

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: P1000432

Luminaire Tested: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000432
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-B1195DB2750-4F0-XX-W2A-A_3000K
Description: Define 4 Regressed Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

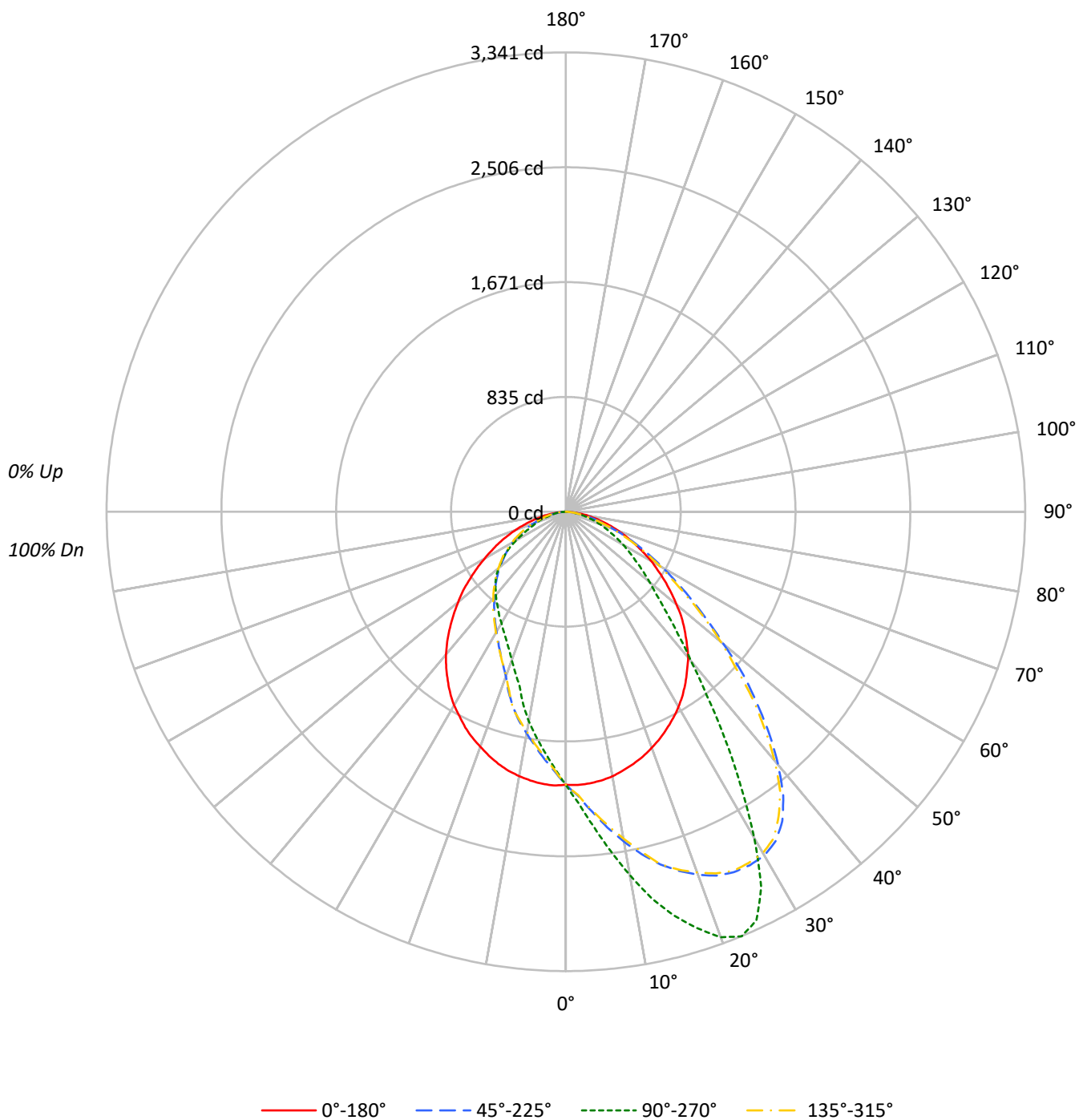
Lumens per Lamp: N/A
Luminaire Lumens: 5020.0 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

Luminous Intensity Polar Plot





TEST NUMBER: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-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	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°	16194	16194	16194	16194
5°	16230	18784	16256	14356
10°	16178	22220	16165	12813
15°	16021	25667	16021	11010
20°	15858	28578	15775	9956
25°	15650	29501	15578	9243
30°	15429	25825	15309	8814
35°	15101	20104	14910	8554
40°	14735	15075	14445	8415
45°	14099	11902	13749	8341
50°	13337	10049	12972	8100
55°	12512	8759	12103	7667
60°	11692	7882	11170	6786
65°	10653	6946	10313	5835
70°	9730	6256	9270	5264
75°	8721	5243	8116	4487
80°	7514	4433	6837	4208
85°	6138	3742	5090	3742

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 24212 cd/sqm

TEST NUMBER: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.3	3.8
10°-20°	580.7	11.6
20°-30°	909.6	18.1
30°-40°	1010.1	20.1
40°-50°	895.1	17.8
50°-60°	697.6	13.9
60°-70°	456.3	9.1
70°-80°	223.9	4.5
80°-90°	54.5	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°	1682.6	33.5
0°-40°	2692.7	53.6
0°-60°	4285.3	85.4
0°-90°	5020.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5020.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1986	1986	1986	1986	1986	
5°	1983	2295	1986	1754	1983	188
15°	1898	3040	1898	1304	1898	535
25°	1739	3279	1731	1027	1739	802
35°	1517	2020	1498	859	1517	948
45°	1223	1032	1192	723	1223	943
55°	880	616	851	539	880	787
65°	552	360	534	302	552	551
75°	277	166	258	142	277	294
85°	66	40	54	40	66	78
90°	0	0	0	0	0	

TEST NUMBER: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9
2.5°	1989.1	2006.7	2016.3	2024.3	2040.3	2046.7	2059.5	2062.7	2075.5	2073.9	2069.1
5°	1982.7	2013.1	2035.5	2059.5	2088.3	2104.3	2121.9	2147.5	2160.3	2177.9	2189.1
7.5°	1971.4	2013.1	2049.9	2086.7	2133.1	2158.7	2181.1	2221.1	2254.7	2283.5	2315.5
10°	1953.8	2006.7	2061.1	2110.7	2174.7	2205.1	2238.7	2297.9	2344.3	2384.3	2435.5
12.5°	1926.6	2000.3	2061.1	2128.3	2209.9	2251.5	2296.3	2366.7	2421.1	2486.7	2550.7
15°	1897.8	1979.5	2059.5	2147.5	2240.3	2288.3	2333.1	2427.5	2510.7	2585.9	2656.3
17.5°	1865.8	1955.4	2043.5	2141.1	2253.1	2312.3	2365.1	2478.7	2569.9	2667.5	2737.9
20°	1827.4	1925.0	2025.9	2134.7	2261.1	2326.7	2385.9	2515.5	2616.3	2721.9	2810.0
22.5°	1785.8	1891.4	2001.9	2120.3	2251.5	2323.5	2392.3	2531.5	2648.3	2745.9	2864.4
25°	1739.4	1851.4	1965.0	2089.9	2237.1	2315.5	2385.9	2523.5	2648.3	2776.4	2891.6
27.5°	1691.4	1806.6	1925.0	2056.3	2206.7	2283.5	2363.5	2496.3	2641.9	2781.2	2898.0
30°	1638.6	1750.6	1875.4	2000.3	2160.3	2237.1	2318.7	2462.7	2621.1	2760.3	2886.8
32.5°	1581.0	1696.2	1814.6	1944.2	2101.1	2184.3	2259.5	2422.7	2584.3	2721.9	2840.4
35°	1517.0	1625.8	1737.8	1870.6	2025.9	2101.1	2190.7	2360.3	2523.5	2669.1	2745.9
37.5°	1448.2	1552.2	1656.2	1787.4	1936.2	2027.5	2115.5	2286.7	2459.5	2557.1	2597.1
40°	1384.2	1475.4	1566.6	1693.0	1843.4	1937.8	2027.5	2205.1	2357.1	2432.3	2401.9
42.5°	1302.6	1397.0	1478.6	1595.4	1747.4	1835.4	1926.6	2110.7	2233.9	2264.3	2189.1
45°	1222.6	1301.0	1379.4	1493.0	1653.0	1728.2	1825.8	1997.1	2099.5	2072.3	1961.8
47.5°	1144.1	1208.2	1281.8	1392.2	1536.2	1625.8	1717.0	1865.8	1937.8	1899.4	1745.8
50°	1051.3	1115.3	1192.2	1288.2	1427.4	1513.8	1585.8	1723.4	1777.8	1683.4	1497.8
52.5°	963.3	1019.3	1084.9	1174.5	1307.4	1385.8	1464.2	1582.6	1600.2	1491.4	1296.2
55°	880.1	924.9	993.7	1065.7	1187.4	1270.6	1325.0	1425.8	1421.0	1285.0	1116.9
57.5°	793.7	835.3	881.7	956.9	1072.1	1134.5	1193.8	1281.8	1235.4	1120.1	953.7
60°	716.9	740.9	787.3	859.3	956.9	1011.3	1057.7	1105.7	1065.7	940.9	812.9
62.5°	632.1	659.3	692.9	750.5	836.9	888.1	921.7	942.5	900.9	804.9	688.1
65°	552.1	576.1	611.3	662.5	728.1	766.5	784.1	798.5	776.1	667.3	574.5
67.5°	480.1	496.1	528.1	561.7	632.1	641.7	665.7	672.1	627.3	544.1	470.5
70°	408.1	424.1	438.5	478.5	510.5	528.1	532.9	532.9	488.1	433.7	372.8
72.5°	340.8	350.4	364.8	392.0	409.7	422.5	428.9	420.9	379.2	334.4	289.6
75°	276.8	281.6	294.4	312.0	326.4	321.6	320.0	310.4	280.0	248.0	222.4
77.5°	212.8	216.0	230.4	235.2	235.2	240.0	233.6	224.0	198.4	174.4	163.2
80°	160.0	164.8	166.4	169.6	166.4	166.4	161.6	145.6	132.8	121.6	113.6
82.5°	110.4	113.6	115.2	110.4	113.6	108.8	100.8	89.6	81.6	80.0	76.8
85°	65.6	67.2	65.6	65.6	60.8	59.2	52.8	51.2	48.0	48.0	46.4
87.5°	32.0	30.4	27.2	24.0	24.0	22.4	24.0	20.8	24.0	22.4	20.8
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: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9
2.5°	2081.9	2099.5	2101.1	2117.1	2112.3	2104.3	2118.7	2109.1	2128.3	2121.9	2129.9
5°	2203.5	2227.5	2248.3	2261.1	2283.5	2278.7	2302.7	2294.7	2312.3	2294.7	2317.1
7.5°	2345.9	2385.9	2406.7	2440.3	2449.9	2451.5	2480.3	2486.7	2497.9	2486.7	2499.5
10°	2485.1	2533.1	2581.1	2608.3	2625.9	2649.9	2675.5	2686.7	2694.7	2683.5	2691.5
12.5°	2611.5	2686.7	2739.5	2794.0	2806.8	2827.6	2854.8	2851.6	2883.6	2877.2	2891.6
15°	2728.3	2811.6	2875.6	2918.8	2954.0	2971.6	3022.8	3026.0	3024.4	3040.4	3030.8
17.5°	2832.4	2902.8	2994.0	3050.0	3093.2	3093.2	3122.0	3181.2	3176.4	3174.8	3184.4
20°	2917.2	2997.2	3082.0	3176.4	3211.6	3218.0	3258.0	3288.4	3293.2	3293.2	3293.2
22.5°	2981.2	3075.6	3166.8	3234.0	3261.2	3283.6	3318.8	3338.0	3344.4	3341.2	3344.4
25°	3013.2	3102.8	3195.6	3256.4	3272.4	3285.2	3288.4	3299.6	3298.0	3278.8	3290.0
27.5°	3019.6	3106.0	3166.8	3182.8	3174.8	3166.8	3115.6	3120.4	3106.0	3077.2	3088.4
30°	2990.8	3037.2	3035.6	2986.0	2971.6	2938.0	2891.6	2822.8	2766.8	2742.7	2750.7
32.5°	2886.8	2886.8	2829.2	2717.1	2667.5	2606.7	2523.5	2461.1	2387.5	2371.5	2401.9
35°	2742.7	2661.1	2555.5	2408.3	2333.1	2288.3	2144.3	2099.5	2037.1	2019.5	2033.9
37.5°	2518.7	2382.7	2229.1	2091.5	2027.5	1947.4	1821.0	1757.0	1712.2	1681.8	1696.2
40°	2267.5	2102.7	1942.6	1773.0	1702.6	1637.0	1542.6	1485.0	1413.0	1416.2	1421.0
42.5°	2027.5	1833.8	1654.6	1497.8	1430.6	1376.2	1310.6	1240.2	1214.6	1206.6	1198.6
45°	1773.0	1566.6	1398.6	1281.8	1221.0	1169.7	1108.9	1068.9	1038.5	1032.1	1040.1
47.5°	1533.0	1358.6	1198.6	1089.7	1040.1	1014.5	966.5	929.7	910.5	894.5	904.1
50°	1315.4	1152.1	1024.1	932.9	897.7	880.1	835.3	816.1	796.9	792.1	790.5
52.5°	1136.1	996.9	886.5	812.9	785.7	776.1	742.5	715.3	699.3	704.1	707.3
55°	972.9	854.5	768.1	708.9	686.5	675.3	651.3	632.1	620.9	616.1	619.3
57.5°	828.9	726.5	664.1	616.1	598.5	593.7	568.1	561.7	553.7	548.9	548.9
60°	697.7	625.7	568.1	540.9	521.7	516.9	497.7	489.7	488.1	483.3	480.1
62.5°	587.3	528.1	488.1	459.3	451.3	449.7	436.9	427.3	422.5	419.3	419.3
65°	491.3	448.1	414.5	393.6	387.2	384.0	369.6	366.4	363.2	360.0	358.4
67.5°	409.7	371.2	347.2	332.8	324.8	326.4	318.4	312.0	312.0	310.4	308.8
70°	331.2	307.2	286.4	278.4	275.2	272.0	268.8	264.0	262.4	262.4	262.4
72.5°	260.8	244.8	233.6	228.8	225.6	222.4	219.2	219.2	219.2	217.6	217.6
75°	200.0	193.6	185.6	180.8	180.8	184.0	179.2	174.4	169.6	166.4	168.0
77.5°	150.4	147.2	142.4	134.4	136.0	132.8	132.8	129.6	131.2	131.2	128.0
80°	110.4	105.6	104.0	99.2	100.8	99.2	97.6	97.6	94.4	94.4	94.4
82.5°	76.8	72.0	72.0	70.4	68.8	68.8	67.2	67.2	68.8	65.6	65.6
85°	46.4	44.8	44.8	41.6	41.6	41.6	41.6	43.2	41.6	40.0	40.0
87.5°	20.8	22.4	20.8	19.2	19.2	19.2	17.6	17.6	16.0	17.6	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: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9
2.5°	2134.7	2123.5	2121.9	2121.9	2104.3	2113.9	2094.7	2073.9	2064.3	2064.3	2046.7
5°	2312.3	2301.1	2289.9	2272.3	2272.3	2262.7	2232.3	2201.9	2179.5	2160.3	2139.5
7.5°	2494.7	2483.5	2451.5	2433.9	2443.5	2424.3	2384.3	2333.1	2294.7	2264.3	2221.1
10°	2693.1	2662.7	2646.7	2637.1	2603.5	2582.7	2536.3	2461.1	2413.1	2373.1	2317.1
12.5°	2854.8	2864.4	2803.6	2808.4	2774.8	2745.9	2673.9	2601.9	2529.9	2473.9	2390.7
15°	3029.2	3000.4	2963.6	2934.8	2923.6	2888.4	2827.6	2731.5	2653.1	2565.1	2470.7
17.5°	3166.8	3144.4	3109.2	3082.0	3058.0	2973.2	2922.0	2837.2	2729.9	2643.5	2528.3
20°	3283.6	3262.8	3213.2	3195.6	3152.4	3091.6	3018.0	2886.8	2790.8	2696.3	2584.3
22.5°	3333.2	3312.4	3269.2	3246.8	3219.6	3160.4	3090.0	2965.2	2846.8	2728.3	2609.9
25°	3291.6	3291.6	3270.8	3262.8	3238.8	3186.0	3114.0	3008.4	2882.0	2753.9	2613.1
27.5°	3090.0	3130.0	3144.4	3152.4	3152.4	3154.0	3104.4	3002.0	2878.8	2753.9	2606.7
30°	2798.8	2866.0	2925.2	2942.8	2973.2	3006.8	3027.6	2978.0	2867.6	2736.3	2589.1
32.5°	2432.3	2518.7	2629.1	2656.3	2697.9	2798.8	2854.8	2875.6	2814.8	2699.5	2542.7
35°	2067.5	2176.3	2243.5	2326.7	2365.1	2513.9	2638.7	2713.9	2699.5	2630.7	2488.3
37.5°	1749.0	1811.4	1893.0	1981.1	2057.9	2200.3	2355.5	2501.1	2560.3	2526.7	2419.5
40°	1443.4	1517.0	1614.6	1686.6	1739.4	1881.8	2073.9	2232.3	2361.9	2382.7	2317.1
42.5°	1227.4	1301.0	1360.2	1438.6	1480.2	1617.8	1787.4	1985.9	2139.5	2221.1	2192.3
45°	1060.9	1105.7	1153.7	1198.6	1249.8	1371.4	1528.2	1745.8	1918.6	2033.9	2045.1
47.5°	915.3	955.3	996.9	1038.5	1067.3	1161.7	1305.8	1483.4	1672.2	1830.6	1893.0
50°	812.9	832.1	862.5	886.5	920.1	1001.7	1116.9	1270.6	1470.6	1641.8	1723.4
52.5°	712.1	736.1	760.1	780.9	803.3	860.9	966.5	1099.3	1272.2	1448.2	1549.0
55°	627.3	646.5	668.9	683.3	696.1	747.3	827.3	929.7	1078.5	1245.0	1369.8
57.5°	558.5	566.5	585.7	593.7	608.1	649.7	707.3	798.5	918.5	1080.1	1182.5
60°	483.3	499.3	513.7	520.1	531.3	560.1	600.1	684.9	788.9	907.3	1024.1
62.5°	422.5	428.9	440.1	448.1	456.1	486.5	520.1	584.1	662.5	761.7	868.9
65°	366.4	369.6	376.0	387.2	392.0	414.5	433.7	480.1	553.7	628.9	736.1
67.5°	308.8	312.0	320.0	326.4	331.2	345.6	366.4	400.1	440.1	523.3	582.5
70°	264.0	264.0	268.8	272.0	276.8	283.2	294.4	320.0	356.8	409.7	464.1
72.5°	220.8	220.8	220.8	225.6	225.6	230.4	236.8	254.4	280.0	321.6	356.8
75°	171.2	172.8	176.0	176.0	177.6	184.0	188.8	193.6	206.4	233.6	265.6
77.5°	129.6	132.8	134.4	131.2	134.4	134.4	140.8	147.2	153.6	161.6	185.6
80°	96.0	97.6	94.4	96.0	96.0	99.2	102.4	100.8	104.0	113.6	120.0
82.5°	64.0	65.6	65.6	65.6	65.6	70.4	70.4	68.8	70.4	72.0	73.6
85°	40.0	38.4	38.4	40.0	38.4	38.4	40.0	41.6	40.0	41.6	43.2
87.5°	17.6	17.6	17.6	17.6	16.0	16.0	17.6	16.0	17.6	16.0	14.4
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: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9
2.5°	2037.1	2029.1	2024.3	2022.7	2008.3	2000.3	1995.5	1992.3	1987.5	1974.7	1963.4
5°	2113.9	2091.5	2080.3	2067.5	2045.1	2019.5	1998.7	1985.9	1969.8	1944.2	1920.2
7.5°	2185.9	2152.3	2129.9	2112.3	2073.9	2032.3	1998.7	1971.4	1941.0	1905.8	1872.2
10°	2261.1	2206.7	2177.9	2150.7	2094.7	2040.3	1992.3	1952.2	1909.0	1862.6	1825.8
12.5°	2320.3	2248.3	2216.3	2177.9	2109.1	2045.1	1984.3	1929.8	1873.8	1824.2	1771.4
15°	2389.1	2299.5	2262.7	2213.1	2118.7	2035.5	1957.0	1897.8	1840.2	1766.6	1710.6
17.5°	2429.1	2325.1	2272.3	2229.1	2126.7	2025.9	1934.6	1861.0	1793.8	1720.2	1661.0
20°	2469.1	2350.7	2291.5	2230.7	2109.1	2001.9	1905.8	1817.8	1747.4	1667.4	1606.6
22.5°	2481.9	2344.3	2281.9	2225.9	2097.9	1977.9	1867.4	1777.8	1696.2	1616.2	1547.4
25°	2481.9	2342.7	2269.1	2197.1	2062.7	1939.4	1829.0	1731.4	1640.2	1560.2	1491.4
27.5°	2456.3	2310.7	2233.9	2168.3	2029.1	1896.2	1782.6	1675.4	1587.4	1507.4	1429.0
30°	2424.3	2264.3	2187.5	2109.1	1974.7	1848.2	1725.0	1625.8	1533.0	1441.8	1371.4
32.5°	2384.3	2214.7	2129.9	2049.9	1907.4	1776.2	1662.6	1565.0	1477.0	1382.6	1304.2
35°	2326.7	2141.1	2046.7	1976.3	1838.6	1702.6	1593.8	1497.8	1413.0	1315.4	1230.6
37.5°	2253.1	2073.9	1977.9	1891.4	1749.0	1624.2	1521.8	1429.0	1345.8	1256.2	1161.7
40°	2166.7	1979.5	1896.2	1805.0	1654.6	1536.2	1440.2	1357.0	1273.8	1189.0	1097.7
42.5°	2069.1	1883.4	1790.6	1702.6	1558.6	1441.8	1352.2	1277.0	1200.2	1121.7	1024.1
45°	1952.2	1777.8	1688.2	1605.0	1465.8	1345.8	1264.2	1192.2	1126.5	1046.5	960.1
47.5°	1821.0	1669.0	1577.8	1488.2	1352.2	1248.2	1168.1	1107.3	1051.3	971.3	892.9
50°	1693.0	1542.6	1469.0	1377.8	1253.0	1155.3	1073.7	1022.5	979.3	900.9	830.5
52.5°	1531.4	1417.8	1347.4	1269.0	1148.9	1049.7	985.7	940.9	889.7	828.9	766.5
55°	1389.0	1283.4	1227.4	1153.7	1035.3	947.3	892.9	851.3	811.3	756.9	707.3
57.5°	1227.4	1161.7	1105.7	1041.7	924.9	849.7	801.7	766.5	729.7	684.9	644.9
60°	1057.7	1027.3	972.9	921.7	822.5	756.9	716.9	684.9	649.7	612.9	579.3
62.5°	907.3	889.7	857.7	817.7	724.9	668.9	628.9	604.9	579.3	545.7	513.7
65°	764.9	756.9	726.5	697.7	633.7	584.1	548.9	534.5	505.7	480.1	451.3
67.5°	638.5	628.9	611.3	598.5	544.1	497.7	480.1	460.9	436.9	417.7	393.6
70°	510.5	508.9	497.7	481.7	452.9	419.3	401.7	388.8	364.8	350.4	332.8
72.5°	396.9	404.9	395.3	388.8	369.6	345.6	329.6	321.6	302.4	291.2	278.4
75°	296.0	302.4	307.2	296.0	291.2	280.0	265.6	257.6	248.0	232.0	227.2
77.5°	201.6	216.0	216.0	219.2	220.8	214.4	203.2	196.8	185.6	182.4	176.0
80°	132.8	145.6	147.2	150.4	155.2	155.2	147.2	145.6	134.4	132.8	128.0
82.5°	76.8	88.0	94.4	99.2	97.6	104.0	97.6	96.0	89.6	89.6	86.4
85°	41.6	43.2	46.4	49.6	52.8	56.0	56.0	54.4	52.8	51.2	48.0
87.5°	16.0	16.0	17.6	16.0	17.6	20.8	22.4	22.4	20.8	19.2	16.0
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: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9
2.5°	1953.8	1950.6	1947.4	1934.6	1923.4	1904.2	1888.2	1881.8	1880.2	1881.8	1877.0
5°	1897.8	1896.2	1885.0	1862.6	1841.8	1819.4	1803.4	1787.4	1777.8	1777.8	1766.6
7.5°	1845.0	1833.8	1824.2	1795.4	1771.4	1741.0	1717.0	1702.6	1694.6	1677.0	1677.0
10°	1789.0	1773.0	1760.2	1733.0	1697.8	1667.4	1637.0	1619.4	1605.0	1592.2	1587.4
12.5°	1733.0	1720.2	1696.2	1667.4	1632.2	1593.8	1561.8	1549.0	1515.4	1488.2	1489.8
15°	1680.2	1651.4	1640.2	1598.6	1557.0	1520.2	1473.8	1437.0	1409.8	1392.2	1369.8
17.5°	1621.0	1592.2	1571.4	1536.2	1481.8	1424.2	1379.4	1329.8	1302.6	1272.2	1257.8
20°	1555.4	1531.4	1515.4	1459.4	1393.8	1325.0	1275.4	1245.0	1214.6	1192.2	1179.3
22.5°	1499.4	1469.0	1449.8	1374.6	1302.6	1233.8	1195.4	1169.7	1144.1	1124.9	1118.5
25°	1427.4	1409.8	1363.4	1297.8	1209.8	1163.3	1129.7	1096.1	1081.7	1068.9	1054.5
27.5°	1368.2	1325.0	1293.0	1206.6	1152.1	1099.3	1065.7	1040.1	1022.5	1009.7	998.5
30°	1294.6	1254.6	1209.8	1137.7	1088.1	1038.5	1008.1	987.3	968.1	960.1	950.5
32.5°	1217.8	1180.9	1137.7	1080.1	1019.3	980.9	956.9	934.5	921.7	913.7	902.5
35°	1148.9	1102.5	1073.7	1019.3	969.7	926.5	904.1	884.9	870.5	867.3	865.7
37.5°	1075.3	1040.1	1012.9	956.9	915.3	878.5	857.7	836.9	828.9	827.3	820.9
40°	1011.3	980.9	955.3	902.5	857.7	824.1	808.1	795.3	787.3	787.3	785.7
42.5°	955.3	923.3	897.7	849.7	809.7	779.3	761.7	748.9	745.7	747.3	745.7
45°	892.9	865.7	840.1	790.5	756.9	734.5	715.3	708.9	704.1	705.7	707.3
47.5°	833.7	811.3	785.7	745.7	707.3	683.3	672.1	665.7	665.7	665.7	668.9
50°	780.9	755.3	732.9	691.3	656.1	636.9	627.3	619.3	620.9	622.5	624.1
52.5°	718.5	696.1	680.1	638.5	612.9	588.9	577.7	579.3	577.7	577.7	580.9
55°	664.1	641.7	625.7	587.3	561.7	545.7	536.1	531.3	532.9	529.7	536.1
57.5°	603.3	584.1	572.9	536.1	513.7	499.3	491.3	483.3	486.5	484.9	483.3
60°	550.5	528.1	510.5	484.9	465.7	448.1	443.3	435.3	438.5	435.3	433.7
62.5°	489.7	472.1	459.3	433.7	417.7	403.3	392.0	387.2	385.6	380.8	376.0
65°	428.9	419.3	406.5	380.8	364.8	353.6	347.2	342.4	340.8	328.0	313.6
67.5°	372.8	366.4	353.6	334.4	320.0	308.8	299.2	291.2	281.6	272.0	264.0
70°	320.0	310.4	302.4	284.8	272.0	260.8	251.2	241.6	236.8	227.2	224.0
72.5°	268.8	259.2	251.2	235.2	224.0	212.8	209.6	198.4	193.6	192.0	192.0
75°	216.0	208.0	203.2	188.8	179.2	171.2	166.4	163.2	160.0	156.8	152.0
77.5°	164.8	160.0	156.8	147.2	139.2	134.4	132.8	121.6	118.4	115.2	112.0
80°	120.0	118.4	115.2	107.2	104.0	92.8	92.8	89.6	88.0	88.0	88.0
82.5°	81.6	78.4	76.8	68.8	67.2	65.6	64.0	62.4	64.0	62.4	64.0
85°	43.2	41.6	40.0	40.0	40.0	40.0	40.0	40.0	40.0	38.4	40.0
87.5°	16.0	16.0	16.0	16.0	14.4	16.0	16.0	14.4	16.0	16.0	16.0
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: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9
2.5°	1877.0	1883.4	1875.4	1880.2	1869.0	1867.4	1869.0	1869.0	1870.6	1872.2	1873.8
5°	1771.4	1769.8	1760.2	1753.8	1749.0	1753.8	1757.0	1760.2	1757.0	1760.2	1761.8
7.5°	1672.2	1667.4	1662.6	1651.4	1654.6	1651.4	1661.0	1656.2	1656.2	1664.2	1670.6
10°	1584.2	1574.6	1571.4	1558.6	1549.0	1547.4	1558.6	1563.4	1568.2	1571.4	1584.2
12.5°	1470.6	1456.2	1445.0	1449.8	1422.6	1433.8	1437.0	1430.6	1449.8	1472.2	1459.4
15°	1349.0	1350.6	1328.2	1320.2	1297.8	1304.2	1305.8	1321.8	1337.8	1336.2	1355.4
17.5°	1259.4	1249.8	1230.6	1229.0	1219.4	1224.2	1222.6	1235.4	1230.6	1238.6	1254.6
20°	1176.1	1169.7	1153.7	1147.3	1150.5	1147.3	1148.9	1150.5	1155.3	1172.9	1169.7
22.5°	1110.5	1102.5	1102.5	1094.5	1084.9	1081.7	1089.7	1094.5	1100.9	1104.1	1112.1
25°	1052.9	1046.5	1038.5	1033.7	1025.7	1027.3	1032.1	1038.5	1043.3	1049.7	1056.1
27.5°	993.7	993.7	985.7	984.1	980.9	979.3	985.7	988.9	988.9	993.7	1000.1
30°	947.3	947.3	939.3	937.7	936.1	936.1	940.9	942.5	944.1	948.9	952.1
32.5°	902.5	900.9	897.7	899.3	897.7	899.3	899.3	900.9	904.1	905.7	912.1
35°	860.9	862.5	859.3	859.3	857.7	859.3	862.5	864.1	865.7	868.9	868.9
37.5°	820.9	824.1	822.5	827.3	827.3	827.3	827.3	830.5	830.5	830.5	828.9
40°	785.7	785.7	784.1	787.3	790.5	790.5	792.1	792.1	793.7	793.7	792.1
42.5°	745.7	748.9	753.7	755.3	758.5	756.9	761.7	760.1	761.7	758.5	755.3
45°	708.9	708.9	715.3	721.7	723.3	723.3	723.3	726.5	723.3	718.5	716.9
47.5°	668.9	672.1	675.3	683.3	684.9	684.9	684.9	684.9	681.7	681.7	681.7
50°	628.9	630.5	632.1	635.3	640.1	638.5	638.5	638.5	644.9	638.5	640.1
52.5°	580.9	582.5	584.1	590.5	588.9	588.9	590.5	590.5	595.3	593.7	590.5
55°	532.9	532.9	536.1	536.1	536.1	539.3	540.9	544.1	542.5	544.1	545.7
57.5°	484.9	481.7	480.1	480.1	484.9	483.3	484.9	484.9	491.3	494.5	496.1
60°	428.9	428.9	427.3	417.7	417.7	416.1	420.9	424.1	427.3	441.7	440.1
62.5°	371.2	364.8	358.4	360.0	350.4	355.2	352.0	355.2	364.8	376.0	377.6
65°	313.6	308.8	302.4	300.8	297.6	302.4	300.8	302.4	307.2	313.6	321.6
67.5°	262.4	260.8	257.6	256.0	256.0	256.0	259.2	259.2	260.8	265.6	270.4
70°	224.0	222.4	224.0	220.8	222.4	220.8	222.4	224.0	225.6	227.2	232.0
72.5°	188.8	188.8	188.8	185.6	188.8	187.2	187.2	188.8	190.4	192.0	195.2
75°	150.4	147.2	144.0	140.8	139.2	142.4	144.0	142.4	147.2	153.6	153.6
77.5°	113.6	112.0	112.0	112.0	113.6	112.0	115.2	113.6	115.2	115.2	118.4
80°	88.0	86.4	88.0	88.0	86.4	89.6	88.0	88.0	89.6	91.2	89.6
82.5°	64.0	65.6	64.0	64.0	64.0	67.2	64.0	64.0	64.0	65.6	65.6
85°	40.0	40.0	40.0	40.0	41.6	40.0	41.6	40.0	43.2	41.6	41.6
87.5°	14.4	16.0	17.6	17.6	17.6	17.6	16.0	17.6	19.2	17.6	19.2
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: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9	1985.9
2.5°	1880.2	1888.2	1885.0	1873.8	1878.6	1888.2	1897.8	1910.6	1918.6	1925.0	1928.2
5°	1769.8	1784.2	1781.0	1781.0	1787.4	1803.4	1819.4	1846.6	1856.2	1867.4	1883.4
7.5°	1672.2	1683.4	1693.0	1696.2	1705.8	1726.6	1747.4	1777.8	1801.8	1814.6	1824.2
10°	1585.8	1593.8	1608.2	1616.2	1625.8	1651.4	1681.8	1713.8	1737.8	1760.2	1773.0
12.5°	1475.4	1507.4	1526.6	1539.4	1552.2	1590.6	1614.6	1649.8	1678.6	1699.4	1718.6
15°	1352.2	1390.6	1401.8	1451.4	1483.4	1513.8	1550.6	1592.2	1619.4	1643.4	1669.0
17.5°	1248.2	1275.4	1288.2	1341.0	1368.2	1416.2	1469.0	1521.8	1563.4	1581.0	1606.6
20°	1182.5	1197.0	1222.6	1240.2	1269.0	1325.0	1382.6	1446.6	1509.0	1526.6	1552.2
22.5°	1115.3	1134.5	1152.1	1176.1	1198.6	1237.0	1294.6	1365.0	1432.2	1464.2	1494.6
25°	1054.5	1073.7	1084.9	1110.5	1131.3	1169.7	1209.8	1281.8	1361.8	1389.0	1437.0
27.5°	1006.5	1017.7	1036.9	1048.1	1072.1	1107.3	1144.1	1198.6	1277.0	1323.4	1369.8
30°	958.5	966.5	982.5	998.5	1016.1	1040.1	1081.7	1134.5	1206.6	1246.6	1293.0
32.5°	910.5	923.3	932.9	944.1	963.3	992.1	1020.9	1072.1	1129.7	1174.5	1221.0
35°	870.5	875.3	888.1	900.9	913.7	939.3	969.7	1019.3	1070.5	1105.7	1147.3
37.5°	827.3	835.3	844.9	849.7	870.5	886.5	918.5	956.9	1017.7	1040.1	1081.7
40°	793.7	792.1	801.7	809.7	819.3	844.9	864.1	905.7	953.7	988.9	1014.5
42.5°	752.1	752.1	755.3	764.9	777.7	793.7	816.1	851.3	900.9	926.5	956.9
45°	718.5	713.7	715.3	721.7	729.7	745.7	768.1	798.5	848.1	868.9	900.9
47.5°	678.5	673.7	673.7	680.1	686.5	697.7	715.3	750.5	790.5	817.7	841.7
50°	633.7	635.3	633.7	638.5	641.7	652.9	672.1	700.9	737.7	760.1	787.3
52.5°	592.1	588.9	587.3	590.5	596.9	604.9	625.7	651.3	686.5	708.9	732.9
55°	540.9	544.1	544.1	544.1	553.7	556.9	572.9	598.5	633.7	651.3	673.7
57.5°	494.5	492.9	496.1	494.5	502.5	513.7	526.5	545.7	580.9	598.5	619.3
60°	443.3	444.9	446.5	446.5	452.9	464.1	478.5	496.1	524.9	542.5	561.7
62.5°	380.8	388.8	396.9	400.1	409.7	417.7	427.3	446.5	472.1	484.9	502.5
65°	321.6	332.8	344.0	352.0	358.4	366.4	379.2	396.9	417.7	430.5	448.1
67.5°	270.4	278.4	292.8	300.8	313.6	323.2	331.2	345.6	371.2	376.0	390.4
70°	233.6	236.8	243.2	249.6	264.0	272.0	281.6	296.0	315.2	326.4	334.4
72.5°	196.8	198.4	201.6	208.0	214.4	224.0	235.2	248.0	265.6	270.4	281.6
75°	156.8	166.4	166.4	171.2	176.0	180.8	190.4	203.2	214.4	222.4	228.8
77.5°	116.8	121.6	124.8	132.8	139.2	144.0	150.4	160.0	166.4	172.8	177.6
80°	91.2	92.8	94.4	94.4	97.6	104.0	110.4	116.8	124.8	128.0	132.8
82.5°	67.2	67.2	67.2	70.4	72.0	73.6	73.6	76.8	84.8	88.0	92.8
85°	43.2	43.2	43.2	43.2	44.8	46.4	48.0	49.6	49.6	49.6	52.8
87.5°	17.6	20.8	19.2	20.8	20.8	20.8	20.8	22.4	22.4	24.0	24.0
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: P1000432

CATALOG NUMBER: SA4XXRDP-B1195DB2750-4F0-XX-W2A-A_3000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1985.9	1985.9	1985.9	1985.9
2.5°	1941.0	1950.6	1966.6	1989.1
5°	1896.2	1923.4	1949.0	1982.7
7.5°	1856.2	1888.2	1923.4	1971.4
10°	1809.8	1849.8	1894.6	1953.8
12.5°	1755.4	1811.4	1862.6	1926.6
15°	1715.4	1757.0	1822.6	1897.8
17.5°	1659.4	1715.4	1781.0	1865.8
20°	1606.6	1665.8	1739.4	1827.4
22.5°	1550.6	1617.8	1691.4	1785.8
25°	1493.0	1565.0	1638.6	1739.4
27.5°	1440.2	1505.8	1589.0	1691.4
30°	1376.2	1451.4	1531.4	1638.6
32.5°	1313.8	1392.2	1473.8	1581.0
35°	1246.6	1325.0	1414.6	1517.0
37.5°	1180.9	1267.4	1349.0	1448.2
40°	1108.9	1198.6	1283.4	1384.2
42.5°	1038.5	1131.3	1216.2	1302.6
45°	972.9	1064.1	1140.9	1222.6
47.5°	910.5	992.1	1070.5	1144.1
50°	849.7	918.5	990.5	1051.3
52.5°	785.7	851.3	908.9	963.3
55°	728.1	779.3	830.5	880.1
57.5°	659.3	710.5	755.3	793.7
60°	601.7	633.7	676.9	716.9
62.5°	536.1	572.9	606.5	632.1
65°	472.1	504.1	529.7	552.1
67.5°	417.7	436.9	456.1	480.1
70°	352.0	368.0	390.4	408.1
72.5°	296.0	308.8	320.0	340.8
75°	240.0	251.2	257.6	276.8
77.5°	185.6	196.8	201.6	212.8
80°	142.4	144.0	150.4	160.0
82.5°	97.6	100.8	102.4	110.4
85°	56.0	64.0	62.4	65.6
87.5°	24.0	25.6	28.8	32.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)