

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: P249285

Luminaire Tested: **LSR8B120D010 EC8B120927 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249285  
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 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9743.6 lumens  
Efficiency: N/A  
Efficacy: 82.4 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

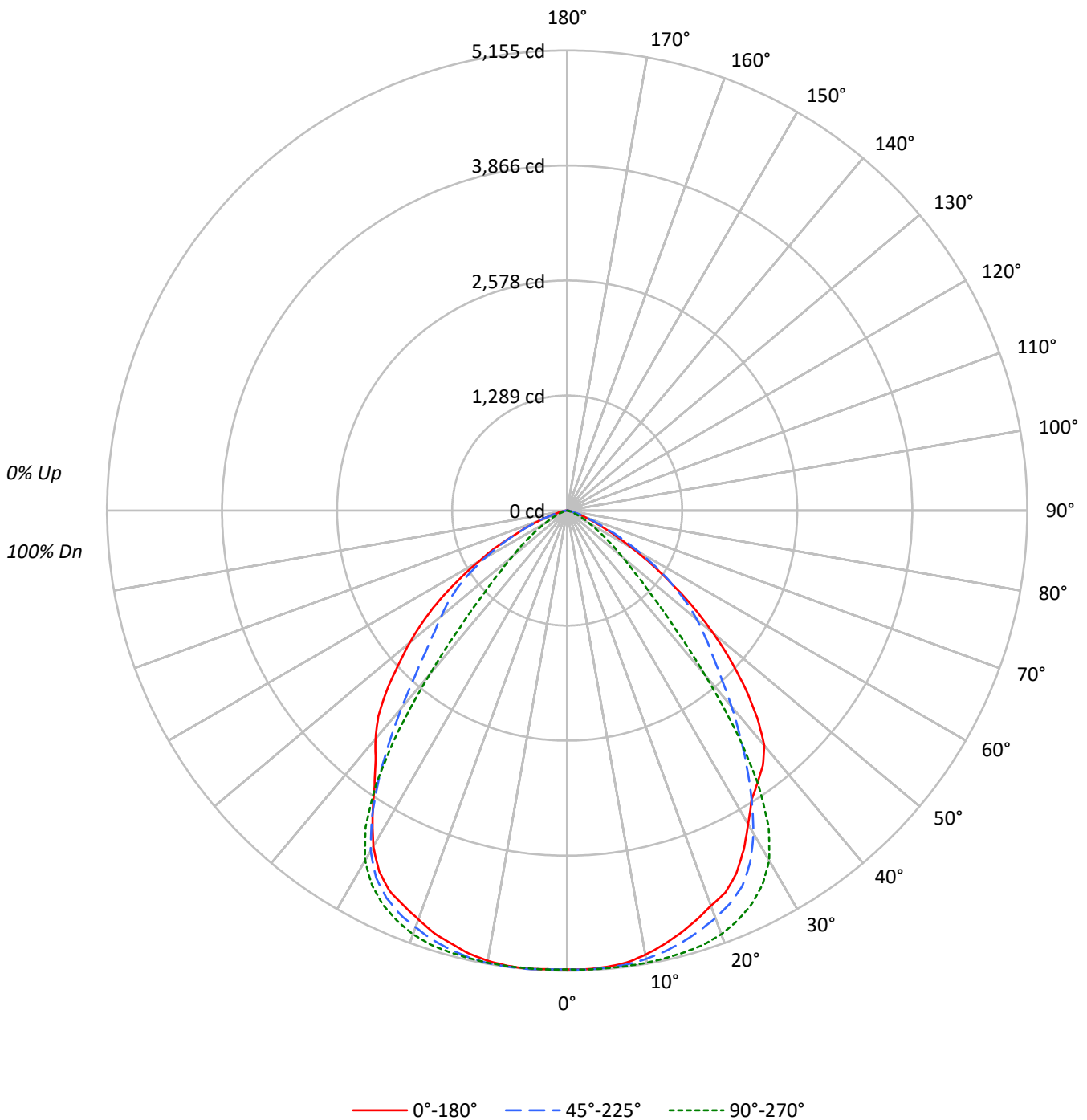
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	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°	490.6	5.0
10°-20°	1424.9	14.6
20°-30°	2162.7	22.2
30°-40°	2271.4	23.3
40°-50°	1703.0	17.5
50°-60°	1092.7	11.2
60°-70°	467.4	4.8
70°-80°	110.4	1.1
80°-90°	20.5	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°	4078.1	41.9
0°-40°	6349.6	65.2
0°-60°	9145.2	93.9
0°-90°	9743.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9743.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5141	5141	5141	5141	5141	
5°	5133	5141	5146	5155	5152	488
15°	4901	5003	5119	5086	5022	1382
25°	4484	4642	4876	4788	4705	2049
35°	3720	3513	3722	3678	3761	2335
45°	2826	2310	1327	2244	2864	2164
55°	1429	1429	494	1490	1741	1297
65°	430	508	157	654	665	460
75°	66	77	22	132	130	96
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°	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9
2.5°	5143.7	5149.2	5146.4	5146.4	5143.7	5146.4	5146.4	5152.0	5152.0	5146.4	5143.7
5°	5132.6	5138.2	5138.2	5132.6	5132.6	5146.4	5138.2	5143.7	5143.7	5140.9	5140.9
7.5°	5107.8	5107.8	5118.9	5110.7	5110.7	5118.9	5116.0	5121.6	5127.2	5129.9	5129.9
10°	5052.6	5058.1	5060.9	5060.9	5063.7	5072.0	5077.5	5088.5	5094.0	5099.5	5102.3
12.5°	4983.6	4992.0	4994.7	4992.0	5000.2	5011.2	5025.0	5038.9	5047.1	5058.1	5066.4
15°	4900.8	4900.8	4906.3	4914.7	4920.2	4936.7	4950.6	4967.1	4989.2	5003.0	5016.7
17.5°	4809.8	4815.3	4823.6	4823.6	4834.7	4862.2	4870.5	4895.3	4920.2	4934.0	4961.6
20°	4710.5	4716.0	4724.2	4729.8	4743.6	4765.6	4782.2	4804.3	4831.9	4856.7	4884.3
22.5°	4633.2	4622.2	4627.7	4633.2	4647.0	4666.3	4685.6	4713.2	4740.8	4765.6	4793.3
25°	4484.1	4487.0	4495.3	4500.7	4517.3	4533.9	4555.9	4589.0	4613.8	4641.5	4671.8
27.5°	4282.8	4285.5	4299.3	4299.3	4313.0	4340.7	4354.4	4382.1	4415.2	4442.7	4478.7
30°	4053.7	4059.2	4059.2	4070.2	4078.5	4092.3	4106.1	4133.7	4150.2	4175.1	4224.8
32.5°	3844.0	3849.4	3846.7	3844.0	3835.7	3832.9	3830.2	3835.7	3841.2	3849.4	3868.8
35°	3719.8	3706.0	3695.0	3675.7	3653.6	3626.0	3601.1	3568.0	3537.7	3512.8	3485.2
37.5°	3601.1	3598.3	3581.8	3554.2	3510.0	3460.4	3402.4	3330.7	3258.9	3181.7	3107.2
40°	3435.5	3427.3	3413.5	3374.9	3325.2	3264.5	3187.2	3098.9	2982.9	2864.4	2743.0
42.5°	3154.0	3156.9	3140.3	3110.0	3063.0	3005.1	2925.0	2828.5	2704.3	2563.5	2406.3
45°	2825.8	2825.8	2820.2	2795.3	2762.2	2715.3	2654.7	2574.6	2453.2	2309.6	2141.3
47.5°	2483.5	2486.2	2478.0	2472.5	2458.7	2428.3	2384.2	2323.5	2238.0	2099.9	1931.6
50°	2135.8	2135.8	2149.6	2146.8	2146.8	2135.8	2116.6	2080.7	2006.2	1895.7	1738.5
52.5°	1788.2	1793.7	1802.0	1812.9	1826.8	1848.8	1826.8	1810.2	1763.3	1677.7	1542.6
55°	1429.4	1434.9	1448.7	1468.0	1484.7	1506.7	1512.2	1512.2	1487.4	1429.4	1327.3
57.5°	1123.1	1114.9	1125.9	1142.4	1164.5	1186.6	1203.2	1222.4	1219.7	1181.0	1098.3
60°	844.4	847.1	855.4	872.0	888.5	907.9	929.9	946.5	954.8	935.4	883.0
62.5°	615.4	615.4	626.4	642.9	651.3	678.8	692.7	700.9	709.2	706.4	673.3
65°	430.5	435.9	441.6	449.8	458.1	474.6	482.8	499.5	505.0	507.7	482.8
67.5°	303.5	295.3	300.8	306.2	314.6	325.7	342.2	342.2	350.4	350.4	333.9
70°	193.2	193.2	196.0	204.2	209.7	212.5	218.0	223.5	231.8	229.0	229.0
72.5°	129.7	126.9	129.7	132.5	135.2	143.4	143.4	146.2	151.8	154.6	143.4
75°	66.3	69.0	74.5	71.8	80.0	74.5	77.3	85.5	82.8	77.3	77.3
77.5°	55.1	55.1	55.1	52.4	57.9	57.9	55.1	60.8	57.9	57.9	55.1
80°	38.6	41.4	38.6	35.9	38.6	35.9	35.9	35.9	35.9	35.9	33.1
82.5°	30.4	24.9	27.6	24.9	27.6	27.6	24.9	22.0	22.0	24.9	22.0
85°	22.0	16.5	19.3	19.3	16.5	16.5	16.5	16.5	16.5	13.7	13.7
87.5°	13.7	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°	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9
2.5°	5149.2	5146.4	5152.0	5149.2	5149.2	5146.4	5149.2	5146.4	5152.0	5140.9	5143.7
5°	5149.2	5143.7	5146.4	5149.2	5152.0	5146.4	5146.4	5146.4	5152.0	5146.4	5149.2
7.5°	5138.2	5135.4	5143.7	5149.2	5146.4	5143.7	5149.2	5146.4	5152.0	5149.2	5154.8
10°	5116.0	5118.9	5124.4	5132.6	5135.4	5138.2	5143.7	5143.7	5152.0	5140.9	5146.4
12.5°	5083.0	5094.0	5107.8	5113.3	5124.4	5124.4	5129.9	5132.6	5138.2	5135.4	5143.7
15°	5041.6	5055.4	5072.0	5085.8	5099.5	5107.8	5116.0	5118.9	5127.2	5118.9	5121.6
17.5°	4992.0	5008.5	5033.2	5049.9	5072.0	5080.3	5091.2	5096.8	5105.0	5099.5	5102.3
20°	4922.9	4942.2	4969.8	4994.7	5008.5	5027.7	5041.6	5049.9	5055.4	5049.9	5052.6
22.5°	4826.4	4853.9	4889.8	4909.2	4936.7	4953.3	4956.1	4975.3	4989.2	4975.3	4980.9
25°	4713.2	4740.8	4768.4	4809.8	4834.7	4853.9	4873.3	4876.1	4889.8	4887.0	4884.3
27.5°	4525.5	4561.4	4608.3	4641.5	4674.6	4705.0	4727.0	4732.5	4746.4	4740.8	4743.6
30°	4268.9	4307.6	4351.7	4404.2	4451.1	4481.4	4509.0	4528.3	4542.1	4533.9	4531.0
32.5°	3904.6	3943.4	3990.3	4042.7	4097.9	4141.9	4175.1	4200.0	4216.5	4211.0	4197.2
35°	3488.1	3499.1	3529.5	3570.9	3617.7	3664.6	3695.0	3722.5	3741.9	3747.4	3747.4
37.5°	3060.3	3024.5	3002.4	3002.4	3030.0	3049.2	3076.9	3093.4	3123.8	3134.8	3143.0
40°	2646.3	2563.5	2486.2	2428.3	2389.7	2387.0	2387.0	2395.2	2422.8	2458.7	2491.9
42.5°	2276.5	2144.1	2025.4	1917.9	1840.6	1796.4	1777.2	1779.9	1802.0	1835.1	1890.2
45°	1981.4	1815.8	1666.7	1537.1	1432.1	1363.2	1330.1	1327.3	1343.8	1382.5	1443.3
47.5°	1752.3	1575.7	1407.4	1258.3	1145.2	1070.7	1032.1	1021.0	1032.1	1067.9	1139.6
50°	1561.8	1379.8	1205.9	1051.3	929.9	852.8	816.8	803.0	816.8	847.1	918.9
52.5°	1385.2	1197.6	1034.8	885.8	756.1	689.8	651.3	642.9	651.3	687.0	745.1
55°	1181.0	1021.0	861.0	711.9	598.8	532.6	502.2	494.0	502.2	535.4	596.0
57.5°	979.6	841.6	700.9	565.6	469.1	411.2	383.6	372.5	391.8	413.9	485.7
60°	792.0	681.6	562.9	444.3	364.3	311.8	289.7	287.0	292.5	320.1	369.8
62.5°	620.9	529.9	435.9	339.4	273.2	251.1	223.5	220.8	226.2	242.8	281.5
65°	447.1	389.1	317.4	248.3	196.0	165.6	154.6	157.3	162.8	173.8	209.7
67.5°	311.8	270.4	220.8	173.8	135.2	121.4	110.4	107.7	110.4	129.7	149.1
70°	209.7	184.8	149.1	132.5	93.8	74.5	77.3	69.0	80.0	80.0	96.5
72.5°	137.9	121.4	99.3	77.3	66.3	52.4	52.4	49.7	55.1	57.9	71.8
75°	71.8	55.1	55.1	38.6	27.6	13.7	24.9	22.0	19.3	22.0	27.6
77.5°	49.7	41.4	38.6	30.4	27.6	22.0	22.0	22.0	22.0	24.9	27.6
80°	30.4	30.4	22.0	19.3	16.5	13.7	16.5	16.5	16.5	16.5	19.3
82.5°	19.3	16.5	16.5	13.7	13.7	11.0	11.0	11.0	11.0	11.0	16.5
85°	16.5	11.0	11.0	8.3	11.0	19.3	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	13.7	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°	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9	5140.9
2.5°	5149.2	5152.0	5152.0	5149.2	5149.2	5143.7	5154.8	5146.4	5149.2	5160.3	5152.0
5°	5154.8	5157.4	5157.4	5154.8	5154.8	5154.8	5157.4	5157.4	5154.8	5152.0	5157.4
7.5°	5165.8	5163.0	5163.0	5157.4	5157.4	5152.0	5157.4	5149.2	5154.8	5149.2	5157.4
10°	5152.0	5154.8	5152.0	5149.2	5149.2	5146.4	5146.4	5138.2	5140.9	5132.6	5138.2
12.5°	5143.7	5140.9	5140.9	5135.4	5129.9	5124.4	5121.6	5113.3	5113.3	5094.0	5102.3
15°	5121.6	5124.4	5116.0	5105.0	5099.5	5085.8	5080.3	5069.1	5058.1	5044.4	5047.1
17.5°	5102.3	5094.0	5083.0	5072.0	5049.9	5038.9	5027.7	5011.2	5005.7	4989.2	4983.6
20°	5044.4	5038.9	5025.0	5005.7	4992.0	4967.1	4956.1	4939.5	4925.7	4909.2	4900.8
22.5°	4969.8	4964.3	4947.8	4928.4	4906.3	4895.3	4884.3	4853.9	4840.1	4823.6	4820.8
25°	4876.1	4867.8	4851.2	4829.2	4818.0	4787.8	4776.6	4754.6	4749.1	4732.5	4729.8
27.5°	4732.5	4721.5	4702.2	4674.6	4655.2	4635.9	4625.0	4608.3	4602.8	4586.3	4583.6
30°	4517.3	4503.5	4464.9	4453.9	4420.7	4401.3	4401.3	4379.3	4382.1	4371.1	4371.1
32.5°	4177.9	4155.9	4125.4	4103.3	4081.3	4070.2	4070.2	4061.9	4067.4	4067.4	4073.1
35°	3728.0	3697.8	3681.1	3667.4	3667.4	3678.4	3711.5	3719.8	3736.4	3750.2	3761.2
37.5°	3151.4	3148.6	3167.9	3184.4	3225.8	3272.7	3330.7	3380.4	3427.3	3460.4	3493.5
40°	2527.6	2596.7	2651.8	2729.1	2792.6	2883.7	2988.6	3074.1	3154.0	3212.1	3272.7
42.5°	1973.0	2061.3	2177.2	2290.4	2403.6	2527.6	2665.7	2784.4	2889.2	2969.2	3032.7
45°	1537.1	1658.5	1799.2	1942.6	2088.9	2243.5	2387.0	2508.4	2618.8	2701.6	2765.0
47.5°	1239.0	1371.5	1531.5	1688.8	1854.3	2017.1	2177.2	2282.1	2373.2	2439.3	2497.4
50°	1023.8	1164.5	1332.9	1512.2	1677.7	1840.6	1978.5	2080.7	2155.2	2213.1	2249.0
52.5°	855.4	1004.4	1183.8	1363.2	1528.8	1677.7	1802.0	1879.2	1940.0	1981.4	2014.4
55°	706.4	849.9	1018.2	1186.6	1349.4	1490.1	1592.2	1650.2	1697.1	1721.9	1741.2
57.5°	576.8	709.2	863.8	1018.2	1159.0	1275.0	1355.0	1412.9	1434.9	1454.3	1451.5
60°	452.6	576.8	717.5	849.9	971.3	1065.1	1123.1	1156.2	1172.8	1181.0	1175.5
62.5°	356.0	469.1	576.8	692.7	781.0	861.0	916.2	916.2	924.4	927.2	935.4
65°	264.9	350.4	444.3	529.9	601.5	654.0	684.3	692.7	703.7	700.9	695.4
67.5°	196.0	259.4	328.4	391.8	441.6	474.6	496.7	516.0	513.3	507.7	505.0
70°	135.2	176.6	237.4	276.0	311.8	344.9	350.4	353.2	356.0	358.8	353.2
72.5°	93.8	124.2	157.3	190.5	212.5	226.2	240.1	242.8	242.8	242.8	240.1
75°	46.9	63.4	93.8	107.7	126.9	132.5	143.4	143.4	151.8	140.7	137.9
77.5°	41.4	49.7	66.3	77.3	85.5	93.8	96.5	104.8	102.0	96.5	99.3
80°	24.9	30.4	41.4	46.9	57.9	60.8	63.4	66.3	63.4	66.3	66.3
82.5°	19.3	22.0	27.6	27.6	35.9	35.9	38.6	38.6	41.4	41.4	41.4
85°	11.0	19.3	16.5	33.1	22.0	22.0	27.6	33.1	27.6	27.6	33.1
87.5°	11.0	11.0	8.3	11.0	11.0	11.0	13.7	16.5	16.5	19.3	16.5
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: P249285

CATALOG NUMBER: LSR8B120D010 EC8B120927 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5140.9	5140.9	5140.9	5140.9
2.5°	5149.2	5154.8	5146.4	5143.7
5°	5157.4	5157.4	5152.0	5152.0
7.5°	5157.4	5157.4	5149.2	5143.7
10°	5135.4	5135.4	5127.2	5121.6
12.5°	5094.0	5094.0	5091.2	5083.0
15°	5041.6	5041.6	5030.6	5022.3
17.5°	4969.8	4975.3	4961.6	4961.6
20°	4892.6	4889.8	4878.8	4873.3
22.5°	4812.5	4807.0	4804.3	4787.8
25°	4727.0	4721.5	4713.2	4705.0
27.5°	4580.8	4578.0	4569.8	4558.7
30°	4357.2	4354.4	4343.4	4343.4
32.5°	4067.4	4064.7	4053.7	4056.5
35°	3766.7	3777.8	3772.2	3761.2
37.5°	3515.6	3523.8	3529.5	3523.8
40°	3305.8	3330.7	3333.5	3339.0
42.5°	3082.4	3115.5	3126.5	3132.0
45°	2814.6	2845.0	2869.9	2864.4
47.5°	2541.5	2563.5	2585.6	2569.0
50°	2279.4	2293.1	2301.4	2301.4
52.5°	2031.0	2031.0	2028.3	2031.0
55°	1746.8	1746.8	1735.8	1741.2
57.5°	1448.7	1454.3	1446.0	1432.1
60°	1172.8	1159.0	1153.5	1145.2
62.5°	913.4	913.4	894.2	918.9
65°	684.3	676.1	667.8	665.0
67.5°	496.7	494.0	485.7	482.8
70°	350.4	339.4	336.7	331.1
72.5°	234.6	234.6	229.0	229.0
75°	143.4	129.7	126.9	129.7
77.5°	99.3	96.5	96.5	93.8
80°	66.3	63.4	69.0	60.8
82.5°	41.4	44.2	41.4	44.2
85°	27.6	33.1	30.4	30.4
87.5°	16.5	16.5	16.5	16.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)