

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: P1067977

Luminaire Tested: **NAV-SA4A-735-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1067977
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA4A-735-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 615mA 4xLight Square PACKAGE
70CRI 3500K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (56) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11370.6 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G2

Input Watts (W): 107.4
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

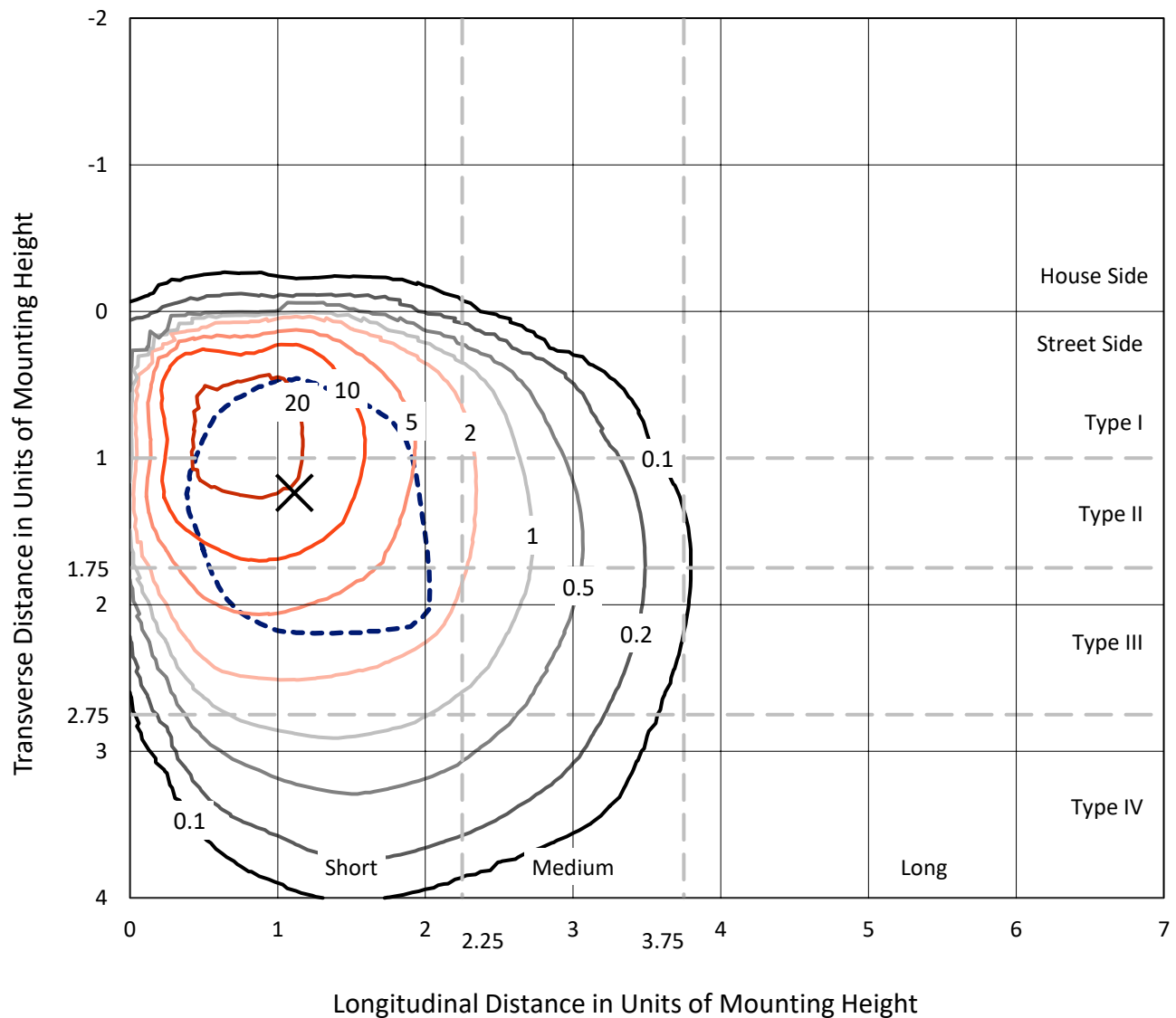


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

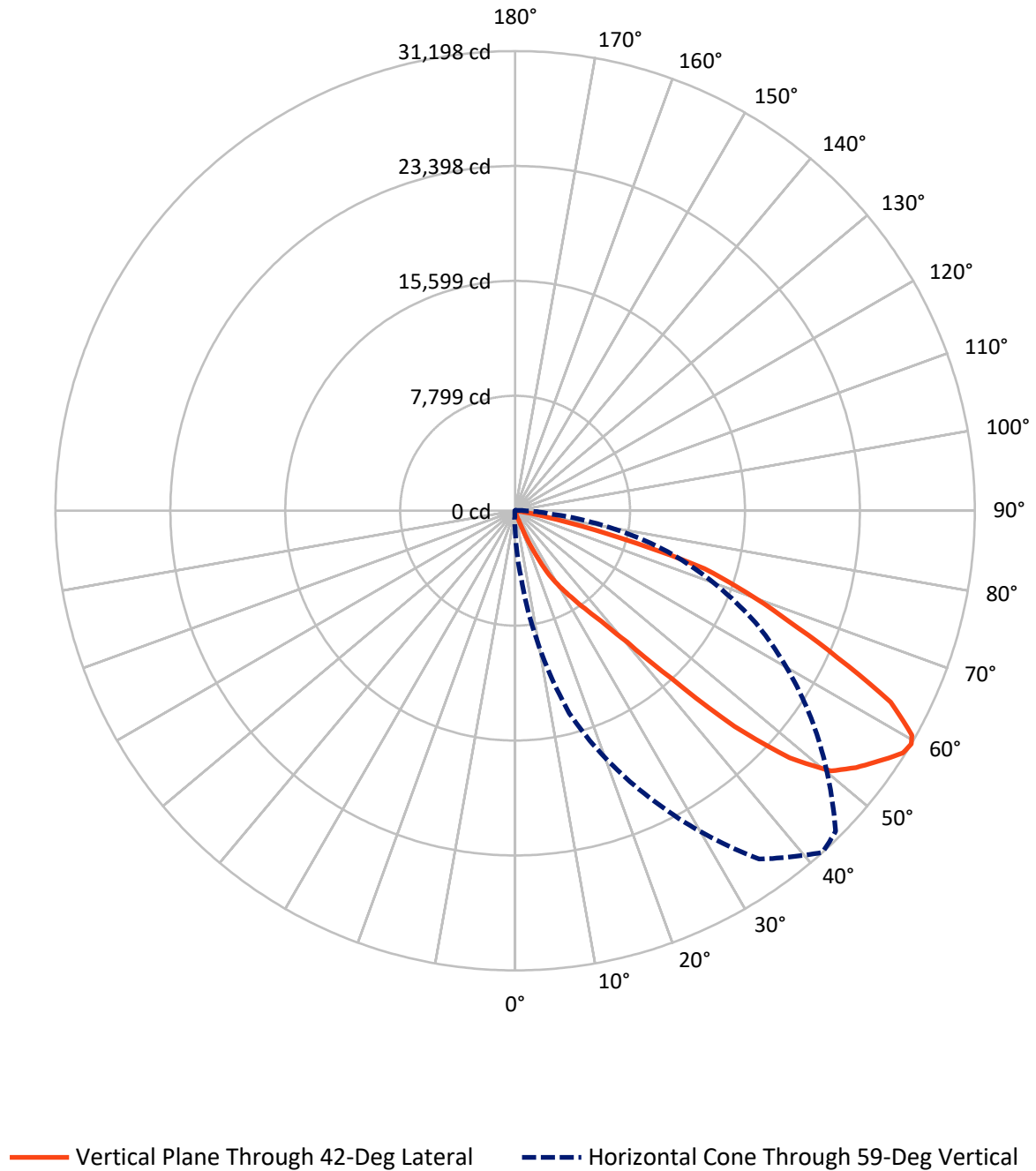


Based on 15 foot mounting height. Maximum calculated value = 33.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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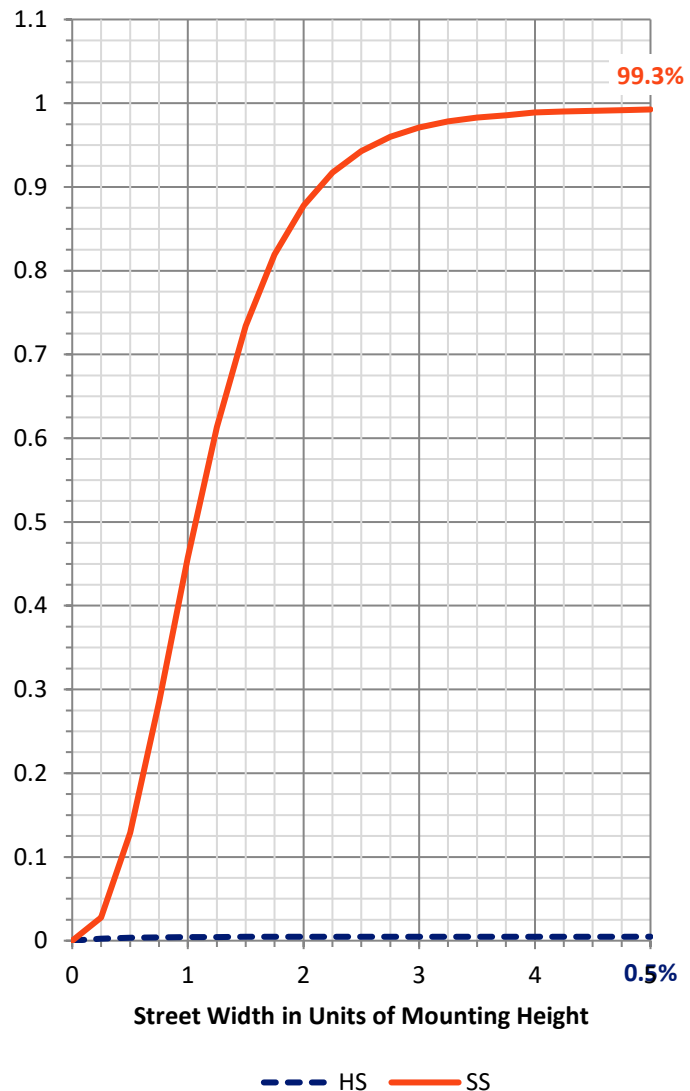
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	54.8	0.0	54.8
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	11315.8	0.0	11315.8
	% Fixture	99.5	0.0	99.5
Total	Lumens	11370.6	0.0	11370.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.3	0.0
10°-20°	16.6	0.1
20°-30°	212.1	1.9
30°-40°	715.1	6.3
40°-50°	2159.8	19.0
50°-60°	3812.6	33.5
60°-70°	3357.0	29.5
70°-80°	1068.5	9.4
80°-90°	25.6	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°	11370.6	100.0
0°-180°	11370.6	100.0



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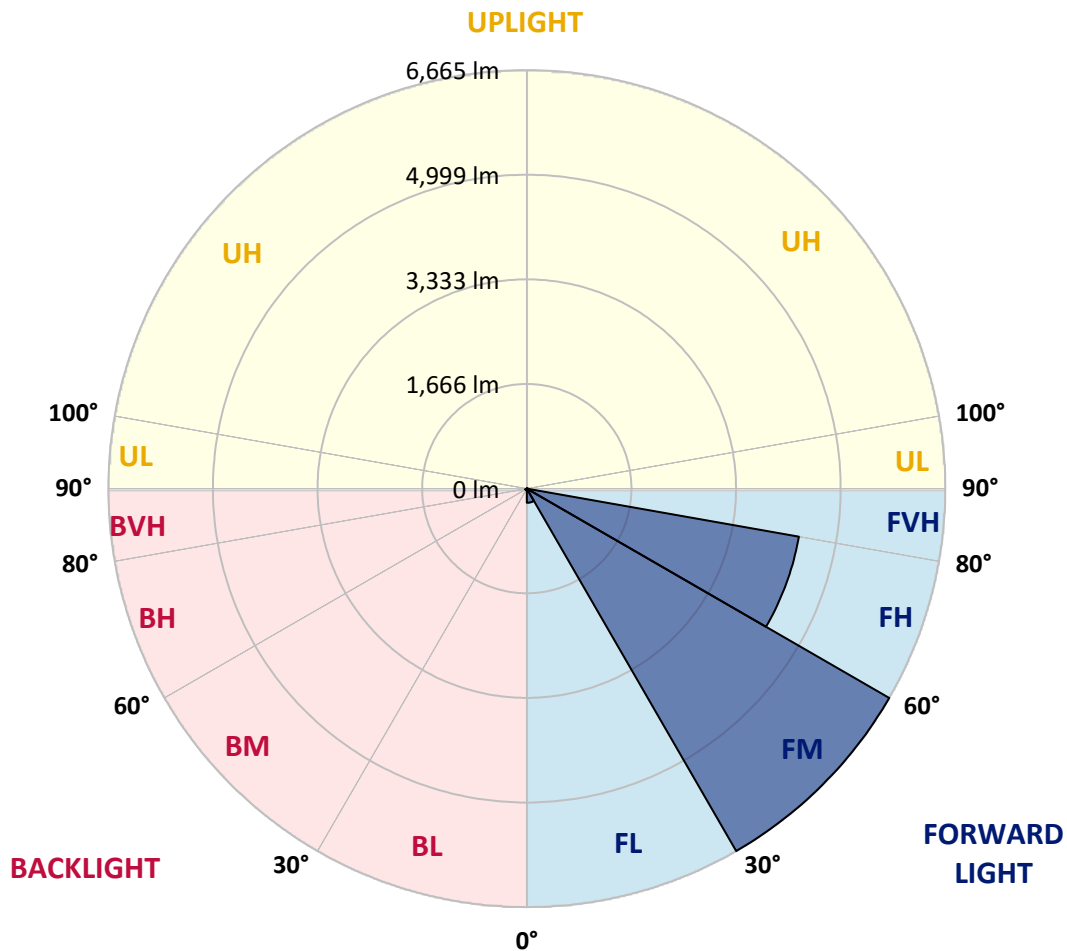
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	225.9	2.0			
FM	(30°-60°)	6665.1	58.6			
FH	(60°-80°)	4400.5	38.7			G2/5000
FVH	(80°-90°)	24.3	0.2			G1/100
BL	(0°-30°)	6.1	0.1	B0/110		
BM	(30°-60°)	22.4	0.2	B0/220		
BH	(60°-80°)	25.1	0.2	B0/110		G0/110
BVH	(80°-90°)	1.2	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-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
2.5°	49.9	49.9	46.3	42.8	39.2	35.7	35.7	35.7	32.1	32.1	28.5
5°	57.0	57.0	53.5	49.9	49.9	46.3	46.3	42.8	39.2	39.2	35.7
7.5°	60.6	60.6	60.6	60.6	57.0	57.0	57.0	53.5	49.9	46.3	42.8
10°	64.2	67.7	71.3	71.3	71.3	71.3	71.3	67.7	60.6	57.0	49.9
12.5°	71.3	74.9	82.0	89.1	89.1	92.7	89.1	85.6	78.4	67.7	57.0
15°	78.4	85.6	96.3	110.5	124.8	128.3	128.3	117.6	103.4	82.0	67.7
17.5°	89.1	99.8	128.3	174.7	224.6	263.8	263.8	235.3	164.0	107.0	78.4
20°	96.3	117.6	206.8	420.7	641.7	805.7	773.6	684.5	367.2	167.6	85.6
22.5°	107.0	149.7	438.5	1105.2	1711.2	2010.7	1939.4	1472.4	823.5	299.5	103.4
25°	121.2	217.5	869.9	2071.3	3180.0	3504.5	3458.1	2748.7	1500.9	502.7	131.9
27.5°	149.7	320.9	1393.9	3140.8	4691.6	4969.7	4951.9	4025.0	2399.3	809.3	171.1
30°	188.9	467.0	2067.7	4267.4	5693.4	5975.0	5885.9	4959.0	3237.1	1237.1	221.0
32.5°	235.3	652.4	2677.4	5098.0	6616.8	6987.5	6880.6	5771.8	3910.9	1600.7	328.0
35°	306.6	834.2	3279.9	5832.4	7682.7	8153.3	7975.0	6609.6	4492.0	2010.7	395.7
37.5°	342.2	941.2	3832.4	6631.0	8880.6	9522.3	9386.8	7668.4	5083.8	2534.8	484.8
40°	345.8	1069.5	4406.4	7672.0	10574.0	11718.4	11475.9	9486.6	6185.4	3208.6	623.9
42.5°	356.5	1262.0	5151.5	9447.4	13900.2	15543.7	15269.2	12830.7	8684.5	4559.7	884.1
45°	406.4	1625.7	6670.2	12766.5	18467.0	20877.0	20559.7	17490.2	12174.7	7101.6	1508.0
47.5°	581.1	2445.6	9333.3	16349.4	23137.3	25058.8	24980.4	21162.2	15336.9	9707.7	2556.1
50°	934.0	3754.0	12363.6	19361.9	26110.5	27761.1	27565.1	22695.2	17140.8	11486.6	3276.3
52.5°	1247.8	5005.3	14267.4	20470.6	26998.2	28966.1	28727.3	23254.9	17615.0	12010.7	3475.9
55°	1326.2	5458.1	14834.2	20812.8	27586.5	29985.7	29639.9	23629.2	17675.6	11636.4	3144.4
57.5°	1287.0	5030.3	14467.0	21148.0	28406.4	31033.9	30574.0	24360.1	17878.8	11001.8	2616.8
59°	1219.3	4502.7	14238.9	21415.3	28859.2	31197.9	30766.5	24520.5	18014.3	10713.0	2295.9
60°	1140.8	4146.2	14060.6	21590.0	28830.7	30941.2	30495.5	24445.6	18067.7	10463.5	2142.6
62.5°	880.6	3308.4	13803.9	21465.2	27030.3	28598.9	28345.8	22613.2	17283.4	9664.9	1689.8
65°	684.5	2531.2	12862.7	19144.4	23001.8	24057.0	23978.6	19148.0	14545.5	8331.6	1219.3
67.5°	541.9	1846.7	10877.0	15504.5	18506.2	20007.1	19950.1	15543.7	11041.0	6367.2	877.0
70°	442.1	1315.5	7458.1	11689.8	14802.1	16691.6	16609.6	12509.8	8181.8	4039.2	638.1
72.5°	374.3	841.4	4524.1	8812.8	12352.9	13433.2	13194.3	10092.7	5950.1	2199.6	506.2
75°	317.3	516.9	2242.4	5493.8	7358.3	7351.2	7112.3	5344.0	3194.3	1076.6	402.9
77.5°	256.7	363.6	880.6	1508.0	2320.9	2873.4	2827.1	1893.0	955.4	313.7	249.6
80°	167.6	171.1	235.3	413.5	638.1	705.9	802.1	577.5	278.1	149.7	103.4
82.5°	74.9	82.0	107.0	135.5	135.5	124.8	110.5	82.0	60.6	49.9	25.0
85°	17.8	25.0	17.8	21.4	17.8	14.3	14.3	7.1	0.0	0.0	0.0
87.5°	3.6	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°	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
2.5°	28.5	28.5	28.5	25.0	25.0	25.0	21.4	21.4	21.4	17.8	17.8
5°	35.7	32.1	28.5	28.5	25.0	25.0	21.4	17.8	17.8	17.8	14.3
7.5°	39.2	35.7	32.1	28.5	25.0	21.4	21.4	17.8	14.3	14.3	14.3
10°	46.3	42.8	35.7	28.5	25.0	21.4	17.8	17.8	14.3	10.7	10.7
12.5°	53.5	46.3	39.2	32.1	25.0	21.4	17.8	17.8	14.3	10.7	7.1
15°	60.6	53.5	42.8	32.1	25.0	21.4	17.8	17.8	10.7	7.1	3.6
17.5°	67.7	57.0	42.8	35.7	25.0	21.4	17.8	14.3	7.1	3.6	0.0
20°	71.3	60.6	46.3	35.7	25.0	21.4	17.8	10.7	3.6	0.0	0.0
22.5°	78.4	67.7	49.9	35.7	25.0	17.8	10.7	3.6	0.0	0.0	0.0
25°	92.7	71.3	49.9	35.7	25.0	17.8	7.1	0.0	0.0	0.0	0.0
27.5°	103.4	78.4	49.9	35.7	25.0	14.3	3.6	0.0	0.0	0.0	0.0
30°	121.2	85.6	53.5	35.7	25.0	10.7	3.6	0.0	0.0	0.0	0.0
32.5°	149.7	92.7	53.5	35.7	21.4	10.7	0.0	0.0	0.0	0.0	0.0
35°	181.8	107.0	53.5	35.7	21.4	10.7	0.0	0.0	0.0	0.0	0.0
37.5°	185.4	114.1	53.5	35.7	21.4	7.1	0.0	0.0	0.0	0.0	0.0
40°	192.5	107.0	57.0	35.7	21.4	7.1	0.0	0.0	0.0	0.0	0.0
42.5°	221.0	99.8	60.6	35.7	21.4	7.1	0.0	0.0	0.0	0.0	0.0
45°	328.0	103.4	60.6	39.2	21.4	10.7	0.0	0.0	0.0	0.0	0.0
47.5°	570.4	107.0	57.0	39.2	21.4	10.7	0.0	0.0	0.0	0.0	0.0
50°	730.8	124.8	57.0	42.8	25.0	7.1	0.0	0.0	0.0	0.0	0.0
52.5°	777.2	146.2	57.0	46.3	32.1	3.6	0.0	0.0	0.0	0.0	0.0
55°	755.8	171.1	60.6	49.9	39.2	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	698.8	185.4	64.2	53.5	42.8	0.0	0.0	0.0	0.0	0.0	0.0
59°	638.1	196.1	74.9	57.0	42.8	0.0	0.0	0.0	0.0	0.0	0.0
60°	588.2	206.8	78.4	60.6	42.8	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	474.2	221.0	85.6	71.3	35.7	0.0	0.0	0.0	0.0	0.0	0.0
65°	413.5	231.7	89.1	78.4	32.1	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	377.9	238.9	96.3	82.0	28.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	349.4	235.3	103.4	78.4	25.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	317.3	224.6	124.8	71.3	21.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	285.2	203.2	135.5	64.2	14.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	206.8	171.1	124.8	57.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	89.1	92.7	89.1	42.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	17.8	21.4	17.8	10.7	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°	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
2.5°	17.8	17.8	17.8	17.8	21.4	21.4	28.5	35.7	42.8	46.3	46.3
5°	14.3	14.3	14.3	14.3	14.3	17.8	21.4	28.5	39.2	42.8	42.8
7.5°	10.7	10.7	10.7	10.7	10.7	10.7	17.8	25.0	35.7	39.2	42.8
10°	10.7	7.1	7.1	3.6	3.6	7.1	10.7	21.4	32.1	35.7	39.2
12.5°	7.1	3.6	3.6	0.0	0.0	3.6	7.1	17.8	28.5	32.1	35.7
15°	3.6	0.0	0.0	0.0	0.0	0.0	3.6	14.3	25.0	28.5	35.7
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	21.4	28.5	32.1
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	17.8	25.0	28.5
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	14.3	21.4	25.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	14.3	17.8
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	10.7	14.3
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	10.7	14.3
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1	10.7
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1	10.7
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1	7.1
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
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°	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
2.5°	49.9	49.9	46.3	42.8	42.8	42.8	46.3	49.9	49.9	49.9
5°	46.3	46.3	42.8	42.8	42.8	42.8	46.3	53.5	57.0	57.0
7.5°	46.3	46.3	42.8	42.8	42.8	42.8	46.3	53.5	57.0	60.6
10°	42.8	42.8	42.8	42.8	39.2	42.8	46.3	53.5	64.2	64.2
12.5°	42.8	42.8	42.8	42.8	39.2	42.8	49.9	57.0	67.7	71.3
15°	42.8	42.8	42.8	39.2	39.2	42.8	49.9	60.6	71.3	78.4
17.5°	39.2	42.8	42.8	39.2	39.2	42.8	49.9	60.6	78.4	89.1
20°	35.7	39.2	42.8	39.2	39.2	39.2	49.9	60.6	82.0	96.3
22.5°	32.1	35.7	39.2	39.2	35.7	39.2	49.9	64.2	89.1	107.0
25°	28.5	32.1	32.1	35.7	35.7	39.2	49.9	64.2	92.7	121.2
27.5°	21.4	25.0	28.5	32.1	32.1	39.2	49.9	67.7	99.8	149.7
30°	17.8	21.4	25.0	28.5	32.1	39.2	49.9	67.7	107.0	188.9
32.5°	17.8	21.4	25.0	28.5	32.1	35.7	49.9	71.3	117.6	235.3
35°	14.3	17.8	21.4	28.5	28.5	35.7	49.9	71.3	128.3	306.6
37.5°	14.3	17.8	21.4	28.5	28.5	35.7	49.9	71.3	156.9	342.2
40°	10.7	14.3	17.8	28.5	28.5	35.7	53.5	74.9	160.4	345.8
42.5°	10.7	14.3	17.8	25.0	28.5	35.7	53.5	74.9	149.7	356.5
45°	10.7	14.3	17.8	28.5	32.1	39.2	53.5	78.4	146.2	406.4
47.5°	10.7	14.3	17.8	28.5	35.7	39.2	53.5	78.4	149.7	581.1
50°	10.7	14.3	17.8	28.5	39.2	39.2	53.5	78.4	164.0	934.0
52.5°	7.1	10.7	14.3	25.0	32.1	42.8	57.0	74.9	174.7	1247.8
55°	7.1	7.1	10.7	21.4	28.5	46.3	60.6	74.9	203.2	1326.2
57.5°	7.1	7.1	10.7	17.8	25.0	49.9	64.2	74.9	235.3	1287.0
59°	7.1	7.1	7.1	17.8	21.4	49.9	64.2	78.4	238.9	1219.3
60°	7.1	7.1	7.1	14.3	21.4	49.9	67.7	82.0	242.4	1140.8
62.5°	3.6	3.6	3.6	14.3	17.8	49.9	74.9	99.8	249.6	880.6
65°	7.1	7.1	3.6	10.7	17.8	42.8	85.6	107.0	253.1	684.5
67.5°	7.1	7.1	7.1	14.3	17.8	42.8	89.1	110.5	253.1	541.9
70°	7.1	7.1	7.1	14.3	21.4	42.8	89.1	114.1	249.6	442.1
72.5°	7.1	7.1	7.1	14.3	21.4	39.2	82.0	117.6	238.9	374.3
75°	7.1	7.1	7.1	10.7	17.8	35.7	78.4	128.3	217.5	317.3
77.5°	7.1	7.1	7.1	7.1	14.3	28.5	71.3	142.6	192.5	256.7
80°	10.7	7.1	7.1	7.1	10.7	25.0	67.7	139.0	160.4	167.6
82.5°	10.7	7.1	7.1	3.6	7.1	17.8	53.5	107.0	82.0	74.9
85°	7.1	7.1	7.1	3.6	3.6	10.7	25.0	32.1	25.0	17.8
87.5°	7.1	7.1	7.1	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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

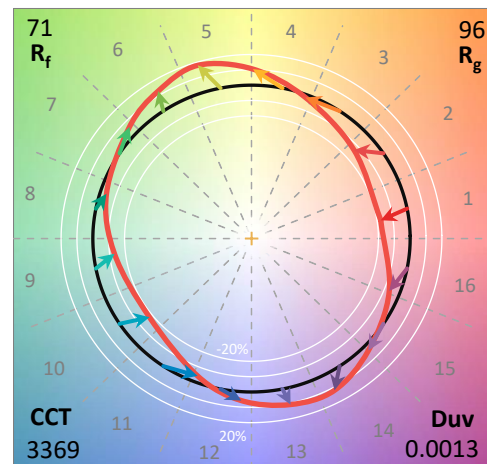
Test Information

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

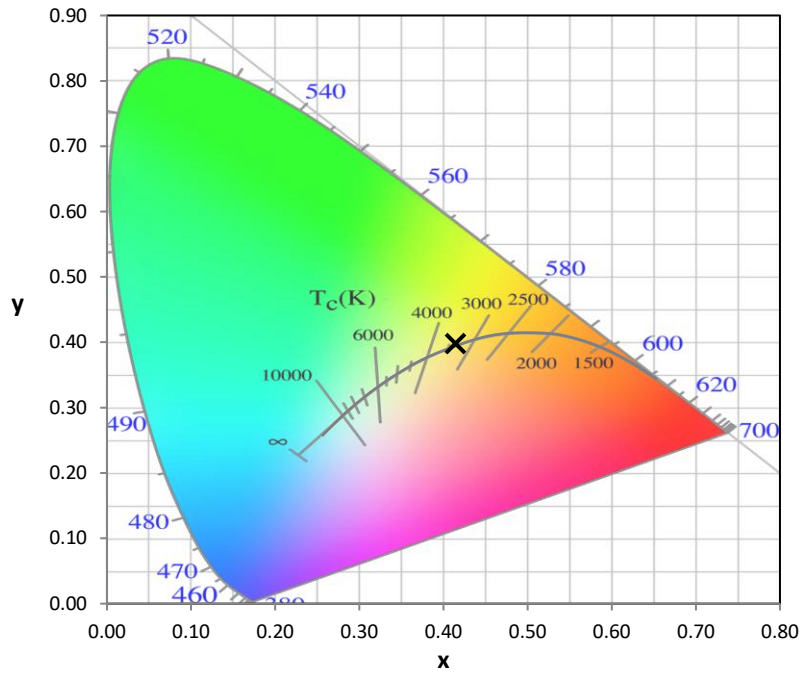
Stabilization Time: 21M
 Operation Time: 1H 21M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-5

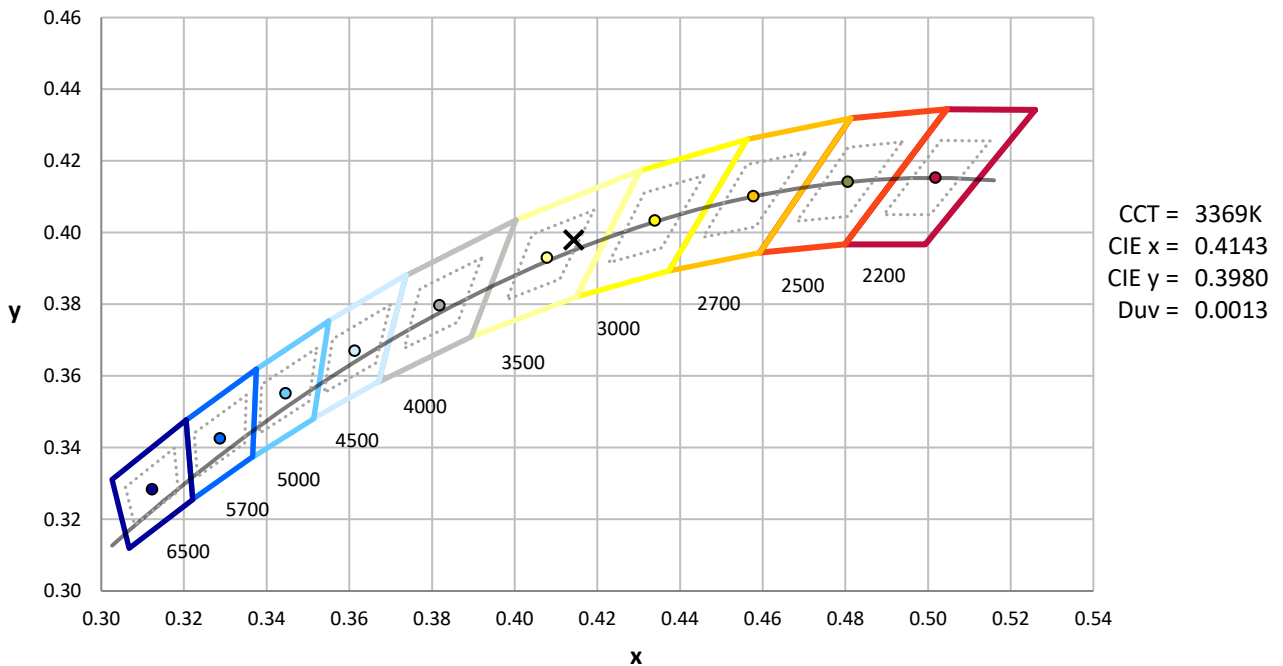
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



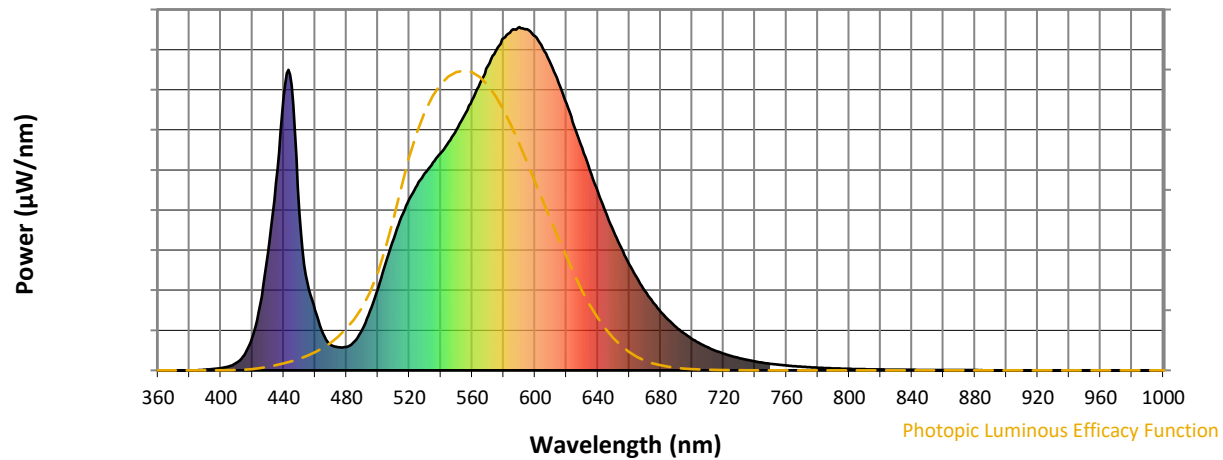
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-5

Photopic Flux vs. Wavelength

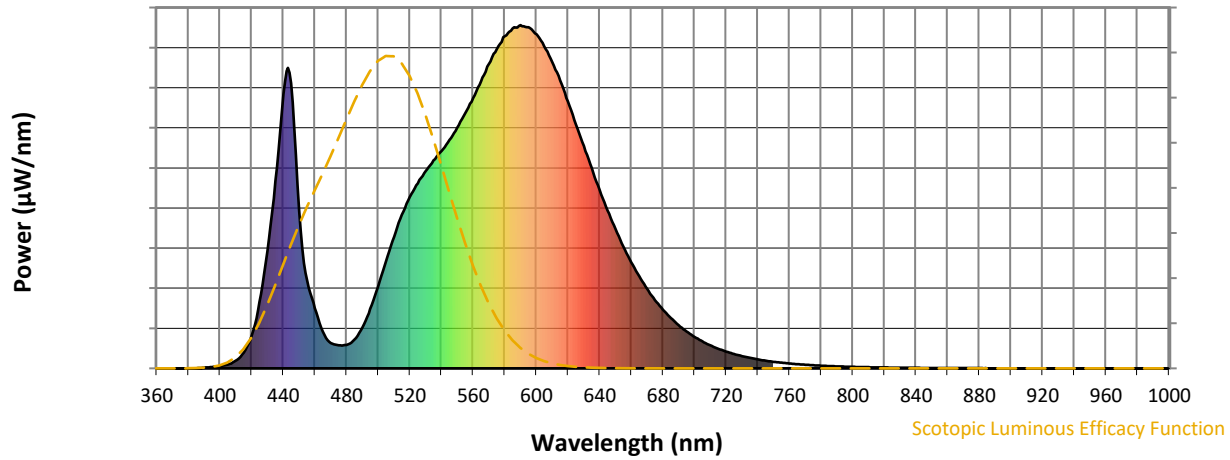


Photopic Lumens: NR

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



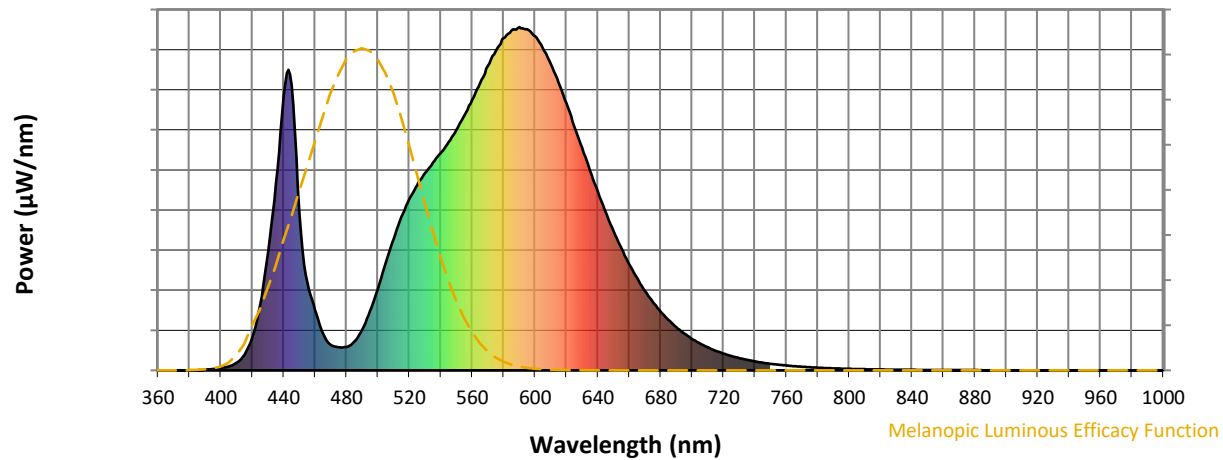
Scotopic Lumens: NR

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			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.36

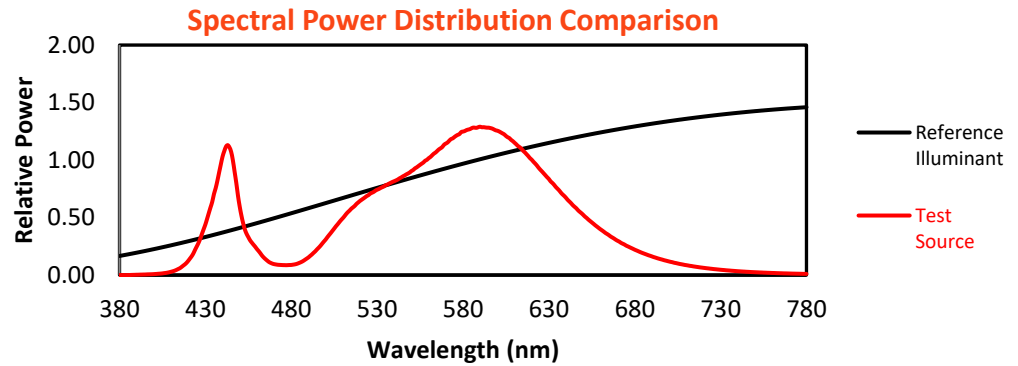
λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	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

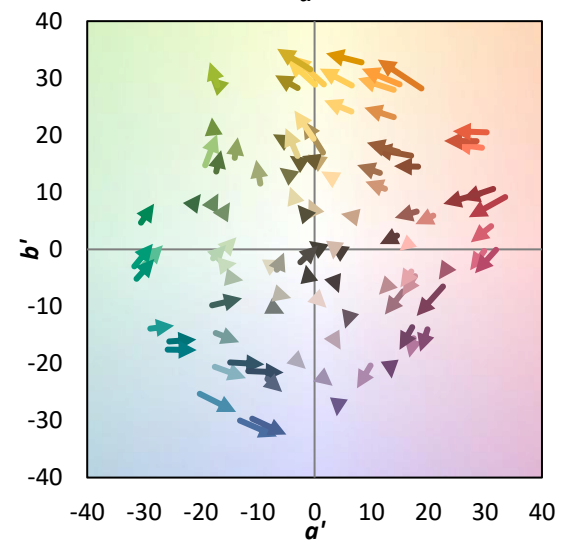
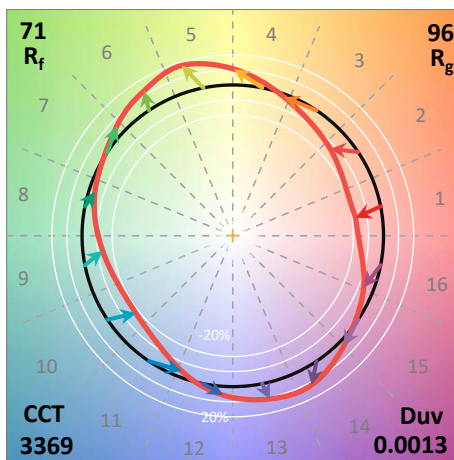
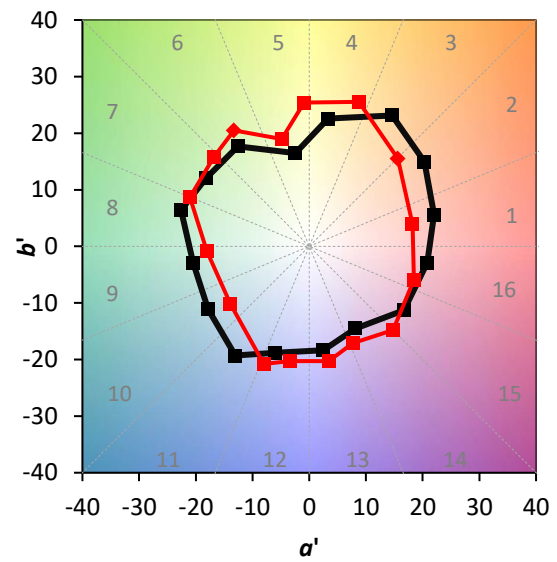
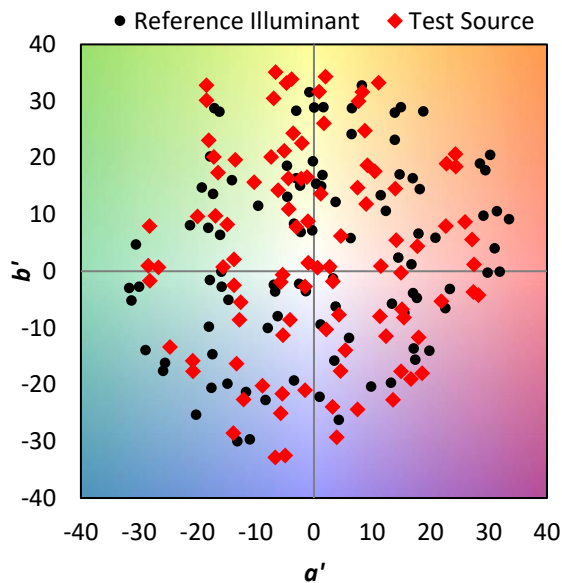
TM-30-18

Summary

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

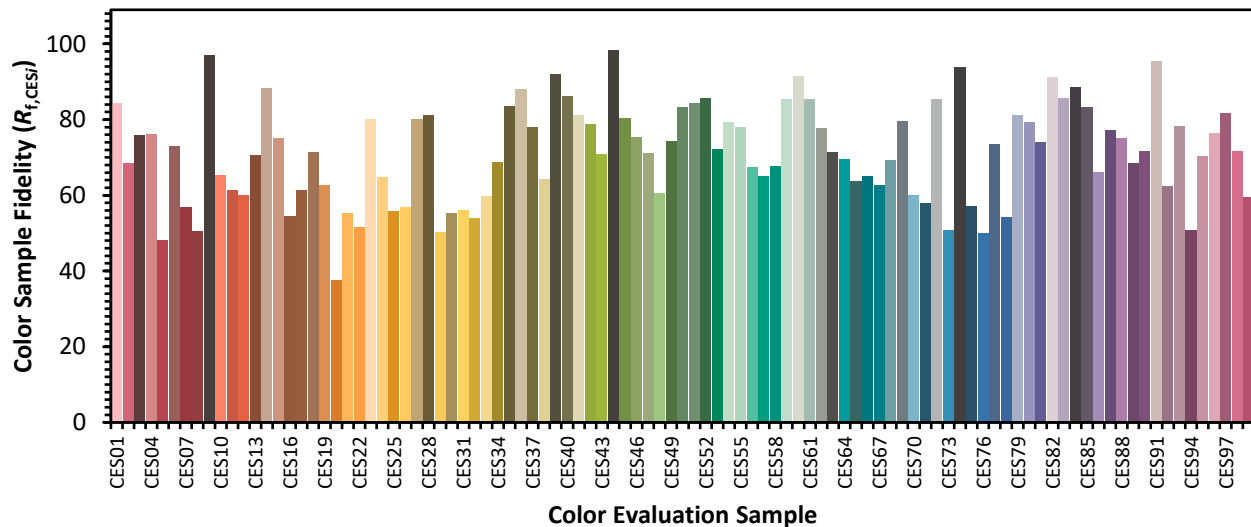


Color Vector Graphics

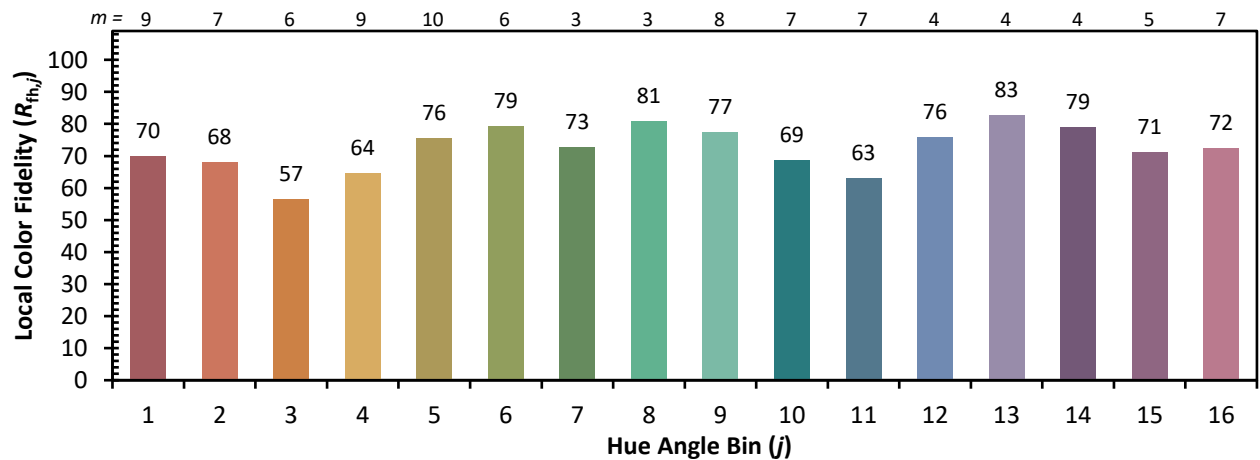
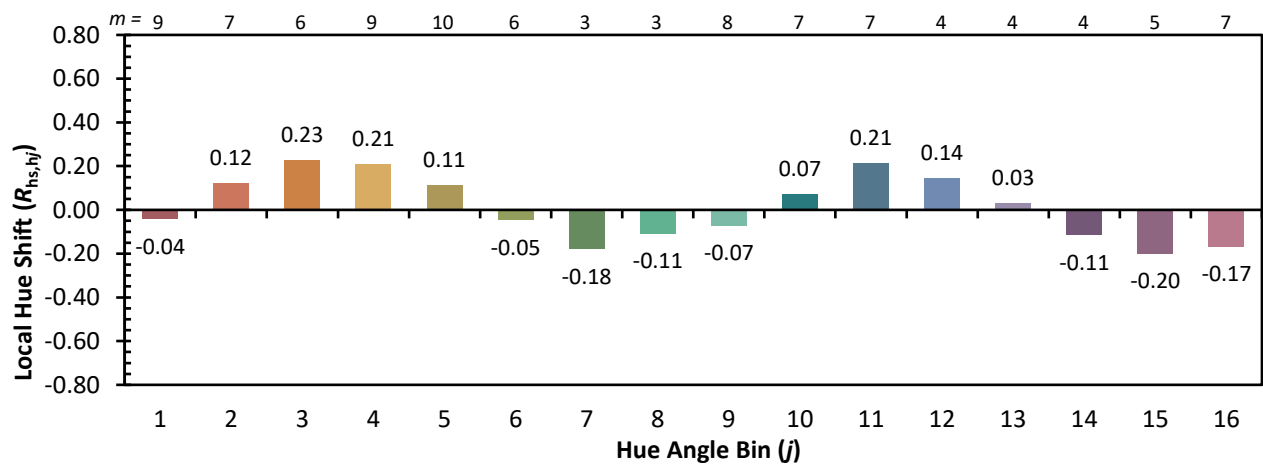
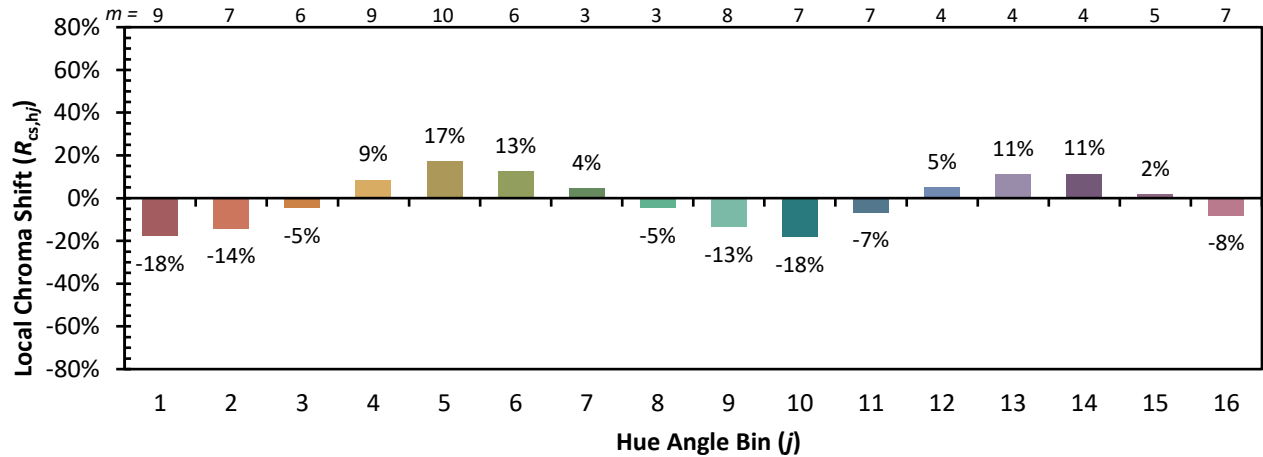


Individual Sample Fidelity Index ($R_{f,i}$)

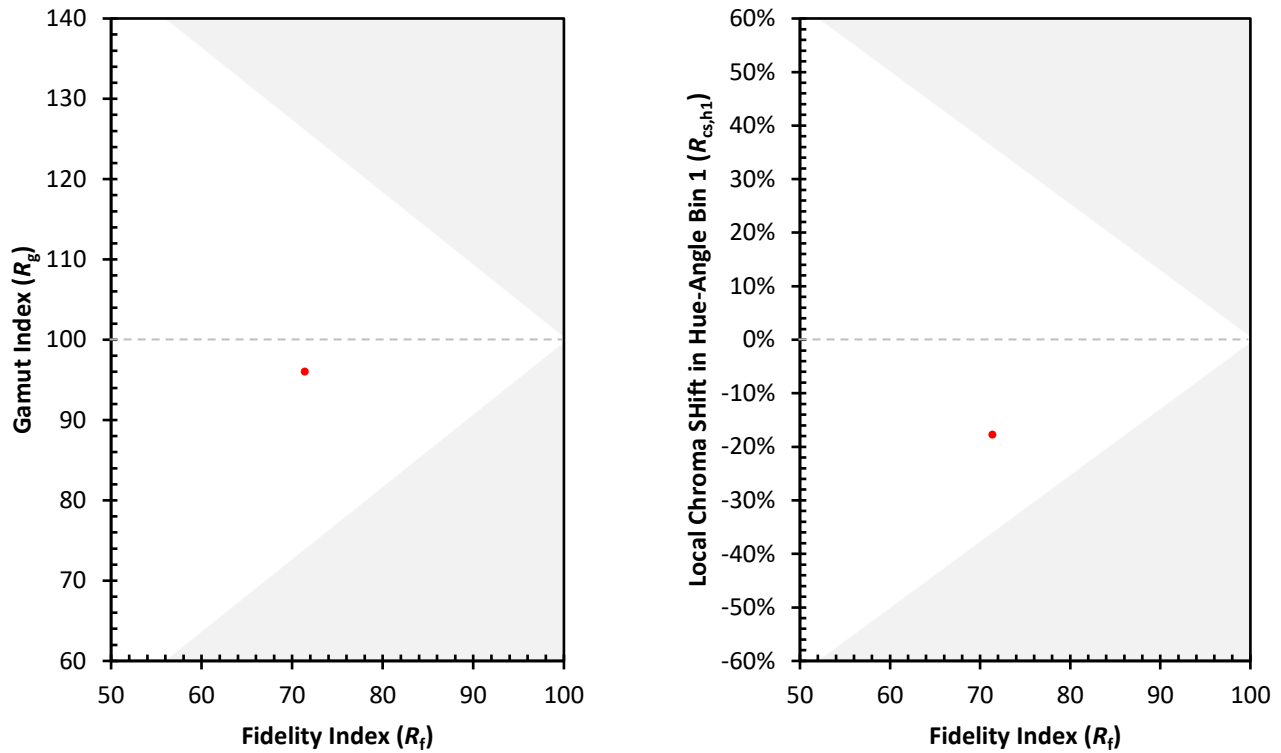
CES01 = 86	CES26 = 57	CES51 = 84	CES76 = 50
CES02 = 62	CES27 = 80	CES52 = 86	CES77 = 74
CES03 = 31	CES28 = 81	CES53 = 72	CES78 = 54
CES04 = 70	CES29 = 50	CES54 = 79	CES79 = 81
CES05 = 48	CES30 = 55	CES55 = 78	CES80 = 79
CES06 = 51	CES31 = 56	CES56 = 67	CES81 = 74
CES07 = 40	CES32 = 54	CES57 = 65	CES82 = 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)