

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: P248446

Luminaire Tested: **LSR8B90D010 EC8B90830 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248446
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: LSR8B90D010 EC8B90830 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9264.0 lumens
Efficiency: N/A
Efficacy: 107.6 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

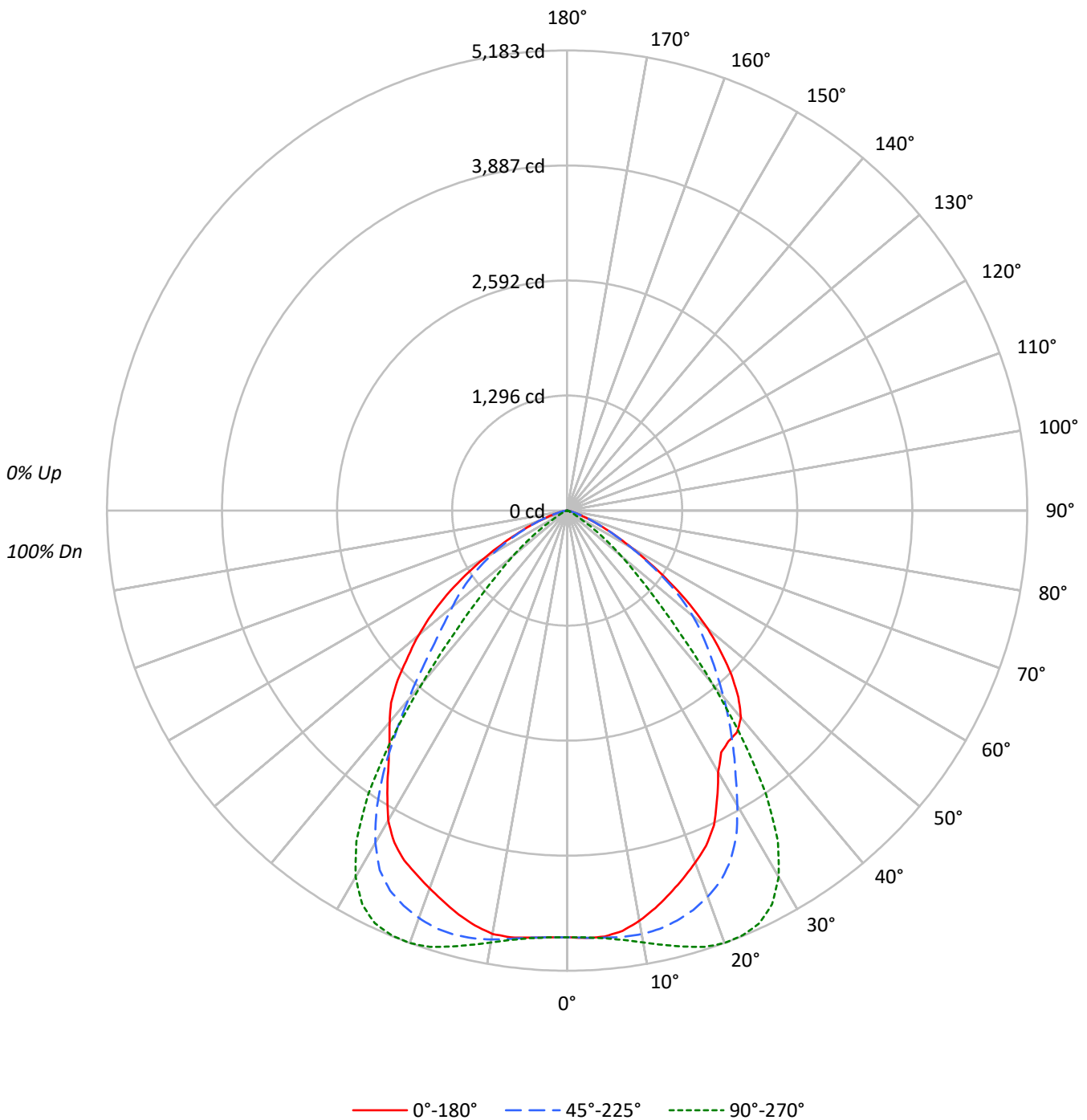
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P248446

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBDW0WH

Luminous Intensity Polar Plot





TEST NUMBER: P248446

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBDW0WH

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	148193	148193	148193
5°	149078	149629	149471
10°	146888	154634	151600
15°	142592	162299	150410
20°	138454	170095	148581
25°	133136	174452	147893
30°	121166	169670	143509
35°	119358	147016	132037
40°	122605	101963	125170
45°	114134	61628	117697
50°	99001	38057	104873
55°	75976	19886	89002
60°	51756	8024	67174
65°	32199	4093	46340
70°	17482	2533	28292
75°	9114	1215	16716
80°	4084	1367	9057
85°	2724	920	8138



TEST NUMBER: P248446

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBDW0WH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.2	5.0
10°-20°	1369.1	14.8
20°-30°	2088.7	22.5
30°-40°	2179.6	23.5
40°-50°	1637.2	17.7
50°-60°	1007.3	10.9
60°-70°	409.9	4.4
70°-80°	96.6	1.0
80°-90°	13.3	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°	3920.0	42.3
0°-40°	6099.7	65.8
0°-60°	8744.2	94.4
0°-90°	9264.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9264.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4806	4806	4806	4806	4806	
5°	4816	4829	4834	4829	4829	456
15°	4467	4780	5084	4944	4712	1258
25°	3913	4352	5127	4722	4347	1779
35°	3171	3260	3905	3610	3508	2002
45°	2617	2265	1413	2110	2699	1997
55°	1413	1342	370	1342	1656	1270
65°	441	446	56	599	635	460
75°	76	76	10	135	140	92
85°	8	8	3	18	23	11
90°	0	0	0	0	0	



TEST NUMBER: P248446

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBDW0WH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8
2.5°	4818.6	4811.0	4818.6	4818.6	4821.2	4816.1	4818.6	4821.2	4816.1	4816.1	4816.1
5°	4816.1	4811.0	4816.1	4813.5	4818.6	4818.6	4823.7	4823.7	4828.8	4828.8	4836.5
7.5°	4775.3	4765.1	4775.3	4782.9	4788.0	4798.2	4811.0	4821.2	4831.4	4841.6	4854.3
10°	4691.1	4691.1	4698.7	4714.0	4729.3	4747.2	4770.1	4795.7	4821.2	4844.1	4867.1
12.5°	4586.5	4578.8	4594.1	4614.5	4637.5	4665.6	4701.3	4739.5	4780.4	4826.2	4862.0
15°	4466.6	4458.9	4476.8	4497.2	4525.3	4566.1	4609.5	4660.5	4719.1	4780.4	4839.0
17.5°	4344.1	4341.6	4359.4	4387.5	4410.5	4453.8	4510.0	4571.2	4637.5	4719.1	4795.7
20°	4219.2	4216.6	4234.5	4257.4	4288.0	4328.9	4385.0	4456.4	4535.5	4627.3	4716.6
22.5°	4089.1	4091.6	4106.9	4132.4	4158.0	4201.3	4259.9	4331.4	4418.1	4517.6	4617.1
25°	3913.0	3900.3	3920.7	3946.2	3989.6	4025.3	4081.4	4158.0	4247.2	4351.8	4469.2
27.5°	3657.9	3655.4	3673.3	3696.2	3734.5	3777.8	3839.1	3918.2	4012.5	4127.3	4242.1
30°	3402.9	3408.0	3415.6	3438.6	3464.1	3507.5	3568.7	3635.0	3724.3	3834.0	3956.4
32.5°	3229.4	3229.4	3239.6	3254.9	3272.8	3295.7	3339.1	3387.6	3456.5	3533.0	3622.2
35°	3170.7	3160.6	3170.7	3173.3	3175.8	3181.0	3188.6	3203.9	3226.8	3260.0	3293.2
37.5°	3145.3	3137.6	3137.6	3127.4	3114.6	3099.3	3078.9	3055.9	3030.5	2997.3	2971.8
40°	3045.8	3040.7	3035.5	3025.4	2997.3	2966.7	2933.5	2879.9	2821.3	2739.6	2658.0
42.5°	2854.5	2849.3	2846.8	2826.4	2800.9	2765.1	2726.9	2670.8	2596.8	2492.2	2374.9
45°	2617.2	2607.0	2599.4	2581.5	2563.6	2533.0	2497.3	2446.3	2372.3	2265.2	2124.9
47.5°	2341.7	2336.6	2334.0	2326.4	2308.6	2290.7	2267.8	2226.9	2160.6	2058.5	1913.2
50°	2063.7	2053.5	2058.5	2056.0	2048.4	2035.6	2020.3	1992.3	1941.2	1849.4	1716.7
52.5°	1744.8	1744.8	1742.3	1749.9	1752.5	1749.9	1752.5	1721.9	1678.5	1609.6	1497.4
55°	1413.2	1413.2	1420.8	1431.1	1441.2	1443.8	1441.2	1428.5	1397.9	1341.8	1242.3
57.5°	1102.0	1096.9	1112.2	1127.5	1137.7	1147.9	1140.2	1130.0	1112.2	1066.3	989.7
60°	839.2	839.2	849.4	859.7	869.8	880.1	877.5	874.9	859.7	829.0	767.8
62.5°	617.3	619.9	619.9	627.5	637.7	647.9	655.6	647.9	640.3	619.9	579.0
65°	441.3	438.7	441.3	449.0	456.6	466.8	471.9	469.4	461.7	446.4	415.8
67.5°	295.9	293.4	303.5	306.1	311.2	321.4	318.9	321.4	318.9	306.1	280.6
70°	193.9	188.7	193.9	191.3	199.0	201.5	206.6	209.2	206.6	199.0	191.3
72.5°	119.9	117.3	119.9	122.5	125.0	127.5	132.6	132.6	130.1	125.0	114.8
75°	76.5	68.8	71.4	66.3	71.4	71.4	76.5	79.1	76.5	76.5	71.4
77.5°	45.9	45.9	45.9	45.9	45.9	45.9	45.9	48.5	51.0	45.9	43.4
80°	23.0	23.0	25.5	25.5	25.5	28.1	25.5	25.5	25.5	28.1	20.4
82.5°	17.9	15.3	15.3	15.3	17.9	15.3	15.3	15.3	15.3	15.3	15.3
85°	7.7	10.2	7.7	5.1	7.7	7.7	10.2	7.7	7.7	7.7	10.2
87.5°	2.6	2.6	0.0	0.0	0.0	2.6	0.0	2.6	2.6	5.1	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: P248446

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8
2.5°	4818.6	4813.5	4813.5	4811.0	4816.1	4811.0	4813.5	4811.0	4811.0	4816.1	4811.0
5°	4836.5	4839.0	4833.9	4831.4	4839.0	4839.0	4839.0	4833.9	4833.9	4836.5	4833.9
7.5°	4862.0	4867.1	4869.6	4872.2	4877.3	4879.9	4879.9	4877.3	4874.7	4882.4	4872.2
10°	4890.0	4897.7	4913.0	4920.7	4933.4	4933.4	4938.5	4938.5	4933.4	4938.5	4936.0
12.5°	4879.9	4925.7	4951.3	4969.1	4987.0	5002.3	5007.4	5009.9	5007.4	5017.6	5007.4
15°	4897.7	4936.0	4976.8	5007.4	5040.5	5058.4	5063.5	5083.9	5089.0	5091.6	5076.3
17.5°	4869.6	4938.5	4981.8	5027.8	5076.3	5109.4	5140.0	5152.8	5155.4	5160.4	5140.0
20°	4805.8	4882.4	4948.7	5015.1	5071.2	5122.2	5147.7	5183.4	5173.2	5193.6	5165.5
22.5°	4719.1	4805.8	4890.0	4976.8	5035.5	5096.7	5150.2	5175.7	5188.5	5188.5	5157.9
25°	4581.4	4683.4	4775.3	4864.5	4953.8	5027.8	5089.0	5127.3	5135.0	5132.4	5096.7
27.5°	4367.1	4476.8	4583.9	4686.0	4795.7	4882.4	4953.8	4999.7	5012.5	5012.5	4974.2
30°	4071.2	4188.5	4293.2	4415.6	4527.8	4624.8	4724.3	4765.1	4788.0	4788.0	4744.7
32.5°	3719.2	3818.7	3915.6	4035.5	4158.0	4267.6	4362.0	4418.1	4446.2	4443.6	4405.4
35°	3336.6	3385.0	3459.0	3548.3	3657.9	3760.0	3851.8	3905.4	3953.9	3951.3	3915.6
37.5°	2953.9	2941.2	2948.8	2982.0	3050.8	3122.3	3193.7	3244.8	3285.5	3303.4	3295.7
40°	2579.0	2512.6	2448.8	2425.9	2431.0	2456.5	2494.8	2533.0	2579.0	2601.9	2612.1
42.5°	2242.2	2130.0	2017.7	1933.6	1885.1	1869.8	1887.6	1900.4	1928.5	1961.6	1994.8
45°	1971.8	1821.4	1673.4	1543.3	1461.7	1413.2	1403.0	1413.2	1428.5	1461.7	1505.0
47.5°	1749.9	1573.9	1408.1	1262.7	1142.8	1079.0	1061.2	1056.1	1071.4	1102.0	1160.6
50°	1553.5	1377.5	1193.8	1025.4	900.5	829.0	803.5	793.3	811.2	834.1	887.7
52.5°	1339.2	1165.7	977.0	813.7	683.6	609.7	581.6	566.3	576.5	607.1	660.7
55°	1107.1	946.4	775.5	607.1	482.1	413.3	380.1	369.9	380.1	413.3	466.8
57.5°	874.9	739.8	596.9	438.7	326.5	257.7	224.4	214.3	242.4	255.1	311.2
60°	683.6	574.0	451.5	321.4	224.4	170.9	137.8	130.1	142.9	165.8	211.7
62.5°	512.7	443.8	346.9	229.6	165.8	109.7	91.8	84.2	91.8	109.7	145.4
65°	372.4	318.9	242.4	168.3	112.2	81.6	61.2	56.1	63.8	76.5	107.2
67.5°	255.1	214.3	168.3	117.3	76.5	51.0	43.4	43.4	45.9	56.1	79.1
70°	165.8	140.3	107.2	76.5	51.0	38.3	33.1	28.1	33.1	40.8	53.6
72.5°	104.6	89.3	68.8	53.6	38.3	28.1	23.0	20.4	25.5	30.6	40.8
75°	63.8	48.5	35.7	28.1	20.4	20.4	20.4	10.2	12.7	20.4	25.5
77.5°	38.3	33.1	28.1	23.0	17.9	10.2	10.2	10.2	12.7	15.3	23.0
80°	20.4	17.9	12.7	12.7	10.2	7.7	10.2	7.7	5.1	12.7	15.3
82.5°	12.7	10.2	10.2	10.2	12.7	5.1	7.7	5.1	7.7	10.2	7.7
85°	7.7	7.7	7.7	5.1	12.7	5.1	5.1	2.6	2.6	5.1	5.1
87.5°	0.0	2.6	2.6	0.0	2.6	0.0	2.6	2.6	2.6	2.6	2.6
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: P248446

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8	4805.8
2.5°	4813.5	4811.0	4813.5	4811.0	4811.0	4811.0	4813.5	4813.5	4811.0	4811.0	4816.1
5°	4833.9	4833.9	4833.9	4831.4	4828.8	4828.8	4833.9	4833.9	4826.2	4833.9	4833.9
7.5°	4877.3	4869.6	4877.3	4867.1	4862.0	4864.5	4867.1	4862.0	4856.9	4859.5	4859.5
10°	4933.4	4925.7	4925.7	4918.1	4910.4	4905.3	4900.3	4887.5	4874.7	4872.2	4862.0
12.5°	4999.7	4987.0	4979.4	4964.0	4951.3	4933.4	4918.1	4897.7	4872.2	4854.3	4836.5
15°	5066.0	5045.6	5027.8	5002.3	4974.2	4943.6	4910.4	4877.3	4836.5	4800.8	4770.1
17.5°	5119.6	5091.6	5058.4	5017.6	4976.8	4930.9	4882.4	4833.9	4775.3	4729.3	4693.6
20°	5137.5	5096.7	5053.3	4999.7	4946.1	4882.4	4821.2	4757.4	4691.1	4642.6	4601.8
22.5°	5114.5	5066.0	5012.5	4956.4	4884.9	4816.1	4744.7	4670.6	4612.0	4545.7	4507.4
25°	5050.8	4992.1	4933.4	4867.1	4798.2	4721.7	4645.2	4568.7	4497.2	4461.5	4413.1
27.5°	4920.7	4856.9	4793.1	4724.3	4645.2	4568.7	4489.6	4415.6	4354.4	4305.9	4277.9
30°	4691.1	4617.1	4543.1	4469.2	4400.3	4321.2	4247.2	4186.0	4124.8	4086.5	4058.5
32.5°	4339.0	4272.7	4198.8	4127.3	4063.6	3997.2	3936.0	3882.5	3839.1	3813.5	3793.1
35°	3864.6	3798.3	3742.1	3691.1	3637.5	3609.5	3571.2	3540.6	3522.8	3512.6	3510.0
37.5°	3267.7	3229.4	3211.5	3201.4	3191.1	3183.5	3188.6	3201.4	3211.5	3229.4	3249.8
40°	2630.0	2663.1	2673.3	2709.0	2742.2	2785.6	2834.1	2890.2	2936.0	2994.7	3035.5
42.5°	2048.4	2109.6	2181.0	2257.5	2339.2	2418.2	2515.2	2604.4	2686.1	2760.0	2823.8
45°	1573.9	1668.3	1775.4	1885.1	1994.8	2109.6	2226.9	2336.6	2433.5	2512.6	2579.0
47.5°	1227.0	1331.6	1469.3	1604.5	1737.2	1872.4	2002.4	2117.2	2198.8	2275.4	2334.0
50°	971.9	1091.8	1242.3	1397.9	1543.3	1686.1	1823.9	1931.0	2012.7	2073.9	2117.2
52.5°	752.5	895.4	1048.4	1211.7	1367.3	1522.9	1650.4	1749.9	1816.2	1869.8	1902.9
55°	561.2	701.5	864.8	1033.1	1191.3	1341.8	1461.7	1548.4	1607.1	1637.7	1655.5
57.5°	405.6	533.2	696.4	864.8	1007.6	1150.4	1247.4	1326.5	1359.6	1377.5	1385.1
60°	295.9	413.3	558.6	704.1	839.2	954.0	1038.2	1091.8	1117.3	1127.5	1124.9
62.5°	216.8	318.9	443.8	566.3	676.0	770.3	836.7	872.4	885.2	890.2	882.6
65°	165.8	244.9	352.0	446.4	530.6	599.4	647.9	670.9	678.5	676.0	670.9
67.5°	122.5	183.7	262.8	334.2	395.4	449.0	474.5	494.9	500.0	492.3	484.7
70°	86.8	135.2	191.3	239.8	285.7	316.3	344.3	346.9	346.9	344.3	339.3
72.5°	61.2	94.4	130.1	163.3	191.3	214.3	224.4	232.1	229.6	227.0	221.9
75°	40.8	58.7	94.4	102.0	127.5	135.2	145.4	145.4	147.9	140.3	140.3
77.5°	25.5	40.8	56.1	66.3	76.5	86.8	91.8	91.8	94.4	91.8	91.8
80°	15.3	25.5	30.6	45.9	45.9	53.6	56.1	58.7	53.6	61.2	53.6
82.5°	10.2	15.3	23.0	23.0	28.1	33.1	33.1	35.7	35.7	33.1	33.1
85°	7.7	10.2	12.7	15.3	15.3	17.9	15.3	15.3	17.9	20.4	17.9
87.5°	2.6	5.1	2.6	5.1	5.1	10.2	7.7	7.7	7.7	10.2	10.2
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: P248446

CATALOG NUMBER: LSR8B90D010 EC8B90830 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4805.8	4805.8	4805.8	4805.8
2.5°	4811.0	4813.5	4811.0	4811.0
5°	4833.9	4831.4	4833.9	4828.8
7.5°	4851.8	4851.8	4849.2	4849.2
10°	4851.8	4841.6	4841.6	4841.6
12.5°	4813.5	4800.8	4793.1	4788.0
15°	4747.2	4724.3	4714.0	4711.5
17.5°	4660.5	4640.1	4627.3	4619.6
20°	4561.0	4540.6	4525.3	4527.8
22.5°	4474.2	4451.3	4441.1	4436.0
25°	4387.5	4359.4	4351.8	4346.7
27.5°	4247.2	4231.9	4224.2	4216.6
30°	4032.9	4025.3	4012.5	4030.4
32.5°	3785.5	3772.7	3762.6	3770.2
35°	3512.6	3504.9	3512.6	3507.5
37.5°	3262.6	3270.2	3280.5	3285.5
40°	3066.2	3094.2	3104.4	3109.5
42.5°	2869.8	2902.9	2923.3	2936.0
45°	2627.4	2660.5	2683.5	2698.9
47.5°	2377.4	2405.5	2428.4	2425.9
50°	2150.4	2165.7	2175.9	2186.1
52.5°	1920.8	1920.8	1923.3	1923.3
55°	1660.6	1655.5	1653.0	1655.5
57.5°	1374.9	1369.8	1367.3	1359.6
60°	1114.7	1099.5	1089.2	1089.2
62.5°	872.4	854.5	846.9	844.4
65°	655.6	653.0	637.7	635.1
67.5°	474.5	464.2	454.1	456.6
70°	334.2	318.9	318.9	313.8
72.5°	216.8	209.2	206.6	206.6
75°	135.2	135.2	130.1	140.3
77.5°	89.3	89.3	86.8	89.3
80°	53.6	53.6	53.6	51.0
82.5°	33.1	35.7	33.1	33.1
85°	17.9	20.4	15.3	23.0
87.5°	10.2	12.7	10.2	12.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)