

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: P249417

Luminaire Tested: **LD8B80D010 ER8B80830 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249417  
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: LD8B80D010 ER8B80830 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 3000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7223.0 lumens  
Efficiency: N/A  
Efficacy: 97.1 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

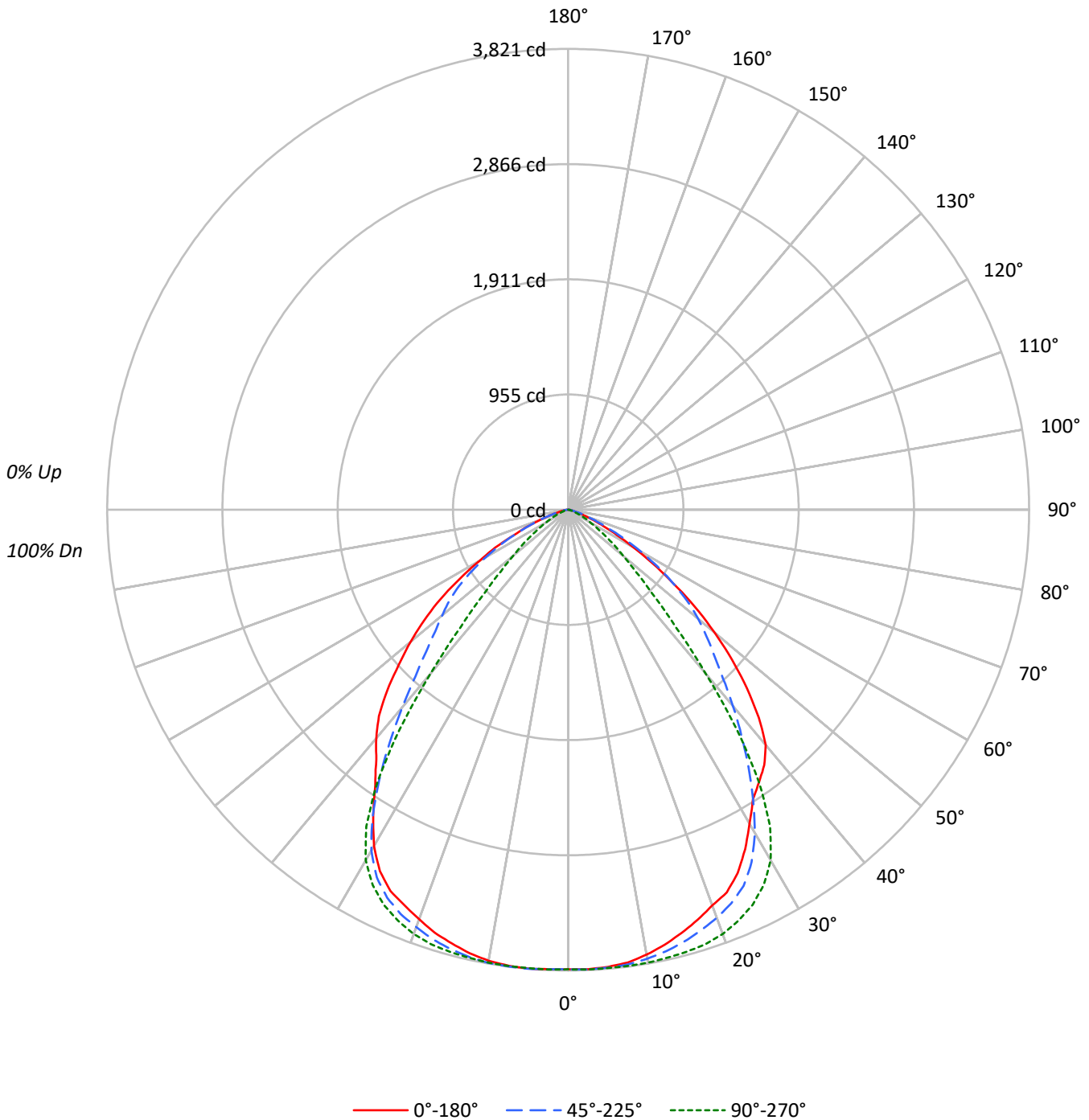
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P249417

CATALOG NUMBER: LD8B80D010 ER8B80830 8LBDW0B

### Luminous Intensity Polar Plot





TEST NUMBER: P249417

CATALOG NUMBER: LD8B80D010 ER8B80830 8LBDW0B

**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°	117517	117517	117517
5°	117774	118093	118220
10°	117279	119393	118882
15°	115980	121139	118857
20°	114588	122844	118549
25°	113100	122984	118669
30°	106998	119528	114646
35°	103804	103879	104960
40°	102519	71475	99637
45°	91348	42907	92600
50°	75955	28558	81846
55°	56966	19687	69395
60°	38607	13118	52360
65°	23283	8508	35972
70°	12911	4616	22134
75°	5850	1954	11461
80°	5079	2184	7991
85°	5802	2901	7961



TEST NUMBER: P249417

CATALOG NUMBER: LD8B80D010 ER8B80830 8LBDW0B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	363.7	5.0
10°-20°	1056.3	14.6
20°-30°	1603.2	22.2
30°-40°	1683.8	23.3
40°-50°	1262.4	17.5
50°-60°	810.0	11.2
60°-70°	346.5	4.8
70°-80°	81.9	1.1
80°-90°	15.2	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°	3023.2	41.9
0°-40°	4707.0	65.2
0°-60°	6779.4	93.9
0°-90°	7223.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7223.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3811	3811	3811	3811	3811	
5°	3805	3811	3815	3821	3819	361
15°	3633	3709	3795	3770	3723	1025
25°	3324	3441	3615	3549	3488	1519
35°	2758	2604	2760	2727	2788	1731
45°	2095	1712	984	1663	2123	1604
55°	1060	1060	366	1105	1291	961
65°	319	376	117	485	493	341
75°	49	57	16	98	96	72
85°	16	10	8	16	22	17
90°	0	0	0	0	0	



TEST NUMBER: P249417

CATALOG NUMBER: LD8B80D010 ER8B80830 8LBDW0B

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0
2.5°	3813.0	3817.2	3815.1	3815.1	3813.0	3815.1	3815.1	3819.2	3819.2	3815.1	3813.0
5°	3804.8	3808.9	3808.9	3804.8	3804.8	3815.1	3808.9	3813.0	3813.0	3811.0	3811.0
7.5°	3786.5	3786.5	3794.6	3788.5	3788.5	3794.6	3792.6	3796.7	3800.8	3802.8	3802.8
10°	3745.5	3749.6	3751.7	3751.7	3753.7	3759.8	3763.9	3772.2	3776.2	3780.3	3782.4
12.5°	3694.4	3700.5	3702.6	3700.5	3706.7	3714.8	3725.1	3735.3	3741.5	3749.6	3755.8
15°	3633.0	3633.0	3637.1	3643.3	3647.4	3659.6	3669.8	3682.1	3698.5	3708.7	3718.9
17.5°	3565.5	3569.6	3575.7	3575.7	3584.0	3604.4	3610.5	3629.0	3647.4	3657.6	3678.1
20°	3491.9	3496.0	3502.1	3506.2	3516.4	3532.8	3545.1	3561.4	3581.9	3600.3	3620.7
22.5°	3434.6	3426.4	3430.5	3434.6	3444.9	3459.2	3473.5	3493.9	3514.4	3532.8	3553.3
25°	3324.1	3326.2	3332.3	3336.4	3348.7	3361.0	3377.3	3401.9	3420.3	3440.8	3463.2
27.5°	3174.8	3176.9	3187.1	3187.1	3197.3	3217.8	3228.0	3248.4	3273.0	3293.4	3320.1
30°	3005.0	3009.1	3009.1	3017.3	3023.4	3033.7	3043.9	3064.4	3076.6	3095.0	3131.9
32.5°	2849.6	2853.6	2851.6	2849.6	2843.4	2841.4	2839.3	2843.4	2847.5	2853.6	2867.9
35°	2757.5	2747.3	2739.1	2724.8	2708.4	2688.0	2669.5	2645.0	2622.5	2604.1	2583.6
37.5°	2669.5	2667.5	2655.2	2634.7	2602.0	2565.2	2522.3	2469.1	2415.9	2358.6	2303.4
40°	2546.8	2540.6	2530.4	2501.8	2465.0	2420.0	2362.7	2297.2	2211.3	2123.4	2033.4
42.5°	2338.1	2340.2	2327.9	2305.4	2270.7	2227.7	2168.4	2096.8	2004.7	1900.4	1783.8
45°	2094.7	2094.7	2090.6	2072.2	2047.7	2012.9	1967.9	1908.6	1818.6	1712.2	1587.4
47.5°	1841.1	1843.1	1837.0	1832.9	1822.6	1800.2	1767.4	1722.4	1659.0	1556.7	1431.9
50°	1583.3	1583.3	1593.5	1591.5	1591.5	1583.3	1569.0	1542.4	1487.2	1405.3	1288.8
52.5°	1325.6	1329.7	1335.8	1344.0	1354.2	1370.6	1354.2	1341.9	1307.1	1243.7	1143.5
55°	1059.6	1063.7	1073.9	1088.3	1100.6	1116.9	1121.0	1121.0	1102.6	1059.6	983.9
57.5°	832.6	826.4	834.6	846.9	863.3	879.6	891.9	906.2	904.2	875.5	814.2
60°	626.0	628.0	634.1	646.4	658.7	673.0	689.4	701.6	707.8	693.5	654.6
62.5°	456.2	456.2	464.3	476.6	482.8	503.2	513.4	519.6	525.7	523.7	499.1
65°	319.1	323.2	327.3	333.5	339.6	351.8	358.0	370.2	374.3	376.4	358.0
67.5°	225.0	218.9	223.0	227.0	233.2	241.4	253.7	253.7	259.8	259.8	247.5
70°	143.2	143.2	145.3	151.4	155.5	157.5	161.6	165.7	171.8	169.8	169.8
72.5°	96.2	94.1	96.2	98.2	100.3	106.4	106.4	108.4	112.5	114.6	106.4
75°	49.1	51.2	55.2	53.2	59.3	55.2	57.3	63.4	61.4	57.3	57.3
77.5°	40.9	40.9	40.9	38.9	42.9	42.9	40.9	45.0	42.9	42.9	40.9
80°	28.6	30.7	28.6	26.6	28.6	26.6	26.6	26.6	26.6	26.6	24.5
82.5°	22.5	18.4	20.5	18.4	20.5	20.5	18.4	16.4	16.4	18.4	16.4
85°	16.4	12.3	14.3	14.3	12.3	12.3	12.3	12.3	12.3	10.2	10.2
87.5°	10.2	6.2	6.2	6.2	8.2	8.2	8.2	6.2	8.2	8.2	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



TEST NUMBER: P249417

CATALOG NUMBER: LD8B80D010 ER8B80830 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0
2.5°	3817.2	3815.1	3819.2	3817.2	3817.2	3815.1	3817.2	3815.1	3819.2	3811.0	3813.0
5°	3817.2	3813.0	3815.1	3817.2	3819.2	3815.1	3815.1	3815.1	3819.2	3815.1	3817.2
7.5°	3808.9	3806.9	3813.0	3817.2	3815.1	3813.0	3817.2	3815.1	3819.2	3817.2	3821.2
10°	3792.6	3794.6	3798.7	3804.8	3806.9	3808.9	3813.0	3813.0	3819.2	3811.0	3815.1
12.5°	3768.1	3776.2	3786.5	3790.5	3798.7	3798.7	3802.8	3804.8	3808.9	3806.9	3813.0
15°	3737.4	3747.6	3759.8	3770.1	3780.3	3786.5	3792.6	3794.6	3800.8	3794.6	3796.7
17.5°	3700.5	3712.8	3731.2	3743.5	3759.8	3766.0	3774.2	3778.3	3784.4	3780.3	3782.4
20°	3649.4	3663.7	3684.2	3702.6	3712.8	3727.1	3737.4	3743.5	3747.6	3743.5	3745.5
22.5°	3577.8	3598.3	3624.8	3639.2	3659.6	3671.9	3674.0	3688.3	3698.5	3688.3	3692.4
25°	3493.9	3514.4	3534.9	3565.5	3584.0	3598.3	3612.6	3614.6	3624.8	3622.8	3620.7
27.5°	3354.8	3381.4	3416.2	3440.8	3465.3	3487.8	3504.2	3508.2	3518.5	3514.4	3516.4
30°	3164.6	3193.2	3226.0	3264.8	3299.6	3322.1	3342.5	3356.9	3367.1	3361.0	3358.9
32.5°	2894.6	2923.2	2958.0	2996.8	3037.8	3070.5	3095.0	3113.5	3125.7	3121.6	3111.4
35°	2585.7	2593.9	2616.4	2647.1	2681.8	2716.6	2739.1	2759.5	2773.8	2778.0	2778.0
37.5°	2268.6	2242.0	2225.7	2225.7	2246.1	2260.4	2280.9	2293.1	2315.7	2323.8	2330.0
40°	1961.7	1900.4	1843.1	1800.2	1771.5	1769.5	1769.5	1775.6	1796.1	1822.6	1847.2
42.5°	1687.6	1589.4	1501.5	1421.7	1364.4	1331.7	1317.4	1319.5	1335.8	1360.3	1401.2
45°	1468.8	1346.0	1235.6	1139.4	1061.7	1010.5	986.0	983.9	996.2	1024.8	1069.9
47.5°	1299.0	1168.0	1043.3	932.8	849.0	793.7	765.1	756.9	765.1	791.6	844.8
50°	1157.8	1022.8	893.9	779.4	689.4	632.1	605.5	595.3	605.5	628.0	681.2
52.5°	1026.9	887.8	767.1	656.6	560.5	511.4	482.8	476.6	482.8	509.3	552.3
55°	875.5	756.9	638.2	527.8	443.9	394.8	372.3	366.2	372.3	396.9	441.9
57.5°	726.2	623.9	519.6	419.3	347.8	304.8	284.4	276.1	290.5	306.8	360.0
60°	587.1	505.3	417.3	329.3	270.0	231.1	214.8	212.7	216.8	237.3	274.1
62.5°	460.3	392.8	323.2	251.6	202.5	186.1	165.7	163.7	167.7	180.0	208.7
65°	331.4	288.5	235.2	184.1	145.3	122.7	114.6	116.6	120.7	128.9	155.5
67.5°	231.1	200.5	163.7	128.9	100.3	90.0	81.8	79.8	81.8	96.2	110.5
70°	155.5	137.0	110.5	98.2	69.6	55.2	57.3	51.2	59.3	59.3	71.6
72.5°	102.3	90.0	73.6	57.3	49.1	38.9	38.9	36.8	40.9	42.9	53.2
75°	53.2	40.9	40.9	28.6	20.5	10.2	18.4	16.4	14.3	16.4	20.5
77.5°	36.8	30.7	28.6	22.5	20.5	16.4	16.4	16.4	16.4	18.4	20.5
80°	22.5	22.5	16.4	14.3	12.3	10.2	12.3	12.3	12.3	12.3	14.3
82.5°	14.3	12.3	12.3	10.2	10.2	8.2	8.2	8.2	8.2	8.2	12.3
85°	12.3	8.2	8.2	6.2	8.2	14.3	6.2	8.2	8.2	8.2	6.2
87.5°	4.1	6.2	6.2	6.2	4.1	2.1	4.1	6.2	6.2	10.2	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: P249417

CATALOG NUMBER: LD8B80D010 ER8B80830 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0	3811.0
2.5°	3817.2	3819.2	3819.2	3817.2	3817.2	3813.0	3821.2	3815.1	3817.2	3825.3	3819.2
5°	3821.2	3823.3	3823.3	3821.2	3821.2	3821.2	3823.3	3823.3	3821.2	3819.2	3823.3
7.5°	3829.4	3827.4	3827.4	3823.3	3823.3	3819.2	3823.3	3817.2	3821.2	3817.2	3823.3
10°	3819.2	3821.2	3819.2	3817.2	3817.2	3815.1	3815.1	3808.9	3811.0	3804.8	3808.9
12.5°	3813.0	3811.0	3811.0	3806.9	3802.8	3798.7	3796.7	3790.5	3790.5	3776.2	3782.4
15°	3796.7	3798.7	3792.6	3784.4	3780.3	3770.1	3766.0	3757.8	3749.6	3739.4	3741.5
17.5°	3782.4	3776.2	3768.1	3759.8	3743.5	3735.3	3727.1	3714.8	3710.7	3698.5	3694.4
20°	3739.4	3735.3	3725.1	3710.7	3700.5	3682.1	3674.0	3661.7	3651.4	3639.2	3633.0
22.5°	3684.2	3680.1	3667.8	3653.5	3637.1	3629.0	3620.7	3598.3	3588.0	3575.7	3573.7
25°	3614.6	3608.5	3596.2	3579.9	3571.6	3549.2	3541.0	3524.6	3520.5	3508.2	3506.2
27.5°	3508.2	3500.1	3485.8	3465.3	3451.0	3436.6	3428.5	3416.2	3412.1	3399.8	3397.8
30°	3348.7	3338.4	3309.8	3301.7	3277.1	3262.8	3262.8	3246.4	3248.4	3240.3	3240.3
32.5°	3097.1	3080.7	3058.2	3041.8	3025.5	3017.3	3017.3	3011.1	3015.3	3015.3	3019.4
35°	2763.6	2741.2	2728.8	2718.6	2718.6	2726.8	2751.4	2757.5	2769.8	2780.0	2788.2
37.5°	2336.1	2334.1	2348.4	2360.7	2391.3	2426.1	2469.1	2505.9	2540.6	2565.2	2589.8
40°	1873.8	1924.9	1965.8	2023.1	2070.1	2137.7	2215.4	2278.8	2338.1	2381.1	2426.1
42.5°	1462.6	1528.1	1614.0	1697.9	1781.7	1873.8	1976.1	2064.0	2141.8	2201.1	2248.1
45°	1139.4	1229.4	1333.8	1440.1	1548.5	1663.1	1769.5	1859.5	1941.3	2002.7	2049.7
47.5°	918.5	1016.7	1135.3	1251.9	1374.7	1495.3	1614.0	1691.7	1759.2	1808.3	1851.3
50°	758.9	863.3	988.0	1121.0	1243.7	1364.4	1466.7	1542.4	1597.6	1640.6	1667.2
52.5°	634.1	744.6	877.6	1010.5	1133.3	1243.7	1335.8	1393.1	1438.1	1468.8	1493.3
55°	523.7	630.1	754.9	879.6	1000.3	1104.6	1180.3	1223.3	1258.0	1276.5	1290.8
57.5°	427.6	525.7	640.3	754.9	859.2	945.1	1004.4	1047.4	1063.7	1078.0	1076.0
60°	335.5	427.6	531.9	630.1	720.1	789.6	832.6	857.1	869.4	875.5	871.4
62.5°	263.9	347.8	427.6	513.4	578.9	638.2	679.2	679.2	685.3	687.3	693.5
65°	196.4	259.8	329.3	392.8	445.9	484.8	507.3	513.4	521.7	519.6	515.5
67.5°	145.3	192.3	243.4	290.5	327.3	351.8	368.2	382.6	380.5	376.4	374.3
70°	100.3	130.9	175.9	204.6	231.1	255.7	259.8	261.8	263.9	265.9	261.8
72.5°	69.6	92.0	116.6	141.1	157.5	167.7	178.0	180.0	180.0	180.0	178.0
75°	34.8	47.0	69.6	79.8	94.1	98.2	106.4	106.4	112.5	104.3	102.3
77.5°	30.7	36.8	49.1	57.3	63.4	69.6	71.6	77.7	75.7	71.6	73.6
80°	18.4	22.5	30.7	34.8	42.9	45.0	47.0	49.1	47.0	49.1	49.1
82.5°	14.3	16.4	20.5	20.5	26.6	26.6	28.6	28.6	30.7	30.7	30.7
85°	8.2	14.3	12.3	24.5	16.4	16.4	20.5	24.5	20.5	20.5	24.5
87.5°	8.2	8.2	6.2	8.2	8.2	8.2	10.2	12.3	12.3	14.3	12.3
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: P249417

CATALOG NUMBER: LD8B80D010 ER8B80830 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3811.0	3811.0	3811.0	3811.0
2.5°	3817.2	3821.2	3815.1	3813.0
5°	3823.3	3823.3	3819.2	3819.2
7.5°	3823.3	3823.3	3817.2	3813.0
10°	3806.9	3806.9	3800.8	3796.7
12.5°	3776.2	3776.2	3774.2	3768.1
15°	3737.4	3737.4	3729.2	3723.1
17.5°	3684.2	3688.3	3678.1	3678.1
20°	3626.9	3624.8	3616.7	3612.6
22.5°	3567.6	3563.5	3561.4	3549.2
25°	3504.2	3500.1	3493.9	3487.8
27.5°	3395.8	3393.7	3387.5	3379.4
30°	3230.0	3228.0	3219.8	3219.8
32.5°	3015.3	3013.2	3005.0	3007.1
35°	2792.3	2800.5	2796.4	2788.2
37.5°	2606.1	2612.3	2616.4	2612.3
40°	2450.7	2469.1	2471.1	2475.2
42.5°	2285.0	2309.5	2317.7	2321.8
45°	2086.5	2109.0	2127.5	2123.4
47.5°	1884.0	1900.4	1916.7	1904.5
50°	1689.7	1699.9	1706.1	1706.1
52.5°	1505.6	1505.6	1503.5	1505.6
55°	1294.9	1294.9	1286.7	1290.8
57.5°	1073.9	1078.0	1071.9	1061.7
60°	869.4	859.2	855.1	849.0
62.5°	677.1	677.1	662.8	681.2
65°	507.3	501.2	495.0	493.0
67.5°	368.2	366.2	360.0	358.0
70°	259.8	251.6	249.6	245.5
72.5°	173.9	173.9	169.8	169.8
75°	106.4	96.2	94.1	96.2
77.5°	73.6	71.6	71.6	69.6
80°	49.1	47.0	51.2	45.0
82.5°	30.7	32.7	30.7	32.7
85°	20.5	24.5	22.5	22.5
87.5°	12.3	12.3	12.3	12.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)