

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: P249374

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249374
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 EC8B100940 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9603.0 lumens
Efficiency: N/A
Efficacy: 90.3 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

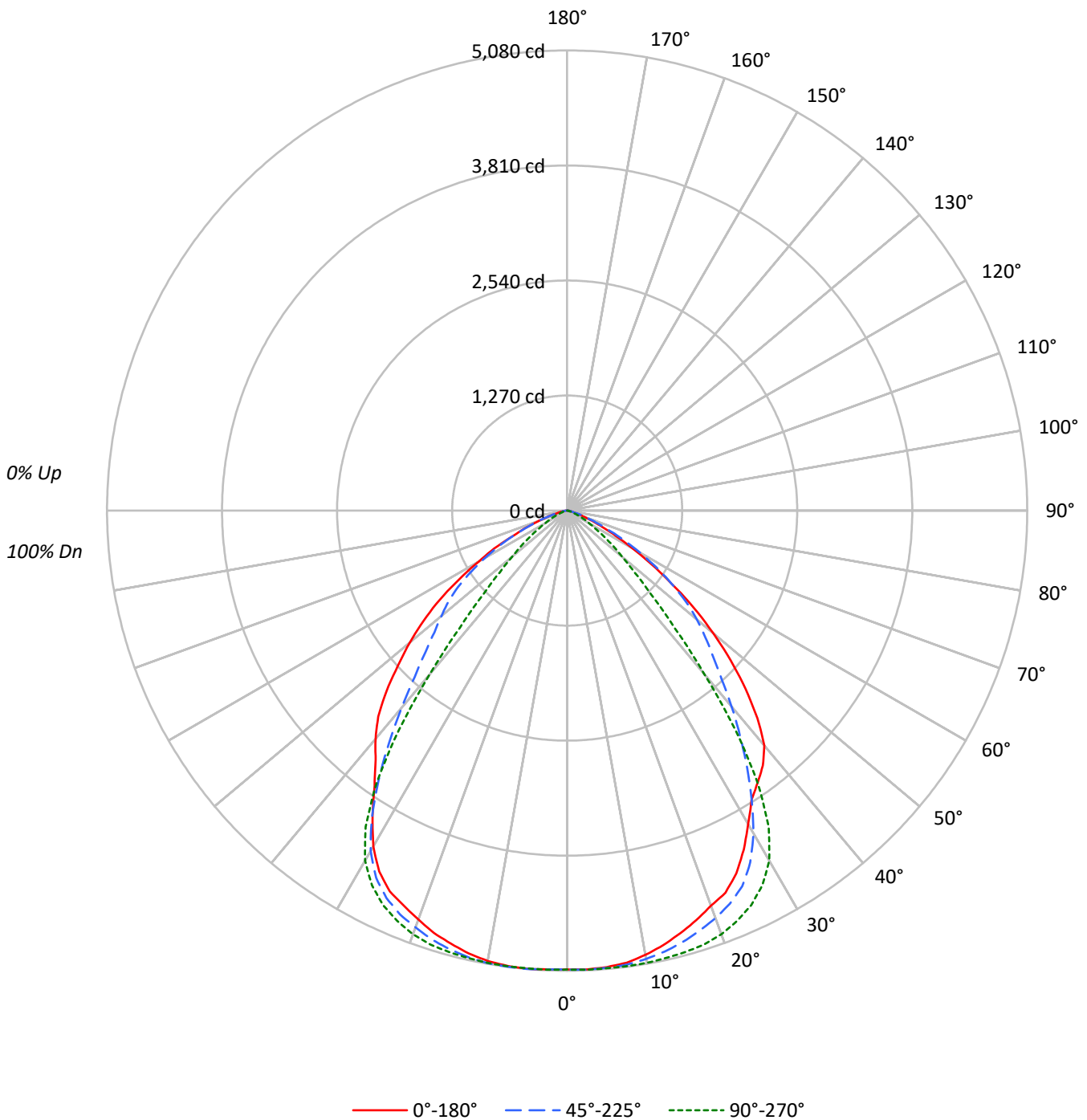
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	156238	156238	156238
5°	156581	157005	157173
10°	155924	158736	158054
15°	154197	161057	158018
20°	152345	163322	157609
25°	150366	163510	157770
30°	142256	158913	152425
35°	138007	138109	139543
40°	136300	95023	132468
45°	121447	57049	123109
50°	100983	37966	108812
55°	75739	26171	92260
60°	51324	17441	69610
65°	30959	11317	47821
70°	17166	6131	29419
75°	7780	2597	15226
80°	6766	2895	10619
85°	7713	3821	10579



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	483.5	5.0
10°-20°	1404.3	14.6
20°-30°	2131.4	22.2
30°-40°	2238.7	23.3
40°-50°	1678.4	17.5
50°-60°	1076.9	11.2
60°-70°	460.7	4.8
70°-80°	108.8	1.1
80°-90°	20.2	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°	4019.3	41.9
0°-40°	6257.9	65.2
0°-60°	9013.2	93.9
0°-90°	9603.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9603.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5067	5067	5067	5067	5067	
5°	5058	5067	5072	5080	5078	481
15°	4830	4931	5045	5012	4950	1362
25°	4419	4574	4806	4719	4637	2019
35°	3666	3462	3669	3625	3707	2301
45°	2785	2276	1308	2211	2823	2133
55°	1409	1409	487	1469	1716	1278
65°	424	500	155	645	655	453
75°	65	76	22	131	128	95
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°	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7
2.5°	5069.5	5074.9	5072.2	5072.2	5069.5	5072.2	5072.2	5077.6	5077.6	5072.2	5069.5
5°	5058.5	5064.0	5064.0	5058.5	5058.5	5072.2	5064.0	5069.5	5069.5	5066.7	5066.7
7.5°	5034.1	5034.1	5045.0	5036.9	5036.9	5045.0	5042.2	5047.7	5053.2	5055.9	5055.9
10°	4979.7	4985.1	4987.9	4987.9	4990.6	4998.7	5004.2	5015.1	5020.5	5025.9	5028.7
12.5°	4911.7	4919.9	4922.6	4919.9	4928.0	4938.9	4952.5	4966.1	4974.3	4985.1	4993.3
15°	4830.1	4830.1	4835.6	4843.7	4849.2	4865.5	4879.1	4895.4	4917.1	4930.8	4944.4
17.5°	4740.4	4745.8	4754.0	4754.0	4764.9	4792.0	4800.2	4824.7	4849.2	4862.8	4890.0
20°	4642.5	4647.9	4656.1	4661.5	4675.1	4696.9	4713.2	4734.9	4762.2	4786.6	4813.8
22.5°	4566.3	4555.5	4560.9	4566.3	4579.9	4599.0	4618.0	4645.2	4672.4	4696.9	4724.1
25°	4419.4	4422.2	4430.4	4435.7	4452.1	4468.4	4490.2	4522.8	4547.3	4574.5	4604.4
27.5°	4220.9	4223.7	4237.2	4237.2	4250.8	4278.0	4291.6	4318.8	4351.5	4378.6	4414.0
30°	3995.2	4000.6	4000.6	4011.5	4019.6	4033.3	4046.9	4074.1	4090.4	4114.9	4163.8
32.5°	3788.5	3793.9	3791.2	3788.5	3780.3	3777.6	3774.9	3780.3	3785.8	3793.9	3812.9
35°	3666.1	3652.5	3641.7	3622.6	3600.9	3573.6	3549.2	3516.5	3486.6	3462.1	3435.0
37.5°	3549.2	3546.4	3530.1	3502.9	3459.4	3410.5	3353.4	3282.6	3211.9	3135.8	3062.4
40°	3386.0	3377.8	3364.2	3326.2	3277.2	3217.4	3141.2	3054.2	2939.9	2823.0	2703.4
42.5°	3108.6	3111.3	3095.0	3065.0	3018.8	2961.7	2882.8	2787.7	2665.3	2526.5	2371.6
45°	2784.9	2784.9	2779.5	2755.0	2722.4	2676.1	2616.3	2537.5	2417.8	2276.3	2110.4
47.5°	2447.7	2450.4	2442.2	2436.8	2423.2	2393.3	2349.8	2290.0	2205.7	2069.6	1903.7
50°	2105.0	2105.0	2118.6	2115.9	2115.9	2105.0	2086.0	2050.6	1977.2	1868.4	1713.4
52.5°	1762.3	1767.8	1776.0	1786.8	1800.4	1822.2	1800.4	1784.1	1737.8	1653.5	1520.3
55°	1408.8	1414.2	1427.8	1446.8	1463.2	1485.0	1490.4	1490.4	1465.9	1408.8	1308.2
57.5°	1106.9	1098.7	1109.7	1126.0	1147.7	1169.5	1185.8	1204.8	1202.1	1164.0	1082.4
60°	832.2	834.9	843.1	859.4	875.7	894.8	916.5	932.8	941.0	922.0	870.3
62.5°	606.5	606.5	617.3	633.7	641.8	669.1	682.6	690.8	698.9	696.2	663.6
65°	424.3	429.7	435.1	443.3	451.4	467.8	475.9	492.2	497.7	500.4	475.9
67.5°	299.2	291.0	296.5	301.9	310.0	320.9	337.3	337.3	345.4	345.4	329.1
70°	190.4	190.4	193.1	201.2	206.7	209.4	214.9	220.3	228.5	225.7	225.7
72.5°	127.8	125.1	127.8	130.6	133.3	141.4	141.4	144.1	149.6	152.3	141.4
75°	65.3	68.0	73.4	70.7	78.9	73.4	76.1	84.3	81.6	76.1	76.1
77.5°	54.4	54.4	54.4	51.7	57.1	57.1	54.4	59.8	57.1	57.1	54.4
80°	38.1	40.8	38.1	35.3	38.1	35.3	35.3	35.3	35.3	35.3	32.6
82.5°	29.9	24.5	27.2	24.5	27.2	27.2	24.5	21.8	21.8	24.5	21.8
85°	21.8	16.3	19.0	19.0	16.3	16.3	16.3	16.3	16.3	13.6	13.6
87.5°	13.6	8.2	8.2	8.2	10.8	10.8	10.8	8.2	10.8	10.8	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°	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7
2.5°	5074.9	5072.2	5077.6	5074.9	5074.9	5072.2	5074.9	5072.2	5077.6	5066.7	5069.5
5°	5074.9	5069.5	5072.2	5074.9	5077.6	5072.2	5072.2	5072.2	5077.6	5072.2	5074.9
7.5°	5064.0	5061.3	5069.5	5074.9	5072.2	5069.5	5074.9	5072.2	5077.6	5074.9	5080.3
10°	5042.2	5045.0	5050.4	5058.5	5061.3	5064.0	5069.5	5069.5	5077.6	5066.7	5072.2
12.5°	5009.6	5020.5	5034.1	5039.5	5050.4	5050.4	5055.9	5058.5	5064.0	5061.3	5069.5
15°	4968.8	4982.4	4998.7	5012.4	5025.9	5034.1	5042.2	5045.0	5053.2	5045.0	5047.7
17.5°	4919.9	4936.2	4960.7	4977.0	4998.7	5006.9	5017.8	5023.2	5031.4	5025.9	5028.7
20°	4851.9	4871.0	4898.1	4922.6	4936.2	4955.2	4968.8	4977.0	4982.4	4977.0	4979.7
22.5°	4756.7	4783.9	4819.2	4838.3	4865.5	4881.8	4884.5	4903.6	4917.1	4903.6	4909.0
25°	4645.2	4672.4	4699.6	4740.4	4764.9	4783.9	4802.9	4805.7	4819.2	4816.5	4813.8
27.5°	4460.2	4495.6	4541.8	4574.5	4607.1	4637.0	4658.8	4664.2	4677.8	4672.4	4675.1
30°	4207.3	4245.4	4288.9	4340.6	4386.8	4416.7	4443.9	4463.0	4476.5	4468.4	4465.7
32.5°	3848.3	3886.4	3932.7	3984.3	4038.7	4082.2	4114.9	4139.3	4155.7	4150.2	4136.6
35°	3437.7	3448.5	3478.5	3519.3	3565.5	3611.7	3641.7	3668.8	3687.8	3693.3	3693.3
37.5°	3016.1	2980.8	2959.0	2959.0	2986.2	3005.2	3032.4	3048.7	3078.7	3089.5	3097.7
40°	2608.1	2526.5	2450.4	2393.3	2355.3	2352.5	2352.5	2360.6	2387.9	2423.2	2455.9
42.5°	2243.7	2113.2	1996.2	1890.2	1814.0	1770.5	1751.5	1754.2	1776.0	1808.6	1863.0
45°	1952.7	1789.5	1642.7	1514.8	1411.5	1343.5	1310.9	1308.2	1324.5	1362.5	1422.4
47.5°	1727.0	1552.9	1387.0	1240.1	1128.7	1055.2	1017.2	1006.3	1017.2	1052.5	1123.2
50°	1539.3	1359.9	1188.5	1036.2	916.5	840.4	805.0	791.4	805.0	834.9	905.6
52.5°	1365.3	1180.3	1019.9	873.0	745.2	679.9	641.8	633.7	641.8	677.2	734.3
55°	1164.0	1006.3	848.5	701.7	590.2	524.9	495.0	486.8	495.0	527.6	587.5
57.5°	965.5	829.5	690.8	557.5	462.4	405.2	378.0	367.1	386.2	407.9	478.7
60°	780.5	671.8	554.8	437.9	359.0	307.3	285.5	282.8	288.3	315.5	364.4
62.5°	612.0	522.2	429.7	334.5	269.2	247.5	220.3	217.6	223.0	239.3	277.4
65°	440.6	383.5	312.8	244.8	193.1	163.2	152.3	155.1	160.4	171.4	206.7
67.5°	307.3	266.5	217.6	171.4	133.3	119.7	108.8	106.1	108.8	127.8	146.9
70°	206.7	182.2	146.9	130.6	92.5	73.4	76.1	68.0	78.9	78.9	95.2
72.5°	136.0	119.7	97.9	76.1	65.3	51.7	51.7	49.0	54.4	57.1	70.7
75°	70.7	54.4	54.4	38.1	27.2	13.6	24.5	21.8	19.0	21.8	27.2
77.5°	49.0	40.8	38.1	29.9	27.2	21.8	21.8	21.8	21.8	24.5	27.2
80°	29.9	29.9	21.8	19.0	16.3	13.6	16.3	16.3	16.3	16.3	19.0
82.5°	19.0	16.3	16.3	13.6	13.6	10.8	10.8	10.8	10.8	10.8	16.3
85°	16.3	10.8	10.8	8.2	10.8	19.0	8.2	10.8	10.8	10.8	8.2
87.5°	5.5	8.2	8.2	8.2	5.5	2.7	5.5	8.2	8.2	13.6	10.8
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°	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7	5066.7
2.5°	5074.9	5077.6	5077.6	5074.9	5074.9	5069.5	5080.3	5072.2	5074.9	5085.8	5077.6
5°	5080.3	5083.0	5083.0	5080.3	5080.3	5080.3	5083.0	5083.0	5080.3	5077.6	5083.0
7.5°	5091.2	5088.5	5088.5	5083.0	5083.0	5077.6	5083.0	5074.9	5080.3	5074.9	5083.0
10°	5077.6	5080.3	5077.6	5074.9	5074.9	5072.2	5072.2	5064.0	5066.7	5058.5	5064.0
12.5°	5069.5	5066.7	5066.7	5061.3	5055.9	5050.4	5047.7	5039.5	5039.5	5020.5	5028.7
15°	5047.7	5050.4	5042.2	5031.4	5025.9	5012.4	5006.9	4996.0	4985.1	4971.6	4974.3
17.5°	5028.7	5020.5	5009.6	4998.7	4977.0	4966.1	4955.2	4938.9	4933.4	4917.1	4911.7
20°	4971.6	4966.1	4952.5	4933.4	4919.9	4895.4	4884.5	4868.2	4854.6	4838.3	4830.1
22.5°	4898.1	4892.6	4876.3	4857.3	4835.6	4824.7	4813.8	4783.9	4770.3	4754.0	4751.2
25°	4805.7	4797.5	4781.2	4759.4	4748.5	4718.6	4707.7	4686.0	4680.6	4664.2	4661.5
27.5°	4664.2	4653.3	4634.3	4607.1	4588.1	4569.0	4558.2	4541.8	4536.4	4520.1	4517.4
30°	4452.1	4438.5	4400.4	4389.6	4356.9	4337.9	4337.9	4316.1	4318.8	4308.0	4308.0
32.5°	4117.6	4095.8	4065.9	4044.1	4022.4	4011.5	4011.5	4003.3	4008.8	4008.8	4014.2
35°	3674.3	3644.4	3628.0	3614.4	3614.4	3625.3	3658.0	3666.1	3682.4	3696.0	3706.9
37.5°	3105.8	3103.2	3122.2	3138.5	3179.3	3225.5	3282.6	3331.6	3377.8	3410.5	3443.1
40°	2491.2	2559.2	2613.6	2689.8	2752.3	2842.0	2945.4	3029.7	3108.6	3165.7	3225.5
42.5°	1944.5	2031.6	2145.8	2257.3	2368.8	2491.2	2627.2	2744.1	2847.5	2926.4	2988.9
45°	1514.8	1634.5	1773.2	1914.7	2058.8	2211.1	2352.5	2472.2	2581.0	2662.6	2725.1
47.5°	1221.1	1351.7	1509.4	1664.4	1827.6	1988.1	2145.8	2249.2	2338.9	2404.2	2461.3
50°	1009.0	1147.7	1313.6	1490.4	1653.5	1814.0	1950.0	2050.6	2124.1	2181.2	2216.5
52.5°	843.1	989.9	1166.7	1343.5	1506.7	1653.5	1776.0	1852.1	1911.9	1952.7	1985.3
55°	696.2	837.7	1003.6	1169.5	1329.9	1468.6	1569.2	1626.4	1672.6	1697.1	1716.1
57.5°	568.4	698.9	851.3	1003.6	1142.3	1256.5	1335.4	1392.5	1414.2	1433.3	1430.5
60°	446.1	568.4	707.1	837.7	957.3	1049.8	1106.9	1139.5	1155.8	1164.0	1158.6
62.5°	350.8	462.4	568.4	682.6	769.7	848.5	903.0	903.0	911.1	913.8	922.0
65°	261.1	345.4	437.9	522.2	592.9	644.6	674.5	682.6	693.5	690.8	685.4
67.5°	193.1	255.7	323.6	386.2	435.1	467.8	489.5	508.6	505.9	500.4	497.7
70°	133.3	174.1	233.9	272.0	307.3	340.0	345.4	348.1	350.8	353.6	348.1
72.5°	92.5	122.4	155.1	187.7	209.4	223.0	236.6	239.3	239.3	239.3	236.6
75°	46.2	62.6	92.5	106.1	125.1	130.6	141.4	141.4	149.6	138.7	136.0
77.5°	40.8	49.0	65.3	76.1	84.3	92.5	95.2	103.3	100.6	95.2	97.9
80°	24.5	29.9	40.8	46.2	57.1	59.8	62.6	65.3	62.6	65.3	65.3
82.5°	19.0	21.8	27.2	27.2	35.3	35.3	38.1	38.1	40.8	40.8	40.8
85°	10.8	19.0	16.3	32.6	21.8	21.8	27.2	32.6	27.2	27.2	32.6
87.5°	10.8	10.8	8.2	10.8	10.8	10.8	13.6	16.3	16.3	19.0	16.3
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: P249374

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5066.7	5066.7	5066.7	5066.7
2.5°	5074.9	5080.3	5072.2	5069.5
5°	5083.0	5083.0	5077.6	5077.6
7.5°	5083.0	5083.0	5074.9	5069.5
10°	5061.3	5061.3	5053.2	5047.7
12.5°	5020.5	5020.5	5017.8	5009.6
15°	4968.8	4968.8	4957.9	4949.8
17.5°	4898.1	4903.6	4890.0	4890.0
20°	4822.0	4819.2	4808.4	4802.9
22.5°	4743.1	4737.7	4734.9	4718.6
25°	4658.8	4653.3	4645.2	4637.0
27.5°	4514.7	4511.9	4503.8	4492.9
30°	4294.3	4291.6	4280.8	4280.8
32.5°	4008.8	4006.1	3995.2	3997.9
35°	3712.3	3723.2	3717.8	3706.9
37.5°	3464.8	3473.0	3478.5	3473.0
40°	3258.1	3282.6	3285.4	3290.8
42.5°	3037.9	3070.5	3081.4	3086.8
45°	2774.0	2804.0	2828.5	2823.0
47.5°	2504.8	2526.5	2548.3	2532.0
50°	2246.5	2260.0	2268.2	2268.2
52.5°	2001.7	2001.7	1999.0	2001.7
55°	1721.5	1721.5	1710.7	1716.1
57.5°	1427.8	1433.3	1425.1	1411.5
60°	1155.8	1142.3	1136.8	1128.7
62.5°	900.2	900.2	881.2	905.6
65°	674.5	666.3	658.1	655.4
67.5°	489.5	486.8	478.7	475.9
70°	345.4	334.5	331.8	326.3
72.5°	231.2	231.2	225.7	225.7
75°	141.4	127.8	125.1	127.8
77.5°	97.9	95.2	95.2	92.5
80°	65.3	62.6	68.0	59.8
82.5°	40.8	43.5	40.8	43.5
85°	27.2	32.6	29.9	29.9
87.5°	16.3	16.3	16.3	16.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)