

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: P249548

Luminaire Tested: **LD8B175D010 ER8B175840 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249548
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 8LBDW0MMW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18261.0 lumens
Efficiency: N/A
Efficacy: 103.1 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

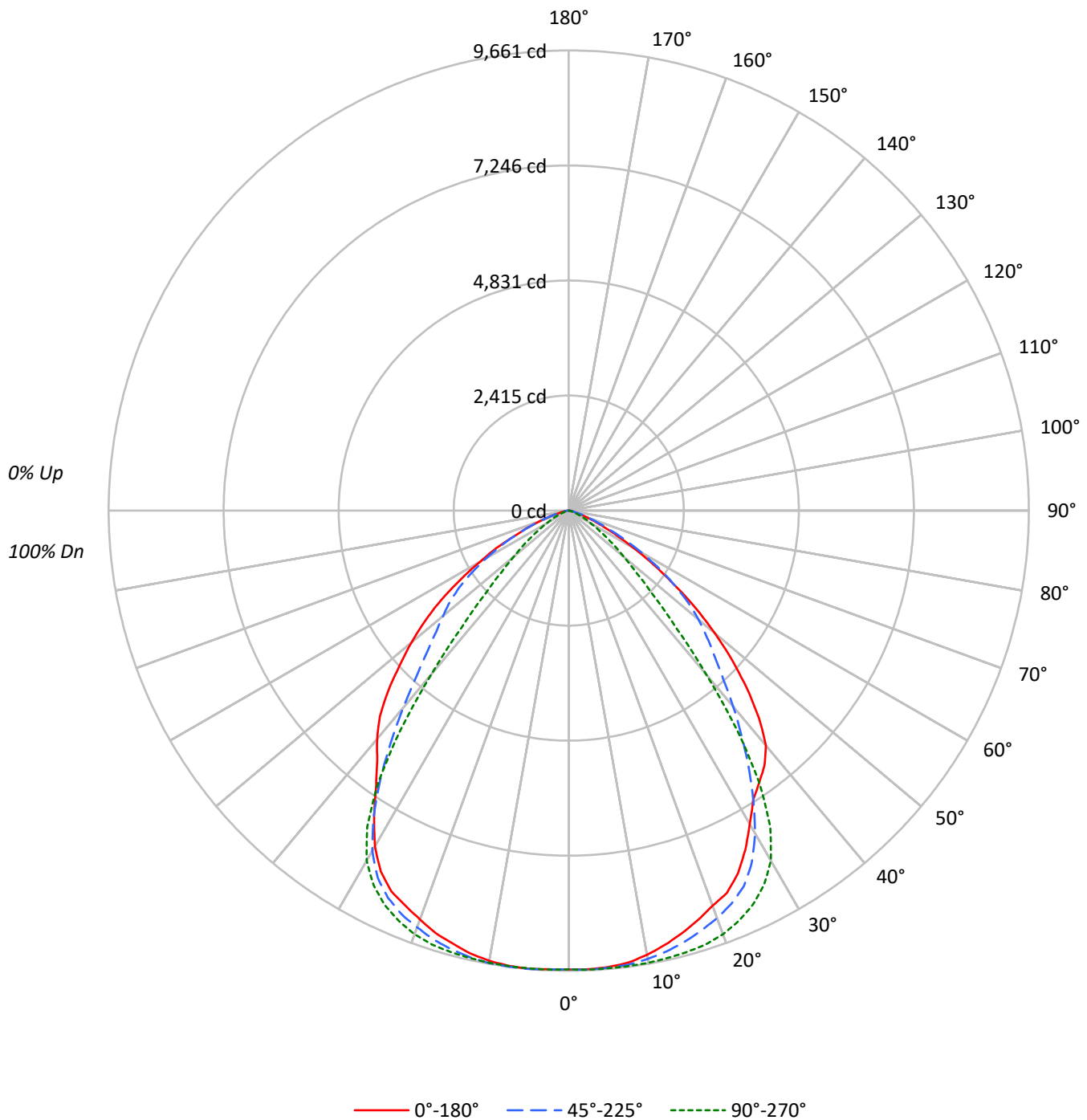
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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°	297105	297105	297105
5°	297757	298559	298880
10°	296503	301851	300555
15°	293220	306264	300486
20°	289697	310571	299709
25°	285939	310926	300018
30°	270515	302183	289849
35°	262436	262628	265358
40°	259187	180700	251901
45°	230945	108482	234103
50°	192030	72199	206916
55°	144022	49772	175440
60°	97597	33168	132368
65°	58868	21510	90936
70°	32638	11658	55953
75°	14786	4932	28964
80°	12857	5505	20209
85°	14648	7288	20132



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	919.5	5.0
10°-20°	2670.4	14.6
20°-30°	4053.1	22.2
30°-40°	4257.0	23.3
40°-50°	3191.6	17.5
50°-60°	2047.8	11.2
60°-70°	876.0	4.8
70°-80°	207.0	1.1
80°-90°	38.5	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°	7643.1	41.9
0°-40°	11900.1	65.2
0°-60°	17139.5	93.9
0°-90°	18261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18261.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9635	9635	9635	9635	9635	
5°	9619	9635	9645	9661	9656	914
15°	9185	9376	9594	9532	9412	2591
25°	8404	8699	9138	8973	8818	3839
35°	6972	6584	6977	6894	7049	4375
45°	5296	4329	2488	4205	5368	4056
55°	2679	2679	926	2793	3263	2430
65°	807	952	295	1226	1246	861
75°	124	145	41	248	243	181
85°	41	26	21	41	57	44
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°	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9
2.5°	9640.1	9650.4	9645.2	9645.2	9640.1	9645.2	9645.2	9655.6	9655.6	9645.2	9640.1
5°	9619.3	9629.7	9629.7	9619.3	9619.3	9645.2	9629.7	9640.1	9640.1	9634.9	9634.9
7.5°	9572.9	9572.9	9593.5	9578.0	9578.0	9593.5	9588.3	9598.7	9609.0	9614.2	9614.2
10°	9469.3	9479.7	9484.9	9484.9	9490.1	9505.5	9515.9	9536.7	9546.9	9557.3	9562.5
12.5°	9340.1	9355.6	9360.8	9355.6	9371.1	9391.8	9417.7	9443.5	9459.1	9479.7	9495.3
15°	9184.9	9184.9	9195.3	9210.8	9221.2	9252.2	9278.0	9309.0	9350.4	9376.3	9402.1
17.5°	9014.3	9024.7	9040.1	9040.1	9060.9	9112.5	9128.1	9174.6	9221.2	9247.0	9298.8
20°	8828.1	8838.4	8854.0	8864.3	8890.2	8931.5	8962.5	9003.9	9055.7	9102.2	9153.9
22.5°	8683.3	8662.6	8672.9	8683.3	8709.2	8745.4	8781.6	8833.2	8885.0	8931.5	8983.3
25°	8404.0	8409.2	8424.7	8435.0	8466.1	8497.1	8538.5	8600.5	8647.1	8698.8	8755.6
27.5°	8026.5	8031.7	8057.5	8057.5	8083.3	8135.1	8160.9	8212.6	8274.8	8326.4	8393.7
30°	7597.3	7607.5	7607.5	7628.3	7643.7	7669.6	7695.5	7747.2	7778.2	7824.8	7917.9
32.5°	7204.2	7214.5	7209.3	7204.2	7188.7	7183.5	7178.3	7188.7	7199.0	7214.5	7250.7
35°	6971.5	6945.6	6924.9	6888.7	6847.4	6795.6	6749.0	6687.0	6630.1	6583.5	6531.9
37.5°	6749.0	6743.9	6712.9	6661.1	6578.3	6485.3	6376.8	6242.2	6107.7	5963.0	5823.4
40°	6438.8	6423.2	6397.4	6325.0	6231.9	6118.1	5973.3	5807.8	5590.5	5368.2	5140.7
42.5°	5911.2	5916.4	5885.4	5828.4	5740.6	5631.9	5482.0	5301.0	5068.3	4804.5	4509.7
45°	5295.8	5295.8	5285.5	5238.9	5176.9	5088.9	4975.2	4825.2	4597.7	4328.7	4013.2
47.5°	4654.5	4659.7	4644.1	4633.9	4607.9	4551.1	4468.4	4354.6	4194.3	3935.6	3620.1
50°	4002.9	4002.9	4028.8	4023.6	4023.6	4002.9	3966.7	3899.4	3759.8	3552.9	3258.2
52.5°	3351.2	3361.6	3377.2	3397.8	3423.6	3465.0	3423.6	3392.6	3304.7	3144.3	2891.0
55°	2678.9	2689.3	2715.1	2751.3	2782.4	2823.8	2834.1	2834.1	2787.5	2678.9	2487.6
57.5°	2104.9	2089.4	2110.1	2141.1	2182.5	2223.9	2254.9	2291.1	2285.9	2213.5	2058.3
60°	1582.5	1587.7	1603.2	1634.3	1665.3	1701.5	1742.9	1773.9	1789.4	1753.3	1654.9
62.5°	1153.3	1153.3	1173.9	1204.9	1220.5	1272.3	1298.1	1313.6	1329.1	1323.9	1261.9
65°	806.8	817.1	827.5	843.0	858.5	889.5	905.0	936.0	946.4	951.6	905.0
67.5°	568.9	553.4	563.7	574.0	589.6	610.3	641.3	641.3	656.8	656.8	625.8
70°	362.0	362.0	367.2	382.7	393.0	398.2	408.6	418.9	434.4	429.2	429.2
72.5°	243.1	237.9	243.1	248.3	253.5	268.9	268.9	274.1	284.5	289.7	268.9
75°	124.1	129.3	139.6	134.5	150.0	139.6	144.8	160.3	155.1	144.8	144.8
77.5°	103.4	103.4	103.4	98.3	108.6	108.6	103.4	113.8	108.6	108.6	103.4
80°	72.4	77.6	72.4	67.2	72.4	67.2	67.2	67.2	67.2	67.2	62.0
82.5°	56.9	46.6	51.8	46.6	51.8	51.8	46.6	41.4	41.4	46.6	41.4
85°	41.4	31.0	36.2	36.2	31.0	31.0	31.0	31.0	31.0	25.8	25.8
87.5°	25.8	15.6	15.6	15.6	20.6	20.6	20.6	15.6	20.6	20.6	10.4
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9
2.5°	9650.4	9645.2	9655.6	9650.4	9650.4	9645.2	9650.4	9645.2	9655.6	9634.9	9640.1
5°	9650.4	9640.1	9645.2	9650.4	9655.6	9645.2	9645.2	9645.2	9655.6	9645.2	9650.4
7.5°	9629.7	9624.5	9640.1	9650.4	9645.2	9640.1	9650.4	9645.2	9655.6	9650.4	9660.7
10°	9588.3	9593.5	9603.9	9619.3	9624.5	9629.7	9640.1	9640.1	9655.6	9634.9	9645.2
12.5°	9526.3	9546.9	9572.9	9583.1	9603.9	9603.9	9614.2	9619.3	9629.7	9624.5	9640.1
15°	9448.7	9474.5	9505.5	9531.5	9557.3	9572.9	9588.3	9593.5	9609.0	9593.5	9598.7
17.5°	9355.6	9386.6	9433.2	9464.2	9505.5	9521.1	9541.7	9552.1	9567.7	9557.3	9562.5
20°	9226.3	9262.6	9314.2	9360.8	9386.6	9422.8	9448.7	9464.2	9474.5	9464.2	9469.3
22.5°	9045.3	9097.1	9164.2	9200.4	9252.2	9283.2	9288.4	9324.6	9350.4	9324.6	9335.0
25°	8833.2	8885.0	8936.7	9014.3	9060.9	9097.1	9133.2	9138.4	9164.2	9159.1	9153.9
27.5°	8481.6	8548.9	8636.7	8698.8	8760.8	8817.8	8859.2	8869.4	8895.3	8885.0	8890.2
30°	8000.6	8073.1	8155.8	8254.0	8342.0	8398.8	8450.5	8486.7	8512.6	8497.1	8491.9
32.5°	7318.0	7390.4	7478.3	7576.5	7680.0	7762.7	7824.8	7871.4	7902.4	7892.0	7866.2
35°	6537.1	6557.7	6614.7	6692.2	6780.1	6868.0	6924.9	6976.6	7012.8	7023.1	7023.1
37.5°	5735.4	5668.2	5626.9	5626.9	5678.5	5714.7	5766.4	5797.4	5854.4	5875.0	5890.6
40°	4959.6	4804.5	4659.7	4551.1	4478.7	4473.5	4473.5	4489.0	4540.7	4607.9	4670.1
42.5°	4266.7	4018.4	3796.0	3594.3	3449.6	3366.8	3330.6	3335.8	3377.2	3439.2	3542.6
45°	3713.3	3403.0	3123.7	2880.6	2684.1	2554.8	2492.8	2487.6	2518.6	2591.0	2704.9
47.5°	3284.0	2953.0	2637.5	2358.3	2146.3	2006.6	1934.2	1913.6	1934.2	2001.4	2135.9
50°	2927.2	2585.9	2260.1	1970.4	1742.9	1598.1	1530.8	1505.0	1530.8	1587.7	1722.1
52.5°	2596.2	2244.5	1939.4	1660.1	1417.0	1292.9	1220.5	1204.9	1220.5	1287.7	1396.4
55°	2213.5	1913.6	1613.6	1334.3	1122.3	998.2	941.2	925.8	941.2	1003.4	1117.1
57.5°	1836.0	1577.4	1313.6	1060.2	879.2	770.5	718.9	698.1	734.3	775.7	910.2
60°	1484.2	1277.5	1055.0	832.7	682.7	584.4	543.0	537.8	548.2	599.9	693.0
62.5°	1163.7	993.0	817.1	636.1	512.0	470.6	418.9	413.8	424.0	455.1	527.6
65°	837.8	729.3	594.8	465.4	367.2	310.3	289.7	294.8	305.1	325.8	393.0
67.5°	584.4	506.8	413.8	325.8	253.5	227.5	206.9	201.7	206.9	243.1	279.3
70°	393.0	346.5	279.3	248.3	175.9	139.6	144.8	129.3	150.0	150.0	181.0
72.5°	258.5	227.5	186.1	144.8	124.1	98.3	98.3	93.1	103.4	108.6	134.5
75°	134.5	103.4	103.4	72.4	51.8	25.8	46.6	41.4	36.2	41.4	51.8
77.5°	93.1	77.6	72.4	56.9	51.8	41.4	41.4	41.4	41.4	46.6	51.8
80°	56.9	56.9	41.4	36.2	31.0	25.8	31.0	31.0	31.0	31.0	36.2
82.5°	36.2	31.0	31.0	25.8	25.8	20.6	20.6	20.6	20.6	20.6	31.0
85°	31.0	20.6	20.6	15.6	20.6	36.2	15.6	20.6	20.6	20.6	15.6
87.5°	10.4	15.6	15.6	15.6	10.4	5.2	10.4	15.6	15.6	25.8	20.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9	9634.9
2.5°	9650.4	9655.6	9655.6	9650.4	9650.4	9640.1	9660.7	9645.2	9650.4	9671.1	9655.6
5°	9660.7	9665.9	9665.9	9660.7	9660.7	9660.7	9665.9	9665.9	9660.7	9655.6	9665.9
7.5°	9681.4	9676.2	9676.2	9665.9	9665.9	9655.6	9665.9	9650.4	9660.7	9650.4	9665.9
10°	9655.6	9660.7	9655.6	9650.4	9650.4	9645.2	9645.2	9629.7	9634.9	9619.3	9629.7
12.5°	9640.1	9634.9	9634.9	9624.5	9614.2	9603.9	9598.7	9583.1	9583.1	9546.9	9562.5
15°	9598.7	9603.9	9588.3	9567.7	9557.3	9531.5	9521.1	9500.4	9479.7	9453.9	9459.1
17.5°	9562.5	9546.9	9526.3	9505.5	9464.2	9443.5	9422.8	9391.8	9381.4	9350.4	9340.1
20°	9453.9	9443.5	9417.7	9381.4	9355.6	9309.0	9288.4	9257.4	9231.4	9200.4	9184.9
22.5°	9314.2	9303.8	9272.8	9236.6	9195.3	9174.6	9153.9	9097.1	9071.1	9040.1	9034.9
25°	9138.4	9122.9	9091.9	9050.5	9029.7	8972.9	8952.2	8910.8	8900.5	8869.4	8864.3
27.5°	8869.4	8848.8	8812.6	8760.8	8724.6	8688.4	8667.8	8636.7	8626.4	8595.3	8590.2
30°	8466.1	8440.2	8367.8	8347.2	8285.0	8248.8	8248.8	8207.5	8212.6	8192.0	8192.0
32.5°	7830.0	7788.6	7731.7	7690.3	7648.9	7628.3	7628.3	7612.7	7623.1	7623.1	7633.5
35°	6986.9	6930.1	6899.0	6873.2	6873.2	6893.8	6955.9	6971.5	7002.5	7028.3	7049.1
37.5°	5906.0	5901.0	5937.1	5968.2	6045.7	6133.7	6242.2	6335.4	6423.2	6485.3	6547.3
40°	4737.3	4866.6	4970.0	5114.9	5233.7	5404.4	5600.9	5761.3	5911.2	6019.9	6133.7
42.5°	3697.7	3863.2	4080.5	4292.5	4504.6	4737.3	4995.9	5218.3	5414.8	5564.7	5683.7
45°	2880.6	3108.2	3372.0	3640.9	3915.0	4204.6	4473.5	4701.1	4908.0	5063.1	5182.1
47.5°	2322.1	2570.3	2870.3	3165.1	3475.4	3780.5	4080.5	4277.0	4447.6	4571.7	4680.4
50°	1918.6	2182.5	2498.0	2834.1	3144.3	3449.6	3708.1	3899.4	4039.1	4147.7	4214.9
52.5°	1603.2	1882.5	2218.7	2554.8	2865.1	3144.3	3377.2	3521.9	3635.7	3713.3	3775.3
55°	1323.9	1592.9	1908.4	2223.9	2529.0	2792.7	2984.0	3092.7	3180.5	3227.1	3263.3
57.5°	1080.9	1329.1	1618.7	1908.4	2172.1	2389.4	2539.3	2647.9	2689.3	2725.5	2720.3
60°	848.2	1080.9	1344.6	1592.9	1820.4	1996.2	2104.9	2166.9	2197.9	2213.5	2203.1
62.5°	667.1	879.2	1080.9	1298.1	1463.6	1613.6	1717.1	1717.1	1732.5	1737.7	1753.3
65°	496.4	656.8	832.7	993.0	1127.4	1225.7	1282.6	1298.1	1318.8	1313.6	1303.3
67.5°	367.2	486.2	615.4	734.3	827.5	889.5	930.9	967.2	962.0	951.6	946.4
70°	253.5	331.0	444.8	517.2	584.4	646.5	656.8	661.9	667.1	672.3	661.9
72.5°	175.9	232.7	294.8	356.9	398.2	424.0	450.0	455.1	455.1	455.1	450.0
75°	87.9	119.0	175.9	201.7	237.9	248.3	268.9	268.9	284.5	263.7	258.5
77.5°	77.6	93.1	124.1	144.8	160.3	175.9	181.0	196.5	191.3	181.0	186.1
80°	46.6	56.9	77.6	87.9	108.6	113.8	119.0	124.1	119.0	124.1	124.1
82.5°	36.2	41.4	51.8	51.8	67.2	67.2	72.4	72.4	77.6	77.6	77.6
85°	20.6	36.2	31.0	62.0	41.4	41.4	51.8	62.0	51.8	51.8	62.0
87.5°	20.6	20.6	15.6	20.6	20.6	20.6	25.8	31.0	31.0	36.2	31.0
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: P249548

CATALOG NUMBER: LD8B175D010 ER8B175840 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9634.9	9634.9	9634.9	9634.9
2.5°	9650.4	9660.7	9645.2	9640.1
5°	9665.9	9665.9	9655.6	9655.6
7.5°	9665.9	9665.9	9650.4	9640.1
10°	9624.5	9624.5	9609.0	9598.7
12.5°	9546.9	9546.9	9541.7	9526.3
15°	9448.7	9448.7	9428.0	9412.5
17.5°	9314.2	9324.6	9298.8	9298.8
20°	9169.4	9164.2	9143.6	9133.2
22.5°	9019.5	9009.1	9003.9	8972.9
25°	8859.2	8848.8	8833.2	8817.8
27.5°	8585.1	8579.9	8564.3	8543.7
30°	8166.1	8160.9	8140.3	8140.3
32.5°	7623.1	7617.9	7597.3	7602.5
35°	7059.3	7080.1	7069.7	7049.1
37.5°	6588.7	6604.3	6614.7	6604.3
40°	6195.7	6242.2	6247.4	6257.8
42.5°	5776.8	5838.8	5859.6	5869.8
45°	5275.1	5332.0	5378.6	5368.2
47.5°	4763.1	4804.5	4845.8	4814.8
50°	4271.8	4297.7	4313.2	4313.2
52.5°	3806.4	3806.4	3801.2	3806.4
55°	3273.7	3273.7	3253.0	3263.3
57.5°	2715.1	2725.5	2709.9	2684.1
60°	2197.9	2172.1	2161.7	2146.3
62.5°	1711.9	1711.9	1675.7	1722.1
65°	1282.6	1267.1	1251.5	1246.3
67.5°	930.9	925.8	910.2	905.0
70°	656.8	636.1	630.9	620.6
72.5°	439.6	439.6	429.2	429.2
75°	268.9	243.1	237.9	243.1
77.5°	186.1	181.0	181.0	175.9
80°	124.1	119.0	129.3	113.8
82.5°	77.6	82.8	77.6	82.8
85°	51.8	62.0	56.9	56.9
87.5°	31.0	31.0	31.0	31.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)