

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: P249483

Luminaire Tested: **LSR8B120D010 EC8B120940 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249483
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: LSR8B120D010 EC8B120940 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9855.0 lumens
Efficiency: N/A
Efficacy: 83.3 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

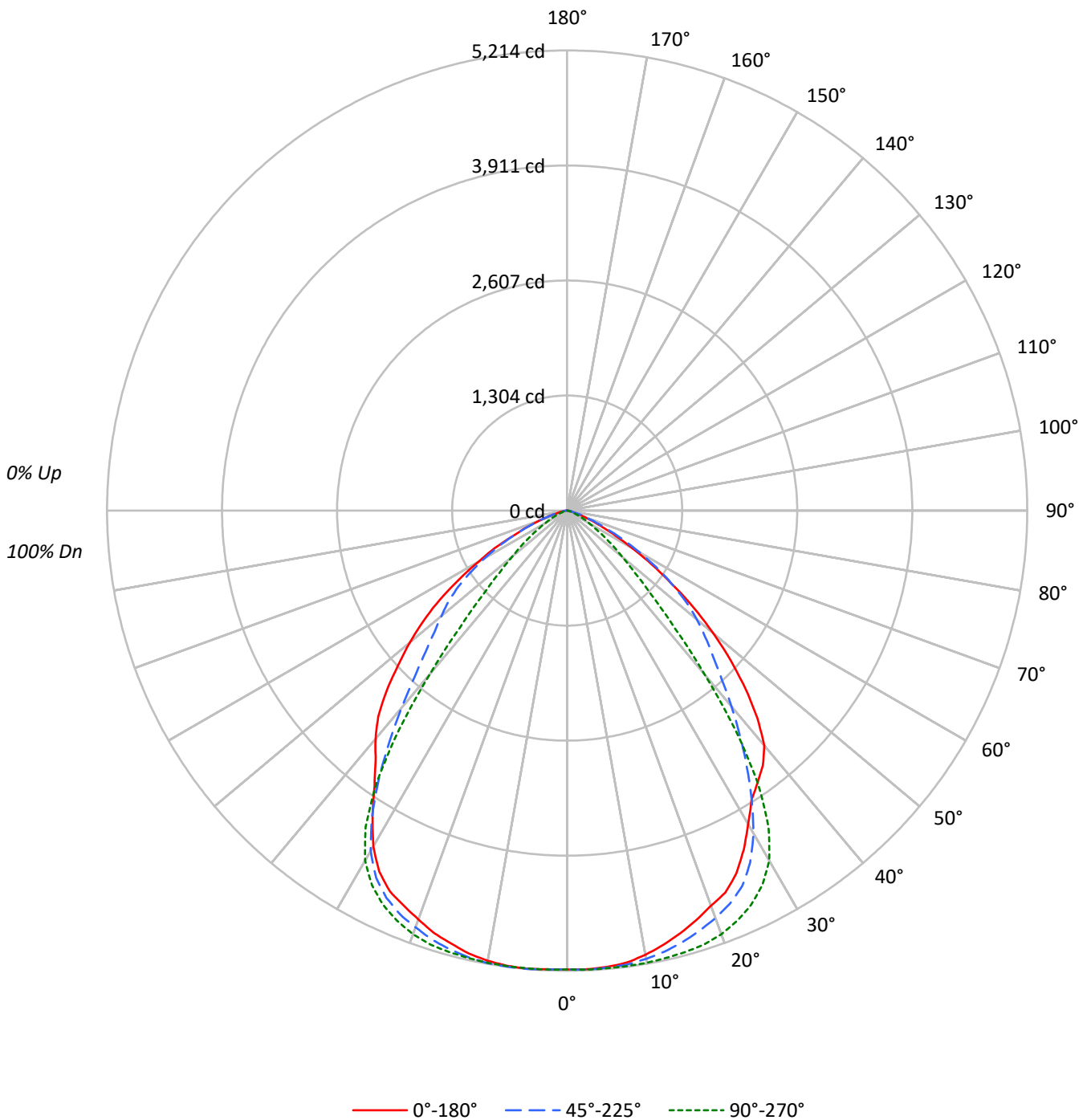
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	160340	160340	160340
5°	160692	161125	161299
10°	160017	162901	162202
15°	158241	165284	162165
20°	156342	167608	161747
25°	154313	167800	161911
30°	145991	163082	156424
35°	141629	141734	143206
40°	139874	97519	135946
45°	124635	58545	126340
50°	103636	38963	111666
55°	77723	26859	94679
60°	52675	17897	71435
65°	31769	11609	49076
70°	17617	6293	30194
75°	7983	2657	15631
80°	6943	2966	10903
85°	7890	3927	10862



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	496.2	5.0
10°-20°	1441.1	14.6
20°-30°	2187.4	22.2
30°-40°	2297.4	23.3
40°-50°	1722.4	17.5
50°-60°	1105.2	11.2
60°-70°	472.8	4.8
70°-80°	111.7	1.1
80°-90°	20.8	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°	4124.8	41.9
0°-40°	6422.2	65.2
0°-60°	9249.8	93.9
0°-90°	9855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9855.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5200	5200	5200	5200	5200	
5°	5191	5200	5205	5214	5211	493
15°	4957	5060	5177	5144	5080	1398
25°	4535	4694	4932	4842	4759	2072
35°	3762	3553	3765	3720	3804	2361
45°	2858	2336	1342	2269	2897	2189
55°	1446	1446	500	1507	1761	1311
65°	435	514	159	662	673	465
75°	67	78	22	134	131	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°	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7
2.5°	5202.5	5208.1	5205.3	5205.3	5202.5	5205.3	5205.3	5210.9	5210.9	5205.3	5202.5
5°	5191.3	5196.9	5196.9	5191.3	5191.3	5205.3	5196.9	5202.5	5202.5	5199.7	5199.7
7.5°	5166.2	5166.2	5177.4	5169.0	5169.0	5177.4	5174.6	5180.2	5185.8	5188.6	5188.6
10°	5110.4	5116.0	5118.8	5118.8	5121.6	5129.9	5135.5	5146.7	5152.2	5157.8	5160.6
12.5°	5040.6	5049.0	5051.8	5049.0	5057.4	5068.5	5082.5	5096.4	5104.8	5116.0	5124.4
15°	4956.8	4956.8	4962.4	4970.8	4976.4	4993.2	5007.1	5023.8	5046.2	5060.2	5074.1
17.5°	4864.8	4870.4	4878.7	4878.7	4889.9	4917.8	4926.2	4951.3	4976.4	4990.4	5018.3
20°	4764.3	4769.9	4778.3	4783.9	4797.8	4820.1	4836.9	4859.2	4887.1	4912.2	4940.1
22.5°	4686.1	4675.0	4680.5	4686.1	4700.1	4719.7	4739.2	4767.1	4795.0	4820.1	4848.1
25°	4535.4	4538.2	4546.6	4552.1	4568.9	4585.7	4608.0	4641.5	4666.6	4694.5	4725.2
27.5°	4331.7	4334.5	4348.4	4348.4	4362.4	4390.3	4404.2	4432.2	4465.7	4493.6	4529.9
30°	4100.1	4105.6	4105.6	4116.8	4125.1	4139.1	4153.0	4181.0	4197.7	4222.8	4273.1
32.5°	3887.9	3893.5	3890.7	3887.9	3879.5	3876.7	3873.9	3879.5	3885.1	3893.5	3913.0
35°	3762.3	3748.3	3737.2	3717.7	3695.4	3667.4	3642.3	3608.8	3578.1	3553.0	3525.1
37.5°	3642.3	3639.5	3622.8	3594.8	3550.2	3500.0	3441.4	3368.8	3296.2	3218.1	3142.7
40°	3474.8	3466.4	3452.5	3413.4	3363.2	3301.8	3223.7	3134.3	3017.1	2897.1	2774.3
42.5°	3190.1	3192.9	3176.2	3145.5	3098.1	3039.4	2958.5	2860.8	2735.2	2592.8	2433.8
45°	2858.0	2858.0	2852.4	2827.3	2793.8	2746.4	2685.0	2604.0	2481.3	2336.1	2165.8
47.5°	2511.9	2514.7	2506.3	2500.8	2486.8	2456.1	2411.5	2350.1	2263.5	2124.0	1953.7
50°	2160.3	2160.3	2174.2	2171.4	2171.4	2160.3	2140.8	2104.4	2029.1	1917.4	1758.4
52.5°	1808.6	1814.2	1822.6	1833.7	1847.6	1870.0	1847.6	1830.9	1783.4	1696.9	1560.2
55°	1445.7	1451.3	1465.3	1484.8	1501.6	1523.9	1529.5	1529.5	1504.3	1445.7	1342.5
57.5°	1136.0	1127.6	1138.8	1155.5	1177.8	1200.2	1216.9	1236.4	1233.6	1194.6	1110.8
60°	854.1	856.9	865.2	882.0	898.7	918.3	940.6	957.3	965.7	946.2	893.1
62.5°	622.4	622.4	633.5	650.3	658.7	686.6	700.5	708.9	717.3	714.5	681.0
65°	435.4	441.0	446.6	455.0	463.3	480.0	488.4	505.2	510.8	513.6	488.4
67.5°	307.0	298.6	304.2	309.8	318.2	329.4	346.1	346.1	354.4	354.4	337.7
70°	195.4	195.4	198.2	206.5	212.1	214.9	220.5	226.0	234.4	231.6	231.6
72.5°	131.2	128.4	131.2	134.0	136.8	145.1	145.1	147.9	153.5	156.3	145.1
75°	67.0	69.8	75.3	72.6	80.9	75.3	78.1	86.5	83.7	78.1	78.1
77.5°	55.8	55.8	55.8	53.1	58.6	58.6	55.8	61.4	58.6	58.6	55.8
80°	39.1	41.9	39.1	36.3	39.1	36.3	36.3	36.3	36.3	36.3	33.5
82.5°	30.7	25.1	27.9	25.1	27.9	27.9	25.1	22.3	22.3	25.1	22.3
85°	22.3	16.7	19.5	19.5	16.7	16.7	16.7	16.7	16.7	13.9	13.9
87.5°	13.9	8.4	8.4	8.4	11.1	11.1	11.1	8.4	11.1	11.1	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°	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7
2.5°	5208.1	5205.3	5210.9	5208.1	5208.1	5205.3	5208.1	5205.3	5210.9	5199.7	5202.5
5°	5208.1	5202.5	5205.3	5208.1	5210.9	5205.3	5205.3	5205.3	5210.9	5205.3	5208.1
7.5°	5196.9	5194.1	5202.5	5208.1	5205.3	5202.5	5208.1	5205.3	5210.9	5208.1	5213.6
10°	5174.6	5177.4	5183.0	5191.3	5194.1	5196.9	5202.5	5202.5	5210.9	5199.7	5205.3
12.5°	5141.1	5152.2	5166.2	5171.8	5183.0	5183.0	5188.6	5191.3	5196.9	5194.1	5202.5
15°	5099.2	5113.2	5129.9	5143.9	5157.8	5166.2	5174.6	5177.4	5185.8	5177.4	5180.2
17.5°	5049.0	5065.7	5090.8	5107.6	5129.9	5138.3	5149.4	5155.0	5163.4	5157.8	5160.6
20°	4979.2	4998.8	5026.6	5051.8	5065.7	5085.2	5099.2	5107.6	5113.2	5107.6	5110.4
22.5°	4881.5	4909.4	4945.7	4965.2	4993.2	5009.9	5012.7	5032.2	5046.2	5032.2	5037.8
25°	4767.1	4795.0	4822.9	4864.8	4889.9	4909.4	4929.0	4931.8	4945.7	4942.9	4940.1
27.5°	4577.3	4613.6	4661.0	4694.5	4728.0	4758.7	4781.1	4786.6	4800.6	4795.0	4797.8
30°	4317.7	4356.8	4401.5	4454.5	4502.0	4532.6	4560.5	4580.1	4594.0	4585.7	4582.9
32.5°	3949.3	3988.4	4035.9	4088.9	4144.7	4189.3	4222.8	4248.0	4264.7	4259.1	4245.2
35°	3527.9	3539.0	3569.8	3611.6	3659.0	3706.5	3737.2	3765.1	3784.6	3790.2	3790.2
37.5°	3095.3	3059.0	3036.7	3036.7	3064.5	3084.1	3112.0	3128.7	3159.5	3170.6	3179.0
40°	2676.6	2592.8	2514.7	2456.1	2417.1	2414.3	2414.3	2422.6	2450.5	2486.8	2520.3
42.5°	2302.6	2168.6	2048.6	1939.8	1861.6	1817.0	1797.4	1800.2	1822.6	1856.0	1911.8
45°	2004.0	1836.5	1685.8	1554.6	1448.5	1378.8	1345.3	1342.5	1359.2	1398.3	1459.7
47.5°	1772.3	1593.7	1423.4	1272.7	1158.3	1082.9	1043.8	1032.7	1043.8	1080.1	1152.7
50°	1579.7	1395.5	1219.7	1063.4	940.6	862.5	826.1	812.2	826.1	856.9	929.4
52.5°	1401.1	1211.3	1046.6	895.9	764.7	697.7	658.7	650.3	658.7	694.9	753.6
55°	1194.6	1032.7	870.8	720.1	605.7	538.7	508.0	499.6	508.0	541.5	602.9
57.5°	990.8	851.3	708.9	572.2	474.5	415.8	388.0	376.8	396.3	418.6	491.2
60°	801.0	689.4	569.4	449.4	368.4	315.4	293.0	290.2	295.8	323.8	374.0
62.5°	628.0	535.9	441.0	343.3	276.3	254.0	226.0	223.3	228.8	245.6	284.7
65°	452.2	393.6	321.0	251.2	198.2	167.5	156.3	159.1	164.7	175.9	212.1
67.5°	315.4	273.5	223.3	175.9	136.8	122.8	111.7	108.9	111.7	131.2	150.7
70°	212.1	187.0	150.7	134.0	94.9	75.3	78.1	69.8	80.9	80.9	97.7
72.5°	139.5	122.8	100.5	78.1	67.0	53.1	53.1	50.3	55.8	58.6	72.6
75°	72.6	55.8	55.8	39.1	27.9	13.9	25.1	22.3	19.5	22.3	27.9
77.5°	50.3	41.9	39.1	30.7	27.9	22.3	22.3	22.3	22.3	25.1	27.9
80°	30.7	30.7	22.3	19.5	16.7	13.9	16.7	16.7	16.7	16.7	19.5
82.5°	19.5	16.7	16.7	13.9	13.9	11.1	11.1	11.1	11.1	11.1	16.7
85°	16.7	11.1	11.1	8.4	11.1	19.5	8.4	11.1	11.1	11.1	8.4
87.5°	5.6	8.4	8.4	8.4	5.6	2.8	5.6	8.4	8.4	13.9	11.1
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°	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7	5199.7
2.5°	5208.1	5210.9	5210.9	5208.1	5208.1	5202.5	5213.6	5205.3	5208.1	5219.2	5210.9
5°	5213.6	5216.4	5216.4	5213.6	5213.6	5213.6	5216.4	5216.4	5213.6	5210.9	5216.4
7.5°	5224.8	5222.0	5222.0	5216.4	5216.4	5210.9	5216.4	5208.1	5213.6	5208.1	5216.4
10°	5210.9	5213.6	5210.9	5208.1	5208.1	5205.3	5205.3	5196.9	5199.7	5191.3	5196.9
12.5°	5202.5	5199.7	5199.7	5194.1	5188.6	5183.0	5180.2	5171.8	5171.8	5152.2	5160.6
15°	5180.2	5183.0	5174.6	5163.4	5157.8	5143.9	5138.3	5127.1	5116.0	5102.0	5104.8
17.5°	5160.6	5152.2	5141.1	5129.9	5107.6	5096.4	5085.2	5068.5	5062.9	5046.2	5040.6
20°	5102.0	5096.4	5082.5	5062.9	5049.0	5023.8	5012.7	4996.0	4982.0	4965.2	4956.8
22.5°	5026.6	5021.0	5004.3	4984.8	4962.4	4951.3	4940.1	4909.4	4895.5	4878.7	4875.9
25°	4931.8	4923.4	4906.6	4884.3	4873.1	4842.5	4831.3	4808.9	4803.4	4786.6	4783.9
27.5°	4786.6	4775.5	4755.9	4728.0	4708.5	4688.9	4677.8	4661.0	4655.5	4638.7	4635.9
30°	4568.9	4554.9	4515.9	4504.8	4471.2	4451.7	4451.7	4429.4	4432.2	4421.0	4421.0
32.5°	4225.6	4203.3	4172.6	4150.2	4127.9	4116.8	4116.8	4108.4	4114.0	4114.0	4119.6
35°	3770.7	3740.0	3723.2	3709.3	3709.3	3720.4	3753.9	3762.3	3779.1	3793.0	3804.2
37.5°	3187.3	3184.6	3204.1	3220.9	3262.7	3310.2	3368.8	3419.0	3466.4	3500.0	3533.4
40°	2556.6	2626.4	2682.2	2760.4	2824.5	2916.6	3022.7	3109.2	3190.1	3248.8	3310.2
42.5°	1995.6	2084.9	2202.1	2316.5	2431.0	2556.6	2696.2	2816.2	2922.2	3003.1	3067.3
45°	1554.6	1677.4	1819.8	1964.9	2112.8	2269.1	2414.3	2537.1	2648.7	2732.4	2796.6
47.5°	1253.2	1387.1	1549.0	1708.1	1875.6	2040.2	2202.1	2308.2	2400.3	2467.3	2525.9
50°	1035.4	1177.8	1348.1	1529.5	1696.9	1861.6	2001.2	2104.4	2179.8	2238.4	2274.7
52.5°	865.2	1015.9	1197.4	1378.8	1546.2	1696.9	1822.6	1900.7	1962.1	2004.0	2037.4
55°	714.5	859.7	1029.9	1200.2	1364.8	1507.1	1610.4	1669.1	1716.5	1741.6	1761.1
57.5°	583.3	717.3	873.6	1029.9	1172.2	1289.5	1370.4	1429.0	1451.3	1470.9	1468.1
60°	457.8	583.3	725.7	859.7	982.4	1077.3	1136.0	1169.4	1186.2	1194.6	1189.0
62.5°	360.0	474.5	583.3	700.5	789.9	870.8	926.7	926.7	935.0	937.8	946.2
65°	267.9	354.4	449.4	535.9	608.4	661.5	692.2	700.5	711.7	708.9	703.3
67.5°	198.2	262.4	332.1	396.3	446.6	480.0	502.4	522.0	519.2	513.6	510.8
70°	136.8	178.7	240.0	279.1	315.4	348.9	354.4	357.2	360.0	362.8	357.2
72.5°	94.9	125.6	159.1	192.6	214.9	228.8	242.8	245.6	245.6	245.6	242.8
75°	47.5	64.2	94.9	108.9	128.4	134.0	145.1	145.1	153.5	142.3	139.5
77.5°	41.9	50.3	67.0	78.1	86.5	94.9	97.7	106.1	103.3	97.7	100.5
80°	25.1	30.7	41.9	47.5	58.6	61.4	64.2	67.0	64.2	67.0	67.0
82.5°	19.5	22.3	27.9	27.9	36.3	36.3	39.1	39.1	41.9	41.9	41.9
85°	11.1	19.5	16.7	33.5	22.3	22.3	27.9	33.5	27.9	27.9	33.5
87.5°	11.1	11.1	8.4	11.1	11.1	11.1	13.9	16.7	16.7	19.5	16.7
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: P249483

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5199.7	5199.7	5199.7	5199.7
2.5°	5208.1	5213.6	5205.3	5202.5
5°	5216.4	5216.4	5210.9	5210.9
7.5°	5216.4	5216.4	5208.1	5202.5
10°	5194.1	5194.1	5185.8	5180.2
12.5°	5152.2	5152.2	5149.4	5141.1
15°	5099.2	5099.2	5088.0	5079.7
17.5°	5026.6	5032.2	5018.3	5018.3
20°	4948.5	4945.7	4934.6	4929.0
22.5°	4867.6	4862.0	4859.2	4842.5
25°	4781.1	4775.5	4767.1	4758.7
27.5°	4633.1	4630.3	4621.9	4610.8
30°	4407.0	4404.2	4393.1	4393.1
32.5°	4114.0	4111.2	4100.1	4102.9
35°	3809.7	3820.9	3815.3	3804.2
37.5°	3555.8	3564.2	3569.8	3564.2
40°	3343.6	3368.8	3371.6	3377.2
42.5°	3117.6	3151.1	3162.3	3167.8
45°	2846.8	2877.6	2902.7	2897.1
47.5°	2570.5	2592.8	2615.2	2598.4
50°	2305.4	2319.3	2327.7	2327.7
52.5°	2054.2	2054.2	2051.4	2054.2
55°	1766.7	1766.7	1755.6	1761.1
57.5°	1465.3	1470.9	1462.5	1448.5
60°	1186.2	1172.2	1166.6	1158.3
62.5°	923.9	923.9	904.3	929.4
65°	692.2	683.8	675.4	672.6
67.5°	502.4	499.6	491.2	488.4
70°	354.4	343.3	340.5	334.9
72.5°	237.2	237.2	231.6	231.6
75°	145.1	131.2	128.4	131.2
77.5°	100.5	97.7	97.7	94.9
80°	67.0	64.2	69.8	61.4
82.5°	41.9	44.7	41.9	44.7
85°	27.9	33.5	30.7	30.7
87.5°	16.7	16.7	16.7	16.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)