

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: P1037606

Luminaire Tested: S124DS-B1020DB50-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-21)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DS-B1020DB50-4F0-XX-W2A-A
Description: Define 4 Direct Surface with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

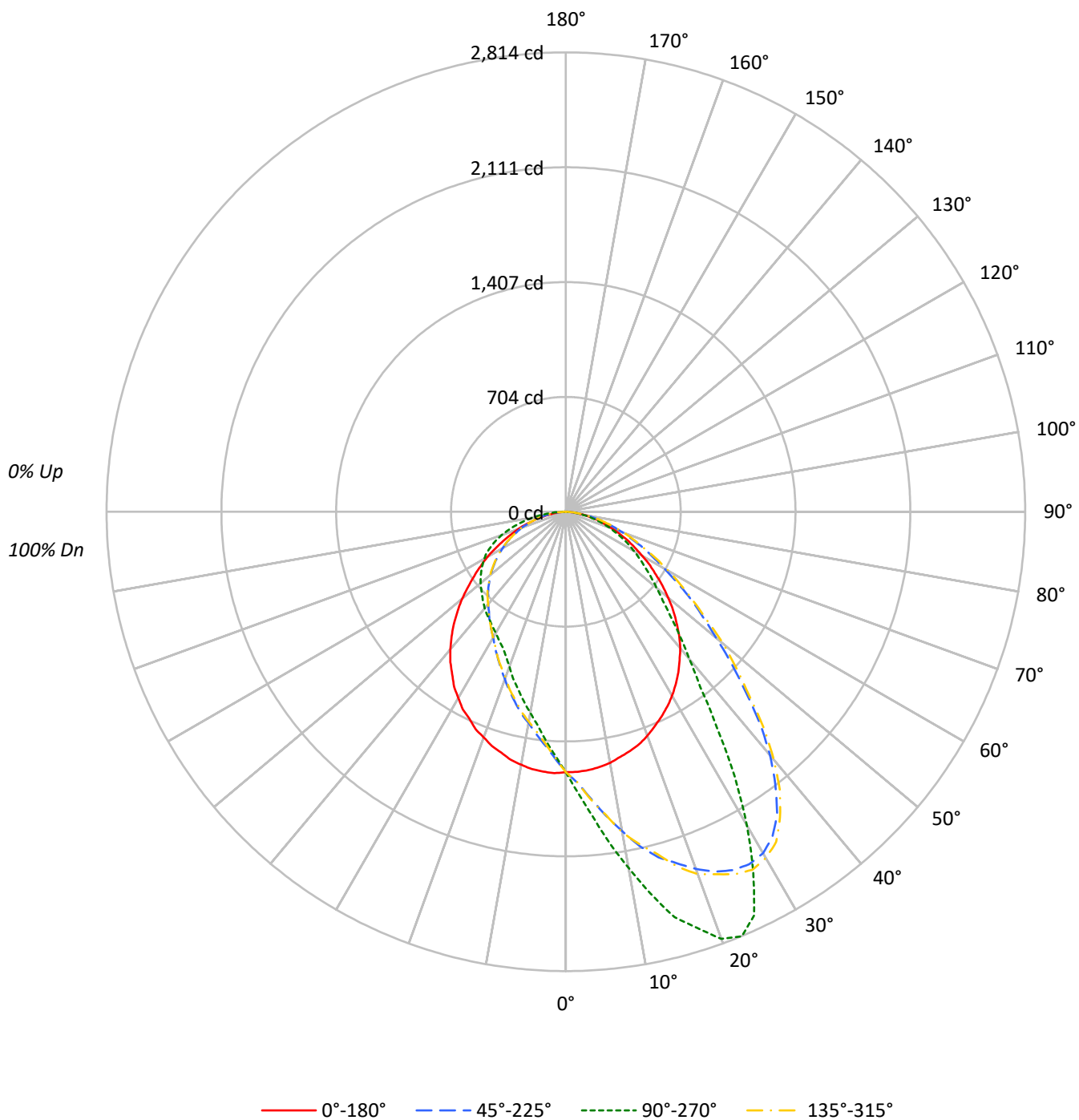
Lumens per Lamp: N/A
Luminaire Lumens: 4401.0 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.41
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	101	97	107	103	99	96	98	95	93		95	92	90		91
2	100	92	86	80	98	90	84	79	87	82	78		84	79	76		81
3	92	82	74	68	89	80	73	67	77	71	66		74	69	65		72
4	84	73	64	58	82	72	64	58	69	62	57		67	61	56		65
5	78	65	57	50	76	64	56	50	62	55	50		60	54	49		58
6	72	59	51	44	70	58	50	44	56	49	44		55	48	43		53
7	67	54	45	39	65	53	45	39	52	44	39		50	44	39		49
8	62	49	41	35	61	49	41	35	47	40	35		46	40	35		45
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	34	29	54	41	34	29	40	34	29		39	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13006	13006	13006	13006
5°	13001	15316	13077	11508
10°	12933	18338	13032	10361
15°	12806	21697	12895	9515
20°	12670	24160	12762	8760
25°	12460	24551	12578	8239
30°	12256	20890	12405	8075
35°	11957	16061	12088	8076
40°	11604	12518	11717	8229
45°	11048	10438	11185	8365
50°	10376	9186	10527	8649
55°	9581	8416	9731	8998
60°	8813	7887	9073	9417
65°	8108	7344	8185	9765
70°	7277	6712	7434	9987
75°	6493	5996	6453	9868
80°	5335	5025	5274	9556
85°	3958	3705	3705	9150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 145°

Vertical Angle: 45°

Luminance: 20084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.2	3.5
10°-20°	479.1	10.9
20°-30°	761.1	17.3
30°-40°	845.7	19.2
40°-50°	769.1	17.5
50°-60°	628.5	14.3
60°-70°	448.6	10.2
70°-80°	246.9	5.6
80°-90°	66.7	1.5
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°	1395.4	31.7
0°-40°	2241.2	50.9
0°-60°	3638.8	82.7
0°-90°	4401.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4401.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1595	1595	1595	1595	1595	
5°	1588	1871	1598	1406	1588	151
15°	1517	2570	1528	1127	1517	428
25°	1385	2729	1398	916	1385	638
35°	1201	1613	1214	811	1201	750
45°	958	905	970	725	958	739
55°	674	592	684	633	674	606
65°	420	381	424	506	420	415
75°	206	190	205	313	206	216
85°	42	40	40	98	42	52
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°	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9
2.5°	1594.9	1610.8	1617.4	1622.6	1639.8	1645.1	1646.4	1654.4	1661.0	1662.3	1662.3
5°	1588.3	1613.4	1633.2	1651.7	1679.5	1691.4	1705.9	1721.7	1742.9	1756.1	1762.7
7.5°	1577.7	1614.7	1645.1	1676.8	1715.1	1738.9	1752.1	1794.4	1823.5	1847.3	1876.3
10°	1561.9	1609.4	1653.0	1699.3	1753.5	1782.5	1811.6	1863.1	1904.1	1950.3	1987.3
12.5°	1538.1	1600.2	1653.0	1717.8	1785.2	1819.5	1853.9	1943.7	1991.3	2032.3	2098.3
15°	1516.9	1579.0	1654.4	1720.4	1803.7	1855.2	1905.4	1963.6	2038.9	2127.4	2190.8
17.5°	1493.2	1571.1	1641.1	1733.6	1826.1	1875.0	1916.0	2005.8	2111.6	2198.8	2256.9
20°	1460.1	1539.4	1631.9	1729.7	1839.3	1877.7	1931.8	2052.1	2147.2	2233.1	2328.3
22.5°	1421.8	1514.3	1612.1	1705.9	1819.5	1900.1	1959.6	2065.3	2180.3	2279.4	2386.4
25°	1384.8	1485.2	1571.1	1699.3	1819.5	1873.7	1941.1	2066.6	2192.2	2312.4	2422.1
27.5°	1345.2	1439.0	1555.3	1657.0	1793.1	1852.6	1925.2	2062.7	2196.1	2316.4	2434.0
30°	1301.6	1402.0	1498.4	1618.7	1750.8	1827.5	1894.8	2044.2	2180.3	2305.8	2415.5
32.5°	1252.7	1347.8	1450.9	1564.5	1703.2	1781.2	1865.8	2019.1	2164.4	2272.8	2357.3
35°	1201.1	1297.6	1387.4	1503.7	1646.4	1724.4	1806.3	1975.5	2119.5	2208.0	2256.9
37.5°	1144.3	1235.5	1324.0	1439.0	1581.7	1664.9	1748.2	1912.0	2048.1	2122.1	2108.9
40°	1090.1	1172.1	1254.0	1362.3	1511.6	1600.2	1672.9	1838.0	1957.0	1988.7	1945.1
42.5°	1028.0	1098.1	1177.3	1288.3	1433.7	1516.9	1608.1	1758.7	1847.3	1834.1	1760.1
45°	958.0	1020.1	1099.4	1203.8	1351.8	1437.7	1514.3	1657.0	1721.7	1688.7	1553.9
47.5°	890.6	951.4	1016.1	1120.5	1264.6	1337.2	1415.2	1543.4	1580.4	1510.3	1375.5
50°	817.9	868.1	935.5	1034.6	1169.4	1246.1	1310.8	1413.9	1427.1	1341.2	1201.1
52.5°	747.9	790.2	854.9	952.7	1078.2	1139.0	1202.4	1293.6	1283.1	1194.5	1059.7
55°	673.9	713.5	773.0	862.9	973.9	1032.0	1086.2	1166.8	1144.3	1053.1	935.5
57.5°	611.8	639.5	697.7	780.9	872.1	935.5	981.8	1045.2	1010.8	919.7	810.0
60°	540.4	574.8	623.7	691.1	780.9	823.2	864.2	906.5	882.7	795.5	697.7
62.5°	475.7	502.1	544.4	609.2	679.2	717.5	761.1	787.5	763.8	683.1	601.2
65°	420.2	441.3	474.4	527.2	594.6	626.3	651.4	676.5	656.7	581.4	521.9
67.5°	359.4	377.9	405.7	447.9	504.8	527.2	551.0	568.2	545.7	495.5	437.4
70°	305.2	318.5	344.9	376.6	416.2	437.4	457.2	474.4	454.6	412.3	368.7
72.5°	249.7	260.3	284.1	306.6	342.2	356.8	371.3	384.5	377.9	338.3	302.6
75°	206.1	210.1	226.0	244.5	266.9	282.8	293.3	301.3	296.0	264.3	241.8
77.5°	155.9	161.2	173.1	187.6	207.5	216.7	223.3	231.2	224.6	199.5	183.7
80°	113.6	115.0	121.6	134.8	148.0	149.3	155.9	166.5	162.5	145.4	133.5
82.5°	72.7	76.6	79.3	87.2	96.5	99.1	103.1	105.7	104.4	93.8	89.9
85°	42.3	42.3	44.9	50.2	52.9	56.8	58.1	59.5	62.1	55.5	51.5
87.5°	18.5	19.8	19.8	21.1	23.8	23.8	25.1	26.4	27.7	26.4	22.5
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°	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9
2.5°	1666.2	1690.0	1700.6	1703.2	1717.8	1708.5	1712.5	1711.2	1721.7	1723.1	1723.1
5°	1787.8	1815.6	1824.8	1838.0	1857.8	1863.1	1859.2	1867.1	1881.6	1871.1	1886.9
7.5°	1916.0	1946.4	1967.5	1996.6	2003.2	2020.4	2030.9	2040.2	2042.8	2044.2	2046.8
10°	2034.9	2073.2	2102.3	2151.2	2161.8	2171.0	2217.3	2198.8	2222.5	2214.6	2217.3
12.5°	2131.4	2206.7	2230.5	2312.4	2320.3	2352.0	2349.4	2378.5	2383.8	2394.3	2383.8
15°	2258.2	2345.4	2383.8	2430.0	2456.4	2493.4	2500.0	2539.7	2555.5	2570.1	2555.5
17.5°	2374.5	2420.8	2518.5	2555.5	2572.7	2592.5	2642.7	2657.3	2681.1	2671.8	2698.2
20°	2432.6	2498.7	2601.8	2665.2	2691.6	2710.1	2752.4	2774.9	2784.1	2784.1	2786.8
22.5°	2484.2	2579.3	2656.0	2728.6	2752.4	2765.6	2790.7	2807.9	2811.9	2814.5	2817.2
25°	2530.4	2616.3	2678.4	2719.4	2728.6	2728.6	2743.2	2732.6	2715.4	2728.6	2736.6
27.5°	2530.4	2591.2	2619.0	2633.5	2633.5	2597.8	2576.7	2533.1	2496.1	2485.5	2509.3
30°	2488.1	2515.9	2477.6	2441.9	2414.1	2390.4	2307.1	2241.0	2227.8	2218.6	2254.3
32.5°	2390.4	2354.7	2279.4	2176.3	2135.3	2081.2	2016.4	1966.2	1935.8	1925.2	1917.3
35°	2217.3	2124.8	2027.0	1888.2	1859.2	1790.5	1701.9	1664.9	1614.7	1613.4	1630.6
37.5°	2028.3	1885.6	1779.9	1647.8	1606.8	1534.1	1450.9	1412.5	1378.2	1351.8	1383.5
40°	1807.6	1683.4	1522.2	1413.9	1355.7	1317.4	1247.4	1205.1	1189.2	1176.0	1195.8
42.5°	1601.5	1465.4	1339.9	1228.9	1181.3	1137.7	1091.5	1050.5	1038.6	1037.3	1051.8
45°	1396.7	1263.2	1147.0	1051.8	1021.4	995.0	950.1	938.2	918.4	905.1	911.7
47.5°	1232.8	1095.4	999.0	926.3	899.9	877.4	848.3	828.5	811.3	806.0	814.0
50°	1071.6	979.1	880.0	819.3	799.4	778.3	755.8	737.3	729.4	724.1	729.4
52.5°	942.1	843.0	775.6	726.8	706.9	691.1	675.2	667.3	656.7	659.4	664.7
55°	825.9	738.6	681.8	646.2	634.3	627.7	607.8	598.6	594.6	592.0	594.6
57.5°	716.2	652.8	610.5	580.1	564.2	560.3	544.4	544.4	540.4	536.5	537.8
60°	629.0	574.8	533.8	510.0	507.4	500.8	490.2	488.9	479.7	483.6	484.9
62.5°	540.4	496.8	469.1	454.6	445.3	442.7	436.1	434.7	430.8	432.1	429.4
65°	470.4	434.7	407.0	395.1	391.1	389.8	384.5	380.6	377.9	380.6	377.9
67.5°	400.4	376.6	355.4	343.6	338.3	336.9	333.0	330.3	331.7	327.7	330.3
70°	334.3	310.5	297.3	290.7	288.1	284.1	284.1	284.1	284.1	281.5	280.1
72.5°	281.5	257.7	248.4	244.5	241.8	240.5	236.5	237.8	236.5	235.2	240.5
75°	223.3	208.8	199.5	195.6	198.2	194.2	190.3	192.9	189.0	190.3	195.6
77.5°	169.1	162.5	157.2	154.6	152.0	149.3	149.3	146.7	146.7	146.7	146.7
80°	122.9	121.6	112.3	111.0	111.0	108.4	108.4	108.4	108.4	107.0	108.4
82.5°	81.9	80.6	78.0	76.6	74.0	75.3	75.3	72.7	72.7	71.4	72.7
85°	47.6	47.6	44.9	43.6	42.3	43.6	41.0	39.6	41.0	39.6	41.0
87.5°	22.5	19.8	21.1	19.8	17.2	18.5	15.9	17.2	15.9	14.5	17.2
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°	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9
2.5°	1720.4	1716.5	1711.2	1711.2	1704.6	1704.6	1694.0	1675.5	1659.6	1654.4	1657.0
5°	1867.1	1868.4	1860.5	1853.9	1842.0	1832.7	1815.6	1782.5	1772.0	1750.8	1736.3
7.5°	2034.9	2029.6	2015.1	2004.5	2001.9	1980.7	1943.7	1904.1	1872.4	1851.2	1820.9
10°	2223.9	2202.7	2181.6	2175.0	2159.1	2123.4	2081.2	2037.6	1994.0	1947.7	1896.2
12.5°	2382.4	2341.5	2340.1	2324.3	2293.9	2274.1	2223.9	2161.8	2086.4	2034.9	1976.8
15°	2552.9	2514.6	2482.9	2453.8	2439.3	2381.1	2338.8	2260.9	2171.0	2115.5	2075.9
17.5°	2674.5	2657.3	2603.1	2589.9	2570.1	2502.7	2435.3	2358.6	2280.7	2202.7	2095.7
20°	2772.2	2761.7	2726.0	2707.5	2675.8	2622.9	2541.0	2452.5	2362.6	2251.6	2151.2
22.5°	2814.5	2801.3	2772.2	2756.4	2736.6	2691.6	2621.6	2521.2	2403.6	2304.5	2197.4
25°	2731.3	2755.1	2747.1	2740.5	2732.6	2706.2	2653.3	2564.8	2449.8	2337.5	2204.0
27.5°	2543.6	2584.6	2624.2	2629.5	2642.7	2653.3	2632.2	2568.7	2472.3	2353.4	2206.7
30°	2291.3	2309.8	2390.4	2414.1	2432.6	2500.0	2539.7	2523.8	2449.8	2342.8	2208.0
32.5°	1967.5	2016.4	2098.3	2155.2	2205.4	2280.7	2383.8	2424.7	2398.3	2311.1	2177.6
35°	1661.0	1719.1	1814.2	1886.9	1937.1	2044.2	2165.7	2254.3	2287.3	2243.7	2124.8
37.5°	1409.9	1479.9	1564.5	1592.3	1650.4	1782.5	1950.3	2073.2	2153.8	2157.8	2065.3
40°	1220.9	1256.6	1324.0	1366.3	1423.1	1534.1	1698.0	1860.5	1982.1	2023.0	1974.1
42.5°	1061.1	1088.8	1139.0	1190.6	1242.1	1326.7	1477.3	1629.3	1793.1	1875.0	1873.7
45°	934.2	963.3	997.6	1039.9	1075.6	1166.8	1285.7	1441.6	1583.0	1709.9	1741.6
47.5°	823.2	848.3	890.6	909.1	932.9	1018.8	1121.8	1267.2	1413.9	1559.2	1596.2
50°	741.3	762.4	791.5	803.4	829.8	893.2	977.8	1095.4	1257.9	1391.4	1460.1
52.5°	667.3	683.1	705.6	714.9	733.4	780.9	857.6	950.1	1084.8	1222.3	1318.7
55°	603.9	614.4	630.3	640.9	654.1	696.4	753.2	836.4	952.7	1071.6	1165.4
57.5°	544.4	552.3	568.2	573.5	584.0	617.1	656.7	726.8	833.8	939.5	1030.7
60°	488.9	494.2	503.4	515.3	523.3	545.7	582.7	640.9	726.8	823.2	897.2
62.5°	436.1	444.0	446.6	451.9	458.5	479.7	508.7	551.0	626.3	705.6	783.6
65°	381.9	388.5	393.8	395.1	401.7	417.6	444.0	481.0	529.9	598.6	671.3
67.5°	331.7	335.6	338.3	343.6	350.2	358.1	379.2	407.0	451.9	507.4	565.5
70°	285.4	285.4	289.4	290.7	298.6	307.9	317.1	343.6	383.2	428.1	467.8
72.5°	235.2	241.8	240.5	247.1	245.8	252.4	264.3	281.5	310.5	346.2	384.5
75°	191.6	195.6	195.6	195.6	198.2	203.5	210.1	226.0	248.4	277.5	300.0
77.5°	149.3	152.0	152.0	152.0	153.3	158.6	165.2	175.7	191.6	208.8	222.0
80°	107.0	109.7	109.7	112.3	112.3	113.6	120.2	125.5	133.5	146.7	159.9
82.5°	72.7	74.0	76.6	76.6	75.3	78.0	79.3	84.6	92.5	95.1	104.4
85°	39.6	41.0	42.3	42.3	43.6	46.2	44.9	50.2	50.2	55.5	58.1
87.5°	15.9	18.5	18.5	17.2	18.5	18.5	18.5	21.1	22.5	23.8	22.5
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: P1037606

CATALOG NUMBER: S124DS-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9
2.5°	1645.1	1639.8	1635.9	1635.9	1624.0	1612.1	1605.5	1602.8	1600.2	1589.6	1575.1
5°	1712.5	1695.3	1683.4	1671.5	1651.7	1630.6	1609.4	1597.5	1580.4	1556.6	1539.4
7.5°	1787.8	1746.9	1733.6	1719.1	1679.5	1643.8	1614.7	1589.6	1561.9	1531.5	1501.1
10°	1851.2	1807.6	1778.6	1753.5	1701.9	1654.4	1610.8	1573.8	1538.1	1498.4	1461.4
12.5°	1912.0	1849.9	1819.5	1782.5	1728.4	1659.6	1602.8	1556.6	1503.7	1462.8	1417.8
15°	1996.6	1892.2	1842.0	1818.2	1745.5	1664.9	1596.2	1527.5	1483.9	1421.8	1382.2
17.5°	2009.8	1925.2	1892.2	1831.4	1744.2	1653.0	1573.8	1505.0	1439.0	1383.5	1331.9
20°	2056.1	1945.1	1892.2	1853.9	1738.9	1646.4	1559.2	1470.7	1407.3	1347.8	1289.7
22.5°	2085.1	1959.6	1904.1	1843.3	1733.6	1622.6	1519.6	1442.9	1365.0	1304.2	1257.9
25°	2077.2	1951.7	1889.6	1832.7	1699.3	1588.3	1495.8	1398.0	1325.3	1259.3	1198.5
27.5°	2073.2	1931.8	1865.8	1802.4	1676.8	1560.5	1444.3	1365.0	1284.4	1207.7	1162.8
30°	2062.7	1906.7	1830.1	1761.4	1630.6	1509.0	1409.9	1317.4	1236.8	1166.8	1107.3
32.5°	2027.0	1864.5	1790.5	1716.5	1580.4	1458.8	1358.4	1272.5	1191.9	1119.2	1062.4
35°	1979.4	1814.2	1733.6	1655.7	1519.6	1396.7	1304.2	1214.3	1139.0	1069.0	1014.8
37.5°	1931.8	1756.1	1680.8	1590.9	1465.4	1337.2	1242.1	1161.5	1091.5	1018.8	959.3
40°	1863.1	1687.4	1604.1	1527.5	1380.8	1260.6	1173.4	1100.7	1032.0	963.3	913.1
42.5°	1769.3	1612.1	1526.2	1441.6	1304.2	1185.3	1100.7	1036.0	971.2	914.4	858.9
45°	1674.2	1520.9	1444.3	1368.9	1219.6	1107.3	1029.3	969.9	915.7	853.6	808.7
47.5°	1559.2	1429.7	1353.1	1279.1	1137.7	1025.4	954.0	898.5	848.3	796.8	754.5
50°	1441.6	1329.3	1259.3	1182.6	1047.8	946.1	876.1	829.8	788.9	740.0	705.6
52.5°	1314.8	1217.0	1157.5	1083.5	964.6	870.8	799.4	753.2	718.8	683.1	652.8
55°	1180.0	1108.6	1045.2	985.7	873.4	788.9	725.4	684.5	660.7	627.7	601.2
57.5°	1058.4	989.7	951.4	884.0	786.2	703.0	652.8	618.4	590.7	570.8	549.7
60°	931.6	876.1	833.8	784.9	699.0	629.0	576.1	556.3	527.2	512.7	503.4
62.5°	810.0	770.4	730.7	693.7	617.1	551.0	511.4	486.3	469.1	454.6	446.6
65°	695.0	658.0	630.3	597.3	533.8	481.0	444.0	424.2	407.0	403.0	393.8
67.5°	582.7	566.9	536.5	510.0	455.9	414.9	387.2	362.1	352.8	348.8	340.9
70°	487.6	469.1	445.3	422.8	381.9	346.2	321.1	311.8	298.6	297.3	288.1
72.5°	401.7	379.2	362.1	344.9	314.5	282.8	269.6	256.3	249.7	244.5	240.5
75°	318.5	302.6	290.7	276.2	249.7	228.6	210.1	204.8	200.8	199.5	196.9
77.5°	237.8	227.3	222.0	207.5	189.0	170.5	162.5	154.6	154.6	152.0	153.3
80°	169.1	162.5	155.9	148.0	132.1	124.2	117.6	112.3	109.7	108.4	109.7
82.5°	107.0	103.1	101.7	96.5	85.9	81.9	76.6	72.7	72.7	72.7	72.7
85°	59.5	59.5	59.5	51.5	47.6	43.6	41.0	39.6	39.6	39.6	41.0
87.5°	25.1	25.1	21.1	21.1	19.8	17.2	15.9	15.9	17.2	17.2	18.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1037606

CATALOG NUMBER: S124DS-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9
2.5°	1571.1	1565.8	1568.5	1555.3	1543.4	1526.2	1511.6	1509.0	1506.4	1514.3	1509.0
5°	1526.2	1519.6	1513.0	1497.1	1473.3	1458.8	1437.7	1436.3	1428.4	1416.5	1419.2
7.5°	1477.3	1473.3	1464.1	1439.0	1417.8	1392.7	1375.5	1361.0	1354.4	1343.8	1339.9
10°	1437.7	1423.1	1415.2	1387.4	1362.3	1335.9	1313.4	1302.9	1291.0	1281.7	1275.1
12.5°	1383.5	1379.5	1357.0	1334.6	1313.4	1283.1	1265.9	1235.5	1219.6	1227.6	1224.9
15°	1347.8	1329.3	1324.0	1292.3	1256.6	1236.8	1205.1	1185.3	1178.7	1166.8	1152.2
17.5°	1300.2	1288.3	1269.8	1240.8	1199.8	1172.1	1149.6	1131.1	1123.2	1107.3	1095.4
20°	1255.3	1235.5	1220.9	1194.5	1154.9	1119.2	1091.5	1079.6	1059.7	1046.5	1039.9
22.5°	1214.3	1199.8	1178.7	1139.0	1104.7	1070.3	1037.3	1020.1	1001.6	993.7	983.1
25°	1164.1	1140.3	1125.8	1082.2	1045.2	1017.5	987.1	964.6	954.0	940.8	938.2
27.5°	1115.2	1092.8	1075.6	1037.3	992.4	956.7	938.2	922.3	903.8	903.8	897.2
30°	1066.3	1050.5	1024.1	987.1	944.8	910.4	889.3	874.7	868.1	862.9	861.5
32.5°	1017.5	996.3	980.5	930.2	898.5	866.8	851.0	839.1	831.1	829.8	831.1
35°	967.2	943.5	927.6	882.7	851.0	821.9	815.3	804.7	800.8	799.4	806.0
37.5°	914.4	895.9	876.1	839.1	803.4	786.2	773.0	769.0	767.7	775.6	778.3
40°	865.5	849.6	831.1	791.5	765.1	746.6	740.0	736.0	741.3	749.2	753.2
42.5°	819.3	796.8	782.3	746.6	722.8	712.2	704.3	704.3	709.6	718.8	725.4
45°	770.4	753.2	738.6	706.9	685.8	673.9	672.6	673.9	680.5	687.1	695.0
47.5°	722.8	705.6	689.8	663.3	644.8	638.2	636.9	638.2	648.8	658.0	667.3
50°	679.2	660.7	646.2	621.0	606.5	598.6	599.9	606.5	614.4	627.7	639.5
52.5°	627.7	614.4	601.2	578.8	565.5	560.3	564.2	569.5	584.0	593.3	607.8
55°	577.4	565.5	555.0	537.8	527.2	523.3	525.9	533.8	545.7	561.6	578.8
57.5°	531.2	518.0	507.4	495.5	483.6	484.9	486.3	496.8	511.4	525.9	545.7
60°	479.7	471.7	462.5	447.9	442.7	442.7	446.6	458.5	471.7	495.5	512.7
62.5°	433.4	422.8	416.2	407.0	399.1	400.4	409.6	420.2	436.1	455.9	478.3
65°	385.8	373.9	368.7	360.7	358.1	359.4	366.0	381.9	399.1	416.2	437.4
67.5°	333.0	329.0	323.7	315.8	318.5	319.8	326.4	339.6	358.1	375.3	399.1
70°	288.1	280.1	278.8	272.2	272.2	276.2	289.4	298.6	315.8	334.3	359.4
72.5°	240.5	233.9	233.9	228.6	232.6	236.5	243.1	256.3	272.2	290.7	311.8
75°	191.6	189.0	191.6	189.0	189.0	195.6	203.5	214.1	231.2	251.1	268.2
77.5°	148.0	148.0	146.7	150.6	150.6	154.6	165.2	175.7	189.0	204.8	223.3
80°	108.4	108.4	108.4	112.3	116.3	116.3	122.9	136.1	148.0	158.6	175.7
82.5°	74.0	74.0	74.0	76.6	81.9	81.9	89.9	97.8	111.0	120.2	128.2
85°	44.9	44.9	43.6	46.2	47.6	51.5	58.1	63.4	70.0	78.0	85.9
87.5°	19.8	19.8	21.1	22.5	23.8	26.4	29.1	31.7	38.3	41.0	44.9
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: P1037606

CATALOG NUMBER: S124DS-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9
2.5°	1505.0	1503.7	1497.1	1499.8	1491.8	1494.5	1498.4	1499.8	1505.0	1501.1	1499.8
5°	1412.5	1409.9	1405.9	1402.0	1400.7	1405.9	1396.7	1399.3	1402.0	1405.9	1411.2
7.5°	1337.2	1335.9	1331.9	1325.3	1322.7	1320.1	1321.4	1330.6	1329.3	1328.0	1337.2
10°	1268.5	1269.8	1261.9	1260.6	1252.7	1251.3	1252.7	1255.3	1259.3	1264.6	1265.9
12.5°	1197.2	1214.3	1199.8	1194.5	1182.6	1189.2	1191.9	1180.0	1186.6	1190.6	1210.4
15°	1152.2	1144.3	1135.1	1135.1	1129.8	1127.1	1120.5	1129.8	1135.1	1143.0	1140.3
17.5°	1090.1	1076.9	1071.6	1066.3	1067.7	1073.0	1058.4	1079.6	1079.6	1083.5	1076.9
20°	1036.0	1025.4	1018.8	1016.1	1012.2	1009.5	1008.2	1013.5	1021.4	1024.1	1030.7
22.5°	979.1	979.1	968.6	964.6	962.0	958.0	964.6	960.6	965.9	971.2	981.8
25°	931.6	931.6	927.6	922.3	918.4	915.7	919.7	918.4	922.3	928.9	931.6
27.5°	893.2	889.3	888.0	886.6	885.3	886.6	885.3	889.3	893.2	894.6	891.9
30°	860.2	856.2	857.6	857.6	858.9	857.6	856.2	860.2	861.5	858.9	860.2
32.5°	829.8	829.8	832.5	833.8	833.8	835.1	836.4	833.8	835.1	831.1	832.5
35°	804.7	807.4	810.0	811.3	812.6	811.3	814.0	812.6	810.0	807.4	806.0
37.5°	779.6	782.3	787.5	788.9	792.8	794.1	791.5	791.5	790.2	784.9	782.3
40°	753.2	755.8	762.4	766.4	769.0	773.0	770.4	770.4	765.1	759.8	755.8
42.5°	728.1	733.4	740.0	743.9	749.2	749.2	749.2	746.6	740.0	734.7	730.7
45°	703.0	704.3	713.5	720.1	725.4	725.4	725.4	721.5	717.5	706.9	701.6
47.5°	675.2	679.2	689.8	696.4	701.6	703.0	703.0	699.0	691.1	681.8	675.2
50°	644.8	651.4	663.3	672.6	679.2	681.8	677.9	675.2	666.0	655.4	647.5
52.5°	615.8	623.7	638.2	646.2	655.4	656.7	655.4	651.4	640.9	626.3	619.7
55°	586.7	593.3	609.2	622.4	630.3	632.9	630.3	623.7	610.5	595.9	589.3
57.5°	555.0	564.2	581.4	594.6	603.9	605.2	602.5	595.9	585.4	566.9	557.6
60°	521.9	533.8	551.0	564.2	576.1	577.4	574.8	565.5	552.3	533.8	525.9
62.5°	488.9	498.2	518.0	532.5	541.8	548.4	543.1	533.8	520.6	502.1	490.2
65°	450.6	463.8	481.0	494.2	504.8	506.1	503.4	495.5	481.0	461.2	451.9
67.5°	413.6	422.8	440.0	457.2	461.2	465.1	461.2	453.2	441.3	424.2	410.9
70°	368.7	376.6	397.7	409.6	414.9	418.9	416.2	408.3	397.7	381.9	371.3
72.5°	323.7	330.3	350.2	359.4	370.0	368.7	367.3	362.1	347.5	336.9	330.3
75°	276.2	284.1	297.3	309.2	313.2	313.2	313.2	309.2	300.0	282.8	276.2
77.5°	232.6	236.5	247.1	253.7	257.7	259.0	257.7	251.1	245.8	233.9	229.9
80°	178.4	189.0	196.9	198.2	203.5	203.5	203.5	200.8	195.6	183.7	182.3
82.5°	134.8	137.4	145.4	149.3	152.0	150.6	150.6	145.4	144.0	137.4	134.8
85°	91.2	95.1	93.8	99.1	100.4	97.8	97.8	100.4	93.8	95.1	91.2
87.5°	50.2	50.2	52.9	51.5	56.8	56.8	54.2	55.5	52.9	51.5	50.2
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: P1037606

CATALOG NUMBER: S124DS-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9	1594.9
2.5°	1499.8	1507.7	1499.8	1505.0	1507.7	1514.3	1516.9	1528.8	1532.8	1542.0	1542.0
5°	1409.9	1413.9	1415.2	1420.5	1425.8	1439.0	1448.2	1465.4	1485.2	1487.9	1499.8
7.5°	1337.2	1343.8	1354.4	1350.4	1359.7	1379.5	1391.4	1412.5	1432.4	1442.9	1457.5
10°	1272.5	1280.4	1284.4	1288.3	1305.5	1322.7	1341.2	1355.7	1382.2	1398.0	1409.9
12.5°	1219.6	1213.0	1220.9	1235.5	1255.3	1265.9	1291.0	1313.4	1333.3	1350.4	1361.0
15°	1150.9	1156.2	1164.1	1189.2	1194.5	1220.9	1230.2	1255.3	1292.3	1308.2	1321.4
17.5°	1084.8	1102.0	1117.9	1127.1	1143.0	1164.1	1190.6	1218.3	1242.1	1260.6	1276.4
20°	1032.0	1049.2	1058.4	1065.0	1080.9	1110.0	1135.1	1169.4	1199.8	1214.3	1235.5
22.5°	989.7	989.7	1002.9	1022.7	1032.0	1059.7	1080.9	1117.9	1150.9	1169.4	1189.2
25°	936.9	944.8	955.4	972.5	985.7	1008.2	1038.6	1070.3	1106.0	1121.8	1147.0
27.5°	893.2	902.5	917.0	921.0	934.2	954.0	985.7	1020.1	1057.1	1074.3	1095.4
30°	860.2	865.5	870.8	878.7	890.6	907.8	934.2	964.6	1009.5	1022.7	1049.2
32.5°	831.1	833.8	836.4	843.0	849.6	866.8	888.0	921.0	958.0	977.8	1001.6
35°	804.7	802.1	803.4	807.4	814.0	820.6	843.0	870.8	905.1	928.9	947.4
37.5°	779.6	774.3	773.0	773.0	775.6	783.6	800.8	824.5	861.5	881.4	899.9
40°	751.9	746.6	743.9	742.6	741.3	746.6	759.8	783.6	812.6	831.1	852.3
42.5°	725.4	720.1	713.5	712.2	709.6	712.2	721.5	743.9	769.0	787.5	804.7
45°	699.0	689.8	681.8	676.5	677.9	673.9	680.5	697.7	726.8	738.6	755.8
47.5°	669.9	659.4	648.8	643.5	638.2	640.9	643.5	658.0	683.1	695.0	712.2
50°	642.2	627.7	615.8	609.2	605.2	602.5	605.2	619.7	638.2	648.8	663.3
52.5°	610.5	595.9	584.0	573.5	568.2	564.2	565.5	578.8	595.9	606.5	621.0
55°	581.4	562.9	547.0	533.8	529.9	528.5	527.2	536.5	551.0	561.6	573.5
57.5°	548.4	529.9	512.7	496.8	488.9	487.6	487.6	490.2	508.7	516.7	523.3
60°	515.3	495.5	477.0	462.5	450.6	446.6	445.3	450.6	459.8	467.8	477.0
62.5°	478.3	458.5	436.1	422.8	410.9	400.4	404.3	405.7	418.9	422.8	430.8
65°	442.7	420.2	401.7	380.6	367.3	360.7	358.1	360.7	371.3	372.6	377.9
67.5°	401.7	380.6	358.1	343.6	331.7	319.8	317.1	317.1	322.4	326.4	333.0
70°	362.1	340.9	315.8	300.0	288.1	277.5	273.5	272.2	276.2	278.8	285.4
72.5°	315.8	294.7	276.2	259.0	244.5	236.5	232.6	229.9	233.9	236.5	237.8
75°	266.9	249.7	231.2	214.1	204.8	196.9	191.6	187.6	190.3	190.3	190.3
77.5°	220.7	203.5	189.0	177.1	165.2	155.9	152.0	148.0	149.3	149.3	152.0
80°	171.8	159.9	148.0	137.4	126.9	118.9	116.3	112.3	109.7	108.4	108.4
82.5°	126.9	117.6	107.0	97.8	92.5	84.6	81.9	76.6	76.6	75.3	75.3
85°	84.6	79.3	68.7	62.1	58.1	54.2	51.5	48.9	44.9	44.9	43.6
87.5°	44.9	42.3	39.6	31.7	31.7	27.7	26.4	25.1	21.1	22.5	22.5
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: P1037606

CATALOG NUMBER: S124DS-B1020DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1594.9	1594.9	1594.9	1594.9
2.5°	1551.3	1564.5	1576.4	1594.9
5°	1516.9	1535.4	1560.5	1588.3
7.5°	1477.3	1506.4	1539.4	1577.7
10°	1440.3	1473.3	1515.6	1561.9
12.5°	1402.0	1441.6	1487.9	1538.1
15°	1358.4	1398.0	1449.5	1516.9
17.5°	1318.7	1366.3	1421.8	1493.2
20°	1272.5	1317.4	1378.2	1460.1
22.5°	1231.5	1283.1	1350.4	1421.8
25°	1186.6	1231.5	1298.9	1384.8
27.5°	1141.7	1197.2	1261.9	1345.2
30°	1098.1	1144.3	1214.3	1301.6
32.5°	1050.5	1106.0	1170.7	1252.7
35°	999.0	1051.8	1112.6	1201.1
37.5°	952.7	1004.2	1066.3	1144.3
40°	901.2	955.4	1012.2	1090.1
42.5°	851.0	899.9	956.7	1028.0
45°	802.1	844.4	895.9	958.0
47.5°	751.9	787.5	835.1	890.6
50°	697.7	736.0	771.7	817.9
52.5°	647.5	680.5	709.6	747.9
55°	598.6	621.0	644.8	673.9
57.5°	547.0	564.2	581.4	611.8
60°	495.5	511.4	520.6	540.4
62.5°	445.3	451.9	463.8	475.7
65°	389.8	399.1	405.7	420.2
67.5°	339.6	343.6	350.2	359.4
70°	286.7	296.0	298.6	305.2
72.5°	241.8	245.8	248.4	249.7
75°	191.6	195.6	198.2	206.1
77.5°	150.6	149.3	154.6	155.9
80°	111.0	107.0	108.4	113.6
82.5°	72.7	74.0	72.7	72.7
85°	44.9	43.6	41.0	42.3
87.5°	19.8	19.8	18.5	18.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)