

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: P248399

Luminaire Tested: **LSR8B70D010 EC8B70940 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248399
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 EC8B70940 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7045.0 lumens
Efficiency: N/A
Efficacy: 92.8 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

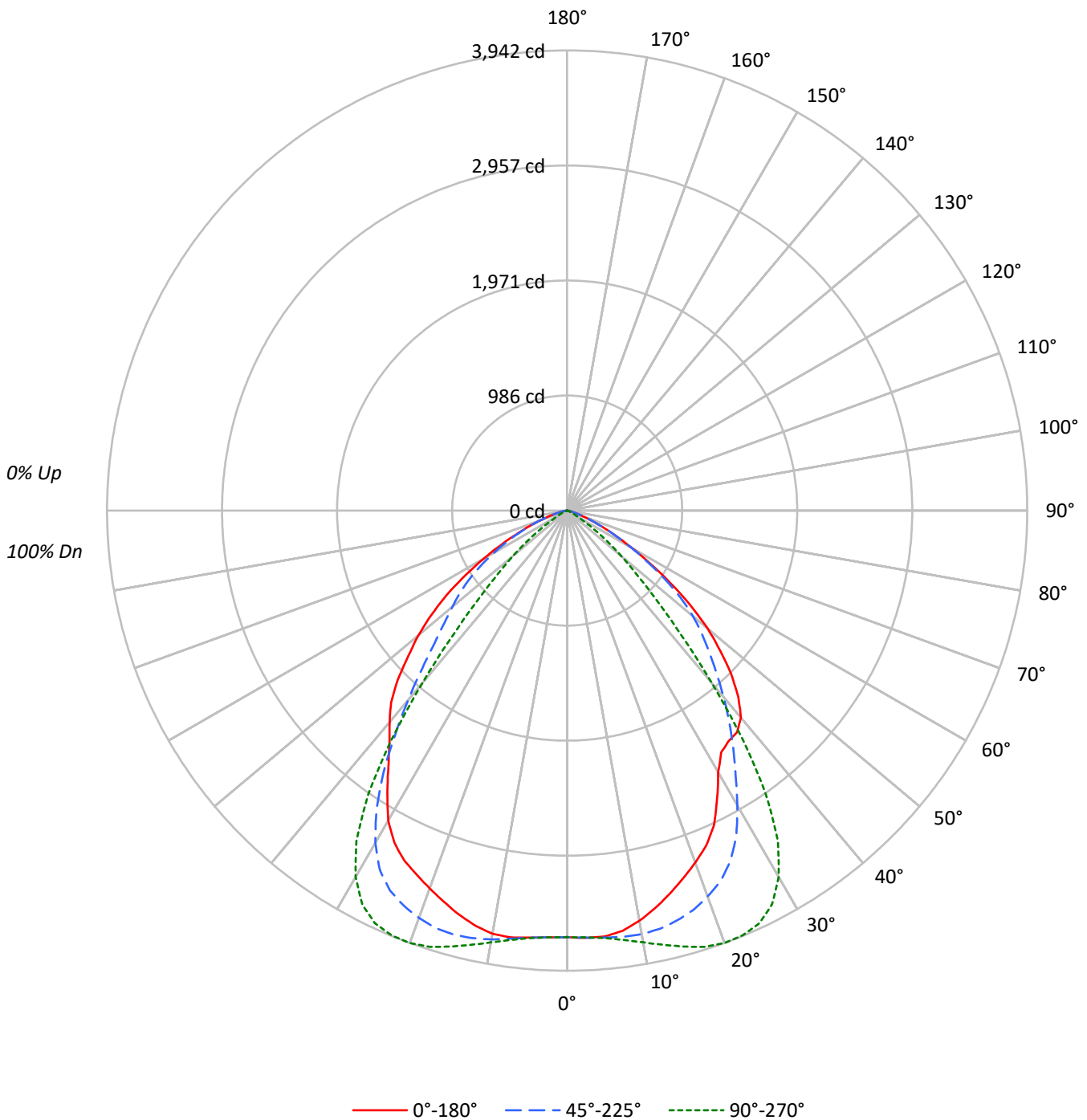
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	112697	112697	112697
5°	113369	113790	113670
10°	111702	117595	115288
15°	108437	123425	114381
20°	105291	129351	112993
25°	101249	132663	112467
30°	92143	129028	109135
35°	90768	111803	100408
40°	93236	77541	95189
45°	86795	46867	89503
50°	75288	28942	79755
55°	57777	15123	67686
60°	39359	6099	51083
65°	24487	3116	35242
70°	13289	1929	21512
75°	6934	917	12712
80°	3108	1030	6890
85°	2052	672	6192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.5	5.0
10°-20°	1041.2	14.8
20°-30°	1588.4	22.5
30°-40°	1657.5	23.5
40°-50°	1245.0	17.7
50°-60°	766.0	10.9
60°-70°	311.8	4.4
70°-80°	73.5	1.0
80°-90°	10.1	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°	2981.1	42.3
0°-40°	4638.6	65.8
0°-60°	6649.7	94.4
0°-90°	7045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7045.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3655	3655	3655	3655	3655	
5°	3662	3672	3676	3672	3672	347
15°	3397	3635	3866	3760	3583	957
25°	2976	3309	3899	3591	3306	1353
35°	2411	2479	2970	2745	2667	1522
45°	1990	1723	1075	1604	2052	1519
55°	1075	1020	281	1020	1259	966
65°	336	340	43	456	483	350
75°	58	58	8	103	107	70
85°	6	6	2	14	18	8
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°	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7
2.5°	3664.4	3658.6	3664.4	3664.4	3666.4	3662.5	3664.4	3666.4	3662.5	3662.5	3662.5
5°	3662.5	3658.6	3662.5	3660.5	3664.4	3664.4	3668.3	3668.3	3672.2	3672.2	3678.0
7.5°	3631.4	3623.7	3631.4	3637.3	3641.1	3648.9	3658.6	3666.4	3674.1	3681.9	3691.6
10°	3567.4	3567.4	3573.2	3584.9	3596.5	3610.1	3627.5	3647.0	3666.4	3683.8	3701.3
12.5°	3487.9	3482.1	3493.7	3509.2	3526.7	3548.0	3575.2	3604.3	3635.3	3670.2	3697.4
15°	3396.7	3390.9	3404.5	3420.0	3441.3	3472.4	3505.4	3544.1	3588.8	3635.3	3679.9
17.5°	3303.6	3301.6	3315.2	3336.6	3354.1	3387.0	3429.7	3476.2	3526.7	3588.8	3647.0
20°	3208.6	3206.6	3220.2	3237.7	3260.9	3292.0	3334.6	3388.9	3449.1	3518.9	3586.8
22.5°	3109.6	3111.6	3123.2	3142.6	3162.0	3194.9	3239.6	3293.9	3359.8	3435.5	3511.2
25°	2975.8	2966.1	2981.6	3001.0	3033.9	3061.1	3103.8	3162.0	3229.9	3309.4	3398.7
27.5°	2781.8	2779.8	2793.4	2810.9	2840.0	2872.9	2919.5	2979.6	3051.4	3138.7	3226.0
30°	2587.8	2591.7	2597.5	2615.0	2634.3	2667.3	2713.9	2764.3	2832.2	2915.6	3008.7
32.5°	2455.9	2455.9	2463.6	2475.3	2488.9	2506.3	2539.3	2576.1	2628.5	2686.7	2754.6
35°	2411.2	2403.5	2411.2	2413.2	2415.1	2419.0	2424.8	2436.5	2453.9	2479.2	2504.4
37.5°	2391.9	2386.0	2386.0	2378.3	2368.6	2356.9	2341.4	2324.0	2304.6	2279.3	2260.0
40°	2316.2	2312.3	2308.4	2300.7	2279.3	2256.1	2230.8	2190.1	2145.5	2083.4	2021.4
42.5°	2170.7	2166.8	2164.9	2149.4	2130.0	2102.8	2073.7	2031.0	1974.8	1895.2	1806.0
45°	1990.3	1982.5	1976.7	1963.2	1949.5	1926.3	1899.1	1860.3	1804.1	1722.6	1615.9
47.5°	1780.8	1776.9	1775.0	1769.2	1755.6	1742.0	1724.6	1693.5	1643.1	1565.5	1454.9
50°	1569.4	1561.6	1565.5	1563.6	1557.7	1548.0	1536.4	1515.0	1476.2	1406.4	1305.5
52.5°	1326.9	1326.9	1324.9	1330.7	1332.7	1330.7	1332.7	1309.4	1276.4	1224.0	1138.7
55°	1074.7	1074.7	1080.5	1088.3	1096.0	1098.0	1096.0	1086.3	1063.0	1020.4	944.7
57.5°	838.0	834.2	845.8	857.4	865.2	872.9	867.1	859.4	845.8	810.9	752.7
60°	638.2	638.2	646.0	653.7	661.5	669.3	667.3	665.4	653.7	630.4	583.9
62.5°	469.4	471.4	471.4	477.2	485.0	492.7	498.5	492.7	486.9	471.4	440.3
65°	335.6	333.6	335.6	341.4	347.3	355.0	358.9	356.9	351.1	339.5	316.2
67.5°	225.0	223.1	230.8	232.8	236.7	244.4	242.5	244.4	242.5	232.8	213.4
70°	147.4	143.5	147.4	145.5	151.3	153.3	157.1	159.1	157.1	151.3	145.5
72.5°	91.2	89.2	91.2	93.1	95.1	97.0	100.9	100.9	98.9	95.1	87.3
75°	58.2	52.4	54.3	50.5	54.3	54.3	58.2	60.1	58.2	58.2	54.3
77.5°	34.9	34.9	34.9	34.9	34.9	34.9	34.9	36.9	38.8	34.9	33.0
80°	17.5	17.5	19.4	19.4	19.4	21.4	19.4	19.4	19.4	21.4	15.5
82.5°	13.6	11.6	11.6	11.6	13.6	11.6	11.6	11.6	11.6	11.6	11.6
85°	5.8	7.7	5.8	3.9	5.8	5.8	7.7	5.8	5.8	5.8	7.7
87.5°	1.9	1.9	0.0	0.0	0.0	1.9	0.0	1.9	1.9	3.9	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°	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7
2.5°	3664.4	3660.5	3660.5	3658.6	3662.5	3658.6	3660.5	3658.6	3658.6	3662.5	3658.6
5°	3678.0	3679.9	3676.1	3674.1	3679.9	3679.9	3679.9	3676.1	3676.1	3678.0	3676.1
7.5°	3697.4	3701.3	3703.2	3705.2	3709.0	3711.0	3711.0	3709.0	3707.1	3712.9	3705.2
10°	3718.7	3724.6	3736.2	3742.0	3751.7	3751.7	3755.6	3755.6	3751.7	3755.6	3753.7
12.5°	3711.0	3745.9	3765.3	3778.9	3792.4	3804.1	3808.0	3809.9	3808.0	3815.7	3808.0
15°	3724.6	3753.7	3784.7	3808.0	3833.2	3846.7	3850.6	3866.2	3870.0	3872.0	3860.4
17.5°	3703.2	3755.6	3788.6	3823.5	3860.4	3885.6	3908.8	3918.6	3920.5	3924.3	3908.8
20°	3654.7	3712.9	3763.3	3813.8	3856.5	3895.3	3914.7	3941.8	3934.1	3949.6	3928.2
22.5°	3588.8	3654.7	3718.7	3784.7	3829.3	3875.9	3916.6	3936.0	3945.7	3945.7	3922.4
25°	3484.0	3561.6	3631.4	3699.3	3767.2	3823.5	3870.0	3899.1	3905.0	3903.0	3875.9
27.5°	3321.1	3404.5	3486.0	3563.6	3647.0	3712.9	3767.2	3802.1	3811.9	3811.9	3782.8
30°	3096.0	3185.3	3264.8	3357.9	3443.3	3517.0	3592.7	3623.7	3641.1	3641.1	3608.2
32.5°	2828.3	2904.0	2977.7	3068.9	3162.0	3245.4	3317.2	3359.8	3381.2	3379.3	3350.2
35°	2537.4	2574.2	2630.5	2698.4	2781.8	2859.4	2929.2	2970.0	3006.8	3004.8	2977.7
37.5°	2246.4	2236.7	2242.5	2267.7	2320.1	2374.4	2428.7	2467.5	2498.5	2512.2	2506.3
40°	1961.2	1910.8	1862.3	1844.8	1848.7	1868.1	1897.2	1926.3	1961.2	1978.7	1986.4
42.5°	1705.1	1619.8	1534.4	1470.4	1433.6	1421.9	1435.5	1445.2	1466.5	1491.7	1517.0
45°	1499.5	1385.1	1272.5	1173.6	1111.5	1074.7	1066.9	1074.7	1086.3	1111.5	1144.5
47.5°	1330.7	1196.9	1070.8	960.2	869.0	820.6	807.0	803.1	814.7	838.0	882.6
50°	1181.4	1047.5	907.9	779.8	684.8	630.4	611.1	603.3	616.9	634.3	675.1
52.5°	1018.4	886.5	743.0	618.8	519.9	463.6	442.3	430.7	438.4	461.7	502.4
55°	841.9	719.7	589.7	461.7	366.6	314.3	289.0	281.3	289.0	314.3	355.0
57.5°	665.4	562.6	453.9	333.6	248.3	195.9	170.7	162.9	184.3	194.0	236.7
60°	519.9	436.5	343.4	244.4	170.7	130.0	104.8	98.9	108.6	126.1	161.0
62.5°	389.9	337.5	263.8	174.6	126.1	83.4	69.8	64.0	69.8	83.4	110.6
65°	283.2	242.5	184.3	128.0	85.3	62.1	46.6	42.7	48.5	58.2	81.5
67.5°	194.0	162.9	128.0	89.2	58.2	38.8	33.0	33.0	34.9	42.7	60.1
70°	126.1	106.7	81.5	58.2	38.8	29.1	25.2	21.4	25.2	31.0	40.7
72.5°	79.6	67.9	52.4	40.7	29.1	21.4	17.5	15.5	19.4	23.3	31.0
75°	48.5	36.9	27.2	21.4	15.5	15.5	15.5	7.7	9.7	15.5	19.4
77.5°	29.1	25.2	21.4	17.5	13.6	7.7	7.7	7.7	9.7	11.6	17.5
80°	15.5	13.6	9.7	9.7	7.7	5.8	7.7	5.8	3.9	9.7	11.6
82.5°	9.7	7.7	7.7	7.7	9.7	3.9	5.8	3.9	5.8	7.7	5.8
85°	5.8	5.8	5.8	3.9	9.7	3.9	3.9	1.9	1.9	3.9	3.9
87.5°	0.0	1.9	1.9	0.0	1.9	0.0	1.9	1.9	1.9	1.9	1.9
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°	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7	3654.7
2.5°	3660.5	3658.6	3660.5	3658.6	3658.6	3658.6	3660.5	3660.5	3658.6	3658.6	3662.5
5°	3676.1	3676.1	3676.1	3674.1	3672.2	3672.2	3676.1	3676.1	3670.2	3676.1	3676.1
7.5°	3709.0	3703.2	3709.0	3701.3	3697.4	3699.3	3701.3	3697.4	3693.5	3695.5	3695.5
10°	3751.7	3745.9	3745.9	3740.1	3734.2	3730.4	3726.5	3716.8	3707.1	3705.2	3697.4
12.5°	3802.1	3792.4	3786.6	3775.0	3765.3	3751.7	3740.1	3724.6	3705.2	3691.6	3678.0
15°	3852.6	3837.1	3823.5	3804.1	3782.8	3759.5	3734.2	3709.0	3678.0	3650.9	3627.5
17.5°	3893.3	3872.0	3846.7	3815.7	3784.7	3749.8	3712.9	3676.1	3631.4	3596.5	3569.4
20°	3906.9	3875.9	3842.9	3802.1	3761.4	3712.9	3666.4	3617.9	3567.4	3530.6	3499.5
22.5°	3889.5	3852.6	3811.9	3769.2	3714.8	3662.5	3608.2	3551.9	3507.3	3456.9	3427.8
25°	3841.0	3796.3	3751.7	3701.3	3648.9	3590.7	3532.5	3474.3	3420.0	3392.8	3356.0
27.5°	3742.0	3693.5	3645.0	3592.7	3532.5	3474.3	3414.2	3357.9	3311.4	3274.5	3253.2
30°	3567.4	3511.2	3454.9	3398.7	3346.3	3286.1	3229.9	3183.3	3136.8	3107.7	3086.3
32.5°	3299.7	3249.3	3193.0	3138.7	3090.2	3039.8	2993.2	2952.5	2919.5	2900.1	2884.6
35°	2938.9	2888.5	2845.8	2807.0	2766.2	2744.9	2715.8	2692.5	2679.0	2671.2	2669.3
37.5°	2485.0	2455.9	2442.3	2434.5	2426.8	2421.0	2424.8	2434.5	2442.3	2455.9	2471.4
40°	2000.0	2025.2	2033.0	2060.1	2085.3	2118.3	2155.2	2197.9	2232.8	2277.4	2308.4
42.5°	1557.7	1604.3	1658.6	1716.8	1778.9	1839.0	1912.7	1980.6	2042.7	2098.9	2147.4
45°	1196.9	1268.7	1350.2	1433.6	1517.0	1604.3	1693.5	1776.9	1850.6	1910.8	1961.2
47.5°	933.1	1012.6	1117.4	1220.2	1321.1	1423.9	1522.8	1610.1	1672.2	1730.4	1775.0
50°	739.1	830.3	944.7	1063.0	1173.6	1282.2	1387.0	1468.5	1530.6	1577.1	1610.1
52.5°	572.2	680.9	797.3	921.4	1039.8	1158.1	1255.1	1330.7	1381.2	1421.9	1447.1
55°	426.8	533.5	657.6	785.6	905.9	1020.4	1111.5	1177.5	1222.1	1245.4	1259.0
57.5°	308.4	405.4	529.6	657.6	766.2	874.9	948.6	1008.7	1033.9	1047.5	1053.4
60°	225.0	314.3	424.8	535.4	638.2	725.5	789.5	830.3	849.7	857.4	855.5
62.5°	164.9	242.5	337.5	430.7	514.1	585.8	636.3	663.4	673.2	677.0	671.2
65°	126.1	186.2	267.7	339.5	403.5	455.9	492.7	510.2	516.0	514.1	510.2
67.5°	93.1	139.7	199.8	254.1	300.7	341.4	360.8	376.4	380.2	374.4	368.6
70°	66.0	102.8	145.5	182.4	217.3	240.6	261.9	263.8	263.8	261.9	258.0
72.5°	46.6	71.8	98.9	124.2	145.5	162.9	170.7	176.5	174.6	172.6	168.8
75°	31.0	44.6	71.8	77.6	97.0	102.8	110.6	110.6	112.5	106.7	106.7
77.5°	19.4	31.0	42.7	50.5	58.2	66.0	69.8	69.8	71.8	69.8	69.8
80°	11.6	19.4	23.3	34.9	34.9	40.7	42.7	44.6	40.7	46.6	40.7
82.5°	7.7	11.6	17.5	17.5	21.4	25.2	25.2	27.2	27.2	25.2	25.2
85°	5.8	7.7	9.7	11.6	11.6	13.6	11.6	11.6	13.6	15.5	13.6
87.5°	1.9	3.9	1.9	3.9	3.9	7.7	5.8	5.8	5.8	7.7	7.7
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: P248399

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3654.7	3654.7	3654.7	3654.7
2.5°	3658.6	3660.5	3658.6	3658.6
5°	3676.1	3674.1	3676.1	3672.2
7.5°	3689.6	3689.6	3687.7	3687.7
10°	3689.6	3681.9	3681.9	3681.9
12.5°	3660.5	3650.9	3645.0	3641.1
15°	3610.1	3592.7	3584.9	3582.9
17.5°	3544.1	3528.6	3518.9	3513.1
20°	3468.5	3453.0	3441.3	3443.3
22.5°	3402.5	3385.1	3377.3	3373.4
25°	3336.6	3315.2	3309.4	3305.5
27.5°	3229.9	3218.3	3212.4	3206.6
30°	3066.9	3061.1	3051.4	3065.0
32.5°	2878.8	2869.0	2861.3	2867.1
35°	2671.2	2665.4	2671.2	2667.3
37.5°	2481.1	2486.9	2494.7	2498.5
40°	2331.7	2353.1	2360.8	2364.7
42.5°	2182.4	2207.6	2223.1	2232.8
45°	1998.1	2023.3	2040.7	2052.4
47.5°	1808.0	1829.3	1846.7	1844.8
50°	1635.3	1647.0	1654.7	1662.5
52.5°	1460.7	1460.7	1462.6	1462.6
55°	1262.9	1259.0	1257.0	1259.0
57.5°	1045.6	1041.7	1039.8	1033.9
60°	847.7	836.1	828.3	828.3
62.5°	663.4	649.8	644.1	642.1
65°	498.5	496.6	485.0	483.0
67.5°	360.8	353.0	345.3	347.3
70°	254.1	242.5	242.5	238.6
72.5°	164.9	159.1	157.1	157.1
75°	102.8	102.8	98.9	106.7
77.5°	67.9	67.9	66.0	67.9
80°	40.7	40.7	40.7	38.8
82.5°	25.2	27.2	25.2	25.2
85°	13.6	15.5	11.6	17.5
87.5°	7.7	9.7	7.7	9.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)