

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: P248369

Luminaire Tested: **LD8B175D010 ER8B175850 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248369
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B175D010 ER8B175850 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19514.0 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

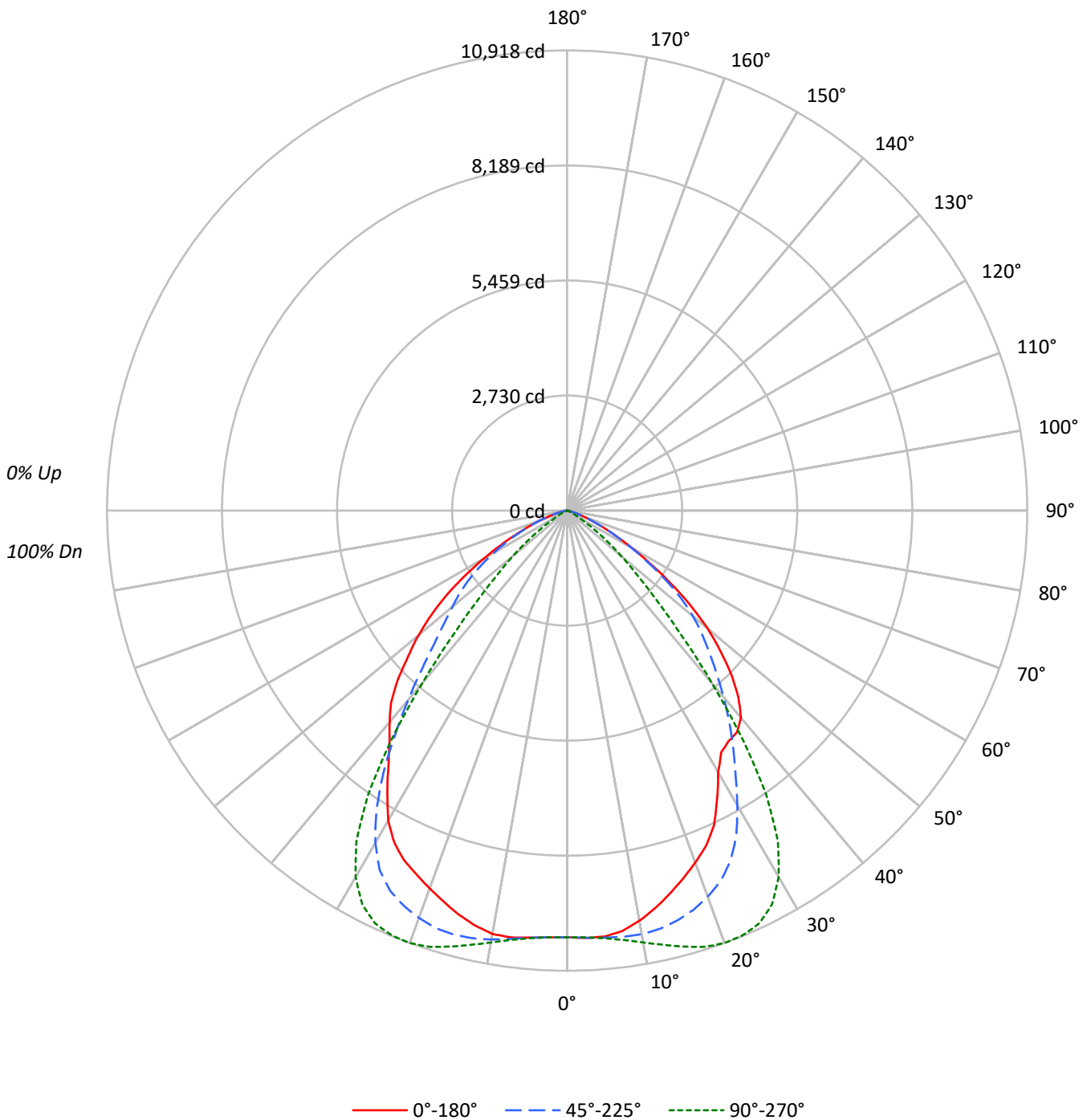
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	312162	312162	312162
5°	314020	315184	314853
10°	309407	325729	319336
15°	300361	341872	316828
20°	291643	358294	312979
25°	280447	367471	311525
30°	255225	357395	302290
35°	251422	309680	278123
40°	258257	214779	263663
45°	240417	129811	247918
50°	208538	80163	220910
55°	160032	41886	187477
60°	109025	16898	141502
65°	67821	8624	97620
70°	36821	5337	59586
75°	19206	2550	35218
80°	8595	2877	19072
85°	5732	1911	17124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	973.5	5.0
10°-20°	2884.0	14.8
20°-30°	4399.8	22.5
30°-40°	4591.2	23.5
40°-50°	3448.6	17.7
50°-60°	2121.9	10.9
60°-70°	863.5	4.4
70°-80°	203.5	1.0
80°-90°	28.0	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°	8257.3	42.3
0°-40°	12848.5	65.8
0°-60°	18419.0	94.4
0°-90°	19514.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19514.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10123	10123	10123	10123	10123	
5°	10145	10172	10182	10172	10172	960
15°	9409	10070	10709	10413	9924	2650
25°	8243	9167	10800	9946	9156	3747
35°	6679	6867	8226	7603	7388	4217
45°	5513	4772	2977	4444	5685	4206
55°	2977	2826	779	2826	3487	2676
65°	930	940	118	1263	1338	969
75°	161	161	21	285	296	194
85°	16	16	5	38	48	23
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°	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2
2.5°	10150.1	10134.0	10150.1	10150.1	10155.5	10144.7	10150.1	10155.5	10144.7	10144.7	10144.7
5°	10144.7	10134.0	10144.7	10139.3	10150.1	10150.1	10160.9	10160.9	10171.6	10171.6	10187.7
7.5°	10058.8	10037.3	10058.8	10074.9	10085.6	10107.1	10134.0	10155.5	10176.9	10198.5	10225.3
10°	9881.4	9881.4	9897.6	9929.8	9962.0	9999.6	10048.0	10101.7	10155.5	10203.8	10252.2
12.5°	9661.2	9645.0	9677.2	9720.2	9768.6	9827.7	9903.0	9983.5	10069.5	10166.2	10241.5
15°	9408.6	9392.4	9430.0	9473.0	9532.2	9618.2	9709.6	9817.0	9940.6	10069.5	10193.1
17.5°	9150.7	9145.3	9182.9	9242.0	9290.4	9381.7	9500.0	9628.8	9768.6	9940.6	10101.7
20°	8887.4	8882.0	8919.7	8968.0	9032.5	9118.4	9236.6	9387.0	9553.6	9747.2	9935.2
22.5°	8613.3	8618.7	8650.9	8704.7	8758.5	8849.7	8973.3	9123.8	9306.5	9516.0	9725.6
25°	8242.6	8215.7	8258.7	8312.5	8403.7	8479.0	8597.3	8758.5	8946.5	9166.8	9414.0
27.5°	7705.2	7699.8	7737.6	7785.8	7866.4	7957.8	8086.8	8253.3	8452.1	8693.9	8935.7
30°	7167.9	7178.7	7194.8	7243.2	7296.9	7388.2	7517.2	7657.0	7845.0	8076.0	8333.9
32.5°	6802.5	6802.5	6824.1	6856.3	6893.9	6942.3	7033.6	7135.7	7280.8	7442.0	7630.0
35°	6678.9	6657.5	6678.9	6684.3	6689.7	6700.5	6716.5	6748.9	6797.1	6867.1	6936.9
37.5°	6625.3	6609.1	6609.1	6587.7	6560.7	6528.5	6485.5	6437.1	6383.5	6313.6	6259.9
40°	6415.7	6404.9	6394.2	6372.7	6313.6	6249.1	6179.2	6066.4	5942.8	5770.8	5599.0
42.5°	6012.7	6002.0	5996.6	5953.6	5899.8	5824.6	5744.0	5625.8	5470.0	5249.7	5002.5
45°	5513.0	5491.4	5475.4	5437.8	5400.1	5335.6	5260.4	5152.9	4997.1	4771.5	4475.9
47.5°	4932.7	4921.9	4916.5	4900.5	4862.9	4825.1	4776.9	4690.9	4551.1	4336.2	4030.0
50°	4347.0	4325.5	4336.2	4330.9	4314.7	4287.9	4255.6	4196.5	4089.0	3895.6	3616.2
52.5°	3675.3	3675.3	3670.0	3686.0	3691.4	3686.0	3691.4	3627.0	3535.6	3390.5	3154.1
55°	2976.7	2976.7	2992.9	3014.5	3035.9	3041.3	3035.9	3009.1	2944.5	2826.3	2616.7
57.5°	2321.2	2310.5	2342.8	2375.0	2396.5	2418.0	2401.8	2380.4	2342.8	2246.0	2084.8
60°	1767.8	1767.8	1789.2	1810.8	1832.2	1853.8	1848.4	1843.0	1810.8	1746.3	1617.4
62.5°	1300.3	1305.7	1305.7	1321.8	1343.3	1364.8	1380.9	1364.8	1348.7	1305.7	1219.7
65°	929.5	924.1	929.5	945.7	961.9	983.3	994.1	988.7	972.5	940.3	875.9
67.5°	623.3	617.9	639.4	644.8	655.5	677.1	671.7	677.1	671.7	644.8	591.1
70°	408.4	397.6	408.4	403.0	419.1	424.5	435.2	440.6	435.2	419.1	403.0
72.5°	252.6	247.2	252.6	258.0	263.3	268.6	279.4	279.4	274.0	263.3	241.8
75°	161.2	145.0	150.4	139.8	150.4	150.4	161.2	166.6	161.2	161.2	150.4
77.5°	96.8	96.8	96.8	96.8	96.8	96.8	96.8	102.2	107.4	96.8	91.4
80°	48.4	48.4	53.8	53.8	53.8	59.2	53.8	53.8	53.8	59.2	43.0
82.5°	37.6	32.2	32.2	32.2	37.6	32.2	32.2	32.2	32.2	32.2	32.2
85°	16.2	21.4	16.2	10.8	16.2	16.2	21.4	16.2	16.2	16.2	21.4
87.5°	5.4	5.4	0.0	0.0	0.0	5.4	0.0	5.4	5.4	10.8	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2
2.5°	10150.1	10139.3	10139.3	10134.0	10144.7	10134.0	10139.3	10134.0	10134.0	10134.0	10134.0
5°	10187.7	10193.1	10182.3	10176.9	10193.1	10193.1	10193.1	10182.3	10182.3	10182.3	10182.3
7.5°	10241.5	10252.2	10257.5	10262.9	10273.7	10279.1	10279.1	10273.7	10268.3	10284.5	10262.9
10°	10300.5	10316.7	10348.9	10365.1	10391.9	10391.9	10402.7	10402.7	10391.9	10402.7	10397.3
12.5°	10279.1	10375.7	10429.5	10467.1	10504.7	10536.9	10547.7	10553.1	10547.7	10569.3	10547.7
15°	10316.7	10397.3	10483.3	10547.7	10617.5	10655.1	10665.9	10708.9	10719.7	10725.1	10692.9
17.5°	10257.5	10402.7	10493.9	10590.7	10692.9	10762.7	10827.1	10854.0	10859.4	10870.1	10827.1
20°	10123.2	10284.5	10424.1	10563.9	10682.1	10789.5	10843.3	10918.5	10897.0	10940.0	10880.9
22.5°	9940.6	10123.2	10300.5	10483.3	10606.9	10735.8	10848.7	10902.3	10929.2	10929.2	10864.7
25°	9650.4	9865.3	10058.8	10246.8	10434.9	10590.7	10719.7	10800.3	10816.4	10811.0	10735.8
27.5°	9199.0	9430.0	9655.8	9870.7	10101.7	10284.5	10434.9	10531.5	10558.5	10558.5	10477.9
30°	8575.7	8822.9	9043.2	9301.1	9537.6	9741.8	9951.3	10037.3	10085.6	10085.6	9994.3
32.5°	7834.2	8043.8	8247.9	8500.5	8758.5	8989.5	9188.3	9306.5	9365.6	9360.2	9279.6
35°	7028.3	7130.3	7286.2	7474.2	7705.2	7920.2	8113.6	8226.5	8328.5	8323.2	8247.9
37.5°	6222.2	6195.4	6211.5	6281.3	6426.4	6576.9	6727.3	6834.9	6920.7	6958.4	6942.3
40°	5432.4	5292.7	5158.3	5110.0	5120.7	5174.5	5255.1	5335.6	5432.4	5480.8	5502.2
42.5°	4723.1	4486.7	4250.2	4073.0	3970.8	3938.6	3976.2	4003.0	4062.2	4132.0	4201.9
45°	4153.6	3836.6	3524.8	3250.8	3078.9	2976.7	2955.3	2976.7	3009.1	3078.9	3170.3
47.5°	3686.0	3315.3	2966.1	2659.7	2407.2	2272.9	2235.3	2224.6	2256.8	2321.2	2444.8
50°	3272.3	2901.5	2514.7	2160.0	1896.8	1746.3	1692.6	1671.0	1708.7	1757.0	1869.8
52.5°	2820.9	2455.6	2058.0	1714.0	1440.0	1284.2	1225.1	1192.9	1214.3	1278.9	1391.7
55°	2332.0	1993.4	1633.4	1278.9	1015.5	870.5	800.6	779.1	800.6	870.5	983.3
57.5°	1843.0	1558.2	1257.3	924.1	687.7	542.7	472.8	451.4	510.5	537.3	655.5
60°	1440.0	1209.0	951.1	677.1	472.8	360.0	290.2	274.0	300.9	349.2	446.0
62.5°	1080.1	934.9	730.7	483.6	349.2	231.0	193.4	177.4	193.4	231.0	306.3
65°	784.5	671.7	510.5	354.6	236.4	172.0	129.0	118.2	134.4	161.2	225.7
67.5°	537.3	451.4	354.6	247.2	161.2	107.4	91.4	91.4	96.8	118.2	166.6
70°	349.2	295.6	225.7	161.2	107.4	80.6	69.8	59.2	69.8	86.0	112.8
72.5°	220.3	188.0	145.0	112.8	80.6	59.2	48.4	43.0	53.8	64.4	86.0
75°	134.4	102.2	75.2	59.2	43.0	43.0	43.0	21.4	26.8	43.0	53.8
77.5°	80.6	69.8	59.2	48.4	37.6	21.4	21.4	21.4	26.8	32.2	48.4
80°	43.0	37.6	26.8	26.8	21.4	16.2	21.4	16.2	10.8	26.8	32.2
82.5°	26.8	21.4	21.4	21.4	26.8	10.8	16.2	10.8	16.2	21.4	16.2
85°	16.2	16.2	16.2	10.8	26.8	10.8	10.8	5.4	5.4	10.8	10.8
87.5°	0.0	5.4	5.4	0.0	5.4	0.0	5.4	5.4	5.4	5.4	5.4
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°	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2	10123.2
2.5°	10139.3	10134.0	10139.3	10134.0	10134.0	10134.0	10139.3	10139.3	10134.0	10134.0	10144.7
5°	10182.3	10182.3	10182.3	10176.9	10171.6	10171.6	10182.3	10182.3	10166.2	10182.3	10182.3
7.5°	10273.7	10257.5	10273.7	10252.2	10241.5	10246.8	10252.2	10241.5	10230.7	10236.1	10236.1
10°	10391.9	10375.7	10375.7	10359.7	10343.5	10332.7	10322.1	10295.1	10268.3	10262.9	10241.5
12.5°	10531.5	10504.7	10488.7	10456.3	10429.5	10391.9	10359.7	10316.7	10262.9	10225.3	10187.7
15°	10671.3	10628.3	10590.7	10536.9	10477.9	10413.3	10343.5	10273.7	10187.7	10112.5	10048.0
17.5°	10784.1	10725.1	10655.1	10569.3	10483.3	10386.5	10284.5	10182.3	10058.8	9962.0	9886.8
20°	10821.7	10735.8	10644.5	10531.5	10418.7	10284.5	10155.5	10021.1	9881.4	9779.4	9693.4
22.5°	10773.4	10671.3	10558.5	10440.3	10289.8	10144.7	9994.3	9838.4	9714.8	9575.2	9494.6
25°	10639.1	10515.5	10391.9	10252.2	10107.1	9945.9	9784.8	9623.6	9473.0	9397.8	9295.8
27.5°	10365.1	10230.7	10096.4	9951.3	9784.8	9623.6	9457.0	9301.1	9172.2	9070.1	9011.0
30°	9881.4	9725.6	9569.8	9414.0	9268.9	9102.3	8946.5	8817.5	8688.5	8607.9	8548.9
32.5°	9139.9	9000.2	8844.4	8693.9	8559.7	8419.9	8290.9	8178.1	8086.8	8033.0	7990.0
35°	8140.5	8000.8	7882.6	7775.2	7662.2	7603.2	7522.6	7458.0	7420.4	7399.0	7393.6
37.5°	6883.1	6802.5	6764.9	6743.5	6721.9	6705.9	6716.5	6743.5	6764.9	6802.5	6845.5
40°	5539.8	5609.6	5631.2	5706.4	5776.2	5867.6	5969.7	6087.9	6184.6	6308.2	6394.2
42.5°	4314.7	4443.7	4594.1	4755.3	4927.3	5093.9	5298.0	5486.1	5658.0	5813.8	5948.2
45°	3315.3	3514.1	3739.8	3970.8	4201.9	4443.7	4690.9	4921.9	5126.1	5292.7	5432.4
47.5°	2584.5	2804.9	3095.0	3379.8	3659.2	3944.0	4218.0	4459.8	4631.7	4792.9	4916.5
50°	2047.2	2299.8	2616.7	2944.5	3250.8	3551.7	3841.8	4067.6	4239.5	4368.5	4459.8
52.5°	1585.1	1886.0	2208.4	2552.3	2880.1	3207.9	3476.5	3686.0	3825.8	3938.6	4008.4
55°	1182.1	1477.6	1821.6	2176.2	2509.3	2826.3	3078.9	3261.6	3385.2	3449.6	3487.2
57.5°	854.3	1123.1	1466.9	1821.6	2122.4	2423.3	2627.5	2794.1	2863.9	2901.5	2917.7
60°	623.3	870.5	1176.7	1483.0	1767.8	2009.6	2187.0	2299.8	2353.5	2375.0	2369.6
62.5°	456.7	671.7	934.9	1192.9	1423.9	1622.7	1762.4	1837.6	1864.6	1875.2	1859.2
65°	349.2	515.8	741.5	940.3	1117.7	1262.7	1364.8	1413.2	1429.3	1423.9	1413.2
67.5°	258.0	386.9	553.5	703.9	832.9	945.7	999.5	1042.5	1053.1	1037.1	1020.9
70°	182.7	284.8	403.0	505.1	601.8	666.3	725.3	730.7	730.7	725.3	714.7
72.5°	129.0	198.8	274.0	343.9	403.0	451.4	472.8	489.0	483.6	478.2	467.5
75°	86.0	123.6	198.8	215.0	268.6	284.8	306.3	306.3	311.6	295.6	295.6
77.5°	53.8	86.0	118.2	139.8	161.2	182.7	193.4	193.4	198.8	193.4	193.4
80°	32.2	53.8	64.4	96.8	96.8	112.8	118.2	123.6	112.8	129.0	112.8
82.5°	21.4	32.2	48.4	48.4	59.2	69.8	69.8	75.2	75.2	69.8	69.8
85°	16.2	21.4	26.8	32.2	32.2	37.6	32.2	32.2	37.6	43.0	37.6
87.5°	5.4	10.8	5.4	10.8	10.8	21.4	16.2	16.2	16.2	21.4	21.4
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: P248369

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	10123.2	10123.2	10123.2	10123.2
2.5°	10134.0	10139.3	10134.0	10134.0
5°	10182.3	10176.9	10182.3	10171.6
7.5°	10219.9	10219.9	10214.5	10214.5
10°	10219.9	10198.5	10198.5	10198.5
12.5°	10139.3	10112.5	10096.4	10085.6
15°	9999.6	9951.3	9929.8	9924.4
17.5°	9817.0	9774.0	9747.2	9731.0
20°	9607.4	9564.4	9532.2	9537.6
22.5°	9424.6	9376.4	9354.8	9344.1
25°	9242.0	9182.9	9166.8	9156.0
27.5°	8946.5	8914.3	8898.1	8882.0
30°	8495.1	8479.0	8452.1	8489.7
32.5°	7974.0	7947.0	7925.6	7941.7
35°	7399.0	7382.8	7399.0	7388.2
37.5°	6872.5	6888.5	6910.1	6920.7
40°	6458.7	6517.7	6539.3	6550.0
42.5°	6045.0	6114.8	6157.8	6184.6
45°	5534.4	5604.3	5652.6	5685.0
47.5°	5007.9	5067.0	5115.3	5110.0
50°	4529.7	4561.9	4583.3	4604.9
52.5°	4046.0	4046.0	4051.4	4051.4
55°	3498.0	3487.2	3481.9	3487.2
57.5°	2896.1	2885.5	2880.1	2863.9
60°	2348.1	2315.9	2294.4	2294.4
62.5°	1837.6	1800.0	1784.0	1778.6
65°	1380.9	1375.5	1343.3	1337.9
67.5°	999.5	977.9	956.5	961.9
70°	703.9	671.7	671.7	660.9
72.5°	456.7	440.6	435.2	435.2
75°	284.8	284.8	274.0	295.6
77.5°	188.0	188.0	182.7	188.0
80°	112.8	112.8	112.8	107.4
82.5°	69.8	75.2	69.8	69.8
85°	37.6	43.0	32.2	48.4
87.5°	21.4	26.8	21.4	26.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)