

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: P249218

Luminaire Tested: **LSR8B70D010 EC8B70840 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B70D010 EC8B70840 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7543.0 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

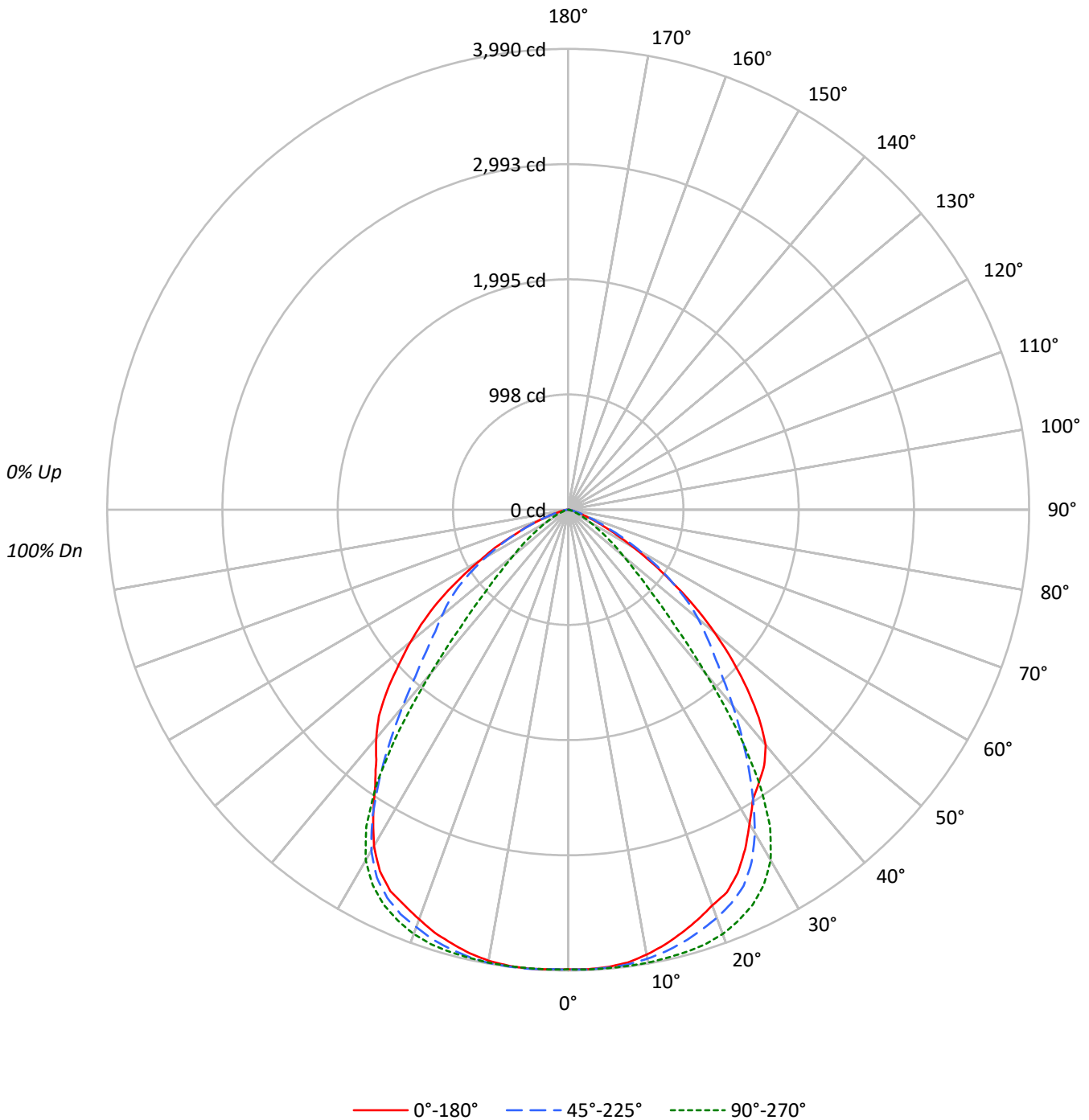
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	122722	122722	122722
5°	122993	123324	123457
10°	122477	124684	124149
15°	121120	126506	124121
20°	119664	128285	123799
25°	118111	128434	123926
30°	111741	124823	119728
35°	108404	108483	109609
40°	107059	74639	104052
45°	95395	44808	96699
50°	79323	29825	85468
55°	59492	20558	72470
60°	40315	13704	54679
65°	24319	8887	37562
70°	13479	4815	23108
75°	6112	2037	11962
80°	5310	2273	8346
85°	6050	3007	8314



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.8	5.0
10°-20°	1103.0	14.6
20°-30°	1674.2	22.2
30°-40°	1758.4	23.3
40°-50°	1318.4	17.5
50°-60°	845.9	11.2
60°-70°	361.9	4.8
70°-80°	85.5	1.1
80°-90°	15.9	0.2
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°	3157.1	41.9
0°-40°	4915.5	65.2
0°-60°	7079.8	93.9
0°-90°	7543.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7543.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3980	3980	3980	3980	3980	
5°	3973	3980	3984	3990	3988	377
15°	3794	3873	3963	3937	3888	1070
25°	3471	3593	3775	3706	3642	1586
35°	2880	2719	2882	2848	2912	1807
45°	2188	1788	1028	1737	2217	1675
55°	1107	1107	382	1154	1348	1004
65°	333	393	122	506	515	356
75°	51	60	17	103	100	75
85°	17	11	8	17	24	18
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°	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8
2.5°	3982.0	3986.3	3984.1	3984.1	3982.0	3984.1	3984.1	3988.4	3988.4	3984.1	3982.0
5°	3973.4	3977.7	3977.7	3973.4	3973.4	3984.1	3977.7	3982.0	3982.0	3979.8	3979.8
7.5°	3954.2	3954.2	3962.7	3956.4	3956.4	3962.7	3960.6	3964.9	3969.2	3971.3	3971.3
10°	3911.5	3915.8	3917.9	3917.9	3920.0	3926.4	3930.7	3939.3	3943.5	3947.8	3949.9
12.5°	3858.1	3864.5	3866.6	3864.5	3870.9	3879.4	3890.1	3900.8	3907.2	3915.8	3922.2
15°	3794.0	3794.0	3798.2	3804.7	3809.0	3821.8	3832.4	3845.2	3862.3	3873.0	3883.7
17.5°	3723.5	3727.8	3734.2	3734.2	3742.7	3764.1	3770.5	3789.7	3809.0	3819.6	3841.0
20°	3646.6	3650.8	3657.3	3661.6	3672.2	3689.3	3702.1	3719.2	3740.6	3759.8	3781.2
22.5°	3586.8	3578.2	3582.5	3586.8	3597.5	3612.4	3627.4	3648.7	3670.1	3689.3	3710.7
25°	3471.4	3473.5	3480.0	3484.2	3497.1	3509.9	3527.0	3552.6	3571.8	3593.2	3616.7
27.5°	3315.5	3317.6	3328.3	3328.3	3338.9	3360.3	3371.0	3392.4	3418.0	3439.4	3467.2
30°	3138.2	3142.4	3142.4	3151.0	3157.4	3168.1	3178.7	3200.1	3212.9	3232.2	3270.6
32.5°	2975.8	2980.1	2977.9	2975.8	2969.4	2967.2	2965.1	2969.4	2973.7	2980.1	2995.0
35°	2879.7	2869.0	2860.5	2845.5	2828.4	2807.0	2787.8	2762.2	2738.7	2719.4	2698.1
37.5°	2787.8	2785.7	2772.9	2751.5	2717.3	2678.9	2634.0	2578.5	2522.9	2463.1	2405.4
40°	2659.6	2653.2	2642.5	2612.6	2574.2	2527.2	2467.4	2399.0	2309.3	2217.4	2123.4
42.5°	2441.7	2443.9	2431.1	2407.5	2371.3	2326.4	2264.4	2189.7	2093.5	1984.6	1862.8
45°	2187.5	2187.5	2183.2	2164.0	2138.4	2102.1	2055.1	1993.1	1899.1	1788.0	1657.7
47.5°	1922.6	1924.8	1918.3	1914.1	1903.4	1879.9	1845.7	1798.7	1732.5	1625.7	1495.4
50°	1653.5	1653.5	1664.1	1662.0	1662.0	1653.5	1638.5	1610.7	1553.1	1467.6	1345.9
52.5°	1384.3	1388.6	1395.0	1403.5	1414.2	1431.3	1414.2	1401.4	1365.0	1298.8	1194.2
55°	1106.6	1110.9	1121.5	1136.5	1149.3	1166.4	1170.7	1170.7	1151.4	1106.6	1027.5
57.5°	869.5	863.0	871.6	884.4	901.5	918.6	931.4	946.4	944.2	914.3	850.2
60°	653.7	655.8	662.2	675.1	687.9	702.8	719.9	732.7	739.2	724.2	683.6
62.5°	476.4	476.4	484.9	497.7	504.2	525.5	536.2	542.6	549.0	546.9	521.2
65°	333.3	337.5	341.8	348.2	354.6	367.4	373.8	386.6	390.9	393.1	373.8
67.5°	235.0	228.6	232.9	237.1	243.5	252.1	264.9	264.9	271.3	271.3	258.5
70°	149.5	149.5	151.7	158.1	162.4	164.5	168.8	173.0	179.4	177.3	177.3
72.5°	100.4	98.3	100.4	102.6	104.7	111.1	111.1	113.2	117.5	119.6	111.1
75°	51.3	53.4	57.7	55.6	61.9	57.7	59.8	66.2	64.1	59.8	59.8
77.5°	42.7	42.7	42.7	40.6	44.8	44.8	42.7	47.0	44.8	44.8	42.7
80°	29.9	32.0	29.9	27.8	29.9	27.8	27.8	27.8	27.8	27.8	25.6
82.5°	23.5	19.2	21.4	19.2	21.4	21.4	19.2	17.1	17.1	19.2	17.1
85°	17.1	12.8	14.9	14.9	12.8	12.8	12.8	12.8	12.8	10.7	10.7
87.5°	10.7	6.4	6.4	6.4	8.5	8.5	8.5	6.4	8.5	8.5	4.3
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°	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8
2.5°	3986.3	3984.1	3988.4	3986.3	3986.3	3984.1	3986.3	3984.1	3988.4	3979.8	3982.0
5°	3986.3	3982.0	3984.1	3986.3	3988.4	3984.1	3984.1	3984.1	3988.4	3984.1	3986.3
7.5°	3977.7	3975.5	3982.0	3986.3	3984.1	3982.0	3986.3	3984.1	3988.4	3986.3	3990.5
10°	3960.6	3962.7	3967.0	3973.4	3975.5	3977.7	3982.0	3982.0	3988.4	3979.8	3984.1
12.5°	3935.0	3943.5	3954.2	3958.5	3967.0	3967.0	3971.3	3973.4	3977.7	3975.5	3982.0
15°	3902.9	3913.6	3926.4	3937.1	3947.8	3954.2	3960.6	3962.7	3969.2	3962.7	3964.9
17.5°	3864.5	3877.3	3896.5	3909.3	3926.4	3932.8	3941.4	3945.7	3952.1	3947.8	3949.9
20°	3811.1	3826.1	3847.4	3866.6	3877.3	3892.2	3902.9	3909.3	3913.6	3909.3	3911.5
22.5°	3736.3	3757.7	3785.4	3800.4	3821.8	3834.6	3836.7	3851.7	3862.3	3851.7	3856.0
25°	3648.7	3670.1	3691.5	3723.5	3742.7	3757.7	3772.6	3774.8	3785.4	3783.3	3781.2
27.5°	3503.4	3531.2	3567.5	3593.2	3618.8	3642.3	3659.4	3663.7	3674.4	3670.1	3672.2
30°	3304.8	3334.7	3368.9	3409.5	3445.8	3469.3	3490.6	3505.6	3516.2	3509.9	3507.7
32.5°	3022.8	3052.7	3089.0	3129.6	3172.4	3206.5	3232.2	3251.4	3264.2	3259.9	3249.2
35°	2700.2	2708.8	2732.3	2764.3	2800.6	2836.9	2860.5	2881.8	2896.7	2901.0	2901.0
37.5°	2369.1	2341.4	2324.3	2324.3	2345.6	2360.5	2381.9	2394.7	2418.2	2426.8	2433.2
40°	2048.6	1984.6	1924.8	1879.9	1850.0	1847.9	1847.9	1854.2	1875.6	1903.4	1929.0
42.5°	1762.4	1659.9	1568.0	1484.7	1424.9	1390.7	1375.8	1377.9	1395.0	1420.6	1463.3
45°	1533.8	1405.7	1290.3	1189.9	1108.7	1055.3	1029.7	1027.5	1040.3	1070.2	1117.3
47.5°	1356.5	1219.8	1089.5	974.1	886.6	828.9	799.0	790.4	799.0	826.7	882.3
50°	1209.1	1068.1	933.6	813.9	719.9	660.1	632.3	621.7	632.3	655.8	711.4
52.5°	1072.4	927.1	801.1	685.7	585.3	534.0	504.2	497.7	504.2	531.9	576.8
55°	914.3	790.4	666.5	551.1	463.6	412.3	388.8	382.4	388.8	414.5	461.4
57.5°	758.4	651.6	542.6	437.9	363.2	318.3	296.9	288.4	303.3	320.4	376.0
60°	613.1	527.7	435.8	343.9	282.0	241.4	224.3	222.2	226.4	247.8	286.2
62.5°	480.7	410.2	337.5	262.8	211.5	194.4	173.0	170.9	175.2	188.0	217.9
65°	346.1	301.2	245.7	192.3	151.7	128.2	119.6	121.8	126.0	134.6	162.4
67.5°	241.4	209.3	170.9	134.6	104.7	94.0	85.5	83.3	85.5	100.4	115.4
70°	162.4	143.1	115.4	102.6	72.7	57.7	59.8	53.4	61.9	61.9	74.7
72.5°	106.8	94.0	76.9	59.8	51.3	40.6	40.6	38.5	42.7	44.8	55.6
75°	55.6	42.7	42.7	29.9	21.4	10.7	19.2	17.1	14.9	17.1	21.4
77.5°	38.5	32.0	29.9	23.5	21.4	17.1	17.1	17.1	17.1	19.2	21.4
80°	23.5	23.5	17.1	14.9	12.8	10.7	12.8	12.8	12.8	12.8	14.9
82.5°	14.9	12.8	12.8	10.7	10.7	8.5	8.5	8.5	8.5	8.5	12.8
85°	12.8	8.5	8.5	6.4	8.5	14.9	6.4	8.5	8.5	8.5	6.4
87.5°	4.3	6.4	6.4	6.4	4.3	2.1	4.3	6.4	6.4	10.7	8.5
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°	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8	3979.8
2.5°	3986.3	3988.4	3988.4	3986.3	3986.3	3982.0	3990.5	3984.1	3986.3	3994.8	3988.4
5°	3990.5	3992.6	3992.6	3990.5	3990.5	3990.5	3992.6	3992.6	3990.5	3988.4	3992.6
7.5°	3999.1	3996.9	3996.9	3992.6	3992.6	3988.4	3992.6	3986.3	3990.5	3986.3	3992.6
10°	3988.4	3990.5	3988.4	3986.3	3986.3	3984.1	3984.1	3977.7	3979.8	3973.4	3977.7
12.5°	3982.0	3979.8	3979.8	3975.5	3971.3	3967.0	3964.9	3958.5	3958.5	3943.5	3949.9
15°	3964.9	3967.0	3960.6	3952.1	3947.8	3937.1	3932.8	3924.3	3915.8	3905.1	3907.2
17.5°	3949.9	3943.5	3935.0	3926.4	3909.3	3900.8	3892.2	3879.4	3875.1	3862.3	3858.1
20°	3905.1	3900.8	3890.1	3875.1	3864.5	3845.2	3836.7	3823.9	3813.2	3800.4	3794.0
22.5°	3847.4	3843.1	3830.3	3815.3	3798.2	3789.7	3781.2	3757.7	3747.0	3734.2	3732.0
25°	3774.8	3768.3	3755.5	3738.4	3729.9	3706.4	3697.8	3680.7	3676.5	3663.7	3661.6
27.5°	3663.7	3655.1	3640.2	3618.8	3603.9	3588.9	3580.4	3567.5	3563.3	3550.4	3548.3
30°	3497.1	3486.3	3456.4	3447.9	3422.3	3407.3	3407.3	3390.2	3392.4	3383.8	3383.8
32.5°	3234.3	3217.2	3193.7	3176.6	3159.5	3151.0	3151.0	3144.6	3148.8	3148.8	3153.1
35°	2886.1	2862.6	2849.7	2839.1	2839.1	2847.6	2873.3	2879.7	2892.5	2903.2	2911.7
37.5°	2439.6	2437.5	2452.4	2465.2	2497.3	2533.6	2578.5	2616.9	2653.2	2678.9	2704.5
40°	1956.8	2010.2	2052.9	2112.8	2161.9	2232.4	2313.6	2379.8	2441.7	2486.6	2533.6
42.5°	1527.4	1595.8	1685.5	1773.1	1860.7	1956.8	2063.6	2155.5	2236.7	2298.6	2347.7
45°	1189.9	1283.9	1392.9	1503.9	1617.1	1736.8	1847.9	1941.9	2027.3	2091.4	2140.5
47.5°	959.2	1061.7	1185.6	1307.4	1435.6	1561.6	1685.5	1766.7	1837.2	1888.4	1933.3
50°	792.5	901.5	1031.8	1170.7	1298.8	1424.9	1531.7	1610.7	1668.4	1713.3	1741.0
52.5°	662.2	777.6	916.5	1055.3	1183.5	1298.8	1395.0	1454.8	1501.8	1533.8	1559.4
55°	546.9	658.0	788.3	918.6	1044.6	1153.6	1232.6	1277.5	1313.8	1333.0	1348.0
57.5°	446.5	549.0	668.6	788.3	897.2	987.0	1048.9	1093.8	1110.9	1125.8	1123.7
60°	350.4	446.5	555.4	658.0	752.0	824.6	869.5	895.1	907.9	914.3	910.0
62.5°	275.6	363.2	446.5	536.2	604.6	666.5	709.3	709.3	715.6	717.8	724.2
65°	205.1	271.3	343.9	410.2	465.7	506.3	529.8	536.2	544.8	542.6	538.3
67.5°	151.7	200.8	254.2	303.3	341.8	367.4	384.5	399.5	397.4	393.1	390.9
70°	104.7	136.7	183.7	213.6	241.4	267.0	271.3	273.4	275.6	277.7	273.4
72.5°	72.7	96.1	121.8	147.4	164.5	175.2	185.9	188.0	188.0	188.0	185.9
75°	36.3	49.1	72.7	83.3	98.3	102.6	111.1	111.1	117.5	108.9	106.8
77.5°	32.0	38.5	51.3	59.8	66.2	72.7	74.7	81.2	79.0	74.7	76.9
80°	19.2	23.5	32.0	36.3	44.8	47.0	49.1	51.3	49.1	51.3	51.3
82.5°	14.9	17.1	21.4	21.4	27.8	27.8	29.9	29.9	32.0	32.0	32.0
85°	8.5	14.9	12.8	25.6	17.1	17.1	21.4	25.6	21.4	21.4	25.6
87.5°	8.5	8.5	6.4	8.5	8.5	8.5	10.7	12.8	12.8	14.9	12.8
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: P249218

CATALOG NUMBER: LSR8B70D010 EC8B70840 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3979.8	3979.8	3979.8	3979.8
2.5°	3986.3	3990.5	3984.1	3982.0
5°	3992.6	3992.6	3988.4	3988.4
7.5°	3992.6	3992.6	3986.3	3982.0
10°	3975.5	3975.5	3969.2	3964.9
12.5°	3943.5	3943.5	3941.4	3935.0
15°	3902.9	3902.9	3894.4	3888.0
17.5°	3847.4	3851.7	3841.0	3841.0
20°	3787.6	3785.4	3776.9	3772.6
22.5°	3725.6	3721.4	3719.2	3706.4
25°	3659.4	3655.1	3648.7	3642.3
27.5°	3546.2	3544.1	3537.6	3529.1
30°	3373.1	3371.0	3362.5	3362.5
32.5°	3148.8	3146.7	3138.2	3140.3
35°	2916.0	2924.5	2920.3	2911.7
37.5°	2721.6	2728.0	2732.3	2728.0
40°	2559.2	2578.5	2580.6	2584.9
42.5°	2386.2	2411.8	2420.4	2424.6
45°	2179.0	2202.5	2221.7	2217.4
47.5°	1967.5	1984.6	2001.7	1988.8
50°	1764.6	1775.2	1781.6	1781.6
52.5°	1572.3	1572.3	1570.2	1572.3
55°	1352.2	1352.2	1343.7	1348.0
57.5°	1121.5	1125.8	1119.4	1108.7
60°	907.9	897.2	892.9	886.6
62.5°	707.1	707.1	692.2	711.4
65°	529.8	523.4	517.0	514.8
67.5°	384.5	382.4	376.0	373.8
70°	271.3	262.8	260.6	256.3
72.5°	181.6	181.6	177.3	177.3
75°	111.1	100.4	98.3	100.4
77.5°	76.9	74.7	74.7	72.7
80°	51.3	49.1	53.4	47.0
82.5°	32.0	34.2	32.0	34.2
85°	21.4	25.6	23.5	23.5
87.5°	12.8	12.8	12.8	12.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)