

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: McGRAW-EDISON

Report Number: P1050049

Luminaire Tested: **GALN-SA4A-950-U-LBC**

Issue Date: 07/10/2025



Test Information

Test Method: LM-79-08
Report Number: P1050049
Test Lab: INNOVATION CENTER(G3)
Issue Date: 07/10/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4A-950-U-LBC
Description: GALLEON II AREA AND ROADWAY LUMINAIRE 615mA 4xLight Square PACKAGE
90CRI 5000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10511 lumens
Efficiency: N/A
Efficacy: 97.9 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

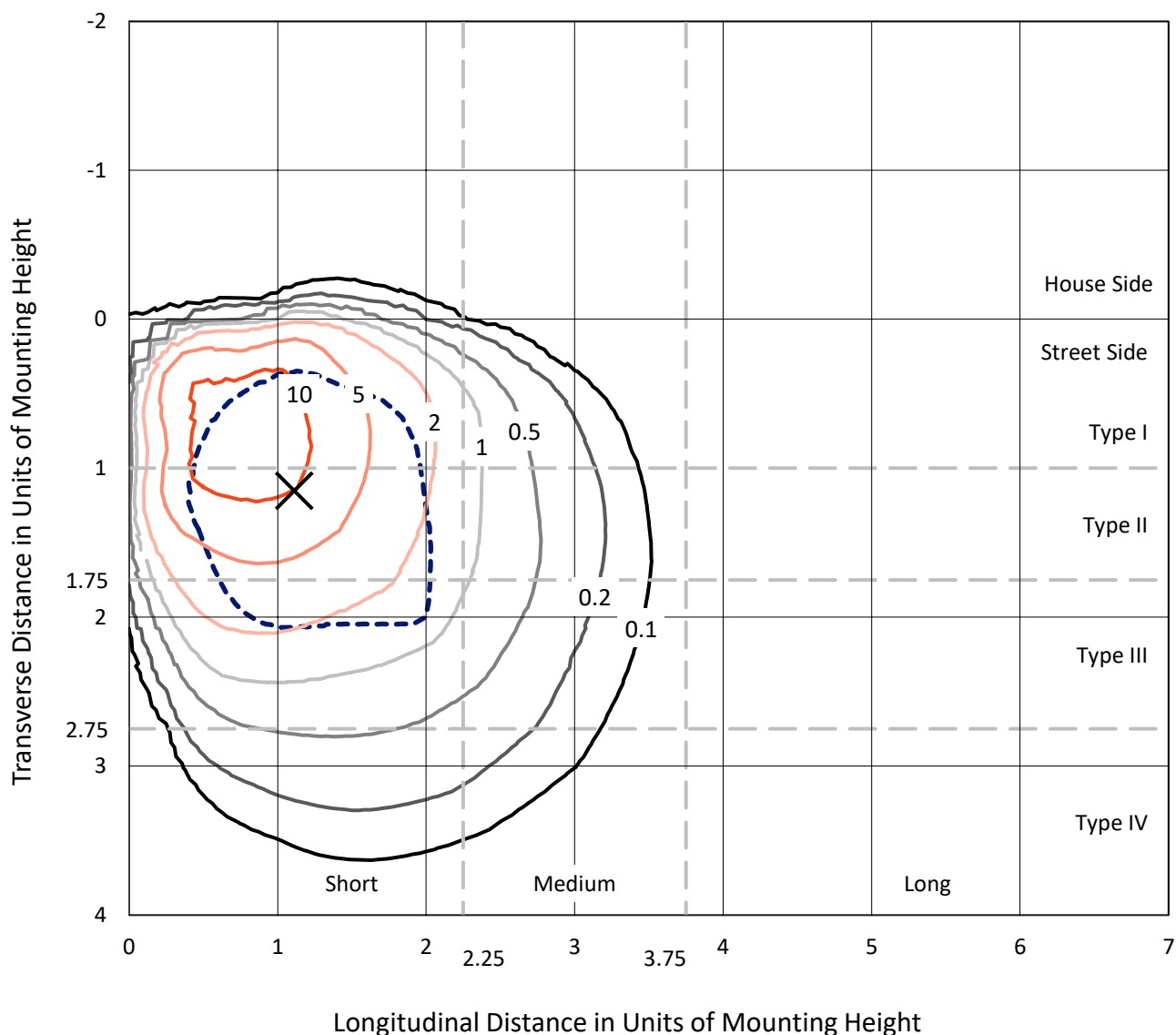
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



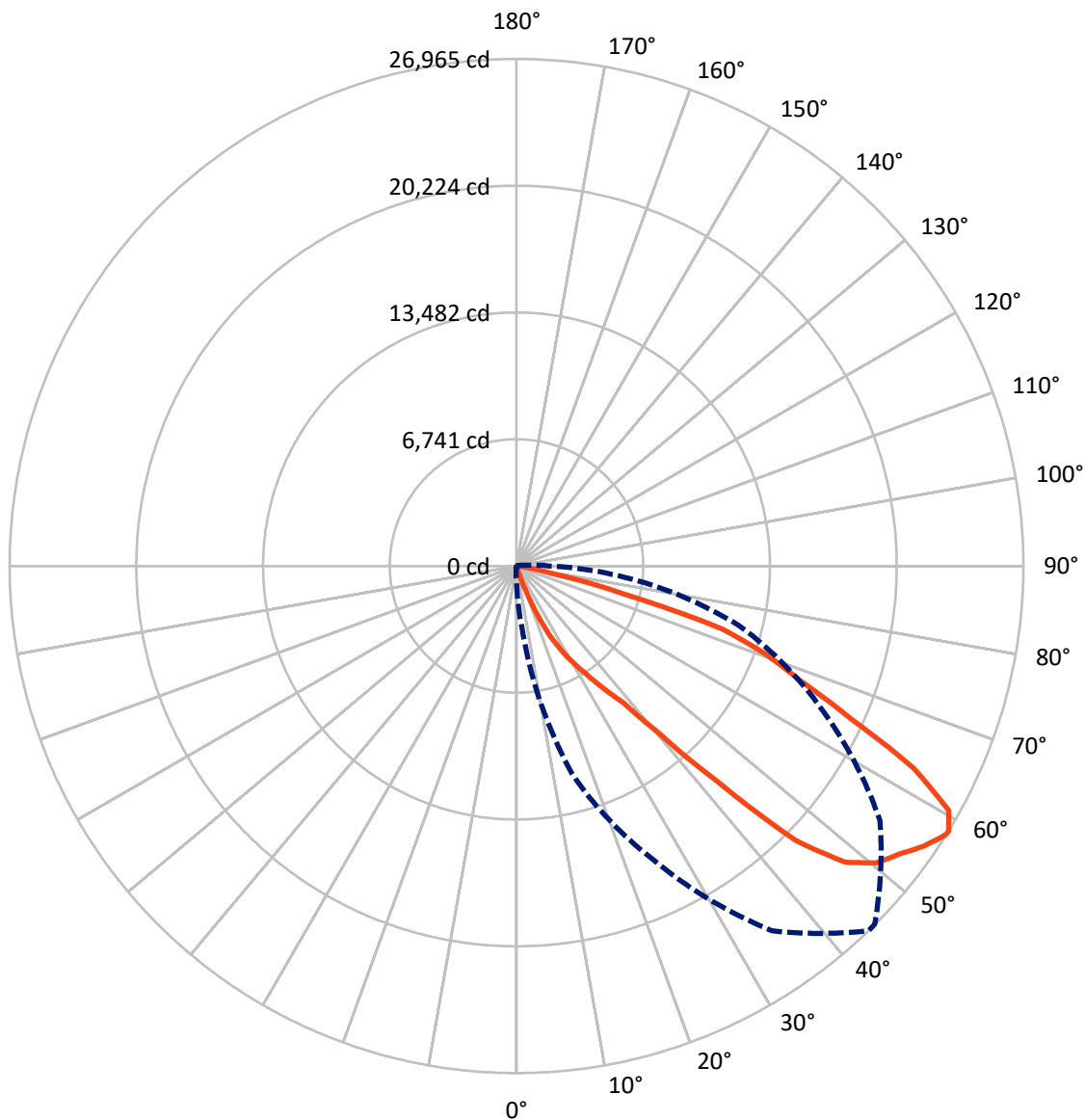
Based on 20 foot mounting height. Maximum calculated value = 18.3 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	71.8	0.0	71.8
	% Fixture	0.7	0.0	0.7
Street Side	Lumens	10439.2	0.0	10439.2
	% Fixture	99.3	0.0	99.3
Total	Lumens	10511.0	0.0	10511.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.1	0.0
10°-20°	23.1	0.2
20°-30°	249.0	2.4
30°-40°	736.4	7.0
40°-50°	2194.9	20.9
50°-60°	3482.7	33.1
60°-70°	2905.0	27.6
70°-80°	895.9	8.5
80°-90°	19.9	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°	10511.0	100.0
0°-180°	10511.0	100.0



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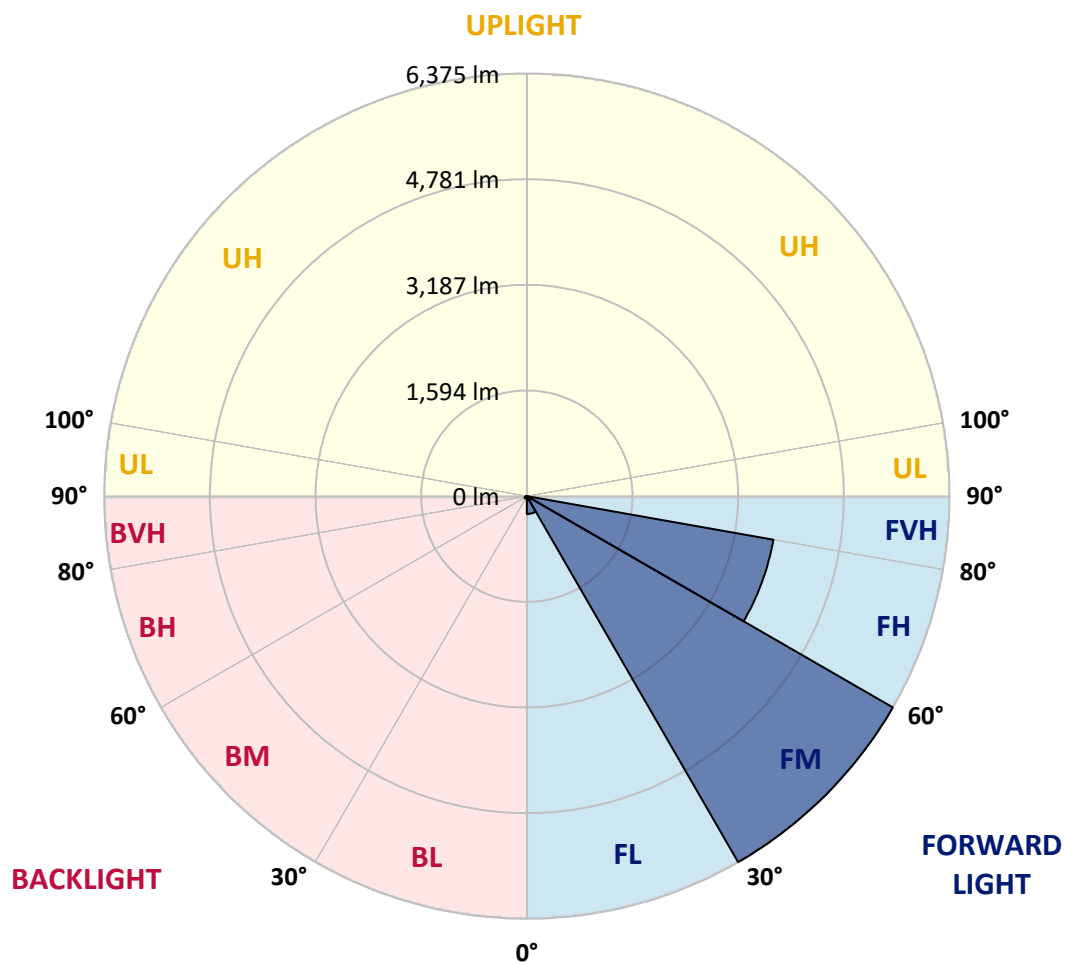
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	269.1	2.6			
FM	(30°-60°)	6374.7	60.6			
FH	(60°-80°)	3776.4	35.9			G2/5000
FVH	(80°-90°)	18.9	0.2			G1/100
BL	(0°-30°)	7.0	0.1	B0/110		
BM	(30°-60°)	39.3	0.4	B0/220		
BH	(60°-80°)	24.5	0.2	B0/110		G0/110
BVH	(80°-90°)	1.0	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°	44°	45°	55°	65°	75°
0°	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
2.5°	59.6	59.6	57.2	54.0	50.8	47.6	46.8	45.3	44.5	43.7
5°	61.9	61.9	61.1	58.8	55.6	53.2	53.2	50.8	49.2	47.6
7.5°	63.5	64.3	65.9	65.1	63.5	61.1	61.1	59.6	57.2	53.2
10°	65.9	68.3	71.5	73.0	73.8	73.8	73.0	72.3	68.3	62.7
12.5°	68.3	73.0	81.0	88.9	93.7	100.0	99.3	97.7	87.3	75.4
15°	73.0	80.2	96.9	119.9	155.6	177.9	186.6	178.7	144.5	101.6
17.5°	78.6	90.5	140.5	250.9	411.3	487.5	533.6	496.3	328.7	192.9
20°	84.2	110.4	261.2	650.3	1067.2	1316.5	1385.6	1277.6	820.2	367.6
22.5°	93.7	154.8	529.6	1344.3	2299.5	2673.4	2744.1	2398.7	1549.1	725.7
25°	113.5	224.7	913.1	2190.7	3431.7	4063.0	4033.6	3581.0	2513.1	1159.3
27.5°	142.1	327.1	1380.8	3112.5	4516.4	5073.0	5139.7	4579.9	3349.9	1704.7
30°	183.4	453.4	1882.6	3851.0	5385.8	5987.7	5998.8	5419.9	4098.7	2183.5
32.5°	223.1	572.5	2321.7	4564.8	6242.5	6902.4	6951.6	6239.4	4657.7	2682.2
35°	253.3	650.3	2766.3	5192.1	7106.4	8015.6	8012.4	7166.8	5319.9	3127.6
37.5°	255.7	728.1	3168.9	5833.6	8200.6	9218.5	9319.3	8387.2	6120.3	3678.7
40°	250.1	815.5	3678.7	6834.1	10172.1	11733.9	11822.9	10647.7	7725.8	4622.0
42.5°	256.5	967.1	4506.0	8681.7	13445.8	15688.9	15860.4	14624.9	10677.1	6546.6
45°	289.8	1252.2	6239.4	11772.8	18112.3	20846.8	20789.7	19010.3	14111.2	9476.6
47.5°	400.2	1950.1	8808.8	14781.4	21094.6	23529.8	23579.0	21404.2	16115.3	11729.2
50°	615.4	2983.9	10967.7	16371.8	22376.9	24820.1	24774.0	22261.0	16876.8	12838.4
52.5°	800.4	3731.9	12050.7	16930.0	22541.3	25457.7	25454.5	22486.5	16995.1	12933.7
55°	846.4	3788.2	12059.5	16960.1	22909.7	26292.2	26397.0	23041.5	17148.3	12517.6
57.5°	828.2	3353.9	11556.1	17134.8	23565.5	26937.7	26943.3	23579.0	17537.4	12262.8
58°	812.3	3285.6	11454.4	17234.1	23678.3	26964.7	26951.2	23603.7	17854.2	12253.2
60°	723.3	2852.9	11058.2	17487.4	23510.8	26410.5	26284.2	23066.1	17807.3	12155.6
62.5°	568.5	2225.6	10668.4	17194.4	21714.7	23727.5	23779.9	20421.2	16233.6	11586.3
65°	452.6	1658.7	9855.3	15082.3	17881.2	19485.1	19680.4	16606.0	13549.8	9810.8
67.5°	360.5	1199.0	8267.3	12007.9	14149.3	16262.2	16404.3	13942.1	10497.7	7516.9
70°	293.0	810.7	5706.6	8781.8	11670.4	14046.1	14054.8	11582.3	7835.3	4925.3
72.5°	259.6	561.4	3312.6	6404.5	9463.1	11445.7	11214.7	9398.7	6021.8	2917.2
75°	224.7	372.4	1624.6	3915.3	5737.5	5776.5	5864.6	4359.9	3010.1	1387.1
77.5°	185.0	264.4	640.0	1069.5	1720.6	2202.6	2284.4	1731.0	1001.3	341.4
80°	127.0	125.5	172.3	327.9	492.3	616.9	575.7	445.4	262.0	131.0
82.5°	54.8	59.6	77.8	93.7	76.2	73.8	70.7	45.3	34.9	27.0
85°	17.5	15.9	16.7	16.7	13.5	10.3	10.3	4.8	0.0	0.0
87.5°	8.7	7.1	7.1	6.4	4.0	1.6	0.8	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

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CANDELA DISTRIBUTION (continued):

85°		90°	95°	105°	115°	125°	135°	145°	155°	165°	175°
46.1	0°	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
42.9	2.5°	42.1	42.1	40.5	38.9	38.1	36.5	35.7	34.9	34.1	33.3
46.1	5°	44.5	43.7	41.3	38.9	36.5	34.1	32.6	31.0	29.4	28.6
50.8	7.5°	48.4	46.8	42.1	38.1	34.9	31.8	30.2	27.8	26.2	23.8
56.4	10°	53.2	50.0	43.7	38.9	34.1	30.2	27.8	25.4	23.0	19.9
64.3	12.5°	59.6	54.0	46.1	38.1	32.6	27.8	25.4	22.2	19.9	17.5
74.6	15°	65.1	58.0	46.8	38.1	31.0	25.4	22.2	19.1	16.7	13.5
93.7	17.5°	73.0	61.1	46.1	35.7	28.6	22.2	19.1	16.7	12.7	7.9
139.0	20°	86.5	63.5	44.5	33.3	24.6	18.3	14.3	11.1	5.6	1.6
208.8	22.5°	108.0	69.9	42.9	30.2	21.4	14.3	9.5	4.0	0.0	0.0
317.6	25°	149.3	81.0	42.9	28.6	19.1	10.3	3.2	0.0	0.0	0.0
451.0	27.5°	198.5	96.1	42.9	24.6	15.1	5.6	0.0	0.0	0.0	0.0
614.6	30°	248.5	112.7	42.9	21.4	11.9	0.8	0.0	0.0	0.0	0.0
756.7	32.5°	296.2	127.0	43.7	18.3	7.9	0.0	0.0	0.0	0.0	0.0
953.6	35°	344.6	129.4	42.9	15.9	4.8	0.0	0.0	0.0	0.0	0.0
1195.0	37.5°	406.5	124.7	40.5	14.3	2.4	0.0	0.0	0.0	0.0	0.0
1572.1	40°	500.2	127.0	38.1	13.5	0.8	0.0	0.0	0.0	0.0	0.0
2244.7	42.5°	673.3	137.4	34.9	13.5	0.0	0.0	0.0	0.0	0.0	0.0
3575.4	45°	1164.0	184.2	31.8	14.3	0.0	0.0	0.0	0.0	0.0	0.0
5367.5	47.5°	1925.5	331.1	31.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0
6465.7	50°	2457.5	416.9	32.6	15.1	0.0	0.0	0.0	0.0	0.0	0.0
6603.0	52.5°	2453.5	464.5	34.1	15.9	3.2	0.0	0.0	0.0	0.0	0.0
6086.1	55°	2181.2	473.2	36.5	17.5	10.3	0.0	0.0	0.0	0.0	0.0
5230.2	57.5°	1823.1	431.9	42.1	21.4	19.1	0.0	0.0	0.0	0.0	0.0
5096.0	58°	1759.5	412.9	43.7	22.2	20.6	0.0	0.0	0.0	0.0	0.0
4420.3	60°	1441.9	336.7	55.6	27.8	27.8	0.0	0.0	0.0	0.0	0.0
3623.9	62.5°	995.7	293.8	63.5	35.7	28.6	0.0	0.0	0.0	0.0	0.0
2671.9	65°	704.3	265.2	69.1	38.1	23.0	0.0	0.0	0.0	0.0	0.0
1898.5	67.5°	526.4	244.6	76.2	38.9	11.9	0.0	0.0	0.0	0.0	0.0
1191.0	70°	403.4	229.5	93.7	41.3	3.2	0.0	0.0	0.0	0.0	0.0
709.8	72.5°	328.7	212.0	113.5	42.9	0.0	0.0	0.0	0.0	0.0	0.0
425.6	75°	272.3	191.4	109.6	46.8	0.0	0.0	0.0	0.0	0.0	0.0
227.1	77.5°	181.0	148.5	100.0	46.8	0.0	0.0	0.0	0.0	0.0	0.0
81.0	80°	63.5	58.8	77.8	41.3	0.0	0.0	0.0	0.0	0.0	0.0
16.7	82.5°	9.5	7.9	11.1	14.3	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

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CANDELA DISTRIBUTION (continued):

180°		185°	195°	205°	215°	225°	235°	245°	255°	265°	270°
46.1	0°	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
32.6	2.5°	32.6	32.6	31.8	32.6	32.6	34.1	38.1	43.7	50.0	52.4
27.8	5°	27.0	26.2	25.4	25.4	25.4	27.8	31.0	37.3	44.5	47.6
23.0	7.5°	22.2	21.4	20.6	19.9	19.9	21.4	25.4	32.6	39.7	42.9
19.1	10°	18.3	16.7	15.9	15.1	15.1	16.7	20.6	27.8	35.7	38.9
15.9	12.5°	15.1	12.7	11.1	10.3	9.5	11.9	15.9	22.2	31.0	34.9
11.9	15°	10.3	7.9	5.6	4.8	4.0	6.4	10.3	17.5	26.2	31.0
6.4	17.5°	5.6	2.4	0.8	0.0	0.0	1.6	4.8	12.7	21.4	25.4
0.0	20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	15.9	19.9
0.0	22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	9.5	13.5
0.0	25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	7.1
0.0	27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
0.0	30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	58°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	82.5°	0.0	0.0	0.0	0.0	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	2.4
0.0	87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	6.4
0.0	90°	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):

275°		285°	295°	305°	315°	316°	325°	335°	345°	355°	360°
46.1	0°	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
54.8	2.5°	56.4	55.6	54.0	52.4	52.4	52.4	54.8	57.2	59.6	59.6
49.2	5°	52.4	52.4	51.6	50.0	50.0	50.8	54.0	58.0	61.1	61.9
45.3	7.5°	48.4	50.0	48.4	47.6	48.4	49.2	52.4	57.2	61.9	63.5
42.1	10°	46.1	46.8	46.8	46.1	46.1	47.6	50.8	57.2	63.5	65.9
38.1	12.5°	42.9	44.5	43.7	43.7	43.7	45.3	49.2	56.4	65.1	68.3
34.1	15°	39.7	42.1	42.1	41.3	41.3	42.1	47.6	55.6	67.5	73.0
29.4	17.5°	36.5	38.9	39.7	38.1	38.1	39.7	45.3	55.6	69.1	78.6
23.8	20°	30.2	34.1	36.5	34.1	34.1	35.7	41.3	52.4	69.9	84.2
17.5	22.5°	23.8	27.8	31.0	30.2	30.2	31.0	38.1	50.0	70.7	93.7
10.3	25°	17.5	21.4	23.8	25.4	25.4	27.8	34.9	48.4	73.8	113.5
4.8	27.5°	10.3	15.1	18.3	19.9	20.6	23.8	32.6	46.8	79.4	142.1
0.0	30°	4.8	8.7	12.7	15.9	15.9	21.4	30.2	45.3	86.5	183.4
0.0	32.5°	0.0	4.0	6.4	11.1	11.9	17.5	27.8	43.7	96.9	223.1
0.0	35°	0.0	0.0	3.2	8.7	8.7	14.3	25.4	42.1	112.7	253.3
0.0	37.5°	0.0	0.0	0.0	6.4	7.1	12.7	24.6	41.3	115.9	255.7
0.0	40°	0.0	0.0	0.0	4.8	5.6	11.9	24.6	42.1	104.8	250.1
0.0	42.5°	0.0	0.0	0.0	3.2	4.0	11.9	24.6	43.7	94.5	256.5
0.0	45°	0.0	0.0	0.0	2.4	3.2	12.7	23.8	42.9	88.9	289.8
0.0	47.5°	0.0	0.0	0.0	3.2	4.8	12.7	23.0	42.1	89.7	400.2
0.0	50°	0.0	0.0	0.0	4.0	5.6	12.7	23.8	40.5	98.5	615.4
0.0	52.5°	0.0	0.0	0.0	3.2	4.8	14.3	26.2	39.7	107.2	800.4
0.0	55°	0.0	0.0	0.0	0.8	2.4	18.3	28.6	39.7	120.7	846.4
0.0	57.5°	0.0	0.0	0.0	0.0	0.0	20.6	32.6	42.1	142.9	828.2
0.0	58°	0.0	0.0	0.0	0.0	0.0	20.6	33.3	42.1	144.5	812.3
0.0	60°	0.0	0.0	0.0	0.0	0.0	20.6	36.5	46.8	155.6	723.3
0.0	62.5°	0.0	0.0	0.0	0.0	0.0	17.5	43.7	58.8	162.0	568.5
0.0	65°	0.0	0.0	0.0	0.0	0.0	14.3	51.6	64.3	166.7	452.6
0.0	67.5°	0.0	0.0	0.0	0.0	0.0	13.5	53.2	65.1	169.1	360.5
0.0	70°	0.0	0.0	0.0	0.0	0.0	14.3	52.4	69.9	177.1	293.0
0.0	72.5°	0.0	0.0	0.0	0.0	0.0	15.9	47.6	77.0	177.1	259.6
0.0	75°	0.0	0.0	0.0	0.0	0.0	16.7	44.5	86.5	161.2	224.7
0.0	77.5°	0.0	0.0	0.0	0.0	0.0	15.9	43.7	100.8	143.7	185.0
0.0	80°	1.6	2.4	2.4	1.6	1.6	13.5	42.9	102.4	122.3	127.0
0.8	82.5°	4.8	6.4	5.6	4.0	4.0	11.9	38.1	85.8	63.5	54.8
4.8	85°	8.7	10.3	10.3	8.7	8.7	11.1	23.8	31.0	21.4	17.5
8.7	87.5°	11.9	13.5	13.5	11.9	11.9	11.1	10.3	9.5	8.7	8.7
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF RI



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-17

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-950-U-5WQ

Data in this report applies to families of products including GSS-SB1A-950-U-5WQ

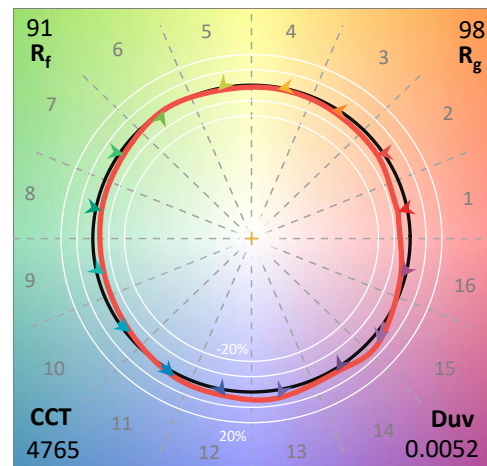
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-17
 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-950-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 90 CRI
 5000K CCT 26 LEDS

Spectral Parameters

CCT (K): 4765
 CIE u' : 0.2105
 CIE v' : 0.4941
 Duv: 0.0052
 CIE x: 0.3536
 CIE y: 0.3689
 CIE z: 0.2775
 Peak Wavelength (nm): 449
 Dominant Wavelength (nm): 571
 Purity: 16.80041
 R_f: 90.7
 R_g: 98

CRI (Ra): 90.8
 R1: 89.8
 R2: 93.1
 R3: 95.3
 R4: 90.3
 R5: 89.0
 R6: 89.7
 R7: 94.9
 R8: 84.0
 R9: 54.9
 R10: 83.0
 R11: 89.6
 R12: 68.0
 R13: 90.6
 R14: 97.3
 R15: 86.2



Test Conditions

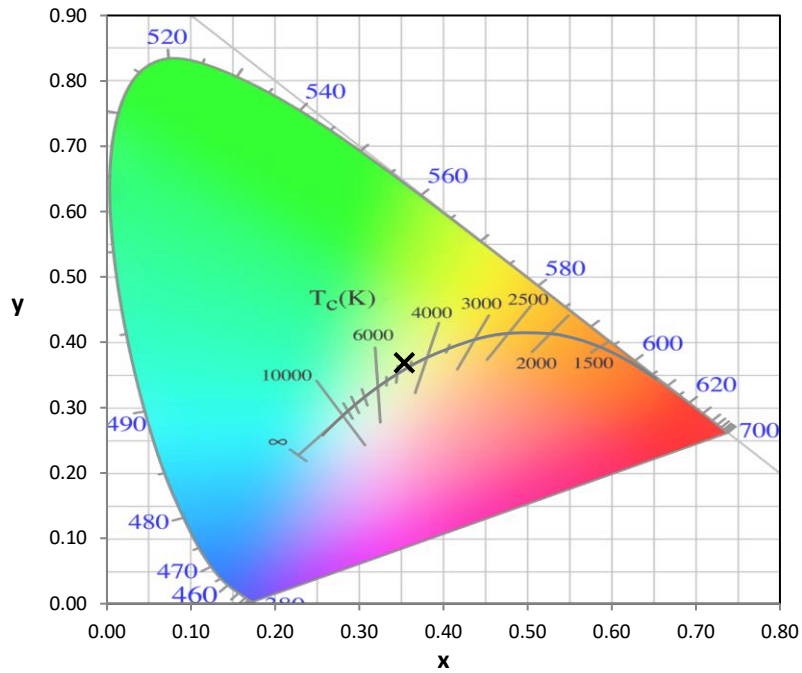
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-17

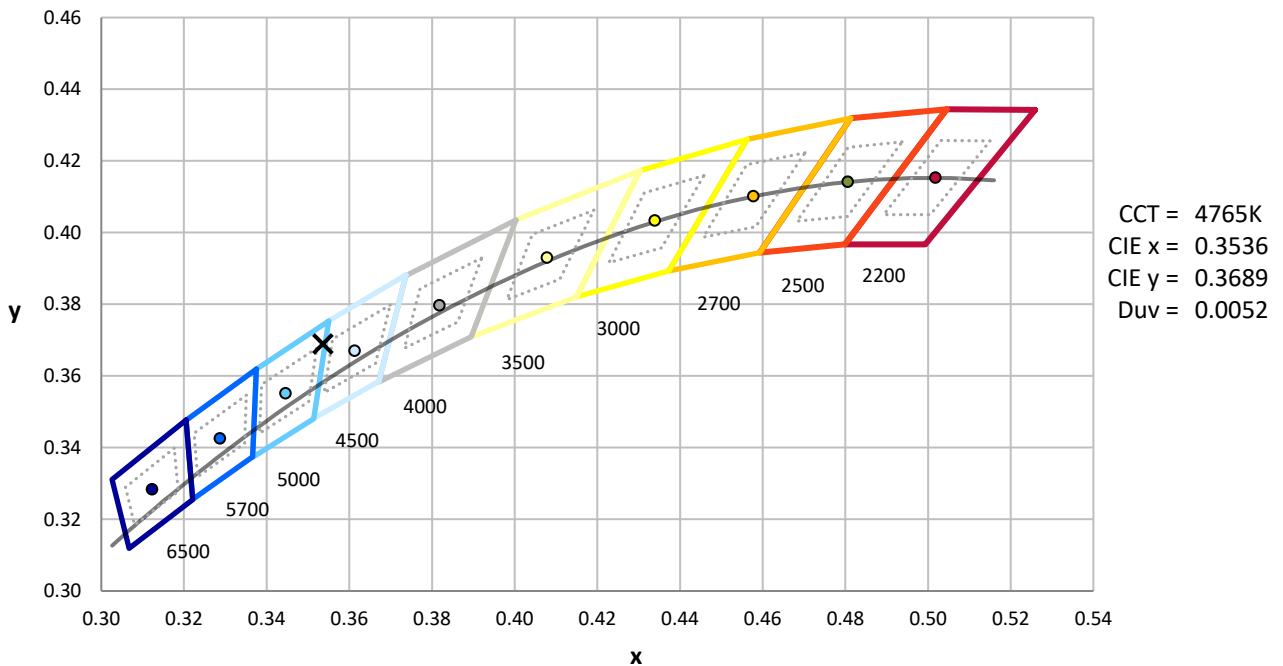
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-17

CIE 1931 Chromaticity Diagram



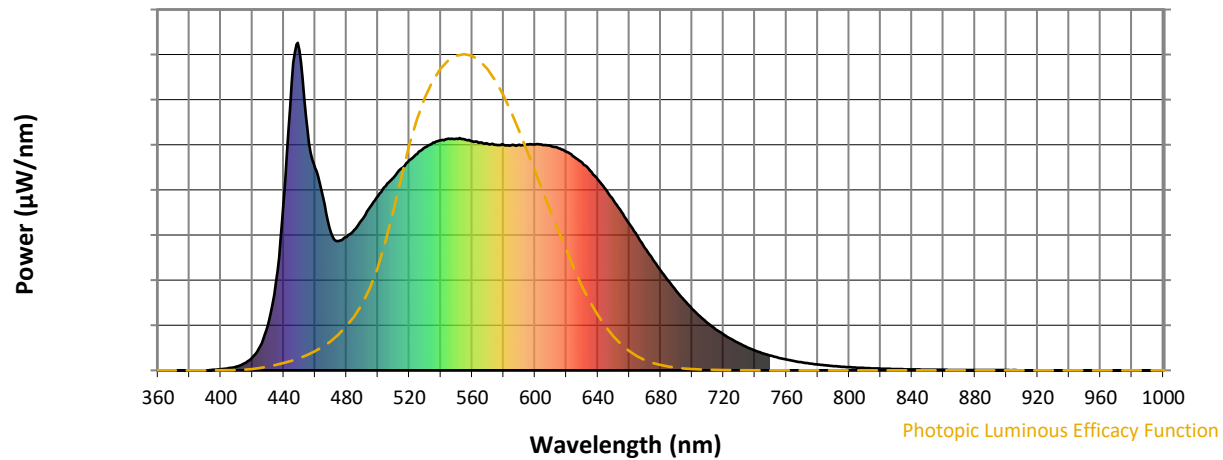
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-17

Photopic Flux vs. Wavelength

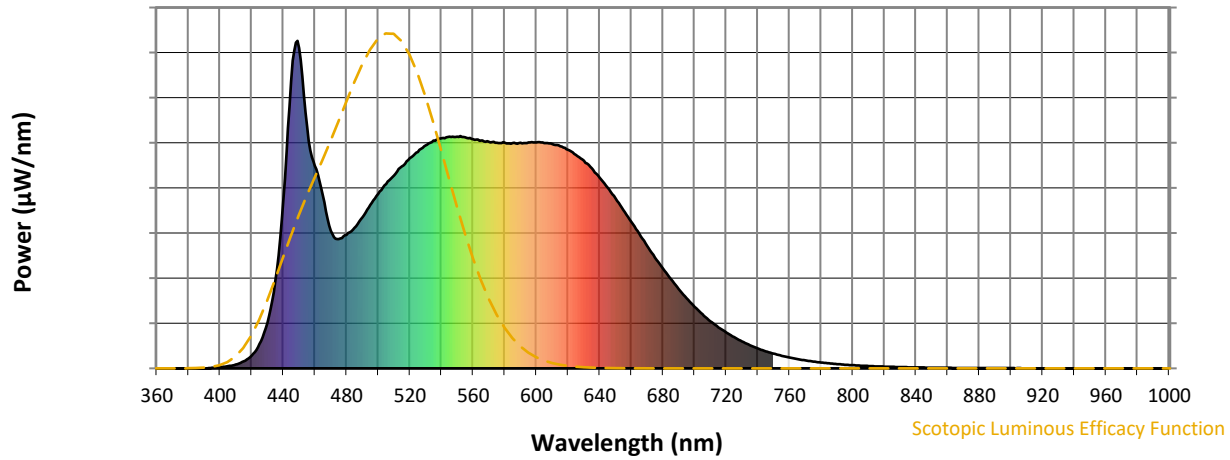


Photopic Lumens: NR

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	462	NR	620	668	NR	750	45	NR	880	1	NR
365	0	NR	495	498	NR	625	652	NR	755	39	NR	885	1	NR
370	0	NR	500	533	NR	630	634	NR	760	33	NR	890	1	NR
375	0	NR	505	562	NR	635	610	NR	765	28	NR	895	1	NR
380	0	NR	510	590	NR	640	583	NR	770	24	NR	900	1	NR
385	0	NR	515	617	NR	645	552	NR	775	21	NR	905	1	NR
390	0	NR	520	642	NR	650	519	NR	780	18	NR	910	0	NR
395	2	NR	525	661	NR	655	484	NR	785	15	NR	915	0	NR
400	4	NR	530	681	NR	660	448	NR	790	13	NR	920	0	NR
405	7	NR	535	695	NR	665	411	NR	795	11	NR	925	0	NR
410	12	NR	540	702	NR	670	373	NR	800	10	NR	930	0	NR
415	21	NR	545	708	NR	675	338	NR	805	8	NR	935	0	NR
420	39	NR	550	707	NR	680	305	NR	810	7	NR	940	0	NR
425	74	NR	555	706	NR	685	272	NR	815	6	NR	945	0	NR
430	139	NR	560	700	NR	690	243	NR	820	5	NR	950	0	NR
435	270	NR	565	696	NR	695	214	NR	825	5	NR	955	0	NR
440	517	NR	570	692	NR	700	188	NR	830	4	NR	960	0	NR
445	877	NR	575	689	NR	705	165	NR	835	3	NR	965	0	NR
450	978	NR	580	688	NR	710	144	NR	840	3	NR	970	0	NR
455	738	NR	585	688	NR	715	125	NR	845	3	NR	975	0	NR
460	618	NR	590	689	NR	720	110	NR	850	2	NR	980	0	NR
465	529	NR	595	690	NR	725	95	NR	855	2	NR	985	0	NR
470	420	NR	600	690	NR	730	82	NR	860	2	NR	990	0	NR
475	395	NR	605	688	NR	735	71	NR	865	1	NR	995	0	NR
480	408	NR	610	685	NR	740	61	NR	870	1	NR	1000	0	NR
485	429	NR	615	678	NR	745	52	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-17

Scotopic Flux vs. Wavelength



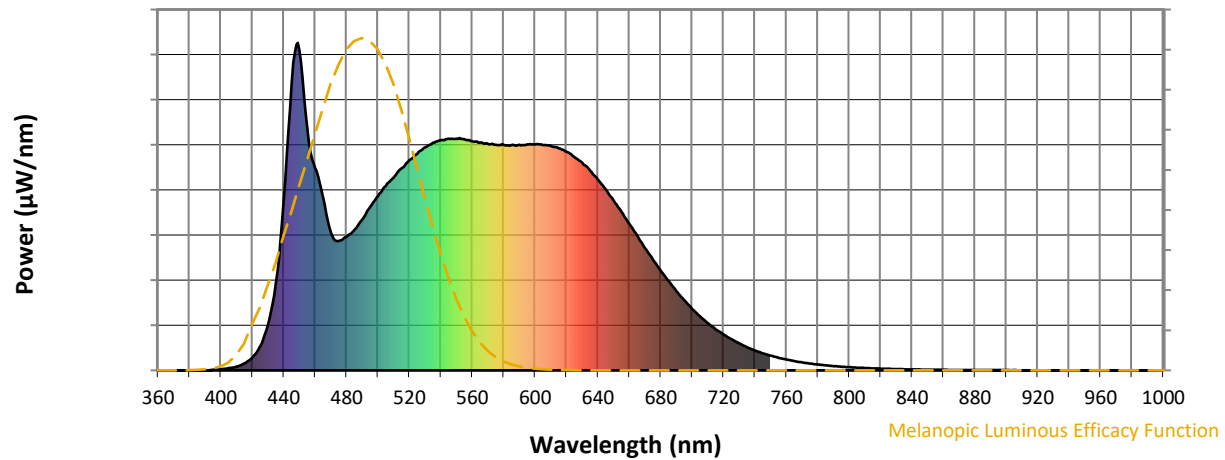
Scotopic Lumens: NR

S/P: 1.99

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	462	NR	620	668	NR	750	45	NR	880	1	NR
365	0	NR	495	498	NR	625	652	NR	755	39	NR	885	1	NR
370	0	NR	500	533	NR	630	634	NR	760	33	NR	890	1	NR
375	0	NR	505	562	NR	635	610	NR	765	28	NR	895	1	NR
380	0	NR	510	590	NR	640	583	NR	770	24	NR	900	1	NR
385	0	NR	515	617	NR	645	552	NR	775	21	NR	905	1	NR
390	0	NR	520	642	NR	650	519	NR	780	18	NR	910	0	NR
395	2	NR	525	661	NR	655	484	NR	785	15	NR	915	0	NR
400	4	NR	530	681	NR	660	448	NR	790	13	NR	920	0	NR
405	7	NR	535	695	NR	665	411	NR	795	11	NR	925	0	NR
410	12	NR	540	702	NR	670	373	NR	800	10	NR	930	0	NR
415	21	NR	545	708	NR	675	338	NR	805	8	NR	935	0	NR
420	39	NR	550	707	NR	680	305	NR	810	7	NR	940	0	NR
425	74	NR	555	706	NR	685	272	NR	815	6	NR	945	0	NR
430	139	NR	560	700	NR	690	243	NR	820	5	NR	950	0	NR
435	270	NR	565	696	NR	695	214	NR	825	5	NR	955	0	NR
440	517	NR	570	692	NR	700	188	NR	830	4	NR	960	0	NR
445	877	NR	575	689	NR	705	165	NR	835	3	NR	965	0	NR
450	978	NR	580	688	NR	710	144	NR	840	3	NR	970	0	NR
455	738	NR	585	688	NR	715	125	NR	845	3	NR	975	0	NR
460	618	NR	590	689	NR	720	110	NR	850	2	NR	980	0	NR
465	529	NR	595	690	NR	725	95	NR	855	2	NR	985	0	NR
470	420	NR	600	690	NR	730	82	NR	860	2	NR	990	0	NR
475	395	NR	605	688	NR	735	71	NR	865	1	NR	995	0	NR
480	408	NR	610	685	NR	740	61	NR	870	1	NR	1000	0	NR
485	429	NR	615	678	NR	745	52	NR	875	1	NR			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 4.22

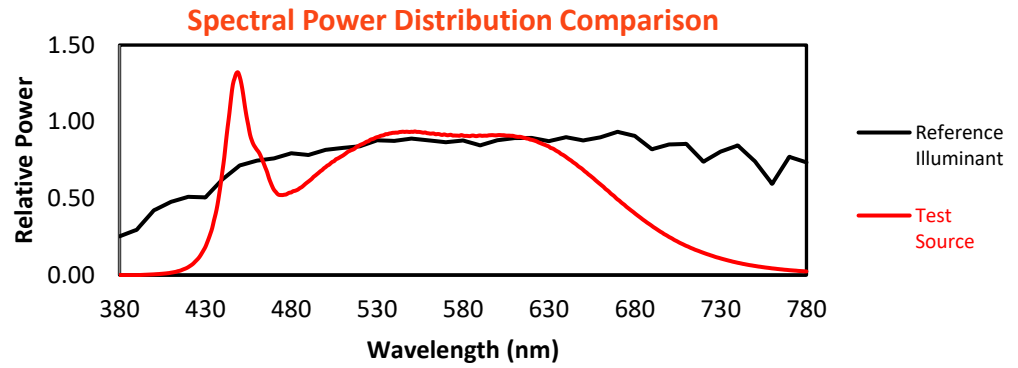
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	462	NR	620	668	NR	750	45	NR	880	1	NR
365	0	NR	495	498	NR	625	652	NR	755	39	NR	885	1	NR
370	0	NR	500	533	NR	630	634	NR	760	33	NR	890	1	NR
375	0	NR	505	562	NR	635	610	NR	765	28	NR	895	1	NR
380	0	NR	510	590	NR	640	583	NR	770	24	NR	900	1	NR
385	0	NR	515	617	NR	645	552	NR	775	21	NR	905	1	NR
390	0	NR	520	642	NR	650	519	NR	780	18	NR	910	0	NR
395	2	NR	525	661	NR	655	484	NR	785	15	NR	915	0	NR
400	4	NR	530	681	NR	660	448	NR	790	13	NR	920	0	NR
405	7	NR	535	695	NR	665	411	NR	795	11	NR	925	0	NR
410	12	NR	540	702	NR	670	373	NR	800	10	NR	930	0	NR
415	21	NR	545	708	NR	675	338	NR	805	8	NR	935	0	NR
420	39	NR	550	707	NR	680	305	NR	810	7	NR	940	0	NR
425	74	NR	555	706	NR	685	272	NR	815	6	NR	945	0	NR
430	139	NR	560	700	NR	690	243	NR	820	5	NR	950	0	NR
435	270	NR	565	696	NR	695	214	NR	825	5	NR	955	0	NR
440	517	NR	570	692	NR	700	188	NR	830	4	NR	960	0	NR
445	877	NR	575	689	NR	705	165	NR	835	3	NR	965	0	NR
450	978	NR	580	688	NR	710	144	NR	840	3	NR	970	0	NR
455	738	NR	585	688	NR	715	125	NR	845	3	NR	975	0	NR
460	618	NR	590	689	NR	720	110	NR	850	2	NR	980	0	NR
465	529	NR	595	690	NR	725	95	NR	855	2	NR	985	0	NR
470	420	NR	600	690	NR	730	82	NR	860	2	NR	990	0	NR
475	395	NR	605	688	NR	735	71	NR	865	1	NR	995	0	NR
480	408	NR	610	685	NR	740	61	NR	870	1	NR	1000	0	NR
485	429	NR	615	678	NR	745	52	NR	875	1	NR			

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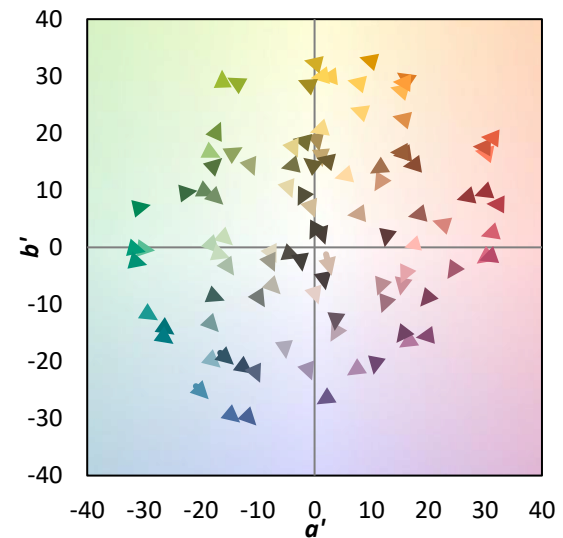
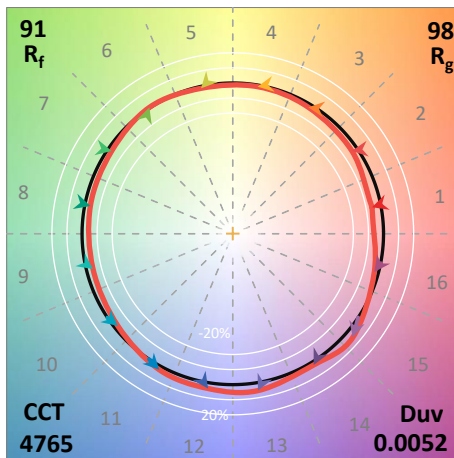
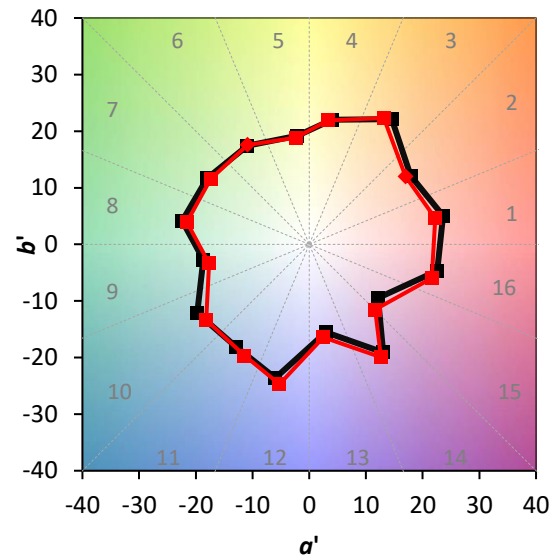
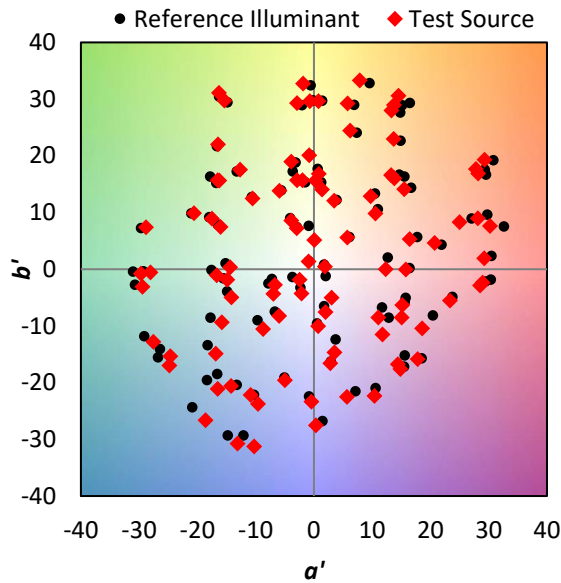
TM-30-18

Summary

$R_f = 90.7$
 $R_g = 98$
 CIE $R_a = 90.8$
 $R_9 = 54.9$

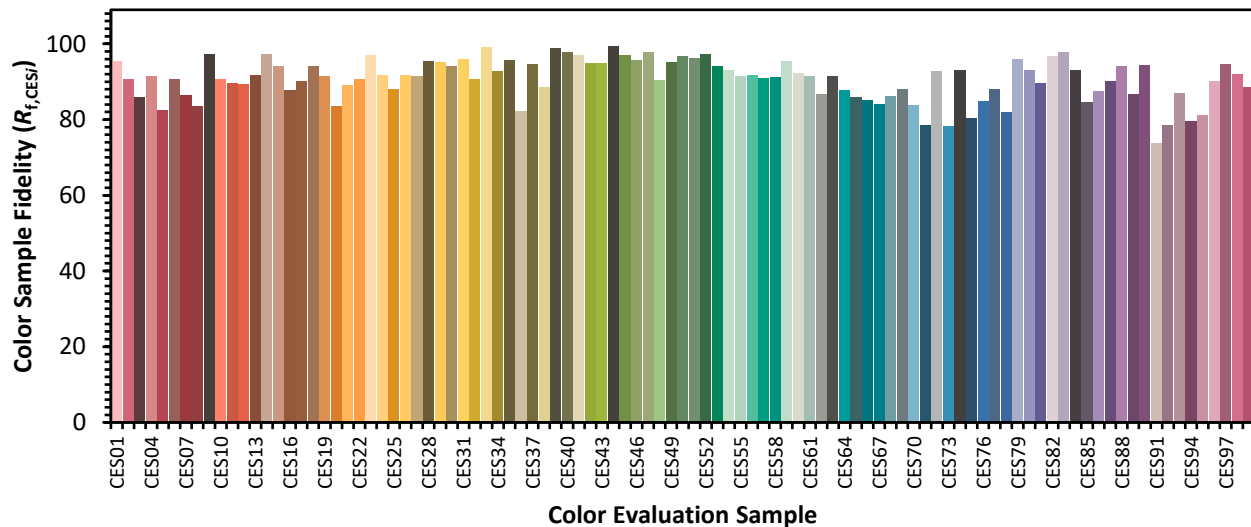


Color Vector Graphics

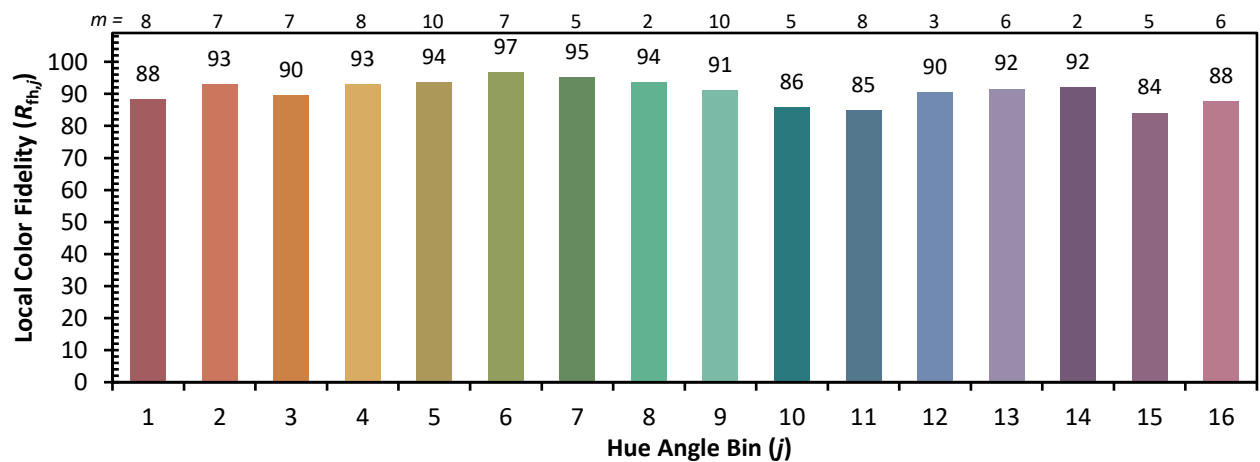
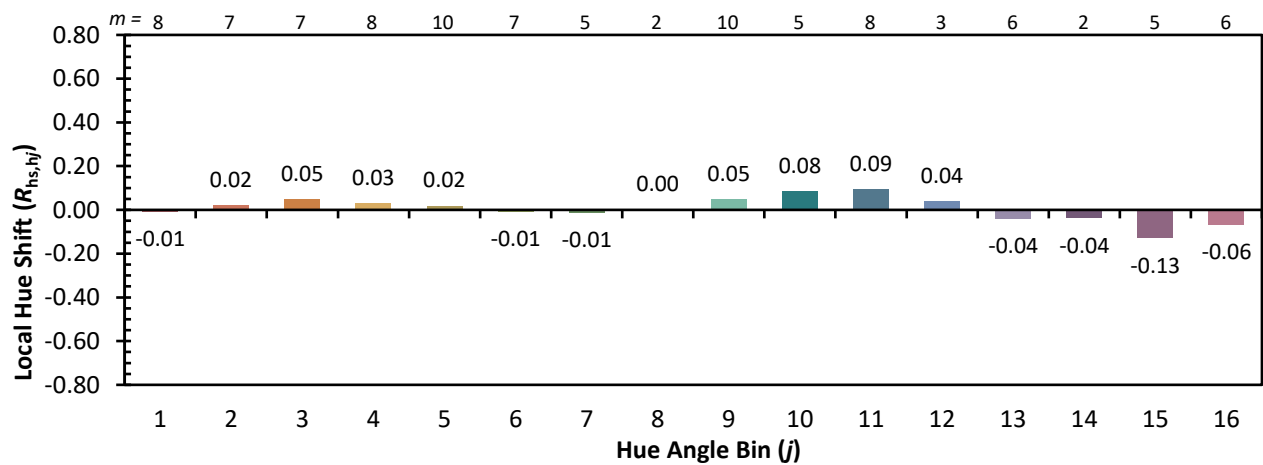
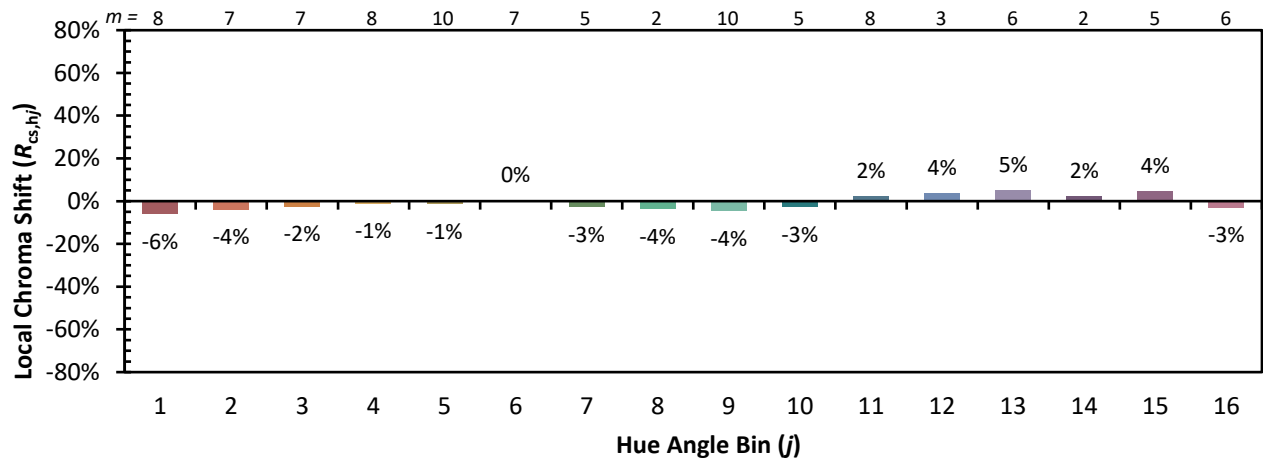


Individual Sample Fidelity Index ($R_{f,i}$)

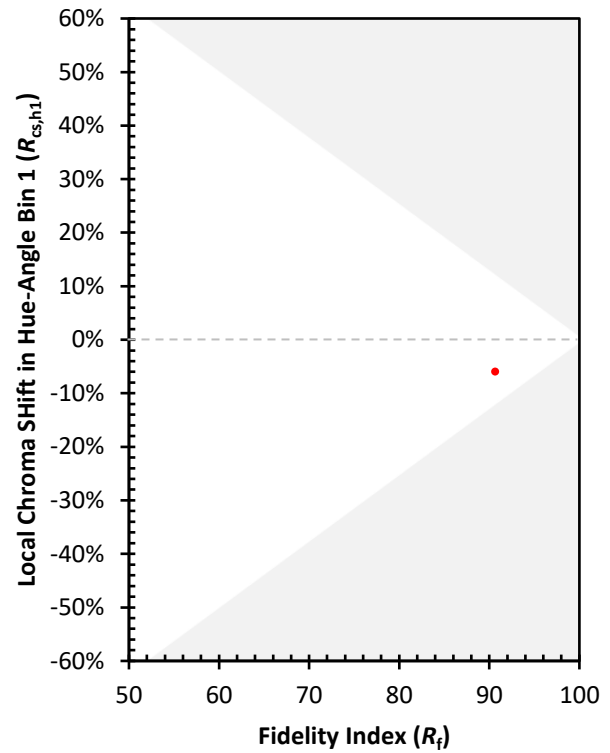
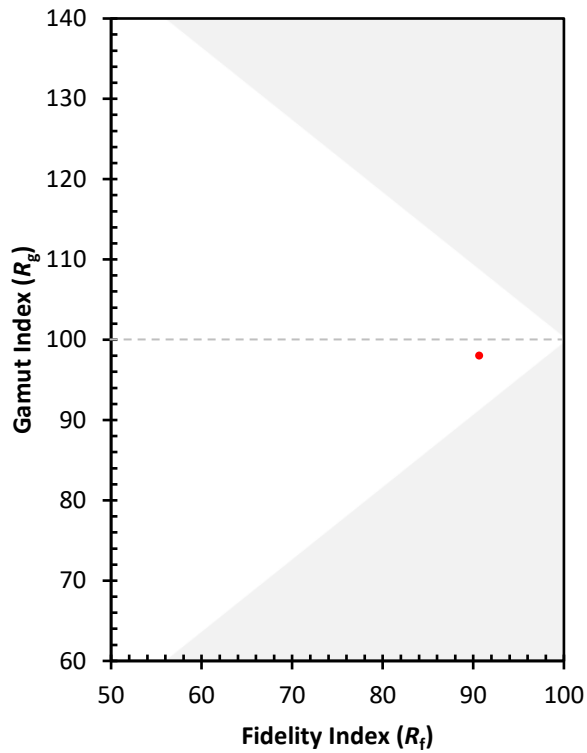
CES01 = 85	CES26 = 92	CES51 = 96	CES76 = 85
CES02 = 60	CES27 = 92	CES52 = 97	CES77 = 88
CES03 = 31	CES28 = 95	CES53 = 94	CES78 = 82
CES04 = 69	CES29 = 95	CES54 = 93	CES79 = 96
CES05 = 48	CES30 = 94	CES55 = 92	CES80 = 93
CES06 = 50	CES31 = 96	CES56 = 92	CES81 = 89
CES07 = 41	CES32 = 91	CES57 = 91	CES82 = 97
CES08 = 40	CES33 = 99	CES58 = 91	CES83 = 98
CES09 = 29	CES34 = 93	CES59 = 95	CES84 = 93
CES10 = 73	CES35 = 96	CES60 = 92	CES85 = 85
CES11 = 56	CES36 = 82	CES61 = 92	CES86 = 88
CES12 = 62	CES37 = 95	CES62 = 87	CES87 = 90
CES13 = 42	CES38 = 89	CES63 = 91	CES88 = 94
CES14 = 74	CES39 = 99	CES64 = 88	CES89 = 87
CES15 = 71	CES40 = 98	CES65 = 86	CES90 = 94
CES16 = 46	CES41 = 97	CES66 = 85	CES91 = 74
CES17 = 48	CES42 = 95	CES67 = 84	CES92 = 78
CES18 = 56	CES43 = 95	CES68 = 86	CES93 = 87
CES19 = 70	CES44 = 100	CES69 = 88	CES94 = 80
CES20 = 65	CES45 = 97	CES70 = 84	CES95 = 81
CES21 = 85	CES46 = 96	CES71 = 79	CES96 = 90
CES22 = 77	CES47 = 98	CES72 = 93	CES97 = 95
CES23 = 91	CES48 = 90	CES73 = 78	CES98 = 92
CES24 = 90	CES49 = 95	CES74 = 93	CES99 = 88
CES25 = 70	CES50 = 97	CES75 = 80	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)