

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: P249332

Luminaire Tested: **LD8B175D010 ER8B175840 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249332
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18053.0 lumens
Efficiency: N/A
Efficacy: 101.9 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

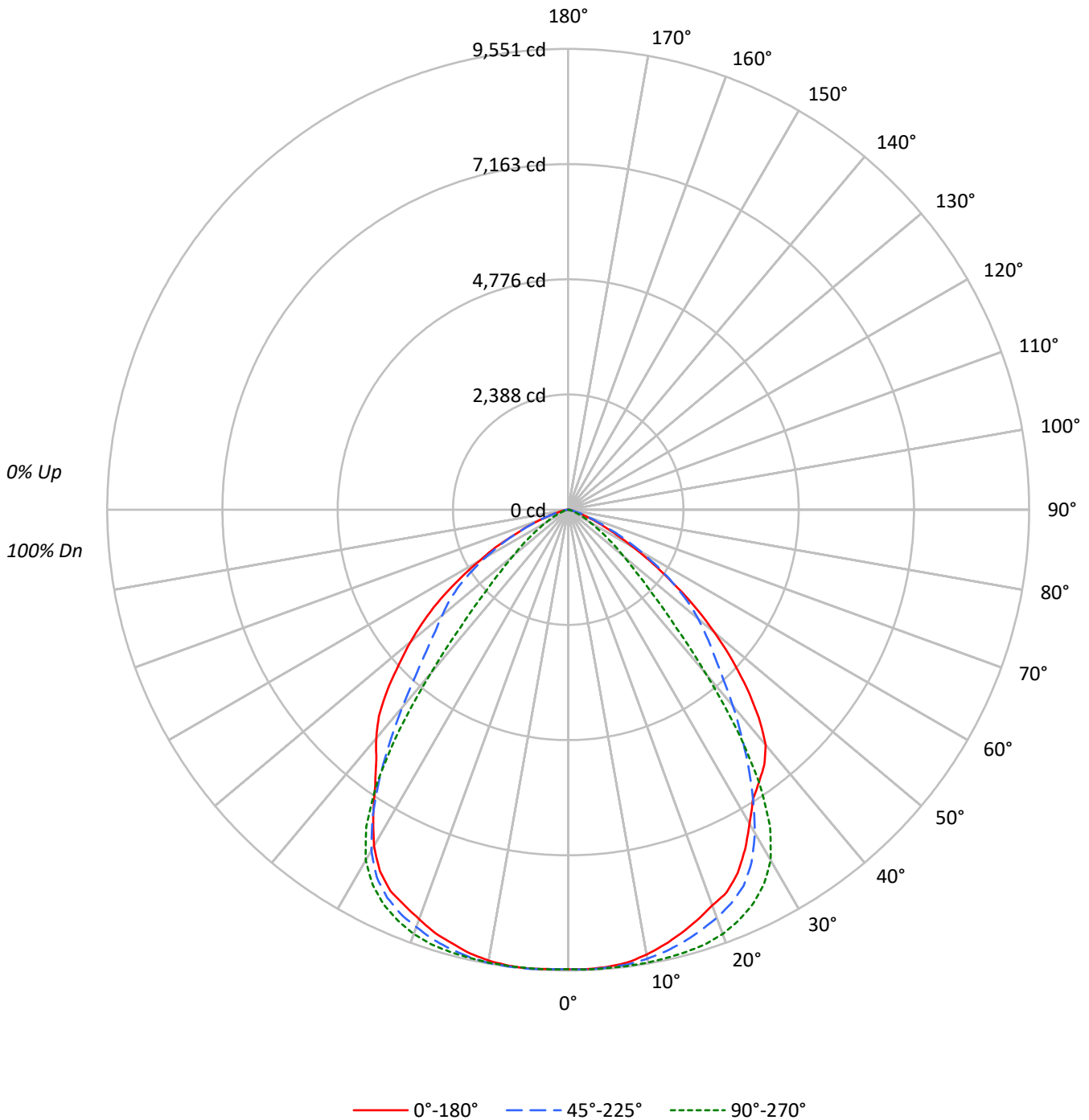
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	293719	293719	293719
5°	294364	295160	295475
10°	293127	298410	297129
15°	289880	302775	297063
20°	286399	307033	296296
25°	282682	307384	296598
30°	267431	298744	286545
35°	259448	259636	262335
40°	256232	178643	249031
45°	228316	107244	231438
50°	189843	71374	204561
55°	142382	49203	173440
60°	96487	32791	130857
65°	58197	21269	89900
70°	32268	11531	55313
75°	14619	4873	28630
80°	12715	5452	19978
85°	14471	7218	19919



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	909.0	5.0
10°-20°	2640.0	14.6
20°-30°	4007.0	22.2
30°-40°	4208.5	23.3
40°-50°	3155.3	17.5
50°-60°	2024.5	11.2
60°-70°	866.0	4.8
70°-80°	204.6	1.1
80°-90°	38.1	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°	7556.0	41.9
0°-40°	11764.5	65.2
0°-60°	16944.3	93.9
0°-90°	18053.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18053.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9525	9525	9525	9525	9525	
5°	9510	9525	9535	9551	9546	903
15°	9080	9270	9484	9423	9305	2561
25°	8308	8600	9034	8871	8717	3796
35°	6892	6508	6897	6815	6969	4326
45°	5236	4279	2459	4157	5307	4010
55°	2648	2648	915	2761	3226	2402
65°	798	941	292	1212	1232	851
75°	123	143	41	245	240	179
85°	41	26	20	41	56	43
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°	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1
2.5°	9530.2	9540.5	9535.4	9535.4	9530.2	9535.4	9535.4	9545.6	9545.6	9535.4	9530.2
5°	9509.7	9520.0	9520.0	9509.7	9509.7	9535.4	9520.0	9530.2	9530.2	9525.1	9525.1
7.5°	9463.8	9463.8	9484.2	9468.9	9468.9	9484.2	9479.1	9489.3	9499.6	9504.7	9504.7
10°	9361.5	9371.7	9376.9	9376.9	9382.0	9397.3	9407.5	9428.0	9438.2	9448.4	9453.6
12.5°	9233.8	9249.0	9254.1	9249.0	9264.4	9284.8	9310.4	9336.0	9351.3	9371.7	9387.1
15°	9080.3	9080.3	9090.5	9105.9	9116.2	9146.8	9172.3	9203.0	9243.9	9269.5	9295.1
17.5°	8911.6	8921.9	8937.1	8937.1	8957.7	9008.7	9024.1	9070.1	9116.2	9141.7	9192.8
20°	8727.6	8737.7	8753.1	8763.4	8788.9	8829.8	8860.5	8901.4	8952.5	8998.6	9049.6
22.5°	8584.4	8564.0	8574.1	8584.4	8610.0	8645.8	8681.6	8732.6	8783.8	8829.8	8881.0
25°	8308.3	8313.4	8328.8	8338.9	8369.7	8400.3	8441.2	8502.5	8548.6	8599.7	8655.9
27.5°	7935.1	7940.2	7965.7	7965.7	7991.2	8042.4	8067.9	8119.1	8180.5	8231.6	8298.1
30°	7510.7	7520.9	7520.9	7541.4	7556.6	7582.3	7607.8	7659.0	7689.6	7735.7	7827.7
32.5°	7122.2	7132.3	7127.2	7122.2	7106.8	7101.6	7096.5	7106.8	7117.0	7132.3	7168.1
35°	6892.1	6866.5	6846.1	6810.3	6769.4	6718.2	6672.2	6610.9	6554.6	6508.5	6457.5
37.5°	6672.2	6667.0	6636.4	6585.2	6503.4	6411.5	6304.1	6171.1	6038.2	5895.0	5757.1
40°	6365.4	6350.0	6324.5	6253.0	6160.9	6048.4	5905.3	5741.7	5526.9	5307.1	5082.1
42.5°	5843.9	5849.0	5818.4	5762.1	5675.2	5567.8	5419.5	5240.6	5010.6	4749.7	4458.4
45°	5235.5	5235.5	5225.2	5179.2	5117.9	5031.0	4918.5	4770.3	4545.3	4279.4	3967.5
47.5°	4601.5	4606.6	4591.2	4581.1	4555.5	4499.3	4417.5	4305.0	4146.5	3890.8	3578.9
50°	3957.3	3957.3	3982.9	3977.7	3977.7	3957.3	3921.6	3855.0	3717.0	3512.5	3221.1
52.5°	3313.1	3323.3	3338.7	3359.1	3384.6	3425.5	3384.6	3354.0	3267.0	3108.5	2858.1
55°	2648.4	2658.7	2684.2	2720.0	2750.7	2791.6	2801.8	2801.8	2755.7	2648.4	2459.2
57.5°	2080.9	2065.6	2086.1	2116.7	2157.6	2198.5	2229.2	2265.0	2259.8	2188.3	2034.9
60°	1564.5	1569.6	1584.9	1615.7	1646.3	1682.1	1723.0	1753.7	1769.1	1733.3	1636.1
62.5°	1140.2	1140.2	1160.6	1191.2	1206.6	1257.8	1283.3	1298.7	1313.9	1308.8	1247.5
65°	797.6	807.8	818.0	833.4	848.7	879.3	894.7	925.4	935.6	940.8	894.7
67.5°	562.5	547.1	557.3	567.5	582.8	603.4	634.0	634.0	649.3	649.3	618.6
70°	357.9	357.9	363.0	378.3	388.6	393.7	404.0	414.1	429.5	424.3	424.3
72.5°	240.3	235.2	240.3	245.4	250.6	265.8	265.8	271.0	281.2	286.4	265.8
75°	122.7	127.9	138.0	133.0	148.2	138.0	143.1	158.5	153.4	143.1	143.1
77.5°	102.2	102.2	102.2	97.2	107.3	107.3	102.2	112.5	107.3	107.3	102.2
80°	71.6	76.7	71.6	66.4	71.6	66.4	66.4	66.4	66.4	66.4	61.3
82.5°	56.3	46.0	51.2	46.0	51.2	51.2	46.0	40.9	40.9	46.0	40.9
85°	40.9	30.7	35.8	35.8	30.7	30.7	30.7	30.7	30.7	25.5	25.5
87.5°	25.5	15.4	15.4	15.4	20.4	20.4	20.4	15.4	20.4	20.4	10.3
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°	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1
2.5°	9540.5	9535.4	9545.6	9540.5	9540.5	9535.4	9540.5	9535.4	9545.6	9525.1	9530.2
5°	9540.5	9530.2	9535.4	9540.5	9545.6	9535.4	9535.4	9535.4	9545.6	9535.4	9540.5
7.5°	9520.0	9514.9	9530.2	9540.5	9535.4	9530.2	9540.5	9535.4	9545.6	9540.5	9550.6
10°	9479.1	9484.2	9494.5	9509.7	9514.9	9520.0	9530.2	9530.2	9545.6	9525.1	9535.4
12.5°	9417.8	9438.2	9463.8	9474.0	9494.5	9494.5	9504.7	9509.7	9520.0	9514.9	9530.2
15°	9341.1	9366.6	9397.3	9422.9	9448.4	9463.8	9479.1	9484.2	9499.6	9484.2	9489.3
17.5°	9249.0	9279.7	9325.7	9356.4	9397.3	9412.7	9433.0	9443.3	9458.7	9448.4	9453.6
20°	9121.2	9157.1	9208.1	9254.1	9279.7	9315.4	9341.1	9356.4	9366.6	9356.4	9361.5
22.5°	8942.3	8993.4	9059.9	9095.6	9146.8	9177.5	9182.6	9218.4	9243.9	9218.4	9228.6
25°	8732.6	8783.8	8834.9	8911.6	8957.7	8993.4	9029.2	9034.3	9059.9	9054.7	9049.6
27.5°	8384.9	8451.5	8538.3	8599.7	8661.0	8717.3	8758.2	8768.4	8794.0	8783.8	8788.9
30°	7909.4	7981.1	8062.9	8160.0	8247.0	8303.1	8354.3	8390.1	8415.6	8400.3	8395.2
32.5°	7234.6	7306.2	7393.1	7490.2	7592.5	7674.2	7735.7	7781.7	7812.4	7802.1	7776.6
35°	6462.6	6483.0	6539.3	6616.0	6702.8	6789.8	6846.1	6897.1	6932.9	6943.1	6943.1
37.5°	5670.1	5603.7	5562.8	5562.8	5613.8	5649.6	5700.8	5731.4	5787.7	5808.1	5823.5
40°	4903.1	4749.7	4606.6	4499.3	4427.7	4422.6	4422.6	4437.9	4489.0	4555.5	4616.9
42.5°	4218.1	3972.6	3752.8	3553.4	3410.3	3328.5	3292.7	3297.8	3338.7	3400.0	3502.2
45°	3671.0	3364.2	3088.1	2847.8	2653.5	2525.7	2464.4	2459.2	2489.9	2561.5	2674.0
47.5°	3246.6	2919.4	2607.5	2331.4	2121.8	1983.7	1912.2	1891.8	1912.2	1978.6	2111.6
50°	2893.9	2556.5	2234.3	1948.0	1723.0	1579.9	1513.4	1487.8	1513.4	1569.6	1702.5
52.5°	2566.6	2218.9	1917.3	1641.2	1400.9	1278.2	1206.6	1191.2	1206.6	1273.0	1380.5
55°	2188.3	1891.8	1595.2	1319.1	1109.5	986.8	930.5	915.2	930.5	991.9	1104.4
57.5°	1815.1	1559.4	1298.7	1048.1	869.2	761.7	710.7	690.2	726.0	766.9	899.9
60°	1467.3	1262.9	1043.0	823.2	674.9	577.7	536.8	531.7	541.9	593.1	685.1
62.5°	1150.4	981.7	807.8	628.9	506.2	465.3	414.1	409.1	419.2	449.9	521.5
65°	828.3	721.0	588.0	460.1	363.0	306.8	286.4	291.5	301.6	322.1	388.6
67.5°	577.7	501.0	409.1	322.1	250.6	224.9	204.5	199.4	204.5	240.3	276.1
70°	388.6	342.5	276.1	245.4	173.9	138.0	143.1	127.9	148.2	148.2	178.9
72.5°	255.6	224.9	184.0	143.1	122.7	97.2	97.2	92.1	102.2	107.3	133.0
75°	133.0	102.2	102.2	71.6	51.2	25.5	46.0	40.9	35.8	40.9	51.2
77.5°	92.1	76.7	71.6	56.3	51.2	40.9	40.9	40.9	40.9	46.0	51.2
80°	56.3	56.3	40.9	35.8	30.7	25.5	30.7	30.7	30.7	30.7	35.8
82.5°	35.8	30.7	30.7	25.5	25.5	20.4	20.4	20.4	20.4	20.4	30.7
85°	30.7	20.4	20.4	15.4	20.4	35.8	15.4	20.4	20.4	20.4	15.4
87.5°	10.3	15.4	15.4	15.4	10.3	5.1	10.3	15.4	15.4	25.5	20.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1	9525.1
2.5°	9540.5	9545.6	9545.6	9540.5	9540.5	9530.2	9550.6	9535.4	9540.5	9560.9	9545.6
5°	9550.6	9555.8	9555.8	9550.6	9550.6	9550.6	9555.8	9555.8	9550.6	9545.6	9555.8
7.5°	9571.2	9566.0	9566.0	9555.8	9555.8	9545.6	9555.8	9540.5	9550.6	9540.5	9555.8
10°	9545.6	9550.6	9545.6	9540.5	9540.5	9535.4	9535.4	9520.0	9525.1	9509.7	9520.0
12.5°	9530.2	9525.1	9525.1	9514.9	9504.7	9494.5	9489.3	9474.0	9474.0	9438.2	9453.6
15°	9489.3	9494.5	9479.1	9458.7	9448.4	9422.9	9412.7	9392.1	9371.7	9346.2	9351.3
17.5°	9453.6	9438.2	9417.8	9397.3	9356.4	9336.0	9315.4	9284.8	9274.5	9243.9	9233.8
20°	9346.2	9336.0	9310.4	9274.5	9249.0	9203.0	9182.6	9151.9	9126.3	9095.6	9080.3
22.5°	9208.1	9197.9	9167.2	9131.4	9090.5	9070.1	9049.6	8993.4	8967.8	8937.1	8932.0
25°	9034.3	9019.0	8988.3	8947.4	8926.9	8870.7	8850.2	8809.3	8799.2	8768.4	8763.4
27.5°	8768.4	8748.0	8712.2	8661.0	8625.3	8589.5	8569.1	8538.3	8528.2	8497.4	8492.4
30°	8369.7	8344.0	8272.5	8252.1	8190.7	8154.9	8154.9	8114.0	8119.1	8098.7	8098.7
32.5°	7740.8	7699.9	7643.6	7602.7	7561.8	7541.4	7541.4	7526.0	7536.3	7536.3	7546.5
35°	6907.4	6851.2	6820.4	6794.9	6794.9	6815.3	6876.7	6892.1	6922.8	6948.3	6968.8
37.5°	5838.7	5833.7	5869.5	5900.2	5976.9	6063.8	6171.1	6263.2	6350.0	6411.5	6472.8
40°	4683.3	4811.2	4913.4	5056.6	5174.1	5342.8	5537.1	5695.6	5843.9	5951.3	6063.8
42.5°	3655.6	3819.2	4034.0	4243.6	4453.2	4683.3	4939.0	5158.8	5353.1	5501.3	5618.9
45°	2847.8	3072.7	3333.6	3599.4	3870.4	4156.8	4422.6	4647.5	4852.1	5005.4	5123.0
47.5°	2295.6	2541.1	2837.6	3129.0	3435.8	3737.4	4034.0	4228.3	4397.0	4519.7	4627.1
50°	1896.8	2157.6	2469.5	2801.8	3108.5	3410.3	3665.9	3855.0	3993.1	4100.5	4166.9
52.5°	1584.9	1861.0	2193.4	2525.7	2832.4	3108.5	3338.7	3481.8	3594.3	3671.0	3732.3
55°	1308.8	1574.8	1886.7	2198.5	2500.2	2760.9	2950.0	3057.5	3144.3	3190.3	3226.1
57.5°	1068.6	1313.9	1600.3	1886.7	2147.4	2362.2	2510.4	2617.8	2658.7	2694.4	2689.3
60°	838.6	1068.6	1329.3	1574.8	1799.7	1973.5	2080.9	2142.2	2172.9	2188.3	2178.0
62.5°	659.5	869.2	1068.6	1283.3	1446.9	1595.2	1697.5	1697.5	1712.8	1717.9	1733.3
65°	490.8	649.3	823.2	981.7	1114.5	1211.7	1268.0	1283.3	1303.8	1298.7	1288.4
67.5°	363.0	480.6	608.4	726.0	818.0	879.3	920.3	956.1	951.0	940.8	935.6
70°	250.6	327.3	439.7	511.3	577.7	639.1	649.3	654.4	659.5	664.7	654.4
72.5°	173.9	230.1	291.5	352.8	393.7	419.2	444.9	449.9	449.9	449.9	444.9
75°	86.9	117.6	173.9	199.4	235.2	245.4	265.8	265.8	281.2	260.7	255.6
77.5°	76.7	92.1	122.7	143.1	158.5	173.9	178.9	194.3	189.2	178.9	184.0
80°	46.0	56.3	76.7	86.9	107.3	112.5	117.6	122.7	117.6	122.7	122.7
82.5°	35.8	40.9	51.2	51.2	66.4	66.4	71.6	71.6	76.7	76.7	76.7
85°	20.4	35.8	30.7	61.3	40.9	40.9	51.2	61.3	51.2	51.2	61.3
87.5°	20.4	20.4	15.4	20.4	20.4	20.4	25.5	30.7	30.7	35.8	30.7
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: P249332

CATALOG NUMBER: LD8B175D010 ER8B175840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9525.1	9525.1	9525.1	9525.1
2.5°	9540.5	9550.6	9535.4	9530.2
5°	9555.8	9555.8	9545.6	9545.6
7.5°	9555.8	9555.8	9540.5	9530.2
10°	9514.9	9514.9	9499.6	9489.3
12.5°	9438.2	9438.2	9433.0	9417.8
15°	9341.1	9341.1	9320.6	9305.3
17.5°	9208.1	9218.4	9192.8	9192.8
20°	9065.0	9059.9	9039.5	9029.2
22.5°	8916.7	8906.5	8901.4	8870.7
25°	8758.2	8748.0	8732.6	8717.3
27.5°	8487.3	8482.1	8466.8	8446.4
30°	8073.1	8067.9	8047.5	8047.5
32.5°	7536.3	7531.1	7510.7	7515.9
35°	6978.9	6999.4	6989.2	6968.8
37.5°	6513.7	6529.1	6539.3	6529.1
40°	6125.1	6171.1	6176.3	6186.5
42.5°	5711.0	5772.3	5792.8	5803.0
45°	5215.0	5271.3	5317.3	5307.1
47.5°	4708.8	4749.7	4790.6	4760.0
50°	4223.2	4248.7	4264.1	4264.1
52.5°	3763.1	3763.1	3757.9	3763.1
55°	3236.4	3236.4	3216.0	3226.1
57.5°	2684.2	2694.4	2679.1	2653.5
60°	2172.9	2147.4	2137.1	2121.8
62.5°	1692.4	1692.4	1656.6	1702.5
65°	1268.0	1252.6	1237.3	1232.1
67.5°	920.3	915.2	899.9	894.7
70°	649.3	628.9	623.8	613.5
72.5°	434.6	434.6	424.3	424.3
75°	265.8	240.3	235.2	240.3
77.5°	184.0	178.9	178.9	173.9
80°	122.7	117.6	127.9	112.5
82.5°	76.7	81.8	76.7	81.8
85°	51.2	61.3	56.3	56.3
87.5°	30.7	30.7	30.7	30.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)