

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO COMMERCIAL

Report Number: P776006

Luminaire Tested: HCDJBS1525CSD-HCD4TSQH-2500lm-3000K

Issue Date: 2/7/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P776006  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( A2310613A001)  
Test Lab:  
Issue Date: 2/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO COMMERCIAL  
Catalog Number: HCDJBL51525CSD-HCD4TSQH-2500lm-3000K  
Description: 4 INCH SQUARE MEDIUM HAZE TRIM  
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2480.7 lumens  
Efficiency: N/A  
Efficacy: 99.2 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.05 / 1.09  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

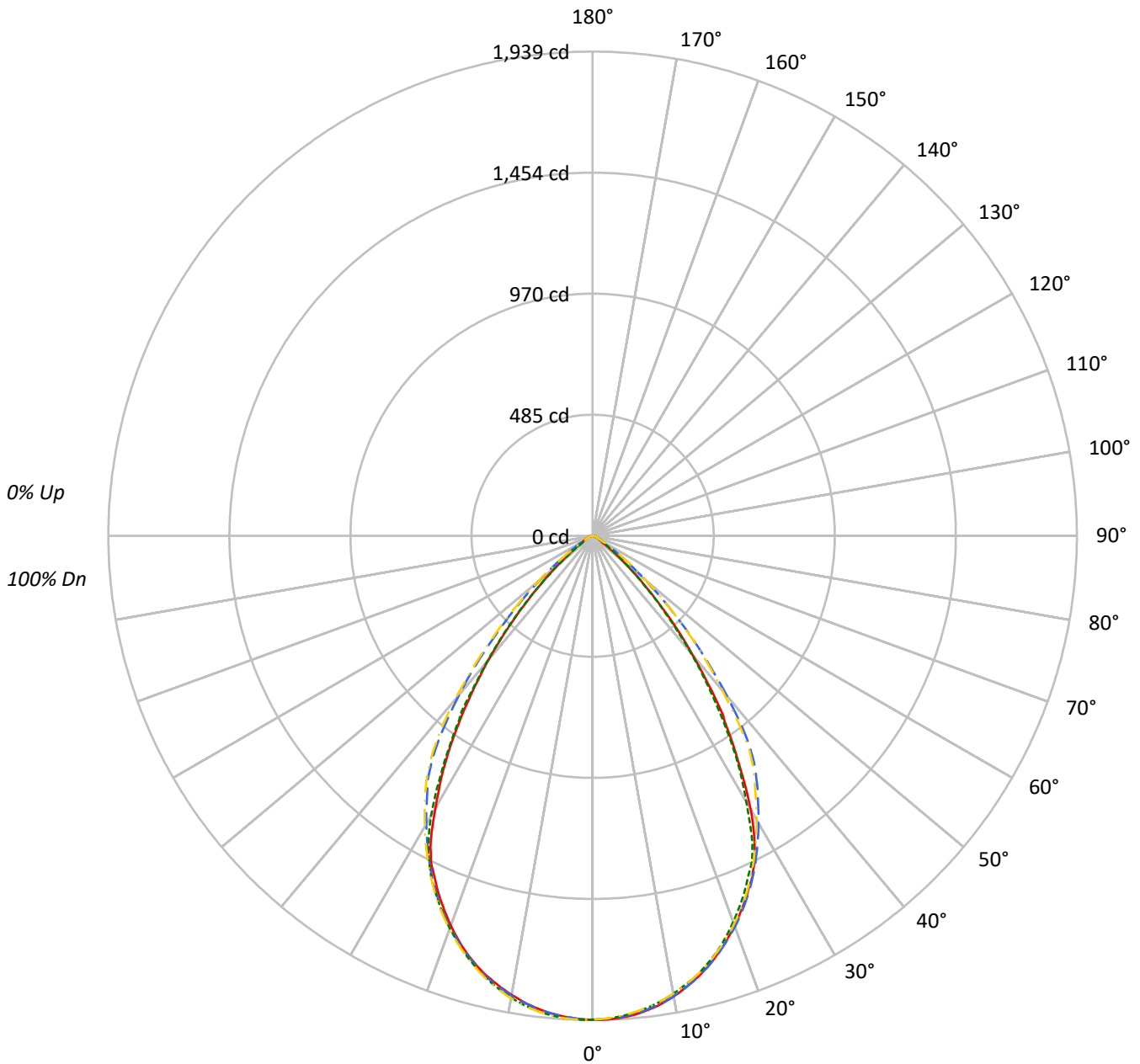
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20										
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	85	84					84			
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	67	87	78	72	67	76	71	66	74	70	66	73	69	65	64					64			
6	83	73	66	61	82	72	66	61	71	65	61	69	64	60	68	63	60	58					58			
7	78	68	61	56	77	67	61	56	66	60	56	65	59	56	63	59	55	54					54			
8	74	63	56	52	73	63	56	52	61	56	51	60	55	51	59	55	51	49					49			
9	70	59	52	48	69	58	52	48	57	52	48	57	51	47	56	51	47	46					46			
10	66	55	49	44	65	55	49	44	54	48	44	53	48	44	52	47	44	43					43			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	191536	191536	191536	191536
5°	191018	190184	190432	191187
10°	187967	186833	187355	188519
15°	182647	181665	182627	183455
20°	174766	173125	174661	176007
25°	164768	162020	163743	166175
30°	144333	140589	143739	147517
35°	113255	110842	115463	117020
40°	80579	78863	83676	84501
45°	49260	48016	52223	52545
50°	24188	24942	26925	26049
55°	9064	12511	13200	10133
60°	6583	8342	8441	6682
65°	5192	6595	6689	5379
70°	4133	5289	5346	4364
75°	3208	4163	4163	3590
80°	2106	3244	3074	2789
85°	794	2495	1361	1928

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 315°  
 Vertical Angle: 45°  
 Luminance: 75567 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.8	7.3
10°-20°	501.1	20.2
20°-30°	689.7	27.8
30°-40°	633.6	25.5
40°-50°	342.7	13.8
50°-60°	92.3	3.7
60°-70°	26.3	1.1
70°-80°	11.0	0.4
80°-90°	2.1	0.1
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°-30°	1372.6	55.3
0°-40°	2006.2	80.9
0°-60°	2441.2	98.4
0°-90°	2480.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2480.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1938	1938	1938	1938	1938	
5°	1925	1917	1919	1927	1925	182
15°	1785	1775	1785	1793	1785	501
25°	1511	1486	1501	1524	1511	686
35°	939	919	957	970	939	583
45°	352	344	374	376	352	278
55°	53	73	77	59	53	62
65°	22	28	29	23	22	22
75°	8	11	11	9	8	9
85°	1	2	1	2	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1937.8	1937.8	1937.8	1937.8	1937.8	1937.8	1937.8	1937.8	1937.8	1937.8	1937.8
0.5°	1938.8	1938.0	1937.3	1936.6	1937.8	1936.6	1937.0	1937.3	1938.0	1938.0	1937.0
1°	1938.8	1937.5	1936.6	1936.1	1936.8	1935.6	1935.8	1936.1	1937.0	1937.5	1936.6
1.5°	1938.0	1936.6	1936.3	1934.8	1935.1	1933.6	1934.3	1934.6	1936.1	1936.3	1935.3
2°	1937.5	1935.8	1934.8	1933.6	1933.1	1932.1	1932.4	1932.9	1934.1	1935.1	1934.1
2.5°	1936.3	1934.6	1933.6	1931.9	1931.1	1929.9	1930.4	1930.6	1932.6	1933.3	1932.6
3°	1934.8	1932.4	1931.9	1930.1	1929.1	1927.4	1927.9	1928.4	1930.6	1931.9	1930.6
3.5°	1932.9	1930.4	1929.6	1927.9	1926.7	1924.7	1924.9	1925.7	1928.2	1929.6	1928.7
4°	1930.6	1927.9	1927.9	1925.4	1923.7	1922.0	1922.0	1923.0	1925.2	1927.4	1926.2
4.5°	1928.2	1924.9	1924.7	1922.7	1920.3	1918.3	1918.8	1919.8	1922.5	1924.9	1923.2
5°	1925.2	1921.7	1921.7	1919.3	1916.8	1914.8	1915.1	1916.3	1919.3	1921.5	1920.0
5.5°	1921.5	1918.3	1918.5	1915.8	1912.8	1910.6	1911.1	1912.4	1915.6	1918.5	1916.6
6°	1918.0	1914.1	1914.6	1911.9	1908.7	1906.2	1906.9	1908.4	1911.4	1914.6	1912.6
6.5°	1913.8	1909.9	1910.6	1907.9	1904.0	1901.5	1902.2	1903.7	1907.2	1910.9	1908.7
7°	1909.1	1904.9	1905.9	1903.0	1899.0	1896.3	1897.5	1899.3	1902.5	1906.4	1904.2
7.5°	1904.2	1900.0	1901.2	1898.5	1893.6	1891.1	1892.1	1894.1	1897.3	1901.7	1899.3
8°	1899.0	1894.6	1896.6	1892.6	1887.9	1884.9	1886.4	1888.2	1892.1	1896.6	1894.1
8.5°	1893.1	1888.9	1890.9	1886.7	1881.5	1879.3	1880.7	1882.5	1886.2	1890.9	1888.6
9°	1886.9	1883.0	1884.9	1880.7	1875.3	1872.6	1874.3	1876.3	1880.0	1884.9	1883.0
9.5°	1880.3	1875.8	1879.0	1874.6	1868.4	1865.9	1867.7	1869.6	1873.3	1879.0	1876.5
10°	1872.8	1868.9	1872.1	1867.4	1861.5	1859.0	1861.0	1863.0	1866.7	1872.6	1870.1
10.5°	1865.7	1861.2	1865.2	1860.2	1854.3	1851.9	1854.1	1855.8	1859.5	1865.9	1863.0
11°	1858.0	1853.6	1858.5	1852.8	1846.9	1844.4	1846.7	1848.4	1852.3	1858.8	1855.8
11.5°	1850.1	1845.7	1850.1	1845.2	1838.8	1836.3	1838.5	1841.5	1845.2	1851.4	1848.1
12°	1841.5	1837.0	1842.2	1836.8	1830.6	1828.4	1830.6	1833.3	1837.0	1844.2	1843.0
12.5°	1833.1	1828.1	1833.3	1828.4	1822.5	1820.2	1822.5	1825.4	1828.9	1835.8	1834.6
13°	1824.2	1819.3	1824.9	1819.5	1814.6	1812.1	1814.3	1817.3	1820.7	1827.7	1826.2
13.5°	1815.1	1809.6	1815.8	1810.4	1806.2	1803.9	1806.2	1809.4	1812.6	1819.5	1817.8
14°	1805.4	1800.2	1805.9	1801.0	1796.3	1793.8	1796.8	1799.5	1804.4	1811.4	1809.6
14.5°	1795.1	1789.6	1795.8	1791.4	1785.9	1783.7	1786.7	1789.4	1794.8	1803.2	1798.0
15°	1784.9	1779.3	1785.9	1781.5	1775.3	1773.6	1776.0	1779.5	1784.7	1793.3	1787.9
15.5°	1774.1	1768.6	1775.5	1770.6	1764.4	1762.5	1765.2	1768.6	1774.1	1783.2	1777.3
16°	1763.2	1757.5	1764.2	1759.5	1753.3	1751.6	1754.1	1758.0	1763.2	1772.6	1766.7
16.5°	1751.3	1746.7	1752.8	1748.4	1741.5	1739.7	1742.9	1746.7	1752.3	1761.5	1755.5
17°	1739.7	1734.3	1741.7	1737.0	1729.4	1728.1	1731.3	1735.3	1741.0	1750.4	1743.9
17.5°	1727.6	1722.5	1729.6	1724.9	1716.8	1716.0	1719.2	1722.9	1728.4	1739.0	1732.1
18°	1715.0	1709.9	1717.8	1712.3	1702.9	1703.2	1707.1	1710.8	1715.3	1727.1	1720.2
18.5°	1701.5	1696.8	1704.9	1700.0	1689.1	1689.9	1694.3	1698.0	1702.2	1714.6	1707.9
19°	1688.6	1683.4	1692.6	1686.9	1674.8	1676.0	1681.5	1684.7	1688.6	1701.5	1695.0
19.5°	1675.0	1670.1	1679.5	1672.8	1660.7	1662.0	1668.4	1671.1	1674.8	1687.9	1682.0
20°	1661.5	1656.3	1666.4	1658.5	1645.9	1647.1	1655.0	1657.0	1660.5	1674.1	1668.9
20.5°	1647.1	1642.2	1652.8	1643.9	1631.1	1632.3	1641.0	1642.4	1645.9	1660.0	1654.8
21°	1632.6	1627.4	1638.2	1628.9	1615.8	1617.3	1626.9	1627.6	1631.1	1645.2	1641.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
22.5°	1588.1	1582.2	1594.5	1581.9	1569.3	1570.6	1582.7	1581.2	1584.9	1599.5	1597.5
23°	1571.6	1566.6	1579.2	1565.4	1552.8	1554.3	1567.6	1564.7	1569.3	1583.7	1582.2
23.5°	1556.3	1551.1	1563.2	1549.8	1535.5	1538.5	1551.6	1548.6	1552.8	1567.6	1566.1
24°	1540.5	1534.5	1547.6	1533.0	1517.7	1521.7	1535.3	1532.3	1536.0	1551.6	1549.8
24.5°	1526.1	1518.2	1531.1	1516.7	1501.2	1504.4	1518.0	1515.8	1518.5	1535.0	1533.0
25°	1510.8	1500.9	1514.0	1498.7	1485.6	1486.6	1500.9	1498.7	1501.4	1518.0	1516.3
25.5°	1490.8	1484.9	1496.5	1480.9	1470.1	1468.6	1483.2	1481.2	1485.4	1500.2	1499.0
26°	1472.8	1469.3	1478.2	1462.4	1454.5	1451.1	1465.4	1463.4	1470.3	1482.4	1481.7
26.5°	1453.3	1454.0	1460.7	1444.9	1431.8	1434.5	1446.9	1445.1	1451.8	1464.4	1463.4
27°	1430.1	1433.8	1442.4	1427.8	1407.8	1418.7	1428.3	1427.6	1427.6	1447.8	1445.1
27.5°	1405.9	1414.3	1423.9	1412.0	1385.4	1402.4	1409.6	1410.6	1406.4	1432.3	1426.6
28°	1380.4	1393.5	1404.6	1396.0	1354.5	1383.6	1390.6	1394.5	1380.2	1415.3	1407.8
28.5°	1353.8	1371.8	1386.1	1378.2	1323.1	1358.2	1371.5	1376.0	1350.3	1391.1	1389.3
29°	1326.1	1348.1	1366.6	1353.8	1293.0	1337.2	1352.5	1352.3	1320.2	1369.1	1370.1
29.5°	1295.7	1323.4	1348.1	1331.0	1262.1	1311.3	1332.5	1330.5	1289.3	1346.8	1351.3
30°	1264.6	1296.5	1329.1	1306.8	1231.8	1280.7	1313.3	1306.1	1259.4	1318.2	1332.0
30.5°	1231.8	1270.5	1309.6	1277.2	1202.1	1250.0	1293.3	1276.7	1228.8	1287.6	1312.8
31°	1198.7	1240.7	1289.8	1246.3	1172.7	1220.4	1273.0	1247.8	1199.9	1257.9	1293.0
31.5°	1165.1	1211.5	1270.0	1216.2	1143.1	1190.0	1252.5	1217.4	1171.0	1227.6	1272.8
32°	1130.8	1179.2	1250.0	1186.3	1114.2	1160.6	1232.8	1187.8	1141.9	1198.2	1253.3
32.5°	1097.7	1148.3	1231.5	1156.2	1083.6	1132.0	1212.5	1158.2	1112.2	1168.8	1233.3
33°	1065.3	1115.5	1213.5	1127.1	1052.7	1103.9	1193.5	1130.0	1082.9	1139.9	1214.5
33.5°	1033.2	1082.1	1194.2	1098.2	1019.4	1075.0	1175.0	1100.9	1053.0	1110.8	1197.9
34°	1001.9	1050.0	1172.3	1069.5	986.8	1046.3	1156.9	1073.2	1021.9	1082.1	1180.9
34.5°	970.3	1017.7	1153.2	1040.4	952.2	1016.4	1137.9	1044.6	989.3	1053.2	1156.0
35°	938.6	985.3	1133.7	1011.0	918.6	988.0	1116.9	1017.2	956.9	1024.1	1130.8
35.5°	907.8	954.7	1112.7	980.9	884.8	956.4	1093.7	988.0	924.6	994.0	1109.0
36°	888.8	924.3	1088.0	950.5	853.0	925.1	1070.3	959.6	892.0	963.8	1082.1
36.5°	854.2	894.7	1059.6	919.1	820.6	893.2	1040.4	929.5	859.6	933.0	1052.2
37°	818.9	864.8	1033.0	887.3	789.7	861.3	1010.5	899.4	826.8	901.4	1021.6
37.5°	783.6	834.7	1004.3	856.4	759.4	828.8	978.4	869.0	795.9	869.3	990.7
38°	748.2	804.8	971.0	825.5	729.7	797.6	943.6	838.4	765.8	838.4	959.4
38.5°	716.6	774.9	936.4	794.9	699.8	767.5	909.0	807.3	735.9	806.5	928.0
39°	685.3	744.8	902.8	764.1	671.2	738.1	874.4	776.9	706.0	776.4	895.9
39.5°	654.7	714.2	869.5	733.2	641.1	710.5	841.3	747.0	676.9	746.5	864.1
40°	624.5	684.0	836.2	703.8	611.2	681.3	808.8	718.4	648.5	717.1	832.0
40.5°	595.6	653.4	802.8	675.4	581.1	653.4	777.4	689.0	618.8	688.0	800.4
41°	566.7	624.3	769.2	647.5	552.2	626.3	746.8	661.3	589.5	659.8	767.8
41.5°	538.1	595.6	735.9	619.8	522.5	599.3	716.6	634.2	559.6	632.4	736.1
42°	510.4	568.0	704.0	591.7	494.6	570.9	687.3	607.0	530.9	604.5	703.8
42.5°	482.8	540.3	672.9	564.5	467.5	543.0	658.9	580.3	503.0	577.1	672.2
43°	455.9	513.6	642.1	537.1	441.0	515.9	630.7	553.2	475.9	549.2	640.1
43.5°	428.2	487.7	611.9	509.9	415.1	489.4	602.5	526.5	449.2	521.8	609.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	352.4	411.7	523.5	431.2	343.5	412.2	518.6	448.5	373.6	442.8	520.1
45.5°	328.7	386.7	494.6	406.7	320.5	388.9	491.7	423.0	349.9	417.8	492.4
46°	306.0	363.0	467.0	382.5	298.1	365.5	464.8	399.1	327.0	393.6	464.8
46.5°	283.7	339.8	440.1	359.8	277.1	343.0	439.1	375.4	304.7	370.4	438.3
47°	262.8	317.6	413.6	337.6	257.1	321.0	414.4	352.6	282.8	347.5	413.1
47.5°	243.2	295.8	388.2	315.6	238.3	299.8	390.4	329.9	262.3	324.7	388.4
48°	224.2	275.1	364.0	294.1	222.5	279.0	368.2	308.4	242.7	303.7	364.5
48.5°	206.4	255.6	340.8	273.6	206.7	259.3	346.0	287.9	225.7	282.8	341.3
49°	189.4	236.8	318.6	254.6	190.9	240.5	325.0	267.4	208.9	262.8	320.0
49.5°	172.9	218.8	297.6	235.8	175.3	224.2	305.0	248.2	191.9	243.5	297.6
50°	157.3	201.5	277.1	217.6	162.2	207.9	285.7	231.6	175.1	226.5	276.8
50.5°	143.0	184.7	256.8	200.0	150.1	191.6	267.4	215.1	161.5	209.2	257.6
51°	129.6	169.2	238.1	184.2	139.8	175.3	248.9	198.3	148.9	191.9	239.5
51.5°	117.3	154.6	220.0	169.4	129.9	162.0	232.9	181.8	137.5	174.8	222.7
52°	105.7	140.8	203.2	155.6	120.5	149.6	217.3	165.2	126.9	160.3	206.2
52.5°	95.1	127.4	186.7	143.2	111.6	138.3	201.5	151.4	117.5	147.2	189.7
53°	85.2	115.1	171.6	131.9	103.2	127.9	185.7	138.8	108.4	135.3	173.1
53.5°	77.0	104.0	157.3	121.7	95.6	118.5	169.9	127.4	100.0	124.5	158.0
54°	68.9	93.6	144.0	112.1	87.7	109.9	156.6	117.1	91.9	114.6	144.7
54.5°	60.7	83.7	131.1	103.2	80.0	101.5	144.0	107.4	84.0	105.2	132.4
55°	52.6	74.6	120.0	95.3	72.6	93.6	132.1	98.8	76.6	96.8	120.5
55.5°	47.2	67.9	109.2	87.4	65.9	86.2	121.0	90.6	69.1	88.9	109.6
56°	45.2	61.5	99.3	81.0	60.0	78.8	110.6	82.7	62.7	81.2	99.5
56.5°	43.5	54.8	90.1	74.3	55.8	71.6	101.0	75.6	57.5	74.1	90.4
57°	42.0	48.4	83.5	67.7	53.3	64.7	92.1	68.7	53.8	66.9	81.7
57.5°	40.3	41.7	76.6	61.0	51.4	58.5	84.0	62.0	51.9	60.3	74.1
58°	38.8	40.3	69.9	55.3	49.4	52.8	76.3	55.6	49.9	54.6	67.2
58.5°	37.3	38.8	63.2	50.4	47.7	48.6	69.6	50.4	47.9	50.1	60.7
59°	35.8	37.3	56.6	46.7	45.7	46.4	63.2	46.4	46.2	47.2	55.3
59.5°	34.6	35.8	51.6	44.7	44.0	44.5	57.8	44.2	44.5	45.4	50.6
60°	33.3	34.6	47.4	42.7	42.2	42.7	52.8	42.5	42.7	43.7	46.4
60.5°	31.9	33.3	43.5	41.2	40.5	41.2	48.4	40.7	41.0	42.0	42.5
61°	30.6	31.9	40.3	39.5	39.0	39.5	44.5	39.0	39.5	40.3	39.5
61.5°	29.6	30.9	37.3	38.0	37.5	38.0	41.0	37.5	38.0	38.8	36.5
62°	28.4	29.6	34.8	36.3	36.1	36.5	38.0	36.1	36.3	37.3	34.1
62.5°	27.2	28.4	32.4	35.1	34.6	35.1	35.6	34.6	35.1	35.8	31.9
63°	26.2	27.4	30.4	33.6	33.1	33.6	33.1	33.3	33.6	34.3	30.1
63.5°	25.2	26.2	28.6	32.1	31.9	32.4	31.1	31.9	32.4	33.1	28.4
64°	24.2	25.2	27.4	30.9	30.6	31.1	29.1	30.6	30.9	31.6	27.2
64.5°	23.2	24.2	26.4	29.6	29.4	29.9	27.7	29.4	29.6	30.4	25.9
65°	22.2	23.5	25.2	28.4	28.2	28.6	26.4	28.2	28.6	29.1	24.9
65.5°	21.5	22.5	24.2	27.4	26.9	27.4	25.4	26.9	27.4	27.9	24.0
66°	20.5	21.5	23.5	26.2	25.7	26.4	24.4	25.9	26.2	26.9	23.0





TEST NUMBER: P776006

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQH-2500lm-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	18.0	19.0	20.7	23.0	22.7	23.2	21.7	22.7	23.0	23.7	20.2
68°	17.3	18.3	19.8	22.0	21.7	22.2	20.7	21.7	22.0	22.7	19.5
68.5°	16.5	17.3	19.0	21.2	20.7	21.2	20.0	20.7	21.0	21.7	18.8
69°	15.8	16.5	18.3	20.2	20.0	20.5	19.0	20.0	20.2	20.7	18.0
69.5°	15.1	15.8	17.5	19.5	19.0	19.5	18.3	19.0	19.3	19.8	17.3
70°	14.3	15.1	16.8	18.5	18.3	18.8	17.5	18.3	18.5	19.0	16.3
70.5°	13.6	14.6	16.1	17.8	17.3	18.0	16.5	17.3	17.5	18.0	15.8
71°	13.1	13.8	15.3	17.0	16.5	17.0	15.8	16.5	16.8	17.3	15.1
71.5°	12.3	13.1	14.6	16.1	15.8	16.3	15.1	15.8	15.8	16.3	14.3
72°	11.9	12.6	13.8	15.6	15.1	15.6	14.6	15.1	15.1	15.6	13.6
72.5°	11.1	11.9	13.3	14.8	14.3	14.8	13.8	14.3	14.3	14.8	13.1
73°	10.6	11.4	12.6	14.1	13.6	14.1	13.1	13.6	13.6	14.1	12.3
73.5°	9.9	10.6	11.9	13.3	12.8	13.3	12.6	12.8	12.8	13.3	11.9
74°	9.4	10.1	11.4	12.6	12.3	12.8	11.9	12.1	12.3	12.8	11.4
74.5°	8.9	9.6	10.9	12.1	11.6	12.1	11.4	11.6	11.6	12.1	10.6
75°	8.4	8.9	10.1	11.4	10.9	11.6	10.6	10.9	10.9	11.4	10.1
75.5°	7.9	8.4	9.6	10.9	10.4	10.9	10.1	10.4	10.4	10.9	9.6
76°	7.2	7.9	9.1	10.4	9.9	10.4	9.6	9.6	9.6	10.1	9.1
76.5°	6.7	7.4	8.6	9.6	9.1	9.9	9.1	9.1	9.1	9.6	8.4
77°	6.4	6.9	8.1	9.1	8.6	9.1	8.6	8.4	8.4	8.9	7.9
77.5°	5.9	6.4	7.7	8.6	8.1	8.6	8.1	7.9	7.9	8.4	7.4
78°	5.4	5.9	7.2	8.1	7.7	8.1	7.7	7.4	7.4	7.9	6.9
78.5°	4.9	5.4	6.7	7.7	7.2	7.7	7.2	6.9	6.9	7.2	6.7
79°	4.7	4.9	6.2	7.2	6.7	7.2	6.7	6.4	6.4	6.7	6.2
79.5°	4.2	4.4	5.9	6.7	6.2	6.7	6.2	5.9	5.9	6.2	5.7
80°	3.7	4.2	5.4	6.2	5.7	6.2	5.9	5.4	5.4	5.7	5.2
80.5°	3.5	3.7	4.9	5.7	5.4	5.7	5.4	4.9	4.9	5.2	4.9
81°	3.0	3.2	4.7	5.2	4.9	5.2	4.9	4.4	4.4	4.7	4.4
81.5°	2.7	3.0	4.2	4.7	4.4	4.9	4.7	4.0	4.0	4.2	4.2
82°	2.5	2.5	4.0	4.4	4.2	4.4	4.2	3.7	3.7	3.7	3.7
82.5°	2.0	2.2	3.5	4.0	3.7	4.2	4.0	3.2	3.2	3.2	3.5
83°	1.7	2.0	3.2	3.7	3.5	3.7	3.5	3.0	2.7	3.0	3.0
83.5°	1.2	1.5	2.7	3.2	3.2	3.5	3.2	2.5	2.5	2.5	2.7
84°	1.0	1.2	2.5	3.0	2.7	3.0	3.0	2.2	2.0	2.2	2.5
84.5°	1.0	1.0	2.2	2.5	2.5	2.7	2.5	2.0	1.7	1.7	2.2
85°	0.7	1.0	2.0	2.2	2.2	2.5	2.2	1.5	1.2	1.5	2.0
85.5°	0.5	0.7	1.7	2.0	1.7	2.0	2.0	1.2	1.0	1.2	1.5
86°	0.5	0.5	1.2	1.5	1.5	1.7	1.7	1.0	1.0	1.0	1.2
86.5°	0.5	0.5	1.0	1.2	1.2	1.5	1.5	1.0	0.7	0.7	1.0
87°	0.2	0.2	0.7	1.0	1.0	1.0	1.2	0.7	0.7	0.7	0.7
87.5°	0.0	0.2	0.5	0.7	0.7	0.7	1.0	0.5	0.5	0.5	0.5
88°	0.0	0.0	0.2	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.2
88.5°	0.0	0.0	0.0	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2



TEST NUMBER: P776006

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776006

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1937.8	1937.8	1937.8	1937.8	1937.8	1937.8
0.5°	1937.3	1939.0	1938.0	1938.5	1938.0	1938.8
1°	1937.0	1938.8	1938.0	1938.5	1938.0	1938.8
1.5°	1936.3	1938.8	1938.0	1938.3	1938.0	1938.0
2°	1935.3	1938.0	1937.8	1937.8	1937.5	1937.5
2.5°	1934.1	1937.5	1936.8	1937.5	1936.6	1936.3
3°	1932.4	1936.3	1935.6	1936.1	1935.3	1934.8
3.5°	1930.4	1934.3	1934.1	1934.6	1933.6	1932.9
4°	1927.9	1932.1	1932.1	1932.6	1931.9	1930.6
4.5°	1925.2	1929.6	1929.9	1930.4	1929.4	1928.2
5°	1922.2	1926.9	1927.2	1927.7	1926.7	1925.2
5.5°	1918.8	1924.0	1924.2	1924.5	1923.5	1921.5
6°	1915.1	1920.3	1920.8	1921.2	1920.0	1918.0
6.5°	1910.9	1916.3	1917.0	1917.3	1916.1	1913.8
7°	1906.4	1912.1	1912.8	1913.3	1911.9	1909.1
7.5°	1901.5	1907.7	1908.7	1908.7	1907.2	1904.2
8°	1896.1	1902.2	1903.5	1904.0	1902.0	1899.0
8.5°	1890.6	1897.0	1898.3	1898.5	1896.6	1893.1
9°	1884.9	1890.9	1892.8	1893.1	1890.4	1886.9
9.5°	1878.5	1884.4	1886.4	1886.9	1884.7	1880.3
10°	1871.9	1878.3	1879.8	1880.7	1877.8	1872.8
10.5°	1864.7	1871.4	1873.1	1873.8	1870.9	1865.7
11°	1857.8	1863.7	1865.7	1866.4	1863.5	1858.0
11.5°	1850.1	1856.3	1858.0	1859.0	1855.8	1850.1
12°	1842.2	1847.9	1850.1	1851.1	1847.2	1841.5
12.5°	1833.3	1839.8	1841.7	1842.5	1839.0	1833.1
13°	1824.7	1831.1	1833.3	1834.3	1830.4	1824.2
13.5°	1816.0	1822.2	1824.4	1824.9	1821.0	1815.1
14°	1807.2	1813.1	1815.3	1815.1	1811.6	1805.4
14.5°	1800.2	1803.2	1805.7	1804.9	1801.7	1795.1
15°	1790.1	1792.8	1795.8	1794.8	1791.6	1784.9
15.5°	1779.5	1782.7	1784.7	1784.4	1781.0	1774.1
16°	1768.6	1771.8	1774.3	1774.1	1770.1	1763.2
16.5°	1757.5	1760.7	1763.4	1762.7	1759.2	1751.3
17°	1745.9	1748.9	1752.1	1751.1	1747.9	1739.7
17.5°	1734.1	1737.3	1740.2	1739.5	1735.8	1727.6
18°	1721.7	1724.7	1728.1	1727.4	1723.7	1715.0
18.5°	1709.1	1712.3	1715.8	1714.6	1710.6	1701.5
19°	1696.5	1699.5	1702.9	1702.2	1697.5	1688.6
19.5°	1682.9	1686.6	1689.6	1689.1	1684.4	1675.0
20°	1669.4	1673.3	1676.5	1676.0	1670.8	1661.5
20.5°	1655.5	1659.2	1662.7	1662.2	1656.8	1647.1
21°	1641.2	1645.2	1648.1	1648.4	1641.9	1632.6

TEST NUMBER: P776006

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1596.8	1600.7	1603.9	1604.7	1597.3	1588.1
23°	1581.7	1585.4	1588.4	1589.3	1581.7	1571.6
23.5°	1565.9	1569.6	1572.8	1573.5	1565.9	1556.3
24°	1549.3	1553.3	1556.8	1557.5	1550.1	1540.5
24.5°	1533.3	1537.7	1540.5	1540.9	1533.8	1526.1
25°	1517.0	1523.7	1523.4	1524.4	1517.0	1510.8
25.5°	1499.7	1504.4	1506.4	1507.4	1499.7	1490.8
26°	1482.2	1485.9	1490.3	1489.6	1483.4	1472.8
26.5°	1467.1	1467.1	1475.3	1472.3	1468.1	1453.3
27°	1450.3	1445.1	1455.0	1454.8	1452.5	1430.1
27.5°	1429.3	1423.4	1436.2	1436.5	1432.5	1405.9
28°	1410.8	1399.9	1416.7	1417.7	1412.5	1380.4
28.5°	1390.3	1375.2	1395.2	1399.7	1393.0	1353.8
29°	1369.1	1348.6	1373.5	1381.4	1371.0	1326.1
29.5°	1345.9	1321.7	1349.8	1362.7	1348.1	1295.7
30°	1322.4	1292.5	1325.4	1343.9	1323.6	1264.6
30.5°	1297.2	1261.7	1300.2	1324.9	1297.2	1231.8
31°	1271.3	1228.8	1272.5	1305.6	1270.3	1198.7
31.5°	1243.9	1197.7	1244.1	1286.1	1241.6	1165.1
32°	1216.0	1164.1	1215.0	1266.8	1212.5	1130.8
32.5°	1185.8	1130.0	1184.1	1249.5	1181.9	1097.7
33°	1154.7	1097.7	1151.8	1230.5	1149.8	1065.3
33.5°	1122.9	1065.1	1119.4	1210.3	1117.4	1033.2
34°	1091.3	1033.2	1087.1	1192.3	1085.1	1001.9
34.5°	1058.4	1000.6	1055.2	1171.0	1052.7	970.3
35°	1026.8	969.8	1022.9	1147.1	1020.4	938.6
35.5°	995.7	938.9	991.0	1123.6	989.5	907.8
36°	964.8	908.3	960.6	1099.9	959.1	888.8
36.5°	933.7	890.5	930.5	1073.5	928.8	854.2
37°	903.8	855.7	900.4	1046.1	899.1	818.9
37.5°	874.2	819.9	870.2	1017.7	869.3	783.6
38°	844.8	784.1	840.1	987.8	839.6	748.2
38.5°	814.9	748.2	810.0	957.4	809.7	716.6
39°	785.0	717.4	779.9	925.3	779.9	685.3
39.5°	755.2	685.8	749.7	893.7	750.2	654.7
40°	725.0	654.9	718.9	859.9	719.1	624.5
40.5°	694.9	625.0	688.0	825.8	689.0	595.6
41°	664.8	596.4	658.1	792.0	659.6	566.7
41.5°	635.6	566.7	628.5	758.1	630.5	538.1
42°	607.2	538.8	600.1	724.3	602.3	510.4
42.5°	579.1	511.4	571.7	691.7	574.2	482.8
43°	551.7	482.5	544.5	659.8	547.0	455.9
43.5°	524.8	454.9	517.4	628.7	519.8	428.2



TEST NUMBER: P776006

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQH-2500lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
45°	448.2	375.9	438.3	540.6	442.8	352.4
45.5°	423.5	351.2	412.6	513.2	417.8	328.7
46°	399.1	327.2	388.0	486.0	393.6	306.0
46.5°	374.6	304.2	362.8	458.6	369.4	283.7
47°	351.4	282.3	339.6	432.2	346.7	262.8
47.5°	328.7	260.8	316.6	406.2	324.0	243.2
48°	306.7	240.3	294.4	381.8	302.3	224.2
48.5°	285.7	221.3	273.4	356.8	280.8	206.4
49°	265.2	203.0	253.1	333.4	261.3	189.4
49.5°	246.2	186.0	233.1	310.7	241.8	172.9
50°	228.7	169.4	214.8	288.4	222.5	157.3
50.5°	211.1	153.6	197.3	267.7	204.7	143.0
51°	193.6	139.3	180.0	247.7	187.9	129.6
51.5°	176.3	126.2	164.5	228.4	171.9	117.3
52°	160.5	114.1	149.9	210.4	156.8	105.7
52.5°	145.9	102.5	135.6	193.1	142.2	95.1
53°	132.1	91.9	122.7	176.8	128.4	85.2
53.5°	119.0	83.7	110.4	161.8	115.8	77.0
54°	106.7	75.3	99.3	146.4	104.2	68.9
54.5°	95.8	66.9	89.1	133.1	93.6	60.7
55°	85.7	58.8	80.8	120.5	84.9	52.6
55.5°	76.6	50.4	72.6	108.4	76.6	47.2
56°	67.4	46.4	64.2	97.3	68.2	45.2
56.5°	59.3	44.5	56.1	86.9	59.8	43.5
57°	52.1	42.7	47.7	79.8	51.4	42.0
57.5°	45.9	41.0	43.0	72.8	45.2	40.3
58°	41.2	39.5	41.2	65.7	41.2	38.8
58.5°	39.5	38.0	39.8	58.5	39.5	37.3
59°	37.8	36.5	38.3	51.6	38.0	35.8
59.5°	36.5	35.3	36.8	46.9	36.5	34.6
60°	35.1	33.8	35.3	43.0	35.3	33.3
60.5°	33.8	32.6	34.1	39.5	33.8	31.9
61°	32.6	31.4	32.8	36.5	32.6	30.6
61.5°	31.4	30.1	31.6	33.8	31.4	29.6
62°	30.1	29.1	30.4	31.6	30.1	28.4
62.5°	28.9	27.9	29.1	29.6	29.1	27.2
63°	27.9	26.9	28.2	27.9	27.9	26.2
63.5°	26.9	25.9	26.9	26.7	26.7	25.2
64°	25.7	24.9	25.9	25.7	25.7	24.2
64.5°	24.9	24.0	24.9	24.7	24.7	23.2
65°	24.0	23.0	24.0	23.7	23.7	22.2
65.5°	23.0	22.0	23.2	22.7	22.7	21.5
66°	22.0	21.2	22.2	22.0	22.0	20.5



TEST NUMBER: P776006

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	19.8	18.8	19.8	19.5	19.3	18.0
68°	18.8	18.0	18.8	18.5	18.5	17.3
68.5°	18.0	17.3	18.0	17.8	17.8	16.5
69°	17.3	16.5	17.3	17.0	17.0	15.8
69.5°	16.5	15.8	16.5	16.3	16.3	15.1
70°	15.8	15.1	16.1	15.6	15.6	14.3
70.5°	15.3	14.6	15.3	15.1	14.8	13.6
71°	14.6	13.8	14.6	14.3	14.1	13.1
71.5°	13.8	13.3	13.8	13.6	13.3	12.3
72°	13.3	12.6	13.3	13.1	12.8	11.9
72.5°	12.8	12.1	12.6	12.3	12.1	11.1
73°	12.1	11.4	12.1	11.9	11.4	10.6
73.5°	11.6	10.9	11.6	11.4	10.9	9.9
74°	11.1	10.4	10.9	10.6	10.4	9.4
74.5°	10.6	9.9	10.4	10.1	9.6	8.9
75°	9.9	9.4	9.9	9.6	9.1	8.4
75.5°	9.4	8.9	9.4	9.1	8.6	7.9
76°	8.9	8.4	8.9	8.6	8.1	7.2
76.5°	8.4	7.9	8.4	8.1	7.7	6.7
77°	7.9	7.4	7.9	7.4	7.2	6.4
77.5°	7.4	6.9	7.4	7.2	6.4	5.9
78°	6.9	6.4	6.9	6.7	5.9	5.4
78.5°	6.7	6.2	6.4	6.2	5.7	4.9
79°	6.2	5.7	5.9	5.7	5.2	4.7
79.5°	5.7	5.2	5.7	5.2	4.7	4.2
80°	5.2	4.9	5.2	4.9	4.2	3.7
80.5°	4.9	4.7	4.9	4.4	3.7	3.5
81°	4.4	4.2	4.4	4.2	3.5	3.0
81.5°	4.2	4.0	4.0	3.7	3.0	2.7
82°	3.7	3.5	3.7	3.5	2.5	2.5
82.5°	3.5	3.2	3.5	3.0	2.2	2.0
83°	3.2	3.0	3.0	2.7	2.0	1.7
83.5°	2.7	2.7	2.7	2.5	1.7	1.2
84°	2.5	2.5	2.5	2.2	1.2	1.0
84.5°	2.2	2.2	2.0	2.0	1.0	1.0
85°	2.0	1.7	1.7	1.5	1.0	0.7
85.5°	1.5	1.5	1.5	1.2	0.7	0.5
86°	1.2	1.2	1.2	1.0	0.5	0.5
86.5°	1.0	1.0	1.0	0.7	0.5	0.5
87°	0.7	0.7	0.7	0.5	0.2	0.2
87.5°	0.5	0.5	0.5	0.2	0.2	0.0
88°	0.2	0.2	0.2	0.2	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776006

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQH-2500lm-3000K

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
90°	0.0	0.0	0.0	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



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Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report





— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°

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1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report





21.5°	1618.0	1612.3	1623.9	1613.3	1600.7	1601.7	1612.6	1612.3	1615.8	1630.1	1626.6
22°	1603.2	1597.5	1609.4	1597.7	1585.4	1586.4	1597.5	1596.8	1600.5	1614.8	1612.6



44°	402.0	462.0	582.1	482.8	390.7	462.3	573.9	500.1	422.5	495.1	578.8
44.5°	376.8	436.6	552.7	456.1	366.5	437.3	546.0	473.9	397.8	468.7	549.0



66.5°	19.8	20.7	22.5	25.2	24.7	25.2	23.5	24.7	25.2	25.7	22.0
67°	18.8	19.8	21.5	24.0	23.7	24.2	22.5	23.7	24.0	24.7	21.2



89°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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21.5°	1626.4	1630.3	1633.8	1634.0	1627.4	1618.0
22°	1611.8	1615.8	1619.0	1619.5	1612.6	1603.2



44°	498.8	428.5	490.4	598.6	493.9	402.0
44.5°	473.6	401.8	464.3	569.0	468.0	376.8



66.5°	21.2	20.2	21.2	21.0	21.0	19.8
67°	20.5	19.5	20.5	20.2	20.0	18.8



89°	0.0	0.0	0.0	0.0	0.0	0.0
89.5°	0.0	0.0	0.0	0.0	0.0	0.0

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Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)