

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: P1068063

Luminaire Tested: **NAV-SA1C-830-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068063
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA1C-830-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 1050mA 1xLight Square PACKAGE
80CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (14) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3944.7 lumens
Efficiency: N/A
Efficacy: 78.7 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): 50.1
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



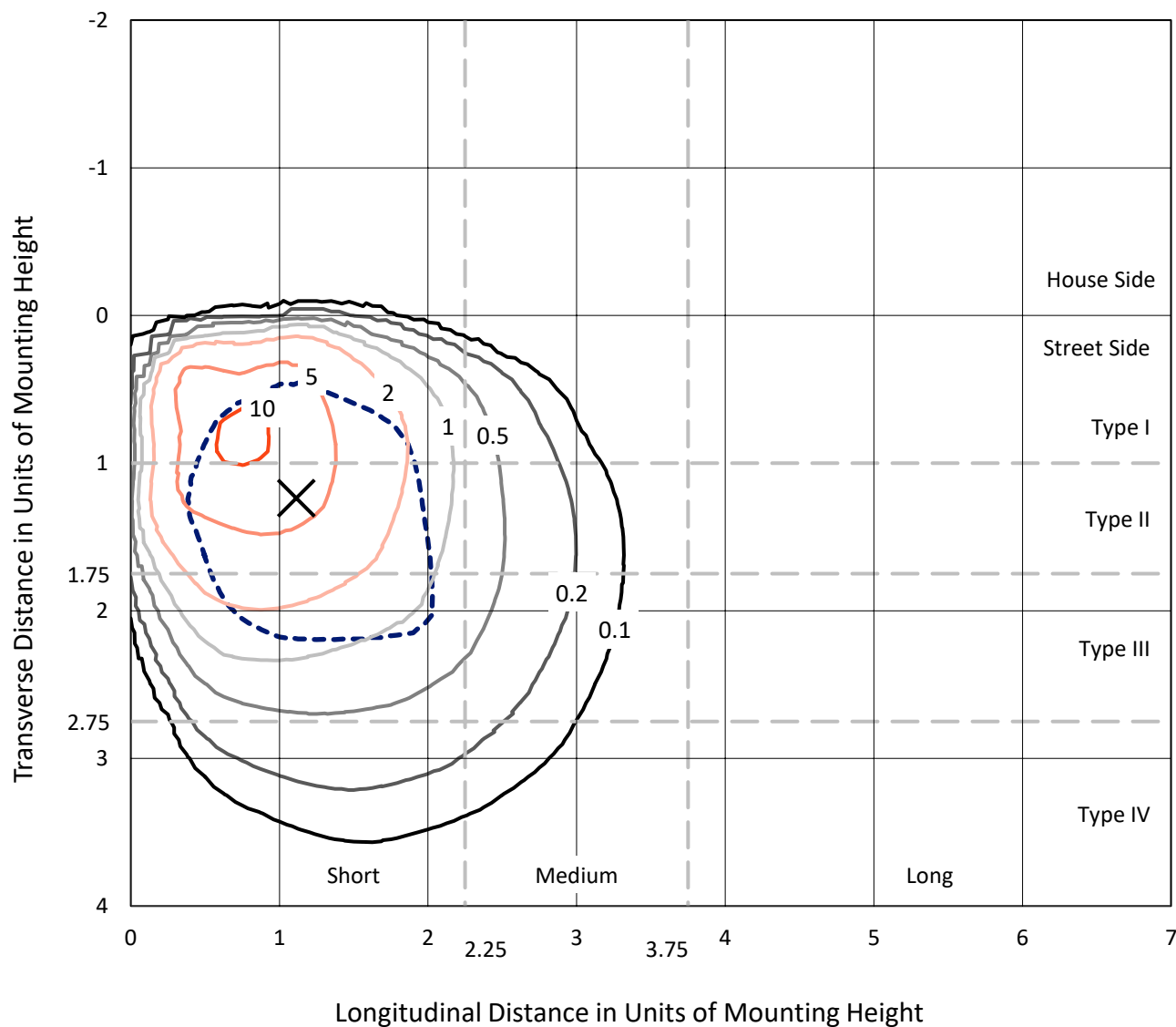
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

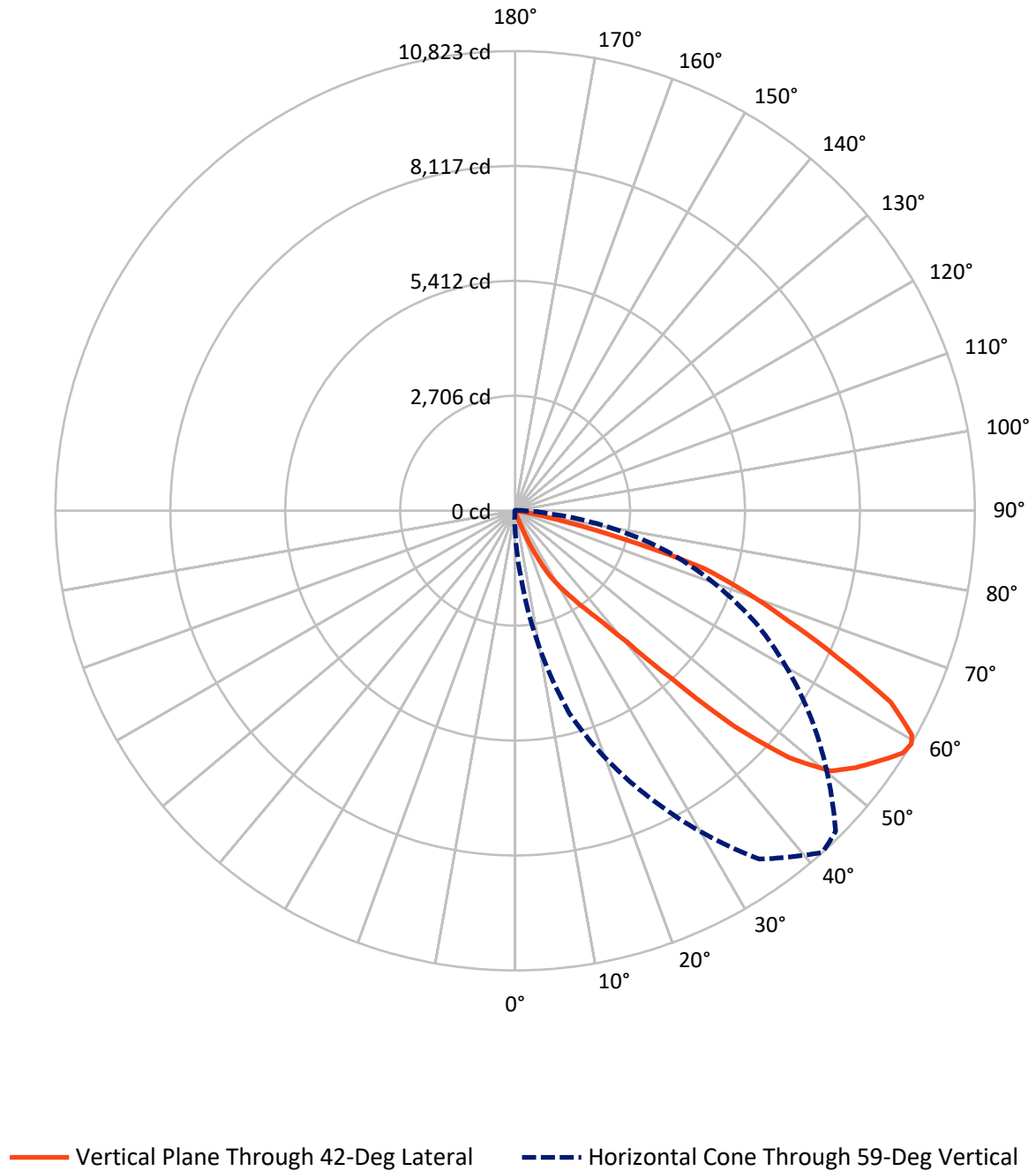


Based on 15 foot mounting height. Maximum calculated value = 11.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	19.0	0.0	19.0
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	3925.7	0.0	3925.7
	% Fixture	99.5	0.0	99.5
Total	Lumens	3944.7	0.0	3944.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.2	0.0
10°-20°	5.7	0.1
20°-30°	73.6	1.9
30°-40°	248.1	6.3
40°-50°	749.3	19.0
50°-60°	1322.7	33.5
60°-70°	1164.6	29.5
70°-80°	370.7	9.4
80°-90°	8.9	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°	3944.7	100.0
0°-180°	3944.7	100.0



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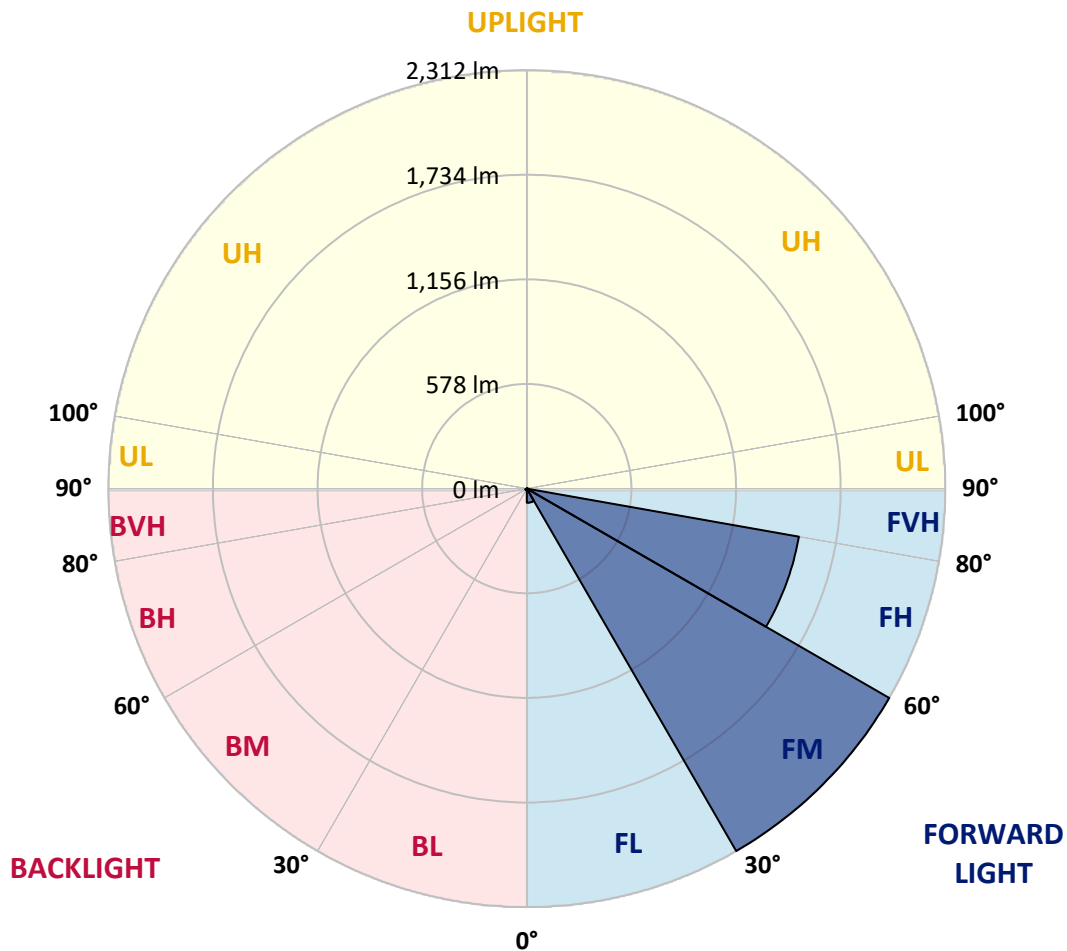
CATALOG NUMBER: NAV-SA1C-830-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	78.4	2.0			
FM	(30°-60°)	2312.2	58.6			
FH	(60°-80°)	1526.6	38.7			G1/1800
FVH	(80°-90°)	8.4	0.2			G0/10
BL	(0°-30°)	2.1	0.1	B0/110		
BM	(30°-60°)	7.8	0.2	B0/220		
BH	(60°-80°)	8.7	0.2	B0/110		G0/110
BVH	(80°-90°)	0.4	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°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
2.5°	17.3	17.3	16.1	14.8	13.6	12.4	12.4	12.4	11.1	11.1	9.9
5°	19.8	19.8	18.6	17.3	17.3	16.1	16.1	14.8	13.6	13.6	12.4
7.5°	21.0	21.0	21.0	21.0	19.8	19.8	19.8	18.6	17.3	16.1	14.8
10°	22.3	23.5	24.7	24.7	24.7	24.7	24.7	23.5	21.0	19.8	17.3
12.5°	24.7	26.0	28.4	30.9	30.9	32.2	30.9	29.7	27.2	23.5	19.8
15°	27.2	29.7	33.4	38.3	43.3	44.5	44.5	40.8	35.9	28.4	23.5
17.5°	30.9	34.6	44.5	60.6	77.9	91.5	91.5	81.6	56.9	37.1	27.2
20°	33.4	40.8	71.7	145.9	222.6	279.5	268.4	237.5	127.4	58.1	29.7
22.5°	37.1	51.9	152.1	383.4	593.7	697.6	672.8	510.8	285.7	103.9	35.9
25°	42.1	75.4	301.8	718.6	1103.2	1215.8	1199.7	953.6	520.7	174.4	45.8
27.5°	51.9	111.3	483.6	1089.6	1627.6	1724.1	1717.9	1396.3	832.4	280.8	59.4
30°	65.6	162.0	717.3	1480.4	1975.2	2072.9	2041.9	1720.4	1123.0	429.2	76.7
32.5°	81.6	226.3	928.8	1768.6	2295.5	2424.1	2387.0	2002.4	1356.8	555.3	113.8
35°	106.4	289.4	1137.8	2023.4	2665.3	2828.5	2766.7	2293.0	1558.4	697.6	137.3
37.5°	118.7	326.5	1329.6	2300.4	3080.9	3303.5	3256.5	2660.3	1763.7	879.4	168.2
40°	120.0	371.0	1528.7	2661.6	3668.3	4065.3	3981.2	3291.1	2145.8	1113.1	216.4
42.5°	123.7	437.8	1787.2	3277.5	4822.3	5392.4	5297.2	4451.2	3012.8	1581.9	306.7
45°	141.0	564.0	2314.0	4429.0	6406.6	7242.7	7132.6	6067.7	4223.6	2463.7	523.2
47.5°	201.6	848.4	3237.9	5671.9	8026.8	8693.4	8666.2	7341.6	5320.7	3367.8	886.8
50°	324.0	1302.3	4289.2	6717.0	9058.3	9630.9	9562.9	7873.4	5946.5	3984.9	1136.6
52.5°	432.9	1736.5	4949.6	7101.7	9366.2	10048.9	9966.1	8067.6	6111.0	4166.8	1205.9
55°	460.1	1893.5	5146.3	7220.4	9570.3	10402.7	10282.7	8197.5	6132.0	4036.9	1090.9
57.5°	446.5	1745.1	5018.9	7336.7	9854.8	10766.3	10606.7	8451.0	6202.5	3816.7	907.8
59°	423.0	1562.1	4939.8	7429.4	10011.8	10823.2	10673.5	8506.7	6249.5	3716.6	796.5
60°	395.8	1438.4	4877.9	7490.0	10001.9	10734.1	10579.5	8480.7	6268.1	3630.0	743.3
62.5°	305.5	1147.7	4788.9	7446.7	9377.4	9921.6	9833.7	7845.0	5996.0	3352.9	586.2
65°	237.5	878.1	4462.3	6641.6	7979.8	8345.9	8318.7	6642.8	5046.1	2890.4	423.0
67.5°	188.0	640.7	3773.5	5378.8	6420.2	6940.9	6921.1	5392.4	3830.3	2208.9	304.3
70°	153.4	456.4	2587.4	4055.4	5135.2	5790.7	5762.2	4339.9	2838.4	1401.3	221.4
72.5°	129.9	291.9	1569.5	3057.4	4285.5	4660.2	4577.4	3501.4	2064.2	763.1	175.6
75°	110.1	179.3	777.9	1905.9	2552.7	2550.3	2467.4	1854.0	1108.2	373.5	139.8
77.5°	89.0	126.2	305.5	523.2	805.2	996.9	980.8	656.7	331.5	108.8	86.6
80°	58.1	59.4	81.6	143.5	221.4	244.9	278.3	200.4	96.5	51.9	35.9
82.5°	26.0	28.4	37.1	47.0	47.0	43.3	38.3	28.4	21.0	17.3	8.7
85°	6.2	8.7	6.2	7.4	6.2	4.9	4.9	2.5	0.0	0.0	0.0
87.5°	1.2	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°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
2.5°	9.9	9.9	9.9	8.7	8.7	8.7	7.4	7.4	7.4	6.2	6.2
5°	12.4	11.1	9.9	9.9	8.7	8.7	7.4	6.2	6.2	6.2	4.9
7.5°	13.6	12.4	11.1	9.9	8.7	7.4	7.4	6.2	4.9	4.9	4.9
10°	16.1	14.8	12.4	9.9	8.7	7.4	6.2	6.2	4.9	3.7	3.7
12.5°	18.6	16.1	13.6	11.1	8.7	7.4	6.2	6.2	4.9	3.7	2.5
15°	21.0	18.6	14.8	11.1	8.7	7.4	6.2	6.2	3.7	2.5	1.2
17.5°	23.5	19.8	14.8	12.4	8.7	7.4	6.2	4.9	2.5	1.2	0.0
20°	24.7	21.0	16.1	12.4	8.7	7.4	6.2	3.7	1.2	0.0	0.0
22.5°	27.2	23.5	17.3	12.4	8.7	6.2	3.7	1.2	0.0	0.0	0.0
25°	32.2	24.7	17.3	12.4	8.7	6.2	2.5	0.0	0.0	0.0	0.0
27.5°	35.9	27.2	17.3	12.4	8.7	4.9	1.2	0.0	0.0	0.0	0.0
30°	42.1	29.7	18.6	12.4	8.7	3.7	1.2	0.0	0.0	0.0	0.0
32.5°	51.9	32.2	18.6	12.4	7.4	3.7	0.0	0.0	0.0	0.0	0.0
35°	63.1	37.1	18.6	12.4	7.4	3.7	0.0	0.0	0.0	0.0	0.0
37.5°	64.3	39.6	18.6	12.4	7.4	2.5	0.0	0.0	0.0	0.0	0.0
40°	66.8	37.1	19.8	12.4	7.4	2.5	0.0	0.0	0.0	0.0	0.0
42.5°	76.7	34.6	21.0	12.4	7.4	2.5	0.0	0.0	0.0	0.0	0.0
45°	113.8	35.9	21.0	13.6	7.4	3.7	0.0	0.0	0.0	0.0	0.0
47.5°	197.9	37.1	19.8	13.6	7.4	3.7	0.0	0.0	0.0	0.0	0.0
50°	253.5	43.3	19.8	14.8	8.7	2.5	0.0	0.0	0.0	0.0	0.0
52.5°	269.6	50.7	19.8	16.1	11.1	1.2	0.0	0.0	0.0	0.0	0.0
55°	262.2	59.4	21.0	17.3	13.6	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	242.4	64.3	22.3	18.6	14.8	0.0	0.0	0.0	0.0	0.0	0.0
59°	221.4	68.0	26.0	19.8	14.8	0.0	0.0	0.0	0.0	0.0	0.0
60°	204.1	71.7	27.2	21.0	14.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	164.5	76.7	29.7	24.7	12.4	0.0	0.0	0.0	0.0	0.0	0.0
65°	143.5	80.4	30.9	27.2	11.1	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	131.1	82.9	33.4	28.4	9.9	0.0	0.0	0.0	0.0	0.0	0.0
70°	121.2	81.6	35.9	27.2	8.7	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	110.1	77.9	43.3	24.7	7.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	98.9	70.5	47.0	22.3	4.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	71.7	59.4	43.3	19.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	30.9	32.2	30.9	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.2	7.4	6.2	3.7	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
2.5°	6.2	6.2	6.2	6.2	7.4	7.4	9.9	12.4	14.8	16.1	16.1
5°	4.9	4.9	4.9	4.9	4.9	6.2	7.4	9.9	13.6	14.8	14.8
7.5°	3.7	3.7	3.7	3.7	3.7	3.7	6.2	8.7	12.4	13.6	14.8
10°	3.7	2.5	2.5	1.2	1.2	2.5	3.7	7.4	11.1	12.4	13.6
12.5°	2.5	1.2	1.2	0.0	0.0	1.2	2.5	6.2	9.9	11.1	12.4
15°	1.2	0.0	0.0	0.0	0.0	0.0	1.2	4.9	8.7	9.9	12.4
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	7.4	9.9	11.1
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	6.2	8.7	9.9
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	4.9	7.4	8.7
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	4.9	6.2
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	3.7	4.9
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	3.7	4.9
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5	3.7
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5	3.7
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5	2.5
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.5
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
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°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
2.5°	17.3	17.3	16.1	14.8	14.8	14.8	16.1	17.3	17.3	17.3
5°	16.1	16.1	14.8	14.8	14.8	14.8	16.1	18.6	19.8	19.8
7.5°	16.1	16.1	14.8	14.8	14.8	14.8	16.1	18.6	19.8	21.0
10°	14.8	14.8	14.8	14.8	13.6	14.8	16.1	18.6	22.3	22.3
12.5°	14.8	14.8	14.8	14.8	13.6	14.8	17.3	19.8	23.5	24.7
15°	14.8	14.8	14.8	13.6	13.6	14.8	17.3	21.0	24.7	27.2
17.5°	13.6	14.8	14.8	13.6	13.6	14.8	17.3	21.0	27.2	30.9
20°	12.4	13.6	14.8	13.6	13.6	13.6	17.3	21.0	28.4	33.4
22.5°	11.1	12.4	13.6	13.6	12.4	13.6	17.3	22.3	30.9	37.1
25°	9.9	11.1	11.1	12.4	12.4	13.6	17.3	22.3	32.2	42.1
27.5°	7.4	8.7	9.9	11.1	11.1	13.6	17.3	23.5	34.6	51.9
30°	6.2	7.4	8.7	9.9	11.1	13.6	17.3	23.5	37.1	65.6
32.5°	6.2	7.4	8.7	9.9	11.1	12.4	17.3	24.7	40.8	81.6
35°	4.9	6.2	7.4	9.9	9.9	12.4	17.3	24.7	44.5	106.4
37.5°	4.9	6.2	7.4	9.9	9.9	12.4	17.3	24.7	54.4	118.7
40°	3.7	4.9	6.2	9.9	9.9	12.4	18.6	26.0	55.7	120.0
42.5°	3.7	4.9	6.2	8.7	9.9	12.4	18.6	26.0	51.9	123.7
45°	3.7	4.9	6.2	9.9	11.1	13.6	18.6	27.2	50.7	141.0
47.5°	3.7	4.9	6.2	9.9	12.4	13.6	18.6	27.2	51.9	201.6
50°	3.7	4.9	6.2	9.9	13.6	13.6	18.6	27.2	56.9	324.0
52.5°	2.5	3.7	4.9	8.7	11.1	14.8	19.8	26.0	60.6	432.9
55°	2.5	2.5	3.7	7.4	9.9	16.1	21.0	26.0	70.5	460.1
57.5°	2.5	2.5	3.7	6.2	8.7	17.3	22.3	26.0	81.6	446.5
59°	2.5	2.5	2.5	6.2	7.4	17.3	22.3	27.2	82.9	423.0
60°	2.5	2.5	2.5	4.9	7.4	17.3	23.5	28.4	84.1	395.8
62.5°	1.2	1.2	1.2	4.9	6.2	17.3	26.0	34.6	86.6	305.5
65°	2.5	2.5	1.2	3.7	6.2	14.8	29.7	37.1	87.8	237.5
67.5°	2.5	2.5	2.5	4.9	6.2	14.8	30.9	38.3	87.8	188.0
70°	2.5	2.5	2.5	4.9	7.4	14.8	30.9	39.6	86.6	153.4
72.5°	2.5	2.5	2.5	4.9	7.4	13.6	28.4	40.8	82.9	129.9
75°	2.5	2.5	2.5	3.7	6.2	12.4	27.2	44.5	75.4	110.1
77.5°	2.5	2.5	2.5	2.5	4.9	9.9	24.7	49.5	66.8	89.0
80°	3.7	2.5	2.5	2.5	3.7	8.7	23.5	48.2	55.7	58.1
82.5°	3.7	2.5	2.5	1.2	2.5	6.2	18.6	37.1	28.4	26.0
85°	2.5	2.5	2.5	1.2	1.2	3.7	8.7	11.1	8.7	6.2
87.5°	2.5	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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

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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

REPORT NUMBER: SP1-2407-184-9

Photopic Flux vs. Wavelength

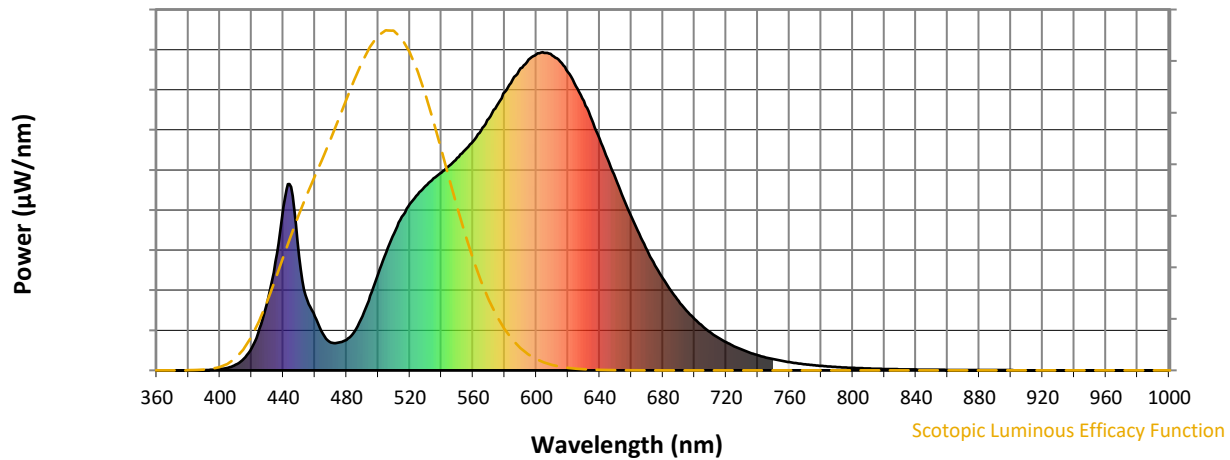


Photopic Lumens: NR

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



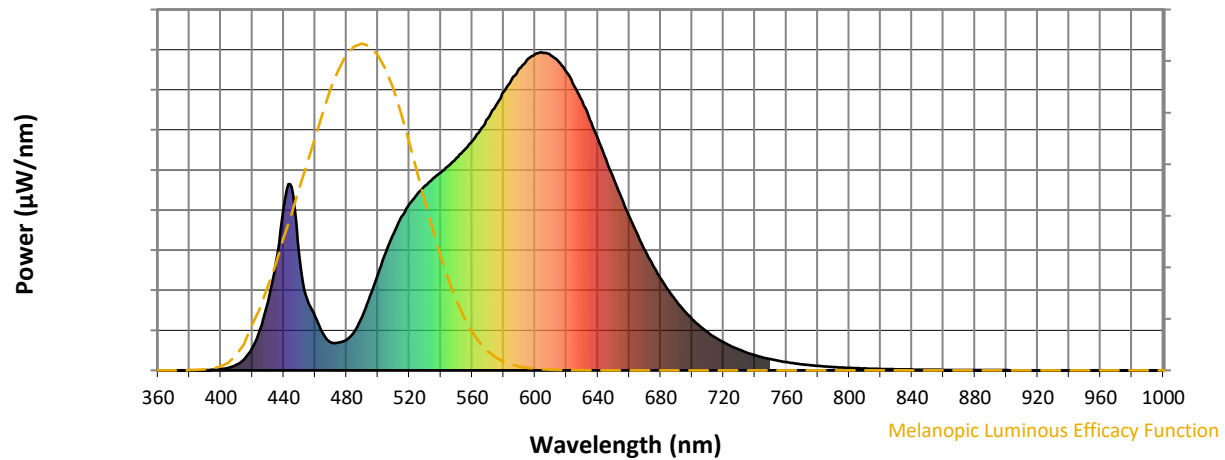
Scotopic Lumens: NR

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			

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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			

REPORT NUMBER: SP1-2407-184-9

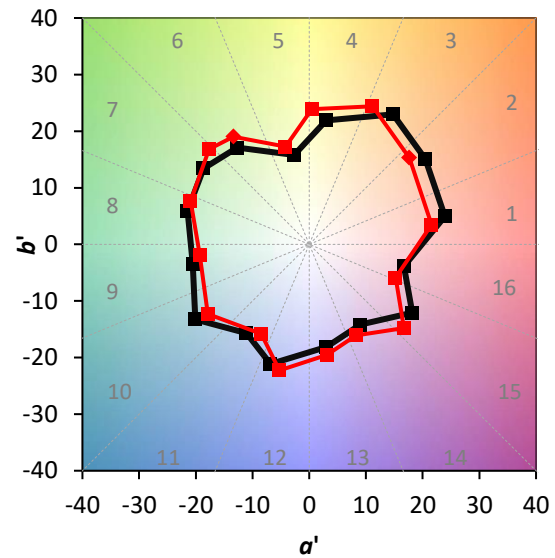
TM-30-18

Summary

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

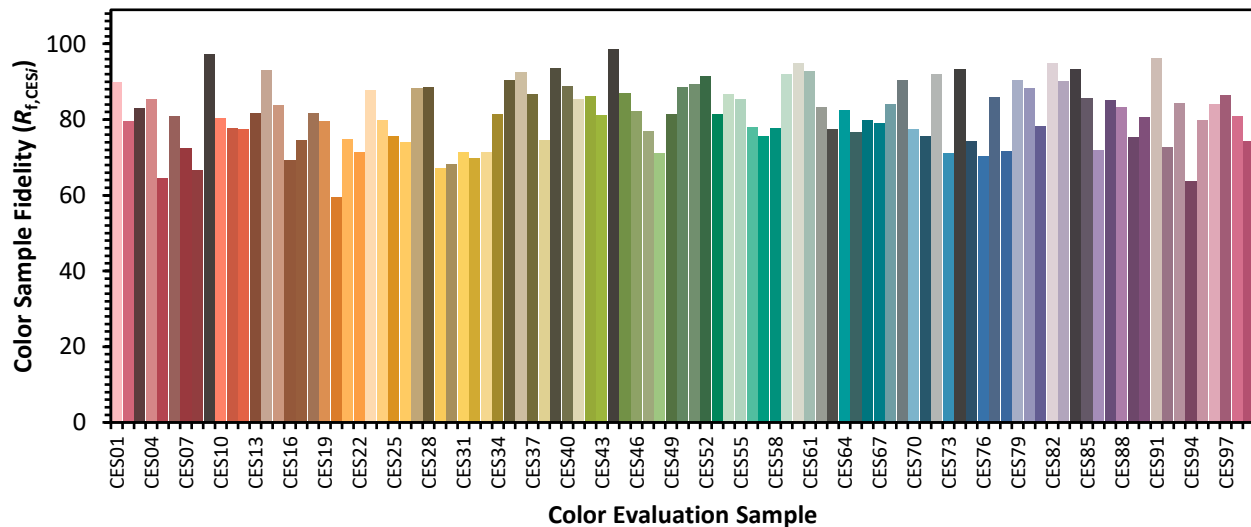


Color Vector Graphics

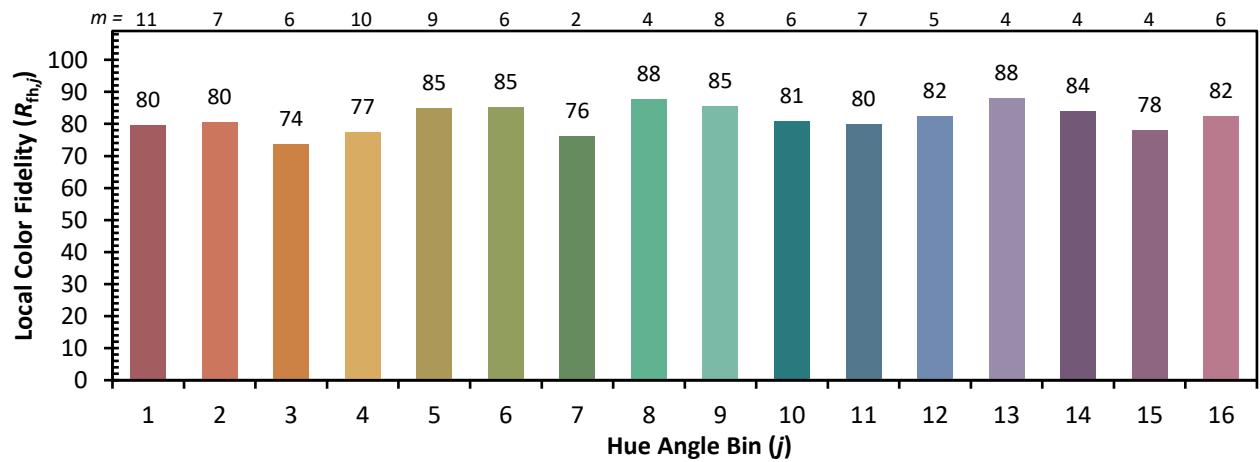
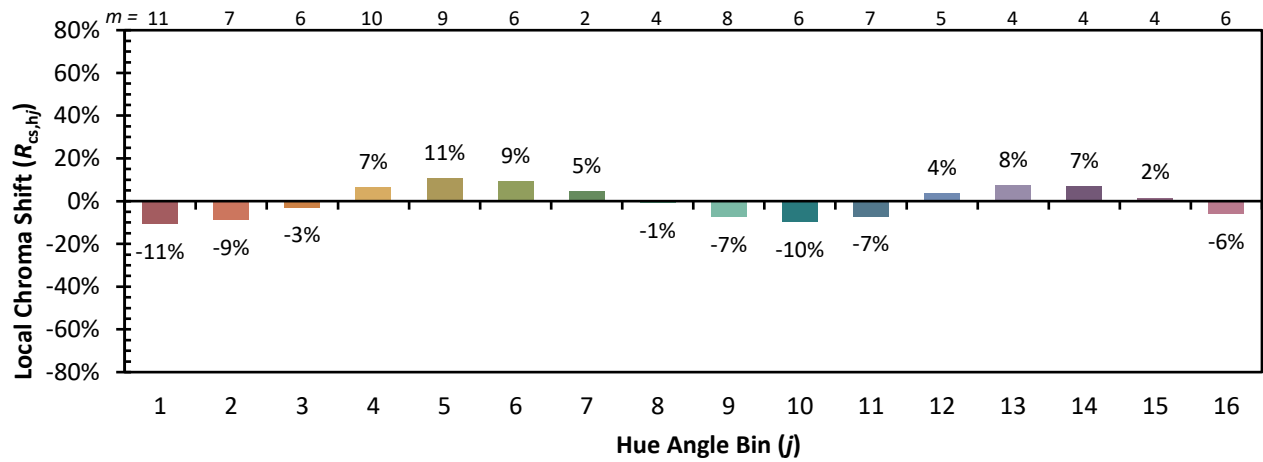


Individual Sample Fidelity Index ($R_{f,i}$)

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)