

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: P1037482

Luminaire Tested: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037482
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: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K
Description: Define 3 Regressed Direct Surface with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

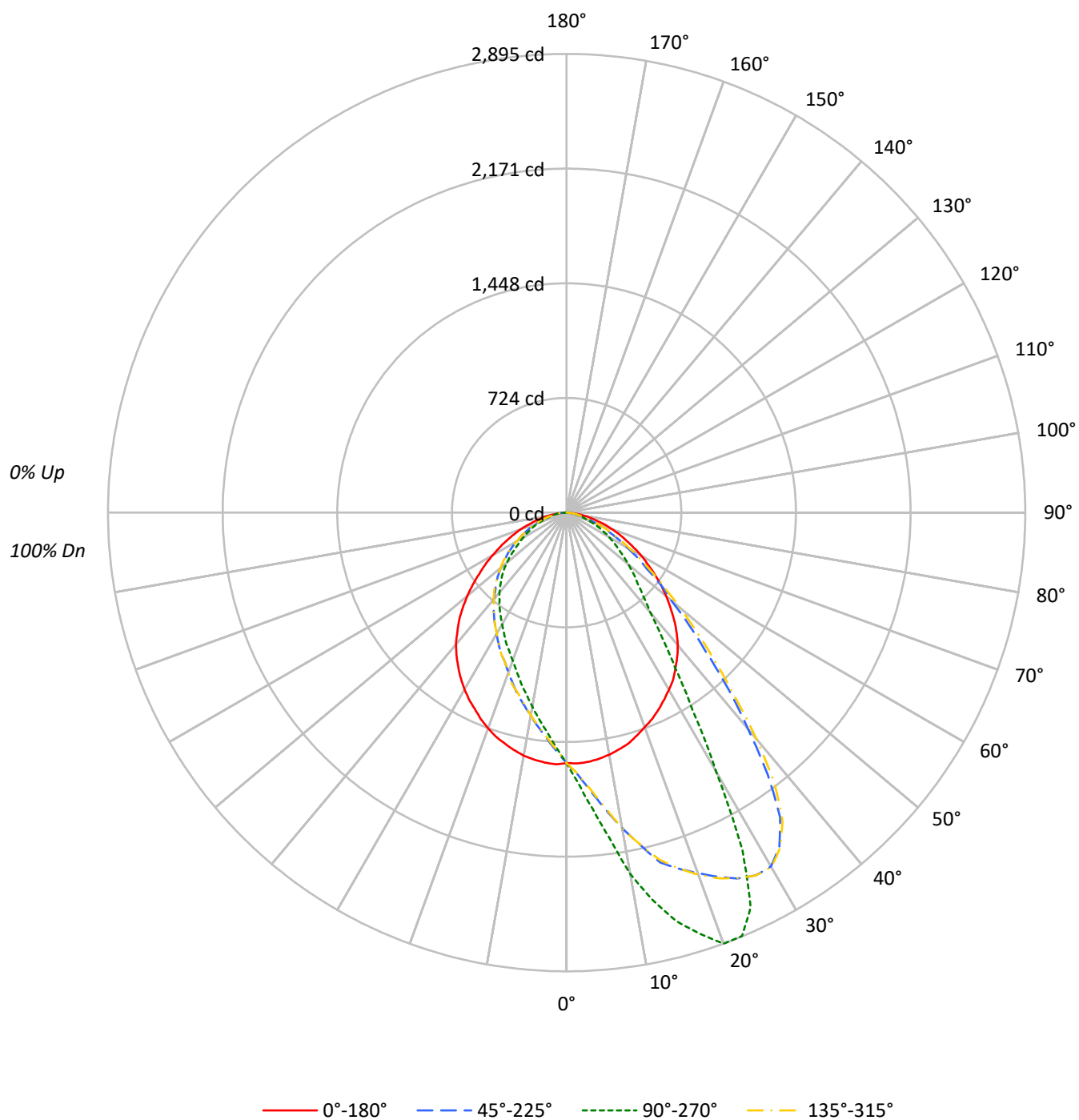
Lumens per Lamp: N/A
Luminaire Lumens: 3935.0 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.2 / 1.34
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V):
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

TEST NUMBER: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

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°	17010	17010	17010	17010
5°	17060	20277	17104	15043
10°	16947	25317	17021	13590
15°	16811	29717	16811	12394
20°	16505	33166	16598	11376
25°	16294	32636	16262	10750
30°	16042	23459	16009	10106
35°	15734	15663	15663	9690
40°	15343	11540	15265	9258
45°	14623	9680	14603	8835
50°	13730	8542	13685	8247
55°	12720	7490	12618	7439
60°	11739	6669	11621	6816
65°	10580	5858	10649	6339
70°	9539	4598	9794	5791
75°	8272	4051	8609	5290
80°	6874	3521	7463	5201
85°	5508	2841	6015	5508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 30°

Vertical Angle: 45°

Luminance: 27743 cd/sqm

TEST NUMBER: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.2	3.9
10°-20°	485.8	12.3
20°-30°	765.1	19.4
30°-40°	795.6	20.2
40°-50°	680.7	17.3
50°-60°	518.9	13.2
60°-70°	332.5	8.4
70°-80°	159.3	4.0
80°-90°	41.9	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°	1406.1	35.7
0°-40°	2201.7	56.0
0°-60°	3401.4	86.4
0°-90°	3935.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3935.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1580	1580	1580	1580	1580	
5°	1579	1877	1583	1392	1579	150
15°	1509	2667	1509	1112	1509	424
25°	1372	2748	1369	905	1372	632
35°	1197	1192	1192	737	1197	749
45°	961	636	959	580	961	740
55°	678	399	672	396	678	607
65°	415	230	418	249	415	415
75°	199	97	207	127	199	215
85°	45	23	49	45	45	52
90°	0	0	0	0	0	

TEST NUMBER: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3
2.5°	1584.3	1595.2	1603.3	1608.7	1622.2	1630.3	1637.1	1649.3	1649.3	1652.0	1657.4
5°	1578.9	1601.9	1618.2	1639.8	1668.2	1681.8	1700.7	1716.9	1739.9	1752.1	1764.3
7.5°	1566.8	1599.2	1633.1	1665.5	1707.5	1734.5	1753.5	1795.4	1825.2	1861.7	1890.1
10°	1550.5	1595.2	1638.5	1688.5	1745.4	1785.9	1814.4	1869.8	1926.7	1978.1	2021.4
12.5°	1530.2	1584.3	1646.6	1707.5	1787.3	1827.9	1873.9	1942.9	2024.1	2089.0	2147.2
15°	1508.6	1570.8	1641.2	1715.6	1815.7	1872.5	1938.8	2022.7	2113.4	2206.7	2286.5
17.5°	1474.8	1553.2	1631.7	1739.9	1857.6	1891.5	1948.3	2063.3	2175.6	2259.5	2356.9
20°	1440.9	1528.9	1627.6	1725.1	1852.2	1930.7	1983.5	2105.2	2225.7	2327.1	2420.5
22.5°	1409.8	1501.8	1604.6	1727.8	1846.8	1925.3	1991.6	2118.8	2258.1	2371.8	2486.8
25°	1371.9	1472.0	1585.7	1702.1	1846.8	1906.4	1979.4	2126.9	2274.4	2405.6	2547.7
27.5°	1331.3	1432.8	1545.1	1664.2	1796.8	1884.7	1956.4	2114.7	2294.7	2435.4	2581.5
30°	1290.7	1394.9	1503.2	1610.1	1758.9	1842.8	1925.3	2099.8	2305.5	2466.5	2578.8
32.5°	1251.5	1339.5	1446.3	1550.5	1698.0	1790.0	1883.4	2084.9	2309.5	2444.8	2499.0
35°	1197.4	1289.4	1376.0	1486.9	1635.8	1726.4	1836.0	2083.6	2292.0	2375.8	2348.8
37.5°	1147.3	1224.5	1307.0	1405.8	1558.6	1676.3	1790.0	2048.4	2233.8	2239.2	2086.3
40°	1091.9	1155.4	1224.5	1328.6	1493.7	1610.1	1733.2	1994.3	2128.2	2048.4	1779.2
42.5°	1028.3	1085.1	1139.2	1240.7	1420.6	1550.5	1683.1	1926.7	1975.4	1791.4	1511.3
45°	960.6	1006.6	1056.7	1163.6	1343.5	1472.0	1604.6	1822.5	1772.4	1512.6	1246.1
47.5°	890.3	929.5	978.2	1075.6	1261.0	1392.2	1518.0	1673.6	1546.5	1267.7	1044.5
50°	819.9	851.0	898.4	998.5	1177.1	1296.2	1412.5	1514.0	1335.4	1087.8	863.2
52.5°	750.9	775.3	824.0	909.2	1082.4	1196.0	1279.9	1319.2	1137.9	898.4	749.6
55°	677.8	704.9	737.4	824.0	995.8	1079.7	1135.2	1133.8	947.1	761.7	619.7
57.5°	607.5	631.8	660.3	746.8	886.2	943.0	990.4	967.4	790.1	623.7	531.7
60°	545.3	558.8	589.9	663.0	768.5	817.2	844.3	805.0	645.4	526.3	439.7
62.5°	477.6	491.1	516.8	585.8	650.8	676.5	699.5	649.4	533.1	428.9	376.1
65°	415.4	433.0	449.2	504.7	539.8	571.0	568.3	526.3	416.7	349.1	305.8
67.5°	361.2	368.0	381.5	415.4	431.6	454.6	456.0	408.6	335.5	284.1	258.4
70°	303.1	309.8	319.3	335.5	346.4	351.8	349.1	307.1	253.0	221.9	198.9
72.5°	253.0	251.7	258.4	258.4	269.2	267.9	259.8	227.3	192.1	166.4	152.9
75°	198.9	200.2	201.6	198.9	194.8	189.4	182.7	158.3	135.3	123.1	110.9
77.5°	155.6	152.9	154.2	144.8	139.4	133.9	124.5	112.3	93.4	90.6	85.2
80°	110.9	109.6	108.2	104.2	92.0	86.6	79.8	73.1	69.0	66.3	64.9
82.5°	74.4	74.4	71.7	63.6	56.8	52.8	51.4	48.7	44.6	44.6	43.3
85°	44.6	43.3	40.6	32.5	28.4	28.4	28.4	28.4	25.7	25.7	24.4
87.5°	17.6	16.2	12.2	12.2	10.8	10.8	10.8	9.5	9.5	8.1	8.1
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: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3
2.5°	1668.2	1668.2	1680.4	1692.6	1685.8	1689.9	1704.8	1699.3	1710.2	1708.8	1712.9
5°	1794.1	1808.9	1821.1	1846.8	1850.9	1846.8	1872.5	1879.3	1891.5	1876.6	1883.4
7.5°	1936.1	1967.2	1997.0	2034.9	2047.1	2049.8	2063.3	2082.2	2098.5	2068.7	2083.6
10°	2074.1	2121.5	2182.4	2216.2	2246.0	2256.8	2267.6	2279.8	2298.7	2316.3	2302.8
12.5°	2223.0	2292.0	2350.1	2411.0	2447.5	2443.5	2474.6	2482.7	2497.6	2501.7	2507.1
15°	2344.7	2442.1	2478.7	2569.3	2577.4	2604.5	2639.7	2670.8	2674.9	2666.7	2666.7
17.5°	2461.1	2545.0	2609.9	2683.0	2697.9	2720.9	2765.5	2780.4	2785.8	2784.4	2784.4
20°	2555.8	2611.3	2720.9	2781.7	2806.1	2835.9	2867.0	2885.9	2890.0	2895.4	2887.3
22.5°	2618.0	2701.9	2791.2	2841.3	2861.6	2872.4	2892.7	2898.1	2891.3	2892.7	2894.0
25°	2666.7	2749.3	2803.4	2816.9	2815.6	2802.0	2787.1	2761.4	2758.7	2747.9	2726.3
27.5°	2680.3	2711.4	2704.6	2649.1	2593.7	2588.3	2499.0	2450.3	2394.8	2402.9	2371.8
30°	2607.2	2566.6	2470.6	2329.8	2271.7	2177.0	2076.8	1972.7	1932.1	1887.4	1969.9
32.5°	2428.6	2283.8	2113.4	1930.7	1833.3	1749.4	1642.5	1566.8	1523.5	1486.9	1557.3
35°	2159.4	1933.4	1707.5	1534.3	1454.5	1378.7	1278.6	1240.7	1186.6	1192.0	1198.7
37.5°	1813.0	1564.1	1393.6	1223.1	1170.3	1139.2	1066.2	1008.0	989.0	983.6	983.6
40°	1488.3	1284.0	1132.4	998.5	957.9	932.2	874.0	847.0	826.7	821.3	828.0
42.5°	1231.2	1056.7	939.0	849.7	821.3	788.8	764.4	730.6	726.6	717.1	729.3
45°	1033.7	882.1	794.2	729.3	704.9	692.7	665.7	645.4	637.3	635.9	645.4
47.5°	876.7	759.0	681.9	641.3	622.4	610.2	587.2	579.1	571.0	573.7	569.6
50°	736.0	648.1	598.0	561.5	549.3	537.1	522.3	514.1	510.1	510.1	508.7
52.5°	631.8	558.8	526.3	492.5	487.1	480.3	464.1	458.7	451.9	450.5	456.0
55°	541.2	491.1	458.7	438.4	433.0	419.4	412.7	405.9	401.8	399.1	400.5
57.5°	462.7	424.8	403.2	385.6	376.1	370.7	358.5	357.2	354.5	354.5	353.1
60°	397.8	370.7	345.0	334.2	327.4	320.7	319.3	311.2	307.1	309.8	308.5
62.5°	336.9	315.2	300.4	288.2	284.1	278.7	274.7	271.9	267.9	269.2	269.2
65°	281.4	263.8	253.0	242.2	240.8	235.4	234.1	231.4	231.4	230.0	232.7
67.5°	231.4	219.2	209.7	202.9	198.9	200.2	194.8	190.8	190.8	189.4	193.5
70°	184.0	177.2	167.8	159.7	154.2	154.2	147.5	146.1	146.1	146.1	144.8
72.5°	142.1	129.9	125.8	123.1	123.1	123.1	120.4	120.4	119.1	120.4	119.1
75°	105.5	104.2	101.5	100.1	100.1	98.8	97.4	97.4	97.4	97.4	97.4
77.5°	82.5	82.5	79.8	78.5	78.5	78.5	77.1	77.1	75.8	75.8	75.8
80°	60.9	60.9	58.2	58.2	58.2	56.8	56.8	56.8	58.2	56.8	56.8
82.5°	41.9	41.9	40.6	41.9	40.6	39.2	39.2	39.2	37.9	39.2	39.2
85°	24.4	24.4	23.0	21.6	23.0	23.0	21.6	23.0	21.6	23.0	21.6
87.5°	9.5	8.1	8.1	8.1	6.8	8.1	6.8	6.8	8.1	6.8	8.1
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: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3
2.5°	1706.1	1698.0	1692.6	1688.5	1684.5	1696.6	1680.4	1662.8	1650.6	1642.5	1639.8
5°	1884.7	1867.1	1852.2	1840.1	1842.8	1842.8	1814.4	1783.2	1756.2	1741.3	1725.1
7.5°	2091.7	2072.8	2043.0	2036.2	2030.8	1997.0	1968.6	1911.8	1877.9	1844.1	1814.4
10°	2297.4	2273.0	2244.6	2235.1	2221.6	2179.7	2136.4	2063.3	2021.4	1959.1	1919.9
12.5°	2489.5	2459.7	2431.3	2424.5	2404.3	2367.7	2293.3	2217.5	2145.8	2079.5	2010.5
15°	2650.5	2642.4	2599.1	2572.0	2527.4	2477.3	2461.1	2358.3	2267.6	2198.6	2074.1
17.5°	2785.8	2747.9	2707.3	2689.7	2672.1	2614.0	2555.8	2450.3	2352.8	2251.4	2171.5
20°	2894.0	2852.1	2823.7	2798.0	2789.9	2723.6	2631.6	2538.2	2431.3	2317.7	2213.5
22.5°	2899.4	2894.0	2875.1	2860.2	2844.0	2800.7	2727.6	2611.3	2497.6	2373.1	2236.5
25°	2787.1	2779.0	2833.2	2819.6	2830.4	2814.2	2775.0	2677.6	2545.0	2398.8	2260.8
27.5°	2448.9	2531.4	2616.7	2646.4	2666.7	2724.9	2743.9	2689.7	2582.8	2427.3	2273.0
30°	1988.9	2098.5	2236.5	2310.9	2367.7	2476.0	2616.7	2634.3	2584.2	2459.7	2270.3
32.5°	1561.3	1661.5	1772.4	1860.4	1936.1	2158.0	2347.4	2484.1	2508.4	2443.5	2277.1
35°	1258.3	1301.6	1407.1	1491.0	1593.8	1783.2	2006.5	2227.0	2375.8	2384.0	2256.8
37.5°	1037.7	1060.7	1152.7	1200.1	1261.0	1427.4	1635.8	1923.9	2155.3	2264.9	2200.0
40°	859.1	911.9	964.7	991.7	1035.0	1150.0	1350.3	1576.2	1863.1	2066.0	2112.0
42.5°	745.5	768.5	802.3	840.2	867.3	967.4	1101.3	1308.3	1566.8	1849.5	1976.7
45°	657.6	665.7	700.8	725.2	753.6	824.0	918.7	1091.9	1319.2	1597.9	1814.4
47.5°	584.5	600.7	619.7	634.5	653.5	707.6	788.8	914.6	1114.9	1363.8	1596.5
50°	519.5	529.0	553.4	560.1	573.7	611.5	673.8	769.8	934.9	1133.8	1374.6
52.5°	458.7	476.3	485.7	495.2	507.4	538.5	579.1	657.6	782.0	968.7	1173.0
55°	411.3	416.7	430.2	438.4	447.8	469.5	504.7	562.8	660.3	809.1	1002.6
57.5°	365.3	365.3	378.8	385.6	395.1	411.3	442.4	487.1	557.4	668.4	845.6
60°	316.6	318.0	328.8	336.9	339.6	355.8	381.5	416.7	470.8	552.0	696.8
62.5°	273.3	280.1	285.5	288.2	297.7	307.1	328.8	353.1	391.0	462.7	565.5
65°	236.8	238.1	242.2	244.9	248.9	259.8	276.0	292.2	324.7	377.5	461.4
67.5°	194.8	200.2	205.7	205.7	209.7	215.1	231.4	244.9	269.2	300.4	357.2
70°	146.1	148.8	156.9	161.0	166.4	175.9	184.0	192.1	211.1	234.1	277.4
72.5°	121.8	121.8	124.5	125.8	125.8	132.6	144.8	152.9	162.4	178.6	208.4
75°	97.4	97.4	101.5	100.1	102.8	105.5	106.9	112.3	117.7	129.9	147.5
77.5°	77.1	78.5	78.5	79.8	79.8	81.2	82.5	85.2	87.9	94.7	102.8
80°	56.8	58.2	58.2	59.5	59.5	60.9	62.2	63.6	66.3	69.0	73.1
82.5°	39.2	40.6	40.6	41.9	40.6	41.9	43.3	43.3	44.6	47.4	48.7
85°	23.0	23.0	24.4	23.0	23.0	23.0	24.4	24.4	25.7	29.8	29.8
87.5°	6.8	8.1	6.8	8.1	8.1	8.1	8.1	9.5	9.5	10.8	12.2
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: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3
2.5°	1635.8	1629.0	1622.2	1622.2	1607.3	1593.8	1587.1	1589.8	1581.6	1570.8	1560.0
5°	1707.5	1680.4	1675.0	1660.1	1639.8	1611.4	1596.5	1583.0	1566.8	1545.1	1524.8
7.5°	1773.8	1738.6	1719.6	1704.8	1665.5	1626.3	1593.8	1572.2	1543.8	1511.3	1486.9
10°	1860.4	1795.4	1775.1	1741.3	1685.8	1630.3	1592.5	1557.3	1518.0	1480.2	1447.7
12.5°	1929.4	1854.9	1817.1	1783.2	1711.5	1641.2	1577.6	1534.3	1486.9	1445.0	1403.0
15°	2007.8	1923.9	1857.6	1817.1	1726.4	1641.2	1569.5	1508.6	1455.8	1404.4	1367.9
17.5°	2045.7	1940.2	1910.4	1852.2	1721.0	1635.8	1547.8	1482.9	1419.3	1359.7	1316.5
20°	2105.2	1982.1	1907.7	1868.5	1752.1	1626.3	1523.5	1449.0	1382.8	1319.2	1273.2
22.5°	2109.3	1975.4	1926.7	1852.2	1708.8	1597.9	1501.8	1411.2	1334.0	1274.5	1227.2
25°	2099.8	1963.2	1895.5	1836.0	1716.9	1581.6	1458.5	1369.2	1293.5	1224.5	1169.0
27.5°	2095.8	1928.0	1864.4	1804.9	1670.9	1534.3	1432.8	1331.3	1244.7	1183.9	1127.0
30°	2090.4	1890.1	1813.0	1744.0	1620.9	1497.8	1376.0	1288.0	1205.5	1128.4	1071.6
32.5°	2055.2	1838.7	1760.2	1687.2	1554.6	1431.5	1335.4	1242.0	1152.7	1081.0	1029.6
35°	2044.4	1791.4	1688.5	1610.1	1480.2	1370.6	1269.1	1192.0	1108.1	1036.4	975.5
37.5°	2013.2	1742.6	1631.7	1531.6	1396.3	1292.1	1217.7	1140.6	1059.4	982.3	933.6
40°	1959.1	1685.8	1560.0	1457.2	1317.8	1212.3	1143.3	1086.4	1006.6	937.6	878.1
42.5°	1879.3	1627.6	1492.3	1384.1	1229.9	1131.1	1074.3	1020.2	952.5	880.8	832.1
45°	1787.3	1550.5	1424.7	1304.3	1147.3	1051.3	991.7	959.3	897.0	836.1	779.3
47.5°	1661.5	1470.7	1346.2	1221.7	1062.1	968.7	921.4	888.9	845.6	779.3	733.3
50°	1503.2	1367.9	1250.2	1139.2	978.2	888.9	841.6	817.2	780.7	733.3	688.7
52.5°	1327.3	1248.8	1151.4	1048.6	893.0	809.1	765.8	746.8	719.8	675.1	637.3
55°	1150.0	1116.2	1049.9	948.4	803.7	734.7	696.8	672.4	652.1	619.7	587.2
57.5°	991.7	975.5	929.5	851.0	729.3	657.6	625.1	608.8	592.6	568.3	535.8
60°	828.0	845.6	798.3	759.0	648.1	585.8	557.4	539.8	531.7	510.1	489.8
62.5°	686.0	702.2	675.1	645.4	566.9	511.4	493.8	477.6	472.2	453.2	433.0
65°	557.4	577.7	557.4	541.2	493.8	447.8	426.2	418.1	412.7	400.5	384.2
67.5°	443.8	464.1	454.6	434.3	419.4	381.5	369.4	361.2	358.5	349.1	335.5
70°	334.2	362.6	365.3	353.1	339.6	322.0	313.9	311.2	304.4	296.3	288.2
72.5°	240.8	273.3	274.7	274.7	266.5	266.5	258.4	254.4	254.4	246.2	236.8
75°	177.2	198.9	201.6	204.3	208.4	212.4	207.0	207.0	205.7	197.5	193.5
77.5°	117.7	136.7	143.4	152.9	158.3	158.3	161.0	163.7	161.0	156.9	154.2
80°	75.8	89.3	97.4	102.8	110.9	115.0	119.1	120.4	117.7	116.4	112.3
82.5°	50.1	54.1	58.2	64.9	74.4	81.2	81.2	79.8	82.5	81.2	79.8
85°	28.4	31.1	32.5	33.8	39.2	46.0	47.4	48.7	51.4	48.7	46.0
87.5°	10.8	12.2	12.2	12.2	14.9	16.2	20.3	25.7	24.4	21.6	21.6
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: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3
2.5°	1560.0	1553.2	1550.5	1543.8	1527.5	1516.7	1504.5	1496.4	1497.8	1491.0	1495.0
5°	1511.3	1509.9	1500.5	1486.9	1463.9	1451.8	1430.1	1419.3	1413.9	1415.2	1407.1
7.5°	1470.7	1458.5	1451.8	1430.1	1408.5	1382.8	1365.2	1355.7	1347.6	1339.5	1334.0
10°	1424.7	1413.9	1403.0	1380.0	1350.3	1325.9	1301.6	1292.1	1279.9	1274.5	1270.5
12.5°	1376.0	1369.2	1355.7	1328.6	1294.8	1271.8	1243.4	1238.0	1221.7	1210.9	1208.2
15°	1331.3	1327.3	1302.9	1271.8	1238.0	1215.0	1190.6	1174.4	1147.3	1152.7	1143.3
17.5°	1284.0	1266.4	1251.5	1209.6	1193.3	1158.2	1129.7	1121.6	1102.7	1090.5	1078.3
20°	1231.2	1220.4	1201.5	1174.4	1135.2	1094.6	1072.9	1059.4	1048.6	1029.6	1024.2
22.5°	1181.2	1167.6	1151.4	1116.2	1082.4	1048.6	1018.8	1006.6	993.1	979.6	971.4
25°	1141.9	1121.6	1104.0	1060.7	1026.9	998.5	979.6	959.3	940.3	932.2	929.5
27.5°	1081.0	1068.9	1051.3	1010.7	979.6	948.4	930.9	917.3	897.0	887.6	879.4
30°	1041.8	1017.4	997.1	964.7	933.6	899.7	883.5	867.3	855.1	842.9	833.4
32.5°	989.0	970.1	953.9	921.4	890.3	859.1	841.6	817.2	810.4	801.0	790.1
35°	937.6	925.4	907.9	872.7	838.9	817.2	798.3	775.3	767.1	760.4	750.9
37.5°	888.9	871.3	859.1	825.3	795.6	769.8	755.0	736.0	730.6	722.5	715.7
40°	847.0	829.4	817.2	783.4	752.3	725.2	715.7	696.8	688.7	679.2	675.1
42.5°	799.6	784.7	768.5	744.1	711.7	684.6	665.7	654.8	644.0	640.0	631.8
45°	749.6	736.0	723.8	696.8	663.0	644.0	627.8	612.9	604.8	598.0	592.6
47.5°	706.3	694.1	677.8	648.1	621.0	603.4	587.2	572.3	564.2	556.1	549.3
50°	656.2	649.4	631.8	603.4	577.7	557.4	542.5	529.0	523.6	514.1	503.3
52.5°	611.5	599.4	584.5	561.5	538.5	514.1	493.8	485.7	476.3	470.8	461.4
55°	558.8	550.7	534.4	514.1	489.8	469.5	454.6	443.8	431.6	426.2	414.0
57.5°	514.1	499.3	491.1	465.4	442.4	422.1	411.3	400.5	387.0	378.8	373.4
60°	465.4	451.9	439.7	418.1	401.8	380.2	364.0	354.5	345.0	334.2	328.8
62.5°	418.1	407.2	392.4	374.8	354.5	336.9	324.7	311.2	305.8	295.0	290.9
65°	366.7	358.5	346.4	326.1	309.8	295.0	282.8	271.9	266.5	262.5	259.8
67.5°	320.7	309.8	301.7	284.1	266.5	254.4	247.6	240.8	234.1	230.0	225.9
70°	273.3	265.2	257.1	240.8	228.7	217.8	212.4	207.0	202.9	198.9	194.8
72.5°	224.6	220.5	212.4	201.6	192.1	184.0	179.9	173.2	169.1	162.4	159.7
75°	185.4	178.6	174.5	165.1	156.9	150.2	144.8	136.7	131.2	128.5	127.2
77.5°	146.1	143.4	138.0	129.9	125.8	119.1	110.9	108.2	105.5	105.5	104.2
80°	109.6	105.5	101.5	94.7	90.6	85.2	85.2	85.2	83.9	85.2	83.9
82.5°	74.4	71.7	69.0	64.9	63.6	63.6	64.9	64.9	64.9	64.9	64.9
85°	43.3	43.3	43.3	44.6	43.3	43.3	44.6	46.0	44.6	44.6	43.3
87.5°	20.3	20.3	21.6	21.6	23.0	23.0	23.0	23.0	23.0	23.0	24.4
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: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3
2.5°	1493.7	1495.0	1491.0	1482.9	1481.5	1484.2	1492.3	1489.6	1482.9	1495.0	1484.2
5°	1411.2	1404.4	1401.7	1404.4	1396.3	1392.2	1400.3	1396.3	1400.3	1401.7	1405.8
7.5°	1331.3	1332.7	1324.6	1325.9	1315.1	1317.8	1317.8	1317.8	1321.9	1324.6	1330.0
10°	1262.3	1265.0	1255.6	1256.9	1248.8	1243.4	1247.5	1255.6	1255.6	1255.6	1258.3
12.5°	1206.9	1194.7	1187.9	1186.6	1177.1	1174.4	1182.5	1185.2	1192.0	1192.0	1196.0
15°	1137.9	1135.2	1129.7	1129.7	1106.7	1112.2	1114.9	1124.3	1137.9	1127.0	1129.7
17.5°	1075.6	1068.9	1062.1	1059.4	1056.7	1048.6	1059.4	1058.0	1066.2	1067.5	1071.6
20°	1020.2	1014.7	1001.2	1002.6	1005.3	993.1	999.9	999.9	1008.0	1016.1	1025.6
22.5°	966.0	960.6	953.9	956.6	948.4	945.7	945.7	952.5	962.0	968.7	967.4
25°	924.1	914.6	910.6	906.5	902.4	905.1	901.1	907.9	914.6	918.7	914.6
27.5°	876.7	872.7	864.6	860.5	853.7	856.4	859.1	864.6	868.6	868.6	872.7
30°	830.7	825.3	822.6	818.6	818.6	813.1	814.5	819.9	824.0	828.0	833.4
32.5°	786.1	782.0	778.0	778.0	775.3	773.9	772.6	780.7	780.7	788.8	788.8
35°	749.6	742.8	742.8	736.0	738.7	737.4	734.7	740.1	741.4	746.8	745.5
37.5°	709.0	709.0	706.3	699.5	694.1	695.4	702.2	702.2	706.3	704.9	709.0
40°	668.4	665.7	665.7	661.6	660.3	658.9	660.3	661.6	668.4	667.0	668.4
42.5°	627.8	629.1	622.4	622.4	622.4	618.3	619.7	621.0	623.7	626.4	630.5
45°	588.5	585.8	584.5	581.8	579.1	580.4	579.1	584.5	583.1	585.8	589.9
47.5°	546.6	542.5	541.2	535.8	535.8	538.5	537.1	541.2	542.5	546.6	543.9
50°	506.0	500.6	496.5	497.9	489.8	492.5	492.5	496.5	500.6	502.0	504.7
52.5°	458.7	457.3	456.0	449.2	447.8	446.5	447.8	449.2	454.6	458.7	460.0
55°	412.7	411.3	403.2	400.5	396.4	396.4	399.1	400.5	410.0	411.3	416.7
57.5°	370.7	366.7	357.2	355.8	355.8	355.8	351.8	357.2	359.9	366.7	366.7
60°	324.7	324.7	316.6	316.6	318.0	316.6	316.6	318.0	318.0	323.4	326.1
62.5°	288.2	286.8	286.8	284.1	282.8	284.1	282.8	282.8	284.1	288.2	292.2
65°	255.7	254.4	253.0	251.7	248.9	248.9	250.3	253.0	253.0	255.7	257.1
67.5°	224.6	224.6	221.9	221.9	220.5	219.2	220.5	219.2	224.6	224.6	225.9
70°	193.5	192.1	188.1	186.7	182.7	184.0	184.0	188.1	189.4	192.1	194.8
72.5°	155.6	155.6	152.9	150.2	151.5	148.8	148.8	150.2	150.2	154.2	155.6
75°	128.5	125.8	124.5	125.8	124.5	127.2	124.5	124.5	127.2	127.2	127.2
77.5°	105.5	105.5	104.2	104.2	105.5	104.2	105.5	105.5	105.5	104.2	105.5
80°	86.6	85.2	85.2	85.2	83.9	83.9	83.9	83.9	83.9	83.9	83.9
82.5°	64.9	64.9	63.6	64.9	64.9	63.6	64.9	63.6	63.6	64.9	64.9
85°	43.3	46.0	43.3	43.3	44.6	44.6	46.0	44.6	46.0	43.3	44.6
87.5°	23.0	24.4	24.4	23.0	23.0	24.4	24.4	24.4	25.7	23.0	24.4
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: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3	1580.3
2.5°	1495.0	1500.5	1495.0	1484.2	1495.0	1501.8	1508.6	1519.4	1524.8	1524.8	1532.9
5°	1409.8	1420.6	1416.6	1413.9	1424.7	1431.5	1442.3	1455.8	1470.7	1480.2	1491.0
7.5°	1334.0	1340.8	1347.6	1347.6	1358.4	1373.3	1389.5	1405.8	1424.7	1438.2	1446.3
10°	1267.7	1273.2	1277.2	1282.6	1298.9	1315.1	1336.7	1357.0	1373.3	1388.2	1401.7
12.5°	1204.2	1212.3	1221.7	1225.8	1238.0	1258.3	1278.6	1302.9	1328.6	1343.5	1357.0
15°	1143.3	1147.3	1158.2	1170.3	1181.2	1202.8	1228.5	1254.2	1275.9	1298.9	1311.0
17.5°	1081.0	1082.4	1110.8	1104.0	1139.2	1159.5	1173.0	1197.4	1232.6	1251.5	1270.5
20°	1020.2	1033.7	1045.9	1052.6	1071.6	1094.6	1133.8	1152.7	1181.2	1198.7	1215.0
22.5°	972.8	993.1	993.1	1009.3	1018.8	1040.4	1068.9	1105.4	1136.5	1148.7	1171.7
25°	930.9	940.3	956.6	962.0	979.6	998.5	1017.4	1056.7	1090.5	1106.7	1123.0
27.5°	876.7	888.9	910.6	910.6	933.6	953.9	976.9	1002.6	1036.4	1059.4	1077.0
30°	834.8	847.0	856.4	871.3	880.8	899.7	940.3	959.3	989.0	1009.3	1031.0
32.5°	795.6	805.0	813.1	829.4	840.2	861.9	883.5	917.3	943.0	962.0	985.0
35°	752.3	761.7	772.6	784.7	801.0	821.3	841.6	870.0	895.7	913.3	932.2
37.5°	711.7	718.4	734.7	742.8	756.3	775.3	801.0	830.7	853.7	867.3	886.2
40°	672.4	677.8	690.0	704.9	714.4	729.3	756.3	782.0	810.4	826.7	841.6
42.5°	630.5	637.3	648.1	663.0	677.8	694.1	709.0	738.7	764.4	778.0	794.2
45°	594.0	598.0	606.1	621.0	635.9	648.1	671.1	698.1	722.5	733.3	750.9
47.5°	550.7	554.7	566.9	573.7	589.9	606.1	629.1	656.2	677.8	688.7	704.9
50°	506.0	510.1	518.2	533.1	543.9	561.5	581.8	604.8	631.8	646.7	656.2
52.5°	462.7	470.8	477.6	489.8	503.3	520.9	539.8	561.5	584.5	599.4	610.2
55°	419.4	426.2	434.3	441.1	457.3	473.5	495.2	515.5	535.8	549.3	561.5
57.5°	370.7	380.2	388.3	401.8	414.0	427.5	451.9	468.1	492.5	502.0	512.8
60°	328.8	338.2	345.0	355.8	366.7	384.2	400.5	420.8	441.1	453.2	466.8
62.5°	293.6	297.7	301.7	312.5	323.4	339.6	355.8	376.1	397.8	404.5	415.4
65°	258.4	262.5	269.2	278.7	286.8	296.3	313.9	330.1	350.4	361.2	365.3
67.5°	228.7	232.7	234.1	240.8	247.6	258.4	267.9	284.1	303.1	309.8	318.0
70°	194.8	201.6	202.9	208.4	211.1	217.8	228.7	240.8	255.7	267.9	274.7
72.5°	155.6	165.1	167.8	175.9	179.9	186.7	194.8	204.3	213.8	219.2	224.6
75°	127.2	129.9	131.2	138.0	144.8	154.2	158.3	163.7	171.8	178.6	184.0
77.5°	105.5	106.9	108.2	108.2	109.6	115.0	123.1	129.9	135.3	138.0	142.1
80°	85.2	83.9	83.9	85.2	85.2	85.2	87.9	97.4	100.1	106.9	105.5
82.5°	66.3	63.6	64.9	63.6	63.6	63.6	63.6	64.9	64.9	69.0	71.7
85°	43.3	44.6	43.3	43.3	41.9	43.3	41.9	41.9	40.6	40.6	39.2
87.5°	23.0	24.4	23.0	23.0	21.6	23.0	21.6	21.6	20.3	20.3	17.6
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: P1037482

CATALOG NUMBER: S123RDS-B1000DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1580.3	1580.3	1580.3	1580.3
2.5°	1539.7	1549.2	1568.1	1584.3
5°	1507.2	1522.1	1550.5	1578.9
7.5°	1468.0	1491.0	1527.5	1566.8
10°	1430.1	1459.9	1504.5	1550.5
12.5°	1392.2	1423.3	1470.7	1530.2
15°	1347.6	1380.0	1436.9	1508.6
17.5°	1308.3	1351.6	1403.0	1474.8
20°	1266.4	1298.9	1365.2	1440.9
22.5°	1213.6	1267.7	1330.0	1409.8
25°	1171.7	1219.0	1281.3	1371.9
27.5°	1120.3	1175.7	1251.5	1331.3
30°	1078.3	1124.3	1194.7	1290.7
32.5°	1029.6	1083.7	1156.8	1251.5
35°	986.3	1032.3	1101.3	1197.4
37.5°	934.9	985.0	1062.1	1147.3
40°	890.3	939.0	1012.0	1091.9
42.5°	836.1	887.6	960.6	1028.3
45°	792.8	840.2	898.4	960.6
47.5°	740.1	790.1	847.0	890.3
50°	692.7	738.7	783.4	819.9
52.5°	641.3	683.3	723.8	750.9
55°	594.0	626.4	658.9	677.8
57.5°	538.5	569.6	596.7	607.5
60°	489.8	515.5	533.1	545.3
62.5°	438.4	457.3	470.8	477.6
65°	388.3	401.8	408.6	415.4
67.5°	336.9	349.1	353.1	361.2
70°	282.8	296.3	299.0	303.1
72.5°	242.2	242.2	247.6	253.0
75°	193.5	196.2	198.9	198.9
77.5°	151.5	151.5	154.2	155.6
80°	110.9	112.3	112.3	110.9
82.5°	75.8	78.5	75.8	74.4
85°	41.9	47.4	44.6	44.6
87.5°	17.6	17.6	20.3	17.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)