

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: P246083

Luminaire Tested: **LD8B50D010 ER8B50940 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246083  
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 ER8B50940 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
90 CRI 4000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4859.0 lumens  
Efficiency: N/A  
Efficacy: 91.7 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

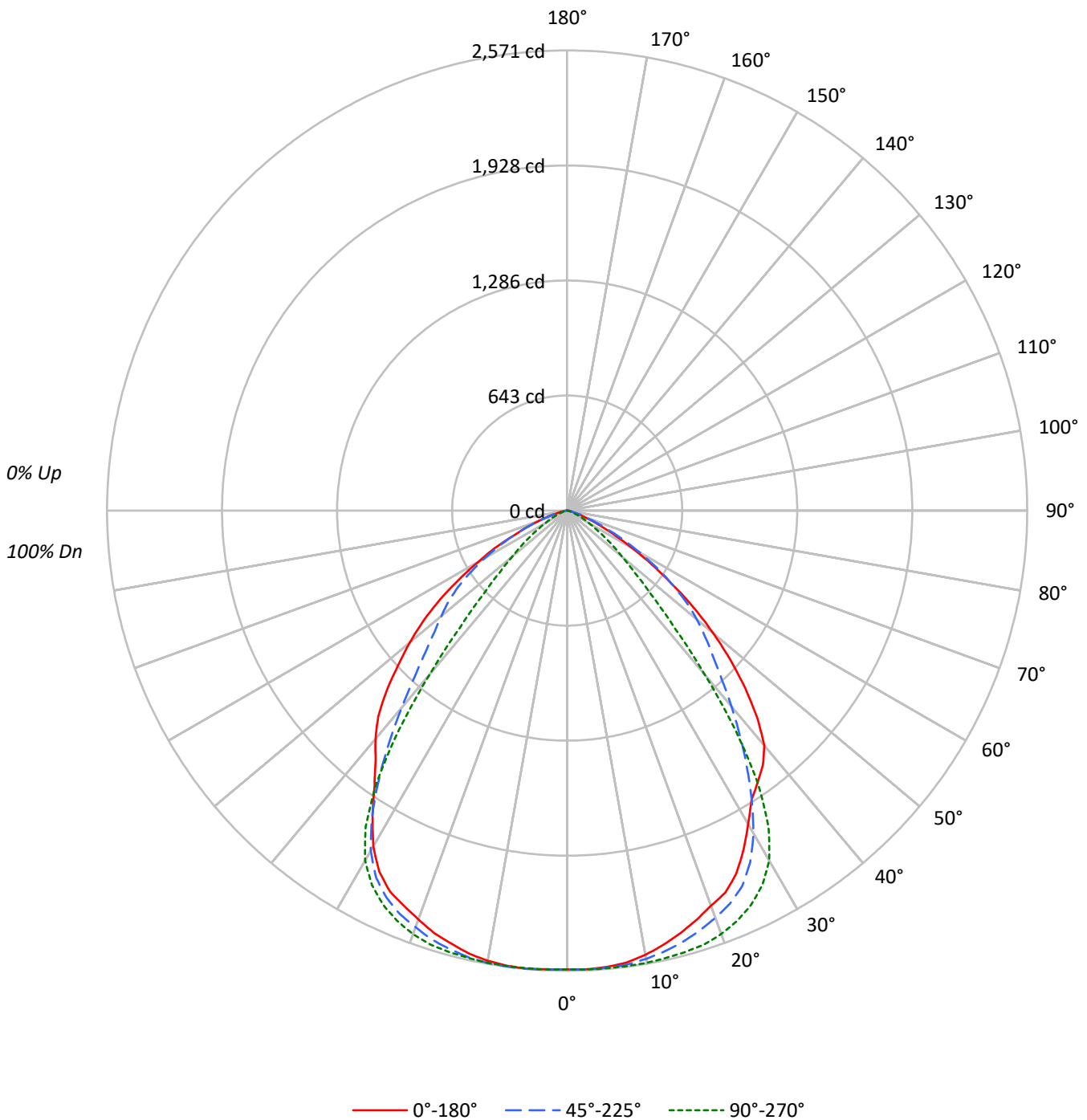
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P246083

CATALOG NUMBER: LD8B50D010 ER8B50940 8LBDW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P246083

CATALOG NUMBER: LD8B50D010 ER8B50940 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°	79055	79055	79055
5°	79230	79444	79527
10°	78897	80318	79974
15°	78023	81493	79954
20°	77083	82639	79748
25°	76085	82733	79831
30°	71979	80407	77124
35°	69830	69883	70609
40°	68967	48083	67027
45°	61450	28865	62291
50°	51096	19213	55058
55°	38321	13241	46681
60°	25970	8825	35221
65°	15666	5728	24195
70°	8682	3101	14885
75°	3932	1311	7709
80°	3427	1456	5381
85°	3892	1946	5378



TEST NUMBER: P246083

CATALOG NUMBER: LD8B50D010 ER8B50940 8LBDW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.7	5.0
10°-20°	710.6	14.6
20°-30°	1078.5	22.2
30°-40°	1132.7	23.3
40°-50°	849.2	17.5
50°-60°	544.9	11.2
60°-70°	233.1	4.8
70°-80°	55.1	1.1
80°-90°	10.2	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°	2033.7	41.9
0°-40°	3166.4	65.2
0°-60°	4560.6	93.9
0°-90°	4859.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4859.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2564	2564	2564	2564	2564	
5°	2560	2564	2566	2571	2569	243
15°	2444	2495	2553	2536	2504	689
25°	2236	2315	2432	2388	2346	1022
35°	1855	1752	1856	1834	1876	1164
45°	1409	1152	662	1119	1428	1079
55°	713	713	246	743	868	647
65°	215	253	78	326	332	229
75°	33	38	11	66	65	48
85°	11	7	6	11	15	12
90°	0	0	0	0	0	



TEST NUMBER: P246083

CATALOG NUMBER: LD8B50D010 ER8B50940 8LBDW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7
2.5°	2565.1	2567.8	2566.5	2566.5	2565.1	2566.5	2566.5	2569.2	2569.2	2566.5	2565.1
5°	2559.6	2562.3	2562.3	2559.6	2559.6	2566.5	2562.3	2565.1	2565.1	2563.7	2563.7
7.5°	2547.2	2547.2	2552.7	2548.6	2548.6	2552.7	2551.3	2554.1	2556.8	2558.2	2558.2
10°	2519.7	2522.4	2523.8	2523.8	2525.2	2529.3	2532.1	2537.6	2540.3	2543.1	2544.4
12.5°	2485.3	2489.4	2490.8	2489.4	2493.5	2499.0	2505.9	2512.8	2516.9	2522.4	2526.6
15°	2444.0	2444.0	2446.7	2450.9	2453.6	2461.9	2468.8	2477.0	2488.0	2494.9	2501.8
17.5°	2398.6	2401.3	2405.4	2405.4	2411.0	2424.7	2428.8	2441.2	2453.6	2460.5	2474.3
20°	2349.0	2351.8	2355.9	2358.7	2365.5	2376.6	2384.8	2395.8	2409.6	2422.0	2435.7
22.5°	2310.5	2305.0	2307.7	2310.5	2317.4	2327.0	2336.7	2350.4	2364.2	2376.6	2390.3
25°	2236.2	2237.6	2241.7	2244.4	2252.7	2261.0	2272.0	2288.5	2300.9	2314.6	2329.8
27.5°	2135.7	2137.1	2144.0	2144.0	2150.9	2164.6	2171.5	2185.3	2201.8	2215.5	2233.5
30°	2021.5	2024.3	2024.3	2029.8	2033.9	2040.8	2047.7	2061.4	2069.7	2082.1	2106.9
32.5°	1916.9	1919.7	1918.3	1916.9	1912.8	1911.4	1910.0	1912.8	1915.6	1919.7	1929.3
35°	1855.0	1848.1	1842.6	1833.0	1822.0	1808.2	1795.8	1779.3	1764.2	1751.8	1738.0
37.5°	1795.8	1794.4	1786.2	1772.4	1750.4	1725.7	1696.8	1661.0	1625.2	1586.7	1549.5
40°	1713.3	1709.1	1702.3	1683.0	1658.2	1627.9	1589.4	1545.4	1487.6	1428.4	1367.9
42.5°	1572.9	1574.3	1566.0	1550.9	1527.5	1498.6	1458.7	1410.5	1348.6	1278.4	1200.0
45°	1409.1	1409.1	1406.4	1394.0	1377.5	1354.1	1323.8	1283.9	1223.4	1151.8	1067.9
47.5°	1238.5	1239.9	1235.7	1233.0	1226.1	1211.0	1189.0	1158.7	1116.0	1047.2	963.3
50°	1065.1	1065.1	1072.0	1070.6	1070.6	1065.1	1055.5	1037.6	1000.4	945.4	867.0
52.5°	891.7	894.5	898.6	904.1	911.0	922.0	911.0	902.7	879.3	836.7	769.3
55°	712.8	715.6	722.5	732.1	740.4	751.4	754.1	754.1	741.7	712.8	661.9
57.5°	560.1	555.9	561.5	569.7	580.7	591.7	600.0	609.6	608.2	589.0	547.7
60°	421.1	422.5	426.6	434.9	443.1	452.7	463.8	472.0	476.1	466.5	440.4
62.5°	306.9	306.9	312.4	320.6	324.8	338.5	345.4	349.5	353.7	352.3	335.8
65°	214.7	217.4	220.2	224.3	228.4	236.7	240.8	249.1	251.8	253.2	240.8
67.5°	151.4	147.2	150.0	152.7	156.9	162.4	170.6	170.6	174.8	174.8	166.5
70°	96.3	96.3	97.7	101.8	104.6	106.0	108.7	111.5	115.6	114.2	114.2
72.5°	64.7	63.3	64.7	66.1	67.4	71.6	71.6	72.9	75.7	77.1	71.6
75°	33.0	34.4	37.1	35.8	39.9	37.1	38.5	42.7	41.3	38.5	38.5
77.5°	27.5	27.5	27.5	26.2	28.9	28.9	27.5	30.3	28.9	28.9	27.5
80°	19.3	20.6	19.3	17.9	19.3	17.9	17.9	17.9	17.9	17.9	16.5
82.5°	15.2	12.4	13.8	12.4	13.8	13.8	12.4	11.0	11.0	12.4	11.0
85°	11.0	8.2	9.6	9.6	8.2	8.2	8.2	8.2	8.2	6.9	6.9
87.5°	6.9	4.1	4.1	4.1	5.5	5.5	5.5	4.1	5.5	5.5	2.8
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: P246083

CATALOG NUMBER: LD8B50D010 ER8B50940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7
2.5°	2567.8	2566.5	2569.2	2567.8	2567.8	2566.5	2567.8	2566.5	2569.2	2563.7	2565.1
5°	2567.8	2565.1	2566.5	2567.8	2569.2	2566.5	2566.5	2566.5	2569.2	2566.5	2567.8
7.5°	2562.3	2560.9	2565.1	2567.8	2566.5	2565.1	2567.8	2566.5	2569.2	2567.8	2570.6
10°	2551.3	2552.7	2555.5	2559.6	2560.9	2562.3	2565.1	2565.1	2569.2	2563.7	2566.5
12.5°	2534.8	2540.3	2547.2	2549.9	2555.5	2555.5	2558.2	2559.6	2562.3	2560.9	2565.1
15°	2514.2	2521.0	2529.3	2536.2	2543.1	2547.2	2551.3	2552.7	2556.8	2552.7	2554.1
17.5°	2489.4	2497.6	2510.0	2518.3	2529.3	2533.4	2538.9	2541.7	2545.8	2543.1	2544.4
20°	2455.0	2464.6	2478.4	2490.8	2497.6	2507.3	2514.2	2518.3	2521.0	2518.3	2519.7
22.5°	2406.8	2420.6	2438.5	2448.1	2461.9	2470.1	2471.5	2481.1	2488.0	2481.1	2483.9
25°	2350.4	2364.2	2377.9	2398.6	2411.0	2420.6	2430.2	2431.6	2438.5	2437.1	2435.7
27.5°	2256.8	2274.7	2298.1	2314.6	2331.1	2346.3	2357.3	2360.0	2366.9	2364.2	2365.5
30°	2128.8	2148.1	2170.2	2196.3	2219.7	2234.8	2248.6	2258.2	2265.1	2261.0	2259.6
32.5°	1947.2	1966.5	1989.9	2016.0	2043.5	2065.5	2082.1	2094.5	2102.7	2099.9	2093.1
35°	1739.4	1744.9	1760.1	1780.7	1804.1	1827.5	1842.6	1856.4	1866.0	1868.8	1868.8
37.5°	1526.1	1508.2	1497.2	1497.2	1511.0	1520.6	1534.4	1542.6	1557.8	1563.3	1567.4
40°	1319.7	1278.4	1239.9	1211.0	1191.7	1190.3	1190.3	1194.5	1208.2	1226.1	1242.6
42.5°	1135.3	1069.2	1010.1	956.4	917.9	895.9	886.2	887.6	898.6	915.1	942.6
45°	988.1	905.5	831.2	766.5	714.2	679.8	663.3	661.9	670.2	689.4	719.7
47.5°	873.8	785.8	701.8	627.5	571.1	533.9	514.7	509.2	514.7	532.5	568.3
50°	778.9	688.1	601.4	524.3	463.8	425.2	407.3	400.5	407.3	422.5	458.2
52.5°	690.8	597.2	516.0	441.7	377.1	344.0	324.8	320.6	324.8	342.6	371.6
55°	589.0	509.2	429.3	355.0	298.6	265.6	250.4	246.3	250.4	267.0	297.3
57.5°	488.5	419.7	349.5	282.1	233.9	205.0	191.3	185.8	195.4	206.4	242.2
60°	394.9	339.9	280.7	221.6	181.7	155.5	144.5	143.1	145.9	159.6	184.4
62.5°	309.6	264.2	217.4	169.3	136.2	125.2	111.5	110.1	112.8	121.1	140.4
65°	222.9	194.0	158.3	123.8	97.7	82.6	77.1	78.5	81.2	86.7	104.6
67.5°	155.5	134.9	110.1	86.7	67.4	60.5	55.1	53.7	55.1	64.7	74.3
70°	104.6	92.2	74.3	66.1	46.8	37.1	38.5	34.4	39.9	39.9	48.2
72.5°	68.8	60.5	49.5	38.5	33.0	26.2	26.2	24.8	27.5	28.9	35.8
75°	35.8	27.5	27.5	19.3	13.8	6.9	12.4	11.0	9.6	11.0	13.8
77.5°	24.8	20.6	19.3	15.2	13.8	11.0	11.0	11.0	11.0	12.4	13.8
80°	15.2	15.2	11.0	9.6	8.2	6.9	8.2	8.2	8.2	8.2	9.6
82.5°	9.6	8.2	8.2	6.9	6.9	5.5	5.5	5.5	5.5	5.5	8.2
85°	8.2	5.5	5.5	4.1	5.5	9.6	4.1	5.5	5.5	5.5	4.1
87.5°	2.8	4.1	4.1	4.1	2.8	1.4	2.8	4.1	4.1	6.9	5.5
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: P246083

CATALOG NUMBER: LD8B50D010 ER8B50940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7	2563.7
2.5°	2567.8	2569.2	2569.2	2567.8	2567.8	2565.1	2570.6	2566.5	2567.8	2573.3	2569.2
5°	2570.6	2572.0	2572.0	2570.6	2570.6	2570.6	2572.0	2572.0	2570.6	2569.2	2572.0
7.5°	2576.1	2574.7	2574.7	2572.0	2572.0	2569.2	2572.0	2567.8	2570.6	2567.8	2572.0
10°	2569.2	2570.6	2569.2	2567.8	2567.8	2566.5	2566.5	2562.3	2563.7	2559.6	2562.3
12.5°	2565.1	2563.7	2563.7	2560.9	2558.2	2555.5	2554.1	2549.9	2549.9	2540.3	2544.4
15°	2554.1	2555.5	2551.3	2545.8	2543.1	2536.2	2533.4	2527.9	2522.4	2515.6	2516.9
17.5°	2544.4	2540.3	2534.8	2529.3	2518.3	2512.8	2507.3	2499.0	2496.3	2488.0	2485.3
20°	2515.6	2512.8	2505.9	2496.3	2489.4	2477.0	2471.5	2463.3	2456.4	2448.1	2444.0
22.5°	2478.4	2475.6	2467.4	2457.7	2446.7	2441.2	2435.7	2420.6	2413.7	2405.4	2404.1
25°	2431.6	2427.5	2419.2	2408.2	2402.7	2387.6	2382.0	2371.0	2368.3	2360.0	2358.7
27.5°	2360.0	2354.5	2344.9	2331.1	2321.5	2311.9	2306.4	2298.1	2295.4	2287.1	2285.7
30°	2252.7	2245.8	2226.6	2221.1	2204.5	2194.9	2194.9	2183.9	2185.3	2179.8	2179.8
32.5°	2083.4	2072.4	2057.3	2046.3	2035.3	2029.8	2029.8	2025.6	2028.4	2028.4	2031.2
35°	1859.1	1844.0	1835.7	1828.9	1828.9	1834.3	1850.9	1855.0	1863.3	1870.1	1875.7
37.5°	1571.5	1570.2	1579.8	1588.0	1608.7	1632.1	1661.0	1685.8	1709.1	1725.7	1742.2
40°	1260.5	1294.9	1322.4	1361.0	1392.6	1438.0	1490.3	1533.0	1572.9	1601.8	1632.1
42.5°	983.9	1028.0	1085.8	1142.2	1198.6	1260.5	1329.3	1388.5	1440.8	1480.7	1512.3
45°	766.5	827.0	897.2	968.8	1041.7	1118.8	1190.3	1250.9	1305.9	1347.2	1378.9
47.5°	617.9	683.9	763.7	842.2	924.8	1005.9	1085.8	1138.1	1183.4	1216.5	1245.4
50°	510.5	580.7	664.7	754.1	836.7	917.9	986.7	1037.6	1074.8	1103.6	1121.5
52.5°	426.6	500.9	590.4	679.8	762.4	836.7	898.6	937.1	967.4	988.1	1004.6
55°	352.3	423.9	507.8	591.7	672.9	743.1	794.0	822.9	846.3	858.7	868.3
57.5°	287.6	353.7	430.7	507.8	578.0	635.8	675.7	704.6	715.6	725.2	723.8
60°	225.7	287.6	357.8	423.9	484.4	531.2	560.1	576.6	584.8	589.0	586.2
62.5°	177.5	233.9	287.6	345.4	389.4	429.3	456.9	456.9	461.0	462.4	466.5
65°	132.1	174.8	221.6	264.2	300.0	326.1	341.3	345.4	350.9	349.5	346.8
67.5°	97.7	129.4	163.7	195.4	220.2	236.7	247.7	257.3	256.0	253.2	251.8
70°	67.4	88.1	118.4	137.6	155.5	172.0	174.8	176.1	177.5	178.9	176.1
72.5°	46.8	61.9	78.5	95.0	106.0	112.8	119.7	121.1	121.1	121.1	119.7
75°	23.4	31.7	46.8	53.7	63.3	66.1	71.6	71.6	75.7	70.2	68.8
77.5°	20.6	24.8	33.0	38.5	42.7	46.8	48.2	52.3	50.9	48.2	49.5
80°	12.4	15.2	20.6	23.4	28.9	30.3	31.7	33.0	31.7	33.0	33.0
82.5°	9.6	11.0	13.8	13.8	17.9	17.9	19.3	19.3	20.6	20.6	20.6
85°	5.5	9.6	8.2	16.5	11.0	11.0	13.8	16.5	13.8	13.8	16.5
87.5°	5.5	5.5	4.1	5.5	5.5	5.5	6.9	8.2	8.2	9.6	8.2
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: P246083

CATALOG NUMBER: LD8B50D010 ER8B50940 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2563.7	2563.7	2563.7	2563.7
2.5°	2567.8	2570.6	2566.5	2565.1
5°	2572.0	2572.0	2569.2	2569.2
7.5°	2572.0	2572.0	2567.8	2565.1
10°	2560.9	2560.9	2556.8	2554.1
12.5°	2540.3	2540.3	2538.9	2534.8
15°	2514.2	2514.2	2508.7	2504.5
17.5°	2478.4	2481.1	2474.3	2474.3
20°	2439.9	2438.5	2433.0	2430.2
22.5°	2400.0	2397.2	2395.8	2387.6
25°	2357.3	2354.5	2350.4	2346.3
27.5°	2284.4	2283.0	2278.8	2273.4
30°	2172.9	2171.5	2166.0	2166.0
32.5°	2028.4	2027.0	2021.5	2022.9
35°	1878.4	1883.9	1881.2	1875.7
37.5°	1753.2	1757.3	1760.1	1757.3
40°	1648.6	1661.0	1662.4	1665.1
42.5°	1537.1	1553.6	1559.2	1561.9
45°	1403.6	1418.8	1431.2	1428.4
47.5°	1267.4	1278.4	1289.4	1281.2
50°	1136.7	1143.5	1147.7	1147.7
52.5°	1012.8	1012.8	1011.5	1012.8
55°	871.1	871.1	865.6	868.3
57.5°	722.5	725.2	721.1	714.2
60°	584.8	578.0	575.2	571.1
62.5°	455.5	455.5	445.9	458.2
65°	341.3	337.2	333.0	331.6
67.5°	247.7	246.3	242.2	240.8
70°	174.8	169.3	167.9	165.1
72.5°	117.0	117.0	114.2	114.2
75°	71.6	64.7	63.3	64.7
77.5°	49.5	48.2	48.2	46.8
80°	33.0	31.7	34.4	30.3
82.5°	20.6	22.0	20.6	22.0
85°	13.8	16.5	15.2	15.2
87.5°	8.2	8.2	8.2	8.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)