

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: P776422

Luminaire Tested: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-3500K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776422
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B018)
Test Lab:
Issue Date: 2/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-3500K
Description: 6 INCH SQUARE MEDIUM LENSED WALLWASH KIT
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3526.6 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

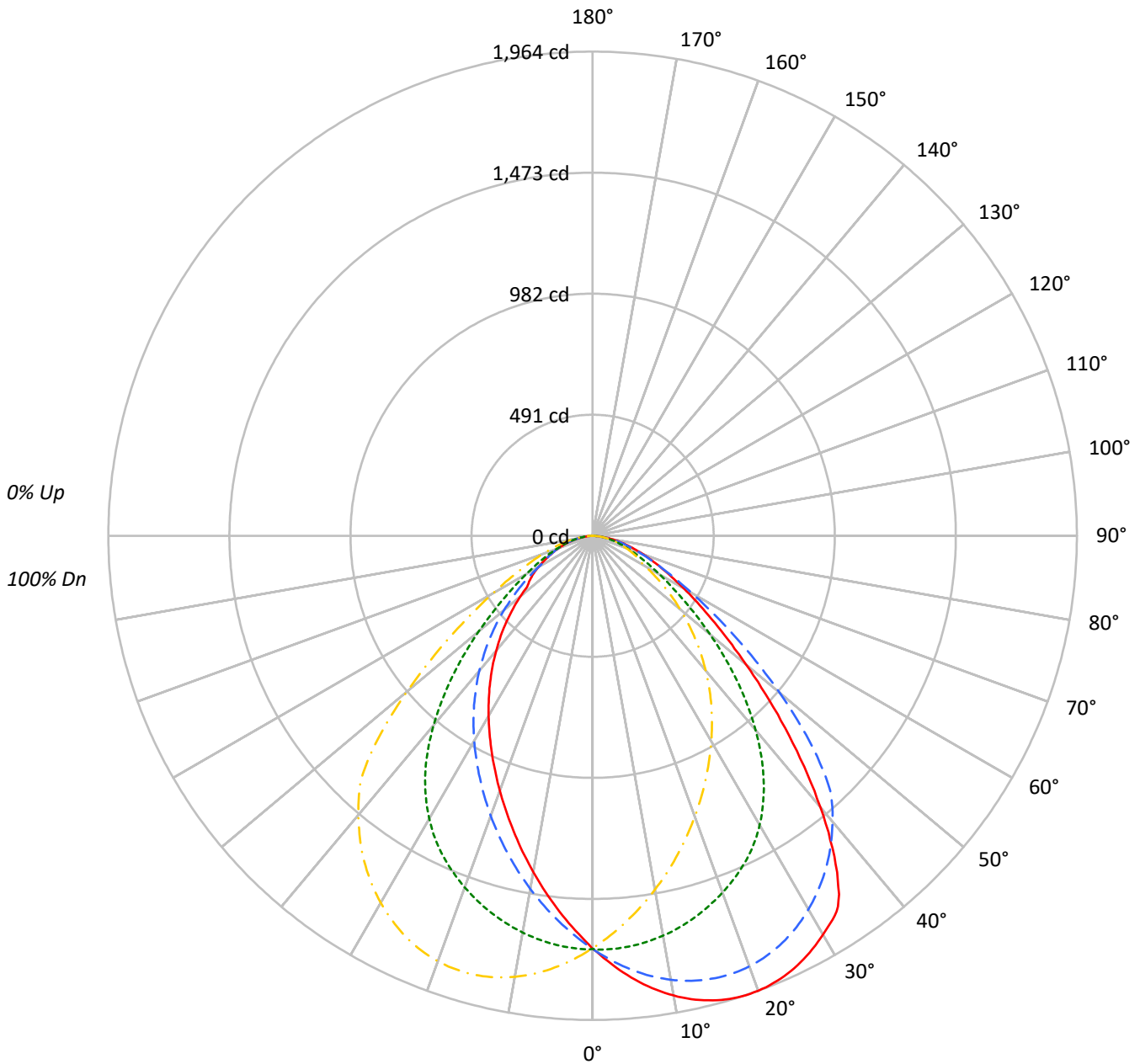
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87					87			
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	83	80	78	76					76			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66					66			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58					58			
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51					51			
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	45					45			
7	70	57	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41					41			
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37					37			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	33					33			
10	57	45	38	33	56	45	37	33	44	37	32	43	37	32	42	36	32	31					31			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	72148	72148	72148	72148
5°	77753	72307	66170	72031
10°	82788	71993	60556	71456
15°	86925	71417	55255	70602
20°	89988	70570	50405	69530
25°	91940	69426	45991	68144
30°	92900	67341	41941	65899
35°	91320	63568	38075	62248
40°	80823	57785	34190	56379
45°	67320	50204	30116	48755
50°	54457	41623	25567	40317
55°	44108	33306	23218	32526
60°	36804	27013	21803	26738
65°	31307	22474	19887	22637
70°	27229	19273	18316	19613
75°	23739	16669	16602	17268
80°	19513	14282	13910	14976
85°	12548	11016	7657	12153

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 79400 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	4.5
10°-20°	449.3	12.7
20°-30°	666.5	18.9
30°-40°	761.7	21.6
40°-50°	662.2	18.8
50°-60°	430.8	12.2
60°-70°	245.5	7.0
70°-80°	123.0	3.5
80°-90°	29.2	0.8
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°	1274.2	36.1
0°-40°	2035.9	57.7
0°-60°	3128.9	88.7
0°-90°	3526.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3526.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1676	1676	1676	1676	1676	
5°	1799	1673	1531	1667	1799	175
15°	1950	1602	1240	1584	1950	552
25°	1935	1461	968	1434	1935	891
35°	1737	1209	724	1184	1737	1066
45°	1106	824	495	801	1106	854
55°	588	444	309	433	588	535
65°	307	221	195	222	307	308
75°	143	100	100	104	143	152
85°	25	22	16	25	25	33
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°	1675.7	1675.7	1675.7	1675.7	1675.7	1675.7	1675.7	1675.7	1675.7	1675.7	1675.7
0.5°	1686.1	1686.1	1686.1	1684.1	1679.3	1675.7	1663.4	1658.6	1658.6	1660.6	1665.8
1°	1699.2	1698.4	1695.2	1689.3	1679.3	1670.6	1653.9	1645.9	1644.7	1647.5	1655.9
1.5°	1712.7	1711.1	1704.8	1694.4	1679.3	1665.0	1643.5	1633.2	1630.4	1634.4	1645.5
2°	1725.8	1723.4	1713.9	1699.2	1678.9	1659.4	1633.6	1620.1	1616.5	1621.7	1635.2
2.5°	1738.5	1735.0	1723.4	1704.0	1678.5	1653.5	1623.7	1607.0	1602.2	1608.1	1624.4
3°	1751.3	1746.9	1732.2	1708.3	1677.7	1647.9	1612.9	1593.8	1588.3	1595.0	1613.7
3.5°	1763.6	1758.4	1740.5	1712.7	1676.9	1641.9	1602.6	1580.7	1574.0	1581.5	1603.0
4°	1775.5	1769.6	1749.3	1716.7	1675.3	1635.2	1591.8	1567.6	1560.0	1568.4	1592.2
4.5°	1787.4	1780.3	1757.2	1720.7	1674.1	1629.2	1581.5	1553.7	1545.3	1554.5	1581.5
5°	1799.0	1791.0	1765.2	1724.6	1673.0	1622.5	1570.8	1540.6	1531.0	1541.0	1570.4
5.5°	1809.7	1801.4	1773.1	1727.8	1671.0	1615.7	1559.6	1527.0	1516.7	1527.4	1559.2
6°	1820.4	1811.3	1780.3	1731.0	1669.0	1608.5	1548.5	1513.5	1502.4	1513.5	1547.7
6.5°	1831.2	1820.8	1787.4	1734.2	1667.0	1601.8	1537.8	1500.0	1487.7	1500.0	1536.6
7°	1841.1	1830.4	1794.2	1737.0	1664.6	1595.0	1526.6	1486.1	1473.0	1486.1	1525.1
7.5°	1850.7	1839.1	1801.0	1739.7	1662.2	1587.1	1515.1	1472.2	1458.3	1472.2	1513.5
8°	1859.8	1847.9	1806.9	1742.1	1659.4	1579.9	1503.6	1458.7	1444.0	1458.3	1502.0
8.5°	1869.0	1855.8	1812.9	1744.1	1656.7	1572.0	1492.5	1444.7	1429.2	1444.7	1490.1
9°	1877.7	1864.2	1818.5	1745.7	1653.5	1564.4	1480.9	1431.2	1414.1	1430.4	1478.5
9.5°	1886.0	1871.7	1823.6	1747.3	1650.3	1556.9	1469.4	1416.9	1399.8	1416.5	1466.6
10°	1893.6	1878.9	1828.8	1748.9	1646.7	1548.5	1457.5	1403.0	1385.1	1402.6	1454.7
10.5°	1901.2	1886.0	1833.6	1750.1	1643.5	1540.6	1445.5	1389.1	1370.8	1388.7	1442.8
11°	1908.3	1892.4	1837.5	1750.9	1639.6	1532.2	1433.6	1375.2	1356.1	1374.4	1430.8
11.5°	1915.1	1898.4	1841.9	1751.7	1635.6	1523.5	1421.7	1361.7	1341.0	1360.9	1418.9
12°	1921.4	1904.3	1845.5	1751.7	1631.2	1514.7	1409.8	1346.9	1326.7	1346.6	1406.6
12.5°	1927.4	1909.5	1848.7	1752.1	1626.8	1506.0	1397.8	1333.4	1312.4	1332.6	1394.7
13°	1932.6	1914.7	1851.9	1751.7	1622.5	1497.6	1385.5	1319.5	1297.7	1318.3	1382.3
13.5°	1937.7	1919.0	1854.6	1751.3	1617.3	1488.5	1373.2	1305.6	1282.9	1304.8	1370.0
14°	1942.1	1923.4	1857.0	1750.9	1612.5	1479.3	1361.3	1291.7	1268.6	1290.5	1357.7
14.5°	1946.5	1927.0	1859.0	1750.1	1607.4	1470.2	1348.5	1277.4	1253.9	1276.6	1345.4
15°	1950.1	1930.6	1860.6	1748.9	1602.2	1460.7	1336.2	1263.5	1239.6	1262.7	1333.0
15.5°	1953.6	1933.4	1862.2	1747.3	1596.6	1451.5	1323.9	1249.9	1225.3	1249.1	1320.3
16°	1956.4	1936.1	1863.0	1745.7	1591.1	1442.0	1311.6	1236.0	1211.0	1234.8	1308.0
16.5°	1958.8	1938.1	1863.8	1743.7	1585.5	1432.4	1299.2	1222.1	1197.1	1221.3	1295.7
17°	1960.8	1939.7	1864.2	1741.3	1579.1	1422.5	1286.5	1208.2	1182.8	1207.4	1283.3
17.5°	1962.4	1940.9	1864.2	1738.9	1573.2	1412.9	1274.2	1194.7	1168.8	1193.5	1270.6
18°	1963.6	1941.7	1863.8	1736.6	1566.8	1403.4	1261.9	1180.8	1154.5	1180.0	1257.9
18.5°	1964.4	1942.5	1863.0	1733.4	1560.4	1393.1	1249.1	1167.2	1141.0	1166.5	1245.6
19°	1964.4	1942.5	1861.8	1730.2	1553.7	1382.7	1236.8	1153.7	1127.5	1152.9	1233.2
19.5°	1964.4	1942.1	1860.6	1727.0	1547.3	1372.8	1224.1	1140.2	1113.6	1139.4	1220.9
20°	1964.0	1941.3	1858.6	1723.0	1540.2	1362.9	1211.4	1126.7	1100.1	1125.9	1208.2
20.5°	1962.8	1940.1	1856.6	1719.5	1533.4	1352.5	1199.1	1113.2	1086.1	1112.8	1195.5
21°	1961.6	1938.5	1853.8	1715.1	1525.9	1341.8	1186.3	1100.1	1073.0	1099.3	1183.2



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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°	1954.4	1931.0	1844.3	1701.2	1503.2	1310.4	1149.0	1060.7	1032.9	1060.3	1145.4
23°	1951.6	1927.8	1840.3	1696.0	1495.6	1299.6	1136.2	1047.6	1019.8	1047.2	1133.1
23.5°	1948.1	1924.2	1836.0	1690.8	1487.3	1288.9	1123.9	1034.5	1006.6	1034.5	1120.7
24°	1944.1	1919.8	1831.6	1684.9	1478.9	1277.8	1111.2	1021.7	993.9	1021.3	1108.0
24.5°	1939.7	1915.5	1826.4	1679.3	1470.6	1267.0	1098.9	1009.0	981.2	1008.2	1095.7
25°	1935.3	1910.7	1821.2	1673.0	1461.4	1255.5	1086.5	995.9	968.1	995.5	1083.0
25.5°	1930.2	1905.1	1815.7	1666.6	1452.7	1244.8	1073.8	983.2	955.3	983.2	1071.0
26°	1924.6	1900.0	1809.7	1659.4	1443.2	1233.2	1061.5	970.5	942.6	970.1	1058.3
26.5°	1918.6	1893.6	1803.4	1652.7	1433.6	1221.7	1049.2	958.1	929.9	957.7	1046.0
27°	1912.7	1887.6	1797.0	1645.5	1423.7	1210.2	1036.8	945.4	917.6	945.0	1033.7
27.5°	1906.3	1880.9	1789.8	1637.6	1412.9	1198.7	1024.1	932.7	905.3	932.7	1021.7
28°	1899.2	1874.1	1782.3	1629.2	1401.8	1186.7	1011.8	920.0	892.5	920.0	1009.4
28.5°	1892.0	1866.6	1775.1	1620.9	1391.1	1174.4	999.9	907.6	880.2	907.6	997.1
29°	1884.5	1858.6	1767.2	1611.7	1379.2	1162.1	987.2	895.3	868.3	895.3	984.8
29.5°	1876.5	1850.7	1758.8	1602.2	1367.2	1149.8	975.2	883.0	856.0	883.4	972.4
30°	1868.6	1842.3	1750.5	1592.2	1354.5	1136.6	962.5	871.1	843.6	870.7	960.1
30.5°	1860.2	1833.6	1741.7	1581.9	1341.8	1123.5	950.2	858.3	831.3	858.7	948.2
31°	1852.3	1824.8	1732.6	1571.2	1328.7	1110.8	937.9	846.0	819.4	846.8	935.9
31.5°	1844.3	1815.7	1723.0	1559.2	1315.1	1097.3	925.5	834.5	807.5	834.5	923.5
32°	1836.3	1806.1	1713.5	1547.3	1301.2	1083.8	913.2	822.2	795.5	822.6	911.2
32.5°	1826.8	1797.0	1703.2	1534.6	1286.5	1070.2	900.9	809.8	783.6	810.6	899.3
33°	1816.1	1787.4	1693.2	1521.5	1271.4	1056.3	888.6	798.3	771.7	798.7	887.0
33.5°	1803.0	1778.3	1682.9	1508.0	1256.7	1042.4	876.2	786.4	759.7	787.2	874.6
34°	1782.7	1768.8	1672.2	1494.0	1241.2	1028.1	863.5	774.5	748.2	774.9	862.3
34.5°	1764.8	1758.4	1660.6	1478.9	1225.7	1013.8	851.2	762.1	736.3	763.3	850.0
35°	1737.4	1746.1	1649.1	1463.4	1209.4	999.1	838.9	750.6	724.4	751.4	838.1
35.5°	1711.9	1732.2	1637.2	1447.5	1193.1	984.8	826.9	738.7	712.8	739.9	825.7
36°	1687.3	1712.7	1624.8	1430.8	1176.0	970.1	814.2	727.1	701.3	728.3	813.4
36.5°	1655.5	1693.6	1612.1	1414.1	1158.5	955.3	801.5	715.2	689.4	716.4	800.7
37°	1629.6	1668.6	1599.0	1396.6	1141.0	940.2	789.2	703.3	677.8	704.5	788.8
37.5°	1598.2	1641.9	1585.5	1378.0	1123.1	925.1	776.4	691.8	666.3	693.0	776.0
38°	1565.6	1619.7	1572.0	1358.9	1104.0	910.0	764.1	679.8	654.8	681.4	763.7
38.5°	1536.2	1588.3	1557.7	1339.8	1086.1	894.9	751.4	668.3	643.3	669.9	751.4
39°	1501.2	1561.6	1543.7	1320.3	1067.1	879.8	738.7	656.8	631.3	658.4	739.5
39.5°	1471.0	1533.0	1528.6	1299.6	1048.0	864.3	726.0	644.8	619.8	646.8	726.7
40°	1438.0	1500.0	1513.5	1278.2	1028.1	848.4	713.2	633.3	608.3	635.3	714.0
40.5°	1401.4	1473.8	1498.0	1256.7	1008.6	832.9	700.9	621.8	597.1	623.8	701.7
41°	1371.6	1440.0	1483.7	1234.8	988.7	817.4	687.8	610.3	585.6	612.2	689.8
41.5°	1335.4	1408.2	1467.8	1211.8	968.5	801.5	675.1	598.7	574.5	601.1	676.7
42°	1302.8	1378.4	1450.3	1188.3	948.2	786.0	662.7	587.2	563.0	589.6	664.3
42.5°	1270.2	1343.8	1431.6	1165.3	927.9	770.1	650.4	576.1	551.4	578.1	652.4
43°	1233.2	1314.7	1412.1	1141.4	907.2	754.6	637.7	564.5	539.9	566.9	640.1
43.5°	1204.6	1281.7	1386.7	1116.8	886.6	738.7	624.6	553.0	528.8	555.4	627.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	1105.6	1183.2	1304.0	1042.8	824.5	691.0	587.2	518.8	494.6	521.6	590.8
45.5°	1070.6	1153.7	1276.6	1017.4	803.5	675.5	574.9	507.3	483.4	510.5	578.5
46°	1044.0	1121.9	1245.2	992.3	783.2	659.6	562.2	496.2	471.9	498.9	566.1
46.5°	1009.8	1088.1	1213.4	966.5	762.5	644.1	549.8	484.6	460.4	487.8	553.4
47°	981.6	1060.7	1183.9	940.6	741.9	628.5	537.1	473.1	449.2	476.3	541.5
47.5°	952.6	1026.5	1149.8	915.2	721.2	613.0	524.8	462.0	438.1	465.5	529.2
48°	920.0	999.9	1118.7	889.7	700.9	597.9	512.9	450.4	427.0	454.0	516.8
48.5°	896.5	969.7	1086.9	863.9	680.6	582.0	500.5	439.3	415.9	442.9	504.5
49°	863.5	938.6	1052.8	838.5	660.4	566.9	487.8	427.8	404.3	431.8	492.6
49.5°	841.2	913.2	1022.9	812.6	640.9	551.8	475.9	416.6	393.2	420.6	480.3
50°	813.0	880.6	989.5	787.2	621.4	537.1	463.6	405.5	381.7	409.5	468.3
50.5°	787.2	857.5	957.7	761.7	601.1	522.0	451.6	394.0	370.5	398.4	456.4
51°	764.5	827.3	926.7	736.3	582.0	507.3	439.7	383.3	359.8	387.2	444.1
51.5°	735.5	803.5	893.7	711.6	563.7	493.4	427.8	371.7	348.3	376.1	432.6
52°	717.2	778.4	865.5	687.0	545.5	478.7	415.9	360.6	337.9	365.4	420.6
52.5°	690.2	751.4	834.5	662.7	526.8	464.8	404.7	349.5	332.8	354.2	409.1
53°	671.5	729.9	805.1	638.9	509.7	450.8	392.8	340.7	328.0	345.1	397.6
53.5°	649.6	701.3	776.0	615.4	492.2	436.9	381.3	332.0	323.2	335.9	386.0
54°	627.8	682.2	746.2	592.4	475.9	423.8	370.1	323.6	318.8	326.8	374.9
54.5°	609.9	656.4	720.4	570.1	459.6	410.3	359.0	314.9	314.1	317.7	364.2
55°	587.6	636.5	691.8	548.6	443.7	397.6	347.9	306.5	309.3	308.5	353.0
55.5°	572.5	615.0	667.1	528.0	428.6	385.2	337.1	301.8	304.1	303.7	342.3
56°	550.2	593.2	640.1	507.7	413.5	372.5	326.4	297.0	299.0	299.4	332.0
56.5°	536.3	574.9	616.2	488.2	399.6	360.6	315.3	291.8	293.8	294.2	321.6
57°	517.6	552.2	592.4	469.5	385.6	348.7	304.5	287.0	288.2	289.4	311.3
57.5°	502.9	536.3	568.1	451.2	372.5	337.9	295.0	281.9	282.7	284.3	300.6
58°	487.0	514.8	546.3	434.1	359.8	326.8	284.7	276.7	277.1	279.1	291.0
58.5°	471.1	500.1	524.0	417.4	347.5	315.7	274.7	271.5	271.1	273.9	280.7
59°	457.2	480.3	504.1	401.9	335.9	304.9	265.2	266.4	265.2	268.8	271.1
59.5°	441.3	466.3	483.0	386.4	324.8	295.0	255.6	260.8	259.2	263.2	262.0
60°	427.4	448.5	464.4	372.1	313.7	285.5	246.5	255.6	253.2	257.6	252.9
60.5°	413.1	434.9	445.3	358.2	302.1	275.9	237.7	249.7	247.3	252.1	244.1
61°	399.6	418.2	428.2	344.7	291.8	266.8	229.8	244.5	241.3	246.5	235.8
61.5°	386.8	404.7	410.3	332.0	281.9	257.6	224.6	238.5	235.0	240.9	228.2
62°	374.5	390.0	395.2	319.6	272.3	249.3	220.3	233.0	229.0	235.0	222.6
62.5°	361.8	377.3	378.5	308.1	262.8	240.9	215.5	227.4	223.0	229.4	218.3
63°	350.7	363.4	364.2	297.0	254.0	233.0	210.7	221.4	217.1	223.4	213.5
63.5°	338.7	351.4	349.5	285.8	245.3	225.0	206.3	215.9	211.5	217.9	209.1
64°	328.4	338.3	335.9	275.5	236.9	217.5	201.6	210.3	205.9	211.9	204.7
64.5°	316.9	327.2	322.4	265.6	228.6	210.3	196.8	204.7	200.4	206.7	200.0
65°	307.3	315.3	310.1	256.0	220.6	203.2	192.0	199.2	195.2	201.2	195.6
65.5°	297.0	304.9	298.2	247.3	213.1	196.4	187.7	194.0	190.0	195.6	190.8
66°	287.4	293.4	286.6	238.1	205.5	189.6	182.5	188.8	184.9	190.0	186.1



TEST NUMBER: P776422

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-3500K

CANDELA DISTRIBUTION (continued):

Table with 11 columns (0° to 225°) and 21 rows (67.5° to 88.5°) showing candela values for various beam angles.



TEST NUMBER: P776422

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-3500K

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: P776422

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1675.7	1675.7	1675.7	1675.7	1675.7	1675.7
0.5°	1673.0	1678.9	1685.3	1682.5	1684.1	1686.1
1°	1667.0	1678.1	1689.6	1692.0	1696.0	1699.2
1.5°	1661.0	1677.3	1694.4	1700.8	1708.3	1712.7
2°	1654.7	1676.5	1698.4	1709.5	1720.3	1725.8
2.5°	1648.7	1675.3	1702.4	1718.3	1731.8	1738.5
3°	1641.9	1673.7	1705.9	1726.6	1743.3	1751.3
3.5°	1635.2	1672.2	1709.5	1735.0	1754.8	1763.6
4°	1628.4	1670.6	1712.7	1742.9	1765.6	1775.5
4.5°	1621.3	1668.6	1716.3	1750.5	1776.3	1787.4
5°	1614.1	1666.6	1719.1	1758.0	1786.7	1799.0
5.5°	1607.0	1663.8	1721.9	1765.2	1797.0	1809.7
6°	1599.4	1661.4	1724.2	1772.3	1806.5	1820.4
6.5°	1591.8	1658.6	1726.2	1778.7	1815.7	1831.2
7°	1584.3	1655.9	1728.6	1785.1	1824.8	1841.1
7.5°	1576.3	1652.7	1730.2	1791.0	1833.6	1850.7
8°	1568.4	1649.5	1731.8	1797.0	1841.9	1859.8
8.5°	1560.4	1645.9	1733.0	1802.2	1849.9	1869.0
9°	1552.1	1642.3	1734.2	1807.3	1857.4	1877.7
9.5°	1543.7	1638.4	1735.0	1812.1	1865.0	1886.0
10°	1535.4	1634.4	1735.4	1816.9	1871.7	1893.6
10.5°	1526.6	1630.0	1735.8	1820.8	1878.1	1901.2
11°	1517.9	1625.6	1735.8	1824.8	1884.5	1908.3
11.5°	1509.2	1621.3	1735.4	1828.0	1890.4	1915.1
12°	1500.4	1616.1	1735.0	1831.2	1895.6	1921.4
12.5°	1491.3	1611.3	1734.6	1834.4	1900.8	1927.4
13°	1482.1	1606.2	1733.4	1836.7	1905.5	1932.6
13.5°	1472.6	1601.0	1732.2	1839.1	1909.9	1937.7
14°	1463.0	1595.4	1730.6	1841.1	1913.5	1942.1
14.5°	1453.5	1589.9	1729.0	1842.3	1917.1	1946.5
15°	1444.0	1583.9	1727.0	1843.9	1920.2	1950.1
15.5°	1434.4	1577.9	1725.0	1844.7	1922.6	1953.6
16°	1424.9	1572.0	1722.2	1845.1	1925.0	1956.4
16.5°	1414.9	1565.6	1719.5	1845.1	1926.6	1958.8
17°	1404.6	1559.2	1716.7	1844.7	1927.8	1960.8
17.5°	1394.7	1552.5	1713.5	1844.3	1929.0	1962.4
18°	1384.7	1545.7	1709.9	1843.5	1929.4	1963.6
18.5°	1374.4	1539.0	1705.9	1842.3	1929.4	1964.4
19°	1364.4	1531.8	1702.4	1840.3	1929.4	1964.4
19.5°	1353.7	1524.7	1698.0	1838.3	1928.6	1964.4
20°	1343.4	1517.5	1693.6	1836.3	1927.4	1964.0
20.5°	1333.0	1509.9	1688.9	1833.6	1925.8	1962.8
21°	1322.3	1502.0	1684.1	1830.4	1923.8	1961.6

TEST NUMBER: P776422

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1290.1	1478.1	1667.8	1819.3	1915.5	1954.4
23°	1279.4	1469.8	1661.8	1814.9	1911.9	1951.6
23.5°	1268.2	1461.4	1655.5	1810.1	1907.9	1948.1
24°	1257.5	1452.7	1649.1	1804.9	1903.5	1944.1
24.5°	1246.0	1443.6	1642.3	1799.8	1898.8	1939.7
25°	1234.8	1434.4	1635.6	1793.8	1893.6	1935.3
25.5°	1223.7	1424.9	1628.0	1787.8	1888.0	1930.2
26°	1212.2	1415.3	1620.9	1781.1	1882.1	1924.6
26.5°	1200.6	1405.4	1612.9	1774.7	1875.7	1918.6
27°	1189.1	1395.1	1605.0	1767.6	1869.7	1912.7
27.5°	1177.2	1383.9	1596.2	1760.0	1862.6	1906.3
28°	1164.9	1373.2	1587.5	1752.5	1855.4	1899.2
28.5°	1152.9	1361.7	1578.3	1744.5	1847.5	1892.0
29°	1140.6	1349.7	1568.4	1736.2	1839.9	1884.5
29.5°	1127.9	1337.8	1558.5	1727.8	1831.6	1876.5
30°	1114.8	1325.5	1547.7	1718.7	1823.2	1868.6
30.5°	1102.0	1312.4	1536.6	1709.5	1814.1	1860.2
31°	1088.9	1299.6	1525.1	1700.0	1804.9	1852.3
31.5°	1075.8	1286.1	1513.1	1690.4	1795.8	1844.3
32°	1062.7	1272.6	1500.8	1680.1	1785.9	1836.3
32.5°	1048.8	1258.3	1487.7	1669.8	1776.3	1826.8
33°	1035.3	1244.4	1474.6	1659.4	1766.4	1816.1
33.5°	1021.7	1230.1	1460.7	1648.7	1756.4	1803.0
34°	1007.8	1215.0	1446.3	1637.6	1747.3	1782.7
34.5°	993.5	1199.8	1432.0	1626.0	1737.4	1764.8
35°	979.6	1184.3	1416.9	1614.1	1725.4	1737.4
35.5°	965.7	1167.6	1401.0	1602.2	1712.7	1711.9
36°	951.0	1151.3	1385.1	1589.5	1695.6	1687.3
36.5°	936.7	1133.9	1368.8	1576.7	1674.9	1655.5
37°	922.3	1116.4	1351.3	1563.6	1655.1	1629.6
37.5°	907.6	1098.1	1333.4	1550.1	1627.2	1598.2
38°	892.9	1079.4	1314.3	1536.2	1603.8	1565.6
38.5°	877.0	1060.7	1294.5	1521.5	1577.1	1536.2
39°	861.9	1041.6	1274.6	1507.6	1546.5	1501.2
39.5°	846.8	1022.5	1253.5	1493.3	1522.7	1471.0
40°	831.3	1003.1	1231.3	1478.1	1491.3	1438.0
40.5°	815.8	983.2	1209.0	1462.2	1461.0	1401.4
41°	799.9	962.9	1186.3	1447.5	1433.2	1371.6
41.5°	784.4	943.8	1163.7	1432.4	1400.2	1335.4
42°	768.9	923.5	1140.2	1416.5	1370.8	1302.8
42.5°	753.0	902.9	1116.8	1400.2	1339.4	1270.2
43°	737.5	882.6	1092.5	1382.7	1306.0	1233.2
43.5°	721.6	862.3	1068.3	1363.6	1277.8	1204.6

TEST NUMBER: P776422

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	674.7	800.7	993.9	1291.7	1183.2	1105.6
45.5°	658.8	780.4	969.3	1261.5	1148.6	1070.6
46°	642.9	760.1	943.8	1233.6	1121.1	1044.0
46.5°	627.4	739.9	918.8	1204.6	1088.9	1009.8
47°	612.2	720.0	893.7	1171.6	1059.5	981.6
47.5°	597.1	699.3	868.3	1142.2	1030.1	952.6
48°	581.6	679.4	843.2	1110.0	997.1	920.0
48.5°	566.5	660.0	818.6	1077.0	972.4	896.5
49°	551.8	640.1	793.5	1047.2	940.6	863.5
49.5°	537.5	621.0	768.5	1013.4	915.2	841.2
50°	522.4	601.9	743.8	982.0	888.2	813.0
50.5°	507.3	582.8	719.2	951.4	857.9	787.2
51°	493.4	564.5	694.9	919.2	834.9	764.5
51.5°	479.5	546.3	671.5	890.1	804.7	735.5
52°	465.5	529.2	648.4	858.7	783.6	717.2
52.5°	451.2	512.1	625.4	828.9	757.8	690.2
53°	438.1	495.0	602.3	801.1	733.1	671.5
53.5°	425.0	478.7	581.2	770.9	710.8	649.6
54°	411.9	463.2	559.8	744.2	684.2	627.8
54.5°	399.6	448.5	539.5	716.0	665.5	609.9
55°	386.8	433.3	519.6	690.2	639.7	587.6
55.5°	374.9	419.0	500.9	664.7	621.8	572.5
56°	363.4	405.1	482.6	638.5	598.7	550.2
56.5°	351.8	392.4	465.2	615.8	580.0	536.3
57°	341.5	379.3	448.1	591.6	560.6	517.6
57.5°	330.8	366.6	432.2	569.7	540.3	502.9
58°	320.4	354.6	416.6	546.7	523.6	487.0
58.5°	310.1	343.1	401.5	526.4	503.7	471.1
59°	299.4	332.0	387.6	506.1	489.0	457.2
59.5°	289.8	320.8	374.1	486.2	470.3	441.3
60°	280.7	310.5	361.0	467.5	456.8	427.4
60.5°	271.9	300.2	348.3	448.9	438.9	413.1
61°	263.2	290.2	335.9	432.2	426.2	399.6
61.5°	254.8	281.1	324.4	414.7	409.9	386.8
62°	246.5	271.9	313.3	399.6	397.6	374.5
62.5°	238.5	262.8	302.5	384.0	382.5	361.8
63°	231.0	254.0	292.2	369.3	370.5	350.7
63.5°	223.4	245.7	281.9	355.0	357.0	338.7
64°	216.3	237.7	271.9	341.9	345.5	328.4
64.5°	209.5	229.8	262.8	328.4	332.4	316.9
65°	202.8	222.2	253.6	316.1	322.0	307.3
65.5°	196.0	214.7	244.9	304.1	309.7	297.0
66°	189.6	207.5	236.2	292.6	300.2	287.4



TEST NUMBER: P776422

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-3500K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	171.4	186.9	212.3	260.8	268.8	258.8
68°	165.8	180.1	204.3	250.9	259.6	250.1
68.5°	160.2	173.7	197.2	241.3	250.1	241.3
69°	154.7	167.8	190.0	232.2	240.9	232.6
69.5°	149.5	161.8	182.9	223.0	232.2	224.2
70°	144.3	155.8	176.1	214.3	223.0	216.3
70.5°	139.1	149.9	169.4	205.9	214.7	207.9
71°	134.4	143.9	163.0	197.6	206.3	200.0
71.5°	129.6	138.7	156.6	189.6	198.4	192.4
72°	124.8	133.6	150.3	181.7	190.4	184.9
72.5°	120.1	128.4	144.3	174.5	182.5	177.3
73°	115.7	123.6	138.7	167.0	175.3	169.8
73.5°	111.3	118.5	133.2	159.4	167.4	162.6
74°	107.3	113.3	127.6	152.7	160.2	155.4
74.5°	103.0	108.5	122.1	145.5	153.1	148.3
75°	99.4	103.8	116.5	139.1	145.9	142.7
75.5°	95.8	99.0	111.3	132.8	139.5	136.0
76°	92.2	94.2	105.8	126.4	132.8	129.2
76.5°	88.3	89.8	101.0	120.1	126.4	122.1
77°	84.7	85.5	95.8	113.7	119.7	115.3
77.5°	80.7	81.1	91.0	107.7	113.3	109.3
78°	76.7	76.7	86.3	101.8	106.9	103.0
78.5°	73.2	72.8	81.1	95.8	101.0	96.6
79°	69.2	68.4	76.7	89.8	94.6	90.6
79.5°	65.2	64.4	72.0	84.3	88.7	84.7
80°	61.6	60.4	67.6	78.7	82.7	78.7
80.5°	57.6	56.5	63.2	73.5	77.1	73.2
81°	53.7	52.9	58.8	68.4	71.2	67.6
81.5°	50.1	48.9	54.5	63.2	65.6	62.0
82°	46.5	45.3	50.1	58.0	60.0	56.5
82.5°	42.9	41.7	46.1	53.3	54.9	51.3
83°	39.4	38.2	42.1	48.5	49.7	46.1
83.5°	35.8	34.6	38.2	44.1	44.1	40.6
84°	32.2	31.4	34.2	39.8	39.0	35.4
84.5°	28.6	27.8	30.6	35.4	34.2	30.2
85°	25.0	24.6	26.6	31.4	29.8	25.4
85.5°	21.5	21.5	23.1	27.4	25.4	20.3
86°	17.9	18.3	19.5	23.9	21.5	16.7
86.5°	14.7	15.1	15.9	19.9	17.9	13.9
87°	11.5	11.9	12.7	16.3	14.7	11.5
87.5°	8.3	9.1	9.5	13.1	11.5	8.7
88°	5.2	6.0	6.4	9.9	8.3	6.4
88.5°	2.4	3.2	2.8	6.8	5.6	3.6



TEST NUMBER: P776422

CATALOG NUMBER: HCDJBL3040CSD-HCD6TSQH-HCD6TSQLWW-4000lm-3500K

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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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

Scaled Data Report





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

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

Scaled Data Report



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

Scaled Data Report





21.5°	1959.6	1936.1	1851.1	1710.7	1518.7	1331.0	1174.0	1086.9	1059.5	1086.1	1170.4
22°	1957.2	1933.8	1847.9	1705.9	1511.1	1321.1	1161.3	1073.8	1046.4	1073.0	1158.1



44°	1168.8	1247.2	1362.1	1092.9	865.9	722.8	612.2	541.5	517.6	543.9	615.0
44.5°	1137.8	1217.7	1334.6	1067.5	845.2	706.9	599.9	530.0	506.1	532.7	602.7



66.5°	277.5	283.9	275.1	229.4	198.4	183.3	177.7	183.7	179.7	184.9	181.3
67°	268.4	273.1	264.4	221.0	191.2	176.9	172.9	178.5	174.5	179.7	176.5



89°	1.2	0.8	0.8	0.8	0.4	0.4	0.0	0.4	0.0	0.4	0.4
89.5°	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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21.5°	1311.6	1494.4	1678.5	1827.2	1921.4	1959.6
22°	1300.8	1486.5	1673.3	1823.6	1918.6	1957.2



44°	705.7	842.0	1043.2	1340.6	1243.6	1168.8
44.5°	690.6	821.8	1018.6	1315.1	1213.8	1137.8



66.5°	183.3	200.4	228.2	281.9	288.6	277.5
67°	177.3	193.6	219.9	270.7	279.5	268.4

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89°	0.4	0.8	0.8	3.6	2.4	1.2
89.5°	0.0	0.0	0.0	0.8	0.4	0.0

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(END OF REPORT)