

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: P249305

Luminaire Tested: **LD8B175D010 ER8B175827 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249305  
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 ER8B175827 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 2700 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17048.0 lumens  
Efficiency: N/A  
Efficacy: 96.2 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

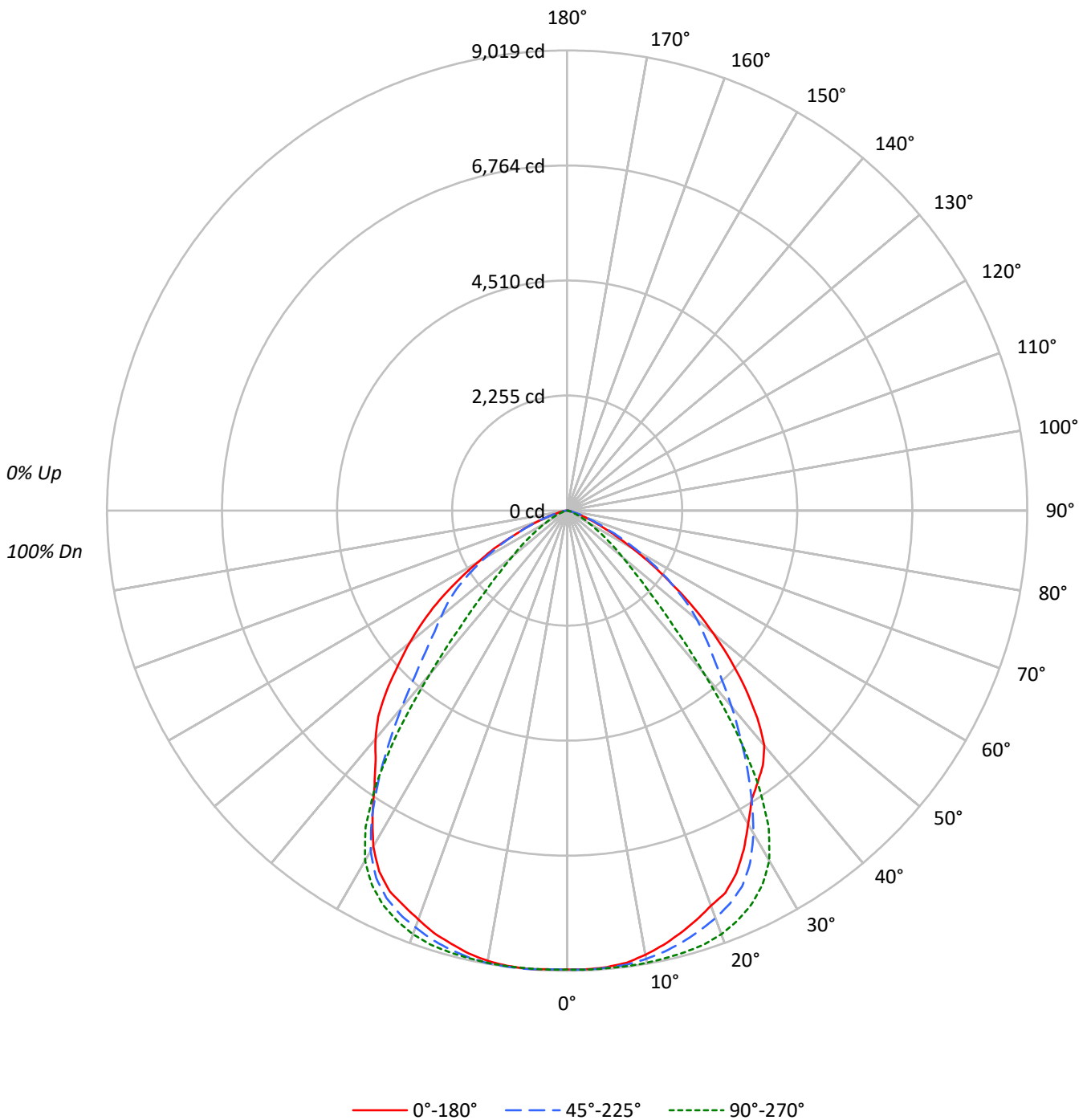
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249305

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBDW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P249305

CATALOG NUMBER: LD8B175D010 ER8B175827 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	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°	277370	277370	277370
5°	277977	278726	279026
10°	276808	281799	280590
15°	273743	285919	280527
20°	270454	289940	279803
25°	266943	290273	280086
30°	252544	282112	270593
35°	245003	245184	247729
40°	241971	168696	235168
45°	215604	101273	218552
50°	179274	67402	193172
55°	134457	46466	163784
60°	91115	30966	123573
65°	54957	20087	84895
70°	30474	10882	52229
75°	13809	4599	27033
80°	12004	5132	18859
85°	13657	6828	18823



TEST NUMBER: P249305

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	858.4	5.0
10°-20°	2493.0	14.6
20°-30°	3783.9	22.2
30°-40°	3974.2	23.3
40°-50°	2979.6	17.5
50°-60°	1911.8	11.2
60°-70°	817.8	4.8
70°-80°	193.2	1.1
80°-90°	35.9	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°	7135.4	41.9
0°-40°	11109.6	65.2
0°-60°	16001.0	93.9
0°-90°	17048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17048.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	8995	8995	8995	8995	8995	
5°	8980	8995	9004	9019	9014	853
15°	8575	8754	8956	8898	8787	2419
25°	7846	8121	8531	8377	8232	3584
35°	6508	6146	6513	6436	6581	4085
45°	4944	4041	2322	3925	5012	3786
55°	2501	2501	864	2607	3046	2269
65°	753	888	275	1144	1164	804
75°	116	135	39	232	227	169
85°	39	24	19	39	53	41
90°	0	0	0	0	0	



TEST NUMBER: P249305

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBDW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9
2.5°	8999.7	9009.4	9004.5	9004.5	8999.7	9004.5	9004.5	9014.2	9014.2	9004.5	8999.7
5°	8980.3	8990.0	8990.0	8980.3	8980.3	9004.5	8990.0	8999.7	8999.7	8994.9	8994.9
7.5°	8937.0	8937.0	8956.2	8941.8	8941.8	8956.2	8951.4	8961.1	8970.8	8975.6	8975.6
10°	8840.3	8850.0	8854.9	8854.9	8859.7	8874.1	8883.8	8903.2	8912.8	8922.4	8927.3
12.5°	8719.7	8734.1	8739.0	8734.1	8748.7	8767.9	8792.1	8816.2	8830.8	8850.0	8864.6
15°	8574.8	8574.8	8584.5	8599.0	8608.7	8637.6	8661.7	8690.7	8729.3	8753.5	8777.6
17.5°	8415.5	8425.2	8439.6	8439.6	8459.0	8507.2	8521.7	8565.2	8608.7	8632.8	8681.1
20°	8241.7	8251.3	8265.8	8275.5	8299.6	8338.3	8367.2	8405.8	8454.1	8497.6	8545.8
22.5°	8106.5	8087.2	8096.8	8106.5	8130.7	8164.5	8198.3	8246.5	8294.8	8338.3	8386.6
25°	7845.7	7850.6	7865.1	7874.7	7903.7	7932.7	7971.3	8029.2	8072.7	8121.0	8174.0
27.5°	7493.3	7498.2	7522.3	7522.3	7546.4	7594.7	7618.8	7667.1	7725.1	7773.3	7836.2
30°	7092.6	7102.2	7102.2	7121.6	7136.0	7160.2	7184.3	7232.6	7261.5	7305.0	7392.0
32.5°	6725.7	6735.2	6730.4	6725.7	6711.1	6706.3	6701.5	6711.1	6720.8	6735.2	6769.0
35°	6508.4	6484.2	6464.9	6431.2	6392.5	6344.2	6300.7	6242.8	6189.7	6146.2	6098.0
37.5°	6300.7	6295.9	6267.0	6218.6	6141.4	6054.5	5953.2	5827.6	5702.0	5566.9	5436.6
40°	6011.1	5996.5	5972.4	5904.9	5817.9	5711.7	5576.6	5422.0	5219.2	5011.6	4799.2
42.5°	5518.6	5523.4	5494.5	5441.3	5359.3	5257.8	5117.8	4948.9	4731.6	4485.3	4210.2
45°	4944.0	4944.0	4934.4	4890.9	4833.0	4750.9	4644.7	4504.7	4292.3	4041.1	3746.6
47.5°	4345.3	4350.2	4335.6	4326.1	4301.9	4248.8	4171.5	4065.3	3915.7	3674.2	3379.7
50°	3737.0	3737.0	3761.1	3756.3	3756.3	3737.0	3703.2	3640.4	3510.1	3316.9	3041.8
52.5°	3128.6	3138.3	3152.8	3172.1	3196.2	3234.8	3196.2	3167.3	3085.2	2935.5	2699.0
55°	2501.0	2510.7	2534.8	2568.5	2597.6	2636.2	2645.8	2645.8	2602.3	2501.0	2322.3
57.5°	1965.1	1950.6	1969.9	1998.9	2037.5	2076.1	2105.1	2138.9	2134.0	2066.5	1921.6
60°	1477.4	1482.3	1496.7	1525.7	1554.7	1588.5	1627.1	1656.0	1670.6	1636.8	1545.0
62.5°	1076.7	1076.7	1096.0	1124.9	1139.4	1187.8	1211.9	1226.4	1240.8	1236.0	1178.1
65°	753.2	762.8	772.5	787.0	801.4	830.4	844.9	873.9	883.5	888.4	844.9
67.5°	531.1	516.6	526.3	535.9	550.4	569.8	598.7	598.7	613.1	613.1	584.2
70°	338.0	338.0	342.8	357.2	366.9	371.8	381.5	391.0	405.6	400.7	400.7
72.5°	226.9	222.1	226.9	231.8	236.6	251.0	251.0	255.9	265.6	270.4	251.0
75°	115.9	120.7	130.3	125.6	140.0	130.3	135.2	149.7	144.8	135.2	135.2
77.5°	96.5	96.5	96.5	91.8	101.4	101.4	96.5	106.2	101.4	101.4	96.5
80°	67.6	72.4	67.6	62.7	67.6	62.7	62.7	62.7	62.7	62.7	57.9
82.5°	53.2	43.5	48.3	43.5	48.3	48.3	43.5	38.6	38.6	43.5	38.6
85°	38.6	28.9	33.8	33.8	28.9	28.9	28.9	28.9	28.9	24.1	24.1
87.5°	24.1	14.5	14.5	14.5	19.3	19.3	19.3	14.5	19.3	19.3	9.7
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: P249305

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9
2.5°	9009.4	9004.5	9014.2	9009.4	9009.4	9004.5	9009.4	9004.5	9014.2	8994.9	8999.7
5°	9009.4	8999.7	9004.5	9009.4	9014.2	9004.5	9004.5	9004.5	9014.2	9004.5	9009.4
7.5°	8990.0	8985.2	8999.7	9009.4	9004.5	8999.7	9009.4	9004.5	9014.2	9009.4	9019.0
10°	8951.4	8956.2	8965.9	8980.3	8985.2	8990.0	8999.7	8999.7	9014.2	8994.9	9004.5
12.5°	8893.5	8912.8	8937.0	8946.5	8965.9	8965.9	8975.6	8980.3	8990.0	8985.2	8999.7
15°	8821.1	8845.2	8874.1	8898.3	8922.4	8937.0	8951.4	8956.2	8970.8	8956.2	8961.1
17.5°	8734.1	8763.1	8806.5	8835.5	8874.1	8888.7	8907.9	8917.6	8932.1	8922.4	8927.3
20°	8613.4	8647.3	8695.5	8739.0	8763.1	8796.9	8821.1	8835.5	8845.2	8835.5	8840.3
22.5°	8444.5	8492.8	8555.5	8589.3	8637.6	8666.6	8671.4	8705.2	8729.3	8705.2	8714.9
25°	8246.5	8294.8	8343.1	8415.5	8459.0	8492.8	8526.6	8531.4	8555.5	8550.7	8545.8
27.5°	7918.2	7981.0	8063.0	8121.0	8178.9	8232.0	8270.7	8280.2	8304.5	8294.8	8299.6
30°	7469.1	7536.8	7614.1	7705.7	7787.8	7840.9	7889.2	7923.0	7947.1	7932.7	7927.8
32.5°	6831.9	6899.5	6981.6	7073.2	7169.9	7247.0	7305.0	7348.5	7377.4	7367.8	7343.7
35°	6102.9	6122.1	6175.3	6247.7	6329.7	6411.8	6464.9	6513.2	6546.9	6556.6	6556.6
37.5°	5354.5	5291.7	5253.1	5253.1	5301.3	5335.1	5383.4	5412.3	5465.5	5484.8	5499.3
40°	4630.2	4485.3	4350.2	4248.8	4181.2	4176.4	4176.4	4190.8	4239.1	4301.9	4359.9
42.5°	3983.2	3751.5	3543.9	3355.6	3220.4	3143.2	3109.4	3114.2	3152.8	3210.7	3307.3
45°	3466.6	3176.9	2916.2	2689.3	2505.8	2385.1	2327.2	2322.3	2351.3	2418.9	2525.2
47.5°	3065.9	2756.9	2462.3	2201.6	2003.7	1873.3	1805.7	1786.5	1805.7	1868.5	1994.0
50°	2732.8	2414.1	2109.9	1839.5	1627.1	1492.0	1429.1	1405.0	1429.1	1482.3	1607.7
52.5°	2423.7	2095.4	1810.6	1549.8	1322.9	1207.0	1139.4	1124.9	1139.4	1202.2	1303.6
55°	2066.5	1786.5	1506.4	1245.6	1047.8	931.9	878.7	864.3	878.7	936.7	1042.9
57.5°	1714.1	1472.6	1226.4	989.8	820.8	719.3	671.1	651.8	685.6	724.2	849.8
60°	1385.6	1192.6	984.9	777.3	637.3	545.6	506.9	502.1	511.8	560.1	646.9
62.5°	1086.4	927.0	762.8	593.9	478.0	439.4	391.0	386.3	395.9	424.8	492.5
65°	782.2	680.8	555.2	434.5	342.8	289.7	270.4	275.3	284.8	304.2	366.9
67.5°	545.6	473.1	386.3	304.2	236.6	212.4	193.2	188.3	193.2	226.9	260.7
70°	366.9	323.5	260.7	231.8	164.2	130.3	135.2	120.7	140.0	140.0	168.9
72.5°	241.4	212.4	173.8	135.2	115.9	91.8	91.8	86.9	96.5	101.4	125.6
75°	125.6	96.5	96.5	67.6	48.3	24.1	43.5	38.6	33.8	38.6	48.3
77.5°	86.9	72.4	67.6	53.2	48.3	38.6	38.6	38.6	38.6	43.5	48.3
80°	53.2	53.2	38.6	33.8	28.9	24.1	28.9	28.9	28.9	28.9	33.8
82.5°	33.8	28.9	28.9	24.1	24.1	19.3	19.3	19.3	19.3	19.3	28.9
85°	28.9	19.3	19.3	14.5	19.3	33.8	14.5	19.3	19.3	19.3	14.5
87.5°	9.7	14.5	14.5	14.5	9.7	4.8	9.7	14.5	14.5	24.1	19.3
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: P249305

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9	8994.9
2.5°	9009.4	9014.2	9014.2	9009.4	9009.4	8999.7	9019.0	9004.5	9009.4	9028.6	9014.2
5°	9019.0	9023.8	9023.8	9019.0	9019.0	9019.0	9023.8	9023.8	9019.0	9014.2	9023.8
7.5°	9038.3	9033.5	9033.5	9023.8	9023.8	9014.2	9023.8	9009.4	9019.0	9009.4	9023.8
10°	9014.2	9019.0	9014.2	9009.4	9009.4	9004.5	9004.5	8990.0	8994.9	8980.3	8990.0
12.5°	8999.7	8994.9	8994.9	8985.2	8975.6	8965.9	8961.1	8946.5	8946.5	8912.8	8927.3
15°	8961.1	8965.9	8951.4	8932.1	8922.4	8898.3	8888.7	8869.3	8850.0	8825.9	8830.8
17.5°	8927.3	8912.8	8893.5	8874.1	8835.5	8816.2	8796.9	8767.9	8758.2	8729.3	8719.7
20°	8825.9	8816.2	8792.1	8758.2	8734.1	8690.7	8671.4	8642.5	8618.2	8589.3	8574.8
22.5°	8695.5	8685.8	8656.9	8623.1	8584.5	8565.2	8545.8	8492.8	8468.6	8439.6	8434.8
25°	8531.4	8516.9	8487.9	8449.3	8429.9	8376.9	8357.5	8318.9	8309.3	8280.2	8275.5
27.5°	8280.2	8261.0	8227.2	8178.9	8145.1	8111.3	8092.1	8063.0	8053.4	8024.4	8019.6
30°	7903.7	7879.5	7812.0	7792.7	7734.7	7700.9	7700.9	7662.3	7667.1	7647.9	7647.9
32.5°	7309.9	7271.2	7218.1	7179.4	7140.8	7121.6	7121.6	7107.0	7116.7	7116.7	7126.4
35°	6522.8	6469.8	6440.7	6416.6	6416.6	6435.9	6493.9	6508.4	6537.4	6561.5	6580.8
37.5°	5513.7	5509.0	5542.8	5571.7	5644.1	5726.2	5827.6	5914.5	5996.5	6054.5	6112.4
40°	4422.6	4543.3	4639.8	4775.1	4886.0	5045.4	5228.9	5378.6	5518.6	5620.0	5726.2
42.5°	3452.1	3606.6	3809.5	4007.3	4205.3	4422.6	4664.1	4871.6	5055.1	5195.1	5306.1
45°	2689.3	2901.7	3148.0	3399.0	3654.9	3925.3	4176.4	4388.8	4582.0	4726.8	4837.8
47.5°	2167.8	2399.6	2679.6	2954.9	3244.5	3529.4	3809.5	3992.9	4152.2	4268.1	4369.5
50°	1791.2	2037.5	2332.0	2645.8	2935.5	3220.4	3461.8	3640.4	3770.8	3872.2	3934.9
52.5°	1496.7	1757.4	2071.3	2385.1	2674.8	2935.5	3152.8	3288.0	3394.2	3466.6	3524.5
55°	1236.0	1487.1	1781.6	2076.1	2361.0	2607.2	2785.8	2887.3	2969.3	3012.7	3046.5
57.5°	1009.1	1240.8	1511.2	1781.6	2027.8	2230.7	2370.7	2472.0	2510.7	2544.4	2539.6
60°	791.9	1009.1	1255.3	1487.1	1699.5	1863.6	1965.1	2023.0	2051.9	2066.5	2056.8
62.5°	622.8	820.8	1009.1	1211.9	1366.4	1506.4	1603.0	1603.0	1617.4	1622.3	1636.8
65°	463.5	613.1	777.3	927.0	1052.5	1144.3	1197.4	1211.9	1231.2	1226.4	1216.7
67.5°	342.8	453.9	574.5	685.6	772.5	830.4	869.0	902.9	898.1	888.4	883.5
70°	236.6	309.0	415.3	482.8	545.6	603.6	613.1	618.0	622.8	627.7	618.0
72.5°	164.2	217.3	275.3	333.1	371.8	395.9	420.1	424.8	424.8	424.8	420.1
75°	82.1	111.0	164.2	188.3	222.1	231.8	251.0	251.0	265.6	246.2	241.4
77.5°	72.4	86.9	115.9	135.2	149.7	164.2	168.9	183.5	178.6	168.9	173.8
80°	43.5	53.2	72.4	82.1	101.4	106.2	111.0	115.9	111.0	115.9	115.9
82.5°	33.8	38.6	48.3	48.3	62.7	62.7	67.6	67.6	72.4	72.4	72.4
85°	19.3	33.8	28.9	57.9	38.6	38.6	48.3	57.9	48.3	48.3	57.9
87.5°	19.3	19.3	14.5	19.3	19.3	19.3	24.1	28.9	28.9	33.8	28.9
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: P249305

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	8994.9	8994.9	8994.9	8994.9
2.5°	9009.4	9019.0	9004.5	8999.7
5°	9023.8	9023.8	9014.2	9014.2
7.5°	9023.8	9023.8	9009.4	8999.7
10°	8985.2	8985.2	8970.8	8961.1
12.5°	8912.8	8912.8	8907.9	8893.5
15°	8821.1	8821.1	8801.7	8787.3
17.5°	8695.5	8705.2	8681.1	8681.1
20°	8560.3	8555.5	8536.2	8526.6
22.5°	8420.4	8410.7	8405.8	8376.9
25°	8270.7	8261.0	8246.5	8232.0
27.5°	8014.8	8009.9	7995.4	7976.2
30°	7623.6	7618.8	7599.5	7599.5
32.5°	7116.7	7111.9	7092.6	7097.5
35°	6590.4	6609.8	6600.1	6580.8
37.5°	6151.1	6165.6	6175.3	6165.6
40°	5784.1	5827.6	5832.4	5842.1
42.5°	5393.1	5451.0	5470.3	5479.9
45°	4924.7	4977.8	5021.3	5011.6
47.5°	4446.7	4485.3	4524.0	4495.0
50°	3988.1	4012.2	4026.7	4026.7
52.5°	3553.6	3553.6	3548.7	3553.6
55°	3056.2	3056.2	3037.0	3046.5
57.5°	2534.8	2544.4	2529.9	2505.8
60°	2051.9	2027.8	2018.1	2003.7
62.5°	1598.2	1598.2	1564.4	1607.7
65°	1197.4	1182.9	1168.4	1163.5
67.5°	869.0	864.3	849.8	844.9
70°	613.1	593.9	589.0	579.3
72.5°	410.4	410.4	400.7	400.7
75°	251.0	226.9	222.1	226.9
77.5°	173.8	168.9	168.9	164.2
80°	115.9	111.0	120.7	106.2
82.5°	72.4	77.3	72.4	77.3
85°	48.3	57.9	53.2	53.2
87.5°	28.9	28.9	28.9	28.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)