

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: P1000427

Luminaire Tested: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000427
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-31)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXRDP-B1020DB50-4F0-XX-W2A-A
Description: Define 4 Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

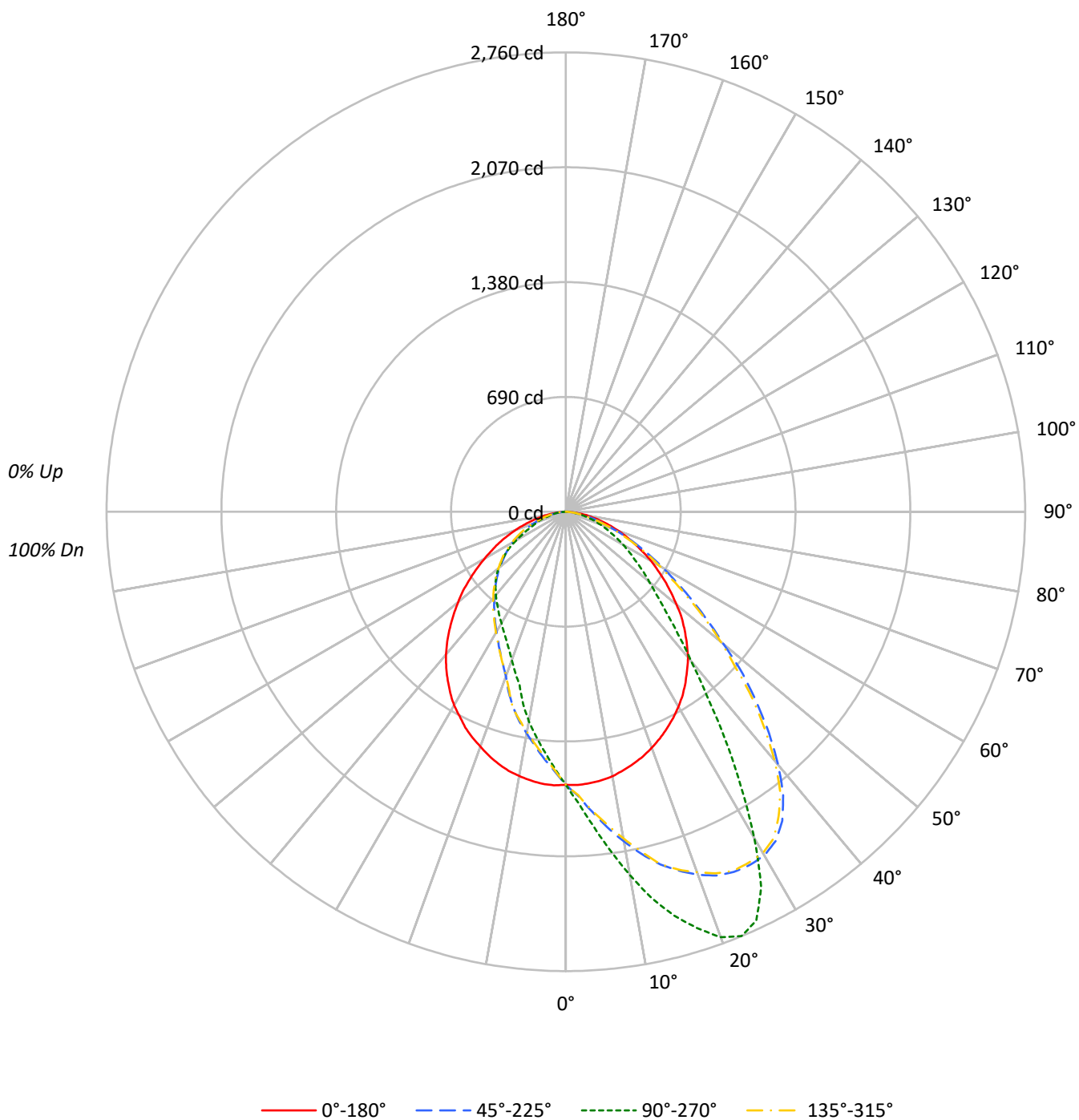
Lumens per Lamp: N/A
Luminaire Lumens: 4146.0 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

Luminous Intensity Polar Plot



TEST NUMBER: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74		
3	93	83	76	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63		
4	85	74	66	60	83	73	65	59	71	64	59	68	63	58	66	61	57	55		
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48		
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43		
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38		
8	64	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34		
9	59	47	39	33	58	46	38	33	45	38	33	44	38	33	43	37	33	31		
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	28		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13374	13374	13374	13374
5°	13404	15513	13425	11857
10°	13362	18352	13351	10582
15°	13232	21198	13232	9093
20°	13097	23603	13028	8223
25°	12926	24365	12866	7634
30°	12743	21329	12643	7279
35°	12472	16604	12314	7065
40°	12169	12450	11930	6950
45°	11644	9830	11355	6889
50°	11015	8299	10713	6689
55°	10334	7234	9996	6332
60°	9657	6509	9224	5604
65°	8799	5738	8517	4820
70°	8035	5167	7656	4349
75°	7202	4329	6705	3705
80°	6208	3663	5649	3475
85°	5071	3088	4201	3088

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 19996 cd/sqm

TEST NUMBER: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.8	3.8
10°-20°	479.6	11.6
20°-30°	751.2	18.1
30°-40°	834.2	20.1
40°-50°	739.2	17.8
50°-60°	576.1	13.9
60°-70°	376.8	9.1
70°-80°	184.9	4.5
80°-90°	45.0	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°	1389.6	33.5
0°-40°	2223.9	53.6
0°-60°	3539.2	85.4
0°-90°	4146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4146.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1640	1640	1640	1640	1640	
5°	1638	1895	1640	1448	1638	156
15°	1567	2511	1567	1077	1567	442
25°	1437	2708	1430	848	1437	662
35°	1253	1668	1237	710	1253	783
45°	1010	852	985	597	1010	779
55°	727	509	703	445	727	650
65°	456	297	441	250	456	455
75°	229	137	213	118	229	243
85°	54	33	45	33	54	65
90°	0	0	0	0	0	

TEST NUMBER: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1
2.5°	1642.8	1657.3	1665.2	1671.8	1685.0	1690.3	1700.9	1703.5	1714.1	1712.8	1708.8
5°	1637.5	1662.6	1681.1	1700.9	1724.7	1737.9	1752.4	1773.6	1784.2	1798.7	1808.0
7.5°	1628.2	1662.6	1693.0	1723.4	1761.7	1782.8	1801.3	1834.4	1862.1	1885.9	1912.4
10°	1613.7	1657.3	1702.2	1743.2	1796.1	1821.2	1848.9	1897.8	1936.1	1969.2	2011.5
12.5°	1591.2	1652.0	1702.2	1757.7	1825.1	1859.5	1896.5	1954.6	1999.6	2053.8	2106.6
15°	1567.4	1634.8	1700.9	1773.6	1850.2	1889.9	1926.9	2004.9	2073.6	2135.7	2193.9
17.5°	1541.0	1615.0	1687.7	1768.3	1860.8	1909.7	1953.3	2047.2	2122.5	2203.1	2261.3
20°	1509.3	1589.9	1673.1	1763.0	1867.4	1921.6	1970.5	2077.6	2160.8	2248.0	2320.7
22.5°	1474.9	1562.1	1653.3	1751.1	1859.5	1919.0	1975.8	2090.8	2187.3	2267.9	2365.7
25°	1436.6	1529.1	1622.9	1726.0	1847.6	1912.4	1970.5	2084.2	2187.3	2293.0	2388.1
27.5°	1396.9	1492.1	1589.9	1698.3	1822.5	1885.9	1952.0	2061.7	2182.0	2296.9	2393.4
30°	1353.3	1445.8	1548.9	1652.0	1784.2	1847.6	1915.0	2033.9	2164.8	2279.8	2384.2
32.5°	1305.7	1400.9	1498.7	1605.7	1735.3	1804.0	1866.1	2000.9	2134.4	2248.0	2345.8
35°	1252.9	1342.7	1435.3	1545.0	1673.1	1735.3	1809.3	1949.4	2084.2	2204.4	2267.9
37.5°	1196.0	1282.0	1367.9	1476.2	1599.1	1674.5	1747.2	1888.6	2031.3	2111.9	2145.0
40°	1143.2	1218.5	1293.8	1398.3	1522.5	1600.5	1674.5	1821.2	1946.7	2008.8	1983.7
42.5°	1075.8	1153.8	1221.2	1317.6	1443.2	1515.9	1591.2	1743.2	1845.0	1870.1	1808.0
45°	1009.7	1074.5	1139.2	1233.1	1365.2	1427.3	1507.9	1649.4	1733.9	1711.5	1620.3
47.5°	944.9	997.8	1058.6	1149.8	1268.7	1342.7	1418.1	1541.0	1600.5	1568.7	1441.9
50°	868.3	921.2	984.6	1063.9	1178.9	1250.2	1309.7	1423.4	1468.3	1390.3	1237.0
52.5°	795.6	841.9	896.0	970.1	1079.7	1144.5	1209.3	1307.1	1321.6	1231.7	1070.5
55°	726.9	763.9	820.7	880.2	980.6	1049.4	1094.3	1177.5	1173.6	1061.2	922.5
57.5°	655.5	689.9	728.2	790.3	885.5	937.0	985.9	1058.6	1020.3	925.1	787.7
60°	592.1	611.9	650.2	709.7	790.3	835.3	873.6	913.2	880.2	777.1	671.4
62.5°	522.0	544.5	572.3	619.8	691.2	733.5	761.2	778.4	744.1	664.8	568.3
65°	456.0	475.8	504.9	547.1	601.3	633.0	647.6	659.5	641.0	551.1	474.5
67.5°	396.5	409.7	436.1	463.9	522.0	530.0	549.8	555.1	518.1	449.3	388.6
70°	337.0	350.2	362.1	395.2	421.6	436.1	440.1	440.1	403.1	358.2	307.9
72.5°	281.5	289.4	301.3	323.8	338.3	348.9	354.2	347.6	313.2	276.2	239.2
75°	228.6	232.6	243.2	257.7	269.6	265.6	264.3	256.4	231.3	204.8	183.7
77.5°	175.8	178.4	190.3	194.3	194.3	198.2	193.0	185.0	163.9	144.1	134.8
80°	132.2	136.1	137.4	140.1	137.4	137.4	133.5	120.3	109.7	100.4	93.8
82.5°	91.2	93.8	95.2	91.2	93.8	89.9	83.3	74.0	67.4	66.1	63.4
85°	54.2	55.5	54.2	54.2	50.2	48.9	43.6	42.3	39.6	39.6	38.3
87.5°	26.4	25.1	22.5	19.8	19.8	18.5	19.8	17.2	19.8	18.5	17.2
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: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1
2.5°	1719.4	1733.9	1735.3	1748.5	1744.5	1737.9	1749.8	1741.9	1757.7	1752.4	1759.1
5°	1819.8	1839.7	1856.9	1867.4	1885.9	1882.0	1901.8	1895.2	1909.7	1895.2	1913.7
7.5°	1937.5	1970.5	1987.7	2015.4	2023.4	2024.7	2048.5	2053.8	2063.0	2053.8	2064.3
10°	2052.4	2092.1	2131.7	2154.2	2168.7	2188.6	2209.7	2219.0	2225.6	2216.3	2222.9
12.5°	2156.9	2219.0	2262.6	2307.5	2318.1	2335.3	2357.7	2355.1	2381.5	2376.2	2388.1
15°	2253.3	2322.1	2374.9	2410.6	2439.7	2454.2	2496.5	2499.1	2497.8	2511.0	2503.1
17.5°	2339.2	2397.4	2472.7	2519.0	2554.7	2554.7	2578.4	2627.3	2623.4	2622.1	2630.0
20°	2409.3	2475.4	2545.4	2623.4	2652.5	2657.7	2690.8	2715.9	2719.9	2719.9	2719.9
22.5°	2462.1	2540.1	2615.4	2671.0	2693.4	2711.9	2741.0	2756.9	2762.1	2759.5	2762.1
25°	2488.6	2562.6	2639.2	2689.5	2702.7	2713.2	2715.9	2725.1	2723.8	2708.0	2717.2
27.5°	2493.9	2565.2	2615.4	2628.7	2622.1	2615.4	2573.2	2577.1	2565.2	2541.4	2550.7
30°	2470.1	2508.4	2507.1	2466.1	2454.2	2426.5	2388.1	2331.3	2285.0	2265.2	2271.8
32.5°	2384.2	2384.2	2336.6	2244.1	2203.1	2152.9	2084.2	2032.6	1971.8	1958.6	1983.7
35°	2265.2	2197.8	2110.6	1989.0	1926.9	1889.9	1770.9	1733.9	1682.4	1667.9	1679.8
37.5°	2080.2	1967.9	1841.0	1727.3	1674.5	1608.4	1504.0	1451.1	1414.1	1389.0	1400.9
40°	1872.7	1736.6	1604.4	1464.3	1406.2	1352.0	1274.0	1226.4	1167.0	1169.6	1173.6
42.5°	1674.5	1514.6	1366.5	1237.0	1181.5	1136.6	1082.4	1024.2	1003.1	996.5	989.9
45°	1464.3	1293.8	1155.1	1058.6	1008.4	966.1	915.9	882.8	857.7	852.4	859.0
47.5°	1266.1	1122.0	989.9	900.0	859.0	837.9	798.2	767.9	752.0	738.8	746.7
50°	1086.4	951.6	845.8	770.5	741.4	726.9	689.9	674.0	658.2	654.2	652.9
52.5°	938.3	823.4	732.2	671.4	648.9	641.0	613.2	590.8	577.5	581.5	584.1
55°	803.5	705.7	634.4	585.5	567.0	557.7	537.9	522.0	512.8	508.8	511.5
57.5°	684.6	600.0	548.5	508.8	494.3	490.3	469.2	463.9	457.3	453.3	453.3
60°	576.2	516.7	469.2	446.7	430.8	426.9	411.0	404.4	403.1	399.1	396.5
62.5°	485.0	436.1	403.1	379.3	372.7	371.4	360.8	352.9	348.9	346.3	346.3
65°	405.7	370.0	342.3	325.1	319.8	317.2	305.3	302.6	300.0	297.4	296.0
67.5°	338.3	306.6	286.8	274.9	268.3	269.6	263.0	257.7	257.7	256.4	255.1
70°	273.6	253.7	236.6	230.0	227.3	224.7	222.0	218.1	216.7	216.7	216.7
72.5°	215.4	202.2	193.0	189.0	186.3	183.7	181.1	181.1	181.1	179.7	179.7
75°	165.2	159.9	153.3	149.3	149.3	152.0	148.0	144.1	140.1	137.4	138.8
77.5°	124.2	121.6	117.6	111.0	112.3	109.7	109.7	107.0	108.4	108.4	105.7
80°	91.2	87.2	85.9	81.9	83.3	81.9	80.6	80.6	78.0	78.0	78.0
82.5°	63.4	59.5	59.5	58.2	56.8	56.8	55.5	55.5	56.8	54.2	54.2
85°	38.3	37.0	37.0	34.4	34.4	34.4	34.4	35.7	34.4	33.0	33.0
87.5°	17.2	18.5	17.2	15.9	15.9	15.9	14.5	14.5	13.2	14.5	14.5
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: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1
2.5°	1763.0	1753.8	1752.4	1752.4	1737.9	1745.8	1730.0	1712.8	1704.9	1704.9	1690.3
5°	1909.7	1900.5	1891.2	1876.7	1876.7	1868.7	1843.6	1818.5	1800.0	1784.2	1767.0
7.5°	2060.4	2051.1	2024.7	2010.2	2018.1	2002.2	1969.2	1926.9	1895.2	1870.1	1834.4
10°	2224.3	2199.1	2185.9	2178.0	2150.2	2133.1	2094.7	2032.6	1993.0	1959.9	1913.7
12.5°	2357.7	2365.7	2315.4	2319.4	2291.7	2267.9	2208.4	2148.9	2089.5	2043.2	1974.5
15°	2501.8	2478.0	2447.6	2423.8	2414.6	2385.5	2335.3	2256.0	2191.2	2118.5	2040.6
17.5°	2615.4	2596.9	2567.9	2545.4	2525.6	2455.5	2413.2	2343.2	2254.7	2183.3	2088.1
20°	2711.9	2694.7	2653.8	2639.2	2603.6	2553.3	2492.5	2384.2	2304.9	2226.9	2134.4
22.5°	2752.9	2735.7	2700.0	2681.5	2659.1	2610.2	2552.0	2448.9	2351.1	2253.3	2155.5
25°	2718.5	2718.5	2701.4	2694.7	2674.9	2631.3	2571.8	2484.6	2380.2	2274.5	2158.2
27.5°	2552.0	2585.1	2596.9	2603.6	2603.6	2604.9	2563.9	2479.3	2377.6	2274.5	2152.9
30°	2311.5	2367.0	2415.9	2430.4	2455.5	2483.3	2500.5	2459.5	2368.3	2259.9	2138.4
32.5°	2008.8	2080.2	2171.4	2193.9	2228.2	2311.5	2357.7	2374.9	2324.7	2229.5	2100.0
35°	1707.5	1797.4	1852.9	1921.6	1953.3	2076.2	2179.3	2241.4	2229.5	2172.7	2055.1
37.5°	1444.5	1496.1	1563.5	1636.1	1699.6	1817.2	1945.4	2065.7	2114.6	2086.8	1998.3
40°	1192.1	1252.9	1333.5	1393.0	1436.6	1554.2	1712.8	1843.6	1950.7	1967.9	1913.7
42.5°	1013.7	1074.5	1123.4	1188.1	1222.5	1336.1	1476.2	1640.1	1767.0	1834.4	1810.6
45°	876.2	913.2	952.9	989.9	1032.2	1132.6	1262.1	1441.9	1584.6	1679.8	1689.0
47.5°	756.0	789.0	823.4	857.7	881.5	959.5	1078.4	1225.1	1381.1	1511.9	1563.5
50°	671.4	687.2	712.3	732.2	759.9	827.3	922.5	1049.4	1214.6	1356.0	1423.4
52.5°	588.1	607.9	627.8	644.9	663.4	711.0	798.2	907.9	1050.7	1196.0	1279.3
55°	518.1	533.9	552.4	564.3	574.9	617.2	683.3	767.9	890.8	1028.2	1131.3
57.5°	461.2	467.8	483.7	490.3	502.2	536.6	584.1	659.5	758.6	892.1	976.7
60°	399.1	412.3	424.2	429.5	438.8	462.6	495.6	565.6	651.5	749.3	845.8
62.5°	348.9	354.2	363.4	370.0	376.7	401.8	429.5	482.4	547.1	629.1	717.6
65°	302.6	305.3	310.6	319.8	323.8	342.3	358.2	396.5	457.3	519.4	607.9
67.5°	255.1	257.7	264.3	269.6	273.6	285.5	302.6	330.4	363.4	432.2	481.1
70°	218.1	218.1	222.0	224.7	228.6	233.9	243.2	264.3	294.7	338.3	383.3
72.5°	182.4	182.4	182.4	186.3	186.3	190.3	195.6	210.1	231.3	265.6	294.7
75°	141.4	142.7	145.4	145.4	146.7	152.0	155.9	159.9	170.5	193.0	219.4
77.5°	107.0	109.7	111.0	108.4	111.0	111.0	116.3	121.6	126.9	133.5	153.3
80°	79.3	80.6	78.0	79.3	79.3	81.9	84.6	83.3	85.9	93.8	99.1
82.5°	52.9	54.2	54.2	54.2	54.2	58.2	58.2	56.8	58.2	59.5	60.8
85°	33.0	31.7	31.7	33.0	31.7	31.7	33.0	34.4	33.0	34.4	35.7
87.5°	14.5	14.5	14.5	14.5	13.2	13.2	14.5	13.2	14.5	13.2	11.9
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: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1
2.5°	1682.4	1675.8	1671.8	1670.5	1658.6	1652.0	1648.0	1645.4	1641.4	1630.9	1621.6
5°	1745.8	1727.3	1718.1	1707.5	1689.0	1667.9	1650.7	1640.1	1626.9	1605.7	1585.9
7.5°	1805.3	1777.6	1759.1	1744.5	1712.8	1678.4	1650.7	1628.2	1603.1	1574.0	1546.3
10°	1867.4	1822.5	1798.7	1776.2	1730.0	1685.0	1645.4	1612.4	1576.7	1538.3	1507.9
12.5°	1916.3	1856.9	1830.4	1798.7	1741.9	1689.0	1638.8	1593.9	1547.6	1506.6	1463.0
15°	1973.2	1899.1	1868.7	1827.8	1749.8	1681.1	1616.3	1567.4	1519.8	1459.0	1412.8
17.5°	2006.2	1920.3	1876.7	1841.0	1756.4	1673.1	1597.8	1537.0	1481.5	1420.7	1371.8
20°	2039.2	1941.4	1892.5	1842.3	1741.9	1653.3	1574.0	1501.3	1443.2	1377.1	1326.9
22.5°	2049.8	1936.1	1884.6	1838.3	1732.6	1633.5	1542.3	1468.3	1400.9	1334.8	1278.0
25°	2049.8	1934.8	1874.0	1814.6	1703.5	1601.8	1510.6	1430.0	1354.6	1288.6	1231.7
27.5°	2028.7	1908.4	1845.0	1790.8	1675.8	1566.1	1472.3	1383.7	1311.0	1244.9	1180.2
30°	2002.2	1870.1	1806.6	1741.9	1630.9	1526.5	1424.7	1342.7	1266.1	1190.8	1132.6
32.5°	1969.2	1829.1	1759.1	1693.0	1575.3	1467.0	1373.1	1292.5	1219.8	1141.9	1077.1
35°	1921.6	1768.3	1690.3	1632.2	1518.5	1406.2	1316.3	1237.0	1167.0	1086.4	1016.3
37.5°	1860.8	1712.8	1633.5	1562.1	1444.5	1341.4	1256.8	1180.2	1111.5	1037.5	959.5
40°	1789.4	1634.8	1566.1	1490.8	1366.5	1268.7	1189.4	1120.7	1052.0	982.0	906.6
42.5°	1708.8	1555.5	1478.9	1406.2	1287.2	1190.8	1116.8	1054.6	991.2	926.4	845.8
45°	1612.4	1468.3	1394.3	1325.6	1210.6	1111.5	1044.1	984.6	930.4	864.3	793.0
47.5°	1504.0	1378.4	1303.1	1229.1	1116.8	1030.8	964.8	914.5	868.3	802.2	737.5
50°	1398.3	1274.0	1213.2	1137.9	1034.8	954.2	886.8	844.5	808.8	744.1	685.9
52.5°	1264.8	1170.9	1112.8	1048.0	948.9	867.0	814.1	777.1	734.8	684.6	633.0
55°	1147.2	1059.9	1013.7	952.9	855.1	782.4	737.5	703.1	670.1	625.1	584.1
57.5°	1013.7	959.5	913.2	860.4	763.9	701.8	662.1	633.0	602.7	565.6	532.6
60°	873.6	848.5	803.5	761.2	679.3	625.1	592.1	565.6	536.6	506.2	478.4
62.5°	749.3	734.8	708.4	675.3	598.7	552.4	519.4	499.6	478.4	450.7	424.2
65°	631.7	625.1	600.0	576.2	523.4	482.4	453.3	441.4	417.6	396.5	372.7
67.5°	527.3	519.4	504.9	494.3	449.3	411.0	396.5	380.6	360.8	344.9	325.1
70°	421.6	420.3	411.0	397.8	374.0	346.3	331.7	321.1	301.3	289.4	274.9
72.5°	327.8	334.4	326.4	321.1	305.3	285.5	272.2	265.6	249.8	240.5	230.0
75°	244.5	249.8	253.7	244.5	240.5	231.3	219.4	212.8	204.8	191.6	187.7
77.5°	166.5	178.4	178.4	181.1	182.4	177.1	167.8	162.6	153.3	150.7	145.4
80°	109.7	120.3	121.6	124.2	128.2	128.2	121.6	120.3	111.0	109.7	105.7
82.5°	63.4	72.7	78.0	81.9	80.6	85.9	80.6	79.3	74.0	74.0	71.4
85°	34.4	35.7	38.3	41.0	43.6	46.3	46.3	44.9	43.6	42.3	39.6
87.5°	13.2	13.2	14.5	13.2	14.5	17.2	18.5	18.5	17.2	15.9	13.2
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: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1
2.5°	1613.7	1611.0	1608.4	1597.8	1588.6	1572.7	1559.5	1554.2	1552.9	1554.2	1550.2
5°	1567.4	1566.1	1556.8	1538.3	1521.2	1502.7	1489.4	1476.2	1468.3	1468.3	1459.0
7.5°	1523.8	1514.6	1506.6	1482.8	1463.0	1437.9	1418.1	1406.2	1399.6	1385.0	1385.0
10°	1477.6	1464.3	1453.8	1431.3	1402.2	1377.1	1352.0	1337.5	1325.6	1315.0	1311.0
12.5°	1431.3	1420.7	1400.9	1377.1	1348.0	1316.3	1289.9	1279.3	1251.6	1229.1	1230.4
15°	1387.7	1363.9	1354.6	1320.3	1285.9	1255.5	1217.2	1186.8	1164.3	1149.8	1131.3
17.5°	1338.8	1315.0	1297.8	1268.7	1223.8	1176.2	1139.2	1098.3	1075.8	1050.7	1038.8
20°	1284.6	1264.8	1251.6	1205.3	1151.1	1094.3	1053.3	1028.2	1003.1	984.6	974.0
22.5°	1238.3	1213.2	1197.4	1135.3	1075.8	1019.0	987.2	966.1	944.9	929.1	923.8
25°	1178.9	1164.3	1126.0	1071.8	999.1	960.8	933.1	905.3	893.4	882.8	870.9
27.5°	1130.0	1094.3	1067.9	996.5	951.6	907.9	880.2	859.0	844.5	833.9	824.7
30°	1069.2	1036.1	999.1	939.7	898.7	857.7	832.6	815.4	799.6	793.0	785.0
32.5°	1005.7	975.3	939.7	892.1	841.9	810.1	790.3	771.8	761.2	754.6	745.4
35°	948.9	910.6	886.8	841.9	800.9	765.2	746.7	730.8	719.0	716.3	715.0
37.5°	888.1	859.0	836.6	790.3	756.0	725.6	708.4	691.2	684.6	683.3	678.0
40°	835.3	810.1	789.0	745.4	708.4	680.6	667.4	656.8	650.2	650.2	648.9
42.5°	789.0	762.6	741.4	701.8	668.7	643.6	629.1	618.5	615.9	617.2	615.9
45°	737.5	715.0	693.8	652.9	625.1	606.6	590.8	585.5	581.5	582.8	584.1
47.5°	688.6	670.1	648.9	615.9	584.1	564.3	555.1	549.8	549.8	549.8	552.4
50°	644.9	623.8	605.3	570.9	541.9	526.0	518.1	511.5	512.8	514.1	515.4
52.5°	593.4	574.9	561.7	527.3	506.2	486.3	477.1	478.4	477.1	477.1	479.7
55°	548.5	530.0	516.7	485.0	463.9	450.7	442.7	438.8	440.1	437.5	442.7
57.5°	498.2	482.4	473.1	442.7	424.2	412.3	405.7	399.1	401.8	400.4	399.1
60°	454.6	436.1	421.6	400.4	384.6	370.0	366.1	359.5	362.1	359.5	358.2
62.5°	404.4	389.9	379.3	358.2	344.9	333.0	323.8	319.8	318.5	314.5	310.6
65°	354.2	346.3	335.7	314.5	301.3	292.1	286.8	282.8	281.5	270.9	259.0
67.5°	307.9	302.6	292.1	276.2	264.3	255.1	247.1	240.5	232.6	224.7	218.1
70°	264.3	256.4	249.8	235.2	224.7	215.4	207.5	199.6	195.6	187.7	185.0
72.5°	222.0	214.1	207.5	194.3	185.0	175.8	173.1	163.9	159.9	158.6	158.6
75°	178.4	171.8	167.8	155.9	148.0	141.4	137.4	134.8	132.2	129.5	125.6
77.5°	136.1	132.2	129.5	121.6	115.0	111.0	109.7	100.4	97.8	95.2	92.5
80°	99.1	97.8	95.2	88.5	85.9	76.7	76.7	74.0	72.7	72.7	72.7
82.5°	67.4	64.8	63.4	56.8	55.5	54.2	52.9	51.5	52.9	51.5	52.9
85°	35.7	34.4	33.0	33.0	33.0	33.0	33.0	33.0	33.0	31.7	33.0
87.5°	13.2	13.2	13.2	13.2	11.9	13.2	13.2	11.9	13.2	13.2	13.2
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: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1
2.5°	1550.2	1555.5	1548.9	1552.9	1543.6	1542.3	1543.6	1543.6	1545.0	1546.3	1547.6
5°	1463.0	1461.7	1453.8	1448.5	1444.5	1448.5	1451.1	1453.8	1451.1	1453.8	1455.1
7.5°	1381.1	1377.1	1373.1	1363.9	1366.5	1363.9	1371.8	1367.9	1367.9	1374.5	1379.8
10°	1308.4	1300.5	1297.8	1287.2	1279.3	1278.0	1287.2	1291.2	1295.2	1297.8	1308.4
12.5°	1214.6	1202.7	1193.4	1197.4	1174.9	1184.2	1186.8	1181.5	1197.4	1215.9	1205.3
15°	1114.1	1115.4	1096.9	1090.3	1071.8	1077.1	1078.4	1091.6	1104.9	1103.5	1119.4
17.5°	1040.1	1032.2	1016.3	1015.0	1007.1	1011.0	1009.7	1020.3	1016.3	1022.9	1036.1
20°	971.4	966.1	952.9	947.6	950.2	947.6	948.9	950.2	954.2	968.7	966.1
22.5°	917.2	910.6	910.6	904.0	896.0	893.4	900.0	904.0	909.3	911.9	918.5
25°	869.6	864.3	857.7	853.8	847.1	848.5	852.4	857.7	861.7	867.0	872.3
27.5°	820.7	820.7	814.1	812.8	810.1	808.8	814.1	816.7	816.7	820.7	826.0
30°	782.4	782.4	775.8	774.5	773.1	773.1	777.1	778.4	779.7	783.7	786.4
32.5°	745.4	744.1	741.4	742.7	741.4	742.7	742.7	744.1	746.7	748.0	753.3
35°	711.0	712.3	709.7	709.7	708.4	709.7	712.3	713.7	715.0	717.6	717.6
37.5°	678.0	680.6	679.3	683.3	683.3	683.3	683.3	685.9	685.9	685.9	684.6
40°	648.9	648.9	647.6	650.2	652.9	652.9	654.2	654.2	655.5	655.5	654.2
42.5°	615.9	618.5	622.5	623.8	626.4	625.1	629.1	627.8	629.1	626.4	623.8
45°	585.5	585.5	590.8	596.0	597.4	597.4	597.4	600.0	597.4	593.4	592.1
47.5°	552.4	555.1	557.7	564.3	565.6	565.6	565.6	565.6	563.0	563.0	563.0
50°	519.4	520.7	522.0	524.7	528.6	527.3	527.3	527.3	532.6	527.3	528.6
52.5°	479.7	481.1	482.4	487.7	486.3	486.3	487.7	487.7	491.6	490.3	487.7
55°	440.1	440.1	442.7	442.7	442.7	445.4	446.7	449.3	448.0	449.3	450.7
57.5°	400.4	397.8	396.5	396.5	400.4	399.1	400.4	400.4	405.7	408.4	409.7
60°	354.2	354.2	352.9	344.9	344.9	343.6	347.6	350.2	352.9	364.8	363.4
62.5°	306.6	301.3	296.0	297.4	289.4	293.4	290.8	293.4	301.3	310.6	311.9
65°	259.0	255.1	249.8	248.5	245.8	249.8	248.5	249.8	253.7	259.0	265.6
67.5°	216.7	215.4	212.8	211.5	211.5	211.5	214.1	214.1	215.4	219.4	223.4
70°	185.0	183.7	185.0	182.4	183.7	182.4	183.7	185.0	186.3	187.7	191.6
72.5°	155.9	155.9	155.9	153.3	155.9	154.6	154.6	155.9	157.3	158.6	161.2
75°	124.2	121.6	118.9	116.3	115.0	117.6	118.9	117.6	121.6	126.9	126.9
77.5°	93.8	92.5	92.5	92.5	93.8	92.5	95.2	93.8	95.2	95.2	97.8
80°	72.7	71.4	72.7	72.7	71.4	74.0	72.7	72.7	74.0	75.3	74.0
82.5°	52.9	54.2	52.9	52.9	52.9	55.5	52.9	52.9	52.9	54.2	54.2
85°	33.0	33.0	33.0	33.0	34.4	33.0	34.4	33.0	35.7	34.4	34.4
87.5°	11.9	13.2	14.5	14.5	14.5	14.5	13.2	14.5	15.9	14.5	15.9
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: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1	1640.1
2.5°	1552.9	1559.5	1556.8	1547.6	1551.6	1559.5	1567.4	1578.0	1584.6	1589.9	1592.5
5°	1461.7	1473.6	1470.9	1470.9	1476.2	1489.4	1502.7	1525.1	1533.1	1542.3	1555.5
7.5°	1381.1	1390.3	1398.3	1400.9	1408.8	1426.0	1443.2	1468.3	1488.1	1498.7	1506.6
10°	1309.7	1316.3	1328.2	1334.8	1342.7	1363.9	1389.0	1415.4	1435.3	1453.8	1464.3
12.5°	1218.5	1244.9	1260.8	1271.4	1282.0	1313.7	1333.5	1362.6	1386.4	1403.5	1419.4
15°	1116.8	1148.5	1157.7	1198.7	1225.1	1250.2	1280.6	1315.0	1337.5	1357.3	1378.4
17.5°	1030.8	1053.3	1063.9	1107.5	1130.0	1169.6	1213.2	1256.8	1291.2	1305.7	1326.9
20°	976.7	988.6	1009.7	1024.2	1048.0	1094.3	1141.9	1194.7	1246.3	1260.8	1282.0
22.5°	921.2	937.0	951.6	971.4	989.9	1021.6	1069.2	1127.3	1182.8	1209.3	1234.4
25°	870.9	886.8	896.0	917.2	934.4	966.1	999.1	1058.6	1124.7	1147.2	1186.8
27.5°	831.3	840.5	856.4	865.6	885.5	914.5	944.9	989.9	1054.6	1093.0	1131.3
30°	791.6	798.2	811.5	824.7	839.2	859.0	893.4	937.0	996.5	1029.5	1067.9
32.5°	752.0	762.6	770.5	779.7	795.6	819.4	843.2	885.5	933.1	970.1	1008.4
35°	719.0	722.9	733.5	744.1	754.6	775.8	800.9	841.9	884.2	913.2	947.6
37.5°	683.3	689.9	697.8	701.8	719.0	732.2	758.6	790.3	840.5	859.0	893.4
40°	655.5	654.2	662.1	668.7	676.7	697.8	713.7	748.0	787.7	816.7	837.9
42.5°	621.2	621.2	623.8	631.7	642.3	655.5	674.0	703.1	744.1	765.2	790.3
45°	593.4	589.4	590.8	596.0	602.7	615.9	634.4	659.5	700.4	717.6	744.1
47.5°	560.4	556.4	556.4	561.7	567.0	576.2	590.8	619.8	652.9	675.3	695.2
50°	523.4	524.7	523.4	527.3	530.0	539.2	555.1	578.9	609.3	627.8	650.2
52.5°	489.0	486.3	485.0	487.7	493.0	499.6	516.7	537.9	567.0	585.5	605.3
55°	446.7	449.3	449.3	449.3	457.3	459.9	473.1	494.3	523.4	537.9	556.4
57.5°	408.4	407.1	409.7	408.4	415.0	424.2	434.8	450.7	479.7	494.3	511.5
60°	366.1	367.4	368.7	368.7	374.0	383.3	395.2	409.7	433.5	448.0	463.9
62.5°	314.5	321.1	327.8	330.4	338.3	344.9	352.9	368.7	389.9	400.4	415.0
65°	265.6	274.9	284.1	290.8	296.0	302.6	313.2	327.8	344.9	355.5	370.0
67.5°	223.4	230.0	241.9	248.5	259.0	267.0	273.6	285.5	306.6	310.6	322.5
70°	193.0	195.6	200.9	206.2	218.1	224.7	232.6	244.5	260.4	269.6	276.2
72.5°	162.6	163.9	166.5	171.8	177.1	185.0	194.3	204.8	219.4	223.4	232.6
75°	129.5	137.4	137.4	141.4	145.4	149.3	157.3	167.8	177.1	183.7	189.0
77.5°	96.5	100.4	103.1	109.7	115.0	118.9	124.2	132.2	137.4	142.7	146.7
80°	75.3	76.7	78.0	78.0	80.6	85.9	91.2	96.5	103.1	105.7	109.7
82.5°	55.5	55.5	55.5	58.2	59.5	60.8	60.8	63.4	70.0	72.7	76.7
85°	35.7	35.7	35.7	35.7	37.0	38.3	39.6	41.0	41.0	41.0	43.6
87.5°	14.5	17.2	15.9	17.2	17.2	17.2	17.2	18.5	18.5	19.8	19.8
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: P1000427

CATALOG NUMBER: SA4XXRDP-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1640.1	1640.1	1640.1	1640.1
2.5°	1603.1	1611.0	1624.2	1642.8
5°	1566.1	1588.6	1609.7	1637.5
7.5°	1533.1	1559.5	1588.6	1628.2
10°	1494.7	1527.8	1564.8	1613.7
12.5°	1449.8	1496.1	1538.3	1591.2
15°	1416.8	1451.1	1505.3	1567.4
17.5°	1370.5	1416.8	1470.9	1541.0
20°	1326.9	1375.8	1436.6	1509.3
22.5°	1280.6	1336.1	1396.9	1474.9
25°	1233.1	1292.5	1353.3	1436.6
27.5°	1189.4	1243.6	1312.4	1396.9
30°	1136.6	1198.7	1264.8	1353.3
32.5°	1085.0	1149.8	1217.2	1305.7
35°	1029.5	1094.3	1168.3	1252.9
37.5°	975.3	1046.7	1114.1	1196.0
40°	915.9	989.9	1059.9	1143.2
42.5°	857.7	934.4	1004.4	1075.8
45°	803.5	878.9	942.3	1009.7
47.5°	752.0	819.4	884.2	944.9
50°	701.8	758.6	818.1	868.3
52.5°	648.9	703.1	750.7	795.6
55°	601.3	643.6	685.9	726.9
57.5°	544.5	586.8	623.8	655.5
60°	496.9	523.4	559.0	592.1
62.5°	442.7	473.1	500.9	522.0
65°	389.9	416.3	437.5	456.0
67.5°	344.9	360.8	376.7	396.5
70°	290.8	304.0	322.5	337.0
72.5°	244.5	255.1	264.3	281.5
75°	198.2	207.5	212.8	228.6
77.5°	153.3	162.6	166.5	175.8
80°	117.6	118.9	124.2	132.2
82.5°	80.6	83.3	84.6	91.2
85°	46.3	52.9	51.5	54.2
87.5°	19.8	21.1	23.8	26.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)