

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: P998455

Luminaire Tested: S124DR-B1195DB2750-4F0-XX-W2A-A_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998455
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_4000K
Description: Define 4 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

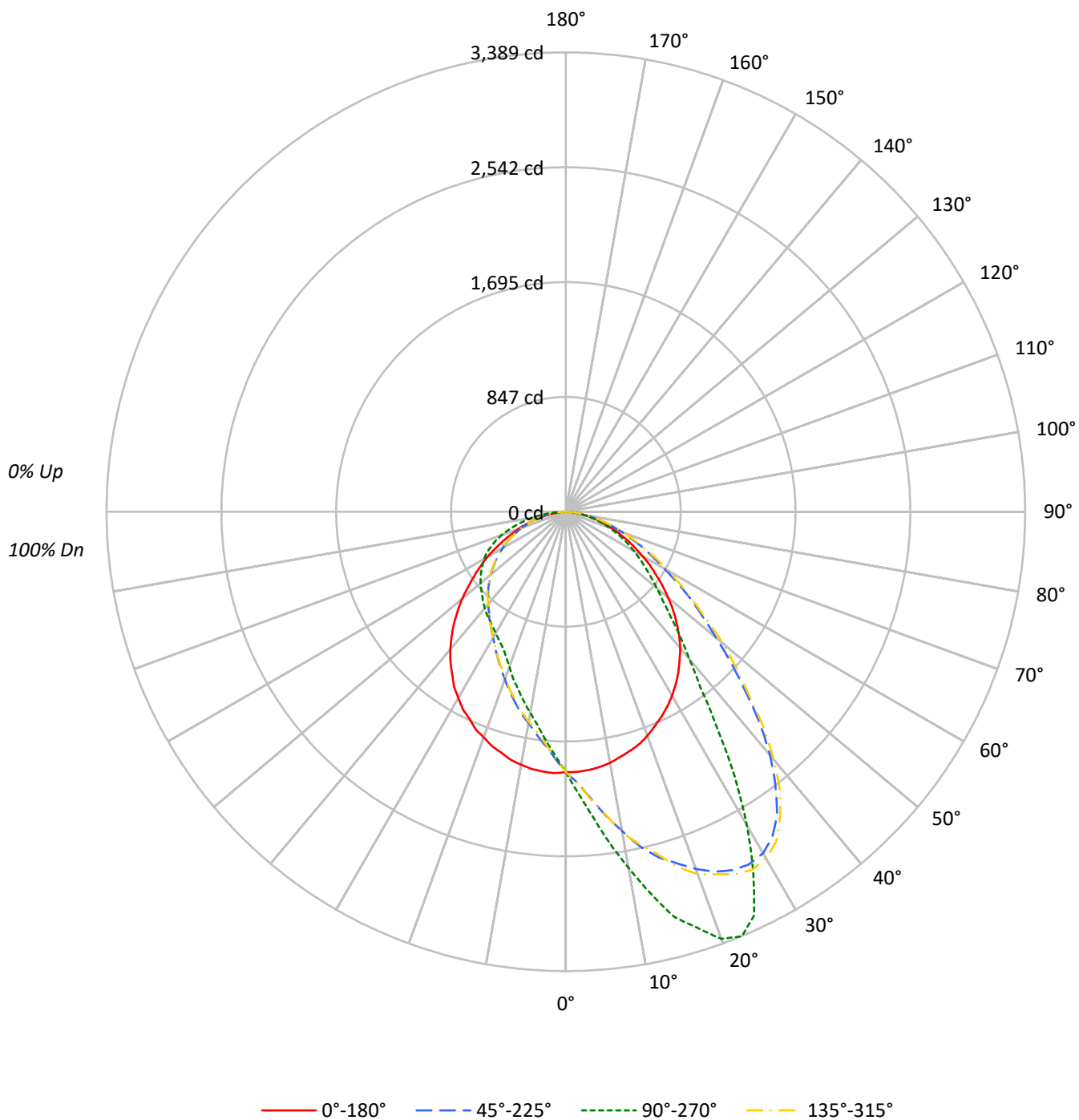
Lumens per Lamp: N/A
Luminaire Lumens: 5300.0 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.41
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_4000K

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	15662	15662	15662	15662
5°	15657	18445	15748	13859
10°	15574	22083	15693	12478
15°	15422	26129	15529	11459
20°	15259	29095	15369	10550
25°	15005	29566	15148	9922
30°	14759	25158	14938	9724
35°	14400	19342	14558	9727
40°	13975	15075	14110	9909
45°	13305	12570	13470	10075
50°	12496	11062	12677	10417
55°	11538	10135	11719	10836
60°	10614	9498	10925	11341
65°	9763	8843	9856	11760
70°	8764	8080	8953	12026
75°	7820	7218	7773	11881
80°	6429	6053	6354	11510
85°	4762	4463	4463	11022

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 145°

Vertical Angle: 45°

Luminance: 24186 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	3.5
10°-20°	577.0	10.9
20°-30°	916.6	17.3
30°-40°	1018.5	19.2
40°-50°	926.2	17.5
50°-60°	756.9	14.3
60°-70°	540.3	10.2
70°-80°	297.3	5.6
80°-90°	80.3	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°	1680.5	31.7
0°-40°	2699.0	50.9
0°-60°	4382.1	82.7
0°-90°	5300.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5300.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1921	1921	1921	1921	1921	
5°	1913	2253	1924	1693	1913	182
15°	1827	3095	1840	1357	1827	515
25°	1668	3286	1684	1103	1668	768
35°	1446	1943	1462	977	1446	904
45°	1154	1090	1168	874	1154	890
55°	812	713	824	762	812	730
65°	506	458	511	610	506	500
75°	248	229	247	377	248	261
85°	51	48	48	118	51	62
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°	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7
2.5°	1920.7	1939.8	1947.7	1954.1	1974.8	1981.2	1982.7	1992.3	2000.3	2001.8	2001.8
5°	1912.7	1943.0	1966.8	1989.1	2022.5	2036.9	2054.4	2073.5	2098.9	2114.8	2122.8
7.5°	1900.0	1944.6	1981.2	2019.3	2065.5	2094.1	2110.1	2161.0	2196.0	2224.6	2259.6
10°	1880.9	1938.2	1990.7	2046.4	2111.6	2146.7	2181.7	2243.7	2293.1	2348.7	2393.3
12.5°	1852.3	1927.1	1990.7	2068.7	2149.8	2191.2	2232.6	2340.8	2398.1	2447.4	2527.0
15°	1826.8	1901.6	1992.3	2071.9	2172.1	2234.2	2294.6	2364.7	2455.4	2562.0	2638.4
17.5°	1798.2	1892.0	1976.4	2087.8	2199.2	2258.0	2307.4	2415.6	2542.9	2647.9	2717.9
20°	1758.4	1853.9	1965.2	2083.0	2215.1	2261.2	2326.5	2471.3	2585.8	2689.3	2803.9
22.5°	1712.2	1823.6	1941.4	2054.4	2191.2	2288.3	2359.9	2487.2	2625.6	2745.0	2873.9
25°	1667.7	1788.6	1892.0	2046.4	2191.2	2256.5	2337.6	2488.8	2640.0	2784.8	2916.8
27.5°	1619.9	1732.9	1872.9	1995.5	2159.4	2231.0	2318.5	2484.0	2644.7	2789.5	2931.2
30°	1567.4	1688.4	1804.5	1949.3	2108.5	2200.8	2281.9	2461.7	2625.6	2776.8	2908.9
32.5°	1508.5	1623.1	1747.2	1884.1	2051.2	2145.1	2246.9	2431.5	2606.5	2737.0	2838.9
35°	1446.5	1562.6	1670.9	1810.9	1982.7	2076.6	2175.3	2379.0	2552.4	2659.0	2717.9
37.5°	1378.1	1487.9	1594.5	1732.9	1904.8	2005.0	2105.3	2302.6	2466.5	2555.6	2539.7
40°	1312.8	1411.5	1510.1	1640.6	1820.4	1927.1	2014.6	2213.5	2356.7	2394.9	2342.4
42.5°	1238.0	1322.4	1417.8	1551.5	1726.6	1826.8	1936.6	2118.0	2224.6	2208.7	2119.6
45°	1153.7	1228.5	1324.0	1449.7	1627.9	1731.3	1823.6	1995.5	2073.5	2033.7	1871.4
47.5°	1072.5	1145.7	1223.7	1349.4	1522.9	1610.4	1704.3	1858.6	1903.2	1818.8	1656.5
50°	985.0	1045.5	1126.6	1246.0	1408.3	1500.6	1578.6	1702.7	1718.6	1615.2	1446.5
52.5°	900.7	951.6	1029.6	1147.3	1298.5	1371.7	1448.1	1557.9	1545.1	1438.5	1276.2
55°	811.6	859.3	930.9	1039.1	1172.8	1242.8	1308.0	1405.1	1378.1	1268.3	1126.6
57.5°	736.8	770.2	840.2	940.5	1050.3	1126.6	1182.3	1258.7	1217.3	1107.5	975.5
60°	650.8	692.2	751.1	832.2	940.5	991.4	1040.7	1091.6	1063.0	958.0	840.2
62.5°	572.9	604.7	655.6	733.6	817.9	864.1	916.6	948.4	919.8	822.7	724.0
65°	506.0	531.5	571.3	634.9	716.1	754.3	784.5	814.7	790.9	700.2	628.6
67.5°	432.8	455.1	488.5	539.4	607.9	634.9	663.6	684.3	657.2	596.7	526.7
70°	367.6	383.5	415.3	453.5	501.3	526.7	550.6	571.3	547.4	496.5	444.0
72.5°	300.8	313.5	342.1	369.2	412.1	429.6	447.2	463.1	455.1	407.4	364.4
75°	248.2	253.0	272.1	294.4	321.4	340.5	353.3	362.8	356.4	318.3	291.2
77.5°	187.8	194.1	208.5	226.0	249.8	261.0	268.9	278.5	270.5	240.3	221.2
80°	136.9	138.4	146.4	162.3	178.2	179.8	187.8	200.5	195.7	175.0	160.7
82.5°	87.5	92.3	95.5	105.0	116.2	119.3	124.1	127.3	125.7	113.0	108.2
85°	50.9	50.9	54.1	60.5	63.7	68.4	70.0	71.6	74.8	66.8	62.1
87.5°	22.3	23.9	23.9	25.5	28.6	28.6	30.2	31.8	33.4	31.8	27.1
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°	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7
2.5°	2006.6	2035.3	2048.0	2051.2	2068.7	2057.5	2062.3	2060.7	2073.5	2075.0	2075.0
5°	2153.0	2186.4	2197.6	2213.5	2237.4	2243.7	2238.9	2248.5	2266.0	2253.3	2272.4
7.5°	2307.4	2344.0	2369.4	2404.4	2412.4	2433.1	2445.8	2457.0	2460.1	2461.7	2464.9
10°	2450.6	2496.7	2531.7	2590.6	2603.4	2614.5	2670.2	2647.9	2676.6	2667.0	2670.2
12.5°	2566.8	2657.5	2686.1	2784.8	2794.3	2832.5	2829.3	2864.3	2870.7	2883.4	2870.7
15°	2719.5	2824.5	2870.7	2926.4	2958.2	3002.8	3010.7	3058.5	3077.6	3095.1	3077.6
17.5°	2859.5	2915.2	3033.0	3077.6	3098.2	3122.1	3182.6	3200.1	3228.7	3217.6	3249.4
20°	2929.6	3009.1	3133.3	3209.6	3241.5	3263.7	3314.7	3341.7	3352.8	3352.8	3356.0
22.5°	2991.6	3106.2	3198.5	3286.0	3314.7	3330.6	3360.8	3381.5	3386.3	3389.4	3392.6
25°	3047.3	3150.8	3225.5	3274.9	3286.0	3286.0	3303.5	3290.8	3270.1	3286.0	3295.6
27.5°	3047.3	3120.5	3153.9	3171.4	3171.4	3128.5	3103.0	3050.5	3005.9	2993.2	3021.9
30°	2996.4	3029.8	2983.7	2940.7	2907.3	2878.6	2778.4	2698.8	2682.9	2671.8	2714.7
32.5°	2878.6	2835.7	2745.0	2620.9	2571.5	2506.3	2428.3	2367.8	2331.2	2318.5	2309.0
35°	2670.2	2558.8	2441.0	2274.0	2238.9	2156.2	2049.6	2005.0	1944.6	1943.0	1963.7
37.5°	2442.6	2270.8	2143.5	1984.3	1935.0	1847.5	1747.2	1701.1	1659.7	1627.9	1666.1
40°	2176.9	2027.3	1833.2	1702.7	1632.7	1586.5	1502.2	1451.3	1432.2	1416.2	1440.1
42.5°	1928.6	1764.7	1613.6	1479.9	1422.6	1370.1	1314.4	1265.1	1250.8	1249.2	1266.7
45°	1682.0	1521.3	1381.2	1266.7	1230.1	1198.2	1144.1	1129.8	1105.9	1090.0	1098.0
47.5°	1484.7	1319.2	1203.0	1115.5	1083.7	1056.6	1021.6	997.7	977.1	970.7	980.2
50°	1290.5	1179.1	1059.8	986.6	962.7	937.3	910.2	887.9	878.4	872.0	878.4
52.5°	1134.6	1015.2	934.1	875.2	851.3	832.2	813.1	803.6	790.9	794.1	800.4
55°	994.6	889.5	821.1	778.1	763.8	755.9	732.0	720.9	716.1	712.9	716.1
57.5°	862.5	786.1	735.2	698.6	679.5	674.7	655.6	655.6	650.8	646.1	647.7
60°	757.5	692.2	642.9	614.2	611.1	603.1	590.4	588.8	577.6	582.4	584.0
62.5°	650.8	598.3	564.9	547.4	536.3	533.1	525.1	523.5	518.8	520.4	517.2
65°	566.5	523.5	490.1	475.8	471.0	469.4	463.1	458.3	455.1	458.3	455.1
67.5°	482.2	453.5	428.1	413.7	407.4	405.8	401.0	397.8	399.4	394.6	397.8
70°	402.6	374.0	358.0	350.1	346.9	342.1	342.1	342.1	342.1	338.9	337.4
72.5°	338.9	310.3	299.2	294.4	291.2	289.6	284.8	286.4	284.8	283.2	289.6
75°	268.9	251.4	240.3	235.5	238.7	233.9	229.1	232.3	227.6	229.1	235.5
77.5°	203.7	195.7	189.4	186.2	183.0	179.8	179.8	176.6	176.6	176.6	176.6
80°	148.0	146.4	135.3	133.7	133.7	130.5	130.5	130.5	130.5	128.9	130.5
82.5°	98.7	97.1	93.9	92.3	89.1	90.7	90.7	87.5	87.5	85.9	87.5
85°	57.3	57.3	54.1	52.5	50.9	52.5	49.3	47.7	49.3	47.7	49.3
87.5°	27.1	23.9	25.5	23.9	20.7	22.3	19.1	20.7	19.1	17.5	20.7
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°	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7
2.5°	2071.9	2067.1	2060.7	2060.7	2052.8	2052.8	2040.0	2017.8	1998.7	1992.3	1995.5
5°	2248.5	2250.1	2240.5	2232.6	2218.3	2207.1	2186.4	2146.7	2133.9	2108.5	2091.0
7.5°	2450.6	2444.2	2426.7	2414.0	2410.8	2385.3	2340.8	2293.1	2254.9	2229.4	2192.8
10°	2678.1	2652.7	2627.2	2619.3	2600.2	2557.2	2506.3	2453.8	2401.3	2345.6	2283.5
12.5°	2869.1	2819.8	2818.2	2799.1	2762.5	2738.6	2678.1	2603.4	2512.6	2450.6	2380.6
15°	3074.4	3028.2	2990.0	2955.0	2937.5	2867.5	2816.6	2722.7	2614.5	2547.7	2499.9
17.5°	3220.8	3200.1	3134.8	3118.9	3095.1	3013.9	2932.7	2840.5	2746.6	2652.7	2523.8
20°	3338.5	3325.8	3282.8	3260.6	3222.4	3158.7	3060.1	2953.4	2845.2	2711.6	2590.6
22.5°	3389.4	3373.5	3338.5	3319.4	3295.6	3241.5	3157.1	3036.2	2894.6	2775.2	2646.3
25°	3289.2	3317.8	3308.3	3300.3	3290.8	3259.0	3195.3	3088.7	2950.3	2815.0	2654.3
27.5°	3063.2	3112.6	3160.3	3166.7	3182.6	3195.3	3169.9	3093.5	2977.3	2834.1	2657.5
30°	2759.3	2781.6	2878.6	2907.3	2929.6	3010.7	3058.5	3039.4	2950.3	2821.4	2659.0
32.5°	2369.4	2428.3	2527.0	2595.4	2655.9	2746.6	2870.7	2920.0	2888.2	2783.2	2622.4
35°	2000.3	2070.3	2184.8	2272.4	2332.8	2461.7	2608.1	2714.7	2754.5	2702.0	2558.8
37.5°	1697.9	1782.2	1884.1	1917.5	1987.5	2146.7	2348.7	2496.7	2593.8	2598.6	2487.2
40°	1470.4	1513.3	1594.5	1645.4	1713.8	1847.5	2044.8	2240.5	2386.9	2436.3	2377.4
42.5°	1277.8	1311.2	1371.7	1433.8	1495.8	1597.7	1779.1	1962.1	2159.4	2258.0	2256.5
45°	1125.0	1160.1	1201.4	1252.3	1295.3	1405.1	1548.3	1736.1	1906.4	2059.1	2097.3
47.5°	991.4	1021.6	1072.5	1094.8	1123.5	1226.9	1351.0	1526.0	1702.7	1877.7	1922.3
50°	892.7	918.2	953.2	967.5	999.3	1075.7	1177.6	1319.2	1514.9	1675.6	1758.4
52.5°	803.6	822.7	849.7	860.9	883.2	940.5	1032.7	1144.1	1306.4	1471.9	1588.1
55°	727.2	740.0	759.0	771.8	787.7	838.6	907.0	1007.3	1147.3	1290.5	1403.5
57.5°	655.6	665.2	684.3	690.6	703.4	743.1	790.9	875.2	1004.1	1131.4	1241.2
60°	588.8	595.1	606.3	620.6	630.2	657.2	701.8	771.8	875.2	991.4	1080.5
62.5°	525.1	534.7	537.9	544.2	552.2	577.6	612.6	663.6	754.3	849.7	943.6
65°	459.9	467.8	474.2	475.8	483.8	502.8	534.7	579.2	638.1	720.9	808.4
67.5°	399.4	404.2	407.4	413.7	421.7	431.2	456.7	490.1	544.2	611.1	681.1
70°	343.7	343.7	348.5	350.1	359.6	370.8	381.9	413.7	461.5	515.6	563.3
72.5°	283.2	291.2	289.6	297.6	296.0	303.9	318.3	338.9	374.0	416.9	463.1
75°	230.7	235.5	235.5	235.5	238.7	245.1	253.0	272.1	299.2	334.2	361.2
77.5°	179.8	183.0	183.0	183.0	184.6	191.0	198.9	211.6	230.7	251.4	267.3
80°	128.9	132.1	132.1	135.3	135.3	136.9	144.8	151.2	160.7	176.6	192.5
82.5°	87.5	89.1	92.3	92.3	90.7	93.9	95.5	101.8	111.4	114.6	125.7
85°	47.7	49.3	50.9	50.9	52.5	55.7	54.1	60.5	60.5	66.8	70.0
87.5°	19.1	22.3	22.3	20.7	22.3	22.3	22.3	25.5	27.1	28.6	27.1
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: P998455

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7
2.5°	1981.2	1974.8	1970.0	1970.0	1955.7	1941.4	1933.4	1930.2	1927.1	1914.3	1896.8
5°	2062.3	2041.6	2027.3	2013.0	1989.1	1963.7	1938.2	1923.9	1903.2	1874.5	1853.9
7.5°	2153.0	2103.7	2087.8	2070.3	2022.5	1979.6	1944.6	1914.3	1880.9	1844.3	1807.7
10°	2229.4	2176.9	2141.9	2111.6	2049.6	1992.3	1939.8	1895.2	1852.3	1804.5	1760.0
12.5°	2302.6	2227.8	2191.2	2146.7	2081.4	1998.7	1930.2	1874.5	1810.9	1761.6	1707.5
15°	2404.4	2278.7	2218.3	2189.6	2102.1	2005.0	1922.3	1839.5	1787.0	1712.2	1664.5
17.5°	2420.4	2318.5	2278.7	2205.5	2100.5	1990.7	1895.2	1812.5	1732.9	1666.1	1604.0
20°	2476.0	2342.4	2278.7	2232.6	2094.1	1982.7	1877.7	1771.1	1694.7	1623.1	1553.1
22.5°	2511.1	2359.9	2293.1	2219.9	2087.8	1954.1	1830.0	1737.7	1643.8	1570.6	1514.9
25°	2501.5	2350.3	2275.5	2207.1	2046.4	1912.7	1801.3	1683.6	1596.1	1516.5	1443.3
27.5°	2496.7	2326.5	2246.9	2170.5	2019.3	1879.3	1739.3	1643.8	1546.7	1454.4	1400.3
30°	2484.0	2296.2	2203.9	2121.2	1963.7	1817.3	1697.9	1586.5	1489.4	1405.1	1333.5
32.5°	2441.0	2245.3	2156.2	2067.1	1903.2	1756.8	1635.8	1532.4	1435.3	1347.8	1279.4
35°	2383.8	2184.8	2087.8	1993.9	1830.0	1682.0	1570.6	1462.4	1371.7	1287.4	1222.1
37.5°	2326.5	2114.8	2024.1	1915.9	1764.7	1610.4	1495.8	1398.7	1314.4	1226.9	1155.3
40°	2243.7	2032.1	1931.8	1839.5	1662.9	1518.1	1413.1	1325.5	1242.8	1160.1	1099.6
42.5°	2130.7	1941.4	1837.9	1736.1	1570.6	1427.4	1325.5	1247.6	1169.6	1101.2	1034.3
45°	2016.2	1831.6	1739.3	1648.6	1468.8	1333.5	1239.6	1168.0	1102.8	1028.0	973.9
47.5°	1877.7	1721.8	1629.5	1540.4	1370.1	1234.8	1148.9	1082.1	1021.6	959.5	908.6
50°	1736.1	1600.8	1516.5	1424.2	1261.9	1139.4	1055.0	999.3	950.0	891.1	849.7
52.5°	1583.3	1465.6	1394.0	1304.9	1161.6	1048.7	962.7	907.0	865.7	822.7	786.1
55°	1421.0	1335.1	1258.7	1187.1	1051.8	950.0	873.6	824.3	795.6	755.9	724.0
57.5°	1274.6	1191.9	1145.7	1064.6	946.8	846.6	786.1	744.7	711.3	687.4	662.0
60°	1121.9	1055.0	1004.1	945.2	841.8	757.5	693.8	669.9	634.9	617.4	606.3
62.5°	975.5	927.7	880.0	835.4	743.1	663.6	615.8	585.6	564.9	547.4	537.9
65°	837.0	792.5	759.0	719.3	642.9	579.2	534.7	510.8	490.1	485.3	474.2
67.5°	701.8	682.7	646.1	614.2	549.0	499.7	466.2	436.0	424.9	420.1	410.6
70°	587.2	564.9	536.3	509.2	459.9	416.9	386.7	375.5	359.6	358.0	346.9
72.5°	483.8	456.7	436.0	415.3	378.7	340.5	324.6	308.7	300.8	294.4	289.6
75°	383.5	364.4	350.1	332.6	300.8	275.3	253.0	246.7	241.9	240.3	237.1
77.5°	286.4	273.7	267.3	249.8	227.6	205.3	195.7	186.2	186.2	183.0	184.6
80°	203.7	195.7	187.8	178.2	159.1	149.6	141.6	135.3	132.1	130.5	132.1
82.5°	128.9	124.1	122.5	116.2	103.4	98.7	92.3	87.5	87.5	87.5	87.5
85°	71.6	71.6	71.6	62.1	57.3	52.5	49.3	47.7	47.7	47.7	49.3
87.5°	30.2	30.2	25.5	25.5	23.9	20.7	19.1	19.1	20.7	20.7	22.3
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: P998455

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7
2.5°	1892.0	1885.7	1888.9	1872.9	1858.6	1837.9	1820.4	1817.3	1814.1	1823.6	1817.3
5°	1837.9	1830.0	1822.0	1802.9	1774.3	1756.8	1731.3	1729.7	1720.2	1705.9	1709.0
7.5°	1779.1	1774.3	1763.2	1732.9	1707.5	1677.2	1656.5	1639.0	1631.1	1618.3	1613.6
10°	1731.3	1713.8	1704.3	1670.9	1640.6	1608.8	1581.7	1569.0	1554.7	1543.6	1535.6
12.5°	1666.1	1661.3	1634.3	1607.2	1581.7	1545.1	1524.5	1487.9	1468.8	1478.3	1475.1
15°	1623.1	1600.8	1594.5	1556.3	1513.3	1489.4	1451.3	1427.4	1419.4	1405.1	1387.6
17.5°	1565.8	1551.5	1529.2	1494.2	1444.9	1411.5	1384.4	1362.1	1352.6	1333.5	1319.2
20°	1511.7	1487.9	1470.4	1438.5	1390.8	1347.8	1314.4	1300.1	1276.2	1260.3	1252.3
22.5°	1462.4	1444.9	1419.4	1371.7	1330.3	1288.9	1249.2	1228.5	1206.2	1196.7	1183.9
25°	1401.9	1373.3	1355.8	1303.3	1258.7	1225.3	1188.7	1161.6	1148.9	1133.0	1129.8
27.5°	1343.0	1316.0	1295.3	1249.2	1195.1	1152.1	1129.8	1110.7	1088.4	1088.4	1080.5
30°	1284.2	1265.1	1233.3	1188.7	1137.8	1096.4	1070.9	1053.4	1045.5	1039.1	1037.5
32.5°	1225.3	1199.8	1180.7	1120.3	1082.1	1043.9	1024.8	1010.5	1000.9	999.3	1000.9
35°	1164.8	1136.2	1117.1	1063.0	1024.8	989.8	981.8	969.1	964.3	962.7	970.7
37.5°	1101.2	1078.9	1055.0	1010.5	967.5	946.8	930.9	926.1	924.5	934.1	937.3
40°	1042.3	1023.2	1000.9	953.2	921.4	899.1	891.1	886.3	892.7	902.3	907.0
42.5°	986.6	959.5	942.0	899.1	870.4	857.7	848.2	848.2	854.5	865.7	873.6
45°	927.7	907.0	889.5	851.3	825.9	811.6	810.0	811.6	819.5	827.5	837.0
47.5°	870.4	849.7	830.7	798.8	776.5	768.6	767.0	768.6	781.3	792.5	803.6
50°	817.9	795.6	778.1	747.9	730.4	720.9	722.4	730.4	740.0	755.9	770.2
52.5°	755.9	740.0	724.0	697.0	681.1	674.7	679.5	685.8	703.4	714.5	732.0
55°	695.4	681.1	668.3	647.7	634.9	630.2	633.3	642.9	657.2	676.3	697.0
57.5°	639.7	623.8	611.1	596.7	582.4	584.0	585.6	598.3	615.8	633.3	657.2
60°	577.6	568.1	557.0	539.4	533.1	533.1	537.9	552.2	568.1	596.7	617.4
62.5°	521.9	509.2	501.3	490.1	480.6	482.2	493.3	506.0	525.1	549.0	576.0
65°	464.7	450.3	444.0	434.4	431.2	432.8	440.8	459.9	480.6	501.3	526.7
67.5°	401.0	396.2	389.9	380.3	383.5	385.1	393.0	409.0	431.2	451.9	480.6
70°	346.9	337.4	335.8	327.8	327.8	332.6	348.5	359.6	380.3	402.6	432.8
72.5°	289.6	281.7	281.7	275.3	280.1	284.8	292.8	308.7	327.8	350.1	375.5
75°	230.7	227.6	230.7	227.6	227.6	235.5	245.1	257.8	278.5	302.3	323.0
77.5°	178.2	178.2	176.6	181.4	181.4	186.2	198.9	211.6	227.6	246.7	268.9
80°	130.5	130.5	130.5	135.3	140.0	140.0	148.0	163.9	178.2	191.0	211.6
82.5°	89.1	89.1	89.1	92.3	98.7	98.7	108.2	117.8	133.7	144.8	154.4
85°	54.1	54.1	52.5	55.7	57.3	62.1	70.0	76.4	84.3	93.9	103.4
87.5°	23.9	23.9	25.5	27.1	28.6	31.8	35.0	38.2	46.1	49.3	54.1
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: P998455

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7
2.5°	1812.5	1810.9	1802.9	1806.1	1796.6	1799.7	1804.5	1806.1	1812.5	1807.7	1806.1
5°	1701.1	1697.9	1693.1	1688.4	1686.8	1693.1	1682.0	1685.2	1688.4	1693.1	1699.5
7.5°	1610.4	1608.8	1604.0	1596.1	1592.9	1589.7	1591.3	1602.4	1600.8	1599.2	1610.4
10°	1527.6	1529.2	1519.7	1518.1	1508.5	1507.0	1508.5	1511.7	1516.5	1522.9	1524.5
12.5°	1441.7	1462.4	1444.9	1438.5	1424.2	1432.2	1435.3	1421.0	1429.0	1433.8	1457.6
15°	1387.6	1378.1	1366.9	1366.9	1360.6	1357.4	1349.4	1360.6	1366.9	1376.5	1373.3
17.5°	1312.8	1296.9	1290.5	1284.2	1285.8	1292.1	1274.6	1300.1	1300.1	1304.9	1296.9
20°	1247.6	1234.8	1226.9	1223.7	1218.9	1215.7	1214.2	1220.5	1230.1	1233.3	1241.2
22.5°	1179.1	1179.1	1166.4	1161.6	1158.5	1153.7	1161.6	1156.9	1163.2	1169.6	1182.3
25°	1121.9	1121.9	1117.1	1110.7	1105.9	1102.8	1107.5	1105.9	1110.7	1118.7	1121.9
27.5°	1075.7	1070.9	1069.3	1067.8	1066.2	1067.8	1066.2	1070.9	1075.7	1077.3	1074.1
30°	1035.9	1031.2	1032.7	1032.7	1034.3	1032.7	1031.2	1035.9	1037.5	1034.3	1035.9
32.5°	999.3	999.3	1002.5	1004.1	1004.1	1005.7	1007.3	1004.1	1005.7	1000.9	1002.5
35°	969.1	972.3	975.5	977.1	978.6	977.1	980.2	978.6	975.5	972.3	970.7
37.5°	938.9	942.0	948.4	950.0	954.8	956.4	953.2	953.2	951.6	945.2	942.0
40°	907.0	910.2	918.2	922.9	926.1	930.9	927.7	927.7	921.4	915.0	910.2
42.5°	876.8	883.2	891.1	895.9	902.3	902.3	902.3	899.1	891.1	884.8	880.0
45°	846.6	848.2	859.3	867.3	873.6	873.6	873.6	868.8	864.1	851.3	845.0
47.5°	813.1	817.9	830.7	838.6	845.0	846.6	846.6	841.8	832.2	821.1	813.1
50°	776.5	784.5	798.8	810.0	817.9	821.1	816.3	813.1	802.0	789.3	779.7
52.5°	741.5	751.1	768.6	778.1	789.3	790.9	789.3	784.5	771.8	754.3	746.3
55°	706.5	714.5	733.6	749.5	759.0	762.2	759.0	751.1	735.2	717.7	709.7
57.5°	668.3	679.5	700.2	716.1	727.2	728.8	725.6	717.7	704.9	682.7	671.5
60°	628.6	642.9	663.6	679.5	693.8	695.4	692.2	681.1	665.2	642.9	633.3
62.5°	588.8	599.9	623.8	641.3	652.4	660.4	654.0	642.9	627.0	604.7	590.4
65°	542.6	558.5	579.2	595.1	607.9	609.5	606.3	596.7	579.2	555.4	544.2
67.5°	498.1	509.2	529.9	550.6	555.4	560.1	555.4	545.8	531.5	510.8	494.9
70°	444.0	453.5	479.0	493.3	499.7	504.4	501.3	491.7	479.0	459.9	447.2
72.5°	389.9	397.8	421.7	432.8	445.6	444.0	442.4	436.0	418.5	405.8	397.8
75°	332.6	342.1	358.0	372.4	377.1	377.1	377.1	372.4	361.2	340.5	332.6
77.5°	280.1	284.8	297.6	305.5	310.3	311.9	310.3	302.3	296.0	281.7	276.9
80°	214.8	227.6	237.1	238.7	245.1	245.1	245.1	241.9	235.5	221.2	219.6
82.5°	162.3	165.5	175.0	179.8	183.0	181.4	181.4	175.0	173.5	165.5	162.3
85°	109.8	114.6	113.0	119.3	120.9	117.8	117.8	120.9	113.0	114.6	109.8
87.5°	60.5	60.5	63.7	62.1	68.4	68.4	65.2	66.8	63.7	62.1	60.5
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: P998455

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7	1920.7
2.5°	1806.1	1815.7	1806.1	1812.5	1815.7	1823.6	1826.8	1841.1	1845.9	1857.0	1857.0
5°	1697.9	1702.7	1704.3	1710.6	1717.0	1732.9	1744.1	1764.7	1788.6	1791.8	1806.1
7.5°	1610.4	1618.3	1631.1	1626.3	1637.4	1661.3	1675.6	1701.1	1725.0	1737.7	1755.2
10°	1532.4	1542.0	1546.7	1551.5	1572.2	1592.9	1615.2	1632.7	1664.5	1683.6	1697.9
12.5°	1468.8	1460.8	1470.4	1487.9	1511.7	1524.5	1554.7	1581.7	1605.6	1626.3	1639.0
15°	1386.0	1392.4	1401.9	1432.2	1438.5	1470.4	1481.5	1511.7	1556.3	1575.4	1591.3
17.5°	1306.4	1327.1	1346.2	1357.4	1376.5	1401.9	1433.8	1467.2	1495.8	1518.1	1537.2
20°	1242.8	1263.5	1274.6	1282.6	1301.7	1336.7	1366.9	1408.3	1444.9	1462.4	1487.9
22.5°	1191.9	1191.9	1207.8	1231.7	1242.8	1276.2	1301.7	1346.2	1386.0	1408.3	1432.2
25°	1128.2	1137.8	1150.5	1171.2	1187.1	1214.2	1250.8	1288.9	1331.9	1351.0	1381.2
27.5°	1075.7	1086.9	1104.4	1109.1	1125.0	1148.9	1187.1	1228.5	1273.0	1293.7	1319.2
30°	1035.9	1042.3	1048.7	1058.2	1072.5	1093.2	1125.0	1161.6	1215.7	1231.7	1263.5
32.5°	1000.9	1004.1	1007.3	1015.2	1023.2	1043.9	1069.3	1109.1	1153.7	1177.6	1206.2
35°	969.1	965.9	967.5	972.3	980.2	988.2	1015.2	1048.7	1090.0	1118.7	1141.0
37.5°	938.9	932.5	930.9	930.9	934.1	943.6	964.3	993.0	1037.5	1061.4	1083.7
40°	905.4	899.1	895.9	894.3	892.7	899.1	915.0	943.6	978.6	1000.9	1026.4
42.5°	873.6	867.3	859.3	857.7	854.5	857.7	868.8	895.9	926.1	948.4	969.1
45°	841.8	830.7	821.1	814.7	816.3	811.6	819.5	840.2	875.2	889.5	910.2
47.5°	806.8	794.1	781.3	775.0	768.6	771.8	775.0	792.5	822.7	837.0	857.7
50°	773.4	755.9	741.5	733.6	728.8	725.6	728.8	746.3	768.6	781.3	798.8
52.5°	735.2	717.7	703.4	690.6	684.3	679.5	681.1	697.0	717.7	730.4	747.9
55°	700.2	677.9	658.8	642.9	638.1	636.5	634.9	646.1	663.6	676.3	690.6
57.5°	660.4	638.1	617.4	598.3	588.8	587.2	587.2	590.4	612.6	622.2	630.2
60°	620.6	596.7	574.5	557.0	542.6	537.9	536.3	542.6	553.8	563.3	574.5
62.5°	576.0	552.2	525.1	509.2	494.9	482.2	486.9	488.5	504.4	509.2	518.8
65°	533.1	506.0	483.8	458.3	442.4	434.4	431.2	434.4	447.2	448.7	455.1
67.5°	483.8	458.3	431.2	413.7	399.4	385.1	381.9	381.9	388.3	393.0	401.0
70°	436.0	410.6	380.3	361.2	346.9	334.2	329.4	327.8	332.6	335.8	343.7
72.5°	380.3	354.9	332.6	311.9	294.4	284.8	280.1	276.9	281.7	284.8	286.4
75°	321.4	300.8	278.5	257.8	246.7	237.1	230.7	226.0	229.1	229.1	229.1
77.5°	265.7	245.1	227.6	213.2	198.9	187.8	183.0	178.2	179.8	179.8	183.0
80°	206.9	192.5	178.2	165.5	152.8	143.2	140.0	135.3	132.1	130.5	130.5
82.5°	152.8	141.6	128.9	117.8	111.4	101.8	98.7	92.3	92.3	90.7	90.7
85°	101.8	95.5	82.7	74.8	70.0	65.2	62.1	58.9	54.1	54.1	52.5
87.5°	54.1	50.9	47.7	38.2	38.2	33.4	31.8	30.2	25.5	27.1	27.1
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: P998455

CATALOG NUMBER: S124DR-B1195DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1920.7	1920.7	1920.7	1920.7
2.5°	1868.2	1884.1	1898.4	1920.7
5°	1826.8	1849.1	1879.3	1912.7
7.5°	1779.1	1814.1	1853.9	1900.0
10°	1734.5	1774.3	1825.2	1880.9
12.5°	1688.4	1736.1	1791.8	1852.3
15°	1635.8	1683.6	1745.6	1826.8
17.5°	1588.1	1645.4	1712.2	1798.2
20°	1532.4	1586.5	1659.7	1758.4
22.5°	1483.1	1545.1	1626.3	1712.2
25°	1429.0	1483.1	1564.2	1667.7
27.5°	1374.9	1441.7	1519.7	1619.9
30°	1322.4	1378.1	1462.4	1567.4
32.5°	1265.1	1331.9	1409.9	1508.5
35°	1203.0	1266.7	1339.9	1446.5
37.5°	1147.3	1209.4	1284.2	1378.1
40°	1085.3	1150.5	1218.9	1312.8
42.5°	1024.8	1083.7	1152.1	1238.0
45°	965.9	1016.8	1078.9	1153.7
47.5°	905.4	948.4	1005.7	1072.5
50°	840.2	886.3	929.3	985.0
52.5°	779.7	819.5	854.5	900.7
55°	720.9	747.9	776.5	811.6
57.5°	658.8	679.5	700.2	736.8
60°	596.7	615.8	627.0	650.8
62.5°	536.3	544.2	558.5	572.9
65°	469.4	480.6	488.5	506.0
67.5°	409.0	413.7	421.7	432.8
70°	345.3	356.4	359.6	367.6
72.5°	291.2	296.0	299.2	300.8
75°	230.7	235.5	238.7	248.2
77.5°	181.4	179.8	186.2	187.8
80°	133.7	128.9	130.5	136.9
82.5°	87.5	89.1	87.5	87.5
85°	54.1	52.5	49.3	50.9
87.5°	23.9	23.9	22.3	22.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)