

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: P249083

Luminaire Tested: **LD8B70D010 ER8B70827 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249083
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: LD8B70D010 ER8B70827 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7160.0 lumens
Efficiency: N/A
Efficacy: 94.3 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

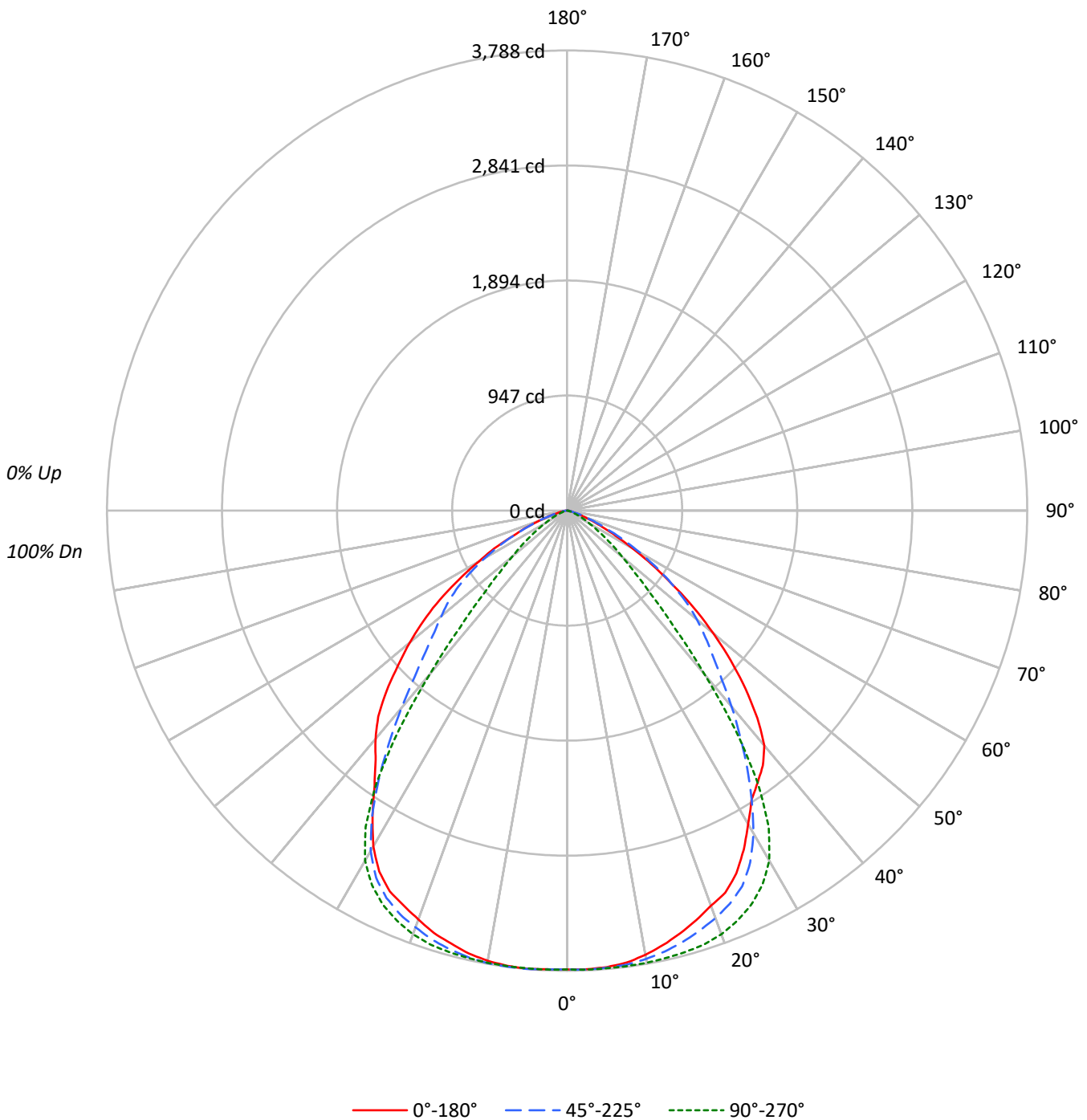
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	116493	116493	116493
5°	116750	117062	117189
10°	116258	118353	117846
15°	114968	120083	117819
20°	113587	121771	117515
25°	112113	121912	117635
30°	106065	118485	113646
35°	102900	102976	104045
40°	101625	70851	98767
45°	90554	42536	91789
50°	75293	28309	81132
55°	56471	19515	68788
60°	38268	13007	51898
65°	23086	8435	35658
70°	12803	4571	21936
75°	5802	1930	11354
80°	5043	2166	7920
85°	5732	2866	7890



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.5	5.0
10°-20°	1047.0	14.6
20°-30°	1589.2	22.2
30°-40°	1669.1	23.3
40°-50°	1251.4	17.5
50°-60°	802.9	11.2
60°-70°	343.5	4.8
70°-80°	81.1	1.1
80°-90°	15.1	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°	2996.8	41.9
0°-40°	4665.9	65.2
0°-60°	6720.3	93.9
0°-90°	7160.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7160.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3778	3778	3778	3778	3778	
5°	3772	3778	3782	3788	3786	358
15°	3601	3676	3762	3737	3691	1016
25°	3295	3411	3583	3518	3457	1505
35°	2734	2581	2736	2703	2764	1716
45°	2076	1697	975	1649	2105	1590
55°	1050	1050	363	1095	1280	953
65°	316	373	116	481	489	338
75°	49	57	16	97	95	71
85°	16	10	8	16	22	17
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°	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8
2.5°	3779.8	3783.9	3781.8	3781.8	3779.8	3781.8	3781.8	3785.9	3785.9	3781.8	3779.8
5°	3771.7	3775.7	3775.7	3771.7	3771.7	3781.8	3775.7	3779.8	3779.8	3777.8	3777.8
7.5°	3753.4	3753.4	3761.5	3755.5	3755.5	3761.5	3759.5	3763.6	3767.6	3769.7	3769.7
10°	3712.9	3716.9	3719.0	3719.0	3721.0	3727.0	3731.1	3739.3	3743.3	3747.3	3749.4
12.5°	3662.2	3668.3	3670.3	3668.3	3674.4	3682.4	3692.6	3702.7	3708.8	3716.9	3723.0
15°	3601.3	3601.3	3605.4	3611.5	3615.6	3627.7	3637.8	3650.0	3666.2	3676.4	3686.5
17.5°	3534.4	3538.5	3544.6	3544.6	3552.7	3572.9	3579.0	3597.3	3615.6	3625.7	3646.0
20°	3461.4	3465.5	3471.6	3475.6	3485.8	3502.0	3514.1	3530.4	3550.7	3568.9	3589.2
22.5°	3404.6	3396.6	3400.6	3404.6	3414.8	3429.0	3443.2	3463.4	3483.7	3502.0	3522.3
25°	3295.1	3297.2	3303.3	3307.3	3319.5	3331.7	3347.9	3372.2	3390.4	3410.7	3433.0
27.5°	3147.1	3149.2	3159.3	3159.3	3169.4	3189.7	3199.8	3220.1	3244.5	3264.7	3291.1
30°	2978.8	2982.9	2982.9	2991.0	2997.0	3007.2	3017.3	3037.6	3049.8	3068.0	3104.6
32.5°	2824.7	2828.7	2826.7	2824.7	2818.6	2816.6	2814.6	2818.6	2822.7	2828.7	2842.9
35°	2733.5	2723.3	2715.2	2701.0	2684.8	2664.5	2646.3	2621.9	2599.6	2581.4	2561.1
37.5°	2646.3	2644.2	2632.1	2611.8	2579.3	2542.8	2500.3	2447.5	2394.8	2338.0	2283.3
40°	2524.6	2518.5	2508.4	2480.0	2443.5	2398.9	2342.1	2277.2	2192.0	2104.8	2015.6
42.5°	2317.7	2319.8	2307.6	2285.3	2250.9	2208.2	2149.4	2078.5	1987.2	1883.8	1768.2
45°	2076.5	2076.5	2072.4	2054.1	2029.8	1995.3	1950.7	1891.9	1802.7	1697.2	1573.5
47.5°	1825.0	1827.0	1820.9	1816.9	1806.7	1784.5	1752.0	1707.4	1644.5	1543.1	1419.4
50°	1569.5	1569.5	1579.6	1577.6	1577.6	1569.5	1555.3	1528.9	1474.2	1393.1	1277.5
52.5°	1314.0	1318.1	1324.2	1332.3	1342.4	1358.6	1342.4	1330.2	1295.7	1232.9	1133.5
55°	1050.4	1054.5	1064.6	1078.8	1091.0	1107.2	1111.2	1111.2	1093.0	1050.4	975.4
57.5°	825.3	819.2	827.4	839.5	855.7	872.0	884.1	898.3	896.3	867.9	807.1
60°	620.5	622.5	628.6	640.8	653.0	667.1	683.4	695.5	701.6	687.4	648.9
62.5°	452.2	452.2	460.3	472.5	478.6	498.8	509.0	515.1	521.1	519.1	494.8
65°	316.4	320.4	324.4	330.5	336.6	348.8	354.9	367.0	371.1	373.1	354.9
67.5°	223.1	217.0	221.0	225.1	231.2	239.3	251.5	251.5	257.5	257.5	245.4
70°	142.0	142.0	144.0	150.0	154.1	156.1	160.2	164.2	170.3	168.3	168.3
72.5°	95.3	93.3	95.3	97.3	99.4	105.4	105.4	107.5	111.5	113.6	105.4
75°	48.7	50.7	54.7	52.7	58.8	54.7	56.8	62.9	60.8	56.8	56.8
77.5°	40.5	40.5	40.5	38.6	42.6	42.6	40.5	44.6	42.6	42.6	40.5
80°	28.4	30.4	28.4	26.3	28.4	26.3	26.3	26.3	26.3	26.3	24.3
82.5°	22.3	18.3	20.3	18.3	20.3	20.3	18.3	16.2	16.2	18.3	16.2
85°	16.2	12.2	14.2	14.2	12.2	12.2	12.2	12.2	12.2	10.1	10.1
87.5°	10.1	6.1	6.1	6.1	8.1	8.1	8.1	6.1	8.1	8.1	4.1
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°	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8
2.5°	3783.9	3781.8	3785.9	3783.9	3783.9	3781.8	3783.9	3781.8	3785.9	3777.8	3779.8
5°	3783.9	3779.8	3781.8	3783.9	3785.9	3781.8	3781.8	3781.8	3785.9	3781.8	3783.9
7.5°	3775.7	3773.7	3779.8	3783.9	3781.8	3779.8	3783.9	3781.8	3785.9	3783.9	3787.9
10°	3759.5	3761.5	3765.6	3771.7	3773.7	3775.7	3779.8	3779.8	3785.9	3777.8	3781.8
12.5°	3735.2	3743.3	3753.4	3757.5	3765.6	3765.6	3769.7	3771.7	3775.7	3773.7	3779.8
15°	3704.8	3714.9	3727.0	3737.2	3747.3	3753.4	3759.5	3761.5	3767.6	3761.5	3763.6
17.5°	3668.3	3680.4	3698.7	3710.8	3727.0	3733.2	3741.2	3745.3	3751.4	3747.3	3749.4
20°	3617.5	3631.8	3652.0	3670.3	3680.4	3694.6	3704.8	3710.8	3714.9	3710.8	3712.9
22.5°	3546.6	3566.9	3593.2	3607.4	3627.7	3639.9	3641.9	3656.1	3666.2	3656.1	3660.2
25°	3463.4	3483.7	3504.0	3534.4	3552.7	3566.9	3581.1	3583.1	3593.2	3591.2	3589.2
27.5°	3325.6	3351.9	3386.4	3410.7	3435.1	3457.4	3473.6	3477.6	3487.8	3483.7	3485.8
30°	3137.0	3165.4	3197.8	3236.3	3270.8	3293.1	3313.4	3327.6	3337.7	3331.7	3329.6
32.5°	2869.3	2897.7	2932.2	2970.7	3011.3	3043.7	3068.0	3086.3	3098.5	3094.4	3084.3
35°	2563.1	2571.2	2593.6	2624.0	2658.4	2692.9	2715.2	2735.5	2749.7	2753.7	2753.7
37.5°	2248.8	2222.5	2206.2	2206.2	2226.5	2240.7	2261.0	2273.1	2295.5	2303.5	2309.7
40°	1944.6	1883.8	1827.0	1784.5	1756.1	1754.0	1754.0	1760.1	1780.4	1806.7	1831.1
42.5°	1672.9	1575.6	1488.4	1409.3	1352.5	1320.1	1305.9	1307.9	1324.2	1348.5	1389.0
45°	1455.9	1334.3	1224.8	1129.5	1052.4	1001.7	977.4	975.4	987.5	1015.9	1060.6
47.5°	1287.6	1157.9	1034.2	924.7	841.5	786.8	758.4	750.3	758.4	784.7	837.5
50°	1147.7	1013.9	886.2	772.6	683.4	626.6	600.2	590.1	600.2	622.5	675.2
52.5°	1017.9	880.0	760.4	650.9	555.6	506.9	478.6	472.5	478.6	504.9	547.5
55°	867.9	750.3	632.7	523.2	440.0	391.4	369.0	363.0	369.0	393.4	438.0
57.5°	719.9	618.5	515.1	415.7	344.7	302.1	281.9	273.7	287.9	304.2	356.9
60°	582.0	500.9	413.7	326.5	267.7	229.1	212.9	210.9	214.9	235.2	271.7
62.5°	456.3	389.3	320.4	249.4	200.7	184.5	164.2	162.2	166.3	178.4	206.9
65°	328.5	285.9	233.2	182.5	144.0	121.7	113.6	115.6	119.6	127.8	154.1
67.5°	229.1	198.7	162.2	127.8	99.4	89.2	81.1	79.1	81.1	95.3	109.5
70°	154.1	135.9	109.5	97.3	69.0	54.7	56.8	50.7	58.8	58.8	71.0
72.5°	101.4	89.2	73.0	56.8	48.7	38.6	38.6	36.5	40.5	42.6	52.7
75°	52.7	40.5	40.5	28.4	20.3	10.1	18.3	16.2	14.2	16.2	20.3
77.5°	36.5	30.4	28.4	22.3	20.3	16.2	16.2	16.2	16.2	18.3	20.3
80°	22.3	22.3	16.2	14.2	12.2	10.1	12.2	12.2	12.2	12.2	14.2
82.5°	14.2	12.2	12.2	10.1	10.1	8.1	8.1	8.1	8.1	8.1	12.2
85°	12.2	8.1	8.1	6.1	8.1	14.2	6.1	8.1	8.1	8.1	6.1
87.5°	4.1	6.1	6.1	6.1	4.1	2.0	4.1	6.1	6.1	10.1	8.1
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8	3777.8
2.5°	3783.9	3785.9	3785.9	3783.9	3783.9	3779.8	3787.9	3781.8	3783.9	3791.9	3785.9
5°	3787.9	3789.9	3789.9	3787.9	3787.9	3787.9	3789.9	3789.9	3787.9	3785.9	3789.9
7.5°	3796.0	3794.0	3794.0	3789.9	3789.9	3785.9	3789.9	3783.9	3787.9	3783.9	3789.9
10°	3785.9	3787.9	3785.9	3783.9	3783.9	3781.8	3781.8	3775.7	3777.8	3771.7	3775.7
12.5°	3779.8	3777.8	3777.8	3773.7	3769.7	3765.6	3763.6	3757.5	3757.5	3743.3	3749.4
15°	3763.6	3765.6	3759.5	3751.4	3747.3	3737.2	3733.2	3725.0	3716.9	3706.8	3708.8
17.5°	3749.4	3743.3	3735.2	3727.0	3710.8	3702.7	3694.6	3682.4	3678.4	3666.2	3662.2
20°	3706.8	3702.7	3692.6	3678.4	3668.3	3650.0	3641.9	3629.7	3619.6	3607.4	3601.3
22.5°	3652.0	3648.0	3635.8	3621.6	3605.4	3597.3	3589.2	3566.9	3556.7	3544.6	3542.5
25°	3583.1	3577.0	3564.9	3548.6	3540.5	3518.2	3510.1	3493.9	3489.8	3477.6	3475.6
27.5°	3477.6	3469.5	3455.3	3435.1	3420.9	3406.7	3398.6	3386.4	3382.4	3370.2	3368.2
30°	3319.5	3309.3	3280.9	3272.9	3248.5	3234.3	3234.3	3218.1	3220.1	3212.0	3212.0
32.5°	3070.1	3053.9	3031.5	3015.3	2999.1	2991.0	2991.0	2984.9	2989.0	2989.0	2993.0
35°	2739.5	2717.3	2705.0	2694.9	2694.9	2703.0	2727.4	2733.5	2745.6	2755.8	2763.9
37.5°	2315.7	2313.7	2327.9	2340.1	2370.5	2405.0	2447.5	2484.1	2518.5	2542.8	2567.2
40°	1857.4	1908.2	1948.7	2005.5	2052.1	2119.0	2196.1	2258.9	2317.7	2360.4	2405.0
42.5°	1449.8	1514.7	1599.9	1683.0	1766.2	1857.4	1958.9	2046.0	2123.1	2181.9	2228.5
45°	1129.5	1218.7	1322.1	1427.6	1535.0	1648.6	1754.0	1843.3	1924.4	1985.2	2031.8
47.5°	910.5	1007.8	1125.4	1241.0	1362.7	1482.3	1599.9	1677.0	1743.9	1792.5	1835.2
50°	752.3	855.7	979.4	1111.2	1232.9	1352.5	1453.9	1528.9	1583.7	1626.3	1652.6
52.5°	628.6	738.1	869.9	1001.7	1123.4	1232.9	1324.2	1380.9	1425.5	1455.9	1480.3
55°	519.1	624.6	748.3	872.0	991.6	1095.0	1170.0	1212.6	1247.1	1265.3	1279.5
57.5°	423.8	521.1	634.7	748.3	851.7	936.9	995.7	1038.2	1054.5	1068.6	1066.6
60°	332.6	423.8	527.2	624.6	713.8	782.7	825.3	849.6	861.8	867.9	863.8
62.5°	261.6	344.7	423.8	509.0	573.9	632.7	673.2	673.2	679.3	681.3	687.4
65°	194.6	257.5	326.5	389.3	442.0	480.6	502.9	509.0	517.1	515.1	511.0
67.5°	144.0	190.6	241.3	287.9	324.4	348.8	365.0	379.2	377.2	373.1	371.1
70°	99.4	129.8	174.4	202.8	229.1	253.5	257.5	259.5	261.6	263.6	259.5
72.5°	69.0	91.2	115.6	139.9	156.1	166.3	176.4	178.4	178.4	178.4	176.4
75°	34.5	46.6	69.0	79.1	93.3	97.3	105.4	105.4	111.5	103.4	101.4
77.5°	30.4	36.5	48.7	56.8	62.9	69.0	71.0	77.1	75.0	71.0	73.0
80°	18.3	22.3	30.4	34.5	42.6	44.6	46.6	48.7	46.6	48.7	48.7
82.5°	14.2	16.2	20.3	20.3	26.3	26.3	28.4	28.4	30.4	30.4	30.4
85°	8.1	14.2	12.2	24.3	16.2	16.2	20.3	24.3	20.3	20.3	24.3
87.5°	8.1	8.1	6.1	8.1	8.1	8.1	10.1	12.2	12.2	14.2	12.2
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: P249083

CATALOG NUMBER: LD8B70D010 ER8B70827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3777.8	3777.8	3777.8	3777.8
2.5°	3783.9	3787.9	3781.8	3779.8
5°	3789.9	3789.9	3785.9	3785.9
7.5°	3789.9	3789.9	3783.9	3779.8
10°	3773.7	3773.7	3767.6	3763.6
12.5°	3743.3	3743.3	3741.2	3735.2
15°	3704.8	3704.8	3696.6	3690.6
17.5°	3652.0	3656.1	3646.0	3646.0
20°	3595.3	3593.2	3585.1	3581.1
22.5°	3536.5	3532.4	3530.4	3518.2
25°	3473.6	3469.5	3463.4	3457.4
27.5°	3366.1	3364.1	3358.0	3349.9
30°	3201.9	3199.8	3191.7	3191.7
32.5°	2989.0	2986.9	2978.8	2980.9
35°	2767.9	2776.0	2772.0	2763.9
37.5°	2583.4	2589.5	2593.6	2589.5
40°	2429.3	2447.5	2449.6	2453.6
42.5°	2265.0	2289.4	2297.5	2301.5
45°	2068.3	2090.6	2108.9	2104.8
47.5°	1867.6	1883.8	1900.0	1887.9
50°	1675.0	1685.1	1691.2	1691.2
52.5°	1492.5	1492.5	1490.4	1492.5
55°	1283.6	1283.6	1275.5	1279.5
57.5°	1064.6	1068.6	1062.5	1052.4
60°	861.8	851.7	847.6	841.5
62.5°	671.2	671.2	657.0	675.2
65°	502.9	496.8	490.7	488.7
67.5°	365.0	363.0	356.9	354.9
70°	257.5	249.4	247.4	243.3
72.5°	172.4	172.4	168.3	168.3
75°	105.4	95.3	93.3	95.3
77.5°	73.0	71.0	71.0	69.0
80°	48.7	46.6	50.7	44.6
82.5°	30.4	32.4	30.4	32.4
85°	20.3	24.3	22.3	22.3
87.5°	12.2	12.2	12.2	12.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)