

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: P1068075

Luminaire Tested: **NAV-SA4C-830-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068075
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA4C-830-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 1050mA 4xLight Square PACKAGE
80CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (56) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15087.7 lumens
Efficiency: N/A
Efficacy: 79.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G3

Input Watts (W): 190.4
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

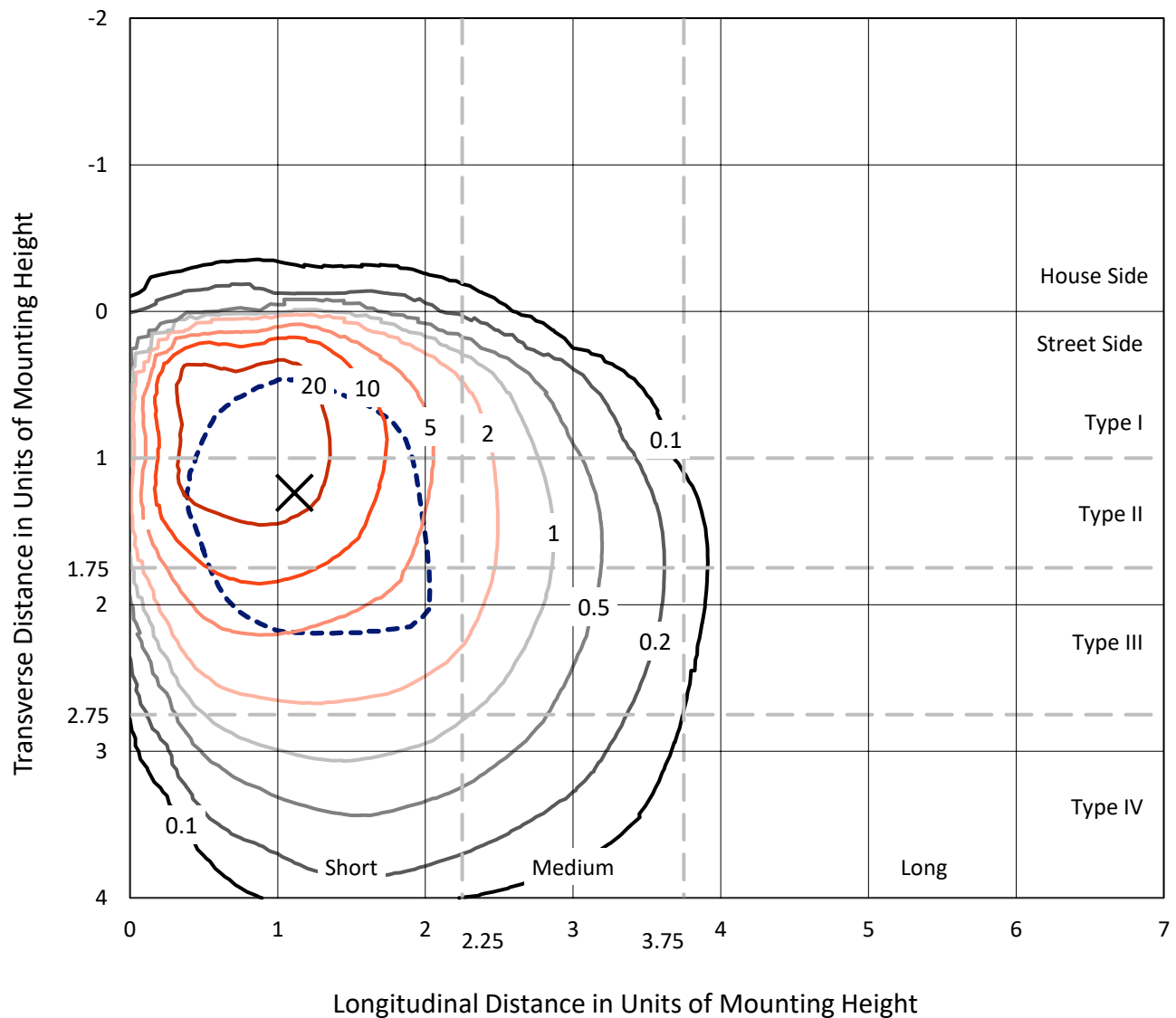


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

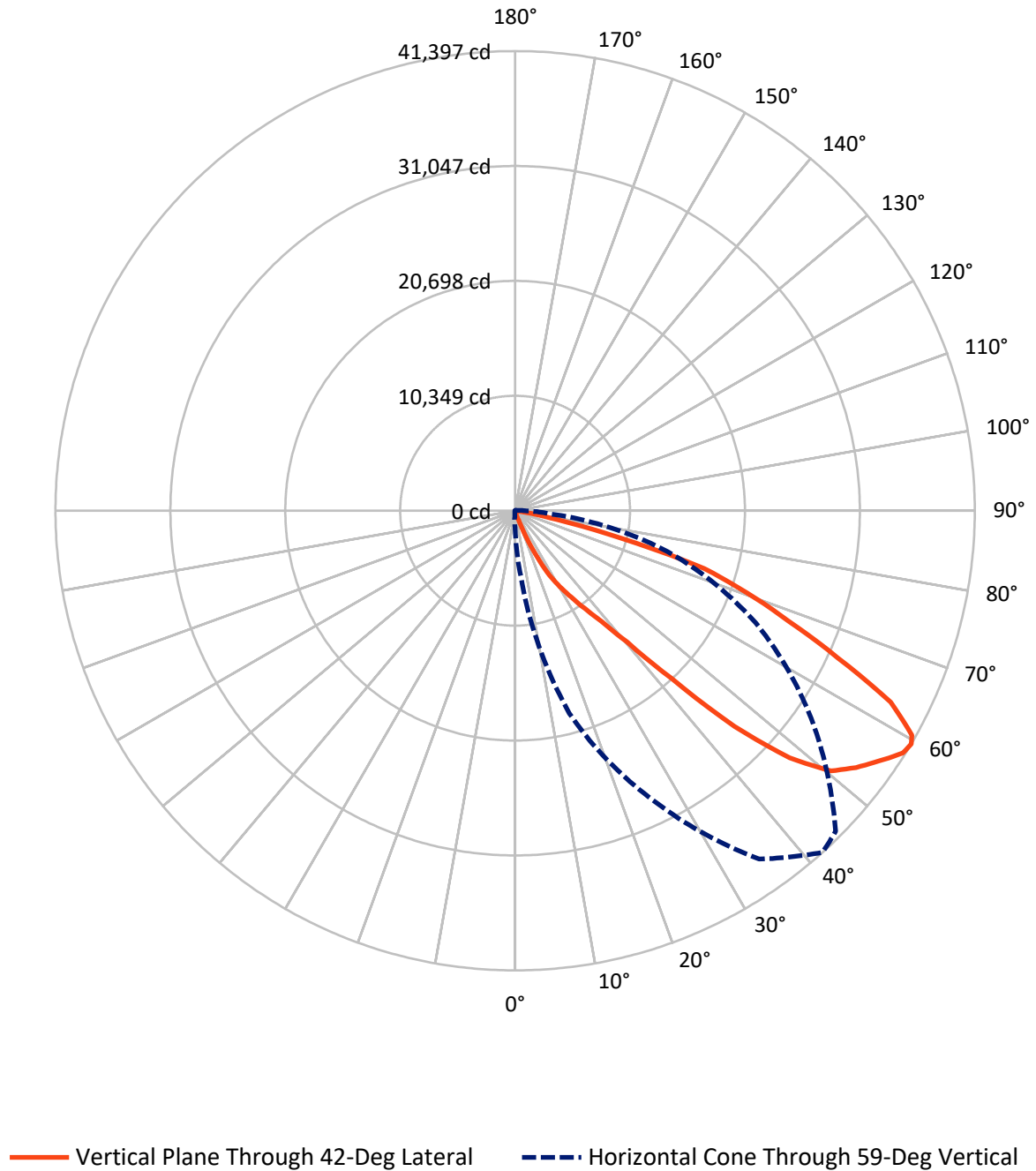


Based on 15 foot mounting height. Maximum calculated value = 44.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	72.7	0.0	72.7
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	15015.0	0.0	15015.0
	% Fixture	99.5	0.0	99.5
Total	Lumens	15087.7	0.0	15087.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.4	0.0
10°-20°	22.0	0.1
20°-30°	281.4	1.9
30°-40°	948.8	6.3
40°-50°	2865.8	19.0
50°-60°	5058.9	33.5
60°-70°	4454.5	29.5
70°-80°	1417.9	9.4
80°-90°	33.9	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°	15087.7	100.0
0°-180°	15087.7	100.0



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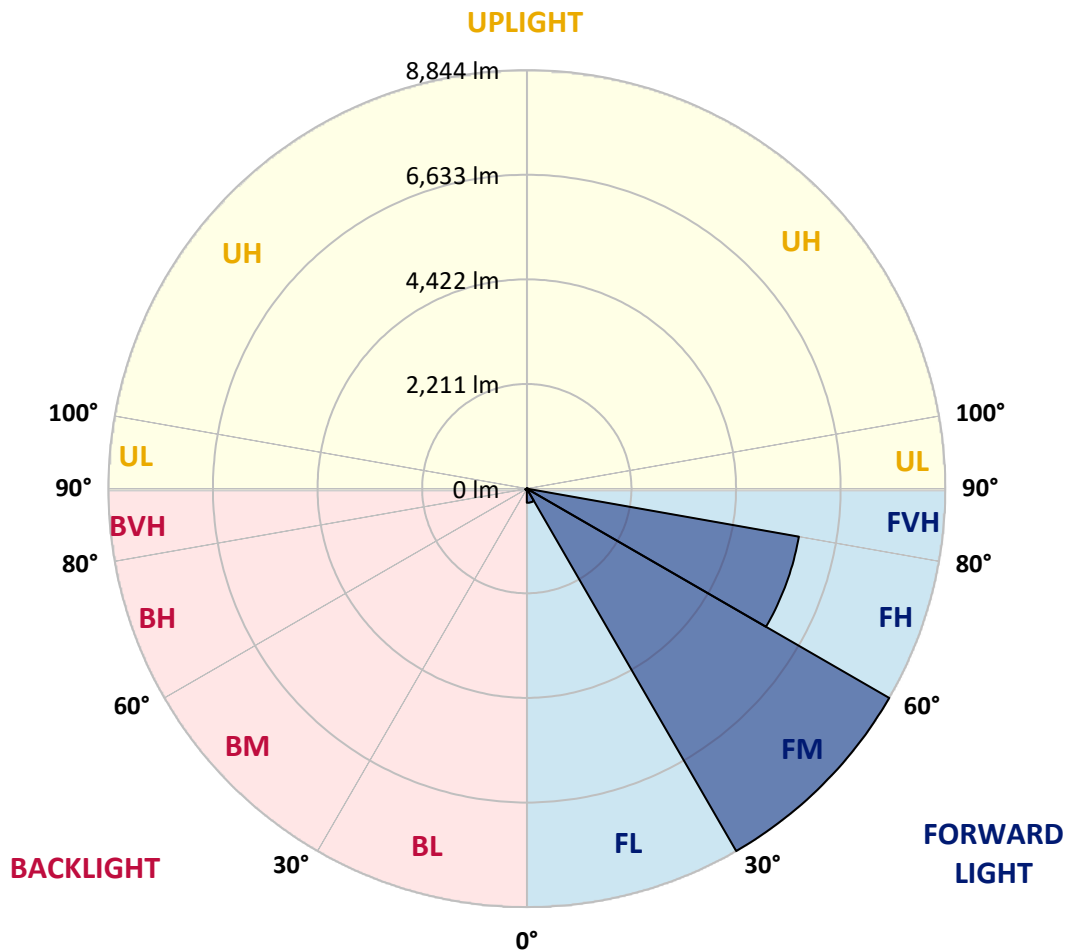
CATALOG NUMBER: NAV-SA4C-830-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	299.7	2.0			
FM	(30°-60°)	8843.9	58.6			
FH	(60°-80°)	5839.1	38.7			G3/7500
FVH	(80°-90°)	32.3	0.2			G1/100
BL	(0°-30°)	8.1	0.1	B0/110		
BM	(30°-60°)	29.7	0.2	B0/220		
BH	(60°-80°)	33.3	0.2	B0/110		G0/110
BVH	(80°-90°)	1.6	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-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
2.5°	66.2	66.2	61.5	56.8	52.0	47.3	47.3	47.3	42.6	42.6	37.8
5°	75.7	75.7	71.0	66.2	66.2	61.5	61.5	56.8	52.0	52.0	47.3
7.5°	80.4	80.4	80.4	80.4	75.7	75.7	75.7	71.0	66.2	61.5	56.8
10°	85.1	89.9	94.6	94.6	94.6	94.6	94.6	89.9	80.4	75.7	66.2
12.5°	94.6	99.3	108.8	118.3	118.3	123.0	118.3	113.5	104.1	89.9	75.7
15°	104.1	113.5	127.7	146.6	165.6	170.3	170.3	156.1	137.2	108.8	89.9
17.5°	118.3	132.5	170.3	231.8	298.0	350.1	350.1	312.2	217.6	141.9	104.1
20°	127.7	156.1	274.4	558.2	851.5	1069.1	1026.5	908.3	487.2	222.3	113.5
22.5°	141.9	198.7	581.9	1466.5	2270.6	2668.0	2573.4	1953.7	1092.7	397.4	137.2
25°	160.8	288.6	1154.2	2748.4	4219.6	4650.1	4588.6	3647.2	1991.5	667.0	175.0
27.5°	198.7	425.7	1849.6	4167.6	6225.3	6594.3	6570.7	5340.7	3183.6	1073.8	227.1
30°	250.7	619.7	2743.7	5662.4	7554.6	7928.3	7810.0	6580.1	4295.3	1641.5	293.3
32.5°	312.2	865.7	3552.6	6764.6	8779.8	9271.8	9129.8	7658.7	5189.3	2124.0	435.2
35°	406.8	1106.9	4352.1	7739.1	10194.2	10818.6	10582.1	8770.3	5960.4	2668.0	525.1
37.5°	454.1	1248.8	5085.3	8798.7	11783.7	12635.1	12455.4	10175.3	6745.7	3363.4	643.3
40°	458.9	1419.1	5846.9	10180.0	14030.6	15549.1	15227.4	12587.8	8207.4	4257.4	827.8
42.5°	473.0	1674.6	6835.6	12535.8	18444.2	20624.9	20260.7	17025.0	11523.5	6050.3	1173.2
45°	539.3	2157.1	8850.7	16939.9	24503.9	27701.8	27280.7	23207.8	16154.6	9423.1	2001.0
47.5°	771.1	3245.1	12384.4	21694.0	30700.9	33250.6	33146.5	28080.2	20350.6	12881.1	3391.8
50°	1239.4	4981.2	16405.3	25691.3	34646.1	36836.3	36576.2	30114.3	22744.2	15241.6	4347.3
52.5°	1655.7	6641.6	18931.4	27162.5	35824.0	38435.2	38118.3	30857.0	23373.4	15937.0	4612.2
55°	1759.7	7242.4	19683.6	27616.6	36604.5	39788.2	39329.3	31353.7	23453.8	15440.3	4172.3
57.5°	1707.7	6674.7	19196.3	28061.3	37692.5	41178.9	40568.7	32323.4	23723.4	14598.3	3472.2
59°	1617.8	5974.6	18893.6	28416.1	38293.3	41396.5	40824.1	32536.3	23903.2	14215.1	3046.4
60°	1513.8	5501.6	18657.1	28647.9	38255.5	41055.9	40464.6	32437.0	23974.1	13884.0	2843.0
62.5°	1168.4	4389.9	18316.5	28482.3	35866.6	37948.0	37612.1	30005.5	22933.4	12824.4	2242.3
65°	908.3	3358.6	17067.6	25402.7	30521.1	31921.4	31817.3	25407.5	19300.4	11055.2	1617.8
67.5°	719.0	2450.4	14432.7	20572.9	24556.0	26547.5	26471.8	20624.9	14650.3	8448.7	1163.7
70°	586.6	1745.6	9896.2	15511.3	19641.0	22148.2	22039.4	16599.3	10856.5	5359.6	846.8
72.5°	496.7	1116.4	6003.0	11693.8	16391.1	17824.5	17507.5	13392.0	7895.2	2918.7	671.7
75°	421.0	685.9	2975.5	7289.7	9763.7	9754.3	9437.3	7091.0	4238.5	1428.6	534.5
77.5°	340.6	482.5	1168.4	2001.0	3079.5	3812.8	3751.3	2511.9	1267.8	416.3	331.1
80°	222.3	227.1	312.2	548.7	846.8	936.6	1064.4	766.3	369.0	198.7	137.2
82.5°	99.3	108.8	141.9	179.8	179.8	165.6	146.6	108.8	80.4	66.2	33.1
85°	23.7	33.1	23.7	28.4	23.7	18.9	18.9	9.5	0.0	0.0	0.0
87.5°	4.7	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°	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
2.5°	37.8	37.8	37.8	33.1	33.1	33.1	28.4	28.4	28.4	23.7	23.7
5°	47.3	42.6	37.8	37.8	33.1	33.1	28.4	23.7	23.7	23.7	18.9
7.5°	52.0	47.3	42.6	37.8	33.1	28.4	28.4	23.7	18.9	18.9	18.9
10°	61.5	56.8	47.3	37.8	33.1	28.4	23.7	23.7	18.9	14.2	14.2
12.5°	71.0	61.5	52.0	42.6	33.1	28.4	23.7	23.7	18.9	14.2	9.5
15°	80.4	71.0	56.8	42.6	33.1	28.4	23.7	23.7	14.2	9.5	4.7
17.5°	89.9	75.7	56.8	47.3	33.1	28.4	23.7	18.9	9.5	4.7	0.0
20°	94.6	80.4	61.5	47.3	33.1	28.4	23.7	14.2	4.7	0.0	0.0
22.5°	104.1	89.9	66.2	47.3	33.1	23.7	14.2	4.7	0.0	0.0	0.0
25°	123.0	94.6	66.2	47.3	33.1	23.7	9.5	0.0	0.0	0.0	0.0
27.5°	137.2	104.1	66.2	47.3	33.1	18.9	4.7	0.0	0.0	0.0	0.0
30°	160.8	113.5	71.0	47.3	33.1	14.2	4.7	0.0	0.0	0.0	0.0
32.5°	198.7	123.0	71.0	47.3	28.4	14.2	0.0	0.0	0.0	0.0	0.0
35°	241.3	141.9	71.0	47.3	28.4	14.2	0.0	0.0	0.0	0.0	0.0
37.5°	246.0	151.4	71.0	47.3	28.4	9.5	0.0	0.0	0.0	0.0	0.0
40°	255.4	141.9	75.7	47.3	28.4	9.5	0.0	0.0	0.0	0.0	0.0
42.5°	293.3	132.5	80.4	47.3	28.4	9.5	0.0	0.0	0.0	0.0	0.0
45°	435.2	137.2	80.4	52.0	28.4	14.2	0.0	0.0	0.0	0.0	0.0
47.5°	756.9	141.9	75.7	52.0	28.4	14.2	0.0	0.0	0.0	0.0	0.0
50°	969.8	165.6	75.7	56.8	33.1	9.5	0.0	0.0	0.0	0.0	0.0
52.5°	1031.2	194.0	75.7	61.5	42.6	4.7	0.0	0.0	0.0	0.0	0.0
55°	1002.9	227.1	80.4	66.2	52.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	927.2	246.0	85.1	71.0	56.8	0.0	0.0	0.0	0.0	0.0	0.0
59°	846.8	260.2	99.3	75.7	56.8	0.0	0.0	0.0	0.0	0.0	0.0
60°	780.5	274.4	104.1	80.4	56.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	629.2	293.3	113.5	94.6	47.3	0.0	0.0	0.0	0.0	0.0	0.0
65°	548.7	307.5	118.3	104.1	42.6	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	501.4	316.9	127.7	108.8	37.8	0.0	0.0	0.0	0.0	0.0	0.0
70°	463.6	312.2	137.2	104.1	33.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	421.0	298.0	165.6	94.6	28.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	378.4	269.6	179.8	85.1	18.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	274.4	227.1	165.6	75.7	9.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	118.3	123.0	118.3	56.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.7	28.4	23.7	14.2	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°	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
2.5°	23.7	23.7	23.7	23.7	28.4	28.4	37.8	47.3	56.8	61.5	61.5
5°	18.9	18.9	18.9	18.9	18.9	23.7	28.4	37.8	52.0	56.8	56.8
7.5°	14.2	14.2	14.2	14.2	14.2	14.2	23.7	33.1	47.3	52.0	56.8
10°	14.2	9.5	9.5	4.7	4.7	9.5	14.2	28.4	42.6	47.3	52.0
12.5°	9.5	4.7	4.7	0.0	0.0	4.7	9.5	23.7	37.8	42.6	47.3
15°	4.7	0.0	0.0	0.0	0.0	0.0	4.7	18.9	33.1	37.8	47.3
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	28.4	37.8	42.6
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	23.7	33.1	37.8
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	18.9	28.4	33.1
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	18.9	23.7
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	14.2	18.9
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	14.2	18.9
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5	14.2
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5	14.2
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5	9.5
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.7
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.7
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	4.7
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°	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
2.5°	66.2	66.2	61.5	56.8	56.8	56.8	61.5	66.2	66.2	66.2
5°	61.5	61.5	56.8	56.8	56.8	56.8	61.5	71.0	75.7	75.7
7.5°	61.5	61.5	56.8	56.8	56.8	56.8	61.5	71.0	75.7	80.4
10°	56.8	56.8	56.8	56.8	52.0	56.8	61.5	71.0	85.1	85.1
12.5°	56.8	56.8	56.8	56.8	52.0	56.8	66.2	75.7	89.9	94.6
15°	56.8	56.8	56.8	52.0	52.0	56.8	66.2	80.4	94.6	104.1
17.5°	52.0	56.8	56.8	52.0	52.0	56.8	66.2	80.4	104.1	118.3
20°	47.3	52.0	56.8	52.0	52.0	52.0	66.2	80.4	108.8	127.7
22.5°	42.6	47.3	52.0	52.0	47.3	52.0	66.2	85.1	118.3	141.9
25°	37.8	42.6	42.6	47.3	47.3	52.0	66.2	85.1	123.0	160.8
27.5°	28.4	33.1	37.8	42.6	42.6	52.0	66.2	89.9	132.5	198.7
30°	23.7	28.4	33.1	37.8	42.6	52.0	66.2	89.9	141.9	250.7
32.5°	23.7	28.4	33.1	37.8	42.6	47.3	66.2	94.6	156.1	312.2
35°	18.9	23.7	28.4	37.8	37.8	47.3	66.2	94.6	170.3	406.8
37.5°	18.9	23.7	28.4	37.8	37.8	47.3	66.2	94.6	208.1	454.1
40°	14.2	18.9	23.7	37.8	37.8	47.3	71.0	99.3	212.9	458.9
42.5°	14.2	18.9	23.7	33.1	37.8	47.3	71.0	99.3	198.7	473.0
45°	14.2	18.9	23.7	37.8	42.6	52.0	71.0	104.1	194.0	539.3
47.5°	14.2	18.9	23.7	37.8	47.3	52.0	71.0	104.1	198.7	771.1
50°	14.2	18.9	23.7	37.8	52.0	52.0	71.0	104.1	217.6	1239.4
52.5°	9.5	14.2	18.9	33.1	42.6	56.8	75.7	99.3	231.8	1655.7
55°	9.5	9.5	14.2	28.4	37.8	61.5	80.4	99.3	269.6	1759.7
57.5°	9.5	9.5	14.2	23.7	33.1	66.2	85.1	99.3	312.2	1707.7
59°	9.5	9.5	9.5	23.7	28.4	66.2	85.1	104.1	316.9	1617.8
60°	9.5	9.5	9.5	18.9	28.4	66.2	89.9	108.8	321.7	1513.8
62.5°	4.7	4.7	4.7	18.9	23.7	66.2	99.3	132.5	331.1	1168.4
65°	9.5	9.5	4.7	14.2	23.7	56.8	113.5	141.9	335.9	908.3
67.5°	9.5	9.5	9.5	18.9	23.7	56.8	118.3	146.6	335.9	719.0
70°	9.5	9.5	9.5	18.9	28.4	56.8	118.3	151.4	331.1	586.6
72.5°	9.5	9.5	9.5	18.9	28.4	52.0	108.8	156.1	316.9	496.7
75°	9.5	9.5	9.5	14.2	23.7	47.3	104.1	170.3	288.6	421.0
77.5°	9.5	9.5	9.5	9.5	18.9	37.8	94.6	189.2	255.4	340.6
80°	14.2	9.5	9.5	9.5	14.2	33.1	89.9	184.5	212.9	222.3
82.5°	14.2	9.5	9.5	4.7	9.5	23.7	71.0	141.9	108.8	99.3
85°	9.5	9.5	9.5	4.7	4.7	14.2	33.1	42.6	33.1	23.7
87.5°	9.5	9.5	9.5	4.7	4.7	4.7	4.7	4.7	4.7	4.7
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: SP1-2407-184-9

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

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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

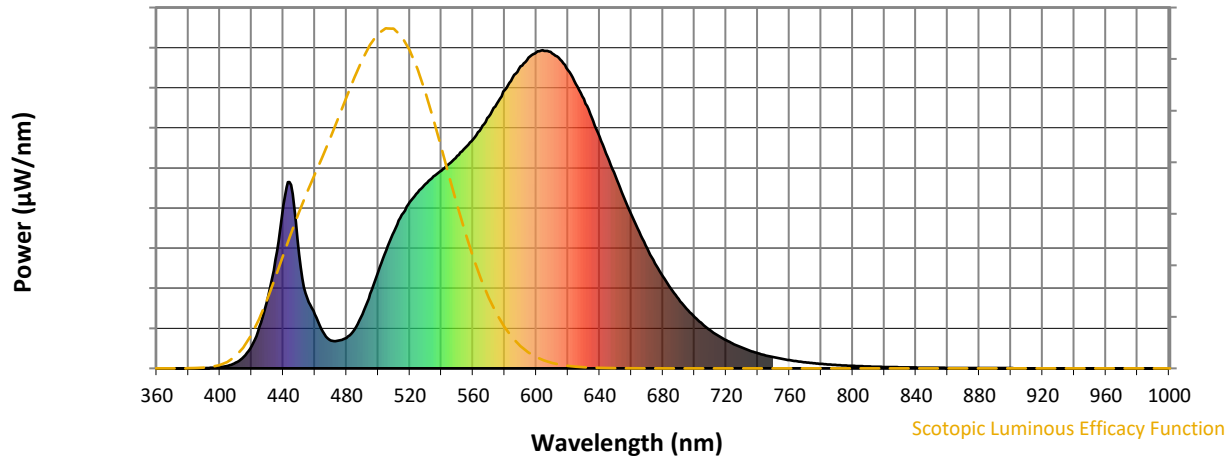


Photopic Lumens: NR

λ (nm)	Power W ^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



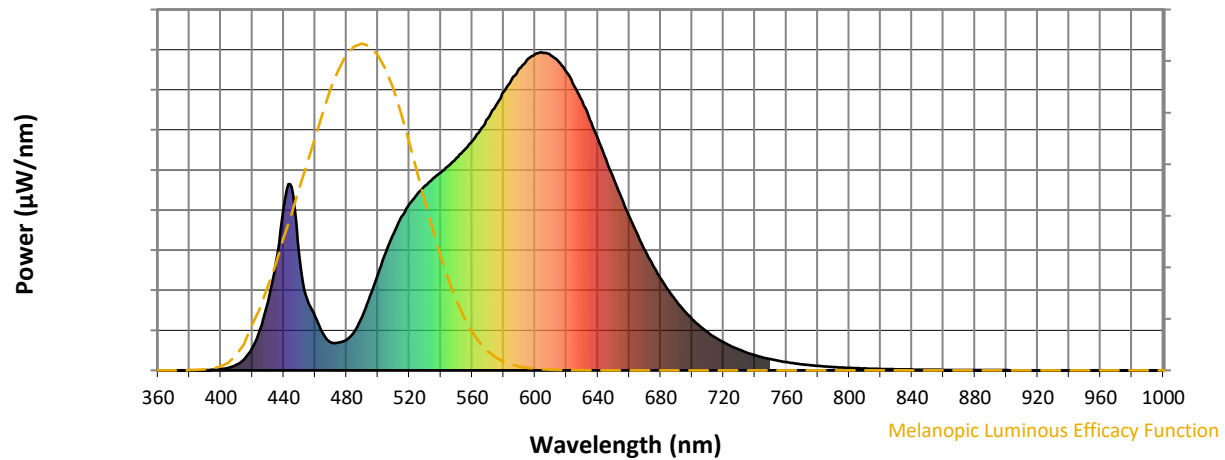
Scotopic Lumens: NR

S/P: 1.28

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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	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			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.33

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	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			

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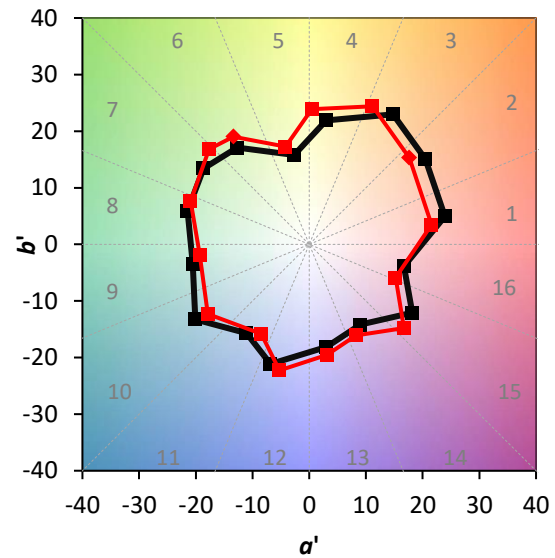
TM-30-18

Summary

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

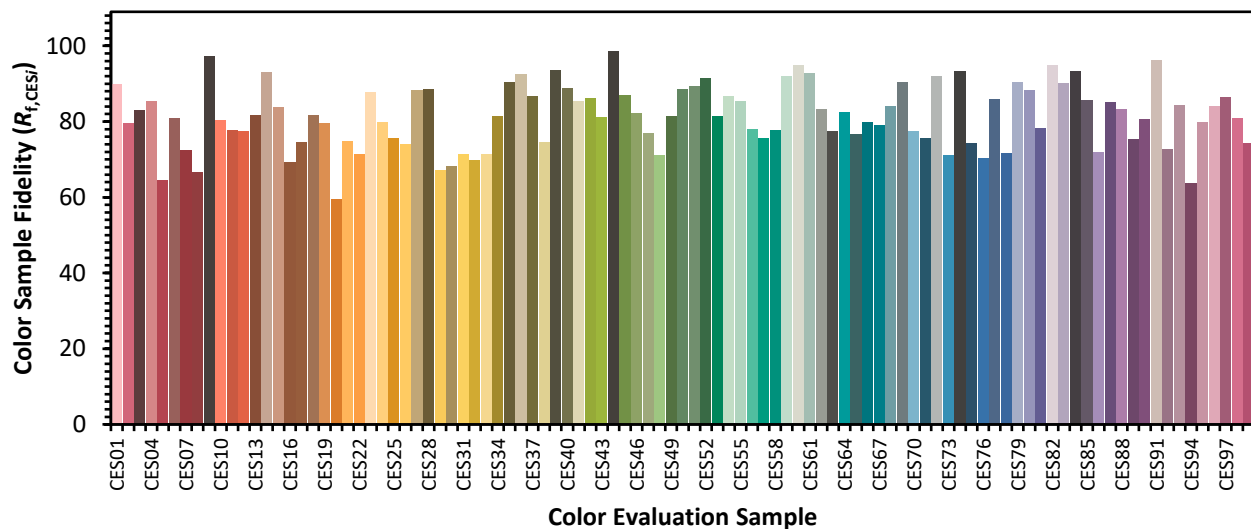


Color Vector Graphics

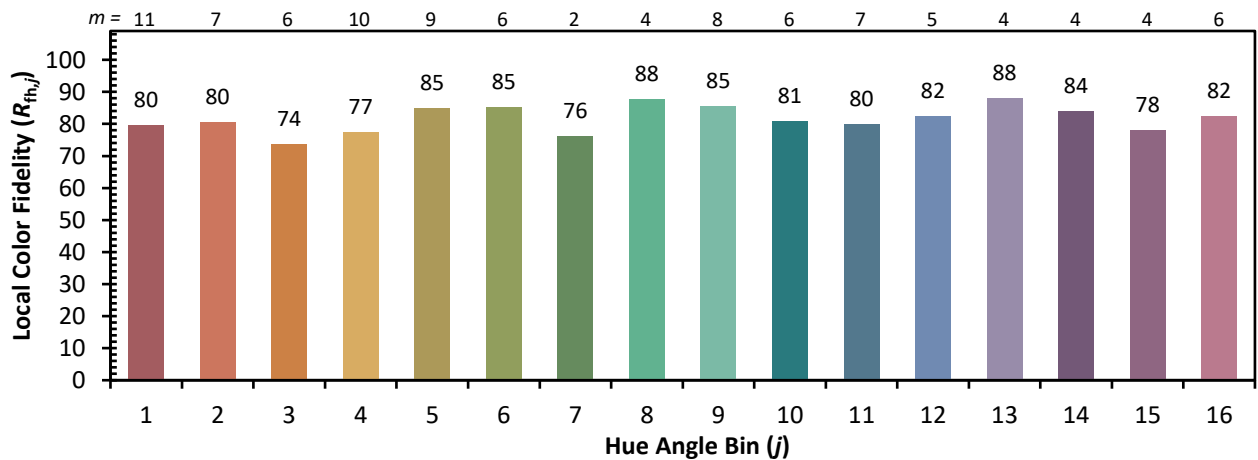


Individual Sample Fidelity Index ($R_{f,i}$)

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)