

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: P1449904

Luminaire Tested: **TWC60_T3_36W_5000K**

Issue Date: 5/19/2026

Test Information

Test Method: LM-79-08
Report Number: P1449904
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_5000K
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T3 distribution, 36W
5000K settings
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6042 lumens
Efficiency: N/A
Efficacy: 173.6 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

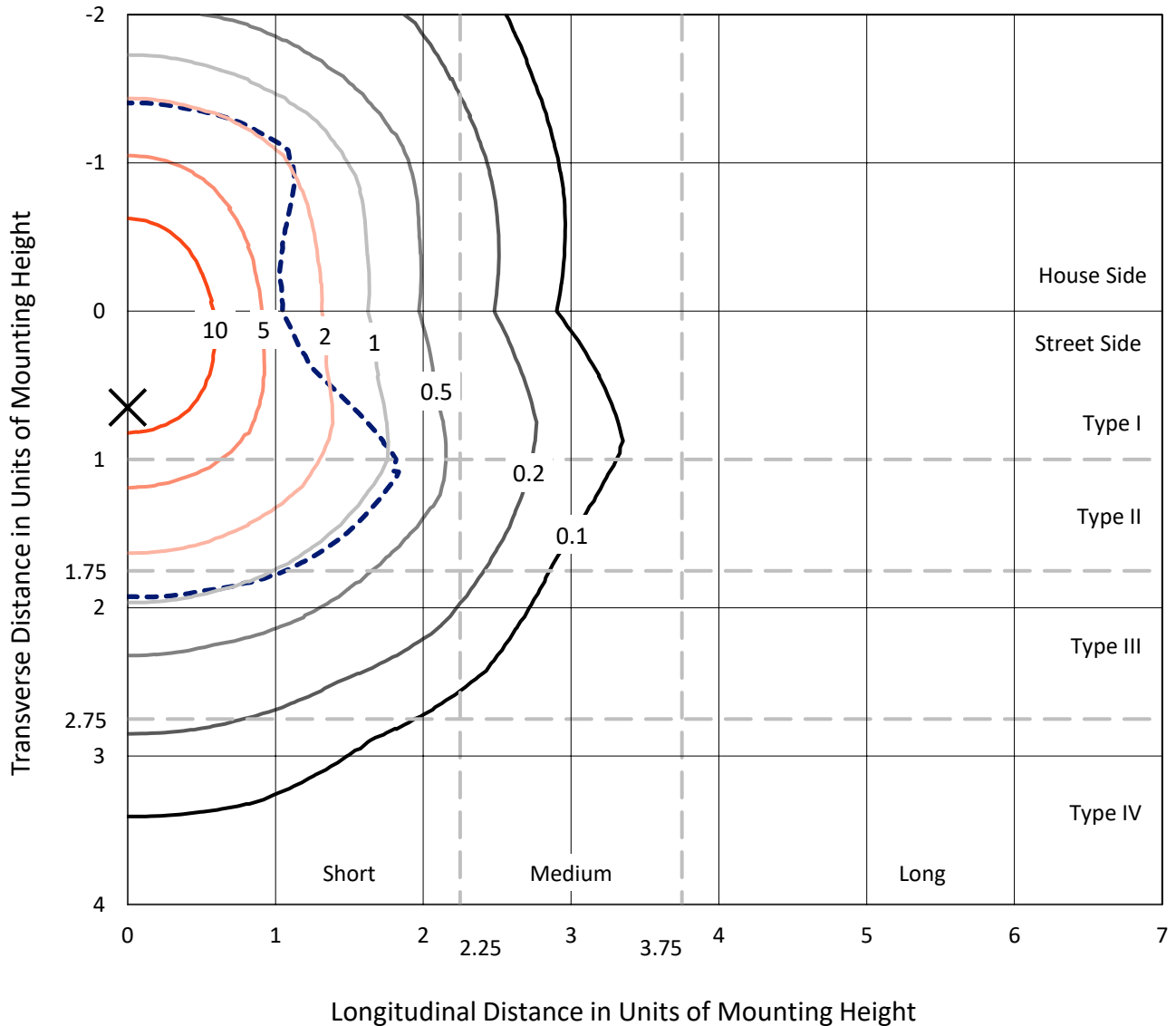
Input Watts (W): 34.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

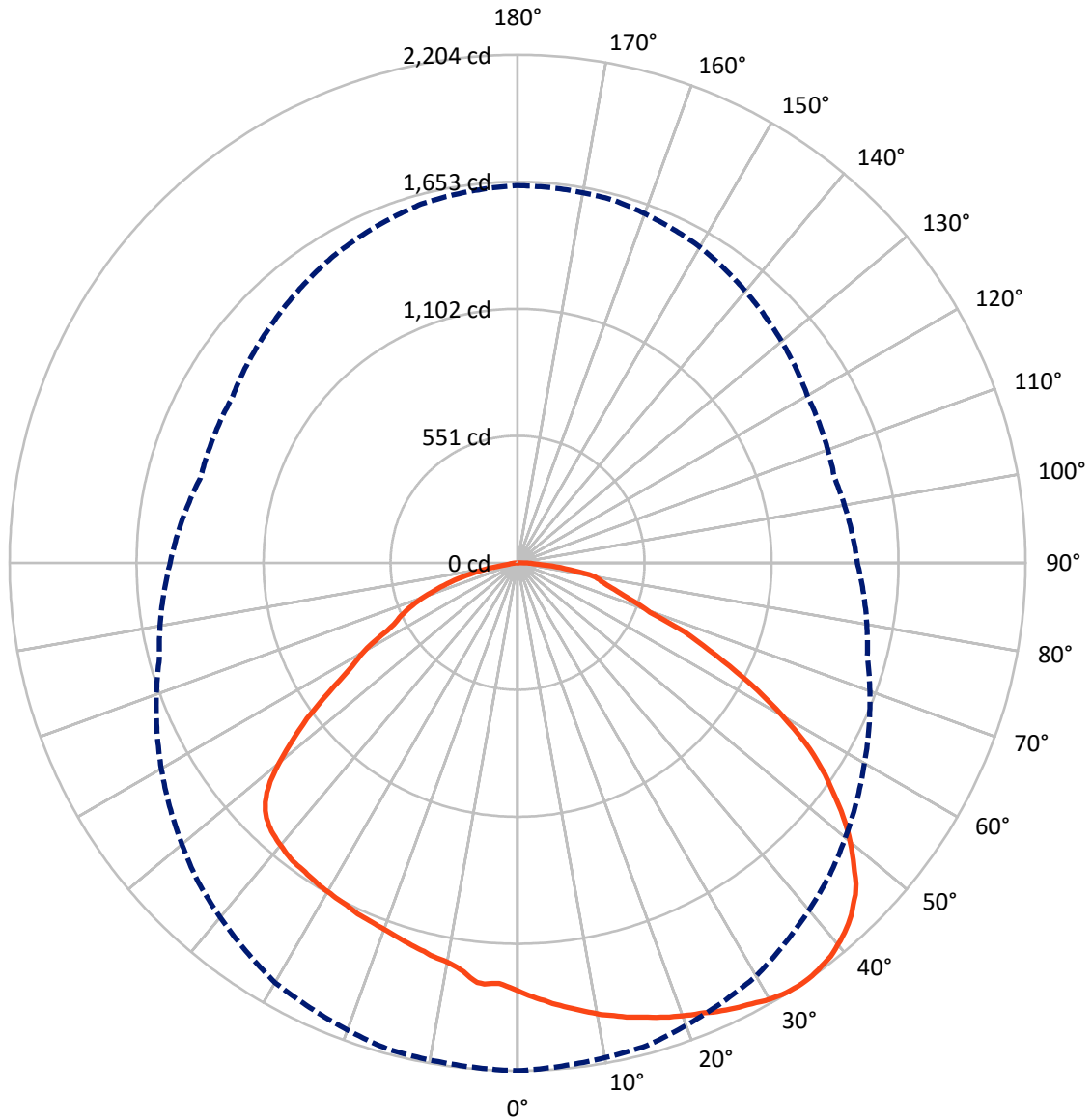
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 19.1 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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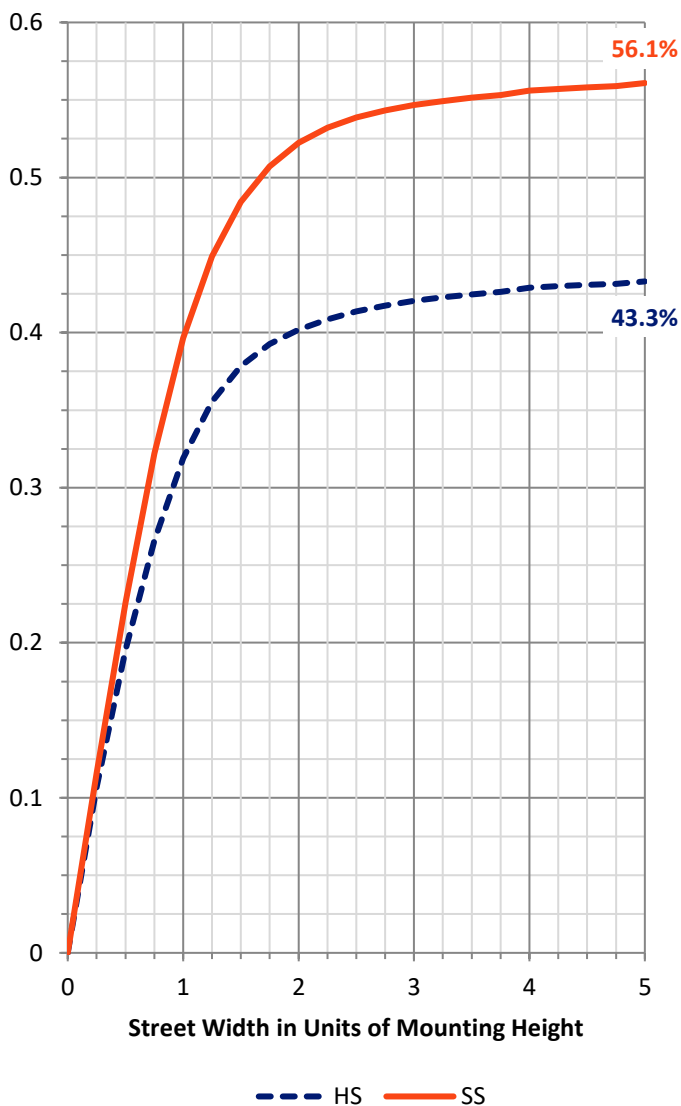
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2631.5	0.0	2631.5
	% Fixture	43.6	0.0	43.6
Street Side	Lumens	3410.5	0.0	3410.5
	% Fixture	56.4	0.0	56.4
Total	Lumens	6042.0	0.0	6042.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.9	2.9
10°-20°	520.1	8.6
20°-30°	822.1	13.6
30°-40°	1056.3	17.5
40°-50°	1179.4	19.5
50°-60°	1092.3	18.1
60°-70°	754.6	12.5
70°-80°	357.5	5.9
80°-90°	81.8	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°	6042.0	100.0
0°-180°	6042.0	100.0

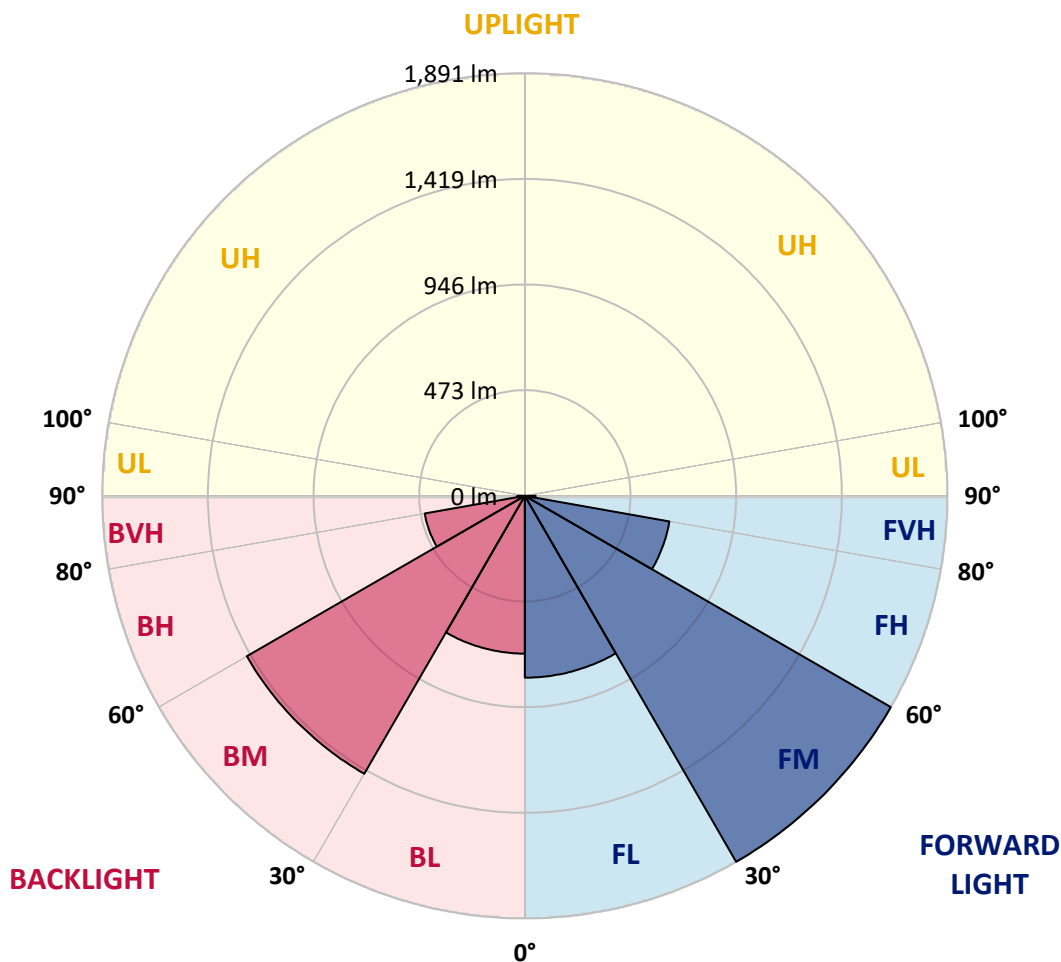


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	813.8	13.5			
FM (30°-60°)	1891.4	31.3			
FH (60°-80°)	657.1	10.9			G0/660
FVH (80°-90°)	48.1	0.8			G1/100
BL (0°-30°)	706.2	11.7	B2/1000		
BM (30°-60°)	1436.6	23.8	B2/2500		
BH (60°-80°)	455.0	7.5	B1/500		G1/500
BVH (80°-90°)	33.7	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°	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2
1°	1877.4	1877.6	1874.6	1872.4	1871.2	1867.3	1860.5	1858.1	1855.3	1854.3	1849.1
2°	1891.0	1890.3	1887.1	1880.3	1876.6	1869.3	1860.2	1852.4	1845.7	1841.8	1839.9
3°	1902.5	1904.4	1897.1	1890.8	1880.9	1872.0	1857.7	1846.8	1839.2	1831.4	1829.1
4°	1917.6	1917.1	1908.5	1896.4	1886.9	1869.0	1854.1	1839.0	1830.8	1823.2	1826.5
5°	1929.3	1926.7	1919.3	1903.5	1887.4	1869.2	1850.0	1835.3	1824.3	1823.9	1829.0
6°	1942.3	1936.7	1927.6	1911.8	1893.0	1868.7	1842.4	1826.7	1818.5	1828.2	1831.6
7°	1953.7	1948.6	1937.0	1917.4	1894.2	1865.8	1837.3	1818.0	1817.8	1828.4	1822.4
8°	1967.7	1961.6	1944.7	1921.1	1896.0	1865.1	1831.6	1810.8	1817.4	1818.4	1803.0
9°	1980.0	1973.3	1955.0	1928.5	1895.6	1861.0	1824.6	1806.0	1817.3	1804.9	1780.5
10°	1993.0	1984.2	1964.1	1934.5	1896.7	1857.8	1817.0	1800.4	1809.5	1780.9	1767.2
11°	2003.1	1995.3	1972.5	1939.8	1897.8	1854.8	1810.4	1796.2	1797.9	1764.1	1758.4
12°	2014.0	2004.6	1980.2	1941.8	1897.4	1847.7	1801.6	1792.4	1777.3	1750.8	1747.4
13°	2026.9	2016.0	1989.1	1947.2	1896.5	1843.5	1791.6	1786.1	1755.8	1739.1	1739.0
14°	2036.1	2025.0	1992.7	1950.5	1896.5	1838.5	1779.3	1780.3	1739.5	1729.7	1732.8
15°	2045.6	2034.3	1999.1	1952.4	1894.7	1831.2	1769.1	1767.9	1724.7	1718.3	1723.5
16°	2056.5	2040.9	2004.8	1954.1	1890.2	1825.8	1758.0	1757.1	1710.5	1709.0	1714.9
17°	2067.0	2049.5	2009.1	1954.3	1888.3	1815.6	1748.1	1736.7	1698.0	1698.9	1705.7
18°	2077.9	2057.6	2015.3	1951.5	1884.5	1809.2	1736.5	1715.4	1683.5	1687.4	1697.9
19°	2086.8	2067.0	2018.7	1953.0	1880.6	1799.0	1725.7	1694.5	1671.2	1676.7	1688.9
20°	2096.3	2075.4	2024.7	1953.8	1873.7	1789.0	1714.9	1674.7	1657.9	1667.4	1679.5
21°	2104.8	2084.1	2030.3	1953.0	1868.7	1777.5	1705.6	1656.9	1643.1	1654.3	1672.2
22°	2113.2	2089.5	2034.5	1952.7	1859.2	1765.6	1694.5	1640.3	1627.9	1643.4	1663.7
23°	2125.5	2098.8	2036.5	1949.9	1852.6	1755.4	1683.9	1622.1	1614.1	1632.5	1654.9
24°	2135.4	2107.2	2041.3	1948.7	1842.8	1740.6	1673.0	1604.2	1599.7	1620.2	1646.4
25°	2145.0	2114.7	2045.1	1947.0	1834.4	1723.7	1656.3	1586.3	1584.0	1608.7	1639.7
26°	2154.9	2121.9	2049.1	1943.5	1824.9	1708.3	1640.4	1569.0	1566.6	1596.9	1634.2
27°	2161.4	2130.3	2052.0	1940.1	1816.0	1692.7	1623.0	1549.4	1552.3	1585.2	1625.9
28°	2171.0	2137.6	2054.9	1935.9	1803.2	1674.3	1599.9	1529.0	1535.9	1575.7	1618.5
29°	2182.9	2144.5	2057.4	1932.3	1792.3	1655.2	1575.5	1509.6	1520.8	1564.8	1610.8
30°	2189.9	2151.1	2060.3	1926.9	1778.9	1635.3	1551.7	1487.8	1503.0	1551.1	1601.6
31°	2197.0	2158.6	2063.8	1923.0	1767.3	1616.1	1524.7	1466.3	1485.5	1541.2	1595.9
32°	2200.6	2164.0	2065.9	1919.4	1754.9	1593.2	1499.1	1445.9	1469.1	1529.4	1589.2
33°	2203.6	2168.5	2070.3	1915.0	1738.0	1570.9	1474.0	1423.2	1451.8	1516.6	1581.9
34°	2202.8	2169.1	2073.0	1908.1	1724.5	1549.0	1447.1	1398.9	1433.2	1504.1	1573.4
35°	2200.9	2165.5	2071.3	1903.9	1710.0	1525.4	1421.0	1377.4	1416.5	1490.9	1565.8
36°	2195.4	2165.3	2071.5	1899.1	1693.7	1499.7	1395.6	1355.4	1398.0	1480.6	1556.2
37°	2188.1	2157.0	2069.0	1894.1	1679.0	1474.5	1367.5	1331.5	1381.4	1465.4	1547.5
38°	2181.4	2152.0	2063.8	1889.1	1660.9	1450.5	1339.8	1307.1	1360.8	1451.9	1538.6
39°	2168.9	2140.2	2059.7	1884.0	1647.0	1425.2	1311.2	1282.1	1342.3	1435.8	1531.6
40°	2155.7	2126.4	2052.5	1876.8	1631.3	1399.0	1283.1	1258.1	1325.3	1421.9	1524.4
41°	2141.9	2114.1	2043.9	1869.9	1613.1	1374.7	1255.7	1236.5	1304.4	1410.5	1516.0
42°	2124.4	2101.3	2029.5	1862.8	1598.7	1346.5	1228.2	1214.8	1284.3	1399.1	1504.5
43°	2104.4	2081.9	2015.4	1854.1	1584.9	1319.6	1200.7	1192.3	1263.5	1386.3	1495.7
44°	2077.8	2059.7	1999.1	1846.5	1567.8	1292.7	1170.9	1167.5	1245.2	1369.3	1487.2



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2054.6	2037.2	1983.1	1837.8	1552.3	1266.8	1140.0	1141.8	1227.0	1353.6	1477.4
46°	2024.3	2009.2	1963.4	1827.3	1538.0	1241.6	1109.1	1116.5	1208.7	1340.2	1466.5
47°	1983.5	1979.1	1940.3	1815.4	1522.7	1213.7	1076.6	1090.4	1189.5	1328.1	1450.7
48°	1945.0	1944.1	1915.4	1800.1	1508.7	1184.9	1044.9	1063.4	1166.5	1313.0	1433.0
49°	1904.1	1902.1	1888.0	1782.5	1494.9	1156.0	1013.4	1035.4	1145.2	1296.4	1415.6
50°	1863.4	1863.5	1855.1	1763.9	1480.8	1125.6	981.0	1005.4	1126.0	1279.3	1389.0
51°	1819.0	1820.2	1818.3	1745.3	1467.8	1095.0	948.9	975.3	1106.2	1262.0	1356.4
52°	1769.7	1775.5	1778.9	1723.0	1452.2	1063.5	915.1	947.4	1085.0	1244.5	1315.7
53°	1716.5	1724.2	1739.1	1700.1	1437.8	1032.2	883.1	919.4	1062.2	1227.1	1263.0
54°	1665.6	1672.0	1691.0	1670.4	1423.7	1000.5	849.1	890.8	1037.1	1209.6	1210.4
55°	1617.6	1621.5	1641.0	1635.4	1402.7	969.2	816.1	861.6	1012.7	1183.1	1157.7
56°	1560.6	1570.3	1590.0	1598.7	1383.7	937.8	782.2	832.1	988.5	1146.6	1099.4
57°	1502.4	1515.5	1534.2	1559.6	1363.3	907.0	746.6	803.1	963.9	1102.9	1036.8
58°	1435.2	1456.1	1482.4	1515.3	1341.3	875.3	709.2	773.0	938.2	1050.5	968.1
59°	1362.7	1390.0	1424.8	1467.4	1317.6	843.1	675.4	742.1	910.7	996.1	904.7
60°	1289.6	1316.4	1368.8	1411.3	1289.1	811.1	638.9	709.2	882.0	940.5	843.4
61°	1216.8	1245.8	1305.0	1351.7	1256.4	781.5	604.6	675.4	853.4	880.1	790.7
62°	1140.5	1169.5	1233.0	1286.9	1222.7	751.3	572.7	643.7	820.4	821.3	756.1
63°	1060.7	1091.3	1162.7	1217.1	1186.7	722.0	539.3	611.8	782.2	762.1	720.8
64°	987.1	1009.6	1095.6	1147.3	1146.8	694.6	507.1	578.7	738.1	705.6	670.4
65°	913.1	930.2	1025.3	1071.8	1098.9	668.5	476.7	547.5	689.4	666.6	613.1
66°	850.6	855.2	950.5	992.8	1044.3	644.7	445.5	514.8	638.5	638.0	569.5
67°	783.9	790.7	872.3	914.6	983.4	622.9	413.9	483.2	583.8	601.5	541.3
68°	698.4	716.1	790.6	849.0	912.0	602.7	382.7	452.4	528.8	556.2	519.4
69°	613.4	629.5	709.4	801.7	836.3	586.6	351.2	421.0	477.0	521.6	496.7
70°	573.8	585.3	614.3	753.0	749.2	570.7	319.4	390.8	434.8	497.2	474.6
71°	535.7	542.5	550.6	686.5	643.5	554.8	287.7	360.1	407.0	473.7	454.4
72°	497.6	499.8	487.1	583.7	548.8	537.2	257.1	327.3	376.7	448.6	433.6
73°	465.2	472.9	423.7	507.8	454.3	511.1	227.3	292.8	347.9	423.8	409.7
74°	435.7	443.4	396.4	432.8	359.7	470.2	199.1	257.5	327.8	399.9	383.9
75°	410.9	410.7	368.3	357.8	387.1	422.6	172.5	220.1	310.9	377.7	356.6
76°	389.0	375.8	343.1	322.5	355.6	378.4	149.5	185.4	292.1	353.1	325.5
77°	372.1	341.4	317.1	303.5	250.4	333.0	126.6	161.7	273.8	331.0	290.4
78°	360.1	314.1	286.7	284.6	181.7	274.6	103.7	138.0	256.9	309.9	257.8
79°	343.8	294.7	259.7	247.0	144.6	218.5	85.1	114.3	239.1	289.3	228.8
80°	315.7	279.0	239.9	199.4	147.3	171.1	68.3	99.5	222.0	263.4	206.6
81°	273.4	260.9	221.3	168.0	152.4	126.4	53.4	84.8	204.0	235.6	183.4
82°	228.8	235.4	202.3	146.7	109.8	89.7	40.4	71.3	185.8	208.5	139.8
83°	187.9	209.4	175.4	127.9	71.5	60.7	30.0	58.6	167.4	188.2	96.0
84°	149.6	185.5	136.5	112.4	58.1	47.2	21.8	46.6	140.7	151.0	36.9
85°	103.7	145.7	105.4	95.6	44.7	34.0	16.5	35.6	114.1	113.9	26.3
86°	71.6	107.6	77.9	65.7	31.4	20.8	11.2	25.1	95.3	76.8	15.6
87°	57.2	62.8	51.8	36.7	22.2	12.0	5.9	17.0	63.4	39.7	5.0
88°	43.0	46.9	38.9	7.7	11.8	5.0	2.8	9.0	42.3	2.6	1.9
89°	28.8	31.4	26.1	4.7	7.8	2.5	0.8	1.2	21.2	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



REPORT NUMBER: P1449904
 CATALOG NUMBER: TWC60_T3_36W_5000K

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



REPORT NUMBER: P1449904
CATALOG NUMBER: TWC60_T3_36W_5000K

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: P1449904

CATALOG NUMBER: TWC60_T3_36W_5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2	1863.2
1°	1849.4	1848.7	1849.2	1852.5	1854.8	1856.3	1860.2	1862.5	1866.9	1870.1	1872.7
2°	1837.0	1837.1	1839.9	1840.9	1844.4	1849.3	1857.1	1859.9	1868.3	1874.0	1882.2
3°	1827.3	1826.7	1828.4	1830.6	1834.2	1844.6	1851.7	1858.5	1870.9	1880.0	1892.0
4°	1827.2	1828.4	1828.3	1825.1	1826.6	1833.5	1844.8	1857.8	1871.4	1885.7	1898.7
5°	1831.4	1832.5	1830.4	1827.4	1822.4	1827.3	1839.0	1854.5	1872.5	1890.6	1905.7
6°	1829.2	1829.3	1830.9	1828.6	1823.2	1818.5	1832.3	1849.6	1872.5	1893.6	1913.7
7°	1815.7	1811.6	1818.4	1824.5	1824.0	1814.6	1826.3	1843.3	1870.1	1898.0	1921.0
8°	1789.7	1789.3	1793.7	1810.3	1820.9	1812.0	1819.3	1840.0	1871.4	1900.7	1927.9
9°	1775.6	1774.8	1774.9	1787.8	1809.9	1810.9	1809.4	1831.7	1869.2	1904.7	1935.5
10°	1765.7	1763.0	1764.1	1770.3	1791.3	1807.9	1801.6	1825.4	1866.5	1905.6	1941.5
11°	1755.8	1755.6	1755.9	1758.4	1770.0	1802.6	1792.5	1819.2	1862.9	1905.9	1946.9
12°	1748.7	1749.8	1748.5	1746.4	1753.6	1791.8	1786.3	1810.7	1859.9	1909.3	1951.5
13°	1742.0	1743.6	1742.6	1738.1	1740.8	1773.6	1779.9	1803.3	1853.9	1909.8	1957.7
14°	1734.9	1733.9	1734.3	1730.5	1729.7	1752.1	1774.9	1791.3	1851.8	1909.4	1960.3
15°	1727.6	1728.0	1726.6	1720.9	1717.3	1732.4	1768.0	1783.7	1846.1	1907.0	1963.0
16°	1721.3	1720.9	1716.8	1709.2	1706.2	1715.3	1760.2	1772.2	1841.4	1906.5	1966.3
17°	1714.7	1714.0	1711.5	1701.2	1693.7	1699.9	1748.8	1760.0	1833.8	1903.9	1969.3
18°	1706.2	1707.2	1701.2	1691.3	1683.6	1685.3	1735.7	1750.2	1827.5	1902.3	1969.6
19°	1699.1	1701.1	1694.8	1682.2	1669.9	1670.1	1719.3	1736.5	1819.3	1898.6	1971.4
20°	1693.2	1694.4	1688.0	1672.3	1657.5	1656.1	1696.5	1724.4	1810.5	1895.4	1973.1
21°	1687.0	1689.8	1680.3	1662.8	1646.1	1642.2	1676.7	1710.7	1801.6	1888.6	1973.2
22°	1679.5	1684.4	1673.1	1654.6	1633.3	1624.5	1653.1	1698.8	1789.3	1883.9	1974.7
23°	1676.8	1680.3	1667.5	1644.4	1621.1	1608.5	1633.7	1683.6	1777.5	1877.0	1975.2
24°	1671.9	1676.6	1663.6	1634.8	1607.0	1590.8	1616.1	1670.1	1764.2	1869.3	1974.3
25°	1664.6	1673.4	1658.0	1626.4	1594.5	1574.9	1595.5	1656.1	1751.1	1864.2	1972.8
26°	1661.7	1666.6	1652.9	1618.5	1581.3	1558.8	1575.5	1643.1	1736.0	1857.1	1975.2
27°	1653.9	1660.2	1645.4	1610.4	1568.0	1541.0	1556.4	1629.6	1721.1	1848.1	1971.2
28°	1649.7	1657.3	1639.7	1602.5	1554.4	1523.5	1536.3	1617.4	1704.9	1839.0	1970.5
29°	1643.2	1653.7	1631.3	1591.2	1541.5	1504.5	1514.7	1598.0	1686.1	1829.4	1968.6
30°	1639.5	1648.8	1625.9	1583.7	1530.1	1487.0	1494.4	1578.3	1667.7	1819.4	1967.4
31°	1638.6	1645.9	1622.5	1573.2	1517.7	1466.6	1470.4	1558.1	1648.8	1808.2	1965.0
32°	1633.3	1642.9	1617.5	1564.2	1503.7	1448.3	1450.1	1534.5	1628.5	1796.2	1962.6
33°	1627.4	1636.8	1611.6	1556.1	1489.4	1430.6	1424.2	1506.9	1608.8	1784.6	1959.0
34°	1618.9	1632.7	1604.9	1547.0	1472.4	1411.7	1402.0	1476.6	1586.8	1771.4	1957.7
35°	1612.1	1627.0	1598.1	1537.8	1459.0	1391.1	1377.1	1448.3	1566.7	1760.5	1957.0
36°	1608.8	1624.8	1590.7	1528.9	1443.8	1370.9	1353.3	1419.7	1545.5	1747.6	1952.3
37°	1606.7	1622.2	1586.5	1516.7	1429.3	1351.2	1327.6	1391.0	1522.6	1735.0	1951.6
38°	1604.1	1617.2	1583.2	1507.1	1413.4	1331.1	1302.8	1362.9	1501.5	1723.2	1945.0
39°	1596.4	1610.7	1577.9	1497.1	1398.5	1309.3	1277.8	1333.3	1478.6	1709.1	1939.2
40°	1587.7	1602.6	1568.7	1487.9	1380.3	1288.1	1252.2	1305.1	1453.6	1697.4	1934.6
41°	1582.5	1595.9	1559.8	1476.9	1364.3	1265.9	1226.7	1274.1	1430.4	1684.5	1927.9
42°	1573.0	1587.4	1551.8	1464.4	1351.0	1246.8	1201.1	1246.0	1403.8	1671.9	1921.5
43°	1565.6	1579.6	1544.2	1455.2	1336.1	1227.7	1175.4	1215.8	1378.2	1660.9	1912.6
44°	1554.1	1567.7	1533.6	1446.1	1322.0	1208.6	1147.3	1183.6	1353.1	1650.1	1902.9



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CATALOG NUMBER: TWC60_T3_36W_5000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1539.9	1553.7	1521.8	1434.6	1305.1	1182.8	1118.4	1151.0	1326.4	1639.7	1890.0
46°	1523.9	1533.7	1506.2	1422.4	1287.1	1157.9	1092.1	1118.9	1299.0	1627.4	1874.4
47°	1503.6	1508.3	1488.9	1410.6	1270.4	1134.4	1063.5	1086.0	1271.5	1616.5	1859.8
48°	1473.6	1474.6	1462.6	1396.0	1255.5	1112.6	1036.4	1053.2	1245.9	1605.3	1840.8
49°	1437.1	1431.9	1431.2	1381.0	1239.0	1089.7	1006.6	1020.4	1217.3	1592.5	1823.0
50°	1389.6	1380.0	1392.2	1360.6	1222.5	1065.8	977.1	986.9	1190.9	1581.8	1801.1
51°	1334.8	1319.2	1342.8	1338.4	1206.1	1041.8	947.0	955.0	1166.8	1569.1	1777.3
52°	1276.2	1257.9	1286.5	1306.1	1185.4	1018.1	916.0	921.1	1141.2	1553.4	1748.1
53°	1217.7	1196.7	1230.1	1262.2	1165.4	996.5	884.2	886.0	1115.4	1533.8	1714.8
54°	1158.8	1135.5	1173.7	1218.4	1146.0	972.5	852.6	852.1	1091.3	1514.8	1678.2
55°	1090.3	1064.5	1110.2	1174.3	1124.3	945.6	822.2	816.1	1067.7	1495.7	1641.4
56°	1020.1	994.8	1039.8	1116.5	1101.6	919.1	792.2	779.8	1045.0	1472.5	1598.9
57°	950.6	926.9	971.2	1059.0	1073.7	890.4	759.0	744.0	1022.2	1445.5	1550.9
58°	885.5	867.7	903.8	997.3	1038.7	861.3	725.8	708.8	999.4	1419.0	1500.6
59°	836.2	825.7	846.3	932.3	996.9	833.8	693.3	674.3	976.6	1385.2	1443.6
60°	798.6	790.6	802.5	869.4	946.4	804.2	660.9	640.8	955.2	1350.8	1383.7
61°	761.0	748.9	767.9	806.8	893.8	775.5	629.2	606.0	929.7	1313.1	1323.4
62°	714.9	696.9	727.0	758.0	837.3	746.0	596.2	573.1	906.5	1271.8	1260.7
63°	654.5	637.2	671.4	723.7	776.2	713.2	561.4	540.1	882.0	1222.3	1194.9
64°	605.2	599.3	613.8	689.4	717.3	681.4	527.6	507.2	858.7	1165.4	1123.2
65°	578.7	577.4	578.9	642.7	660.0	648.3	494.3	475.4	836.9	1103.0	1046.2
66°	557.0	555.5	555.2	588.1	610.4	609.4	460.4	442.2	815.9	1034.3	972.9
67°	536.3	531.9	535.5	550.3	577.5	563.0	427.9	408.5	793.1	960.6	912.3
68°	512.3	505.7	513.2	521.7	550.7	513.2	395.8	374.6	766.8	877.0	855.3
69°	486.4	476.9	490.0	496.4	512.9	463.6	365.2	339.5	732.6	783.7	797.4
70°	459.3	447.0	466.3	471.7	479.4	411.6	334.8	305.7	693.0	677.2	725.9
71°	428.5	412.9	439.0	448.4	456.9	363.2	305.1	272.1	643.7	585.3	632.6
72°	395.8	380.7	409.0	428.9	437.8	323.2	277.5	239.7	594.3	548.3	553.0
73°	364.6	351.0	377.0	409.4	415.9	295.4	249.3	210.4	541.1	512.6	473.3
74°	332.1	318.1	345.2	389.7	394.0	268.1	222.7	183.1	487.8	503.4	393.6
75°	300.2	284.6	311.9	368.9	373.2	245.2	194.2	157.1	434.6	396.3	362.6
76°	265.6	248.5	280.5	345.5	351.7	227.7	167.5	133.9	366.4	289.6	334.8
77°	232.8	214.7	248.8	318.5	329.2	210.6	142.4	113.2	276.5	235.5	311.4
78°	203.5	182.8	220.3	285.7	305.3	193.0	117.4	95.7	206.8	200.6	279.0
79°	165.8	143.8	192.5	250.4	281.2	176.7	96.1	80.1	143.0	196.3	237.8
80°	128.0	104.7	150.2	220.8	256.5	161.0	79.8	65.9	106.8	197.9	200.6
81°	90.2	65.7	108.0	198.4	230.7	144.6	66.5	53.9	92.3	148.5	174.9
82°	47.6	37.2	66.0	180.3	204.3	128.1	55.0	41.9	82.5	98.4	155.3
83°	29.5	28.6	31.4	130.4	177.1	111.6	44.0	30.0	67.5	78.2	139.0
84°	21.4	20.7	21.9	81.0	147.5	94.7	34.0	21.8	53.1	64.3	119.7
85°	15.6	15.1	16.0	55.6	117.8	77.1	25.1	15.4	38.8	53.7	90.9
86°	9.8	9.6	10.1	30.1	88.2	58.3	18.2	10.0	24.4	43.2	49.0
87°	4.1	4.1	4.3	5.1	58.8	43.3	11.4	5.6	14.3	32.7	29.8
88°	1.7	1.6	1.7	1.7	29.4	29.0	4.6	3.0	5.5	13.7	10.9
89°	0.6	0.6	0.6	0.6	0.7	14.7	0.7	0.5	2.8	9.0	7.1



REPORT NUMBER: P1449904
 CATALOG NUMBER: TWC60_T3_36W_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: P1449904
 CATALOG NUMBER: TWC60_T3_36W_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: P1449904
CATALOG NUMBER: TWC60_T3_36W_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: P1449904
 CATALOG NUMBER: TWC60_T3_36W_5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1863.2	1863.2	1863.2
1°	1873.3	1875.7	1877.4
2°	1886.8	1890.5	1891.0
3°	1897.0	1904.0	1902.5
4°	1908.4	1913.8	1917.6
5°	1918.9	1927.0	1929.3
6°	1928.0	1940.5	1942.3
7°	1938.7	1949.8	1953.7
8°	1949.8	1963.3	1967.7
9°	1959.4	1976.7	1980.0
10°	1969.8	1987.6	1993.0
11°	1978.5	1998.5	2003.1
12°	1986.8	2007.6	2014.0
13°	1996.0	2017.3	2026.9
14°	2000.6	2028.4	2036.1
15°	2008.6	2037.1	2045.6
16°	2015.4	2047.4	2056.5
17°	2020.2	2054.5	2067.0
18°	2028.1	2065.8	2077.9
19°	2034.8	2073.5	2086.8
20°	2038.7	2082.4	2096.3
21°	2045.0	2091.0	2104.8
22°	2050.7	2101.7	2113.2
23°	2054.7	2110.2	2125.5
24°	2060.0	2120.2	2135.4
25°	2065.3	2127.3	2145.0
26°	2071.9	2136.1	2154.9
27°	2075.4	2144.7	2161.4
28°	2080.0	2153.5	2171.0
29°	2085.6	2158.8	2182.9
30°	2089.5	2167.9	2189.9
31°	2095.5	2174.5	2197.0
32°	2099.6	2179.4	2200.6
33°	2103.3	2183.6	2203.6
34°	2105.4	2183.0	2202.8
35°	2105.0	2180.4	2200.9
36°	2103.1	2178.6	2195.4
37°	2101.4	2170.8	2188.1
38°	2095.3	2161.4	2181.4
39°	2090.9	2149.5	2168.9
40°	2079.7	2138.3	2155.7
41°	2066.2	2123.4	2141.9
42°	2052.8	2108.7	2124.4
43°	2036.6	2091.3	2104.4
44°	2021.5	2066.8	2077.8



REPORT NUMBER: P1449904
CATALOG NUMBER: TWC60_T3_36W_5000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	2005.3	2041.0	2054.6
46°	1981.9	2014.5	2024.3
47°	1954.8	1980.8	1983.5
48°	1928.2	1941.1	1945.0
49°	1893.8	1900.1	1904.1
50°	1858.5	1860.3	1863.4
51°	1817.4	1815.3	1819.0
52°	1775.4	1769.4	1769.7
53°	1731.4	1718.3	1716.5
54°	1681.6	1668.0	1665.6
55°	1630.6	1616.6	1617.6
56°	1576.6	1564.6	1560.6
57°	1522.8	1508.4	1502.4
58°	1469.8	1444.7	1435.2
59°	1412.2	1372.9	1362.7
60°	1349.6	1300.8	1289.6
61°	1279.1	1227.5	1216.8
62°	1206.7	1153.2	1140.5
63°	1138.6	1073.6	1060.7
64°	1067.9	996.6	987.1
65°	989.3	919.4	913.1
66°	911.4	850.7	850.6
67°	831.6	786.5	783.9
68°	749.8	708.0	698.4
69°	667.4	620.0	613.4
70°	579.2	579.8	573.8
71°	520.0	540.0	535.7
72°	461.5	500.2	497.6
73°	436.3	469.5	465.2
74°	413.2	437.6	435.7
75°	390.0	405.3	410.9
76°	365.1	373.9	389.0
77°	335.6	347.5	372.1
78°	304.4	329.2	360.1
79°	278.9	316.4	343.8
80°	256.8	302.1	315.7
81°	234.4	275.6	273.4
82°	205.0	241.5	228.8
83°	169.3	209.7	187.9
84°	133.1	176.8	149.6
85°	113.9	131.4	103.7
86°	84.8	91.0	71.6
87°	55.4	72.5	57.2
88°	41.7	54.5	43.0
89°	27.9	36.5	28.8



REPORT NUMBER: P1449904
CATALOG NUMBER: TWC60_T3_36W_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: P1449904
CATALOG NUMBER: TWC60_T3_36W_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



REPORT NUMBER: P1449904
CATALOG NUMBER: TWC60_T3_36W_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

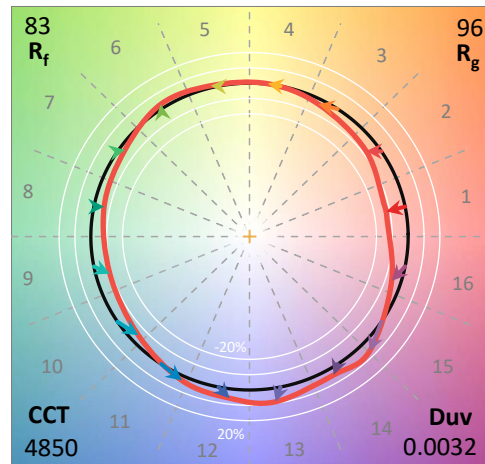
Test Information

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

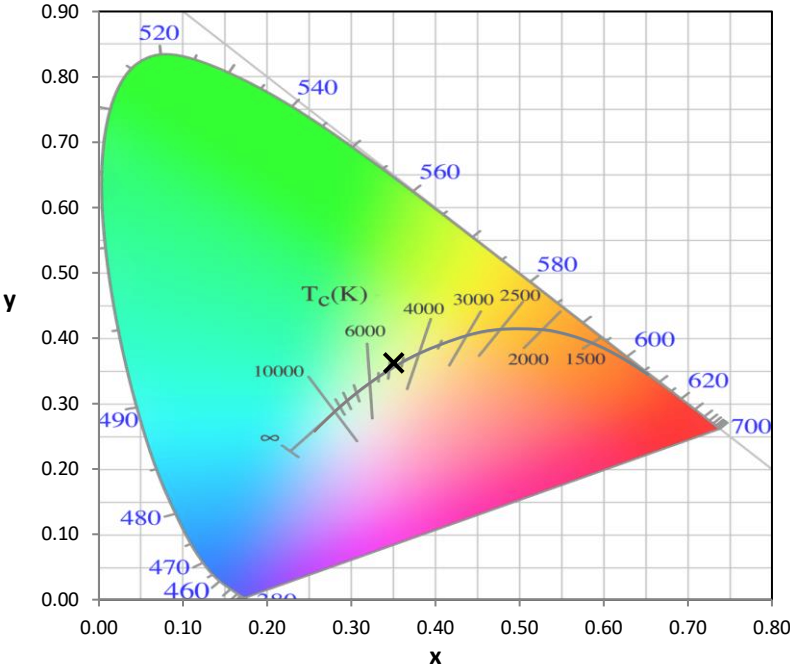
Stabilization Time: 25M
 Operation Time: 1H 25M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-3

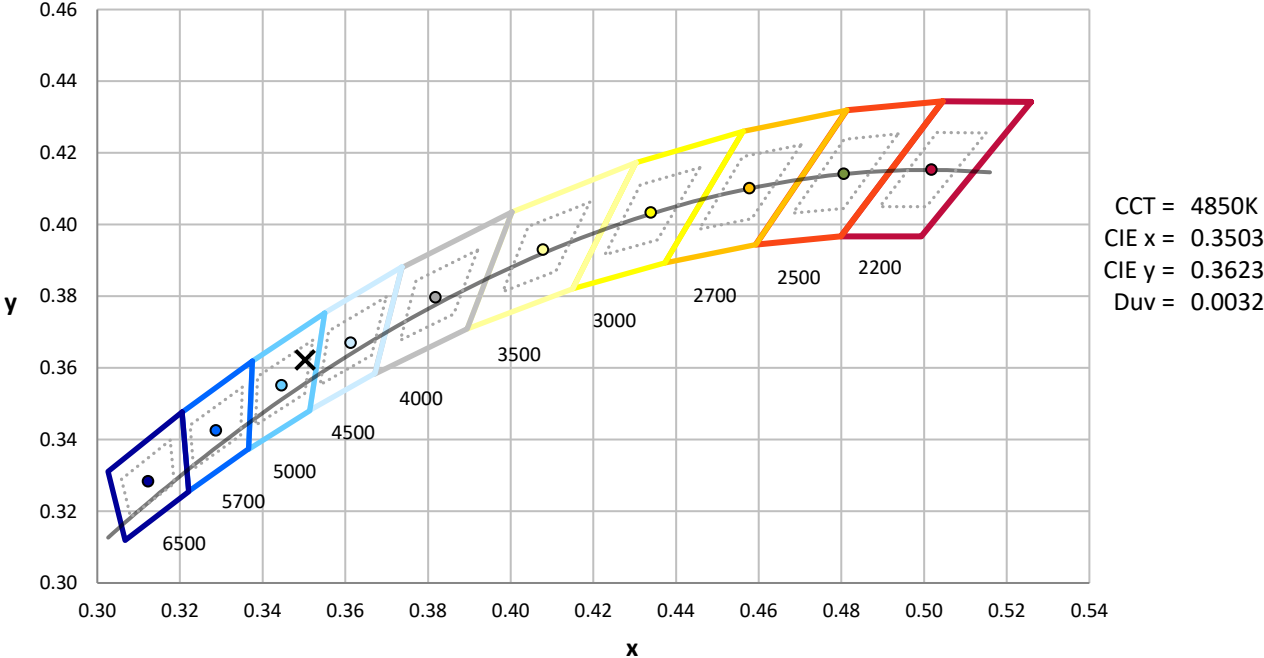
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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



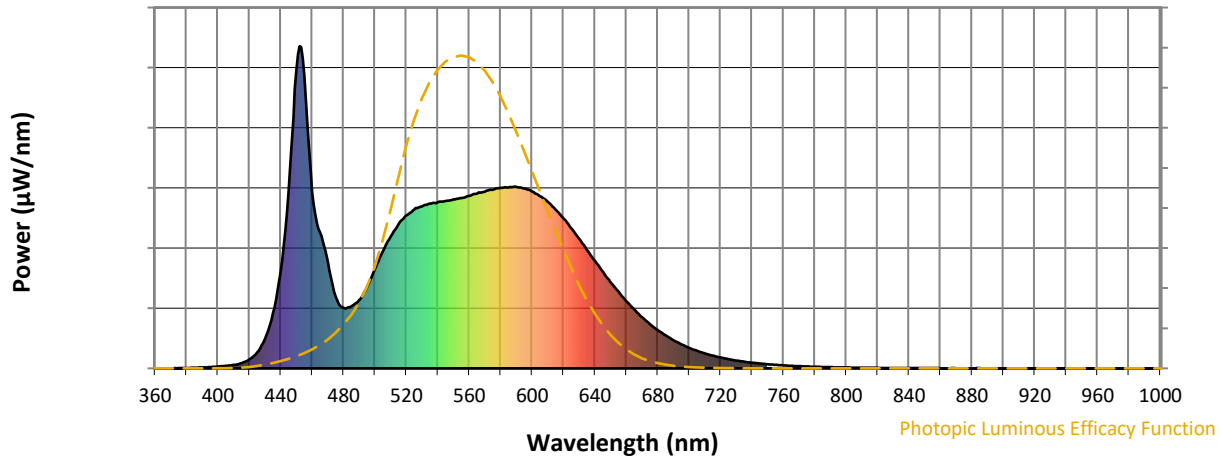
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 4-step quadrangle

REPORT NUMBER: SP1-2601-659-3

Photopic Flux vs. Wavelength

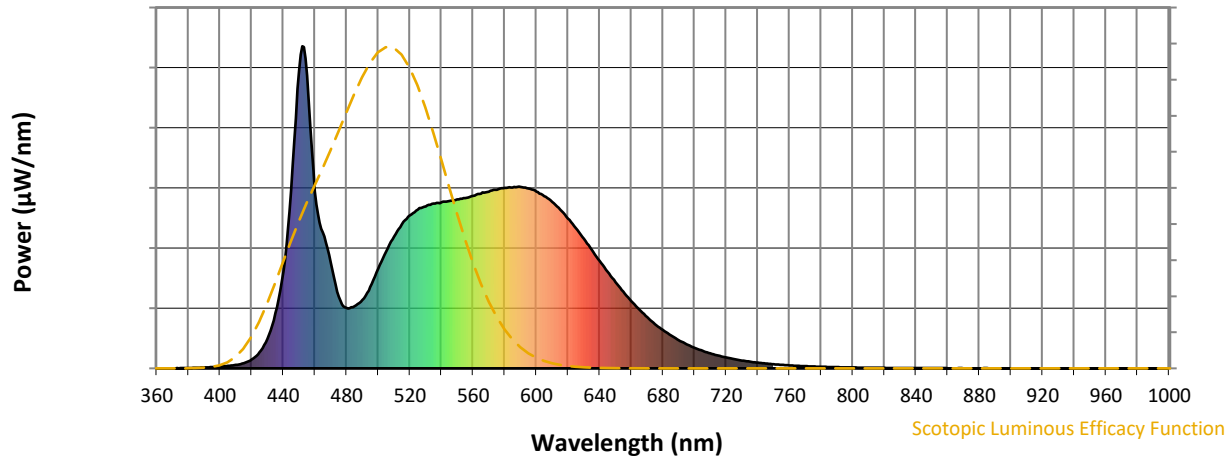


Photopic Lumens: NR

λ (nm)	Power 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

Scotopic Flux vs. Wavelength



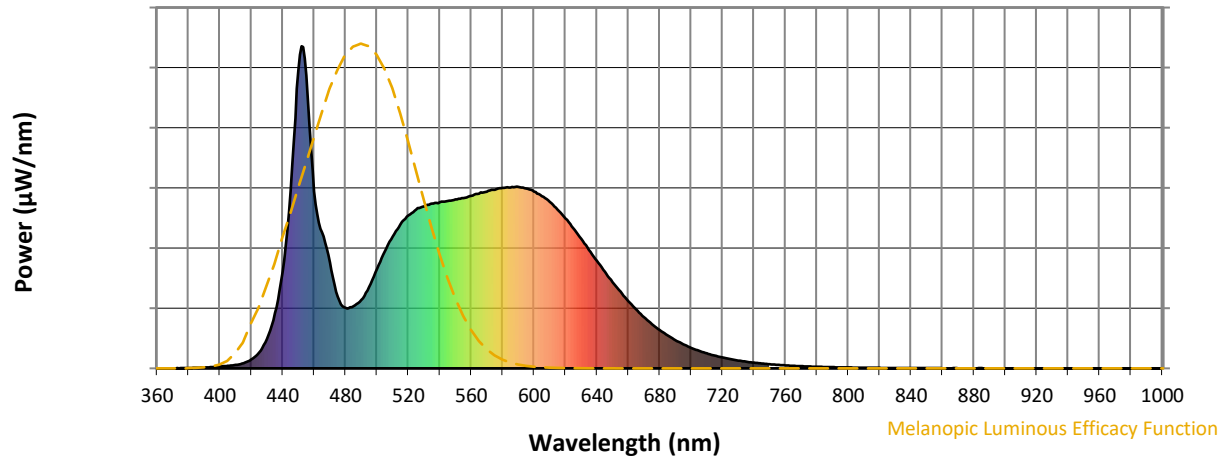
Scotopic Lumens: NR

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



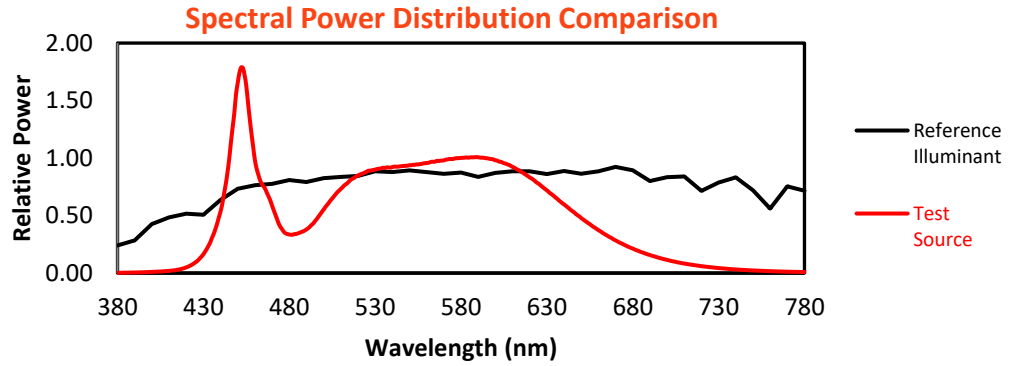
Melanopic Lumens: NR

M/P: 4

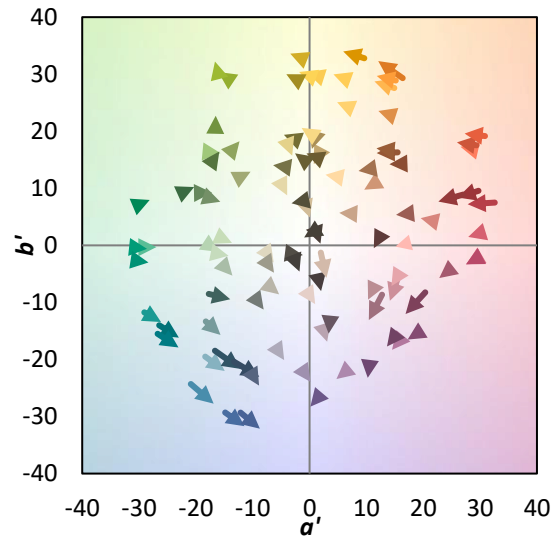
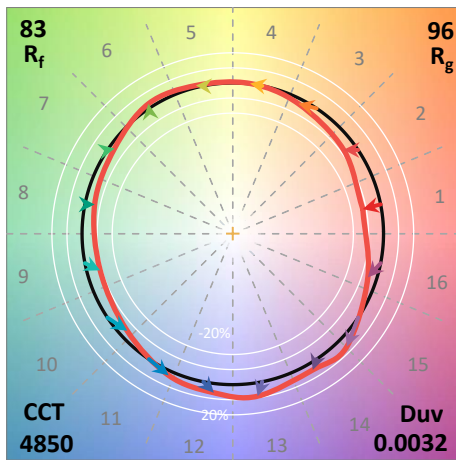
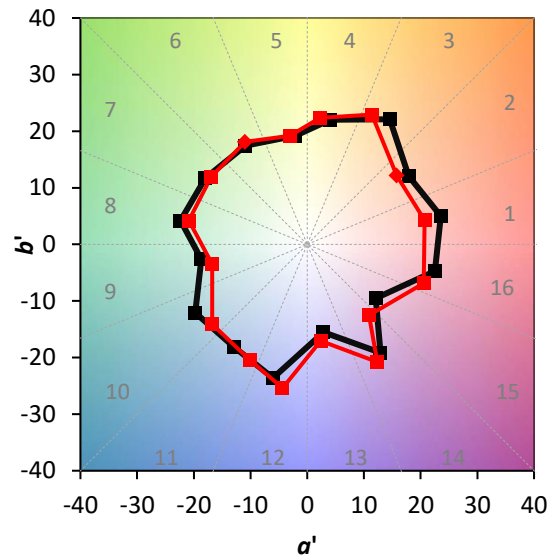
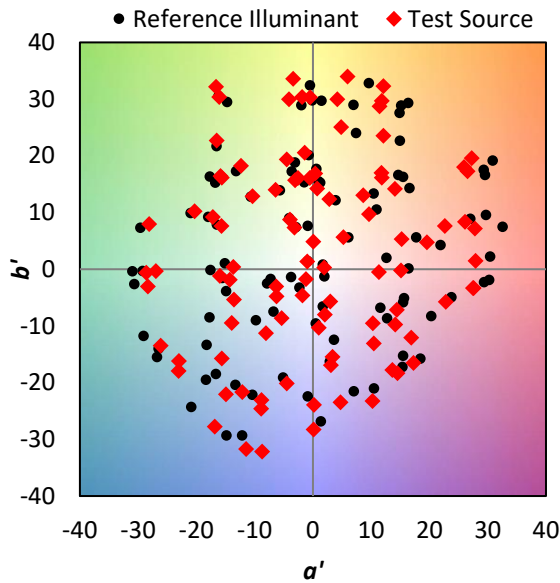
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	212	NR	620	465	NR	750	13	NR	880	0	NR
365	0	NR	495	253	NR	625	436	NR	755	11	NR	885	1	NR
370	0	NR	500	309	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 $R_a = 82.6$
 $R_9 = 8.5$

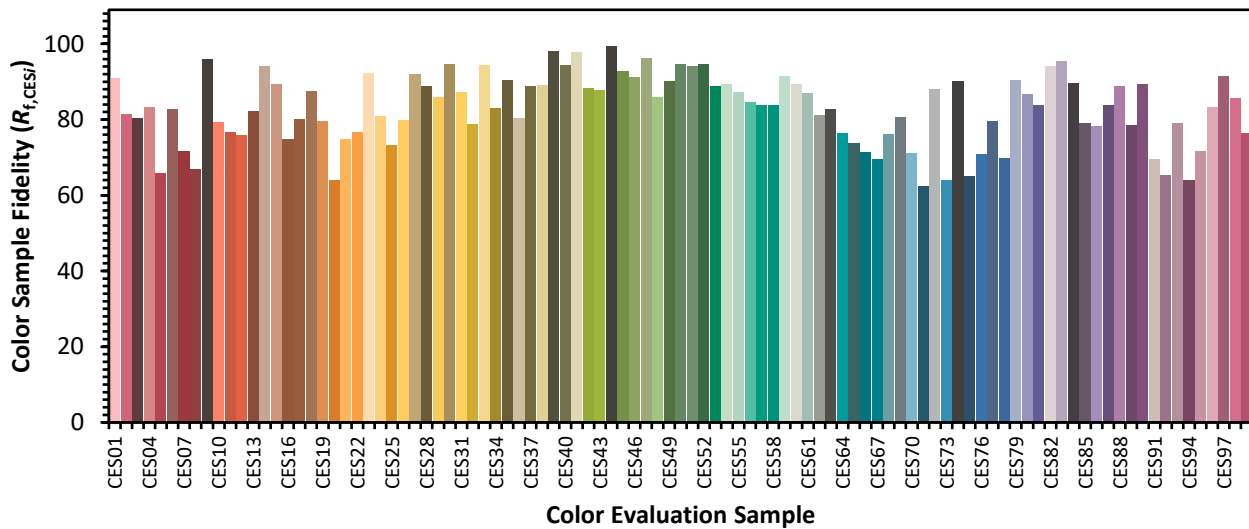


Color Vector Graphics

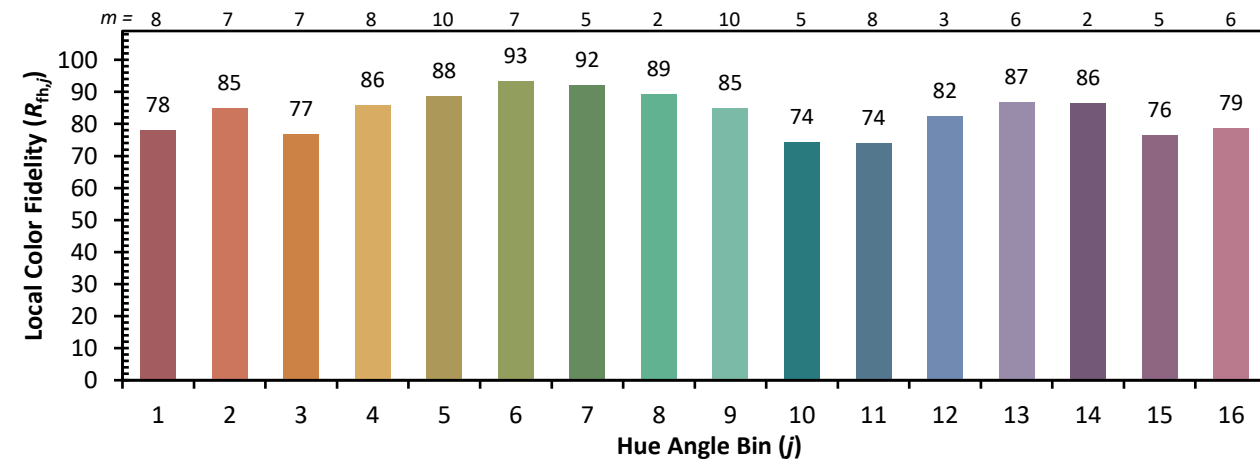
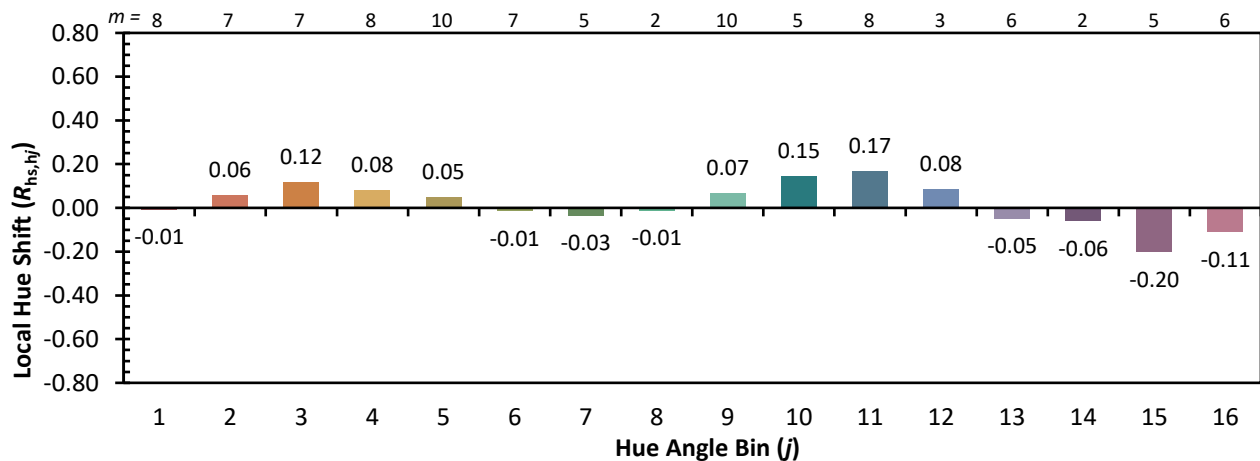
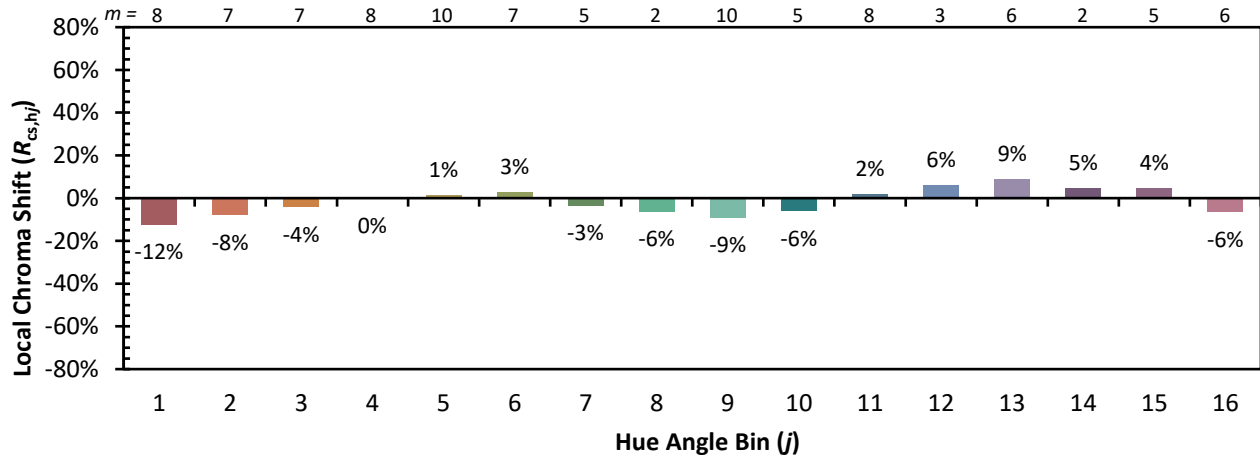


Individual Sample Fidelity Index ($R_{f,i}$)

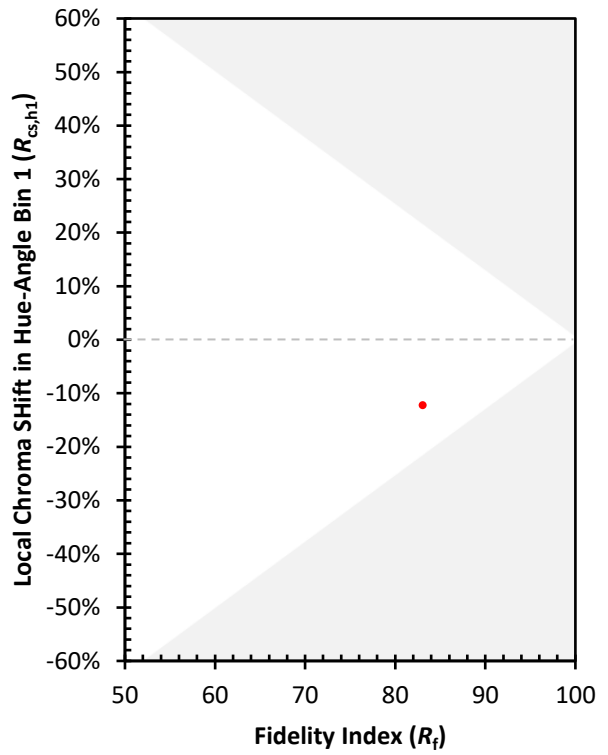
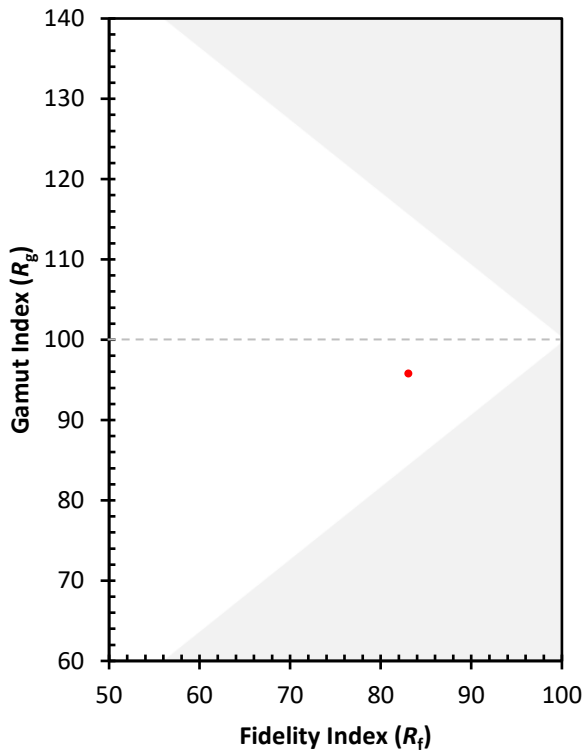
CES01 = 85	CES26 = 80	CES51 = 94	CES76 = 71
CES02 = 60	CES27 = 92	CES52 = 95	CES77 = 80
CES03 = 30	CES28 = 89	CES53 = 89	CES78 = 70
CES04 = 69	CES29 = 86	CES54 = 89	CES79 = 90
CES05 = 47	CES30 = 95	CES55 = 87	CES80 = 87
CES06 = 50	CES31 = 87	CES56 = 85	CES81 = 84
CES07 = 40	CES32 = 79	CES57 = 84	CES82 = 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)