

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: P248510

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248510
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: LSR8B100D010 EC8B100940 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9900.0 lumens
Efficiency: N/A
Efficacy: 93.1 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

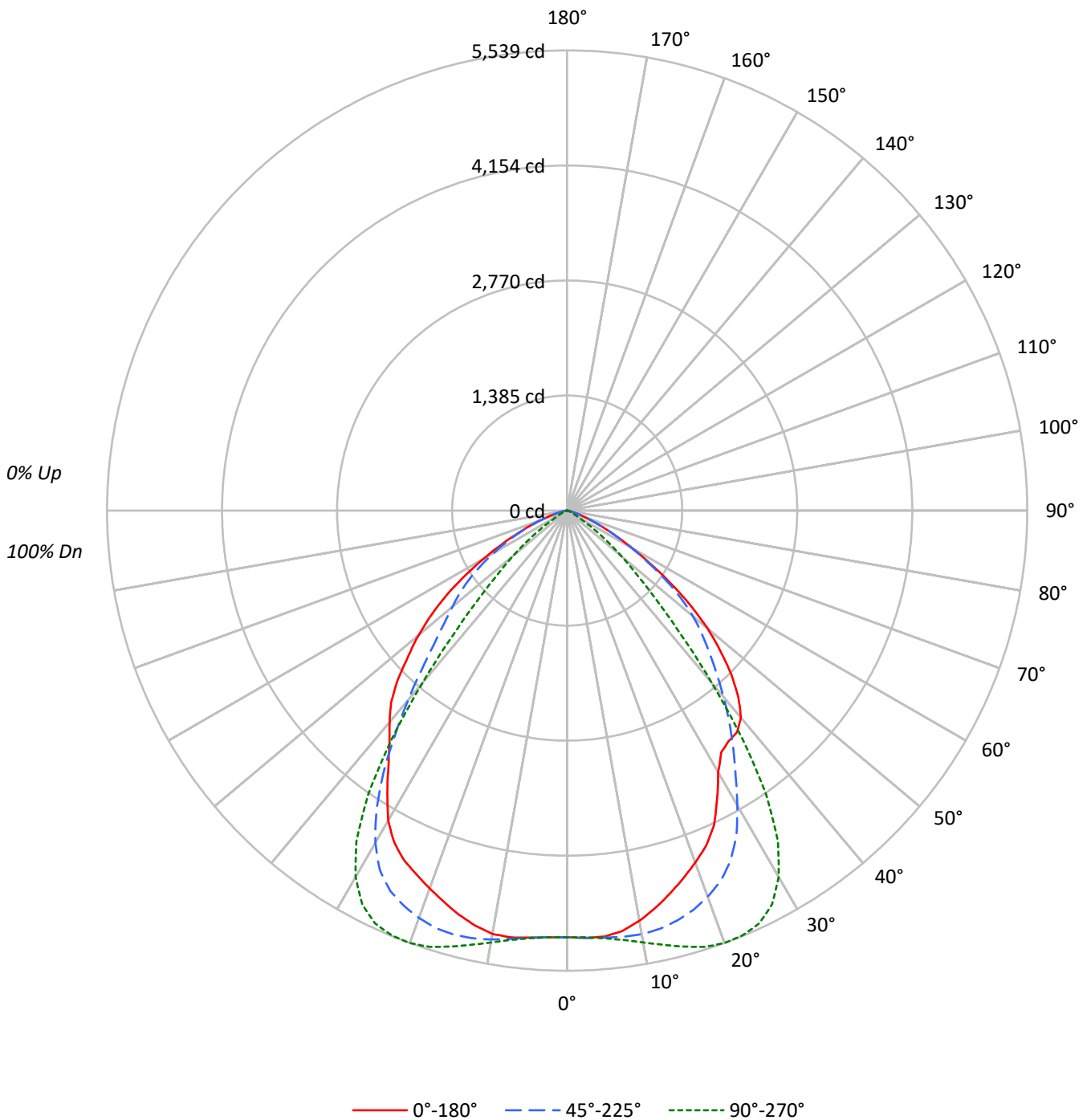
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	158369	158369	158369
5°	159311	159903	159732
10°	156970	165252	162008
15°	152383	173440	160735
20°	147958	181771	158783
25°	142279	186428	158045
30°	129484	181316	153362
35°	127554	157108	141102
40°	131023	108963	133764
45°	121970	65859	125773
50°	105794	40671	112074
55°	81191	21252	95115
60°	55314	8572	71787
65°	34410	4378	49521
70°	18681	2705	30230
75°	9746	1299	17859
80°	4351	1456	9678
85°	2901	955	8668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	493.9	5.0
10°-20°	1463.1	14.8
20°-30°	2232.1	22.5
30°-40°	2329.3	23.5
40°-50°	1749.6	17.7
50°-60°	1076.5	10.9
60°-70°	438.1	4.4
70°-80°	103.2	1.0
80°-90°	14.2	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°	4189.2	42.3
0°-40°	6518.4	65.8
0°-60°	9344.5	94.4
0°-90°	9900.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9900.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5136	5136	5136	5136	5136	
5°	5147	5160	5166	5160	5160	487
15°	4773	5109	5433	5283	5035	1345
25°	4182	4651	5479	5046	4645	1901
35°	3388	3484	4174	3857	3748	2139
45°	2797	2421	1510	2254	2884	2134
55°	1510	1434	395	1434	1769	1358
65°	472	477	60	641	679	492
75°	82	82	11	144	150	98
85°	8	8	3	19	24	11
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°	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8
2.5°	5149.4	5141.2	5149.4	5149.4	5152.2	5146.7	5149.4	5152.2	5146.7	5146.7	5146.7
5°	5146.7	5141.2	5146.7	5144.0	5149.4	5149.4	5154.9	5154.9	5160.3	5160.3	5168.5
7.5°	5103.1	5092.2	5103.1	5111.3	5116.7	5127.6	5141.2	5152.2	5163.1	5174.0	5187.6
10°	5013.1	5013.1	5021.3	5037.7	5054.0	5073.1	5097.6	5124.9	5152.2	5176.7	5201.2
12.5°	4901.4	4893.2	4909.5	4931.3	4955.9	4985.9	5024.0	5064.9	5108.6	5157.6	5195.8
15°	4773.3	4765.0	4784.1	4805.9	4835.9	4879.6	4925.9	4980.4	5043.1	5108.6	5171.3
17.5°	4642.4	4639.6	4658.7	4688.7	4713.3	4759.6	4819.6	4885.0	4955.9	5043.1	5124.9
20°	4508.8	4506.1	4525.2	4549.7	4582.4	4626.0	4686.0	4762.3	4846.8	4945.0	5040.4
22.5°	4369.8	4372.5	4388.9	4416.1	4443.4	4489.7	4552.4	4628.8	4721.4	4827.7	4934.1
25°	4181.7	4168.1	4189.9	4217.2	4263.5	4301.6	4361.6	4443.4	4538.8	4650.6	4776.0
27.5°	3909.1	3906.3	3925.5	3950.0	3990.9	4037.2	4102.6	4187.1	4288.0	4410.7	4533.3
30°	3636.5	3641.9	3650.1	3674.7	3701.9	3748.3	3813.7	3884.6	3980.0	4097.2	4228.0
32.5°	3451.1	3451.1	3462.0	3478.4	3497.5	3522.0	3568.4	3620.1	3693.8	3775.5	3870.9
35°	3388.4	3377.5	3388.4	3391.1	3393.9	3399.3	3407.5	3423.9	3448.4	3483.9	3519.3
37.5°	3361.2	3353.0	3353.0	3342.1	3328.4	3312.1	3290.3	3265.7	3238.5	3203.0	3175.8
40°	3254.9	3249.4	3243.9	3233.1	3203.0	3170.4	3134.9	3077.6	3014.9	2927.7	2840.5
42.5°	3050.4	3045.0	3042.2	3020.4	2993.1	2955.0	2914.1	2854.1	2775.1	2663.3	2537.9
45°	2796.9	2786.0	2777.8	2758.7	2739.6	2706.9	2668.8	2614.2	2535.2	2420.7	2270.8
47.5°	2502.5	2497.0	2494.3	2486.1	2467.1	2447.9	2423.4	2379.8	2308.9	2199.9	2044.5
50°	2205.3	2194.5	2199.9	2197.2	2189.0	2175.4	2159.0	2129.0	2074.5	1976.3	1834.6
52.5°	1864.6	1864.6	1861.9	1870.0	1872.8	1870.0	1872.8	1840.1	1793.7	1720.1	1600.2
55°	1510.2	1510.2	1518.4	1529.3	1540.2	1542.9	1540.2	1526.6	1493.8	1433.9	1327.5
57.5°	1177.6	1172.2	1188.5	1204.9	1215.8	1226.7	1218.5	1207.6	1188.5	1139.5	1057.7
60°	896.9	896.9	907.7	918.7	929.5	940.5	937.7	935.0	918.7	885.9	820.6
62.5°	659.7	662.4	662.4	670.6	681.5	692.4	700.6	692.4	684.2	662.4	618.8
65°	471.6	468.8	471.6	479.8	488.0	498.9	504.3	501.6	493.4	477.0	444.4
67.5°	316.2	313.5	324.4	327.1	332.6	343.5	340.8	343.5	340.8	327.1	299.9
70°	207.2	201.7	207.2	204.4	212.6	215.4	220.8	223.5	220.8	212.6	204.4
72.5°	128.1	125.4	128.1	130.9	133.6	136.3	141.7	141.7	139.0	133.6	122.7
75°	81.8	73.6	76.3	70.9	76.3	76.3	81.8	84.5	81.8	81.8	76.3
77.5°	49.1	49.1	49.1	49.1	49.1	49.1	49.1	51.8	54.5	49.1	46.4
80°	24.5	24.5	27.3	27.3	27.3	30.0	27.3	27.3	27.3	30.0	21.8
82.5°	19.1	16.3	16.3	16.3	19.1	16.3	16.3	16.3	16.3	16.3	16.3
85°	8.2	10.9	8.2	5.5	8.2	8.2	10.9	8.2	8.2	8.2	10.9
87.5°	2.7	2.7	0.0	0.0	0.0	2.7	0.0	2.7	2.7	5.5	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°	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8
2.5°	5149.4	5144.0	5144.0	5141.2	5146.7	5141.2	5144.0	5141.2	5141.2	5146.7	5141.2
5°	5168.5	5171.3	5165.8	5163.1	5171.3	5171.3	5171.3	5165.8	5165.8	5168.5	5165.8
7.5°	5195.8	5201.2	5203.9	5206.7	5212.1	5214.9	5214.9	5212.1	5209.4	5217.6	5206.7
10°	5225.7	5234.0	5250.3	5258.5	5272.1	5272.1	5277.6	5277.6	5272.1	5277.6	5274.8
12.5°	5214.9	5263.9	5291.2	5310.3	5329.3	5345.7	5351.1	5353.9	5351.1	5362.1	5351.1
15°	5234.0	5274.8	5318.5	5351.1	5386.6	5405.6	5411.1	5432.9	5438.4	5441.1	5424.8
17.5°	5203.9	5277.6	5323.9	5373.0	5424.8	5460.2	5492.9	5506.6	5509.3	5514.7	5492.9
20°	5135.8	5217.6	5288.4	5359.4	5419.3	5473.8	5501.1	5539.2	5528.4	5550.2	5520.2
22.5°	5043.1	5135.8	5225.7	5318.5	5381.2	5446.6	5503.8	5531.0	5544.7	5544.7	5512.0
25°	4895.9	5005.0	5103.1	5198.5	5293.9	5373.0	5438.4	5479.3	5487.5	5484.7	5446.6
27.5°	4666.9	4784.1	4898.6	5007.7	5124.9	5217.6	5293.9	5342.9	5356.6	5356.6	5315.7
30°	4350.7	4476.1	4587.9	4718.7	4838.7	4942.3	5048.6	5092.2	5116.7	5116.7	5070.4
32.5°	3974.5	4080.8	4184.4	4312.5	4443.4	4560.6	4661.5	4721.4	4751.4	4748.7	4707.8
35°	3565.6	3617.4	3696.5	3791.9	3909.1	4018.1	4116.2	4173.5	4225.3	4222.6	4184.4
37.5°	3156.7	3143.1	3151.3	3186.7	3260.3	3336.6	3413.0	3467.5	3511.1	3530.2	3522.0
40°	2756.0	2685.1	2616.9	2592.5	2597.9	2625.1	2666.0	2706.9	2756.0	2780.6	2791.4
42.5°	2396.2	2276.2	2156.2	2066.3	2014.5	1998.2	2017.2	2030.8	2060.9	2096.3	2131.8
45°	2107.2	1946.4	1788.3	1649.2	1562.0	1510.2	1499.3	1510.2	1526.6	1562.0	1608.4
47.5°	1870.0	1681.9	1504.8	1349.4	1221.2	1153.1	1134.0	1128.6	1144.9	1177.6	1240.3
50°	1660.1	1472.0	1275.8	1095.8	962.3	885.9	858.7	847.8	866.8	891.4	948.6
52.5°	1431.1	1245.8	1044.1	869.6	730.6	651.5	621.5	605.2	616.1	648.8	706.0
55°	1183.1	1011.3	828.7	648.8	515.2	441.6	406.1	395.3	406.1	441.6	498.9
57.5°	935.0	790.5	637.9	468.8	348.9	275.3	239.9	229.0	259.0	272.6	332.6
60°	730.6	613.4	482.5	343.5	239.9	182.6	147.2	139.0	152.7	177.2	226.2
62.5°	547.9	474.3	370.7	245.3	177.2	117.2	98.1	90.0	98.1	117.2	155.4
65°	398.0	340.8	259.0	179.9	119.9	87.2	65.4	60.0	68.2	81.8	114.5
67.5°	272.6	229.0	179.9	125.4	81.8	54.5	46.4	46.4	49.1	60.0	84.5
70°	177.2	149.9	114.5	81.8	54.5	40.9	35.4	30.0	35.4	43.6	57.2
72.5°	111.8	95.4	73.6	57.2	40.9	30.0	24.5	21.8	27.3	32.7	43.6
75°	68.2	51.8	38.2	30.0	21.8	21.8	21.8	10.9	13.6	21.8	27.3
77.5°	40.9	35.4	30.0	24.5	19.1	10.9	10.9	10.9	13.6	16.3	24.5
80°	21.8	19.1	13.6	13.6	10.9	8.2	10.9	8.2	5.5	13.6	16.3
82.5°	13.6	10.9	10.9	10.9	13.6	5.5	8.2	5.5	8.2	10.9	8.2
85°	8.2	8.2	8.2	5.5	13.6	5.5	5.5	2.7	2.7	5.5	5.5
87.5°	0.0	2.7	2.7	0.0	2.7	0.0	2.7	2.7	2.7	2.7	2.7
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°	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8	5135.8
2.5°	5144.0	5141.2	5144.0	5141.2	5141.2	5141.2	5144.0	5144.0	5141.2	5141.2	5146.7
5°	5165.8	5165.8	5165.8	5163.1	5160.3	5160.3	5165.8	5165.8	5157.6	5165.8	5165.8
7.5°	5212.1	5203.9	5212.1	5201.2	5195.8	5198.5	5201.2	5195.8	5190.3	5193.1	5193.1
10°	5272.1	5263.9	5263.9	5255.8	5247.6	5242.1	5236.7	5223.0	5209.4	5206.7	5195.8
12.5°	5342.9	5329.3	5321.2	5304.8	5291.2	5272.1	5255.8	5234.0	5206.7	5187.6	5168.5
15°	5413.8	5392.0	5373.0	5345.7	5315.7	5283.0	5247.6	5212.1	5168.5	5130.4	5097.6
17.5°	5471.1	5441.1	5405.6	5362.1	5318.5	5269.4	5217.6	5165.8	5103.1	5054.0	5015.8
20°	5490.2	5446.6	5400.2	5342.9	5285.7	5217.6	5152.2	5084.0	5013.1	4961.3	4917.7
22.5°	5465.7	5413.8	5356.6	5296.7	5220.3	5146.7	5070.4	4991.3	4928.6	4857.8	4816.9
25°	5397.5	5334.8	5272.1	5201.2	5127.6	5045.9	4964.1	4882.3	4805.9	4767.8	4716.0
27.5°	5258.5	5190.3	5122.2	5048.6	4964.1	4882.3	4797.8	4718.7	4653.3	4601.5	4571.5
30°	5013.1	4934.1	4855.0	4776.0	4702.3	4617.8	4538.8	4473.4	4407.9	4367.0	4337.1
32.5°	4636.9	4566.1	4487.0	4410.7	4342.6	4271.7	4206.2	4149.0	4102.6	4075.4	4053.5
35°	4129.9	4059.0	3999.1	3944.6	3887.3	3857.3	3816.4	3783.7	3764.6	3753.7	3751.0
37.5°	3492.0	3451.1	3432.0	3421.2	3410.2	3402.1	3407.5	3421.2	3432.0	3451.1	3472.9
40°	2810.5	2845.9	2856.9	2895.0	2930.4	2976.8	3028.6	3088.6	3137.6	3200.3	3243.9
42.5°	2189.0	2254.4	2330.7	2412.5	2499.7	2584.3	2687.8	2783.2	2870.5	2949.5	3017.7
45°	1681.9	1782.8	1897.3	2014.5	2131.8	2254.4	2379.8	2497.0	2600.6	2685.1	2756.0
47.5°	1311.2	1423.0	1570.2	1714.7	1856.4	2000.9	2139.9	2262.6	2349.8	2431.6	2494.3
50°	1038.6	1166.7	1327.5	1493.8	1649.2	1801.9	1949.1	2063.6	2150.8	2216.3	2262.6
52.5°	804.1	956.8	1120.4	1294.9	1461.1	1627.4	1763.7	1870.0	1940.9	1998.2	2033.6
55°	599.7	749.7	924.1	1104.0	1273.1	1433.9	1562.0	1654.7	1717.4	1750.1	1769.2
57.5°	433.4	569.8	744.2	924.1	1076.8	1229.4	1333.0	1417.5	1452.9	1472.0	1480.2
60°	316.2	441.6	597.0	752.4	896.9	1019.5	1109.5	1166.7	1194.0	1204.9	1202.2
62.5°	231.7	340.8	474.3	605.2	722.4	823.2	894.1	932.3	946.0	951.4	943.2
65°	177.2	261.7	376.2	477.0	567.0	640.6	692.4	717.0	725.1	722.4	717.0
67.5°	130.9	196.3	280.8	357.1	422.5	479.8	507.1	528.9	534.3	526.1	517.9
70°	92.7	144.5	204.4	256.3	305.3	338.0	368.0	370.7	370.7	368.0	362.6
72.5°	65.4	100.9	139.0	174.5	204.4	229.0	239.9	248.1	245.3	242.6	237.2
75°	43.6	62.7	100.9	109.1	136.3	144.5	155.4	155.4	158.1	149.9	149.9
77.5°	27.3	43.6	60.0	70.9	81.8	92.7	98.1	98.1	100.9	98.1	98.1
80°	16.3	27.3	32.7	49.1	49.1	57.2	60.0	62.7	57.2	65.4	57.2
82.5°	10.9	16.3	24.5	24.5	30.0	35.4	35.4	38.2	38.2	35.4	35.4
85°	8.2	10.9	13.6	16.3	16.3	19.1	16.3	16.3	19.1	21.8	19.1
87.5°	2.7	5.5	2.7	5.5	5.5	10.9	8.2	8.2	8.2	10.9	10.9
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: P248510

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5135.8	5135.8	5135.8	5135.8
2.5°	5141.2	5144.0	5141.2	5141.2
5°	5165.8	5163.1	5165.8	5160.3
7.5°	5184.9	5184.9	5182.1	5182.1
10°	5184.9	5174.0	5174.0	5174.0
12.5°	5144.0	5130.4	5122.2	5116.7
15°	5073.1	5048.6	5037.7	5034.9
17.5°	4980.4	4958.6	4945.0	4936.8
20°	4874.1	4852.3	4835.9	4838.7
22.5°	4781.4	4756.9	4746.0	4740.5
25°	4688.7	4658.7	4650.6	4645.1
27.5°	4538.8	4522.5	4514.3	4506.1
30°	4309.8	4301.6	4288.0	4307.1
32.5°	4045.4	4031.7	4020.9	4029.1
35°	3753.7	3745.5	3753.7	3748.3
37.5°	3486.6	3494.7	3505.7	3511.1
40°	3276.7	3306.6	3317.6	3323.0
42.5°	3066.8	3102.2	3124.0	3137.6
45°	2807.8	2843.2	2867.7	2884.1
47.5°	2540.6	2570.7	2595.1	2592.5
50°	2298.0	2314.4	2325.3	2336.2
52.5°	2052.7	2052.7	2055.4	2055.4
55°	1774.6	1769.2	1766.4	1769.2
57.5°	1469.3	1463.9	1461.1	1452.9
60°	1191.3	1174.9	1164.0	1164.0
62.5°	932.3	913.2	905.1	902.3
65°	700.6	697.8	681.5	678.7
67.5°	507.1	496.1	485.2	488.0
70°	357.1	340.8	340.8	335.3
72.5°	231.7	223.5	220.8	220.8
75°	144.5	144.5	139.0	149.9
77.5°	95.4	95.4	92.7	95.4
80°	57.2	57.2	57.2	54.5
82.5°	35.4	38.2	35.4	35.4
85°	19.1	21.8	16.3	24.5
87.5°	10.9	13.6	10.9	13.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)