

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: P249125

Luminaire Tested: **LD8B175D010 ER8B175850 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249125
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: LD8B175D010 ER8B175850 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18830.0 lumens
Efficiency: N/A
Efficacy: 106.3 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

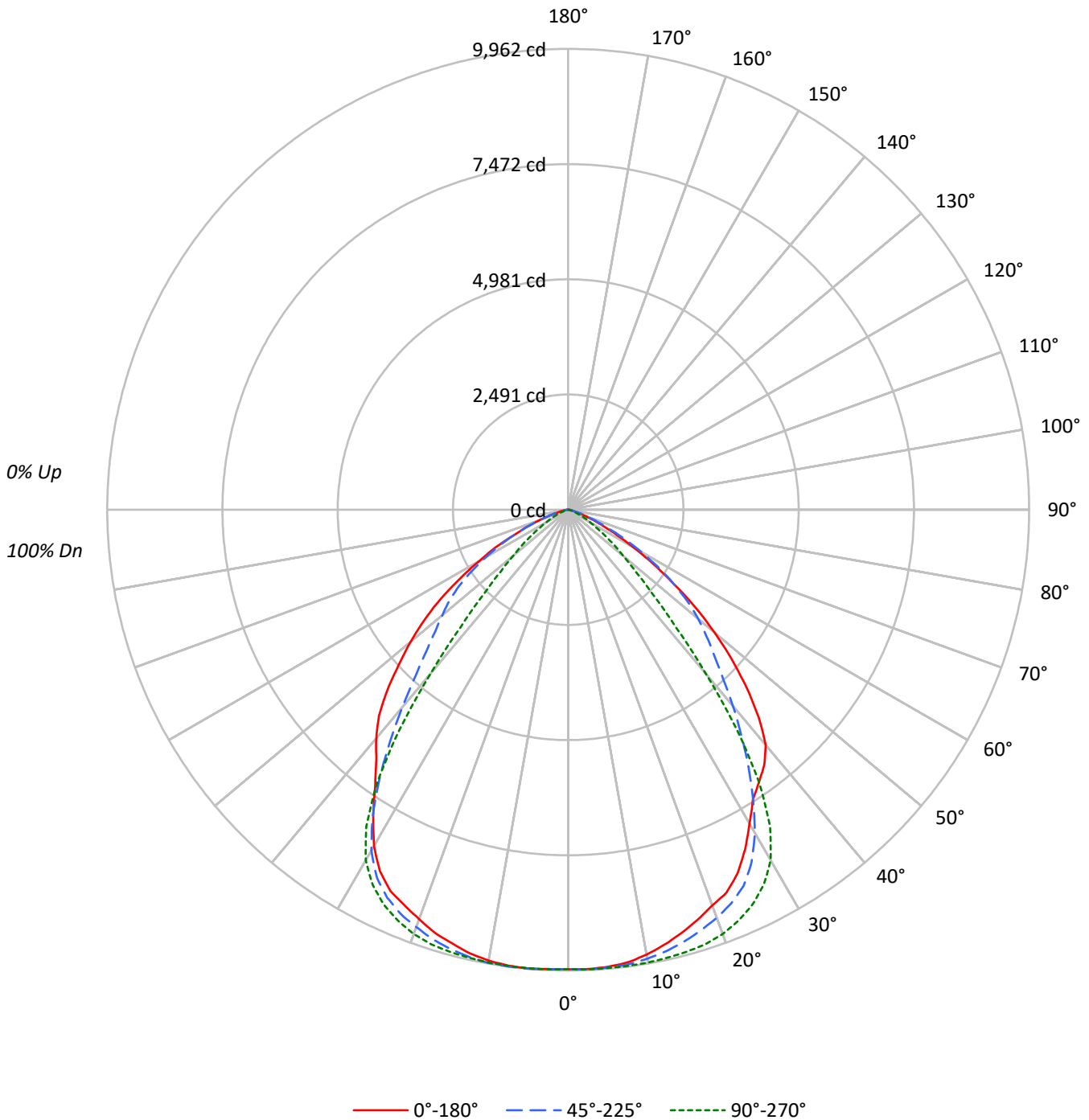
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	306362	306362	306362
5°	307034	307863	308195
10°	305743	311254	309920
15°	302356	315806	309849
20°	298724	320248	309048
25°	294846	320616	309364
30°	278943	311601	298879
35°	270613	270812	273624
40°	267262	186332	259751
45°	238141	111862	241398
50°	198017	74449	213364
55°	148511	51321	180907
60°	100644	34204	136494
65°	60707	22181	93775
70°	33656	12027	57693
75°	15250	5087	29869
80°	13247	5683	20830
85°	15108	7536	20768



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	948.2	5.0
10°-20°	2753.6	14.6
20°-30°	4179.4	22.2
30°-40°	4389.7	23.3
40°-50°	3291.1	17.5
50°-60°	2111.6	11.2
60°-70°	903.3	4.8
70°-80°	213.4	1.1
80°-90°	39.7	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°	7881.2	41.9
0°-40°	12270.9	65.2
0°-60°	17673.6	93.9
0°-90°	18830.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18830.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9935	9935	9935	9935	9935	
5°	9919	9935	9946	9962	9956	942
15°	9471	9668	9892	9828	9706	2671
25°	8666	8970	9423	9252	9092	3959
35°	7189	6789	7194	7109	7269	4512
45°	5461	4464	2565	4336	5536	4182
55°	2762	2762	955	2880	3365	2506
65°	832	981	304	1264	1285	888
75°	128	149	43	256	251	186
85°	43	27	21	43	59	45
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°	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1
2.5°	9940.4	9951.1	9945.8	9945.8	9940.4	9945.8	9945.8	9956.5	9956.5	9945.8	9940.4
5°	9919.0	9929.7	9929.7	9919.0	9919.0	9945.8	9929.7	9940.4	9940.4	9935.1	9935.1
7.5°	9871.1	9871.1	9892.4	9876.5	9876.5	9892.4	9887.1	9897.8	9908.5	9913.8	9913.8
10°	9764.4	9775.1	9780.5	9780.5	9785.8	9801.7	9812.4	9833.8	9844.4	9855.1	9860.4
12.5°	9631.2	9647.1	9652.4	9647.1	9663.1	9684.4	9711.2	9737.8	9753.8	9775.1	9791.1
15°	9471.1	9471.1	9481.8	9497.8	9508.5	9540.5	9567.1	9599.1	9641.7	9668.5	9695.1
17.5°	9295.2	9305.9	9321.8	9321.8	9343.2	9396.4	9412.5	9460.5	9508.5	9535.1	9588.5
20°	9103.2	9113.8	9129.8	9140.5	9167.2	9209.8	9241.8	9284.5	9337.8	9385.9	9439.1
22.5°	8953.8	8932.6	8943.1	8953.8	8980.6	9017.9	9055.2	9108.5	9161.8	9209.8	9263.2
25°	8665.8	8671.2	8687.2	8697.8	8729.9	8761.9	8804.5	8868.5	8916.5	8969.9	9028.5
27.5°	8276.6	8281.9	8308.6	8308.6	8335.2	8388.6	8415.2	8468.5	8532.6	8585.9	8655.3
30°	7834.0	7844.6	7844.6	7866.0	7881.9	7908.6	7935.2	7988.6	8020.6	8068.6	8164.6
32.5°	7428.7	7439.3	7433.9	7428.7	7412.7	7407.3	7402.0	7412.7	7423.4	7439.3	7476.6
35°	7188.7	7162.0	7140.7	7103.4	7060.7	7007.4	6959.3	6895.4	6836.7	6788.7	6735.4
37.5°	6959.3	6954.0	6922.0	6868.7	6783.3	6687.4	6575.5	6436.7	6298.0	6148.8	6004.8
40°	6639.4	6623.3	6596.7	6522.1	6426.0	6308.7	6159.5	5988.8	5764.7	5535.5	5300.9
42.5°	6095.4	6100.7	6068.8	6010.1	5919.5	5807.4	5652.8	5466.2	5226.2	4954.2	4650.3
45°	5460.8	5460.8	5450.1	5402.1	5338.2	5247.5	5130.2	4975.6	4740.9	4463.5	4138.2
47.5°	4799.5	4804.9	4788.8	4778.3	4751.5	4692.9	4607.6	4490.3	4325.0	4058.2	3732.9
50°	4127.7	4127.7	4154.3	4148.9	4148.9	4127.7	4090.3	4020.9	3877.0	3663.7	3359.8
52.5°	3455.7	3466.4	3482.4	3503.7	3530.3	3573.0	3530.3	3498.3	3407.6	3242.3	2981.1
55°	2762.4	2773.1	2799.7	2837.0	2869.1	2911.8	2922.4	2922.4	2874.3	2762.4	2565.1
57.5°	2170.5	2154.5	2175.9	2207.8	2250.5	2293.2	2325.1	2362.5	2357.1	2282.5	2122.5
60°	1631.9	1637.2	1653.1	1685.2	1717.2	1754.5	1797.2	1829.2	1845.2	1807.9	1706.5
62.5°	1189.2	1189.2	1210.5	1242.5	1258.5	1311.9	1338.5	1354.6	1370.5	1365.1	1301.2
65°	832.0	842.6	853.2	869.3	885.2	917.2	933.2	965.2	975.9	981.3	933.2
67.5°	586.7	570.6	581.3	591.9	607.9	629.3	661.3	661.3	677.2	677.2	645.3
70°	373.3	373.3	378.7	394.6	405.3	410.6	421.3	431.9	448.0	442.6	442.6
72.5°	250.7	245.3	250.7	256.0	261.4	277.3	277.3	282.6	293.3	298.7	277.3
75°	128.0	133.4	143.9	138.7	154.6	143.9	149.3	165.3	160.0	149.3	149.3
77.5°	106.6	106.6	106.6	101.4	112.0	112.0	106.6	117.3	112.0	112.0	106.6
80°	74.6	80.0	74.6	69.3	74.6	69.3	69.3	69.3	69.3	69.3	63.9
82.5°	58.7	48.0	53.4	48.0	53.4	53.4	48.0	42.7	42.7	48.0	42.7
85°	42.7	32.0	37.3	37.3	32.0	32.0	32.0	32.0	32.0	26.6	26.6
87.5°	26.6	16.0	16.0	16.0	21.3	21.3	21.3	16.0	21.3	21.3	10.7
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°	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1
2.5°	9951.1	9945.8	9956.5	9951.1	9951.1	9945.8	9951.1	9945.8	9956.5	9935.1	9940.4
5°	9951.1	9940.4	9945.8	9951.1	9956.5	9945.8	9945.8	9945.8	9956.5	9945.8	9951.1
7.5°	9929.7	9924.4	9940.4	9951.1	9945.8	9940.4	9951.1	9945.8	9956.5	9951.1	9961.7
10°	9887.1	9892.4	9903.1	9919.0	9924.4	9929.7	9940.4	9940.4	9956.5	9935.1	9945.8
12.5°	9823.1	9844.4	9871.1	9881.7	9903.1	9903.1	9913.8	9919.0	9929.7	9924.4	9940.4
15°	9743.1	9769.8	9801.7	9828.5	9855.1	9871.1	9887.1	9892.4	9908.5	9892.4	9897.8
17.5°	9647.1	9679.1	9727.1	9759.1	9801.7	9817.8	9839.0	9849.7	9865.8	9855.1	9860.4
20°	9513.7	9551.2	9604.4	9652.4	9679.1	9716.4	9743.1	9759.1	9769.8	9759.1	9764.4
22.5°	9327.1	9380.5	9449.8	9487.1	9540.5	9572.5	9577.8	9615.1	9641.7	9615.1	9625.8
25°	9108.5	9161.8	9215.2	9295.2	9343.2	9380.5	9417.8	9423.2	9449.8	9444.5	9439.1
27.5°	8745.8	8815.2	8905.8	8969.9	9033.8	9092.5	9135.2	9145.8	9172.5	9161.8	9167.2
30°	8249.9	8324.6	8410.0	8511.2	8601.9	8660.5	8713.9	8751.2	8777.8	8761.9	8756.5
32.5°	7546.0	7620.6	7711.3	7812.6	7919.3	8004.5	8068.6	8116.6	8148.6	8137.9	8111.3
35°	6740.8	6762.0	6820.8	6900.8	6991.3	7082.0	7140.7	7194.0	7231.3	7242.0	7242.0
37.5°	5914.1	5844.9	5802.2	5802.2	5855.4	5892.8	5946.1	5978.1	6036.8	6058.1	6074.1
40°	5114.1	4954.2	4804.9	4692.9	4618.3	4612.9	4612.9	4628.9	4682.2	4751.5	4815.6
42.5°	4399.6	4143.6	3914.3	3706.3	3557.0	3471.7	3434.4	3439.7	3482.4	3546.3	3653.0
45°	3829.0	3509.0	3221.0	2970.4	2767.7	2634.4	2570.4	2565.1	2597.1	2671.7	2789.1
47.5°	3386.4	3045.0	2719.7	2431.7	2213.2	2069.1	1994.5	1973.2	1994.5	2063.8	2202.5
50°	3018.4	2666.5	2330.5	2031.8	1797.2	1647.9	1578.5	1551.9	1578.5	1637.2	1775.8
52.5°	2677.1	2314.4	1999.8	1711.8	1461.2	1333.2	1258.5	1242.5	1258.5	1327.8	1439.9
55°	2282.5	1973.2	1663.8	1375.8	1157.3	1029.3	970.6	954.6	970.6	1034.6	1151.9
57.5°	1893.2	1626.5	1354.6	1093.2	906.6	794.5	741.3	719.9	757.2	799.9	938.6
60°	1530.5	1317.3	1087.9	858.6	704.0	602.6	559.9	554.6	565.3	618.6	714.5
62.5°	1199.9	1023.9	842.6	656.0	527.9	485.3	431.9	426.7	437.3	469.2	544.0
65°	863.9	752.0	613.3	479.9	378.7	320.0	298.7	304.0	314.6	336.0	405.3
67.5°	602.6	522.6	426.7	336.0	261.4	234.6	213.3	208.0	213.3	250.7	288.0
70°	405.3	357.3	288.0	256.0	181.4	143.9	149.3	133.4	154.6	154.6	186.6
72.5°	266.6	234.6	191.9	149.3	128.0	101.4	101.4	96.0	106.6	112.0	138.7
75°	138.7	106.6	106.6	74.6	53.4	26.6	48.0	42.7	37.3	42.7	53.4
77.5°	96.0	80.0	74.6	58.7	53.4	42.7	42.7	42.7	42.7	48.0	53.4
80°	58.7	58.7	42.7	37.3	32.0	26.6	32.0	32.0	32.0	32.0	37.3
82.5°	37.3	32.0	32.0	26.6	26.6	21.3	21.3	21.3	21.3	21.3	32.0
85°	32.0	21.3	21.3	16.0	21.3	37.3	16.0	21.3	21.3	21.3	16.0
87.5°	10.7	16.0	16.0	16.0	10.7	5.3	10.7	16.0	16.0	26.6	21.3
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°	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1	9935.1
2.5°	9951.1	9956.5	9956.5	9951.1	9951.1	9940.4	9961.7	9945.8	9951.1	9972.4	9956.5
5°	9961.7	9967.0	9967.0	9961.7	9961.7	9961.7	9967.0	9967.0	9961.7	9956.5	9967.0
7.5°	9983.1	9977.7	9977.7	9967.0	9967.0	9956.5	9967.0	9951.1	9961.7	9951.1	9967.0
10°	9956.5	9961.7	9956.5	9951.1	9951.1	9945.8	9945.8	9929.7	9935.1	9919.0	9929.7
12.5°	9940.4	9935.1	9935.1	9924.4	9913.8	9903.1	9897.8	9881.7	9881.7	9844.4	9860.4
15°	9897.8	9903.1	9887.1	9865.8	9855.1	9828.5	9817.8	9796.4	9775.1	9748.5	9753.8
17.5°	9860.4	9844.4	9823.1	9801.7	9759.1	9737.8	9716.4	9684.4	9673.7	9641.7	9631.2
20°	9748.5	9737.8	9711.2	9673.7	9647.1	9599.1	9577.8	9545.8	9519.1	9487.1	9471.1
22.5°	9604.4	9593.7	9561.8	9524.4	9481.8	9460.5	9439.1	9380.5	9353.8	9321.8	9316.4
25°	9423.2	9407.1	9375.2	9332.5	9311.1	9252.5	9231.1	9188.4	9177.9	9145.8	9140.5
27.5°	9145.8	9124.5	9087.2	9033.8	8996.5	8959.2	8937.9	8905.8	8895.2	8863.1	8857.9
30°	8729.9	8703.2	8628.5	8607.3	8543.2	8505.9	8505.9	8463.2	8468.5	8447.3	8447.3
32.5°	8074.0	8031.3	7972.6	7929.9	7887.2	7866.0	7866.0	7849.9	7860.6	7860.6	7871.3
35°	7204.7	7146.1	7114.0	7087.4	7087.4	7108.6	7172.7	7188.7	7220.7	7247.3	7268.7
37.5°	6090.0	6084.8	6122.1	6154.1	6234.1	6324.8	6436.7	6532.8	6623.3	6687.4	6751.4
40°	4884.9	5018.2	5124.8	5274.2	5396.8	5572.8	5775.4	5940.8	6095.4	6207.5	6324.8
42.5°	3812.9	3983.6	4207.7	4426.2	4644.9	4884.9	5151.6	5380.9	5583.5	5738.1	5860.8
45°	2970.4	3205.0	3477.1	3754.3	4037.0	4335.7	4612.9	4847.6	5060.9	5220.9	5343.5
47.5°	2394.4	2650.4	2959.7	3263.7	3583.7	3898.3	4207.7	4410.3	4586.2	4714.2	4826.3
50°	1978.4	2250.5	2575.8	2922.4	3242.3	3557.0	3823.6	4020.9	4165.0	4276.9	4346.2
52.5°	1653.1	1941.1	2287.8	2634.4	2954.3	3242.3	3482.4	3631.7	3749.0	3829.0	3892.9
55°	1365.1	1642.6	1967.9	2293.2	2607.8	2879.7	3077.0	3189.1	3279.6	3327.7	3365.0
57.5°	1114.6	1370.5	1669.2	1967.9	2239.8	2463.8	2618.5	2730.4	2773.1	2810.4	2805.1
60°	874.6	1114.6	1386.5	1642.6	1877.2	2058.4	2170.5	2234.4	2266.4	2282.5	2271.8
62.5°	687.9	906.6	1114.6	1338.5	1509.2	1663.8	1770.6	1770.6	1786.5	1791.8	1807.9
65°	511.9	677.2	858.6	1023.9	1162.5	1263.9	1322.6	1338.5	1359.9	1354.6	1343.9
67.5°	378.7	501.3	634.6	757.2	853.2	917.2	959.9	997.3	992.0	981.3	975.9
70°	261.4	341.3	458.7	533.3	602.6	666.7	677.2	682.6	687.9	693.3	682.6
72.5°	181.4	240.0	304.0	368.0	410.6	437.3	464.0	469.2	469.2	469.2	464.0
75°	90.7	122.7	181.4	208.0	245.3	256.0	277.3	277.3	293.3	271.9	266.6
77.5°	80.0	96.0	128.0	149.3	165.3	181.4	186.6	202.6	197.3	186.6	191.9
80°	48.0	58.7	80.0	90.7	112.0	117.3	122.7	128.0	122.7	128.0	128.0
82.5°	37.3	42.7	53.4	53.4	69.3	69.3	74.6	74.6	80.0	80.0	80.0
85°	21.3	37.3	32.0	63.9	42.7	42.7	53.4	63.9	53.4	53.4	63.9
87.5°	21.3	21.3	16.0	21.3	21.3	21.3	26.6	32.0	32.0	37.3	32.0
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: P249125

CATALOG NUMBER: LD8B175D010 ER8B175850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9935.1	9935.1	9935.1	9935.1
2.5°	9951.1	9961.7	9945.8	9940.4
5°	9967.0	9967.0	9956.5	9956.5
7.5°	9967.0	9967.0	9951.1	9940.4
10°	9924.4	9924.4	9908.5	9897.8
12.5°	9844.4	9844.4	9839.0	9823.1
15°	9743.1	9743.1	9721.7	9705.8
17.5°	9604.4	9615.1	9588.5	9588.5
20°	9455.1	9449.8	9428.5	9417.8
22.5°	9300.5	9289.8	9284.5	9252.5
25°	9135.2	9124.5	9108.5	9092.5
27.5°	8852.6	8847.2	8831.2	8809.9
30°	8420.5	8415.2	8393.9	8393.9
32.5°	7860.6	7855.3	7834.0	7839.3
35°	7279.3	7300.7	7290.0	7268.7
37.5°	6794.0	6810.1	6820.8	6810.1
40°	6388.7	6436.7	6442.1	6452.8
42.5°	5956.8	6020.8	6042.2	6052.7
45°	5439.4	5498.2	5546.2	5535.5
47.5°	4911.5	4954.2	4996.8	4964.9
50°	4404.9	4431.6	4447.6	4447.6
52.5°	3925.0	3925.0	3919.7	3925.0
55°	3375.7	3375.7	3354.4	3365.0
57.5°	2799.7	2810.4	2794.4	2767.7
60°	2266.4	2239.8	2229.1	2213.2
62.5°	1765.2	1765.2	1727.9	1775.8
65°	1322.6	1306.6	1290.5	1285.2
67.5°	959.9	954.6	938.6	933.2
70°	677.2	656.0	650.6	639.9
72.5°	453.3	453.3	442.6	442.6
75°	277.3	250.7	245.3	250.7
77.5°	191.9	186.6	186.6	181.4
80°	128.0	122.7	133.4	117.3
82.5°	80.0	85.3	80.0	85.3
85°	53.4	63.9	58.7	58.7
87.5°	32.0	32.0	32.0	32.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)