

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: P1449870

Luminaire Tested: **TWC150_T3_60W_4000K**

Issue Date: 5/19/2026

Test Information

Test Method: LM-79-08
Report Number: P1449870
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ()
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2026
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: TWC150_T3_60W_4000K
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T3 distribution, 60W
4000K settings
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10480 lumens
Efficiency: N/A
Efficacy: 190.2 lumens/watt
Luminous Opening: Rectangular (W 1.33' x L: 0.42' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G2

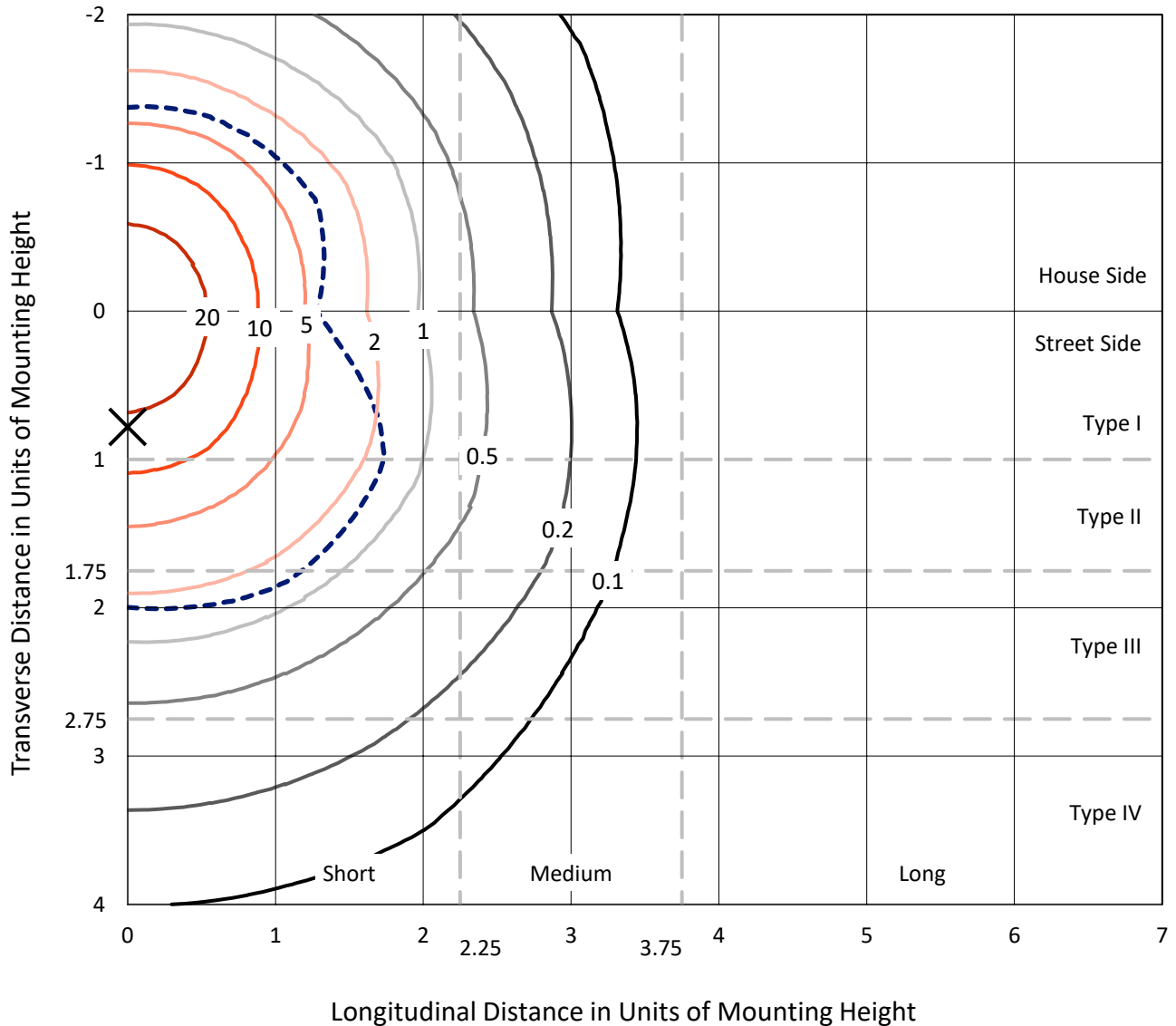
Input Watts (W): 55.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

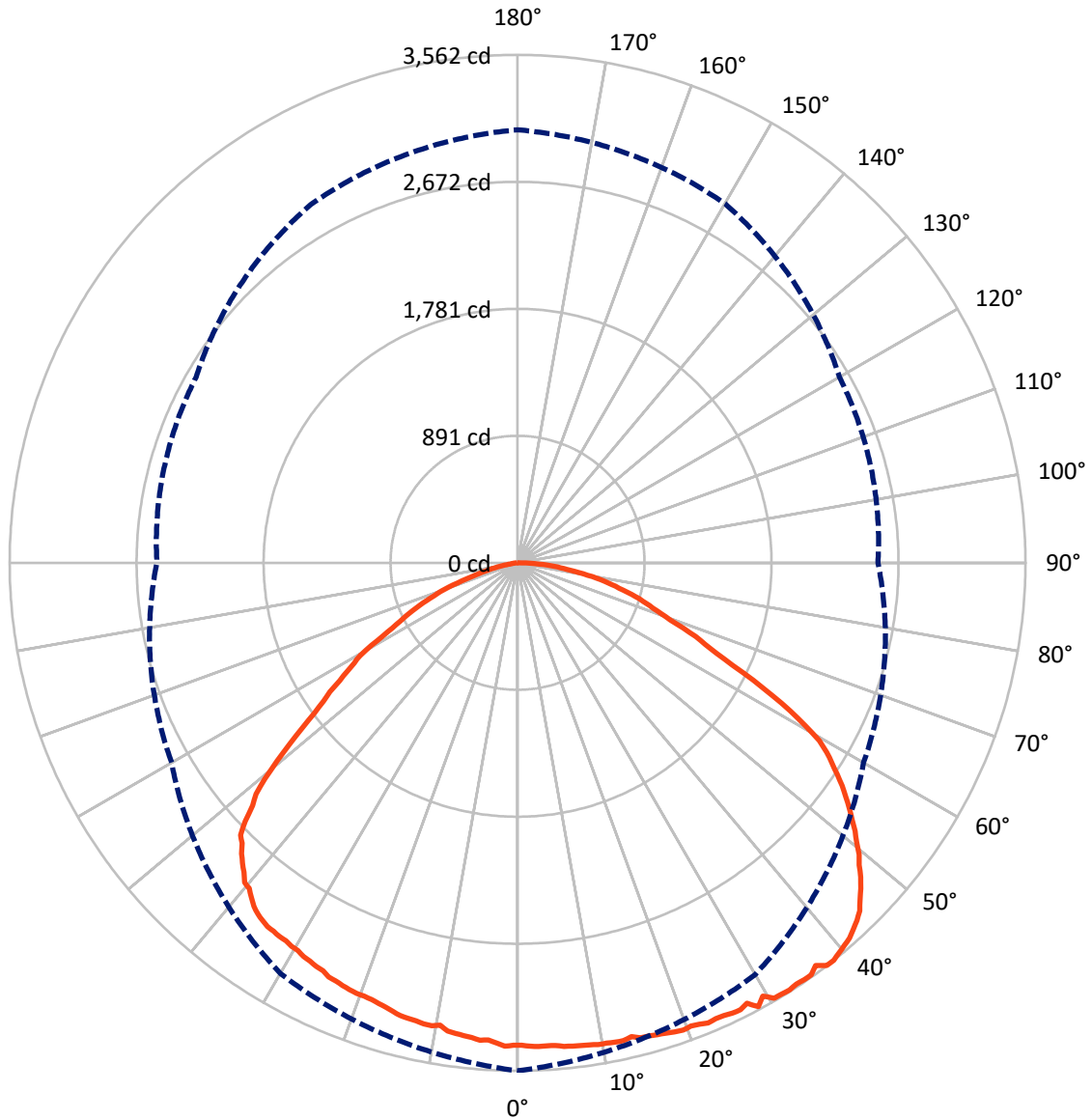
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 33.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 38-Deg Vertical

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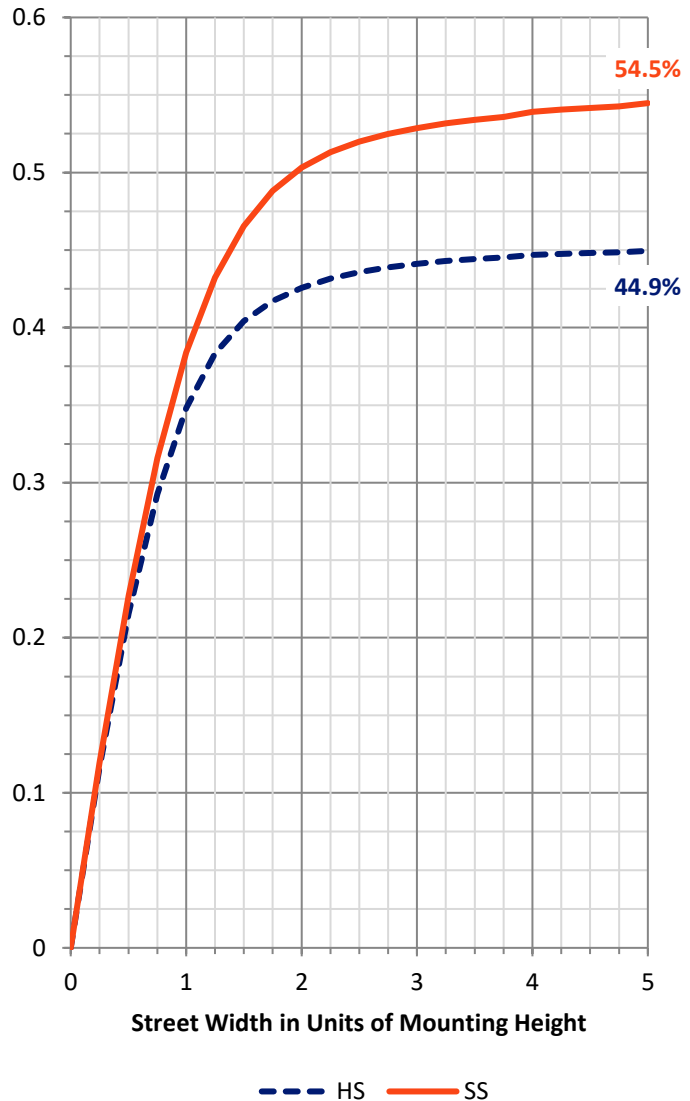
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4732.5	0.0	4732.5
	% Fixture	45.2	0.0	45.2
Street Side	Lumens	5747.5	0.0	5747.5
	% Fixture	54.8	0.0	54.8
Total	Lumens	10480.0	0.0	10480.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.1	3.1
10°-20°	933.7	8.9
20°-30°	1464.3	14.0
30°-40°	1868.5	17.8
40°-50°	2061.6	19.7
50°-60°	1857.2	17.7
60°-70°	1265.1	12.1
70°-80°	573.7	5.5
80°-90°	134.8	1.3
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°	10480.0	100.0
0°-180°	10480.0	100.0

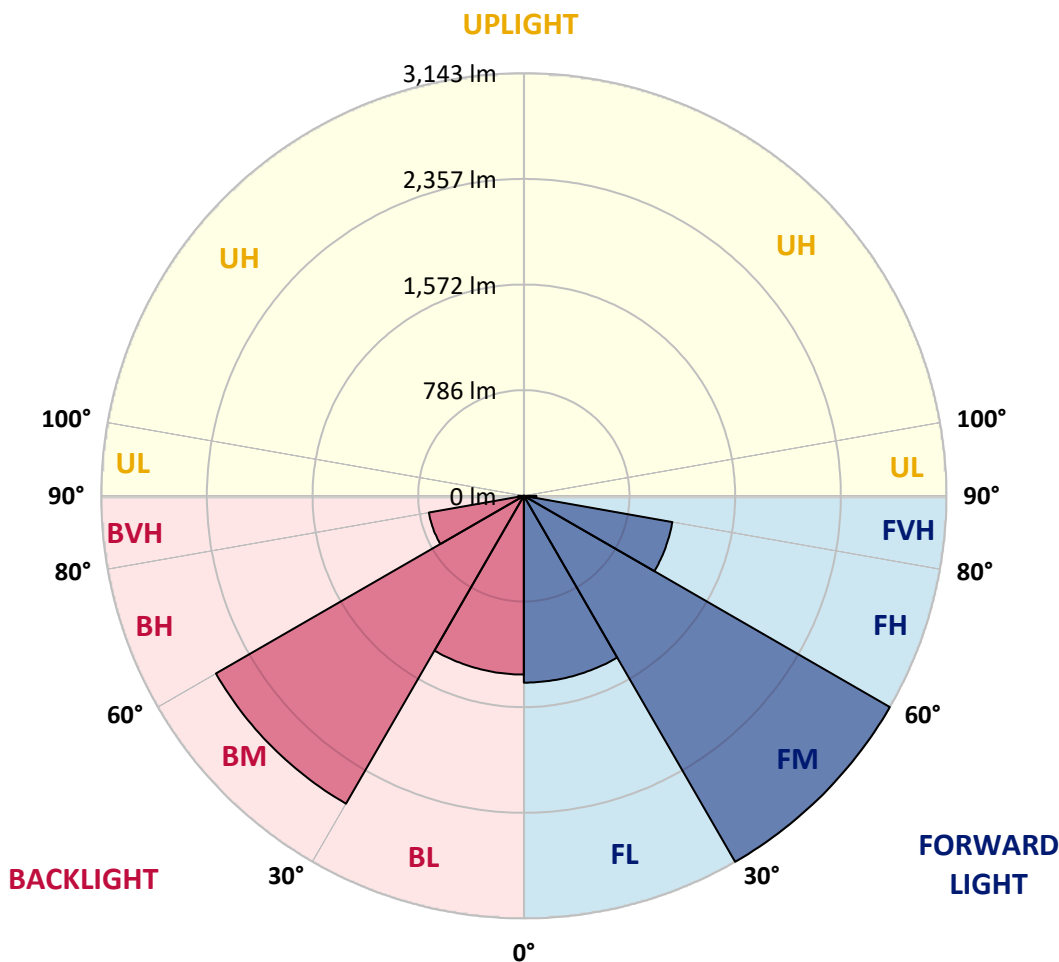


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1389.5	13.3			
FM	(30°-60°)	3143.1	30.0			
FH	(60°-80°)	1121.7	10.7			G1/1800
FVH	(80°-90°)	93.1	0.9			G1/100
BL	(0°-30°)	1329.5	12.7	B3/2500		
BM	(30°-60°)	2644.3	25.2	B3/5000		
BH	(60°-80°)	717.0	6.8	B2/1000		G2/1000
BVH	(80°-90°)	41.6	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	3384.0	3384.0	3384.0	3384.0	3384.0	3384.0	3384.0	3384.0	3384.0	3384.0	3384.0
1°	3391.8	3402.9	3388.9	3378.8	3381.7	3384.2	3384.2	3372.7	3381.8	3383.1	3386.8
2°	3395.4	3400.1	3406.1	3385.8	3389.5	3375.4	3391.6	3385.1	3378.0	3334.5	3391.6
3°	3393.5	3407.0	3396.2	3376.5	3374.4	3377.5	3370.9	3366.8	3372.8	3379.9	3389.9
4°	3395.0	3394.4	3396.1	3377.9	3372.7	3359.5	3351.8	3362.9	3367.0	3384.7	3383.1
5°	3406.8	3392.1	3381.7	3397.3	3356.6	3349.1	3359.5	3357.2	3360.5	3377.1	3380.5
6°	3410.9	3393.8	3381.7	3359.9	3347.4	3339.4	3345.2	3348.5	3352.2	3394.2	3378.4
7°	3415.2	3396.1	3372.2	3349.5	3339.0	3332.5	3336.9	3350.0	3346.9	3350.5	3373.3
8°	3418.5	3400.0	3366.7	3336.1	3331.0	3325.9	3329.8	3346.0	3333.6	3346.9	3368.7
9°	3426.0	3405.8	3366.3	3324.3	3317.1	3277.6	3320.6	3324.8	3326.5	3336.0	3374.1
10°	3426.2	3403.1	3325.0	3319.7	3305.6	3302.5	3287.6	3312.5	3308.9	3323.6	3366.4
11°	3431.1	3408.3	3351.3	3311.7	3297.7	3291.9	3302.6	3298.2	3310.1	3323.1	3347.5
12°	3432.3	3407.0	3343.8	3305.2	3287.1	3286.2	3299.3	3314.9	3279.7	3290.1	3331.7
13°	3416.9	3403.1	3355.7	3280.8	3271.3	3275.1	3290.8	3281.6	3263.1	3276.0	3323.8
14°	3440.2	3409.6	3326.9	3267.5	3242.0	3272.6	3286.4	3235.8	3249.2	3263.9	3315.6
15°	3444.2	3390.3	3311.2	3243.9	3227.3	3264.1	3280.6	3251.6	3198.4	3246.4	3307.0
16°	3450.8	3442.7	3297.2	3223.6	3217.8	3248.7	3266.1	3249.0	3209.6	3235.7	3297.9
17°	3459.5	3418.3	3282.6	3215.2	3189.5	3235.7	3251.1	3232.2	3194.0	3213.6	3293.2
18°	3468.5	3401.0	3265.2	3212.9	3170.5	3211.6	3240.0	3214.7	3176.3	3184.5	3277.1
19°	3477.2	3405.3	3251.7	3165.2	3153.2	3195.4	3229.2	3209.9	3159.3	3176.3	3262.8
20°	3468.6	3405.3	3238.9	3145.6	3135.1	3179.2	3224.1	3205.9	3133.0	3159.0	3242.8
21°	3478.1	3401.0	3226.1	3121.9	3116.1	3203.9	3224.4	3182.9	3108.8	3125.3	3197.7
22°	3493.2	3355.4	3208.7	3101.4	3091.3	3164.3	3216.7	3170.5	3092.5	3100.9	3214.4
23°	3486.8	3386.3	3187.8	3074.5	3071.0	3157.4	3208.9	3147.0	3064.3	3074.4	3198.1
24°	3488.5	3387.2	3172.9	3045.7	3038.5	3147.8	3196.9	3138.2	3038.0	3050.2	3172.1
25°	3499.1	3385.0	3160.2	3021.8	3005.7	3126.6	3192.8	3121.1	3017.9	3022.1	3151.6
26°	3502.8	3374.1	3096.2	2992.6	2984.7	3110.7	3170.5	3132.9	2984.3	2997.2	3122.8
27°	3483.2	3372.2	3064.4	2968.7	2958.7	3098.8	3163.4	3092.5	2958.4	2965.6	3098.1
28°	3542.3	3368.3	3106.5	2924.5	2930.2	3071.2	3149.7	3076.3	2927.7	2931.1	3074.6
29°	3490.8	3364.1	3051.5	2911.5	2903.1	3063.8	3143.5	3058.2	2903.9	2898.9	3065.8
30°	3544.5	3371.1	3020.8	2855.3	2877.7	3047.9	3126.1	3040.6	2873.9	2867.4	3034.8
31°	3547.3	3370.1	3002.2	2820.2	2849.3	3035.1	3121.8	3023.8	2859.4	2828.5	3006.3
32°	3551.0	3369.7	2974.6	2783.3	2825.7	3008.5	3109.1	3010.3	2822.8	2792.7	2994.4
33°	3543.0	3365.0	2953.3	2747.6	2795.0	2999.1	3108.4	2998.7	2791.3	2742.7	2952.9
34°	3548.8	3353.7	2947.1	2704.9	2757.7	2981.5	3098.8	2986.8	2758.0	2699.8	2922.7
35°	3548.6	3341.8	2867.6	2662.4	2723.8	2968.2	3095.7	2966.0	2715.0	2661.4	2890.1
36°	3512.9	3342.8	2858.7	2619.7	2679.4	2949.4	3080.8	2934.6	2680.0	2615.7	2868.1
37°	3560.9	3334.5	2829.8	2571.3	2641.1	2928.0	3063.1	2921.0	2641.6	2577.5	2835.1
38°	3562.3	3333.1	2801.6	2527.1	2606.0	2908.5	3036.5	2901.3	2603.3	2529.5	2802.0
39°	3544.7	3314.9	2772.5	2480.0	2568.9	2883.1	3000.2	2883.0	2575.8	2489.8	2775.9
40°	3530.1	3307.0	2745.4	2438.7	2539.4	2853.5	2959.2	2857.7	2537.1	2442.1	2744.2
41°	3513.2	3295.1	2717.9	2391.5	2505.1	2824.2	2947.3	2837.1	2500.7	2392.7	2714.2
42°	3486.1	3277.6	2685.0	2335.6	2467.8	2786.5	2896.1	2802.4	2459.1	2342.6	2687.9
43°	3458.1	3269.1	2657.5	2289.2	2429.9	2747.4	2855.3	2767.3	2420.0	2288.1	2657.7
44°	3423.0	3258.9	2620.0	2238.1	2392.5	2709.4	2811.2	2730.0	2382.2	2239.5	2624.9



REPORT NUMBER: P1449870

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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	3368.1	3228.3	2592.4	2184.1	2346.2	2668.2	2756.7	2678.3	2349.8	2185.0	2593.2
46°	3318.6	3190.6	2562.3	2128.8	2303.6	2619.9	2723.7	2634.9	2304.5	2128.8	2564.0
47°	3263.5	3153.0	2530.7	2075.9	2263.1	2561.3	2633.7	2592.9	2254.9	2076.9	2523.1
48°	3199.5	3109.1	2496.2	2018.9	2213.5	2508.6	2520.1	2543.2	2209.8	2017.6	2489.8
49°	3150.1	3059.1	2469.4	1931.7	2164.0	2448.4	2448.8	2456.5	2169.6	1964.6	2465.8
50°	3081.9	2978.8	2439.0	1896.5	2109.1	2380.4	2328.6	2425.7	2110.5	1904.8	2436.8
51°	3024.0	2930.8	2412.1	1839.5	2059.3	2299.2	2185.3	2348.4	2058.4	1849.6	2413.9
52°	2956.2	2864.7	2390.0	1780.2	2003.4	2169.8	2042.5	2259.5	2005.4	1788.8	2387.0
53°	2895.0	2790.3	2365.5	1717.9	1951.0	2043.5	1904.3	2143.5	1970.1	1727.2	2357.1
54°	2828.5	2712.8	2339.6	1654.9	1897.4	1911.0	1772.6	2016.9	1891.0	1652.9	2325.1
55°	2761.3	2653.2	2309.7	1591.0	1841.6	1769.5	1672.7	1876.5	1831.1	1598.7	2303.1
56°	2687.6	2594.4	2273.6	1518.2	1769.7	1647.1	1595.8	1753.7	1776.4	1522.9	2273.5
57°	2613.9	2529.3	2242.8	1451.7	1708.6	1544.4	1496.3	1616.1	1715.1	1457.8	2242.2
58°	2543.0	2450.8	2191.3	1387.5	1647.1	1455.6	1413.9	1513.9	1653.9	1390.7	2222.0
59°	2455.0	2374.6	2136.7	1323.8	1585.2	1365.8	1343.7	1434.3	1592.3	1327.2	2152.6
60°	2320.4	2300.7	2074.6	1253.4	1521.1	1290.0	1280.7	1362.4	1528.2	1260.0	2089.9
61°	2175.7	2233.1	2006.5	1190.3	1456.8	1234.4	1178.6	1275.0	1464.0	1196.8	2024.1
62°	2017.5	2143.9	1924.8	1127.6	1386.1	1170.4	1074.4	1208.8	1395.8	1124.0	1948.2
63°	1847.7	2026.7	1826.8	1067.5	1302.2	1086.6	990.4	1153.1	1323.3	1063.2	1861.8
64°	1669.1	1890.1	1729.2	1001.6	1201.7	998.5	923.5	1072.3	1240.9	1001.7	1759.9
65°	1535.7	1742.0	1627.2	939.3	1118.3	939.7	866.9	986.4	1151.2	940.4	1659.4
66°	1436.3	1562.5	1521.4	875.6	1014.4	893.1	809.6	923.7	1056.1	875.1	1560.3
67°	1352.6	1411.4	1416.4	808.9	917.0	846.0	747.4	879.1	939.1	812.1	1448.9
68°	1249.8	1290.8	1298.7	738.0	823.0	793.4	690.5	826.1	847.0	741.0	1335.9
69°	1145.3	1193.1	1198.2	671.6	750.0	742.0	627.8	781.5	762.1	679.3	1233.5
70°	1068.7	1111.9	1113.6	607.9	693.7	693.4	574.7	730.0	700.9	610.6	1137.7
71°	1000.7	1018.0	1040.1	546.2	644.0	644.4	510.6	683.9	648.8	551.4	1073.7
72°	946.0	941.1	947.8	479.6	589.5	595.3	443.4	636.2	597.9	488.3	987.4
73°	891.2	881.9	829.6	424.1	547.7	543.3	378.8	587.7	549.6	428.2	877.4
74°	830.4	828.7	702.9	368.1	511.9	484.7	321.4	532.7	510.9	369.6	745.7
75°	764.8	771.4	574.1	316.5	474.1	412.9	277.9	473.4	478.6	318.9	618.1
76°	704.4	721.1	493.4	265.9	440.3	355.7	235.5	405.7	441.5	272.0	522.6
77°	648.2	666.7	439.2	222.5	408.3	308.2	198.4	351.7	411.6	224.2	461.1
78°	593.2	612.3	380.2	183.7	377.7	265.9	162.4	299.0	379.8	185.3	405.7
79°	531.8	570.3	331.1	150.5	347.9	222.8	126.5	254.7	350.8	152.5	347.3
80°	467.1	529.2	275.5	117.4	314.5	189.5	93.6	219.9	320.5	121.4	298.7
81°	401.3	483.4	230.1	93.0	283.2	155.8	62.2	186.3	288.9	95.4	247.4
82°	347.8	416.4	197.9	72.5	252.0	103.6	47.9	149.4	256.1	73.3	211.0
83°	304.5	331.9	174.0	53.7	215.5	45.9	36.0	87.0	224.3	56.6	182.0
84°	258.1	258.6	151.1	41.0	174.0	24.9	27.9	37.0	187.5	41.3	161.0
85°	209.4	214.5	130.4	29.5	142.3	17.4	18.8	23.1	150.4	30.0	140.5
86°	155.0	169.4	111.8	20.1	111.6	10.3	11.0	14.8	121.2	20.6	121.0
87°	115.3	121.6	89.4	13.4	65.8	7.1	0.0	8.6	83.8	13.0	104.7
88°	59.9	79.6	51.3	0.0	0.0	5.7	0.0	0.0	0.0	0.0	69.8
89°	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	25.7



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1449870
 CATALOG NUMBER: TWC150_T3_60W_4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1449870
CATALOG NUMBER: TWC150_T3_60W_4000K

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1449870
CATALOG NUMBER: TWC150_T3_60W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	3384.0	3384.0
1°	3383.8	3391.8
2°	3388.7	3395.4
3°	3387.9	3393.5
4°	3402.4	3395.0
5°	3401.1	3406.8
6°	3399.3	3410.9
7°	3399.7	3415.2
8°	3399.1	3418.5
9°	3391.9	3426.0
10°	3394.9	3426.2
11°	3410.1	3431.1
12°	3401.7	3432.3
13°	3429.7	3416.9
14°	3399.6	3440.2
15°	3393.0	3444.2
16°	3391.1	3450.8
17°	3391.0	3459.5
18°	3398.1	3468.5
19°	3397.2	3477.2
20°	3397.6	3468.6
21°	3369.6	3478.1
22°	3380.7	3493.2
23°	3377.1	3486.8
24°	3349.5	3488.5
25°	3378.9	3499.1
26°	3391.9	3502.8
27°	3368.9	3483.2
28°	3366.9	3542.3
29°	3371.7	3490.8
30°	3360.4	3544.5
31°	3355.4	3547.3
32°	3362.1	3551.0
33°	3349.4	3543.0
34°	3345.0	3548.8
35°	3336.9	3548.6
36°	3328.6	3512.9
37°	3319.7	3560.9
38°	3325.7	3562.3
39°	3291.1	3544.7
40°	3307.4	3530.1
41°	3294.3	3513.2
42°	3278.9	3486.1
43°	3258.9	3458.1
44°	3278.7	3423.0



REPORT NUMBER: P1449870
CATALOG NUMBER: TWC150_T3_60W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	3223.1	3368.1
46°	3203.3	3318.6
47°	3177.8	3263.5
48°	3136.3	3199.5
49°	3090.5	3150.1
50°	3030.2	3081.9
51°	2969.7	3024.0
52°	2902.7	2956.2
53°	2830.4	2895.0
54°	2761.3	2828.5
55°	2695.5	2761.3
56°	2627.2	2687.6
57°	2566.4	2613.9
58°	2494.0	2543.0
59°	2422.2	2455.0
60°	2346.9	2320.4
61°	2274.7	2175.7
62°	2189.3	2017.5
63°	2112.1	1847.7
64°	1981.4	1669.1
65°	1834.8	1535.7
66°	1679.5	1436.3
67°	1501.5	1352.6
68°	1381.5	1249.8
69°	1265.9	1145.3
70°	1172.6	1068.7
71°	1084.3	1000.7
72°	989.5	946.0
73°	921.5	891.2
74°	867.9	830.4
75°	814.7	764.8
76°	760.6	704.4
77°	707.6	648.2
78°	657.7	593.2
79°	603.6	531.8
80°	553.8	467.1
81°	520.5	401.3
82°	469.8	347.8
83°	402.5	304.5
84°	308.8	258.1
85°	248.4	209.4
86°	207.0	155.0
87°	159.5	115.3
88°	114.7	59.9
89°	67.7	0.0



REPORT NUMBER: P1449870
CATALOG NUMBER: TWC150_T3_60W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.0	0.0
91°	0.0	0.0
92°	0.0	0.0
93°	0.0	0.0
94°	0.0	0.0
95°	0.0	0.0
96°	0.0	0.0
97°	0.0	0.0
98°	0.0	0.0
99°	0.0	0.0
100°	0.0	0.0
101°	0.0	0.0
102°	0.0	0.0
103°	0.0	0.0
104°	0.0	0.0
105°	0.0	0.0
106°	0.0	0.0
107°	0.0	0.0
108°	0.0	0.0
109°	0.0	0.0
110°	0.0	0.0
111°	0.0	0.0
112°	0.0	0.0
113°	0.0	0.0
114°	0.0	0.0
115°	0.0	0.0
116°	0.0	0.0
117°	0.0	0.0
118°	0.0	0.0
119°	0.0	0.0
120°	0.0	0.0
121°	0.0	0.0
122°	0.0	0.0
123°	0.0	0.0
124°	0.0	0.0
125°	0.0	0.0
126°	0.0	0.0
127°	0.0	0.0
128°	0.0	0.0
129°	0.0	0.0
130°	0.0	0.0
131°	0.0	0.0
132°	0.0	0.0
133°	0.0	0.0
134°	0.0	0.0



REPORT NUMBER: P1449870
CATALOG NUMBER: TWC150_T3_60W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
135°	0.0	0.0
136°	0.0	0.0
137°	0.0	0.0
138°	0.0	0.0
139°	0.0	0.0
140°	0.0	0.0
141°	0.0	0.0
142°	0.0	0.0
143°	0.0	0.0
144°	0.0	0.0
145°	0.0	0.0
146°	0.0	0.0
147°	0.0	0.0
148°	0.0	0.0
149°	0.0	0.0
150°	0.0	0.0
151°	0.0	0.0
152°	0.0	0.0
153°	0.0	0.0
154°	0.0	0.0
155°	0.0	0.0
156°	0.0	0.0
157°	0.0	0.0
158°	0.0	0.0
159°	0.0	0.0
160°	0.0	0.0
161°	0.0	0.0
162°	0.0	0.0
163°	0.0	0.0
164°	0.0	0.0
165°	0.0	0.0
166°	0.0	0.0
167°	0.0	0.0
168°	0.0	0.0
169°	0.0	0.0
170°	0.0	0.0
171°	0.0	0.0
172°	0.0	0.0
173°	0.0	0.0
174°	0.0	0.0
175°	0.0	0.0
176°	0.0	0.0
177°	0.0	0.0
178°	0.0	0.0
179°	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



REPORT NUMBER: P1449870
CATALOG NUMBER: TWC150_T3_60W_4000K

CANDELA DISTRIBUTION (continued):

	330°	360°
180°	0.0	0.0

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

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2601-659-2

Test Date: 02/12/2026

Luminaire Tested: MWP2460W34VDDKYYAD-T4-24W-4000K

Data in this report applies to families of products including ;MWP2460W34VDDKYYAD

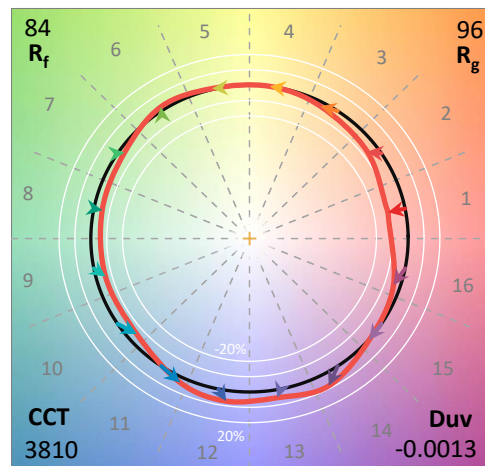
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2601-659-2
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 02/16/2026
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Lumark
 Catalog Number: **MWP2460W34VDDKYYAD-T4-24W-4000K**
 Description: Mester Wedge, at T4 beam setting, 24W output, 4000K

Spectral Parameters

CCT (K): 3810
 CIE u': 0.2295
 CIE v': 0.5035
 Duv: -0.0013
 CIE x: 0.3881
 CIE y: 0.3785
 CIE z: 0.2334
 Peak Wavelength (nm): 453
 Dominant Wavelength (nm): 580
 Purity: 30.07368
 Rf: 84.4
 Rg: 96.5

CRI (Ra):	84.5		
R1:	83.7	R9:	15.9
R2:	90.7	R10:	77.2
R3:	95.1	R11:	83.0
R4:	83.6	R12:	62.4
R5:	83.4	R13:	85.6
R6:	86.7	R14:	97.4
R7:	86.3	R15:	77.9
R8:	66.5		



Test Conditions

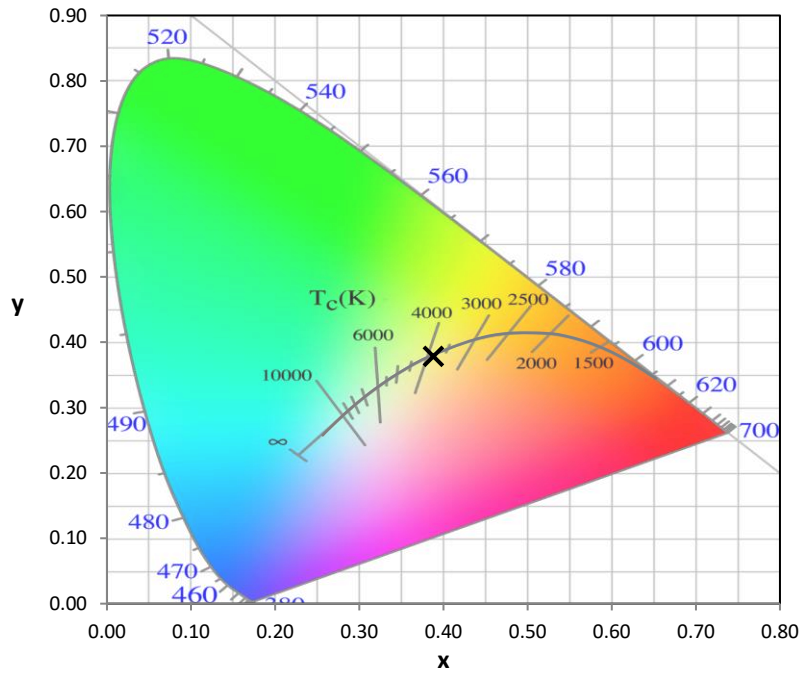
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-2

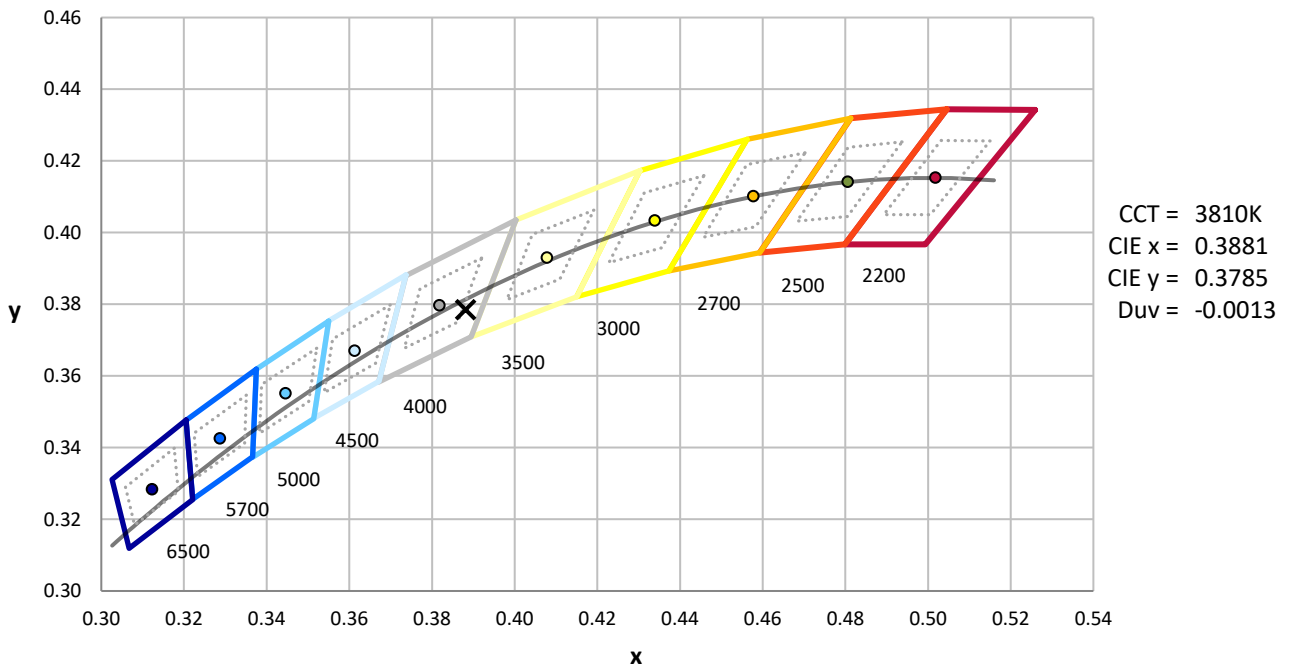
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	10/21/2025	10/21/2026
Sphere Thermometer	ONSET IN0085	10/21/2025	10/21/2026
Room Thermometer	ONSET IN0046	10/21/2025	10/21/2026

REPORT NUMBER: SP1-2601-659-2

CIE 1931 Chromaticity Diagram



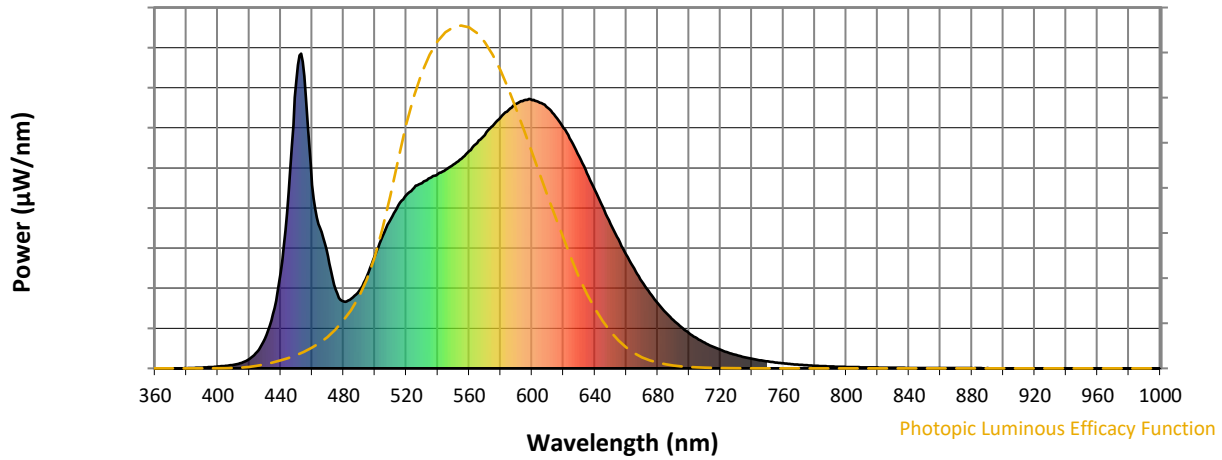
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2601-659-2

Photopic Flux vs. Wavelength

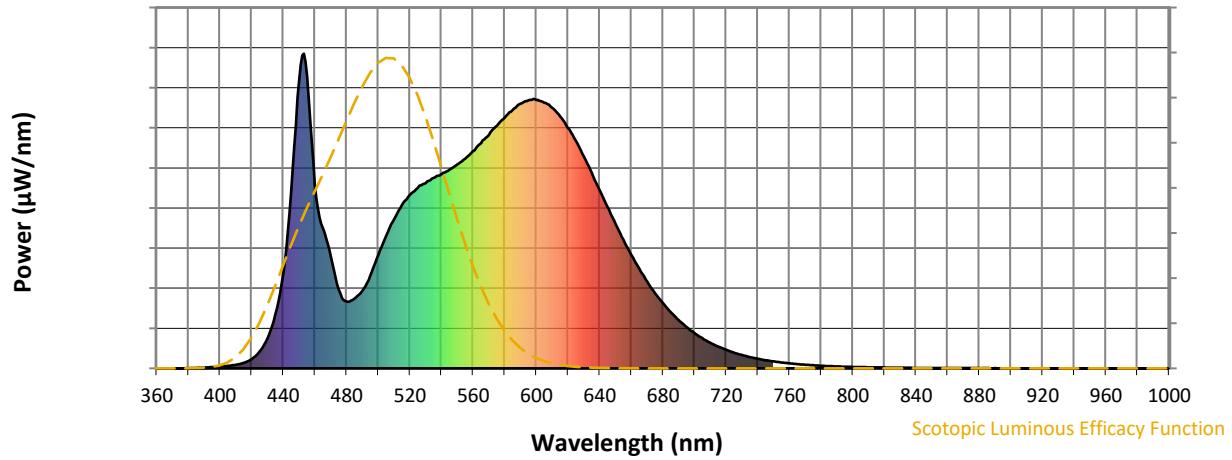


Photopic Lumens: NR

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	247	NR	620	764	NR	750	22	NR	880	1	NR
365	0	NR	495	294	NR	625	723	NR	755	19	NR	885	1	NR
370	0	NR	500	359	NR	630	674	NR	760	16	NR	890	1	NR
375	0	NR	505	421	NR	635	620	NR	765	14	NR	895	0	NR
380	1	NR	510	474	NR	640	566	NR	770	12	NR	900	0	NR
385	1	NR	515	518	NR	645	512	NR	775	10	NR	905	0	NR
390	3	NR	520	552	NR	650	459	NR	780	8	NR	910	0	NR
395	4	NR	525	574	NR	655	410	NR	785	7	NR	915	0	NR
400	6	NR	530	589	NR	660	361	NR	790	6	NR	920	0	NR
405	8	NR	535	605	NR	665	317	NR	795	5	NR	925	0	NR
410	11	NR	540	617	NR	670	276	NR	800	5	NR	930	0	NR
415	18	NR	545	632	NR	675	239	NR	805	4	NR	935	0	NR
420	30	NR	550	648	NR	680	207	NR	810	3	NR	940	0	NR
425	53	NR	555	666	NR	685	178	NR	815	3	NR	945	0	NR
430	95	NR	560	690	NR	690	153	NR	820	3	NR	950	0	NR
435	173	NR	565	716	NR	695	131	NR	825	2	NR	955	0	NR
440	304	NR	570	742	NR	700	112	NR	830	2	NR	960	0	NR
445	559	NR	575	771	NR	705	95	NR	835	2	NR	965	0	NR
450	915	NR	580	798	NR	710	81	NR	840	1	NR	970	0	NR
455	929	NR	585	820	NR	715	69	NR	845	1	NR	975	0	NR
460	582	NR	590	841	NR	720	59	NR	850	1	NR	980	0	NR
465	446	NR	595	852	NR	725	50	NR	855	1	NR	985	0	NR
470	356	NR	600	852	NR	730	42	NR	860	1	NR	990	0	NR
475	250	NR	605	845	NR	735	36	NR	865	1	NR	995	0	NR
480	212	NR	610	827	NR	740	30	NR	870	1	NR	1000	0	NR
485	221	NR	615	801	NR	745	26	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-2

Scotopic Flux vs. Wavelength



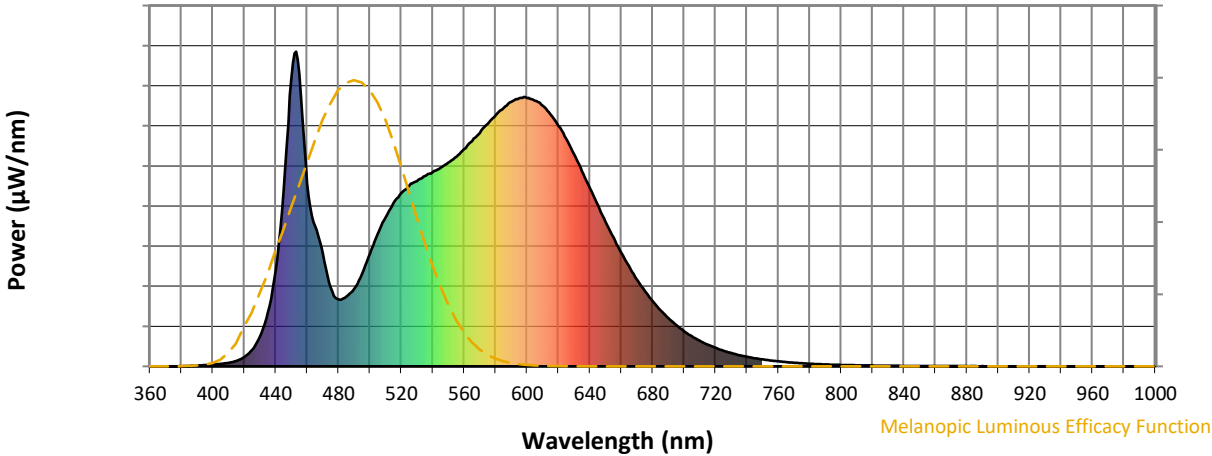
Scotopic Lumens: NR

S/P: 1.64

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	247	NR	620	764	NR	750	22	NR	880	1	NR
365	0	NR	495	294	NR	625	723	NR	755	19	NR	885	1	NR
370	0	NR	500	359	NR	630	674	NR	760	16	NR	890	1	NR
375	0	NR	505	421	NR	635	620	NR	765	14	NR	895	0	NR
380	1	NR	510	474	NR	640	566	NR	770	12	NR	900	0	NR
385	1	NR	515	518	NR	645	512	NR	775	10	NR	905	0	NR
390	3	NR	520	552	NR	650	459	NR	780	8	NR	910	0	NR
395	4	NR	525	574	NR	655	410	NR	785	7	NR	915	0	NR
400	6	NR	530	589	NR	660	361	NR	790	6	NR	920	0	NR
405	8	NR	535	605	NR	665	317	NR	795	5	NR	925	0	NR
410	11	NR	540	617	NR	670	276	NR	800	5	NR	930	0	NR
415	18	NR	545	632	NR	675	239	NR	805	4	NR	935	0	NR
420	30	NR	550	648	NR	680	207	NR	810	3	NR	940	0	NR
425	53	NR	555	666	NR	685	178	NR	815	3	NR	945	0	NR
430	95	NR	560	690	NR	690	153	NR	820	3	NR	950	0	NR
435	173	NR	565	716	NR	695	131	NR	825	2	NR	955	0	NR
440	304	NR	570	742	NR	700	112	NR	830	2	NR	960	0	NR
445	559	NR	575	771	NR	705	95	NR	835	2	NR	965	0	NR
450	915	NR	580	798	NR	710	81	NR	840	1	NR	970	0	NR
455	929	NR	585	820	NR	715	69	NR	845	1	NR	975	0	NR
460	582	NR	590	841	NR	720	59	NR	850	1	NR	980	0	NR
465	446	NR	595	852	NR	725	50	NR	855	1	NR	985	0	NR
470	356	NR	600	852	NR	730	42	NR	860	1	NR	990	0	NR
475	250	NR	605	845	NR	735	36	NR	865	1	NR	995	0	NR
480	212	NR	610	827	NR	740	30	NR	870	1	NR	1000	0	NR
485	221	NR	615	801	NR	745	26	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-2

Melanopic Flux vs. Wavelength



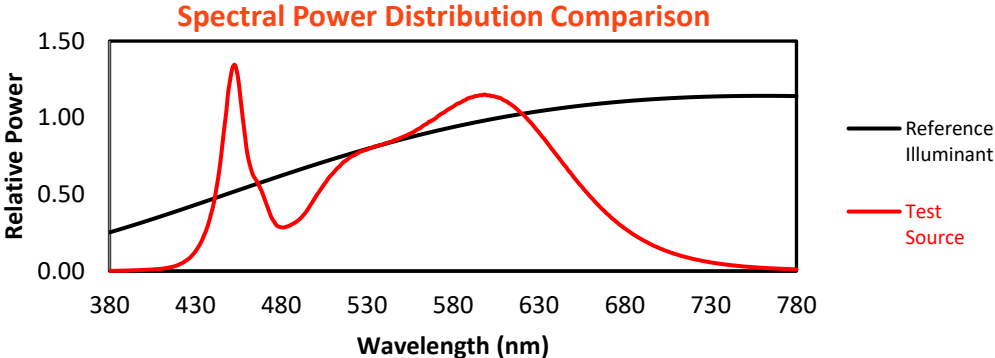
Melanopic Lumens: NR

M/P: 3.35

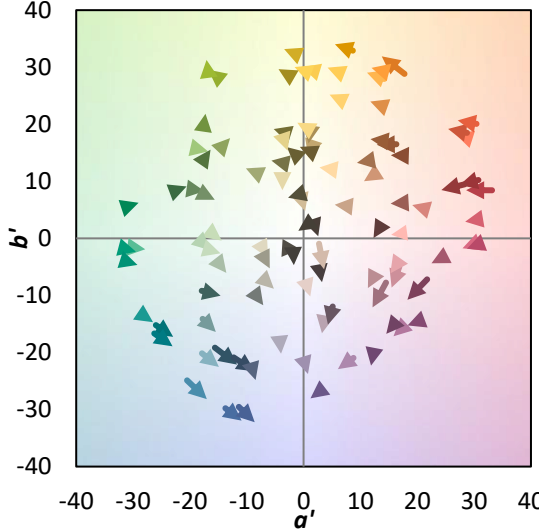
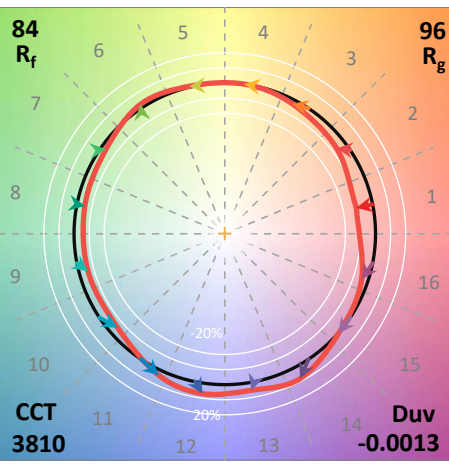
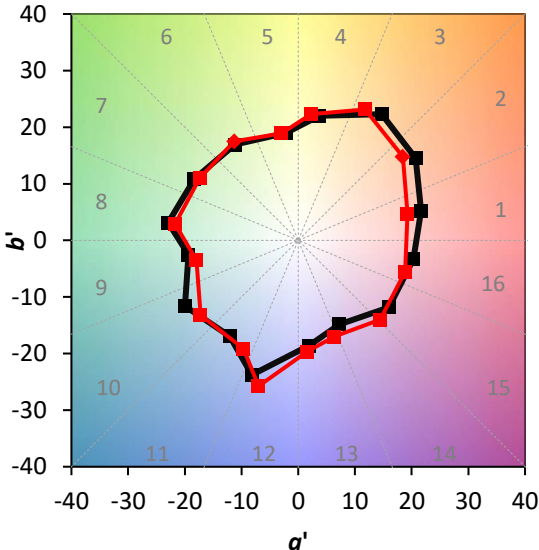
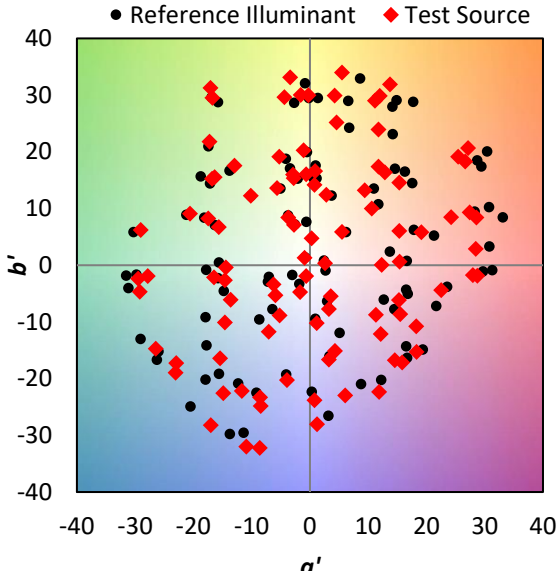
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	247	NR	620	764	NR	750	22	NR	880	1	NR
365	0	NR	495	294	NR	625	723	NR	755	19	NR	885	1	NR
370	0	NR	500	359	NR	630	674	NR	760	16	NR	890	1	NR
375	0	NR	505	421	NR	635	620	NR	765	14	NR	895	0	NR
380	1	NR	510	474	NR	640	566	NR	770	12	NR	900	0	NR
385	1	NR	515	518	NR	645	512	NR	775	10	NR	905	0	NR
390	3	NR	520	552	NR	650	459	NR	780	8	NR	910	0	NR
395	4	NR	525	574	NR	655	410	NR	785	7	NR	915	0	NR
400	6	NR	530	589	NR	660	361	NR	790	6	NR	920	0	NR
405	8	NR	535	605	NR	665	317	NR	795	5	NR	925	0	NR
410	11	NR	540	617	NR	670	276	NR	800	5	NR	930	0	NR
415	18	NR	545	632	NR	675	239	NR	805	4	NR	935	0	NR
420	30	NR	550	648	NR	680	207	NR	810	3	NR	940	0	NR
425	53	NR	555	666	NR	685	178	NR	815	3	NR	945	0	NR
430	95	NR	560	690	NR	690	153	NR	820	3	NR	950	0	NR
435	173	NR	565	716	NR	695	131	NR	825	2	NR	955	0	NR
440	304	NR	570	742	NR	700	112	NR	830	2	NR	960	0	NR
445	559	NR	575	771	NR	705	95	NR	835	2	NR	965	0	NR
450	915	NR	580	798	NR	710	81	NR	840	1	NR	970	0	NR
455	929	NR	585	820	NR	715	69	NR	845	1	NR	975	0	NR
460	582	NR	590	841	NR	720	59	NR	850	1	NR	980	0	NR
465	446	NR	595	852	NR	725	50	NR	855	1	NR	985	0	NR
470	356	NR	600	852	NR	730	42	NR	860	1	NR	990	0	NR
475	250	NR	605	845	NR	735	36	NR	865	1	NR	995	0	NR
480	212	NR	610	827	NR	740	30	NR	870	1	NR	1000	0	NR
485	221	NR	615	801	NR	745	26	NR	875	1	NR			

Summary

$R_f = 84.4$
 $R_g = 96.5$
 CIE $R_a = 84.5$
 $R_9 = 15.9$

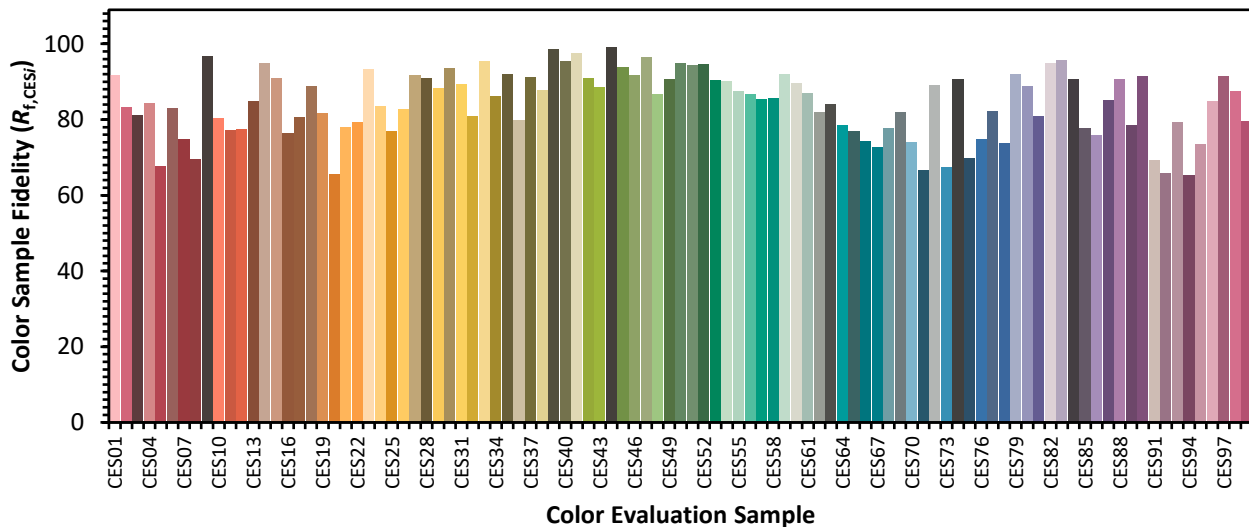


Color Vector Graphics

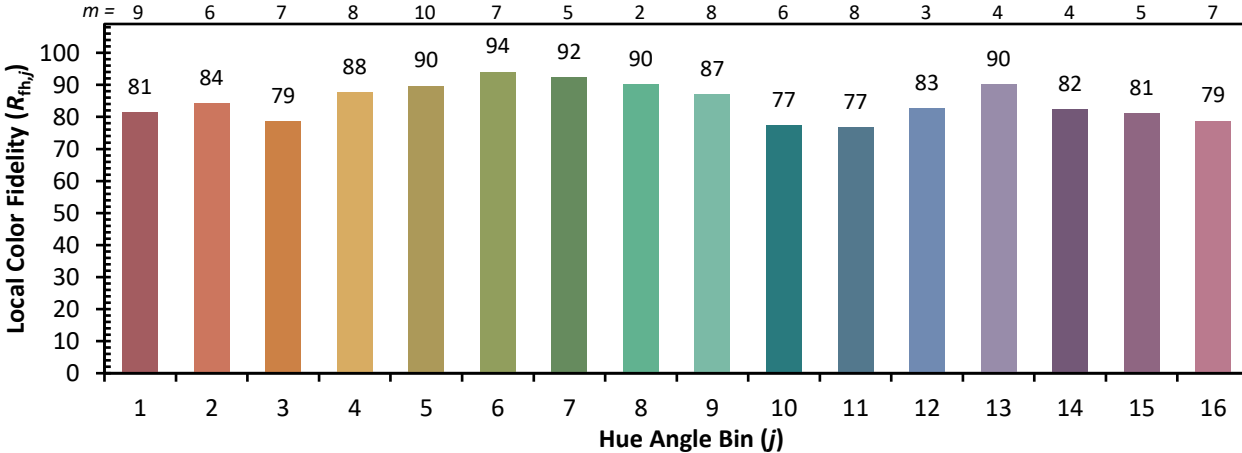
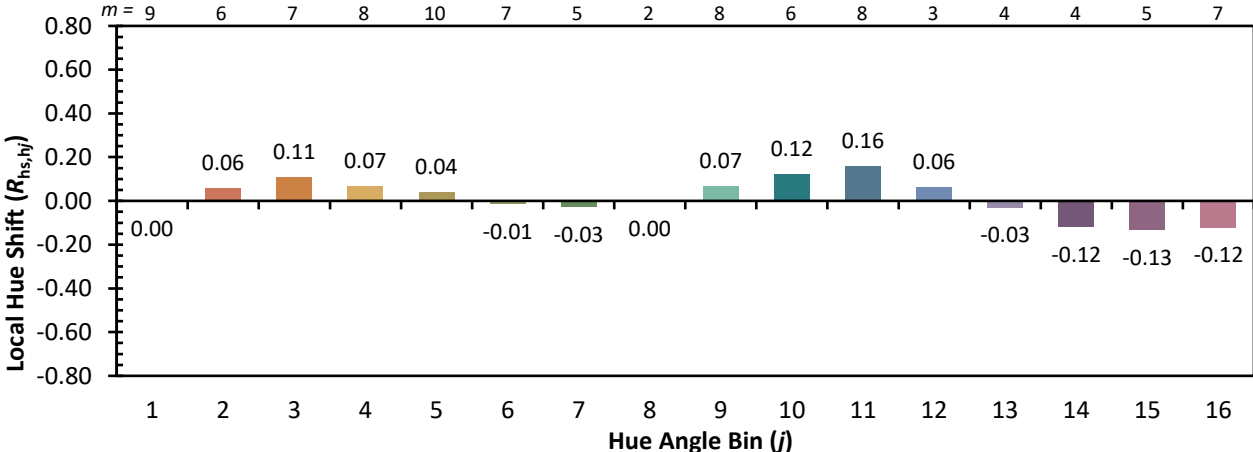
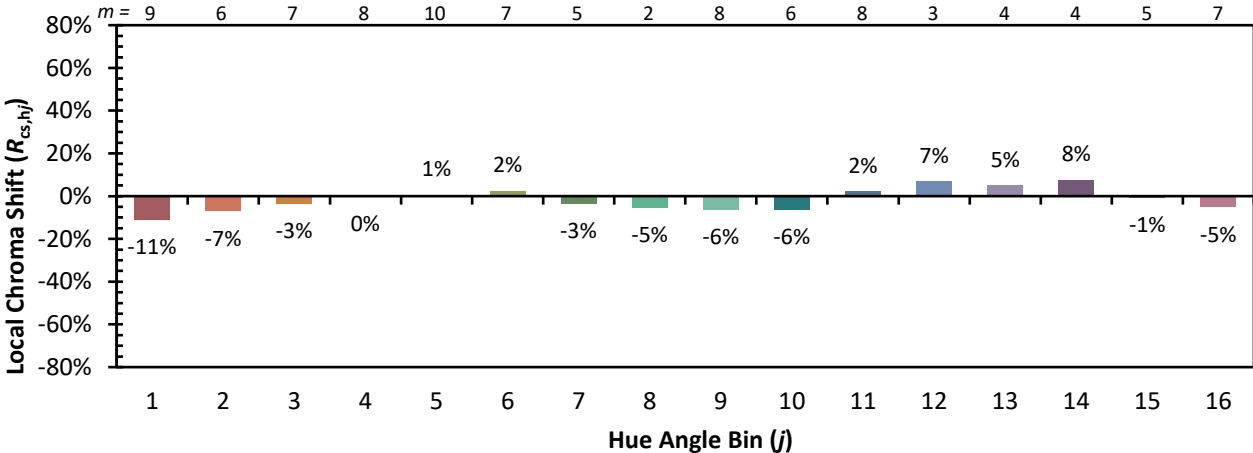


Individual Sample Fidelity Index ($R_{f,i}$)

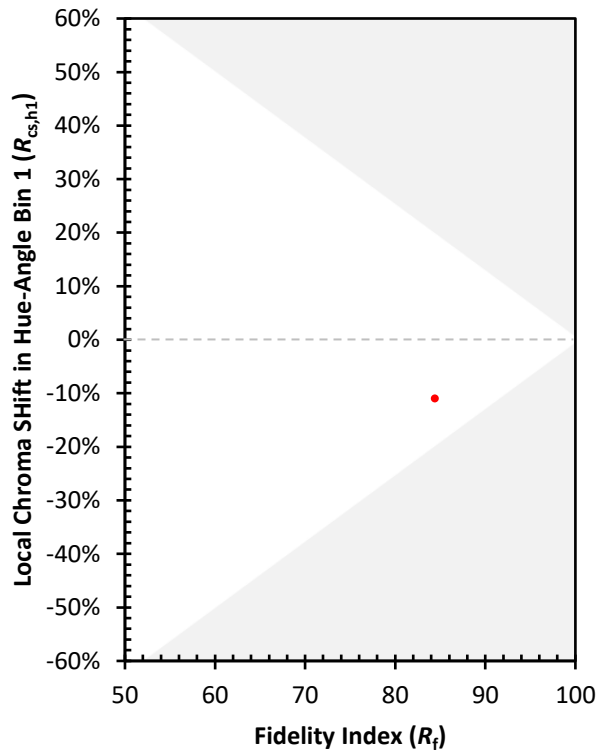
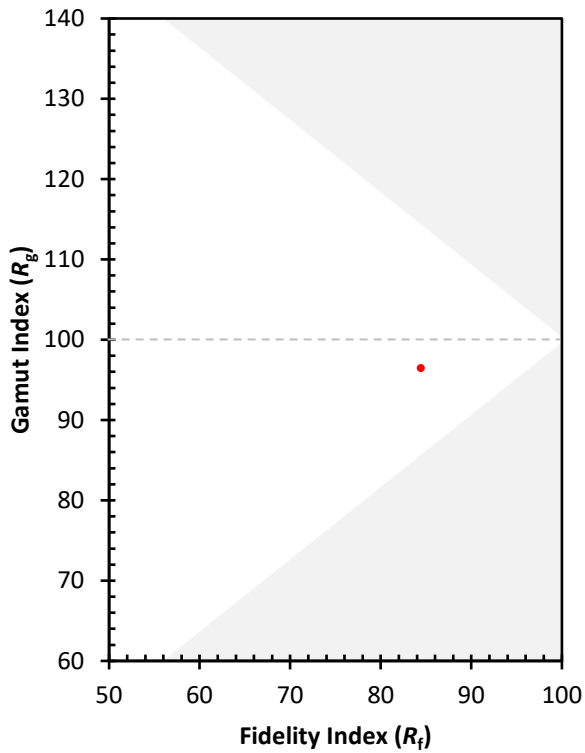
CES01 = 86	CES26 = 83	CES51 = 94	CES76 = 75
CES02 = 62	CES27 = 92	CES52 = 95	CES77 = 82
CES03 = 31	CES28 = 91	CES53 = 90	CES78 = 74
CES04 = 70	CES29 = 88	CES54 = 90	CES79 = 92
CES05 = 48	CES30 = 94	CES55 = 88	CES80 = 89
CES06 = 51	CES31 = 89	CES56 = 87	CES81 = 81
CES07 = 41	CES32 = 81	CES57 = 86	CES82 = 95
CES08 = 40	CES33 = 95	CES58 = 86	CES83 = 96
CES09 = 29	CES34 = 86	CES59 = 92	CES84 = 91
CES10 = 75	CES35 = 92	CES60 = 90	CES85 = 78
CES11 = 57	CES36 = 80	CES61 = 87	CES86 = 76
CES12 = 63	CES37 = 91	CES62 = 82	CES87 = 85
CES13 = 43	CES38 = 88	CES63 = 84	CES88 = 91
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 78
CES15 = 71	CES40 = 96	CES65 = 77	CES90 = 92
CES16 = 47	CES41 = 98	CES66 = 74	CES91 = 69
CES17 = 49	CES42 = 91	CES67 = 73	CES92 = 66
CES18 = 56	CES43 = 89	CES68 = 78	CES93 = 79
CES19 = 71	CES44 = 99	CES69 = 82	CES94 = 65
CES20 = 65	CES45 = 94	CES70 = 74	CES95 = 74
CES21 = 86	CES46 = 92	CES71 = 67	CES96 = 85
CES22 = 78	CES47 = 97	CES72 = 89	CES97 = 91
CES23 = 91	CES48 = 87	CES73 = 68	CES98 = 87
CES24 = 90	CES49 = 91	CES74 = 91	CES99 = 80
CES25 = 71	CES50 = 95	CES75 = 70	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)