

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: P248336

Luminaire Tested: **LSR8B70D010 EC8B70830 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248336
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B70D010 EC8B70830 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7606.0 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

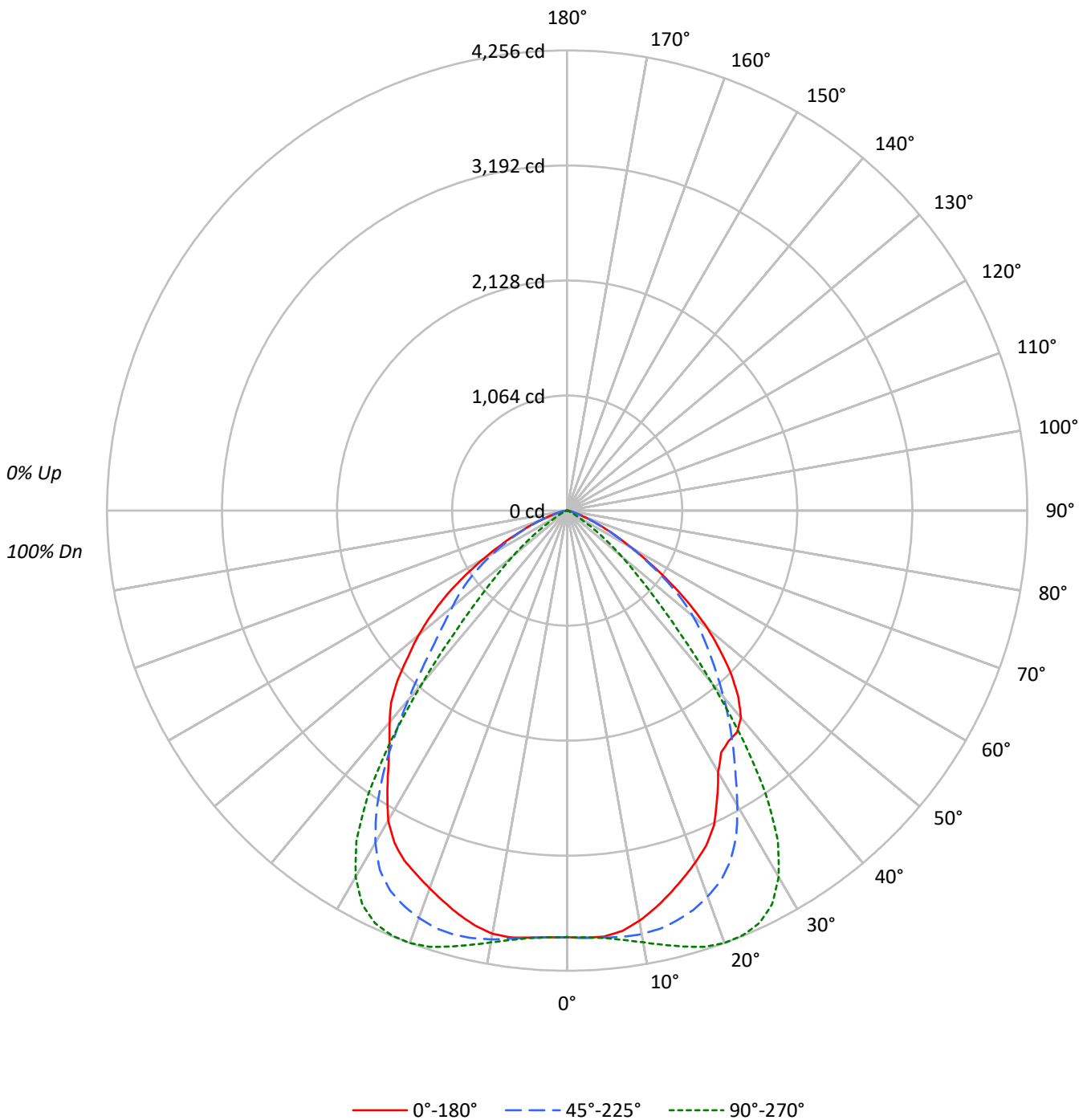
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	121671	121671	121671
5°	122396	122851	122721
10°	120598	126961	124468
15°	117072	133251	123489
20°	113676	139652	121991
25°	109309	143228	121425
30°	99478	139304	117826
35°	97999	120706	108404
40°	100663	83716	102768
45°	93707	50595	96629
50°	81280	31245	86106
55°	62374	16327	73073
60°	42492	6587	55154
65°	26435	3364	38051
70°	14353	2083	23225
75°	7482	1001	13725
80°	3356	1119	7441
85°	2229	743	6687



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.5	5.0
10°-20°	1124.1	14.8
20°-30°	1714.9	22.5
30°-40°	1789.5	23.5
40°-50°	1344.2	17.7
50°-60°	827.0	10.9
60°-70°	336.6	4.4
70°-80°	79.3	1.0
80°-90°	10.9	0.1
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°	3218.5	42.3
0°-40°	5008.0	65.8
0°-60°	7179.2	94.4
0°-90°	7606.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7606.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3946	3946	3946	3946	3946	
5°	3954	3965	3969	3965	3965	374
15°	3667	3925	4174	4059	3868	1033
25°	3213	3573	4210	3877	3569	1461
35°	2603	2677	3206	2964	2880	1644
45°	2149	1860	1160	1732	2216	1639
55°	1160	1102	304	1102	1359	1043
65°	362	366	46	492	522	378
75°	63	63	8	111	115	76
85°	6	6	2	15	19	9
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°	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7
2.5°	3956.2	3949.9	3956.2	3956.2	3958.3	3954.1	3956.2	3958.3	3954.1	3954.1	3954.1
5°	3954.1	3949.9	3954.1	3952.0	3956.2	3956.2	3960.4	3960.4	3964.6	3964.6	3970.9
7.5°	3920.6	3912.3	3920.6	3926.9	3931.1	3939.5	3949.9	3958.3	3966.7	3975.1	3985.5
10°	3851.5	3851.5	3857.8	3870.3	3882.9	3897.6	3916.4	3937.4	3958.3	3977.1	3996.0
12.5°	3765.6	3759.3	3771.9	3788.7	3807.5	3830.6	3859.9	3891.3	3924.8	3962.5	3991.8
15°	3667.2	3660.9	3675.6	3692.3	3715.4	3748.9	3784.5	3826.4	3874.5	3924.8	3973.0
17.5°	3566.7	3564.6	3579.2	3602.3	3621.1	3656.7	3702.8	3753.0	3807.5	3874.5	3937.4
20°	3464.1	3462.0	3476.6	3495.5	3520.6	3554.1	3600.2	3658.8	3723.7	3799.2	3872.4
22.5°	3357.2	3359.3	3371.9	3392.8	3413.8	3449.4	3497.5	3556.2	3627.4	3709.1	3790.8
25°	3212.7	3202.3	3219.0	3240.0	3275.5	3304.9	3351.0	3413.8	3487.1	3573.0	3669.3
27.5°	3003.3	3001.2	3015.9	3034.7	3066.1	3101.7	3152.0	3216.9	3294.4	3388.6	3482.9
30°	2793.8	2798.0	2804.3	2823.2	2844.1	2879.7	2930.0	2984.5	3057.7	3147.8	3248.3
32.5°	2651.4	2651.4	2659.8	2672.4	2687.0	2705.9	2741.5	2781.3	2837.9	2900.7	2974.0
35°	2603.3	2594.9	2603.3	2605.4	2607.5	2611.7	2617.9	2630.5	2649.3	2676.6	2703.8
37.5°	2582.3	2576.0	2576.0	2567.7	2557.2	2544.6	2527.9	2509.0	2488.1	2460.8	2439.9
40°	2500.7	2496.5	2492.3	2483.9	2460.8	2435.7	2408.5	2364.5	2316.3	2249.3	2182.3
42.5°	2343.6	2339.4	2337.3	2320.5	2299.6	2270.3	2238.9	2192.8	2132.1	2046.2	1949.8
45°	2148.8	2140.4	2134.2	2119.5	2104.8	2079.7	2050.4	2008.5	1947.7	1859.8	1744.6
47.5°	1922.6	1918.4	1916.3	1910.1	1895.4	1880.7	1861.9	1828.4	1773.9	1690.1	1570.8
50°	1694.3	1686.0	1690.1	1688.1	1681.8	1671.3	1658.7	1635.7	1593.8	1518.4	1409.5
52.5°	1432.5	1432.5	1430.5	1436.7	1438.8	1436.7	1438.8	1413.7	1378.1	1321.5	1229.4
55°	1160.2	1160.2	1166.5	1174.9	1183.3	1185.4	1183.3	1172.8	1147.7	1101.6	1019.9
57.5°	904.7	900.6	913.1	925.7	934.1	942.5	936.1	927.8	913.1	875.4	812.6
60°	689.0	689.0	697.4	705.8	714.2	722.6	720.5	718.4	705.8	680.6	630.4
62.5°	506.8	508.9	508.9	515.2	523.6	532.0	538.2	532.0	525.7	508.9	475.4
65°	362.3	360.2	362.3	368.6	374.9	383.3	387.5	385.4	379.1	366.5	341.4
67.5°	243.0	240.9	249.2	251.3	255.5	263.9	261.8	263.9	261.8	251.3	230.4
70°	159.2	155.0	159.2	157.1	163.4	165.5	169.6	171.7	169.6	163.4	157.1
72.5°	98.4	96.3	98.4	100.5	102.6	104.7	108.9	108.9	106.8	102.6	94.2
75°	62.8	56.5	58.6	54.5	58.6	58.6	62.8	64.9	62.8	62.8	58.6
77.5°	37.7	37.7	37.7	37.7	37.7	37.7	37.7	39.8	41.9	37.7	35.6
80°	18.9	18.9	21.0	21.0	21.0	23.1	21.0	21.0	21.0	23.1	16.8
82.5°	14.7	12.6	12.6	12.6	14.7	12.6	12.6	12.6	12.6	12.6	12.6
85°	6.3	8.4	6.3	4.2	6.3	6.3	8.4	6.3	6.3	6.3	8.4
87.5°	2.1	2.1	0.0	0.0	0.0	2.1	0.0	2.1	2.1	4.2	0.0
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°	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7
2.5°	3956.2	3952.0	3952.0	3949.9	3954.1	3949.9	3952.0	3949.9	3949.9	3954.1	3949.9
5°	3970.9	3973.0	3968.8	3966.7	3973.0	3973.0	3973.0	3968.8	3968.8	3970.9	3968.8
7.5°	3991.8	3996.0	3998.1	4000.2	4004.4	4006.5	4006.5	4004.4	4002.3	4008.6	4000.2
10°	4014.9	4021.2	4033.7	4040.0	4050.5	4050.5	4054.7	4054.7	4050.5	4054.7	4052.6
12.5°	4006.5	4044.2	4065.1	4079.8	4094.4	4107.0	4111.2	4113.3	4111.2	4119.6	4111.2
15°	4021.2	4052.6	4086.1	4111.2	4138.4	4153.1	4157.3	4174.0	4178.2	4180.3	4167.8
17.5°	3998.1	4054.7	4090.2	4128.0	4167.8	4195.0	4220.1	4230.6	4232.7	4236.8	4220.1
20°	3945.7	4008.6	4063.0	4117.5	4163.6	4205.4	4226.4	4255.7	4247.4	4264.1	4241.0
22.5°	3874.5	3945.7	4014.9	4086.1	4134.3	4184.5	4228.5	4249.4	4259.9	4259.9	4234.7
25°	3761.4	3845.2	3920.6	3993.9	4067.2	4128.0	4178.2	4209.6	4215.9	4213.8	4184.5
27.5°	3585.5	3675.6	3763.5	3847.3	3937.4	4008.6	4067.2	4104.9	4115.4	4115.4	4084.0
30°	3342.6	3438.9	3524.8	3625.3	3717.5	3797.1	3878.7	3912.3	3931.1	3931.1	3895.5
32.5°	3053.5	3135.2	3214.8	3313.3	3413.8	3503.8	3581.3	3627.4	3650.4	3648.3	3616.9
35°	2739.4	2779.2	2840.0	2913.2	3003.3	3087.1	3162.4	3206.5	3246.2	3244.1	3214.8
37.5°	2425.2	2414.8	2421.1	2448.3	2504.8	2563.5	2622.1	2664.0	2697.5	2712.2	2705.9
40°	2117.4	2062.9	2010.6	1991.7	1995.9	2016.9	2048.3	2079.7	2117.4	2136.3	2144.6
42.5°	1840.9	1748.8	1656.6	1587.5	1547.7	1535.2	1549.8	1560.3	1583.3	1610.5	1637.8
45°	1618.9	1495.4	1373.9	1267.1	1200.1	1160.2	1151.9	1160.2	1172.8	1200.1	1235.7
47.5°	1436.7	1292.2	1156.1	1036.7	938.2	885.9	871.3	867.1	879.6	904.7	952.9
50°	1275.4	1130.9	980.2	841.9	739.3	680.6	659.7	651.3	666.0	684.8	728.8
52.5°	1099.5	957.1	802.1	668.1	561.3	500.6	477.5	464.9	473.3	498.5	542.4
55°	908.9	777.0	636.7	498.5	395.8	339.3	312.0	303.7	312.0	339.3	383.3
57.5°	718.4	607.4	490.1	360.2	268.1	211.5	184.3	175.9	199.0	209.4	255.5
60°	561.3	471.2	370.7	263.9	184.3	140.3	113.1	106.8	117.3	136.1	173.8
62.5°	421.0	364.4	284.8	188.5	136.1	90.0	75.4	69.1	75.4	90.0	119.4
65°	305.8	261.8	199.0	138.2	92.1	67.0	50.3	46.1	52.4	62.8	88.0
67.5°	209.4	175.9	138.2	96.3	62.8	41.9	35.6	35.6	37.7	46.1	64.9
70°	136.1	115.2	88.0	62.8	41.9	31.4	27.2	23.1	27.2	33.5	44.0
72.5°	85.9	73.3	56.5	44.0	31.4	23.1	18.9	16.8	21.0	25.1	33.5
75°	52.4	39.8	29.3	23.1	16.8	16.8	16.8	8.4	10.5	16.8	21.0
77.5°	31.4	27.2	23.1	18.9	14.7	8.4	8.4	8.4	10.5	12.6	18.9
80°	16.8	14.7	10.5	10.5	8.4	6.3	8.4	6.3	4.2	10.5	12.6
82.5°	10.5	8.4	8.4	8.4	10.5	4.2	6.3	4.2	6.3	8.4	6.3
85°	6.3	6.3	6.3	4.2	10.5	4.2	4.2	2.1	2.1	4.2	4.2
87.5°	0.0	2.1	2.1	0.0	2.1	0.0	2.1	2.1	2.1	2.1	2.1
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°	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7	3945.7
2.5°	3952.0	3949.9	3952.0	3949.9	3949.9	3949.9	3952.0	3952.0	3949.9	3949.9	3954.1
5°	3968.8	3968.8	3968.8	3966.7	3964.6	3964.6	3968.8	3968.8	3962.5	3968.8	3968.8
7.5°	4004.4	3998.1	4004.4	3996.0	3991.8	3993.9	3996.0	3991.8	3987.6	3989.7	3989.7
10°	4050.5	4044.2	4044.2	4037.9	4031.6	4027.4	4023.3	4012.8	4002.3	4000.2	3991.8
12.5°	4104.9	4094.4	4088.2	4075.6	4065.1	4050.5	4037.9	4021.2	4000.2	3985.5	3970.9
15°	4159.4	4142.6	4128.0	4107.0	4084.0	4058.8	4031.6	4004.4	3970.9	3941.6	3916.4
17.5°	4203.3	4180.3	4153.1	4119.6	4086.1	4048.4	4008.6	3968.8	3920.6	3882.9	3853.6
20°	4218.0	4184.5	4148.9	4104.9	4060.9	4008.6	3958.3	3906.0	3851.5	3811.7	3778.2
22.5°	4199.2	4159.4	4115.4	4069.3	4010.7	3954.1	3895.5	3834.7	3786.6	3732.1	3700.7
25°	4146.8	4098.6	4050.5	3996.0	3939.5	3876.6	3813.8	3751.0	3692.3	3663.0	3623.2
27.5°	4040.0	3987.6	3935.3	3878.7	3813.8	3751.0	3686.1	3625.3	3575.1	3535.3	3512.2
30°	3851.5	3790.8	3730.0	3669.3	3612.7	3547.8	3487.1	3436.8	3386.5	3355.1	3332.1
32.5°	3562.5	3508.0	3447.3	3388.6	3336.3	3281.8	3231.6	3187.6	3152.0	3131.0	3114.3
35°	3172.9	3118.5	3072.4	3030.5	2986.5	2963.5	2932.1	2906.9	2892.3	2883.9	2881.8
37.5°	2682.8	2651.4	2636.8	2628.4	2620.0	2613.8	2617.9	2628.4	2636.8	2651.4	2668.2
40°	2159.3	2186.5	2194.9	2224.2	2251.4	2287.0	2326.8	2372.9	2410.6	2458.7	2492.3
42.5°	1681.8	1732.0	1790.7	1853.5	1920.5	1985.4	2065.0	2138.3	2205.3	2266.1	2318.4
45°	1292.2	1369.7	1457.7	1547.7	1637.8	1732.0	1828.4	1918.4	1998.0	2062.9	2117.4
47.5°	1007.4	1093.3	1206.4	1317.4	1426.3	1537.3	1644.0	1738.3	1805.3	1868.1	1916.3
50°	797.9	896.4	1019.9	1147.7	1267.1	1384.3	1497.4	1585.4	1652.5	1702.7	1738.3
52.5°	617.8	735.1	860.8	994.8	1122.6	1250.3	1355.0	1436.7	1491.2	1535.2	1562.4
55°	460.7	575.9	710.0	848.2	978.1	1101.6	1200.1	1271.3	1319.5	1344.6	1359.2
57.5°	333.0	437.7	571.7	710.0	827.3	944.6	1024.1	1089.1	1116.3	1130.9	1137.2
60°	243.0	339.3	458.6	578.0	689.0	783.3	852.4	896.4	917.3	925.7	923.6
62.5°	178.0	261.8	364.4	464.9	555.0	632.5	686.9	716.3	726.8	730.9	724.7
65°	136.1	201.0	289.0	366.5	435.6	492.2	532.0	550.8	557.1	555.0	550.8
67.5°	100.5	150.8	215.7	274.4	324.6	368.6	389.6	406.3	410.5	404.2	397.9
70°	71.2	111.0	157.1	196.9	234.5	259.7	282.7	284.8	284.8	282.7	278.6
72.5°	50.3	77.5	106.8	134.1	157.1	175.9	184.3	190.6	188.5	186.4	182.2
75°	33.5	48.2	77.5	83.8	104.7	111.0	119.4	119.4	121.5	115.2	115.2
77.5°	21.0	33.5	46.1	54.5	62.8	71.2	75.4	75.4	77.5	75.4	75.4
80°	12.6	21.0	25.1	37.7	37.7	44.0	46.1	48.2	44.0	50.3	44.0
82.5°	8.4	12.6	18.9	18.9	23.1	27.2	27.2	29.3	29.3	27.2	27.2
85°	6.3	8.4	10.5	12.6	12.6	14.7	12.6	12.6	14.7	16.8	14.7
87.5°	2.1	4.2	2.1	4.2	4.2	8.4	6.3	6.3	6.3	8.4	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



TEST NUMBER: P248336

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3945.7	3945.7	3945.7	3945.7
2.5°	3949.9	3952.0	3949.9	3949.9
5°	3968.8	3966.7	3968.8	3964.6
7.5°	3983.4	3983.4	3981.3	3981.3
10°	3983.4	3975.1	3975.1	3975.1
12.5°	3952.0	3941.6	3935.3	3931.1
15°	3897.6	3878.7	3870.3	3868.2
17.5°	3826.4	3809.6	3799.2	3792.9
20°	3744.7	3727.9	3715.4	3717.5
22.5°	3673.5	3654.7	3646.2	3642.0
25°	3602.3	3579.2	3573.0	3568.8
27.5°	3487.1	3474.5	3468.2	3462.0
30°	3311.2	3304.9	3294.4	3309.1
32.5°	3108.0	3097.5	3089.2	3095.5
35°	2883.9	2877.6	2883.9	2879.7
37.5°	2678.7	2684.9	2693.3	2697.5
40°	2517.4	2540.4	2548.8	2553.0
42.5°	2356.1	2383.4	2400.1	2410.6
45°	2157.2	2184.4	2203.2	2215.8
47.5°	1951.9	1975.0	1993.8	1991.7
50°	1765.5	1778.1	1786.5	1794.9
52.5°	1577.0	1577.0	1579.1	1579.1
55°	1363.4	1359.2	1357.1	1359.2
57.5°	1128.8	1124.7	1122.6	1116.3
60°	915.2	902.7	894.3	894.3
62.5°	716.3	701.6	695.3	693.2
65°	538.2	536.1	523.6	521.5
67.5°	389.6	381.2	372.8	374.9
70°	274.4	261.8	261.8	257.6
72.5°	178.0	171.7	169.6	169.6
75°	111.0	111.0	106.8	115.2
77.5°	73.3	73.3	71.2	73.3
80°	44.0	44.0	44.0	41.9
82.5°	27.2	29.3	27.2	27.2
85°	14.7	16.8	12.6	18.9
87.5°	8.4	10.5	8.4	10.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)