

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: P1068094

Luminaire Tested: **NAV-SA3B-835-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068094
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA3B-835-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 800mA 3xLight Square PACKAGE
80CRI 3500K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (42) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10155.4 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G2

Input Watts (W): 106.2
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

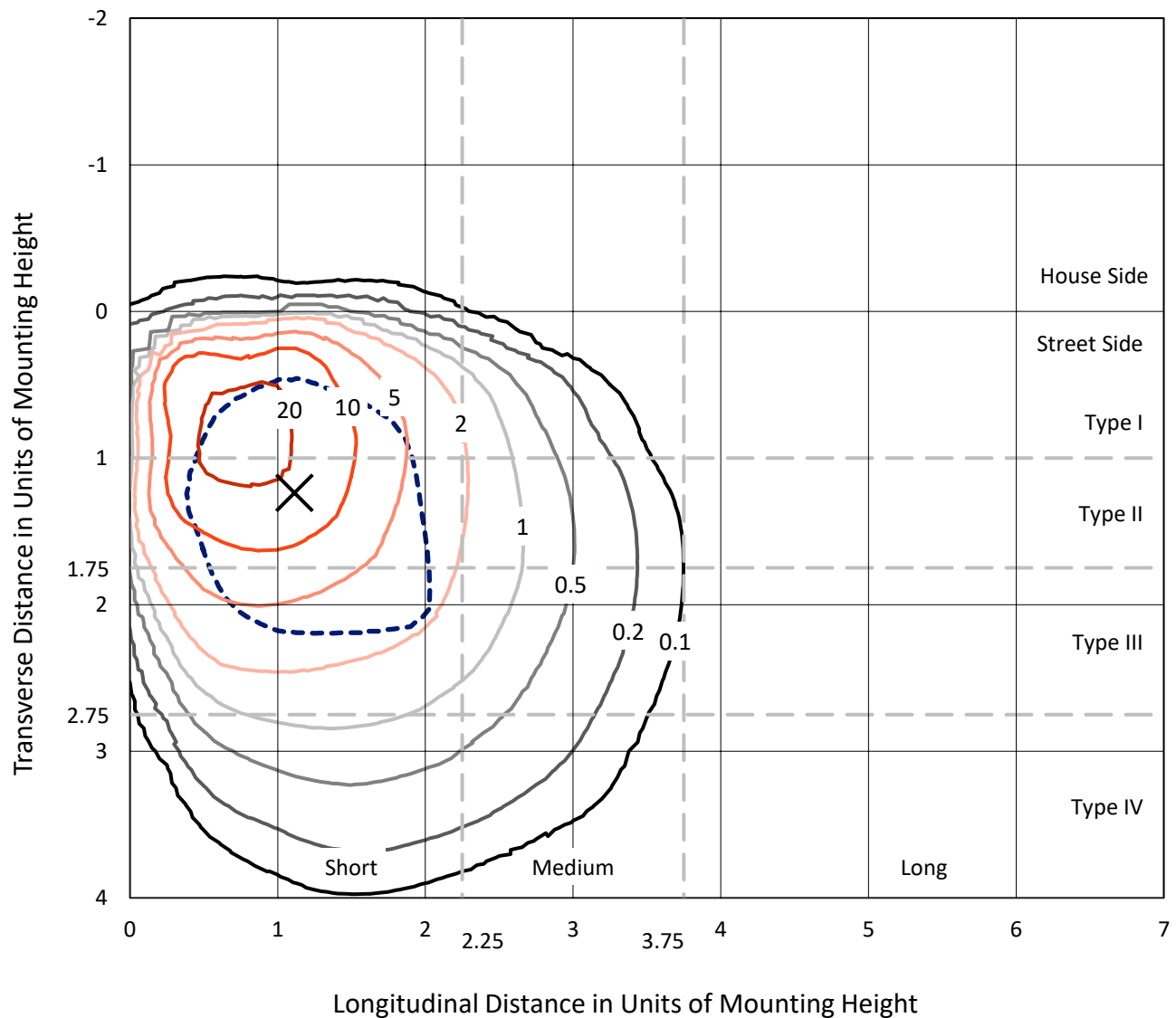


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

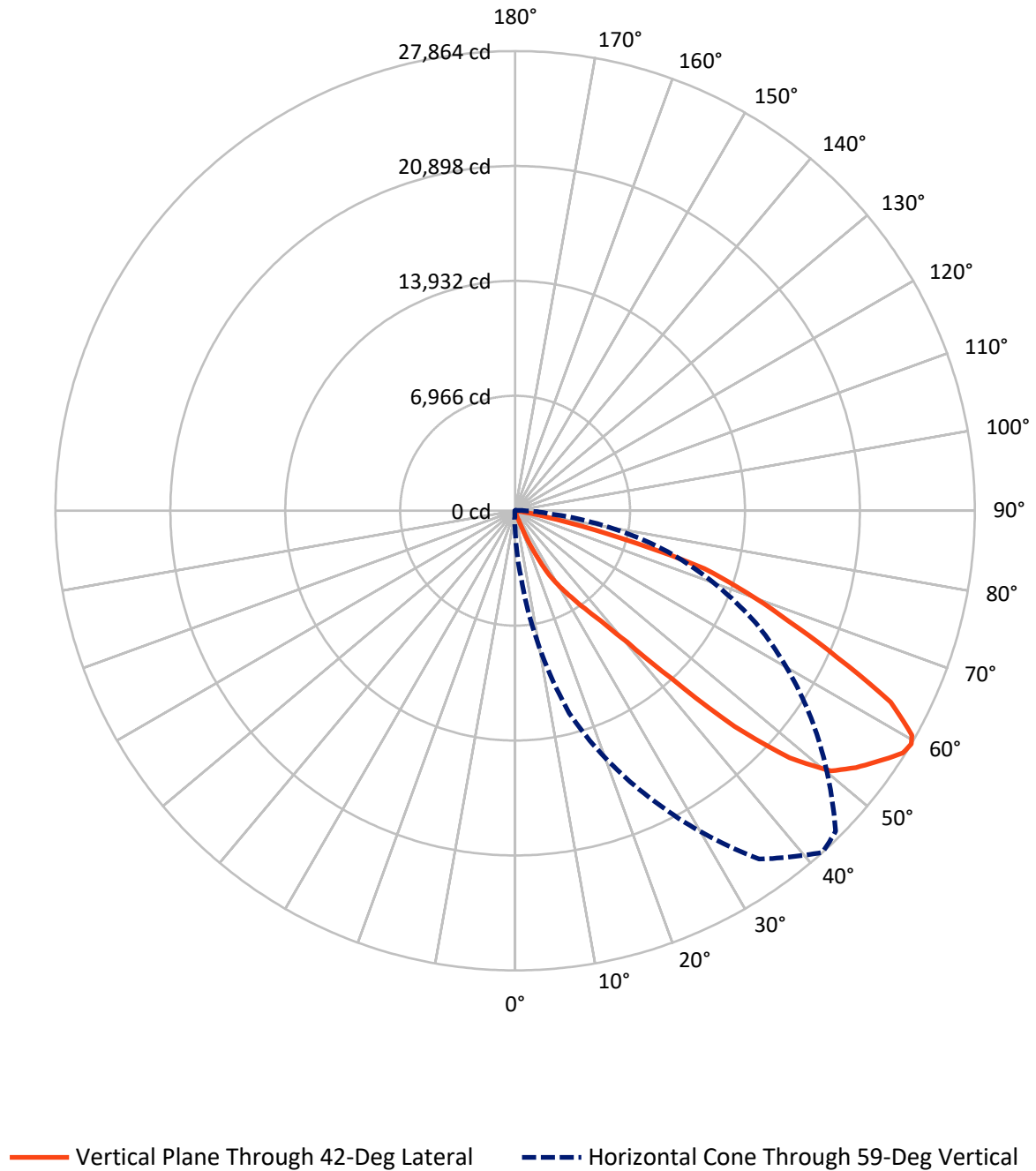


Based on 15 foot mounting height. Maximum calculated value = 30.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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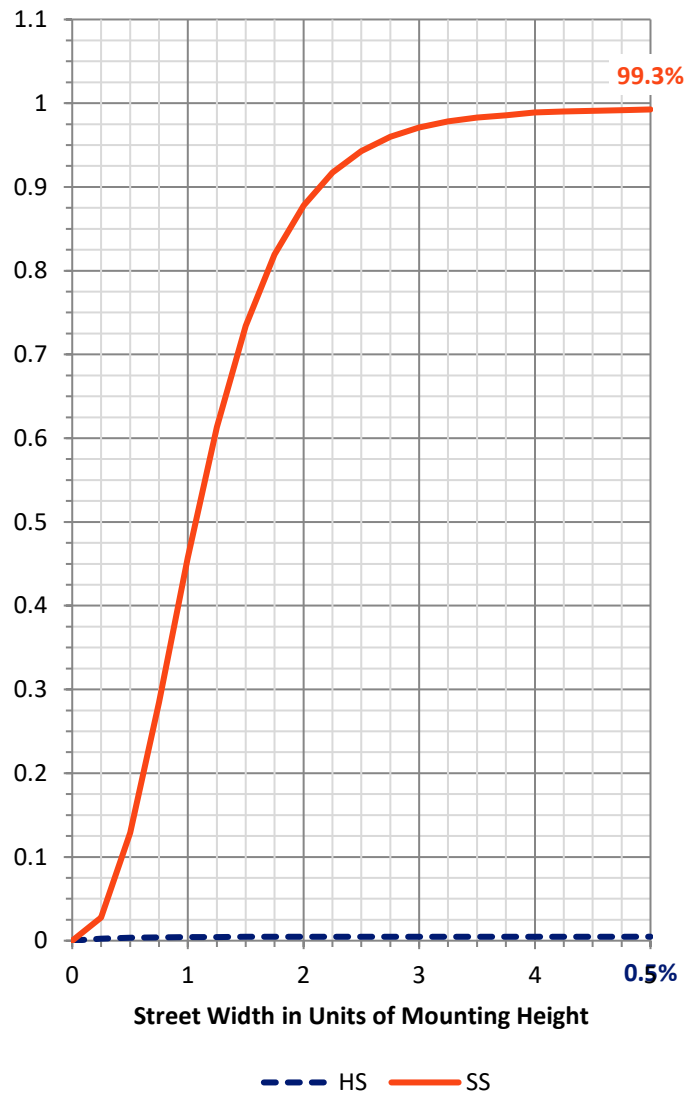
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	48.9	0.0	48.9
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	10106.4	0.0	10106.4
	% Fixture	99.5	0.0	99.5
Total	Lumens	10155.4	0.0	10155.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.0	0.0
10°-20°	14.8	0.1
20°-30°	189.4	1.9
30°-40°	638.6	6.3
40°-50°	1929.0	19.0
50°-60°	3405.1	33.5
60°-70°	2998.2	29.5
70°-80°	954.3	9.4
80°-90°	22.8	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°	10155.4	100.0
0°-180°	10155.4	100.0



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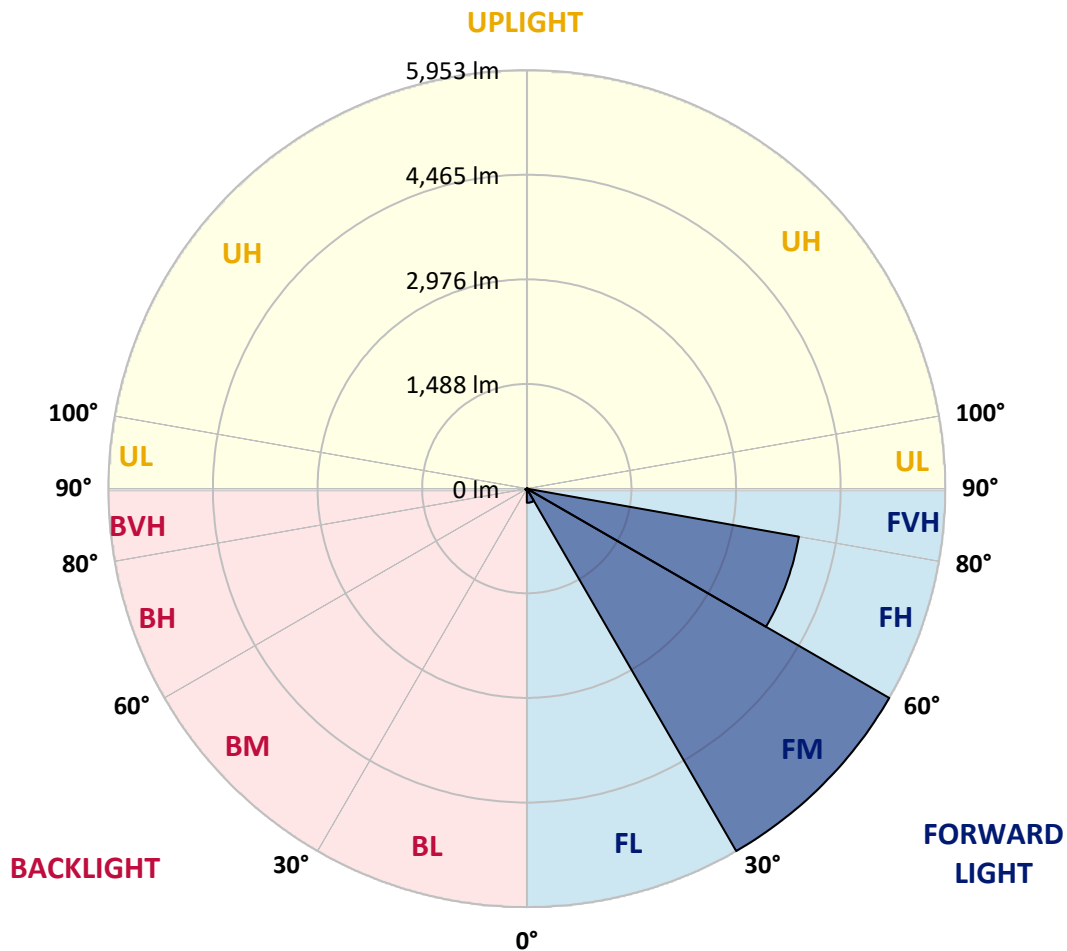
CATALOG NUMBER: NAV-SA3B-835-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	201.7	2.0			
FM	(30°-60°)	5952.7	58.6			
FH	(60°-80°)	3930.2	38.7			G2/5000
FVH	(80°-90°)	21.7	0.2			G1/100
BL	(0°-30°)	5.5	0.1	B0/110		
BM	(30°-60°)	20.0	0.2	B0/220		
BH	(60°-80°)	22.4	0.2	B0/110		G0/110
BVH	(80°-90°)	1.1	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°	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
2.5°	44.6	44.6	41.4	38.2	35.0	31.8	31.8	31.8	28.7	28.7	25.5
5°	50.9	50.9	47.8	44.6	44.6	41.4	41.4	38.2	35.0	35.0	31.8
7.5°	54.1	54.1	54.1	54.1	50.9	50.9	50.9	47.8	44.6	41.4	38.2
10°	57.3	60.5	63.7	63.7	63.7	63.7	63.7	60.5	54.1	50.9	44.6
12.5°	63.7	66.9	73.2	79.6	79.6	82.8	79.6	76.4	70.0	60.5	50.9
15°	70.0	76.4	86.0	98.7	111.4	114.6	114.6	105.1	92.3	73.2	60.5
17.5°	79.6	89.2	114.6	156.0	200.6	235.6	235.6	210.1	146.5	95.5	70.0
20°	86.0	105.1	184.7	375.7	573.1	719.6	690.9	611.3	328.0	149.6	76.4
22.5°	95.5	133.7	391.6	987.1	1528.3	1795.8	1732.1	1315.0	735.5	267.5	92.3
25°	108.3	194.2	776.9	1849.9	2840.2	3129.9	3088.5	2454.9	1340.5	448.9	117.8
27.5°	133.7	286.6	1245.0	2805.1	4190.2	4438.6	4422.6	3594.8	2142.9	722.8	152.8
30°	168.8	417.1	1846.7	3811.3	5084.9	5336.5	5256.9	4429.0	2891.1	1104.9	197.4
32.5°	210.1	582.7	2391.2	4553.2	5909.6	6240.7	6145.2	5155.0	3492.9	1429.6	292.9
35°	273.8	745.1	2929.3	5209.1	6861.6	7281.9	7122.7	5903.2	4011.9	1795.8	353.4
37.5°	305.7	840.6	3422.8	5922.3	7931.4	8504.6	8383.6	6848.9	4540.4	2263.9	433.0
40°	308.9	955.2	3935.5	6852.1	9443.9	10465.9	10249.4	8472.7	5524.3	2865.6	557.2
42.5°	318.4	1127.2	4600.9	8437.7	12414.6	13882.4	13637.2	11459.4	7756.3	4072.4	789.6
45°	363.0	1451.9	5957.3	11402.0	16493.3	18645.7	18362.4	15620.9	10873.5	6342.6	1346.8
47.5°	519.0	2184.3	8335.8	14602.0	20664.4	22380.6	22310.6	18900.5	13697.7	8670.1	2283.0
50°	834.2	3352.8	11042.3	17292.5	23319.9	24794.1	24619.0	20269.6	15308.9	10259.0	2926.1
52.5°	1114.4	4470.4	12742.5	18282.8	24112.7	25870.3	25657.0	20769.5	15732.3	10727.0	3104.4
55°	1184.5	4874.8	13248.8	18588.4	24638.1	26781.0	26472.1	21103.8	15786.5	10392.7	2808.3
57.5°	1149.4	4492.7	12920.8	18887.7	25370.4	27717.1	27306.3	21756.6	15968.0	9825.9	2337.1
59°	1088.9	4021.4	12717.1	19126.5	25774.8	27863.5	27478.3	21899.8	16089.0	9568.0	2050.5
60°	1018.9	3703.0	12557.9	19282.6	25749.3	27634.3	27236.3	21833.0	16136.7	9345.2	1913.6
62.5°	786.5	2954.8	12328.6	19171.1	24141.4	25542.4	25316.3	20196.4	15436.2	8631.9	1509.2
65°	611.3	2260.7	11488.0	17098.3	20543.4	21485.9	21415.9	17101.5	12990.9	7441.1	1088.9
67.5°	484.0	1649.3	9714.5	13847.4	16528.4	17868.8	17817.9	13882.4	9861.0	5686.7	783.3
70°	394.8	1174.9	6661.0	10440.5	13220.1	14907.7	14834.4	11172.8	7307.4	3607.5	569.9
72.5°	334.3	751.4	4040.5	7870.9	11032.7	11997.5	11784.1	9014.0	5314.2	1964.6	452.1
75°	283.4	461.7	2002.8	4906.6	6571.9	6565.5	6352.2	4772.9	2852.9	961.6	359.8
77.5°	229.3	324.8	786.5	1346.8	2072.8	2566.3	2524.9	1690.7	853.3	280.2	222.9
80°	149.6	152.8	210.1	369.3	569.9	630.4	716.4	515.8	248.4	133.7	92.3
82.5°	66.9	73.2	95.5	121.0	121.0	111.4	98.7	73.2	54.1	44.6	22.3
85°	15.9	22.3	15.9	19.1	15.9	12.7	12.7	6.4	0.0	0.0	0.0
87.5°	3.2	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°	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
2.5°	25.5	25.5	25.5	22.3	22.3	22.3	19.1	19.1	19.1	15.9	15.9
5°	31.8	28.7	25.5	25.5	22.3	22.3	19.1	15.9	15.9	15.9	12.7
7.5°	35.0	31.8	28.7	25.5	22.3	19.1	19.1	15.9	12.7	12.7	12.7
10°	41.4	38.2	31.8	25.5	22.3	19.1	15.9	15.9	12.7	9.6	9.6
12.5°	47.8	41.4	35.0	28.7	22.3	19.1	15.9	15.9	12.7	9.6	6.4
15°	54.1	47.8	38.2	28.7	22.3	19.1	15.9	15.9	9.6	6.4	3.2
17.5°	60.5	50.9	38.2	31.8	22.3	19.1	15.9	12.7	6.4	3.2	0.0
20°	63.7	54.1	41.4	31.8	22.3	19.1	15.9	9.6	3.2	0.0	0.0
22.5°	70.0	60.5	44.6	31.8	22.3	15.9	9.6	3.2	0.0	0.0	0.0
25°	82.8	63.7	44.6	31.8	22.3	15.9	6.4	0.0	0.0	0.0	0.0
27.5°	92.3	70.0	44.6	31.8	22.3	12.7	3.2	0.0	0.0	0.0	0.0
30°	108.3	76.4	47.8	31.8	22.3	9.6	3.2	0.0	0.0	0.0	0.0
32.5°	133.7	82.8	47.8	31.8	19.1	9.6	0.0	0.0	0.0	0.0	0.0
35°	162.4	95.5	47.8	31.8	19.1	9.6	0.0	0.0	0.0	0.0	0.0
37.5°	165.6	101.9	47.8	31.8	19.1	6.4	0.0	0.0	0.0	0.0	0.0
40°	171.9	95.5	50.9	31.8	19.1	6.4	0.0	0.0	0.0	0.0	0.0
42.5°	197.4	89.2	54.1	31.8	19.1	6.4	0.0	0.0	0.0	0.0	0.0
45°	292.9	92.3	54.1	35.0	19.1	9.6	0.0	0.0	0.0	0.0	0.0
47.5°	509.4	95.5	50.9	35.0	19.1	9.6	0.0	0.0	0.0	0.0	0.0
50°	652.7	111.4	50.9	38.2	22.3	6.4	0.0	0.0	0.0	0.0	0.0
52.5°	694.1	130.5	50.9	41.4	28.7	3.2	0.0	0.0	0.0	0.0	0.0
55°	675.0	152.8	54.1	44.6	35.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	624.1	165.6	57.3	47.8	38.2	0.0	0.0	0.0	0.0	0.0	0.0
59°	569.9	175.1	66.9	50.9	38.2	0.0	0.0	0.0	0.0	0.0	0.0
60°	525.4	184.7	70.0	54.1	38.2	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	423.5	197.4	76.4	63.7	31.8	0.0	0.0	0.0	0.0	0.0	0.0
65°	369.3	207.0	79.6	70.0	28.7	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	337.5	213.3	86.0	73.2	25.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	312.0	210.1	92.3	70.0	22.3	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	283.4	200.6	111.4	63.7	19.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	254.7	181.5	121.0	57.3	12.7	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	184.7	152.8	111.4	50.9	6.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	79.6	82.8	79.6	38.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.9	19.1	15.9	9.6	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°	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
2.5°	15.9	15.9	15.9	15.9	19.1	19.1	25.5	31.8	38.2	41.4	41.4
5°	12.7	12.7	12.7	12.7	12.7	15.9	19.1	25.5	35.0	38.2	38.2
7.5°	9.6	9.6	9.6	9.6	9.6	9.6	15.9	22.3	31.8	35.0	38.2
10°	9.6	6.4	6.4	3.2	3.2	6.4	9.6	19.1	28.7	31.8	35.0
12.5°	6.4	3.2	3.2	0.0	0.0	3.2	6.4	15.9	25.5	28.7	31.8
15°	3.2	0.0	0.0	0.0	0.0	0.0	3.2	12.7	22.3	25.5	31.8
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	19.1	25.5	28.7
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	15.9	22.3	25.5
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	12.7	19.1	22.3
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	12.7	15.9
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	9.6	12.7
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	9.6	12.7
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4	9.6
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4	9.6
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4	6.4
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	3.2
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	3.2
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	3.2
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	3.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	3.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	3.2
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°	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
2.5°	44.6	44.6	41.4	38.2	38.2	38.2	41.4	44.6	44.6	44.6
5°	41.4	41.4	38.2	38.2	38.2	38.2	41.4	47.8	50.9	50.9
7.5°	41.4	41.4	38.2	38.2	38.2	38.2	41.4	47.8	50.9	54.1
10°	38.2	38.2	38.2	38.2	35.0	38.2	41.4	47.8	57.3	57.3
12.5°	38.2	38.2	38.2	38.2	35.0	38.2	44.6	50.9	60.5	63.7
15°	38.2	38.2	38.2	35.0	35.0	38.2	44.6	54.1	63.7	70.0
17.5°	35.0	38.2	38.2	35.0	35.0	38.2	44.6	54.1	70.0	79.6
20°	31.8	35.0	38.2	35.0	35.0	35.0	44.6	54.1	73.2	86.0
22.5°	28.7	31.8	35.0	35.0	31.8	35.0	44.6	57.3	79.6	95.5
25°	25.5	28.7	28.7	31.8	31.8	35.0	44.6	57.3	82.8	108.3
27.5°	19.1	22.3	25.5	28.7	28.7	35.0	44.6	60.5	89.2	133.7
30°	15.9	19.1	22.3	25.5	28.7	35.0	44.6	60.5	95.5	168.8
32.5°	15.9	19.1	22.3	25.5	28.7	31.8	44.6	63.7	105.1	210.1
35°	12.7	15.9	19.1	25.5	25.5	31.8	44.6	63.7	114.6	273.8
37.5°	12.7	15.9	19.1	25.5	25.5	31.8	44.6	63.7	140.1	305.7
40°	9.6	12.7	15.9	25.5	25.5	31.8	47.8	66.9	143.3	308.9
42.5°	9.6	12.7	15.9	22.3	25.5	31.8	47.8	66.9	133.7	318.4
45°	9.6	12.7	15.9	25.5	28.7	35.0	47.8	70.0	130.5	363.0
47.5°	9.6	12.7	15.9	25.5	31.8	35.0	47.8	70.0	133.7	519.0
50°	9.6	12.7	15.9	25.5	35.0	35.0	47.8	70.0	146.5	834.2
52.5°	6.4	9.6	12.7	22.3	28.7	38.2	50.9	66.9	156.0	1114.4
55°	6.4	6.4	9.6	19.1	25.5	41.4	54.1	66.9	181.5	1184.5
57.5°	6.4	6.4	9.6	15.9	22.3	44.6	57.3	66.9	210.1	1149.4
59°	6.4	6.4	6.4	15.9	19.1	44.6	57.3	70.0	213.3	1088.9
60°	6.4	6.4	6.4	12.7	19.1	44.6	60.5	73.2	216.5	1018.9
62.5°	3.2	3.2	3.2	12.7	15.9	44.6	66.9	89.2	222.9	786.5
65°	6.4	6.4	3.2	9.6	15.9	38.2	76.4	95.5	226.1	611.3
67.5°	6.4	6.4	6.4	12.7	15.9	38.2	79.6	98.7	226.1	484.0
70°	6.4	6.4	6.4	12.7	19.1	38.2	79.6	101.9	222.9	394.8
72.5°	6.4	6.4	6.4	12.7	19.1	35.0	73.2	105.1	213.3	334.3
75°	6.4	6.4	6.4	9.6	15.9	31.8	70.0	114.6	194.2	283.4
77.5°	6.4	6.4	6.4	6.4	12.7	25.5	63.7	127.4	171.9	229.3
80°	9.6	6.4	6.4	6.4	9.6	22.3	60.5	124.2	143.3	149.6
82.5°	9.6	6.4	6.4	3.2	6.4	15.9	47.8	95.5	73.2	66.9
85°	6.4	6.4	6.4	3.2	3.2	9.6	22.3	28.7	22.3	15.9
87.5°	6.4	6.4	6.4	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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: SP1-2407-184-10

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

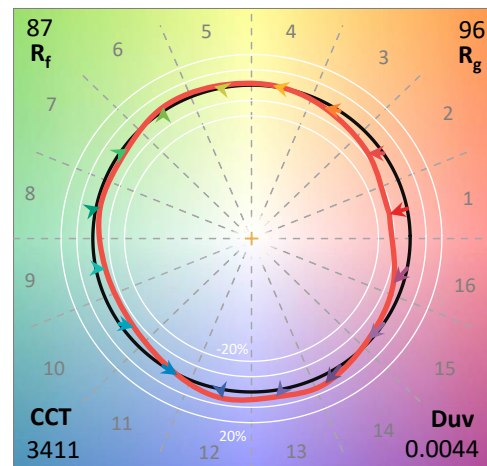
Test Information

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

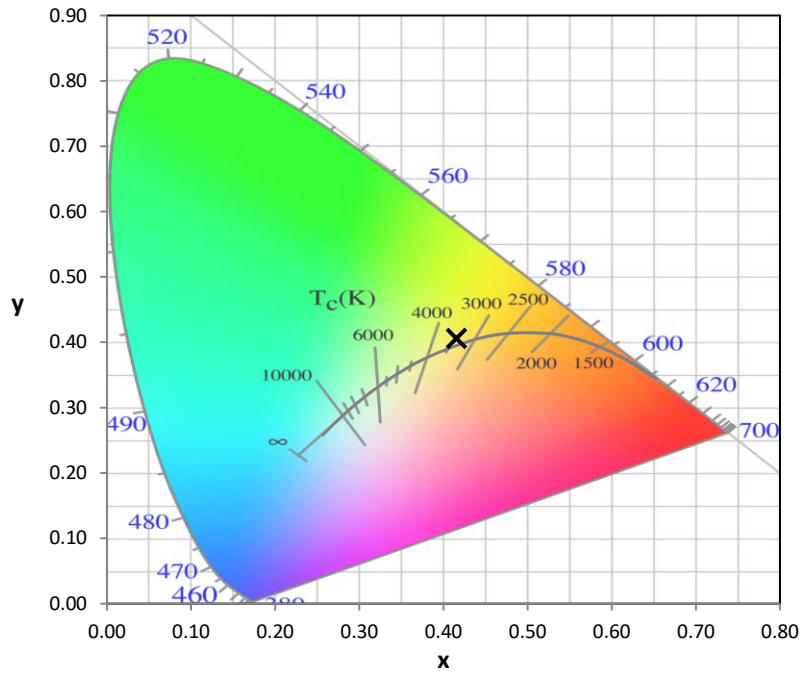
Stabilization Time: 35M
 Operation Time: 1H 35M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-10

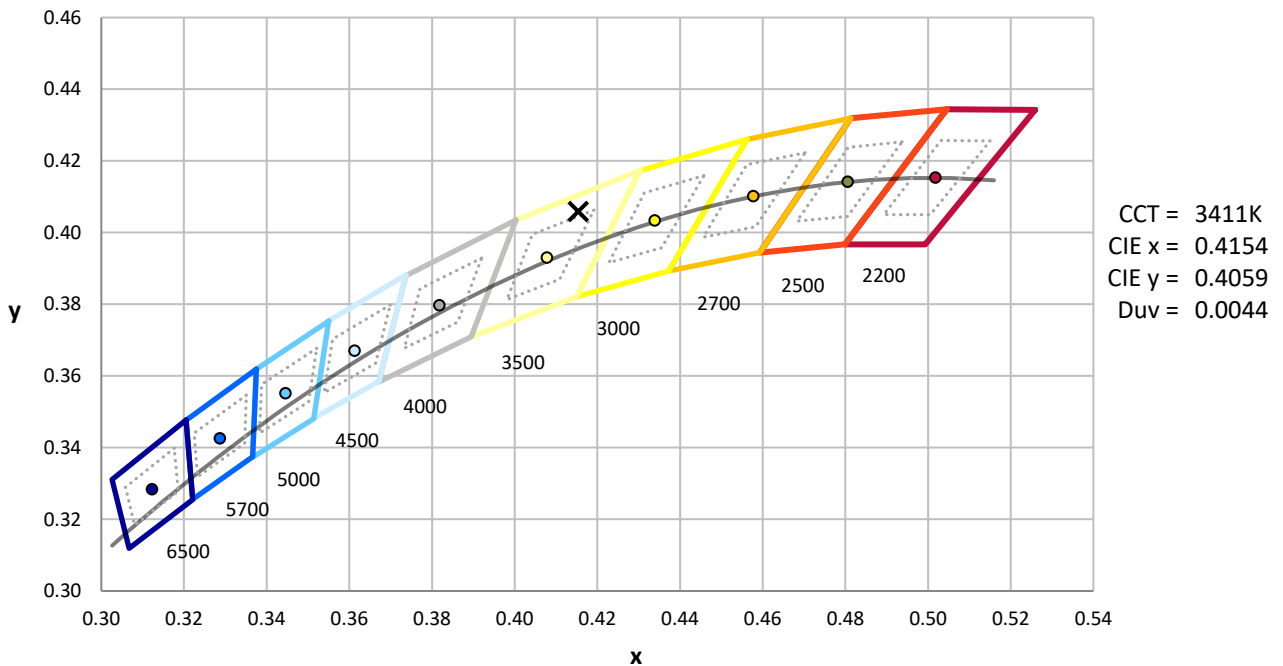
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

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CIE 1931 Chromaticity Diagram



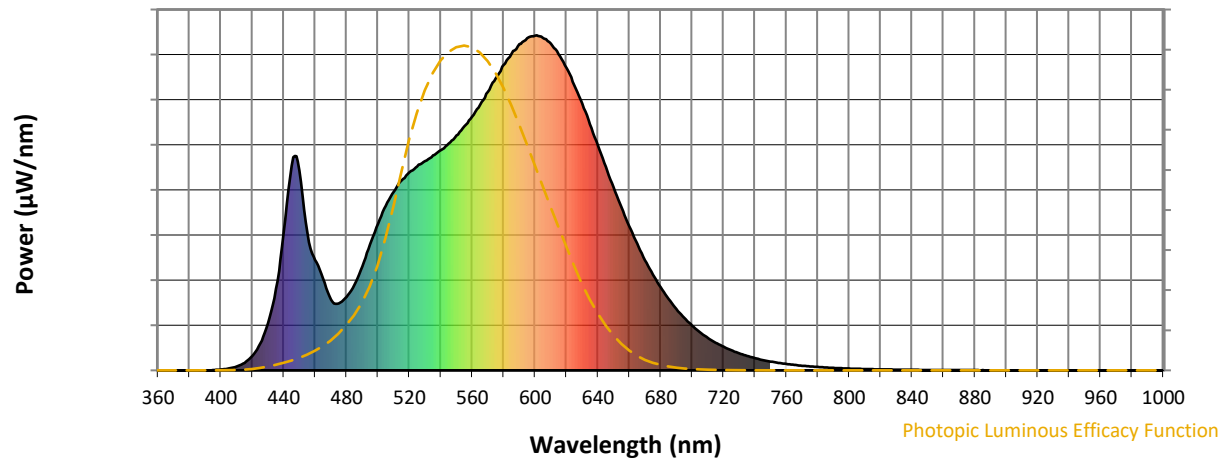
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-10

Photopic Flux vs. Wavelength

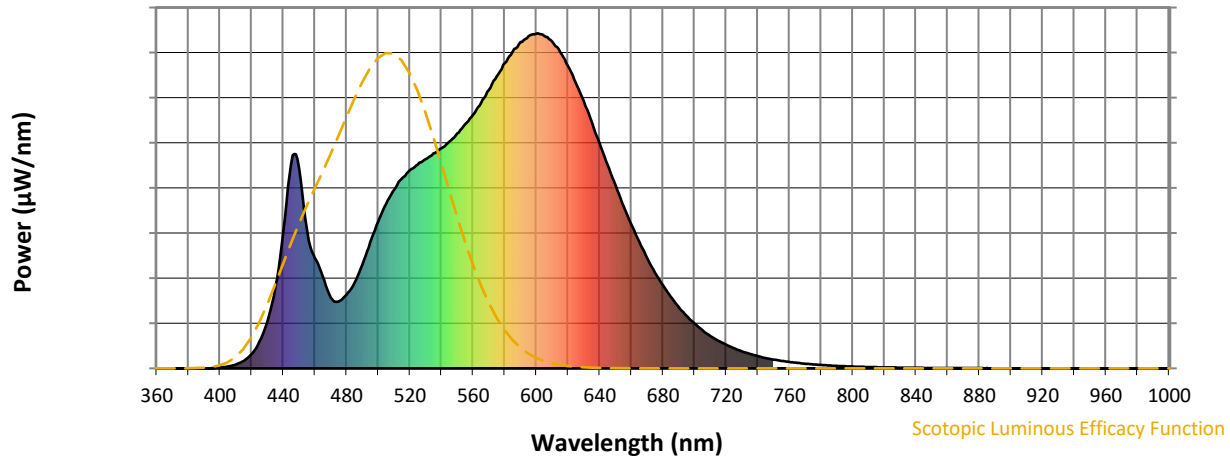


Photopic Lumens: NR

λ (nm)	Power 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	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



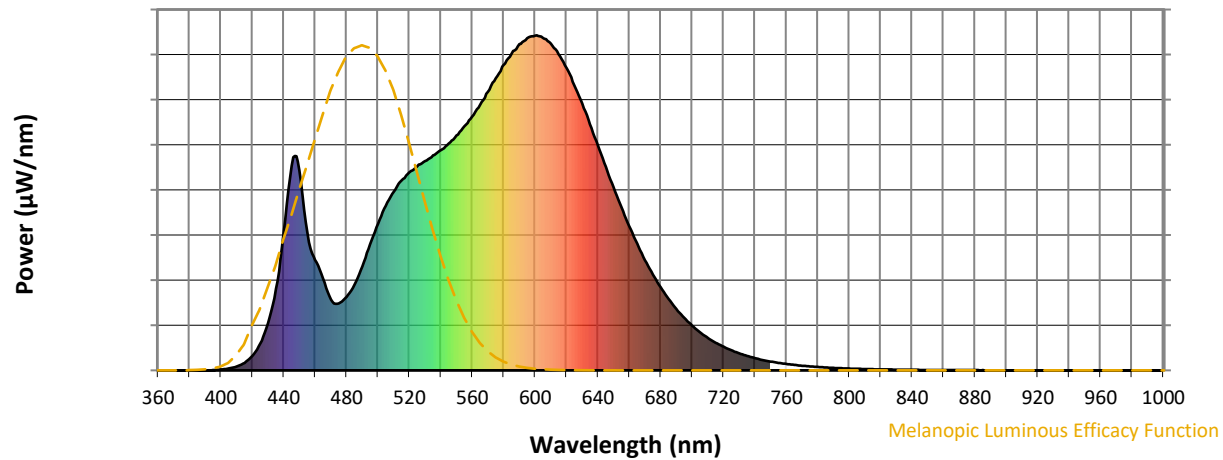
Scotopic Lumens: NR

S/P: 1.48

λ (nm)	Power 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	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

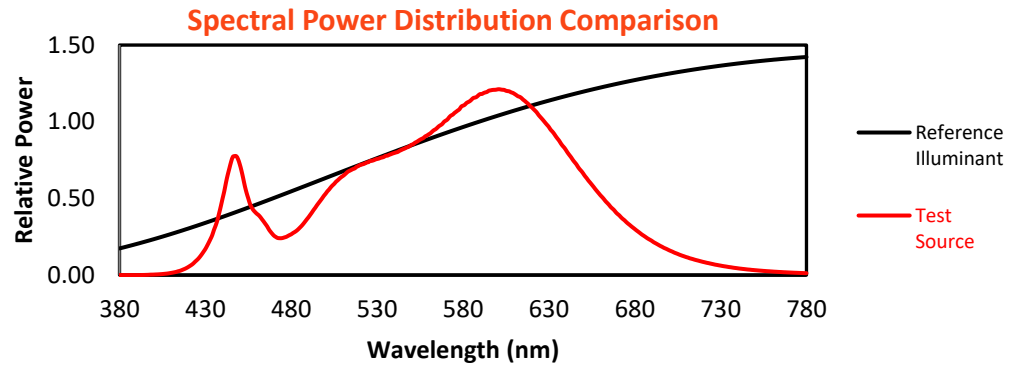
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	311	NR	620	903	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			

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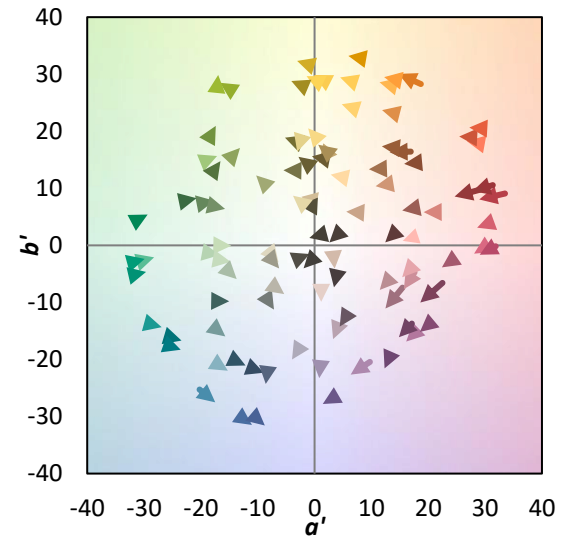
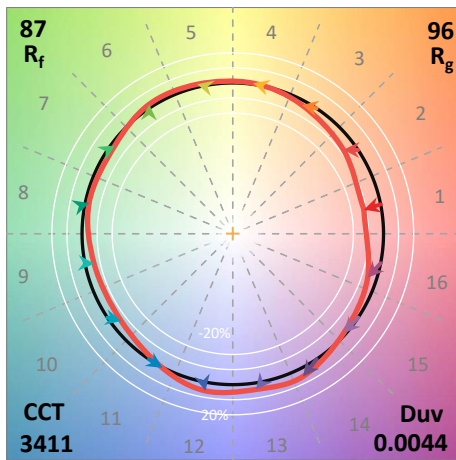
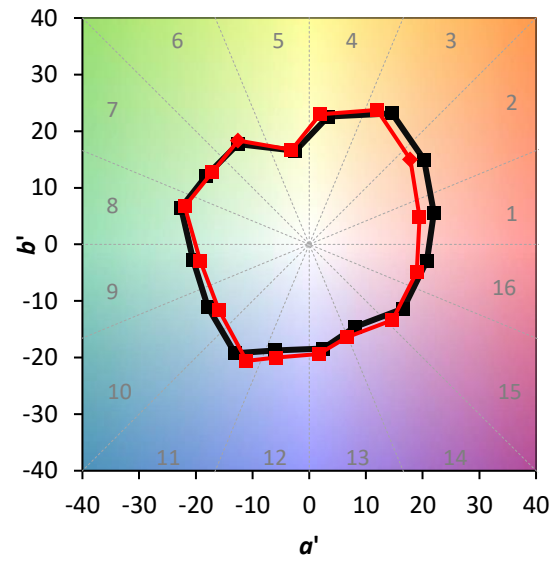
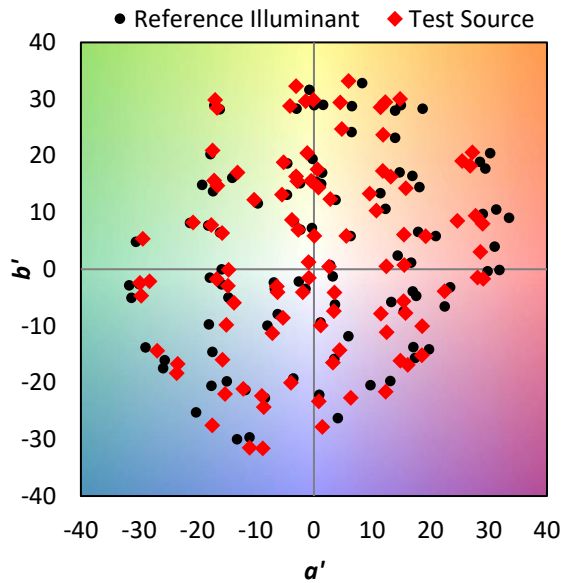
TM-30-18

Summary

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

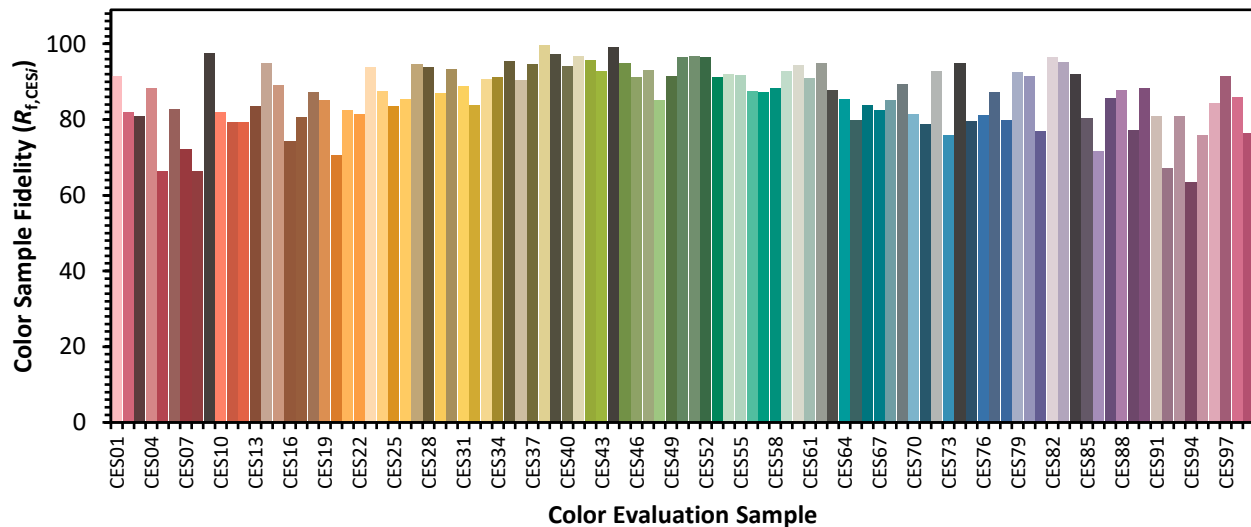


Color Vector Graphics

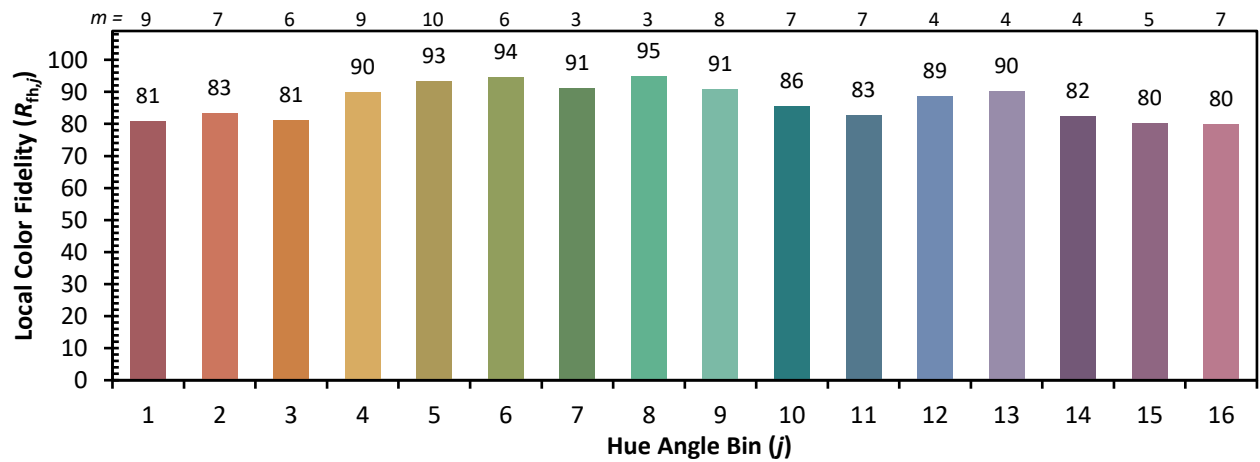
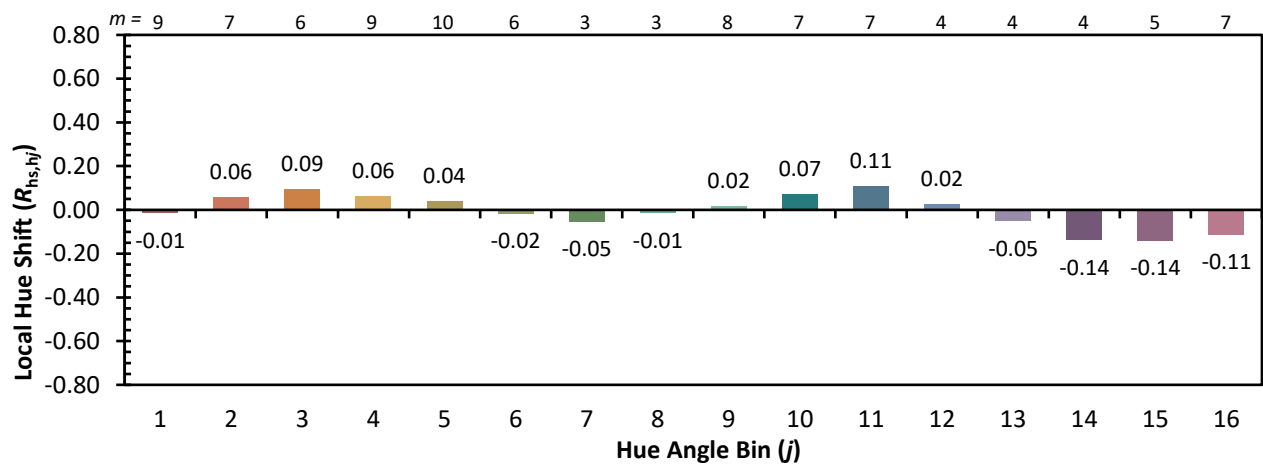
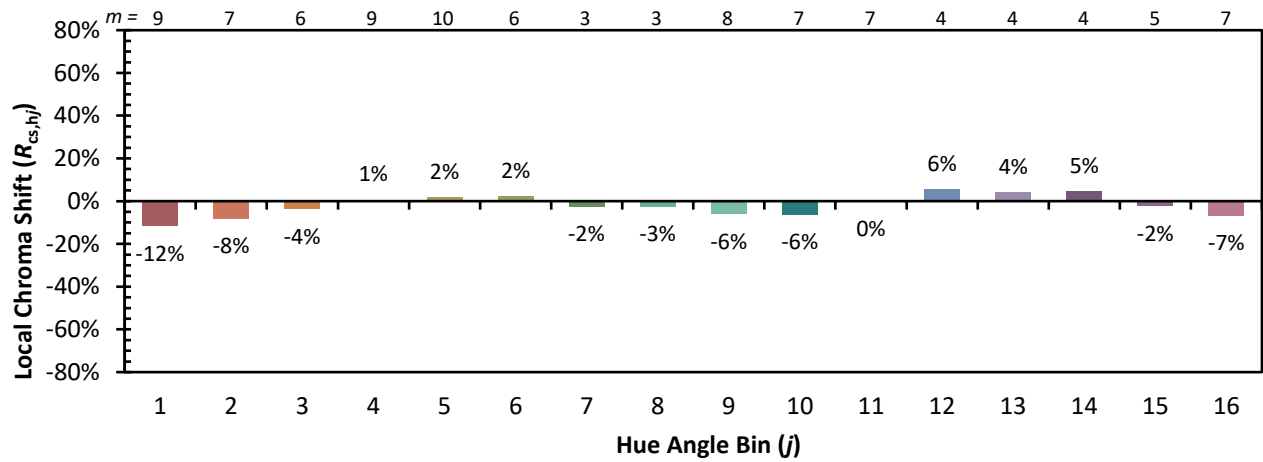


Individual Sample Fidelity Index ($R_{f,i}$)

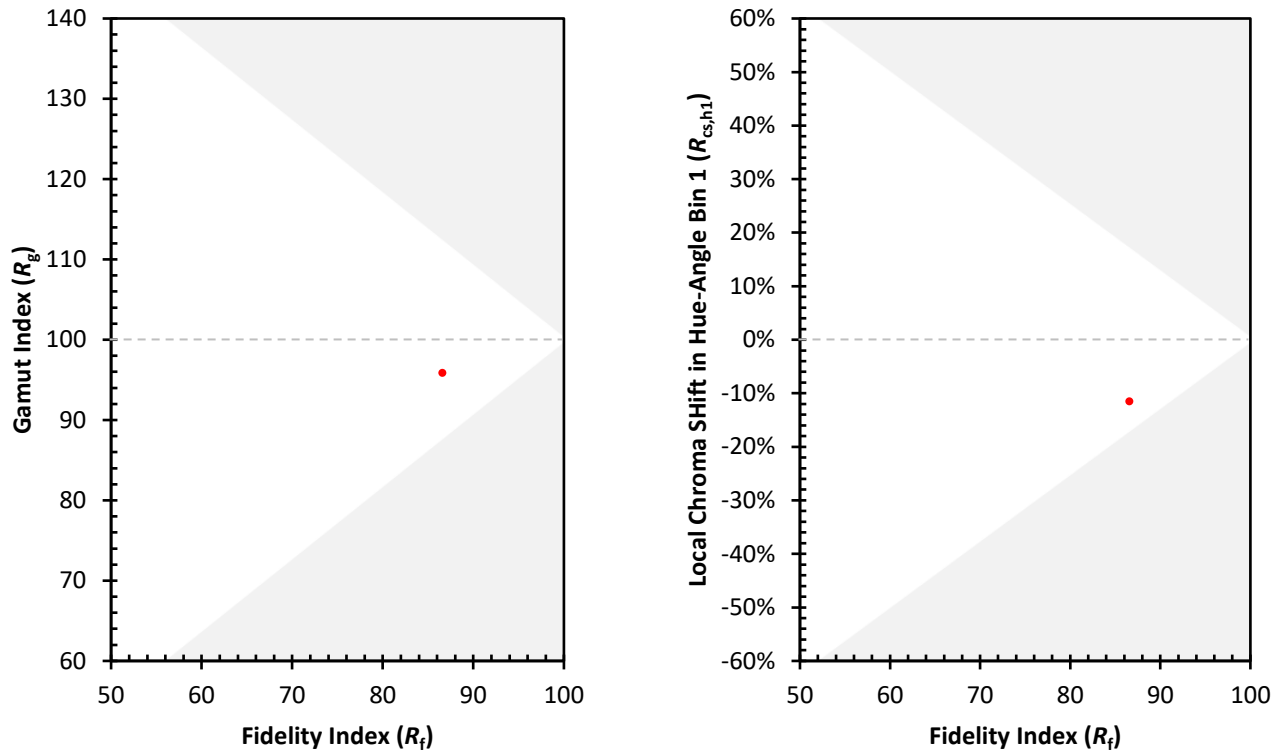
CES01 = 86	CES26 = 85	CES51 = 97	CES76 = 81
CES02 = 62	CES27 = 95	CES52 = 96	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 91	CES78 = 80
CES04 = 70	CES29 = 87	CES54 = 92	CES79 = 93
CES05 = 49	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 89	CES56 = 88	CES81 = 77
CES07 = 41	CES32 = 84	CES57 = 87	CES82 = 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)