

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: P1000447

Luminaire Tested: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000447
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-B1195DB50-4F0-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

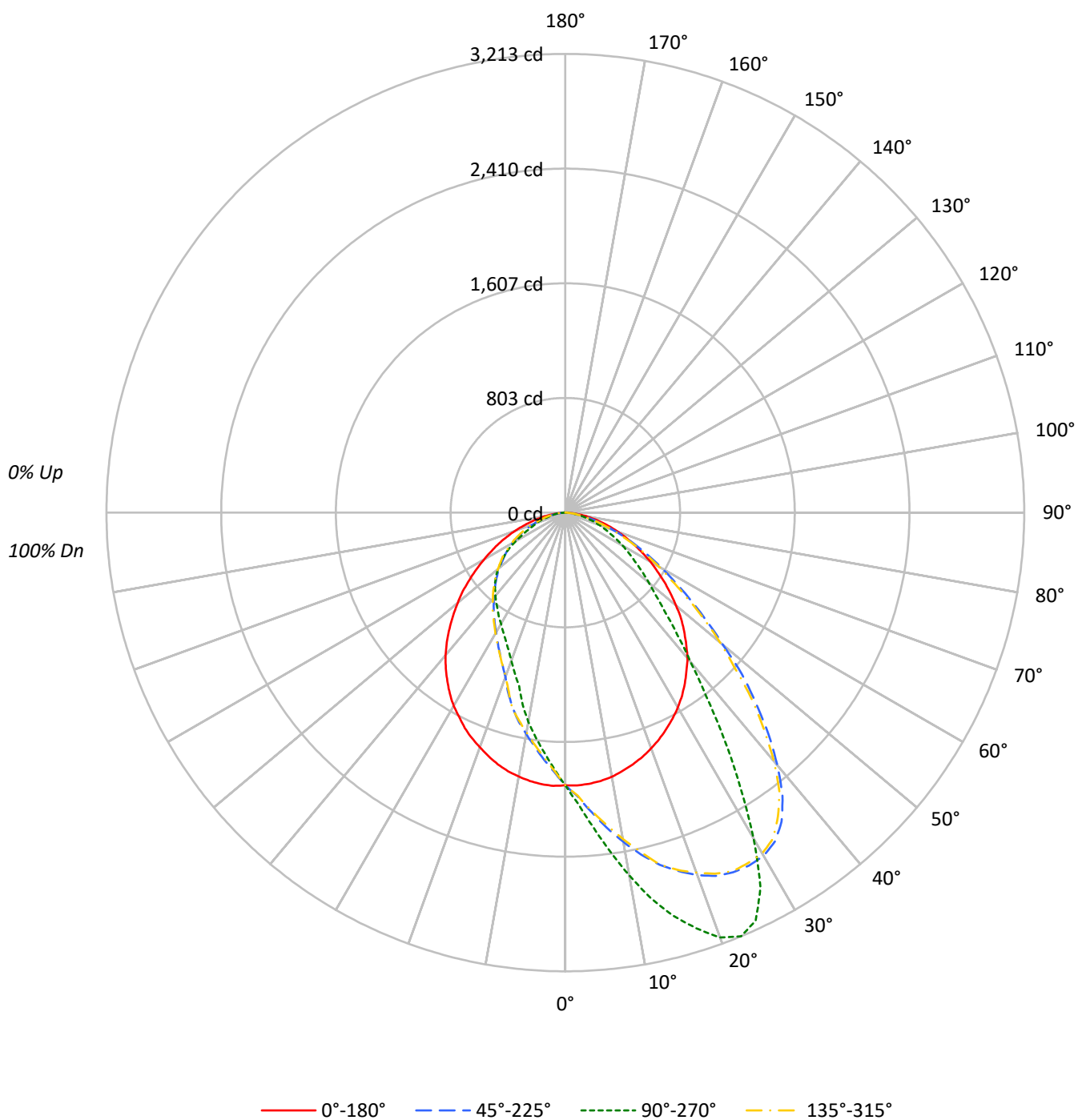
Lumens per Lamp: N/A
Luminaire Lumens: 4827.0 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

Luminous Intensity Polar Plot



TEST NUMBER: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-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	0
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°	15571	15571	15571	15571
5°	15605	18062	15630	13804
10°	15556	21366	15544	12320
15°	15406	24681	15406	10586
20°	15249	27479	15168	9573
25°	15048	28367	14980	8888
30°	14836	24833	14720	8475
35°	14521	19330	14337	8226
40°	14168	14495	13889	8091
45°	13557	11445	13219	8021
50°	12824	9662	12473	7788
55°	12032	8422	11638	7371
60°	11242	7579	10741	6525
65°	10242	6680	9916	5611
70°	9356	6015	8915	5062
75°	8387	5041	7804	4313
80°	7227	4264	6574	4048
85°	5904	3602	4893	3602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 23280 cd/sqm

TEST NUMBER: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.9	3.8
10°-20°	558.4	11.6
20°-30°	874.6	18.1
30°-40°	971.3	20.1
40°-50°	860.7	17.8
50°-60°	670.7	13.9
60°-70°	438.7	9.1
70°-80°	215.3	4.5
80°-90°	52.4	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°	1617.9	33.5
0°-40°	2589.2	53.6
0°-60°	4120.5	85.4
0°-90°	4827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4827.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1910	1910	1910	1910	1910	
5°	1906	2206	1910	1686	1906	181
15°	1825	2924	1825	1254	1825	515
25°	1672	3153	1665	988	1672	771
35°	1459	1942	1440	826	1459	912
45°	1176	992	1146	696	1176	907
55°	846	592	819	518	846	757
65°	531	346	514	291	531	529
75°	266	160	248	137	266	282
85°	63	38	52	38	63	75
90°	0	0	0	0	0	

TEST NUMBER: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5
2.5°	1912.6	1929.5	1938.7	1946.4	1961.8	1968.0	1980.3	1983.4	1995.7	1994.1	1989.5
5°	1906.4	1935.7	1957.2	1980.3	2008.0	2023.4	2040.3	2064.9	2077.2	2094.1	2104.9
7.5°	1895.7	1935.7	1971.1	2006.4	2051.1	2075.7	2097.2	2135.7	2168.0	2195.7	2226.5
10°	1878.7	1929.5	1981.8	2029.5	2091.1	2120.3	2152.6	2209.5	2254.2	2292.6	2341.9
12.5°	1852.6	1923.4	1981.8	2046.4	2124.9	2164.9	2208.0	2275.7	2328.0	2391.1	2452.7
15°	1824.9	1903.3	1980.3	2064.9	2154.2	2200.3	2243.4	2334.2	2414.2	2486.5	2554.2
17.5°	1794.1	1880.3	1964.9	2058.8	2166.5	2223.4	2274.2	2383.4	2471.1	2565.0	2632.7
20°	1757.2	1851.0	1948.0	2052.6	2174.2	2237.2	2294.2	2418.8	2515.7	2617.3	2701.9
22.5°	1717.2	1818.7	1924.9	2038.8	2164.9	2234.2	2300.3	2434.2	2546.5	2640.4	2754.2
25°	1672.5	1780.3	1889.5	2009.5	2151.1	2226.5	2294.2	2426.5	2546.5	2669.6	2780.4
27.5°	1626.4	1737.2	1851.0	1977.2	2121.8	2195.7	2272.6	2400.3	2540.4	2674.2	2786.6
30°	1575.6	1683.3	1803.3	1923.4	2077.2	2151.1	2229.5	2368.0	2520.4	2654.2	2775.8
32.5°	1520.2	1631.0	1744.9	1869.5	2020.3	2100.3	2172.6	2329.6	2485.0	2617.3	2731.2
35°	1458.7	1563.3	1671.0	1798.7	1948.0	2020.3	2106.5	2269.6	2426.5	2566.5	2640.4
37.5°	1392.5	1492.5	1592.5	1718.7	1861.8	1949.5	2034.1	2198.8	2365.0	2458.8	2497.3
40°	1331.0	1418.7	1506.4	1627.9	1772.6	1863.3	1949.5	2120.3	2266.5	2338.8	2309.6
42.5°	1252.5	1343.3	1421.7	1534.1	1680.2	1764.9	1852.6	2029.5	2148.0	2177.2	2104.9
45°	1175.6	1250.9	1326.3	1435.6	1589.5	1661.8	1755.6	1920.3	2018.7	1992.6	1886.4
47.5°	1100.2	1161.7	1232.5	1338.7	1477.1	1563.3	1651.0	1794.1	1863.3	1826.4	1678.7
50°	1010.9	1072.5	1146.3	1238.6	1372.5	1455.6	1524.8	1657.2	1709.5	1618.7	1440.2
52.5°	926.3	980.1	1043.2	1129.4	1257.1	1332.5	1407.9	1521.8	1538.7	1434.1	1246.3
55°	846.3	889.4	955.5	1024.8	1141.7	1221.7	1274.0	1371.0	1366.3	1235.6	1074.0
57.5°	763.2	803.2	847.8	920.1	1030.9	1090.9	1147.9	1232.5	1187.9	1077.1	917.1
60°	689.3	712.4	757.0	826.3	920.1	972.4	1017.1	1063.2	1024.8	904.7	781.6
62.5°	607.8	633.9	666.2	721.6	804.7	854.0	886.3	906.3	866.3	774.0	661.6
65°	530.8	553.9	587.8	637.0	700.1	737.0	754.0	767.8	746.3	641.6	552.4
67.5°	461.6	477.0	507.8	540.1	607.8	617.0	640.1	646.2	603.2	523.2	452.4
70°	392.4	407.8	421.6	460.1	490.8	507.8	512.4	512.4	469.3	417.0	358.5
72.5°	327.7	337.0	350.8	377.0	393.9	406.2	412.4	404.7	364.7	321.6	278.5
75°	266.2	270.8	283.1	300.0	313.9	309.3	307.7	298.5	269.3	238.5	213.9
77.5°	204.6	207.7	221.6	226.2	226.2	230.8	224.6	215.4	190.8	167.7	156.9
80°	153.9	158.5	160.0	163.1	160.0	160.0	155.4	140.0	127.7	116.9	109.2
82.5°	106.2	109.2	110.8	106.2	109.2	104.6	96.9	86.2	78.5	76.9	73.9
85°	63.1	64.6	63.1	63.1	58.5	56.9	50.8	49.2	46.2	46.2	44.6
87.5°	30.8	29.2	26.2	23.1	23.1	21.5	23.1	20.0	23.1	21.5	20.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5
2.5°	2001.8	2018.7	2020.3	2035.7	2031.1	2023.4	2037.2	2028.0	2046.4	2040.3	2048.0
5°	2118.8	2141.8	2161.8	2174.2	2195.7	2191.1	2214.2	2206.5	2223.4	2206.5	2228.0
7.5°	2255.7	2294.2	2314.2	2346.5	2355.7	2357.3	2385.0	2391.1	2401.9	2391.1	2403.4
10°	2389.6	2435.7	2481.9	2508.1	2525.0	2548.1	2572.7	2583.4	2591.1	2580.4	2588.1
12.5°	2511.1	2583.4	2634.2	2686.5	2698.8	2718.8	2745.0	2741.9	2772.7	2766.5	2780.4
15°	2623.5	2703.5	2765.0	2806.6	2840.4	2857.3	2906.6	2909.6	2908.1	2923.5	2914.3
17.5°	2723.5	2791.2	2878.9	2932.7	2974.3	2974.3	3002.0	3058.9	3054.3	3052.7	3062.0
20°	2805.0	2881.9	2963.5	3054.3	3088.1	3094.3	3132.8	3162.0	3166.6	3166.6	3166.6
22.5°	2866.6	2957.3	3045.0	3109.7	3135.8	3157.4	3191.2	3209.7	3215.8	3212.8	3215.8
25°	2897.3	2983.5	3072.7	3131.2	3146.6	3158.9	3162.0	3172.8	3171.2	3152.8	3163.5
27.5°	2903.5	2986.6	3045.0	3060.4	3052.7	3045.0	2995.8	3000.4	2986.6	2958.9	2969.7
30°	2875.8	2920.4	2918.9	2871.2	2857.3	2825.0	2780.4	2714.2	2660.4	2637.3	2645.0
32.5°	2775.8	2775.8	2720.4	2612.7	2565.0	2506.5	2426.5	2366.5	2295.7	2280.3	2309.6
35°	2637.3	2558.8	2457.3	2315.7	2243.4	2200.3	2061.8	2018.7	1958.7	1941.8	1955.7
37.5°	2421.9	2291.1	2143.4	2011.1	1949.5	1872.6	1751.0	1689.5	1646.4	1617.2	1631.0
40°	2180.3	2021.8	1868.0	1704.9	1637.2	1574.1	1483.3	1427.9	1358.7	1361.7	1366.3
42.5°	1949.5	1763.3	1591.0	1440.2	1375.6	1323.3	1260.2	1192.5	1167.9	1160.2	1152.5
45°	1704.9	1506.4	1344.8	1232.5	1174.0	1124.8	1066.3	1027.8	998.6	992.4	1000.1
47.5°	1474.1	1306.3	1152.5	1047.8	1000.1	975.5	929.4	894.0	875.5	860.1	869.4
50°	1264.8	1107.9	984.8	897.1	863.2	846.3	803.2	784.7	766.3	761.6	760.1
52.5°	1092.5	958.6	852.4	781.6	755.5	746.3	713.9	687.8	672.4	677.0	680.1
55°	935.5	821.7	738.6	681.6	660.1	649.3	626.2	607.8	597.0	592.4	595.5
57.5°	797.0	698.6	638.6	592.4	575.5	570.9	546.2	540.1	532.4	527.8	527.8
60°	670.9	601.6	546.2	520.1	501.6	497.0	478.5	470.8	469.3	464.7	461.6
62.5°	564.7	507.8	469.3	441.6	433.9	432.4	420.1	410.8	406.2	403.1	403.1
65°	472.4	430.8	398.5	378.5	372.4	369.3	355.4	352.4	349.3	346.2	344.7
67.5°	393.9	357.0	333.9	320.0	312.4	313.9	306.2	300.0	300.0	298.5	297.0
70°	318.5	295.4	275.4	267.7	264.7	261.6	258.5	253.9	252.3	252.3	252.3
72.5°	250.8	235.4	224.6	220.0	217.0	213.9	210.8	210.8	210.8	209.3	209.3
75°	192.3	186.2	178.5	173.9	173.9	176.9	172.3	167.7	163.1	160.0	161.6
77.5°	144.6	141.6	136.9	129.2	130.8	127.7	127.7	124.6	126.2	126.2	123.1
80°	106.2	101.6	100.0	95.4	96.9	95.4	93.9	93.9	90.8	90.8	90.8
82.5°	73.9	69.2	69.2	67.7	66.2	66.2	64.6	64.6	66.2	63.1	63.1
85°	44.6	43.1	43.1	40.0	40.0	40.0	40.0	41.5	40.0	38.5	38.5
87.5°	20.0	21.5	20.0	18.5	18.5	18.5	16.9	16.9	15.4	16.9	16.9
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: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5
2.5°	2052.6	2041.8	2040.3	2040.3	2023.4	2032.6	2014.1	1994.1	1984.9	1984.9	1968.0
5°	2223.4	2212.6	2201.9	2184.9	2184.9	2175.7	2146.5	2117.2	2095.7	2077.2	2057.2
7.5°	2398.8	2388.0	2357.3	2340.3	2349.6	2331.1	2292.6	2243.4	2206.5	2177.2	2135.7
10°	2589.6	2560.4	2545.0	2535.7	2503.4	2483.4	2438.8	2366.5	2320.3	2281.9	2228.0
12.5°	2745.0	2754.2	2695.8	2700.4	2668.1	2640.4	2571.1	2501.9	2432.7	2378.8	2298.8
15°	2912.7	2885.0	2849.6	2821.9	2811.2	2777.3	2718.8	2626.5	2551.1	2466.5	2375.7
17.5°	3045.0	3023.5	2989.7	2963.5	2940.4	2858.9	2809.6	2728.1	2625.0	2541.9	2431.1
20°	3157.4	3137.4	3089.7	3072.7	3031.2	2972.7	2902.0	2775.8	2683.5	2592.7	2485.0
22.5°	3205.1	3185.1	3143.5	3122.0	3095.8	3038.9	2971.2	2851.2	2737.3	2623.5	2509.6
25°	3165.1	3165.1	3145.1	3137.4	3114.3	3063.5	2994.3	2892.7	2771.2	2648.1	2512.7
27.5°	2971.2	3009.7	3023.5	3031.2	3031.2	3032.7	2985.0	2886.6	2768.1	2648.1	2506.5
30°	2691.2	2755.8	2812.7	2829.6	2858.9	2891.2	2911.2	2863.5	2757.3	2631.1	2489.6
32.5°	2338.8	2421.9	2528.1	2554.2	2594.2	2691.2	2745.0	2765.0	2706.5	2595.8	2445.0
35°	1988.0	2092.6	2157.2	2237.2	2274.2	2417.3	2537.3	2609.6	2595.8	2529.6	2392.6
37.5°	1681.8	1741.8	1820.3	1904.9	1978.7	2115.7	2264.9	2405.0	2461.9	2429.6	2326.5
40°	1387.9	1458.7	1552.5	1621.8	1672.5	1809.5	1994.1	2146.5	2271.1	2291.1	2228.0
42.5°	1180.2	1250.9	1307.9	1383.3	1423.3	1555.6	1718.7	1909.5	2057.2	2135.7	2108.0
45°	1020.1	1063.2	1109.4	1152.5	1201.7	1318.6	1469.4	1678.7	1844.9	1955.7	1966.4
47.5°	880.1	918.6	958.6	998.6	1026.3	1117.1	1255.6	1426.4	1607.9	1760.3	1820.3
50°	781.6	800.1	829.3	852.4	884.7	963.2	1074.0	1221.7	1414.0	1578.7	1657.2
52.5°	684.7	707.8	730.9	750.9	772.4	827.8	929.4	1057.1	1223.3	1392.5	1489.4
55°	603.2	621.6	643.2	657.0	669.3	718.6	795.5	894.0	1037.1	1197.1	1317.1
57.5°	537.0	544.7	563.2	570.9	584.7	624.7	680.1	767.8	883.2	1038.6	1137.1
60°	464.7	480.1	493.9	500.1	510.8	538.5	577.0	658.6	758.6	872.4	984.8
62.5°	406.2	412.4	423.1	430.8	438.5	467.8	500.1	561.6	637.0	732.4	835.5
65°	352.4	355.4	361.6	372.4	377.0	398.5	417.0	461.6	532.4	604.7	707.8
67.5°	297.0	300.0	307.7	313.9	318.5	332.4	352.4	384.7	423.1	503.1	560.1
70°	253.9	253.9	258.5	261.6	266.2	272.3	283.1	307.7	343.1	393.9	446.2
72.5°	212.3	212.3	212.3	217.0	217.0	221.6	227.7	244.7	269.3	309.3	343.1
75°	164.6	166.2	169.3	169.3	170.8	176.9	181.6	186.2	198.5	224.6	255.4
77.5°	124.6	127.7	129.2	126.2	129.2	129.2	135.4	141.6	147.7	155.4	178.5
80°	92.3	93.9	90.8	92.3	92.3	95.4	98.5	96.9	100.0	109.2	115.4
82.5°	61.5	63.1	63.1	63.1	63.1	67.7	67.7	66.2	67.7	69.2	70.8
85°	38.5	36.9	36.9	38.5	36.9	36.9	38.5	40.0	38.5	40.0	41.5
87.5°	16.9	16.9	16.9	16.9	15.4	15.4	16.9	15.4	16.9	15.4	13.8
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: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5
2.5°	1958.7	1951.0	1946.4	1944.9	1931.0	1923.4	1918.7	1915.7	1911.0	1898.7	1888.0
5°	2032.6	2011.1	2000.3	1988.0	1966.4	1941.8	1921.8	1909.5	1894.1	1869.5	1846.4
7.5°	2101.8	2069.5	2048.0	2031.1	1994.1	1954.1	1921.8	1895.7	1866.4	1832.6	1800.3
10°	2174.2	2121.8	2094.1	2068.0	2014.1	1961.8	1915.7	1877.2	1835.6	1791.0	1755.6
12.5°	2231.1	2161.8	2131.1	2094.1	2028.0	1966.4	1908.0	1855.6	1801.8	1754.1	1703.3
15°	2297.3	2211.1	2175.7	2128.0	2037.2	1957.2	1881.8	1824.9	1769.5	1698.7	1644.9
17.5°	2335.7	2235.7	2184.9	2143.4	2044.9	1948.0	1860.3	1789.5	1724.9	1654.1	1597.2
20°	2374.2	2260.3	2203.4	2144.9	2028.0	1924.9	1832.6	1747.9	1680.2	1603.3	1544.8
22.5°	2386.5	2254.2	2194.2	2140.3	2017.2	1901.8	1795.6	1709.5	1631.0	1554.1	1487.9
25°	2386.5	2252.6	2181.8	2112.6	1983.4	1864.9	1758.7	1664.9	1577.1	1500.2	1434.1
27.5°	2361.9	2221.9	2148.0	2084.9	1951.0	1823.3	1714.1	1611.0	1526.4	1449.4	1374.0
30°	2331.1	2177.2	2103.4	2028.0	1898.7	1777.2	1658.7	1563.3	1474.1	1386.4	1318.6
32.5°	2292.6	2129.5	2048.0	1971.1	1834.1	1707.9	1598.7	1504.8	1420.2	1329.4	1254.0
35°	2237.2	2058.8	1968.0	1900.3	1767.9	1637.2	1532.5	1440.2	1358.7	1264.8	1183.2
37.5°	2166.5	1994.1	1901.8	1818.7	1681.8	1561.8	1463.3	1374.0	1294.0	1207.9	1117.1
40°	2083.4	1903.3	1823.3	1735.6	1591.0	1477.1	1384.8	1304.8	1224.8	1143.2	1055.5
42.5°	1989.5	1811.0	1721.8	1637.2	1498.7	1386.4	1300.2	1227.9	1154.0	1078.6	984.8
45°	1877.2	1709.5	1623.3	1543.3	1409.4	1294.0	1215.6	1146.3	1083.2	1006.3	923.2
47.5°	1751.0	1604.8	1517.1	1431.0	1300.2	1200.2	1123.2	1064.8	1010.9	934.0	858.6
50°	1627.9	1483.3	1412.5	1324.8	1204.8	1110.9	1032.5	983.2	941.7	866.3	798.6
52.5°	1472.5	1363.3	1295.6	1220.2	1104.8	1009.4	947.8	904.7	855.5	797.0	737.0
55°	1335.6	1234.0	1180.2	1109.4	995.5	910.9	858.6	818.6	780.1	727.8	680.1
57.5°	1180.2	1117.1	1063.2	1001.7	889.4	817.0	770.9	737.0	701.6	658.6	620.1
60°	1017.1	987.8	935.5	886.3	790.9	727.8	689.3	658.6	624.7	589.3	557.0
62.5°	872.4	855.5	824.7	786.3	697.0	643.2	604.7	581.6	557.0	524.7	493.9
65°	735.5	727.8	698.6	670.9	609.3	561.6	527.8	513.9	486.2	461.6	433.9
67.5°	613.9	604.7	587.8	575.5	523.2	478.5	461.6	443.1	420.1	401.6	378.5
70°	490.8	489.3	478.5	463.1	435.4	403.1	386.2	373.9	350.8	337.0	320.0
72.5°	381.6	389.3	380.1	373.9	355.4	332.4	317.0	309.3	290.8	280.0	267.7
75°	284.7	290.8	295.4	284.7	280.0	269.3	255.4	247.7	238.5	223.1	218.5
77.5°	193.9	207.7	207.7	210.8	212.3	206.2	195.4	189.3	178.5	175.4	169.3
80°	127.7	140.0	141.6	144.6	149.3	149.3	141.6	140.0	129.2	127.7	123.1
82.5°	73.9	84.6	90.8	95.4	93.9	100.0	93.9	92.3	86.2	86.2	83.1
85°	40.0	41.5	44.6	47.7	50.8	53.9	53.9	52.3	50.8	49.2	46.2
87.5°	15.4	15.4	16.9	15.4	16.9	20.0	21.5	21.5	20.0	18.5	15.4
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: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5
2.5°	1878.7	1875.7	1872.6	1860.3	1849.5	1831.0	1815.6	1809.5	1808.0	1809.5	1804.9
5°	1824.9	1823.3	1812.6	1791.0	1771.0	1749.5	1734.1	1718.7	1709.5	1709.5	1698.7
7.5°	1774.1	1763.3	1754.1	1726.4	1703.3	1674.1	1651.0	1637.2	1629.5	1612.5	1612.5
10°	1720.2	1704.9	1692.5	1666.4	1632.5	1603.3	1574.1	1557.1	1543.3	1531.0	1526.4
12.5°	1666.4	1654.1	1631.0	1603.3	1569.5	1532.5	1501.8	1489.4	1457.1	1431.0	1432.5
15°	1615.6	1587.9	1577.1	1537.1	1497.1	1461.7	1417.1	1381.7	1355.6	1338.7	1317.1
17.5°	1558.7	1531.0	1511.0	1477.1	1424.8	1369.4	1326.3	1278.6	1252.5	1223.3	1209.4
20°	1495.6	1472.5	1457.1	1403.3	1340.2	1274.0	1226.3	1197.1	1167.9	1146.3	1134.0
22.5°	1441.7	1412.5	1394.0	1321.7	1252.5	1186.3	1149.4	1124.8	1100.2	1081.7	1075.5
25°	1372.5	1355.6	1311.0	1247.9	1163.2	1118.6	1086.3	1054.0	1040.1	1027.8	1014.0
27.5°	1315.6	1274.0	1243.3	1160.2	1107.9	1057.1	1024.8	1000.1	983.2	970.9	960.1
30°	1244.8	1206.3	1163.2	1094.0	1046.3	998.6	969.4	949.4	930.9	923.2	914.0
32.5°	1170.9	1135.5	1094.0	1038.6	980.1	943.2	920.1	898.6	886.3	878.6	867.8
35°	1104.8	1060.2	1032.5	980.1	932.4	890.9	869.4	850.9	837.0	834.0	832.4
37.5°	1034.0	1000.1	974.0	920.1	880.1	844.7	824.7	804.7	797.0	795.5	789.3
40°	972.4	943.2	918.6	867.8	824.7	792.4	777.0	764.7	757.0	757.0	755.5
42.5°	918.6	887.8	863.2	817.0	778.6	749.3	732.4	720.1	717.0	718.6	717.0
45°	858.6	832.4	807.8	760.1	727.8	706.3	687.8	681.6	677.0	678.6	680.1
47.5°	801.7	780.1	755.5	717.0	680.1	657.0	646.2	640.1	640.1	640.1	643.2
50°	750.9	726.3	704.7	664.7	630.9	612.4	603.2	595.5	597.0	598.5	600.1
52.5°	690.9	669.3	653.9	613.9	589.3	566.2	555.5	557.0	555.5	555.5	558.5
55°	638.6	617.0	601.6	564.7	540.1	524.7	515.5	510.8	512.4	509.3	515.5
57.5°	580.1	561.6	550.8	515.5	493.9	480.1	472.4	464.7	467.8	466.2	464.7
60°	529.3	507.8	490.8	466.2	447.8	430.8	426.2	418.5	421.6	418.5	417.0
62.5°	470.8	453.9	441.6	417.0	401.6	387.7	377.0	372.4	370.8	366.2	361.6
65°	412.4	403.1	390.8	366.2	350.8	340.0	333.9	329.3	327.7	315.4	301.6
67.5°	358.5	352.4	340.0	321.6	307.7	297.0	287.7	280.0	270.8	261.6	253.9
70°	307.7	298.5	290.8	273.9	261.6	250.8	241.6	232.3	227.7	218.5	215.4
72.5°	258.5	249.3	241.6	226.2	215.4	204.6	201.6	190.8	186.2	184.6	184.6
75°	207.7	200.0	195.4	181.6	172.3	164.6	160.0	156.9	153.9	150.8	146.2
77.5°	158.5	153.9	150.8	141.6	133.9	129.2	127.7	116.9	113.9	110.8	107.7
80°	115.4	113.9	110.8	103.1	100.0	89.2	89.2	86.2	84.6	84.6	84.6
82.5°	78.5	75.4	73.9	66.2	64.6	63.1	61.5	60.0	61.5	60.0	61.5
85°	41.5	40.0	38.5	38.5	38.5	38.5	38.5	38.5	38.5	36.9	38.5
87.5°	15.4	15.4	15.4	15.4	13.8	15.4	15.4	13.8	15.4	15.4	15.4
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: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5
2.5°	1804.9	1811.0	1803.3	1808.0	1797.2	1795.6	1797.2	1797.2	1798.7	1800.3	1801.8
5°	1703.3	1701.8	1692.5	1686.4	1681.8	1686.4	1689.5	1692.5	1689.5	1692.5	1694.1
7.5°	1607.9	1603.3	1598.7	1587.9	1591.0	1587.9	1597.2	1592.5	1592.5	1600.2	1606.4
10°	1523.3	1514.1	1511.0	1498.7	1489.4	1487.9	1498.7	1503.3	1507.9	1511.0	1523.3
12.5°	1414.0	1400.2	1389.4	1394.0	1367.9	1378.7	1381.7	1375.6	1394.0	1415.6	1403.3
15°	1297.1	1298.6	1277.1	1269.4	1247.9	1254.0	1255.6	1271.0	1286.3	1284.8	1303.3
17.5°	1210.9	1201.7	1183.2	1181.7	1172.5	1177.1	1175.6	1187.9	1183.2	1190.9	1206.3
20°	1130.9	1124.8	1109.4	1103.2	1106.3	1103.2	1104.8	1106.3	1110.9	1127.9	1124.8
22.5°	1067.8	1060.2	1060.2	1052.5	1043.2	1040.1	1047.8	1052.5	1058.6	1061.7	1069.4
25°	1012.5	1006.3	998.6	994.0	986.3	987.8	992.4	998.6	1003.2	1009.4	1015.5
27.5°	955.5	955.5	947.8	946.3	943.2	941.7	947.8	950.9	950.9	955.5	961.7
30°	910.9	910.9	903.2	901.7	900.1	900.1	904.7	906.3	907.8	912.4	915.5
32.5°	867.8	866.3	863.2	864.7	863.2	864.7	864.7	866.3	869.4	870.9	877.0
35°	827.8	829.3	826.3	826.3	824.7	826.3	829.3	830.9	832.4	835.5	835.5
37.5°	789.3	792.4	790.9	795.5	795.5	795.5	795.5	798.6	798.6	798.6	797.0
40°	755.5	755.5	754.0	757.0	760.1	760.1	761.6	761.6	763.2	763.2	761.6
42.5°	717.0	720.1	724.7	726.3	729.3	727.8	732.4	730.9	732.4	729.3	726.3
45°	681.6	681.6	687.8	693.9	695.5	695.5	695.5	698.6	695.5	690.9	689.3
47.5°	643.2	646.2	649.3	657.0	658.6	658.6	658.6	658.6	655.5	655.5	655.5
50°	604.7	606.2	607.8	610.9	615.5	613.9	613.9	613.9	620.1	613.9	615.5
52.5°	558.5	560.1	561.6	567.8	566.2	566.2	567.8	567.8	572.4	570.9	567.8
55°	512.4	512.4	515.5	515.5	515.5	518.5	520.1	523.2	521.6	523.2	524.7
57.5°	466.2	463.1	461.6	461.6	466.2	464.7	466.2	466.2	472.4	475.5	477.0
60°	412.4	412.4	410.8	401.6	401.6	400.1	404.7	407.8	410.8	424.7	423.1
62.5°	357.0	350.8	344.7	346.2	337.0	341.6	338.5	341.6	350.8	361.6	363.1
65°	301.6	297.0	290.8	289.3	286.2	290.8	289.3	290.8	295.4	301.6	309.3
67.5°	252.3	250.8	247.7	246.2	246.2	246.2	249.3	249.3	250.8	255.4	260.0
70°	215.4	213.9	215.4	212.3	213.9	212.3	213.9	215.4	217.0	218.5	223.1
72.5°	181.6	181.6	181.6	178.5	181.6	180.0	180.0	181.6	183.1	184.6	187.7
75°	144.6	141.6	138.5	135.4	133.9	136.9	138.5	136.9	141.6	147.7	147.7
77.5°	109.2	107.7	107.7	107.7	109.2	107.7	110.8	109.2	110.8	110.8	113.9
80°	84.6	83.1	84.6	84.6	83.1	86.2	84.6	84.6	86.2	87.7	86.2
82.5°	61.5	63.1	61.5	61.5	61.5	64.6	61.5	61.5	61.5	63.1	63.1
85°	38.5	38.5	38.5	38.5	40.0	38.5	40.0	38.5	41.5	40.0	40.0
87.5°	13.8	15.4	16.9	16.9	16.9	16.9	15.4	16.9	18.5	16.9	18.5
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: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5	1909.5
2.5°	1808.0	1815.6	1812.6	1801.8	1806.4	1815.6	1824.9	1837.2	1844.9	1851.0	1854.1
5°	1701.8	1715.6	1712.6	1712.6	1718.7	1734.1	1749.5	1775.6	1784.9	1795.6	1811.0
7.5°	1607.9	1618.7	1627.9	1631.0	1640.2	1660.2	1680.2	1709.5	1732.6	1744.9	1754.1
10°	1524.8	1532.5	1546.4	1554.1	1563.3	1587.9	1617.2	1647.9	1671.0	1692.5	1704.9
12.5°	1418.7	1449.4	1467.9	1480.2	1492.5	1529.4	1552.5	1586.4	1614.1	1634.1	1652.5
15°	1300.2	1337.1	1347.9	1395.6	1426.4	1455.6	1491.0	1531.0	1557.1	1580.2	1604.8
17.5°	1200.2	1226.3	1238.6	1289.4	1315.6	1361.7	1412.5	1463.3	1503.3	1520.2	1544.8
20°	1137.1	1150.9	1175.6	1192.5	1220.2	1274.0	1329.4	1391.0	1451.0	1467.9	1492.5
22.5°	1072.5	1090.9	1107.9	1130.9	1152.5	1189.4	1244.8	1312.5	1377.1	1407.9	1437.1
25°	1014.0	1032.5	1043.2	1067.8	1087.8	1124.8	1163.2	1232.5	1309.4	1335.6	1381.7
27.5°	967.8	978.6	997.1	1007.8	1030.9	1064.8	1100.2	1152.5	1227.9	1272.5	1317.1
30°	921.7	929.4	944.8	960.1	977.1	1000.1	1040.1	1090.9	1160.2	1198.6	1243.3
32.5°	875.5	887.8	897.1	907.8	926.3	954.0	981.7	1030.9	1086.3	1129.4	1174.0
35°	837.0	841.7	854.0	866.3	878.6	903.2	932.4	980.1	1029.4	1063.2	1103.2
37.5°	795.5	803.2	812.4	817.0	837.0	852.4	883.2	920.1	978.6	1000.1	1040.1
40°	763.2	761.6	770.9	778.6	787.8	812.4	830.9	870.9	917.1	950.9	975.5
42.5°	723.2	723.2	726.3	735.5	747.8	763.2	784.7	818.6	866.3	890.9	920.1
45°	690.9	686.3	687.8	693.9	701.6	717.0	738.6	767.8	815.5	835.5	866.3
47.5°	652.4	647.8	647.8	653.9	660.1	670.9	687.8	721.6	760.1	786.3	809.3
50°	609.3	610.9	609.3	613.9	617.0	627.8	646.2	673.9	709.3	730.9	757.0
52.5°	569.3	566.2	564.7	567.8	573.9	581.6	601.6	626.2	660.1	681.6	704.7
55°	520.1	523.2	523.2	523.2	532.4	535.5	550.8	575.5	609.3	626.2	647.8
57.5°	475.5	473.9	477.0	475.5	483.1	493.9	506.2	524.7	558.5	575.5	595.5
60°	426.2	427.8	429.3	429.3	435.4	446.2	460.1	477.0	504.7	521.6	540.1
62.5°	366.2	373.9	381.6	384.7	393.9	401.6	410.8	429.3	453.9	466.2	483.1
65°	309.3	320.0	330.8	338.5	344.7	352.4	364.7	381.6	401.6	413.9	430.8
67.5°	260.0	267.7	281.6	289.3	301.6	310.8	318.5	332.4	357.0	361.6	375.4
70°	224.6	227.7	233.9	240.0	253.9	261.6	270.8	284.7	303.1	313.9	321.6
72.5°	189.3	190.8	193.9	200.0	206.2	215.4	226.2	238.5	255.4	260.0	270.8
75°	150.8	160.0	160.0	164.6	169.3	173.9	183.1	195.4	206.2	213.9	220.0
77.5°	112.3	116.9	120.0	127.7	133.9	138.5	144.6	153.9	160.0	166.2	170.8
80°	87.7	89.2	90.8	90.8	93.9	100.0	106.2	112.3	120.0	123.1	127.7
82.5°	64.6	64.6	64.6	67.7	69.2	70.8	70.8	73.9	81.6	84.6	89.2
85°	41.5	41.5	41.5	41.5	43.1	44.6	46.2	47.7	47.7	47.7	50.8
87.5°	16.9	20.0	18.5	20.0	20.0	20.0	20.0	21.5	21.5	23.1	23.1
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: P1000447

CATALOG NUMBER: SA4XXRDP-B1195DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1909.5	1909.5	1909.5	1909.5
2.5°	1866.4	1875.7	1891.0	1912.6
5°	1823.3	1849.5	1874.1	1906.4
7.5°	1784.9	1815.6	1849.5	1895.7
10°	1740.2	1778.7	1821.8	1878.7
12.5°	1687.9	1741.8	1791.0	1852.6
15°	1649.5	1689.5	1752.6	1824.9
17.5°	1595.6	1649.5	1712.6	1794.1
20°	1544.8	1601.8	1672.5	1757.2
22.5°	1491.0	1555.6	1626.4	1717.2
25°	1435.6	1504.8	1575.6	1672.5
27.5°	1384.8	1447.9	1527.9	1626.4
30°	1323.3	1395.6	1472.5	1575.6
32.5°	1263.3	1338.7	1417.1	1520.2
35°	1198.6	1274.0	1360.2	1458.7
37.5°	1135.5	1218.6	1297.1	1392.5
40°	1066.3	1152.5	1234.0	1331.0
42.5°	998.6	1087.8	1169.4	1252.5
45°	935.5	1023.2	1097.1	1175.6
47.5°	875.5	954.0	1029.4	1100.2
50°	817.0	883.2	952.4	1010.9
52.5°	755.5	818.6	874.0	926.3
55°	700.1	749.3	798.6	846.3
57.5°	633.9	683.2	726.3	763.2
60°	578.5	609.3	650.9	689.3
62.5°	515.5	550.8	583.2	607.8
65°	453.9	484.7	509.3	530.8
67.5°	401.6	420.1	438.5	461.6
70°	338.5	353.9	375.4	392.4
72.5°	284.7	297.0	307.7	327.7
75°	230.8	241.6	247.7	266.2
77.5°	178.5	189.3	193.9	204.6
80°	136.9	138.5	144.6	153.9
82.5°	93.9	96.9	98.5	106.2
85°	53.9	61.5	60.0	63.1
87.5°	23.1	24.6	27.7	30.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)