

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: McGRAW-EDISON

Report Number: P1050050

Luminaire Tested: **GALN-SA4B-950-U-LBC**

Issue Date: 07/10/2025

Test Information

Test Method: LM-79-08
Report Number: P1050050
Test Lab: INNOVATION CENTER(G3)
Issue Date: 07/10/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-950-U-LBC
Description: GALLEON II AREA AND ROADWAY LUMINAIRE 800mA 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: 12997.7 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B0 - U0 - G2

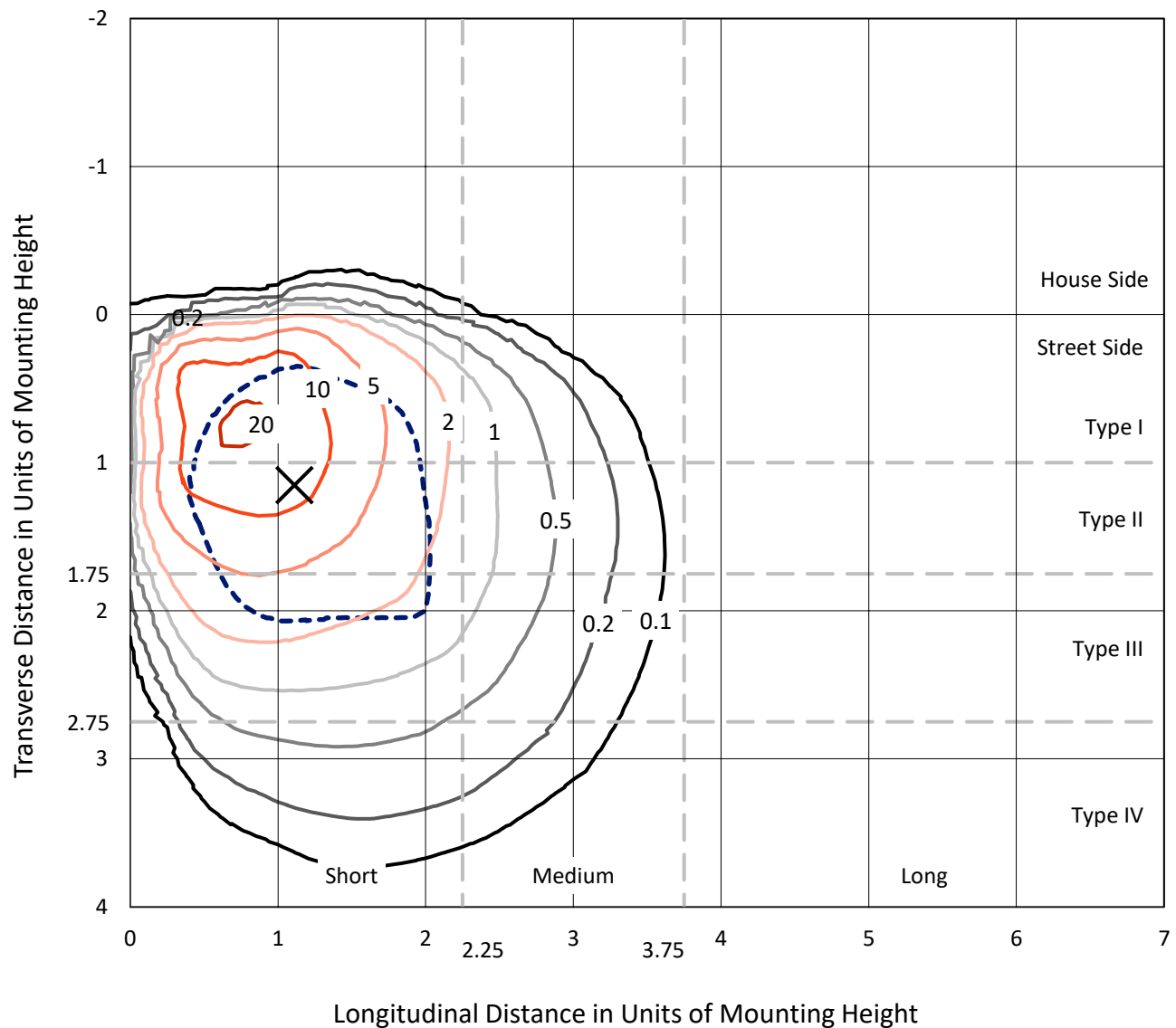
Input Watts (W): 144.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

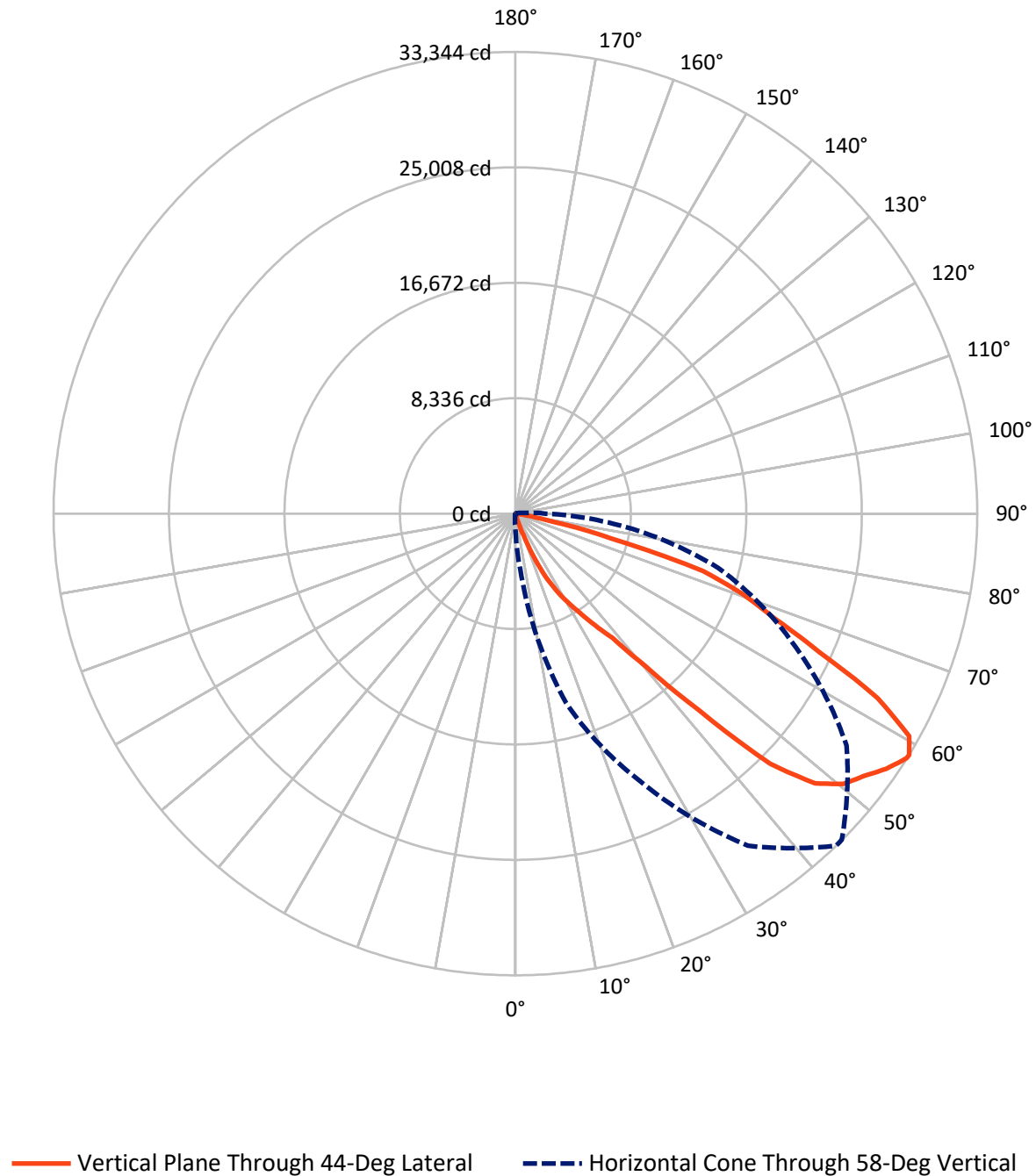
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 22.6 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	88.7	0.0	88.7
	% Fixture	0.7	0.0	0.7
Street Side	Lumens	12908.9	0.0	12908.9
	% Fixture	99.3	0.0	99.3
Total	Lumens	12997.7	0.0	12997.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.1	0.0
10°-20°	28.5	0.2
20°-30°	307.9	2.4
30°-40°	910.6	7.0
40°-50°	2714.1	20.9
50°-60°	4306.6	33.1
60°-70°	3592.3	27.6
70°-80°	1107.9	8.5
80°-90°	24.6	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°	12997.7	100.0
0°-180°	12997.7	100.0



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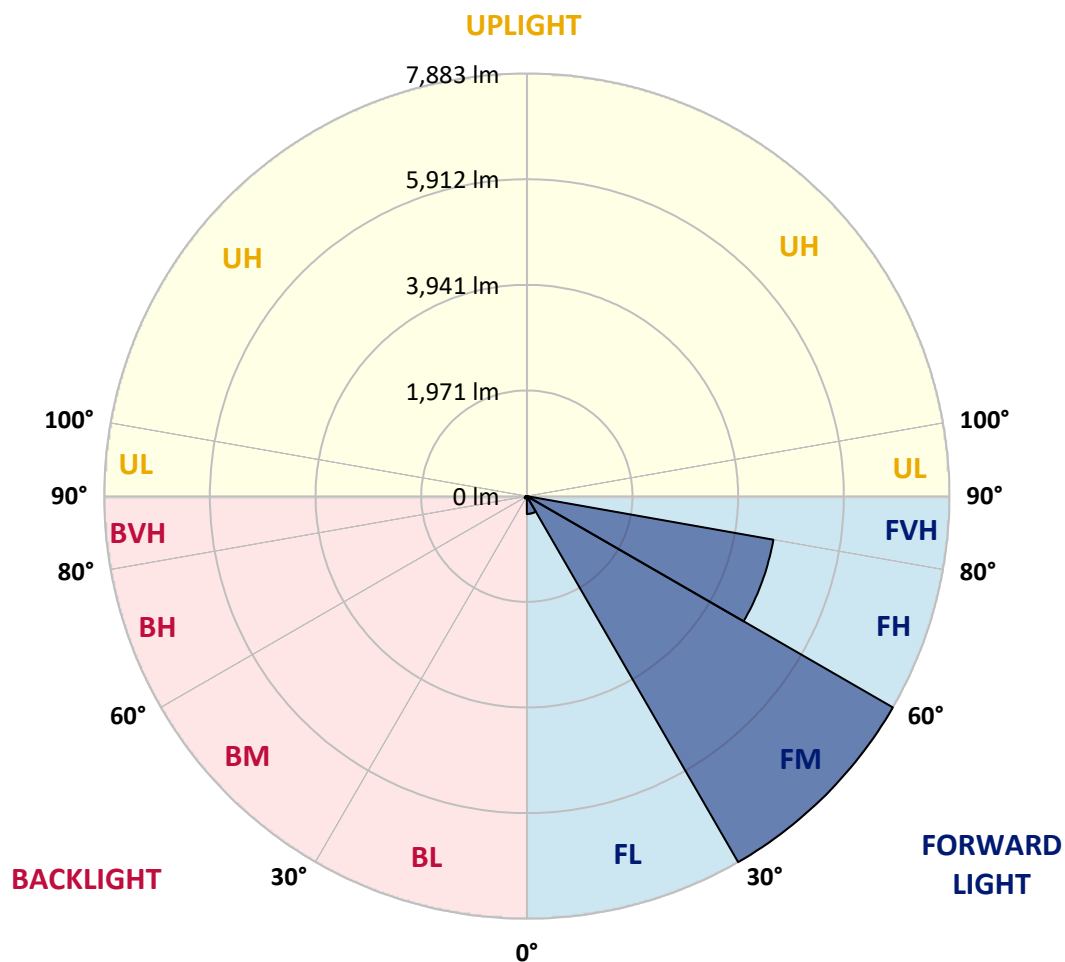
CATALOG NUMBER: GALN-SA4B-950-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	332.8	2.6			
FM	(30°-60°)	7882.8	60.6			
FH	(60°-80°)	4669.9	35.9			G2/5000
FVH	(80°-90°)	23.4	0.2			G1/100
BL	(0°-30°)	8.7	0.1	B0/110		
BM	(30°-60°)	48.6	0.4	B0/220		
BH	(60°-80°)	30.3	0.2	B0/110		G0/110
BVH	(80°-90°)	1.2	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°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
2.5°	73.6	73.6	70.7	66.8	62.8	58.9	57.9	56.0	55.0	54.0
5°	76.6	76.6	75.6	72.7	68.7	65.8	65.8	62.8	60.9	58.9
7.5°	78.5	79.5	81.5	80.5	78.5	75.6	75.6	73.6	70.7	65.8
10°	81.5	84.4	88.4	90.3	91.3	91.3	90.3	89.3	84.4	77.6
12.5°	84.4	90.3	100.1	110.0	115.9	123.7	122.7	120.8	108.0	93.3
15°	90.3	99.2	119.8	148.3	192.4	219.9	230.7	220.9	178.7	125.7
17.5°	97.2	111.9	173.8	310.3	508.6	602.9	659.8	613.7	406.5	238.6
20°	104.1	136.5	323.0	804.1	1319.6	1627.9	1713.3	1579.8	1014.3	454.6
22.5°	115.9	191.5	654.9	1662.3	2843.5	3305.9	3393.3	2966.2	1915.6	897.4
25°	140.4	277.9	1129.1	2709.0	4243.6	5024.2	4987.9	4428.2	3107.6	1433.5
27.5°	175.8	404.5	1707.5	3848.9	5584.8	6273.1	6355.6	5663.4	4142.5	2108.1
30°	226.8	560.6	2328.0	4762.0	6660.0	7404.2	7418.0	6702.2	5068.4	2700.1
32.5°	275.9	707.9	2871.0	5644.7	7719.4	8535.3	8596.2	7715.5	5759.6	3316.7
35°	313.2	804.1	3420.8	6420.4	8787.7	9911.9	9908.0	8862.3	6578.5	3867.6
37.5°	316.2	900.4	3918.6	7213.7	10140.7	11399.4	11524.1	10371.4	7568.2	4549.0
40°	309.3	1008.4	4549.0	8450.9	12578.6	14510.0	14619.9	13166.8	9553.5	5715.4
42.5°	317.1	1195.9	5572.1	10735.7	16626.8	19400.6	19612.7	18084.9	13203.1	8095.5
45°	358.4	1548.4	7715.5	14558.1	22397.3	25778.8	25708.1	23507.7	17449.6	11718.5
47.5°	494.9	2411.5	10892.8	18278.3	26085.1	29096.5	29157.4	26468.1	19927.9	14504.1
50°	760.9	3689.8	13562.5	20245.0	27670.8	30692.0	30635.1	27527.5	20869.5	15875.7
52.5°	989.7	4614.8	14901.7	20935.3	27874.1	31480.5	31476.5	27806.3	21015.8	15993.5
55°	1046.7	4684.5	14912.5	20972.6	28329.7	32512.4	32642.0	28492.7	21205.3	15479.1
57.5°	1024.1	4147.4	14290.0	21188.6	29140.7	33310.6	33317.5	29157.4	21686.4	15163.9
58°	1004.4	4062.9	14164.3	21311.3	29280.1	33344.0	33327.3	29187.8	22078.1	15152.1
60°	894.5	3527.8	13674.4	21624.5	29072.9	32658.7	32502.6	28523.1	22020.2	15031.3
62.5°	703.0	2752.2	13192.3	21262.2	26852.0	29341.0	29405.8	25252.5	20074.2	14327.3
65°	559.7	2051.1	12186.9	18650.5	22111.5	24094.9	24336.4	20534.7	16755.5	12131.9
67.5°	445.8	1482.6	10223.1	14848.7	17496.8	20109.5	20285.3	17240.5	12981.2	9295.3
70°	362.3	1002.5	7056.6	10859.4	14431.4	17369.1	17379.9	14322.4	9689.0	6090.5
72.5°	321.1	694.2	4096.3	7919.7	11701.8	14153.5	13867.8	11622.3	7446.4	3607.4
75°	277.9	460.5	2008.9	4841.6	7094.9	7143.0	7252.0	5391.4	3722.2	1715.3
77.5°	228.8	327.0	791.4	1322.6	2127.7	2723.7	2824.8	2140.5	1238.1	422.2
80°	157.1	155.1	213.1	405.5	608.8	762.9	711.8	550.8	324.0	162.0
82.5°	67.7	73.6	96.2	115.9	94.3	91.3	87.4	56.0	43.2	33.4
85°	21.6	19.6	20.6	20.6	16.7	12.8	12.8	5.9	0.0	0.0
87.5°	10.8	8.8	8.8	7.9	4.9	2.0	1.0	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):

85°		90°	95°	105°	115°	125°	135°	145°	155°	165°	175°
56.9	0°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
53.0	2.5°	52.0	52.0	50.1	48.1	47.1	45.2	44.2	43.2	42.2	41.2
56.9	5°	55.0	54.0	51.1	48.1	45.2	42.2	40.3	38.3	36.3	35.3
62.8	7.5°	59.9	57.9	52.0	47.1	43.2	39.3	37.3	34.4	32.4	29.5
69.7	10°	65.8	61.9	54.0	48.1	42.2	37.3	34.4	31.4	28.5	24.5
79.5	12.5°	73.6	66.8	56.9	47.1	40.3	34.4	31.4	27.5	24.5	21.6
92.3	15°	80.5	71.7	57.9	47.1	38.3	31.4	27.5	23.6	20.6	16.7
115.9	17.5°	90.3	75.6	56.9	44.2	35.3	27.5	23.6	20.6	15.7	9.8
171.8	20°	107.0	78.5	55.0	41.2	30.4	22.6	17.7	13.7	6.9	2.0
258.2	22.5°	133.5	86.4	53.0	37.3	26.5	17.7	11.8	4.9	0.0	0.0
392.7	25°	184.6	100.1	53.0	35.3	23.6	12.8	3.9	0.0	0.0	0.0
557.7	27.5°	245.5	118.8	53.0	30.4	18.7	6.9	0.0	0.0	0.0	0.0
760.0	30°	307.3	139.4	53.0	26.5	14.7	1.0	0.0	0.0	0.0	0.0
935.7	32.5°	366.2	157.1	54.0	22.6	9.8	0.0	0.0	0.0	0.0	0.0
1179.2	35°	426.1	160.0	53.0	19.6	5.9	0.0	0.0	0.0	0.0	0.0
1477.7	37.5°	502.7	154.2	50.1	17.7	2.9	0.0	0.0	0.0	0.0	0.0
1944.1	40°	618.6	157.1	47.1	16.7	1.0	0.0	0.0	0.0	0.0	0.0
2775.7	42.5°	832.6	169.9	43.2	16.7	0.0	0.0	0.0	0.0	0.0	0.0
4421.3	45°	1439.4	227.8	39.3	17.7	0.0	0.0	0.0	0.0	0.0	0.0
6637.4	47.5°	2381.0	409.4	38.3	17.7	0.0	0.0	0.0	0.0	0.0	0.0
7995.3	50°	3038.9	515.5	40.3	18.7	0.0	0.0	0.0	0.0	0.0	0.0
8165.2	52.5°	3034.0	574.4	42.2	19.6	3.9	0.0	0.0	0.0	0.0	0.0
7526.0	55°	2697.2	585.2	45.2	21.6	12.8	0.0	0.0	0.0	0.0	0.0
6467.5	57.5°	2254.4	534.1	52.0	26.5	23.6	0.0	0.0	0.0	0.0	0.0
6301.6	58°	2175.8	510.6	54.0	27.5	25.5	0.0	0.0	0.0	0.0	0.0
5466.0	60°	1783.1	416.3	68.7	34.4	34.4	0.0	0.0	0.0	0.0	0.0
4481.2	62.5°	1231.3	363.3	78.5	44.2	35.3	0.0	0.0	0.0	0.0	0.0
3304.0	65°	870.9	327.9	85.4	47.1	28.5	0.0	0.0	0.0	0.0	0.0
2347.6	67.5°	651.0	302.4	94.3	48.1	14.7	0.0	0.0	0.0	0.0	0.0
1472.8	70°	498.8	283.8	115.9	51.1	3.9	0.0	0.0	0.0	0.0	0.0
877.8	72.5°	406.5	262.2	140.4	53.0	0.0	0.0	0.0	0.0	0.0	0.0
526.3	75°	336.8	236.6	135.5	57.9	0.0	0.0	0.0	0.0	0.0	0.0
280.8	77.5°	223.9	183.6	123.7	57.9	0.0	0.0	0.0	0.0	0.0	0.0
100.1	80°	78.5	72.7	96.2	51.1	0.0	0.0	0.0	0.0	0.0	0.0
20.6	82.5°	11.8	9.8	13.7	17.7	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°
56.9	0°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
40.3	2.5°	40.3	40.3	39.3	40.3	40.3	42.2	47.1	54.0	61.9	64.8
34.4	5°	33.4	32.4	31.4	31.4	31.4	34.4	38.3	46.1	55.0	58.9
28.5	7.5°	27.5	26.5	25.5	24.5	24.5	26.5	31.4	40.3	49.1	53.0
23.6	10°	22.6	20.6	19.6	18.7	18.7	20.6	25.5	34.4	44.2	48.1
19.6	12.5°	18.7	15.7	13.7	12.8	11.8	14.7	19.6	27.5	38.3	43.2
14.7	15°	12.8	9.8	6.9	5.9	4.9	7.9	12.8	21.6	32.4	38.3
7.9	17.5°	6.9	2.9	1.0	0.0	0.0	2.0	5.9	15.7	26.5	31.4
0.0	20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	19.6	24.5
0.0	22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	11.8	16.7
0.0	25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	8.8
0.0	27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
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	2.9
0.0	87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	7.9
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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CATALOG NUMBER: GALN-SA4B-950-U-LBC

CANDELA DISTRIBUTION (continued):

275°		285°	295°	305°	315°	316°	325°	335°	345°	355°	360°
56.9	0°	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
67.7	2.5°	69.7	68.7	66.8	64.8	64.8	64.8	67.7	70.7	73.6	73.6
60.9	5°	64.8	64.8	63.8	61.9	61.9	62.8	66.8	71.7	75.6	76.6
56.0	7.5°	59.9	61.9	59.9	58.9	59.9	60.9	64.8	70.7	76.6	78.5
52.0	10°	56.9	57.9	57.9	56.9	56.9	58.9	62.8	70.7	78.5	81.5
47.1	12.5°	53.0	55.0	54.0	54.0	54.0	56.0	60.9	69.7	80.5	84.4
42.2	15°	49.1	52.0	52.0	51.1	51.1	52.0	58.9	68.7	83.5	90.3
36.3	17.5°	45.2	48.1	49.1	47.1	47.1	49.1	56.0	68.7	85.4	97.2
29.5	20°	37.3	42.2	45.2	42.2	42.2	44.2	51.1	64.8	86.4	104.1
21.6	22.5°	29.5	34.4	38.3	37.3	37.3	38.3	47.1	61.9	87.4	115.9
12.8	25°	21.6	26.5	29.5	31.4	31.4	34.4	43.2	59.9	91.3	140.4
5.9	27.5°	12.8	18.7	22.6	24.5	25.5	29.5	40.3	57.9	98.2	175.8
0.0	30°	5.9	10.8	15.7	19.6	19.6	26.5	37.3	56.0	107.0	226.8
0.0	32.5°	0.0	4.9	7.9	13.7	14.7	21.6	34.4	54.0	119.8	275.9
0.0	35°	0.0	0.0	3.9	10.8	10.8	17.7	31.4	52.0	139.4	313.2
0.0	37.5°	0.0	0.0	0.0	7.9	8.8	15.7	30.4	51.1	143.4	316.2
0.0	40°	0.0	0.0	0.0	5.9	6.9	14.7	30.4	52.0	129.6	309.3
0.0	42.5°	0.0	0.0	0.0	3.9	4.9	14.7	30.4	54.0	116.8	317.1
0.0	45°	0.0	0.0	0.0	2.9	3.9	15.7	29.5	53.0	110.0	358.4
0.0	47.5°	0.0	0.0	0.0	3.9	5.9	15.7	28.5	52.0	111.0	494.9
0.0	50°	0.0	0.0	0.0	4.9	6.9	15.7	29.5	50.1	121.8	760.9
0.0	52.5°	0.0	0.0	0.0	3.9	5.9	17.7	32.4	49.1	132.6	989.7
0.0	55°	0.0	0.0	0.0	1.0	2.9	22.6	35.3	49.1	149.2	1046.7
0.0	57.5°	0.0	0.0	0.0	0.0	0.0	25.5	40.3	52.0	176.7	1024.1
0.0	58°	0.0	0.0	0.0	0.0	0.0	25.5	41.2	52.0	178.7	1004.4
0.0	60°	0.0	0.0	0.0	0.0	0.0	25.5	45.2	57.9	192.4	894.5
0.0	62.5°	0.0	0.0	0.0	0.0	0.0	21.6	54.0	72.7	200.3	703.0
0.0	65°	0.0	0.0	0.0	0.0	0.0	17.7	63.8	79.5	206.2	559.7
0.0	67.5°	0.0	0.0	0.0	0.0	0.0	16.7	65.8	80.5	209.1	445.8
0.0	70°	0.0	0.0	0.0	0.0	0.0	17.7	64.8	86.4	219.0	362.3
0.0	72.5°	0.0	0.0	0.0	0.0	0.0	19.6	58.9	95.2	219.0	321.1
0.0	75°	0.0	0.0	0.0	0.0	0.0	20.6	55.0	107.0	199.3	277.9
0.0	77.5°	0.0	0.0	0.0	0.0	0.0	19.6	54.0	124.7	177.7	228.8
0.0	80°	2.0	2.9	2.9	2.0	2.0	16.7	53.0	126.7	151.2	157.1
1.0	82.5°	5.9	7.9	6.9	4.9	4.9	14.7	47.1	106.0	78.5	67.7
5.9	85°	10.8	12.8	12.8	10.8	10.8	13.7	29.5	38.3	26.5	21.6
10.8	87.5°	14.7	16.7	16.7	14.7	14.7	13.7	12.8	11.8	10.8	10.8
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

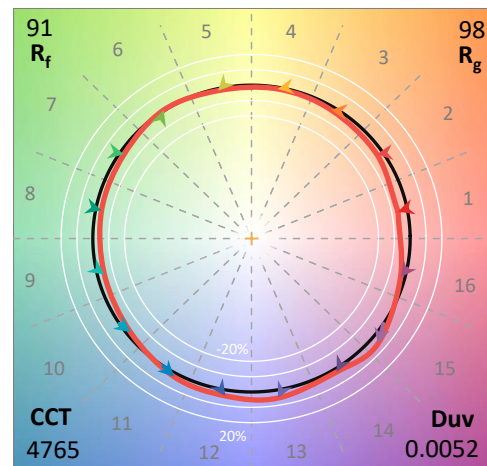
Test Information

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

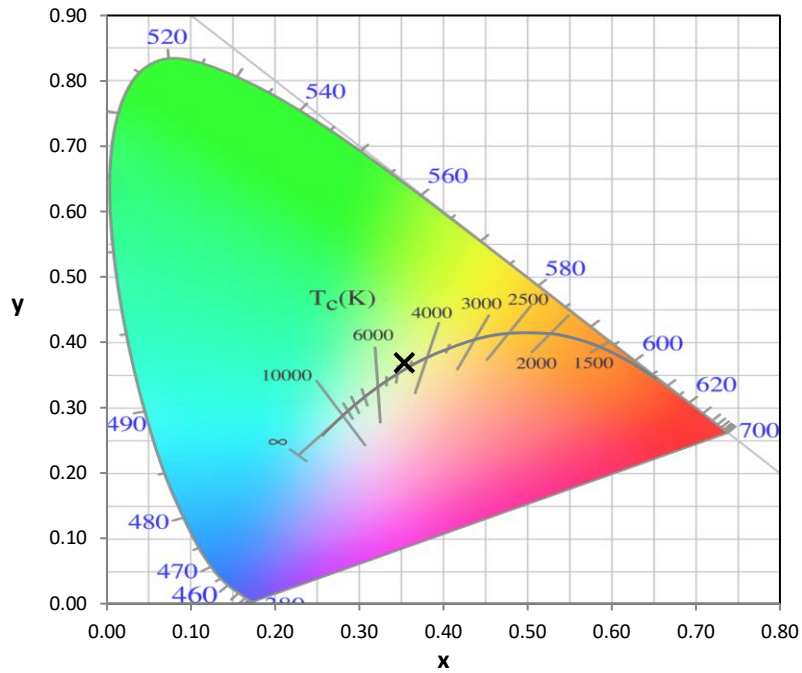
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-17

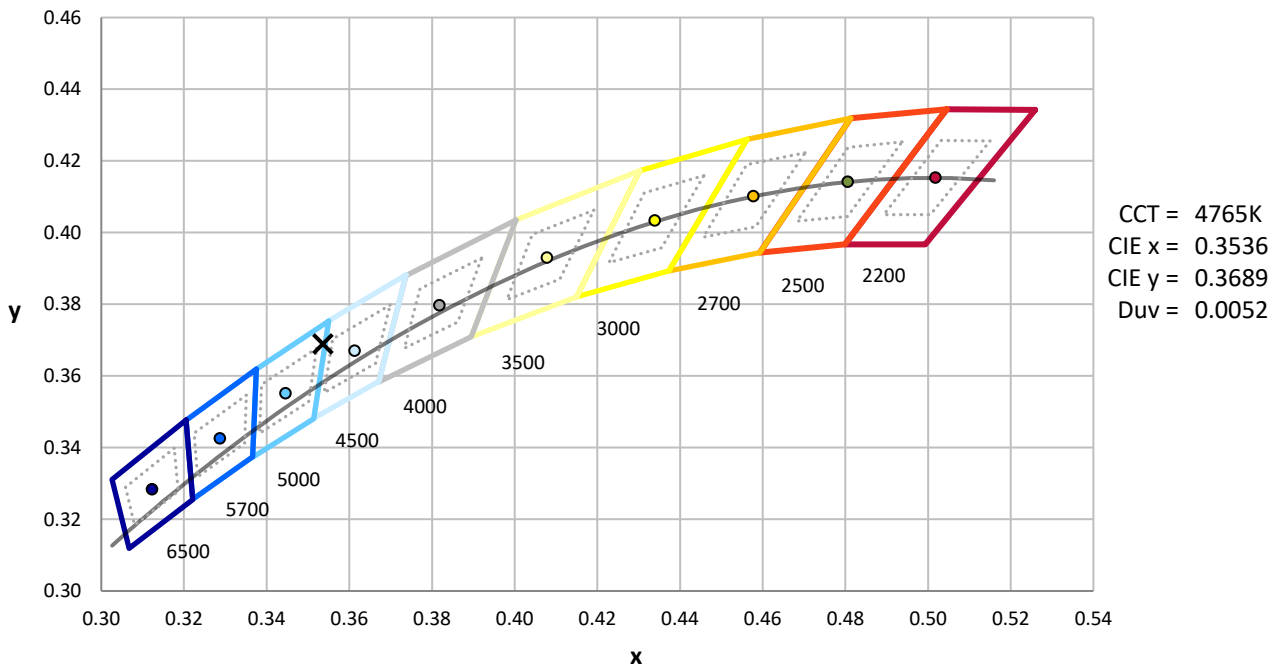
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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



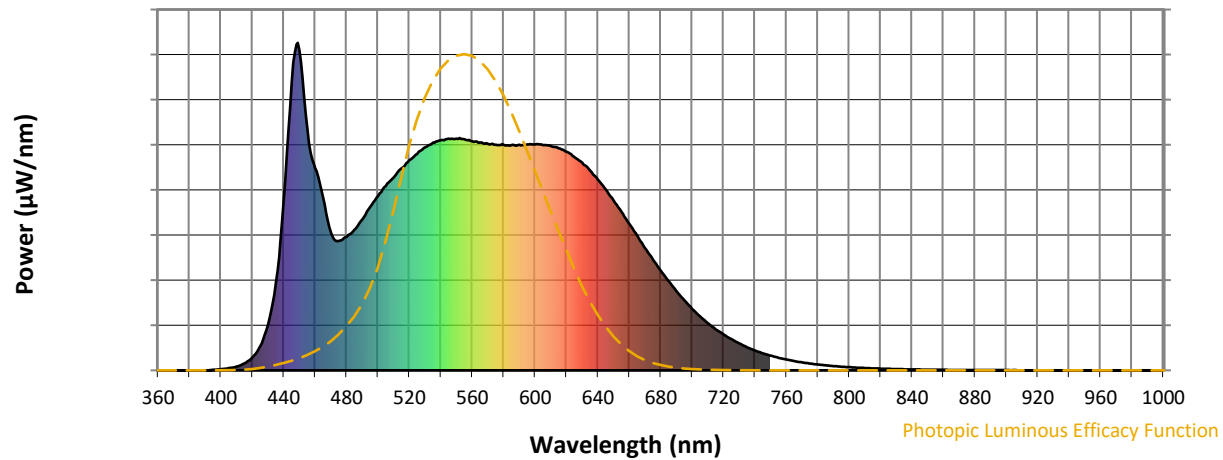
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-17

Photopic Flux vs. Wavelength

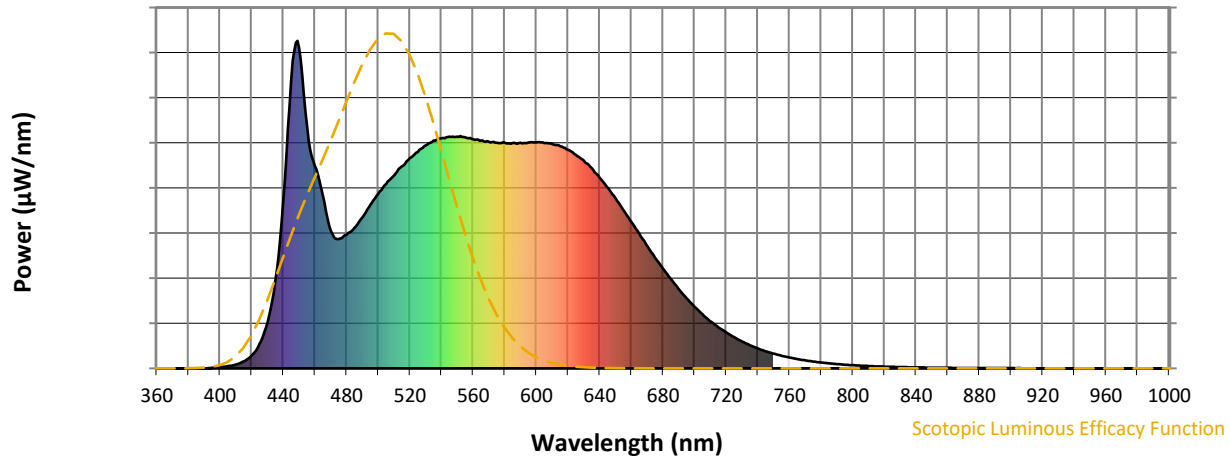


Photopic Lumens: NR

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



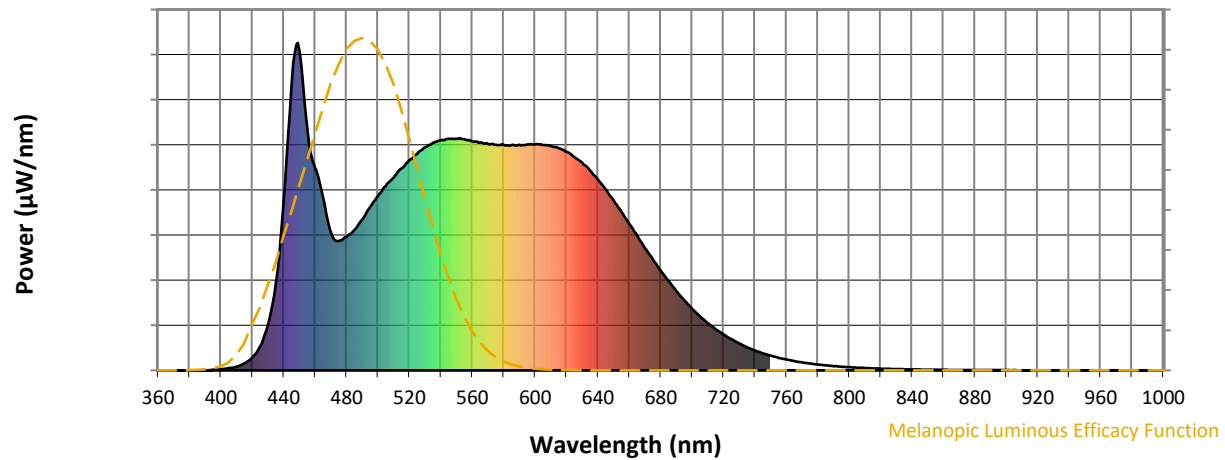
Scotopic Lumens: NR

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

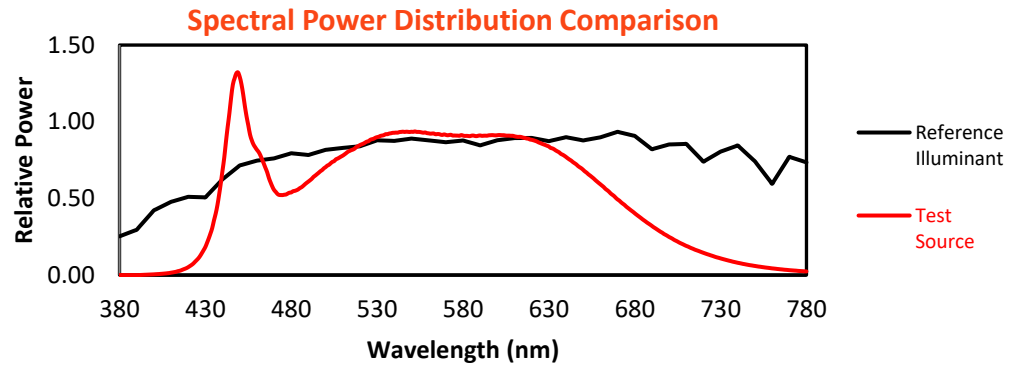
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	462	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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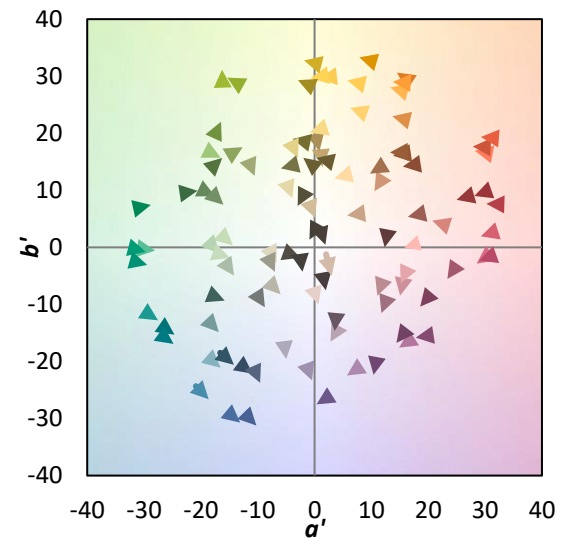
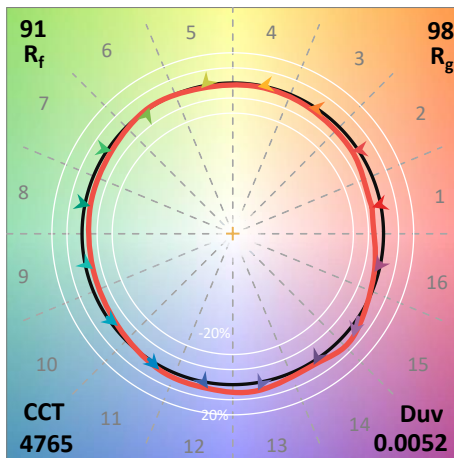
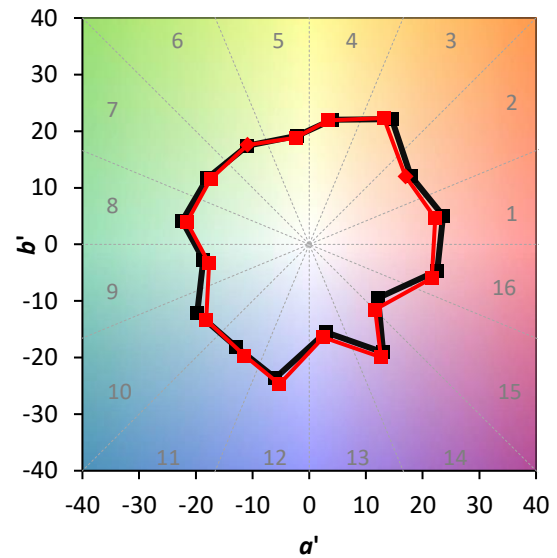
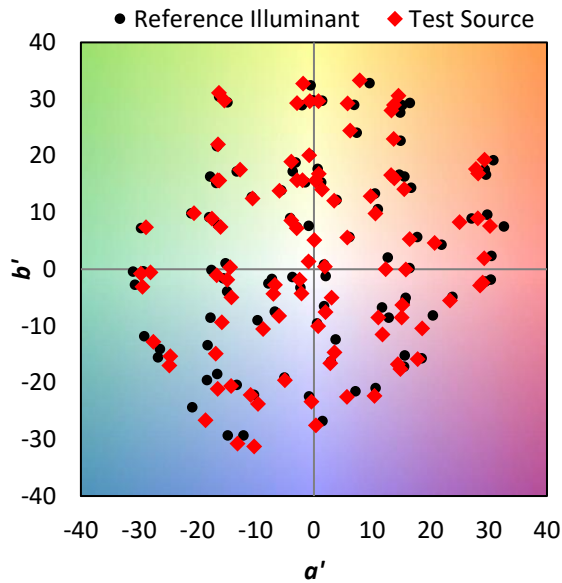
TM-30-18

Summary

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

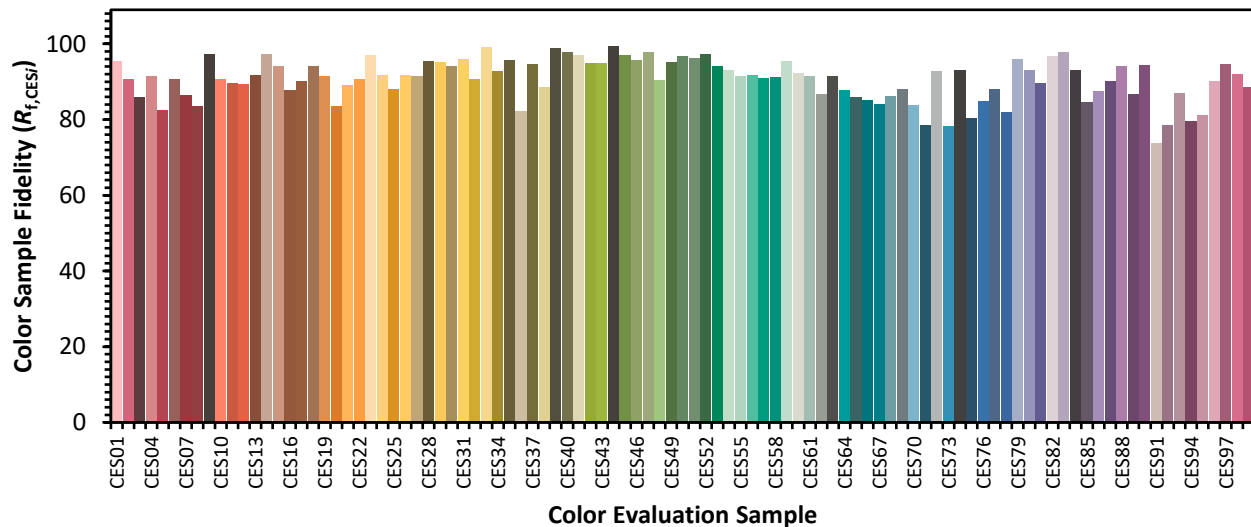


Color Vector Graphics

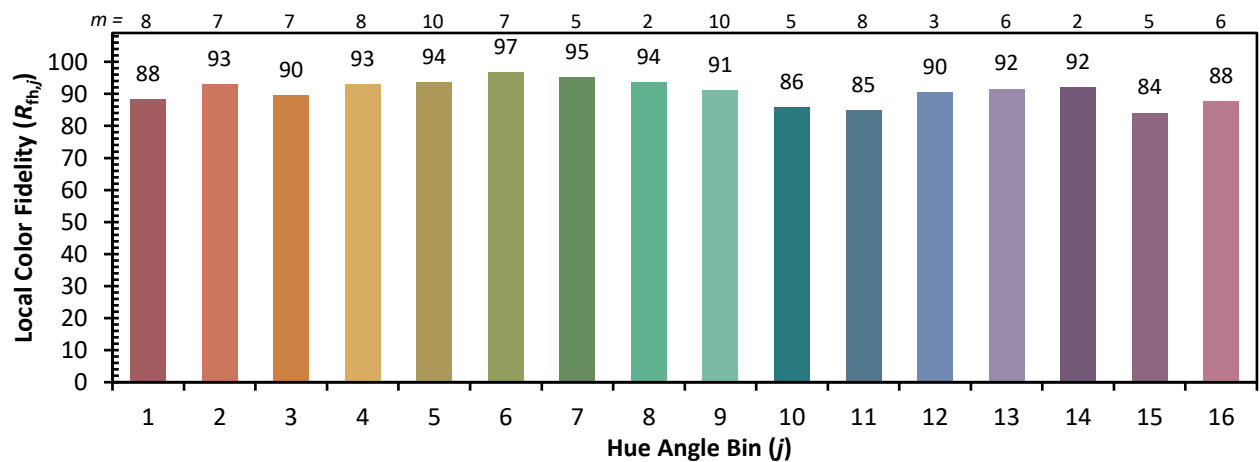
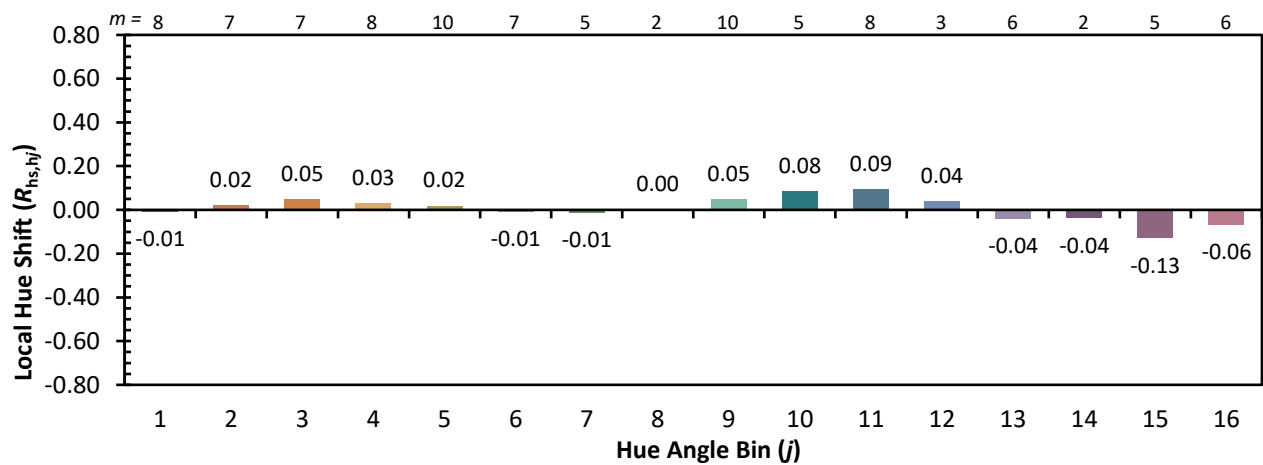
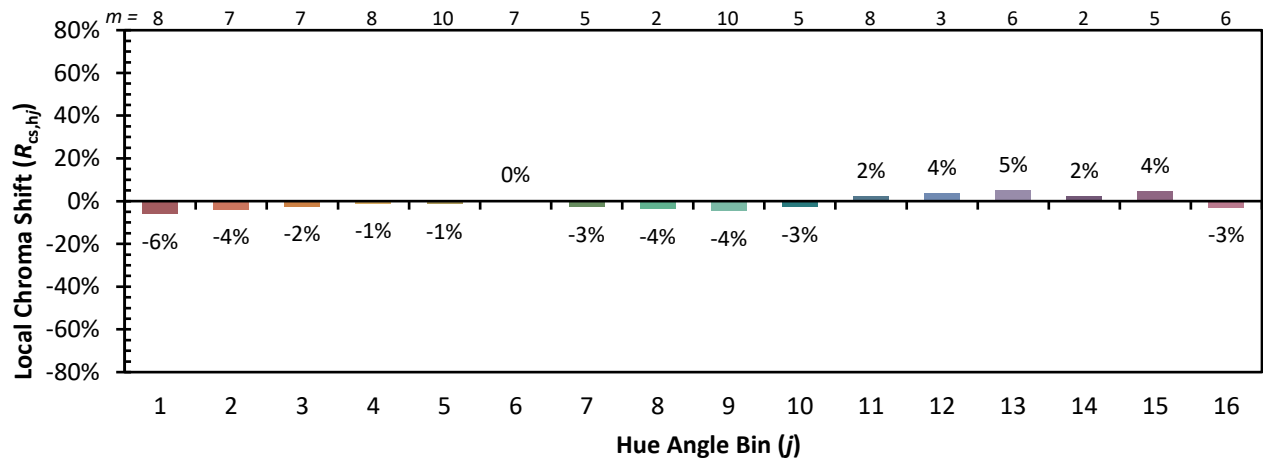


Individual Sample Fidelity Index ($R_{f,i}$)

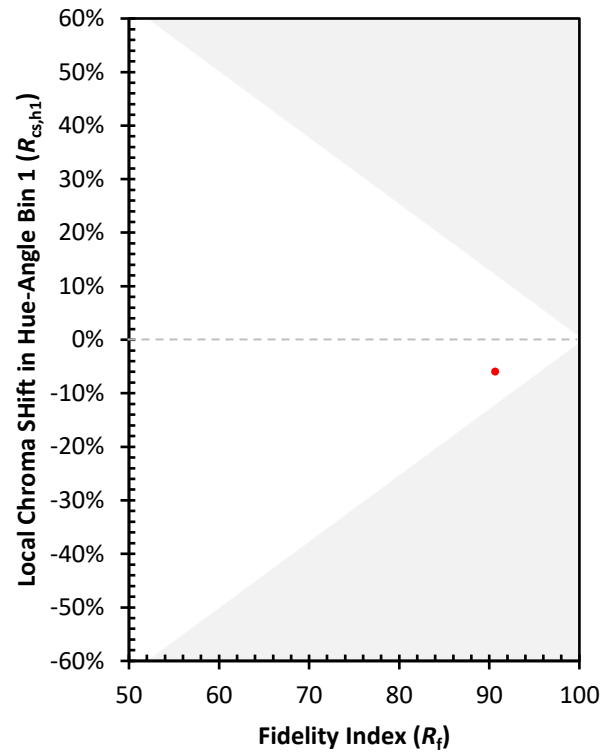
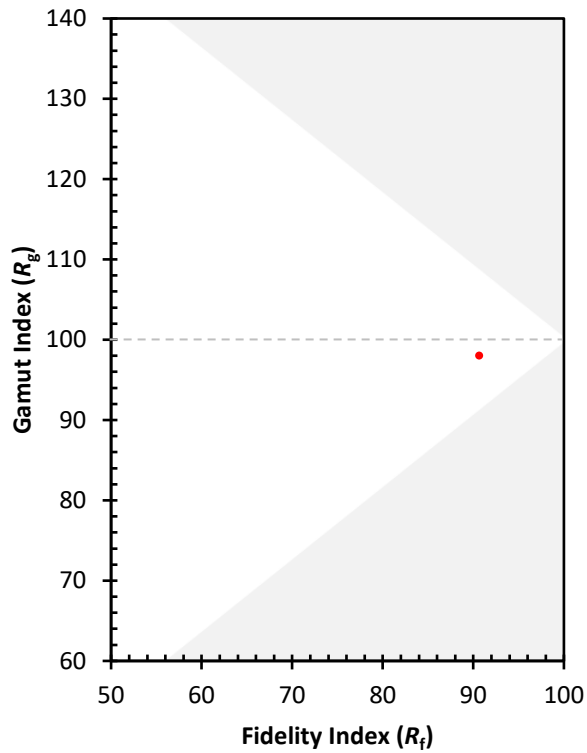
CES01 = 85	CES26 = 92	CES51 = 96	CES76 = 85
CES02 = 60	CES27 = 92	CES52 = 97	CES77 = 88
CES03 = 31	CES28 = 95	CES53 = 94	CES78 = 82
CES04 = 69	CES29 = 95	CES54 = 93	CES79 = 96
CES05 = 48	CES30 = 94	CES55 = 92	CES80 = 93
CES06 = 50	CES31 = 96	CES56 = 92	CES81 = 89
CES07 = 41	CES32 = 91	CES57 = 91	CES82 = 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)