

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: P1449914

Luminaire Tested: **TWC60_T4_36W_3000K**

Issue Date: 5/19/2026

Test Information

Test Method: LM-79-08
Report Number: P1449914
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_3000K
Description: Tapered Wall Cutoff Wall Mount Luminaire at, T4 distribution, 36W
3000K settings
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5379 lumens
Efficiency: N/A
Efficacy: 149.4 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

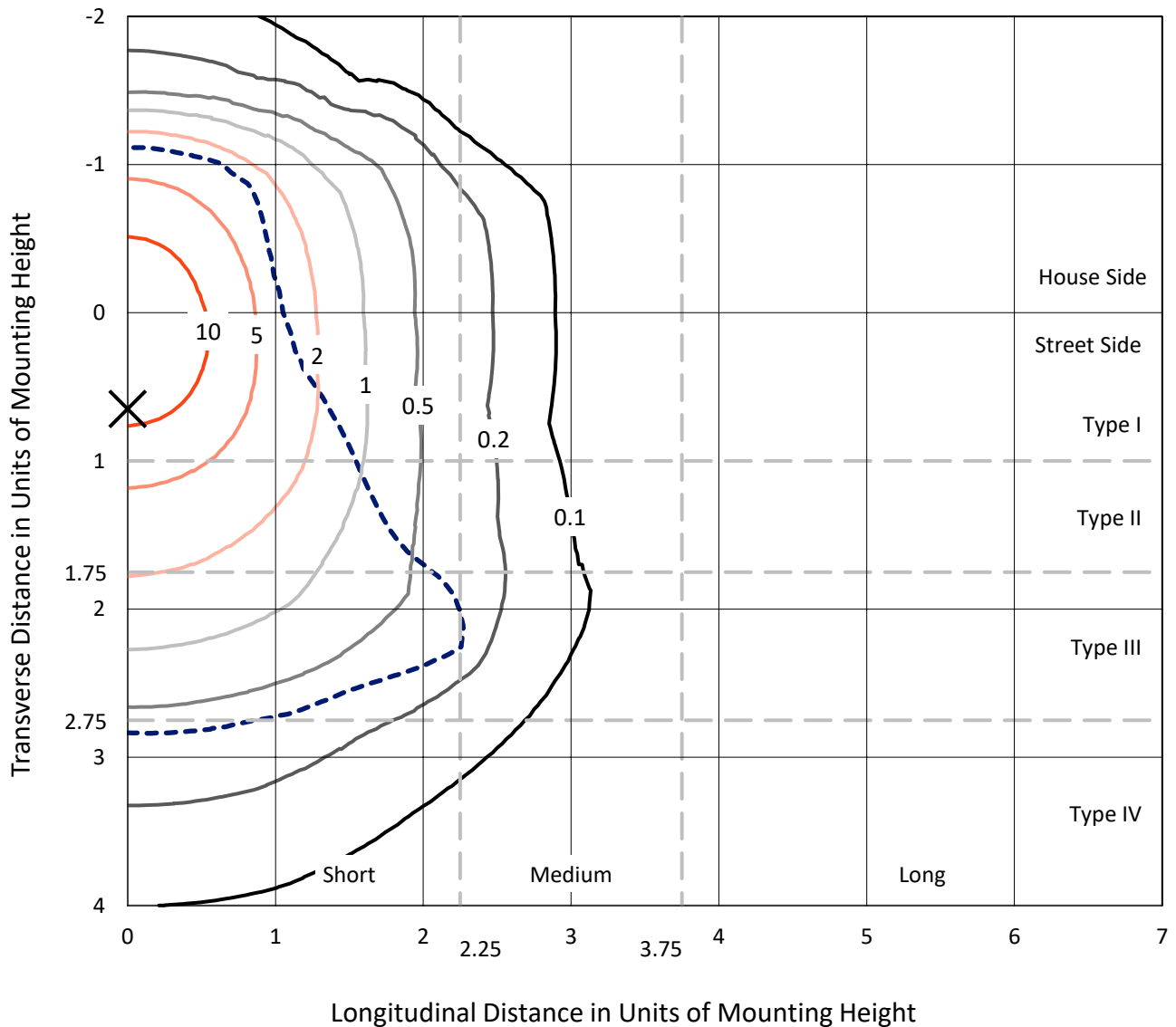
Input Watts (W): 36
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

Iso-Footcandle Lines of Horizontal Illumination

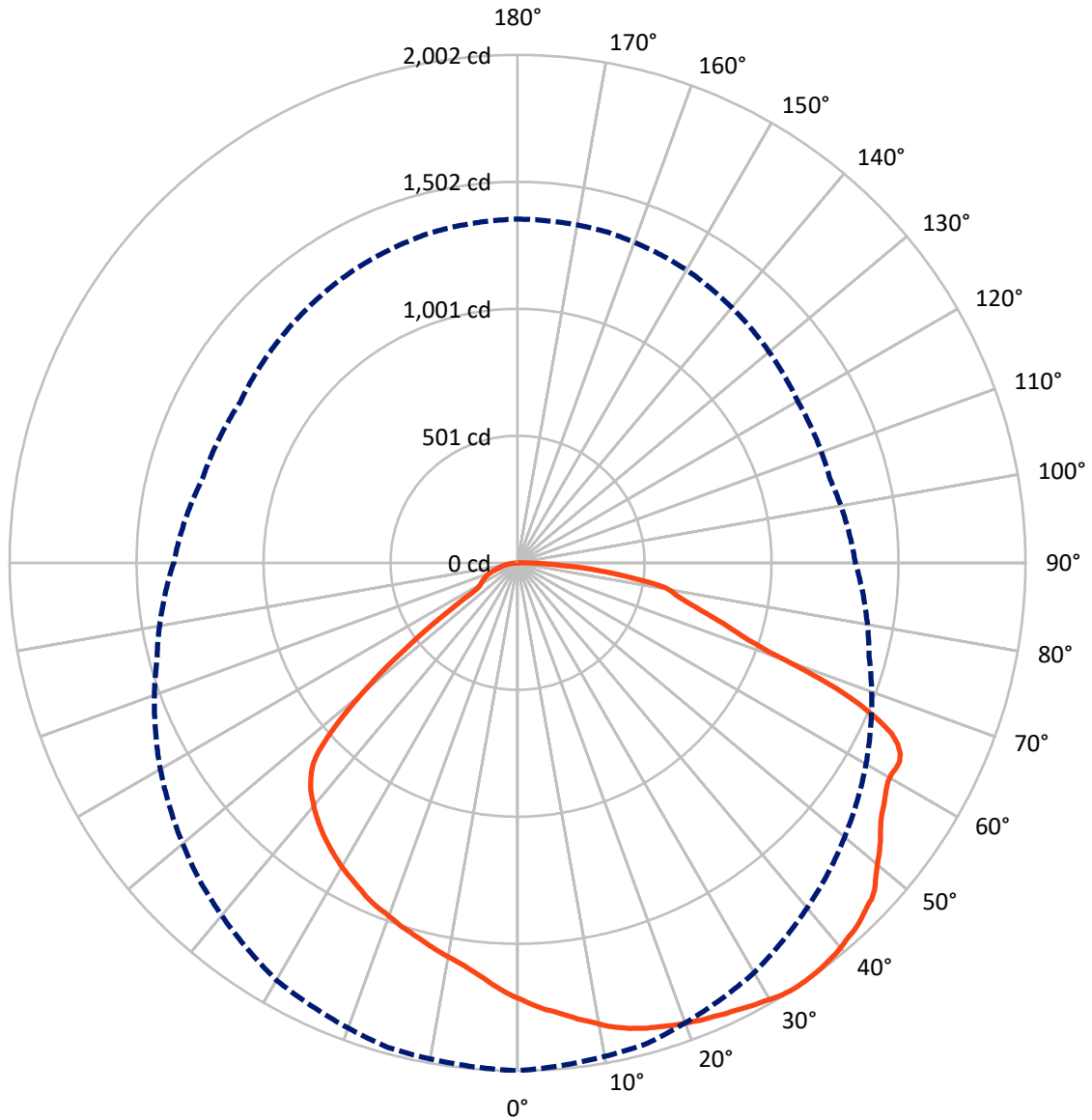
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P1449914
CATALOG NUMBER: TWC60_T4_36W_3000K

Luminous Intensity Polar Plot



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

REPORT NUMBER: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

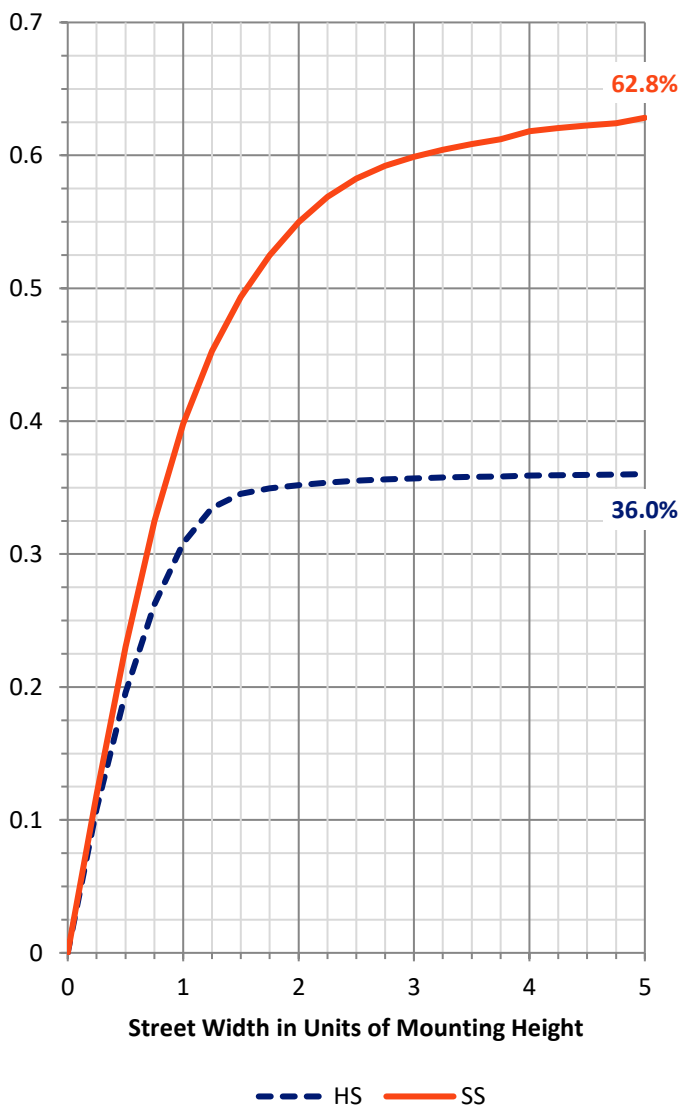
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1950.3	0.0	1950.3
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	3428.7	0.0	3428.7
	% Fixture	63.7	0.0	63.7
Total	Lumens	5379.0	0.0	5379.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.2	3.0
10°-20°	474.5	8.8
20°-30°	739.8	13.8
30°-40°	933.7	17.4
40°-50°	1020.9	19.0
50°-60°	904.1	16.8
60°-70°	684.4	12.7
70°-80°	357.1	6.6
80°-90°	101.4	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°	5379.0	100.0
0°-180°	5379.0	100.0

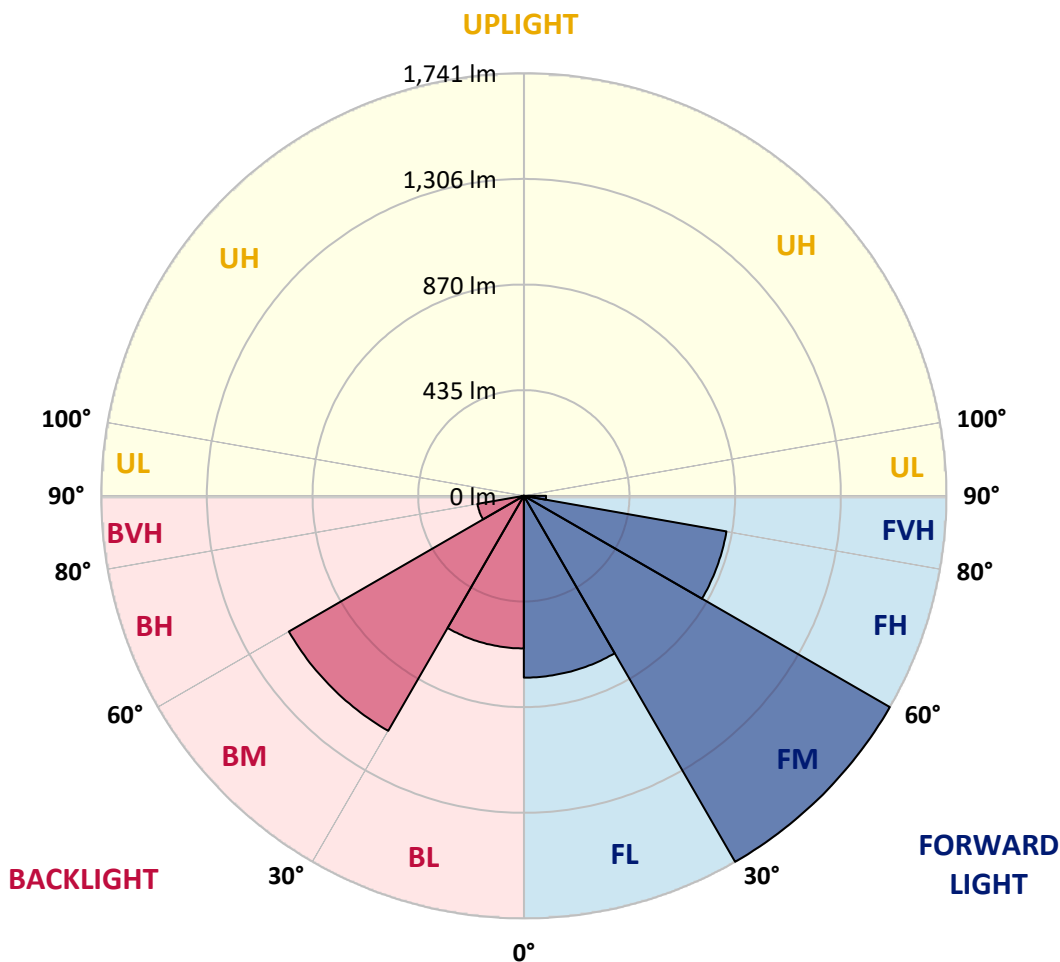


REPORT NUMBER: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	748.8	13.9			
FM (30°-60°)	1740.8	32.4			
FH (60°-80°)	847.5	15.8			G1/1800
FVH (80°-90°)	91.6	1.7			G1/100
BL (0°-30°)	628.6	11.7	B2/1000		
BM (30°-60°)	1117.9	20.8	B2/2500		
BH (60°-80°)	194.0	3.6	B1/500		G1/500
BVH (80°-90°)	9.8	0.2			G0/10
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





REPORT NUMBER: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8
1°	1736.3	1734.8	1732.5	1730.0	1727.1	1723.7	1720.3	1716.6	1713.3	1710.7	1708.8
2°	1750.1	1748.8	1745.5	1740.1	1731.7	1725.4	1718.6	1711.7	1705.5	1700.3	1696.7
3°	1763.4	1760.7	1756.4	1749.3	1739.1	1726.8	1715.9	1706.3	1697.5	1689.8	1684.3
4°	1773.4	1772.0	1765.6	1756.2	1743.8	1727.0	1712.6	1700.4	1688.4	1677.8	1670.0
5°	1786.2	1783.2	1775.1	1762.8	1747.4	1727.5	1708.9	1693.4	1678.1	1664.0	1653.2
6°	1798.5	1794.5	1784.7	1769.0	1750.4	1726.8	1704.7	1685.8	1667.0	1649.3	1637.3
7°	1813.3	1806.5	1793.8	1774.6	1752.4	1725.6	1699.6	1677.3	1655.0	1634.7	1622.5
8°	1824.9	1817.6	1802.5	1780.7	1753.9	1722.9	1693.3	1667.8	1642.0	1620.6	1609.4
9°	1837.7	1829.7	1812.2	1787.0	1755.3	1719.8	1686.2	1657.5	1629.1	1607.4	1598.0
10°	1852.9	1843.6	1823.0	1793.1	1756.0	1716.6	1679.1	1646.9	1616.1	1594.8	1587.0
11°	1866.6	1856.4	1833.7	1798.7	1756.6	1712.8	1671.2	1635.9	1603.5	1583.4	1577.3
12°	1876.6	1866.6	1842.8	1804.2	1757.4	1707.8	1661.7	1623.8	1590.2	1572.2	1566.7
13°	1887.7	1875.1	1850.2	1809.5	1757.9	1702.5	1652.4	1611.1	1576.4	1560.6	1555.9
14°	1895.1	1882.9	1855.4	1812.7	1758.3	1697.8	1643.1	1598.3	1562.8	1549.6	1545.7
15°	1903.4	1889.1	1858.6	1813.8	1757.0	1692.3	1632.0	1584.7	1549.5	1538.5	1534.9
16°	1909.7	1894.0	1862.2	1814.5	1754.0	1686.1	1621.2	1571.7	1535.7	1526.7	1523.9
17°	1915.7	1898.7	1863.7	1813.0	1749.5	1678.2	1609.2	1557.3	1522.0	1514.5	1513.2
18°	1922.6	1903.8	1863.4	1809.1	1743.8	1670.1	1597.1	1542.6	1508.6	1502.0	1503.0
19°	1928.6	1909.0	1864.5	1805.9	1736.8	1660.7	1584.4	1527.6	1495.3	1489.9	1493.6
20°	1933.9	1914.3	1867.2	1802.3	1728.8	1649.9	1571.1	1512.4	1481.5	1478.7	1483.8
21°	1940.3	1918.6	1869.0	1798.5	1720.6	1637.4	1557.4	1496.8	1467.6	1466.7	1471.9
22°	1945.4	1923.2	1870.0	1794.8	1711.7	1624.0	1541.8	1480.6	1453.2	1454.2	1461.1
23°	1949.1	1926.1	1871.0	1791.5	1702.4	1609.8	1526.8	1464.0	1437.9	1441.5	1450.5
24°	1955.6	1930.0	1871.3	1788.4	1693.0	1594.9	1509.7	1446.9	1422.8	1428.5	1440.7
25°	1960.3	1932.9	1870.7	1784.0	1683.1	1580.0	1491.9	1429.7	1407.8	1415.9	1430.9
26°	1966.2	1935.8	1869.9	1779.0	1671.8	1564.3	1474.1	1411.6	1392.8	1402.3	1420.0
27°	1972.8	1939.0	1870.3	1773.6	1660.5	1547.8	1456.2	1394.0	1377.3	1388.7	1408.1
28°	1978.5	1943.7	1869.8	1767.6	1649.6	1530.7	1437.5	1375.2	1360.9	1375.7	1395.6
29°	1983.6	1948.1	1867.8	1761.2	1637.7	1512.6	1417.7	1356.2	1344.1	1363.5	1382.7
30°	1991.1	1952.2	1867.1	1753.9	1626.0	1493.7	1396.9	1336.1	1327.0	1349.9	1370.5
31°	1996.8	1955.6	1866.5	1746.4	1613.6	1474.4	1375.3	1316.5	1309.3	1334.8	1359.1
32°	2000.3	1959.9	1865.9	1738.2	1600.4	1455.2	1354.6	1296.0	1291.8	1319.3	1346.4
33°	2002.2	1962.7	1865.3	1730.7	1586.4	1434.7	1331.5	1275.2	1274.7	1304.0	1332.9
34°	2001.0	1962.1	1864.7	1722.9	1571.4	1414.4	1309.6	1254.3	1257.0	1288.4	1319.2
35°	1999.6	1961.8	1864.3	1714.3	1555.4	1392.8	1286.5	1233.3	1238.9	1272.2	1305.5
36°	1998.1	1958.7	1861.9	1705.2	1538.9	1370.8	1261.9	1212.5	1220.6	1255.8	1291.1
37°	1993.3	1954.9	1857.3	1696.5	1521.5	1346.7	1238.4	1191.6	1202.5	1239.1	1276.6
38°	1989.8	1950.6	1852.2	1687.6	1503.1	1324.2	1214.6	1171.5	1184.4	1222.2	1262.2
39°	1984.2	1943.7	1845.6	1677.2	1483.6	1301.1	1191.5	1150.1	1166.2	1205.8	1245.9
40°	1976.8	1936.0	1838.2	1664.9	1464.1	1276.4	1168.1	1127.8	1148.1	1190.7	1229.9
41°	1968.8	1926.5	1829.8	1652.4	1444.3	1251.2	1144.7	1105.6	1128.1	1176.0	1213.6
42°	1964.7	1919.4	1822.3	1639.3	1423.9	1224.7	1118.2	1082.6	1106.8	1159.9	1197.9
43°	1955.8	1911.3	1811.7	1627.1	1402.9	1197.5	1091.9	1060.5	1085.7	1141.9	1182.3
44°	1944.3	1901.7	1799.8	1615.1	1381.9	1169.7	1064.7	1037.7	1064.3	1122.4	1166.3



REPORT NUMBER: P1449914

CATALOG NUMBER: TWC60_T4_36W_3000K

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	1932.1	1888.9	1788.9	1602.5	1361.2	1140.8	1037.6	1013.5	1042.9	1103.1	1148.6
46°	1924.5	1877.2	1777.5	1589.6	1339.6	1112.4	1009.9	989.1	1021.8	1083.3	1129.3
47°	1908.8	1865.9	1764.1	1575.5	1317.1	1083.1	981.6	963.9	1000.8	1063.1	1107.9
48°	1884.6	1850.6	1748.1	1560.5	1295.1	1052.7	954.1	940.4	979.5	1042.5	1080.7
49°	1861.4	1826.5	1733.6	1544.7	1273.6	1022.4	926.5	916.7	958.0	1020.6	1046.1
50°	1841.9	1803.6	1716.5	1528.7	1251.8	991.0	898.3	892.0	936.4	997.6	1000.1
51°	1823.3	1783.7	1694.2	1512.2	1230.0	960.8	870.5	866.8	914.9	973.3	939.9
52°	1802.5	1764.5	1670.5	1494.3	1207.1	931.4	841.6	841.5	893.4	946.4	864.1
53°	1780.1	1744.3	1646.8	1476.6	1183.9	901.1	811.8	815.7	870.3	916.2	780.5
54°	1758.6	1721.5	1625.3	1456.6	1159.6	871.9	782.6	791.2	846.0	879.2	691.0
55°	1743.6	1701.4	1602.8	1432.6	1131.5	843.4	753.0	766.3	821.2	830.5	601.9
56°	1731.4	1685.4	1578.6	1406.7	1102.6	812.9	723.7	740.5	795.3	769.3	509.8
57°	1717.1	1672.4	1553.5	1379.7	1074.4	781.7	690.2	714.6	768.5	695.6	416.3
58°	1704.2	1659.4	1532.3	1354.1	1046.7	749.7	657.7	687.5	739.4	615.7	328.5
59°	1694.9	1647.8	1515.6	1325.9	1018.3	718.2	626.2	660.1	710.2	534.8	252.1
60°	1693.0	1640.8	1502.4	1294.8	988.4	684.7	596.1	631.8	677.1	450.0	197.8
61°	1697.6	1639.0	1492.2	1264.8	956.0	650.8	565.5	602.6	640.7	365.5	168.6
62°	1697.7	1640.9	1481.6	1235.8	921.9	618.0	536.8	572.5	597.2	285.7	158.4
63°	1685.9	1637.2	1478.5	1208.8	887.8	583.6	509.2	542.1	545.1	213.8	151.7
64°	1660.6	1620.9	1482.6	1184.6	854.7	548.2	483.4	511.1	480.7	164.6	145.9
65°	1619.1	1586.8	1493.3	1163.6	819.0	512.3	457.4	479.8	415.6	146.1	139.8
66°	1549.8	1532.6	1490.1	1146.5	777.2	476.4	431.0	448.2	346.1	137.2	133.7
67°	1460.8	1453.7	1467.6	1135.9	733.1	439.7	403.7	418.1	276.7	127.9	127.5
68°	1350.8	1354.4	1417.3	1139.5	687.2	403.7	375.3	388.9	220.8	120.1	121.5
69°	1201.6	1230.1	1320.7	1160.1	643.2	370.7	346.1	359.3	176.0	113.6	115.9
70°	1051.2	1088.5	1195.7	1186.2	599.7	339.8	315.1	328.4	132.9	107.1	110.5
71°	958.7	972.5	1041.1	1180.4	563.3	308.3	283.5	297.0	107.9	100.8	104.4
72°	901.4	899.0	888.2	1094.5	530.8	278.2	251.8	262.2	99.5	95.1	97.0
73°	848.6	852.0	779.9	936.4	496.7	248.1	221.1	226.9	93.0	89.9	88.9
74°	795.0	808.0	720.2	757.6	492.3	221.3	192.7	189.1	85.9	84.5	80.6
75°	745.0	759.0	670.3	646.3	552.6	194.6	167.0	152.8	78.6	77.4	72.5
76°	702.6	705.4	625.4	596.5	595.2	170.1	144.7	116.2	72.0	69.8	64.3
77°	667.2	646.6	583.3	555.9	499.4	148.4	122.5	87.0	65.8	62.2	57.0
78°	637.6	592.7	537.7	513.4	351.8	126.4	100.8	73.6	60.1	54.9	51.8
79°	617.9	553.8	491.6	465.9	261.8	110.2	83.5	65.1	54.4	47.8	47.7
80°	591.5	517.8	447.2	400.3	226.1	96.0	67.6	57.1	48.1	39.1	43.2
81°	524.9	482.3	412.6	330.2	230.6	81.7	52.7	49.1	41.3	31.6	37.8
82°	457.9	447.1	379.9	281.1	205.1	68.5	39.6	41.2	34.5	26.5	32.0
83°	390.9	405.8	343.7	244.0	141.1	57.0	30.0	33.9	27.8	22.5	26.0
84°	323.0	361.9	295.2	212.3	95.1	46.3	22.5	27.1	21.3	17.9	19.5
85°	257.2	315.3	232.4	183.9	74.1	35.8	17.1	20.7	15.7	12.8	13.0
86°	180.5	253.9	178.3	148.7	59.1	26.2	11.8	14.8	10.8	7.9	6.6
87°	125.2	185.2	131.3	92.1	43.2	17.2	6.5	8.8	6.0	3.7	2.7
88°	68.1	110.2	86.3	41.0	27.8	9.1	3.0	3.6	2.2	1.4	1.1
89°	34.6	48.8	46.4	26.5	16.9	4.3	0.8	0.7	0.4	0.3	0.2



REPORT NUMBER: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

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: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

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: P1449914
CATALOG NUMBER: TWC60_T4_36W_3000K

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: P1449914

CATALOG NUMBER: TWC60_T4_36W_3000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8	1721.8
1°	1708.3	1708.7	1709.1	1710.3	1712.6	1715.5	1719.1	1723.0	1726.2	1729.1	1731.4
2°	1695.1	1695.3	1696.6	1698.8	1703.1	1708.9	1715.6	1722.6	1728.9	1734.0	1740.6
3°	1681.0	1679.4	1681.6	1686.2	1693.1	1701.7	1710.7	1721.0	1730.0	1740.3	1750.0
4°	1664.7	1663.4	1665.9	1671.9	1681.2	1692.6	1704.7	1718.1	1731.2	1745.7	1757.9
5°	1647.4	1645.2	1649.1	1656.8	1669.3	1683.6	1698.6	1715.3	1732.9	1750.8	1765.1
6°	1631.8	1630.5	1633.2	1641.1	1655.1	1673.2	1692.0	1711.2	1732.6	1754.5	1772.0
7°	1617.3	1615.5	1618.8	1626.2	1641.0	1662.0	1685.1	1708.1	1731.9	1757.4	1779.1
8°	1604.3	1602.3	1605.7	1611.9	1626.9	1650.6	1677.1	1703.7	1730.9	1760.1	1786.5
9°	1593.5	1591.1	1594.5	1599.5	1613.2	1638.5	1667.8	1697.2	1728.8	1762.3	1793.9
10°	1583.3	1581.4	1584.1	1588.2	1600.4	1626.0	1658.4	1691.1	1726.4	1764.6	1801.1
11°	1573.5	1572.5	1574.2	1577.7	1587.8	1613.1	1647.8	1683.8	1723.2	1766.7	1808.2
12°	1563.6	1562.7	1563.6	1566.9	1575.2	1599.6	1636.6	1675.3	1719.5	1769.2	1815.3
13°	1553.5	1552.5	1553.6	1556.1	1562.5	1585.6	1625.2	1666.7	1715.9	1771.6	1821.3
14°	1544.0	1542.5	1544.4	1545.1	1550.6	1571.9	1612.9	1658.1	1713.1	1772.6	1825.7
15°	1533.5	1532.0	1533.3	1533.6	1538.3	1557.6	1600.0	1648.1	1708.7	1772.2	1827.6
16°	1523.6	1524.0	1522.2	1522.6	1526.4	1542.9	1586.8	1638.4	1703.6	1770.5	1828.5
17°	1514.2	1513.8	1512.2	1511.8	1514.3	1528.0	1573.0	1628.1	1697.5	1767.2	1827.5
18°	1505.7	1506.5	1503.6	1500.4	1501.1	1513.4	1558.1	1616.5	1689.0	1762.0	1825.1
19°	1495.8	1496.3	1493.8	1489.5	1488.8	1498.8	1543.7	1603.5	1679.3	1756.0	1822.8
20°	1485.7	1486.2	1484.2	1478.4	1476.2	1483.8	1528.5	1592.2	1669.5	1749.3	1820.5
21°	1476.0	1477.4	1474.1	1466.8	1463.4	1469.1	1512.6	1579.6	1658.2	1741.8	1818.1
22°	1468.0	1470.1	1464.5	1455.4	1450.2	1453.6	1496.6	1564.6	1645.7	1734.0	1816.1
23°	1460.5	1462.4	1455.3	1444.0	1436.1	1437.5	1480.0	1548.9	1632.8	1726.3	1815.0
24°	1451.7	1453.5	1446.4	1432.9	1422.3	1421.8	1462.4	1532.6	1619.9	1718.7	1813.8
25°	1441.1	1443.3	1436.8	1421.8	1408.6	1406.3	1445.2	1515.8	1606.0	1710.9	1810.5
26°	1430.6	1431.1	1425.6	1411.8	1394.1	1389.9	1427.5	1497.1	1591.3	1702.2	1806.5
27°	1418.6	1420.3	1413.1	1399.8	1380.0	1372.8	1408.0	1477.9	1575.8	1692.8	1802.2
28°	1407.6	1409.9	1401.5	1387.4	1365.9	1355.6	1389.1	1458.7	1560.0	1683.2	1798.2
29°	1397.1	1400.1	1390.3	1374.3	1351.9	1338.4	1369.2	1439.4	1543.4	1673.4	1793.9
30°	1386.8	1389.7	1379.4	1360.6	1337.7	1320.0	1348.3	1419.4	1525.9	1662.4	1788.7
31°	1374.8	1378.2	1368.3	1347.3	1323.1	1301.5	1328.3	1399.3	1508.5	1650.4	1782.3
32°	1362.8	1366.4	1356.6	1333.8	1306.8	1282.8	1307.0	1377.3	1490.7	1638.5	1777.1
33°	1350.6	1354.9	1344.9	1320.6	1290.2	1263.6	1285.3	1355.4	1471.7	1626.2	1771.7
34°	1338.7	1342.5	1332.0	1306.9	1273.4	1244.5	1263.4	1333.7	1452.6	1612.8	1765.6
35°	1327.0	1330.2	1319.1	1292.2	1255.9	1226.0	1241.2	1311.2	1433.2	1598.4	1759.7
36°	1313.2	1317.2	1305.3	1278.1	1238.8	1207.6	1219.7	1287.6	1412.7	1583.9	1753.7
37°	1299.1	1303.4	1291.5	1263.6	1222.1	1189.3	1198.3	1264.0	1391.8	1568.3	1747.5
38°	1284.1	1289.0	1276.8	1247.5	1205.8	1170.7	1177.7	1240.3	1370.2	1552.3	1740.0
39°	1269.2	1273.9	1260.7	1231.1	1189.8	1150.7	1155.7	1213.5	1347.7	1537.0	1731.2
40°	1253.2	1257.9	1245.8	1214.7	1173.5	1130.0	1131.8	1188.5	1324.2	1520.1	1721.6
41°	1237.5	1241.1	1229.1	1199.3	1156.1	1109.3	1107.4	1161.4	1299.6	1502.3	1710.4
42°	1221.3	1225.1	1213.1	1184.4	1138.4	1088.9	1082.9	1134.7	1274.4	1485.2	1699.6
43°	1204.5	1206.9	1196.6	1169.2	1120.6	1067.6	1059.1	1106.3	1248.5	1467.5	1689.0
44°	1188.4	1184.2	1180.4	1151.5	1102.5	1045.6	1034.9	1077.4	1220.8	1449.0	1678.2



REPORT NUMBER: P1449914

CATALOG NUMBER: TWC60_T4_36W_3000K

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1171.7	1159.5	1163.7	1132.9	1083.4	1023.8	1010.9	1048.4	1192.0	1429.6	1665.7
46°	1141.8	1129.7	1138.8	1114.2	1063.7	1001.8	986.6	1019.7	1164.5	1410.0	1651.7
47°	1100.4	1081.5	1105.9	1094.2	1043.5	979.0	962.0	988.8	1135.2	1391.2	1637.5
48°	1045.4	1015.0	1060.8	1071.7	1023.5	956.1	936.9	960.2	1106.1	1372.9	1622.6
49°	974.4	934.1	999.0	1046.3	1002.4	934.3	910.9	931.1	1077.1	1354.7	1607.9
50°	888.7	844.3	923.1	1015.5	979.9	912.3	884.0	902.6	1048.2	1336.6	1591.2
51°	798.6	752.3	837.6	972.9	956.8	890.0	857.9	873.6	1019.9	1316.6	1572.9
52°	706.7	658.3	747.0	915.8	932.4	867.2	831.2	843.2	991.8	1294.7	1553.5
53°	612.5	560.2	655.9	848.5	906.6	844.2	804.1	812.8	962.2	1270.0	1532.4
54°	514.1	462.4	561.0	766.2	878.9	820.3	777.6	780.1	933.2	1245.6	1507.7
55°	419.3	368.7	464.1	680.9	848.6	796.0	750.1	747.6	903.7	1223.2	1482.3
56°	329.3	285.4	371.9	594.2	811.8	770.9	722.5	716.2	872.8	1200.3	1457.6
57°	250.3	222.7	284.4	503.0	764.7	743.7	694.2	683.7	841.4	1175.7	1431.8
58°	203.4	188.5	223.2	411.4	704.9	714.9	664.9	652.1	809.5	1148.6	1404.7
59°	179.9	175.8	187.3	324.5	633.6	685.5	636.1	622.2	778.4	1119.2	1376.9
60°	170.6	170.3	171.1	247.3	557.0	655.1	606.3	592.5	744.2	1087.8	1349.3
61°	165.7	165.6	164.7	189.6	478.9	624.8	576.9	563.8	708.5	1055.7	1325.5
62°	160.7	160.7	159.5	160.4	397.6	592.7	547.7	535.1	672.3	1023.9	1305.1
63°	155.5	155.5	154.1	148.9	317.5	560.3	518.0	506.4	633.9	988.9	1287.6
64°	150.3	150.5	148.8	143.2	242.7	523.6	487.7	478.0	595.0	948.3	1272.9
65°	145.1	145.7	143.2	136.1	183.0	483.2	457.0	448.8	557.3	906.5	1260.4
66°	140.1	141.1	137.6	129.7	152.0	431.8	426.2	419.4	522.4	866.5	1255.1
67°	135.1	135.8	132.1	123.1	133.8	374.7	396.2	388.3	486.4	827.8	1264.6
68°	130.1	130.6	126.8	116.8	123.0	313.9	367.1	357.0	447.5	790.0	1285.0
69°	124.5	125.0	121.4	110.8	116.5	253.7	338.2	324.7	410.4	757.2	1291.1
70°	117.2	116.7	115.0	105.1	109.3	202.0	308.9	293.0	379.1	726.4	1263.3
71°	108.6	108.1	107.1	100.0	102.2	160.9	281.1	261.5	348.5	703.5	1175.8
72°	100.0	99.4	98.7	93.9	95.6	120.1	253.6	230.5	319.4	700.5	1019.9
73°	91.2	90.7	90.1	86.6	89.0	96.8	228.2	201.3	289.5	747.4	849.6
74°	82.6	82.7	81.8	78.7	83.1	89.3	201.0	175.1	261.4	800.2	726.8
75°	75.2	76.2	73.8	70.8	77.7	81.8	172.8	150.2	230.2	741.6	657.8
76°	69.8	71.9	67.5	63.3	71.4	74.9	145.1	128.1	199.9	613.6	605.3
77°	66.1	68.7	63.1	55.8	64.1	68.2	117.5	107.8	175.8	499.6	557.1
78°	62.1	64.1	59.2	48.7	56.6	61.8	92.2	89.0	162.1	386.5	512.0
79°	55.8	56.7	54.3	43.4	49.2	55.6	73.3	73.3	146.5	324.9	459.9
80°	49.6	50.9	47.9	39.3	42.1	49.5	62.0	59.3	133.0	320.9	395.2
81°	43.2	44.1	41.5	35.0	34.3	43.3	52.7	48.8	126.1	285.6	337.5
82°	35.8	35.9	34.9	30.0	26.7	36.7	44.1	38.5	117.8	206.4	293.8
83°	26.9	25.7	27.0	24.3	21.4	29.6	35.7	28.1	99.0	147.9	260.3
84°	19.2	18.5	19.5	18.3	16.8	23.1	27.5	20.7	71.6	119.0	229.5
85°	12.1	11.6	12.2	12.3	12.1	17.2	20.4	14.8	51.0	98.7	191.6
86°	5.6	4.9	5.7	6.4	7.5	11.4	14.3	9.8	35.2	80.3	136.6
87°	2.3	1.9	2.3	2.5	3.6	6.2	8.3	5.6	20.5	63.5	84.6
88°	0.9	0.8	0.9	1.0	1.3	2.3	3.2	3.1	9.7	48.6	63.1
89°	0.1	0.0	0.1	0.2	0.2	0.3	0.6	0.6	4.4	34.9	46.0



REPORT NUMBER: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

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: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

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: P1449914
CATALOG NUMBER: TWC60_T4_36W_3000K

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: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1721.8	1721.8	1721.8
1°	1733.3	1735.1	1736.3
2°	1745.0	1748.2	1750.1
3°	1756.8	1760.7	1763.4
4°	1767.0	1772.6	1773.4
5°	1776.8	1784.1	1786.2
6°	1786.5	1795.8	1798.5
7°	1796.4	1807.4	1813.3
8°	1807.5	1819.7	1824.9
9°	1818.6	1833.2	1837.7
10°	1829.3	1847.3	1852.9
11°	1840.6	1860.5	1866.6
12°	1850.7	1871.6	1876.6
13°	1858.5	1880.1	1887.7
14°	1864.0	1888.1	1895.1
15°	1867.7	1893.5	1903.4
16°	1871.2	1898.6	1909.7
17°	1874.0	1904.0	1915.7
18°	1876.3	1910.4	1922.6
19°	1878.4	1915.9	1928.6
20°	1881.3	1921.2	1933.9
21°	1883.8	1925.7	1940.3
22°	1886.5	1930.0	1945.4
23°	1888.6	1934.4	1949.1
24°	1890.2	1939.8	1955.6
25°	1890.6	1943.7	1960.3
26°	1892.1	1948.2	1966.2
27°	1892.1	1953.2	1972.8
28°	1893.6	1958.7	1978.5
29°	1895.5	1963.1	1983.6
30°	1895.9	1968.5	1991.1
31°	1896.9	1974.1	1996.8
32°	1898.6	1976.1	2000.3
33°	1900.0	1977.4	2002.2
34°	1899.8	1977.5	2001.0
35°	1897.6	1976.9	1999.6
36°	1894.3	1973.6	1998.1
37°	1891.1	1970.8	1993.3
38°	1886.2	1965.8	1989.8
39°	1880.2	1959.8	1984.2
40°	1873.8	1953.2	1976.8
41°	1864.8	1943.4	1968.8
42°	1855.6	1937.8	1964.7
43°	1845.8	1929.5	1955.8
44°	1835.6	1919.0	1944.3



REPORT NUMBER: P1449914
 CATALOG NUMBER: TWC60_T4_36W_3000K

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	1825.2	1907.3	1932.1
46°	1813.5	1895.1	1924.5
47°	1800.1	1883.5	1908.8
48°	1785.8	1864.2	1884.6
49°	1770.5	1838.3	1861.4
50°	1749.6	1818.2	1841.9
51°	1725.8	1798.5	1823.3
52°	1703.2	1778.9	1802.5
53°	1683.2	1757.5	1780.1
54°	1659.4	1735.2	1758.6
55°	1635.1	1716.9	1743.6
56°	1611.2	1703.8	1731.4
57°	1590.0	1692.5	1717.1
58°	1574.3	1678.4	1704.2
59°	1561.8	1667.7	1694.9
60°	1550.0	1662.1	1693.0
61°	1539.6	1662.6	1697.6
62°	1534.6	1663.1	1697.7
63°	1537.8	1655.7	1685.9
64°	1545.5	1634.8	1660.6
65°	1541.5	1596.5	1619.1
66°	1517.9	1536.5	1549.8
67°	1470.8	1453.1	1460.8
68°	1388.3	1346.1	1350.8
69°	1271.3	1213.4	1201.6
70°	1130.2	1074.2	1051.2
71°	980.1	969.3	958.7
72°	858.7	901.5	901.4
73°	784.1	850.8	848.6
74°	740.6	801.2	795.0
75°	701.7	748.2	745.0
76°	664.0	694.5	702.6
77°	622.9	643.5	667.2
78°	575.6	600.2	637.6
79°	530.3	572.1	617.9
80°	485.3	546.8	591.5
81°	441.3	517.3	524.9
82°	398.3	472.7	457.9
83°	346.7	416.6	390.9
84°	286.5	360.2	323.0
85°	230.6	299.8	257.2
86°	189.7	228.7	180.5
87°	142.0	158.8	125.2
88°	92.8	91.8	68.1
89°	53.0	43.9	34.6



REPORT NUMBER: P1449914
CATALOG NUMBER: TWC60_T4_36W_3000K

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: P1449914
CATALOG NUMBER: TWC60_T4_36W_3000K

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: P1449914
CATALOG NUMBER: TWC60_T4_36W_3000K

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: SP1-2601-659-1

Test Date: 02/12/2026

Luminaire Tested: MWP2460W34VDDKYYAD-T4-24W-3000K

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

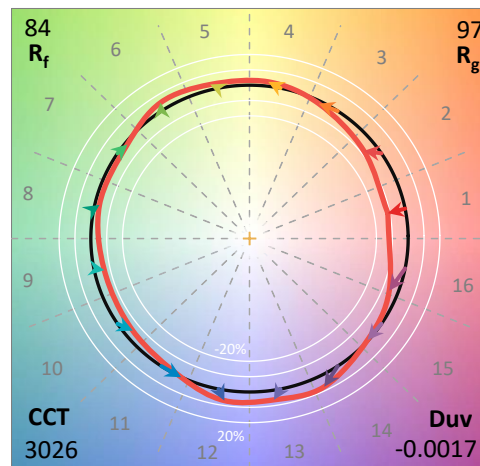
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2601-659-1
 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-3000K**
 Description: Mester Wedge, at T4 beam setting, 24W output, 3000K

Spectral Parameters

CCT (K): 3026
 CIE u': 0.2503
 CIE v': 0.5184
 Duv: -0.0017
 CIE x: 0.4326
 CIE y: 0.3983
 CIE z: 0.1691
 Peak Wavelength (nm): 604
 Dominant Wavelength (nm): 583
 Purity: 49.3886
 Rf: 84
 Rg: 97.4

CRI (Ra):	82.7		
R1:	81.4	R9:	7.5
R2:	90.7	R10:	78.8
R3:	96.3	R11:	80.8
R4:	81.1	R12:	70.7
R5:	81.6	R13:	83.7
R6:	88.6	R14:	98.6
R7:	82.6	R15:	74.2
R8:	59.3		



Test Conditions

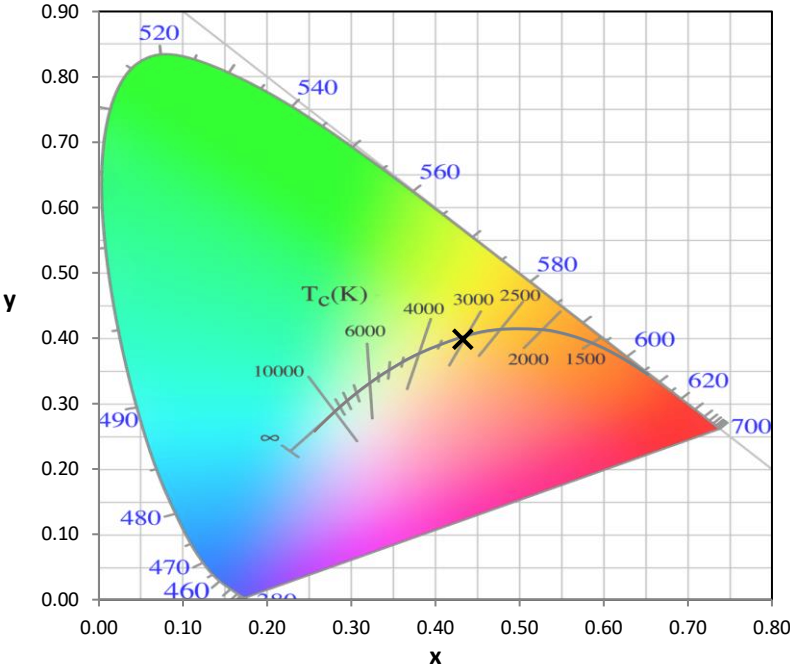
Stabilization Time: 64M
 Operation Time: 2H 4M
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2601-659-1

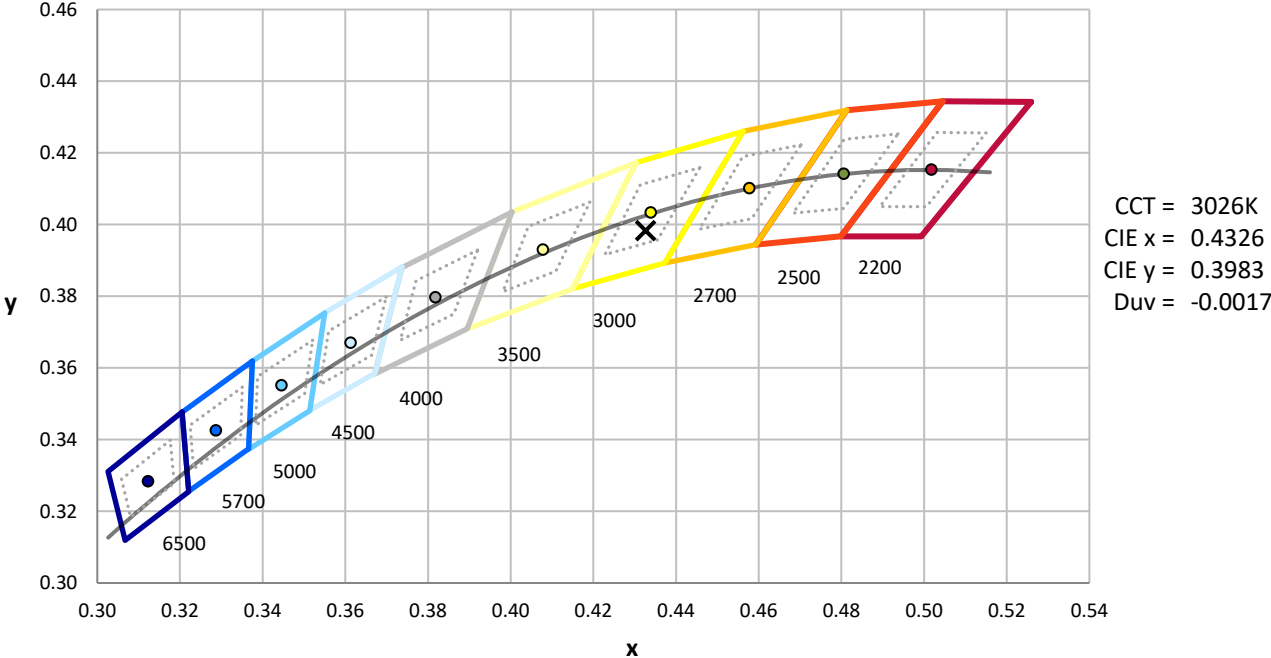
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	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: SP1-2601-659-1

CIE 1931 Chromaticity Diagram



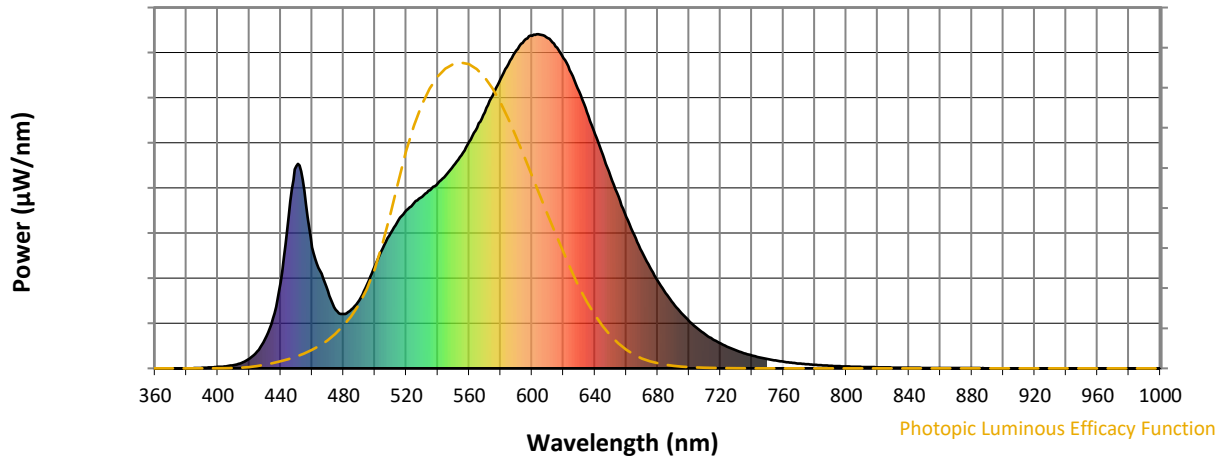
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2601-659-1

Photopic Flux vs. Wavelength

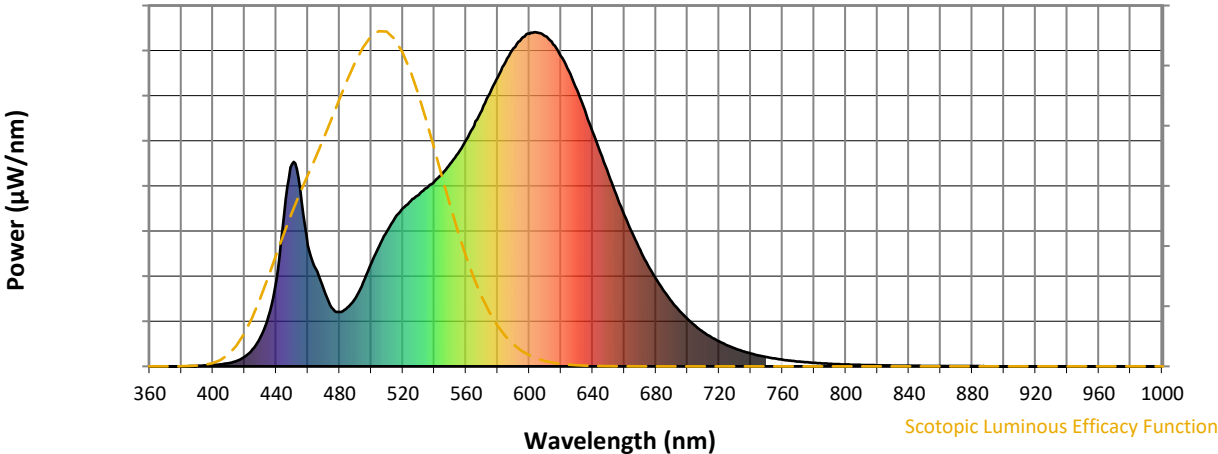


Photopic Lumens: NR

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	204	NR	620	928	NR	750	28	NR	880	1	NR
365	0	NR	495	251	NR	625	884	NR	755	24	NR	885	1	NR
370	0	NR	500	307	NR	630	828	NR	760	20	NR	890	0	NR
375	0	NR	505	360	NR	635	767	NR	765	17	NR	895	0	NR
380	0	NR	510	405	NR	640	702	NR	770	14	NR	900	0	NR
385	1	NR	515	444	NR	645	639	NR	775	12	NR	905	0	NR
390	2	NR	520	473	NR	650	574	NR	780	11	NR	910	0	NR
395	3	NR	525	495	NR	655	514	NR	785	9	NR	915	0	NR
400	5	NR	530	513	NR	660	453	NR	790	8	NR	920	0	NR
405	6	NR	535	534	NR	665	399	NR	795	7	NR	925	0	NR
410	10	NR	540	554	NR	670	348	NR	800	6	NR	930	0	NR
415	17	NR	545	577	NR	675	303	NR	805	5	NR	935	0	NR
420	29	NR	550	606	NR	680	263	NR	810	4	NR	940	0	NR
425	51	NR	555	638	NR	685	226	NR	815	4	NR	945	0	NR
430	87	NR	560	678	NR	690	194	NR	820	3	NR	950	0	NR
435	150	NR	565	720	NR	695	166	NR	825	3	NR	955	0	NR
440	258	NR	570	767	NR	700	142	NR	830	2	NR	960	0	NR
445	454	NR	575	817	NR	705	121	NR	835	2	NR	965	0	NR
450	605	NR	580	866	NR	710	103	NR	840	2	NR	970	0	NR
455	533	NR	585	911	NR	715	87	NR	845	2	NR	975	0	NR
460	362	NR	590	952	NR	720	74	NR	850	1	NR	980	0	NR
465	293	NR	595	981	NR	725	63	NR	855	1	NR	985	0	NR
470	231	NR	600	995	NR	730	54	NR	860	1	NR	990	0	NR
475	176	NR	605	999	NR	735	46	NR	865	1	NR	995	0	NR
480	163	NR	610	989	NR	740	38	NR	870	1	NR	1000	0	NR
485	176	NR	615	964	NR	745	33	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-1

Scotopic Flux vs. Wavelength



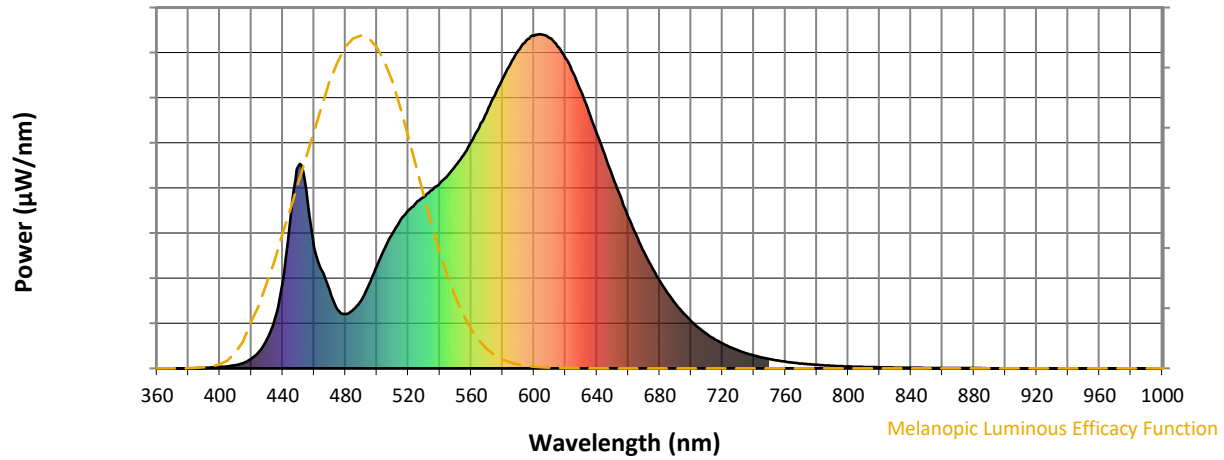
Scotopic Lumens: NR

S/P: 1.35

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	204	NR	620	928	NR	750	28	NR	880	1	NR
365	0	NR	495	251	NR	625	884	NR	755	24	NR	885	1	NR
370	0	NR	500	307	NR	630	828	NR	760	20	NR	890	0	NR
375	0	NR	505	360	NR	635	767	NR	765	17	NR	895	0	NR
380	0	NR	510	405	NR	640	702	NR	770	14	NR	900	0	NR
385	1	NR	515	444	NR	645	639	NR	775	12	NR	905	0	NR
390	2	NR	520	473	NR	650	574	NR	780	11	NR	910	0	NR
395	3	NR	525	495	NR	655	514	NR	785	9	NR	915	0	NR
400	5	NR	530	513	NR	660	453	NR	790	8	NR	920	0	NR
405	6	NR	535	534	NR	665	399	NR	795	7	NR	925	0	NR
410	10	NR	540	554	NR	670	348	NR	800	6	NR	930	0	NR
415	17	NR	545	577	NR	675	303	NR	805	5	NR	935	0	NR
420	29	NR	550	606	NR	680	263	NR	810	4	NR	940	0	NR
425	51	NR	555	638	NR	685	226	NR	815	4	NR	945	0	NR
430	87	NR	560	678	NR	690	194	NR	820	3	NR	950	0	NR
435	150	NR	565	720	NR	695	166	NR	825	3	NR	955	0	NR
440	258	NR	570	767	NR	700	142	NR	830	2	NR	960	0	NR
445	454	NR	575	817	NR	705	121	NR	835	2	NR	965	0	NR
450	605	NR	580	866	NR	710	103	NR	840	2	NR	970	0	NR
455	533	NR	585	911	NR	715	87	NR	845	2	NR	975	0	NR
460	362	NR	590	952	NR	720	74	NR	850	1	NR	980	0	NR
465	293	NR	595	981	NR	725	63	NR	855	1	NR	985	0	NR
470	231	NR	600	995	NR	730	54	NR	860	1	NR	990	0	NR
475	176	NR	605	999	NR	735	46	NR	865	1	NR	995	0	NR
480	163	NR	610	989	NR	740	38	NR	870	1	NR	1000	0	NR
485	176	NR	615	964	NR	745	33	NR	875	1	NR			

REPORT NUMBER: SP1-2601-659-1

Melanopic Flux vs. Wavelength



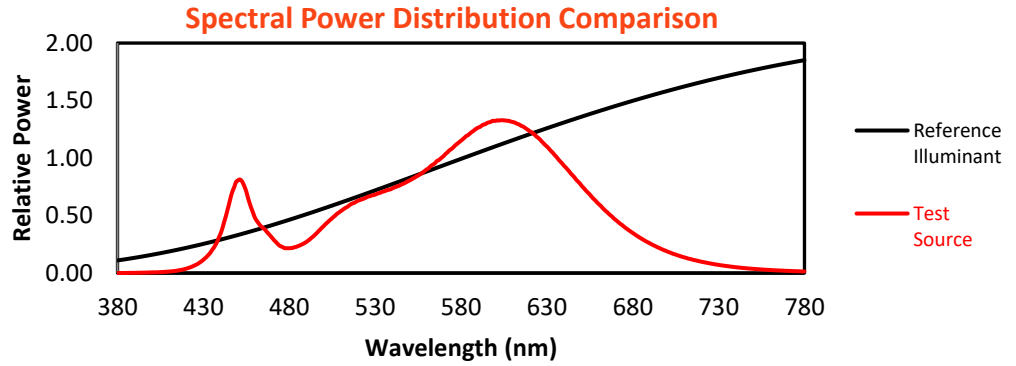
Melanopic Lumens: NR

M/P: 2.61

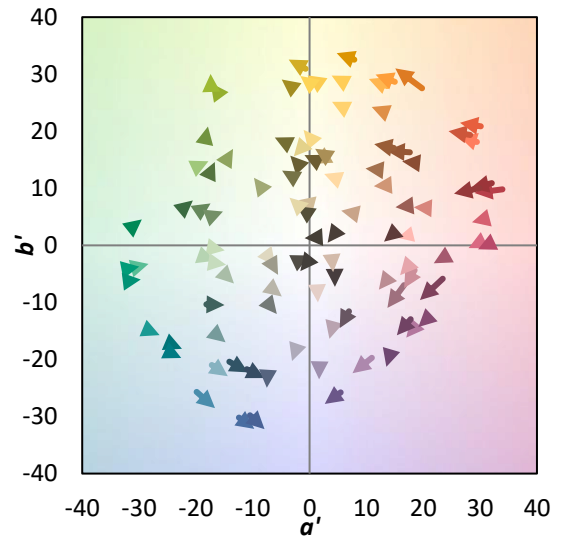
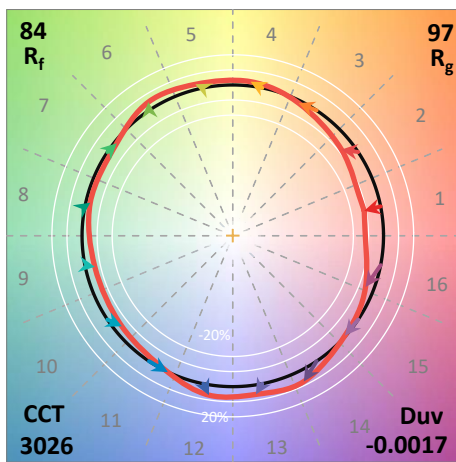
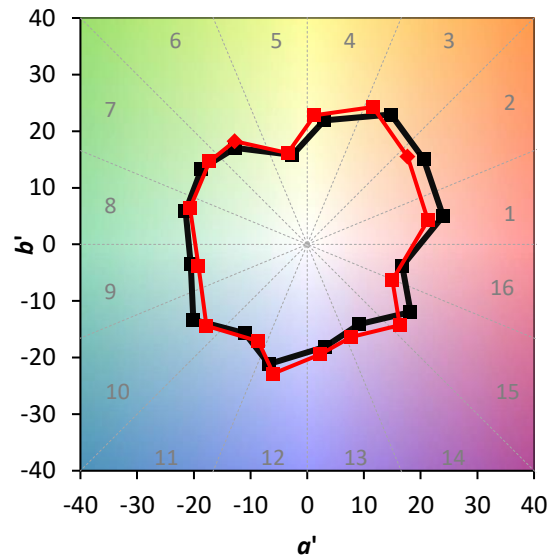
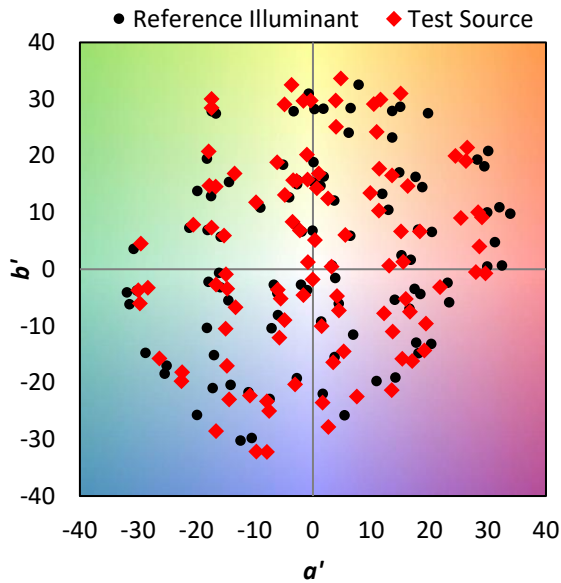
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	204	NR	620	928	NR	750	28	NR	880	1	NR
365	0	NR	495	251	NR	625	884	NR	755	24	NR	885	1	NR
370	0	NR	500	307	NR	630	828	NR	760	20	NR	890	0	NR
375	0	NR	505	360	NR	635	767	NR	765	17	NR	895	0	NR
380	0	NR	510	405	NR	640	702	NR	770	14	NR	900	0	NR
385	1	NR	515	444	NR	645	639	NR	775	12	NR	905	0	NR
390	2	NR	520	473	NR	650	574	NR	780	11	NR	910	0	NR
395	3	NR	525	495	NR	655	514	NR	785	9	NR	915	0	NR
400	5	NR	530	513	NR	660	453	NR	790	8	NR	920	0	NR
405	6	NR	535	534	NR	665	399	NR	795	7	NR	925	0	NR
410	10	NR	540	554	NR	670	348	NR	800	6	NR	930	0	NR
415	17	NR	545	577	NR	675	303	NR	805	5	NR	935	0	NR
420	29	NR	550	606	NR	680	263	NR	810	4	NR	940	0	NR
425	51	NR	555	638	NR	685	226	NR	815	4	NR	945	0	NR
430	87	NR	560	678	NR	690	194	NR	820	3	NR	950	0	NR
435	150	NR	565	720	NR	695	166	NR	825	3	NR	955	0	NR
440	258	NR	570	767	NR	700	142	NR	830	2	NR	960	0	NR
445	454	NR	575	817	NR	705	121	NR	835	2	NR	965	0	NR
450	605	NR	580	866	NR	710	103	NR	840	2	NR	970	0	NR
455	533	NR	585	911	NR	715	87	NR	845	2	NR	975	0	NR
460	362	NR	590	952	NR	720	74	NR	850	1	NR	980	0	NR
465	293	NR	595	981	NR	725	63	NR	855	1	NR	985	0	NR
470	231	NR	600	995	NR	730	54	NR	860	1	NR	990	0	NR
475	176	NR	605	999	NR	735	46	NR	865	1	NR	995	0	NR
480	163	NR	610	989	NR	740	38	NR	870	1	NR	1000	0	NR
485	176	NR	615	964	NR	745	33	NR	875	1	NR			

Summary

$R_f = 84$
 $R_g = 97.4$
 $CIE R_a = 82.7$
 $R_9 = 7.5$

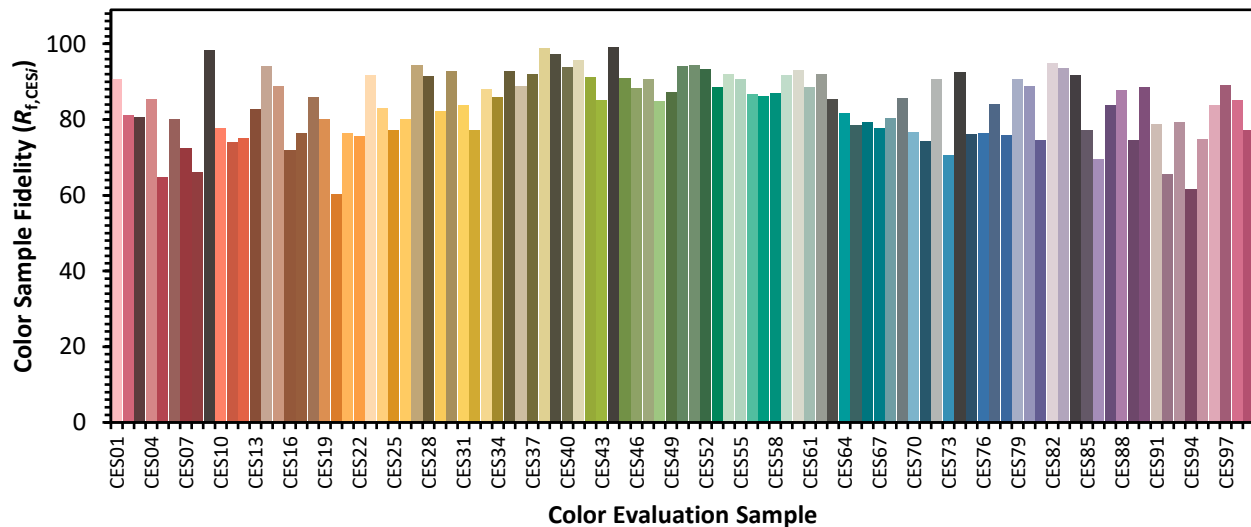


Color Vector Graphics

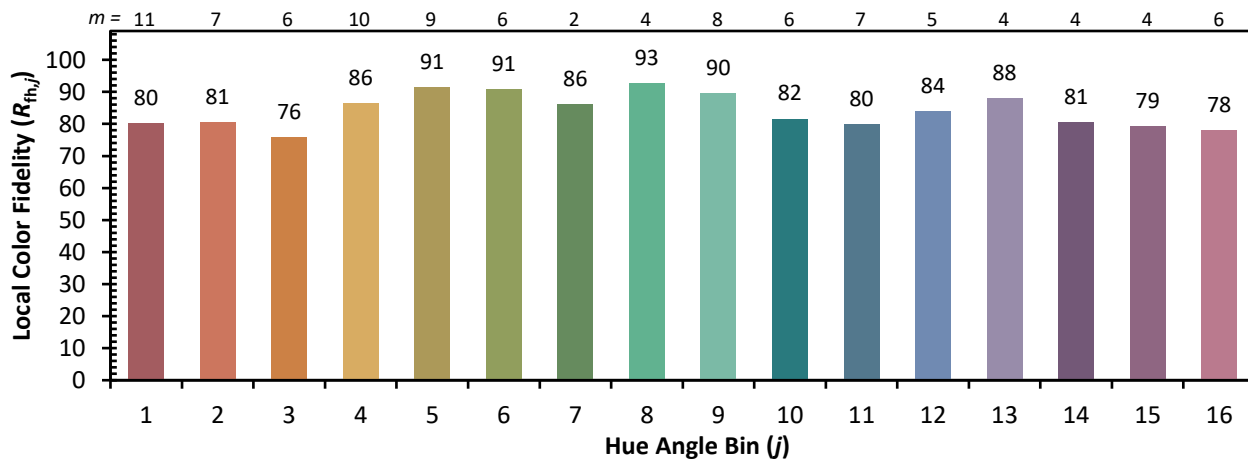
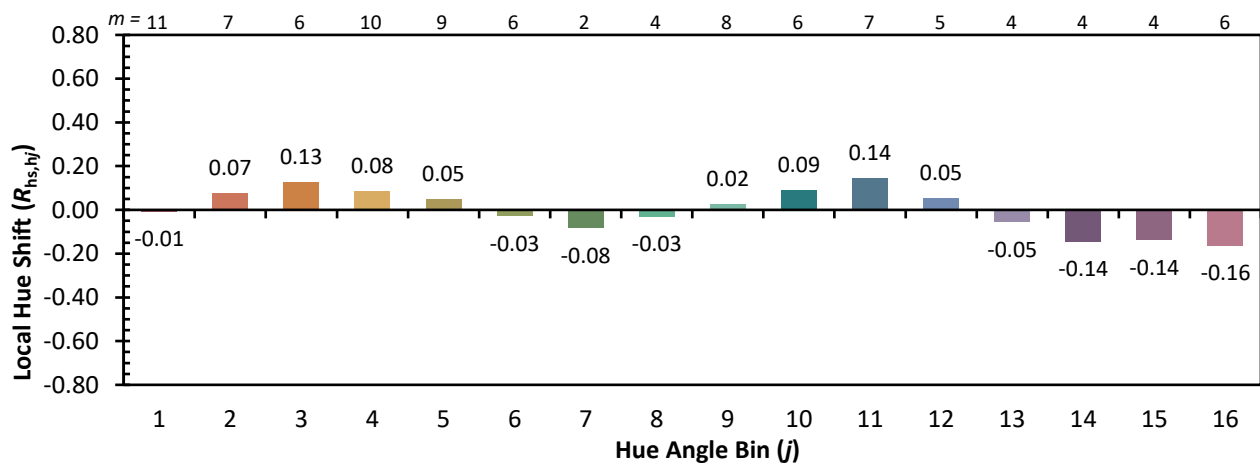
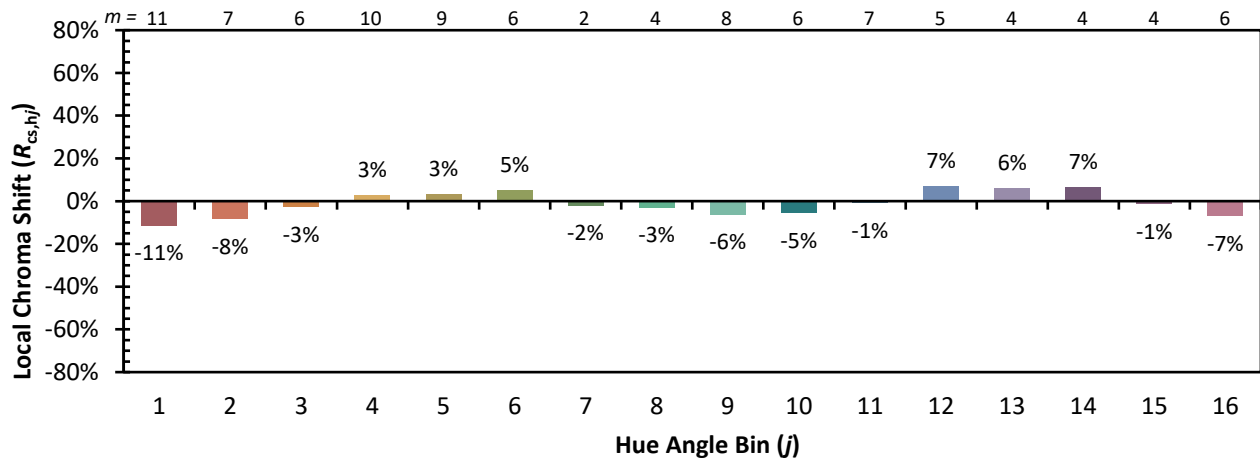


Individual Sample Fidelity Index ($R_{f,i}$)

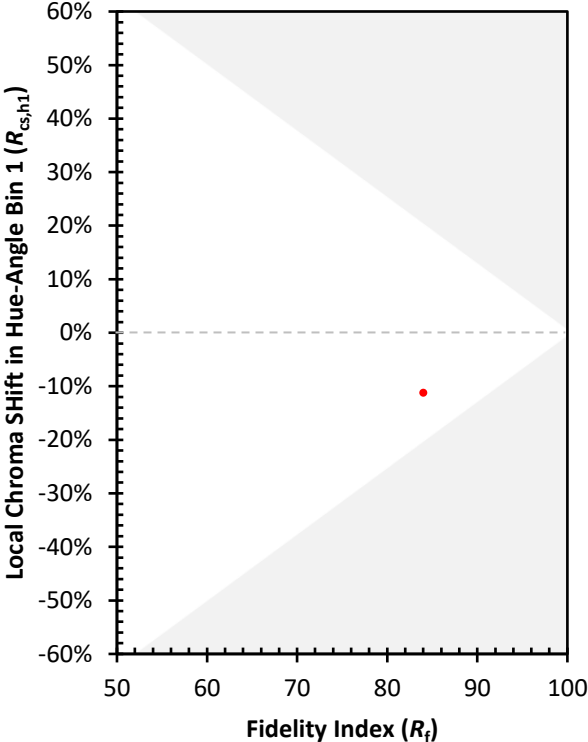
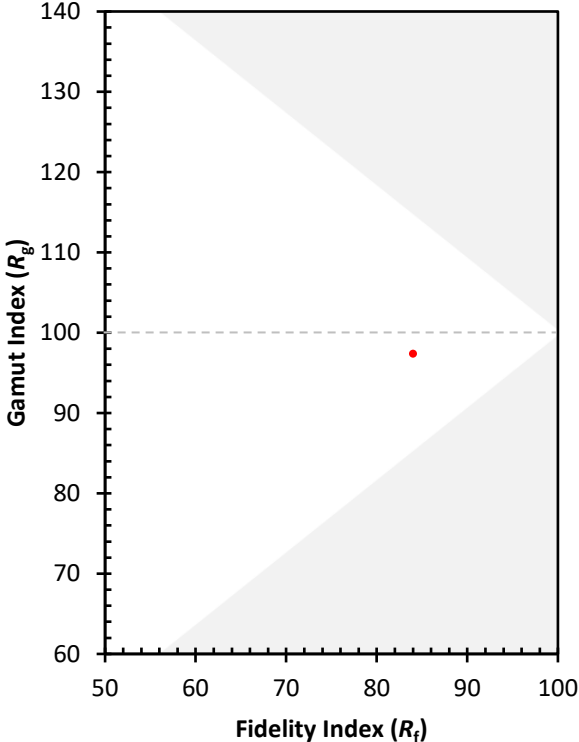
CES01 = 86	CES26 = 80	CES51 = 94	CES76 = 76
CES02 = 63	CES27 = 94	CES52 = 93	CES77 = 84
CES03 = 31	CES28 = 92	CES53 = 88	CES78 = 76
CES04 = 70	CES29 = 82	CES54 = 92	CES79 = 91
CES05 = 50	CES30 = 93	CES55 = 91	CES80 = 89
CES06 = 51	CES31 = 84	CES56 = 87	CES81 = 75
CES07 = 42	CES32 = 77	CES57 = 86	CES82 = 95
CES08 = 41	CES33 = 88	CES58 = 87	CES83 = 93
CES09 = 29	CES34 = 86	CES59 = 92	CES84 = 92
CES10 = 76	CES35 = 93	CES60 = 93	CES85 = 77
CES11 = 59	CES36 = 89	CES61 = 89	CES86 = 69
CES12 = 65	CES37 = 92	CES62 = 92	CES87 = 84
CES13 = 43	CES38 = 99	CES63 = 85	CES88 = 88
CES14 = 74	CES39 = 97	CES64 = 82	CES89 = 75
CES15 = 72	CES40 = 94	CES65 = 79	CES90 = 89
CES16 = 48	CES41 = 96	CES66 = 79	CES91 = 79
CES17 = 50	CES42 = 91	CES67 = 78	CES92 = 66
CES18 = 57	CES43 = 85	CES68 = 80	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 86	CES94 = 62
CES20 = 67	CES45 = 91	CES70 = 77	CES95 = 75
CES21 = 87	CES46 = 88	CES71 = 74	CES96 = 84
CES22 = 79	CES47 = 91	CES72 = 91	CES97 = 89
CES23 = 92	CES48 = 85	CES73 = 71	CES98 = 85
CES24 = 91	CES49 = 87	CES74 = 93	CES99 = 77
CES25 = 72	CES50 = 94	CES75 = 76	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)