

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: P248400

Luminaire Tested: **LSR8B80D010 EC8B80940 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248400
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B80D010 EC8B80940 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7834.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

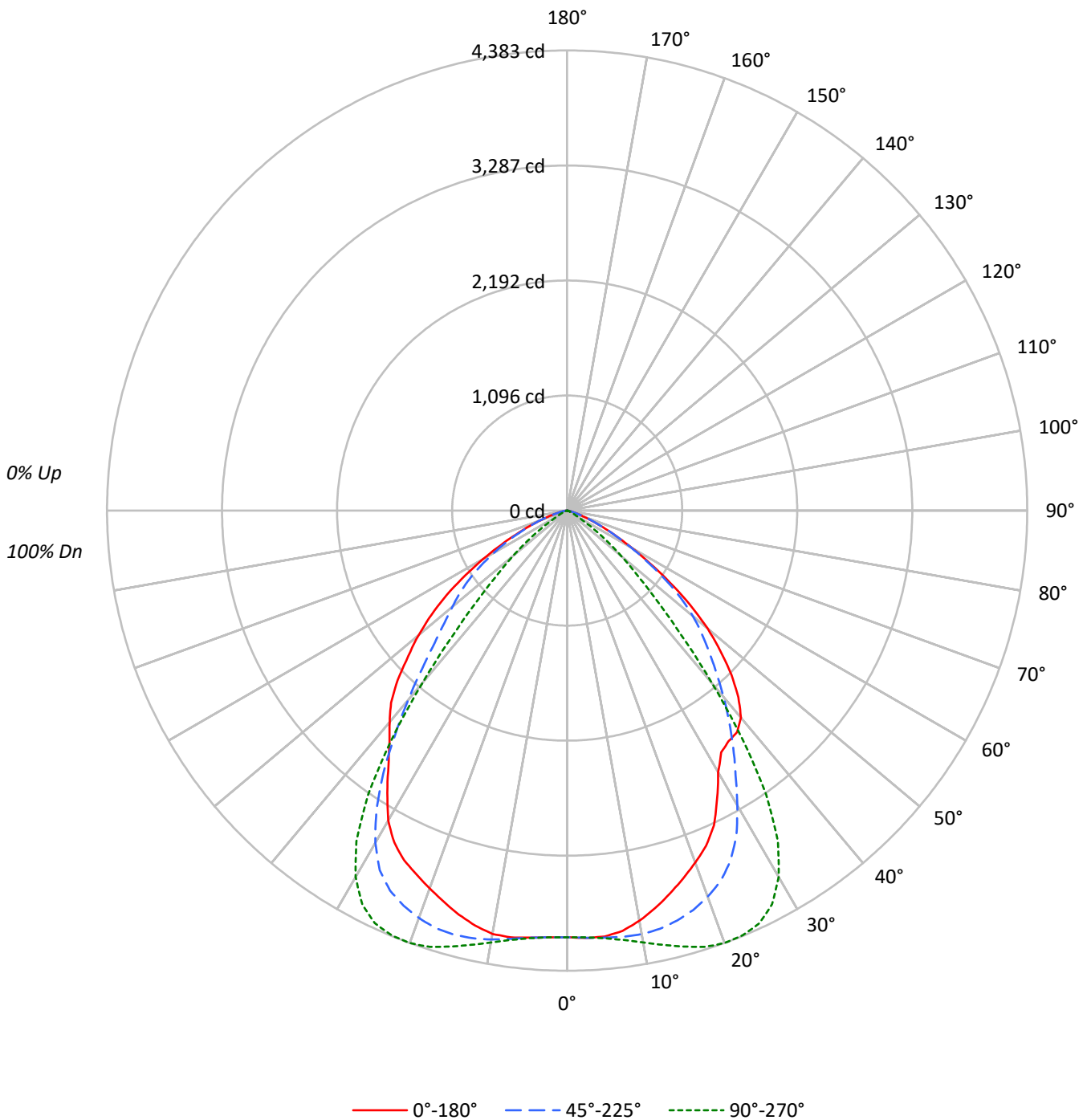
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	125319	125319	125319
5°	126067	126534	126398
10°	124212	130765	128198
15°	120581	137245	127192
20°	117082	143839	125647
25°	112586	147522	125062
30°	102462	143477	121355
35°	100935	124324	111653
40°	103678	86224	105848
45°	96516	52113	99529
50°	83717	32185	88687
55°	64245	16817	75266
60°	43769	6784	56807
65°	27231	3466	39189
70°	14777	2146	23919
75°	7709	1025	14142
80°	3445	1154	7654
85°	2300	778	6864



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.8	5.0
10°-20°	1157.8	14.8
20°-30°	1766.3	22.5
30°-40°	1843.2	23.5
40°-50°	1384.5	17.7
50°-60°	851.8	10.9
60°-70°	346.7	4.4
70°-80°	81.7	1.0
80°-90°	11.2	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°	3314.9	42.3
0°-40°	5158.1	65.8
0°-60°	7394.4	94.4
0°-90°	7834.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7834.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4064	4064	4064	4064	4064	
5°	4073	4083	4088	4083	4083	385
15°	3777	4042	4299	4180	3984	1064
25°	3309	3680	4336	3993	3676	1504
35°	2681	2757	3303	3052	2966	1693
45°	2213	1916	1195	1784	2282	1689
55°	1195	1135	313	1135	1400	1074
65°	373	378	48	507	537	389
75°	65	65	9	114	119	78
85°	6	6	2	15	19	9
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°	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0
2.5°	4074.8	4068.3	4074.8	4074.8	4077.0	4072.7	4074.8	4077.0	4072.7	4072.7	4072.7
5°	4072.7	4068.3	4072.7	4070.5	4074.8	4074.8	4079.1	4079.1	4083.4	4083.4	4089.9
7.5°	4038.1	4029.5	4038.1	4044.6	4048.9	4057.6	4068.3	4077.0	4085.6	4094.2	4105.0
10°	3966.9	3966.9	3973.4	3986.4	3999.3	4014.4	4033.8	4055.4	4077.0	4096.4	4115.8
12.5°	3878.5	3872.0	3885.0	3902.2	3921.7	3945.4	3975.6	4007.9	4042.5	4081.3	4111.5
15°	3777.1	3770.6	3785.7	3803.0	3826.7	3861.3	3898.0	3941.1	3990.7	4042.5	4092.1
17.5°	3673.6	3671.4	3686.5	3710.3	3729.7	3766.3	3813.8	3865.5	3921.7	3990.7	4055.4
20°	3567.9	3565.7	3580.8	3600.3	3626.1	3660.6	3708.1	3768.5	3835.4	3913.0	3988.5
22.5°	3457.9	3460.0	3473.0	3494.5	3516.1	3552.8	3602.4	3662.8	3736.1	3820.3	3904.4
25°	3309.0	3298.3	3315.5	3337.1	3373.7	3403.9	3451.4	3516.1	3591.6	3680.1	3779.3
27.5°	3093.3	3091.1	3106.3	3125.7	3158.0	3194.7	3246.5	3313.3	3393.2	3490.2	3587.3
30°	2877.6	2881.9	2888.4	2907.8	2929.4	2966.0	3017.8	3073.9	3149.4	3242.1	3345.7
32.5°	2730.9	2730.9	2739.6	2752.5	2767.6	2787.0	2823.7	2864.7	2922.9	2987.6	3063.1
35°	2681.3	2672.7	2681.3	2683.5	2685.6	2689.9	2696.4	2709.4	2728.7	2756.8	2784.8
37.5°	2659.8	2653.3	2653.3	2644.7	2633.8	2620.9	2603.6	2584.2	2562.7	2534.6	2513.1
40°	2575.6	2571.3	2567.0	2558.4	2534.6	2508.7	2480.7	2435.4	2385.8	2316.7	2247.7
42.5°	2413.8	2409.5	2407.4	2390.1	2368.5	2338.3	2306.0	2258.5	2196.0	2107.5	2008.3
45°	2213.2	2204.6	2198.1	2183.0	2167.9	2142.0	2111.8	2068.7	2006.1	1915.5	1796.9
47.5°	1980.2	1975.9	1973.8	1967.3	1952.2	1937.1	1917.7	1883.2	1827.1	1740.8	1617.9
50°	1745.1	1736.5	1740.8	1738.7	1732.2	1721.4	1708.4	1684.7	1641.6	1563.9	1451.7
52.5°	1475.4	1475.4	1473.3	1479.8	1481.9	1479.8	1481.9	1456.1	1419.4	1361.1	1266.2
55°	1195.0	1195.0	1201.5	1210.2	1218.8	1220.9	1218.8	1208.0	1182.1	1134.6	1050.5
57.5°	931.9	927.6	940.5	953.4	962.1	970.7	964.2	955.6	940.5	901.7	837.0
60°	709.7	709.7	718.3	727.0	735.6	744.2	742.1	739.9	727.0	701.0	649.3
62.5°	522.0	524.2	524.2	530.7	539.3	547.9	554.4	547.9	541.4	524.2	489.7
65°	373.2	371.0	373.2	379.7	386.1	394.8	399.1	396.9	390.4	377.5	351.6
67.5°	250.2	248.1	256.7	258.8	263.2	271.8	269.7	271.8	269.7	258.8	237.3
70°	163.9	159.6	163.9	161.8	168.3	170.4	174.7	176.9	174.7	168.3	161.8
72.5°	101.4	99.2	101.4	103.6	105.7	107.8	112.2	112.2	110.0	105.7	97.1
75°	64.7	58.2	60.4	56.1	60.4	60.4	64.7	66.9	64.7	64.7	60.4
77.5°	38.8	38.8	38.8	38.8	38.8	38.8	38.8	41.0	43.1	38.8	36.7
80°	19.4	19.4	21.6	21.6	21.6	23.8	21.6	21.6	21.6	23.8	17.3
82.5°	15.1	12.9	12.9	12.9	15.1	12.9	12.9	12.9	12.9	12.9	12.9
85°	6.5	8.6	6.5	4.3	6.5	6.5	8.6	6.5	6.5	6.5	8.6
87.5°	2.2	2.2	0.0	0.0	0.0	2.2	0.0	2.2	2.2	4.3	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0
2.5°	4074.8	4070.5	4070.5	4068.3	4072.7	4068.3	4070.5	4068.3	4068.3	4072.7	4068.3
5°	4089.9	4092.1	4087.8	4085.6	4092.1	4092.1	4092.1	4087.8	4087.8	4089.9	4087.8
7.5°	4111.5	4115.8	4117.9	4120.1	4124.4	4126.6	4126.6	4124.4	4122.3	4128.8	4120.1
10°	4135.2	4141.7	4154.6	4161.1	4171.9	4171.9	4176.2	4176.2	4171.9	4176.2	4174.1
12.5°	4126.6	4165.4	4187.0	4202.1	4217.2	4230.1	4234.4	4236.6	4234.4	4243.1	4234.4
15°	4141.7	4174.1	4208.6	4234.4	4262.5	4277.6	4281.9	4299.1	4303.5	4305.6	4292.7
17.5°	4117.9	4176.2	4212.8	4251.7	4292.7	4320.7	4346.6	4357.4	4359.6	4363.9	4346.6
20°	4064.0	4128.8	4184.8	4240.9	4288.4	4331.5	4353.1	4383.3	4374.7	4391.9	4368.2
22.5°	3990.7	4064.0	4135.2	4208.6	4258.2	4310.0	4355.2	4376.8	4387.6	4387.6	4361.7
25°	3874.2	3960.5	4038.1	4113.6	4189.1	4251.7	4303.5	4335.8	4342.3	4340.2	4310.0
27.5°	3693.0	3785.7	3876.4	3962.7	4055.4	4128.8	4189.1	4227.9	4238.8	4238.8	4206.4
30°	3442.8	3542.0	3630.5	3734.0	3828.9	3910.9	3995.0	4029.5	4048.9	4048.9	4012.3
32.5°	3145.1	3229.2	3311.2	3412.6	3516.1	3608.9	3688.7	3736.1	3759.9	3757.7	3725.4
35°	2821.5	2862.5	2925.1	3000.6	3093.3	3179.6	3257.2	3302.6	3343.5	3341.4	3311.2
37.5°	2497.9	2487.2	2493.7	2521.7	2579.9	2640.3	2700.7	2743.9	2778.4	2793.5	2787.0
40°	2180.9	2124.8	2070.8	2051.4	2055.7	2077.3	2109.7	2142.0	2180.9	2200.3	2208.9
42.5°	1896.1	1801.2	1706.3	1635.1	1594.1	1581.2	1596.3	1607.0	1630.8	1658.8	1686.9
45°	1667.5	1540.2	1415.1	1305.1	1236.0	1195.0	1186.4	1195.0	1208.0	1236.0	1272.7
47.5°	1479.8	1330.9	1190.7	1067.8	966.4	912.5	897.4	893.1	906.0	931.9	981.5
50°	1313.7	1164.8	1009.5	867.1	761.5	701.0	679.5	670.9	685.9	705.4	750.7
52.5°	1132.5	985.8	826.2	688.1	578.1	515.6	491.8	478.9	487.5	513.4	558.7
55°	936.2	800.3	655.8	513.4	407.7	349.5	321.4	312.8	321.4	349.5	394.8
57.5°	739.9	625.6	504.7	371.0	276.1	217.9	189.8	181.2	204.9	215.7	263.2
60°	578.1	485.4	381.8	271.8	189.8	144.5	116.5	110.0	120.8	140.2	179.0
62.5°	433.6	375.3	293.4	194.1	140.2	92.7	77.6	71.2	77.6	92.7	123.0
65°	314.9	269.7	204.9	142.4	94.9	69.0	51.8	47.5	53.9	64.7	90.6
67.5°	215.7	181.2	142.4	99.2	64.7	43.1	36.7	36.7	38.8	47.5	66.9
70°	140.2	118.7	90.6	64.7	43.1	32.4	28.0	23.8	28.0	34.5	45.3
72.5°	88.5	75.5	58.2	45.3	32.4	23.8	19.4	17.3	21.6	25.9	34.5
75°	53.9	41.0	30.2	23.8	17.3	17.3	17.3	8.6	10.8	17.3	21.6
77.5°	32.4	28.0	23.8	19.4	15.1	8.6	8.6	8.6	10.8	12.9	19.4
80°	17.3	15.1	10.8	10.8	8.6	6.5	8.6	6.5	4.3	10.8	12.9
82.5°	10.8	8.6	8.6	8.6	10.8	4.3	6.5	4.3	6.5	8.6	6.5
85°	6.5	6.5	6.5	4.3	10.8	4.3	4.3	2.2	2.2	4.3	4.3
87.5°	0.0	2.2	2.2	0.0	2.2	0.0	2.2	2.2	2.2	2.2	2.2
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°	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0	4064.0
2.5°	4070.5	4068.3	4070.5	4068.3	4068.3	4068.3	4070.5	4070.5	4068.3	4068.3	4072.7
5°	4087.8	4087.8	4087.8	4085.6	4083.4	4083.4	4087.8	4087.8	4081.3	4087.8	4087.8
7.5°	4124.4	4117.9	4124.4	4115.8	4111.5	4113.6	4115.8	4111.5	4107.2	4109.3	4109.3
10°	4171.9	4165.4	4165.4	4159.0	4152.5	4148.1	4143.9	4133.0	4122.3	4120.1	4111.5
12.5°	4227.9	4217.2	4210.7	4197.8	4187.0	4171.9	4159.0	4141.7	4120.1	4105.0	4089.9
15°	4284.0	4266.8	4251.7	4230.1	4206.4	4180.5	4152.5	4124.4	4089.9	4059.7	4033.8
17.5°	4329.3	4305.6	4277.6	4243.1	4208.6	4169.7	4128.8	4087.8	4038.1	3999.3	3969.1
20°	4344.4	4310.0	4273.3	4227.9	4182.7	4128.8	4077.0	4023.0	3966.9	3926.0	3891.5
22.5°	4325.1	4284.0	4238.8	4191.3	4130.9	4072.7	4012.3	3949.7	3900.1	3844.0	3811.7
25°	4271.1	4221.5	4171.9	4115.8	4057.6	3992.9	3928.1	3863.4	3803.0	3772.8	3731.8
27.5°	4161.1	4107.2	4053.2	3995.0	3928.1	3863.4	3796.6	3734.0	3682.2	3641.2	3617.5
30°	3966.9	3904.4	3841.8	3779.3	3721.0	3654.2	3591.6	3539.8	3488.1	3455.7	3432.0
32.5°	3669.3	3613.2	3550.7	3490.2	3436.3	3380.2	3328.4	3283.2	3246.5	3224.9	3207.6
35°	3268.1	3212.0	3164.5	3121.4	3076.0	3052.3	3020.0	2994.1	2979.0	2970.4	2968.2
37.5°	2763.3	2730.9	2715.8	2707.2	2698.6	2692.1	2696.4	2707.2	2715.8	2730.9	2748.2
40°	2224.0	2252.0	2260.7	2290.9	2318.9	2355.6	2396.6	2444.0	2482.8	2532.4	2567.0
42.5°	1732.2	1784.0	1844.3	1909.0	1978.1	2045.0	2126.9	2202.4	2271.4	2334.0	2387.9
45°	1330.9	1410.7	1501.4	1594.1	1686.9	1784.0	1883.2	1975.9	2057.9	2124.8	2180.9
47.5°	1037.6	1126.0	1242.5	1356.8	1469.0	1583.3	1693.3	1790.4	1859.4	1924.1	1973.8
50°	821.9	923.3	1050.5	1182.1	1305.1	1425.8	1542.3	1632.9	1702.0	1753.8	1790.4
52.5°	636.3	757.1	886.6	1024.6	1156.2	1287.8	1395.6	1479.8	1535.9	1581.2	1609.2
55°	474.6	593.2	731.3	873.6	1007.4	1134.6	1236.0	1309.4	1359.0	1384.9	1400.0
57.5°	343.0	450.9	588.9	731.3	852.0	972.9	1054.8	1121.7	1149.7	1164.8	1171.3
60°	250.2	349.5	472.4	595.4	709.7	806.8	878.0	923.3	944.8	953.4	951.3
62.5°	183.4	269.7	375.3	478.9	571.6	651.4	707.5	737.7	748.5	752.8	746.4
65°	140.2	207.1	297.7	377.5	448.7	506.9	547.9	567.3	573.8	571.6	567.3
67.5°	103.6	155.3	222.2	282.6	334.4	379.7	401.2	418.5	422.8	416.3	409.8
70°	73.4	114.3	161.8	202.8	241.6	267.5	291.2	293.4	293.4	291.2	286.9
72.5°	51.8	79.8	110.0	138.1	161.8	181.2	189.8	196.3	194.1	192.0	187.7
75°	34.5	49.6	79.8	86.3	107.8	114.3	123.0	123.0	125.1	118.7	118.7
77.5°	21.6	34.5	47.5	56.1	64.7	73.4	77.6	77.6	79.8	77.6	77.6
80°	12.9	21.6	25.9	38.8	38.8	45.3	47.5	49.6	45.3	51.8	45.3
82.5°	8.6	12.9	19.4	19.4	23.8	28.0	28.0	30.2	30.2	28.0	28.0
85°	6.5	8.6	10.8	12.9	12.9	15.1	12.9	12.9	15.1	17.3	15.1
87.5°	2.2	4.3	2.2	4.3	4.3	8.6	6.5	6.5	6.5	8.6	8.6
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: P248400

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4064.0	4064.0	4064.0	4064.0
2.5°	4068.3	4070.5	4068.3	4068.3
5°	4087.8	4085.6	4087.8	4083.4
7.5°	4102.8	4102.8	4100.7	4100.7
10°	4102.8	4094.2	4094.2	4094.2
12.5°	4070.5	4059.7	4053.2	4048.9
15°	4014.4	3995.0	3986.4	3984.2
17.5°	3941.1	3923.8	3913.0	3906.6
20°	3856.9	3839.7	3826.7	3828.9
22.5°	3783.6	3764.2	3755.5	3751.2
25°	3710.3	3686.5	3680.1	3675.7
27.5°	3591.6	3578.7	3572.2	3565.7
30°	3410.4	3403.9	3393.2	3408.2
32.5°	3201.2	3190.4	3181.8	3188.3
35°	2970.4	2963.9	2970.4	2966.0
37.5°	2759.0	2765.4	2774.1	2778.4
40°	2592.9	2616.6	2625.2	2629.5
42.5°	2426.8	2454.8	2472.1	2482.8
45°	2221.8	2249.9	2269.3	2282.3
47.5°	2010.4	2034.2	2053.6	2051.4
50°	1818.5	1831.4	1840.0	1848.7
52.5°	1624.3	1624.3	1626.5	1626.5
55°	1404.3	1400.0	1397.8	1400.0
57.5°	1162.7	1158.4	1156.2	1149.7
60°	942.7	929.7	921.1	921.1
62.5°	737.7	722.6	716.2	714.0
65°	554.4	552.2	539.3	537.1
67.5°	401.2	392.6	384.0	386.1
70°	282.6	269.7	269.7	265.3
72.5°	183.4	176.9	174.7	174.7
75°	114.3	114.3	110.0	118.7
77.5°	75.5	75.5	73.4	75.5
80°	45.3	45.3	45.3	43.1
82.5°	28.0	30.2	28.0	28.0
85°	15.1	17.3	12.9	19.4
87.5°	8.6	10.8	8.6	10.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)