

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: P249761

Luminaire Tested: **LD8B175D010 ER8B175940 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249761
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 ER8B175940 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17275.0 lumens
Efficiency: N/A
Efficacy: 97.5 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

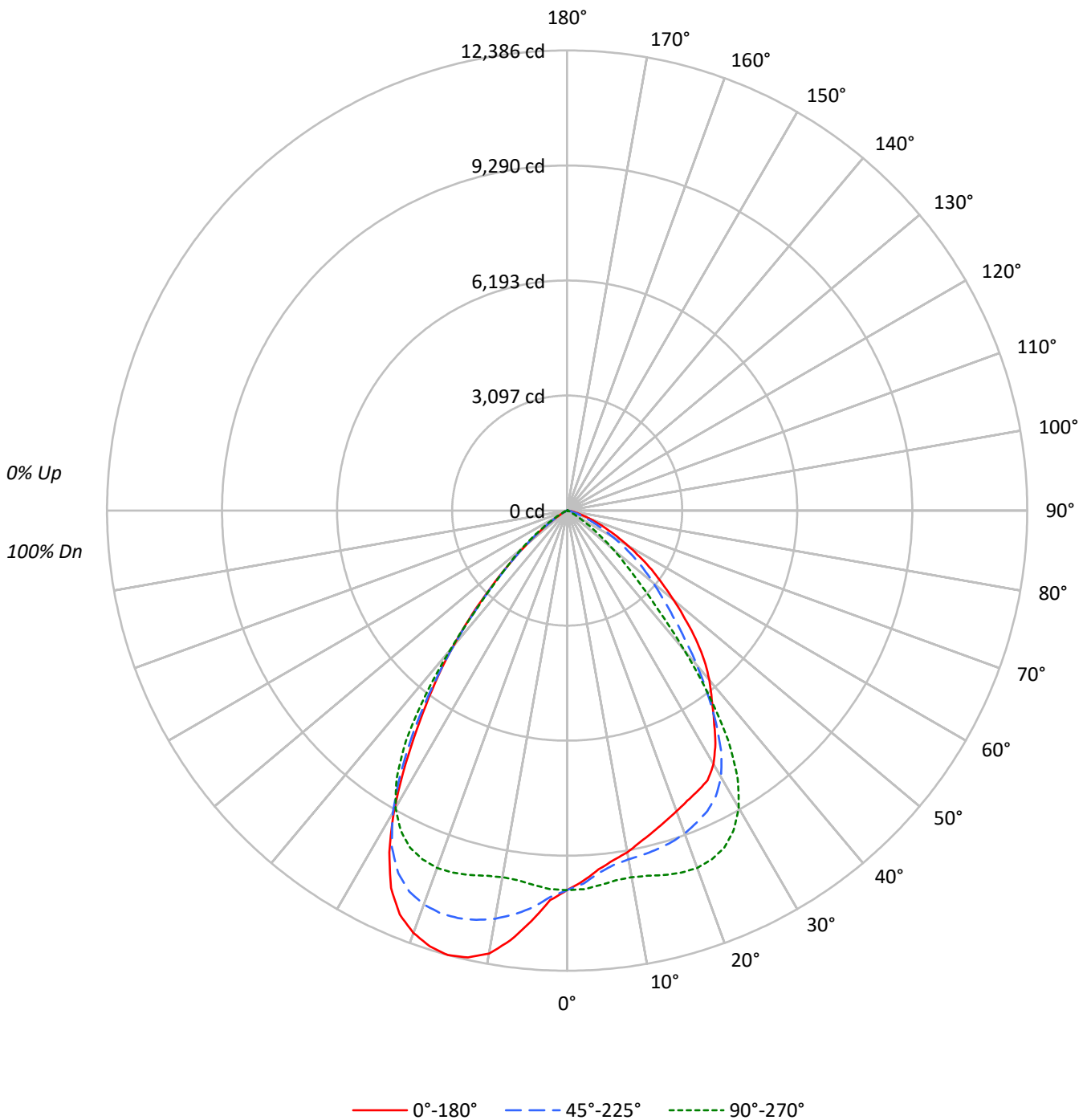
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	314984	314984	314984
5°	300085	313234	343380
10°	292345	313718	379032
15°	285718	324116	395428
20°	282569	335825	396914
25°	283234	340568	381492
30°	280606	328874	331766
35°	259289	284620	259643
40°	239604	197333	192531
45°	213358	119070	123017
50°	179524	76713	69613
55°	149355	42079	31827
60°	116580	18249	10009
65°	86026	9062	4874
70°	59821	5599	2146
75°	36398	1144	0
80°	26264	1705	0
85°	16877	1663	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	982.0	5.7
10°-20°	2939.0	17.0
20°-30°	4500.7	26.1
30°-40°	4412.2	25.5
40°-50°	2657.0	15.4
50°-60°	1223.0	7.1
60°-70°	429.6	2.5
70°-80°	112.4	0.7
80°-90°	19.1	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°	8421.7	48.8
0°-40°	12833.9	74.3
0°-60°	16713.9	96.8
0°-90°	17275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17275.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10215	10215	10215	10215	10215	
5°	9694	9785	10119	10726	11093	916
15°	8950	9432	10153	11356	12386	2529
25°	8324	8926	10010	10764	11212	3834
35°	6888	6983	7561	7126	6897	4314
45°	4892	4029	2730	2749	2821	3752
55°	2778	2200	783	616	592	2479
65°	1179	816	124	62	67	1201
75°	306	177	10	0	0	370
85°	48	24	5	0	0	66
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°	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7
2.5°	9976.0	9985.7	9985.7	9985.7	10004.7	10009.6	10004.7	10009.6	10019.1	10052.5	10066.8
5°	9694.5	9680.1	9689.8	9684.9	9708.8	9723.2	9713.5	9727.9	9761.3	9785.3	9809.0
7.5°	9494.1	9494.1	9494.1	9503.5	9517.9	9546.5	9541.8	9551.3	9584.7	9618.1	9651.5
10°	9336.5	9331.8	9331.8	9355.6	9374.6	9408.0	9417.7	9446.3	9489.2	9532.2	9570.3
12.5°	9131.2	9136.1	9159.9	9183.9	9226.7	9279.1	9307.8	9346.1	9412.9	9484.5	9527.5
15°	8949.9	8954.6	8973.8	9021.4	9074.0	9136.1	9198.0	9260.1	9341.2	9432.0	9508.4
17.5°	8773.2	8777.9	8792.3	8844.9	8911.7	8992.9	9064.4	9145.5	9250.7	9355.6	9451.1
20°	8610.9	8606.2	8630.0	8677.7	8763.8	8840.0	8911.7	9007.2	9121.8	9250.7	9360.3
22.5°	8453.4	8453.4	8477.3	8525.1	8601.5	8677.7	8754.2	8854.4	8968.9	9093.1	9222.0
25°	8324.5	8319.8	8353.2	8377.1	8434.3	8510.7	8591.9	8673.0	8787.6	8926.1	9050.1
27.5°	8186.2	8181.5	8186.2	8214.9	8267.3	8324.5	8386.6	8458.3	8553.8	8668.3	8787.6
30°	7880.7	7885.4	7885.4	7909.3	7938.0	7999.9	8033.3	8105.0	8190.9	8286.4	8391.5
32.5°	7427.2	7431.9	7431.9	7441.6	7465.3	7494.0	7522.7	7575.2	7642.0	7723.1	7818.6
35°	6887.9	6887.9	6883.0	6887.9	6902.2	6902.2	6926.0	6902.2	6935.6	6983.4	7054.9
37.5°	6391.4	6381.8	6372.4	6362.7	6348.4	6324.6	6291.2	6233.8	6219.5	6200.4	6205.2
40°	5952.3	5947.6	5918.9	5894.9	5847.2	5790.0	5708.9	5608.7	5527.5	5432.0	5350.9
42.5°	5465.4	5460.5	5436.8	5393.7	5341.3	5255.4	5126.5	4992.9	4830.6	4687.4	4539.5
45°	4892.5	4906.9	4873.5	4825.7	4763.6	4682.5	4539.5	4377.0	4214.7	4028.6	3842.4
47.5°	4295.8	4291.1	4267.4	4238.7	4186.2	4105.1	4009.6	3833.0	3661.0	3489.3	3298.4
50°	3742.2	3723.1	3713.5	3685.0	3651.6	3584.8	3484.4	3341.2	3188.5	3026.2	2849.6
52.5°	3217.2	3217.2	3193.2	3174.2	3145.5	3093.0	3007.2	2892.6	2763.8	2610.9	2424.8
55°	2778.1	2768.5	2744.7	2720.7	2692.1	2658.7	2582.4	2486.9	2348.4	2200.5	2038.2
57.5°	2310.3	2305.4	2296.0	2267.3	2252.9	2219.5	2133.7	2038.2	1918.9	1790.1	1656.3
60°	1890.3	1871.2	1851.9	1832.9	1809.1	1775.7	1718.3	1637.2	1537.0	1422.5	1288.9
62.5°	1513.2	1541.7	1484.5	1484.5	1436.8	1408.1	1355.7	1307.9	1202.8	1097.9	983.3
65°	1179.0	1179.0	1155.1	1136.0	1107.3	1073.9	1021.5	973.7	897.3	816.1	735.0
67.5°	902.2	897.3	873.5	854.5	830.5	811.4	773.3	715.9	658.8	592.0	525.0
70°	663.5	658.8	653.9	620.5	601.4	577.6	548.9	510.8	467.8	420.1	358.0
72.5°	477.2	477.2	463.1	448.7	429.7	410.4	381.9	358.0	319.9	286.5	243.4
75°	305.5	300.8	300.8	276.8	276.8	248.1	229.1	214.7	195.7	176.6	138.5
77.5°	219.7	214.7	210.0	200.4	191.0	181.3	167.0	147.9	133.6	114.5	100.2
80°	147.9	138.5	133.6	133.6	119.3	114.5	119.3	90.8	85.9	71.5	62.1
82.5°	90.8	90.8	85.9	85.9	81.1	76.4	62.1	62.1	57.4	52.5	43.0
85°	47.7	62.1	43.0	47.7	43.0	47.7	43.0	33.4	28.7	23.8	23.8
87.5°	28.7	19.1	19.1	28.7	23.8	19.1	19.1	19.1	14.3	9.6	9.6
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°	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7
2.5°	10057.4	10090.8	10085.9	10128.9	10143.2	10176.6	10176.6	10200.4	10214.7	10248.1	10276.8
5°	9818.7	9871.1	9885.5	9937.9	9980.9	10033.4	10066.8	10119.3	10167.0	10238.7	10305.5
7.5°	9670.7	9713.5	9742.2	9804.3	9852.1	9909.2	9966.6	10038.1	10104.9	10191.0	10286.5
10°	9599.0	9656.4	9699.2	9761.3	9818.7	9880.7	9937.9	10019.1	10095.5	10205.3	10310.2
12.5°	9579.9	9646.7	9699.2	9785.3	9842.4	9909.2	9976.0	10066.8	10147.9	10262.5	10381.9
15°	9579.9	9670.7	9742.2	9837.7	9904.5	9990.4	10062.1	10152.7	10243.4	10362.7	10477.2
17.5°	9560.9	9670.7	9761.3	9871.1	9957.0	10043.0	10133.6	10219.7	10314.9	10429.7	10558.4
20°	9484.5	9623.0	9732.6	9861.5	9952.3	10047.7	10138.5	10233.8	10334.2	10453.5	10563.3
22.5°	9350.9	9513.1	9637.3	9775.6	9880.7	9976.0	10066.8	10162.3	10272.1	10386.7	10501.2
25°	9174.2	9326.9	9460.7	9603.7	9708.8	9813.7	9899.8	10009.6	10109.8	10219.7	10310.2
27.5°	8906.8	9069.1	9198.0	9346.1	9441.4	9541.8	9613.3	9704.1	9799.6	9890.2	9961.9
30°	8506.0	8654.0	8787.6	8921.2	9016.7	9088.4	9164.6	9236.3	9298.4	9360.3	9422.4
32.5°	7918.8	8052.6	8181.5	8305.4	8381.9	8443.9	8501.1	8544.1	8577.5	8610.9	8615.7
35°	7112.3	7221.9	7303.0	7412.9	7484.6	7541.8	7541.8	7560.8	7556.1	7541.8	7527.4
37.5°	6210.1	6252.9	6286.3	6329.3	6334.0	6334.0	6305.6	6281.6	6243.5	6233.8	6205.2
40°	5269.8	5212.4	5169.4	5112.2	5078.8	5007.1	4945.2	4902.2	4840.1	4830.6	4821.0
42.5°	4377.0	4243.4	4124.1	4023.9	3909.4	3809.0	3718.4	3651.6	3603.9	3599.0	3603.9
45°	3651.6	3498.8	3322.1	3183.8	3054.9	2930.8	2811.5	2730.4	2687.3	2677.7	2687.3
47.5°	3102.7	2926.0	2754.1	2596.6	2458.3	2319.7	2200.5	2090.7	2038.2	2023.9	2019.1
50°	2668.3	2486.9	2305.4	2143.1	1990.5	1851.9	1704.0	1599.1	1532.3	1508.3	1489.3
52.5°	2243.5	2081.2	1895.0	1728.0	1575.1	1412.8	1260.2	1140.7	1073.9	1045.4	1026.2
55°	1871.2	1708.9	1537.0	1374.7	1212.4	1050.1	897.3	782.7	711.2	677.8	653.9
57.5°	1494.0	1341.3	1193.4	1031.1	897.3	739.9	587.1	486.9	424.8	386.7	367.6
60°	1155.1	1035.8	906.9	773.3	644.4	515.5	391.4	295.9	248.1	219.7	195.7
62.5°	873.5	773.3	687.3	572.7	472.5	362.7	267.4	191.0	147.9	124.2	114.5
65°	630.1	553.7	477.2	405.7	334.2	253.1	181.3	124.2	85.9	71.5	66.8
67.5°	448.7	386.7	329.3	281.5	229.1	181.3	128.9	85.9	66.8	57.4	52.5
70°	314.9	267.4	229.1	186.3	152.7	119.3	100.2	62.1	38.1	43.0	33.4
72.5°	210.0	176.6	157.6	128.9	104.9	85.9	62.1	43.0	43.0	33.4	28.7
75°	114.5	104.9	81.1	62.1	52.5	47.7	19.1	9.6	4.7	14.3	4.7
77.5°	81.1	71.5	62.1	52.5	43.0	33.4	19.1	19.1	14.3	19.1	9.6
80°	52.5	43.0	38.1	38.1	23.8	14.3	9.6	9.6	14.3	4.7	4.7
82.5°	33.4	28.7	23.8	23.8	23.8	14.3	14.3	14.3	14.3	9.6	9.6
85°	19.1	14.3	9.6	9.6	4.7	9.6	0.0	4.7	4.7	0.0	0.0
87.5°	9.6	4.7	4.7	4.7	4.7	0.0	0.0	4.7	0.0	4.7	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°	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7	10214.7
2.5°	10295.9	10314.9	10338.9	10358.0	10401.0	10410.4	10429.7	10448.7	10463.1	10477.2	10482.1
5°	10362.7	10434.4	10501.2	10572.7	10663.5	10725.6	10797.1	10859.2	10921.3	10973.7	11011.8
7.5°	10381.9	10491.6	10592.0	10715.9	10849.5	10964.3	11083.5	11202.8	11327.0	11422.5	11503.6
10°	10420.1	10553.7	10682.5	10830.5	11002.4	11155.1	11303.0	11460.6	11618.1	11751.7	11871.2
12.5°	10486.9	10634.8	10773.3	10935.6	11112.2	11283.9	11446.2	11622.9	11790.1	11938.0	12071.6
15°	10596.7	10735.0	10868.8	11021.5	11198.1	11355.7	11517.9	11689.7	11856.9	12009.5	12133.7
17.5°	10668.2	10797.1	10930.7	11069.2	11217.1	11360.4	11513.0	11665.9	11818.5	11957.1	12071.6
20°	10668.2	10792.4	10892.6	11016.7	11155.1	11279.2	11403.4	11537.0	11670.6	11785.1	11895.0
22.5°	10582.3	10701.6	10778.0	10873.5	10992.8	11097.9	11164.7	11312.6	11412.8	11513.0	11594.2
25°	10381.9	10467.8	10529.9	10596.7	10692.2	10763.7	10821.1	10906.9	11007.1	11045.4	11102.6
27.5°	10019.1	10081.1	10114.5	10128.9	10176.6	10214.7	10224.4	10262.5	10305.5	10314.9	10338.9
30°	9446.3	9451.1	9436.7	9432.0	9408.0	9379.5	9374.6	9369.9	9350.9	9331.8	9336.5
32.5°	8582.3	8558.5	8501.1	8439.2	8377.1	8310.3	8272.0	8224.3	8195.6	8167.1	8133.7
35°	7465.3	7408.2	7327.0	7250.6	7179.1	7126.4	7040.6	7011.9	6983.4	6945.1	6935.6
37.5°	6152.7	6119.3	6042.9	5985.7	5947.6	5923.6	5880.6	5852.1	5852.1	5837.8	5828.1
40°	4797.0	4787.6	4758.9	4773.3	4754.2	4763.6	4758.9	4749.3	4773.3	4773.3	4782.9
42.5°	3599.0	3603.9	3618.2	3627.6	3656.3	3661.0	3685.0	3685.0	3699.4	3713.5	3723.1
45°	2677.7	2697.0	2697.0	2716.0	2744.7	2749.4	2758.9	2763.8	2773.2	2797.2	2806.6
47.5°	2009.5	2014.2	2014.2	2019.1	2028.6	2038.2	2033.5	2038.2	2052.5	2042.9	2052.5
50°	1484.5	1489.3	1474.9	1460.6	1474.9	1474.9	1470.2	1455.9	1470.2	1451.1	1460.6
52.5°	1012.0	1007.1	992.8	997.7	988.1	983.3	983.3	973.7	973.7	973.7	954.7
55°	639.7	639.7	630.1	630.1	625.4	615.7	611.0	606.1	601.4	596.7	596.7
57.5°	358.0	362.7	348.5	343.6	348.5	343.6	334.2	334.2	334.2	319.9	329.3
60°	195.7	191.0	186.3	181.3	176.6	181.3	181.3	171.9	171.9	171.9	176.6
62.5°	104.9	104.9	100.2	100.2	95.5	95.5	104.9	90.8	95.5	90.8	95.5
65°	57.4	71.5	52.5	52.5	66.8	62.1	57.4	57.4	62.1	52.5	57.4
67.5°	62.1	43.0	38.1	43.0	38.1	38.1	38.1	47.7	43.0	33.4	43.0
70°	28.7	33.4	33.4	23.8	38.1	19.1	33.4	19.1	28.7	23.8	28.7
72.5°	28.7	28.7	28.7	19.1	28.7	19.1	23.8	23.8	19.1	19.1	28.7
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°	9.6	9.6	4.7	4.7	4.7	4.7	9.6	9.6	9.6	0.0	4.7
80°	9.6	9.6	0.0	4.7	0.0	0.0	4.7	0.0	4.7	0.0	9.6
82.5°	4.7	9.6	4.7	4.7	9.6	9.6	9.6	4.7	4.7	4.7	4.7
85°	0.0	4.7	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.0	4.7
87.5°	0.0	4.7	0.0	0.0	0.0	0.0	4.7	4.7	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: P249761

CATALOG NUMBER: LD8B175D010 ER8B175940 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	10214.7	10214.7	10214.7	10214.7
2.5°	10486.9	10491.6	10501.2	10496.5
5°	11040.5	11078.8	11097.9	11093.2
7.5°	11560.8	11627.8	11665.9	11665.9
10°	11961.8	12038.2	12095.4	12105.0
12.5°	12176.5	12262.6	12339.0	12319.7
15°	12238.6	12324.7	12400.9	12386.5
17.5°	12167.1	12252.9	12310.3	12300.7
20°	11971.4	12042.9	12100.3	12095.4
22.5°	11665.9	11728.0	11775.7	11770.8
25°	11150.3	11193.4	11231.5	11212.4
27.5°	10358.0	10372.3	10396.1	10367.6
30°	9303.1	9312.5	9322.2	9317.5
32.5°	8119.4	8114.5	8105.0	8095.4
35°	6921.3	6921.3	6926.0	6897.3
37.5°	5832.8	5828.1	5842.5	5828.1
40°	4792.3	4787.6	4806.7	4782.9
42.5°	3737.5	3751.8	3756.5	3756.5
45°	2811.5	2816.2	2820.9	2820.9
47.5°	2052.5	2057.3	2081.2	2052.5
50°	1451.1	1455.9	1460.6	1451.1
52.5°	959.4	964.3	959.4	945.0
55°	587.1	592.0	592.0	592.0
57.5°	314.9	319.9	319.9	314.9
60°	171.9	167.0	171.9	162.3
62.5°	90.8	100.2	95.5	85.9
65°	57.4	57.4	57.4	66.8
67.5°	47.7	38.1	43.0	33.4
70°	28.7	33.4	33.4	23.8
72.5°	23.8	23.8	23.8	28.7
75°	0.0	0.0	0.0	0.0
77.5°	9.6	9.6	9.6	4.7
80°	4.7	0.0	4.7	0.0
82.5°	4.7	4.7	9.6	4.7
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)