

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: P249203

Luminaire Tested: **LSR8B100D010 EC8B100830 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249203
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 EC8B100830 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10551.0 lumens
Efficiency: N/A
Efficacy: 99.3 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

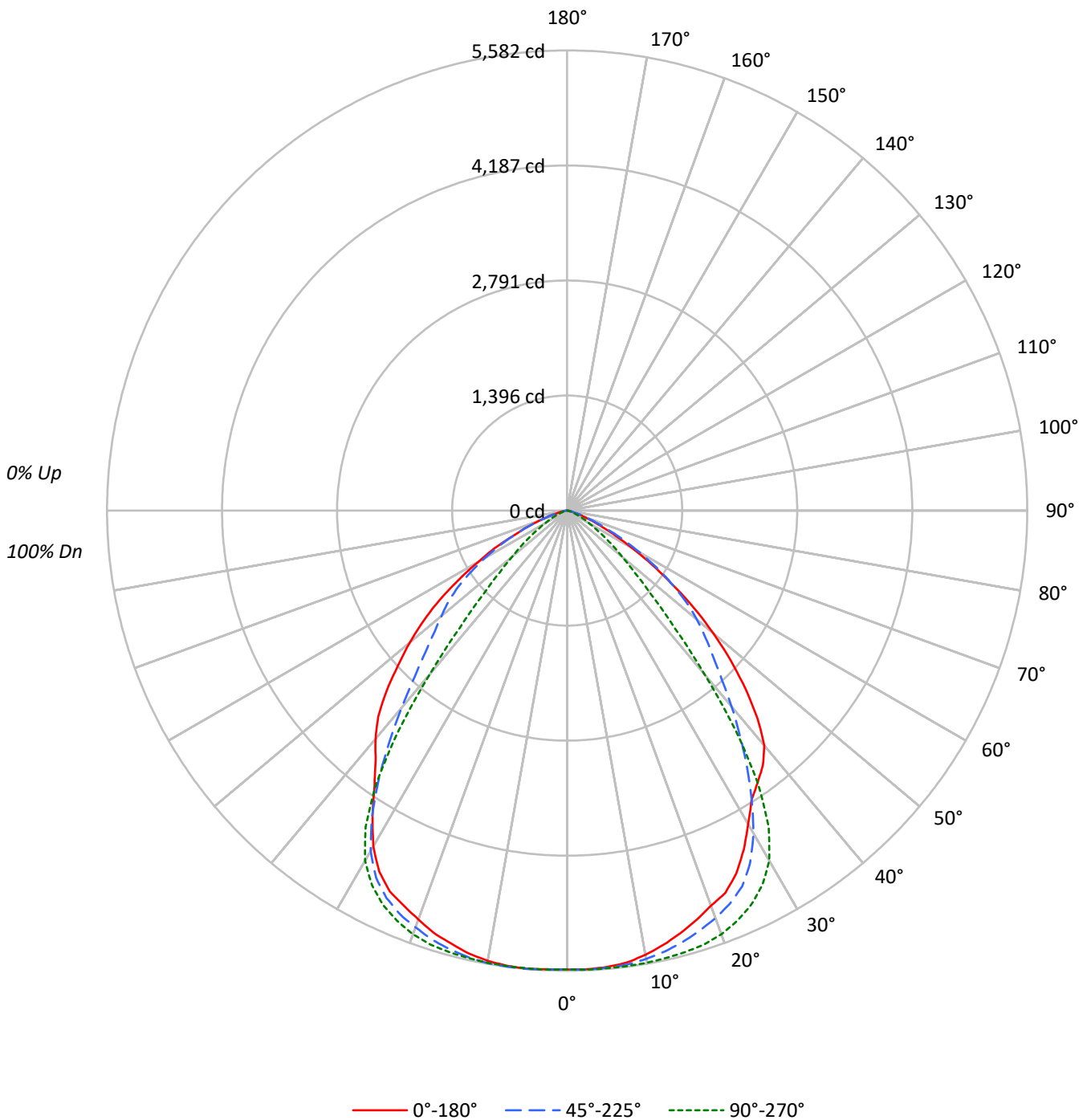
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	171663	171663	171663
5°	172040	172504	172690
10°	171317	174405	173656
15°	169418	176955	173619
20°	167384	179444	173170
25°	165211	179651	173346
30°	156299	174597	167473
35°	151635	151744	153321
40°	149753	104407	145546
45°	133440	62679	135262
50°	110956	41717	119553
55°	83212	28757	101367
60°	56393	19162	76480
65°	34016	12433	52542
70°	18861	6735	32331
75°	8543	2848	16740
80°	7423	3179	11667
85°	8456	4210	11640



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	531.3	5.0
10°-20°	1542.9	14.6
20°-30°	2341.9	22.2
30°-40°	2459.7	23.3
40°-50°	1844.1	17.5
50°-60°	1183.2	11.2
60°-70°	506.2	4.8
70°-80°	119.6	1.1
80°-90°	22.2	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°	4416.1	41.9
0°-40°	6875.7	65.2
0°-60°	9903.0	93.9
0°-90°	10551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10551.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5567	5567	5567	5567	5567	
5°	5558	5567	5573	5582	5579	528
15°	5307	5418	5543	5507	5438	1497
25°	4856	5026	5280	5184	5095	2218
35°	4028	3804	4031	3983	4073	2528
45°	3060	2501	1437	2429	3102	2343
55°	1548	1548	535	1614	1886	1404
65°	466	550	170	708	720	498
75°	72	84	24	144	140	104
85°	24	15	12	24	33	25
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°	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9
2.5°	5569.9	5575.9	5572.9	5572.9	5569.9	5572.9	5572.9	5578.9	5578.9	5572.9	5569.9
5°	5557.9	5563.9	5563.9	5557.9	5557.9	5572.9	5563.9	5569.9	5569.9	5566.9	5566.9
7.5°	5531.1	5531.1	5543.0	5534.1	5534.1	5543.0	5540.0	5546.0	5552.0	5555.0	5555.0
10°	5471.3	5477.3	5480.3	5480.3	5483.3	5492.2	5498.2	5510.2	5516.1	5522.1	5525.1
12.5°	5396.6	5405.6	5408.5	5405.6	5414.5	5426.5	5441.4	5456.4	5465.4	5477.3	5486.3
15°	5306.9	5306.9	5312.9	5321.9	5327.9	5345.8	5360.7	5378.6	5402.6	5417.5	5432.5
17.5°	5208.4	5214.4	5223.3	5223.3	5235.3	5265.1	5274.1	5301.0	5327.9	5342.8	5372.7
20°	5100.8	5106.7	5115.7	5121.7	5136.6	5160.5	5178.5	5202.4	5232.3	5259.2	5289.0
22.5°	5017.1	5005.2	5011.1	5017.1	5032.1	5053.0	5073.9	5103.7	5133.6	5160.5	5190.4
25°	4855.7	4858.7	4867.7	4873.6	4891.6	4909.5	4933.4	4969.3	4996.2	5026.1	5058.9
27.5°	4637.6	4640.6	4655.5	4655.5	4670.5	4700.4	4715.3	4745.2	4781.1	4810.9	4849.8
30°	4389.6	4395.5	4395.5	4407.5	4416.4	4431.4	4446.4	4476.3	4494.2	4521.1	4574.9
32.5°	4162.5	4168.4	4165.4	4162.5	4153.5	4150.5	4147.5	4153.5	4159.5	4168.4	4189.4
35°	4028.1	4013.1	4001.2	3980.2	3956.3	3926.4	3899.5	3863.7	3830.8	3803.9	3774.1
37.5°	3899.5	3896.5	3878.6	3848.7	3800.9	3747.2	3684.4	3606.7	3529.0	3445.3	3364.7
40°	3720.2	3711.3	3696.3	3654.5	3600.7	3535.0	3451.3	3355.7	3230.2	3101.7	2970.2
42.5°	3415.4	3418.4	3400.5	3367.6	3316.9	3254.1	3167.4	3062.9	2928.4	2776.0	2605.7
45°	3059.9	3059.9	3053.9	3027.0	2991.1	2940.3	2874.6	2788.0	2656.5	2501.1	2318.8
47.5°	2689.3	2692.3	2683.3	2677.4	2662.4	2629.6	2581.8	2516.0	2423.4	2274.0	2091.7
50°	2312.9	2312.9	2327.8	2324.8	2324.8	2312.9	2291.9	2253.0	2172.4	2052.9	1882.6
52.5°	1936.3	1942.3	1951.3	1963.2	1978.1	2002.0	1978.1	1960.2	1909.4	1816.8	1670.4
55°	1547.8	1553.8	1568.8	1589.7	1607.7	1631.6	1637.5	1637.5	1610.6	1547.8	1437.3
57.5°	1216.2	1207.2	1219.2	1237.1	1261.0	1284.9	1302.8	1323.7	1320.8	1278.9	1189.3
60°	914.4	917.4	926.3	944.3	962.2	983.1	1007.0	1024.9	1033.9	1013.0	956.2
62.5°	666.4	666.4	678.3	696.2	705.2	735.1	750.0	759.0	767.9	764.9	729.1
65°	466.2	472.1	478.1	487.1	496.0	513.9	522.9	540.8	546.8	549.8	522.9
67.5°	328.7	319.7	325.7	331.7	340.6	352.6	370.5	370.5	379.5	379.5	361.6
70°	209.2	209.2	212.2	221.1	227.1	230.1	236.1	242.0	251.0	248.0	248.0
72.5°	140.5	137.5	140.5	143.5	146.4	155.4	155.4	158.4	164.4	167.4	155.4
75°	71.7	74.7	80.6	77.7	86.6	80.6	83.6	92.6	89.6	83.6	83.6
77.5°	59.7	59.7	59.7	56.8	62.7	62.7	59.7	65.7	62.7	62.7	59.7
80°	41.8	44.8	41.8	38.8	41.8	38.8	38.8	38.8	38.8	38.8	35.8
82.5°	32.9	26.9	29.9	26.9	29.9	29.9	26.9	23.9	23.9	26.9	23.9
85°	23.9	17.9	20.9	20.9	17.9	17.9	17.9	17.9	17.9	14.9	14.9
87.5°	14.9	9.0	9.0	9.0	11.9	11.9	11.9	9.0	11.9	11.9	6.0
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: P249203

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9
2.5°	5575.9	5572.9	5578.9	5575.9	5575.9	5572.9	5575.9	5572.9	5578.9	5566.9	5569.9
5°	5575.9	5569.9	5572.9	5575.9	5578.9	5572.9	5572.9	5572.9	5578.9	5572.9	5575.9
7.5°	5563.9	5560.9	5569.9	5575.9	5572.9	5569.9	5575.9	5572.9	5578.9	5575.9	5581.8
10°	5540.0	5543.0	5549.0	5557.9	5560.9	5563.9	5569.9	5569.9	5578.9	5566.9	5572.9
12.5°	5504.2	5516.1	5531.1	5537.0	5549.0	5549.0	5555.0	5557.9	5563.9	5560.9	5569.9
15°	5459.4	5474.3	5492.2	5507.2	5522.1	5531.1	5540.0	5543.0	5552.0	5543.0	5546.0
17.5°	5405.6	5423.5	5450.4	5468.3	5492.2	5501.2	5513.1	5519.1	5528.1	5522.1	5525.1
20°	5330.8	5351.8	5381.6	5408.5	5423.5	5444.4	5459.4	5468.3	5474.3	5468.3	5471.3
22.5°	5226.3	5256.2	5295.0	5315.9	5345.8	5363.7	5366.7	5387.6	5402.6	5387.6	5393.6
25°	5103.7	5133.6	5163.5	5208.4	5235.3	5256.2	5277.1	5280.1	5295.0	5292.0	5289.0
27.5°	4900.5	4939.4	4990.2	5026.1	5061.9	5094.8	5118.7	5124.6	5139.6	5133.6	5136.6
30°	4622.6	4664.5	4712.3	4769.1	4819.9	4852.7	4882.6	4903.5	4918.5	4909.5	4906.5
32.5°	4228.2	4270.1	4320.9	4377.6	4437.4	4485.2	4521.1	4548.0	4565.9	4559.9	4545.0
35°	3777.1	3789.0	3821.9	3866.7	3917.4	3968.3	4001.2	4031.0	4051.9	4057.9	4057.9
37.5°	3313.9	3275.0	3251.1	3251.1	3281.0	3301.9	3331.8	3349.7	3382.6	3394.5	3403.5
40°	2865.6	2776.0	2692.3	2629.6	2587.8	2584.8	2584.8	2593.7	2623.6	2662.4	2698.3
42.5°	2465.2	2321.8	2193.3	2076.8	1993.1	1945.3	1924.4	1927.4	1951.3	1987.1	2046.9
45°	2145.5	1966.2	1804.8	1664.4	1550.8	1476.1	1440.3	1437.3	1455.2	1497.0	1562.8
47.5°	1897.5	1706.2	1523.9	1362.6	1240.1	1159.4	1117.6	1105.6	1117.6	1156.4	1234.1
50°	1691.3	1494.1	1305.8	1138.5	1007.0	923.4	884.5	869.6	884.5	917.4	995.0
52.5°	1500.0	1296.8	1120.6	959.2	818.7	747.0	705.2	696.2	705.2	744.0	806.8
55°	1278.9	1105.6	932.3	770.9	648.5	576.7	543.8	534.9	543.8	579.7	645.5
57.5°	1060.8	911.4	759.0	612.6	508.0	445.2	415.4	403.4	424.3	448.2	525.9
60°	857.6	738.1	609.6	481.1	394.5	337.6	313.7	310.7	316.7	346.6	400.4
62.5°	672.4	573.7	472.1	367.5	295.8	271.9	242.0	239.1	245.0	262.9	304.8
65°	484.1	421.4	343.6	268.9	212.2	179.3	167.4	170.4	176.3	188.3	227.1
67.5°	337.6	292.8	239.1	188.3	146.4	131.5	119.5	116.5	119.5	140.5	161.4
70°	227.1	200.2	161.4	143.5	101.6	80.6	83.6	74.7	86.6	86.6	104.6
72.5°	149.4	131.5	107.6	83.6	71.7	56.8	56.8	53.8	59.7	62.7	77.7
75°	77.7	59.7	59.7	41.8	29.9	14.9	26.9	23.9	20.9	23.9	29.9
77.5°	53.8	44.8	41.8	32.9	29.9	23.9	23.9	23.9	23.9	26.9	29.9
80°	32.9	32.9	23.9	20.9	17.9	14.9	17.9	17.9	17.9	17.9	20.9
82.5°	20.9	17.9	17.9	14.9	14.9	11.9	11.9	11.9	11.9	11.9	17.9
85°	17.9	11.9	11.9	9.0	11.9	20.9	9.0	11.9	11.9	11.9	9.0
87.5°	6.0	9.0	9.0	9.0	6.0	3.0	6.0	9.0	9.0	14.9	11.9
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°	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9	5566.9
2.5°	5575.9	5578.9	5578.9	5575.9	5575.9	5569.9	5581.8	5572.9	5575.9	5587.8	5578.9
5°	5581.8	5584.8	5584.8	5581.8	5581.8	5581.8	5584.8	5584.8	5581.8	5578.9	5584.8
7.5°	5593.8	5590.8	5590.8	5584.8	5584.8	5578.9	5584.8	5575.9	5581.8	5575.9	5584.8
10°	5578.9	5581.8	5578.9	5575.9	5575.9	5572.9	5572.9	5563.9	5566.9	5557.9	5563.9
12.5°	5569.9	5566.9	5566.9	5560.9	5555.0	5549.0	5546.0	5537.0	5537.0	5516.1	5525.1
15°	5546.0	5549.0	5540.0	5528.1	5522.1	5507.2	5501.2	5489.2	5477.3	5462.4	5465.4
17.5°	5525.1	5516.1	5504.2	5492.2	5468.3	5456.4	5444.4	5426.5	5420.5	5402.6	5396.6
20°	5462.4	5456.4	5441.4	5420.5	5405.6	5378.6	5366.7	5348.8	5333.8	5315.9	5306.9
22.5°	5381.6	5375.6	5357.7	5336.8	5312.9	5301.0	5289.0	5256.2	5241.2	5223.3	5220.3
25°	5280.1	5271.1	5253.2	5229.3	5217.3	5184.4	5172.5	5148.6	5142.6	5124.6	5121.7
27.5°	5124.6	5112.7	5091.8	5061.9	5041.0	5020.1	5008.2	4990.2	4984.3	4966.3	4963.3
30°	4891.6	4876.6	4834.8	4822.9	4787.0	4766.1	4766.1	4742.2	4745.2	4733.3	4733.3
32.5°	4524.1	4500.2	4467.3	4443.4	4419.4	4407.5	4407.5	4398.5	4404.5	4404.5	4410.5
35°	4037.0	4004.2	3986.2	3971.2	3971.2	3983.2	4019.1	4028.1	4046.0	4060.9	4072.9
37.5°	3412.4	3409.5	3430.4	3448.3	3493.1	3544.0	3606.7	3660.5	3711.3	3747.2	3783.0
40°	2737.1	2811.9	2871.6	2955.3	3024.0	3122.6	3236.2	3328.8	3415.4	3478.2	3544.0
42.5°	2136.5	2232.1	2357.7	2480.1	2602.7	2737.1	2886.6	3015.0	3128.6	3215.2	3284.0
45°	1664.4	1795.9	1948.3	2103.7	2262.0	2429.4	2584.8	2716.2	2835.8	2925.4	2994.1
47.5°	1341.7	1485.1	1658.4	1828.8	2008.0	2184.3	2357.7	2471.2	2569.8	2641.5	2704.3
50°	1108.6	1261.0	1443.3	1637.5	1816.8	1993.1	2142.5	2253.0	2333.8	2396.5	2435.3
52.5°	926.3	1087.7	1281.9	1476.1	1655.4	1816.8	1951.3	2034.9	2100.7	2145.5	2181.3
55°	764.9	920.4	1102.6	1284.9	1461.2	1613.6	1724.1	1786.9	1837.7	1864.6	1885.5
57.5°	624.5	767.9	935.3	1102.6	1255.0	1380.6	1467.2	1529.9	1553.8	1574.8	1571.8
60°	490.1	624.5	776.9	920.4	1051.8	1153.4	1216.2	1252.0	1269.9	1278.9	1272.9
62.5°	385.5	508.0	624.5	750.0	845.6	932.3	992.1	992.1	1001.0	1004.0	1013.0
65°	286.8	379.5	481.1	573.7	651.4	708.2	741.1	750.0	762.0	759.0	753.0
67.5°	212.2	280.9	355.6	424.3	478.1	513.9	537.8	558.8	555.8	549.8	546.8
70°	146.4	191.3	257.0	298.8	337.6	373.5	379.5	382.5	385.5	388.5	382.5
72.5°	101.6	134.5	170.4	206.2	230.1	245.0	260.0	262.9	262.9	262.9	260.0
75°	50.8	68.7	101.6	116.5	137.5	143.5	155.4	155.4	164.4	152.4	149.4
77.5°	44.8	53.8	71.7	83.6	92.6	101.6	104.6	113.5	110.6	104.6	107.6
80°	26.9	32.9	44.8	50.8	62.7	65.7	68.7	71.7	68.7	71.7	71.7
82.5°	20.9	23.9	29.9	29.9	38.8	38.8	41.8	41.8	44.8	44.8	44.8
85°	11.9	20.9	17.9	35.8	23.9	23.9	29.9	35.8	29.9	29.9	35.8
87.5°	11.9	11.9	9.0	11.9	11.9	11.9	14.9	17.9	17.9	20.9	17.9
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: P249203

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5566.9	5566.9	5566.9	5566.9
2.5°	5575.9	5581.8	5572.9	5569.9
5°	5584.8	5584.8	5578.9	5578.9
7.5°	5584.8	5584.8	5575.9	5569.9
10°	5560.9	5560.9	5552.0	5546.0
12.5°	5516.1	5516.1	5513.1	5504.2
15°	5459.4	5459.4	5447.4	5438.5
17.5°	5381.6	5387.6	5372.7	5372.7
20°	5298.0	5295.0	5283.1	5277.1
22.5°	5211.4	5205.4	5202.4	5184.4
25°	5118.7	5112.7	5103.7	5094.8
27.5°	4960.4	4957.4	4948.4	4936.4
30°	4718.3	4715.3	4703.4	4703.4
32.5°	4404.5	4401.5	4389.6	4392.6
35°	4078.8	4090.8	4084.8	4072.9
37.5°	3806.9	3815.9	3821.9	3815.9
40°	3579.8	3606.7	3609.7	3615.7
42.5°	3337.8	3373.6	3385.6	3391.5
45°	3047.9	3080.8	3107.7	3101.7
47.5°	2752.1	2776.0	2799.9	2782.0
50°	2468.2	2483.1	2492.1	2492.1
52.5°	2199.3	2199.3	2196.3	2199.3
55°	1891.5	1891.5	1879.6	1885.5
57.5°	1568.8	1574.8	1565.8	1550.8
60°	1269.9	1255.0	1249.0	1240.1
62.5°	989.1	989.1	968.2	995.0
65°	741.1	732.1	723.1	720.1
67.5°	537.8	534.9	525.9	522.9
70°	379.5	367.5	364.6	358.6
72.5°	254.0	254.0	248.0	248.0
75°	155.4	140.5	137.5	140.5
77.5°	107.6	104.6	104.6	101.6
80°	71.7	68.7	74.7	65.7
82.5°	44.8	47.8	44.8	47.8
85°	29.9	35.8	32.9	32.9
87.5°	17.9	17.9	17.9	17.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)