

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: NEO-RAY

Report Number: P998456

Luminaire Tested: S124DR-B1195DB2750-4F0-XX-W2A-A_5000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998456
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-21)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DR-B1195DB2750-4F0-XX-W2A-A_5000K
Description: Define 4 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

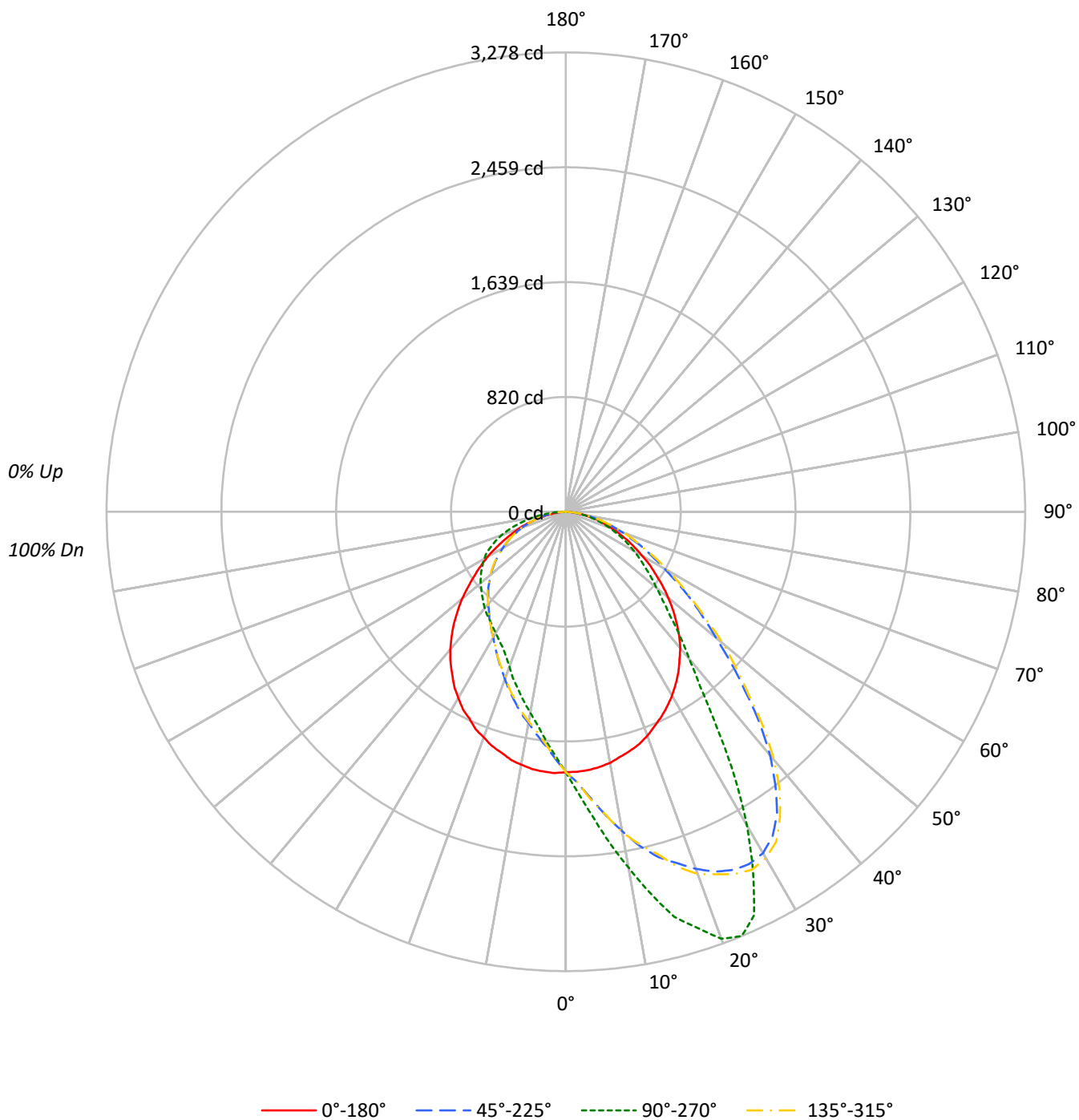
Lumens per Lamp: N/A
Luminaire Lumens: 5125.0 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.41
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 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				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		0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102		100
1	109	105	101	97	107	103	99	96	98	95	93		95	92	90		91	89	87		85
2	100	92	86	80	98	90	84	79	87	82	78		84	79	76		81	77	74		72
3	92	82	74	68	89	80	73	67	77	71	66		74	69	65		72	67	64		62
4	84	73	64	58	82	72	64	58	69	62	57		67	61	56		65	60	55		53
5	78	65	57	50	76	64	56	50	62	55	50		60	54	49		58	53	49		46
6	72	59	51	44	70	58	50	44	56	49	44		55	48	43		53	47	43		41
7	67	54	45	39	65	53	45	39	52	44	39		50	44	39		49	43	38		36
8	62	49	41	35	61	49	41	35	47	40	35		46	40	35		45	39	35		33
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42	36	31		30
10	55	42	34	29	54	41	34	29	40	34	29		39	33	29		39	33	29		27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	15145	15145	15145	15145
5°	15140	17836	15228	13402
10°	15060	21354	15174	12066
15°	14913	25266	15017	11081
20°	14755	28134	14862	10202
25°	14509	28589	14648	9595
30°	14272	24327	14445	9403
35°	13924	18703	14077	9405
40°	13514	14578	13645	9583
45°	12865	12155	13024	9742
50°	12084	10697	12259	10073
55°	11157	9801	11332	10479
60°	10263	9185	10565	10966
65°	9441	8552	9530	11371
70°	8476	7815	8657	11630
75°	7562	6982	7514	11490
80°	6213	5851	6142	11129
85°	4603	4323	4323	10657

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 145°

Vertical Angle: 45°

Luminance: 23388 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.7	3.5
10°-20°	557.9	10.9
20°-30°	886.3	17.3
30°-40°	984.9	19.2
40°-50°	895.6	17.5
50°-60°	731.9	14.3
60°-70°	522.4	10.2
70°-80°	287.5	5.6
80°-90°	77.7	1.5
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°	1625.0	31.7
0°-40°	2609.9	50.9
0°-60°	4237.4	82.7
0°-90°	5125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5125.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1857	1857	1857	1857	1857	
5°	1850	2179	1860	1637	1850	176
15°	1766	2993	1779	1313	1766	498
25°	1613	3178	1628	1066	1613	743
35°	1399	1879	1414	945	1399	874
45°	1116	1054	1129	845	1116	860
55°	785	689	797	737	785	706
65°	489	443	494	589	489	483
75°	240	222	238	365	240	252
85°	49	46	46	114	49	60
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3
2.5°	1857.3	1875.7	1883.4	1889.6	1909.6	1915.7	1917.3	1926.5	1934.2	1935.7	1935.7
5°	1849.6	1878.8	1901.9	1923.4	1955.7	1969.6	1986.5	2005.0	2029.6	2045.0	2052.7
7.5°	1837.3	1880.4	1915.7	1952.7	1997.3	2025.0	2040.4	2089.6	2123.5	2151.2	2185.0
10°	1818.8	1874.2	1925.0	1978.8	2041.9	2075.8	2109.6	2169.6	2217.3	2271.2	2314.3
12.5°	1791.1	1863.4	1925.0	2000.4	2078.8	2118.9	2158.9	2263.5	2318.9	2366.6	2443.5
15°	1766.5	1838.8	1926.5	2003.5	2100.4	2160.4	2218.9	2286.6	2374.3	2477.4	2551.2
17.5°	1738.8	1829.6	1911.1	2018.8	2126.5	2183.5	2231.2	2335.8	2458.9	2560.5	2628.2
20°	1700.3	1792.6	1900.4	2014.2	2141.9	2186.6	2249.6	2389.7	2500.5	2600.5	2711.3
22.5°	1655.7	1763.4	1877.3	1986.5	2118.9	2212.7	2282.0	2405.1	2538.9	2654.3	2779.0
25°	1612.6	1729.6	1829.6	1978.8	2118.9	2181.9	2260.4	2406.6	2552.8	2692.8	2820.5
27.5°	1566.4	1675.7	1811.1	1929.6	2088.1	2157.3	2242.0	2402.0	2557.4	2697.4	2834.4
30°	1515.7	1632.6	1744.9	1885.0	2038.8	2128.1	2206.6	2380.4	2538.9	2685.1	2812.8
32.5°	1458.7	1569.5	1689.5	1821.9	1983.4	2074.2	2172.7	2351.2	2520.5	2646.6	2745.1
35°	1398.7	1511.1	1615.7	1751.1	1917.3	2008.1	2103.5	2300.4	2468.2	2571.2	2628.2
37.5°	1332.6	1438.7	1541.8	1675.7	1841.9	1938.8	2035.8	2226.6	2385.1	2471.2	2455.8
40°	1269.5	1364.9	1460.3	1586.4	1760.3	1863.4	1948.1	2140.4	2278.9	2315.8	2265.0
42.5°	1197.1	1278.7	1371.0	1500.3	1669.5	1766.5	1872.7	2048.1	2151.2	2135.8	2049.6
45°	1115.6	1187.9	1280.2	1401.8	1574.1	1674.2	1763.4	1929.6	2005.0	1966.5	1809.6
47.5°	1037.1	1107.9	1183.3	1304.9	1472.6	1557.2	1648.0	1797.3	1840.3	1758.8	1601.8
50°	952.5	1011.0	1089.4	1204.8	1361.8	1451.0	1526.4	1646.5	1661.8	1561.8	1398.7
52.5°	870.9	920.2	995.6	1109.4	1255.6	1326.4	1400.3	1506.4	1494.1	1391.0	1234.1
55°	784.8	830.9	900.2	1004.8	1134.1	1201.8	1264.9	1358.7	1332.6	1226.4	1089.4
57.5°	712.4	744.8	812.5	909.4	1015.6	1089.4	1143.3	1217.1	1177.1	1071.0	943.3
60°	629.3	669.4	726.3	804.8	909.4	958.6	1006.3	1055.6	1027.9	926.3	812.5
62.5°	553.9	584.7	634.0	709.4	790.9	835.5	886.3	917.1	889.4	795.5	700.1
65°	489.3	513.9	552.4	614.0	692.4	729.4	758.6	787.8	764.8	677.0	607.8
67.5°	418.5	440.1	472.4	521.6	587.8	614.0	641.7	661.7	635.5	577.0	509.3
70°	355.5	370.8	401.6	438.5	484.7	509.3	532.4	552.4	529.3	480.1	429.3
72.5°	290.8	303.1	330.8	357.0	398.5	415.5	432.4	447.8	440.1	393.9	352.4
75°	240.0	244.7	263.1	284.7	310.8	329.3	341.6	350.8	344.7	307.7	281.6
77.5°	181.6	187.7	201.6	218.5	241.6	252.4	260.0	269.3	261.6	232.4	213.9
80°	132.3	133.9	141.6	157.0	172.3	173.9	181.6	193.9	189.3	169.3	155.4
82.5°	84.6	89.2	92.3	101.6	112.3	115.4	120.0	123.1	121.6	109.3	104.6
85°	49.2	49.2	52.3	58.5	61.5	66.2	67.7	69.2	72.3	64.6	60.0
87.5°	21.5	23.1	23.1	24.6	27.7	27.7	29.2	30.8	32.3	30.8	26.2
90°	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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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3
2.5°	1940.4	1968.1	1980.4	1983.4	2000.4	1989.6	1994.2	1992.7	2005.0	2006.5	2006.5
5°	2081.9	2114.2	2125.0	2140.4	2163.5	2169.6	2165.0	2174.3	2191.2	2178.9	2197.3
7.5°	2231.2	2266.6	2291.2	2325.0	2332.7	2352.7	2365.1	2375.8	2378.9	2380.4	2383.5
10°	2369.7	2414.3	2448.1	2505.1	2517.4	2528.2	2582.0	2560.5	2588.2	2578.9	2582.0
12.5°	2482.0	2569.7	2597.4	2692.8	2702.0	2739.0	2735.9	2769.7	2775.9	2788.2	2775.9
15°	2629.7	2731.3	2775.9	2829.8	2860.5	2903.6	2911.3	2957.5	2975.9	2992.9	2975.9
17.5°	2765.1	2819.0	2932.9	2975.9	2995.9	3019.0	3077.5	3094.4	3122.1	3111.3	3142.1
20°	2832.8	2909.8	3029.8	3103.7	3134.4	3156.0	3205.2	3231.4	3242.1	3242.1	3245.2
22.5°	2892.8	3003.6	3092.9	3177.5	3205.2	3220.6	3249.8	3269.8	3274.5	3277.5	3280.6
25°	2946.7	3046.7	3119.0	3166.7	3177.5	3177.5	3194.4	3182.1	3162.1	3177.5	3186.7
27.5°	2946.7	3017.5	3049.8	3066.7	3066.7	3025.2	3000.6	2949.8	2906.7	2894.4	2922.1
30°	2897.5	2929.8	2885.2	2843.6	2811.3	2783.6	2686.7	2609.7	2594.3	2583.6	2625.1
32.5°	2783.6	2742.0	2654.3	2534.3	2486.6	2423.5	2348.1	2289.7	2254.3	2242.0	2232.7
35°	2582.0	2474.3	2360.4	2198.9	2165.0	2085.0	1981.9	1938.8	1880.4	1878.8	1898.8
37.5°	2362.0	2195.8	2072.7	1918.8	1871.1	1786.5	1689.5	1644.9	1604.9	1574.1	1611.1
40°	2105.0	1960.4	1772.6	1646.5	1578.8	1534.1	1452.6	1403.3	1384.9	1369.5	1392.6
42.5°	1865.0	1706.5	1560.3	1431.0	1375.6	1324.9	1271.0	1223.3	1209.5	1207.9	1224.8
45°	1626.5	1471.0	1335.6	1224.8	1189.5	1158.7	1106.4	1092.5	1069.4	1054.0	1061.7
47.5°	1435.7	1275.6	1163.3	1078.7	1047.9	1021.7	987.9	964.8	944.8	938.6	947.9
50°	1247.9	1140.2	1024.8	954.0	930.9	906.3	880.2	858.6	849.4	843.2	849.4
52.5°	1097.1	981.7	903.2	846.3	823.2	804.8	786.3	777.1	764.8	767.8	774.0
55°	961.7	860.2	794.0	752.4	738.6	730.9	707.8	697.1	692.4	689.4	692.4
57.5°	834.0	760.1	710.9	675.5	657.0	652.4	634.0	634.0	629.3	624.7	626.3
60°	732.4	669.4	621.7	594.0	590.9	583.2	570.9	569.3	558.6	563.2	564.7
62.5°	629.3	578.6	546.3	529.3	518.6	515.5	507.8	506.2	501.6	503.2	500.1
65°	547.8	506.2	473.9	460.1	455.5	453.9	447.8	443.2	440.1	443.2	440.1
67.5°	466.2	438.5	413.9	400.1	393.9	392.4	387.8	384.7	386.2	381.6	384.7
70°	389.3	361.6	346.2	338.5	335.4	330.8	330.8	330.8	330.8	327.8	326.2
72.5°	327.8	300.1	289.3	284.7	281.6	280.1	275.4	277.0	275.4	273.9	280.1
75°	260.0	243.1	232.4	227.7	230.8	226.2	221.6	224.7	220.0	221.6	227.7
77.5°	197.0	189.3	183.1	180.0	177.0	173.9	173.9	170.8	170.8	170.8	170.8
80°	143.1	141.6	130.8	129.3	129.3	126.2	126.2	126.2	126.2	124.6	126.2
82.5°	95.4	93.9	90.8	89.2	86.2	87.7	87.7	84.6	84.6	83.1	84.6
85°	55.4	55.4	52.3	50.8	49.2	50.8	47.7	46.2	47.7	46.2	47.7
87.5°	26.2	23.1	24.6	23.1	20.0	21.5	18.5	20.0	18.5	16.9	20.0
90°	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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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3
2.5°	2003.5	1998.8	1992.7	1992.7	1985.0	1985.0	1972.7	1951.1	1932.7	1926.5	1929.6
5°	2174.3	2175.8	2166.6	2158.9	2145.0	2134.2	2114.2	2075.8	2063.5	2038.8	2021.9
7.5°	2369.7	2363.5	2346.6	2334.3	2331.2	2306.6	2263.5	2217.3	2180.4	2155.8	2120.4
10°	2589.7	2565.1	2540.5	2532.8	2514.3	2472.8	2423.5	2372.7	2322.0	2268.1	2208.1
12.5°	2774.4	2726.7	2725.1	2706.7	2671.3	2648.2	2589.7	2517.4	2429.7	2369.7	2302.0
15°	2972.9	2928.2	2891.3	2857.5	2840.5	2772.8	2723.6	2632.8	2528.2	2463.5	2417.4
17.5°	3114.4	3094.4	3031.3	3015.9	2992.9	2914.4	2835.9	2746.7	2655.9	2565.1	2440.5
20°	3228.3	3216.0	3174.4	3152.9	3116.0	3054.4	2959.0	2855.9	2751.3	2622.0	2505.1
22.5°	3277.5	3262.1	3228.3	3209.8	3186.7	3134.4	3052.9	2935.9	2799.0	2683.6	2558.9
25°	3180.6	3208.3	3199.1	3191.4	3182.1	3151.4	3089.8	2986.7	2852.8	2722.0	2566.6
27.5°	2962.1	3009.8	3056.0	3062.1	3077.5	3089.8	3065.2	2991.3	2879.0	2740.5	2569.7
30°	2668.2	2689.7	2783.6	2811.3	2832.8	2911.3	2957.5	2939.0	2852.8	2728.2	2571.2
32.5°	2291.2	2348.1	2443.5	2509.7	2568.2	2655.9	2775.9	2823.6	2792.8	2691.3	2535.9
35°	1934.2	2001.9	2112.7	2197.3	2255.8	2380.4	2522.0	2625.1	2663.6	2612.8	2474.3
37.5°	1641.8	1723.4	1821.9	1854.2	1921.9	2075.8	2271.2	2414.3	2508.2	2512.8	2405.1
40°	1421.8	1463.3	1541.8	1591.1	1657.2	1786.5	1977.3	2166.6	2308.1	2355.8	2298.9
42.5°	1235.6	1267.9	1326.4	1386.4	1446.4	1544.9	1720.3	1897.3	2088.1	2183.5	2181.9
45°	1087.9	1121.7	1161.8	1211.0	1252.5	1358.7	1497.2	1678.8	1843.4	1991.1	2028.1
47.5°	958.6	987.9	1037.1	1058.7	1086.4	1186.4	1306.4	1475.7	1646.5	1815.7	1858.8
50°	863.2	887.9	921.7	935.6	966.3	1040.2	1138.7	1275.6	1464.9	1620.3	1700.3
52.5°	777.1	795.5	821.7	832.5	854.0	909.4	998.6	1106.4	1263.3	1423.3	1535.7
55°	703.2	715.5	734.0	746.3	761.7	810.9	877.1	974.0	1109.4	1247.9	1357.2
57.5°	634.0	643.2	661.7	667.8	680.1	718.6	764.8	846.3	971.0	1094.0	1200.2
60°	569.3	575.5	586.3	600.1	609.3	635.5	678.6	746.3	846.3	958.6	1044.8
62.5°	507.8	517.0	520.1	526.3	533.9	558.6	592.4	641.7	729.4	821.7	912.5
65°	444.7	452.4	458.5	460.1	467.8	486.2	517.0	560.1	617.0	697.1	781.7
67.5°	386.2	390.8	393.9	400.1	407.8	417.0	441.6	473.9	526.3	590.9	658.6
70°	332.4	332.4	337.0	338.5	347.8	358.5	369.3	400.1	446.2	498.6	544.7
72.5°	273.9	281.6	280.1	287.7	286.2	293.9	307.7	327.8	361.6	403.2	447.8
75°	223.1	227.7	227.7	227.7	230.8	237.0	244.7	263.1	289.3	323.1	349.3
77.5°	173.9	177.0	177.0	177.0	178.5	184.6	192.3	204.7	223.1	243.1	258.5
80°	124.6	127.7	127.7	130.8	130.8	132.3	140.0	146.2	155.4	170.8	186.2
82.5°	84.6	86.2	89.2	89.2	87.7	90.8	92.3	98.5	107.7	110.8	121.6
85°	46.2	47.7	49.2	49.2	50.8	53.9	52.3	58.5	58.5	64.6	67.7
87.5°	18.5	21.5	21.5	20.0	21.5	21.5	21.5	24.6	26.2	27.7	26.2
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: P998456

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3
2.5°	1915.7	1909.6	1905.0	1905.0	1891.1	1877.3	1869.6	1866.5	1863.4	1851.1	1834.2
5°	1994.2	1974.2	1960.4	1946.5	1923.4	1898.8	1874.2	1860.3	1840.3	1812.6	1792.6
7.5°	2081.9	2034.2	2018.8	2001.9	1955.7	1914.2	1880.4	1851.1	1818.8	1783.4	1748.0
10°	2155.8	2105.0	2071.2	2041.9	1981.9	1926.5	1875.7	1832.6	1791.1	1744.9	1701.9
12.5°	2226.6	2154.2	2118.9	2075.8	2012.7	1932.7	1866.5	1812.6	1751.1	1703.4	1651.1
15°	2325.0	2203.5	2145.0	2117.3	2032.7	1938.8	1858.8	1778.8	1728.0	1655.7	1609.5
17.5°	2340.4	2242.0	2203.5	2132.7	2031.1	1925.0	1832.6	1752.6	1675.7	1611.1	1551.1
20°	2394.3	2265.0	2203.5	2158.9	2025.0	1917.3	1815.7	1712.6	1638.8	1569.5	1501.8
22.5°	2428.1	2282.0	2217.3	2146.6	2018.8	1889.6	1769.6	1680.3	1589.5	1518.7	1464.9
25°	2418.9	2272.7	2200.4	2134.2	1978.8	1849.6	1741.9	1628.0	1543.4	1466.4	1395.6
27.5°	2414.3	2249.6	2172.7	2098.9	1952.7	1817.3	1681.9	1589.5	1495.7	1406.4	1354.1
30°	2402.0	2220.4	2131.2	2051.2	1898.8	1757.3	1641.8	1534.1	1440.3	1358.7	1289.5
32.5°	2360.4	2171.2	2085.0	1998.8	1840.3	1698.8	1581.8	1481.8	1388.0	1303.3	1237.2
35°	2305.0	2112.7	2018.8	1928.1	1769.6	1626.5	1518.7	1414.1	1326.4	1244.8	1181.8
37.5°	2249.6	2045.0	1957.3	1852.7	1706.5	1557.2	1446.4	1352.6	1271.0	1186.4	1117.1
40°	2169.6	1965.0	1868.0	1778.8	1608.0	1468.0	1366.4	1281.8	1201.8	1121.7	1063.3
42.5°	2060.4	1877.3	1777.3	1678.8	1518.7	1380.3	1281.8	1206.4	1131.0	1064.8	1000.2
45°	1949.6	1771.1	1681.9	1594.1	1420.3	1289.5	1198.7	1129.4	1066.4	994.0	941.7
47.5°	1815.7	1664.9	1575.7	1489.5	1324.9	1194.1	1111.0	1046.3	987.9	927.9	878.6
50°	1678.8	1548.0	1466.4	1377.2	1220.2	1101.7	1020.2	966.3	918.6	861.7	821.7
52.5°	1531.1	1417.2	1347.9	1261.8	1123.3	1014.0	930.9	877.1	837.1	795.5	760.1
55°	1374.1	1291.0	1217.1	1147.9	1017.1	918.6	844.8	797.1	769.4	730.9	700.1
57.5°	1232.5	1152.5	1107.9	1029.4	915.6	818.6	760.1	720.1	687.8	664.7	640.1
60°	1084.8	1020.2	971.0	914.0	814.0	732.4	670.9	647.8	614.0	597.0	586.3
62.5°	943.3	897.1	850.9	807.8	718.6	641.7	595.5	566.3	546.3	529.3	520.1
65°	809.4	766.3	734.0	695.5	621.7	560.1	517.0	493.9	473.9	469.3	458.5
67.5°	678.6	660.1	624.7	594.0	530.9	483.2	450.9	421.6	410.8	406.2	397.0
70°	567.8	546.3	518.6	492.4	444.7	403.2	373.9	363.1	347.8	346.2	335.4
72.5°	467.8	441.6	421.6	401.6	366.2	329.3	313.9	298.5	290.8	284.7	280.1
75°	370.8	352.4	338.5	321.6	290.8	266.2	244.7	238.5	233.9	232.4	229.3
77.5°	277.0	264.7	258.5	241.6	220.0	198.5	189.3	180.0	180.0	177.0	178.5
80°	197.0	189.3	181.6	172.3	153.9	144.6	136.9	130.8	127.7	126.2	127.7
82.5°	124.6	120.0	118.5	112.3	100.0	95.4	89.2	84.6	84.6	84.6	84.6
85°	69.2	69.2	69.2	60.0	55.4	50.8	47.7	46.2	46.2	46.2	47.7
87.5°	29.2	29.2	24.6	24.6	23.1	20.0	18.5	18.5	20.0	20.0	21.5
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: P998456

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3
2.5°	1829.6	1823.4	1826.5	1811.1	1797.3	1777.3	1760.3	1757.3	1754.2	1763.4	1757.3
5°	1777.3	1769.6	1761.9	1743.4	1715.7	1698.8	1674.2	1672.6	1663.4	1649.5	1652.6
7.5°	1720.3	1715.7	1704.9	1675.7	1651.1	1621.8	1601.8	1584.9	1577.2	1564.9	1560.3
10°	1674.2	1657.2	1648.0	1615.7	1586.4	1555.7	1529.5	1517.2	1503.4	1492.6	1484.9
12.5°	1611.1	1606.5	1580.3	1554.1	1529.5	1494.1	1474.1	1438.7	1420.3	1429.5	1426.4
15°	1569.5	1548.0	1541.8	1504.9	1463.3	1440.3	1403.3	1380.3	1372.6	1358.7	1341.8
17.5°	1514.1	1500.3	1478.7	1444.9	1397.2	1364.9	1338.7	1317.2	1307.9	1289.5	1275.6
20°	1461.8	1438.7	1421.8	1391.0	1344.9	1303.3	1271.0	1257.2	1234.1	1218.7	1211.0
22.5°	1414.1	1397.2	1372.6	1326.4	1286.4	1246.4	1207.9	1187.9	1166.4	1157.1	1144.8
25°	1355.6	1327.9	1311.0	1260.2	1217.1	1184.8	1149.4	1123.3	1111.0	1095.6	1092.5
27.5°	1298.7	1272.5	1252.5	1207.9	1155.6	1114.1	1092.5	1074.0	1052.5	1052.5	1044.8
30°	1241.8	1223.3	1192.5	1149.4	1100.2	1060.2	1035.6	1018.7	1011.0	1004.8	1003.3
32.5°	1184.8	1160.2	1141.8	1083.3	1046.3	1009.4	991.0	977.1	967.9	966.3	967.9
35°	1126.4	1098.7	1080.2	1027.9	991.0	957.1	949.4	937.1	932.5	930.9	938.6
37.5°	1064.8	1043.3	1020.2	977.1	935.6	915.6	900.2	895.6	894.0	903.2	906.3
40°	1007.9	989.4	967.9	921.7	890.9	869.4	861.7	857.1	863.2	872.5	877.1
42.5°	954.0	927.9	910.9	869.4	841.7	829.4	820.2	820.2	826.3	837.1	844.8
45°	897.1	877.1	860.2	823.2	798.6	784.8	783.2	784.8	792.5	800.1	809.4
47.5°	841.7	821.7	803.2	772.5	750.9	743.2	741.7	743.2	755.5	766.3	777.1
50°	790.9	769.4	752.4	723.2	706.3	697.1	698.6	706.3	715.5	730.9	744.8
52.5°	730.9	715.5	700.1	674.0	658.6	652.4	657.0	663.2	680.1	690.9	707.8
55°	672.4	658.6	646.3	626.3	614.0	609.3	612.4	621.7	635.5	654.0	674.0
57.5°	618.6	603.2	590.9	577.0	563.2	564.7	566.3	578.6	595.5	612.4	635.5
60°	558.6	549.3	538.6	521.6	515.5	515.5	520.1	533.9	549.3	577.0	597.0
62.5°	504.7	492.4	484.7	473.9	464.7	466.2	477.0	489.3	507.8	530.9	557.0
65°	449.3	435.5	429.3	420.1	417.0	418.5	426.2	444.7	464.7	484.7	509.3
67.5°	387.8	383.1	377.0	367.8	370.8	372.4	380.1	395.5	417.0	437.0	464.7
70°	335.4	326.2	324.7	317.0	317.0	321.6	337.0	347.8	367.8	389.3	418.5
72.5°	280.1	272.4	272.4	266.2	270.8	275.4	283.1	298.5	317.0	338.5	363.1
75°	223.1	220.0	223.1	220.0	220.0	227.7	237.0	249.3	269.3	292.4	312.4
77.5°	172.3	172.3	170.8	175.4	175.4	180.0	192.3	204.7	220.0	238.5	260.0
80°	126.2	126.2	126.2	130.8	135.4	135.4	143.1	158.5	172.3	184.6	204.7
82.5°	86.2	86.2	86.2	89.2	95.4	95.4	104.6	113.9	129.3	140.0	149.3
85°	52.3	52.3	50.8	53.9	55.4	60.0	67.7	73.9	81.6	90.8	100.0
87.5°	23.1	23.1	24.6	26.2	27.7	30.8	33.9	36.9	44.6	47.7	52.3
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: P998456

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3
2.5°	1752.6	1751.1	1743.4	1746.5	1737.2	1740.3	1744.9	1746.5	1752.6	1748.0	1746.5
5°	1644.9	1641.8	1637.2	1632.6	1631.1	1637.2	1626.5	1629.5	1632.6	1637.2	1643.4
7.5°	1557.2	1555.7	1551.1	1543.4	1540.3	1537.2	1538.7	1549.5	1548.0	1546.4	1557.2
10°	1477.2	1478.7	1469.5	1468.0	1458.7	1457.2	1458.7	1461.8	1466.4	1472.6	1474.1
12.5°	1394.1	1414.1	1397.2	1391.0	1377.2	1384.9	1388.0	1374.1	1381.8	1386.4	1409.5
15°	1341.8	1332.6	1321.8	1321.8	1315.6	1312.6	1304.9	1315.6	1321.8	1331.0	1327.9
17.5°	1269.5	1254.1	1247.9	1241.8	1243.3	1249.5	1232.5	1257.2	1257.2	1261.8	1254.1
20°	1206.4	1194.1	1186.4	1183.3	1178.7	1175.6	1174.1	1180.2	1189.5	1192.5	1200.2
22.5°	1140.2	1140.2	1127.9	1123.3	1120.2	1115.6	1123.3	1118.7	1124.8	1131.0	1143.3
25°	1084.8	1084.8	1080.2	1074.0	1069.4	1066.4	1071.0	1069.4	1074.0	1081.7	1084.8
27.5°	1040.2	1035.6	1034.0	1032.5	1031.0	1032.5	1031.0	1035.6	1040.2	1041.7	1038.7
30°	1001.7	997.1	998.6	998.6	1000.2	998.6	997.1	1001.7	1003.3	1000.2	1001.7
32.5°	966.3	966.3	969.4	971.0	971.0	972.5	974.0	971.0	972.5	967.9	969.4
35°	937.1	940.2	943.3	944.8	946.3	944.8	947.9	946.3	943.3	940.2	938.6
37.5°	907.9	910.9	917.1	918.6	923.2	924.8	921.7	921.7	920.2	914.0	910.9
40°	877.1	880.2	887.9	892.5	895.6	900.2	897.1	897.1	890.9	884.8	880.2
42.5°	847.9	854.0	861.7	866.3	872.5	872.5	872.5	869.4	861.7	855.5	850.9
45°	818.6	820.2	830.9	838.6	844.8	844.8	844.8	840.2	835.5	823.2	817.1
47.5°	786.3	790.9	803.2	810.9	817.1	818.6	818.6	814.0	804.8	794.0	786.3
50°	750.9	758.6	772.5	783.2	790.9	794.0	789.4	786.3	775.5	763.2	754.0
52.5°	717.1	726.3	743.2	752.4	763.2	764.8	763.2	758.6	746.3	729.4	721.7
55°	683.2	690.9	709.4	724.8	734.0	737.1	734.0	726.3	710.9	694.0	686.3
57.5°	646.3	657.0	677.0	692.4	703.2	704.7	701.7	694.0	681.7	660.1	649.4
60°	607.8	621.7	641.7	657.0	670.9	672.4	669.4	658.6	643.2	621.7	612.4
62.5°	569.3	580.1	603.2	620.1	630.9	638.6	632.4	621.7	606.3	584.7	570.9
65°	524.7	540.1	560.1	575.5	587.8	589.3	586.3	577.0	560.1	537.0	526.3
67.5°	481.6	492.4	512.4	532.4	537.0	541.6	537.0	527.8	513.9	493.9	478.6
70°	429.3	438.5	463.2	477.0	483.2	487.8	484.7	475.5	463.2	444.7	432.4
72.5°	377.0	384.7	407.8	418.5	430.8	429.3	427.8	421.6	404.7	392.4	384.7
75°	321.6	330.8	346.2	360.1	364.7	364.7	364.7	360.1	349.3	329.3	321.6
77.5°	270.8	275.4	287.7	295.4	300.1	301.6	300.1	292.4	286.2	272.4	267.7
80°	207.7	220.0	229.3	230.8	237.0	237.0	237.0	233.9	227.7	213.9	212.3
82.5°	157.0	160.0	169.3	173.9	177.0	175.4	175.4	169.3	167.7	160.0	157.0
85°	106.2	110.8	109.3	115.4	116.9	113.9	113.9	116.9	109.3	110.8	106.2
87.5°	58.5	58.5	61.5	60.0	66.2	66.2	63.1	64.6	61.5	60.0	58.5
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: P998456

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3	1857.3
2.5°	1746.5	1755.7	1746.5	1752.6	1755.7	1763.4	1766.5	1780.3	1784.9	1795.7	1795.7
5°	1641.8	1646.5	1648.0	1654.2	1660.3	1675.7	1686.5	1706.5	1729.6	1732.6	1746.5
7.5°	1557.2	1564.9	1577.2	1572.6	1583.4	1606.5	1620.3	1644.9	1668.0	1680.3	1697.2
10°	1481.8	1491.0	1495.7	1500.3	1520.3	1540.3	1561.8	1578.8	1609.5	1628.0	1641.8
12.5°	1420.3	1412.6	1421.8	1438.7	1461.8	1474.1	1503.4	1529.5	1552.6	1572.6	1584.9
15°	1340.2	1346.4	1355.6	1384.9	1391.0	1421.8	1432.6	1461.8	1504.9	1523.4	1538.7
17.5°	1263.3	1283.3	1301.8	1312.6	1331.0	1355.6	1386.4	1418.7	1446.4	1468.0	1486.4
20°	1201.8	1221.8	1232.5	1240.2	1258.7	1292.5	1321.8	1361.8	1397.2	1414.1	1438.7
22.5°	1152.5	1152.5	1167.9	1191.0	1201.8	1234.1	1258.7	1301.8	1340.2	1361.8	1384.9
25°	1091.0	1100.2	1112.5	1132.5	1147.9	1174.1	1209.5	1246.4	1287.9	1306.4	1335.6
27.5°	1040.2	1051.0	1067.9	1072.5	1087.9	1111.0	1147.9	1187.9	1231.0	1251.0	1275.6
30°	1001.7	1007.9	1014.0	1023.3	1037.1	1057.1	1087.9	1123.3	1175.6	1191.0	1221.8
32.5°	967.9	971.0	974.0	981.7	989.4	1009.4	1034.0	1072.5	1115.6	1138.7	1166.4
35°	937.1	934.0	935.6	940.2	947.9	955.6	981.7	1014.0	1054.0	1081.7	1103.3
37.5°	907.9	901.7	900.2	900.2	903.2	912.5	932.5	960.2	1003.3	1026.3	1047.9
40°	875.5	869.4	866.3	864.8	863.2	869.4	884.8	912.5	946.3	967.9	992.5
42.5°	844.8	838.6	830.9	829.4	826.3	829.4	840.2	866.3	895.6	917.1	937.1
45°	814.0	803.2	794.0	787.8	789.4	784.8	792.5	812.5	846.3	860.2	880.2
47.5°	780.1	767.8	755.5	749.4	743.2	746.3	749.4	766.3	795.5	809.4	829.4
50°	747.8	730.9	717.1	709.4	704.7	701.7	704.7	721.7	743.2	755.5	772.5
52.5°	710.9	694.0	680.1	667.8	661.7	657.0	658.6	674.0	694.0	706.3	723.2
55°	677.0	655.5	637.0	621.7	617.0	615.5	614.0	624.7	641.7	654.0	667.8
57.5°	638.6	617.0	597.0	578.6	569.3	567.8	567.8	570.9	592.4	601.7	609.3
60°	600.1	577.0	555.5	538.6	524.7	520.1	518.6	524.7	535.5	544.7	555.5
62.5°	557.0	533.9	507.8	492.4	478.6	466.2	470.9	472.4	487.8	492.4	501.6
65°	515.5	489.3	467.8	443.2	427.8	420.1	417.0	420.1	432.4	433.9	440.1
67.5°	467.8	443.2	417.0	400.1	386.2	372.4	369.3	369.3	375.5	380.1	387.8
70°	421.6	397.0	367.8	349.3	335.4	323.1	318.5	317.0	321.6	324.7	332.4
72.5°	367.8	343.1	321.6	301.6	284.7	275.4	270.8	267.7	272.4	275.4	277.0
75°	310.8	290.8	269.3	249.3	238.5	229.3	223.1	218.5	221.6	221.6	221.6
77.5°	257.0	237.0	220.0	206.2	192.3	181.6	177.0	172.3	173.9	173.9	177.0
80°	200.0	186.2	172.3	160.0	147.7	138.5	135.4	130.8	127.7	126.2	126.2
82.5°	147.7	136.9	124.6	113.9	107.7	98.5	95.4	89.2	89.2	87.7	87.7
85°	98.5	92.3	80.0	72.3	67.7	63.1	60.0	56.9	52.3	52.3	50.8
87.5°	52.3	49.2	46.2	36.9	36.9	32.3	30.8	29.2	24.6	26.2	26.2
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: P998456

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1857.3	1857.3	1857.3	1857.3
2.5°	1806.5	1821.9	1835.7	1857.3
5°	1766.5	1788.0	1817.3	1849.6
7.5°	1720.3	1754.2	1792.6	1837.3
10°	1677.2	1715.7	1764.9	1818.8
12.5°	1632.6	1678.8	1732.6	1791.1
15°	1581.8	1628.0	1688.0	1766.5
17.5°	1535.7	1591.1	1655.7	1738.8
20°	1481.8	1534.1	1604.9	1700.3
22.5°	1434.1	1494.1	1572.6	1655.7
25°	1381.8	1434.1	1512.6	1612.6
27.5°	1329.5	1394.1	1469.5	1566.4
30°	1278.7	1332.6	1414.1	1515.7
32.5°	1223.3	1287.9	1363.3	1458.7
35°	1163.3	1224.8	1295.6	1398.7
37.5°	1109.4	1169.4	1241.8	1332.6
40°	1049.4	1112.5	1178.7	1269.5
42.5°	991.0	1047.9	1114.1	1197.1
45°	934.0	983.3	1043.3	1115.6
47.5°	875.5	917.1	972.5	1037.1
50°	812.5	857.1	898.6	952.5
52.5°	754.0	792.5	826.3	870.9
55°	697.1	723.2	750.9	784.8
57.5°	637.0	657.0	677.0	712.4
60°	577.0	595.5	606.3	629.3
62.5°	518.6	526.3	540.1	553.9
65°	453.9	464.7	472.4	489.3
67.5°	395.5	400.1	407.8	418.5
70°	333.9	344.7	347.8	355.5
72.5°	281.6	286.2	289.3	290.8
75°	223.1	227.7	230.8	240.0
77.5°	175.4	173.9	180.0	181.6
80°	129.3	124.6	126.2	132.3
82.5°	84.6	86.2	84.6	84.6
85°	52.3	50.8	47.7	49.2
87.5°	23.1	23.1	21.5	21.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)