

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: P250275

Luminaire Tested: **LSR8B90D010 EC8B909727 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250275
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B909727 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6691.0 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

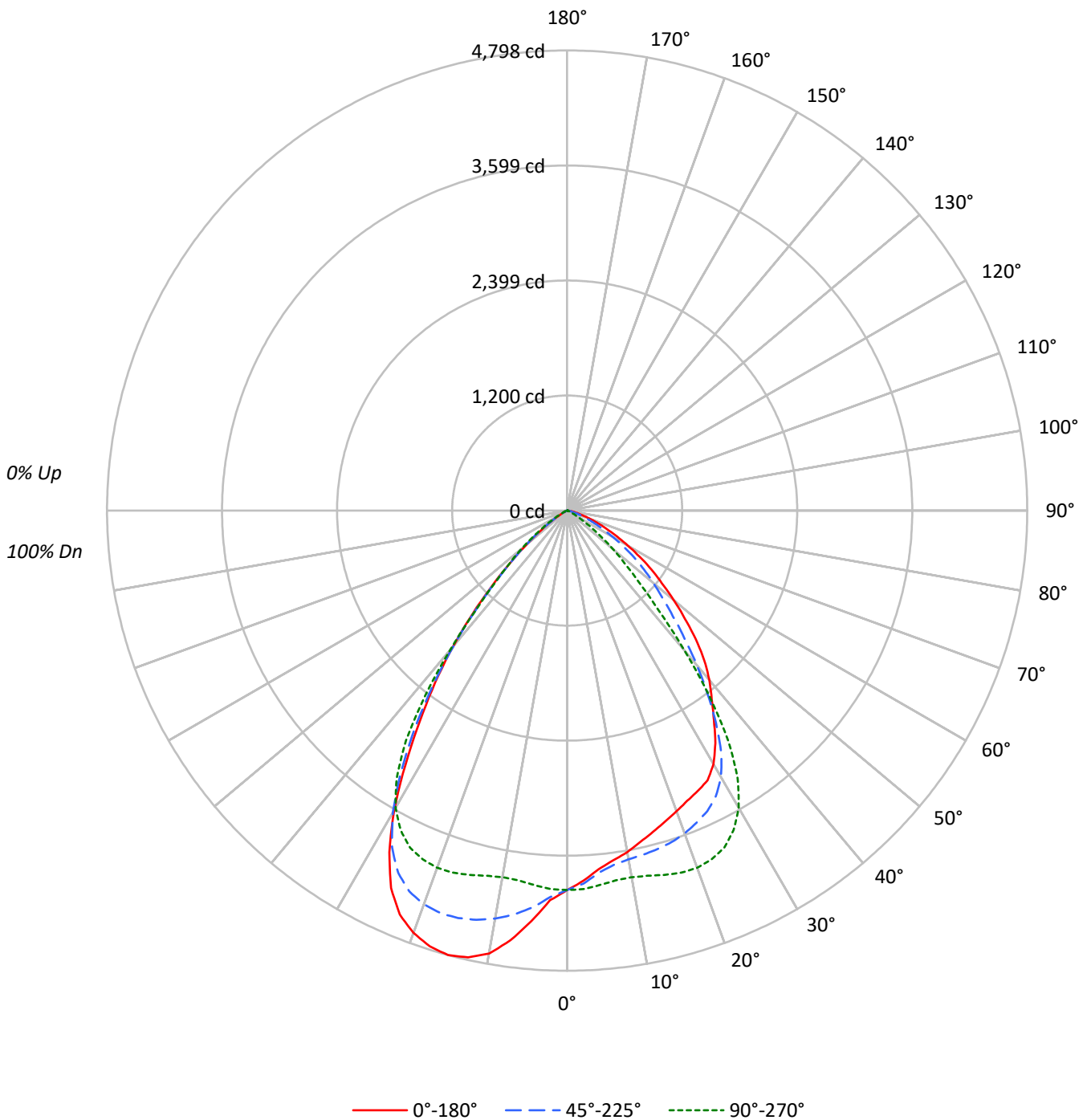
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91	91	91	91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82	82	82	82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73	73	73	73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66	66	66	66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60	60	60	60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54	54	54	54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49	49	49	49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45	45	45	45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42	42	42	42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38	38	38	38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	380.3	5.7
10°-20°	1138.3	17.0
20°-30°	1743.2	26.1
30°-40°	1708.9	25.5
40°-50°	1029.1	15.4
50°-60°	473.7	7.1
60°-70°	166.4	2.5
70°-80°	43.5	0.7
80°-90°	7.4	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°	3261.9	48.8
0°-40°	4970.9	74.3
0°-60°	6473.7	96.8
0°-90°	6691.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6691.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3956	3956	3956	3956	3956	
5°	3755	3790	3919	4154	4297	355
15°	3466	3653	3932	4398	4798	979
25°	3224	3457	3877	4169	4343	1485
35°	2668	2705	2928	2760	2672	1671
45°	1895	1560	1058	1065	1093	1453
55°	1076	852	303	238	229	960
65°	457	316	48	24	26	465
75°	118	68	4	0	0	143
85°	18	9	2	0	0	25
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°	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4
2.5°	3863.9	3867.7	3867.7	3867.7	3875.1	3877.0	3875.1	3877.0	3880.6	3893.5	3899.1
5°	3754.9	3749.3	3753.1	3751.2	3760.5	3766.0	3762.3	3767.8	3780.8	3790.1	3799.3
7.5°	3677.3	3677.3	3677.3	3680.9	3686.5	3697.6	3695.8	3699.4	3712.4	3725.3	3738.2
10°	3616.2	3614.4	3614.4	3623.6	3631.0	3643.9	3647.7	3658.8	3675.4	3692.0	3706.8
12.5°	3536.7	3538.6	3547.8	3557.1	3573.7	3594.0	3605.1	3620.0	3645.8	3673.5	3690.2
15°	3466.5	3468.3	3475.8	3494.2	3514.6	3538.6	3562.6	3586.6	3618.1	3653.2	3682.8
17.5°	3398.1	3399.9	3405.5	3425.8	3451.7	3483.2	3510.8	3542.3	3583.0	3623.6	3660.6
20°	3335.2	3333.4	3342.6	3361.1	3394.4	3423.9	3451.7	3488.7	3533.1	3583.0	3625.5
22.5°	3274.2	3274.2	3283.5	3302.0	3331.6	3361.1	3390.7	3429.5	3473.9	3522.0	3571.9
25°	3224.3	3222.4	3235.4	3244.7	3266.8	3296.4	3327.8	3359.3	3403.6	3457.3	3505.3
27.5°	3170.7	3168.9	3170.7	3181.8	3202.1	3224.3	3248.3	3276.1	3313.1	3357.4	3403.6
30°	3052.4	3054.2	3054.2	3063.5	3074.6	3098.6	3111.5	3139.3	3172.5	3209.5	3250.2
32.5°	2876.7	2878.6	2878.6	2882.3	2891.5	2902.6	2913.7	2934.0	2959.9	2991.3	3028.3
35°	2667.8	2667.8	2665.9	2667.8	2673.4	2673.4	2682.6	2673.4	2686.3	2704.8	2732.5
37.5°	2475.5	2471.8	2468.2	2464.4	2458.9	2449.7	2436.7	2414.5	2409.0	2401.6	2403.4
40°	2305.5	2303.6	2292.5	2283.2	2264.7	2242.6	2211.2	2172.4	2140.9	2104.0	2072.5
42.5°	2116.9	2115.0	2105.8	2089.1	2068.8	2035.5	1985.6	1933.9	1871.0	1815.5	1758.2
45°	1895.0	1900.5	1887.6	1869.1	1845.1	1813.6	1758.2	1695.3	1632.5	1560.4	1488.2
47.5°	1663.9	1662.1	1652.8	1641.7	1621.4	1590.0	1553.0	1484.6	1418.0	1351.5	1277.5
50°	1449.4	1442.1	1438.3	1427.3	1414.4	1388.5	1349.6	1294.1	1235.0	1172.1	1103.7
52.5°	1246.1	1246.1	1236.8	1229.4	1218.3	1198.0	1164.8	1120.4	1070.5	1011.3	939.2
55°	1076.0	1072.3	1063.1	1053.8	1042.7	1029.8	1000.2	963.2	909.6	852.3	789.4
57.5°	894.8	892.9	889.3	878.2	872.6	859.7	826.4	789.4	743.2	693.3	641.5
60°	732.1	724.8	717.3	709.9	700.7	687.8	665.6	634.1	595.3	550.9	499.2
62.5°	586.1	597.1	575.0	575.0	556.5	545.4	525.1	506.6	465.9	425.2	380.9
65°	456.7	456.7	447.4	440.0	428.9	416.0	395.6	377.1	347.5	316.1	284.7
67.5°	349.4	347.5	338.3	330.9	321.7	314.3	299.5	277.3	255.2	229.3	203.3
70°	257.0	255.2	253.3	240.3	232.9	223.7	212.6	197.9	181.2	162.7	138.7
72.5°	184.8	184.8	179.4	173.8	166.4	159.0	147.9	138.7	123.9	111.0	94.3
75°	118.3	116.5	116.5	107.2	107.2	96.1	88.7	83.2	75.8	68.4	53.6
77.5°	85.1	83.2	81.3	77.6	74.0	70.2	64.7	57.3	51.7	44.4	38.8
80°	57.3	53.6	51.7	51.7	46.2	44.4	46.2	35.2	33.3	27.7	24.0
82.5°	35.2	35.2	33.3	33.3	31.4	29.6	24.0	24.0	22.2	20.3	16.7
85°	18.5	24.0	16.7	18.5	16.7	18.5	16.7	12.9	11.1	9.2	9.2
87.5°	11.1	7.4	7.4	11.1	9.2	7.4	7.4	7.4	5.6	3.7	3.7
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4
2.5°	3895.4	3908.4	3906.5	3923.1	3928.7	3941.6	3941.6	3950.8	3956.4	3969.3	3980.4
5°	3803.0	3823.3	3828.9	3849.2	3865.8	3886.2	3899.1	3919.4	3937.9	3965.7	3991.6
7.5°	3745.7	3762.3	3773.4	3797.4	3815.9	3838.1	3860.3	3888.0	3913.9	3947.2	3984.2
10°	3717.9	3740.1	3756.7	3780.8	3803.0	3827.0	3849.2	3880.6	3910.2	3952.7	3993.4
12.5°	3710.5	3736.4	3756.7	3790.1	3812.2	3838.1	3863.9	3899.1	3930.5	3974.9	4021.2
15°	3710.5	3745.7	3773.4	3810.4	3836.2	3869.5	3897.3	3932.4	3967.5	4013.7	4058.1
17.5°	3703.1	3745.7	3780.8	3823.3	3856.6	3889.9	3925.0	3958.3	3995.2	4039.7	4089.5
20°	3673.5	3727.2	3769.7	3819.6	3854.7	3891.7	3926.9	3963.8	4002.7	4048.9	4091.4
22.5°	3621.8	3684.7	3732.8	3786.3	3827.0	3863.9	3899.1	3936.1	3978.6	4023.0	4067.4
25°	3553.4	3612.5	3664.3	3719.7	3760.5	3801.1	3834.4	3877.0	3915.8	3958.3	3993.4
27.5°	3449.8	3512.7	3562.6	3620.0	3656.9	3695.8	3723.5	3758.6	3795.6	3830.7	3858.5
30°	3294.6	3351.9	3403.6	3455.4	3492.4	3520.1	3549.7	3577.4	3601.5	3625.5	3649.5
32.5°	3067.1	3118.9	3168.9	3216.9	3246.5	3270.5	3292.7	3309.3	3322.3	3335.2	3337.0
35°	2754.7	2797.2	2828.6	2871.2	2898.9	2921.1	2921.1	2928.5	2926.6	2921.1	2915.5
37.5°	2405.3	2421.9	2434.8	2451.5	2453.3	2453.3	2442.3	2433.0	2418.2	2414.5	2403.4
40°	2041.1	2018.9	2002.2	1980.1	1967.1	1939.4	1915.4	1898.7	1874.7	1871.0	1867.3
42.5°	1695.3	1643.6	1597.4	1558.6	1514.2	1475.3	1440.2	1414.4	1395.9	1394.0	1395.9
45°	1414.4	1355.2	1286.7	1233.2	1183.2	1135.2	1089.0	1057.5	1040.9	1037.1	1040.9
47.5°	1201.7	1133.3	1066.7	1005.7	952.1	898.5	852.3	809.8	789.4	783.9	782.1
50°	1033.5	963.2	892.9	830.1	770.9	717.3	660.0	619.4	593.5	584.2	576.8
52.5°	869.0	806.1	734.0	669.3	610.1	547.2	488.1	441.8	416.0	404.9	397.5
55°	724.8	661.9	595.3	532.5	469.6	406.7	347.5	303.2	275.5	262.5	253.3
57.5°	578.6	519.5	462.2	399.4	347.5	286.6	227.4	188.6	164.5	149.8	142.4
60°	447.4	401.2	351.3	299.5	249.6	199.7	151.6	114.6	96.1	85.1	75.8
62.5°	338.3	299.5	266.2	221.8	183.0	140.5	103.6	74.0	57.3	48.1	44.4
65°	244.0	214.4	184.8	157.1	129.4	98.0	70.2	48.1	33.3	27.7	25.9
67.5°	173.8	149.8	127.5	109.0	88.7	70.2	49.9	33.3	25.9	22.2	20.3
70°	122.0	103.6	88.7	72.1	59.1	46.2	38.8	24.0	14.8	16.7	12.9
72.5°	81.3	68.4	61.0	49.9	40.6	33.3	24.0	16.7	16.7	12.9	11.1
75°	44.4	40.6	31.4	24.0	20.3	18.5	7.4	3.7	1.8	5.6	1.8
77.5°	31.4	27.7	24.0	20.3	16.7	12.9	7.4	7.4	5.6	7.4	3.7
80°	20.3	16.7	14.8	14.8	9.2	5.6	3.7	3.7	5.6	1.8	1.8
82.5°	12.9	11.1	9.2	9.2	9.2	5.6	5.6	5.6	5.6	3.7	3.7
85°	7.4	5.6	3.7	3.7	1.8	3.7	0.0	1.8	1.8	0.0	0.0
87.5°	3.7	1.8	1.8	1.8	1.8	0.0	0.0	1.8	0.0	1.8	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4	3956.4
2.5°	3987.8	3995.2	4004.5	4011.9	4028.5	4032.2	4039.7	4047.0	4052.6	4058.1	4060.0
5°	4013.7	4041.5	4067.4	4095.1	4130.2	4154.3	4182.0	4206.0	4230.1	4250.4	4265.1
7.5°	4021.2	4063.6	4102.5	4150.5	4202.3	4246.7	4292.9	4339.1	4387.2	4424.2	4455.6
10°	4035.9	4087.7	4137.6	4194.9	4261.5	4320.6	4377.9	4438.9	4500.0	4551.7	4598.0
12.5°	4061.8	4119.1	4172.7	4235.6	4304.0	4370.5	4433.4	4501.8	4566.6	4623.9	4675.6
15°	4104.3	4157.9	4209.7	4268.9	4337.3	4398.3	4461.2	4527.7	4592.4	4651.6	4699.7
17.5°	4132.0	4182.0	4233.7	4287.4	4344.7	4400.1	4459.3	4518.5	4577.6	4631.2	4675.6
20°	4132.0	4180.1	4218.9	4267.0	4320.6	4368.7	4416.8	4468.5	4520.3	4564.7	4607.2
22.5°	4098.8	4145.0	4174.6	4211.6	4257.7	4298.5	4324.3	4381.6	4420.4	4459.3	4490.7
25°	4021.2	4054.4	4078.5	4104.3	4141.3	4169.0	4191.2	4224.5	4263.3	4278.1	4300.3
27.5°	3880.6	3904.7	3917.6	3923.1	3941.6	3956.4	3960.1	3974.9	3991.6	3995.2	4004.5
30°	3658.8	3660.6	3655.1	3653.2	3643.9	3632.9	3631.0	3629.2	3621.8	3614.4	3616.2
32.5°	3324.1	3314.9	3292.7	3268.7	3244.7	3218.8	3203.9	3185.5	3174.3	3163.3	3150.4
35°	2891.5	2869.3	2837.9	2808.3	2780.6	2760.2	2727.0	2715.9	2704.8	2690.0	2686.3
37.5°	2383.1	2370.1	2340.5	2318.4	2303.6	2294.3	2277.7	2266.7	2266.7	2261.1	2257.4
40°	1858.0	1854.4	1843.2	1848.8	1841.4	1845.1	1843.2	1839.5	1848.8	1848.8	1852.5
42.5°	1394.0	1395.9	1401.4	1405.1	1416.2	1418.0	1427.3	1427.3	1432.8	1438.3	1442.1
45°	1037.1	1044.6	1044.6	1052.0	1063.1	1064.9	1068.6	1070.5	1074.1	1083.4	1087.1
47.5°	778.3	780.2	780.2	782.1	785.7	789.4	787.6	789.4	795.0	791.3	795.0
50°	575.0	576.8	571.3	565.7	571.3	571.3	569.4	563.9	569.4	562.1	565.7
52.5°	392.0	390.1	384.5	386.4	382.7	380.9	380.9	377.1	377.1	377.1	369.8
55°	247.8	247.8	244.0	244.0	242.2	238.5	236.7	234.8	232.9	231.1	231.1
57.5°	138.7	140.5	135.0	133.1	135.0	133.1	129.4	129.4	129.4	123.9	127.5
60°	75.8	74.0	72.1	70.2	68.4	70.2	70.2	66.6	66.6	66.6	68.4
62.5°	40.6	40.6	38.8	38.8	37.0	37.0	40.6	35.2	37.0	35.2	37.0
65°	22.2	27.7	20.3	20.3	25.9	24.0	22.2	22.2	24.0	20.3	22.2
67.5°	24.0	16.7	14.8	16.7	14.8	14.8	14.8	18.5	16.7	12.9	16.7
70°	11.1	12.9	12.9	9.2	14.8	7.4	12.9	7.4	11.1	9.2	11.1
72.5°	11.1	11.1	11.1	7.4	11.1	7.4	9.2	9.2	7.4	7.4	11.1
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.7	3.7	1.8	1.8	1.8	1.8	3.7	3.7	3.7	0.0	1.8
80°	3.7	3.7	0.0	1.8	0.0	0.0	1.8	0.0	1.8	0.0	3.7
82.5°	1.8	3.7	1.8	1.8	3.7	3.7	3.7	1.8	1.8	1.8	1.8
85°	0.0	1.8	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	1.8
87.5°	0.0	1.8	0.0	0.0	0.0	0.0	1.8	1.8	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: P250275

CATALOG NUMBER: LSR8B90D010 EC8B909727 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3956.4	3956.4	3956.4	3956.4
2.5°	4061.8	4063.6	4067.4	4065.5
5°	4276.2	4291.1	4298.5	4296.6
7.5°	4477.7	4503.7	4518.5	4518.5
10°	4633.1	4662.7	4684.8	4688.5
12.5°	4716.2	4749.6	4779.2	4771.7
15°	4740.3	4773.6	4803.1	4797.6
17.5°	4712.6	4745.8	4768.1	4764.3
20°	4636.8	4664.5	4686.7	4684.8
22.5°	4518.5	4542.5	4561.0	4559.1
25°	4318.8	4335.4	4350.2	4342.8
27.5°	4011.9	4017.4	4026.6	4015.6
30°	3603.3	3607.0	3610.7	3608.9
32.5°	3144.8	3142.9	3139.3	3135.5
35°	2680.8	2680.8	2682.6	2671.5
37.5°	2259.2	2257.4	2262.9	2257.4
40°	1856.2	1854.4	1861.7	1852.5
42.5°	1447.6	1453.2	1455.0	1455.0
45°	1089.0	1090.8	1092.6	1092.6
47.5°	795.0	796.8	806.1	795.0
50°	562.1	563.9	565.7	562.1
52.5°	371.6	373.5	371.6	366.0
55°	227.4	229.3	229.3	229.3
57.5°	122.0	123.9	123.9	122.0
60°	66.6	64.7	66.6	62.9
62.5°	35.2	38.8	37.0	33.3
65°	22.2	22.2	22.2	25.9
67.5°	18.5	14.8	16.7	12.9
70°	11.1	12.9	12.9	9.2
72.5°	9.2	9.2	9.2	11.1
75°	0.0	0.0	0.0	0.0
77.5°	3.7	3.7	3.7	1.8
80°	1.8	0.0	1.8	0.0
82.5°	1.8	1.8	3.7	1.8
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)