

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: P249408

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249408  
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: LSR8B80D010 EC8B80827 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7046.0 lumens  
Efficiency: N/A  
Efficacy: 94.7 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

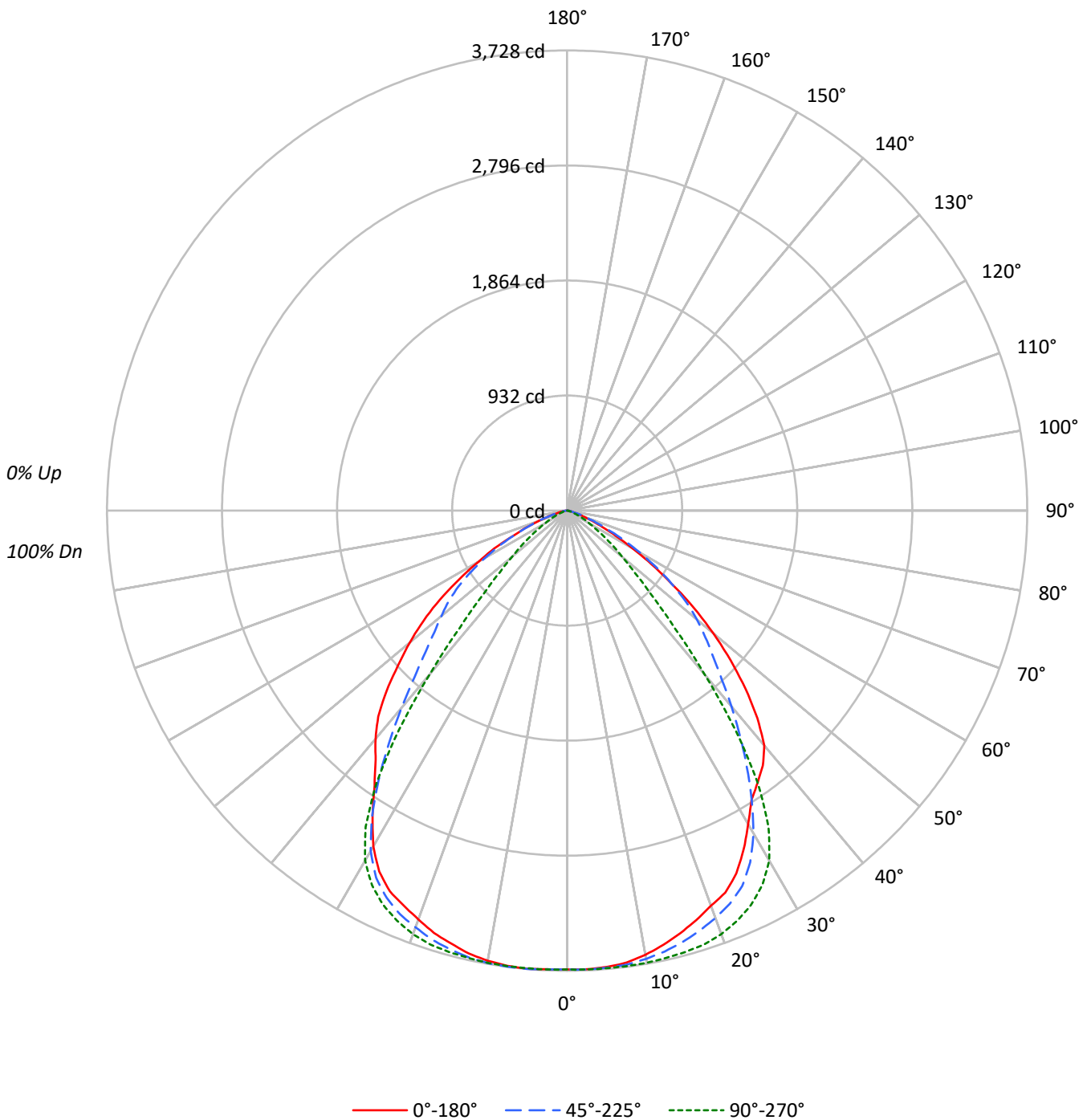
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	114637	114637	114637
5°	114889	115199	115323
10°	114405	116468	115967
15°	113139	118170	115942
20°	111779	119832	115644
25°	110330	119972	115760
30°	104378	116598	111837
35°	101263	101334	102388
40°	100007	69724	97197
45°	89111	41856	90328
50°	74094	27858	79841
55°	55573	19204	67691
60°	37657	12797	51071
65°	22714	8303	35089
70°	12595	4499	21584
75°	5707	1906	11176
80°	4954	2131	7796
85°	5661	2830	7784



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	354.8	5.0
10°-20°	1030.4	14.6
20°-30°	1563.9	22.2
30°-40°	1642.6	23.3
40°-50°	1231.5	17.5
50°-60°	790.2	11.2
60°-70°	338.0	4.8
70°-80°	79.9	1.1
80°-90°	14.9	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°	2949.1	41.9
0°-40°	4591.6	65.2
0°-60°	6613.3	93.9
0°-90°	7046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7046.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3718	3718	3718	3718	3718	
5°	3712	3718	3722	3728	3726	353
15°	3544	3618	3702	3678	3632	1000
25°	3243	3356	3526	3462	3402	1481
35°	2690	2540	2692	2660	2720	1688
45°	2043	1670	960	1622	2071	1565
55°	1034	1034	357	1078	1259	938
65°	311	367	114	473	481	332
75°	48	56	16	96	94	70
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°	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6
2.5°	3719.6	3723.6	3721.6	3721.6	3719.6	3721.6	3721.6	3725.6	3725.6	3721.6	3719.6
5°	3711.6	3715.6	3715.6	3711.6	3711.6	3721.6	3715.6	3719.6	3719.6	3717.6	3717.6
7.5°	3693.7	3693.7	3701.6	3695.7	3695.7	3701.6	3699.6	3703.6	3707.6	3709.6	3709.6
10°	3653.7	3657.7	3659.7	3659.7	3661.7	3667.7	3671.7	3679.7	3683.7	3687.7	3689.7
12.5°	3603.9	3609.8	3611.8	3609.8	3615.9	3623.8	3633.8	3643.8	3649.8	3657.7	3663.8
15°	3544.0	3544.0	3548.0	3554.0	3558.0	3570.0	3579.9	3591.9	3607.8	3617.9	3627.8
17.5°	3478.2	3482.2	3488.1	3488.1	3496.1	3516.1	3522.1	3540.0	3558.0	3568.0	3587.9
20°	3406.3	3410.3	3416.3	3420.3	3430.3	3446.2	3458.2	3474.2	3494.1	3512.1	3532.0
22.5°	3350.4	3342.5	3346.4	3350.4	3360.4	3374.4	3388.4	3408.3	3428.3	3446.2	3466.2
25°	3242.7	3244.7	3250.7	3254.6	3266.6	3278.6	3294.6	3318.5	3336.5	3356.4	3378.4
27.5°	3097.0	3099.0	3109.0	3109.0	3118.9	3138.9	3148.9	3168.8	3192.8	3212.7	3238.7
30°	2931.4	2935.4	2935.4	2943.4	2949.3	2959.3	2969.3	2989.3	3001.2	3019.2	3055.1
32.5°	2779.7	2783.7	2781.7	2779.7	2773.7	2771.7	2769.7	2773.7	2777.7	2783.7	2797.7
35°	2690.0	2679.9	2672.0	2658.0	2642.1	2622.1	2604.1	2580.2	2558.2	2540.3	2520.3
37.5°	2604.1	2602.1	2590.2	2570.2	2538.3	2502.4	2460.5	2408.6	2356.7	2300.8	2247.0
40°	2484.4	2478.4	2468.4	2440.5	2404.6	2360.7	2304.8	2240.9	2157.1	2071.3	1983.5
42.5°	2280.8	2282.8	2270.9	2248.9	2215.0	2173.1	2115.2	2045.4	1955.6	1853.8	1740.1
45°	2043.4	2043.4	2039.4	2021.4	1997.5	1963.6	1919.7	1861.8	1774.0	1670.2	1548.5
47.5°	1795.9	1797.9	1791.9	1788.0	1778.0	1756.0	1724.1	1680.2	1618.4	1518.6	1396.8
50°	1544.5	1544.5	1554.5	1552.5	1552.5	1544.5	1530.6	1504.6	1450.7	1370.9	1257.2
52.5°	1293.1	1297.1	1303.1	1311.0	1321.0	1337.0	1321.0	1309.0	1275.1	1213.2	1115.5
55°	1033.7	1037.7	1047.6	1061.6	1073.6	1089.6	1093.5	1093.5	1075.6	1033.7	959.8
57.5°	812.2	806.2	814.2	826.1	842.1	858.1	870.0	884.0	882.0	854.1	794.2
60°	610.6	612.6	618.6	630.6	642.6	656.5	672.5	684.5	690.5	676.5	638.6
62.5°	445.0	445.0	453.0	464.9	470.9	490.9	500.9	506.9	512.8	510.8	486.9
65°	311.3	315.3	319.3	325.3	331.2	343.2	349.2	361.2	365.2	367.2	349.2
67.5°	219.5	213.5	217.5	221.5	227.5	235.5	247.5	247.5	253.4	253.4	241.4
70°	139.7	139.7	141.7	147.7	151.7	153.7	157.7	161.6	167.6	165.6	165.6
72.5°	93.8	91.8	93.8	95.8	97.8	103.8	103.8	105.8	109.8	111.8	103.8
75°	47.9	49.9	53.9	51.9	57.9	53.9	55.9	61.9	59.9	55.9	55.9
77.5°	39.9	39.9	39.9	37.9	41.9	41.9	39.9	43.9	41.9	41.9	39.9
80°	27.9	29.9	27.9	25.9	27.9	25.9	25.9	25.9	25.9	25.9	23.9
82.5°	22.0	18.0	20.0	18.0	20.0	20.0	18.0	16.0	16.0	18.0	16.0
85°	16.0	12.0	14.0	14.0	12.0	12.0	12.0	12.0	12.0	10.0	10.0
87.5°	10.0	6.0	6.0	6.0	8.0	8.0	8.0	6.0	8.0	8.0	4.0
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°	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6
2.5°	3723.6	3721.6	3725.6	3723.6	3723.6	3721.6	3723.6	3721.6	3725.6	3717.6	3719.6
5°	3723.6	3719.6	3721.6	3723.6	3725.6	3721.6	3721.6	3721.6	3725.6	3721.6	3723.6
7.5°	3715.6	3713.6	3719.6	3723.6	3721.6	3719.6	3723.6	3721.6	3725.6	3723.6	3727.6
10°	3699.6	3701.6	3705.6	3711.6	3713.6	3715.6	3719.6	3719.6	3725.6	3717.6	3721.6
12.5°	3675.7	3683.7	3693.7	3697.6	3705.6	3705.6	3709.6	3711.6	3715.6	3713.6	3719.6
15°	3645.8	3655.7	3667.7	3677.7	3687.7	3693.7	3699.6	3701.6	3707.6	3701.6	3703.6
17.5°	3609.8	3621.8	3639.8	3651.7	3667.7	3673.7	3681.7	3685.7	3691.7	3687.7	3689.7
20°	3559.9	3574.0	3593.9	3611.8	3621.8	3635.8	3645.8	3651.7	3655.7	3651.7	3653.7
22.5°	3490.1	3510.1	3536.0	3550.0	3570.0	3581.9	3583.9	3597.9	3607.8	3597.9	3601.9
25°	3408.3	3428.3	3448.2	3478.2	3496.1	3510.1	3524.1	3526.1	3536.0	3534.0	3532.0
27.5°	3272.6	3298.6	3332.5	3356.4	3380.4	3402.3	3418.3	3422.3	3432.3	3428.3	3430.3
30°	3087.0	3115.0	3146.9	3184.8	3218.7	3240.7	3260.6	3274.6	3284.6	3278.6	3276.6
32.5°	2823.6	2851.6	2885.5	2923.4	2963.3	2995.2	3019.2	3037.2	3049.1	3045.1	3035.2
35°	2522.3	2530.3	2552.3	2582.2	2616.1	2650.0	2672.0	2691.9	2705.9	2709.9	2709.9
37.5°	2213.0	2187.1	2171.1	2171.1	2191.0	2205.0	2225.0	2236.9	2258.9	2266.9	2272.9
40°	1913.7	1853.8	1797.9	1756.0	1728.1	1726.1	1726.1	1732.1	1752.0	1778.0	1801.9
42.5°	1646.3	1550.5	1464.7	1386.9	1331.0	1299.1	1285.1	1287.1	1303.1	1327.0	1366.9
45°	1432.8	1313.0	1205.3	1111.5	1035.7	985.8	961.8	959.8	971.8	999.7	1043.7
47.5°	1267.1	1139.4	1017.7	909.9	828.1	774.2	746.3	738.4	746.3	772.2	824.1
50°	1129.5	997.8	872.0	760.3	672.5	616.6	590.7	580.7	590.7	612.6	664.5
52.5°	1001.7	866.0	748.3	640.6	546.8	498.9	470.9	464.9	470.9	496.9	538.8
55°	854.1	738.4	622.6	514.8	433.0	385.1	363.2	357.2	363.2	387.1	431.0
57.5°	708.4	608.6	506.9	409.1	339.2	297.3	277.4	269.4	283.3	299.3	351.2
60°	572.7	492.9	407.1	321.3	263.4	225.5	209.5	207.5	211.5	231.5	267.4
62.5°	449.0	383.1	315.3	245.5	197.6	181.6	161.6	159.7	163.6	175.6	203.6
65°	323.3	281.4	229.5	179.6	141.7	119.7	111.8	113.8	117.7	125.7	151.7
67.5°	225.5	195.6	159.7	125.7	97.8	87.8	79.8	77.8	79.8	93.8	107.8
70°	151.7	133.7	107.8	95.8	67.9	53.9	55.9	49.9	57.9	57.9	69.8
72.5°	99.8	87.8	71.8	55.9	47.9	37.9	37.9	35.9	39.9	41.9	51.9
75°	51.9	39.9	39.9	27.9	20.0	10.0	18.0	16.0	14.0	16.0	20.0
77.5°	35.9	29.9	27.9	22.0	20.0	16.0	16.0	16.0	16.0	18.0	20.0
80°	22.0	22.0	16.0	14.0	12.0	10.0	12.0	12.0	12.0	12.0	14.0
82.5°	14.0	12.0	12.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	12.0
85°	12.0	8.0	8.0	6.0	8.0	14.0	6.0	8.0	8.0	8.0	6.0
87.5°	4.0	6.0	6.0	6.0	4.0	2.0	4.0	6.0	6.0	10.0	8.0
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°	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6	3717.6
2.5°	3723.6	3725.6	3725.6	3723.6	3723.6	3719.6	3727.6	3721.6	3723.6	3731.6	3725.6
5°	3727.6	3729.6	3729.6	3727.6	3727.6	3727.6	3729.6	3729.6	3727.6	3725.6	3729.6
7.5°	3735.6	3733.6	3733.6	3729.6	3729.6	3725.6	3729.6	3723.6	3727.6	3723.6	3729.6
10°	3725.6	3727.6	3725.6	3723.6	3723.6	3721.6	3721.6	3715.6	3717.6	3711.6	3715.6
12.5°	3719.6	3717.6	3717.6	3713.6	3709.6	3705.6	3703.6	3697.6	3697.6	3683.7	3689.7
15°	3703.6	3705.6	3699.6	3691.7	3687.7	3677.7	3673.7	3665.7	3657.7	3647.8	3649.8
17.5°	3689.7	3683.7	3675.7	3667.7	3651.7	3643.8	3635.8	3623.8	3619.8	3607.8	3603.9
20°	3647.8	3643.8	3633.8	3619.8	3609.8	3591.9	3583.9	3572.0	3561.9	3550.0	3544.0
22.5°	3593.9	3589.9	3577.9	3564.0	3548.0	3540.0	3532.0	3510.1	3500.1	3488.1	3486.1
25°	3526.1	3520.1	3508.1	3492.1	3484.1	3462.2	3454.2	3438.2	3434.3	3422.3	3420.3
27.5°	3422.3	3414.3	3400.3	3380.4	3366.4	3352.4	3344.5	3332.5	3328.5	3316.5	3314.5
30°	3266.6	3256.6	3228.7	3220.7	3196.8	3182.8	3182.8	3166.8	3168.8	3160.9	3160.9
32.5°	3021.2	3005.2	2983.3	2967.3	2951.3	2943.4	2943.4	2937.4	2941.4	2941.4	2945.4
35°	2695.9	2674.0	2662.0	2652.0	2652.0	2660.0	2683.9	2690.0	2701.9	2711.9	2719.9
37.5°	2278.8	2276.9	2290.8	2302.8	2332.7	2366.7	2408.6	2444.5	2478.4	2502.4	2526.3
40°	1827.9	1877.8	1917.7	1973.6	2019.4	2085.3	2161.1	2223.0	2280.8	2322.8	2366.7
42.5°	1426.8	1490.6	1574.5	1656.2	1738.1	1827.9	1927.7	2013.5	2089.3	2147.1	2193.0
45°	1111.5	1199.3	1301.1	1404.8	1510.6	1622.4	1726.1	1813.9	1893.7	1953.6	1999.5
47.5°	896.0	991.8	1107.5	1221.3	1341.0	1458.7	1574.5	1650.3	1716.1	1764.0	1805.9
50°	740.3	842.1	963.8	1093.5	1213.2	1331.0	1430.8	1504.6	1558.5	1600.4	1626.3
52.5°	618.6	726.3	856.1	985.8	1105.5	1213.2	1303.1	1358.9	1402.8	1432.8	1456.7
55°	510.8	614.6	736.4	858.1	975.8	1077.6	1151.4	1193.3	1227.2	1245.2	1259.1
57.5°	417.1	512.8	624.6	736.4	838.1	921.9	979.8	1021.7	1037.7	1051.6	1049.6
60°	327.3	417.1	518.8	614.6	702.4	770.2	812.2	836.1	848.1	854.1	850.1
62.5°	257.4	339.2	417.1	500.9	564.7	622.6	662.5	662.5	668.5	670.5	676.5
65°	191.5	253.4	321.3	383.1	435.0	472.9	494.9	500.9	508.9	506.9	502.9
67.5°	141.7	187.6	237.4	283.3	319.3	343.2	359.2	373.2	371.2	367.2	365.2
70°	97.8	127.7	171.6	199.6	225.5	249.5	253.4	255.4	257.4	259.4	255.4
72.5°	67.9	89.8	113.8	137.7	153.7	163.6	173.6	175.6	175.6	175.6	173.6
75°	33.9	45.9	67.9	77.8	91.8	95.8	103.8	103.8	109.8	101.8	99.8
77.5°	29.9	35.9	47.9	55.9	61.9	67.9	69.8	75.8	73.8	69.8	71.8
80°	18.0	22.0	29.9	33.9	41.9	43.9	45.9	47.9	45.9	47.9	47.9
82.5°	14.0	16.0	20.0	20.0	25.9	25.9	27.9	27.9	29.9	29.9	29.9
85°	8.0	14.0	12.0	23.9	16.0	16.0	20.0	23.9	20.0	20.0	23.9
87.5°	8.0	8.0	6.0	8.0	8.0	8.0	10.0	12.0	12.0	14.0	12.0
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: P249408

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3717.6	3717.6	3717.6	3717.6
2.5°	3723.6	3727.6	3721.6	3719.6
5°	3729.6	3729.6	3725.6	3725.6
7.5°	3729.6	3729.6	3723.6	3719.6
10°	3713.6	3713.6	3707.6	3703.6
12.5°	3683.7	3683.7	3681.7	3675.7
15°	3645.8	3645.8	3637.8	3631.8
17.5°	3593.9	3597.9	3587.9	3587.9
20°	3538.0	3536.0	3528.1	3524.1
22.5°	3480.2	3476.2	3474.2	3462.2
25°	3418.3	3414.3	3408.3	3402.3
27.5°	3312.5	3310.5	3304.5	3296.6
30°	3150.9	3148.9	3140.9	3140.9
32.5°	2941.4	2939.4	2931.4	2933.4
35°	2723.8	2731.8	2727.8	2719.9
37.5°	2542.3	2548.3	2552.3	2548.3
40°	2390.6	2408.6	2410.6	2414.6
42.5°	2229.0	2252.9	2260.9	2264.9
45°	2035.4	2057.4	2075.3	2071.3
47.5°	1837.8	1853.8	1869.8	1857.8
50°	1648.3	1658.2	1664.3	1664.3
52.5°	1468.7	1468.7	1466.7	1468.7
55°	1263.1	1263.1	1255.2	1259.1
57.5°	1047.6	1051.6	1045.6	1035.7
60°	848.1	838.1	834.1	828.1
62.5°	660.5	660.5	646.6	664.5
65°	494.9	488.9	482.9	480.9
67.5°	359.2	357.2	351.2	349.2
70°	253.4	245.5	243.4	239.4
72.5°	169.6	169.6	165.6	165.6
75°	103.8	93.8	91.8	93.8
77.5°	71.8	69.8	69.8	67.9
80°	47.9	45.9	49.9	43.9
82.5°	29.9	31.9	29.9	31.9
85°	20.0	23.9	22.0	22.0
87.5°	12.0	12.0	12.0	12.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)