

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: P249386

Luminaire Tested: **LD8B175D010 ER8B175950 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249386
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 ER8B175950 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16757.0 lumens
Efficiency: N/A
Efficacy: 94.6 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

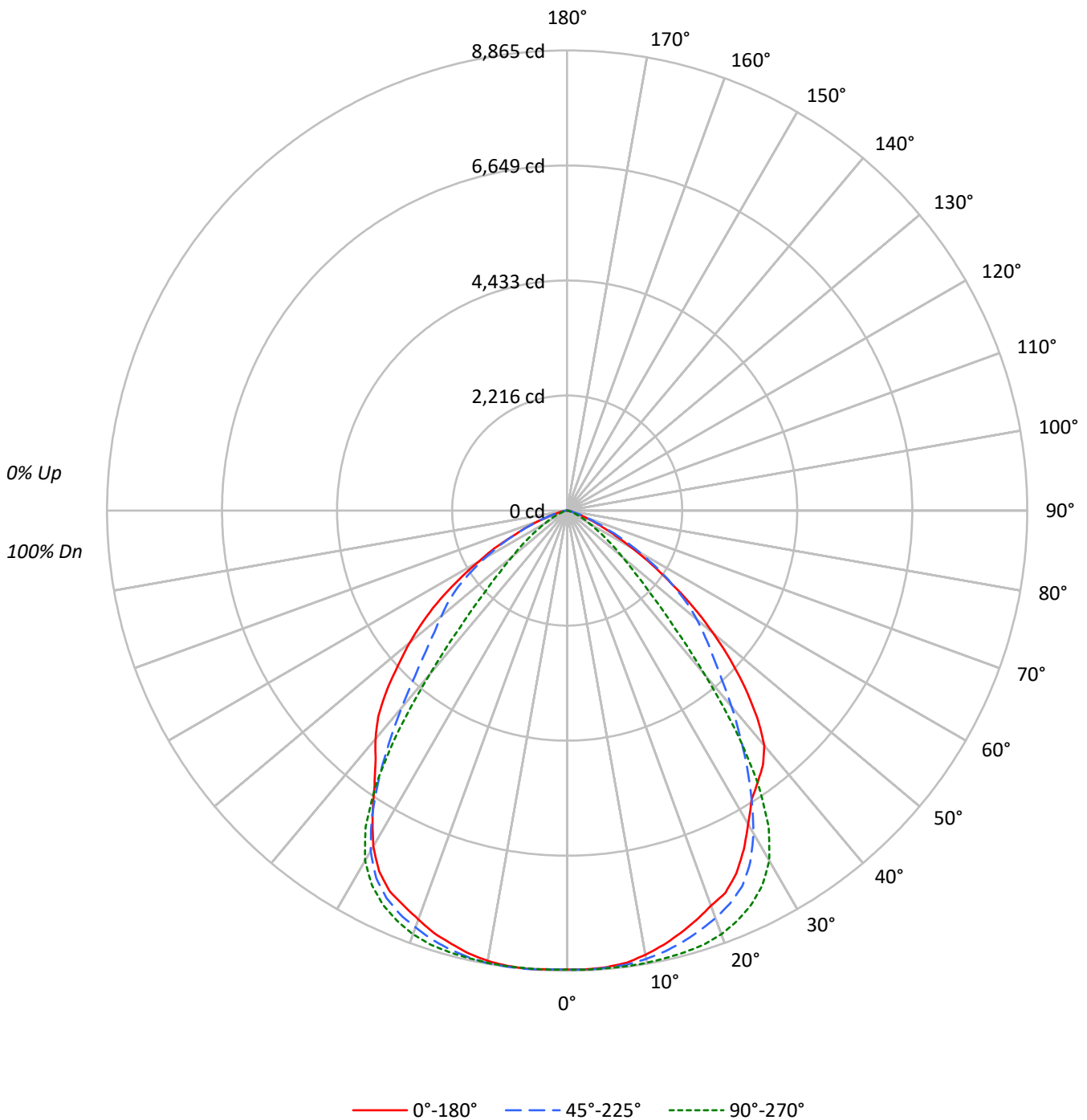
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	272633	272633	272633
5°	273232	273969	274266
10°	272083	276989	275799
15°	269069	281041	275738
20°	265837	284991	275025
25°	262387	285319	275306
30°	248232	277298	265975
35°	240821	240998	243501
40°	237840	165818	231154
45°	211927	99547	214823
50°	176214	66250	189876
55°	132162	45670	160989
60°	89561	30435	121464
65°	54023	19744	83450
70°	29951	10702	51346
75°	13570	4527	26581
80°	11791	5061	18539
85°	13445	6687	18504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	843.8	5.0
10°-20°	2450.5	14.6
20°-30°	3719.3	22.2
30°-40°	3906.4	23.3
40°-50°	2928.8	17.5
50°-60°	1879.2	11.2
60°-70°	803.9	4.8
70°-80°	189.9	1.1
80°-90°	35.3	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°	7013.6	41.9
0°-40°	10920.0	65.2
0°-60°	15727.9	93.9
0°-90°	16757.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16757.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8841	8841	8841	8841	8841	
5°	8827	8841	8851	8865	8860	838
15°	8428	8604	8803	8746	8637	2377
25°	7712	7982	8386	8234	8092	3523
35°	6397	6041	6402	6326	6468	4015
45°	4860	3972	2283	3858	4926	3722
55°	2458	2458	850	2563	2994	2230
65°	740	873	271	1125	1144	790
75°	114	133	38	228	223	166
85°	38	24	19	38	52	40
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°	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3
2.5°	8846.1	8855.6	8850.8	8850.8	8846.1	8850.8	8850.8	8860.4	8860.4	8850.8	8846.1
5°	8827.0	8836.6	8836.6	8827.0	8827.0	8850.8	8836.6	8846.1	8846.1	8841.3	8841.3
7.5°	8784.4	8784.4	8803.4	8789.2	8789.2	8803.4	8798.6	8808.1	8817.6	8822.4	8822.4
10°	8689.4	8699.0	8703.7	8703.7	8708.5	8722.6	8732.2	8751.2	8760.6	8770.1	8774.9
12.5°	8570.9	8585.0	8589.8	8585.0	8599.3	8618.3	8642.1	8665.7	8680.0	8699.0	8713.2
15°	8428.4	8428.4	8437.9	8452.2	8461.7	8490.2	8513.9	8542.3	8580.3	8604.1	8627.8
17.5°	8271.9	8281.4	8295.6	8295.6	8314.6	8362.0	8376.3	8419.0	8461.7	8485.4	8532.9
20°	8101.0	8110.5	8124.7	8134.3	8158.0	8195.9	8224.4	8262.3	8309.8	8352.6	8399.9
22.5°	7968.1	7949.2	7958.6	7968.1	7991.9	8025.1	8058.3	8105.7	8153.2	8195.9	8243.4
25°	7711.8	7716.6	7730.9	7740.3	7768.8	7797.3	7835.3	7892.2	7934.9	7982.4	8034.5
27.5°	7365.4	7370.2	7393.9	7393.9	7417.6	7465.1	7488.7	7536.2	7593.3	7640.6	7702.4
30°	6971.5	6981.0	6981.0	7000.0	7014.2	7038.0	7061.7	7109.1	7137.6	7180.3	7265.8
32.5°	6610.9	6620.3	6615.5	6610.9	6596.6	6591.8	6587.1	6596.6	6606.1	6620.3	6653.5
35°	6397.3	6373.5	6354.6	6321.4	6283.4	6235.9	6193.2	6136.3	6084.0	6041.3	5993.9
37.5°	6193.2	6188.4	6160.0	6112.5	6036.5	5951.2	5851.6	5728.1	5604.7	5471.8	5343.8
40°	5908.5	5894.2	5870.5	5804.1	5718.6	5614.2	5481.4	5329.5	5130.1	4926.1	4717.3
42.5°	5424.4	5429.1	5400.7	5348.4	5267.8	5168.1	5030.5	4864.4	4650.9	4408.8	4138.3
45°	4859.7	4859.7	4850.1	4807.4	4750.5	4669.8	4565.4	4427.8	4219.0	3972.1	3682.7
47.5°	4271.2	4275.9	4261.6	4252.2	4228.4	4176.3	4100.3	3995.9	3848.8	3611.5	3322.0
50°	3673.2	3673.2	3696.9	3692.2	3692.2	3673.2	3640.0	3578.3	3450.2	3260.3	2989.9
52.5°	3075.2	3084.7	3099.0	3118.0	3141.7	3179.6	3141.7	3113.2	3032.5	2885.4	2652.9
55°	2458.3	2467.8	2491.5	2524.7	2553.3	2591.2	2600.6	2600.6	2557.9	2458.3	2282.7
57.5°	1931.6	1917.3	1936.3	1964.8	2002.7	2040.7	2069.2	2102.4	2097.6	2031.2	1888.8
60°	1452.2	1457.0	1471.1	1499.7	1528.1	1561.4	1599.3	1627.8	1642.1	1608.9	1518.6
62.5°	1058.3	1058.3	1077.3	1105.7	1120.0	1167.5	1191.2	1205.4	1219.6	1214.9	1158.0
65°	740.4	749.8	759.3	773.6	787.8	816.2	830.5	858.9	868.5	873.2	830.5
67.5°	522.1	507.8	517.3	526.7	541.0	560.0	588.5	588.5	602.7	602.7	574.2
70°	332.2	332.2	337.0	351.2	360.7	365.4	375.0	384.4	398.6	393.9	393.9
72.5°	223.1	218.3	223.1	227.8	232.6	246.8	246.8	251.5	261.0	265.8	246.8
75°	113.9	118.7	128.1	123.4	137.6	128.1	132.8	147.1	142.4	132.8	132.8
77.5°	94.9	94.9	94.9	90.2	99.6	99.6	94.9	104.4	99.6	99.6	94.9
80°	66.4	71.2	66.4	61.7	66.4	61.7	61.7	61.7	61.7	61.7	56.9
82.5°	52.3	42.7	47.5	42.7	47.5	47.5	42.7	38.0	38.0	42.7	38.0
85°	38.0	28.5	33.2	33.2	28.5	28.5	28.5	28.5	28.5	23.7	23.7
87.5°	23.7	14.3	14.3	14.3	18.9	18.9	18.9	14.3	18.9	18.9	9.5
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3
2.5°	8855.6	8850.8	8860.4	8855.6	8855.6	8850.8	8855.6	8850.8	8860.4	8841.3	8846.1
5°	8855.6	8846.1	8850.8	8855.6	8860.4	8850.8	8850.8	8850.8	8860.4	8850.8	8855.6
7.5°	8836.6	8831.8	8846.1	8855.6	8850.8	8846.1	8855.6	8850.8	8860.4	8855.6	8865.0
10°	8798.6	8803.4	8812.9	8827.0	8831.8	8836.6	8846.1	8846.1	8860.4	8841.3	8850.8
12.5°	8741.7	8760.6	8784.4	8793.8	8812.9	8812.9	8822.4	8827.0	8836.6	8831.8	8846.1
15°	8670.5	8694.2	8722.6	8746.5	8770.1	8784.4	8798.6	8803.4	8817.6	8803.4	8808.1
17.5°	8585.0	8613.5	8656.2	8684.7	8722.6	8736.9	8755.9	8765.4	8779.7	8770.1	8774.9
20°	8466.4	8499.7	8547.1	8589.8	8613.5	8646.7	8670.5	8684.7	8694.2	8684.7	8689.4
22.5°	8300.3	8347.8	8409.5	8442.7	8490.2	8518.6	8523.4	8556.6	8580.3	8556.6	8566.1
25°	8105.7	8153.2	8200.7	8271.9	8314.6	8347.8	8381.0	8385.8	8409.5	8404.7	8399.9
27.5°	7783.0	7844.8	7925.4	7982.4	8039.3	8091.5	8129.5	8138.9	8162.7	8153.2	8158.0
30°	7341.6	7408.2	7484.1	7574.2	7654.9	7707.1	7754.5	7787.8	7811.4	7797.3	7792.5
32.5°	6715.3	6781.7	6862.4	6952.5	7047.5	7123.3	7180.3	7223.1	7251.5	7242.0	7218.3
35°	5998.7	6017.6	6069.9	6141.0	6221.6	6302.3	6354.6	6402.0	6435.2	6444.7	6444.7
37.5°	5263.1	5201.4	5163.4	5163.4	5210.8	5244.0	5291.5	5320.0	5372.2	5391.1	5405.4
40°	4551.1	4408.8	4275.9	4176.3	4109.9	4105.1	4105.1	4119.3	4166.8	4228.4	4285.4
42.5°	3915.2	3687.4	3483.4	3298.3	3165.5	3089.5	3056.3	3061.1	3099.0	3155.9	3250.8
45°	3407.4	3122.7	2866.4	2643.4	2463.0	2344.4	2287.5	2282.7	2311.2	2377.6	2482.1
47.5°	3013.6	2709.8	2420.3	2164.0	1969.5	1841.3	1774.9	1756.0	1774.9	1836.6	1960.0
50°	2686.1	2372.9	2073.9	1808.1	1599.3	1466.5	1404.7	1381.0	1404.7	1457.0	1580.3
52.5°	2382.3	2059.6	1779.7	1523.4	1300.3	1186.4	1120.0	1105.7	1120.0	1181.6	1281.4
55°	2031.2	1756.0	1480.7	1224.4	1029.9	916.0	863.7	849.5	863.7	920.7	1025.1
57.5°	1684.8	1447.4	1205.4	972.9	806.8	707.1	659.7	640.6	673.9	711.8	835.3
60°	1362.0	1172.2	968.1	764.1	626.5	536.2	498.3	493.5	503.0	550.5	635.9
62.5°	1067.8	911.2	749.8	583.7	469.8	431.9	384.4	379.7	389.1	417.6	484.1
65°	768.8	669.2	545.8	427.1	337.0	284.7	265.8	270.6	280.0	299.0	360.7
67.5°	536.2	465.1	379.7	299.0	232.6	208.8	189.9	185.1	189.9	223.1	256.3
70°	360.7	317.9	256.3	227.8	161.4	128.1	132.8	118.7	137.6	137.6	166.1
72.5°	237.2	208.8	170.8	132.8	113.9	90.2	90.2	85.5	94.9	99.6	123.4
75°	123.4	94.9	94.9	66.4	47.5	23.7	42.7	38.0	33.2	38.0	47.5
77.5°	85.5	71.2	66.4	52.3	47.5	38.0	38.0	38.0	38.0	42.7	47.5
80°	52.3	52.3	38.0	33.2	28.5	23.7	28.5	28.5	28.5	28.5	33.2
82.5°	33.2	28.5	28.5	23.7	23.7	18.9	18.9	18.9	18.9	18.9	28.5
85°	28.5	18.9	18.9	14.3	18.9	33.2	14.3	18.9	18.9	18.9	14.3
87.5°	9.5	14.3	14.3	14.3	9.5	4.8	9.5	14.3	14.3	23.7	18.9
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°	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3	8841.3
2.5°	8855.6	8860.4	8860.4	8855.6	8855.6	8846.1	8865.0	8850.8	8855.6	8874.5	8860.4
5°	8865.0	8869.8	8869.8	8865.0	8865.0	8865.0	8869.8	8869.8	8865.0	8860.4	8869.8
7.5°	8884.1	8879.3	8879.3	8869.8	8869.8	8860.4	8869.8	8855.6	8865.0	8855.6	8869.8
10°	8860.4	8865.0	8860.4	8855.6	8855.6	8850.8	8850.8	8836.6	8841.3	8827.0	8836.6
12.5°	8846.1	8841.3	8841.3	8831.8	8822.4	8812.9	8808.1	8793.8	8793.8	8760.6	8774.9
15°	8808.1	8812.9	8798.6	8779.7	8770.1	8746.5	8736.9	8717.9	8699.0	8675.3	8680.0
17.5°	8774.9	8760.6	8741.7	8722.6	8684.7	8665.7	8646.7	8618.3	8608.7	8580.3	8570.9
20°	8675.3	8665.7	8642.1	8608.7	8585.0	8542.3	8523.4	8494.9	8471.1	8442.7	8428.4
22.5°	8547.1	8537.6	8509.1	8475.9	8437.9	8419.0	8399.9	8347.8	8324.0	8295.6	8290.8
25°	8385.8	8371.5	8343.0	8305.1	8286.0	8233.9	8214.9	8176.9	8167.5	8138.9	8134.3
27.5°	8138.9	8120.0	8086.8	8039.3	8006.1	7972.9	7953.9	7925.4	7916.0	7887.4	7882.7
30°	7768.8	7745.0	7678.6	7659.7	7602.7	7569.5	7569.5	7531.5	7536.2	7517.3	7517.3
32.5°	7185.1	7147.1	7094.9	7056.9	7018.9	7000.0	7000.0	6985.7	6995.2	6995.2	7004.8
35°	6411.5	6359.4	6330.8	6307.1	6307.1	6326.0	6383.0	6397.3	6425.8	6449.5	6468.5
37.5°	5419.6	5414.9	5448.2	5476.6	5547.8	5628.5	5728.1	5813.6	5894.2	5951.2	6008.1
40°	4347.1	4465.8	4560.6	4693.6	4802.6	4959.3	5139.6	5286.7	5424.4	5524.1	5628.5
42.5°	3393.2	3545.1	3744.4	3938.9	4133.6	4347.1	4584.4	4788.5	4968.8	5106.4	5215.6
45°	2643.4	2852.2	3094.3	3341.0	3592.5	3858.3	4105.1	4313.9	4503.7	4646.1	4755.3
47.5°	2130.8	2358.6	2633.9	2904.4	3189.1	3469.1	3744.4	3924.8	4081.3	4195.2	4295.0
50°	1760.6	2002.7	2292.2	2600.6	2885.4	3165.5	3402.7	3578.3	3706.5	3806.1	3867.8
52.5°	1471.1	1727.4	2035.9	2344.4	2629.1	2885.4	3099.0	3231.9	3336.3	3407.4	3464.4
55°	1214.9	1461.7	1751.2	2040.7	2320.7	2562.7	2738.2	2838.0	2918.6	2961.3	2994.5
57.5°	991.9	1219.6	1485.4	1751.2	1993.2	2192.6	2330.2	2429.8	2467.8	2501.0	2496.2
60°	778.4	991.9	1233.9	1461.7	1670.5	1831.8	1931.6	1988.5	2016.9	2031.2	2021.7
62.5°	612.2	806.8	991.9	1191.2	1343.1	1480.7	1575.6	1575.6	1589.8	1594.6	1608.9
65°	455.5	602.7	764.1	911.2	1034.5	1124.7	1177.0	1191.2	1210.2	1205.4	1195.9
67.5°	337.0	446.1	564.7	673.9	759.3	816.2	854.2	887.5	882.7	873.2	868.5
70°	232.6	303.8	408.2	474.6	536.2	593.3	602.7	607.4	612.2	616.9	607.4
72.5°	161.4	213.5	270.6	327.5	365.4	389.1	412.9	417.6	417.6	417.6	412.9
75°	80.7	109.2	161.4	185.1	218.3	227.8	246.8	246.8	261.0	242.0	237.2
77.5°	71.2	85.5	113.9	132.8	147.1	161.4	166.1	180.3	175.6	166.1	170.8
80°	42.7	52.3	71.2	80.7	99.6	104.4	109.2	113.9	109.2	113.9	113.9
82.5°	33.2	38.0	47.5	47.5	61.7	61.7	66.4	66.4	71.2	71.2	71.2
85°	18.9	33.2	28.5	56.9	38.0	38.0	47.5	56.9	47.5	47.5	56.9
87.5°	18.9	18.9	14.3	18.9	18.9	18.9	23.7	28.5	28.5	33.2	28.5
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: P249386

CATALOG NUMBER: LD8B175D010 ER8B175950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8841.3	8841.3	8841.3	8841.3
2.5°	8855.6	8865.0	8850.8	8846.1
5°	8869.8	8869.8	8860.4	8860.4
7.5°	8869.8	8869.8	8855.6	8846.1
10°	8831.8	8831.8	8817.6	8808.1
12.5°	8760.6	8760.6	8755.9	8741.7
15°	8670.5	8670.5	8651.5	8637.3
17.5°	8547.1	8556.6	8532.9	8532.9
20°	8414.2	8409.5	8390.5	8381.0
22.5°	8276.6	8267.1	8262.3	8233.9
25°	8129.5	8120.0	8105.7	8091.5
27.5°	7878.0	7873.2	7858.9	7840.0
30°	7493.5	7488.7	7469.8	7469.8
32.5°	6995.2	6990.5	6971.5	6976.3
35°	6477.9	6497.0	6487.4	6468.5
37.5°	6046.1	6060.3	6069.9	6060.3
40°	5685.4	5728.1	5732.9	5742.4
42.5°	5301.0	5357.9	5377.0	5386.4
45°	4840.6	4892.9	4935.6	4926.1
47.5°	4370.8	4408.8	4446.7	4418.3
50°	3920.0	3943.7	3958.0	3958.0
52.5°	3492.9	3492.9	3488.2	3492.9
55°	3004.0	3004.0	2985.1	2994.5
57.5°	2491.5	2501.0	2486.7	2463.0
60°	2016.9	1993.2	1983.7	1969.5
62.5°	1570.9	1570.9	1537.7	1580.3
65°	1177.0	1162.7	1148.4	1143.7
67.5°	854.2	849.5	835.3	830.5
70°	602.7	583.7	579.0	569.5
72.5°	403.4	403.4	393.9	393.9
75°	246.8	223.1	218.3	223.1
77.5°	170.8	166.1	166.1	161.4
80°	113.9	109.2	118.7	104.4
82.5°	71.2	75.9	71.2	75.9
85°	47.5	56.9	52.3	52.3
87.5°	28.5	28.5	28.5	28.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)