

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: P249428

Luminaire Tested: **LSR8B100D010 EC8B100835 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249428
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: LSR8B100D010 EC8B100835 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9761.0 lumens
Efficiency: N/A
Efficacy: 91.8 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

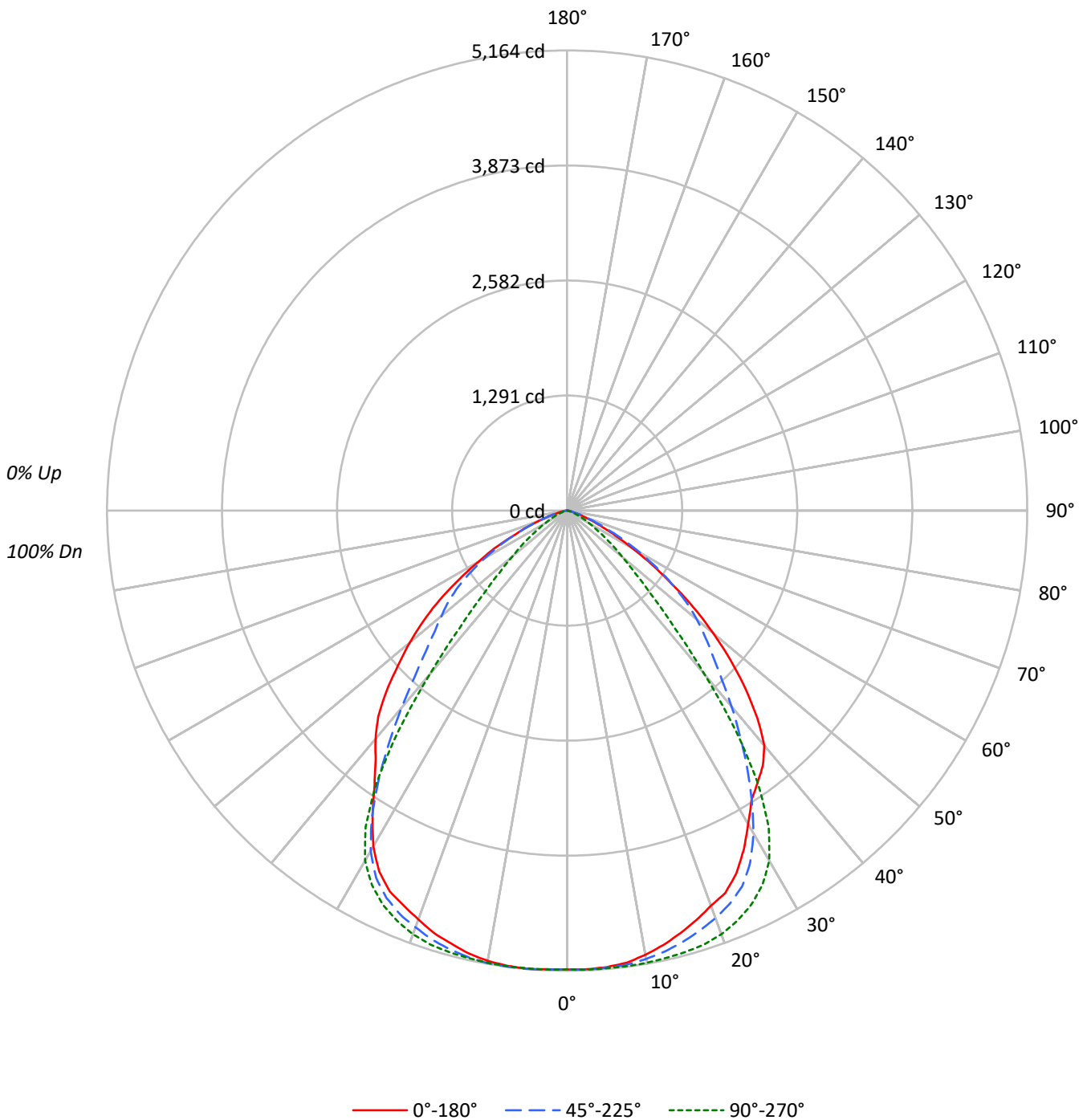
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	158810	158810	158810
5°	159160	159587	159760
10°	158489	161348	160656
15°	156735	163707	160617
20°	154852	166006	160204
25°	152843	166198	160366
30°	144595	161526	154932
35°	140281	140383	141840
40°	138542	96589	134649
45°	123449	57987	125136
50°	102647	38594	110601
55°	76986	26607	93776
60°	52169	17731	70757
65°	31470	11499	48609
70°	17446	6230	29906
75°	7911	2633	15477
80°	6872	2948	10797
85°	7819	3892	10756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	491.5	5.0
10°-20°	1427.4	14.6
20°-30°	2166.5	22.2
30°-40°	2275.5	23.3
40°-50°	1706.0	17.5
50°-60°	1094.6	11.2
60°-70°	468.3	4.8
70°-80°	110.6	1.1
80°-90°	20.6	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°	4085.4	41.9
0°-40°	6360.9	65.2
0°-60°	9161.5	93.9
0°-90°	9761.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9761.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5150	5150	5150	5150	5150	
5°	5142	5150	5156	5164	5161	488
15°	4910	5012	5128	5095	5031	1385
25°	4492	4650	4885	4796	4713	2052
35°	3726	3519	3729	3685	3768	2339
45°	2831	2314	1330	2248	2870	2168
55°	1432	1432	495	1493	1744	1299
65°	431	509	158	655	666	460
75°	66	77	22	133	130	97
85°	22	14	11	22	30	23
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°	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1
2.5°	5152.9	5158.4	5155.6	5155.6	5152.9	5155.6	5155.6	5161.2	5161.2	5155.6	5152.9
5°	5141.8	5147.3	5147.3	5141.8	5141.8	5155.6	5147.3	5152.9	5152.9	5150.1	5150.1
7.5°	5117.0	5117.0	5128.0	5119.7	5119.7	5128.0	5125.2	5130.8	5136.3	5139.1	5139.1
10°	5061.6	5067.2	5069.9	5069.9	5072.7	5081.0	5086.5	5097.6	5103.1	5108.6	5111.4
12.5°	4992.6	5000.8	5003.6	5000.8	5009.1	5020.2	5034.0	5047.8	5056.1	5067.2	5075.5
15°	4909.6	4909.6	4915.1	4923.4	4929.0	4945.5	4959.3	4975.9	4998.0	5011.9	5025.7
17.5°	4818.4	4823.9	4832.2	4832.2	4843.3	4870.9	4879.2	4904.1	4929.0	4942.8	4970.4
20°	4718.9	4724.4	4732.7	4738.2	4752.0	4774.1	4790.7	4812.8	4840.5	4865.4	4893.0
22.5°	4641.4	4630.4	4635.9	4641.4	4655.3	4674.6	4694.0	4721.6	4749.3	4774.1	4801.8
25°	4492.2	4494.9	4503.2	4508.7	4525.4	4541.9	4564.1	4597.2	4622.1	4649.8	4680.1
27.5°	4290.4	4293.2	4307.0	4307.0	4320.8	4348.4	4362.2	4389.9	4423.1	4450.7	4486.7
30°	4060.9	4066.4	4066.4	4077.5	4085.8	4099.6	4113.4	4141.1	4157.7	4182.6	4232.3
32.5°	3850.9	3856.3	3853.6	3850.9	3842.5	3839.8	3837.0	3842.5	3848.1	3856.3	3875.7
35°	3726.5	3712.6	3701.6	3682.2	3660.1	3632.4	3607.5	3574.4	3544.0	3519.1	3491.5
37.5°	3607.5	3604.8	3588.2	3560.5	3516.3	3466.6	3408.5	3336.6	3264.7	3187.4	3112.8
40°	3441.7	3433.4	3419.6	3380.9	3331.1	3270.3	3192.9	3104.4	2988.3	2869.5	2747.8
42.5°	3159.7	3162.5	3145.9	3115.5	3068.5	3010.4	2930.3	2833.5	2709.1	2568.1	2410.6
45°	2830.8	2830.8	2825.2	2800.3	2767.2	2720.2	2659.4	2579.2	2457.6	2313.8	2145.2
47.5°	2488.0	2490.7	2482.4	2476.9	2463.1	2432.7	2388.5	2327.7	2242.0	2103.7	1935.1
50°	2139.7	2139.7	2153.5	2150.7	2150.7	2139.7	2120.3	2084.3	2009.7	1899.1	1741.6
52.5°	1791.3	1796.9	1805.2	1816.2	1830.0	1852.1	1830.0	1813.4	1766.4	1680.7	1545.3
55°	1432.0	1437.5	1451.3	1470.6	1487.3	1509.4	1514.9	1514.9	1490.0	1432.0	1329.7
57.5°	1125.1	1116.8	1127.9	1144.5	1166.6	1188.7	1205.3	1224.6	1221.9	1183.2	1100.2
60°	845.9	848.7	856.9	873.6	890.2	909.5	931.6	948.2	956.5	937.2	884.6
62.5°	616.5	616.5	627.5	644.1	652.4	680.1	693.9	702.2	710.4	707.7	674.5
65°	431.3	436.8	442.3	450.6	458.9	475.4	483.8	500.3	505.9	508.7	483.8
67.5°	304.1	295.8	301.3	306.8	315.1	326.2	342.8	342.8	351.1	351.1	334.5
70°	193.5	193.5	196.3	204.5	210.1	212.9	218.4	223.9	232.2	229.4	229.4
72.5°	129.9	127.2	129.9	132.7	135.5	143.7	143.7	146.5	152.1	154.8	143.7
75°	66.4	69.1	74.6	71.9	80.2	74.6	77.4	85.7	82.9	77.4	77.4
77.5°	55.3	55.3	55.3	52.6	58.0	58.0	55.3	60.8	58.0	58.0	55.3
80°	38.7	41.5	38.7	35.9	38.7	35.9	35.9	35.9	35.9	35.9	33.1
82.5°	30.4	24.9	27.7	24.9	27.7	27.7	24.9	22.1	22.1	24.9	22.1
85°	22.1	16.6	19.3	19.3	16.6	16.6	16.6	16.6	16.6	13.8	13.8
87.5°	13.8	8.3	8.3	8.3	11.0	11.0	11.0	8.3	11.0	11.0	5.5
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°	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1
2.5°	5158.4	5155.6	5161.2	5158.4	5158.4	5155.6	5158.4	5155.6	5161.2	5150.1	5152.9
5°	5158.4	5152.9	5155.6	5158.4	5161.2	5155.6	5155.6	5155.6	5161.2	5155.6	5158.4
7.5°	5147.3	5144.5	5152.9	5158.4	5155.6	5152.9	5158.4	5155.6	5161.2	5158.4	5163.9
10°	5125.2	5128.0	5133.5	5141.8	5144.5	5147.3	5152.9	5152.9	5161.2	5150.1	5155.6
12.5°	5092.1	5103.1	5117.0	5122.4	5133.5	5133.5	5139.1	5141.8	5147.3	5144.5	5152.9
15°	5050.6	5064.4	5081.0	5094.8	5108.6	5117.0	5125.2	5128.0	5136.3	5128.0	5130.8
17.5°	5000.8	5017.4	5042.3	5058.8	5081.0	5089.3	5100.3	5105.9	5114.2	5108.6	5111.4
20°	4931.7	4951.1	4978.7	5003.6	5017.4	5036.7	5050.6	5058.8	5064.4	5058.8	5061.6
22.5°	4835.0	4862.6	4898.5	4917.9	4945.5	4962.1	4964.9	4984.2	4998.0	4984.2	4989.8
25°	4721.6	4749.3	4776.9	4818.4	4843.3	4862.6	4882.0	4884.7	4898.5	4895.8	4893.0
27.5°	4533.6	4569.6	4616.5	4649.8	4682.9	4713.3	4735.5	4740.9	4754.8	4749.3	4752.0
30°	4276.5	4315.3	4359.5	4412.0	4459.0	4489.4	4517.0	4536.4	4550.2	4541.9	4539.2
32.5°	3911.7	3950.4	3997.4	4049.9	4105.2	4149.4	4182.6	4207.5	4224.0	4218.5	4204.7
35°	3494.2	3505.3	3535.7	3577.2	3624.1	3671.1	3701.6	3729.2	3748.5	3754.1	3754.1
37.5°	3065.7	3029.8	3007.7	3007.7	3035.3	3054.7	3082.3	3098.9	3129.3	3140.4	3148.7
40°	2651.0	2568.1	2490.7	2432.7	2394.0	2391.2	2391.2	2399.5	2427.2	2463.1	2496.3
42.5°	2280.6	2147.9	2029.1	1921.3	1843.9	1799.6	1780.3	1783.1	1805.2	1838.3	1893.6
45°	1984.8	1819.0	1669.7	1539.8	1434.7	1365.6	1332.5	1329.7	1346.3	1384.9	1445.8
47.5°	1755.4	1578.5	1409.8	1260.6	1147.3	1072.6	1033.9	1022.9	1033.9	1069.8	1141.7
50°	1564.7	1382.2	1208.1	1053.2	931.6	854.2	818.3	804.5	818.3	848.7	920.5
52.5°	1387.7	1199.7	1036.7	887.4	757.4	691.1	652.4	644.1	652.4	688.3	746.4
55°	1183.2	1022.9	862.5	713.2	599.9	533.5	503.1	494.9	503.1	536.3	597.1
57.5°	981.4	843.1	702.2	566.7	470.0	411.9	384.3	373.2	392.5	414.6	486.5
60°	793.4	682.8	563.9	445.1	364.9	312.4	290.2	287.5	293.0	320.7	370.4
62.5°	622.0	530.8	436.8	340.0	273.7	251.6	223.9	221.2	226.7	243.2	282.0
65°	447.8	389.8	317.9	248.8	196.3	165.9	154.8	157.6	163.1	174.2	210.1
67.5°	312.4	270.9	221.2	174.2	135.5	121.6	110.6	107.8	110.6	129.9	149.3
70°	210.1	185.2	149.3	132.7	94.0	74.6	77.4	69.1	80.2	80.2	96.7
72.5°	138.2	121.6	99.5	77.4	66.4	52.6	52.6	49.8	55.3	58.0	71.9
75°	71.9	55.3	55.3	38.7	27.7	13.8	24.9	22.1	19.3	22.1	27.7
77.5°	49.8	41.5	38.7	30.4	27.7	22.1	22.1	22.1	22.1	24.9	27.7
80°	30.4	30.4	22.1	19.3	16.6	13.8	16.6	16.6	16.6	16.6	19.3
82.5°	19.3	16.6	16.6	13.8	13.8	11.0	11.0	11.0	11.0	11.0	16.6
85°	16.6	11.0	11.0	8.3	11.0	19.3	8.3	11.0	11.0	11.0	8.3
87.5°	5.5	8.3	8.3	8.3	5.5	2.8	5.5	8.3	8.3	13.8	11.0
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°	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1	5150.1
2.5°	5158.4	5161.2	5161.2	5158.4	5158.4	5152.9	5163.9	5155.6	5158.4	5169.4	5161.2
5°	5163.9	5166.7	5166.7	5163.9	5163.9	5163.9	5166.7	5166.7	5163.9	5161.2	5166.7
7.5°	5175.0	5172.2	5172.2	5166.7	5166.7	5161.2	5166.7	5158.4	5163.9	5158.4	5166.7
10°	5161.2	5163.9	5161.2	5158.4	5158.4	5155.6	5155.6	5147.3	5150.1	5141.8	5147.3
12.5°	5152.9	5150.1	5150.1	5144.5	5139.1	5133.5	5130.8	5122.4	5122.4	5103.1	5111.4
15°	5130.8	5133.5	5125.2	5114.2	5108.6	5094.8	5089.3	5078.2	5067.2	5053.4	5056.1
17.5°	5111.4	5103.1	5092.1	5081.0	5058.8	5047.8	5036.7	5020.2	5014.6	4998.0	4992.6
20°	5053.4	5047.8	5034.0	5014.6	5000.8	4975.9	4964.9	4948.3	4934.5	4917.9	4909.6
22.5°	4978.7	4973.1	4956.6	4937.2	4915.1	4904.1	4893.0	4862.6	4848.8	4832.2	4829.4
25°	4884.7	4876.4	4859.8	4837.7	4826.6	4796.3	4785.2	4763.1	4757.6	4740.9	4738.2
27.5°	4740.9	4729.9	4710.6	4682.9	4663.6	4644.2	4633.2	4616.5	4611.1	4594.4	4591.7
30°	4525.4	4511.5	4472.8	4461.8	4428.6	4409.2	4409.2	4387.1	4389.9	4378.9	4378.9
32.5°	4185.3	4163.2	4132.8	4110.7	4088.5	4077.5	4077.5	4069.2	4074.7	4074.7	4080.3
35°	3734.7	3704.3	3687.7	3673.9	3673.9	3684.9	3718.1	3726.5	3743.0	3756.8	3767.9
37.5°	3156.9	3154.2	3173.6	3190.1	3231.6	3278.6	3336.6	3386.4	3433.4	3466.6	3499.7
40°	2532.2	2601.3	2656.6	2734.0	2797.6	2888.8	2993.8	3079.5	3159.7	3217.8	3278.6
42.5°	1976.5	2065.0	2181.1	2294.4	2407.8	2532.2	2670.5	2789.3	2894.3	2974.5	3038.1
45°	1539.8	1661.4	1802.4	1946.2	2092.7	2247.5	2391.2	2512.9	2623.4	2706.4	2770.0
47.5°	1241.2	1373.9	1534.2	1691.8	1857.7	2020.8	2181.1	2286.2	2377.4	2443.7	2501.8
50°	1025.6	1166.6	1335.2	1514.9	1680.7	1843.9	1982.1	2084.3	2159.0	2217.1	2253.0
52.5°	856.9	1006.2	1185.9	1365.6	1531.5	1680.7	1805.2	1882.6	1943.4	1984.8	2018.0
55°	707.7	851.5	1020.1	1188.7	1351.8	1492.8	1595.0	1653.1	1700.1	1725.0	1744.3
57.5°	577.8	710.4	865.3	1020.1	1161.1	1277.2	1357.3	1415.4	1437.5	1456.8	1454.1
60°	453.4	577.8	718.7	851.5	973.1	1067.0	1125.1	1158.3	1174.9	1183.2	1177.6
62.5°	356.6	470.0	577.8	693.9	782.3	862.5	917.8	917.8	926.1	928.8	937.2
65°	265.4	351.1	445.1	530.8	602.6	655.2	685.6	693.9	705.0	702.2	696.6
67.5°	196.3	259.9	328.9	392.5	442.3	475.4	497.6	517.0	514.2	508.7	505.9
70°	135.5	176.9	237.8	276.4	312.4	345.6	351.1	353.8	356.6	359.4	353.8
72.5°	94.0	124.4	157.6	190.7	212.9	226.7	240.5	243.2	243.2	243.2	240.5
75°	47.0	63.6	94.0	107.8	127.2	132.7	143.7	143.7	152.1	141.0	138.2
77.5°	41.5	49.8	66.4	77.4	85.7	94.0	96.7	105.0	102.3	96.7	99.5
80°	24.9	30.4	41.5	47.0	58.0	60.8	63.6	66.4	63.6	66.4	66.4
82.5°	19.3	22.1	27.7	27.7	35.9	35.9	38.7	38.7	41.5	41.5	41.5
85°	11.0	19.3	16.6	33.1	22.1	22.1	27.7	33.1	27.7	27.7	33.1
87.5°	11.0	11.0	8.3	11.0	11.0	11.0	13.8	16.6	16.6	19.3	16.6
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: P249428

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5150.1	5150.1	5150.1	5150.1
2.5°	5158.4	5163.9	5155.6	5152.9
5°	5166.7	5166.7	5161.2	5161.2
7.5°	5166.7	5166.7	5158.4	5152.9
10°	5144.5	5144.5	5136.3	5130.8
12.5°	5103.1	5103.1	5100.3	5092.1
15°	5050.6	5050.6	5039.5	5031.2
17.5°	4978.7	4984.2	4970.4	4970.4
20°	4901.3	4898.5	4887.5	4882.0
22.5°	4821.2	4815.6	4812.8	4796.3
25°	4735.5	4729.9	4721.6	4713.3
27.5°	4588.9	4586.2	4577.9	4566.8
30°	4365.0	4362.2	4351.2	4351.2
32.5°	4074.7	4072.0	4060.9	4063.7
35°	3773.4	3784.5	3779.0	3767.9
37.5°	3521.8	3530.2	3535.7	3530.2
40°	3311.8	3336.6	3339.4	3345.0
42.5°	3087.9	3121.0	3132.1	3137.6
45°	2819.7	2850.1	2875.0	2869.5
47.5°	2546.0	2568.1	2590.2	2573.7
50°	2283.4	2297.2	2305.5	2305.5
52.5°	2034.6	2034.6	2031.9	2034.6
55°	1749.9	1749.9	1738.8	1744.3
57.5°	1451.3	1456.8	1448.5	1434.7
60°	1174.9	1161.1	1155.5	1147.3
62.5°	915.0	915.0	895.7	920.5
65°	685.6	677.3	669.0	666.2
67.5°	497.6	494.9	486.5	483.8
70°	351.1	340.0	337.3	331.7
72.5°	235.0	235.0	229.4	229.4
75°	143.7	129.9	127.2	129.9
77.5°	99.5	96.7	96.7	94.0
80°	66.4	63.6	69.1	60.8
82.5°	41.5	44.2	41.5	44.2
85°	27.7	33.1	30.4	30.4
87.5°	16.6	16.6	16.6	16.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)