

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: P249500

Luminaire Tested: **LSR8B100D010 EC8B100927 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249500
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 EC8B100927 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7645.5 lumens
Efficiency: N/A
Efficacy: 71.9 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

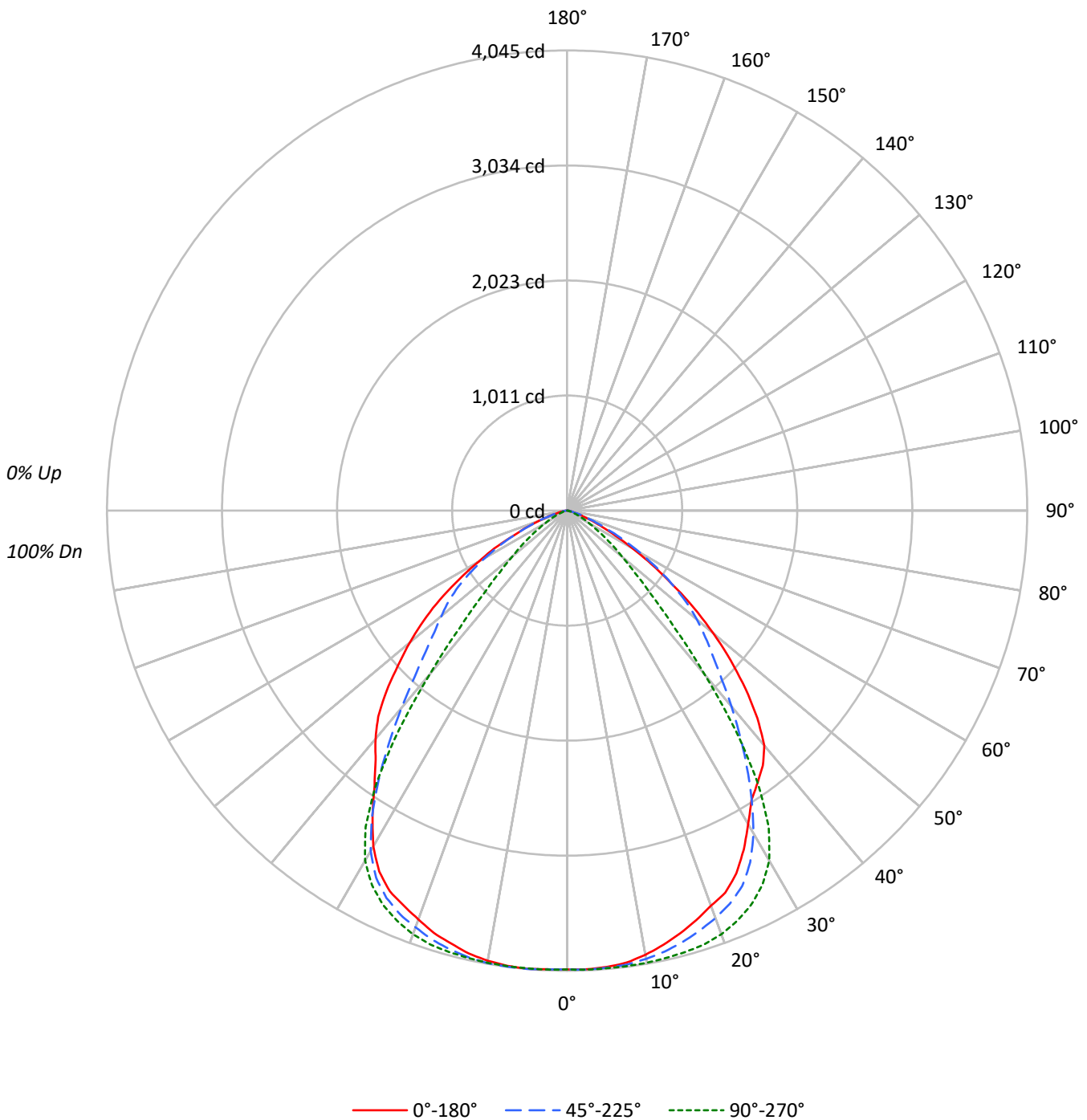
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	385.0	5.0
10°-20°	1118.0	14.6
20°-30°	1697.0	22.2
30°-40°	1782.3	23.3
40°-50°	1336.3	17.5
50°-60°	857.4	11.2
60°-70°	366.8	4.8
70°-80°	86.7	1.1
80°-90°	16.1	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°	3200.0	41.9
0°-40°	4982.3	65.2
0°-60°	7176.0	93.9
0°-90°	7645.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7645.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4034	4034	4034	4034	4034	
5°	4027	4034	4038	4045	4043	383
15°	3846	3926	4017	3991	3941	1085
25°	3519	3642	3826	3757	3692	1607
35°	2919	2756	2921	2886	2951	1832
45°	2217	1812	1042	1760	2248	1698
55°	1122	1122	388	1169	1366	1017
65°	338	398	123	513	522	361
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°	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9
2.5°	4036.0	4040.4	4038.3	4038.3	4036.0	4038.3	4038.3	4042.6	4042.6	4038.3	4036.0
5°	4027.4	4031.8	4031.8	4027.4	4027.4	4038.3	4031.8	4036.0	4036.0	4033.9	4033.9
7.5°	4007.9	4007.9	4016.6	4010.2	4010.2	4016.6	4014.4	4018.7	4023.1	4025.2	4025.2
10°	3964.6	3969.0	3971.1	3971.1	3973.3	3979.8	3984.1	3992.8	3997.1	4001.4	4003.6
12.5°	3910.5	3917.0	3919.2	3917.0	3923.6	3932.1	3943.0	3953.8	3960.3	3969.0	3975.5
15°	3845.5	3845.5	3849.9	3856.4	3860.8	3873.7	3884.5	3897.4	3914.8	3925.7	3936.5
17.5°	3774.2	3778.4	3785.0	3785.0	3793.6	3815.2	3821.7	3841.2	3860.8	3871.6	3893.2
20°	3696.2	3700.5	3707.0	3711.3	3722.2	3739.5	3752.4	3769.8	3791.5	3810.9	3832.5
22.5°	3635.6	3626.9	3631.2	3635.6	3646.4	3661.5	3676.6	3698.3	3719.9	3739.5	3761.1
25°	3518.6	3520.7	3527.2	3531.6	3544.5	3557.6	3574.9	3600.9	3620.4	3642.0	3665.8
27.5°	3360.5	3362.7	3373.5	3373.5	3384.3	3405.9	3416.8	3438.4	3464.4	3486.0	3514.3
30°	3180.8	3185.1	3185.1	3193.8	3200.3	3211.1	3221.9	3243.6	3256.5	3276.1	3315.0
32.5°	3016.2	3020.5	3018.4	3016.2	3009.7	3007.6	3005.4	3009.7	3014.1	3020.5	3035.7
35°	2918.8	2908.0	2899.4	2884.2	2866.8	2845.2	2825.7	2799.7	2775.9	2756.4	2734.8
37.5°	2825.7	2823.5	2810.6	2788.9	2754.2	2715.3	2669.8	2613.5	2557.1	2496.6	2438.1
40°	2695.7	2689.3	2678.4	2648.1	2609.1	2561.5	2500.9	2431.6	2340.7	2247.5	2152.4
42.5°	2474.9	2477.0	2464.1	2440.2	2403.5	2358.0	2295.2	2219.4	2122.0	2011.5	1888.1
45°	2217.3	2217.3	2212.9	2193.4	2167.4	2130.6	2083.0	2020.2	1925.0	1812.4	1680.2
47.5°	1948.7	1950.9	1944.4	1940.1	1929.3	1905.4	1870.8	1823.2	1756.0	1647.8	1515.7
50°	1675.9	1675.9	1686.7	1684.6	1684.6	1675.9	1660.8	1632.6	1574.2	1487.6	1364.2
52.5°	1403.1	1407.5	1413.9	1422.6	1433.4	1450.7	1433.4	1420.4	1383.6	1316.5	1210.4
55°	1121.6	1125.9	1136.8	1151.9	1164.9	1182.3	1186.5	1186.5	1167.1	1121.6	1041.5
57.5°	881.3	874.8	883.5	896.4	913.7	931.0	944.1	959.2	957.0	926.8	861.8
60°	662.6	664.8	671.2	684.2	697.3	712.4	729.7	742.7	749.2	734.1	692.9
62.5°	482.8	482.8	491.5	504.4	511.0	532.7	543.5	550.0	556.4	554.3	528.3
65°	337.8	342.1	346.4	352.9	359.4	372.4	378.9	392.0	396.2	398.4	378.9
67.5°	238.2	231.6	236.0	240.3	246.8	255.5	268.5	268.5	275.0	275.0	262.0
70°	151.5	151.5	153.8	160.2	164.6	166.7	171.1	175.4	181.9	179.7	179.7
72.5°	101.8	99.6	101.8	104.0	106.1	112.6	112.6	114.8	119.1	121.3	112.6
75°	52.0	54.1	58.4	56.4	62.8	58.4	60.6	67.2	64.9	60.6	60.6
77.5°	43.3	43.3	43.3	41.2	45.4	45.4	43.3	47.6	45.4	45.4	43.3
80°	30.3	32.5	30.3	28.1	30.3	28.1	28.1	28.1	28.1	28.1	26.0
82.5°	23.8	19.5	21.7	19.5	21.7	21.7	19.5	17.3	17.3	19.5	17.3
85°	17.3	12.9	15.2	15.2	12.9	12.9	12.9	12.9	12.9	10.8	10.8
87.5°	10.8	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°	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9
2.5°	4040.4	4038.3	4042.6	4040.4	4040.4	4038.3	4040.4	4038.3	4042.6	4033.9	4036.0
5°	4040.4	4036.0	4038.3	4040.4	4042.6	4038.3	4038.3	4038.3	4042.6	4038.3	4040.4
7.5°	4031.8	4029.5	4036.0	4040.4	4038.3	4036.0	4040.4	4038.3	4042.6	4040.4	4044.7
10°	4014.4	4016.6	4021.0	4027.4	4029.5	4031.8	4036.0	4036.0	4042.6	4033.9	4038.3
12.5°	3988.5	3997.1	4007.9	4012.2	4021.0	4021.0	4025.2	4027.4	4031.8	4029.5	4036.0
15°	3956.0	3966.8	3979.8	3990.6	4001.4	4007.9	4014.4	4016.6	4023.1	4016.6	4018.7
17.5°	3917.0	3930.0	3949.4	3962.5	3979.8	3986.3	3994.9	3999.3	4005.8	4001.4	4003.6
20°	3862.8	3878.1	3899.7	3919.2	3930.0	3945.2	3956.0	3962.5	3966.8	3962.5	3964.6
22.5°	3787.1	3808.8	3836.9	3852.0	3873.7	3886.6	3888.9	3904.0	3914.8	3904.0	3908.4
25°	3698.3	3719.9	3741.6	3774.2	3793.6	3808.8	3823.9	3826.1	3836.9	3834.7	3832.5
27.5°	3551.1	3579.2	3616.0	3642.0	3668.0	3691.8	3709.1	3713.4	3724.3	3719.9	3722.2
30°	3349.7	3380.1	3414.7	3455.8	3492.6	3516.4	3538.0	3553.2	3564.0	3557.6	3555.3
32.5°	3063.9	3094.2	3131.0	3172.2	3215.5	3250.0	3276.1	3295.6	3308.5	3304.2	3293.4
35°	2736.9	2745.6	2769.4	2801.9	2838.7	2875.5	2899.4	2921.0	2936.1	2940.4	2940.4
37.5°	2401.3	2373.2	2355.9	2355.9	2377.5	2392.6	2414.2	2427.3	2451.2	2459.7	2466.2
40°	2076.5	2011.5	1950.9	1905.4	1875.2	1873.0	1873.0	1879.4	1901.1	1929.3	1955.2
42.5°	1786.4	1682.4	1589.3	1504.9	1444.3	1409.6	1394.4	1396.6	1413.9	1439.9	1483.2
45°	1554.6	1424.8	1307.8	1206.1	1123.8	1069.6	1043.7	1041.5	1054.5	1084.8	1132.4
47.5°	1375.0	1236.4	1104.3	987.3	898.6	840.2	809.8	801.2	809.8	837.9	894.3
50°	1225.6	1082.7	946.2	825.0	729.7	669.2	640.9	630.1	640.9	664.8	721.0
52.5°	1087.0	939.7	812.0	695.0	593.3	541.4	511.0	504.4	511.0	539.1	584.7
55°	926.8	801.2	675.6	558.7	469.9	417.9	394.1	387.6	394.1	420.1	467.7
57.5°	768.7	660.4	550.0	443.9	368.1	322.7	300.9	292.3	307.5	324.8	381.0
60°	621.4	534.8	441.7	348.6	285.9	244.7	227.4	225.2	229.5	251.2	290.1
62.5°	487.2	415.7	342.1	266.3	214.3	197.0	175.4	173.2	177.5	190.6	220.8
65°	350.8	305.3	249.0	194.8	153.8	129.9	121.3	123.4	127.7	136.5	164.6
67.5°	244.7	212.2	173.2	136.5	106.1	95.3	86.6	84.5	86.6	101.8	116.9
70°	164.6	145.0	116.9	104.0	73.7	58.4	60.6	54.1	62.8	62.8	75.7
72.5°	108.2	95.3	78.0	60.6	52.0	41.2	41.2	39.0	43.3	45.4	56.4
75°	56.4	43.3	43.3	30.3	21.7	10.8	19.5	17.3	15.2	17.3	21.7
77.5°	39.0	32.5	30.3	23.8	21.7	17.3	17.3	17.3	17.3	19.5	21.7
80°	23.8	23.8	17.3	15.2	12.9	10.8	12.9	12.9	12.9	12.9	15.2
82.5°	15.2	12.9	12.9	10.8	10.8	8.7	8.7	8.7	8.7	8.7	12.9
85°	12.9	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	2.1	4.4	6.5	6.5	10.8	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°	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9	4033.9
2.5°	4040.4	4042.6	4042.6	4040.4	4040.4	4036.0	4044.7	4038.3	4040.4	4049.1	4042.6
5°	4044.7	4046.8	4046.8	4044.7	4044.7	4044.7	4046.8	4046.8	4044.7	4042.6	4046.8
7.5°	4053.4	4051.2	4051.2	4046.8	4046.8	4042.6	4046.8	4040.4	4044.7	4040.4	4046.8
10°	4042.6	4044.7	4042.6	4040.4	4040.4	4038.3	4038.3	4031.8	4033.9	4027.4	4031.8
12.5°	4036.0	4033.9	4033.9	4029.5	4025.2	4021.0	4018.7	4012.2	4012.2	3997.1	4003.6
15°	4018.7	4021.0	4014.4	4005.8	4001.4	3990.6	3986.3	3977.6	3969.0	3958.2	3960.3
17.5°	4003.6	3997.1	3988.5	3979.8	3962.5	3953.8	3945.2	3932.1	3927.8	3914.8	3910.5
20°	3958.2	3953.8	3943.0	3927.8	3917.0	3897.4	3888.9	3875.8	3865.0	3852.0	3845.5
22.5°	3899.7	3895.3	3882.4	3867.2	3849.9	3841.2	3832.5	3808.8	3797.9	3785.0	3782.7
25°	3826.1	3819.6	3806.6	3789.2	3780.6	3756.8	3748.0	3730.7	3726.4	3713.4	3711.3
27.5°	3713.4	3704.8	3689.7	3668.0	3652.9	3637.7	3629.0	3616.0	3611.7	3598.6	3596.5
30°	3544.5	3533.7	3503.4	3494.8	3468.8	3453.6	3453.6	3436.3	3438.4	3429.8	3429.8
32.5°	3278.2	3260.9	3237.1	3219.8	3202.4	3193.8	3193.8	3187.2	3191.6	3191.6	3196.0
35°	2925.3	2901.5	2888.4	2877.6	2877.6	2886.3	2912.3	2918.8	2931.8	2942.7	2951.3
37.5°	2472.8	2470.6	2485.8	2498.7	2531.2	2568.0	2613.5	2652.5	2689.3	2715.3	2741.3
40°	1983.4	2037.5	2080.8	2141.4	2191.3	2262.7	2345.0	2412.1	2474.9	2520.5	2568.0
42.5°	1548.1	1617.4	1708.4	1797.2	1886.0	1983.4	2091.7	2184.8	2267.1	2329.9	2379.6
45°	1206.1	1301.3	1411.8	1524.4	1639.1	1760.4	1873.0	1968.2	2054.8	2119.8	2169.7
47.5°	972.2	1076.2	1201.7	1325.1	1455.1	1582.8	1708.4	1790.7	1862.1	1914.1	1959.6
50°	803.2	913.7	1045.8	1186.5	1316.5	1444.3	1552.5	1632.6	1691.1	1736.6	1764.7
52.5°	671.2	788.2	928.9	1069.6	1199.6	1316.5	1413.9	1474.5	1522.2	1554.6	1580.6
55°	554.3	666.9	799.0	931.0	1058.9	1169.2	1249.3	1294.9	1331.7	1351.1	1366.3
57.5°	452.6	556.4	677.7	799.0	909.4	1000.4	1063.1	1108.6	1125.9	1141.1	1139.0
60°	355.2	452.6	562.9	666.9	762.2	835.8	881.3	907.2	920.2	926.8	922.4
62.5°	279.3	368.1	452.6	543.5	612.8	675.6	718.9	718.9	725.4	727.5	734.1
65°	207.9	275.0	348.6	415.7	472.0	513.2	537.0	543.5	552.2	550.0	545.6
67.5°	153.8	203.5	257.6	307.5	346.4	372.4	389.7	404.9	402.8	398.4	396.2
70°	106.1	138.6	186.2	216.6	244.7	270.7	275.0	277.2	279.3	281.5	277.2
72.5°	73.7	97.4	123.4	149.4	166.7	177.5	188.4	190.6	190.6	190.6	188.4
75°	36.8	49.8	73.7	84.5	99.6	104.0	112.6	112.6	119.1	110.4	108.2
77.5°	32.5	39.0	52.0	60.6	67.2	73.7	75.7	82.2	80.1	75.7	78.0
80°	19.5	23.8	32.5	36.8	45.4	47.6	49.8	52.0	49.8	52.0	52.0
82.5°	15.2	17.3	21.7	21.7	28.1	28.1	30.3	30.3	32.5	32.5	32.5
85°	8.7	15.2	12.9	26.0	17.3	17.3	21.7	26.0	21.7	21.7	26.0
87.5°	8.7	8.7	6.5	8.7	8.7	8.7	10.8	12.9	12.9	15.2	12.9
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: P249500

CATALOG NUMBER: LSR8B100D010 EC8B100927 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4033.9	4033.9	4033.9	4033.9
2.5°	4040.4	4044.7	4038.3	4036.0
5°	4046.8	4046.8	4042.6	4042.6
7.5°	4046.8	4046.8	4040.4	4036.0
10°	4029.5	4029.5	4023.1	4018.7
12.5°	3997.1	3997.1	3994.9	3988.5
15°	3956.0	3956.0	3947.3	3940.9
17.5°	3899.7	3904.0	3893.2	3893.2
20°	3839.1	3836.9	3828.3	3823.9
22.5°	3776.3	3771.9	3769.8	3756.8
25°	3709.1	3704.8	3698.3	3691.8
27.5°	3594.4	3592.2	3585.7	3577.0
30°	3419.0	3416.8	3408.2	3408.2
32.5°	3191.6	3189.5	3180.8	3183.0
35°	2955.6	2964.3	2960.0	2951.3
37.5°	2758.6	2765.0	2769.4	2765.0
40°	2594.0	2613.5	2615.6	2620.0
42.5°	2418.6	2444.6	2453.3	2457.6
45°	2208.6	2232.5	2251.9	2247.5
47.5°	1994.2	2011.5	2028.8	2015.9
50°	1788.5	1799.3	1805.8	1805.8
52.5°	1593.7	1593.7	1591.5	1593.7
55°	1370.6	1370.6	1361.9	1366.3
57.5°	1136.8	1141.1	1134.6	1123.8
60°	920.2	909.4	905.1	898.6
62.5°	716.7	716.7	701.6	721.0
65°	537.0	530.6	524.0	521.8
67.5°	389.7	387.6	381.0	378.9
70°	275.0	266.3	264.2	259.9
72.5°	184.0	184.0	179.7	179.7
75°	112.6	101.8	99.6	101.8
77.5°	78.0	75.7	75.7	73.7
80°	52.0	49.8	54.1	47.6
82.5°	32.5	34.6	32.5	34.6
85°	21.7	26.0	23.8	23.8
87.5°	12.9	12.9	12.9	12.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)