

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: P250261

Luminaire Tested: **LD8B90D010 ER8B90940 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250261  
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: LD8B90D010 ER8B90940 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
90 CRI 4000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8559.0 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

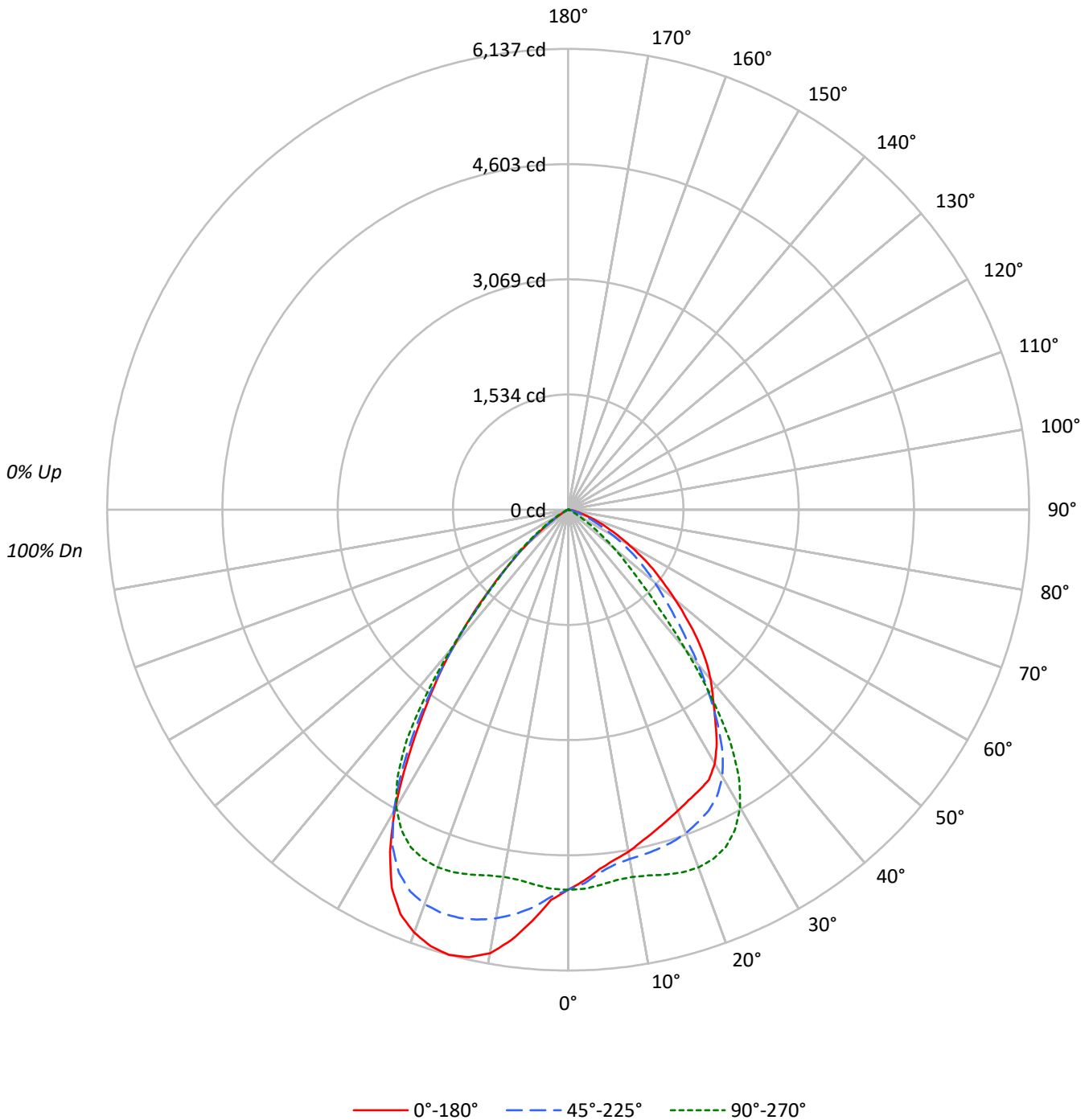
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P250261

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WH

### Luminous Intensity Polar Plot





TEST NUMBER: P250261

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WH

**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°	156063	156063	156063
5°	148679	155191	170130
10°	144843	155433	187794
15°	141561	160585	195918
20°	140000	166387	196652
25°	140329	168736	189014
30°	139026	162943	164375
35°	128465	141015	128641
40°	118713	97769	95390
45°	105709	58994	60948
50°	88946	38009	34492
55°	73997	20849	15768
60°	57756	9041	4958
65°	42626	4487	2415
70°	29635	2777	1064
75°	18038	572	0
80°	13017	852	0
85°	8385	814	0



TEST NUMBER: P250261

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	486.5	5.7
10°-20°	1456.1	17.0
20°-30°	2229.9	26.1
30°-40°	2186.1	25.5
40°-50°	1316.4	15.4
50°-60°	605.9	7.1
60°-70°	212.9	2.5
70°-80°	55.7	0.7
80°-90°	9.5	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°	4172.6	48.8
0°-40°	6358.6	74.3
0°-60°	8281.0	96.8
0°-90°	8559.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8559.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5061	5061	5061	5061	5061	
5°	4803	4848	5014	5314	5496	454
15°	4434	4673	5030	5626	6137	1253
25°	4124	4422	4959	5333	5555	1900
35°	3413	3460	3746	3531	3417	2137
45°	2424	1996	1353	1362	1398	1859
55°	1376	1090	388	305	293	1228
65°	584	404	62	31	33	595
75°	151	88	5	0	0	184
85°	24	12	2	0	0	33
90°	0	0	0	0	0	



TEST NUMBER: P250261

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0
2.5°	4942.7	4947.5	4947.5	4947.5	4956.9	4959.3	4956.9	4959.3	4964.0	4980.5	4987.7
5°	4803.2	4796.1	4800.9	4798.4	4810.3	4817.4	4812.6	4819.7	4836.3	4848.2	4859.9
7.5°	4703.9	4703.9	4703.9	4708.6	4715.7	4729.9	4727.6	4732.2	4748.8	4765.3	4781.9
10°	4625.8	4623.5	4623.5	4635.3	4644.7	4661.3	4666.0	4680.2	4701.5	4722.8	4741.7
12.5°	4524.1	4526.5	4538.3	4550.2	4571.4	4597.4	4611.6	4630.6	4663.7	4699.1	4720.4
15°	4434.3	4436.6	4446.1	4469.7	4495.8	4526.5	4557.2	4588.0	4628.2	4673.1	4711.0
17.5°	4346.7	4349.1	4356.2	4382.3	4415.4	4455.6	4491.0	4531.2	4583.3	4635.3	4682.6
20°	4266.3	4264.0	4275.8	4299.4	4342.1	4379.8	4415.4	4462.7	4519.4	4583.3	4637.6
22.5°	4188.3	4188.3	4200.2	4223.8	4261.7	4299.4	4337.3	4387.0	4443.7	4505.2	4569.1
25°	4124.4	4122.1	4138.6	4150.5	4178.8	4216.7	4256.9	4297.1	4353.9	4422.5	4483.9
27.5°	4055.9	4053.6	4055.9	4070.1	4096.1	4124.4	4155.2	4190.7	4238.0	4294.8	4353.9
30°	3904.5	3906.9	3906.9	3918.7	3932.9	3963.6	3980.2	4015.7	4058.2	4105.5	4157.6
32.5°	3679.9	3682.2	3682.2	3687.0	3698.7	3713.0	3727.2	3753.2	3786.2	3826.5	3873.8
35°	3412.6	3412.6	3410.2	3412.6	3419.8	3419.8	3431.5	3419.8	3436.3	3460.0	3495.4
37.5°	3166.7	3161.9	3157.2	3152.4	3145.3	3133.6	3117.0	3088.6	3081.5	3072.0	3074.4
40°	2949.1	2946.8	2932.6	2920.7	2897.0	2868.7	2828.5	2778.8	2738.6	2691.3	2651.1
42.5°	2707.9	2705.5	2693.7	2672.4	2646.4	2603.8	2540.0	2473.8	2393.4	2322.4	2249.1
45°	2424.0	2431.1	2414.6	2390.9	2360.2	2320.0	2249.1	2168.6	2088.2	1996.0	1903.7
47.5°	2128.4	2126.1	2114.3	2100.1	2074.1	2033.9	1986.6	1899.1	1813.9	1728.8	1634.2
50°	1854.1	1844.6	1839.9	1825.8	1809.2	1776.1	1726.4	1655.4	1579.8	1499.4	1411.9
52.5°	1594.0	1594.0	1582.1	1572.7	1558.5	1532.5	1489.9	1433.2	1369.3	1293.6	1201.4
55°	1376.4	1371.7	1359.9	1348.0	1333.8	1317.2	1279.5	1232.2	1163.5	1090.2	1009.8
57.5°	1144.7	1142.2	1137.5	1123.3	1116.2	1099.7	1057.1	1009.8	950.7	886.9	820.6
60°	936.5	927.1	917.6	908.1	896.3	879.8	851.4	811.2	761.5	704.8	638.6
62.5°	749.7	763.8	735.5	735.5	711.9	697.7	671.7	648.0	595.9	544.0	487.2
65°	584.2	584.2	572.3	562.8	548.6	532.1	506.1	482.4	444.6	404.4	364.2
67.5°	447.0	444.6	432.8	423.3	411.5	402.0	383.1	354.7	326.4	293.3	260.1
70°	328.7	326.4	324.0	307.4	298.0	286.2	272.0	253.1	231.8	208.1	177.4
72.5°	236.4	236.4	229.4	222.3	212.9	203.3	189.2	177.4	158.5	141.9	120.6
75°	151.4	149.0	149.0	137.2	137.2	122.9	113.5	106.4	97.0	87.5	68.6
77.5°	108.8	106.4	104.1	99.3	94.6	89.8	82.7	73.3	66.2	56.8	49.6
80°	73.3	68.6	66.2	66.2	59.1	56.8	59.1	45.0	42.5	35.4	30.8
82.5°	45.0	45.0	42.5	42.5	40.2	37.9	30.8	30.8	28.4	26.0	21.3
85°	23.7	30.8	21.3	23.7	21.3	23.7	21.3	16.5	14.2	11.8	11.8
87.5°	14.2	9.4	9.4	14.2	11.8	9.4	9.4	9.4	7.1	4.8	4.8
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: P250261

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0
2.5°	4983.0	4999.5	4997.1	5018.4	5025.5	5042.1	5042.1	5053.8	5061.0	5077.5	5091.7
5°	4864.7	4890.7	4897.8	4923.8	4945.1	4971.1	4987.7	5013.6	5037.3	5072.8	5105.9
7.5°	4791.4	4812.6	4826.8	4857.6	4881.3	4909.6	4938.0	4973.4	5006.5	5049.2	5096.5
10°	4755.9	4784.3	4805.5	4836.3	4864.7	4895.5	4923.8	4964.0	5001.9	5056.3	5108.3
12.5°	4746.4	4779.5	4805.5	4848.2	4876.5	4909.6	4942.7	4987.7	5027.9	5084.6	5143.8
15°	4746.4	4791.4	4826.8	4874.2	4907.3	4949.8	4985.3	5030.2	5075.2	5134.3	5191.0
17.5°	4737.0	4791.4	4836.3	4890.7	4933.2	4975.9	5020.8	5063.4	5110.6	5167.4	5231.2
20°	4699.1	4767.8	4822.1	4885.9	4930.9	4978.2	5023.2	5070.4	5120.1	5179.2	5233.6
22.5°	4632.9	4713.3	4774.9	4843.4	4895.5	4942.7	4987.7	5035.0	5089.4	5146.1	5202.9
25°	4545.4	4621.1	4687.4	4758.2	4810.3	4862.3	4904.9	4959.3	5009.0	5063.4	5108.3
27.5°	4412.9	4493.3	4557.2	4630.6	4677.8	4727.6	4763.0	4808.0	4855.3	4900.1	4935.7
30°	4214.4	4287.7	4353.9	4420.0	4467.4	4502.9	4540.7	4576.2	4606.9	4637.6	4668.4
32.5°	3923.4	3989.7	4053.6	4115.0	4152.8	4183.6	4211.9	4233.2	4249.8	4266.3	4268.7
35°	3523.8	3578.1	3618.3	3672.7	3708.3	3736.6	3736.6	3746.0	3743.7	3736.6	3729.5
37.5°	3076.8	3098.0	3114.6	3135.9	3138.2	3138.2	3124.1	3112.2	3093.4	3088.6	3074.4
40°	2610.9	2582.5	2561.2	2532.9	2516.3	2480.8	2450.1	2428.8	2398.0	2393.4	2388.6
42.5°	2168.6	2102.4	2043.3	1993.7	1936.9	1887.2	1842.3	1809.2	1785.6	1783.1	1785.6
45°	1809.2	1733.5	1646.0	1577.4	1513.6	1452.1	1393.0	1352.8	1331.5	1326.7	1331.5
47.5°	1537.2	1449.7	1364.6	1286.5	1218.0	1149.3	1090.2	1035.8	1009.8	1002.7	1000.4
50°	1322.0	1232.2	1142.2	1061.8	986.2	917.6	844.3	792.3	759.2	747.3	737.9
52.5°	1111.6	1031.2	938.9	856.1	780.4	700.0	624.4	565.2	532.1	518.0	508.4
55°	927.1	846.7	761.5	681.1	600.7	520.3	444.6	387.8	352.4	335.8	324.0
57.5°	740.2	664.6	591.3	510.9	444.6	366.6	290.9	241.2	210.5	191.6	182.1
60°	572.3	513.2	449.3	383.1	319.3	255.4	193.9	146.6	122.9	108.8	97.0
62.5°	432.8	383.1	340.5	283.8	234.1	179.7	132.5	94.6	73.3	61.5	56.8
65°	312.2	274.3	236.4	201.0	165.6	125.4	89.8	61.5	42.5	35.4	33.1
67.5°	222.3	191.6	163.1	139.5	113.5	89.8	63.9	42.5	33.1	28.4	26.0
70°	156.0	132.5	113.5	92.3	75.6	59.1	49.6	30.8	18.9	21.3	16.5
72.5°	104.1	87.5	78.1	63.9	52.0	42.5	30.8	21.3	21.3	16.5	14.2
75°	56.8	52.0	40.2	30.8	26.0	23.7	9.4	4.8	2.3	7.1	2.3
77.5°	40.2	35.4	30.8	26.0	21.3	16.5	9.4	9.4	7.1	9.4	4.8
80°	26.0	21.3	18.9	18.9	11.8	7.1	4.8	4.8	7.1	2.3	2.3
82.5°	16.5	14.2	11.8	11.8	11.8	7.1	7.1	7.1	7.1	4.8	4.8
85°	9.4	7.1	4.8	4.8	2.3	4.8	0.0	2.3	2.3	0.0	0.0
87.5°	4.8	2.3	2.3	2.3	2.3	0.0	0.0	2.3	0.0	2.3	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



TEST NUMBER: P250261

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0	5061.0
2.5°	5101.2	5110.6	5122.5	5131.9	5153.2	5157.9	5167.4	5176.9	5184.0	5191.0	5193.4
5°	5134.3	5169.8	5202.9	5238.3	5283.3	5314.0	5349.5	5380.2	5411.0	5437.0	5455.9
7.5°	5143.8	5198.1	5247.9	5309.3	5375.5	5432.3	5491.4	5550.5	5612.0	5659.3	5699.5
10°	5162.7	5228.9	5292.7	5366.0	5451.2	5526.8	5600.1	5678.2	5756.3	5822.5	5881.7
12.5°	5195.8	5269.1	5337.7	5418.1	5505.6	5590.7	5671.1	5758.6	5841.5	5914.7	5980.9
15°	5250.2	5318.7	5385.0	5460.6	5548.2	5626.2	5706.6	5791.7	5874.5	5950.2	6011.7
17.5°	5285.6	5349.5	5415.7	5484.3	5557.6	5628.6	5704.2	5779.9	5855.6	5924.2	5980.9
20°	5285.6	5347.1	5396.8	5458.3	5526.8	5588.4	5649.9	5716.1	5782.3	5839.0	5893.4
22.5°	5243.1	5302.2	5340.0	5387.3	5446.4	5498.5	5531.6	5604.9	5654.6	5704.2	5744.4
25°	5143.8	5186.3	5217.1	5250.2	5297.5	5332.9	5361.4	5403.9	5453.5	5472.5	5500.8
27.5°	4964.0	4994.8	5011.3	5018.4	5042.1	5061.0	5065.7	5084.6	5105.9	5110.6	5122.5
30°	4680.2	4682.6	4675.5	4673.1	4661.3	4647.2	4644.7	4642.4	4632.9	4623.5	4625.8
32.5°	4252.1	4240.4	4211.9	4181.3	4150.5	4117.4	4098.4	4074.8	4060.6	4046.4	4029.9
35°	3698.7	3670.4	3630.2	3592.3	3556.9	3530.8	3488.3	3474.1	3460.0	3441.0	3436.3
37.5°	3048.4	3031.8	2994.0	2965.6	2946.8	2934.9	2913.6	2899.5	2899.5	2892.3	2887.6
40°	2376.7	2372.1	2357.8	2364.9	2355.5	2360.2	2357.8	2353.1	2364.9	2364.9	2369.7
42.5°	1783.1	1785.6	1792.7	1797.3	1811.6	1813.9	1825.8	1825.8	1832.9	1839.9	1844.6
45°	1326.7	1336.2	1336.2	1345.7	1359.9	1362.2	1366.9	1369.3	1374.0	1385.9	1390.5
47.5°	995.6	998.0	998.0	1000.4	1005.1	1009.8	1007.5	1009.8	1016.9	1012.2	1016.9
50°	735.5	737.9	730.8	723.6	730.8	730.8	728.4	721.3	728.4	719.0	723.6
52.5°	501.4	499.0	491.9	494.3	489.5	487.2	487.2	482.4	482.4	482.4	473.0
55°	316.9	316.9	312.2	312.2	309.8	305.1	302.7	300.3	298.0	295.6	295.6
57.5°	177.4	179.7	172.7	170.3	172.7	170.3	165.6	165.6	165.6	158.5	163.1
60°	97.0	94.6	92.3	89.8	87.5	89.8	89.8	85.2	85.2	85.2	87.5
62.5°	52.0	52.0	49.6	49.6	47.3	47.3	52.0	45.0	47.3	45.0	47.3
65°	28.4	35.4	26.0	26.0	33.1	30.8	28.4	28.4	30.8	26.0	28.4
67.5°	30.8	21.3	18.9	21.3	18.9	18.9	18.9	23.7	21.3	16.5	21.3
70°	14.2	16.5	16.5	11.8	18.9	9.4	16.5	9.4	14.2	11.8	14.2
72.5°	14.2	14.2	14.2	9.4	14.2	9.4	11.8	11.8	9.4	9.4	14.2
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°	4.8	4.8	2.3	2.3	2.3	2.3	4.8	4.8	4.8	0.0	2.3
80°	4.8	4.8	0.0	2.3	0.0	0.0	2.3	0.0	2.3	0.0	4.8
82.5°	2.3	4.8	2.3	2.3	4.8	4.8	4.8	2.3	2.3	2.3	2.3
85°	0.0	2.3	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	2.3
87.5°	0.0	2.3	0.0	0.0	0.0	0.0	2.3	2.3	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: P250261

CATALOG NUMBER: LD8B90D010 ER8B90940 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5061.0	5061.0	5061.0	5061.0
2.5°	5195.8	5198.1	5202.9	5200.5
5°	5470.1	5489.1	5498.5	5496.2
7.5°	5727.9	5761.0	5779.9	5779.9
10°	5926.5	5964.4	5992.7	5997.5
12.5°	6032.9	6075.6	6113.4	6103.9
15°	6063.7	6106.3	6144.1	6137.0
17.5°	6028.3	6070.8	6099.2	6094.4
20°	5931.3	5966.7	5995.2	5992.7
22.5°	5779.9	5810.7	5834.3	5831.9
25°	5524.5	5545.8	5564.7	5555.3
27.5°	5131.9	5139.0	5150.8	5136.7
30°	4609.3	4614.0	4618.7	4616.4
32.5°	4022.8	4020.4	4015.7	4010.9
35°	3429.2	3429.2	3431.5	3417.3
37.5°	2889.9	2887.6	2894.7	2887.6
40°	2374.4	2372.1	2381.5	2369.7
42.5°	1851.8	1858.9	1861.2	1861.2
45°	1393.0	1395.3	1397.6	1397.6
47.5°	1016.9	1019.3	1031.2	1016.9
50°	719.0	721.3	723.6	719.0
52.5°	475.3	477.8	475.3	468.2
55°	290.9	293.3	293.3	293.3
57.5°	156.0	158.5	158.5	156.0
60°	85.2	82.7	85.2	80.4
62.5°	45.0	49.6	47.3	42.5
65°	28.4	28.4	28.4	33.1
67.5°	23.7	18.9	21.3	16.5
70°	14.2	16.5	16.5	11.8
72.5°	11.8	11.8	11.8	14.2
75°	0.0	0.0	0.0	0.0
77.5°	4.8	4.8	4.8	2.3
80°	2.3	0.0	2.3	0.0
82.5°	2.3	2.3	4.8	2.3
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)