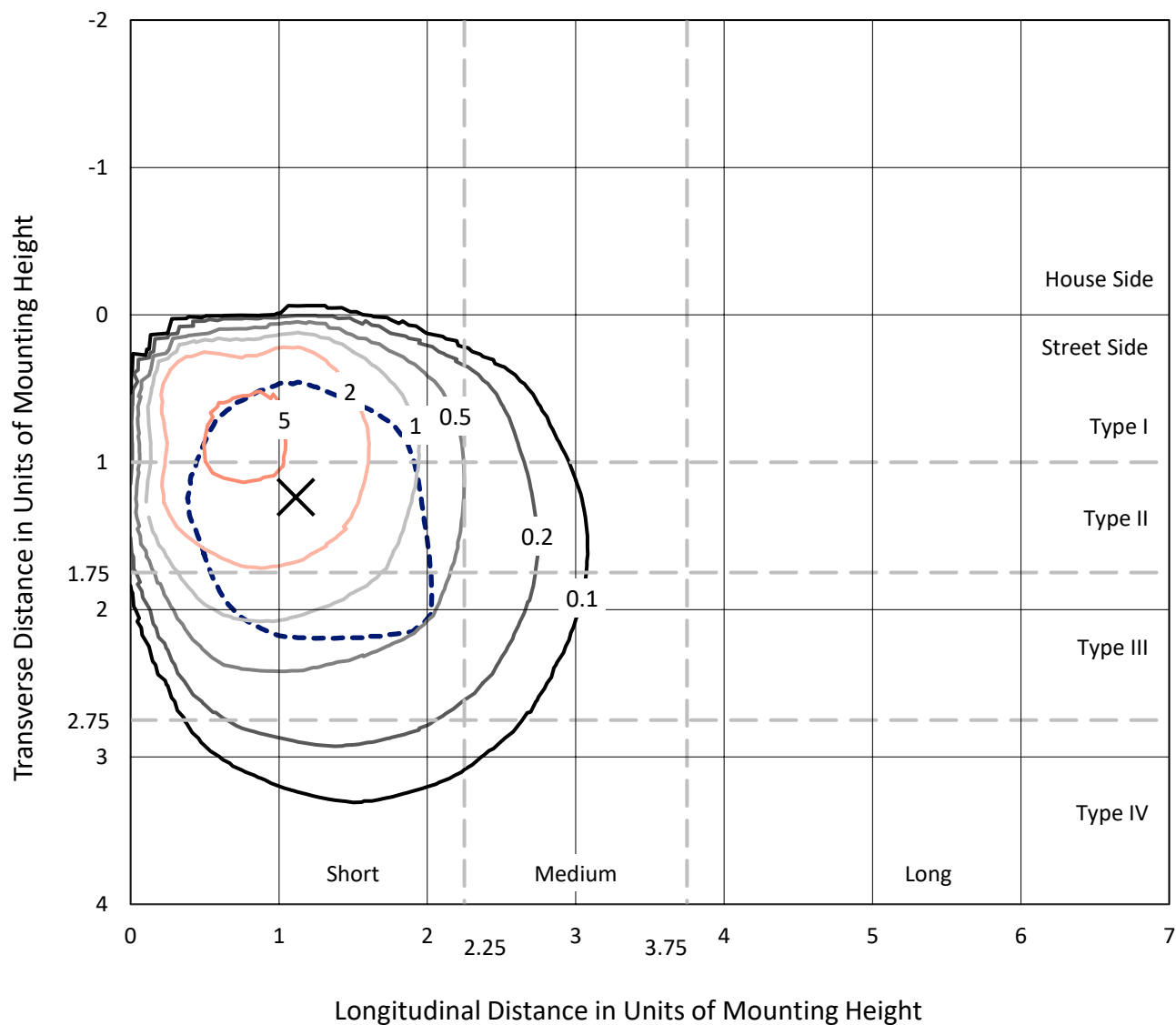
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

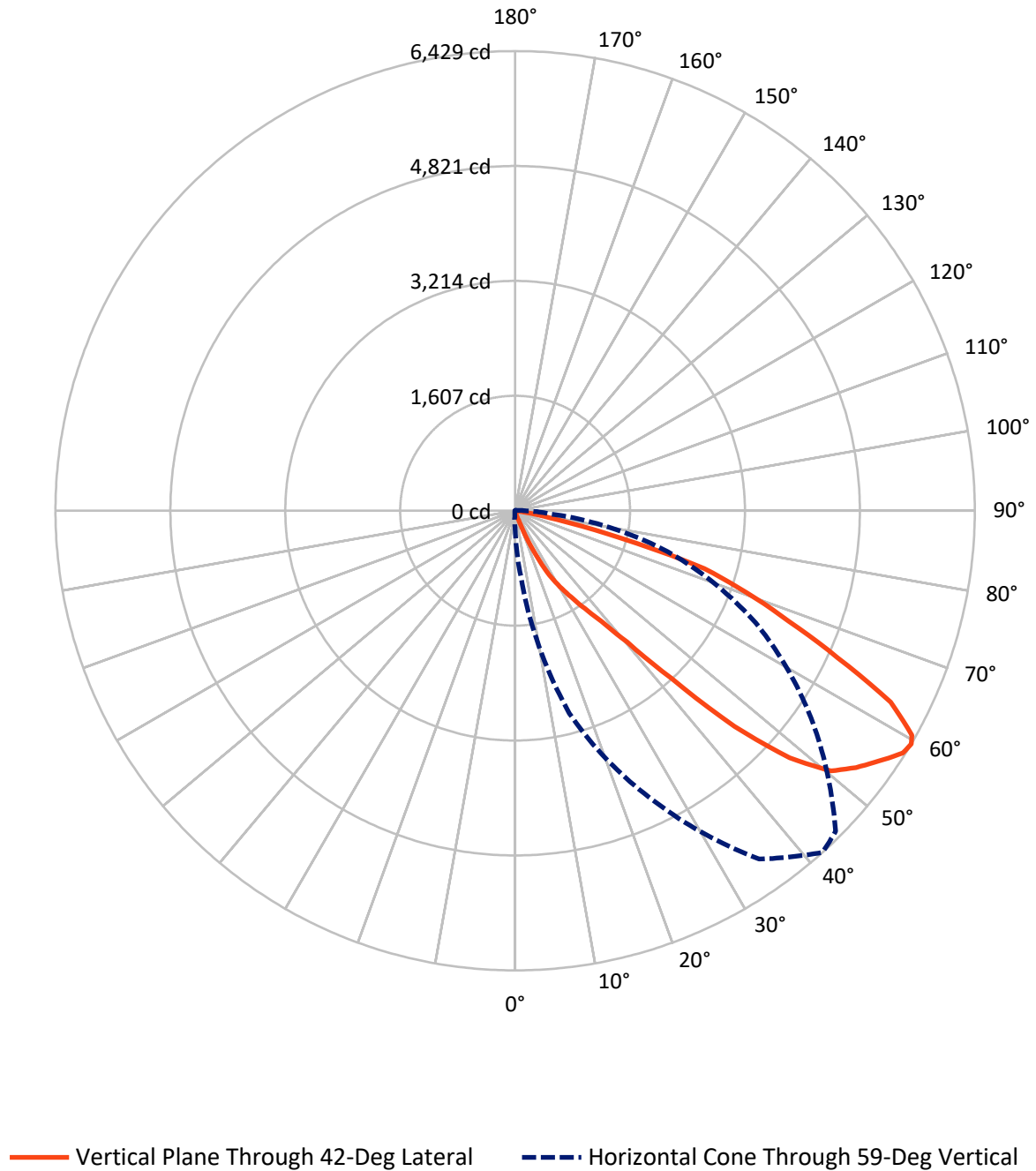


Based on 15 foot mounting height. Maximum calculated value = 7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11.3	0.0	11.3
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	2331.7	0.0	2331.7
	% Fixture	99.5	0.0	99.5
Total	Lumens	2343.0	0.0	2343.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.7	0.0
10°-20°	3.4	0.1
20°-30°	43.7	1.9
30°-40°	147.3	6.3
40°-50°	445.0	19.0
50°-60°	785.6	33.5
60°-70°	691.7	29.5
70°-80°	220.2	9.4
80°-90°	5.3	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°	2343.0	100.0
0°-180°	2343.0	100.0



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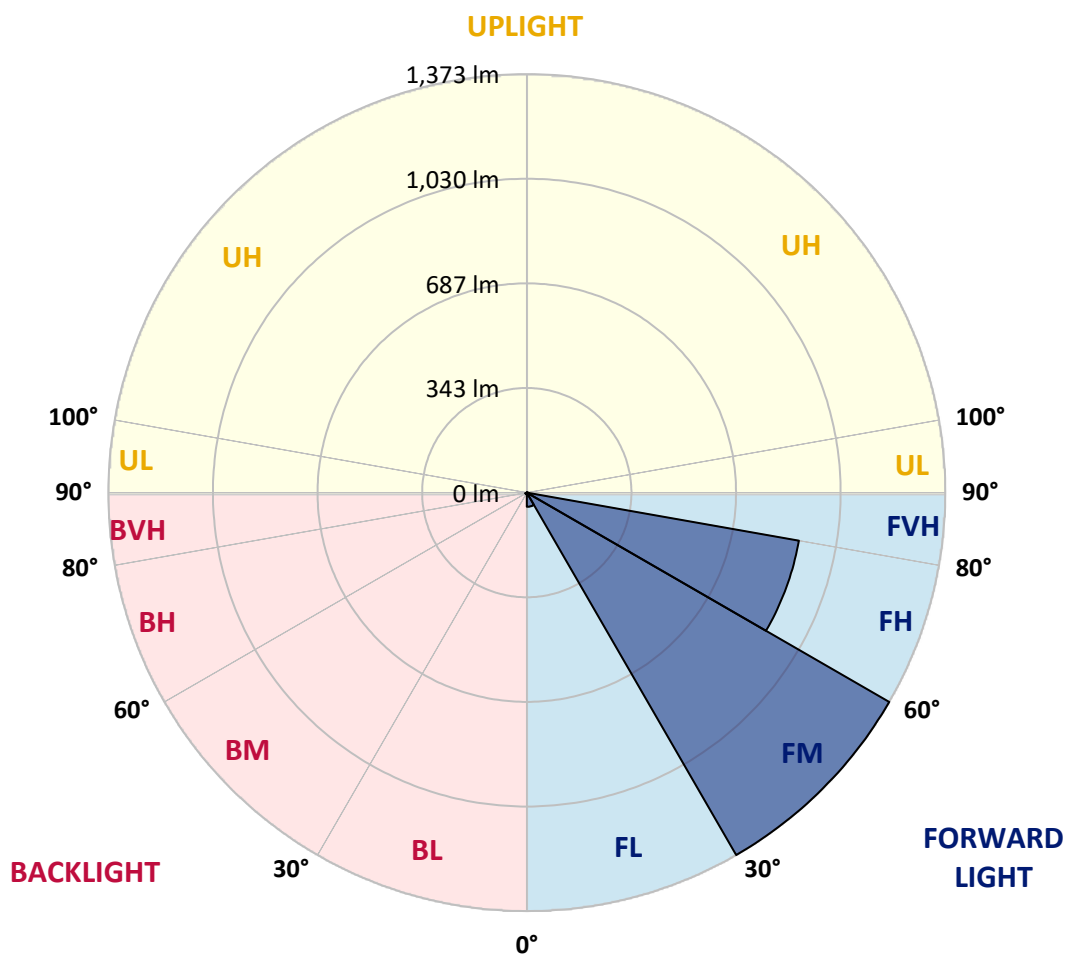
CATALOG NUMBER: NAV-SA1A-827-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	46.5	2.0			
FM	(30°-60°)	1373.4	58.6			
FH	(60°-80°)	906.8	38.7			G1/1800
FVH	(80°-90°)	5.0	0.2			G0/10
BL	(0°-30°)	1.3	0.1	B0/110		
BM	(30°-60°)	4.6	0.2	B0/220		
BH	(60°-80°)	5.2	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°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
2.5°	10.3	10.3	9.5	8.8	8.1	7.3	7.3	7.3	6.6	6.6	5.9
5°	11.8	11.8	11.0	10.3	10.3	9.5	9.5	8.8	8.1	8.1	7.3
7.5°	12.5	12.5	12.5	12.5	11.8	11.8	11.8	11.0	10.3	9.5	8.8
10°	13.2	14.0	14.7	14.7	14.7	14.7	14.7	14.0	12.5	11.8	10.3
12.5°	14.7	15.4	16.9	18.4	18.4	19.1	18.4	17.6	16.2	14.0	11.8
15°	16.2	17.6	19.8	22.8	25.7	26.4	26.4	24.2	21.3	16.9	14.0
17.5°	18.4	20.6	26.4	36.0	46.3	54.4	54.4	48.5	33.8	22.0	16.2
20°	19.8	24.2	42.6	86.7	132.2	166.0	159.4	141.0	75.7	34.5	17.6
22.5°	22.0	30.9	90.4	227.7	352.6	414.3	399.6	303.4	169.7	61.7	21.3
25°	25.0	44.8	179.2	426.8	655.3	722.1	712.6	566.4	309.3	103.6	27.2
27.5°	30.9	66.1	287.2	647.2	966.7	1024.0	1020.4	829.4	494.4	166.8	35.3
30°	38.9	96.2	426.1	879.3	1173.2	1231.2	1212.8	1021.8	667.0	254.9	45.5
32.5°	48.5	134.4	551.7	1050.5	1363.4	1439.8	1417.8	1189.3	805.9	329.8	67.6
35°	63.2	171.9	675.8	1201.8	1583.1	1680.0	1643.3	1361.9	925.6	414.3	81.5
37.5°	70.5	193.9	789.7	1366.4	1829.9	1962.1	1934.2	1580.1	1047.5	522.3	99.9
40°	71.3	220.4	908.0	1580.9	2178.8	2414.6	2364.7	1954.8	1274.5	661.1	128.6
42.5°	73.5	260.0	1061.5	1946.7	2864.2	3202.8	3146.3	2643.8	1789.5	939.6	182.2
45°	83.7	335.0	1374.4	2630.6	3805.2	4301.8	4236.4	3603.9	2508.7	1463.3	310.7
47.5°	119.7	503.9	1923.2	3368.9	4767.5	5163.5	5147.3	4360.6	3160.2	2000.3	526.7
50°	192.5	773.5	2547.6	3989.6	5380.2	5720.3	5679.9	4676.5	3531.9	2366.9	675.1
52.5°	257.1	1031.4	2939.9	4218.1	5563.1	5968.6	5919.4	4791.8	3629.7	2474.9	716.2
55°	273.3	1124.7	3056.7	4288.6	5684.3	6178.7	6107.5	4868.9	3642.1	2397.7	647.9
57.5°	265.2	1036.5	2981.0	4357.6	5853.3	6394.7	6299.9	5019.5	3684.0	2267.0	539.2
59°	251.2	927.8	2934.0	4412.7	5946.6	6428.5	6339.6	5052.6	3711.9	2207.5	473.1
60°	235.1	854.3	2897.3	4448.7	5940.7	6375.6	6283.8	5037.1	3722.9	2156.0	441.5
62.5°	181.4	681.7	2844.4	4423.0	5569.7	5892.9	5840.8	4659.6	3561.3	1991.5	348.2
65°	141.0	521.6	2650.4	3944.8	4739.6	4957.1	4940.9	3945.5	2997.2	1716.8	251.2
67.5°	111.7	380.5	2241.3	3194.8	3813.3	4122.6	4110.8	3202.8	2275.1	1312.0	180.7
70°	91.1	271.1	1536.8	2408.7	3050.1	3439.4	3422.5	2577.7	1685.9	832.3	131.5
72.5°	77.1	173.4	932.2	1815.9	2545.4	2768.0	2718.7	2079.6	1226.0	453.2	104.3
75°	65.4	106.5	462.1	1132.0	1516.2	1514.7	1465.5	1101.2	658.2	221.8	83.0
77.5°	52.9	74.9	181.4	310.7	478.2	592.1	582.5	390.1	196.9	64.6	51.4
80°	34.5	35.3	48.5	85.2	131.5	145.5	165.3	119.0	57.3	30.9	21.3
82.5°	15.4	16.9	22.0	27.9	27.9	25.7	22.8	16.9	12.5	10.3	5.1
85°	3.7	5.1	3.7	4.4	3.7	2.9	2.9	1.5	0.0	0.0	0.0
87.5°	0.7	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°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
2.5°	5.9	5.9	5.9	5.1	5.1	5.1	4.4	4.4	4.4	3.7	3.7
5°	7.3	6.6	5.9	5.9	5.1	5.1	4.4	3.7	3.7	3.7	2.9
7.5°	8.1	7.3	6.6	5.9	5.1	4.4	4.4	3.7	2.9	2.9	2.9
10°	9.5	8.8	7.3	5.9	5.1	4.4	3.7	3.7	2.9	2.2	2.2
12.5°	11.0	9.5	8.1	6.6	5.1	4.4	3.7	3.7	2.9	2.2	1.5
15°	12.5	11.0	8.8	6.6	5.1	4.4	3.7	3.7	2.2	1.5	0.7
17.5°	14.0	11.8	8.8	7.3	5.1	4.4	3.7	2.9	1.5	0.7	0.0
20°	14.7	12.5	9.5	7.3	5.1	4.4	3.7	2.2	0.7	0.0	0.0
22.5°	16.2	14.0	10.3	7.3	5.1	3.7	2.2	0.7	0.0	0.0	0.0
25°	19.1	14.7	10.3	7.3	5.1	3.7	1.5	0.0	0.0	0.0	0.0
27.5°	21.3	16.2	10.3	7.3	5.1	2.9	0.7	0.0	0.0	0.0	0.0
30°	25.0	17.6	11.0	7.3	5.1	2.2	0.7	0.0	0.0	0.0	0.0
32.5°	30.9	19.1	11.0	7.3	4.4	2.2	0.0	0.0	0.0	0.0	0.0
35°	37.5	22.0	11.0	7.3	4.4	2.2	0.0	0.0	0.0	0.0	0.0
37.5°	38.2	23.5	11.0	7.3	4.4	1.5	0.0	0.0	0.0	0.0	0.0
40°	39.7	22.0	11.8	7.3	4.4	1.5	0.0	0.0	0.0	0.0	0.0
42.5°	45.5	20.6	12.5	7.3	4.4	1.5	0.0	0.0	0.0	0.0	0.0
45°	67.6	21.3	12.5	8.1	4.4	2.2	0.0	0.0	0.0	0.0	0.0
47.5°	117.5	22.0	11.8	8.1	4.4	2.2	0.0	0.0	0.0	0.0	0.0
50°	150.6	25.7	11.8	8.8	5.1	1.5	0.0	0.0	0.0	0.0	0.0
52.5°	160.1	30.1	11.8	9.5	6.6	0.7	0.0	0.0	0.0	0.0	0.0
55°	155.7	35.3	12.5	10.3	8.1	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	144.0	38.2	13.2	11.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0
59°	131.5	40.4	15.4	11.8	8.8	0.0	0.0	0.0	0.0	0.0	0.0
60°	121.2	42.6	16.2	12.5	8.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	97.7	45.5	17.6	14.7	7.3	0.0	0.0	0.0	0.0	0.0	0.0
65°	85.2	47.7	18.4	16.2	6.6	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	77.9	49.2	19.8	16.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0
70°	72.0	48.5	21.3	16.2	5.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	65.4	46.3	25.7	14.7	4.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	58.8	41.9	27.9	13.2	2.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	42.6	35.3	25.7	11.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	18.4	19.1	18.4	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.7	4.4	3.7	2.2	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°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
2.5°	3.7	3.7	3.7	3.7	4.4	4.4	5.9	7.3	8.8	9.5	9.5
5°	2.9	2.9	2.9	2.9	2.9	3.7	4.4	5.9	8.1	8.8	8.8
7.5°	2.2	2.2	2.2	2.2	2.2	2.2	3.7	5.1	7.3	8.1	8.8
10°	2.2	1.5	1.5	0.7	0.7	1.5	2.2	4.4	6.6	7.3	8.1
12.5°	1.5	0.7	0.7	0.0	0.0	0.7	1.5	3.7	5.9	6.6	7.3
15°	0.7	0.0	0.0	0.0	0.0	0.0	0.7	2.9	5.1	5.9	7.3
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	4.4	5.9	6.6
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.7	5.1	5.9
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.9	4.4	5.1
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.9	3.7
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.2	2.9
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.2	2.9
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5	2.2
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5	2.2
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5	1.5
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7
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°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
2.5°	10.3	10.3	9.5	8.8	8.8	8.8	9.5	10.3	10.3	10.3
5°	9.5	9.5	8.8	8.8	8.8	8.8	9.5	11.0	11.8	11.8
7.5°	9.5	9.5	8.8	8.8	8.8	8.8	9.5	11.0	11.8	12.5
10°	8.8	8.8	8.8	8.8	8.1	8.8	9.5	11.0	13.2	13.2
12.5°	8.8	8.8	8.8	8.8	8.1	8.8	10.3	11.8	14.0	14.7
15°	8.8	8.8	8.8	8.1	8.1	8.8	10.3	12.5	14.7	16.2
17.5°	8.1	8.8	8.8	8.1	8.1	8.8	10.3	12.5	16.2	18.4
20°	7.3	8.1	8.8	8.1	8.1	8.1	10.3	12.5	16.9	19.8
22.5°	6.6	7.3	8.1	8.1	7.3	8.1	10.3	13.2	18.4	22.0
25°	5.9	6.6	6.6	7.3	7.3	8.1	10.3	13.2	19.1	25.0
27.5°	4.4	5.1	5.9	6.6	6.6	8.1	10.3	14.0	20.6	30.9
30°	3.7	4.4	5.1	5.9	6.6	8.1	10.3	14.0	22.0	38.9
32.5°	3.7	4.4	5.1	5.9	6.6	7.3	10.3	14.7	24.2	48.5
35°	2.9	3.7	4.4	5.9	5.9	7.3	10.3	14.7	26.4	63.2
37.5°	2.9	3.7	4.4	5.9	5.9	7.3	10.3	14.7	32.3	70.5
40°	2.2	2.9	3.7	5.9	5.9	7.3	11.0	15.4	33.1	71.3
42.5°	2.2	2.9	3.7	5.1	5.9	7.3	11.0	15.4	30.9	73.5
45°	2.2	2.9	3.7	5.9	6.6	8.1	11.0	16.2	30.1	83.7
47.5°	2.2	2.9	3.7	5.9	7.3	8.1	11.0	16.2	30.9	119.7
50°	2.2	2.9	3.7	5.9	8.1	8.1	11.0	16.2	33.8	192.5
52.5°	1.5	2.2	2.9	5.1	6.6	8.8	11.8	15.4	36.0	257.1
55°	1.5	1.5	2.2	4.4	5.9	9.5	12.5	15.4	41.9	273.3
57.5°	1.5	1.5	2.2	3.7	5.1	10.3	13.2	15.4	48.5	265.2
59°	1.5	1.5	1.5	2.9	4.4	10.3	13.2	16.2	49.2	251.2
60°	1.5	1.5	1.5	2.9	4.4	10.3	14.0	16.9	50.0	235.1
62.5°	0.7	0.7	0.7	2.9	3.7	10.3	15.4	20.6	51.4	181.4
65°	1.5	1.5	0.7	2.2	3.7	8.8	17.6	22.0	52.2	141.0
67.5°	1.5	1.5	1.5	2.9	3.7	8.8	18.4	22.8	52.2	111.7
70°	1.5	1.5	1.5	2.9	4.4	8.8	18.4	23.5	51.4	91.1
72.5°	1.5	1.5	1.5	2.9	4.4	8.1	16.9	24.2	49.2	77.1
75°	1.5	1.5	1.5	2.2	3.7	7.3	16.2	26.4	44.8	65.4
77.5°	1.5	1.5	1.5	1.5	2.9	5.9	14.7	29.4	39.7	52.9
80°	2.2	1.5	1.5	1.5	2.2	5.1	14.0	28.6	33.1	34.5
82.5°	2.2	1.5	1.5	0.7	1.5	3.7	11.0	22.0	16.9	15.4
85°	1.5	1.5	1.5	0.7	0.7	2.2	5.1	6.6	5.1	3.7
87.5°	1.5	1.5	1.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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

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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 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-8

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	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			

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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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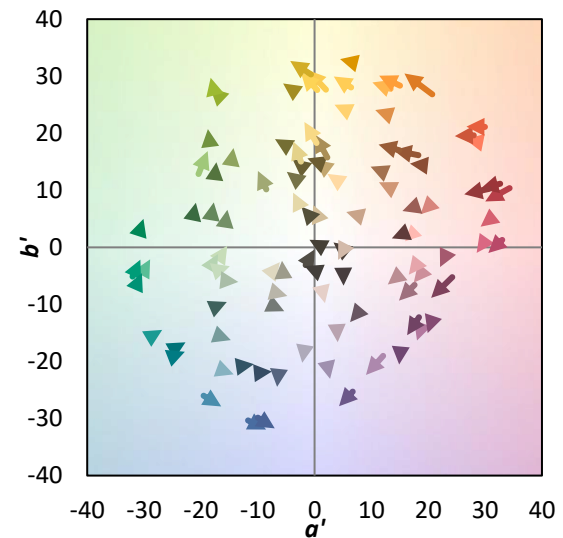
TM-30-18

Summary

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

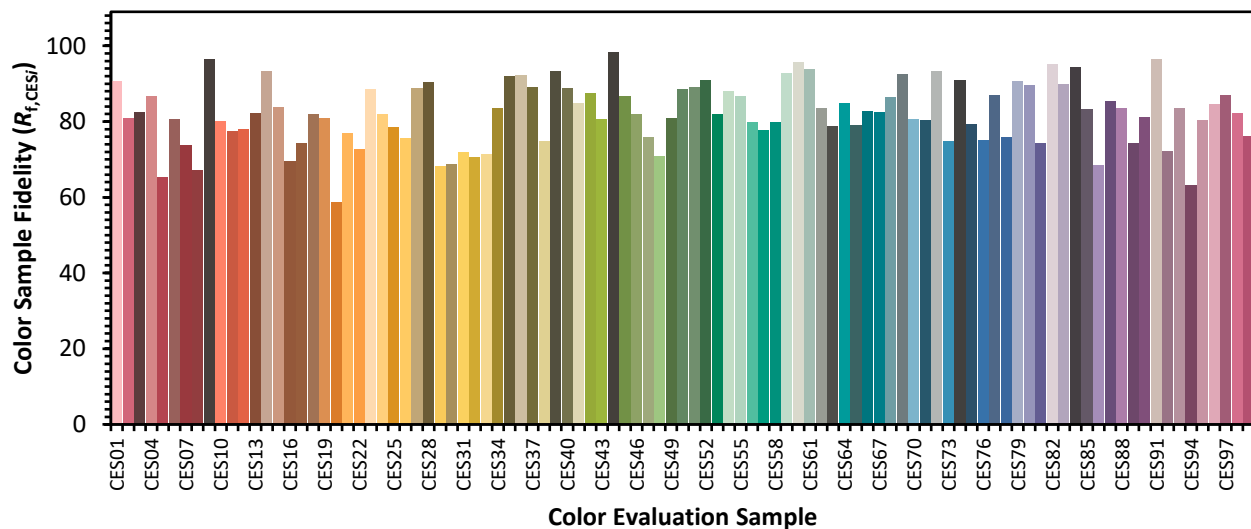


Color Vector Graphics

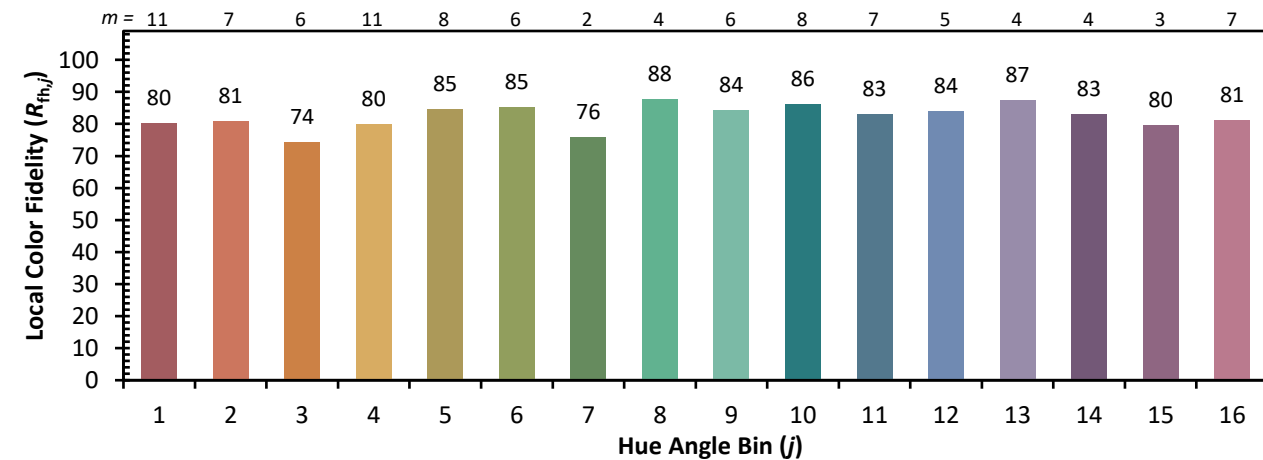


Individual Sample Fidelity Index ($R_{f,i}$)

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)