

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: P1067965

Luminaire Tested: **NAV-SA1A-735-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1067965
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA1A-735-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 615mA 1xLight Square PACKAGE
70CRI 3500K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (14) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2964.6 lumens
Efficiency: N/A
Efficacy: 101.5 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): 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



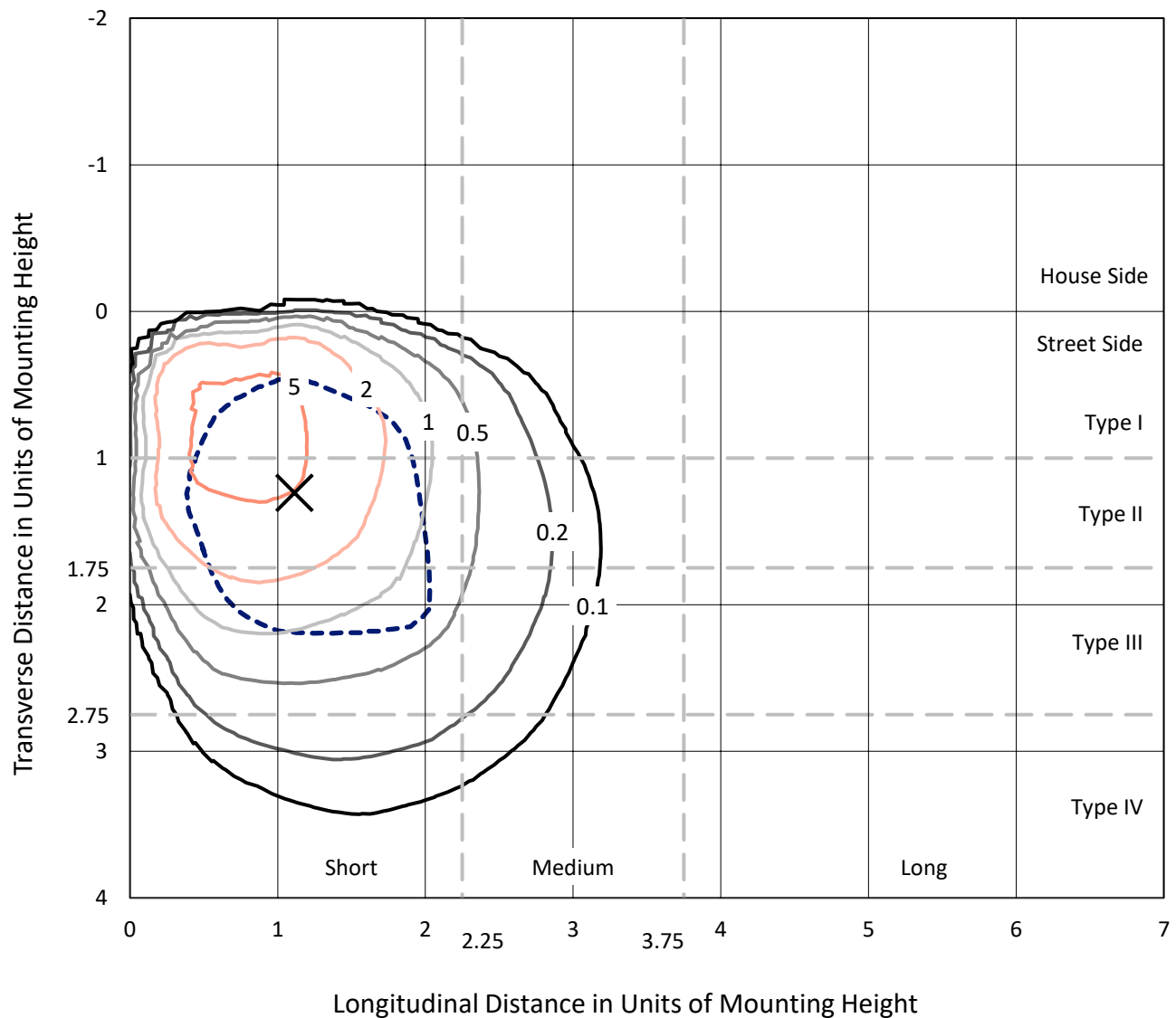
REPORT NUMBER: P1067965

CATALOG NUMBER: NAV-SA1A-735-U-LBC

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

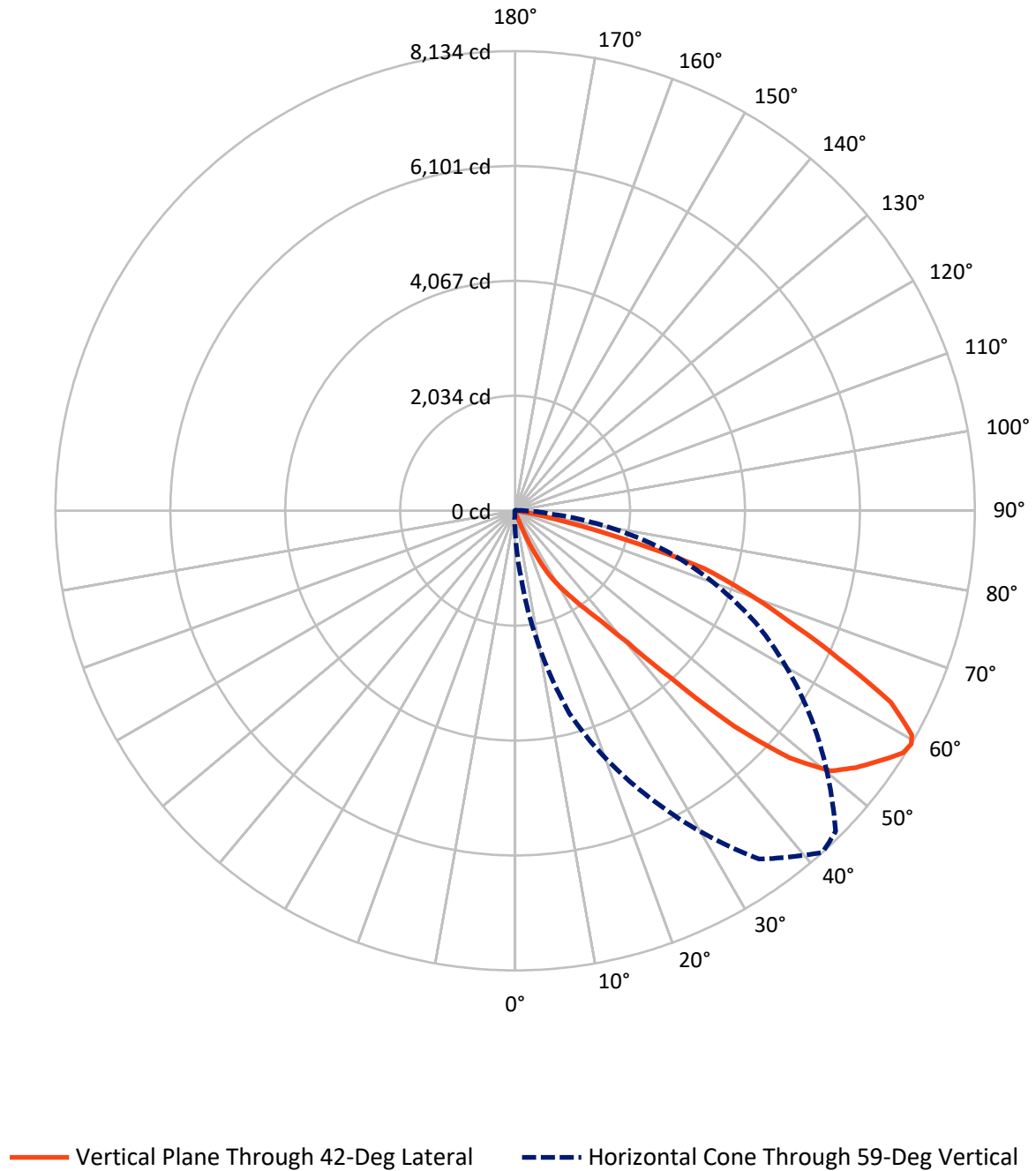


Based on 15 foot mounting height. Maximum calculated value = 8.8 fc
 Type III - Short - N/A

REPORT NUMBER: P1067965

CATALOG NUMBER: NAV-SA1A-735-U-LBC

Luminous Intensity Polar Plot



REPORT NUMBER: P1067965

CATALOG NUMBER: NAV-SA1A-735-U-LBC

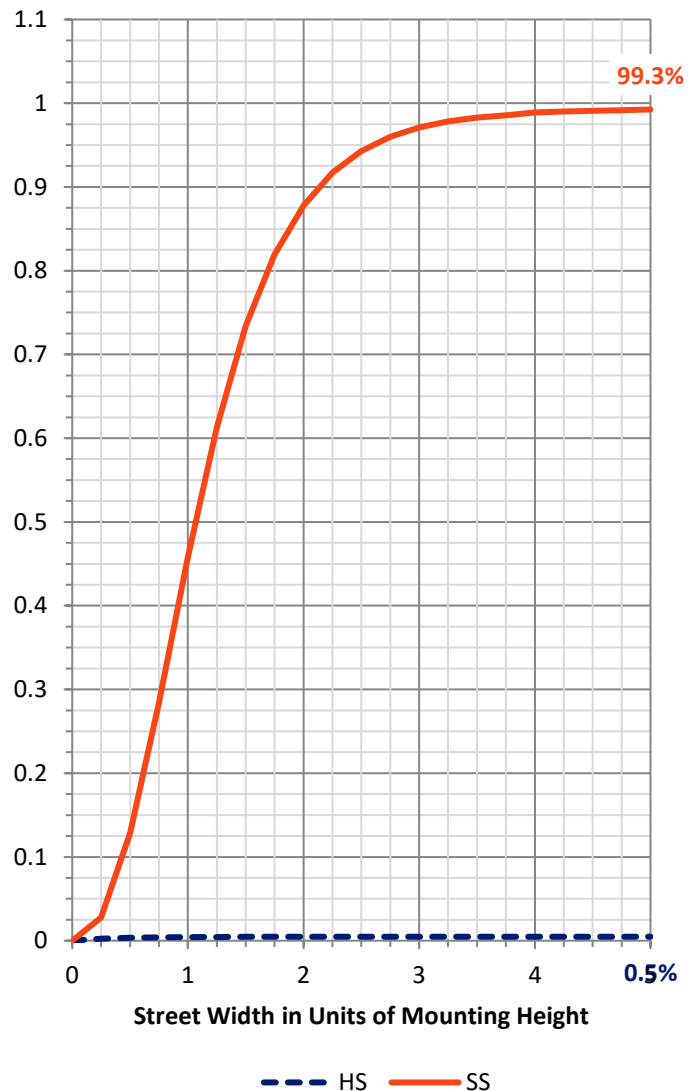
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14.3	0.0	14.3
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	2950.3	0.0	2950.3
	% Fixture	99.5	0.0	99.5
Total	Lumens	2964.6	0.0	2964.6
	% 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°	55.3	1.9
30°-40°	186.4	6.3
40°-50°	563.1	19.0
50°-60°	994.0	33.5
60°-70°	875.3	29.5
70°-80°	278.6	9.4
80°-90°	6.7	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°	2964.6	100.0
0°-180°	2964.6	100.0



REPORT NUMBER: P1067965

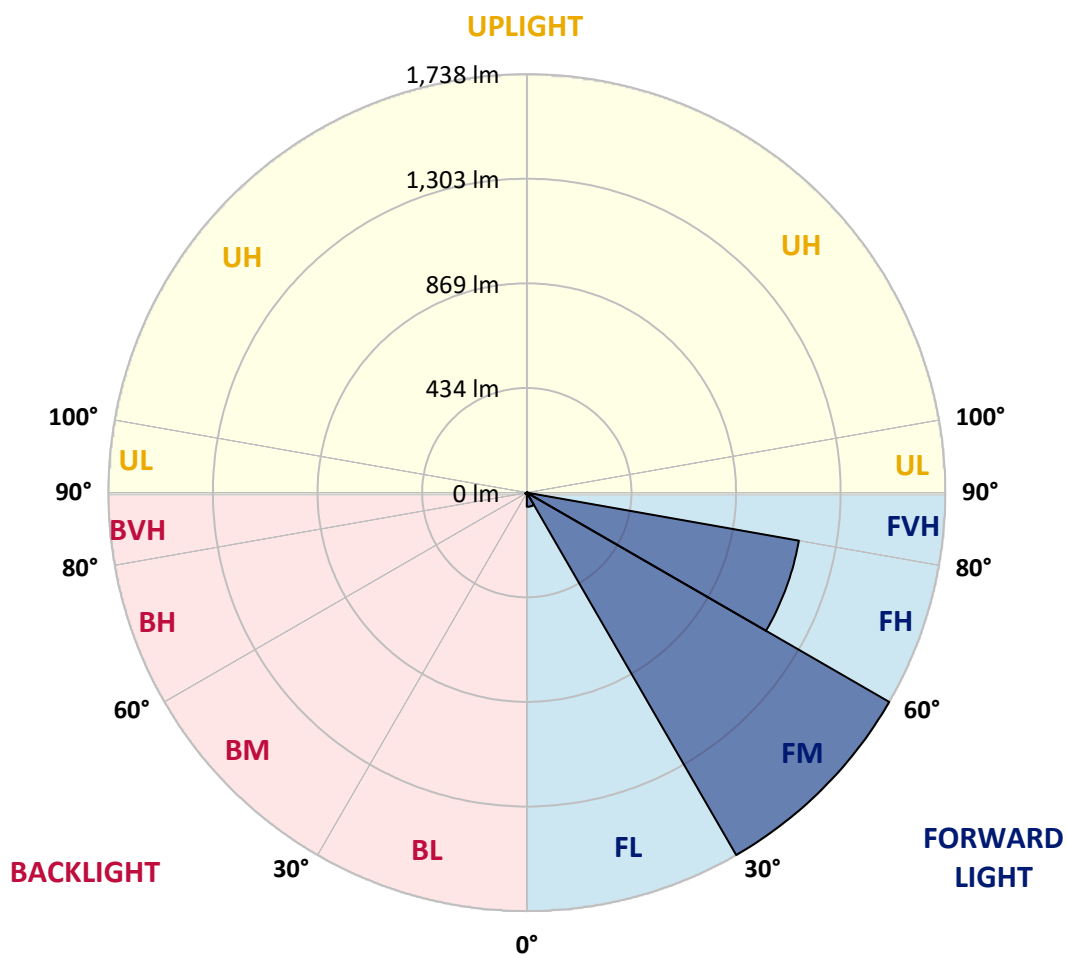
CATALOG NUMBER: NAV-SA1A-735-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	58.9	2.0			
FM	(30°-60°)	1737.7	58.6			
FH	(60°-80°)	1147.3	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



REPORT NUMBER: P1067965

CATALOG NUMBER: NAV-SA1A-735-U-LBC

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
2.5°	13.0	13.0	12.1	11.2	10.2	9.3	9.3	9.3	8.4	8.4	7.4
5°	14.9	14.9	13.9	13.0	13.0	12.1	12.1	11.2	10.2	10.2	9.3
7.5°	15.8	15.8	15.8	15.8	14.9	14.9	14.9	13.9	13.0	12.1	11.2
10°	16.7	17.7	18.6	18.6	18.6	18.6	18.6	17.7	15.8	14.9	13.0
12.5°	18.6	19.5	21.4	23.2	23.2	24.2	23.2	22.3	20.4	17.7	14.9
15°	20.4	22.3	25.1	28.8	32.5	33.5	33.5	30.7	27.0	21.4	17.7
17.5°	23.2	26.0	33.5	45.5	58.6	68.8	68.8	61.3	42.8	27.9	20.4
20°	25.1	30.7	53.9	109.7	167.3	210.1	201.7	178.5	95.7	43.7	22.3
22.5°	27.9	39.0	114.3	288.1	446.2	524.2	505.6	383.9	214.7	78.1	27.0
25°	31.6	56.7	226.8	540.0	829.1	913.7	901.6	716.6	391.3	131.1	34.4
27.5°	39.0	83.7	363.4	818.9	1223.2	1295.7	1291.1	1049.4	625.5	211.0	44.6
30°	49.3	121.8	539.1	1112.6	1484.4	1557.8	1534.6	1292.9	844.0	322.5	57.6
32.5°	61.3	170.1	698.0	1329.2	1725.1	1821.8	1793.9	1504.8	1019.7	417.3	85.5
35°	79.9	217.5	855.1	1520.6	2003.1	2125.7	2079.3	1723.3	1171.2	524.2	103.2
37.5°	89.2	245.4	999.2	1728.9	2315.4	2482.7	2447.4	1999.3	1325.5	660.9	126.4
40°	90.2	278.8	1148.9	2000.3	2756.9	3055.2	2992.0	2473.4	1612.7	836.5	162.7
42.5°	92.9	329.0	1343.1	2463.2	3624.1	4052.6	3981.0	3345.2	2264.2	1188.8	230.5
45°	106.0	423.8	1739.1	3328.5	4814.8	5443.1	5360.4	4560.1	3174.2	1851.5	393.2
47.5°	151.5	637.6	2433.4	4262.7	6032.4	6533.4	6513.0	5517.5	3998.7	2531.0	666.4
50°	243.5	978.8	3223.5	5048.1	6807.6	7238.0	7186.8	5917.1	4469.0	2994.8	854.2
52.5°	325.3	1305.0	3719.8	5337.1	7039.0	7552.1	7489.8	6063.1	4592.6	3131.5	906.3
55°	345.8	1423.1	3867.6	5426.4	7192.4	7818.0	7727.8	6160.7	4608.4	3033.9	819.8
57.5°	335.5	1311.5	3771.9	5513.7	7406.2	8091.2	7971.3	6351.2	4661.4	2868.4	682.2
59°	317.9	1173.9	3712.4	5583.5	7524.2	8134.0	8021.5	6393.0	4696.7	2793.1	598.6
60°	297.4	1081.0	3665.9	5629.0	7516.8	8067.1	7950.9	6373.5	4710.7	2728.1	558.6
62.5°	229.6	862.6	3599.0	5596.5	7047.4	7456.4	7390.4	5895.8	4506.2	2519.9	440.6
65°	178.5	659.9	3353.6	4991.4	5997.1	6272.2	6251.8	4992.3	3792.3	2172.2	317.9
67.5°	141.3	481.5	2835.9	4042.4	4825.0	5216.3	5201.4	4052.6	2878.6	1660.1	228.7
70°	115.3	343.0	1944.5	3047.8	3859.3	4351.9	4330.5	3261.6	2133.2	1053.1	166.4
72.5°	97.6	219.4	1179.5	2297.7	3220.7	3502.3	3440.0	2631.4	1551.3	573.5	132.0
75°	82.7	134.8	584.7	1432.3	1918.5	1916.6	1854.3	1393.3	832.8	280.7	105.0
77.5°	66.9	94.8	229.6	393.2	605.1	749.2	737.1	493.6	249.1	81.8	65.1
80°	43.7	44.6	61.3	107.8	166.4	184.0	209.1	150.6	72.5	39.0	27.0
82.5°	19.5	21.4	27.9	35.3	35.3	32.5	28.8	21.4	15.8	13.0	6.5
85°	4.6	6.5	4.6	5.6	4.6	3.7	3.7	1.9	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



REPORT NUMBER: P1067965

CATALOG NUMBER: NAV-SA1A-735-U-LBC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
2.5°	7.4	7.4	7.4	6.5	6.5	6.5	5.6	5.6	5.6	4.6	4.6
5°	9.3	8.4	7.4	7.4	6.5	6.5	5.6	4.6	4.6	4.6	3.7
7.5°	10.2	9.3	8.4	7.4	6.5	5.6	5.6	4.6	3.7	3.7	3.7
10°	12.1	11.2	9.3	7.4	6.5	5.6	4.6	4.6	3.7	2.8	2.8
12.5°	13.9	12.1	10.2	8.4	6.5	5.6	4.6	4.6	3.7	2.8	1.9
15°	15.8	13.9	11.2	8.4	6.5	5.6	4.6	4.6	2.8	1.9	0.9
17.5°	17.7	14.9	11.2	9.3	6.5	5.6	4.6	3.7	1.9	0.9	0.0
20°	18.6	15.8	12.1	9.3	6.5	5.6	4.6	2.8	0.9	0.0	0.0
22.5°	20.4	17.7	13.0	9.3	6.5	4.6	2.8	0.9	0.0	0.0	0.0
25°	24.2	18.6	13.0	9.3	6.5	4.6	1.9	0.0	0.0	0.0	0.0
27.5°	27.0	20.4	13.0	9.3	6.5	3.7	0.9	0.0	0.0	0.0	0.0
30°	31.6	22.3	13.9	9.3	6.5	2.8	0.9	0.0	0.0	0.0	0.0
32.5°	39.0	24.2	13.9	9.3	5.6	2.8	0.0	0.0	0.0	0.0	0.0
35°	47.4	27.9	13.9	9.3	5.6	2.8	0.0	0.0	0.0	0.0	0.0
37.5°	48.3	29.7	13.9	9.3	5.6	1.9	0.0	0.0	0.0	0.0	0.0
40°	50.2	27.9	14.9	9.3	5.6	1.9	0.0	0.0	0.0	0.0	0.0
42.5°	57.6	26.0	15.8	9.3	5.6	1.9	0.0	0.0	0.0	0.0	0.0
45°	85.5	27.0	15.8	10.2	5.6	2.8	0.0	0.0	0.0	0.0	0.0
47.5°	148.7	27.9	14.9	10.2	5.6	2.8	0.0	0.0	0.0	0.0	0.0
50°	190.5	32.5	14.9	11.2	6.5	1.9	0.0	0.0	0.0	0.0	0.0
52.5°	202.6	38.1	14.9	12.1	8.4	0.9	0.0	0.0	0.0	0.0	0.0
55°	197.1	44.6	15.8	13.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	182.2	48.3	16.7	13.9	11.2	0.0	0.0	0.0	0.0	0.0	0.0
59°	166.4	51.1	19.5	14.9	11.2	0.0	0.0	0.0	0.0	0.0	0.0
60°	153.4	53.9	20.4	15.8	11.2	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	123.6	57.6	22.3	18.6	9.3	0.0	0.0	0.0	0.0	0.0	0.0
65°	107.8	60.4	23.2	20.4	8.4	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	98.5	62.3	25.1	21.4	7.4	0.0	0.0	0.0	0.0	0.0	0.0
70°	91.1	61.3	27.0	20.4	6.5	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	82.7	58.6	32.5	18.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	74.4	53.0	35.3	16.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	53.9	44.6	32.5	14.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	23.2	24.2	23.2	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	4.6	5.6	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



REPORT NUMBER: P1067965

CATALOG NUMBER: NAV-SA1A-735-U-LBC

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
2.5°	4.6	4.6	4.6	4.6	5.6	5.6	7.4	9.3	11.2	12.1	12.1
5°	3.7	3.7	3.7	3.7	3.7	4.6	5.6	7.4	10.2	11.2	11.2
7.5°	2.8	2.8	2.8	2.8	2.8	2.8	4.6	6.5	9.3	10.2	11.2
10°	2.8	1.9	1.9	0.9	0.9	1.9	2.8	5.6	8.4	9.3	10.2
12.5°	1.9	0.9	0.9	0.0	0.0	0.9	1.9	4.6	7.4	8.4	9.3
15°	0.9	0.0	0.0	0.0	0.0	0.0	0.9	3.7	6.5	7.4	9.3
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	5.6	7.4	8.4
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	4.6	6.5	7.4
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	3.7	5.6	6.5
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	1.9	2.8	3.7
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.8	3.7
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9	2.8
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9	2.8
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9	1.9
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9
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	1.9
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9
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

REPORT NUMBER: P1067965

CATALOG NUMBER: NAV-SA1A-735-U-LBC

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	318°	325°	335°	345°	355°	360°
0°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
2.5°	13.0	13.0	12.1	11.2	11.2	11.2	12.1	13.0	13.0	13.0
5°	12.1	12.1	11.2	11.2	11.2	11.2	12.1	13.9	14.9	14.9
7.5°	12.1	12.1	11.2	11.2	11.2	11.2	12.1	13.9	14.9	15.8
10°	11.2	11.2	11.2	11.2	10.2	11.2	12.1	13.9	16.7	16.7
12.5°	11.2	11.2	11.2	11.2	10.2	11.2	13.0	14.9	17.7	18.6
15°	11.2	11.2	11.2	10.2	10.2	11.2	13.0	15.8	18.6	20.4
17.5°	10.2	11.2	11.2	10.2	10.2	11.2	13.0	15.8	20.4	23.2
20°	9.3	10.2	11.2	10.2	10.2	10.2	13.0	15.8	21.4	25.1
22.5°	8.4	9.3	10.2	10.2	9.3	10.2	13.0	16.7	23.2	27.9
25°	7.4	8.4	8.4	9.3	9.3	10.2	13.0	16.7	24.2	31.6
27.5°	5.6	6.5	7.4	8.4	8.4	10.2	13.0	17.7	26.0	39.0
30°	4.6	5.6	6.5	7.4	8.4	10.2	13.0	17.7	27.9	49.3
32.5°	4.6	5.6	6.5	7.4	8.4	9.3	13.0	18.6	30.7	61.3
35°	3.7	4.6	5.6	7.4	7.4	9.3	13.0	18.6	33.5	79.9
37.5°	3.7	4.6	5.6	7.4	7.4	9.3	13.0	18.6	40.9	89.2
40°	2.8	3.7	4.6	7.4	7.4	9.3	13.9	19.5	41.8	90.2
42.5°	2.8	3.7	4.6	6.5	7.4	9.3	13.9	19.5	39.0	92.9
45°	2.8	3.7	4.6	7.4	8.4	10.2	13.9	20.4	38.1	106.0
47.5°	2.8	3.7	4.6	7.4	9.3	10.2	13.9	20.4	39.0	151.5
50°	2.8	3.7	4.6	7.4	10.2	10.2	13.9	20.4	42.8	243.5
52.5°	1.9	2.8	3.7	6.5	8.4	11.2	14.9	19.5	45.5	325.3
55°	1.9	1.9	2.8	5.6	7.4	12.1	15.8	19.5	53.0	345.8
57.5°	1.9	1.9	2.8	4.6	6.5	13.0	16.7	19.5	61.3	335.5
59°	1.9	1.9	1.9	4.6	5.6	13.0	16.7	20.4	62.3	317.9
60°	1.9	1.9	1.9	3.7	5.6	13.0	17.7	21.4	63.2	297.4
62.5°	0.9	0.9	0.9	3.7	4.6	13.0	19.5	26.0	65.1	229.6
65°	1.9	1.9	0.9	2.8	4.6	11.2	22.3	27.9	66.0	178.5
67.5°	1.9	1.9	1.9	3.7	4.6	11.2	23.2	28.8	66.0	141.3
70°	1.9	1.9	1.9	3.7	5.6	11.2	23.2	29.7	65.1	115.3
72.5°	1.9	1.9	1.9	3.7	5.6	10.2	21.4	30.7	62.3	97.6
75°	1.9	1.9	1.9	2.8	4.6	9.3	20.4	33.5	56.7	82.7
77.5°	1.9	1.9	1.9	1.9	3.7	7.4	18.6	37.2	50.2	66.9
80°	2.8	1.9	1.9	1.9	2.8	6.5	17.7	36.3	41.8	43.7
82.5°	2.8	1.9	1.9	0.9	1.9	4.6	13.9	27.9	21.4	19.5
85°	1.9	1.9	1.9	0.9	0.9	2.8	6.5	8.4	6.5	4.6
87.5°	1.9	1.9	1.9	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: SP1-2407-184-5

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-735-U-5WQ

Data in this report applies to families of products including GSS-SB1A-735-U-5WQ

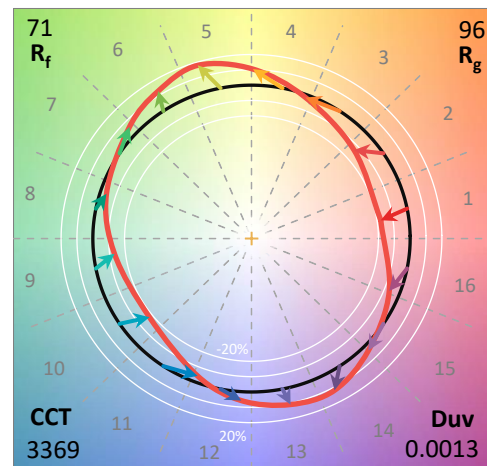
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-5
 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-735-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3500K CCT 26 LEDS

Spectral Parameters

CCT (K): 3369
 CIE u' : 0.2386
 CIE v' : 0.5156
 Duv: 0.0013
 CIE x: 0.4143
 CIE y: 0.3980
 CIE z: 0.1877
 Peak Wavelength (nm): 590
 Dominant Wavelength (nm): 580
 Purity: 43.80166
 R_f: 71.4
 R_g: 96

CRI (Ra): 70.1
 R1: 66.6
 R2: 77.6
 R3: 88.5
 R4: 69.5
 R5: 66.4
 R6: 69.6
 R7: 77.5
 R8: 44.9
 R9: -40.2
 R10: 49.1
 R11: 66.3
 R12: 45.7
 R13: 68.0
 R14: 93.4
 R15: 57.6



Test Conditions

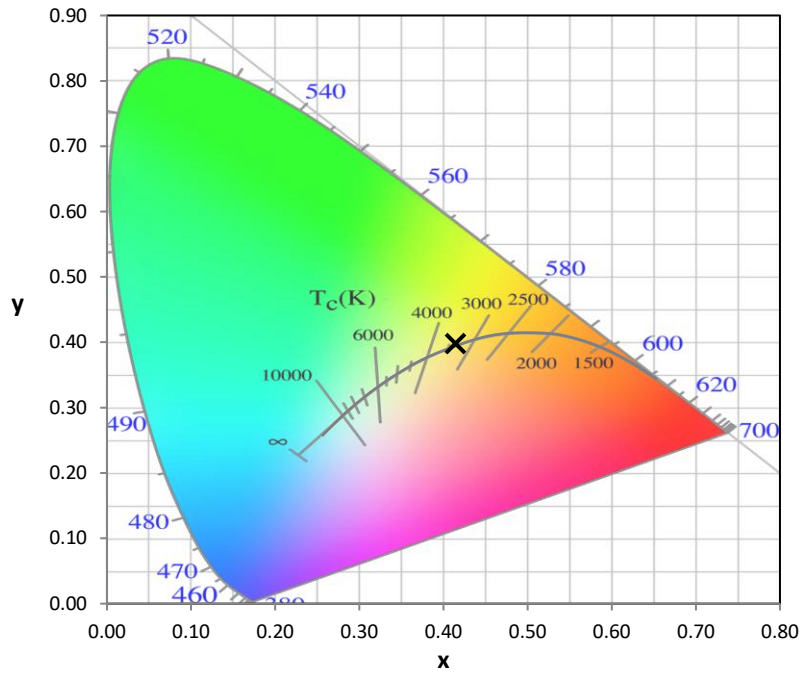
Stabilization Time: 21M
 Operation Time: 1H 21M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-5

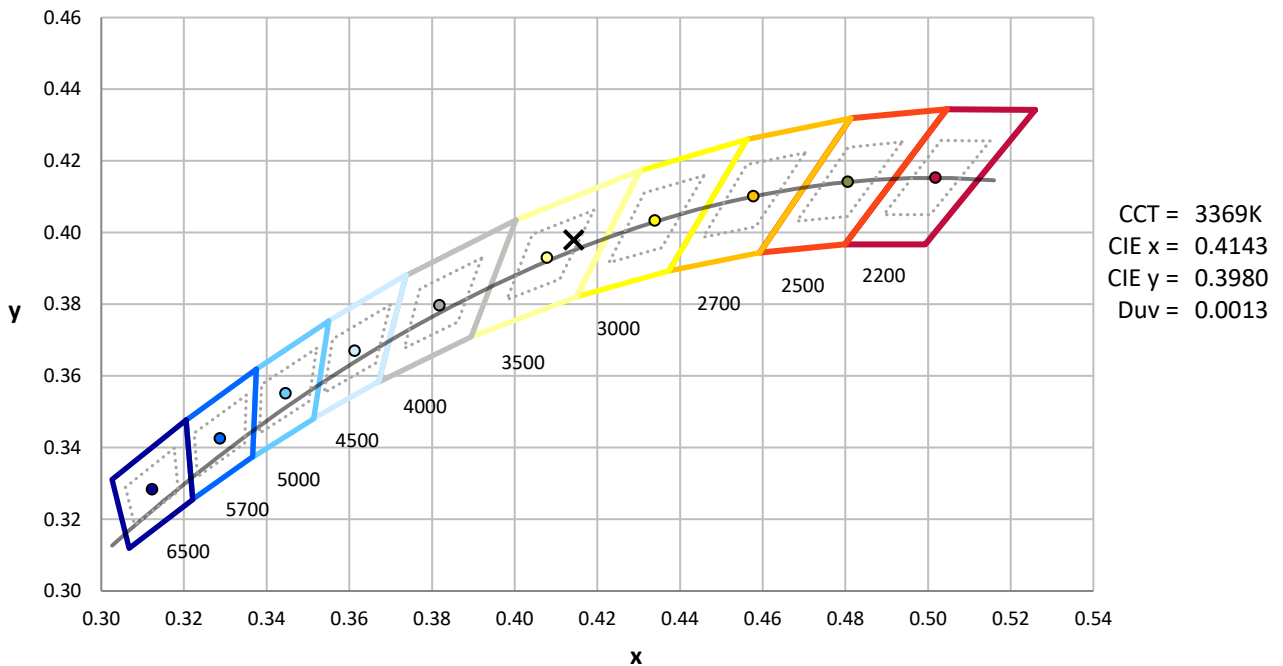
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-5

CIE 1931 Chromaticity Diagram



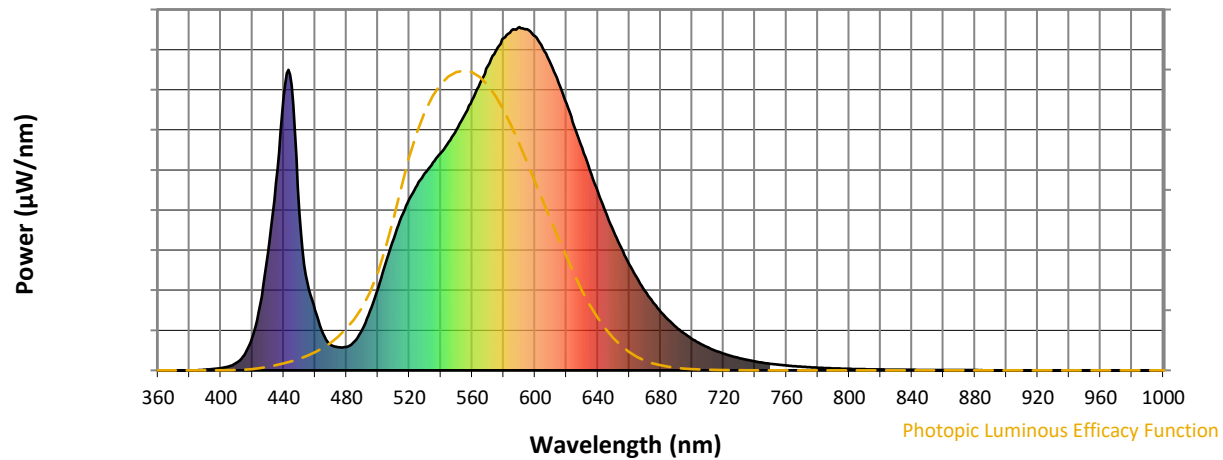
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-5

Photopic Flux vs. Wavelength

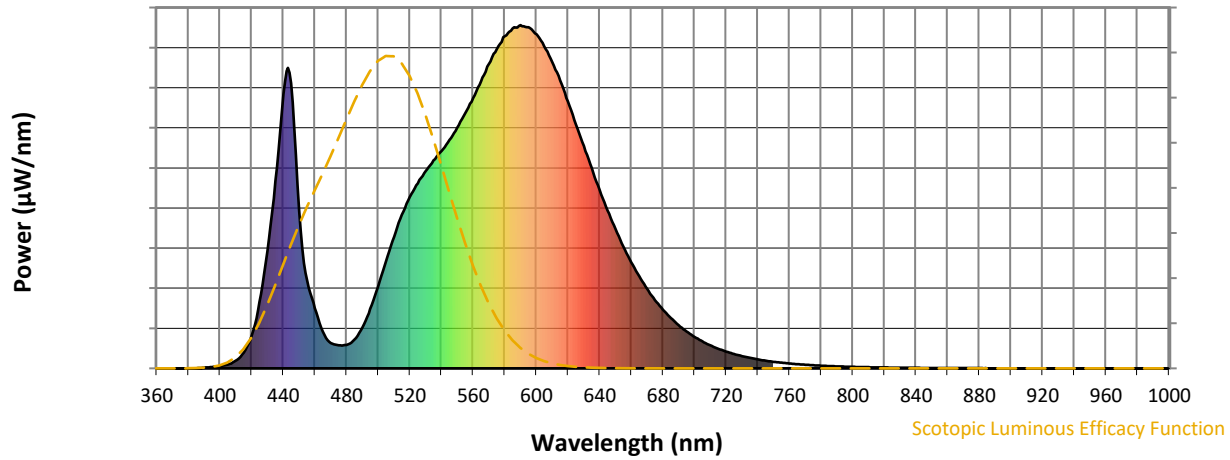


Photopic Lumens: NR

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	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	648	NR	760	14	NR	890	0	NR
375	0	NR	505	313	NR	635	582	NR	765	12	NR	895	0	NR
380	0	NR	510	383	NR	640	520	NR	770	11	NR	900	0	NR
385	0	NR	515	448	NR	645	460	NR	775	9	NR	905	0	NR
390	2	NR	520	500	NR	650	406	NR	780	8	NR	910	0	NR
395	4	NR	525	539	NR	655	355	NR	785	7	NR	915	0	NR
400	6	NR	530	575	NR	660	309	NR	790	6	NR	920	0	NR
405	11	NR	535	606	NR	665	269	NR	795	5	NR	925	0	NR
410	22	NR	540	633	NR	670	231	NR	800	4	NR	930	0	NR
415	45	NR	545	666	NR	675	199	NR	805	4	NR	935	0	NR
420	96	NR	550	701	NR	680	171	NR	810	3	NR	940	0	NR
425	193	NR	555	743	NR	685	147	NR	815	3	NR	945	0	NR
430	341	NR	560	788	NR	690	126	NR	820	3	NR	950	0	NR
435	547	NR	565	837	NR	695	107	NR	825	2	NR	955	0	NR
440	799	NR	570	887	NR	700	92	NR	830	2	NR	960	0	NR
445	831	NR	575	931	NR	705	78	NR	835	2	NR	965	0	NR
450	461	NR	580	967	NR	710	67	NR	840	2	NR	970	0	NR
455	256	NR	585	990	NR	715	57	NR	845	1	NR	975	0	NR
460	176	NR	590	1000	NR	720	49	NR	850	1	NR	980	0	NR
465	107	NR	595	994	NR	725	42	NR	855	1	NR	985	0	NR
470	74	NR	600	973	NR	730	36	NR	860	1	NR	990	0	NR
475	67	NR	605	938	NR	735	31	NR	865	1	NR	995	0	NR
480	68	NR	610	892	NR	740	26	NR	870	1	NR	1000	0	NR
485	84	NR	615	838	NR	745	22	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-5

Scotopic Flux vs. Wavelength



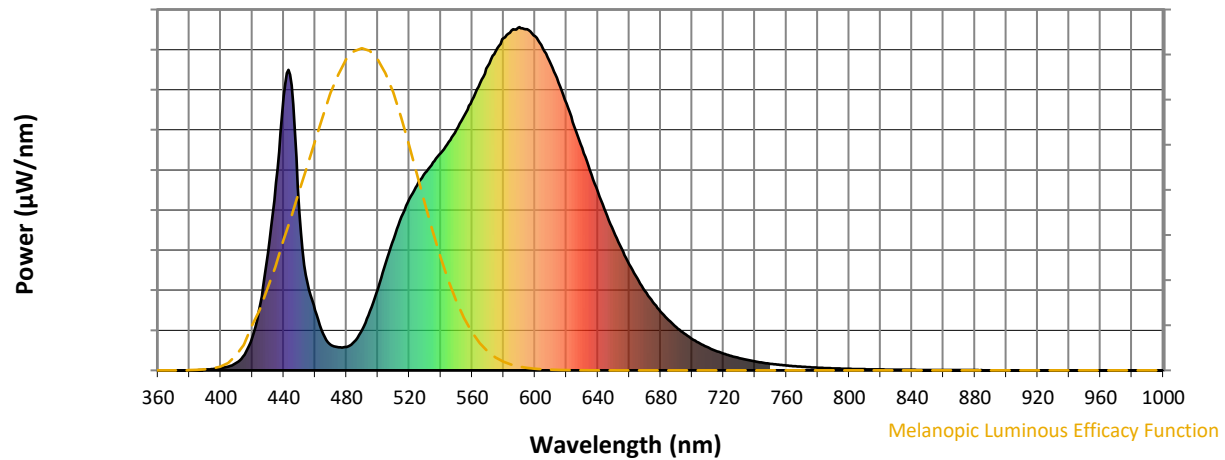
Scotopic Lumens: NR

S/P: 1.29

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	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	648	NR	760	14	NR	890	0	NR
375	0	NR	505	313	NR	635	582	NR	765	12	NR	895	0	NR
380	0	NR	510	383	NR	640	520	NR	770	11	NR	900	0	NR
385	0	NR	515	448	NR	645	460	NR	775	9	NR	905	0	NR
390	2	NR	520	500	NR	650	406	NR	780	8	NR	910	0	NR
395	4	NR	525	539	NR	655	355	NR	785	7	NR	915	0	NR
400	6	NR	530	575	NR	660	309	NR	790	6	NR	920	0	NR
405	11	NR	535	606	NR	665	269	NR	795	5	NR	925	0	NR
410	22	NR	540	633	NR	670	231	NR	800	4	NR	930	0	NR
415	45	NR	545	666	NR	675	199	NR	805	4	NR	935	0	NR
420	96	NR	550	701	NR	680	171	NR	810	3	NR	940	0	NR
425	193	NR	555	743	NR	685	147	NR	815	3	NR	945	0	NR
430	341	NR	560	788	NR	690	126	NR	820	3	NR	950	0	NR
435	547	NR	565	837	NR	695	107	NR	825	2	NR	955	0	NR
440	799	NR	570	887	NR	700	92	NR	830	2	NR	960	0	NR
445	831	NR	575	931	NR	705	78	NR	835	2	NR	965	0	NR
450	461	NR	580	967	NR	710	67	NR	840	2	NR	970	0	NR
455	256	NR	585	990	NR	715	57	NR	845	1	NR	975	0	NR
460	176	NR	590	1000	NR	720	49	NR	850	1	NR	980	0	NR
465	107	NR	595	994	NR	725	42	NR	855	1	NR	985	0	NR
470	74	NR	600	973	NR	730	36	NR	860	1	NR	990	0	NR
475	67	NR	605	938	NR	735	31	NR	865	1	NR	995	0	NR
480	68	NR	610	892	NR	740	26	NR	870	1	NR	1000	0	NR
485	84	NR	615	838	NR	745	22	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-5

Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.36

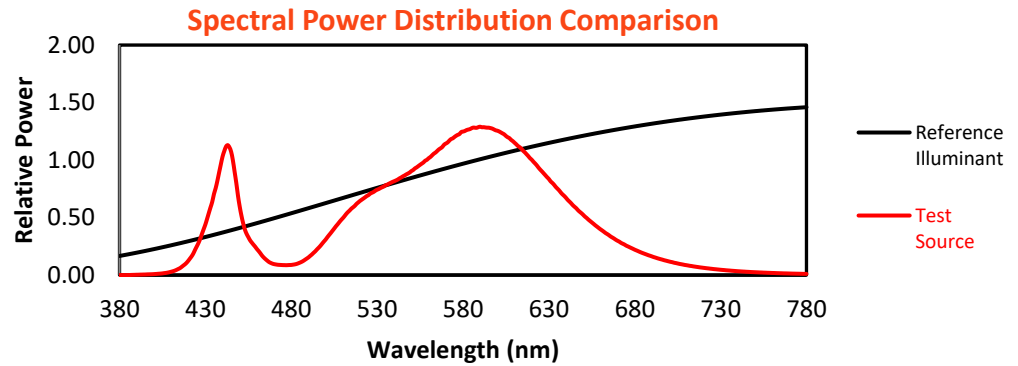
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	648	NR	760	14	NR	890	0	NR
375	0	NR	505	313	NR	635	582	NR	765	12	NR	895	0	NR
380	0	NR	510	383	NR	640	520	NR	770	11	NR	900	0	NR
385	0	NR	515	448	NR	645	460	NR	775	9	NR	905	0	NR
390	2	NR	520	500	NR	650	406	NR	780	8	NR	910	0	NR
395	4	NR	525	539	NR	655	355	NR	785	7	NR	915	0	NR
400	6	NR	530	575	NR	660	309	NR	790	6	NR	920	0	NR
405	11	NR	535	606	NR	665	269	NR	795	5	NR	925	0	NR
410	22	NR	540	633	NR	670	231	NR	800	4	NR	930	0	NR
415	45	NR	545	666	NR	675	199	NR	805	4	NR	935	0	NR
420	96	NR	550	701	NR	680	171	NR	810	3	NR	940	0	NR
425	193	NR	555	743	NR	685	147	NR	815	3	NR	945	0	NR
430	341	NR	560	788	NR	690	126	NR	820	3	NR	950	0	NR
435	547	NR	565	837	NR	695	107	NR	825	2	NR	955	0	NR
440	799	NR	570	887	NR	700	92	NR	830	2	NR	960	0	NR
445	831	NR	575	931	NR	705	78	NR	835	2	NR	965	0	NR
450	461	NR	580	967	NR	710	67	NR	840	2	NR	970	0	NR
455	256	NR	585	990	NR	715	57	NR	845	1	NR	975	0	NR
460	176	NR	590	1000	NR	720	49	NR	850	1	NR	980	0	NR
465	107	NR	595	994	NR	725	42	NR	855	1	NR	985	0	NR
470	74	NR	600	973	NR	730	36	NR	860	1	NR	990	0	NR
475	67	NR	605	938	NR	735	31	NR	865	1	NR	995	0	NR
480	68	NR	610	892	NR	740	26	NR	870	1	NR	1000	0	NR
485	84	NR	615	838	NR	745	22	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-5

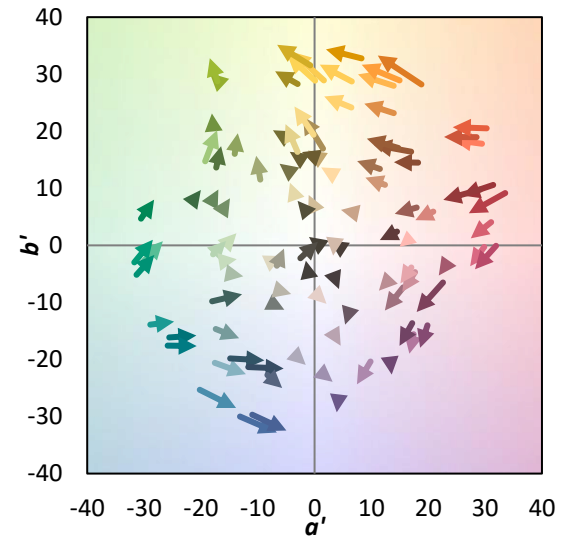
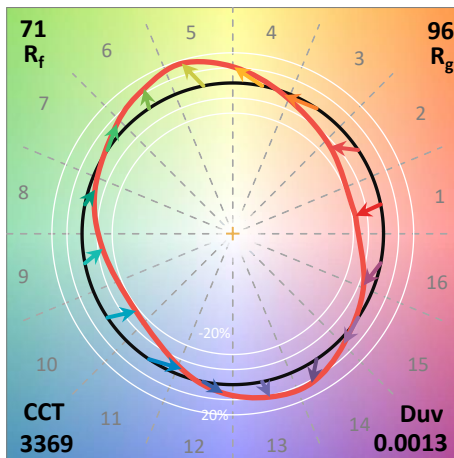
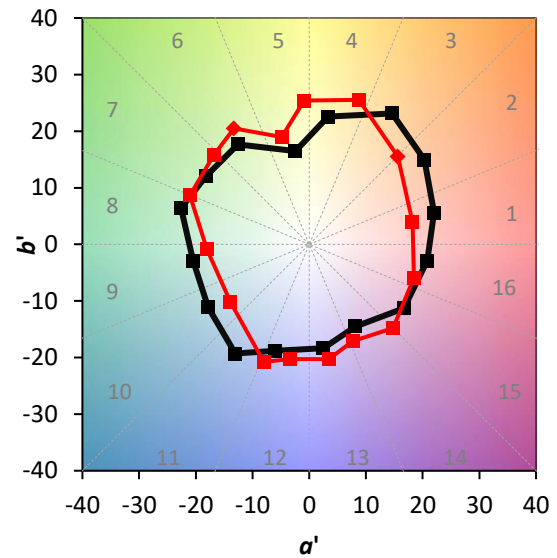
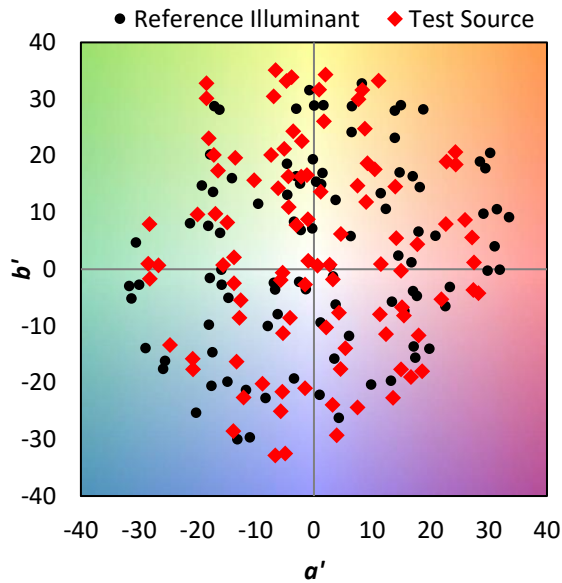
TM-30-18

Summary

$R_f = 71.4$
 $R_g = 96$
 $CIE R_a = 70.1$
 $R_g = -40.2$

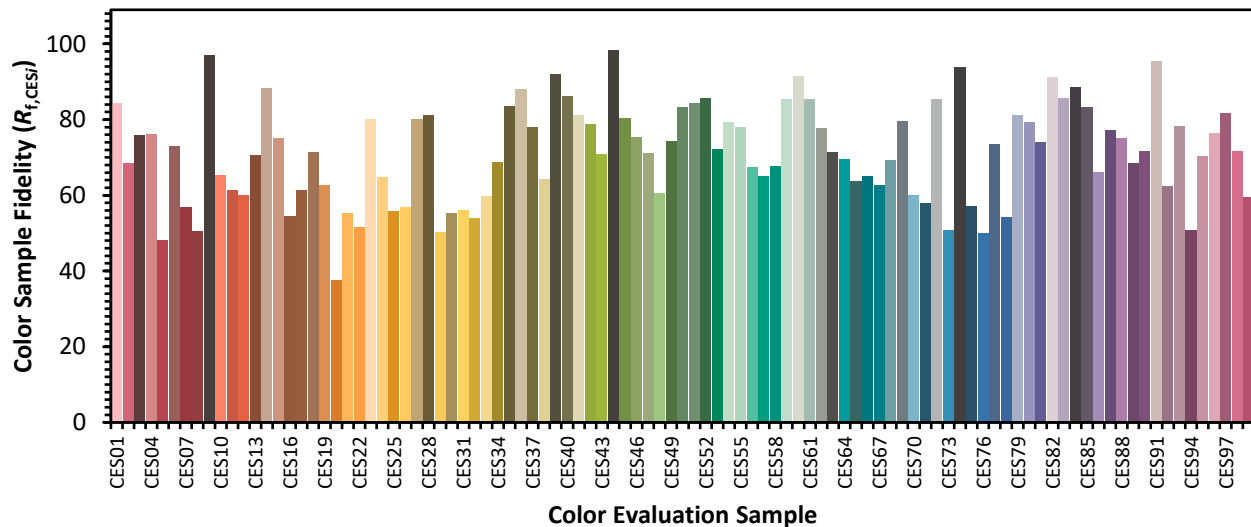


Color Vector Graphics

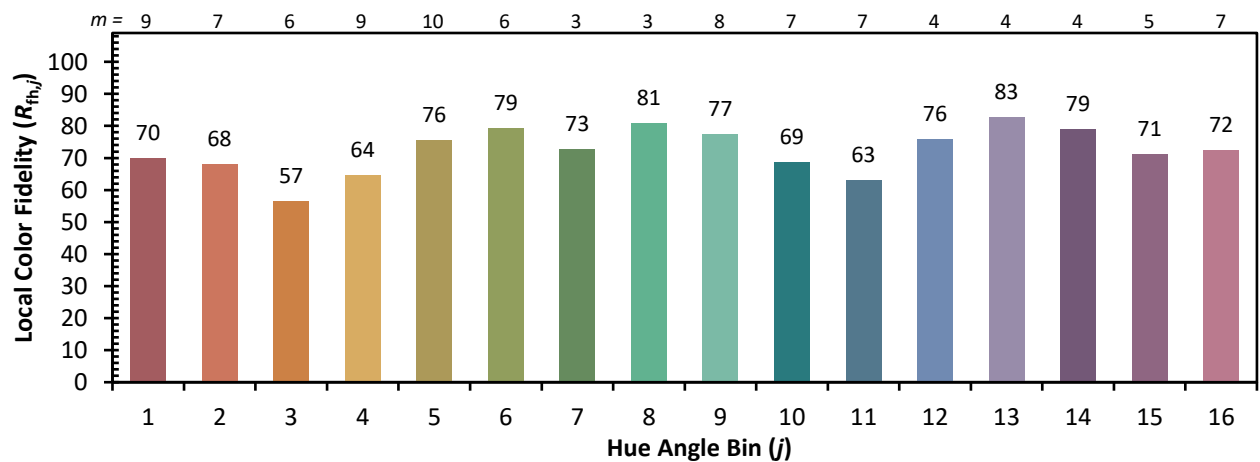
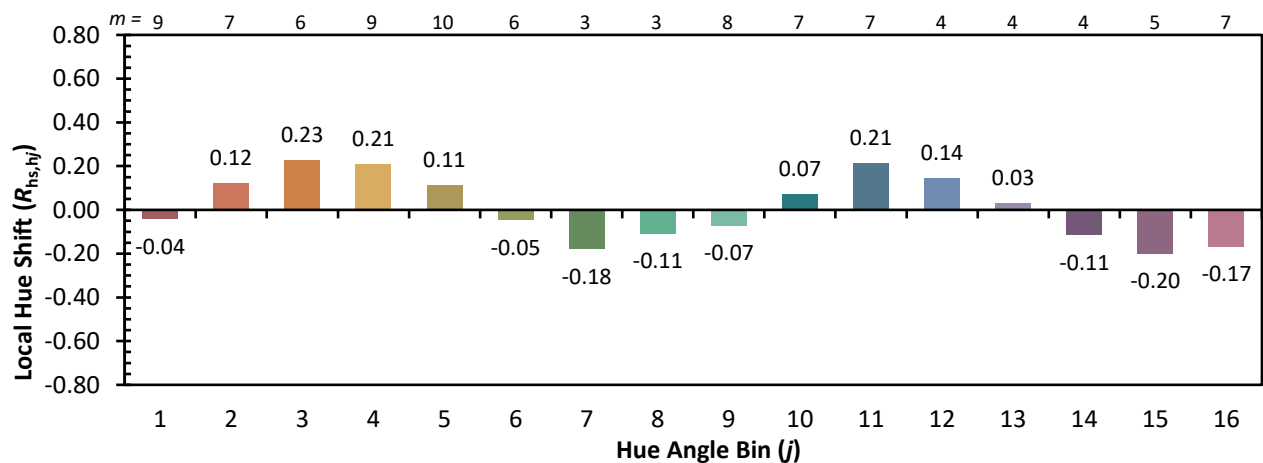
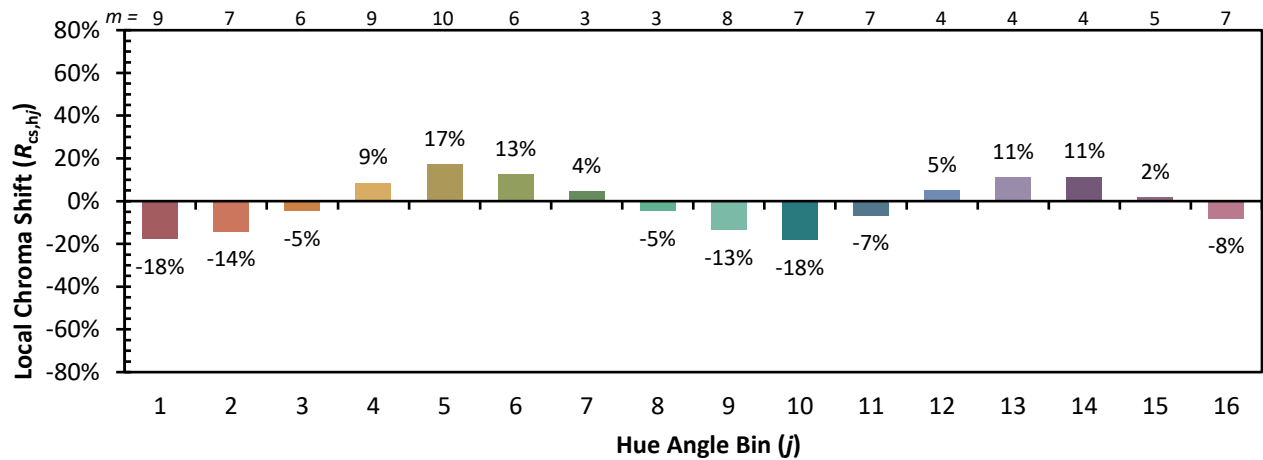


Individual Sample Fidelity Index ($R_{f,i}$)

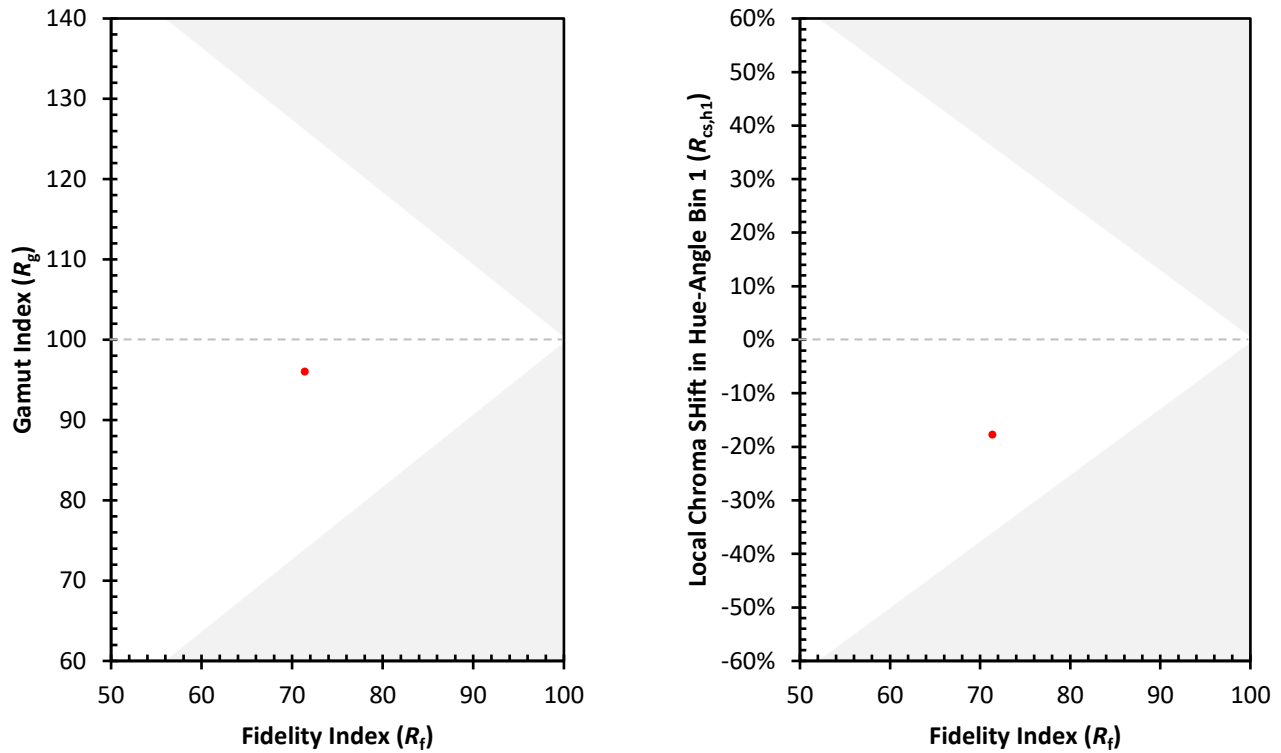
CES01 = 86	CES26 = 57	CES51 = 84	CES76 = 50
CES02 = 62	CES27 = 80	CES52 = 86	CES77 = 74
CES03 = 31	CES28 = 81	CES53 = 72	CES78 = 54
CES04 = 70	CES29 = 50	CES54 = 79	CES79 = 81
CES05 = 48	CES30 = 55	CES55 = 78	CES80 = 79
CES06 = 51	CES31 = 56	CES56 = 67	CES81 = 74
CES07 = 40	CES32 = 54	CES57 = 65	CES82 = 91
CES08 = 39	CES33 = 60	CES58 = 68	CES83 = 86
CES09 = 29	CES34 = 69	CES59 = 85	CES84 = 89
CES10 = 75	CES35 = 83	CES60 = 91	CES85 = 83
CES11 = 58	CES36 = 88	CES61 = 85	CES86 = 66
CES12 = 64	CES37 = 78	CES62 = 78	CES87 = 77
CES13 = 43	CES38 = 64	CES63 = 71	CES88 = 75
CES14 = 74	CES39 = 92	CES64 = 70	CES89 = 68
CES15 = 71	CES40 = 86	CES65 = 64	CES90 = 72
CES16 = 47	CES41 = 81	CES66 = 65	CES91 = 95
CES17 = 50	CES42 = 79	CES67 = 63	CES92 = 62
CES18 = 56	CES43 = 71	CES68 = 69	CES93 = 78
CES19 = 72	CES44 = 98	CES69 = 80	CES94 = 51
CES20 = 65	CES45 = 80	CES70 = 60	CES95 = 70
CES21 = 87	CES46 = 75	CES71 = 58	CES96 = 76
CES22 = 79	CES47 = 71	CES72 = 85	CES97 = 82
CES23 = 92	CES48 = 61	CES73 = 51	CES98 = 72
CES24 = 91	CES49 = 74	CES74 = 94	CES99 = 60
CES25 = 72	CES50 = 83	CES75 = 57	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)