

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: P249596

Luminaire Tested: **LSR8B70D010 EC8B70950 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249596
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 EC8B70950 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6959.0 lumens
Efficiency: N/A
Efficacy: 91.7 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

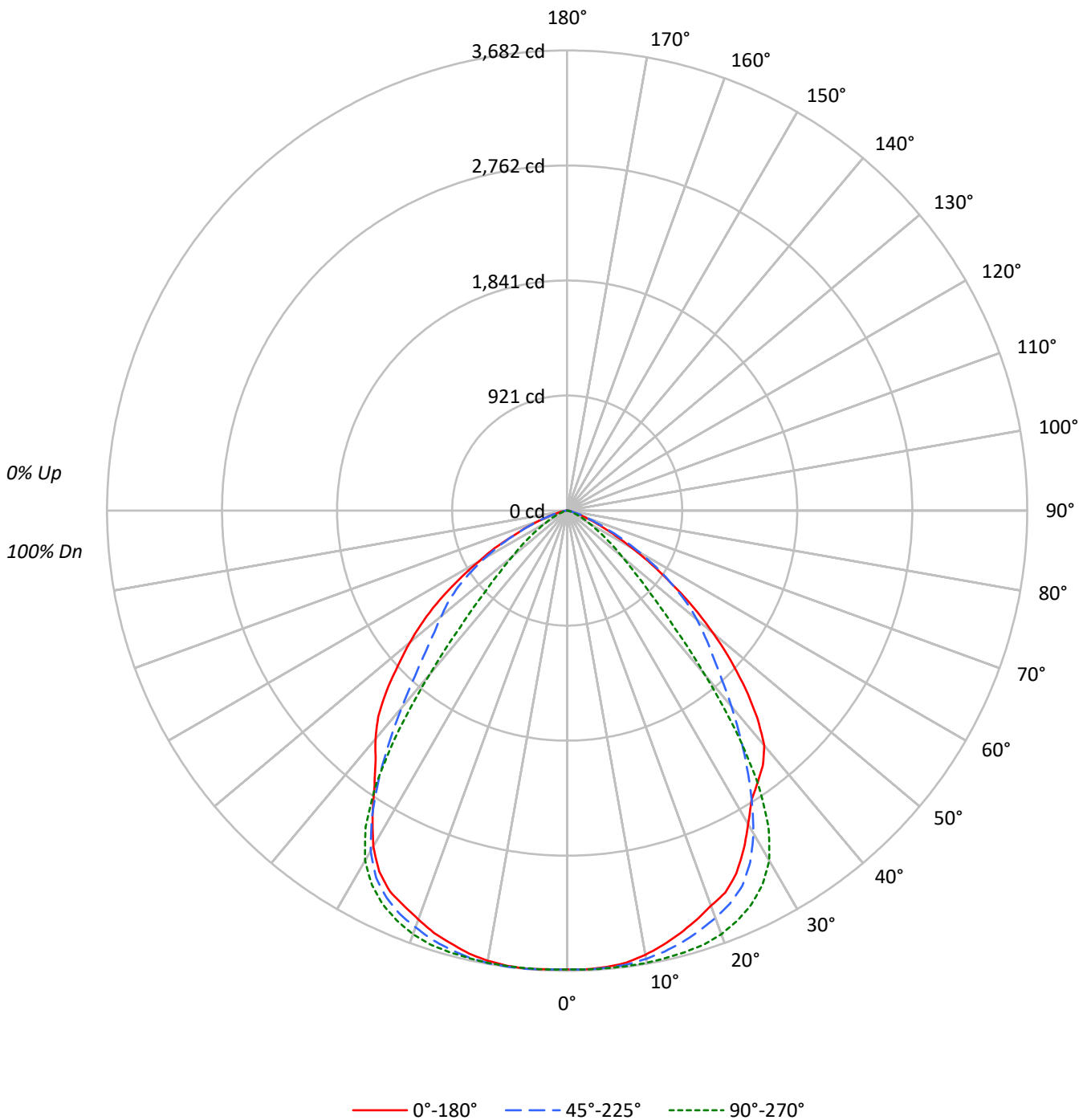
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	113222	113222	113222
5°	113472	113778	113899
10°	112993	115031	114536
15°	111741	116711	114512
20°	110401	118355	114214
25°	108966	118489	114331
30°	103089	115159	110456
35°	100009	100085	101124
40°	98771	68862	95998
45°	88012	41341	89211
50°	73182	27512	78853
55°	54885	18967	66858
60°	37195	12643	50442
65°	22437	8201	34658
70°	12442	4445	21323
75°	5635	1882	11033
80°	4901	2095	7707
85°	5590	2795	7678



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.4	5.0
10°-20°	1017.6	14.6
20°-30°	1544.6	22.2
30°-40°	1622.3	23.3
40°-50°	1216.3	17.5
50°-60°	780.4	11.2
60°-70°	333.8	4.8
70°-80°	78.9	1.1
80°-90°	14.7	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°	2912.7	41.9
0°-40°	4534.9	65.2
0°-60°	6531.6	93.9
0°-90°	6959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6959.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3672	3672	3672	3672	3672	
5°	3666	3672	3676	3682	3680	348
15°	3500	3573	3656	3632	3587	987
25°	3203	3315	3482	3419	3360	1463
35°	2657	2509	2659	2627	2686	1667
45°	2018	1650	948	1602	2046	1546
55°	1021	1021	353	1064	1244	926
65°	308	363	112	467	475	328
75°	47	55	16	95	93	69
85°	16	10	8	16	22	17
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°	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7
2.5°	3673.7	3677.6	3675.7	3675.7	3673.7	3675.7	3675.7	3679.6	3679.6	3675.7	3673.7
5°	3665.8	3669.7	3669.7	3665.8	3665.8	3675.7	3669.7	3673.7	3673.7	3671.7	3671.7
7.5°	3648.1	3648.1	3655.9	3650.1	3650.1	3655.9	3654.0	3657.9	3661.9	3663.8	3663.8
10°	3608.6	3612.6	3614.6	3614.6	3616.5	3622.4	3626.4	3634.3	3638.2	3642.1	3644.1
12.5°	3559.4	3565.3	3567.3	3565.3	3571.2	3579.1	3589.0	3598.8	3604.7	3612.6	3618.5
15°	3500.2	3500.2	3504.2	3510.1	3514.1	3525.9	3535.7	3547.5	3563.3	3573.2	3583.0
17.5°	3435.2	3439.2	3445.1	3445.1	3453.0	3472.6	3478.6	3496.3	3514.1	3523.9	3543.6
20°	3364.3	3368.2	3374.1	3378.1	3387.9	3403.7	3415.5	3431.3	3451.0	3468.7	3488.4
22.5°	3309.1	3301.2	3305.1	3309.1	3318.9	3332.7	3346.5	3366.2	3385.9	3403.7	3423.4
25°	3202.6	3204.6	3210.5	3214.4	3226.3	3238.1	3253.9	3277.5	3295.3	3315.0	3336.6
27.5°	3058.8	3060.8	3070.6	3070.6	3080.4	3100.2	3110.0	3129.7	3153.4	3173.1	3198.7
30°	2895.2	2899.1	2899.1	2907.0	2912.9	2922.8	2932.6	2952.4	2964.2	2981.9	3017.4
32.5°	2745.4	2749.3	2747.4	2745.4	2739.5	2737.5	2735.5	2739.5	2743.4	2749.3	2763.1
35°	2656.7	2646.9	2639.0	2625.2	2609.4	2589.7	2572.0	2548.3	2526.6	2508.9	2489.2
37.5°	2572.0	2570.0	2558.2	2538.4	2506.9	2471.5	2430.1	2378.8	2327.6	2272.4	2219.2
40°	2453.7	2447.8	2437.9	2410.4	2374.9	2331.5	2276.4	2213.3	2130.5	2045.7	1959.0
42.5°	2252.7	2254.7	2242.8	2221.1	2187.7	2146.2	2089.1	2020.1	1931.5	1830.9	1718.6
45°	2018.2	2018.2	2014.2	1996.5	1972.8	1939.3	1896.0	1838.8	1752.1	1649.6	1529.4
47.5°	1773.8	1775.7	1769.8	1765.9	1756.0	1734.4	1702.8	1659.5	1598.4	1499.8	1379.6
50°	1525.5	1525.5	1535.3	1533.3	1533.3	1525.5	1511.7	1486.0	1432.8	1354.0	1241.7
52.5°	1277.1	1281.1	1287.0	1294.9	1304.7	1320.5	1304.7	1292.9	1259.4	1198.3	1101.7
55°	1020.9	1024.9	1034.7	1048.5	1060.3	1076.1	1080.0	1080.0	1062.3	1020.9	948.0
57.5°	802.2	796.2	804.1	815.9	831.7	847.5	859.3	873.1	871.1	843.5	784.4
60°	603.1	605.1	610.9	622.8	634.6	648.4	664.2	676.0	681.9	668.1	630.7
62.5°	439.5	439.5	447.4	459.2	465.1	484.8	494.7	500.6	506.5	504.5	480.9
65°	307.5	311.4	315.3	321.3	327.2	339.0	344.9	356.7	360.7	362.6	344.9
67.5°	216.8	210.9	214.8	218.7	224.7	232.6	244.4	244.4	250.3	250.3	238.5
70°	138.0	138.0	139.9	145.8	149.8	151.8	155.7	159.6	165.6	163.6	163.6
72.5°	92.6	90.7	92.6	94.6	96.6	102.5	102.5	104.5	108.4	110.4	102.5
75°	47.3	49.3	53.2	51.3	57.1	53.2	55.2	61.1	59.1	55.2	55.2
77.5°	39.4	39.4	39.4	37.5	41.4	41.4	39.4	43.4	41.4	41.4	39.4
80°	27.6	29.6	27.6	25.6	27.6	25.6	25.6	25.6	25.6	25.6	23.6
82.5°	21.7	17.7	19.7	17.7	19.7	19.7	17.7	15.8	15.8	17.7	15.8
85°	15.8	11.8	13.8	13.8	11.8	11.8	11.8	11.8	11.8	9.8	9.8
87.5°	9.8	5.9	5.9	5.9	7.9	7.9	7.9	5.9	7.9	7.9	4.0
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°	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7
2.5°	3677.6	3675.7	3679.6	3677.6	3677.6	3675.7	3677.6	3675.7	3679.6	3671.7	3673.7
5°	3677.6	3673.7	3675.7	3677.6	3679.6	3675.7	3675.7	3675.7	3679.6	3675.7	3677.6
7.5°	3669.7	3667.8	3673.7	3677.6	3675.7	3673.7	3677.6	3675.7	3679.6	3677.6	3681.5
10°	3654.0	3655.9	3659.9	3665.8	3667.8	3669.7	3673.7	3673.7	3679.6	3671.7	3675.7
12.5°	3630.3	3638.2	3648.1	3652.0	3659.9	3659.9	3663.8	3665.8	3669.7	3667.8	3673.7
15°	3600.8	3610.6	3622.4	3632.3	3642.1	3648.1	3654.0	3655.9	3661.9	3655.9	3657.9
17.5°	3565.3	3577.1	3594.8	3606.7	3622.4	3628.4	3636.2	3640.2	3646.1	3642.1	3644.1
20°	3516.0	3529.8	3549.5	3567.3	3577.1	3590.9	3600.8	3606.7	3610.6	3606.7	3608.6
22.5°	3447.0	3466.8	3492.4	3506.2	3525.9	3537.7	3539.7	3553.5	3563.3	3553.5	3557.4
25°	3366.2	3385.9	3405.7	3435.2	3453.0	3466.8	3480.5	3482.5	3492.4	3490.4	3488.4
27.5°	3232.2	3257.8	3291.3	3315.0	3338.6	3360.3	3376.1	3380.0	3389.9	3385.9	3387.9
30°	3048.9	3076.5	3108.1	3145.5	3179.0	3200.7	3220.4	3234.2	3244.0	3238.1	3236.1
32.5°	2788.8	2816.4	2849.9	2887.3	2926.7	2958.2	2981.9	2999.7	3011.5	3007.5	2997.7
35°	2491.2	2499.0	2520.7	2550.3	2583.8	2617.3	2639.0	2658.7	2672.5	2676.4	2676.4
37.5°	2185.7	2160.1	2144.3	2144.3	2164.0	2177.8	2197.5	2209.3	2231.0	2238.9	2244.8
40°	1890.0	1830.9	1775.7	1734.4	1706.8	1704.8	1704.8	1710.7	1730.4	1756.0	1779.7
42.5°	1626.0	1531.3	1446.6	1369.7	1314.6	1283.0	1269.2	1271.2	1287.0	1310.6	1350.0
45°	1415.1	1296.8	1190.4	1097.8	1022.9	973.6	950.0	948.0	959.8	987.4	1030.8
47.5°	1251.5	1125.3	1005.1	898.7	817.9	764.7	737.1	729.2	737.1	762.7	814.0
50°	1115.5	985.5	861.3	750.9	664.2	609.0	583.4	573.5	583.4	605.1	656.3
52.5°	989.4	855.3	739.1	632.6	540.0	492.7	465.1	459.2	465.1	490.7	532.1
55°	843.5	729.2	614.9	508.5	427.7	380.4	358.7	352.8	358.7	382.4	425.7
57.5°	699.7	601.1	500.6	404.0	335.1	293.6	274.0	266.1	279.8	295.6	346.9
60°	565.6	486.8	402.0	317.3	260.2	222.7	206.9	205.0	208.9	228.6	264.1
62.5°	443.5	378.4	311.4	242.4	195.1	179.3	159.6	157.7	161.6	173.4	201.0
65°	319.3	277.9	226.7	177.4	139.9	118.2	110.4	112.4	116.3	124.2	149.8
67.5°	222.7	193.1	157.7	124.2	96.6	86.7	78.8	76.9	78.8	92.6	106.4
70°	149.8	132.0	106.4	94.6	67.0	53.2	55.2	49.3	57.1	57.1	69.0
72.5°	98.5	86.7	70.9	55.2	47.3	37.5	37.5	35.5	39.4	41.4	51.3
75°	51.3	39.4	39.4	27.6	19.7	9.8	17.7	15.8	13.8	15.8	19.7
77.5°	35.5	29.6	27.6	21.7	19.7	15.8	15.8	15.8	15.8	17.7	19.7
80°	21.7	21.7	15.8	13.8	11.8	9.8	11.8	11.8	11.8	11.8	13.8
82.5°	13.8	11.8	11.8	9.8	9.8	7.9	7.9	7.9	7.9	7.9	11.8
85°	11.8	7.9	7.9	5.9	7.9	13.8	5.9	7.9	7.9	7.9	5.9
87.5°	4.0	5.9	5.9	5.9	4.0	2.0	4.0	5.9	5.9	9.8	7.9
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°	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7	3671.7
2.5°	3677.6	3679.6	3679.6	3677.6	3677.6	3673.7	3681.5	3675.7	3677.6	3685.5	3679.6
5°	3681.5	3683.5	3683.5	3681.5	3681.5	3681.5	3683.5	3683.5	3681.5	3679.6	3683.5
7.5°	3689.5	3687.5	3687.5	3683.5	3683.5	3679.6	3683.5	3677.6	3681.5	3677.6	3683.5
10°	3679.6	3681.5	3679.6	3677.6	3677.6	3675.7	3675.7	3669.7	3671.7	3665.8	3669.7
12.5°	3673.7	3671.7	3671.7	3667.8	3663.8	3659.9	3657.9	3652.0	3652.0	3638.2	3644.1
15°	3657.9	3659.9	3654.0	3646.1	3642.1	3632.3	3628.4	3620.4	3612.6	3602.7	3604.7
17.5°	3644.1	3638.2	3630.3	3622.4	3606.7	3598.8	3590.9	3579.1	3575.1	3563.3	3559.4
20°	3602.7	3598.8	3589.0	3575.1	3565.3	3547.5	3539.7	3527.9	3518.0	3506.2	3500.2
22.5°	3549.5	3545.6	3533.7	3519.9	3504.2	3496.3	3488.4	3466.8	3456.9	3445.1	3443.1
25°	3482.5	3476.6	3464.8	3449.0	3441.1	3419.4	3411.5	3395.8	3391.9	3380.0	3378.1
27.5°	3380.0	3372.1	3358.3	3338.6	3324.8	3311.0	3303.2	3291.3	3287.4	3275.5	3273.6
30°	3226.3	3216.4	3188.8	3181.0	3157.3	3143.5	3143.5	3127.7	3129.7	3121.9	3121.9
32.5°	2983.9	2968.1	2946.4	2930.7	2914.9	2907.0	2907.0	2901.1	2905.0	2905.0	2909.0
35°	2662.6	2641.0	2629.1	2619.3	2619.3	2627.1	2650.8	2656.7	2668.6	2678.4	2686.3
37.5°	2250.7	2248.8	2262.6	2274.4	2303.9	2337.5	2378.8	2414.3	2447.8	2471.5	2495.1
40°	1805.3	1854.6	1894.0	1949.2	1994.5	2059.5	2134.4	2195.5	2252.7	2294.1	2337.5
42.5°	1409.1	1472.2	1555.0	1635.8	1716.6	1805.3	1903.9	1988.6	2063.5	2120.6	2166.0
45°	1097.8	1184.5	1285.0	1387.5	1491.9	1602.3	1704.8	1791.5	1870.4	1929.5	1974.8
47.5°	884.9	979.5	1093.8	1206.2	1324.4	1440.7	1555.0	1629.9	1694.9	1742.2	1783.6
50°	731.2	831.7	951.9	1080.0	1198.3	1314.6	1413.1	1486.0	1539.3	1580.6	1606.2
52.5°	610.9	717.4	845.5	973.6	1091.8	1198.3	1287.0	1342.2	1385.5	1415.1	1438.7
55°	504.5	607.0	727.3	847.5	963.8	1064.2	1137.2	1178.6	1212.1	1229.8	1243.6
57.5°	411.9	506.5	616.9	727.3	827.8	910.6	967.7	1009.1	1024.9	1038.6	1036.7
60°	323.2	411.9	512.4	607.0	693.7	760.7	802.2	825.8	837.6	843.5	839.6
62.5°	254.2	335.1	411.9	494.7	557.8	614.9	654.3	654.3	660.2	662.2	668.1
65°	189.2	250.3	317.3	378.4	429.6	467.1	488.8	494.7	502.6	500.6	496.7
67.5°	139.9	185.3	234.5	279.8	315.3	339.0	354.7	368.6	366.6	362.6	360.7
70°	96.6	126.2	169.5	197.1	222.7	246.4	250.3	252.3	254.2	256.2	252.3
72.5°	67.0	88.7	112.4	136.0	151.8	161.6	171.5	173.4	173.4	173.4	171.5
75°	33.5	45.3	67.0	76.9	90.7	94.6	102.5	102.5	108.4	100.5	98.5
77.5°	29.6	35.5	47.3	55.2	61.1	67.0	69.0	74.9	72.9	69.0	70.9
80°	17.7	21.7	29.6	33.5	41.4	43.4	45.3	47.3	45.3	47.3	47.3
82.5°	13.8	15.8	19.7	19.7	25.6	25.6	27.6	27.6	29.6	29.6	29.6
85°	7.9	13.8	11.8	23.6	15.8	15.8	19.7	23.6	19.7	19.7	23.6
87.5°	7.9	7.9	5.9	7.9	7.9	7.9	9.8	11.8	11.8	13.8	11.8
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: P249596

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3671.7	3671.7	3671.7	3671.7
2.5°	3677.6	3681.5	3675.7	3673.7
5°	3683.5	3683.5	3679.6	3679.6
7.5°	3683.5	3683.5	3677.6	3673.7
10°	3667.8	3667.8	3661.9	3657.9
12.5°	3638.2	3638.2	3636.2	3630.3
15°	3600.8	3600.8	3592.9	3587.0
17.5°	3549.5	3553.5	3543.6	3543.6
20°	3494.3	3492.4	3484.5	3480.5
22.5°	3437.2	3433.2	3431.3	3419.4
25°	3376.1	3372.1	3366.2	3360.3
27.5°	3271.6	3269.7	3263.7	3255.9
30°	3112.0	3110.0	3102.1	3102.1
32.5°	2905.0	2903.1	2895.2	2897.2
35°	2690.2	2698.1	2694.2	2686.3
37.5°	2510.9	2516.8	2520.7	2516.8
40°	2361.1	2378.8	2380.8	2384.8
42.5°	2201.5	2225.1	2233.0	2236.9
45°	2010.3	2032.0	2049.7	2045.7
47.5°	1815.1	1830.9	1846.7	1834.9
50°	1627.9	1637.8	1643.7	1643.7
52.5°	1450.6	1450.6	1448.6	1450.6
55°	1247.5	1247.5	1239.7	1243.6
57.5°	1034.7	1038.6	1032.7	1022.9
60°	837.6	827.8	823.8	817.9
62.5°	652.4	652.4	638.6	656.3
65°	488.8	482.9	476.9	475.0
67.5°	354.7	352.8	346.9	344.9
70°	250.3	242.4	240.4	236.5
72.5°	167.5	167.5	163.6	163.6
75°	102.5	92.6	90.7	92.6
77.5°	70.9	69.0	69.0	67.0
80°	47.3	45.3	49.3	43.4
82.5°	29.6	31.5	29.6	31.5
85°	19.7	23.6	21.7	21.7
87.5°	11.8	11.8	11.8	11.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)