

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: P249176

Luminaire Tested: **LSR8B100D010 EC8B1009727 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249176  
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: LSR8B100D010 EC8B1009727 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7680.0 lumens  
Efficiency: N/A  
Efficacy: 72.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

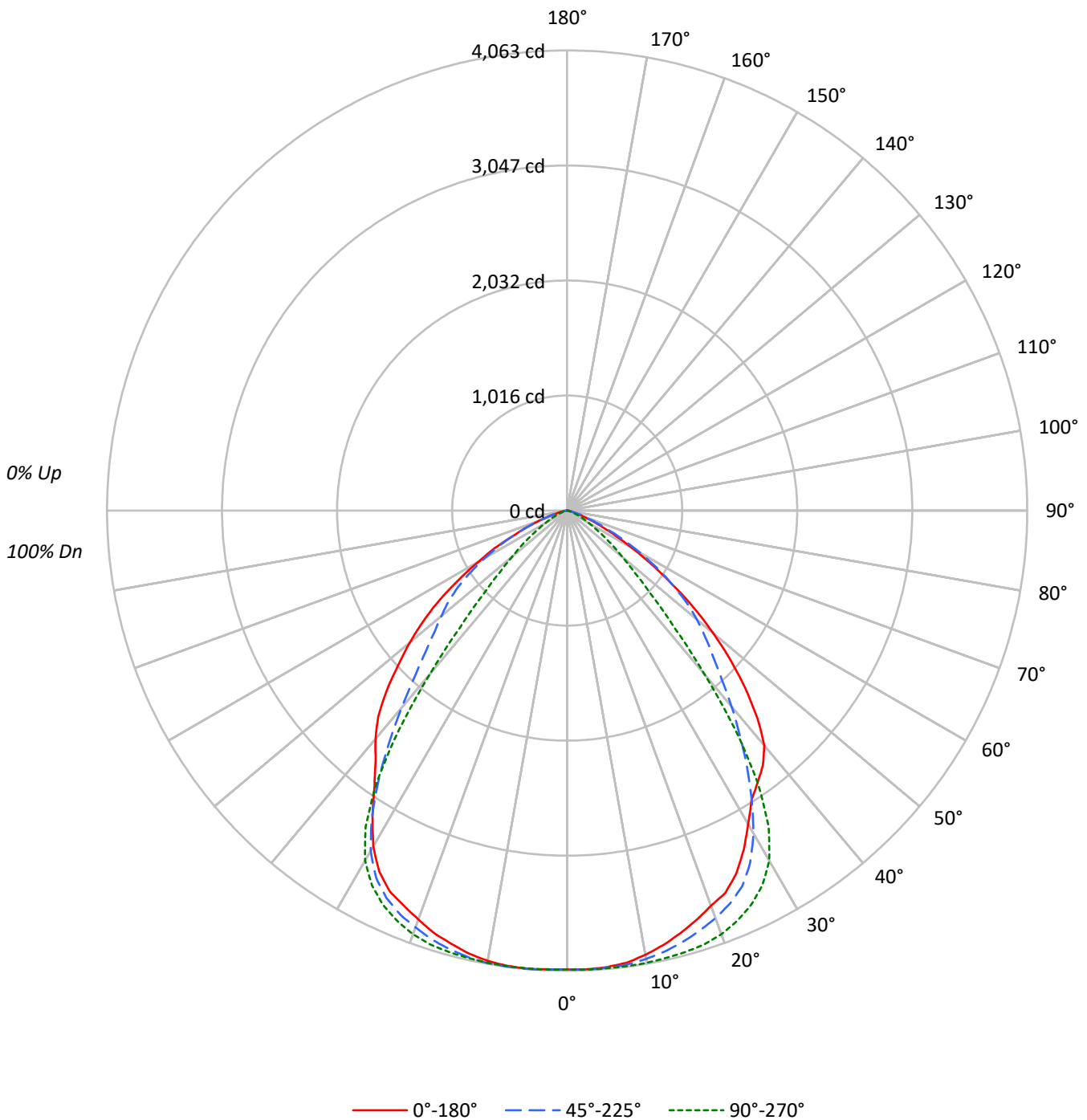
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	386.7	5.0
10°-20°	1123.1	14.6
20°-30°	1704.6	22.2
30°-40°	1790.4	23.3
40°-50°	1342.3	17.5
50°-60°	861.3	11.2
60°-70°	368.4	4.8
70°-80°	87.0	1.1
80°-90°	16.2	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°	3214.4	41.9
0°-40°	5004.8	65.2
0°-60°	7208.3	93.9
0°-90°	7680.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7680.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4052	4052	4052	4052	4052	
5°	4046	4052	4056	4063	4061	384
15°	3863	3943	4035	4009	3959	1090
25°	3534	3658	3843	3774	3708	1615
35°	2932	2769	2934	2899	2965	1840
45°	2227	1820	1046	1768	2258	1706
55°	1127	1127	389	1174	1372	1022
65°	339	400	124	516	524	362
75°	52	61	17	104	102	76
85°	17	11	9	17	24	18
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°	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1
2.5°	4054.3	4058.7	4056.5	4056.5	4054.3	4056.5	4056.5	4060.8	4060.8	4056.5	4054.3
5°	4045.6	4049.9	4049.9	4045.6	4045.6	4056.5	4049.9	4054.3	4054.3	4052.1	4052.1
7.5°	4026.0	4026.0	4034.7	4028.2	4028.2	4034.7	4032.5	4036.9	4041.3	4043.4	4043.4
10°	3982.5	3986.9	3989.1	3989.1	3991.2	3997.7	4002.1	4010.8	4015.1	4019.5	4021.7
12.5°	3928.2	3934.7	3936.8	3934.7	3941.2	3949.9	3960.8	3971.7	3978.2	3986.9	3993.4
15°	3862.9	3862.9	3867.2	3873.8	3878.1	3891.2	3902.0	3915.1	3932.5	3943.4	3954.2
17.5°	3791.1	3795.5	3802.0	3802.0	3810.7	3832.4	3839.0	3858.6	3878.1	3889.0	3910.8
20°	3712.8	3717.2	3723.7	3728.1	3738.9	3756.3	3769.4	3786.8	3808.5	3828.1	3849.8
22.5°	3651.9	3643.2	3647.5	3651.9	3662.8	3678.0	3693.3	3715.0	3736.7	3756.3	3778.1
25°	3534.4	3536.6	3543.2	3547.5	3560.6	3573.6	3591.0	3617.1	3636.7	3658.4	3682.3
27.5°	3375.7	3377.9	3388.7	3388.7	3399.6	3421.4	3432.2	3454.0	3480.1	3501.8	3530.1
30°	3195.2	3199.5	3199.5	3208.2	3214.7	3225.6	3236.5	3258.2	3271.3	3290.9	3330.0
32.5°	3029.9	3034.2	3032.0	3029.9	3023.3	3021.1	3019.0	3023.3	3027.7	3034.2	3049.4
35°	2932.0	2921.1	2912.4	2897.2	2879.8	2858.0	2838.4	2812.4	2788.4	2768.8	2747.1
37.5°	2838.4	2836.3	2823.2	2801.4	2766.6	2727.5	2681.9	2625.3	2568.7	2507.8	2449.1
40°	2707.9	2701.4	2690.5	2660.1	2620.9	2573.1	2512.2	2442.6	2351.2	2257.7	2162.0
42.5°	2486.1	2488.2	2475.2	2451.3	2414.3	2368.6	2305.5	2229.4	2131.6	2020.6	1896.7
45°	2227.3	2227.3	2222.9	2203.3	2177.2	2140.2	2092.4	2029.3	1933.6	1820.5	1687.8
47.5°	1957.5	1959.7	1953.2	1948.9	1938.0	1914.1	1879.3	1831.4	1764.0	1655.2	1522.5
50°	1683.5	1683.5	1694.4	1692.2	1692.2	1683.5	1668.3	1640.0	1581.3	1494.3	1370.3
52.5°	1409.4	1413.8	1420.3	1429.0	1439.9	1457.3	1439.9	1426.8	1389.8	1322.4	1215.9
55°	1126.7	1131.0	1141.9	1157.1	1170.2	1187.6	1191.9	1191.9	1172.3	1126.7	1046.2
57.5°	885.3	878.7	887.4	900.5	917.9	935.3	948.3	963.5	961.4	930.9	865.7
60°	665.6	667.8	674.2	687.3	700.4	715.6	733.0	746.0	752.6	737.4	696.0
62.5°	485.0	485.0	493.7	506.8	513.3	535.1	545.9	552.5	559.0	556.8	530.7
65°	339.3	343.6	348.0	354.6	361.0	374.1	380.6	393.7	398.0	400.2	380.6
67.5°	239.3	232.7	237.1	241.4	248.0	256.7	269.7	269.7	276.2	276.2	263.2
70°	152.3	152.3	154.4	160.9	165.3	167.5	171.8	176.2	182.7	180.5	180.5
72.5°	102.2	100.1	102.2	104.4	106.6	113.1	113.1	115.3	119.6	121.8	113.1
75°	52.2	54.4	58.7	56.6	63.1	58.7	60.9	67.4	65.2	60.9	60.9
77.5°	43.5	43.5	43.5	41.4	45.7	45.7	43.5	47.8	45.7	45.7	43.5
80°	30.4	32.6	30.4	28.3	30.4	28.3	28.3	28.3	28.3	28.3	26.1
82.5°	23.9	19.6	21.8	19.6	21.8	21.8	19.6	17.4	17.4	19.6	17.4
85°	17.4	13.0	15.2	15.2	13.0	13.0	13.0	13.0	13.0	10.9	10.9
87.5°	10.9	6.5	6.5	6.5	8.7	8.7	8.7	6.5	8.7	8.7	4.4
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°	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1
2.5°	4058.7	4056.5	4060.8	4058.7	4058.7	4056.5	4058.7	4056.5	4060.8	4052.1	4054.3
5°	4058.7	4054.3	4056.5	4058.7	4060.8	4056.5	4056.5	4056.5	4060.8	4056.5	4058.7
7.5°	4049.9	4047.8	4054.3	4058.7	4056.5	4054.3	4058.7	4056.5	4060.8	4058.7	4063.0
10°	4032.5	4034.7	4039.1	4045.6	4047.8	4049.9	4054.3	4054.3	4060.8	4052.1	4056.5
12.5°	4006.5	4015.1	4026.0	4030.4	4039.1	4039.1	4043.4	4045.6	4049.9	4047.8	4054.3
15°	3973.8	3984.7	3997.7	4008.6	4019.5	4026.0	4032.5	4034.7	4041.3	4034.7	4036.9
17.5°	3934.7	3947.7	3967.3	3980.3	3997.7	4004.3	4013.0	4017.3	4023.9	4019.5	4021.7
20°	3880.3	3895.5	3917.3	3936.8	3947.7	3962.9	3973.8	3980.3	3984.7	3980.3	3982.5
22.5°	3804.2	3825.9	3854.2	3869.4	3891.2	3904.2	3906.4	3921.6	3932.5	3921.6	3926.0
25°	3715.0	3736.7	3758.5	3791.1	3810.7	3825.9	3841.2	3843.3	3854.2	3852.0	3849.8
27.5°	3567.1	3595.4	3632.3	3658.4	3684.5	3708.5	3725.9	3730.2	3741.1	3736.7	3738.9
30°	3364.8	3395.3	3430.1	3471.4	3508.4	3532.3	3554.0	3569.3	3580.1	3573.6	3571.4
32.5°	3077.7	3108.2	3145.1	3186.4	3230.0	3264.7	3290.9	3310.4	3323.5	3319.1	3308.3
35°	2749.3	2758.0	2781.9	2814.5	2851.5	2888.5	2912.4	2934.1	2949.3	2953.7	2953.7
37.5°	2412.1	2383.9	2366.5	2366.5	2388.2	2403.4	2425.2	2438.2	2462.2	2470.8	2477.4
40°	2085.9	2020.6	1959.7	1914.1	1883.6	1881.4	1881.4	1887.9	1909.7	1938.0	1964.1
42.5°	1794.4	1690.0	1596.5	1511.7	1450.8	1416.0	1400.8	1402.9	1420.3	1446.4	1489.9
45°	1561.7	1431.2	1313.7	1211.5	1128.8	1074.5	1048.4	1046.2	1059.2	1089.7	1137.6
47.5°	1381.2	1241.9	1109.3	991.8	902.7	843.9	813.5	804.8	813.5	841.7	898.3
50°	1231.1	1087.5	950.5	828.7	733.0	672.1	643.8	632.9	643.8	667.8	724.3
52.5°	1091.9	944.0	815.6	698.2	596.0	543.7	513.3	506.8	513.3	541.6	587.3
55°	930.9	804.8	678.6	561.2	472.0	419.8	395.9	389.4	395.9	422.0	469.8
57.5°	772.2	663.4	552.5	445.9	369.8	324.1	302.3	293.6	308.8	326.2	382.8
60°	624.2	537.3	443.7	350.2	287.1	245.8	228.4	226.2	230.5	252.3	291.4
62.5°	489.4	417.6	343.6	267.5	215.3	197.9	176.2	174.0	178.3	191.4	221.9
65°	352.4	306.7	250.1	195.7	154.4	130.5	121.8	124.0	128.3	137.0	165.3
67.5°	245.8	213.1	174.0	137.0	106.6	95.7	87.0	84.8	87.0	102.2	117.5
70°	165.3	145.7	117.5	104.4	74.0	58.7	60.9	54.4	63.1	63.1	76.1
72.5°	108.7	95.7	78.3	60.9	52.2	41.4	41.4	39.2	43.5	45.7	56.6
75°	56.6	43.5	43.5	30.4	21.8	10.9	19.6	17.4	15.2	17.4	21.8
77.5°	39.2	32.6	30.4	23.9	21.8	17.4	17.4	17.4	17.4	19.6	21.8
80°	23.9	23.9	17.4	15.2	13.0	10.9	13.0	13.0	13.0	13.0	15.2
82.5°	15.2	13.0	13.0	10.9	10.9	8.7	8.7	8.7	8.7	8.7	13.0
85°	13.0	8.7	8.7	6.5	8.7	15.2	6.5	8.7	8.7	8.7	6.5
87.5°	4.4	6.5	6.5	6.5	4.4	2.2	4.4	6.5	6.5	10.9	8.7
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1	4052.1
2.5°	4058.7	4060.8	4060.8	4058.7	4058.7	4054.3	4063.0	4056.5	4058.7	4067.3	4060.8
5°	4063.0	4065.2	4065.2	4063.0	4063.0	4063.0	4065.2	4065.2	4063.0	4060.8	4065.2
7.5°	4071.7	4069.5	4069.5	4065.2	4065.2	4060.8	4065.2	4058.7	4063.0	4058.7	4065.2
10°	4060.8	4063.0	4060.8	4058.7	4058.7	4056.5	4056.5	4049.9	4052.1	4045.6	4049.9
12.5°	4054.3	4052.1	4052.1	4047.8	4043.4	4039.1	4036.9	4030.4	4030.4	4015.1	4021.7
15°	4036.9	4039.1	4032.5	4023.9	4019.5	4008.6	4004.3	3995.5	3986.9	3976.0	3978.2
17.5°	4021.7	4015.1	4006.5	3997.7	3980.3	3971.7	3962.9	3949.9	3945.5	3932.5	3928.2
20°	3976.0	3971.7	3960.8	3945.5	3934.7	3915.1	3906.4	3893.4	3882.5	3869.4	3862.9
22.5°	3917.3	3912.9	3899.9	3884.6	3867.2	3858.6	3849.8	3825.9	3815.0	3802.0	3799.8
25°	3843.3	3836.8	3823.8	3806.3	3797.6	3773.7	3765.0	3747.6	3743.3	3730.2	3728.1
27.5°	3730.2	3721.5	3706.3	3684.5	3669.3	3654.1	3645.4	3632.3	3628.0	3614.9	3612.8
30°	3560.6	3549.7	3519.2	3510.6	3484.4	3469.2	3469.2	3451.8	3454.0	3445.3	3445.3
32.5°	3293.0	3275.6	3251.7	3234.3	3216.9	3208.2	3208.2	3201.7	3206.0	3206.0	3210.4
35°	2938.5	2914.6	2901.5	2890.6	2890.6	2899.3	2925.5	2932.0	2945.0	2955.9	2964.6
37.5°	2483.9	2481.8	2497.0	2510.0	2542.6	2579.6	2625.3	2664.5	2701.4	2727.5	2753.6
40°	1992.3	2046.7	2090.2	2151.2	2201.1	2272.9	2355.6	2423.0	2486.1	2531.8	2579.6
42.5°	1555.1	1624.8	1716.1	1805.3	1894.5	1992.3	2101.1	2194.6	2277.3	2340.4	2390.4
45°	1211.5	1307.2	1418.2	1531.2	1646.5	1768.3	1881.4	1977.1	2064.1	2129.4	2179.4
47.5°	976.6	1081.0	1207.1	1331.1	1461.6	1589.9	1716.1	1798.8	1870.5	1922.7	1968.4
50°	806.9	917.9	1050.6	1191.9	1322.4	1450.8	1559.5	1640.0	1698.7	1744.4	1772.7
52.5°	674.2	791.7	933.1	1074.5	1205.0	1322.4	1420.3	1481.2	1529.1	1561.7	1587.8
55°	556.8	669.9	802.6	935.3	1063.6	1174.5	1255.0	1300.7	1337.6	1357.2	1372.4
57.5°	454.6	559.0	680.8	802.6	913.5	1004.9	1068.0	1113.6	1131.0	1146.3	1144.1
60°	356.7	454.6	565.5	669.9	765.6	839.5	885.3	911.3	924.4	930.9	926.6
62.5°	280.6	369.8	454.6	545.9	615.5	678.6	722.1	722.1	728.6	730.8	737.4
65°	208.8	276.2	350.2	417.6	474.1	515.5	539.4	545.9	554.7	552.5	548.1
67.5°	154.4	204.5	258.8	308.8	348.0	374.1	391.5	406.8	404.6	400.2	398.0
70°	106.6	139.2	187.1	217.5	245.8	271.9	276.2	278.4	280.6	282.8	278.4
72.5°	74.0	97.9	124.0	150.1	167.5	178.3	189.2	191.4	191.4	191.4	189.2
75°	37.0	50.0	74.0	84.8	100.1	104.4	113.1	113.1	119.6	110.9	108.7
77.5°	32.6	39.2	52.2	60.9	67.4	74.0	76.1	82.7	80.5	76.1	78.3
80°	19.6	23.9	32.6	37.0	45.7	47.8	50.0	52.2	50.0	52.2	52.2
82.5°	15.2	17.4	21.8	21.8	28.3	28.3	30.4	30.4	32.6	32.6	32.6
85°	8.7	15.2	13.0	26.1	17.4	17.4	21.8	26.1	21.8	21.8	26.1
87.5°	8.7	8.7	6.5	8.7	8.7	8.7	10.9	13.0	13.0	15.2	13.0
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: P249176

CATALOG NUMBER: LSR8B100D010 EC8B1009727 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4052.1	4052.1	4052.1	4052.1
2.5°	4058.7	4063.0	4056.5	4054.3
5°	4065.2	4065.2	4060.8	4060.8
7.5°	4065.2	4065.2	4058.7	4054.3
10°	4047.8	4047.8	4041.3	4036.9
12.5°	4015.1	4015.1	4013.0	4006.5
15°	3973.8	3973.8	3965.1	3958.6
17.5°	3917.3	3921.6	3910.8	3910.8
20°	3856.4	3854.2	3845.5	3841.2
22.5°	3793.3	3788.9	3786.8	3773.7
25°	3725.9	3721.5	3715.0	3708.5
27.5°	3610.6	3608.4	3601.9	3593.2
30°	3434.4	3432.2	3423.5	3423.5
32.5°	3206.0	3203.8	3195.2	3197.4
35°	2968.9	2977.7	2973.3	2964.6
37.5°	2771.0	2777.6	2781.9	2777.6
40°	2605.7	2625.3	2627.5	2631.8
42.5°	2429.5	2455.6	2464.4	2468.7
45°	2218.5	2242.5	2262.1	2257.7
47.5°	2003.2	2020.6	2038.0	2025.0
50°	1796.6	1807.5	1814.0	1814.0
52.5°	1600.9	1600.9	1598.7	1600.9
55°	1376.8	1376.8	1368.1	1372.4
57.5°	1141.9	1146.3	1139.7	1128.8
60°	924.4	913.5	909.2	902.7
62.5°	720.0	720.0	704.7	724.3
65°	539.4	532.9	526.3	524.2
67.5°	391.5	389.4	382.8	380.6
70°	276.2	267.5	265.4	261.0
72.5°	184.9	184.9	180.5	180.5
75°	113.1	102.2	100.1	102.2
77.5°	78.3	76.1	76.1	74.0
80°	52.2	50.0	54.4	47.8
82.5°	32.6	34.8	32.6	34.8
85°	21.8	26.1	23.9	23.9
87.5°	13.0	13.0	13.0	13.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)