

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: P1068097

Luminaire Tested: **NAV-SA4A-835-U-LBC**

Issue Date: 08/07/2025

Test Information

Test Method: LM-79-08
Report Number: P1068097
Test Lab: INNOVATION CENTER(G3)
Issue Date: 08/07/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA4A-835-U-LBC
Description: Navion AREA AND ROADWAY LUMINAIRE 615mA 4xLight Square PACKAGE
80CRI 3500K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL
Light Source: (56) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10722.6 lumens
Efficiency: N/A
Efficacy: 99.8 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

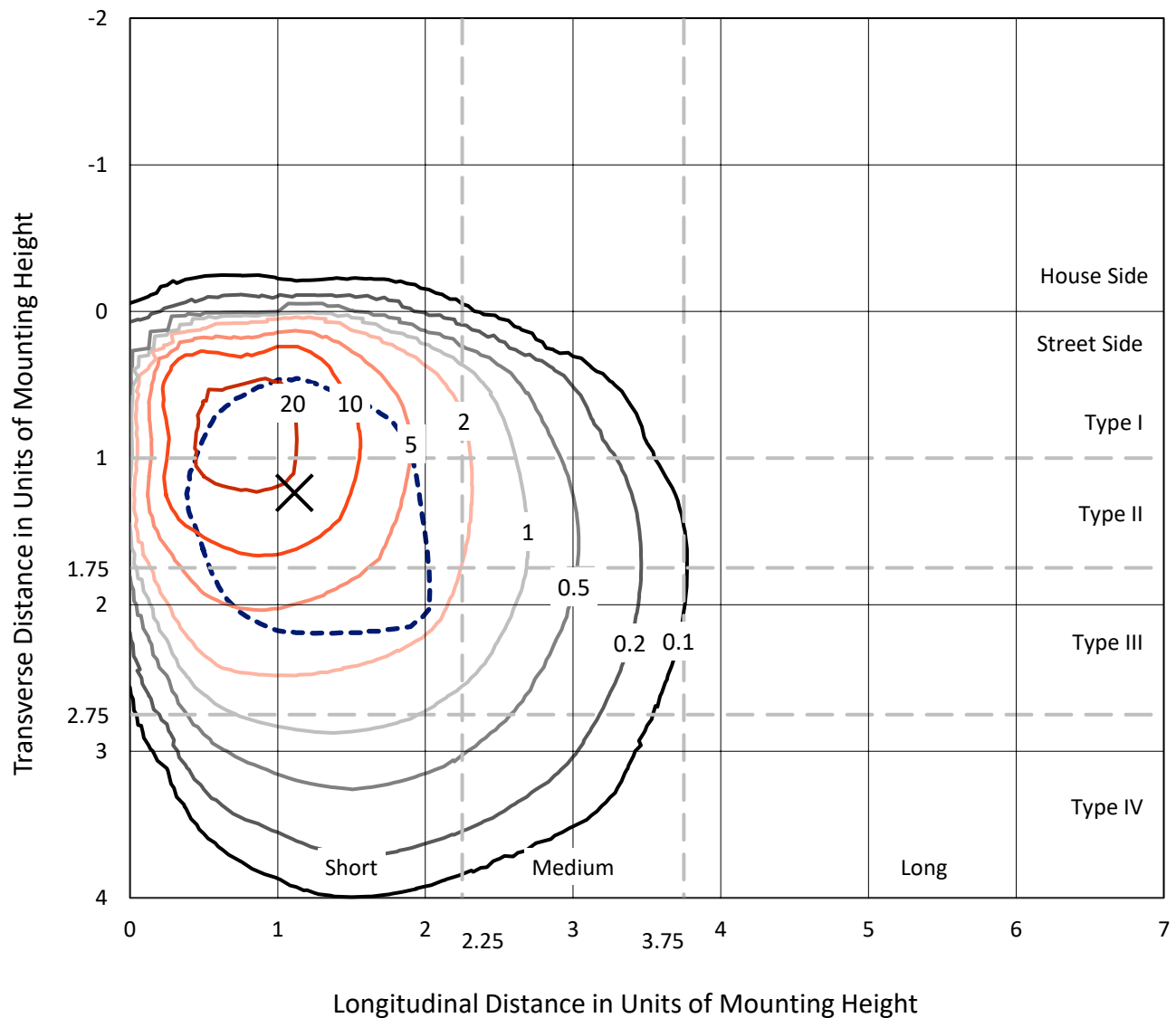


REPORT NUMBER: P1068097

CATALOG NUMBER: NAV-SA4A-835-U-LBC

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

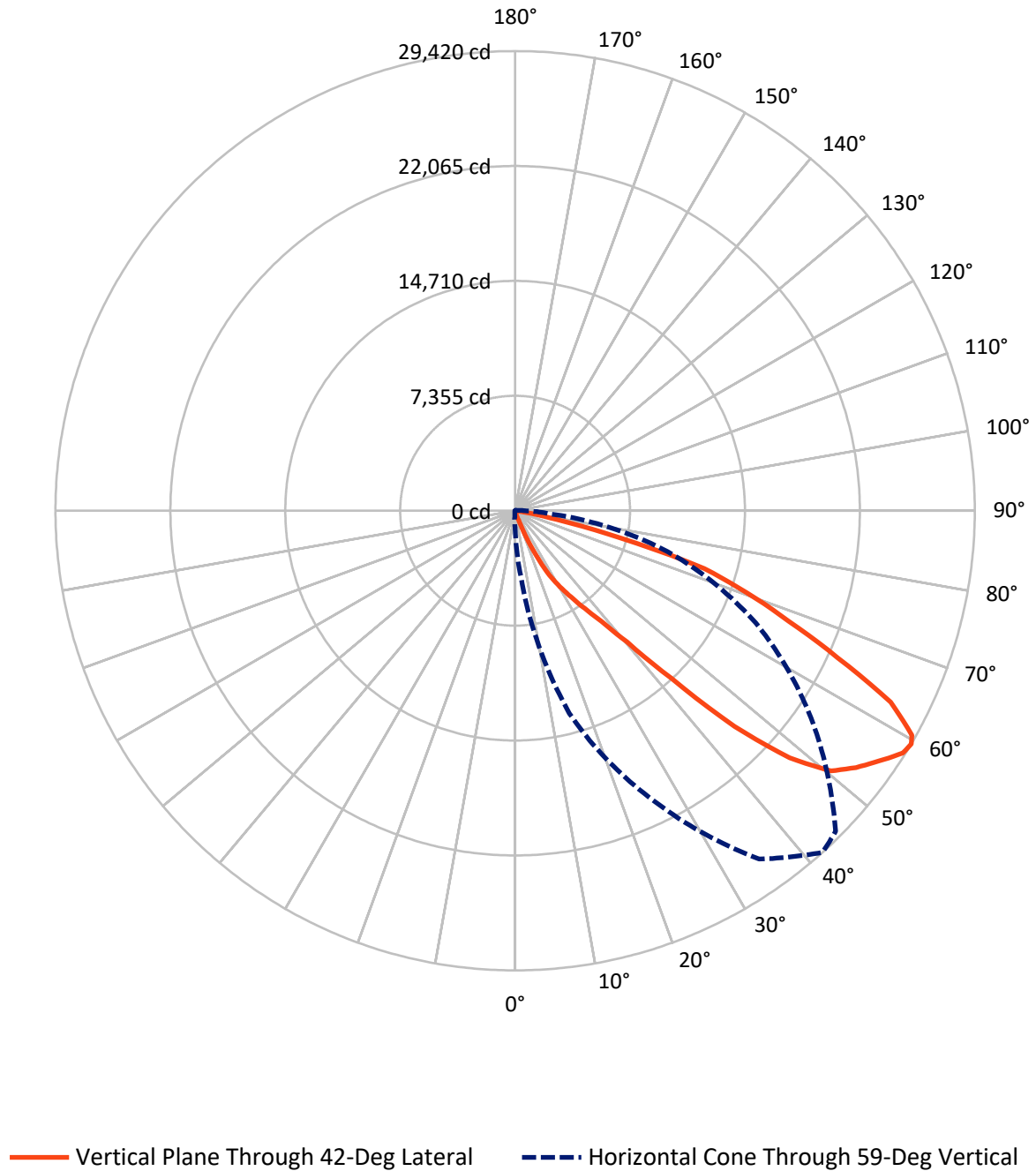


Based on 15 foot mounting height. Maximum calculated value = 31.9 fc
 Type III - Short - N/A

REPORT NUMBER: P1068097

CATALOG NUMBER: NAV-SA4A-835-U-LBC

Luminous Intensity Polar Plot



REPORT NUMBER: P1068097

CATALOG NUMBER: NAV-SA4A-835-U-LBC

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	51.7	0.0	51.7
	% Fixture	0.5	0.0	0.5
Street Side	Lumens	10670.9	0.0	10670.9
	% Fixture	99.5	0.0	99.5
Total	Lumens	10722.6	0.0	10722.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.1	0.0
10°-20°	15.6	0.1
20°-30°	200.0	1.9
30°-40°	674.3	6.3
40°-50°	2036.7	19.0
50°-60°	3595.3	33.5
60°-70°	3165.7	29.5
70°-80°	1007.7	9.4
80°-90°	24.1	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°	10722.6	100.0
0°-180°	10722.6	100.0



REPORT NUMBER: P1068097

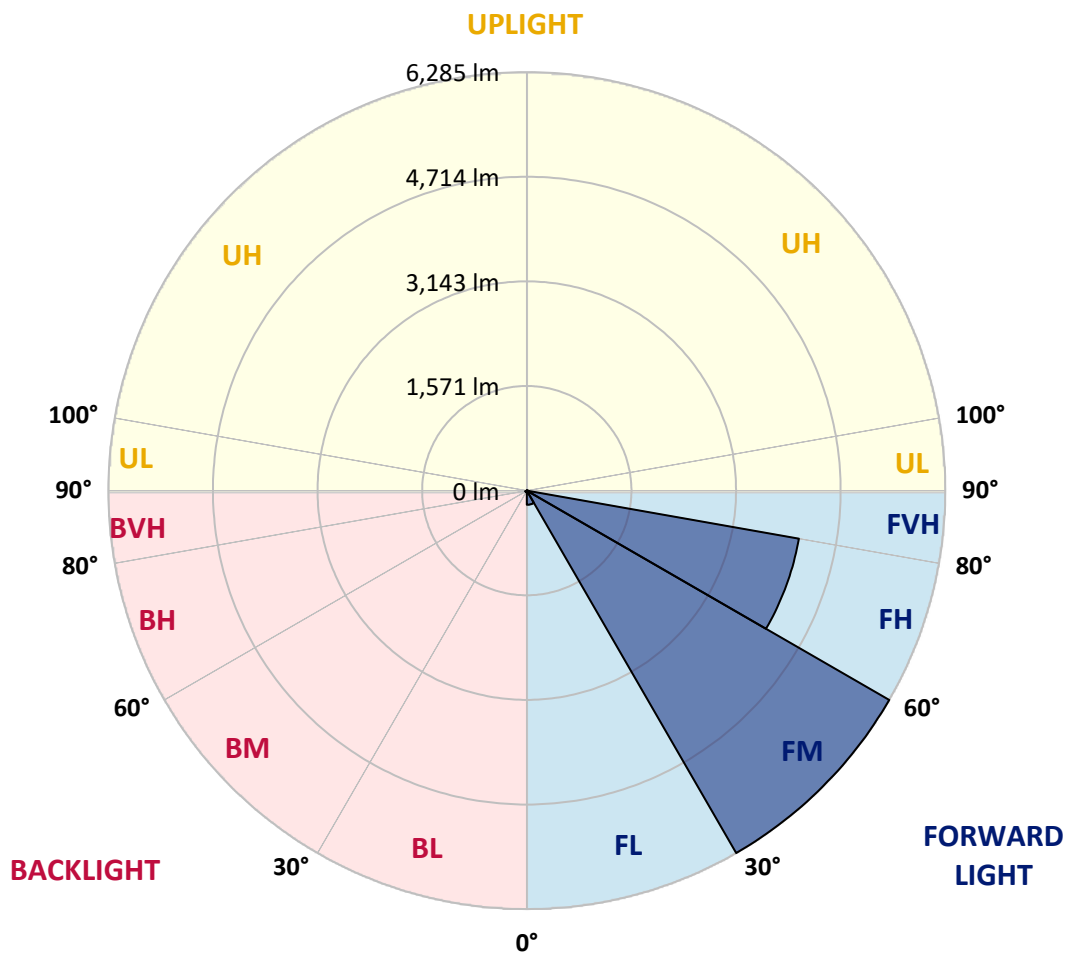
CATALOG NUMBER: NAV-SA4A-835-U-LBC

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	213.0	2.0			
FM	(30°-60°)	6285.2	58.6			
FH	(60°-80°)	4149.7	38.7			G2/5000
FVH	(80°-90°)	22.9	0.2			G1/100
BL	(0°-30°)	5.8	0.1	B0/110		
BM	(30°-60°)	21.1	0.2	B0/220		
BH	(60°-80°)	23.6	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



REPORT NUMBER: P1068097

CATALOG NUMBER: NAV-SA4A-835-U-LBC

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	42°	45°	55°	65°	75°	85°
0°	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
2.5°	47.1	47.1	43.7	40.3	37.0	33.6	33.6	33.6	30.3	30.3	26.9
5°	53.8	53.8	50.4	47.1	47.1	43.7	43.7	40.3	37.0	37.0	33.6
7.5°	57.2	57.2	57.2	57.2	53.8	53.8	53.8	50.4	47.1	43.7	40.3
10°	60.5	63.9	67.2	67.2	67.2	67.2	67.2	63.9	57.2	53.8	47.1
12.5°	67.2	70.6	77.3	84.0	84.0	87.4	84.0	80.7	74.0	63.9	53.8
15°	74.0	80.7	90.8	104.2	117.7	121.0	121.0	110.9	97.5	77.3	63.9
17.5°	84.0	94.1	121.0	164.7	211.8	248.8	248.8	221.9	154.6	100.9	74.0
20°	90.8	110.9	195.0	396.7	605.1	759.8	729.5	645.5	346.3	158.0	80.7
22.5°	100.9	141.2	413.5	1042.2	1613.7	1896.1	1828.9	1388.5	776.6	282.4	97.5
25°	114.3	205.1	820.3	1953.3	2998.8	3304.7	3261.0	2592.0	1415.4	474.0	124.4
27.5°	141.2	302.6	1314.5	2961.8	4424.3	4686.5	4669.7	3795.6	2262.6	763.1	161.4
30°	178.2	440.4	1949.9	4024.2	5368.9	5634.5	5550.5	4676.4	3052.6	1166.6	208.4
32.5°	221.9	615.2	2524.8	4807.5	6239.7	6589.3	6488.5	5442.9	3688.0	1509.5	309.3
35°	289.1	786.7	3092.9	5500.1	7244.9	7688.6	7520.6	6232.9	4236.0	1896.1	373.2
37.5°	322.7	887.5	3614.0	6253.1	8374.5	8979.6	8851.9	7231.4	4794.1	2390.3	457.2
40°	326.1	1008.6	4155.3	7234.8	9971.4	11050.5	10821.9	8946.0	5832.9	3025.7	588.3
42.5°	336.2	1190.1	4857.9	8909.0	13108.0	14657.8	14399.0	12099.4	8189.6	4299.9	833.7
45°	383.3	1533.0	6290.1	12038.9	17414.6	19687.2	19388.0	16493.4	11480.9	6696.9	1422.1
47.5°	548.0	2306.3	8801.4	15417.6	21818.7	23630.7	23556.8	19956.2	14462.9	9154.4	2410.5
50°	880.8	3540.1	11659.0	18258.4	24622.5	26179.1	25994.2	21401.8	16164.0	10832.0	3089.6
52.5°	1176.7	4720.1	13454.3	19304.0	25459.6	27315.4	27090.1	21929.6	16611.1	11326.2	3277.8
55°	1250.6	5147.1	13988.8	19626.7	26014.3	28276.9	27950.8	22282.6	16668.3	10973.2	2965.2
57.5°	1213.6	4743.6	13642.6	19942.7	26787.6	29265.3	28831.6	22971.8	16859.9	10374.8	2467.6
59°	1149.8	4246.1	13427.4	20194.9	27214.5	29419.9	29013.1	23123.1	16987.6	10102.5	2165.1
60°	1075.8	3909.9	13259.3	20359.6	27187.6	29177.9	28757.6	23052.5	17038.1	9867.2	2020.5
62.5°	830.4	3119.8	13017.2	20242.0	25489.9	26969.1	26730.4	21324.5	16298.5	9114.1	1593.5
65°	645.5	2386.9	12129.7	18053.4	21690.9	22686.0	22612.1	18056.7	13716.5	7856.7	1149.8
67.5°	511.0	1741.5	10257.1	14620.9	17451.6	18866.9	18813.1	14657.8	10411.8	6004.3	827.0
70°	416.9	1240.5	7033.1	11023.6	13958.6	15740.4	15663.1	11796.9	7715.5	3809.0	601.8
72.5°	353.0	793.4	4266.2	8310.6	11649.0	12667.6	12442.4	9517.5	5611.0	2074.3	477.4
75°	299.2	487.5	2114.6	5180.7	6938.9	6932.2	6707.0	5039.5	3012.3	1015.3	379.9
77.5°	242.1	342.9	830.4	1422.1	2188.6	2709.7	2666.0	1785.2	901.0	295.8	235.3
80°	158.0	161.4	221.9	390.0	601.8	665.7	756.4	544.6	262.2	141.2	97.5
82.5°	70.6	77.3	100.9	127.8	127.8	117.7	104.2	77.3	57.2	47.1	23.5
85°	16.8	23.5	16.8	20.2	16.8	13.4	13.4	6.7	0.0	0.0	0.0
87.5°	3.4	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

REPORT NUMBER: P1068097

CATALOG NUMBER: NAV-SA4A-835-U-LBC

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
2.5°	26.9	26.9	26.9	23.5	23.5	23.5	20.2	20.2	20.2	16.8	16.8
5°	33.6	30.3	26.9	26.9	23.5	23.5	20.2	16.8	16.8	16.8	13.4
7.5°	37.0	33.6	30.3	26.9	23.5	20.2	20.2	16.8	13.4	13.4	13.4
10°	43.7	40.3	33.6	26.9	23.5	20.2	16.8	16.8	13.4	10.1	10.1
12.5°	50.4	43.7	37.0	30.3	23.5	20.2	16.8	16.8	13.4	10.1	6.7
15°	57.2	50.4	40.3	30.3	23.5	20.2	16.8	16.8	10.1	6.7	3.4
17.5°	63.9	53.8	40.3	33.6	23.5	20.2	16.8	13.4	6.7	3.4	0.0
20°	67.2	57.2	43.7	33.6	23.5	20.2	16.8	10.1	3.4	0.0	0.0
22.5°	74.0	63.9	47.1	33.6	23.5	16.8	10.1	3.4	0.0	0.0	0.0
25°	87.4	67.2	47.1	33.6	23.5	16.8	6.7	0.0	0.0	0.0	0.0
27.5°	97.5	74.0	47.1	33.6	23.5	13.4	3.4	0.0	0.0	0.0	0.0
30°	114.3	80.7	50.4	33.6	23.5	10.1	3.4	0.0	0.0	0.0	0.0
32.5°	141.2	87.4	50.4	33.6	20.2	10.1	0.0	0.0	0.0	0.0	0.0
35°	171.5	100.9	50.4	33.6	20.2	10.1	0.0	0.0	0.0	0.0	0.0
37.5°	174.8	107.6	50.4	33.6	20.2	6.7	0.0	0.0	0.0	0.0	0.0
40°	181.5	100.9	53.8	33.6	20.2	6.7	0.0	0.0	0.0	0.0	0.0
42.5°	208.4	94.1	57.2	33.6	20.2	6.7	0.0	0.0	0.0	0.0	0.0
45°	309.3	97.5	57.2	37.0	20.2	10.1	0.0	0.0	0.0	0.0	0.0
47.5°	537.9	100.9	53.8	37.0	20.2	10.1	0.0	0.0	0.0	0.0	0.0
50°	689.2	117.7	53.8	40.3	23.5	6.7	0.0	0.0	0.0	0.0	0.0
52.5°	732.9	137.8	53.8	43.7	30.3	3.4	0.0	0.0	0.0	0.0	0.0
55°	712.7	161.4	57.2	47.1	37.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	658.9	174.8	60.5	50.4	40.3	0.0	0.0	0.0	0.0	0.0	0.0
59°	601.8	184.9	70.6	53.8	40.3	0.0	0.0	0.0	0.0	0.0	0.0
60°	554.7	195.0	74.0	57.2	40.3	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	447.1	208.4	80.7	67.2	33.6	0.0	0.0	0.0	0.0	0.0	0.0
65°	390.0	218.5	84.0	74.0	30.3	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	356.4	225.2	90.8	77.3	26.9	0.0	0.0	0.0	0.0	0.0	0.0
70°	329.5	221.9	97.5	74.0	23.5	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	299.2	211.8	117.7	67.2	20.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	269.0	191.6	127.8	60.5	13.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	195.0	161.4	117.7	53.8	6.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	84.0	87.4	84.0	40.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.8	20.2	16.8	10.1	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



REPORT NUMBER: P1068097

CATALOG NUMBER: NAV-SA4A-835-U-LBC

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
2.5°	16.8	16.8	16.8	16.8	20.2	20.2	26.9	33.6	40.3	43.7	43.7
5°	13.4	13.4	13.4	13.4	13.4	16.8	20.2	26.9	37.0	40.3	40.3
7.5°	10.1	10.1	10.1	10.1	10.1	10.1	16.8	23.5	33.6	37.0	40.3
10°	10.1	6.7	6.7	3.4	3.4	6.7	10.1	20.2	30.3	33.6	37.0
12.5°	6.7	3.4	3.4	0.0	0.0	3.4	6.7	16.8	26.9	30.3	33.6
15°	3.4	0.0	0.0	0.0	0.0	0.0	3.4	13.4	23.5	26.9	33.6
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1	20.2	26.9	30.3
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	16.8	23.5	26.9
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	13.4	20.2	23.5
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1	13.4	16.8
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	10.1	13.4
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	10.1	13.4
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7	10.1
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7	10.1
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7	6.7
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
59°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	6.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1068097

CATALOG NUMBER: NAV-SA4A-835-U-LBC

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	318°	325°	335°	345°	355°	360°
0°	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
2.5°	47.1	47.1	43.7	40.3	40.3	40.3	43.7	47.1	47.1	47.1
5°	43.7	43.7	40.3	40.3	40.3	40.3	43.7	50.4	53.8	53.8
7.5°	43.7	43.7	40.3	40.3	40.3	40.3	43.7	50.4	53.8	57.2
10°	40.3	40.3	40.3	40.3	37.0	40.3	43.7	50.4	60.5	60.5
12.5°	40.3	40.3	40.3	40.3	37.0	40.3	47.1	53.8	63.9	67.2
15°	40.3	40.3	40.3	37.0	37.0	40.3	47.1	57.2	67.2	74.0
17.5°	37.0	40.3	40.3	37.0	37.0	40.3	47.1	57.2	74.0	84.0
20°	33.6	37.0	40.3	37.0	37.0	37.0	47.1	57.2	77.3	90.8
22.5°	30.3	33.6	37.0	37.0	33.6	37.0	47.1	60.5	84.0	100.9
25°	26.9	30.3	30.3	33.6	33.6	37.0	47.1	60.5	87.4	114.3
27.5°	20.2	23.5	26.9	30.3	30.3	37.0	47.1	63.9	94.1	141.2
30°	16.8	20.2	23.5	26.9	30.3	37.0	47.1	63.9	100.9	178.2
32.5°	16.8	20.2	23.5	26.9	30.3	33.6	47.1	67.2	110.9	221.9
35°	13.4	16.8	20.2	26.9	26.9	33.6	47.1	67.2	121.0	289.1
37.5°	13.4	16.8	20.2	26.9	26.9	33.6	47.1	67.2	147.9	322.7
40°	10.1	13.4	16.8	26.9	26.9	33.6	50.4	70.6	151.3	326.1
42.5°	10.1	13.4	16.8	23.5	26.9	33.6	50.4	70.6	141.2	336.2
45°	10.1	13.4	16.8	26.9	30.3	37.0	50.4	74.0	137.8	383.3
47.5°	10.1	13.4	16.8	26.9	33.6	37.0	50.4	74.0	141.2	548.0
50°	10.1	13.4	16.8	26.9	37.0	37.0	50.4	74.0	154.6	880.8
52.5°	6.7	10.1	13.4	23.5	30.3	40.3	53.8	70.6	164.7	1176.7
55°	6.7	6.7	10.1	20.2	26.9	43.7	57.2	70.6	191.6	1250.6
57.5°	6.7	6.7	10.1	16.8	23.5	47.1	60.5	70.6	221.9	1213.6
59°	6.7	6.7	6.7	16.8	20.2	47.1	60.5	74.0	225.2	1149.8
60°	6.7	6.7	6.7	13.4	20.2	47.1	63.9	77.3	228.6	1075.8
62.5°	3.4	3.4	3.4	13.4	16.8	47.1	70.6	94.1	235.3	830.4
65°	6.7	6.7	3.4	10.1	16.8	40.3	80.7	100.9	238.7	645.5
67.5°	6.7	6.7	6.7	13.4	16.8	40.3	84.0	104.2	238.7	511.0
70°	6.7	6.7	6.7	13.4	20.2	40.3	84.0	107.6	235.3	416.9
72.5°	6.7	6.7	6.7	13.4	20.2	37.0	77.3	110.9	225.2	353.0
75°	6.7	6.7	6.7	10.1	16.8	33.6	74.0	121.0	205.1	299.2
77.5°	6.7	6.7	6.7	6.7	13.4	26.9	67.2	134.5	181.5	242.1
80°	10.1	6.7	6.7	6.7	10.1	23.5	63.9	131.1	151.3	158.0
82.5°	10.1	6.7	6.7	3.4	6.7	16.8	50.4	100.9	77.3	70.6
85°	6.7	6.7	6.7	3.4	3.4	10.1	23.5	30.3	23.5	16.8
87.5°	6.7	6.7	6.7	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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: SP1-2407-184-10

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-835-U-5WQ

Data in this report applies to families of products including GSS-SB1A-835-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-10
 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-835-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 3500K CCT 26 LEDS

Spectral Parameters

CCT (K): 3411
 CIE u' : 0.2360
 CIE v' : 0.5189
 Duv: 0.0044
 CIE x: 0.4154
 CIE y: 0.4059
 CIE z: 0.1787
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 579
 Purity: 46.51914
 R_f: 86.6
 R_g: 95.9

CRI (Ra): 83.5
 R1: 81.1
 R2: 88.9
 R3: 97.2
 R4: 83.8
 R5: 81.7
 R6: 86.9
 R7: 86.1
 R8: 62.2
 R9: 6.3
 R10: 75.4
 R11: 84.1
 R12: 69.7
 R13: 82.8
 R14: 98.5
 R15: 72.6



Test Conditions

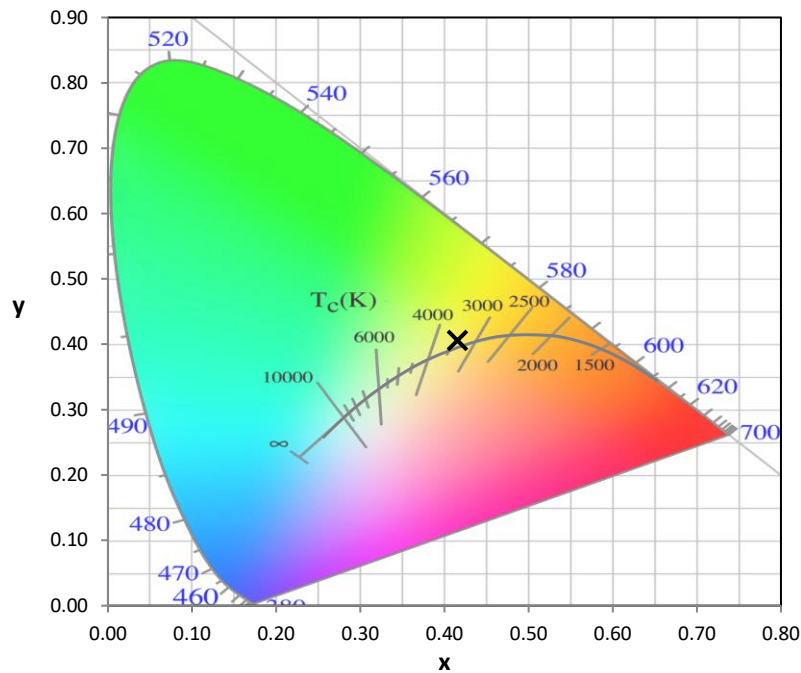
Stabilization Time: 35M
 Operation Time: 1H 35M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-10

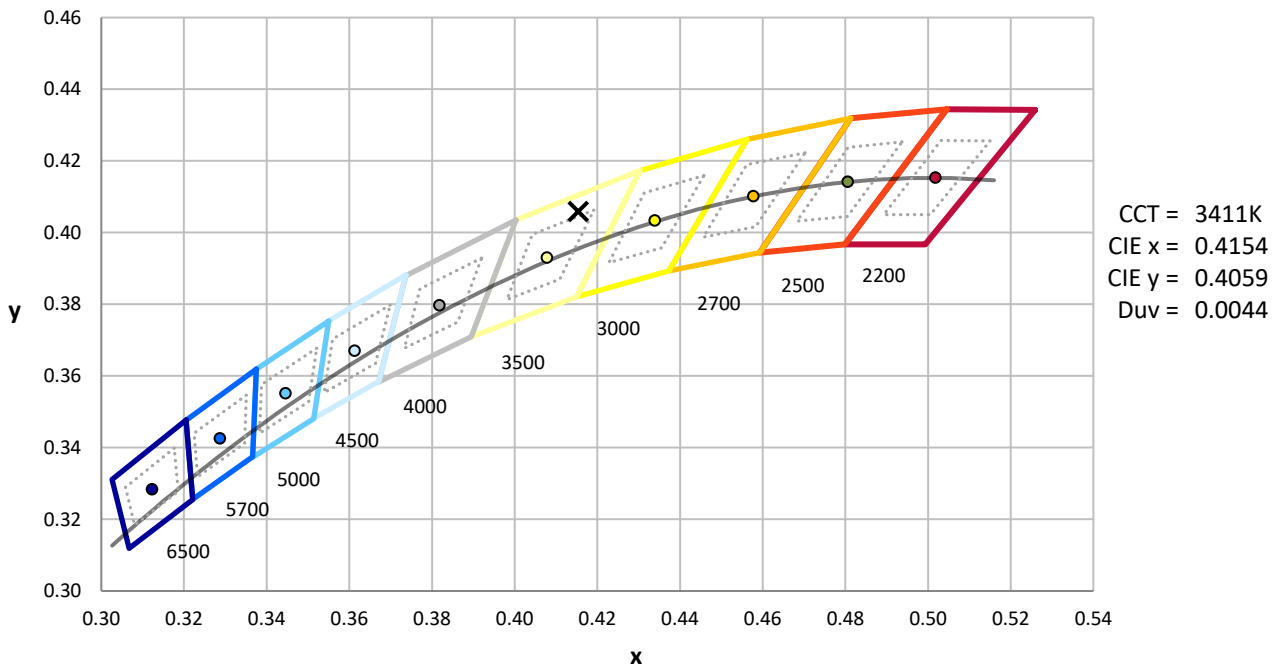
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2407-184-10

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3500K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-10

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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-10

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.48

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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-10

Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.88

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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-10

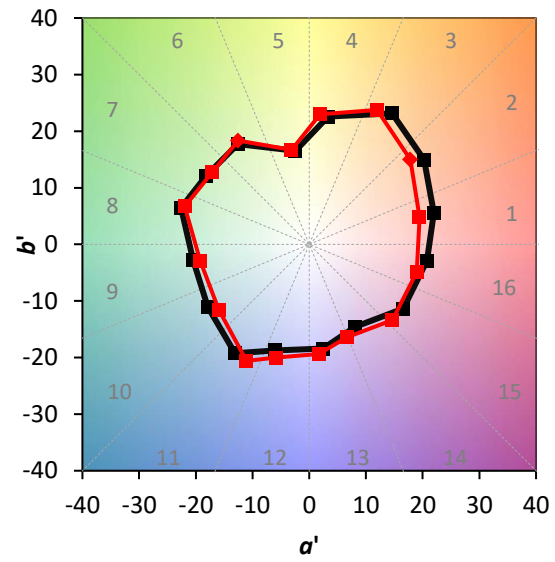
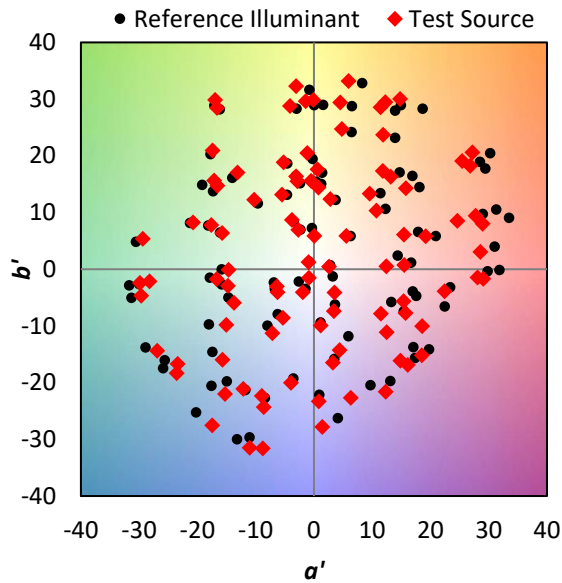
TM-30-18

Summary

$R_f = 86.6$
 $R_g = 95.9$
 $\text{CIE } R_a = 83.5$
 $R_9 = 6.3$

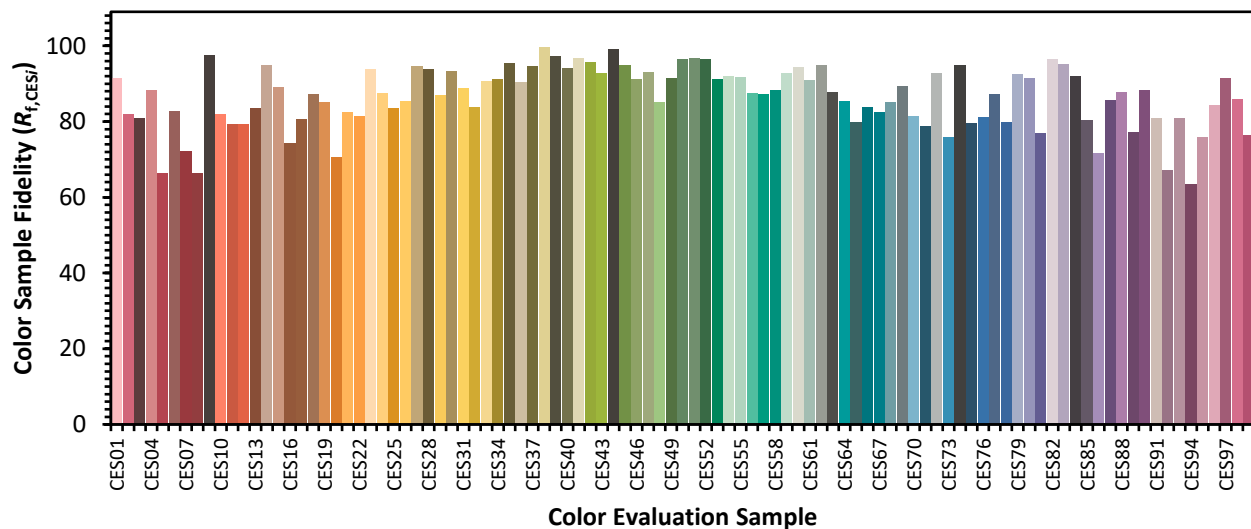


Color Vector Graphics

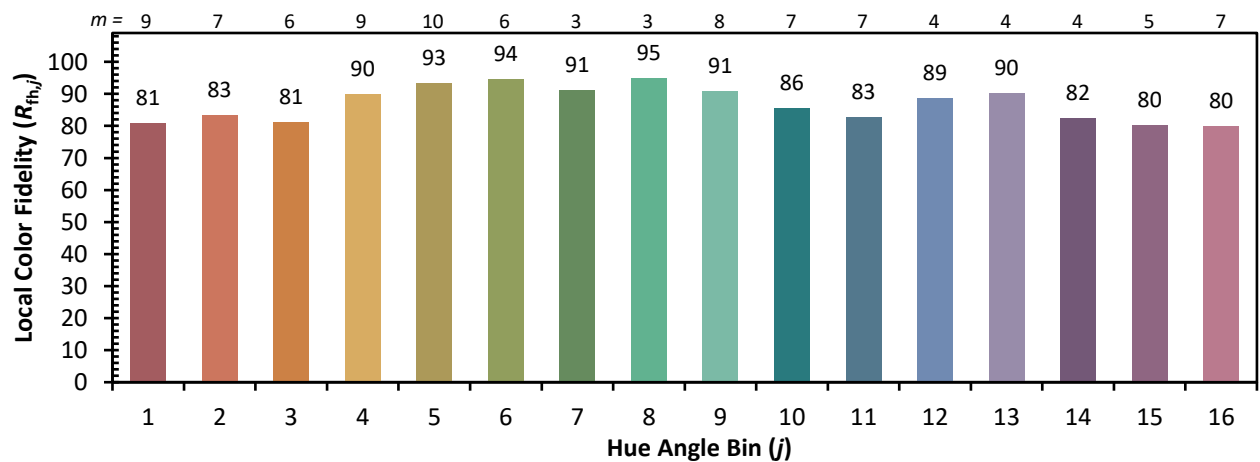
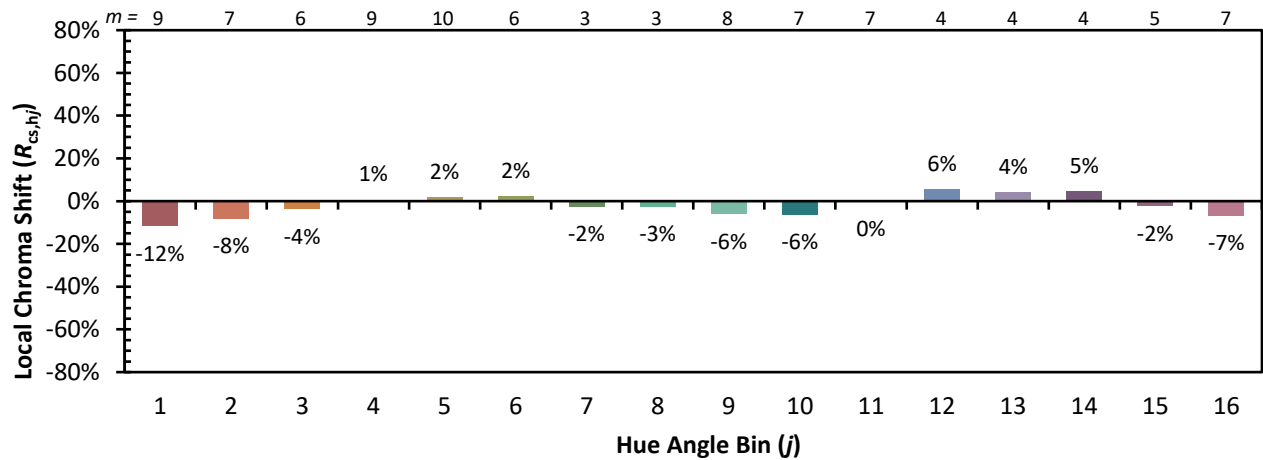


Individual Sample Fidelity Index ($R_{f,i}$)

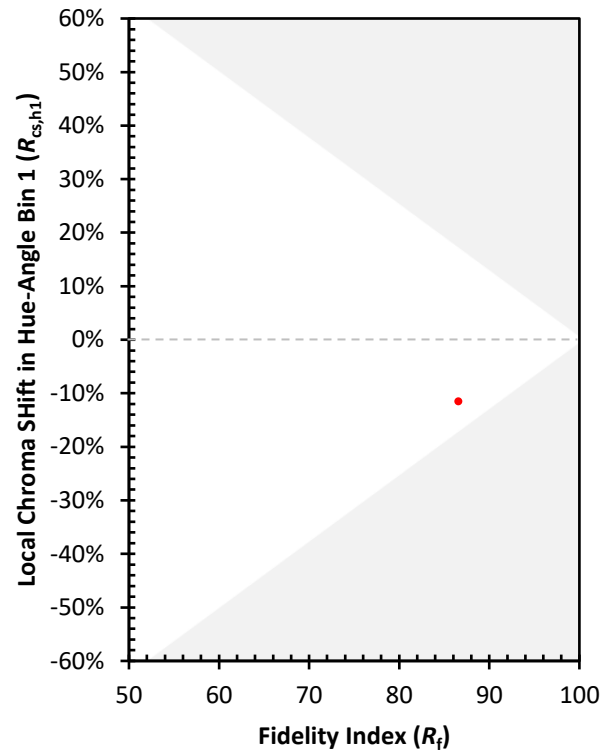
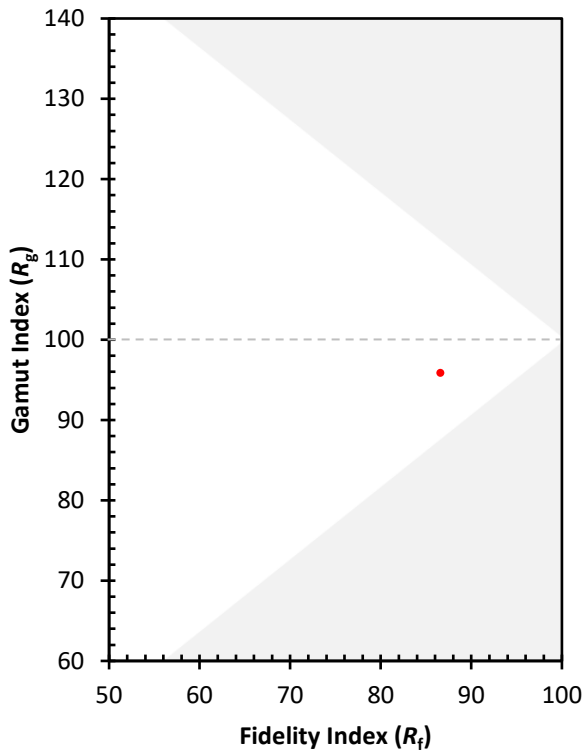
CES01 = 86	CES26 = 85	CES51 = 97	CES76 = 81
CES02 = 62	CES27 = 95	CES52 = 96	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 91	CES78 = 80
CES04 = 70	CES29 = 87	CES54 = 92	CES79 = 93
CES05 = 49	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 89	CES56 = 88	CES81 = 77
CES07 = 41	CES32 = 84	CES57 = 87	CES82 = 96
CES08 = 40	CES33 = 91	CES58 = 88	CES83 = 95
CES09 = 29	CES34 = 91	CES59 = 93	CES84 = 92
CES10 = 75	CES35 = 95	CES60 = 94	CES85 = 80
CES11 = 58	CES36 = 90	CES61 = 91	CES86 = 72
CES12 = 64	CES37 = 95	CES62 = 95	CES87 = 86
CES13 = 43	CES38 = 100	CES63 = 88	CES88 = 88
CES14 = 74	CES39 = 97	CES64 = 85	CES89 = 77
CES15 = 71	CES40 = 94	CES65 = 80	CES90 = 88
CES16 = 47	CES41 = 97	CES66 = 84	CES91 = 81
CES17 = 49	CES42 = 96	CES67 = 82	CES92 = 67
CES18 = 56	CES43 = 93	CES68 = 85	CES93 = 81
CES19 = 72	CES44 = 99	CES69 = 89	CES94 = 63
CES20 = 66	CES45 = 95	CES70 = 81	CES95 = 76
CES21 = 86	CES46 = 91	CES71 = 79	CES96 = 84
CES22 = 78	CES47 = 93	CES72 = 93	CES97 = 92
CES23 = 91	CES48 = 85	CES73 = 76	CES98 = 86
CES24 = 90	CES49 = 92	CES74 = 95	CES99 = 77
CES25 = 72	CES50 = 96	CES75 = 80	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)