

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: P1449915

Luminaire Tested: **TWC60_T4_36W_4000K**

Issue Date: 5/19/2026

Test Information

Test Method: LM-79-08
Report Number: P1449915
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_T4_36W_4000K
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T4 distribution, 36W
4000K settings
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5574 lumens
Efficiency: N/A
Efficacy: 158.4 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.42' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G1

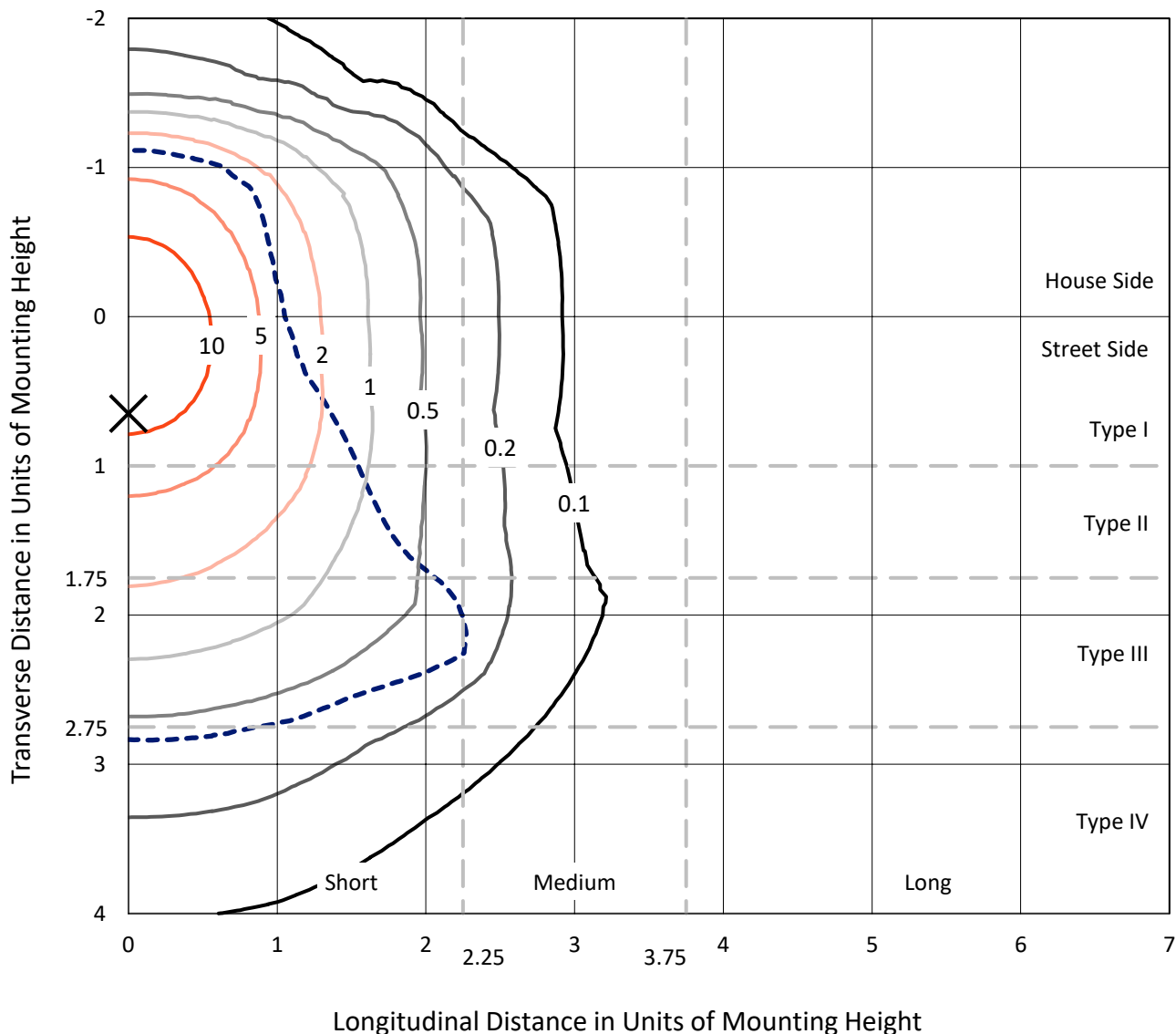
Input Watts (W): 35.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

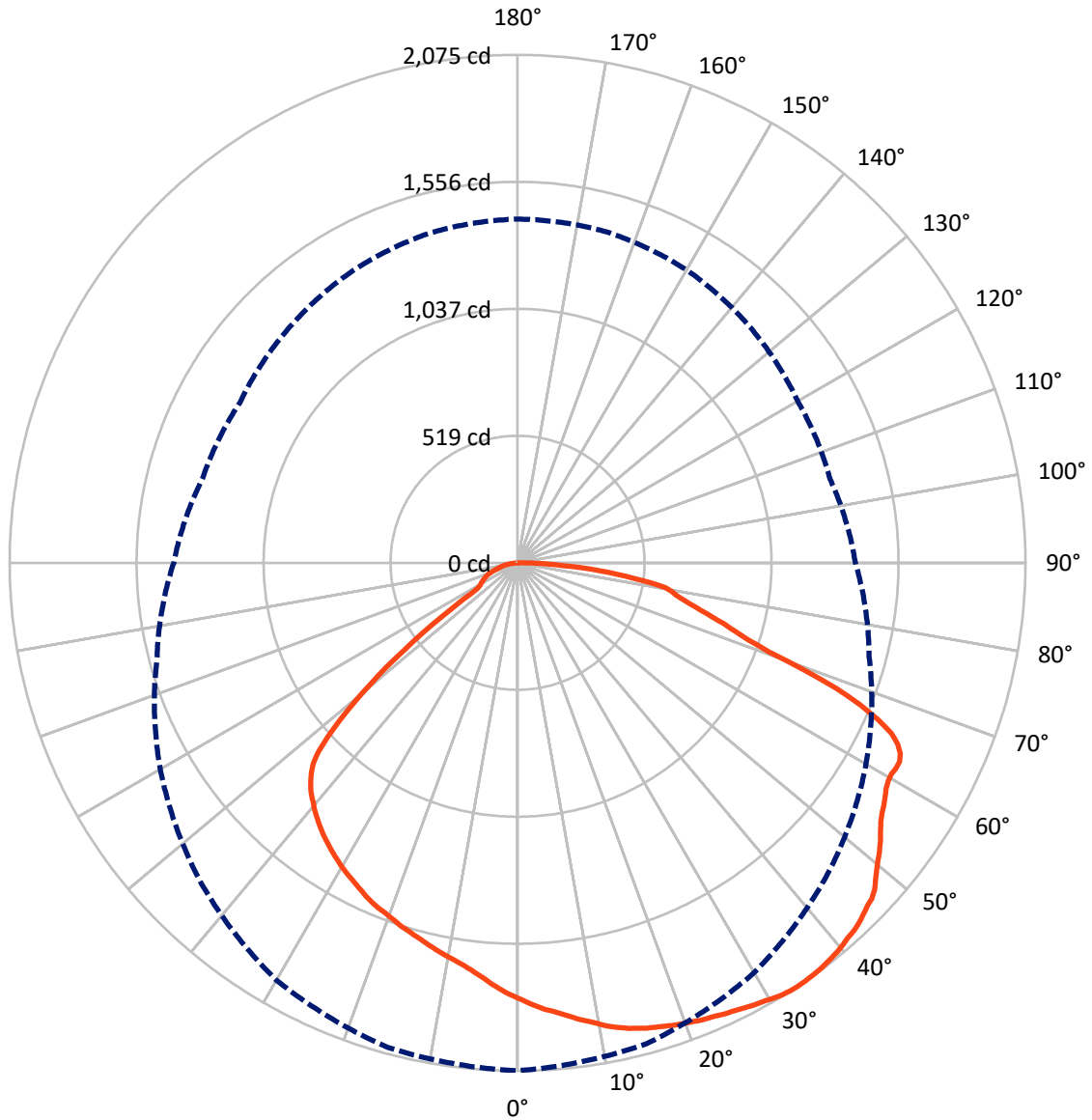
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.4 fc
 Type IV - 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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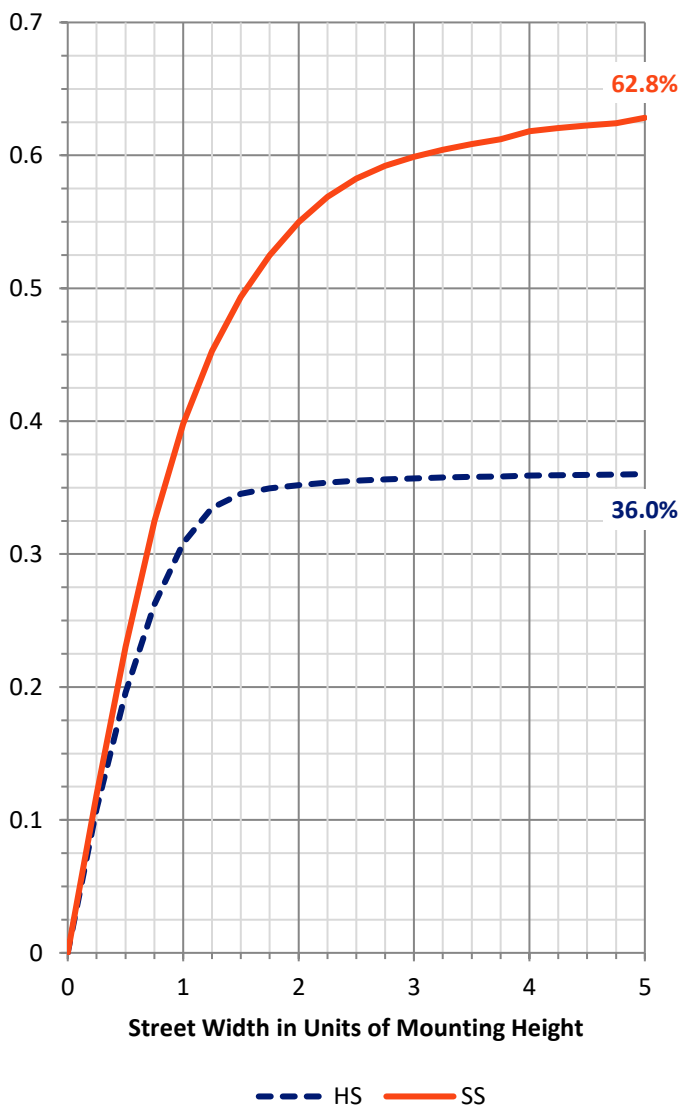
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2021.0	0.0	2021.0
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	3553.0	0.0	3553.0
	% Fixture	63.7	0.0	63.7
Total	Lumens	5574.0	0.0	5574.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.1	3.0
10°-20°	491.7	8.8
20°-30°	766.6	13.8
30°-40°	967.5	17.4
40°-50°	1057.9	19.0
50°-60°	936.9	16.8
60°-70°	709.2	12.7
70°-80°	370.1	6.6
80°-90°	105.0	1.9
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°	5574.0	100.0
0°-180°	5574.0	100.0

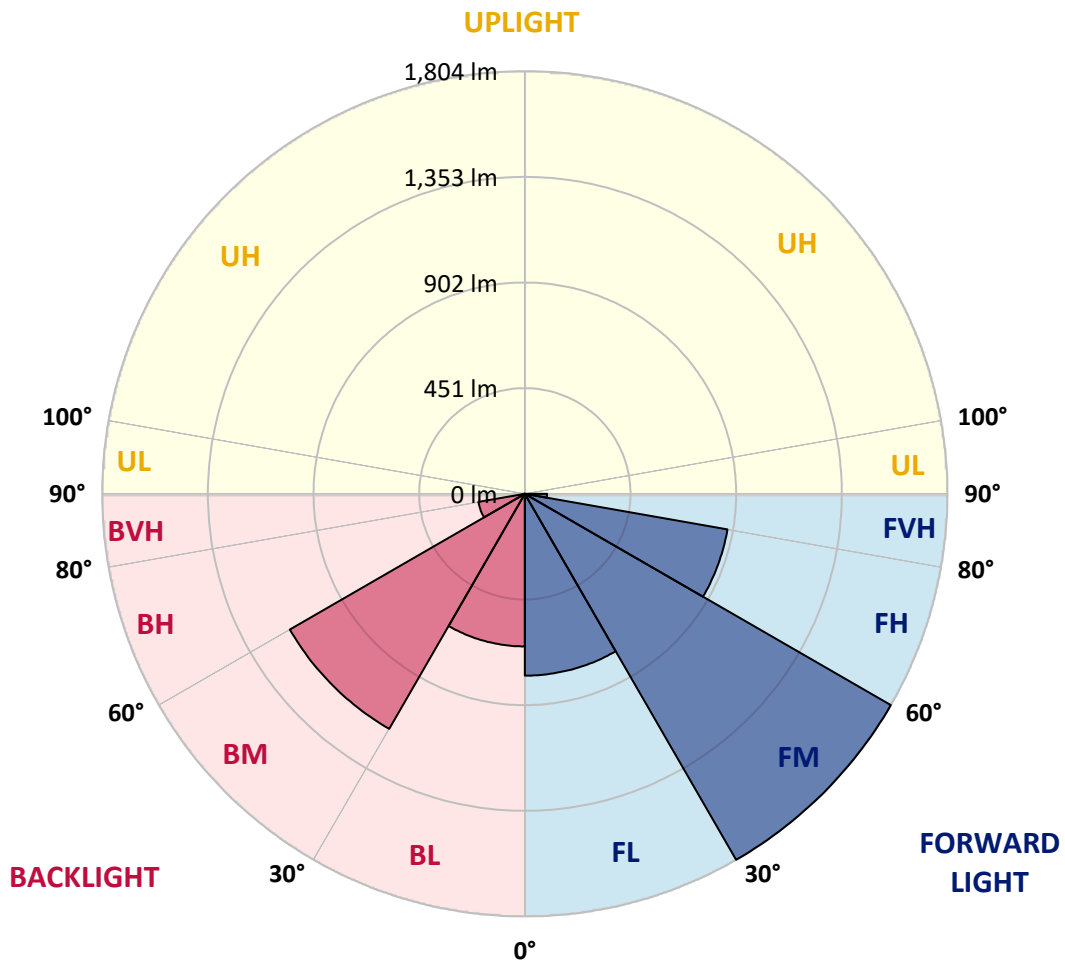


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	776.0	13.9			
FM (30°-60°)	1803.9	32.4			
FH (60°-80°)	878.2	15.8			G1/1800
FVH (80°-90°)	94.9	1.7			G1/100
BL (0°-30°)	651.4	11.7	B2/1000		
BM (30°-60°)	1158.4	20.8	B2/2500		
BH (60°-80°)	201.1	3.6	B1/500		G1/500
BVH (80°-90°)	10.1	0.2			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2
1°	1799.2	1797.7	1795.3	1792.7	1789.7	1786.2	1782.6	1778.8	1775.4	1772.7	1770.8
2°	1813.6	1812.2	1808.8	1803.2	1794.5	1787.9	1780.9	1773.8	1767.3	1761.9	1758.2
3°	1827.3	1824.6	1820.1	1812.7	1802.2	1789.4	1778.1	1768.2	1759.1	1751.1	1745.4
4°	1837.7	1836.2	1829.6	1819.9	1807.0	1789.6	1774.7	1762.0	1749.6	1738.6	1730.5
5°	1851.0	1847.8	1839.5	1826.7	1810.7	1790.1	1770.8	1754.8	1739.0	1724.3	1713.2
6°	1863.7	1859.6	1849.4	1833.2	1813.8	1789.4	1766.5	1746.9	1727.4	1709.1	1696.7
7°	1879.0	1872.0	1858.9	1838.9	1815.9	1788.2	1761.3	1738.1	1715.0	1694.0	1681.4
8°	1891.1	1883.5	1867.8	1845.2	1817.5	1785.3	1754.6	1728.2	1701.5	1679.3	1667.7
9°	1904.3	1896.0	1877.9	1851.8	1819.0	1782.1	1747.3	1717.6	1688.1	1665.7	1655.9
10°	1920.1	1910.5	1889.1	1858.1	1819.7	1778.8	1739.9	1706.6	1674.7	1652.6	1644.6
11°	1934.3	1923.6	1900.1	1863.9	1820.3	1774.9	1731.8	1695.2	1661.7	1640.9	1634.4
12°	1944.6	1934.2	1909.6	1869.6	1821.1	1769.7	1722.0	1682.7	1647.9	1629.2	1623.4
13°	1956.1	1943.1	1917.3	1875.1	1821.7	1764.2	1712.3	1669.5	1633.5	1617.2	1612.3
14°	1963.8	1951.2	1922.7	1878.4	1822.0	1759.4	1702.7	1656.2	1619.5	1605.8	1601.7
15°	1972.4	1957.6	1926.0	1879.5	1820.6	1753.7	1691.2	1642.2	1605.7	1594.2	1590.5
16°	1978.9	1962.6	1929.7	1880.3	1817.6	1747.3	1680.0	1628.7	1591.4	1582.1	1579.1
17°	1985.1	1967.5	1931.2	1878.8	1812.9	1739.0	1667.5	1613.8	1577.2	1569.4	1568.1
18°	1992.3	1972.8	1930.9	1874.7	1807.0	1730.6	1655.0	1598.5	1563.3	1556.5	1557.4
19°	1998.5	1978.2	1932.1	1871.4	1799.7	1720.9	1641.9	1583.0	1549.5	1544.0	1547.7
20°	2004.0	1983.7	1934.9	1867.6	1791.5	1709.7	1628.1	1567.2	1535.2	1532.3	1537.6
21°	2010.7	1988.2	1936.7	1863.7	1783.0	1696.7	1613.9	1551.1	1520.8	1519.9	1525.3
22°	2015.9	1992.9	1937.8	1859.9	1773.8	1682.8	1597.7	1534.3	1505.9	1507.0	1514.0
23°	2019.8	1996.0	1938.8	1856.5	1764.1	1668.1	1582.2	1517.0	1490.1	1493.7	1503.1
24°	2026.5	1999.9	1939.1	1853.2	1754.4	1652.7	1564.4	1499.4	1474.3	1480.3	1492.9
25°	2031.4	2003.0	1938.5	1848.7	1744.1	1637.3	1545.9	1481.5	1458.9	1467.2	1482.8
26°	2037.5	2006.0	1937.7	1843.5	1732.4	1621.0	1527.6	1462.7	1443.3	1453.1	1471.5
27°	2044.3	2009.2	1938.1	1837.9	1720.7	1603.9	1509.0	1444.5	1427.3	1439.0	1459.1
28°	2050.2	2014.1	1937.6	1831.7	1709.4	1586.2	1489.6	1425.1	1410.3	1425.5	1446.2
29°	2055.5	2018.7	1935.5	1825.0	1697.0	1567.4	1469.1	1405.4	1392.8	1412.9	1432.8
30°	2063.3	2023.0	1934.8	1817.4	1684.9	1547.8	1447.6	1384.5	1375.1	1398.8	1420.1
31°	2069.2	2026.5	1934.1	1809.7	1672.1	1527.9	1425.2	1364.2	1356.8	1383.2	1408.4
32°	2072.8	2030.9	1933.5	1801.3	1658.4	1508.0	1403.7	1343.0	1338.7	1367.2	1395.2
33°	2074.8	2033.9	1932.9	1793.4	1643.9	1486.7	1379.8	1321.4	1320.9	1351.3	1381.2
34°	2073.6	2033.2	1932.3	1785.3	1628.3	1465.7	1357.1	1299.7	1302.6	1335.1	1367.0
35°	2072.0	2032.9	1931.9	1776.4	1611.8	1443.3	1333.1	1278.0	1283.8	1318.4	1352.8
36°	2070.6	2029.7	1929.4	1767.0	1594.7	1420.5	1307.6	1256.5	1264.9	1301.4	1337.9
37°	2065.6	2025.7	1924.7	1758.0	1576.7	1395.6	1283.2	1234.8	1246.1	1284.0	1322.9
38°	2061.9	2021.3	1919.3	1748.8	1557.6	1372.2	1258.7	1214.0	1227.3	1266.5	1308.0
39°	2056.1	2014.1	1912.5	1738.0	1537.3	1348.3	1234.7	1191.8	1208.4	1249.5	1291.1
40°	2048.4	2006.2	1904.8	1725.3	1517.2	1322.7	1210.5	1168.7	1189.7	1233.9	1274.5
41°	2040.2	1996.3	1896.2	1712.3	1496.7	1296.6	1186.2	1145.6	1169.0	1218.6	1257.6
42°	2036.0	1989.0	1888.3	1698.7	1475.5	1269.1	1158.7	1121.9	1146.9	1202.0	1241.3
43°	2026.7	1980.6	1877.4	1686.1	1453.7	1240.9	1131.5	1099.0	1125.1	1183.3	1225.2
44°	2014.8	1970.7	1865.0	1673.7	1432.0	1212.1	1103.3	1075.3	1102.9	1163.1	1208.6



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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	2002.1	1957.4	1853.7	1660.6	1410.6	1182.1	1075.2	1050.2	1080.7	1143.1	1190.2
46°	1994.2	1945.2	1842.0	1647.3	1388.2	1152.7	1046.6	1024.9	1058.9	1122.6	1170.2
47°	1978.0	1933.5	1828.1	1632.6	1364.8	1122.4	1017.2	998.8	1037.1	1101.6	1148.1
48°	1952.9	1917.7	1811.5	1617.0	1342.0	1090.9	988.7	974.5	1015.0	1080.3	1119.9
49°	1928.8	1892.7	1796.4	1600.7	1319.8	1059.5	960.1	950.0	992.7	1057.6	1084.1
50°	1908.7	1869.0	1778.7	1584.2	1297.2	1027.0	930.8	924.3	970.3	1033.8	1036.3
51°	1889.4	1848.3	1755.6	1567.0	1274.6	995.6	902.0	898.2	948.1	1008.6	974.0
52°	1867.8	1828.5	1731.1	1548.5	1250.9	965.1	872.1	872.0	925.8	980.7	895.5
53°	1844.6	1807.6	1706.5	1530.1	1226.8	933.7	841.2	845.3	901.9	949.4	808.8
54°	1822.3	1783.9	1684.2	1509.4	1201.6	903.6	811.0	819.9	876.7	911.1	716.0
55°	1806.8	1763.0	1661.0	1484.5	1172.5	874.0	780.3	794.1	851.0	860.7	623.8
56°	1794.2	1746.5	1635.8	1457.7	1142.6	842.4	749.9	767.4	824.1	797.2	528.3
57°	1779.4	1733.1	1609.8	1429.7	1113.4	810.1	715.2	740.5	796.3	720.8	431.4
58°	1765.9	1719.6	1587.9	1403.2	1084.6	776.9	681.5	712.4	766.2	638.0	340.4
59°	1756.4	1707.5	1570.5	1373.9	1055.2	744.2	648.9	684.0	736.0	554.2	261.2
60°	1754.4	1700.3	1556.9	1341.7	1024.2	709.6	617.7	654.7	701.6	466.3	205.0
61°	1759.1	1698.5	1546.3	1310.7	990.7	674.4	586.0	624.4	663.9	378.7	174.7
62°	1759.2	1700.4	1535.3	1280.6	955.4	640.4	556.2	593.2	618.9	296.1	164.1
63°	1747.1	1696.5	1532.1	1252.6	920.0	604.8	527.6	561.8	564.9	221.5	157.2
64°	1720.8	1679.7	1536.3	1227.5	885.7	568.1	500.9	529.7	498.1	170.5	151.2
65°	1677.8	1644.3	1547.5	1205.8	848.6	530.8	474.0	497.1	430.7	151.4	144.9
66°	1606.0	1588.1	1544.1	1188.0	805.4	493.7	446.6	464.4	358.7	142.2	138.6
67°	1513.8	1506.4	1520.8	1177.1	759.7	455.7	418.3	433.3	286.7	132.6	132.1
68°	1399.8	1403.5	1468.7	1180.8	712.1	418.3	388.9	403.0	228.8	124.5	125.9
69°	1245.2	1274.7	1368.6	1202.1	666.5	384.1	358.6	372.3	182.4	117.7	120.1
70°	1089.3	1127.9	1239.0	1229.2	621.5	352.2	326.5	340.3	137.7	111.0	114.5
71°	993.4	1007.7	1078.9	1223.2	583.8	319.5	293.8	307.8	111.9	104.4	108.2
72°	934.1	931.6	920.4	1134.2	550.1	288.3	260.9	271.7	103.1	98.6	100.5
73°	879.4	882.9	808.1	970.4	514.7	257.1	229.1	235.2	96.4	93.2	92.1
74°	823.8	837.3	746.3	785.1	510.2	229.4	199.7	196.0	89.0	87.6	83.5
75°	772.0	786.5	694.6	669.7	572.6	201.6	173.1	158.4	81.5	80.2	75.1
76°	728.1	730.9	648.0	618.1	616.7	176.3	150.0	120.4	74.6	72.3	66.6
77°	691.4	670.1	604.4	576.1	517.5	153.8	127.0	90.2	68.2	64.4	59.0
78°	660.7	614.2	557.2	532.0	364.5	131.0	104.5	76.3	62.3	56.9	53.7
79°	640.3	573.9	509.4	482.8	271.3	114.2	86.5	67.4	56.4	49.5	49.4
80°	613.0	536.6	463.4	414.8	234.3	99.5	70.1	59.2	49.8	40.5	44.7
81°	543.9	499.8	427.6	342.2	238.9	84.6	54.6	50.8	42.8	32.8	39.2
82°	474.5	463.3	393.6	291.3	212.6	71.0	41.0	42.7	35.8	27.5	33.1
83°	405.1	420.5	356.2	252.9	146.3	59.1	31.0	35.2	28.8	23.3	26.9
84°	334.8	375.0	305.9	220.0	98.5	48.0	23.3	28.0	22.0	18.5	20.2
85°	266.5	326.7	240.8	190.6	76.8	37.1	17.8	21.4	16.2	13.3	13.4
86°	187.0	263.1	184.8	154.1	61.2	27.2	12.2	15.3	11.2	8.2	6.9
87°	129.8	191.9	136.0	95.5	44.7	17.8	6.7	9.1	6.2	3.9	2.8
88°	70.6	114.2	89.5	42.5	28.8	9.4	3.1	3.7	2.3	1.4	1.1
89°	35.9	50.6	48.0	27.5	17.5	4.5	0.8	0.7	0.4	0.3	0.2



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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: P1449915
 CATALOG NUMBER: TWC60_T4_36W_4000K

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1449915
CATALOG NUMBER: TWC60_T4_36W_4000K

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: P1449915

CATALOG NUMBER: TWC60_T4_36W_4000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2	1784.2
1°	1770.2	1770.6	1771.0	1772.3	1774.7	1777.7	1781.4	1785.5	1788.7	1791.8	1794.1
2°	1756.5	1756.8	1758.1	1760.4	1764.8	1770.9	1777.8	1785.0	1791.6	1796.8	1803.7
3°	1741.9	1740.3	1742.6	1747.3	1754.4	1763.4	1772.7	1783.3	1792.7	1803.4	1813.4
4°	1725.1	1723.7	1726.3	1732.5	1742.2	1754.0	1766.5	1780.4	1793.9	1809.0	1821.6
5°	1707.1	1704.8	1708.9	1716.9	1729.8	1744.6	1760.2	1777.4	1795.7	1814.2	1829.1
6°	1690.9	1689.6	1692.4	1700.6	1715.1	1733.9	1753.4	1773.2	1795.4	1818.1	1836.2
7°	1676.0	1674.0	1677.5	1685.2	1700.4	1722.2	1746.2	1770.0	1794.7	1821.1	1843.6
8°	1662.5	1660.4	1663.9	1670.3	1685.9	1710.4	1737.9	1765.4	1793.7	1823.9	1851.3
9°	1651.3	1648.8	1652.3	1657.5	1671.7	1697.9	1728.3	1758.7	1791.5	1826.2	1858.9
10°	1640.7	1638.7	1641.6	1645.7	1658.4	1684.9	1718.5	1752.5	1789.0	1828.5	1866.4
11°	1630.6	1629.5	1631.3	1634.9	1645.4	1671.6	1707.5	1744.8	1785.7	1830.8	1873.8
12°	1620.3	1619.3	1620.2	1623.7	1632.3	1657.5	1695.9	1736.1	1781.9	1833.3	1881.1
13°	1609.8	1608.8	1609.9	1612.5	1619.1	1643.1	1684.1	1727.2	1778.1	1835.9	1887.3
14°	1599.9	1598.4	1600.4	1601.1	1606.8	1628.8	1671.4	1718.2	1775.2	1836.9	1891.9
15°	1589.1	1587.6	1588.8	1589.2	1594.0	1614.1	1658.0	1707.9	1770.6	1836.4	1893.9
16°	1578.9	1579.3	1577.4	1577.8	1581.7	1598.8	1644.3	1697.8	1765.4	1834.7	1894.8
17°	1569.1	1568.7	1567.1	1566.6	1569.2	1583.4	1630.1	1687.1	1759.1	1831.3	1893.8
18°	1560.3	1561.2	1558.1	1554.8	1555.5	1568.2	1614.6	1675.1	1750.3	1825.9	1891.2
19°	1550.1	1550.6	1548.0	1543.5	1542.8	1553.1	1599.7	1661.7	1740.2	1819.6	1888.8
20°	1539.6	1540.0	1538.0	1532.0	1529.8	1537.6	1583.9	1650.0	1730.0	1812.8	1886.5
21°	1529.5	1531.0	1527.5	1519.9	1516.5	1522.4	1567.5	1636.9	1718.4	1804.9	1884.0
22°	1521.2	1523.4	1517.6	1508.1	1502.8	1506.3	1550.9	1621.3	1705.3	1796.9	1881.9
23°	1513.5	1515.4	1508.1	1496.3	1488.2	1489.6	1533.7	1605.1	1692.0	1788.9	1880.8
24°	1504.3	1506.2	1498.8	1484.9	1473.9	1473.3	1515.4	1588.1	1678.7	1781.0	1879.6
25°	1493.4	1495.6	1488.9	1473.3	1459.7	1457.3	1497.6	1570.8	1664.2	1772.9	1876.1
26°	1482.4	1483.0	1477.3	1463.0	1444.6	1440.3	1479.2	1551.3	1648.9	1763.9	1872.0
27°	1470.0	1471.8	1464.3	1450.6	1430.0	1422.6	1459.1	1531.4	1632.9	1754.2	1867.5
28°	1458.6	1461.1	1452.3	1437.7	1415.4	1404.7	1439.5	1511.6	1616.5	1744.2	1863.4
29°	1447.8	1450.8	1440.7	1424.1	1400.9	1386.9	1418.8	1491.6	1599.3	1734.1	1858.9
30°	1437.1	1440.1	1429.4	1409.9	1386.2	1367.8	1397.2	1470.8	1581.2	1722.7	1853.6
31°	1424.6	1428.1	1417.9	1396.1	1371.0	1348.7	1376.4	1450.0	1563.2	1710.3	1846.9
32°	1412.2	1415.9	1405.8	1382.2	1354.1	1329.4	1354.4	1427.3	1544.8	1697.9	1841.5
33°	1399.5	1404.0	1393.6	1368.5	1336.9	1309.4	1331.9	1404.5	1525.0	1685.2	1835.9
34°	1387.3	1391.1	1380.3	1354.3	1319.6	1289.6	1309.2	1382.0	1505.3	1671.2	1829.6
35°	1375.1	1378.4	1366.9	1339.0	1301.4	1270.4	1286.2	1358.7	1485.2	1656.4	1823.5
36°	1360.8	1365.0	1352.7	1324.5	1283.7	1251.4	1263.9	1334.3	1463.9	1641.3	1817.3
37°	1346.2	1350.7	1338.3	1309.4	1266.4	1232.5	1241.7	1309.8	1442.2	1625.1	1810.8
38°	1330.7	1335.7	1323.1	1292.7	1249.5	1213.2	1220.4	1285.3	1419.8	1608.6	1803.1
39°	1315.2	1320.0	1306.4	1275.7	1232.9	1192.4	1197.6	1257.5	1396.6	1592.7	1794.0
40°	1298.7	1303.5	1291.0	1258.7	1216.1	1171.0	1172.9	1231.6	1372.2	1575.2	1784.0
41°	1282.3	1286.1	1273.7	1242.8	1198.0	1149.6	1147.5	1203.5	1346.7	1556.7	1772.4
42°	1265.6	1269.5	1257.0	1227.4	1179.7	1128.4	1122.1	1175.8	1320.6	1539.1	1761.2
43°	1248.2	1250.6	1240.0	1211.6	1161.2	1106.3	1097.5	1146.4	1293.8	1520.7	1750.2
44°	1231.5	1227.1	1223.1	1193.2	1142.5	1083.5	1072.4	1116.4	1265.1	1501.6	1739.0



REPORT NUMBER: P1449915
 CATALOG NUMBER: TWC60_T4_36W_4000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1214.2	1201.5	1205.9	1174.0	1122.7	1060.9	1047.6	1086.4	1235.2	1481.4	1726.1
46°	1183.2	1170.7	1180.1	1154.6	1102.2	1038.1	1022.3	1056.6	1206.8	1461.1	1711.6
47°	1140.3	1120.7	1146.0	1133.9	1081.3	1014.5	996.9	1024.7	1176.3	1441.6	1696.9
48°	1083.3	1051.8	1099.3	1110.5	1060.6	990.8	970.9	995.0	1146.1	1422.7	1681.4
49°	1009.8	968.0	1035.3	1084.2	1038.8	968.1	943.9	964.8	1116.2	1403.8	1666.2
50°	921.0	874.9	956.6	1052.3	1015.5	945.4	916.0	935.3	1086.2	1385.0	1648.9
51°	827.5	779.6	868.0	1008.2	991.5	922.2	889.0	905.3	1056.8	1364.3	1629.9
52°	732.4	682.1	774.0	948.9	966.2	898.6	861.4	873.8	1027.8	1341.6	1609.8
53°	634.7	580.5	679.7	879.3	939.5	874.8	833.2	842.2	997.1	1316.1	1587.9
54°	532.7	479.2	581.3	793.9	910.8	850.0	805.8	808.4	967.1	1290.8	1562.4
55°	434.5	382.0	480.9	705.6	879.3	824.8	777.3	774.7	936.5	1267.5	1536.0
56°	341.2	295.8	385.4	615.8	841.2	798.9	748.7	742.1	904.4	1243.8	1510.4
57°	259.4	230.8	294.7	521.2	792.4	770.7	719.4	708.5	871.9	1218.3	1483.7
58°	210.8	195.4	231.3	426.4	730.5	740.8	689.0	675.8	838.8	1190.3	1455.6
59°	186.4	182.2	194.1	336.3	656.5	710.3	659.2	644.8	806.7	1159.8	1426.8
60°	176.8	176.5	177.3	256.3	577.2	678.9	628.2	614.0	771.2	1127.3	1398.3
61°	171.7	171.6	170.6	196.4	496.2	647.5	597.8	584.2	734.2	1094.0	1373.5
62°	166.6	166.5	165.2	166.2	412.0	614.2	567.6	554.5	696.7	1061.0	1352.4
63°	161.1	161.2	159.7	154.3	329.0	580.6	536.8	524.7	656.8	1024.7	1334.2
64°	155.8	156.0	154.2	148.4	251.5	542.6	505.3	495.3	616.6	982.7	1319.1
65°	150.4	151.0	148.3	141.0	189.7	500.7	473.5	465.0	577.5	939.4	1306.0
66°	145.2	146.2	142.6	134.4	157.5	447.5	441.7	434.6	541.4	898.0	1300.6
67°	140.0	140.8	136.9	127.6	138.7	388.3	410.6	402.4	504.1	857.8	1310.5
68°	134.8	135.3	131.4	121.1	127.5	325.3	380.5	369.9	463.7	818.7	1331.6
69°	129.1	129.5	125.8	114.8	120.7	262.9	350.5	336.4	425.2	784.6	1338.0
70°	121.4	120.9	119.2	108.9	113.3	209.3	320.1	303.6	392.8	752.7	1309.1
71°	112.5	112.1	111.0	103.6	105.9	166.8	291.3	271.0	361.1	729.0	1218.4
72°	103.6	103.0	102.2	97.3	99.1	124.4	262.8	238.8	331.0	725.9	1056.9
73°	94.5	94.0	93.4	89.7	92.2	100.3	236.5	208.6	300.0	774.5	880.4
74°	85.6	85.7	84.7	81.6	86.1	92.5	208.3	181.4	270.8	829.2	753.1
75°	77.9	79.0	76.5	73.4	80.5	84.7	179.0	155.7	238.6	768.5	681.6
76°	72.4	74.5	69.9	65.6	74.0	77.7	150.4	132.7	207.1	635.8	627.3
77°	68.5	71.2	65.4	57.9	66.4	70.7	121.8	111.7	182.2	517.7	577.3
78°	64.3	66.4	61.4	50.4	58.7	64.0	95.5	92.2	167.9	400.5	530.6
79°	57.8	58.8	56.2	45.0	51.0	57.6	75.9	75.9	151.8	336.6	476.6
80°	51.4	52.7	49.6	40.7	43.7	51.3	64.2	61.4	137.9	332.5	409.5
81°	44.8	45.7	43.0	36.2	35.5	44.9	54.6	50.6	130.6	295.9	349.7
82°	37.1	37.2	36.2	31.0	27.7	38.0	45.7	39.9	122.1	213.8	304.4
83°	27.9	26.6	28.0	25.2	22.1	30.7	37.0	29.1	102.6	153.3	269.8
84°	19.9	19.2	20.2	19.0	17.4	23.9	28.5	21.4	74.2	123.4	237.8
85°	12.5	12.0	12.7	12.7	12.5	17.9	21.1	15.3	52.8	102.3	198.6
86°	5.8	5.1	5.9	6.6	7.8	11.9	14.9	10.1	36.5	83.2	141.5
87°	2.4	2.0	2.4	2.6	3.7	6.4	8.6	5.8	21.2	65.8	87.6
88°	0.9	0.9	0.9	1.0	1.3	2.3	3.3	3.2	10.1	50.4	65.4
89°	0.1	0.0	0.1	0.2	0.2	0.3	0.6	0.6	4.5	36.2	47.6



REPORT NUMBER: P1449915
 CATALOG NUMBER: TWC60_T4_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: P1449915
 CATALOG NUMBER: TWC60_T4_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: P1449915
CATALOG NUMBER: TWC60_T4_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: P1449915
CATALOG NUMBER: TWC60_T4_36W_4000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1784.2	1784.2	1784.2
1°	1796.1	1798.0	1799.2
2°	1808.3	1811.5	1813.6
3°	1820.5	1824.5	1827.3
4°	1831.1	1836.8	1837.7
5°	1841.2	1848.8	1851.0
6°	1851.3	1860.9	1863.7
7°	1861.5	1872.9	1879.0
8°	1873.0	1885.7	1891.1
9°	1884.5	1899.6	1904.3
10°	1895.6	1914.3	1920.1
11°	1907.3	1928.0	1934.3
12°	1917.8	1939.4	1944.6
13°	1925.9	1948.3	1956.1
14°	1931.6	1956.5	1963.8
15°	1935.4	1962.1	1972.4
16°	1939.0	1967.4	1978.9
17°	1941.9	1973.0	1985.1
18°	1944.3	1979.6	1992.3
19°	1946.4	1985.4	1998.5
20°	1949.5	1990.8	2004.0
21°	1952.1	1995.5	2010.7
22°	1954.9	1999.9	2015.9
23°	1957.0	2004.5	2019.8
24°	1958.8	2010.1	2026.5
25°	1959.2	2014.2	2031.4
26°	1960.7	2018.9	2037.5
27°	1960.7	2024.0	2044.3
28°	1962.2	2029.7	2050.2
29°	1964.2	2034.3	2055.5
30°	1964.7	2039.9	2063.3
31°	1965.7	2045.7	2069.2
32°	1967.4	2047.7	2072.8
33°	1968.9	2049.1	2074.8
34°	1968.7	2049.2	2073.6
35°	1966.4	2048.6	2072.0
36°	1962.9	2045.1	2070.6
37°	1959.7	2042.3	2065.6
38°	1954.6	2037.1	2061.9
39°	1948.4	2030.8	2056.1
40°	1941.8	2024.0	2048.4
41°	1932.4	2013.9	2040.2
42°	1922.9	2008.1	2036.0
43°	1912.7	1999.4	2026.7
44°	1902.1	1988.6	2014.8



REPORT NUMBER: P1449915
CATALOG NUMBER: TWC60_T4_36W_4000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	1891.4	1976.4	2002.1
46°	1879.2	1963.8	1994.2
47°	1865.3	1951.8	1978.0
48°	1850.6	1931.7	1952.9
49°	1834.7	1904.9	1928.8
50°	1813.0	1884.2	1908.7
51°	1788.4	1863.7	1889.4
52°	1765.0	1843.4	1867.8
53°	1744.2	1821.2	1844.6
54°	1719.6	1798.1	1822.3
55°	1694.3	1779.1	1806.8
56°	1669.6	1765.6	1794.2
57°	1647.6	1753.9	1779.4
58°	1631.3	1739.2	1765.9
59°	1618.4	1728.2	1756.4
60°	1606.2	1722.4	1754.4
61°	1595.5	1722.9	1759.1
62°	1590.2	1723.4	1759.2
63°	1593.5	1715.7	1747.1
64°	1601.5	1694.0	1720.8
65°	1597.4	1654.3	1677.8
66°	1572.9	1592.2	1606.0
67°	1524.1	1505.7	1513.8
68°	1438.6	1394.8	1399.8
69°	1317.4	1257.4	1245.2
70°	1171.1	1113.1	1089.3
71°	1015.7	1004.4	993.4
72°	889.8	934.2	934.1
73°	812.5	881.7	879.4
74°	767.4	830.3	823.8
75°	727.1	775.3	772.0
76°	688.0	719.7	728.1
77°	645.5	666.9	691.4
78°	596.5	621.9	660.7
79°	549.5	592.8	640.3
80°	502.9	566.7	613.0
81°	457.3	536.1	543.9
82°	412.7	489.9	474.5
83°	359.3	431.7	405.1
84°	296.9	373.2	334.8
85°	239.0	310.7	266.5
86°	196.6	237.0	187.0
87°	147.2	164.5	129.8
88°	96.2	95.1	70.6
89°	55.0	45.5	35.9



REPORT NUMBER: P1449915
CATALOG NUMBER: TWC60_T4_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: P1449915
CATALOG NUMBER: TWC60_T4_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

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

Scaled Data Report



REPORT NUMBER: P1449915
CATALOG NUMBER: TWC60_T4_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

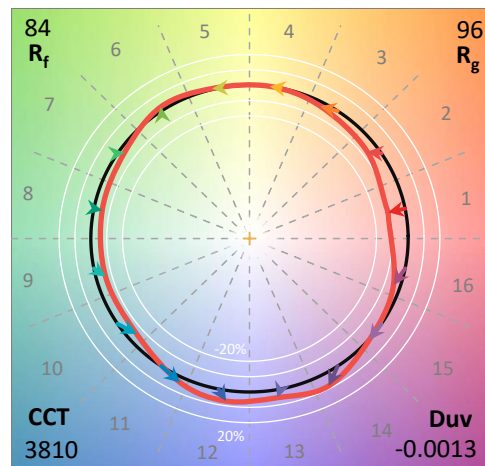
Test Information

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

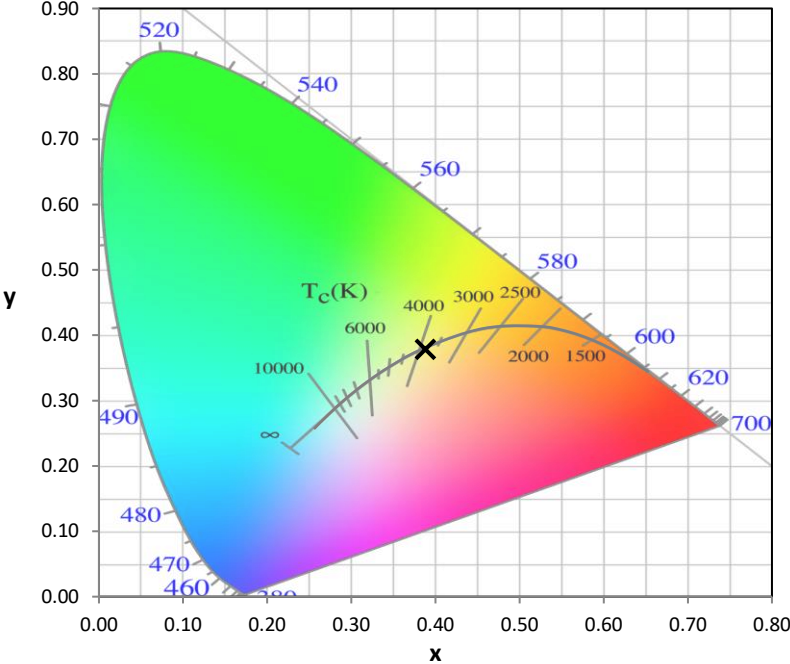
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-2

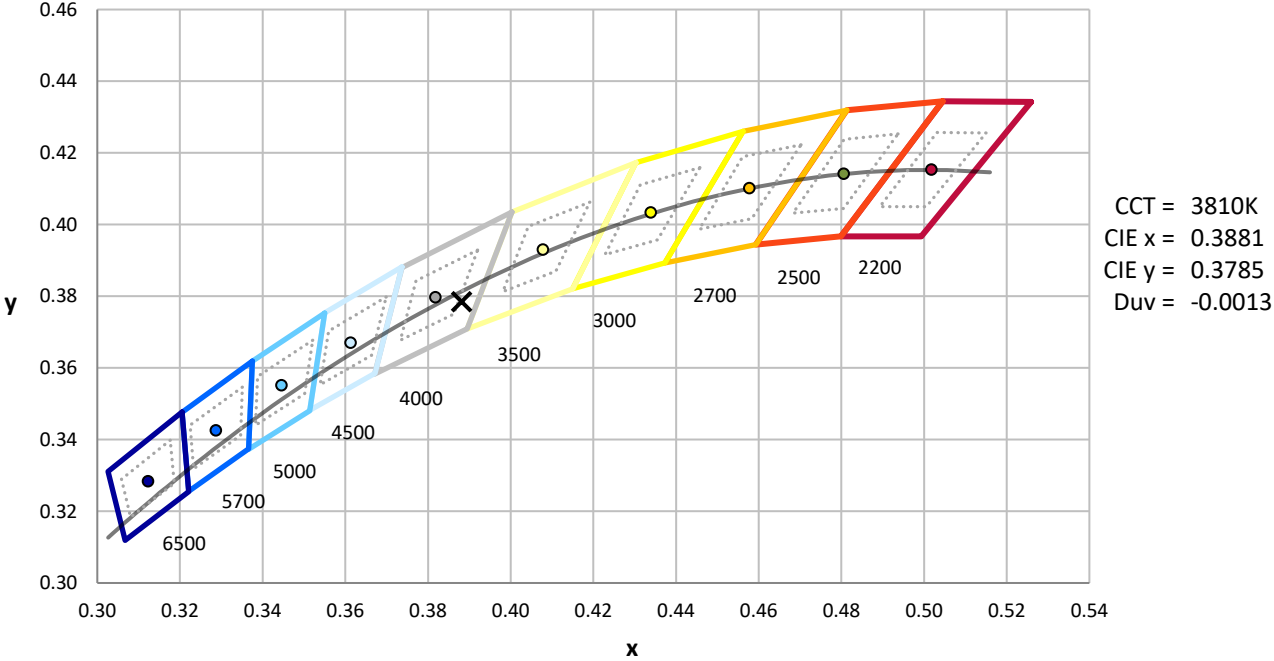
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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



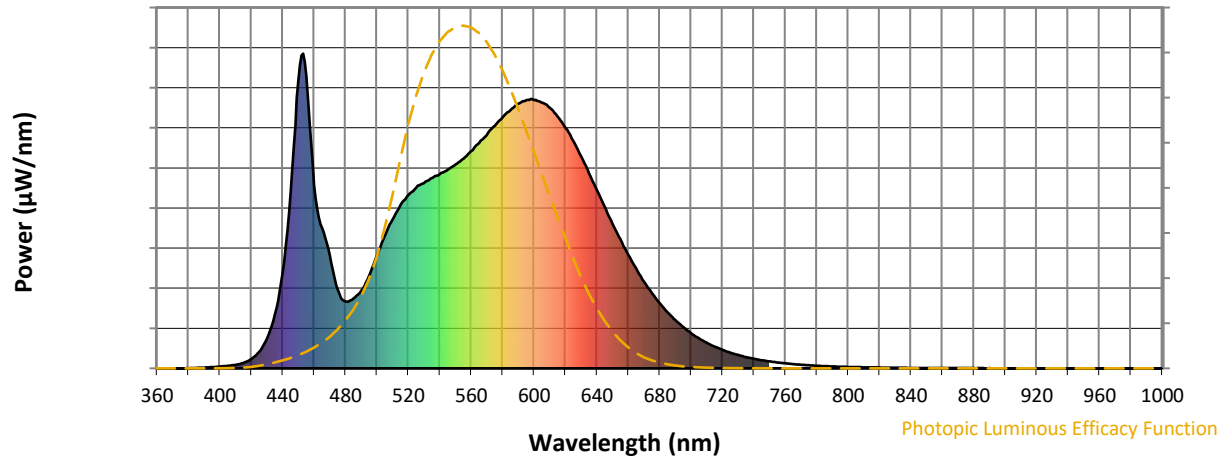
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2601-659-2

Photopic Flux vs. Wavelength

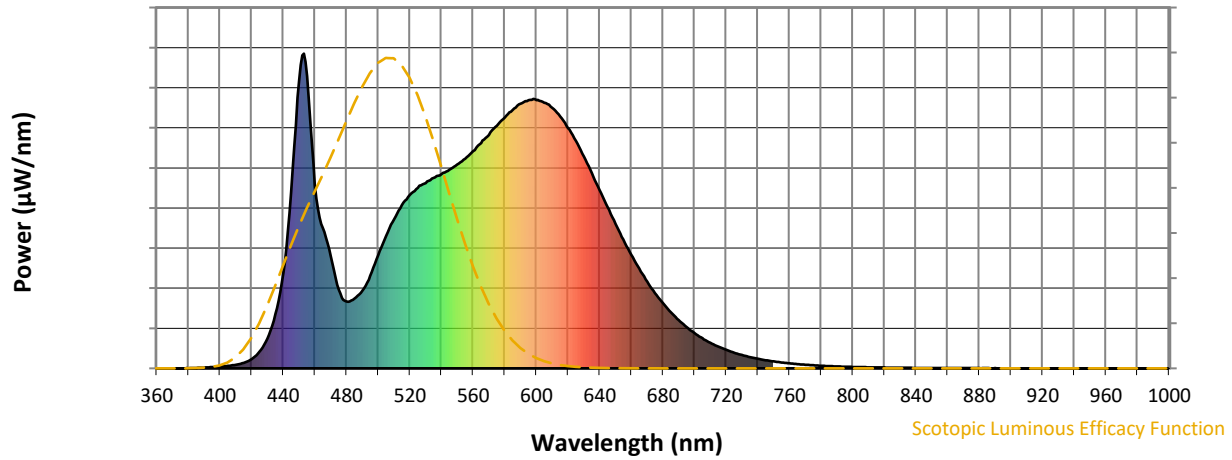


Photopic Lumens: NR

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	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



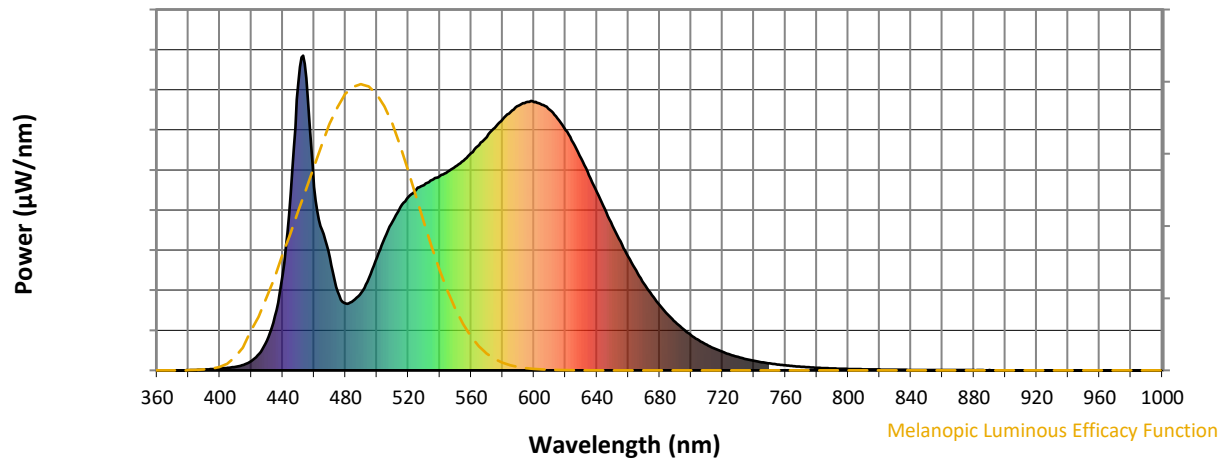
Scotopic Lumens: NR

S/P: 1.64

λ (nm)	Power W [^] /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	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



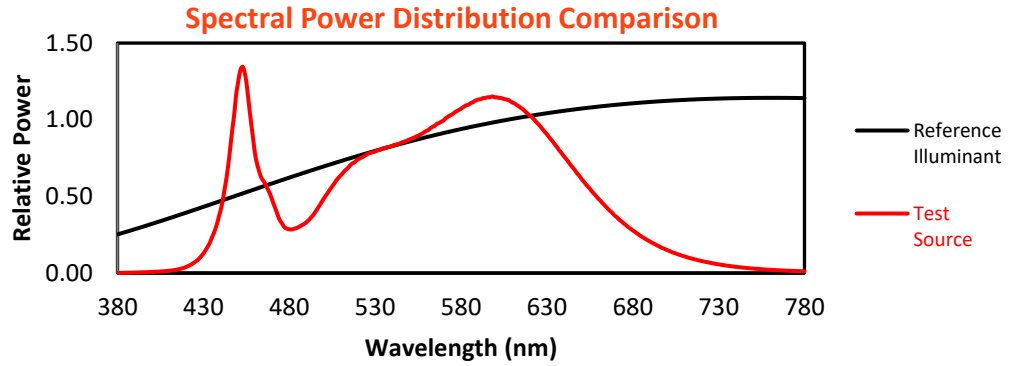
Melanopic Lumens: NR

M/P: 3.35

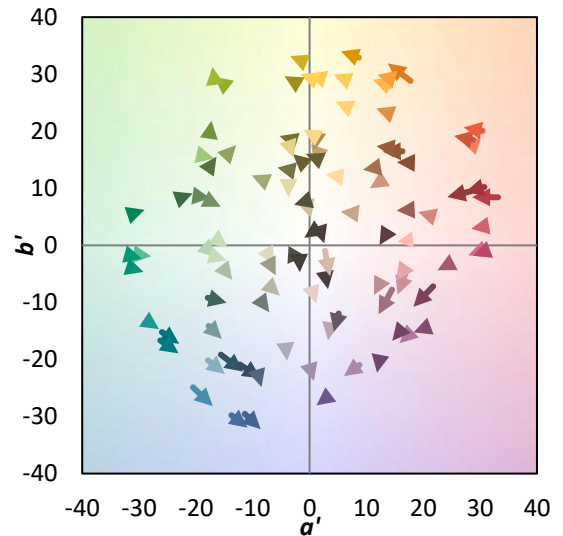
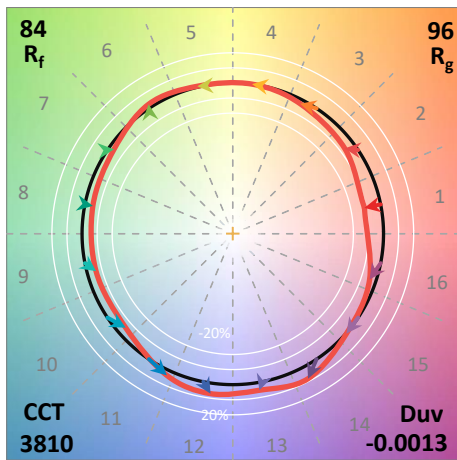
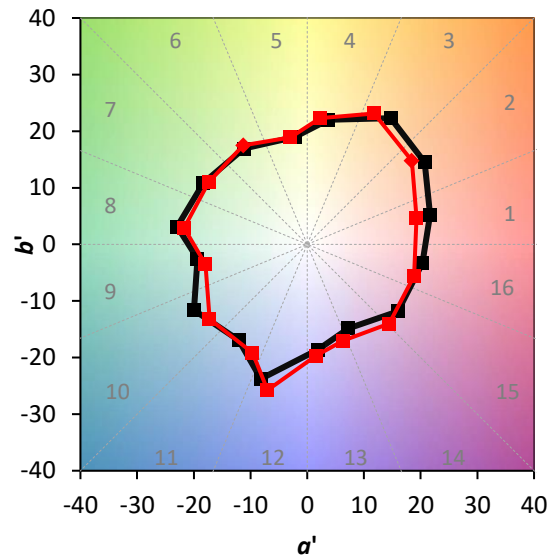
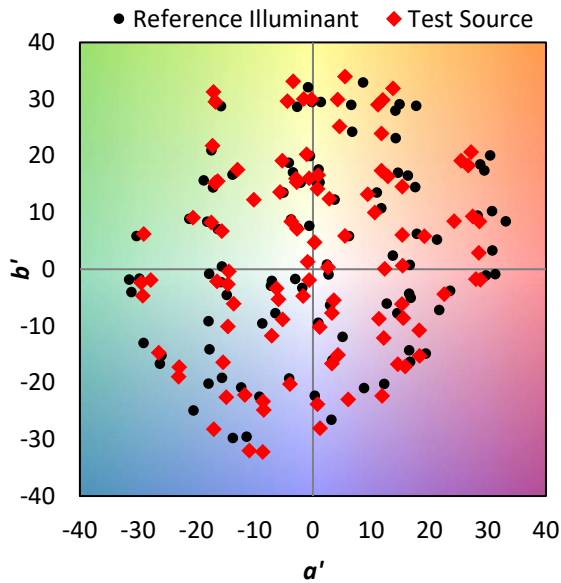
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	247	NR	620	764	NR	750	22	NR	880	1	NR
365	0	NR	495	294	NR	625	723	NR	755	19	NR	885	1	NR
370	0	NR	500	359	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 $R_a = 84.5$
 $R_9 = 15.9$

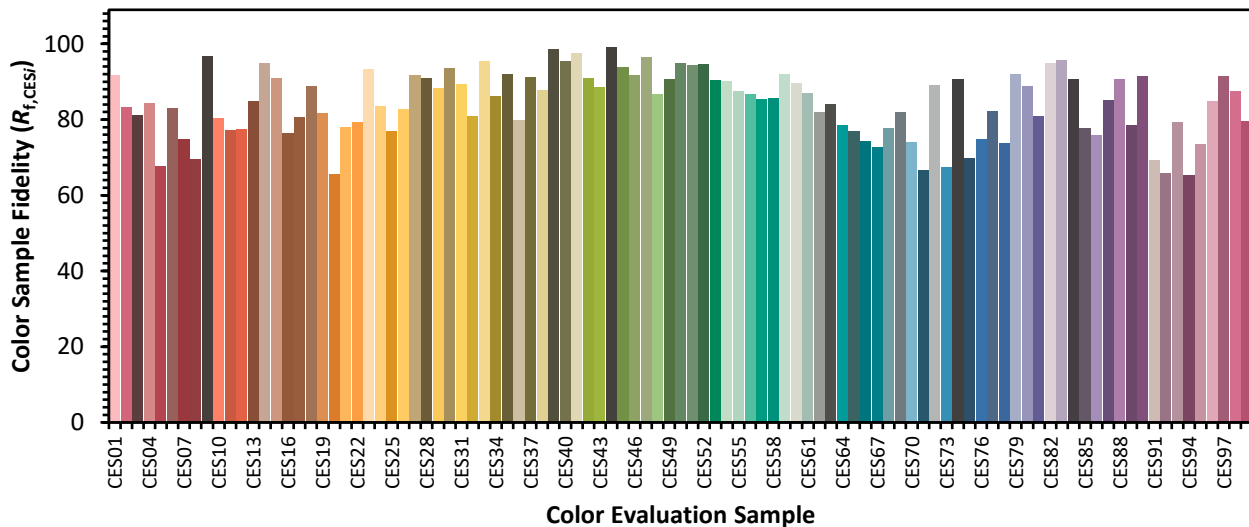


Color Vector Graphics

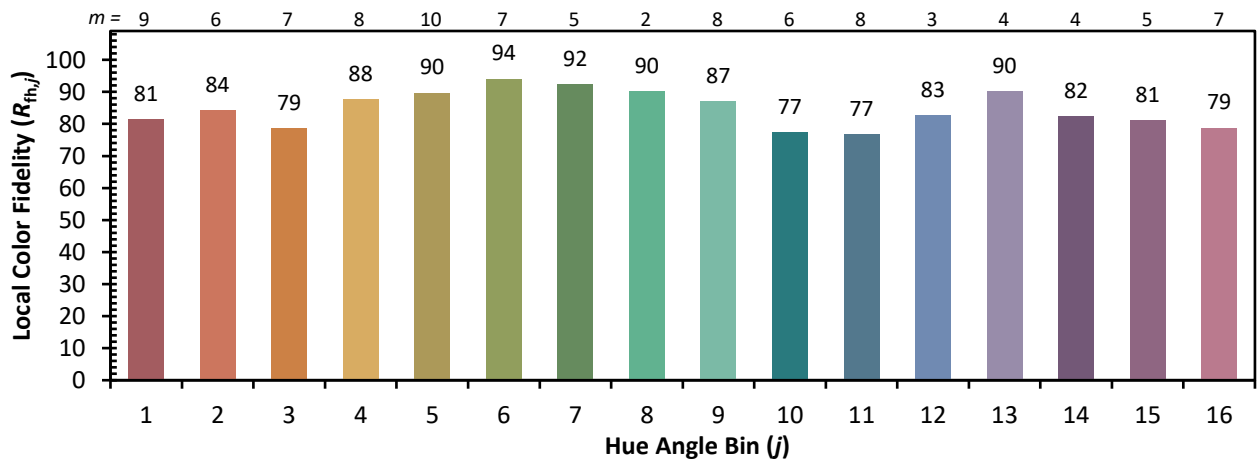
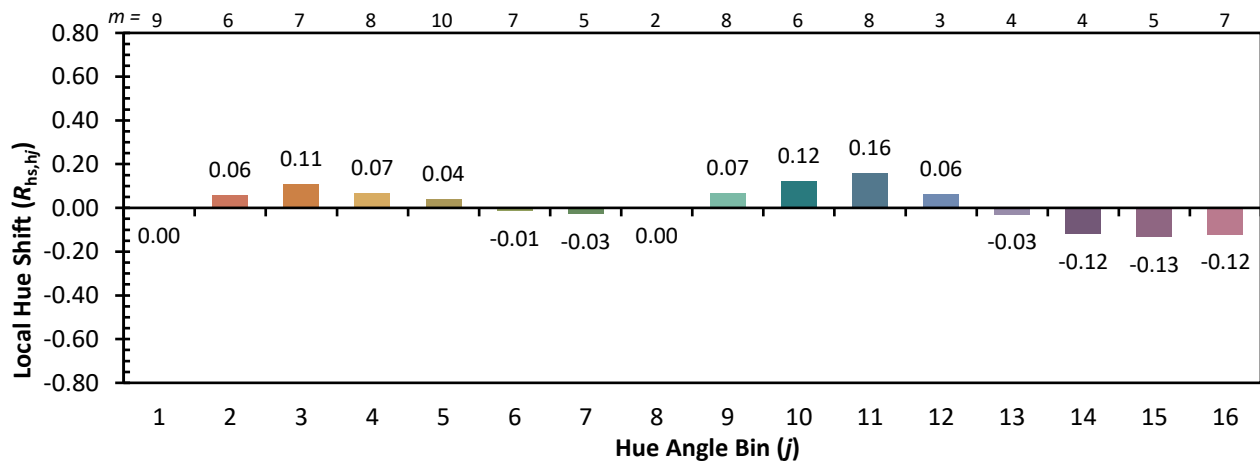
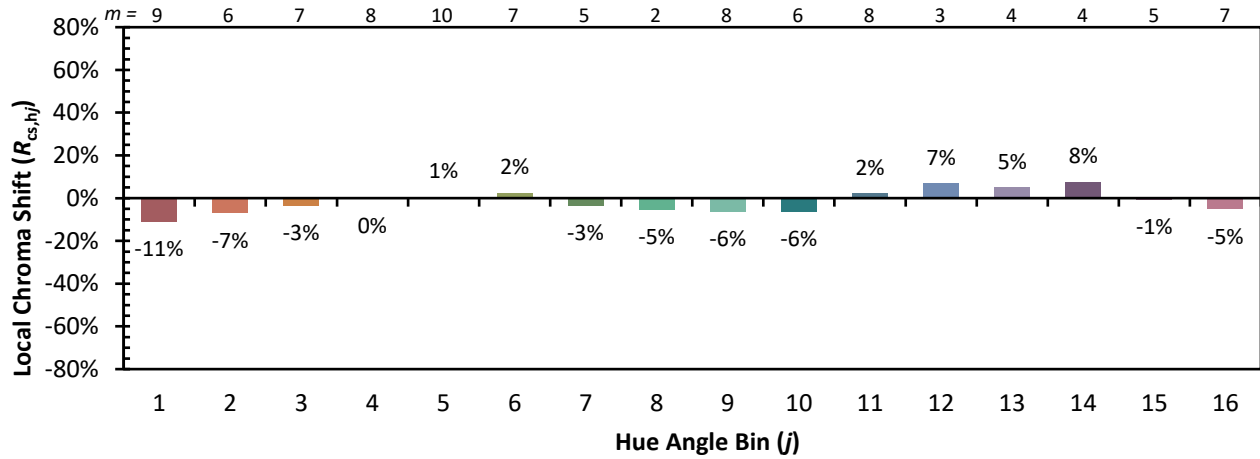


Individual Sample Fidelity Index ($R_{f,i}$)

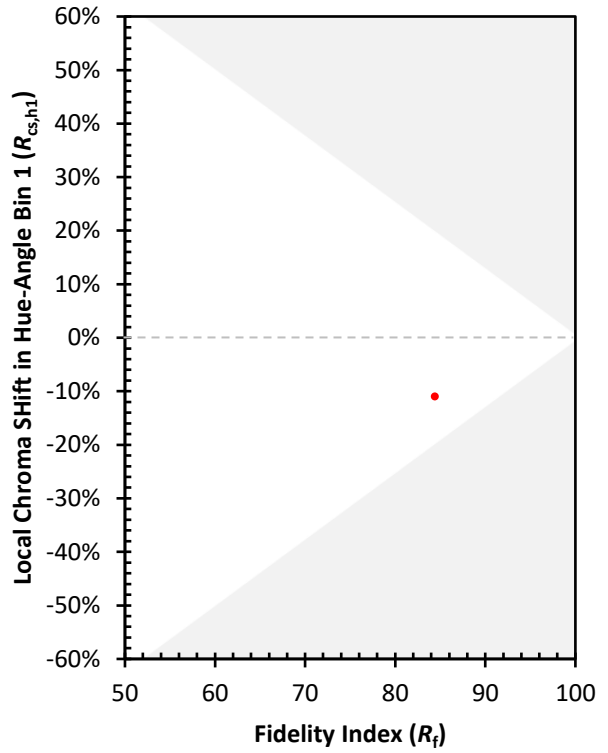
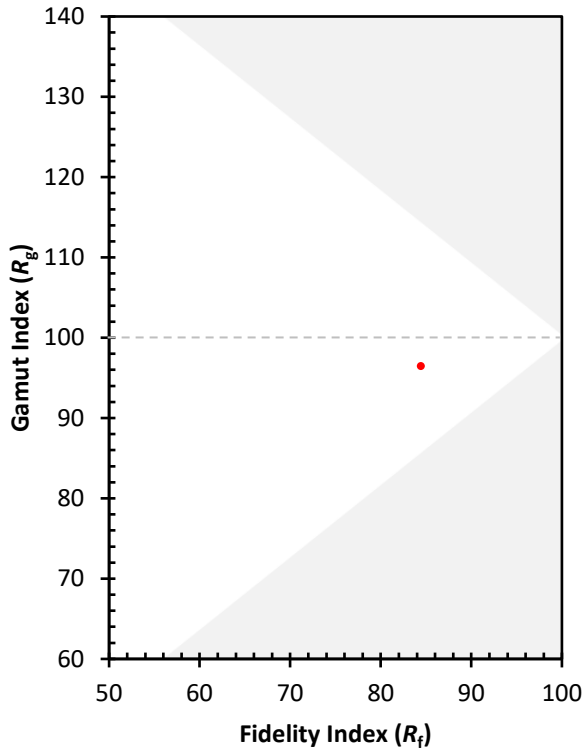
CES01 = 86	CES26 = 83	CES51 = 94	CES76 = 75
CES02 = 62	CES27 = 92	CES52 = 95	CES77 = 82
CES03 = 31	CES28 = 91	CES53 = 90	CES78 = 74
CES04 = 70	CES29 = 88	CES54 = 90	CES79 = 92
CES05 = 48	CES30 = 94	CES55 = 88	CES80 = 89
CES06 = 51	CES31 = 89	CES56 = 87	CES81 = 81
CES07 = 41	CES32 = 81	CES57 = 86	CES82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