

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: P1068081

Luminaire Tested: **NAV-SA6A-830-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068081
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA6A-830-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 615mA 6xLight Square PACKAGE
80CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (84) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14674 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G3

Input Watts (W): 161.6
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



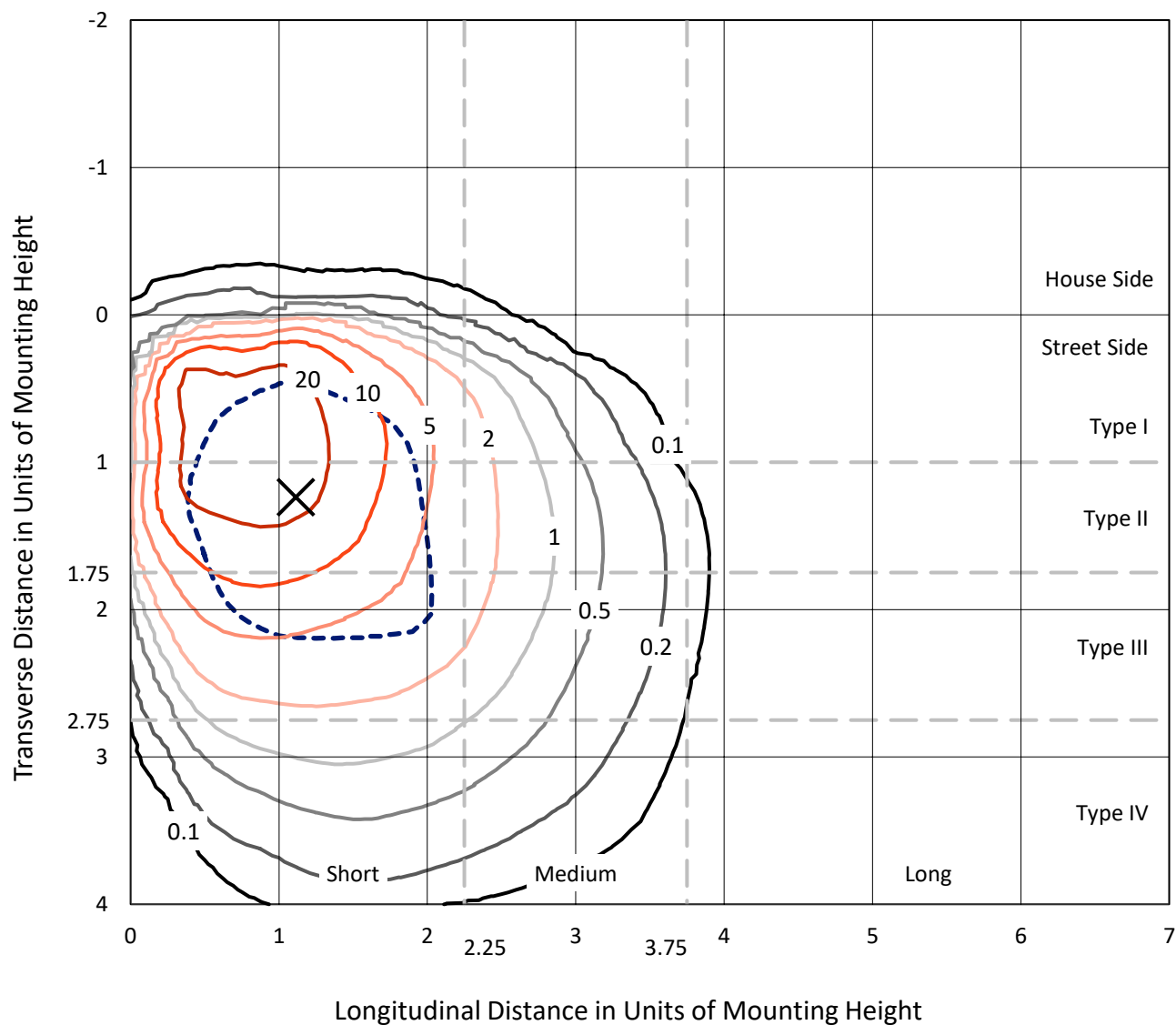
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

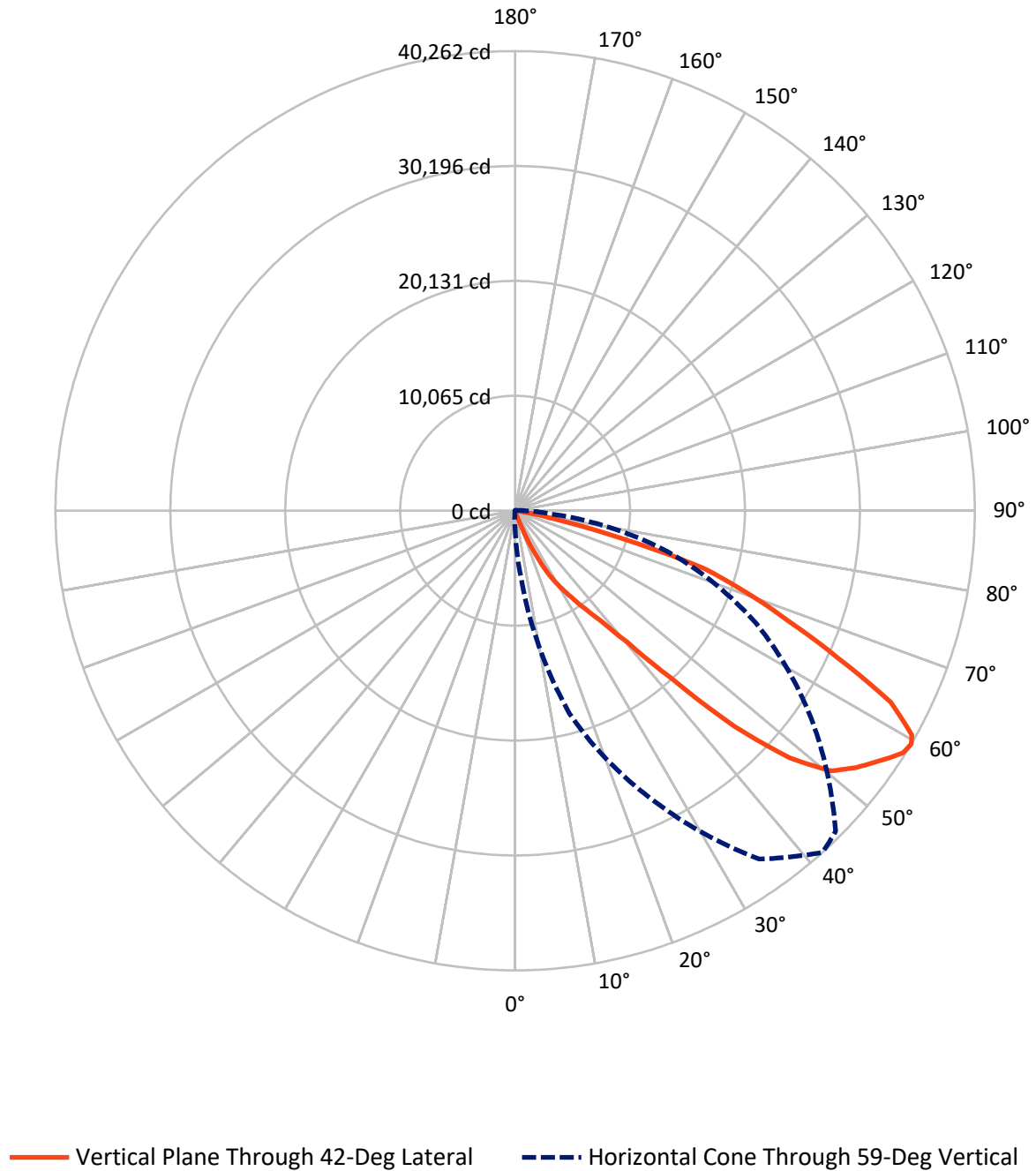


Based on 15 foot mounting height. Maximum calculated value = 43.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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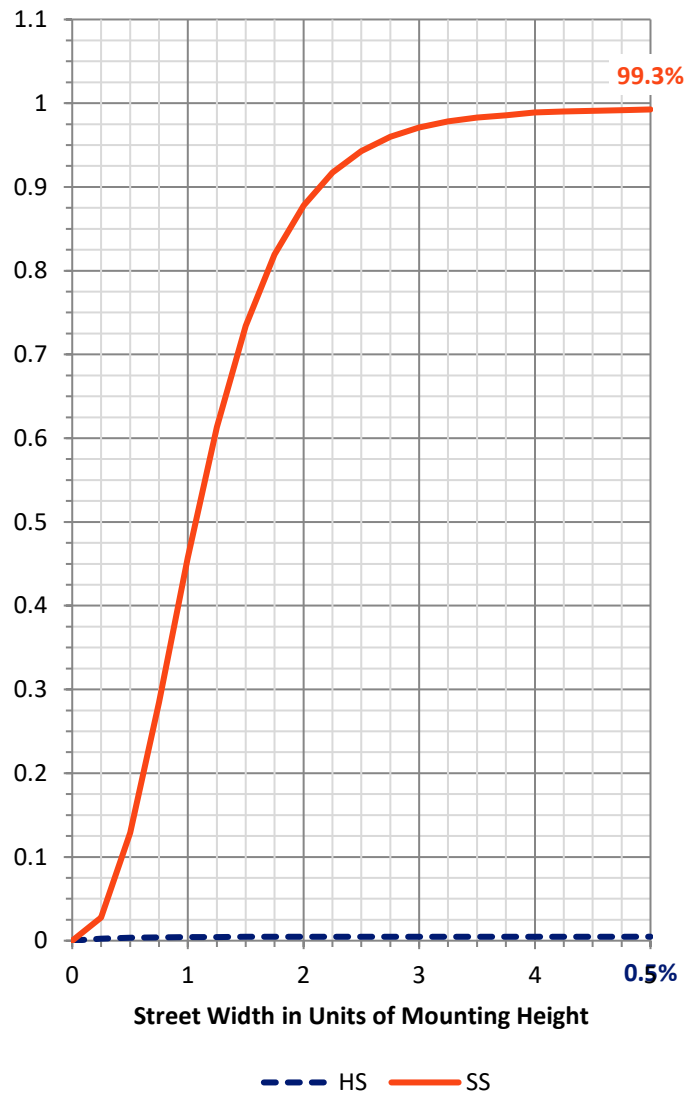
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	70.7	0.0	70.7
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	14603.3	0.0	14603.3
	% Fixture	99.5	0.0	99.5
Total	Lumens	14674.0	0.0	14674.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.3	0.0
10°-20°	21.4	0.1
20°-30°	273.7	1.9
30°-40°	922.8	6.3
40°-50°	2787.3	19.0
50°-60°	4920.2	33.5
60°-70°	4332.3	29.5
70°-80°	1379.0	9.4
80°-90°	33.0	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°	14674.0	100.0
0°-180°	14674.0	100.0



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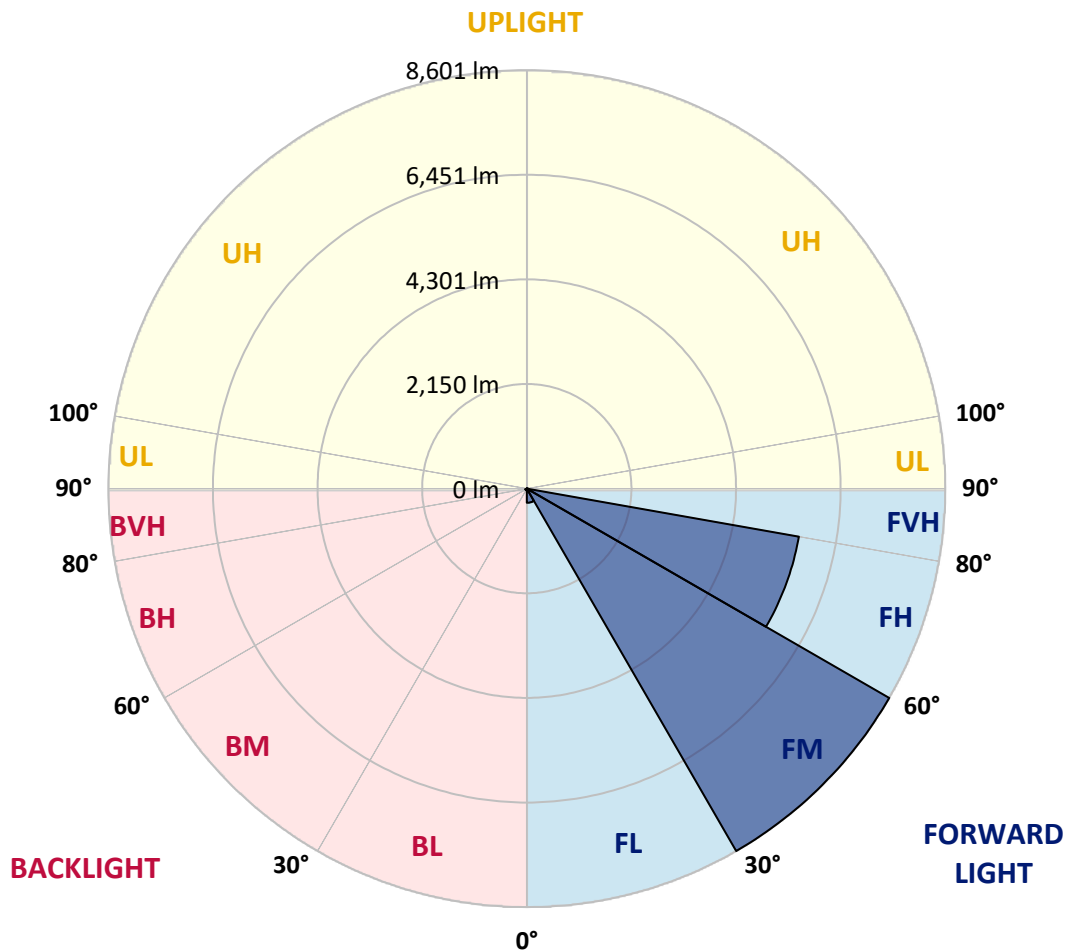
CATALOG NUMBER: NAV-SA6A-830-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	291.5	2.0			
FM	(30°-60°)	8601.4	58.6			
FH	(60°-80°)	5679.0	38.7			G3/7500
FVH	(80°-90°)	31.4	0.2			G1/100
BL	(0°-30°)	7.9	0.1	B0/110		
BM	(30°-60°)	28.9	0.2	B0/220		
BH	(60°-80°)	32.3	0.2	B0/110		G0/110
BVH	(80°-90°)	1.6	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-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4
2.5°	64.4	64.4	59.8	55.2	50.6	46.0	46.0	46.0	41.4	41.4	36.8
5°	73.6	73.6	69.0	64.4	64.4	59.8	59.8	55.2	50.6	50.6	46.0
7.5°	78.2	78.2	78.2	78.2	73.6	73.6	73.6	69.0	64.4	59.8	55.2
10°	82.8	87.4	92.0	92.0	92.0	92.0	92.0	87.4	78.2	73.6	64.4
12.5°	92.0	96.6	105.8	115.0	115.0	119.6	115.0	110.4	101.2	87.4	73.6
15°	101.2	110.4	124.2	142.6	161.0	165.6	165.6	151.8	133.4	105.8	87.4
17.5°	115.0	128.8	165.6	225.4	289.9	340.5	340.5	303.7	211.6	138.0	101.2
20°	124.2	151.8	266.8	542.9	828.1	1039.8	998.4	883.4	473.9	216.2	110.4
22.5°	138.0	193.2	565.9	1426.3	2208.4	2594.9	2502.8	1900.1	1062.8	386.5	133.4
25°	156.4	280.6	1122.6	2673.1	4103.9	4522.6	4462.8	3547.2	1936.9	648.7	170.2
27.5°	193.2	414.1	1798.9	4053.3	6054.7	6413.5	6390.5	5194.3	3096.3	1044.4	220.8
30°	243.8	602.7	2668.5	5507.2	7347.5	7711.0	7595.9	6399.7	4177.5	1596.5	285.3
32.5°	303.7	841.9	3455.2	6579.2	8539.1	9017.6	8879.6	7448.7	5047.1	2065.8	423.3
35°	395.7	1076.6	4232.7	7526.9	9914.7	10522.1	10292.0	8529.9	5797.0	2594.9	510.7
37.5°	441.7	1214.6	4945.9	8557.5	11460.6	12288.8	12113.9	9896.3	6560.8	3271.2	625.7
40°	446.3	1380.2	5686.6	9900.9	13646.0	15122.9	14810.0	12242.8	7982.4	4140.7	805.1
42.5°	460.1	1628.7	6648.2	12192.2	17938.6	20059.5	19705.3	16558.3	11207.6	5884.4	1141.0
45°	524.5	2098.0	8608.1	16475.5	23832.2	26942.4	26532.9	22571.6	15711.8	9164.8	1946.1
47.5°	749.9	3156.2	12044.9	21099.3	29859.3	32339.1	32237.9	27310.4	19792.7	12528.0	3298.8
50°	1205.4	4844.7	15955.6	24987.0	33696.3	35826.5	35573.5	29288.8	22120.7	14823.8	4228.1
52.5°	1610.3	6459.5	18412.4	26417.9	34841.9	37381.6	37073.3	30011.1	22732.6	15500.1	4485.8
55°	1711.5	7043.8	19144.0	26859.5	35601.1	38697.4	38251.1	30494.2	22810.8	15017.0	4057.9
57.5°	1660.9	6491.7	18670.1	27292.0	36659.3	40050.1	39456.6	31437.3	23073.1	14198.1	3377.0
59°	1573.5	5810.8	18375.6	27637.1	37243.6	40261.7	39705.0	31644.4	23247.9	13825.4	2962.9
60°	1472.3	5350.7	18145.6	27862.5	37206.8	39930.4	39355.3	31547.8	23316.9	13503.4	2765.1
62.5°	1136.4	4269.6	17814.3	27701.5	34883.4	36907.7	36581.1	29182.9	22304.7	12472.8	2180.8
65°	883.4	3266.6	16599.7	24706.4	29684.4	31046.3	30945.1	24711.0	18771.3	10752.1	1573.5
67.5°	699.3	2383.2	14037.1	20008.9	23882.8	25819.8	25746.1	20059.5	14248.7	8217.0	1131.8
70°	570.5	1697.7	9624.9	15086.1	19102.6	21541.0	21435.2	16144.2	10558.9	5212.7	823.5
72.5°	483.1	1085.8	5838.4	11373.2	15941.8	17335.9	17027.6	13024.9	7678.8	2838.7	653.3
75°	409.5	667.1	2893.9	7089.9	9496.1	9486.9	9178.6	6896.6	4122.3	1389.4	519.9
77.5°	331.3	469.3	1136.4	1946.1	2995.1	3708.3	3648.4	2443.0	1233.0	404.9	322.1
80°	216.2	220.8	303.7	533.7	823.5	911.0	1035.2	745.3	358.9	193.2	133.4
82.5°	96.6	105.8	138.0	174.8	174.8	161.0	142.6	105.8	78.2	64.4	32.2
85°	23.0	32.2	23.0	27.6	23.0	18.4	18.4	9.2	0.0	0.0	0.0
87.5°	4.6	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°	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4
2.5°	36.8	36.8	36.8	32.2	32.2	32.2	27.6	27.6	27.6	23.0	23.0
5°	46.0	41.4	36.8	36.8	32.2	32.2	27.6	23.0	23.0	23.0	18.4
7.5°	50.6	46.0	41.4	36.8	32.2	27.6	27.6	23.0	18.4	18.4	18.4
10°	59.8	55.2	46.0	36.8	32.2	27.6	23.0	23.0	18.4	13.8	13.8
12.5°	69.0	59.8	50.6	41.4	32.2	27.6	23.0	23.0	18.4	13.8	9.2
15°	78.2	69.0	55.2	41.4	32.2	27.6	23.0	23.0	13.8	9.2	4.6
17.5°	87.4	73.6	55.2	46.0	32.2	27.6	23.0	18.4	9.2	4.6	0.0
20°	92.0	78.2	59.8	46.0	32.2	27.6	23.0	13.8	4.6	0.0	0.0
22.5°	101.2	87.4	64.4	46.0	32.2	23.0	13.8	4.6	0.0	0.0	0.0
25°	119.6	92.0	64.4	46.0	32.2	23.0	9.2	0.0	0.0	0.0	0.0
27.5°	133.4	101.2	64.4	46.0	32.2	18.4	4.6	0.0	0.0	0.0	0.0
30°	156.4	110.4	69.0	46.0	32.2	13.8	4.6	0.0	0.0	0.0	0.0
32.5°	193.2	119.6	69.0	46.0	27.6	13.8	0.0	0.0	0.0	0.0	0.0
35°	234.6	138.0	69.0	46.0	27.6	13.8	0.0	0.0	0.0	0.0	0.0
37.5°	239.2	147.2	69.0	46.0	27.6	9.2	0.0	0.0	0.0	0.0	0.0
40°	248.4	138.0	73.6	46.0	27.6	9.2	0.0	0.0	0.0	0.0	0.0
42.5°	285.3	128.8	78.2	46.0	27.6	9.2	0.0	0.0	0.0	0.0	0.0
45°	423.3	133.4	78.2	50.6	27.6	13.8	0.0	0.0	0.0	0.0	0.0
47.5°	736.1	138.0	73.6	50.6	27.6	13.8	0.0	0.0	0.0	0.0	0.0
50°	943.2	161.0	73.6	55.2	32.2	9.2	0.0	0.0	0.0	0.0	0.0
52.5°	1003.0	188.6	73.6	59.8	41.4	4.6	0.0	0.0	0.0	0.0	0.0
55°	975.4	220.8	78.2	64.4	50.6	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	901.8	239.2	82.8	69.0	55.2	0.0	0.0	0.0	0.0	0.0	0.0
59°	823.5	253.0	96.6	73.6	55.2	0.0	0.0	0.0	0.0	0.0	0.0
60°	759.1	266.8	101.2	78.2	55.2	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	611.9	285.3	110.4	92.0	46.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	533.7	299.1	115.0	101.2	41.4	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	487.7	308.3	124.2	105.8	36.8	0.0	0.0	0.0	0.0	0.0	0.0
70°	450.9	303.7	133.4	101.2	32.2	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	409.5	289.9	161.0	92.0	27.6	0.0	0.0	0.0	0.0	0.0	0.0
75°	368.1	262.2	174.8	82.8	18.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	266.8	220.8	161.0	73.6	9.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	115.0	119.6	115.0	55.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.0	27.6	23.0	13.8	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4
2.5°	23.0	23.0	23.0	23.0	27.6	27.6	36.8	46.0	55.2	59.8	59.8
5°	18.4	18.4	18.4	18.4	18.4	23.0	27.6	36.8	50.6	55.2	55.2
7.5°	13.8	13.8	13.8	13.8	13.8	13.8	23.0	32.2	46.0	50.6	55.2
10°	13.8	9.2	9.2	4.6	4.6	9.2	13.8	27.6	41.4	46.0	50.6
12.5°	9.2	4.6	4.6	0.0	0.0	4.6	9.2	23.0	36.8	41.4	46.0
15°	4.6	0.0	0.0	0.0	0.0	0.0	4.6	18.4	32.2	36.8	46.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	27.6	36.8	41.4
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	23.0	32.2	36.8
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	18.4	27.6	32.2
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	18.4	23.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	13.8	18.4
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	13.8	18.4
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2	13.8
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2	13.8
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2	9.2
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	9.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	4.6
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°	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4
2.5°	64.4	64.4	59.8	55.2	55.2	55.2	59.8	64.4	64.4	64.4
5°	59.8	59.8	55.2	55.2	55.2	55.2	59.8	69.0	73.6	73.6
7.5°	59.8	59.8	55.2	55.2	55.2	55.2	59.8	69.0	73.6	78.2
10°	55.2	55.2	55.2	55.2	50.6	55.2	59.8	69.0	82.8	82.8
12.5°	55.2	55.2	55.2	55.2	50.6	55.2	64.4	73.6	87.4	92.0
15°	55.2	55.2	55.2	50.6	50.6	55.2	64.4	78.2	92.0	101.2
17.5°	50.6	55.2	55.2	50.6	50.6	55.2	64.4	78.2	101.2	115.0
20°	46.0	50.6	55.2	50.6	50.6	50.6	64.4	78.2	105.8	124.2
22.5°	41.4	46.0	50.6	50.6	46.0	50.6	64.4	82.8	115.0	138.0
25°	36.8	41.4	41.4	46.0	46.0	50.6	64.4	82.8	119.6	156.4
27.5°	27.6	32.2	36.8	41.4	41.4	50.6	64.4	87.4	128.8	193.2
30°	23.0	27.6	32.2	36.8	41.4	50.6	64.4	87.4	138.0	243.8
32.5°	23.0	27.6	32.2	36.8	41.4	46.0	64.4	92.0	151.8	303.7
35°	18.4	23.0	27.6	36.8	36.8	46.0	64.4	92.0	165.6	395.7
37.5°	18.4	23.0	27.6	36.8	36.8	46.0	64.4	92.0	202.4	441.7
40°	13.8	18.4	23.0	36.8	36.8	46.0	69.0	96.6	207.0	446.3
42.5°	13.8	18.4	23.0	32.2	36.8	46.0	69.0	96.6	193.2	460.1
45°	13.8	18.4	23.0	36.8	41.4	50.6	69.0	101.2	188.6	524.5
47.5°	13.8	18.4	23.0	36.8	46.0	50.6	69.0	101.2	193.2	749.9
50°	13.8	18.4	23.0	36.8	50.6	50.6	69.0	101.2	211.6	1205.4
52.5°	9.2	13.8	18.4	32.2	41.4	55.2	73.6	96.6	225.4	1610.3
55°	9.2	9.2	13.8	27.6	36.8	59.8	78.2	96.6	262.2	1711.5
57.5°	9.2	9.2	13.8	23.0	32.2	64.4	82.8	96.6	303.7	1660.9
59°	9.2	9.2	9.2	23.0	27.6	64.4	82.8	101.2	308.3	1573.5
60°	9.2	9.2	9.2	18.4	27.6	64.4	87.4	105.8	312.9	1472.3
62.5°	4.6	4.6	4.6	18.4	23.0	64.4	96.6	128.8	322.1	1136.4
65°	9.2	9.2	4.6	13.8	23.0	55.2	110.4	138.0	326.7	883.4
67.5°	9.2	9.2	9.2	18.4	23.0	55.2	115.0	142.6	326.7	699.3
70°	9.2	9.2	9.2	18.4	27.6	55.2	115.0	147.2	322.1	570.5
72.5°	9.2	9.2	9.2	18.4	27.6	50.6	105.8	151.8	308.3	483.1
75°	9.2	9.2	9.2	13.8	23.0	46.0	101.2	165.6	280.6	409.5
77.5°	9.2	9.2	9.2	9.2	18.4	36.8	92.0	184.0	248.4	331.3
80°	13.8	9.2	9.2	9.2	13.8	32.2	87.4	179.4	207.0	216.2
82.5°	13.8	9.2	9.2	4.6	9.2	23.0	69.0	138.0	105.8	96.6
85°	9.2	9.2	9.2	4.6	4.6	13.8	32.2	41.4	32.2	23.0
87.5°	9.2	9.2	9.2	4.6	4.6	4.6	4.6	4.6	4.6	4.6
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: SP1-2407-184-9

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-830-U-5WQ

Data in this report applies to families of products including GSS-SB1A-830-U-5WQ

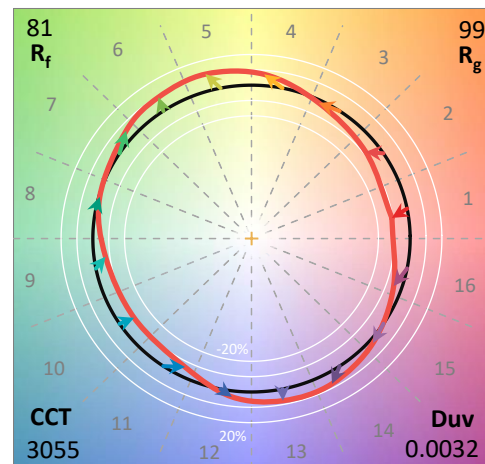
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-9
 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-830-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI
 3000K CCT 26 LEDS

Spectral Parameters

CCT (K): 3055
 CIE u' : 0.2475
 CIE v' : 0.5247
 Duv: 0.0032
 CIE x: 0.4377
 CIE y: 0.4124
 CIE z: 0.1499
 Peak Wavelength (nm): 604
 Dominant Wavelength (nm): 581
 Purity: 55.16339
 R_f: 81.5
 R_g: 99.2

CRI (Ra): 80.9
 R1: 79.5
 R2: 85.6
 R3: 92.1
 R4: 82.4
 R5: 78.9
 R6: 81.7
 R7: 85.1
 R8: 61.9
 R9: 6.8
 R10: 67.1
 R11: 82.5
 R12: 63.4
 R13: 80.2
 R14: 95.1
 R15: 71.7



Test Conditions

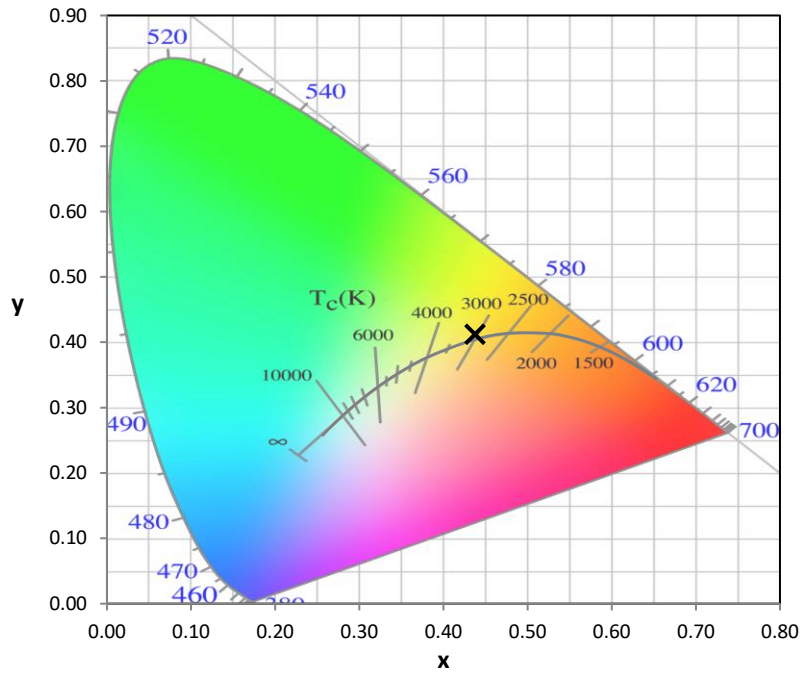
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-9

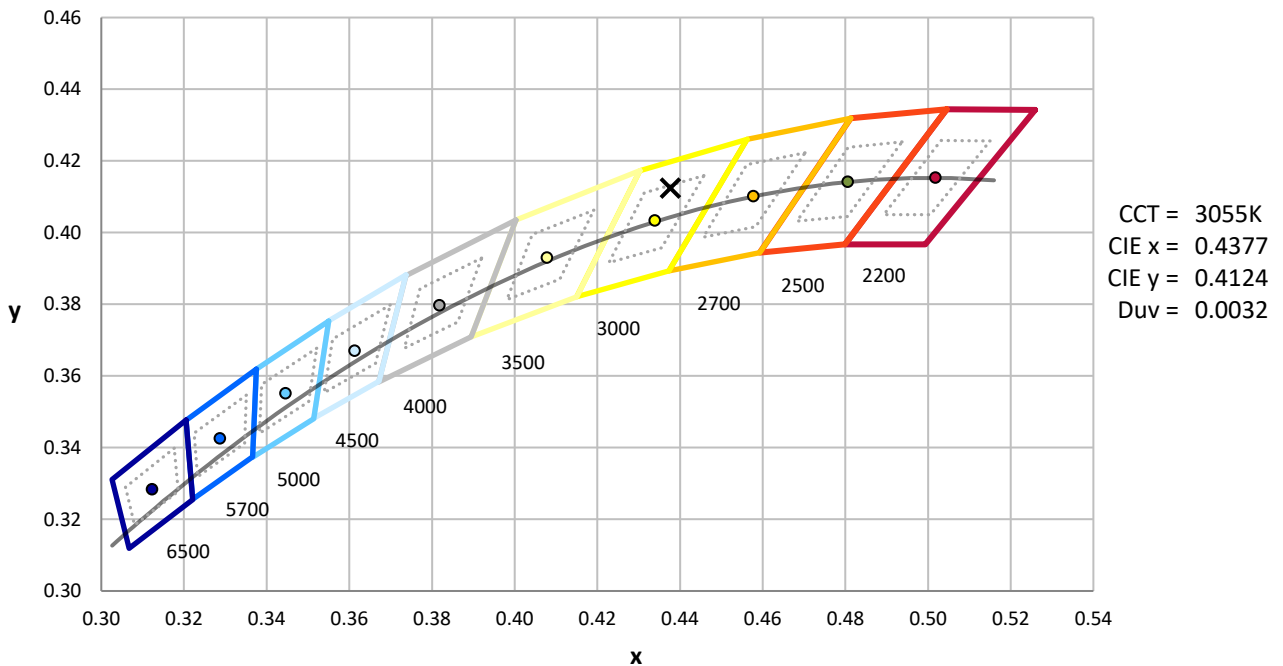
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-9

CIE 1931 Chromaticity Diagram



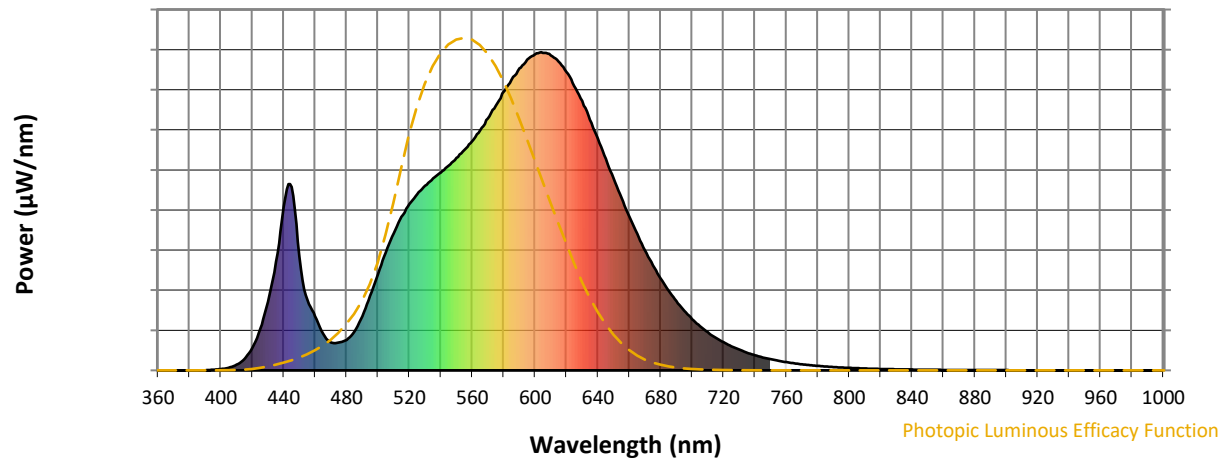
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-9

Photopic Flux vs. Wavelength

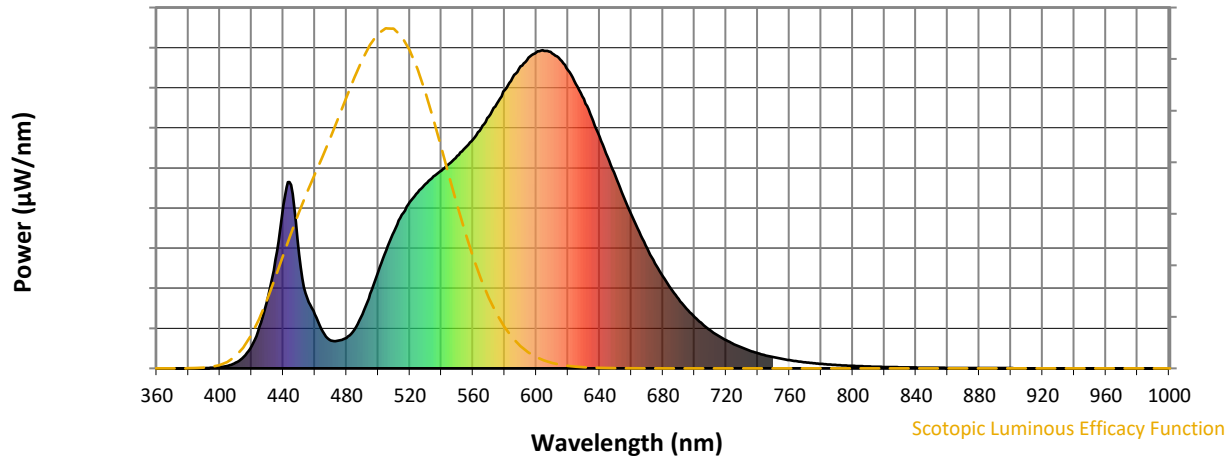


Photopic Lumens: NR

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	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-9

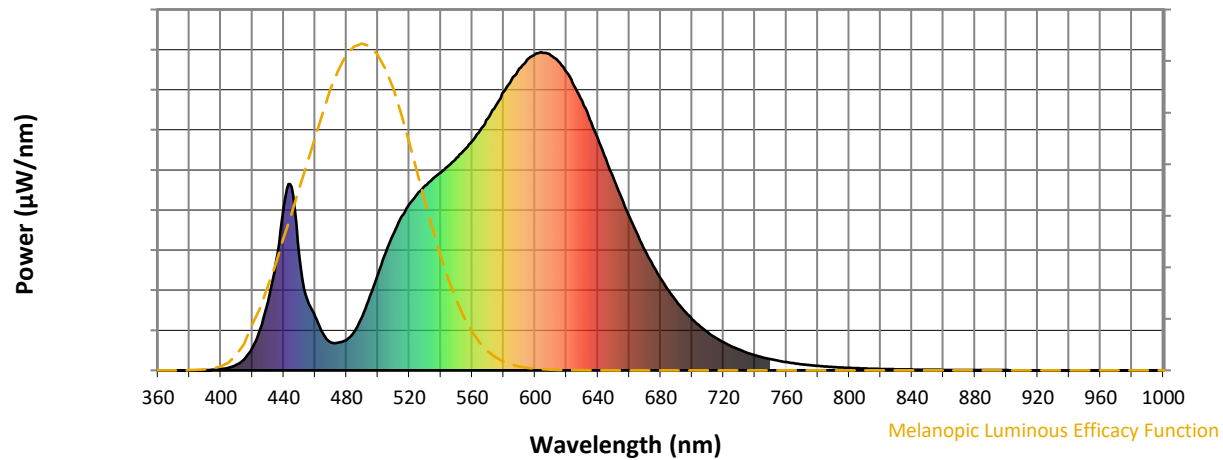
Scotopic Flux vs. Wavelength


Scotopic Lumens: NR
S/P: 1.28

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	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.33

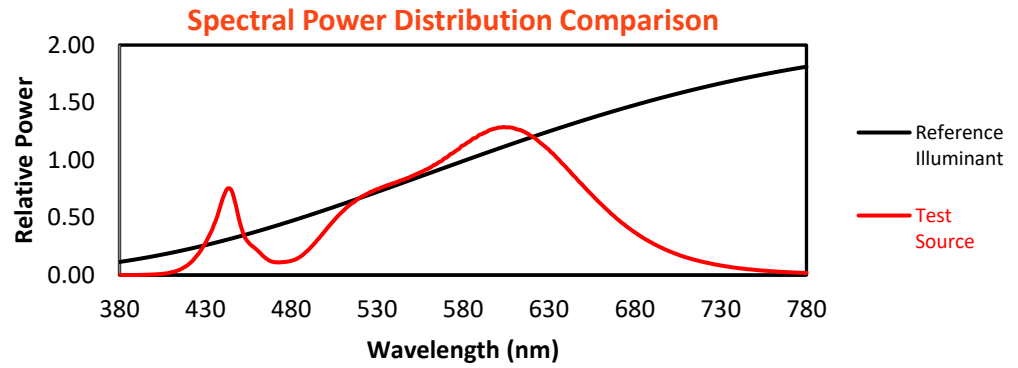
λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	170	NR	620	938	NR	750	35	NR	880	1	NR
365	0	NR	495	234	NR	625	894	NR	755	30	NR	885	1	NR
370	0	NR	500	302	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	371	NR	635	788	NR	765	22	NR	895	1	NR
380	0	NR	510	431	NR	640	728	NR	770	19	NR	900	1	NR
385	0	NR	515	482	NR	645	665	NR	775	16	NR	905	1	NR
390	0	NR	520	523	NR	650	603	NR	780	14	NR	910	0	NR
395	2	NR	525	553	NR	655	542	NR	785	12	NR	915	0	NR
400	4	NR	530	580	NR	660	484	NR	790	11	NR	920	0	NR
405	8	NR	535	603	NR	665	430	NR	795	9	NR	925	0	NR
410	18	NR	540	622	NR	670	377	NR	800	8	NR	930	0	NR
415	36	NR	545	644	NR	675	330	NR	805	7	NR	935	0	NR
420	71	NR	550	668	NR	680	289	NR	810	6	NR	940	0	NR
425	131	NR	555	693	NR	685	250	NR	815	5	NR	945	0	NR
430	215	NR	560	720	NR	690	218	NR	820	4	NR	950	0	NR
435	341	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	514	NR	570	792	NR	700	161	NR	830	3	NR	960	0	NR
445	576	NR	575	832	NR	705	139	NR	835	3	NR	965	0	NR
450	358	NR	580	875	NR	710	119	NR	840	3	NR	970	0	NR
455	222	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	170	NR	590	950	NR	720	88	NR	850	2	NR	980	0	NR
465	115	NR	595	977	NR	725	76	NR	855	2	NR	985	0	NR
470	88	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	87	NR	605	997	NR	735	56	NR	865	1	NR	995	0	NR
480	96	NR	610	990	NR	740	47	NR	870	1	NR	1000	0	NR
485	122	NR	615	971	NR	745	41	NR	875	1	NR			

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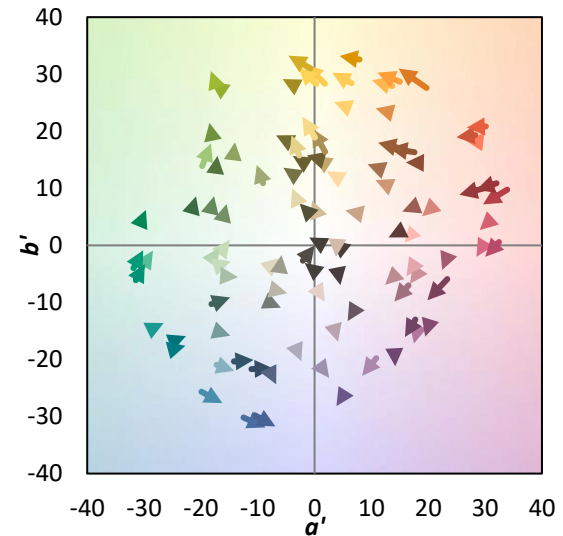
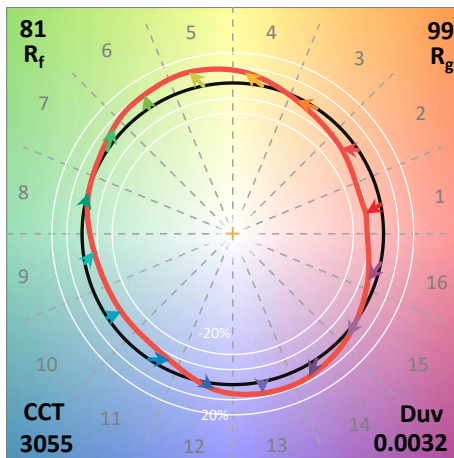
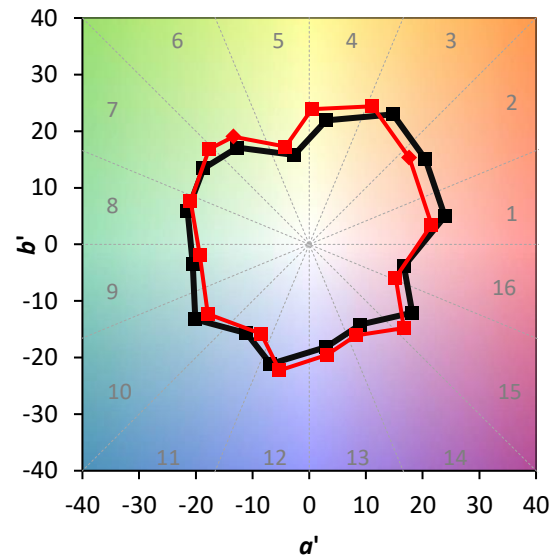
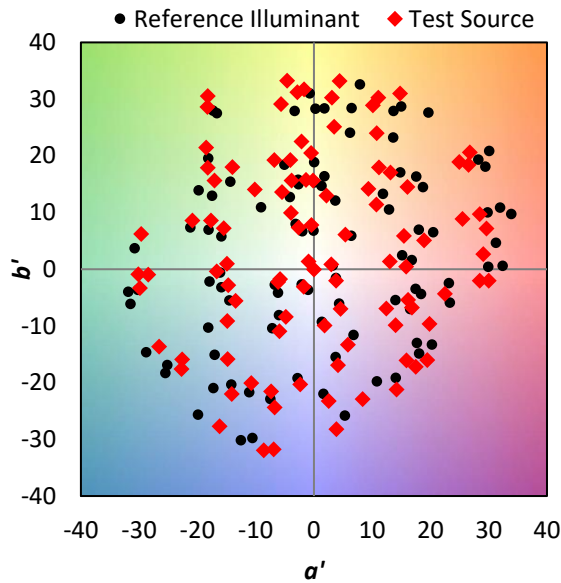
TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 80.9$
 $R_g = 6.8$

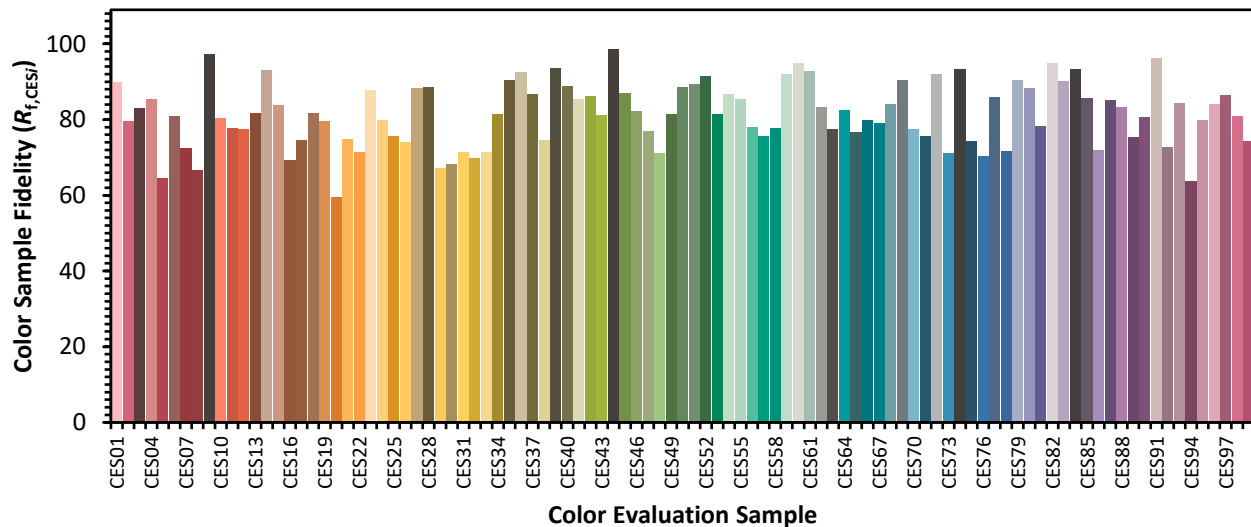


Color Vector Graphics

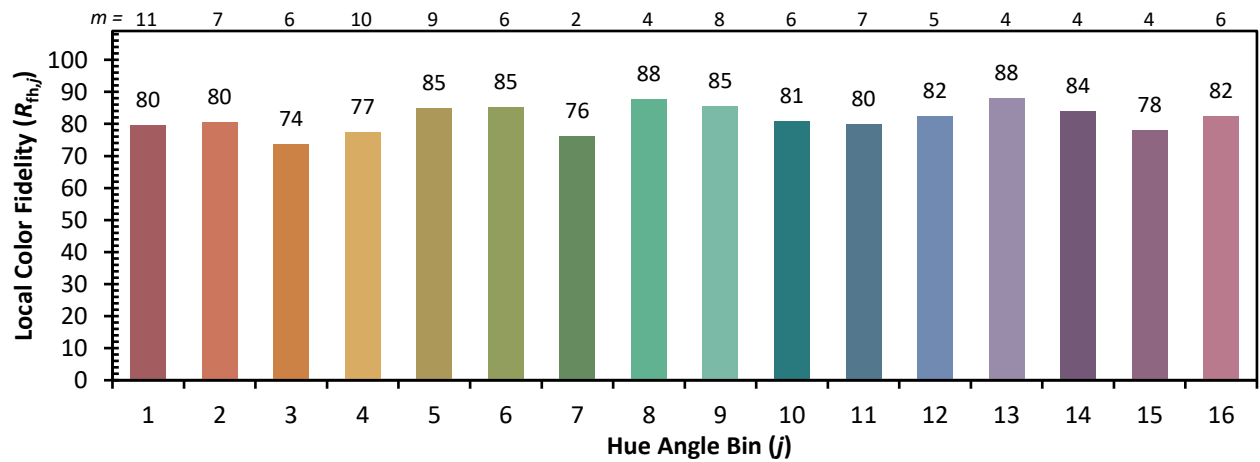
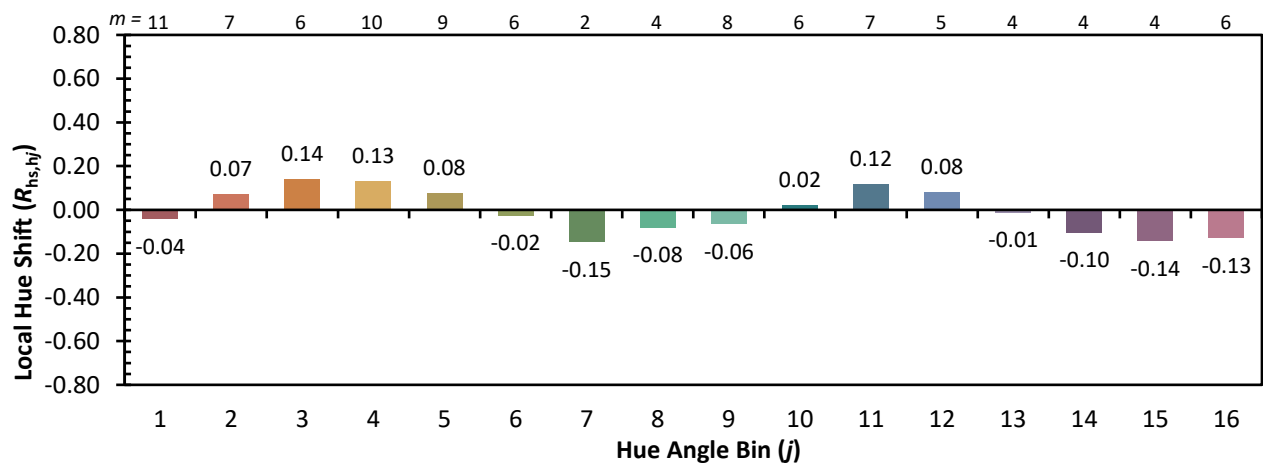
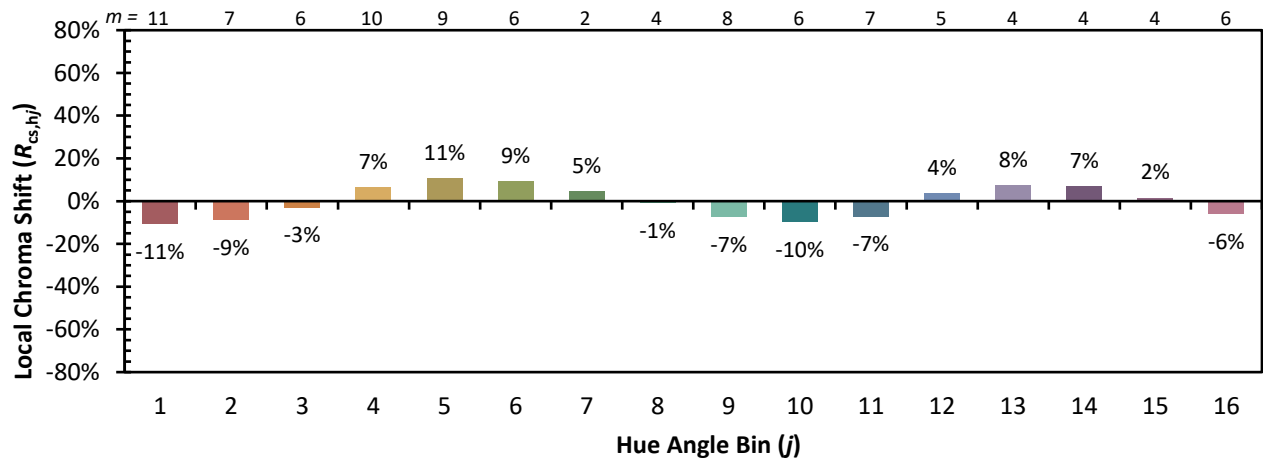


Individual Sample Fidelity Index ($R_{f,i}$)

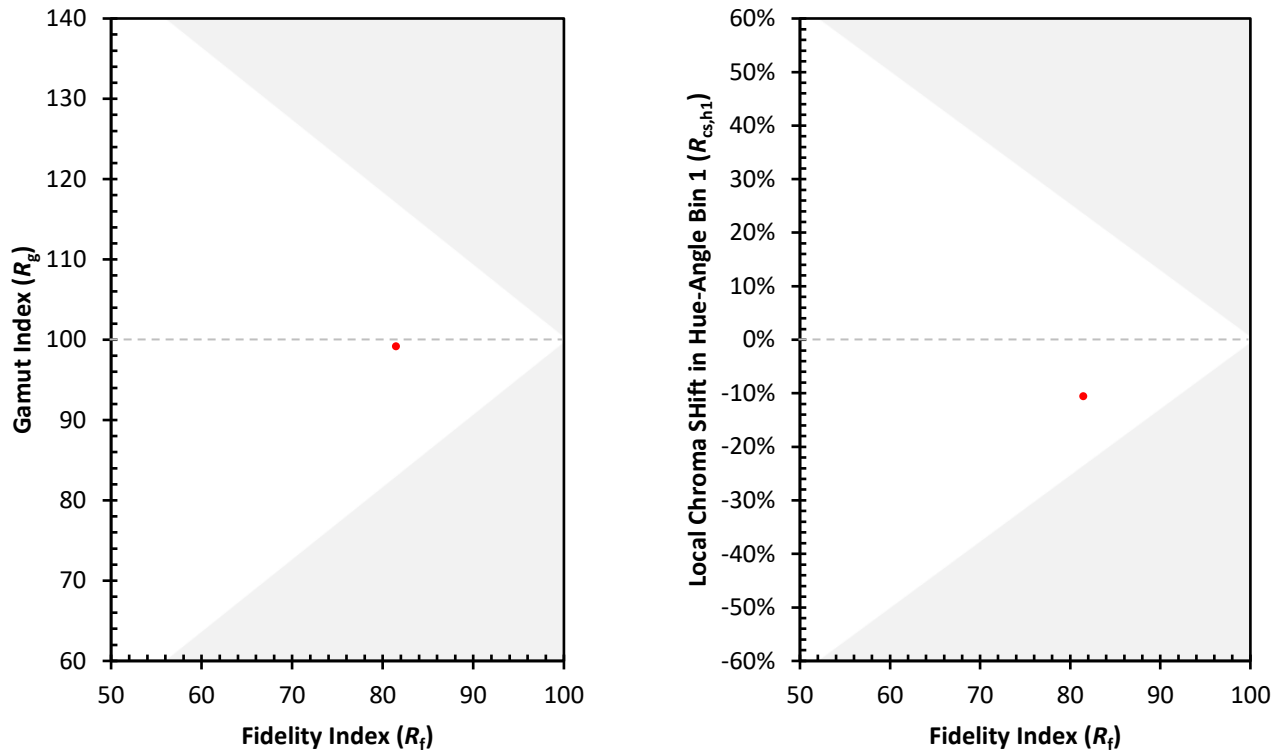
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 91	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 93
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 90	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 77	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)