

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: P248408

Luminaire Tested: **LSR8B70D010 EC8B70950 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248408
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 EC8B70950 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7294.0 lumens
Efficiency: N/A
Efficacy: 96.1 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

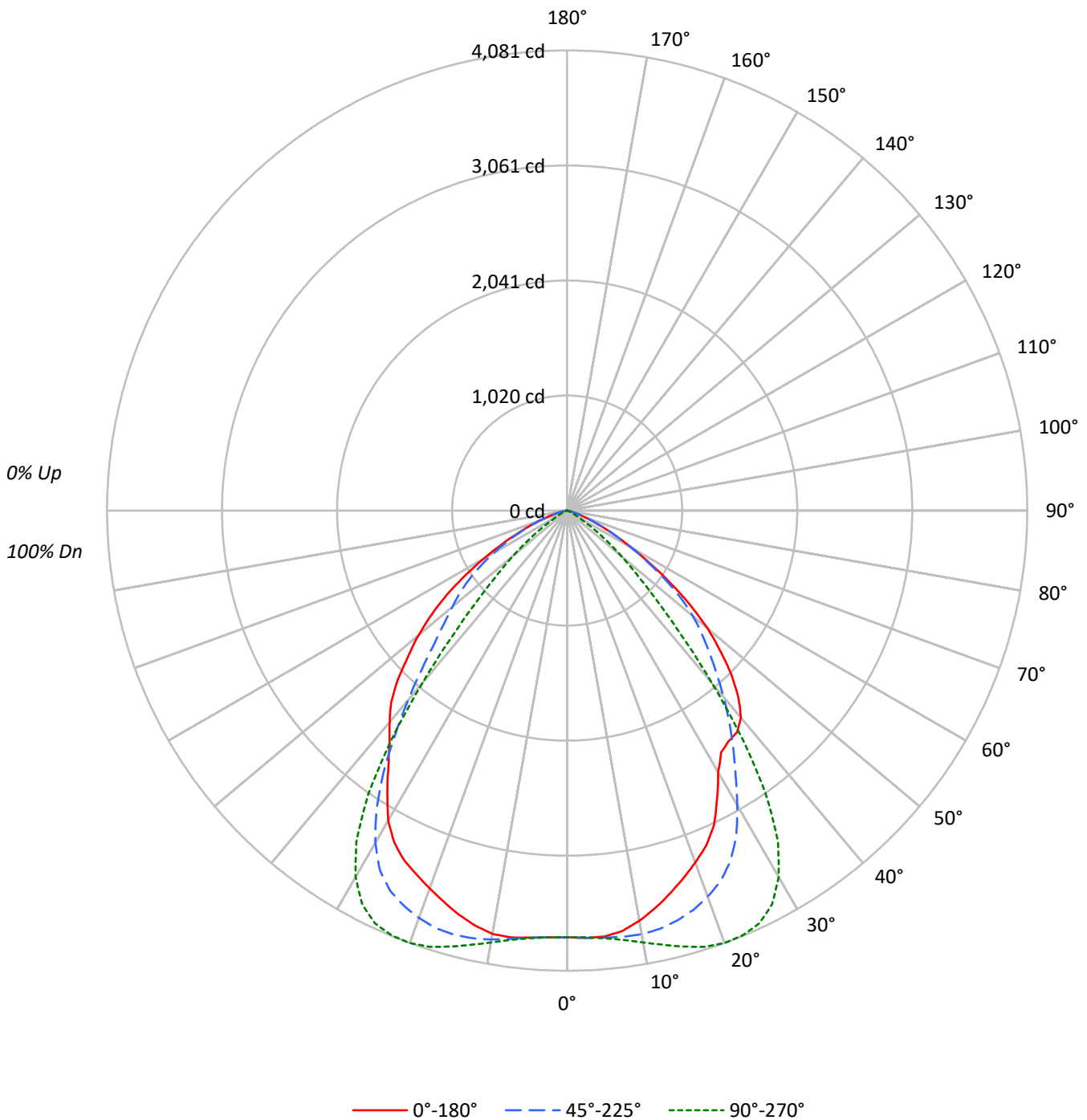
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	116682	116682	116682
5°	117375	117811	117688
10°	115651	121751	119361
15°	112271	127786	118426
20°	109012	133923	116987
25°	104825	137355	116444
30°	95397	133589	112991
35°	93979	115752	103958
40°	96533	80282	98554
45°	89865	48520	92665
50°	77946	29964	82571
55°	59815	15655	70078
60°	40753	6315	52890
65°	25348	3225	36490
70°	13758	1993	22269
75°	7172	953	13165
80°	3214	1065	7139
85°	2123	708	6404



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	363.9	5.0
10°-20°	1078.0	14.8
20°-30°	1644.6	22.5
30°-40°	1716.1	23.5
40°-50°	1289.0	17.7
50°-60°	793.1	10.9
60°-70°	322.8	4.4
70°-80°	76.0	1.0
80°-90°	10.5	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°	3086.4	42.3
0°-40°	4802.6	65.8
0°-60°	6884.7	94.4
0°-90°	7294.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7294.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3784	3784	3784	3784	3784	
5°	3792	3802	3806	3802	3802	359
15°	3517	3764	4003	3892	3710	991
25°	3081	3426	4037	3718	3422	1401
35°	2496	2567	3075	2842	2762	1576
45°	2061	1784	1113	1661	2125	1572
55°	1113	1056	291	1056	1304	1000
65°	347	352	44	472	500	362
75°	60	60	8	106	110	73
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°	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9
2.5°	3793.9	3787.9	3793.9	3793.9	3796.0	3791.9	3793.9	3796.0	3791.9	3791.9	3791.9
5°	3791.9	3787.9	3791.9	3789.9	3793.9	3793.9	3798.0	3798.0	3802.0	3802.0	3808.0
7.5°	3759.8	3751.8	3759.8	3765.8	3769.8	3777.9	3787.9	3796.0	3804.0	3812.0	3822.1
10°	3693.5	3693.5	3699.5	3711.6	3723.6	3737.7	3755.8	3775.9	3796.0	3814.0	3832.1
12.5°	3611.2	3605.1	3617.2	3633.2	3651.3	3673.4	3701.6	3731.7	3763.8	3799.9	3828.1
15°	3516.8	3510.7	3524.8	3540.9	3563.0	3595.1	3629.3	3669.4	3715.6	3763.8	3810.0
17.5°	3420.4	3418.3	3432.4	3454.5	3472.6	3506.7	3550.9	3599.1	3651.3	3715.6	3775.9
20°	3322.0	3320.0	3334.0	3352.1	3376.2	3408.3	3452.5	3508.7	3571.0	3643.3	3713.6
22.5°	3219.5	3221.5	3233.6	3253.7	3273.8	3307.9	3354.1	3410.3	3478.6	3556.9	3635.3
25°	3080.9	3070.9	3087.0	3107.1	3141.2	3169.3	3213.5	3273.8	3344.0	3426.4	3518.8
27.5°	2880.1	2878.1	2892.2	2910.2	2940.3	2974.5	3022.7	3085.0	3159.3	3249.6	3340.0
30°	2679.2	2683.3	2689.3	2707.4	2727.4	2761.6	2809.8	2862.0	2932.3	3018.7	3115.1
32.5°	2542.7	2542.7	2550.7	2562.8	2576.8	2594.9	2629.1	2667.2	2721.4	2781.7	2852.0
35°	2496.5	2488.5	2496.5	2498.5	2500.5	2504.5	2510.5	2522.6	2540.6	2566.8	2592.9
37.5°	2476.4	2470.4	2470.4	2462.4	2452.3	2440.2	2424.2	2406.1	2386.0	2359.9	2339.8
40°	2398.1	2394.1	2390.0	2382.0	2359.9	2335.8	2309.7	2267.5	2221.3	2157.0	2092.8
42.5°	2247.5	2243.4	2241.4	2225.3	2205.2	2177.1	2147.0	2102.8	2044.6	1962.2	1869.8
45°	2060.7	2052.6	2046.6	2032.6	2018.5	1994.4	1966.3	1926.1	1867.8	1783.5	1673.0
47.5°	1843.7	1839.7	1837.7	1831.7	1817.7	1803.6	1785.5	1753.4	1701.1	1620.8	1506.3
50°	1624.8	1616.8	1620.8	1618.8	1612.8	1602.8	1590.7	1568.6	1528.4	1456.1	1351.7
52.5°	1373.7	1373.7	1371.8	1377.8	1379.8	1377.8	1379.8	1355.7	1321.6	1267.3	1178.9
55°	1112.6	1112.6	1118.7	1126.8	1134.8	1136.8	1134.8	1124.7	1100.6	1056.4	978.1
57.5°	867.6	863.6	875.7	887.7	895.8	903.8	897.7	889.7	875.7	839.5	779.3
60°	660.8	660.8	668.8	676.8	684.9	692.9	690.9	688.9	676.8	652.7	604.6
62.5°	486.0	488.0	488.0	494.1	502.1	510.2	516.2	510.2	504.1	488.0	455.9
65°	347.4	345.4	347.4	353.5	359.5	367.5	371.6	369.6	363.5	351.5	327.4
67.5°	233.0	231.0	239.0	241.0	245.0	253.1	251.1	253.1	251.1	241.0	220.9
70°	152.6	148.6	152.6	150.6	156.7	158.7	162.7	164.7	162.7	156.7	150.6
72.5°	94.4	92.4	94.4	96.4	98.4	100.4	104.4	104.4	102.4	98.4	90.4
75°	60.2	54.2	56.2	52.2	56.2	56.2	60.2	62.3	60.2	60.2	56.2
77.5°	36.2	36.2	36.2	36.2	36.2	36.2	36.2	38.2	40.2	36.2	34.2
80°	18.1	18.1	20.1	20.1	20.1	22.1	20.1	20.1	20.1	22.1	16.1
82.5°	14.1	12.0	12.0	12.0	14.1	12.0	12.0	12.0	12.0	12.0	12.0
85°	6.0	8.0	6.0	4.0	6.0	6.0	8.0	6.0	6.0	6.0	8.0
87.5°	2.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	4.0	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°	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9
2.5°	3793.9	3789.9	3789.9	3787.9	3791.9	3787.9	3789.9	3787.9	3787.9	3791.9	3787.9
5°	3808.0	3810.0	3806.0	3804.0	3810.0	3810.0	3810.0	3806.0	3806.0	3808.0	3806.0
7.5°	3828.1	3832.1	3834.1	3836.1	3840.1	3842.2	3842.2	3840.1	3838.1	3844.2	3836.1
10°	3850.2	3856.2	3868.2	3874.3	3884.3	3884.3	3888.3	3888.3	3884.3	3888.3	3886.3
12.5°	3842.2	3878.3	3898.4	3912.4	3926.5	3938.5	3942.6	3944.6	3942.6	3950.6	3942.6
15°	3856.2	3886.3	3918.5	3942.6	3968.6	3982.7	3986.7	4002.8	4006.8	4008.8	3996.8
17.5°	3834.1	3888.3	3922.5	3958.6	3996.8	4022.9	4047.0	4057.1	4059.1	4063.1	4047.0
20°	3783.9	3844.2	3896.4	3948.6	3992.8	4032.9	4053.0	4081.1	4073.1	4089.2	4067.1
22.5°	3715.6	3783.9	3850.2	3918.5	3964.7	4012.9	4055.0	4075.1	4085.2	4085.2	4061.0
25°	3607.2	3687.5	3759.8	3830.1	3900.4	3958.6	4006.8	4037.0	4043.0	4041.0	4012.9
27.5°	3438.4	3524.8	3609.2	3689.5	3775.9	3844.2	3900.4	3936.5	3946.6	3946.6	3916.5
30°	3205.5	3297.8	3380.2	3476.6	3565.0	3641.3	3719.6	3751.8	3769.8	3769.8	3735.7
32.5°	2928.3	3006.6	3082.9	3177.3	3273.8	3360.1	3434.4	3478.6	3500.7	3498.7	3468.6
35°	2627.0	2665.2	2723.5	2793.7	2880.1	2960.4	3032.7	3074.9	3113.1	3111.1	3082.9
37.5°	2325.7	2315.7	2321.8	2347.9	2402.1	2458.3	2514.6	2554.8	2586.8	2600.9	2594.9
40°	2030.5	1978.3	1928.1	1910.0	1914.0	1934.1	1964.2	1994.4	2030.5	2048.6	2056.6
42.5°	1765.4	1677.1	1588.6	1522.4	1484.2	1472.2	1486.2	1496.3	1518.4	1544.5	1570.6
45°	1552.5	1434.0	1317.5	1215.1	1150.8	1112.6	1104.6	1112.6	1124.7	1150.8	1185.0
47.5°	1377.8	1239.2	1108.7	994.2	899.8	849.6	835.5	831.5	843.5	867.6	913.8
50°	1223.1	1084.5	940.0	807.4	709.0	652.7	632.7	624.6	638.7	656.7	698.9
52.5°	1054.4	917.8	769.2	640.7	538.3	480.0	457.9	445.9	453.9	478.0	520.2
55°	871.7	745.1	610.6	478.0	379.6	325.4	299.2	291.2	299.2	325.4	367.5
57.5°	688.9	582.4	470.0	345.4	257.1	202.9	176.7	168.7	190.8	200.8	245.0
60°	538.3	451.9	355.5	253.1	176.7	134.6	108.5	102.4	112.5	130.5	166.7
62.5°	403.7	349.5	273.1	180.7	130.5	86.3	72.3	66.3	72.3	86.3	114.5
65°	293.2	251.1	190.8	132.5	88.4	64.3	48.2	44.2	50.2	60.2	84.4
67.5°	200.8	168.7	132.5	92.4	60.2	40.2	34.2	34.2	36.2	44.2	62.3
70°	130.5	110.5	84.4	60.2	40.2	30.1	26.1	22.1	26.1	32.1	42.2
72.5°	82.4	70.3	54.2	42.2	30.1	22.1	18.1	16.1	20.1	24.1	32.1
75°	50.2	38.2	28.1	22.1	16.1	16.1	16.1	8.0	10.0	16.1	20.1
77.5°	30.1	26.1	22.1	18.1	14.1	8.0	8.0	8.0	10.0	12.0	18.1
80°	16.1	14.1	10.0	10.0	8.0	6.0	8.0	6.0	4.0	10.0	12.0
82.5°	10.0	8.0	8.0	8.0	10.0	4.0	6.0	4.0	6.0	8.0	6.0
85°	6.0	6.0	6.0	4.0	10.0	4.0	4.0	2.0	2.0	4.0	4.0
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°	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9	3783.9
2.5°	3789.9	3787.9	3789.9	3787.9	3787.9	3787.9	3789.9	3789.9	3787.9	3787.9	3791.9
5°	3806.0	3806.0	3806.0	3804.0	3802.0	3802.0	3806.0	3806.0	3799.9	3806.0	3806.0
7.5°	3840.1	3834.1	3840.1	3832.1	3828.1	3830.1	3832.1	3828.1	3824.1	3826.1	3826.1
10°	3884.3	3878.3	3878.3	3872.3	3866.2	3862.2	3858.2	3848.1	3838.1	3836.1	3828.1
12.5°	3936.5	3926.5	3920.5	3908.4	3898.4	3884.3	3872.3	3856.2	3836.1	3822.1	3808.0
15°	3988.7	3972.7	3958.6	3938.5	3916.5	3892.3	3866.2	3840.1	3808.0	3779.9	3755.8
17.5°	4030.9	4008.8	3982.7	3950.6	3918.5	3882.3	3844.2	3806.0	3759.8	3723.6	3695.5
20°	4045.0	4012.9	3978.7	3936.5	3894.3	3844.2	3796.0	3745.7	3693.5	3655.4	3623.2
22.5°	4026.9	3988.7	3946.6	3902.4	3846.1	3791.9	3735.7	3677.4	3631.2	3579.0	3548.9
25°	3976.7	3930.5	3884.3	3832.1	3777.9	3717.6	3657.4	3597.1	3540.9	3512.7	3474.6
27.5°	3874.3	3824.1	3773.8	3719.6	3657.4	3597.1	3534.9	3476.6	3428.4	3390.2	3368.2
30°	3693.5	3635.3	3577.0	3518.8	3464.5	3402.3	3344.0	3295.8	3247.6	3217.5	3195.4
32.5°	3416.3	3364.1	3305.9	3249.6	3199.5	3147.2	3099.0	3056.8	3022.7	3002.6	2986.5
35°	3042.8	2990.6	2946.4	2906.2	2864.0	2841.9	2811.8	2787.7	2773.6	2765.6	2763.6
37.5°	2572.8	2542.7	2528.6	2520.6	2512.5	2506.5	2510.5	2520.6	2528.6	2542.7	2558.7
40°	2070.7	2096.8	2104.8	2133.0	2159.1	2193.2	2231.4	2275.6	2311.7	2357.9	2390.0
42.5°	1612.8	1661.0	1717.2	1777.5	1841.7	1904.0	1980.3	2050.6	2114.9	2173.1	2223.3
45°	1239.2	1313.5	1397.9	1484.2	1570.6	1661.0	1753.4	1839.7	1916.0	1978.3	2030.5
47.5°	966.1	1048.4	1156.9	1263.3	1367.7	1474.2	1576.6	1667.0	1731.3	1791.5	1837.7
50°	765.2	859.6	978.1	1100.6	1215.1	1327.6	1436.0	1520.4	1584.7	1632.9	1667.0
52.5°	592.5	705.0	825.5	954.0	1076.5	1199.0	1299.4	1377.8	1430.0	1472.2	1498.3
55°	441.8	552.3	680.9	813.4	937.9	1056.4	1150.8	1219.1	1265.3	1289.4	1303.5
57.5°	319.3	419.8	548.3	680.9	793.3	905.8	982.1	1044.4	1070.5	1084.5	1090.6
60°	233.0	325.4	439.8	554.3	660.8	751.2	817.4	859.6	879.7	887.7	885.7
62.5°	170.7	251.1	349.5	445.9	532.2	606.5	658.8	686.9	696.9	700.9	694.9
65°	130.5	192.8	277.2	351.5	417.8	472.0	510.2	528.2	534.2	532.2	528.2
67.5°	96.4	144.6	206.9	263.1	311.3	353.5	373.6	389.7	393.6	387.6	381.6
70°	68.3	106.4	150.6	188.8	224.9	249.1	271.1	273.1	273.1	271.1	267.1
72.5°	48.2	74.3	102.4	128.6	150.6	168.7	176.7	182.8	180.7	178.7	174.8
75°	32.1	46.2	74.3	80.3	100.4	106.4	114.5	114.5	116.5	110.5	110.5
77.5°	20.1	32.1	44.2	52.2	60.2	68.3	72.3	72.3	74.3	72.3	72.3
80°	12.0	20.1	24.1	36.2	36.2	42.2	44.2	46.2	42.2	48.2	42.2
82.5°	8.0	12.0	18.1	18.1	22.1	26.1	26.1	28.1	28.1	26.1	26.1
85°	6.0	8.0	10.0	12.0	12.0	14.1	12.0	12.0	14.1	16.1	14.1
87.5°	2.0	4.0	2.0	4.0	4.0	8.0	6.0	6.0	6.0	8.0	8.0
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: P248408

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3783.9	3783.9	3783.9	3783.9
2.5°	3787.9	3789.9	3787.9	3787.9
5°	3806.0	3804.0	3806.0	3802.0
7.5°	3820.0	3820.0	3818.0	3818.0
10°	3820.0	3812.0	3812.0	3812.0
12.5°	3789.9	3779.9	3773.8	3769.8
15°	3737.7	3719.6	3711.6	3709.6
17.5°	3669.4	3653.3	3643.3	3637.3
20°	3591.1	3575.0	3563.0	3565.0
22.5°	3522.8	3504.7	3496.7	3492.6
25°	3454.5	3432.4	3426.4	3422.4
27.5°	3344.0	3332.0	3326.0	3320.0
30°	3175.3	3169.3	3159.3	3173.3
32.5°	2980.5	2970.5	2962.4	2968.5
35°	2765.6	2759.6	2765.6	2761.6
37.5°	2568.8	2574.8	2582.9	2586.8
40°	2414.2	2436.2	2444.3	2448.3
42.5°	2259.5	2285.6	2301.7	2311.7
45°	2068.7	2094.8	2112.9	2124.9
47.5°	1871.9	1894.0	1912.0	1910.0
50°	1693.1	1705.2	1713.2	1721.2
52.5°	1512.3	1512.3	1514.3	1514.3
55°	1307.5	1303.5	1301.5	1303.5
57.5°	1082.5	1078.5	1076.5	1070.5
60°	877.7	865.7	857.6	857.6
62.5°	686.9	672.8	666.8	664.8
65°	516.2	514.1	502.1	500.1
67.5°	373.6	365.5	357.5	359.5
70°	263.1	251.1	251.1	247.0
72.5°	170.7	164.7	162.7	162.7
75°	106.4	106.4	102.4	110.5
77.5°	70.3	70.3	68.3	70.3
80°	42.2	42.2	42.2	40.2
82.5°	26.1	28.1	26.1	26.1
85°	14.1	16.1	12.0	18.1
87.5°	8.0	10.0	8.0	10.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)