

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: P248327

Luminaire Tested: **LSR8B70D010 EC8B70827 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248327
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 EC8B70827 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7421.0 lumens
Efficiency: N/A
Efficacy: 97.8 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

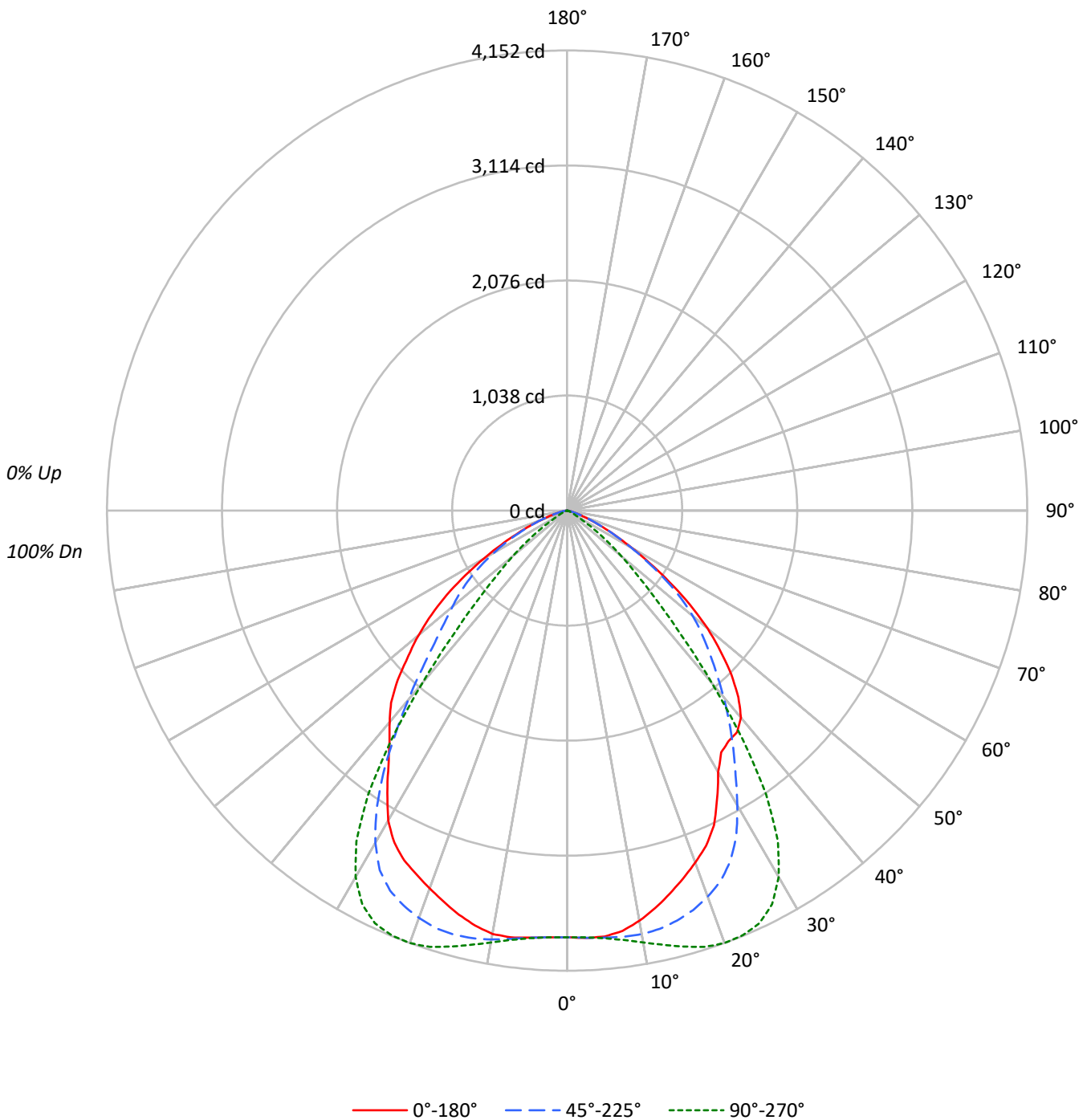
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	118714	118714	118714
5°	119421	119864	119737
10°	117664	123870	121441
15°	114224	130011	120488
20°	110909	136256	119024
25°	106652	139744	118472
30°	97060	135914	114960
35°	95612	117770	105769
40°	98212	81679	100269
45°	91427	49366	94279
50°	79304	30487	84010
55°	60858	15930	71298
60°	41463	6426	53809
65°	25793	3276	37125
70°	14002	2029	22657
75°	7303	977	13392
80°	3267	1083	7245
85°	2158	708	6510



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	370.2	5.0
10°-20°	1096.8	14.8
20°-30°	1673.2	22.5
30°-40°	1746.0	23.5
40°-50°	1311.5	17.7
50°-60°	806.9	10.9
60°-70°	328.4	4.4
70°-80°	77.4	1.0
80°-90°	10.7	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°	3140.2	42.3
0°-40°	4886.2	65.8
0°-60°	7004.6	94.4
0°-90°	7421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7421.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3850	3850	3850	3850	3850	
5°	3858	3868	3872	3868	3868	365
15°	3578	3829	4072	3960	3774	1008
25°	3135	3486	4107	3782	3482	1425
35°	2540	2612	3128	2891	2810	1604
45°	2096	1815	1132	1690	2162	1600
55°	1132	1075	296	1075	1326	1018
65°	354	358	45	480	509	369
75°	61	61	8	108	112	74
85°	6	6	2	14	18	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°	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8
2.5°	3860.0	3853.9	3860.0	3860.0	3862.1	3858.0	3860.0	3862.1	3858.0	3858.0	3858.0
5°	3858.0	3853.9	3858.0	3855.9	3860.0	3860.0	3864.1	3864.1	3868.2	3868.2	3874.3
7.5°	3825.3	3817.1	3825.3	3831.4	3835.5	3843.7	3853.9	3862.1	3870.2	3878.4	3888.6
10°	3757.8	3757.8	3764.0	3776.2	3788.5	3802.8	3821.2	3841.6	3862.1	3880.4	3898.8
12.5°	3674.1	3667.9	3680.2	3696.5	3714.9	3737.4	3766.0	3796.7	3829.4	3866.1	3894.8
15°	3578.0	3571.9	3586.2	3602.5	3625.0	3657.7	3692.5	3733.3	3780.3	3829.4	3876.4
17.5°	3479.9	3477.9	3492.2	3514.7	3533.1	3567.8	3612.8	3661.8	3714.9	3780.3	3841.6
20°	3379.8	3377.8	3392.1	3410.5	3435.0	3467.7	3512.6	3569.8	3633.2	3706.8	3778.3
22.5°	3275.6	3277.6	3289.9	3310.3	3330.8	3365.5	3412.5	3469.7	3539.2	3618.9	3698.6
25°	3134.6	3124.4	3140.7	3161.2	3195.9	3224.5	3269.5	3330.8	3402.3	3486.1	3580.1
27.5°	2930.2	2928.2	2942.5	2960.9	2991.5	3026.3	3075.3	3138.7	3214.3	3306.2	3398.2
30°	2725.9	2730.0	2736.1	2754.5	2774.9	2809.7	2858.7	2911.9	2983.4	3071.2	3169.3
32.5°	2586.9	2586.9	2595.1	2607.4	2621.7	2640.1	2674.8	2713.6	2768.8	2830.1	2901.6
35°	2539.9	2531.8	2539.9	2542.0	2544.0	2548.1	2554.2	2566.5	2584.9	2611.5	2638.0
37.5°	2519.5	2513.4	2513.4	2505.2	2495.0	2482.7	2466.4	2448.0	2427.6	2401.0	2380.6
40°	2439.8	2435.7	2431.6	2423.5	2401.0	2376.5	2349.9	2307.0	2260.0	2194.6	2129.2
42.5°	2286.6	2282.5	2280.4	2264.1	2243.6	2215.0	2184.4	2139.4	2080.2	1996.4	1902.4
45°	2096.5	2088.3	2082.2	2067.9	2053.6	2029.1	2000.5	1959.6	1900.4	1814.6	1702.2
47.5°	1875.9	1871.8	1869.7	1863.6	1849.3	1835.0	1816.6	1783.9	1730.8	1649.0	1532.6
50°	1653.1	1645.0	1649.0	1647.0	1640.9	1630.7	1618.4	1595.9	1555.0	1481.5	1375.2
52.5°	1397.7	1397.7	1395.7	1401.8	1403.8	1401.8	1403.8	1379.3	1344.6	1289.4	1199.5
55°	1132.0	1132.0	1138.2	1146.4	1154.5	1156.6	1154.5	1144.3	1119.8	1074.8	995.1
57.5°	882.7	878.7	890.9	903.2	911.4	919.5	913.4	905.2	890.9	854.1	792.8
60°	672.3	672.3	680.4	688.6	696.8	705.0	702.9	700.9	688.6	664.1	615.1
62.5°	494.5	496.5	496.5	502.7	510.8	519.0	525.1	519.0	512.9	496.5	463.8
65°	353.5	351.4	353.5	359.6	365.8	373.9	378.0	376.0	369.8	357.6	333.1
67.5°	237.0	235.0	243.1	245.2	249.3	257.5	255.4	257.5	255.4	245.2	224.8
70°	155.3	151.2	155.3	153.2	159.4	161.4	165.5	167.5	165.5	159.4	153.2
72.5°	96.0	94.0	96.0	98.1	100.1	102.1	106.2	106.2	104.2	100.1	91.9
75°	61.3	55.1	57.2	53.1	57.2	57.2	61.3	63.3	61.3	61.3	57.2
77.5°	36.8	36.8	36.8	36.8	36.8	36.8	36.8	38.8	40.8	36.8	34.7
80°	18.4	18.4	20.4	20.4	20.4	22.5	20.4	20.4	20.4	22.5	16.3
82.5°	14.3	12.3	12.3	12.3	14.3	12.3	12.3	12.3	12.3	12.3	12.3
85°	6.1	8.2	6.1	4.1	6.1	6.1	8.2	6.1	6.1	6.1	8.2
87.5°	2.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	4.1	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°	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8
2.5°	3860.0	3855.9	3855.9	3853.9	3858.0	3853.9	3855.9	3853.9	3853.9	3858.0	3853.9
5°	3874.3	3876.4	3872.3	3870.2	3876.4	3876.4	3876.4	3872.3	3872.3	3874.3	3872.3
7.5°	3894.8	3898.8	3900.9	3902.9	3907.0	3909.1	3909.1	3907.0	3905.0	3911.1	3902.9
10°	3917.2	3923.3	3935.6	3941.7	3951.9	3951.9	3956.0	3956.0	3951.9	3956.0	3954.0
12.5°	3909.1	3945.8	3966.2	3980.5	3994.8	4007.1	4011.2	4013.2	4011.2	4019.4	4011.2
15°	3923.3	3954.0	3986.7	4011.2	4037.7	4052.0	4056.1	4072.5	4076.6	4078.6	4066.4
17.5°	3900.9	3956.0	3990.7	4027.5	4066.4	4092.9	4117.4	4127.7	4129.7	4133.8	4117.4
20°	3849.8	3911.1	3964.2	4017.3	4062.3	4103.1	4123.6	4152.2	4144.0	4160.4	4137.9
22.5°	3780.3	3849.8	3917.2	3986.7	4033.7	4082.7	4125.6	4146.0	4156.3	4156.3	4131.7
25°	3670.0	3751.7	3825.3	3896.8	3968.3	4027.5	4076.6	4107.2	4113.4	4111.3	4082.7
27.5°	3498.3	3586.2	3672.0	3753.8	3841.6	3911.1	3968.3	4005.0	4015.3	4015.3	3984.6
30°	3261.3	3355.3	3439.1	3537.1	3627.1	3704.7	3784.4	3817.1	3835.5	3835.5	3800.8
32.5°	2979.3	3059.0	3136.6	3232.7	3330.8	3418.6	3494.2	3539.2	3561.7	3559.6	3529.0
35°	2672.8	2711.6	2770.9	2842.4	2930.2	3012.0	3085.5	3128.5	3167.3	3165.2	3136.6
37.5°	2366.2	2356.0	2362.2	2388.7	2443.9	2501.1	2558.3	2599.2	2631.9	2646.2	2640.1
40°	2065.9	2012.7	1961.7	1943.3	1947.4	1967.8	1998.4	2029.1	2065.9	2084.3	2092.4
42.5°	1796.2	1706.3	1616.3	1548.9	1510.1	1497.8	1512.1	1522.3	1544.8	1571.4	1598.0
45°	1579.6	1459.0	1340.5	1236.3	1170.9	1132.0	1123.9	1132.0	1144.3	1170.9	1205.6
47.5°	1401.8	1260.8	1128.0	1011.5	915.4	864.4	850.1	846.0	858.2	882.7	929.7
50°	1244.4	1103.4	956.3	821.4	721.3	664.1	643.7	635.5	649.8	668.2	711.1
52.5°	1072.8	933.8	782.6	651.8	547.6	488.4	465.9	453.6	461.8	486.3	529.2
55°	886.8	758.1	621.2	486.3	386.2	331.0	304.4	296.3	304.4	331.0	373.9
57.5°	700.9	592.6	478.1	351.4	261.5	206.4	179.8	171.6	194.1	204.3	249.3
60°	547.6	459.8	361.7	257.5	179.8	136.9	110.3	104.2	114.4	132.8	169.6
62.5°	410.7	355.5	277.9	183.9	132.8	87.8	73.5	67.4	73.5	87.8	116.5
65°	298.3	255.4	194.1	134.8	89.9	65.4	49.0	44.9	51.1	61.3	85.8
67.5°	204.3	171.6	134.8	94.0	61.3	40.8	34.7	34.7	36.8	44.9	63.3
70°	132.8	112.4	85.8	61.3	40.8	30.6	26.6	22.5	26.6	32.7	42.9
72.5°	83.8	71.5	55.1	42.9	30.6	22.5	18.4	16.3	20.4	24.5	32.7
75°	51.1	38.8	28.6	22.5	16.3	16.3	16.3	8.2	10.2	16.3	20.4
77.5°	30.6	26.6	22.5	18.4	14.3	8.2	8.2	8.2	10.2	12.3	18.4
80°	16.3	14.3	10.2	10.2	8.2	6.1	8.2	6.1	4.1	10.2	12.3
82.5°	10.2	8.2	8.2	8.2	10.2	4.1	6.1	4.1	6.1	8.2	6.1
85°	6.1	6.1	6.1	4.1	10.2	4.1	4.1	2.0	2.0	4.1	4.1
87.5°	0.0	2.0	2.0	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8	3849.8
2.5°	3855.9	3853.9	3855.9	3853.9	3853.9	3853.9	3855.9	3855.9	3853.9	3853.9	3858.0
5°	3872.3	3872.3	3872.3	3870.2	3868.2	3868.2	3872.3	3872.3	3866.1	3872.3	3872.3
7.5°	3907.0	3900.9	3907.0	3898.8	3894.8	3896.8	3898.8	3894.8	3890.7	3892.7	3892.7
10°	3951.9	3945.8	3945.8	3939.7	3933.6	3929.5	3925.4	3915.2	3905.0	3902.9	3894.8
12.5°	4005.0	3994.8	3988.7	3976.4	3966.2	3951.9	3939.7	3923.3	3902.9	3888.6	3874.3
15°	4058.2	4041.8	4027.5	4007.1	3984.6	3960.1	3933.6	3907.0	3874.3	3845.7	3821.2
17.5°	4101.1	4078.6	4052.0	4019.4	3986.7	3949.9	3911.1	3872.3	3825.3	3788.5	3759.9
20°	4115.4	4082.7	4048.0	4005.0	3962.2	3911.1	3862.1	3811.0	3757.8	3719.0	3686.3
22.5°	4097.0	4058.2	4015.3	3970.3	3913.1	3858.0	3800.8	3741.5	3694.5	3641.4	3610.7
25°	4045.9	3998.9	3951.9	3898.8	3843.7	3782.4	3721.1	3659.8	3602.5	3573.9	3535.1
27.5°	3941.7	3890.7	3839.6	3784.4	3721.1	3659.8	3596.4	3537.1	3488.1	3449.3	3426.8
30°	3757.8	3698.6	3639.3	3580.1	3524.9	3461.5	3402.3	3353.2	3304.2	3273.5	3251.1
32.5°	3475.8	3422.7	3363.5	3306.2	3255.2	3202.0	3153.0	3110.1	3075.3	3054.9	3038.5
35°	3095.8	3042.6	2997.7	2956.8	2913.9	2891.4	2860.8	2836.2	2821.9	2813.8	2811.7
37.5°	2617.6	2586.9	2572.6	2564.5	2556.3	2550.2	2554.2	2564.5	2572.6	2586.9	2603.3
40°	2106.7	2133.3	2141.5	2170.1	2196.6	2231.4	2270.2	2315.2	2351.9	2398.9	2431.6
42.5°	1640.9	1689.9	1747.1	1808.4	1873.8	1937.2	2014.8	2086.3	2151.7	2210.9	2262.0
45°	1260.8	1336.4	1422.2	1510.1	1598.0	1689.9	1783.9	1871.8	1949.4	2012.7	2065.9
47.5°	982.9	1066.7	1177.0	1285.3	1391.6	1499.9	1604.1	1696.0	1761.4	1822.7	1869.7
50°	778.5	874.6	995.1	1119.8	1236.3	1350.7	1461.0	1546.9	1612.3	1661.3	1696.0
52.5°	602.8	717.2	839.8	970.6	1095.3	1219.9	1322.1	1401.8	1454.9	1497.8	1524.4
55°	449.5	561.9	692.7	827.6	954.3	1074.8	1170.9	1240.4	1287.4	1311.9	1326.2
57.5°	324.9	427.1	557.8	692.7	807.1	921.6	999.2	1062.6	1089.1	1103.4	1109.6
60°	237.0	331.0	447.5	564.0	672.3	764.2	831.7	874.6	895.0	903.2	901.1
62.5°	173.7	255.4	355.5	453.6	541.5	617.1	670.2	698.8	709.1	713.1	707.0
65°	132.8	196.1	282.0	357.6	425.0	480.2	519.0	537.4	543.5	541.5	537.4
67.5°	98.1	147.1	210.5	267.7	316.7	359.6	380.1	396.4	400.5	394.4	388.2
70°	69.5	108.3	153.2	192.1	228.8	253.4	275.8	277.9	277.9	275.8	271.8
72.5°	49.0	75.6	104.2	130.8	153.2	171.6	179.8	185.9	183.9	181.8	177.8
75°	32.7	47.0	75.6	81.7	102.1	108.3	116.5	116.5	118.5	112.4	112.4
77.5°	20.4	32.7	44.9	53.1	61.3	69.5	73.5	73.5	75.6	73.5	73.5
80°	12.3	20.4	24.5	36.8	36.8	42.9	44.9	47.0	42.9	49.0	42.9
82.5°	8.2	12.3	18.4	18.4	22.5	26.6	26.6	28.6	28.6	26.6	26.6
85°	6.1	8.2	10.2	12.3	12.3	14.3	12.3	12.3	14.3	16.3	14.3
87.5°	2.0	4.1	2.0	4.1	4.1	8.2	6.1	6.1	6.1	8.2	8.2
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: P248327

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3849.8	3849.8	3849.8	3849.8
2.5°	3853.9	3855.9	3853.9	3853.9
5°	3872.3	3870.2	3872.3	3868.2
7.5°	3886.6	3886.6	3884.5	3884.5
10°	3886.6	3878.4	3878.4	3878.4
12.5°	3855.9	3845.7	3839.6	3835.5
15°	3802.8	3784.4	3776.2	3774.2
17.5°	3733.3	3717.0	3706.8	3700.6
20°	3653.6	3637.3	3625.0	3627.1
22.5°	3584.1	3565.8	3557.6	3553.5
25°	3514.7	3492.2	3486.1	3482.0
27.5°	3402.3	3390.0	3383.9	3377.8
30°	3230.6	3224.5	3214.3	3228.6
32.5°	3032.4	3022.2	3014.0	3020.2
35°	2813.8	2807.6	2813.8	2809.7
37.5°	2613.5	2619.6	2627.8	2631.9
40°	2456.2	2478.6	2486.8	2490.9
42.5°	2298.8	2325.4	2341.7	2351.9
45°	2104.7	2131.2	2149.6	2161.9
47.5°	1904.5	1927.0	1945.3	1943.3
50°	1722.6	1734.9	1743.0	1751.2
52.5°	1538.7	1538.7	1540.7	1540.7
55°	1330.3	1326.2	1324.1	1326.2
57.5°	1101.4	1097.3	1095.3	1089.1
60°	893.0	880.7	872.5	872.5
62.5°	698.8	684.5	678.4	676.4
65°	525.1	523.1	510.8	508.8
67.5°	380.1	371.9	363.7	365.8
70°	267.7	255.4	255.4	251.3
72.5°	173.7	167.5	165.5	165.5
75°	108.3	108.3	104.2	112.4
77.5°	71.5	71.5	69.5	71.5
80°	42.9	42.9	42.9	40.8
82.5°	26.6	28.6	26.6	26.6
85°	14.3	16.3	12.3	18.4
87.5°	8.2	10.2	8.2	10.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)