

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: P1449896

Luminaire Tested: **TWC60_T2_60W_3000K**

Issue Date: 5/19/2026

Test Information

Test Method: LM-79-08
Report Number: P1449896
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: TWC60_T2_60W_3000K
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T2 distribution, 60W
3000K settings
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8997 lumens
Efficiency: N/A
Efficacy: 150.7 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.42' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

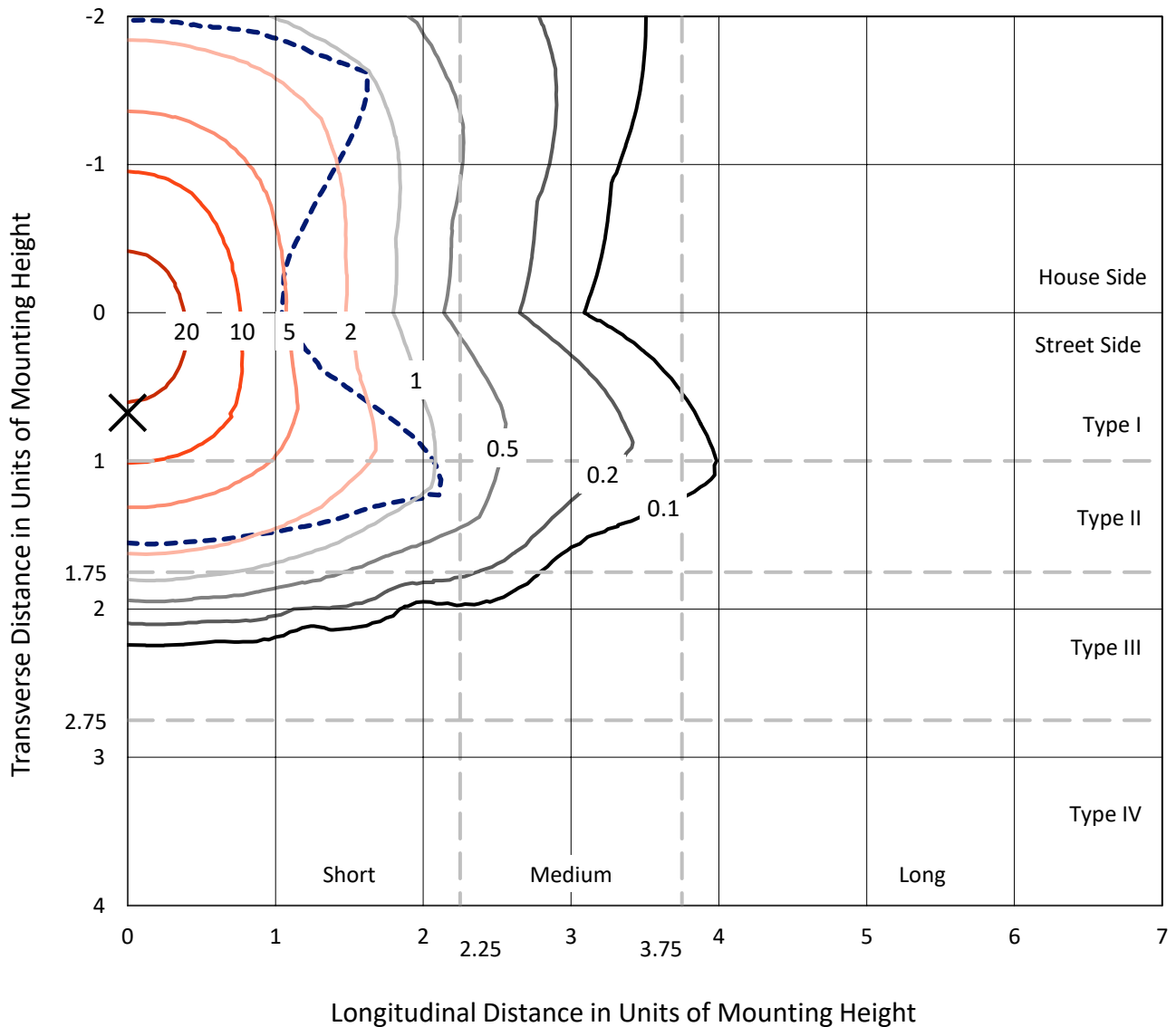
Input Watts (W): 59.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

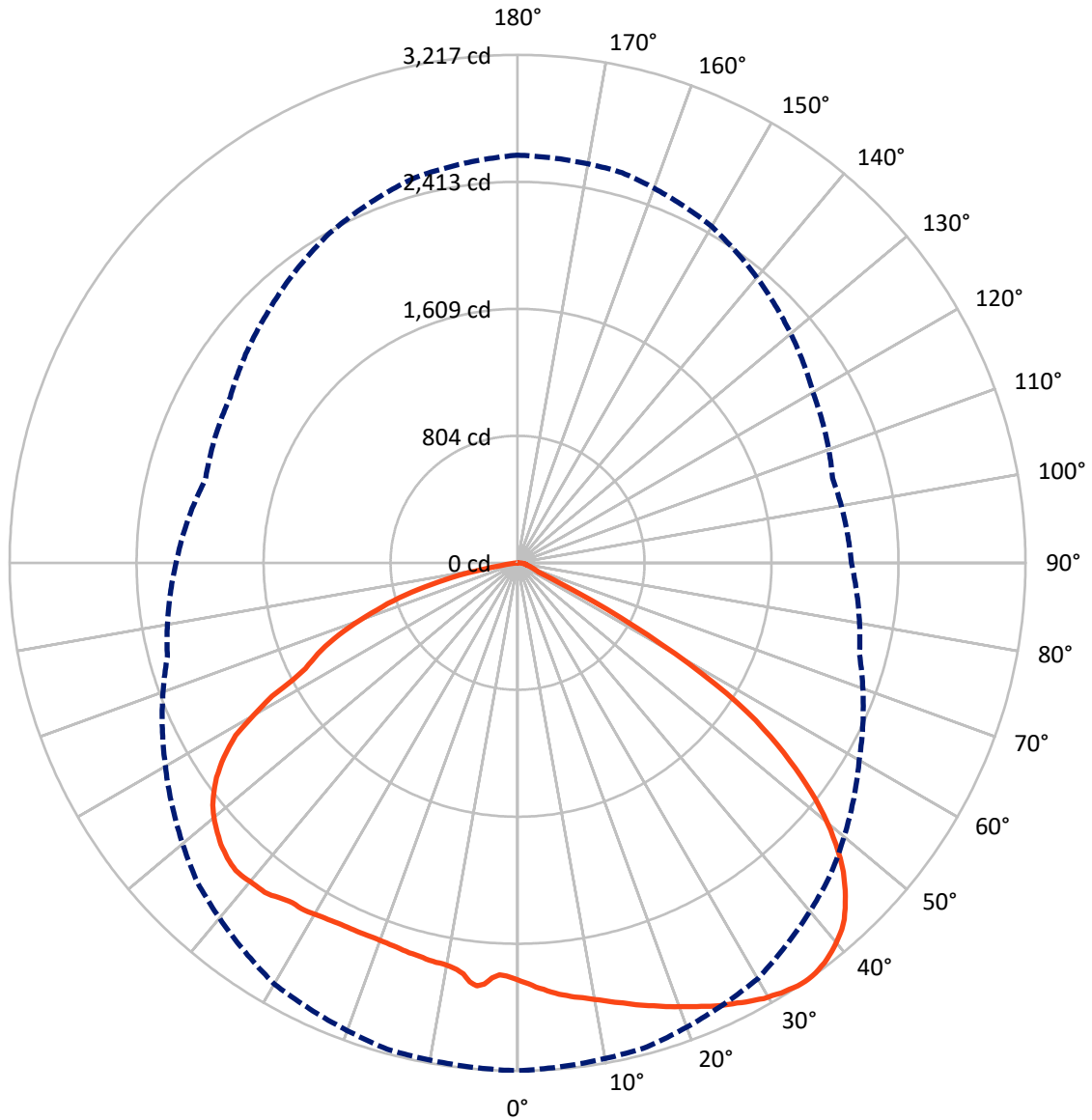
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 27.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 34-Deg Vertical

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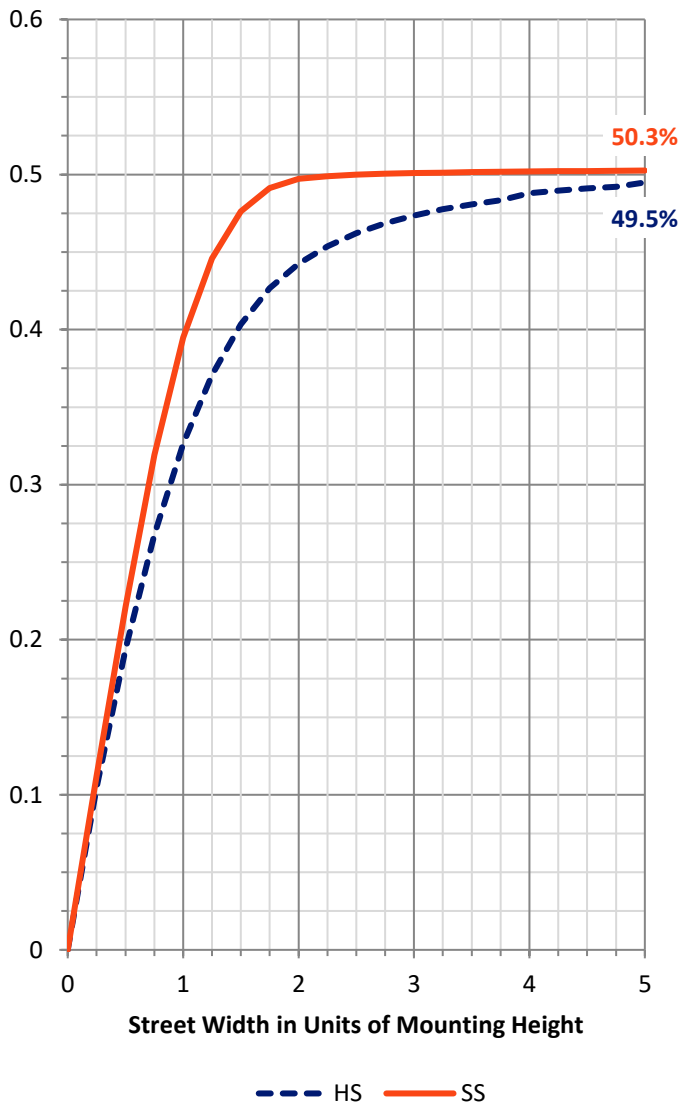
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4476.4	0.0	4476.4
	% Fixture	49.8	0.0	49.8
Street Side	Lumens	4520.6	0.0	4520.6
	% Fixture	50.2	0.0	50.2
Total	Lumens	8997.0	0.0	8997.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.9	2.8
10°-20°	751.3	8.4
20°-30°	1205.4	13.4
30°-40°	1577.4	17.5
40°-50°	1797.4	20.0
50°-60°	1711.5	19.0
60°-70°	1111.1	12.3
70°-80°	492.5	5.5
80°-90°	95.5	1.1
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°	8997.0	100.0
0°-180°	8997.0	100.0

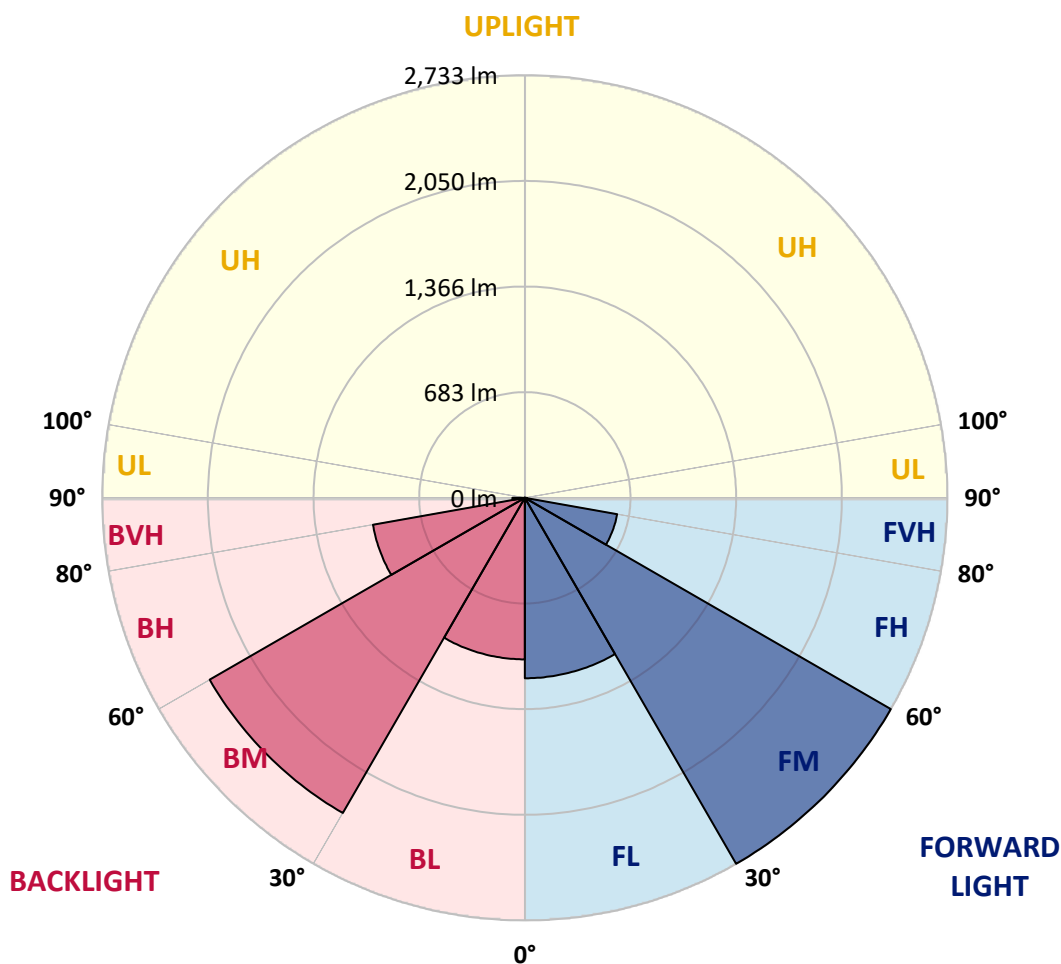


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1166.8	13.0			
FM (30°-60°)	2733.0	30.4			
FH (60°-80°)	606.1	6.7			G0/660
FVH (80°-90°)	14.6	0.2			G1/100
BL (0°-30°)	1044.7	11.6	B3/2500		
BM (30°-60°)	2353.4	26.2	B2/2500		
BH (60°-80°)	997.4	11.1	B2/1000		G2/1000
BVH (80°-90°)	80.9	0.9			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7
1°	2666.6	2665.0	2666.0	2659.5	2654.6	2652.5	2650.2	2645.2	2640.8	2637.5	2634.9
2°	2689.3	2685.0	2680.3	2672.8	2663.7	2654.9	2647.8	2638.7	2631.2	2627.5	2622.8
3°	2707.2	2705.1	2696.6	2684.8	2672.6	2655.6	2644.8	2631.5	2620.9	2613.8	2610.2
4°	2727.6	2721.7	2712.4	2697.4	2677.0	2656.3	2639.5	2623.8	2611.7	2610.8	2621.2
5°	2744.5	2738.9	2726.1	2708.3	2682.6	2657.3	2636.4	2616.0	2604.8	2623.5	2655.5
6°	2759.1	2752.2	2739.3	2717.7	2688.0	2654.3	2625.2	2603.3	2607.4	2654.6	2684.8
7°	2773.4	2764.3	2746.6	2723.9	2690.3	2653.6	2619.7	2595.6	2622.9	2679.0	2688.7
8°	2785.7	2776.8	2758.4	2728.8	2694.0	2651.6	2611.8	2589.0	2643.4	2681.6	2654.4
9°	2800.9	2790.9	2765.6	2737.3	2693.1	2646.7	2601.7	2582.8	2662.6	2660.9	2614.5
10°	2815.4	2801.8	2777.9	2741.1	2695.4	2639.4	2591.9	2586.2	2661.7	2617.8	2596.2
11°	2832.4	2819.2	2785.6	2745.1	2692.1	2635.6	2582.6	2593.9	2650.3	2586.9	2582.9
12°	2850.4	2835.4	2797.0	2751.8	2692.7	2629.5	2567.5	2601.8	2613.4	2571.3	2573.3
13°	2866.3	2850.1	2809.2	2754.2	2691.7	2621.0	2554.0	2607.2	2577.6	2557.3	2566.6
14°	2886.9	2867.7	2822.0	2759.4	2689.8	2612.2	2541.3	2610.6	2549.7	2545.5	2562.1
15°	2907.6	2887.2	2834.1	2765.1	2684.8	2601.5	2526.6	2599.8	2529.2	2535.6	2550.5
16°	2924.7	2903.8	2850.6	2769.6	2685.3	2594.9	2512.3	2580.9	2513.5	2524.8	2543.2
17°	2942.2	2921.6	2861.8	2778.4	2684.1	2585.8	2498.5	2551.2	2495.0	2513.5	2536.9
18°	2963.7	2936.1	2874.2	2785.2	2682.4	2575.6	2486.5	2510.5	2481.0	2499.4	2530.6
19°	2983.0	2955.2	2888.0	2792.3	2678.1	2563.0	2473.7	2473.6	2466.4	2489.0	2520.4
20°	3000.7	2968.9	2897.5	2796.6	2678.0	2554.0	2464.3	2442.3	2448.5	2476.2	2510.2
21°	3020.9	2987.1	2911.9	2800.3	2670.9	2544.7	2459.2	2418.5	2428.1	2462.3	2504.7
22°	3041.4	3002.5	2919.8	2804.6	2664.1	2533.6	2453.6	2395.0	2407.8	2450.1	2498.5
23°	3062.5	3023.3	2930.1	2805.4	2656.3	2517.8	2447.5	2371.4	2390.7	2437.6	2488.3
24°	3082.8	3040.9	2941.1	2808.0	2649.8	2504.0	2438.3	2350.3	2371.6	2426.1	2482.4
25°	3099.5	3057.3	2953.0	2806.4	2639.9	2481.7	2426.3	2329.1	2352.7	2413.6	2479.8
26°	3115.6	3074.1	2964.1	2805.1	2626.7	2460.5	2406.1	2300.2	2329.7	2398.1	2475.0
27°	3135.7	3089.4	2979.3	2807.4	2616.3	2440.8	2381.7	2275.8	2309.1	2385.7	2469.0
28°	3151.2	3103.5	2986.8	2802.7	2601.5	2416.3	2348.2	2247.0	2289.0	2375.1	2467.4
29°	3170.4	3121.2	2998.0	2803.7	2584.8	2392.9	2313.2	2218.9	2270.5	2361.5	2466.2
30°	3180.5	3137.4	3004.4	2801.1	2570.4	2363.7	2269.6	2190.0	2248.8	2349.7	2461.4
31°	3195.1	3147.9	3016.9	2804.0	2553.4	2335.4	2228.8	2161.1	2225.2	2339.2	2461.0
32°	3203.9	3160.5	3023.4	2802.4	2534.6	2306.8	2188.5	2129.2	2205.2	2328.0	2458.4
33°	3213.6	3167.0	3034.0	2800.7	2516.7	2274.6	2148.8	2098.1	2180.8	2317.5	2460.0
34°	3217.1	3174.2	3041.8	2800.4	2499.0	2241.9	2113.7	2065.8	2160.2	2307.4	2459.3
35°	3215.1	3175.7	3049.8	2799.0	2481.5	2210.4	2075.5	2033.6	2134.4	2295.2	2456.9
36°	3204.9	3174.4	3049.7	2794.1	2463.3	2174.5	2036.8	2001.4	2112.1	2288.0	2446.0
37°	3193.9	3164.2	3054.6	2795.3	2445.6	2139.0	1997.1	1968.3	2089.2	2274.5	2445.0
38°	3175.1	3150.7	3051.1	2797.3	2431.0	2105.7	1957.5	1935.5	2068.0	2260.0	2445.8
39°	3152.5	3134.3	3042.9	2796.7	2415.2	2070.1	1916.4	1904.8	2045.3	2241.7	2451.1
40°	3127.8	3111.5	3035.7	2798.0	2400.6	2033.5	1875.2	1874.1	2023.0	2229.0	2457.0
41°	3100.4	3085.9	3020.7	2798.0	2386.9	2000.2	1834.0	1843.4	1999.5	2224.9	2454.7
42°	3062.5	3054.5	3002.9	2796.4	2373.2	1965.3	1793.6	1808.0	1973.0	2217.9	2453.7
43°	3014.0	3018.1	2978.5	2795.0	2362.1	1932.4	1748.3	1772.6	1941.8	2203.5	2453.4
44°	2962.3	2972.8	2950.7	2792.4	2351.1	1901.3	1701.8	1737.7	1919.7	2187.5	2455.0



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2905.6	2924.6	2921.3	2784.9	2341.4	1871.3	1655.9	1699.8	1897.6	2170.8	2454.9
46°	2844.8	2868.2	2883.5	2775.5	2332.6	1842.8	1612.0	1662.7	1875.5	2165.7	2449.0
47°	2771.4	2806.2	2845.6	2760.5	2327.0	1812.6	1562.9	1625.4	1851.1	2158.1	2435.7
48°	2692.1	2736.5	2795.2	2745.8	2318.4	1778.5	1516.4	1584.8	1822.2	2147.2	2420.1
49°	2607.2	2657.3	2740.3	2720.4	2312.4	1742.6	1467.2	1540.7	1793.7	2133.4	2402.5
50°	2514.7	2567.3	2680.1	2694.0	2308.3	1703.7	1419.3	1492.7	1771.4	2118.2	2382.1
51°	2413.4	2477.8	2611.8	2665.6	2303.3	1663.8	1370.1	1446.2	1747.3	2098.9	2360.0
52°	2306.4	2374.8	2536.5	2633.9	2301.0	1622.0	1319.2	1406.5	1717.8	2081.8	2339.0
53°	2190.7	2267.6	2450.0	2592.5	2295.3	1573.2	1270.6	1368.9	1685.9	2065.9	2314.9
54°	2071.0	2152.0	2352.0	2544.4	2288.3	1531.1	1222.5	1322.8	1652.7	2047.0	2288.9
55°	1944.0	2029.2	2247.9	2487.4	2283.0	1487.9	1170.2	1275.6	1616.2	2025.6	2260.6
56°	1807.8	1899.4	2136.2	2426.0	2273.8	1445.8	1118.9	1232.1	1585.9	2000.8	2229.7
57°	1653.7	1758.7	2013.1	2355.3	2260.0	1405.2	1068.1	1189.0	1551.0	1975.4	2195.7
58°	1468.6	1605.2	1883.1	2269.5	2238.1	1364.8	1015.3	1144.0	1517.8	1949.5	2156.6
59°	1260.4	1423.2	1743.2	2173.7	2213.6	1324.9	962.8	1095.3	1481.7	1923.4	2110.4
60°	1044.8	1213.7	1591.3	2062.4	2180.9	1285.0	908.4	1045.5	1444.7	1897.2	2059.0
61°	841.8	997.7	1423.9	1937.8	2145.7	1248.0	856.4	995.7	1407.0	1870.9	1997.0
62°	638.9	795.2	1222.8	1791.0	2101.8	1215.9	807.9	948.9	1371.6	1835.0	1903.9
63°	436.0	592.9	1013.3	1633.3	2050.2	1187.2	755.6	899.1	1338.4	1795.9	1810.9
64°	282.7	390.5	804.3	1469.2	1988.4	1163.7	704.1	852.8	1303.2	1751.5	1715.9
65°	185.8	243.9	595.3	1277.0	1916.6	1147.6	654.9	807.0	1267.1	1706.1	1554.7
66°	143.0	160.6	386.2	1063.3	1830.6	1140.1	606.3	761.3	1228.3	1645.2	1437.6
67°	129.7	126.1	236.1	843.9	1724.8	1136.0	559.9	715.6	1190.2	1547.3	1368.9
68°	120.6	114.6	149.5	624.4	1594.0	1133.9	513.0	671.5	1145.3	1426.0	1311.5
69°	111.6	105.5	116.9	404.8	1447.2	1130.3	467.9	628.5	1101.0	1331.9	1255.0
70°	102.8	96.9	105.2	235.9	1260.3	1129.5	424.0	587.2	1058.6	1272.7	1200.7
71°	94.6	89.6	96.6	139.2	1013.7	1135.4	381.6	545.5	1010.7	1215.3	1150.7
72°	88.0	82.3	88.1	101.0	750.5	1136.5	343.2	504.6	934.3	1152.3	1098.1
73°	81.5	75.0	79.5	89.6	487.0	1109.8	305.1	462.6	862.4	1087.0	1042.4
74°	74.9	68.6	70.9	78.7	223.5	1032.4	268.7	421.7	814.8	1025.4	979.9
75°	68.2	61.6	62.8	67.8	124.0	933.5	234.4	383.4	775.0	967.2	914.5
76°	62.5	55.3	53.6	60.4	104.5	827.1	200.1	345.3	731.1	910.5	835.6
77°	58.3	50.5	46.6	54.6	86.1	720.6	165.9	309.3	687.6	857.7	744.8
78°	55.5	46.3	40.7	48.1	67.8	614.1	137.3	265.9	647.4	806.8	662.7
79°	53.3	43.8	36.6	39.9	61.5	468.5	111.6	231.9	604.7	758.0	586.7
80°	50.3	41.6	33.3	32.5	61.4	354.0	88.5	197.9	562.9	694.7	527.7
81°	46.9	38.9	30.8	27.6	57.1	247.5	69.2	163.9	522.9	628.5	467.0
82°	42.9	35.8	28.4	24.1	48.9	161.1	52.6	137.6	479.6	560.9	332.9
83°	35.4	31.1	25.9	21.0	40.5	94.9	38.1	112.8	436.7	509.4	198.7
84°	28.0	25.5	21.9	18.3	27.8	70.9	29.1	88.5	377.4	462.7	67.1
85°	20.1	18.9	16.5	15.6	16.4	47.0	20.2	66.9	303.9	369.7	38.6
86°	14.0	14.3	12.0	11.6	10.5	23.2	11.3	46.6	243.2	276.6	10.6
87°	9.6	9.7	8.2	7.9	7.1	12.7	6.4	31.6	182.5	183.6	5.2
88°	5.1	5.2	4.5	4.3	3.7	8.5	2.9	16.5	121.8	90.6	1.8
89°	0.7	0.7	0.7	0.7	0.8	4.4	1.0	1.8	61.1	0.7	0.4



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
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



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
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



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
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: P1449896

CATALOG NUMBER: TWC60_T2_60W_3000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7	2649.7
1°	2632.4	2632.2	2634.3	2632.5	2636.5	2639.5	2642.9	2650.6	2654.8	2657.5	2661.0
2°	2616.7	2618.1	2617.2	2619.0	2628.1	2632.6	2639.1	2648.3	2659.3	2665.4	2674.1
3°	2609.1	2612.2	2607.9	2608.5	2612.3	2623.8	2631.0	2644.6	2658.6	2672.8	2689.0
4°	2633.8	2633.2	2624.9	2611.2	2602.8	2612.2	2624.1	2642.9	2664.3	2680.8	2700.6
5°	2673.4	2675.4	2663.0	2640.8	2607.4	2601.2	2616.7	2637.3	2663.0	2689.5	2712.3
6°	2692.2	2692.7	2692.0	2669.2	2629.0	2594.8	2607.4	2631.0	2662.6	2695.6	2721.1
7°	2677.0	2671.9	2679.7	2682.5	2655.3	2597.3	2597.8	2626.2	2663.0	2700.0	2730.6
8°	2630.1	2625.1	2634.0	2665.1	2670.9	2607.5	2587.0	2620.0	2663.6	2703.3	2737.0
9°	2604.4	2604.4	2604.7	2619.5	2666.5	2626.2	2573.9	2609.5	2657.7	2704.4	2743.8
10°	2593.0	2592.2	2591.5	2591.0	2634.3	2639.0	2565.8	2601.6	2655.6	2707.1	2751.3
11°	2583.3	2584.3	2581.6	2577.5	2596.3	2641.1	2558.3	2592.1	2648.1	2705.8	2754.5
12°	2581.4	2582.0	2574.9	2563.5	2569.1	2629.5	2554.0	2578.1	2644.6	2705.7	2761.7
13°	2575.6	2578.2	2571.7	2555.6	2553.3	2600.8	2556.8	2565.2	2638.1	2705.4	2768.5
14°	2569.3	2571.5	2561.0	2549.2	2536.9	2563.6	2563.3	2554.7	2632.6	2705.7	2775.1
15°	2563.0	2565.0	2554.9	2540.6	2522.0	2531.4	2562.7	2543.6	2624.3	2708.3	2784.6
16°	2558.5	2562.9	2551.5	2528.2	2511.2	2506.7	2564.8	2525.5	2616.7	2710.4	2792.1
17°	2554.2	2557.9	2545.8	2520.6	2496.0	2489.1	2554.5	2511.9	2607.9	2709.4	2801.6
18°	2547.1	2550.9	2536.6	2510.1	2480.7	2468.6	2536.6	2495.0	2603.5	2709.4	2811.5
19°	2539.9	2548.3	2532.1	2502.8	2464.1	2449.9	2511.5	2481.8	2595.3	2707.8	2820.2
20°	2538.5	2546.3	2525.2	2490.6	2453.6	2431.8	2477.8	2462.3	2586.4	2706.8	2822.4
21°	2536.3	2543.6	2521.5	2480.1	2439.9	2414.0	2439.9	2446.8	2579.8	2707.1	2829.2
22°	2533.6	2543.0	2518.9	2471.6	2423.5	2392.1	2402.3	2430.0	2567.5	2701.5	2833.7
23°	2533.9	2545.6	2516.2	2465.0	2407.4	2365.7	2370.4	2415.8	2555.4	2697.8	2839.4
24°	2531.6	2545.6	2515.2	2453.0	2391.5	2343.7	2342.2	2401.1	2538.7	2690.1	2844.1
25°	2530.3	2546.6	2514.2	2448.1	2378.3	2324.6	2314.4	2392.7	2520.8	2681.9	2846.1
26°	2533.6	2548.3	2510.5	2440.3	2363.3	2300.1	2287.8	2384.7	2504.0	2672.8	2849.4
27°	2532.6	2550.1	2511.5	2435.5	2348.3	2274.8	2259.6	2373.1	2481.6	2666.3	2851.8
28°	2534.7	2555.1	2511.5	2427.6	2331.6	2249.0	2235.0	2361.6	2458.6	2651.9	2853.5
29°	2540.3	2560.0	2512.6	2418.8	2317.8	2227.8	2207.7	2345.4	2434.5	2641.7	2857.1
30°	2541.4	2565.5	2516.6	2413.2	2302.2	2201.7	2176.3	2319.4	2407.8	2627.3	2862.4
31°	2552.0	2574.2	2518.1	2411.1	2287.5	2178.8	2143.2	2290.1	2379.6	2615.4	2864.9
32°	2556.0	2581.4	2525.2	2404.5	2271.1	2152.2	2113.0	2253.7	2354.1	2604.5	2862.9
33°	2558.3	2583.3	2526.2	2402.8	2252.0	2126.8	2077.5	2209.6	2325.1	2589.0	2868.6
34°	2558.0	2581.7	2524.5	2400.1	2239.9	2101.1	2046.7	2162.5	2296.3	2575.8	2865.9
35°	2558.5	2591.1	2521.9	2395.8	2221.9	2076.7	2013.0	2114.6	2266.2	2562.3	2869.9
36°	2568.7	2603.6	2524.0	2387.3	2207.2	2050.5	1977.7	2065.9	2236.3	2554.4	2871.9
37°	2581.8	2619.6	2534.4	2375.7	2192.7	2024.3	1941.1	2024.3	2206.5	2539.6	2876.1
38°	2591.2	2629.6	2545.2	2373.1	2177.2	1996.7	1907.1	1980.2	2178.1	2532.4	2876.2
39°	2595.4	2631.2	2552.3	2371.4	2157.8	1967.7	1873.1	1938.4	2148.4	2521.6	2877.2
40°	2597.5	2633.7	2550.9	2367.4	2136.1	1941.2	1839.1	1894.5	2116.5	2511.7	2874.9
41°	2601.2	2637.9	2550.0	2363.5	2119.2	1915.5	1797.2	1853.8	2085.2	2500.4	2877.9
42°	2604.8	2642.9	2558.4	2357.4	2104.3	1889.8	1756.4	1811.3	2054.1	2494.5	2871.6
43°	2608.7	2642.3	2560.0	2357.1	2092.9	1864.0	1713.6	1766.3	2024.3	2490.9	2866.6
44°	2603.1	2633.5	2559.6	2357.0	2080.4	1830.4	1672.4	1721.3	1991.0	2489.1	2855.1



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CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2592.5	2622.1	2551.0	2354.4	2058.1	1794.1	1631.0	1675.8	1957.8	2486.8	2840.9
46°	2576.7	2605.6	2536.4	2350.5	2038.7	1758.4	1589.8	1630.1	1927.6	2482.5	2821.9
47°	2560.5	2590.5	2518.9	2342.2	2021.3	1724.1	1549.0	1581.8	1895.4	2477.9	2798.4
48°	2542.5	2567.9	2501.8	2331.2	2005.9	1697.2	1507.1	1535.9	1866.1	2475.5	2769.3
49°	2521.1	2546.7	2480.6	2316.3	1987.0	1664.4	1464.7	1485.6	1835.5	2471.8	2741.4
50°	2498.2	2522.8	2461.4	2299.4	1966.6	1630.5	1420.9	1435.8	1803.8	2466.5	2707.2
51°	2472.7	2495.4	2438.7	2275.6	1943.2	1597.5	1376.4	1388.0	1775.1	2460.5	2667.9
52°	2447.6	2466.7	2412.5	2255.6	1921.8	1565.3	1327.8	1338.5	1745.3	2453.6	2616.8
53°	2413.6	2427.1	2383.9	2231.1	1905.0	1536.3	1278.4	1289.3	1718.3	2441.7	2562.7
54°	2377.3	2386.7	2354.1	2207.3	1888.3	1501.9	1229.0	1237.9	1694.8	2424.1	2498.0
55°	2335.8	2341.1	2314.6	2180.4	1871.6	1465.5	1184.9	1185.8	1672.5	2403.3	2426.6
56°	2288.4	2287.5	2271.9	2154.0	1849.2	1423.4	1138.1	1133.0	1655.2	2371.8	2347.1
57°	2234.2	2230.8	2221.8	2121.3	1824.6	1382.9	1088.4	1080.0	1643.6	2341.3	2251.8
58°	2173.6	2163.0	2165.8	2091.0	1801.5	1340.6	1038.7	1027.0	1629.3	2303.9	2149.8
59°	2108.5	2093.0	2105.4	2053.6	1779.5	1301.1	990.7	975.2	1617.7	2259.9	2030.6
60°	2037.0	1984.8	2038.9	2014.8	1750.2	1260.8	943.2	924.5	1603.2	2210.5	1900.7
61°	1907.7	1876.6	1925.4	1966.8	1719.8	1222.1	895.9	874.2	1589.2	2149.9	1758.6
62°	1778.5	1768.1	1812.0	1904.0	1687.7	1180.8	846.8	823.8	1583.3	2082.8	1602.7
63°	1649.3	1599.7	1698.2	1841.2	1648.0	1137.2	795.6	771.9	1576.9	1998.0	1433.0
64°	1517.7	1500.6	1542.8	1777.1	1609.4	1097.3	744.7	719.7	1573.9	1903.1	1245.5
65°	1447.3	1443.0	1450.5	1653.0	1564.9	1055.8	694.0	671.2	1567.1	1789.7	1033.6
66°	1394.2	1389.2	1389.2	1502.9	1519.7	1012.6	645.0	623.3	1563.1	1656.1	819.8
67°	1341.0	1329.2	1339.6	1397.6	1467.4	969.6	597.1	575.5	1560.2	1504.5	605.9
68°	1279.2	1259.6	1287.1	1328.5	1402.4	925.4	549.9	524.4	1542.7	1317.7	392.1
69°	1212.0	1181.9	1226.4	1261.8	1304.1	879.4	503.8	475.0	1504.5	1100.6	235.7
70°	1141.8	1104.7	1165.8	1199.2	1214.9	835.5	459.4	427.4	1437.9	849.7	143.9
71°	1062.3	1017.3	1095.4	1141.2	1161.1	791.1	418.4	380.1	1341.1	597.7	107.1
72°	981.5	938.1	1021.9	1092.3	1115.6	748.1	380.4	336.4	1250.5	345.8	95.4
73°	904.3	864.0	943.0	1046.5	1061.8	701.5	341.1	294.7	1176.8	189.0	86.2
74°	823.0	781.6	861.7	999.6	1009.3	634.0	305.2	257.6	1059.0	112.2	77.1
75°	742.9	697.6	779.5	950.7	956.1	578.7	270.8	221.2	923.2	95.7	67.9
76°	656.9	602.9	700.3	896.6	903.2	538.0	240.9	188.3	734.2	80.3	58.2
77°	569.5	512.5	618.2	828.3	848.4	498.9	211.0	160.9	543.3	64.9	49.9
78°	489.7	425.7	544.3	745.2	789.6	457.9	181.2	138.0	352.4	59.3	42.1
79°	403.6	320.4	467.4	656.2	732.8	419.5	156.1	118.6	197.0	56.6	35.2
80°	291.5	215.1	384.4	574.8	672.6	383.5	128.1	98.8	106.5	51.7	29.9
81°	179.4	110.5	253.0	517.6	607.0	346.6	104.0	80.5	86.5	42.2	26.5
82°	69.7	36.2	122.2	472.3	545.6	310.0	84.6	62.2	67.4	33.4	23.6
83°	51.0	28.5	86.2	331.6	477.2	272.3	66.3	44.0	48.4	24.2	21.1
84°	32.3	20.9	50.2	191.0	424.8	230.9	50.7	31.6	46.8	16.9	18.6
85°	13.8	13.3	14.5	50.6	375.3	189.6	36.9	21.9	40.7	13.2	15.4
86°	8.4	7.9	9.1	28.1	234.8	148.3	26.7	14.2	30.1	10.4	10.6
87°	4.0	3.9	4.2	5.5	96.0	110.6	16.5	9.6	17.8	6.9	6.6
88°	1.5	1.5	1.6	1.6	47.5	73.6	6.3	5.1	11.9	3.5	2.5
89°	0.3	0.3	0.3	0.4	0.6	36.6	0.9	0.7	6.1	0.7	0.7



REPORT NUMBER: P1449896
 CATALOG NUMBER: TWC60_T2_60W_3000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
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: P1449896
 CATALOG NUMBER: TWC60_T2_60W_3000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
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: P1449896
CATALOG NUMBER: TWC60_T2_60W_3000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
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: P1449896
 CATALOG NUMBER: TWC60_T2_60W_3000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	2649.7	2649.7	2649.7
1°	2665.2	2667.1	2666.6
2°	2681.9	2684.5	2689.3
3°	2696.3	2703.9	2707.2
4°	2714.4	2722.0	2727.6
5°	2728.3	2738.4	2744.5
6°	2740.5	2753.7	2759.1
7°	2752.3	2770.2	2773.4
8°	2764.2	2783.1	2785.7
9°	2774.4	2793.9	2800.9
10°	2783.8	2805.9	2815.4
11°	2795.1	2822.5	2832.4
12°	2807.2	2841.5	2850.4
13°	2822.6	2857.8	2866.3
14°	2836.1	2878.5	2886.9
15°	2851.8	2894.0	2907.6
16°	2866.4	2912.7	2924.7
17°	2878.6	2926.7	2942.2
18°	2892.1	2946.9	2963.7
19°	2905.9	2964.8	2983.0
20°	2920.2	2981.7	3000.7
21°	2935.1	2998.0	3020.9
22°	2946.6	3020.0	3041.4
23°	2957.4	3038.5	3062.5
24°	2973.9	3056.8	3082.8
25°	2985.3	3078.0	3099.5
26°	3000.1	3093.0	3115.6
27°	3013.7	3106.1	3135.7
28°	3025.3	3124.8	3151.2
29°	3032.7	3142.5	3170.4
30°	3048.6	3156.3	3180.5
31°	3058.9	3168.1	3195.1
32°	3068.6	3178.4	3203.9
33°	3077.9	3185.4	3213.6
34°	<i>3080.4</i>	<i>3189.0</i>	<i>3217.1</i>
35°	3089.1	3189.7	3215.1
36°	3092.4	3185.4	3204.9
37°	3087.9	3176.1	3193.9
38°	3085.4	3162.8	3175.1
39°	3075.9	3140.3	3152.5
40°	3061.4	3115.7	3127.8
41°	3040.4	3090.5	3100.4
42°	3018.4	3054.7	3062.5
43°	2990.6	3018.0	3014.0
44°	2959.4	2970.7	2962.3



REPORT NUMBER: P1449896
CATALOG NUMBER: TWC60_T2_60W_3000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	2923.7	2914.6	2905.6
46°	2881.5	2855.0	2844.8
47°	2828.8	2790.6	2771.4
48°	2774.4	2715.2	2692.1
49°	2709.2	2629.5	2607.2
50°	2638.1	2541.3	2514.7
51°	2559.3	2448.0	2413.4
52°	2472.2	2343.1	2306.4
53°	2381.9	2229.8	2190.7
54°	2276.6	2113.4	2071.0
55°	2164.2	1989.1	1944.0
56°	2043.5	1852.9	1807.8
57°	1915.0	1710.0	1653.7
58°	1775.6	1543.0	1468.6
59°	1629.7	1346.5	1260.4
60°	1461.5	1133.8	1044.8
61°	1271.3	910.4	841.8
62°	1055.3	706.6	638.9
63°	847.0	503.0	436.0
64°	638.8	333.7	282.7
65°	430.5	210.1	185.8
66°	271.5	148.4	143.0
67°	168.1	126.1	129.7
68°	123.6	116.2	120.6
69°	109.2	107.5	111.6
70°	99.8	99.0	102.8
71°	91.9	91.6	94.6
72°	83.7	84.2	88.0
73°	75.4	76.9	81.5
74°	69.0	70.5	74.9
75°	61.4	63.7	68.2
76°	53.1	57.6	62.5
77°	46.2	52.9	58.3
78°	41.3	49.5	55.5
79°	37.5	47.0	53.3
80°	34.7	44.6	50.3
81°	32.3	41.6	46.9
82°	29.7	38.2	42.9
83°	26.7	32.6	35.4
84°	21.5	26.5	28.0
85°	16.9	19.6	20.1
86°	11.0	14.2	14.0
87°	7.6	9.6	9.6
88°	4.1	5.2	5.1
89°	0.7	0.7	0.7



REPORT NUMBER: P1449896
CATALOG NUMBER: TWC60_T2_60W_3000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
90°	0.0	0.0	0.0
91°	0.0	0.0	0.0
92°	0.0	0.0	0.0
93°	0.0	0.0	0.0
94°	0.0	0.0	0.0
95°	0.0	0.0	0.0
96°	0.0	0.0	0.0
97°	0.0	0.0	0.0
98°	0.0	0.0	0.0
99°	0.0	0.0	0.0
100°	0.0	0.0	0.0
101°	0.0	0.0	0.0
102°	0.0	0.0	0.0
103°	0.0	0.0	0.0
104°	0.0	0.0	0.0
105°	0.0	0.0	0.0
106°	0.0	0.0	0.0
107°	0.0	0.0	0.0
108°	0.0	0.0	0.0
109°	0.0	0.0	0.0
110°	0.0	0.0	0.0
111°	0.0	0.0	0.0
112°	0.0	0.0	0.0
113°	0.0	0.0	0.0
114°	0.0	0.0	0.0
115°	0.0	0.0	0.0
116°	0.0	0.0	0.0
117°	0.0	0.0	0.0
118°	0.0	0.0	0.0
119°	0.0	0.0	0.0
120°	0.0	0.0	0.0
121°	0.0	0.0	0.0
122°	0.0	0.0	0.0
123°	0.0	0.0	0.0
124°	0.0	0.0	0.0
125°	0.0	0.0	0.0
126°	0.0	0.0	0.0
127°	0.0	0.0	0.0
128°	0.0	0.0	0.0
129°	0.0	0.0	0.0
130°	0.0	0.0	0.0
131°	0.0	0.0	0.0
132°	0.0	0.0	0.0
133°	0.0	0.0	0.0
134°	0.0	0.0	0.0



REPORT NUMBER: P1449896
CATALOG NUMBER: TWC60_T2_60W_3000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
135°	0.0	0.0	0.0
136°	0.0	0.0	0.0
137°	0.0	0.0	0.0
138°	0.0	0.0	0.0
139°	0.0	0.0	0.0
140°	0.0	0.0	0.0
141°	0.0	0.0	0.0
142°	0.0	0.0	0.0
143°	0.0	0.0	0.0
144°	0.0	0.0	0.0
145°	0.0	0.0	0.0
146°	0.0	0.0	0.0
147°	0.0	0.0	0.0
148°	0.0	0.0	0.0
149°	0.0	0.0	0.0
150°	0.0	0.0	0.0
151°	0.0	0.0	0.0
152°	0.0	0.0	0.0
153°	0.0	0.0	0.0
154°	0.0	0.0	0.0
155°	0.0	0.0	0.0
156°	0.0	0.0	0.0
157°	0.0	0.0	0.0
158°	0.0	0.0	0.0
159°	0.0	0.0	0.0
160°	0.0	0.0	0.0
161°	0.0	0.0	0.0
162°	0.0	0.0	0.0
163°	0.0	0.0	0.0
164°	0.0	0.0	0.0
165°	0.0	0.0	0.0
166°	0.0	0.0	0.0
167°	0.0	0.0	0.0
168°	0.0	0.0	0.0
169°	0.0	0.0	0.0
170°	0.0	0.0	0.0
171°	0.0	0.0	0.0
172°	0.0	0.0	0.0
173°	0.0	0.0	0.0
174°	0.0	0.0	0.0
175°	0.0	0.0	0.0
176°	0.0	0.0	0.0
177°	0.0	0.0	0.0
178°	0.0	0.0	0.0
179°	0.0	0.0	0.0



REPORT NUMBER: P1449896
CATALOG NUMBER: TWC60_T2_60W_3000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	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

Lumark

Report Number: SP1-2601-659-1

Test Date: 02/12/2026

Luminaire Tested: MWP2460W34VDDKYYAD-T4-24W-3000K

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

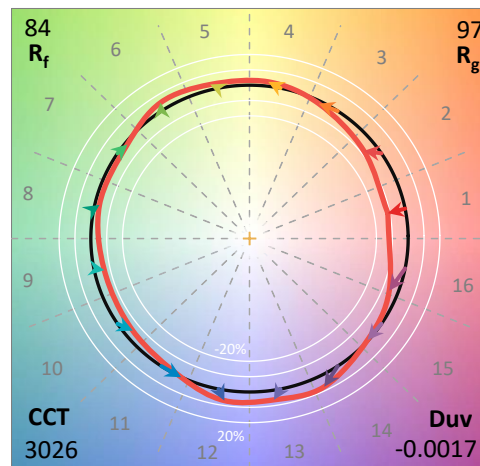
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2601-659-1
 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-3000K**
 Description: Mester Wedge, at T4 beam setting, 24W output, 3000K

Spectral Parameters

CCT (K): 3026
 CIE u': 0.2503
 CIE v': 0.5184
 Duv: -0.0017
 CIE x: 0.4326
 CIE y: 0.3983
 CIE z: 0.1691
 Peak Wavelength (nm): 604
 Dominant Wavelength (nm): 583
 Purity: 49.3886
 Rf: 84
 Rg: 97.4

CRI (Ra):	82.7		
R1:	81.4	R9:	7.5
R2:	90.7	R10:	78.8
R3:	96.3	R11:	80.8
R4:	81.1	R12:	70.7
R5:	81.6	R13:	83.7
R6:	88.6	R14:	98.6
R7:	82.6	R15:	74.2
R8:	59.3		



Test Conditions

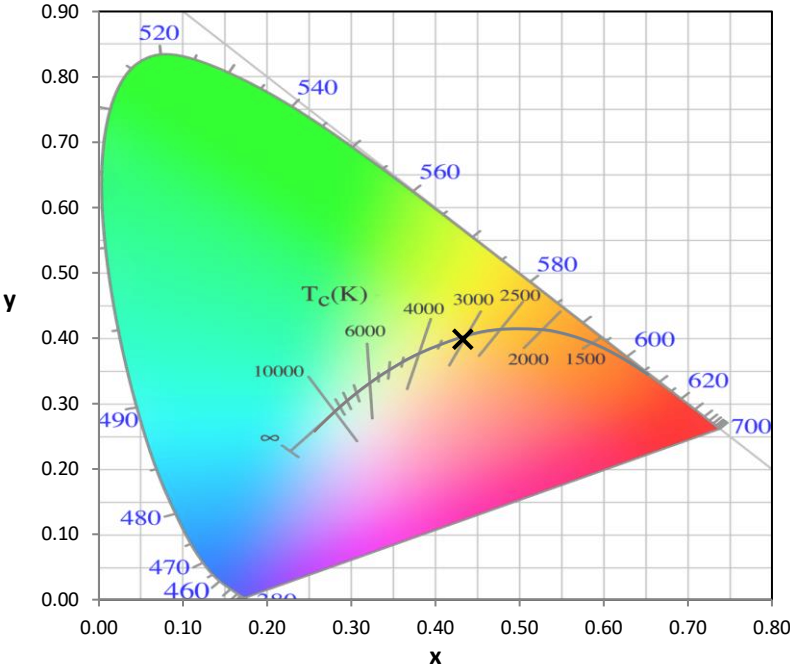
Stabilization Time: 64M
 Operation Time: 2H 4M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-1

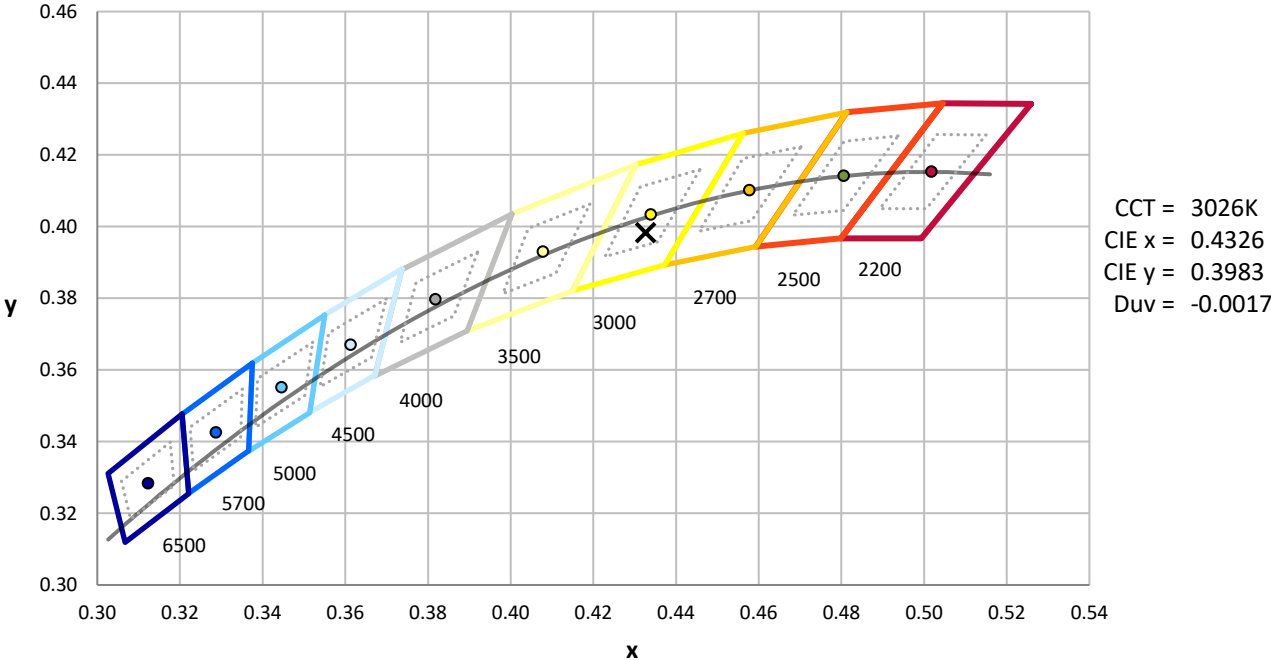
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	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: SP1-2601-659-1

CIE 1931 Chromaticity Diagram



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

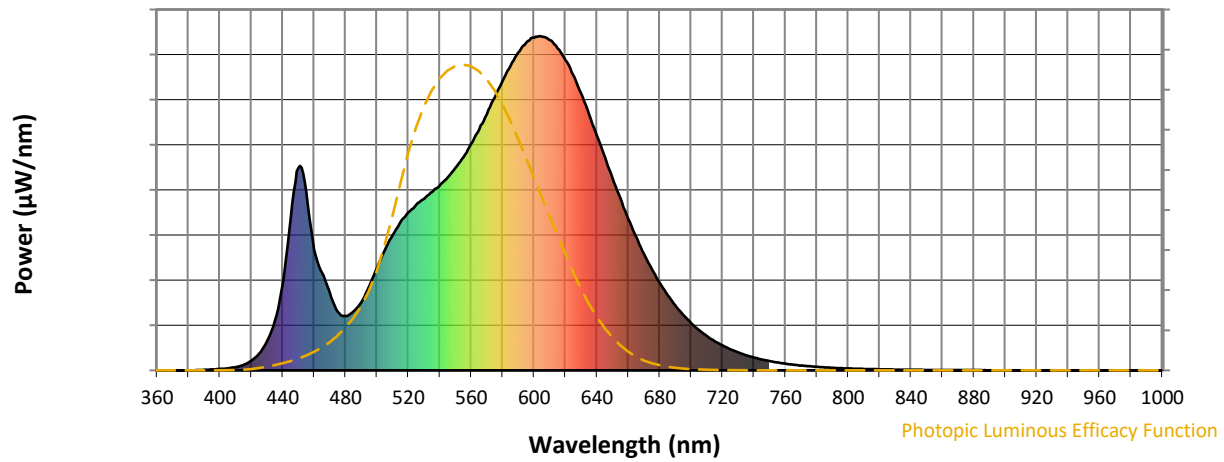


CCT = 3026K
 CIE x = 0.4326
 CIE y = 0.3983
 Duv = -0.0017

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2601-659-1

Photopic Flux vs. Wavelength

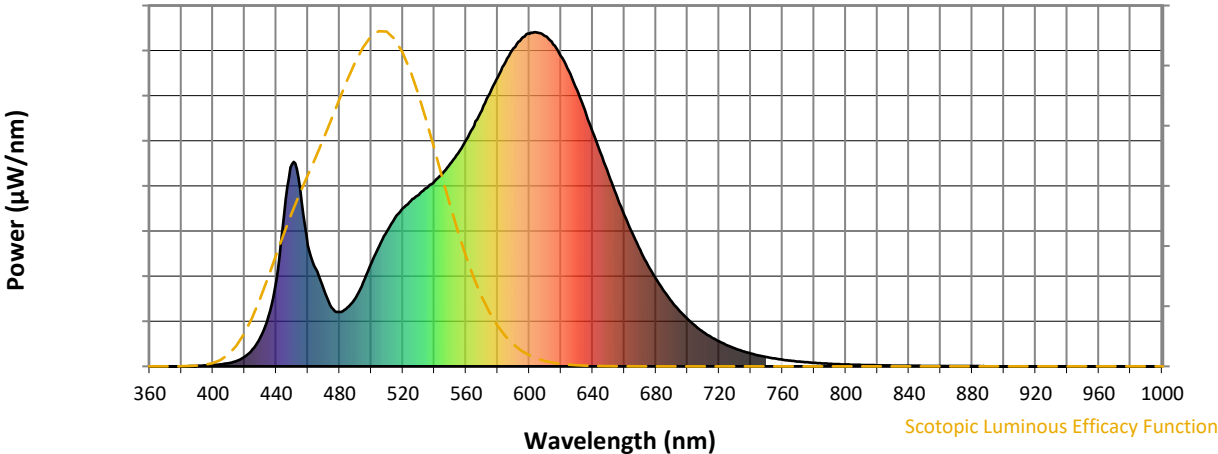


Photopic Lumens: NR

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	204	NR	620	928	NR	750	28	NR	880	1	NR
365	0	NR	495	251	NR	625	884	NR	755	24	NR	885	1	NR
370	0	NR	500	307	NR	630	828	NR	760	20	NR	890	0	NR
375	0	NR	505	360	NR	635	767	NR	765	17	NR	895	0	NR
380	0	NR	510	405	NR	640	702	NR	770	14	NR	900	0	NR
385	1	NR	515	444	NR	645	639	NR	775	12	NR	905	0	NR
390	2	NR	520	473	NR	650	574	NR	780	11	NR	910	0	NR
395	3	NR	525	495	NR	655	514	NR	785	9	NR	915	0	NR
400	5	NR	530	513	NR	660	453	NR	790	8	NR	920	0	NR
405	6	NR	535	534	NR	665	399	NR	795	7	NR	925	0	NR
410	10	NR	540	554	NR	670	348	NR	800	6	NR	930	0	NR
415	17	NR	545	577	NR	675	303	NR	805	5	NR	935	0	NR
420	29	NR	550	606	NR	680	263	NR	810	4	NR	940	0	NR
425	51	NR	555	638	NR	685	226	NR	815	4	NR	945	0	NR
430	87	NR	560	678	NR	690	194	NR	820	3	NR	950	0	NR
435	150	NR	565	720	NR	695	166	NR	825	3	NR	955	0	NR
440	258	NR	570	767	NR	700	142	NR	830	2	NR	960	0	NR
445	454	NR	575	817	NR	705	121	NR	835	2	NR	965	0	NR
450	605	NR	580	866	NR	710	103	NR	840	2	NR	970	0	NR
455	533	NR	585	911	NR	715	87	NR	845	2	NR	975	0	NR
460	362	NR	590	952	NR	720	74	NR	850	1	NR	980	0	NR
465	293	NR	595	981	NR	725	63	NR	855	1	NR	985	0	NR
470	231	NR	600	995	NR	730	54	NR	860	1	NR	990	0	NR
475	176	NR	605	999	NR	735	46	NR	865	1	NR	995	0	NR
480	163	NR	610	989	NR	740	38	NR	870	1	NR	1000	0	NR
485	176	NR	615	964	NR	745	33	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-1

Scotopic Flux vs. Wavelength



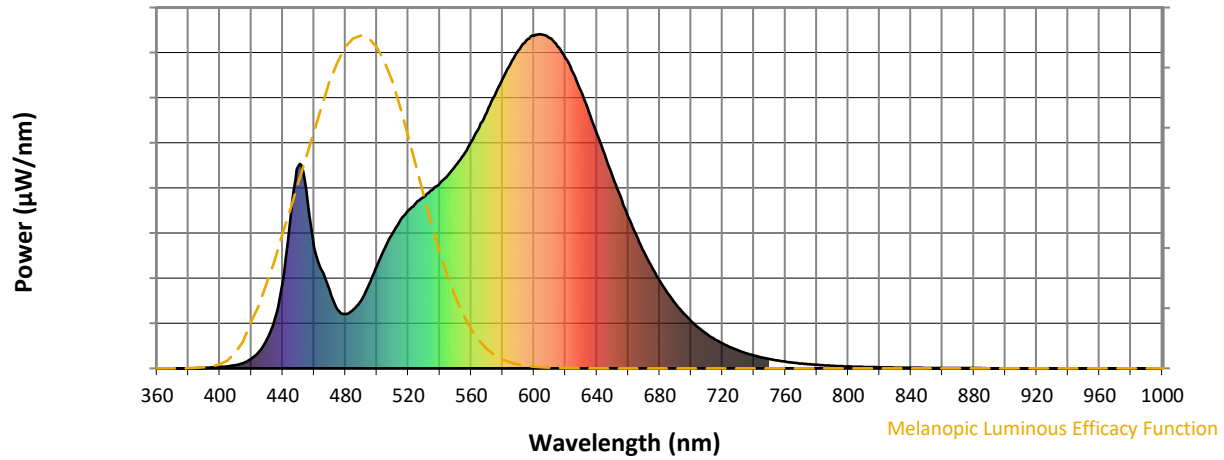
Scotopic Lumens: NR

S/P: 1.35

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	204	NR	620	928	NR	750	28	NR	880	1	NR
365	0	NR	495	251	NR	625	884	NR	755	24	NR	885	1	NR
370	0	NR	500	307	NR	630	828	NR	760	20	NR	890	0	NR
375	0	NR	505	360	NR	635	767	NR	765	17	NR	895	0	NR
380	0	NR	510	405	NR	640	702	NR	770	14	NR	900	0	NR
385	1	NR	515	444	NR	645	639	NR	775	12	NR	905	0	NR
390	2	NR	520	473	NR	650	574	NR	780	11	NR	910	0	NR
395	3	NR	525	495	NR	655	514	NR	785	9	NR	915	0	NR
400	5	NR	530	513	NR	660	453	NR	790	8	NR	920	0	NR
405	6	NR	535	534	NR	665	399	NR	795	7	NR	925	0	NR
410	10	NR	540	554	NR	670	348	NR	800	6	NR	930	0	NR
415	17	NR	545	577	NR	675	303	NR	805	5	NR	935	0	NR
420	29	NR	550	606	NR	680	263	NR	810	4	NR	940	0	NR
425	51	NR	555	638	NR	685	226	NR	815	4	NR	945	0	NR
430	87	NR	560	678	NR	690	194	NR	820	3	NR	950	0	NR
435	150	NR	565	720	NR	695	166	NR	825	3	NR	955	0	NR
440	258	NR	570	767	NR	700	142	NR	830	2	NR	960	0	NR
445	454	NR	575	817	NR	705	121	NR	835	2	NR	965	0	NR
450	605	NR	580	866	NR	710	103	NR	840	2	NR	970	0	NR
455	533	NR	585	911	NR	715	87	NR	845	2	NR	975	0	NR
460	362	NR	590	952	NR	720	74	NR	850	1	NR	980	0	NR
465	293	NR	595	981	NR	725	63	NR	855	1	NR	985	0	NR
470	231	NR	600	995	NR	730	54	NR	860	1	NR	990	0	NR
475	176	NR	605	999	NR	735	46	NR	865	1	NR	995	0	NR
480	163	NR	610	989	NR	740	38	NR	870	1	NR	1000	0	NR
485	176	NR	615	964	NR	745	33	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-1

Melanopic Flux vs. Wavelength



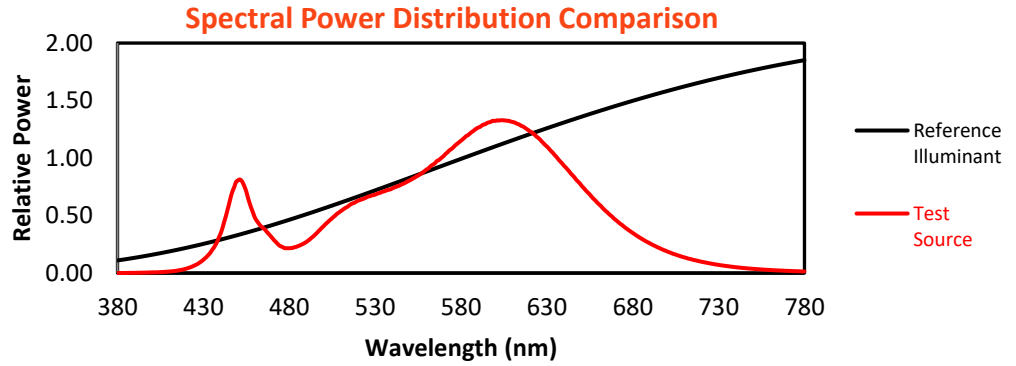
Melanopic Lumens: NR

M/P: 2.61

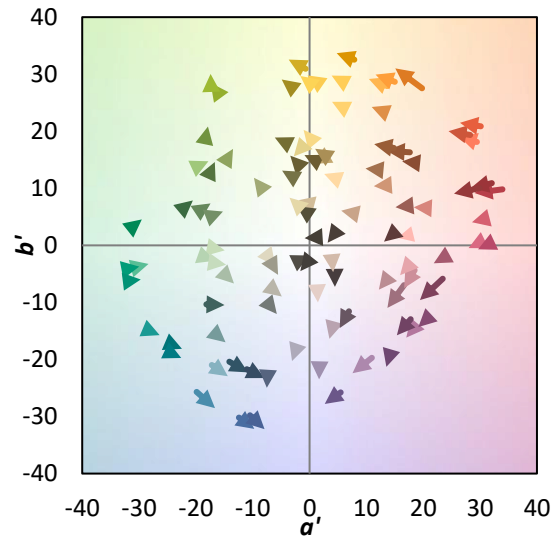
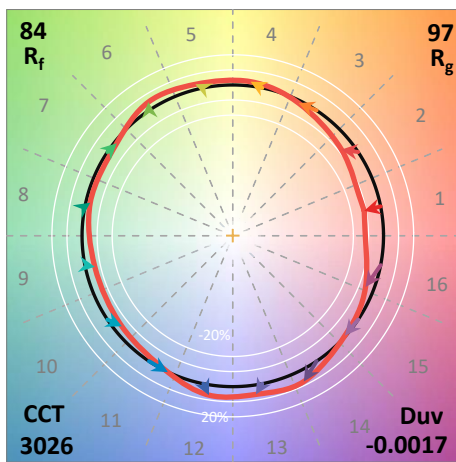
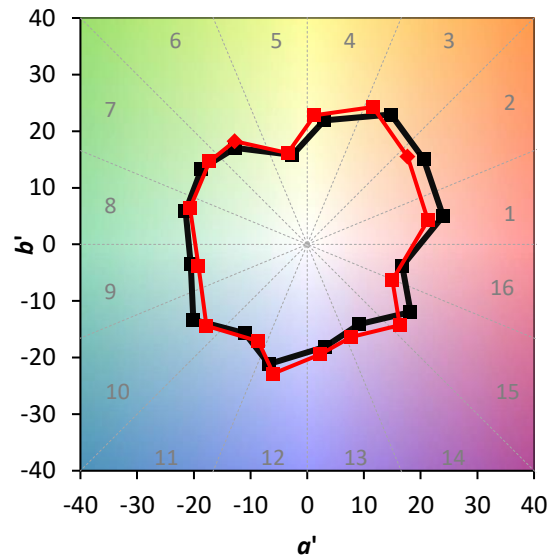
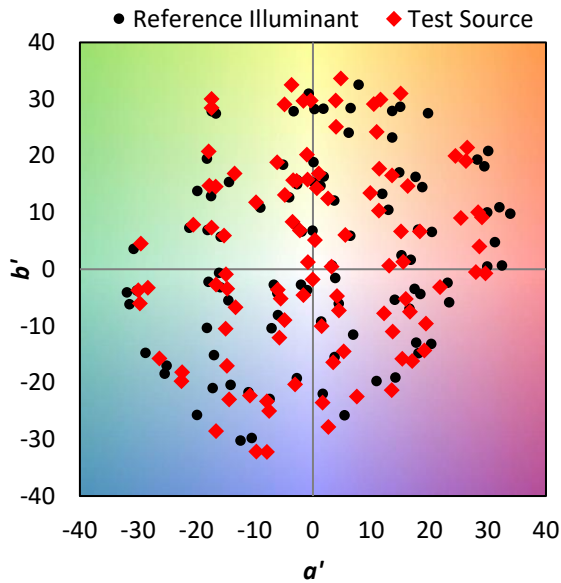
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	204	NR	620	928	NR	750	28	NR	880	1	NR
365	0	NR	495	251	NR	625	884	NR	755	24	NR	885	1	NR
370	0	NR	500	307	NR	630	828	NR	760	20	NR	890	0	NR
375	0	NR	505	360	NR	635	767	NR	765	17	NR	895	0	NR
380	0	NR	510	405	NR	640	702	NR	770	14	NR	900	0	NR
385	1	NR	515	444	NR	645	639	NR	775	12	NR	905	0	NR
390	2	NR	520	473	NR	650	574	NR	780	11	NR	910	0	NR
395	3	NR	525	495	NR	655	514	NR	785	9	NR	915	0	NR
400	5	NR	530	513	NR	660	453	NR	790	8	NR	920	0	NR
405	6	NR	535	534	NR	665	399	NR	795	7	NR	925	0	NR
410	10	NR	540	554	NR	670	348	NR	800	6	NR	930	0	NR
415	17	NR	545	577	NR	675	303	NR	805	5	NR	935	0	NR
420	29	NR	550	606	NR	680	263	NR	810	4	NR	940	0	NR
425	51	NR	555	638	NR	685	226	NR	815	4	NR	945	0	NR
430	87	NR	560	678	NR	690	194	NR	820	3	NR	950	0	NR
435	150	NR	565	720	NR	695	166	NR	825	3	NR	955	0	NR
440	258	NR	570	767	NR	700	142	NR	830	2	NR	960	0	NR
445	454	NR	575	817	NR	705	121	NR	835	2	NR	965	0	NR
450	605	NR	580	866	NR	710	103	NR	840	2	NR	970	0	NR
455	533	NR	585	911	NR	715	87	NR	845	2	NR	975	0	NR
460	362	NR	590	952	NR	720	74	NR	850	1	NR	980	0	NR
465	293	NR	595	981	NR	725	63	NR	855	1	NR	985	0	NR
470	231	NR	600	995	NR	730	54	NR	860	1	NR	990	0	NR
475	176	NR	605	999	NR	735	46	NR	865	1	NR	995	0	NR
480	163	NR	610	989	NR	740	38	NR	870	1	NR	1000	0	NR
485	176	NR	615	964	NR	745	33	NR	875	1	NR			

Summary

$R_f = 84$
 $R_g = 97.4$
 $CIE R_a = 82.7$
 $R_9 = 7.5$

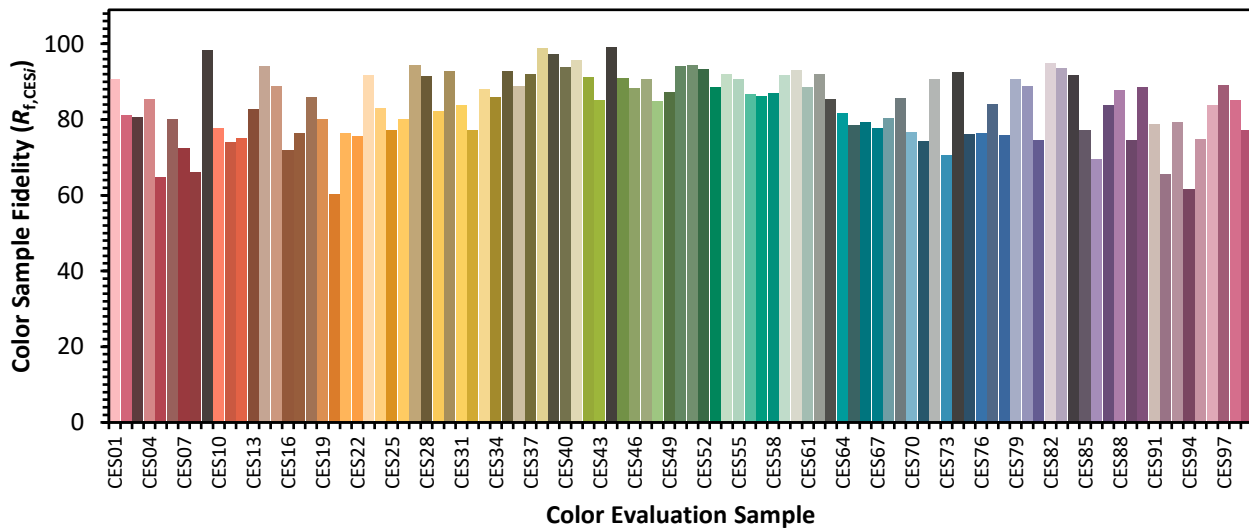


Color Vector Graphics

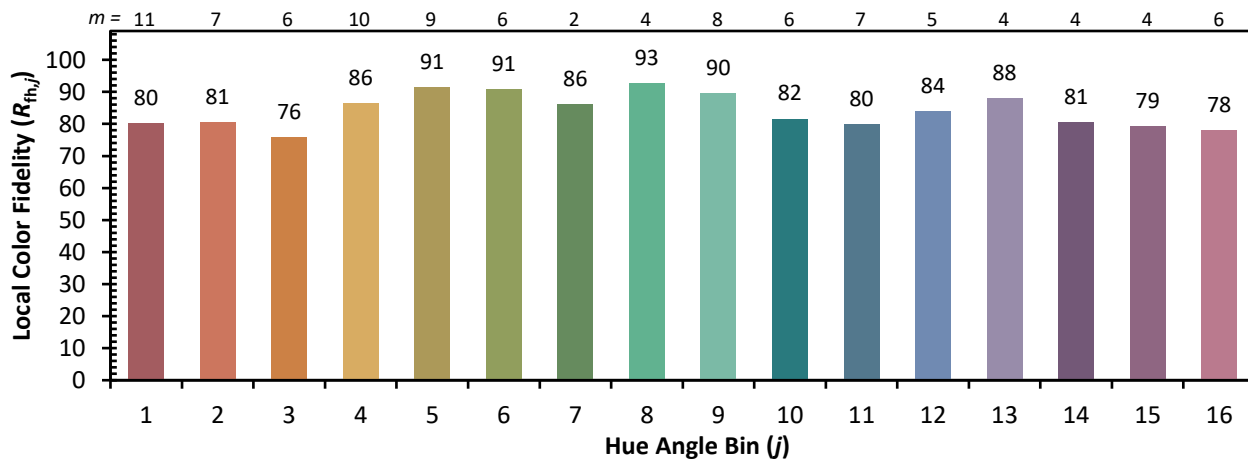
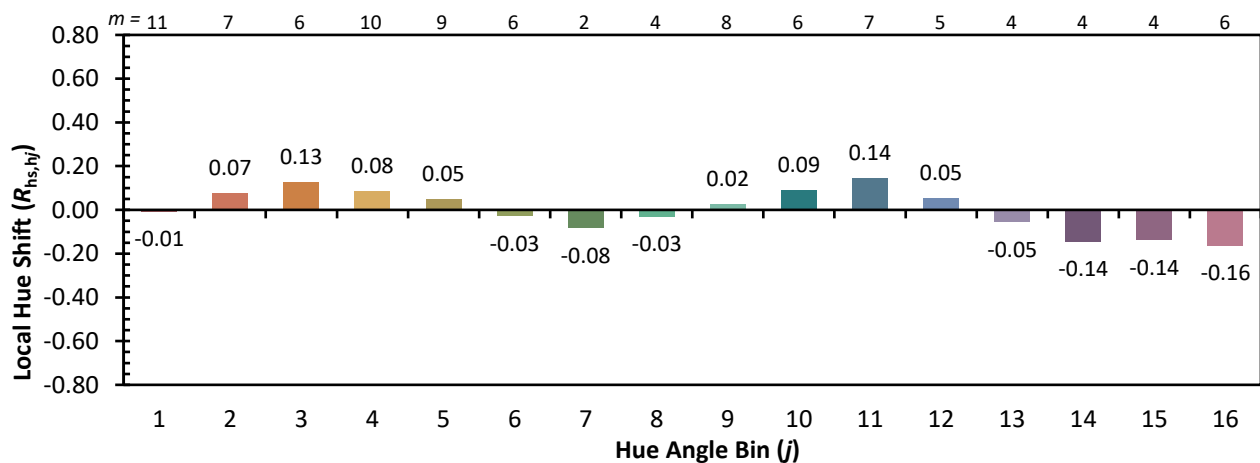
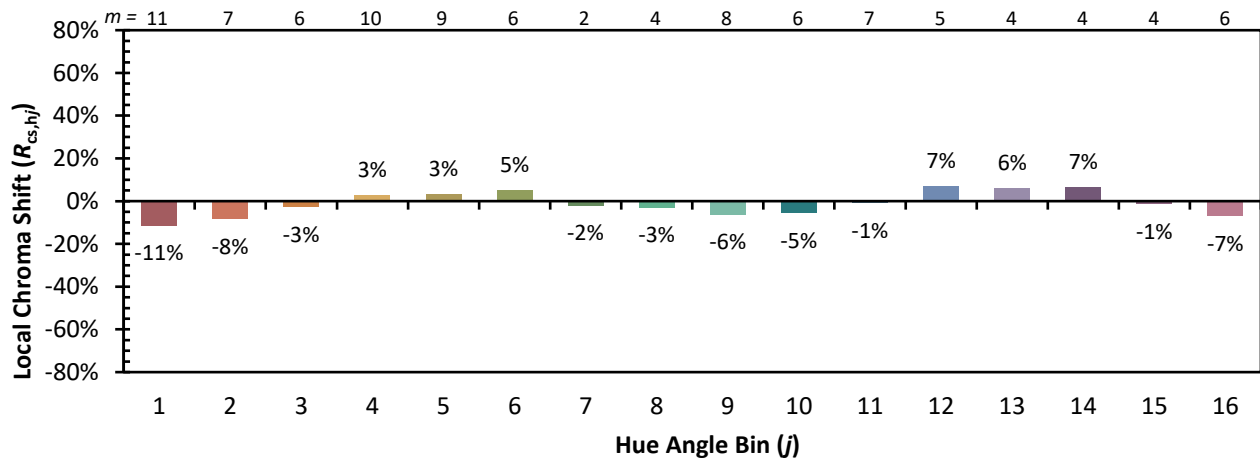


Individual Sample Fidelity Index ($R_{f,i}$)

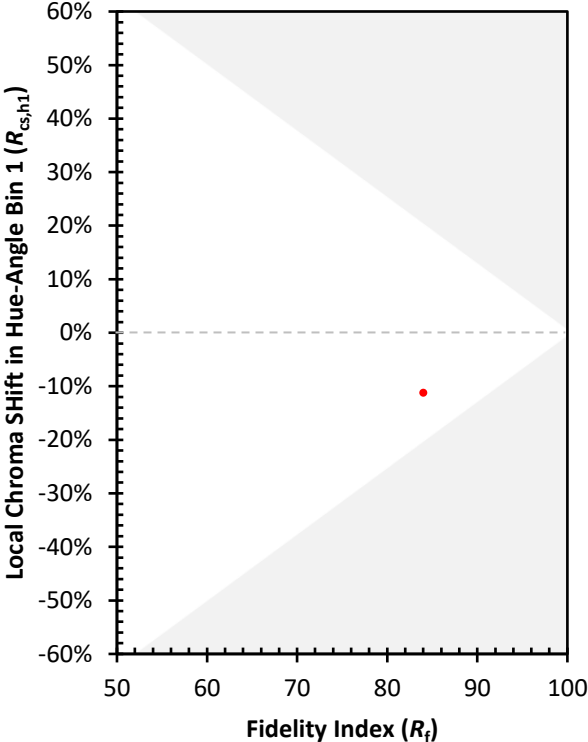
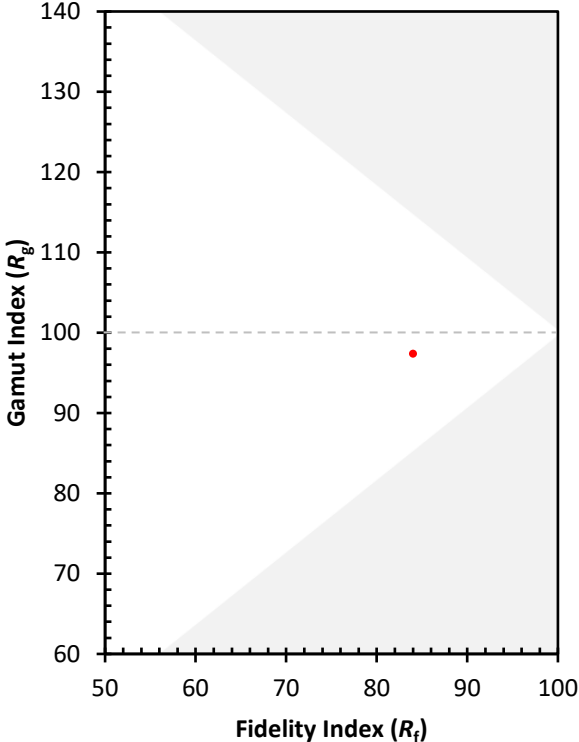
CES01 = 86	CES26 = 80	CES51 = 94	CES76 = 76
CES02 = 63	CES27 = 94	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 92	CES53 = 88	CES78 = 76
CES04 = 70	CES29 = 82	CES54 = 92	CES79 = 91
CES05 = 50	CES30 = 93	CES55 = 91	CES80 = 89
CES06 = 51	CES31 = 84	CES56 = 87	CES81 = 75
CES07 = 42	CES32 = 77	CES57 = 86	CES82 = 95
CES08 = 41	CES33 = 88	CES58 = 87	CES83 = 93
CES09 = 29	CES34 = 86	CES59 = 92	CES84 = 92
CES10 = 76	CES35 = 93	CES60 = 93	CES85 = 77
CES11 = 59	CES36 = 89	CES61 = 89	CES86 = 69
CES12 = 65	CES37 = 92	CES62 = 92	CES87 = 84
CES13 = 43	CES38 = 99	CES63 = 85	CES88 = 88
CES14 = 74	CES39 = 97	CES64 = 82	CES89 = 75
CES15 = 72	CES40 = 94	CES65 = 79	CES90 = 89
CES16 = 48	CES41 = 96	CES66 = 79	CES91 = 79
CES17 = 50	CES42 = 91	CES67 = 78	CES92 = 66
CES18 = 57	CES43 = 85	CES68 = 80	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 86	CES94 = 62
CES20 = 67	CES45 = 91	CES70 = 77	CES95 = 75
CES21 = 87	CES46 = 88	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 91	CES72 = 91	CES97 = 89
CES23 = 92	CES48 = 85	CES73 = 71	CES98 = 85
CES24 = 91	CES49 = 87	CES74 = 93	CES99 = 77
CES25 = 72	CES50 = 94	CES75 = 76	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)