

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: P249177

Luminaire Tested: **LSR8B120D010 EC8B120927 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249177  
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 EC8B120927 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9794.2 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

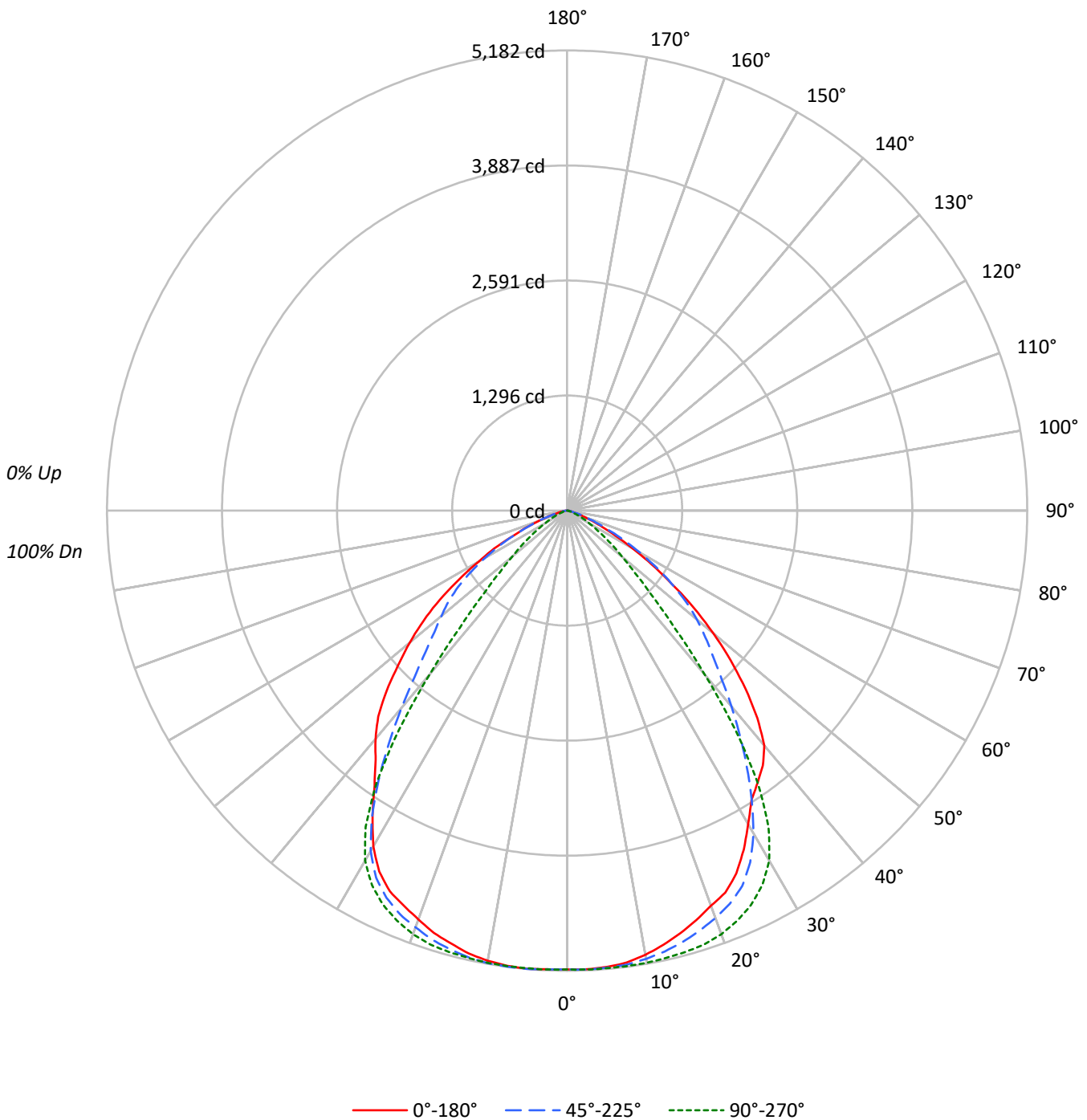
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0			
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90	90	90	90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79	79	79	79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70	70	70	70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62	62	62	62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55	55	55	55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50	50	50	50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45	45	45	45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41	41	41	41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37	37	37	37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34	34	34	34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	493.2	5.0
10°-20°	1432.3	14.6
20°-30°	2173.9	22.2
30°-40°	2283.2	23.3
40°-50°	1711.8	17.5
50°-60°	1098.3	11.2
60°-70°	469.9	4.8
70°-80°	111.0	1.1
80°-90°	20.6	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°	4099.3	41.9
0°-40°	6382.6	65.2
0°-60°	9192.7	93.9
0°-90°	9794.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9794.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5168	5168	5168	5168	5168	
5°	5159	5168	5173	5182	5179	490
15°	4926	5029	5145	5112	5048	1389
25°	4507	4666	4901	4813	4729	2059
35°	3739	3531	3742	3698	3781	2347
45°	2840	2322	1334	2255	2879	2175
55°	1437	1437	497	1498	1750	1303
65°	433	510	158	657	668	462
75°	67	78	22	133	130	97
85°	22	14	11	22	30	23
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°	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7
2.5°	5170.4	5176.0	5173.2	5173.2	5170.4	5173.2	5173.2	5178.7	5178.7	5173.2	5170.4
5°	5159.2	5164.9	5164.9	5159.2	5159.2	5173.2	5164.9	5170.4	5170.4	5167.7	5167.7
7.5°	5134.4	5134.4	5145.4	5137.2	5137.2	5145.4	5142.7	5148.2	5153.7	5156.6	5156.6
10°	5078.8	5084.4	5087.2	5087.2	5090.0	5098.3	5103.8	5114.9	5120.4	5126.1	5128.8
12.5°	5009.5	5017.8	5020.7	5017.8	5026.2	5037.3	5051.1	5065.0	5073.4	5084.4	5092.8
15°	4926.3	4926.3	4931.9	4940.2	4945.7	4962.4	4976.2	4992.9	5015.0	5029.0	5042.8
17.5°	4834.8	4840.3	4848.6	4848.6	4859.8	4887.4	4895.8	4920.8	4945.7	4959.6	4987.3
20°	4735.0	4740.4	4748.8	4754.4	4768.2	4790.4	4807.0	4829.3	4857.0	4881.9	4909.6
22.5°	4657.3	4646.1	4651.7	4657.3	4671.1	4690.6	4710.0	4737.7	4765.4	4790.4	4818.2
25°	4507.4	4510.2	4518.6	4524.1	4540.7	4557.4	4579.7	4612.8	4637.8	4665.6	4696.1
27.5°	4305.0	4307.7	4321.6	4321.6	4335.5	4363.2	4377.0	4404.8	4438.1	4465.8	4501.9
30°	4074.8	4080.3	4080.3	4091.4	4099.7	4113.6	4127.4	4155.2	4171.8	4196.8	4246.8
32.5°	3863.9	3869.4	3866.7	3863.9	3855.6	3852.8	3850.1	3855.6	3861.2	3869.4	3888.9
35°	3739.2	3725.2	3714.2	3694.7	3672.6	3644.8	3619.8	3586.6	3556.0	3531.0	3503.4
37.5°	3619.8	3617.1	3600.4	3572.7	3528.3	3478.4	3420.1	3348.0	3275.9	3198.3	3123.3
40°	3453.4	3445.1	3431.2	3392.4	3342.5	3281.4	3203.8	3115.0	2998.5	2879.2	2757.2
42.5°	3170.5	3173.3	3156.6	3126.0	3079.0	3020.6	2940.3	2843.2	2718.3	2576.8	2418.8
45°	2840.4	2840.4	2834.9	2809.9	2776.6	2729.5	2668.4	2588.0	2466.0	2321.7	2152.5
47.5°	2496.5	2499.2	2490.9	2485.4	2471.5	2441.0	2396.6	2335.6	2249.5	2110.8	1941.6
50°	2147.0	2147.0	2160.8	2158.0	2158.0	2147.0	2127.6	2091.5	2016.6	1905.6	1747.6
52.5°	1797.4	1803.0	1811.4	1822.4	1836.2	1858.5	1836.2	1819.6	1772.4	1686.5	1550.6
55°	1436.9	1442.4	1456.2	1475.7	1492.3	1514.6	1520.0	1520.0	1495.0	1436.9	1334.2
57.5°	1128.9	1120.6	1131.8	1148.4	1170.6	1192.7	1209.4	1228.8	1226.0	1187.2	1104.0
60°	848.8	851.6	859.8	876.6	893.1	912.6	934.8	951.4	959.7	940.4	887.6
62.5°	618.5	618.5	629.7	646.3	654.6	682.4	696.3	704.6	712.8	710.1	676.8
65°	432.8	438.3	443.8	452.1	460.5	477.1	485.4	502.1	507.6	510.4	485.4
67.5°	305.1	296.8	302.4	307.9	316.2	327.4	344.0	344.0	352.2	352.2	335.6
70°	194.2	194.2	197.0	205.2	210.8	213.6	219.2	224.7	233.0	230.2	230.2
72.5°	130.4	127.6	130.4	133.2	135.9	144.2	144.2	147.0	152.5	155.4	144.2
75°	66.6	69.4	74.8	72.1	80.4	74.8	77.6	86.0	83.2	77.6	77.6
77.5°	55.5	55.5	55.5	52.8	58.3	58.3	55.5	61.0	58.3	58.3	55.5
80°	38.8	41.6	38.8	36.0	38.8	36.0	36.0	36.0	36.0	36.0	33.3
82.5°	30.5	25.0	27.8	25.0	27.8	27.8	25.0	22.2	22.2	25.0	22.2
85°	22.2	16.7	19.5	19.5	16.7	16.7	16.7	16.7	16.7	13.8	13.8
87.5°	13.8	8.3	8.3	8.3	11.0	11.0	11.0	8.3	11.0	11.0	5.5
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7
2.5°	5176.0	5173.2	5178.7	5176.0	5176.0	5173.2	5176.0	5173.2	5178.7	5167.7	5170.4
5°	5176.0	5170.4	5173.2	5176.0	5178.7	5173.2	5173.2	5173.2	5178.7	5173.2	5176.0
7.5°	5164.9	5162.1	5170.4	5176.0	5173.2	5170.4	5176.0	5173.2	5178.7	5176.0	5181.5
10°	5142.7	5145.4	5151.0	5159.2	5162.1	5164.9	5170.4	5170.4	5178.7	5167.7	5173.2
12.5°	5109.4	5120.4	5134.4	5139.9	5151.0	5151.0	5156.6	5159.2	5164.9	5162.1	5170.4
15°	5067.8	5081.6	5098.3	5112.2	5126.1	5134.4	5142.7	5145.4	5153.7	5145.4	5148.2
17.5°	5017.8	5034.5	5059.5	5076.1	5098.3	5106.6	5117.7	5123.2	5131.6	5126.1	5128.8
20°	4948.5	4968.0	4995.7	5020.7	5034.5	5053.8	5067.8	5076.1	5081.6	5076.1	5078.8
22.5°	4851.4	4879.2	4915.2	4934.6	4962.4	4979.0	4981.8	5001.2	5015.0	5001.2	5006.8
25°	4737.7	4765.4	4793.2	4834.8	4859.8	4879.2	4898.6	4901.4	4915.2	4912.4	4909.6
27.5°	4549.0	4585.2	4632.3	4665.6	4698.9	4729.4	4751.6	4757.1	4771.0	4765.4	4768.2
30°	4291.1	4330.0	4374.3	4427.0	4474.2	4504.7	4532.4	4551.9	4565.7	4557.4	4554.7
32.5°	3925.0	3963.8	4011.0	4063.6	4119.2	4163.5	4196.8	4221.8	4238.4	4232.8	4219.0
35°	3506.2	3517.2	3547.8	3589.3	3636.4	3683.6	3714.2	3741.9	3761.3	3766.8	3766.8
37.5°	3076.2	3040.2	3017.9	3017.9	3045.6	3065.1	3092.8	3109.5	3140.0	3151.0	3159.5
40°	2660.1	2576.8	2499.2	2441.0	2402.2	2399.4	2399.4	2407.6	2435.4	2471.5	2504.8
42.5°	2288.4	2155.3	2036.0	1927.8	1850.2	1805.7	1786.4	1789.2	1811.4	1844.6	1900.0
45°	1991.6	1825.2	1675.4	1545.0	1439.7	1370.2	1337.0	1334.2	1350.8	1389.7	1450.7
47.5°	1761.4	1583.9	1414.7	1264.8	1151.2	1076.3	1037.4	1026.3	1037.4	1073.5	1145.6
50°	1570.0	1386.9	1212.2	1056.8	934.8	857.1	821.0	807.2	821.0	851.6	923.6
52.5°	1392.4	1203.9	1040.2	890.4	760.1	693.4	654.6	646.3	654.6	690.6	748.9
55°	1187.2	1026.3	865.5	715.6	602.0	535.4	504.8	496.6	504.8	538.2	599.2
57.5°	984.7	846.0	704.6	568.6	471.6	413.3	385.5	374.4	393.9	416.0	488.2
60°	796.1	685.1	565.9	446.6	366.2	313.4	291.3	288.4	294.0	321.8	371.7
62.5°	624.2	532.6	438.3	341.2	274.6	252.4	224.7	222.0	227.5	244.0	282.9
65°	449.3	391.2	319.0	249.6	197.0	166.4	155.4	158.2	163.7	174.7	210.8
67.5°	313.4	271.8	222.0	174.7	135.9	122.1	110.9	108.2	110.9	130.4	149.7
70°	210.8	185.8	149.7	133.2	94.4	74.8	77.6	69.4	80.4	80.4	97.1
72.5°	138.7	122.1	99.8	77.6	66.6	52.8	52.8	49.9	55.5	58.3	72.1
75°	72.1	55.5	55.5	38.8	27.8	13.8	25.0	22.2	19.5	22.2	27.8
77.5°	49.9	41.6	38.8	30.5	27.8	22.2	22.2	22.2	22.2	25.0	27.8
80°	30.5	30.5	22.2	19.5	16.7	13.8	16.7	16.7	16.7	16.7	19.5
82.5°	19.5	16.7	16.7	13.8	13.8	11.0	11.0	11.0	11.0	11.0	16.7
85°	16.7	11.0	11.0	8.3	11.0	19.5	8.3	11.0	11.0	11.0	8.3
87.5°	5.5	8.3	8.3	8.3	5.5	2.8	5.5	8.3	8.3	13.8	11.0
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°	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7	5167.7
2.5°	5176.0	5178.7	5178.7	5176.0	5176.0	5170.4	5181.5	5173.2	5176.0	5187.0	5178.7
5°	5181.5	5184.2	5184.2	5181.5	5181.5	5181.5	5184.2	5184.2	5181.5	5178.7	5184.2
7.5°	5192.7	5189.8	5189.8	5184.2	5184.2	5178.7	5184.2	5176.0	5181.5	5176.0	5184.2
10°	5178.7	5181.5	5178.7	5176.0	5176.0	5173.2	5173.2	5164.9	5167.7	5159.2	5164.9
12.5°	5170.4	5167.7	5167.7	5162.1	5156.6	5151.0	5148.2	5139.9	5139.9	5120.4	5128.8
15°	5148.2	5151.0	5142.7	5131.6	5126.1	5112.2	5106.6	5095.5	5084.4	5070.6	5073.4
17.5°	5128.8	5120.4	5109.4	5098.3	5076.1	5065.0	5053.8	5037.3	5031.7	5015.0	5009.5
20°	5070.6	5065.0	5051.1	5031.7	5017.8	4992.9	4981.8	4965.2	4951.2	4934.6	4926.3
22.5°	4995.7	4990.0	4973.5	4954.0	4931.9	4920.8	4909.6	4879.2	4865.3	4848.6	4845.8
25°	4901.4	4893.1	4876.4	4854.3	4843.1	4812.6	4801.5	4779.3	4773.8	4757.1	4754.4
27.5°	4757.1	4746.0	4726.6	4698.9	4679.4	4660.0	4649.0	4632.3	4626.8	4610.0	4607.3
30°	4540.7	4526.9	4488.1	4476.9	4443.6	4424.3	4424.3	4402.0	4404.8	4393.8	4393.8
32.5°	4199.6	4177.3	4146.9	4124.7	4102.4	4091.4	4091.4	4083.1	4088.6	4088.6	4094.2
35°	3747.5	3717.0	3700.2	3686.4	3686.4	3697.5	3730.8	3739.2	3755.8	3769.6	3780.8
37.5°	3167.7	3165.0	3184.4	3201.0	3242.6	3289.7	3348.0	3398.0	3445.1	3478.4	3511.7
40°	2540.8	2610.2	2665.7	2743.3	2807.1	2898.7	3004.1	3090.0	3170.5	3228.8	3289.7
42.5°	1983.3	2072.0	2188.6	2302.3	2416.0	2540.8	2679.5	2798.8	2904.2	2984.6	3048.4
45°	1545.0	1667.0	1808.6	1952.8	2099.8	2255.2	2399.4	2521.5	2632.4	2715.6	2779.4
47.5°	1245.5	1378.6	1539.4	1697.6	1864.0	2027.7	2188.6	2294.0	2385.5	2452.0	2510.3
50°	1029.0	1170.6	1339.8	1520.0	1686.5	1850.2	1988.8	2091.5	2166.4	2224.6	2260.7
52.5°	859.8	1009.7	1190.0	1370.2	1536.6	1686.5	1811.4	1889.0	1950.0	1991.6	2024.9
55°	710.1	854.3	1023.5	1192.7	1356.4	1497.8	1600.4	1658.8	1705.8	1730.8	1750.3
57.5°	579.7	712.8	868.2	1023.5	1165.0	1281.5	1361.9	1420.2	1442.4	1461.8	1459.0
60°	455.0	579.7	721.2	854.3	976.4	1070.7	1128.9	1162.2	1178.9	1187.2	1181.6
62.5°	357.9	471.6	579.7	696.3	785.0	865.5	920.9	920.9	929.2	932.0	940.4
65°	266.3	352.2	446.6	532.6	604.7	657.4	687.9	696.3	707.4	704.6	699.0
67.5°	197.0	260.8	330.1	393.9	443.8	477.1	499.3	518.7	515.9	510.4	507.6
70°	135.9	177.5	238.6	277.4	313.4	346.7	352.2	355.0	357.9	360.6	355.0
72.5°	94.4	124.8	158.2	191.4	213.6	227.5	241.3	244.0	244.0	244.0	241.3
75°	47.1	63.8	94.4	108.2	127.6	133.2	144.2	144.2	152.5	141.4	138.7
77.5°	41.6	49.9	66.6	77.6	86.0	94.4	97.1	105.4	102.6	97.1	99.8
80°	25.0	30.5	41.6	47.1	58.3	61.0	63.8	66.6	63.8	66.6	66.6
82.5°	19.5	22.2	27.8	27.8	36.0	36.0	38.8	38.8	41.6	41.6	41.6
85°	11.0	19.5	16.7	33.3	22.2	22.2	27.8	33.3	27.8	27.8	33.3
87.5°	11.0	11.0	8.3	11.0	11.0	11.0	13.8	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: P249177

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5167.7	5167.7	5167.7	5167.7
2.5°	5176.0	5181.5	5173.2	5170.4
5°	5184.2	5184.2	5178.7	5178.7
7.5°	5184.2	5184.2	5176.0	5170.4
10°	5162.1	5162.1	5153.7	5148.2
12.5°	5120.4	5120.4	5117.7	5109.4
15°	5067.8	5067.8	5056.7	5048.4
17.5°	4995.7	5001.2	4987.3	4987.3
20°	4918.0	4915.2	4904.2	4898.6
22.5°	4837.6	4832.0	4829.3	4812.6
25°	4751.6	4746.0	4737.7	4729.4
27.5°	4604.6	4601.8	4593.5	4582.3
30°	4379.8	4377.0	4366.0	4366.0
32.5°	4088.6	4085.9	4074.8	4077.6
35°	3786.3	3797.4	3791.8	3780.8
37.5°	3533.8	3542.2	3547.8	3542.2
40°	3323.0	3348.0	3350.8	3356.3
42.5°	3098.4	3131.7	3142.8	3148.3
45°	2829.3	2859.9	2884.8	2879.2
47.5°	2554.6	2576.8	2599.1	2582.4
50°	2291.2	2305.0	2313.3	2313.3
52.5°	2041.5	2041.5	2038.7	2041.5
55°	1755.8	1755.8	1744.8	1750.3
57.5°	1456.2	1461.8	1453.5	1439.7
60°	1178.9	1165.0	1159.4	1151.2
62.5°	918.1	918.1	898.8	923.6
65°	687.9	679.6	671.3	668.5
67.5°	499.3	496.6	488.2	485.4
70°	352.2	341.2	338.4	332.9
72.5°	235.8	235.8	230.2	230.2
75°	144.2	130.4	127.6	130.4
77.5°	99.8	97.1	97.1	94.4
80°	66.6	63.8	69.4	61.0
82.5°	41.6	44.4	41.6	44.4
85°	27.8	33.3	30.5	30.5
87.5°	16.7	16.7	16.7	16.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)