

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: P249536

Luminaire Tested: **LSR8B100D010 EC8B100835 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249536
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 EC8B100835 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10906.0 lumens
Efficiency: N/A
Efficacy: 102.6 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

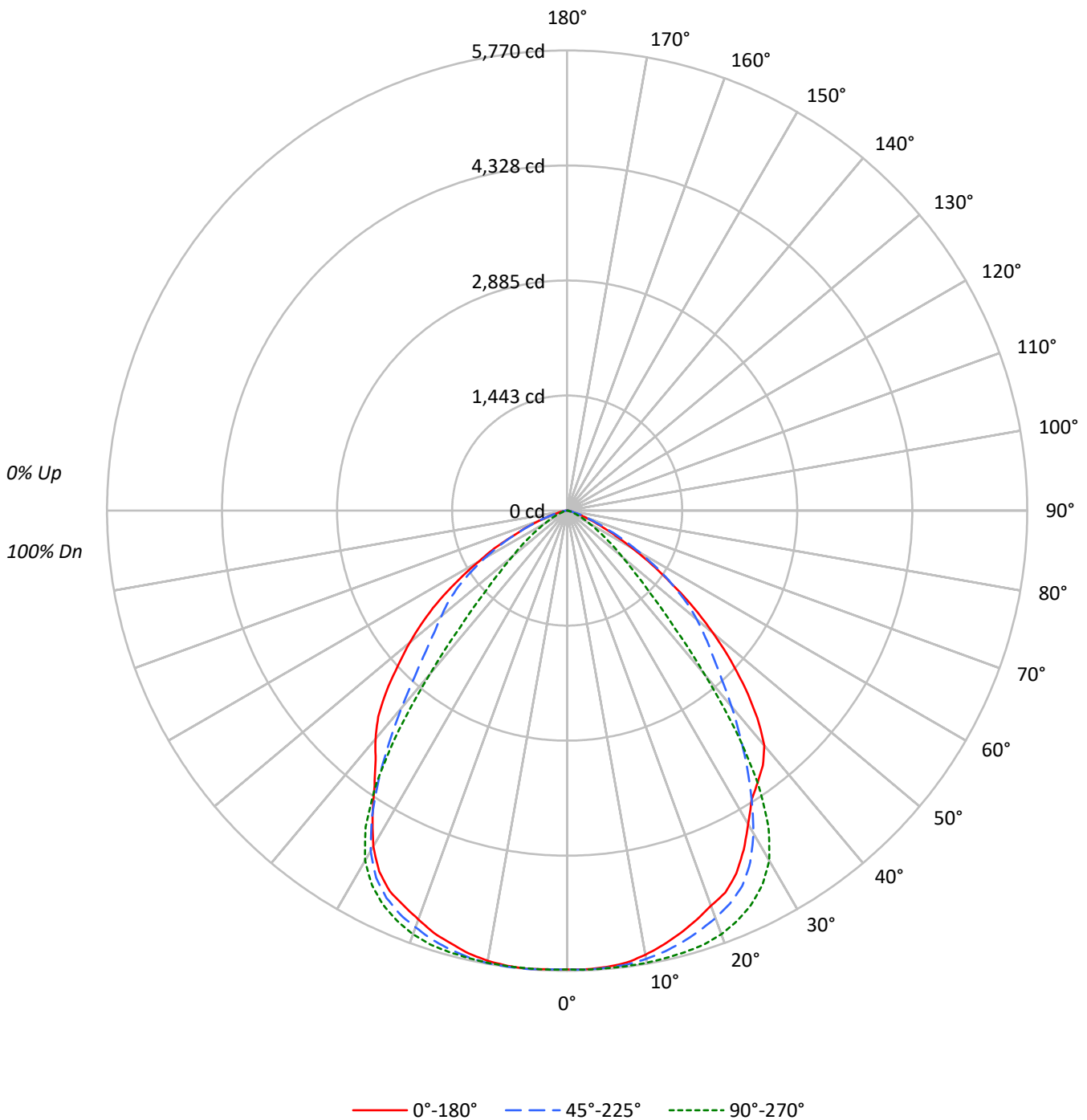
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	177438	177438	177438
5°	177828	178308	178500
10°	177082	180273	179499
15°	175120	182909	179458
20°	173015	185482	178994
25°	170770	185693	179178
30°	161558	180473	173106
35°	156735	156848	158478
40°	154793	107921	150441
45°	137927	64790	139815
50°	114689	43118	123578
55°	86013	29725	104776
60°	58287	19809	79052
65°	35162	12849	54308
70°	19492	6960	33413
75°	8828	2943	17299
80°	7671	3285	12058
85°	8739	4352	12029



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	549.2	5.0
10°-20°	1594.8	14.6
20°-30°	2420.7	22.2
30°-40°	2542.4	23.3
40°-50°	1906.1	17.5
50°-60°	1223.0	11.2
60°-70°	523.2	4.8
70°-80°	123.6	1.1
80°-90°	23.0	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°	4564.6	41.9
0°-40°	7107.1	65.2
0°-60°	10236.2	93.9
0°-90°	10906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10906.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5754	5754	5754	5754	5754	
5°	5745	5754	5760	5770	5767	546
15°	5486	5600	5730	5692	5621	1547
25°	5019	5195	5458	5359	5266	2293
35°	4164	3932	4167	4117	4210	2613
45°	3163	2585	1486	2511	3206	2422
55°	1600	1600	553	1668	1949	1451
65°	482	568	176	732	744	514
75°	74	86	25	148	145	108
85°	25	15	12	25	34	26
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°	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2
2.5°	5757.3	5763.5	5760.4	5760.4	5757.3	5760.4	5760.4	5766.6	5766.6	5760.4	5757.3
5°	5744.9	5751.1	5751.1	5744.9	5744.9	5760.4	5751.1	5757.3	5757.3	5754.2	5754.2
7.5°	5717.2	5717.2	5729.5	5720.3	5720.3	5729.5	5726.4	5732.6	5738.8	5741.9	5741.9
10°	5655.4	5661.6	5664.7	5664.7	5667.8	5677.0	5683.2	5695.6	5701.7	5707.9	5711.0
12.5°	5578.2	5587.4	5590.5	5587.4	5596.7	5609.0	5624.5	5639.9	5649.2	5661.6	5670.9
15°	5485.5	5485.5	5491.7	5501.0	5507.2	5525.7	5541.1	5559.6	5584.3	5599.8	5615.2
17.5°	5383.6	5389.8	5399.0	5399.0	5411.4	5442.2	5451.5	5479.4	5507.2	5522.6	5553.5
20°	5272.4	5278.6	5287.8	5294.0	5309.5	5334.2	5352.7	5377.4	5408.3	5436.1	5467.0
22.5°	5185.9	5173.6	5179.7	5185.9	5201.4	5223.0	5244.6	5275.5	5306.4	5334.2	5365.1
25°	5019.1	5022.2	5031.5	5037.6	5056.2	5074.7	5099.4	5136.5	5164.3	5195.2	5229.1
27.5°	4793.7	4796.8	4812.2	4812.2	4827.6	4858.5	4873.9	4904.8	4941.9	4972.8	5013.0
30°	4537.3	4543.4	4543.4	4555.8	4565.0	4580.5	4596.0	4626.9	4645.4	4673.2	4728.8
32.5°	4302.6	4308.7	4305.6	4302.6	4293.3	4290.2	4287.1	4293.3	4299.5	4308.7	4330.3
35°	4163.6	4148.1	4135.8	4114.2	4089.4	4058.5	4030.7	3993.7	3959.7	3931.9	3901.0
37.5°	4030.7	4027.6	4009.1	3978.2	3928.8	3873.2	3808.4	3728.0	3647.7	3561.3	3477.9
40°	3845.4	3836.1	3820.7	3777.5	3721.9	3653.9	3567.5	3468.6	3338.8	3206.1	3070.2
42.5°	3530.3	3533.4	3514.9	3480.9	3428.5	3363.6	3274.0	3165.9	3026.9	2869.4	2693.3
45°	3162.8	3162.8	3156.6	3128.8	3091.8	3039.3	2971.3	2881.8	2745.9	2585.2	2396.8
47.5°	2779.8	2782.9	2773.6	2767.5	2752.0	2718.1	2668.6	2600.7	2504.9	2350.5	2162.1
50°	2390.7	2390.7	2406.1	2403.0	2403.0	2390.7	2369.1	2328.9	2245.5	2121.9	1945.9
52.5°	2001.5	2007.7	2016.9	2029.3	2044.7	2069.4	2044.7	2026.2	1973.6	1877.9	1726.6
55°	1599.9	1606.1	1621.5	1643.2	1661.7	1686.5	1692.6	1692.6	1664.8	1599.9	1485.7
57.5°	1257.1	1247.8	1260.2	1278.7	1303.4	1328.2	1346.7	1368.3	1365.2	1322.0	1229.3
60°	945.1	948.2	957.5	976.1	994.6	1016.2	1040.9	1059.4	1068.7	1047.1	988.4
62.5°	688.8	688.8	701.1	719.6	728.9	759.8	775.3	784.5	793.8	790.7	753.6
65°	481.9	488.0	494.2	503.5	512.7	531.2	540.5	559.0	565.2	568.3	540.5
67.5°	339.8	330.5	336.7	342.8	352.1	364.5	383.0	383.0	392.2	392.2	373.7
70°	216.2	216.2	219.3	228.5	234.7	237.8	244.0	250.2	259.4	256.4	256.4
72.5°	145.2	142.1	145.2	148.3	151.4	160.6	160.6	163.7	169.9	173.0	160.6
75°	74.1	77.2	83.4	80.3	89.6	83.4	86.5	95.8	92.7	86.5	86.5
77.5°	61.7	61.7	61.7	58.7	64.8	64.8	61.7	67.9	64.8	64.8	61.7
80°	43.2	46.3	43.2	40.1	43.2	40.1	40.1	40.1	40.1	40.1	37.0
82.5°	34.0	27.8	30.9	27.8	30.9	30.9	27.8	24.7	24.7	27.8	24.7
85°	24.7	18.5	21.6	21.6	18.5	18.5	18.5	18.5	18.5	15.4	15.4
87.5°	15.4	9.3	9.3	9.3	12.3	12.3	12.3	9.3	12.3	12.3	6.2
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°	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2
2.5°	5763.5	5760.4	5766.6	5763.5	5763.5	5760.4	5763.5	5760.4	5766.6	5754.2	5757.3
5°	5763.5	5757.3	5760.4	5763.5	5766.6	5760.4	5760.4	5760.4	5766.6	5760.4	5763.5
7.5°	5751.1	5748.0	5757.3	5763.5	5760.4	5757.3	5763.5	5760.4	5766.6	5763.5	5769.6
10°	5726.4	5729.5	5735.7	5744.9	5748.0	5751.1	5757.3	5757.3	5766.6	5754.2	5760.4
12.5°	5689.4	5701.7	5717.2	5723.3	5735.7	5735.7	5741.9	5744.9	5751.1	5748.0	5757.3
15°	5643.0	5658.5	5677.0	5692.5	5707.9	5717.2	5726.4	5729.5	5738.8	5729.5	5732.6
17.5°	5587.4	5605.9	5633.8	5652.3	5677.0	5686.3	5698.6	5704.8	5714.1	5707.9	5711.0
20°	5510.2	5531.9	5562.7	5590.5	5605.9	5627.6	5643.0	5652.3	5658.5	5652.3	5655.4
22.5°	5402.1	5433.0	5473.2	5494.8	5525.7	5544.2	5547.3	5568.9	5584.3	5568.9	5575.1
25°	5275.5	5306.4	5337.3	5383.6	5411.4	5433.0	5454.6	5457.7	5473.2	5470.1	5467.0
27.5°	5065.4	5105.6	5158.1	5195.2	5232.2	5266.2	5290.9	5297.1	5312.6	5306.4	5309.5
30°	4778.2	4821.5	4870.9	4929.5	4982.1	5016.0	5046.9	5068.5	5083.9	5074.7	5071.6
32.5°	4370.5	4413.7	4466.3	4524.9	4586.7	4636.1	4673.2	4701.0	4719.5	4713.3	4697.9
35°	3904.1	3916.5	3950.5	3996.8	4049.2	4101.8	4135.8	4166.6	4188.2	4194.4	4194.4
37.5°	3425.4	3385.2	3360.5	3360.5	3391.4	3413.0	3443.9	3462.4	3496.4	3508.7	3518.0
40°	2962.0	2869.4	2782.9	2718.1	2674.8	2671.7	2671.7	2681.0	2711.9	2752.0	2789.1
42.5°	2548.2	2399.9	2267.1	2146.6	2060.2	2010.8	1989.1	1992.2	2016.9	2054.0	2115.7
45°	2217.7	2032.4	1865.6	1720.4	1603.0	1525.8	1488.8	1485.7	1504.2	1547.4	1615.4
47.5°	1961.3	1763.6	1575.2	1408.4	1281.8	1198.4	1155.2	1142.8	1155.2	1195.3	1275.6
50°	1748.2	1544.4	1349.8	1176.8	1040.9	954.4	914.2	898.8	914.2	948.2	1028.5
52.5°	1550.5	1340.5	1158.3	991.5	846.3	772.2	728.9	719.6	728.9	769.1	834.0
55°	1322.0	1142.8	963.7	796.9	670.3	596.1	562.1	552.9	562.1	599.2	667.2
57.5°	1096.5	942.0	784.5	633.2	525.1	460.2	429.3	416.9	438.6	463.3	543.6
60°	886.4	762.9	630.1	497.3	407.7	349.0	324.3	321.2	327.4	358.3	413.9
62.5°	695.0	593.0	488.0	379.9	305.8	281.1	250.2	247.1	253.3	271.8	315.1
65°	500.4	435.5	355.2	278.0	219.3	185.3	173.0	176.1	182.2	194.6	234.7
67.5°	349.0	302.7	247.1	194.6	151.4	135.9	123.6	120.5	123.6	145.2	166.8
70°	234.7	206.9	166.8	148.3	105.0	83.4	86.5	77.2	89.6	89.6	108.1
72.5°	154.4	135.9	111.2	86.5	74.1	58.7	58.7	55.6	61.7	64.8	80.3
75°	80.3	61.7	61.7	43.2	30.9	15.4	27.8	24.7	21.6	24.7	30.9
77.5°	55.6	46.3	43.2	34.0	30.9	24.7	24.7	24.7	24.7	27.8	30.9
80°	34.0	34.0	24.7	21.6	18.5	15.4	18.5	18.5	18.5	18.5	21.6
82.5°	21.6	18.5	18.5	15.4	15.4	12.3	12.3	12.3	12.3	12.3	18.5
85°	18.5	12.3	12.3	9.3	12.3	21.6	9.3	12.3	12.3	12.3	9.3
87.5°	6.2	9.3	9.3	9.3	6.2	3.1	6.2	9.3	9.3	15.4	12.3
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2	5754.2
2.5°	5763.5	5766.6	5766.6	5763.5	5763.5	5757.3	5769.6	5760.4	5763.5	5775.8	5766.6
5°	5769.6	5772.7	5772.7	5769.6	5769.6	5769.6	5772.7	5772.7	5769.6	5766.6	5772.7
7.5°	5782.0	5778.9	5778.9	5772.7	5772.7	5766.6	5772.7	5763.5	5769.6	5763.5	5772.7
10°	5766.6	5769.6	5766.6	5763.5	5763.5	5760.4	5760.4	5751.1	5754.2	5744.9	5751.1
12.5°	5757.3	5754.2	5754.2	5748.0	5741.9	5735.7	5732.6	5723.3	5723.3	5701.7	5711.0
15°	5732.6	5735.7	5726.4	5714.1	5707.9	5692.5	5686.3	5673.9	5661.6	5646.1	5649.2
17.5°	5711.0	5701.7	5689.4	5677.0	5652.3	5639.9	5627.6	5609.0	5602.8	5584.3	5578.2
20°	5646.1	5639.9	5624.5	5602.8	5587.4	5559.6	5547.3	5528.8	5513.3	5494.8	5485.5
22.5°	5562.7	5556.5	5538.0	5516.4	5491.7	5479.4	5467.0	5433.0	5417.5	5399.0	5395.9
25°	5457.7	5448.4	5429.9	5405.2	5392.8	5358.9	5346.5	5321.8	5315.7	5297.1	5294.0
27.5°	5297.1	5284.7	5263.1	5232.2	5210.6	5189.0	5176.7	5158.1	5152.0	5133.4	5130.3
30°	5056.2	5040.7	4997.5	4985.2	4948.1	4926.4	4926.4	4901.7	4904.8	4892.5	4892.5
32.5°	4676.3	4651.6	4617.6	4592.9	4568.1	4555.8	4555.8	4546.5	4552.7	4552.7	4558.9
35°	4172.8	4138.9	4120.3	4104.9	4104.9	4117.2	4154.3	4163.6	4182.1	4197.5	4209.9
37.5°	3527.2	3524.2	3545.8	3564.4	3610.7	3663.2	3728.0	3783.7	3836.1	3873.2	3910.3
40°	2829.2	2906.5	2968.2	3054.7	3125.7	3227.7	3345.0	3440.8	3530.3	3595.3	3663.2
42.5°	2208.4	2307.2	2437.0	2563.6	2690.3	2829.2	2983.7	3116.5	3233.9	3323.4	3394.5
45°	1720.4	1856.3	2013.9	2174.4	2338.1	2511.1	2671.7	2807.6	2931.2	3023.8	3094.9
47.5°	1386.8	1535.1	1714.2	1890.3	2075.6	2257.8	2437.0	2554.4	2656.2	2730.4	2795.3
50°	1145.9	1303.4	1491.9	1692.6	1877.9	2060.2	2214.6	2328.9	2412.3	2477.1	2517.3
52.5°	957.5	1124.3	1325.1	1525.8	1711.1	1877.9	2016.9	2103.4	2171.4	2217.7	2254.7
55°	790.7	951.3	1139.7	1328.2	1510.4	1667.9	1782.1	1847.1	1899.5	1927.3	1948.9
57.5°	645.6	793.8	966.8	1139.7	1297.2	1427.0	1516.6	1581.4	1606.1	1627.7	1624.6
60°	506.6	645.6	803.1	951.3	1087.2	1192.2	1257.1	1294.2	1312.7	1322.0	1315.8
62.5°	398.4	525.1	645.6	775.3	874.1	963.7	1025.5	1025.5	1034.7	1037.8	1047.1
65°	296.5	392.2	497.3	593.0	673.3	732.0	766.0	775.3	787.6	784.5	778.3
67.5°	219.3	290.4	367.5	438.6	494.2	531.2	555.9	577.6	574.5	568.3	565.2
70°	151.4	197.7	265.6	308.9	349.0	386.1	392.2	395.3	398.4	401.5	395.3
72.5°	105.0	139.0	176.1	213.1	237.8	253.3	268.7	271.8	271.8	271.8	268.7
75°	52.5	71.0	105.0	120.5	142.1	148.3	160.6	160.6	169.9	157.5	154.4
77.5°	46.3	55.6	74.1	86.5	95.8	105.0	108.1	117.4	114.3	108.1	111.2
80°	27.8	34.0	46.3	52.5	64.8	67.9	71.0	74.1	71.0	74.1	74.1
82.5°	21.6	24.7	30.9	30.9	40.1	40.1	43.2	43.2	46.3	46.3	46.3
85°	12.3	21.6	18.5	37.0	24.7	24.7	30.9	37.0	30.9	30.9	37.0
87.5°	12.3	12.3	9.3	12.3	12.3	12.3	15.4	18.5	18.5	21.6	18.5
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: P249536

CATALOG NUMBER: LSR8B100D010 EC8B100835 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5754.2	5754.2	5754.2	5754.2
2.5°	5763.5	5769.6	5760.4	5757.3
5°	5772.7	5772.7	5766.6	5766.6
7.5°	5772.7	5772.7	5763.5	5757.3
10°	5748.0	5748.0	5738.8	5732.6
12.5°	5701.7	5701.7	5698.6	5689.4
15°	5643.0	5643.0	5630.7	5621.4
17.5°	5562.7	5568.9	5553.5	5553.5
20°	5476.3	5473.2	5460.8	5454.6
22.5°	5386.7	5380.5	5377.4	5358.9
25°	5290.9	5284.7	5275.5	5266.2
27.5°	5127.2	5124.1	5114.9	5102.5
30°	4877.0	4873.9	4861.6	4861.6
32.5°	4552.7	4549.6	4537.3	4540.4
35°	4216.0	4228.4	4222.2	4209.9
37.5°	3935.0	3944.3	3950.5	3944.3
40°	3700.2	3728.0	3731.1	3737.3
42.5°	3450.1	3487.1	3499.5	3505.6
45°	3150.4	3184.4	3212.2	3206.1
47.5°	2844.7	2869.4	2894.1	2875.6
50°	2551.3	2566.7	2576.0	2576.0
52.5°	2273.3	2273.3	2270.2	2273.3
55°	1955.1	1955.1	1942.8	1948.9
57.5°	1621.5	1627.7	1618.4	1603.0
60°	1312.7	1297.2	1291.1	1281.8
62.5°	1022.4	1022.4	1000.8	1028.5
65°	766.0	756.7	747.4	744.3
67.5°	555.9	552.9	543.6	540.5
70°	392.2	379.9	376.8	370.6
72.5°	262.5	262.5	256.4	256.4
75°	160.6	145.2	142.1	145.2
77.5°	111.2	108.1	108.1	105.0
80°	74.1	71.0	77.2	67.9
82.5°	46.3	49.4	46.3	49.4
85°	30.9	37.0	34.0	34.0
87.5°	18.5	18.5	18.5	18.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)