

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: P248507

Luminaire Tested: **LSR8B70D010 EC8B70940 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248507
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 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6851.0 lumens
Efficiency: N/A
Efficacy: 90.3 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

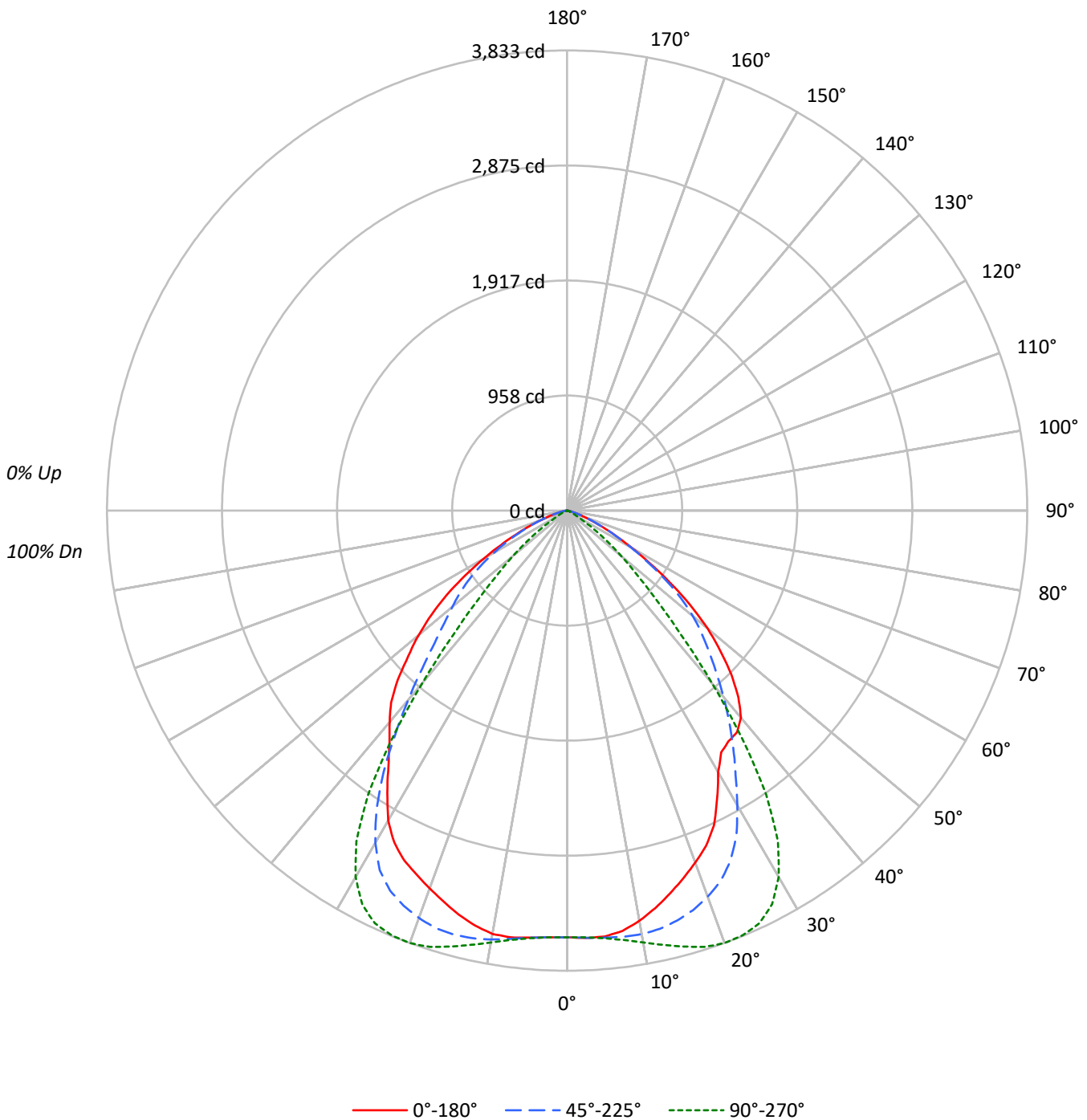
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	109595	109595	109595
5°	110246	110655	110537
10°	108628	114358	112113
15°	105452	120025	111233
20°	102390	125791	109882
25°	98459	129013	109370
30°	89604	125474	106129
35°	88268	108724	97645
40°	90668	75404	92568
45°	84405	45576	87039
50°	73211	28146	77558
55°	56186	14704	65820
60°	38274	5933	49677
65°	23808	3028	34272
70°	12929	1875	20917
75°	6743	894	12367
80°	3019	1012	6695
85°	2017	672	6015



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.8	5.0
10°-20°	1012.5	14.8
20°-30°	1544.7	22.5
30°-40°	1611.9	23.5
40°-50°	1210.7	17.7
50°-60°	744.9	10.9
60°-70°	303.2	4.4
70°-80°	71.4	1.0
80°-90°	9.8	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°	2899.0	42.3
0°-40°	4510.9	65.8
0°-60°	6466.6	94.4
0°-90°	6851.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6851.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3554	3554	3554	3554	3554	
5°	3562	3571	3575	3571	3571	337
15°	3303	3535	3760	3656	3484	931
25°	2894	3218	3792	3492	3214	1316
35°	2345	2411	2888	2669	2594	1481
45°	1936	1675	1045	1560	1996	1477
55°	1045	992	274	992	1224	939
65°	326	330	42	443	470	340
75°	57	57	8	100	104	68
85°	6	6	2	13	17	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°	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1
2.5°	3563.5	3557.8	3563.5	3563.5	3565.4	3561.6	3563.5	3565.4	3561.6	3561.6	3561.6
5°	3561.6	3557.8	3561.6	3559.7	3563.5	3563.5	3567.3	3567.3	3571.0	3571.0	3576.7
7.5°	3531.4	3523.9	3531.4	3537.1	3540.9	3548.4	3557.8	3565.4	3572.9	3580.5	3589.9
10°	3469.2	3469.2	3474.8	3486.2	3497.5	3510.7	3527.7	3546.5	3565.4	3582.4	3599.3
12.5°	3391.9	3386.2	3397.5	3412.6	3429.6	3450.3	3476.7	3505.0	3535.2	3569.2	3595.6
15°	3303.2	3297.5	3310.7	3325.8	3346.6	3376.8	3408.8	3446.6	3489.9	3535.2	3578.6
17.5°	3212.6	3210.7	3223.9	3244.7	3261.7	3293.7	3335.3	3380.5	3429.6	3489.9	3546.5
20°	3120.2	3118.3	3131.5	3148.5	3171.1	3201.3	3242.8	3295.6	3354.1	3422.0	3488.1
22.5°	3024.0	3025.9	3037.2	3056.1	3074.9	3107.0	3150.4	3203.2	3267.3	3340.9	3414.5
25°	2893.8	2884.4	2899.5	2918.4	2950.4	2976.8	3018.3	3074.9	3140.9	3218.3	3305.1
27.5°	2705.2	2703.3	2716.5	2733.5	2761.7	2793.8	2839.1	2897.6	2967.4	3052.3	3137.2
30°	2516.5	2520.3	2526.0	2543.0	2561.8	2593.9	2639.2	2688.2	2754.2	2835.3	2925.9
32.5°	2388.2	2388.2	2395.8	2407.1	2420.3	2437.3	2469.4	2505.2	2556.2	2612.7	2678.8
35°	2344.8	2337.3	2344.8	2346.7	2348.6	2352.4	2358.0	2369.4	2386.3	2410.9	2435.4
37.5°	2326.0	2320.3	2320.3	2312.8	2303.3	2292.0	2276.9	2260.0	2241.1	2216.6	2197.7
40°	2252.4	2248.7	2244.9	2237.3	2216.6	2194.0	2169.4	2129.8	2086.4	2026.0	1965.7
42.5°	2111.0	2107.2	2105.3	2090.2	2071.3	2044.9	2016.6	1975.1	1920.4	1843.1	1756.3
45°	1935.5	1927.9	1922.3	1909.1	1895.9	1873.2	1846.8	1809.1	1754.4	1675.2	1571.4
47.5°	1731.8	1728.0	1726.1	1720.5	1707.3	1694.0	1677.1	1646.9	1597.8	1522.4	1414.8
50°	1526.1	1518.6	1522.4	1520.5	1514.8	1505.4	1494.1	1473.3	1435.6	1367.7	1269.6
52.5°	1290.3	1290.3	1288.5	1294.1	1296.0	1294.1	1296.0	1273.4	1241.3	1190.3	1107.3
55°	1045.1	1045.1	1050.7	1058.3	1065.8	1067.7	1065.8	1056.4	1033.8	992.3	918.7
57.5°	814.9	811.2	822.5	833.8	841.4	848.9	843.2	835.7	822.5	788.5	731.9
60°	620.6	620.6	628.2	635.7	643.3	650.8	648.9	647.0	635.7	613.1	567.8
62.5°	456.5	458.4	458.4	464.1	471.6	479.2	484.8	479.2	473.5	458.4	428.2
65°	326.3	324.4	326.3	332.0	337.7	345.2	349.0	347.1	341.4	330.1	307.5
67.5°	218.8	216.9	224.5	226.4	230.1	237.7	235.8	237.7	235.8	226.4	207.5
70°	143.4	139.6	143.4	141.5	147.2	149.0	152.8	154.7	152.8	147.2	141.5
72.5°	88.7	86.8	88.7	90.6	92.5	94.3	98.1	98.1	96.2	92.5	84.9
75°	56.6	50.9	52.8	49.1	52.8	52.8	56.6	58.5	56.6	56.6	52.8
77.5°	34.0	34.0	34.0	34.0	34.0	34.0	34.0	35.9	37.7	34.0	32.1
80°	17.0	17.0	18.9	18.9	18.9	20.8	18.9	18.9	18.9	20.8	15.1
82.5°	13.2	11.3	11.3	11.3	13.2	11.3	11.3	11.3	11.3	11.3	11.3
85°	5.7	7.5	5.7	3.8	5.7	5.7	7.5	5.7	5.7	5.7	7.5
87.5°	1.9	1.9	0.0	0.0	0.0	1.9	0.0	1.9	1.9	3.8	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°	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1
2.5°	3563.5	3559.7	3559.7	3557.8	3561.6	3557.8	3559.7	3557.8	3557.8	3561.6	3557.8
5°	3576.7	3578.6	3574.8	3572.9	3578.6	3578.6	3578.6	3574.8	3574.8	3576.7	3574.8
7.5°	3595.6	3599.3	3601.2	3603.1	3606.9	3608.8	3608.8	3606.9	3605.0	3610.7	3603.1
10°	3616.3	3622.0	3633.3	3639.0	3648.4	3648.4	3652.2	3652.2	3648.4	3652.2	3650.3
12.5°	3608.8	3642.7	3661.6	3674.8	3688.0	3699.3	3703.1	3705.0	3703.1	3710.7	3703.1
15°	3622.0	3650.3	3680.5	3703.1	3727.6	3740.8	3744.6	3759.7	3763.5	3765.4	3754.1
17.5°	3601.2	3652.2	3684.2	3718.2	3754.1	3778.6	3801.2	3810.7	3812.5	3816.3	3801.2
20°	3554.1	3610.7	3659.7	3708.8	3750.3	3788.0	3806.9	3833.3	3825.7	3840.8	3820.1
22.5°	3489.9	3554.1	3616.3	3680.5	3723.9	3769.2	3808.8	3827.6	3837.1	3837.1	3814.4
25°	3388.1	3463.5	3531.4	3597.4	3663.5	3718.2	3763.5	3791.8	3797.4	3795.6	3769.2
27.5°	3229.6	3310.7	3390.0	3465.4	3546.5	3610.7	3663.5	3697.4	3706.9	3706.9	3678.6
30°	3010.8	3097.6	3174.9	3265.4	3348.5	3420.2	3493.7	3523.9	3540.9	3540.9	3508.8
32.5°	2750.4	2824.0	2895.7	2984.4	3074.9	3156.0	3225.8	3267.3	3288.1	3286.2	3257.9
35°	2467.5	2503.3	2558.1	2624.1	2705.2	2780.6	2848.5	2888.2	2924.0	2922.1	2895.7
37.5°	2184.5	2175.1	2180.8	2205.3	2256.2	2309.0	2361.8	2399.6	2429.7	2443.0	2437.3
40°	1907.2	1858.2	1811.0	1794.0	1797.8	1816.7	1845.0	1873.2	1907.2	1924.2	1931.7
42.5°	1658.2	1575.2	1492.2	1429.9	1394.1	1382.8	1396.0	1405.4	1426.2	1450.7	1475.2
45°	1458.2	1346.9	1237.5	1141.3	1080.9	1045.1	1037.5	1045.1	1056.4	1080.9	1113.0
47.5°	1294.1	1163.9	1041.3	933.8	845.1	798.0	784.8	781.0	792.3	814.9	858.3
50°	1148.8	1018.7	882.9	758.3	665.9	613.1	594.2	586.7	599.9	616.9	656.5
52.5°	990.4	862.1	722.5	601.8	505.6	450.9	430.1	418.8	426.3	449.0	488.6
55°	818.7	699.9	573.5	449.0	356.5	305.6	281.1	273.5	281.1	305.6	345.2
57.5°	647.0	547.1	441.4	324.4	241.5	190.5	166.0	158.5	179.2	188.6	230.1
60°	505.6	424.5	333.9	237.7	166.0	126.4	101.9	96.2	105.7	122.6	156.6
62.5°	379.2	328.2	256.5	169.8	122.6	81.1	67.9	62.3	67.9	81.1	107.5
65°	275.4	235.8	179.2	124.5	83.0	60.4	45.3	41.5	47.2	56.6	79.3
67.5°	188.6	158.5	124.5	86.8	56.6	37.7	32.1	32.1	34.0	41.5	58.5
70°	122.6	103.8	79.3	56.6	37.7	28.3	24.5	20.8	24.5	30.2	39.6
72.5°	77.4	66.0	50.9	39.6	28.3	20.8	17.0	15.1	18.9	22.6	30.2
75°	47.2	35.9	26.4	20.8	15.1	15.1	15.1	7.5	9.4	15.1	18.9
77.5°	28.3	24.5	20.8	17.0	13.2	7.5	7.5	7.5	9.4	11.3	17.0
80°	15.1	13.2	9.4	9.4	7.5	5.7	7.5	5.7	3.8	9.4	11.3
82.5°	9.4	7.5	7.5	7.5	9.4	3.8	5.7	3.8	5.7	7.5	5.7
85°	5.7	5.7	5.7	3.8	9.4	3.8	3.8	1.9	1.9	3.8	3.8
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°	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1	3554.1
2.5°	3559.7	3557.8	3559.7	3557.8	3557.8	3557.8	3559.7	3559.7	3557.8	3557.8	3561.6
5°	3574.8	3574.8	3574.8	3572.9	3571.0	3571.0	3574.8	3574.8	3569.2	3574.8	3574.8
7.5°	3606.9	3601.2	3606.9	3599.3	3595.6	3597.4	3599.3	3595.6	3591.8	3593.7	3593.7
10°	3648.4	3642.7	3642.7	3637.1	3631.4	3627.6	3623.9	3614.4	3605.0	3603.1	3595.6
12.5°	3697.4	3688.0	3682.4	3671.0	3661.6	3648.4	3637.1	3622.0	3603.1	3589.9	3576.7
15°	3746.5	3731.4	3718.2	3699.3	3678.6	3655.9	3631.4	3606.9	3576.7	3550.3	3527.7
17.5°	3786.1	3765.4	3740.8	3710.7	3680.5	3646.5	3610.7	3574.8	3531.4	3497.5	3471.1
20°	3799.3	3769.2	3737.1	3697.4	3657.8	3610.7	3565.4	3518.2	3469.2	3433.4	3403.2
22.5°	3782.4	3746.5	3706.9	3665.4	3612.5	3561.6	3508.8	3454.1	3410.7	3361.7	3333.4
25°	3735.2	3691.8	3648.4	3599.3	3548.4	3491.8	3435.2	3378.7	3325.8	3299.4	3263.6
27.5°	3639.0	3591.8	3544.6	3493.7	3435.2	3378.7	3320.2	3265.4	3220.2	3184.3	3163.6
30°	3469.2	3414.5	3359.8	3305.1	3254.1	3195.6	3140.9	3095.7	3050.4	3022.1	3001.4
32.5°	3208.8	3159.8	3105.1	3052.3	3005.1	2956.1	2910.8	2871.2	2839.1	2820.2	2805.1
35°	2858.0	2808.9	2767.4	2729.7	2690.1	2669.3	2641.0	2618.4	2605.2	2597.7	2595.8
37.5°	2416.5	2388.2	2375.0	2367.5	2359.9	2354.3	2358.0	2367.5	2375.0	2388.2	2403.3
40°	1944.9	1969.4	1977.0	2003.4	2027.9	2060.0	2095.9	2137.4	2171.3	2214.7	2244.9
42.5°	1514.8	1560.1	1612.9	1669.5	1729.9	1788.4	1860.0	1926.1	1986.4	2041.1	2088.3
45°	1163.9	1233.7	1313.0	1394.1	1475.2	1560.1	1646.9	1728.0	1799.7	1858.2	1907.2
47.5°	907.4	984.7	1086.6	1186.6	1284.7	1384.7	1480.9	1565.7	1626.1	1682.7	1726.1
50°	718.7	807.4	918.7	1033.8	1141.3	1246.9	1348.8	1428.0	1488.4	1533.7	1565.7
52.5°	556.5	662.1	775.3	896.1	1011.1	1126.2	1220.5	1294.1	1343.2	1382.8	1407.3
55°	415.0	518.8	639.5	764.0	881.0	992.3	1080.9	1145.1	1188.5	1211.1	1224.3
57.5°	299.9	394.3	515.0	639.5	745.1	850.8	922.5	981.0	1005.5	1018.7	1024.3
60°	218.8	305.6	413.1	520.7	620.6	705.5	767.8	807.4	826.3	833.8	831.9
62.5°	160.4	235.8	328.2	418.8	499.9	569.7	618.8	645.2	654.6	658.4	652.7
65°	122.6	181.1	260.3	330.1	392.4	443.3	479.2	496.2	501.8	499.9	496.2
67.5°	90.6	135.8	194.3	247.1	292.4	332.0	350.9	366.0	369.7	364.1	358.4
70°	64.2	100.0	141.5	177.3	211.3	233.9	254.7	256.5	256.5	254.7	250.9
72.5°	45.3	69.8	96.2	120.7	141.5	158.5	166.0	171.7	169.8	167.9	164.1
75°	30.2	43.4	69.8	75.5	94.3	100.0	107.5	107.5	109.4	103.8	103.8
77.5°	18.9	30.2	41.5	49.1	56.6	64.2	67.9	67.9	69.8	67.9	67.9
80°	11.3	18.9	22.6	34.0	34.0	39.6	41.5	43.4	39.6	45.3	39.6
82.5°	7.5	11.3	17.0	17.0	20.8	24.5	24.5	26.4	26.4	24.5	24.5
85°	5.7	7.5	9.4	11.3	11.3	13.2	11.3	11.3	13.2	15.1	13.2
87.5°	1.9	3.8	1.9	3.8	3.8	7.5	5.7	5.7	5.7	7.5	7.5
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: P248507

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3554.1	3554.1	3554.1	3554.1
2.5°	3557.8	3559.7	3557.8	3557.8
5°	3574.8	3572.9	3574.8	3571.0
7.5°	3588.0	3588.0	3586.1	3586.1
10°	3588.0	3580.5	3580.5	3580.5
12.5°	3559.7	3550.3	3544.6	3540.9
15°	3510.7	3493.7	3486.2	3484.3
17.5°	3446.6	3431.5	3422.0	3416.4
20°	3373.0	3357.9	3346.6	3348.5
22.5°	3308.8	3291.9	3284.3	3280.5
25°	3244.7	3223.9	3218.3	3214.5
27.5°	3140.9	3129.6	3124.0	3118.3
30°	2982.5	2976.8	2967.4	2980.6
32.5°	2799.5	2790.0	2782.5	2788.2
35°	2597.7	2592.0	2597.7	2593.9
37.5°	2412.8	2418.4	2426.0	2429.7
40°	2267.5	2288.3	2295.8	2299.6
42.5°	2122.3	2146.8	2161.9	2171.3
45°	1943.0	1967.5	1984.5	1995.9
47.5°	1758.2	1778.9	1795.9	1794.0
50°	1590.3	1601.6	1609.1	1616.7
52.5°	1420.5	1420.5	1422.4	1422.4
55°	1228.1	1224.3	1222.4	1224.3
57.5°	1016.8	1013.0	1011.1	1005.5
60°	824.4	813.1	805.5	805.5
62.5°	645.2	632.0	626.3	624.4
65°	484.8	482.9	471.6	469.7
67.5°	350.9	343.3	335.8	337.7
70°	247.1	235.8	235.8	232.0
72.5°	160.4	154.7	152.8	152.8
75°	100.0	100.0	96.2	103.8
77.5°	66.0	66.0	64.2	66.0
80°	39.6	39.6	39.6	37.7
82.5°	24.5	26.4	24.5	24.5
85°	13.2	15.1	11.3	17.0
87.5°	7.5	9.4	7.5	9.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)