

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: P249404

Luminaire Tested: **LD8B175D010 ER8B175930 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249404  
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 ER8B175930 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
97 CRI 3000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15006.8 lumens  
Efficiency: N/A  
Efficacy: 84.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

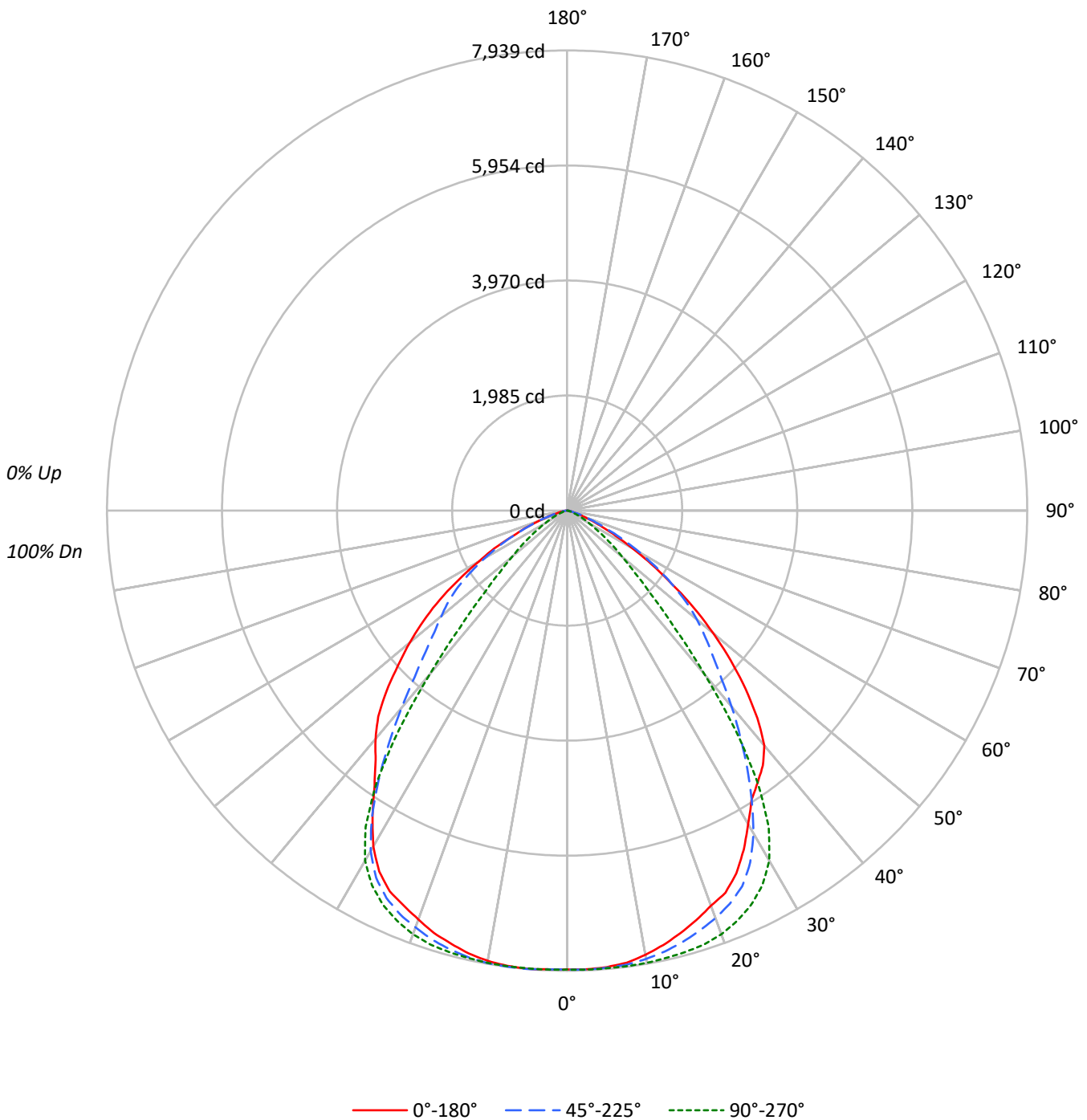
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249404

CATALOG NUMBER: LD8B175D010 ER8B175930 8LBDW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P249404

CATALOG NUMBER: LD8B175D010 ER8B175930 8LBDW0GPH

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



TEST NUMBER: P249404

CATALOG NUMBER: LD8B175D010 ER8B175930 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	755.7	5.0
10°-20°	2194.5	14.6
20°-30°	3330.9	22.2
30°-40°	3498.4	23.3
40°-50°	2622.9	17.5
50°-60°	1682.9	11.2
60°-70°	719.9	4.8
70°-80°	170.1	1.1
80°-90°	31.6	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°	6281.0	41.9
0°-40°	9779.4	65.2
0°-60°	14085.2	93.9
0°-90°	15006.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15006.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	7918	7918	7918	7918	7918	
5°	7905	7918	7926	7939	7935	751
15°	7548	7705	7884	7833	7735	2129
25°	6906	7149	7510	7374	7246	3155
35°	5729	5410	5733	5665	5793	3596
45°	4352	3557	2044	3455	4412	3333
55°	2202	2202	761	2295	2682	1997
65°	663	782	242	1007	1024	708
75°	102	119	34	204	200	149
85°	34	21	17	34	47	36
90°	0	0	0	0	0	



TEST NUMBER: P249404

CATALOG NUMBER: LD8B175D010 ER8B175930 8LBDW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8
2.5°	7922.1	7930.7	7926.5	7926.5	7922.1	7926.5	7926.5	7935.0	7935.0	7926.5	7922.1
5°	7905.1	7913.6	7913.6	7905.1	7905.1	7926.5	7913.6	7922.1	7922.1	7917.8	7917.8
7.5°	7867.0	7867.0	7883.9	7871.2	7871.2	7883.9	7879.6	7888.1	7896.7	7900.9	7900.9
10°	7781.9	7790.4	7794.6	7794.6	7798.9	7811.6	7820.1	7837.2	7845.7	7854.2	7858.4
12.5°	7675.7	7688.4	7692.6	7688.4	7701.2	7718.1	7739.5	7760.7	7773.5	7790.4	7803.2
15°	7548.1	7548.1	7556.7	7569.4	7578.0	7603.4	7624.6	7650.2	7684.1	7705.4	7726.6
17.5°	7407.9	7416.4	7429.1	7429.1	7446.1	7488.6	7501.4	7539.6	7578.0	7599.1	7641.7
20°	7254.9	7263.4	7276.2	7284.7	7305.9	7339.9	7365.4	7399.4	7441.9	7480.2	7522.6
22.5°	7135.8	7118.9	7127.3	7135.8	7157.1	7187.0	7216.7	7259.1	7301.6	7339.9	7382.5
25°	6906.4	6910.6	6923.4	6931.8	6957.4	6982.9	7016.9	7067.9	7106.1	7148.6	7195.4
27.5°	6596.2	6600.4	6621.6	6621.6	6642.8	6685.4	6706.6	6749.1	6800.2	6842.6	6898.0
30°	6243.4	6251.8	6251.8	6268.9	6281.5	6302.9	6324.1	6366.6	6392.2	6430.4	6507.0
32.5°	5920.4	5928.9	5924.6	5920.4	5907.7	5903.3	5899.0	5907.7	5916.2	5928.9	5958.6
35°	5729.2	5707.8	5690.9	5661.2	5627.2	5584.6	5546.4	5495.4	5448.6	5410.3	5367.9
37.5°	5546.4	5542.1	5516.6	5474.1	5406.0	5329.6	5240.5	5129.8	5019.3	4900.3	4785.7
40°	5291.3	5278.6	5257.4	5197.9	5121.3	5027.8	4908.9	4772.9	4594.3	4411.6	4224.6
42.5°	4857.9	4862.1	4836.6	4789.8	4717.6	4628.3	4505.1	4356.3	4165.1	3948.3	3706.1
45°	4352.1	4352.1	4343.5	4305.3	4254.3	4182.1	4088.6	3965.3	3778.3	3557.3	3298.0
47.5°	3825.1	3829.3	3816.6	3808.1	3786.7	3740.1	3672.1	3578.6	3446.9	3234.3	2975.0
50°	3289.6	3289.6	3310.8	3306.5	3306.5	3289.6	3259.9	3204.5	3089.8	2919.8	2677.6
52.5°	2754.1	2762.6	2775.4	2792.3	2813.5	2847.6	2813.5	2788.0	2715.7	2584.0	2375.8
55°	2201.5	2210.1	2231.2	2261.1	2286.6	2320.6	2329.0	2329.0	2290.8	2201.5	2044.3
57.5°	1729.8	1717.0	1734.1	1759.5	1793.6	1827.6	1853.0	1882.8	1878.6	1819.0	1691.6
60°	1300.6	1304.8	1317.5	1343.1	1368.5	1398.3	1432.3	1457.7	1470.5	1440.8	1360.0
62.5°	947.8	947.8	964.7	990.2	1003.0	1045.6	1066.7	1079.5	1092.2	1087.9	1037.0
65°	663.1	671.5	680.0	692.8	705.4	731.0	743.8	769.2	777.7	782.0	743.8
67.5°	467.6	454.8	463.3	471.7	484.5	501.5	527.0	527.0	539.8	539.8	514.2
70°	297.5	297.5	301.8	314.4	323.0	327.2	335.7	344.3	357.0	352.8	352.8
72.5°	199.8	195.5	199.8	204.0	208.3	220.9	220.9	225.2	233.7	238.0	220.9
75°	102.0	106.3	114.7	110.5	123.2	114.7	118.9	131.7	127.5	118.9	118.9
77.5°	85.0	85.0	85.0	80.8	89.2	89.2	85.0	93.5	89.2	89.2	85.0
80°	59.5	63.8	59.5	55.3	59.5	55.3	55.3	55.3	55.3	55.3	51.0
82.5°	46.7	38.2	42.5	38.2	42.5	42.5	38.2	34.0	34.0	38.2	34.0
85°	34.0	25.4	29.7	29.7	25.4	25.4	25.4	25.4	25.4	21.2	21.2
87.5°	21.2	12.8	12.8	12.8	16.9	16.9	16.9	12.8	16.9	16.9	8.5
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: P249404

CATALOG NUMBER: LD8B175D010 ER8B175930 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8
2.5°	7930.7	7926.5	7935.0	7930.7	7930.7	7926.5	7930.7	7926.5	7935.0	7917.8	7922.1
5°	7930.7	7922.1	7926.5	7930.7	7935.0	7926.5	7926.5	7926.5	7935.0	7926.5	7930.7
7.5°	7913.6	7909.3	7922.1	7930.7	7926.5	7922.1	7930.7	7926.5	7935.0	7930.7	7939.1
10°	7879.6	7883.9	7892.4	7905.1	7909.3	7913.6	7922.1	7922.1	7935.0	7917.8	7926.5
12.5°	7828.6	7845.7	7867.0	7875.4	7892.4	7892.4	7900.9	7905.1	7913.6	7909.3	7922.1
15°	7764.9	7786.1	7811.6	7833.0	7854.2	7867.0	7879.6	7883.9	7896.7	7883.9	7888.1
17.5°	7688.4	7713.8	7752.2	7777.6	7811.6	7824.4	7841.4	7849.9	7862.7	7854.2	7858.4
20°	7582.1	7611.9	7654.4	7692.6	7713.8	7743.6	7764.9	7777.6	7786.1	7777.6	7781.9
22.5°	7433.4	7475.9	7531.1	7560.9	7603.4	7628.9	7633.1	7662.9	7684.1	7662.9	7671.5
25°	7259.1	7301.6	7344.1	7407.9	7446.1	7475.9	7505.7	7509.9	7531.1	7526.8	7522.6
27.5°	6970.2	7025.4	7097.6	7148.6	7199.6	7246.4	7280.4	7288.9	7310.2	7301.6	7305.9
30°	6574.9	6634.4	6702.5	6783.2	6855.4	6902.1	6944.6	6974.4	6995.6	6982.9	6978.7
32.5°	6013.9	6073.4	6145.7	6226.4	6311.5	6379.3	6430.4	6468.6	6494.2	6485.7	6464.4
35°	5372.2	5389.1	5436.0	5499.6	5571.8	5644.1	5690.9	5733.4	5763.1	5771.6	5771.6
37.5°	4713.4	4658.1	4624.1	4624.1	4666.6	4696.3	4738.8	4764.4	4811.1	4828.0	4840.8
40°	4075.7	3948.3	3829.3	3740.1	3680.6	3676.3	3676.3	3689.0	3731.6	3786.7	3837.9
42.5°	3506.4	3302.2	3119.5	2953.8	2834.8	2766.9	2737.0	2741.3	2775.4	2826.3	2911.2
45°	3051.6	2796.6	2567.1	2367.3	2205.8	2099.5	2048.5	2044.3	2069.8	2129.2	2222.8
47.5°	2698.8	2426.7	2167.6	1938.0	1763.8	1649.0	1589.6	1572.5	1589.6	1644.7	1755.3
50°	2405.6	2125.1	1857.3	1619.3	1432.3	1313.4	1258.0	1236.8	1258.0	1304.8	1415.3
52.5°	2133.5	1844.5	1593.8	1364.3	1164.5	1062.5	1003.0	990.2	1003.0	1058.2	1147.6
55°	1819.0	1572.5	1326.0	1096.5	922.4	820.3	773.5	760.8	773.5	824.6	918.1
57.5°	1508.9	1296.3	1079.5	871.2	722.5	633.3	590.8	573.7	603.4	637.5	748.0
60°	1219.8	1049.8	867.0	684.3	561.1	480.2	446.3	442.0	450.5	493.0	569.5
62.5°	956.3	816.0	671.5	522.7	420.7	386.7	344.3	340.0	348.5	374.0	433.5
65°	688.5	599.3	488.8	382.5	301.8	255.0	238.0	242.2	250.8	267.8	323.0
67.5°	480.2	416.5	340.0	267.8	208.3	187.0	170.1	165.8	170.1	199.8	229.5
70°	323.0	284.7	229.5	204.0	144.5	114.7	118.9	106.3	123.2	123.2	148.8
72.5°	212.4	187.0	153.0	118.9	102.0	80.8	80.8	76.6	85.0	89.2	110.5
75°	110.5	85.0	85.0	59.5	42.5	21.2	38.2	34.0	29.7	34.0	42.5
77.5°	76.6	63.8	59.5	46.7	42.5	34.0	34.0	34.0	34.0	38.2	42.5
80°	46.7	46.7	34.0	29.7	25.4	21.2	25.4	25.4	25.4	25.4	29.7
82.5°	29.7	25.4	25.4	21.2	21.2	16.9	16.9	16.9	16.9	16.9	25.4
85°	25.4	16.9	16.9	12.8	16.9	29.7	12.8	16.9	16.9	16.9	12.8
87.5°	8.5	12.8	12.8	12.8	8.5	4.3	8.5	12.8	12.8	21.2	16.9
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: P249404

CATALOG NUMBER: LD8B175D010 ER8B175930 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8	7917.8
2.5°	7930.7	7935.0	7935.0	7930.7	7930.7	7922.1	7939.1	7926.5	7930.7	7947.7	7935.0
5°	7939.1	7943.4	7943.4	7939.1	7939.1	7939.1	7943.4	7943.4	7939.1	7935.0	7943.4
7.5°	7956.2	7951.9	7951.9	7943.4	7943.4	7935.0	7943.4	7930.7	7939.1	7930.7	7943.4
10°	7935.0	7939.1	7935.0	7930.7	7930.7	7926.5	7926.5	7913.6	7917.8	7905.1	7913.6
12.5°	7922.1	7917.8	7917.8	7909.3	7900.9	7892.4	7888.1	7875.4	7875.4	7845.7	7858.4
15°	7888.1	7892.4	7879.6	7862.7	7854.2	7833.0	7824.4	7807.3	7790.4	7769.2	7773.5
17.5°	7858.4	7845.7	7828.6	7811.6	7777.6	7760.7	7743.6	7718.1	7709.6	7684.1	7675.7
20°	7769.2	7760.7	7739.5	7709.6	7688.4	7650.2	7633.1	7607.7	7586.4	7560.9	7548.1
22.5°	7654.4	7645.9	7620.3	7590.6	7556.7	7539.6	7522.6	7475.9	7454.6	7429.1	7424.8
25°	7509.9	7497.1	7471.7	7437.6	7420.6	7373.9	7356.9	7322.8	7314.4	7288.9	7284.7
27.5°	7288.9	7271.9	7242.1	7199.6	7169.9	7140.1	7123.2	7097.6	7089.2	7063.6	7059.4
30°	6957.4	6936.1	6876.7	6859.6	6808.6	6778.9	6778.9	6744.8	6749.1	6732.2	6732.2
32.5°	6434.7	6400.7	6353.8	6319.9	6285.8	6268.9	6268.9	6256.1	6264.6	6264.6	6273.1
35°	5741.9	5695.1	5669.6	5648.4	5648.4	5665.3	5716.4	5729.2	5754.7	5775.8	5792.9
37.5°	4853.6	4849.3	4879.2	4904.6	4968.4	5040.6	5129.8	5206.4	5278.6	5329.6	5380.6
40°	3893.1	3999.4	4084.4	4203.4	4301.1	4441.3	4602.8	4734.5	4857.9	4947.1	5040.6
42.5°	3038.8	3174.8	3353.4	3527.6	3701.9	3893.1	4105.7	4288.4	4449.8	4573.1	4670.9
45°	2367.3	2554.3	2771.1	2992.1	3217.3	3455.4	3676.3	3863.3	4033.4	4160.8	4258.6
47.5°	1908.3	2112.3	2358.8	2601.1	2856.1	3106.7	3353.4	3514.9	3655.0	3757.0	3846.4
50°	1576.7	1793.6	2052.8	2329.0	2584.0	2834.8	3047.3	3204.5	3319.4	3408.5	3463.8
52.5°	1317.5	1547.0	1823.3	2099.5	2354.5	2584.0	2775.4	2894.3	2987.8	3051.6	3102.5
55°	1087.9	1309.1	1568.3	1827.6	2078.3	2295.0	2452.3	2541.5	2613.7	2652.1	2681.8
57.5°	888.3	1092.2	1330.3	1568.3	1785.1	1963.5	2086.9	2176.1	2210.1	2239.8	2235.5
60°	697.0	888.3	1105.1	1309.1	1496.1	1640.5	1729.8	1780.8	1806.3	1819.0	1810.5
62.5°	548.3	722.5	888.3	1066.7	1202.8	1326.0	1411.1	1411.1	1423.8	1428.0	1440.8
65°	407.9	539.8	684.3	816.0	926.5	1007.2	1054.1	1066.7	1083.8	1079.5	1071.0
67.5°	301.8	399.5	505.7	603.4	680.0	731.0	765.0	794.8	790.5	782.0	777.7
70°	208.3	272.1	365.6	425.0	480.2	531.2	539.8	544.0	548.3	552.5	544.0
72.5°	144.5	191.2	242.2	293.3	327.2	348.5	369.8	374.0	374.0	374.0	369.8
75°	72.3	97.8	144.5	165.8	195.5	204.0	220.9	220.9	233.7	216.7	212.4
77.5°	63.8	76.6	102.0	118.9	131.7	144.5	148.8	161.5	157.3	148.8	153.0
80°	38.2	46.7	63.8	72.3	89.2	93.5	97.8	102.0	97.8	102.0	102.0
82.5°	29.7	34.0	42.5	42.5	55.3	55.3	59.5	59.5	63.8	63.8	63.8
85°	16.9	29.7	25.4	51.0	34.0	34.0	42.5	51.0	42.5	42.5	51.0
87.5°	16.9	16.9	12.8	16.9	16.9	16.9	21.2	25.4	25.4	29.7	25.4
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: P249404

CATALOG NUMBER: LD8B175D010 ER8B175930 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	7917.8	7917.8	7917.8	7917.8
2.5°	7930.7	7939.1	7926.5	7922.1
5°	7943.4	7943.4	7935.0	7935.0
7.5°	7943.4	7943.4	7930.7	7922.1
10°	7909.3	7909.3	7896.7	7888.1
12.5°	7845.7	7845.7	7841.4	7828.6
15°	7764.9	7764.9	7747.9	7735.2
17.5°	7654.4	7662.9	7641.7	7641.7
20°	7535.4	7531.1	7514.2	7505.7
22.5°	7412.2	7403.6	7399.4	7373.9
25°	7280.4	7271.9	7259.1	7246.4
27.5°	7055.1	7050.9	7038.1	7021.2
30°	6710.9	6706.6	6689.7	6689.7
32.5°	6264.6	6260.3	6243.4	6247.7
35°	5801.3	5818.4	5809.8	5792.9
37.5°	5414.5	5427.3	5436.0	5427.3
40°	5091.6	5129.8	5134.1	5142.6
42.5°	4747.3	4798.3	4815.4	4823.8
45°	4335.0	4381.9	4420.1	4411.6
47.5°	3914.3	3948.3	3982.2	3956.8
50°	3510.6	3531.8	3544.6	3544.6
52.5°	3128.2	3128.2	3123.8	3128.2
55°	2690.3	2690.3	2673.4	2681.8
57.5°	2231.2	2239.8	2227.0	2205.8
60°	1806.3	1785.1	1776.6	1763.8
62.5°	1406.9	1406.9	1377.0	1415.3
65°	1054.1	1041.3	1028.5	1024.3
67.5°	765.0	760.8	748.0	743.8
70°	539.8	522.7	518.5	509.9
72.5°	361.3	361.3	352.8	352.8
75°	220.9	199.8	195.5	199.8
77.5°	153.0	148.8	148.8	144.5
80°	102.0	97.8	106.3	93.5
82.5°	63.8	68.0	63.8	68.0
85°	42.5	51.0	46.7	46.7
87.5°	25.4	25.4	25.4	25.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)