

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: P250275

Luminaire Tested: **LSR8B90D010 EC8B90927 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250275  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B90D010 EC8B90927 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE 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: 7527.4 lumens  
Efficiency: N/A  
Efficacy: 87.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

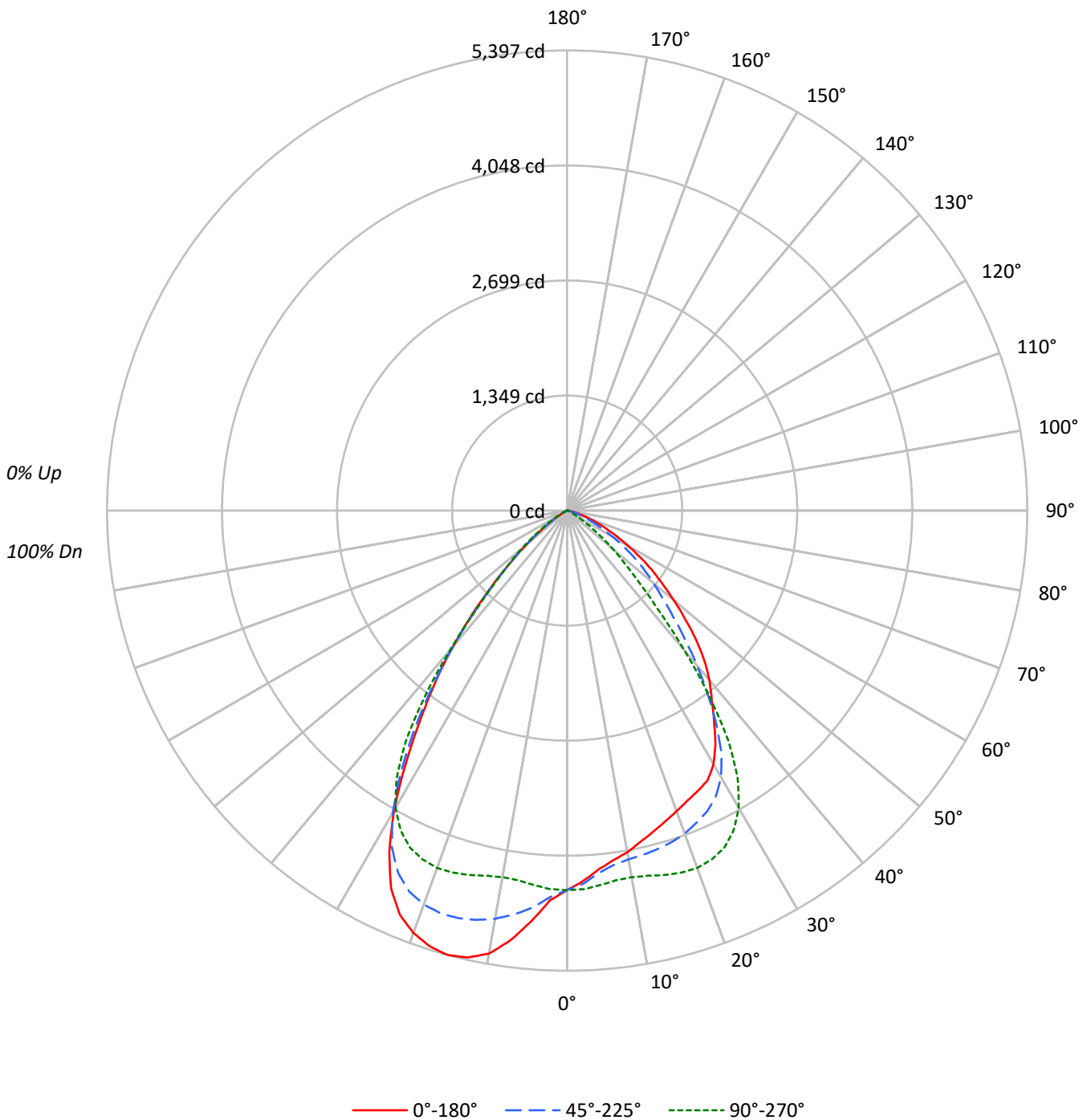
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38

**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°	427.9	5.7
10°-20°	1280.6	17.0
20°-30°	1961.1	26.1
30°-40°	1922.6	25.5
40°-50°	1157.8	15.4
50°-60°	532.9	7.1
60°-70°	187.2	2.5
70°-80°	49.0	0.7
80°-90°	8.3	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°	3669.6	48.8
0°-40°	5592.2	74.3
0°-60°	7282.9	96.8
0°-90°	7527.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7527.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4451	4451	4451	4451	4451	
5°	4224	4264	4409	4674	4834	399
15°	3900	4110	4424	4948	5397	1102
25°	3627	3890	4362	4690	4886	1671
35°	3001	3043	3295	3105	3005	1880
45°	2132	1755	1190	1198	1229	1635
55°	1210	959	341	268	258	1080
65°	514	356	54	27	29	523
75°	133	77	4	0	0	161
85°	21	10	2	0	0	29
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°	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0
2.5°	4346.9	4351.2	4351.2	4351.2	4359.5	4361.6	4359.5	4361.6	4365.7	4380.2	4386.5
5°	4224.3	4218.0	4222.2	4220.1	4230.6	4236.8	4232.6	4238.8	4253.4	4263.9	4274.2
7.5°	4137.0	4137.0	4137.0	4141.0	4147.3	4159.8	4157.8	4161.8	4176.4	4191.0	4205.5
10°	4068.2	4066.2	4066.2	4076.6	4084.9	4099.4	4103.7	4116.2	4134.8	4153.5	4170.2
12.5°	3978.8	3980.9	3991.3	4001.7	4020.4	4043.2	4055.7	4072.5	4101.5	4132.7	4151.5
15°	3899.8	3901.8	3910.3	3931.0	3953.9	3980.9	4007.9	4034.9	4070.4	4109.8	4143.2
17.5°	3822.9	3824.9	3831.2	3854.0	3883.2	3918.6	3949.6	3985.1	4030.9	4076.6	4118.2
20°	3752.1	3750.1	3760.4	3781.2	3818.7	3851.9	3883.2	3924.8	3974.7	4030.9	4078.7
22.5°	3683.5	3683.5	3693.9	3714.8	3748.0	3781.2	3814.5	3858.2	3908.1	3962.2	4018.4
25°	3627.3	3625.2	3639.8	3650.3	3675.2	3708.4	3743.8	3779.2	3829.0	3889.5	3943.5
27.5°	3567.0	3565.0	3567.0	3579.5	3602.4	3627.3	3654.3	3685.6	3727.2	3777.1	3829.0
30°	3434.0	3436.0	3436.0	3446.4	3458.9	3485.9	3500.4	3531.7	3569.1	3610.7	3656.5
32.5°	3236.3	3238.4	3238.4	3242.6	3252.9	3265.4	3277.9	3300.8	3329.9	3365.2	3406.8
35°	3001.3	3001.3	2999.1	3001.3	3007.6	3007.6	3017.9	3007.6	3022.1	3042.9	3074.1
37.5°	2784.9	2780.8	2776.7	2772.5	2766.3	2755.9	2741.3	2716.3	2710.1	2701.8	2703.8
40°	2593.7	2591.5	2579.1	2568.6	2547.8	2522.9	2487.6	2444.0	2408.5	2367.0	2331.6
42.5°	2381.5	2379.4	2369.0	2350.2	2327.4	2289.9	2233.8	2175.6	2104.9	2042.4	1978.0
45°	2131.9	2138.1	2123.5	2102.7	2075.7	2040.3	1978.0	1907.2	1836.6	1755.4	1674.2
47.5°	1871.9	1869.9	1859.4	1846.9	1824.1	1788.8	1747.1	1670.2	1595.2	1520.4	1437.2
50°	1630.6	1622.4	1618.1	1605.7	1591.2	1562.1	1518.3	1455.9	1389.4	1318.6	1241.7
52.5°	1401.9	1401.9	1391.4	1383.1	1370.6	1347.8	1310.4	1260.4	1204.3	1137.7	1056.6
55°	1210.5	1206.3	1196.0	1185.5	1173.0	1158.5	1125.2	1083.6	1023.3	958.8	888.1
57.5°	1006.6	1004.5	1000.5	988.0	981.7	967.2	929.7	888.1	836.1	780.0	721.7
60°	823.6	815.4	807.0	798.6	788.3	773.8	748.8	713.4	669.7	619.8	561.6
62.5°	659.4	671.7	646.9	646.9	626.1	613.6	590.7	569.9	524.1	478.4	428.5
65°	513.8	513.8	503.3	495.0	482.5	468.0	445.0	424.2	390.9	355.6	320.3
67.5°	393.1	390.9	380.6	372.3	361.9	353.6	336.9	312.0	287.1	258.0	228.7
70°	289.1	287.1	285.0	270.3	262.0	251.7	239.2	222.6	203.8	183.0	156.0
72.5°	207.9	207.9	201.8	195.5	187.2	178.9	166.4	156.0	139.4	124.9	106.1
75°	133.1	131.1	131.1	120.6	120.6	108.1	99.8	93.6	85.3	77.0	60.3
77.5°	95.7	93.6	91.5	87.3	83.2	79.0	72.8	64.5	58.2	49.9	43.6
80°	64.5	60.3	58.2	58.2	52.0	49.9	52.0	39.6	37.5	31.2	27.0
82.5°	39.6	39.6	37.5	37.5	35.3	33.3	27.0	27.0	25.0	22.8	18.8
85°	20.8	27.0	18.8	20.8	18.8	20.8	18.8	14.5	12.5	10.4	10.4
87.5°	12.5	8.3	8.3	12.5	10.4	8.3	8.3	8.3	6.3	4.2	4.2
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0
2.5°	4382.3	4397.0	4394.8	4413.5	4419.8	4434.3	4434.3	4444.7	4451.0	4465.5	4478.0
5°	4278.4	4301.2	4307.5	4330.3	4349.0	4372.0	4386.5	4409.3	4430.1	4461.4	4490.6
7.5°	4213.9	4232.6	4245.1	4272.1	4292.9	4317.9	4342.8	4374.0	4403.1	4440.6	4482.2
10°	4182.6	4207.6	4226.3	4253.4	4278.4	4305.4	4330.3	4365.7	4399.0	4446.8	4492.6
12.5°	4174.3	4203.4	4226.3	4263.9	4288.7	4317.9	4346.9	4386.5	4421.8	4471.8	4523.8
15°	4174.3	4213.9	4245.1	4286.7	4315.7	4353.2	4384.5	4424.0	4463.4	4515.4	4565.4
17.5°	4166.0	4213.9	4253.4	4301.2	4338.7	4376.1	4415.6	4453.1	4494.6	4544.7	4600.7
20°	4132.7	4193.1	4240.9	4297.0	4336.5	4378.2	4417.8	4459.3	4503.0	4555.0	4602.8
22.5°	4074.5	4145.3	4199.4	4259.6	4305.4	4346.9	4386.5	4428.1	4475.9	4525.9	4575.8
25°	3997.6	4064.1	4122.3	4184.7	4230.6	4276.2	4313.7	4361.6	4405.3	4453.1	4492.6
27.5°	3881.0	3951.8	4007.9	4072.5	4114.0	4157.8	4188.9	4228.4	4270.0	4309.5	4340.8
30°	3706.4	3770.9	3829.0	3887.3	3929.0	3960.1	3993.4	4024.6	4051.7	4078.7	4105.7
32.5°	3450.5	3508.8	3565.0	3619.0	3652.3	3679.3	3704.3	3723.0	3737.6	3752.1	3754.1
35°	3099.0	3146.8	3182.2	3230.1	3261.3	3286.2	3286.2	3294.6	3292.4	3286.2	3279.9
37.5°	2706.0	2724.6	2739.2	2757.9	2760.0	2760.0	2747.6	2737.1	2720.5	2716.3	2703.8
40°	2296.2	2271.3	2252.5	2227.6	2213.0	2181.8	2154.8	2136.0	2109.0	2104.9	2100.7
42.5°	1907.2	1849.0	1797.1	1753.4	1703.5	1659.7	1620.2	1591.2	1570.4	1568.2	1570.4
45°	1591.2	1524.6	1447.5	1387.4	1331.1	1277.1	1225.1	1189.7	1171.0	1166.7	1171.0
47.5°	1351.9	1275.0	1200.0	1131.4	1071.1	1010.8	958.8	911.0	888.1	881.9	879.9
50°	1162.7	1083.6	1004.5	933.9	867.3	807.0	742.5	696.8	667.7	657.2	648.9
52.5°	977.6	906.9	825.8	753.0	686.4	615.6	549.1	497.0	468.0	455.5	447.2
55°	815.4	744.6	669.7	599.1	528.3	457.5	390.9	341.1	309.9	295.3	285.0
57.5°	650.9	584.4	520.0	449.3	390.9	322.4	255.8	212.2	185.1	168.5	160.2
60°	503.3	451.4	395.2	336.9	280.8	224.7	170.5	128.9	108.1	95.7	85.3
62.5°	380.6	336.9	299.5	249.5	205.9	158.1	116.6	83.2	64.5	54.1	49.9
65°	274.5	241.2	207.9	176.7	145.6	110.2	79.0	54.1	37.5	31.2	29.1
67.5°	195.5	168.5	143.4	122.6	99.8	79.0	56.1	37.5	29.1	25.0	22.8
70°	137.2	116.6	99.8	81.1	66.5	52.0	43.6	27.0	16.7	18.8	14.5
72.5°	91.5	77.0	68.6	56.1	45.7	37.5	27.0	18.8	18.8	14.5	12.5
75°	49.9	45.7	35.3	27.0	22.8	20.8	8.3	4.2	2.0	6.3	2.0
77.5°	35.3	31.2	27.0	22.8	18.8	14.5	8.3	8.3	6.3	8.3	4.2
80°	22.8	18.8	16.7	16.7	10.4	6.3	4.2	4.2	6.3	2.0	2.0
82.5°	14.5	12.5	10.4	10.4	10.4	6.3	6.3	6.3	6.3	4.2	4.2
85°	8.3	6.3	4.2	4.2	2.0	4.2	0.0	2.0	2.0	0.0	0.0
87.5°	4.2	2.0	2.0	2.0	2.0	0.0	0.0	2.0	0.0	2.0	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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0	4451.0
2.5°	4486.3	4494.6	4505.1	4513.4	4532.1	4536.2	4544.7	4552.9	4559.2	4565.4	4567.5
5°	4515.4	4546.7	4575.8	4607.0	4646.5	4673.6	4704.8	4731.8	4758.9	4781.7	4798.2
7.5°	4523.8	4571.6	4615.3	4669.3	4727.6	4777.5	4829.5	4881.5	4935.6	4977.2	5012.6
10°	4540.4	4598.7	4654.8	4719.3	4794.2	4860.7	4925.1	4993.8	5062.5	5120.7	5172.8
12.5°	4569.5	4634.0	4694.3	4765.0	4842.0	4916.8	4987.6	5064.5	5137.4	5201.9	5260.0
15°	4617.3	4677.6	4735.9	4802.5	4879.5	4948.1	5018.8	5093.7	5166.4	5233.0	5287.2
17.5°	4648.5	4704.8	4762.9	4823.3	4887.8	4950.1	5016.7	5083.3	5149.8	5210.1	5260.0
20°	4648.5	4702.6	4746.3	4800.4	4860.7	4914.8	4968.9	5027.1	5085.3	5135.3	5183.1
22.5°	4611.2	4663.1	4696.4	4738.0	4789.9	4835.8	4864.8	4929.3	4973.0	5016.7	5052.0
25°	4523.8	4561.2	4588.3	4617.3	4659.0	4690.1	4715.1	4752.6	4796.2	4812.9	4837.8
27.5°	4365.7	4392.8	4407.3	4413.5	4434.3	4451.0	4455.1	4471.8	4490.6	4494.6	4505.1
30°	4116.2	4118.2	4112.0	4109.8	4099.4	4087.0	4084.9	4082.8	4074.5	4066.2	4068.2
32.5°	3739.6	3729.3	3704.3	3677.3	3650.3	3621.2	3604.4	3583.7	3571.1	3558.7	3544.2
35°	3252.9	3228.0	3192.6	3159.3	3128.2	3105.2	3067.9	3055.4	3042.9	3026.2	3022.1
37.5°	2681.0	2666.4	2633.1	2608.2	2591.5	2581.1	2562.4	2550.0	2550.0	2543.7	2539.6
40°	2090.2	2086.2	2073.6	2079.9	2071.6	2075.7	2073.6	2069.4	2079.9	2079.9	2084.1
42.5°	1568.2	1570.4	1576.6	1580.7	1593.2	1595.2	1605.7	1605.7	1611.9	1618.1	1622.4
45°	1166.7	1175.2	1175.2	1183.5	1196.0	1198.0	1202.2	1204.3	1208.4	1218.8	1223.0
47.5°	875.6	877.7	877.7	879.9	883.9	888.1	886.0	888.1	894.4	890.2	894.4
50°	646.9	648.9	642.7	636.4	642.7	642.7	640.6	634.4	640.6	632.4	636.4
52.5°	441.0	438.9	432.6	434.7	430.5	428.5	428.5	424.2	424.2	424.2	416.0
55°	278.8	278.8	274.5	274.5	272.5	268.3	266.3	264.2	262.0	260.0	260.0
57.5°	156.0	158.1	151.9	149.7	151.9	149.7	145.6	145.6	145.6	139.4	143.4
60°	85.3	83.2	81.1	79.0	77.0	79.0	79.0	74.9	74.9	74.9	77.0
62.5°	45.7	45.7	43.6	43.6	41.6	41.6	45.7	39.6	41.6	39.6	41.6
65°	25.0	31.2	22.8	22.8	29.1	27.0	25.0	25.0	27.0	22.8	25.0
67.5°	27.0	18.8	16.7	18.8	16.7	16.7	16.7	20.8	18.8	14.5	18.8
70°	12.5	14.5	14.5	10.4	16.7	8.3	14.5	8.3	12.5	10.4	12.5
72.5°	12.5	12.5	12.5	8.3	12.5	8.3	10.4	10.4	8.3	8.3	12.5
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	4.2	4.2	2.0	2.0	2.0	2.0	4.2	4.2	4.2	0.0	2.0
80°	4.2	4.2	0.0	2.0	0.0	0.0	2.0	0.0	2.0	0.0	4.2
82.5°	2.0	4.2	2.0	2.0	4.2	4.2	4.2	2.0	2.0	2.0	2.0
85°	0.0	2.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0	2.0
87.5°	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	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





TEST NUMBER: P250275

CATALOG NUMBER: LSR8B90D010 EC8B90927 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4451.0	4451.0	4451.0	4451.0
2.5°	4569.5	4571.6	4575.8	4573.7
5°	4810.7	4827.5	4835.8	4833.7
7.5°	5037.4	5066.7	5083.3	5083.3
10°	5212.2	5245.5	5270.4	5274.6
12.5°	5305.7	5343.3	5376.6	5368.2
15°	5332.8	5370.3	5403.5	5397.3
17.5°	5301.7	5339.0	5364.1	5359.8
20°	5216.4	5247.6	5272.5	5270.4
22.5°	5083.3	5110.3	5131.1	5129.0
25°	4858.7	4877.3	4894.0	4885.7
27.5°	4513.4	4519.6	4529.9	4517.6
30°	4053.7	4057.9	4062.0	4060.0
32.5°	3537.9	3535.8	3531.7	3527.4
35°	3015.9	3015.9	3017.9	3005.4
37.5°	2541.6	2539.6	2545.8	2539.6
40°	2088.2	2086.2	2094.4	2084.1
42.5°	1628.6	1634.9	1636.9	1636.9
45°	1225.1	1227.1	1229.2	1229.2
47.5°	894.4	896.4	906.9	894.4
50°	632.4	634.4	636.4	632.4
52.5°	418.0	420.2	418.0	411.8
55°	255.8	258.0	258.0	258.0
57.5°	137.2	139.4	139.4	137.2
60°	74.9	72.8	74.9	70.8
62.5°	39.6	43.6	41.6	37.5
65°	25.0	25.0	25.0	29.1
67.5°	20.8	16.7	18.8	14.5
70°	12.5	14.5	14.5	10.4
72.5°	10.4	10.4	10.4	12.5
75°	0.0	0.0	0.0	0.0
77.5°	4.2	4.2	4.2	2.0
80°	2.0	0.0	2.0	0.0
82.5°	2.0	2.0	4.2	2.0
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)