

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: P249365

Luminaire Tested: **LSR8B100D010 EC8B100935 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249365
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 EC8B100935 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9194.0 lumens
Efficiency: N/A
Efficacy: 86.5 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

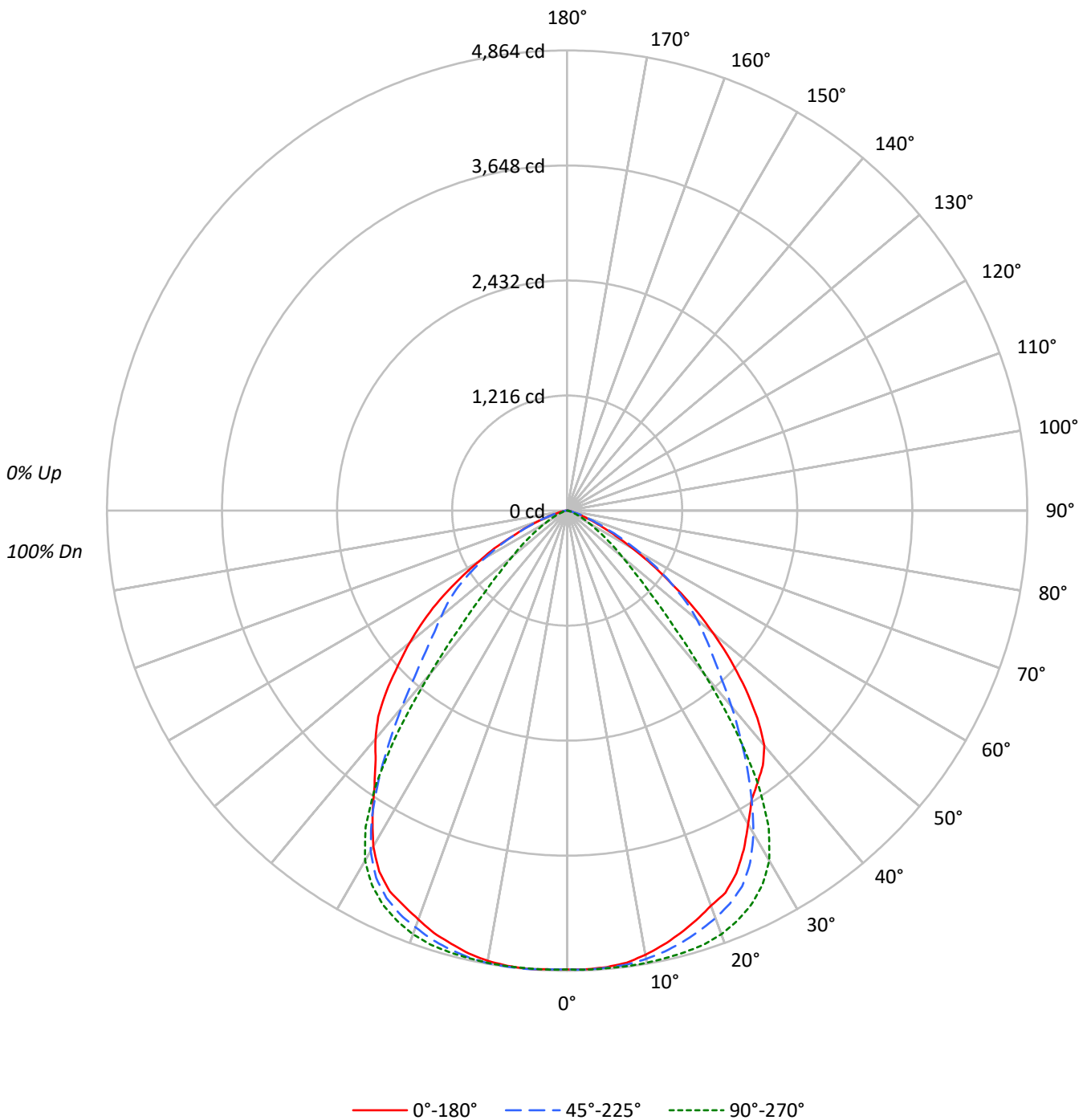
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	149584	149584	149584
5°	149914	150319	150480
10°	149283	151973	151322
15°	147630	154197	151288
20°	145858	156365	150898
25°	143963	156545	151050
30°	136199	152144	145931
35°	132131	132225	133603
40°	130495	90978	126828
45°	116275	54616	117867
50°	96684	36349	104178
55°	72513	25058	88330
60°	49141	16701	66643
65°	29638	10828	45785
70°	16436	5869	28166
75°	7446	2478	14583
80°	6464	2770	10175
85°	7359	3680	10154



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	463.0	5.0
10°-20°	1344.5	14.6
20°-30°	2040.7	22.2
30°-40°	2143.3	23.3
40°-50°	1606.9	17.5
50°-60°	1031.0	11.2
60°-70°	441.1	4.8
70°-80°	104.2	1.1
80°-90°	19.4	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°	3848.1	41.9
0°-40°	5991.4	65.2
0°-60°	8629.4	93.9
0°-90°	9194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9194.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4851	4851	4851	4851	4851	
5°	4843	4851	4856	4864	4861	460
15°	4624	4721	4830	4799	4739	1304
25°	4231	4380	4601	4518	4440	1933
35°	3510	3315	3512	3471	3549	2203
45°	2666	2179	1252	2117	2703	2042
55°	1349	1349	466	1406	1643	1223
65°	406	479	148	617	628	434
75°	62	73	21	125	122	91
85°	21	13	10	21	29	22
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°	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9
2.5°	4853.5	4858.8	4856.2	4856.2	4853.5	4856.2	4856.2	4861.4	4861.4	4856.2	4853.5
5°	4843.1	4848.3	4848.3	4843.1	4843.1	4856.2	4848.3	4853.5	4853.5	4850.9	4850.9
7.5°	4819.7	4819.7	4830.1	4822.3	4822.3	4830.1	4827.5	4832.7	4837.9	4840.5	4840.5
10°	4767.6	4772.8	4775.4	4775.4	4778.0	4785.8	4791.0	4801.5	4806.7	4811.9	4814.5
12.5°	4702.5	4710.3	4712.9	4710.3	4718.2	4728.5	4741.6	4754.6	4762.4	4772.8	4780.7
15°	4624.4	4624.4	4629.6	4637.4	4642.7	4658.3	4671.3	4686.9	4707.7	4720.8	4733.8
17.5°	4538.5	4543.7	4551.5	4551.5	4561.9	4587.9	4595.8	4619.2	4642.7	4655.7	4681.7
20°	4444.8	4449.9	4457.8	4463.0	4476.0	4496.8	4512.4	4533.3	4559.3	4582.8	4608.8
22.5°	4371.8	4361.4	4366.6	4371.8	4384.9	4403.1	4421.3	4447.3	4473.4	4496.8	4522.9
25°	4231.2	4233.8	4241.7	4246.8	4262.5	4278.1	4298.9	4330.2	4353.6	4379.7	4408.3
27.5°	4041.2	4043.8	4056.8	4056.8	4069.8	4095.8	4108.8	4134.9	4166.2	4192.2	4226.1
30°	3825.1	3830.2	3830.2	3840.7	3848.4	3861.5	3874.5	3900.5	3916.2	3939.6	3986.5
32.5°	3627.2	3632.3	3629.7	3627.2	3619.3	3616.7	3614.1	3619.3	3624.6	3632.3	3650.5
35°	3510.0	3496.9	3486.6	3468.3	3447.5	3421.4	3398.0	3366.8	3338.1	3314.7	3288.7
37.5°	3398.0	3395.4	3379.8	3353.7	3312.0	3265.2	3210.6	3142.8	3075.1	3002.2	2931.9
40°	3241.8	3233.9	3220.9	3184.5	3137.6	3080.3	3007.4	2924.1	2814.7	2702.8	2588.2
42.5°	2976.2	2978.8	2963.2	2934.5	2890.3	2835.5	2760.0	2668.9	2551.8	2418.9	2270.6
45°	2666.3	2666.3	2661.1	2637.7	2606.4	2562.2	2504.9	2429.4	2314.8	2179.4	2020.5
47.5°	2343.4	2346.1	2338.2	2333.1	2320.0	2291.4	2249.7	2192.4	2111.7	1981.5	1822.7
50°	2015.4	2015.4	2028.4	2025.8	2025.8	2015.4	1997.2	1963.3	1893.0	1788.8	1640.4
52.5°	1687.3	1692.5	1700.3	1710.7	1723.7	1744.6	1723.7	1708.1	1663.8	1583.1	1455.6
55°	1348.8	1354.0	1367.0	1385.2	1400.9	1421.7	1426.9	1426.9	1403.4	1348.8	1252.4
57.5°	1059.8	1051.9	1062.4	1078.0	1098.8	1119.7	1135.3	1153.5	1150.9	1114.4	1036.3
60°	796.8	799.4	807.2	822.8	838.4	856.7	877.5	893.1	900.9	882.7	833.2
62.5°	580.7	580.7	591.1	606.7	614.5	640.6	653.6	661.4	669.2	666.6	635.3
65°	406.2	411.4	416.6	424.4	432.2	447.8	455.7	471.3	476.5	479.1	455.7
67.5°	286.4	278.6	283.8	289.0	296.8	307.3	322.9	322.9	330.7	330.7	315.1
70°	182.3	182.3	184.9	192.7	197.9	200.5	205.7	210.9	218.7	216.1	216.1
72.5°	122.4	119.8	122.4	125.0	127.6	135.4	135.4	138.0	143.2	145.8	135.4
75°	62.5	65.1	70.3	67.7	75.5	70.3	72.9	80.7	78.1	72.9	72.9
77.5°	52.1	52.1	52.1	49.5	54.7	54.7	52.1	57.3	54.7	54.7	52.1
80°	36.4	39.1	36.4	33.8	36.4	33.8	33.8	33.8	33.8	33.8	31.2
82.5°	28.7	23.4	26.1	23.4	26.1	26.1	23.4	20.8	20.8	23.4	20.8
85°	20.8	15.6	18.2	18.2	15.6	15.6	15.6	15.6	15.6	13.0	13.0
87.5°	13.0	7.8	7.8	7.8	10.4	10.4	10.4	7.8	10.4	10.4	5.2
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°	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9
2.5°	4858.8	4856.2	4861.4	4858.8	4858.8	4856.2	4858.8	4856.2	4861.4	4850.9	4853.5
5°	4858.8	4853.5	4856.2	4858.8	4861.4	4856.2	4856.2	4856.2	4861.4	4856.2	4858.8
7.5°	4848.3	4845.7	4853.5	4858.8	4856.2	4853.5	4858.8	4856.2	4861.4	4858.8	4863.9
10°	4827.5	4830.1	4835.3	4843.1	4845.7	4848.3	4853.5	4853.5	4861.4	4850.9	4856.2
12.5°	4796.3	4806.7	4819.7	4824.9	4835.3	4835.3	4840.5	4843.1	4848.3	4845.7	4853.5
15°	4757.2	4770.2	4785.8	4798.9	4811.9	4819.7	4827.5	4830.1	4837.9	4830.1	4832.7
17.5°	4710.3	4725.9	4749.4	4765.0	4785.8	4793.7	4804.0	4809.3	4817.1	4811.9	4814.5
20°	4645.2	4663.5	4689.5	4712.9	4725.9	4744.2	4757.2	4765.0	4770.2	4765.0	4767.6
22.5°	4554.1	4580.2	4614.0	4632.2	4658.3	4673.9	4676.5	4694.7	4707.7	4694.7	4699.9
25°	4447.3	4473.4	4499.4	4538.5	4561.9	4580.2	4598.4	4601.0	4614.0	4611.4	4608.8
27.5°	4270.3	4304.2	4348.4	4379.7	4410.9	4439.5	4460.4	4465.5	4478.6	4473.4	4476.0
30°	4028.1	4064.6	4106.3	4155.7	4200.0	4228.6	4254.7	4272.9	4285.9	4278.1	4275.5
32.5°	3684.4	3720.9	3765.2	3814.6	3866.7	3908.3	3939.6	3963.0	3978.7	3973.4	3960.4
35°	3291.3	3301.7	3330.3	3369.4	3413.6	3457.9	3486.6	3512.5	3530.8	3536.0	3536.0
37.5°	2887.7	2853.8	2833.0	2833.0	2859.0	2877.2	2903.3	2918.9	2947.6	2957.9	2965.8
40°	2497.0	2418.9	2346.1	2291.4	2254.9	2252.3	2252.3	2260.1	2286.2	2320.0	2351.3
42.5°	2148.2	2023.2	1911.2	1809.7	1736.8	1695.1	1676.9	1679.5	1700.3	1731.6	1783.6
45°	1869.6	1713.3	1572.7	1450.3	1351.4	1286.3	1255.1	1252.4	1268.1	1304.5	1361.8
47.5°	1653.4	1486.8	1327.9	1187.3	1080.6	1010.3	973.8	963.4	973.8	1007.7	1075.4
50°	1473.8	1301.9	1137.9	992.1	877.5	804.6	770.7	757.7	770.7	799.4	867.1
52.5°	1307.1	1130.1	976.4	835.8	713.4	650.9	614.5	606.7	614.5	648.3	703.1
55°	1114.4	963.4	812.4	671.8	565.1	502.6	473.9	466.1	473.9	505.2	562.4
57.5°	924.4	794.2	661.4	533.8	442.7	387.9	361.9	351.5	369.7	390.6	458.3
60°	747.3	643.2	531.2	419.2	343.7	294.2	273.4	270.8	276.0	302.1	348.9
62.5°	585.9	499.9	411.4	320.3	257.8	236.9	210.9	208.3	213.5	229.1	265.6
65°	421.8	367.2	299.4	234.3	184.9	156.2	145.8	148.4	153.6	164.1	197.9
67.5°	294.2	255.2	208.3	164.1	127.6	114.6	104.2	101.6	104.2	122.4	140.6
70°	197.9	174.4	140.6	125.0	88.6	70.3	72.9	65.1	75.5	75.5	91.1
72.5°	130.2	114.6	93.7	72.9	62.5	49.5	49.5	46.9	52.1	54.7	67.7
75°	67.7	52.1	52.1	36.4	26.1	13.0	23.4	20.8	18.2	20.8	26.1
77.5°	46.9	39.1	36.4	28.7	26.1	20.8	20.8	20.8	20.8	23.4	26.1
80°	28.7	28.7	20.8	18.2	15.6	13.0	15.6	15.6	15.6	15.6	18.2
82.5°	18.2	15.6	15.6	13.0	13.0	10.4	10.4	10.4	10.4	10.4	15.6
85°	15.6	10.4	10.4	7.8	10.4	18.2	7.8	10.4	10.4	10.4	7.8
87.5°	5.2	7.8	7.8	7.8	5.2	2.6	5.2	7.8	7.8	13.0	10.4
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°	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9	4850.9
2.5°	4858.8	4861.4	4861.4	4858.8	4858.8	4853.5	4863.9	4856.2	4858.8	4869.2	4861.4
5°	4863.9	4866.5	4866.5	4863.9	4863.9	4863.9	4866.5	4866.5	4863.9	4861.4	4866.5
7.5°	4874.4	4871.8	4871.8	4866.5	4866.5	4861.4	4866.5	4858.8	4863.9	4858.8	4866.5
10°	4861.4	4863.9	4861.4	4858.8	4858.8	4856.2	4856.2	4848.3	4850.9	4843.1	4848.3
12.5°	4853.5	4850.9	4850.9	4845.7	4840.5	4835.3	4832.7	4824.9	4824.9	4806.7	4814.5
15°	4832.7	4835.3	4827.5	4817.1	4811.9	4798.9	4793.7	4783.2	4772.8	4759.8	4762.4
17.5°	4814.5	4806.7	4796.3	4785.8	4765.0	4754.6	4744.2	4728.5	4723.3	4707.7	4702.5
20°	4759.8	4754.6	4741.6	4723.3	4710.3	4686.9	4676.5	4660.9	4647.8	4632.2	4624.4
22.5°	4689.5	4684.3	4668.7	4650.4	4629.6	4619.2	4608.8	4580.2	4567.1	4551.5	4548.9
25°	4601.0	4593.2	4577.5	4556.7	4546.3	4517.7	4507.2	4486.4	4481.2	4465.5	4463.0
27.5°	4465.5	4455.2	4436.9	4410.9	4392.7	4374.4	4364.1	4348.4	4343.2	4327.5	4325.0
30°	4262.5	4249.4	4213.0	4202.6	4171.3	4153.1	4153.1	4132.3	4134.9	4124.5	4124.5
32.5°	3942.2	3921.4	3892.7	3871.9	3851.0	3840.7	3840.7	3832.8	3838.0	3838.0	3843.3
35°	3517.8	3489.2	3473.5	3460.5	3460.5	3470.9	3502.2	3510.0	3525.6	3538.6	3549.1
37.5°	2973.5	2971.0	2989.2	3004.8	3043.9	3088.2	3142.8	3189.7	3233.9	3265.2	3296.4
40°	2385.1	2450.2	2502.3	2575.2	2635.0	2721.0	2819.9	2900.7	2976.2	3030.9	3088.2
42.5°	1861.7	1945.1	2054.4	2161.2	2267.9	2385.1	2515.3	2627.3	2726.2	2801.7	2861.6
45°	1450.3	1564.9	1697.7	1833.1	1971.1	2116.9	2252.3	2366.9	2471.1	2549.2	2609.1
47.5°	1169.1	1294.1	1445.1	1593.6	1749.8	1903.4	2054.4	2153.4	2239.3	2301.8	2356.5
50°	966.0	1098.8	1257.7	1426.9	1583.1	1736.8	1866.9	1963.3	2033.6	2088.3	2122.1
52.5°	807.2	947.8	1117.1	1286.3	1442.5	1583.1	1700.3	1773.2	1830.5	1869.6	1900.8
55°	666.6	802.0	960.8	1119.7	1273.3	1406.1	1502.4	1557.1	1601.3	1624.8	1643.0
57.5°	544.2	669.2	815.0	960.8	1093.6	1203.0	1278.5	1333.2	1354.0	1372.2	1369.6
60°	427.1	544.2	677.0	802.0	916.6	1005.1	1059.8	1091.0	1106.6	1114.4	1109.2
62.5°	335.9	442.7	544.2	653.6	736.9	812.4	864.5	864.5	872.3	874.9	882.7
65°	249.9	330.7	419.2	499.9	567.6	617.1	645.8	653.6	664.0	661.4	656.2
67.5°	184.9	244.8	309.8	369.7	416.6	447.8	468.7	486.9	484.3	479.1	476.5
70°	127.6	166.7	223.9	260.4	294.2	325.5	330.7	333.3	335.9	338.5	333.3
72.5°	88.6	117.2	148.4	179.7	200.5	213.5	226.6	229.1	229.1	229.1	226.6
75°	44.3	59.9	88.6	101.6	119.8	125.0	135.4	135.4	143.2	132.8	130.2
77.5°	39.1	46.9	62.5	72.9	80.7	88.6	91.1	98.9	96.3	91.1	93.7
80°	23.4	28.7	39.1	44.3	54.7	57.3	59.9	62.5	59.9	62.5	62.5
82.5°	18.2	20.8	26.1	26.1	33.8	33.8	36.4	36.4	39.1	39.1	39.1
85°	10.4	18.2	15.6	31.2	20.8	20.8	26.1	31.2	26.1	26.1	31.2
87.5°	10.4	10.4	7.8	10.4	10.4	10.4	13.0	15.6	15.6	18.2	15.6
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: P249365

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4850.9	4850.9	4850.9	4850.9
2.5°	4858.8	4863.9	4856.2	4853.5
5°	4866.5	4866.5	4861.4	4861.4
7.5°	4866.5	4866.5	4858.8	4853.5
10°	4845.7	4845.7	4837.9	4832.7
12.5°	4806.7	4806.7	4804.0	4796.3
15°	4757.2	4757.2	4746.8	4739.0
17.5°	4689.5	4694.7	4681.7	4681.7
20°	4616.6	4614.0	4603.6	4598.4
22.5°	4541.1	4535.9	4533.3	4517.7
25°	4460.4	4455.2	4447.3	4439.5
27.5°	4322.4	4319.8	4311.9	4301.5
30°	4111.4	4108.8	4098.4	4098.4
32.5°	3838.0	3835.4	3825.1	3827.7
35°	3554.2	3564.7	3559.4	3549.1
37.5°	3317.3	3325.1	3330.3	3325.1
40°	3119.4	3142.8	3145.4	3150.7
42.5°	2908.5	2939.7	2950.2	2955.3
45°	2655.9	2684.6	2708.0	2702.8
47.5°	2398.1	2418.9	2439.8	2424.2
50°	2150.8	2163.8	2171.6	2171.6
52.5°	1916.4	1916.4	1913.8	1916.4
55°	1648.2	1648.2	1637.8	1643.0
57.5°	1367.0	1372.2	1364.4	1351.4
60°	1106.6	1093.6	1088.4	1080.6
62.5°	861.9	861.9	843.7	867.1
65°	645.8	637.9	630.1	627.5
67.5°	468.7	466.1	458.3	455.7
70°	330.7	320.3	317.7	312.4
72.5°	221.3	221.3	216.1	216.1
75°	135.4	122.4	119.8	122.4
77.5°	93.7	91.1	91.1	88.6
80°	62.5	59.9	65.1	57.3
82.5°	39.1	41.7	39.1	41.7
85°	26.1	31.2	28.7	28.7
87.5°	15.6	15.6	15.6	15.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)