

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: P246047

Luminaire Tested: **LD8B50D010 ER8B50835 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246047  
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: LD8B50D010 ER8B50835 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 3500 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5456.0 lumens  
Efficiency: N/A  
Efficacy: 102.9 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

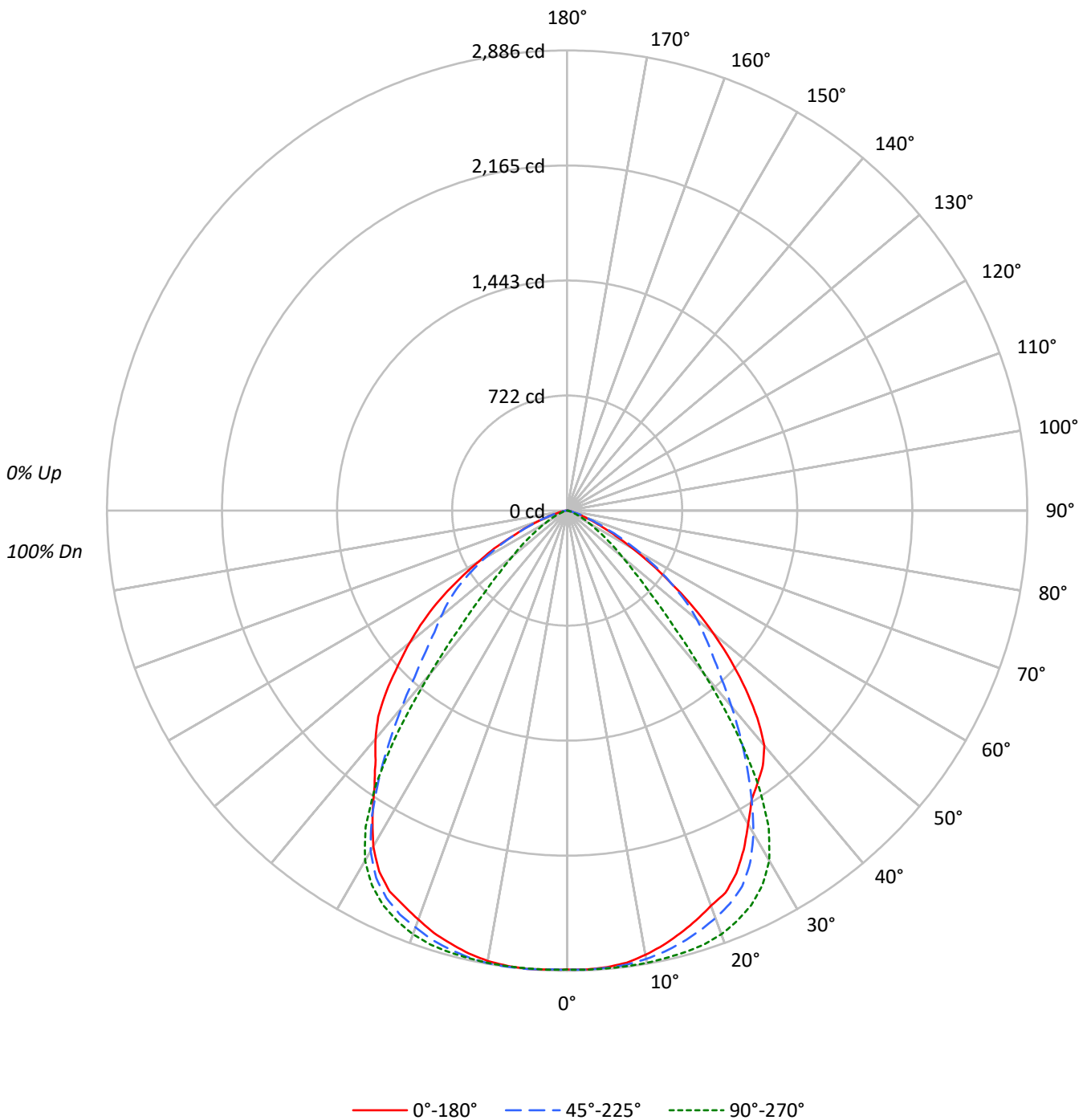
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	88768	88768	88768
5°	88962	89204	89299
10°	88588	90185	89800
15°	87606	91504	89780
20°	86557	92792	89546
25°	85431	92899	89640
30°	80824	90288	86599
35°	78409	78469	79282
40°	77441	53989	75263
45°	69003	32410	69945
50°	57375	21573	61823
55°	43031	14870	52417
60°	29159	9911	39551
65°	17592	6428	27172
70°	9755	3480	16716
75°	4420	1477	8650
80°	3836	1651	6038
85°	4387	2194	6015



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.7	5.0
10°-20°	797.9	14.6
20°-30°	1211.0	22.2
30°-40°	1271.9	23.3
40°-50°	953.6	17.5
50°-60°	611.8	11.2
60°-70°	261.7	4.8
70°-80°	61.8	1.1
80°-90°	11.5	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°	2283.6	41.9
0°-40°	3555.5	65.2
0°-60°	5120.9	93.9
0°-90°	5456.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5456.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2879	2879	2879	2879	2879	
5°	2874	2879	2882	2886	2885	273
15°	2744	2801	2866	2848	2812	774
25°	2511	2599	2730	2681	2635	1147
35°	2083	1967	2084	2060	2106	1307
45°	1582	1293	743	1256	1604	1212
55°	800	800	277	834	975	726
65°	241	284	88	366	372	257
75°	37	43	12	74	73	54
85°	12	8	6	12	17	13
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°	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7
2.5°	2880.2	2883.3	2881.8	2881.8	2880.2	2881.8	2881.8	2884.9	2884.9	2881.8	2880.2
5°	2874.0	2877.1	2877.1	2874.0	2874.0	2881.8	2877.1	2880.2	2880.2	2878.7	2878.7
7.5°	2860.2	2860.2	2866.3	2861.7	2861.7	2866.3	2864.8	2867.9	2871.0	2872.5	2872.5
10°	2829.2	2832.3	2833.9	2833.9	2835.4	2840.1	2843.2	2849.4	2852.4	2855.5	2857.1
12.5°	2790.6	2795.2	2796.8	2795.2	2799.9	2806.1	2813.8	2821.5	2826.2	2832.3	2837.0
15°	2744.2	2744.2	2747.3	2752.0	2755.1	2764.4	2772.1	2781.3	2793.7	2801.4	2809.2
17.5°	2693.3	2696.4	2701.0	2701.0	2707.2	2722.6	2727.3	2741.2	2755.1	2762.8	2778.3
20°	2637.7	2640.7	2645.4	2648.5	2656.2	2668.6	2677.8	2690.2	2705.6	2719.6	2735.0
22.5°	2594.4	2588.2	2591.3	2594.4	2602.1	2612.9	2623.8	2639.2	2654.6	2668.6	2684.0
25°	2510.9	2512.5	2517.1	2520.2	2529.5	2538.8	2551.1	2569.6	2583.6	2599.0	2616.0
27.5°	2398.1	2399.7	2407.4	2407.4	2415.1	2430.6	2438.3	2453.8	2472.3	2487.8	2507.9
30°	2269.9	2273.0	2273.0	2279.2	2283.8	2291.5	2299.2	2314.7	2324.0	2337.9	2365.7
32.5°	2152.5	2155.5	2154.0	2152.5	2147.8	2146.3	2144.7	2147.8	2150.9	2155.5	2166.3
35°	2082.9	2075.2	2069.0	2058.2	2045.8	2030.4	2016.5	1997.9	1980.9	1967.0	1951.6
37.5°	2016.5	2014.9	2005.7	1990.2	1965.5	1937.7	1905.2	1865.0	1824.9	1781.6	1739.9
40°	1923.8	1919.1	1911.4	1889.8	1862.0	1828.0	1784.7	1735.3	1670.3	1603.9	1535.9
42.5°	1766.1	1767.7	1758.4	1741.4	1715.2	1682.7	1637.9	1583.8	1514.3	1435.5	1347.4
45°	1582.3	1582.3	1579.2	1565.3	1546.7	1520.5	1486.5	1441.7	1373.7	1293.3	1199.1
47.5°	1390.7	1392.2	1387.6	1384.5	1376.8	1359.8	1335.1	1301.1	1253.2	1175.9	1081.6
50°	1196.0	1196.0	1203.7	1202.2	1202.2	1196.0	1185.2	1165.1	1123.4	1061.5	973.5
52.5°	1001.3	1004.4	1009.0	1015.2	1022.9	1035.3	1022.9	1013.6	987.4	939.5	863.8
55°	800.4	803.5	811.2	822.0	831.3	843.7	846.8	846.8	832.8	800.4	743.2
57.5°	628.9	624.3	630.5	639.7	652.1	664.4	673.7	684.5	683.0	661.3	615.0
60°	472.8	474.4	479.0	488.3	497.6	508.4	520.7	530.0	534.6	523.8	494.5
62.5°	344.6	344.6	350.7	360.0	364.7	380.1	387.8	392.5	397.1	395.6	377.0
65°	241.1	244.1	247.2	251.9	256.5	265.8	270.4	279.7	282.8	284.3	270.4
67.5°	170.0	165.3	168.4	171.5	176.1	182.3	191.6	191.6	196.2	196.2	187.0
70°	108.2	108.2	109.7	114.3	117.4	119.0	122.1	125.1	129.8	128.2	128.2
72.5°	72.6	71.1	72.6	74.2	75.7	80.3	80.3	81.9	85.0	86.5	80.3
75°	37.1	38.6	41.7	40.2	44.8	41.7	43.3	47.9	46.4	43.3	43.3
77.5°	30.9	30.9	30.9	29.4	32.4	32.4	30.9	34.0	32.4	32.4	30.9
80°	21.6	23.2	21.6	20.1	21.6	20.1	20.1	20.1	20.1	20.1	18.5
82.5°	17.0	13.9	15.5	13.9	15.5	15.5	13.9	12.4	12.4	13.9	12.4
85°	12.4	9.3	10.8	10.8	9.3	9.3	9.3	9.3	9.3	7.7	7.7
87.5°	7.7	4.6	4.6	4.6	6.2	6.2	6.2	4.6	6.2	6.2	3.1
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°	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7
2.5°	2883.3	2881.8	2884.9	2883.3	2883.3	2881.8	2883.3	2881.8	2884.9	2878.7	2880.2
5°	2883.3	2880.2	2881.8	2883.3	2884.9	2881.8	2881.8	2881.8	2884.9	2881.8	2883.3
7.5°	2877.1	2875.6	2880.2	2883.3	2881.8	2880.2	2883.3	2881.8	2884.9	2883.3	2886.4
10°	2864.8	2866.3	2869.4	2874.0	2875.6	2877.1	2880.2	2880.2	2884.9	2878.7	2881.8
12.5°	2846.3	2852.4	2860.2	2863.2	2869.4	2869.4	2872.5	2874.0	2877.1	2875.6	2880.2
15°	2823.1	2830.8	2840.1	2847.8	2855.5	2860.2	2864.8	2866.3	2871.0	2866.3	2867.9
17.5°	2795.2	2804.5	2818.4	2827.7	2840.1	2844.7	2850.9	2854.0	2858.6	2855.5	2857.1
20°	2756.6	2767.5	2782.9	2796.8	2804.5	2815.3	2823.1	2827.7	2830.8	2827.7	2829.2
22.5°	2702.5	2718.0	2738.1	2748.9	2764.4	2773.6	2775.2	2786.0	2793.7	2786.0	2789.1
25°	2639.2	2654.6	2670.1	2693.3	2707.2	2718.0	2728.8	2730.4	2738.1	2736.5	2735.0
27.5°	2534.1	2554.2	2580.5	2599.0	2617.6	2634.6	2646.9	2650.0	2657.7	2654.6	2656.2
30°	2390.4	2412.1	2436.8	2466.1	2492.4	2509.4	2524.8	2535.7	2543.4	2538.8	2537.2
32.5°	2186.5	2208.1	2234.4	2263.7	2294.6	2319.3	2337.9	2351.8	2361.1	2358.0	2350.2
35°	1953.1	1959.3	1976.3	1999.5	2025.7	2052.0	2069.0	2084.5	2095.3	2098.4	2098.4
37.5°	1713.6	1693.6	1681.2	1681.2	1696.6	1707.4	1722.9	1732.2	1749.2	1755.3	1760.0
40°	1481.8	1435.5	1392.2	1359.8	1338.2	1336.6	1336.6	1341.2	1356.7	1376.8	1395.3
42.5°	1274.8	1200.6	1134.2	1073.9	1030.7	1005.9	995.1	996.7	1009.0	1027.6	1058.4
45°	1109.4	1016.7	933.3	860.7	802.0	763.3	744.8	743.2	752.5	774.1	808.2
47.5°	981.2	882.3	788.0	704.6	641.3	599.5	577.9	571.7	577.9	598.0	638.2
50°	874.6	772.6	675.3	588.7	520.7	477.5	457.4	449.7	457.4	474.4	514.5
52.5°	775.7	670.6	579.5	496.0	423.4	386.3	364.7	360.0	364.7	384.7	417.2
55°	661.3	571.7	482.1	398.7	335.3	298.2	281.2	276.6	281.2	299.8	333.8
57.5°	548.6	471.3	392.5	316.8	262.7	230.2	214.8	208.6	219.4	231.8	272.0
60°	443.5	381.7	315.2	248.8	204.0	174.6	162.2	160.7	163.8	179.2	207.0
62.5°	347.7	296.7	244.1	190.1	153.0	140.6	125.1	123.6	126.7	136.0	157.6
65°	250.3	217.9	177.7	139.1	109.7	92.7	86.5	88.1	91.2	97.4	117.4
67.5°	174.6	151.4	123.6	97.4	75.7	68.0	61.8	60.3	61.8	72.6	83.4
70°	117.4	103.5	83.4	74.2	52.6	41.7	43.3	38.6	44.8	44.8	54.1
72.5°	77.2	68.0	55.6	43.3	37.1	29.4	29.4	27.8	30.9	32.4	40.2
75°	40.2	30.9	30.9	21.6	15.5	7.7	13.9	12.4	10.8	12.4	15.5
77.5°	27.8	23.2	21.6	17.0	15.5	12.4	12.4	12.4	12.4	13.9	15.5
80°	17.0	17.0	12.4	10.8	9.3	7.7	9.3	9.3	9.3	9.3	10.8
82.5°	10.8	9.3	9.3	7.7	7.7	6.2	6.2	6.2	6.2	6.2	9.3
85°	9.3	6.2	6.2	4.6	6.2	10.8	4.6	6.2	6.2	6.2	4.6
87.5°	3.1	4.6	4.6	4.6	3.1	1.5	3.1	4.6	4.6	7.7	6.2
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°	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7	2878.7
2.5°	2883.3	2884.9	2884.9	2883.3	2883.3	2880.2	2886.4	2881.8	2883.3	2889.5	2884.9
5°	2886.4	2888.0	2888.0	2886.4	2886.4	2886.4	2888.0	2888.0	2886.4	2884.9	2888.0
7.5°	2892.6	2891.1	2891.1	2888.0	2888.0	2884.9	2888.0	2883.3	2886.4	2883.3	2888.0
10°	2884.9	2886.4	2884.9	2883.3	2883.3	2881.8	2881.8	2877.1	2878.7	2874.0	2877.1
12.5°	2880.2	2878.7	2878.7	2875.6	2872.5	2869.4	2867.9	2863.2	2863.2	2852.4	2857.1
15°	2867.9	2869.4	2864.8	2858.6	2855.5	2847.8	2844.7	2838.5	2832.3	2824.6	2826.2
17.5°	2857.1	2852.4	2846.3	2840.1	2827.7	2821.5	2815.3	2806.1	2803.0	2793.7	2790.6
20°	2824.6	2821.5	2813.8	2803.0	2795.2	2781.3	2775.2	2765.9	2758.2	2748.9	2744.2
22.5°	2782.9	2779.8	2770.5	2759.7	2747.3	2741.2	2735.0	2718.0	2710.3	2701.0	2699.4
25°	2730.4	2725.7	2716.5	2704.1	2697.9	2680.9	2674.7	2662.4	2659.3	2650.0	2648.5
27.5°	2650.0	2643.8	2633.0	2617.6	2606.7	2595.9	2589.8	2580.5	2577.4	2568.1	2566.6
30°	2529.5	2521.7	2500.1	2494.0	2475.4	2464.6	2464.6	2452.2	2453.8	2447.6	2447.6
32.5°	2339.4	2327.1	2310.1	2297.7	2285.3	2279.2	2279.2	2274.5	2277.6	2277.6	2280.7
35°	2087.6	2070.6	2061.3	2053.6	2053.6	2059.7	2078.3	2082.9	2092.2	2099.9	2106.1
37.5°	1764.6	1763.1	1773.9	1783.2	1806.3	1832.6	1865.0	1892.9	1919.1	1937.7	1956.2
40°	1415.4	1454.0	1484.9	1528.2	1563.7	1614.7	1673.4	1721.3	1766.1	1798.6	1832.6
42.5°	1104.8	1154.3	1219.2	1282.5	1345.9	1415.4	1492.7	1559.1	1617.8	1662.6	1698.2
45°	860.7	928.7	1007.5	1087.8	1169.7	1256.3	1336.6	1404.6	1466.4	1512.8	1548.3
47.5°	693.8	768.0	857.6	945.7	1038.4	1129.5	1219.2	1277.9	1328.9	1365.9	1398.4
50°	573.3	652.1	746.3	846.8	939.5	1030.7	1107.9	1165.1	1206.8	1239.2	1259.3
52.5°	479.0	562.4	662.9	763.3	856.0	939.5	1009.0	1052.3	1086.3	1109.4	1128.0
55°	395.6	475.9	570.2	664.4	755.6	834.4	891.6	924.0	950.3	964.2	975.0
57.5°	323.0	397.1	483.6	570.2	649.0	713.9	758.7	791.1	803.5	814.3	812.8
60°	253.4	323.0	401.8	475.9	543.9	596.4	628.9	647.4	656.7	661.3	658.2
62.5°	199.3	262.7	323.0	387.8	437.3	482.1	513.0	513.0	517.6	519.2	523.8
65°	148.3	196.2	248.8	296.7	336.8	366.2	383.2	387.8	394.0	392.5	389.4
67.5°	109.7	145.3	183.9	219.4	247.2	265.8	278.1	289.0	287.4	284.3	282.8
70°	75.7	98.9	132.9	154.5	174.6	193.2	196.2	197.8	199.3	200.9	197.8
72.5°	52.6	69.5	88.1	106.6	119.0	126.7	134.4	136.0	136.0	136.0	134.4
75°	26.3	35.5	52.6	60.3	71.1	74.2	80.3	80.3	85.0	78.8	77.2
77.5°	23.2	27.8	37.1	43.3	47.9	52.6	54.1	58.7	57.2	54.1	55.6
80°	13.9	17.0	23.2	26.3	32.4	34.0	35.5	37.1	35.5	37.1	37.1
82.5°	10.8	12.4	15.5	15.5	20.1	20.1	21.6	21.6	23.2	23.2	23.2
85°	6.2	10.8	9.3	18.5	12.4	12.4	15.5	18.5	15.5	15.5	18.5
87.5°	6.2	6.2	4.6	6.2	6.2	6.2	7.7	9.3	9.3	10.8	9.3
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: P246047

CATALOG NUMBER: LD8B50D010 ER8B50835 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2878.7	2878.7	2878.7	2878.7
2.5°	2883.3	2886.4	2881.8	2880.2
5°	2888.0	2888.0	2884.9	2884.9
7.5°	2888.0	2888.0	2883.3	2880.2
10°	2875.6	2875.6	2871.0	2867.9
12.5°	2852.4	2852.4	2850.9	2846.3
15°	2823.1	2823.1	2816.9	2812.3
17.5°	2782.9	2786.0	2778.3	2778.3
20°	2739.6	2738.1	2731.9	2728.8
22.5°	2694.8	2691.7	2690.2	2680.9
25°	2646.9	2643.8	2639.2	2634.6
27.5°	2565.0	2563.5	2558.8	2552.7
30°	2439.9	2438.3	2432.1	2432.1
32.5°	2277.6	2276.1	2269.9	2271.5
35°	2109.2	2115.4	2112.3	2106.1
37.5°	1968.6	1973.2	1976.3	1973.2
40°	1851.1	1865.0	1866.6	1869.7
42.5°	1726.0	1744.5	1750.7	1753.8
45°	1576.1	1593.1	1607.0	1603.9
47.5°	1423.1	1435.5	1447.8	1438.6
50°	1276.3	1284.0	1288.7	1288.7
52.5°	1137.3	1137.3	1135.7	1137.3
55°	978.1	978.1	971.9	975.0
57.5°	811.2	814.3	809.7	802.0
60°	656.7	649.0	645.9	641.3
62.5°	511.5	511.5	500.7	514.5
65°	383.2	378.6	373.9	372.4
67.5°	278.1	276.6	272.0	270.4
70°	196.2	190.1	188.5	185.4
72.5°	131.3	131.3	128.2	128.2
75°	80.3	72.6	71.1	72.6
77.5°	55.6	54.1	54.1	52.6
80°	37.1	35.5	38.6	34.0
82.5°	23.2	24.7	23.2	24.7
85°	15.5	18.5	17.0	17.0
87.5°	9.3	9.3	9.3	9.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)