

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: P249383

Luminaire Tested: **LSR8B100D010 EC8B100950 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249383
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9942.0 lumens
Efficiency: N/A
Efficacy: 93.5 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

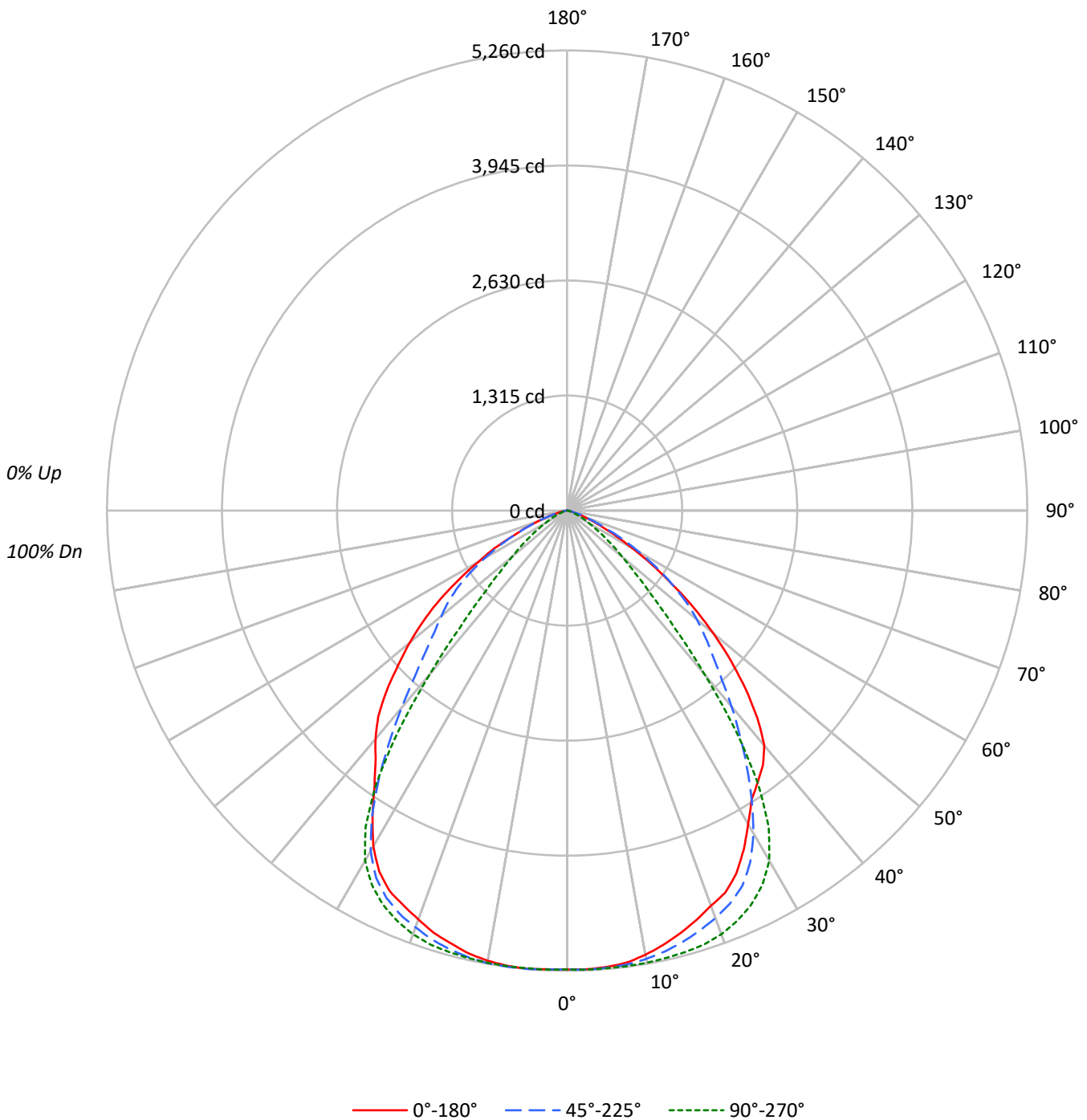
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	161755	161755	161755
5°	162110	162546	162723
10°	161429	164338	163633
15°	159640	166743	163595
20°	157724	169088	163174
25°	155677	169280	163340
30°	147276	164521	157805
35°	142882	142984	144471
40°	141110	98381	137145
45°	125738	59060	127456
50°	104552	39309	112655
55°	78411	27096	95518
60°	53137	18058	72064
65°	32053	11711	49507
70°	17770	6347	30465
75°	8054	2681	15763
80°	6997	3001	10992
85°	7961	3963	10968



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	500.6	5.0
10°-20°	1453.9	14.6
20°-30°	2206.7	22.2
30°-40°	2317.7	23.3
40°-50°	1737.6	17.5
50°-60°	1114.9	11.2
60°-70°	476.9	4.8
70°-80°	112.7	1.1
80°-90°	21.0	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°	4161.2	41.9
0°-40°	6478.9	65.2
0°-60°	9331.4	93.9
0°-90°	9942.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9942.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5246	5246	5246	5246	5246	
5°	5237	5246	5251	5260	5257	497
15°	5001	5105	5223	5189	5124	1410
25°	4576	4736	4975	4885	4801	2090
35°	3796	3584	3798	3753	3838	2382
45°	2883	2357	1354	2289	2923	2208
55°	1458	1458	504	1520	1777	1323
65°	439	518	160	667	678	469
75°	68	79	22	135	132	98
85°	22	14	11	22	31	24
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°	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6
2.5°	5248.4	5254.1	5251.2	5251.2	5248.4	5251.2	5251.2	5256.9	5256.9	5251.2	5248.4
5°	5237.1	5242.8	5242.8	5237.1	5237.1	5251.2	5242.8	5248.4	5248.4	5245.6	5245.6
7.5°	5211.8	5211.8	5223.1	5214.7	5214.7	5223.1	5220.2	5225.9	5231.5	5234.4	5234.4
10°	5155.5	5161.1	5164.0	5164.0	5166.8	5175.2	5180.8	5192.1	5197.7	5203.4	5206.2
12.5°	5085.1	5093.5	5096.4	5093.5	5102.0	5113.2	5127.4	5141.4	5149.9	5161.1	5169.6
15°	5000.6	5000.6	5006.3	5014.7	5020.4	5037.3	5051.3	5068.2	5090.7	5104.8	5118.9
17.5°	4907.7	4913.4	4921.8	4921.8	4933.1	4961.2	4969.7	4995.0	5020.4	5034.4	5062.6
20°	4806.4	4812.0	4820.4	4826.1	4840.1	4862.7	4879.6	4902.1	4930.3	4955.6	4983.7
22.5°	4727.5	4716.3	4721.9	4727.5	4741.6	4761.3	4781.0	4809.1	4837.3	4862.7	4890.9
25°	4575.5	4578.3	4586.8	4592.3	4609.3	4626.2	4648.7	4682.4	4707.8	4736.0	4766.9
27.5°	4369.9	4372.8	4386.8	4386.8	4400.9	4429.1	4443.1	4471.3	4505.1	4533.2	4569.9
30°	4136.2	4141.8	4141.8	4153.1	4161.5	4175.7	4189.7	4217.9	4234.8	4260.1	4310.8
32.5°	3922.3	3927.8	3925.0	3922.3	3913.8	3911.0	3908.1	3913.8	3919.4	3927.8	3947.5
35°	3795.6	3781.4	3770.2	3750.5	3728.0	3699.8	3674.4	3640.7	3609.7	3584.3	3556.2
37.5°	3674.4	3671.6	3654.7	3626.6	3581.5	3530.9	3471.8	3398.5	3325.3	3246.5	3170.5
40°	3505.5	3497.0	3483.0	3443.6	3392.9	3330.9	3252.1	3162.0	3043.7	2922.7	2798.8
42.5°	3218.3	3221.1	3204.2	3173.2	3125.4	3066.2	2984.6	2886.1	2759.4	2615.7	2455.3
45°	2883.3	2883.3	2877.6	2852.3	2818.5	2770.6	2708.7	2627.0	2503.2	2356.7	2184.9
47.5°	2534.1	2536.9	2528.4	2522.9	2508.7	2477.8	2432.8	2370.8	2283.5	2142.7	1970.9
50°	2179.4	2179.4	2193.4	2190.6	2190.6	2179.4	2159.6	2123.0	2047.0	1934.4	1773.9
52.5°	1824.5	1830.2	1838.7	1849.9	1864.0	1886.5	1864.0	1847.1	1799.2	1711.9	1574.0
55°	1458.5	1464.2	1478.2	1497.9	1514.9	1537.4	1543.0	1543.0	1517.6	1458.5	1354.3
57.5°	1146.0	1137.5	1148.8	1165.7	1188.2	1210.8	1227.6	1247.3	1244.5	1205.1	1120.6
60°	861.6	864.4	872.8	889.8	906.7	926.4	948.9	965.8	974.2	954.5	901.0
62.5°	627.9	627.9	639.1	656.0	664.5	692.7	706.7	715.2	723.6	720.8	687.0
65°	439.3	444.9	450.5	459.0	467.4	484.3	492.7	509.6	515.3	518.1	492.7
67.5°	309.8	301.3	306.9	312.5	321.0	332.3	349.2	349.2	357.6	357.6	340.7
70°	197.1	197.1	199.9	208.3	214.0	216.8	222.5	228.0	236.5	233.7	233.7
72.5°	132.3	129.5	132.3	135.2	138.0	146.4	146.4	149.2	154.9	157.7	146.4
75°	67.6	70.4	76.0	73.2	81.6	76.0	78.8	87.3	84.5	78.8	78.8
77.5°	56.3	56.3	56.3	53.5	59.1	59.1	56.3	61.9	59.1	59.1	56.3
80°	39.4	42.2	39.4	36.6	39.4	36.6	36.6	36.6	36.6	36.6	33.8
82.5°	31.0	25.4	28.2	25.4	28.2	28.2	25.4	22.5	22.5	25.4	22.5
85°	22.5	16.9	19.7	19.7	16.9	16.9	16.9	16.9	16.9	14.1	14.1
87.5°	14.1	8.5	8.5	8.5	11.2	11.2	11.2	8.5	11.2	11.2	5.6
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°	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6
2.5°	5254.1	5251.2	5256.9	5254.1	5254.1	5251.2	5254.1	5251.2	5256.9	5245.6	5248.4
5°	5254.1	5248.4	5251.2	5254.1	5256.9	5251.2	5251.2	5251.2	5256.9	5251.2	5254.1
7.5°	5242.8	5239.9	5248.4	5254.1	5251.2	5248.4	5254.1	5251.2	5256.9	5254.1	5259.7
10°	5220.2	5223.1	5228.7	5237.1	5239.9	5242.8	5248.4	5248.4	5256.9	5245.6	5251.2
12.5°	5186.5	5197.7	5211.8	5217.4	5228.7	5228.7	5234.4	5237.1	5242.8	5239.9	5248.4
15°	5144.2	5158.3	5175.2	5189.3	5203.4	5211.8	5220.2	5223.1	5231.5	5223.1	5225.9
17.5°	5093.5	5110.4	5135.8	5152.7	5175.2	5183.7	5194.9	5200.5	5209.0	5203.4	5206.2
20°	5023.1	5042.9	5071.0	5096.4	5110.4	5130.1	5144.2	5152.7	5158.3	5152.7	5155.5
22.5°	4924.6	4952.8	4989.4	5009.1	5037.3	5054.1	5057.0	5076.7	5090.7	5076.7	5082.3
25°	4809.1	4837.3	4865.5	4907.7	4933.1	4952.8	4972.5	4975.3	4989.4	4986.5	4983.7
27.5°	4617.7	4654.3	4702.2	4736.0	4769.7	4800.7	4823.3	4828.9	4843.0	4837.3	4840.1
30°	4355.8	4395.3	4440.3	4493.8	4541.7	4572.6	4600.8	4620.5	4634.6	4626.2	4623.3
32.5°	3984.2	4023.6	4071.5	4124.9	4181.3	4226.3	4260.1	4285.5	4302.4	4296.7	4282.6
35°	3559.0	3570.3	3601.3	3643.5	3691.3	3739.2	3770.2	3798.3	3818.0	3823.7	3823.7
37.5°	3122.6	3086.0	3063.5	3063.5	3091.6	3111.3	3139.5	3156.4	3187.4	3198.6	3207.1
40°	2700.2	2615.7	2536.9	2477.8	2438.4	2435.6	2435.6	2444.0	2472.2	2508.7	2542.6
42.5°	2322.9	2187.8	2066.7	1956.9	1878.1	1833.0	1813.3	1816.1	1838.7	1872.4	1928.7
45°	2021.7	1852.7	1700.7	1568.3	1461.3	1390.9	1357.2	1354.3	1371.2	1410.6	1472.6
47.5°	1788.0	1607.7	1436.0	1283.9	1168.5	1092.5	1053.1	1041.8	1053.1	1089.6	1162.9
50°	1593.7	1407.9	1230.5	1072.8	948.9	870.1	833.4	819.4	833.4	864.4	937.6
52.5°	1413.5	1222.0	1055.9	903.8	771.5	703.9	664.5	656.0	664.5	701.1	760.3
55°	1205.1	1041.8	878.5	726.4	611.0	543.4	512.4	504.0	512.4	546.3	608.2
57.5°	999.6	858.8	715.2	577.2	478.7	419.5	391.4	380.1	399.8	422.3	495.6
60°	808.1	695.5	574.4	453.3	371.7	318.2	295.6	292.8	298.5	326.6	377.3
62.5°	633.6	540.6	444.9	346.3	278.7	256.2	228.0	225.3	230.9	247.7	287.2
65°	456.2	397.0	323.8	253.4	199.9	168.9	157.7	160.5	166.1	177.4	214.0
67.5°	318.2	275.9	225.3	177.4	138.0	123.9	112.6	109.8	112.6	132.3	152.1
70°	214.0	188.6	152.1	135.2	95.8	76.0	78.8	70.4	81.6	81.6	98.5
72.5°	140.8	123.9	101.3	78.8	67.6	53.5	53.5	50.7	56.3	59.1	73.2
75°	73.2	56.3	56.3	39.4	28.2	14.1	25.4	22.5	19.7	22.5	28.2
77.5°	50.7	42.2	39.4	31.0	28.2	22.5	22.5	22.5	22.5	25.4	28.2
80°	31.0	31.0	22.5	19.7	16.9	14.1	16.9	16.9	16.9	16.9	19.7
82.5°	19.7	16.9	16.9	14.1	14.1	11.2	11.2	11.2	11.2	11.2	16.9
85°	16.9	11.2	11.2	8.5	11.2	19.7	8.5	11.2	11.2	11.2	8.5
87.5°	5.6	8.5	8.5	8.5	5.6	2.8	5.6	8.5	8.5	14.1	11.2
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6	5245.6
2.5°	5254.1	5256.9	5256.9	5254.1	5254.1	5248.4	5259.7	5251.2	5254.1	5265.3	5256.9
5°	5259.7	5262.5	5262.5	5259.7	5259.7	5259.7	5262.5	5262.5	5259.7	5256.9	5262.5
7.5°	5270.9	5268.1	5268.1	5262.5	5262.5	5256.9	5262.5	5254.1	5259.7	5254.1	5262.5
10°	5256.9	5259.7	5256.9	5254.1	5254.1	5251.2	5251.2	5242.8	5245.6	5237.1	5242.8
12.5°	5248.4	5245.6	5245.6	5239.9	5234.4	5228.7	5225.9	5217.4	5217.4	5197.7	5206.2
15°	5225.9	5228.7	5220.2	5209.0	5203.4	5189.3	5183.7	5172.4	5161.1	5147.1	5149.9
17.5°	5206.2	5197.7	5186.5	5175.2	5152.7	5141.4	5130.1	5113.2	5107.6	5090.7	5085.1
20°	5147.1	5141.4	5127.4	5107.6	5093.5	5068.2	5057.0	5040.1	5026.0	5009.1	5000.6
22.5°	5071.0	5065.4	5048.5	5028.8	5006.3	4995.0	4983.7	4952.8	4938.7	4921.8	4919.0
25°	4975.3	4966.8	4950.0	4927.4	4916.1	4885.2	4873.9	4851.4	4845.8	4828.9	4826.1
27.5°	4828.9	4817.6	4797.9	4769.7	4750.0	4730.3	4719.1	4702.2	4696.6	4679.6	4676.9
30°	4609.3	4595.2	4555.7	4544.5	4510.7	4491.0	4491.0	4468.5	4471.3	4460.1	4460.1
32.5°	4262.9	4240.4	4209.4	4186.9	4164.4	4153.1	4153.1	4144.7	4150.3	4150.3	4156.0
35°	3804.0	3773.0	3756.1	3742.0	3742.0	3753.3	3787.1	3795.6	3812.4	3826.5	3837.8
37.5°	3215.5	3212.7	3232.4	3249.3	3291.5	3339.4	3398.5	3449.2	3497.0	3530.9	3564.6
40°	2579.2	2649.6	2705.9	2784.7	2849.4	2942.4	3049.4	3136.7	3218.3	3277.5	3339.4
42.5°	2013.2	2103.3	2221.6	2337.0	2452.5	2579.2	2720.0	2841.0	2948.0	3029.7	3094.4
45°	1568.3	1692.2	1835.8	1982.2	2131.5	2289.2	2435.6	2559.4	2672.1	2756.6	2821.3
47.5°	1264.2	1399.4	1562.7	1723.2	1892.1	2058.2	2221.6	2328.6	2421.5	2489.0	2548.2
50°	1044.6	1188.2	1360.0	1543.0	1711.9	1878.1	2018.8	2123.0	2199.1	2258.2	2294.8
52.5°	872.8	1024.9	1207.9	1390.9	1559.9	1711.9	1838.7	1917.5	1979.4	2021.7	2055.4
55°	720.8	867.2	1039.0	1210.8	1376.9	1520.4	1624.6	1683.8	1731.6	1757.0	1776.7
57.5°	588.5	723.6	881.3	1039.0	1182.6	1300.9	1382.5	1441.6	1464.2	1483.9	1481.0
60°	461.8	588.5	732.1	867.2	991.1	1086.8	1146.0	1179.8	1196.6	1205.1	1199.5
62.5°	363.2	478.7	588.5	706.7	796.8	878.5	934.8	934.8	943.2	946.1	954.5
65°	270.3	357.6	453.3	540.6	613.8	667.3	698.3	706.7	718.0	715.2	709.5
67.5°	199.9	264.7	335.0	399.8	450.5	484.3	506.8	526.6	523.7	518.1	515.3
70°	138.0	180.2	242.2	281.6	318.2	352.0	357.6	360.4	363.2	366.0	360.4
72.5°	95.8	126.7	160.5	194.3	216.8	230.9	245.0	247.7	247.7	247.7	245.0
75°	47.9	64.8	95.8	109.8	129.5	135.2	146.4	146.4	154.9	143.6	140.8
77.5°	42.2	50.7	67.6	78.8	87.3	95.8	98.5	107.0	104.2	98.5	101.3
80°	25.4	31.0	42.2	47.9	59.1	61.9	64.8	67.6	64.8	67.6	67.6
82.5°	19.7	22.5	28.2	28.2	36.6	36.6	39.4	39.4	42.2	42.2	42.2
85°	11.2	19.7	16.9	33.8	22.5	22.5	28.2	33.8	28.2	28.2	33.8
87.5°	11.2	11.2	8.5	11.2	11.2	11.2	14.1	16.9	16.9	19.7	16.9
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: P249383

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5245.6	5245.6	5245.6	5245.6
2.5°	5254.1	5259.7	5251.2	5248.4
5°	5262.5	5262.5	5256.9	5256.9
7.5°	5262.5	5262.5	5254.1	5248.4
10°	5239.9	5239.9	5231.5	5225.9
12.5°	5197.7	5197.7	5194.9	5186.5
15°	5144.2	5144.2	5133.0	5124.5
17.5°	5071.0	5076.7	5062.6	5062.6
20°	4992.2	4989.4	4978.1	4972.5
22.5°	4910.6	4904.9	4902.1	4885.2
25°	4823.3	4817.6	4809.1	4800.7
27.5°	4674.0	4671.2	4662.7	4651.5
30°	4445.9	4443.1	4431.9	4431.9
32.5°	4150.3	4147.5	4136.2	4139.1
35°	3843.4	3854.7	3849.0	3837.8
37.5°	3587.2	3595.6	3601.3	3595.6
40°	3373.2	3398.5	3401.3	3407.0
42.5°	3145.1	3178.9	3190.2	3195.8
45°	2872.0	2903.0	2928.3	2922.7
47.5°	2593.2	2615.7	2638.3	2621.4
50°	2325.8	2339.8	2348.3	2348.3
52.5°	2072.4	2072.4	2069.5	2072.4
55°	1782.3	1782.3	1771.1	1776.7
57.5°	1478.2	1483.9	1475.4	1461.3
60°	1196.6	1182.6	1176.9	1168.5
62.5°	932.0	932.0	912.3	937.6
65°	698.3	689.8	681.4	678.5
67.5°	506.8	504.0	495.6	492.7
70°	357.6	346.3	343.5	337.9
72.5°	239.3	239.3	233.7	233.7
75°	146.4	132.3	129.5	132.3
77.5°	101.3	98.5	98.5	95.8
80°	67.6	64.8	70.4	61.9
82.5°	42.2	45.1	42.2	45.1
85°	28.2	33.8	31.0	31.0
87.5°	16.9	16.9	16.9	16.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)