

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: P248428

Luminaire Tested: **LSR8B90D010 EC8B90930 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248428
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: LSR8B90D010 EC8B90930 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8181.0 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

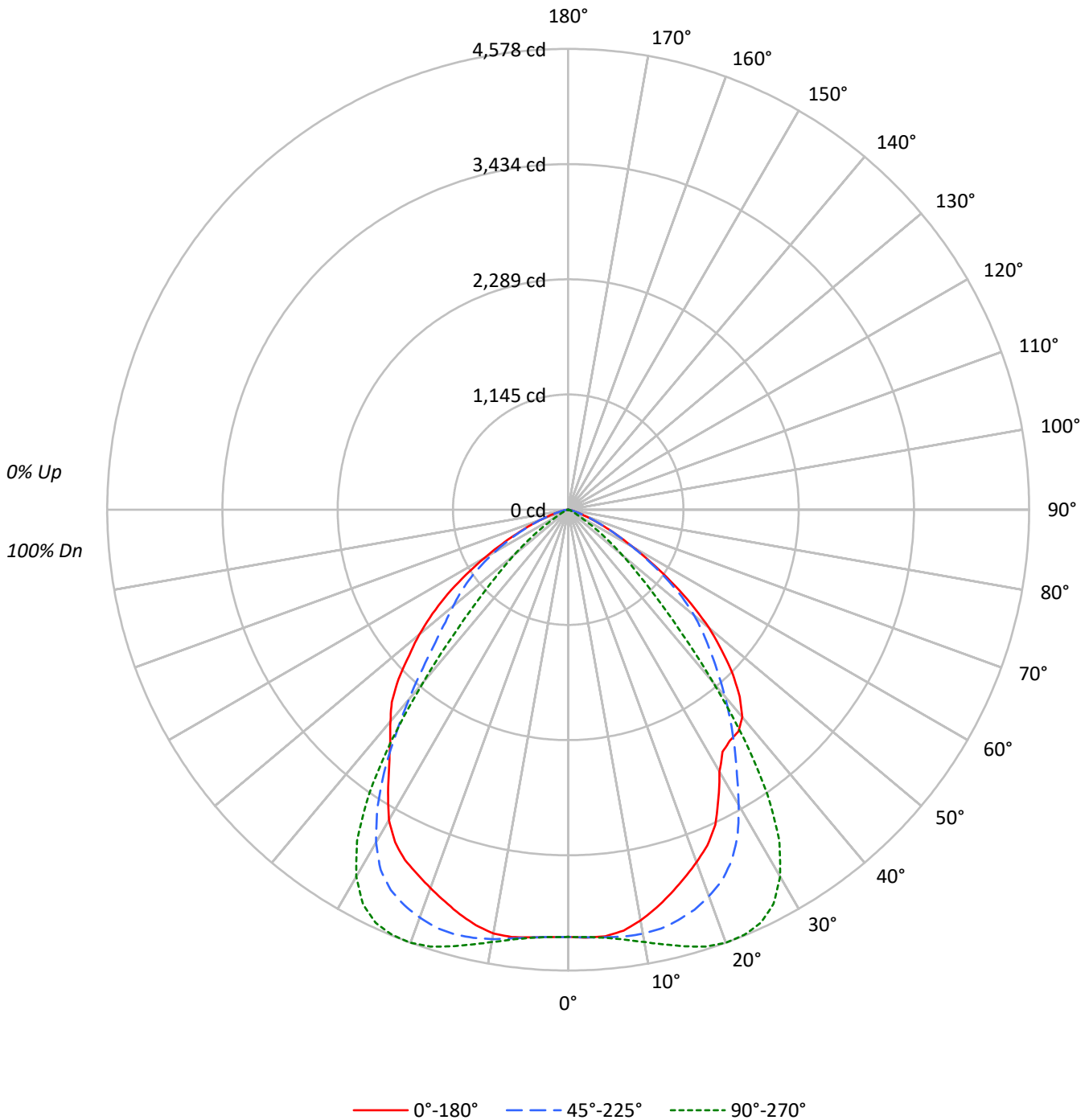
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P248428

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBDW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P248428

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBDW0LI

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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

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°			



TEST NUMBER: P248428

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBDW0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	408.1	5.0
10°-20°	1209.1	14.8
20°-30°	1844.6	22.5
30°-40°	1924.8	23.5
40°-50°	1445.8	17.7
50°-60°	889.6	10.9
60°-70°	362.0	4.4
70°-80°	85.3	1.0
80°-90°	11.7	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°	3461.8	42.3
0°-40°	5386.6	65.8
0°-60°	7722.0	94.4
0°-90°	8181.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8181.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4244	4244	4244	4244	4244	
5°	4253	4264	4269	4264	4264	402
15°	3944	4222	4490	4366	4161	1111
25°	3456	3843	4528	4170	3838	1571
35°	2800	2879	3449	3188	3097	1768
45°	2311	2000	1248	1863	2383	1763
55°	1248	1185	327	1185	1462	1122
65°	390	394	50	529	561	406
75°	68	68	9	119	124	81
85°	7	7	2	16	20	9
90°	0	0	0	0	0	



TEST NUMBER: P248428

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBDW0LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0
2.5°	4255.3	4248.6	4255.3	4255.3	4257.6	4253.1	4255.3	4257.6	4253.1	4253.1	4253.1
5°	4253.1	4248.6	4253.1	4250.8	4255.3	4255.3	4259.9	4259.9	4264.3	4264.3	4271.1
7.5°	4217.1	4208.0	4217.1	4223.8	4228.3	4237.3	4248.6	4257.6	4266.6	4275.6	4286.8
10°	4142.7	4142.7	4149.5	4162.9	4176.5	4192.2	4212.5	4235.0	4257.6	4277.8	4298.1
12.5°	4050.4	4043.6	4057.1	4075.1	4095.3	4120.2	4151.7	4185.5	4221.6	4262.0	4293.7
15°	3944.5	3937.7	3953.4	3971.5	3996.3	4032.3	4070.7	4115.6	4167.4	4221.6	4273.4
17.5°	3836.3	3834.0	3849.9	3874.6	3894.9	3933.1	3982.8	4036.8	4095.3	4167.4	4235.0
20°	3726.0	3723.7	3739.4	3759.7	3786.7	3822.8	3872.4	3935.4	4005.2	4086.4	4165.2
22.5°	3611.1	3613.3	3626.8	3649.3	3671.9	3710.2	3762.0	3825.1	3901.6	3989.5	4077.4
25°	3455.6	3444.4	3462.4	3485.0	3523.2	3554.7	3604.4	3671.9	3750.8	3843.1	3946.7
27.5°	3230.4	3228.0	3243.9	3264.1	3297.9	3336.2	3390.2	3460.1	3543.5	3644.8	3746.2
30°	3005.1	3009.5	3016.4	3036.7	3059.1	3097.4	3151.5	3210.1	3288.9	3385.8	3493.9
32.5°	2851.9	2851.9	2860.9	2874.5	2890.2	2910.5	2948.8	2991.6	3052.4	3120.0	3198.8
35°	2800.0	2791.1	2800.0	2802.4	2804.6	2809.1	2815.8	2829.4	2849.6	2879.0	2908.2
37.5°	2777.6	2770.8	2770.8	2761.8	2750.5	2737.0	2719.0	2698.7	2676.3	2646.9	2624.4
40°	2689.7	2685.2	2680.6	2671.7	2646.9	2619.9	2590.5	2543.3	2491.4	2419.3	2347.4
42.5°	2520.8	2516.3	2514.0	2496.0	2473.5	2441.9	2408.1	2358.6	2293.2	2200.9	2097.3
45°	2311.3	2302.2	2295.5	2279.8	2264.0	2237.0	2205.3	2160.3	2095.0	2000.4	1876.4
47.5°	2068.0	2063.4	2061.2	2054.5	2038.8	2022.8	2002.7	1966.6	1908.1	1817.9	1689.6
50°	1822.4	1813.4	1817.9	1815.7	1809.0	1797.6	1784.1	1759.4	1714.2	1633.2	1516.0
52.5°	1540.8	1540.8	1538.6	1545.3	1547.5	1545.3	1547.5	1520.6	1482.3	1421.4	1322.3
55°	1248.0	1248.0	1254.7	1263.8	1272.8	1275.0	1272.8	1261.6	1234.4	1184.9	1097.0
57.5°	973.1	968.7	982.2	995.7	1004.8	1013.7	1006.9	997.9	982.2	941.6	874.0
60°	741.1	741.1	750.2	759.1	768.1	777.2	774.9	772.7	759.1	732.1	678.1
62.5°	545.1	547.4	547.4	554.2	563.2	572.2	578.9	572.2	565.4	547.4	511.4
65°	389.7	387.4	389.7	396.5	403.2	412.2	416.8	414.5	407.7	394.3	367.2
67.5°	261.3	259.1	268.0	270.3	274.9	283.8	281.6	283.8	281.6	270.3	247.9
70°	171.2	166.7	171.2	168.9	175.8	178.0	182.5	184.7	182.5	175.8	168.9
72.5°	105.9	103.6	105.9	108.2	110.4	112.7	117.1	117.1	114.9	110.4	101.3
75°	67.6	60.8	63.1	58.6	63.1	63.1	67.6	69.8	67.6	67.6	63.1
77.5°	40.6	40.6	40.6	40.6	40.6	40.6	40.6	42.8	45.1	40.6	38.3
80°	20.3	20.3	22.5	22.5	22.5	24.8	22.5	22.5	22.5	24.8	18.0
82.5°	15.8	13.5	13.5	13.5	15.8	13.5	13.5	13.5	13.5	13.5	13.5
85°	6.7	9.0	6.7	4.5	6.7	6.7	9.0	6.7	6.7	6.7	9.0
87.5°	2.2	2.2	0.0	0.0	0.0	2.2	0.0	2.2	2.2	4.5	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: P248428

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0
2.5°	4255.3	4250.8	4250.8	4248.6	4253.1	4248.6	4250.8	4248.6	4248.6	4253.1	4248.6
5°	4271.1	4273.4	4268.9	4266.6	4273.4	4273.4	4273.4	4268.9	4268.9	4271.1	4268.9
7.5°	4293.7	4298.1	4300.4	4302.6	4307.1	4309.5	4309.5	4307.1	4304.9	4311.7	4302.6
10°	4318.4	4325.2	4338.7	4345.4	4356.7	4356.7	4361.3	4361.3	4356.7	4361.3	4359.0
12.5°	4309.5	4349.9	4372.5	4388.3	4404.0	4417.5	4422.0	4424.3	4422.0	4431.1	4422.0
15°	4325.2	4359.0	4395.0	4422.0	4451.3	4467.1	4471.6	4489.6	4494.1	4496.3	4482.9
17.5°	4300.4	4361.3	4399.5	4440.1	4482.9	4512.1	4539.2	4550.5	4552.7	4557.2	4539.2
20°	4244.0	4311.7	4370.2	4428.8	4478.4	4523.3	4545.9	4577.5	4568.5	4586.5	4561.7
22.5°	4167.4	4244.0	4318.4	4395.0	4446.8	4500.9	4548.2	4570.7	4582.0	4582.0	4555.0
25°	4045.8	4135.9	4217.1	4295.9	4374.7	4440.1	4494.1	4527.9	4534.7	4532.4	4500.9
27.5°	3856.6	3953.4	4048.0	4138.2	4235.0	4311.7	4374.7	4415.3	4426.5	4426.5	4392.8
30°	3595.3	3699.0	3791.3	3899.4	3998.5	4084.1	4172.0	4208.0	4228.3	4228.3	4190.1
32.5°	3284.4	3372.3	3457.8	3563.8	3671.9	3768.8	3852.1	3901.6	3926.4	3924.2	3890.4
35°	2946.5	2989.3	3054.7	3133.5	3230.4	3320.5	3401.6	3448.9	3491.7	3489.4	3457.8
37.5°	2608.6	2597.4	2604.1	2633.3	2694.2	2757.3	2820.3	2865.5	2901.5	2917.3	2910.5
40°	2277.5	2218.9	2162.5	2142.3	2146.8	2169.4	2203.1	2237.0	2277.5	2297.7	2306.8
42.5°	1980.1	1881.0	1781.8	1707.5	1664.7	1651.2	1666.9	1678.2	1703.0	1732.3	1761.7
45°	1741.4	1608.4	1477.7	1362.9	1290.8	1248.0	1238.9	1248.0	1261.6	1290.8	1329.1
47.5°	1545.3	1389.9	1243.5	1115.1	1009.2	953.0	937.2	932.7	946.1	973.1	1024.9
50°	1371.9	1216.4	1054.3	905.5	795.2	732.1	709.6	700.6	716.3	736.6	783.9
52.5°	1182.7	1029.4	862.8	718.6	603.8	538.4	513.6	500.1	509.0	536.2	583.5
55°	977.6	835.7	684.8	536.2	425.8	365.0	335.6	326.7	335.6	365.0	412.2
57.5°	772.7	653.3	527.1	387.4	288.3	227.6	198.2	189.2	214.0	225.3	274.9
60°	603.8	506.9	398.7	283.8	198.2	150.9	121.6	114.9	126.1	146.4	187.0
62.5°	452.8	391.9	306.4	202.7	146.4	96.9	81.0	74.3	81.0	96.9	128.5
65°	328.9	281.6	214.0	148.6	99.1	72.1	54.0	49.5	56.4	67.6	94.6
67.5°	225.3	189.2	148.6	103.6	67.6	45.1	38.3	38.3	40.6	49.5	69.8
70°	146.4	123.9	94.6	67.6	45.1	33.7	29.3	24.8	29.3	36.1	47.3
72.5°	92.4	78.8	60.8	47.3	33.7	24.8	20.3	18.0	22.5	27.0	36.1
75°	56.4	42.8	31.5	24.8	18.0	18.0	18.0	9.0	11.2	18.0	22.5
77.5°	33.7	29.3	24.8	20.3	15.8	9.0	9.0	9.0	11.2	13.5	20.3
80°	18.0	15.8	11.2	11.2	9.0	6.7	9.0	6.7	4.5	11.2	13.5
82.5°	11.2	9.0	9.0	9.0	11.2	4.5	6.7	4.5	6.7	9.0	6.7
85°	6.7	6.7	6.7	4.5	11.2	4.5	4.5	2.2	2.2	4.5	4.5
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



TEST NUMBER: P248428

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0	4244.0
2.5°	4250.8	4248.6	4250.8	4248.6	4248.6	4248.6	4250.8	4250.8	4248.6	4248.6	4253.1
5°	4268.9	4268.9	4268.9	4266.6	4264.3	4264.3	4268.9	4268.9	4262.0	4268.9	4268.9
7.5°	4307.1	4300.4	4307.1	4298.1	4293.7	4295.9	4298.1	4293.7	4289.2	4291.4	4291.4
10°	4356.7	4349.9	4349.9	4343.2	4336.5	4331.9	4327.4	4316.2	4304.9	4302.6	4293.7
12.5°	4415.3	4404.0	4397.2	4383.7	4372.5	4356.7	4343.2	4325.2	4302.6	4286.8	4271.1
15°	4473.8	4455.9	4440.1	4417.5	4392.8	4365.7	4336.5	4307.1	4271.1	4239.6	4212.5
17.5°	4521.1	4496.3	4467.1	4431.1	4395.0	4354.4	4311.7	4268.9	4217.1	4176.5	4144.9
20°	4536.9	4500.9	4462.6	4415.3	4368.0	4311.7	4257.6	4201.3	4142.7	4099.9	4063.8
22.5°	4516.6	4473.8	4426.5	4376.9	4313.8	4253.1	4190.1	4124.6	4072.8	4014.3	3980.6
25°	4460.3	4408.6	4356.7	4298.1	4237.3	4169.8	4102.2	4034.6	3971.5	3940.0	3897.2
27.5°	4345.4	4289.2	4232.8	4172.0	4102.2	4034.6	3964.8	3899.4	3845.4	3802.5	3777.8
30°	4142.7	4077.4	4012.1	3946.7	3885.8	3816.0	3750.8	3696.6	3642.6	3608.8	3584.1
32.5°	3831.8	3773.3	3707.9	3644.8	3588.5	3529.9	3475.9	3428.6	3390.2	3367.7	3349.8
35°	3412.9	3354.3	3304.7	3259.6	3212.3	3187.6	3153.8	3126.7	3111.0	3101.9	3099.7
37.5°	2885.7	2851.9	2836.1	2827.2	2818.1	2811.4	2815.8	2827.2	2836.1	2851.9	2869.9
40°	2322.5	2351.7	2360.8	2392.3	2421.6	2459.9	2502.7	2552.3	2592.9	2644.7	2680.6
42.5°	1809.0	1863.0	1926.0	1993.6	2065.7	2135.5	2221.1	2300.0	2372.0	2437.4	2493.8
45°	1389.9	1473.2	1567.8	1664.7	1761.7	1863.0	1966.6	2063.4	2149.1	2218.9	2277.5
47.5°	1083.6	1175.9	1297.6	1416.9	1534.1	1653.5	1768.4	1869.7	1941.8	2009.4	2061.2
50°	858.2	964.2	1097.0	1234.4	1362.9	1489.0	1610.7	1705.3	1777.3	1831.5	1869.7
52.5°	664.5	790.6	925.8	1070.0	1207.4	1344.9	1457.5	1545.3	1603.9	1651.2	1680.5
55°	495.6	619.5	763.6	912.4	1052.1	1184.9	1290.8	1367.4	1419.2	1446.2	1462.0
57.5°	358.2	470.8	615.0	763.6	889.8	1016.0	1101.6	1171.4	1200.7	1216.4	1223.2
60°	261.3	365.0	493.4	621.7	741.1	842.5	916.9	964.2	986.7	995.7	993.4
62.5°	191.5	281.6	391.9	500.1	596.9	680.3	738.9	770.4	781.7	786.2	779.4
65°	146.4	216.2	310.9	394.3	468.6	529.3	572.2	592.4	599.2	596.9	592.4
67.5°	108.2	162.2	232.0	295.2	349.2	396.5	419.0	437.1	441.6	434.8	428.0
70°	76.6	119.4	168.9	211.8	252.3	279.4	304.1	306.4	306.4	304.1	299.6
72.5°	54.0	83.3	114.9	144.2	168.9	189.2	198.2	205.0	202.7	200.4	196.0
75°	36.1	51.8	83.3	90.1	112.7	119.4	128.5	128.5	130.6	123.9	123.9
77.5°	22.5	36.1	49.5	58.6	67.6	76.6	81.0	81.0	83.3	81.0	81.0
80°	13.5	22.5	27.0	40.6	40.6	47.3	49.5	51.8	47.3	54.0	47.3
82.5°	9.0	13.5	20.3	20.3	24.8	29.3	29.3	31.5	31.5	29.3	29.3
85°	6.7	9.0	11.2	13.5	13.5	15.8	13.5	13.5	15.8	18.0	15.8
87.5°	2.2	4.5	2.2	4.5	4.5	9.0	6.7	6.7	6.7	9.0	9.0
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: P248428

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4244.0	4244.0	4244.0	4244.0
2.5°	4248.6	4250.8	4248.6	4248.6
5°	4268.9	4266.6	4268.9	4264.3
7.5°	4284.6	4284.6	4282.3	4282.3
10°	4284.6	4275.6	4275.6	4275.6
12.5°	4250.8	4239.6	4232.8	4228.3
15°	4192.2	4172.0	4162.9	4160.7
17.5°	4115.6	4097.6	4086.4	4079.7
20°	4027.9	4009.8	3996.3	3998.5
22.5°	3951.2	3931.0	3921.9	3917.4
25°	3874.6	3849.9	3843.1	3838.5
27.5°	3750.8	3737.2	3730.5	3723.7
30°	3561.5	3554.7	3543.5	3559.3
32.5°	3343.0	3331.7	3322.8	3329.5
35°	3101.9	3095.2	3101.9	3097.4
37.5°	2881.2	2887.9	2897.0	2901.5
40°	2707.8	2732.5	2741.5	2746.0
42.5°	2534.2	2563.5	2581.6	2592.9
45°	2320.2	2349.5	2369.8	2383.4
47.5°	2099.5	2124.3	2144.6	2142.3
50°	1899.1	1912.5	1921.5	1930.6
52.5°	1696.3	1696.3	1698.5	1698.5
55°	1466.5	1462.0	1459.8	1462.0
57.5°	1214.2	1209.7	1207.4	1200.7
60°	984.5	970.9	961.9	961.9
62.5°	770.4	754.7	747.9	745.7
65°	578.9	576.6	563.2	560.9
67.5°	419.0	409.9	401.0	403.2
70°	295.2	281.6	281.6	277.1
72.5°	191.5	184.7	182.5	182.5
75°	119.4	119.4	114.9	123.9
77.5°	78.8	78.8	76.6	78.8
80°	47.3	47.3	47.3	45.1
82.5°	29.3	31.5	29.3	29.3
85°	15.8	18.0	13.5	20.3
87.5°	9.0	11.2	9.0	11.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)