

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: P1449903

Luminaire Tested: **TWC60\_T3\_36W\_4000K**

Issue Date: 5/19/2026

**Test Information**

Test Method: LM-79-08  
Report Number: P1449903  
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\_36W\_4000K  
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T3 distribution, 36W  
4000K settings  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5963 lumens  
Efficiency: N/A  
Efficacy: 175.4 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.42' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G1

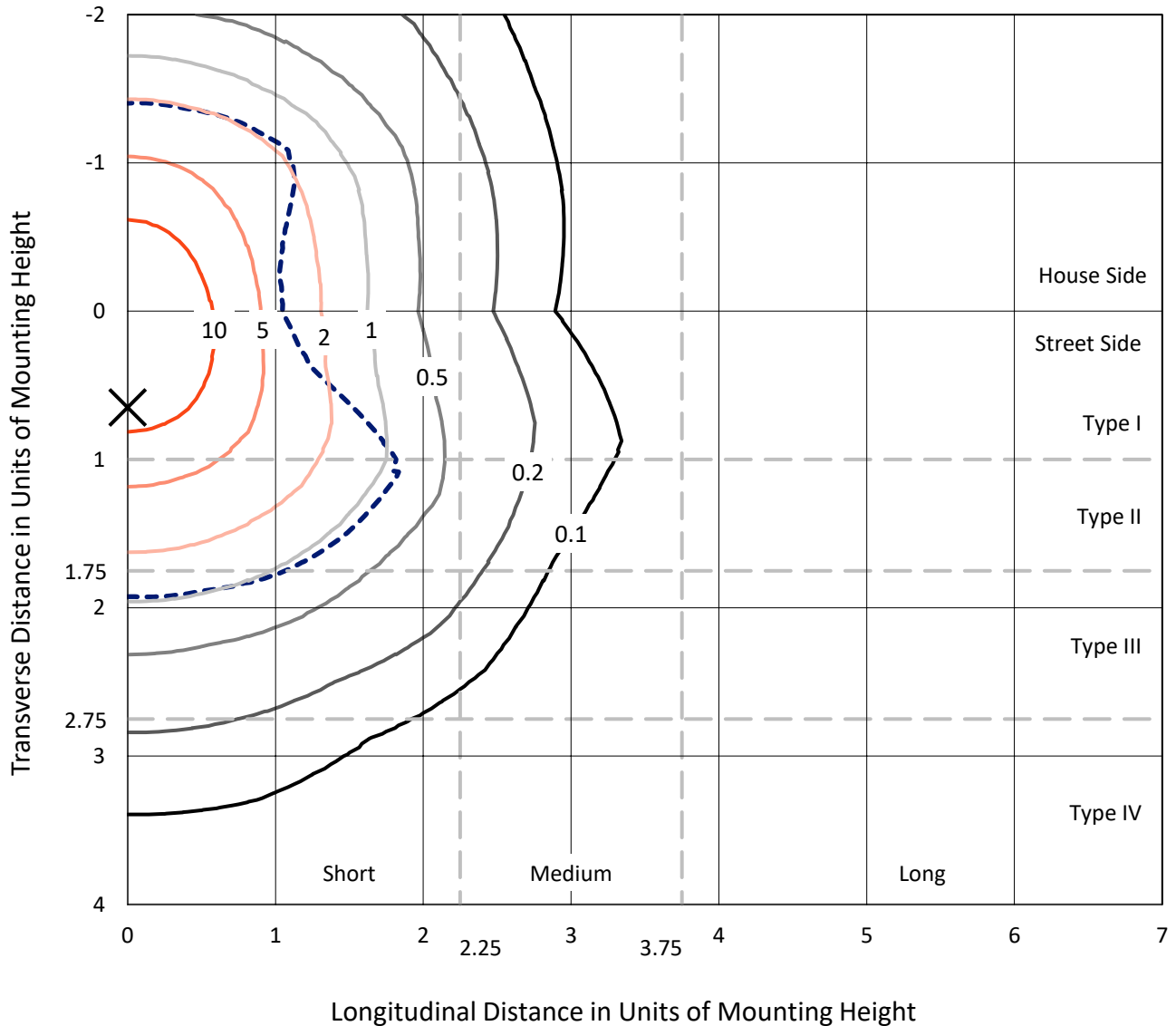
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

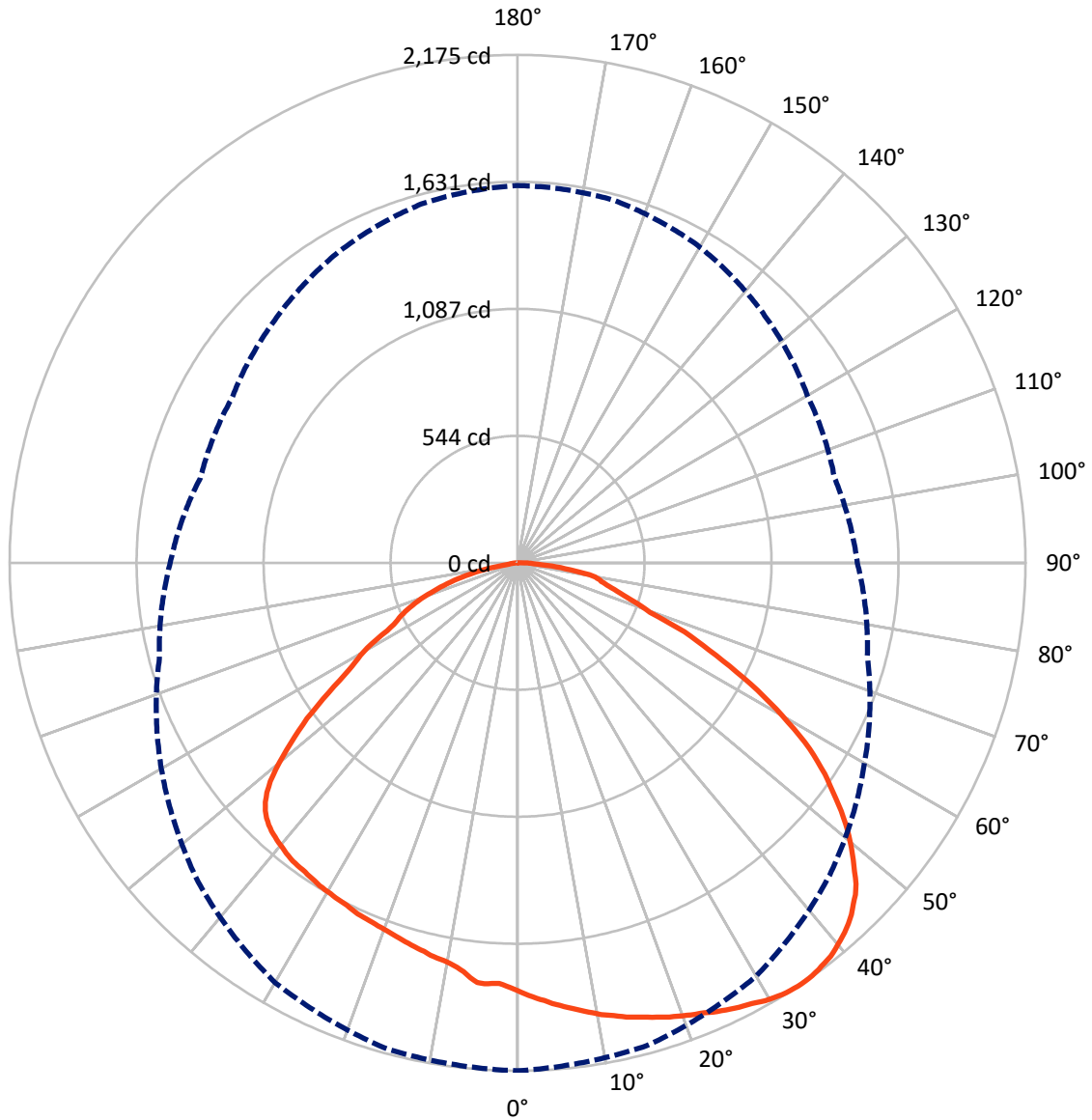
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.9 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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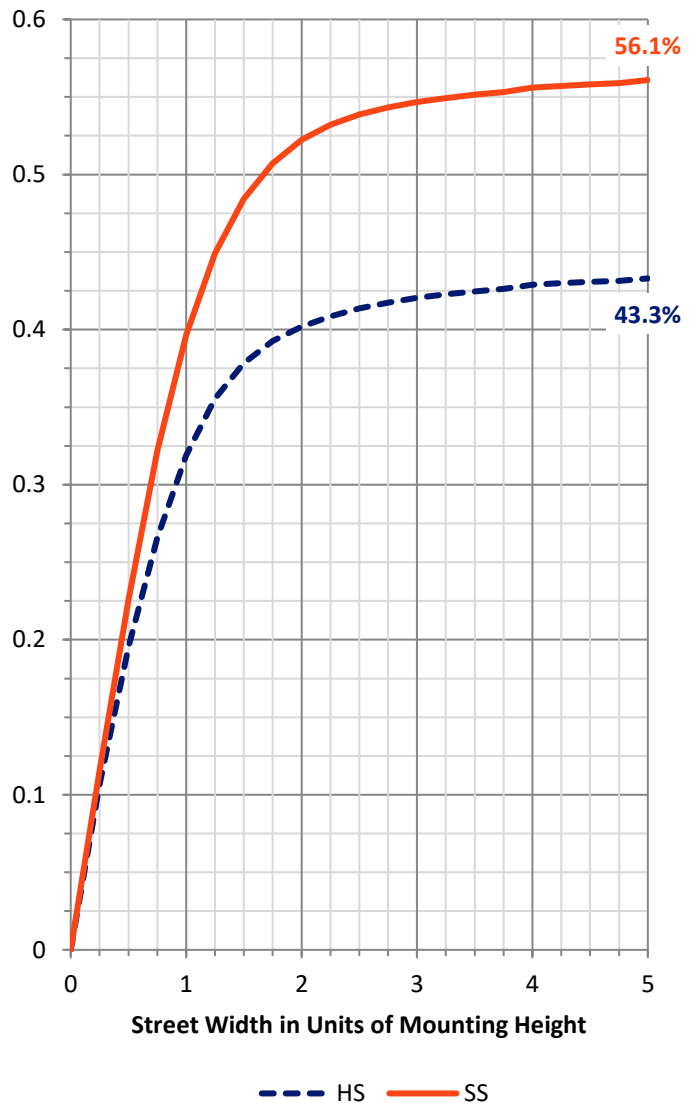
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2597.1	0.0	2597.1
	% Fixture	43.6	0.0	43.6
<b>Street Side</b>	Lumens	3365.9	0.0	3365.9
	% Fixture	56.4	0.0	56.4
<b>Total</b>	Lumens	5963.0	0.0	5963.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.5	2.9
10°-20°	513.3	8.6
20°-30°	811.3	13.6
30°-40°	1042.5	17.5
40°-50°	1164.0	19.5
50°-60°	1078.0	18.1
60°-70°	744.8	12.5
70°-80°	352.8	5.9
80°-90°	80.7	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°	5963.0	100.0
0°-180°	5963.0	100.0

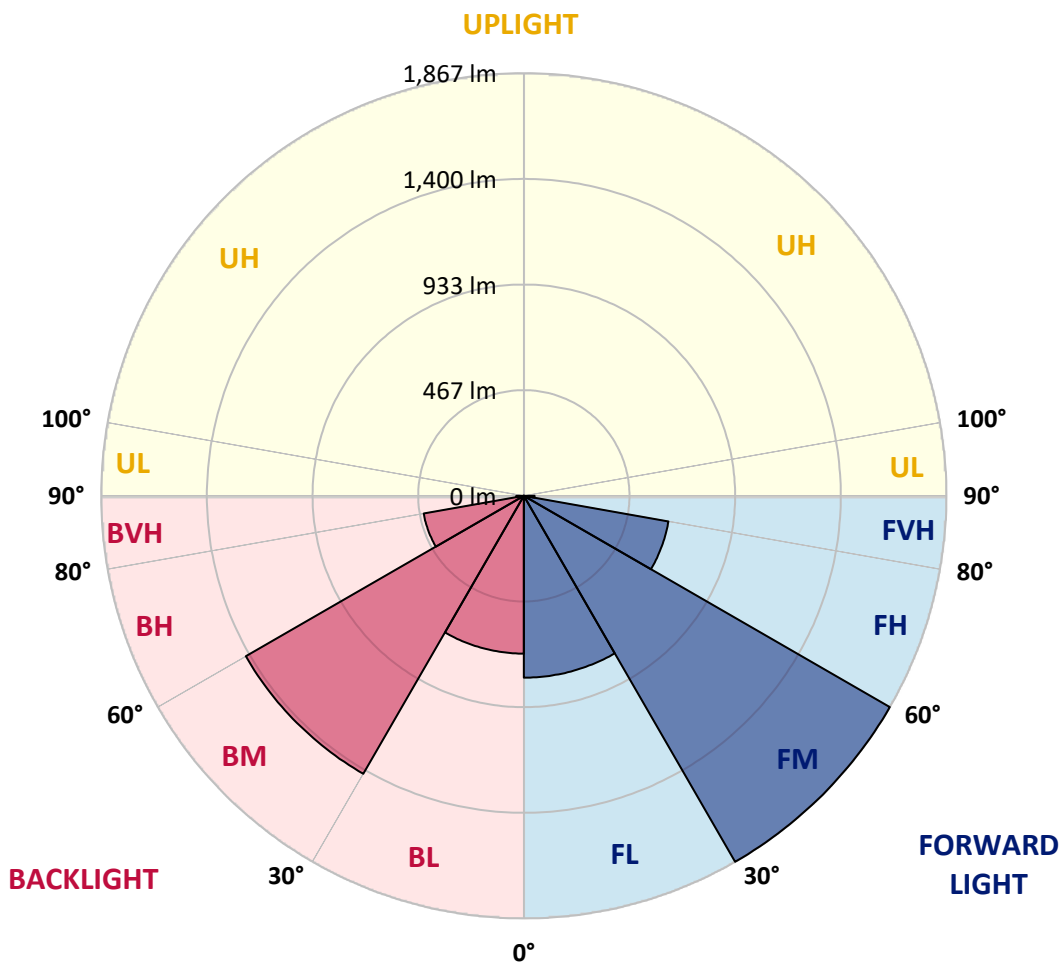


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	803.2	13.5			
FM (30°-60°)	1866.7	31.3			
FH (60°-80°)	648.5	10.9			G0/660
FVH (80°-90°)	47.5	0.8			G1/100
BL (0°-30°)	697.0	11.7	B2/1000		
BM (30°-60°)	1417.9	23.8	B2/2500		
BH (60°-80°)	449.0	7.5	B1/500		G1/500
BVH (80°-90°)	33.2	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9
1°	1852.9	1853.1	1850.1	1847.9	1846.7	1842.9	1836.2	1833.8	1831.0	1830.0	1824.9
2°	1866.2	1865.6	1862.4	1855.7	1852.1	1844.9	1835.9	1828.2	1821.6	1817.7	1815.9
3°	1877.6	1879.5	1872.3	1866.1	1856.3	1847.5	1833.4	1822.7	1815.1	1807.4	1805.2
4°	1892.6	1892.0	1883.5	1871.6	1862.3	1844.6	1829.9	1815.0	1806.9	1799.3	1802.6
5°	1904.1	1901.6	1894.2	1878.6	1862.7	1844.7	1825.8	1811.3	1800.5	1800.0	1805.1
6°	1916.9	1911.4	1902.4	1886.8	1868.3	1844.3	1818.3	1802.8	1794.7	1804.3	1807.6
7°	1928.1	1923.1	1911.6	1892.4	1869.4	1841.4	1813.3	1794.2	1794.0	1804.5	1798.6
8°	1941.9	1935.9	1919.3	1896.0	1871.2	1840.7	1807.7	1787.1	1793.6	1794.6	1779.4
9°	1954.1	1947.5	1929.4	1903.3	1870.8	1836.7	1800.7	1782.4	1793.5	1781.3	1757.3
10°	1966.9	1958.3	1938.4	1909.2	1871.9	1833.5	1793.2	1776.8	1785.8	1757.6	1744.1
11°	1976.9	1969.2	1946.7	1914.4	1873.0	1830.5	1786.7	1772.7	1774.4	1741.0	1735.4
12°	1987.7	1978.4	1954.3	1916.4	1872.6	1823.5	1778.0	1768.9	1754.0	1727.9	1724.6
13°	2000.4	1989.7	1963.1	1921.8	1871.7	1819.4	1768.2	1762.8	1732.8	1716.4	1716.2
14°	2009.4	1998.5	1966.6	1925.0	1871.7	1814.5	1756.0	1757.0	1716.8	1707.1	1710.2
15°	2018.8	2007.7	1973.0	1926.9	1870.0	1807.3	1746.0	1744.8	1702.2	1695.9	1701.0
16°	2029.6	2014.3	1978.6	1928.5	1865.5	1802.0	1735.0	1734.1	1688.2	1686.7	1692.5
17°	2039.9	2022.7	1982.8	1928.7	1863.6	1791.9	1725.3	1714.0	1675.8	1676.7	1683.4
18°	2050.7	2030.7	1989.0	1926.0	1859.9	1785.5	1713.8	1693.0	1661.5	1665.4	1675.7
19°	2059.5	2039.9	1992.4	1927.4	1856.0	1775.5	1703.1	1672.4	1649.3	1654.8	1666.8
20°	2068.9	2048.3	1998.3	1928.3	1849.2	1765.6	1692.5	1652.8	1636.2	1645.6	1657.5
21°	2077.2	2056.8	2003.7	1927.4	1844.3	1754.2	1683.3	1635.3	1621.6	1632.7	1650.3
22°	2085.6	2062.2	2007.9	1927.2	1834.9	1742.6	1672.3	1618.9	1606.6	1622.0	1641.9
23°	2097.7	2071.3	2009.9	1924.4	1828.3	1732.4	1661.9	1600.9	1593.0	1611.2	1633.3
24°	2107.5	2079.7	2014.6	1923.3	1818.7	1717.8	1651.1	1583.2	1578.7	1599.0	1624.9
25°	2116.9	2087.0	2018.4	1921.5	1810.4	1701.2	1634.7	1565.6	1563.3	1587.7	1618.3
26°	2126.7	2094.2	2022.3	1918.1	1801.1	1686.0	1618.9	1548.5	1546.1	1576.0	1612.8
27°	2133.1	2102.5	2025.2	1914.8	1792.3	1670.6	1601.8	1529.2	1532.0	1564.5	1604.7
28°	2142.6	2109.7	2028.1	1910.6	1779.7	1652.4	1578.9	1509.0	1515.8	1555.1	1597.3
29°	2154.4	2116.5	2030.5	1907.1	1768.8	1633.6	1554.9	1489.9	1500.9	1544.4	1589.7
30°	2161.3	2123.0	2033.3	1901.7	1755.7	1613.9	1531.4	1468.4	1483.3	1530.8	1580.7
31°	2168.3	2130.4	2036.9	1897.9	1744.2	1595.0	1504.8	1447.1	1466.1	1521.0	1575.1
32°	2171.8	2135.7	2038.8	1894.3	1732.0	1572.3	1479.5	1427.0	1449.9	1509.4	1568.4
33°	2174.8	2140.2	2043.2	1889.9	1715.3	1550.4	1454.7	1404.6	1432.8	1496.7	1561.2
34°	2174.0	2140.7	2045.9	1883.1	1702.0	1528.8	1428.2	1380.6	1414.5	1484.5	1552.9
35°	2172.1	2137.2	2044.2	1879.0	1687.7	1505.5	1402.4	1359.4	1398.0	1471.4	1545.3
36°	2166.7	2137.0	2044.4	1874.3	1671.5	1480.1	1377.4	1337.7	1379.7	1461.2	1535.8
37°	2159.5	2128.8	2042.0	1869.4	1657.1	1455.3	1349.6	1314.0	1363.3	1446.2	1527.2
38°	2152.9	2123.9	2036.9	1864.4	1639.2	1431.5	1322.3	1290.0	1343.0	1432.9	1518.4
39°	2140.5	2112.2	2032.7	1859.4	1625.5	1406.6	1294.1	1265.4	1324.8	1417.0	1511.6
40°	2127.5	2098.6	2025.7	1852.3	1609.9	1380.7	1266.3	1241.7	1308.0	1403.3	1504.4
41°	2113.9	2086.4	2017.1	1845.5	1592.0	1356.7	1239.2	1220.3	1287.3	1392.1	1496.2
42°	2096.6	2073.8	2002.9	1838.4	1577.8	1328.9	1212.1	1198.9	1267.6	1380.8	1484.8
43°	2076.9	2054.6	1989.1	1829.9	1564.2	1302.4	1185.0	1176.8	1247.0	1368.2	1476.2
44°	2050.6	2032.7	1973.0	1822.4	1547.3	1275.8	1155.6	1152.2	1229.0	1351.4	1467.7



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**CANDELA DISTRIBUTION (continued):**

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2027.7	2010.6	1957.2	1813.8	1532.0	1250.3	1125.1	1126.9	1210.9	1335.9	1458.1
46°	1997.8	1982.9	1937.8	1803.4	1517.9	1225.4	1094.6	1101.9	1192.9	1322.7	1447.4
47°	1957.5	1953.2	1914.9	1791.7	1502.8	1197.9	1062.5	1076.1	1173.9	1310.8	1431.7
48°	1919.6	1918.6	1890.3	1776.5	1489.0	1169.4	1031.2	1049.5	1151.3	1295.8	1414.2
49°	1879.2	1877.2	1863.3	1759.2	1475.4	1140.9	1000.2	1021.9	1130.2	1279.5	1397.1
50°	1839.1	1839.1	1830.9	1740.8	1461.4	1110.9	968.2	992.3	1111.3	1262.6	1370.9
51°	1795.2	1796.4	1794.6	1722.5	1448.6	1080.7	936.5	962.6	1091.7	1245.5	1338.7
52°	1746.5	1752.3	1755.7	1700.5	1433.2	1049.6	903.1	935.0	1070.8	1228.3	1298.5
53°	1694.1	1701.6	1716.4	1677.8	1419.0	1018.7	871.5	907.4	1048.3	1211.0	1246.5
54°	1643.8	1650.1	1668.9	1648.6	1405.1	987.4	838.0	879.1	1023.5	1193.8	1194.5
55°	1596.5	1600.3	1619.5	1614.0	1384.4	956.6	805.5	850.3	999.5	1167.6	1142.5
56°	1540.1	1549.8	1569.2	1577.8	1365.6	925.5	771.9	821.3	975.6	1131.6	1085.1
57°	1482.8	1495.6	1514.1	1539.2	1345.5	895.2	736.8	792.6	951.3	1088.5	1023.3
58°	1416.4	1437.0	1463.0	1495.5	1323.8	863.9	700.0	762.9	925.9	1036.8	955.4
59°	1344.9	1371.8	1406.1	1448.2	1300.4	832.0	666.6	732.4	898.8	983.1	892.9
60°	1272.8	1299.1	1350.9	1392.8	1272.2	800.4	630.5	699.9	870.4	928.2	832.4
61°	1200.9	1229.5	1287.9	1334.0	1240.0	771.3	596.7	666.6	842.3	868.6	780.3
62°	1125.6	1154.2	1216.9	1270.1	1206.7	741.5	565.2	635.3	809.6	810.5	746.2
63°	1046.8	1077.0	1147.5	1201.2	1171.2	712.6	532.3	603.8	772.0	752.2	711.4
64°	974.2	996.4	1081.3	1132.3	1131.8	685.6	500.5	571.2	728.5	696.4	661.7
65°	901.1	918.0	1011.8	1057.8	1084.5	659.8	470.5	540.3	680.4	657.9	605.1
66°	839.5	844.0	938.1	979.9	1030.7	636.3	439.7	508.0	630.2	629.7	562.0
67°	773.6	780.3	860.9	902.6	970.6	614.7	408.5	476.9	576.2	593.6	534.2
68°	689.2	706.8	780.2	837.9	900.0	594.8	377.7	446.5	521.9	548.9	512.6
69°	605.4	621.3	700.1	791.2	825.4	579.0	346.6	415.4	470.8	514.8	490.2
70°	566.3	577.6	606.3	743.2	739.4	563.3	315.2	385.7	429.1	490.7	468.4
71°	528.7	535.4	543.4	677.5	635.1	547.6	283.9	355.4	401.6	467.5	448.5
72°	491.1	493.3	480.8	576.1	541.6	530.2	253.8	323.0	371.8	442.8	427.9
73°	459.1	466.7	418.2	501.2	448.3	504.4	224.3	289.0	343.4	418.3	404.3
74°	430.0	437.6	391.2	427.2	355.0	464.0	196.5	254.2	323.6	394.7	378.9
75°	405.5	405.3	363.5	353.1	382.0	417.1	170.2	217.2	306.9	372.7	351.9
76°	383.9	370.9	338.7	318.3	350.9	373.5	147.6	183.0	288.3	348.4	321.3
77°	367.2	337.0	312.9	299.6	247.1	328.6	124.9	159.6	270.2	326.7	286.6
78°	355.4	310.0	282.9	280.9	179.3	271.0	102.4	136.2	253.5	305.8	254.4
79°	339.4	290.9	256.3	243.7	142.7	215.6	84.0	112.8	236.0	285.5	225.8
80°	311.6	275.3	236.7	196.8	145.4	168.8	67.4	98.2	219.1	260.0	203.9
81°	269.8	257.5	218.4	165.8	150.4	124.7	52.7	83.7	201.3	232.5	181.0
82°	225.8	232.3	199.7	144.8	108.4	88.5	39.9	70.4	183.4	205.7	138.0
83°	185.4	206.7	173.1	126.2	70.6	59.9	29.6	57.8	165.2	185.7	94.7
84°	147.7	183.1	134.7	110.9	57.3	46.6	21.5	46.0	138.8	149.1	36.4
85°	102.3	143.8	104.0	94.3	44.1	33.6	16.3	35.1	112.6	112.4	25.9
86°	70.6	106.2	76.8	64.9	31.0	20.5	11.1	24.7	94.1	75.8	15.4
87°	56.5	62.0	51.1	36.2	21.9	11.9	5.9	16.8	62.5	39.1	5.0
88°	42.5	46.3	38.4	7.6	11.6	4.9	2.7	8.9	41.7	2.6	1.9
89°	28.4	30.9	25.8	4.6	7.7	2.5	0.8	1.1	20.9	0.7	0.6



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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: P1449903

CATALOG NUMBER: TWC60\_T3\_36W\_4000K

**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9	1838.9
1°	1825.2	1824.5	1825.0	1828.3	1830.6	1832.0	1835.9	1838.1	1842.5	1845.6	1848.3
2°	1813.0	1813.1	1815.8	1816.8	1820.3	1825.1	1832.8	1835.5	1843.8	1849.5	1857.6
3°	1803.4	1802.9	1804.5	1806.7	1810.2	1820.5	1827.4	1834.2	1846.5	1855.4	1867.3
4°	1803.3	1804.5	1804.4	1801.2	1802.7	1809.5	1820.7	1833.5	1846.9	1861.0	1873.9
5°	1807.4	1808.5	1806.5	1803.5	1798.6	1803.4	1814.9	1830.2	1848.0	1865.8	1880.8
6°	1805.3	1805.4	1807.0	1804.7	1799.3	1794.8	1808.4	1825.5	1848.0	1868.8	1888.7
7°	1792.0	1788.0	1794.6	1800.7	1800.2	1790.9	1802.5	1819.2	1845.6	1873.2	1895.8
8°	1766.3	1765.9	1770.2	1786.7	1797.1	1788.3	1795.5	1816.0	1846.9	1875.8	1902.7
9°	1752.4	1751.5	1751.7	1764.5	1786.2	1787.2	1785.7	1807.8	1844.7	1879.8	1910.2
10°	1742.6	1740.0	1741.1	1747.1	1767.9	1784.2	1778.1	1801.5	1842.1	1880.7	1916.1
11°	1732.8	1732.7	1732.9	1735.4	1746.9	1779.0	1769.1	1795.4	1838.6	1880.9	1921.4
12°	1725.9	1726.9	1725.6	1723.5	1730.7	1768.4	1763.0	1787.1	1835.6	1884.3	1926.0
13°	1719.2	1720.9	1719.8	1715.4	1718.0	1750.5	1756.6	1779.7	1829.7	1884.9	1932.1
14°	1712.2	1711.2	1711.7	1707.9	1707.0	1729.2	1751.7	1767.9	1827.6	1884.4	1934.7
15°	1705.0	1705.4	1704.0	1698.4	1694.8	1709.7	1744.9	1760.3	1822.0	1882.0	1937.3
16°	1698.8	1698.4	1694.4	1686.8	1683.9	1692.9	1737.2	1749.0	1817.3	1881.6	1940.6
17°	1692.3	1691.6	1689.1	1679.0	1671.6	1677.6	1725.9	1737.0	1809.8	1879.0	1943.5
18°	1683.9	1684.9	1679.0	1669.2	1661.6	1663.2	1713.0	1727.3	1803.6	1877.5	1943.9
19°	1676.9	1678.9	1672.6	1660.2	1648.1	1648.3	1696.8	1713.8	1795.5	1873.7	1945.6
20°	1671.1	1672.2	1665.9	1650.5	1635.8	1634.5	1674.3	1701.8	1786.8	1870.7	1947.3
21°	1665.0	1667.7	1658.4	1641.1	1624.6	1620.7	1654.8	1688.3	1778.1	1863.9	1947.4
22°	1657.5	1662.3	1651.2	1632.9	1611.9	1603.3	1631.5	1676.6	1765.9	1859.2	1948.9
23°	1654.9	1658.4	1645.7	1622.9	1599.9	1587.5	1612.3	1661.6	1754.3	1852.5	1949.3
24°	1650.0	1654.7	1641.9	1613.4	1586.0	1570.0	1595.0	1648.2	1741.1	1844.9	1948.5
25°	1642.8	1651.5	1636.3	1605.1	1573.6	1554.3	1574.6	1634.4	1728.2	1839.8	1947.0
26°	1639.9	1644.8	1631.3	1597.3	1560.6	1538.4	1554.9	1621.6	1713.3	1832.8	1949.3
27°	1632.3	1638.5	1623.9	1589.3	1547.5	1520.9	1536.0	1608.3	1698.6	1823.9	1945.4
28°	1628.1	1635.6	1618.2	1581.5	1534.0	1503.5	1516.3	1596.2	1682.6	1815.0	1944.8
29°	1621.7	1632.0	1610.0	1570.4	1521.3	1484.8	1494.9	1577.1	1664.1	1805.5	1942.8
30°	1618.0	1627.2	1604.7	1562.9	1510.1	1467.6	1474.9	1557.7	1645.8	1795.6	1941.7
31°	1617.1	1624.4	1601.3	1552.6	1497.8	1447.4	1451.1	1537.7	1627.2	1784.6	1939.3
32°	1611.9	1621.4	1596.3	1543.7	1484.0	1429.4	1431.1	1514.4	1607.2	1772.7	1936.9
33°	1606.2	1615.4	1590.5	1535.7	1469.9	1411.9	1405.6	1487.2	1587.8	1761.3	1933.4
34°	1597.7	1611.4	1583.9	1526.8	1453.1	1393.3	1383.7	1457.2	1566.1	1748.2	1932.1
35°	1591.1	1605.8	1577.2	1517.7	1439.9	1372.9	1359.1	1429.4	1546.2	1737.5	1931.4
36°	1587.7	1603.6	1569.9	1508.9	1424.9	1353.0	1335.6	1401.2	1525.2	1724.7	1926.7
37°	1585.7	1601.0	1565.8	1496.9	1410.6	1333.5	1310.3	1372.8	1502.7	1712.3	1926.1
38°	1583.1	1596.1	1562.5	1487.4	1395.0	1313.7	1285.8	1345.1	1481.9	1700.6	1919.6
39°	1575.5	1589.6	1557.3	1477.5	1380.3	1292.2	1261.1	1315.8	1459.3	1686.8	1913.9
40°	1566.9	1581.6	1548.2	1468.4	1362.2	1271.2	1235.8	1288.0	1434.6	1675.2	1909.3
41°	1561.9	1575.1	1539.4	1457.6	1346.5	1249.3	1210.7	1257.4	1411.7	1662.5	1902.7
42°	1552.5	1566.7	1531.5	1445.3	1333.4	1230.5	1185.4	1229.7	1385.5	1650.1	1896.4
43°	1545.1	1558.9	1524.0	1436.2	1318.6	1211.7	1160.1	1199.9	1360.2	1639.2	1887.6
44°	1533.8	1547.2	1513.6	1427.2	1304.7	1192.8	1132.3	1168.1	1335.4	1628.5	1878.1



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**CANDELA DISTRIBUTION (continued):**

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1519.7	1533.4	1501.9	1415.9	1288.0	1167.3	1103.8	1135.9	1309.0	1618.2	1865.3
46°	1504.0	1513.6	1486.5	1403.8	1270.3	1142.8	1077.9	1104.3	1282.0	1606.2	1849.9
47°	1483.9	1488.6	1469.4	1392.1	1253.8	1119.6	1049.6	1071.8	1254.8	1595.4	1835.5
48°	1454.4	1455.3	1443.4	1377.7	1239.0	1098.0	1022.8	1039.4	1229.6	1584.3	1816.7
49°	1418.3	1413.2	1412.5	1362.9	1222.8	1075.5	993.5	1007.1	1201.4	1571.7	1799.1
50°	1371.4	1361.9	1374.0	1342.8	1206.5	1051.9	964.3	974.0	1175.3	1561.1	1777.6
51°	1317.3	1301.9	1325.3	1320.9	1190.3	1028.2	934.7	942.5	1151.6	1548.6	1754.0
52°	1259.5	1241.5	1269.7	1289.1	1169.9	1004.8	904.0	909.1	1126.3	1533.1	1725.3
53°	1201.7	1181.1	1214.1	1245.7	1150.2	983.5	872.6	874.4	1100.8	1513.8	1692.4
54°	1143.7	1120.6	1158.3	1202.4	1131.0	959.8	841.4	841.0	1077.0	1495.0	1656.2
55°	1076.1	1050.6	1095.6	1158.9	1109.6	933.2	811.5	805.4	1053.8	1476.2	1620.0
56°	1006.8	981.8	1026.2	1101.9	1087.2	907.0	781.8	769.6	1031.4	1453.2	1578.0
57°	938.1	914.8	958.5	1045.1	1059.7	878.7	749.1	734.3	1008.8	1426.6	1530.6
58°	873.9	856.4	892.0	984.2	1025.1	850.0	716.3	699.5	986.3	1400.4	1481.0
59°	825.2	814.9	835.3	920.1	983.8	822.9	684.2	665.5	963.9	1367.1	1424.7
60°	788.1	780.2	792.0	858.0	934.0	793.6	652.3	632.4	942.7	1333.1	1365.6
61°	751.1	739.1	757.9	796.3	882.1	765.3	620.9	598.1	917.6	1295.9	1306.1
62°	705.6	687.7	717.5	748.1	826.3	736.2	588.4	565.6	894.7	1255.2	1244.2
63°	645.9	628.9	662.6	714.3	766.0	703.9	554.1	533.0	870.4	1206.3	1179.3
64°	597.3	591.5	605.7	680.4	707.9	672.5	520.7	500.5	847.5	1150.2	1108.6
65°	571.1	569.8	571.3	634.3	651.3	639.8	487.8	469.2	825.9	1088.6	1032.5
66°	549.7	548.2	547.9	580.4	602.5	601.4	454.3	436.4	805.2	1020.8	960.2
67°	529.2	525.0	528.5	543.1	570.0	555.7	422.3	403.2	782.7	948.0	900.4
68°	505.6	499.1	506.5	514.9	543.5	506.5	390.6	369.7	756.8	865.6	844.1
69°	480.0	470.7	483.6	489.9	506.2	457.5	360.4	335.0	723.1	773.5	787.0
70°	453.3	441.2	460.2	465.6	473.2	406.2	330.4	301.7	684.0	668.4	716.4
71°	422.9	407.5	433.3	442.6	451.0	358.5	301.1	268.5	635.3	577.6	624.4
72°	390.6	375.7	403.6	423.3	432.0	318.9	273.9	236.6	586.5	541.1	545.7
73°	359.8	346.4	372.1	404.0	410.4	291.6	246.1	207.6	534.0	505.9	467.1
74°	327.7	313.9	340.7	384.6	388.8	264.6	219.8	180.7	481.4	496.8	388.5
75°	296.3	280.9	307.8	364.1	368.3	242.0	191.7	155.0	428.9	391.2	357.9
76°	262.1	245.2	276.8	340.9	347.1	224.7	165.3	132.2	361.6	285.8	330.4
77°	229.7	211.9	245.6	314.4	324.9	207.9	140.5	111.7	272.9	232.4	307.4
78°	200.8	180.4	217.4	282.0	301.3	190.5	115.9	94.4	204.1	197.9	275.4
79°	163.6	141.9	189.9	247.1	277.5	174.4	94.9	79.1	141.2	193.8	234.7
80°	126.3	103.3	148.3	218.0	253.2	158.9	78.7	65.0	105.4	195.3	197.9
81°	89.1	64.8	106.6	195.8	227.7	142.7	65.6	53.1	91.1	146.6	172.6
82°	47.0	36.7	65.1	177.9	201.6	126.4	54.3	41.4	81.4	97.2	153.3
83°	29.1	28.3	31.0	128.7	174.8	110.1	43.5	29.6	66.6	77.2	137.2
84°	21.2	20.4	21.6	80.0	145.6	93.5	33.5	21.5	52.4	63.5	118.2
85°	15.4	14.9	15.8	54.8	116.3	76.1	24.8	15.2	38.3	53.0	89.7
86°	9.7	9.4	10.0	29.7	87.1	57.5	18.0	9.9	24.1	42.7	48.4
87°	4.1	4.0	4.3	5.0	58.0	42.7	11.2	5.5	14.1	32.3	29.4
88°	1.7	1.6	1.7	1.7	29.0	28.6	4.5	3.0	5.4	13.5	10.7
89°	0.6	0.6	0.6	0.6	0.6	14.5	0.7	0.5	2.8	8.8	7.0



REPORT NUMBER: P1449903  
 CATALOG NUMBER: TWC60\_T3\_36W\_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: P1449903  
 CATALOG NUMBER: TWC60\_T3\_36W\_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: P1449903  
CATALOG NUMBER: TWC60\_T3\_36W\_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: P1449903  
 CATALOG NUMBER: TWC60\_T3\_36W\_4000K

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
0°	1838.9	1838.9	1838.9
1°	1848.8	1851.2	1852.9
2°	1862.1	1865.8	1866.2
3°	1872.2	1879.1	1877.6
4°	1883.4	1888.8	1892.6
5°	1893.8	1901.8	1904.1
6°	1902.8	1915.2	1916.9
7°	1913.3	1924.3	1928.1
8°	1924.3	1937.6	1941.9
9°	1933.8	1950.8	1954.1
10°	1944.1	1961.6	1966.9
11°	1952.6	1972.4	1976.9
12°	1960.8	1981.4	1987.7
13°	1969.9	1990.9	2000.4
14°	1974.4	2001.9	2009.4
15°	1982.3	2010.5	2018.8
16°	1989.1	2020.7	2029.6
17°	1993.8	2027.7	2039.9
18°	2001.6	2038.8	2050.7
19°	2008.2	2046.4	2059.5
20°	2012.1	2055.2	2068.9
21°	2018.3	2063.7	2077.2
22°	2023.9	2074.2	2085.6
23°	2027.9	2082.6	2097.7
24°	2033.1	2092.5	2107.5
25°	2038.3	2099.5	2116.9
26°	2044.8	2108.1	2126.7
27°	2048.3	2116.7	2133.1
28°	2052.8	2125.3	2142.6
29°	2058.4	2130.6	2154.4
30°	2062.2	2139.6	2161.3
31°	2068.1	2146.0	2168.3
32°	2072.1	2150.9	2171.8
33°	2075.8	2155.1	2174.8
34°	2077.9	2154.5	2174.0
35°	2077.5	2151.9	2172.1
36°	2075.6	2150.1	2166.7
37°	2074.0	2142.4	2159.5
38°	2067.9	2133.1	2152.9
39°	2063.6	2121.4	2140.5
40°	2052.5	2110.4	2127.5
41°	2039.2	2095.7	2113.9
42°	2026.0	2081.1	2096.6
43°	2009.9	2064.0	2076.9
44°	1995.1	2039.7	2050.6



REPORT NUMBER: P1449903  
 CATALOG NUMBER: TWC60\_T3\_36W\_4000K

**CANDELA DISTRIBUTION (continued):**

	330°	345°	360°
45°	1979.1	2014.3	2027.7
46°	1956.0	1988.2	1997.8
47°	1929.2	1954.9	1957.5
48°	1903.0	1915.7	1919.6
49°	1869.0	1875.3	1879.2
50°	1834.2	1836.0	1839.1
51°	1793.7	1791.6	1795.2
52°	1752.2	1746.3	1746.5
53°	1708.7	1695.8	1694.1
54°	1659.6	1646.2	1643.8
55°	1609.2	1595.4	1596.5
56°	1555.9	1544.1	1540.1
57°	1502.9	1488.7	1482.8
58°	1450.6	1425.8	1416.4
59°	1393.7	1354.9	1344.9
60°	1332.0	1283.8	1272.8
61°	1262.4	1211.5	1200.9
62°	1190.9	1138.1	1125.6
63°	1123.7	1059.6	1046.8
64°	1054.0	983.6	974.2
65°	976.3	907.4	901.1
66°	899.5	839.6	839.5
67°	820.7	776.2	773.6
68°	740.0	698.7	689.2
69°	658.7	611.9	605.4
70°	571.7	572.2	566.3
71°	513.2	532.9	528.7
72°	455.4	493.6	491.1
73°	430.6	463.4	459.1
74°	407.8	431.9	430.0
75°	384.9	400.0	405.5
76°	360.3	369.0	383.9
77°	331.2	343.0	367.2
78°	300.4	324.9	355.4
79°	275.3	312.2	339.4
80°	253.4	298.1	311.6
81°	231.3	272.0	269.8
82°	202.3	238.4	225.8
83°	167.1	206.9	185.4
84°	131.4	174.5	147.7
85°	112.4	129.7	102.3
86°	83.7	89.8	70.6
87°	54.7	71.5	56.5
88°	41.1	53.8	42.5
89°	27.6	36.0	28.4



REPORT NUMBER: P1449903  
CATALOG NUMBER: TWC60\_T3\_36W\_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: P1449903  
CATALOG NUMBER: TWC60\_T3\_36W\_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



REPORT NUMBER: P1449903  
CATALOG NUMBER: TWC60\_T3\_36W\_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

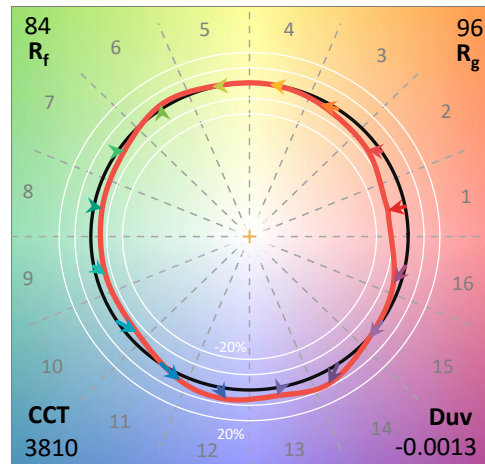
**Test Information**

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**

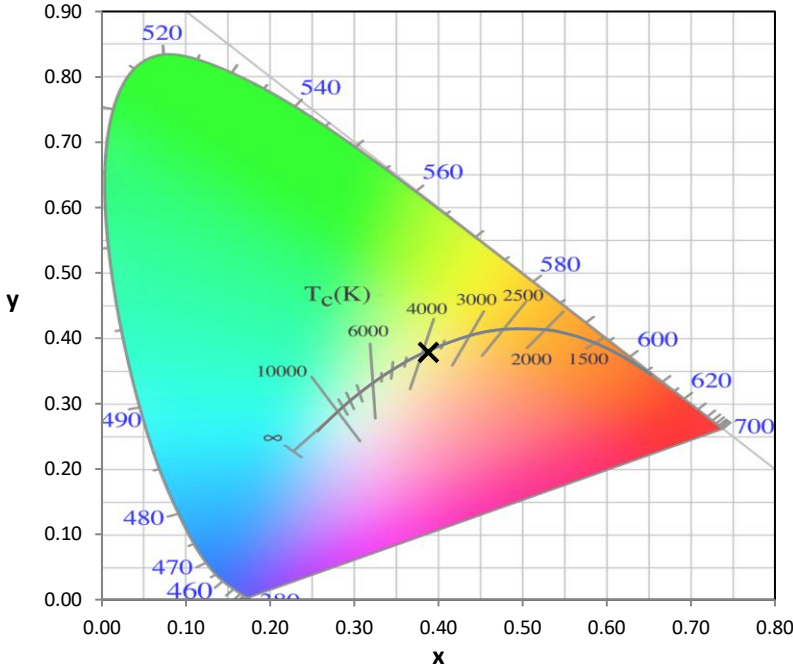
Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-2

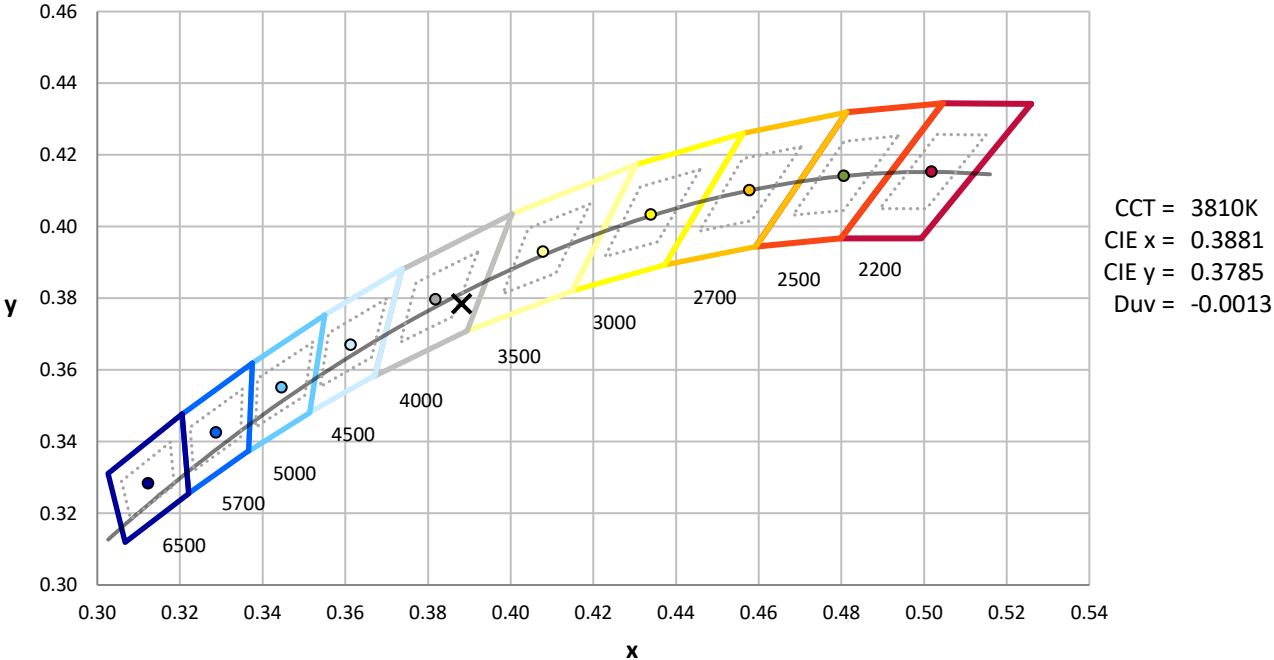
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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



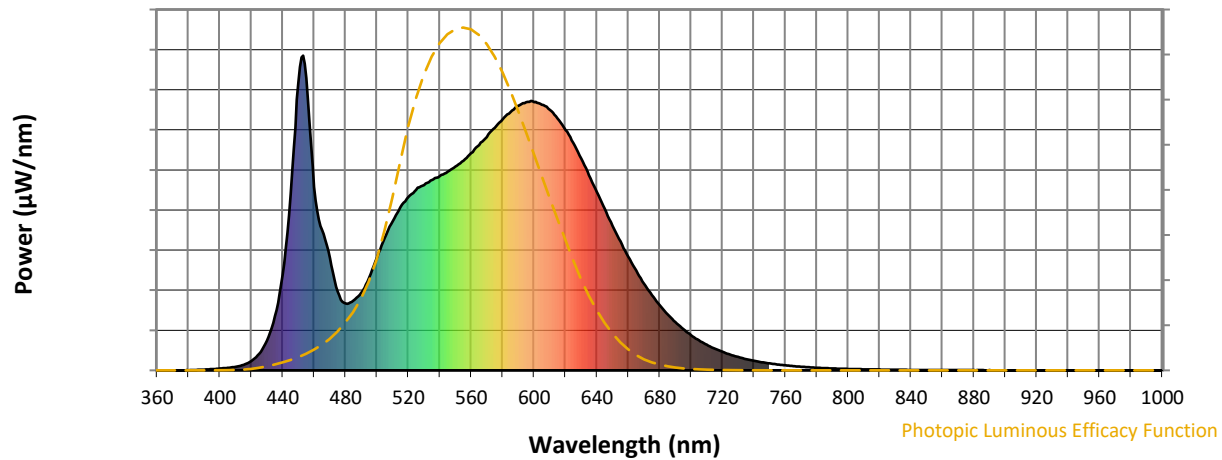
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2601-659-2

**Photopic Flux vs. Wavelength**

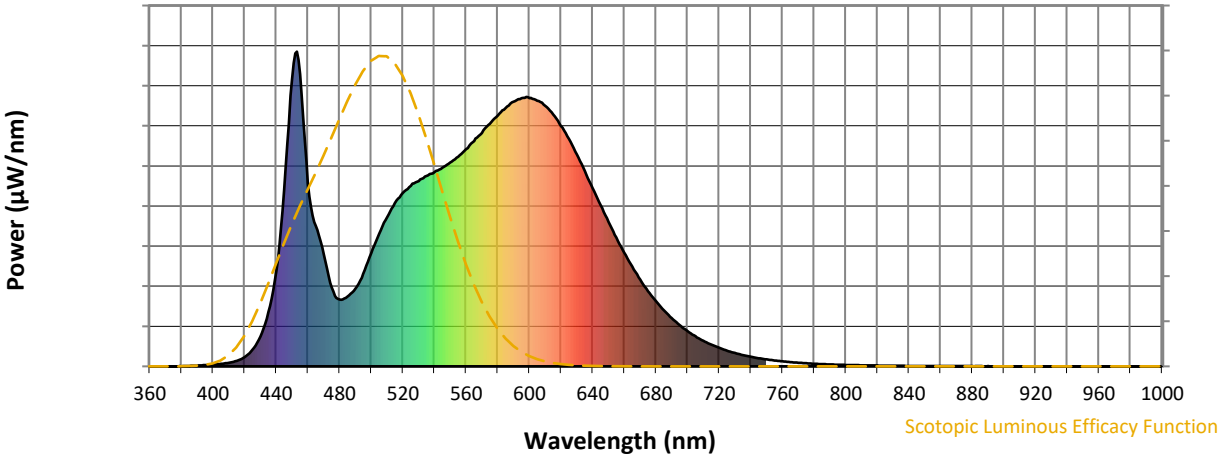


**Photopic Lumens: NR**

$\lambda$ (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



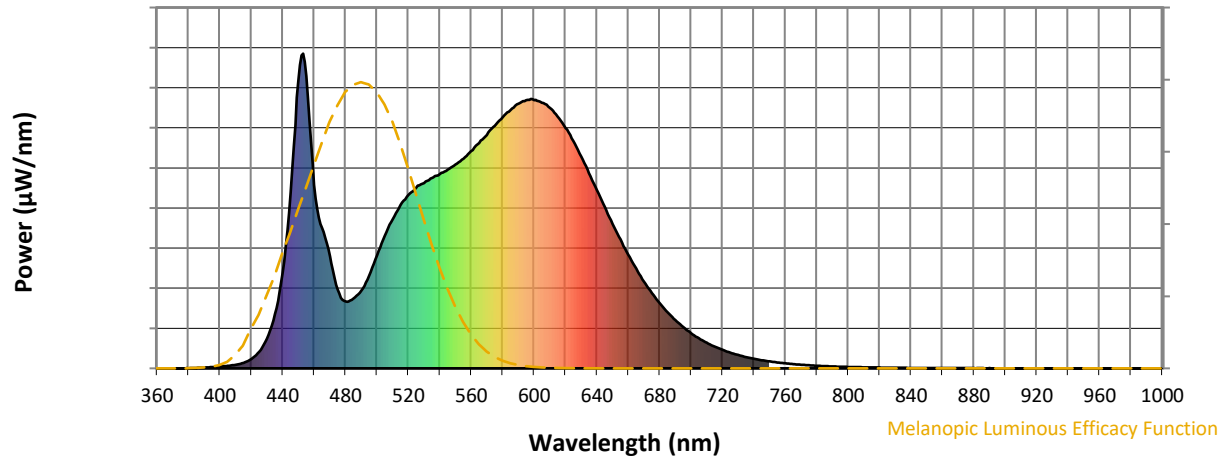
Scotopic Lumens: NR

S/P: 1.64

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			

REPORT NUMBER: SP1-2601-659-2

Melanopic Flux vs. Wavelength



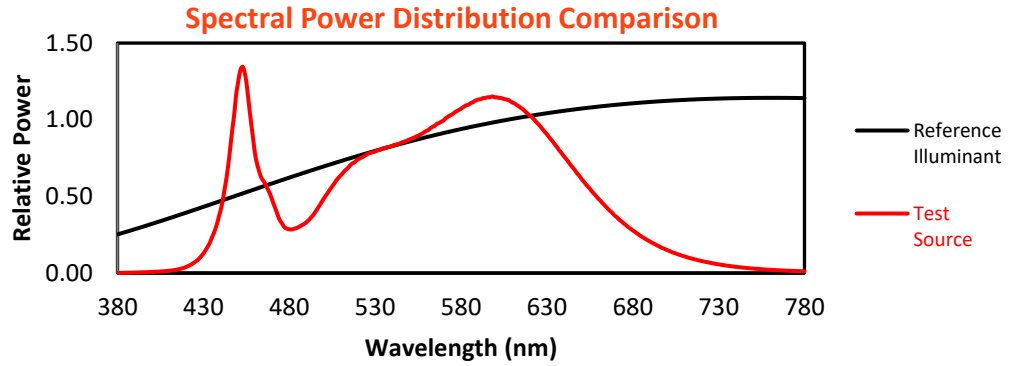
Melanopic Lumens: NR

M/P: 3.35

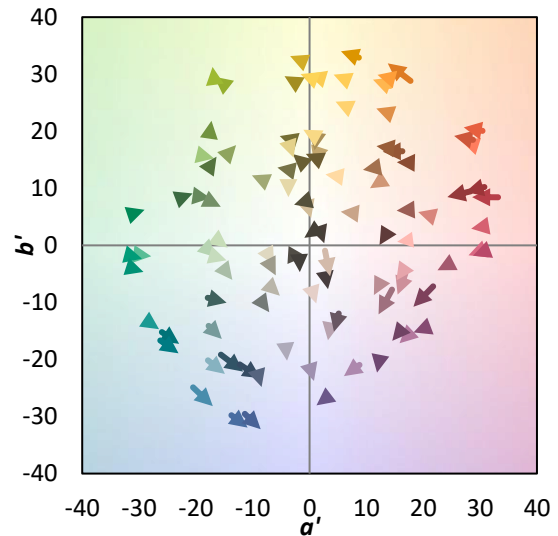
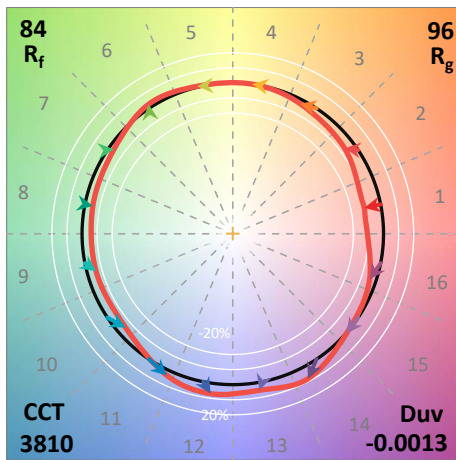
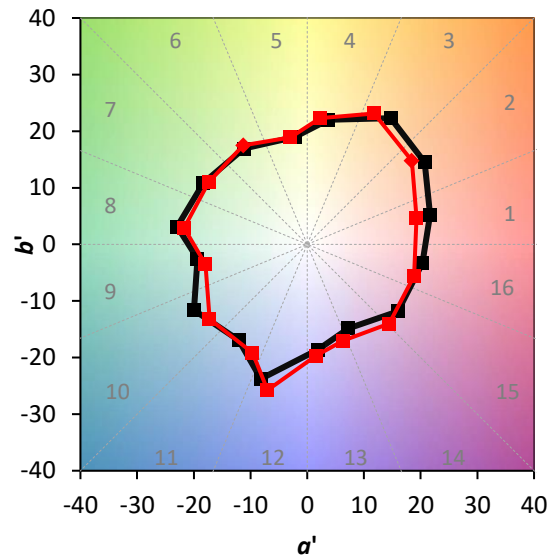
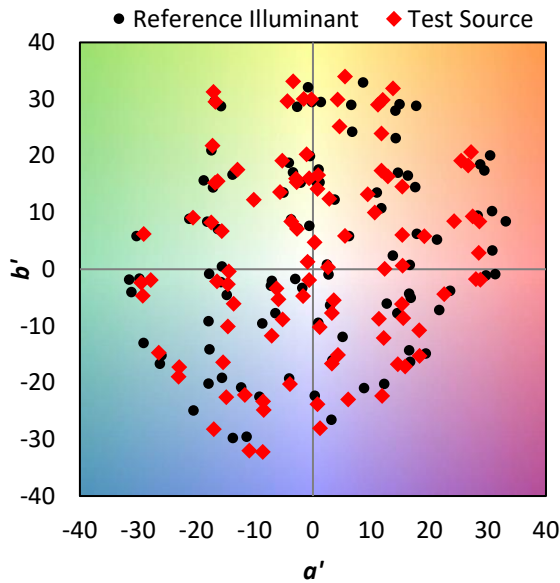
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	247	NR	620	764	NR	750	22	NR	880	1	NR
365	0	NR	495	294	NR	625	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  $R_a = 84.5$   
 $R_9 = 15.9$

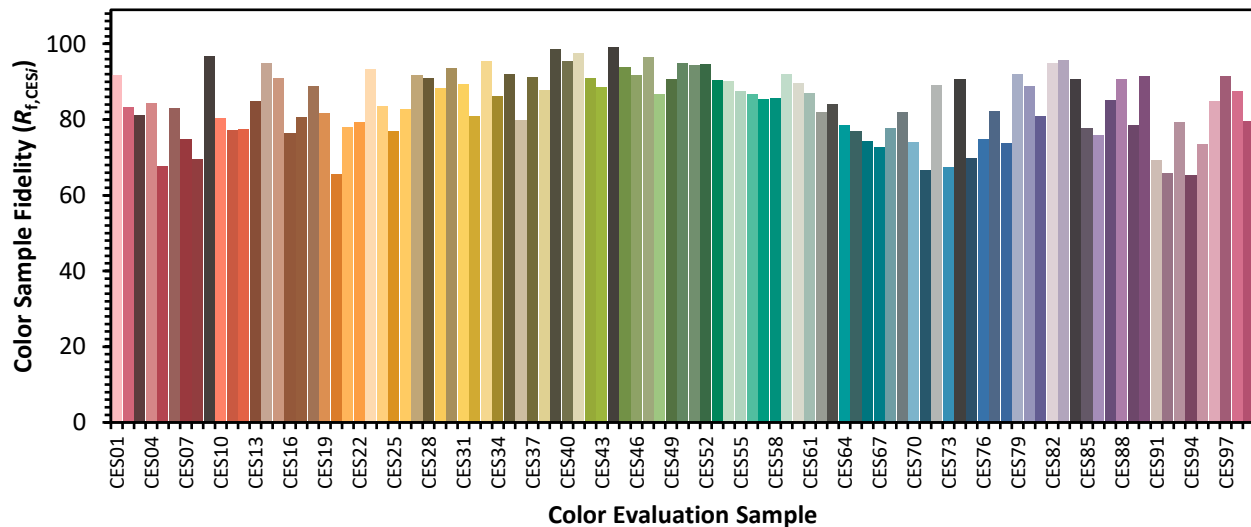


**Color Vector Graphics**

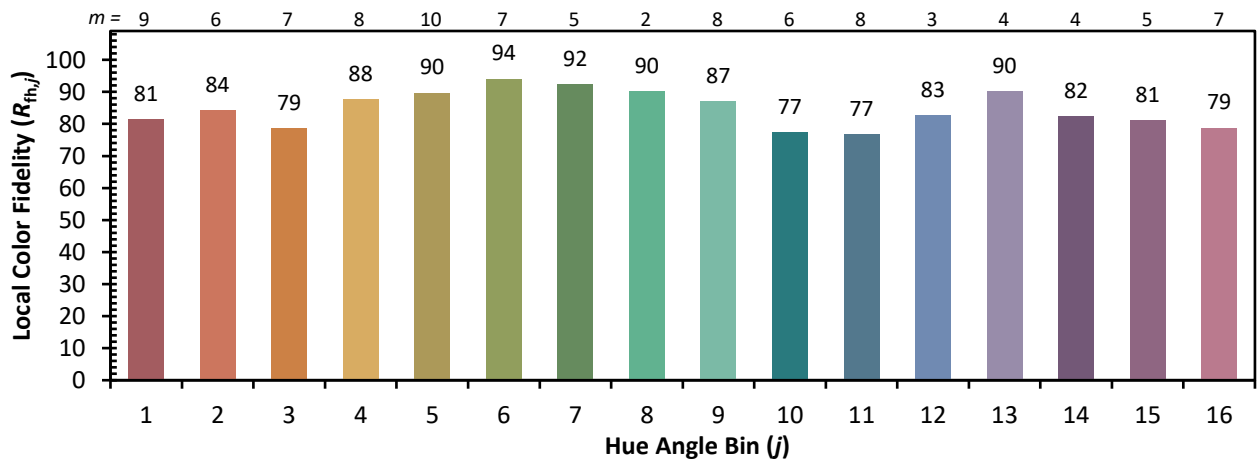
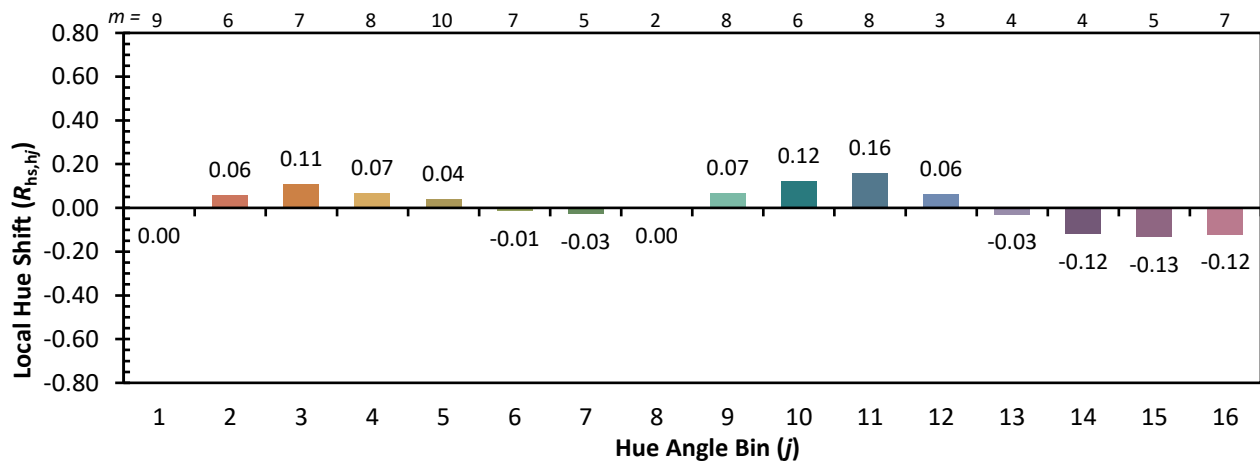
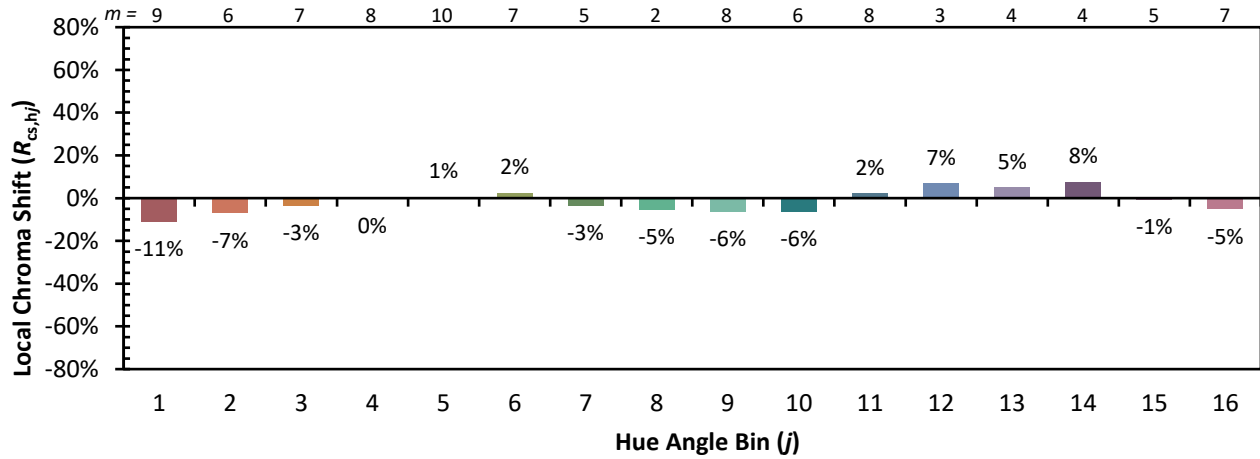


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

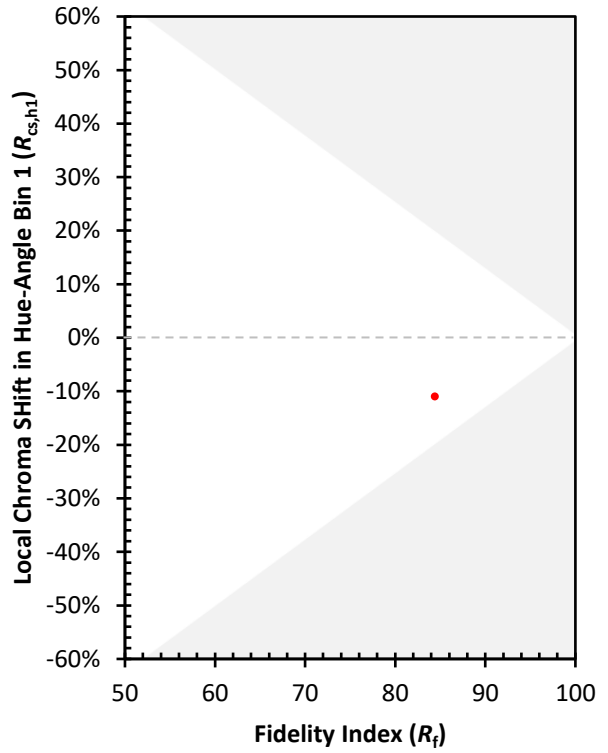
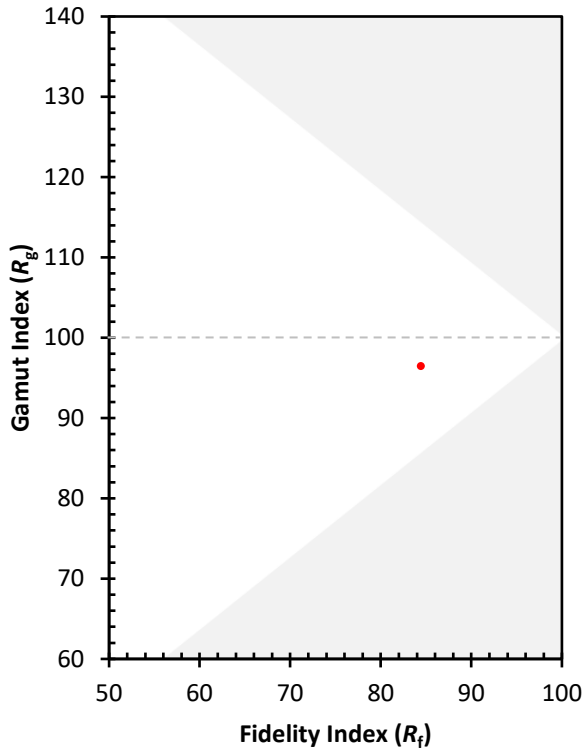
CES01 = 86	CES26 = 83	CES51 = 94	CES76 = 75
CES02 = 62	CES27 = 92	CES52 = 95	CES77 = 82
CES03 = 31	CES28 = 91	CES53 = 90	CES78 = 74
CES04 = 70	CES29 = 88	CES54 = 90	CES79 = 92
CES05 = 48	CES30 = 94	CES55 = 88	CES80 = 89
CES06 = 51	CES31 = 89	CES56 = 87	CES81 = 81
CES07 = 41	CES32 = 81	CES57 = 86	CES82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