

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: P244097

Luminaire Tested: **LD8B50D010 ER8B50830 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244097
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 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5596.0 lumens
Efficiency: N/A
Efficacy: 105.6 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

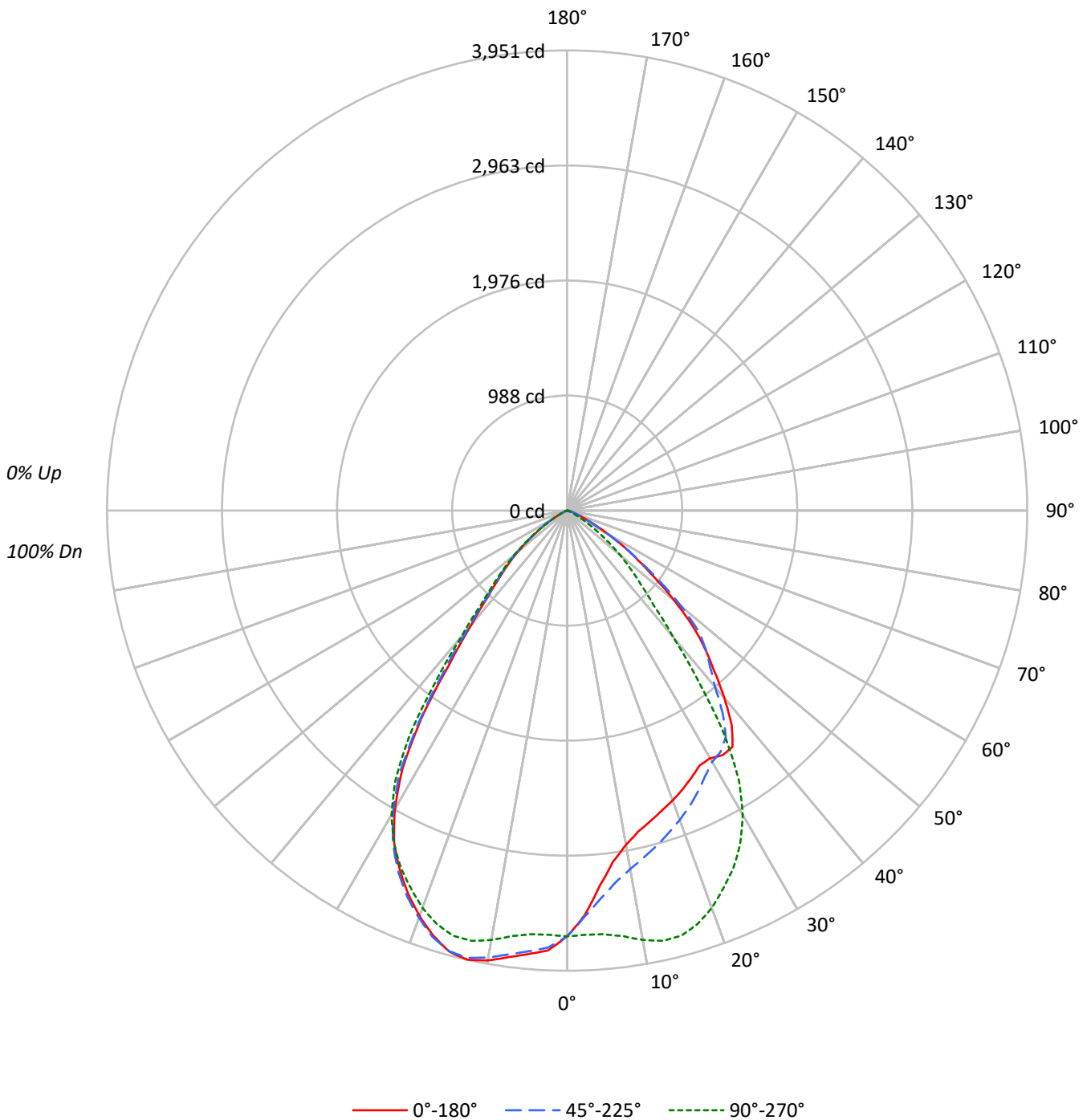
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P244097

CATALOG NUMBER: LD8B50D010 ER8B50830 8LBSW0LI

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°	112731	112731	112731
5°	100019	113013	118303
10°	91190	117207	122799
15°	88126	120632	125139
20°	86869	119146	121604
25°	86016	115036	115757
30°	87418	107358	105374
35°	93181	88840	82403
40°	84445	56875	51501
45°	72884	38912	36235
50°	57505	28385	26726
55°	39918	17456	16419
60°	25415	8825	7876
65°	12689	3502	2663
70°	7014	1731	956
75°	5040	1263	453
80°	4102	852	178
85°	4423	672	0



TEST NUMBER: P244097

CATALOG NUMBER: LD8B50D010 ER8B50830 8LBSW0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.7	6.1
10°-20°	984.1	17.6
20°-30°	1428.4	25.5
30°-40°	1406.8	25.1
40°-50°	881.9	15.8
50°-60°	425.5	7.6
60°-70°	103.0	1.8
70°-80°	20.8	0.4
80°-90°	4.8	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°	2753.2	49.2
0°-40°	4160.0	74.3
0°-60°	5467.4	97.7
0°-90°	5596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5596.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3656	3656	3656	3656	3656	
5°	3231	3341	3651	3799	3822	299
15°	2760	2978	3779	3917	3920	780
25°	2528	2660	3381	3427	3402	1170
35°	2475	2374	2360	2226	2189	1498
45°	1671	1683	892	855	831	1278
55°	742	766	325	321	305	683
65°	174	172	48	41	36	198
75°	42	36	11	5	4	47
85°	12	10	2	0	0	13
90°	0	0	0	0	0	



TEST NUMBER: P244097

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8
2.5°	3475.2	3453.1	3411.8	3461.7	3461.7	3433.9	3489.6	3456.0	3482.9	3525.1	3487.7
5°	3231.2	3213.0	3178.4	3231.2	3237.9	3212.0	3279.2	3254.3	3293.6	3345.5	3340.7
7.5°	3038.1	3015.1	2983.4	3038.1	3048.7	3031.4	3095.8	3084.2	3136.1	3203.3	3214.9
10°	2912.3	2888.3	2860.4	2910.4	2918.1	2906.5	2971.9	2965.1	3016.0	3093.8	3124.6
12.5°	2823.0	2802.8	2772.1	2824.9	2833.5	2817.2	2878.7	2875.8	2928.6	3010.3	3048.7
15°	2760.5	2736.5	2708.7	2753.8	2765.3	2747.1	2805.7	2799.9	2853.7	2934.4	2977.6
17.5°	2702.0	2679.9	2651.0	2693.3	2704.8	2685.6	2743.3	2733.7	2779.8	2856.6	2900.8
20°	2647.2	2623.2	2597.3	2640.5	2647.2	2625.1	2682.7	2670.3	2711.6	2782.6	2825.9
22.5°	2590.5	2565.6	2538.7	2580.9	2587.7	2565.6	2618.4	2604.0	2642.4	2706.8	2746.1
25°	2528.1	2505.0	2478.2	2517.5	2523.3	2499.3	2555.0	2536.7	2570.4	2627.0	2659.7
27.5°	2465.7	2443.6	2413.8	2454.1	2457.0	2434.0	2484.9	2459.9	2487.8	2539.6	2567.5
30°	2455.1	2430.1	2399.4	2432.0	2433.0	2403.2	2451.3	2421.5	2436.8	2475.3	2491.6
32.5°	2488.7	2463.7	2432.0	2458.9	2456.1	2423.4	2469.5	2433.0	2437.8	2458.0	2454.1
35°	2475.3	2445.5	2408.0	2436.8	2436.8	2397.5	2443.6	2400.3	2395.5	2398.4	2374.4
37.5°	2322.5	2299.5	2264.0	2291.8	2288.9	2259.2	2294.7	2259.2	2242.8	2236.1	2192.9
40°	2097.8	2069.9	2043.0	2072.8	2075.7	2044.0	2090.1	2049.8	2045.0	2025.7	1974.8
42.5°	1870.1	1860.5	1834.6	1859.6	1873.0	1846.1	1884.5	1865.3	1868.2	1863.4	1815.4
45°	1671.3	1655.0	1635.8	1664.6	1673.2	1659.8	1698.2	1686.7	1698.2	1722.2	1682.8
47.5°	1457.1	1440.8	1419.7	1450.4	1465.8	1440.8	1473.4	1469.6	1486.9	1528.2	1524.4
50°	1198.7	1187.2	1183.4	1187.2	1196.8	1185.3	1208.3	1209.3	1220.8	1277.5	1281.3
52.5°	949.0	946.1	932.7	945.2	945.2	926.9	950.0	939.4	950.9	989.3	1014.3
55°	742.5	739.6	731.0	742.5	730.0	723.3	730.0	719.4	710.8	740.6	766.5
57.5°	578.2	568.6	558.1	562.9	561.9	547.5	555.2	542.7	536.0	546.5	569.6
60°	412.1	409.2	399.6	404.4	408.2	397.7	405.3	399.6	388.1	396.7	397.7
62.5°	273.7	275.7	269.9	270.9	268.0	266.1	270.9	273.7	270.9	267.0	268.0
65°	173.9	172.9	171.9	172.9	174.8	171.0	173.9	175.8	172.9	172.9	171.9
67.5°	115.3	112.4	109.5	111.4	113.3	110.5	113.3	112.4	113.3	112.4	109.5
70°	77.8	76.8	75.9	76.8	76.8	74.9	76.8	75.9	76.8	75.9	73.0
72.5°	56.7	56.7	55.7	56.7	56.7	54.7	55.7	53.8	54.7	53.8	51.9
75°	42.3	42.3	41.3	42.3	41.3	40.3	41.3	40.3	38.4	38.4	36.5
77.5°	30.7	30.7	30.7	30.7	30.7	29.8	29.8	28.8	27.9	26.9	26.9
80°	23.1	22.1	22.1	22.1	22.1	21.1	22.1	21.1	20.2	19.2	18.2
82.5°	16.3	17.3	16.3	16.3	16.3	15.4	16.3	15.4	15.4	14.4	12.5
85°	12.5	12.5	12.5	12.5	12.5	11.5	11.5	11.5	10.6	10.6	9.6
87.5°	6.7	6.7	6.7	7.7	6.7	6.7	6.7	5.8	5.8	4.8	4.8
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: P244097

CATALOG NUMBER: LD8B50D010 ER8B50830 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8
2.5°	3537.6	3542.4	3531.8	3548.2	3611.6	3560.7	3581.8	3588.5	3636.5	3645.2	3639.4
5°	3403.1	3424.3	3437.7	3474.2	3544.3	3507.8	3545.3	3569.3	3630.8	3651.0	3655.8
7.5°	3297.5	3341.7	3374.3	3433.9	3516.5	3488.6	3545.3	3584.7	3659.6	3685.5	3698.0
10°	3218.7	3286.0	3342.6	3424.3	3517.4	3499.2	3573.1	3628.9	3712.4	3743.2	3758.5
12.5°	3159.2	3240.8	3316.7	3420.4	3521.3	3512.6	3602.0	3665.4	3753.7	3784.5	3802.7
15°	3093.8	3188.0	3276.3	3392.6	3501.1	3499.2	3595.2	3662.5	3752.8	3778.7	3796.0
17.5°	3016.0	3116.9	3213.9	3339.7	3447.3	3449.2	3546.3	3612.5	3700.9	3722.0	3733.6
20°	2937.3	3037.2	3134.2	3263.9	3369.5	3372.4	3467.5	3529.0	3613.5	3630.8	3633.7
22.5°	2853.7	2946.9	3043.9	3172.6	3274.4	3276.3	3370.5	3428.1	3500.1	3508.8	3516.5
25°	2758.6	2849.9	2941.1	3068.9	3165.9	3171.6	3257.1	3308.0	3374.3	3381.0	3383.9
27.5°	2659.7	2734.6	2822.0	2931.5	3029.5	3025.6	3106.3	3164.0	3223.5	3219.7	3218.7
30°	2559.8	2622.2	2676.0	2781.7	2853.7	2856.6	2932.5	2960.3	3022.8	3015.1	3014.1
32.5°	2489.7	2506.0	2520.4	2574.2	2642.4	2618.4	2670.3	2704.8	2748.1	2745.2	2746.1
35°	2361.0	2331.2	2288.0	2295.7	2337.0	2299.5	2327.3	2326.4	2370.6	2360.0	2372.5
37.5°	2141.0	2056.5	1960.4	1905.7	1913.4	1866.3	1856.7	1879.7	1895.1	1865.3	1875.9
40°	1906.6	1781.8	1631.9	1507.1	1500.3	1441.7	1431.2	1408.1	1437.9	1412.9	1420.6
42.5°	1733.7	1568.5	1371.6	1219.9	1187.2	1138.2	1109.4	1105.6	1114.2	1096.9	1092.1
45°	1601.2	1425.4	1199.7	1025.8	989.3	936.5	907.7	897.1	898.1	892.3	887.5
47.5°	1445.6	1268.9	1040.2	862.6	821.2	771.3	742.5	735.8	739.6	731.9	726.2
50°	1230.4	1071.9	863.5	701.2	664.7	628.2	605.1	598.4	597.4	591.7	587.8
52.5°	998.9	867.4	686.8	551.3	518.7	483.1	466.8	458.2	459.1	453.4	447.6
55°	773.2	691.6	532.1	416.9	387.1	359.2	343.9	333.3	330.4	324.7	321.8
57.5°	575.4	520.6	398.6	300.6	283.4	256.5	241.1	228.6	226.7	223.8	222.8
60°	403.4	364.0	280.5	214.2	194.0	177.7	162.3	149.8	144.1	143.1	140.2
62.5°	261.3	237.2	184.4	143.1	127.7	116.2	100.9	92.2	88.4	84.5	85.5
65°	162.3	144.1	115.3	92.2	83.6	74.9	63.4	55.7	51.9	48.0	49.0
67.5°	100.9	90.3	73.0	59.6	53.8	47.1	38.4	32.7	29.8	26.9	25.0
70°	68.2	58.6	49.9	42.3	38.4	33.6	27.9	23.1	21.1	19.2	17.3
72.5°	48.0	43.2	36.5	31.7	28.8	25.0	21.1	18.2	16.3	14.4	12.5
75°	34.6	30.7	26.9	23.1	21.1	19.2	16.3	14.4	12.5	10.6	8.6
77.5°	25.0	22.1	19.2	17.3	16.3	13.4	11.5	10.6	9.6	7.7	5.8
80°	17.3	15.4	12.5	11.5	11.5	9.6	8.6	7.7	6.7	4.8	3.8
82.5°	11.5	10.6	9.6	8.6	7.7	6.7	6.7	4.8	3.8	2.9	1.9
85°	8.6	7.7	6.7	5.8	5.8	4.8	3.8	2.9	2.9	1.9	1.0
87.5°	4.8	4.8	3.8	2.9	2.9	1.9	1.9	1.0	1.0	1.0	1.0
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: P244097

CATALOG NUMBER: LD8B50D010 ER8B50830 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8
2.5°	3688.4	3691.3	3707.6	3695.1	3726.8	3749.9	3738.4	3764.3	3755.6	3753.7	3783.5
5°	3713.4	3720.1	3742.2	3730.7	3765.3	3790.2	3778.7	3807.5	3798.9	3797.0	3827.7
7.5°	3761.4	3768.1	3787.3	3777.7	3814.2	3836.3	3821.9	3853.6	3842.1	3841.1	3870.9
10°	3821.9	3831.5	3847.9	3838.3	3871.9	3891.1	3876.7	3907.4	3896.8	3892.0	3924.7
12.5°	3867.1	3873.8	3890.1	3882.4	3915.1	3929.5	3917.0	3946.8	3933.3	3929.5	3958.3
15°	3856.5	3863.2	3876.7	3870.0	3900.7	3914.1	3897.8	3930.5	3917.0	3909.3	3935.3
17.5°	3789.3	3793.1	3802.7	3796.0	3828.6	3837.3	3819.0	3851.7	3839.2	3825.8	3850.7
20°	3690.3	3688.4	3694.2	3691.3	3718.2	3723.0	3711.5	3735.5	3721.1	3713.4	3727.8
22.5°	3567.4	3565.5	3569.3	3561.6	3588.5	3591.4	3574.1	3602.9	3588.5	3574.1	3598.1
25°	3431.0	3420.4	3418.5	3421.4	3439.6	3442.5	3424.3	3445.4	3427.1	3415.6	3438.7
27.5°	3262.9	3249.5	3246.6	3249.5	3267.7	3254.3	3238.9	3254.3	3236.0	3225.4	3239.8
30°	3055.4	3036.2	3027.6	3021.8	3041.0	3036.2	3000.7	3018.0	2989.1	2973.8	2984.3
32.5°	2775.9	2765.3	2742.3	2728.8	2747.1	2710.6	2688.5	2688.5	2677.0	2651.0	2656.8
35°	2387.9	2371.5	2350.4	2338.9	2341.8	2292.8	2256.3	2264.0	2225.5	2218.8	2221.7
37.5°	1897.0	1870.1	1862.5	1838.4	1844.2	1801.0	1751.0	1752.0	1731.8	1710.7	1704.0
40°	1425.4	1420.6	1412.9	1392.8	1400.4	1353.4	1334.2	1335.1	1321.7	1306.3	1314.0
42.5°	1101.7	1086.4	1081.5	1074.8	1076.7	1069.1	1044.1	1047.0	1035.4	1031.6	1027.8
45°	895.2	878.9	867.4	873.1	873.1	864.5	854.9	860.6	854.9	847.2	851.0
47.5°	737.7	722.3	716.6	715.6	722.3	716.6	706.9	708.9	707.9	705.0	703.1
50°	588.8	585.0	580.2	577.3	580.2	578.2	569.6	574.4	577.3	567.7	570.6
52.5°	448.6	448.6	447.6	440.9	446.6	440.9	439.9	441.8	439.0	435.1	434.2
55°	328.5	325.6	320.8	319.9	321.8	319.9	317.9	318.9	320.8	311.2	311.2
57.5°	224.8	222.8	220.0	220.0	223.8	219.0	216.1	220.0	216.1	212.3	212.3
60°	144.1	143.1	140.2	140.2	140.2	139.3	136.4	137.4	139.3	133.5	134.5
62.5°	86.4	83.6	82.6	81.6	82.6	81.6	81.6	80.7	79.7	79.7	76.8
65°	47.1	45.1	43.2	44.2	44.2	43.2	43.2	43.2	41.3	40.3	39.4
67.5°	24.0	22.1	22.1	21.1	21.1	21.1	21.1	20.2	20.2	20.2	19.2
70°	15.4	14.4	13.4	13.4	13.4	12.5	12.5	12.5	12.5	12.5	11.5
72.5°	10.6	9.6	8.6	8.6	8.6	7.7	7.7	7.7	7.7	6.7	6.7
75°	7.7	6.7	5.8	5.8	5.8	4.8	4.8	4.8	4.8	4.8	4.8
77.5°	4.8	3.8	3.8	3.8	3.8	2.9	2.9	2.9	2.9	2.9	1.9
80°	2.9	2.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0
82.5°	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
87.5°	1.0	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: P244097

CATALOG NUMBER: LD8B50D010 ER8B50830 8LBSW01

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8	3655.8
2.5°	3772.9	3765.3	3770.1	3805.6	3790.2	3785.4	3745.1	3780.6
5°	3818.1	3812.3	3812.3	3852.7	3834.4	3830.6	3791.2	3821.9
7.5°	3860.3	3854.6	3855.5	3896.8	3882.4	3876.7	3837.3	3868.0
10°	3915.1	3911.3	3912.2	3951.6	3936.2	3930.5	3890.1	3921.8
12.5°	3947.8	3942.0	3942.0	3984.3	3967.0	3958.3	3919.9	3950.6
15°	3922.8	3914.1	3914.1	3956.4	3937.2	3924.7	3891.1	3919.9
17.5°	3837.3	3828.6	3828.6	3865.1	3850.7	3832.5	3797.9	3824.8
20°	3718.2	3707.6	3704.7	3747.0	3726.8	3710.5	3679.8	3705.7
22.5°	3583.7	3578.9	3570.3	3612.5	3594.3	3577.0	3544.3	3564.5
25°	3422.3	3414.7	3406.0	3447.3	3429.1	3411.8	3385.8	3402.2
27.5°	3221.6	3222.6	3217.8	3250.4	3232.2	3222.6	3190.9	3217.8
30°	2978.6	2968.0	2964.2	3002.6	2985.3	2972.8	2933.4	2959.4
32.5°	2661.6	2646.2	2626.1	2669.3	2639.5	2629.0	2595.3	2632.8
35°	2200.6	2195.8	2177.5	2214.0	2197.7	2178.5	2157.3	2189.0
37.5°	1701.1	1704.9	1703.0	1712.6	1703.0	1690.5	1667.5	1655.9
40°	1298.6	1289.0	1281.3	1298.6	1278.5	1278.5	1265.0	1279.4
42.5°	1018.2	1014.3	1023.9	1027.8	1016.2	1014.3	1012.4	1011.4
45°	840.5	840.5	842.4	846.2	842.4	840.5	834.7	830.9
47.5°	692.5	696.4	692.5	705.0	698.3	696.4	684.9	689.7
50°	560.9	556.1	560.9	564.8	565.7	560.0	554.2	557.1
52.5°	435.1	427.4	425.5	431.3	427.4	427.4	423.6	422.6
55°	306.4	309.3	304.5	309.3	307.4	304.5	301.6	305.4
57.5°	207.5	208.4	206.5	209.4	204.6	205.6	204.6	203.6
60°	134.5	130.6	130.6	133.5	128.7	128.7	127.7	127.7
62.5°	76.8	75.9	75.9	74.9	74.0	74.0	74.0	72.0
65°	39.4	38.4	37.5	37.5	37.5	37.5	36.5	36.5
67.5°	19.2	18.2	18.2	19.2	18.2	18.2	18.2	18.2
70°	11.5	11.5	10.6	11.5	10.6	10.6	10.6	10.6
72.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
75°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)