

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: P249768

Luminaire Tested: **LD8B175D010 ER8B175950 8LBSW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249768  
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: LD8B175D010 ER8B175950 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17886.0 lumens  
Efficiency: N/A  
Efficacy: 100.9 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

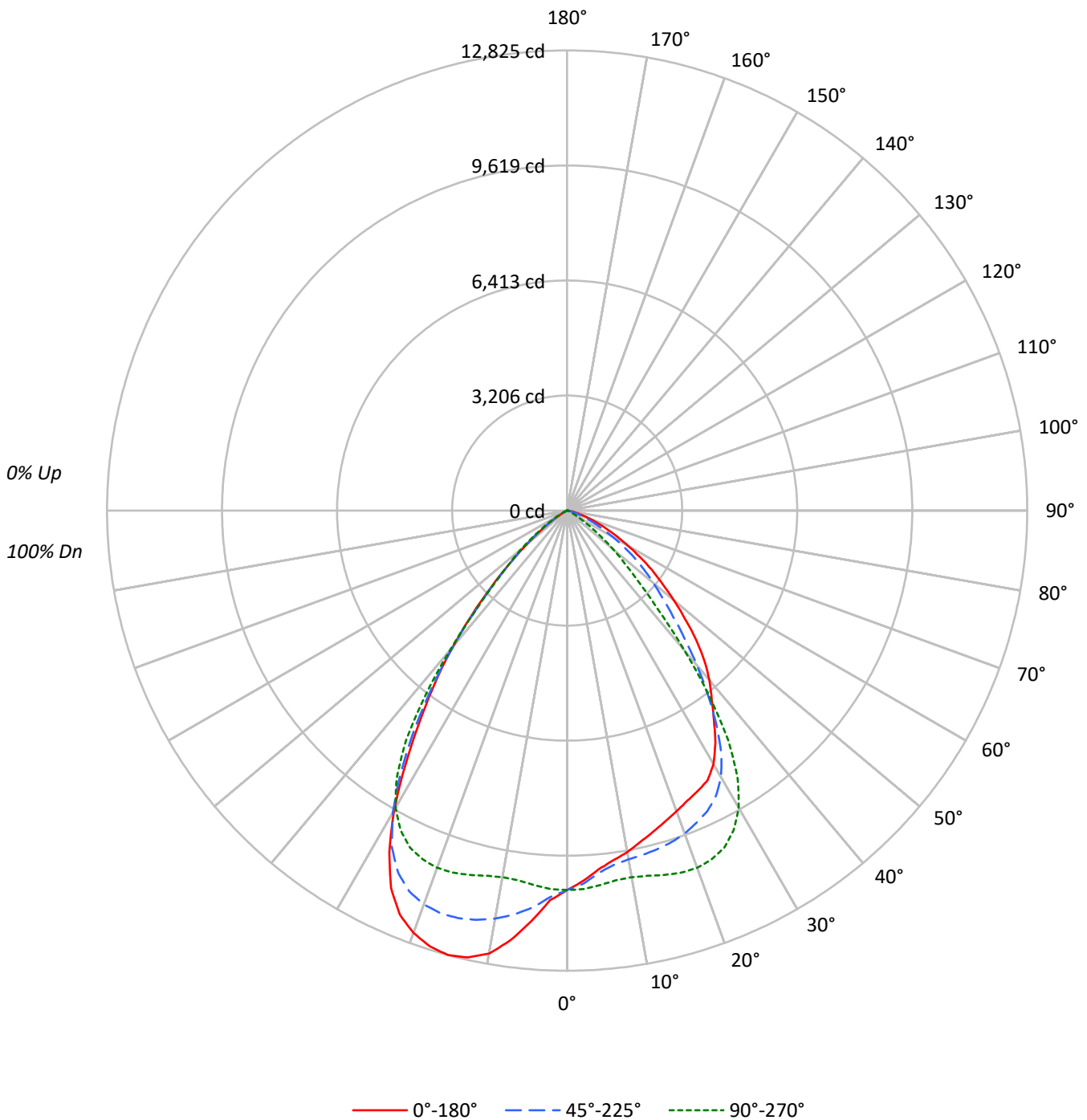
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	326125	326125	326125
5°	310699	324312	355523
10°	302684	324812	392437
15°	295821	335577	409414
20°	292565	347705	410953
25°	293250	352616	394986
30°	290529	340507	343498
35°	268460	294686	268828
40°	248077	204309	199342
45°	220906	123279	127369
50°	185871	79424	72079
55°	154640	43568	32950
60°	120700	18896	10361
65°	89068	9383	5049
70°	61939	5797	2218
75°	37685	1191	0
80°	27205	1776	0
85°	17478	1734	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1016.7	5.7
10°-20°	3042.9	17.0
20°-30°	4659.9	26.1
30°-40°	4568.3	25.5
40°-50°	2751.0	15.4
50°-60°	1266.2	7.1
60°-70°	444.8	2.5
70°-80°	116.3	0.7
80°-90°	19.8	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°	8719.5	48.8
0°-40°	13287.8	74.3
0°-60°	17305.0	96.8
0°-90°	17886.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17886.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	10576	10576	10576	10576	10576	
5°	10037	10131	10477	11105	11486	948
15°	9266	9766	10512	11757	12825	2618
25°	8619	9242	10364	11144	11609	3970
35°	7132	7230	7828	7378	7141	4466
45°	5066	4171	2827	2847	2921	3884
55°	2876	2278	810	638	613	2566
65°	1221	845	129	64	69	1244
75°	316	183	10	0	0	383
85°	49	25	5	0	0	68
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°	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0
2.5°	10328.9	10338.8	10338.8	10338.8	10358.6	10363.7	10358.6	10363.7	10373.4	10408.0	10422.9
5°	10037.4	10022.5	10032.5	10027.4	10052.2	10067.1	10057.1	10072.0	10106.5	10131.4	10156.0
7.5°	9829.9	9829.9	9829.9	9839.6	9854.5	9884.2	9879.3	9889.1	9923.7	9958.2	9992.8
10°	9666.7	9661.9	9661.9	9686.5	9706.2	9740.8	9750.8	9780.5	9824.8	9869.3	9908.8
12.5°	9454.2	9459.3	9483.9	9508.7	9553.0	9607.3	9637.0	9676.7	9745.9	9819.9	9864.5
15°	9266.4	9271.3	9291.2	9340.5	9395.0	9459.3	9523.3	9587.6	9671.6	9765.6	9844.7
17.5°	9083.5	9088.4	9103.3	9157.8	9226.9	9311.0	9385.0	9469.0	9577.8	9686.5	9785.3
20°	8915.5	8910.6	8935.2	8984.7	9073.8	9152.7	9226.9	9325.8	9444.4	9577.8	9691.4
22.5°	8752.4	8752.4	8777.2	8826.6	8905.7	8984.7	9063.8	9167.5	9286.1	9414.7	9548.1
25°	8618.9	8614.0	8648.6	8673.4	8732.6	8811.8	8895.8	8979.8	9098.4	9241.8	9370.2
27.5°	8475.7	8470.8	8475.7	8505.4	8559.7	8618.9	8683.2	8757.5	8856.3	8974.9	9098.4
30°	8159.4	8164.3	8164.3	8189.1	8218.8	8282.9	8317.5	8391.7	8480.6	8579.5	8688.3
32.5°	7689.9	7694.8	7694.8	7704.8	7729.4	7759.1	7788.8	7843.1	7912.2	7996.3	8095.1
35°	7131.5	7131.5	7126.4	7131.5	7146.4	7146.4	7171.0	7146.4	7180.9	7230.4	7304.4
37.5°	6617.5	6607.5	6597.7	6587.8	6572.9	6548.3	6513.7	6454.3	6439.5	6419.7	6424.6
40°	6162.8	6157.9	6128.2	6103.4	6054.0	5994.8	5910.8	5807.0	5723.0	5624.2	5540.2
42.5°	5658.7	5653.7	5629.0	5584.5	5530.2	5441.3	5307.8	5169.5	5001.5	4853.2	4700.0
45°	5065.6	5080.4	5045.8	4996.4	4932.1	4848.1	4700.0	4531.8	4363.8	4171.1	3978.3
47.5°	4447.8	4442.9	4418.3	4388.6	4334.3	4250.3	4151.4	3968.5	3790.5	3612.7	3415.0
50°	3874.5	3854.8	3844.8	3815.4	3780.8	3711.6	3607.7	3459.4	3301.3	3133.3	2950.4
52.5°	3331.0	3331.0	3306.2	3286.5	3256.8	3202.4	3113.6	2995.0	2861.5	2703.3	2510.6
55°	2876.4	2866.4	2841.8	2817.0	2787.3	2752.7	2673.8	2574.9	2431.5	2278.3	2110.3
57.5°	2392.0	2386.9	2377.2	2347.5	2332.6	2298.0	2209.1	2110.3	1986.8	1853.4	1714.8
60°	1957.1	1937.4	1917.4	1897.7	1873.1	1838.5	1779.1	1695.1	1591.4	1472.8	1334.4
62.5°	1566.7	1596.2	1537.0	1537.0	1487.6	1457.9	1403.6	1354.2	1245.3	1136.7	1018.1
65°	1220.7	1220.7	1195.9	1176.2	1146.5	1111.9	1057.6	1008.2	929.0	845.0	761.0
67.5°	934.1	929.0	904.4	884.7	859.9	840.1	800.7	741.3	682.1	612.9	543.5
70°	687.0	682.1	677.0	642.4	622.7	598.1	568.4	528.9	484.3	434.9	370.6
72.5°	494.1	494.1	479.5	464.6	444.9	424.9	395.4	370.6	331.2	296.6	252.0
75°	316.3	311.4	311.4	286.6	286.6	256.9	237.2	222.3	202.6	182.9	143.4
77.5°	227.4	222.3	217.5	207.5	197.7	187.8	172.9	153.2	138.3	118.6	103.7
80°	153.2	143.4	138.3	138.3	123.5	118.6	123.5	94.0	88.9	74.0	64.3
82.5°	94.0	94.0	88.9	88.9	84.0	79.1	64.3	64.3	59.4	54.3	44.5
85°	49.4	64.3	44.5	49.4	44.5	49.4	44.5	34.6	29.7	24.6	24.6
87.5°	29.7	19.7	19.7	29.7	24.6	19.7	19.7	19.7	14.8	10.0	10.0
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°	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0
2.5°	10413.1	10447.7	10442.6	10487.1	10502.0	10536.6	10536.6	10561.2	10576.0	10610.6	10640.3
5°	10165.9	10220.2	10235.1	10289.4	10334.0	10388.3	10422.9	10477.2	10526.6	10600.8	10670.0
7.5°	10012.8	10057.1	10086.8	10151.1	10200.5	10259.7	10319.1	10393.2	10462.3	10551.4	10650.3
10°	9938.5	9997.9	10042.3	10106.5	10165.9	10230.2	10289.4	10373.4	10452.6	10566.3	10674.9
12.5°	9918.8	9987.9	10042.3	10131.4	10190.5	10259.7	10328.9	10422.9	10506.9	10625.5	10749.1
15°	9918.8	10012.8	10086.8	10185.7	10254.8	10343.7	10418.0	10511.7	10605.7	10729.2	10847.8
17.5°	9899.0	10012.8	10106.5	10220.2	10309.1	10398.2	10492.0	10581.1	10679.8	10798.6	10931.8
20°	9819.9	9963.3	10076.8	10210.3	10304.3	10403.1	10497.1	10595.8	10699.7	10823.2	10936.9
22.5°	9681.6	9849.6	9978.2	10121.4	10230.2	10328.9	10422.9	10521.7	10635.4	10754.0	10872.6
25°	9498.7	9656.8	9795.3	9943.4	10052.2	10160.8	10249.9	10363.7	10467.4	10581.1	10674.9
27.5°	9221.9	9389.9	9523.3	9676.7	9775.4	9879.3	9953.4	10047.3	10146.2	10240.0	10314.2
30°	8806.9	8960.1	9098.4	9236.7	9335.6	9409.8	9488.7	9563.0	9627.3	9691.4	9755.6
32.5°	8198.9	8337.4	8470.8	8599.2	8678.3	8742.6	8801.8	8846.3	8880.9	8915.5	8920.4
35°	7363.8	7477.3	7561.3	7675.1	7749.3	7808.5	7808.5	7828.2	7823.3	7808.5	7793.6
37.5°	6429.7	6474.1	6508.6	6553.2	6558.1	6558.1	6528.6	6503.8	6464.3	6454.3	6424.6
40°	5456.1	5396.7	5352.2	5293.0	5258.4	5184.2	5120.1	5075.5	5011.3	5001.5	4991.5
42.5°	4531.8	4393.5	4270.0	4166.3	4047.7	3943.7	3849.9	3780.8	3731.3	3726.3	3731.3
45°	3780.8	3622.5	3439.6	3296.4	3163.0	3034.4	2910.9	2826.9	2782.4	2772.4	2782.4
47.5°	3212.4	3029.5	2851.5	2688.4	2545.2	2401.8	2278.3	2164.6	2110.3	2095.4	2090.6
50°	2762.7	2574.9	2386.9	2218.9	2060.9	1917.4	1764.3	1655.6	1586.5	1561.7	1541.9
52.5°	2322.9	2154.8	1962.0	1789.1	1630.8	1462.8	1304.7	1181.1	1111.9	1082.4	1062.5
55°	1937.4	1769.4	1591.4	1423.3	1255.3	1087.3	929.0	810.4	736.4	701.8	677.0
57.5°	1546.8	1388.8	1235.6	1067.6	929.0	766.1	607.8	504.1	439.8	400.3	380.6
60°	1195.9	1072.4	939.0	800.7	667.2	533.8	405.2	306.4	256.9	227.4	202.6
62.5°	904.4	800.7	711.6	593.0	489.2	375.5	276.9	197.7	153.2	128.6	118.6
65°	652.4	573.2	494.1	420.1	346.0	262.0	187.8	128.6	88.9	74.0	69.2
67.5°	464.6	400.3	340.9	291.5	237.2	187.8	133.4	88.9	69.2	59.4	54.3
70°	326.1	276.9	237.2	192.8	158.1	123.5	103.7	64.3	39.5	44.5	34.6
72.5°	217.5	182.9	163.1	133.4	108.6	88.9	64.3	44.5	44.5	34.6	29.7
75°	118.6	108.6	84.0	64.3	54.3	49.4	19.7	10.0	4.9	14.8	4.9
77.5°	84.0	74.0	64.3	54.3	44.5	34.6	19.7	19.7	14.8	19.7	10.0
80°	54.3	44.5	39.5	39.5	24.6	14.8	10.0	10.0	14.8	4.9	4.9
82.5°	34.6	29.7	24.6	24.6	24.6	14.8	14.8	14.8	14.8	10.0	10.0
85°	19.7	14.8	10.0	10.0	4.9	10.0	0.0	4.9	4.9	0.0	0.0
87.5°	10.0	4.9	4.9	4.9	4.9	0.0	0.0	4.9	0.0	4.9	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°	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0	10576.0
2.5°	10660.0	10679.8	10704.6	10724.3	10768.9	10778.6	10798.6	10818.3	10833.2	10847.8	10852.9
5°	10729.2	10803.5	10872.6	10946.7	11040.6	11104.9	11179.0	11243.2	11307.5	11361.8	11401.3
7.5°	10749.1	10862.6	10966.6	11095.0	11233.3	11352.1	11475.6	11599.0	11727.6	11826.5	11910.5
10°	10788.6	10926.9	11060.4	11213.5	11391.5	11549.6	11702.8	11865.9	12029.1	12167.4	12291.1
12.5°	10857.8	11010.9	11154.4	11322.4	11505.3	11683.0	11851.1	12033.9	12207.1	12360.2	12498.6
15°	10971.5	11114.7	11253.2	11411.3	11594.1	11757.3	11925.3	12103.1	12276.2	12434.3	12562.8
17.5°	11045.5	11179.0	11317.3	11460.7	11613.9	11762.2	11920.2	12078.5	12236.6	12380.0	12498.6
20°	11045.5	11174.1	11277.8	11406.4	11549.6	11678.2	11806.7	11945.0	12083.4	12202.0	12315.7
22.5°	10956.6	11080.1	11159.2	11258.1	11381.6	11490.4	11559.6	11712.7	11816.5	11920.2	12004.2
25°	10749.1	10838.0	10902.3	10971.5	11070.3	11144.4	11203.8	11292.7	11396.4	11436.1	11495.3
27.5°	10373.4	10437.7	10472.3	10487.1	10536.6	10576.0	10586.0	10625.5	10670.0	10679.8	10704.6
30°	9780.5	9785.3	9770.5	9765.6	9740.8	9711.3	9706.2	9701.3	9681.6	9661.9	9666.7
32.5°	8885.8	8861.2	8801.8	8737.7	8673.4	8604.3	8564.6	8515.2	8485.5	8456.0	8421.4
35°	7729.4	7670.2	7586.2	7507.0	7433.0	7378.5	7289.6	7259.9	7230.4	7190.7	7180.9
37.5°	6370.3	6335.7	6256.6	6197.4	6157.9	6133.1	6088.6	6059.1	6059.1	6044.2	6034.3
40°	4966.7	4956.9	4927.2	4942.1	4922.4	4932.1	4927.2	4917.3	4942.1	4942.1	4952.1
42.5°	3726.3	3731.3	3746.2	3756.0	3785.7	3790.5	3815.4	3815.4	3830.2	3844.8	3854.8
45°	2772.4	2792.4	2792.4	2812.1	2841.8	2846.7	2856.4	2861.5	2871.3	2896.1	2905.9
47.5°	2080.6	2085.5	2085.5	2090.6	2100.3	2110.3	2105.4	2110.3	2125.1	2115.2	2125.1
50°	1537.0	1541.9	1527.1	1512.2	1527.1	1527.1	1522.2	1507.3	1522.2	1502.5	1512.2
52.5°	1047.8	1042.7	1027.9	1033.0	1023.0	1018.1	1018.1	1008.2	1008.2	1008.2	988.4
55°	662.3	662.3	652.4	652.4	647.5	637.5	632.6	627.6	622.7	617.8	617.8
57.5°	370.6	375.5	360.9	355.8	360.9	355.8	346.0	346.0	346.0	331.2	340.9
60°	202.6	197.7	192.8	187.8	182.9	187.8	187.8	178.0	178.0	178.0	182.9
62.5°	108.6	108.6	103.7	103.7	98.9	98.9	108.6	94.0	98.9	94.0	98.9
65°	59.4	74.0	54.3	54.3	69.2	64.3	59.4	59.4	64.3	54.3	59.4
67.5°	64.3	44.5	39.5	44.5	39.5	39.5	39.5	49.4	44.5	34.6	44.5
70°	29.7	34.6	34.6	24.6	39.5	19.7	34.6	19.7	29.7	24.6	29.7
72.5°	29.7	29.7	29.7	19.7	29.7	19.7	24.6	24.6	19.7	19.7	29.7
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°	10.0	10.0	4.9	4.9	4.9	4.9	10.0	10.0	10.0	0.0	4.9
80°	10.0	10.0	0.0	4.9	0.0	0.0	4.9	0.0	4.9	0.0	10.0
82.5°	4.9	10.0	4.9	4.9	10.0	10.0	10.0	4.9	4.9	4.9	4.9
85°	0.0	4.9	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	4.9
87.5°	0.0	4.9	0.0	0.0	0.0	0.0	4.9	4.9	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: P249768

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	10576.0	10576.0	10576.0	10576.0
2.5°	10857.8	10862.6	10872.6	10867.7
5°	11431.0	11470.7	11490.4	11485.5
7.5°	11969.7	12039.0	12078.5	12078.5
10°	12384.8	12464.0	12523.2	12533.1
12.5°	12607.2	12696.3	12775.4	12755.5
15°	12671.5	12760.6	12839.5	12824.6
17.5°	12597.4	12686.3	12745.7	12735.7
20°	12394.8	12468.9	12528.3	12523.2
22.5°	12078.5	12142.8	12192.2	12187.1
25°	11544.7	11589.3	11628.7	11609.0
27.5°	10724.3	10739.2	10763.8	10734.3
30°	9632.2	9641.9	9651.9	9647.0
32.5°	8406.6	8401.5	8391.7	8381.7
35°	7166.1	7166.1	7171.0	7141.3
37.5°	6039.1	6034.3	6049.1	6034.3
40°	4961.8	4956.9	4976.7	4952.1
42.5°	3869.7	3884.5	3889.4	3889.4
45°	2910.9	2915.8	2920.7	2920.7
47.5°	2125.1	2130.0	2154.8	2125.1
50°	1502.5	1507.3	1512.2	1502.5
52.5°	993.3	998.4	993.3	978.5
55°	607.8	612.9	612.9	612.9
57.5°	326.1	331.2	331.2	326.1
60°	178.0	172.9	178.0	168.0
62.5°	94.0	103.7	98.9	88.9
65°	59.4	59.4	59.4	69.2
67.5°	49.4	39.5	44.5	34.6
70°	29.7	34.6	34.6	24.6
72.5°	24.6	24.6	24.6	29.7
75°	0.0	0.0	0.0	0.0
77.5°	10.0	10.0	10.0	4.9
80°	4.9	0.0	4.9	0.0
82.5°	4.9	4.9	10.0	4.9
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)