

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: P249362

Luminaire Tested: **LSR8B70D010 EC8B70935 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249362  
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 EC8B70935 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 3500 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6363.0 lumens  
Efficiency: N/A  
Efficacy: 83.8 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

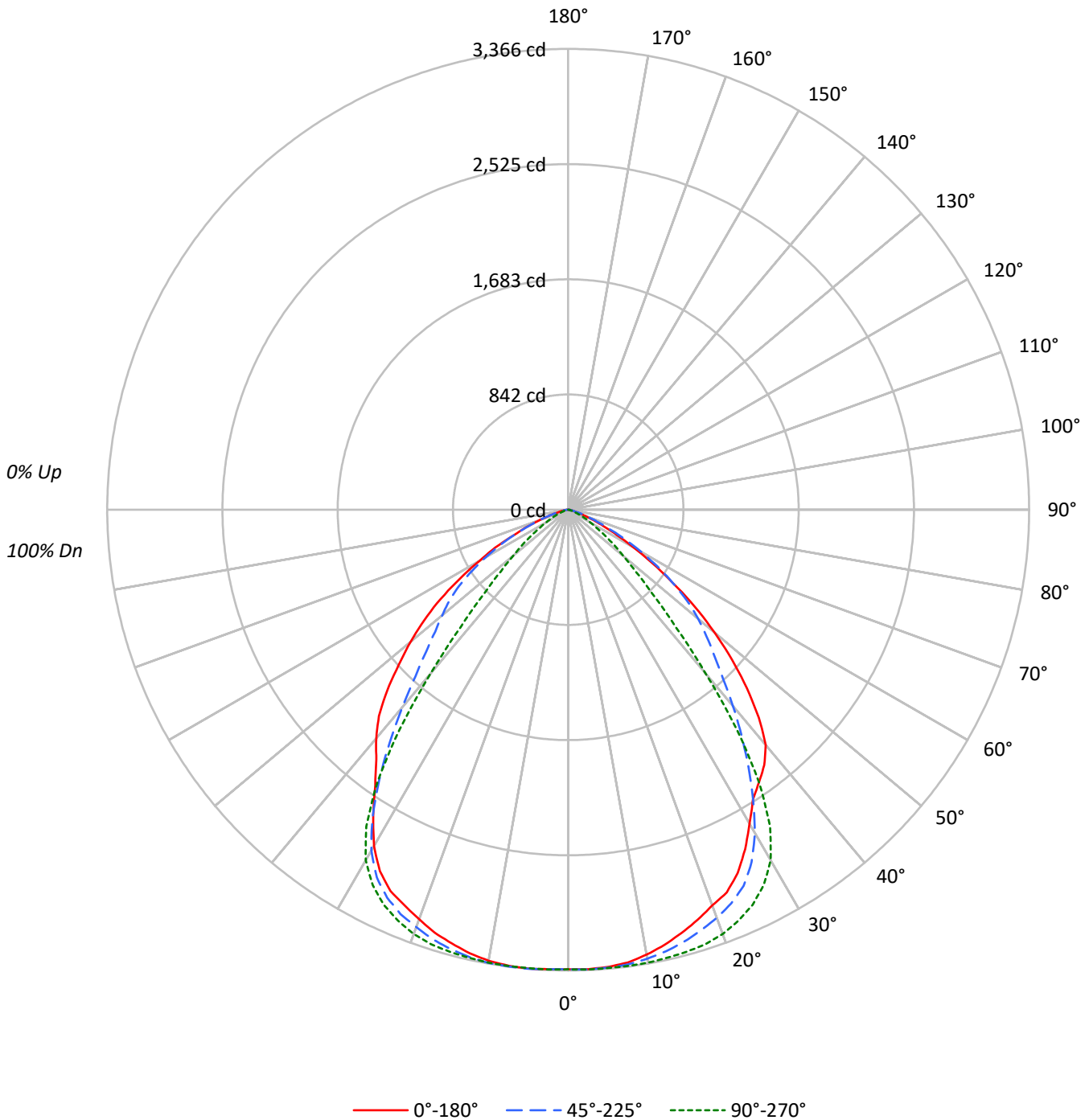
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249362

CATALOG NUMBER: LSR8B70D010 EC8B70935 8LBDW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P249362

CATALOG NUMBER: LSR8B70D010 EC8B70935 8LBDW0GPH

**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°	103524	103524	103524
5°	103752	104034	104145
10°	103317	105180	104726
15°	102170	106716	104705
20°	100943	108218	104435
25°	99633	108343	104539
30°	94258	105296	100998
35°	91445	91513	92462
40°	90314	62965	87774
45°	80472	37800	81571
50°	66912	25157	72098
55°	50186	17343	61132
60°	34006	11557	46125
65°	20510	7493	31689
70°	11378	4066	19492
75°	5159	1716	10091
80°	4475	1918	7032
85°	5095	2547	7005



TEST NUMBER: P249362

CATALOG NUMBER: LSR8B70D010 EC8B70935 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	320.4	5.0
10°-20°	930.5	14.6
20°-30°	1412.3	22.2
30°-40°	1483.3	23.3
40°-50°	1112.1	17.5
50°-60°	713.6	11.2
60°-70°	305.3	4.8
70°-80°	72.1	1.1
80°-90°	13.4	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°	2663.2	41.9
0°-40°	4146.5	65.2
0°-60°	5972.2	93.9
0°-90°	6363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6363.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3357	3357	3357	3357	3357	
5°	3352	3357	3361	3366	3364	318
15°	3200	3267	3343	3321	3280	903
25°	2928	3031	3184	3127	3072	1338
35°	2429	2294	2431	2402	2456	1525
45°	1845	1508	867	1465	1870	1413
55°	934	934	323	973	1137	847
65°	281	332	103	427	434	300
75°	43	50	14	86	85	63
85°	14	9	7	14	20	15
90°	0	0	0	0	0	



TEST NUMBER: P249362

CATALOG NUMBER: LSR8B70D010 EC8B70935 8LBDW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2
2.5°	3359.1	3362.7	3360.9	3360.9	3359.1	3360.9	3360.9	3364.5	3364.5	3360.9	3359.1
5°	3351.8	3355.4	3355.4	3351.8	3351.8	3360.9	3355.4	3359.1	3359.1	3357.2	3357.2
7.5°	3335.6	3335.6	3342.8	3337.4	3337.4	3342.8	3341.0	3344.6	3348.2	3350.1	3350.1
10°	3299.6	3303.2	3305.0	3305.0	3306.8	3312.2	3315.8	3323.0	3326.6	3330.2	3332.0
12.5°	3254.5	3259.9	3261.7	3259.9	3265.4	3272.5	3281.6	3290.6	3296.0	3303.2	3308.6
15°	3200.4	3200.4	3204.1	3209.5	3213.1	3223.9	3232.9	3243.7	3258.1	3267.2	3276.2
17.5°	3141.0	3144.6	3150.0	3150.0	3157.2	3175.2	3180.6	3196.9	3213.1	3222.1	3240.1
20°	3076.1	3079.7	3085.1	3088.8	3097.8	3112.2	3123.0	3137.4	3155.4	3171.7	3189.6
22.5°	3025.7	3018.5	3022.0	3025.7	3034.7	3047.3	3059.9	3077.9	3095.9	3112.2	3130.2
25°	2928.3	2930.2	2935.6	2939.1	2950.0	2960.8	2975.2	2996.8	3013.0	3031.1	3050.9
27.5°	2796.8	2798.6	2807.6	2807.6	2816.6	2834.6	2843.6	2861.7	2883.3	2901.3	2924.8
30°	2647.2	2650.8	2650.8	2658.1	2663.4	2672.5	2681.5	2699.5	2710.3	2726.5	2759.0
32.5°	2510.3	2513.9	2512.1	2510.3	2504.9	2503.1	2501.3	2504.9	2508.5	2513.9	2526.5
35°	2429.2	2420.2	2413.0	2400.4	2385.9	2367.9	2351.7	2330.1	2310.2	2294.0	2276.0
37.5°	2351.7	2349.9	2339.1	2321.0	2292.2	2259.8	2222.0	2175.1	2128.2	2077.8	2029.1
40°	2243.6	2238.1	2229.2	2203.9	2171.5	2131.8	2081.4	2023.7	1948.0	1870.5	1791.3
42.5°	2059.7	2061.6	2050.8	2030.9	2000.3	1962.4	1910.2	1847.1	1766.0	1674.1	1571.4
45°	1845.3	1845.3	1841.7	1825.5	1803.9	1773.2	1733.6	1681.3	1602.1	1508.3	1398.4
47.5°	1621.9	1623.7	1618.2	1614.7	1605.6	1585.8	1557.0	1517.3	1461.5	1371.4	1261.4
50°	1394.8	1394.8	1403.8	1402.0	1402.0	1394.8	1382.2	1358.7	1310.1	1238.0	1135.3
52.5°	1167.7	1171.3	1176.8	1184.0	1193.0	1207.4	1193.0	1182.2	1151.5	1095.6	1007.4
55°	933.5	937.1	946.1	958.7	969.5	983.9	987.5	987.5	971.3	933.5	866.8
57.5°	733.5	728.0	735.3	746.1	760.5	774.9	785.7	798.3	796.5	771.3	717.2
60°	551.4	553.2	558.6	569.5	580.3	592.9	607.3	618.1	623.5	610.9	576.7
62.5°	401.9	401.9	409.1	419.9	425.3	443.3	452.3	457.7	463.1	461.3	439.7
65°	281.1	284.7	288.3	293.8	299.1	309.9	315.4	326.2	329.8	331.6	315.4
67.5°	198.2	192.8	196.4	200.0	205.4	212.7	223.5	223.5	228.8	228.8	218.0
70°	126.2	126.2	128.0	133.3	137.0	138.8	142.4	146.0	151.4	149.6	149.6
72.5°	84.7	82.9	84.7	86.5	88.3	93.7	93.7	95.5	99.1	100.9	93.7
75°	43.3	45.1	48.6	46.9	52.3	48.6	50.4	55.9	54.1	50.4	50.4
77.5°	36.0	36.0	36.0	34.3	37.8	37.8	36.0	39.6	37.8	37.8	36.0
80°	25.2	27.0	25.2	23.4	25.2	23.4	23.4	23.4	23.4	23.4	21.6
82.5°	19.8	16.2	18.0	16.2	18.0	18.0	16.2	14.4	14.4	16.2	14.4
85°	14.4	10.8	12.6	12.6	10.8	10.8	10.8	10.8	10.8	9.0	9.0
87.5°	9.0	5.4	5.4	5.4	7.2	7.2	7.2	5.4	7.2	7.2	3.6
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: P249362

CATALOG NUMBER: LSR8B70D010 EC8B70935 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2
2.5°	3362.7	3360.9	3364.5	3362.7	3362.7	3360.9	3362.7	3360.9	3364.5	3357.2	3359.1
5°	3362.7	3359.1	3360.9	3362.7	3364.5	3360.9	3360.9	3360.9	3364.5	3360.9	3362.7
7.5°	3355.4	3353.6	3359.1	3362.7	3360.9	3359.1	3362.7	3360.9	3364.5	3362.7	3366.2
10°	3341.0	3342.8	3346.4	3351.8	3353.6	3355.4	3359.1	3359.1	3364.5	3357.2	3360.9
12.5°	3319.4	3326.6	3335.6	3339.2	3346.4	3346.4	3350.1	3351.8	3355.4	3353.6	3359.1
15°	3292.4	3301.4	3312.2	3321.2	3330.2	3335.6	3341.0	3342.8	3348.2	3342.8	3344.6
17.5°	3259.9	3270.7	3287.0	3297.8	3312.2	3317.6	3324.8	3328.4	3333.8	3330.2	3332.0
20°	3214.9	3227.5	3245.5	3261.7	3270.7	3283.3	3292.4	3297.8	3301.4	3297.8	3299.6
22.5°	3151.8	3169.8	3193.3	3205.9	3223.9	3234.7	3236.5	3249.1	3258.1	3249.1	3252.7
25°	3077.9	3095.9	3114.0	3141.0	3157.2	3169.8	3182.5	3184.3	3193.3	3191.5	3189.6
27.5°	2955.4	2978.8	3009.4	3031.1	3052.7	3072.5	3086.9	3090.5	3099.6	3095.9	3097.8
30°	2787.8	2813.0	2841.9	2876.1	2906.7	2926.5	2944.6	2957.2	2966.2	2960.8	2959.0
32.5°	2549.9	2575.2	2605.8	2640.0	2676.1	2704.9	2726.5	2742.8	2753.6	2749.9	2740.9
35°	2277.8	2285.0	2304.9	2331.9	2362.5	2393.1	2413.0	2431.0	2443.6	2447.2	2447.2
37.5°	1998.5	1975.1	1960.7	1960.7	1978.7	1991.3	2009.3	2020.1	2039.9	2047.1	2052.6
40°	1728.2	1674.1	1623.7	1585.8	1560.6	1558.8	1558.8	1564.2	1582.2	1605.6	1627.3
42.5°	1486.7	1400.2	1322.7	1252.4	1202.0	1173.2	1160.5	1162.4	1176.8	1198.4	1234.4
45°	1293.9	1185.8	1088.5	1003.7	935.3	890.2	868.6	866.8	877.6	902.8	942.5
47.5°	1144.3	1029.0	919.0	821.7	747.9	699.2	674.0	666.8	674.0	697.4	744.3
50°	1020.0	901.1	787.5	686.6	607.3	556.9	533.4	524.4	533.4	553.2	600.1
52.5°	904.6	782.1	675.8	578.5	493.8	450.5	425.3	419.9	425.3	448.7	486.6
55°	771.3	666.8	562.2	464.9	391.1	347.8	328.0	322.6	328.0	349.6	389.3
57.5°	639.8	549.6	457.7	369.4	306.4	268.5	250.5	243.3	255.9	270.3	317.2
60°	517.2	445.1	367.6	290.1	237.9	203.6	189.2	187.4	191.0	209.0	241.5
62.5°	405.5	346.0	284.7	221.7	178.4	164.0	146.0	144.2	147.8	158.6	183.8
65°	291.9	254.1	207.2	162.2	128.0	108.1	100.9	102.7	106.3	113.5	137.0
67.5°	203.6	176.6	144.2	113.5	88.3	79.3	72.1	70.3	72.1	84.7	97.3
70°	137.0	120.7	97.3	86.5	61.3	48.6	50.4	45.1	52.3	52.3	63.1
72.5°	90.1	79.3	64.9	50.4	43.3	34.3	34.3	32.5	36.0	37.8	46.9
75°	46.9	36.0	36.0	25.2	18.0	9.0	16.2	14.4	12.6	14.4	18.0
77.5°	32.5	27.0	25.2	19.8	18.0	14.4	14.4	14.4	14.4	16.2	18.0
80°	19.8	19.8	14.4	12.6	10.8	9.0	10.8	10.8	10.8	10.8	12.6
82.5°	12.6	10.8	10.8	9.0	9.0	7.2	7.2	7.2	7.2	7.2	10.8
85°	10.8	7.2	7.2	5.4	7.2	12.6	5.4	7.2	7.2	7.2	5.4
87.5°	3.6	5.4	5.4	5.4	3.6	1.8	3.6	5.4	5.4	9.0	7.2
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: P249362

CATALOG NUMBER: LSR8B70D010 EC8B70935 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2	3357.2
2.5°	3362.7	3364.5	3364.5	3362.7	3362.7	3359.1	3366.2	3360.9	3362.7	3369.9	3364.5
5°	3366.2	3368.0	3368.0	3366.2	3366.2	3366.2	3368.0	3368.0	3366.2	3364.5	3368.0
7.5°	3373.5	3371.7	3371.7	3368.0	3368.0	3364.5	3368.0	3362.7	3366.2	3362.7	3368.0
10°	3364.5	3366.2	3364.5	3362.7	3362.7	3360.9	3360.9	3355.4	3357.2	3351.8	3355.4
12.5°	3359.1	3357.2	3357.2	3353.6	3350.1	3346.4	3344.6	3339.2	3339.2	3326.6	3332.0
15°	3344.6	3346.4	3341.0	3333.8	3330.2	3321.2	3317.6	3310.4	3303.2	3294.2	3296.0
17.5°	3332.0	3326.6	3319.4	3312.2	3297.8	3290.6	3283.3	3272.5	3268.9	3258.1	3254.5
20°	3294.2	3290.6	3281.6	3268.9	3259.9	3243.7	3236.5	3225.7	3216.7	3205.9	3200.4
22.5°	3245.5	3241.9	3231.1	3218.5	3204.1	3196.9	3189.6	3169.8	3160.8	3150.0	3148.2
25°	3184.3	3178.8	3168.0	3153.6	3146.4	3126.6	3119.4	3104.9	3101.4	3090.5	3088.8
27.5°	3090.5	3083.3	3070.7	3052.7	3040.1	3027.5	3020.3	3009.4	3005.9	2995.0	2993.3
30°	2950.0	2941.0	2915.7	2908.5	2886.9	2874.3	2874.3	2859.9	2861.7	2854.5	2854.5
32.5°	2728.3	2713.9	2694.1	2679.7	2665.2	2658.1	2658.1	2652.6	2656.2	2656.2	2659.9
35°	2434.6	2414.8	2403.9	2394.9	2394.9	2402.1	2423.8	2429.2	2440.0	2449.0	2456.2
37.5°	2057.9	2056.2	2068.8	2079.6	2106.6	2137.3	2175.1	2207.5	2238.1	2259.8	2281.4
40°	1650.7	1695.8	1731.8	1782.3	1823.7	1883.2	1951.6	2007.5	2059.7	2097.6	2137.3
42.5°	1288.5	1346.1	1421.8	1495.7	1569.6	1650.7	1740.8	1818.3	1886.8	1939.0	1980.5
45°	1003.7	1083.0	1175.0	1268.7	1364.2	1465.1	1558.8	1638.1	1710.2	1764.2	1805.7
47.5°	809.1	895.6	1000.1	1102.9	1211.0	1317.3	1421.8	1490.3	1549.8	1593.0	1630.9
50°	668.5	760.5	870.4	987.5	1095.6	1202.0	1292.1	1358.7	1407.4	1445.3	1468.7
52.5°	558.6	655.9	773.1	890.2	998.3	1095.6	1176.8	1227.2	1266.9	1293.9	1315.5
55°	461.3	555.0	665.0	774.9	881.2	973.1	1039.8	1077.6	1108.2	1124.5	1137.1
57.5°	376.6	463.1	564.0	665.0	756.9	832.6	884.8	922.7	937.1	949.7	947.9
60°	295.6	376.6	468.5	555.0	634.3	695.6	733.5	755.1	765.9	771.3	767.7
62.5°	232.5	306.4	376.6	452.3	510.0	562.2	598.3	598.3	603.7	605.5	610.9
65°	173.0	228.8	290.1	346.0	392.8	427.1	446.9	452.3	459.5	457.7	454.1
67.5°	128.0	169.4	214.4	255.9	288.3	309.9	324.4	337.0	335.2	331.6	329.8
70°	88.3	115.3	155.0	180.2	203.6	225.3	228.8	230.7	232.5	234.3	230.7
72.5°	61.3	81.1	102.7	124.3	138.8	147.8	156.8	158.6	158.6	158.6	156.8
75°	30.6	41.4	61.3	70.3	82.9	86.5	93.7	93.7	99.1	91.9	90.1
77.5°	27.0	32.5	43.3	50.4	55.9	61.3	63.1	68.5	66.7	63.1	64.9
80°	16.2	19.8	27.0	30.6	37.8	39.6	41.4	43.3	41.4	43.3	43.3
82.5°	12.6	14.4	18.0	18.0	23.4	23.4	25.2	25.2	27.0	27.0	27.0
85°	7.2	12.6	10.8	21.6	14.4	14.4	18.0	21.6	18.0	18.0	21.6
87.5°	7.2	7.2	5.4	7.2	7.2	7.2	9.0	10.8	10.8	12.6	10.8
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: P249362

CATALOG NUMBER: LSR8B70D010 EC8B70935 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3357.2	3357.2	3357.2	3357.2
2.5°	3362.7	3366.2	3360.9	3359.1
5°	3368.0	3368.0	3364.5	3364.5
7.5°	3368.0	3368.0	3362.7	3359.1
10°	3353.6	3353.6	3348.2	3344.6
12.5°	3326.6	3326.6	3324.8	3319.4
15°	3292.4	3292.4	3285.2	3279.8
17.5°	3245.5	3249.1	3240.1	3240.1
20°	3195.1	3193.3	3186.1	3182.5
22.5°	3142.8	3139.2	3137.4	3126.6
25°	3086.9	3083.3	3077.9	3072.5
27.5°	2991.4	2989.6	2984.2	2977.0
30°	2845.4	2843.6	2836.5	2836.5
32.5°	2656.2	2654.4	2647.2	2649.1
35°	2459.8	2467.0	2463.4	2456.2
37.5°	2295.8	2301.2	2304.9	2301.2
40°	2158.9	2175.1	2176.9	2180.5
42.5°	2012.9	2034.5	2041.8	2045.3
45°	1838.1	1857.9	1874.2	1870.5
47.5°	1659.7	1674.1	1688.5	1677.7
50°	1488.5	1497.5	1502.9	1502.9
52.5°	1326.3	1326.3	1324.5	1326.3
55°	1140.7	1140.7	1133.5	1137.1
57.5°	946.1	949.7	944.3	935.3
60°	765.9	756.9	753.3	747.9
62.5°	596.5	596.5	583.9	600.1
65°	446.9	441.5	436.1	434.3
67.5°	324.4	322.6	317.2	315.4
70°	228.8	221.7	219.9	216.2
72.5°	153.2	153.2	149.6	149.6
75°	93.7	84.7	82.9	84.7
77.5°	64.9	63.1	63.1	61.3
80°	43.3	41.4	45.1	39.6
82.5°	27.0	28.8	27.0	28.8
85°	18.0	21.6	19.8	19.8
87.5°	10.8	10.8	10.8	10.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)