

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: P1037232

Luminaire Tested: S123DS-B1000DB2750-4F0-XX-W2A-A_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037232
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-20)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DS-B1000DB2750-4F0-XX-W2A-A_2700K
Description: Define 3 Direct Surface with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

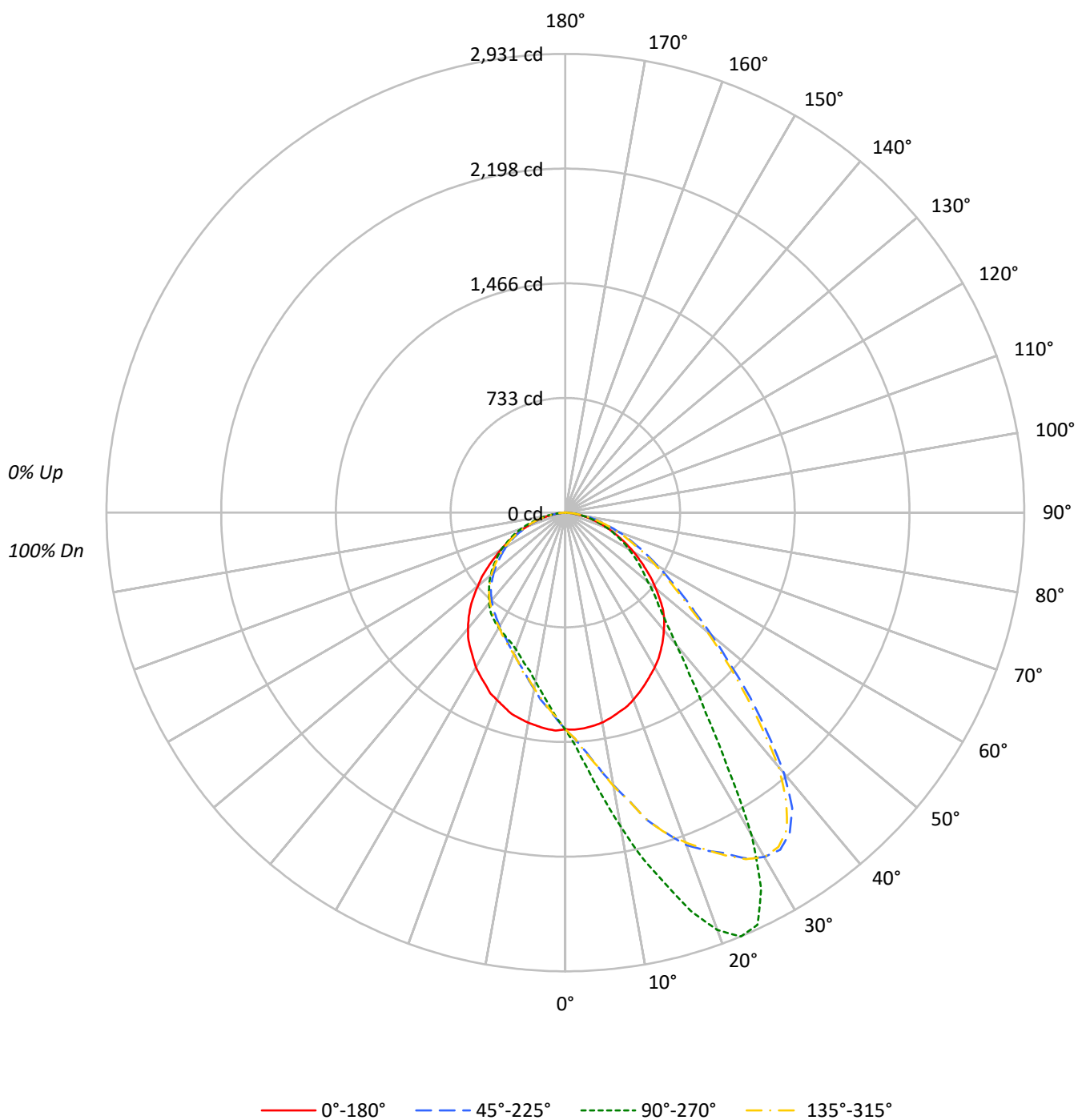
Lumens per Lamp: N/A
Luminaire Lumens: 4178.0 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.5
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V): 120
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				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	105	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87		85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	74		72
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72	68	64		62
4	84	73	65	58	82	72	64	58	69	62	57		67	61	56		65	60	56		53
5	78	66	57	51	76	64	56	50	62	55	50		60	54	49		59	53	49		47
6	72	59	51	44	70	58	50	44	56	49	44		55	48	43		53	48	43		41
7	67	54	45	39	65	53	45	39	52	44	39		50	44	39		49	43	38		36
8	62	49	41	35	61	49	41	35	47	40	35		46	39	35		45	39	35		33
9	58	45	37	32	57	45	37	32	43	36	32		42	36	31		41	36	31		29
10	55	42	34	29	53	41	34	29	40	33	29		39	33	29		38	33	28		27

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14900	14900	14900	14900
5°	14942	17769	14987	13261
10°	14881	22240	14895	11978
15°	14708	27280	14828	11151
20°	14566	32497	14597	10617
25°	14338	34506	14370	10499
30°	14188	29576	14188	10554
35°	13994	20570	13906	10663
40°	13759	15493	13589	10630
45°	13457	12865	13068	10496
50°	12646	11523	12198	10401
55°	11755	10774	11277	10271
60°	10859	10107	10280	10165
65°	9875	9498	9396	9839
70°	8866	8906	8274	9372
75°	7752	7977	7253	8592
80°	6403	6986	5901	7401
85°	4965	5471	3977	4965

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 30035 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.1	3.3
10°-20°	437.3	10.5
20°-30°	735.8	17.6
30°-40°	831.5	19.9
40°-50°	744.7	17.8
50°-60°	601.2	14.4
60°-70°	418.9	10.0
70°-80°	219.9	5.3
80°-90°	52.7	1.3
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°	1309.2	31.3
0°-40°	2140.6	51.2
0°-60°	3486.5	83.4
0°-90°	4178.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4178.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1384	1384	1384	1384	1384	
5°	1383	1644	1387	1227	1383	131
15°	1320	2448	1331	1001	1320	373
25°	1207	2905	1210	884	1207	557
35°	1065	1565	1058	812	1065	667
45°	884	845	858	690	884	676
55°	626	574	601	547	626	561
65°	388	373	369	386	388	386
75°	186	192	174	207	186	200
85°	40	44	32	40	40	49
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°	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3
2.5°	1388.3	1399.0	1404.4	1412.5	1420.5	1432.6	1436.6	1443.3	1440.6	1446.0	1448.7
5°	1382.9	1401.7	1417.8	1437.9	1456.7	1470.1	1483.5	1505.0	1521.1	1523.8	1535.9
7.5°	1373.6	1400.4	1428.6	1456.7	1492.9	1514.4	1538.5	1568.1	1592.2	1631.1	1645.9
10°	1361.5	1399.0	1439.3	1478.2	1527.8	1561.3	1590.9	1640.5	1690.1	1730.4	1767.9
12.5°	1342.7	1389.7	1442.0	1499.6	1564.0	1602.9	1643.2	1708.9	1784.0	1845.7	1886.0
15°	1319.9	1378.9	1446.0	1507.7	1578.8	1651.2	1694.1	1767.9	1875.2	1932.9	2036.2
17.5°	1301.1	1361.5	1428.6	1525.1	1621.7	1694.1	1725.0	1860.5	1934.2	2030.8	2147.5
20°	1271.6	1348.1	1433.9	1530.5	1655.2	1699.5	1762.6	1899.4	1990.6	2116.7	2260.2
22.5°	1240.8	1322.6	1425.9	1526.5	1666.0	1712.9	1798.8	1907.4	2052.3	2177.0	2335.3
25°	1207.2	1295.8	1400.4	1519.8	1656.6	1725.0	1805.5	1939.6	2096.6	2253.5	2399.7
27.5°	1173.7	1270.3	1378.9	1498.3	1631.1	1711.6	1792.1	1931.6	2132.8	2303.1	2489.6
30°	1141.5	1238.1	1346.7	1468.8	1608.3	1686.1	1762.6	1936.9	2160.9	2352.8	2540.5
32.5°	1106.6	1205.9	1319.9	1421.8	1562.7	1645.9	1731.7	1936.9	2178.4	2382.3	2554.0
35°	1065.0	1167.0	1264.9	1366.8	1506.4	1598.9	1695.5	1923.5	2194.5	2391.7	2497.6
37.5°	1024.8	1114.7	1199.2	1298.4	1444.6	1543.9	1655.2	1907.4	2186.4	2351.4	2380.9
40°	979.2	1069.1	1137.5	1230.0	1384.3	1499.6	1612.3	1886.0	2151.5	2256.2	2170.3
42.5°	934.9	1006.0	1065.0	1154.9	1322.6	1435.3	1557.3	1847.1	2083.1	2104.6	1911.4
45°	884.0	934.9	987.2	1089.2	1255.5	1370.9	1506.4	1790.7	1973.1	1911.4	1667.3
47.5°	818.2	863.8	921.5	1015.4	1184.4	1303.8	1432.6	1718.3	1813.5	1684.8	1417.8
50°	755.2	794.1	847.7	939.0	1109.3	1226.0	1362.8	1604.3	1651.2	1448.7	1222.0
52.5°	692.1	721.7	774.0	865.2	1035.5	1148.2	1273.0	1487.6	1460.7	1243.4	1042.2
55°	626.4	651.9	701.5	791.4	949.7	1057.0	1176.4	1344.0	1274.3	1067.7	906.8
57.5°	562.0	588.9	639.8	714.9	863.8	968.5	1063.7	1195.2	1090.5	925.5	783.4
60°	504.4	527.2	566.1	639.8	775.3	859.8	947.0	1036.9	949.7	790.1	681.4
62.5°	444.0	465.5	501.7	568.7	685.4	760.6	830.3	904.1	807.5	690.8	594.2
65°	387.7	405.1	438.6	500.3	595.6	657.3	713.6	764.6	686.8	579.5	507.0
67.5°	336.7	351.4	379.6	434.6	515.1	559.3	605.0	647.9	582.2	496.3	434.6
70°	281.7	293.8	319.2	359.5	423.9	469.5	503.0	535.2	476.2	407.8	366.2
72.5°	233.4	245.5	261.6	303.1	347.4	375.6	411.8	429.2	395.7	339.4	297.8
75°	186.4	195.8	210.6	237.4	279.0	297.8	320.6	334.0	303.1	265.6	240.1
77.5°	146.2	150.2	161.0	179.7	207.9	229.4	246.8	254.9	233.4	209.3	187.8
80°	103.3	108.7	116.7	132.8	154.3	161.0	171.7	181.1	167.7	146.2	132.8
82.5°	68.4	75.1	79.1	85.8	99.3	107.3	110.0	118.0	106.0	97.9	92.6
85°	40.2	42.9	44.3	48.3	55.0	59.0	63.0	64.4	61.7	60.4	55.0
87.5°	20.1	20.1	20.1	22.8	24.1	26.8	28.2	28.2	28.2	26.8	25.5
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3
2.5°	1458.1	1460.7	1470.1	1476.8	1490.3	1488.9	1488.9	1487.6	1483.5	1490.3	1494.3
5°	1560.0	1582.8	1585.5	1615.0	1616.3	1628.4	1636.5	1629.8	1645.9	1644.5	1632.4
7.5°	1686.1	1716.9	1731.7	1759.9	1792.1	1784.0	1814.9	1820.2	1817.5	1831.0	1840.4
10°	1824.3	1877.9	1915.5	1967.8	1981.2	1989.2	2009.4	2026.8	2061.7	2034.8	2052.3
12.5°	1982.5	2021.4	2071.1	2154.2	2195.8	2222.6	2232.0	2244.1	2268.2	2253.5	2254.8
15°	2115.3	2167.6	2252.1	2355.4	2367.5	2401.0	2393.0	2465.4	2500.3	2448.0	2477.5
17.5°	2253.5	2323.2	2423.8	2513.7	2564.7	2587.5	2609.0	2678.7	2676.0	2668.0	2674.7
20°	2342.0	2456.0	2580.8	2700.2	2714.9	2732.4	2790.0	2819.5	2814.2	2837.0	2851.7
22.5°	2466.8	2587.5	2720.3	2799.4	2833.0	2853.1	2898.7	2917.5	2925.5	2930.9	2921.5
25°	2571.4	2700.2	2798.1	2867.8	2888.0	2898.7	2913.4	2918.8	2914.8	2905.4	2913.4
27.5°	2642.5	2745.8	2812.8	2845.0	2834.3	2816.9	2788.7	2769.9	2728.3	2708.2	2732.4
30°	2672.0	2717.6	2737.7	2684.1	2630.4	2587.5	2533.8	2434.6	2356.8	2379.6	2348.7
32.5°	2625.0	2595.5	2499.0	2360.8	2319.2	2249.5	2097.9	1981.2	1985.2	1923.5	1949.0
35°	2486.9	2352.8	2170.3	1961.1	1906.1	1868.5	1702.2	1676.7	1623.0	1565.4	1581.5
37.5°	2242.8	2046.9	1825.6	1671.3	1589.5	1507.7	1413.8	1357.5	1325.3	1301.1	1319.9
40°	1945.0	1706.2	1523.8	1385.6	1315.9	1263.6	1199.2	1142.8	1106.6	1102.6	1109.3
42.5°	1652.6	1451.4	1283.7	1152.2	1129.4	1067.7	1026.1	981.9	971.1	953.7	963.1
45°	1399.0	1235.4	1097.2	989.9	963.1	947.0	896.0	867.9	855.8	845.1	861.2
47.5°	1215.3	1043.6	943.0	878.6	851.8	824.9	796.8	778.0	768.6	769.9	768.6
50°	1038.2	912.1	823.6	774.0	757.9	739.1	716.3	704.2	700.2	688.1	697.5
52.5°	893.3	802.1	740.4	693.5	681.4	668.0	649.2	642.5	633.1	630.4	630.4
55°	776.6	705.6	655.9	625.1	610.3	599.6	588.9	580.8	574.1	574.1	574.1
57.5°	685.4	623.7	587.5	560.7	555.3	544.6	532.5	532.5	523.1	521.8	525.8
60°	607.6	552.6	524.5	501.7	493.6	490.9	478.9	478.9	476.2	469.5	474.8
62.5°	528.5	488.3	464.1	446.7	438.6	438.6	429.2	422.5	422.5	423.9	421.2
65°	456.1	426.6	405.1	391.7	387.7	382.3	380.9	375.6	371.6	372.9	371.6
67.5°	391.7	368.9	354.1	343.4	336.7	334.0	330.0	330.0	327.3	328.6	321.9
70°	334.0	311.2	299.1	288.4	285.7	285.7	280.3	281.7	279.0	283.0	280.3
72.5°	275.0	257.5	248.2	244.1	241.4	240.1	237.4	234.7	233.4	236.1	234.7
75°	222.7	207.9	201.2	198.5	195.8	195.8	194.5	193.2	191.8	191.8	191.8
77.5°	173.0	163.6	155.6	158.3	154.3	155.6	151.6	151.6	152.9	151.6	151.6
80°	127.4	120.7	120.7	118.0	112.7	115.4	115.4	111.3	110.0	112.7	108.7
82.5°	84.5	83.2	80.5	79.1	76.5	77.8	76.5	75.1	73.8	76.5	73.8
85°	49.6	49.6	48.3	45.6	48.3	46.9	45.6	45.6	44.3	44.3	44.3
87.5°	25.5	22.8	22.8	21.5	22.8	20.1	21.5	20.1	18.8	20.1	18.8
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°	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3
2.5°	1483.5	1487.6	1476.8	1474.2	1474.2	1479.5	1475.5	1439.3	1446.0	1437.9	1435.3
5°	1647.2	1639.1	1628.4	1623.0	1616.3	1597.6	1596.2	1554.6	1546.6	1519.8	1507.7
7.5°	1826.9	1820.2	1788.0	1784.0	1781.3	1763.9	1719.6	1675.4	1643.2	1612.3	1582.8
10°	2032.2	2012.0	1997.3	1967.8	1953.0	1928.9	1871.2	1829.6	1774.6	1727.7	1666.0
12.5°	2279.0	2256.2	2206.5	2185.1	2166.3	2099.2	2041.6	1994.6	1887.3	1855.1	1778.6
15°	2460.1	2411.8	2406.4	2359.5	2356.8	2283.0	2173.0	2122.0	2038.9	1920.8	1841.7
17.5°	2655.9	2613.0	2579.4	2523.1	2515.1	2445.3	2364.8	2240.1	2148.9	2036.2	1935.6
20°	2799.4	2776.6	2718.9	2696.1	2649.2	2590.2	2507.0	2352.8	2241.4	2128.7	2005.3
22.5°	2913.4	2890.6	2845.0	2814.2	2787.4	2710.9	2611.6	2480.2	2327.3	2179.7	2052.3
25°	2912.1	2905.4	2886.6	2871.9	2851.7	2795.4	2712.2	2586.1	2415.8	2253.5	2076.4
27.5°	2747.1	2765.9	2798.1	2814.2	2810.2	2802.1	2755.2	2649.2	2496.3	2303.1	2104.6
30°	2403.7	2472.1	2532.5	2613.0	2637.1	2696.1	2723.0	2662.6	2540.5	2360.8	2140.8
32.5°	1993.3	2092.5	2224.0	2268.2	2344.7	2458.7	2586.1	2609.0	2532.5	2394.3	2163.6
35°	1635.1	1716.9	1818.9	1888.6	1957.0	2142.2	2303.1	2442.6	2468.1	2376.9	2158.3
37.5°	1353.4	1411.1	1501.0	1560.0	1623.0	1781.3	2006.7	2187.8	2315.2	2317.9	2143.5
40°	1149.5	1175.0	1252.8	1295.8	1356.1	1492.9	1694.1	1930.2	2116.7	2202.5	2104.6
42.5°	973.8	1007.4	1071.7	1103.9	1142.8	1262.2	1395.0	1619.0	1849.7	2033.5	2032.2
45°	869.2	893.3	922.9	949.7	994.0	1065.0	1216.6	1384.3	1605.6	1813.5	1895.3
47.5°	776.6	799.5	829.0	837.0	866.5	933.6	1026.1	1172.4	1378.9	1585.5	1739.7
50°	698.9	717.6	737.7	752.5	765.9	820.9	890.7	1014.1	1179.1	1378.9	1570.7
52.5°	638.5	651.9	669.3	677.4	689.5	729.7	783.4	874.6	1010.0	1192.5	1378.9
55°	582.2	591.5	602.3	615.7	621.1	650.6	692.1	769.9	870.5	1034.2	1211.3
57.5°	529.8	533.9	540.6	548.6	555.3	580.8	617.0	669.3	757.9	884.0	1051.6
60°	470.8	481.5	485.6	493.6	497.6	517.8	545.9	590.2	658.6	767.3	893.3
62.5°	421.2	427.9	434.6	438.6	448.0	454.7	477.5	517.8	574.1	654.6	768.6
65°	376.9	379.6	383.6	387.7	390.3	398.4	419.8	446.7	489.6	560.7	649.2
67.5°	326.0	328.6	334.0	335.3	338.0	348.8	360.8	383.6	419.8	473.5	545.9
70°	276.3	280.3	283.0	285.7	289.7	293.8	307.2	326.0	354.1	391.7	448.0
72.5°	233.4	237.4	237.4	240.1	238.8	244.1	257.5	271.0	289.7	320.6	370.2
75°	190.5	190.5	193.2	194.5	195.8	201.2	206.6	217.3	232.1	256.2	287.1
77.5°	150.2	148.9	151.6	151.6	151.6	155.6	161.0	166.3	175.7	193.2	217.3
80°	110.0	110.0	112.7	114.0	111.3	112.7	115.4	120.7	127.4	139.5	152.9
82.5°	72.4	77.8	76.5	77.8	76.5	79.1	80.5	81.8	84.5	89.9	99.3
85°	44.3	44.3	44.3	45.6	44.3	45.6	45.6	45.6	46.9	49.6	53.7
87.5°	18.8	18.8	18.8	20.1	18.8	18.8	20.1	18.8	20.1	20.1	21.5
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: P1037232

CATALOG NUMBER: S123DS-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3
2.5°	1421.8	1417.8	1417.8	1415.1	1407.1	1392.3	1391.0	1393.7	1385.6	1377.6	1365.5
5°	1491.6	1466.1	1458.1	1450.0	1433.9	1407.1	1396.4	1387.0	1372.2	1354.8	1336.0
7.5°	1550.6	1514.4	1503.7	1488.9	1456.7	1419.2	1395.0	1374.9	1354.8	1330.6	1307.8
10°	1624.4	1572.1	1546.6	1525.1	1480.9	1428.6	1392.3	1362.8	1330.6	1301.1	1271.6
12.5°	1707.6	1623.0	1615.0	1562.7	1511.7	1433.9	1389.7	1346.7	1303.8	1267.6	1236.7
15°	1777.3	1684.8	1651.2	1616.3	1518.4	1421.8	1378.9	1330.6	1281.0	1242.1	1196.5
17.5°	1821.6	1745.1	1674.0	1627.1	1525.1	1439.3	1356.1	1301.1	1248.8	1195.2	1157.6
20°	1875.2	1763.9	1702.2	1639.1	1538.5	1425.9	1342.7	1274.3	1209.9	1161.6	1116.0
22.5°	1928.9	1778.6	1727.7	1659.3	1541.2	1412.5	1318.6	1250.2	1176.4	1128.1	1078.5
25°	1923.5	1800.1	1715.6	1657.9	1514.4	1400.4	1290.4	1209.9	1141.5	1079.8	1030.2
27.5°	1927.5	1776.0	1690.1	1623.0	1495.6	1382.9	1260.9	1176.4	1105.3	1040.9	988.6
30°	1928.9	1739.7	1664.6	1584.1	1460.7	1341.4	1227.3	1141.5	1066.4	996.6	949.7
32.5°	1924.9	1710.2	1616.3	1543.9	1405.7	1301.1	1188.4	1097.2	1020.8	956.4	912.1
35°	1915.5	1675.4	1566.7	1475.5	1349.4	1243.4	1152.2	1058.3	976.5	917.5	866.5
37.5°	1890.0	1637.8	1514.4	1424.5	1283.7	1176.4	1095.9	1018.1	939.0	869.2	826.3
40°	1871.2	1586.8	1462.1	1364.2	1212.6	1108.0	1040.9	967.1	889.3	826.3	784.7
42.5°	1828.3	1538.5	1408.4	1291.7	1142.8	1035.5	972.5	913.5	846.4	784.7	747.1
45°	1758.5	1486.2	1342.7	1224.7	1066.4	964.4	906.8	858.5	799.5	740.4	702.9
47.5°	1660.6	1411.1	1273.0	1154.9	991.3	888.0	830.3	794.1	747.1	697.5	665.3
50°	1554.6	1329.3	1201.9	1085.2	918.8	818.2	761.9	728.4	697.5	651.9	621.1
52.5°	1416.5	1242.1	1120.0	1008.7	841.0	744.5	694.8	670.7	638.5	606.3	579.5
55°	1282.3	1129.4	1028.8	922.9	764.6	674.7	626.4	600.9	582.2	555.3	533.9
57.5°	1126.7	1024.8	932.2	835.7	693.5	611.7	566.1	535.2	523.1	511.1	490.9
60°	983.2	905.4	830.3	749.8	619.7	545.9	501.7	477.5	465.5	457.4	444.0
62.5°	851.8	791.4	727.0	662.6	544.6	477.5	444.0	419.8	409.1	407.8	395.7
65°	725.7	682.8	630.4	567.4	474.8	415.8	383.6	368.9	356.8	356.8	347.4
67.5°	599.6	570.1	528.5	484.2	411.8	356.8	327.3	313.9	307.2	307.2	300.5
70°	499.0	478.9	441.3	402.4	339.4	297.8	275.0	262.9	258.9	260.2	254.9
72.5°	405.1	383.6	352.8	324.6	277.7	246.8	230.7	217.3	210.6	211.9	210.6
75°	313.9	303.1	276.3	254.9	217.3	195.8	181.1	174.4	169.0	170.4	167.7
77.5°	236.1	220.0	205.2	190.5	167.7	150.2	138.2	131.5	127.4	127.4	127.4
80°	161.0	158.3	146.2	138.2	119.4	106.0	96.6	95.2	91.2	91.2	91.2
82.5°	104.6	97.9	91.2	85.8	75.1	67.1	63.0	60.4	59.0	57.7	60.4
85°	57.7	53.7	51.0	45.6	41.6	37.6	33.5	32.2	30.9	32.2	30.9
87.5°	22.8	18.8	18.8	17.4	16.1	14.8	14.8	12.1	12.1	10.7	10.7
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: P1037232

CATALOG NUMBER: S123DS-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3
2.5°	1362.8	1361.5	1364.2	1356.1	1342.7	1336.0	1317.2	1313.2	1311.9	1313.2	1314.5
5°	1325.3	1323.9	1319.9	1306.5	1290.4	1278.3	1255.5	1254.2	1246.1	1238.1	1242.1
7.5°	1289.1	1283.7	1275.6	1258.2	1236.7	1223.3	1204.5	1191.1	1180.4	1173.7	1168.3
10°	1252.8	1244.8	1236.7	1213.9	1187.1	1167.0	1144.2	1133.5	1121.4	1116.0	1110.6
12.5°	1205.9	1197.8	1183.1	1156.3	1140.2	1114.7	1091.9	1081.1	1074.4	1063.7	1057.0
15°	1168.3	1152.2	1144.2	1116.0	1082.5	1079.8	1038.2	1035.5	1022.1	1022.1	1011.4
17.5°	1125.4	1113.3	1098.6	1070.4	1046.3	1022.1	1000.7	992.6	980.5	977.9	972.5
20°	1083.8	1067.7	1062.4	1034.2	1008.7	979.2	956.4	948.3	943.0	937.6	941.6
22.5°	1040.9	1027.5	1014.1	988.6	969.8	940.3	926.9	918.8	910.8	908.1	909.4
25°	999.3	987.2	973.8	948.3	928.2	904.1	892.0	888.0	884.0	884.0	882.6
27.5°	959.1	947.0	934.9	912.1	892.0	874.6	865.2	861.2	857.1	859.8	862.5
30°	917.5	906.8	896.0	875.9	859.8	843.7	838.4	835.7	834.3	841.0	841.0
32.5°	879.9	870.5	862.5	843.7	827.6	814.2	810.2	811.5	812.9	816.9	819.6
35°	841.0	834.3	826.3	810.2	796.8	784.7	786.0	786.0	788.7	795.4	800.8
37.5°	806.2	796.8	790.1	776.6	765.9	755.2	759.2	763.2	765.9	774.0	776.6
40°	764.6	760.6	755.2	741.8	732.4	731.0	732.4	735.1	740.4	744.5	748.5
42.5°	731.0	725.7	719.0	708.2	700.2	701.5	702.9	705.6	708.2	714.9	719.0
45°	693.5	689.5	684.1	674.7	668.0	669.3	670.7	670.7	673.4	681.4	684.1
47.5°	651.9	653.2	646.5	637.1	633.1	633.1	633.1	635.8	642.5	645.2	646.5
50°	611.7	609.0	607.6	598.2	595.6	594.2	595.6	596.9	606.3	605.0	609.0
52.5°	568.7	568.7	567.4	562.0	558.0	558.0	555.3	562.0	564.7	567.4	571.4
55°	527.2	523.1	521.8	519.1	513.7	512.4	515.1	523.1	525.8	528.5	532.5
57.5°	481.5	481.5	478.9	474.8	474.8	474.8	474.8	480.2	484.2	486.9	495.0
60°	440.0	434.6	430.6	430.6	430.6	429.2	437.3	437.3	445.3	446.7	449.4
62.5°	390.3	387.7	385.0	386.3	385.0	387.7	390.3	395.7	397.0	401.1	405.1
65°	343.4	343.4	340.7	348.8	343.4	343.4	350.1	350.1	352.8	356.8	362.2
67.5°	297.8	299.1	296.4	296.4	299.1	300.5	301.8	307.2	308.5	313.9	320.6
70°	250.8	253.5	254.9	252.2	254.9	257.5	260.2	261.6	266.9	269.6	273.6
72.5°	209.3	211.9	207.9	209.3	210.6	213.3	214.6	217.3	220.0	228.0	230.7
75°	167.7	166.3	165.0	170.4	167.7	173.0	174.4	174.4	177.1	183.8	186.4
77.5°	128.8	128.8	130.1	127.4	131.5	130.1	131.5	135.5	139.5	139.5	150.2
80°	89.9	92.6	92.6	92.6	93.9	95.2	92.6	99.3	100.6	100.6	104.6
82.5°	57.7	59.0	57.7	60.4	60.4	63.0	61.7	63.0	65.7	68.4	69.8
85°	30.9	30.9	33.5	33.5	32.2	33.5	32.2	33.5	36.2	36.2	37.6
87.5°	10.7	10.7	10.7	10.7	12.1	10.7	12.1	12.1	10.7	10.7	14.8
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: P1037232

CATALOG NUMBER: S123DS-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3
2.5°	1313.2	1314.5	1309.2	1305.1	1315.9	1309.2	1309.2	1310.5	1307.8	1311.9	1310.5
5°	1239.4	1240.8	1231.4	1234.1	1228.7	1227.3	1226.0	1234.1	1232.7	1231.4	1234.1
7.5°	1167.0	1167.0	1163.0	1160.3	1160.3	1156.3	1161.6	1160.3	1163.0	1163.0	1167.0
10°	1106.6	1109.3	1102.6	1095.9	1094.6	1095.9	1095.9	1097.2	1098.6	1108.0	1106.6
12.5°	1057.0	1053.0	1051.6	1047.6	1040.9	1038.2	1035.5	1050.3	1046.3	1046.3	1046.3
15°	1002.0	1011.4	1010.0	998.0	995.3	1000.7	998.0	998.0	1011.4	1010.0	1008.7
17.5°	972.5	969.8	967.1	960.4	961.8	960.4	961.8	961.8	969.8	969.8	969.8
20°	939.0	933.6	933.6	930.9	930.9	926.9	932.2	933.6	939.0	939.0	940.3
22.5°	909.4	905.4	905.4	904.1	906.8	901.4	906.8	908.1	908.1	912.1	912.1
25°	884.0	881.3	881.3	884.0	884.0	884.0	884.0	889.3	885.3	886.6	885.3
27.5°	861.2	862.5	863.8	865.2	863.8	865.2	866.5	869.2	870.5	869.2	866.5
30°	839.7	843.7	845.1	845.1	847.7	849.1	850.4	850.4	851.8	847.7	850.4
32.5°	823.6	823.6	826.3	827.6	830.3	831.6	831.6	834.3	833.0	829.0	830.3
35°	800.8	800.8	806.2	808.8	812.9	811.5	812.9	812.9	814.2	811.5	807.5
37.5°	778.0	780.7	780.7	786.0	787.4	788.7	787.4	790.1	788.7	786.0	784.7
40°	751.2	749.8	751.2	755.2	756.5	756.5	756.5	759.2	759.2	759.2	757.9
42.5°	717.6	721.7	720.3	724.3	723.0	723.0	725.7	728.4	729.7	725.7	727.0
45°	685.4	685.4	688.1	688.1	689.5	689.5	694.8	692.1	694.8	692.1	693.5
47.5°	650.6	651.9	651.9	653.2	655.9	658.6	655.9	657.3	657.3	658.6	655.9
50°	611.7	611.7	614.3	618.4	623.7	621.1	619.7	625.1	621.1	621.1	618.4
52.5°	571.4	575.4	576.8	580.8	584.8	586.2	587.5	584.8	586.2	582.2	583.5
55°	532.5	533.9	539.2	543.3	547.3	547.3	545.9	547.3	548.6	543.3	543.3
57.5°	493.6	497.6	503.0	503.0	508.4	508.4	507.0	507.0	508.4	504.4	503.0
60°	452.0	456.1	462.8	462.8	470.8	472.2	469.5	466.8	466.8	462.8	464.1
62.5°	407.8	411.8	415.8	422.5	427.9	425.2	430.6	425.2	426.6	418.5	418.5
65°	368.9	370.2	376.9	383.6	383.6	386.3	383.6	385.0	380.9	380.9	375.6
67.5°	323.3	323.3	330.0	336.7	343.4	343.4	343.4	339.4	339.4	335.3	335.3
70°	283.0	281.7	288.4	292.4	296.4	297.8	295.1	293.8	291.1	287.1	285.7
72.5°	233.4	236.1	242.8	245.5	252.2	250.8	257.5	249.5	249.5	242.8	241.4
75°	189.1	191.8	198.5	202.5	206.6	206.6	210.6	206.6	201.2	198.5	197.2
77.5°	150.2	148.9	154.3	161.0	162.3	161.0	163.6	162.3	156.9	156.9	154.3
80°	107.3	111.3	116.7	115.4	120.7	119.4	119.4	116.7	116.7	112.7	115.4
82.5°	71.1	75.1	76.5	75.1	76.5	79.1	80.5	79.1	79.1	76.5	77.8
85°	37.6	37.6	40.2	41.6	40.2	40.2	41.6	45.6	42.9	40.2	42.9
87.5°	12.1	10.7	10.7	12.1	10.7	10.7	12.1	12.1	13.4	13.4	13.4
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: P1037232

CATALOG NUMBER: S123DS-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3	1384.3
2.5°	1314.5	1317.2	1318.6	1313.2	1309.2	1315.9	1325.3	1332.0	1337.3	1344.0	1348.1
5°	1236.7	1246.1	1246.1	1248.8	1252.8	1259.5	1277.0	1289.1	1299.8	1307.8	1314.5
7.5°	1171.0	1177.7	1181.7	1188.4	1195.2	1204.5	1224.7	1242.1	1258.2	1267.6	1278.3
10°	1112.0	1117.4	1124.1	1128.1	1140.2	1153.6	1179.1	1193.8	1212.6	1227.3	1240.8
12.5°	1055.7	1074.4	1078.5	1077.1	1087.8	1102.6	1128.1	1150.9	1171.0	1185.8	1200.5
15°	1015.4	1022.1	1030.2	1028.8	1051.6	1055.7	1077.1	1103.9	1130.8	1140.2	1153.6
17.5°	971.1	981.9	989.9	994.0	1000.7	1015.4	1035.5	1055.7	1090.5	1091.9	1126.7
20°	936.3	947.0	952.4	957.7	961.8	979.2	996.6	1019.4	1047.6	1062.4	1081.1
22.5°	913.5	918.8	922.9	926.9	932.2	941.6	963.1	988.6	1007.4	1023.5	1035.5
25°	886.6	892.0	897.4	900.1	904.1	909.4	925.5	945.7	972.5	983.2	995.3
27.5°	867.9	867.9	870.5	870.5	875.9	881.3	893.3	912.1	933.6	947.0	963.1
30°	847.7	846.4	847.7	846.4	845.1	853.1	863.8	879.9	894.7	910.8	921.5
32.5°	827.6	826.3	826.3	827.6	822.3	826.3	831.6	846.4	862.5	870.5	882.6
35°	806.2	803.5	803.5	803.5	800.8	798.1	803.5	816.9	827.6	838.4	847.7
37.5°	784.7	780.7	780.7	778.0	775.3	771.3	771.3	782.0	796.8	800.8	812.9
40°	755.2	755.2	752.5	751.2	748.5	745.8	741.8	751.2	764.6	768.6	778.0
42.5°	725.7	721.7	720.3	720.3	720.3	716.3	713.6	720.3	728.4	735.1	740.4
45°	692.1	689.5	690.8	689.5	686.8	685.4	684.1	686.8	696.2	698.9	705.6
47.5°	655.9	654.6	654.6	653.2	651.9	653.2	647.9	654.6	657.3	660.0	665.3
50°	618.4	617.0	615.7	614.3	614.3	615.7	614.3	614.3	619.7	622.4	627.8
52.5°	580.8	576.8	576.8	575.4	575.4	572.8	575.4	576.8	579.5	582.2	584.8
55°	540.6	540.6	536.5	536.5	533.9	533.9	535.2	533.9	539.2	541.9	541.9
57.5°	501.7	496.3	497.6	495.0	492.3	490.9	490.9	493.6	496.3	496.3	499.0
60°	460.1	454.7	453.4	448.0	450.7	446.7	448.0	448.0	453.4	450.7	453.4
62.5°	418.5	411.8	407.8	405.1	405.1	406.4	403.8	402.4	405.1	407.8	413.1
65°	374.2	370.2	366.2	362.2	362.2	360.8	363.5	359.5	358.1	359.5	362.2
67.5°	328.6	324.6	320.6	316.6	317.9	313.9	311.2	315.2	312.5	313.9	316.6
70°	284.4	281.7	273.6	271.0	269.6	271.0	269.6	266.9	271.0	269.6	271.0
72.5°	240.1	237.4	233.4	226.7	226.7	225.3	224.0	224.0	222.7	222.7	222.7
75°	197.2	191.8	187.8	186.4	183.8	182.4	181.1	178.4	179.7	181.1	178.4
77.5°	152.9	146.2	144.9	144.9	140.8	140.8	142.2	140.8	139.5	139.5	139.5
80°	112.7	107.3	107.3	104.6	101.9	101.9	101.9	101.9	100.6	99.3	100.6
82.5°	72.4	71.1	69.8	69.8	72.4	67.1	69.8	68.4	67.1	67.1	65.7
85°	40.2	41.6	40.2	41.6	38.9	40.2	40.2	40.2	38.9	40.2	37.6
87.5°	14.8	14.8	14.8	16.1	16.1	16.1	16.1	16.1	17.4	16.1	16.1
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: P1037232

CATALOG NUMBER: S123DS-B1000DB2750-4F0-XX-W2A-A_2700K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1384.3	1384.3	1384.3	1384.3
2.5°	1354.8	1358.8	1372.2	1388.3
5°	1327.9	1338.7	1357.5	1382.9
7.5°	1298.4	1314.5	1341.4	1373.6
10°	1264.9	1287.7	1321.2	1361.5
12.5°	1228.7	1258.2	1301.1	1342.7
15°	1205.9	1235.4	1274.3	1319.9
17.5°	1161.6	1196.5	1236.7	1301.1
20°	1116.0	1154.9	1207.2	1271.6
22.5°	1081.1	1122.7	1172.4	1240.8
25°	1039.6	1082.5	1136.1	1207.2
27.5°	995.3	1038.2	1098.6	1173.7
30°	961.8	1003.3	1061.0	1141.5
32.5°	921.5	961.8	1022.1	1106.6
35°	875.9	921.5	979.2	1065.0
37.5°	841.0	882.6	943.0	1024.8
40°	803.5	839.7	898.7	979.2
42.5°	763.2	803.5	854.4	934.9
45°	725.7	755.2	807.5	884.0
47.5°	685.4	719.0	759.2	818.2
50°	642.5	670.7	714.9	755.2
52.5°	600.9	623.7	661.3	692.1
55°	556.7	579.5	607.6	626.4
57.5°	515.1	531.2	550.0	562.0
60°	464.1	480.2	492.3	504.4
62.5°	418.5	430.6	437.3	444.0
65°	371.6	378.3	382.3	387.7
67.5°	320.6	327.3	328.6	336.7
70°	273.6	275.0	277.7	281.7
72.5°	229.4	232.1	230.7	233.4
75°	183.8	186.4	183.8	186.4
77.5°	139.5	142.2	142.2	146.2
80°	100.6	101.9	103.3	103.3
82.5°	65.7	69.8	67.1	68.4
85°	37.6	38.9	38.9	40.2
87.5°	17.4	18.8	17.4	20.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)