

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P249164

Luminaire Tested: **LSR8B70D010 EC8B70950 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249164  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B70D010 EC8B70950 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7038.0 lumens  
Efficiency: N/A  
Efficacy: 92.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

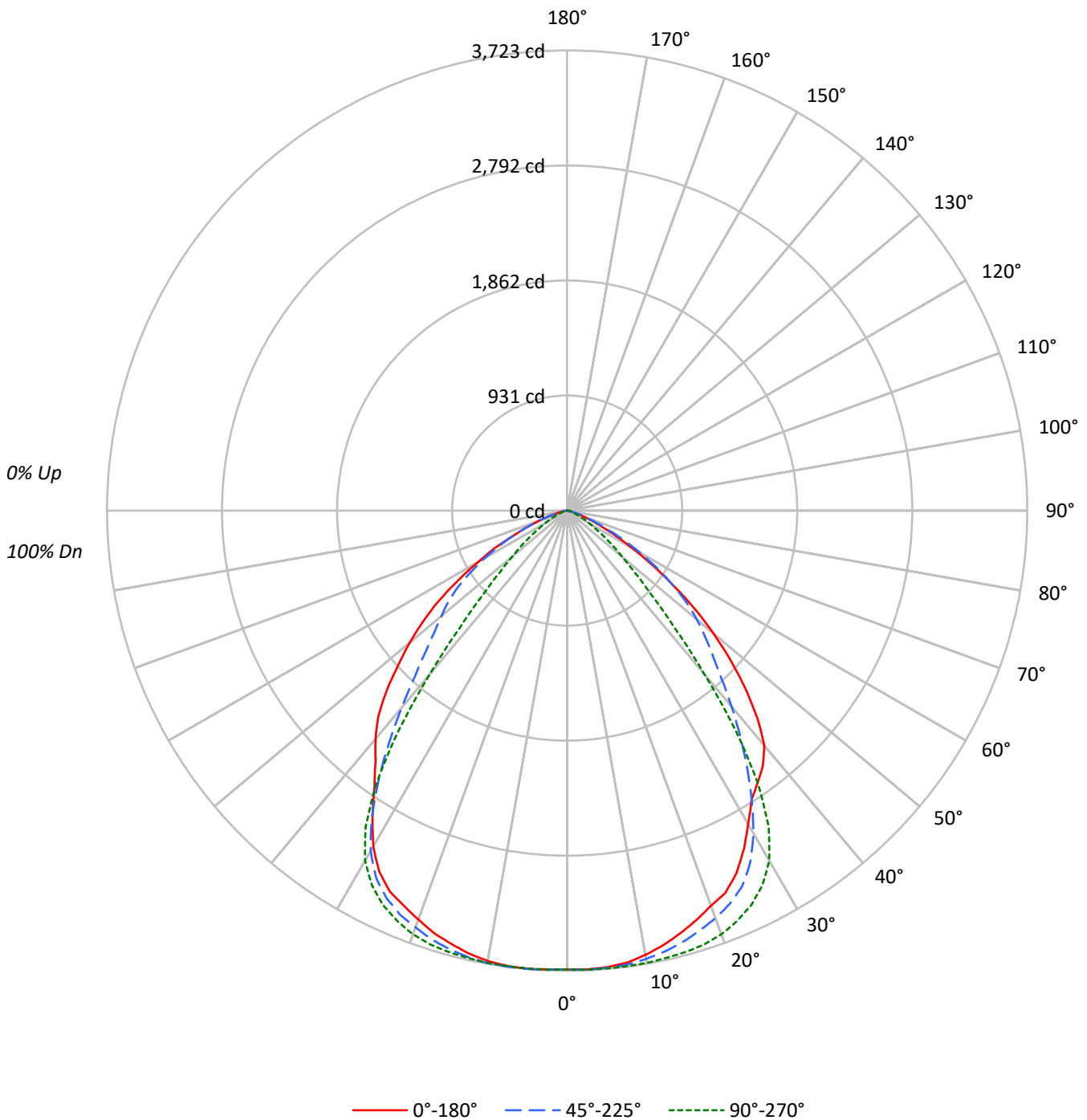
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	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					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	114508	114508	114508
5°	114759	115069	115193
10°	114276	116337	115836
15°	113011	118036	115811
20°	111654	119697	115513
25°	110204	119836	115631
30°	104260	116466	111712
35°	101146	101221	102272
40°	99894	69643	97084
45°	89011	41808	90227
50°	74012	27824	79750
55°	55509	19182	67616
60°	37614	12785	51016
65°	22692	8289	35045
70°	12577	4490	21566
75°	5695	1894	11164
80°	4954	2113	7778
85°	5626	2830	7748



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	354.4	5.0
10°-20°	1029.2	14.6
20°-30°	1562.1	22.2
30°-40°	1640.7	23.3
40°-50°	1230.1	17.5
50°-60°	789.3	11.2
60°-70°	337.6	4.8
70°-80°	79.7	1.1
80°-90°	14.8	0.2
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°	2945.7	41.9
0°-40°	4586.4	65.2
0°-60°	6605.8	93.9
0°-90°	7038.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7038.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3713	3713	3713	3713	3713	
5°	3707	3713	3717	3723	3721	352
15°	3540	3614	3697	3674	3628	998
25°	3239	3353	3522	3458	3398	1480
35°	2687	2537	2689	2657	2717	1686
45°	2041	1668	959	1620	2069	1563
55°	1032	1032	357	1076	1258	937
65°	311	367	114	472	480	332
75°	48	56	16	96	94	70
85°	16	10	8	16	22	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4
2.5°	3715.4	3719.4	3717.4	3717.4	3715.4	3717.4	3717.4	3721.4	3721.4	3717.4	3715.4
5°	3707.4	3711.4	3711.4	3707.4	3707.4	3717.4	3711.4	3715.4	3715.4	3713.4	3713.4
7.5°	3689.5	3689.5	3697.4	3691.5	3691.5	3697.4	3695.4	3699.4	3703.4	3705.4	3705.4
10°	3649.6	3653.6	3655.6	3655.6	3657.6	3663.5	3667.5	3675.5	3679.5	3683.5	3685.5
12.5°	3599.8	3605.7	3607.7	3605.7	3611.7	3619.7	3629.7	3639.6	3645.6	3653.6	3659.6
15°	3540.0	3540.0	3544.0	3550.0	3554.0	3565.9	3575.9	3587.8	3603.8	3613.7	3623.7
17.5°	3474.2	3478.2	3484.2	3484.2	3492.2	3512.1	3518.1	3536.0	3554.0	3563.9	3583.9
20°	3402.5	3406.4	3412.4	3416.4	3426.4	3442.3	3454.3	3470.2	3490.2	3508.1	3528.0
22.5°	3346.6	3338.7	3342.6	3346.6	3356.6	3370.6	3384.5	3404.4	3424.4	3442.3	3462.3
25°	3239.0	3241.0	3247.0	3250.9	3262.9	3274.9	3290.8	3314.7	3332.7	3352.6	3374.5
27.5°	3093.5	3095.5	3105.5	3105.5	3115.4	3135.4	3145.3	3165.2	3189.2	3209.1	3235.0
30°	2928.1	2932.0	2932.0	2940.0	2946.0	2956.0	2965.9	2985.9	2997.8	3015.8	3051.7
32.5°	2776.6	2780.5	2778.5	2776.6	2770.6	2768.6	2766.6	2770.6	2774.6	2780.5	2794.5
35°	2686.9	2676.9	2669.0	2655.0	2639.1	2619.1	2601.2	2577.3	2555.3	2537.4	2517.5
37.5°	2601.2	2599.2	2587.2	2567.3	2535.4	2499.5	2457.7	2405.8	2354.0	2298.2	2244.4
40°	2481.6	2475.6	2465.6	2437.7	2401.8	2358.0	2302.2	2238.4	2154.7	2069.0	1981.3
42.5°	2278.2	2280.2	2268.3	2246.4	2212.5	2170.6	2112.8	2043.1	1953.4	1851.7	1738.1
45°	2041.1	2041.1	2037.1	2019.1	1995.2	1961.3	1917.5	1859.7	1772.0	1668.3	1546.7
47.5°	1793.9	1795.9	1789.9	1786.0	1776.0	1754.1	1722.2	1678.3	1616.5	1516.8	1395.2
50°	1542.8	1542.8	1552.7	1550.7	1550.7	1542.8	1528.8	1502.9	1449.1	1369.3	1255.8
52.5°	1291.6	1295.6	1301.6	1309.6	1319.5	1335.5	1319.5	1307.6	1273.7	1211.9	1114.2
55°	1032.5	1036.5	1046.4	1060.4	1072.4	1088.3	1092.3	1092.3	1074.3	1032.5	958.7
57.5°	811.3	805.3	813.3	825.2	841.2	857.1	869.1	883.0	881.0	853.1	793.3
60°	609.9	611.9	617.9	629.9	641.8	655.8	671.7	683.7	689.7	675.7	637.8
62.5°	444.5	444.5	452.5	464.4	470.4	490.3	500.3	506.3	512.2	510.2	486.3
65°	311.0	314.9	318.9	324.9	330.9	342.8	348.8	360.8	364.8	366.8	348.8
67.5°	219.3	213.3	217.3	221.2	227.2	235.2	247.2	247.2	253.1	253.1	241.2
70°	139.5	139.5	141.5	147.5	151.5	153.5	157.5	161.4	167.4	165.4	165.4
72.5°	93.7	91.7	93.7	95.7	97.7	103.6	103.6	105.6	109.6	111.6	103.6
75°	47.8	49.8	53.8	51.8	57.8	53.8	55.8	61.8	59.8	55.8	55.8
77.5°	39.8	39.8	39.8	37.9	41.8	41.8	39.8	43.8	41.8	41.8	39.8
80°	27.9	29.9	27.9	25.9	27.9	25.9	25.9	25.9	25.9	25.9	23.9
82.5°	21.9	17.9	19.9	17.9	19.9	19.9	17.9	15.9	15.9	17.9	15.9
85°	15.9	11.9	13.9	13.9	11.9	11.9	11.9	11.9	11.9	10.0	10.0
87.5°	10.0	6.0	6.0	6.0	8.0	8.0	8.0	6.0	8.0	8.0	4.0
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4
2.5°	3719.4	3717.4	3721.4	3719.4	3719.4	3717.4	3719.4	3717.4	3721.4	3713.4	3715.4
5°	3719.4	3715.4	3717.4	3719.4	3721.4	3717.4	3717.4	3717.4	3721.4	3717.4	3719.4
7.5°	3711.4	3709.4	3715.4	3719.4	3717.4	3715.4	3719.4	3717.4	3721.4	3719.4	3723.3
10°	3695.4	3697.4	3701.4	3707.4	3709.4	3711.4	3715.4	3715.4	3721.4	3713.4	3717.4
12.5°	3671.5	3679.5	3689.5	3693.4	3701.4	3701.4	3705.4	3707.4	3711.4	3709.4	3715.4
15°	3641.6	3651.6	3663.5	3673.5	3683.5	3689.5	3695.4	3697.4	3703.4	3697.4	3699.4
17.5°	3605.7	3617.7	3635.6	3647.6	3663.5	3669.5	3677.5	3681.5	3687.5	3683.5	3685.5
20°	3555.9	3569.9	3589.8	3607.7	3617.7	3631.6	3641.6	3647.6	3651.6	3647.6	3649.6
22.5°	3486.2	3506.1	3532.0	3546.0	3565.9	3577.9	3579.9	3593.8	3603.8	3593.8	3597.8
25°	3404.4	3424.4	3444.3	3474.2	3492.2	3506.1	3520.1	3522.1	3532.0	3530.0	3528.0
27.5°	3268.9	3294.8	3328.7	3352.6	3376.5	3398.5	3414.4	3418.4	3428.4	3424.4	3426.4
30°	3083.5	3111.5	3143.3	3181.2	3215.1	3237.0	3256.9	3270.9	3280.8	3274.9	3272.9
32.5°	2820.4	2848.3	2882.2	2920.1	2960.0	2991.8	3015.8	3033.7	3045.7	3041.7	3031.7
35°	2519.5	2527.4	2549.4	2579.3	2613.1	2647.0	2669.0	2688.9	2702.8	2706.8	2706.8
37.5°	2210.5	2184.6	2168.7	2168.7	2188.6	2202.5	2222.5	2234.4	2256.3	2264.3	2270.3
40°	1911.5	1851.7	1795.9	1754.1	1726.2	1724.2	1724.2	1730.1	1750.1	1776.0	1799.9
42.5°	1644.4	1548.7	1463.0	1385.3	1329.5	1297.6	1283.7	1285.7	1301.6	1325.5	1365.3
45°	1431.1	1311.6	1203.9	1110.2	1034.5	984.6	960.7	958.7	970.7	998.6	1042.5
47.5°	1265.7	1138.1	1016.5	908.9	827.2	773.4	745.5	737.5	745.5	771.4	823.2
50°	1128.2	996.6	871.1	759.4	671.7	615.9	590.0	580.0	590.0	611.9	663.7
52.5°	1000.6	865.1	747.5	639.8	546.1	498.3	470.4	464.4	470.4	496.3	538.2
55°	853.1	737.5	621.9	514.2	432.6	384.7	362.8	356.8	362.8	386.7	430.6
57.5°	707.6	607.9	506.3	408.6	338.9	297.0	277.1	269.1	283.0	299.0	350.8
60°	572.0	492.3	406.6	320.9	263.1	225.2	209.3	207.3	211.3	231.2	267.1
62.5°	448.5	382.7	314.9	245.2	197.3	181.4	161.4	159.5	163.4	175.4	203.3
65°	322.9	281.1	229.2	179.4	141.5	119.6	111.6	113.6	117.6	125.6	151.5
67.5°	225.2	195.3	159.5	125.6	97.7	87.7	79.7	77.7	79.7	93.7	107.6
70°	151.5	133.5	107.6	95.7	67.8	53.8	55.8	49.8	57.8	57.8	69.7
72.5°	99.6	87.7	71.7	55.8	47.8	37.9	37.9	35.9	39.8	41.8	51.8
75°	51.8	39.8	39.8	27.9	19.9	10.0	17.9	15.9	13.9	15.9	19.9
77.5°	35.9	29.9	27.9	21.9	19.9	15.9	15.9	15.9	15.9	17.9	19.9
80°	21.9	21.9	15.9	13.9	11.9	10.0	11.9	11.9	11.9	11.9	13.9
82.5°	13.9	11.9	11.9	10.0	10.0	8.0	8.0	8.0	8.0	8.0	11.9
85°	11.9	8.0	8.0	6.0	8.0	13.9	6.0	8.0	8.0	8.0	6.0
87.5°	4.0	6.0	6.0	6.0	4.0	2.0	4.0	6.0	6.0	10.0	8.0
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4	3713.4
2.5°	3719.4	3721.4	3721.4	3719.4	3719.4	3715.4	3723.3	3717.4	3719.4	3727.3	3721.4
5°	3723.3	3725.3	3725.3	3723.3	3723.3	3723.3	3725.3	3725.3	3723.3	3721.4	3725.3
7.5°	3731.3	3729.3	3729.3	3725.3	3725.3	3721.4	3725.3	3719.4	3723.3	3719.4	3725.3
10°	3721.4	3723.3	3721.4	3719.4	3719.4	3717.4	3717.4	3711.4	3713.4	3707.4	3711.4
12.5°	3715.4	3713.4	3713.4	3709.4	3705.4	3701.4	3699.4	3693.4	3693.4	3679.5	3685.5
15°	3699.4	3701.4	3695.4	3687.5	3683.5	3673.5	3669.5	3661.5	3653.6	3643.6	3645.6
17.5°	3685.5	3679.5	3671.5	3663.5	3647.6	3639.6	3631.6	3619.7	3615.7	3603.8	3599.8
20°	3643.6	3639.6	3629.7	3615.7	3605.7	3587.8	3579.9	3567.9	3557.9	3546.0	3540.0
22.5°	3589.8	3585.8	3573.9	3559.9	3544.0	3536.0	3528.0	3506.1	3496.1	3484.2	3482.2
25°	3522.1	3516.1	3504.1	3488.2	3480.2	3458.3	3450.3	3434.3	3430.4	3418.4	3416.4
27.5°	3418.4	3410.4	3396.5	3376.5	3362.6	3348.6	3340.7	3328.7	3324.7	3312.7	3310.8
30°	3262.9	3252.9	3225.0	3217.1	3193.1	3179.2	3179.2	3163.2	3165.2	3157.3	3157.3
32.5°	3017.8	3001.8	2979.9	2963.9	2948.0	2940.0	2940.0	2934.0	2938.0	2938.0	2942.0
35°	2692.9	2671.0	2659.0	2649.0	2649.0	2657.0	2680.9	2686.9	2698.8	2708.8	2716.8
37.5°	2276.2	2274.3	2288.2	2300.2	2330.1	2364.0	2405.8	2441.7	2475.6	2499.5	2523.4
40°	1825.8	1875.6	1915.5	1971.3	2017.1	2082.9	2158.7	2220.5	2278.2	2320.1	2364.0
42.5°	1425.1	1488.9	1572.7	1654.4	1736.1	1825.8	1925.5	2011.2	2086.9	2144.7	2190.6
45°	1110.2	1197.9	1299.6	1403.2	1508.9	1620.5	1724.2	1811.8	1891.6	1951.4	1997.2
47.5°	895.0	990.6	1106.2	1219.9	1339.5	1457.0	1572.7	1648.4	1714.2	1762.0	1803.9
50°	739.5	841.2	962.7	1092.3	1211.9	1329.5	1429.1	1502.9	1556.7	1598.6	1624.5
52.5°	617.9	725.5	855.1	984.6	1104.2	1211.9	1301.6	1357.4	1401.2	1431.1	1455.0
55°	510.2	613.9	735.5	857.1	974.7	1076.3	1150.1	1192.0	1225.8	1243.8	1257.7
57.5°	416.6	512.2	623.9	735.5	837.2	920.9	978.7	1020.5	1036.5	1050.4	1048.4
60°	326.9	416.6	518.2	613.9	701.6	769.4	811.3	835.2	847.1	853.1	849.1
62.5°	257.1	338.9	416.6	500.3	564.1	621.9	661.8	661.8	667.7	669.7	675.7
65°	191.3	253.1	320.9	382.7	434.5	472.4	494.3	500.3	508.3	506.3	502.3
67.5°	141.5	187.4	237.2	283.0	318.9	342.8	358.8	372.8	370.8	366.8	364.8
70°	97.7	127.6	171.4	199.3	225.2	249.2	253.1	255.1	257.1	259.1	255.1
72.5°	67.8	89.7	113.6	137.5	153.5	163.4	173.4	175.4	175.4	175.4	173.4
75°	33.9	45.8	67.8	77.7	91.7	95.7	103.6	103.6	109.6	101.6	99.6
77.5°	29.9	35.9	47.8	55.8	61.8	67.8	69.7	75.7	73.7	69.7	71.7
80°	17.9	21.9	29.9	33.9	41.8	43.8	45.8	47.8	45.8	47.8	47.8
82.5°	13.9	15.9	19.9	19.9	25.9	25.9	27.9	27.9	29.9	29.9	29.9
85°	8.0	13.9	11.9	23.9	15.9	15.9	19.9	23.9	19.9	19.9	23.9
87.5°	8.0	8.0	6.0	8.0	8.0	8.0	10.0	11.9	11.9	13.9	11.9
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: P249164

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3713.4	3713.4	3713.4	3713.4
2.5°	3719.4	3723.3	3717.4	3715.4
5°	3725.3	3725.3	3721.4	3721.4
7.5°	3725.3	3725.3	3719.4	3715.4
10°	3709.4	3709.4	3703.4	3699.4
12.5°	3679.5	3679.5	3677.5	3671.5
15°	3641.6	3641.6	3633.6	3627.7
17.5°	3589.8	3593.8	3583.9	3583.9
20°	3534.0	3532.0	3524.1	3520.1
22.5°	3476.2	3472.2	3470.2	3458.3
25°	3414.4	3410.4	3404.4	3398.5
27.5°	3308.8	3306.8	3300.8	3292.8
30°	3147.3	3145.3	3137.4	3137.4
32.5°	2938.0	2936.0	2928.1	2930.1
35°	2720.7	2728.7	2724.7	2716.8
37.5°	2539.4	2545.4	2549.4	2545.4
40°	2387.9	2405.8	2407.8	2411.8
42.5°	2226.5	2250.4	2258.3	2262.3
45°	2033.1	2055.0	2073.0	2069.0
47.5°	1835.7	1851.7	1867.6	1855.7
50°	1646.4	1656.4	1662.4	1662.4
52.5°	1467.0	1467.0	1465.0	1467.0
55°	1261.7	1261.7	1253.8	1257.7
57.5°	1046.4	1050.4	1044.4	1034.5
60°	847.1	837.2	833.2	827.2
62.5°	659.8	659.8	645.8	663.7
65°	494.3	488.3	482.3	480.3
67.5°	358.8	356.8	350.8	348.8
70°	253.1	245.2	243.2	239.2
72.5°	169.4	169.4	165.4	165.4
75°	103.6	93.7	91.7	93.7
77.5°	71.7	69.7	69.7	67.8
80°	47.8	45.8	49.8	43.8
82.5°	29.9	31.9	29.9	31.9
85°	19.9	23.9	21.9	21.9
87.5°	11.9	11.9	11.9	11.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)