

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: P245393

Luminaire Tested: **LD8B50D010 ER8B50830 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245393  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B50D010 ER8B50830 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5397.0 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

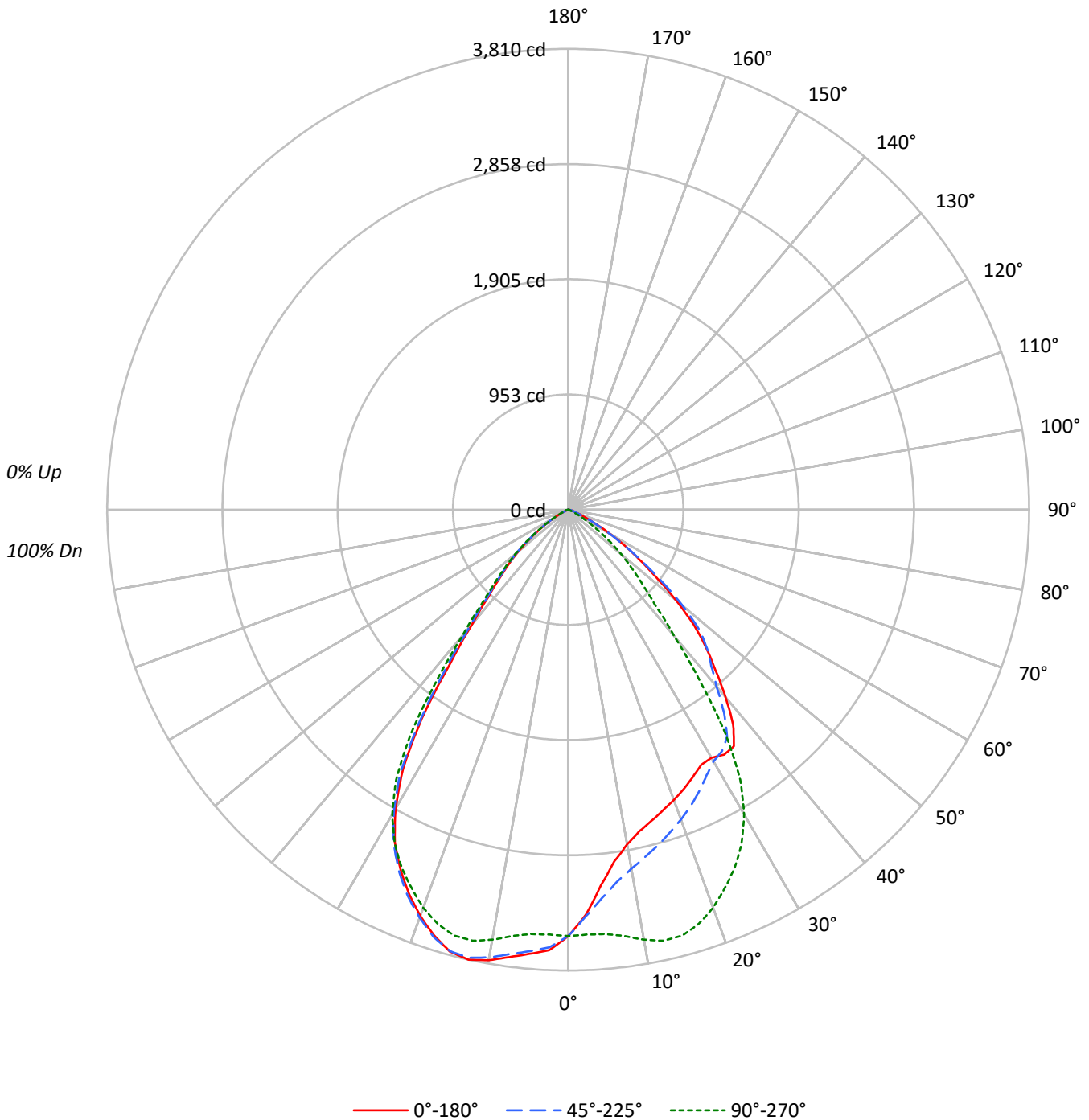
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	108723	108723	108723
5°	96462	108992	114097
10°	87946	113036	118435
15°	84995	116341	120689
20°	83781	114909	117279
25°	82958	110946	111640
30°	84310	103541	101625
35°	89864	85682	79474
40°	81442	54854	49669
45°	70294	37530	34944
50°	55461	27373	25776
55°	38499	16833	15838
60°	24509	8511	7598
65°	12236	3378	2568
70°	6762	1668	920
75°	4861	1215	441
80°	3942	817	160
85°	4246	672	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	328.6	6.1
10°-20°	949.1	17.6
20°-30°	1377.6	25.5
30°-40°	1356.8	25.1
40°-50°	850.5	15.8
50°-60°	410.4	7.6
60°-70°	99.3	1.8
70°-80°	20.1	0.4
80°-90°	4.6	0.1
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°	2655.3	49.2
0°-40°	4012.1	74.3
0°-60°	5273.0	97.7
0°-90°	5397.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5397.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3526	3526	3526	3526	3526	
5°	3116	3222	3521	3664	3686	288
15°	2662	2872	3644	3778	3780	753
25°	2438	2565	3261	3305	3281	1128
35°	2387	2290	2276	2146	2111	1444
45°	1612	1623	861	824	801	1232
55°	716	739	313	309	295	659
65°	168	166	46	40	35	191
75°	41	35	10	5	4	46
85°	12	9	2	0	0	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8
2.5°	3351.6	3330.3	3290.5	3338.6	3338.6	3311.8	3365.5	3333.1	3359.0	3399.8	3363.6
5°	3116.3	3098.7	3065.3	3116.3	3122.8	3097.8	3162.6	3138.5	3176.5	3226.5	3221.9
7.5°	2930.1	2907.9	2877.3	2930.1	2940.3	2923.6	2985.7	2974.6	3024.6	3089.4	3100.5
10°	2808.7	2785.6	2758.7	2806.9	2814.3	2803.2	2866.2	2859.7	2908.8	2983.8	3013.5
12.5°	2722.6	2703.1	2673.5	2724.4	2732.8	2717.0	2776.3	2773.5	2824.5	2903.2	2940.3
15°	2662.4	2639.2	2612.4	2655.9	2667.0	2649.4	2705.9	2700.4	2752.2	2830.0	2871.7
17.5°	2605.9	2584.6	2556.8	2597.5	2608.6	2590.1	2645.7	2636.4	2680.9	2755.0	2797.6
20°	2553.1	2529.9	2504.9	2546.6	2553.1	2531.8	2587.3	2575.3	2615.1	2683.7	2725.4
22.5°	2498.4	2474.3	2448.4	2489.1	2495.6	2474.3	2525.3	2511.4	2548.4	2610.5	2648.5
25°	2438.2	2416.0	2390.0	2428.0	2433.6	2410.4	2464.1	2446.5	2479.0	2533.6	2565.1
27.5°	2378.0	2356.7	2328.0	2366.9	2369.6	2347.4	2396.5	2372.4	2399.3	2449.3	2476.2
30°	2367.8	2343.7	2314.1	2345.6	2346.5	2317.8	2364.1	2335.4	2350.2	2387.2	2403.0
32.5°	2400.2	2376.1	2345.6	2371.5	2368.7	2337.2	2381.7	2346.5	2351.1	2370.6	2366.9
35°	2387.2	2358.5	2322.4	2350.2	2350.2	2312.2	2356.7	2315.0	2310.4	2313.1	2290.0
37.5°	2240.0	2217.7	2183.4	2210.3	2207.5	2178.8	2213.1	2178.8	2163.1	2156.6	2114.9
40°	2023.2	1996.3	1970.4	1999.1	2001.9	1971.3	2015.8	1976.9	1972.2	1953.7	1904.6
42.5°	1803.6	1794.4	1769.4	1793.4	1806.4	1780.5	1817.5	1799.0	1801.8	1797.2	1750.8
45°	1611.9	1596.1	1577.6	1605.4	1613.7	1600.8	1637.8	1626.7	1637.8	1661.0	1623.0
47.5°	1405.3	1389.5	1369.2	1398.8	1413.6	1389.5	1421.0	1417.3	1434.0	1473.8	1470.1
50°	1156.1	1145.0	1141.3	1145.0	1154.3	1143.1	1165.4	1166.3	1177.4	1232.1	1235.8
52.5°	915.3	912.5	899.5	911.5	911.5	893.9	916.2	906.0	917.1	954.2	978.2
55°	716.1	713.3	705.0	716.1	704.0	697.6	704.0	693.8	685.5	714.2	739.2
57.5°	557.7	548.4	538.2	542.9	541.9	528.0	535.4	523.4	516.9	527.1	549.3
60°	397.4	394.6	385.4	390.0	393.7	383.5	390.9	385.4	374.3	382.6	383.5
62.5°	264.0	265.9	260.3	261.2	258.5	256.6	261.2	264.0	261.2	257.5	258.5
65°	167.7	166.7	165.8	166.7	168.6	164.9	167.7	169.5	166.7	166.7	165.8
67.5°	111.2	108.4	105.6	107.5	109.3	106.5	109.3	108.4	109.3	108.4	105.6
70°	75.0	74.1	73.2	74.1	74.1	72.3	74.1	73.2	74.1	73.2	70.4
72.5°	54.7	54.7	53.7	54.7	54.7	52.8	53.7	51.9	52.8	51.9	50.0
75°	40.8	40.8	39.8	40.8	39.8	38.9	39.8	38.9	37.1	37.1	35.2
77.5°	29.6	29.6	29.6	29.6	29.6	28.7	28.7	27.8	26.9	25.9	25.9
80°	22.2	21.3	21.3	21.3	21.3	20.4	21.3	20.4	19.5	18.5	17.6
82.5°	15.7	16.7	15.7	15.7	15.7	14.8	15.7	14.8	14.8	13.9	12.0
85°	12.0	12.0	12.0	12.0	12.0	11.1	11.1	11.1	10.2	10.2	9.3
87.5°	6.5	6.5	6.5	7.4	6.5	6.5	6.5	5.6	5.6	4.6	4.6
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8
2.5°	3411.8	3416.4	3406.2	3422.0	3483.1	3434.0	3454.4	3460.9	3507.2	3515.6	3510.0
5°	3282.1	3302.5	3315.5	3350.7	3418.3	3383.1	3419.2	3442.4	3501.7	3521.1	3525.8
7.5°	3180.2	3222.8	3254.3	3311.8	3391.4	3364.6	3419.2	3457.2	3529.5	3554.5	3566.5
10°	3104.3	3169.1	3223.8	3302.5	3392.4	3374.8	3446.1	3499.8	3580.4	3610.0	3624.9
12.5°	3046.8	3125.6	3198.7	3298.8	3396.1	3387.7	3473.9	3535.0	3620.2	3649.9	3667.5
15°	2983.8	3074.6	3159.8	3271.9	3376.6	3374.8	3467.4	3532.2	3619.3	3644.3	3661.0
17.5°	2908.8	3006.1	3099.6	3221.0	3324.7	3326.6	3420.1	3484.1	3569.3	3589.7	3600.8
20°	2832.8	2929.2	3022.7	3147.8	3249.7	3252.5	3344.2	3403.5	3485.0	3501.7	3504.4
22.5°	2752.2	2842.1	2935.7	3059.8	3158.0	3159.8	3250.6	3306.2	3375.7	3384.0	3391.4
25°	2660.5	2748.5	2836.5	2959.7	3053.3	3058.9	3141.3	3190.4	3254.3	3260.8	3263.6
27.5°	2565.1	2637.4	2721.7	2827.3	2921.8	2918.1	2995.9	3051.5	3108.9	3105.2	3104.3
30°	2468.8	2529.0	2580.9	2682.8	2752.2	2755.0	2828.2	2855.1	2915.3	2907.9	2906.9
32.5°	2401.1	2416.9	2430.8	2482.7	2548.4	2525.3	2575.3	2608.6	2650.3	2647.6	2648.5
35°	2277.0	2248.3	2206.6	2214.0	2253.8	2217.7	2244.6	2243.7	2286.3	2276.1	2288.1
37.5°	2064.9	1983.4	1890.7	1837.9	1845.3	1799.9	1790.7	1812.9	1827.7	1799.0	1809.2
40°	1838.8	1718.4	1573.9	1453.5	1447.0	1390.5	1380.3	1358.1	1386.8	1362.7	1370.1
42.5°	1672.1	1512.8	1322.9	1176.5	1145.0	1097.7	1070.0	1066.2	1074.6	1057.9	1053.3
45°	1544.3	1374.7	1157.0	989.4	954.2	903.2	875.4	865.2	866.2	860.6	856.0
47.5°	1394.2	1223.7	1003.3	831.9	792.0	743.9	716.1	709.6	713.3	705.9	700.3
50°	1186.7	1033.8	832.8	676.2	641.0	605.8	583.6	577.1	576.2	570.6	566.9
52.5°	963.4	836.5	662.4	531.7	500.2	466.0	450.2	441.9	442.8	437.2	431.7
55°	745.7	667.0	513.2	402.0	373.3	346.5	331.6	321.4	318.7	313.1	310.3
57.5°	554.9	502.1	384.4	290.0	273.3	247.3	232.5	220.5	218.6	215.8	214.9
60°	389.1	351.1	270.5	206.6	187.1	171.4	156.6	144.5	139.0	138.0	135.2
62.5°	252.0	228.8	177.9	138.0	123.2	112.1	97.3	88.9	85.2	81.5	82.4
65°	156.6	139.0	111.2	88.9	80.6	72.3	61.1	53.7	50.0	46.3	47.2
67.5°	97.3	87.1	70.4	57.4	51.9	45.4	37.1	31.5	28.7	25.9	24.1
70°	65.8	56.5	48.2	40.8	37.1	32.4	26.9	22.2	20.4	18.5	16.7
72.5°	46.3	41.7	35.2	30.6	27.8	24.1	20.4	17.6	15.7	13.9	12.0
75°	33.3	29.6	25.9	22.2	20.4	18.5	15.7	13.9	12.0	10.2	8.3
77.5°	24.1	21.3	18.5	16.7	15.7	13.0	11.1	10.2	9.3	7.4	5.6
80°	16.7	14.8	12.0	11.1	11.1	9.3	8.3	7.4	6.5	4.6	3.7
82.5°	11.1	10.2	9.3	8.3	7.4	6.5	6.5	4.6	3.7	2.8	1.9
85°	8.3	7.4	6.5	5.6	5.6	4.6	3.7	2.8	2.8	1.9	0.9
87.5°	4.6	4.6	3.7	2.8	2.8	1.9	1.9	0.9	0.9	0.9	0.9
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8
2.5°	3557.2	3560.0	3575.8	3563.7	3594.3	3616.5	3605.4	3630.4	3622.1	3620.2	3649.0
5°	3581.3	3587.8	3609.1	3598.0	3631.4	3655.4	3644.3	3672.1	3663.8	3661.9	3691.6
7.5°	3627.7	3634.1	3652.7	3643.4	3678.6	3699.9	3686.0	3716.6	3705.5	3704.5	3733.3
10°	3686.0	3695.3	3711.0	3701.8	3734.2	3752.7	3738.8	3768.5	3758.3	3753.6	3785.1
12.5°	3729.6	3736.0	3751.8	3744.4	3775.9	3789.8	3777.7	3806.4	3793.5	3789.8	3817.6
15°	3719.4	3725.8	3738.8	3732.3	3762.0	3774.9	3759.2	3790.7	3777.7	3770.3	3795.3
17.5°	3654.5	3658.2	3667.5	3661.0	3692.5	3700.8	3683.2	3714.7	3702.7	3689.7	3713.8
20°	3559.1	3557.2	3562.8	3560.0	3586.0	3590.6	3579.5	3602.6	3588.7	3581.3	3595.2
22.5°	3440.5	3438.7	3442.4	3435.0	3460.9	3463.7	3447.0	3474.8	3460.9	3447.0	3470.2
25°	3309.0	3298.8	3296.9	3299.7	3317.3	3320.1	3302.5	3322.9	3305.3	3294.2	3316.4
27.5°	3146.9	3133.9	3131.1	3133.9	3151.5	3138.5	3123.7	3138.5	3120.9	3110.7	3124.6
30°	2946.8	2928.2	2919.9	2914.3	2932.9	2928.2	2894.0	2910.6	2882.9	2868.0	2878.2
32.5°	2677.2	2667.0	2644.8	2631.8	2649.4	2614.2	2592.9	2592.9	2581.8	2556.8	2562.3
35°	2302.9	2287.2	2266.8	2255.7	2258.5	2211.2	2176.0	2183.4	2146.4	2139.9	2142.7
37.5°	1829.6	1803.6	1796.2	1773.1	1778.6	1736.9	1688.8	1689.7	1670.2	1649.9	1643.4
40°	1374.7	1370.1	1362.7	1343.2	1350.6	1305.3	1286.7	1287.6	1274.7	1259.9	1267.3
42.5°	1062.5	1047.7	1043.1	1036.6	1038.5	1031.0	1007.0	1009.7	998.6	994.9	991.2
45°	863.4	847.6	836.5	842.1	842.1	833.7	824.5	830.0	824.5	817.1	820.8
47.5°	711.4	696.6	691.1	690.1	696.6	691.1	681.8	683.7	682.7	680.0	678.1
50°	567.9	564.2	559.5	556.7	559.5	557.7	549.3	554.0	556.7	547.5	550.3
52.5°	432.6	432.6	431.7	425.2	430.8	425.2	424.3	426.1	423.3	419.6	418.7
55°	316.8	314.0	309.4	308.5	310.3	308.5	306.6	307.6	309.4	300.1	300.1
57.5°	216.8	214.9	212.1	212.1	215.8	211.2	208.4	212.1	208.4	204.7	204.7
60°	139.0	138.0	135.2	135.2	135.2	134.3	131.5	132.5	134.3	128.8	129.7
62.5°	83.4	80.6	79.7	78.7	79.7	78.7	78.7	77.8	76.9	76.9	74.1
65°	45.4	43.5	41.7	42.6	42.6	41.7	41.7	41.7	39.8	38.9	38.0
67.5°	23.2	21.3	21.3	20.4	20.4	20.4	20.4	19.5	19.5	19.5	18.5
70°	14.8	13.9	13.0	13.0	13.0	12.0	12.0	12.0	12.0	12.0	11.1
72.5°	10.2	9.3	8.3	8.3	8.3	7.4	7.4	7.4	7.4	6.5	6.5
75°	7.4	6.5	5.6	5.6	5.6	4.6	4.6	4.6	4.6	4.6	4.6
77.5°	4.6	3.7	3.7	3.7	3.7	2.8	2.8	2.8	2.8	2.8	1.9
80°	2.8	2.8	1.9	1.9	1.9	1.9	0.9	0.9	0.9	0.9	0.9
82.5°	1.9	1.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
85°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0
87.5°	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P245393

CATALOG NUMBER: LD8B50D010 ER8B50830 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8	3525.8
2.5°	3638.8	3631.4	3636.0	3670.3	3655.4	3650.8	3611.9	3646.2
5°	3682.3	3676.7	3676.7	3715.7	3698.1	3694.3	3656.4	3686.0
7.5°	3723.1	3717.5	3718.4	3758.3	3744.4	3738.8	3700.8	3730.5
10°	3775.9	3772.2	3773.1	3811.1	3796.2	3790.7	3751.8	3782.4
12.5°	3807.4	3801.8	3801.8	3842.6	3825.9	3817.6	3780.5	3810.1
15°	3783.3	3774.9	3774.9	3815.7	3797.2	3785.1	3752.7	3780.5
17.5°	3700.8	3692.5	3692.5	3727.7	3713.8	3696.2	3662.9	3688.8
20°	3586.0	3575.8	3573.0	3613.8	3594.3	3578.6	3548.9	3573.9
22.5°	3456.3	3451.6	3443.3	3484.1	3466.5	3449.8	3418.3	3437.7
25°	3300.6	3293.2	3284.9	3324.7	3307.1	3290.5	3265.4	3281.2
27.5°	3107.0	3108.0	3103.3	3134.8	3117.2	3108.0	3077.4	3103.3
30°	2872.7	2862.5	2858.8	2895.8	2879.1	2867.1	2829.1	2854.1
32.5°	2567.0	2552.1	2532.7	2574.4	2545.7	2535.5	2503.0	2539.2
35°	2122.3	2117.7	2100.1	2135.3	2119.5	2101.0	2080.6	2111.2
37.5°	1640.6	1644.3	1642.4	1651.7	1642.4	1630.4	1608.2	1597.1
40°	1252.4	1243.2	1235.8	1252.4	1233.0	1233.0	1220.0	1233.9
42.5°	981.9	978.2	987.5	991.2	980.1	978.2	976.4	975.5
45°	810.6	810.6	812.4	816.1	812.4	810.6	805.0	801.3
47.5°	667.9	671.6	667.9	680.0	673.5	671.6	660.5	665.1
50°	541.0	536.4	541.0	544.7	545.6	540.1	534.5	537.3
52.5°	419.6	412.2	410.4	415.9	412.2	412.2	408.5	407.6
55°	295.5	298.3	293.7	298.3	296.4	293.7	290.9	294.6
57.5°	200.1	201.0	199.2	201.9	197.3	198.2	197.3	196.4
60°	129.7	126.0	126.0	128.8	124.1	124.1	123.2	123.2
62.5°	74.1	73.2	73.2	72.3	71.3	71.3	71.3	69.5
65°	38.0	37.1	36.1	36.1	36.1	36.1	35.2	35.2
67.5°	18.5	17.6	17.6	18.5	17.6	17.6	17.6	17.6
70°	11.1	11.1	10.2	11.1	10.2	10.2	10.2	10.2
72.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
75°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
77.5°	2.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)