

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: P248444

Luminaire Tested: **LSR8B70D010 EC8B70830 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248444
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 EC8B70830 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7397.0 lumens
Efficiency: N/A
Efficacy: 97.5 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

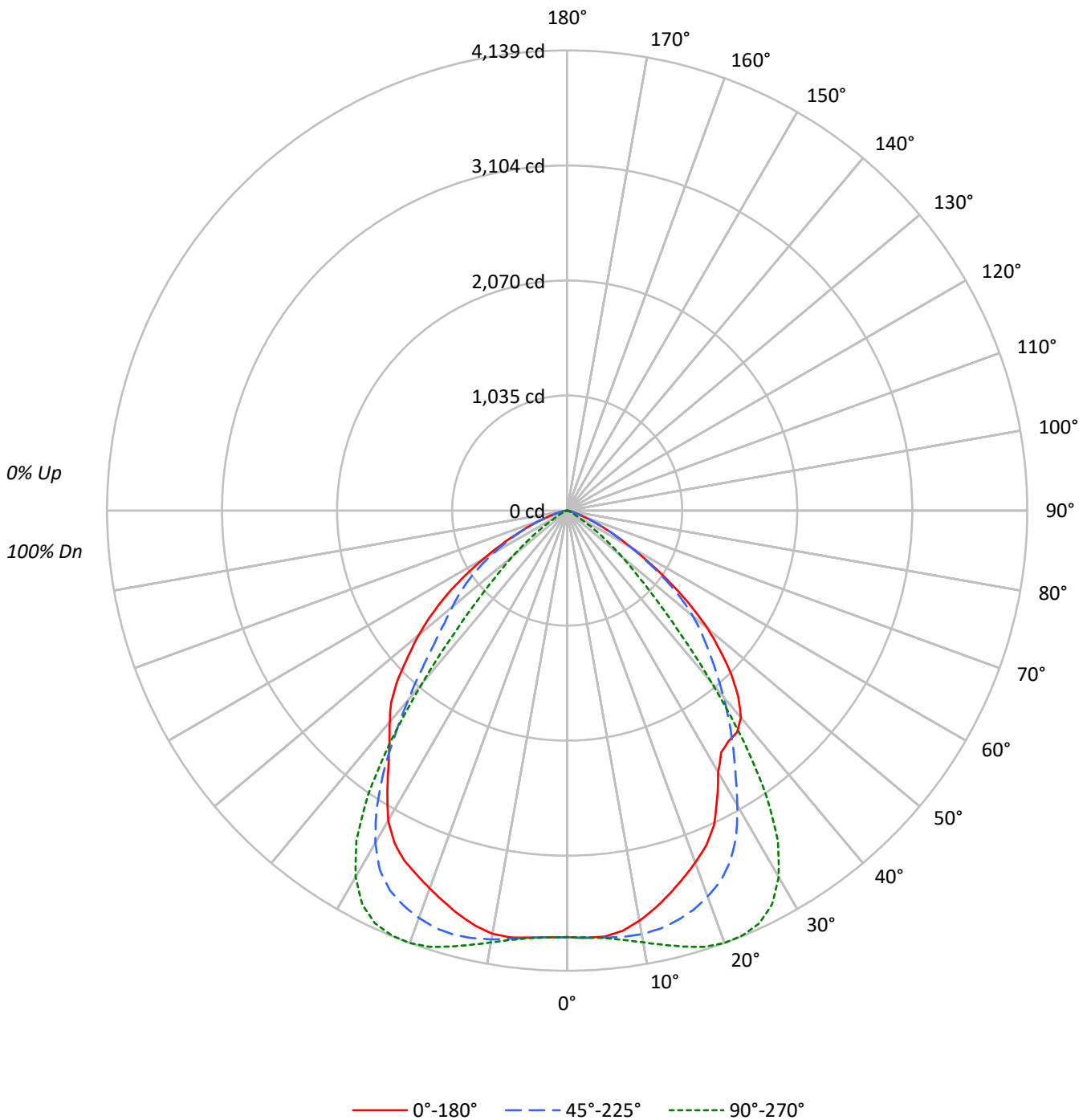
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P248444

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WH

Luminous Intensity Polar Plot





TEST NUMBER: P248444

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WH

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°	118328	118328	118328
5°	119034	119474	119347
10°	117285	123473	121049
15°	113854	129590	120095
20°	110552	135816	118637
25°	106305	139295	118087
30°	96747	135476	114586
35°	95304	117390	105426
40°	97894	81414	99943
45°	91134	49209	93978
50°	79050	30386	83737
55°	60664	15876	71067
60°	41327	6408	53637
65°	25706	3269	37001
70°	13957	2020	22585
75°	7280	965	13344
80°	3250	1083	7227
85°	2158	708	6475



TEST NUMBER: P248444

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.0	5.0
10°-20°	1093.2	14.8
20°-30°	1667.8	22.5
30°-40°	1740.4	23.5
40°-50°	1307.2	17.7
50°-60°	804.3	10.9
60°-70°	327.3	4.4
70°-80°	77.1	1.0
80°-90°	10.6	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°	3130.0	42.3
0°-40°	4870.4	65.8
0°-60°	6981.9	94.4
0°-90°	7397.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7397.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3837	3837	3837	3837	3837	
5°	3846	3856	3860	3856	3856	364
15°	3566	3817	4059	3947	3762	1005
25°	3124	3475	4094	3770	3471	1420
35°	2532	2603	3118	2882	2801	1599
45°	2090	1809	1128	1684	2155	1594
55°	1128	1071	295	1071	1322	1014
65°	352	356	45	479	507	367
75°	61	61	8	108	112	74
85°	6	6	2	14	18	9
90°	0	0	0	0	0	



TEST NUMBER: P248444

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3
2.5°	3847.5	3841.4	3847.5	3847.5	3849.6	3845.5	3847.5	3849.6	3845.5	3845.5	3845.5
5°	3845.5	3841.4	3845.5	3843.4	3847.5	3847.5	3851.6	3851.6	3855.6	3855.6	3861.8
7.5°	3812.9	3804.8	3812.9	3819.0	3823.0	3831.2	3841.4	3849.6	3857.7	3865.9	3876.0
10°	3745.7	3745.7	3751.8	3764.0	3776.2	3790.5	3808.8	3829.2	3849.6	3867.9	3886.2
12.5°	3662.2	3656.0	3668.3	3684.6	3702.9	3725.3	3753.8	3784.4	3817.0	3853.6	3882.2
15°	3566.4	3560.3	3574.6	3590.9	3613.3	3645.9	3680.5	3721.2	3768.1	3817.0	3863.8
17.5°	3468.7	3466.6	3480.9	3503.3	3521.6	3556.2	3601.1	3649.9	3702.9	3768.1	3829.2
20°	3368.9	3366.8	3381.1	3399.4	3423.9	3456.4	3501.3	3558.3	3621.4	3694.8	3766.0
22.5°	3265.0	3267.0	3279.2	3299.6	3320.0	3354.6	3401.4	3458.5	3527.7	3607.2	3686.6
25°	3124.4	3114.3	3130.6	3150.9	3185.5	3214.0	3258.9	3320.0	3391.3	3474.8	3568.5
27.5°	2920.7	2918.7	2933.0	2951.3	2981.9	3016.5	3065.4	3128.5	3203.9	3295.5	3387.2
30°	2717.1	2721.2	2727.3	2745.6	2766.0	2800.6	2849.5	2902.5	2973.7	3061.3	3159.1
32.5°	2578.6	2578.6	2586.7	2599.0	2613.2	2631.5	2666.2	2704.9	2759.9	2821.0	2892.2
35°	2531.7	2523.6	2531.7	2533.8	2535.8	2539.9	2546.0	2558.2	2576.5	2603.0	2629.5
37.5°	2511.4	2505.3	2505.3	2497.1	2486.9	2474.7	2458.4	2440.1	2419.7	2393.2	2372.9
40°	2431.9	2427.9	2423.8	2415.7	2393.2	2368.8	2342.3	2299.5	2252.7	2187.5	2122.4
42.5°	2279.2	2275.1	2273.1	2256.8	2236.4	2207.9	2177.3	2132.5	2073.5	1989.9	1896.2
45°	2089.8	2081.6	2075.5	2061.3	2047.0	2022.5	1994.0	1953.3	1894.2	1808.7	1696.7
47.5°	1869.8	1865.7	1863.7	1857.6	1843.3	1829.0	1810.7	1778.1	1725.2	1643.7	1527.6
50°	1647.8	1639.6	1643.7	1641.7	1635.6	1625.4	1613.1	1590.7	1550.0	1476.7	1370.8
52.5°	1393.1	1393.1	1391.2	1397.2	1399.3	1397.2	1399.3	1374.9	1340.2	1285.2	1195.6
55°	1128.4	1128.4	1134.5	1142.7	1150.8	1152.8	1150.8	1140.6	1116.2	1071.3	991.9
57.5°	879.9	875.8	888.0	900.3	908.4	916.6	910.4	902.3	888.0	851.4	790.3
60°	670.1	670.1	678.2	686.4	694.5	702.7	700.7	698.6	686.4	661.9	613.1
62.5°	492.9	494.9	494.9	501.1	509.2	517.4	523.4	517.4	511.2	494.9	462.3
65°	352.3	350.3	352.3	358.5	364.6	372.7	376.8	374.8	368.6	356.4	332.0
67.5°	236.3	234.2	242.4	244.4	248.5	256.7	254.6	256.7	254.6	244.4	224.1
70°	154.8	150.7	154.8	152.8	158.9	160.9	165.0	167.0	165.0	158.9	152.8
72.5°	95.7	93.7	95.7	97.8	99.8	101.8	105.9	105.9	103.9	99.8	91.7
75°	61.1	55.0	57.0	53.0	57.0	57.0	61.1	63.1	61.1	61.1	57.0
77.5°	36.7	36.7	36.7	36.7	36.7	36.7	36.7	38.7	40.7	36.7	34.6
80°	18.3	18.3	20.4	20.4	20.4	22.4	20.4	20.4	20.4	22.4	16.3
82.5°	14.3	12.2	12.2	12.2	14.3	12.2	12.2	12.2	12.2	12.2	12.2
85°	6.1	8.1	6.1	4.1	6.1	6.1	8.1	6.1	6.1	6.1	8.1
87.5°	2.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	4.1	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



TEST NUMBER: P248444

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3
2.5°	3847.5	3843.4	3843.4	3841.4	3845.5	3841.4	3843.4	3841.4	3841.4	3845.5	3841.4
5°	3861.8	3863.8	3859.7	3857.7	3863.8	3863.8	3863.8	3859.7	3859.7	3861.8	3859.7
7.5°	3882.2	3886.2	3888.2	3890.3	3894.4	3896.4	3896.4	3894.4	3892.3	3898.5	3890.3
10°	3904.5	3910.7	3922.9	3929.0	3939.2	3939.2	3943.3	3943.3	3939.2	3943.3	3941.2
12.5°	3896.4	3933.0	3953.4	3967.7	3981.9	3994.1	3998.2	4000.3	3998.2	4006.4	3998.2
15°	3910.7	3941.2	3973.8	3998.2	4024.7	4038.9	4043.0	4059.3	4063.4	4065.5	4053.2
17.5°	3888.2	3943.3	3977.8	4014.5	4053.2	4079.7	4104.1	4114.3	4116.4	4120.4	4104.1
20°	3837.3	3898.5	3951.4	4004.4	4049.2	4089.9	4110.3	4138.8	4130.6	4146.9	4124.5
22.5°	3768.1	3837.3	3904.5	3973.8	4020.7	4069.5	4112.3	4132.6	4142.9	4142.9	4118.4
25°	3658.1	3739.6	3812.9	3884.1	3955.5	4014.5	4063.4	4094.0	4100.1	4098.0	4069.5
27.5°	3487.0	3574.6	3660.1	3741.6	3829.2	3898.5	3955.5	3992.1	4002.3	4002.3	3971.8
30°	3250.7	3344.4	3427.9	3525.7	3615.3	3692.7	3772.2	3804.8	3823.0	3823.0	3788.5
32.5°	2969.6	3049.1	3126.5	3222.2	3320.0	3407.6	3482.9	3527.7	3550.1	3548.1	3517.5
35°	2664.1	2702.8	2761.9	2833.2	2920.7	3002.2	3075.5	3118.4	3157.0	3155.0	3126.5
37.5°	2358.6	2348.4	2354.5	2381.0	2436.0	2493.0	2550.1	2590.8	2623.4	2637.7	2631.5
40°	2059.2	2006.2	1955.3	1937.0	1941.1	1961.4	1992.0	2022.5	2059.2	2077.6	2085.7
42.5°	1790.3	1700.7	1611.1	1543.9	1505.2	1493.0	1507.2	1517.4	1539.8	1566.3	1592.8
45°	1574.5	1454.3	1336.1	1232.3	1167.1	1128.4	1120.2	1128.4	1140.6	1167.1	1201.7
47.5°	1397.2	1256.7	1124.3	1008.2	912.5	861.6	847.3	843.2	855.5	879.9	926.7
50°	1240.4	1099.9	953.2	818.8	719.0	661.9	641.6	633.4	647.7	666.0	708.8
52.5°	1069.3	930.8	780.1	649.7	545.9	486.8	464.4	452.2	460.3	484.8	527.5
55°	884.0	755.6	619.2	484.8	384.9	330.0	303.5	295.3	303.5	330.0	372.7
57.5°	698.6	590.7	476.6	350.3	260.7	205.7	179.2	171.1	193.5	203.7	248.5
60°	545.9	458.3	360.5	256.7	179.2	136.5	110.0	103.9	114.1	132.4	169.0
62.5°	409.4	354.4	277.0	183.3	132.4	87.6	73.3	67.2	73.3	87.6	116.1
65°	297.4	254.6	193.5	134.4	89.6	65.2	48.9	44.8	50.9	61.1	85.6
67.5°	203.7	171.1	134.4	93.7	61.1	40.7	34.6	34.6	36.7	44.8	63.1
70°	132.4	112.0	85.6	61.1	40.7	30.6	26.5	22.4	26.5	32.6	42.8
72.5°	83.5	71.3	55.0	42.8	30.6	22.4	18.3	16.3	20.4	24.4	32.6
75°	50.9	38.7	28.5	22.4	16.3	16.3	16.3	8.1	10.2	16.3	20.4
77.5°	30.6	26.5	22.4	18.3	14.3	8.1	8.1	8.1	10.2	12.2	18.3
80°	16.3	14.3	10.2	10.2	8.1	6.1	8.1	6.1	4.1	10.2	12.2
82.5°	10.2	8.1	8.1	8.1	10.2	4.1	6.1	4.1	6.1	8.1	6.1
85°	6.1	6.1	6.1	4.1	10.2	4.1	4.1	2.0	2.0	4.1	4.1
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



TEST NUMBER: P248444

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3	3837.3
2.5°	3843.4	3841.4	3843.4	3841.4	3841.4	3841.4	3843.4	3843.4	3841.4	3841.4	3845.5
5°	3859.7	3859.7	3859.7	3857.7	3855.6	3855.6	3859.7	3859.7	3853.6	3859.7	3859.7
7.5°	3894.4	3888.2	3894.4	3886.2	3882.2	3884.1	3886.2	3882.2	3878.1	3880.1	3880.1
10°	3939.2	3933.0	3933.0	3927.0	3920.8	3916.7	3912.7	3902.5	3892.3	3890.3	3882.2
12.5°	3992.1	3981.9	3975.8	3963.6	3953.4	3939.2	3927.0	3910.7	3890.3	3876.0	3861.8
15°	4045.1	4028.8	4014.5	3994.1	3971.8	3947.3	3920.8	3894.4	3861.8	3833.3	3808.8
17.5°	4087.8	4065.5	4038.9	4006.4	3973.8	3937.1	3898.5	3859.7	3812.9	3776.2	3747.7
20°	4102.1	4069.5	4034.9	3992.1	3949.3	3898.5	3849.6	3798.6	3745.7	3707.0	3674.4
22.5°	4083.8	4045.1	4002.3	3957.5	3900.4	3845.5	3788.5	3729.4	3682.5	3629.6	3599.0
25°	4032.9	3986.0	3939.2	3886.2	3831.2	3770.1	3709.0	3647.9	3590.9	3562.4	3523.7
27.5°	3929.0	3878.1	3827.1	3772.2	3709.0	3647.9	3584.8	3525.7	3476.8	3438.1	3415.7
30°	3745.7	3686.6	3627.5	3568.5	3513.5	3450.3	3391.3	3342.4	3293.5	3262.9	3240.6
32.5°	3464.6	3411.6	3352.6	3295.5	3244.6	3191.7	3142.8	3100.0	3065.4	3045.0	3028.7
35°	3085.8	3032.8	2988.0	2947.3	2904.5	2882.1	2851.5	2827.1	2812.8	2804.7	2802.6
37.5°	2609.1	2578.6	2564.3	2556.2	2548.0	2541.9	2546.0	2556.2	2564.3	2578.6	2594.9
40°	2099.9	2126.4	2134.6	2163.1	2189.5	2224.2	2262.9	2307.7	2344.3	2391.2	2423.8
42.5°	1635.6	1684.4	1741.5	1802.6	1867.7	1930.9	2008.3	2079.6	2144.7	2203.8	2254.7
45°	1256.7	1332.0	1417.6	1505.2	1592.8	1684.4	1778.1	1865.7	1943.1	2006.2	2059.2
47.5°	979.7	1063.2	1173.2	1281.2	1387.1	1495.0	1598.9	1690.5	1755.7	1816.8	1863.7
50°	776.0	871.7	991.9	1116.2	1232.3	1346.3	1456.3	1541.9	1607.0	1655.9	1690.5
52.5°	600.8	714.9	837.1	967.5	1091.7	1216.0	1317.8	1397.2	1450.2	1493.0	1519.4
55°	448.1	560.1	690.5	824.9	951.2	1071.3	1167.1	1236.4	1283.2	1307.6	1321.9
57.5°	323.8	425.7	556.0	690.5	804.5	918.6	996.0	1059.1	1085.6	1099.9	1106.0
60°	236.3	330.0	446.0	562.2	670.1	761.8	829.0	871.7	892.1	900.3	898.2
62.5°	173.1	254.6	354.4	452.2	539.7	615.1	668.1	696.6	706.8	710.8	704.7
65°	132.4	195.5	281.1	356.4	423.7	478.6	517.4	535.7	541.8	539.7	535.7
67.5°	97.8	146.7	209.8	266.8	315.7	358.5	378.9	395.2	399.2	393.1	387.0
70°	69.3	107.9	152.8	191.5	228.1	252.6	275.0	277.0	277.0	275.0	270.9
72.5°	48.9	75.4	103.9	130.4	152.8	171.1	179.2	185.3	183.3	181.3	177.2
75°	32.6	46.8	75.4	81.5	101.8	107.9	116.1	116.1	118.1	112.0	112.0
77.5°	20.4	32.6	44.8	53.0	61.1	69.3	73.3	73.3	75.4	73.3	73.3
80°	12.2	20.4	24.4	36.7	36.7	42.8	44.8	46.8	42.8	48.9	42.8
82.5°	8.1	12.2	18.3	18.3	22.4	26.5	26.5	28.5	28.5	26.5	26.5
85°	6.1	8.1	10.2	12.2	12.2	14.3	12.2	12.2	14.3	16.3	14.3
87.5°	2.0	4.1	2.0	4.1	4.1	8.1	6.1	6.1	6.1	8.1	8.1
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: P248444

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3837.3	3837.3	3837.3	3837.3
2.5°	3841.4	3843.4	3841.4	3841.4
5°	3859.7	3857.7	3859.7	3855.6
7.5°	3874.0	3874.0	3871.9	3871.9
10°	3874.0	3865.9	3865.9	3865.9
12.5°	3843.4	3833.3	3827.1	3823.0
15°	3790.5	3772.2	3764.0	3761.9
17.5°	3721.2	3704.9	3694.8	3688.6
20°	3641.8	3625.5	3613.3	3615.3
22.5°	3572.5	3554.2	3546.1	3542.0
25°	3503.3	3480.9	3474.8	3470.7
27.5°	3391.3	3379.1	3372.9	3366.8
30°	3220.2	3214.0	3203.9	3218.1
32.5°	3022.6	3012.4	3004.3	3010.4
35°	2804.7	2798.5	2804.7	2800.6
37.5°	2605.1	2611.2	2619.3	2623.4
40°	2448.2	2470.6	2478.8	2482.8
42.5°	2291.4	2317.9	2334.2	2344.3
45°	2097.9	2124.4	2142.7	2155.0
47.5°	1898.3	1920.7	1939.0	1937.0
50°	1717.0	1729.2	1737.4	1745.5
52.5°	1533.7	1533.7	1535.7	1535.7
55°	1326.0	1321.9	1319.8	1321.9
57.5°	1097.8	1093.8	1091.7	1085.6
60°	890.1	877.9	869.7	869.7
62.5°	696.6	682.3	676.2	674.2
65°	523.4	521.4	509.2	507.1
67.5°	378.9	370.7	362.6	364.6
70°	266.8	254.6	254.6	250.5
72.5°	173.1	167.0	165.0	165.0
75°	107.9	107.9	103.9	112.0
77.5°	71.3	71.3	69.3	71.3
80°	42.8	42.8	42.8	40.7
82.5°	26.5	28.5	26.5	26.5
85°	14.3	16.3	12.2	18.3
87.5°	8.1	10.2	8.1	10.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)