

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: P248529

Luminaire Tested: **LSR8B120D010 EC8B1209727 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248529  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B120D010 EC8B1209727 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8774.0 lumens  
Efficiency: N/A  
Efficacy: 74.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

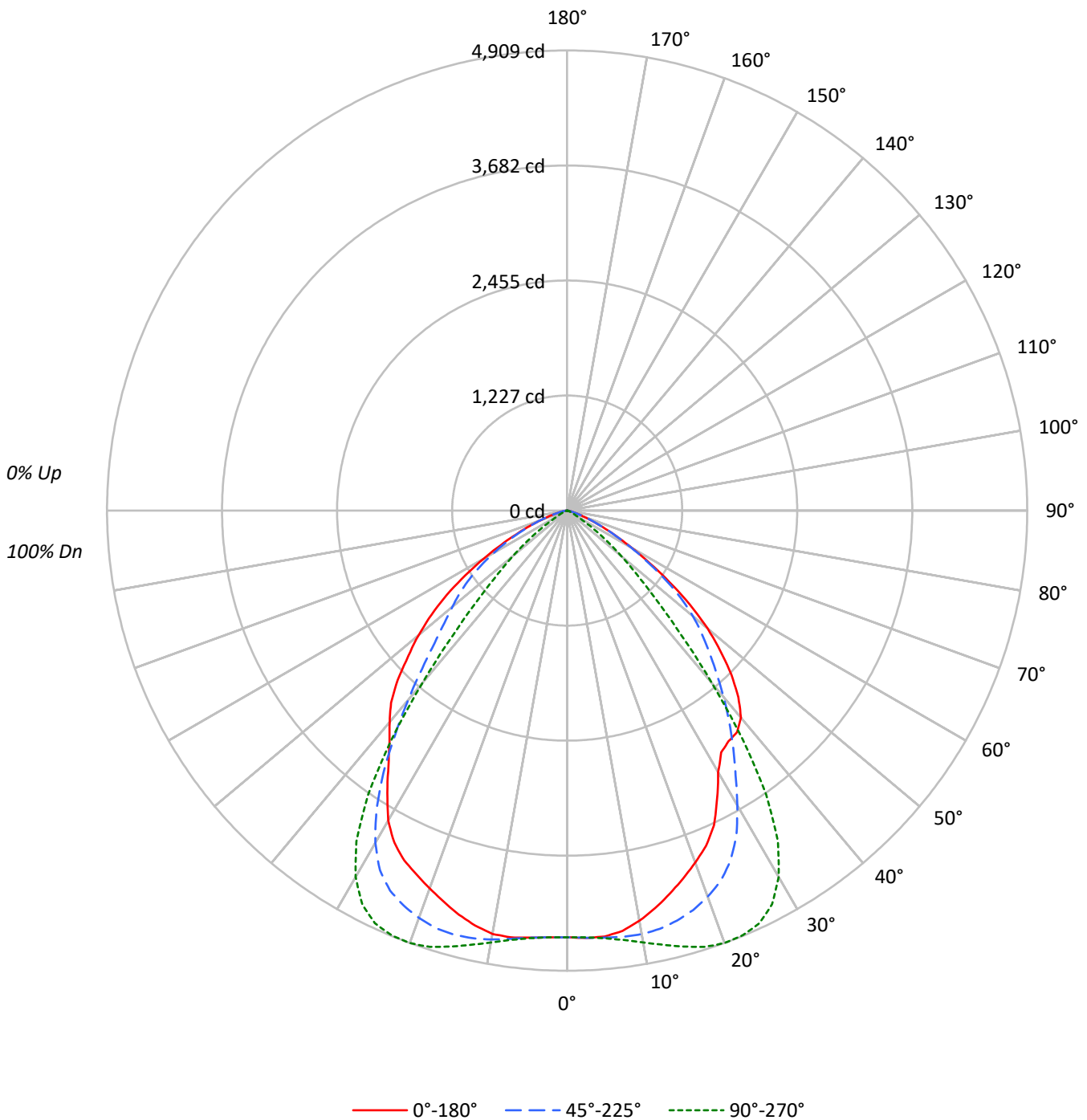
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	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°	437.7	5.0
10°-20°	1296.7	14.8
20°-30°	1978.3	22.5
30°-40°	2064.3	23.5
40°-50°	1550.6	17.7
50°-60°	954.0	10.9
60°-70°	388.3	4.4
70°-80°	91.5	1.0
80°-90°	12.6	0.1
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°	3712.7	42.3
0°-40°	5777.0	65.8
0°-60°	8281.7	94.4
0°-90°	8774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8774.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4552	4552	4552	4552	4552	
5°	4561	4573	4578	4573	4573	432
15°	4230	4528	4815	4682	4462	1192
25°	3706	4122	4856	4472	4117	1685
35°	3003	3088	3699	3419	3322	1896
45°	2479	2145	1338	1998	2556	1891
55°	1338	1271	350	1271	1568	1203
65°	418	423	53	568	602	436
75°	72	72	10	128	133	87
85°	7	7	2	17	22	10
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°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4563.8	4556.5	4563.8	4563.8	4566.2	4561.3	4563.8	4566.2	4561.3	4561.3	4561.3
5°	4561.3	4556.5	4561.3	4558.9	4563.8	4563.8	4568.6	4568.6	4573.4	4573.4	4580.7
7.5°	4522.7	4513.0	4522.7	4529.9	4534.7	4544.4	4556.5	4566.2	4575.8	4585.5	4597.6
10°	4442.9	4442.9	4450.2	4464.7	4479.2	4496.1	4517.8	4542.0	4566.2	4587.9	4609.6
12.5°	4343.9	4336.6	4351.1	4370.5	4392.2	4418.8	4452.6	4488.9	4527.5	4571.0	4604.8
15°	4230.4	4223.1	4240.0	4259.3	4285.9	4324.6	4365.7	4414.0	4469.5	4527.5	4583.1
17.5°	4114.4	4111.9	4128.9	4155.5	4177.2	4218.2	4271.4	4329.4	4392.2	4469.5	4542.0
20°	3996.0	3993.6	4010.5	4032.3	4061.2	4099.9	4153.0	4220.7	4295.6	4382.6	4467.1
22.5°	3872.8	3875.2	3889.7	3913.9	3938.0	3979.1	4034.6	4102.3	4184.4	4278.7	4372.9
25°	3706.1	3694.0	3713.3	3737.5	3778.5	3812.4	3865.6	3938.0	4022.6	4121.6	4232.8
27.5°	3464.5	3462.0	3479.0	3500.7	3536.9	3578.0	3636.0	3710.9	3800.3	3909.0	4017.7
30°	3222.9	3227.7	3235.0	3256.7	3280.9	3321.9	3379.9	3442.8	3527.3	3631.2	3747.2
32.5°	3058.6	3058.6	3068.3	3082.8	3099.7	3121.4	3162.5	3208.4	3273.6	3346.1	3430.7
35°	3003.0	2993.4	3003.0	3005.4	3007.9	3012.7	3019.9	3034.5	3056.2	3087.6	3119.0
37.5°	2978.9	2971.6	2971.6	2962.0	2949.9	2935.4	2916.1	2894.3	2870.2	2838.7	2814.6
40°	2884.7	2879.8	2875.0	2865.3	2838.7	2809.8	2778.3	2727.6	2672.0	2594.7	2517.5
42.5°	2703.5	2698.6	2696.2	2676.9	2652.7	2618.9	2582.7	2529.5	2459.5	2360.4	2249.2
45°	2478.8	2469.1	2461.9	2445.0	2428.0	2399.0	2365.2	2316.9	2246.8	2145.4	2012.5
47.5°	2217.9	2213.0	2210.6	2203.4	2186.5	2169.5	2147.8	2109.1	2046.3	1949.7	1812.0
50°	1954.5	1944.9	1949.7	1947.3	1940.0	1928.0	1913.4	1886.9	1838.5	1751.6	1625.9
52.5°	1652.5	1652.5	1650.1	1657.3	1659.8	1657.3	1659.8	1630.8	1589.7	1524.4	1418.2
55°	1338.4	1338.4	1345.7	1355.4	1365.0	1367.4	1365.0	1353.0	1323.9	1270.8	1176.6
57.5°	1043.7	1038.9	1053.4	1067.8	1077.5	1087.2	1079.9	1070.3	1053.4	1009.9	937.4
60°	794.9	794.9	804.5	814.2	823.8	833.5	831.1	828.7	814.2	785.2	727.2
62.5°	584.6	587.1	587.1	594.3	604.0	613.7	620.9	613.7	606.4	587.1	548.4
65°	417.9	415.5	417.9	425.2	432.5	442.1	447.0	444.5	437.3	422.8	393.8
67.5°	280.3	277.8	287.5	289.9	294.7	304.4	302.0	304.4	302.0	289.9	265.8
70°	183.6	178.8	183.6	181.2	188.5	190.9	195.7	198.1	195.7	188.5	181.2
72.5°	113.6	111.1	113.6	116.0	118.4	120.8	125.6	125.6	123.2	118.4	108.7
75°	72.5	65.2	67.6	62.8	67.6	67.6	72.5	74.9	72.5	72.5	67.6
77.5°	43.5	43.5	43.5	43.5	43.5	43.5	43.5	45.9	48.3	43.5	41.1
80°	21.8	21.8	24.2	24.2	24.2	26.6	24.2	24.2	24.2	26.6	19.3
82.5°	16.9	14.5	14.5	14.5	16.9	14.5	14.5	14.5	14.5	14.5	14.5
85°	7.3	9.6	7.3	4.8	7.3	7.3	9.6	7.3	7.3	7.3	9.6
87.5°	2.4	2.4	0.0	0.0	0.0	2.4	0.0	2.4	2.4	4.8	0.0
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4563.8	4558.9	4558.9	4556.5	4561.3	4556.5	4558.9	4556.5	4556.5	4561.3	4556.5
5°	4580.7	4583.1	4578.2	4575.8	4583.1	4583.1	4583.1	4578.2	4578.2	4580.7	4578.2
7.5°	4604.8	4609.6	4612.1	4614.5	4619.3	4621.7	4621.7	4619.3	4616.9	4624.2	4614.5
10°	4631.4	4638.7	4653.1	4660.4	4672.5	4672.5	4677.3	4677.3	4672.5	4677.3	4674.9
12.5°	4621.7	4665.2	4689.4	4706.3	4723.2	4737.7	4742.5	4744.9	4742.5	4752.2	4742.5
15°	4638.7	4674.9	4713.6	4742.5	4773.9	4790.8	4795.7	4815.0	4819.8	4822.3	4807.8
17.5°	4612.1	4677.3	4718.3	4761.9	4807.8	4839.2	4868.1	4880.3	4882.7	4887.5	4868.1
20°	4551.6	4624.2	4687.0	4749.8	4802.9	4851.2	4875.4	4909.2	4899.6	4918.9	4892.3
22.5°	4469.5	4551.6	4631.4	4713.6	4769.1	4827.1	4877.8	4902.0	4914.1	4914.1	4885.0
25°	4339.1	4435.7	4522.7	4607.2	4691.8	4761.9	4819.8	4856.1	4863.4	4860.9	4827.1
27.5°	4136.1	4240.0	4341.5	4438.1	4542.0	4624.2	4691.8	4735.3	4747.4	4747.4	4711.1
30°	3855.9	3967.0	4066.1	4182.0	4288.3	4380.1	4474.4	4513.0	4534.7	4534.7	4493.7
32.5°	3522.5	3616.7	3708.5	3822.0	3938.0	4041.9	4131.3	4184.4	4211.0	4208.6	4172.4
35°	3160.1	3206.0	3276.1	3360.6	3464.5	3561.1	3648.1	3698.9	3744.7	3742.3	3708.5
37.5°	2797.7	2785.6	2792.9	2824.3	2889.5	2957.1	3024.8	3073.1	3111.7	3128.7	3121.4
40°	2442.6	2379.7	2319.3	2297.6	2302.4	2326.6	2362.8	2399.0	2442.6	2464.3	2473.9
42.5°	2123.6	2017.3	1911.0	1831.3	1785.4	1770.9	1787.8	1799.9	1826.5	1857.9	1889.3
45°	1867.5	1725.0	1584.9	1461.7	1384.3	1338.4	1328.8	1338.4	1353.0	1384.3	1425.4
47.5°	1657.3	1490.6	1333.6	1195.9	1082.3	1022.0	1005.1	1000.2	1014.7	1043.7	1099.2
50°	1471.3	1304.6	1130.7	971.2	852.8	785.2	761.0	751.3	768.3	790.0	840.7
52.5°	1268.4	1104.1	925.3	770.7	647.5	577.4	550.8	536.3	546.0	575.0	625.7
55°	1048.5	896.3	734.4	575.0	456.6	391.4	359.9	350.3	359.9	391.4	442.1
57.5°	828.7	700.6	565.3	415.5	309.2	244.0	212.6	202.9	229.5	241.6	294.7
60°	647.5	543.6	427.6	304.4	212.6	161.9	130.5	123.2	135.3	157.0	200.5
62.5°	485.6	420.4	328.6	217.4	157.0	103.9	87.0	79.7	87.0	103.9	137.7
65°	352.7	302.0	229.5	159.4	106.3	77.3	58.0	53.1	60.4	72.5	101.5
67.5°	241.6	202.9	159.4	111.1	72.5	48.3	41.1	41.1	43.5	53.1	74.9
70°	157.0	132.9	101.5	72.5	48.3	36.2	31.4	26.6	31.4	38.7	50.7
72.5°	99.1	84.5	65.2	50.7	36.2	26.6	21.8	19.3	24.2	29.0	38.7
75°	60.4	45.9	33.8	26.6	19.3	19.3	19.3	9.6	12.1	19.3	24.2
77.5°	36.2	31.4	26.6	21.8	16.9	9.6	9.6	9.6	12.1	14.5	21.8
80°	19.3	16.9	12.1	12.1	9.6	7.3	9.6	7.3	4.8	12.1	14.5
82.5°	12.1	9.6	9.6	9.6	12.1	4.8	7.3	4.8	7.3	9.6	7.3
85°	7.3	7.3	7.3	4.8	12.1	4.8	4.8	2.4	2.4	4.8	4.8
87.5°	0.0	2.4	2.4	0.0	2.4	0.0	2.4	2.4	2.4	2.4	2.4
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°	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6	4551.6
2.5°	4558.9	4556.5	4558.9	4556.5	4556.5	4556.5	4558.9	4558.9	4556.5	4556.5	4561.3
5°	4578.2	4578.2	4578.2	4575.8	4573.4	4573.4	4578.2	4578.2	4571.0	4578.2	4578.2
7.5°	4619.3	4612.1	4619.3	4609.6	4604.8	4607.2	4609.6	4604.8	4600.0	4602.4	4602.4
10°	4672.5	4665.2	4665.2	4658.0	4650.7	4645.9	4641.1	4629.0	4616.9	4614.5	4604.8
12.5°	4735.3	4723.2	4716.0	4701.4	4689.4	4672.5	4658.0	4638.7	4614.5	4597.6	4580.7
15°	4798.1	4778.8	4761.9	4737.7	4711.1	4682.1	4650.7	4619.3	4580.7	4546.9	4517.8
17.5°	4848.8	4822.3	4790.8	4752.2	4713.6	4670.0	4624.2	4578.2	4522.7	4479.2	4445.4
20°	4865.7	4827.1	4786.0	4735.3	4684.5	4624.2	4566.2	4505.8	4442.9	4397.1	4358.4
22.5°	4844.0	4798.1	4747.4	4694.2	4626.5	4561.3	4493.7	4423.6	4368.0	4305.3	4269.0
25°	4783.6	4728.0	4672.5	4609.6	4544.4	4472.0	4399.5	4327.0	4259.3	4225.5	4179.6
27.5°	4660.4	4600.0	4539.6	4474.4	4399.5	4327.0	4252.1	4182.0	4124.1	4078.1	4051.6
30°	4442.9	4372.9	4302.8	4232.8	4167.5	4092.6	4022.6	3964.6	3906.6	3870.3	3843.8
32.5°	4109.5	4046.7	3976.7	3909.0	3848.6	3785.8	3727.8	3677.1	3636.0	3611.8	3592.5
35°	3660.2	3597.4	3544.2	3495.9	3445.1	3418.6	3382.4	3353.3	3336.4	3326.8	3324.4
37.5°	3094.8	3058.6	3041.7	3032.0	3022.3	3015.1	3019.9	3032.0	3041.7	3058.6	3077.9
40°	2490.8	2522.2	2531.9	2565.7	2597.1	2638.2	2684.2	2737.3	2780.7	2836.3	2875.0
42.5°	1940.0	1998.0	2065.6	2138.1	2215.4	2290.3	2382.1	2466.7	2544.0	2614.0	2674.5
45°	1490.6	1580.0	1681.5	1785.4	1889.3	1998.0	2109.1	2213.0	2304.8	2379.7	2442.6
47.5°	1162.1	1261.1	1391.6	1519.7	1645.3	1773.3	1896.5	2005.2	2082.5	2155.0	2210.6
50°	920.5	1034.0	1176.6	1323.9	1461.7	1596.9	1727.4	1828.9	1906.2	1964.2	2005.2
52.5°	712.7	848.0	992.9	1147.6	1295.0	1442.3	1563.1	1657.3	1720.2	1770.9	1802.3
55°	531.5	664.4	819.0	978.5	1128.3	1270.8	1384.3	1466.5	1522.1	1551.0	1568.0
57.5°	384.1	505.0	659.5	819.0	954.3	1089.6	1181.4	1256.3	1287.7	1304.6	1311.9
60°	280.3	391.4	529.1	666.8	794.9	903.6	983.3	1034.0	1058.2	1067.8	1065.4
62.5°	205.4	302.0	420.4	536.3	640.2	729.6	792.4	826.2	838.4	843.2	835.9
65°	157.0	231.9	333.4	422.8	502.5	567.7	613.7	635.4	642.6	640.2	635.4
67.5°	116.0	174.0	248.9	316.5	374.5	425.2	449.4	468.7	473.5	466.3	459.0
70°	82.2	128.0	181.2	227.1	270.6	299.6	326.1	328.6	328.6	326.1	321.3
72.5°	58.0	89.4	123.2	154.6	181.2	202.9	212.6	219.8	217.4	215.0	210.2
75°	38.7	55.6	89.4	96.7	120.8	128.0	137.7	137.7	140.1	132.9	132.9
77.5°	24.2	38.7	53.1	62.8	72.5	82.2	87.0	87.0	89.4	87.0	87.0
80°	14.5	24.2	29.0	43.5	43.5	50.7	53.1	55.6	50.7	58.0	50.7
82.5°	9.6	14.5	21.8	21.8	26.6	31.4	31.4	33.8	33.8	31.4	31.4
85°	7.3	9.6	12.1	14.5	14.5	16.9	14.5	14.5	16.9	19.3	16.9
87.5°	2.4	4.8	2.4	4.8	4.8	9.6	7.3	7.3	7.3	9.6	9.6
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: P248529

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4551.6	4551.6	4551.6	4551.6
2.5°	4556.5	4558.9	4556.5	4556.5
5°	4578.2	4575.8	4578.2	4573.4
7.5°	4595.1	4595.1	4592.7	4592.7
10°	4595.1	4585.5	4585.5	4585.5
12.5°	4558.9	4546.9	4539.6	4534.7
15°	4496.1	4474.4	4464.7	4462.3
17.5°	4414.0	4394.6	4382.6	4375.3
20°	4319.7	4300.4	4285.9	4288.3
22.5°	4237.6	4215.9	4206.2	4201.3
25°	4155.5	4128.9	4121.6	4116.8
27.5°	4022.6	4008.1	4000.8	3993.6
30°	3819.6	3812.4	3800.3	3817.2
32.5°	3585.3	3573.2	3563.5	3570.8
35°	3326.8	3319.5	3326.8	3321.9
37.5°	3090.0	3097.2	3106.9	3111.7
40°	2904.0	2930.5	2940.2	2945.0
42.5°	2718.0	2749.4	2768.7	2780.7
45°	2488.4	2519.8	2541.6	2556.1
47.5°	2251.7	2278.3	2300.0	2297.6
50°	2036.7	2051.2	2060.8	2070.5
52.5°	1819.2	1819.2	1821.6	1821.6
55°	1572.8	1568.0	1565.5	1568.0
57.5°	1302.2	1297.4	1295.0	1287.7
60°	1055.8	1041.3	1031.6	1031.6
62.5°	826.2	809.3	802.1	799.7
65°	620.9	618.5	604.0	601.6
67.5°	449.4	439.7	430.1	432.5
70°	316.5	302.0	302.0	297.2
72.5°	205.4	198.1	195.7	195.7
75°	128.0	128.0	123.2	132.9
77.5°	84.5	84.5	82.2	84.5
80°	50.7	50.7	50.7	48.3
82.5°	31.4	33.8	31.4	31.4
85°	16.9	19.3	14.5	21.8
87.5°	9.6	12.1	9.6	12.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)