

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: P1037266

Luminaire Tested: S123DS-B1165DB2750-4F0-XX-W2A-A_5000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037266
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-B1165DB2750-4F0-XX-W2A-A_5000K
Description: Define 3 Direct Surface with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

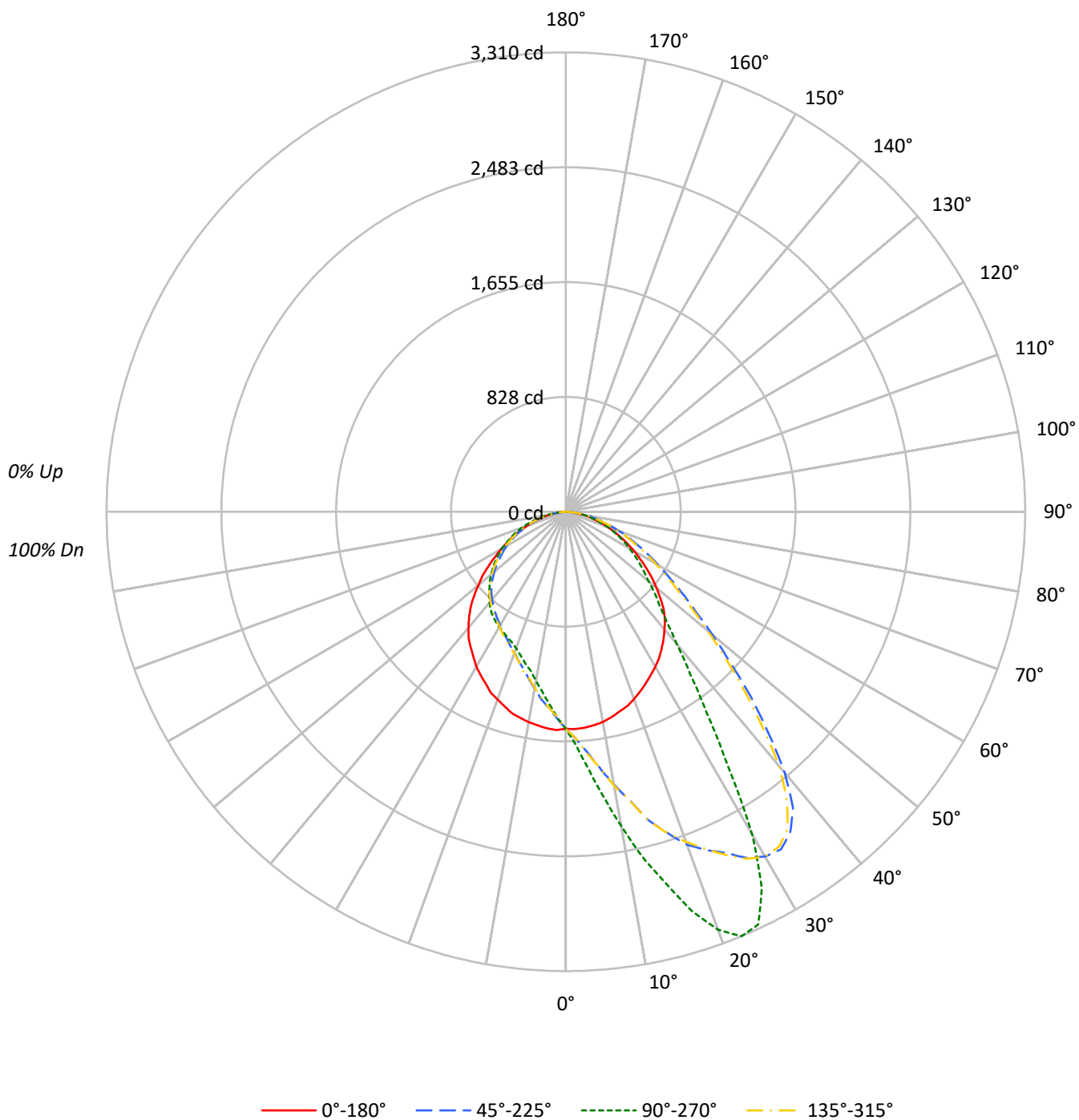
Lumens per Lamp: N/A
Luminaire Lumens: 4718.0 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.37 / 1.5
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	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°	16826	16826	16826	16826
5°	16874	20066	16923	14976
10°	16805	25115	16821	13526
15°	16610	30805	16744	12592
20°	16449	36697	16483	11990
25°	16191	38966	16227	11855
30°	16021	33398	16021	11917
35°	15804	23228	15704	12042
40°	15538	17495	15345	12004
45°	15195	14527	14757	11852
50°	14281	13013	13773	11744
55°	13275	12166	12735	11598
60°	12260	11414	11608	11479
65°	11151	10725	10611	11110
70°	10011	10058	9344	10584
75°	8754	9008	8189	9703
80°	7228	7885	6664	8356
85°	5607	6175	4495	5607

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 35°

Vertical Angle: 45°

Luminance: 33919 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.7	3.3
10°-20°	493.8	10.5
20°-30°	830.9	17.6
30°-40°	938.9	19.9
40°-50°	841.0	17.8
50°-60°	678.9	14.4
60°-70°	473.1	10.0
70°-80°	248.3	5.3
80°-90°	59.5	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°	1478.4	31.3
0°-40°	2417.3	51.2
0°-60°	3937.1	83.4
0°-90°	4718.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4718.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1563	1563	1563	1563	1563	
5°	1562	1857	1566	1386	1562	148
15°	1490	2764	1503	1130	1490	421
25°	1363	3281	1366	998	1363	629
35°	1203	1768	1195	916	1203	753
45°	998	954	969	779	998	763
55°	707	648	679	618	707	633
65°	438	421	417	436	438	436
75°	210	217	197	233	210	226
85°	45	50	36	45	45	55
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°	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2
2.5°	1567.7	1579.9	1585.9	1595.0	1604.1	1617.7	1622.3	1629.9	1626.8	1632.9	1635.9
5°	1561.7	1582.9	1601.1	1623.8	1645.0	1660.1	1675.3	1699.5	1717.7	1720.7	1734.4
7.5°	1551.1	1581.4	1613.2	1645.0	1685.9	1710.1	1737.4	1770.7	1798.0	1841.9	1858.6
10°	1537.5	1579.9	1625.3	1669.2	1725.3	1763.1	1796.5	1852.5	1908.6	1954.0	1996.4
12.5°	1516.2	1569.3	1628.3	1693.5	1766.2	1810.1	1855.5	1929.8	2014.6	2084.3	2129.7
15°	1490.5	1557.1	1632.9	1702.6	1782.8	1864.6	1913.1	1996.4	2117.6	2182.7	2299.4
17.5°	1469.3	1537.5	1613.2	1722.3	1831.3	1913.1	1947.9	2100.9	2184.2	2293.3	2425.1
20°	1436.0	1522.3	1619.2	1728.3	1869.2	1919.2	1990.4	2144.9	2247.9	2390.2	2552.3
22.5°	1401.1	1493.5	1610.2	1723.8	1881.3	1934.3	2031.3	2153.9	2317.5	2458.4	2637.1
25°	1363.3	1463.2	1581.4	1716.2	1870.7	1947.9	2038.8	2190.3	2367.5	2544.8	2709.9
27.5°	1325.4	1434.5	1557.1	1692.0	1841.9	1932.8	2023.7	2181.2	2408.4	2600.8	2811.3
30°	1289.0	1398.1	1520.8	1658.6	1816.2	1904.0	1990.4	2187.3	2440.2	2656.8	2868.9
32.5°	1249.7	1361.7	1490.5	1605.6	1764.7	1858.6	1955.5	2187.3	2459.9	2690.2	2884.1
35°	1202.7	1317.8	1428.4	1543.5	1701.0	1805.6	1914.6	2172.1	2478.1	2700.8	2820.4
37.5°	1157.3	1258.7	1354.2	1466.3	1631.4	1743.5	1869.2	2153.9	2469.0	2655.3	2688.6
40°	1105.8	1207.2	1284.5	1389.0	1563.2	1693.5	1820.7	2129.7	2429.6	2547.8	2450.8
42.5°	1055.8	1136.0	1202.7	1304.2	1493.5	1620.8	1758.6	2085.8	2352.4	2376.6	2158.5
45°	998.2	1055.8	1114.8	1230.0	1417.8	1548.1	1701.0	2022.2	2228.2	2158.5	1882.8
47.5°	924.0	975.5	1040.6	1146.7	1337.5	1472.3	1617.7	1940.4	2047.9	1902.5	1601.1
50°	852.8	896.7	957.3	1060.3	1252.7	1384.5	1539.0	1811.6	1864.6	1635.9	1379.9
52.5°	781.6	814.9	874.0	977.0	1169.4	1296.6	1437.5	1679.8	1649.5	1404.2	1176.9
55°	707.4	736.2	792.2	893.7	1072.4	1193.6	1328.4	1517.8	1439.0	1205.7	1024.0
57.5°	634.7	665.0	722.5	807.4	975.5	1093.6	1201.2	1349.6	1231.5	1045.2	884.6
60°	569.5	595.3	639.2	722.5	875.5	970.9	1069.4	1170.9	1072.4	892.2	769.5
62.5°	501.4	525.6	566.5	642.2	774.0	858.9	937.6	1020.9	911.9	780.1	671.0
65°	437.8	457.4	495.3	565.0	672.5	742.2	805.8	863.4	775.5	654.4	572.6
67.5°	380.2	396.9	428.7	490.8	581.7	631.6	683.1	731.6	657.4	560.5	490.8
70°	318.1	331.7	360.5	405.9	478.7	530.2	568.0	604.4	537.7	460.5	413.5
72.5°	263.6	277.2	295.4	342.3	392.3	424.1	465.0	484.7	446.8	383.2	336.3
75°	210.5	221.2	237.8	268.1	315.1	336.3	362.0	377.2	342.3	299.9	271.1
77.5°	165.1	169.7	181.8	203.0	234.8	259.0	278.7	287.8	263.6	236.3	212.1
80°	116.6	122.7	131.8	150.0	174.2	181.8	193.9	204.5	189.3	165.1	150.0
82.5°	77.3	84.8	89.4	96.9	112.1	121.2	124.2	133.3	119.7	110.6	104.5
85°	45.4	48.5	50.0	54.5	62.1	66.6	71.2	72.7	69.7	68.2	62.1
87.5°	22.7	22.7	22.7	25.8	27.3	30.3	31.8	31.8	31.8	30.3	28.8
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2
2.5°	1646.5	1649.5	1660.1	1667.7	1682.9	1681.4	1681.4	1679.8	1675.3	1682.9	1687.4
5°	1761.6	1787.4	1790.4	1823.7	1825.3	1838.9	1848.0	1840.4	1858.6	1857.1	1843.4
7.5°	1904.0	1938.9	1955.5	1987.3	2023.7	2014.6	2049.4	2055.5	2052.5	2067.6	2078.2
10°	2060.0	2120.6	2163.0	2222.1	2237.3	2246.3	2269.1	2288.8	2328.1	2297.8	2317.5
12.5°	2238.8	2282.7	2338.7	2432.7	2479.6	2509.9	2520.5	2534.1	2561.4	2544.8	2546.3
15°	2388.7	2447.8	2543.2	2659.9	2673.5	2711.4	2702.3	2784.1	2823.5	2764.4	2797.7
17.5°	2544.8	2623.5	2737.1	2838.6	2896.2	2921.9	2946.2	3024.9	3021.9	3012.8	3020.4
20°	2644.7	2773.5	2914.3	3049.2	3065.8	3085.5	3150.6	3184.0	3177.9	3203.7	3220.3
22.5°	2785.6	2921.9	3071.9	3161.2	3199.1	3221.8	3273.3	3294.5	3303.6	3309.7	3299.1
25°	2903.7	3049.2	3159.7	3238.5	3261.2	3273.3	3290.0	3296.1	3291.5	3280.9	3290.0
27.5°	2984.0	3100.7	3176.4	3212.7	3200.6	3180.9	3149.1	3127.9	3081.0	3058.2	3085.5
30°	3017.3	3068.8	3091.6	3031.0	2970.4	2921.9	2861.3	2749.2	2661.4	2687.1	2652.3
32.5°	2964.3	2931.0	2821.9	2665.9	2619.0	2540.2	2369.0	2237.3	2241.8	2172.1	2200.9
35°	2808.3	2656.8	2450.8	2214.5	2152.4	2110.0	1922.2	1893.4	1832.8	1767.7	1785.9
37.5°	2532.6	2311.5	2061.6	1887.4	1795.0	1702.6	1596.5	1532.9	1496.6	1469.3	1490.5
40°	2196.4	1926.7	1720.7	1564.7	1486.0	1426.9	1354.2	1290.6	1249.7	1245.1	1252.7
42.5°	1866.2	1638.9	1449.6	1301.2	1275.4	1205.7	1158.8	1108.8	1096.7	1077.0	1087.6
45°	1579.9	1395.1	1239.1	1117.9	1087.6	1069.4	1011.8	980.0	966.4	954.3	972.5
47.5°	1372.3	1178.5	1064.9	992.1	961.9	931.6	899.8	878.5	867.9	869.5	867.9
50°	1172.4	1030.0	930.0	874.0	855.8	834.6	808.9	795.2	790.7	777.1	787.7
52.5°	1008.8	905.8	836.1	783.1	769.5	754.3	733.1	725.6	715.0	711.9	711.9
55°	877.0	796.7	740.7	705.9	689.2	677.1	665.0	655.9	648.3	648.3	648.3
57.5°	774.0	704.4	663.5	633.2	627.1	615.0	601.3	601.3	590.7	589.2	593.8
60°	686.2	624.1	592.3	566.5	557.4	554.4	540.8	540.8	537.7	530.2	536.2
62.5°	596.8	551.4	524.1	504.4	495.3	495.3	484.7	477.1	477.1	478.7	475.6
65°	515.0	481.7	457.4	442.3	437.8	431.7	430.2	424.1	419.6	421.1	419.6
67.5°	442.3	416.6	399.9	387.8	380.2	377.2	372.6	372.6	369.6	371.1	363.5
70°	377.2	351.4	337.8	325.7	322.6	322.6	316.6	318.1	315.1	319.6	316.6
72.5°	310.5	290.8	280.2	275.7	272.7	271.1	268.1	265.1	263.6	266.6	265.1
75°	251.4	234.8	227.2	224.2	221.2	221.2	219.6	218.1	216.6	216.6	216.6
77.5°	195.4	184.8	175.7	178.7	174.2	175.7	171.2	171.2	172.7	171.2	171.2
80°	143.9	136.3	136.3	133.3	127.2	130.3	130.3	125.7	124.2	127.2	122.7
82.5°	95.4	93.9	90.9	89.4	86.3	87.9	86.3	84.8	83.3	86.3	83.3
85°	56.0	56.0	54.5	51.5	54.5	53.0	51.5	51.5	50.0	50.0	50.0
87.5°	28.8	25.8	25.8	24.2	25.8	22.7	24.2	22.7	21.2	22.7	21.2
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°	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2
2.5°	1675.3	1679.8	1667.7	1664.7	1664.7	1670.7	1666.2	1625.3	1632.9	1623.8	1620.8
5°	1860.1	1851.0	1838.9	1832.8	1825.3	1804.0	1802.5	1755.6	1746.5	1716.2	1702.6
7.5°	2063.1	2055.5	2019.1	2014.6	2011.6	1991.9	1941.9	1891.9	1855.5	1820.7	1787.4
10°	2294.8	2272.1	2255.4	2222.1	2205.5	2178.2	2113.1	2066.1	2004.0	1951.0	1881.3
12.5°	2573.5	2547.8	2491.7	2467.5	2446.3	2370.6	2305.4	2252.4	2131.2	2094.9	2008.5
15°	2778.0	2723.5	2717.4	2664.4	2661.4	2578.1	2453.9	2396.3	2302.4	2169.1	2079.7
17.5°	2999.2	2950.7	2912.8	2849.2	2840.1	2761.4	2670.5	2529.6	2426.6	2299.4	2185.8
20°	3161.2	3135.5	3070.4	3044.6	2991.6	2924.9	2831.0	2656.8	2531.1	2403.9	2264.5
22.5°	3290.0	3264.2	3212.7	3177.9	3147.6	3061.3	2949.2	2800.7	2628.1	2461.4	2317.5
25°	3288.5	3280.9	3259.7	3243.0	3220.3	3156.7	3062.8	2920.4	2728.0	2544.8	2344.8
27.5°	3102.2	3123.4	3159.7	3177.9	3173.4	3164.3	3111.3	2991.6	2818.9	2600.8	2376.6
30°	2714.4	2791.7	2859.8	2950.7	2978.0	3044.6	3074.9	3006.7	2868.9	2665.9	2417.5
32.5°	2250.9	2363.0	2511.4	2561.4	2647.8	2776.5	2920.4	2946.2	2859.8	2703.8	2443.3
35°	1846.5	1938.9	2054.0	2132.7	2210.0	2419.0	2600.8	2758.3	2787.1	2684.1	2437.2
37.5°	1528.4	1593.5	1695.0	1761.6	1832.8	2011.6	2266.0	2470.5	2614.4	2617.5	2420.5
40°	1298.1	1326.9	1414.8	1463.2	1531.4	1685.9	1913.1	2179.7	2390.2	2487.2	2376.6
42.5°	1099.7	1137.6	1210.3	1246.6	1290.6	1425.4	1575.3	1828.3	2088.8	2296.3	2294.8
45°	981.5	1008.8	1042.1	1072.4	1122.4	1202.7	1373.9	1563.2	1813.1	2047.9	2140.3
47.5°	877.0	902.8	936.1	945.2	978.5	1054.3	1158.8	1323.9	1557.1	1790.4	1964.6
50°	789.2	810.4	833.1	849.8	864.9	927.0	1005.8	1145.1	1331.4	1557.1	1773.8
52.5°	721.0	736.2	755.9	764.9	778.6	824.0	884.6	987.6	1140.6	1346.6	1557.1
55°	657.4	668.0	680.1	695.3	701.3	734.6	781.6	869.5	983.1	1167.9	1367.8
57.5°	598.3	602.9	610.4	619.5	627.1	655.9	696.8	755.9	855.8	998.2	1187.6
60°	531.7	543.8	548.3	557.4	562.0	584.7	616.5	666.5	743.7	866.4	1008.8
62.5°	475.6	483.2	490.8	495.3	505.9	513.5	539.2	584.7	648.3	739.2	867.9
65°	425.6	428.7	433.2	437.8	440.8	449.9	474.1	504.4	552.9	633.2	733.1
67.5°	368.1	371.1	377.2	378.7	381.7	393.8	407.5	433.2	474.1	534.7	616.5
70°	312.0	316.6	319.6	322.6	327.2	331.7	346.9	368.1	399.9	442.3	505.9
72.5°	263.6	268.1	268.1	271.1	269.6	275.7	290.8	306.0	327.2	362.0	418.1
75°	215.1	215.1	218.1	219.6	221.2	227.2	233.3	245.4	262.0	289.3	324.2
77.5°	169.7	168.1	171.2	171.2	171.2	175.7	181.8	187.8	198.4	218.1	245.4
80°	124.2	124.2	127.2	128.8	125.7	127.2	130.3	136.3	143.9	157.5	172.7
82.5°	81.8	87.9	86.3	87.9	86.3	89.4	90.9	92.4	95.4	101.5	112.1
85°	50.0	50.0	50.0	51.5	50.0	51.5	51.5	51.5	53.0	56.0	60.6
87.5°	21.2	21.2	21.2	22.7	21.2	21.2	22.7	21.2	22.7	22.7	24.2
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: P1037266

CATALOG NUMBER: S123DS-B1165DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2
2.5°	1605.6	1601.1	1601.1	1598.0	1589.0	1572.3	1570.8	1573.8	1564.7	1555.6	1542.0
5°	1684.4	1655.6	1646.5	1637.4	1619.2	1589.0	1576.8	1566.2	1549.6	1529.9	1508.7
7.5°	1751.0	1710.1	1698.0	1681.4	1645.0	1602.6	1575.3	1552.6	1529.9	1502.6	1476.9
10°	1834.3	1775.3	1746.5	1722.3	1672.3	1613.2	1572.3	1539.0	1502.6	1469.3	1436.0
12.5°	1928.3	1832.8	1823.7	1764.7	1707.1	1619.2	1569.3	1520.8	1472.3	1431.4	1396.6
15°	2007.0	1902.5	1864.6	1825.3	1714.7	1605.6	1557.1	1502.6	1446.6	1402.6	1351.1
17.5°	2057.0	1970.7	1890.4	1837.4	1722.3	1625.3	1531.4	1469.3	1410.2	1349.6	1307.2
20°	2117.6	1991.9	1922.2	1851.0	1737.4	1610.2	1516.2	1439.0	1366.3	1311.8	1260.3
22.5°	2178.2	2008.5	1951.0	1873.7	1740.4	1595.0	1489.0	1411.7	1328.4	1273.9	1217.8
25°	2172.1	2032.8	1937.3	1872.2	1710.1	1581.4	1457.2	1366.3	1289.0	1219.4	1163.3
27.5°	2176.7	2005.5	1908.6	1832.8	1688.9	1561.7	1423.8	1328.4	1248.1	1175.4	1116.4
30°	2178.2	1964.6	1879.8	1788.9	1649.5	1514.7	1386.0	1289.0	1204.2	1125.4	1072.4
32.5°	2173.6	1931.3	1825.3	1743.5	1587.4	1469.3	1342.1	1239.1	1152.7	1080.0	1030.0
35°	2163.0	1891.9	1769.2	1666.2	1523.8	1404.2	1301.2	1195.1	1102.7	1036.1	978.5
37.5°	2134.3	1849.5	1710.1	1608.6	1449.6	1328.4	1237.5	1149.7	1060.3	981.5	933.1
40°	2113.1	1791.9	1651.1	1540.5	1369.3	1251.2	1175.4	1092.1	1004.3	933.1	886.1
42.5°	2064.6	1737.4	1590.5	1458.7	1290.6	1169.4	1098.2	1031.5	955.8	886.1	843.7
45°	1985.8	1678.3	1516.2	1383.0	1204.2	1089.1	1024.0	969.4	902.8	836.1	793.7
47.5°	1875.2	1593.5	1437.5	1304.2	1119.4	1002.8	937.6	896.7	843.7	787.7	751.3
50°	1755.6	1501.1	1357.2	1225.4	1037.6	924.0	860.4	822.5	787.7	736.2	701.3
52.5°	1599.6	1402.6	1264.8	1139.1	949.7	840.7	784.6	757.4	721.0	684.7	654.4
55°	1448.1	1275.4	1161.8	1042.1	863.4	761.9	707.4	678.6	657.4	627.1	602.9
57.5°	1272.4	1157.3	1052.7	943.7	783.1	690.7	639.2	604.4	590.7	577.1	554.4
60°	1110.3	1022.4	937.6	846.7	699.8	616.5	566.5	539.2	525.6	516.5	501.4
62.5°	961.9	893.7	821.0	748.3	615.0	539.2	501.4	474.1	462.0	460.5	446.8
65°	819.5	771.0	711.9	640.7	536.2	469.6	433.2	416.6	402.9	402.9	392.3
67.5°	677.1	643.8	596.8	546.8	465.0	402.9	369.6	354.4	346.9	346.9	339.3
70°	563.5	540.8	498.3	454.4	383.2	336.3	310.5	296.9	292.3	293.9	287.8
72.5°	457.4	433.2	398.4	366.6	313.5	278.7	260.5	245.4	237.8	239.3	237.8
75°	354.4	342.3	312.0	287.8	245.4	221.2	204.5	196.9	190.9	192.4	189.3
77.5°	266.6	248.4	231.8	215.1	189.3	169.7	156.0	148.4	143.9	143.9	143.9
80°	181.8	178.7	165.1	156.0	134.8	119.7	109.1	107.5	103.0	103.0	103.0
82.5°	118.1	110.6	103.0	96.9	84.8	75.7	71.2	68.2	66.6	65.1	68.2
85°	65.1	60.6	57.6	51.5	47.0	42.4	37.9	36.4	34.8	36.4	34.8
87.5°	25.8	21.2	21.2	19.7	18.2	16.7	16.7	13.6	13.6	12.1	12.1
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: P1037266

CATALOG NUMBER: S123DS-B1165DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2
2.5°	1539.0	1537.5	1540.5	1531.4	1516.2	1508.7	1487.5	1482.9	1481.4	1482.9	1484.4
5°	1496.6	1495.0	1490.5	1475.3	1457.2	1443.5	1417.8	1416.3	1407.2	1398.1	1402.6
7.5°	1455.7	1449.6	1440.5	1420.8	1396.6	1381.4	1360.2	1345.1	1333.0	1325.4	1319.3
10°	1414.8	1405.7	1396.6	1370.8	1340.5	1317.8	1292.1	1279.9	1266.3	1260.3	1254.2
12.5°	1361.7	1352.7	1336.0	1305.7	1287.5	1258.7	1233.0	1220.9	1213.3	1201.2	1193.6
15°	1319.3	1301.2	1292.1	1260.3	1222.4	1219.4	1172.4	1169.4	1154.2	1154.2	1142.1
17.5°	1270.9	1257.2	1240.6	1208.8	1181.5	1154.2	1130.0	1120.9	1107.3	1104.2	1098.2
20°	1223.9	1205.7	1199.7	1167.9	1139.1	1105.8	1080.0	1070.9	1064.9	1058.8	1063.3
22.5°	1175.4	1160.3	1145.1	1116.4	1095.2	1061.8	1046.7	1037.6	1028.5	1025.5	1027.0
25°	1128.5	1114.8	1099.7	1070.9	1048.2	1020.9	1007.3	1002.8	998.2	998.2	996.7
27.5°	1083.0	1069.4	1055.8	1030.0	1007.3	987.6	977.0	972.5	967.9	970.9	974.0
30°	1036.1	1024.0	1011.8	989.1	970.9	952.8	946.7	943.7	942.2	949.7	949.7
32.5°	993.7	983.1	974.0	952.8	934.6	919.4	914.9	916.4	917.9	922.5	925.5
35°	949.7	942.2	933.1	914.9	899.8	886.1	887.6	887.6	890.7	898.2	904.3
37.5°	910.4	899.8	892.2	877.0	864.9	852.8	857.3	861.9	864.9	874.0	877.0
40°	863.4	858.9	852.8	837.6	827.0	825.5	827.0	830.1	836.1	840.7	845.2
42.5°	825.5	819.5	811.9	799.8	790.7	792.2	793.7	796.7	799.8	807.4	811.9
45°	783.1	778.6	772.5	761.9	754.3	755.9	757.4	757.4	760.4	769.5	772.5
47.5°	736.2	737.7	730.1	719.5	715.0	715.0	715.0	718.0	725.6	728.6	730.1
50°	690.7	687.7	686.2	675.6	672.5	671.0	672.5	674.1	684.7	683.1	687.7
52.5°	642.2	642.2	640.7	634.7	630.1	630.1	627.1	634.7	637.7	640.7	645.3
55°	595.3	590.7	589.2	586.2	580.1	578.6	581.7	590.7	593.8	596.8	601.3
57.5°	543.8	543.8	540.8	536.2	536.2	536.2	536.2	542.3	546.8	549.8	558.9
60°	496.8	490.8	486.2	486.2	486.2	484.7	493.8	493.8	502.9	504.4	507.4
62.5°	440.8	437.8	434.7	436.2	434.7	437.8	440.8	446.8	448.4	452.9	457.4
65°	387.8	387.8	384.7	393.8	387.8	387.8	395.3	395.3	398.4	402.9	409.0
67.5°	336.3	337.8	334.8	334.8	337.8	339.3	340.8	346.9	348.4	354.4	362.0
70°	283.3	286.3	287.8	284.8	287.8	290.8	293.9	295.4	301.4	304.5	309.0
72.5°	236.3	239.3	234.8	236.3	237.8	240.8	242.4	245.4	248.4	257.5	260.5
75°	189.3	187.8	186.3	192.4	189.3	195.4	196.9	196.9	199.9	207.5	210.5
77.5°	145.4	145.4	146.9	143.9	148.4	146.9	148.4	153.0	157.5	157.5	169.7
80°	101.5	104.5	104.5	104.5	106.0	107.5	104.5	112.1	113.6	113.6	118.1
82.5°	65.1	66.6	65.1	68.2	68.2	71.2	69.7	71.2	74.2	77.3	78.8
85°	34.8	34.8	37.9	37.9	36.4	37.9	36.4	37.9	40.9	40.9	42.4
87.5°	12.1	12.1	12.1	12.1	13.6	12.1	13.6	13.6	12.1	12.1	16.7
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: P1037266

CATALOG NUMBER: S123DS-B1165DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2
2.5°	1482.9	1484.4	1478.4	1473.8	1486.0	1478.4	1478.4	1479.9	1476.9	1481.4	1479.9
5°	1399.6	1401.1	1390.5	1393.6	1387.5	1386.0	1384.5	1393.6	1392.0	1390.5	1393.6
7.5°	1317.8	1317.8	1313.3	1310.2	1310.2	1305.7	1311.8	1310.2	1313.3	1313.3	1317.8
10°	1249.7	1252.7	1245.1	1237.5	1236.0	1237.5	1237.5	1239.1	1240.6	1251.2	1249.7
12.5°	1193.6	1189.1	1187.6	1183.0	1175.4	1172.4	1169.4	1186.0	1181.5	1181.5	1181.5
15°	1131.5	1142.1	1140.6	1127.0	1123.9	1130.0	1127.0	1127.0	1142.1	1140.6	1139.1
17.5°	1098.2	1095.2	1092.1	1084.5	1086.1	1084.5	1086.1	1086.1	1095.2	1095.2	1095.2
20°	1060.3	1054.3	1054.3	1051.2	1051.2	1046.7	1052.7	1054.3	1060.3	1060.3	1061.8
22.5°	1027.0	1022.4	1022.4	1020.9	1024.0	1017.9	1024.0	1025.5	1025.5	1030.0	1030.0
25°	998.2	995.2	995.2	998.2	998.2	998.2	998.2	1004.3	999.7	1001.2	999.7
27.5°	972.5	974.0	975.5	977.0	975.5	977.0	978.5	981.5	983.1	981.5	978.5
30°	948.2	952.8	954.3	954.3	957.3	958.8	960.3	960.3	961.9	957.3	960.3
32.5°	930.0	930.0	933.1	934.6	937.6	939.1	939.1	942.2	940.6	936.1	937.6
35°	904.3	904.3	910.4	913.4	917.9	916.4	917.9	917.9	919.4	916.4	911.9
37.5°	878.5	881.6	881.6	887.6	889.1	890.7	889.1	892.2	890.7	887.6	886.1
40°	848.3	846.7	848.3	852.8	854.3	854.3	854.3	857.3	857.3	857.3	855.8
42.5°	810.4	814.9	813.4	818.0	816.4	816.4	819.5	822.5	824.0	819.5	821.0
45°	774.0	774.0	777.1	777.1	778.6	778.6	784.6	781.6	784.6	781.6	783.1
47.5°	734.6	736.2	736.2	737.7	740.7	743.7	740.7	742.2	742.2	743.7	740.7
50°	690.7	690.7	693.7	698.3	704.4	701.3	699.8	705.9	701.3	701.3	698.3
52.5°	645.3	649.8	651.3	655.9	660.4	661.9	663.5	660.4	661.9	657.4	658.9
55°	601.3	602.9	608.9	613.5	618.0	618.0	616.5	618.0	619.5	613.5	613.5
57.5°	557.4	562.0	568.0	568.0	574.1	574.1	572.6	572.6	574.1	569.5	568.0
60°	510.5	515.0	522.6	522.6	531.7	533.2	530.2	527.1	527.1	522.6	524.1
62.5°	460.5	465.0	469.6	477.1	483.2	480.2	486.2	480.2	481.7	472.6	472.6
65°	416.6	418.1	425.6	433.2	433.2	436.2	433.2	434.7	430.2	430.2	424.1
67.5°	365.1	365.1	372.6	380.2	387.8	387.8	387.8	383.2	383.2	378.7	378.7
70°	319.6	318.1	325.7	330.2	334.8	336.3	333.2	331.7	328.7	324.2	322.6
72.5°	263.6	266.6	274.2	277.2	284.8	283.3	290.8	281.7	281.7	274.2	272.7
75°	213.6	216.6	224.2	228.7	233.3	233.3	237.8	233.3	227.2	224.2	222.7
77.5°	169.7	168.1	174.2	181.8	183.3	181.8	184.8	183.3	177.2	177.2	174.2
80°	121.2	125.7	131.8	130.3	136.3	134.8	134.8	131.8	131.8	127.2	130.3
82.5°	80.3	84.8	86.3	84.8	86.3	89.4	90.9	89.4	89.4	86.3	87.9
85°	42.4	42.4	45.4	47.0	45.4	45.4	47.0	51.5	48.5	45.4	48.5
87.5°	13.6	12.1	12.1	13.6	12.1	12.1	13.6	13.6	15.1	15.1	15.1
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: P1037266

CATALOG NUMBER: S123DS-B1165DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2	1563.2
2.5°	1484.4	1487.5	1489.0	1482.9	1478.4	1486.0	1496.6	1504.1	1510.2	1517.8	1522.3
5°	1396.6	1407.2	1407.2	1410.2	1414.8	1422.3	1442.0	1455.7	1467.8	1476.9	1484.4
7.5°	1322.4	1329.9	1334.5	1342.1	1349.6	1360.2	1383.0	1402.6	1420.8	1431.4	1443.5
10°	1255.7	1261.8	1269.3	1273.9	1287.5	1302.7	1331.4	1348.1	1369.3	1386.0	1401.1
12.5°	1192.1	1213.3	1217.8	1216.3	1228.4	1245.1	1273.9	1299.6	1322.4	1339.0	1355.7
15°	1146.7	1154.2	1163.3	1161.8	1187.6	1192.1	1216.3	1246.6	1276.9	1287.5	1302.7
17.5°	1096.7	1108.8	1117.9	1122.4	1130.0	1146.7	1169.4	1192.1	1231.5	1233.0	1272.4
20°	1057.3	1069.4	1075.5	1081.5	1086.1	1105.8	1125.4	1151.2	1183.0	1199.7	1220.9
22.5°	1031.5	1037.6	1042.1	1046.7	1052.7	1063.3	1087.6	1116.4	1137.6	1155.7	1169.4
25°	1001.2	1007.3	1013.4	1016.4	1020.9	1027.0	1045.2	1067.9	1098.2	1110.3	1123.9
27.5°	980.0	980.0	983.1	983.1	989.1	995.2	1008.8	1030.0	1054.3	1069.4	1087.6
30°	957.3	955.8	957.3	955.8	954.3	963.4	975.5	993.7	1010.3	1028.5	1040.6
32.5°	934.6	933.1	933.1	934.6	928.5	933.1	939.1	955.8	974.0	983.1	996.7
35°	910.4	907.3	907.3	907.3	904.3	901.3	907.3	922.5	934.6	946.7	957.3
37.5°	886.1	881.6	881.6	878.5	875.5	871.0	871.0	883.1	899.8	904.3	917.9
40°	852.8	852.8	849.8	848.3	845.2	842.2	837.6	848.3	863.4	867.9	878.5
42.5°	819.5	814.9	813.4	813.4	813.4	808.9	805.8	813.4	822.5	830.1	836.1
45°	781.6	778.6	780.1	778.6	775.5	774.0	772.5	775.5	786.1	789.2	796.7
47.5°	740.7	739.2	739.2	737.7	736.2	737.7	731.6	739.2	742.2	745.2	751.3
50°	698.3	696.8	695.3	693.7	693.7	695.3	693.7	693.7	699.8	702.8	708.9
52.5°	655.9	651.3	651.3	649.8	649.8	646.8	649.8	651.3	654.4	657.4	660.4
55°	610.4	610.4	605.9	605.9	602.9	602.9	604.4	602.9	608.9	612.0	612.0
57.5°	566.5	560.5	562.0	558.9	555.9	554.4	554.4	557.4	560.5	560.5	563.5
60°	519.6	513.5	512.0	505.9	509.0	504.4	505.9	505.9	512.0	509.0	512.0
62.5°	472.6	465.0	460.5	457.4	457.4	459.0	455.9	454.4	457.4	460.5	466.5
65°	422.6	418.1	413.5	409.0	409.0	407.5	410.5	405.9	404.4	405.9	409.0
67.5°	371.1	366.6	362.0	357.5	359.0	354.4	351.4	356.0	352.9	354.4	357.5
70°	321.1	318.1	309.0	306.0	304.5	306.0	304.5	301.4	306.0	304.5	306.0
72.5°	271.1	268.1	263.6	256.0	256.0	254.5	253.0	253.0	251.4	251.4	251.4
75°	222.7	216.6	212.1	210.5	207.5	206.0	204.5	201.5	203.0	204.5	201.5
77.5°	172.7	165.1	163.6	163.6	159.0	159.0	160.6	159.0	157.5	157.5	157.5
80°	127.2	121.2	121.2	118.1	115.1	115.1	115.1	115.1	113.6	112.1	113.6
82.5°	81.8	80.3	78.8	78.8	81.8	75.7	78.8	77.3	75.7	75.7	74.2
85°	45.4	47.0	45.4	47.0	43.9	45.4	45.4	45.4	43.9	45.4	42.4
87.5°	16.7	16.7	16.7	18.2	18.2	18.2	18.2	18.2	19.7	18.2	18.2
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: P1037266

CATALOG NUMBER: S123DS-B1165DB2750-4F0-XX-W2A-A_5000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1563.2	1563.2	1563.2	1563.2
2.5°	1529.9	1534.4	1549.6	1567.7
5°	1499.6	1511.7	1532.9	1561.7
7.5°	1466.3	1484.4	1514.7	1551.1
10°	1428.4	1454.1	1492.0	1537.5
12.5°	1387.5	1420.8	1469.3	1516.2
15°	1361.7	1395.1	1439.0	1490.5
17.5°	1311.8	1351.1	1396.6	1469.3
20°	1260.3	1304.2	1363.3	1436.0
22.5°	1220.9	1267.8	1323.9	1401.1
25°	1173.9	1222.4	1283.0	1363.3
27.5°	1123.9	1172.4	1240.6	1325.4
30°	1086.1	1133.0	1198.2	1289.0
32.5°	1040.6	1086.1	1154.2	1249.7
35°	989.1	1040.6	1105.8	1202.7
37.5°	949.7	996.7	1064.9	1157.3
40°	907.3	948.2	1014.9	1105.8
42.5°	861.9	907.3	964.9	1055.8
45°	819.5	852.8	911.9	998.2
47.5°	774.0	811.9	857.3	924.0
50°	725.6	757.4	807.4	852.8
52.5°	678.6	704.4	746.8	781.6
55°	628.6	654.4	686.2	707.4
57.5°	581.7	599.8	621.0	634.7
60°	524.1	542.3	555.9	569.5
62.5°	472.6	486.2	493.8	501.4
65°	419.6	427.2	431.7	437.8
67.5°	362.0	369.6	371.1	380.2
70°	309.0	310.5	313.5	318.1
72.5°	259.0	262.0	260.5	263.6
75°	207.5	210.5	207.5	210.5
77.5°	157.5	160.6	160.6	165.1
80°	113.6	115.1	116.6	116.6
82.5°	74.2	78.8	75.7	77.3
85°	42.4	43.9	43.9	45.4
87.5°	19.7	21.2	19.7	22.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)