

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: P1037854

Luminaire Tested: S124RDS-B1195DB2750-4F0-XX-W2A-A_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037854
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: S124RDS-B1195DB2750-4F0-XX-W2A-A_4000K
Description: Define 4 Regressed Direct Surface with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

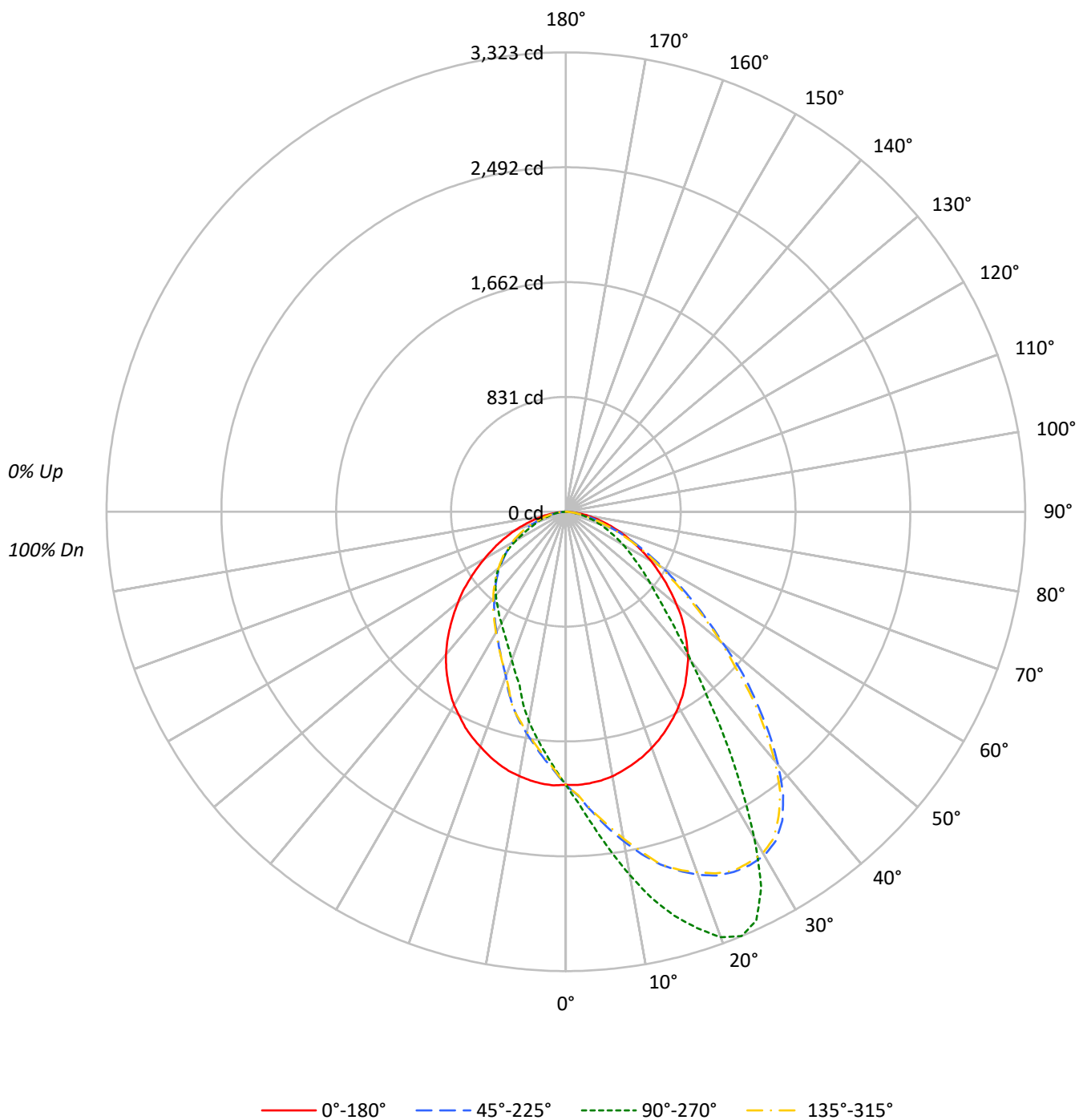
Lumens per Lamp: N/A
Luminaire Lumens: 4992.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.27 / 1.38
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					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°	16103	16103	16103	16103
5°	16139	18679	16165	14276
10°	16088	22097	16075	12742
15°	15933	25524	15933	10949
20°	15769	28418	15687	9901
25°	15563	29336	15492	9192
30°	15343	25681	15223	8765
35°	15017	19991	14827	8506
40°	14653	14991	14364	8368
45°	14020	11837	13671	8295
50°	13263	9993	12899	8054
55°	12443	8709	12036	7625
60°	11627	7838	11108	6747
65°	10593	6908	10255	5804
70°	9675	6223	9220	5236
75°	8674	5214	8072	4461
80°	7471	4410	6800	4184
85°	6100	3724	5062	3724

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 24077 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.2	3.8
10°-20°	577.5	11.6
20°-30°	904.5	18.1
30°-40°	1004.5	20.1
40°-50°	890.1	17.8
50°-60°	693.7	13.9
60°-70°	453.7	9.1
70°-80°	222.6	4.5
80°-90°	54.2	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°	1673.2	33.5
0°-40°	2677.7	53.6
0°-60°	4261.4	85.4
0°-90°	4992.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4992.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1975	1975	1975	1975	1975	
5°	1972	2282	1975	1744	1972	187
15°	1887	3023	1887	1297	1887	532
25°	1730	3260	1722	1022	1730	797
35°	1508	2008	1489	854	1508	943
45°	1216	1026	1186	719	1216	937
55°	875	613	847	536	875	783
65°	549	358	532	301	549	548
75°	275	166	256	142	275	292
85°	65	40	54	40	65	78
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8
2.5°	1978.0	1995.5	2005.0	2013.0	2028.9	2035.2	2048.0	2051.2	2063.9	2062.3	2057.5
5°	1971.6	2001.8	2024.1	2048.0	2076.6	2092.5	2110.0	2135.5	2148.2	2165.7	2176.9
7.5°	1960.5	2001.8	2038.4	2075.0	2121.2	2146.6	2168.9	2208.7	2242.1	2270.8	2302.6
10°	1942.9	1995.5	2049.6	2098.9	2162.5	2192.8	2226.2	2285.1	2331.2	2371.0	2421.9
12.5°	1915.9	1989.1	2049.6	2116.4	2197.6	2238.9	2283.5	2353.5	2407.6	2472.8	2536.5
15°	1887.3	1968.4	2048.0	2135.5	2227.8	2275.5	2320.1	2414.0	2496.7	2571.5	2641.5
17.5°	1855.4	1944.5	2032.1	2129.1	2240.5	2299.4	2351.9	2464.9	2555.6	2652.7	2722.7
20°	1817.2	1914.3	2014.6	2122.8	2248.5	2313.7	2372.6	2501.5	2601.7	2706.8	2794.3
22.5°	1775.9	1880.9	1990.7	2108.4	2238.9	2310.5	2379.0	2517.4	2633.6	2730.6	2848.4
25°	1729.7	1841.1	1954.1	2078.2	2224.6	2302.6	2372.6	2509.4	2633.6	2760.9	2875.4
27.5°	1682.0	1796.6	1914.3	2044.8	2194.4	2270.8	2350.3	2482.4	2627.2	2765.6	2881.8
30°	1629.5	1740.9	1865.0	1989.1	2148.2	2224.6	2305.8	2449.0	2606.5	2745.0	2870.7
32.5°	1572.2	1686.8	1804.5	1933.4	2089.3	2172.1	2246.9	2409.2	2569.9	2706.8	2824.5
35°	1508.5	1616.7	1728.1	1860.2	2014.6	2089.3	2178.5	2347.1	2509.4	2654.3	2730.6
37.5°	1440.1	1543.5	1647.0	1777.5	1925.4	2016.1	2103.7	2273.9	2445.8	2542.9	2582.6
40°	1376.5	1467.2	1557.9	1683.6	1833.2	1927.0	2016.1	2192.8	2344.0	2418.7	2388.5
42.5°	1295.3	1389.2	1470.3	1586.5	1737.7	1825.2	1915.9	2098.9	2221.4	2251.7	2176.9
45°	1215.7	1293.7	1371.7	1484.7	1643.8	1718.6	1815.6	1985.9	2087.8	2060.7	1950.9
47.5°	1137.8	1201.4	1274.6	1384.4	1527.6	1616.7	1707.4	1855.4	1927.0	1888.8	1736.1
50°	1045.5	1109.1	1185.5	1281.0	1419.4	1505.3	1577.0	1713.8	1767.9	1674.0	1489.4
52.5°	957.9	1013.6	1078.9	1168.0	1300.1	1378.0	1456.0	1573.8	1591.3	1483.1	1288.9
55°	875.2	919.8	988.2	1059.8	1180.7	1263.5	1317.6	1417.8	1413.1	1277.8	1110.7
57.5°	789.3	830.6	876.8	951.6	1066.2	1128.2	1187.1	1274.6	1228.5	1113.9	948.4
60°	712.9	736.8	782.9	854.5	951.6	1005.7	1051.8	1099.6	1059.8	935.7	808.4
62.5°	628.6	655.6	689.0	746.3	832.2	883.2	916.6	937.3	895.9	800.4	684.2
65°	549.0	572.9	607.9	658.8	724.0	762.2	779.7	794.0	771.8	663.6	571.3
67.5°	477.4	493.3	525.1	558.5	628.6	638.1	662.0	668.3	623.8	541.0	467.8
70°	405.8	421.7	436.0	475.8	507.6	525.1	529.9	529.9	485.3	431.2	370.8
72.5°	338.9	348.5	362.8	389.9	407.4	420.1	426.5	418.5	377.1	332.6	288.0
75°	275.3	280.1	292.8	310.3	324.6	319.8	318.3	308.7	278.5	246.6	221.2
77.5°	211.6	214.8	229.1	233.9	233.9	238.7	232.3	222.8	197.3	173.4	162.3
80°	159.1	163.9	165.5	168.7	165.5	165.5	160.7	144.8	132.1	120.9	113.0
82.5°	109.8	113.0	114.6	109.8	113.0	108.2	100.3	89.1	81.2	79.6	76.4
85°	65.2	66.8	65.2	65.2	60.5	58.9	52.5	50.9	47.7	47.7	46.1
87.5°	31.8	30.2	27.1	23.9	23.9	22.3	23.9	20.7	23.9	22.3	20.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8
2.5°	2070.3	2087.8	2089.3	2105.3	2100.5	2092.5	2106.9	2097.3	2116.4	2110.0	2118.0
5°	2191.2	2215.1	2235.7	2248.5	2270.8	2266.0	2289.8	2281.9	2299.4	2281.9	2304.2
7.5°	2332.8	2372.6	2393.3	2426.7	2436.2	2437.8	2466.5	2472.8	2484.0	2472.8	2485.6
10°	2471.3	2519.0	2566.7	2593.8	2611.3	2635.2	2660.6	2671.8	2679.7	2668.6	2676.5
12.5°	2597.0	2671.8	2724.3	2778.4	2791.1	2811.8	2838.8	2835.7	2867.5	2861.1	2875.4
15°	2713.1	2795.9	2859.5	2902.5	2937.5	2955.0	3005.9	3009.1	3007.5	3023.4	3013.9
17.5°	2816.6	2886.6	2977.3	3033.0	3075.9	3075.9	3104.6	3163.5	3158.7	3157.1	3166.6
20°	2900.9	2980.5	3064.8	3158.7	3193.7	3200.1	3239.8	3270.1	3274.8	3274.8	3274.8
22.5°	2964.5	3058.4	3149.1	3216.0	3243.0	3265.3	3300.3	3319.4	3325.8	3322.6	3325.8
25°	2996.4	3085.5	3177.8	3238.2	3254.2	3266.9	3270.1	3281.2	3279.6	3260.5	3271.7
27.5°	3002.7	3088.7	3149.1	3165.1	3157.1	3149.1	3098.2	3103.0	3088.7	3060.0	3071.2
30°	2974.1	3020.2	3018.7	2969.3	2955.0	2921.6	2875.4	2807.0	2751.3	2727.4	2735.4
32.5°	2870.7	2870.7	2813.4	2702.0	2652.7	2592.2	2509.4	2447.4	2374.2	2358.3	2388.5
35°	2727.4	2646.3	2541.3	2394.9	2320.1	2275.5	2132.3	2087.8	2025.7	2008.2	2022.5
37.5°	2504.7	2369.4	2216.6	2079.8	2016.1	1936.6	1810.9	1747.2	1702.7	1672.4	1686.8
40°	2254.8	2090.9	1931.8	1763.1	1693.1	1627.9	1534.0	1476.7	1405.1	1408.3	1413.1
42.5°	2016.1	1823.6	1645.4	1489.4	1422.6	1368.5	1303.3	1233.2	1207.8	1199.8	1191.9
45°	1763.1	1557.9	1390.8	1274.6	1214.1	1163.2	1102.8	1063.0	1032.7	1026.4	1034.3
47.5°	1524.4	1351.0	1191.9	1083.7	1034.3	1008.9	961.1	924.5	905.4	889.5	899.1
50°	1308.0	1145.7	1018.4	927.7	892.7	875.2	830.6	811.6	792.5	787.7	786.1
52.5°	1129.8	991.4	881.6	808.4	781.3	771.8	738.4	711.3	695.4	700.2	703.3
55°	967.5	849.7	763.8	704.9	682.7	671.5	647.6	628.6	617.4	612.6	615.8
57.5°	824.3	722.4	660.4	612.6	595.1	590.4	564.9	558.5	550.6	545.8	545.8
60°	693.8	622.2	564.9	537.9	518.8	514.0	494.9	486.9	485.3	480.6	477.4
62.5°	584.0	525.1	485.3	456.7	448.7	447.1	434.4	424.9	420.1	416.9	416.9
65°	488.5	445.6	412.1	391.5	385.1	381.9	367.6	364.4	361.2	358.0	356.4
67.5°	407.4	369.2	345.3	331.0	323.0	324.6	316.7	310.3	310.3	308.7	307.1
70°	329.4	305.5	284.8	276.9	273.7	270.5	267.3	262.6	261.0	261.0	261.0
72.5°	259.4	243.5	232.3	227.6	224.4	221.2	218.0	218.0	218.0	216.4	216.4
75°	198.9	192.5	184.6	179.8	179.8	183.0	178.2	173.4	168.7	165.5	167.1
77.5°	149.6	146.4	141.6	133.7	135.3	132.1	132.1	128.9	130.5	130.5	127.3
80°	109.8	105.0	103.4	98.7	100.3	98.7	97.1	97.1	93.9	93.9	93.9
82.5°	76.4	71.6	71.6	70.0	68.4	68.4	66.8	66.8	68.4	65.2	65.2
85°	46.1	44.6	44.6	41.4	41.4	41.4	41.4	43.0	41.4	39.8	39.8
87.5°	20.7	22.3	20.7	19.1	19.1	19.1	17.5	17.5	15.9	17.5	17.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8
2.5°	2122.8	2111.6	2110.0	2110.0	2092.5	2102.1	2083.0	2062.3	2052.7	2052.7	2035.2
5°	2299.4	2288.3	2277.1	2259.6	2259.6	2250.1	2219.8	2189.6	2167.3	2148.2	2127.5
7.5°	2480.8	2469.7	2437.8	2420.3	2429.9	2410.8	2371.0	2320.1	2281.9	2251.7	2208.7
10°	2678.1	2647.9	2632.0	2622.4	2589.0	2568.3	2522.2	2447.4	2399.6	2359.9	2304.2
12.5°	2838.8	2848.4	2787.9	2792.7	2759.3	2730.6	2659.0	2587.4	2515.8	2460.1	2377.4
15°	3012.3	2983.6	2947.0	2918.4	2907.3	2872.3	2811.8	2716.3	2638.3	2550.8	2456.9
17.5°	3149.1	3126.9	3091.9	3064.8	3040.9	2956.6	2905.7	2821.3	2714.7	2628.8	2514.2
20°	3265.3	3244.6	3195.3	3177.8	3134.8	3074.3	3001.1	2870.7	2775.2	2681.3	2569.9
22.5°	3314.6	3293.9	3251.0	3228.7	3201.7	3142.8	3072.8	2948.6	2830.9	2713.1	2595.4
25°	3273.3	3273.3	3252.6	3244.6	3220.7	3168.2	3096.6	2991.6	2865.9	2738.6	2598.6
27.5°	3072.8	3112.5	3126.9	3134.8	3134.8	3136.4	3087.1	2985.2	2862.7	2738.6	2592.2
30°	2783.1	2850.0	2908.9	2926.4	2956.6	2990.0	3010.7	2961.4	2851.6	2721.1	2574.7
32.5°	2418.7	2504.7	2614.5	2641.5	2682.9	2783.1	2838.8	2859.5	2799.1	2684.5	2528.5
35°	2055.9	2164.1	2231.0	2313.7	2351.9	2499.9	2624.0	2698.8	2684.5	2616.1	2474.4
37.5°	1739.3	1801.3	1882.5	1970.0	2046.4	2188.0	2342.4	2487.2	2546.0	2512.6	2406.0
40°	1435.3	1508.5	1605.6	1677.2	1729.7	1871.3	2062.3	2219.8	2348.7	2369.4	2304.2
42.5°	1220.5	1293.7	1352.6	1430.6	1471.9	1608.8	1777.5	1974.8	2127.5	2208.7	2180.0
45°	1055.0	1099.6	1147.3	1191.9	1242.8	1363.7	1519.7	1736.1	1907.9	2022.5	2033.7
47.5°	910.2	950.0	991.4	1032.7	1061.4	1155.3	1298.5	1475.1	1662.9	1820.4	1882.5
50°	808.4	827.5	857.7	881.6	915.0	996.1	1110.7	1263.5	1462.4	1632.7	1713.8
52.5°	708.1	732.0	755.9	776.5	798.8	856.1	961.1	1093.2	1265.1	1440.1	1540.4
55°	623.8	642.9	665.2	679.5	692.2	743.1	822.7	924.5	1072.5	1238.0	1362.1
57.5°	555.4	563.3	582.4	590.4	604.7	646.1	703.3	794.0	913.4	1074.1	1176.0
60°	480.6	496.5	510.8	517.2	528.3	556.9	596.7	681.1	784.5	902.3	1018.4
62.5°	420.1	426.5	437.6	445.6	453.5	483.7	517.2	580.8	658.8	757.4	864.1
65°	364.4	367.6	374.0	385.1	389.9	412.1	431.2	477.4	550.6	625.4	732.0
67.5°	307.1	310.3	318.3	324.6	329.4	343.7	364.4	397.8	437.6	520.3	579.2
70°	262.6	262.6	267.3	270.5	275.3	281.7	292.8	318.3	354.9	407.4	461.5
72.5°	219.6	219.6	219.6	224.4	224.4	229.1	235.5	253.0	278.5	319.8	354.9
75°	170.3	171.9	175.0	175.0	176.6	183.0	187.8	192.5	205.3	232.3	264.2
77.5°	128.9	132.1	133.7	130.5	133.7	133.7	140.0	146.4	152.8	160.7	184.6
80°	95.5	97.1	93.9	95.5	95.5	98.7	101.8	100.3	103.4	113.0	119.3
82.5°	63.7	65.2	65.2	65.2	65.2	70.0	70.0	68.4	70.0	71.6	73.2
85°	39.8	38.2	38.2	39.8	38.2	38.2	39.8	41.4	39.8	41.4	43.0
87.5°	17.5	17.5	17.5	17.5	15.9	15.9	17.5	15.9	17.5	15.9	14.3
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: P1037854

CATALOG NUMBER: S124RDS-B1195DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8
2.5°	2025.7	2017.7	2013.0	2011.4	1997.1	1989.1	1984.3	1981.1	1976.4	1963.6	1952.5
5°	2102.1	2079.8	2068.7	2055.9	2033.7	2008.2	1987.5	1974.8	1958.9	1933.4	1909.5
7.5°	2173.7	2140.3	2118.0	2100.5	2062.3	2020.9	1987.5	1960.5	1930.2	1895.2	1861.8
10°	2248.5	2194.4	2165.7	2138.7	2083.0	2028.9	1981.1	1941.4	1898.4	1852.2	1815.6
12.5°	2307.4	2235.7	2203.9	2165.7	2097.3	2033.7	1973.2	1919.1	1863.4	1814.1	1761.5
15°	2375.8	2286.7	2250.1	2200.7	2106.9	2024.1	1946.1	1887.3	1830.0	1756.8	1701.1
17.5°	2415.6	2312.1	2259.6	2216.6	2114.8	2014.6	1923.9	1850.7	1783.8	1710.6	1651.7
20°	2455.3	2337.6	2278.7	2218.2	2097.3	1990.7	1895.2	1807.7	1737.7	1658.1	1597.6
22.5°	2468.1	2331.2	2269.2	2213.5	2086.2	1966.8	1857.0	1767.9	1686.8	1607.2	1538.8
25°	2468.1	2329.6	2256.4	2184.8	2051.2	1928.6	1818.8	1721.8	1631.1	1551.5	1483.1
27.5°	2442.6	2297.8	2221.4	2156.2	2017.7	1885.7	1772.7	1666.1	1578.5	1499.0	1421.0
30°	2410.8	2251.7	2175.3	2097.3	1963.6	1837.9	1715.4	1616.7	1524.4	1433.7	1363.7
32.5°	2371.0	2202.3	2118.0	2038.4	1896.8	1766.3	1653.3	1556.3	1468.7	1374.9	1296.9
35°	2313.7	2129.1	2035.2	1965.2	1828.4	1693.1	1584.9	1489.4	1405.1	1308.0	1223.7
37.5°	2240.5	2062.3	1966.8	1880.9	1739.3	1615.1	1513.3	1421.0	1338.3	1249.2	1155.3
40°	2154.6	1968.4	1885.7	1795.0	1645.4	1527.6	1432.1	1349.4	1266.7	1182.3	1091.6
42.5°	2057.5	1872.9	1780.6	1693.1	1549.9	1433.7	1344.6	1269.8	1193.5	1115.5	1018.4
45°	1941.4	1767.9	1678.8	1596.1	1457.6	1338.3	1257.1	1185.5	1120.3	1040.7	954.8
47.5°	1810.9	1659.7	1569.0	1479.9	1344.6	1241.2	1161.6	1101.2	1045.5	965.9	887.9
50°	1683.6	1534.0	1460.8	1370.1	1246.0	1148.9	1067.7	1016.8	973.9	895.9	825.9
52.5°	1522.9	1409.9	1339.9	1261.9	1142.5	1043.9	980.2	935.7	884.8	824.3	762.2
55°	1381.2	1276.2	1220.5	1147.3	1029.6	942.0	887.9	846.6	806.8	752.7	703.3
57.5°	1220.5	1155.3	1099.6	1035.9	919.8	845.0	797.2	762.2	725.6	681.1	641.3
60°	1051.8	1021.6	967.5	916.6	817.9	752.7	712.9	681.1	646.1	609.5	576.0
62.5°	902.3	884.8	852.9	813.1	720.8	665.2	625.4	601.5	576.0	542.6	510.8
65°	760.6	752.7	722.4	693.8	630.1	580.8	545.8	531.5	502.8	477.4	448.7
67.5°	634.9	625.4	607.9	595.1	541.0	494.9	477.4	458.3	434.4	415.3	391.5
70°	507.6	506.0	494.9	479.0	450.3	416.9	399.4	386.7	362.8	348.5	331.0
72.5°	394.6	402.6	393.0	386.7	367.6	343.7	327.8	319.8	300.8	289.6	276.9
75°	294.4	300.8	305.5	294.4	289.6	278.5	264.2	256.2	246.6	230.7	226.0
77.5°	200.5	214.8	214.8	218.0	219.6	213.2	202.1	195.7	184.6	181.4	175.0
80°	132.1	144.8	146.4	149.6	154.4	154.4	146.4	144.8	133.7	132.1	127.3
82.5°	76.4	87.5	93.9	98.7	97.1	103.4	97.1	95.5	89.1	89.1	85.9
85°	41.4	43.0	46.1	49.3	52.5	55.7	55.7	54.1	52.5	50.9	47.7
87.5°	15.9	15.9	17.5	15.9	17.5	20.7	22.3	22.3	20.7	19.1	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: P1037854

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CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8
2.5°	1942.9	1939.8	1936.6	1923.9	1912.7	1893.6	1877.7	1871.3	1869.8	1871.3	1866.6
5°	1887.3	1885.7	1874.5	1852.2	1831.6	1809.3	1793.4	1777.5	1767.9	1767.9	1756.8
7.5°	1834.7	1823.6	1814.1	1785.4	1761.5	1731.3	1707.4	1693.1	1685.2	1667.7	1667.7
10°	1779.0	1763.1	1750.4	1723.4	1688.3	1658.1	1627.9	1610.4	1596.1	1583.3	1578.5
12.5°	1723.4	1710.6	1686.8	1658.1	1623.1	1584.9	1553.1	1540.4	1506.9	1479.9	1481.5
15°	1670.8	1642.2	1631.1	1589.7	1548.3	1511.7	1465.6	1429.0	1401.9	1384.4	1362.1
17.5°	1612.0	1583.3	1562.6	1527.6	1473.5	1416.2	1371.7	1322.4	1295.3	1265.1	1250.7
20°	1546.7	1522.9	1506.9	1451.2	1386.0	1317.6	1268.2	1238.0	1207.8	1185.5	1172.8
22.5°	1491.0	1460.8	1441.7	1366.9	1295.3	1226.9	1188.7	1163.2	1137.8	1118.7	1112.3
25°	1419.4	1401.9	1355.8	1290.5	1203.0	1156.9	1123.4	1090.0	1075.7	1063.0	1048.7
27.5°	1360.5	1317.6	1285.8	1199.8	1145.7	1093.2	1059.8	1034.3	1016.8	1004.1	993.0
30°	1287.3	1247.6	1203.0	1131.4	1082.1	1032.7	1002.5	981.8	962.7	954.8	945.2
32.5°	1211.0	1174.4	1131.4	1074.1	1013.6	975.5	951.6	929.3	916.6	908.6	897.5
35°	1142.5	1096.4	1067.7	1013.6	964.3	921.3	899.1	880.0	865.7	862.5	860.9
37.5°	1069.3	1034.3	1007.3	951.6	910.2	873.6	852.9	832.2	824.3	822.7	816.3
40°	1005.7	975.5	950.0	897.5	852.9	819.5	803.6	790.9	782.9	782.9	781.3
42.5°	950.0	918.2	892.7	845.0	805.2	775.0	757.4	744.7	741.5	743.1	741.5
45°	887.9	860.9	835.4	786.1	752.7	730.4	711.3	704.9	700.2	701.8	703.3
47.5°	829.1	806.8	781.3	741.5	703.3	679.5	668.3	662.0	662.0	662.0	665.2
50°	776.5	751.1	728.8	687.4	652.4	633.3	623.8	615.8	617.4	619.0	620.6
52.5°	714.5	692.2	676.3	634.9	609.5	585.6	574.5	576.0	574.5	574.5	577.6
55°	660.4	638.1	622.2	584.0	558.5	542.6	533.1	528.3	529.9	526.7	533.1
57.5°	599.9	580.8	569.7	533.1	510.8	496.5	488.5	480.6	483.7	482.2	480.6
60°	547.4	525.1	507.6	482.2	463.1	445.6	440.8	432.8	436.0	432.8	431.2
62.5°	486.9	469.4	456.7	431.2	415.3	401.0	389.9	385.1	383.5	378.7	374.0
65°	426.5	416.9	404.2	378.7	362.8	351.7	345.3	340.5	338.9	326.2	311.9
67.5°	370.8	364.4	351.7	332.6	318.3	307.1	297.6	289.6	280.1	270.5	262.6
70°	318.3	308.7	300.8	283.2	270.5	259.4	249.8	240.3	235.5	226.0	222.8
72.5°	267.3	257.8	249.8	233.9	222.8	211.6	208.5	197.3	192.5	191.0	191.0
75°	214.8	206.9	202.1	187.8	178.2	170.3	165.5	162.3	159.1	155.9	151.2
77.5°	163.9	159.1	155.9	146.4	138.4	133.7	132.1	120.9	117.8	114.6	111.4
80°	119.3	117.8	114.6	106.6	103.4	92.3	92.3	89.1	87.5	87.5	87.5
82.5°	81.2	78.0	76.4	68.4	66.8	65.2	63.7	62.1	63.7	62.1	63.7
85°	43.0	41.4	39.8	39.8	39.8	39.8	39.8	39.8	39.8	38.2	39.8
87.5°	15.9	15.9	15.9	15.9	14.3	15.9	15.9	14.3	15.9	15.9	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: P1037854

CATALOG NUMBER: S124RDS-B1195DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8
2.5°	1866.6	1872.9	1865.0	1869.8	1858.6	1857.0	1858.6	1858.6	1860.2	1861.8	1863.4
5°	1761.5	1760.0	1750.4	1744.0	1739.3	1744.0	1747.2	1750.4	1747.2	1750.4	1752.0
7.5°	1662.9	1658.1	1653.3	1642.2	1645.4	1642.2	1651.7	1647.0	1647.0	1654.9	1661.3
10°	1575.4	1565.8	1562.6	1549.9	1540.4	1538.8	1549.9	1554.7	1559.5	1562.6	1575.4
12.5°	1462.4	1448.1	1436.9	1441.7	1414.6	1425.8	1429.0	1422.6	1441.7	1464.0	1451.2
15°	1341.4	1343.0	1320.8	1312.8	1290.5	1296.9	1298.5	1314.4	1330.3	1328.7	1347.8
17.5°	1252.3	1242.8	1223.7	1222.1	1212.6	1217.3	1215.7	1228.5	1223.7	1231.6	1247.6
20°	1169.6	1163.2	1147.3	1140.9	1144.1	1140.9	1142.5	1144.1	1148.9	1166.4	1163.2
22.5°	1104.3	1096.4	1096.4	1088.4	1078.9	1075.7	1083.7	1088.4	1094.8	1098.0	1105.9
25°	1047.1	1040.7	1032.7	1028.0	1020.0	1021.6	1026.4	1032.7	1037.5	1043.9	1050.2
27.5°	988.2	988.2	980.2	978.6	975.5	973.9	980.2	983.4	983.4	988.2	994.5
30°	942.0	942.0	934.1	932.5	930.9	930.9	935.7	937.3	938.9	943.6	946.8
32.5°	897.5	895.9	892.7	894.3	892.7	894.3	894.3	895.9	899.1	900.7	907.0
35°	856.1	857.7	854.5	854.5	852.9	854.5	857.7	859.3	860.9	864.1	864.1
37.5°	816.3	819.5	817.9	822.7	822.7	822.7	822.7	825.9	825.9	825.9	824.3
40°	781.3	781.3	779.7	782.9	786.1	786.1	787.7	787.7	789.3	789.3	787.7
42.5°	741.5	744.7	749.5	751.1	754.3	752.7	757.4	755.9	757.4	754.3	751.1
45°	704.9	704.9	711.3	717.7	719.3	719.3	719.3	722.4	719.3	714.5	712.9
47.5°	665.2	668.3	671.5	679.5	681.1	681.1	681.1	681.1	677.9	677.9	677.9
50°	625.4	627.0	628.6	631.7	636.5	634.9	634.9	634.9	641.3	634.9	636.5
52.5°	577.6	579.2	580.8	587.2	585.6	585.6	587.2	587.2	592.0	590.4	587.2
55°	529.9	529.9	533.1	533.1	533.1	536.3	537.9	541.0	539.4	541.0	542.6
57.5°	482.2	479.0	477.4	477.4	482.2	480.6	482.2	482.2	488.5	491.7	493.3
60°	426.5	426.5	424.9	415.3	415.3	413.7	418.5	421.7	424.9	439.2	437.6
62.5°	369.2	362.8	356.4	358.0	348.5	353.3	350.1	353.3	362.8	374.0	375.5
65°	311.9	307.1	300.8	299.2	296.0	300.8	299.2	300.8	305.5	311.9	319.8
67.5°	261.0	259.4	256.2	254.6	254.6	254.6	257.8	257.8	259.4	264.2	268.9
70°	222.8	221.2	222.8	219.6	221.2	219.6	221.2	222.8	224.4	226.0	230.7
72.5°	187.8	187.8	187.8	184.6	187.8	186.2	186.2	187.8	189.4	191.0	194.1
75°	149.6	146.4	143.2	140.0	138.4	141.6	143.2	141.6	146.4	152.8	152.8
77.5°	113.0	111.4	111.4	111.4	113.0	111.4	114.6	113.0	114.6	114.6	117.8
80°	87.5	85.9	87.5	87.5	85.9	89.1	87.5	87.5	89.1	90.7	89.1
82.5°	63.7	65.2	63.7	63.7	63.7	66.8	63.7	63.7	63.7	65.2	65.2
85°	39.8	39.8	39.8	39.8	41.4	39.8	41.4	39.8	43.0	41.4	41.4
87.5°	14.3	15.9	17.5	17.5	17.5	17.5	15.9	17.5	19.1	17.5	19.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8	1974.8
2.5°	1869.8	1877.7	1874.5	1863.4	1868.2	1877.7	1887.3	1900.0	1907.9	1914.3	1917.5
5°	1760.0	1774.3	1771.1	1771.1	1777.5	1793.4	1809.3	1836.3	1845.9	1857.0	1872.9
7.5°	1662.9	1674.0	1683.6	1686.8	1696.3	1717.0	1737.7	1767.9	1791.8	1804.5	1814.1
10°	1577.0	1584.9	1599.2	1607.2	1616.7	1642.2	1672.4	1704.3	1728.1	1750.4	1763.1
12.5°	1467.2	1499.0	1518.1	1530.8	1543.5	1581.7	1605.6	1640.6	1669.2	1689.9	1709.0
15°	1344.6	1382.8	1394.0	1443.3	1475.1	1505.3	1541.9	1583.3	1610.4	1634.2	1659.7
17.5°	1241.2	1268.2	1281.0	1333.5	1360.5	1408.3	1460.8	1513.3	1554.7	1572.2	1597.6
20°	1176.0	1190.3	1215.7	1233.2	1261.9	1317.6	1374.9	1438.5	1500.6	1518.1	1543.5
22.5°	1109.1	1128.2	1145.7	1169.6	1191.9	1230.1	1287.3	1357.4	1424.2	1456.0	1486.3
25°	1048.7	1067.7	1078.9	1104.3	1125.0	1163.2	1203.0	1274.6	1354.2	1381.2	1429.0
27.5°	1000.9	1012.1	1031.1	1042.3	1066.2	1101.2	1137.8	1191.9	1269.8	1316.0	1362.1
30°	953.2	961.1	977.0	993.0	1010.5	1034.3	1075.7	1128.2	1199.8	1239.6	1285.8
32.5°	905.4	918.2	927.7	938.9	957.9	986.6	1015.2	1066.2	1123.4	1168.0	1214.1
35°	865.7	870.4	883.2	895.9	908.6	934.1	964.3	1013.6	1064.6	1099.6	1140.9
37.5°	822.7	830.6	840.2	845.0	865.7	881.6	913.4	951.6	1012.1	1034.3	1075.7
40°	789.3	787.7	797.2	805.2	814.7	840.2	859.3	900.7	948.4	983.4	1008.9
42.5°	747.9	747.9	751.1	760.6	773.4	789.3	811.6	846.6	895.9	921.3	951.6
45°	714.5	709.7	711.3	717.7	725.6	741.5	763.8	794.0	843.4	864.1	895.9
47.5°	674.7	669.9	669.9	676.3	682.7	693.8	711.3	746.3	786.1	813.1	837.0
50°	630.1	631.7	630.1	634.9	638.1	649.2	668.3	697.0	733.6	755.9	782.9
52.5°	588.8	585.6	584.0	587.2	593.5	601.5	622.2	647.6	682.7	704.9	728.8
55°	537.9	541.0	541.0	541.0	550.6	553.8	569.7	595.1	630.1	647.6	669.9
57.5°	491.7	490.1	493.3	491.7	499.7	510.8	523.5	542.6	577.6	595.1	615.8
60°	440.8	442.4	444.0	444.0	450.3	461.5	475.8	493.3	521.9	539.4	558.5
62.5°	378.7	386.7	394.6	397.8	407.4	415.3	424.9	444.0	469.4	482.2	499.7
65°	319.8	331.0	342.1	350.1	356.4	364.4	377.1	394.6	415.3	428.1	445.6
67.5°	268.9	276.9	291.2	299.2	311.9	321.4	329.4	343.7	369.2	374.0	388.3
70°	232.3	235.5	241.9	248.2	262.6	270.5	280.1	294.4	313.5	324.6	332.6
72.5°	195.7	197.3	200.5	206.9	213.2	222.8	233.9	246.6	264.2	268.9	280.1
75°	155.9	165.5	165.5	170.3	175.0	179.8	189.4	202.1	213.2	221.2	227.6
77.5°	116.2	120.9	124.1	132.1	138.4	143.2	149.6	159.1	165.5	171.9	176.6
80°	90.7	92.3	93.9	93.9	97.1	103.4	109.8	116.2	124.1	127.3	132.1
82.5°	66.8	66.8	66.8	70.0	71.6	73.2	73.2	76.4	84.3	87.5	92.3
85°	43.0	43.0	43.0	43.0	44.6	46.1	47.7	49.3	49.3	49.3	52.5
87.5°	17.5	20.7	19.1	20.7	20.7	20.7	20.7	22.3	22.3	23.9	23.9
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: P1037854

CATALOG NUMBER: S124RDS-B1195DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1974.8	1974.8	1974.8	1974.8
2.5°	1930.2	1939.8	1955.7	1978.0
5°	1885.7	1912.7	1938.2	1971.6
7.5°	1845.9	1877.7	1912.7	1960.5
10°	1799.7	1839.5	1884.1	1942.9
12.5°	1745.6	1801.3	1852.2	1915.9
15°	1705.8	1747.2	1812.5	1887.3
17.5°	1650.2	1705.8	1771.1	1855.4
20°	1597.6	1656.5	1729.7	1817.2
22.5°	1541.9	1608.8	1682.0	1775.9
25°	1484.7	1556.3	1629.5	1729.7
27.5°	1432.1	1497.4	1580.1	1682.0
30°	1368.5	1443.3	1522.9	1629.5
32.5°	1306.4	1384.4	1465.6	1572.2
35°	1239.6	1317.6	1406.7	1508.5
37.5°	1174.4	1260.3	1341.4	1440.1
40°	1102.8	1191.9	1276.2	1376.5
42.5°	1032.7	1125.0	1209.4	1295.3
45°	967.5	1058.2	1134.6	1215.7
47.5°	905.4	986.6	1064.6	1137.8
50°	845.0	913.4	985.0	1045.5
52.5°	781.3	846.6	903.8	957.9
55°	724.0	775.0	825.9	875.2
57.5°	655.6	706.5	751.1	789.3
60°	598.3	630.1	673.1	712.9
62.5°	533.1	569.7	603.1	628.6
65°	469.4	501.3	526.7	549.0
67.5°	415.3	434.4	453.5	477.4
70°	350.1	366.0	388.3	405.8
72.5°	294.4	307.1	318.3	338.9
75°	238.7	249.8	256.2	275.3
77.5°	184.6	195.7	200.5	211.6
80°	141.6	143.2	149.6	159.1
82.5°	97.1	100.3	101.8	109.8
85°	55.7	63.7	62.1	65.2
87.5°	23.9	25.5	28.6	31.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)