

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: P251209

Luminaire Tested: **LSR8B70D010 EC8B709730 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P251209
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B70D010 EC8B709730 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6341.0 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

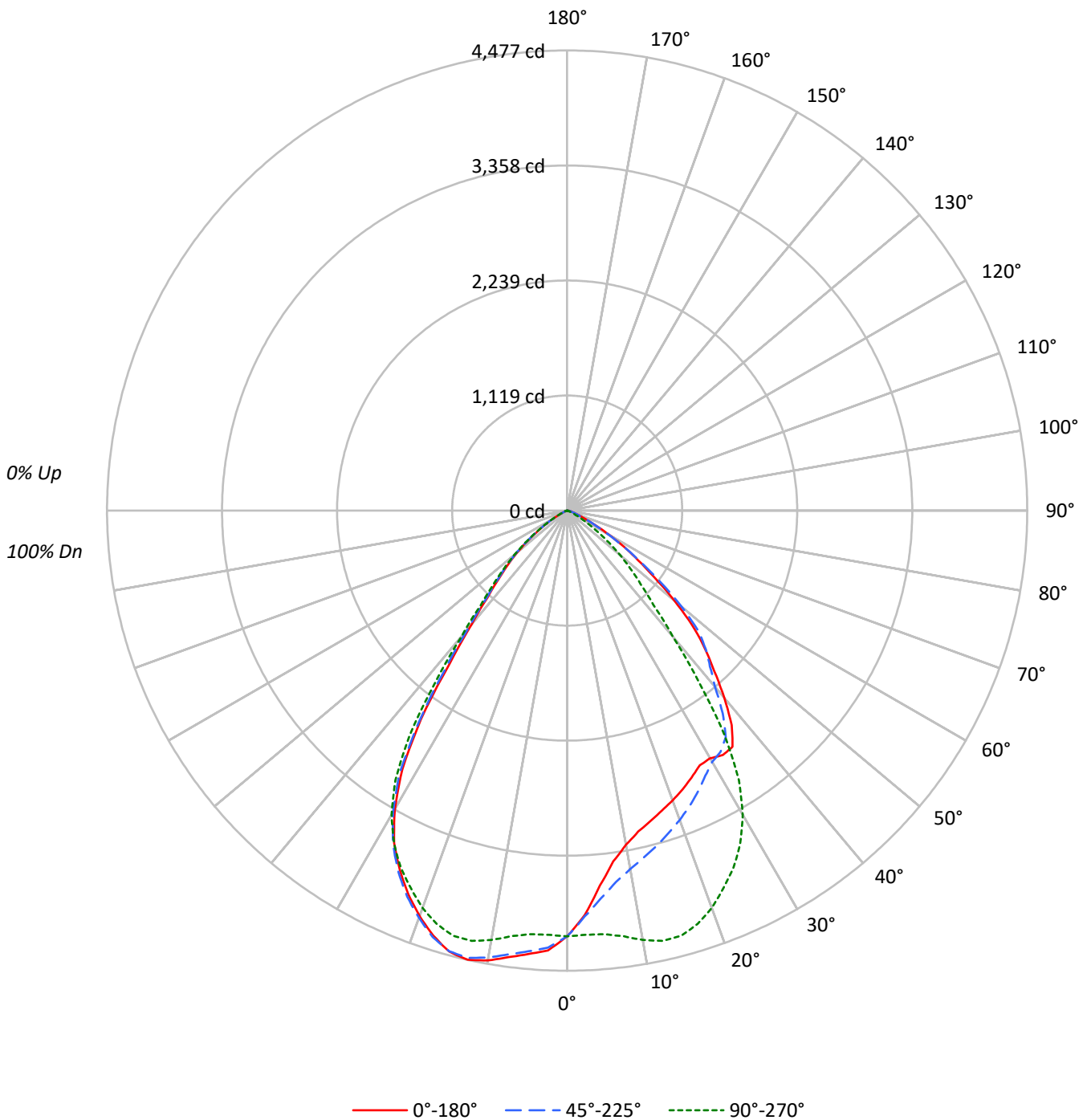
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	127736	127736	127736
5°	113335	128057	134053
10°	103330	132810	139147
15°	99862	136693	141800
20°	98433	135006	137792
25°	97469	130353	131166
30°	99054	121650	119404
35°	105584	100668	93376
40°	95688	64447	58356
45°	82587	44093	41058
50°	65161	32166	30285
55°	45230	19779	18607
60°	28795	10003	8930
65°	14374	3969	3021
70°	7952	1965	1082
75°	5707	1430	524
80°	4635	959	195
85°	4989	778	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	386.1	6.1
10°-20°	1115.1	17.6
20°-30°	1618.5	25.5
30°-40°	1594.1	25.1
40°-50°	999.3	15.8
50°-60°	482.2	7.6
60°-70°	116.7	1.8
70°-80°	23.6	0.4
80°-90°	5.4	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°	3119.8	49.2
0°-40°	4713.9	74.3
0°-60°	6195.3	97.7
0°-90°	6341.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6341.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4142	4142	4142	4142	4142	
5°	3661	3786	4137	4305	4331	339
15°	3128	3374	4282	4438	4442	884
25°	2865	3014	3831	3883	3855	1326
35°	2805	2690	2674	2522	2480	1697
45°	1894	1907	1011	969	942	1448
55°	841	868	368	364	346	774
65°	197	195	54	47	41	225
75°	48	41	12	5	4	54
85°	14	11	2	0	0	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4
2.5°	3937.8	3912.8	3866.0	3922.6	3922.6	3891.0	3954.2	3916.1	3946.5	3994.4	3952.0
5°	3661.4	3640.7	3601.5	3661.4	3669.0	3639.6	3715.8	3687.5	3732.1	3790.9	3785.5
7.5°	3442.6	3416.5	3380.6	3442.6	3454.6	3435.0	3507.9	3494.8	3553.6	3629.8	3642.9
10°	3300.0	3272.8	3241.3	3297.8	3306.6	3293.5	3367.5	3359.9	3417.6	3505.7	3540.6
12.5°	3198.8	3175.9	3141.1	3201.0	3210.8	3192.3	3261.9	3258.7	3318.5	3411.0	3454.6
15°	3128.1	3100.8	3069.3	3120.4	3133.5	3112.8	3179.2	3172.7	3233.6	3325.1	3374.0
17.5°	3061.7	3036.6	3004.0	3051.9	3064.9	3043.2	3108.5	3097.6	3149.8	3236.9	3287.0
20°	2999.6	2972.4	2943.0	2992.0	2999.6	2974.6	3039.9	3025.7	3072.6	3153.1	3202.1
22.5°	2935.4	2907.1	2876.6	2924.5	2932.1	2907.1	2967.0	2950.6	2994.2	3067.1	3111.7
25°	2864.7	2838.5	2808.1	2852.7	2859.2	2832.0	2895.1	2874.5	2912.6	2976.8	3013.8
27.5°	2793.9	2768.9	2735.1	2780.9	2784.1	2758.0	2815.7	2787.4	2819.0	2877.7	2909.3
30°	2781.9	2753.6	2718.8	2755.8	2756.9	2723.2	2777.6	2743.9	2761.3	2804.8	2823.3
32.5°	2820.0	2791.7	2755.8	2786.3	2783.0	2746.0	2798.3	2756.9	2762.4	2785.2	2780.9
35°	2804.8	2771.1	2728.6	2761.3	2761.3	2716.6	2768.9	2719.9	2714.5	2717.7	2690.5
37.5°	2631.7	2605.6	2565.4	2596.9	2593.7	2559.9	2600.2	2559.9	2541.4	2533.8	2484.8
40°	2377.1	2345.5	2315.0	2348.8	2352.0	2316.1	2368.4	2322.6	2317.2	2295.4	2237.7
42.5°	2119.1	2108.2	2078.8	2107.1	2122.4	2091.9	2135.4	2113.7	2116.9	2111.5	2057.1
45°	1893.8	1875.3	1853.5	1886.2	1896.0	1880.8	1924.3	1911.2	1924.3	1951.5	1906.9
47.5°	1651.1	1632.6	1608.7	1643.5	1660.9	1632.6	1669.6	1665.3	1684.8	1731.6	1727.3
50°	1358.3	1345.3	1340.9	1345.3	1356.1	1343.1	1369.2	1370.3	1383.4	1447.6	1451.9
52.5°	1075.3	1072.1	1056.8	1071.0	1071.0	1050.3	1076.4	1064.5	1077.5	1121.1	1149.3
55°	841.3	838.1	828.3	841.3	827.2	819.6	827.2	815.2	805.4	839.2	868.5
57.5°	655.2	644.3	632.4	637.8	636.7	620.4	629.1	614.9	607.3	619.3	645.4
60°	466.9	463.7	452.8	458.2	462.6	450.6	459.3	452.8	439.7	449.5	450.6
62.5°	310.2	312.4	305.8	306.9	303.7	301.5	306.9	310.2	306.9	302.6	303.7
65°	197.0	195.9	194.8	195.9	198.1	193.7	197.0	199.2	195.9	195.9	194.8
67.5°	130.6	127.3	124.1	126.3	128.4	125.2	128.4	127.3	128.4	127.3	124.1
70°	88.2	87.1	86.0	87.1	87.1	84.9	87.1	86.0	87.1	86.0	82.7
72.5°	64.2	64.2	63.1	64.2	64.2	62.0	63.1	61.0	62.0	61.0	58.8
75°	47.9	47.9	46.8	47.9	46.8	45.7	46.8	45.7	43.5	43.5	41.4
77.5°	34.8	34.8	34.8	34.8	34.8	33.7	33.7	32.7	31.6	30.5	30.5
80°	26.1	25.0	25.0	25.0	25.0	23.9	25.0	23.9	22.9	21.8	20.7
82.5°	18.5	19.6	18.5	18.5	18.5	17.4	18.5	17.4	17.4	16.3	14.1
85°	14.1	14.1	14.1	14.1	14.1	13.1	13.1	13.1	12.0	12.0	10.9
87.5°	7.6	7.6	7.6	8.7	7.6	7.6	7.6	6.5	6.5	5.4	5.4
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4
2.5°	4008.6	4014.0	4002.0	4020.5	4092.4	4034.7	4058.6	4066.3	4120.7	4130.5	4123.9
5°	3856.2	3880.1	3895.4	3936.7	4016.2	3974.8	4017.3	4044.5	4114.1	4137.0	4142.4
7.5°	3736.5	3786.5	3823.5	3891.0	3984.6	3953.1	4017.3	4061.9	4146.8	4176.2	4190.3
10°	3647.2	3723.4	3787.6	3880.1	3985.7	3965.0	4048.8	4112.0	4206.7	4241.5	4258.9
12.5°	3579.7	3672.3	3758.2	3875.8	3990.1	3980.3	4081.5	4153.3	4253.5	4288.3	4309.0
15°	3505.7	3612.4	3712.5	3844.2	3967.2	3965.0	4073.9	4150.1	4252.4	4281.8	4301.4
17.5°	3417.6	3531.9	3641.8	3784.4	3906.3	3908.4	4018.4	4093.5	4193.6	4217.5	4230.6
20°	3328.3	3441.5	3551.4	3698.4	3818.1	3821.4	3929.1	3998.8	4094.6	4114.1	4117.4
22.5°	3233.6	3339.2	3449.1	3595.0	3710.4	3712.5	3819.2	3884.5	3966.1	3975.9	3984.6
25°	3125.9	3229.3	3332.7	3477.4	3587.4	3593.9	3690.8	3748.4	3823.5	3831.2	3834.4
27.5°	3013.8	3098.7	3197.7	3321.8	3432.8	3428.5	3519.9	3585.2	3652.7	3648.3	3647.2
30°	2900.6	2971.3	3032.3	3152.0	3233.6	3236.9	3322.9	3354.4	3425.2	3416.5	3415.4
32.5°	2821.1	2839.6	2856.0	2916.9	2994.2	2967.0	3025.7	3064.9	3113.9	3110.6	3111.7
35°	2675.3	2641.5	2592.6	2601.3	2648.1	2605.6	2637.2	2636.1	2686.2	2674.2	2688.3
37.5°	2426.0	2330.3	2221.4	2159.4	2168.1	2114.8	2103.9	2130.0	2147.4	2113.7	2125.6
40°	2160.5	2019.0	1849.2	1707.7	1700.1	1633.7	1621.7	1595.6	1629.3	1601.0	1609.7
42.5°	1964.6	1777.4	1554.2	1382.3	1345.3	1289.8	1257.1	1252.7	1262.5	1243.0	1237.5
45°	1814.4	1615.2	1359.4	1162.4	1121.1	1061.2	1028.5	1016.6	1017.7	1011.1	1005.7
47.5°	1638.0	1437.8	1178.7	977.4	930.6	874.0	841.3	833.7	838.1	829.4	822.8
50°	1394.2	1214.7	978.5	794.5	753.2	711.8	685.7	678.1	677.0	670.5	666.1
52.5°	1131.9	982.8	778.2	624.7	587.7	547.5	529.0	519.2	520.3	513.7	507.2
55°	876.2	783.6	603.0	472.4	438.6	407.1	389.6	377.7	374.4	367.9	364.6
57.5°	652.0	589.9	451.7	340.7	321.1	290.6	273.2	259.0	256.9	253.6	252.5
60°	457.1	412.5	317.8	242.7	219.9	201.4	183.9	169.8	163.3	162.2	158.9
62.5°	296.0	268.8	209.0	162.2	144.8	131.7	114.3	104.5	100.1	95.8	96.9
65°	183.9	163.3	130.6	104.5	94.7	84.9	71.8	63.1	58.8	54.4	55.5
67.5°	114.3	102.3	82.7	67.5	61.0	53.3	43.5	37.0	33.7	30.5	28.3
70°	77.3	66.4	56.6	47.9	43.5	38.1	31.6	26.1	23.9	21.8	19.6
72.5°	54.4	49.0	41.4	35.9	32.7	28.3	23.9	20.7	18.5	16.3	14.1
75°	39.2	34.8	30.5	26.1	23.9	21.8	18.5	16.3	14.1	12.0	9.8
77.5°	28.3	25.0	21.8	19.6	18.5	15.2	13.1	12.0	10.9	8.7	6.5
80°	19.6	17.4	14.1	13.1	13.1	10.9	9.8	8.7	7.6	5.4	4.4
82.5°	13.1	12.0	10.9	9.8	8.7	7.6	7.6	5.4	4.4	3.3	2.2
85°	9.8	8.7	7.6	6.5	6.5	5.4	4.4	3.3	3.3	2.2	1.1
87.5°	5.4	5.4	4.4	3.3	3.3	2.2	2.2	1.1	1.1	1.1	1.1
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4
2.5°	4179.5	4182.7	4201.2	4187.1	4223.0	4249.1	4236.0	4265.4	4255.6	4253.5	4287.2
5°	4207.8	4215.4	4240.4	4227.3	4266.5	4294.8	4281.8	4314.4	4304.6	4302.4	4337.3
7.5°	4262.2	4269.8	4291.6	4280.7	4322.0	4347.1	4330.7	4366.7	4353.6	4352.5	4386.2
10°	4330.7	4341.6	4360.1	4349.2	4387.3	4409.1	4392.8	4427.6	4415.6	4410.2	4447.2
12.5°	4381.9	4389.5	4408.0	4399.3	4436.3	4452.6	4438.5	4472.2	4457.0	4452.6	4485.3
15°	4369.9	4377.5	4392.8	4385.2	4420.0	4435.2	4416.7	4453.7	4438.5	4429.8	4459.2
17.5°	4293.7	4298.1	4309.0	4301.4	4338.4	4348.2	4327.5	4364.5	4350.3	4335.1	4363.4
20°	4181.6	4179.5	4186.0	4182.7	4213.2	4218.6	4205.6	4232.8	4216.5	4207.8	4224.1
22.5°	4042.3	4040.1	4044.5	4035.8	4066.3	4069.5	4049.9	4082.6	4066.3	4049.9	4077.1
25°	3887.8	3875.8	3873.6	3876.9	3897.6	3900.8	3880.1	3904.1	3883.4	3870.3	3896.5
27.5°	3697.3	3682.1	3678.8	3682.1	3702.7	3687.5	3670.1	3687.5	3666.8	3654.8	3671.2
30°	3462.2	3440.4	3430.6	3424.1	3445.9	3440.4	3400.2	3419.7	3387.1	3369.7	3381.7
32.5°	3145.5	3133.5	3107.4	3092.1	3112.8	3071.5	3046.4	3046.4	3033.4	3004.0	3010.5
35°	2705.8	2687.3	2663.3	2650.3	2653.5	2598.0	2556.6	2565.4	2521.8	2514.2	2517.5
37.5°	2149.6	2119.1	2110.4	2083.2	2089.7	2040.7	1984.2	1985.2	1962.4	1938.4	1930.8
40°	1615.2	1609.7	1601.0	1578.2	1586.9	1533.6	1511.8	1512.9	1497.6	1480.2	1488.9
42.5°	1248.4	1231.0	1225.5	1217.9	1220.1	1211.4	1183.1	1186.4	1173.3	1168.9	1164.6
45°	1014.4	995.9	982.8	989.4	989.4	979.6	968.7	975.2	968.7	960.0	964.3
47.5°	835.9	818.5	811.9	810.9	818.5	811.9	801.1	803.2	802.2	798.9	796.7
50°	667.2	662.8	657.4	654.1	657.4	655.2	645.4	650.9	654.1	643.2	646.5
52.5°	508.3	508.3	507.2	499.6	506.1	499.6	498.5	500.7	497.4	493.0	492.0
55°	372.2	369.0	363.5	362.4	364.6	362.4	360.3	361.3	363.5	352.6	352.6
57.5°	254.7	252.5	249.2	249.2	253.6	248.2	244.9	249.2	244.9	240.5	240.5
60°	163.3	162.2	158.9	158.9	158.9	157.8	154.6	155.6	157.8	151.3	152.4
62.5°	98.0	94.7	93.6	92.5	93.6	92.5	92.5	91.4	90.3	90.3	87.1
65°	53.3	51.2	49.0	50.1	50.1	49.0	49.0	49.0	46.8	45.7	44.6
67.5°	27.2	25.0	25.0	23.9	23.9	23.9	23.9	22.9	22.9	22.9	21.8
70°	17.4	16.3	15.2	15.2	15.2	14.1	14.1	14.1	14.1	14.1	13.1
72.5°	12.0	10.9	9.8	9.8	9.8	8.7	8.7	8.7	8.7	7.6	7.6
75°	8.7	7.6	6.5	6.5	6.5	5.4	5.4	5.4	5.4	5.4	5.4
77.5°	5.4	4.4	4.4	4.4	4.4	3.3	3.3	3.3	3.3	3.3	2.2
80°	3.3	3.3	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1
82.5°	2.2	2.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0
87.5°	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P251209

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4	4142.4
2.5°	4275.2	4266.5	4272.0	4312.2	4294.8	4289.4	4243.7	4283.9
5°	4326.4	4319.9	4319.9	4365.6	4344.9	4340.5	4295.9	4330.7
7.5°	4374.3	4367.7	4368.8	4415.6	4399.3	4392.8	4348.2	4383.0
10°	4436.3	4432.0	4433.0	4477.7	4460.3	4453.7	4408.0	4443.9
12.5°	4473.3	4466.8	4466.8	4514.7	4495.1	4485.3	4441.8	4476.6
15°	4445.0	4435.2	4435.2	4483.1	4461.3	4447.2	4409.1	4441.8
17.5°	4348.2	4338.4	4338.4	4379.7	4363.4	4342.7	4303.5	4334.0
20°	4213.2	4201.2	4198.0	4245.8	4223.0	4204.5	4169.7	4199.0
22.5°	4060.8	4055.4	4045.6	4093.5	4072.8	4053.2	4016.2	4039.0
25°	3878.0	3869.3	3859.5	3906.3	3885.6	3866.0	3836.6	3855.1
27.5°	3650.5	3651.6	3646.1	3683.1	3662.5	3651.6	3615.7	3646.1
30°	3375.1	3363.2	3358.8	3402.3	3382.7	3368.6	3324.0	3353.4
32.5°	3016.0	2998.5	2975.7	3024.7	2990.9	2978.9	2940.9	2983.3
35°	2493.5	2488.1	2467.4	2508.8	2490.3	2468.5	2444.5	2480.5
37.5°	1927.6	1931.9	1929.7	1940.6	1929.7	1915.6	1889.5	1876.4
40°	1471.5	1460.6	1451.9	1471.5	1448.7	1448.7	1433.4	1449.7
42.5°	1153.7	1149.3	1160.2	1164.6	1151.5	1149.3	1147.2	1146.1
45°	952.3	952.3	954.5	958.9	954.5	952.3	945.8	941.5
47.5°	784.7	789.1	784.7	798.9	791.3	789.1	776.0	781.5
50°	635.6	630.2	635.6	640.0	641.1	634.5	628.0	631.3
52.5°	493.0	484.3	482.2	488.7	484.3	484.3	480.0	478.9
55°	347.2	350.5	345.0	350.5	348.3	345.0	341.8	346.1
57.5°	235.1	236.2	234.0	237.3	231.8	232.9	231.8	230.7
60°	152.4	148.0	148.0	151.3	145.8	145.8	144.8	144.8
62.5°	87.1	86.0	86.0	84.9	83.8	83.8	83.8	81.6
65°	44.6	43.5	42.4	42.4	42.4	42.4	41.4	41.4
67.5°	21.8	20.7	20.7	21.8	20.7	20.7	20.7	20.7
70°	13.1	13.1	12.0	13.1	12.0	12.0	12.0	12.0
72.5°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
75°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
77.5°	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)