

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: P1449910

Luminaire Tested: **TWC60_T3_60W_5000K**

Issue Date: 5/19/2026

Test Information

Test Method: LM-79-08
Report Number: P1449910
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_T3_60W_5000K
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T3 distribution, 60W
5000K settings
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9750 lumens
Efficiency: N/A
Efficacy: 169.0 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.42' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G2

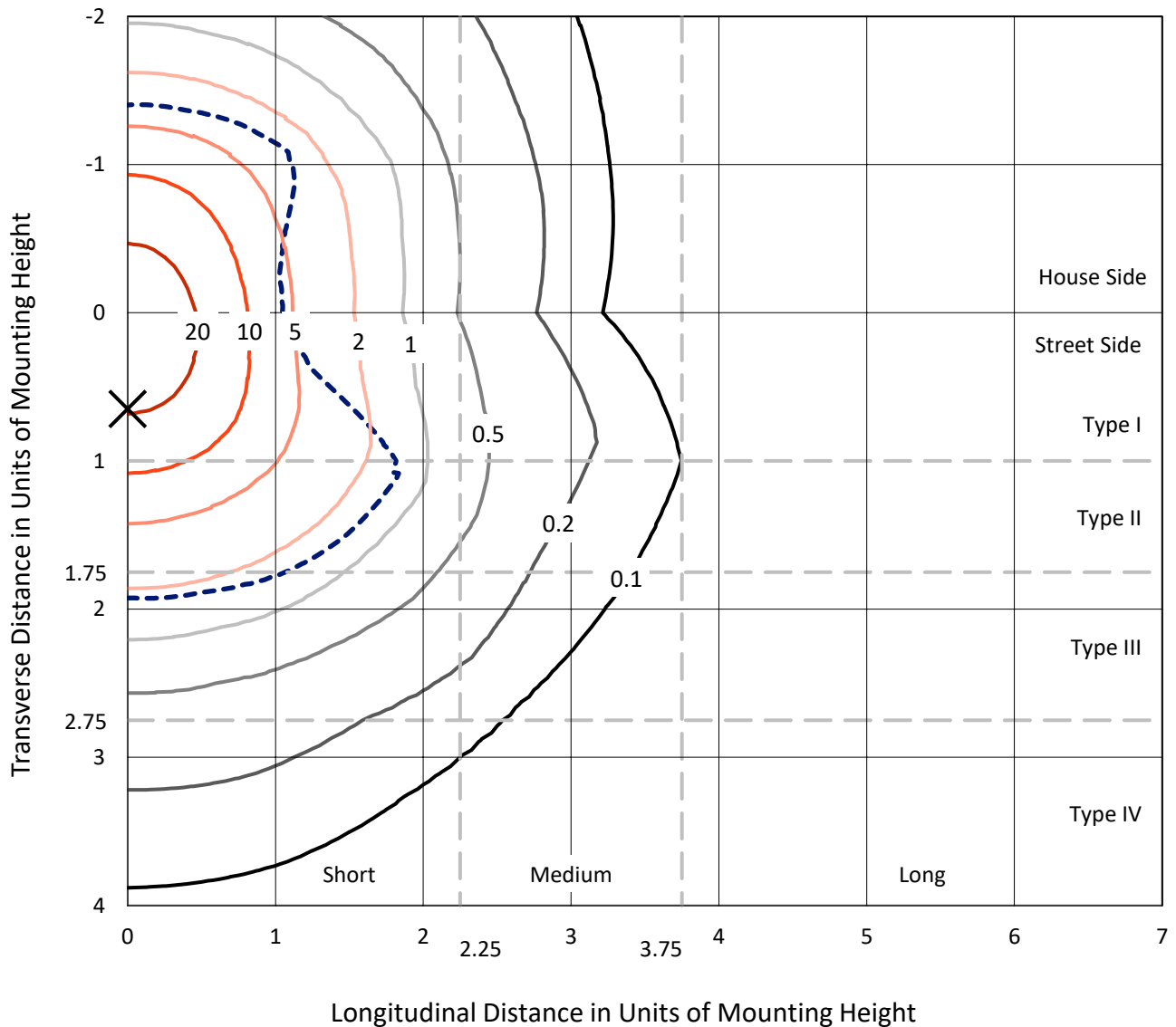
Input Watts (W): 57.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

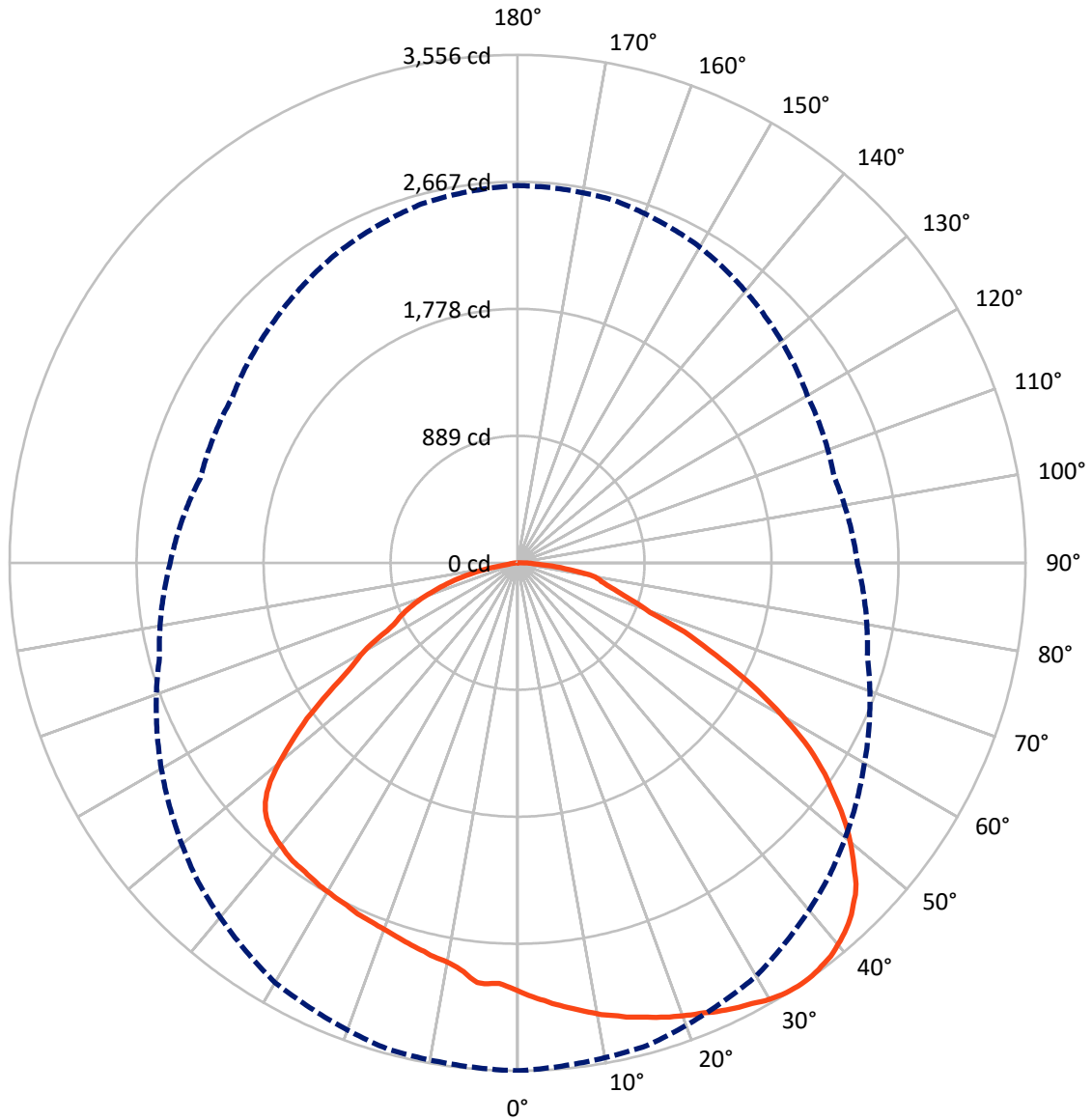
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 30.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 33-Deg Vertical

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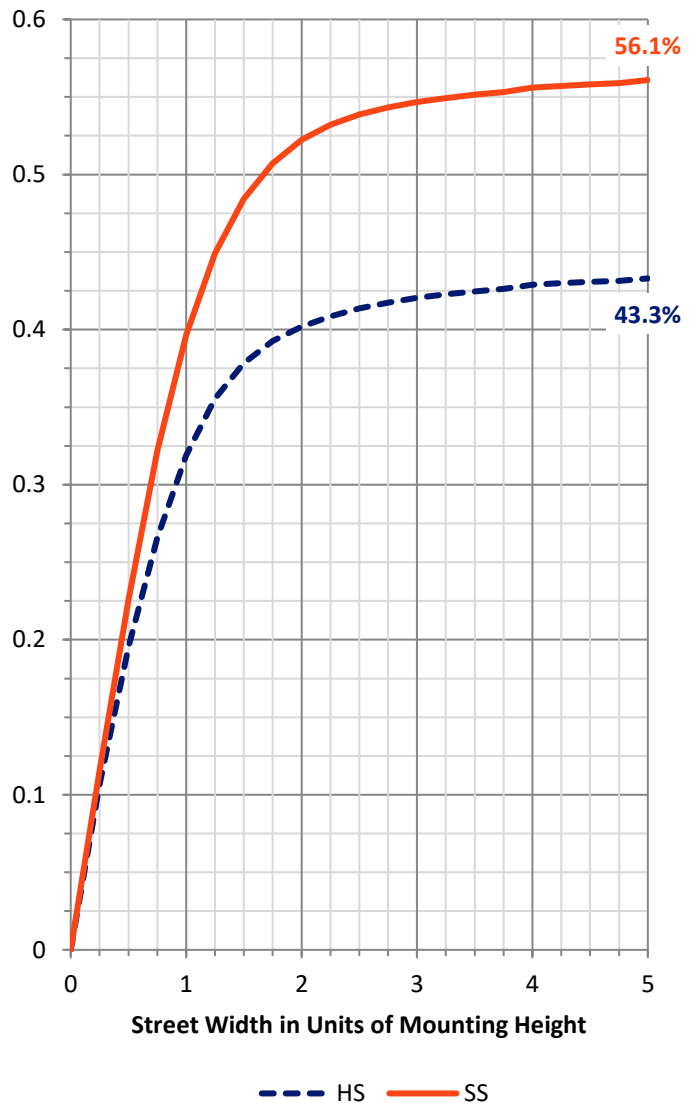
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4246.5	0.0	4246.5
	% Fixture	43.6	0.0	43.6
Street Side	Lumens	5503.5	0.0	5503.5
	% Fixture	56.4	0.0	56.4
Total	Lumens	9750.0	0.0	9750.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.0	2.9
10°-20°	839.3	8.6
20°-30°	1326.6	13.6
30°-40°	1704.5	17.5
40°-50°	1903.2	19.5
50°-60°	1762.7	18.1
60°-70°	1217.7	12.5
70°-80°	576.9	5.9
80°-90°	132.0	1.4
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°	9750.0	100.0
0°-180°	9750.0	100.0

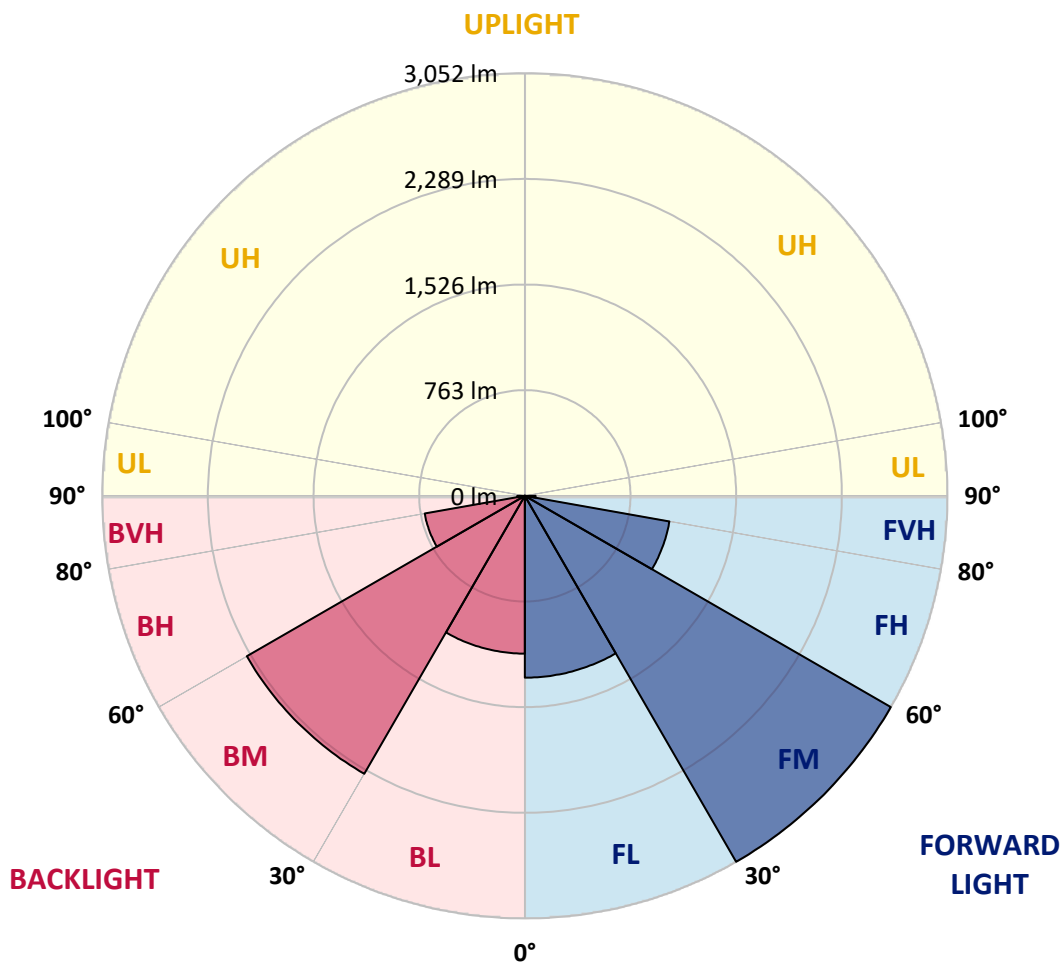


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1313.3	13.5			
FM (30°-60°)	3052.1	31.3			
FH (60°-80°)	1060.4	10.9			G1/1800
FVH (80°-90°)	77.6	0.8			G1/100
BL (0°-30°)	1139.6	11.7	B3/2500		
BM (30°-60°)	2318.3	23.8	B2/2500		
BH (60°-80°)	734.2	7.5	B2/1000		G2/1000
BVH (80°-90°)	54.3	0.6			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°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7
1°	3029.6	3029.9	3025.1	3021.5	3019.5	3013.3	3002.3	2998.4	2993.9	2992.2	2983.9
2°	3051.4	3050.4	3045.1	3034.2	3028.3	3016.5	3001.9	2989.3	2978.5	2972.1	2969.1
3°	3070.0	3073.1	3061.3	3051.2	3035.2	3020.9	2997.8	2980.3	2967.9	2955.3	2951.6
4°	3094.5	3093.6	3079.7	3060.3	3044.9	3016.1	2992.0	2967.7	2954.4	2942.0	2947.4
5°	3113.3	3109.2	3097.1	3071.7	3045.7	3016.3	2985.4	2961.6	2943.9	2943.2	2951.5
6°	3134.3	3125.3	3110.6	3085.2	3054.8	3015.5	2973.1	2947.7	2934.5	2950.2	2955.6
7°	3152.7	3144.5	3125.7	3094.2	3056.7	3010.9	2964.9	2933.6	2933.3	2950.5	2940.9
8°	3175.2	3165.4	3138.2	3100.2	3059.5	3009.8	2955.7	2922.1	2932.7	2934.4	2909.5
9°	3195.1	3184.4	3154.8	3112.0	3058.9	3003.1	2944.4	2914.3	2932.6	2912.6	2873.3
10°	3216.1	3201.9	3169.5	3121.7	3060.7	2998.0	2932.1	2905.3	2920.0	2873.9	2851.7
11°	3232.4	3219.8	3183.0	3130.2	3062.5	2993.1	2921.5	2898.5	2901.3	2846.7	2837.5
12°	3250.0	3234.8	3195.4	3133.5	3061.8	2981.6	2907.2	2892.4	2868.0	2825.3	2819.8
13°	3270.8	3253.3	3209.9	3142.3	3060.4	2974.8	2891.1	2882.3	2833.3	2806.4	2806.2
14°	3285.6	3267.7	3215.6	3147.5	3060.4	2966.8	2871.3	2872.8	2807.1	2791.3	2796.3
15°	3300.9	3282.8	3226.0	3150.7	3057.5	2955.1	2854.8	2852.9	2783.2	2772.9	2781.3
16°	3318.6	3293.5	3235.2	3153.3	3050.3	2946.3	2836.8	2835.4	2760.3	2757.9	2767.3
17°	3335.5	3307.3	3242.0	3153.6	3047.1	2929.9	2821.0	2802.5	2740.0	2741.6	2752.5
18°	3353.1	3320.3	3252.1	3149.1	3041.1	2919.5	2802.2	2768.2	2716.7	2723.0	2739.9
19°	3367.5	3335.5	3257.7	3151.5	3034.8	2903.1	2784.8	2734.5	2696.8	2705.7	2725.4
20°	3382.8	3349.1	3267.3	3152.9	3023.5	2886.9	2767.3	2702.5	2675.3	2690.7	2710.2
21°	3396.5	3363.1	3276.2	3151.5	3015.5	2868.3	2752.4	2673.8	2651.5	2669.6	2698.4
22°	3410.1	3371.9	3283.1	3151.1	3000.2	2849.2	2734.4	2647.0	2626.9	2652.0	2684.7
23°	3430.0	3386.8	3286.3	3146.6	2989.5	2832.6	2717.3	2617.6	2604.7	2634.4	2670.5
24°	3445.9	3400.5	3294.1	3144.7	2973.7	2808.8	2699.7	2588.7	2581.4	2614.6	2656.9
25°	3461.4	3412.4	3300.2	3141.9	2960.2	2781.6	2672.8	2559.8	2556.1	2596.0	2646.1
26°	3477.3	3424.2	3306.7	3136.2	2944.9	2756.7	2647.1	2531.9	2528.0	2576.9	2637.1
27°	3487.8	3437.7	3311.3	3130.8	2930.5	2731.5	2619.1	2500.3	2504.9	2558.1	2623.8
28°	3503.4	3449.5	3316.0	3124.0	2909.9	2701.8	2581.7	2467.3	2478.5	2542.7	2611.7
29°	3522.6	3460.6	3320.0	3118.2	2892.2	2671.0	2542.3	2436.1	2454.1	2525.2	2599.3
30°	3533.9	3471.2	3324.7	3109.5	2870.6	2638.9	2504.0	2400.9	2425.3	2503.0	2584.5
31°	3545.4	3483.4	3330.4	3103.2	2851.8	2607.9	2460.4	2366.1	2397.2	2487.0	2575.4
32°	3551.1	3492.1	3333.7	3097.3	2831.9	2570.9	2419.0	2333.3	2370.6	2468.0	2564.5
33°	3556.0	3499.4	3340.8	3090.2	2804.6	2535.0	2378.6	2296.6	2342.8	2447.3	2552.7
34°	3554.7	3500.2	3345.2	3079.1	2782.9	2499.7	2335.3	2257.5	2312.8	2427.2	2539.1
35°	3551.6	3494.5	3342.4	3072.3	2759.4	2461.6	2293.0	2222.7	2285.8	2405.8	2526.8
36°	3542.7	3494.1	3342.7	3064.6	2733.1	2420.1	2252.1	2187.2	2255.9	2389.2	2511.2
37°	3531.0	3480.8	3338.8	3056.6	2709.5	2379.5	2206.7	2148.6	2229.1	2364.7	2497.2
38°	3520.2	3472.7	3330.4	3048.4	2680.3	2340.6	2162.1	2109.3	2195.9	2342.9	2482.8
39°	3499.9	3453.6	3323.7	3040.2	2657.8	2299.9	2115.9	2069.0	2166.1	2317.0	2471.5
40°	3478.7	3431.3	3312.2	3028.7	2632.4	2257.6	2070.6	2030.2	2138.7	2294.5	2459.9
41°	3456.4	3411.5	3298.2	3017.5	2603.1	2218.3	2026.2	1995.3	2104.9	2276.1	2446.5
42°	3428.2	3390.9	3275.0	3006.0	2579.8	2172.9	1981.9	1960.3	2072.6	2257.7	2427.8
43°	3395.9	3359.5	3252.3	2992.0	2557.5	2129.5	1937.5	1924.1	2039.0	2237.1	2413.7
44°	3352.9	3323.7	3226.0	2979.7	2530.0	2086.1	1889.4	1884.0	2009.4	2209.7	2399.8



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CATALOG NUMBER: TWC60_T3_60W_5000K

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3315.5	3287.5	3200.1	2965.7	2504.9	2044.3	1839.6	1842.5	1979.9	2184.4	2384.1
46°	3266.6	3242.2	3168.4	2948.7	2481.9	2003.6	1789.7	1801.8	1950.4	2162.7	2366.5
47°	3200.8	3193.6	3131.0	2929.5	2457.3	1958.6	1737.3	1759.6	1919.5	2143.2	2340.9
48°	3138.7	3137.1	3090.8	2904.8	2434.6	1912.0	1686.2	1716.0	1882.4	2118.8	2312.4
49°	3072.7	3069.4	3046.7	2876.4	2412.3	1865.4	1635.3	1670.8	1848.0	2092.1	2284.3
50°	3007.0	3007.1	2993.6	2846.4	2389.5	1816.4	1583.1	1622.4	1817.1	2064.5	2241.5
51°	2935.3	2937.2	2934.3	2816.4	2368.6	1767.0	1531.3	1573.9	1785.1	2036.4	2188.9
52°	2855.7	2865.2	2870.6	2780.4	2343.3	1716.2	1476.7	1528.9	1750.8	2008.3	2123.2
53°	2769.9	2782.3	2806.4	2743.4	2320.1	1665.7	1425.0	1483.6	1714.1	1980.2	2038.1
54°	2687.7	2698.1	2728.8	2695.6	2297.5	1614.4	1370.2	1437.4	1673.6	1951.9	1953.2
55°	2610.4	2616.7	2648.0	2639.0	2263.5	1564.0	1317.0	1390.4	1634.2	1909.2	1868.1
56°	2518.3	2534.0	2565.7	2579.8	2232.9	1513.3	1262.2	1342.8	1595.1	1850.3	1774.1
57°	2424.5	2445.5	2475.7	2516.8	2200.0	1463.7	1204.7	1296.0	1555.4	1779.7	1673.1
58°	2315.9	2349.6	2392.2	2445.2	2164.5	1412.5	1144.5	1247.4	1514.0	1695.2	1562.2
59°	2199.0	2243.1	2299.1	2367.9	2126.2	1360.5	1089.9	1197.6	1469.7	1607.4	1460.0
60°	2081.1	2124.2	2208.8	2277.4	2080.2	1308.8	1030.9	1144.4	1423.2	1517.6	1361.0
61°	1963.6	2010.4	2105.8	2181.2	2027.5	1261.1	975.7	1089.9	1377.2	1420.2	1275.9
62°	1840.5	1887.2	1989.7	2076.8	1973.1	1212.4	924.1	1038.8	1323.8	1325.3	1220.2
63°	1711.7	1761.0	1876.2	1964.1	1915.0	1165.2	870.3	987.2	1262.3	1229.8	1163.2
64°	1592.9	1629.1	1768.0	1851.4	1850.6	1121.0	818.4	933.9	1191.1	1138.7	1081.9
65°	1473.4	1501.0	1654.5	1729.6	1773.3	1078.7	769.3	883.5	1112.6	1075.7	989.3
66°	1372.6	1380.0	1533.8	1602.2	1685.2	1040.4	719.0	830.7	1030.4	1029.6	919.0
67°	1264.9	1275.9	1407.7	1475.9	1586.9	1005.2	667.9	779.8	942.1	970.6	873.5
68°	1126.9	1155.6	1275.7	1370.0	1471.7	972.5	617.6	730.0	853.3	897.5	838.1
69°	989.9	1015.9	1144.7	1293.7	1349.5	946.6	566.8	679.3	769.7	841.7	801.5
70°	925.9	944.4	991.3	1215.1	1209.1	921.0	515.4	630.7	701.6	802.3	765.8
71°	864.4	875.5	888.5	1107.8	1038.4	895.3	464.2	581.1	656.7	764.4	733.3
72°	802.9	806.6	786.1	942.0	885.6	866.9	414.9	528.2	607.9	723.9	699.7
73°	750.7	763.2	683.7	819.5	733.0	824.8	366.7	472.6	561.5	683.9	661.1
74°	703.1	715.6	639.6	698.4	580.4	758.7	321.3	415.6	529.0	645.4	619.5
75°	663.0	662.7	594.4	577.4	624.7	682.0	278.3	355.2	501.7	609.4	575.4
76°	627.7	606.4	553.7	520.5	573.8	610.7	241.3	299.3	471.3	569.7	525.3
77°	600.4	550.9	511.7	489.8	404.1	537.3	204.2	261.0	441.8	534.2	468.6
78°	581.1	506.8	462.6	459.3	293.1	443.2	167.4	222.7	414.6	500.0	415.9
79°	554.9	475.6	419.0	398.6	233.3	352.5	137.3	184.5	385.8	466.9	369.2
80°	509.5	450.2	387.1	321.7	237.8	276.1	110.2	160.6	358.3	425.1	333.3
81°	441.2	421.0	357.2	271.1	245.9	203.9	86.2	136.8	329.2	380.2	296.0
82°	369.2	379.9	326.5	236.8	177.3	144.8	65.2	115.1	299.8	336.4	225.6
83°	303.2	337.9	283.0	206.4	115.4	98.0	48.3	94.5	270.2	303.6	154.9
84°	241.4	299.4	220.3	181.3	93.7	76.2	35.2	75.3	227.0	243.7	59.6
85°	167.3	235.1	170.1	154.2	72.2	54.9	26.6	57.4	184.1	183.8	42.4
86°	115.5	173.6	125.6	106.1	50.6	33.6	18.1	40.4	153.9	123.9	25.2
87°	92.4	101.3	83.6	59.3	35.9	19.4	9.6	27.5	102.3	64.0	8.1
88°	69.4	75.6	62.8	12.4	19.0	8.0	4.5	14.5	68.2	4.2	3.0
89°	46.5	50.6	42.2	7.6	12.6	4.1	1.4	1.9	34.1	1.2	1.0



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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: P1449910

CATALOG NUMBER: TWC60_T3_60W_5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7	3006.7
1°	2984.4	2983.2	2984.0	2989.4	2993.2	2995.5	3001.8	3005.5	3012.7	3017.7	3022.0
2°	2964.4	2964.5	2969.0	2970.6	2976.4	2984.2	2996.7	3001.3	3014.8	3024.1	3037.3
3°	2948.8	2947.8	2950.5	2954.1	2959.9	2976.7	2988.0	2999.1	3019.1	3033.7	3053.1
4°	2948.6	2950.4	2950.3	2945.2	2947.6	2958.7	2977.0	2998.0	3019.8	3042.9	3063.9
5°	2955.3	2957.1	2953.8	2948.9	2940.9	2948.8	2967.6	2992.5	3021.6	3050.8	3075.3
6°	2951.8	2951.9	2954.5	2950.8	2942.0	2934.6	2956.8	2984.8	3021.6	3055.6	3088.2
7°	2930.1	2923.5	2934.4	2944.2	2943.4	2928.3	2947.2	2974.6	3017.7	3062.8	3099.9
8°	2888.1	2887.3	2894.5	2921.4	2938.4	2924.1	2935.7	2969.2	3019.8	3067.1	3111.1
9°	2865.3	2863.9	2864.2	2885.0	2920.6	2922.2	2919.8	2955.9	3016.3	3073.6	3123.3
10°	2849.3	2845.0	2846.8	2856.7	2890.6	2917.4	2907.3	2945.6	3012.0	3075.1	3133.0
11°	2833.3	2833.1	2833.5	2837.6	2856.3	2908.9	2892.6	2935.6	3006.2	3075.5	3141.6
12°	2821.9	2823.6	2821.5	2818.1	2829.8	2891.4	2882.6	2922.0	3001.4	3081.1	3149.2
13°	2811.1	2813.7	2812.1	2804.8	2809.1	2862.1	2872.2	2910.0	2991.7	3081.9	3159.2
14°	2799.6	2798.0	2798.7	2792.5	2791.2	2827.4	2864.2	2890.6	2988.2	3081.2	3163.4
15°	2787.8	2788.4	2786.2	2777.0	2771.2	2795.6	2853.1	2878.3	2979.1	3077.3	3167.7
16°	2777.7	2777.0	2770.5	2758.1	2753.3	2768.1	2840.4	2859.8	2971.4	3076.5	3173.0
17°	2767.0	2766.0	2761.9	2745.3	2733.2	2743.1	2822.0	2840.1	2959.2	3072.3	3177.9
18°	2753.3	2754.9	2745.3	2729.2	2716.8	2719.5	2800.9	2824.3	2949.0	3069.8	3178.4
19°	2741.9	2745.1	2734.9	2714.6	2694.8	2695.1	2774.5	2802.2	2935.7	3063.7	3181.2
20°	2732.4	2734.2	2724.0	2698.7	2674.7	2672.5	2737.6	2782.7	2921.6	3058.7	3184.1
21°	2722.4	2726.9	2711.6	2683.3	2656.3	2650.0	2705.7	2760.5	2907.3	3047.6	3184.2
22°	2710.2	2718.1	2699.9	2670.0	2635.7	2621.5	2667.7	2741.4	2887.4	3040.0	3186.6
23°	2705.9	2711.6	2690.8	2653.6	2616.0	2595.7	2636.3	2716.8	2868.4	3029.0	3187.3
24°	2697.9	2705.6	2684.6	2638.1	2593.2	2567.1	2607.9	2695.0	2846.9	3016.5	3186.0
25°	2686.2	2700.3	2675.6	2624.5	2573.0	2541.5	2574.7	2672.4	2825.7	3008.3	3183.5
26°	2681.4	2689.4	2667.4	2611.7	2551.8	2515.4	2542.4	2651.4	2801.4	2996.8	3187.3
27°	2668.9	2679.0	2655.2	2598.7	2530.3	2486.8	2511.5	2629.7	2777.4	2982.3	3180.9
28°	2662.1	2674.4	2645.9	2585.9	2508.3	2458.4	2479.2	2609.9	2751.2	2967.7	3179.9
29°	2651.6	2668.5	2632.5	2567.7	2487.5	2427.8	2444.4	2578.7	2720.9	2952.1	3176.7
30°	2645.6	2660.6	2623.8	2555.5	2469.1	2399.6	2411.6	2546.9	2691.1	2936.0	3174.8
31°	2644.2	2656.0	2618.2	2538.6	2449.1	2366.7	2372.7	2514.3	2660.6	2917.9	3170.9
32°	2635.7	2651.1	2610.1	2524.1	2426.5	2337.1	2340.0	2476.2	2627.9	2898.5	3167.1
33°	2626.2	2641.3	2600.6	2511.0	2403.4	2308.6	2298.3	2431.8	2596.2	2879.9	3161.3
34°	2612.5	2634.7	2589.8	2496.4	2376.0	2278.1	2262.4	2382.7	2560.7	2858.5	3159.1
35°	2601.5	2625.6	2578.9	2481.5	2354.4	2244.9	2222.3	2337.1	2528.1	2840.9	3158.0
36°	2596.1	2622.0	2567.0	2467.2	2329.8	2212.3	2183.9	2291.1	2493.9	2820.0	3150.4
37°	2592.8	2617.8	2560.2	2447.5	2306.5	2180.4	2142.4	2244.6	2457.1	2799.8	3149.3
38°	2588.5	2609.7	2554.8	2432.1	2280.9	2148.0	2102.4	2199.3	2423.0	2780.7	3138.7
39°	2576.1	2599.1	2546.3	2415.9	2256.8	2112.9	2061.9	2151.5	2386.1	2758.0	3129.4
40°	2562.1	2586.1	2531.4	2401.0	2227.3	2078.5	2020.7	2106.0	2345.7	2739.1	3121.8
41°	2553.8	2575.4	2517.1	2383.2	2201.6	2042.7	1979.5	2056.0	2308.2	2718.3	3111.1
42°	2538.4	2561.6	2504.2	2363.2	2180.2	2012.0	1938.3	2010.6	2265.3	2698.0	3100.7
43°	2526.4	2548.9	2491.9	2348.3	2156.0	1981.2	1896.8	1962.0	2224.0	2680.2	3086.4
44°	2507.9	2529.8	2474.8	2333.6	2133.3	1950.3	1851.4	1910.0	2183.4	2662.7	3070.8



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CATALOG NUMBER: TWC60_T3_60W_5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	2484.9	2507.2	2455.8	2315.1	2106.0	1908.7	1804.8	1857.3	2140.4	2645.9	3049.9
46°	2459.2	2474.9	2430.6	2295.4	2077.1	1868.5	1762.4	1805.5	2096.2	2626.2	3024.7
47°	2426.3	2434.0	2402.7	2276.2	2050.1	1830.6	1716.2	1752.4	2051.8	2608.6	3001.2
48°	2378.0	2379.6	2360.1	2252.7	2025.9	1795.4	1672.4	1699.5	2010.5	2590.4	2970.5
49°	2319.1	2310.7	2309.5	2228.5	1999.4	1758.5	1624.4	1646.7	1964.4	2569.8	2941.7
50°	2242.3	2226.9	2246.5	2195.6	1972.8	1719.9	1576.8	1592.5	1921.8	2552.5	2906.4
51°	2153.9	2128.7	2166.9	2159.7	1946.2	1681.1	1528.2	1541.1	1882.9	2532.1	2868.0
52°	2059.4	2029.9	2076.0	2107.7	1912.9	1642.9	1478.2	1486.5	1841.6	2506.7	2821.0
53°	1964.9	1931.1	1985.1	2036.9	1880.6	1608.0	1426.8	1429.8	1800.0	2475.1	2767.2
54°	1870.0	1832.3	1894.0	1966.1	1849.3	1569.3	1375.8	1375.1	1761.0	2444.5	2708.1
55°	1759.4	1717.8	1791.5	1894.9	1814.4	1525.9	1326.9	1316.9	1723.0	2413.7	2648.8
56°	1646.2	1605.3	1678.0	1801.8	1777.7	1483.1	1278.3	1258.4	1686.4	2376.1	2580.2
57°	1533.9	1495.7	1567.3	1708.8	1732.7	1436.8	1224.8	1200.7	1649.5	2332.6	2502.7
58°	1428.9	1400.3	1458.4	1609.3	1676.2	1389.9	1171.3	1143.7	1612.7	2289.8	2421.6
59°	1349.3	1332.4	1365.7	1504.4	1608.7	1345.5	1118.8	1088.2	1576.0	2235.3	2329.5
60°	1288.6	1275.7	1295.0	1403.0	1527.2	1297.7	1066.6	1034.0	1541.4	2179.8	2232.9
61°	1228.1	1208.5	1239.2	1302.0	1442.4	1251.4	1015.3	978.0	1500.3	2119.0	2135.6
62°	1153.7	1124.5	1173.1	1223.2	1351.1	1203.8	962.0	924.8	1462.8	2052.3	2034.4
63°	1056.2	1028.3	1083.4	1167.9	1252.5	1150.9	906.0	871.6	1423.2	1972.4	1928.3
64°	976.6	967.2	990.4	1112.5	1157.5	1099.6	851.4	818.4	1385.8	1880.6	1812.6
65°	933.9	931.7	934.2	1037.2	1065.0	1046.1	797.6	767.1	1350.5	1779.9	1688.3
66°	898.9	896.4	895.9	949.0	985.1	983.4	742.9	713.6	1316.6	1669.0	1570.0
67°	865.4	858.4	864.1	888.0	932.0	908.6	690.5	659.3	1279.8	1550.1	1472.2
68°	826.7	816.1	828.1	841.9	888.7	828.2	638.7	604.4	1237.4	1415.3	1380.2
69°	784.8	769.6	790.7	801.1	827.7	748.1	589.3	547.8	1182.3	1264.7	1286.7
70°	741.2	721.4	752.4	761.2	773.7	664.2	540.2	493.3	1118.3	1092.8	1171.4
71°	691.5	666.3	708.4	723.7	737.4	586.2	492.3	439.0	1038.7	944.5	1020.9
72°	638.6	614.3	659.9	692.2	706.4	521.5	447.8	386.8	959.0	884.7	892.3
73°	588.4	566.4	608.4	660.6	671.1	476.8	402.4	339.5	873.1	827.1	763.8
74°	535.9	513.3	557.1	628.9	635.8	432.7	359.3	295.4	787.2	812.3	635.2
75°	484.4	459.3	503.3	595.3	602.2	395.6	313.4	253.4	701.3	639.6	585.2
76°	428.6	401.0	452.6	557.5	567.5	367.4	270.2	216.1	591.3	467.4	540.2
77°	375.6	346.5	401.5	514.0	531.2	339.9	229.8	182.7	446.3	380.0	502.6
78°	328.4	295.0	355.5	461.1	492.7	311.5	189.5	154.4	333.8	323.6	450.2
79°	267.5	232.0	310.6	404.0	453.8	285.1	155.1	129.3	230.8	316.8	383.8
80°	206.6	169.0	242.4	356.4	413.9	259.9	128.7	106.3	172.3	319.3	323.7
81°	145.6	106.0	174.3	320.2	372.3	233.3	107.3	86.9	149.0	239.6	282.2
82°	76.8	60.0	106.5	290.9	329.7	206.7	88.7	67.6	133.1	158.9	250.6
83°	47.6	46.2	50.7	210.4	285.8	180.1	71.1	48.4	109.0	126.2	224.3
84°	34.6	33.4	35.3	130.8	238.0	152.9	54.8	35.2	85.7	103.8	193.2
85°	25.2	24.4	25.8	89.7	190.2	124.5	40.5	24.8	62.5	86.7	146.7
86°	15.9	15.4	16.3	48.6	142.3	94.0	29.4	16.1	39.4	69.8	79.1
87°	6.6	6.6	7.0	8.2	94.9	69.9	18.4	9.1	23.0	52.8	48.1
88°	2.7	2.7	2.8	2.7	47.5	46.8	7.3	4.9	8.9	22.1	17.6
89°	1.0	1.0	1.0	1.0	1.1	23.7	1.2	0.8	4.5	14.5	11.4



REPORT NUMBER: P1449910
 CATALOG NUMBER: TWC60_T3_60W_5000K

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: P1449910
 CATALOG NUMBER: TWC60_T3_60W_5000K

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: P1449910
CATALOG NUMBER: TWC60_T3_60W_5000K

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: P1449910
 CATALOG NUMBER: TWC60_T3_60W_5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	3006.7	3006.7	3006.7
1°	3023.0	3026.9	3029.6
2°	3044.7	3050.7	3051.4
3°	3061.2	3072.4	3070.0
4°	3079.6	3088.3	3094.5
5°	3096.6	3109.6	3113.3
6°	3111.2	3131.5	3134.3
7°	3128.4	3146.5	3152.7
8°	3146.4	3168.2	3175.2
9°	3161.9	3189.7	3195.1
10°	3178.7	3207.4	3216.1
11°	3192.7	3225.0	3232.4
12°	3206.1	3239.7	3250.0
13°	3221.0	3255.4	3270.8
14°	3228.4	3273.2	3285.6
15°	3241.3	3287.3	3300.9
16°	3252.3	3304.0	3318.6
17°	3260.0	3315.4	3335.5
18°	3272.8	3333.6	3353.1
19°	3283.5	3346.1	3367.5
20°	3289.9	3360.5	3382.8
21°	3300.1	3374.3	3396.5
22°	3309.2	3391.5	3410.1
23°	3315.7	3405.3	3430.0
24°	3324.2	3421.4	3445.9
25°	3332.7	3432.8	3461.4
26°	3343.4	3447.0	3477.3
27°	3349.1	3460.9	3487.8
28°	3356.6	3475.1	3503.4
29°	3365.6	3483.7	3522.6
30°	3371.8	3498.4	3533.9
31°	3381.6	3508.9	3545.4
32°	3388.1	3516.9	3551.1
33°	3394.2	3523.7	3556.0
34°	3397.5	3522.8	3554.7
35°	3396.9	3518.5	3551.6
36°	3393.7	3515.6	3542.7
37°	3391.1	3503.0	3531.0
38°	3381.1	3487.8	3520.2
39°	3374.1	3468.7	3499.9
40°	3355.9	3450.6	3478.7
41°	3334.3	3426.6	3456.4
42°	3312.7	3402.8	3428.2
43°	3286.4	3374.7	3395.9
44°	3262.2	3335.2	3352.9



REPORT NUMBER: P1449910
 CATALOG NUMBER: TWC60_T3_60W_5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3236.0	3293.6	3315.5
46°	3198.2	3250.8	3266.6
47°	3154.5	3196.3	3200.8
48°	3111.5	3132.4	3138.7
49°	3056.0	3066.3	3072.7
50°	2999.1	3002.0	3007.0
51°	2932.8	2929.3	2935.3
52°	2865.0	2855.3	2855.7
53°	2793.9	2772.8	2769.9
54°	2713.6	2691.6	2687.7
55°	2631.2	2608.7	2610.4
56°	2544.1	2524.8	2518.3
57°	2457.4	2434.2	2424.5
58°	2371.9	2331.4	2315.9
59°	2278.9	2215.5	2199.0
60°	2177.9	2099.1	2081.1
61°	2064.2	1980.9	1963.6
62°	1947.2	1860.9	1840.5
63°	1837.4	1732.5	1711.7
64°	1723.3	1608.3	1592.9
65°	1596.4	1483.6	1473.4
66°	1470.8	1372.8	1372.6
67°	1342.0	1269.2	1264.9
68°	1210.0	1142.5	1126.9
69°	1077.0	1000.6	989.9
70°	934.7	935.7	925.9
71°	839.1	871.4	864.4
72°	744.7	807.1	802.9
73°	704.0	757.7	750.7
74°	666.7	706.2	703.1
75°	629.4	654.1	663.0
76°	589.1	603.4	627.7
77°	541.6	560.8	600.4
78°	491.2	531.2	581.1
79°	450.1	510.5	554.9
80°	414.3	487.5	509.5
81°	378.3	444.7	441.2
82°	330.8	389.7	369.2
83°	273.1	338.4	303.2
84°	214.8	285.4	241.4
85°	183.8	212.0	167.3
86°	136.9	146.8	115.5
87°	89.5	116.9	92.4
88°	67.3	87.9	69.4
89°	45.1	58.8	46.5



REPORT NUMBER: P1449910
CATALOG NUMBER: TWC60_T3_60W_5000K

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: P1449910
CATALOG NUMBER: TWC60_T3_60W_5000K

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: P1449910
CATALOG NUMBER: TWC60_T3_60W_5000K

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: SP1-2601-659-3

Test Date: 02/12/2026

Luminaire Tested: MWP2460W34VDDKYYAD-T4-24W-5000K

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

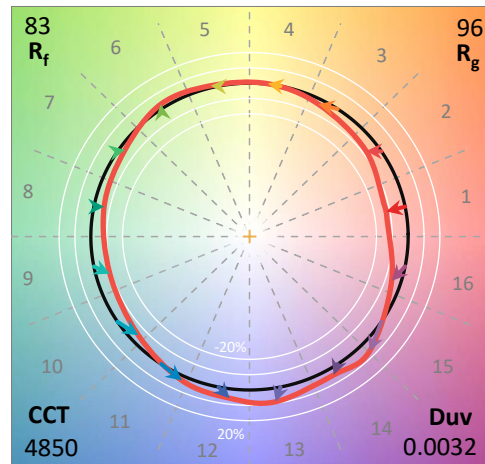
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2601-659-3
 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-5000K**
 Description: Mester Wedge, at T4 beam setting, 24W output, 5000K

Spectral Parameters

CCT (K): 4850
 CIE u': 0.2108
 CIE v': 0.4905
 Duv: 0.0032
 CIE x: 0.3503
 CIE y: 0.3623
 CIE z: 0.2875
 Peak Wavelength (nm): 452
 Dominant Wavelength (nm): 571
 Purity: 13.81051
 R_f: 83.1
 R_g: 95.8

CRI (Ra):	82.6		
R1:	80.9	R9:	8.5
R2:	87.6	R10:	69.7
R3:	92.0	R11:	80.6
R4:	81.9	R12:	52.2
R5:	80.4	R13:	82.7
R6:	82.0	R14:	95.7
R7:	88.2	R15:	74.9
R8:	67.7		



Test Conditions

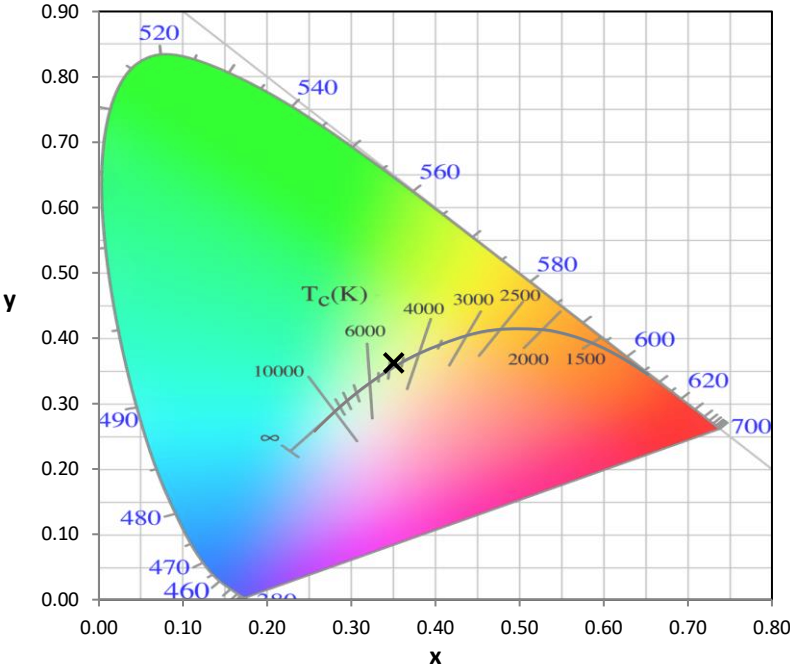
Stabilization Time: 25M
 Operation Time: 1H 25M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-3

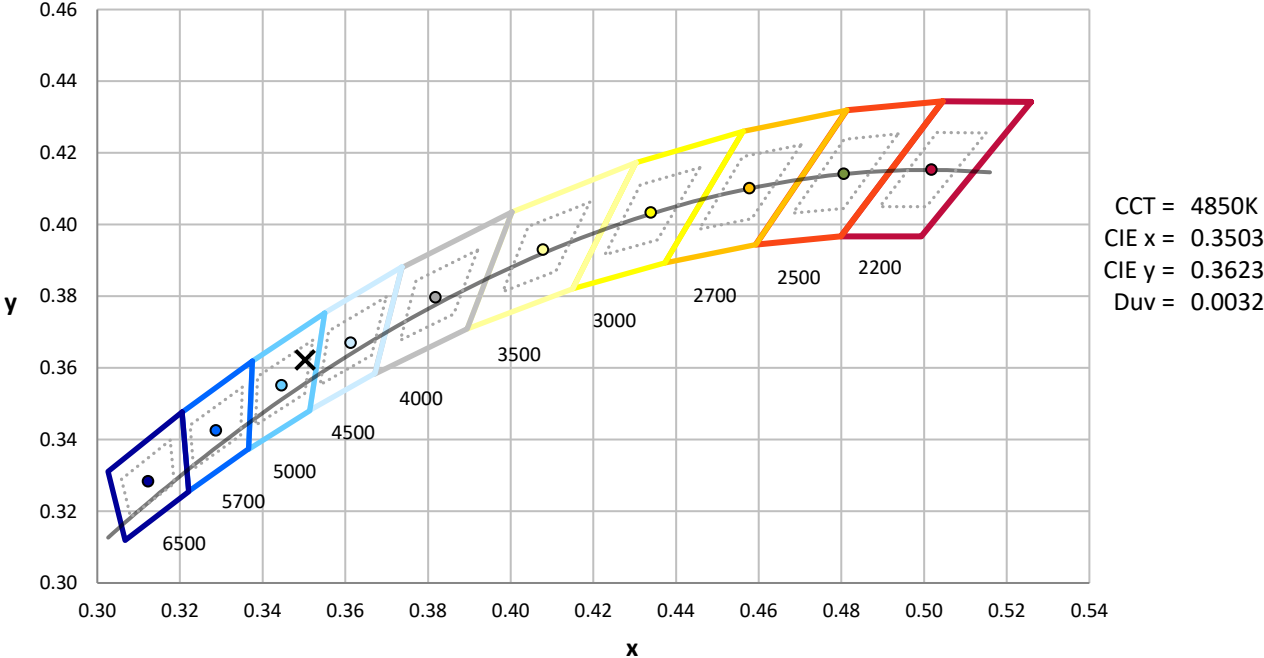
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	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: SP1-2601-659-3

CIE 1931 Chromaticity Diagram



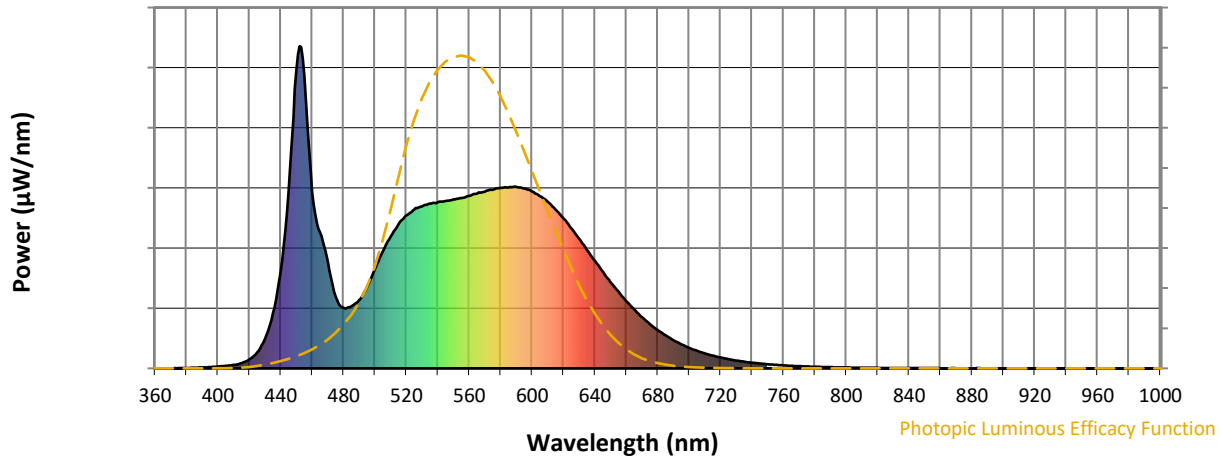
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2601-659-3

Photopic Flux vs. Wavelength

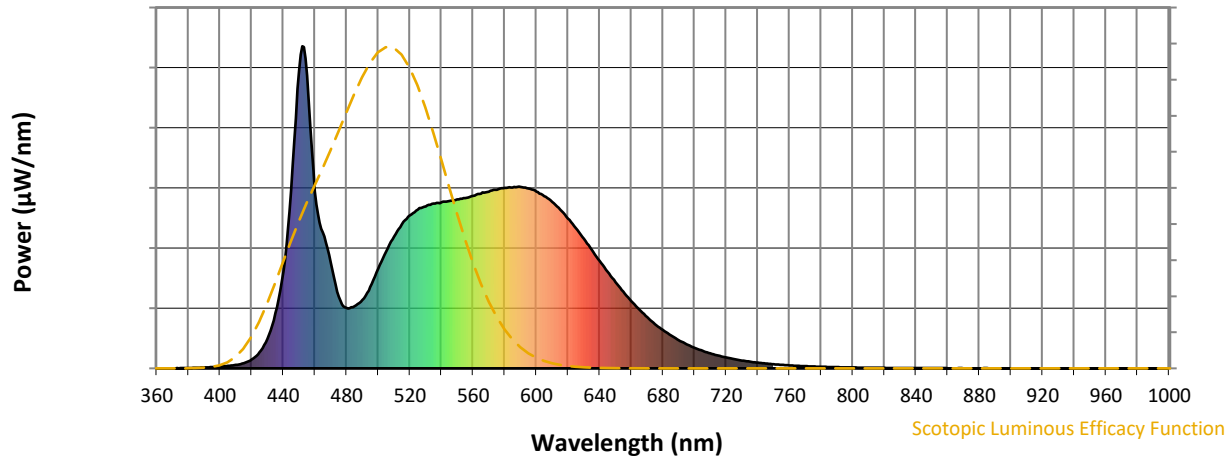


Photopic Lumens: NR

λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	212	NR	620	465	NR	750	13	NR	880	0	NR
365	0	NR	495	253	NR	625	436	NR	755	11	NR	885	1	NR
370	0	NR	500	309	NR	630	403	NR	760	9	NR	890	0	NR
375	1	NR	505	363	NR	635	368	NR	765	8	NR	895	0	NR
380	1	NR	510	409	NR	640	334	NR	770	7	NR	900	0	NR
385	2	NR	515	448	NR	645	300	NR	775	6	NR	905	0	NR
390	3	NR	520	475	NR	650	268	NR	780	5	NR	910	0	NR
395	4	NR	525	493	NR	655	238	NR	785	4	NR	915	0	NR
400	6	NR	530	503	NR	660	209	NR	790	4	NR	920	0	NR
405	8	NR	535	512	NR	665	183	NR	795	3	NR	925	0	NR
410	11	NR	540	515	NR	670	159	NR	800	3	NR	930	0	NR
415	16	NR	545	520	NR	675	138	NR	805	2	NR	935	0	NR
420	28	NR	550	524	NR	680	119	NR	810	2	NR	940	0	NR
425	50	NR	555	528	NR	685	102	NR	815	2	NR	945	0	NR
430	92	NR	560	535	NR	690	88	NR	820	2	NR	950	0	NR
435	171	NR	565	542	NR	695	75	NR	825	1	NR	955	0	NR
440	300	NR	570	548	NR	700	64	NR	830	1	NR	960	0	NR
445	553	NR	575	555	NR	705	55	NR	835	1	NR	965	0	NR
450	925	NR	580	560	NR	710	46	NR	840	1	NR	970	0	NR
455	909	NR	585	562	NR	715	40	NR	845	1	NR	975	0	NR
460	550	NR	590	563	NR	720	34	NR	850	1	NR	980	0	NR
465	422	NR	595	558	NR	725	29	NR	855	1	NR	985	0	NR
470	328	NR	600	548	NR	730	24	NR	860	1	NR	990	0	NR
475	223	NR	605	534	NR	735	21	NR	865	0	NR	995	0	NR
480	188	NR	610	516	NR	740	18	NR	870	0	NR	1000	0	NR
485	193	NR	615	492	NR	745	15	NR	875	0	NR			

REPORT NUMBER: SP1-2601-659-3

Scotopic Flux vs. Wavelength



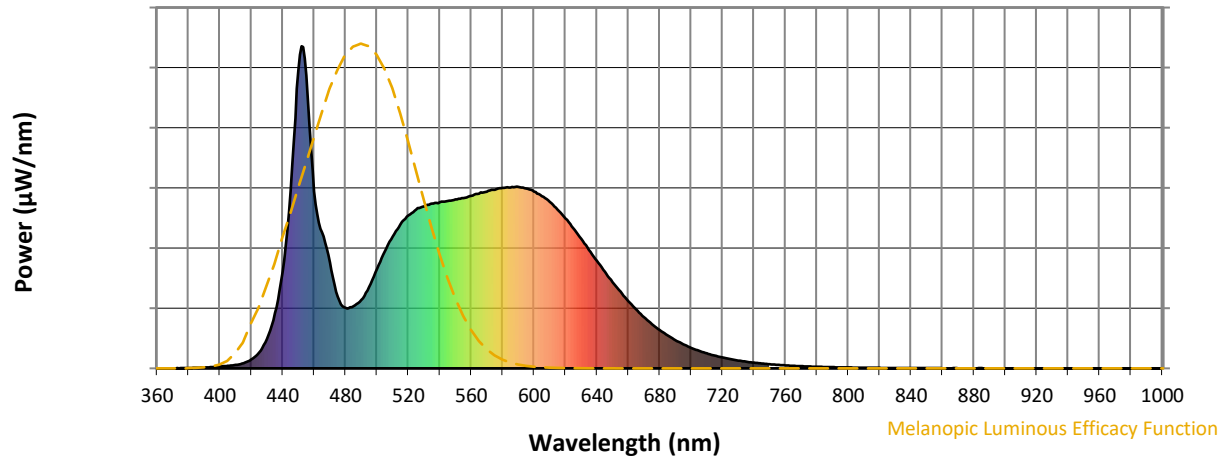
Scotopic Lumens: NR

S/P: 1.9

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	212	NR	620	465	NR	750	13	NR	880	0	NR
365	0	NR	495	253	NR	625	436	NR	755	11	NR	885	1	NR
370	0	NR	500	309	NR	630	403	NR	760	9	NR	890	0	NR
375	1	NR	505	363	NR	635	368	NR	765	8	NR	895	0	NR
380	1	NR	510	409	NR	640	334	NR	770	7	NR	900	0	NR
385	2	NR	515	448	NR	645	300	NR	775	6	NR	905	0	NR
390	3	NR	520	475	NR	650	268	NR	780	5	NR	910	0	NR
395	4	NR	525	493	NR	655	238	NR	785	4	NR	915	0	NR
400	6	NR	530	503	NR	660	209	NR	790	4	NR	920	0	NR
405	8	NR	535	512	NR	665	183	NR	795	3	NR	925	0	NR
410	11	NR	540	515	NR	670	159	NR	800	3	NR	930	0	NR
415	16	NR	545	520	NR	675	138	NR	805	2	NR	935	0	NR
420	28	NR	550	524	NR	680	119	NR	810	2	NR	940	0	NR
425	50	NR	555	528	NR	685	102	NR	815	2	NR	945	0	NR
430	92	NR	560	535	NR	690	88	NR	820	2	NR	950	0	NR
435	171	NR	565	542	NR	695	75	NR	825	1	NR	955	0	NR
440	300	NR	570	548	NR	700	64	NR	830	1	NR	960	0	NR
445	553	NR	575	555	NR	705	55	NR	835	1	NR	965	0	NR
450	925	NR	580	560	NR	710	46	NR	840	1	NR	970	0	NR
455	909	NR	585	562	NR	715	40	NR	845	1	NR	975	0	NR
460	550	NR	590	563	NR	720	34	NR	850	1	NR	980	0	NR
465	422	NR	595	558	NR	725	29	NR	855	1	NR	985	0	NR
470	328	NR	600	548	NR	730	24	NR	860	1	NR	990	0	NR
475	223	NR	605	534	NR	735	21	NR	865	0	NR	995	0	NR
480	188	NR	610	516	NR	740	18	NR	870	0	NR	1000	0	NR
485	193	NR	615	492	NR	745	15	NR	875	0	NR			

REPORT NUMBER: SP1-2601-659-3

Melanopic Flux vs. Wavelength



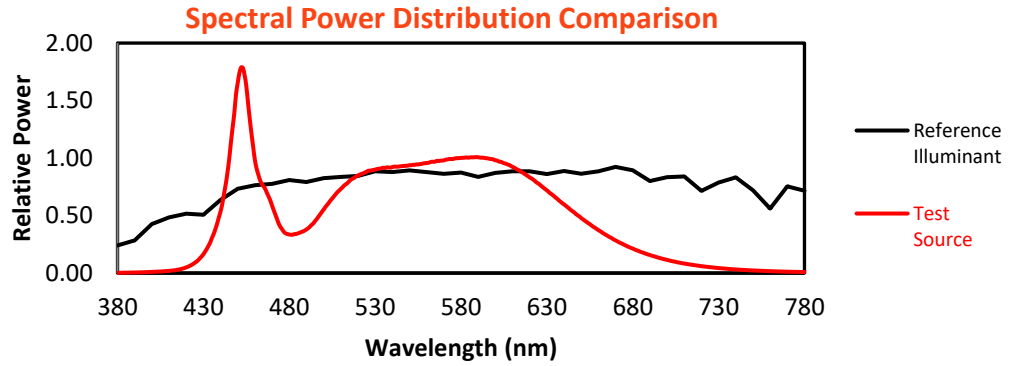
Melanopic Lumens: NR

M/P: 4

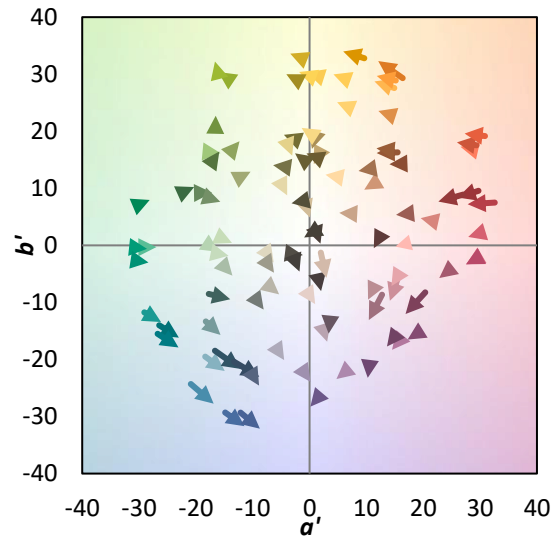
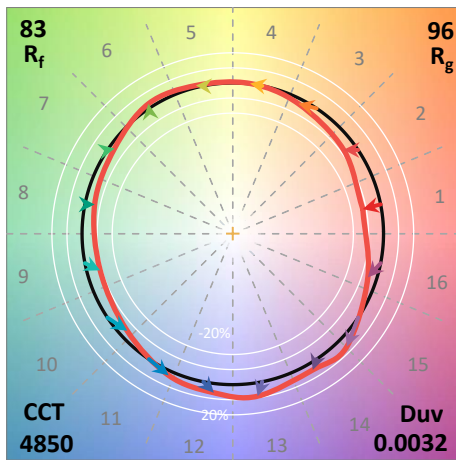
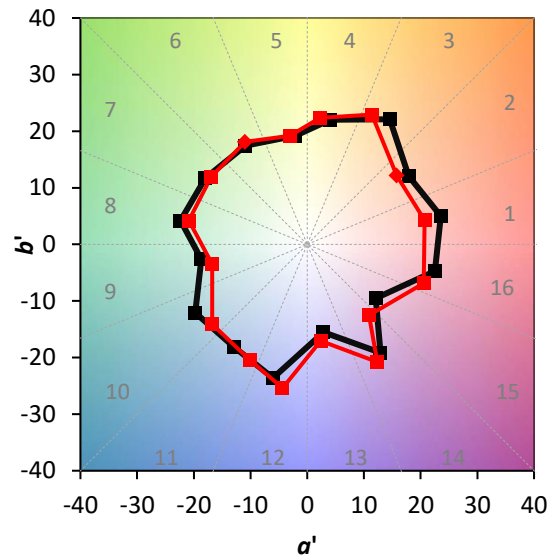
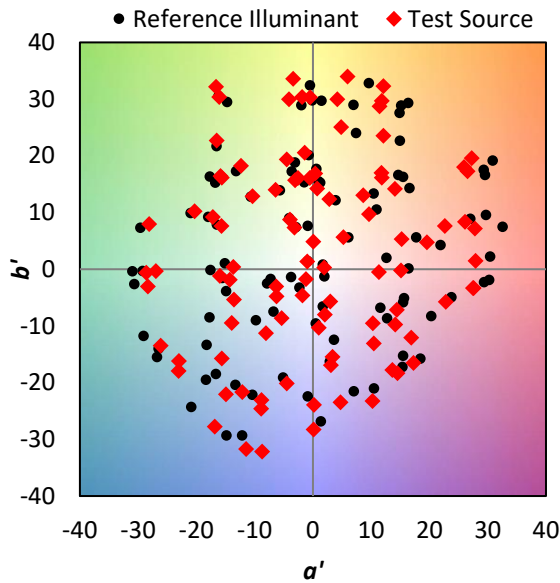
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	212	NR	620	465	NR	750	13	NR	880	0	NR
365	0	NR	495	253	NR	625	436	NR	755	11	NR	885	1	NR
370	0	NR	500	309	NR	630	403	NR	760	9	NR	890	0	NR
375	1	NR	505	363	NR	635	368	NR	765	8	NR	895	0	NR
380	1	NR	510	409	NR	640	334	NR	770	7	NR	900	0	NR
385	2	NR	515	448	NR	645	300	NR	775	6	NR	905	0	NR
390	3	NR	520	475	NR	650	268	NR	780	5	NR	910	0	NR
395	4	NR	525	493	NR	655	238	NR	785	4	NR	915	0	NR
400	6	NR	530	503	NR	660	209	NR	790	4	NR	920	0	NR
405	8	NR	535	512	NR	665	183	NR	795	3	NR	925	0	NR
410	11	NR	540	515	NR	670	159	NR	800	3	NR	930	0	NR
415	16	NR	545	520	NR	675	138	NR	805	2	NR	935	0	NR
420	28	NR	550	524	NR	680	119	NR	810	2	NR	940	0	NR
425	50	NR	555	528	NR	685	102	NR	815	2	NR	945	0	NR
430	92	NR	560	535	NR	690	88	NR	820	2	NR	950	0	NR
435	171	NR	565	542	NR	695	75	NR	825	1	NR	955	0	NR
440	300	NR	570	548	NR	700	64	NR	830	1	NR	960	0	NR
445	553	NR	575	555	NR	705	55	NR	835	1	NR	965	0	NR
450	925	NR	580	560	NR	710	46	NR	840	1	NR	970	0	NR
455	909	NR	585	562	NR	715	40	NR	845	1	NR	975	0	NR
460	550	NR	590	563	NR	720	34	NR	850	1	NR	980	0	NR
465	422	NR	595	558	NR	725	29	NR	855	1	NR	985	0	NR
470	328	NR	600	548	NR	730	24	NR	860	1	NR	990	0	NR
475	223	NR	605	534	NR	735	21	NR	865	0	NR	995	0	NR
480	188	NR	610	516	NR	740	18	NR	870	0	NR	1000	0	NR
485	193	NR	615	492	NR	745	15	NR	875	0	NR			

Summary

$R_f = 83.1$
 $R_g = 95.8$
 CIE $R_a = 82.6$
 $R_9 = 8.5$

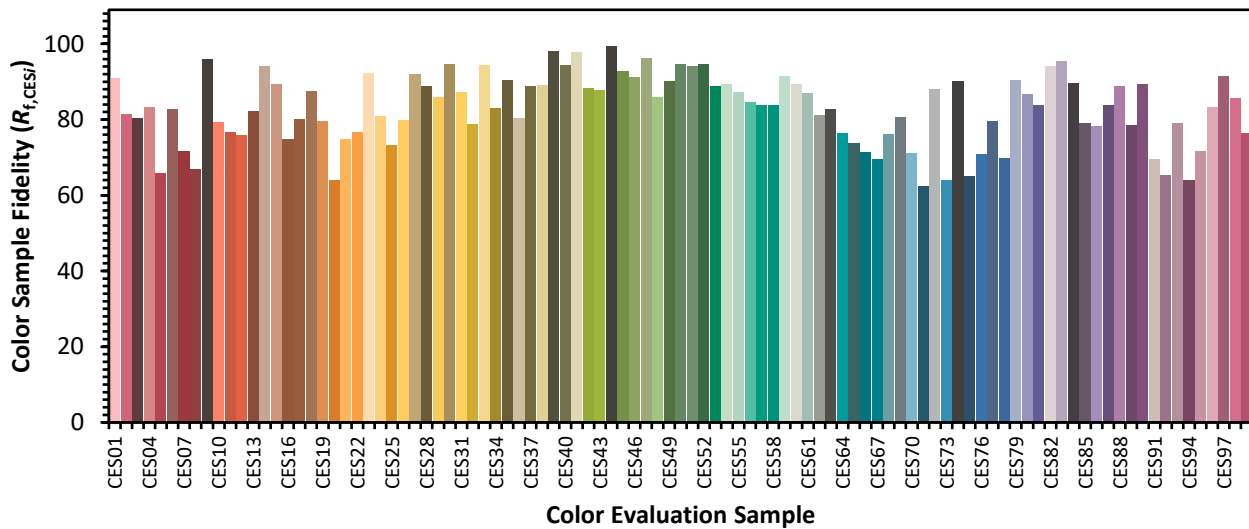


Color Vector Graphics

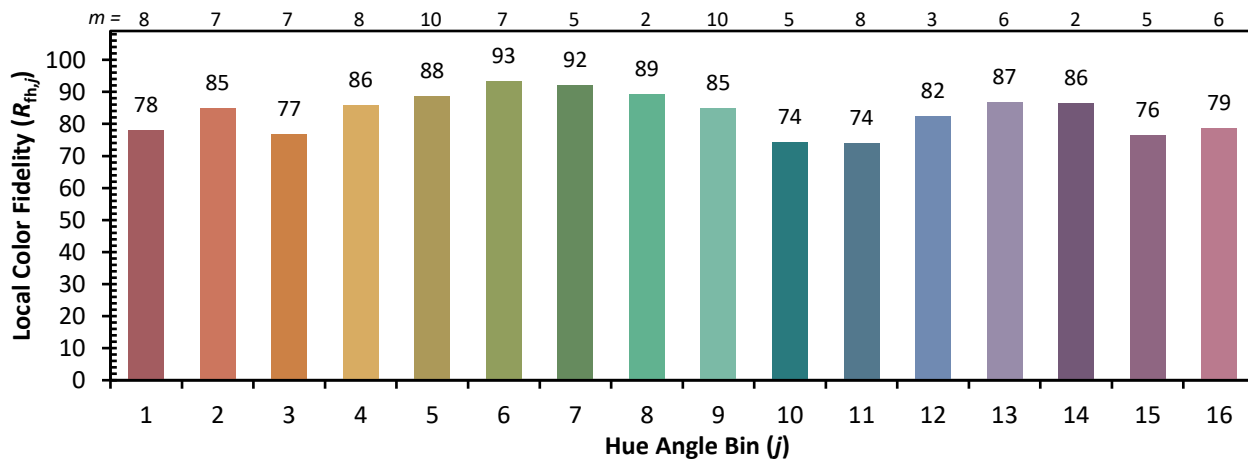
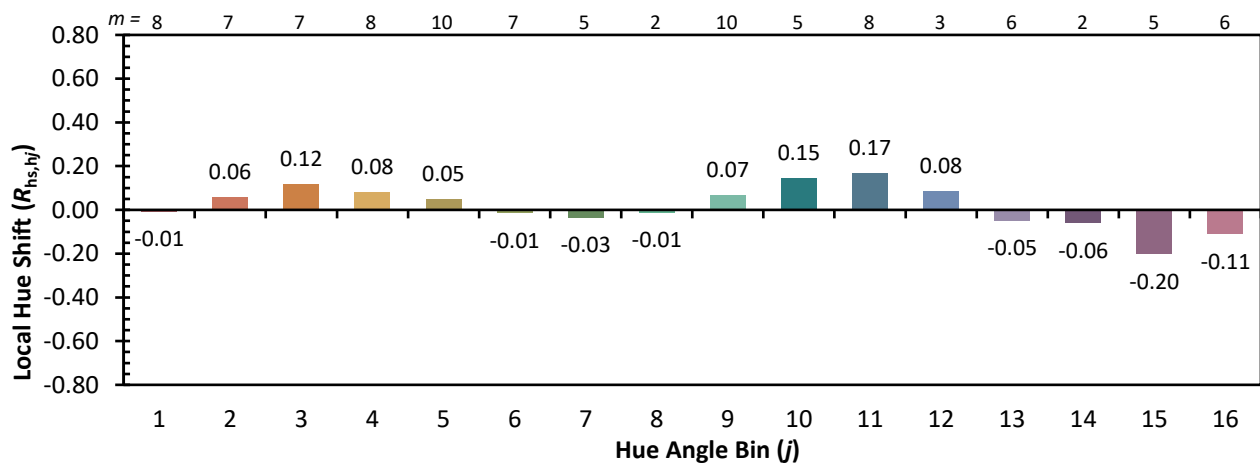
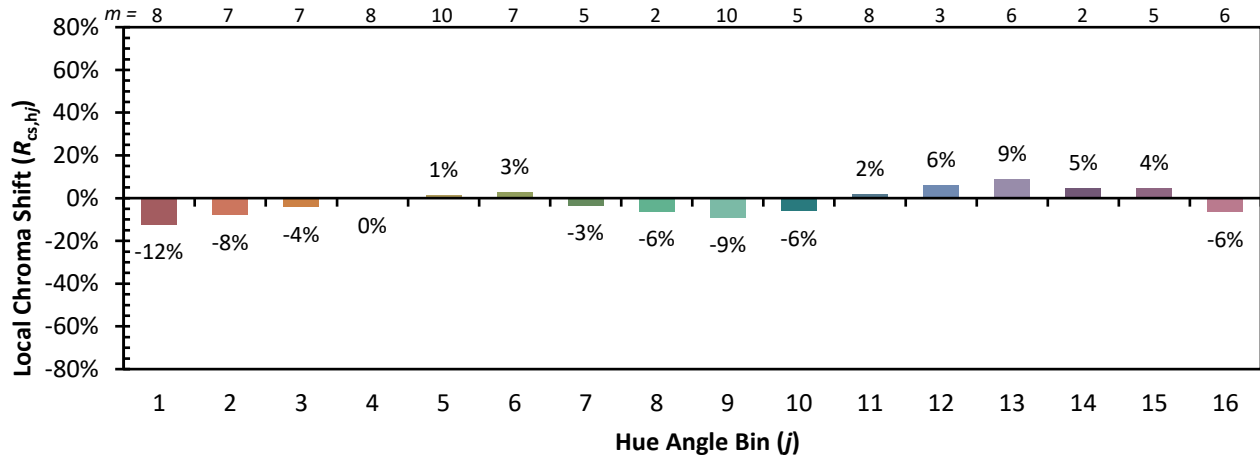


Individual Sample Fidelity Index ($R_{f,i}$)

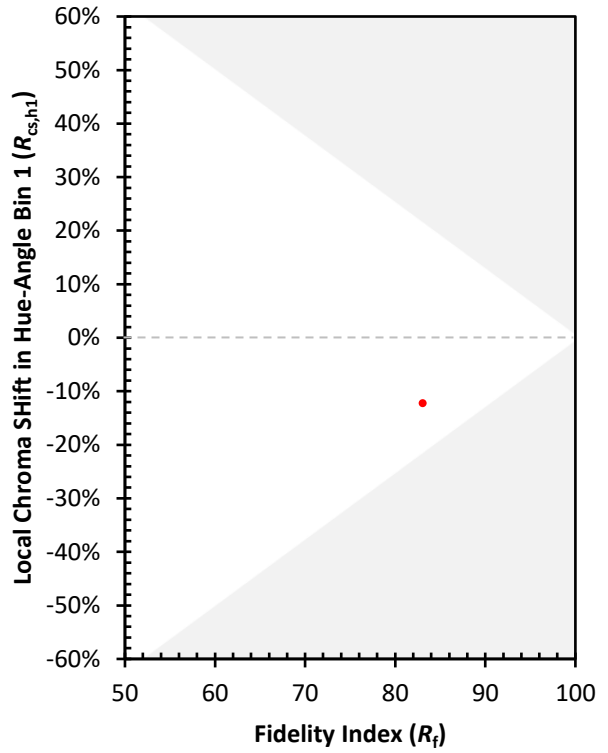
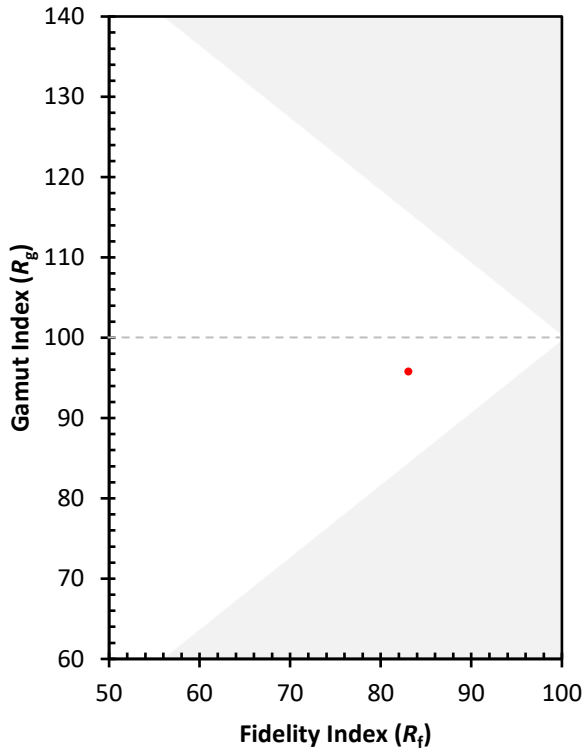
CES01 = 85	CES26 = 80	CES51 = 94	CES76 = 71
CES02 = 60	CES27 = 92	CES52 = 95	CES77 = 80
CES03 = 30	CES28 = 89	CES53 = 89	CES78 = 70
CES04 = 69	CES29 = 86	CES54 = 89	CES79 = 90
CES05 = 47	CES30 = 95	CES55 = 87	CES80 = 87
CES06 = 50	CES31 = 87	CES56 = 85	CES81 = 84
CES07 = 40	CES32 = 79	CES57 = 84	CES82 = 94
CES08 = 39	CES33 = 94	CES58 = 84	CES83 = 95
CES09 = 29	CES34 = 83	CES59 = 91	CES84 = 90
CES10 = 73	CES35 = 90	CES60 = 89	CES85 = 79
CES11 = 56	CES36 = 80	CES61 = 87	CES86 = 78
CES12 = 62	CES37 = 89	CES62 = 81	CES87 = 84
CES13 = 42	CES38 = 89	CES63 = 83	CES88 = 89
CES14 = 74	CES39 = 98	CES64 = 77	CES89 = 79
CES15 = 71	CES40 = 94	CES65 = 74	CES90 = 89
CES16 = 46	CES41 = 98	CES66 = 71	CES91 = 70
CES17 = 49	CES42 = 88	CES67 = 70	CES92 = 65
CES18 = 56	CES43 = 88	CES68 = 76	CES93 = 79
CES19 = 71	CES44 = 99	CES69 = 81	CES94 = 64
CES20 = 64	CES45 = 93	CES70 = 71	CES95 = 72
CES21 = 85	CES46 = 91	CES71 = 62	CES96 = 83
CES22 = 77	CES47 = 96	CES72 = 88	CES97 = 91
CES23 = 91	CES48 = 86	CES73 = 64	CES98 = 86
CES24 = 90	CES49 = 90	CES74 = 90	CES99 = 76
CES25 = 71	CES50 = 95	CES75 = 65	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)