

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: P994921

Luminaire Tested: S123RDR-B1000DB2750-4F0-XX-W2A-A_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P994921
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-30)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-B1000DB2750-4F0-XX-W2A-A_2700K
Description: Define 3 Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

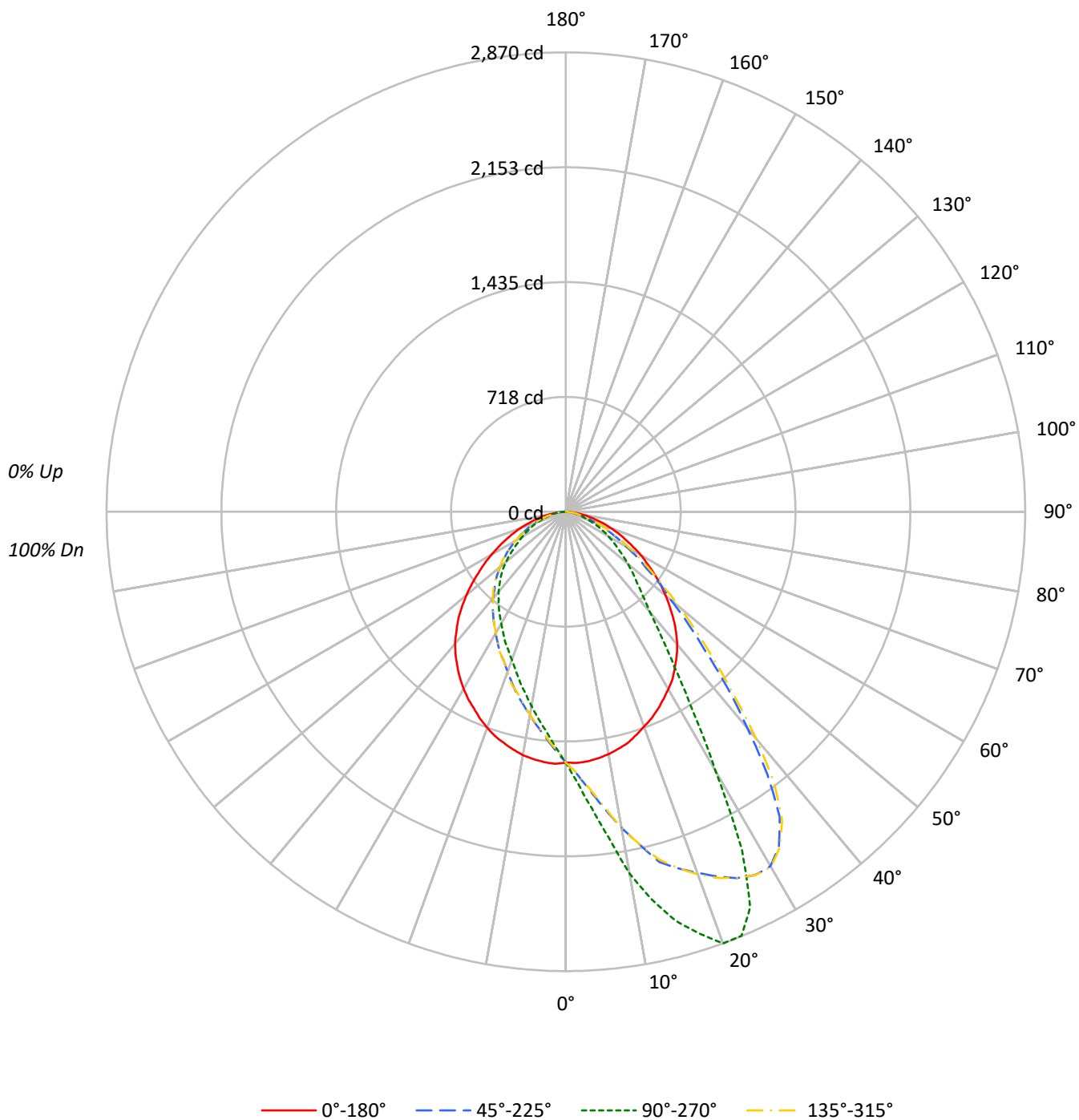
Lumens per Lamp: N/A
Luminaire Lumens: 3901.0 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.34
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V): 120
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					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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	74		
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64		
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59	67	62	58	56		
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50		
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44		
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39		
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36		
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32		
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	16863	16863	16863	16863
5°	16913	20102	16956	14913
10°	16800	25098	16874	13472
15°	16665	29460	16665	12286
20°	16363	32880	16455	11277
25°	16153	32354	16121	10657
30°	15904	23256	15871	10019
35°	15598	15528	15528	9606
40°	15209	11441	15135	9178
45°	14496	9596	14477	8759
50°	13611	8468	13566	8175
55°	12611	7426	12510	7375
60°	11636	6613	11522	6758
65°	10488	5807	10557	6286
70°	9454	4560	9709	5740
75°	8201	4017	8534	5244
80°	6819	3490	7401	5157
85°	5471	2816	5965	5471

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 30°

Vertical Angle: 45°

Luminance: 27502 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.9	3.9
10°-20°	481.6	12.3
20°-30°	758.5	19.4
30°-40°	788.7	20.2
40°-50°	674.8	17.3
50°-60°	514.5	13.2
60°-70°	329.6	8.4
70°-80°	157.9	4.0
80°-90°	41.5	1.1
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°	1394.0	35.7
0°-40°	2182.7	56.0
0°-60°	3372.0	86.4
0°-90°	3901.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3901.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1567	1567	1567	1567	1567	
5°	1565	1860	1569	1380	1565	148
15°	1496	2644	1496	1102	1496	421
25°	1360	2724	1357	897	1360	626
35°	1187	1182	1182	731	1187	743
45°	952	630	951	575	952	733
55°	672	396	667	393	672	602
65°	412	228	414	247	412	411
75°	197	97	205	126	197	213
85°	44	23	48	44	44	52
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°	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1570.7	1581.4	1589.4	1594.8	1608.2	1616.3	1623.0	1635.0	1635.0	1637.7	1643.1
5°	1565.3	1588.1	1604.2	1625.6	1653.8	1667.2	1686.0	1702.1	1724.9	1737.0	1749.0
7.5°	1553.2	1585.4	1618.9	1651.1	1692.7	1719.5	1738.3	1779.9	1809.4	1845.6	1873.8
10°	1537.1	1581.4	1624.3	1673.9	1730.3	1770.5	1798.7	1853.7	1910.0	1961.0	2003.9
12.5°	1517.0	1570.7	1632.4	1692.7	1771.8	1812.1	1857.7	1926.1	2006.6	2071.0	2128.6
15°	1495.5	1557.2	1627.0	1700.8	1800.0	1856.4	1922.1	2005.2	2095.1	2187.7	2266.8
17.5°	1462.0	1539.8	1617.6	1724.9	1841.6	1875.1	1931.5	2045.5	2156.8	2240.0	2336.5
20°	1428.5	1515.7	1613.6	1710.2	1836.2	1914.0	1966.3	2087.1	2206.4	2307.0	2399.6
22.5°	1397.6	1488.8	1590.8	1712.8	1830.9	1908.7	1974.4	2100.5	2238.6	2351.3	2465.3
25°	1360.1	1459.3	1572.0	1687.3	1830.9	1889.9	1962.3	2108.5	2254.7	2384.8	2525.7
27.5°	1319.8	1420.4	1531.8	1649.8	1781.2	1868.4	1939.5	2096.4	2274.8	2414.3	2559.2
30°	1279.6	1382.9	1490.2	1596.1	1743.7	1826.8	1908.7	2081.7	2285.6	2445.2	2556.5
32.5°	1240.7	1327.9	1433.8	1537.1	1683.3	1774.5	1867.1	2066.9	2289.6	2423.7	2477.4
35°	1187.0	1278.3	1364.1	1474.1	1621.6	1711.5	1820.1	2065.6	2272.2	2355.3	2328.5
37.5°	1137.4	1213.9	1295.7	1393.6	1545.2	1661.9	1774.5	2030.7	2214.5	2219.8	2068.3
40°	1082.4	1145.5	1213.9	1317.2	1480.8	1596.1	1718.2	1977.1	2109.9	2030.7	1763.8
42.5°	1019.4	1075.7	1129.4	1230.0	1408.4	1537.1	1668.6	1910.0	1958.3	1775.9	1498.2
45°	952.3	997.9	1047.6	1153.5	1331.9	1459.3	1590.8	1806.7	1757.1	1499.6	1235.3
47.5°	882.6	921.5	969.8	1066.3	1250.1	1380.2	1504.9	1659.2	1533.1	1256.8	1035.5
50°	812.8	843.7	890.6	989.9	1166.9	1285.0	1400.3	1500.9	1323.9	1078.4	855.7
52.5°	744.4	768.6	816.8	901.3	1073.0	1185.7	1268.9	1307.8	1128.0	890.6	743.1
55°	672.0	698.8	731.0	816.8	987.2	1070.4	1125.3	1124.0	938.9	755.1	614.3
57.5°	602.2	626.4	654.6	740.4	878.5	934.9	981.8	959.0	783.3	618.3	527.1
60°	540.5	554.0	584.8	657.2	761.9	810.1	837.0	798.1	639.8	521.8	435.9
62.5°	473.5	486.9	512.4	580.8	645.2	670.6	693.4	643.8	528.5	425.2	372.9
65°	411.8	429.2	445.3	500.3	535.2	566.0	563.3	521.8	413.1	346.1	303.1
67.5°	358.1	364.8	378.2	411.8	427.9	450.7	452.0	405.1	332.6	281.7	256.2
70°	300.4	307.2	316.5	332.6	343.4	348.7	346.1	304.5	250.8	220.0	197.2
72.5°	250.8	249.5	256.2	256.2	266.9	265.6	257.5	225.3	190.5	165.0	151.6
75°	197.2	198.5	199.9	197.2	193.1	187.8	181.1	156.9	134.1	122.1	110.0
77.5°	154.2	151.6	152.9	143.5	138.2	132.8	123.4	111.3	92.5	89.9	84.5
80°	110.0	108.6	107.3	103.3	91.2	85.8	79.1	72.4	68.4	65.7	64.4
82.5°	73.8	73.8	71.1	63.0	56.3	52.3	51.0	48.3	44.3	44.3	42.9
85°	44.3	42.9	40.2	32.2	28.2	28.2	28.2	28.2	25.5	25.5	24.1
87.5°	17.4	16.1	12.1	12.1	10.7	10.7	10.7	9.4	9.4	8.0	8.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1653.8	1653.8	1665.9	1678.0	1671.3	1675.3	1690.0	1684.7	1695.4	1694.1	1698.1
5°	1778.6	1793.3	1805.4	1830.9	1834.9	1830.9	1856.4	1863.1	1875.1	1860.4	1867.1
7.5°	1919.4	1950.2	1979.8	2017.3	2029.4	2032.1	2045.5	2064.3	2080.3	2050.8	2065.6
10°	2056.2	2103.1	2163.5	2197.0	2226.5	2237.3	2248.0	2260.1	2278.9	2296.3	2282.9
12.5°	2203.7	2272.2	2329.8	2390.2	2426.4	2422.4	2453.2	2461.3	2476.0	2480.1	2485.4
15°	2324.5	2421.0	2457.3	2547.1	2555.2	2582.0	2616.9	2647.7	2651.7	2643.7	2643.7
17.5°	2439.8	2523.0	2587.4	2659.8	2674.5	2697.3	2741.6	2756.4	2761.7	2760.4	2760.4
20°	2533.7	2588.7	2697.3	2757.7	2781.8	2811.4	2842.2	2861.0	2865.0	2870.4	2862.3
22.5°	2595.4	2678.6	2767.1	2816.7	2836.8	2847.6	2867.7	2873.1	2866.3	2867.7	2869.0
25°	2643.7	2725.5	2779.2	2792.6	2791.2	2777.8	2763.1	2737.6	2734.9	2724.2	2702.7
27.5°	2657.1	2688.0	2681.2	2626.3	2571.3	2565.9	2477.4	2429.1	2374.1	2382.1	2351.3
30°	2584.7	2544.4	2449.2	2309.7	2252.0	2158.1	2058.9	1955.6	1915.4	1871.1	1952.9
32.5°	2407.6	2264.1	2095.1	1914.0	1817.5	1734.3	1628.3	1553.2	1510.3	1474.1	1543.8
35°	2140.7	1916.7	1692.7	1521.0	1441.9	1366.8	1267.5	1230.0	1176.3	1181.7	1188.4
37.5°	1797.3	1550.5	1381.5	1212.5	1160.2	1129.4	1056.9	999.3	980.5	975.1	975.1
40°	1475.4	1272.9	1122.7	989.9	949.6	924.2	866.5	839.7	819.5	814.2	820.9
42.5°	1220.6	1047.6	930.9	842.3	814.2	782.0	757.8	724.3	720.3	710.9	723.0
45°	1024.7	874.5	787.3	723.0	698.8	686.7	659.9	639.8	631.7	630.4	639.8
47.5°	869.2	752.5	676.0	635.8	617.0	604.9	582.1	574.1	566.0	568.7	564.7
50°	729.7	642.5	592.9	556.6	544.6	532.5	517.7	509.7	505.7	505.7	504.3
52.5°	626.4	554.0	521.8	488.2	482.9	476.2	460.1	454.7	448.0	446.7	452.0
55°	536.5	486.9	454.7	434.6	429.2	415.8	409.1	402.4	398.4	395.7	397.0
57.5°	458.7	421.2	399.7	382.3	372.9	367.5	355.4	354.1	351.4	351.4	350.1
60°	394.3	367.5	342.0	331.3	324.6	317.9	316.5	308.5	304.5	307.2	305.8
62.5°	334.0	312.5	297.8	285.7	281.7	276.3	272.3	269.6	265.6	266.9	266.9
65°	279.0	261.6	250.8	240.1	238.8	233.4	232.0	229.4	229.4	228.0	230.7
67.5°	229.4	217.3	207.9	201.2	197.2	198.5	193.1	189.1	189.1	187.8	191.8
70°	182.4	175.7	166.3	158.3	152.9	152.9	146.2	144.9	144.9	144.9	143.5
72.5°	140.8	128.8	124.7	122.1	122.1	122.1	119.4	119.4	118.0	119.4	118.0
75°	104.6	103.3	100.6	99.3	99.3	97.9	96.6	96.6	96.6	96.6	96.6
77.5°	81.8	81.8	79.1	77.8	77.8	77.8	76.5	76.5	75.1	75.1	75.1
80°	60.4	60.4	57.7	57.7	57.7	56.3	56.3	56.3	57.7	56.3	56.3
82.5°	41.6	41.6	40.2	41.6	40.2	38.9	38.9	38.9	37.6	38.9	38.9
85°	24.1	24.1	22.8	21.5	22.8	22.8	21.5	22.8	21.5	22.8	21.5
87.5°	9.4	8.0	8.0	8.0	6.7	8.0	6.7	6.7	8.0	6.7	8.0
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°	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1691.4	1683.3	1678.0	1673.9	1669.9	1682.0	1665.9	1648.5	1636.4	1628.3	1625.6
5°	1868.4	1851.0	1836.2	1824.2	1826.8	1826.8	1798.7	1767.8	1741.0	1726.2	1710.2
7.5°	2073.6	2054.9	2025.4	2018.6	2013.3	1979.8	1951.6	1895.2	1861.7	1828.2	1798.7
10°	2277.5	2253.4	2225.2	2215.8	2202.4	2160.8	2117.9	2045.5	2003.9	1942.2	1903.3
12.5°	2468.0	2438.5	2410.3	2403.6	2383.5	2347.3	2273.5	2198.4	2127.3	2061.6	1993.2
15°	2627.6	2619.5	2576.6	2549.8	2505.5	2455.9	2439.8	2337.9	2248.0	2179.6	2056.2
17.5°	2761.7	2724.2	2683.9	2666.5	2649.1	2591.4	2533.7	2429.1	2332.5	2231.9	2152.8
20°	2869.0	2827.4	2799.3	2773.8	2765.7	2700.0	2608.8	2516.3	2410.3	2297.6	2194.4
22.5°	2874.4	2869.0	2850.3	2835.5	2819.4	2776.5	2704.0	2588.7	2476.0	2352.6	2217.2
25°	2763.1	2755.0	2808.7	2795.3	2806.0	2789.9	2751.0	2654.4	2523.0	2378.1	2241.3
27.5°	2427.7	2509.6	2594.1	2623.6	2643.7	2701.4	2720.1	2666.5	2560.5	2406.3	2253.4
30°	1971.7	2080.3	2217.2	2290.9	2347.3	2454.6	2594.1	2611.5	2561.9	2438.5	2250.7
32.5°	1547.9	1647.1	1757.1	1844.3	1919.4	2139.4	2327.1	2462.6	2486.8	2422.4	2257.4
35°	1247.4	1290.3	1394.9	1478.1	1580.0	1767.8	1989.1	2207.8	2355.3	2363.4	2237.3
37.5°	1028.8	1051.6	1142.8	1189.7	1250.1	1415.1	1621.6	1907.3	2136.7	2245.3	2180.9
40°	851.7	904.0	956.3	983.2	1026.1	1140.1	1338.6	1562.6	1847.0	2048.2	2093.8
42.5°	739.1	761.9	795.4	832.9	859.8	959.0	1091.8	1297.0	1553.2	1833.5	1959.6
45°	651.9	659.9	694.8	718.9	747.1	816.8	910.7	1082.4	1307.8	1584.1	1798.7
47.5°	579.4	595.5	614.3	629.1	647.8	701.5	782.0	906.7	1105.2	1352.0	1582.7
50°	515.1	524.4	548.6	555.3	568.7	606.3	668.0	763.2	926.8	1124.0	1362.8
52.5°	454.7	472.1	481.5	490.9	503.0	533.8	574.1	651.9	775.3	960.4	1162.9
55°	407.8	413.1	426.5	434.6	444.0	465.4	500.3	558.0	654.6	802.1	993.9
57.5°	362.1	362.1	375.6	382.3	391.7	407.8	438.6	482.9	552.6	662.6	838.3
60°	313.9	315.2	325.9	334.0	336.7	352.8	378.2	413.1	466.8	547.2	690.8
62.5°	270.9	277.6	283.0	285.7	295.1	304.5	325.9	350.1	387.6	458.7	560.7
65°	234.7	236.1	240.1	242.8	246.8	257.5	273.6	289.7	321.9	374.2	457.4
67.5°	193.1	198.5	203.9	203.9	207.9	213.3	229.4	242.8	266.9	297.8	354.1
70°	144.9	147.5	155.6	159.6	165.0	174.4	182.4	190.5	209.2	232.0	275.0
72.5°	120.7	120.7	123.4	124.7	124.7	131.4	143.5	151.6	161.0	177.1	206.6
75°	96.6	96.6	100.6	99.3	101.9	104.6	106.0	111.3	116.7	128.8	146.2
77.5°	76.5	77.8	77.8	79.1	79.1	80.5	81.8	84.5	87.2	93.9	101.9
80°	56.3	57.7	57.7	59.0	59.0	60.4	61.7	63.0	65.7	68.4	72.4
82.5°	38.9	40.2	40.2	41.6	40.2	41.6	42.9	42.9	44.3	46.9	48.3
85°	22.8	22.8	24.1	22.8	22.8	22.8	24.1	24.1	25.5	29.5	29.5
87.5°	6.7	8.0	6.7	8.0	8.0	8.0	8.0	9.4	9.4	10.7	12.1
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: P994921

CATALOG NUMBER: S123RDR-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1621.6	1614.9	1608.2	1608.2	1593.5	1580.0	1573.3	1576.0	1568.0	1557.2	1546.5
5°	1692.7	1665.9	1660.5	1645.8	1625.6	1597.5	1582.7	1569.3	1553.2	1531.8	1511.6
7.5°	1758.4	1723.6	1704.8	1690.0	1651.1	1612.2	1580.0	1558.6	1530.4	1498.2	1474.1
10°	1844.3	1779.9	1759.8	1726.2	1671.3	1616.3	1578.7	1543.8	1504.9	1467.4	1435.2
12.5°	1912.7	1838.9	1801.4	1767.8	1696.7	1627.0	1563.9	1521.0	1474.1	1432.5	1390.9
15°	1990.5	1907.3	1841.6	1801.4	1711.5	1627.0	1555.9	1495.5	1443.2	1392.3	1356.0
17.5°	2028.0	1923.4	1893.9	1836.2	1706.1	1621.6	1534.4	1470.1	1407.0	1348.0	1305.1
20°	2087.1	1965.0	1891.2	1852.3	1737.0	1612.2	1510.3	1436.5	1370.8	1307.8	1262.2
22.5°	2091.1	1958.3	1910.0	1836.2	1694.1	1584.1	1488.8	1399.0	1322.5	1263.5	1216.6
25°	2081.7	1946.2	1879.2	1820.1	1702.1	1568.0	1445.9	1357.4	1282.3	1213.9	1158.9
27.5°	2077.7	1911.3	1848.3	1789.3	1656.5	1521.0	1420.4	1319.8	1234.0	1173.6	1117.3
30°	2072.3	1873.8	1797.3	1728.9	1606.9	1484.8	1364.1	1276.9	1195.1	1118.6	1062.3
32.5°	2037.4	1822.8	1745.0	1672.6	1541.1	1419.1	1323.9	1231.3	1142.8	1071.7	1020.7
35°	2026.7	1775.9	1673.9	1596.1	1467.4	1358.7	1258.1	1181.7	1098.5	1027.4	967.1
37.5°	1995.8	1727.6	1617.6	1518.3	1384.2	1280.9	1207.2	1130.7	1050.2	973.8	925.5
40°	1942.2	1671.3	1546.5	1444.6	1306.4	1201.8	1133.4	1077.1	997.9	929.5	870.5
42.5°	1863.1	1613.6	1479.4	1372.1	1219.2	1121.3	1065.0	1011.3	944.3	873.2	824.9
45°	1771.8	1537.1	1412.4	1293.0	1137.4	1042.2	983.2	951.0	889.3	828.9	772.6
47.5°	1647.1	1458.0	1334.6	1211.2	1052.9	960.4	913.4	881.2	838.3	772.6	727.0
50°	1490.2	1356.0	1239.4	1129.4	969.8	881.2	834.3	810.1	773.9	727.0	682.7
52.5°	1315.8	1238.0	1141.4	1039.5	885.3	802.1	759.2	740.4	713.6	669.3	631.7
55°	1140.1	1106.6	1040.8	940.2	796.7	728.3	690.8	666.6	646.5	614.3	582.1
57.5°	983.2	967.1	921.5	843.7	723.0	651.9	619.7	603.6	587.5	563.3	531.2
60°	820.9	838.3	791.4	752.5	642.5	580.8	552.6	535.2	527.1	505.7	485.5
62.5°	680.0	696.1	669.3	639.8	562.0	507.0	489.6	473.5	468.1	449.3	429.2
65°	552.6	572.7	552.6	536.5	489.6	444.0	422.5	414.5	409.1	397.0	380.9
67.5°	439.9	460.1	450.7	430.6	415.8	378.2	366.2	358.1	355.4	346.1	332.6
70°	331.3	359.5	362.1	350.1	336.7	319.2	311.2	308.5	301.8	293.7	285.7
72.5°	238.8	270.9	272.3	272.3	264.2	264.2	256.2	252.2	252.2	244.1	234.7
75°	175.7	197.2	199.9	202.5	206.6	210.6	205.2	205.2	203.9	195.8	191.8
77.5°	116.7	135.5	142.2	151.6	156.9	156.9	159.6	162.3	159.6	155.6	152.9
80°	75.1	88.5	96.6	101.9	110.0	114.0	118.0	119.4	116.7	115.4	111.3
82.5°	49.6	53.7	57.7	64.4	73.8	80.5	80.5	79.1	81.8	80.5	79.1
85°	28.2	30.8	32.2	33.5	38.9	45.6	46.9	48.3	51.0	48.3	45.6
87.5°	10.7	12.1	12.1	12.1	14.8	16.1	20.1	25.5	24.1	21.5	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: P994921

CATALOG NUMBER: S123RDR-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1546.5	1539.8	1537.1	1530.4	1514.3	1503.6	1491.5	1483.5	1484.8	1478.1	1482.1
5°	1498.2	1496.9	1487.5	1474.1	1451.3	1439.2	1417.7	1407.0	1401.7	1403.0	1394.9
7.5°	1458.0	1445.9	1439.2	1417.7	1396.3	1370.8	1353.4	1344.0	1335.9	1327.9	1322.5
10°	1412.4	1401.7	1390.9	1368.1	1338.6	1314.5	1290.3	1280.9	1268.9	1263.5	1259.5
12.5°	1364.1	1357.4	1344.0	1317.2	1283.6	1260.8	1232.6	1227.3	1211.2	1200.5	1197.8
15°	1319.8	1315.8	1291.7	1260.8	1227.3	1204.5	1180.3	1164.2	1137.4	1142.8	1133.4
17.5°	1272.9	1255.5	1240.7	1199.1	1183.0	1148.1	1120.0	1111.9	1093.2	1081.1	1069.0
20°	1220.6	1209.8	1191.1	1164.2	1125.3	1085.1	1063.6	1050.2	1039.5	1020.7	1015.4
22.5°	1171.0	1157.5	1141.4	1106.6	1073.0	1039.5	1010.0	997.9	984.5	971.1	963.0
25°	1132.1	1111.9	1094.5	1051.6	1018.0	989.9	971.1	951.0	932.2	924.2	921.5
27.5°	1071.7	1059.6	1042.2	1001.9	971.1	940.2	922.8	909.4	889.3	879.9	871.8
30°	1032.8	1008.7	988.5	956.3	925.5	892.0	875.9	859.8	847.7	835.6	826.2
32.5°	980.5	961.7	945.6	913.4	882.6	851.7	834.3	810.1	803.4	794.0	783.3
35°	929.5	917.4	900.0	865.1	831.6	810.1	791.4	768.6	760.5	753.8	744.4
37.5°	881.2	863.8	851.7	818.2	788.7	763.2	748.4	729.7	724.3	716.3	709.5
40°	839.7	822.2	810.1	776.6	745.8	718.9	709.5	690.8	682.7	673.3	669.3
42.5°	792.7	778.0	761.9	737.7	705.5	678.7	659.9	649.2	638.5	634.4	626.4
45°	743.1	729.7	717.6	690.8	657.2	638.5	622.4	607.6	599.6	592.9	587.5
47.5°	700.2	688.1	672.0	642.5	615.7	598.2	582.1	567.4	559.3	551.3	544.6
50°	650.5	643.8	626.4	598.2	572.7	552.6	537.9	524.4	519.1	509.7	499.0
52.5°	606.3	594.2	579.4	556.6	533.8	509.7	489.6	481.5	472.1	466.8	457.4
55°	554.0	545.9	529.8	509.7	485.5	465.4	450.7	439.9	427.9	422.5	410.4
57.5°	509.7	494.9	486.9	461.4	438.6	418.5	407.8	397.0	383.6	375.6	370.2
60°	461.4	448.0	435.9	414.5	398.4	376.9	360.8	351.4	342.0	331.3	325.9
62.5°	414.5	403.7	389.0	371.5	351.4	334.0	321.9	308.5	303.1	292.4	288.4
65°	363.5	355.4	343.4	323.3	307.2	292.4	280.3	269.6	264.2	260.2	257.5
67.5°	317.9	307.2	299.1	281.7	264.2	252.2	245.5	238.8	232.0	228.0	224.0
70°	270.9	262.9	254.8	238.8	226.7	215.9	210.6	205.2	201.2	197.2	193.1
72.5°	222.7	218.6	210.6	199.9	190.5	182.4	178.4	171.7	167.7	161.0	158.3
75°	183.8	177.1	173.0	163.6	155.6	148.9	143.5	135.5	130.1	127.4	126.1
77.5°	144.9	142.2	136.8	128.8	124.7	118.0	110.0	107.3	104.6	104.6	103.3
80°	108.6	104.6	100.6	93.9	89.9	84.5	84.5	84.5	83.2	84.5	83.2
82.5°	73.8	71.1	68.4	64.4	63.0	63.0	64.4	64.4	64.4	64.4	64.4
85°	42.9	42.9	42.9	44.3	42.9	42.9	44.3	45.6	44.3	44.3	42.9
87.5°	20.1	20.1	21.5	21.5	22.8	22.8	22.8	22.8	22.8	22.8	24.1
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: P994921

CATALOG NUMBER: S123RDR-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1480.8	1482.1	1478.1	1470.1	1468.7	1471.4	1479.4	1476.8	1470.1	1482.1	1471.4
5°	1399.0	1392.3	1389.6	1392.3	1384.2	1380.2	1388.2	1384.2	1388.2	1389.6	1393.6
7.5°	1319.8	1321.2	1313.1	1314.5	1303.7	1306.4	1306.4	1306.4	1310.4	1313.1	1318.5
10°	1251.4	1254.1	1244.7	1246.1	1238.0	1232.6	1236.7	1244.7	1244.7	1244.7	1247.4
12.5°	1196.4	1184.4	1177.7	1176.3	1166.9	1164.2	1172.3	1175.0	1181.7	1181.7	1185.7
15°	1128.0	1125.3	1120.0	1120.0	1097.2	1102.5	1105.2	1114.6	1128.0	1117.3	1120.0
17.5°	1066.3	1059.6	1052.9	1050.2	1047.6	1039.5	1050.2	1048.9	1056.9	1058.3	1062.3
20°	1011.3	1006.0	992.6	993.9	996.6	984.5	991.2	991.2	999.3	1007.3	1016.7
22.5°	957.7	952.3	945.6	948.3	940.2	937.6	937.6	944.3	953.7	960.4	959.0
25°	916.1	906.7	902.7	898.7	894.6	897.3	893.3	900.0	906.7	910.7	906.7
27.5°	869.2	865.1	857.1	853.1	846.4	849.0	851.7	857.1	861.1	861.1	865.1
30°	823.6	818.2	815.5	811.5	811.5	806.1	807.5	812.8	816.8	820.9	826.2
32.5°	779.3	775.3	771.2	771.2	768.6	767.2	765.9	773.9	773.9	782.0	782.0
35°	743.1	736.4	736.4	729.7	732.3	731.0	728.3	733.7	735.0	740.4	739.1
37.5°	702.8	702.8	700.2	693.4	688.1	689.4	696.1	696.1	700.2	698.8	702.8
40°	662.6	659.9	659.9	655.9	654.6	653.2	654.6	655.9	662.6	661.3	662.6
42.5°	622.4	623.7	617.0	617.0	617.0	613.0	614.3	615.7	618.3	621.0	625.0
45°	583.5	580.8	579.4	576.8	574.1	575.4	574.1	579.4	578.1	580.8	584.8
47.5°	541.9	537.9	536.5	531.2	531.2	533.8	532.5	536.5	537.9	541.9	539.2
50°	501.6	496.3	492.3	493.6	485.5	488.2	488.2	492.3	496.3	497.6	500.3
52.5°	454.7	453.4	452.0	445.3	444.0	442.6	444.0	445.3	450.7	454.7	456.0
55°	409.1	407.8	399.7	397.0	393.0	393.0	395.7	397.0	406.4	407.8	413.1
57.5°	367.5	363.5	354.1	352.8	352.8	352.8	348.7	354.1	356.8	363.5	363.5
60°	321.9	321.9	313.9	313.9	315.2	313.9	313.9	315.2	315.2	320.6	323.3
62.5°	285.7	284.4	284.4	281.7	280.3	281.7	280.3	280.3	281.7	285.7	289.7
65°	253.5	252.2	250.8	249.5	246.8	246.8	248.1	250.8	250.8	253.5	254.8
67.5°	222.7	222.7	220.0	220.0	218.6	217.3	218.6	217.3	222.7	222.7	224.0
70°	191.8	190.5	186.4	185.1	181.1	182.4	182.4	186.4	187.8	190.5	193.1
72.5°	154.2	154.2	151.6	148.9	150.2	147.5	147.5	148.9	148.9	152.9	154.2
75°	127.4	124.7	123.4	124.7	123.4	126.1	123.4	123.4	126.1	126.1	126.1
77.5°	104.6	104.6	103.3	103.3	104.6	103.3	104.6	104.6	104.6	103.3	104.6
80°	85.8	84.5	84.5	84.5	83.2	83.2	83.2	83.2	83.2	83.2	83.2
82.5°	64.4	64.4	63.0	64.4	64.4	63.0	64.4	63.0	63.0	64.4	64.4
85°	42.9	45.6	42.9	42.9	44.3	44.3	45.6	44.3	45.6	42.9	44.3
87.5°	22.8	24.1	24.1	22.8	22.8	24.1	24.1	24.1	25.5	22.8	24.1
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: P994921

CATALOG NUMBER: S123RDR-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1482.1	1487.5	1482.1	1471.4	1482.1	1488.8	1495.5	1506.3	1511.6	1511.6	1519.7
5°	1397.6	1408.4	1404.3	1401.7	1412.4	1419.1	1429.8	1443.2	1458.0	1467.4	1478.1
7.5°	1322.5	1329.2	1335.9	1335.9	1346.7	1361.4	1377.5	1393.6	1412.4	1425.8	1433.8
10°	1256.8	1262.2	1266.2	1271.5	1287.6	1303.7	1325.2	1345.3	1361.4	1376.2	1389.6
12.5°	1193.8	1201.8	1211.2	1215.2	1227.3	1247.4	1267.5	1291.7	1317.2	1331.9	1345.3
15°	1133.4	1137.4	1148.1	1160.2	1171.0	1192.4	1217.9	1243.4	1264.8	1287.6	1299.7
17.5°	1071.7	1073.0	1101.2	1094.5	1129.4	1149.5	1162.9	1187.0	1221.9	1240.7	1259.5
20°	1011.3	1024.7	1036.8	1043.5	1062.3	1085.1	1124.0	1142.8	1171.0	1188.4	1204.5
22.5°	964.4	984.5	984.5	1000.6	1010.0	1031.5	1059.6	1095.8	1126.7	1138.8	1161.6
25°	922.8	932.2	948.3	953.7	971.1	989.9	1008.7	1047.6	1081.1	1097.2	1113.3
27.5°	869.2	881.2	902.7	902.7	925.5	945.6	968.4	993.9	1027.4	1050.2	1067.7
30°	827.6	839.7	849.0	863.8	873.2	892.0	932.2	951.0	980.5	1000.6	1022.1
32.5°	788.7	798.1	806.1	822.2	832.9	854.4	875.9	909.4	934.9	953.7	976.5
35°	745.8	755.1	765.9	778.0	794.0	814.2	834.3	862.5	887.9	905.4	924.2
37.5°	705.5	712.2	728.3	736.4	749.8	768.6	794.0	823.6	846.4	859.8	878.5
40°	666.6	672.0	684.1	698.8	708.2	723.0	749.8	775.3	803.4	819.5	834.3
42.5°	625.0	631.7	642.5	657.2	672.0	688.1	702.8	732.3	757.8	771.2	787.3
45°	588.8	592.9	600.9	615.7	630.4	642.5	665.3	692.1	716.3	727.0	744.4
47.5°	545.9	549.9	562.0	568.7	584.8	600.9	623.7	650.5	672.0	682.7	698.8
50°	501.6	505.7	513.7	528.5	539.2	556.6	576.8	599.6	626.4	641.1	650.5
52.5°	458.7	466.8	473.5	485.5	499.0	516.4	535.2	556.6	579.4	594.2	604.9
55°	415.8	422.5	430.6	437.3	453.4	469.5	490.9	511.0	531.2	544.6	556.6
57.5°	367.5	376.9	385.0	398.4	410.4	423.8	448.0	464.1	488.2	497.6	508.4
60°	325.9	335.3	342.0	352.8	363.5	380.9	397.0	417.1	437.3	449.3	462.7
62.5°	291.1	295.1	299.1	309.8	320.6	336.7	352.8	372.9	394.3	401.0	411.8
65°	256.2	260.2	266.9	276.3	284.4	293.7	311.2	327.3	347.4	358.1	362.1
67.5°	226.7	230.7	232.0	238.8	245.5	256.2	265.6	281.7	300.4	307.2	315.2
70°	193.1	199.9	201.2	206.6	209.2	215.9	226.7	238.8	253.5	265.6	272.3
72.5°	154.2	163.6	166.3	174.4	178.4	185.1	193.1	202.5	211.9	217.3	222.7
75°	126.1	128.8	130.1	136.8	143.5	152.9	156.9	162.3	170.3	177.1	182.4
77.5°	104.6	106.0	107.3	107.3	108.6	114.0	122.1	128.8	134.1	136.8	140.8
80°	84.5	83.2	83.2	84.5	84.5	84.5	87.2	96.6	99.3	106.0	104.6
82.5°	65.7	63.0	64.4	63.0	63.0	63.0	63.0	64.4	64.4	68.4	71.1
85°	42.9	44.3	42.9	42.9	41.6	42.9	41.6	41.6	40.2	40.2	38.9
87.5°	22.8	24.1	22.8	22.8	21.5	22.8	21.5	21.5	20.1	20.1	17.4
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: P994921

CATALOG NUMBER: S123RDR-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1566.6	1566.6	1566.6	1566.6
2.5°	1526.4	1535.8	1554.6	1570.7
5°	1494.2	1509.0	1537.1	1565.3
7.5°	1455.3	1478.1	1514.3	1553.2
10°	1417.7	1447.3	1491.5	1537.1
12.5°	1380.2	1411.0	1458.0	1517.0
15°	1335.9	1368.1	1424.5	1495.5
17.5°	1297.0	1340.0	1390.9	1462.0
20°	1255.5	1287.6	1353.4	1428.5
22.5°	1203.1	1256.8	1318.5	1397.6
25°	1161.6	1208.5	1270.2	1360.1
27.5°	1110.6	1165.6	1240.7	1319.8
30°	1069.0	1114.6	1184.4	1279.6
32.5°	1020.7	1074.4	1146.8	1240.7
35°	977.8	1023.4	1091.8	1187.0
37.5°	926.8	976.5	1052.9	1137.4
40°	882.6	930.9	1003.3	1082.4
42.5°	828.9	879.9	952.3	1019.4
45°	786.0	832.9	890.6	952.3
47.5°	733.7	783.3	839.7	882.6
50°	686.7	732.3	776.6	812.8
52.5°	635.8	677.4	717.6	744.4
55°	588.8	621.0	653.2	672.0
57.5°	533.8	564.7	591.5	602.2
60°	485.5	511.0	528.5	540.5
62.5°	434.6	453.4	466.8	473.5
65°	385.0	398.4	405.1	411.8
67.5°	334.0	346.1	350.1	358.1
70°	280.3	293.7	296.4	300.4
72.5°	240.1	240.1	245.5	250.8
75°	191.8	194.5	197.2	197.2
77.5°	150.2	150.2	152.9	154.2
80°	110.0	111.3	111.3	110.0
82.5°	75.1	77.8	75.1	73.8
85°	41.6	46.9	44.3	44.3
87.5°	17.4	17.4	20.1	17.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)