

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: P249721

Luminaire Tested: **LD8B80D010 ER8B80840 8LBSW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249721  
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: LD8B80D010 ER8B80840 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8790.0 lumens  
Efficiency: N/A  
Efficacy: 118.1 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

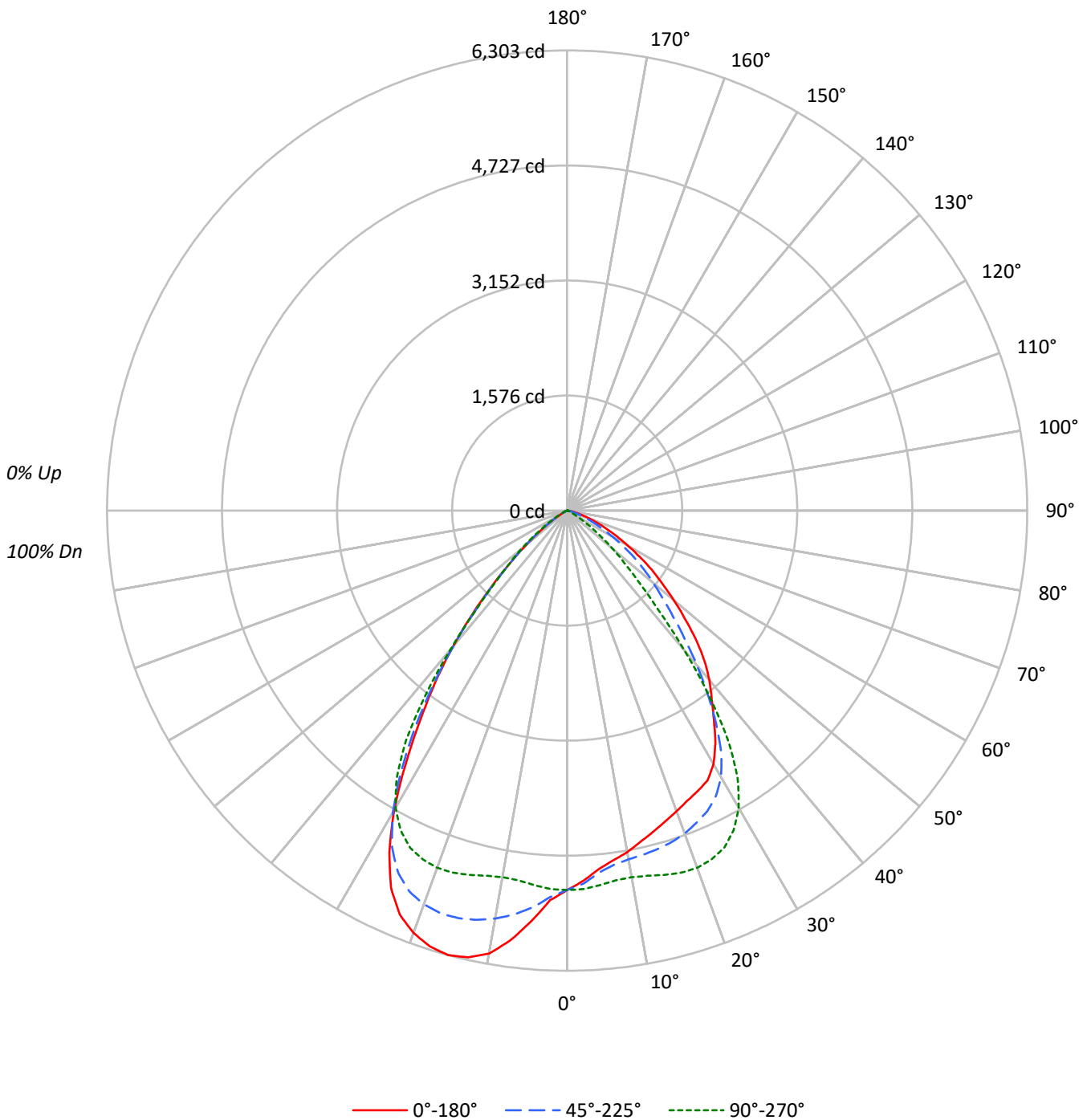
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	90°	180°
0°	160272	160272	160272
5°	152690	159383	174720
10°	148754	159629	192863
15°	145379	164920	201205
20°	143780	170876	201962
25°	144116	173292	194114
30°	142779	167341	168811
35°	131935	144821	132116
40°	121917	100409	97966
45°	108565	60586	62597
50°	91345	39035	35423
55°	75997	21413	16193
60°	59317	9288	5094
65°	43772	4611	2481
70°	30438	2849	1091
75°	18527	584	0
80°	13372	870	0
85°	8598	849	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	499.7	5.7
10°-20°	1495.4	17.0
20°-30°	2290.1	26.1
30°-40°	2245.1	25.5
40°-50°	1352.0	15.4
50°-60°	622.3	7.1
60°-70°	218.6	2.5
70°-80°	57.2	0.7
80°-90°	9.7	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°	4285.2	48.8
0°-40°	6530.2	74.3
0°-60°	8504.5	96.8
0°-90°	8790.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8790.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5198	5198	5198	5198	5198	
5°	4933	4979	5149	5458	5644	466
15°	4554	4799	5166	5778	6303	1287
25°	4236	4542	5093	5477	5705	1951
35°	3505	3553	3847	3626	3510	2195
45°	2490	2050	1389	1399	1435	1909
55°	1414	1120	398	313	301	1261
65°	600	415	63	32	34	611
75°	156	90	5	0	0	188
85°	24	12	2	0	0	33
90°	0	0	0	0	0	



TEST NUMBER: P249721

CATALOG NUMBER: LD8B80D010 ER8B80840 8LBSW01

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5
2.5°	5076.1	5081.0	5081.0	5081.0	5090.7	5093.2	5090.7	5093.2	5098.0	5115.0	5122.3
5°	4932.8	4925.5	4930.4	4927.9	4940.1	4947.4	4942.5	4949.8	4966.8	4979.0	4991.1
7.5°	4830.9	4830.9	4830.9	4835.7	4843.0	4857.5	4855.1	4859.9	4876.9	4893.9	4910.9
10°	4750.7	4748.3	4748.3	4760.4	4770.1	4787.1	4792.0	4806.6	4828.4	4850.2	4869.6
12.5°	4646.2	4648.7	4660.8	4673.0	4694.8	4721.5	4736.1	4755.6	4789.6	4826.0	4847.9
15°	4553.9	4556.3	4566.1	4590.3	4617.1	4648.7	4680.2	4711.8	4753.1	4799.3	4838.2
17.5°	4464.1	4466.5	4473.8	4500.6	4534.5	4575.8	4612.2	4653.5	4707.0	4760.4	4809.0
20°	4381.5	4379.1	4391.2	4415.5	4459.3	4498.1	4534.5	4583.1	4641.4	4707.0	4762.8
22.5°	4301.3	4301.3	4313.5	4337.8	4376.7	4415.5	4454.4	4505.4	4563.6	4626.8	4692.4
25°	4235.7	4233.3	4250.3	4262.5	4291.6	4330.5	4371.8	4413.1	4471.4	4541.8	4604.9
27.5°	4165.4	4163.0	4165.4	4179.9	4206.6	4235.7	4267.3	4303.8	4352.4	4410.7	4471.4
30°	4009.9	4012.3	4012.3	4024.5	4039.1	4070.6	4087.6	4124.1	4167.8	4216.3	4269.8
32.5°	3779.2	3781.6	3781.6	3786.5	3798.6	3813.2	3827.8	3854.4	3888.4	3929.7	3978.3
35°	3504.8	3504.8	3502.3	3504.8	3512.0	3512.0	3524.1	3512.0	3529.0	3553.3	3589.7
37.5°	3252.1	3247.2	3242.4	3237.5	3230.2	3218.1	3201.1	3172.0	3164.7	3155.0	3157.4
40°	3028.7	3026.3	3011.7	2999.5	2975.2	2946.1	2904.8	2853.8	2812.6	2764.0	2722.7
42.5°	2781.0	2778.5	2766.4	2744.5	2717.8	2674.1	2608.5	2540.5	2458.0	2385.1	2309.8
45°	2489.5	2496.8	2479.8	2455.5	2423.9	2382.6	2309.8	2227.1	2144.6	2049.9	1955.1
47.5°	2185.8	2183.4	2171.4	2156.8	2130.1	2088.8	2040.2	1950.3	1862.8	1775.5	1678.3
50°	1904.1	1894.4	1889.5	1875.0	1858.0	1824.1	1773.0	1700.1	1622.4	1539.8	1450.0
52.5°	1637.0	1637.0	1624.8	1615.1	1600.5	1573.8	1530.1	1471.9	1406.3	1328.5	1233.8
55°	1413.6	1408.7	1396.6	1384.4	1369.8	1352.8	1314.0	1265.4	1194.9	1119.7	1037.1
57.5°	1175.5	1173.0	1168.3	1153.7	1146.4	1129.4	1085.7	1037.1	976.4	910.8	842.7
60°	961.8	952.1	942.3	932.6	920.5	903.5	874.3	833.1	782.1	723.8	655.8
62.5°	770.0	784.5	755.4	755.4	731.1	716.5	689.8	665.5	612.0	558.6	500.4
65°	599.9	599.9	587.7	578.0	563.4	546.4	519.7	495.5	456.6	415.3	374.0
67.5°	459.1	456.6	444.5	434.8	422.6	412.9	393.5	364.3	335.2	301.2	267.1
70°	337.6	335.2	332.7	315.7	306.0	293.9	279.3	259.9	238.0	213.7	182.1
72.5°	242.8	242.8	235.6	228.3	218.6	208.8	194.3	182.1	162.8	145.8	123.9
75°	155.5	153.1	153.1	140.9	140.9	126.3	116.6	109.3	99.6	89.9	70.5
77.5°	111.8	109.3	106.9	102.0	97.2	92.3	85.0	75.3	68.0	58.3	51.0
80°	75.3	70.5	68.0	68.0	60.7	58.3	60.7	46.2	43.7	36.4	31.6
82.5°	46.2	46.2	43.7	43.7	41.3	38.9	31.6	31.6	29.2	26.7	21.9
85°	24.3	31.6	21.9	24.3	21.9	24.3	21.9	17.0	14.6	12.1	12.1
87.5°	14.6	9.7	9.7	14.6	12.1	9.7	9.7	9.7	7.3	4.9	4.9
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5
2.5°	5117.5	5134.5	5132.0	5153.9	5161.2	5178.2	5178.2	5190.2	5197.5	5214.5	5229.1
5°	4996.0	5022.7	5030.0	5056.7	5078.6	5105.3	5122.3	5149.0	5173.3	5209.7	5243.7
7.5°	4920.7	4942.5	4957.1	4988.7	5013.0	5042.1	5071.3	5107.7	5141.7	5185.4	5234.0
10°	4884.2	4913.4	4935.2	4966.8	4996.0	5027.6	5056.7	5098.0	5136.9	5192.7	5246.1
12.5°	4874.5	4908.5	4935.2	4979.0	5008.1	5042.1	5076.1	5122.3	5163.6	5221.8	5282.6
15°	4874.5	4920.7	4957.1	5005.7	5039.7	5083.4	5119.9	5166.0	5212.1	5272.8	5331.1
17.5°	4864.8	4920.7	4966.8	5022.7	5066.4	5110.2	5156.3	5200.0	5248.5	5306.9	5372.4
20°	4826.0	4896.4	4952.2	5017.8	5064.0	5112.6	5158.8	5207.2	5258.3	5319.0	5374.9
22.5°	4758.0	4840.6	4903.7	4974.1	5027.6	5076.1	5122.3	5170.9	5226.7	5285.0	5343.3
25°	4668.1	4745.8	4813.9	4886.6	4940.1	4993.5	5037.3	5093.2	5144.2	5200.0	5246.1
27.5°	4532.0	4614.6	4680.2	4755.6	4804.1	4855.1	4891.5	4937.7	4986.3	5032.4	5068.9
30°	4328.1	4403.4	4471.4	4539.3	4587.9	4624.4	4663.2	4699.7	4731.3	4762.8	4794.4
32.5°	4029.3	4097.4	4163.0	4226.0	4264.9	4296.5	4325.6	4347.5	4364.5	4381.5	4383.9
35°	3618.9	3674.7	3716.0	3771.9	3808.4	3837.5	3837.5	3847.1	3844.8	3837.5	3830.2
37.5°	3159.9	3181.6	3198.6	3220.5	3222.9	3222.9	3208.4	3196.2	3176.8	3172.0	3157.4
40°	2681.4	2652.2	2630.3	2601.2	2584.2	2547.7	2516.2	2494.4	2462.8	2458.0	2453.1
42.5°	2227.1	2159.2	2098.5	2047.5	1989.2	1938.1	1892.0	1858.0	1833.8	1831.3	1833.8
45°	1858.0	1780.3	1690.4	1620.0	1554.4	1491.3	1430.6	1389.3	1367.4	1362.5	1367.4
47.5°	1578.7	1488.9	1401.4	1321.2	1250.8	1180.3	1119.7	1063.8	1037.1	1029.8	1027.4
50°	1357.7	1265.4	1173.0	1090.5	1012.8	942.3	867.0	813.7	779.7	767.5	757.8
52.5°	1141.6	1059.0	964.2	879.2	801.5	718.9	641.2	580.4	546.4	531.9	522.1
55°	952.1	869.5	782.1	699.5	616.9	534.3	456.6	398.3	361.9	344.9	332.7
57.5°	760.2	682.5	607.2	524.6	456.6	376.5	298.7	247.7	216.1	196.7	187.0
60°	587.7	527.0	461.5	393.5	327.9	262.3	199.1	150.6	126.3	111.8	99.6
62.5°	444.5	393.5	349.7	291.4	240.4	184.5	136.1	97.2	75.3	63.2	58.3
65°	320.6	281.7	242.8	206.4	170.0	128.8	92.3	63.2	43.7	36.4	34.0
67.5°	228.3	196.7	167.5	143.3	116.6	92.3	65.6	43.7	34.0	29.2	26.7
70°	160.3	136.1	116.6	94.8	77.7	60.7	51.0	31.6	19.4	21.9	17.0
72.5°	106.9	89.9	80.2	65.6	53.4	43.7	31.6	21.9	21.9	17.0	14.6
75°	58.3	53.4	41.3	31.6	26.7	24.3	9.7	4.9	2.4	7.3	2.4
77.5°	41.3	36.4	31.6	26.7	21.9	17.0	9.7	9.7	7.3	9.7	4.9
80°	26.7	21.9	19.4	19.4	12.1	7.3	4.9	4.9	7.3	2.4	2.4
82.5°	17.0	14.6	12.1	12.1	12.1	7.3	7.3	7.3	7.3	4.9	4.9
85°	9.7	7.3	4.9	4.9	2.4	4.9	0.0	2.4	2.4	0.0	0.0
87.5°	4.9	2.4	2.4	2.4	2.4	0.0	0.0	2.4	0.0	2.4	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°	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5	5197.5
2.5°	5238.8	5248.5	5260.7	5270.4	5292.3	5297.1	5306.9	5316.6	5323.9	5331.1	5333.6
5°	5272.8	5309.3	5343.3	5379.7	5425.9	5457.5	5493.9	5525.4	5557.0	5583.7	5603.1
7.5°	5282.6	5338.4	5389.5	5452.6	5520.5	5578.9	5639.6	5700.3	5763.5	5812.1	5853.3
10°	5302.0	5370.0	5435.6	5510.9	5598.3	5676.0	5751.3	5831.5	5911.6	5979.6	6040.4
12.5°	5336.0	5411.3	5481.8	5564.3	5654.2	5741.6	5824.2	5914.0	5999.1	6074.4	6142.4
15°	5391.9	5462.3	5530.3	5608.0	5697.9	5778.1	5860.6	5948.0	6033.1	6110.8	6174.0
17.5°	5428.3	5493.9	5561.8	5632.3	5707.6	5780.5	5858.1	5935.9	6013.6	6084.1	6142.4
20°	5428.3	5491.5	5542.4	5605.6	5676.0	5739.2	5802.4	5870.3	5938.3	5996.6	6052.5
22.5°	5384.6	5445.3	5484.2	5532.7	5593.4	5646.9	5680.9	5756.2	5807.2	5858.1	5899.4
25°	5282.6	5326.3	5357.9	5391.9	5440.5	5476.9	5506.1	5549.7	5600.7	5620.2	5649.3
27.5°	5098.0	5129.6	5146.6	5153.9	5178.2	5197.5	5202.4	5221.8	5243.7	5248.5	5260.7
30°	4806.6	4809.0	4801.7	4799.3	4787.1	4772.6	4770.1	4767.7	4758.0	4748.3	4750.7
32.5°	4366.9	4354.8	4325.6	4294.1	4262.5	4228.5	4209.0	4184.7	4170.2	4155.7	4138.7
35°	3798.6	3769.5	3728.2	3689.3	3652.9	3626.1	3582.4	3567.8	3553.3	3533.8	3529.0
37.5°	3130.7	3113.7	3074.8	3045.7	3026.3	3014.1	2992.2	2977.7	2977.7	2970.4	2965.5
40°	2440.9	2436.1	2421.5	2428.8	2419.1	2423.9	2421.5	2416.6	2428.8	2428.8	2433.7
42.5°	1831.3	1833.8	1841.0	1845.8	1860.4	1862.8	1875.0	1875.0	1882.3	1889.5	1894.4
45°	1362.5	1372.3	1372.3	1382.0	1396.6	1399.0	1403.8	1406.3	1411.1	1423.3	1428.1
47.5°	1022.5	1024.9	1024.9	1027.4	1032.2	1037.1	1034.7	1037.1	1044.4	1039.5	1044.4
50°	755.4	757.8	750.5	743.2	750.5	750.5	748.1	740.8	748.1	738.4	743.2
52.5°	514.9	512.4	505.1	507.6	502.7	500.4	500.4	495.5	495.5	495.5	485.8
55°	325.5	325.5	320.6	320.6	318.2	313.3	310.9	308.4	306.0	303.6	303.6
57.5°	182.1	184.5	177.3	174.8	177.3	174.8	170.0	170.0	170.0	162.8	167.5
60°	99.6	97.2	94.8	92.3	89.9	92.3	92.3	87.5	87.5	87.5	89.9
62.5°	53.4	53.4	51.0	51.0	48.6	48.6	53.4	46.2	48.6	46.2	48.6
65°	29.2	36.4	26.7	26.7	34.0	31.6	29.2	29.2	31.6	26.7	29.2
67.5°	31.6	21.9	19.4	21.9	19.4	19.4	19.4	24.3	21.9	17.0	21.9
70°	14.6	17.0	17.0	12.1	19.4	9.7	17.0	9.7	14.6	12.1	14.6
72.5°	14.6	14.6	14.6	9.7	14.6	9.7	12.1	12.1	9.7	9.7	14.6
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°	4.9	4.9	2.4	2.4	2.4	2.4	4.9	4.9	4.9	0.0	2.4
80°	4.9	4.9	0.0	2.4	0.0	0.0	2.4	0.0	2.4	0.0	4.9
82.5°	2.4	4.9	2.4	2.4	4.9	4.9	4.9	2.4	2.4	2.4	2.4
85°	0.0	2.4	0.0	0.0	0.0	0.0	4.9	0.0	0.0	0.0	2.4
87.5°	0.0	2.4	0.0	0.0	0.0	0.0	2.4	2.4	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: P249721

CATALOG NUMBER: LD8B80D010 ER8B80840 8LBSW01

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5197.5	5197.5	5197.5	5197.5
2.5°	5336.0	5338.4	5343.3	5340.9
5°	5617.7	5637.2	5646.9	5644.5
7.5°	5882.4	5916.5	5935.9	5935.9
10°	6086.5	6125.4	6154.5	6159.4
12.5°	6195.7	6239.5	6278.4	6268.6
15°	6227.3	6271.1	6309.9	6302.6
17.5°	6190.9	6234.6	6263.8	6258.9
20°	6091.4	6127.8	6157.0	6154.5
22.5°	5935.9	5967.5	5991.8	5989.3
25°	5673.6	5695.5	5714.9	5705.2
27.5°	5270.4	5277.7	5289.8	5275.3
30°	4733.7	4738.5	4743.4	4741.0
32.5°	4131.4	4128.9	4124.1	4119.2
35°	3521.7	3521.7	3524.1	3509.6
37.5°	2967.9	2965.5	2972.8	2965.5
40°	2438.5	2436.1	2445.8	2433.7
42.5°	1901.7	1909.0	1911.4	1911.4
45°	1430.6	1433.0	1435.4	1435.4
47.5°	1044.4	1046.8	1059.0	1044.4
50°	738.4	740.8	743.2	738.4
52.5°	488.2	490.7	488.2	480.9
55°	298.7	301.2	301.2	301.2
57.5°	160.3	162.8	162.8	160.3
60°	87.5	85.0	87.5	82.6
62.5°	46.2	51.0	48.6	43.7
65°	29.2	29.2	29.2	34.0
67.5°	24.3	19.4	21.9	17.0
70°	14.6	17.0	17.0	12.1
72.5°	12.1	12.1	12.1	14.6
75°	0.0	0.0	0.0	0.0
77.5°	4.9	4.9	4.9	2.4
80°	2.4	0.0	2.4	0.0
82.5°	2.4	2.4	4.9	2.4
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)