

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: P250282

Luminaire Tested: **LSR8B90D010 EC8B90930 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250282
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 EC8B90930 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7935.5 lumens
Efficiency: N/A
Efficacy: 92.2 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

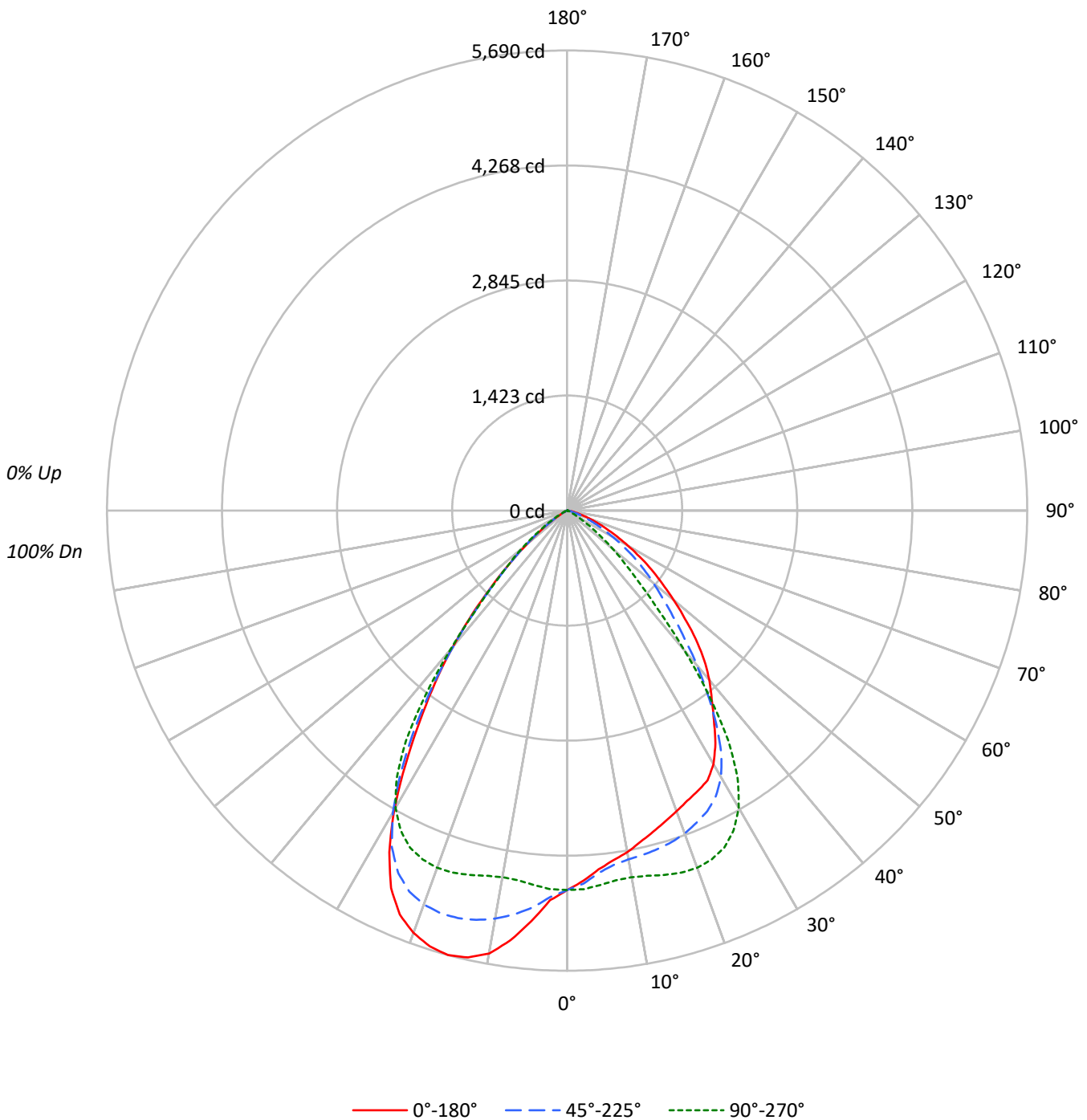
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	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°	451.1	5.7
10°-20°	1350.1	17.0
20°-30°	2067.5	26.1
30°-40°	2026.8	25.5
40°-50°	1220.6	15.4
50°-60°	561.8	7.1
60°-70°	197.4	2.5
70°-80°	51.6	0.7
80°-90°	8.8	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°	3868.6	48.8
0°-40°	5895.5	74.3
0°-60°	7677.8	96.8
0°-90°	7935.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7935.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4692	4692	4692	4692	4692	
5°	4453	4495	4648	4927	5096	421
15°	4111	4333	4664	5216	5690	1162
25°	3824	4100	4598	4944	5151	1761
35°	3164	3208	3473	3274	3168	1982
45°	2248	1851	1254	1263	1296	1723
55°	1276	1011	360	283	272	1139
65°	542	375	57	28	31	552
75°	140	81	4	0	0	170
85°	22	11	2	0	0	30
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°	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3
2.5°	4582.6	4587.1	4587.1	4587.1	4595.9	4598.1	4595.9	4598.1	4602.4	4617.7	4624.3
5°	4453.3	4446.8	4451.2	4448.9	4459.9	4466.5	4462.0	4468.6	4484.0	4495.0	4506.0
7.5°	4361.3	4361.3	4361.3	4365.6	4372.2	4385.4	4383.2	4387.5	4402.8	4418.2	4433.6
10°	4288.8	4286.7	4286.7	4297.7	4306.4	4321.8	4326.2	4339.4	4359.0	4378.7	4396.3
12.5°	4194.6	4196.8	4207.8	4218.8	4238.4	4262.5	4275.7	4293.3	4324.0	4356.9	4376.6
15°	4111.3	4113.4	4122.3	4144.1	4168.3	4196.8	4225.3	4253.7	4291.1	4332.8	4367.9
17.5°	4030.1	4032.3	4038.9	4063.1	4093.8	4131.0	4163.8	4201.2	4249.5	4297.7	4341.5
20°	3955.6	3953.4	3964.3	3986.3	4025.8	4060.8	4093.8	4137.6	4190.2	4249.5	4299.8
22.5°	3883.1	3883.1	3894.2	3916.1	3951.3	3986.3	4021.4	4067.4	4120.0	4177.1	4236.3
25°	3824.0	3821.8	3837.2	3848.2	3874.4	3909.6	3946.8	3984.1	4036.7	4100.4	4157.3
27.5°	3760.5	3758.3	3760.5	3773.6	3797.7	3824.0	3852.5	3885.5	3929.3	3981.9	4036.7
30°	3620.2	3622.3	3622.3	3633.3	3646.5	3674.9	3690.2	3723.2	3762.6	3806.5	3854.8
32.5°	3411.8	3414.0	3414.0	3418.4	3429.4	3442.5	3455.7	3479.8	3510.4	3547.7	3591.6
35°	3164.0	3164.0	3161.8	3164.0	3170.6	3170.6	3181.6	3170.6	3186.0	3208.0	3240.8
37.5°	2936.0	2931.5	2927.3	2922.8	2916.3	2905.3	2889.9	2863.6	2857.0	2848.2	2850.5
40°	2734.2	2732.1	2719.0	2707.9	2686.0	2659.7	2622.5	2576.4	2539.2	2495.3	2458.0
42.5°	2510.6	2508.3	2497.5	2477.7	2453.6	2414.2	2355.0	2293.6	2219.0	2153.2	2085.3
45°	2247.5	2254.1	2238.7	2216.8	2188.3	2151.0	2085.3	2010.6	1936.1	1850.7	1765.0
47.5°	1973.4	1971.2	1960.3	1947.1	1923.0	1885.7	1841.9	1760.8	1681.7	1602.9	1515.1
50°	1719.1	1710.3	1705.8	1692.8	1677.5	1646.7	1600.7	1534.9	1464.7	1390.2	1309.0
52.5°	1477.9	1477.9	1466.8	1458.1	1445.0	1420.9	1381.4	1328.8	1269.5	1199.4	1113.9
55°	1276.1	1271.8	1260.8	1249.8	1236.7	1221.3	1186.2	1142.4	1078.7	1010.8	936.3
57.5°	1061.3	1059.0	1054.6	1041.5	1034.9	1019.5	980.1	936.3	881.4	822.3	760.8
60°	868.3	859.6	850.7	842.0	831.0	815.8	789.3	752.1	706.0	653.4	592.0
62.5°	695.1	708.2	681.9	681.9	660.0	646.8	622.7	600.9	552.5	504.3	451.8
65°	541.6	541.6	530.6	521.8	508.7	493.4	469.3	447.3	412.2	374.9	337.6
67.5°	414.4	412.2	401.3	392.5	381.5	372.7	355.2	328.9	302.7	272.0	241.1
70°	304.8	302.7	300.3	285.1	276.2	265.3	252.1	234.6	214.9	192.9	164.5
72.5°	219.3	219.3	212.8	206.2	197.4	188.6	175.4	164.5	147.0	131.6	111.9
75°	140.3	138.2	138.2	127.1	127.1	114.0	105.3	98.6	89.9	81.2	63.7
77.5°	100.9	98.6	96.5	92.0	87.8	83.3	76.7	67.9	61.3	52.6	46.1
80°	67.9	63.7	61.3	61.3	54.8	52.6	54.8	41.7	39.5	32.8	28.5
82.5°	41.7	41.7	39.5	39.5	37.3	35.1	28.5	28.5	26.3	24.1	19.7
85°	22.0	28.5	19.7	22.0	19.7	22.0	19.7	15.4	13.2	10.9	10.9
87.5°	13.2	8.7	8.7	13.2	10.9	8.7	8.7	8.7	6.6	4.4	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°	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3
2.5°	4620.0	4635.3	4633.1	4652.8	4659.4	4674.8	4674.8	4685.8	4692.3	4707.6	4720.9
5°	4510.3	4534.4	4541.1	4565.2	4584.9	4609.0	4624.3	4648.5	4670.4	4703.4	4734.0
7.5°	4442.4	4462.0	4475.3	4503.7	4525.7	4551.9	4578.3	4611.1	4641.8	4681.4	4725.2
10°	4409.5	4435.8	4455.5	4484.0	4510.3	4538.9	4565.2	4602.4	4637.6	4688.0	4736.2
12.5°	4400.7	4431.4	4455.5	4495.0	4521.3	4551.9	4582.6	4624.3	4661.7	4714.3	4769.1
15°	4400.7	4442.4	4475.3	4519.1	4549.8	4589.3	4622.2	4663.8	4705.5	4760.3	4812.9
17.5°	4392.0	4442.4	4484.0	4534.4	4573.9	4613.5	4655.1	4694.5	4738.4	4791.0	4850.1
20°	4356.9	4420.4	4470.9	4530.1	4571.8	4615.6	4657.3	4701.0	4747.2	4801.9	4852.5
22.5°	4295.4	4370.0	4427.1	4490.6	4538.9	4582.6	4624.3	4668.2	4718.6	4771.3	4823.9
25°	4214.3	4284.5	4345.9	4411.6	4459.9	4508.1	4547.7	4598.1	4644.1	4694.5	4736.2
27.5°	4091.5	4166.1	4225.3	4293.3	4337.0	4383.2	4416.1	4457.8	4501.6	4543.2	4576.1
30°	3907.4	3975.4	4036.7	4098.0	4142.0	4174.9	4209.9	4242.9	4271.3	4299.8	4328.3
32.5°	3637.6	3699.1	3758.3	3815.2	3850.3	3878.9	3905.1	3924.8	3940.2	3955.6	3957.8
35°	3267.2	3317.5	3354.8	3405.3	3438.2	3464.5	3464.5	3473.2	3471.1	3464.5	3457.8
37.5°	2852.7	2872.3	2887.7	2907.4	2909.7	2909.7	2896.6	2885.6	2868.1	2863.6	2850.5
40°	2420.8	2394.3	2374.6	2348.4	2333.0	2300.1	2271.7	2251.9	2223.4	2219.0	2214.6
42.5°	2010.6	1949.3	1894.5	1848.4	1795.8	1749.8	1708.1	1677.5	1655.5	1653.3	1655.5
45°	1677.5	1607.2	1526.1	1462.6	1403.4	1346.3	1291.5	1254.3	1234.4	1230.1	1234.4
47.5°	1425.2	1344.1	1265.2	1192.7	1129.2	1065.6	1010.8	960.4	936.3	929.6	927.5
50°	1225.7	1142.4	1059.0	984.5	914.4	850.7	782.8	734.6	703.9	692.9	684.1
52.5°	1030.6	956.0	870.5	793.8	723.6	649.1	578.9	524.0	493.4	480.2	471.4
55°	859.6	785.0	706.0	631.5	556.9	482.4	412.2	359.6	326.7	311.4	300.3
57.5°	686.3	616.1	548.2	473.6	412.2	339.9	269.7	223.6	195.2	177.6	168.8
60°	530.6	475.9	416.6	355.2	296.1	236.9	179.8	135.9	114.0	100.9	89.9
62.5°	401.3	355.2	315.7	263.1	217.0	166.6	122.9	87.8	67.9	57.1	52.6
65°	289.4	254.4	219.3	186.4	153.5	116.2	83.3	57.1	39.5	32.8	30.7
67.5°	206.2	177.6	151.2	129.4	105.3	83.3	59.2	39.5	30.7	26.3	24.1
70°	144.7	122.9	105.3	85.5	70.2	54.8	46.1	28.5	17.5	19.7	15.4
72.5°	96.5	81.2	72.4	59.2	48.2	39.5	28.5	19.7	19.7	15.4	13.2
75°	52.6	48.2	37.3	28.5	24.1	22.0	8.7	4.4	2.1	6.6	2.1
77.5°	37.3	32.8	28.5	24.1	19.7	15.4	8.7	8.7	6.6	8.7	4.4
80°	24.1	19.7	17.5	17.5	10.9	6.6	4.4	4.4	6.6	2.1	2.1
82.5°	15.4	13.2	10.9	10.9	10.9	6.6	6.6	6.6	6.6	4.4	4.4
85°	8.7	6.6	4.4	4.4	2.1	4.4	0.0	2.1	2.1	0.0	0.0
87.5°	4.4	2.1	2.1	2.1	2.1	0.0	0.0	2.1	0.0	2.1	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°	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3	4692.3
2.5°	4729.6	4738.4	4749.3	4758.1	4777.9	4782.2	4791.0	4799.8	4806.4	4812.9	4815.1
5°	4760.3	4793.2	4823.9	4856.7	4898.4	4927.0	4959.9	4988.3	5016.8	5040.9	5058.5
7.5°	4769.1	4819.5	4865.6	4922.5	4984.0	5036.7	5091.4	5146.2	5203.2	5247.1	5284.4
10°	4786.7	4848.0	4907.2	4975.1	5054.1	5124.3	5192.2	5264.6	5337.0	5398.4	5453.2
12.5°	4817.3	4885.3	4948.9	5023.4	5104.6	5183.5	5258.1	5339.1	5416.0	5483.9	5545.3
15°	4867.7	4931.3	4992.7	5062.9	5144.0	5216.5	5291.0	5369.8	5446.6	5516.8	5573.8
17.5°	4900.6	4959.9	5021.2	5084.9	5152.8	5218.6	5288.7	5358.9	5429.0	5492.7	5545.3
20°	4900.6	4957.6	5003.7	5060.8	5124.3	5181.3	5238.3	5299.8	5361.1	5413.6	5464.2
22.5°	4861.2	4915.9	4951.1	4995.0	5049.7	5098.0	5128.7	5196.6	5242.7	5288.7	5326.0
25°	4769.1	4808.5	4837.1	4867.7	4911.7	4944.5	4970.9	5010.3	5056.3	5073.9	5100.2
27.5°	4602.4	4631.0	4646.3	4652.8	4674.8	4692.3	4696.8	4714.3	4734.0	4738.4	4749.3
30°	4339.4	4341.5	4334.9	4332.8	4321.8	4308.7	4306.4	4304.2	4295.4	4286.7	4288.8
32.5°	3942.4	3931.5	3905.1	3876.8	3848.2	3817.5	3799.9	3778.0	3764.8	3751.7	3736.4
35°	3429.4	3403.0	3365.8	3330.7	3297.9	3273.7	3234.2	3221.0	3208.0	3190.4	3186.0
37.5°	2826.4	2811.0	2775.9	2749.6	2732.1	2721.1	2701.4	2688.3	2688.3	2681.7	2677.3
40°	2203.5	2199.3	2186.1	2192.7	2183.9	2188.3	2186.1	2181.7	2192.7	2192.7	2197.2
42.5°	1653.3	1655.5	1662.1	1666.4	1679.6	1681.7	1692.8	1692.8	1699.3	1705.8	1710.3
45°	1230.1	1238.9	1238.9	1247.7	1260.8	1263.0	1267.3	1269.5	1273.9	1284.9	1289.3
47.5°	923.1	925.3	925.3	927.5	931.9	936.3	934.1	936.3	942.9	938.4	942.9
50°	681.9	684.1	677.5	670.9	677.5	677.5	675.4	668.8	675.4	666.7	670.9
52.5°	464.9	462.6	456.0	458.3	453.9	451.8	451.8	447.3	447.3	447.3	438.5
55°	293.8	293.8	289.4	289.4	287.3	282.8	280.7	278.5	276.2	274.1	274.1
57.5°	164.5	166.6	160.1	157.8	160.1	157.8	153.5	153.5	153.5	147.0	151.2
60°	89.9	87.8	85.5	83.3	81.2	83.3	83.3	78.9	78.9	78.9	81.2
62.5°	48.2	48.2	46.1	46.1	43.8	43.8	48.2	41.7	43.8	41.7	43.8
65°	26.3	32.8	24.1	24.1	30.7	28.5	26.3	26.3	28.5	24.1	26.3
67.5°	28.5	19.7	17.5	19.7	17.5	17.5	17.5	22.0	19.7	15.4	19.7
70°	13.2	15.4	15.4	10.9	17.5	8.7	15.4	8.7	13.2	10.9	13.2
72.5°	13.2	13.2	13.2	8.7	13.2	8.7	10.9	10.9	8.7	8.7	13.2
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°	4.4	4.4	2.1	2.1	2.1	2.1	4.4	4.4	4.4	0.0	2.1
80°	4.4	4.4	0.0	2.1	0.0	0.0	2.1	0.0	2.1	0.0	4.4
82.5°	2.1	4.4	2.1	2.1	4.4	4.4	4.4	2.1	2.1	2.1	2.1
85°	0.0	2.1	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	2.1
87.5°	0.0	2.1	0.0	0.0	0.0	0.0	2.1	2.1	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: P250282

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4692.3	4692.3	4692.3	4692.3
2.5°	4817.3	4819.5	4823.9	4821.8
5°	5071.6	5089.2	5098.0	5095.8
7.5°	5310.6	5341.5	5358.9	5358.9
10°	5494.8	5529.9	5556.2	5560.6
12.5°	5593.5	5633.0	5668.1	5659.3
15°	5622.0	5661.5	5696.6	5690.0
17.5°	5589.2	5628.5	5655.0	5650.5
20°	5499.3	5532.1	5558.5	5556.2
22.5°	5358.9	5387.4	5409.4	5407.1
25°	5122.1	5141.9	5159.4	5150.7
27.5°	4758.1	4764.7	4775.6	4762.6
30°	4273.6	4277.8	4282.3	4280.1
32.5°	3729.8	3727.5	3723.2	3718.8
35°	3179.4	3179.4	3181.6	3168.4
37.5°	2679.4	2677.3	2683.8	2677.3
40°	2201.4	2199.3	2208.0	2197.2
42.5°	1716.9	1723.4	1725.7	1725.7
45°	1291.5	1293.6	1295.9	1295.9
47.5°	942.9	945.0	956.0	942.9
50°	666.7	668.8	670.9	666.7
52.5°	440.7	442.9	440.7	434.2
55°	269.7	272.0	272.0	272.0
57.5°	144.7	147.0	147.0	144.7
60°	78.9	76.7	78.9	74.5
62.5°	41.7	46.1	43.8	39.5
65°	26.3	26.3	26.3	30.7
67.5°	22.0	17.5	19.7	15.4
70°	13.2	15.4	15.4	10.9
72.5°	10.9	10.9	10.9	13.2
75°	0.0	0.0	0.0	0.0
77.5°	4.4	4.4	4.4	2.1
80°	2.1	0.0	2.1	0.0
82.5°	2.1	2.1	4.4	2.1
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)