

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: P249272

Luminaire Tested: **LSR8B70D010 EC8B70950 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249272
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 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7002.0 lumens
Efficiency: N/A
Efficacy: 92.3 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

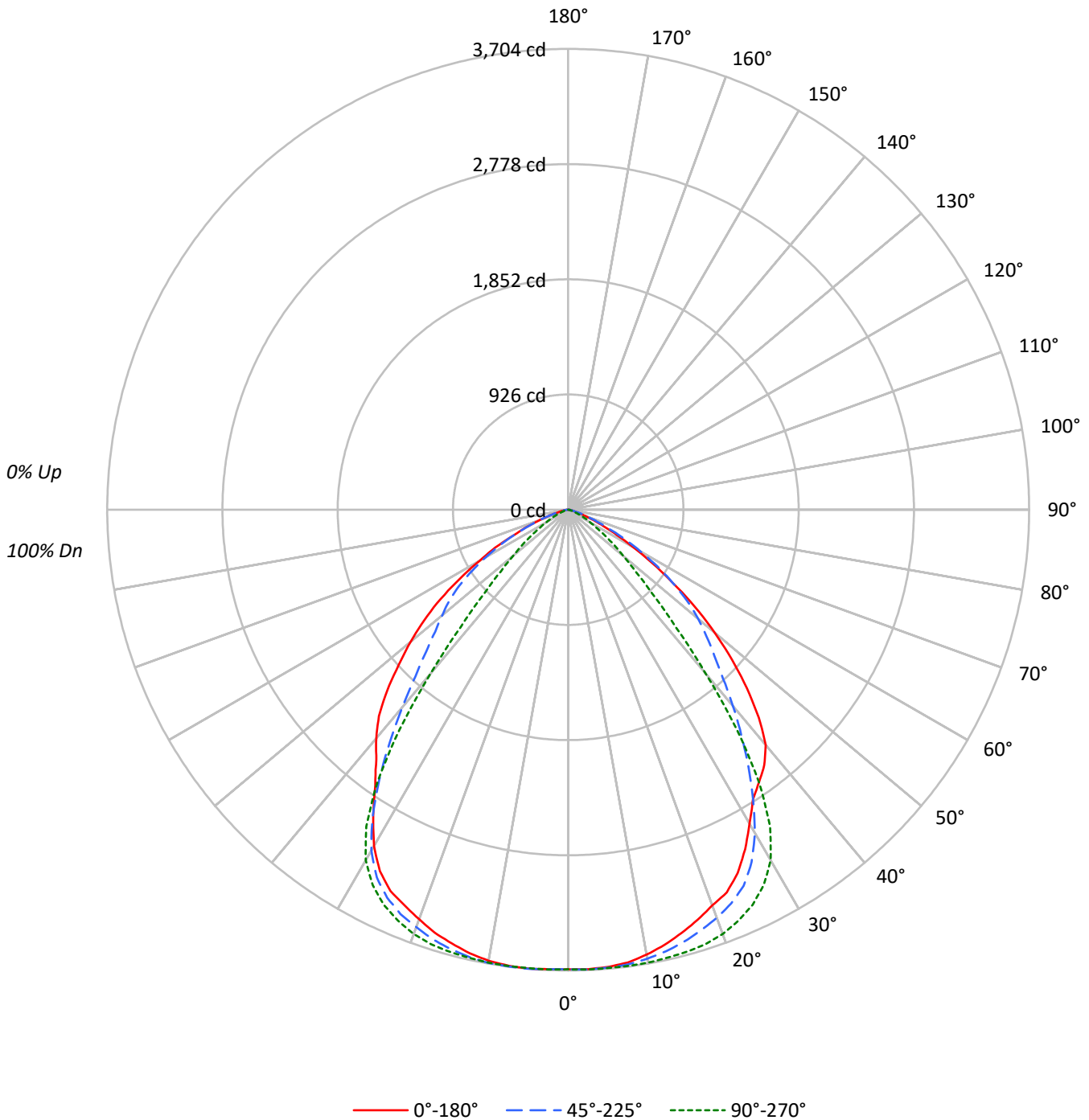
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	113922	113922	113922
5°	114171	114481	114601
10°	113691	115742	115244
15°	112433	117433	115217
20°	111083	119084	114923
25°	109639	119220	115039
30°	103726	115871	111139
35°	100630	100702	101748
40°	99383	69289	96589
45°	88553	41594	89765
50°	73633	27685	79342
55°	55224	19085	67272
60°	37423	12717	50757
65°	22575	8252	34870
70°	12514	4472	21458
75°	5671	1894	11104
80°	4937	2113	7742
85°	5626	2795	7713



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.6	5.0
10°-20°	1023.9	14.6
20°-30°	1554.1	22.2
30°-40°	1632.3	23.3
40°-50°	1223.8	17.5
50°-60°	785.2	11.2
60°-70°	335.9	4.8
70°-80°	79.4	1.1
80°-90°	14.8	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°	2930.7	41.9
0°-40°	4563.0	65.2
0°-60°	6572.0	93.9
0°-90°	7002.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7002.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3694	3694	3694	3694	3694	
5°	3688	3694	3698	3704	3702	350
15°	3522	3595	3678	3655	3609	993
25°	3222	3336	3504	3441	3381	1472
35°	2673	2524	2675	2643	2703	1678
45°	2031	1660	954	1612	2058	1555
55°	1027	1027	355	1071	1251	932
65°	309	365	113	470	478	330
75°	48	56	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°	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4
2.5°	3696.4	3700.4	3698.4	3698.4	3696.4	3698.4	3698.4	3702.3	3702.3	3698.4	3696.4
5°	3688.4	3692.4	3692.4	3688.4	3688.4	3698.4	3692.4	3696.4	3696.4	3694.4	3694.4
7.5°	3670.6	3670.6	3678.5	3672.6	3672.6	3678.5	3676.5	3680.5	3684.5	3686.5	3686.5
10°	3630.9	3634.9	3636.9	3636.9	3638.9	3644.8	3648.8	3656.7	3660.7	3664.6	3666.6
12.5°	3581.4	3587.3	3589.3	3587.3	3593.3	3601.2	3611.1	3621.0	3627.0	3634.9	3640.9
15°	3521.9	3521.9	3525.8	3531.8	3535.8	3547.7	3557.6	3569.5	3585.3	3595.3	3605.2
17.5°	3456.4	3460.4	3466.3	3466.3	3474.3	3494.1	3500.1	3517.9	3535.8	3545.7	3565.5
20°	3385.1	3389.0	3395.0	3398.9	3408.8	3424.7	3436.6	3452.5	3472.3	3490.2	3510.0
22.5°	3329.5	3321.6	3325.5	3329.5	3339.5	3353.3	3367.2	3387.0	3406.9	3424.7	3444.6
25°	3222.4	3224.4	3230.4	3234.3	3246.2	3258.1	3274.0	3297.8	3315.6	3335.5	3357.3
27.5°	3077.7	3079.7	3089.6	3089.6	3099.5	3119.3	3129.2	3149.1	3172.9	3192.7	3218.5
30°	2913.1	2917.0	2917.0	2925.0	2930.9	2940.9	2950.7	2970.6	2982.5	3000.3	3036.0
32.5°	2762.4	2766.3	2764.3	2762.4	2756.4	2754.4	2752.4	2756.4	2760.4	2766.3	2780.2
35°	2673.2	2663.2	2655.3	2641.4	2625.6	2605.7	2587.9	2564.1	2542.2	2524.4	2504.6
37.5°	2587.9	2585.9	2574.0	2554.1	2522.4	2486.7	2445.1	2393.5	2341.9	2286.4	2232.9
40°	2468.9	2462.9	2453.0	2425.3	2389.5	2345.9	2290.4	2227.0	2143.6	2058.4	1971.1
42.5°	2266.6	2268.6	2256.7	2234.9	2201.2	2159.5	2102.0	2032.6	1943.4	1842.2	1729.2
45°	2030.6	2030.6	2026.7	2008.8	1985.0	1951.3	1907.7	1850.2	1762.9	1659.8	1538.8
47.5°	1784.7	1786.7	1780.7	1776.8	1766.9	1745.1	1713.3	1669.7	1608.3	1509.1	1388.1
50°	1534.9	1534.9	1544.8	1542.8	1542.8	1534.9	1521.0	1495.2	1441.7	1362.3	1249.3
52.5°	1285.0	1289.0	1294.9	1302.9	1312.8	1328.6	1312.8	1300.9	1267.1	1205.7	1108.5
55°	1027.2	1031.2	1041.1	1055.0	1066.9	1082.8	1086.7	1086.7	1068.8	1027.2	953.8
57.5°	807.1	801.1	809.1	821.0	836.9	852.7	864.6	878.5	876.5	848.7	789.3
60°	606.8	608.8	614.7	626.7	638.5	652.4	668.3	680.2	686.1	672.3	634.6
62.5°	442.2	442.2	450.1	462.0	468.0	487.8	497.7	503.7	509.6	507.6	483.9
65°	309.4	313.3	317.3	323.3	329.2	341.1	347.0	358.9	362.9	364.9	347.0
67.5°	218.2	212.2	216.2	220.1	226.1	234.0	245.9	245.9	251.8	251.8	239.9
70°	138.8	138.8	140.8	146.7	150.7	152.7	156.7	160.6	166.6	164.6	164.6
72.5°	93.2	91.2	93.2	95.2	97.2	103.1	103.1	105.1	109.1	111.1	103.1
75°	47.6	49.6	53.5	51.6	57.5	53.5	55.5	61.5	59.5	55.5	55.5
77.5°	39.6	39.6	39.6	37.7	41.6	41.6	39.6	43.6	41.6	41.6	39.6
80°	27.8	29.7	27.8	25.8	27.8	25.8	25.8	25.8	25.8	25.8	23.8
82.5°	21.8	17.9	19.8	17.9	19.8	19.8	17.9	15.9	15.9	17.9	15.9
85°	15.9	11.9	13.9	13.9	11.9	11.9	11.9	11.9	11.9	9.9	9.9
87.5°	9.9	6.0	6.0	6.0	7.9	7.9	7.9	6.0	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°	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4
2.5°	3700.4	3698.4	3702.3	3700.4	3700.4	3698.4	3700.4	3698.4	3702.3	3694.4	3696.4
5°	3700.4	3696.4	3698.4	3700.4	3702.3	3698.4	3698.4	3698.4	3702.3	3698.4	3700.4
7.5°	3692.4	3690.4	3696.4	3700.4	3698.4	3696.4	3700.4	3698.4	3702.3	3700.4	3704.3
10°	3676.5	3678.5	3682.5	3688.4	3690.4	3692.4	3696.4	3696.4	3702.3	3694.4	3698.4
12.5°	3652.8	3660.7	3670.6	3674.5	3682.5	3682.5	3686.5	3688.4	3692.4	3690.4	3696.4
15°	3623.0	3632.9	3644.8	3654.7	3664.6	3670.6	3676.5	3678.5	3684.5	3678.5	3680.5
17.5°	3587.3	3599.2	3617.0	3628.9	3644.8	3650.8	3658.7	3662.7	3668.6	3664.6	3666.6
20°	3537.7	3551.6	3571.4	3589.3	3599.2	3613.1	3623.0	3628.9	3632.9	3628.9	3630.9
22.5°	3468.3	3488.2	3513.9	3527.8	3547.7	3559.6	3561.5	3575.4	3585.3	3575.4	3579.4
25°	3387.0	3406.9	3426.7	3456.4	3474.3	3488.2	3502.1	3504.0	3513.9	3512.0	3510.0
27.5°	3252.2	3278.0	3311.7	3335.5	3359.3	3381.1	3397.0	3400.9	3410.8	3406.9	3408.8
30°	3067.7	3095.5	3127.3	3164.9	3198.6	3220.4	3240.3	3254.2	3264.1	3258.1	3256.1
32.5°	2806.0	2833.8	2867.5	2905.1	2944.8	2976.5	3000.3	3018.2	3030.1	3026.1	3016.2
35°	2506.6	2514.5	2536.3	2566.1	2599.7	2633.5	2655.3	2675.1	2689.0	2693.0	2693.0
37.5°	2199.2	2173.4	2157.6	2157.6	2177.4	2191.2	2211.1	2223.0	2244.8	2252.7	2258.7
40°	1901.7	1842.2	1786.7	1745.1	1717.3	1715.3	1715.3	1721.3	1741.1	1766.9	1790.7
42.5°	1636.0	1540.8	1455.6	1378.2	1322.7	1291.0	1277.1	1279.1	1294.9	1318.7	1358.4
45°	1423.8	1304.8	1197.8	1104.5	1029.2	979.6	955.8	953.8	965.7	993.5	1037.2
47.5°	1259.2	1132.3	1011.3	904.3	823.0	769.4	741.7	733.7	741.7	767.4	819.0
50°	1122.4	991.5	866.6	755.5	668.3	612.8	587.0	577.1	587.0	608.8	660.3
52.5°	995.5	860.6	743.6	636.6	543.3	495.7	468.0	462.0	468.0	493.8	535.4
55°	848.7	733.7	618.7	511.6	430.3	382.7	360.9	355.0	360.9	384.7	428.3
57.5°	704.0	604.8	503.7	406.5	337.1	295.4	275.7	267.7	281.6	297.4	349.0
60°	569.1	489.8	404.5	319.3	261.8	224.1	208.2	206.2	210.2	230.0	265.7
62.5°	446.2	380.7	313.3	243.9	196.3	180.5	160.6	158.7	162.6	174.5	202.3
65°	321.3	279.6	228.1	178.5	140.8	119.0	111.1	113.1	117.0	124.9	150.7
67.5°	224.1	194.3	158.7	124.9	97.2	87.2	79.3	77.3	79.3	93.2	107.1
70°	150.7	132.9	107.1	95.2	67.4	53.5	55.5	49.6	57.5	57.5	69.4
72.5°	99.1	87.2	71.4	55.5	47.6	37.7	37.7	35.7	39.6	41.6	51.6
75°	51.6	39.6	39.6	27.8	19.8	9.9	17.9	15.9	13.9	15.9	19.8
77.5°	35.7	29.7	27.8	21.8	19.8	15.9	15.9	15.9	15.9	17.9	19.8
80°	21.8	21.8	15.9	13.9	11.9	9.9	11.9	11.9	11.9	11.9	13.9
82.5°	13.9	11.9	11.9	9.9	9.9	7.9	7.9	7.9	7.9	7.9	11.9
85°	11.9	7.9	7.9	6.0	7.9	13.9	6.0	7.9	7.9	7.9	6.0
87.5°	4.0	6.0	6.0	6.0	4.0	2.0	4.0	6.0	6.0	9.9	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°	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4	3694.4
2.5°	3700.4	3702.3	3702.3	3700.4	3700.4	3696.4	3704.3	3698.4	3700.4	3708.3	3702.3
5°	3704.3	3706.3	3706.3	3704.3	3704.3	3704.3	3706.3	3706.3	3704.3	3702.3	3706.3
7.5°	3712.2	3710.3	3710.3	3706.3	3706.3	3702.3	3706.3	3700.4	3704.3	3700.4	3706.3
10°	3702.3	3704.3	3702.3	3700.4	3700.4	3698.4	3698.4	3692.4	3694.4	3688.4	3692.4
12.5°	3696.4	3694.4	3694.4	3690.4	3686.5	3682.5	3680.5	3674.5	3674.5	3660.7	3666.6
15°	3680.5	3682.5	3676.5	3668.6	3664.6	3654.7	3650.8	3642.8	3634.9	3625.0	3627.0
17.5°	3666.6	3660.7	3652.8	3644.8	3628.9	3621.0	3613.1	3601.2	3597.2	3585.3	3581.4
20°	3625.0	3621.0	3611.1	3597.2	3587.3	3569.5	3561.5	3549.7	3539.7	3527.8	3521.9
22.5°	3571.4	3567.5	3555.6	3541.7	3525.8	3517.9	3510.0	3488.2	3478.2	3466.3	3464.4
25°	3504.0	3498.1	3486.2	3470.3	3462.4	3440.6	3432.6	3416.8	3412.8	3400.9	3398.9
27.5°	3400.9	3393.0	3379.1	3359.3	3345.4	3331.5	3323.6	3311.7	3307.7	3295.8	3293.8
30°	3246.2	3236.3	3208.5	3200.6	3176.8	3162.9	3162.9	3147.1	3149.1	3141.1	3141.1
32.5°	3002.3	2986.5	2964.6	2948.8	2932.9	2925.0	2925.0	2919.0	2923.0	2923.0	2927.0
35°	2679.1	2657.3	2645.4	2635.5	2635.5	2643.4	2667.2	2673.2	2685.0	2694.9	2702.9
37.5°	2264.6	2262.7	2276.5	2288.4	2318.2	2351.9	2393.5	2429.2	2462.9	2486.7	2510.5
40°	1816.5	1866.0	1905.7	1961.2	2006.8	2072.3	2147.6	2209.1	2266.6	2308.3	2351.9
42.5°	1417.9	1481.3	1564.6	1645.9	1727.2	1816.5	1915.6	2000.9	2076.2	2133.7	2179.4
45°	1104.5	1191.8	1293.0	1396.1	1501.2	1612.2	1715.3	1802.6	1881.9	1941.4	1987.0
47.5°	890.4	985.6	1100.6	1213.6	1332.6	1449.6	1564.6	1640.0	1705.4	1753.0	1794.7
50°	735.7	836.9	957.8	1086.7	1205.7	1322.7	1421.8	1495.2	1548.8	1590.4	1616.2
52.5°	614.7	721.8	850.7	979.6	1098.6	1205.7	1294.9	1350.5	1394.1	1423.8	1447.6
55°	507.6	610.8	731.8	852.7	969.7	1070.8	1144.2	1185.9	1219.5	1237.4	1251.3
57.5°	414.5	509.6	620.7	731.8	832.9	916.2	973.7	1015.3	1031.2	1045.1	1043.1
60°	325.2	414.5	515.6	610.8	698.0	765.4	807.1	830.9	842.8	848.7	844.8
62.5°	255.8	337.1	414.5	497.7	561.2	618.7	658.4	658.4	664.3	666.3	672.3
65°	190.4	251.8	319.3	380.7	432.3	470.0	491.8	497.7	505.7	503.7	499.7
67.5°	140.8	186.4	236.0	281.6	317.3	341.1	356.9	370.9	368.9	364.9	362.9
70°	97.2	126.9	170.6	198.3	224.1	247.9	251.8	253.8	255.8	257.8	253.8
72.5°	67.4	89.2	113.1	136.8	152.7	162.6	172.5	174.5	174.5	174.5	172.5
75°	33.7	45.6	67.4	77.3	91.2	95.2	103.1	103.1	109.1	101.1	99.1
77.5°	29.7	35.7	47.6	55.5	61.5	67.4	69.4	75.4	73.4	69.4	71.4
80°	17.9	21.8	29.7	33.7	41.6	43.6	45.6	47.6	45.6	47.6	47.6
82.5°	13.9	15.9	19.8	19.8	25.8	25.8	27.8	27.8	29.7	29.7	29.7
85°	7.9	13.9	11.9	23.8	15.9	15.9	19.8	23.8	19.8	19.8	23.8
87.5°	7.9	7.9	6.0	7.9	7.9	7.9	9.9	11.9	11.9	13.9	11.9
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: P249272

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3694.4	3694.4	3694.4	3694.4
2.5°	3700.4	3704.3	3698.4	3696.4
5°	3706.3	3706.3	3702.3	3702.3
7.5°	3706.3	3706.3	3700.4	3696.4
10°	3690.4	3690.4	3684.5	3680.5
12.5°	3660.7	3660.7	3658.7	3652.8
15°	3623.0	3623.0	3615.1	3609.1
17.5°	3571.4	3575.4	3565.5	3565.5
20°	3515.9	3513.9	3506.0	3502.1
22.5°	3458.4	3454.5	3452.5	3440.6
25°	3397.0	3393.0	3387.0	3381.1
27.5°	3291.9	3289.9	3283.9	3276.0
30°	3131.2	3129.2	3121.3	3121.3
32.5°	2923.0	2921.0	2913.1	2915.1
35°	2706.8	2714.8	2710.8	2702.9
37.5°	2526.4	2532.3	2536.3	2532.3
40°	2375.7	2393.5	2395.5	2399.5
42.5°	2215.1	2238.8	2246.8	2250.7
45°	2022.7	2044.5	2062.4	2058.4
47.5°	1826.4	1842.2	1858.1	1846.2
50°	1638.0	1647.9	1653.9	1653.9
52.5°	1459.5	1459.5	1457.5	1459.5
55°	1255.3	1255.3	1247.3	1251.3
57.5°	1041.1	1045.1	1039.1	1029.2
60°	842.8	832.9	828.9	823.0
62.5°	656.4	656.4	642.5	660.3
65°	491.8	485.8	479.9	477.9
67.5°	356.9	355.0	349.0	347.0
70°	251.8	243.9	241.9	238.0
72.5°	168.6	168.6	164.6	164.6
75°	103.1	93.2	91.2	93.2
77.5°	71.4	69.4	69.4	67.4
80°	47.6	45.6	49.6	43.6
82.5°	29.7	31.7	29.7	31.7
85°	19.8	23.8	21.8	21.8
87.5°	11.9	11.9	11.9	11.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)