

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: P249175

Luminaire Tested: **LSR8B90D010 EC8B90927 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249175
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: LSR8B90D010 EC8B90927 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: 7488.0 lumens
Efficiency: N/A
Efficacy: 87.0 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

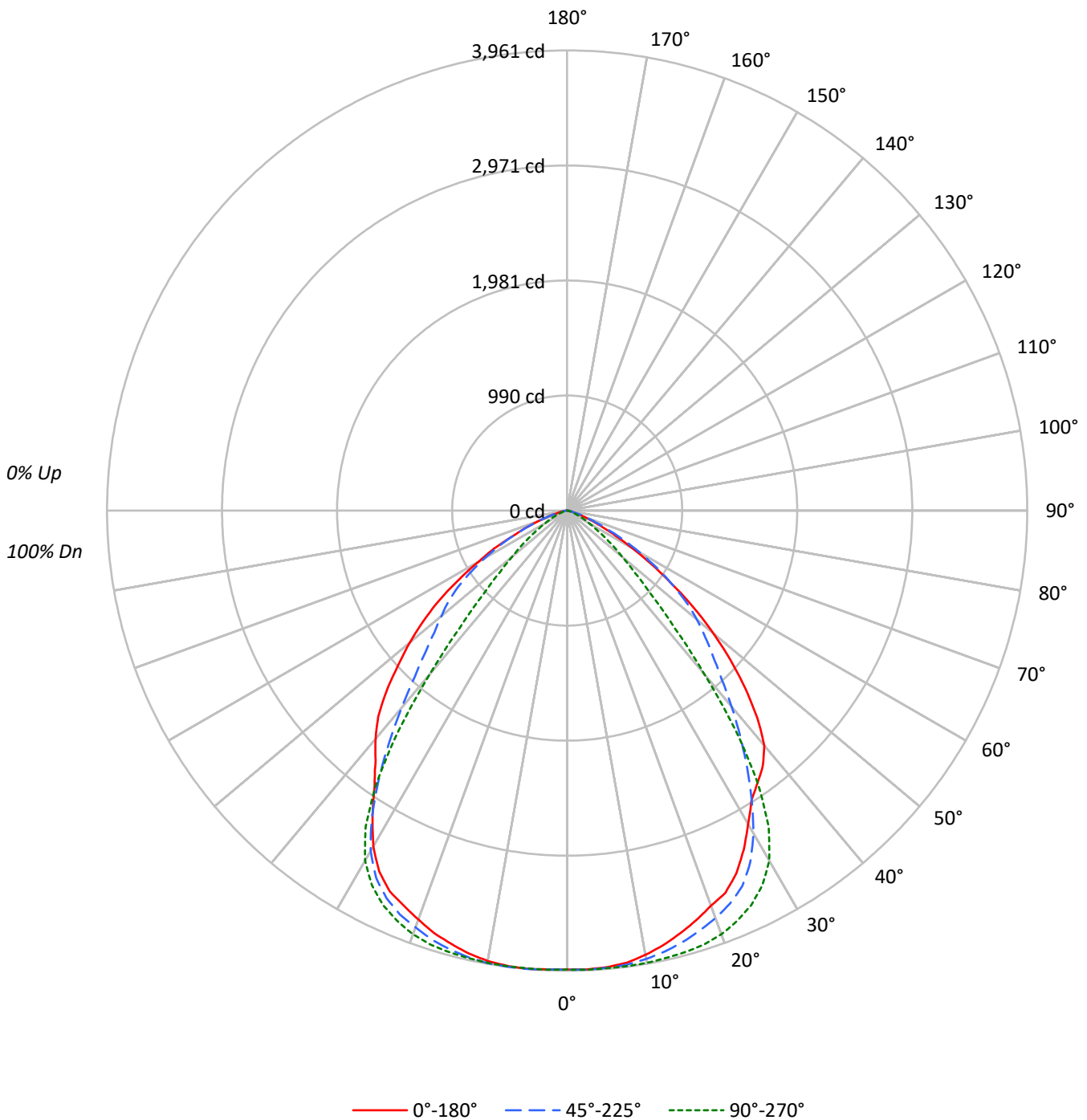
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	377.0	5.0
10°-20°	1095.0	14.6
20°-30°	1662.0	22.2
30°-40°	1745.6	23.3
40°-50°	1308.7	17.5
50°-60°	839.7	11.2
60°-70°	359.2	4.8
70°-80°	84.9	1.1
80°-90°	15.8	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°	3134.1	41.9
0°-40°	4879.7	65.2
0°-60°	7028.1	93.9
0°-90°	7488.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7488.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3951	3951	3951	3951	3951	
5°	3944	3951	3955	3961	3959	375
15°	3766	3845	3934	3908	3860	1062
25°	3446	3567	3747	3679	3616	1574
35°	2859	2700	2861	2827	2890	1794
45°	2172	1775	1020	1724	2201	1663
55°	1098	1098	380	1145	1338	996
65°	331	390	121	503	511	353
75°	51	59	17	102	100	74
85°	17	11	8	17	23	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°	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8
2.5°	3952.9	3957.2	3955.0	3955.0	3952.9	3955.0	3955.0	3959.3	3959.3	3955.0	3952.9
5°	3944.5	3948.6	3948.6	3944.5	3944.5	3955.0	3948.6	3952.9	3952.9	3950.8	3950.8
7.5°	3925.4	3925.4	3933.9	3927.5	3927.5	3933.9	3931.8	3935.9	3940.2	3942.3	3942.3
10°	3882.9	3887.2	3889.4	3889.4	3891.5	3897.8	3902.1	3910.5	3914.8	3919.0	3921.2
12.5°	3830.0	3836.2	3838.4	3836.2	3842.7	3851.1	3861.8	3872.4	3878.8	3887.2	3893.6
15°	3766.3	3766.3	3770.6	3777.0	3781.2	3794.0	3804.5	3817.2	3834.2	3844.8	3855.4
17.5°	3696.3	3700.6	3707.0	3707.0	3715.4	3736.6	3743.0	3762.1	3781.2	3791.8	3813.0
20°	3620.0	3624.2	3630.6	3634.9	3645.4	3662.4	3675.2	3692.1	3713.3	3732.4	3753.6
22.5°	3560.6	3552.2	3556.4	3560.6	3571.2	3586.0	3600.9	3622.0	3643.3	3662.4	3683.6
25°	3446.1	3448.2	3454.6	3458.8	3471.5	3484.2	3501.2	3526.6	3545.8	3567.0	3590.3
27.5°	3291.3	3293.4	3304.0	3304.0	3314.6	3335.8	3346.4	3367.6	3393.1	3414.3	3441.9
30°	3115.2	3119.5	3119.5	3128.0	3134.4	3144.9	3155.5	3176.8	3189.5	3208.6	3246.8
32.5°	2954.1	2958.3	2956.2	2954.1	2947.7	2945.6	2943.5	2947.7	2952.0	2958.3	2973.2
35°	2858.7	2848.0	2839.6	2824.8	2807.8	2786.6	2767.5	2742.1	2718.7	2699.5	2678.4
37.5°	2767.5	2765.4	2752.6	2731.4	2697.5	2659.4	2614.8	2559.7	2504.5	2445.2	2387.9
40°	2640.3	2633.8	2623.3	2593.6	2555.4	2508.8	2449.4	2381.5	2292.4	2201.3	2107.9
42.5°	2423.9	2426.1	2413.4	2390.0	2354.0	2309.4	2247.9	2173.7	2078.3	1970.1	1849.3
45°	2171.6	2171.6	2167.3	2148.2	2122.8	2086.8	2040.1	1978.6	1885.3	1775.0	1645.6
47.5°	1908.6	1910.7	1904.4	1900.1	1889.6	1866.2	1832.3	1785.6	1719.9	1613.8	1484.4
50°	1641.4	1641.4	1652.1	1649.9	1649.9	1641.4	1626.5	1599.0	1541.7	1456.9	1336.0
52.5°	1374.2	1378.5	1384.9	1393.3	1403.9	1420.9	1403.9	1391.2	1355.1	1289.4	1185.4
55°	1098.4	1102.7	1113.3	1128.1	1141.0	1158.0	1162.1	1162.1	1143.0	1098.4	1020.0
57.5°	863.1	856.8	865.2	878.0	894.9	911.9	924.6	939.5	937.4	907.6	844.1
60°	648.9	651.0	657.3	670.2	682.9	697.7	714.7	727.4	733.7	718.9	678.6
62.5°	473.0	473.0	481.4	494.1	500.5	521.7	532.2	538.6	544.9	542.9	517.4
65°	330.9	335.0	339.3	345.7	352.0	364.7	371.1	383.8	388.1	390.3	371.1
67.5°	233.3	226.9	231.2	235.4	241.8	250.3	263.0	263.0	269.3	269.3	256.6
70°	148.5	148.5	150.6	156.9	161.2	163.4	167.5	171.8	178.1	176.1	176.1
72.5°	99.7	97.5	99.7	101.8	104.0	110.2	110.2	112.4	116.7	118.8	110.2
75°	50.8	53.0	57.3	55.1	61.5	57.3	59.4	65.7	63.6	59.4	59.4
77.5°	42.4	42.4	42.4	40.3	44.6	44.6	42.4	46.7	44.6	44.6	42.4
80°	29.7	31.8	29.7	27.6	29.7	27.6	27.6	27.6	27.6	27.6	25.4
82.5°	23.4	19.1	21.3	19.1	21.3	21.3	19.1	17.0	17.0	19.1	17.0
85°	17.0	12.7	14.8	14.8	12.7	12.7	12.7	12.7	12.7	10.6	10.6
87.5°	10.6	6.4	6.4	6.4	8.4	8.4	8.4	6.4	8.4	8.4	4.3
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°	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8
2.5°	3957.2	3955.0	3959.3	3957.2	3957.2	3955.0	3957.2	3955.0	3959.3	3950.8	3952.9
5°	3957.2	3952.9	3955.0	3957.2	3959.3	3955.0	3955.0	3955.0	3959.3	3955.0	3957.2
7.5°	3948.6	3946.6	3952.9	3957.2	3955.0	3952.9	3957.2	3955.0	3959.3	3957.2	3961.4
10°	3931.8	3933.9	3938.1	3944.5	3946.6	3948.6	3952.9	3952.9	3959.3	3950.8	3955.0
12.5°	3906.3	3914.8	3925.4	3929.6	3938.1	3938.1	3942.3	3944.5	3948.6	3946.6	3952.9
15°	3874.5	3885.1	3897.8	3908.5	3919.0	3925.4	3931.8	3933.9	3940.2	3933.9	3935.9
17.5°	3836.2	3849.0	3868.1	3880.8	3897.8	3904.2	3912.6	3916.9	3923.2	3919.0	3921.2
20°	3783.3	3798.1	3819.4	3838.4	3849.0	3863.8	3874.5	3880.8	3885.1	3880.8	3882.9
22.5°	3709.0	3730.3	3757.8	3772.7	3794.0	3806.7	3808.7	3823.5	3834.2	3823.5	3827.8
25°	3622.0	3643.3	3664.6	3696.3	3715.4	3730.3	3745.1	3747.3	3757.8	3755.7	3753.6
27.5°	3477.9	3505.5	3541.5	3567.0	3592.5	3615.8	3632.7	3636.9	3647.6	3643.3	3645.4
30°	3280.6	3310.4	3344.3	3384.6	3420.7	3444.0	3465.2	3480.1	3490.6	3484.2	3482.1
32.5°	3000.8	3030.4	3066.5	3106.8	3149.2	3183.1	3208.6	3227.7	3240.5	3236.2	3225.6
35°	2680.5	2689.0	2712.4	2744.2	2780.2	2816.2	2839.6	2860.8	2875.6	2879.9	2879.9
37.5°	2351.8	2324.2	2307.3	2307.3	2328.5	2343.4	2364.5	2377.2	2400.6	2409.1	2415.5
40°	2033.7	1970.1	1910.7	1866.2	1836.6	1834.4	1834.4	1840.7	1862.0	1889.6	1915.0
42.5°	1749.6	1647.8	1556.6	1473.9	1414.5	1380.6	1365.8	1367.9	1384.9	1410.3	1452.6
45°	1522.7	1395.4	1280.9	1181.2	1100.6	1047.6	1022.2	1020.0	1032.8	1062.4	1109.1
47.5°	1346.6	1211.0	1081.6	967.0	880.1	822.8	793.1	784.7	793.1	820.7	875.8
50°	1200.3	1060.3	926.8	808.0	714.7	655.3	627.8	617.2	627.8	651.0	706.2
52.5°	1064.6	920.4	795.3	680.7	581.1	530.1	500.5	494.1	500.5	528.1	572.6
55°	907.6	784.7	661.6	547.1	460.2	409.3	386.0	379.6	386.0	411.4	458.1
57.5°	752.8	646.8	538.6	434.7	360.6	316.0	294.8	286.3	301.2	318.0	373.3
60°	608.6	523.8	432.6	341.4	279.9	239.6	222.6	220.5	224.8	246.0	284.2
62.5°	477.2	407.1	335.0	260.9	209.9	192.9	171.8	169.6	173.9	186.6	216.3
65°	343.6	299.0	243.9	190.8	150.6	127.2	118.8	120.9	125.1	133.6	161.2
67.5°	239.6	207.8	169.6	133.6	104.0	93.3	84.8	82.7	84.8	99.7	114.5
70°	161.2	142.1	114.5	101.8	72.1	57.3	59.4	53.0	61.5	61.5	74.2
72.5°	106.0	93.3	76.3	59.4	50.8	40.3	40.3	38.1	42.4	44.6	55.1
75°	55.1	42.4	42.4	29.7	21.3	10.6	19.1	17.0	14.8	17.0	21.3
77.5°	38.1	31.8	29.7	23.4	21.3	17.0	17.0	17.0	17.0	19.1	21.3
80°	23.4	23.4	17.0	14.8	12.7	10.6	12.7	12.7	12.7	12.7	14.8
82.5°	14.8	12.7	12.7	10.6	10.6	8.4	8.4	8.4	8.4	8.4	12.7
85°	12.7	8.4	8.4	6.4	8.4	14.8	6.4	8.4	8.4	8.4	6.4
87.5°	4.3	6.4	6.4	6.4	4.3	2.1	4.3	6.4	6.4	10.6	8.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8	3950.8
2.5°	3957.2	3959.3	3959.3	3957.2	3957.2	3952.9	3961.4	3955.0	3957.2	3965.6	3959.3
5°	3961.4	3963.5	3963.5	3961.4	3961.4	3961.4	3963.5	3963.5	3961.4	3959.3	3963.5
7.5°	3969.9	3967.8	3967.8	3963.5	3963.5	3959.3	3963.5	3957.2	3961.4	3957.2	3963.5
10°	3959.3	3961.4	3959.3	3957.2	3957.2	3955.0	3955.0	3948.6	3950.8	3944.5	3948.6
12.5°	3952.9	3950.8	3950.8	3946.6	3942.3	3938.1	3935.9	3929.6	3929.6	3914.8	3921.2
15°	3935.9	3938.1	3931.8	3923.2	3919.0	3908.5	3904.2	3895.6	3887.2	3876.6	3878.8
17.5°	3921.2	3914.8	3906.3	3897.8	3880.8	3872.4	3863.8	3851.1	3846.9	3834.2	3830.0
20°	3876.6	3872.4	3861.8	3846.9	3836.2	3817.2	3808.7	3796.0	3785.4	3772.7	3766.3
22.5°	3819.4	3815.1	3802.4	3787.5	3770.6	3762.1	3753.6	3730.3	3719.7	3707.0	3704.8
25°	3747.3	3740.8	3728.1	3711.2	3702.7	3679.4	3670.9	3653.9	3649.7	3636.9	3634.9
27.5°	3636.9	3628.5	3613.6	3592.5	3577.6	3562.8	3554.3	3541.5	3537.3	3524.5	3522.5
30°	3471.5	3461.0	3431.2	3422.8	3397.3	3382.4	3382.4	3365.6	3367.6	3359.1	3359.1
32.5°	3210.8	3193.8	3170.4	3153.4	3136.5	3128.0	3128.0	3121.6	3125.9	3125.9	3130.1
35°	2865.0	2841.8	2828.9	2818.4	2818.4	2826.8	2852.3	2858.7	2871.5	2882.0	2890.5
37.5°	2421.8	2419.8	2434.5	2447.2	2479.0	2515.2	2559.7	2597.8	2633.8	2659.4	2684.8
40°	1942.5	1995.5	2037.9	2097.3	2146.0	2216.1	2296.7	2362.4	2423.9	2468.5	2515.2
42.5°	1516.3	1584.1	1673.2	1760.2	1847.1	1942.5	2048.6	2139.8	2220.3	2281.8	2330.7
45°	1181.2	1274.5	1382.7	1493.0	1605.4	1724.2	1834.4	1927.7	2012.5	2076.2	2124.9
47.5°	952.2	1054.0	1177.0	1297.9	1425.0	1550.2	1673.2	1753.8	1823.7	1874.7	1919.2
50°	786.7	894.9	1024.3	1162.1	1289.4	1414.5	1520.6	1599.0	1656.2	1700.8	1728.3
52.5°	657.3	771.9	909.8	1047.6	1174.8	1289.4	1384.9	1444.2	1490.9	1522.7	1548.1
55°	542.9	653.2	782.6	911.9	1037.0	1145.1	1223.7	1268.2	1304.2	1323.3	1338.1
57.5°	443.2	544.9	663.8	782.6	890.7	979.8	1041.3	1085.7	1102.7	1117.6	1115.4
60°	347.8	443.2	551.4	653.2	746.4	818.6	863.1	888.5	901.2	907.6	903.4
62.5°	273.6	360.6	443.2	532.2	600.2	661.6	704.1	704.1	710.4	712.6	718.9
65°	203.5	269.3	341.4	407.1	462.3	502.6	525.9	532.2	540.8	538.6	534.4
67.5°	150.6	199.4	252.3	301.2	339.3	364.7	381.7	396.6	394.4	390.3	388.1
70°	104.0	135.8	182.4	212.1	239.6	265.0	269.3	271.5	273.6	275.7	271.5
72.5°	72.1	95.4	120.9	146.4	163.4	173.9	184.5	186.6	186.6	186.6	184.5
75°	36.1	48.8	72.1	82.7	97.5	101.8	110.2	110.2	116.7	108.1	106.0
77.5°	31.8	38.1	50.8	59.4	65.7	72.1	74.2	80.6	78.4	74.2	76.3
80°	19.1	23.4	31.8	36.1	44.6	46.7	48.8	50.8	48.8	50.8	50.8
82.5°	14.8	17.0	21.3	21.3	27.6	27.6	29.7	29.7	31.8	31.8	31.8
85°	8.4	14.8	12.7	25.4	17.0	17.0	21.3	25.4	21.3	21.3	25.4
87.5°	8.4	8.4	6.4	8.4	8.4	8.4	10.6	12.7	12.7	14.8	12.7
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: P249175

CATALOG NUMBER: LSR8B90D010 EC8B90927 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3950.8	3950.8	3950.8	3950.8
2.5°	3957.2	3961.4	3955.0	3952.9
5°	3963.5	3963.5	3959.3	3959.3
7.5°	3963.5	3963.5	3957.2	3952.9
10°	3946.6	3946.6	3940.2	3935.9
12.5°	3914.8	3914.8	3912.6	3906.3
15°	3874.5	3874.5	3866.0	3859.6
17.5°	3819.4	3823.5	3813.0	3813.0
20°	3760.0	3757.8	3749.4	3745.1
22.5°	3698.4	3694.3	3692.1	3679.4
25°	3632.7	3628.5	3622.0	3615.8
27.5°	3520.4	3518.2	3511.8	3503.4
30°	3348.6	3346.4	3338.0	3338.0
32.5°	3125.9	3123.8	3115.2	3117.4
35°	2894.7	2903.2	2899.0	2890.5
37.5°	2701.7	2708.1	2712.4	2708.1
40°	2540.6	2559.7	2561.7	2566.0
42.5°	2368.8	2394.2	2402.8	2406.9
45°	2163.0	2186.4	2205.6	2201.3
47.5°	1953.1	1970.1	1987.1	1974.4
50°	1751.7	1762.3	1768.6	1768.6
52.5°	1560.8	1560.8	1558.7	1560.8
55°	1342.4	1342.4	1333.9	1338.1
57.5°	1113.3	1117.6	1111.2	1100.6
60°	901.2	890.7	886.4	880.1
62.5°	702.0	702.0	687.2	706.2
65°	525.9	519.5	513.2	511.1
67.5°	381.7	379.6	373.3	371.1
70°	269.3	260.9	258.8	254.5
72.5°	180.2	180.2	176.1	176.1
75°	110.2	99.7	97.5	99.7
77.5°	76.3	74.2	74.2	72.1
80°	50.8	48.8	53.0	46.7
82.5°	31.8	34.0	31.8	34.0
85°	21.3	25.4	23.4	23.4
87.5°	12.7	12.7	12.7	12.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)