

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: P987743

Luminaire Tested: S122R3DR-B290DB2750-4F0-XX-W2A-A_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987743
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-B290DB2750-4F0-XX-W2A-A_4000K
Description: Define 2 3in Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951
Light Source: -
Ballast/Driver: -

Summary

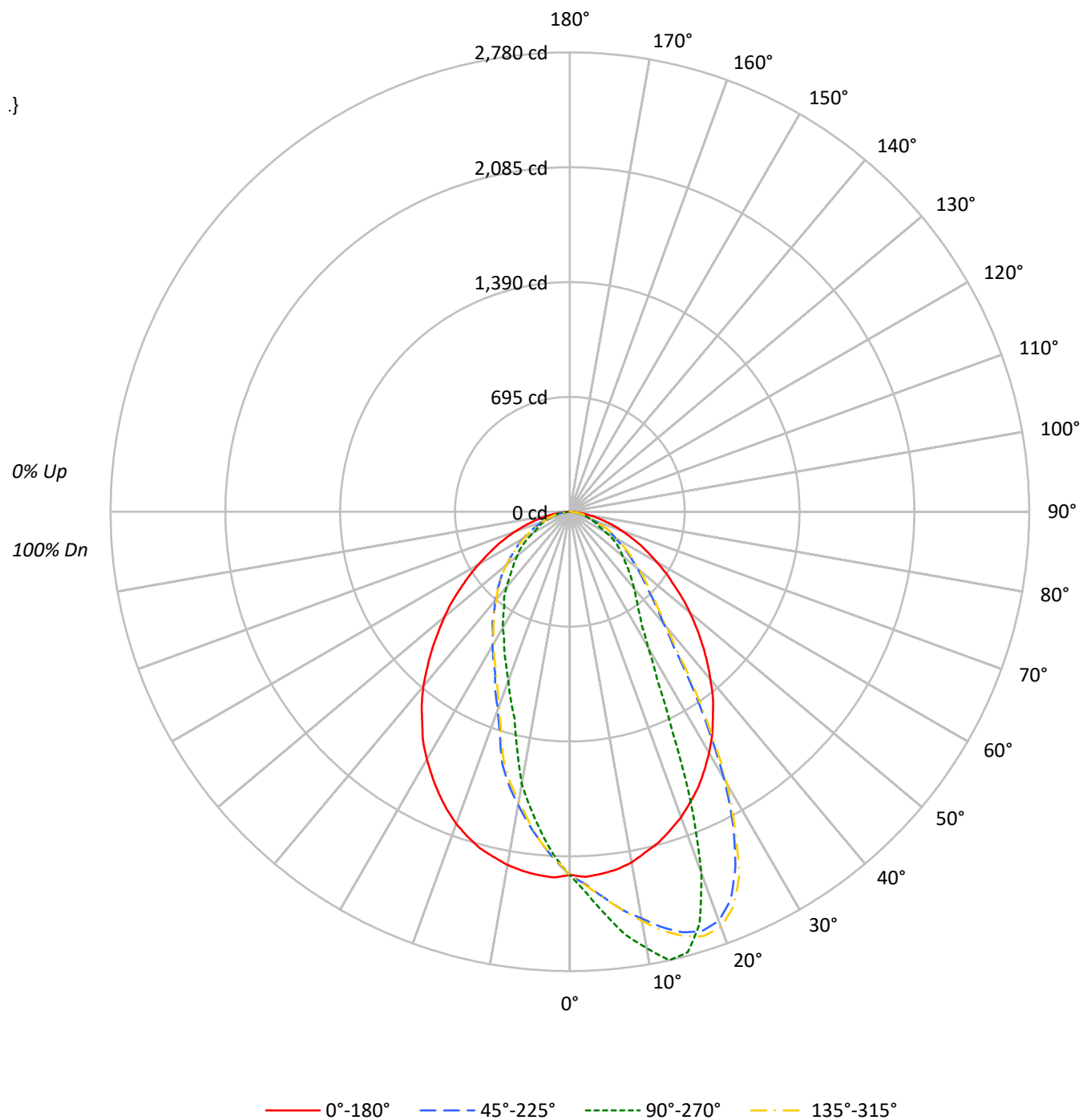
Lumens per Lamp: N/A
Luminaire Lumens: 3798.0 lumens
Efficiency: N/A
Efficacy: 62.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V):
Input Current (A_{in}): 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	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°	34790	34790	34790	34790
5°	34946	38854	35067	31039
10°	34638	43107	34884	26905
15°	33963	45227	34539	21199
20°	33136	39209	33857	18344
25°	32116	25715	32811	16379
30°	30791	17308	31628	14824
35°	29160	14020	30103	13370
40°	27330	12466	28497	12371
45°	25368	11283	26429	11043
50°	23355	10267	24446	10230
55°	21118	9651	22255	9527
60°	19147	8076	20163	7978
65°	17334	6806	18364	7723
70°	15338	6290	16541	7280
75°	13266	5884	14476	6728
80°	11003	5433	11832	5989
85°	8591	4995	9426	5267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 160°

Vertical Angle: 45°

Luminance: 38191 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.5	5.5
10°-20°	581.9	15.3
20°-30°	748.9	19.7
30°-40°	710.4	18.7
40°-50°	608.9	16.0
50°-60°	463.7	12.2
60°-70°	292.4	7.7
70°-80°	145.9	3.8
80°-90°	37.5	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°	1539.2	40.5
0°-40°	2249.6	59.2
0°-60°	3322.2	87.5
0°-90°	3798.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3798.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2198	2198	2198	2198	2198	
5°	2199	2445	2207	1953	2199	209
15°	2072	2760	2108	1294	2072	583
25°	1839	1472	1879	938	1839	844
35°	1509	726	1558	692	1509	944
45°	1133	504	1181	493	1133	875
55°	765	350	806	345	765	690
65°	463	182	490	206	463	459
75°	217	96	237	110	217	235
85°	47	28	52	29	47	57
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°	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8
2.5°	2211.5	2220.7	2225.2	2231.4	2245.1	2254.3	2268.0	2271.1	2269.5	2275.7	2258.9
5°	2199.3	2219.1	2237.5	2252.7	2277.2	2292.5	2309.3	2329.1	2333.7	2356.6	2342.9
7.5°	2182.5	2211.5	2237.5	2268.0	2304.7	2324.5	2350.5	2381.0	2394.8	2422.3	2429.9
10°	2155.0	2196.2	2240.5	2272.6	2323.0	2358.1	2382.6	2431.4	2463.5	2504.7	2498.6
12.5°	2110.7	2164.2	2223.7	2277.2	2342.9	2365.8	2411.6	2462.0	2503.2	2541.4	2575.0
15°	2072.5	2133.6	2199.3	2265.0	2339.8	2382.6	2428.4	2494.1	2538.3	2605.5	2634.6
17.5°	2020.6	2098.5	2176.4	2249.7	2338.3	2387.1	2443.7	2507.8	2573.5	2637.6	2660.5
20°	1967.1	2051.1	2135.1	2234.4	2335.2	2382.6	2440.6	2520.0	2584.2	2634.6	2634.6
22.5°	1903.0	2005.3	2101.5	2196.2	2306.2	2374.9	2434.5	2527.7	2573.5	2584.2	2542.9
25°	1838.8	1941.2	2046.6	2164.2	2289.4	2350.5	2417.7	2504.7	2520.0	2477.3	2370.3
27.5°	1762.5	1877.0	1996.2	2122.9	2254.3	2330.6	2391.7	2449.8	2420.7	2306.2	2139.7
30°	1684.6	1808.3	1942.7	2063.4	2222.2	2292.5	2344.4	2361.2	2269.5	2083.2	1867.9
32.5°	1603.6	1724.3	1866.3	2011.4	2171.8	2239.0	2272.6	2228.3	2060.3	1825.1	1562.4
35°	1509.0	1644.9	1793.0	1944.2	2103.1	2153.5	2173.3	2064.9	1849.5	1545.6	1284.4
37.5°	1423.4	1559.4	1718.2	1872.4	2026.7	2054.2	2034.3	1864.8	1591.4	1290.6	1035.5
40°	1322.6	1467.7	1623.5	1796.1	1922.8	1930.5	1881.6	1661.7	1322.6	1040.1	882.8
42.5°	1229.5	1376.1	1531.9	1707.5	1803.7	1777.8	1712.1	1423.4	1104.2	896.5	769.8
45°	1133.2	1272.2	1440.2	1596.0	1664.7	1603.6	1504.4	1197.4	927.1	771.3	673.5
47.5°	1040.1	1169.9	1336.4	1486.0	1498.3	1429.5	1311.9	1003.4	803.4	678.1	598.7
50°	948.4	1078.3	1234.0	1357.8	1345.5	1250.8	1118.0	872.1	698.0	598.7	533.0
52.5°	856.8	974.4	1125.6	1223.4	1171.4	1079.8	948.4	739.2	609.4	522.3	471.9
55°	765.2	875.1	1005.0	1085.9	1003.4	898.0	804.9	633.8	528.4	458.2	420.0
57.5°	688.8	775.9	895.0	943.9	844.6	762.1	681.2	545.2	458.2	407.8	363.5
60°	604.8	684.2	782.0	811.0	708.7	641.5	572.7	461.2	392.5	348.2	319.2
62.5°	533.0	598.7	673.5	673.5	583.4	533.0	481.1	386.4	329.9	294.8	281.0
65°	462.8	510.1	563.6	557.5	481.1	436.8	395.6	319.2	276.4	252.0	238.3
67.5°	394.0	430.7	465.8	444.4	389.5	351.3	313.1	258.1	229.1	212.3	194.0
70°	331.4	360.4	378.8	358.9	303.9	271.9	244.4	207.7	184.8	163.4	152.7
72.5°	278.0	290.2	296.3	271.9	226.0	207.7	187.9	161.9	142.0	131.3	128.3
75°	216.9	227.6	223.0	204.7	166.5	152.7	137.5	119.1	114.5	108.4	105.4
77.5°	169.5	169.5	161.9	145.1	119.1	108.4	102.3	93.2	88.6	87.1	84.0
80°	120.7	119.1	114.5	96.2	80.9	74.8	74.8	68.7	67.2	64.1	64.1
82.5°	79.4	79.4	73.3	58.0	53.5	51.9	50.4	47.3	47.3	45.8	45.8
85°	47.3	44.3	36.7	32.1	30.5	30.5	29.0	27.5	29.0	27.5	27.5
87.5°	21.4	16.8	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8
2.5°	2275.7	2278.7	2283.3	2304.7	2307.7	2313.8	2310.8	2310.8	2312.3	2309.3	2310.8
5°	2373.4	2378.0	2400.9	2426.9	2433.0	2426.9	2434.5	2445.2	2445.2	2445.2	2442.1
7.5°	2465.0	2481.8	2507.8	2546.0	2553.6	2561.3	2575.0	2565.8	2568.9	2582.6	2578.1
10°	2553.6	2578.1	2607.1	2639.1	2655.9	2666.6	2672.7	2686.5	2718.6	2681.9	2695.7
12.5°	2637.6	2672.7	2703.3	2738.4	2750.6	2764.4	2769.0	2781.2	2781.2	2779.7	2790.3
15°	2692.6	2724.7	2752.2	2775.1	2778.1	2775.1	2772.0	2773.5	2778.1	2759.8	2770.5
17.5°	2704.8	2707.9	2717.0	2707.9	2709.4	2677.3	2659.0	2654.4	2611.7	2613.2	2648.3
20°	2645.3	2593.3	2579.6	2529.2	2498.6	2416.2	2413.1	2390.2	2300.1	2327.6	2321.5
22.5°	2481.8	2393.3	2275.7	2217.6	2188.6	2101.5	2034.3	1987.0	1954.9	1922.8	1909.1
25°	2266.5	2122.9	1956.4	1841.9	1825.1	1744.2	1620.4	1562.4	1493.7	1472.3	1509.0
27.5°	1988.5	1802.2	1614.3	1438.7	1406.6	1333.3	1270.7	1229.5	1150.0	1145.5	1148.5
30°	1611.3	1423.4	1266.1	1151.6	1072.2	1038.6	997.3	966.8	934.7	946.9	950.0
32.5°	1324.2	1145.5	998.8	937.8	901.1	879.7	844.6	824.7	811.0	806.4	804.9
35°	1052.3	933.2	867.5	807.9	786.6	771.3	745.3	736.1	723.9	725.5	725.5
37.5°	901.1	801.8	753.0	722.4	702.5	694.9	678.1	668.9	661.3	658.3	662.8
40°	777.4	708.7	678.1	650.6	633.8	630.8	621.6	610.9	601.7	603.3	607.9
42.5°	687.3	647.6	610.9	589.5	577.3	572.7	565.1	557.5	557.5	552.9	551.3
45°	615.5	583.4	552.9	533.0	525.4	519.3	510.1	508.6	502.5	504.0	505.5
47.5°	551.3	525.4	502.5	482.6	475.0	473.5	464.3	458.2	458.2	456.7	455.1
50°	493.3	467.3	447.5	436.8	426.1	423.1	421.5	420.0	416.9	416.9	418.5
52.5°	446.0	420.0	404.7	395.6	389.5	386.4	386.4	384.9	384.9	384.9	383.3
55°	394.0	372.7	360.4	357.4	354.3	352.8	351.3	348.2	346.7	349.7	346.7
57.5°	345.2	337.5	326.8	323.8	316.1	316.1	311.6	308.5	305.5	308.5	308.5
60°	307.0	296.3	290.2	281.0	274.9	268.8	261.2	259.6	256.6	255.1	253.5
62.5°	267.3	258.1	242.8	229.1	219.9	213.8	210.8	209.2	209.2	207.7	207.7
65°	223.0	201.6	194.0	189.4	187.9	186.3	183.3	181.7	183.3	181.7	183.3
67.5°	174.1	171.1	166.5	163.4	161.9	160.4	160.4	158.8	158.8	158.8	158.8
70°	151.2	143.6	142.0	139.0	139.0	137.5	137.5	137.5	137.5	135.9	139.0
72.5°	125.2	120.7	119.1	117.6	117.6	117.6	116.1	116.1	116.1	114.5	116.1
75°	102.3	100.8	97.7	97.7	96.2	97.7	96.2	96.2	94.7	96.2	96.2
77.5°	82.5	80.9	79.4	79.4	77.9	77.9	77.9	77.9	77.9	77.9	79.4
80°	62.6	61.1	59.6	61.1	59.6	61.1	59.6	59.6	61.1	59.6	59.6
82.5°	45.8	44.3	44.3	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8
85°	27.5	26.0	26.0	27.5	26.0	27.5	26.0	26.0	26.0	27.5	27.5
87.5°	12.2	13.7	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	13.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8
2.5°	2316.9	2306.2	2303.1	2306.2	2303.1	2304.7	2294.0	2254.3	2265.0	2248.2	2257.3
5°	2448.2	2439.1	2419.2	2416.2	2413.1	2410.1	2394.8	2359.7	2345.9	2323.0	2321.5
7.5°	2573.5	2573.5	2558.2	2547.5	2533.8	2523.1	2503.2	2451.3	2429.9	2402.4	2387.1
10°	2697.2	2657.5	2674.3	2663.6	2630.0	2623.9	2587.2	2556.7	2515.4	2487.9	2463.5
12.5°	2785.8	2773.5	2758.3	2749.1	2739.9	2720.1	2695.7	2617.8	2596.4	2541.4	2513.9
15°	2782.7	2775.1	2779.7	2779.7	2776.6	2772.0	2752.2	2695.7	2659.0	2605.5	2558.2
17.5°	2633.0	2652.9	2672.7	2686.5	2717.0	2730.8	2749.1	2715.5	2692.6	2646.8	2596.4
20°	2371.9	2420.7	2478.8	2491.0	2518.5	2599.4	2636.1	2665.1	2674.3	2659.0	2617.8
22.5°	2008.4	2049.6	2190.1	2187.1	2226.8	2323.0	2429.9	2517.0	2585.7	2623.9	2608.6
25°	1573.1	1631.1	1706.0	1762.5	1892.3	2035.9	2168.7	2307.7	2426.9	2532.2	2558.2
27.5°	1189.8	1266.1	1325.7	1400.5	1466.2	1635.7	1806.8	2023.6	2162.6	2362.7	2466.6
30°	962.2	997.3	1056.9	1092.0	1124.1	1253.9	1447.9	1661.7	1906.0	2136.7	2315.4
32.5°	821.7	846.1	890.4	905.7	939.3	1026.3	1148.5	1344.0	1596.0	1875.5	2110.7
35°	737.7	763.6	772.8	786.6	814.0	869.0	953.0	1095.1	1322.6	1596.0	1877.0
37.5°	665.9	679.6	705.6	714.8	723.9	765.2	821.7	921.0	1072.2	1296.7	1608.2
40°	615.5	623.1	636.9	644.5	650.6	679.6	730.0	797.2	908.7	1079.8	1366.9
42.5°	562.0	571.2	580.4	589.5	597.2	620.1	650.6	714.8	789.6	919.4	1127.1
45°	510.1	516.2	526.9	533.0	543.7	562.0	589.5	633.8	701.0	783.5	951.5
47.5°	462.8	470.4	475.0	482.6	490.3	510.1	536.1	565.1	620.1	701.0	823.2
50°	420.0	429.2	435.3	436.8	442.9	461.2	482.6	514.7	549.8	612.4	719.3
52.5°	389.5	391.0	395.6	401.7	400.1	410.8	430.7	455.1	491.8	542.2	620.1
55°	354.3	358.9	362.0	363.5	363.5	372.7	383.3	406.3	435.3	476.5	542.2
57.5°	310.0	314.6	323.8	326.8	331.4	336.0	340.6	355.9	380.3	420.0	473.5
60°	264.2	267.3	276.4	282.5	285.6	297.8	303.9	316.1	329.9	358.9	409.3
62.5°	212.3	215.3	219.9	226.0	232.1	250.5	265.7	278.0	288.7	308.5	349.7
65°	184.8	186.3	189.4	190.9	192.4	200.1	213.8	230.6	250.5	265.7	290.2
67.5°	160.4	161.9	163.4	166.5	168.0	169.5	175.6	180.2	200.1	221.5	239.8
70°	137.5	140.5	142.0	142.0	143.6	146.6	149.7	155.8	161.9	172.6	195.5
72.5°	116.1	117.6	120.7	120.7	120.7	123.7	126.8	129.8	132.9	139.0	148.1
75°	96.2	99.3	99.3	99.3	100.8	100.8	103.9	106.9	110.0	114.5	117.6
77.5°	79.4	79.4	79.4	79.4	80.9	80.9	82.5	85.5	87.1	88.6	91.6
80°	59.6	61.1	61.1	61.1	62.6	62.6	62.6	65.7	67.2	67.2	70.3
82.5°	44.3	44.3	44.3	45.8	44.3	45.8	45.8	47.3	45.8	47.3	48.9
85°	27.5	27.5	27.5	29.0	29.0	29.0	29.0	29.0	29.0	29.0	30.5
87.5°	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	15.3	13.7	13.7
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: P987743

CATALOG NUMBER: S122R3DR-B290DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8
2.5°	2243.6	2235.9	2235.9	2231.4	2231.4	2206.9	2206.9	2214.6	2205.4	2194.7	2179.4
5°	2301.6	2284.8	2280.2	2274.1	2254.3	2223.7	2211.5	2206.9	2188.6	2165.7	2139.7
7.5°	2356.6	2329.1	2315.4	2301.6	2275.7	2232.9	2208.4	2191.6	2164.2	2129.0	2095.4
10°	2410.1	2374.9	2339.8	2323.0	2286.3	2232.9	2197.8	2170.3	2130.6	2083.2	2035.9
12.5°	2458.9	2385.6	2379.5	2345.9	2292.5	2231.4	2177.9	2138.2	2087.8	2032.8	1977.8
15°	2501.7	2426.9	2390.2	2359.7	2289.4	2213.0	2156.5	2107.6	2040.4	1977.8	1910.6
17.5°	2523.1	2442.1	2417.7	2367.3	2295.5	2196.2	2119.9	2060.3	1987.0	1912.2	1835.8
20°	2544.5	2449.8	2410.1	2374.9	2277.2	2164.2	2078.6	2009.9	1929.0	1840.4	1756.4
22.5°	2555.1	2449.8	2402.4	2353.5	2258.9	2129.0	2028.2	1947.3	1852.6	1762.5	1661.7
25°	2536.8	2440.6	2384.1	2333.7	2226.8	2086.3	1970.2	1878.6	1777.8	1675.4	1573.1
27.5°	2491.0	2419.2	2353.5	2301.6	2182.5	2031.3	1909.1	1805.2	1701.4	1586.8	1483.0
30°	2405.5	2373.4	2321.5	2263.4	2133.6	1982.4	1837.3	1730.4	1615.9	1501.3	1392.9
32.5°	2272.6	2300.1	2266.5	2216.1	2075.6	1915.2	1761.0	1652.5	1527.3	1403.6	1304.3
35°	2110.7	2208.4	2190.1	2155.0	2014.5	1843.4	1689.2	1557.8	1432.6	1307.4	1208.1
37.5°	1933.5	2081.7	2097.0	2075.6	1944.2	1770.1	1600.6	1472.3	1344.0	1217.2	1116.4
40°	1690.7	1918.3	1967.1	1976.3	1870.9	1681.5	1504.4	1379.1	1252.4	1128.7	1006.5
42.5°	1467.7	1754.8	1815.9	1854.1	1777.8	1594.5	1415.8	1276.8	1151.6	1040.1	917.9
45°	1258.5	1557.8	1657.1	1706.0	1672.4	1495.2	1310.4	1180.6	1066.0	963.7	846.1
47.5°	1043.1	1344.0	1483.0	1560.9	1560.9	1394.4	1209.6	1081.3	971.4	884.3	780.4
50°	899.6	1150.0	1293.6	1395.9	1423.4	1292.1	1118.0	992.7	888.9	794.2	714.8
52.5°	766.7	991.2	1110.3	1217.2	1296.7	1182.1	1015.6	902.6	800.3	711.7	649.1
55°	662.8	830.8	939.3	1056.9	1145.5	1070.6	916.4	806.4	717.8	644.5	591.1
57.5°	563.6	710.2	798.8	902.6	997.3	940.8	817.1	722.4	644.5	580.4	533.0
60°	479.6	598.7	667.4	748.4	866.0	826.3	723.9	636.9	574.3	516.2	476.5
62.5°	407.8	502.5	560.5	618.5	725.5	707.1	627.7	560.5	507.1	458.2	424.6
65°	334.5	412.4	458.2	508.6	594.1	601.7	537.6	490.3	441.4	398.6	368.1
67.5°	270.3	331.4	372.7	415.4	484.1	505.5	461.2	421.5	380.3	345.2	317.7
70°	218.4	261.2	291.7	325.3	381.8	407.8	384.9	357.4	323.8	294.8	270.3
72.5°	172.6	200.1	218.4	244.4	290.2	316.1	314.6	290.2	265.7	245.9	226.0
75°	126.8	148.1	163.4	180.2	216.9	241.3	247.4	236.7	212.3	197.0	181.7
77.5°	96.2	108.4	116.1	128.3	154.3	175.6	184.8	181.7	164.9	152.7	142.0
80°	73.3	76.4	79.4	84.0	105.4	125.2	131.3	129.8	120.7	116.1	103.9
82.5°	51.9	53.5	55.0	56.5	64.1	80.9	87.1	90.1	82.5	77.9	67.2
85°	30.5	32.1	32.1	35.1	36.7	41.2	51.9	51.9	50.4	44.3	42.8
87.5°	15.3	15.3	13.7	13.7	15.3	16.8	19.9	22.9	19.9	18.3	16.8
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: P987743

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CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8
2.5°	2173.3	2174.8	2179.4	2165.7	2144.3	2135.1	2107.6	2103.1	2098.5	2098.5	2103.1
5°	2124.4	2118.3	2119.9	2093.9	2063.4	2045.0	2006.8	2013.0	1993.1	1980.9	1983.9
7.5°	2071.0	2054.2	2052.7	2019.1	1980.9	1947.3	1907.6	1898.4	1880.1	1858.7	1849.5
10°	2003.8	1991.6	1968.7	1930.5	1881.6	1854.1	1800.7	1768.6	1764.0	1731.9	1719.7
12.5°	1935.1	1913.7	1890.8	1837.3	1782.3	1738.0	1698.3	1663.2	1638.8	1611.3	1593.0
15°	1855.6	1829.7	1803.7	1747.2	1683.1	1638.8	1579.2	1527.3	1455.5	1399.0	1366.9
17.5°	1768.6	1739.6	1704.4	1641.8	1579.2	1518.1	1408.2	1347.1	1296.7	1263.1	1243.2
20°	1678.5	1646.4	1611.3	1548.7	1440.2	1333.3	1272.2	1224.9	1194.3	1160.7	1136.3
22.5°	1583.8	1550.2	1512.0	1414.3	1299.7	1224.9	1177.5	1133.2	1089.0	1070.6	1058.4
25°	1495.2	1464.7	1415.8	1282.9	1192.8	1124.1	1070.6	1041.6	1018.7	994.3	971.4
27.5°	1403.6	1347.1	1278.3	1166.8	1110.3	1040.1	1001.9	980.5	940.8	924.0	913.3
30°	1293.6	1231.0	1165.3	1085.9	1020.2	971.4	936.2	901.1	878.2	861.4	843.1
32.5°	1182.1	1122.6	1081.3	998.8	950.0	899.6	866.0	844.6	811.0	800.3	792.7
35°	1085.9	1035.5	998.8	931.6	885.8	840.0	815.6	783.5	762.1	742.3	730.0
37.5°	991.2	963.7	925.5	869.0	820.2	783.5	749.9	739.2	710.2	699.5	687.3
40°	925.5	884.3	852.2	803.4	762.1	722.4	701.0	676.6	656.7	639.9	635.3
42.5°	846.1	815.6	797.2	743.8	701.0	678.1	652.1	624.7	609.4	595.6	578.8
45°	786.6	759.1	733.1	690.3	652.1	623.1	600.2	581.9	555.9	549.8	523.9
47.5°	723.9	696.4	676.6	633.8	598.7	571.2	554.4	530.0	508.6	494.8	482.6
50°	661.3	638.4	620.1	583.4	552.9	523.9	500.9	476.5	467.3	444.4	436.8
52.5°	601.7	586.5	566.6	531.5	500.9	476.5	452.1	432.2	418.5	406.3	397.1
55°	551.3	526.9	517.7	479.6	453.6	427.6	406.3	394.0	377.2	369.6	362.0
57.5°	494.8	481.1	465.8	436.8	407.8	383.3	368.1	349.7	340.6	331.4	325.3
60°	446.0	426.1	413.9	389.5	363.5	340.6	326.8	313.1	300.9	293.2	281.0
62.5°	389.5	374.2	366.5	340.6	319.2	297.8	285.6	271.9	262.7	248.9	233.7
65°	340.6	328.4	319.2	297.8	278.0	258.1	245.9	229.1	216.9	209.2	207.7
67.5°	297.8	288.7	274.9	255.1	235.2	219.9	206.2	192.4	190.9	187.9	187.9
70°	250.5	241.3	233.7	212.3	195.5	178.7	175.6	171.1	166.5	164.9	161.9
72.5°	209.2	201.6	192.4	174.1	157.3	152.7	149.7	146.6	142.0	140.5	139.0
75°	169.5	158.8	152.7	135.9	131.3	128.3	125.2	120.7	117.6	116.1	113.0
77.5°	129.8	119.1	119.1	110.0	106.9	102.3	99.3	96.2	94.7	91.6	91.6
80°	91.6	91.6	88.6	84.0	79.4	77.9	73.3	71.8	70.3	71.8	68.7
82.5°	67.2	61.1	61.1	58.0	55.0	53.5	50.4	50.4	48.9	48.9	48.9
85°	38.2	38.2	36.7	33.6	32.1	32.1	30.5	30.5	29.0	29.0	27.5
87.5°	15.3	13.7	15.3	13.7	13.7	12.2	12.2	12.2	10.7	12.2	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: P987743

CATALOG NUMBER: S122R3DR-B290DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8
2.5°	2103.1	2100.0	2090.8	2093.9	2089.3	2089.3	2086.3	2086.3	2086.3	2093.9	2089.3
5°	1988.5	1977.8	1967.1	1962.6	1958.0	1953.4	1953.4	1951.9	1965.6	1962.6	1974.8
7.5°	1846.5	1843.4	1822.0	1822.0	1814.4	1811.4	1819.0	1820.5	1822.0	1825.1	1832.7
10°	1719.7	1712.1	1681.5	1684.6	1680.0	1673.9	1678.5	1675.4	1686.1	1689.2	1686.1
12.5°	1570.0	1556.3	1522.7	1505.9	1487.6	1473.8	1490.6	1478.4	1521.2	1533.4	1567.0
15°	1371.5	1345.5	1322.6	1322.6	1305.8	1293.6	1301.2	1315.0	1324.2	1337.9	1344.0
17.5°	1238.6	1227.9	1209.6	1198.9	1194.3	1189.8	1189.8	1195.9	1215.7	1214.2	1226.4
20°	1125.6	1119.5	1110.3	1096.6	1092.0	1089.0	1089.0	1089.0	1102.7	1114.9	1122.6
22.5°	1047.7	1043.1	1037.0	1018.7	1009.5	1006.5	1014.1	1018.7	1029.4	1038.6	1046.2
25°	969.8	959.1	948.4	942.3	937.8	937.8	940.8	942.3	946.9	951.5	960.7
27.5°	905.7	898.0	882.8	866.0	866.0	861.4	864.4	867.5	878.2	893.5	901.1
30°	833.9	832.4	826.3	820.2	814.0	811.0	817.1	821.7	823.2	830.8	830.8
32.5°	782.0	771.3	760.6	754.5	751.4	749.9	751.4	757.5	757.5	766.7	777.4
35°	730.0	723.9	713.2	702.5	699.5	691.9	698.0	704.1	714.8	719.3	723.9
37.5°	673.5	665.9	661.3	658.3	652.1	653.7	649.1	658.3	667.4	665.9	668.9
40°	630.8	617.0	603.3	601.7	600.2	598.7	598.7	600.2	606.3	612.4	621.6
42.5°	575.8	571.2	559.0	546.8	543.7	540.7	537.6	543.7	555.9	566.6	571.2
45°	519.3	513.2	510.1	500.9	494.8	493.3	490.3	497.9	508.6	513.2	516.2
47.5°	467.3	465.8	456.7	458.2	453.6	455.1	453.6	458.2	458.2	462.8	465.8
50°	432.2	427.6	423.1	420.0	415.4	415.4	413.9	415.4	421.5	427.6	426.1
52.5°	397.1	389.5	387.9	386.4	383.3	386.4	381.8	383.3	389.5	392.5	391.0
55°	355.9	354.3	351.3	348.2	346.7	345.2	345.2	345.2	351.3	355.9	357.4
57.5°	323.8	316.1	310.0	310.0	303.9	302.4	305.5	307.0	311.6	314.6	317.7
60°	279.5	276.4	267.3	262.7	253.5	252.0	252.0	258.1	265.7	276.4	279.5
62.5°	232.1	227.6	226.0	226.0	226.0	226.0	226.0	226.0	226.0	227.6	227.6
65°	206.2	207.7	206.2	204.7	206.2	206.2	204.7	204.7	204.7	206.2	207.7
67.5°	184.8	183.3	184.8	183.3	181.7	181.7	180.2	181.7	183.3	184.8	184.8
70°	160.4	160.4	158.8	160.4	158.8	157.3	155.8	155.8	158.8	160.4	160.4
72.5°	137.5	137.5	135.9	135.9	132.9	132.9	134.4	132.9	132.9	137.5	137.5
75°	114.5	113.0	111.5	111.5	110.0	110.0	110.0	108.4	111.5	111.5	113.0
77.5°	90.1	90.1	90.1	88.6	88.6	87.1	87.1	88.6	88.6	88.6	90.1
80°	68.7	68.7	68.7	67.2	65.7	65.7	65.7	65.7	65.7	67.2	65.7
82.5°	47.3	47.3	47.3	47.3	47.3	45.8	45.8	45.8	47.3	47.3	45.8
85°	29.0	27.5	29.0	29.0	27.5	29.0	27.5	27.5	26.0	26.0	27.5
87.5°	12.2	10.7	9.2	9.2	10.7	9.2	9.2	9.2	10.7	9.2	9.2
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: P987743

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CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8	2197.8
2.5°	2093.9	2101.5	2098.5	2081.7	2098.5	2103.1	2112.2	2121.4	2127.5	2136.7	2144.3
5°	1962.6	1977.8	1987.0	1977.8	2008.4	2013.0	2034.3	2046.6	2064.9	2080.2	2092.4
7.5°	1838.8	1851.1	1869.4	1872.4	1890.8	1912.2	1942.7	1973.2	2002.3	2017.5	2031.3
10°	1706.0	1727.4	1754.8	1748.7	1776.2	1809.8	1841.9	1890.8	1915.2	1942.7	1967.1
12.5°	1573.1	1586.8	1623.5	1635.7	1675.4	1701.4	1745.7	1776.2	1837.3	1869.4	1890.8
15°	1341.0	1397.5	1443.3	1498.3	1550.2	1599.1	1638.8	1693.8	1747.2	1771.6	1806.8
17.5°	1235.6	1261.5	1289.0	1316.5	1383.7	1470.8	1541.0	1600.6	1646.4	1678.5	1719.7
20°	1125.6	1151.6	1182.1	1208.1	1249.3	1311.9	1399.0	1501.3	1556.3	1589.9	1629.6
22.5°	1047.7	1072.2	1092.0	1114.9	1147.0	1192.8	1258.5	1385.2	1458.6	1499.8	1534.9
25°	963.7	994.3	1015.6	1032.4	1058.4	1108.8	1162.3	1234.0	1365.4	1397.5	1446.3
27.5°	905.7	914.8	939.3	965.2	991.2	1018.7	1073.7	1134.8	1223.4	1293.6	1353.2
30°	837.0	859.9	882.8	893.5	916.4	956.1	989.7	1055.4	1124.1	1179.1	1250.8
32.5°	785.0	798.8	814.0	840.0	861.4	888.9	922.5	977.5	1035.5	1070.6	1125.6
35°	727.0	736.1	768.2	778.9	800.3	827.8	861.4	904.2	966.8	994.3	1034.0
37.5°	672.0	693.4	702.5	727.0	746.8	774.3	798.8	847.6	888.9	921.0	957.6
40°	629.2	638.4	655.2	676.6	693.4	714.8	745.3	780.4	824.7	850.7	882.8
42.5°	577.3	584.9	606.3	618.5	646.0	665.9	684.2	727.0	766.7	786.6	818.6
45°	520.8	539.1	552.9	577.3	592.6	617.0	639.9	670.5	707.1	730.0	748.4
47.5°	471.9	490.3	504.0	526.9	551.3	562.0	586.5	618.5	652.1	670.5	696.4
50°	432.2	438.3	464.3	475.0	500.9	522.3	539.1	566.6	603.3	614.0	635.3
52.5°	394.0	398.6	415.4	429.2	452.1	470.4	491.8	517.7	548.3	565.1	581.9
55°	360.4	363.5	371.1	386.4	401.7	424.6	444.4	468.9	494.8	513.2	528.4
57.5°	322.3	328.4	334.5	343.6	358.9	380.3	401.7	424.6	446.0	458.2	478.0
60°	278.0	287.1	297.8	308.5	319.2	334.5	358.9	380.3	400.1	410.8	426.1
62.5°	230.6	248.9	258.1	270.3	279.5	293.2	311.6	336.0	349.7	363.5	375.7
65°	207.7	209.2	210.8	223.0	239.8	253.5	270.3	288.7	310.0	319.2	328.4
67.5°	184.8	186.3	189.4	190.9	197.0	212.3	230.6	250.5	267.3	273.4	282.5
70°	161.9	161.9	168.0	169.5	171.1	172.6	187.9	207.7	223.0	230.6	241.3
72.5°	137.5	139.0	142.0	143.6	146.6	149.7	154.3	164.9	183.3	190.9	203.1
75°	113.0	114.5	116.1	117.6	122.2	123.7	128.3	134.4	142.0	151.2	158.8
77.5°	90.1	90.1	91.6	94.7	97.7	99.3	103.9	106.9	110.0	114.5	120.7
80°	67.2	68.7	68.7	71.8	71.8	73.3	74.8	79.4	82.5	85.5	88.6
82.5°	45.8	48.9	48.9	48.9	50.4	51.9	53.5	53.5	56.5	58.0	62.6
85°	27.5	29.0	29.0	29.0	27.5	30.5	30.5	32.1	32.1	32.1	33.6
87.5°	10.7	9.2	10.7	10.7	10.7	12.2	10.7	10.7	12.2	13.7	13.7
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: P987743

CATALOG NUMBER: S122R3DR-B290DB2750-4F0-XX-W2A-A_4000K

CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	2197.8	2197.8	2197.8	2197.8
2.5°	2158.0	2153.5	2181.0	2211.5
5°	2113.8	2121.4	2156.5	2199.3
7.5°	2067.9	2084.7	2126.0	2182.5
10°	2003.8	2034.3	2097.0	2155.0
12.5°	1941.2	1982.4	2042.0	2110.7
15°	1870.9	1916.7	1990.0	2072.5
17.5°	1793.0	1845.0	1930.5	2020.6
20°	1710.6	1779.3	1869.4	1967.1
22.5°	1618.9	1701.4	1794.6	1903.0
25°	1530.3	1620.4	1713.6	1838.8
27.5°	1443.3	1531.9	1635.7	1762.5
30°	1356.2	1437.2	1548.7	1684.6
32.5°	1263.1	1347.1	1464.7	1603.6
35°	1177.5	1261.5	1371.5	1509.0
37.5°	1085.9	1176.0	1281.4	1423.4
40°	979.0	1084.4	1186.7	1322.6
42.5°	890.4	1001.9	1101.2	1229.5
45°	820.2	925.5	1008.0	1133.2
47.5°	754.5	840.0	924.0	1040.1
50°	691.9	757.5	844.6	948.4
52.5°	627.7	684.2	759.1	856.8
55°	569.7	623.1	690.3	765.2
57.5°	516.2	554.4	621.6	688.8
60°	456.7	496.4	548.3	604.8
62.5°	406.3	436.8	485.7	533.0
65°	352.8	381.8	418.5	462.8
67.5°	303.9	329.9	358.9	394.0
70°	259.6	279.5	300.9	331.4
72.5°	212.3	233.7	253.5	278.0
75°	174.1	183.3	200.1	216.9
77.5°	134.4	146.6	155.8	169.5
80°	96.2	106.9	110.0	120.7
82.5°	64.1	70.3	76.4	79.4
85°	36.7	39.7	45.8	47.3
87.5°	13.7	15.3	18.3	21.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)