

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: P1449897

Luminaire Tested: **TWC60\_T2\_60W\_4000K**

Issue Date: 5/19/2026

**Test Information**

Test Method: LM-79-08  
Report Number: P1449897  
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\_4000K  
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T2 distribution, 60W  
4000K settings  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9324 lumens  
Efficiency: N/A  
Efficacy: 159.4 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.42' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

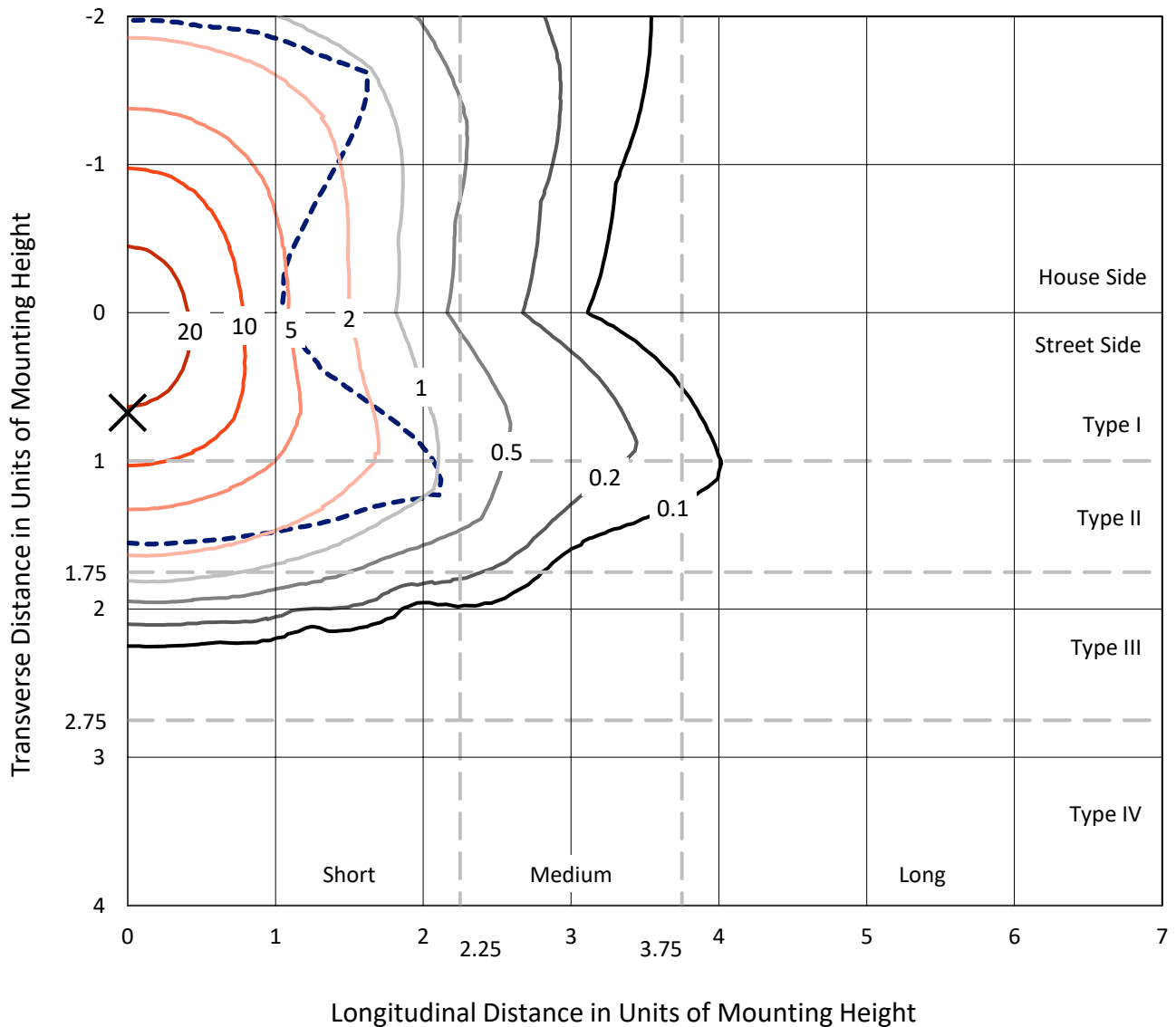
Input Watts (W): 58.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

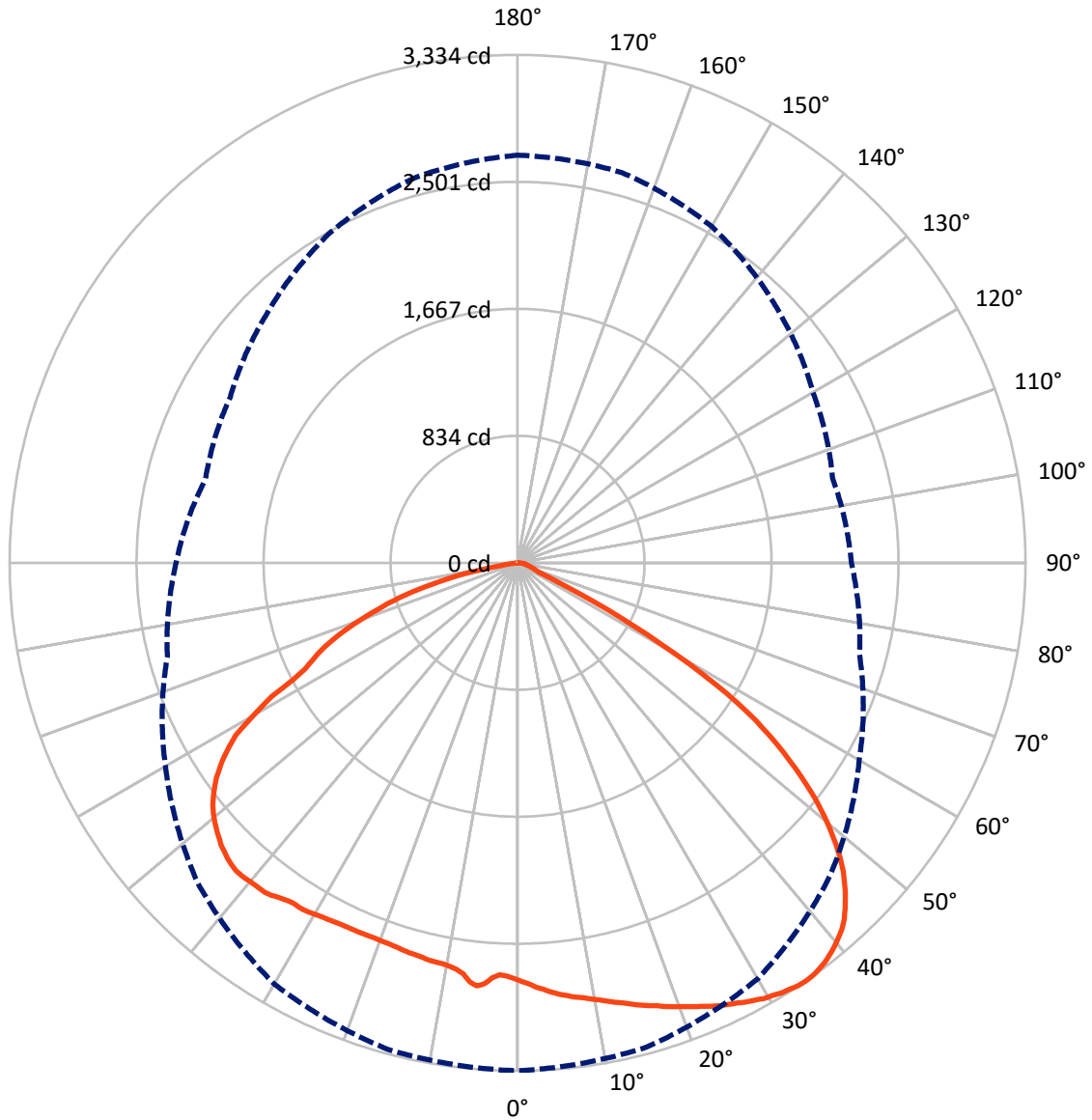
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 28.1 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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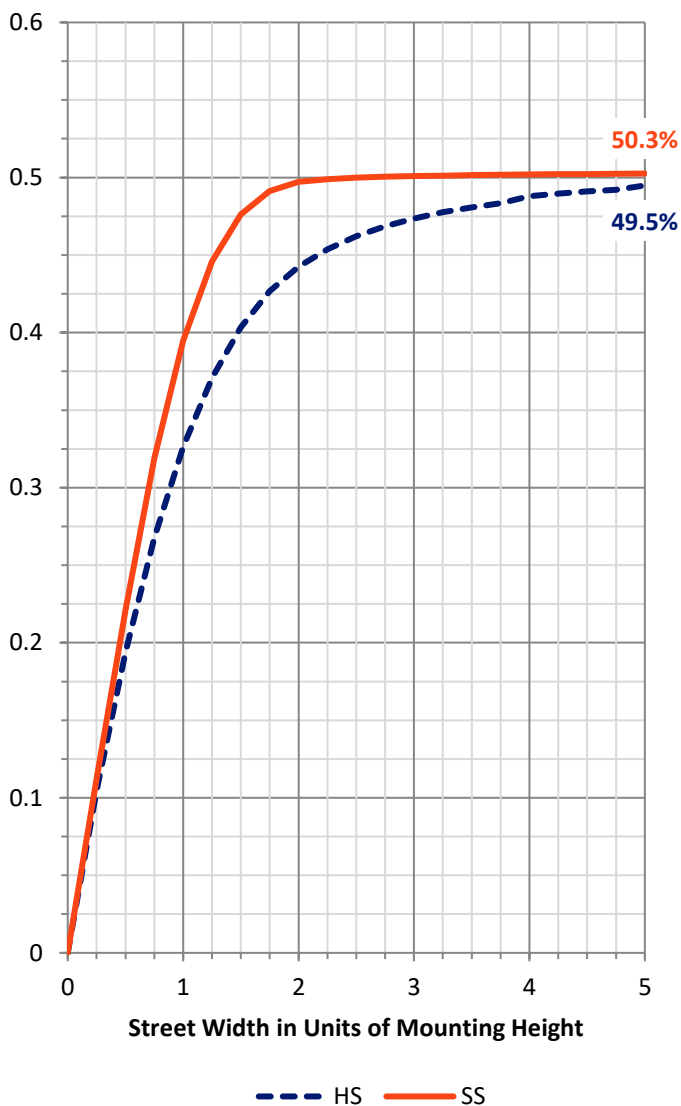
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4639.1	0.0	4639.1
	% Fixture	49.8	0.0	49.8
<b>Street Side</b>	Lumens	4684.9	0.0	4684.9
	% Fixture	50.2	0.0	50.2
<b>Total</b>	Lumens	9324.0	0.0	9324.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	264.2	2.8
10°-20°	778.6	8.4
20°-30°	1249.2	13.4
30°-40°	1634.7	17.5
40°-50°	1862.7	20.0
50°-60°	1773.8	19.0
60°-70°	1151.5	12.3
70°-80°	510.4	5.5
80°-90°	99.0	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°	9324.0	100.0
0°-180°	9324.0	100.0

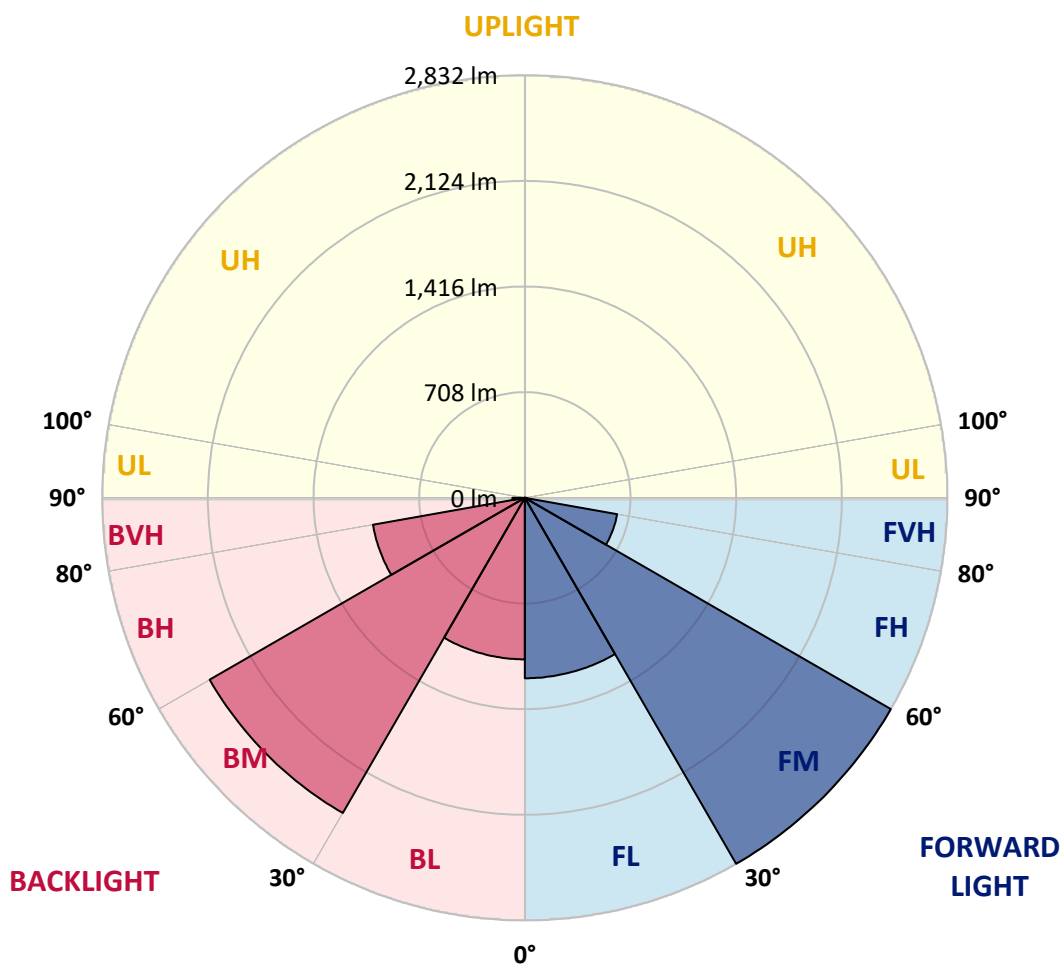


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1209.2	13.0			
FM (30°-60°)	2832.3	30.4			
FH (60°-80°)	628.2	6.7			G0/660
FVH (80°-90°)	15.2	0.2			G1/100
BL (0°-30°)	1082.7	11.6	B3/2500		
BM (30°-60°)	2438.9	26.2	B2/2500		
BH (60°-80°)	1033.7	11.1	B3/2500		G3/2500
BVH (80°-90°)	83.8	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-G3**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0
1°	2763.5	2761.8	2762.9	2756.1	2751.0	2748.9	2746.5	2741.3	2736.7	2733.3	2730.6
2°	2787.0	2782.6	2777.7	2769.9	2760.5	2751.4	2744.0	2734.6	2726.8	2723.0	2718.1
3°	2805.6	2803.4	2794.6	2782.3	2769.7	2752.1	2740.9	2727.1	2716.1	2708.8	2705.0
4°	2826.7	2820.6	2810.9	2795.4	2774.3	2752.8	2735.4	2719.1	2706.6	2705.7	2716.4
5°	2844.2	2838.4	2825.1	2806.7	2780.1	2753.8	2732.2	2711.0	2699.4	2718.8	2752.0
6°	2859.3	2852.2	2838.8	2816.4	2785.7	2750.7	2720.6	2697.9	2702.1	2751.0	2782.3
7°	2874.2	2864.7	2846.4	2822.9	2788.0	2750.0	2714.9	2689.9	2718.2	2776.3	2786.4
8°	2886.9	2877.7	2858.6	2827.9	2791.9	2747.9	2706.7	2683.1	2739.4	2779.0	2750.8
9°	2902.7	2892.3	2866.1	2836.7	2790.9	2742.9	2696.2	2676.6	2759.3	2757.6	2709.5
10°	2917.7	2903.6	2878.8	2840.7	2793.3	2735.3	2686.1	2680.2	2758.4	2712.9	2690.5
11°	2935.3	2921.6	2886.8	2844.8	2789.9	2731.4	2676.4	2688.1	2746.6	2680.9	2676.7
12°	2954.0	2938.4	2898.6	2851.8	2790.5	2725.0	2660.8	2696.3	2708.4	2664.7	2666.8
13°	2970.4	2953.6	2911.3	2854.3	2789.5	2716.2	2646.8	2701.9	2671.3	2650.2	2659.9
14°	2991.8	2971.9	2924.5	2859.7	2787.5	2707.1	2633.6	2705.5	2642.3	2638.0	2655.2
15°	3013.2	2992.1	2937.1	2865.6	2782.3	2696.0	2618.4	2694.3	2621.1	2627.7	2643.2
16°	3031.0	3009.3	2954.2	2870.2	2782.9	2689.2	2603.6	2674.7	2604.8	2616.5	2635.6
17°	3049.1	3027.7	2965.8	2879.3	2781.6	2679.8	2589.3	2643.9	2585.7	2604.8	2629.1
18°	3071.4	3042.8	2978.6	2886.4	2779.9	2669.2	2576.8	2601.7	2571.1	2590.2	2622.5
19°	3091.5	3062.6	2992.9	2893.7	2775.4	2656.1	2563.6	2563.5	2556.0	2579.4	2612.0
20°	3109.8	3076.8	3002.8	2898.2	2775.3	2646.8	2553.8	2531.0	2537.5	2566.2	2601.4
21°	3130.7	3095.7	3017.7	2902.0	2767.9	2637.2	2548.6	2506.4	2516.3	2551.8	2595.7
22°	3152.0	3111.7	3025.9	2906.5	2760.9	2625.7	2542.8	2482.0	2495.3	2539.1	2589.3
23°	3173.9	3133.2	3036.5	2907.3	2752.8	2609.3	2536.4	2457.6	2477.6	2526.2	2578.7
24°	3194.9	3151.5	3047.9	2910.0	2746.1	2595.0	2526.9	2435.7	2457.8	2514.3	2572.6
25°	3212.2	3168.5	3060.3	2908.4	2735.8	2571.9	2514.5	2413.7	2438.2	2501.3	2569.9
26°	3228.9	3185.9	3071.8	2907.0	2722.1	2549.9	2493.5	2383.8	2414.4	2485.2	2564.9
27°	3249.7	3201.7	3087.6	2909.4	2711.4	2529.5	2468.2	2358.5	2393.0	2472.4	2558.7
28°	3265.8	3216.3	3095.4	2904.5	2696.0	2504.1	2433.5	2328.7	2372.2	2461.4	2557.1
29°	3285.7	3234.7	3107.0	2905.6	2678.7	2479.8	2397.3	2299.5	2353.0	2447.3	2555.8
30°	3296.1	3251.5	3113.6	2902.9	2663.8	2449.6	2352.1	2269.6	2330.5	2435.1	2550.8
31°	3311.3	3262.4	3126.6	2905.9	2646.2	2420.3	2309.8	2239.6	2306.1	2424.2	2550.4
32°	3320.4	3275.4	3133.3	2904.2	2626.7	2390.6	2268.0	2206.6	2285.3	2412.6	2547.7
33°	3330.4	3282.1	3144.3	2902.4	2608.1	2357.3	2226.9	2174.4	2260.1	2401.7	2549.4
34°	3334.1	3289.6	3152.4	2902.1	2589.8	2323.4	2190.5	2140.9	2238.7	2391.2	2548.7
35°	3332.0	3291.2	3160.7	2900.7	2571.7	2290.7	2150.9	2107.5	2212.0	2378.6	2546.2
36°	3321.4	3289.8	3160.6	2895.6	2552.8	2253.5	2110.8	2074.1	2188.9	2371.1	2534.9
37°	3310.0	3279.2	3165.7	2896.9	2534.5	2216.7	2069.7	2039.8	2165.1	2357.2	2533.8
38°	3290.5	3265.3	3162.0	2898.9	2519.3	2182.2	2028.6	2005.8	2143.2	2342.1	2534.7
39°	3267.1	3248.3	3153.5	2898.3	2503.0	2145.3	1986.1	1974.0	2119.6	2323.2	2540.2
40°	3241.5	3224.6	3146.1	2899.7	2487.8	2107.4	1943.4	1942.2	2096.5	2310.0	2546.3
41°	3213.1	3198.1	3130.5	2899.7	2473.6	2072.9	1900.7	1910.4	2072.2	2305.8	2543.9
42°	3173.9	3165.6	3112.1	2898.0	2459.4	2036.7	1858.8	1873.7	2044.7	2298.5	2542.9
43°	3123.6	3127.8	3086.8	2896.5	2447.9	2002.6	1811.9	1837.0	2012.4	2283.6	2542.5
44°	3069.9	3080.9	3057.9	2893.8	2436.5	1970.4	1763.7	1800.9	1989.5	2267.0	2544.2



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**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3011.2	3030.8	3027.4	2886.1	2426.5	1939.3	1716.1	1761.6	1966.6	2249.7	2544.1
46°	2948.2	2972.4	2988.3	2876.3	2417.4	1909.8	1670.6	1723.1	1943.7	2244.4	2538.0
47°	2872.1	2908.1	2949.0	2860.8	2411.6	1878.5	1619.7	1684.5	1918.4	2236.5	2524.2
48°	2789.9	2835.9	2896.8	2845.6	2402.6	1843.2	1571.5	1642.4	1888.4	2225.2	2508.0
49°	2701.9	2753.8	2839.9	2819.2	2396.4	1805.9	1520.6	1596.7	1858.9	2210.9	2489.8
50°	2606.1	2660.6	2777.5	2791.9	2392.2	1765.6	1470.9	1547.0	1835.8	2195.2	2468.7
51°	2501.1	2567.8	2706.7	2762.4	2387.0	1724.3	1419.9	1498.8	1810.8	2175.2	2445.8
52°	2390.2	2461.1	2628.7	2729.6	2384.6	1681.0	1367.2	1457.6	1780.2	2157.5	2424.0
53°	2270.3	2350.0	2539.0	2686.7	2378.7	1630.4	1316.8	1418.7	1747.2	2141.0	2399.0
54°	2146.3	2230.2	2437.5	2636.8	2371.5	1586.8	1267.0	1370.9	1712.8	2121.4	2372.1
55°	2014.7	2102.9	2329.6	2577.8	2366.0	1542.0	1212.8	1322.0	1675.0	2099.2	2342.7
56°	1873.5	1968.4	2213.8	2514.2	2356.4	1498.4	1159.6	1276.9	1643.6	2073.5	2310.7
57°	1713.8	1822.6	2086.3	2440.9	2342.1	1456.3	1107.0	1232.3	1607.4	2047.2	2275.5
58°	1522.0	1663.6	1951.5	2352.0	2319.4	1414.4	1052.3	1185.6	1573.0	2020.4	2235.0
59°	1306.2	1475.0	1806.6	2252.7	2294.0	1373.1	997.8	1135.2	1535.6	1993.3	2187.1
60°	1082.8	1257.9	1649.2	2137.4	2260.2	1331.7	941.4	1083.5	1497.2	1966.2	2133.8
61°	872.4	1034.0	1475.7	2008.2	2223.7	1293.4	887.5	1031.9	1458.2	1938.9	2069.6
62°	662.1	824.2	1267.3	1856.1	2178.2	1260.1	837.2	983.4	1421.5	1901.7	1973.1
63°	451.9	614.4	1050.2	1692.7	2124.7	1230.4	783.0	931.8	1387.1	1861.2	1876.7
64°	292.9	404.7	833.5	1522.6	2060.7	1206.0	729.7	883.8	1350.6	1815.2	1778.3
65°	192.5	252.8	616.9	1323.4	1986.3	1189.4	678.7	836.3	1313.2	1768.1	1611.2
66°	148.2	166.5	400.2	1102.0	1897.1	1181.6	628.3	789.0	1273.0	1705.0	1489.9
67°	134.4	130.7	244.6	874.6	1787.5	1177.3	580.2	741.6	1233.5	1603.6	1418.7
68°	125.0	118.8	154.9	647.1	1652.0	1175.2	531.6	695.9	1187.0	1477.9	1359.2
69°	115.7	109.4	121.2	419.5	1499.8	1171.4	484.9	651.3	1141.1	1380.3	1300.7
70°	106.6	100.4	109.1	244.4	1306.1	1170.6	439.5	608.6	1097.1	1319.0	1244.4
71°	98.0	92.8	100.2	144.3	1050.6	1176.7	395.5	565.3	1047.5	1259.5	1192.6
72°	91.2	85.3	91.3	104.6	777.8	1177.9	355.7	523.0	968.2	1194.2	1138.1
73°	84.4	77.7	82.3	92.8	504.7	1150.2	316.2	479.4	893.7	1126.6	1080.3
74°	77.7	71.0	73.4	81.5	231.6	1070.0	278.4	437.0	844.5	1062.7	1015.6
75°	70.7	63.8	65.1	70.3	128.5	967.4	242.9	397.3	803.1	1002.4	947.7
76°	64.8	57.4	55.5	62.6	108.3	857.1	207.3	357.8	757.7	943.6	866.0
77°	60.4	52.3	48.2	56.6	89.3	746.8	172.0	320.5	712.6	888.9	771.9
78°	57.5	48.0	42.2	49.8	70.3	636.4	142.3	275.6	671.0	836.1	686.8
79°	55.2	45.4	37.9	41.4	63.7	485.5	115.7	240.3	626.7	785.5	608.0
80°	52.1	43.1	34.5	33.7	63.7	366.9	91.8	205.1	583.3	720.0	546.8
81°	48.6	40.3	31.9	28.6	59.2	256.5	71.7	169.9	541.9	651.3	484.0
82°	44.5	37.1	29.4	25.0	50.6	166.9	54.5	142.6	497.1	581.3	345.0
83°	36.7	32.2	26.9	21.8	42.0	98.3	39.4	116.9	452.5	527.9	206.0
84°	29.0	26.4	22.7	18.9	28.8	73.4	30.2	91.7	391.1	479.5	69.5
85°	20.9	19.6	17.1	16.1	17.0	48.7	20.9	69.3	314.9	383.1	40.0
86°	14.6	14.8	12.5	12.0	10.9	24.0	11.7	48.3	252.0	286.7	11.0
87°	9.9	10.1	8.5	8.2	7.4	13.2	6.7	32.7	189.1	190.3	5.4
88°	5.3	5.4	4.6	4.5	3.9	8.8	3.0	17.1	126.2	93.9	1.9
89°	0.7	0.7	0.7	0.8	0.8	4.6	1.0	1.9	63.3	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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 CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**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: P1449897

CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0	2746.0
1°	2728.0	2727.8	2730.0	2728.1	2732.3	2735.4	2738.9	2746.9	2751.3	2754.1	2757.7
2°	2711.8	2713.2	2712.3	2714.2	2723.6	2728.2	2735.0	2744.5	2755.9	2762.2	2771.3
3°	2703.9	2707.1	2702.7	2703.3	2707.2	2719.1	2726.6	2740.7	2755.2	2769.9	2786.7
4°	2729.5	2728.9	2720.3	2706.1	2697.4	2707.1	2719.4	2738.9	2761.1	2778.2	2798.7
5°	2770.5	2772.6	2759.8	2736.7	2702.1	2695.7	2711.8	2733.1	2759.8	2787.2	2810.8
6°	2790.0	2790.5	2789.8	2766.2	2724.5	2689.1	2702.1	2726.6	2759.3	2793.5	2820.0
7°	2774.3	2769.0	2777.1	2780.0	2751.8	2691.7	2692.2	2721.6	2759.8	2798.1	2829.8
8°	2725.7	2720.5	2729.7	2761.9	2767.9	2702.2	2681.0	2715.2	2760.4	2801.5	2836.4
9°	2699.0	2699.0	2699.3	2714.7	2763.4	2721.6	2667.4	2704.3	2754.3	2802.7	2843.5
10°	2687.2	2686.4	2685.7	2685.1	2730.0	2734.9	2659.0	2696.1	2752.1	2805.5	2851.3
11°	2677.2	2678.2	2675.4	2671.1	2690.6	2737.1	2651.3	2686.3	2744.3	2804.1	2854.6
12°	2675.2	2675.8	2668.5	2656.6	2662.4	2725.0	2646.8	2671.8	2740.7	2804.0	2862.0
13°	2669.2	2671.9	2665.1	2648.5	2646.1	2695.3	2649.7	2658.4	2733.9	2803.7	2869.1
14°	2662.7	2664.9	2654.1	2641.8	2629.1	2656.7	2656.4	2647.5	2728.2	2804.0	2875.9
15°	2656.1	2658.2	2647.7	2632.9	2613.6	2623.4	2655.8	2636.0	2719.6	2806.7	2885.8
16°	2651.5	2656.0	2644.2	2620.1	2602.4	2597.8	2658.0	2617.3	2711.8	2808.9	2893.5
17°	2647.0	2650.8	2638.3	2612.2	2586.7	2579.5	2647.3	2603.2	2702.7	2807.8	2903.4
18°	2639.6	2643.6	2628.8	2601.3	2570.8	2558.3	2628.8	2585.7	2698.1	2807.8	2913.6
19°	2632.2	2640.9	2624.1	2593.7	2553.6	2538.9	2602.8	2572.0	2689.6	2806.2	2922.7
20°	2630.7	2638.8	2617.0	2581.1	2542.8	2520.2	2567.8	2551.8	2680.4	2805.1	2924.9
21°	2628.5	2636.0	2613.1	2570.2	2528.6	2501.7	2528.6	2535.7	2673.5	2805.5	2932.0
22°	2625.7	2635.4	2610.4	2561.4	2511.6	2479.0	2489.6	2518.3	2660.8	2799.6	2936.6
23°	2626.0	2638.1	2607.6	2554.6	2494.9	2451.7	2456.5	2503.6	2648.2	2795.8	2942.6
24°	2623.6	2638.1	2606.6	2542.1	2478.4	2428.9	2427.3	2488.3	2630.9	2787.8	2947.4
25°	2622.2	2639.1	2605.6	2537.1	2464.7	2409.1	2398.5	2479.6	2612.4	2779.3	2949.5
26°	2625.7	2640.9	2601.7	2529.0	2449.2	2383.7	2370.9	2471.4	2595.0	2769.9	2952.9
27°	2624.6	2642.8	2602.8	2524.0	2433.6	2357.5	2341.7	2459.3	2571.8	2763.2	2955.4
28°	2626.8	2647.9	2602.8	2515.8	2416.3	2330.7	2316.2	2447.4	2547.9	2748.2	2957.2
29°	2632.6	2653.0	2603.9	2506.7	2402.0	2308.8	2287.9	2430.6	2523.0	2737.7	2960.9
30°	2633.7	2658.7	2608.0	2500.9	2385.9	2281.7	2255.4	2403.7	2495.3	2722.8	2966.4
31°	2644.7	2667.7	2609.6	2498.7	2370.6	2258.0	2221.1	2373.3	2466.1	2710.4	2969.0
32°	2648.9	2675.2	2617.0	2491.9	2353.6	2230.4	2189.8	2335.6	2439.6	2699.1	2966.9
33°	2651.3	2677.2	2618.0	2490.1	2333.8	2204.1	2153.0	2289.9	2409.6	2683.1	2972.8
34°	2650.9	2675.5	2616.2	2487.3	2321.3	2177.5	2121.1	2241.1	2379.7	2669.4	2970.0
35°	2651.5	2685.2	2613.5	2482.9	2302.6	2152.2	2086.2	2191.4	2348.6	2655.4	2974.2
36°	2662.0	2698.2	2615.7	2474.0	2287.4	2125.0	2049.6	2141.0	2317.6	2647.2	2976.2
37°	2675.6	2714.8	2626.5	2462.0	2272.4	2097.9	2011.7	2097.9	2286.7	2631.9	2980.6
38°	2685.3	2725.1	2637.7	2459.3	2256.3	2069.3	1976.4	2052.2	2257.3	2624.4	2980.7
39°	2689.7	2726.8	2645.0	2457.6	2236.2	2039.2	1941.2	2008.9	2226.5	2613.2	2981.7
40°	2691.9	2729.4	2643.6	2453.4	2213.7	2011.8	1906.0	1963.4	2193.4	2603.0	2979.3
41°	2695.7	2733.7	2642.7	2449.4	2196.2	1985.1	1862.5	1921.2	2161.0	2591.3	2982.5
42°	2699.4	2738.9	2651.4	2443.1	2180.8	1958.5	1820.2	1877.1	2128.8	2585.1	2975.9
43°	2703.5	2738.3	2653.0	2442.8	2169.0	1931.8	1775.9	1830.5	2097.9	2581.4	2970.7
44°	2697.7	2729.2	2652.6	2442.6	2156.0	1896.9	1733.2	1783.9	2063.4	2579.5	2958.8



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**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2686.7	2717.4	2643.7	2440.0	2132.9	1859.3	1690.3	1736.7	2029.0	2577.2	2944.1
46°	2670.3	2700.3	2628.6	2435.9	2112.8	1822.3	1647.6	1689.4	1997.7	2572.7	2924.4
47°	2653.5	2684.6	2610.4	2427.3	2094.8	1786.8	1605.3	1639.3	1964.3	2567.9	2900.1
48°	2634.9	2661.2	2592.7	2415.9	2078.8	1758.9	1561.9	1591.7	1933.9	2565.4	2869.9
49°	2612.7	2639.2	2570.7	2400.5	2059.2	1724.9	1518.0	1539.6	1902.2	2561.6	2841.0
50°	2589.0	2614.5	2550.8	2383.0	2038.1	1689.8	1472.6	1488.0	1869.4	2556.1	2805.6
51°	2562.5	2586.1	2527.3	2358.3	2013.8	1655.6	1426.5	1438.5	1839.6	2549.9	2764.8
52°	2536.5	2556.3	2500.2	2337.6	1991.7	1622.2	1376.1	1387.2	1808.7	2542.8	2711.9
53°	2501.3	2515.3	2470.5	2312.2	1974.2	1592.2	1324.9	1336.2	1780.8	2530.4	2655.8
54°	2463.7	2473.4	2439.6	2287.5	1956.9	1556.5	1273.7	1282.9	1756.4	2512.2	2588.8
55°	2420.7	2426.2	2398.7	2259.6	1939.6	1518.8	1228.0	1228.9	1733.3	2490.6	2514.8
56°	2371.6	2370.6	2354.5	2232.3	1916.4	1475.2	1179.5	1174.2	1715.4	2458.0	2432.4
57°	2315.4	2311.9	2302.5	2198.4	1890.9	1433.2	1128.0	1119.3	1703.4	2426.4	2333.6
58°	2252.6	2241.6	2244.5	2167.0	1867.0	1389.4	1076.5	1064.4	1688.5	2387.6	2227.9
59°	2185.1	2169.1	2181.9	2128.2	1844.2	1348.4	1026.7	1010.6	1676.5	2342.0	2104.4
60°	2111.0	2056.9	2113.0	2088.0	1813.8	1306.7	977.4	958.1	1661.5	2290.8	1969.8
61°	1977.0	1944.8	1995.4	2038.3	1782.3	1266.6	928.4	905.9	1647.0	2228.0	1822.5
62°	1843.2	1832.4	1877.9	1973.2	1749.1	1223.8	877.6	853.7	1640.9	2158.5	1661.0
63°	1709.3	1657.9	1759.9	1908.1	1707.9	1178.6	824.5	800.0	1634.2	2070.6	1485.1
64°	1572.9	1555.2	1598.9	1841.7	1667.9	1137.2	771.8	745.9	1631.1	1972.3	1290.8
65°	1499.9	1495.5	1503.2	1713.1	1621.8	1094.2	719.2	695.6	1624.1	1854.8	1071.2
66°	1444.9	1439.7	1439.7	1557.5	1575.0	1049.5	668.4	646.0	1619.9	1716.3	849.6
67°	1389.8	1377.5	1388.3	1448.4	1520.8	1004.8	618.8	596.4	1616.9	1559.2	627.9
68°	1325.7	1305.4	1333.9	1376.8	1453.4	959.0	569.8	543.5	1598.8	1365.6	406.3
69°	1256.1	1224.9	1271.0	1307.7	1351.5	911.3	522.1	492.3	1559.2	1140.6	244.2
70°	1183.3	1144.9	1208.2	1242.8	1259.1	865.9	476.1	442.9	1490.2	880.6	149.1
71°	1101.0	1054.3	1135.3	1182.7	1203.3	819.8	433.7	393.9	1389.9	619.4	111.0
72°	1017.2	972.2	1059.1	1132.0	1156.2	775.3	394.2	348.6	1296.0	358.3	98.9
73°	937.2	895.4	977.3	1084.6	1100.4	727.0	353.5	305.4	1219.6	195.9	89.3
74°	852.9	810.0	893.0	1035.9	1046.0	657.0	316.3	266.9	1097.5	116.3	79.9
75°	769.9	722.9	807.9	985.3	990.9	599.8	280.7	229.3	956.8	99.2	70.4
76°	680.8	624.8	725.8	929.2	936.0	557.6	249.7	195.1	760.9	83.2	60.3
77°	590.1	531.2	640.7	858.4	879.3	517.0	218.6	166.7	563.1	67.3	51.7
78°	507.5	441.1	564.1	772.3	818.3	474.5	187.7	143.0	365.3	61.5	43.7
79°	418.3	332.0	484.4	680.0	759.4	434.8	161.7	122.9	204.1	58.6	36.4
80°	302.1	222.9	398.4	595.7	697.0	397.4	132.8	102.4	110.3	53.6	31.0
81°	185.9	114.5	262.2	536.4	629.1	359.1	107.8	83.4	89.6	43.7	27.5
82°	72.2	37.5	126.6	489.4	565.4	321.3	87.7	64.5	69.9	34.6	24.5
83°	52.8	29.6	89.3	343.7	494.6	282.2	68.8	45.6	50.2	25.1	21.8
84°	33.4	21.6	52.0	198.0	440.2	239.3	52.5	32.7	48.5	17.6	19.3
85°	14.3	13.8	15.0	52.4	388.9	196.4	38.2	22.7	42.2	13.6	15.9
86°	8.7	8.2	9.4	29.1	243.3	153.7	27.7	14.7	31.1	10.7	11.0
87°	4.2	4.0	4.4	5.7	99.5	114.6	17.1	10.0	18.5	7.2	6.8
88°	1.6	1.5	1.6	1.7	49.3	76.3	6.6	5.3	12.3	3.6	2.6
89°	0.3	0.3	0.3	0.4	0.6	37.9	0.9	0.7	6.3	0.7	0.8



REPORT NUMBER: P1449897  
 CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**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: P1449897  
 CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**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: P1449897  
CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**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: P1449897  
 CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	2746.0	2746.0	2746.0
1°	2762.0	2764.0	2763.5
2°	2779.3	2782.0	2787.0
3°	2794.3	2802.1	2805.6
4°	2813.0	2820.9	2826.7
5°	2827.4	2837.9	2844.2
6°	2840.1	2853.7	2859.3
7°	2852.3	2870.8	2874.2
8°	2864.6	2884.2	2886.9
9°	2875.2	2895.4	2902.7
10°	2884.9	2907.8	2917.7
11°	2896.6	2925.0	2935.3
12°	2909.2	2944.7	2954.0
13°	2925.1	2961.6	2970.4
14°	2939.1	2983.1	2991.8
15°	2955.4	2999.1	3013.2
16°	2970.5	3018.5	3031.0
17°	2983.2	3033.0	3049.1
18°	2997.2	3054.0	3071.4
19°	3011.5	3072.5	3091.5
20°	3026.3	3090.1	3109.8
21°	3041.7	3107.0	3130.7
22°	3053.6	3129.8	3152.0
23°	3064.8	3149.0	3173.9
24°	3082.0	3167.9	3194.9
25°	3093.9	3189.9	3212.2
26°	3109.2	3205.5	3228.9
27°	3123.3	3219.0	3249.7
28°	3135.3	3238.4	3265.8
29°	3143.0	3256.8	3285.7
30°	3159.5	3271.1	3296.1
31°	3170.1	3283.3	3311.3
32°	3180.2	3294.0	3320.4
33°	3189.8	3301.2	3330.4
34°	3192.4	3304.9	3334.1
35°	3201.4	3305.7	3332.0
36°	3204.8	3301.2	3321.4
37°	3200.2	3291.6	3310.0
38°	3197.6	3277.8	3290.5
39°	3187.7	3254.5	3267.1
40°	3172.7	3229.0	3241.5
41°	3151.0	3202.9	3213.1
42°	3128.2	3165.8	3173.9
43°	3099.3	3127.7	3123.6
44°	3066.9	3078.7	3069.9



REPORT NUMBER: P1449897  
 CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	3029.9	3020.5	3011.2
46°	2986.2	2958.7	2948.2
47°	2931.6	2892.0	2872.1
48°	2875.2	2813.8	2789.9
49°	2807.6	2725.0	2701.9
50°	2733.9	2633.6	2606.1
51°	2652.3	2536.9	2501.1
52°	2562.0	2428.2	2390.2
53°	2468.5	2310.8	2270.3
54°	2359.3	2190.2	2146.3
55°	2242.8	2061.4	2014.7
56°	2117.8	1920.3	1873.5
57°	1984.6	1772.2	1713.8
58°	1840.1	1599.1	1522.0
59°	1689.0	1395.5	1306.2
60°	1514.6	1175.1	1082.8
61°	1317.5	943.5	872.4
62°	1093.7	732.2	662.1
63°	877.8	521.2	451.9
64°	662.0	345.9	292.9
65°	446.1	217.7	192.5
66°	281.4	153.7	148.2
67°	174.2	130.7	134.4
68°	128.1	120.4	125.0
69°	113.1	111.4	115.7
70°	103.5	102.6	106.6
71°	95.3	94.9	98.0
72°	86.7	87.3	91.2
73°	78.2	79.7	84.4
74°	71.5	73.1	77.7
75°	63.6	66.1	70.7
76°	55.0	59.7	64.8
77°	47.9	54.9	60.4
78°	42.8	51.3	57.5
79°	38.9	48.7	55.2
80°	35.9	46.2	52.1
81°	33.5	43.1	48.6
82°	30.8	39.6	44.5
83°	27.7	33.8	36.7
84°	22.3	27.5	29.0
85°	17.5	20.3	20.9
86°	11.4	14.7	14.6
87°	7.8	10.0	9.9
88°	4.3	5.3	5.3
89°	0.7	0.7	0.7



REPORT NUMBER: P1449897  
CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**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: P1449897  
CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**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

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

Scaled Data Report



REPORT NUMBER: P1449897  
CATALOG NUMBER: TWC60\_T2\_60W\_4000K

**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: SP1-2601-659-2

Test Date: 02/12/2026

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

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

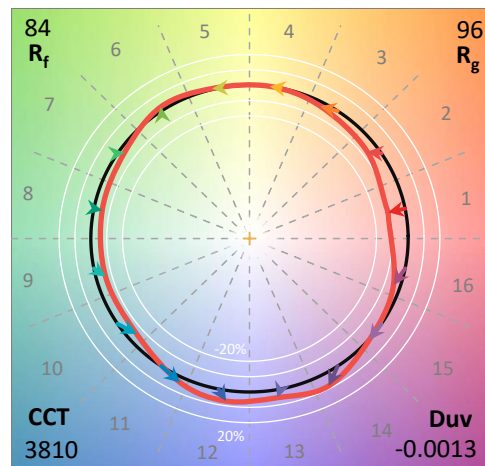
**Test Information**

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**

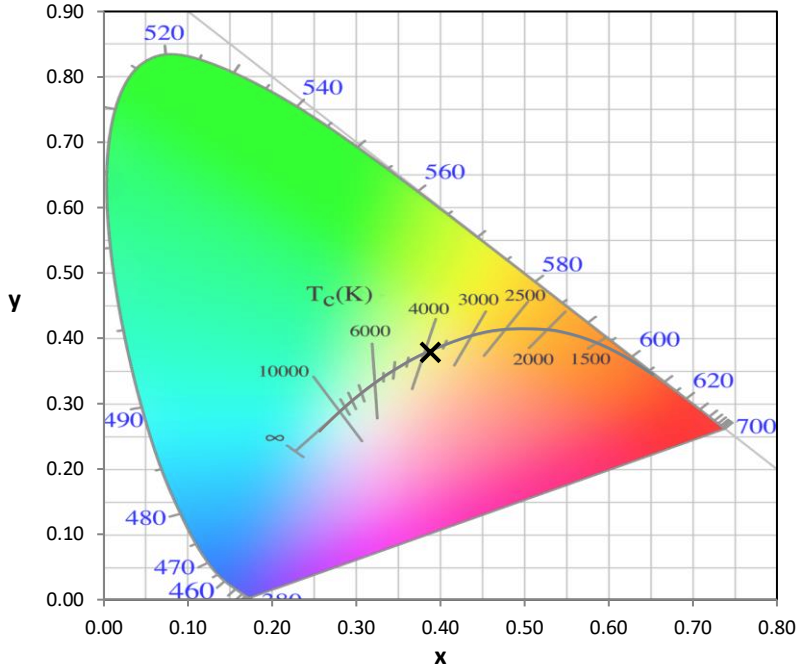
Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-2

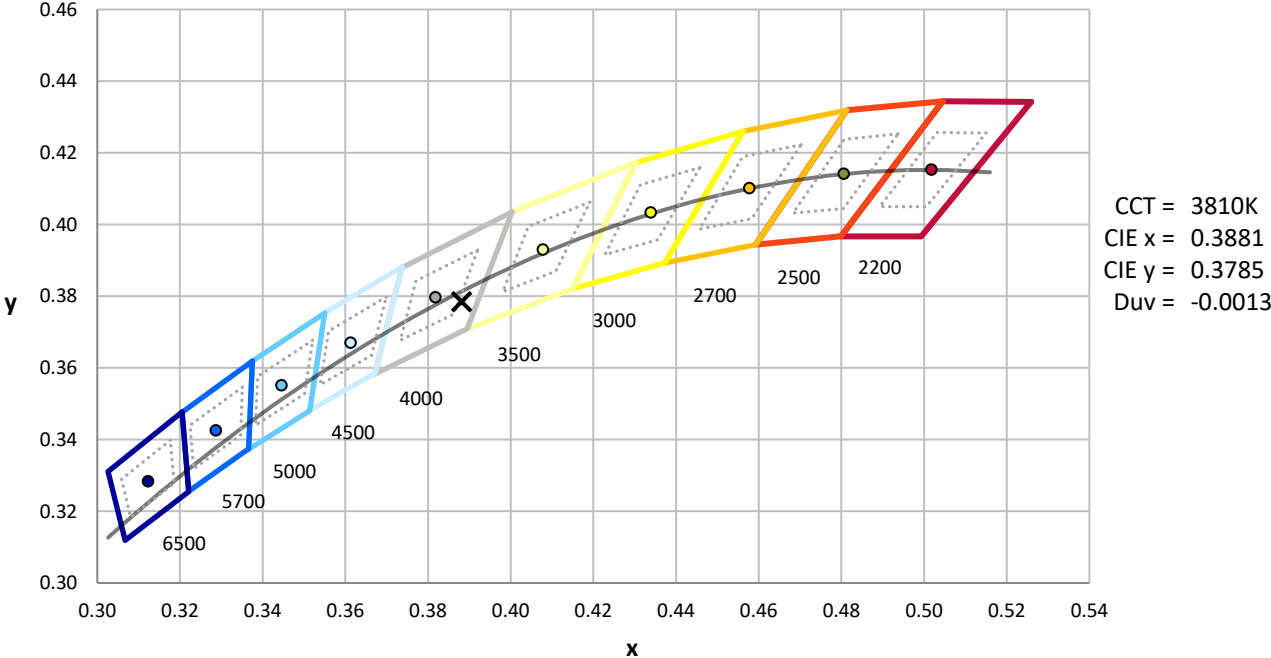
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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



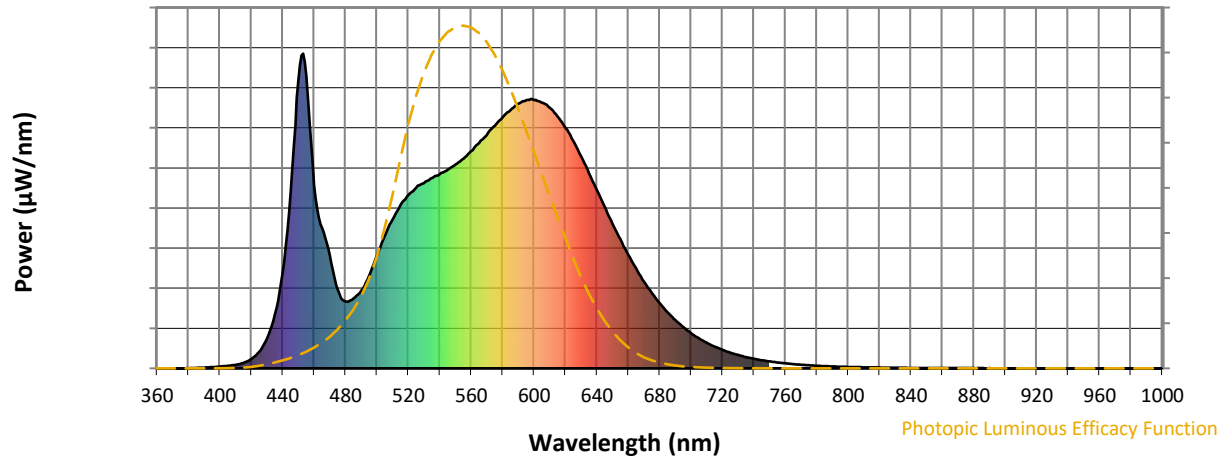
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2601-659-2

**Photopic Flux vs. Wavelength**

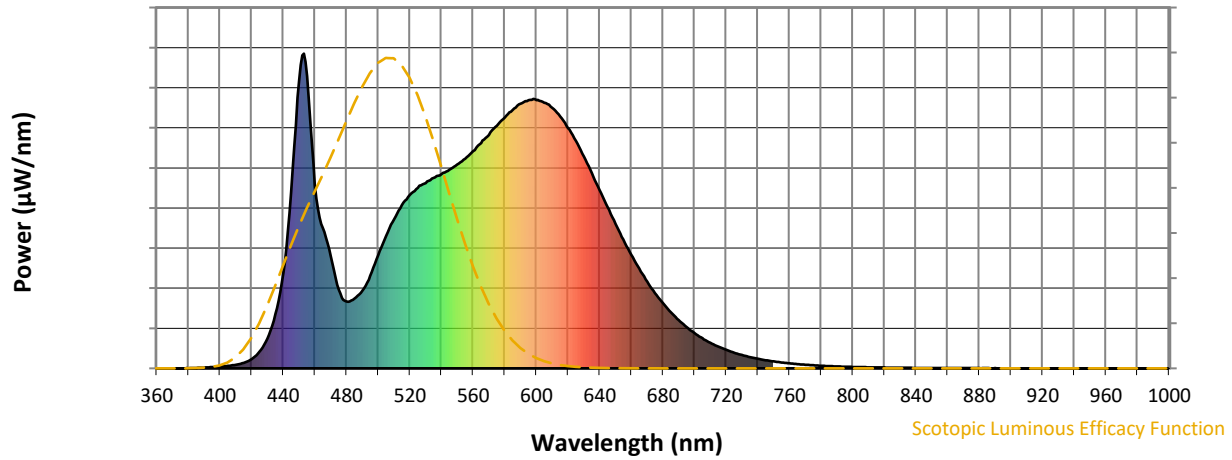


**Photopic Lumens: NR**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**



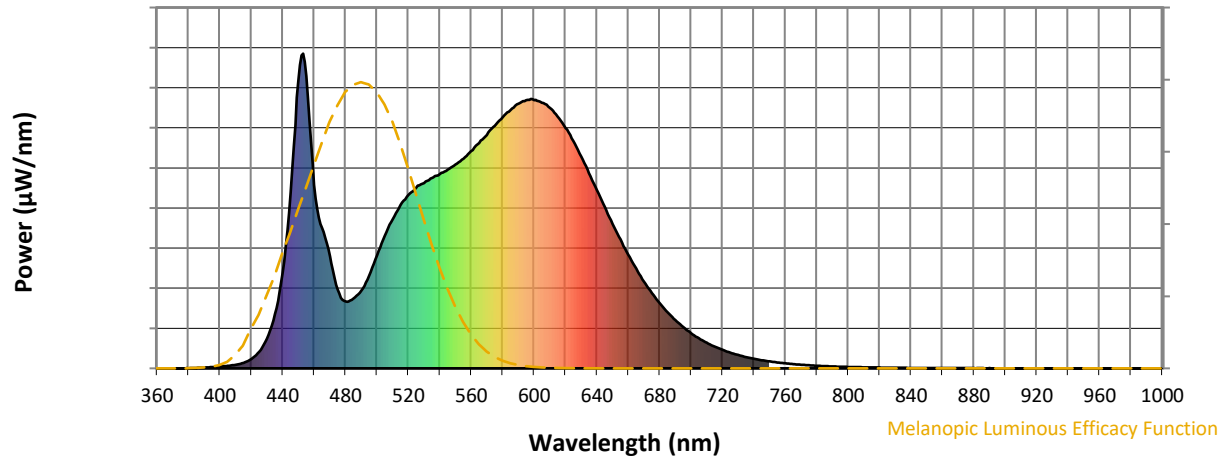
**Scotopic Lumens: NR**

**S/P: 1.64**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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



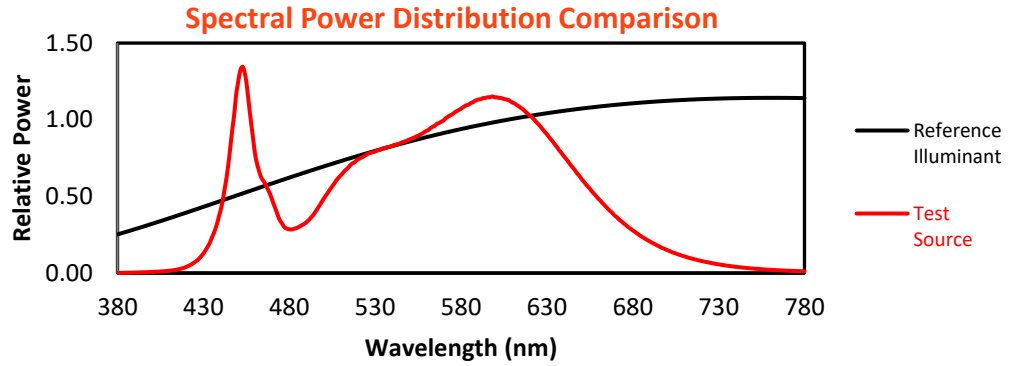
Melanopic Lumens: NR

M/P: 3.35

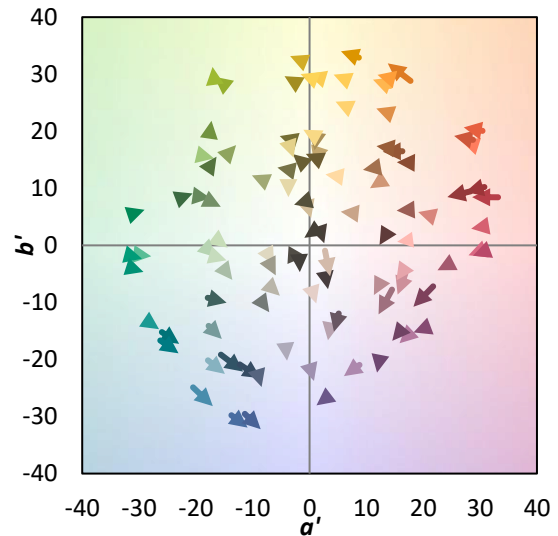
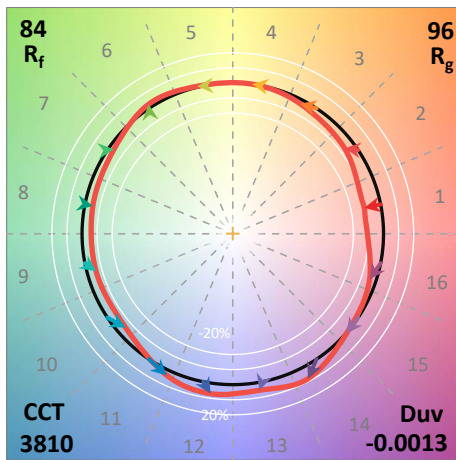
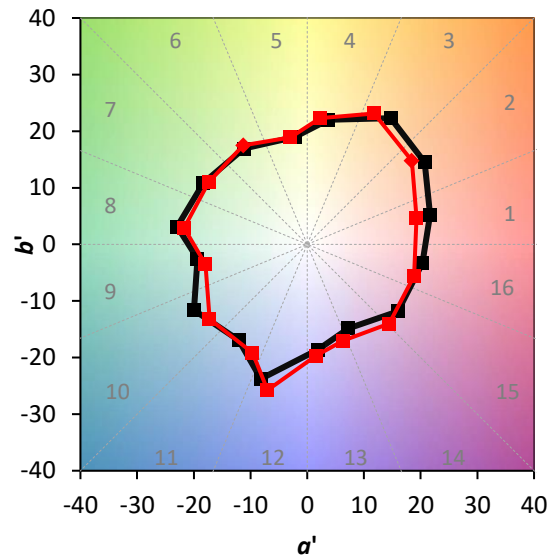
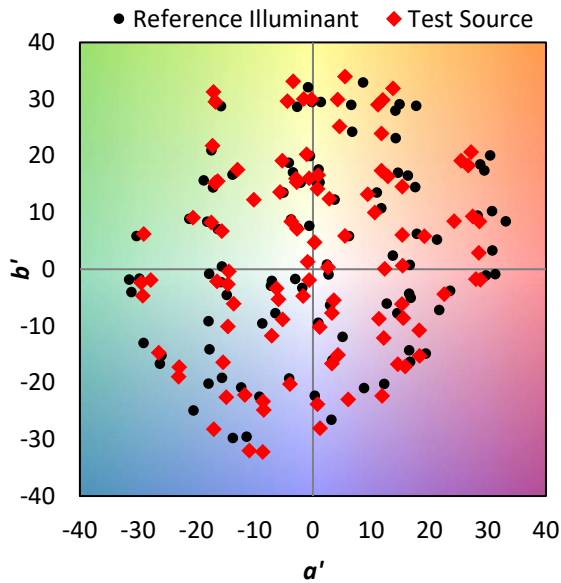
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	247	NR	620	764	NR	750	22	NR	880	1	NR
365	0	NR	495	294	NR	625	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**

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

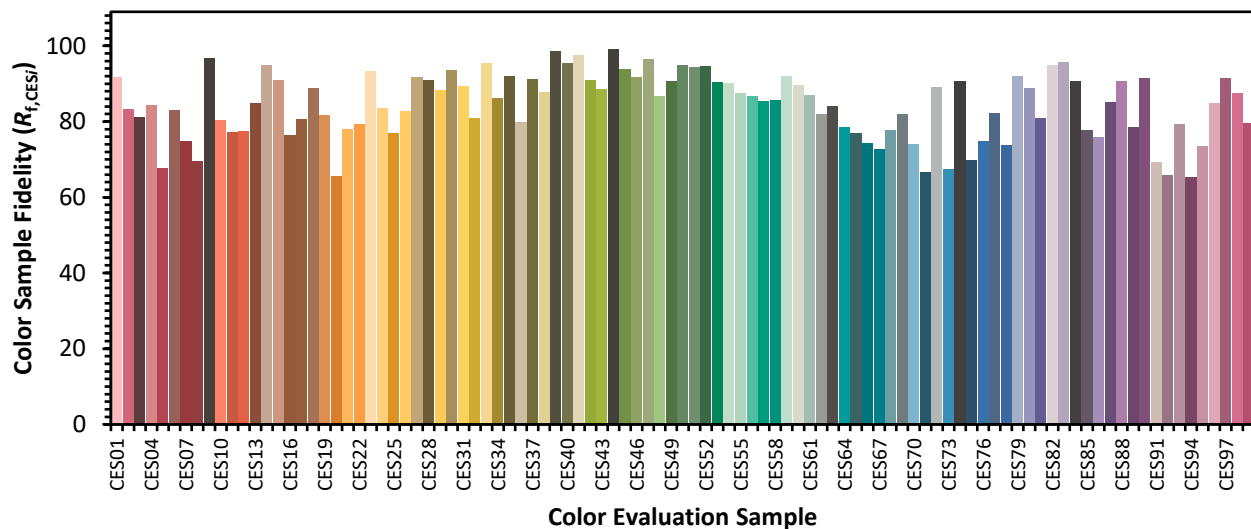


**Color Vector Graphics**

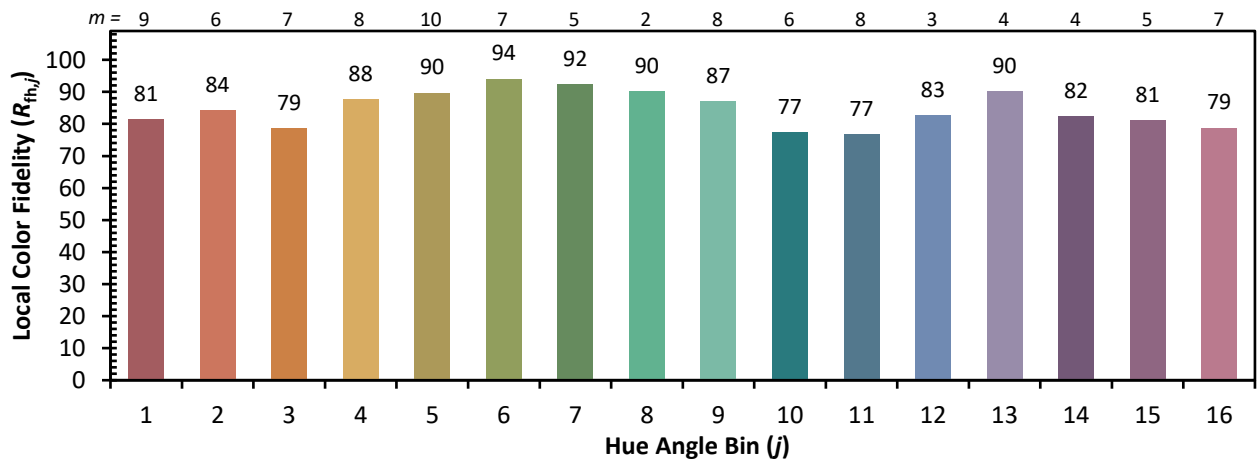
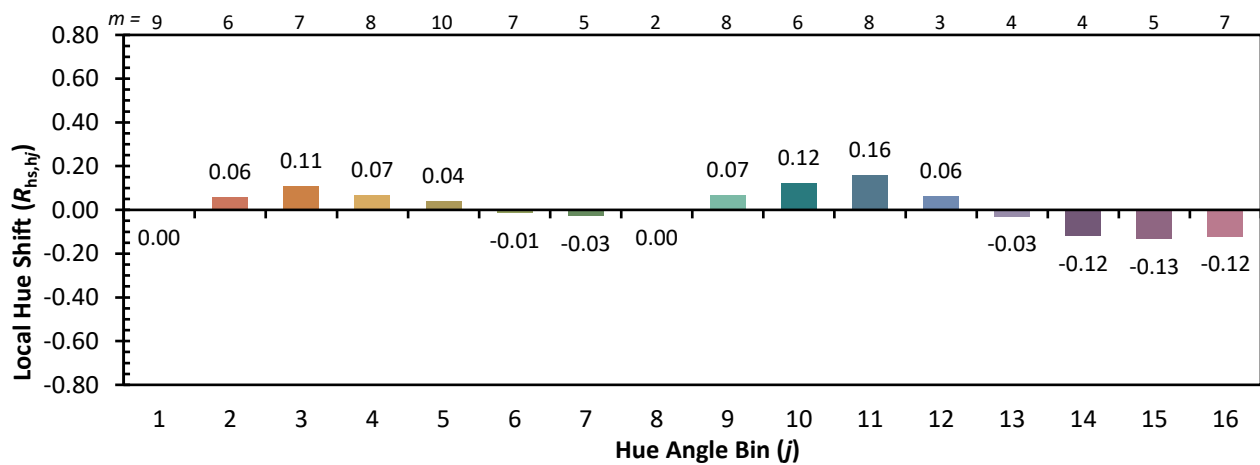
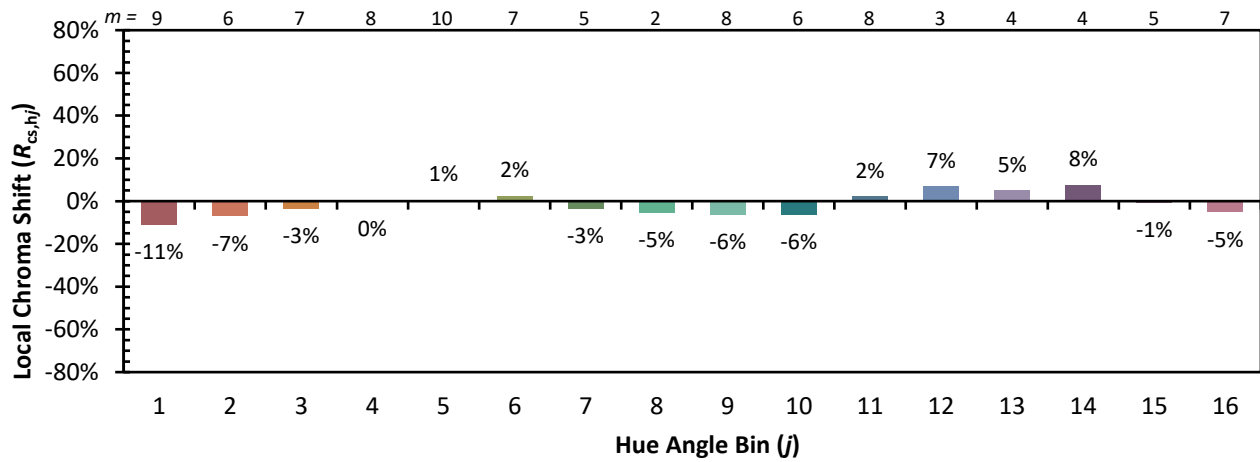


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

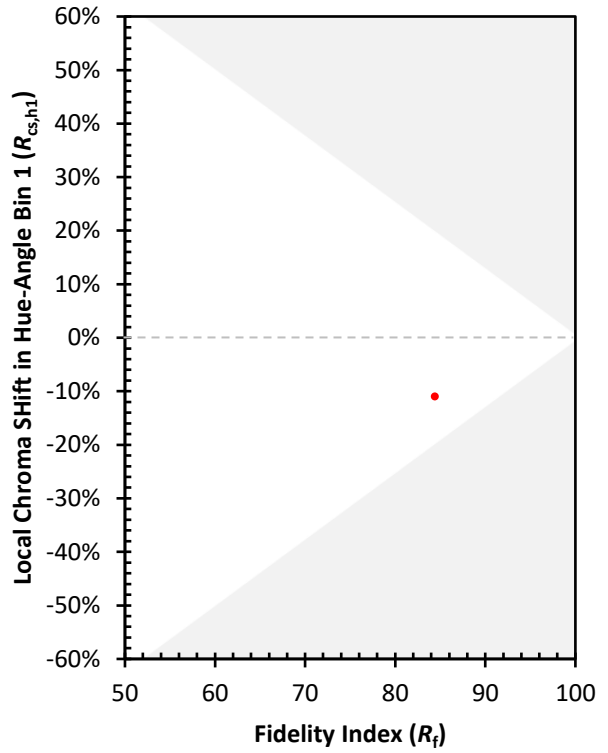
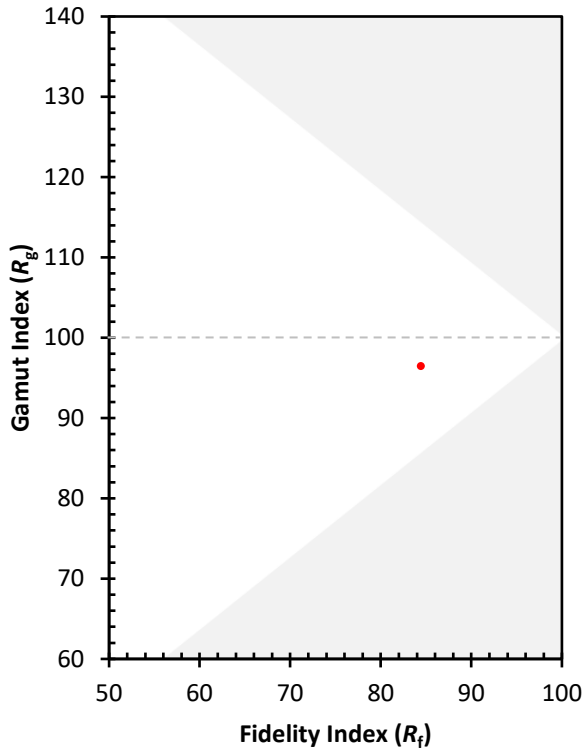
CES01 = 86	CES26 = 83	CES51 = 94	CES76 = 75
CES02 = 62	CES27 = 92	CES52 = 95	CES77 = 82
CES03 = 31	CES28 = 91	CES53 = 90	CES78 = 74
CES04 = 70	CES29 = 88	CES54 = 90	CES79 = 92
CES05 = 48	CES30 = 94	CES55 = 88	CES80 = 89
CES06 = 51	CES31 = 89	CES56 = 87	CES81 = 81
CES07 = 41	CES32 = 81	CES57 = 86	CES82 = 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)