

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: P249301

Luminaire Tested: **LD8B90D010 ER8B90827 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249301  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B90D010 ER8B90827 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 2700 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8767.0 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

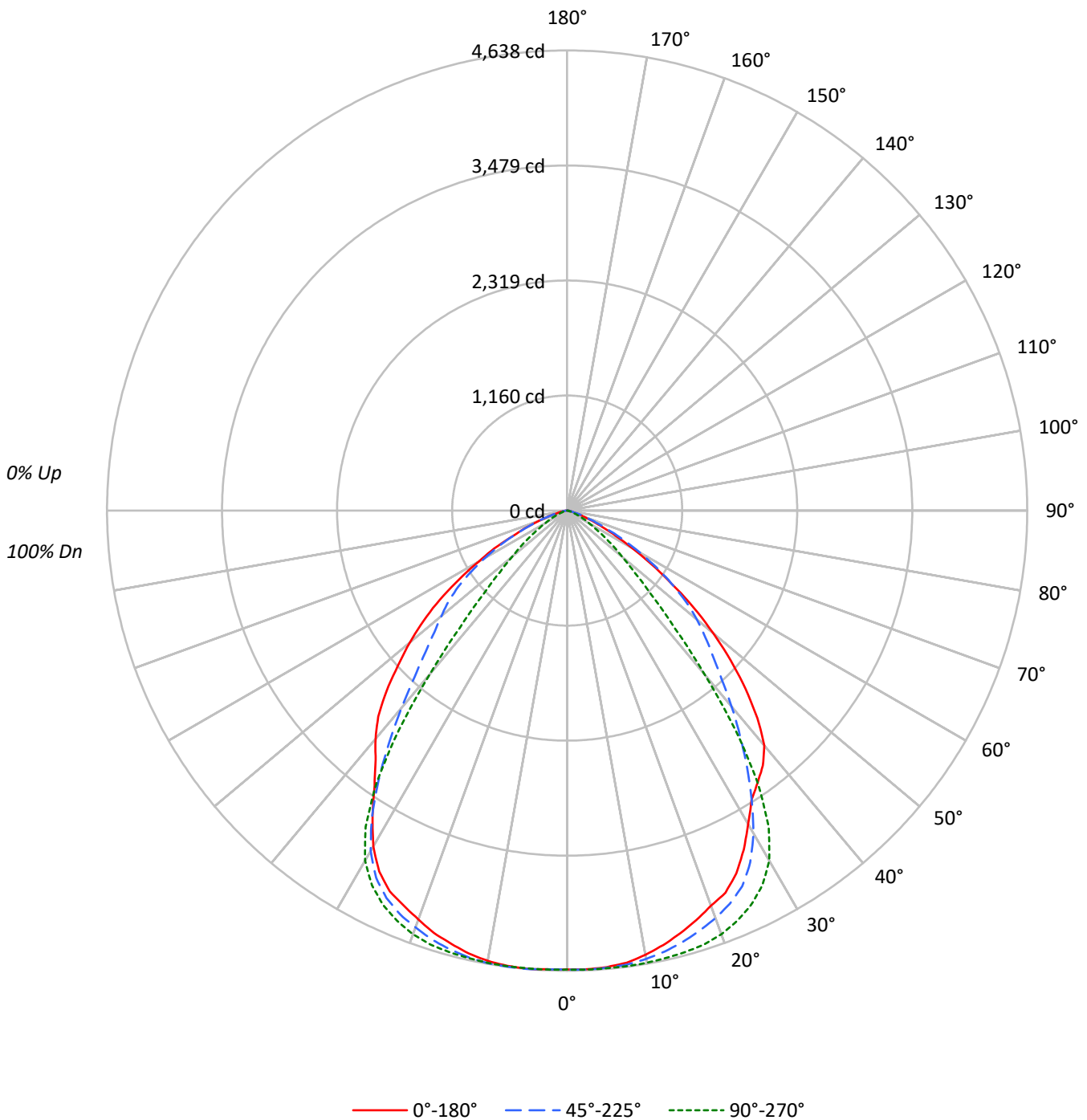
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	142636	142636	142636
5°	142952	143336	143491
10°	142351	144915	144295
15°	140773	147036	144262
20°	139081	149103	143889
25°	137277	149274	144038
30°	129872	145076	139155
35°	125995	126085	127395
40°	124433	86751	120935
45°	110876	52082	112389
50°	92194	34660	99342
55°	69143	23897	84228
60°	46859	15924	63547
65°	28267	10332	43662
70°	15670	5599	26858
75°	7101	2371	13904
80°	6180	2646	9696
85°	7041	3503	9659



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	441.5	5.0
10°-20°	1282.0	14.6
20°-30°	1945.9	22.2
30°-40°	2043.8	23.3
40°-50°	1532.3	17.5
50°-60°	983.1	11.2
60°-70°	420.6	4.8
70°-80°	99.4	1.1
80°-90°	18.5	0.2
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°	3669.4	41.9
0°-40°	5713.2	65.2
0°-60°	8228.6	93.9
0°-90°	8767.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8767.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4626	4626	4626	4626	4626	
5°	4618	4626	4631	4638	4636	439
15°	4410	4502	4606	4576	4519	1244
25°	4035	4176	4387	4308	4233	1843
35°	3347	3161	3349	3310	3384	2101
45°	2542	2078	1194	2019	2577	1947
55°	1286	1286	444	1341	1567	1167
65°	387	457	142	588	598	413
75°	60	70	20	119	117	87
85°	20	12	10	20	27	21
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°	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6
2.5°	4628.1	4633.1	4630.6	4630.6	4628.1	4630.6	4630.6	4635.6	4635.6	4630.6	4628.1
5°	4618.2	4623.2	4623.2	4618.2	4618.2	4630.6	4623.2	4628.1	4628.1	4625.6	4625.6
7.5°	4595.9	4595.9	4605.8	4598.4	4598.4	4605.8	4603.3	4608.3	4613.2	4615.7	4615.7
10°	4546.2	4551.2	4553.6	4553.6	4556.1	4563.6	4568.5	4578.5	4583.4	4588.4	4590.9
12.5°	4484.1	4491.6	4494.1	4491.6	4499.0	4508.9	4521.4	4533.8	4541.3	4551.2	4558.6
15°	4409.6	4409.6	4414.6	4422.1	4427.0	4441.9	4454.3	4469.2	4489.1	4501.5	4513.9
17.5°	4327.7	4332.7	4340.1	4340.1	4350.1	4374.9	4382.3	4404.7	4427.0	4439.4	4464.3
20°	4238.3	4243.3	4250.7	4255.7	4268.1	4288.0	4302.9	4322.7	4347.6	4369.9	4394.7
22.5°	4168.8	4158.9	4163.8	4168.8	4181.2	4198.6	4216.0	4240.8	4265.6	4288.0	4312.8
25°	4034.7	4037.2	4044.7	4049.6	4064.5	4079.4	4099.3	4129.1	4151.4	4176.3	4203.5
27.5°	3853.5	3856.0	3868.4	3868.4	3880.8	3905.6	3918.0	3942.8	3972.7	3997.5	4029.8
30°	3647.4	3652.3	3652.3	3662.3	3669.7	3682.2	3694.5	3719.4	3734.3	3756.6	3801.3
32.5°	3458.7	3463.6	3461.1	3458.7	3451.2	3448.7	3446.3	3451.2	3456.2	3463.6	3481.0
35°	3347.0	3334.5	3324.6	3307.2	3287.4	3262.5	3240.2	3210.4	3183.1	3160.7	3135.9
37.5°	3240.2	3237.7	3222.8	3198.0	3158.2	3113.6	3061.4	2996.9	2932.3	2862.8	2795.8
40°	3091.2	3083.7	3071.3	3036.6	2991.9	2937.3	2867.8	2788.3	2684.0	2577.2	2468.0
42.5°	2837.9	2840.4	2825.5	2798.2	2756.0	2703.9	2631.9	2545.0	2433.3	2306.6	2165.1
45°	2542.5	2542.5	2537.5	2515.2	2485.4	2443.2	2388.5	2316.6	2207.3	2078.2	1926.7
47.5°	2234.6	2237.1	2229.6	2224.7	2212.2	2185.0	2145.2	2090.6	2013.6	1889.5	1738.0
50°	1921.8	1921.8	1934.2	1931.7	1931.7	1921.8	1904.4	1872.1	1805.1	1705.8	1564.3
52.5°	1608.9	1613.9	1621.4	1631.3	1643.7	1663.5	1643.7	1628.8	1586.6	1509.6	1388.0
55°	1286.1	1291.1	1303.5	1320.9	1335.8	1355.7	1360.6	1360.6	1338.3	1286.1	1194.3
57.5°	1010.6	1003.1	1013.0	1027.9	1047.8	1067.7	1082.6	1099.9	1097.4	1062.7	988.2
60°	759.8	762.3	769.7	784.6	799.5	816.9	836.7	851.6	859.1	841.7	794.5
62.5°	553.7	553.7	563.6	578.5	586.0	610.8	623.2	630.7	638.1	635.6	605.8
65°	387.4	392.3	397.3	404.7	412.1	427.0	434.5	449.4	454.4	456.9	434.5
67.5°	273.1	265.7	270.7	275.6	283.0	293.0	307.9	307.9	315.3	315.3	300.4
70°	173.8	173.8	176.3	183.7	188.7	191.2	196.2	201.1	208.6	206.1	206.1
72.5°	116.7	114.2	116.7	119.2	121.7	129.1	129.1	131.6	136.6	139.1	129.1
75°	59.6	62.1	67.0	64.6	72.0	67.0	69.5	77.0	74.5	69.5	69.5
77.5°	49.6	49.6	49.6	47.2	52.1	52.1	49.6	54.6	52.1	52.1	49.6
80°	34.8	37.2	34.8	32.3	34.8	32.3	32.3	32.3	32.3	32.3	29.8
82.5°	27.3	22.4	24.8	22.4	24.8	24.8	22.4	19.9	19.9	22.4	19.9
85°	19.9	14.9	17.4	17.4	14.9	14.9	14.9	14.9	14.9	12.4	12.4
87.5°	12.4	7.5	7.5	7.5	9.9	9.9	9.9	7.5	9.9	9.9	5.0
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°	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6
2.5°	4633.1	4630.6	4635.6	4633.1	4633.1	4630.6	4633.1	4630.6	4635.6	4625.6	4628.1
5°	4633.1	4628.1	4630.6	4633.1	4635.6	4630.6	4630.6	4630.6	4635.6	4630.6	4633.1
7.5°	4623.2	4620.7	4628.1	4633.1	4630.6	4628.1	4633.1	4630.6	4635.6	4633.1	4638.0
10°	4603.3	4605.8	4610.8	4618.2	4620.7	4623.2	4628.1	4628.1	4635.6	4625.6	4630.6
12.5°	4573.5	4583.4	4595.9	4600.8	4610.8	4610.8	4615.7	4618.2	4623.2	4620.7	4628.1
15°	4536.3	4548.7	4563.6	4576.0	4588.4	4595.9	4603.3	4605.8	4613.2	4605.8	4608.3
17.5°	4491.6	4506.4	4528.8	4543.7	4563.6	4571.0	4580.9	4585.9	4593.4	4588.4	4590.9
20°	4429.5	4446.9	4471.7	4494.1	4506.4	4523.8	4536.3	4543.7	4548.7	4543.7	4546.2
22.5°	4342.6	4367.4	4399.7	4417.1	4441.9	4456.8	4459.3	4476.7	4489.1	4476.7	4481.7
25°	4240.8	4265.6	4290.5	4327.7	4350.1	4367.4	4384.8	4387.3	4399.7	4397.2	4394.7
27.5°	4071.9	4104.3	4146.4	4176.3	4206.0	4233.4	4253.2	4258.2	4270.6	4265.6	4268.1
30°	3841.0	3875.8	3915.6	3962.7	4004.9	4032.2	4057.1	4074.4	4086.8	4079.4	4076.9
32.5°	3513.3	3548.1	3590.3	3637.4	3687.1	3726.8	3756.6	3779.0	3793.9	3788.9	3776.5
35°	3138.4	3148.3	3175.7	3212.9	3255.1	3297.3	3324.6	3349.4	3366.8	3371.8	3371.8
37.5°	2753.5	2721.3	2701.4	2701.4	2726.2	2743.6	2768.4	2783.3	2810.7	2820.6	2828.0
40°	2381.1	2306.6	2237.1	2185.0	2150.2	2147.7	2147.7	2155.1	2180.0	2212.2	2242.1
42.5°	2048.4	1929.2	1822.5	1725.6	1656.1	1616.4	1599.0	1601.5	1621.4	1651.1	1700.8
45°	1782.7	1633.8	1499.7	1383.0	1288.6	1226.5	1196.8	1194.3	1209.2	1243.9	1298.6
47.5°	1576.7	1417.7	1266.3	1132.2	1030.4	963.4	928.6	918.7	928.6	960.9	1025.4
50°	1405.3	1241.5	1085.0	946.0	836.7	767.2	734.9	722.5	734.9	762.3	826.8
52.5°	1246.4	1077.6	931.1	797.0	680.3	620.7	586.0	578.5	586.0	618.2	670.4
55°	1062.7	918.7	774.7	640.6	538.8	479.2	451.9	444.5	451.9	481.7	536.3
57.5°	881.5	757.3	630.7	509.0	422.1	369.9	345.1	335.2	352.5	372.4	437.0
60°	712.6	613.3	506.5	399.8	327.8	280.6	260.7	258.2	263.2	288.0	332.7
62.5°	558.7	476.7	392.3	305.4	245.8	225.9	201.1	198.7	203.6	218.5	253.3
65°	402.2	350.1	285.5	223.4	176.3	149.0	139.1	141.6	146.5	156.4	188.7
67.5°	280.6	243.3	198.7	156.4	121.7	109.2	99.3	96.8	99.3	116.7	134.1
70°	188.7	166.3	134.1	119.2	84.4	67.0	69.5	62.1	72.0	72.0	86.9
72.5°	124.1	109.2	89.4	69.5	59.6	47.2	47.2	44.7	49.6	52.1	64.6
75°	64.6	49.6	49.6	34.8	24.8	12.4	22.4	19.9	17.4	19.9	24.8
77.5°	44.7	37.2	34.8	27.3	24.8	19.9	19.9	19.9	19.9	22.4	24.8
80°	27.3	27.3	19.9	17.4	14.9	12.4	14.9	14.9	14.9	14.9	17.4
82.5°	17.4	14.9	14.9	12.4	12.4	9.9	9.9	9.9	9.9	9.9	14.9
85°	14.9	9.9	9.9	7.5	9.9	17.4	7.5	9.9	9.9	9.9	7.5
87.5°	5.0	7.5	7.5	7.5	5.0	2.5	5.0	7.5	7.5	12.4	9.9
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°	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6	4625.6
2.5°	4633.1	4635.6	4635.6	4633.1	4633.1	4628.1	4638.0	4630.6	4633.1	4643.0	4635.6
5°	4638.0	4640.5	4640.5	4638.0	4638.0	4638.0	4640.5	4640.5	4638.0	4635.6	4640.5
7.5°	4648.0	4645.5	4645.5	4640.5	4640.5	4635.6	4640.5	4633.1	4638.0	4633.1	4640.5
10°	4635.6	4638.0	4635.6	4633.1	4633.1	4630.6	4630.6	4623.2	4625.6	4618.2	4623.2
12.5°	4628.1	4625.6	4625.6	4620.7	4615.7	4610.8	4608.3	4600.8	4600.8	4583.4	4590.9
15°	4608.3	4610.8	4603.3	4593.4	4588.4	4576.0	4571.0	4561.1	4551.2	4538.8	4541.3
17.5°	4590.9	4583.4	4573.5	4563.6	4543.7	4533.8	4523.8	4508.9	4504.0	4489.1	4484.1
20°	4538.8	4533.8	4521.4	4504.0	4491.6	4469.2	4459.3	4444.4	4432.0	4417.1	4409.6
22.5°	4471.7	4466.7	4451.8	4434.5	4414.6	4404.7	4394.7	4367.4	4355.0	4340.1	4337.6
25°	4387.3	4379.8	4365.0	4345.1	4335.1	4307.8	4297.9	4278.0	4273.1	4258.2	4255.7
27.5°	4258.2	4248.2	4230.9	4206.0	4188.6	4171.3	4161.4	4146.4	4141.5	4126.6	4124.1
30°	4064.5	4052.1	4017.3	4007.4	3977.6	3960.2	3960.2	3940.4	3942.8	3932.9	3932.9
32.5°	3759.1	3739.3	3711.9	3692.1	3672.2	3662.3	3662.3	3654.8	3659.8	3659.8	3664.8
35°	3354.4	3327.1	3312.2	3299.8	3299.8	3309.7	3339.5	3347.0	3361.9	3374.3	3384.2
37.5°	2835.4	2833.0	2850.4	2865.3	2902.5	2944.7	2996.9	3041.6	3083.7	3113.6	3143.3
40°	2274.3	2336.4	2386.1	2455.6	2512.7	2594.6	2689.0	2765.9	2837.9	2890.1	2944.7
42.5°	1775.3	1854.7	1959.0	2060.8	2162.6	2274.3	2398.5	2505.3	2599.6	2671.6	2728.7
45°	1383.0	1492.2	1618.9	1748.0	1879.6	2018.6	2147.7	2257.0	2356.3	2430.8	2487.9
47.5°	1114.8	1234.0	1378.0	1519.5	1668.5	1815.0	1959.0	2053.4	2135.3	2194.9	2247.1
50°	921.1	1047.8	1199.3	1360.6	1509.6	1656.1	1780.2	1872.1	1939.2	1991.3	2023.5
52.5°	769.7	903.8	1065.2	1226.5	1375.5	1509.6	1621.4	1690.9	1745.5	1782.7	1812.5
55°	635.6	764.8	916.2	1067.7	1214.1	1340.7	1432.6	1484.8	1527.0	1549.3	1566.7
57.5°	518.9	638.1	777.1	916.2	1042.8	1147.1	1219.1	1271.2	1291.1	1308.5	1306.0
60°	407.2	518.9	645.6	764.8	874.0	958.4	1010.6	1040.3	1055.2	1062.7	1057.7
62.5°	320.3	422.1	518.9	623.2	702.7	774.7	824.4	824.4	831.8	834.3	841.7
65°	238.3	315.3	399.8	476.7	541.2	588.4	615.8	623.2	633.2	630.7	625.7
67.5°	176.3	233.4	295.4	352.5	397.3	427.0	446.9	464.3	461.8	456.9	454.4
70°	121.7	158.9	213.5	248.3	280.6	310.4	315.3	317.8	320.3	322.8	317.8
72.5°	84.4	111.7	141.6	171.3	191.2	203.6	216.0	218.5	218.5	218.5	216.0
75°	42.2	57.1	84.4	96.8	114.2	119.2	129.1	129.1	136.6	126.6	124.1
77.5°	37.2	44.7	59.6	69.5	77.0	84.4	86.9	94.3	91.9	86.9	89.4
80°	22.4	27.3	37.2	42.2	52.1	54.6	57.1	59.6	57.1	59.6	59.6
82.5°	17.4	19.9	24.8	24.8	32.3	32.3	34.8	34.8	37.2	37.2	37.2
85°	9.9	17.4	14.9	29.8	19.9	19.9	24.8	29.8	24.8	24.8	29.8
87.5°	9.9	9.9	7.5	9.9	9.9	9.9	12.4	14.9	14.9	17.4	14.9
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: P249301

CATALOG NUMBER: LD8B90D010 ER8B90827 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4625.6	4625.6	4625.6	4625.6
2.5°	4633.1	4638.0	4630.6	4628.1
5°	4640.5	4640.5	4635.6	4635.6
7.5°	4640.5	4640.5	4633.1	4628.1
10°	4620.7	4620.7	4613.2	4608.3
12.5°	4583.4	4583.4	4580.9	4573.5
15°	4536.3	4536.3	4526.3	4518.9
17.5°	4471.7	4476.7	4464.3	4464.3
20°	4402.2	4399.7	4389.8	4384.8
22.5°	4330.2	4325.2	4322.7	4307.8
25°	4253.2	4248.2	4240.8	4233.4
27.5°	4121.6	4119.1	4111.7	4101.8
30°	3920.5	3918.0	3908.1	3908.1
32.5°	3659.8	3657.3	3647.4	3649.9
35°	3389.1	3399.1	3394.1	3384.2
37.5°	3163.2	3170.7	3175.7	3170.7
40°	2974.5	2996.9	2999.4	3004.3
42.5°	2773.4	2803.2	2813.1	2818.1
45°	2532.5	2559.9	2582.2	2577.2
47.5°	2286.7	2306.6	2326.5	2311.6
50°	2050.9	2063.3	2070.8	2070.8
52.5°	1827.4	1827.4	1824.9	1827.4
55°	1571.7	1571.7	1561.8	1566.7
57.5°	1303.5	1308.5	1301.0	1288.6
60°	1055.2	1042.8	1037.8	1030.4
62.5°	821.9	821.9	804.5	826.8
65°	615.8	608.3	600.8	598.4
67.5°	446.9	444.5	437.0	434.5
70°	315.3	305.4	302.9	297.9
72.5°	211.1	211.1	206.1	206.1
75°	129.1	116.7	114.2	116.7
77.5°	89.4	86.9	86.9	84.4
80°	59.6	57.1	62.1	54.6
82.5°	37.2	39.7	37.2	39.7
85°	24.8	29.8	27.3	27.3
87.5°	14.9	14.9	14.9	14.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)