

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: P249227

Luminaire Tested: **LSR8B70D010 EC8B70850 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249227
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 EC8B70850 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7691.0 lumens
Efficiency: N/A
Efficacy: 101.3 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

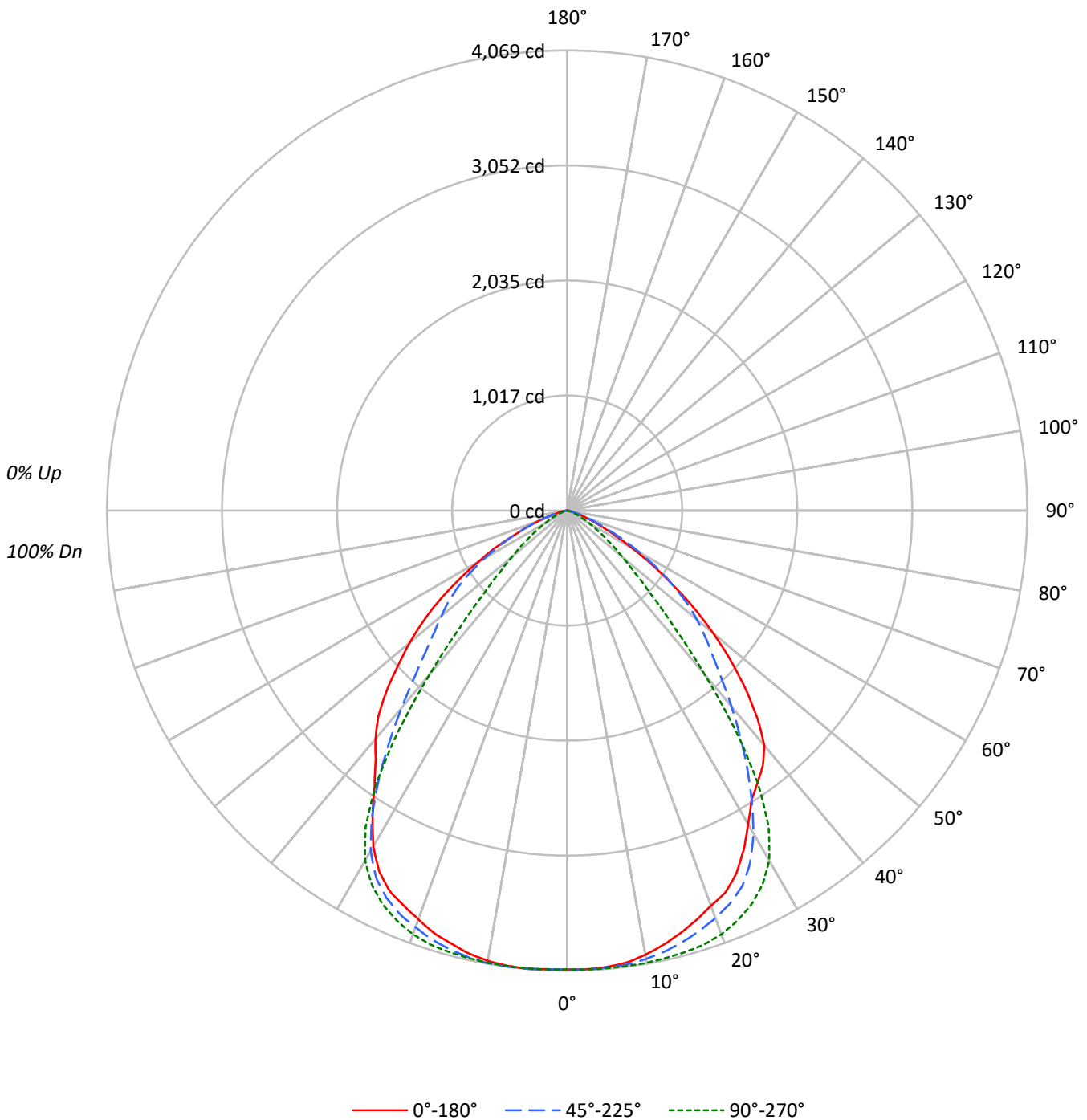
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	125131	125131	125131
5°	125407	125745	125881
10°	124879	127130	126585
15°	123495	128989	126557
20°	122014	130802	126231
25°	120428	130952	126359
30°	113931	127273	122074
35°	110531	110610	111762
40°	109161	76104	106093
45°	97266	45689	98596
50°	80877	30410	87147
55°	60659	20962	73890
60°	41105	13969	55752
65°	24793	9062	38299
70°	13749	4914	23568
75°	6231	2073	12200
80°	5416	2326	8506
85°	6156	3078	8491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	387.3	5.0
10°-20°	1124.7	14.6
20°-30°	1707.1	22.2
30°-40°	1792.9	23.3
40°-50°	1344.2	17.5
50°-60°	862.5	11.2
60°-70°	369.0	4.8
70°-80°	87.2	1.1
80°-90°	16.2	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°	3219.0	41.9
0°-40°	5012.0	65.2
0°-60°	7218.7	93.9
0°-90°	7691.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7691.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4058	4058	4058	4058	4058	
5°	4051	4058	4062	4069	4067	385
15°	3868	3949	4040	4014	3964	1091
25°	3540	3664	3849	3779	3714	1617
35°	2936	2773	2938	2904	2969	1843
45°	2230	1823	1048	1771	2261	1708
55°	1128	1128	390	1176	1374	1023
65°	340	401	124	516	525	363
75°	52	61	17	105	102	76
85°	17	11	9	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°	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9
2.5°	4060.1	4064.5	4062.3	4062.3	4060.1	4062.3	4062.3	4066.7	4066.7	4062.3	4060.1
5°	4051.4	4055.7	4055.7	4051.4	4051.4	4062.3	4055.7	4060.1	4060.1	4057.9	4057.9
7.5°	4031.8	4031.8	4040.5	4034.0	4034.0	4040.5	4038.3	4042.7	4047.0	4049.2	4049.2
10°	3988.2	3992.6	3994.8	3994.8	3997.0	4003.5	4007.8	4016.6	4020.9	4025.3	4027.4
12.5°	3933.8	3940.3	3942.5	3940.3	3946.9	3955.5	3966.5	3977.3	3983.9	3992.6	3999.1
15°	3868.4	3868.4	3872.8	3879.3	3883.7	3896.8	3907.6	3920.7	3938.1	3949.0	3959.9
17.5°	3796.6	3800.9	3807.4	3807.4	3816.2	3837.9	3844.5	3864.1	3883.7	3894.6	3916.4
20°	3718.2	3722.5	3729.0	3733.4	3744.3	3761.7	3774.8	3792.2	3814.0	3833.6	3855.3
22.5°	3657.1	3648.4	3652.8	3657.1	3668.1	3683.3	3698.5	3720.3	3742.1	3761.7	3783.5
25°	3539.5	3541.7	3548.3	3552.6	3565.7	3578.7	3596.2	3622.3	3641.9	3663.7	3687.6
27.5°	3380.5	3382.7	3393.6	3393.6	3404.5	3426.3	3437.1	3458.9	3485.1	3506.8	3535.2
30°	3199.7	3204.1	3204.1	3212.8	3219.3	3230.2	3241.1	3262.9	3276.0	3295.6	3334.8
32.5°	3034.2	3038.5	3036.3	3034.2	3027.7	3025.5	3023.3	3027.7	3032.0	3038.5	3053.8
35°	2936.2	2925.3	2916.6	2901.3	2883.9	2862.1	2842.5	2816.4	2792.4	2772.8	2751.0
37.5°	2842.5	2840.3	2827.3	2805.5	2770.6	2731.4	2685.7	2629.1	2572.4	2511.4	2452.6
40°	2711.8	2705.3	2694.4	2663.9	2624.7	2576.8	2515.8	2446.1	2354.6	2260.9	2165.1
42.5°	2489.6	2491.8	2478.8	2454.8	2417.8	2372.0	2308.8	2232.6	2134.6	2023.5	1899.4
45°	2230.4	2230.4	2226.1	2206.5	2180.3	2143.3	2095.4	2032.2	1936.4	1823.1	1690.2
47.5°	1960.3	1962.5	1956.0	1951.7	1940.7	1916.8	1881.9	1834.0	1766.5	1657.6	1524.7
50°	1685.9	1685.9	1696.8	1694.6	1694.6	1685.9	1670.7	1642.3	1583.5	1496.4	1372.3
52.5°	1411.4	1415.8	1422.4	1431.1	1441.9	1459.4	1441.9	1428.9	1391.8	1324.3	1217.6
55°	1128.3	1132.7	1143.5	1158.8	1171.9	1189.3	1193.6	1193.6	1174.0	1128.3	1047.7
57.5°	886.5	880.0	888.7	901.8	919.2	936.6	949.7	964.9	962.7	932.3	866.9
60°	666.5	668.7	675.2	688.3	701.4	716.6	734.0	747.1	753.7	738.4	697.0
62.5°	485.7	485.7	494.4	507.5	514.0	535.8	546.7	553.3	559.8	557.6	531.5
65°	339.8	344.1	348.5	355.1	361.6	374.6	381.2	394.2	398.6	400.8	381.2
67.5°	239.6	233.1	237.4	241.8	248.3	257.0	270.1	270.1	276.6	276.6	263.6
70°	152.5	152.5	154.7	161.2	165.5	167.7	172.1	176.4	183.0	180.8	180.8
72.5°	102.4	100.2	102.4	104.6	106.8	113.3	113.3	115.4	119.8	122.0	113.3
75°	52.3	54.5	58.8	56.7	63.2	58.8	61.0	67.5	65.3	61.0	61.0
77.5°	43.5	43.5	43.5	41.4	45.7	45.7	43.5	47.9	45.7	45.7	43.5
80°	30.5	32.7	30.5	28.3	30.5	28.3	28.3	28.3	28.3	28.3	26.1
82.5°	24.0	19.6	21.8	19.6	21.8	21.8	19.6	17.4	17.4	19.6	17.4
85°	17.4	13.1	15.2	15.2	13.1	13.1	13.1	13.1	13.1	10.9	10.9
87.5°	10.9	6.6	6.6	6.6	8.7	8.7	8.7	6.6	8.7	8.7	4.4
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°	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9
2.5°	4064.5	4062.3	4066.7	4064.5	4064.5	4062.3	4064.5	4062.3	4066.7	4057.9	4060.1
5°	4064.5	4060.1	4062.3	4064.5	4066.7	4062.3	4062.3	4062.3	4066.7	4062.3	4064.5
7.5°	4055.7	4053.6	4060.1	4064.5	4062.3	4060.1	4064.5	4062.3	4066.7	4064.5	4068.8
10°	4038.3	4040.5	4044.9	4051.4	4053.6	4055.7	4060.1	4060.1	4066.7	4057.9	4062.3
12.5°	4012.2	4020.9	4031.8	4036.1	4044.9	4044.9	4049.2	4051.4	4055.7	4053.6	4060.1
15°	3979.5	3990.4	4003.5	4014.4	4025.3	4031.8	4038.3	4040.5	4047.0	4040.5	4042.7
17.5°	3940.3	3953.4	3973.0	3986.0	4003.5	4010.0	4018.7	4023.1	4029.6	4025.3	4027.4
20°	3885.8	3901.1	3922.9	3942.5	3953.4	3968.6	3979.5	3986.0	3990.4	3986.0	3988.2
22.5°	3809.6	3831.4	3859.7	3875.0	3896.8	3909.8	3912.0	3927.2	3938.1	3927.2	3931.6
25°	3720.3	3742.1	3763.9	3796.6	3816.2	3831.4	3846.7	3848.8	3859.7	3857.5	3855.3
27.5°	3572.2	3600.5	3637.5	3663.7	3689.8	3713.8	3731.2	3735.5	3746.5	3742.1	3744.3
30°	3369.6	3400.1	3435.0	3476.4	3513.4	3537.3	3559.1	3574.4	3585.2	3578.7	3576.6
32.5°	3082.1	3112.6	3149.6	3191.0	3234.6	3269.4	3295.6	3315.2	3328.2	3323.9	3313.0
35°	2753.2	2761.9	2785.9	2818.6	2855.6	2892.6	2916.6	2938.3	2953.6	2957.9	2957.9
37.5°	2415.6	2387.3	2369.9	2369.9	2391.6	2406.9	2428.7	2441.7	2465.7	2474.4	2480.9
40°	2088.8	2023.5	1962.5	1916.8	1886.3	1884.1	1884.1	1890.6	1912.4	1940.7	1966.9
42.5°	1797.0	1692.4	1598.8	1513.8	1452.9	1418.0	1402.8	1404.9	1422.4	1448.5	1492.0
45°	1563.9	1433.2	1315.6	1213.2	1130.5	1076.0	1049.9	1047.7	1060.8	1091.2	1139.2
47.5°	1383.1	1243.7	1110.9	993.2	904.0	845.1	814.6	805.9	814.6	842.9	899.6
50°	1232.8	1089.1	951.9	829.9	734.0	673.1	644.7	633.9	644.7	668.7	725.3
52.5°	1093.4	945.3	816.8	699.2	596.8	544.5	514.0	507.5	514.0	542.3	588.1
55°	932.3	805.9	679.6	562.0	472.7	420.4	396.4	389.9	396.4	422.6	470.5
57.5°	773.3	664.3	553.3	446.5	370.3	324.5	302.8	294.0	309.3	326.7	383.4
60°	625.1	538.0	444.3	350.7	287.5	246.1	228.7	226.5	230.9	252.7	291.9
62.5°	490.1	418.2	344.1	267.9	215.6	198.2	176.4	174.3	178.6	191.7	222.2
65°	352.9	307.1	250.5	196.0	154.7	130.7	122.0	124.2	128.5	137.2	165.5
67.5°	246.1	213.5	174.3	137.2	106.8	95.8	87.1	85.0	87.1	102.4	117.6
70°	165.5	145.9	117.6	104.6	74.1	58.8	61.0	54.5	63.2	63.2	76.2
72.5°	108.9	95.8	78.4	61.0	52.3	41.4	41.4	39.2	43.5	45.7	56.7
75°	56.7	43.5	43.5	30.5	21.8	10.9	19.6	17.4	15.2	17.4	21.8
77.5°	39.2	32.7	30.5	24.0	21.8	17.4	17.4	17.4	17.4	19.6	21.8
80°	24.0	24.0	17.4	15.2	13.1	10.9	13.1	13.1	13.1	13.1	15.2
82.5°	15.2	13.1	13.1	10.9	10.9	8.7	8.7	8.7	8.7	8.7	13.1
85°	13.1	8.7	8.7	6.6	8.7	15.2	6.6	8.7	8.7	8.7	6.6
87.5°	4.4	6.6	6.6	6.6	4.4	2.2	4.4	6.6	6.6	10.9	8.7
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°	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9	4057.9
2.5°	4064.5	4066.7	4066.7	4064.5	4064.5	4060.1	4068.8	4062.3	4064.5	4073.2	4066.7
5°	4068.8	4071.0	4071.0	4068.8	4068.8	4068.8	4071.0	4071.0	4068.8	4066.7	4071.0
7.5°	4077.5	4075.4	4075.4	4071.0	4071.0	4066.7	4071.0	4064.5	4068.8	4064.5	4071.0
10°	4066.7	4068.8	4066.7	4064.5	4064.5	4062.3	4062.3	4055.7	4057.9	4051.4	4055.7
12.5°	4060.1	4057.9	4057.9	4053.6	4049.2	4044.9	4042.7	4036.1	4036.1	4020.9	4027.4
15°	4042.7	4044.9	4038.3	4029.6	4025.3	4014.4	4010.0	4001.3	3992.6	3981.7	3983.9
17.5°	4027.4	4020.9	4012.2	4003.5	3986.0	3977.3	3968.6	3955.5	3951.2	3938.1	3933.8
20°	3981.7	3977.3	3966.5	3951.2	3940.3	3920.7	3912.0	3898.9	3888.0	3875.0	3868.4
22.5°	3922.9	3918.5	3905.4	3890.2	3872.8	3864.1	3855.3	3831.4	3820.5	3807.4	3805.2
25°	3848.8	3842.3	3829.2	3811.8	3803.1	3779.1	3770.4	3753.0	3748.6	3735.5	3733.4
27.5°	3735.5	3726.8	3711.6	3689.8	3674.6	3659.3	3650.6	3637.5	3633.2	3620.1	3618.0
30°	3565.7	3554.8	3524.3	3515.6	3489.4	3474.2	3474.2	3456.7	3458.9	3450.2	3450.2
32.5°	3297.8	3280.3	3256.3	3238.9	3221.5	3212.8	3212.8	3206.2	3210.6	3210.6	3215.0
35°	2942.7	2918.8	2905.7	2894.8	2894.8	2903.5	2929.6	2936.2	2949.3	2960.1	2968.9
37.5°	2487.4	2485.3	2500.6	2513.6	2546.3	2583.3	2629.1	2668.3	2705.3	2731.4	2757.5
40°	1995.2	2049.7	2093.2	2154.2	2204.3	2276.2	2358.9	2426.5	2489.6	2535.4	2583.3
42.5°	1557.4	1627.1	1718.6	1807.9	1897.2	1995.2	2104.1	2197.8	2280.5	2343.7	2393.8
45°	1213.2	1309.1	1420.2	1533.4	1648.9	1770.9	1884.1	1980.0	2067.1	2132.4	2182.5
47.5°	978.0	1082.6	1208.9	1333.0	1463.7	1592.2	1718.6	1801.4	1873.2	1925.5	1971.3
50°	808.1	919.2	1052.1	1193.6	1324.3	1452.9	1561.7	1642.3	1701.2	1746.9	1775.2
52.5°	675.2	792.8	934.4	1076.0	1206.7	1324.3	1422.4	1483.3	1531.3	1563.9	1590.0
55°	557.6	670.9	803.8	936.6	1065.1	1176.2	1256.8	1302.6	1339.5	1359.2	1374.4
57.5°	455.3	559.8	681.8	803.8	914.8	1006.3	1069.5	1115.2	1132.7	1147.9	1145.7
60°	357.2	455.3	566.3	670.9	766.7	840.7	886.5	912.6	925.7	932.3	927.9
62.5°	281.0	370.3	455.3	546.7	616.4	679.6	723.2	723.2	729.7	731.9	738.4
65°	209.1	276.6	350.7	418.2	474.8	516.2	540.2	546.7	555.5	553.3	548.9
67.5°	154.7	204.8	259.2	309.3	348.5	374.6	392.0	407.3	405.2	400.8	398.6
70°	106.8	139.4	187.3	217.8	246.1	272.3	276.6	278.8	281.0	283.2	278.8
72.5°	74.1	98.0	124.2	150.3	167.7	178.6	189.5	191.7	191.7	191.7	189.5
75°	37.0	50.1	74.1	85.0	100.2	104.6	113.3	113.3	119.8	111.1	108.9
77.5°	32.7	39.2	52.3	61.0	67.5	74.1	76.2	82.8	80.6	76.2	78.4
80°	19.6	24.0	32.7	37.0	45.7	47.9	50.1	52.3	50.1	52.3	52.3
82.5°	15.2	17.4	21.8	21.8	28.3	28.3	30.5	30.5	32.7	32.7	32.7
85°	8.7	15.2	13.1	26.1	17.4	17.4	21.8	26.1	21.8	21.8	26.1
87.5°	8.7	8.7	6.6	8.7	8.7	8.7	10.9	13.1	13.1	15.2	13.1
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: P249227

CATALOG NUMBER: LSR8B70D010 EC8B70850 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4057.9	4057.9	4057.9	4057.9
2.5°	4064.5	4068.8	4062.3	4060.1
5°	4071.0	4071.0	4066.7	4066.7
7.5°	4071.0	4071.0	4064.5	4060.1
10°	4053.6	4053.6	4047.0	4042.7
12.5°	4020.9	4020.9	4018.7	4012.2
15°	3979.5	3979.5	3970.8	3964.3
17.5°	3922.9	3927.2	3916.4	3916.4
20°	3861.9	3859.7	3851.0	3846.7
22.5°	3798.7	3794.4	3792.2	3779.1
25°	3731.2	3726.8	3720.3	3713.8
27.5°	3615.8	3613.6	3607.0	3598.3
30°	3439.3	3437.1	3428.4	3428.4
32.5°	3210.6	3208.4	3199.7	3201.9
35°	2973.2	2981.9	2977.6	2968.9
37.5°	2775.0	2781.5	2785.9	2781.5
40°	2609.4	2629.1	2631.2	2635.6
42.5°	2433.0	2459.1	2467.9	2472.2
45°	2221.7	2245.7	2265.3	2260.9
47.5°	2006.1	2023.5	2040.9	2027.9
50°	1799.2	1810.0	1816.6	1816.6
52.5°	1603.2	1603.2	1601.0	1603.2
55°	1378.8	1378.8	1370.1	1374.4
57.5°	1143.5	1147.9	1141.3	1130.5
60°	925.7	914.8	910.5	904.0
62.5°	721.0	721.0	705.7	725.3
65°	540.2	533.7	527.1	524.9
67.5°	392.0	389.9	383.4	381.2
70°	276.6	267.9	265.7	261.4
72.5°	185.2	185.2	180.8	180.8
75°	113.3	102.4	100.2	102.4
77.5°	78.4	76.2	76.2	74.1
80°	52.3	50.1	54.5	47.9
82.5°	32.7	34.9	32.7	34.9
85°	21.8	26.1	24.0	24.0
87.5°	13.1	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)