

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: P1068086

Luminaire Tested: **NAV-SA1B-835-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068086
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA1B-835-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 800mA 1xLight Square PACKAGE
80CRI 3500K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (14) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3506.5 lumens
Efficiency: N/A
Efficacy: 92.5 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

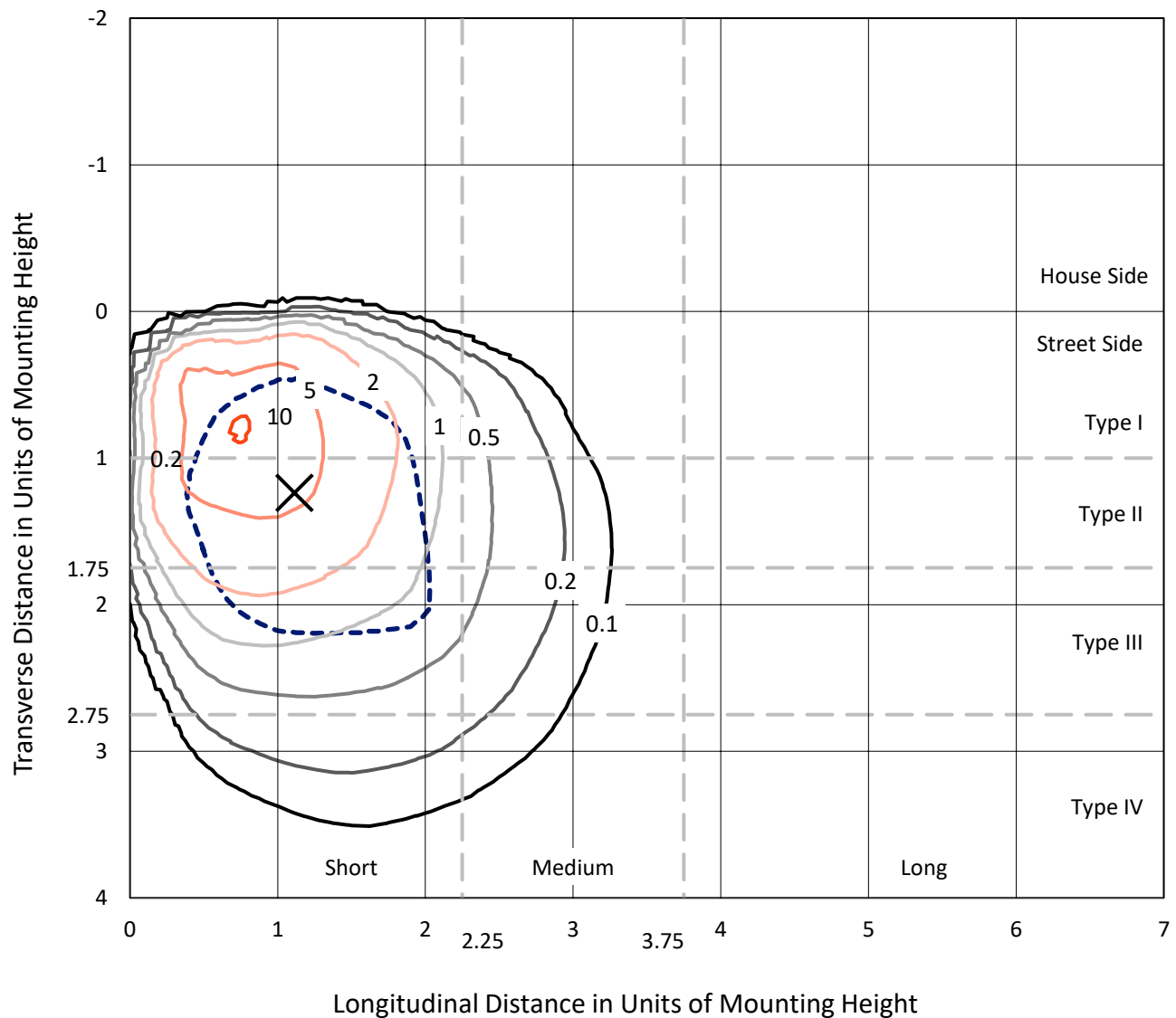


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

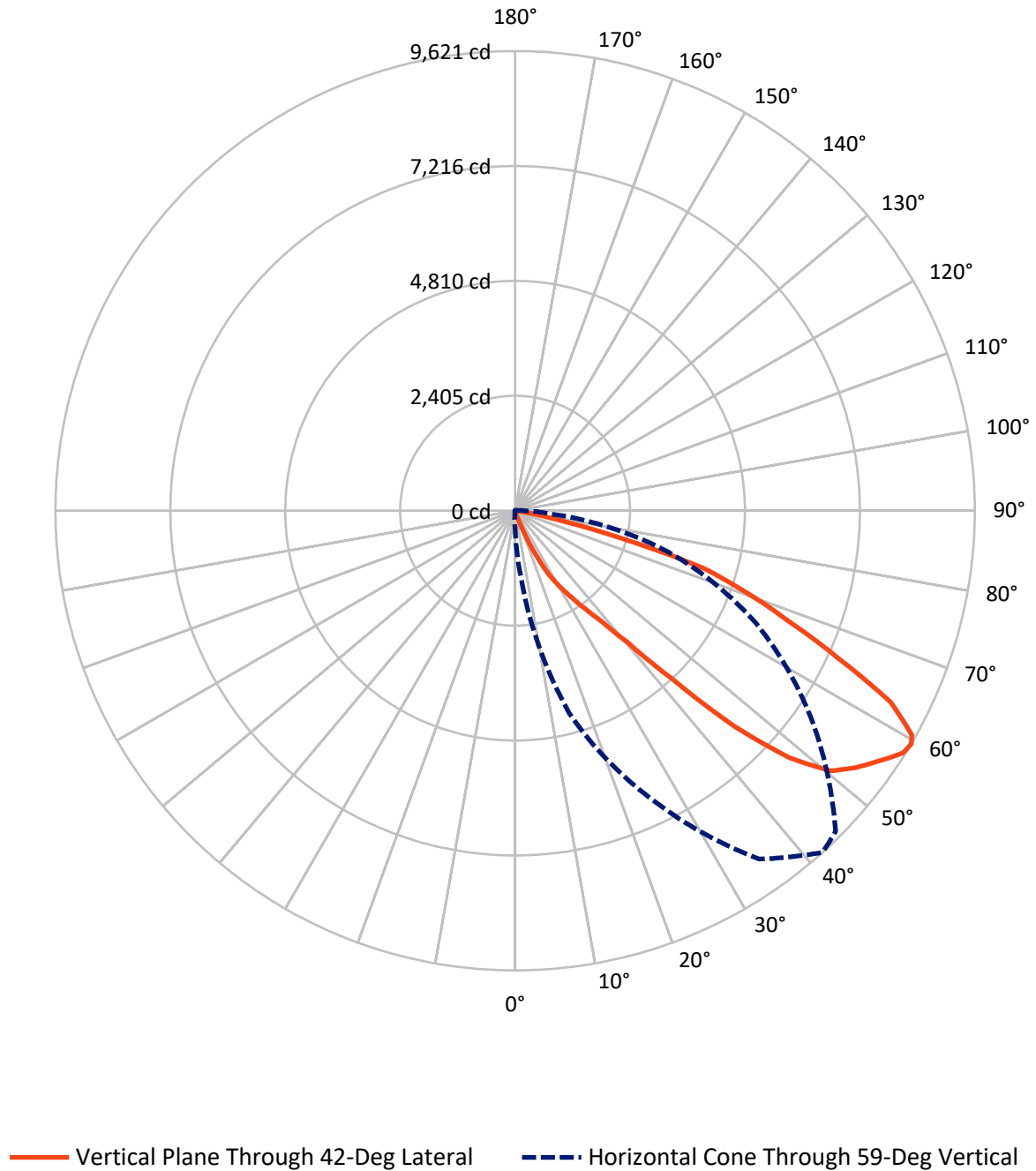


Based on 15 foot mounting height. Maximum calculated value = 10.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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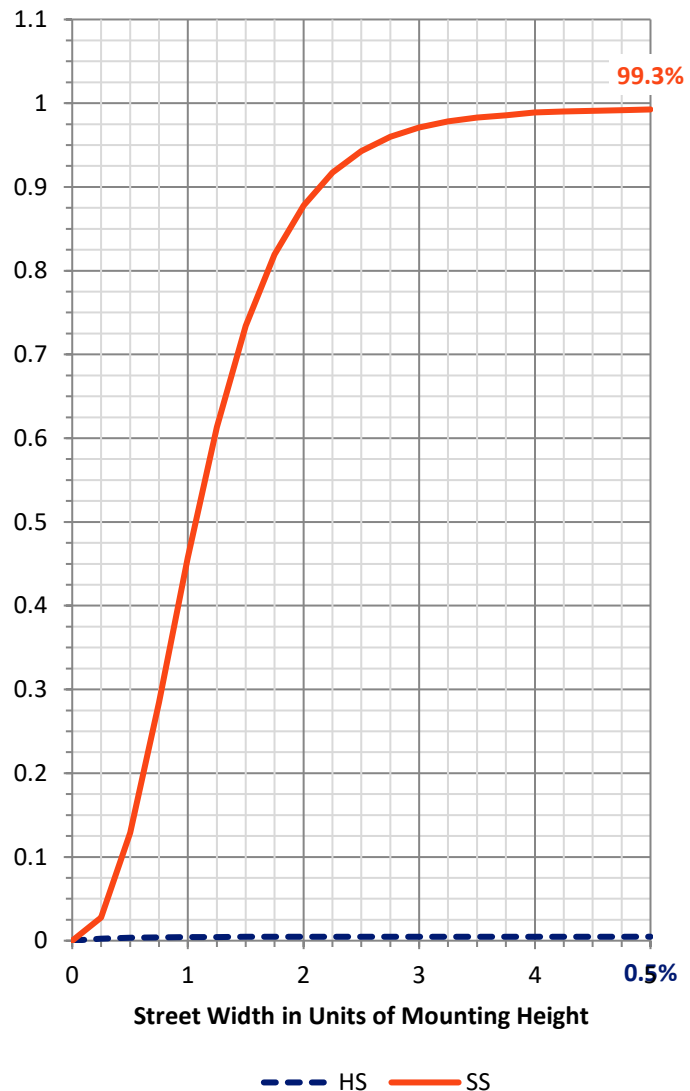
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16.9	0.0	16.9
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	3489.6	0.0	3489.6
	% Fixture	99.5	0.0	99.5
Total	Lumens	3506.5	0.0	3506.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.0
10°-20°	5.1	0.1
20°-30°	65.4	1.9
30°-40°	220.5	6.3
40°-50°	666.0	19.0
50°-60°	1175.7	33.5
60°-70°	1035.3	29.5
70°-80°	329.5	9.4
80°-90°	7.9	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°	3506.5	100.0
0°-180°	3506.5	100.0



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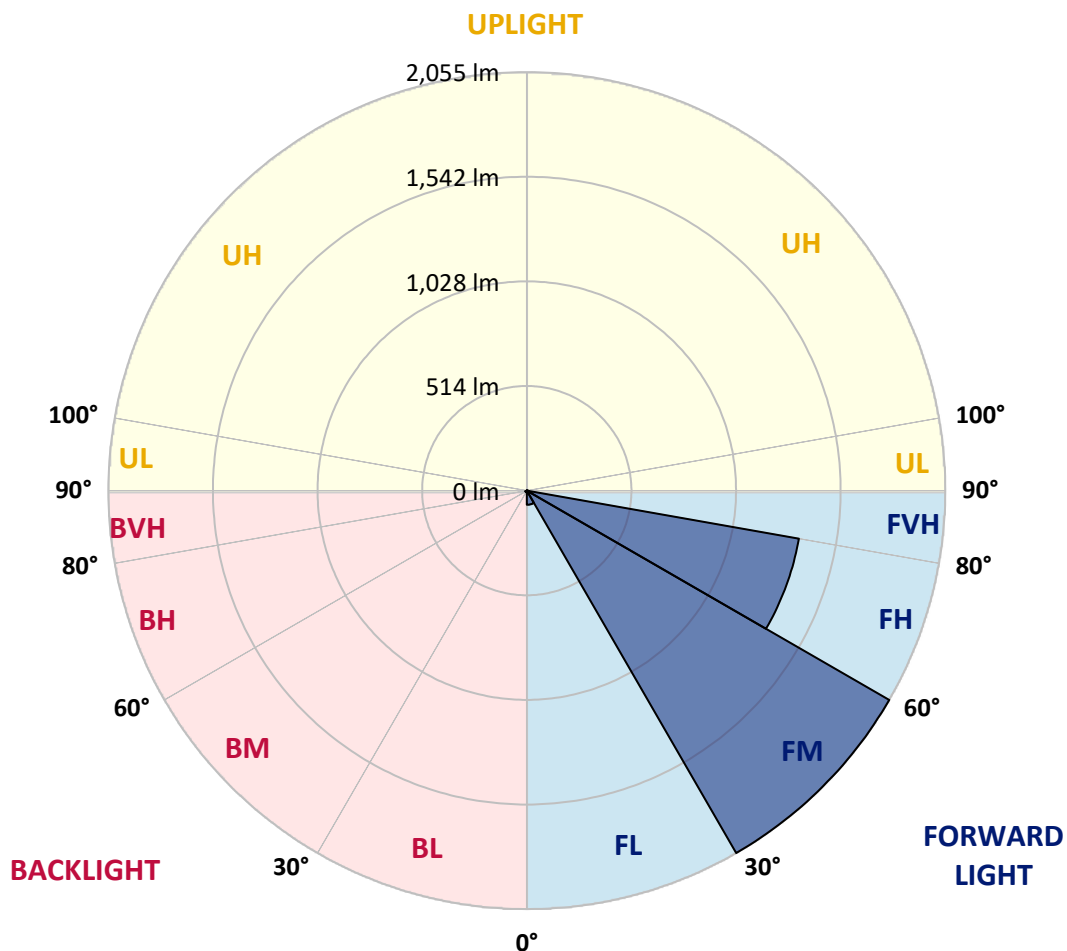
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	69.7	2.0			
FM	(30°-60°)	2055.4	58.6			
FH	(60°-80°)	1357.1	38.7			G1/1800
FVH	(80°-90°)	7.5	0.2			G0/10
BL	(0°-30°)	1.9	0.1	B0/110		
BM	(30°-60°)	6.9	0.2	B0/220		
BH	(60°-80°)	7.7	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°	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
2.5°	15.4	15.4	14.3	13.2	12.1	11.0	11.0	11.0	9.9	9.9	8.8
5°	17.6	17.6	16.5	15.4	15.4	14.3	14.3	13.2	12.1	12.1	11.0
7.5°	18.7	18.7	18.7	18.7	17.6	17.6	17.6	16.5	15.4	14.3	13.2
10°	19.8	20.9	22.0	22.0	22.0	22.0	22.0	20.9	18.7	17.6	15.4
12.5°	22.0	23.1	25.3	27.5	27.5	28.6	27.5	26.4	24.2	20.9	17.6
15°	24.2	26.4	29.7	34.1	38.5	39.6	39.6	36.3	31.9	25.3	20.9
17.5°	27.5	30.8	39.6	53.9	69.3	81.4	81.4	72.6	50.6	33.0	24.2
20°	29.7	36.3	63.8	129.7	197.9	248.5	238.6	211.1	113.2	51.7	26.4
22.5°	33.0	46.2	135.2	340.8	527.7	620.1	598.1	454.1	254.0	92.3	31.9
25°	37.4	67.1	268.3	638.8	980.7	1080.7	1066.4	847.6	462.8	155.0	40.7
27.5°	46.2	98.9	429.9	968.6	1446.8	1532.6	1527.1	1241.2	739.9	249.6	52.8
30°	58.3	144.0	637.7	1316.0	1755.7	1842.6	1815.1	1529.3	998.3	381.5	68.2
32.5°	72.6	201.2	825.7	1572.1	2040.5	2154.8	2121.8	1779.9	1206.0	493.6	101.1
35°	94.5	257.3	1011.5	1798.6	2369.2	2514.3	2459.4	2038.3	1385.2	620.1	122.0
37.5°	105.5	290.2	1181.9	2044.9	2738.6	2936.5	2894.7	2364.8	1567.7	781.7	149.5
40°	106.6	329.8	1358.9	2365.9	3260.8	3613.7	3539.0	2925.5	1907.5	989.5	192.4
42.5°	109.9	389.2	1588.6	2913.4	4286.6	4793.4	4708.7	3956.8	2678.1	1406.1	272.7
45°	125.3	501.3	2057.0	3937.0	5694.9	6438.1	6340.3	5393.7	3754.5	2190.0	465.0
47.5°	179.2	754.2	2878.2	5041.9	7135.1	7727.7	7703.5	6526.1	4729.6	2993.7	788.3
50°	288.0	1157.7	3812.7	5970.9	8052.0	8561.1	8500.6	6998.8	5285.9	3542.3	1010.4
52.5°	384.8	1543.6	4399.8	6312.8	8325.8	8932.7	8859.0	7171.4	5432.2	3703.9	1071.9
55°	409.0	1683.2	4574.6	6418.3	8507.2	9247.1	9140.4	7286.8	5450.8	3588.5	969.7
57.5°	396.9	1551.3	4461.4	6521.7	8760.0	9570.3	9428.5	7512.2	5513.5	3392.8	807.0
59°	376.0	1388.5	4391.0	6604.1	8899.7	9620.9	9487.9	7561.7	5555.3	3303.7	708.0
60°	351.8	1278.6	4336.0	6658.0	8890.9	9541.7	9404.3	7538.6	5571.8	3226.8	660.7
62.5°	271.6	1020.2	4256.9	6619.5	8335.7	8819.4	8741.4	6973.5	5329.9	2980.5	521.1
65°	211.1	780.6	3966.6	5903.8	7093.4	7418.8	7394.6	5904.9	4485.6	2569.3	376.0
67.5°	167.1	569.5	3354.3	4781.3	5707.0	6169.9	6152.3	4793.4	3404.9	1963.5	270.5
70°	136.3	405.7	2300.0	3604.9	4564.7	5147.4	5122.1	3857.8	2523.1	1245.6	196.8
72.5°	115.4	259.5	1395.1	2717.7	3809.4	4142.6	4068.9	3112.4	1834.9	678.3	156.1
75°	97.8	159.4	691.5	1694.2	2269.2	2267.0	2193.3	1648.0	985.1	332.0	124.2
77.5°	79.2	112.1	271.6	465.0	715.7	886.1	871.8	583.8	294.6	96.7	77.0
80°	51.7	52.8	72.6	127.5	196.8	217.7	247.4	178.1	85.8	46.2	31.9
82.5°	23.1	25.3	33.0	41.8	41.8	38.5	34.1	25.3	18.7	15.4	7.7
85°	5.5	7.7	5.5	6.6	5.5	4.4	4.4	2.2	0.0	0.0	0.0
87.5°	1.1	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°	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
2.5°	8.8	8.8	8.8	7.7	7.7	7.7	6.6	6.6	6.6	5.5	5.5
5°	11.0	9.9	8.8	8.8	7.7	7.7	6.6	5.5	5.5	5.5	4.4
7.5°	12.1	11.0	9.9	8.8	7.7	6.6	6.6	5.5	4.4	4.4	4.4
10°	14.3	13.2	11.0	8.8	7.7	6.6	5.5	5.5	4.4	3.3	3.3
12.5°	16.5	14.3	12.1	9.9	7.7	6.6	5.5	5.5	4.4	3.3	2.2
15°	18.7	16.5	13.2	9.9	7.7	6.6	5.5	5.5	3.3	2.2	1.1
17.5°	20.9	17.6	13.2	11.0	7.7	6.6	5.5	4.4	2.2	1.1	0.0
20°	22.0	18.7	14.3	11.0	7.7	6.6	5.5	3.3	1.1	0.0	0.0
22.5°	24.2	20.9	15.4	11.0	7.7	5.5	3.3	1.1	0.0	0.0	0.0
25°	28.6	22.0	15.4	11.0	7.7	5.5	2.2	0.0	0.0	0.0	0.0
27.5°	31.9	24.2	15.4	11.0	7.7	4.4	1.1	0.0	0.0	0.0	0.0
30°	37.4	26.4	16.5	11.0	7.7	3.3	1.1	0.0	0.0	0.0	0.0
32.5°	46.2	28.6	16.5	11.0	6.6	3.3	0.0	0.0	0.0	0.0	0.0
35°	56.1	33.0	16.5	11.0	6.6	3.3	0.0	0.0	0.0	0.0	0.0
37.5°	57.2	35.2	16.5	11.0	6.6	2.2	0.0	0.0	0.0	0.0	0.0
40°	59.4	33.0	17.6	11.0	6.6	2.2	0.0	0.0	0.0	0.0	0.0
42.5°	68.2	30.8	18.7	11.0	6.6	2.2	0.0	0.0	0.0	0.0	0.0
45°	101.1	31.9	18.7	12.1	6.6	3.3	0.0	0.0	0.0	0.0	0.0
47.5°	175.9	33.0	17.6	12.1	6.6	3.3	0.0	0.0	0.0	0.0	0.0
50°	225.4	38.5	17.6	13.2	7.7	2.2	0.0	0.0	0.0	0.0	0.0
52.5°	239.7	45.1	17.6	14.3	9.9	1.1	0.0	0.0	0.0	0.0	0.0
55°	233.1	52.8	18.7	15.4	12.1	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	215.5	57.2	19.8	16.5	13.2	0.0	0.0	0.0	0.0	0.0	0.0
59°	196.8	60.5	23.1	17.6	13.2	0.0	0.0	0.0	0.0	0.0	0.0
60°	181.4	63.8	24.2	18.7	13.2	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	146.2	68.2	26.4	22.0	11.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	127.5	71.5	27.5	24.2	9.9	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	116.5	73.7	29.7	25.3	8.8	0.0	0.0	0.0	0.0	0.0	0.0
70°	107.7	72.6	31.9	24.2	7.7	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	97.8	69.3	38.5	22.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	88.0	62.7	41.8	19.8	4.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	63.8	52.8	38.5	17.6	2.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	27.5	28.6	27.5	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	5.5	6.6	5.5	3.3	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°	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
2.5°	5.5	5.5	5.5	5.5	6.6	6.6	8.8	11.0	13.2	14.3	14.3
5°	4.4	4.4	4.4	4.4	4.4	5.5	6.6	8.8	12.1	13.2	13.2
7.5°	3.3	3.3	3.3	3.3	3.3	3.3	5.5	7.7	11.0	12.1	13.2
10°	3.3	2.2	2.2	1.1	1.1	2.2	3.3	6.6	9.9	11.0	12.1
12.5°	2.2	1.1	1.1	0.0	0.0	1.1	2.2	5.5	8.8	9.9	11.0
15°	1.1	0.0	0.0	0.0	0.0	0.0	1.1	4.4	7.7	8.8	11.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	6.6	8.8	9.9
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	5.5	7.7	8.8
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	4.4	6.6	7.7
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	4.4	5.5
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	3.3	4.4
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	3.3	4.4
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2	3.3
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2	3.3
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2	2.2
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
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°	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
2.5°	15.4	15.4	14.3	13.2	13.2	13.2	14.3	15.4	15.4	15.4
5°	14.3	14.3	13.2	13.2	13.2	13.2	14.3	16.5	17.6	17.6
7.5°	14.3	14.3	13.2	13.2	13.2	13.2	14.3	16.5	17.6	18.7
10°	13.2	13.2	13.2	13.2	12.1	13.2	14.3	16.5	19.8	19.8
12.5°	13.2	13.2	13.2	13.2	12.1	13.2	15.4	17.6	20.9	22.0
15°	13.2	13.2	13.2	12.1	12.1	13.2	15.4	18.7	22.0	24.2
17.5°	12.1	13.2	13.2	12.1	12.1	13.2	15.4	18.7	24.2	27.5
20°	11.0	12.1	13.2	12.1	12.1	12.1	15.4	18.7	25.3	29.7
22.5°	9.9	11.0	12.1	12.1	11.0	12.1	15.4	19.8	27.5	33.0
25°	8.8	9.9	9.9	11.0	11.0	12.1	15.4	19.8	28.6	37.4
27.5°	6.6	7.7	8.8	9.9	9.9	12.1	15.4	20.9	30.8	46.2
30°	5.5	6.6	7.7	8.8	9.9	12.1	15.4	20.9	33.0	58.3
32.5°	5.5	6.6	7.7	8.8	9.9	11.0	15.4	22.0	36.3	72.6
35°	4.4	5.5	6.6	8.8	8.8	11.0	15.4	22.0	39.6	94.5
37.5°	4.4	5.5	6.6	8.8	8.8	11.0	15.4	22.0	48.4	105.5
40°	3.3	4.4	5.5	8.8	8.8	11.0	16.5	23.1	49.5	106.6
42.5°	3.3	4.4	5.5	7.7	8.8	11.0	16.5	23.1	46.2	109.9
45°	3.3	4.4	5.5	8.8	9.9	12.1	16.5	24.2	45.1	125.3
47.5°	3.3	4.4	5.5	8.8	11.0	12.1	16.5	24.2	46.2	179.2
50°	3.3	4.4	5.5	8.8	12.1	12.1	16.5	24.2	50.6	288.0
52.5°	2.2	3.3	4.4	7.7	9.9	13.2	17.6	23.1	53.9	384.8
55°	2.2	2.2	3.3	6.6	8.8	14.3	18.7	23.1	62.7	409.0
57.5°	2.2	2.2	3.3	5.5	7.7	15.4	19.8	23.1	72.6	396.9
59°	2.2	2.2	2.2	5.5	6.6	15.4	19.8	24.2	73.7	376.0
60°	2.2	2.2	2.2	4.4	6.6	15.4	20.9	25.3	74.8	351.8
62.5°	1.1	1.1	1.1	4.4	5.5	15.4	23.1	30.8	77.0	271.6
65°	2.2	2.2	1.1	3.3	5.5	13.2	26.4	33.0	78.1	211.1
67.5°	2.2	2.2	2.2	4.4	5.5	13.2	27.5	34.1	78.1	167.1
70°	2.2	2.2	2.2	4.4	6.6	13.2	27.5	35.2	77.0	136.3
72.5°	2.2	2.2	2.2	4.4	6.6	12.1	25.3	36.3	73.7	115.4
75°	2.2	2.2	2.2	3.3	5.5	11.0	24.2	39.6	67.1	97.8
77.5°	2.2	2.2	2.2	2.2	4.4	8.8	22.0	44.0	59.4	79.2
80°	3.3	2.2	2.2	2.2	3.3	7.7	20.9	42.9	49.5	51.7
82.5°	3.3	2.2	2.2	1.1	2.2	5.5	16.5	33.0	25.3	23.1
85°	2.2	2.2	2.2	1.1	1.1	3.3	7.7	9.9	7.7	5.5
87.5°	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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: SP1-2407-184-10

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-835-U-5WQ

Data in this report applies to families of products including GSS-SB1A-835-U-5WQ

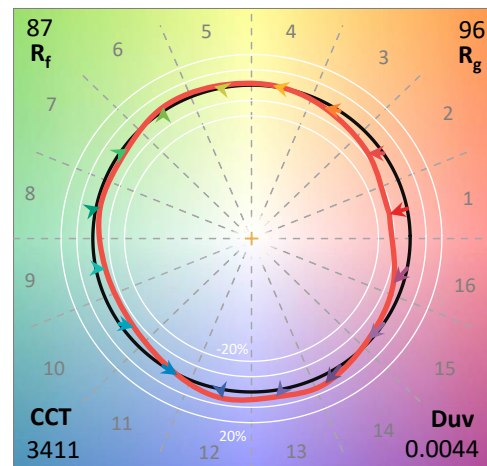
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-10
 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-835-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 3500K CCT 26 LEDS

Spectral Parameters

CCT (K): 3411
 CIE u' : 0.2360
 CIE v' : 0.5189
 Duv: 0.0044
 CIE x: 0.4154
 CIE y: 0.4059
 CIE z: 0.1787
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 579
 Purity: 46.51914
 R_f: 86.6
 R_g: 95.9

CRI (Ra): 83.5
 R1: 81.1
 R2: 88.9
 R3: 97.2
 R4: 83.8
 R5: 81.7
 R6: 86.9
 R7: 86.1
 R8: 62.2
 R9: 6.3
 R10: 75.4
 R11: 84.1
 R12: 69.7
 R13: 82.8
 R14: 98.5
 R15: 72.6



Test Conditions

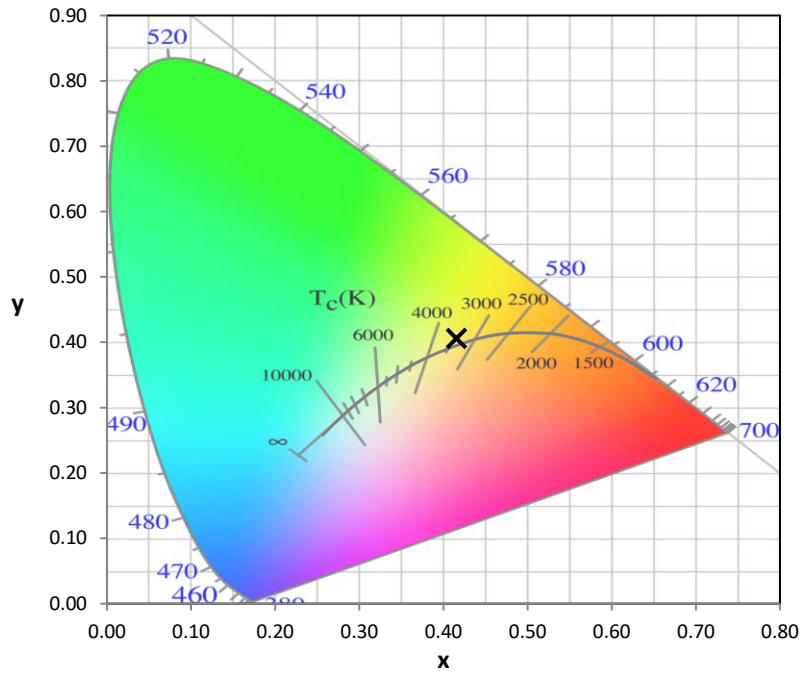
Stabilization Time: 35M
 Operation Time: 1H 35M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-10

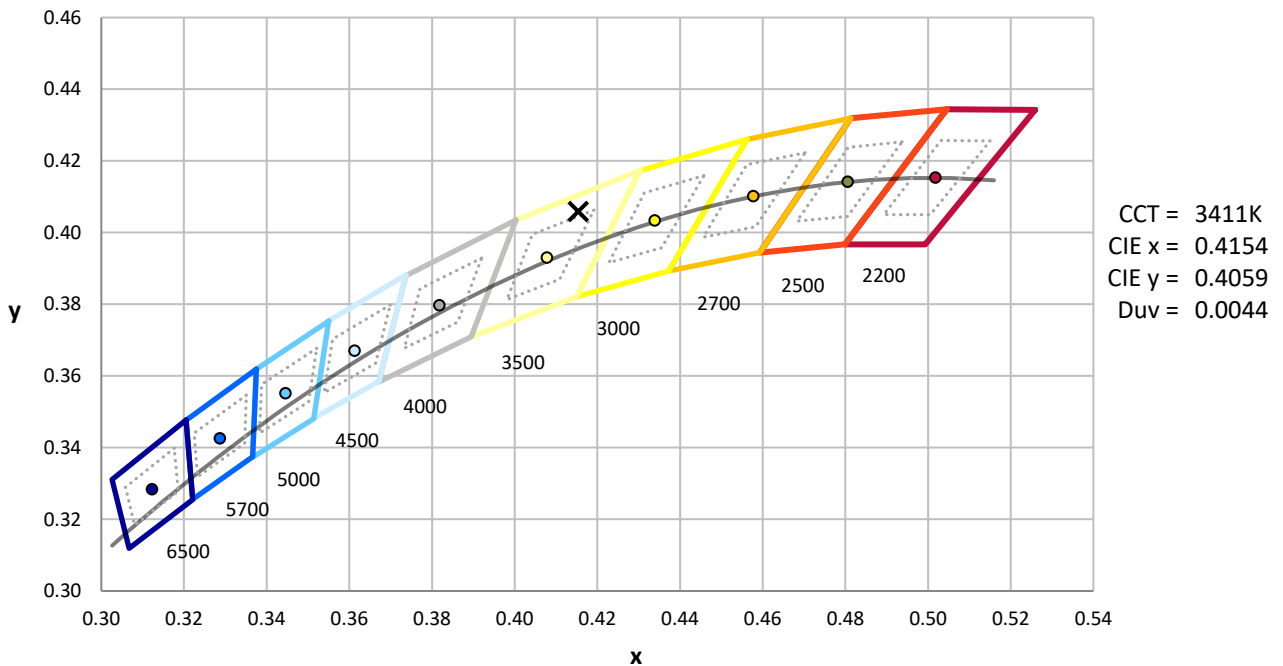
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



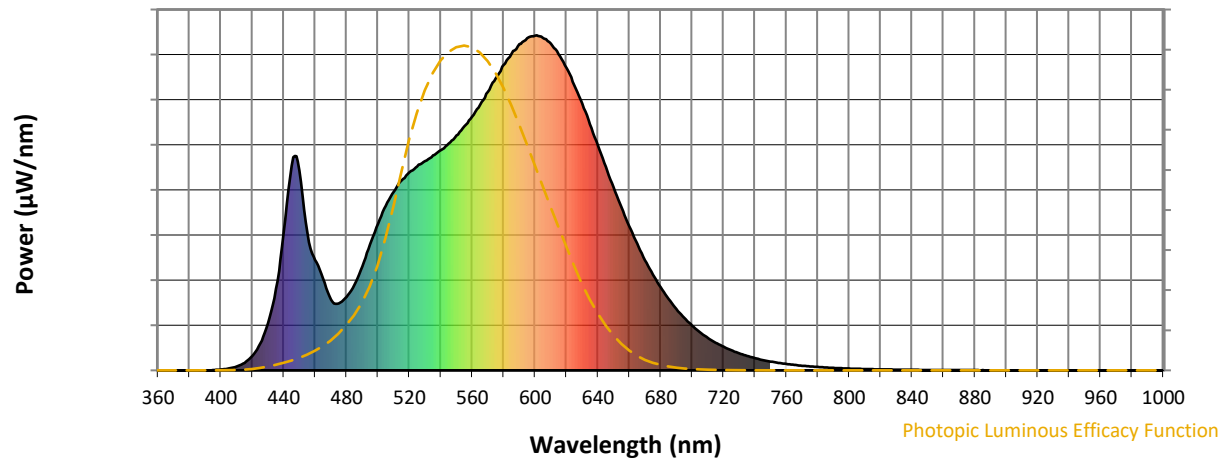
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-10

Photopic Flux vs. Wavelength

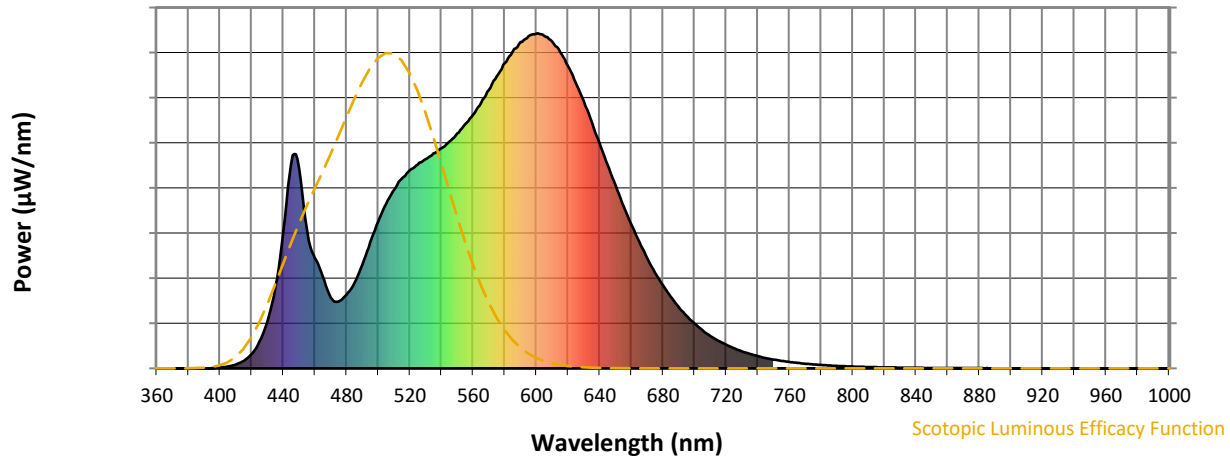


Photopic Lumens: NR

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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-10

Scotopic Flux vs. Wavelength



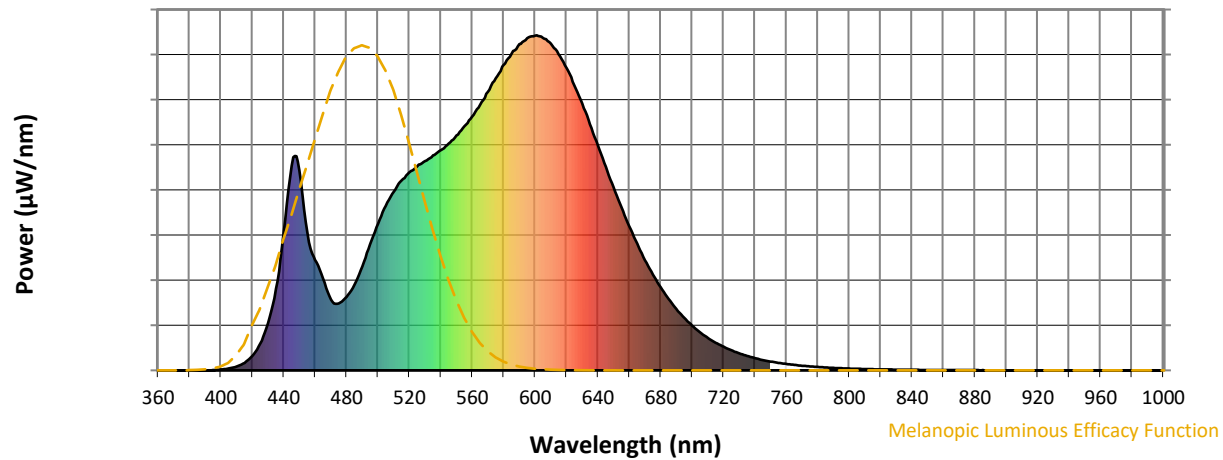
Scotopic Lumens: NR

S/P: 1.48

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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.88

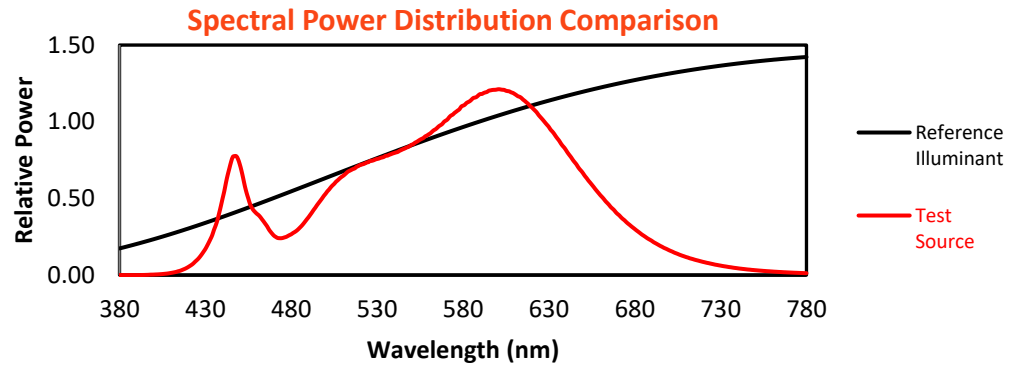
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-10

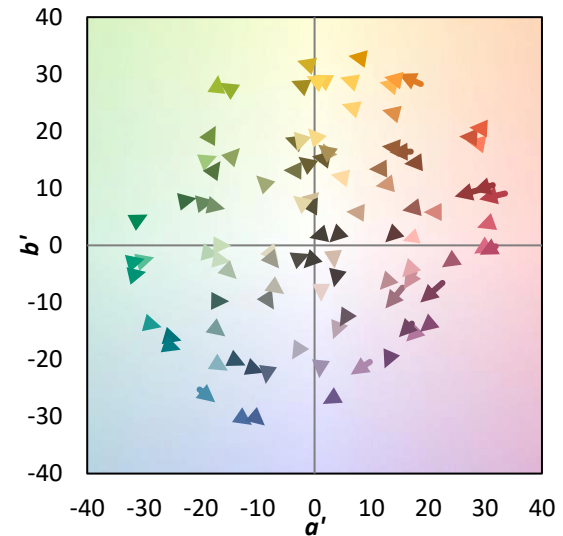
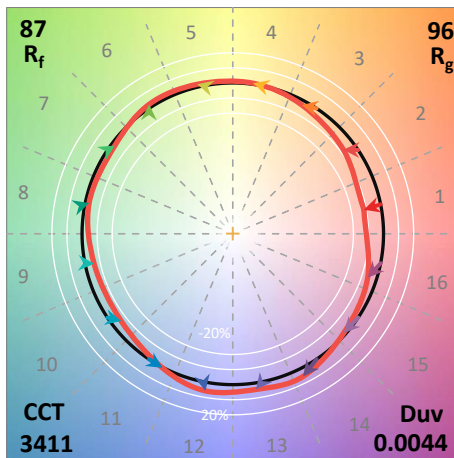
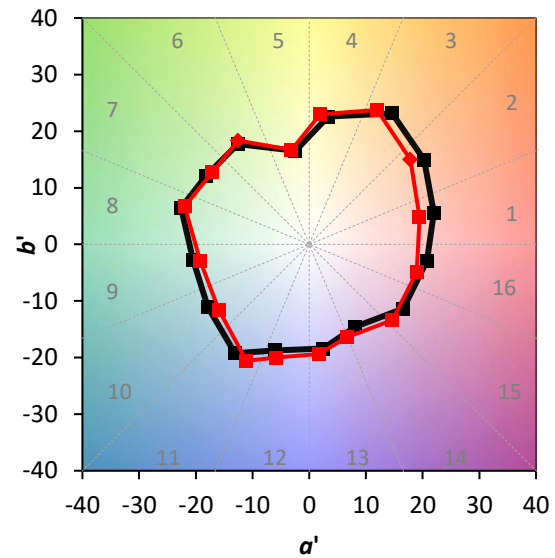
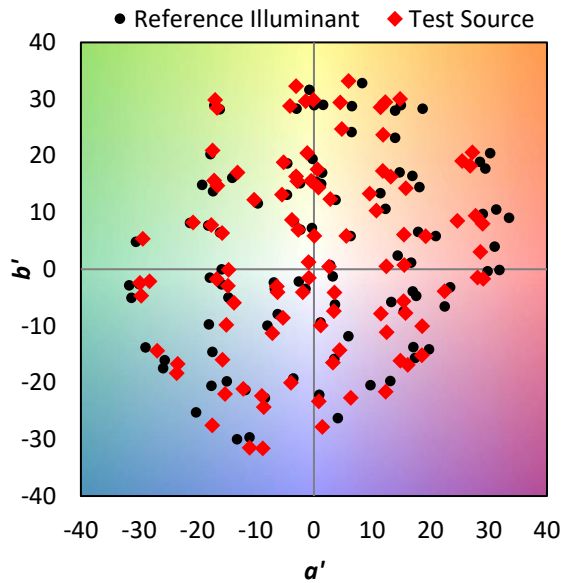
TM-30-18

Summary

$R_f = 86.6$
 $R_g = 95.9$
 $CIE\ R_a = 83.5$
 $R_9 = 6.3$

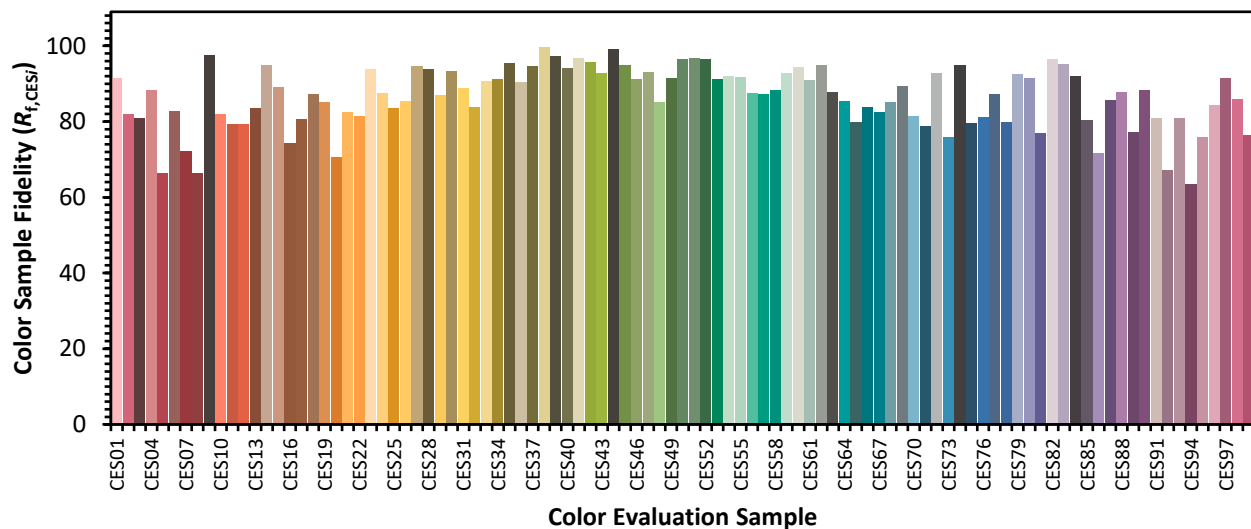


Color Vector Graphics

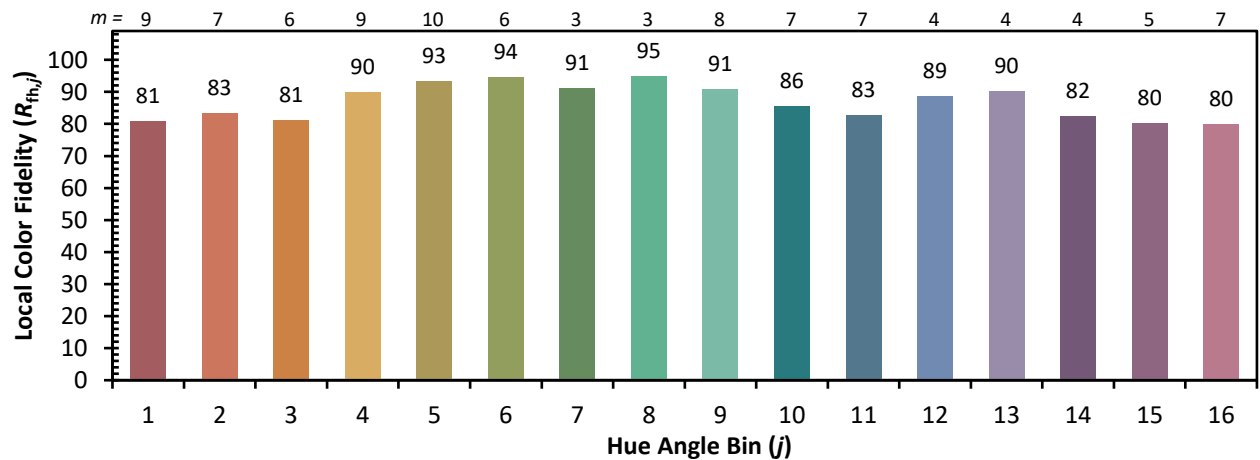
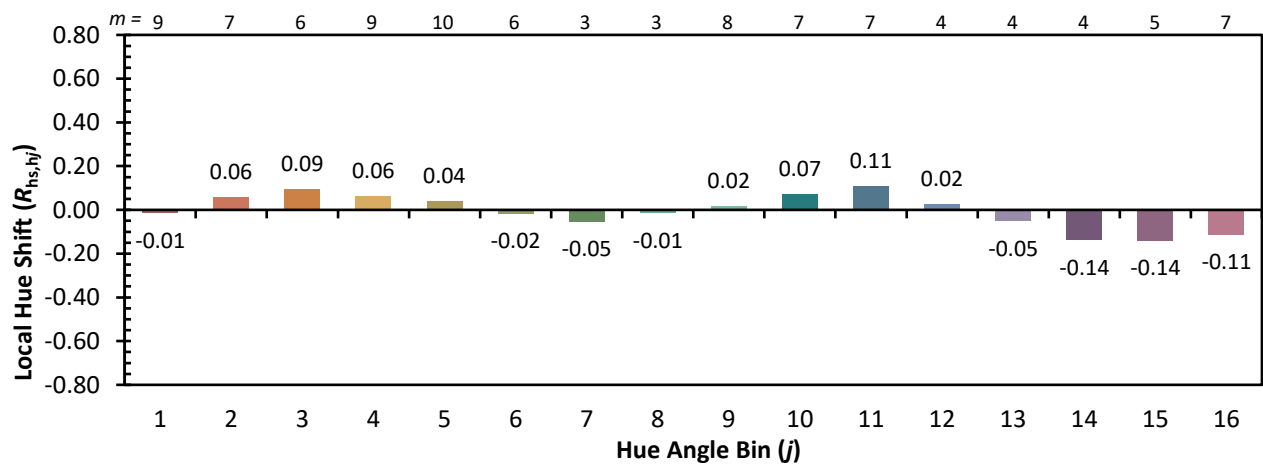
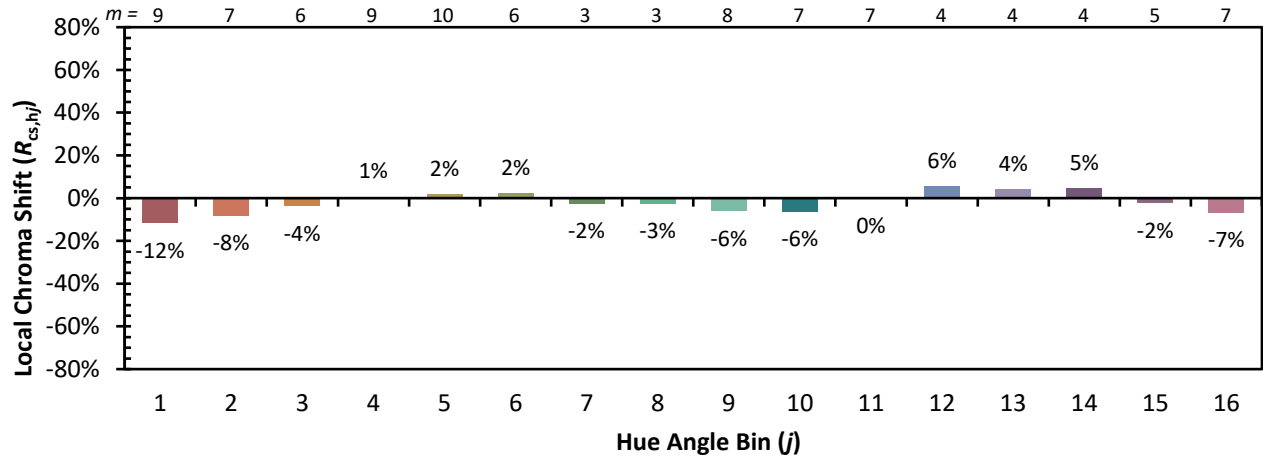


Individual Sample Fidelity Index ($R_{f,i}$)

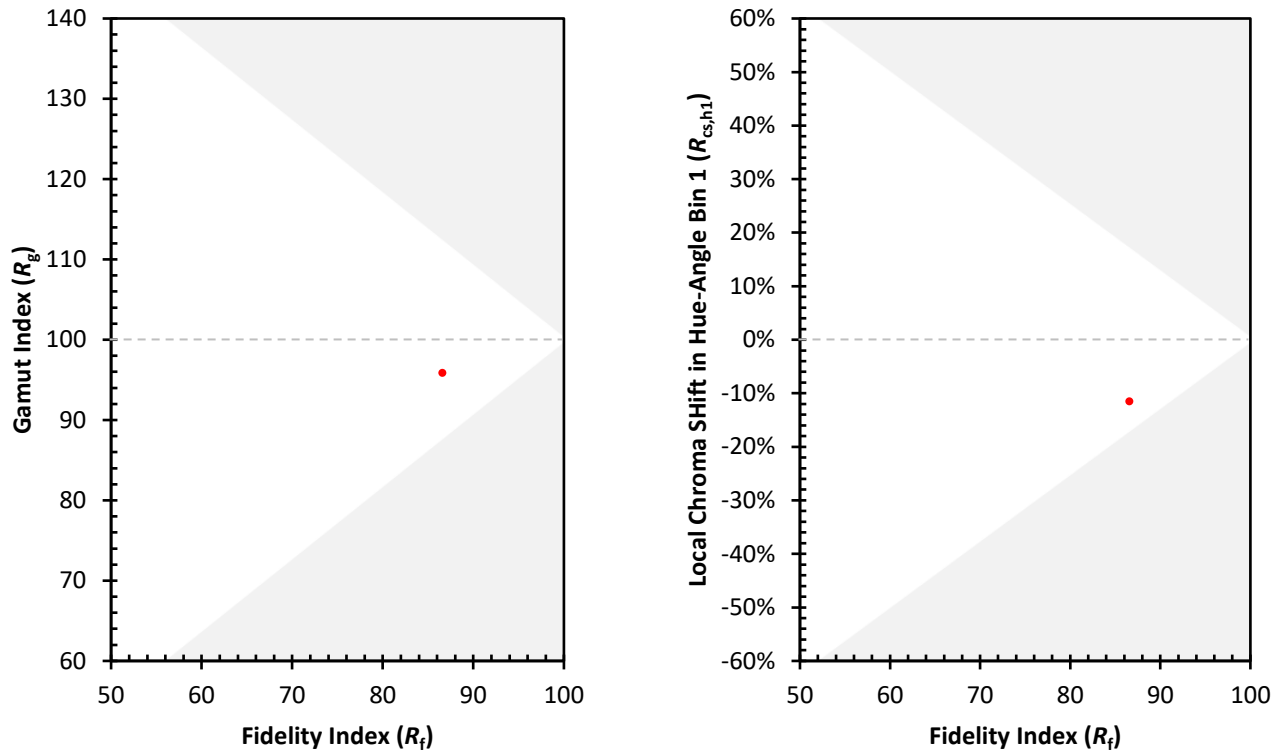
CES01 = 86	CES26 = 85	CES51 = 97	CES76 = 81
CES02 = 62	CES27 = 95	CES52 = 96	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 91	CES78 = 80
CES04 = 70	CES29 = 87	CES54 = 92	CES79 = 93
CES05 = 49	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 89	CES56 = 88	CES81 = 77
CES07 = 41	CES32 = 84	CES57 = 87	CES82 = 96
CES08 = 40	CES33 = 91	CES58 = 88	CES83 = 95
CES09 = 29	CES34 = 91	CES59 = 93	CES84 = 92
CES10 = 75	CES35 = 95	CES60 = 94	CES85 = 80
CES11 = 58	CES36 = 90	CES61 = 91	CES86 = 72
CES12 = 64	CES37 = 95	CES62 = 95	CES87 = 86
CES13 = 43	CES38 = 100	CES63 = 88	CES88 = 88
CES14 = 74	CES39 = 97	CES64 = 85	CES89 = 77
CES15 = 71	CES40 = 94	CES65 = 80	CES90 = 88
CES16 = 47	CES41 = 97	CES66 = 84	CES91 = 81
CES17 = 49	CES42 = 96	CES67 = 82	CES92 = 67
CES18 = 56	CES43 = 93	CES68 = 85	CES93 = 81
CES19 = 72	CES44 = 99	CES69 = 89	CES94 = 63
CES20 = 66	CES45 = 95	CES70 = 81	CES95 = 76
CES21 = 86	CES46 = 91	CES71 = 79	CES96 = 84
CES22 = 78	CES47 = 93	CES72 = 93	CES97 = 92
CES23 = 91	CES48 = 85	CES73 = 76	CES98 = 86
CES24 = 90	CES49 = 92	CES74 = 95	CES99 = 77
CES25 = 72	CES50 = 96	CES75 = 80	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)