

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: P248860

Luminaire Tested: **LD8B90D010 ER8B909730 8LBSW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248860  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13958)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B90D010 ER8B909730 8LBSW0GPH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
97 CRI 3000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6427.0 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.15  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

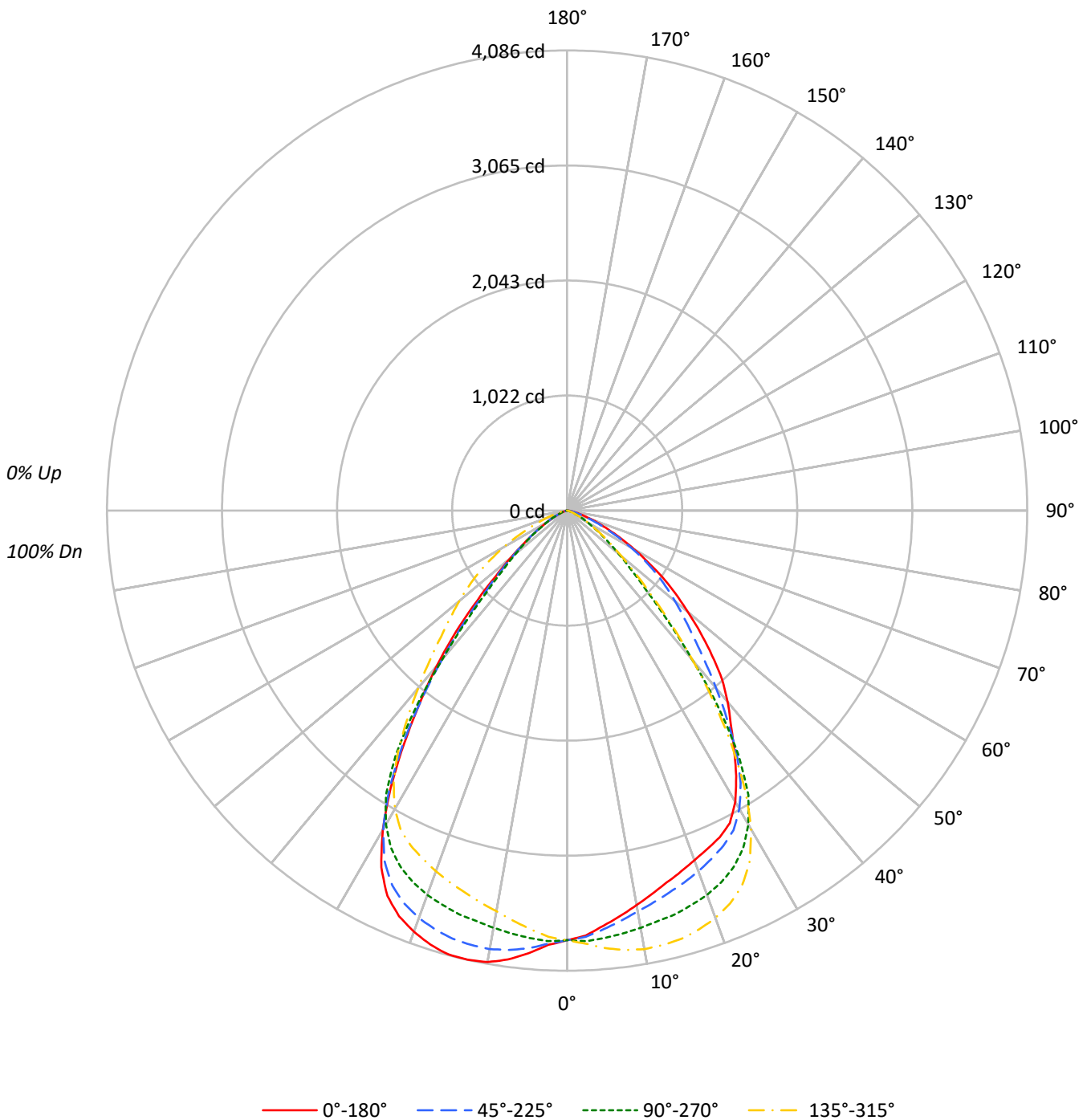
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

### Luminous Intensity Polar Plot





TEST NUMBER: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

**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	109	106	103	109	106	104	101	102	100	98	99	97	95	95	94	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37

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

	0°	90°	180°	270°
0°	Luminaire represents a point source (luminous area is zero).			
5°	No luminance values can be calculated.			
10°				
15°				
20°				
25°				
30°				
35°				
40°				
45°				
50°				
55°				
60°				
65°				
70°				
75°				
80°				
85°				



TEST NUMBER: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	363.2	5.7
10°-20°	1051.7	16.4
20°-30°	1592.4	24.8
30°-40°	1596.0	24.8
40°-50°	1002.2	15.6
50°-60°	534.1	8.3
60°-70°	219.6	3.4
70°-80°	58.0	0.9
80°-90°	9.8	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°	3007.3	46.8
0°-40°	4603.3	71.6
0°-60°	6139.5	95.5
0°-90°	6427.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6427.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	3816	3816	3816	3816	3816	
5°	3700	3810	3946	3810	3700	349
15°	3419	3711	4080	3711	3419	967
25°	3203	3495	3776	3495	3203	1469
35°	2582	2655	2519	2655	2582	1618
45°	1818	972	1125	972	1818	1398
55°	1034	360	380	360	1034	922
65°	412	110	101	110	412	427
75°	116	22	19	22	116	131
85°	24	0	2	0	24	27
90°	0	0	0	0	0	



TEST NUMBER: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5
2.5°	3776.4	3772.6	3770.8	3774.6	3776.4	3783.8	3782.0	3785.7	3785.7	3787.6	3791.3
5°	3700.0	3698.1	3700.0	3700.0	3707.5	3714.9	3713.1	3718.7	3722.3	3731.7	3735.4
7.5°	3629.2	3629.2	3627.3	3634.8	3638.5	3649.7	3647.8	3657.2	3662.8	3672.0	3685.1
10°	3556.5	3556.5	3558.4	3564.0	3565.9	3582.6	3582.6	3595.7	3603.1	3612.4	3629.2
12.5°	3485.8	3485.8	3497.0	3493.2	3500.6	3513.7	3519.3	3532.3	3543.5	3562.1	3578.9
15°	3418.7	3418.7	3422.4	3431.7	3437.3	3454.1	3463.4	3478.3	3491.4	3510.0	3534.2
17.5°	3360.9	3359.1	3360.9	3372.1	3383.3	3398.2	3405.6	3424.3	3437.3	3461.5	3483.9
20°	3303.2	3306.9	3306.9	3316.2	3323.7	3342.3	3349.7	3370.3	3385.2	3407.5	3433.6
22.5°	3252.9	3251.0	3251.0	3264.1	3269.7	3286.4	3293.8	3312.5	3329.3	3347.9	3372.1
25°	3202.6	3198.8	3206.3	3208.2	3211.8	3230.5	3236.1	3249.1	3265.9	3282.7	3306.9
27.5°	3128.0	3124.4	3126.2	3133.6	3139.2	3154.1	3157.9	3170.9	3183.9	3198.8	3219.4
30°	2984.6	2980.9	2979.0	2992.1	2997.7	3008.8	3014.4	3036.8	3040.5	3057.3	3072.1
32.5°	2794.5	2792.7	2796.4	2807.6	2813.2	2828.1	2835.6	2848.6	2857.9	2867.2	2882.1
35°	2582.2	2578.4	2582.2	2593.4	2593.4	2606.4	2612.0	2617.5	2615.7	2617.5	2613.9
37.5°	2384.7	2382.8	2384.7	2390.3	2384.7	2390.3	2384.7	2373.5	2353.1	2330.7	2308.3
40°	2217.0	2218.9	2207.7	2215.2	2194.6	2190.9	2170.5	2142.5	2101.5	2056.8	1993.5
42.5°	2038.2	2032.6	2025.2	2028.8	2012.1	1999.0	1965.5	1930.1	1877.9	1803.5	1727.0
45°	1818.3	1816.5	1812.7	1810.9	1799.7	1786.7	1758.7	1717.7	1660.0	1583.6	1492.3
47.5°	1604.1	1598.5	1598.5	1600.3	1587.3	1585.4	1563.1	1527.7	1477.4	1402.9	1307.9
50°	1399.1	1397.3	1401.0	1408.5	1399.1	1395.4	1380.5	1356.3	1311.6	1248.3	1158.8
52.5°	1214.7	1212.8	1216.6	1225.9	1222.1	1225.9	1211.0	1192.4	1162.5	1101.0	1022.8
55°	1034.0	1034.0	1034.0	1045.1	1045.1	1045.1	1037.7	1026.6	998.6	953.9	881.3
57.5°	845.8	847.7	858.9	860.7	858.9	862.6	860.7	849.5	831.0	799.3	743.4
60°	687.5	687.5	693.1	698.7	696.8	698.7	698.7	693.1	674.4	648.4	603.7
62.5°	544.0	549.6	545.8	549.6	557.0	549.6	545.8	542.2	529.1	512.3	475.1
65°	411.7	415.5	415.5	417.3	413.6	415.5	408.0	402.4	395.0	376.4	352.1
67.5°	313.0	313.0	313.0	313.0	311.1	309.3	307.4	301.8	288.8	281.4	255.2
70°	240.3	229.1	229.1	229.1	229.1	231.0	225.5	218.0	214.3	201.2	182.6
72.5°	160.2	164.0	160.2	160.2	156.5	158.4	150.9	147.2	143.5	136.0	124.8
75°	115.5	106.2	109.9	111.8	106.2	109.9	102.5	95.0	95.0	89.4	83.8
77.5°	74.5	72.7	74.5	76.4	74.5	72.7	68.9	65.2	65.2	63.3	57.7
80°	54.1	52.1	52.1	52.1	50.3	52.1	48.5	48.5	44.7	42.9	39.1
82.5°	35.4	35.4	33.5	35.4	33.5	35.4	29.8	29.8	29.8	27.9	24.2
85°	24.2	20.5	20.5	22.4	18.6	22.4	20.5	18.6	16.8	16.8	14.9
87.5°	11.2	13.0	11.2	13.0	11.2	11.2	13.0	11.2	11.2	7.4	7.4
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: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5
2.5°	3796.9	3798.7	3798.7	3806.2	3809.9	3811.7	3811.7	3826.7	3821.1	3824.9	3828.5
5°	3742.9	3754.0	3757.8	3757.8	3778.2	3785.7	3793.1	3809.9	3811.7	3822.9	3836.0
7.5°	3690.7	3703.7	3711.2	3727.9	3741.0	3754.0	3776.4	3787.6	3798.7	3813.7	3830.4
10°	3640.4	3655.3	3670.2	3683.2	3703.7	3720.5	3735.4	3761.4	3774.6	3795.0	3817.3
12.5°	3592.0	3612.4	3625.5	3647.8	3670.2	3685.1	3707.5	3731.7	3752.2	3772.6	3798.7
15°	3549.1	3573.3	3588.2	3612.4	3636.7	3657.2	3681.4	3711.2	3726.1	3750.3	3774.6
17.5°	3502.5	3528.6	3547.3	3569.6	3599.4	3621.7	3642.3	3672.0	3690.7	3716.7	3744.7
20°	3454.1	3480.2	3502.5	3524.9	3554.7	3577.0	3601.3	3631.1	3651.6	3677.6	3700.0
22.5°	3396.3	3420.6	3444.7	3470.8	3500.6	3519.3	3547.3	3573.3	3595.7	3619.9	3642.3
25°	3321.8	3351.6	3370.3	3394.4	3418.7	3439.1	3469.0	3495.0	3513.7	3536.1	3556.5
27.5°	3234.2	3256.6	3271.5	3292.0	3316.2	3334.8	3357.2	3383.3	3401.9	3422.4	3437.3
30°	3085.2	3105.7	3118.8	3133.6	3157.9	3174.7	3193.3	3217.4	3230.5	3245.4	3258.5
32.5°	2889.5	2906.3	2913.8	2925.0	2941.8	2958.5	2973.4	2993.9	2999.5	3008.8	3008.8
35°	2606.4	2610.1	2608.3	2612.0	2619.5	2628.7	2641.8	2654.8	2662.3	2662.3	2656.7
37.5°	2274.8	2252.4	2228.2	2209.6	2204.0	2200.2	2207.7	2213.3	2220.8	2224.5	2215.2
40°	1930.1	1879.8	1825.8	1777.3	1743.8	1728.9	1723.3	1727.0	1727.0	1740.0	1740.0
42.5°	1633.9	1555.6	1475.6	1402.9	1354.4	1317.2	1300.4	1300.4	1302.3	1311.6	1317.2
45°	1388.0	1289.2	1196.0	1116.0	1048.9	1000.4	978.1	972.5	970.7	974.4	987.4
47.5°	1199.8	1097.4	1000.4	901.7	831.0	782.5	762.0	754.5	747.1	754.5	756.4
50°	1052.6	946.4	844.0	745.2	670.7	627.8	601.7	590.5	588.7	588.7	592.5
52.5°	918.4	819.8	717.3	616.7	538.4	497.5	473.2	467.6	460.2	467.6	467.6
55°	791.8	693.1	592.5	497.5	432.2	389.4	367.0	359.6	355.8	361.4	361.4
57.5°	654.0	570.1	477.0	391.2	326.1	296.2	279.4	270.2	268.2	272.0	268.2
60°	536.6	465.8	385.6	307.4	257.1	225.5	212.4	208.7	204.9	208.7	208.7
62.5°	424.8	365.2	299.9	240.3	197.5	175.1	160.2	160.2	158.4	158.4	160.2
65°	314.9	268.2	221.7	171.4	137.9	121.1	109.9	109.9	108.0	109.9	108.0
67.5°	229.1	197.5	160.2	124.8	98.8	89.4	82.0	76.4	80.1	76.4	74.5
70°	167.7	141.6	115.5	95.0	76.4	67.1	61.5	59.6	55.9	55.9	55.9
72.5°	111.8	95.0	78.2	61.5	50.3	40.9	39.1	35.4	31.7	33.5	37.3
75°	74.5	63.3	55.9	44.7	33.5	33.5	22.4	22.4	18.6	22.4	16.8
77.5°	52.1	42.9	33.5	27.9	22.4	20.5	14.9	14.9	13.0	13.0	13.0
80°	37.3	31.7	24.2	20.5	14.9	14.9	13.0	11.2	9.3	9.3	11.2
82.5°	22.4	16.8	16.8	14.9	9.3	7.4	5.6	7.4	3.8	3.8	3.8
85°	13.0	11.2	9.3	5.6	3.8	3.8	1.8	0.0	1.8	1.8	0.0
87.5°	7.4	3.8	3.8	1.8	0.0	1.8	1.8	0.0	0.0	0.0	3.8
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: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5
2.5°	3837.9	3836.0	3839.7	3839.7	3850.9	3849.0	3854.6	3854.6	3850.9	3852.8	3860.2
5°	3850.9	3856.5	3867.7	3877.0	3893.7	3901.2	3910.5	3919.9	3921.7	3927.3	3932.9
7.5°	3850.9	3869.6	3882.6	3899.3	3921.7	3934.8	3955.2	3972.0	3979.5	3988.7	3999.9
10°	3843.4	3862.1	3886.3	3904.9	3932.9	3953.4	3973.9	3999.9	4011.1	4026.0	4041.0
12.5°	3828.5	3849.0	3875.1	3899.3	3931.0	3949.6	3975.7	3999.9	4016.7	4037.2	4054.0
15°	3806.2	3830.4	3854.6	3878.8	3912.4	3934.8	3959.0	3986.9	4003.7	4026.0	4041.0
17.5°	3770.8	3796.9	3819.3	3841.6	3873.2	3899.3	3921.7	3947.8	3964.6	3983.2	4003.7
20°	3727.9	3752.2	3776.4	3795.0	3826.7	3849.0	3873.2	3897.5	3910.5	3914.3	3945.9
22.5°	3673.9	3690.7	3709.3	3739.1	3757.8	3778.2	3800.6	3822.9	3836.0	3856.5	3867.7
25°	3584.5	3601.3	3621.7	3634.8	3657.2	3673.9	3696.3	3720.5	3727.9	3742.9	3754.0
27.5°	3459.7	3469.0	3478.3	3489.4	3502.5	3511.8	3524.9	3536.1	3543.5	3550.9	3558.4
30°	3262.2	3262.2	3262.2	3254.7	3260.3	3265.9	3267.8	3265.9	3265.9	3264.1	3264.1
32.5°	3001.3	2986.5	2969.7	2954.8	2949.2	2941.8	2938.0	2932.4	2923.1	2917.5	2919.4
35°	2649.2	2615.7	2595.2	2576.6	2561.7	2550.5	2544.9	2539.3	2537.5	2530.0	2522.5
37.5°	2209.6	2185.4	2170.5	2159.3	2146.2	2135.0	2136.9	2138.8	2144.3	2140.6	2142.5
40°	1743.8	1738.2	1743.8	1730.8	1727.0	1730.8	1740.0	1753.2	1760.6	1768.0	1781.1
42.5°	1326.5	1335.8	1348.9	1348.9	1354.4	1361.9	1373.0	1393.6	1404.7	1417.7	1432.7
45°	998.6	1009.8	1026.6	1032.1	1035.9	1045.1	1058.2	1075.0	1082.4	1093.6	1106.6
47.5°	769.5	776.9	786.2	795.5	804.8	808.6	821.6	821.6	831.0	838.4	842.1
50°	599.9	607.3	614.8	620.4	624.1	629.7	633.4	639.0	640.9	644.6	646.4
52.5°	469.5	478.8	478.8	482.5	488.1	493.7	491.9	493.7	495.5	495.5	501.1
55°	367.0	367.0	372.6	372.6	376.4	374.4	376.4	376.4	376.4	376.4	378.2
57.5°	273.8	275.8	281.4	277.6	275.8	279.4	275.8	279.4	277.6	281.4	275.8
60°	210.5	210.5	212.4	212.4	214.3	214.3	214.3	212.4	212.4	210.5	210.5
62.5°	158.4	160.2	162.1	160.2	160.2	160.2	158.4	158.4	156.5	154.6	154.6
65°	106.2	104.4	108.0	104.4	106.2	106.2	104.4	106.2	100.6	102.5	100.6
67.5°	76.4	74.5	72.7	74.5	72.7	70.8	70.8	72.7	74.5	68.9	68.9
70°	50.3	52.1	50.3	52.1	54.1	54.1	52.1	50.3	52.1	48.5	50.3
72.5°	31.7	31.7	31.7	31.7	31.7	33.5	33.5	33.5	29.8	29.8	27.9
75°	14.9	20.5	16.8	14.9	20.5	20.5	18.6	18.6	16.8	16.8	16.8
77.5°	14.9	11.2	11.2	11.2	11.2	11.2	11.2	11.2	9.3	11.2	9.3
80°	7.4	7.4	7.4	5.6	7.4	7.4	9.3	7.4	7.4	5.6	9.3
82.5°	3.8	3.8	3.8	0.0	1.8	3.8	3.8	1.8	3.8	3.8	1.8
85°	0.0	0.0	0.0	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	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: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5
2.5°	3858.4	3856.5	3858.4	3860.2	3858.4	3856.5	3858.4	3860.2	3852.8	3850.9	3854.6
5°	3940.3	3940.3	3944.0	3945.9	3944.0	3940.3	3940.3	3932.9	3927.3	3921.7	3919.9
7.5°	4011.1	4014.9	4018.6	4020.4	4018.6	4014.9	4011.1	3999.9	3988.7	3979.5	3972.0
10°	4054.0	4059.6	4067.0	4070.7	4067.0	4059.6	4054.0	4041.0	4026.0	4011.1	3999.9
12.5°	4072.6	4078.2	4087.5	4085.7	4087.5	4078.2	4072.6	4054.0	4037.2	4016.7	3999.9
15°	4059.6	4067.0	4076.3	4080.1	4076.3	4067.0	4059.6	4041.0	4026.0	4003.7	3986.9
17.5°	4018.6	4029.8	4035.4	4041.0	4035.4	4029.8	4018.6	4003.7	3983.2	3964.6	3947.8
20°	3962.7	3970.2	3977.6	3979.5	3977.6	3970.2	3962.7	3945.9	3914.3	3910.5	3897.5
22.5°	3882.6	3888.2	3904.9	3899.3	3904.9	3888.2	3882.6	3867.7	3856.5	3836.0	3822.9
25°	3767.0	3772.6	3774.6	3776.4	3774.6	3772.6	3767.0	3754.0	3742.9	3727.9	3720.5
27.5°	3567.7	3567.7	3571.4	3573.3	3571.4	3567.7	3567.7	3558.4	3550.9	3543.5	3536.1
30°	3265.9	3265.9	3265.9	3275.3	3265.9	3265.9	3265.9	3264.1	3264.1	3265.9	3265.9
32.5°	2917.5	2913.8	2910.1	2913.8	2910.1	2913.8	2917.5	2919.4	2917.5	2923.1	2932.4
35°	2522.5	2520.7	2526.3	2518.9	2526.3	2520.7	2522.5	2522.5	2530.0	2537.5	2539.3
37.5°	2144.3	2140.6	2148.1	2140.6	2148.1	2140.6	2144.3	2142.5	2140.6	2144.3	2138.8
40°	1784.8	1788.5	1788.5	1803.5	1788.5	1788.5	1784.8	1781.1	1768.0	1760.6	1753.2
42.5°	1440.1	1451.3	1447.6	1458.8	1447.6	1451.3	1440.1	1432.7	1417.7	1404.7	1393.6
45°	1114.1	1121.6	1121.6	1125.3	1121.6	1121.6	1114.1	1106.6	1093.6	1082.4	1075.0
47.5°	855.1	855.1	855.1	857.0	855.1	855.1	855.1	842.1	838.4	831.0	821.6
50°	650.2	652.0	654.0	655.8	654.0	652.0	650.2	646.4	644.6	640.9	639.0
52.5°	499.3	501.1	497.5	501.1	497.5	501.1	499.3	501.1	495.5	495.5	493.7
55°	378.2	376.4	378.2	380.0	378.2	376.4	378.2	378.2	376.4	376.4	376.4
57.5°	277.6	273.8	273.8	273.8	273.8	273.8	277.6	275.8	281.4	277.6	279.4
60°	206.8	208.7	208.7	210.5	208.7	208.7	206.8	210.5	210.5	212.4	212.4
62.5°	152.8	158.4	154.6	158.4	154.6	158.4	152.8	154.6	154.6	156.5	158.4
65°	98.8	98.8	98.8	100.6	98.8	98.8	98.8	100.6	102.5	100.6	106.2
67.5°	67.1	68.9	72.7	70.8	72.7	68.9	67.1	68.9	68.9	74.5	72.7
70°	54.1	48.5	48.5	54.1	48.5	48.5	54.1	50.3	48.5	52.1	50.3
72.5°	31.7	27.9	31.7	31.7	31.7	27.9	31.7	27.9	29.8	29.8	33.5
75°	16.8	14.9	13.0	18.6	13.0	14.9	16.8	16.8	16.8	16.8	18.6
77.5°	11.2	9.3	13.0	13.0	13.0	9.3	11.2	9.3	11.2	9.3	11.2
80°	5.6	7.4	5.6	9.3	5.6	7.4	5.6	9.3	5.6	7.4	7.4
82.5°	1.8	3.8	3.8	3.8	3.8	3.8	1.8	1.8	3.8	3.8	1.8
85°	0.0	3.8	1.8	1.8	1.8	3.8	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	0.0	0.0	1.8	0.0	0.0	1.8	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: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5
2.5°	3854.6	3849.0	3850.9	3839.7	3839.7	3836.0	3837.9	3828.5	3824.9	3821.1	3826.7
5°	3910.5	3901.2	3893.7	3877.0	3867.7	3856.5	3850.9	3836.0	3822.9	3811.7	3809.9
7.5°	3955.2	3934.8	3921.7	3899.3	3882.6	3869.6	3850.9	3830.4	3813.7	3798.7	3787.6
10°	3973.9	3953.4	3932.9	3904.9	3886.3	3862.1	3843.4	3817.3	3795.0	3774.6	3761.4
12.5°	3975.7	3949.6	3931.0	3899.3	3875.1	3849.0	3828.5	3798.7	3772.6	3752.2	3731.7
15°	3959.0	3934.8	3912.4	3878.8	3854.6	3830.4	3806.2	3774.6	3750.3	3726.1	3711.2
17.5°	3921.7	3899.3	3873.2	3841.6	3819.3	3796.9	3770.8	3744.7	3716.7	3690.7	3672.0
20°	3873.2	3849.0	3826.7	3795.0	3776.4	3752.2	3727.9	3700.0	3677.6	3651.6	3631.1
22.5°	3800.6	3778.2	3757.8	3739.1	3709.3	3690.7	3673.9	3642.3	3619.9	3595.7	3573.3
25°	3696.3	3673.9	3657.2	3634.8	3621.7	3601.3	3584.5	3556.5	3536.1	3513.7	3495.0
27.5°	3524.9	3511.8	3502.5	3489.4	3478.3	3469.0	3459.7	3437.3	3422.4	3401.9	3383.3
30°	3267.8	3265.9	3260.3	3254.7	3262.2	3262.2	3262.2	3258.5	3245.4	3230.5	3217.4
32.5°	2938.0	2941.8	2949.2	2954.8	2969.7	2986.5	3001.3	3008.8	3008.8	2999.5	2993.9
35°	2544.9	2550.5	2561.7	2576.6	2595.2	2615.7	2649.2	2656.7	2662.3	2662.3	2654.8
37.5°	2136.9	2135.0	2146.2	2159.3	2170.5	2185.4	2209.6	2215.2	2224.5	2220.8	2213.3
40°	1740.0	1730.8	1727.0	1730.8	1743.8	1738.2	1743.8	1740.0	1740.0	1727.0	1727.0
42.5°	1373.0	1361.9	1354.4	1348.9	1348.9	1335.8	1326.5	1317.2	1311.6	1302.3	1300.4
45°	1058.2	1045.1	1035.9	1032.1	1026.6	1009.8	998.6	987.4	974.4	970.7	972.5
47.5°	821.6	808.6	804.8	795.5	786.2	776.9	769.5	756.4	754.5	747.1	754.5
50°	633.4	629.7	624.1	620.4	614.8	607.3	599.9	592.5	588.7	588.7	590.5
52.5°	491.9	493.7	488.1	482.5	478.8	478.8	469.5	467.6	467.6	460.2	467.6
55°	376.4	374.4	376.4	372.6	372.6	367.0	367.0	361.4	361.4	355.8	359.6
57.5°	275.8	279.4	275.8	277.6	281.4	275.8	273.8	268.2	272.0	268.2	270.2
60°	214.3	214.3	214.3	212.4	212.4	210.5	210.5	208.7	208.7	204.9	208.7
62.5°	158.4	160.2	160.2	160.2	162.1	160.2	158.4	160.2	158.4	158.4	160.2
65°	104.4	106.2	106.2	104.4	108.0	104.4	106.2	108.0	109.9	108.0	109.9
67.5°	70.8	70.8	72.7	74.5	72.7	74.5	76.4	74.5	76.4	80.1	76.4
70°	52.1	54.1	54.1	52.1	50.3	52.1	50.3	55.9	55.9	55.9	59.6
72.5°	33.5	33.5	31.7	31.7	31.7	31.7	31.7	37.3	33.5	31.7	35.4
75°	18.6	20.5	20.5	14.9	16.8	20.5	14.9	16.8	22.4	18.6	22.4
77.5°	11.2	11.2	11.2	11.2	11.2	11.2	14.9	13.0	13.0	13.0	14.9
80°	9.3	7.4	7.4	5.6	7.4	7.4	7.4	11.2	9.3	9.3	11.2
82.5°	3.8	3.8	1.8	0.0	3.8	3.8	3.8	3.8	3.8	3.8	7.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	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: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5
2.5°	3811.7	3811.7	3809.9	3806.2	3798.7	3798.7	3796.9	3791.3	3787.6	3785.7	3785.7
5°	3793.1	3785.7	3778.2	3757.8	3757.8	3754.0	3742.9	3735.4	3731.7	3722.3	3718.7
7.5°	3776.4	3754.0	3741.0	3727.9	3711.2	3703.7	3690.7	3685.1	3672.0	3662.8	3657.2
10°	3735.4	3720.5	3703.7	3683.2	3670.2	3655.3	3640.4	3629.2	3612.4	3603.1	3595.7
12.5°	3707.5	3685.1	3670.2	3647.8	3625.5	3612.4	3592.0	3578.9	3562.1	3543.5	3532.3
15°	3681.4	3657.2	3636.7	3612.4	3588.2	3573.3	3549.1	3534.2	3510.0	3491.4	3478.3
17.5°	3642.3	3621.7	3599.4	3569.6	3547.3	3528.6	3502.5	3483.9	3461.5	3437.3	3424.3
20°	3601.3	3577.0	3554.7	3524.9	3502.5	3480.2	3454.1	3433.6	3407.5	3385.2	3370.3
22.5°	3547.3	3519.3	3500.6	3470.8	3444.7	3420.6	3396.3	3372.1	3347.9	3329.3	3312.5
25°	3469.0	3439.1	3418.7	3394.4	3370.3	3351.6	3321.8	3306.9	3282.7	3265.9	3249.1
27.5°	3357.2	3334.8	3316.2	3292.0	3271.5	3256.6	3234.2	3219.4	3198.8	3183.9	3170.9
30°	3193.3	3174.7	3157.9	3133.6	3118.8	3105.7	3085.2	3072.1	3057.3	3040.5	3036.8
32.5°	2973.4	2958.5	2941.8	2925.0	2913.8	2906.3	2889.5	2882.1	2867.2	2857.9	2848.6
35°	2641.8	2628.7	2619.5	2612.0	2608.3	2610.1	2606.4	2613.9	2617.5	2615.7	2617.5
37.5°	2207.7	2200.2	2204.0	2209.6	2228.2	2252.4	2274.8	2308.3	2330.7	2353.1	2373.5
40°	1723.3	1728.9	1743.8	1777.3	1825.8	1879.8	1930.1	1993.5	2056.8	2101.5	2142.5
42.5°	1300.4	1317.2	1354.4	1402.9	1475.6	1555.6	1633.9	1727.0	1803.5	1877.9	1930.1
45°	978.1	1000.4	1048.9	1116.0	1196.0	1289.2	1388.0	1492.3	1583.6	1660.0	1717.7
47.5°	762.0	782.5	831.0	901.7	1000.4	1097.4	1199.8	1307.9	1402.9	1477.4	1527.7
50°	601.7	627.8	670.7	745.2	844.0	946.4	1052.6	1158.8	1248.3	1311.6	1356.3
52.5°	473.2	497.5	538.4	616.7	717.3	819.8	918.4	1022.8	1101.0	1162.5	1192.4
55°	367.0	389.4	432.2	497.5	592.5	693.1	791.8	881.3	953.9	998.6	1026.6
57.5°	279.4	296.2	326.1	391.2	477.0	570.1	654.0	743.4	799.3	831.0	849.5
60°	212.4	225.5	257.1	307.4	385.6	465.8	536.6	603.7	648.4	674.4	693.1
62.5°	160.2	175.1	197.5	240.3	299.9	365.2	424.8	475.1	512.3	529.1	542.2
65°	109.9	121.1	137.9	171.4	221.7	268.2	314.9	352.1	376.4	395.0	402.4
67.5°	82.0	89.4	98.8	124.8	160.2	197.5	229.1	255.2	281.4	288.8	301.8
70°	61.5	67.1	76.4	95.0	115.5	141.6	167.7	182.6	201.2	214.3	218.0
72.5°	39.1	40.9	50.3	61.5	78.2	95.0	111.8	124.8	136.0	143.5	147.2
75°	22.4	33.5	33.5	44.7	55.9	63.3	74.5	83.8	89.4	95.0	95.0
77.5°	14.9	20.5	22.4	27.9	33.5	42.9	52.1	57.7	63.3	65.2	65.2
80°	13.0	14.9	14.9	20.5	24.2	31.7	37.3	39.1	42.9	44.7	48.5
82.5°	5.6	7.4	9.3	14.9	16.8	16.8	22.4	24.2	27.9	29.8	29.8
85°	1.8	3.8	3.8	5.6	9.3	11.2	13.0	14.9	16.8	16.8	18.6
87.5°	1.8	1.8	0.0	1.8	3.8	3.8	7.4	7.4	7.4	11.2	11.2
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: P248860

CATALOG NUMBER: LD8B90D010 ER8B909730 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5	3815.5
2.5°	3782.0	3783.8	3776.4	3774.6	3770.8	3772.6	3776.4
5°	3713.1	3714.9	3707.5	3700.0	3700.0	3698.1	3700.0
7.5°	3647.8	3649.7	3638.5	3634.8	3627.3	3629.2	3629.2
10°	3582.6	3582.6	3565.9	3564.0	3558.4	3556.5	3556.5
12.5°	3519.3	3513.7	3500.6	3493.2	3497.0	3485.8	3485.8
15°	3463.4	3454.1	3437.3	3431.7	3422.4	3418.7	3418.7
17.5°	3405.6	3398.2	3383.3	3372.1	3360.9	3359.1	3360.9
20°	3349.7	3342.3	3323.7	3316.2	3306.9	3306.9	3303.2
22.5°	3293.8	3286.4	3269.7	3264.1	3251.0	3251.0	3252.9
25°	3236.1	3230.5	3211.8	3208.2	3206.3	3198.8	3202.6
27.5°	3157.9	3154.1	3139.2	3133.6	3126.2	3124.4	3128.0
30°	3014.4	3008.8	2997.7	2992.1	2979.0	2980.9	2984.6
32.5°	2835.6	2828.1	2813.2	2807.6	2796.4	2792.7	2794.5
35°	2612.0	2606.4	2593.4	2593.4	2582.2	2578.4	2582.2
37.5°	2384.7	2390.3	2384.7	2390.3	2384.7	2382.8	2384.7
40°	2170.5	2190.9	2194.6	2215.2	2207.7	2218.9	2217.0
42.5°	1965.5	1999.0	2012.1	2028.8	2025.2	2032.6	2038.2
45°	1758.7	1786.7	1799.7	1810.9	1812.7	1816.5	1818.3
47.5°	1563.1	1585.4	1587.3	1600.3	1598.5	1598.5	1604.1
50°	1380.5	1395.4	1399.1	1408.5	1401.0	1397.3	1399.1
52.5°	1211.0	1225.9	1222.1	1225.9	1216.6	1212.8	1214.7
55°	1037.7	1045.1	1045.1	1045.1	1034.0	1034.0	1034.0
57.5°	860.7	862.6	858.9	860.7	858.9	847.7	845.8
60°	698.7	698.7	696.8	698.7	693.1	687.5	687.5
62.5°	545.8	549.6	557.0	549.6	545.8	549.6	544.0
65°	408.0	415.5	413.6	417.3	415.5	415.5	411.7
67.5°	307.4	309.3	311.1	313.0	313.0	313.0	313.0
70°	225.5	231.0	229.1	229.1	229.1	229.1	240.3
72.5°	150.9	158.4	156.5	160.2	160.2	164.0	160.2
75°	102.5	109.9	106.2	111.8	109.9	106.2	115.5
77.5°	68.9	72.7	74.5	76.4	74.5	72.7	74.5
80°	48.5	52.1	50.3	52.1	52.1	52.1	54.1
82.5°	29.8	35.4	33.5	35.4	33.5	35.4	35.4
85°	20.5	22.4	18.6	22.4	20.5	20.5	24.2
87.5°	13.0	11.2	11.2	13.0	11.2	13.0	11.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)