

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: P248471

Luminaire Tested: **LSR8B70D010 EC8B70850 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248471
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 EC8B70850 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7791.0 lumens
Efficiency: N/A
Efficacy: 102.6 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

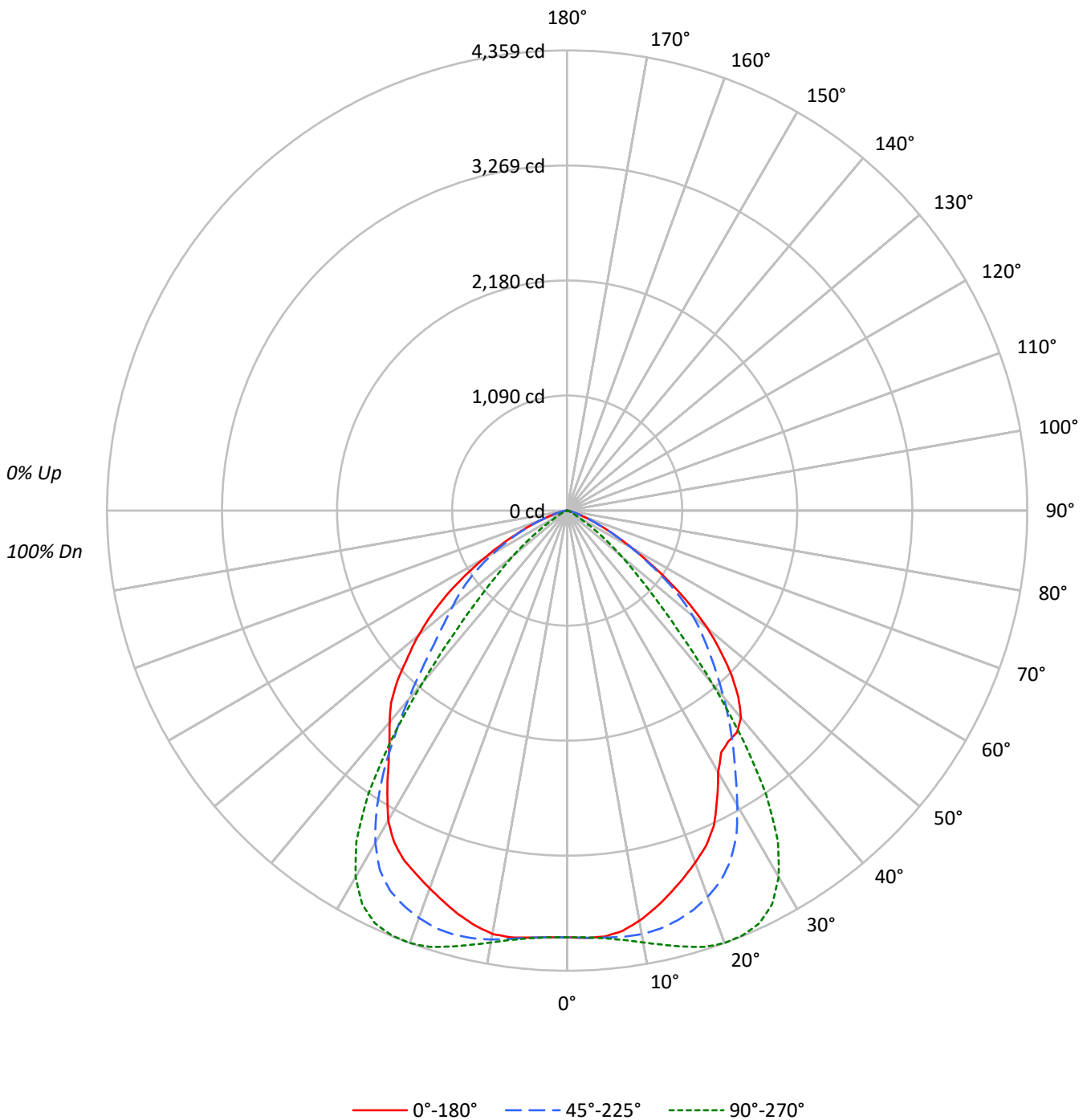
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	124631	124631	124631
5°	125373	125838	125705
10°	123532	130048	127496
15°	119920	136491	126493
20°	116439	143049	124957
25°	111970	146712	124379
30°	101899	142690	120689
35°	100382	123642	111043
40°	103110	85753	105268
45°	95988	51829	98980
50°	83257	32007	88198
55°	63896	16725	74852
60°	43529	6747	56492
65°	27077	3444	38978
70°	14696	2128	23793
75°	7673	1025	14059
80°	3427	1154	7618
85°	2300	778	6828



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.7	5.0
10°-20°	1151.4	14.8
20°-30°	1756.6	22.5
30°-40°	1833.1	23.5
40°-50°	1376.9	17.7
50°-60°	847.2	10.9
60°-70°	344.8	4.4
70°-80°	81.2	1.0
80°-90°	11.2	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°	3296.7	42.3
0°-40°	5129.8	65.8
0°-60°	7353.8	94.4
0°-90°	7791.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7791.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4042	4042	4042	4042	4042	
5°	4050	4061	4065	4061	4061	383
15°	3756	4020	4276	4158	3962	1058
25°	3291	3660	4312	3971	3656	1496
35°	2667	2742	3284	3036	2950	1684
45°	2201	1905	1188	1774	2270	1679
55°	1188	1128	311	1128	1392	1068
65°	371	375	47	504	534	387
75°	64	64	9	114	118	77
85°	6	6	2	15	19	9
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°	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7
2.5°	4052.5	4046.0	4052.5	4052.5	4054.6	4050.3	4052.5	4054.6	4050.3	4050.3	4050.3
5°	4050.3	4046.0	4050.3	4048.2	4052.5	4052.5	4056.8	4056.8	4061.0	4061.0	4067.5
7.5°	4016.0	4007.4	4016.0	4022.4	4026.7	4035.3	4046.0	4054.6	4063.2	4071.8	4082.5
10°	3945.2	3945.2	3951.6	3964.5	3977.3	3992.4	4011.7	4033.1	4054.6	4073.9	4093.2
12.5°	3857.2	3850.8	3863.6	3880.8	3900.1	3923.7	3953.8	3985.9	4020.3	4058.9	4088.9
15°	3756.4	3749.9	3765.0	3782.1	3805.7	3840.1	3876.6	3919.4	3968.8	4020.3	4069.6
17.5°	3653.4	3651.3	3666.3	3689.9	3709.2	3745.6	3792.9	3844.3	3900.1	3968.8	4033.1
20°	3548.3	3546.2	3561.2	3580.5	3606.2	3640.6	3687.7	3747.8	3814.3	3891.6	3966.6
22.5°	3438.9	3441.0	3453.9	3475.4	3496.8	3533.3	3582.6	3642.7	3715.6	3799.3	3883.0
25°	3290.9	3280.1	3297.3	3318.8	3355.2	3385.2	3432.5	3496.8	3571.9	3659.9	3758.6
27.5°	3076.3	3074.2	3089.2	3108.5	3140.7	3177.2	3228.7	3295.2	3374.5	3471.1	3567.6
30°	2861.8	2866.1	2872.5	2891.9	2913.3	2949.8	3001.3	3057.1	3132.1	3224.3	3327.3
32.5°	2715.9	2715.9	2724.5	2737.4	2752.4	2771.7	2808.2	2848.9	2906.9	2971.2	3046.3
35°	2666.6	2658.0	2666.6	2668.7	2670.9	2675.2	2681.6	2694.5	2713.8	2741.7	2769.6
37.5°	2645.2	2638.7	2638.7	2630.1	2619.4	2606.5	2589.4	2570.0	2548.6	2520.7	2499.3
40°	2561.5	2557.2	2552.9	2544.3	2520.7	2495.0	2467.1	2422.0	2372.7	2304.0	2235.4
42.5°	2400.6	2396.3	2394.1	2377.0	2355.5	2325.5	2293.3	2246.1	2183.9	2095.9	1997.3
45°	2201.1	2192.5	2186.1	2171.1	2156.0	2130.3	2100.2	2057.3	1995.1	1905.0	1787.0
47.5°	1969.4	1965.1	1962.9	1956.5	1941.5	1926.4	1907.2	1872.8	1817.0	1731.2	1609.0
50°	1735.5	1727.0	1731.2	1729.1	1722.7	1712.0	1699.0	1675.5	1632.5	1555.3	1443.8
52.5°	1467.4	1467.4	1465.2	1471.7	1473.8	1471.7	1473.8	1448.1	1411.6	1353.7	1259.3
55°	1188.5	1188.5	1194.9	1203.5	1212.1	1214.2	1212.1	1201.4	1175.6	1128.4	1044.7
57.5°	926.7	922.5	935.3	948.2	956.8	965.4	958.9	950.4	935.3	896.7	832.4
60°	705.8	705.8	714.4	723.0	731.5	740.1	738.0	735.8	723.0	697.2	645.8
62.5°	519.1	521.3	521.3	527.8	536.3	544.9	551.3	544.9	538.5	521.3	487.0
65°	371.1	369.0	371.1	377.6	384.0	392.6	396.9	394.7	388.3	375.4	349.7
67.5°	248.9	246.7	255.3	257.4	261.7	270.3	268.2	270.3	268.2	257.4	236.0
70°	163.0	158.7	163.0	160.9	167.3	169.5	173.7	175.9	173.7	167.3	160.9
72.5°	100.8	98.7	100.8	103.0	105.1	107.2	111.5	111.5	109.4	105.1	96.5
75°	64.4	57.9	60.1	55.8	60.1	60.1	64.4	66.5	64.4	64.4	60.1
77.5°	38.6	38.6	38.6	38.6	38.6	38.6	38.6	40.8	42.9	38.6	36.5
80°	19.3	19.3	21.5	21.5	21.5	23.6	21.5	21.5	21.5	23.6	17.2
82.5°	15.0	12.9	12.9	12.9	15.0	12.9	12.9	12.9	12.9	12.9	12.9
85°	6.5	8.6	6.5	4.3	6.5	6.5	8.6	6.5	6.5	6.5	8.6
87.5°	2.2	2.2	0.0	0.0	0.0	2.2	0.0	2.2	2.2	4.3	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7
2.5°	4052.5	4048.2	4048.2	4046.0	4050.3	4046.0	4048.2	4046.0	4046.0	4050.3	4046.0
5°	4067.5	4069.6	4065.3	4063.2	4069.6	4069.6	4069.6	4065.3	4065.3	4067.5	4065.3
7.5°	4088.9	4093.2	4095.3	4097.5	4101.8	4103.9	4103.9	4101.8	4099.6	4106.1	4097.5
10°	4112.5	4119.0	4131.8	4138.3	4149.0	4149.0	4153.3	4153.3	4149.0	4153.3	4151.1
12.5°	4103.9	4142.5	4164.0	4179.0	4194.0	4206.9	4211.2	4213.3	4211.2	4219.8	4211.2
15°	4119.0	4151.1	4185.5	4211.2	4239.1	4254.1	4258.4	4275.5	4279.8	4282.0	4269.1
17.5°	4095.3	4153.3	4189.7	4228.4	4269.1	4297.0	4322.7	4333.5	4335.6	4339.9	4322.7
20°	4041.7	4106.1	4161.8	4217.6	4264.8	4307.7	4329.2	4359.2	4350.7	4367.8	4344.2
22.5°	3968.8	4041.7	4112.5	4185.5	4234.8	4286.3	4331.3	4352.8	4363.5	4363.5	4337.7
25°	3852.9	3938.8	4016.0	4091.0	4166.2	4228.4	4279.8	4312.0	4318.5	4316.3	4286.3
27.5°	3672.7	3765.0	3855.1	3940.9	4033.1	4106.1	4166.2	4204.7	4215.5	4215.5	4183.3
30°	3423.9	3522.6	3610.5	3713.5	3807.9	3889.4	3973.1	4007.4	4026.7	4026.7	3990.3
32.5°	3127.8	3211.5	3293.0	3393.8	3496.8	3589.1	3668.4	3715.6	3739.2	3737.1	3704.9
35°	2806.0	2846.8	2909.0	2984.1	3076.3	3162.1	3239.4	3284.5	3325.2	3323.0	3293.0
37.5°	2484.2	2473.5	2480.0	2507.8	2565.7	2625.8	2685.9	2728.8	2763.1	2778.2	2771.7
40°	2168.9	2113.1	2059.5	2040.2	2044.4	2065.9	2098.1	2130.3	2168.9	2188.2	2196.8
42.5°	1885.7	1791.3	1696.9	1626.1	1585.4	1572.5	1587.5	1598.2	1621.8	1649.7	1677.6
45°	1658.3	1531.8	1407.3	1297.9	1229.2	1188.5	1179.9	1188.5	1201.4	1229.2	1265.7
47.5°	1471.7	1323.6	1184.2	1061.9	961.1	907.5	892.5	888.2	901.0	926.7	976.1
50°	1306.5	1158.4	1004.0	862.4	757.3	697.2	675.8	667.2	682.2	701.5	746.5
52.5°	1126.3	980.4	821.7	684.3	574.9	512.7	489.1	476.3	484.8	510.6	555.6
55°	931.0	795.9	652.2	510.6	405.4	347.5	319.6	311.1	319.6	347.5	392.6
57.5°	735.8	622.1	502.0	369.0	274.6	216.7	188.8	180.2	203.8	214.5	261.7
60°	574.9	482.7	379.7	270.3	188.8	143.7	115.8	109.4	120.2	139.4	178.1
62.5°	431.2	373.3	291.7	193.1	139.4	92.2	77.2	70.8	77.2	92.2	122.3
65°	313.2	268.2	203.8	141.6	94.4	68.7	51.5	47.2	53.6	64.4	90.1
67.5°	214.5	180.2	141.6	98.7	64.4	42.9	36.5	36.5	38.6	47.2	66.5
70°	139.4	118.0	90.1	64.4	42.9	32.2	27.9	23.6	27.9	34.3	45.0
72.5°	88.0	75.1	57.9	45.0	32.2	23.6	19.3	17.2	21.5	25.7	34.3
75°	53.6	40.8	30.0	23.6	17.2	17.2	17.2	8.6	10.7	17.2	21.5
77.5°	32.2	27.9	23.6	19.3	15.0	8.6	8.6	8.6	10.7	12.9	19.3
80°	17.2	15.0	10.7	10.7	8.6	6.5	8.6	6.5	4.3	10.7	12.9
82.5°	10.7	8.6	8.6	8.6	10.7	4.3	6.5	4.3	6.5	8.6	6.5
85°	6.5	6.5	6.5	4.3	10.7	4.3	4.3	2.2	2.2	4.3	4.3
87.5°	0.0	2.2	2.2	0.0	2.2	0.0	2.2	2.2	2.2	2.2	2.2
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°	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7	4041.7
2.5°	4048.2	4046.0	4048.2	4046.0	4046.0	4046.0	4048.2	4048.2	4046.0	4046.0	4050.3
5°	4065.3	4065.3	4065.3	4063.2	4061.0	4061.0	4065.3	4065.3	4058.9	4065.3	4065.3
7.5°	4101.8	4095.3	4101.8	4093.2	4088.9	4091.0	4093.2	4088.9	4084.6	4086.8	4086.8
10°	4149.0	4142.5	4142.5	4136.1	4129.7	4125.4	4121.1	4110.4	4099.6	4097.5	4088.9
12.5°	4204.7	4194.0	4187.6	4174.7	4164.0	4149.0	4136.1	4119.0	4097.5	4082.5	4067.5
15°	4260.5	4243.4	4228.4	4206.9	4183.3	4157.5	4129.7	4101.8	4067.5	4037.4	4011.7
17.5°	4305.6	4282.0	4254.1	4219.8	4185.5	4146.8	4106.1	4065.3	4016.0	3977.3	3947.3
20°	4320.6	4286.3	4249.8	4204.7	4159.7	4106.1	4054.6	4001.0	3945.2	3904.4	3870.1
22.5°	4301.3	4260.5	4215.5	4168.3	4108.2	4050.3	3990.3	3928.0	3878.7	3822.9	3790.7
25°	4247.7	4198.3	4149.0	4093.2	4035.3	3970.9	3906.6	3842.2	3782.1	3752.1	3711.4
27.5°	4138.3	4084.6	4031.0	3973.1	3906.6	3842.2	3775.7	3713.5	3662.0	3621.2	3597.7
30°	3945.2	3883.0	3820.8	3758.6	3700.6	3634.1	3571.9	3520.4	3468.9	3436.7	3413.2
32.5°	3649.1	3593.4	3531.2	3471.1	3417.5	3361.7	3310.2	3265.1	3228.7	3207.2	3190.0
35°	3250.1	3194.3	3147.1	3104.2	3059.2	3035.6	3003.4	2977.6	2962.6	2954.1	2951.9
37.5°	2748.1	2715.9	2700.9	2692.3	2683.7	2677.3	2681.6	2692.3	2700.9	2715.9	2733.1
40°	2211.8	2239.7	2248.3	2278.3	2306.2	2342.6	2383.4	2430.6	2469.2	2518.5	2552.9
42.5°	1722.7	1774.2	1834.2	1898.6	1967.2	2033.7	2115.3	2190.3	2259.0	2321.2	2374.8
45°	1323.6	1403.0	1493.1	1585.4	1677.6	1774.2	1872.8	1965.1	2046.6	2113.1	2168.9
47.5°	1031.9	1119.9	1235.7	1349.4	1460.9	1574.6	1684.0	1780.6	1849.2	1913.6	1962.9
50°	817.3	918.2	1044.7	1175.6	1297.9	1418.0	1533.9	1624.0	1692.6	1744.1	1780.6
52.5°	632.8	753.0	881.7	1019.0	1149.9	1280.7	1388.0	1471.7	1527.5	1572.5	1600.4
55°	472.0	590.0	727.3	868.8	1001.9	1128.4	1229.2	1302.2	1351.6	1377.3	1392.3
57.5°	341.1	448.4	585.6	727.3	847.4	967.5	1049.0	1115.6	1143.4	1158.4	1164.9
60°	248.9	347.5	469.8	592.1	705.8	802.3	873.1	918.2	939.7	948.2	946.1
62.5°	182.4	268.2	373.3	476.3	568.5	647.9	703.7	733.7	744.4	748.7	742.3
65°	139.4	205.9	296.1	375.4	446.2	504.1	544.9	564.2	570.6	568.5	564.2
67.5°	103.0	154.5	221.0	281.0	332.5	377.6	399.0	416.2	420.5	414.1	407.6
70°	73.0	113.7	160.9	201.7	240.3	266.0	289.6	291.7	291.7	289.6	285.3
72.5°	51.5	79.4	109.4	137.3	160.9	180.2	188.8	195.2	193.1	190.9	186.7
75°	34.3	49.3	79.4	85.8	107.2	113.7	122.3	122.3	124.4	118.0	118.0
77.5°	21.5	34.3	47.2	55.8	64.4	73.0	77.2	77.2	79.4	77.2	77.2
80°	12.9	21.5	25.7	38.6	38.6	45.0	47.2	49.3	45.0	51.5	45.0
82.5°	8.6	12.9	19.3	19.3	23.6	27.9	27.9	30.0	30.0	27.9	27.9
85°	6.5	8.6	10.7	12.9	12.9	15.0	12.9	12.9	15.0	17.2	15.0
87.5°	2.2	4.3	2.2	4.3	4.3	8.6	6.5	6.5	6.5	8.6	8.6
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: P248471

CATALOG NUMBER: LSR8B70D010 EC8B70850 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4041.7	4041.7	4041.7	4041.7
2.5°	4046.0	4048.2	4046.0	4046.0
5°	4065.3	4063.2	4065.3	4061.0
7.5°	4080.3	4080.3	4078.2	4078.2
10°	4080.3	4071.8	4071.8	4071.8
12.5°	4048.2	4037.4	4031.0	4026.7
15°	3992.4	3973.1	3964.5	3962.3
17.5°	3919.4	3902.3	3891.6	3885.1
20°	3835.8	3818.6	3805.7	3807.9
22.5°	3762.8	3743.5	3734.9	3730.6
25°	3689.9	3666.3	3659.9	3655.6
27.5°	3571.9	3559.0	3552.6	3546.2
30°	3391.7	3385.2	3374.5	3389.5
32.5°	3183.6	3172.9	3164.3	3170.8
35°	2954.1	2947.6	2954.1	2949.8
37.5°	2743.8	2750.2	2758.9	2763.1
40°	2578.6	2602.2	2610.8	2615.1
42.5°	2413.5	2441.3	2458.5	2469.2
45°	2209.6	2237.5	2256.8	2269.7
47.5°	1999.4	2023.0	2042.3	2040.2
50°	1808.5	1821.4	1829.9	1838.5
52.5°	1615.4	1615.4	1617.5	1617.5
55°	1396.6	1392.3	1390.1	1392.3
57.5°	1156.3	1152.0	1149.9	1143.4
60°	937.5	924.6	916.0	916.0
62.5°	733.7	718.7	712.3	710.1
65°	551.3	549.2	536.3	534.2
67.5°	399.0	390.4	381.9	384.0
70°	281.0	268.2	268.2	263.9
72.5°	182.4	175.9	173.7	173.7
75°	113.7	113.7	109.4	118.0
77.5°	75.1	75.1	73.0	75.1
80°	45.0	45.0	45.0	42.9
82.5°	27.9	30.0	27.9	27.9
85°	15.0	17.2	12.9	19.3
87.5°	8.6	10.7	8.6	10.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)