

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: P249440

Luminaire Tested: **LD8B175D010 ER8B175840 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249440
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 ER8B175840 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16344.0 lumens
Efficiency: N/A
Efficacy: 92.2 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

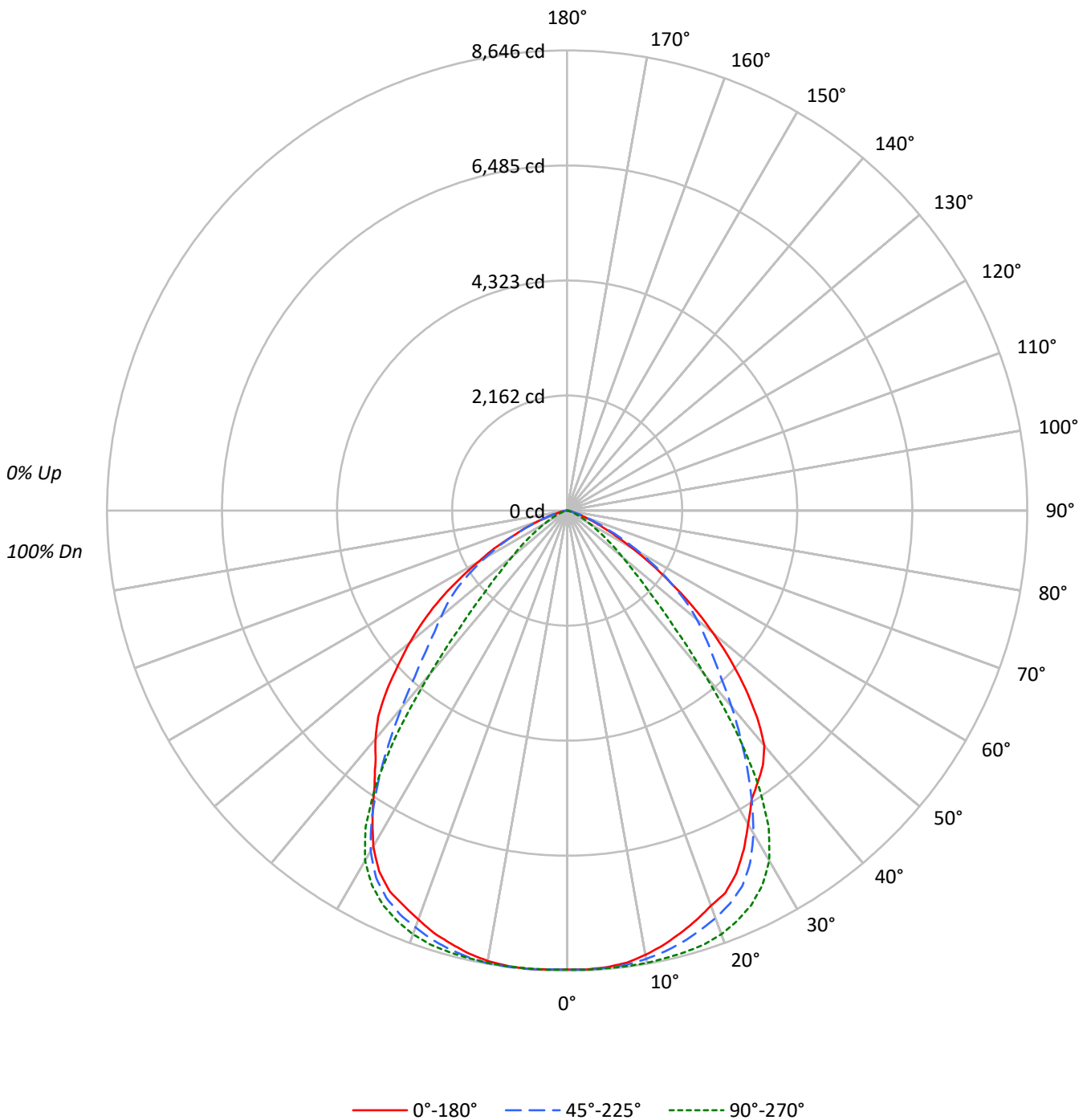
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	265914	265914	265914
5°	266499	267217	267505
10°	265379	270163	269002
15°	262438	274113	268941
20°	259287	277965	268249
25°	255919	278287	268522
30°	242115	270461	259420
35°	234888	235058	237501
40°	231975	161728	225458
45°	206703	97091	209529
50°	171872	64619	185194
55°	128904	44547	157021
60°	87353	29689	118473
65°	52688	19255	81392
70°	29212	10431	50075
75°	13237	4408	25925
80°	11507	4919	18078
85°	13091	6545	18044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	823.0	5.0
10°-20°	2390.1	14.6
20°-30°	3627.7	22.2
30°-40°	3810.1	23.3
40°-50°	2856.6	17.5
50°-60°	1832.8	11.2
60°-70°	784.1	4.8
70°-80°	185.2	1.1
80°-90°	34.5	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°	6840.7	41.9
0°-40°	10650.8	65.2
0°-60°	15340.2	93.9
0°-90°	16344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16344.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8623	8623	8623	8623	8623	
5°	8610	8623	8633	8646	8642	818
15°	8221	8392	8586	8531	8424	2319
25°	7522	7786	8179	8031	7892	3436
35°	6240	5892	6244	6170	6309	3916
45°	4740	3874	2226	3763	4805	3630
55°	2398	2398	829	2500	2921	2175
65°	722	852	264	1097	1116	771
75°	111	130	37	222	218	162
85°	37	23	18	37	51	39
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°	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4
2.5°	8628.1	8637.3	8632.7	8632.7	8628.1	8632.7	8632.7	8642.0	8642.0	8632.7	8628.1
5°	8609.5	8618.8	8618.8	8609.5	8609.5	8632.7	8618.8	8628.1	8628.1	8623.4	8623.4
7.5°	8567.9	8567.9	8586.4	8572.6	8572.6	8586.4	8581.7	8591.0	8600.3	8605.0	8605.0
10°	8475.3	8484.6	8489.2	8489.2	8493.8	8507.7	8517.0	8535.5	8544.7	8554.0	8558.6
12.5°	8359.6	8373.5	8378.1	8373.5	8387.4	8405.8	8429.1	8452.2	8466.1	8484.6	8498.5
15°	8220.7	8220.7	8230.0	8243.9	8253.2	8280.9	8304.0	8331.8	8368.8	8392.0	8415.1
17.5°	8068.0	8077.3	8091.1	8091.1	8109.7	8155.9	8169.8	8211.5	8253.2	8276.3	8322.6
20°	7901.4	7910.6	7924.5	7933.8	7956.9	7993.9	8021.7	8058.7	8105.0	8146.7	8192.9
22.5°	7771.7	7753.2	7762.4	7771.7	7794.9	7827.3	7859.7	7905.9	7952.2	7993.9	8040.2
25°	7521.7	7526.4	7540.3	7549.5	7577.4	7605.1	7642.1	7697.6	7739.3	7785.6	7836.5
27.5°	7183.9	7188.5	7211.6	7211.6	7234.8	7281.1	7304.2	7350.5	7406.1	7452.3	7512.6
30°	6799.7	6808.9	6808.9	6827.5	6841.3	6864.5	6887.6	6933.9	6961.7	7003.4	7086.7
32.5°	6447.9	6457.1	6452.5	6447.9	6434.0	6429.4	6424.7	6434.0	6443.3	6457.1	6489.5
35°	6239.7	6216.4	6198.0	6165.6	6128.5	6082.2	6040.5	5985.0	5934.1	5892.4	5846.2
37.5°	6040.5	6035.9	6008.2	5961.8	5887.8	5804.5	5707.3	5586.9	5466.6	5337.0	5212.1
40°	5762.8	5748.9	5725.8	5661.0	5577.7	5475.8	5346.3	5198.1	5003.7	4804.7	4601.0
42.5°	5290.7	5295.3	5267.6	5216.6	5138.0	5040.7	4906.5	4744.5	4536.2	4300.1	4036.3
45°	4739.9	4739.9	4730.6	4688.9	4633.4	4554.7	4452.9	4318.7	4115.0	3874.2	3591.9
47.5°	4165.9	4170.5	4156.6	4147.4	4124.2	4073.4	3999.3	3897.5	3754.0	3522.5	3240.1
50°	3582.7	3582.7	3605.8	3601.2	3601.2	3582.7	3550.3	3490.1	3365.1	3180.0	2916.2
52.5°	2999.4	3008.7	3022.6	3041.1	3064.2	3101.3	3064.2	3036.5	2957.8	2814.3	2587.5
55°	2397.7	2407.0	2430.1	2462.5	2490.3	2527.4	2536.5	2536.5	2494.9	2397.7	2226.4
57.5°	1883.9	1870.0	1888.6	1916.3	1953.4	1990.4	2018.2	2050.6	2045.9	1981.1	1842.3
60°	1416.4	1421.1	1434.9	1462.7	1490.5	1522.9	1559.9	1587.7	1601.6	1569.2	1481.2
62.5°	1032.2	1032.2	1050.7	1078.5	1092.4	1138.7	1161.8	1175.7	1189.6	1184.9	1129.4
65°	722.1	731.3	740.6	754.5	768.3	796.1	810.0	837.8	847.1	851.7	810.0
67.5°	509.2	495.3	504.6	513.7	527.7	546.2	574.0	574.0	587.8	587.8	560.1
70°	324.0	324.0	328.7	342.5	351.8	356.4	365.7	374.9	388.8	384.2	384.2
72.5°	217.6	212.9	217.6	222.2	226.9	240.7	240.7	245.3	254.6	259.2	240.7
75°	111.1	115.7	124.9	120.4	134.2	124.9	129.6	143.5	138.9	129.6	129.6
77.5°	92.5	92.5	92.5	88.0	97.2	97.2	92.5	101.8	97.2	97.2	92.5
80°	64.8	69.4	64.8	60.1	64.8	60.1	60.1	60.1	60.1	60.1	55.5
82.5°	51.0	41.7	46.3	41.7	46.3	46.3	41.7	37.0	37.0	41.7	37.0
85°	37.0	27.7	32.4	32.4	27.7	27.7	27.7	27.7	27.7	23.1	23.1
87.5°	23.1	13.9	13.9	13.9	18.5	18.5	18.5	13.9	18.5	18.5	9.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4
2.5°	8637.3	8632.7	8642.0	8637.3	8637.3	8632.7	8637.3	8632.7	8642.0	8623.4	8628.1
5°	8637.3	8628.1	8632.7	8637.3	8642.0	8632.7	8632.7	8632.7	8642.0	8632.7	8637.3
7.5°	8618.8	8614.1	8628.1	8637.3	8632.7	8628.1	8637.3	8632.7	8642.0	8637.3	8646.5
10°	8581.7	8586.4	8595.7	8609.5	8614.1	8618.8	8628.1	8628.1	8642.0	8623.4	8632.7
12.5°	8526.2	8544.7	8567.9	8577.1	8595.7	8595.7	8605.0	8609.5	8618.8	8614.1	8628.1
15°	8456.8	8479.9	8507.7	8530.9	8554.0	8567.9	8581.7	8586.4	8600.3	8586.4	8591.0
17.5°	8373.5	8401.2	8442.9	8470.6	8507.7	8521.6	8540.1	8549.3	8563.3	8554.0	8558.6
20°	8257.7	8290.2	8336.4	8378.1	8401.2	8433.6	8456.8	8470.6	8479.9	8470.6	8475.3
22.5°	8095.7	8142.1	8202.2	8234.6	8280.9	8308.7	8313.3	8345.7	8368.8	8345.7	8355.0
25°	7905.9	7952.2	7998.6	8068.0	8109.7	8142.1	8174.5	8179.1	8202.2	8197.6	8192.9
27.5°	7591.2	7651.4	7730.0	7785.6	7841.1	7892.1	7929.1	7938.3	7961.5	7952.2	7956.9
30°	7160.7	7225.6	7299.6	7387.5	7466.2	7517.1	7563.4	7595.8	7618.9	7605.1	7600.5
32.5°	6549.8	6614.5	6693.3	6781.1	6873.8	6947.8	7003.4	7045.0	7072.8	7063.5	7040.4
35°	5850.8	5869.3	5920.3	5989.7	6068.3	6147.0	6198.0	6244.2	6276.6	6285.9	6285.9
37.5°	5133.3	5073.2	5036.2	5036.2	5082.4	5114.8	5161.1	5188.8	5239.8	5258.3	5272.2
40°	4439.0	4300.1	4170.5	4073.4	4008.6	4003.9	4003.9	4017.7	4064.1	4124.2	4179.8
42.5°	3818.7	3596.5	3397.5	3217.0	3087.4	3013.4	2981.0	2985.6	3022.6	3078.1	3170.7
45°	3323.5	3045.8	2795.8	2578.2	2402.3	2286.6	2231.1	2226.4	2254.2	2319.0	2420.9
47.5°	2939.3	2643.0	2360.7	2110.7	1921.0	1795.9	1731.2	1712.7	1731.2	1791.3	1911.7
50°	2619.9	2314.4	2022.8	1763.6	1559.9	1430.3	1370.1	1347.0	1370.1	1421.1	1541.3
52.5°	2323.6	2008.9	1735.8	1485.8	1268.3	1157.2	1092.4	1078.5	1092.4	1152.5	1249.8
55°	1981.1	1712.7	1444.2	1194.2	1004.5	893.4	842.4	828.6	842.4	898.0	999.8
57.5°	1643.3	1411.8	1175.7	948.9	786.9	689.6	643.4	624.9	657.2	694.3	814.7
60°	1328.4	1143.3	944.2	745.2	611.0	523.0	486.0	481.4	490.6	537.0	620.2
62.5°	1041.5	888.7	731.3	569.4	458.2	421.2	374.9	370.4	379.5	407.3	472.2
65°	749.9	652.7	532.3	416.6	328.7	277.7	259.2	263.9	273.1	291.6	351.8
67.5°	523.0	453.6	370.4	291.6	226.9	203.6	185.2	180.5	185.2	217.6	250.0
70°	351.8	310.1	250.0	222.2	157.4	124.9	129.6	115.7	134.2	134.2	162.0
72.5°	231.4	203.6	166.6	129.6	111.1	88.0	88.0	83.4	92.5	97.2	120.4
75°	120.4	92.5	92.5	64.8	46.3	23.1	41.7	37.0	32.4	37.0	46.3
77.5°	83.4	69.4	64.8	51.0	46.3	37.0	37.0	37.0	37.0	41.7	46.3
80°	51.0	51.0	37.0	32.4	27.7	23.1	27.7	27.7	27.7	27.7	32.4
82.5°	32.4	27.7	27.7	23.1	23.1	18.5	18.5	18.5	18.5	18.5	27.7
85°	27.7	18.5	18.5	13.9	18.5	32.4	13.9	18.5	18.5	18.5	13.9
87.5°	9.3	13.9	13.9	13.9	9.3	4.6	9.3	13.9	13.9	23.1	18.5
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°	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4	8623.4
2.5°	8637.3	8642.0	8642.0	8637.3	8637.3	8628.1	8646.5	8632.7	8637.3	8655.8	8642.0
5°	8646.5	8651.2	8651.2	8646.5	8646.5	8646.5	8651.2	8651.2	8646.5	8642.0	8651.2
7.5°	8665.1	8660.5	8660.5	8651.2	8651.2	8642.0	8651.2	8637.3	8646.5	8637.3	8651.2
10°	8642.0	8646.5	8642.0	8637.3	8637.3	8632.7	8632.7	8618.8	8623.4	8609.5	8618.8
12.5°	8628.1	8623.4	8623.4	8614.1	8605.0	8595.7	8591.0	8577.1	8577.1	8544.7	8558.6
15°	8591.0	8595.7	8581.7	8563.3	8554.0	8530.9	8521.6	8503.0	8484.6	8461.5	8466.1
17.5°	8558.6	8544.7	8526.2	8507.7	8470.6	8452.2	8433.6	8405.8	8396.6	8368.8	8359.6
20°	8461.5	8452.2	8429.1	8396.6	8373.5	8331.8	8313.3	8285.6	8262.3	8234.6	8220.7
22.5°	8336.4	8327.1	8299.4	8267.0	8230.0	8211.5	8192.9	8142.1	8118.8	8091.1	8086.5
25°	8179.1	8165.2	8137.4	8100.4	8081.8	8031.0	8012.4	7975.4	7966.2	7938.3	7933.8
27.5°	7938.3	7919.9	7887.5	7841.1	7808.7	7776.4	7757.9	7730.0	7720.9	7693.0	7688.5
30°	7577.4	7554.1	7489.4	7470.9	7415.3	7382.9	7382.9	7345.9	7350.5	7332.0	7332.0
32.5°	7008.0	6971.0	6920.0	6883.0	6845.9	6827.5	6827.5	6813.5	6822.8	6822.8	6832.1
35°	6253.5	6202.6	6174.8	6151.7	6151.7	6170.1	6225.7	6239.7	6267.4	6290.5	6309.1
37.5°	5286.0	5281.5	5313.9	5341.6	5411.1	5489.8	5586.9	5670.3	5748.9	5804.5	5860.0
40°	4240.0	4355.7	4448.2	4577.9	4684.3	4837.1	5013.0	5156.4	5290.7	5387.9	5489.8
42.5°	3309.5	3457.7	3652.1	3841.9	4031.7	4240.0	4471.5	4670.5	4846.3	4980.6	5087.0
45°	2578.2	2781.9	3018.0	3258.7	3504.0	3763.2	4003.9	4207.6	4392.7	4531.6	4638.1
47.5°	2078.3	2300.5	2568.9	2832.8	3110.5	3383.6	3652.1	3828.0	3980.7	4091.8	4189.1
50°	1717.2	1953.4	2235.7	2536.5	2814.3	3087.4	3318.8	3490.1	3615.1	3712.3	3772.4
52.5°	1434.9	1684.8	1985.8	2286.6	2564.3	2814.3	3022.6	3152.2	3254.0	3323.5	3379.0
55°	1184.9	1425.7	1708.1	1990.4	2263.5	2499.5	2670.8	2768.0	2846.7	2888.3	2920.7
57.5°	967.5	1189.6	1448.8	1708.1	1944.1	2138.6	2272.8	2369.9	2407.0	2439.4	2434.7
60°	759.2	967.5	1203.5	1425.7	1629.3	1786.7	1883.9	1939.4	1967.2	1981.1	1971.8
62.5°	597.1	786.9	967.5	1161.8	1310.0	1444.2	1536.8	1536.8	1550.6	1555.3	1569.2
65°	444.3	587.8	745.2	888.7	1009.0	1097.0	1148.0	1161.8	1180.4	1175.7	1166.5
67.5°	328.7	435.1	550.8	657.2	740.6	796.1	833.1	865.6	861.0	851.7	847.1
70°	226.9	296.3	398.1	462.9	523.0	578.6	587.8	592.5	597.1	601.7	592.5
72.5°	157.4	208.3	263.9	319.4	356.4	379.5	402.7	407.3	407.3	407.3	402.7
75°	78.7	106.5	157.4	180.5	212.9	222.2	240.7	240.7	254.6	236.0	231.4
77.5°	69.4	83.4	111.1	129.6	143.5	157.4	162.0	175.9	171.2	162.0	166.6
80°	41.7	51.0	69.4	78.7	97.2	101.8	106.5	111.1	106.5	111.1	111.1
82.5°	32.4	37.0	46.3	46.3	60.1	60.1	64.8	64.8	69.4	69.4	69.4
85°	18.5	32.4	27.7	55.5	37.0	37.0	46.3	55.5	46.3	46.3	55.5
87.5°	18.5	18.5	13.9	18.5	18.5	18.5	23.1	27.7	27.7	32.4	27.7
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: P249440

CATALOG NUMBER: LD8B175D010 ER8B175840 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8623.4	8623.4	8623.4	8623.4
2.5°	8637.3	8646.5	8632.7	8628.1
5°	8651.2	8651.2	8642.0	8642.0
7.5°	8651.2	8651.2	8637.3	8628.1
10°	8614.1	8614.1	8600.3	8591.0
12.5°	8544.7	8544.7	8540.1	8526.2
15°	8456.8	8456.8	8438.2	8424.4
17.5°	8336.4	8345.7	8322.6	8322.6
20°	8206.8	8202.2	8183.7	8174.5
22.5°	8072.6	8063.4	8058.7	8031.0
25°	7929.1	7919.9	7905.9	7892.1
27.5°	7683.8	7679.2	7665.2	7646.8
30°	7308.8	7304.2	7285.7	7285.7
32.5°	6822.8	6818.2	6799.7	6804.4
35°	6318.3	6336.8	6327.5	6309.1
37.5°	5897.0	5911.0	5920.3	5911.0
40°	5545.3	5586.9	5591.6	5600.9
42.5°	5170.4	5225.9	5244.4	5253.6
45°	4721.3	4772.3	4814.0	4804.7
47.5°	4263.1	4300.1	4337.1	4309.4
50°	3823.4	3846.5	3860.4	3860.4
52.5°	3406.8	3406.8	3402.2	3406.8
55°	2930.0	2930.0	2911.5	2920.7
57.5°	2430.1	2439.4	2425.4	2402.3
60°	1967.2	1944.1	1934.8	1921.0
62.5°	1532.2	1532.2	1499.8	1541.3
65°	1148.0	1134.1	1120.1	1115.5
67.5°	833.1	828.6	814.7	810.0
70°	587.8	569.4	564.7	555.4
72.5°	393.5	393.5	384.2	384.2
75°	240.7	217.6	212.9	217.6
77.5°	166.6	162.0	162.0	157.4
80°	111.1	106.5	115.7	101.8
82.5°	69.4	74.1	69.4	74.1
85°	46.3	55.5	51.0	51.0
87.5°	27.7	27.7	27.7	27.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)