

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: P987756

Luminaire Tested: S122R3DR-B290DB50-4F0-XX-W2A-A

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-29)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-B290DB50-4F0-XX-W2A-A
Description: Define 2 3in Regressed Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115
Light Source: -
Ballast/Driver: -

Summary

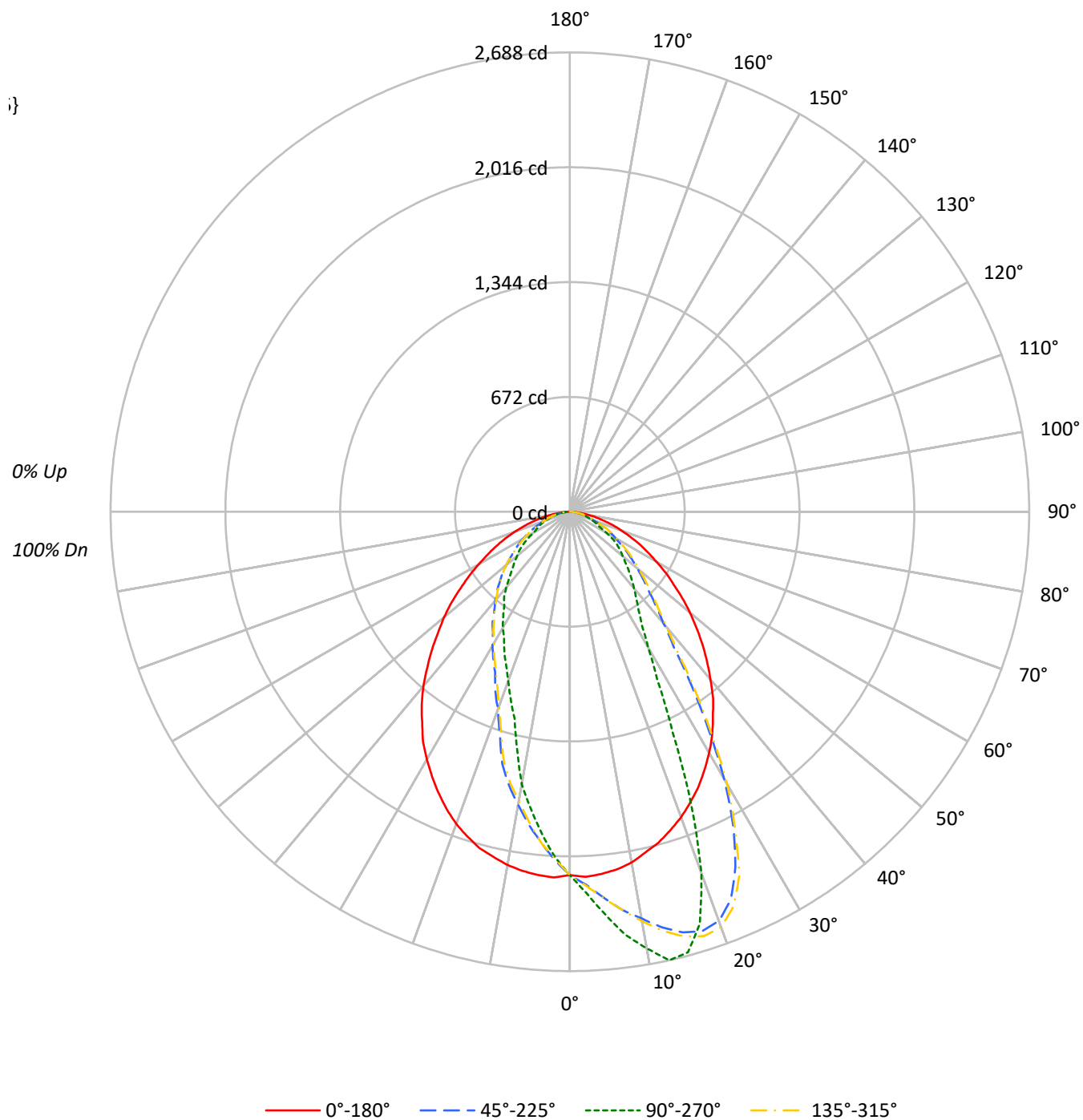
Lumens per Lamp: N/A
Luminaire Lumens: 3673.0 lumens
Efficiency: N/A
Efficacy: 59.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

Luminous Intensity Polar Plot



TEST NUMBER: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87		
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76		
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66		
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	59		
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52		
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47		
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42		
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	39		
9	62	50	43	38	61	50	42	37	49	42	37	47	41	37	47	41	37	35		
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	33644	33644	33644	33644
5°	33796	37574	33913	30017
10°	33499	41688	33735	26020
15°	32846	43739	33403	20501
20°	32046	37918	32744	17740
25°	31059	24868	31730	15840
30°	29777	16737	30588	14336
35°	28200	13558	29114	12930
40°	26431	12055	27559	11964
45°	24533	10911	25558	10680
50°	22587	9929	23643	9892
55°	20422	9333	21523	9212
60°	18517	7810	19499	7715
65°	16761	6585	17758	7469
70°	14833	6086	15995	7039
75°	12825	5694	13999	6501
80°	10638	5251	11440	5788
85°	8318	4831	9117	5104

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 160°

Vertical Angle: 45°

Luminance: 36932 cd/sqm

TEST NUMBER: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.6	5.5
10°-20°	562.7	15.3
20°-30°	724.2	19.7
30°-40°	687.1	18.7
40°-50°	588.8	16.0
50°-60°	448.4	12.2
60°-70°	282.8	7.7
70°-80°	141.1	3.8
80°-90°	36.3	1.0
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°	1488.5	40.5
0°-40°	2175.6	59.2
0°-60°	3212.9	87.5
0°-90°	3673.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3673.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2125	2125	2125	2125	2125	
5°	2127	2365	2134	1889	2127	202
15°	2004	2669	2038	1251	2004	564
25°	1778	1424	1817	907	1778	817
35°	1459	702	1507	669	1459	913
45°	1096	487	1142	477	1096	846
55°	740	338	780	334	740	667
65°	448	176	474	199	448	444
75°	210	93	229	106	210	227
85°	46	27	50	28	46	55
90°	0	0	0	0	0	

TEST NUMBER: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4
2.5°	2138.7	2147.6	2152.0	2157.9	2171.2	2180.1	2193.4	2196.3	2194.8	2200.8	2184.5
5°	2126.9	2146.1	2163.8	2178.6	2202.2	2217.0	2233.2	2252.4	2256.9	2279.0	2265.7
7.5°	2110.7	2138.7	2163.8	2193.4	2228.8	2248.0	2273.1	2302.7	2316.0	2342.5	2349.9
10°	2084.1	2123.9	2166.8	2197.8	2246.5	2280.5	2304.1	2351.4	2382.4	2422.3	2416.4
12.5°	2041.2	2092.9	2150.5	2202.2	2265.7	2287.9	2332.2	2380.9	2420.8	2457.8	2490.2
15°	2004.3	2063.4	2126.9	2190.4	2262.8	2304.1	2348.5	2412.0	2454.8	2519.8	2547.9
17.5°	1954.1	2029.4	2104.7	2175.6	2261.3	2308.6	2363.2	2425.3	2488.8	2550.8	2573.0
20°	1902.4	1983.6	2064.9	2160.9	2258.4	2304.1	2360.3	2437.1	2499.1	2547.9	2547.9
22.5°	1840.4	1939.3	2032.4	2123.9	2230.3	2296.8	2354.4	2444.5	2488.8	2499.1	2459.2
25°	1778.3	1877.3	1979.2	2092.9	2214.0	2273.1	2338.1	2422.3	2437.1	2395.7	2292.3
27.5°	1704.5	1815.3	1930.5	2053.1	2180.1	2253.9	2313.0	2369.1	2341.1	2230.3	2069.3
30°	1629.1	1748.8	1878.8	1995.4	2149.1	2217.0	2267.2	2283.5	2194.8	2014.6	1806.4
32.5°	1550.9	1667.6	1804.9	1945.2	2100.3	2165.3	2197.8	2155.0	1992.5	1765.0	1511.0
35°	1459.3	1590.7	1734.0	1880.2	2033.9	2082.6	2101.8	1996.9	1788.7	1494.7	1242.2
37.5°	1376.6	1508.0	1661.6	1810.8	1960.0	1986.6	1967.4	1803.4	1539.1	1248.1	1001.4
40°	1279.1	1419.4	1570.1	1737.0	1859.6	1866.9	1819.7	1607.0	1279.1	1005.8	853.7
42.5°	1189.0	1330.8	1481.4	1651.3	1744.4	1719.2	1655.7	1376.6	1067.9	867.0	744.4
45°	1095.9	1230.4	1392.8	1543.5	1609.9	1550.9	1454.9	1158.0	896.5	745.9	651.4
47.5°	1005.8	1131.4	1292.4	1437.1	1449.0	1382.5	1268.8	970.4	776.9	655.8	579.0
50°	917.2	1042.8	1193.4	1313.1	1301.3	1209.7	1081.2	843.4	675.0	579.0	515.5
52.5°	828.6	942.3	1088.6	1183.1	1132.9	1044.3	917.2	714.9	589.3	505.1	456.4
55°	740.0	846.3	971.9	1050.2	970.4	868.5	778.4	613.0	511.0	443.1	406.2
57.5°	666.1	750.3	865.5	912.8	816.8	737.0	658.7	527.3	443.1	394.4	351.5
60°	584.9	661.7	756.2	784.3	685.3	620.3	553.9	446.1	379.6	336.8	308.7
62.5°	515.5	579.0	651.4	651.4	564.2	515.5	465.3	373.7	319.0	285.1	271.8
65°	447.5	493.3	545.0	539.1	465.3	422.4	382.5	308.7	267.3	243.7	230.4
67.5°	381.1	416.5	450.5	429.8	376.6	339.7	302.8	249.6	221.6	205.3	187.6
70°	320.5	348.6	366.3	347.1	293.9	262.9	236.3	200.9	178.7	158.0	147.7
72.5°	268.8	280.6	286.5	262.9	218.6	200.9	181.7	156.6	137.4	127.0	124.1
75°	209.7	220.1	215.6	197.9	161.0	147.7	132.9	115.2	110.8	104.9	101.9
77.5°	163.9	163.9	156.6	140.3	115.2	104.9	99.0	90.1	85.7	84.2	81.2
80°	116.7	115.2	110.8	93.1	78.3	72.4	72.4	66.5	65.0	62.0	62.0
82.5°	76.8	76.8	70.9	56.1	51.7	50.2	48.7	45.8	45.8	44.3	44.3
85°	45.8	42.8	35.4	31.0	29.5	29.5	28.1	26.6	28.1	26.6	26.6
87.5°	20.7	16.2	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8
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: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4
2.5°	2200.8	2203.7	2208.1	2228.8	2231.8	2237.7	2234.7	2234.7	2236.2	2233.2	2234.7
5°	2295.3	2299.7	2321.9	2347.0	2352.9	2347.0	2354.4	2364.7	2364.7	2364.7	2361.7
7.5°	2383.9	2400.2	2425.3	2462.2	2469.6	2477.0	2490.2	2481.4	2484.3	2497.6	2493.2
10°	2469.6	2493.2	2521.3	2552.3	2568.5	2578.9	2584.8	2598.1	2629.1	2593.6	2606.9
12.5°	2550.8	2584.8	2614.3	2648.3	2660.1	2673.4	2677.8	2689.6	2689.6	2688.2	2698.5
15°	2604.0	2635.0	2661.6	2683.7	2686.7	2683.7	2680.8	2682.3	2686.7	2669.0	2679.3
17.5°	2615.8	2618.7	2627.6	2618.7	2620.2	2589.2	2571.5	2567.1	2525.7	2527.2	2561.1
20°	2558.2	2508.0	2494.7	2445.9	2416.4	2336.6	2333.7	2311.5	2224.4	2251.0	2245.1
22.5°	2400.2	2314.5	2200.8	2144.6	2116.6	2032.4	1967.4	1921.6	1890.6	1859.6	1846.3
25°	2191.9	2053.1	1892.1	1781.3	1765.0	1686.8	1567.1	1511.0	1444.5	1423.8	1459.3
27.5°	1923.1	1742.9	1561.2	1391.3	1360.3	1289.4	1228.9	1189.0	1112.2	1107.8	1110.7
30°	1558.3	1376.6	1224.4	1113.7	1036.9	1004.4	964.5	935.0	903.9	915.7	918.7
32.5°	1280.6	1107.8	966.0	906.9	871.4	850.8	816.8	797.6	784.3	779.9	778.4
35°	1017.7	902.5	838.9	781.3	760.7	745.9	720.8	711.9	700.1	701.6	701.6
37.5°	871.4	775.4	728.2	698.6	679.4	672.0	655.8	646.9	639.5	636.6	641.0
40°	751.8	685.3	655.8	629.2	613.0	610.0	601.1	590.8	581.9	583.4	587.9
42.5°	664.7	626.3	590.8	570.1	558.3	553.9	546.5	539.1	539.1	534.7	533.2
45°	595.2	564.2	534.7	515.5	508.1	502.2	493.3	491.8	485.9	487.4	488.9
47.5°	533.2	508.1	485.9	466.7	459.4	457.9	449.0	443.1	443.1	441.6	440.2
50°	477.1	452.0	432.8	422.4	412.1	409.1	407.7	406.2	403.2	403.2	404.7
52.5°	431.3	406.2	391.4	382.5	376.6	373.7	373.7	372.2	372.2	372.2	370.7
55°	381.1	360.4	348.6	345.6	342.7	341.2	339.7	336.8	335.3	338.2	335.3
57.5°	333.8	326.4	316.1	313.1	305.7	305.7	301.3	298.4	295.4	298.4	298.4
60°	296.9	286.5	280.6	271.8	265.9	260.0	252.6	251.1	248.1	246.7	245.2
62.5°	258.5	249.6	234.8	221.6	212.7	206.8	203.8	202.4	202.4	200.9	200.9
65°	215.6	195.0	187.6	183.1	181.7	180.2	177.2	175.8	177.2	175.8	177.2
67.5°	168.4	165.4	161.0	158.0	156.6	155.1	155.1	153.6	153.6	153.6	153.6
70°	146.2	138.8	137.4	134.4	134.4	132.9	132.9	132.9	132.9	131.5	134.4
72.5°	121.1	116.7	115.2	113.7	113.7	113.7	112.3	112.3	112.3	110.8	112.3
75°	99.0	97.5	94.5	94.5	93.1	94.5	93.1	93.1	91.6	93.1	93.1
77.5°	79.8	78.3	76.8	76.8	75.3	75.3	75.3	75.3	75.3	75.3	76.8
80°	60.6	59.1	57.6	59.1	57.6	59.1	57.6	57.6	59.1	57.6	57.6
82.5°	44.3	42.8	42.8	41.4	41.4	41.4	41.4	41.4	41.4	41.4	41.4
85°	26.6	25.1	25.1	26.6	25.1	26.6	25.1	25.1	25.1	26.6	26.6
87.5°	11.8	13.3	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	13.3
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: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4
2.5°	2240.6	2230.3	2227.3	2230.3	2227.3	2228.8	2218.5	2180.1	2190.4	2174.2	2183.0
5°	2367.7	2358.8	2339.6	2336.6	2333.7	2330.7	2316.0	2282.0	2268.7	2246.5	2245.1
7.5°	2488.8	2488.8	2474.0	2463.7	2450.4	2440.0	2420.8	2370.6	2349.9	2323.3	2308.6
10°	2608.4	2570.0	2586.3	2575.9	2543.4	2537.5	2502.1	2472.5	2432.6	2406.1	2382.4
12.5°	2694.1	2682.3	2667.5	2658.6	2649.8	2630.6	2606.9	2531.6	2510.9	2457.8	2431.2
15°	2691.1	2683.7	2688.2	2688.2	2685.2	2680.8	2661.6	2606.9	2571.5	2519.8	2474.0
17.5°	2546.4	2565.6	2584.8	2598.1	2627.6	2640.9	2658.6	2626.1	2604.0	2559.7	2510.9
20°	2293.8	2341.1	2397.2	2409.0	2435.6	2513.9	2549.3	2577.4	2586.3	2571.5	2531.6
22.5°	1942.3	1982.2	2118.0	2115.1	2153.5	2246.5	2349.9	2434.1	2500.6	2537.5	2522.7
25°	1521.3	1577.5	1649.8	1704.5	1830.0	1968.9	2097.4	2231.8	2347.0	2448.9	2474.0
27.5°	1150.6	1224.4	1282.0	1354.4	1417.9	1581.9	1747.3	1957.0	2091.5	2284.9	2385.4
30°	930.5	964.5	1022.1	1056.1	1087.1	1212.6	1400.2	1607.0	1843.3	2066.3	2239.2
32.5°	794.6	818.3	861.1	875.9	908.4	992.6	1110.7	1299.8	1543.5	1813.8	2041.2
35°	713.4	738.5	747.4	760.7	787.2	840.4	921.7	1059.0	1279.1	1543.5	1815.3
37.5°	644.0	657.3	682.4	691.2	700.1	740.0	794.6	890.6	1036.9	1254.0	1555.3
40°	595.2	602.6	615.9	623.3	629.2	657.3	706.0	771.0	878.8	1044.3	1321.9
42.5°	543.5	552.4	561.3	570.1	577.5	599.7	629.2	691.2	763.6	889.2	1090.0
45°	493.3	499.2	509.6	515.5	525.8	543.5	570.1	613.0	678.0	757.7	920.2
47.5°	447.5	454.9	459.4	466.7	474.1	493.3	518.4	546.5	599.7	678.0	796.1
50°	406.2	415.0	420.9	422.4	428.3	446.1	466.7	497.8	531.7	592.3	695.7
52.5°	376.6	378.1	382.5	388.5	387.0	397.3	416.5	440.2	475.6	524.3	599.7
55°	342.7	347.1	350.1	351.5	351.5	360.4	370.7	392.9	420.9	460.8	524.3
57.5°	299.8	304.3	313.1	316.1	320.5	324.9	329.4	344.1	367.8	406.2	457.9
60°	255.5	258.5	267.3	273.2	276.2	288.0	293.9	305.7	319.0	347.1	395.8
62.5°	205.3	208.3	212.7	218.6	224.5	242.2	257.0	268.8	279.2	298.4	338.2
65°	178.7	180.2	183.1	184.6	186.1	193.5	206.8	223.0	242.2	257.0	280.6
67.5°	155.1	156.6	158.0	161.0	162.5	163.9	169.9	174.3	193.5	214.2	231.9
70°	132.9	135.9	137.4	137.4	138.8	141.8	144.7	150.7	156.6	166.9	189.1
72.5°	112.3	113.7	116.7	116.7	116.7	119.6	122.6	125.5	128.5	134.4	143.3
75°	93.1	96.0	96.0	96.0	97.5	97.5	100.4	103.4	106.3	110.8	113.7
77.5°	76.8	76.8	76.8	76.8	78.3	78.3	79.8	82.7	84.2	85.7	88.6
80°	57.6	59.1	59.1	59.1	60.6	60.6	60.6	63.5	65.0	65.0	67.9
82.5°	42.8	42.8	42.8	44.3	42.8	44.3	44.3	45.8	44.3	45.8	47.3
85°	26.6	26.6	26.6	28.1	28.1	28.1	28.1	28.1	28.1	28.1	29.5
87.5°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3	14.8	13.3	13.3
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: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4
2.5°	2169.7	2162.4	2162.4	2157.9	2157.9	2134.3	2134.3	2141.7	2132.8	2122.5	2107.7
5°	2225.9	2209.6	2205.2	2199.3	2180.1	2150.5	2138.7	2134.3	2116.6	2094.4	2069.3
7.5°	2279.0	2252.4	2239.2	2225.9	2200.8	2159.4	2135.8	2119.5	2092.9	2059.0	2026.5
10°	2330.7	2296.8	2262.8	2246.5	2211.1	2159.4	2125.4	2098.8	2060.4	2014.6	1968.9
12.5°	2378.0	2307.1	2301.2	2268.7	2217.0	2157.9	2106.2	2067.8	2019.1	1965.9	1912.7
15°	2419.4	2347.0	2311.5	2282.0	2214.0	2140.2	2085.5	2038.3	1973.3	1912.7	1847.7
17.5°	2440.0	2361.7	2338.1	2289.4	2220.0	2123.9	2050.1	1992.5	1921.6	1849.2	1775.4
20°	2460.7	2369.1	2330.7	2296.8	2202.2	2092.9	2010.2	1943.8	1865.5	1779.8	1698.6
22.5°	2471.0	2369.1	2323.3	2276.1	2184.5	2059.0	1961.5	1883.2	1791.6	1704.5	1607.0
25°	2453.3	2360.3	2305.6	2256.9	2153.5	2017.6	1905.4	1816.7	1719.2	1620.3	1521.3
27.5°	2409.0	2339.6	2276.1	2225.9	2110.7	1964.4	1846.3	1745.8	1645.4	1534.6	1434.2
30°	2326.3	2295.3	2245.1	2188.9	2063.4	1917.2	1776.9	1673.5	1562.7	1451.9	1347.0
32.5°	2197.8	2224.4	2191.9	2143.2	2007.3	1852.2	1703.0	1598.1	1477.0	1357.4	1261.4
35°	2041.2	2135.8	2118.0	2084.1	1948.2	1782.8	1633.6	1506.6	1385.4	1264.3	1168.3
37.5°	1869.9	2013.2	2027.9	2007.3	1880.2	1711.9	1547.9	1423.8	1299.8	1177.2	1079.7
40°	1635.1	1855.1	1902.4	1911.3	1809.3	1626.2	1454.9	1333.7	1211.2	1091.5	973.4
42.5°	1419.4	1697.1	1756.2	1793.1	1719.2	1542.0	1369.2	1234.8	1113.7	1005.8	887.7
45°	1217.1	1506.6	1602.6	1649.8	1617.3	1446.0	1267.3	1141.7	1031.0	932.0	818.3
47.5°	1008.8	1299.8	1434.2	1509.5	1509.5	1348.5	1169.8	1045.7	939.4	855.2	754.8
50°	870.0	1112.2	1251.0	1350.0	1376.6	1249.6	1081.2	960.1	859.6	768.0	691.2
52.5°	741.5	958.6	1073.8	1177.2	1254.0	1143.2	982.2	872.9	774.0	688.3	627.7
55°	641.0	803.5	908.4	1022.1	1107.8	1035.4	886.2	779.9	694.2	623.3	571.6
57.5°	545.0	686.8	772.5	872.9	964.5	909.8	790.2	698.6	623.3	561.3	515.5
60°	463.8	579.0	645.5	723.7	837.5	799.1	700.1	615.9	555.4	499.2	460.8
62.5°	394.4	485.9	542.1	598.2	701.6	683.9	607.1	542.1	490.4	443.1	410.6
65°	323.5	398.8	443.1	491.8	574.6	581.9	519.9	474.1	426.9	385.5	356.0
67.5°	261.4	320.5	360.4	401.7	468.2	488.9	446.1	407.7	367.8	333.8	307.2
70°	211.2	252.6	282.1	314.6	369.3	394.4	372.2	345.6	313.1	285.1	261.4
72.5°	166.9	193.5	211.2	236.3	280.6	305.7	304.3	280.6	257.0	237.8	218.6
75°	122.6	143.3	158.0	174.3	209.7	233.4	239.3	228.9	205.3	190.5	175.8
77.5°	93.1	104.9	112.3	124.1	149.2	169.9	178.7	175.8	159.5	147.7	137.4
80°	70.9	73.9	76.8	81.2	101.9	121.1	127.0	125.5	116.7	112.3	100.4
82.5°	50.2	51.7	53.2	54.6	62.0	78.3	84.2	87.1	79.8	75.3	65.0
85°	29.5	31.0	31.0	34.0	35.4	39.9	50.2	50.2	48.7	42.8	41.4
87.5°	14.8	14.8	13.3	13.3	14.8	16.2	19.2	22.2	19.2	17.7	16.2
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: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4
2.5°	2101.8	2103.3	2107.7	2094.4	2073.7	2064.9	2038.3	2033.9	2029.4	2029.4	2033.9
5°	2054.5	2048.6	2050.1	2025.0	1995.4	1977.7	1940.8	1946.7	1927.5	1915.7	1918.6
7.5°	2002.8	1986.6	1985.1	1952.6	1915.7	1883.2	1844.8	1835.9	1818.2	1797.5	1788.7
10°	1937.8	1926.0	1903.9	1866.9	1819.7	1793.1	1741.4	1710.4	1706.0	1674.9	1663.1
12.5°	1871.4	1850.7	1828.5	1776.9	1723.7	1680.8	1642.4	1608.5	1584.8	1558.3	1540.5
15°	1794.6	1769.5	1744.4	1689.7	1627.7	1584.8	1527.2	1477.0	1407.6	1352.9	1321.9
17.5°	1710.4	1682.3	1648.3	1587.8	1527.2	1468.2	1361.8	1302.7	1254.0	1221.5	1202.3
20°	1623.2	1592.2	1558.3	1497.7	1392.8	1289.4	1230.4	1184.6	1155.0	1122.5	1098.9
22.5°	1531.7	1499.2	1462.2	1367.7	1256.9	1184.6	1138.8	1095.9	1053.1	1035.4	1023.6
25°	1446.0	1416.5	1369.2	1240.7	1153.5	1087.1	1035.4	1007.3	985.2	961.5	939.4
27.5°	1357.4	1302.7	1236.3	1128.4	1073.8	1005.8	968.9	948.2	909.8	893.6	883.3
30°	1251.0	1190.5	1127.0	1050.2	986.6	939.4	905.4	871.4	849.3	833.0	815.3
32.5°	1143.2	1085.6	1045.7	966.0	918.7	870.0	837.5	816.8	784.3	774.0	766.6
35°	1050.2	1001.4	966.0	901.0	856.7	812.4	788.7	757.7	737.0	717.8	706.0
37.5°	958.6	932.0	895.1	840.4	793.2	757.7	725.2	714.9	686.8	676.5	664.7
40°	895.1	855.2	824.2	776.9	737.0	698.6	678.0	654.3	635.1	618.9	614.4
42.5°	818.3	788.7	771.0	719.3	678.0	655.8	630.7	604.1	589.3	576.0	559.8
45°	760.7	734.1	709.0	667.6	630.7	602.6	580.5	562.7	537.6	531.7	506.6
47.5°	700.1	673.5	654.3	613.0	579.0	552.4	536.2	512.5	491.8	478.6	466.7
50°	639.5	617.4	599.7	564.2	534.7	506.6	484.5	460.8	452.0	429.8	422.4
52.5°	581.9	567.2	548.0	514.0	484.5	460.8	437.2	418.0	404.7	392.9	384.0
55°	533.2	509.6	500.7	463.8	438.7	413.6	392.9	381.1	364.8	357.4	350.1
57.5°	478.6	465.3	450.5	422.4	394.4	370.7	356.0	338.2	329.4	320.5	314.6
60°	431.3	412.1	400.3	376.6	351.5	329.4	316.1	302.8	291.0	283.6	271.8
62.5°	376.6	361.9	354.5	329.4	308.7	288.0	276.2	262.9	254.0	240.8	226.0
65°	329.4	317.6	308.7	288.0	268.8	249.6	237.8	221.6	209.7	202.4	200.9
67.5°	288.0	279.2	265.9	246.7	227.5	212.7	199.4	186.1	184.6	181.7	181.7
70°	242.2	233.4	226.0	205.3	189.1	172.8	169.9	165.4	161.0	159.5	156.6
72.5°	202.4	195.0	186.1	168.4	152.1	147.7	144.7	141.8	137.4	135.9	134.4
75°	163.9	153.6	147.7	131.5	127.0	124.1	121.1	116.7	113.7	112.3	109.3
77.5°	125.5	115.2	115.2	106.3	103.4	99.0	96.0	93.1	91.6	88.6	88.6
80°	88.6	88.6	85.7	81.2	76.8	75.3	70.9	69.4	67.9	69.4	66.5
82.5°	65.0	59.1	59.1	56.1	53.2	51.7	48.7	48.7	47.3	47.3	47.3
85°	36.9	36.9	35.4	32.5	31.0	31.0	29.5	29.5	28.1	28.1	26.6
87.5°	14.8	13.3	14.8	13.3	13.3	11.8	11.8	11.8	10.3	11.8	10.3
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: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4
2.5°	2033.9	2030.9	2022.0	2025.0	2020.6	2020.6	2017.6	2017.6	2017.6	2025.0	2020.6
5°	1923.1	1912.7	1902.4	1898.0	1893.5	1889.1	1889.1	1887.6	1900.9	1898.0	1909.8
7.5°	1785.7	1782.8	1762.1	1762.1	1754.7	1751.7	1759.1	1760.6	1762.1	1765.0	1772.4
10°	1663.1	1655.7	1626.2	1629.1	1624.7	1618.8	1623.2	1620.3	1630.6	1633.6	1630.6
12.5°	1518.4	1505.1	1472.6	1456.3	1438.6	1425.3	1441.6	1429.8	1471.1	1482.9	1515.4
15°	1326.4	1301.3	1279.1	1279.1	1262.8	1251.0	1258.4	1271.7	1280.6	1293.9	1299.8
17.5°	1197.9	1187.5	1169.8	1159.5	1155.0	1150.6	1150.6	1156.5	1175.7	1174.2	1186.0
20°	1088.6	1082.7	1073.8	1060.5	1056.1	1053.1	1053.1	1053.1	1066.4	1078.2	1085.6
22.5°	1013.2	1008.8	1002.9	985.2	976.3	973.4	980.7	985.2	995.5	1004.4	1011.8
25°	937.9	927.6	917.2	911.3	906.9	906.9	909.8	911.3	915.7	920.2	929.0
27.5°	875.9	868.5	853.7	837.5	837.5	833.0	836.0	838.9	849.3	864.1	871.4
30°	806.5	805.0	799.1	793.2	787.2	784.3	790.2	794.6	796.1	803.5	803.5
32.5°	756.2	745.9	735.6	729.6	726.7	725.2	726.7	732.6	732.6	741.5	751.8
35°	706.0	700.1	689.8	679.4	676.5	669.1	675.0	680.9	691.2	695.7	700.1
37.5°	651.4	644.0	639.5	636.6	630.7	632.2	627.7	636.6	645.5	644.0	646.9
40°	610.0	596.7	583.4	581.9	580.5	579.0	579.0	580.5	586.4	592.3	601.1
42.5°	556.8	552.4	540.6	528.8	525.8	522.9	519.9	525.8	537.6	548.0	552.4
45°	502.2	496.3	493.3	484.5	478.6	477.1	474.1	481.5	491.8	496.3	499.2
47.5°	452.0	450.5	441.6	443.1	438.7	440.2	438.7	443.1	443.1	447.5	450.5
50°	418.0	413.6	409.1	406.2	401.7	401.7	400.3	401.7	407.7	413.6	412.1
52.5°	384.0	376.6	375.2	373.7	370.7	373.7	369.3	370.7	376.6	379.6	378.1
55°	344.1	342.7	339.7	336.8	335.3	333.8	333.8	333.8	339.7	344.1	345.6
57.5°	313.1	305.7	299.8	299.8	293.9	292.4	295.4	296.9	301.3	304.3	307.2
60°	270.3	267.3	258.5	254.0	245.2	243.7	243.7	249.6	257.0	267.3	270.3
62.5°	224.5	220.1	218.6	218.6	218.6	218.6	218.6	218.6	218.6	220.1	220.1
65°	199.4	200.9	199.4	197.9	199.4	199.4	197.9	197.9	197.9	199.4	200.9
67.5°	178.7	177.2	178.7	177.2	175.8	175.8	174.3	175.8	177.2	178.7	178.7
70°	155.1	155.1	153.6	155.1	153.6	152.1	150.7	150.7	153.6	155.1	155.1
72.5°	132.9	132.9	131.5	131.5	128.5	128.5	130.0	128.5	128.5	132.9	132.9
75°	110.8	109.3	107.8	107.8	106.3	106.3	106.3	104.9	107.8	107.8	109.3
77.5°	87.1	87.1	87.1	85.7	85.7	84.2	84.2	85.7	85.7	85.7	87.1
80°	66.5	66.5	66.5	65.0	63.5	63.5	63.5	63.5	63.5	65.0	63.5
82.5°	45.8	45.8	45.8	45.8	45.8	44.3	44.3	44.3	45.8	45.8	44.3
85°	28.1	26.6	28.1	28.1	26.6	28.1	26.6	26.6	25.1	25.1	26.6
87.5°	11.8	10.3	8.9	8.9	10.3	8.9	8.9	8.9	10.3	8.9	8.9
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: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4	2125.4
2.5°	2025.0	2032.4	2029.4	2013.2	2029.4	2033.9	2042.7	2051.6	2057.5	2066.3	2073.7
5°	1898.0	1912.7	1921.6	1912.7	1942.3	1946.7	1967.4	1979.2	1996.9	2011.7	2023.5
7.5°	1778.3	1790.1	1807.9	1810.8	1828.5	1849.2	1878.8	1908.3	1936.4	1951.1	1964.4
10°	1649.8	1670.5	1697.1	1691.2	1717.8	1750.3	1781.3	1828.5	1852.2	1878.8	1902.4
12.5°	1521.3	1534.6	1570.1	1581.9	1620.3	1645.4	1688.2	1717.8	1776.9	1807.9	1828.5
15°	1296.8	1351.5	1395.8	1449.0	1499.2	1546.4	1584.8	1638.0	1689.7	1713.3	1747.3
17.5°	1194.9	1220.0	1246.6	1273.2	1338.2	1422.4	1490.3	1547.9	1592.2	1623.2	1663.1
20°	1088.6	1113.7	1143.2	1168.3	1208.2	1268.8	1352.9	1451.9	1505.1	1537.6	1576.0
22.5°	1013.2	1036.9	1056.1	1078.2	1109.2	1153.5	1217.1	1339.7	1410.6	1450.4	1484.4
25°	932.0	961.5	982.2	998.5	1023.6	1072.3	1124.0	1193.4	1320.5	1351.5	1398.7
27.5°	875.9	884.7	908.4	933.5	958.6	985.2	1038.3	1097.4	1183.1	1251.0	1308.6
30°	809.4	831.6	853.7	864.1	886.2	924.6	957.1	1020.6	1087.1	1140.3	1209.7
32.5°	759.2	772.5	787.2	812.4	833.0	859.6	892.1	945.3	1001.4	1035.4	1088.6
35°	703.1	711.9	742.9	753.3	774.0	800.5	833.0	874.4	935.0	961.5	999.9
37.5°	649.9	670.6	679.4	703.1	722.3	748.8	772.5	819.7	859.6	890.6	926.1
40°	608.5	617.4	633.6	654.3	670.6	691.2	720.8	754.8	797.6	822.7	853.7
42.5°	558.3	565.7	586.4	598.2	624.8	644.0	661.7	703.1	741.5	760.7	791.7
45°	503.7	521.4	534.7	558.3	573.1	596.7	618.9	648.4	683.9	706.0	723.7
47.5°	456.4	474.1	487.4	509.6	533.2	543.5	567.2	598.2	630.7	648.4	673.5
50°	418.0	423.9	449.0	459.4	484.5	505.1	521.4	548.0	583.4	593.8	614.4
52.5°	381.1	385.5	401.7	415.0	437.2	454.9	475.6	500.7	530.2	546.5	562.7
55°	348.6	351.5	358.9	373.7	388.5	410.6	429.8	453.4	478.6	496.3	511.0
57.5°	311.7	317.6	323.5	332.3	347.1	367.8	388.5	410.6	431.3	443.1	462.3
60°	268.8	277.7	288.0	298.4	308.7	323.5	347.1	367.8	387.0	397.3	412.1
62.5°	223.0	240.8	249.6	261.4	270.3	283.6	301.3	324.9	338.2	351.5	363.3
65°	200.9	202.4	203.8	215.6	231.9	245.2	261.4	279.2	299.8	308.7	317.6
67.5°	178.7	180.2	183.1	184.6	190.5	205.3	223.0	242.2	258.5	264.4	273.2
70°	156.6	156.6	162.5	163.9	165.4	166.9	181.7	200.9	215.6	223.0	233.4
72.5°	132.9	134.4	137.4	138.8	141.8	144.7	149.2	159.5	177.2	184.6	196.4
75°	109.3	110.8	112.3	113.7	118.2	119.6	124.1	130.0	137.4	146.2	153.6
77.5°	87.1	87.1	88.6	91.6	94.5	96.0	100.4	103.4	106.3	110.8	116.7
80°	65.0	66.5	66.5	69.4	69.4	70.9	72.4	76.8	79.8	82.7	85.7
82.5°	44.3	47.3	47.3	47.3	48.7	50.2	51.7	51.7	54.6	56.1	60.6
85°	26.6	28.1	28.1	28.1	26.6	29.5	29.5	31.0	31.0	31.0	32.5
87.5°	10.3	8.9	10.3	10.3	10.3	11.8	10.3	10.3	11.8	13.3	13.3
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: P987756

CATALOG NUMBER: S122R3DR-B290DB50-4F0-XX-W2A-A

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	2125.4	2125.4	2125.4	2125.4
2.5°	2087.0	2082.6	2109.2	2138.7
5°	2044.2	2051.6	2085.5	2126.9
7.5°	1999.9	2016.1	2056.0	2110.7
10°	1937.8	1967.4	2027.9	2084.1
12.5°	1877.3	1917.2	1974.8	2041.2
15°	1809.3	1853.7	1924.6	2004.3
17.5°	1734.0	1784.2	1866.9	1954.1
20°	1654.3	1720.7	1807.9	1902.4
22.5°	1565.6	1645.4	1735.5	1840.4
25°	1480.0	1567.1	1657.2	1778.3
27.5°	1395.8	1481.4	1581.9	1704.5
30°	1311.6	1389.9	1497.7	1629.1
32.5°	1221.5	1302.7	1416.5	1550.9
35°	1138.8	1220.0	1326.4	1459.3
37.5°	1050.2	1137.3	1239.2	1376.6
40°	946.8	1048.7	1147.6	1279.1
42.5°	861.1	968.9	1064.9	1189.0
45°	793.2	895.1	974.8	1095.9
47.5°	729.6	812.4	893.6	1005.8
50°	669.1	732.6	816.8	917.2
52.5°	607.1	661.7	734.1	828.6
55°	550.9	602.6	667.6	740.0
57.5°	499.2	536.2	601.1	666.1
60°	441.6	480.0	530.2	584.9
62.5°	392.9	422.4	469.7	515.5
65°	341.2	369.3	404.7	447.5
67.5°	293.9	319.0	347.1	381.1
70°	251.1	270.3	291.0	320.5
72.5°	205.3	226.0	245.2	268.8
75°	168.4	177.2	193.5	209.7
77.5°	130.0	141.8	150.7	163.9
80°	93.1	103.4	106.3	116.7
82.5°	62.0	67.9	73.9	76.8
85°	35.4	38.4	44.3	45.8
87.5°	13.3	14.8	17.7	20.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)