

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: P249401

Luminaire Tested: **LSR8B100D010 EC8B100930 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249401  
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 EC8B100930 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8903.0 lumens  
Efficiency: N/A  
Efficacy: 83.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

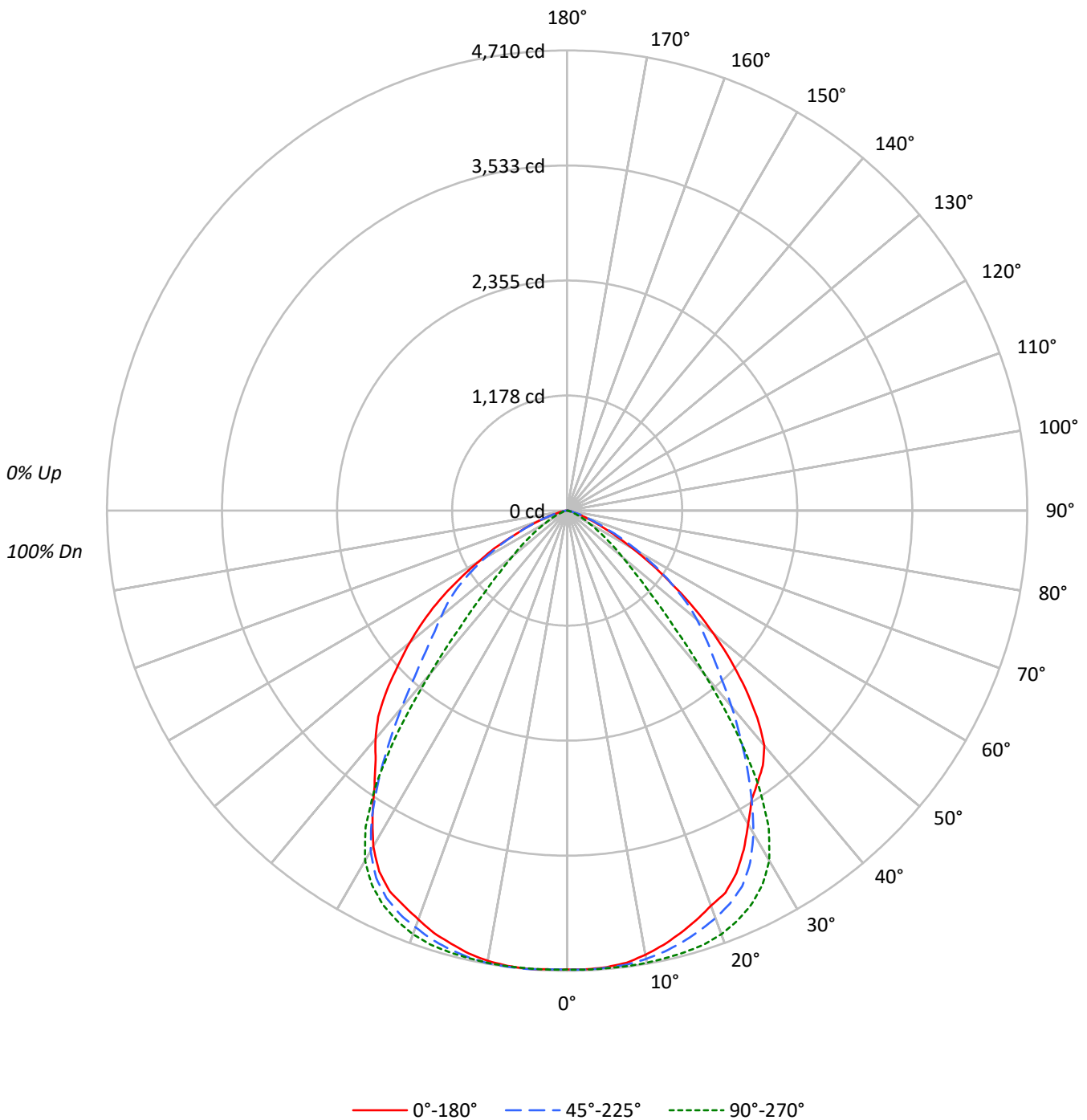
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	448.3	5.0
10°-20°	1301.9	14.6
20°-30°	1976.1	22.2
30°-40°	2075.5	23.3
40°-50°	1556.0	17.5
50°-60°	998.4	11.2
60°-70°	427.1	4.8
70°-80°	100.9	1.1
80°-90°	18.8	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°	3726.3	41.9
0°-40°	5801.8	65.2
0°-60°	8356.2	93.9
0°-90°	8903.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8903.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4697	4697	4697	4697	4697	
5°	4690	4697	4702	4710	4708	445
15°	4478	4571	4677	4647	4589	1263
25°	4097	4241	4455	4375	4299	1872
35°	3399	3210	3401	3361	3437	2133
45°	2582	2110	1213	2050	2617	1977
55°	1306	1306	451	1362	1591	1185
65°	393	464	144	598	608	420
75°	60	71	20	121	118	88
85°	20	13	10	20	28	21
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°	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4
2.5°	4699.9	4704.9	4702.5	4702.5	4699.9	4702.5	4702.5	4707.5	4707.5	4702.5	4699.9
5°	4689.8	4694.9	4694.9	4689.8	4689.8	4702.5	4694.9	4699.9	4699.9	4697.4	4697.4
7.5°	4667.2	4667.2	4677.3	4669.6	4669.6	4677.3	4674.7	4679.7	4684.8	4687.3	4687.3
10°	4616.7	4621.8	4624.2	4624.2	4626.8	4634.3	4639.4	4649.5	4654.5	4659.5	4662.1
12.5°	4553.7	4561.2	4563.7	4561.2	4568.9	4578.8	4591.5	4604.1	4611.7	4621.8	4629.4
15°	4477.9	4477.9	4483.1	4490.6	4495.7	4510.8	4523.5	4538.5	4558.7	4571.3	4583.9
17.5°	4394.9	4399.9	4407.4	4407.4	4417.5	4442.7	4450.3	4473.0	4495.7	4508.3	4533.5
20°	4304.1	4309.1	4316.6	4321.7	4334.3	4354.5	4369.7	4389.7	4415.1	4437.7	4462.9
22.5°	4233.5	4223.4	4228.4	4233.5	4246.1	4263.7	4281.3	4306.5	4331.8	4354.5	4379.7
25°	4097.3	4099.8	4107.3	4112.4	4127.5	4142.7	4162.8	4193.1	4215.7	4241.1	4268.8
27.5°	3913.3	3915.8	3928.3	3928.3	3941.0	3966.2	3978.8	4004.0	4034.3	4059.5	4092.3
30°	3704.0	3708.9	3708.9	3719.1	3726.7	3739.3	3751.9	3777.1	3792.2	3814.9	3860.3
32.5°	3512.3	3517.4	3514.8	3512.3	3504.8	3502.2	3499.6	3504.8	3509.9	3517.4	3535.0
35°	3398.9	3386.2	3376.2	3358.5	3338.3	3313.1	3290.5	3260.2	3232.4	3209.8	3184.5
37.5°	3290.5	3287.9	3272.8	3247.5	3207.2	3161.9	3109.0	3043.4	2977.7	2907.2	2839.2
40°	3139.1	3131.6	3119.0	3083.6	3038.2	2982.9	2912.2	2831.5	2725.6	2617.2	2506.3
42.5°	2882.0	2884.4	2869.4	2841.6	2798.8	2745.8	2672.7	2584.5	2471.0	2342.3	2198.7
45°	2581.9	2581.9	2576.8	2554.2	2523.9	2481.1	2425.6	2352.5	2241.6	2110.4	1956.6
47.5°	2269.2	2271.8	2264.2	2259.2	2246.6	2218.9	2178.6	2123.1	2044.9	1918.8	1765.0
50°	1951.5	1951.5	1964.2	1961.6	1961.6	1951.5	1933.9	1901.1	1833.1	1732.2	1588.6
52.5°	1633.9	1638.9	1646.5	1656.6	1669.2	1689.3	1669.2	1654.0	1611.2	1533.0	1409.4
55°	1306.1	1311.1	1323.7	1341.4	1356.5	1376.7	1381.7	1381.7	1359.0	1306.1	1212.8
57.5°	1026.3	1018.7	1028.7	1043.9	1064.1	1084.2	1099.4	1117.0	1114.5	1079.2	1003.5
60°	771.6	774.1	781.6	796.8	811.9	829.5	849.7	864.9	872.5	854.8	806.9
62.5°	562.3	562.3	572.4	587.5	595.0	620.2	632.9	640.4	647.9	645.5	615.2
65°	393.4	398.4	403.4	411.0	418.6	433.6	441.2	456.4	461.4	464.0	441.2
67.5°	277.3	269.8	274.9	279.8	287.4	297.5	312.6	312.6	320.2	320.2	305.1
70°	176.6	176.6	179.0	186.5	191.6	194.2	199.2	204.2	211.8	209.3	209.3
72.5°	118.5	116.0	118.5	121.1	123.5	131.2	131.2	133.6	138.7	141.2	131.2
75°	60.5	63.0	68.0	65.6	73.1	68.0	70.6	78.1	75.7	70.6	70.6
77.5°	50.4	50.4	50.4	48.0	52.9	52.9	50.4	55.5	52.9	52.9	50.4
80°	35.3	37.8	35.3	32.7	35.3	32.7	32.7	32.7	32.7	32.7	30.3
82.5°	27.8	22.8	25.2	22.8	25.2	25.2	22.8	20.2	20.2	22.8	20.2
85°	20.2	15.1	17.6	17.6	15.1	15.1	15.1	15.1	15.1	12.6	12.6
87.5°	12.6	7.6	7.6	7.6	10.1	10.1	10.1	7.6	10.1	10.1	5.0
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°	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4
2.5°	4704.9	4702.5	4707.5	4704.9	4704.9	4702.5	4704.9	4702.5	4707.5	4697.4	4699.9
5°	4704.9	4699.9	4702.5	4704.9	4707.5	4702.5	4702.5	4702.5	4707.5	4702.5	4704.9
7.5°	4694.9	4692.3	4699.9	4704.9	4702.5	4699.9	4704.9	4702.5	4707.5	4704.9	4710.0
10°	4674.7	4677.3	4682.3	4689.8	4692.3	4694.9	4699.9	4699.9	4707.5	4697.4	4702.5
12.5°	4644.4	4654.5	4667.2	4672.1	4682.3	4682.3	4687.3	4689.8	4694.9	4692.3	4699.9
15°	4606.6	4619.2	4634.3	4647.0	4659.5	4667.2	4674.7	4677.3	4684.8	4677.3	4679.7
17.5°	4561.2	4576.4	4599.0	4614.1	4634.3	4641.9	4652.0	4657.1	4664.6	4659.5	4662.1
20°	4498.1	4515.8	4541.1	4563.7	4576.4	4594.0	4606.6	4614.1	4619.2	4614.1	4616.7
22.5°	4409.9	4435.2	4468.0	4485.6	4510.8	4525.9	4528.5	4546.1	4558.7	4546.1	4551.1
25°	4306.5	4331.8	4357.0	4394.9	4417.5	4435.2	4452.8	4455.3	4468.0	4465.4	4462.9
27.5°	4135.1	4167.9	4210.7	4241.1	4271.2	4299.0	4319.2	4324.1	4336.8	4331.8	4334.3
30°	3900.6	3935.9	3976.3	4024.2	4067.1	4094.8	4120.0	4137.6	4150.2	4142.7	4140.2
32.5°	3567.8	3603.1	3645.9	3693.8	3744.4	3784.6	3814.9	3837.6	3852.8	3847.7	3835.1
35°	3187.1	3197.2	3224.9	3262.8	3305.6	3348.4	3376.2	3401.3	3419.0	3424.1	3424.1
37.5°	2796.2	2763.5	2743.3	2743.3	2768.5	2786.1	2811.4	2826.5	2854.3	2864.3	2871.9
40°	2418.0	2342.3	2271.8	2218.9	2183.6	2181.0	2181.0	2188.5	2213.8	2246.6	2276.9
42.5°	2080.1	1959.2	1850.8	1752.3	1681.8	1641.5	1623.8	1626.3	1646.5	1676.8	1727.1
45°	1810.4	1659.1	1523.0	1404.4	1308.7	1245.5	1215.3	1212.8	1227.9	1263.3	1318.7
47.5°	1601.1	1439.7	1285.9	1149.7	1046.5	978.3	943.0	932.9	943.0	975.7	1041.3
50°	1427.1	1260.8	1101.8	960.7	849.7	779.1	746.4	733.7	746.4	774.1	839.6
52.5°	1265.7	1094.3	945.6	809.4	690.9	630.3	595.0	587.5	595.0	627.8	680.8
55°	1079.2	932.9	786.7	650.5	547.2	486.6	458.9	451.3	458.9	489.2	544.7
57.5°	895.1	769.0	640.4	516.9	428.7	375.6	350.5	340.3	358.0	378.2	443.8
60°	723.6	622.8	514.3	405.9	332.8	285.0	264.8	262.2	267.2	292.5	337.9
62.5°	567.3	484.2	398.4	310.2	249.6	229.5	204.2	201.8	206.7	221.8	257.2
65°	408.5	355.6	290.0	226.9	179.0	151.2	141.2	143.7	148.8	158.8	191.6
67.5°	285.0	247.1	201.8	158.8	123.5	111.0	100.9	98.3	100.9	118.5	136.2
70°	191.6	168.9	136.2	121.1	85.8	68.0	70.6	63.0	73.1	73.1	88.2
72.5°	126.0	111.0	90.8	70.6	60.5	48.0	48.0	45.4	50.4	52.9	65.6
75°	65.6	50.4	50.4	35.3	25.2	12.6	22.8	20.2	17.6	20.2	25.2
77.5°	45.4	37.8	35.3	27.8	25.2	20.2	20.2	20.2	20.2	22.8	25.2
80°	27.8	27.8	20.2	17.6	15.1	12.6	15.1	15.1	15.1	15.1	17.6
82.5°	17.6	15.1	15.1	12.6	12.6	10.1	10.1	10.1	10.1	10.1	15.1
85°	15.1	10.1	10.1	7.6	10.1	17.6	7.6	10.1	10.1	10.1	7.6
87.5°	5.0	7.6	7.6	7.6	5.0	2.6	5.0	7.6	7.6	12.6	10.1
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°	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4	4697.4
2.5°	4704.9	4707.5	4707.5	4704.9	4704.9	4699.9	4710.0	4702.5	4704.9	4715.0	4707.5
5°	4710.0	4712.5	4712.5	4710.0	4710.0	4710.0	4712.5	4712.5	4710.0	4707.5	4712.5
7.5°	4720.1	4717.6	4717.6	4712.5	4712.5	4707.5	4712.5	4704.9	4710.0	4704.9	4712.5
10°	4707.5	4710.0	4707.5	4704.9	4704.9	4702.5	4702.5	4694.9	4697.4	4689.8	4694.9
12.5°	4699.9	4697.4	4697.4	4692.3	4687.3	4682.3	4679.7	4672.1	4672.1	4654.5	4662.1
15°	4679.7	4682.3	4674.7	4664.6	4659.5	4647.0	4641.9	4631.9	4621.8	4609.2	4611.7
17.5°	4662.1	4654.5	4644.4	4634.3	4614.1	4604.1	4594.0	4578.8	4573.8	4558.7	4553.7
20°	4609.2	4604.1	4591.5	4573.8	4561.2	4538.5	4528.5	4513.4	4500.7	4485.6	4477.9
22.5°	4541.1	4536.0	4520.9	4503.3	4483.1	4473.0	4462.9	4435.2	4422.6	4407.4	4404.9
25°	4455.3	4447.8	4432.7	4412.5	4402.4	4374.7	4364.5	4344.3	4339.4	4324.1	4321.7
27.5°	4324.1	4314.2	4296.5	4271.2	4253.6	4235.9	4225.9	4210.7	4205.8	4190.5	4188.1
30°	4127.5	4115.0	4079.7	4069.6	4039.3	4021.7	4021.7	4001.5	4004.0	3993.9	3993.9
32.5°	3817.5	3797.3	3769.5	3749.3	3729.1	3719.1	3719.1	3711.5	3716.6	3716.6	3721.6
35°	3406.4	3378.7	3363.6	3351.0	3351.0	3361.0	3391.4	3398.9	3414.0	3426.6	3436.8
37.5°	2879.4	2876.9	2894.6	2909.7	2947.6	2990.4	3043.4	3088.8	3131.6	3161.9	3192.0
40°	2309.6	2372.7	2423.0	2493.7	2551.6	2634.9	2730.6	2808.9	2882.0	2935.0	2990.4
42.5°	1802.8	1883.5	1989.4	2092.8	2196.2	2309.6	2435.7	2544.1	2640.0	2713.0	2771.0
45°	1404.4	1515.4	1643.9	1775.1	1908.7	2050.0	2181.0	2292.0	2392.9	2468.4	2526.5
47.5°	1132.1	1253.2	1399.3	1543.2	1694.4	1843.1	1989.4	2085.2	2168.4	2228.9	2281.9
50°	935.5	1064.1	1217.9	1381.7	1533.0	1681.8	1807.8	1901.1	1969.3	2022.2	2054.9
52.5°	781.6	917.8	1081.7	1245.5	1396.9	1533.0	1646.5	1717.1	1772.5	1810.4	1840.6
55°	645.5	776.6	930.4	1084.2	1233.0	1361.6	1454.8	1507.9	1550.7	1573.3	1591.0
57.5°	527.0	647.9	789.2	930.4	1059.0	1164.9	1238.0	1290.9	1311.1	1328.8	1326.3
60°	413.5	527.0	655.6	776.6	887.5	973.3	1026.3	1056.4	1071.6	1079.2	1074.1
62.5°	325.2	428.7	527.0	632.9	713.5	786.7	837.2	837.2	844.7	847.1	854.8
65°	242.0	320.2	405.9	484.2	549.6	597.6	625.3	632.9	643.0	640.4	635.4
67.5°	179.0	237.0	300.0	358.0	403.4	433.6	453.8	471.5	469.0	464.0	461.4
70°	123.5	161.4	216.8	252.1	285.0	315.2	320.2	322.7	325.2	327.8	322.7
72.5°	85.8	113.4	143.7	174.0	194.2	206.7	219.4	221.8	221.8	221.8	219.4
75°	42.8	58.0	85.8	98.3	116.0	121.1	131.2	131.2	138.7	128.6	126.0
77.5°	37.8	45.4	60.5	70.6	78.1	85.8	88.2	95.8	93.3	88.2	90.8
80°	22.8	27.8	37.8	42.8	52.9	55.5	58.0	60.5	58.0	60.5	60.5
82.5°	17.6	20.2	25.2	25.2	32.7	32.7	35.3	35.3	37.8	37.8	37.8
85°	10.1	17.6	15.1	30.3	20.2	20.2	25.2	30.3	25.2	25.2	30.3
87.5°	10.1	10.1	7.6	10.1	10.1	10.1	12.6	15.1	15.1	17.6	15.1
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: P249401

CATALOG NUMBER: LSR8B100D010 EC8B100930 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4697.4	4697.4	4697.4	4697.4
2.5°	4704.9	4710.0	4702.5	4699.9
5°	4712.5	4712.5	4707.5	4707.5
7.5°	4712.5	4712.5	4704.9	4699.9
10°	4692.3	4692.3	4684.8	4679.7
12.5°	4654.5	4654.5	4652.0	4644.4
15°	4606.6	4606.6	4596.5	4589.0
17.5°	4541.1	4546.1	4533.5	4533.5
20°	4470.4	4468.0	4457.9	4452.8
22.5°	4397.3	4392.3	4389.7	4374.7
25°	4319.2	4314.2	4306.5	4299.0
27.5°	4185.6	4183.0	4175.5	4165.4
30°	3981.3	3978.8	3968.7	3968.7
32.5°	3716.6	3714.0	3704.0	3706.5
35°	3441.7	3451.8	3446.7	3436.8
37.5°	3212.2	3219.8	3224.9	3219.8
40°	3020.6	3043.4	3045.9	3050.9
42.5°	2816.4	2846.7	2856.8	2861.8
45°	2571.8	2599.6	2622.2	2617.2
47.5°	2322.2	2342.3	2362.5	2347.4
50°	2082.7	2095.3	2102.9	2102.9
52.5°	1855.8	1855.8	1853.2	1855.8
55°	1596.1	1596.1	1586.0	1591.0
57.5°	1323.7	1328.8	1321.2	1308.7
60°	1071.6	1059.0	1054.0	1046.5
62.5°	834.6	834.6	817.0	839.6
65°	625.3	617.8	610.2	607.6
67.5°	453.8	451.3	443.8	441.2
70°	320.2	310.2	307.6	302.6
72.5°	214.3	214.3	209.3	209.3
75°	131.2	118.5	116.0	118.5
77.5°	90.8	88.2	88.2	85.8
80°	60.5	58.0	63.0	55.5
82.5°	37.8	40.4	37.8	40.4
85°	25.2	30.3	27.8	27.8
87.5°	15.1	15.1	15.1	15.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)