

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: P249491

Luminaire Tested: **LSR8B100D010 EC8B100950 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249491
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 EC8B100950 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9001.0 lumens
Efficiency: N/A
Efficacy: 84.7 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

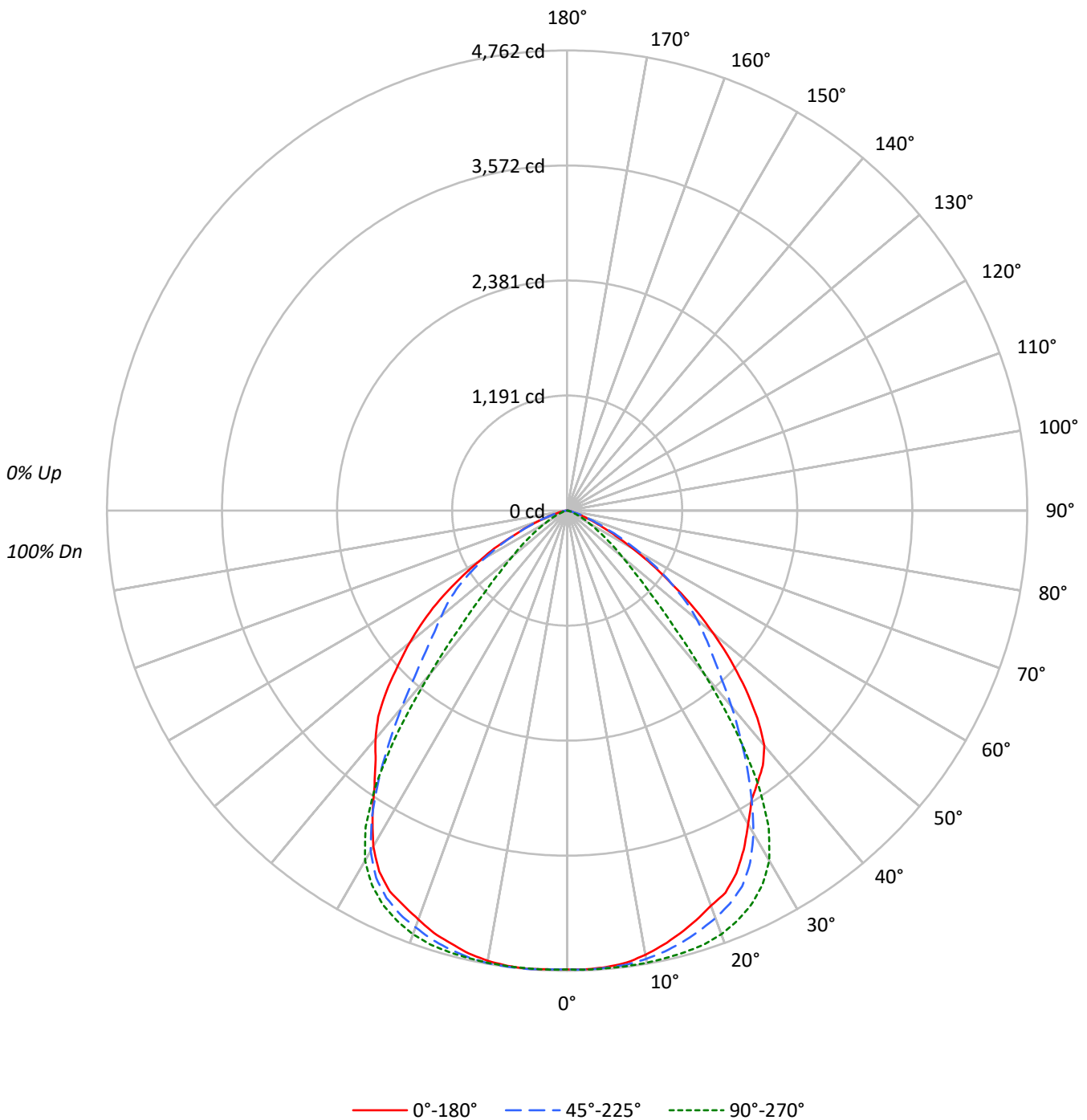
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249491

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0B

Luminous Intensity Polar Plot





TEST NUMBER: P249491

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0B

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°	146445	146445	146445
5°	146766	147162	147320
10°	146149	148785	148147
15°	144530	150959	148112
20°	142796	153083	147731
25°	140941	153258	147882
30°	133340	148950	142868
35°	129357	129451	130798
40°	127754	89070	124163
45°	113837	53474	115390
50°	94655	35586	101990
55°	70992	24531	86475
60°	48111	16349	65243
65°	29018	10602	44822
70°	16093	5743	27580
75°	7292	2431	14273
80°	6340	2717	9962
85°	7218	3609	9942



TEST NUMBER: P249491

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.2	5.0
10°-20°	1316.3	14.6
20°-30°	1997.8	22.2
30°-40°	2098.3	23.3
40°-50°	1573.2	17.5
50°-60°	1009.4	11.2
60°-70°	431.8	4.8
70°-80°	102.0	1.1
80°-90°	19.0	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°	3767.3	41.9
0°-40°	5865.6	65.2
0°-60°	8448.2	93.9
0°-90°	9001.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9001.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4749	4749	4749	4749	4749	
5°	4741	4749	4754	4762	4759	450
15°	4527	4622	4729	4698	4640	1277
25°	4142	4288	4504	4423	4346	1892
35°	3436	3245	3439	3398	3475	2157
45°	2610	2134	1226	2072	2646	1999
55°	1320	1320	456	1376	1608	1198
65°	398	469	145	604	614	425
75°	61	71	20	122	120	89
85°	20	13	10	20	28	22
90°	0	0	0	0	0	



TEST NUMBER: P249491

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0B

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1
2.5°	4751.7	4756.8	4754.2	4754.2	4751.7	4754.2	4754.2	4759.3	4759.3	4754.2	4751.7
5°	4741.4	4746.5	4746.5	4741.4	4741.4	4754.2	4746.5	4751.7	4751.7	4749.1	4749.1
7.5°	4718.5	4718.5	4728.7	4721.1	4721.1	4728.7	4726.2	4731.3	4736.4	4738.9	4738.9
10°	4667.5	4672.6	4675.2	4675.2	4677.7	4685.4	4690.5	4700.7	4705.8	4710.9	4713.4
12.5°	4603.8	4611.4	4614.0	4611.4	4619.1	4629.3	4642.1	4654.8	4662.5	4672.6	4680.3
15°	4527.3	4527.3	4532.4	4540.1	4545.2	4560.5	4573.2	4588.5	4608.9	4621.7	4634.4
17.5°	4443.2	4448.3	4455.9	4455.9	4466.2	4491.6	4499.3	4522.2	4545.2	4557.9	4583.4
20°	4351.5	4356.5	4364.2	4369.3	4382.0	4402.4	4417.7	4438.1	4463.6	4486.6	4512.0
22.5°	4280.1	4269.9	4274.9	4280.1	4292.8	4310.7	4328.5	4354.0	4379.5	4402.4	4427.9
25°	4142.4	4144.9	4152.6	4157.7	4173.0	4188.3	4208.7	4239.3	4262.2	4287.7	4315.7
27.5°	3956.3	3958.9	3971.6	3971.6	3984.3	4009.8	4022.6	4048.1	4078.7	4104.2	4137.3
30°	3744.8	3749.8	3749.8	3760.0	3767.6	3780.4	3793.2	3818.7	3834.0	3856.9	3902.8
32.5°	3551.0	3556.1	3553.5	3551.0	3543.4	3540.8	3538.2	3543.4	3548.5	3556.1	3573.9
35°	3436.3	3423.5	3413.4	3395.5	3375.1	3349.6	3326.7	3296.1	3268.0	3245.1	3219.6
37.5°	3326.7	3324.1	3308.8	3283.3	3242.5	3196.7	3143.2	3076.9	3010.6	2939.2	2870.4
40°	3173.7	3166.1	3153.3	3117.6	3071.7	3015.7	2944.3	2862.7	2755.6	2646.0	2533.9
42.5°	2913.7	2916.2	2901.0	2872.9	2829.6	2776.0	2702.1	2612.9	2498.2	2368.2	2222.9
45°	2610.4	2610.4	2605.2	2582.3	2551.7	2508.4	2452.3	2378.4	2266.2	2133.6	1978.1
47.5°	2294.2	2296.8	2289.1	2284.1	2271.3	2243.3	2202.5	2146.4	2067.4	1939.9	1784.4
50°	1973.1	1973.1	1985.8	1983.2	1983.2	1973.1	1955.2	1922.1	1853.3	1751.3	1606.0
52.5°	1651.9	1657.0	1664.6	1674.8	1687.5	1707.9	1687.5	1672.3	1628.9	1549.9	1425.0
55°	1320.5	1325.6	1338.3	1356.1	1371.5	1391.9	1396.9	1396.9	1374.0	1320.5	1226.2
57.5°	1037.5	1029.9	1040.1	1055.4	1075.8	1096.2	1111.4	1129.3	1126.7	1091.0	1014.6
60°	780.1	782.6	790.2	805.6	820.8	838.7	859.1	874.4	882.0	864.2	815.7
62.5°	568.5	568.5	578.6	593.9	601.6	627.1	639.8	647.5	655.1	652.6	622.0
65°	397.7	402.8	407.9	415.5	423.1	438.4	446.1	461.4	466.5	469.1	446.1
67.5°	280.4	272.8	277.9	282.9	290.6	300.8	316.1	316.1	323.7	323.7	308.4
70°	178.5	178.5	181.0	188.6	193.7	196.3	201.4	206.5	214.1	211.6	211.6
72.5°	119.8	117.3	119.8	122.4	124.9	132.5	132.5	135.1	140.2	142.8	132.5
75°	61.2	63.7	68.8	66.3	73.9	68.8	71.4	79.0	76.5	71.4	71.4
77.5°	51.0	51.0	51.0	48.5	53.5	53.5	51.0	56.1	53.5	53.5	51.0
80°	35.7	38.2	35.7	33.1	35.7	33.1	33.1	33.1	33.1	33.1	30.6
82.5°	28.1	23.0	25.5	23.0	25.5	25.5	23.0	20.4	20.4	23.0	20.4
85°	20.4	15.3	17.8	17.8	15.3	15.3	15.3	15.3	15.3	12.7	12.7
87.5°	12.7	7.7	7.7	7.7	10.2	10.2	10.2	7.7	10.2	10.2	5.1
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: P249491

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1
2.5°	4756.8	4754.2	4759.3	4756.8	4756.8	4754.2	4756.8	4754.2	4759.3	4749.1	4751.7
5°	4756.8	4751.7	4754.2	4756.8	4759.3	4754.2	4754.2	4754.2	4759.3	4754.2	4756.8
7.5°	4746.5	4744.0	4751.7	4756.8	4754.2	4751.7	4756.8	4754.2	4759.3	4756.8	4761.8
10°	4726.2	4728.7	4733.8	4741.4	4744.0	4746.5	4751.7	4751.7	4759.3	4749.1	4754.2
12.5°	4695.6	4705.8	4718.5	4723.6	4733.8	4733.8	4738.9	4741.4	4746.5	4744.0	4751.7
15°	4657.4	4670.1	4685.4	4698.1	4710.9	4718.5	4726.2	4728.7	4736.4	4728.7	4731.3
17.5°	4611.4	4626.7	4649.7	4665.0	4685.4	4693.0	4703.2	4708.3	4716.0	4710.9	4713.4
20°	4547.7	4565.6	4591.0	4614.0	4626.7	4644.6	4657.4	4665.0	4670.1	4665.0	4667.5
22.5°	4458.5	4484.0	4517.1	4535.0	4560.5	4575.8	4578.3	4596.2	4608.9	4596.2	4601.3
25°	4354.0	4379.5	4405.0	4443.2	4466.2	4484.0	4501.9	4504.4	4517.1	4514.6	4512.0
27.5°	4180.6	4213.8	4257.1	4287.7	4318.3	4346.4	4366.8	4371.8	4384.6	4379.5	4382.0
30°	3943.5	3979.3	4020.1	4068.5	4111.8	4139.8	4165.3	4183.2	4195.9	4188.3	4185.7
32.5°	3607.1	3642.8	3686.1	3734.5	3785.5	3826.3	3856.9	3879.9	3895.1	3890.0	3877.3
35°	3222.2	3232.4	3260.4	3298.7	3341.9	3385.3	3413.4	3438.8	3456.7	3461.8	3461.8
37.5°	2827.0	2793.9	2773.5	2773.5	2799.0	2816.8	2842.3	2857.6	2885.7	2895.8	2903.5
40°	2444.6	2368.2	2296.8	2243.3	2207.6	2205.0	2205.0	2212.7	2238.2	2271.3	2301.9
42.5°	2103.1	1980.7	1871.1	1771.7	1700.3	1659.5	1641.7	1644.2	1664.6	1695.2	1746.2
45°	1830.3	1677.4	1539.7	1419.9	1323.0	1259.3	1228.7	1226.2	1241.4	1277.1	1333.2
47.5°	1618.7	1455.6	1300.1	1162.4	1057.9	989.1	953.4	943.2	953.4	986.5	1052.8
50°	1442.8	1274.6	1114.0	971.2	859.1	787.7	754.5	741.8	754.5	782.6	848.9
52.5°	1279.7	1106.3	955.9	818.3	698.5	637.3	601.6	593.9	601.6	634.7	688.3
55°	1091.0	943.2	795.3	657.7	553.2	492.0	463.9	456.3	463.9	494.6	550.6
57.5°	905.0	777.5	647.5	522.6	433.4	379.8	354.3	344.1	362.0	382.4	448.7
60°	731.6	629.7	520.0	410.4	336.5	288.0	267.6	265.1	270.2	295.7	341.6
62.5°	573.6	489.4	402.8	313.6	252.4	232.0	206.5	204.0	209.0	224.3	260.0
65°	413.0	359.5	293.2	229.4	181.0	152.9	142.8	145.3	150.4	160.6	193.7
67.5°	288.0	249.8	204.0	160.6	124.9	112.1	102.0	99.4	102.0	119.8	137.7
70°	193.7	170.8	137.7	122.4	86.7	68.8	71.4	63.7	73.9	73.9	89.2
72.5°	127.4	112.1	91.8	71.4	61.2	48.5	48.5	45.9	51.0	53.5	66.3
75°	66.3	51.0	51.0	35.7	25.5	12.7	23.0	20.4	17.8	20.4	25.5
77.5°	45.9	38.2	35.7	28.1	25.5	20.4	20.4	20.4	20.4	23.0	25.5
80°	28.1	28.1	20.4	17.8	15.3	12.7	15.3	15.3	15.3	15.3	17.8
82.5°	17.8	15.3	15.3	12.7	12.7	10.2	10.2	10.2	10.2	10.2	15.3
85°	15.3	10.2	10.2	7.7	10.2	17.8	7.7	10.2	10.2	10.2	7.7
87.5°	5.1	7.7	7.7	7.7	5.1	2.6	5.1	7.7	7.7	12.7	10.2
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: P249491

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1	4749.1
2.5°	4756.8	4759.3	4759.3	4756.8	4756.8	4751.7	4761.8	4754.2	4756.8	4766.9	4759.3
5°	4761.8	4764.4	4764.4	4761.8	4761.8	4761.8	4764.4	4764.4	4761.8	4759.3	4764.4
7.5°	4772.1	4769.5	4769.5	4764.4	4764.4	4759.3	4764.4	4756.8	4761.8	4756.8	4764.4
10°	4759.3	4761.8	4759.3	4756.8	4756.8	4754.2	4754.2	4746.5	4749.1	4741.4	4746.5
12.5°	4751.7	4749.1	4749.1	4744.0	4738.9	4733.8	4731.3	4723.6	4723.6	4705.8	4713.4
15°	4731.3	4733.8	4726.2	4716.0	4710.9	4698.1	4693.0	4682.8	4672.6	4659.9	4662.5
17.5°	4713.4	4705.8	4695.6	4685.4	4665.0	4654.8	4644.6	4629.3	4624.2	4608.9	4603.8
20°	4659.9	4654.8	4642.1	4624.2	4611.4	4588.5	4578.3	4563.0	4550.3	4535.0	4527.3
22.5°	4591.0	4585.9	4570.7	4552.8	4532.4	4522.2	4512.0	4484.0	4471.2	4455.9	4453.4
25°	4504.4	4496.7	4481.5	4461.1	4450.8	4422.8	4412.6	4392.2	4387.1	4371.8	4369.3
27.5°	4371.8	4361.6	4343.8	4318.3	4300.4	4282.6	4272.4	4257.1	4252.0	4236.7	4234.2
30°	4173.0	4160.2	4124.6	4114.4	4083.8	4065.9	4065.9	4045.5	4048.1	4037.9	4037.9
32.5°	3859.5	3839.1	3811.0	3790.6	3770.2	3760.0	3760.0	3752.4	3757.5	3757.5	3762.6
35°	3443.9	3415.9	3400.6	3387.9	3387.9	3398.0	3428.6	3436.3	3451.6	3464.3	3474.6
37.5°	2911.1	2908.6	2926.5	2941.8	2980.0	3023.3	3076.9	3122.8	3166.1	3196.7	3227.2
40°	2335.0	2398.8	2449.7	2521.2	2579.7	2663.9	2760.7	2839.8	2913.7	2967.3	3023.3
42.5°	1822.6	1904.2	2011.3	2115.8	2220.3	2335.0	2462.5	2572.1	2669.0	2742.9	2801.5
45°	1419.9	1532.0	1662.1	1794.6	1929.7	2072.5	2205.0	2317.2	2419.2	2495.7	2554.3
47.5°	1144.6	1266.9	1414.8	1560.1	1713.0	1863.4	2011.3	2108.2	2192.3	2253.5	2307.0
50°	945.7	1075.8	1231.3	1396.9	1549.9	1700.3	1827.7	1922.1	1990.9	2044.4	2077.6
52.5°	790.2	927.9	1093.6	1259.3	1412.2	1549.9	1664.6	1736.0	1792.1	1830.3	1860.9
55°	652.6	785.2	940.7	1096.2	1246.5	1376.5	1470.8	1524.4	1567.7	1590.7	1608.5
57.5°	532.8	655.1	797.9	940.7	1070.7	1177.7	1251.7	1305.2	1325.6	1343.4	1340.9
60°	418.1	532.8	662.8	785.2	897.3	984.0	1037.5	1068.1	1083.4	1091.0	1085.9
62.5°	328.8	433.4	532.8	639.8	721.4	795.3	846.4	846.4	854.0	856.5	864.2
65°	244.7	323.7	410.4	489.4	555.7	604.2	632.2	639.8	650.1	647.5	642.4
67.5°	181.0	239.6	303.3	362.0	407.9	438.4	458.8	476.7	474.2	469.1	466.5
70°	124.9	163.2	219.2	254.9	288.0	318.7	323.7	326.3	328.8	331.4	326.3
72.5°	86.7	114.7	145.3	175.9	196.3	209.0	221.8	224.3	224.3	224.3	221.8
75°	43.3	58.6	86.7	99.4	117.3	122.4	132.5	132.5	140.2	130.0	127.4
77.5°	38.2	45.9	61.2	71.4	79.0	86.7	89.2	96.9	94.3	89.2	91.8
80°	23.0	28.1	38.2	43.3	53.5	56.1	58.6	61.2	58.6	61.2	61.2
82.5°	17.8	20.4	25.5	25.5	33.1	33.1	35.7	35.7	38.2	38.2	38.2
85°	10.2	17.8	15.3	30.6	20.4	20.4	25.5	30.6	25.5	25.5	30.6
87.5°	10.2	10.2	7.7	10.2	10.2	10.2	12.7	15.3	15.3	17.8	15.3
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: P249491

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4749.1	4749.1	4749.1	4749.1
2.5°	4756.8	4761.8	4754.2	4751.7
5°	4764.4	4764.4	4759.3	4759.3
7.5°	4764.4	4764.4	4756.8	4751.7
10°	4744.0	4744.0	4736.4	4731.3
12.5°	4705.8	4705.8	4703.2	4695.6
15°	4657.4	4657.4	4647.1	4639.5
17.5°	4591.0	4596.2	4583.4	4583.4
20°	4519.7	4517.1	4507.0	4501.9
22.5°	4445.8	4440.7	4438.1	4422.8
25°	4366.8	4361.6	4354.0	4346.4
27.5°	4231.6	4229.1	4221.4	4211.3
30°	4025.1	4022.6	4012.4	4012.4
32.5°	3757.5	3754.9	3744.8	3747.3
35°	3479.6	3489.8	3484.7	3474.6
37.5°	3247.6	3255.3	3260.4	3255.3
40°	3053.9	3076.9	3079.4	3084.5
42.5°	2847.4	2878.0	2888.2	2893.3
45°	2600.1	2628.2	2651.1	2646.0
47.5°	2347.8	2368.2	2388.6	2373.3
50°	2105.6	2118.4	2126.0	2126.0
52.5°	1876.2	1876.2	1873.7	1876.2
55°	1613.6	1613.6	1603.5	1608.5
57.5°	1338.3	1343.4	1335.7	1323.0
60°	1083.4	1070.7	1065.5	1057.9
62.5°	843.8	843.8	826.0	848.9
65°	632.2	624.6	616.9	614.3
67.5°	458.8	456.3	448.7	446.1
70°	323.7	313.6	311.0	305.9
72.5°	216.7	216.7	211.6	211.6
75°	132.5	119.8	117.3	119.8
77.5°	91.8	89.2	89.2	86.7
80°	61.2	58.6	63.7	56.1
82.5°	38.2	40.8	38.2	40.8
85°	25.5	30.6	28.1	28.1
87.5°	15.3	15.3	15.3	15.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)