

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: P1068045

Luminaire Tested: **NAV-SA3A-827-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068045
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA3A-827-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 615mA 3xLight Square PACKAGE
80CRI 2700K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (42) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6809.4 lumens
Efficiency: N/A
Efficacy: 83.0 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): 82
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

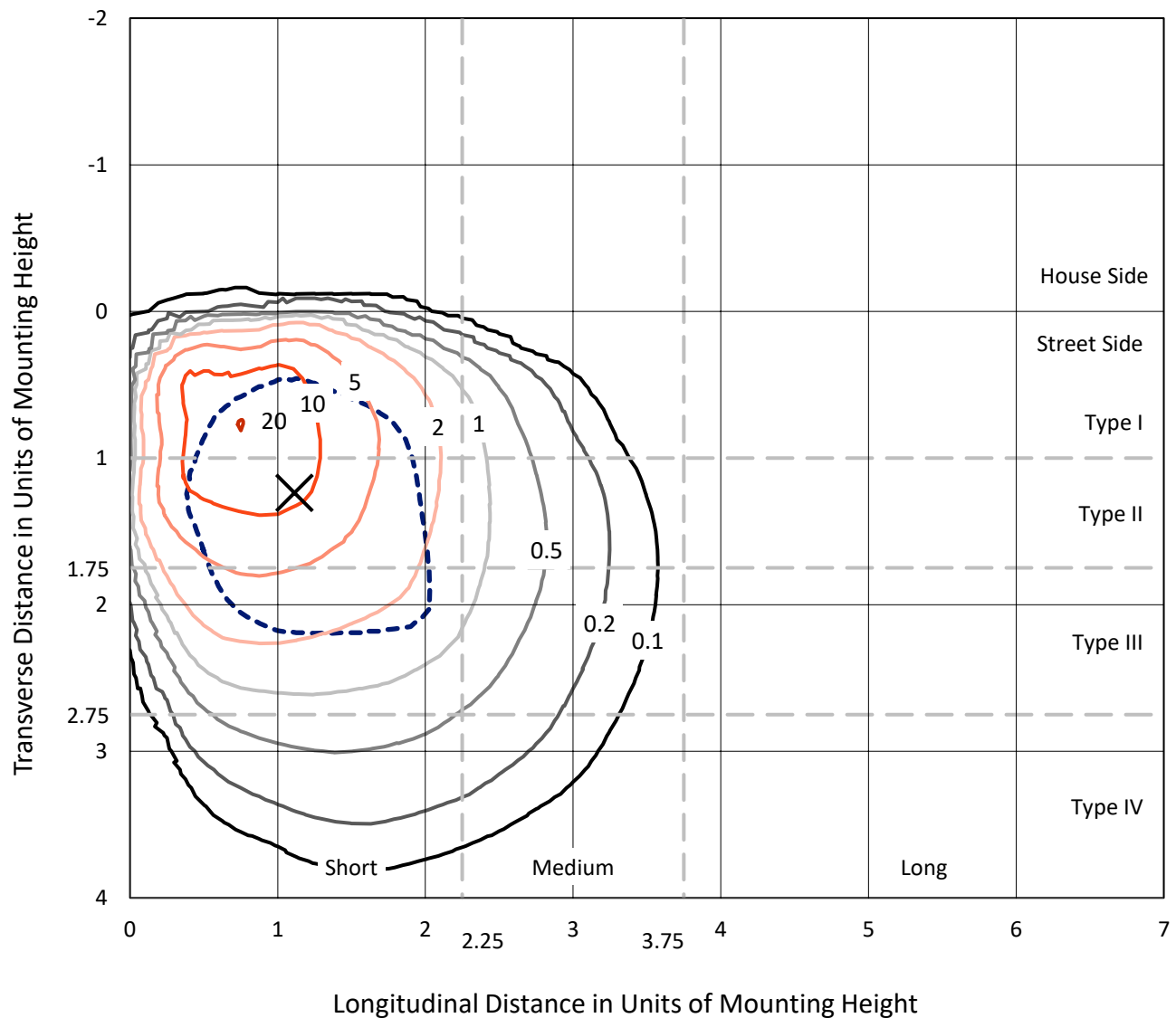


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

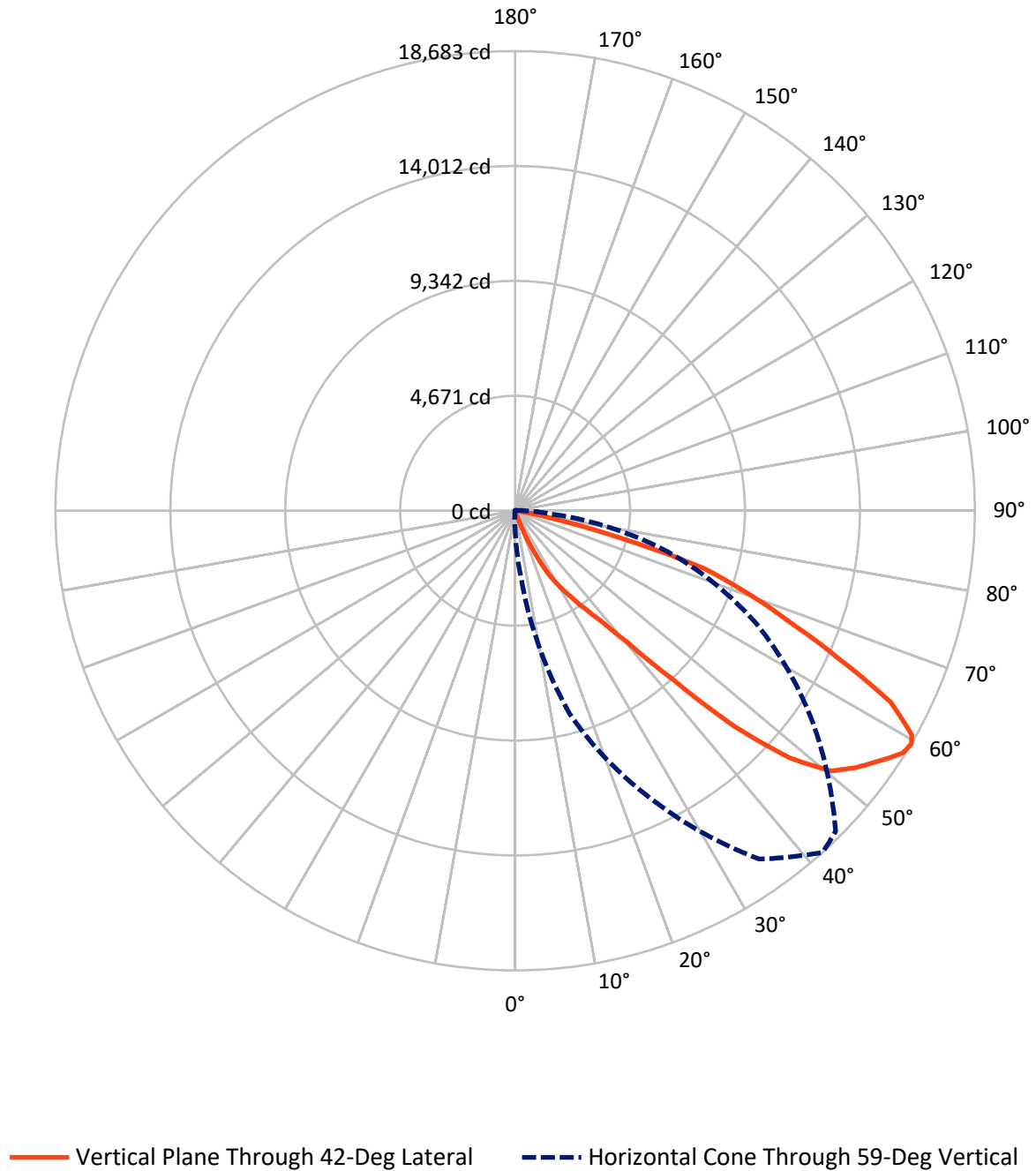


Based on 15 foot mounting height. Maximum calculated value = 20.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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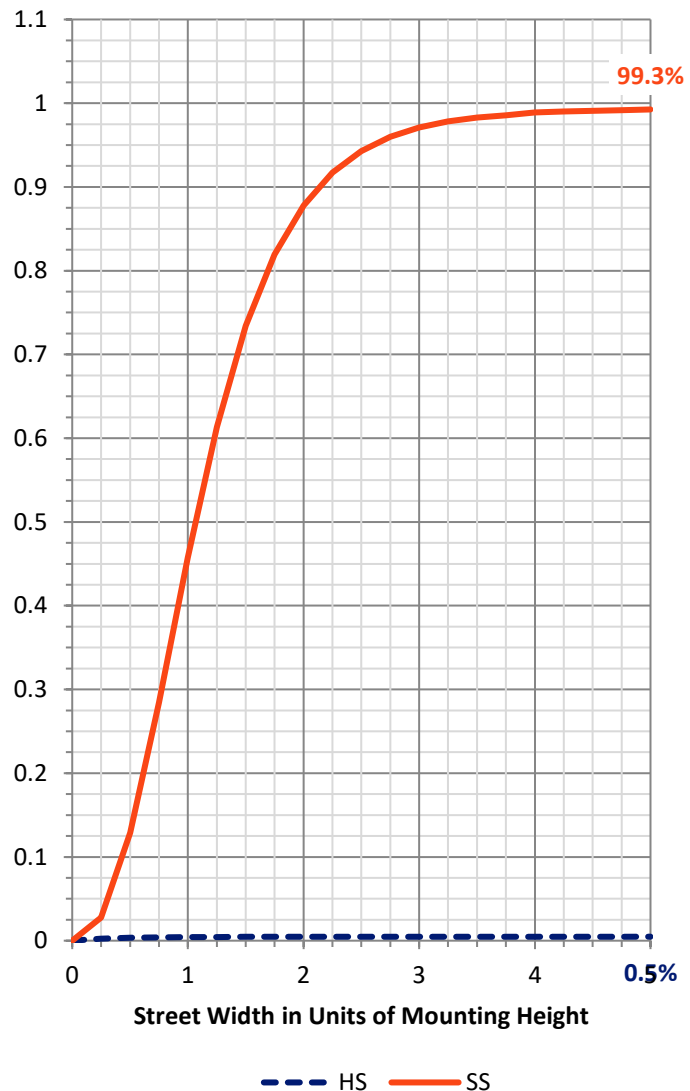
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	32.8	0.0	32.8
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	6776.6	0.0	6776.6
	% Fixture	99.5	0.0	99.5
Total	Lumens	6809.4	0.0	6809.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.0
10°-20°	9.9	0.1
20°-30°	127.0	1.9
30°-40°	428.2	6.3
40°-50°	1293.4	19.0
50°-60°	2283.2	33.5
60°-70°	2010.4	29.5
70°-80°	639.9	9.4
80°-90°	15.3	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°	6809.4	100.0
0°-180°	6809.4	100.0



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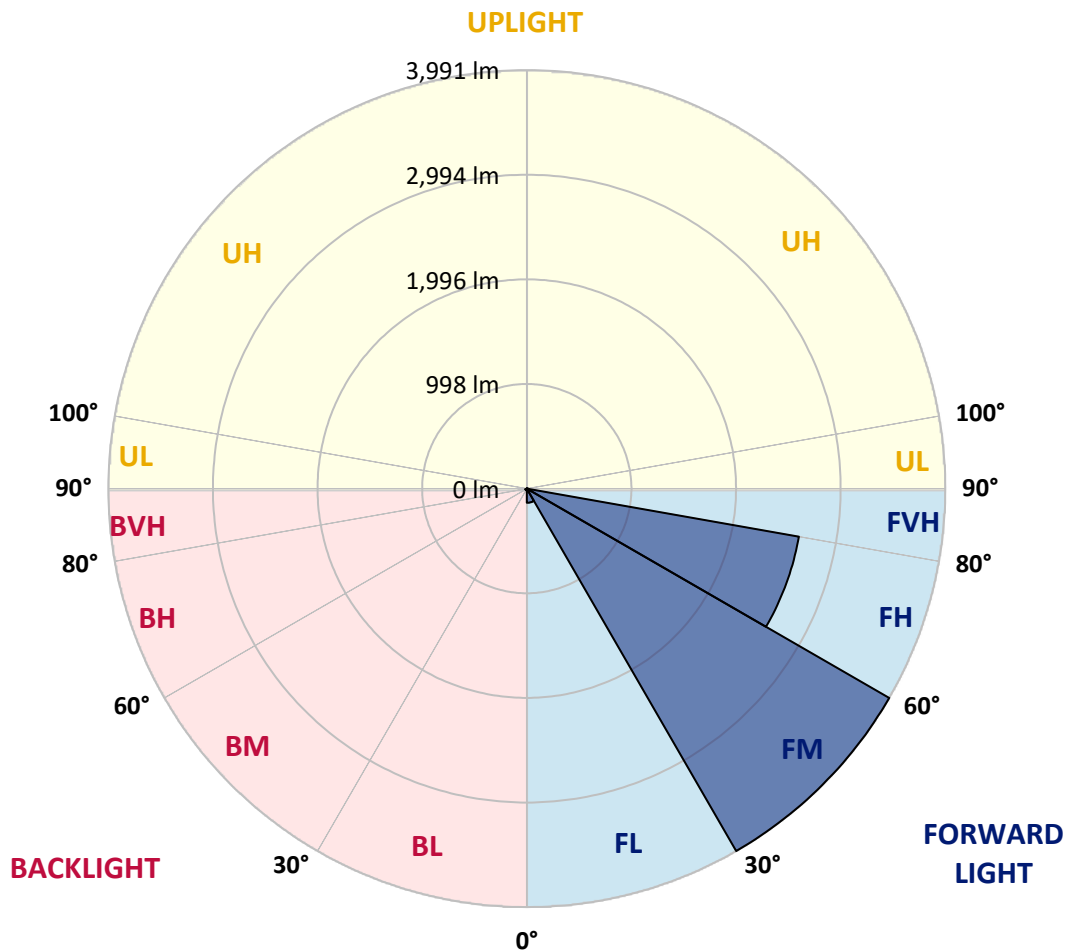
CATALOG NUMBER: NAV-SA3A-827-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	135.3	2.0			
FM	(30°-60°)	3991.5	58.6			
FH	(60°-80°)	2635.3	38.7			G2/5000
FVH	(80°-90°)	14.6	0.2			G1/100
BL	(0°-30°)	3.7	0.1	B0/110		
BM	(30°-60°)	13.4	0.2	B0/220		
BH	(60°-80°)	15.0	0.2	B0/110		G0/110
BVH	(80°-90°)	0.7	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°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
2.5°	29.9	29.9	27.8	25.6	23.5	21.3	21.3	21.3	19.2	19.2	17.1
5°	34.2	34.2	32.0	29.9	29.9	27.8	27.8	25.6	23.5	23.5	21.3
7.5°	36.3	36.3	36.3	36.3	34.2	34.2	34.2	32.0	29.9	27.8	25.6
10°	38.4	40.6	42.7	42.7	42.7	42.7	42.7	40.6	36.3	34.2	29.9
12.5°	42.7	44.8	49.1	53.4	53.4	55.5	53.4	51.2	47.0	40.6	34.2
15°	47.0	51.2	57.6	66.2	74.7	76.9	76.9	70.5	61.9	49.1	40.6
17.5°	53.4	59.8	76.9	104.6	134.5	158.0	158.0	140.9	98.2	64.0	47.0
20°	57.6	70.5	123.8	251.9	384.3	482.5	463.3	409.9	219.9	100.3	51.2
22.5°	64.0	89.7	262.6	661.8	1024.8	1204.1	1161.4	881.7	493.2	179.3	61.9
25°	72.6	130.2	520.9	1240.4	1904.4	2098.7	2070.9	1646.1	898.8	301.0	79.0
27.5°	89.7	192.1	834.8	1880.9	2809.6	2976.2	2965.5	2410.4	1436.8	484.6	102.5
30°	113.2	279.7	1238.3	2555.6	3409.6	3578.2	3524.9	2969.8	1938.6	740.8	132.4
32.5°	140.9	390.7	1603.4	3053.0	3962.5	4184.6	4120.5	3456.5	2342.1	958.6	196.4
35°	183.6	499.6	1964.2	3492.8	4600.9	4882.7	4776.0	3958.3	2690.1	1204.1	237.0
37.5°	205.0	563.6	2295.1	3971.1	5318.3	5702.5	5621.4	4592.4	3044.5	1518.0	290.4
40°	207.1	640.5	2638.8	4594.5	6332.4	7017.7	6872.5	5681.2	3704.2	1921.5	373.6
42.5°	213.5	755.8	3085.1	5657.7	8324.3	9308.5	9144.1	7683.8	5200.8	2730.6	529.5
45°	243.4	973.6	3994.6	7645.4	11059.2	12502.5	12312.5	10474.2	7291.0	4252.9	903.1
47.5°	348.0	1464.6	5589.4	9791.0	13856.1	15006.8	14959.9	12673.3	9184.7	5813.6	1530.8
50°	559.4	2248.1	7404.1	11595.1	15636.6	16625.1	16507.7	13591.3	10265.0	6878.9	1962.1
52.5°	747.2	2997.5	8544.2	12259.1	16168.3	17346.8	17203.7	13926.5	10549.0	7192.8	2081.6
55°	794.2	3268.7	8883.7	12464.1	16520.5	17957.4	17750.3	14150.7	10585.3	6968.6	1883.1
57.5°	770.7	3012.5	8663.8	12664.7	17011.6	18585.1	18309.6	14588.4	10707.0	6588.6	1567.1
59°	730.2	2696.5	8527.1	12824.9	17282.7	18683.3	18424.9	14684.4	10788.1	6415.6	1374.9
60°	683.2	2483.0	8420.4	12929.5	17265.6	18529.5	18262.7	14639.6	10820.1	6266.2	1283.1
62.5°	527.3	1981.3	8266.7	12854.8	16187.5	17126.9	16975.3	13542.2	10350.4	5787.9	1012.0
65°	409.9	1515.8	7703.0	11464.9	13774.9	14406.9	14359.9	11467.0	8710.7	4989.5	730.2
67.5°	324.5	1105.9	6513.8	9285.1	11082.7	11981.5	11947.4	9308.5	6612.1	3813.1	525.2
70°	264.7	787.8	4466.4	7000.6	8864.5	9996.0	9946.9	7491.7	4899.8	2418.9	382.2
72.5°	224.2	503.9	2709.3	5277.7	7397.7	8044.6	7901.6	6044.1	3563.3	1317.3	303.2
75°	190.0	309.6	1342.9	3290.0	4406.6	4402.3	4259.3	3200.3	1912.9	644.8	241.3
77.5°	153.7	217.8	527.3	903.1	1389.9	1720.8	1693.0	1133.7	572.2	187.9	149.4
80°	100.3	102.5	140.9	247.7	382.2	422.7	480.4	345.9	166.5	89.7	61.9
82.5°	44.8	49.1	64.0	81.1	81.1	74.7	66.2	49.1	36.3	29.9	14.9
85°	10.7	14.9	10.7	12.8	10.7	8.5	8.5	4.3	0.0	0.0	0.0
87.5°	2.1	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°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
2.5°	17.1	17.1	17.1	14.9	14.9	14.9	12.8	12.8	12.8	10.7	10.7
5°	21.3	19.2	17.1	17.1	14.9	14.9	12.8	10.7	10.7	10.7	8.5
7.5°	23.5	21.3	19.2	17.1	14.9	12.8	12.8	10.7	8.5	8.5	8.5
10°	27.8	25.6	21.3	17.1	14.9	12.8	10.7	10.7	8.5	6.4	6.4
12.5°	32.0	27.8	23.5	19.2	14.9	12.8	10.7	10.7	8.5	6.4	4.3
15°	36.3	32.0	25.6	19.2	14.9	12.8	10.7	10.7	6.4	4.3	2.1
17.5°	40.6	34.2	25.6	21.3	14.9	12.8	10.7	8.5	4.3	2.1	0.0
20°	42.7	36.3	27.8	21.3	14.9	12.8	10.7	6.4	2.1	0.0	0.0
22.5°	47.0	40.6	29.9	21.3	14.9	10.7	6.4	2.1	0.0	0.0	0.0
25°	55.5	42.7	29.9	21.3	14.9	10.7	4.3	0.0	0.0	0.0	0.0
27.5°	61.9	47.0	29.9	21.3	14.9	8.5	2.1	0.0	0.0	0.0	0.0
30°	72.6	51.2	32.0	21.3	14.9	6.4	2.1	0.0	0.0	0.0	0.0
32.5°	89.7	55.5	32.0	21.3	12.8	6.4	0.0	0.0	0.0	0.0	0.0
35°	108.9	64.0	32.0	21.3	12.8	6.4	0.0	0.0	0.0	0.0	0.0
37.5°	111.0	68.3	32.0	21.3	12.8	4.3	0.0	0.0	0.0	0.0	0.0
40°	115.3	64.0	34.2	21.3	12.8	4.3	0.0	0.0	0.0	0.0	0.0
42.5°	132.4	59.8	36.3	21.3	12.8	4.3	0.0	0.0	0.0	0.0	0.0
45°	196.4	61.9	36.3	23.5	12.8	6.4	0.0	0.0	0.0	0.0	0.0
47.5°	341.6	64.0	34.2	23.5	12.8	6.4	0.0	0.0	0.0	0.0	0.0
50°	437.7	74.7	34.2	25.6	14.9	4.3	0.0	0.0	0.0	0.0	0.0
52.5°	465.4	87.5	34.2	27.8	19.2	2.1	0.0	0.0	0.0	0.0	0.0
55°	452.6	102.5	36.3	29.9	23.5	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	418.5	111.0	38.4	32.0	25.6	0.0	0.0	0.0	0.0	0.0	0.0
59°	382.2	117.4	44.8	34.2	25.6	0.0	0.0	0.0	0.0	0.0	0.0
60°	352.3	123.8	47.0	36.3	25.6	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	284.0	132.4	51.2	42.7	21.3	0.0	0.0	0.0	0.0	0.0	0.0
65°	247.7	138.8	53.4	47.0	19.2	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	226.3	143.0	57.6	49.1	17.1	0.0	0.0	0.0	0.0	0.0	0.0
70°	209.2	140.9	61.9	47.0	14.9	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	190.0	134.5	74.7	42.7	12.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	170.8	121.7	81.1	38.4	8.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	123.8	102.5	74.7	34.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	53.4	55.5	53.4	25.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	10.7	12.8	10.7	6.4	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°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
2.5°	10.7	10.7	10.7	10.7	12.8	12.8	17.1	21.3	25.6	27.8	27.8
5°	8.5	8.5	8.5	8.5	8.5	10.7	12.8	17.1	23.5	25.6	25.6
7.5°	6.4	6.4	6.4	6.4	6.4	6.4	10.7	14.9	21.3	23.5	25.6
10°	6.4	4.3	4.3	2.1	2.1	4.3	6.4	12.8	19.2	21.3	23.5
12.5°	4.3	2.1	2.1	0.0	0.0	2.1	4.3	10.7	17.1	19.2	21.3
15°	2.1	0.0	0.0	0.0	0.0	0.0	2.1	8.5	14.9	17.1	21.3
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	12.8	17.1	19.2
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	10.7	14.9	17.1
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	8.5	12.8	14.9
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	8.5	10.7
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	6.4	8.5
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	6.4	8.5
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3	6.4
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3	6.4
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3	4.3
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	4.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1
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°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2
2.5°	29.9	29.9	27.8	25.6	25.6	25.6	27.8	29.9	29.9	29.9
5°	27.8	27.8	25.6	25.6	25.6	25.6	27.8	32.0	34.2	34.2
7.5°	27.8	27.8	25.6	25.6	25.6	25.6	27.8	32.0	34.2	36.3
10°	25.6	25.6	25.6	25.6	23.5	25.6	27.8	32.0	38.4	38.4
12.5°	25.6	25.6	25.6	25.6	23.5	25.6	29.9	34.2	40.6	42.7
15°	25.6	25.6	25.6	23.5	23.5	25.6	29.9	36.3	42.7	47.0
17.5°	23.5	25.6	25.6	23.5	23.5	25.6	29.9	36.3	47.0	53.4
20°	21.3	23.5	25.6	23.5	23.5	23.5	29.9	36.3	49.1	57.6
22.5°	19.2	21.3	23.5	23.5	21.3	23.5	29.9	38.4	53.4	64.0
25°	17.1	19.2	19.2	21.3	21.3	23.5	29.9	38.4	55.5	72.6
27.5°	12.8	14.9	17.1	19.2	19.2	23.5	29.9	40.6	59.8	89.7
30°	10.7	12.8	14.9	17.1	19.2	23.5	29.9	40.6	64.0	113.2
32.5°	10.7	12.8	14.9	17.1	19.2	21.3	29.9	42.7	70.5	140.9
35°	8.5	10.7	12.8	17.1	17.1	21.3	29.9	42.7	76.9	183.6
37.5°	8.5	10.7	12.8	17.1	17.1	21.3	29.9	42.7	93.9	205.0
40°	6.4	8.5	10.7	17.1	17.1	21.3	32.0	44.8	96.1	207.1
42.5°	6.4	8.5	10.7	14.9	17.1	21.3	32.0	44.8	89.7	213.5
45°	6.4	8.5	10.7	17.1	19.2	23.5	32.0	47.0	87.5	243.4
47.5°	6.4	8.5	10.7	17.1	21.3	23.5	32.0	47.0	89.7	348.0
50°	6.4	8.5	10.7	17.1	23.5	23.5	32.0	47.0	98.2	559.4
52.5°	4.3	6.4	8.5	14.9	19.2	25.6	34.2	44.8	104.6	747.2
55°	4.3	4.3	6.4	12.8	17.1	27.8	36.3	44.8	121.7	794.2
57.5°	4.3	4.3	6.4	10.7	14.9	29.9	38.4	44.8	140.9	770.7
59°	4.3	4.3	4.3	10.7	12.8	29.9	38.4	47.0	143.0	730.2
60°	4.3	4.3	4.3	8.5	12.8	29.9	40.6	49.1	145.2	683.2
62.5°	2.1	2.1	2.1	8.5	10.7	29.9	44.8	59.8	149.4	527.3
65°	4.3	4.3	2.1	6.4	10.7	25.6	51.2	64.0	151.6	409.9
67.5°	4.3	4.3	4.3	8.5	10.7	25.6	53.4	66.2	151.6	324.5
70°	4.3	4.3	4.3	8.5	12.8	25.6	53.4	68.3	149.4	264.7
72.5°	4.3	4.3	4.3	8.5	12.8	23.5	49.1	70.5	143.0	224.2
75°	4.3	4.3	4.3	6.4	10.7	21.3	47.0	76.9	130.2	190.0
77.5°	4.3	4.3	4.3	4.3	8.5	17.1	42.7	85.4	115.3	153.7
80°	6.4	4.3	4.3	4.3	6.4	14.9	40.6	83.3	96.1	100.3
82.5°	6.4	4.3	4.3	2.1	4.3	10.7	32.0	64.0	49.1	44.8
85°	4.3	4.3	4.3	2.1	2.1	6.4	14.9	19.2	14.9	10.7
87.5°	4.3	4.3	4.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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: SP1-2407-184-8

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-827-U-5WQ

Data in this report applies to families of products including GSS-SB1A-827-U-5WQ

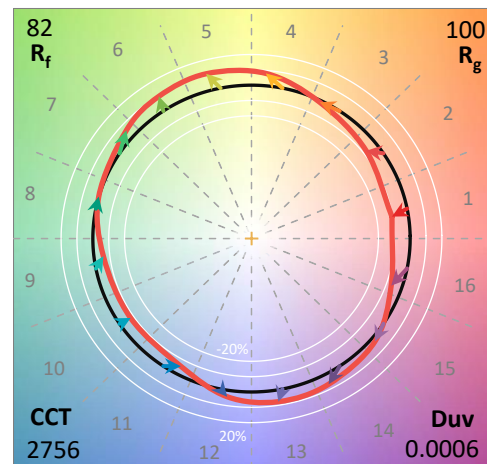
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-8
 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-827-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI
 2700K CCT 26 LEDS

Spectral Parameters

CCT (K): 2756
 CIE u' : 0.2599
 CIE v' : 0.5271
 Duv: 0.0006
 CIE x: 0.4563
 CIE y: 0.4112
 CIE z: 0.1325
 Peak Wavelength (nm): 609
 Dominant Wavelength (nm): 583
 Purity: 60.41121
 R_f: 82.2
 R_g: 99.9

CRI (Ra): 82.9
 R1: 81.6
 R2: 88.8
 R3: 96.0
 R4: 83.4
 R5: 81.4
 R6: 87.0
 R7: 84.0
 R8: 60.8
 R9: 10.8
 R10: 74.8
 R11: 84.3
 R12: 72.1
 R13: 82.9
 R14: 97.3
 R15: 73.7



Test Conditions

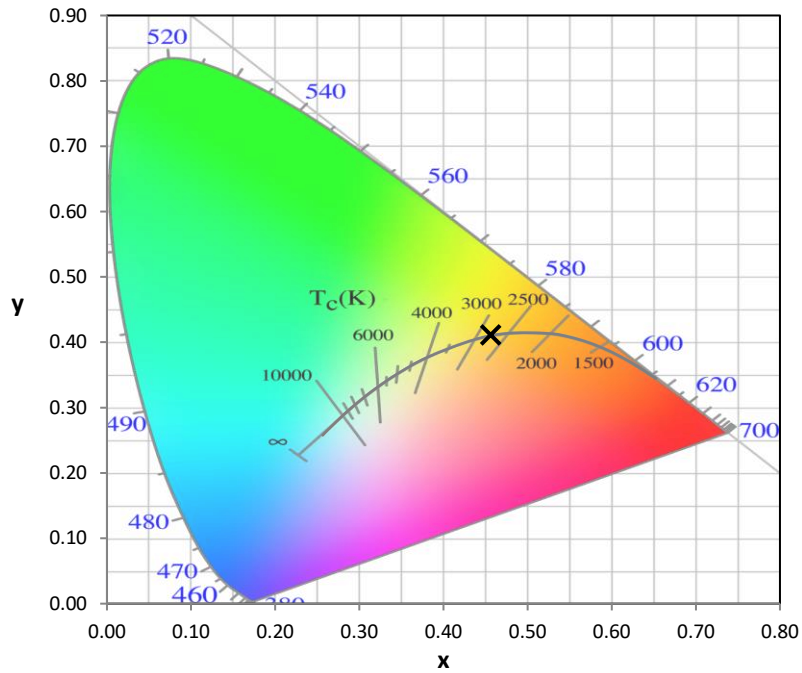
Stabilization Time: 29M
 Operation Time: 1H 29M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-8

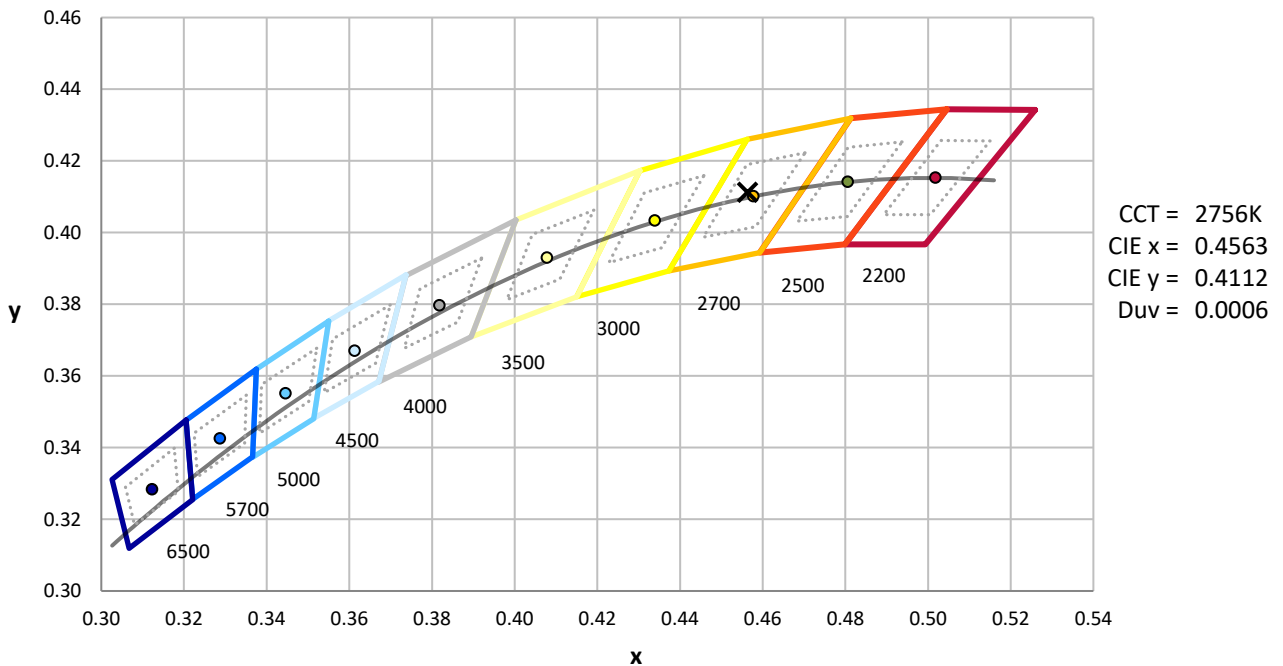
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-8

CIE 1931 Chromaticity Diagram



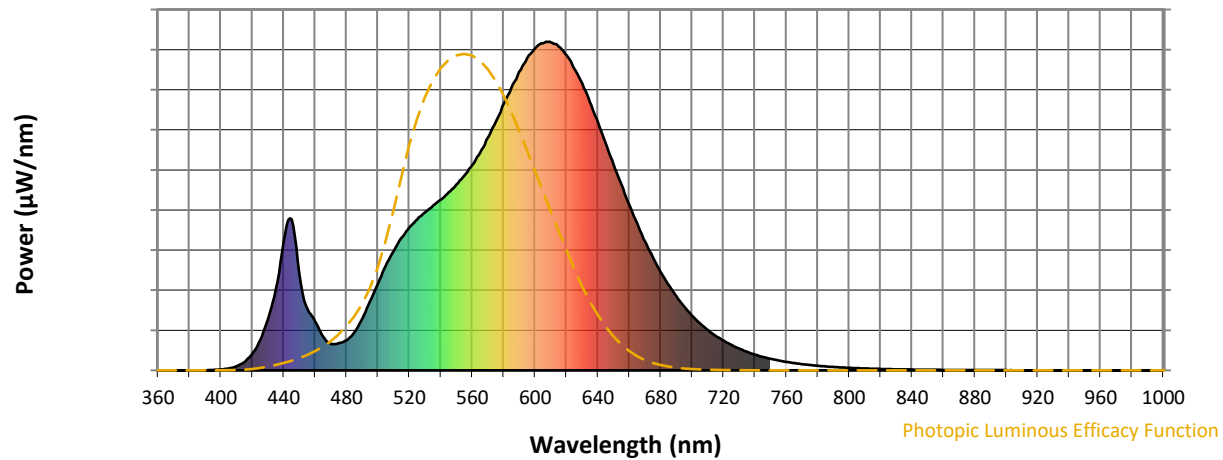
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-8

Photopic Flux vs. Wavelength

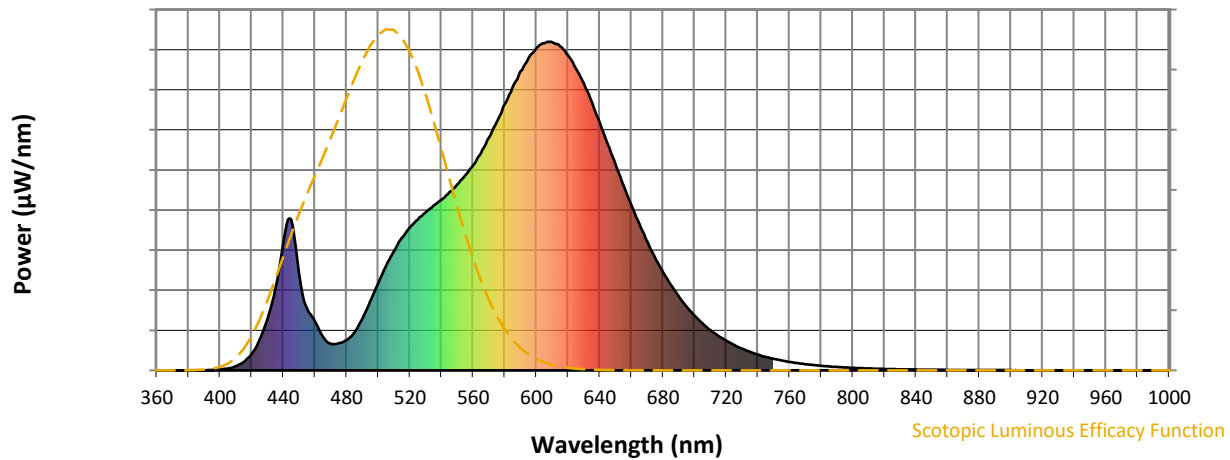


Photopic Lumens: NR

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	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

Scotopic Flux vs. Wavelength



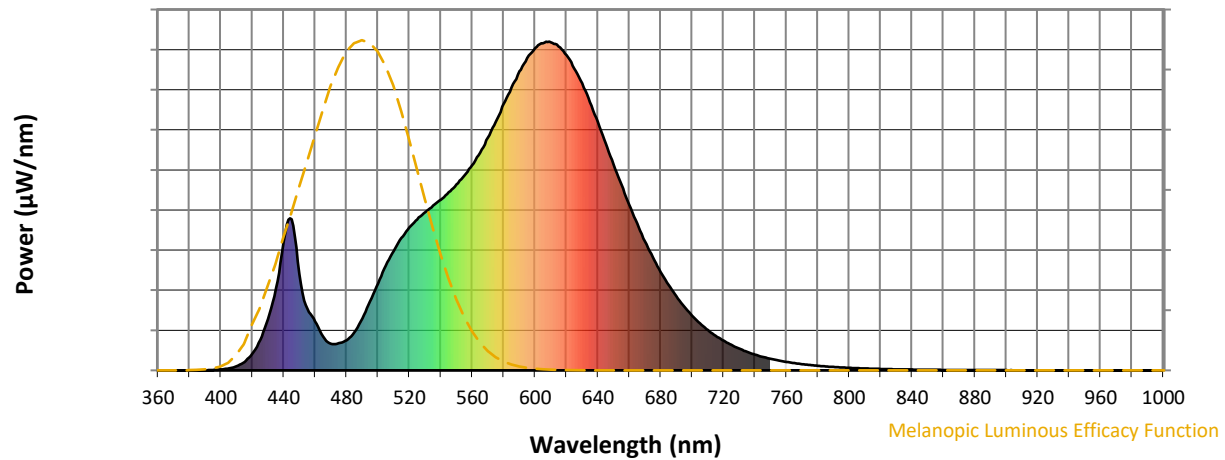
Scotopic Lumens: NR

S/P: 1.2

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	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.16

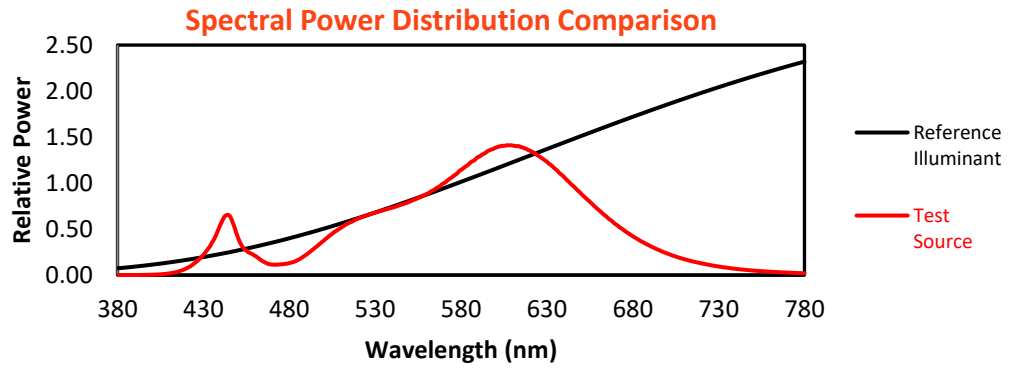
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

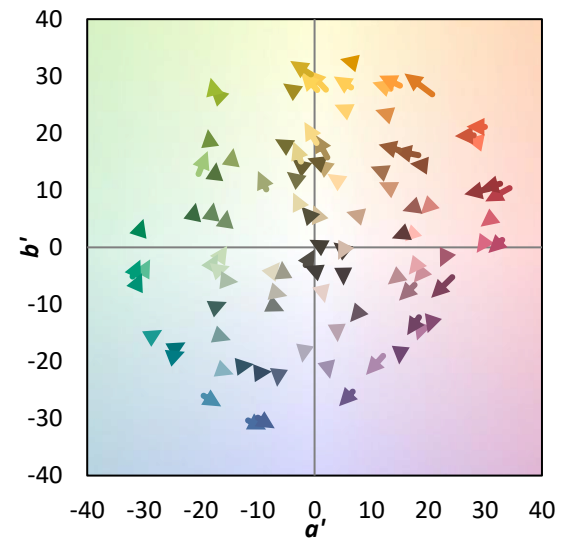
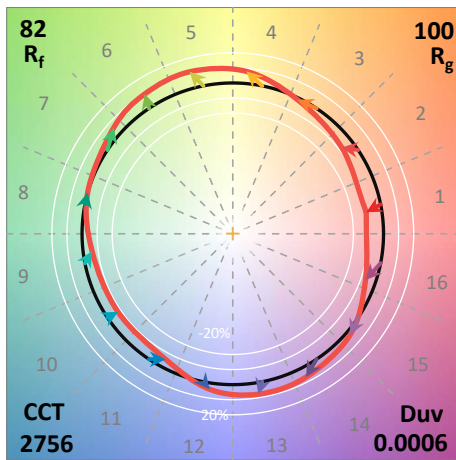
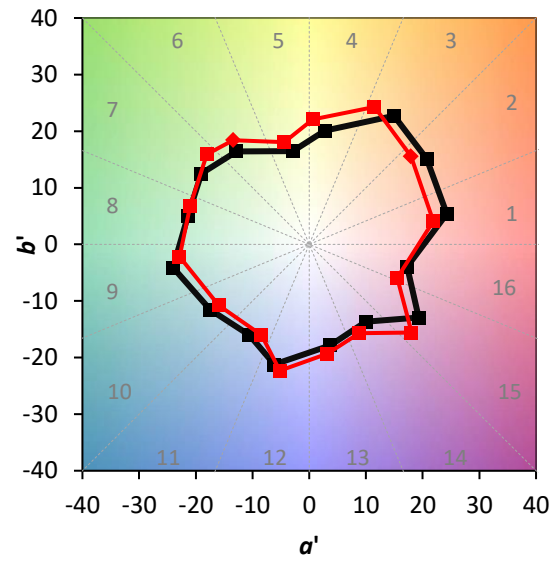
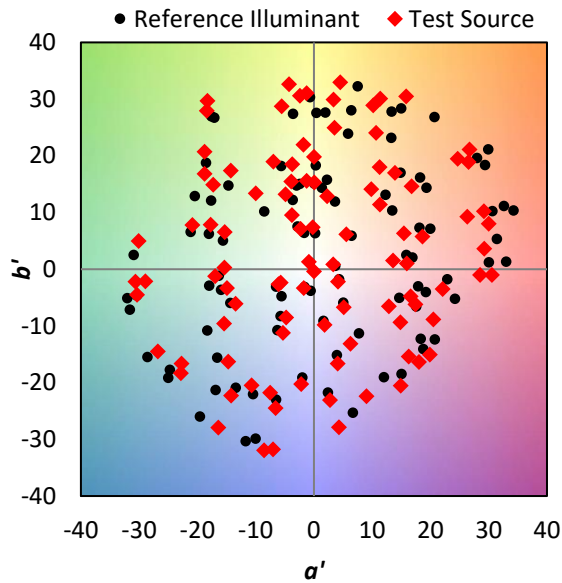
TM-30-18

Summary

$R_f = 82.2$
 $R_g = 99.9$
 $CIE R_a = 82.9$
 $R_9 = 10.8$

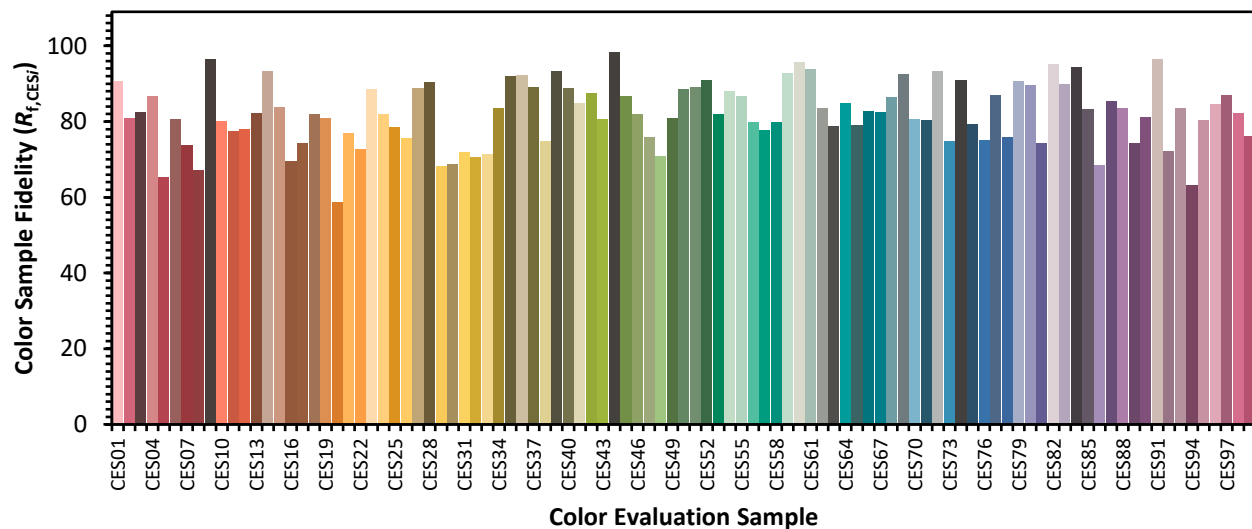


Color Vector Graphics

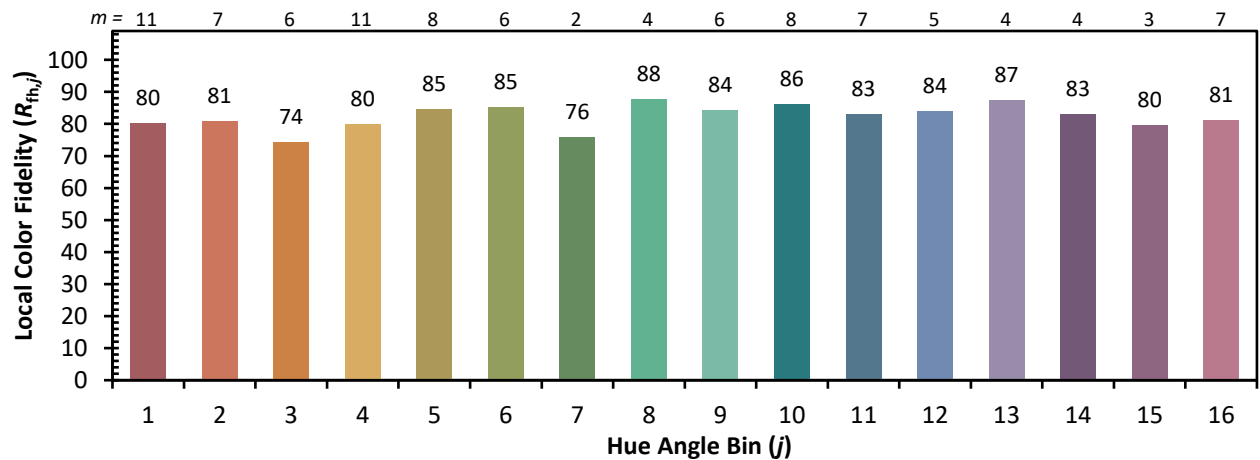
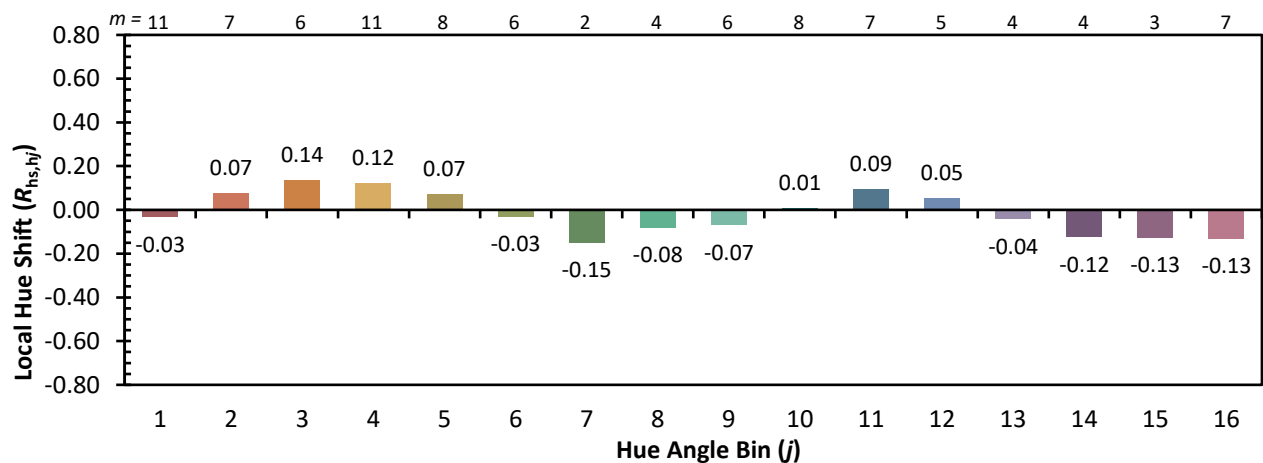
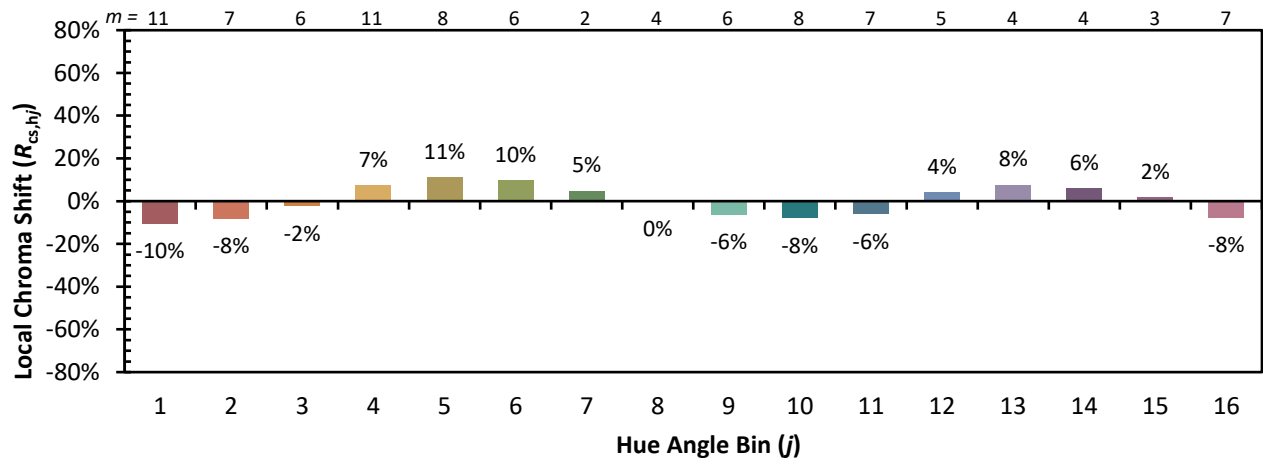


Individual Sample Fidelity Index ($R_{f,i}$)

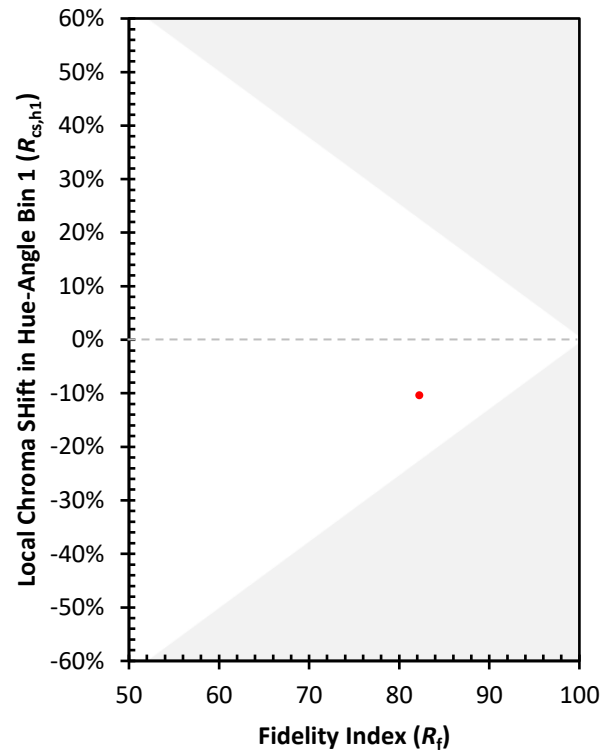
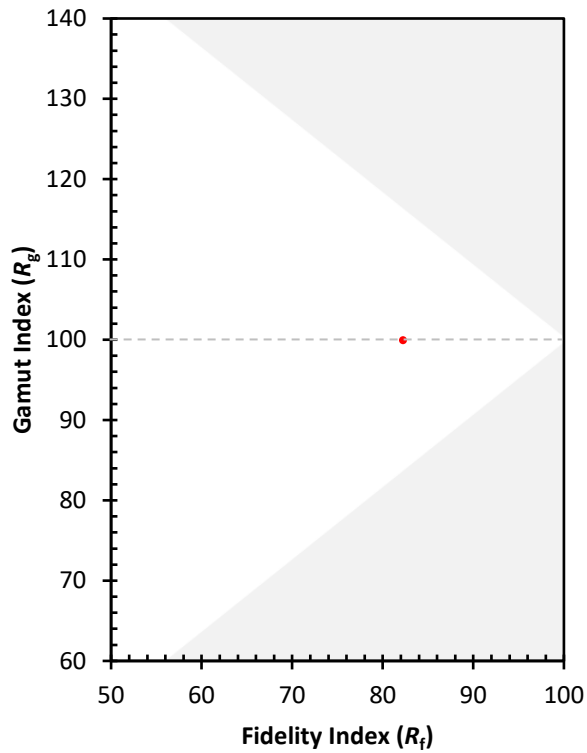
CES01 = 86	CES26 = 76	CES51 = 89	CES76 = 75
CES02 = 63	CES27 = 89	CES52 = 91	CES77 = 87
CES03 = 31	CES28 = 90	CES53 = 82	CES78 = 76
CES04 = 71	CES29 = 68	CES54 = 88	CES79 = 91
CES05 = 50	CES30 = 69	CES55 = 87	CES80 = 90
CES06 = 52	CES31 = 72	CES56 = 80	CES81 = 74
CES07 = 43	CES32 = 71	CES57 = 78	CES82 = 95
CES08 = 42	CES33 = 71	CES58 = 80	CES83 = 90
CES09 = 29	CES34 = 84	CES59 = 93	CES84 = 94
CES10 = 77	CES35 = 92	CES60 = 96	CES85 = 83
CES11 = 59	CES36 = 92	CES61 = 94	CES86 = 69
CES12 = 66	CES37 = 89	CES62 = 84	CES87 = 85
CES13 = 44	CES38 = 75	CES63 = 79	CES88 = 84
CES14 = 74	CES39 = 93	CES64 = 85	CES89 = 74
CES15 = 72	CES40 = 89	CES65 = 79	CES90 = 81
CES16 = 48	CES41 = 85	CES66 = 83	CES91 = 96
CES17 = 50	CES42 = 88	CES67 = 82	CES92 = 72
CES18 = 57	CES43 = 81	CES68 = 86	CES93 = 84
CES19 = 73	CES44 = 98	CES69 = 92	CES94 = 63
CES20 = 67	CES45 = 87	CES70 = 81	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 81	CES96 = 85
CES22 = 79	CES47 = 76	CES72 = 93	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 75	CES98 = 82
CES24 = 91	CES49 = 81	CES74 = 91	CES99 = 76
CES25 = 72	CES50 = 88	CES75 = 79	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)