

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: P249435

Luminaire Tested: **LSR8B80D010 EC8B80840 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249435
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 EC8B80840 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7462.0 lumens
Efficiency: N/A
Efficacy: 100.3 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

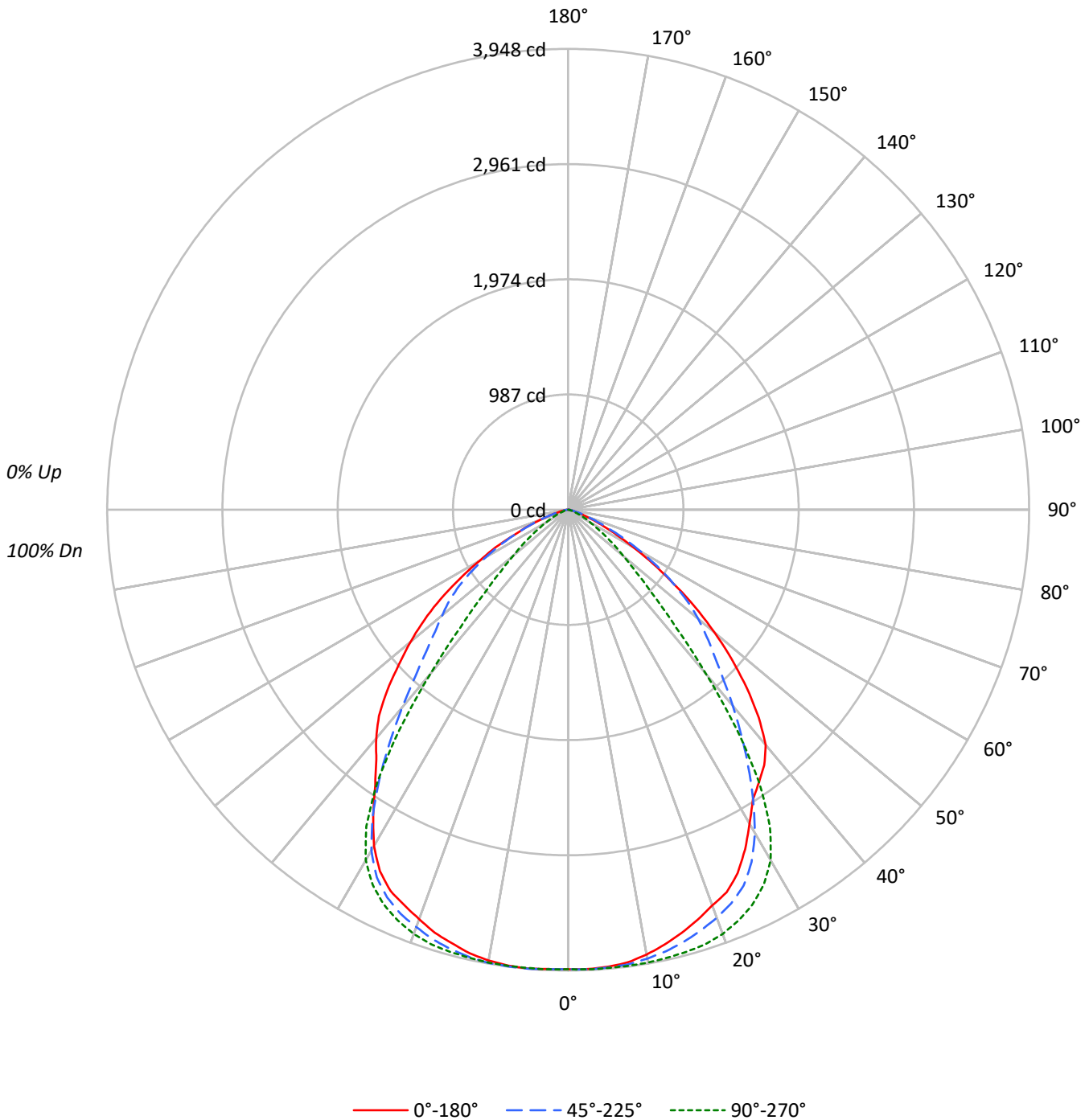
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	121406	121406	121406
5°	121671	121999	122133
10°	121162	123344	122815
15°	119818	125149	122786
20°	118378	126907	122470
25°	116842	127053	122596
30°	110541	123481	118442
35°	107241	107316	108434
40°	105912	73838	102933
45°	94370	44329	95661
50°	78469	29503	84552
55°	58853	20338	71691
60°	39884	13556	54087
65°	24057	8792	37161
70°	13335	4760	22864
75°	6041	2014	11831
80°	5256	2255	8257
85°	5979	2972	8244



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.7	5.0
10°-20°	1091.2	14.6
20°-30°	1656.2	22.2
30°-40°	1739.5	23.3
40°-50°	1304.2	17.5
50°-60°	836.8	11.2
60°-70°	358.0	4.8
70°-80°	84.6	1.1
80°-90°	15.7	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°	3123.2	41.9
0°-40°	4862.7	65.2
0°-60°	7003.7	93.9
0°-90°	7462.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7462.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3937	3937	3937	3937	3937	
5°	3931	3937	3941	3948	3946	373
15°	3753	3832	3920	3895	3846	1059
25°	3434	3555	3734	3667	3603	1569
35°	2849	2690	2851	2817	2880	1788
45°	2164	1769	1016	1718	2194	1657
55°	1095	1095	378	1141	1334	993
65°	330	389	120	501	509	352
75°	51	59	17	102	99	74
85°	17	10	8	17	23	18
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°	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1
2.5°	3939.2	3943.5	3941.3	3941.3	3939.2	3941.3	3941.3	3945.6	3945.6	3941.3	3939.2
5°	3930.7	3935.0	3935.0	3930.7	3930.7	3941.3	3935.0	3939.2	3939.2	3937.1	3937.1
7.5°	3911.8	3911.8	3920.2	3913.9	3913.9	3920.2	3918.1	3922.3	3926.5	3928.7	3928.7
10°	3869.5	3873.7	3875.8	3875.8	3877.9	3884.3	3888.5	3897.0	3901.2	3905.4	3907.5
12.5°	3816.7	3823.0	3825.1	3823.0	3829.3	3837.8	3848.4	3858.9	3865.3	3873.7	3880.1
15°	3753.2	3753.2	3757.5	3763.8	3768.1	3780.7	3791.3	3803.9	3820.9	3831.5	3842.0
17.5°	3683.5	3687.8	3694.1	3694.1	3702.5	3723.6	3730.0	3749.0	3768.1	3778.6	3799.8
20°	3607.4	3611.6	3618.0	3622.2	3632.8	3649.7	3662.4	3679.3	3700.4	3719.5	3740.6
22.5°	3548.2	3539.8	3544.0	3548.2	3558.8	3573.6	3588.4	3609.5	3630.7	3649.7	3670.8
25°	3434.1	3436.2	3442.6	3446.8	3459.5	3472.2	3489.1	3514.4	3533.5	3554.6	3577.8
27.5°	3279.9	3282.0	3292.5	3292.5	3303.1	3324.2	3334.8	3355.9	3381.3	3402.4	3429.9
30°	3104.5	3108.7	3108.7	3117.1	3123.5	3134.1	3144.6	3165.7	3178.4	3197.4	3235.5
32.5°	2943.9	2948.1	2945.9	2943.9	2937.5	2935.4	2933.3	2937.5	2941.7	2948.1	2962.8
35°	2848.8	2838.2	2829.7	2815.0	2798.0	2776.9	2757.9	2732.5	2709.3	2690.2	2669.1
37.5°	2757.9	2755.7	2743.1	2721.9	2688.1	2650.1	2605.7	2550.8	2495.8	2436.6	2379.6
40°	2631.1	2624.7	2614.2	2584.6	2546.5	2500.0	2440.9	2373.3	2284.5	2193.6	2100.6
42.5°	2415.5	2417.6	2404.9	2381.7	2345.8	2301.4	2240.1	2166.2	2071.1	1963.2	1842.8
45°	2164.0	2164.0	2159.8	2140.8	2115.4	2079.5	2033.0	1971.7	1878.8	1768.8	1639.9
47.5°	1902.0	1904.1	1897.7	1893.5	1882.9	1859.7	1825.9	1779.4	1713.9	1608.2	1479.3
50°	1635.7	1635.7	1646.3	1644.2	1644.2	1635.7	1620.9	1593.4	1536.4	1451.8	1331.4
52.5°	1369.4	1373.7	1380.0	1388.4	1399.0	1415.9	1399.0	1386.3	1350.4	1284.9	1181.4
55°	1094.7	1098.9	1109.5	1124.3	1137.0	1153.9	1158.1	1158.1	1139.1	1094.7	1016.5
57.5°	860.1	853.8	862.3	874.9	891.8	908.7	921.4	936.2	934.1	904.5	841.1
60°	646.7	648.8	655.1	667.8	680.5	695.3	712.2	724.9	731.2	716.4	676.3
62.5°	471.3	471.3	479.7	492.4	498.7	519.9	530.4	536.8	543.1	541.0	515.6
65°	329.7	333.9	338.1	344.5	350.8	363.5	369.8	382.5	386.7	388.9	369.8
67.5°	232.5	226.1	230.4	234.6	240.9	249.4	262.1	262.1	268.4	268.4	255.7
70°	147.9	147.9	150.1	156.4	160.6	162.7	167.0	171.2	177.5	175.4	175.4
72.5°	99.3	97.2	99.3	101.5	103.6	109.9	109.9	112.0	116.2	118.4	109.9
75°	50.7	52.8	57.0	55.0	61.3	57.0	59.2	65.5	63.4	59.2	59.2
77.5°	42.2	42.2	42.2	40.2	44.4	44.4	42.2	46.5	44.4	44.4	42.2
80°	29.6	31.7	29.6	27.5	29.6	27.5	27.5	27.5	27.5	27.5	25.3
82.5°	23.3	19.0	21.1	19.0	21.1	21.1	19.0	16.9	16.9	19.0	16.9
85°	16.9	12.7	14.8	14.8	12.7	12.7	12.7	12.7	12.7	10.5	10.5
87.5°	10.5	6.4	6.4	6.4	8.4	8.4	8.4	6.4	8.4	8.4	4.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1
2.5°	3943.5	3941.3	3945.6	3943.5	3943.5	3941.3	3943.5	3941.3	3945.6	3937.1	3939.2
5°	3943.5	3939.2	3941.3	3943.5	3945.6	3941.3	3941.3	3941.3	3945.6	3941.3	3943.5
7.5°	3935.0	3932.9	3939.2	3943.5	3941.3	3939.2	3943.5	3941.3	3945.6	3943.5	3947.6
10°	3918.1	3920.2	3924.4	3930.7	3932.9	3935.0	3939.2	3939.2	3945.6	3937.1	3941.3
12.5°	3892.7	3901.2	3911.8	3915.9	3924.4	3924.4	3928.7	3930.7	3935.0	3932.9	3939.2
15°	3861.0	3871.6	3884.3	3894.9	3905.4	3911.8	3918.1	3920.2	3926.5	3920.2	3922.3
17.5°	3823.0	3835.6	3854.7	3867.3	3884.3	3890.6	3899.0	3903.3	3909.6	3905.4	3907.5
20°	3770.1	3785.0	3806.1	3825.1	3835.6	3850.4	3861.0	3867.3	3871.6	3867.3	3869.5
22.5°	3696.2	3717.3	3744.8	3759.6	3780.7	3793.4	3795.5	3810.3	3820.9	3810.3	3814.5
25°	3609.5	3630.7	3651.8	3683.5	3702.5	3717.3	3732.1	3734.2	3744.8	3742.7	3740.6
27.5°	3465.8	3493.3	3529.2	3554.6	3579.9	3603.2	3620.1	3624.3	3634.9	3630.7	3632.8
30°	3269.3	3298.9	3332.7	3372.8	3408.8	3432.0	3453.2	3467.9	3478.5	3472.2	3470.1
32.5°	2990.4	3019.9	3055.9	3096.0	3138.3	3172.1	3197.4	3216.5	3229.1	3224.9	3214.4
35°	2671.3	2679.7	2702.9	2734.6	2770.5	2806.5	2829.7	2850.8	2865.6	2869.9	2869.9
37.5°	2343.7	2316.2	2299.3	2299.3	2320.4	2335.2	2356.3	2369.0	2392.3	2400.7	2407.1
40°	2026.6	1963.2	1904.1	1859.7	1830.1	1828.0	1828.0	1834.3	1855.5	1882.9	1908.3
42.5°	1743.5	1642.0	1551.2	1468.8	1409.6	1375.8	1361.0	1363.1	1380.0	1405.4	1447.6
45°	1517.4	1390.6	1276.4	1177.1	1096.8	1044.0	1018.6	1016.5	1029.2	1058.7	1105.3
47.5°	1342.0	1206.7	1077.8	963.7	877.0	820.0	790.4	781.9	790.4	817.8	872.8
50°	1196.1	1056.7	923.5	805.2	712.2	653.0	625.5	615.0	625.5	648.8	703.7
52.5°	1060.9	917.2	792.5	678.4	579.0	528.3	498.7	492.4	498.7	526.2	570.6
55°	904.5	781.9	659.3	545.2	458.6	407.9	384.6	378.3	384.6	410.0	456.5
57.5°	750.2	644.6	536.8	433.2	359.3	314.9	293.8	285.3	300.1	317.0	371.9
60°	606.5	522.0	431.1	340.2	279.0	238.8	221.9	219.8	224.0	245.2	283.2
62.5°	475.5	405.8	333.9	259.9	209.2	192.3	171.2	169.1	173.3	185.9	215.6
65°	342.4	298.0	243.0	190.2	150.1	126.8	118.4	120.5	124.7	133.2	160.6
67.5°	238.8	207.1	169.1	133.2	103.6	93.0	84.5	82.4	84.5	99.3	114.1
70°	160.6	141.6	114.1	101.5	71.9	57.0	59.2	52.8	61.3	61.3	73.9
72.5°	105.6	93.0	76.1	59.2	50.7	40.2	40.2	38.1	42.2	44.4	55.0
75°	55.0	42.2	42.2	29.6	21.1	10.5	19.0	16.9	14.8	16.9	21.1
77.5°	38.1	31.7	29.6	23.3	21.1	16.9	16.9	16.9	16.9	19.0	21.1
80°	23.3	23.3	16.9	14.8	12.7	10.5	12.7	12.7	12.7	12.7	14.8
82.5°	14.8	12.7	12.7	10.5	10.5	8.4	8.4	8.4	8.4	8.4	12.7
85°	12.7	8.4	8.4	6.4	8.4	14.8	6.4	8.4	8.4	8.4	6.4
87.5°	4.2	6.4	6.4	6.4	4.2	2.1	4.2	6.4	6.4	10.5	8.4
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°	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1	3937.1
2.5°	3943.5	3945.6	3945.6	3943.5	3943.5	3939.2	3947.6	3941.3	3943.5	3951.9	3945.6
5°	3947.6	3949.8	3949.8	3947.6	3947.6	3947.6	3949.8	3949.8	3947.6	3945.6	3949.8
7.5°	3956.1	3954.0	3954.0	3949.8	3949.8	3945.6	3949.8	3943.5	3947.6	3943.5	3949.8
10°	3945.6	3947.6	3945.6	3943.5	3943.5	3941.3	3941.3	3935.0	3937.1	3930.7	3935.0
12.5°	3939.2	3937.1	3937.1	3932.9	3928.7	3924.4	3922.3	3915.9	3915.9	3901.2	3907.5
15°	3922.3	3924.4	3918.1	3909.6	3905.4	3894.9	3890.6	3882.1	3873.7	3863.2	3865.3
17.5°	3907.5	3901.2	3892.7	3884.3	3867.3	3858.9	3850.4	3837.8	3833.5	3820.9	3816.7
20°	3863.2	3858.9	3848.4	3833.5	3823.0	3803.9	3795.5	3782.8	3772.2	3759.6	3753.2
22.5°	3806.1	3801.8	3789.2	3774.4	3757.5	3749.0	3740.6	3717.3	3706.7	3694.1	3691.9
25°	3734.2	3727.9	3715.2	3698.3	3689.8	3666.6	3658.1	3641.2	3637.0	3624.3	3622.2
27.5°	3624.3	3615.9	3601.1	3579.9	3565.2	3550.4	3541.9	3529.2	3525.0	3512.3	3510.2
30°	3459.5	3448.9	3419.3	3410.9	3385.5	3370.7	3370.7	3353.8	3355.9	3347.5	3347.5
32.5°	3199.6	3182.7	3159.4	3142.5	3125.6	3117.1	3117.1	3110.8	3115.0	3115.0	3119.3
35°	2855.1	2831.9	2819.1	2808.6	2808.6	2817.0	2842.4	2848.8	2861.4	2872.0	2880.5
37.5°	2413.4	2411.3	2426.1	2438.8	2470.5	2506.4	2550.8	2588.8	2624.7	2650.1	2675.4
40°	1935.8	1988.6	2030.9	2090.1	2138.6	2208.4	2288.7	2354.2	2415.5	2459.9	2506.4
42.5°	1511.0	1578.6	1667.4	1754.0	1840.7	1935.8	2041.5	2132.3	2212.6	2273.9	2322.5
45°	1177.1	1270.1	1377.9	1487.8	1599.8	1718.1	1828.0	1921.0	2005.5	2068.9	2117.5
47.5°	948.9	1050.3	1172.9	1293.4	1420.1	1544.8	1667.4	1747.7	1817.4	1868.2	1912.6
50°	784.0	891.8	1020.7	1158.1	1284.9	1409.6	1515.2	1593.4	1650.5	1694.9	1722.3
52.5°	655.1	769.2	906.6	1044.0	1170.8	1284.9	1380.0	1439.2	1485.7	1517.4	1542.7
55°	541.0	650.9	779.8	908.7	1033.4	1141.2	1219.4	1263.8	1299.7	1318.7	1333.5
57.5°	441.7	543.1	661.5	779.8	887.6	976.4	1037.7	1082.0	1098.9	1113.7	1111.6
60°	346.6	441.7	549.5	650.9	743.9	815.7	860.1	885.5	898.1	904.5	900.3
62.5°	272.6	359.3	441.7	530.4	598.1	659.3	701.6	701.6	708.0	710.1	716.4
65°	202.9	268.4	340.2	405.8	460.7	500.9	524.1	530.4	538.9	536.8	532.6
67.5°	150.1	198.7	251.5	300.1	338.1	363.5	380.4	395.2	393.1	388.9	386.7
70°	103.6	135.3	181.8	211.3	238.8	264.2	268.4	270.5	272.6	274.7	270.5
72.5°	71.9	95.1	120.5	145.8	162.7	173.3	183.9	185.9	185.9	185.9	183.9
75°	35.9	48.6	71.9	82.4	97.2	101.5	109.9	109.9	116.2	107.8	105.6
77.5°	31.7	38.1	50.7	59.2	65.5	71.9	73.9	80.3	78.2	73.9	76.1
80°	19.0	23.3	31.7	35.9	44.4	46.5	48.6	50.7	48.6	50.7	50.7
82.5°	14.8	16.9	21.1	21.1	27.5	27.5	29.6	29.6	31.7	31.7	31.7
85°	8.4	14.8	12.7	25.3	16.9	16.9	21.1	25.3	21.1	21.1	25.3
87.5°	8.4	8.4	6.4	8.4	8.4	8.4	10.5	12.7	12.7	14.8	12.7
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: P249435

CATALOG NUMBER: LSR8B80D010 EC8B80840 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3937.1	3937.1	3937.1	3937.1
2.5°	3943.5	3947.6	3941.3	3939.2
5°	3949.8	3949.8	3945.6	3945.6
7.5°	3949.8	3949.8	3943.5	3939.2
10°	3932.9	3932.9	3926.5	3922.3
12.5°	3901.2	3901.2	3899.0	3892.7
15°	3861.0	3861.0	3852.6	3846.2
17.5°	3806.1	3810.3	3799.8	3799.8
20°	3746.9	3744.8	3736.4	3732.1
22.5°	3685.6	3681.4	3679.3	3666.6
25°	3620.1	3615.9	3609.5	3603.2
27.5°	3508.1	3506.0	3499.6	3491.2
30°	3336.9	3334.8	3326.4	3326.4
32.5°	3115.0	3112.9	3104.5	3106.6
35°	2884.7	2893.1	2888.9	2880.5
37.5°	2692.4	2698.7	2702.9	2698.7
40°	2531.7	2550.8	2552.9	2557.1
42.5°	2360.6	2385.9	2394.4	2398.6
45°	2155.6	2178.8	2197.9	2193.6
47.5°	1946.3	1963.2	1980.2	1967.5
50°	1745.6	1756.2	1762.5	1762.5
52.5°	1555.4	1555.4	1553.3	1555.4
55°	1337.7	1337.7	1329.3	1333.5
57.5°	1109.5	1113.7	1107.4	1096.8
60°	898.1	887.6	883.4	877.0
62.5°	699.5	699.5	684.7	703.7
65°	524.1	517.8	511.4	509.3
67.5°	380.4	378.3	371.9	369.8
70°	268.4	259.9	257.8	253.6
72.5°	179.6	179.6	175.4	175.4
75°	109.9	99.3	97.2	99.3
77.5°	76.1	73.9	73.9	71.9
80°	50.7	48.6	52.8	46.5
82.5°	31.7	33.8	31.7	33.8
85°	21.1	25.3	23.3	23.3
87.5°	12.7	12.7	12.7	12.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)