

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: P776003

Luminaire Tested: HCDJBL51525CSD-HCD4TSQC-2500lm-4000K

Issue Date: 2/7/2024

Test Information

Test Method: LM-79-2019
Report Number: P776003
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-HCD4TSQC-2500lm-4000K
Description: 4 INCH SQUARE MEDIUM SPECULAR CLEAR TRIM
Light Source: SELECTABLE LUMENS AND CCT ARRAY 90CRI / 4000K CCT
Ballast/Driver: -

Summary

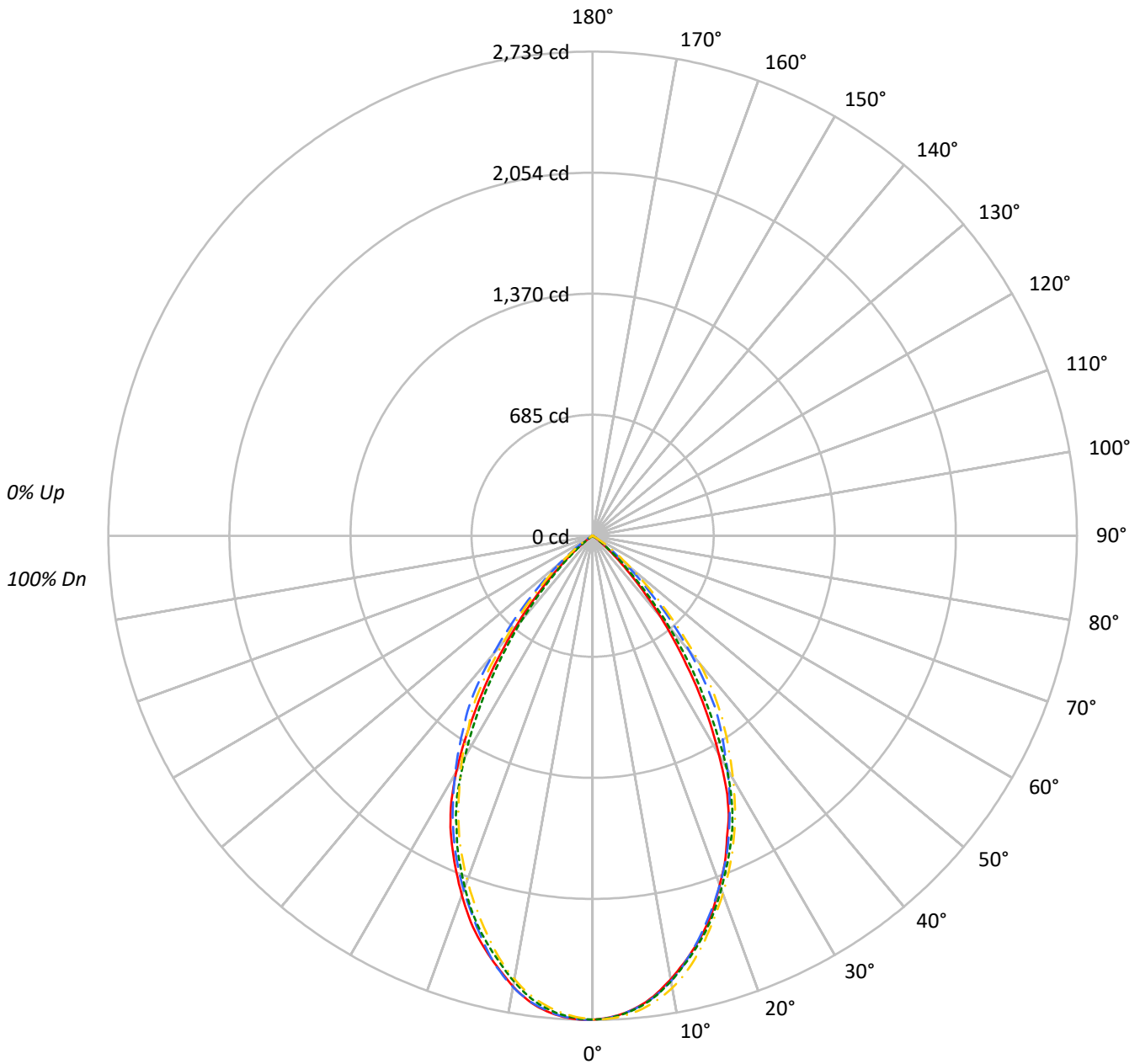
Lumens per Lamp: N/A
Luminaire Lumens: 2830.8 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.93 / 0.98
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 25
Input Voltage (V): NR
Input Current (A_{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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CATALOG NUMBER: HCDJBLS1525CSD-HCD4TSQC-2500lm-4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					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	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93					93			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86					86			
3	101	95	89	85	99	93	88	84	90	86	83	88	85	82	86	83	80	79					79			
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	80	77	74	73					73			
5	90	82	75	71	89	81	75	70	79	74	70	77	73	69	75	72	69	67					67			
6	85	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62					62			
7	81	71	65	60	79	70	64	60	69	64	60	68	63	59	67	62	59	57					57			
8	77	66	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	53					53			
9	73	62	56	52	71	62	56	52	61	55	52	60	55	51	59	55	51	50					50			
10	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47					47			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	270501	270501	270501	270501
5°	266594	267040	268836	267496
10°	255635	256709	259900	256990
15°	240882	242151	245610	241527
20°	221195	223740	227517	222426
25°	197705	202994	206189	198479
30°	163153	172855	176096	165014
35°	120049	129835	132320	122872
40°	76824	86888	88604	79869
45°	38860	47527	48980	41739
50°	13655	18191	19360	15485
55°	2550	3291	3722	3688
60°	949	909	811	1107
65°	772	725	655	842
70°	578	578	520	665
75°	496	496	382	573
80°	285	285	285	455
85°	340	340	0	340

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 135°
 Vertical Angle: 45°
 Luminance: 78950 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.3	8.9
10°-20°	662.7	23.4
20°-30°	841.5	29.7
30°-40°	695.9	24.6
40°-50°	318.5	11.2
50°-60°	53.5	1.9
60°-70°	3.8	0.1
70°-80°	1.4	0.1
80°-90°	0.3	0.0
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°	1757.5	62.1
0°-40°	2453.4	86.7
0°-60°	2825.4	99.8
0°-90°	2830.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2830.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2737	2737	2737	2737	2737	
5°	2687	2691	2710	2696	2687	252
15°	2354	2366	2400	2360	2354	658
25°	1813	1861	1891	1820	1813	823
35°	995	1076	1097	1018	995	618
45°	278	340	350	299	278	226
55°	15	19	22	21	15	24
65°	3	3	3	4	3	3
75°	1	1	1	2	1	1
85°	0	0	0	0	0	0
90°	0	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°	2736.7	2736.7	2736.7	2736.7	2736.7	2736.7	2736.7	2736.7	2736.7	2736.7	2736.7
0.5°	2736.2	2736.5	2736.5	2735.2	2736.2	2736.2	2736.2	2737.2	2738.7	2739.0	2738.5
1°	2733.4	2734.2	2734.4	2733.7	2734.9	2735.4	2736.2	2737.2	2738.7	2738.7	2738.0
1.5°	2730.6	2731.1	2731.6	2731.4	2732.4	2733.4	2735.2	2736.2	2738.0	2738.5	2736.7
2°	2726.3	2727.0	2727.8	2727.6	2729.1	2731.4	2733.4	2734.4	2736.5	2737.2	2735.2
2.5°	2721.4	2722.2	2723.2	2723.2	2724.8	2727.8	2731.4	2731.6	2733.7	2734.4	2733.1
3°	2716.6	2717.1	2717.6	2718.1	2719.9	2723.5	2727.8	2728.3	2730.6	2730.9	2729.1
3.5°	2710.5	2710.8	2711.5	2712.3	2714.1	2718.9	2724.0	2723.2	2726.5	2726.8	2724.5
4°	2703.9	2703.9	2704.4	2705.7	2707.5	2713.1	2718.7	2718.4	2721.7	2721.7	2719.2
4.5°	2695.8	2696.3	2697.3	2698.6	2700.3	2707.0	2712.8	2712.3	2716.4	2716.1	2713.1
5°	2686.9	2687.1	2688.9	2690.4	2691.4	2699.6	2706.4	2705.7	2709.5	2710.0	2705.9
5.5°	2676.9	2677.5	2679.7	2681.5	2682.8	2691.2	2699.3	2698.3	2702.1	2702.6	2698.6
6°	2666.0	2666.5	2669.8	2671.3	2672.6	2682.5	2690.7	2689.7	2694.0	2694.2	2689.9
6.5°	2654.6	2654.8	2658.6	2660.9	2661.7	2672.4	2682.0	2680.5	2685.3	2685.3	2681.5
7°	2641.6	2642.1	2646.7	2649.5	2650.0	2661.2	2672.6	2670.3	2675.2	2675.4	2671.3
7.5°	2628.4	2628.4	2634.2	2637.0	2636.5	2649.2	2661.9	2659.7	2663.5	2664.7	2660.7
8°	2613.9	2614.1	2619.7	2623.8	2622.5	2636.0	2650.5	2647.2	2650.7	2652.0	2648.7
8.5°	2598.4	2599.4	2605.7	2609.3	2607.0	2622.0	2638.3	2634.2	2637.0	2639.6	2635.7
9°	2580.8	2582.8	2590.0	2593.5	2591.2	2607.3	2625.1	2619.7	2621.8	2625.1	2622.8
9.5°	2563.5	2565.8	2573.9	2577.5	2574.7	2591.5	2611.3	2604.2	2606.2	2609.8	2608.3
10°	2547.0	2548.0	2556.7	2560.7	2557.7	2575.7	2596.6	2588.2	2589.5	2593.5	2592.0
10.5°	2528.7	2529.9	2539.1	2542.7	2539.9	2559.4	2580.6	2570.6	2571.9	2576.5	2575.5
11°	2510.6	2511.9	2520.5	2524.6	2522.1	2541.1	2563.0	2552.8	2553.1	2559.2	2558.4
11.5°	2491.8	2493.3	2500.4	2505.3	2503.0	2523.3	2546.2	2533.5	2533.5	2540.4	2540.1
12°	2473.7	2474.3	2480.1	2485.2	2484.2	2505.0	2527.7	2514.2	2514.7	2520.3	2519.8
12.5°	2454.9	2454.9	2457.7	2465.6	2465.6	2486.2	2507.6	2493.8	2496.9	2501.0	2500.7
13°	2435.1	2435.6	2436.6	2445.0	2447.0	2467.4	2487.2	2473.2	2478.6	2481.6	2478.6
13.5°	2415.3	2415.3	2414.7	2423.9	2427.2	2448.3	2467.4	2453.1	2459.2	2460.8	2455.9
14°	2395.2	2394.7	2391.9	2403.3	2407.1	2428.7	2444.0	2432.8	2439.7	2440.4	2432.3
14.5°	2374.6	2373.8	2369.0	2381.9	2387.0	2408.9	2421.6	2412.2	2420.1	2420.3	2408.9
15°	2354.0	2352.9	2346.6	2361.1	2366.4	2388.5	2399.0	2391.6	2400.2	2399.7	2383.2
15.5°	2333.1	2331.3	2322.2	2339.2	2345.6	2367.7	2375.1	2369.7	2379.1	2378.4	2358.0
16°	2310.5	2308.2	2298.8	2316.3	2324.0	2346.3	2350.1	2348.4	2358.8	2357.5	2332.3
16.5°	2288.1	2287.1	2274.6	2293.4	2301.8	2325.7	2326.0	2326.2	2336.9	2335.4	2307.9
17°	2264.7	2264.4	2250.7	2270.5	2278.9	2302.6	2301.1	2303.9	2314.3	2313.0	2282.0
17.5°	2240.0	2240.8	2226.3	2247.1	2254.8	2280.2	2276.4	2280.5	2290.4	2290.6	2257.1
18°	2213.3	2214.6	2201.9	2223.5	2229.9	2256.8	2252.2	2256.6	2265.7	2267.5	2231.4
18.5°	2185.6	2190.4	2177.5	2198.3	2204.9	2233.2	2228.1	2231.6	2240.5	2242.6	2206.7
19°	2157.4	2163.0	2152.5	2172.6	2179.5	2207.2	2203.4	2206.5	2215.6	2217.4	2182.0
19.5°	2130.7	2134.7	2127.1	2145.9	2153.6	2182.8	2179.0	2181.3	2189.7	2191.2	2157.1
20°	2102.9	2106.8	2102.4	2120.0	2127.1	2156.1	2154.1	2154.1	2163.0	2165.0	2131.7
20.5°	2076.0	2079.0	2077.5	2092.8	2100.4	2129.7	2128.9	2127.1	2136.0	2138.0	2106.0
21°	2049.5	2051.1	2051.8	2065.6	2073.2	2102.4	2103.5	2099.9	2109.1	2110.8	2079.6



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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°	1966.9	1968.2	1972.7	1981.9	1996.1	2019.3	2026.4	2015.5	2028.4	2026.9	2001.5
23°	1934.8	1940.7	1945.0	1953.7	1969.9	1991.3	2000.2	1986.7	2002.2	1998.7	1974.3
23.5°	1901.0	1911.4	1916.3	1923.4	1942.7	1964.9	1973.8	1958.0	1975.0	1970.2	1948.3
24°	1868.7	1879.9	1887.5	1896.4	1915.5	1935.4	1946.5	1929.3	1946.5	1941.5	1919.6
24.5°	1840.7	1846.9	1857.8	1869.5	1888.6	1906.1	1918.1	1900.8	1918.6	1912.7	1890.6
25°	1812.8	1812.3	1827.8	1842.0	1861.3	1876.9	1889.6	1872.0	1890.6	1883.7	1861.9
25.5°	1785.1	1780.7	1797.5	1810.7	1834.1	1847.4	1861.1	1843.3	1862.9	1855.0	1833.1
26°	1755.8	1752.0	1767.5	1779.5	1803.4	1818.1	1832.6	1814.8	1834.9	1826.3	1805.7
26.5°	1719.4	1724.3	1737.5	1747.7	1771.1	1791.4	1804.9	1781.7	1802.1	1793.2	1774.9
27°	1684.3	1695.8	1708.0	1719.7	1739.8	1764.2	1774.1	1752.2	1770.6	1765.2	1743.6
27.5°	1648.2	1666.3	1678.0	1693.0	1704.9	1735.0	1743.6	1724.8	1736.5	1735.0	1712.3
28°	1604.7	1628.9	1648.7	1666.0	1670.1	1700.9	1711.6	1695.0	1701.1	1701.1	1679.8
28.5°	1560.0	1593.3	1618.0	1633.5	1632.7	1668.3	1680.8	1662.5	1663.0	1669.6	1648.2
29°	1516.2	1557.7	1587.4	1601.7	1595.1	1634.5	1649.8	1631.7	1624.6	1635.0	1616.4
29.5°	1473.0	1516.5	1555.2	1570.2	1555.7	1598.9	1619.0	1597.9	1583.6	1598.9	1584.9
30°	1429.5	1473.3	1523.1	1536.8	1514.5	1562.0	1589.2	1562.8	1542.9	1562.3	1553.1
30.5°	1386.0	1429.8	1489.8	1501.5	1470.7	1523.4	1558.5	1527.2	1499.7	1524.1	1522.3
31°	1342.8	1387.0	1458.3	1465.1	1427.2	1485.2	1526.4	1490.3	1454.2	1485.7	1492.1
31.5°	1300.3	1344.6	1427.2	1428.2	1382.2	1445.3	1494.1	1452.7	1408.9	1445.0	1461.8
32°	1258.4	1303.4	1399.5	1390.4	1336.9	1404.6	1461.6	1413.0	1363.9	1404.3	1430.0
32.5°	1215.6	1261.4	1371.0	1350.7	1290.9	1362.6	1432.6	1372.3	1317.1	1362.1	1396.5
33°	1171.6	1220.2	1343.0	1310.8	1246.9	1318.6	1404.1	1331.1	1272.3	1319.7	1365.2
33.5°	1128.2	1180.0	1314.1	1269.3	1201.9	1275.1	1375.6	1288.9	1225.3	1275.1	1335.4
34°	1084.7	1139.1	1283.8	1227.3	1159.2	1231.7	1345.1	1245.4	1182.1	1229.9	1304.9
34.5°	1039.9	1097.9	1252.0	1184.9	1116.5	1188.4	1312.3	1201.9	1138.3	1186.1	1274.4
35°	994.9	1056.4	1224.0	1142.6	1076.0	1146.0	1284.6	1160.2	1096.6	1144.9	1247.2
35.5°	950.4	1014.2	1192.0	1100.2	1034.6	1104.5	1257.3	1117.7	1052.6	1101.2	1219.7
36°	905.1	972.5	1153.8	1058.7	994.1	1063.8	1223.8	1076.3	1011.4	1059.7	1186.4
36.5°	865.2	930.0	1116.5	1018.8	954.2	1023.9	1191.0	1035.6	970.0	1017.8	1150.5
37°	825.3	890.6	1080.1	979.1	913.0	984.5	1159.7	995.1	929.8	979.9	1118.0
37.5°	785.3	851.2	1041.2	940.0	871.3	945.8	1124.6	956.2	887.8	939.7	1080.6
38°	745.1	811.8	1002.5	899.0	830.9	907.7	1089.5	917.8	845.4	901.8	1041.4
38.5°	707.0	772.1	964.1	862.9	790.4	869.3	1054.7	880.2	804.4	863.7	1001.5
39°	669.6	732.9	926.2	826.5	750.7	833.1	1016.5	842.6	765.5	826.0	961.1
39.5°	631.7	696.3	888.1	790.4	711.6	794.5	978.4	804.2	725.3	787.9	919.6
40°	595.4	660.7	850.2	754.3	673.4	756.6	940.5	767.0	686.7	751.0	879.4
40.5°	558.2	624.6	812.3	718.2	636.6	719.0	901.3	730.1	648.5	713.9	839.2
41°	522.4	590.8	774.4	682.6	600.7	683.4	861.6	693.5	613.2	677.8	800.1
41.5°	487.3	556.2	736.5	647.7	565.9	647.2	821.2	657.4	577.0	641.1	761.4
42°	453.2	523.1	698.6	612.7	530.8	612.9	781.3	622.8	543.0	607.1	723.5
42.5°	420.4	490.6	661.5	580.4	498.0	578.3	742.9	589.3	508.9	574.0	686.4
43°	389.6	458.3	624.1	548.3	464.4	547.3	704.7	556.7	474.8	540.9	651.1
43.5°	359.9	426.2	587.0	517.3	431.8	514.2	668.1	525.2	442.5	509.1	616.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
45°	278.0	340.3	485.0	429.3	340.0	423.9	564.8	435.1	350.4	420.1	516.0
45.5°	252.5	313.3	454.2	401.6	312.0	394.7	532.3	406.9	322.2	392.2	484.7
46°	228.9	288.9	423.7	373.8	285.3	366.7	501.3	379.7	295.3	364.7	453.7
46.5°	206.3	265.3	395.5	347.4	260.2	339.8	470.7	352.2	269.6	338.0	423.4
47°	184.6	241.6	367.7	321.2	237.8	313.8	442.0	326.3	247.7	312.8	394.7
47.5°	164.8	219.5	341.3	296.8	215.4	288.1	412.8	301.9	225.8	288.4	367.0
48°	146.5	198.4	315.4	273.4	193.3	264.7	385.5	277.5	204.0	265.0	340.5
48.5°	129.7	178.5	290.9	250.8	171.2	244.1	358.3	254.8	182.3	244.9	315.4
49°	114.7	159.5	267.3	229.9	152.1	223.3	332.9	234.7	160.5	224.8	291.4
49.5°	101.0	142.4	244.9	210.3	134.8	202.7	307.2	214.6	142.7	205.0	268.1
50°	88.8	126.7	222.8	191.2	118.3	182.1	283.3	194.6	125.9	184.9	248.2
50.5°	79.6	111.9	203.2	171.9	103.3	161.5	260.4	174.5	110.6	164.8	228.6
51°	70.4	98.4	183.9	154.6	89.8	144.5	240.3	156.4	96.9	148.5	208.8
51.5°	61.3	86.7	166.3	138.1	77.3	128.7	220.0	139.9	83.9	132.8	189.0
52°	52.1	77.8	149.5	122.8	66.1	114.2	199.6	124.1	71.7	118.0	169.4
52.5°	45.0	68.9	134.5	108.3	55.7	99.9	179.3	109.9	60.8	104.0	152.8
53°	38.4	59.8	119.3	94.6	46.5	87.0	162.0	95.9	51.1	91.0	137.3
53.5°	32.0	51.1	106.8	83.9	38.1	75.3	146.0	83.4	42.2	78.8	123.1
54°	26.2	44.3	94.1	73.2	31.8	64.3	130.2	71.5	35.4	67.6	109.4
54.5°	20.1	37.9	84.4	62.8	25.4	54.4	115.5	61.0	28.5	58.0	96.9
55°	14.8	32.0	75.3	52.1	19.1	45.8	102.2	51.1	21.6	48.6	85.5
55.5°	10.7	26.2	65.9	41.7	13.0	37.1	89.5	42.2	14.8	40.2	75.0
56°	9.7	20.3	56.5	33.8	6.6	31.0	77.8	35.4	7.9	33.6	65.6
56.5°	8.6	15.3	47.0	26.7	6.1	24.7	66.9	28.7	5.6	27.0	56.7
57°	7.6	10.7	39.7	20.3	5.8	18.6	57.2	22.1	5.3	20.6	48.8
57.5°	6.6	9.4	33.8	14.0	5.6	12.5	48.3	15.5	5.1	14.0	42.0
58°	5.6	8.4	28.5	9.2	5.3	6.1	40.4	8.9	4.8	7.4	35.9
58.5°	5.3	7.4	23.9	8.1	5.1	5.3	33.8	5.3	4.6	5.3	30.3
59°	5.1	6.4	19.8	7.1	4.8	5.1	29.5	4.8	4.3	4.8	26.7
59.5°	5.1	5.1	16.5	6.1	4.6	4.8	25.2	4.6	4.1	4.8	23.1
60°	4.8	4.8	14.0	4.8	4.6	4.6	21.1	4.3	4.1	4.6	19.3
60.5°	4.6	4.8	11.7	4.8	4.3	4.6	16.8	4.3	3.8	4.3	15.8
61°	4.3	4.6	9.7	4.6	4.1	4.3	12.5	4.1	3.8	4.1	12.2
61.5°	4.3	4.3	8.4	4.3	4.1	4.1	10.2	3.8	3.6	4.1	9.9
62°	4.1	4.3	7.1	4.1	3.8	4.1	8.4	3.8	3.3	3.8	8.4
62.5°	3.8	4.1	5.8	4.1	3.8	3.8	6.9	3.6	3.3	3.8	6.9
63°	3.8	3.8	4.6	3.8	3.6	3.6	5.6	3.6	3.1	3.6	5.6
63.5°	3.6	3.8	4.1	3.8	3.3	3.6	4.6	3.3	3.1	3.3	4.8
64°	3.6	3.6	3.8	3.6	3.3	3.3	3.8	3.3	3.1	3.3	4.1
64.5°	3.3	3.6	3.6	3.6	3.1	3.3	3.6	3.1	2.8	3.1	3.6
65°	3.3	3.3	3.6	3.3	3.1	3.1	3.3	3.1	2.8	3.1	3.6
65.5°	3.1	3.3	3.3	3.3	3.1	3.1	3.1	2.8	2.5	3.1	3.3
66°	3.1	3.1	3.1	3.1	2.8	2.8	3.1	2.8	2.5	2.8	3.1



TEST NUMBER: P776003
 CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
67.5°	2.5	2.8	2.8	2.8	2.5	2.5	2.8	2.5	2.3	2.5	2.8
68°	2.5	2.5	2.8	2.5	2.3	2.5	2.5	2.3	2.0	2.5	2.5
68.5°	2.3	2.5	2.5	2.5	2.3	2.3	2.5	2.3	2.0	2.3	2.5
69°	2.3	2.3	2.5	2.3	2.3	2.3	2.3	2.0	2.0	2.3	2.5
69.5°	2.3	2.3	2.3	2.3	2.0	2.3	2.3	2.0	1.8	2.0	2.3
70°	2.0	2.3	2.3	2.3	2.0	2.0	2.3	2.0	1.8	2.0	2.3
70.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.8	2.0	2.0
71°	1.8	2.0	2.0	2.0	1.8	2.0	2.0	1.8	1.8	1.8	2.0
71.5°	1.8	2.0	2.0	2.0	1.8	1.8	1.8	1.8	1.5	1.8	2.0
72°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.5	1.8	1.8
72.5°	1.5	1.8	1.8	1.8	1.5	1.8	1.8	1.5	1.5	1.5	1.8
73°	1.5	1.5	1.8	1.8	1.5	1.5	1.5	1.5	1.3	1.5	1.8
73.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.3	1.5	1.5
74°	1.3	1.5	1.5	1.5	1.3	1.5	1.5	1.3	1.3	1.5	1.5
74.5°	1.3	1.3	1.5	1.5	1.3	1.3	1.5	1.3	1.3	1.3	1.5
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.3	1.3
75.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.3	1.3
76°	1.0	1.3	1.3	1.3	1.0	1.3	1.3	1.0	1.0	1.0	1.3
76.5°	1.0	1.0	1.3	1.3	1.0	1.0	1.3	1.0	1.0	1.0	1.3
77°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.8	1.0	1.0
78°	0.8	0.8	1.0	1.0	0.8	1.0	1.0	0.8	0.8	0.8	1.0
78.5°	0.8	0.8	1.0	0.8	0.8	0.8	1.0	0.8	0.8	0.8	1.0
79°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.8	0.8
79.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.8	0.8
80°	0.5	0.5	0.8	0.8	0.5	0.8	0.8	0.5	0.5	0.5	0.8
80.5°	0.5	0.5	0.8	0.8	0.5	0.8	0.8	0.5	0.5	0.5	0.8
81°	0.5	0.5	0.8	0.5	0.5	0.5	0.8	0.5	0.5	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.5	0.5	0.5
82°	0.5	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5
82.5°	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.5
83°	0.3	0.3	0.5	0.5	0.3	0.5	0.5	0.3	0.3	0.3	0.5
83.5°	0.3	0.3	0.5	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3
84°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
84.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3
85°	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
85.5°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
86°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3
86.5°	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.3
87°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776003

CATALOG NUMBER: HCDJBL1525CSD-HCD4TSQC-2500lm-4000K

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: P776003

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	2736.7	2736.7	2736.7	2736.7	2736.7	2736.7
0.5°	2736.2	2736.2	2734.7	2733.1	2734.9	2736.2
1°	2735.2	2734.9	2732.6	2730.6	2732.9	2733.4
1.5°	2733.4	2733.1	2730.4	2727.6	2729.6	2730.6
2°	2731.1	2730.4	2727.0	2723.2	2726.0	2726.3
2.5°	2727.6	2726.5	2722.5	2718.7	2721.4	2721.4
3°	2723.5	2722.2	2717.1	2712.5	2716.6	2716.6
3.5°	2718.9	2716.9	2711.3	2706.7	2711.0	2710.5
4°	2713.3	2711.3	2704.7	2699.3	2704.4	2703.9
4.5°	2706.7	2703.9	2697.0	2691.9	2696.8	2695.8
5°	2699.6	2696.0	2688.9	2683.0	2688.6	2686.9
5.5°	2691.2	2687.4	2679.5	2673.6	2679.0	2676.9
6°	2682.0	2677.7	2669.3	2664.0	2668.8	2666.0
6.5°	2671.6	2666.8	2658.4	2652.3	2657.4	2654.6
7°	2660.4	2654.8	2645.9	2639.8	2645.2	2641.6
7.5°	2647.7	2642.1	2633.2	2626.8	2632.4	2628.4
8°	2634.7	2627.9	2618.5	2612.6	2618.5	2613.9
8.5°	2620.2	2612.6	2603.2	2597.6	2604.2	2598.4
9°	2604.7	2595.6	2586.9	2581.8	2587.9	2580.8
9.5°	2588.2	2578.3	2569.6	2565.3	2571.1	2563.5
10°	2570.9	2560.5	2551.1	2546.2	2553.6	2547.0
10.5°	2553.1	2541.4	2531.7	2529.4	2536.1	2528.7
11°	2534.3	2522.6	2512.7	2509.6	2518.0	2510.6
11.5°	2515.5	2502.2	2492.6	2488.5	2499.2	2491.8
12°	2495.1	2482.1	2471.7	2466.1	2479.6	2473.7
12.5°	2475.3	2462.6	2450.6	2444.5	2460.0	2454.9
13°	2454.9	2442.5	2429.2	2421.4	2440.4	2435.1
13.5°	2434.3	2422.6	2408.4	2398.0	2420.1	2415.3
14°	2413.5	2402.3	2386.5	2373.3	2399.0	2395.2
14.5°	2392.4	2382.2	2365.7	2349.4	2378.1	2374.6
15°	2371.5	2360.3	2343.5	2324.5	2356.5	2354.0
15.5°	2350.1	2338.7	2320.9	2299.8	2334.1	2333.1
16°	2328.0	2317.1	2297.8	2274.9	2312.0	2310.5
16.5°	2305.4	2294.7	2275.1	2250.2	2289.4	2288.1
17°	2281.7	2271.1	2251.5	2225.0	2265.7	2264.7
17.5°	2258.8	2247.7	2227.3	2200.4	2242.1	2240.0
18°	2234.4	2222.0	2202.1	2175.4	2217.6	2213.3
18.5°	2210.0	2195.5	2177.0	2150.0	2192.2	2185.6
19°	2184.3	2169.6	2150.5	2124.8	2165.3	2157.4
19.5°	2157.6	2142.6	2123.5	2099.4	2137.3	2130.7
20°	2130.9	2114.6	2096.6	2072.4	2108.8	2102.9
20.5°	2102.9	2087.4	2068.1	2046.5	2080.3	2076.0
21°	2075.2	2059.2	2040.1	2020.0	2050.8	2049.5

TEST NUMBER: P776003

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
22.5°	1990.0	1975.0	1952.4	1939.9	1963.8	1966.9
23°	1960.0	1947.1	1922.6	1912.5	1934.8	1934.8
23.5°	1930.8	1918.3	1892.9	1884.5	1906.6	1901.0
24°	1901.3	1886.0	1863.6	1855.2	1876.6	1868.7
24.5°	1871.8	1851.9	1833.6	1824.5	1844.8	1840.7
25°	1842.5	1819.9	1802.3	1794.0	1811.2	1812.8
25.5°	1813.0	1792.2	1769.8	1763.4	1777.4	1785.1
26°	1778.9	1765.0	1735.5	1732.4	1743.1	1755.8
26.5°	1744.6	1731.1	1703.2	1700.1	1713.3	1719.4
27°	1712.6	1694.5	1674.4	1669.1	1684.3	1684.3
27.5°	1682.8	1661.2	1645.4	1636.5	1656.1	1648.2
28°	1654.1	1619.0	1611.4	1604.7	1626.4	1604.7
28.5°	1621.3	1576.0	1574.2	1573.5	1592.8	1560.0
29°	1583.1	1532.0	1540.9	1543.2	1556.4	1516.2
29.5°	1549.6	1488.8	1500.5	1512.7	1522.9	1473.0
30°	1508.4	1445.8	1458.0	1482.2	1483.4	1429.5
30.5°	1467.9	1403.6	1414.5	1450.6	1442.7	1386.0
31°	1424.2	1361.1	1372.3	1418.3	1400.8	1342.8
31.5°	1382.2	1318.6	1330.6	1383.0	1358.3	1300.3
32°	1341.3	1277.2	1289.6	1348.4	1316.6	1258.4
32.5°	1301.1	1236.0	1247.9	1315.6	1275.4	1215.6
33°	1258.9	1194.0	1209.0	1285.8	1236.0	1171.6
33.5°	1220.0	1150.8	1169.4	1260.4	1195.8	1128.2
34°	1179.5	1106.8	1130.2	1235.7	1156.1	1084.7
34.5°	1141.4	1062.5	1089.2	1203.2	1115.7	1039.9
35°	1100.2	1018.3	1050.1	1173.2	1076.8	994.9
35.5°	1061.0	974.8	1008.9	1142.4	1036.9	950.4
36°	1019.8	931.6	968.4	1102.7	997.7	905.1
36.5°	980.9	891.1	927.2	1065.3	957.3	865.2
37°	938.7	850.7	888.3	1025.9	918.3	825.3
37.5°	897.7	810.5	849.4	983.4	879.7	785.3
38°	857.0	770.1	810.8	940.7	840.8	745.1
38.5°	817.6	729.9	772.1	897.5	802.1	707.0
39°	779.0	693.0	733.5	859.3	763.5	669.6
39.5°	741.8	656.4	697.1	821.4	724.8	631.7
40°	705.0	619.0	663.0	783.3	689.7	595.4
40.5°	669.9	581.6	628.2	745.4	654.6	558.2
41°	635.8	546.8	594.8	709.5	621.0	522.4
41.5°	602.2	509.4	561.5	674.7	587.0	487.3
42°	569.2	476.8	528.7	640.6	554.7	453.2
42.5°	536.1	443.8	496.4	607.8	522.6	420.4
43°	503.8	413.0	464.4	574.8	492.1	389.6
43.5°	472.5	381.2	433.6	542.7	461.1	359.9



TEST NUMBER: P776003

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
45°	383.5	298.6	348.4	449.6	373.1	278.0
45.5°	356.0	272.1	322.5	420.9	346.4	252.5
46°	329.8	248.2	297.8	392.4	320.2	228.9
46.5°	304.7	224.8	273.9	366.2	295.8	206.3
47°	280.5	202.4	251.0	340.5	271.9	184.6
47.5°	257.6	181.1	228.4	316.4	248.5	164.8
48°	236.8	162.8	207.3	292.7	227.1	146.5
48.5°	215.9	144.7	187.4	271.4	206.0	129.7
49°	195.1	128.7	168.6	250.5	186.2	114.7
49.5°	174.5	114.2	151.3	231.2	166.8	101.0
50°	156.4	100.7	134.8	211.6	150.6	88.8
50.5°	139.6	88.5	119.8	193.8	134.5	79.6
51°	124.9	79.6	106.3	176.2	119.3	70.4
51.5°	110.6	70.7	94.4	160.5	105.0	61.3
52°	97.4	62.1	85.5	145.5	93.1	52.1
52.5°	85.7	53.2	76.5	131.0	83.9	45.0
53°	75.3	46.0	67.6	117.2	74.8	38.4
53.5°	66.1	39.4	58.7	105.0	65.6	32.0
54°	57.7	33.1	49.8	93.6	56.5	26.2
54.5°	50.4	27.2	43.5	84.4	47.3	20.1
55°	43.7	21.4	37.1	75.5	40.7	14.8
55.5°	37.4	15.8	31.3	66.4	34.8	10.7
56°	32.6	11.7	25.2	57.5	29.0	9.7
56.5°	27.7	8.4	19.8	48.3	23.7	8.6
57°	22.9	7.9	14.5	41.5	18.6	7.6
57.5°	18.1	7.4	10.4	35.6	13.7	6.6
58°	13.2	7.1	9.4	30.3	9.7	5.6
58.5°	8.4	6.6	8.4	25.4	8.6	5.3
59°	6.6	6.4	7.6	21.4	7.6	5.1
59.5°	6.1	6.1	6.6	17.8	6.4	5.1
60°	5.8	5.6	5.8	14.8	5.3	4.8
60.5°	5.6	5.3	5.6	12.2	5.1	4.6
61°	5.3	5.1	5.3	10.2	4.8	4.3
61.5°	5.1	4.8	5.1	8.9	4.6	4.3
62°	4.8	4.8	4.8	7.6	4.3	4.1
62.5°	4.6	4.6	4.6	6.4	4.3	3.8
63°	4.3	4.3	4.3	5.1	4.1	3.8
63.5°	4.1	4.1	4.1	4.3	3.8	3.6
64°	4.1	3.8	4.1	3.8	3.8	3.6
64.5°	3.8	3.8	3.8	3.8	3.6	3.3
65°	3.6	3.6	3.6	3.6	3.6	3.3
65.5°	3.6	3.6	3.6	3.6	3.3	3.1
66°	3.3	3.3	3.3	3.3	3.3	3.1



TEST NUMBER: P776003

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-4000K

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
67.5°	3.1	2.8	3.1	2.8	2.8	2.5
68°	2.8	2.8	2.8	2.8	2.8	2.5
68.5°	2.8	2.5	2.8	2.5	2.5	2.3
69°	2.5	2.5	2.5	2.5	2.5	2.3
69.5°	2.5	2.5	2.5	2.5	2.3	2.3
70°	2.3	2.3	2.3	2.3	2.3	2.0
70.5°	2.3	2.3	2.3	2.3	2.3	2.0
71°	2.0	2.0	2.0	2.0	2.0	1.8
71.5°	2.0	2.0	2.0	2.0	2.0	1.8
72°	2.0	2.0	2.0	2.0	1.8	1.8
72.5°	1.8	1.8	1.8	1.8	1.8	1.5
73°	1.8	1.8	1.8	1.8	1.8	1.5
73.5°	1.8	1.8	1.8	1.8	1.5	1.5
74°	1.5	1.5	1.5	1.5	1.5	1.3
74.5°	1.5	1.5	1.5	1.5	1.5	1.3
75°	1.5	1.5	1.5	1.5	1.3	1.3
75.5°	1.3	1.3	1.3	1.3	1.3	1.3
76°	1.3	1.3	1.3	1.3	1.3	1.0
76.5°	1.3	1.3	1.3	1.3	1.3	1.0
77°	1.3	1.0	1.3	1.3	1.0	1.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0
78°	1.0	1.0	1.0	1.0	1.0	0.8
78.5°	1.0	1.0	1.0	1.0	0.8	0.8
79°	0.8	0.8	1.0	1.0	0.8	0.8
79.5°	0.8	0.8	0.8	0.8	0.8	0.8
80°	0.8	0.8	0.8	0.8	0.8	0.5
80.5°	0.8	0.8	0.8	0.8	0.5	0.5
81°	0.8	0.8	0.8	0.8	0.5	0.5
81.5°	0.5	0.5	0.5	0.5	0.5	0.5
82°	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.3	0.3
83°	0.5	0.5	0.5	0.5	0.3	0.3
83.5°	0.5	0.5	0.5	0.5	0.3	0.3
84°	0.3	0.3	0.3	0.3	0.3	0.3
84.5°	0.3	0.3	0.3	0.3	0.3	0.3
85°	0.3	0.3	0.3	0.3	0.0	0.3
85.5°	0.3	0.3	0.3	0.3	0.0	0.0
86°	0.3	0.3	0.3	0.3	0.0	0.0
86.5°	0.3	0.3	0.3	0.3	0.0	0.0
87°	0.0	0.3	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0	0.0
88.5°	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P776003

CATALOG NUMBER: HCDJBL51525CSD-HCD4TSQC-2500lm-4000K

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



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Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report





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

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Peachtree City, GA 30269

Scaled Data Report



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Peachtree City, GA 30269

Scaled Data Report





21.5°	2023.6	2023.3	2025.1	2037.6	2046.5	2075.5	2078.0	2072.2	2082.1	2083.1	2054.1
22°	1996.4	1994.6	1999.2	2010.1	2021.6	2047.3	2051.8	2045.2	2055.4	2054.9	2027.9



44°	331.1	396.5	551.4	486.5	400.3	483.7	631.7	493.6	411.2	478.1	582.4
44.5°	303.4	367.7	517.0	458.0	369.3	453.2	597.4	464.1	380.7	448.9	548.6



66.5°	2.8	3.1	3.1	3.1	2.8	2.8	2.8	2.5	2.5	2.8	3.1
67°	2.8	2.8	2.8	2.8	2.5	2.8	2.8	2.5	2.3	2.5	2.8



89°	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0

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21.5°	2047.3	2030.2	2011.1	1993.1	2022.1	2023.6
22°	2018.5	2002.7	1982.1	1966.9	1993.1	1996.4



44°	442.0	353.0	404.1	510.7	430.1	331.1
44.5°	411.7	325.5	376.1	480.2	400.5	303.4

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66.5°	3.3	3.1	3.3	3.1	3.1	2.8
67°	3.1	3.1	3.1	3.1	3.1	2.8

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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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(END OF REPORT)