

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: P249581

Luminaire Tested: **LSR8B100D010 EC8B100935 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249581
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9300.0 lumens
Efficiency: N/A
Efficacy: 87.5 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

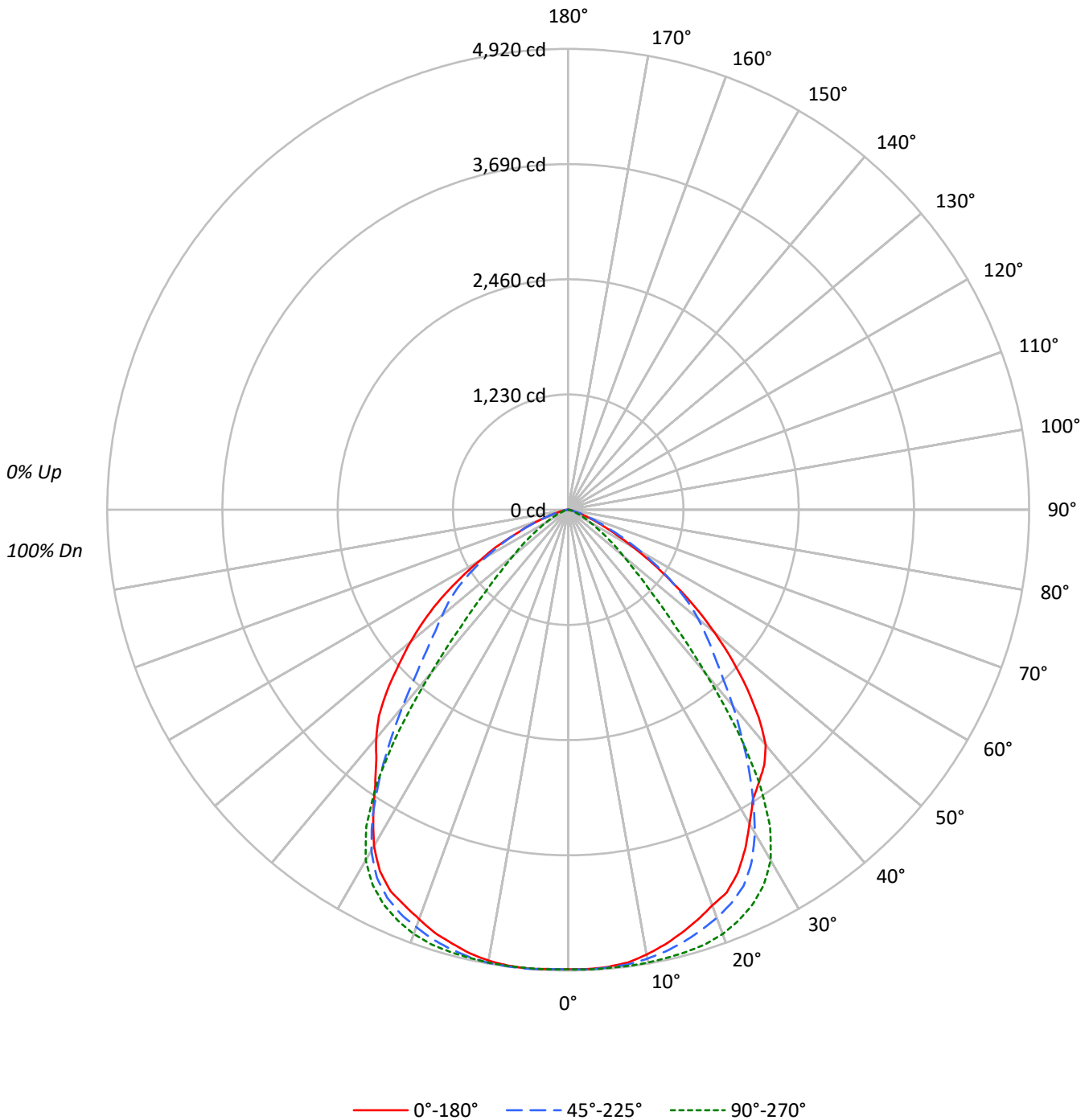
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	151311	151311	151311
5°	151641	152050	152214
10°	151005	153726	153066
15°	149331	155975	153031
20°	147538	158167	152637
25°	145623	158348	152792
30°	137769	153896	147615
35°	133656	133750	135143
40°	131997	92029	128289
45°	117618	55248	119223
50°	97797	36771	105377
55°	73347	25349	89346
60°	49708	16892	67414
65°	29981	10959	46311
70°	16625	5942	28490
75°	7530	2514	14750
80°	6553	2806	10282
85°	7465	3715	10260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	468.3	5.0
10°-20°	1360.0	14.6
20°-30°	2064.2	22.2
30°-40°	2168.0	23.3
40°-50°	1625.4	17.5
50°-60°	1042.9	11.2
60°-70°	446.1	4.8
70°-80°	105.4	1.1
80°-90°	19.6	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°	3892.5	41.9
0°-40°	6060.5	65.2
0°-60°	8728.8	93.9
0°-90°	9300.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9300.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4907	4907	4907	4907	4907	
5°	4899	4907	4912	4920	4917	465
15°	4678	4775	4886	4854	4794	1319
25°	4280	4430	4654	4570	4491	1955
35°	3550	3353	3553	3511	3590	2228
45°	2697	2204	1267	2141	2734	2066
55°	1364	1364	472	1422	1662	1238
65°	411	485	150	624	635	439
75°	63	74	21	126	124	92
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°	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9
2.5°	4909.5	4914.8	4912.1	4912.1	4909.5	4912.1	4912.1	4917.4	4917.4	4912.1	4909.5
5°	4898.9	4904.2	4904.2	4898.9	4898.9	4912.1	4904.2	4909.5	4909.5	4906.9	4906.9
7.5°	4875.3	4875.3	4885.8	4877.9	4877.9	4885.8	4883.1	4888.4	4893.7	4896.4	4896.4
10°	4822.6	4827.9	4830.5	4830.5	4833.1	4841.0	4846.3	4856.9	4862.1	4867.4	4870.0
12.5°	4756.8	4764.6	4767.3	4764.6	4772.6	4783.1	4796.3	4809.4	4817.3	4827.9	4835.8
15°	4677.7	4677.7	4683.0	4690.9	4696.2	4712.0	4725.1	4740.9	4762.0	4775.2	4788.3
17.5°	4590.8	4596.1	4604.0	4604.0	4614.5	4640.8	4648.8	4672.5	4696.2	4709.3	4735.7
20°	4496.0	4501.2	4509.2	4514.4	4527.6	4548.7	4564.5	4585.5	4611.9	4635.6	4661.9
22.5°	4422.2	4411.7	4416.9	4422.2	4435.4	4453.9	4472.3	4498.6	4525.0	4548.7	4575.0
25°	4280.0	4282.6	4290.6	4295.8	4311.6	4327.4	4348.5	4380.1	4403.8	4430.2	4459.1
27.5°	4087.8	4090.4	4103.5	4103.5	4116.7	4143.0	4156.2	4182.6	4214.2	4240.5	4274.8
30°	3869.2	3874.4	3874.4	3884.9	3892.8	3906.0	3919.2	3945.5	3961.3	3985.0	4032.5
32.5°	3669.0	3674.2	3671.6	3669.0	3661.1	3658.4	3655.8	3661.1	3666.3	3674.2	3692.6
35°	3550.5	3537.3	3526.7	3508.3	3487.2	3460.9	3437.2	3405.6	3376.6	3352.9	3326.6
37.5°	3437.2	3434.5	3418.7	3392.4	3350.2	3302.9	3247.6	3179.1	3110.6	3036.8	2965.7
40°	3279.1	3271.2	3258.1	3221.2	3173.8	3115.8	3042.1	2957.8	2847.2	2733.9	2618.1
42.5°	3010.5	3013.1	2997.3	2968.3	2923.6	2868.2	2791.9	2699.7	2581.2	2446.8	2296.7
45°	2697.1	2697.1	2691.8	2668.1	2636.5	2591.7	2533.8	2457.4	2341.5	2204.5	2043.8
47.5°	2370.5	2373.1	2365.2	2360.0	2346.7	2317.8	2275.7	2217.7	2136.1	2004.3	1843.7
50°	2038.6	2038.6	2051.8	2049.1	2049.1	2038.6	2020.2	1985.9	1914.8	1809.5	1659.4
52.5°	1706.7	1712.0	1719.9	1730.4	1743.6	1764.7	1743.6	1727.8	1683.0	1601.4	1472.3
55°	1364.3	1369.6	1382.8	1401.2	1417.0	1438.1	1443.3	1443.3	1419.6	1364.3	1266.9
57.5°	1072.0	1064.1	1074.6	1090.4	1111.5	1132.6	1148.4	1166.8	1164.2	1127.3	1048.3
60°	806.0	808.6	816.5	832.3	848.1	866.5	887.6	903.4	911.3	892.9	842.8
62.5°	587.4	587.4	597.9	613.7	621.6	647.9	661.1	669.0	676.9	674.2	642.7
65°	410.9	416.1	421.4	429.3	437.2	453.0	460.9	476.7	482.0	484.6	460.9
67.5°	289.7	281.8	287.1	292.3	300.3	310.8	326.6	326.6	334.5	334.5	318.7
70°	184.4	184.4	187.0	194.9	200.2	202.8	208.1	213.3	221.2	218.6	218.6
72.5°	123.8	121.2	123.8	126.4	129.1	136.9	136.9	139.6	144.9	147.5	136.9
75°	63.2	65.9	71.1	68.5	76.4	71.1	73.7	81.7	79.0	73.7	73.7
77.5°	52.7	52.7	52.7	50.1	55.3	55.3	52.7	57.9	55.3	55.3	52.7
80°	36.9	39.5	36.9	34.2	36.9	34.2	34.2	34.2	34.2	34.2	31.6
82.5°	29.0	23.7	26.4	23.7	26.4	26.4	23.7	21.1	21.1	23.7	21.1
85°	21.1	15.8	18.4	18.4	15.8	15.8	15.8	15.8	15.8	13.1	13.1
87.5°	13.1	7.9	7.9	7.9	10.5	10.5	10.5	7.9	10.5	10.5	5.3
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°	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9
2.5°	4914.8	4912.1	4917.4	4914.8	4914.8	4912.1	4914.8	4912.1	4917.4	4906.9	4909.5
5°	4914.8	4909.5	4912.1	4914.8	4917.4	4912.1	4912.1	4912.1	4917.4	4912.1	4914.8
7.5°	4904.2	4901.6	4909.5	4914.8	4912.1	4909.5	4914.8	4912.1	4917.4	4914.8	4920.0
10°	4883.1	4885.8	4891.1	4898.9	4901.6	4904.2	4909.5	4909.5	4917.4	4906.9	4912.1
12.5°	4851.6	4862.1	4875.3	4880.5	4891.1	4891.1	4896.4	4898.9	4904.2	4901.6	4909.5
15°	4812.1	4825.2	4841.0	4854.2	4867.4	4875.3	4883.1	4885.8	4893.7	4885.8	4888.4
17.5°	4764.6	4780.4	4804.1	4819.9	4841.0	4848.9	4859.4	4864.7	4872.6	4867.4	4870.0
20°	4698.8	4717.3	4743.6	4767.3	4780.4	4798.9	4812.1	4819.9	4825.2	4819.9	4822.6
22.5°	4606.6	4633.0	4667.2	4685.6	4712.0	4727.8	4730.4	4748.8	4762.0	4748.8	4754.1
25°	4498.6	4525.0	4551.3	4590.8	4614.5	4633.0	4651.4	4654.0	4667.2	4664.5	4661.9
27.5°	4319.5	4353.8	4398.5	4430.2	4461.7	4490.7	4511.8	4517.0	4530.2	4525.0	4527.6
30°	4074.5	4111.5	4153.6	4203.6	4248.4	4277.4	4303.7	4322.1	4335.3	4327.4	4324.8
32.5°	3726.9	3763.8	3808.6	3858.6	3911.3	3953.4	3985.0	4008.7	4024.5	4019.2	4006.1
35°	3329.2	3339.7	3368.7	3408.2	3453.0	3497.7	3526.7	3553.0	3571.5	3576.8	3576.8
37.5°	2921.0	2886.7	2865.7	2865.7	2892.0	2910.4	2936.7	2952.5	2981.5	2992.0	3000.0
40°	2525.8	2446.8	2373.1	2317.8	2280.9	2278.3	2278.3	2286.2	2312.5	2346.7	2378.4
42.5°	2172.9	2046.5	1933.3	1830.5	1756.8	1714.7	1696.2	1698.9	1719.9	1751.5	1804.2
45°	1891.1	1733.1	1590.9	1467.1	1367.0	1301.1	1269.5	1266.9	1282.7	1319.5	1377.5
47.5°	1672.5	1503.9	1343.3	1201.0	1093.1	1021.9	985.1	974.6	985.1	1019.3	1087.8
50°	1490.8	1317.0	1151.0	1003.5	887.6	813.9	779.6	766.5	779.6	808.6	877.0
52.5°	1322.2	1143.1	987.7	845.5	721.7	658.4	621.6	613.7	621.6	655.8	711.2
55°	1127.3	974.6	821.8	679.5	571.6	508.4	479.4	471.5	479.4	511.0	568.9
57.5°	935.0	803.3	669.0	539.9	447.8	392.4	366.1	355.6	374.0	395.1	463.6
60°	755.9	650.6	537.3	424.1	347.7	297.6	276.5	273.9	279.2	305.5	352.9
62.5°	592.6	505.7	416.1	324.0	260.7	239.7	213.3	210.7	216.0	231.7	268.7
65°	426.7	371.4	302.9	237.0	187.0	158.0	147.5	150.2	155.4	165.9	200.2
67.5°	297.6	258.1	210.7	165.9	129.1	115.9	105.4	102.7	105.4	123.8	142.2
70°	200.2	176.5	142.2	126.4	89.6	71.1	73.7	65.9	76.4	76.4	92.2
72.5°	131.7	115.9	94.8	73.7	63.2	50.1	50.1	47.4	52.7	55.3	68.5
75°	68.5	52.7	52.7	36.9	26.4	13.1	23.7	21.1	18.4	21.1	26.4
77.5°	47.4	39.5	36.9	29.0	26.4	21.1	21.1	21.1	21.1	23.7	26.4
80°	29.0	29.0	21.1	18.4	15.8	13.1	15.8	15.8	15.8	15.8	18.4
82.5°	18.4	15.8	15.8	13.1	13.1	10.5	10.5	10.5	10.5	10.5	15.8
85°	15.8	10.5	10.5	7.9	10.5	18.4	7.9	10.5	10.5	10.5	7.9
87.5°	5.3	7.9	7.9	7.9	5.3	2.6	5.3	7.9	7.9	13.1	10.5
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9	4906.9
2.5°	4914.8	4917.4	4917.4	4914.8	4914.8	4909.5	4920.0	4912.1	4914.8	4925.3	4917.4
5°	4920.0	4922.7	4922.7	4920.0	4920.0	4920.0	4922.7	4922.7	4920.0	4917.4	4922.7
7.5°	4930.6	4927.9	4927.9	4922.7	4922.7	4917.4	4922.7	4914.8	4920.0	4914.8	4922.7
10°	4917.4	4920.0	4917.4	4914.8	4914.8	4912.1	4912.1	4904.2	4906.9	4898.9	4904.2
12.5°	4909.5	4906.9	4906.9	4901.6	4896.4	4891.1	4888.4	4880.5	4880.5	4862.1	4870.0
15°	4888.4	4891.1	4883.1	4872.6	4867.4	4854.2	4848.9	4838.4	4827.9	4814.7	4817.3
17.5°	4870.0	4862.1	4851.6	4841.0	4819.9	4809.4	4798.9	4783.1	4777.8	4762.0	4756.8
20°	4814.7	4809.4	4796.3	4777.8	4764.6	4740.9	4730.4	4714.6	4701.4	4685.6	4677.7
22.5°	4743.6	4738.3	4722.5	4704.1	4683.0	4672.5	4661.9	4633.0	4619.8	4604.0	4601.3
25°	4654.0	4646.1	4630.3	4609.3	4598.7	4569.7	4559.2	4538.1	4532.9	4517.0	4514.4
27.5°	4517.0	4506.5	4488.1	4461.7	4443.3	4424.9	4414.4	4398.5	4393.3	4377.4	4374.9
30°	4311.6	4298.4	4261.6	4251.1	4219.4	4201.0	4201.0	4179.9	4182.6	4172.0	4172.0
32.5°	3987.7	3966.6	3937.6	3916.5	3895.4	3884.9	3884.9	3877.0	3882.3	3882.3	3887.6
35°	3558.3	3529.4	3513.5	3500.4	3500.4	3510.9	3542.5	3550.5	3566.3	3579.4	3590.0
37.5°	3007.8	3005.3	3023.7	3039.5	3079.0	3123.8	3179.1	3226.5	3271.2	3302.9	3334.4
40°	2412.6	2478.5	2531.1	2604.9	2665.4	2752.4	2852.5	2934.1	3010.5	3065.8	3123.8
42.5°	1883.2	1967.5	2078.1	2186.1	2294.1	2412.6	2544.3	2657.6	2757.6	2834.0	2894.6
45°	1467.1	1582.9	1717.3	1854.2	1993.8	2141.3	2278.3	2394.2	2499.5	2578.6	2639.1
47.5°	1182.6	1309.0	1461.8	1611.9	1769.9	1925.3	2078.1	2178.2	2265.1	2328.3	2383.7
50°	977.1	1111.5	1272.2	1443.3	1601.4	1756.8	1888.5	1985.9	2057.1	2112.4	2146.6
52.5°	816.5	958.7	1129.9	1301.1	1459.1	1601.4	1719.9	1793.7	1851.6	1891.1	1922.7
55°	674.2	811.2	971.9	1132.6	1288.0	1422.3	1519.7	1575.1	1619.8	1643.5	1661.9
57.5°	550.5	676.9	824.4	971.9	1106.2	1216.9	1293.2	1348.5	1369.6	1388.0	1385.4
60°	432.0	550.5	684.8	811.2	927.1	1016.6	1072.0	1103.6	1119.4	1127.3	1122.0
62.5°	339.8	447.8	550.5	661.1	745.4	821.8	874.5	874.5	882.3	885.0	892.9
65°	252.8	334.5	424.1	505.7	574.2	624.2	653.2	661.1	671.7	669.0	663.7
67.5°	187.0	247.6	313.4	374.0	421.4	453.0	474.1	492.6	489.9	484.6	482.0
70°	129.1	168.6	226.5	263.4	297.6	329.3	334.5	337.1	339.8	342.4	337.1
72.5°	89.6	118.5	150.2	181.7	202.8	216.0	229.2	231.7	231.7	231.7	229.2
75°	44.8	60.6	89.6	102.7	121.2	126.4	136.9	136.9	144.9	134.3	131.7
77.5°	39.5	47.4	63.2	73.7	81.7	89.6	92.2	100.1	97.4	92.2	94.8
80°	23.7	29.0	39.5	44.8	55.3	57.9	60.6	63.2	60.6	63.2	63.2
82.5°	18.4	21.1	26.4	26.4	34.2	34.2	36.9	36.9	39.5	39.5	39.5
85°	10.5	18.4	15.8	31.6	21.1	21.1	26.4	31.6	26.4	26.4	31.6
87.5°	10.5	10.5	7.9	10.5	10.5	10.5	13.1	15.8	15.8	18.4	15.8
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: P249581

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4906.9	4906.9	4906.9	4906.9
2.5°	4914.8	4920.0	4912.1	4909.5
5°	4922.7	4922.7	4917.4	4917.4
7.5°	4922.7	4922.7	4914.8	4909.5
10°	4901.6	4901.6	4893.7	4888.4
12.5°	4862.1	4862.1	4859.4	4851.6
15°	4812.1	4812.1	4801.5	4793.6
17.5°	4743.6	4748.8	4735.7	4735.7
20°	4669.8	4667.2	4656.7	4651.4
22.5°	4593.5	4588.2	4585.5	4569.7
25°	4511.8	4506.5	4498.6	4490.7
27.5°	4372.2	4369.6	4361.6	4351.1
30°	4158.8	4156.2	4145.7	4145.7
32.5°	3882.3	3879.7	3869.2	3871.8
35°	3595.2	3605.8	3600.5	3590.0
37.5°	3355.5	3363.4	3368.7	3363.4
40°	3155.3	3179.1	3181.7	3187.0
42.5°	2942.0	2973.6	2984.2	2989.4
45°	2686.5	2715.5	2739.2	2733.9
47.5°	2425.8	2446.8	2467.9	2452.1
50°	2175.6	2188.7	2196.6	2196.6
52.5°	1938.5	1938.5	1935.9	1938.5
55°	1667.2	1667.2	1656.7	1661.9
57.5°	1382.8	1388.0	1380.1	1367.0
60°	1119.4	1106.2	1100.9	1093.1
62.5°	871.8	871.8	853.4	877.0
65°	653.2	645.3	637.4	634.7
67.5°	474.1	471.5	463.6	460.9
70°	334.5	324.0	321.3	316.0
72.5°	223.9	223.9	218.6	218.6
75°	136.9	123.8	121.2	123.8
77.5°	94.8	92.2	92.2	89.6
80°	63.2	60.6	65.9	57.9
82.5°	39.5	42.1	39.5	42.1
85°	26.4	31.6	29.0	29.0
87.5°	15.8	15.8	15.8	15.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)