

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: P776270

Luminaire Tested: HCDJBL3040CSD-HCD42TRH-HCD42TRLWW-4000lm-2700K

Issue Date: 2/13/2024

Test Information

Test Method: LM-79-2019
Report Number: P776270
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2312156B054)
Test Lab:
Issue Date: 2/13/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: HALO COMMERCIAL
Catalog Number: HCDJBS3040CSD-HCD42TRH-HCD42TRLWW-4000lm-2700K
Description: 4 INCH ROUND NARROW LENSED WALLWASH KIT
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 2700K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3755.7 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.05 / 1.01 / 1.07
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

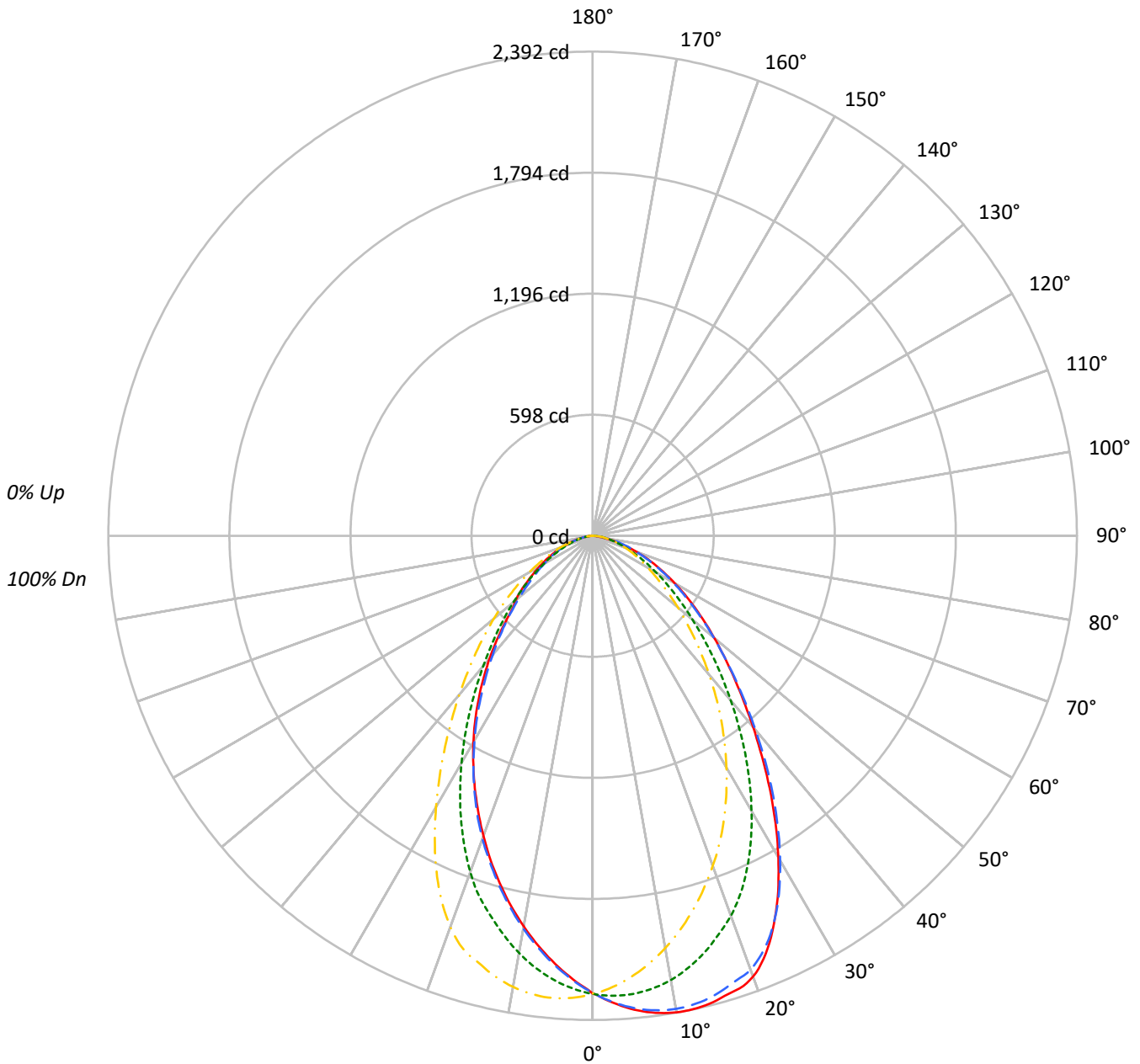
Input Watts (W): 38.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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	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	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88															
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77				77															
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68				68															
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60				60															
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	56	54				54															
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48				48															
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44				44															
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40				40															
9	63	51	44	39	62	51	44	39	50	43	38	49	43	38	48	42	38	36				36															
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34				34															

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	284609	284609	284609	284609
5°	296851	287061	268250	278180
10°	305523	284732	250407	267429
15°	309502	277751	231303	253348
20°	310335	267572	211242	236621
25°	294161	250989	191043	213691
30°	266631	228151	171098	188159
35°	234308	201814	150700	162253
40°	202449	174389	129933	138131
45°	175398	148630	109759	117555
50°	153419	126146	96934	100008
55°	134807	107271	86141	84627
60°	117946	91191	75913	70904
65°	102170	77484	66853	58962
70°	83453	65387	56482	48571
75°	62531	55432	45707	40310
80°	37542	48413	32541	31961
85°	14440	44907	11696	18772

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 180043 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.4	5.6
10°-20°	578.1	15.4
20°-30°	783.2	20.9
30°-40°	761.3	20.3
40°-50°	602.7	16.0
50°-60°	422.0	11.2
60°-70°	255.9	6.8
70°-80°	117.3	3.1
80°-90°	23.9	0.6
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°	1572.8	41.9
0°-40°	2334.0	62.1
0°-60°	3358.7	89.4
0°-90°	3755.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3755.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2262	2262	2262	2262	2262	
5°	2350	2272	2123	2202	2350	226
15°	2376	2132	1775	1944	2376	671
25°	2118	1808	1376	1539	2118	967
35°	1525	1314	981	1056	1525	952
45°	986	835	617	660	986	764
55°	614	489	393	386	614	552
65°	343	260	224	198	343	340
75°	129	114	94	83	129	139
85°	10	31	8	13	10	17
90°	0	4	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°	2261.5	2261.5	2261.5	2261.5	2261.5	2261.5	2261.5	2261.5	2261.5	2261.5	2261.5
0.5°	2268.4	2269.6	2268.8	2267.6	2266.5	2262.3	2259.2	2258.1	2245.4	2245.0	2247.3
1°	2279.2	2280.7	2279.5	2274.9	2269.2	2260.4	2253.1	2248.1	2233.1	2233.1	2236.2
1.5°	2289.5	2291.4	2288.4	2281.1	2271.5	2258.4	2246.5	2238.5	2220.4	2219.7	2224.3
2°	2299.5	2302.2	2297.2	2287.6	2273.0	2255.4	2239.6	2227.7	2207.8	2206.2	2211.6
2.5°	2309.1	2312.5	2306.0	2293.4	2274.6	2252.3	2232.0	2217.4	2194.3	2192.8	2199.0
3°	2318.3	2321.8	2314.5	2298.3	2274.9	2248.1	2223.9	2205.5	2180.5	2179.0	2186.3
3.5°	2327.1	2331.0	2321.8	2303.0	2275.3	2243.9	2215.5	2194.3	2166.7	2164.4	2172.9
4°	2335.2	2339.4	2329.0	2306.8	2274.6	2238.9	2206.6	2182.1	2152.9	2149.8	2159.4
4.5°	2342.9	2347.5	2335.6	2310.2	2273.8	2233.9	2197.4	2169.4	2137.9	2134.9	2145.2
5°	2349.8	2355.5	2341.7	2313.3	2272.3	2227.7	2187.4	2156.7	2123.4	2119.5	2131.4
5.5°	2356.3	2362.8	2347.5	2315.6	2270.3	2221.6	2177.5	2143.7	2107.6	2103.8	2116.1
6°	2362.4	2369.3	2352.5	2317.9	2267.6	2214.3	2166.3	2129.9	2092.7	2087.7	2101.5
6.5°	2367.8	2375.5	2357.1	2319.5	2264.6	2207.4	2155.6	2116.1	2076.9	2071.9	2085.7
7°	2372.8	2380.9	2360.9	2320.2	2261.1	2199.3	2144.1	2102.2	2060.8	2055.4	2069.6
7.5°	2377.4	2385.8	2364.4	2320.2	2256.5	2191.3	2132.6	2087.7	2044.7	2038.5	2053.9
8°	2380.9	2390.1	2367.4	2320.2	2251.9	2182.5	2120.3	2072.7	2028.2	2021.3	2037.8
8.5°	2384.3	2393.9	2369.7	2319.5	2246.9	2173.6	2107.6	2057.3	2011.3	2004.8	2021.7
9°	2387.0	2397.4	2371.6	2317.9	2241.2	2163.6	2094.6	2042.4	1994.4	1987.1	2004.8
9.5°	2389.3	2400.0	2372.4	2315.6	2235.0	2153.7	2081.5	2026.6	1976.8	1969.5	1987.5
10°	2390.8	2402.0	2373.2	2312.9	2228.1	2142.9	2068.1	2011.3	1959.5	1951.8	1970.2
10.5°	2391.6	2403.5	2372.8	2309.9	2220.8	2132.2	2053.9	1994.8	1941.8	1933.8	1953.0
11°	2392.0	2404.3	2372.4	2306.4	2212.8	2120.7	2039.3	1978.3	1924.2	1915.7	1935.3
11.5°	2392.0	2404.6	2371.3	2301.8	2204.3	2109.2	2025.1	1961.8	1906.1	1897.3	1917.3
12°	2391.2	2404.6	2369.3	2297.2	2195.5	2096.9	2010.1	1945.3	1888.1	1878.9	1898.9
12.5°	2390.1	2403.9	2367.0	2291.8	2185.9	2083.8	1994.8	1928.0	1869.7	1859.7	1880.8
13°	2388.1	2402.3	2364.0	2286.1	2176.3	2071.2	1979.4	1910.7	1851.3	1841.3	1862.8
13.5°	2385.5	2400.8	2360.9	2279.5	2165.9	2058.1	1963.7	1893.1	1832.5	1822.1	1844.0
14°	2382.8	2397.7	2356.7	2271.9	2155.2	2043.9	1947.2	1875.4	1813.7	1802.5	1825.2
14.5°	2379.3	2394.7	2352.1	2264.2	2143.7	2029.7	1930.7	1857.4	1794.5	1783.7	1806.0
15°	2375.5	2391.2	2346.7	2256.1	2131.8	2014.7	1914.2	1839.4	1775.3	1763.8	1786.8
15.5°	2370.5	2386.6	2340.9	2247.7	2119.9	2000.2	1897.3	1820.9	1756.1	1744.6	1767.2
16°	2365.1	2382.0	2334.4	2238.5	2106.8	1984.8	1879.7	1802.5	1736.9	1725.0	1748.0
16.5°	2360.9	2376.6	2327.5	2228.9	2093.8	1969.5	1862.4	1783.7	1717.3	1705.4	1728.5
17°	2357.4	2371.6	2320.6	2218.9	2080.0	1953.3	1845.1	1765.3	1697.8	1684.7	1709.3
17.5°	2354.4	2368.2	2313.3	2207.8	2066.6	1937.2	1827.1	1746.1	1677.8	1664.8	1689.7
18°	2351.3	2365.1	2307.6	2197.8	2052.7	1920.7	1808.7	1726.9	1657.8	1644.8	1669.7
18.5°	2345.5	2361.7	2302.2	2187.8	2039.3	1904.6	1790.6	1707.7	1637.9	1624.8	1650.2
19°	2338.3	2356.7	2296.8	2178.6	2025.9	1888.1	1772.2	1688.5	1617.9	1604.9	1631.4
19.5°	2328.3	2349.0	2289.9	2169.0	2012.4	1872.0	1754.6	1669.4	1597.6	1584.9	1611.8
20°	2317.2	2339.8	2280.7	2158.3	1997.9	1854.7	1735.4	1650.2	1577.3	1564.6	1591.8
20.5°	2304.5	2328.7	2269.6	2145.6	1981.7	1837.8	1717.3	1630.2	1556.9	1544.3	1571.5
21°	2289.5	2316.4	2256.5	2132.6	1964.5	1819.0	1697.8	1610.3	1537.3	1524.3	1550.8



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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°	2235.0	2269.6	2212.0	2083.4	1910.7	1761.8	1639.8	1550.8	1476.3	1463.7	1489.0
23°	2213.5	2250.8	2195.1	2066.2	1890.8	1741.9	1619.5	1530.4	1456.0	1443.7	1467.9
23.5°	2191.3	2231.2	2176.7	2047.8	1871.2	1721.9	1599.5	1510.5	1436.4	1423.4	1446.4
24°	2168.3	2210.1	2157.9	2028.2	1850.5	1700.4	1578.8	1490.5	1416.1	1403.4	1425.3
24.5°	2143.7	2187.4	2137.2	2007.5	1829.4	1679.3	1558.1	1469.8	1395.7	1383.1	1404.2
25°	2118.4	2163.6	2115.7	1986.3	1807.5	1657.8	1536.6	1449.5	1375.8	1363.1	1383.1
25.5°	2092.7	2138.7	2092.7	1964.9	1785.6	1636.0	1515.9	1429.1	1355.8	1342.4	1361.2
26°	2066.2	2113.4	2069.2	1942.2	1763.4	1614.1	1495.1	1408.8	1336.3	1321.7	1339.7
26.5°	2038.5	2087.7	2045.1	1919.6	1740.4	1591.5	1473.6	1388.1	1315.9	1301.7	1318.2
27°	2011.3	2060.4	2019.7	1895.8	1716.6	1568.8	1452.2	1367.3	1296.3	1281.4	1296.7
27.5°	1983.3	2032.8	1993.6	1871.6	1693.2	1546.6	1430.3	1347.0	1276.0	1261.0	1274.9
28°	1953.7	2004.0	1966.0	1846.3	1669.0	1524.3	1408.8	1326.7	1256.4	1240.7	1253.0
28.5°	1924.6	1974.8	1937.6	1820.9	1645.2	1500.9	1387.3	1305.6	1236.9	1220.4	1231.5
29°	1895.0	1945.7	1910.0	1795.2	1620.2	1477.5	1365.4	1284.8	1217.3	1200.0	1210.0
29.5°	1864.7	1916.1	1882.0	1768.4	1595.3	1454.8	1343.9	1264.5	1197.3	1180.1	1188.5
30°	1834.8	1885.4	1852.8	1742.3	1570.0	1431.4	1321.7	1244.2	1177.4	1159.7	1166.6
30.5°	1804.1	1855.1	1822.9	1715.0	1544.6	1407.6	1299.8	1223.4	1157.4	1139.8	1145.5
31°	1773.0	1824.0	1792.9	1687.0	1520.1	1384.6	1278.3	1202.7	1137.9	1119.4	1124.4
31.5°	1742.7	1792.5	1763.0	1659.4	1494.0	1360.8	1256.4	1182.4	1118.3	1099.1	1103.7
32°	1711.2	1760.7	1732.3	1630.6	1468.3	1337.8	1234.9	1162.0	1098.7	1079.5	1082.6
32.5°	1679.7	1728.8	1701.6	1602.2	1442.6	1314.4	1212.7	1141.7	1078.8	1059.6	1061.1
33°	1648.6	1697.4	1671.3	1573.8	1416.5	1290.6	1191.2	1121.7	1059.2	1039.6	1040.0
33.5°	1617.2	1665.9	1641.7	1545.0	1391.1	1267.2	1169.7	1100.6	1039.6	1019.7	1020.0
34°	1586.5	1634.1	1610.6	1515.9	1365.0	1243.0	1148.2	1080.7	1020.0	999.7	998.9
34.5°	1555.8	1601.8	1579.6	1487.1	1338.9	1219.6	1126.7	1060.7	1000.1	980.1	978.6
35°	1525.1	1570.4	1548.5	1458.3	1313.6	1196.6	1104.8	1040.8	980.9	960.9	957.9
35.5°	1494.4	1539.3	1517.8	1429.9	1287.5	1173.2	1084.1	1020.4	961.7	941.8	938.3
36°	1463.3	1508.2	1487.5	1401.5	1261.8	1149.7	1063.0	1000.8	942.1	922.6	918.3
36.5°	1433.7	1477.5	1457.1	1372.7	1235.7	1126.3	1041.5	981.3	922.9	903.4	898.8
37°	1403.4	1446.0	1426.8	1345.1	1211.2	1104.1	1020.0	961.7	903.4	884.2	879.2
37.5°	1374.2	1415.3	1397.3	1317.1	1185.1	1080.7	998.9	942.1	885.0	865.8	860.0
38°	1344.7	1385.4	1366.6	1288.3	1160.5	1058.0	978.6	923.3	865.8	847.0	840.8
38.5°	1316.3	1355.4	1337.4	1261.4	1135.5	1035.4	957.1	903.8	847.0	828.2	822.8
39°	1287.9	1325.9	1307.9	1233.4	1111.0	1013.5	936.4	885.0	828.5	809.7	804.0
39.5°	1260.3	1297.1	1280.2	1207.3	1085.7	990.9	915.7	865.8	809.7	791.7	785.6
40°	1232.3	1268.7	1251.4	1179.3	1061.5	968.6	895.7	847.0	790.9	773.3	767.5
40.5°	1205.8	1241.1	1223.4	1154.0	1037.7	946.0	875.4	827.4	772.9	755.2	750.3
41°	1179.3	1212.7	1195.8	1127.5	1013.5	925.2	855.8	809.0	754.9	737.6	732.6
41.5°	1152.8	1186.6	1168.9	1101.4	989.7	903.0	836.2	790.2	736.8	719.9	715.7
42°	1127.5	1159.7	1142.1	1075.3	967.1	881.9	817.0	772.5	718.8	703.1	699.6
42.5°	1102.9	1133.6	1116.4	1051.5	944.4	861.5	797.8	754.1	701.5	686.5	683.5
43°	1078.4	1108.7	1091.0	1026.9	921.8	841.2	779.4	736.4	683.9	670.0	667.0
43.5°	1054.6	1083.7	1065.3	1002.8	899.5	820.9	760.6	718.4	666.6	654.3	650.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	985.5	1011.6	992.8	932.2	835.1	762.9	706.9	668.1	616.7	609.4	605.2
45.5°	963.2	989.0	969.4	909.5	814.3	744.1	690.0	652.4	600.6	595.2	590.6
46°	941.8	966.7	946.7	887.6	794.0	726.1	673.1	636.7	585.2	580.6	576.0
46.5°	920.6	944.4	924.1	865.8	774.0	707.7	657.0	620.9	570.3	566.4	561.4
47°	899.9	922.6	902.6	844.3	754.1	689.6	640.5	605.6	556.1	553.0	547.2
47.5°	880.0	901.5	880.7	823.6	734.9	672.3	624.4	590.6	542.6	540.0	533.4
48°	859.6	880.3	859.2	802.1	715.7	654.7	608.6	576.0	530.7	526.9	520.4
48.5°	839.7	860.4	838.9	782.5	697.3	638.2	592.9	561.4	520.4	514.2	506.9
49°	820.9	840.4	818.6	762.9	679.3	621.7	577.9	547.6	511.2	502.0	494.3
49.5°	802.1	820.9	799.0	743.7	661.6	605.6	562.6	533.8	502.7	490.4	481.6
50°	783.6	802.1	779.8	724.5	644.3	589.8	548.0	520.4	495.1	479.7	469.3
50.5°	765.6	782.9	760.2	705.7	627.1	574.1	533.8	507.3	487.4	469.0	456.7
51°	747.6	764.5	741.4	687.7	610.2	559.1	519.6	494.7	478.6	459.4	445.2
51.5°	729.9	746.4	723.4	670.0	594.4	544.6	506.2	482.4	468.2	450.5	434.0
52°	712.6	728.4	705.4	652.0	578.3	530.0	492.4	470.5	456.7	440.2	422.5
52.5°	695.8	710.7	687.7	635.1	562.6	515.8	479.3	459.0	445.5	429.8	411.4
53°	679.3	693.8	670.0	618.6	547.2	501.6	466.3	448.2	434.8	419.5	400.6
53.5°	662.4	676.6	653.2	601.7	532.3	487.8	453.6	437.1	423.7	409.1	389.9
54°	646.3	660.1	636.3	585.6	517.7	474.3	441.3	427.1	412.9	399.1	379.5
54.5°	630.1	643.2	619.4	569.9	502.7	461.3	429.0	417.9	402.9	389.1	369.6
55°	614.4	627.4	604.0	554.2	488.9	448.6	417.5	408.3	392.6	379.9	360.0
55.5°	598.7	611.3	587.9	539.2	475.1	435.6	406.0	398.7	383.0	369.6	350.4
56°	583.3	595.6	572.2	523.8	461.7	422.9	394.5	388.8	373.0	360.0	341.2
56.5°	568.4	580.2	556.8	509.3	448.6	411.0	383.4	379.2	363.4	351.1	332.7
57°	553.8	565.3	541.9	495.1	435.2	398.7	372.6	369.6	353.8	342.3	324.3
57.5°	538.4	549.9	527.3	480.9	422.5	387.2	362.3	360.4	345.0	333.1	316.2
58°	524.2	535.0	512.3	467.0	409.9	375.7	352.3	351.1	335.8	324.7	307.8
58.5°	510.0	520.4	498.1	453.2	398.3	364.6	342.3	341.9	327.3	316.2	299.7
59°	495.8	506.6	484.3	439.8	386.1	353.4	332.7	333.1	318.5	307.8	291.3
59.5°	482.0	491.6	470.1	426.7	374.2	342.7	323.9	324.7	310.1	299.3	283.6
60°	468.6	478.6	456.7	414.1	362.3	332.3	315.1	316.2	301.6	290.9	275.9
60.5°	455.1	464.7	443.2	401.0	351.5	322.7	306.2	307.8	293.2	282.8	268.2
61°	441.7	451.3	430.2	389.1	340.4	312.8	297.4	299.3	285.1	275.2	260.6
61.5°	428.7	437.5	416.8	376.9	330.0	302.8	288.6	290.9	277.1	267.1	253.3
62°	416.0	425.2	404.5	365.0	319.7	292.8	280.9	282.8	269.4	259.4	246.0
62.5°	403.7	412.2	392.2	353.4	309.3	283.2	272.9	275.2	261.3	251.7	238.7
63°	391.1	399.5	379.5	341.9	299.0	274.0	265.2	267.1	254.0	244.8	231.4
63.5°	378.8	386.8	367.6	330.8	288.6	265.2	257.5	259.4	246.4	237.2	224.5
64°	366.9	374.6	355.7	319.7	278.6	256.4	250.6	251.7	239.1	230.3	217.6
64.5°	355.0	362.7	344.2	308.9	269.4	247.9	243.3	244.5	231.8	223.0	211.1
65°	343.1	351.1	332.7	298.2	260.2	239.5	236.4	237.5	224.5	216.1	204.2
65.5°	331.2	338.9	321.2	288.2	251.0	231.4	229.1	230.3	216.8	209.1	197.6
66°	318.9	327.7	310.5	278.2	242.2	223.3	222.6	223.0	209.5	202.2	191.5



TEST NUMBER: P776270

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRH-HCD42TRLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	283.6	293.6	278.2	248.7	216.8	201.1	202.2	202.2	187.7	181.9	172.7
68°	272.1	282.4	267.9	239.5	208.8	193.8	196.1	195.3	180.8	175.4	166.6
68.5°	260.2	271.3	257.9	230.6	200.7	186.9	189.6	188.4	173.8	168.5	160.8
69°	249.1	260.2	248.3	221.4	193.0	180.0	183.4	181.9	166.9	162.3	155.0
69.5°	237.9	249.4	238.7	213.0	185.4	173.8	176.9	175.0	160.0	155.8	149.3
70°	226.8	238.7	229.1	204.2	177.7	167.3	171.2	168.5	153.5	149.7	143.5
70.5°	216.4	228.3	219.9	195.7	170.4	161.2	165.0	162.3	147.4	143.5	138.2
71°	205.7	218.4	210.7	187.7	163.5	155.4	159.3	155.8	140.8	137.0	132.4
71.5°	195.3	208.0	201.9	179.6	156.6	149.7	153.5	149.7	134.7	131.2	127.0
72°	185.0	198.4	193.4	171.9	150.1	143.9	147.7	143.5	128.6	125.5	121.7
72.5°	175.4	189.2	184.6	164.6	143.5	138.5	142.4	137.4	122.4	119.3	116.3
73°	165.8	179.6	176.1	157.3	137.4	132.8	136.6	131.6	116.3	114.0	111.3
73.5°	155.8	170.8	168.1	149.7	131.2	127.8	131.2	125.5	110.5	108.2	106.3
74°	146.6	161.6	159.6	142.8	125.5	122.8	125.9	120.1	104.8	102.5	101.3
74.5°	137.0	152.7	152.0	137.8	119.7	117.8	120.9	114.4	99.4	97.1	95.9
75°	128.6	144.3	144.3	131.2	114.0	112.8	115.5	109.0	94.0	91.7	91.3
75.5°	120.1	135.9	136.2	124.7	108.6	108.2	110.5	103.6	88.6	86.7	86.3
76°	111.7	128.6	129.3	117.8	103.6	103.6	105.5	98.2	83.3	81.4	81.7
76.5°	103.2	120.9	122.4	111.3	98.2	99.0	100.5	92.9	77.9	76.4	77.1
77°	95.2	113.2	115.9	105.2	93.6	94.4	95.6	87.9	72.9	71.4	72.5
77.5°	87.1	105.5	109.0	99.4	88.6	90.2	90.6	82.9	67.9	66.8	68.3
78°	79.4	98.2	102.1	94.0	84.0	86.0	86.3	77.9	63.3	61.8	64.1
78.5°	72.1	91.7	95.6	88.6	79.4	81.4	81.4	72.9	58.3	57.2	59.5
79°	64.9	84.8	89.4	83.3	74.8	77.1	77.1	67.9	53.7	52.6	55.3
79.5°	58.3	78.3	83.3	77.9	70.6	73.3	72.5	63.3	49.1	48.4	51.4
80°	51.8	71.8	77.1	72.9	66.8	69.1	68.3	58.7	44.9	43.7	47.2
80.5°	46.1	66.0	71.4	68.3	62.6	65.2	64.1	54.5	40.3	39.5	43.4
81°	40.3	60.3	66.0	63.7	58.7	61.4	59.9	49.9	36.5	35.7	39.5
81.5°	34.9	54.9	60.6	59.1	54.9	57.6	55.6	45.7	32.2	31.9	36.1
82°	29.5	49.5	55.3	54.9	51.0	53.7	51.8	41.4	28.4	28.0	32.6
82.5°	24.6	44.1	50.3	50.7	47.6	49.9	47.6	37.6	24.2	24.2	29.2
83°	20.3	39.1	45.7	46.4	44.1	46.4	43.7	33.8	20.0	20.3	25.7
83.5°	16.5	34.5	41.1	42.6	40.7	43.0	40.3	29.9	16.5	17.3	22.3
84°	13.4	29.5	36.8	38.8	37.2	39.1	36.8	26.1	13.0	14.6	19.2
84.5°	11.5	25.3	32.6	35.3	34.2	36.1	33.4	22.3	10.0	12.3	16.5
85°	10.0	21.1	28.8	31.9	31.1	32.6	30.3	19.2	8.1	10.4	13.4
85.5°	8.1	17.3	25.3	28.4	28.0	29.5	26.9	16.5	6.9	8.4	10.7
86°	6.5	13.8	21.9	25.3	24.9	26.1	23.4	14.2	5.8	6.9	7.7
86.5°	5.4	11.5	18.8	21.9	21.9	22.6	20.3	12.3	4.6	5.0	5.4
87°	4.6	9.2	15.7	19.2	19.2	19.6	17.3	10.0	3.5	3.5	3.1
87.5°	3.5	6.9	13.4	16.5	16.5	16.5	14.2	8.1	2.3	1.9	1.2
88°	2.7	4.6	11.1	13.8	13.4	13.8	11.5	6.1	1.5	0.8	0.4
88.5°	1.9	3.1	8.4	11.1	10.7	10.7	8.8	4.2	0.4	0.4	0.0



TEST NUMBER: P776270

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRH-HCD42TRLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
90°	0.0	0.8	2.3	4.2	3.5	3.1	1.5	0.4	0.0	0.4	0.0



TEST NUMBER: P776270

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRH-HCD42TRLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2261.5	2261.5	2261.5	2261.5	2261.5	2261.5
0.5°	2251.1	2259.6	2263.8	2269.9	2275.7	2268.4
1°	2242.7	2255.0	2264.2	2274.2	2283.8	2279.2
1.5°	2233.5	2250.0	2263.8	2278.4	2291.4	2289.5
2°	2224.3	2245.0	2262.7	2281.8	2298.7	2299.5
2.5°	2214.3	2238.9	2261.5	2284.9	2305.6	2309.1
3°	2203.9	2232.7	2259.2	2287.2	2311.8	2318.3
3.5°	2192.8	2225.8	2256.9	2289.5	2317.5	2327.1
4°	2181.7	2218.5	2253.4	2290.7	2322.1	2335.2
4.5°	2170.2	2210.5	2250.0	2291.4	2326.7	2342.9
5°	2157.9	2202.0	2245.8	2291.8	2331.3	2349.8
5.5°	2145.2	2193.6	2240.8	2291.4	2334.8	2356.3
6°	2132.6	2184.0	2235.8	2290.7	2337.5	2362.4
6.5°	2119.5	2174.0	2230.0	2289.1	2339.8	2367.8
7°	2105.3	2163.6	2223.5	2286.8	2341.7	2372.8
7.5°	2091.5	2152.9	2216.6	2284.1	2343.2	2377.4
8°	2077.3	2142.2	2209.3	2281.1	2343.6	2380.9
8.5°	2062.3	2130.3	2201.3	2277.6	2343.6	2384.3
9°	2047.4	2118.0	2192.8	2273.4	2343.2	2387.0
9.5°	2031.6	2105.3	2184.0	2268.4	2342.5	2389.3
10°	2015.9	2092.7	2174.8	2263.0	2340.9	2390.8
10.5°	1999.8	2079.2	2165.2	2257.3	2339.0	2391.6
11°	1983.7	2065.8	2154.4	2250.8	2336.3	2392.0
11.5°	1967.2	2051.6	2143.3	2243.9	2332.9	2392.0
12°	1950.3	2036.6	2132.6	2236.6	2329.0	2391.2
12.5°	1933.4	2022.0	2121.0	2228.5	2324.8	2390.1
13°	1916.1	2007.1	2108.8	2220.1	2320.2	2388.1
13.5°	1898.1	1991.7	2096.1	2211.6	2314.8	2385.5
14°	1880.0	1975.6	2083.1	2201.6	2308.7	2382.8
14.5°	1862.0	1960.3	2070.8	2192.0	2303.0	2379.3
15°	1844.7	1944.5	2057.7	2182.8	2295.7	2375.5
15.5°	1826.7	1929.2	2045.8	2174.8	2289.9	2370.5
16°	1809.1	1913.4	2033.9	2167.5	2285.3	2365.1
16.5°	1791.0	1898.1	2022.0	2159.0	2280.7	2360.9
17°	1773.0	1882.3	2008.2	2149.1	2275.3	2357.4
17.5°	1754.6	1865.5	1992.5	2136.4	2268.0	2354.4
18°	1736.1	1847.4	1975.6	2123.0	2257.7	2351.3
18.5°	1716.9	1828.6	1957.6	2107.6	2245.4	2345.5
19°	1697.0	1808.3	1938.8	2091.5	2231.6	2338.3
19.5°	1676.7	1787.9	1919.6	2073.8	2217.4	2328.3
20°	1655.9	1766.8	1900.0	2055.4	2200.9	2317.2
20.5°	1634.4	1746.1	1878.9	2036.2	2184.0	2304.5
21°	1613.3	1723.9	1857.4	2015.5	2165.2	2289.5

TEST NUMBER: P776270

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRH-HCD42TRLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1547.3	1656.7	1791.0	1949.9	2102.2	2235.0
23°	1525.1	1633.7	1767.6	1926.9	2078.8	2213.5
23.5°	1502.0	1610.3	1743.4	1902.3	2054.7	2191.3
24°	1479.4	1586.5	1719.6	1877.7	2028.9	2168.3
24.5°	1456.4	1562.7	1694.7	1851.6	2003.2	2143.7
25°	1433.7	1538.9	1669.7	1825.6	1976.0	2118.4
25.5°	1410.7	1515.1	1644.0	1799.1	1949.1	2092.7
26°	1387.7	1490.9	1618.3	1771.8	1921.1	2066.2
26.5°	1365.0	1466.4	1593.4	1744.6	1893.5	2038.5
27°	1342.0	1441.8	1566.9	1716.6	1865.1	2011.3
27.5°	1319.0	1417.2	1540.8	1688.5	1835.5	1983.3
28°	1296.0	1392.7	1513.6	1659.8	1806.0	1953.7
28.5°	1273.3	1367.7	1487.5	1631.4	1777.2	1924.6
29°	1250.3	1343.9	1461.4	1603.0	1748.0	1895.0
29.5°	1227.3	1319.4	1434.5	1573.8	1718.1	1864.7
30°	1204.6	1294.8	1407.6	1546.6	1688.2	1834.8
30.5°	1182.0	1270.2	1380.8	1517.8	1658.2	1804.1
31°	1159.3	1246.5	1354.3	1489.0	1629.1	1773.0
31.5°	1137.1	1221.9	1328.2	1461.0	1599.5	1742.7
32°	1114.1	1197.7	1301.7	1433.0	1569.2	1711.2
32.5°	1092.6	1173.9	1275.6	1404.6	1539.7	1679.7
33°	1070.3	1149.7	1249.5	1378.1	1510.1	1648.6
33.5°	1048.1	1126.0	1224.2	1350.5	1480.6	1617.2
34°	1026.6	1102.5	1198.5	1323.2	1452.5	1586.5
34.5°	1005.1	1079.1	1173.5	1296.3	1423.0	1555.8
35°	983.6	1056.1	1148.6	1269.9	1394.6	1525.1
35.5°	962.5	1032.7	1123.7	1243.4	1366.2	1494.4
36°	941.8	1010.8	1100.2	1218.4	1338.6	1463.3
36.5°	921.0	988.2	1076.1	1191.6	1311.3	1433.7
37°	900.3	966.3	1053.4	1167.0	1283.3	1403.4
37.5°	880.7	944.1	1029.6	1142.1	1256.4	1374.2
38°	860.8	922.9	1007.0	1117.9	1229.6	1344.7
38.5°	841.6	901.8	984.3	1093.0	1203.1	1316.3
39°	822.8	881.1	962.5	1069.9	1178.1	1287.9
39.5°	803.2	860.4	941.0	1046.5	1152.4	1260.3
40°	784.4	840.8	919.1	1023.5	1127.1	1232.3
40.5°	766.4	820.9	898.4	1000.1	1102.5	1205.8
41°	748.3	802.1	877.7	978.2	1078.4	1179.3
41.5°	730.3	782.9	857.7	955.9	1054.6	1152.8
42°	713.4	764.5	837.8	934.8	1031.2	1127.5
42.5°	696.1	746.0	817.8	913.7	1008.1	1102.9
43°	679.6	728.8	798.6	893.0	985.5	1078.4
43.5°	663.1	710.7	779.4	872.3	963.6	1054.6



TEST NUMBER: P776270

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRH-HCD42TRLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	616.3	660.5	724.5	813.2	899.9	985.5
45.5°	601.4	644.0	707.3	794.0	879.6	963.2
46°	586.4	628.2	689.6	775.2	859.6	941.8
46.5°	571.8	612.5	673.1	756.8	839.7	920.6
47°	557.2	597.1	655.8	738.4	820.5	899.9
47.5°	543.4	582.2	639.7	720.7	801.3	880.0
48°	529.6	567.6	623.6	703.1	782.9	859.6
48.5°	516.2	553.0	607.5	685.8	764.5	839.7
49°	502.3	538.8	592.1	669.3	746.8	820.9
49.5°	489.3	524.6	576.8	652.8	729.1	802.1
50°	476.6	510.8	561.4	635.9	711.5	783.6
50.5°	464.0	497.4	546.9	619.8	694.6	765.6
51°	451.7	483.9	532.3	604.4	677.7	747.6
51.5°	439.4	470.5	518.1	588.7	661.6	729.9
52°	427.1	458.2	503.9	573.7	644.7	712.6
52.5°	415.2	445.5	490.4	558.8	629.0	695.8
53°	403.7	433.3	476.6	543.8	613.3	679.3
53.5°	392.2	421.0	463.6	529.6	597.5	662.4
54°	381.1	408.7	450.5	515.0	582.2	646.3
54.5°	370.3	397.2	437.9	500.8	567.6	630.1
55°	359.6	385.7	425.2	487.0	552.2	614.4
55.5°	348.8	374.6	412.9	473.6	538.0	598.7
56°	338.9	363.4	400.3	460.1	523.5	583.3
56.5°	329.3	352.7	388.8	447.1	509.3	568.4
57°	319.7	341.5	376.9	434.0	495.1	553.8
57.5°	310.1	331.6	365.3	421.4	481.2	538.4
58°	300.5	320.8	354.2	408.7	467.4	524.2
58.5°	290.9	310.8	343.5	396.8	454.4	510.0
59°	282.1	300.9	332.3	384.5	440.9	495.8
59.5°	273.2	291.3	322.0	372.6	428.3	482.0
60°	265.2	281.7	311.2	361.1	415.2	468.6
60.5°	256.7	272.5	301.3	349.6	402.9	455.1
61°	248.7	263.6	290.9	338.5	389.9	441.7
61.5°	240.6	254.4	281.3	327.3	378.4	428.7
62°	232.9	245.6	271.7	316.2	366.5	416.0
62.5°	225.3	237.2	262.1	305.9	354.6	403.7
63°	218.0	229.1	252.9	295.1	342.7	391.1
63.5°	210.7	221.0	244.1	285.1	331.6	378.8
64°	203.8	213.0	234.9	274.8	320.4	366.9
64.5°	197.3	205.3	226.4	264.8	309.3	355.0
65°	190.7	198.0	218.0	255.2	298.6	343.1
65.5°	184.6	190.3	209.9	245.6	288.2	331.2
66°	178.4	183.1	201.5	236.0	277.8	318.9



TEST NUMBER: P776270

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRH-HCD42TRLWW-4000lm-2700K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	160.8	162.7	178.1	209.1	246.4	283.6
68°	155.4	156.2	170.8	200.7	236.4	272.1
68.5°	149.7	150.1	163.9	192.3	226.4	260.2
69°	144.3	143.9	157.0	183.8	216.4	249.1
69.5°	138.9	137.4	149.7	176.1	206.8	237.9
70°	133.5	132.0	143.1	168.5	197.6	226.8
70.5°	128.6	127.0	137.0	160.8	188.4	216.4
71°	123.6	121.7	131.2	153.1	179.2	205.7
71.5°	118.2	116.3	125.1	145.8	170.4	195.3
72°	113.6	111.3	119.0	138.9	161.6	185.0
72.5°	109.0	106.3	112.8	132.0	153.1	175.4
73°	103.6	101.3	107.5	125.5	145.1	165.8
73.5°	99.0	96.7	101.7	118.6	136.2	155.8
74°	94.4	92.1	96.3	112.1	128.9	146.6
74.5°	90.2	87.5	91.3	105.5	121.7	137.0
75°	85.6	82.9	86.3	99.4	114.4	128.6
75.5°	81.4	78.7	81.4	93.3	107.1	120.1
76°	77.1	74.4	76.8	87.1	100.2	111.7
76.5°	72.9	70.2	71.8	81.7	93.3	103.2
77°	68.7	66.4	67.5	76.0	86.7	95.2
77.5°	64.9	62.6	62.9	70.6	80.2	87.1
78°	60.6	58.7	58.7	65.6	74.1	79.4
78.5°	56.8	54.9	54.9	60.3	67.9	72.1
79°	53.0	51.4	51.0	55.6	62.2	64.9
79.5°	49.1	47.6	46.8	50.7	56.4	58.3
80°	45.3	44.1	43.4	46.4	51.0	51.8
80.5°	41.8	41.1	39.5	42.2	45.7	46.1
81°	38.4	37.6	36.5	38.0	40.7	40.3
81.5°	34.9	34.2	33.0	33.8	35.7	34.9
82°	31.5	31.1	29.5	30.3	31.1	29.5
82.5°	28.0	28.0	26.5	26.9	26.5	24.6
83°	24.9	24.9	23.4	23.4	22.3	20.3
83.5°	21.5	21.5	20.3	20.3	18.8	16.5
84°	18.4	18.8	17.7	17.3	15.4	13.4
84.5°	15.4	15.7	15.0	14.6	13.0	11.5
85°	12.3	13.0	12.7	12.3	10.4	10.0
85.5°	9.2	10.7	10.0	10.0	8.1	8.1
86°	6.5	8.1	7.7	7.7	5.8	6.5
86.5°	3.8	5.4	5.0	5.4	4.2	5.4
87°	1.9	2.7	3.1	3.8	3.1	4.6
87.5°	0.4	0.8	1.2	1.9	1.9	3.5
88°	0.0	0.0	0.0	0.4	1.2	2.7
88.5°	0.0	0.0	0.0	0.0	0.4	1.9



TEST NUMBER: P776270

CATALOG NUMBER: HCDJBL3040CSD-HCD42TRH-HCD42TRLWW-4000lm-2700K

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



Report Generated By 670245859 / DESKTOP-T8S5UU9

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Scaled Data Report





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

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Scaled Data Report



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Scaled Data Report





21.5°	2272.3	2302.2	2243.1	2117.2	1947.2	1800.2	1679.0	1590.7	1517.0	1503.6	1530.8
22°	2253.8	2286.8	2228.1	2100.7	1929.2	1781.4	1659.4	1570.7	1496.7	1483.6	1509.7



44°	1030.8	1058.8	1040.4	977.4	878.0	801.3	742.6	701.5	649.7	639.3	635.9
44.5°	1007.8	1035.0	1017.0	955.2	856.6	781.7	724.5	684.2	633.6	624.8	620.5



66.5°	307.0	316.6	299.3	267.9	233.3	215.7	215.7	216.4	202.2	195.3	185.0
67°	295.1	304.7	289.0	258.3	224.9	208.4	208.8	209.1	195.0	188.8	178.8



89°	1.2	2.3	6.1	8.8	8.1	8.1	6.1	2.7	0.0	0.4	0.0
89.5°	0.4	1.5	3.8	6.5	5.8	5.4	3.5	1.2	0.0	0.4	0.0

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21.5°	1591.8	1701.6	1835.9	1994.8	2145.6	2272.3
22°	1570.0	1679.7	1813.7	1972.9	2124.1	2253.8



44°	647.4	693.5	761.0	852.0	941.8	1030.8
44.5°	631.7	676.6	743.0	832.4	920.6	1007.8



66.5°	172.3	176.1	193.4	226.8	267.1	307.0
67°	166.6	169.2	185.7	218.0	256.7	295.1

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Scaled Data Report



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

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Scaled Data Report



(END OF REPORT)