

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: P1067967

Luminaire Tested: **NAV-SA1C-735-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1067967
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA1C-735-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 1050mA 1xLight Square PACKAGE
70CRI 3500K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (14) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4614.5 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G1

Input Watts (W): 50.1
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

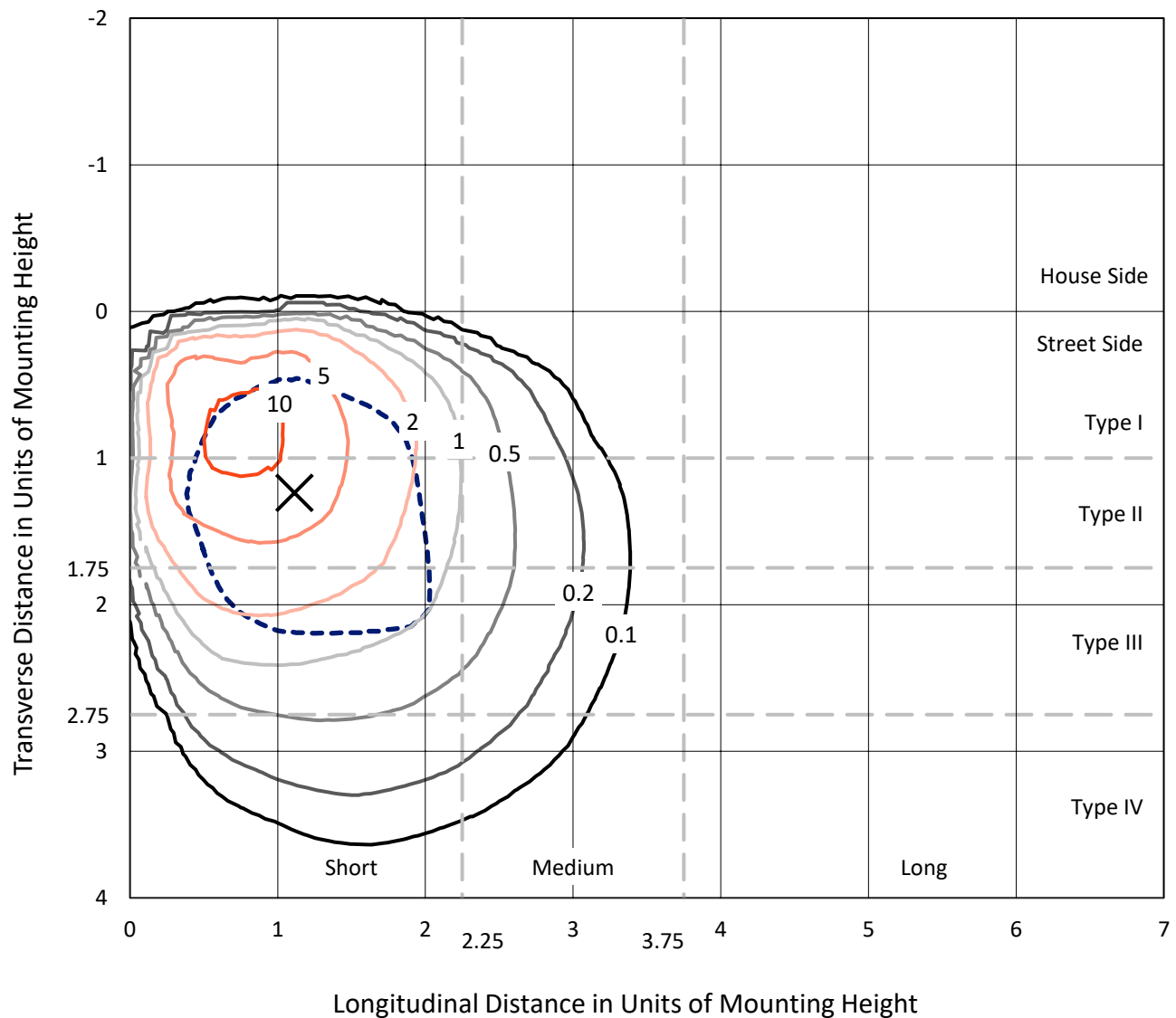


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

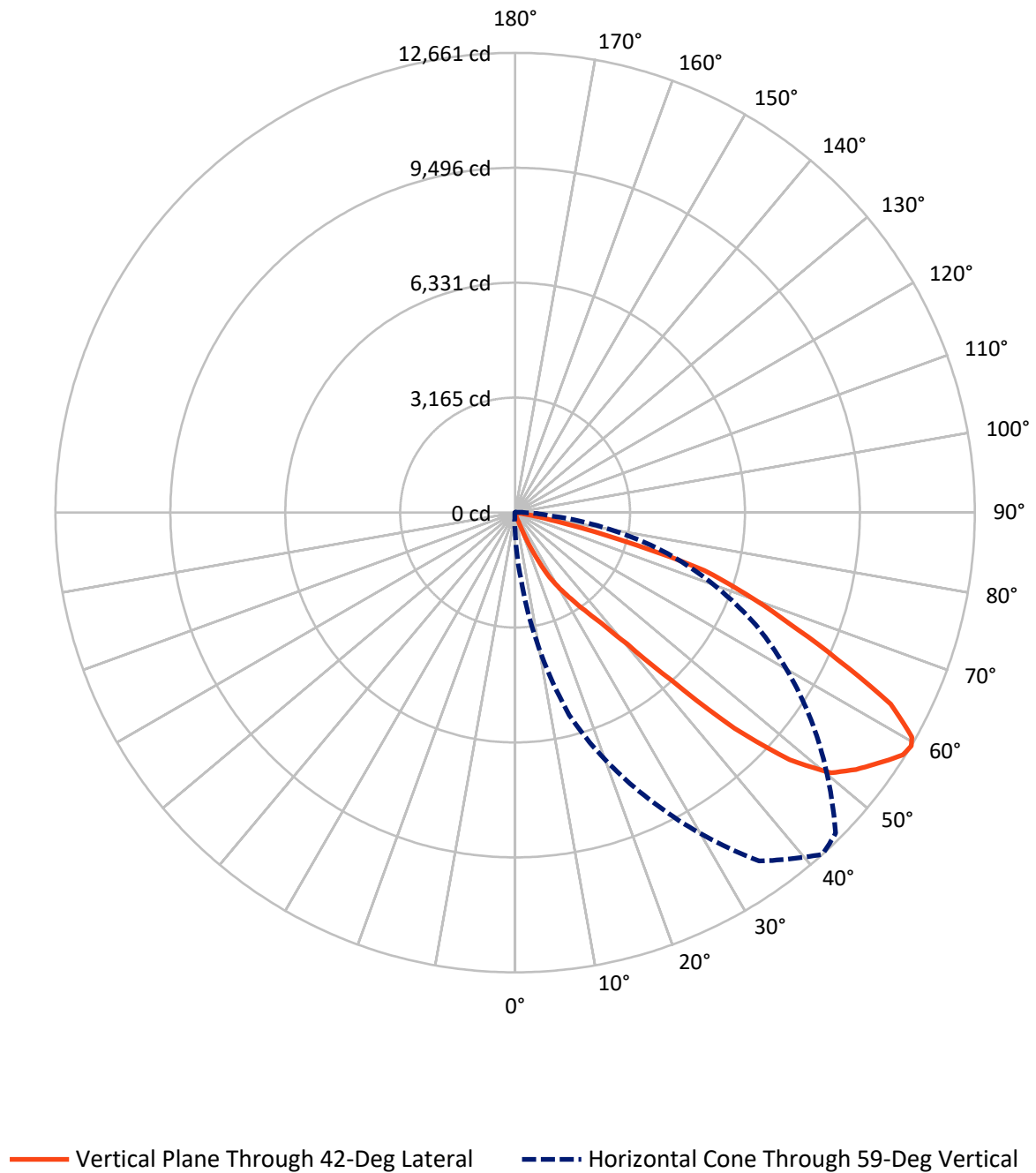


Based on 15 foot mounting height. Maximum calculated value = 13.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	22.2	0.0	22.2
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	4592.3	0.0	4592.3
	% Fixture	99.5	0.0	99.5
Total	Lumens	4614.5	0.0	4614.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.4	0.0
10°-20°	6.7	0.1
20°-30°	86.1	1.9
30°-40°	290.2	6.3
40°-50°	876.5	19.0
50°-60°	1547.3	33.5
60°-70°	1362.4	29.5
70°-80°	433.6	9.4
80°-90°	10.4	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°	4614.5	100.0
0°-180°	4614.5	100.0



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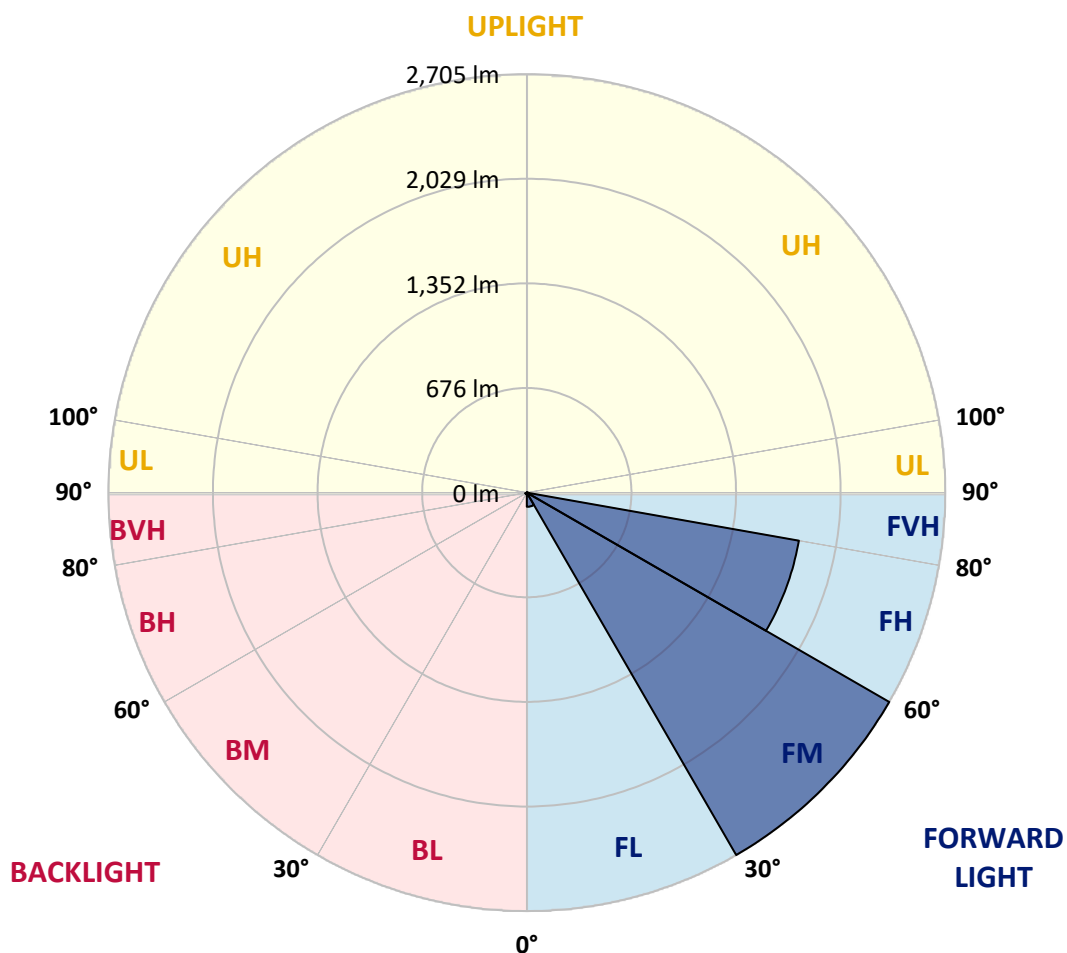
CATALOG NUMBER: NAV-SA1C-735-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	91.7	2.0			
FM	(30°-60°)	2704.9	58.6			
FH	(60°-80°)	1785.9	38.7			G1/1800
FVH	(80°-90°)	9.9	0.2			G0/10
BL	(0°-30°)	2.5	0.1	B0/110		
BM	(30°-60°)	9.1	0.2	B0/220		
BH	(60°-80°)	10.2	0.2	B0/110		G0/110
BVH	(80°-90°)	0.5	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-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
2.5°	20.3	20.3	18.8	17.4	15.9	14.5	14.5	14.5	13.0	13.0	11.6
5°	23.1	23.1	21.7	20.3	20.3	18.8	18.8	17.4	15.9	15.9	14.5
7.5°	24.6	24.6	24.6	24.6	23.1	23.1	23.1	21.7	20.3	18.8	17.4
10°	26.0	27.5	28.9	28.9	28.9	28.9	28.9	27.5	24.6	23.1	20.3
12.5°	28.9	30.4	33.3	36.2	36.2	37.6	36.2	34.7	31.8	27.5	23.1
15°	31.8	34.7	39.1	44.9	50.6	52.1	52.1	47.7	42.0	33.3	27.5
17.5°	36.2	40.5	52.1	70.9	91.1	107.1	107.1	95.5	66.6	43.4	31.8
20°	39.1	47.7	83.9	170.7	260.4	327.0	314.0	277.8	149.0	68.0	34.7
22.5°	43.4	60.8	178.0	448.5	694.5	816.0	787.1	597.5	334.2	121.5	42.0
25°	49.2	88.3	353.0	840.6	1290.6	1422.2	1403.4	1115.5	609.1	204.0	53.5
27.5°	60.8	130.2	565.7	1274.6	1904.0	2016.9	2009.6	1633.5	973.7	328.4	69.4
30°	76.7	189.5	839.2	1731.8	2310.6	2424.9	2388.7	2012.5	1313.7	502.0	89.7
32.5°	95.5	264.8	1086.6	2068.9	2685.3	2835.8	2792.4	2342.4	1587.2	649.6	133.1
35°	124.4	338.6	1331.1	2367.0	3117.9	3308.9	3236.5	2682.4	1823.0	816.0	160.6
37.5°	138.9	382.0	1555.3	2691.1	3604.0	3864.4	3809.5	3112.1	2063.2	1028.7	196.8
40°	140.3	434.0	1788.3	3113.5	4291.3	4755.7	4657.3	3850.0	2510.2	1302.1	253.2
42.5°	144.7	512.2	2090.6	3834.1	5641.1	6308.1	6196.7	5207.1	3524.4	1850.5	358.8
45°	164.9	659.7	2707.0	5181.0	7494.5	8472.5	8343.8	7098.1	4940.9	2882.1	612.0
47.5°	235.8	992.5	3787.8	6635.1	9389.8	10169.7	10137.8	8588.3	6224.2	3939.7	1037.4
50°	379.1	1523.5	5017.6	7857.6	10596.5	11266.3	11186.8	9210.4	6956.3	4661.6	1329.6
52.5°	506.4	2031.3	5790.2	8307.6	10956.7	11755.4	11658.4	9437.6	7148.7	4874.3	1410.6
55°	538.2	2215.1	6020.2	8446.5	11195.4	12169.2	12028.8	9589.5	7173.3	4722.4	1276.1
57.5°	522.3	2041.5	5871.2	8582.5	11528.2	12594.5	12407.9	9886.1	7255.8	4464.9	1062.0
59°	494.8	1827.3	5778.6	8691.0	11712.0	12661.1	12486.0	9951.2	7310.8	4347.7	931.7
60°	463.0	1682.6	5706.2	8761.9	11700.4	12556.9	12376.0	9920.8	7332.5	4246.4	869.5
62.5°	357.4	1342.6	5602.1	8711.3	10969.7	11606.3	11503.6	9177.1	7014.2	3922.3	685.8
65°	277.8	1027.2	5220.1	7769.4	9334.8	9763.1	9731.3	7770.8	5903.0	3381.2	494.8
67.5°	219.9	749.4	4414.2	6292.2	7510.4	8119.5	8096.4	6308.1	4480.8	2584.0	355.9
70°	179.4	533.9	3026.7	4744.1	6007.2	6774.0	6740.7	5076.9	3320.4	1639.2	259.0
72.5°	151.9	341.4	1836.0	3576.5	5013.2	5451.6	5354.7	4095.9	2414.7	892.7	205.4
75°	128.8	209.8	910.0	2229.5	2986.2	2983.3	2886.4	2168.8	1296.3	436.9	163.5
77.5°	104.2	147.6	357.4	612.0	941.9	1166.1	1147.3	768.3	387.7	127.3	101.3
80°	68.0	69.4	95.5	167.8	259.0	286.5	325.5	234.4	112.9	60.8	42.0
82.5°	30.4	33.3	43.4	55.0	55.0	50.6	44.9	33.3	24.6	20.3	10.1
85°	7.2	10.1	7.2	8.7	7.2	5.8	5.8	2.9	0.0	0.0	0.0
87.5°	1.4	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°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
2.5°	11.6	11.6	11.6	10.1	10.1	10.1	8.7	8.7	8.7	7.2	7.2
5°	14.5	13.0	11.6	11.6	10.1	10.1	8.7	7.2	7.2	7.2	5.8
7.5°	15.9	14.5	13.0	11.6	10.1	8.7	8.7	7.2	5.8	5.8	5.8
10°	18.8	17.4	14.5	11.6	10.1	8.7	7.2	7.2	5.8	4.3	4.3
12.5°	21.7	18.8	15.9	13.0	10.1	8.7	7.2	7.2	5.8	4.3	2.9
15°	24.6	21.7	17.4	13.0	10.1	8.7	7.2	7.2	4.3	2.9	1.4
17.5°	27.5	23.1	17.4	14.5	10.1	8.7	7.2	5.8	2.9	1.4	0.0
20°	28.9	24.6	18.8	14.5	10.1	8.7	7.2	4.3	1.4	0.0	0.0
22.5°	31.8	27.5	20.3	14.5	10.1	7.2	4.3	1.4	0.0	0.0	0.0
25°	37.6	28.9	20.3	14.5	10.1	7.2	2.9	0.0	0.0	0.0	0.0
27.5°	42.0	31.8	20.3	14.5	10.1	5.8	1.4	0.0	0.0	0.0	0.0
30°	49.2	34.7	21.7	14.5	10.1	4.3	1.4	0.0	0.0	0.0	0.0
32.5°	60.8	37.6	21.7	14.5	8.7	4.3	0.0	0.0	0.0	0.0	0.0
35°	73.8	43.4	21.7	14.5	8.7	4.3	0.0	0.0	0.0	0.0	0.0
37.5°	75.2	46.3	21.7	14.5	8.7	2.9	0.0	0.0	0.0	0.0	0.0
40°	78.1	43.4	23.1	14.5	8.7	2.9	0.0	0.0	0.0	0.0	0.0
42.5°	89.7	40.5	24.6	14.5	8.7	2.9	0.0	0.0	0.0	0.0	0.0
45°	133.1	42.0	24.6	15.9	8.7	4.3	0.0	0.0	0.0	0.0	0.0
47.5°	231.5	43.4	23.1	15.9	8.7	4.3	0.0	0.0	0.0	0.0	0.0
50°	296.6	50.6	23.1	17.4	10.1	2.9	0.0	0.0	0.0	0.0	0.0
52.5°	315.4	59.3	23.1	18.8	13.0	1.4	0.0	0.0	0.0	0.0	0.0
55°	306.7	69.4	24.6	20.3	15.9	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	283.6	75.2	26.0	21.7	17.4	0.0	0.0	0.0	0.0	0.0	0.0
59°	259.0	79.6	30.4	23.1	17.4	0.0	0.0	0.0	0.0	0.0	0.0
60°	238.7	83.9	31.8	24.6	17.4	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	192.4	89.7	34.7	28.9	14.5	0.0	0.0	0.0	0.0	0.0	0.0
65°	167.8	94.0	36.2	31.8	13.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	153.4	96.9	39.1	33.3	11.6	0.0	0.0	0.0	0.0	0.0	0.0
70°	141.8	95.5	42.0	31.8	10.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	128.8	91.1	50.6	28.9	8.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	115.7	82.5	55.0	26.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	83.9	69.4	50.6	23.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	36.2	37.6	36.2	17.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	7.2	8.7	7.2	4.3	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	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
2.5°	7.2	7.2	7.2	7.2	8.7	8.7	11.6	14.5	17.4	18.8	18.8
5°	5.8	5.8	5.8	5.8	5.8	7.2	8.7	11.6	15.9	17.4	17.4
7.5°	4.3	4.3	4.3	4.3	4.3	4.3	7.2	10.1	14.5	15.9	17.4
10°	4.3	2.9	2.9	1.4	1.4	2.9	4.3	8.7	13.0	14.5	15.9
12.5°	2.9	1.4	1.4	0.0	0.0	1.4	2.9	7.2	11.6	13.0	14.5
15°	1.4	0.0	0.0	0.0	0.0	0.0	1.4	5.8	10.1	11.6	14.5
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	8.7	11.6	13.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	7.2	10.1	11.6
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.8	8.7	10.1
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	5.8	7.2
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	4.3	5.8
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	4.3	5.8
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9	4.3
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9	4.3
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9	2.9
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	2.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
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°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
2.5°	20.3	20.3	18.8	17.4	17.4	17.4	18.8	20.3	20.3	20.3
5°	18.8	18.8	17.4	17.4	17.4	17.4	18.8	21.7	23.1	23.1
7.5°	18.8	18.8	17.4	17.4	17.4	17.4	18.8	21.7	23.1	24.6
10°	17.4	17.4	17.4	17.4	15.9	17.4	18.8	21.7	26.0	26.0
12.5°	17.4	17.4	17.4	17.4	15.9	17.4	20.3	23.1	27.5	28.9
15°	17.4	17.4	17.4	15.9	15.9	17.4	20.3	24.6	28.9	31.8
17.5°	15.9	17.4	17.4	15.9	15.9	17.4	20.3	24.6	31.8	36.2
20°	14.5	15.9	17.4	15.9	15.9	15.9	20.3	24.6	33.3	39.1
22.5°	13.0	14.5	15.9	15.9	14.5	15.9	20.3	26.0	36.2	43.4
25°	11.6	13.0	13.0	14.5	14.5	15.9	20.3	26.0	37.6	49.2
27.5°	8.7	10.1	11.6	13.0	13.0	15.9	20.3	27.5	40.5	60.8
30°	7.2	8.7	10.1	11.6	13.0	15.9	20.3	27.5	43.4	76.7
32.5°	7.2	8.7	10.1	11.6	13.0	14.5	20.3	28.9	47.7	95.5
35°	5.8	7.2	8.7	11.6	11.6	14.5	20.3	28.9	52.1	124.4
37.5°	5.8	7.2	8.7	11.6	11.6	14.5	20.3	28.9	63.7	138.9
40°	4.3	5.8	7.2	11.6	11.6	14.5	21.7	30.4	65.1	140.3
42.5°	4.3	5.8	7.2	10.1	11.6	14.5	21.7	30.4	60.8	144.7
45°	4.3	5.8	7.2	11.6	13.0	15.9	21.7	31.8	59.3	164.9
47.5°	4.3	5.8	7.2	11.6	14.5	15.9	21.7	31.8	60.8	235.8
50°	4.3	5.8	7.2	11.6	15.9	15.9	21.7	31.8	66.6	379.1
52.5°	2.9	4.3	5.8	10.1	13.0	17.4	23.1	30.4	70.9	506.4
55°	2.9	2.9	4.3	8.7	11.6	18.8	24.6	30.4	82.5	538.2
57.5°	2.9	2.9	4.3	7.2	10.1	20.3	26.0	30.4	95.5	522.3
59°	2.9	2.9	2.9	7.2	8.7	20.3	26.0	31.8	96.9	494.8
60°	2.9	2.9	2.9	5.8	8.7	20.3	27.5	33.3	98.4	463.0
62.5°	1.4	1.4	1.4	5.8	7.2	20.3	30.4	40.5	101.3	357.4
65°	2.9	2.9	1.4	4.3	7.2	17.4	34.7	43.4	102.7	277.8
67.5°	2.9	2.9	2.9	5.8	7.2	17.4	36.2	44.9	102.7	219.9
70°	2.9	2.9	2.9	5.8	8.7	17.4	36.2	46.3	101.3	179.4
72.5°	2.9	2.9	2.9	5.8	8.7	15.9	33.3	47.7	96.9	151.9
75°	2.9	2.9	2.9	4.3	7.2	14.5	31.8	52.1	88.3	128.8
77.5°	2.9	2.9	2.9	2.9	5.8	11.6	28.9	57.9	78.1	104.2
80°	4.3	2.9	2.9	2.9	4.3	10.1	27.5	56.4	65.1	68.0
82.5°	4.3	2.9	2.9	1.4	2.9	7.2	21.7	43.4	33.3	30.4
85°	2.9	2.9	2.9	1.4	1.4	4.3	10.1	13.0	10.1	7.2
87.5°	2.9	2.9	2.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-5

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-735-U-5WQ

Data in this report applies to families of products including GSS-SB1A-735-U-5WQ

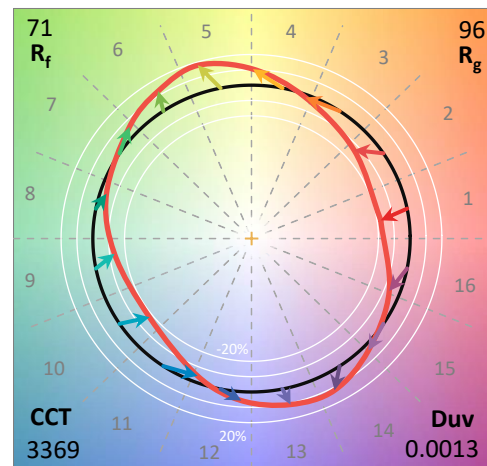
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-5
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/15/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGraw-Edison
 Catalog Number: **GSS-SB1A-735-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3500K CCT 26 LEDS

Spectral Parameters

CCT (K): 3369
 CIE u' : 0.2386
 CIE v' : 0.5156
 Duv: 0.0013
 CIE x: 0.4143
 CIE y: 0.3980
 CIE z: 0.1877
 Peak Wavelength (nm): 590
 Dominant Wavelength (nm): 580
 Purity: 43.80166
 R_f: 71.4
 R_g: 96

CRI (Ra): 70.1
 R1: 66.6
 R2: 77.6
 R3: 88.5
 R4: 69.5
 R5: 66.4
 R6: 69.6
 R7: 77.5
 R8: 44.9
 R9: -40.2
 R10: 49.1
 R11: 66.3
 R12: 45.7
 R13: 68.0
 R14: 93.4
 R15: 57.6



Test Conditions

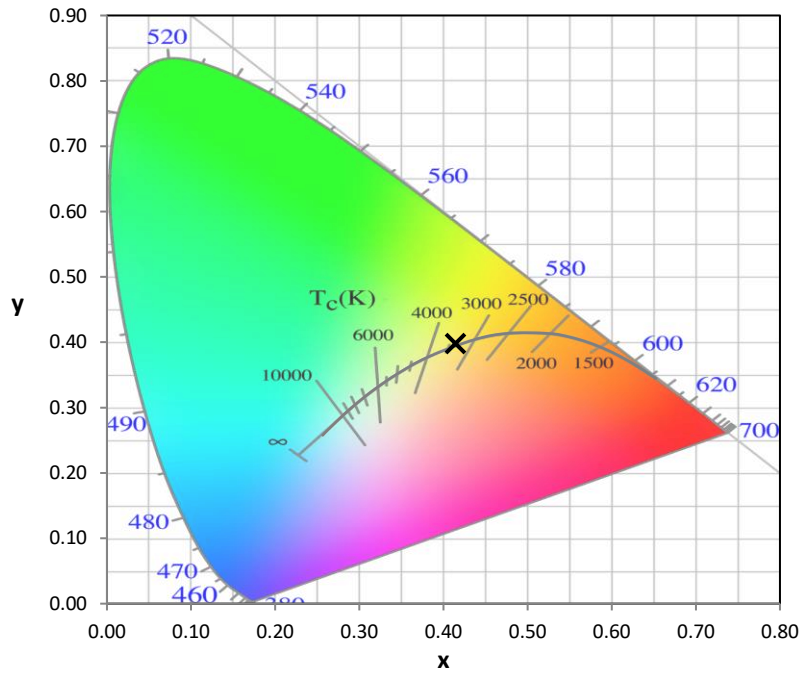
Stabilization Time: 21M
 Operation Time: 1H 21M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-5

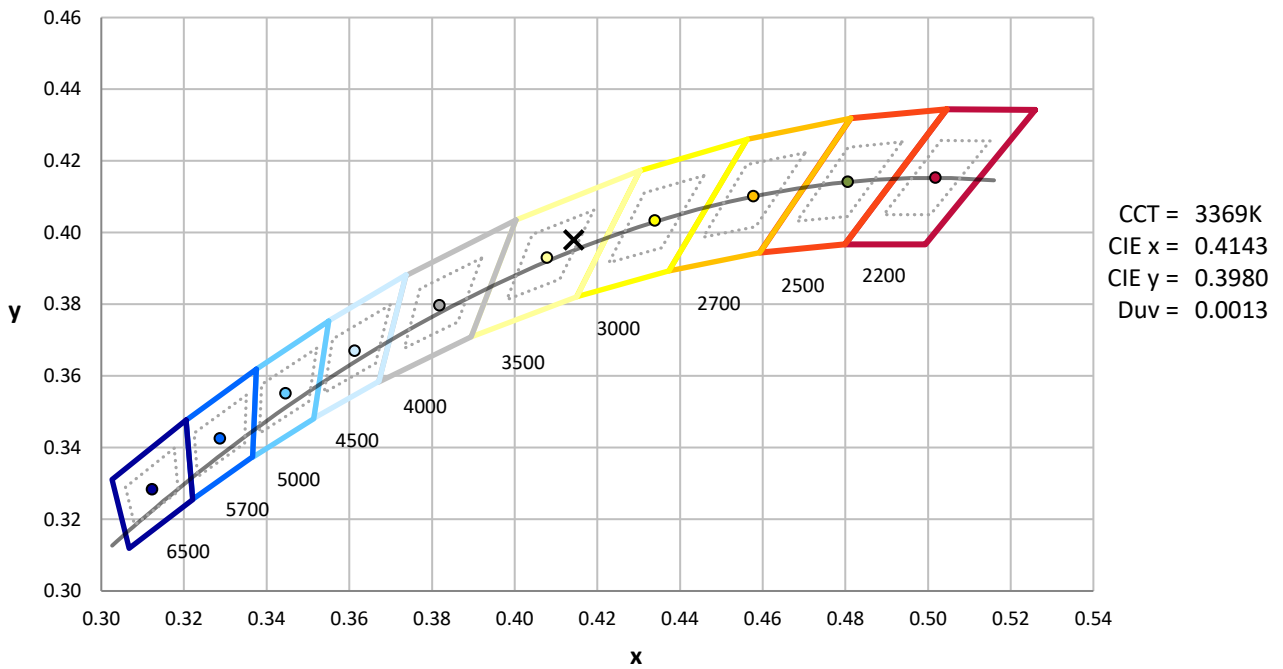
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-5

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-5

Photopic Flux vs. Wavelength

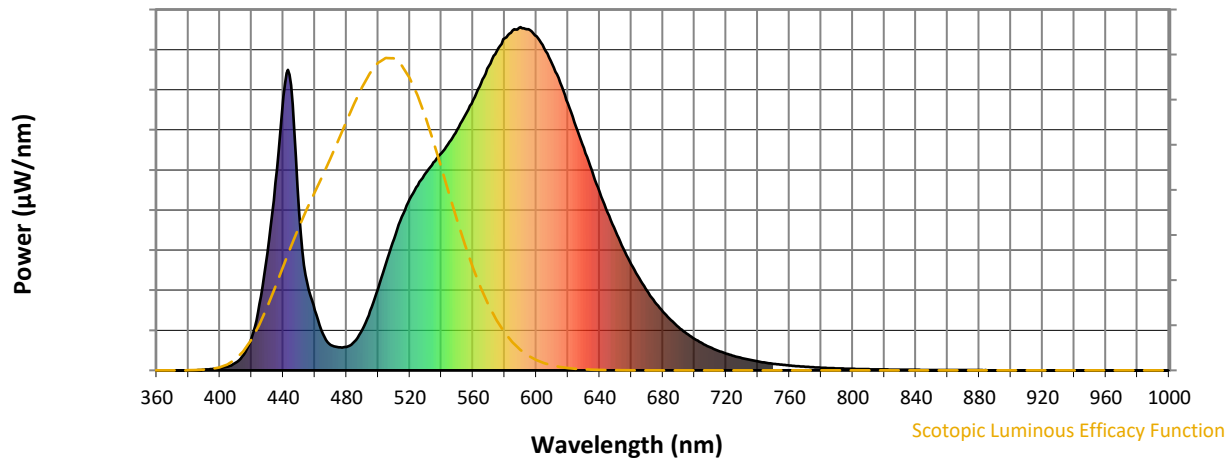


Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	648	NR	760	14	NR	890	0	NR
375	0	NR	505	313	NR	635	582	NR	765	12	NR	895	0	NR
380	0	NR	510	383	NR	640	520	NR	770	11	NR	900	0	NR
385	0	NR	515	448	NR	645	460	NR	775	9	NR	905	0	NR
390	2	NR	520	500	NR	650	406	NR	780	8	NR	910	0	NR
395	4	NR	525	539	NR	655	355	NR	785	7	NR	915	0	NR
400	6	NR	530	575	NR	660	309	NR	790	6	NR	920	0	NR
405	11	NR	535	606	NR	665	269	NR	795	5	NR	925	0	NR
410	22	NR	540	633	NR	670	231	NR	800	4	NR	930	0	NR
415	45	NR	545	666	NR	675	199	NR	805	4	NR	935	0	NR
420	96	NR	550	701	NR	680	171	NR	810	3	NR	940	0	NR
425	193	NR	555	743	NR	685	147	NR	815	3	NR	945	0	NR
430	341	NR	560	788	NR	690	126	NR	820	3	NR	950	0	NR
435	547	NR	565	837	NR	695	107	NR	825	2	NR	955	0	NR
440	799	NR	570	887	NR	700	92	NR	830	2	NR	960	0	NR
445	831	NR	575	931	NR	705	78	NR	835	2	NR	965	0	NR
450	461	NR	580	967	NR	710	67	NR	840	2	NR	970	0	NR
455	256	NR	585	990	NR	715	57	NR	845	1	NR	975	0	NR
460	176	NR	590	1000	NR	720	49	NR	850	1	NR	980	0	NR
465	107	NR	595	994	NR	725	42	NR	855	1	NR	985	0	NR
470	74	NR	600	973	NR	730	36	NR	860	1	NR	990	0	NR
475	67	NR	605	938	NR	735	31	NR	865	1	NR	995	0	NR
480	68	NR	610	892	NR	740	26	NR	870	1	NR	1000	0	NR
485	84	NR	615	838	NR	745	22	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-5

Scotopic Flux vs. Wavelength



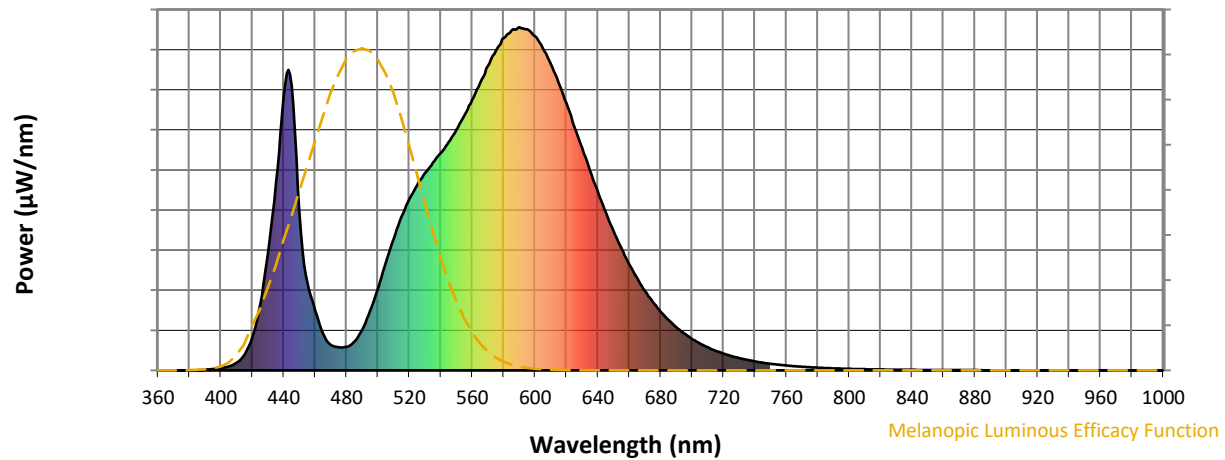
Scotopic Lumens: NR

S/P: 1.29

λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (Φ/nm)
360	0	NR	490	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	648	NR	760	14	NR	890	0	NR
375	0	NR	505	313	NR	635	582	NR	765	12	NR	895	0	NR
380	0	NR	510	383	NR	640	520	NR	770	11	NR	900	0	NR
385	0	NR	515	448	NR	645	460	NR	775	9	NR	905	0	NR
390	2	NR	520	500	NR	650	406	NR	780	8	NR	910	0	NR
395	4	NR	525	539	NR	655	355	NR	785	7	NR	915	0	NR
400	6	NR	530	575	NR	660	309	NR	790	6	NR	920	0	NR
405	11	NR	535	606	NR	665	269	NR	795	5	NR	925	0	NR
410	22	NR	540	633	NR	670	231	NR	800	4	NR	930	0	NR
415	45	NR	545	666	NR	675	199	NR	805	4	NR	935	0	NR
420	96	NR	550	701	NR	680	171	NR	810	3	NR	940	0	NR
425	193	NR	555	743	NR	685	147	NR	815	3	NR	945	0	NR
430	341	NR	560	788	NR	690	126	NR	820	3	NR	950	0	NR
435	547	NR	565	837	NR	695	107	NR	825	2	NR	955	0	NR
440	799	NR	570	887	NR	700	92	NR	830	2	NR	960	0	NR
445	831	NR	575	931	NR	705	78	NR	835	2	NR	965	0	NR
450	461	NR	580	967	NR	710	67	NR	840	2	NR	970	0	NR
455	256	NR	585	990	NR	715	57	NR	845	1	NR	975	0	NR
460	176	NR	590	1000	NR	720	49	NR	850	1	NR	980	0	NR
465	107	NR	595	994	NR	725	42	NR	855	1	NR	985	0	NR
470	74	NR	600	973	NR	730	36	NR	860	1	NR	990	0	NR
475	67	NR	605	938	NR	735	31	NR	865	1	NR	995	0	NR
480	68	NR	610	892	NR	740	26	NR	870	1	NR	1000	0	NR
485	84	NR	615	838	NR	745	22	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.36

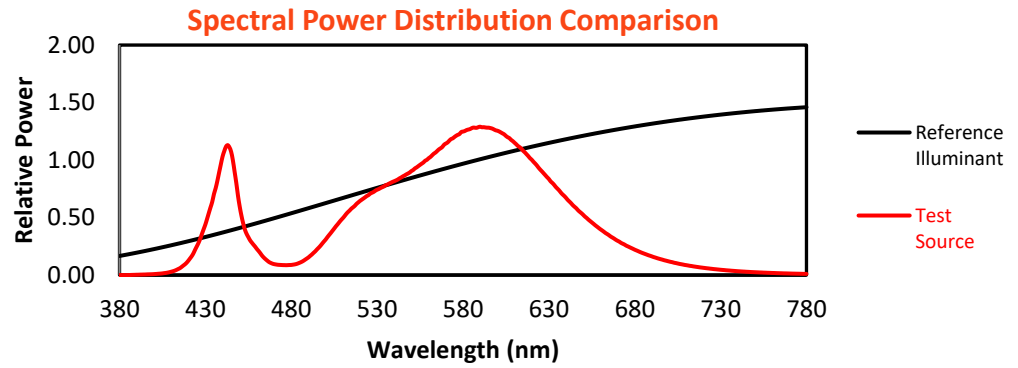
λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	648	NR	760	14	NR	890	0	NR
375	0	NR	505	313	NR	635	582	NR	765	12	NR	895	0	NR
380	0	NR	510	383	NR	640	520	NR	770	11	NR	900	0	NR
385	0	NR	515	448	NR	645	460	NR	775	9	NR	905	0	NR
390	2	NR	520	500	NR	650	406	NR	780	8	NR	910	0	NR
395	4	NR	525	539	NR	655	355	NR	785	7	NR	915	0	NR
400	6	NR	530	575	NR	660	309	NR	790	6	NR	920	0	NR
405	11	NR	535	606	NR	665	269	NR	795	5	NR	925	0	NR
410	22	NR	540	633	NR	670	231	NR	800	4	NR	930	0	NR
415	45	NR	545	666	NR	675	199	NR	805	4	NR	935	0	NR
420	96	NR	550	701	NR	680	171	NR	810	3	NR	940	0	NR
425	193	NR	555	743	NR	685	147	NR	815	3	NR	945	0	NR
430	341	NR	560	788	NR	690	126	NR	820	3	NR	950	0	NR
435	547	NR	565	837	NR	695	107	NR	825	2	NR	955	0	NR
440	799	NR	570	887	NR	700	92	NR	830	2	NR	960	0	NR
445	831	NR	575	931	NR	705	78	NR	835	2	NR	965	0	NR
450	461	NR	580	967	NR	710	67	NR	840	2	NR	970	0	NR
455	256	NR	585	990	NR	715	57	NR	845	1	NR	975	0	NR
460	176	NR	590	1000	NR	720	49	NR	850	1	NR	980	0	NR
465	107	NR	595	994	NR	725	42	NR	855	1	NR	985	0	NR
470	74	NR	600	973	NR	730	36	NR	860	1	NR	990	0	NR
475	67	NR	605	938	NR	735	31	NR	865	1	NR	995	0	NR
480	68	NR	610	892	NR	740	26	NR	870	1	NR	1000	0	NR
485	84	NR	615	838	NR	745	22	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-5

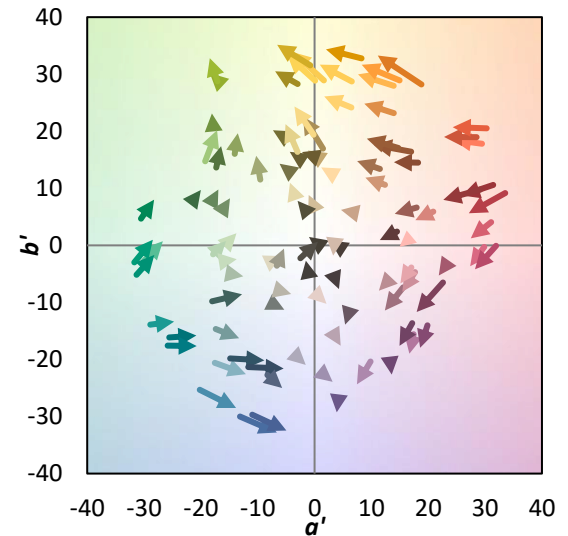
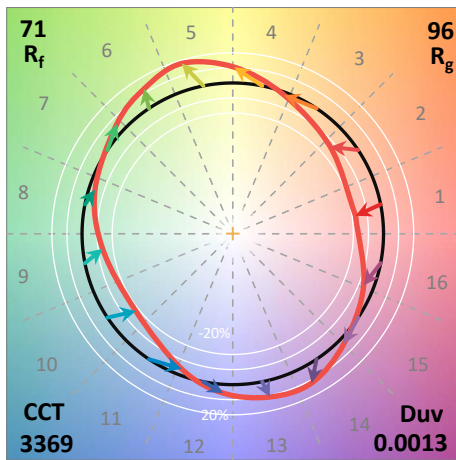
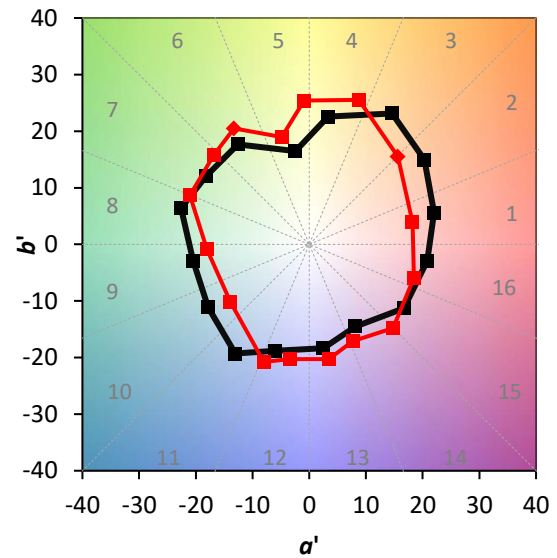
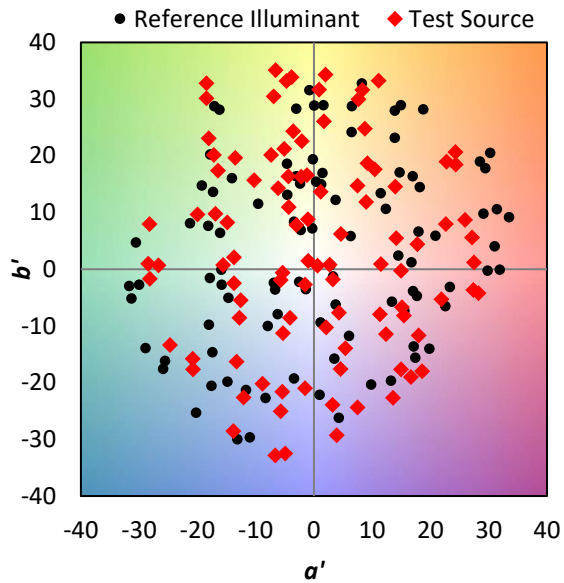
TM-30-18

Summary

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

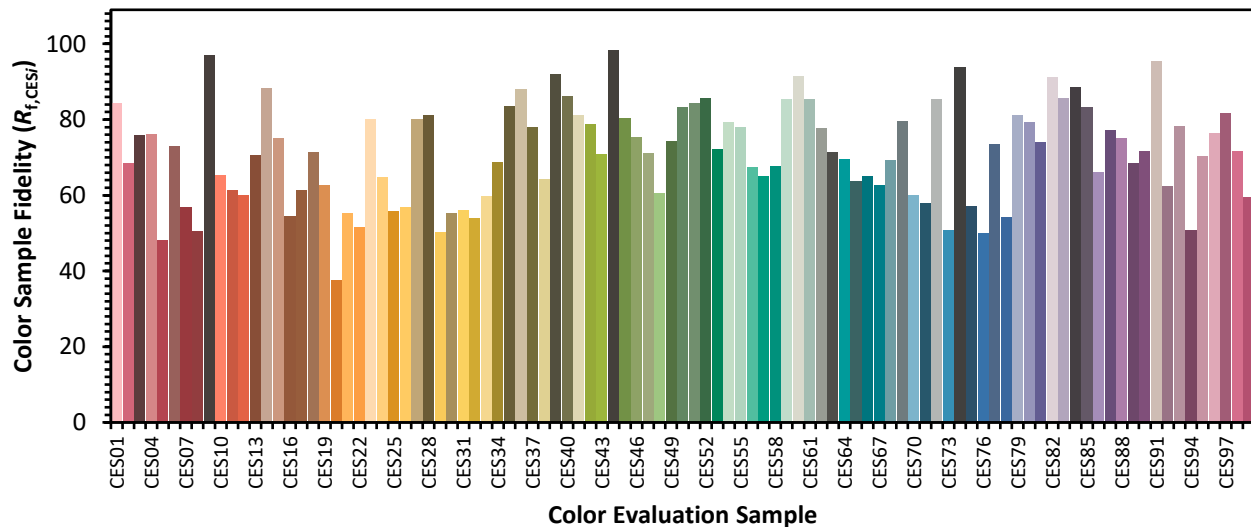


Color Vector Graphics

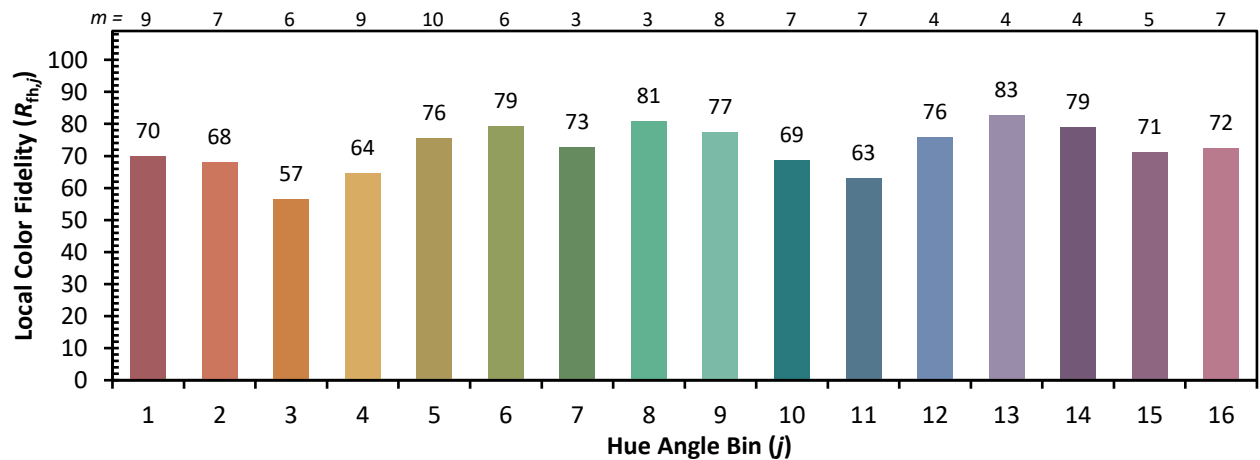
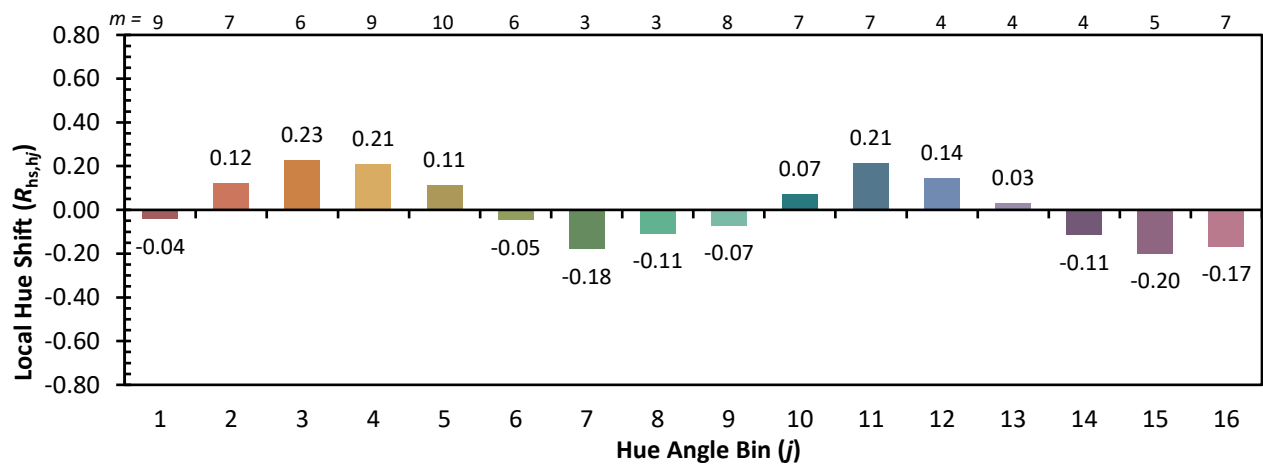
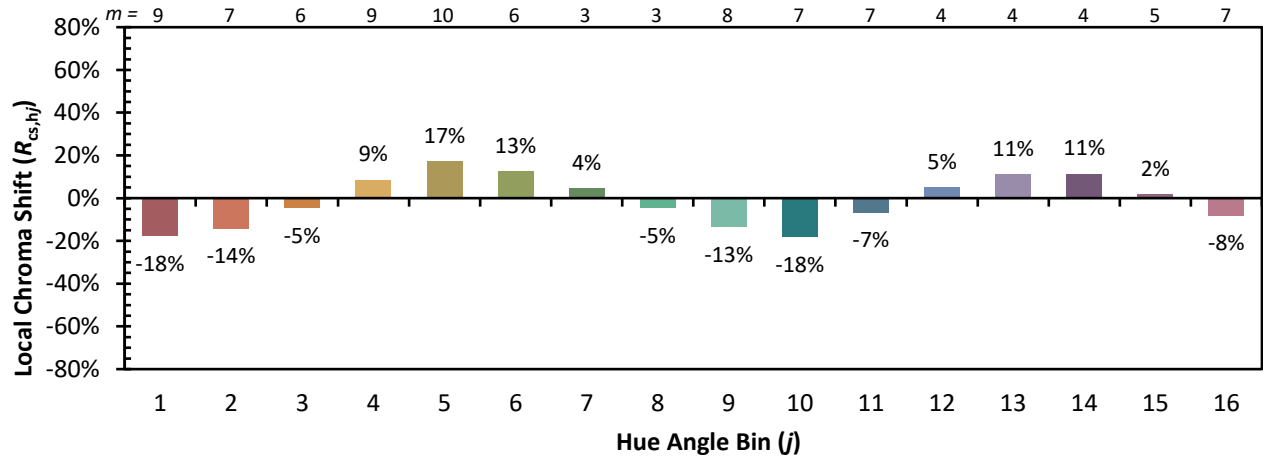


Individual Sample Fidelity Index ($R_{f,i}$)

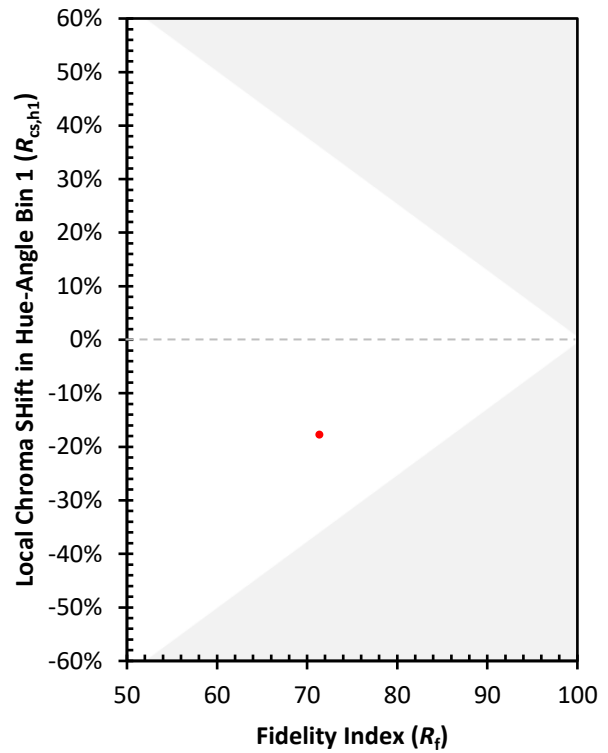
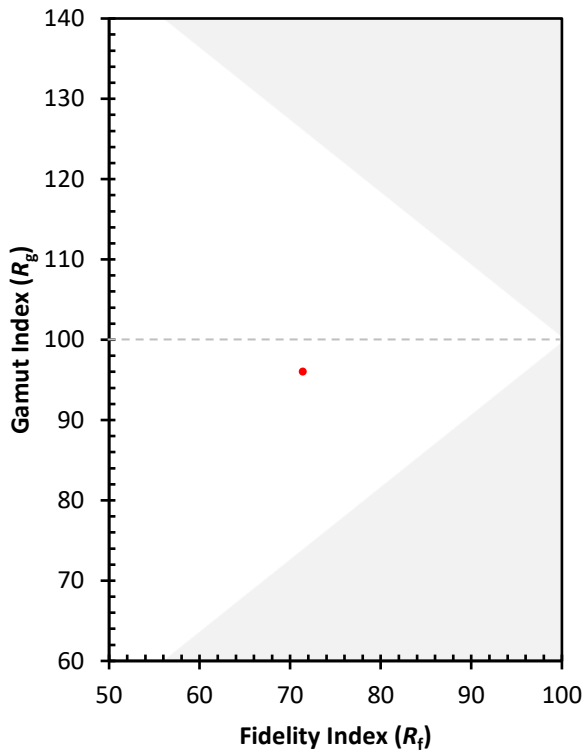
CES01 = 86	CES26 = 57	CES51 = 84	CES76 = 50
CES02 = 62	CES27 = 80	CES52 = 86	CES77 = 74
CES03 = 31	CES28 = 81	CES53 = 72	CES78 = 54
CES04 = 70	CES29 = 50	CES54 = 79	CES79 = 81
CES05 = 48	CES30 = 55	CES55 = 78	CES80 = 79
CES06 = 51	CES31 = 56	CES56 = 67	CES81 = 74
CES07 = 40	CES32 = 54	CES57 = 65	CES82 = 91
CES08 = 39	CES33 = 60	CES58 = 68	CES83 = 86
CES09 = 29	CES34 = 69	CES59 = 85	CES84 = 89
CES10 = 75	CES35 = 83	CES60 = 91	CES85 = 83
CES11 = 58	CES36 = 88	CES61 = 85	CES86 = 66
CES12 = 64	CES37 = 78	CES62 = 78	CES87 = 77
CES13 = 43	CES38 = 64	CES63 = 71	CES88 = 75
CES14 = 74	CES39 = 92	CES64 = 70	CES89 = 68
CES15 = 71	CES40 = 86	CES65 = 64	CES90 = 72
CES16 = 47	CES41 = 81	CES66 = 65	CES91 = 95
CES17 = 50	CES42 = 79	CES67 = 63	CES92 = 62
CES18 = 56	CES43 = 71	CES68 = 69	CES93 = 78
CES19 = 72	CES44 = 98	CES69 = 80	CES94 = 51
CES20 = 65	CES45 = 80	CES70 = 60	CES95 = 70
CES21 = 87	CES46 = 75	CES71 = 58	CES96 = 76
CES22 = 79	CES47 = 71	CES72 = 85	CES97 = 82
CES23 = 92	CES48 = 61	CES73 = 51	CES98 = 72
CES24 = 91	CES49 = 74	CES74 = 94	CES99 = 60
CES25 = 72	CES50 = 83	CES75 = 57	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)