

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: P250211

Luminaire Tested: **LSR8B80D010 EC8B80830 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250211  
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: LSR8B80D010 EC8B80830 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8205.0 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

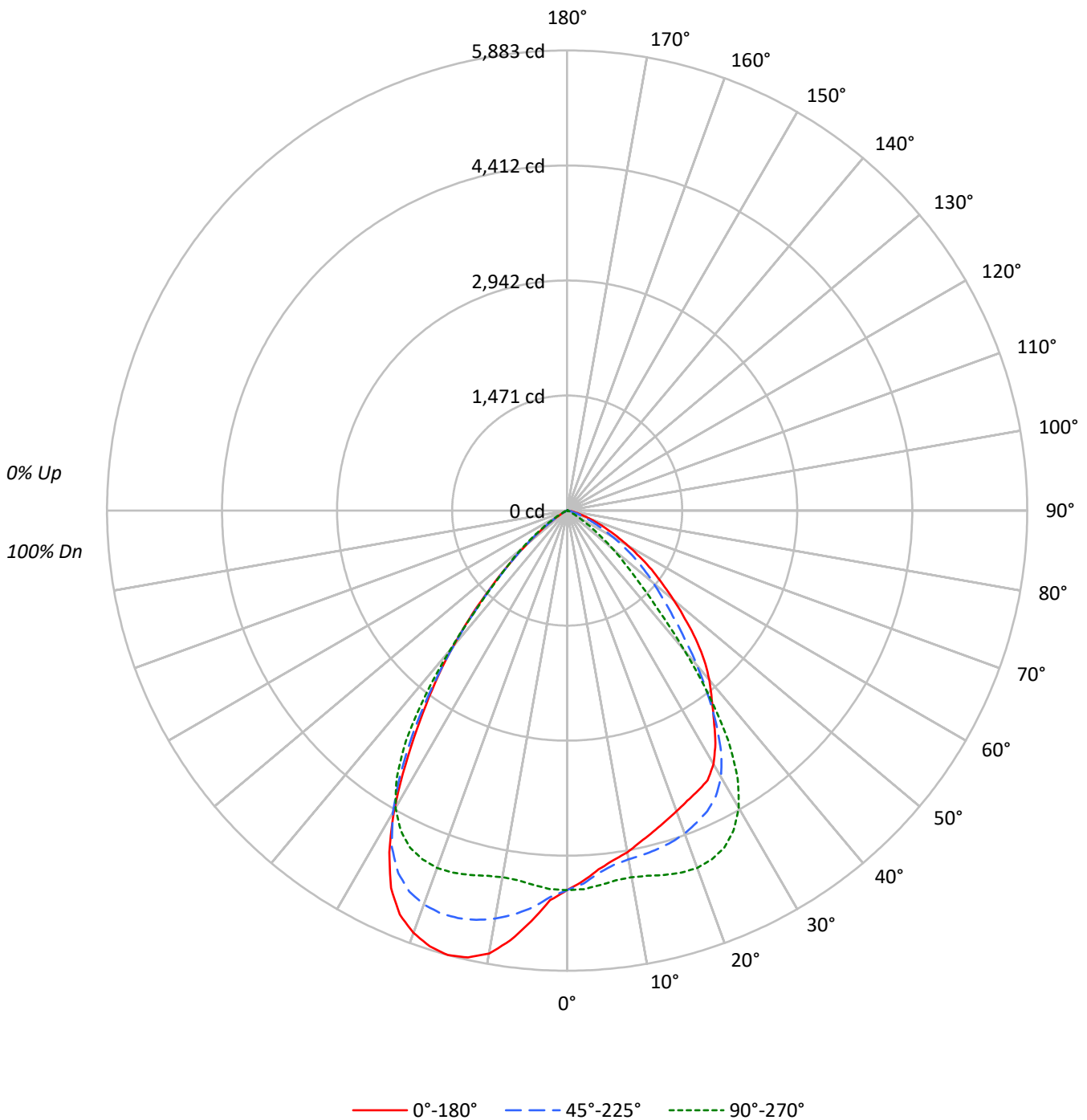
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	90°	180°
0°	149605	149605	149605
5°	142528	148775	163094
10°	138853	149004	180025
15°	135706	153941	187816
20°	134211	159505	188521
25°	134525	161757	181195
30°	133276	156203	157577
35°	123153	135184	123322
40°	113802	93723	91445
45°	101339	56552	58428
50°	85267	36435	33063
55°	70938	19989	15118
60°	55370	8665	4755
65°	40860	4305	2313
70°	28409	2660	1019
75°	17288	548	0
80°	12484	817	0
85°	8031	778	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	466.4	5.7
10°-20°	1395.9	17.0
20°-30°	2137.7	26.1
30°-40°	2095.6	25.5
40°-50°	1262.0	15.4
50°-60°	580.9	7.1
60°-70°	204.1	2.5
70°-80°	53.4	0.7
80°-90°	9.1	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°	4000.0	48.8
0°-40°	6095.6	74.3
0°-60°	7938.5	96.8
0°-90°	8205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8205.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4852	4852	4852	4852	4852	
5°	4604	4648	4806	5094	5269	435
15°	4251	4480	4822	5394	5883	1201
25°	3954	4240	4754	5112	5326	1821
35°	3272	3317	3591	3385	3276	2049
45°	2324	1914	1297	1306	1340	1782
55°	1320	1045	372	292	281	1177
65°	560	388	59	30	32	570
75°	145	84	5	0	0	176
85°	23	11	2	0	0	31
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°	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6
2.5°	4738.3	4742.8	4742.8	4742.8	4751.9	4754.2	4751.9	4754.2	4758.7	4774.6	4781.4
5°	4604.5	4597.7	4602.3	4600.0	4611.3	4618.2	4613.6	4620.4	4636.3	4647.6	4658.9
7.5°	4509.3	4509.3	4509.3	4513.8	4520.6	4534.3	4532.0	4536.5	4552.4	4568.2	4584.1
10°	4434.5	4432.3	4432.3	4443.6	4452.6	4468.5	4473.0	4486.7	4507.0	4527.5	4545.6
12.5°	4337.0	4339.3	4350.6	4362.0	4382.3	4407.3	4420.9	4439.1	4470.8	4504.8	4525.2
15°	4250.9	4253.1	4262.2	4284.8	4309.8	4339.3	4368.7	4398.2	4436.7	4479.9	4516.2
17.5°	4167.0	4169.2	4176.0	4201.0	4232.8	4271.3	4305.3	4343.8	4393.7	4443.6	4488.9
20°	4089.9	4087.6	4098.9	4121.6	4162.5	4198.7	4232.8	4278.1	4332.5	4393.7	4445.8
22.5°	4015.0	4015.0	4026.4	4049.1	4085.4	4121.6	4157.9	4205.5	4259.9	4318.9	4380.1
25°	3953.8	3951.6	3967.5	3978.8	4006.0	4042.3	4080.8	4119.4	4173.8	4239.6	4298.5
27.5°	3888.1	3885.9	3888.1	3901.8	3926.7	3953.8	3983.3	4017.4	4062.7	4117.1	4173.8
30°	3743.0	3745.3	3745.3	3756.7	3770.3	3799.7	3815.5	3849.6	3890.4	3935.7	3985.7
32.5°	3527.7	3529.9	3529.9	3534.5	3545.8	3559.4	3573.0	3597.9	3629.7	3668.2	3713.5
35°	3271.5	3271.5	3269.2	3271.5	3278.3	3278.3	3289.6	3278.3	3294.2	3316.9	3350.8
37.5°	3035.7	3031.1	3026.6	3022.1	3015.3	3004.0	2988.1	2960.8	2954.0	2945.0	2947.2
40°	2827.1	2824.9	2811.3	2799.9	2777.2	2750.0	2711.5	2663.9	2625.4	2580.0	2541.5
42.5°	2595.9	2593.6	2582.3	2561.8	2536.9	2496.1	2434.9	2371.5	2294.4	2226.4	2156.1
45°	2323.8	2330.6	2314.7	2292.0	2262.6	2224.0	2156.1	2078.9	2001.8	1913.5	1825.0
47.5°	2040.4	2038.1	2026.8	2013.2	1988.3	1949.8	1904.4	1820.5	1738.9	1657.3	1566.6
50°	1777.4	1768.4	1763.8	1750.2	1734.4	1702.7	1655.0	1586.9	1514.4	1437.4	1353.5
52.5°	1528.1	1528.1	1516.7	1507.6	1494.0	1469.1	1428.3	1373.9	1312.7	1240.1	1151.7
55°	1319.5	1314.9	1303.6	1292.3	1278.6	1262.8	1226.6	1181.2	1115.4	1045.1	968.1
57.5°	1097.3	1095.0	1090.5	1076.9	1070.1	1054.2	1013.4	968.1	911.4	850.2	786.7
60°	897.8	888.7	879.6	870.6	859.3	843.4	816.1	777.6	730.0	675.6	612.2
62.5°	718.7	732.3	705.1	705.1	682.4	668.8	643.9	621.2	571.3	521.5	467.1
65°	560.0	560.0	548.6	539.6	525.9	510.1	485.2	462.5	426.2	387.6	349.1
67.5°	428.5	426.2	414.9	405.8	394.5	385.4	367.3	340.0	312.9	281.2	249.3
70°	315.1	312.9	310.6	294.7	285.6	274.4	260.7	242.6	222.2	199.5	170.0
72.5°	226.7	226.7	219.9	213.1	204.1	194.9	181.4	170.0	151.9	136.1	115.6
75°	145.1	142.9	142.9	131.5	131.5	117.9	108.8	102.0	92.9	83.9	65.8
77.5°	104.3	102.0	99.8	95.2	90.7	86.1	79.3	70.3	63.5	54.4	47.6
80°	70.3	65.8	63.5	63.5	56.6	54.4	56.6	43.1	40.8	34.0	29.5
82.5°	43.1	43.1	40.8	40.8	38.5	36.3	29.5	29.5	27.2	24.9	20.4
85°	22.7	29.5	20.4	22.7	20.4	22.7	20.4	15.9	13.6	11.3	11.3
87.5°	13.6	9.1	9.1	13.6	11.3	9.1	9.1	9.1	6.8	4.6	4.6
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°	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6
2.5°	4776.9	4792.8	4790.4	4810.9	4817.7	4833.5	4833.5	4844.8	4851.6	4867.5	4881.1
5°	4663.5	4688.4	4695.2	4720.2	4740.6	4765.5	4781.4	4806.3	4829.0	4863.0	4894.7
7.5°	4593.2	4613.6	4627.2	4656.7	4679.4	4706.5	4733.8	4767.7	4799.5	4840.3	4885.7
10°	4559.2	4586.4	4606.8	4636.3	4663.5	4693.0	4720.2	4758.7	4795.0	4847.2	4897.0
12.5°	4550.1	4581.9	4606.8	4647.6	4674.8	4706.5	4738.3	4781.4	4819.9	4874.3	4931.0
15°	4550.1	4593.2	4627.2	4672.6	4704.3	4745.1	4779.1	4822.1	4865.3	4921.9	4976.3
17.5°	4541.1	4593.2	4636.3	4688.4	4729.2	4770.1	4813.1	4854.0	4899.2	4953.7	5014.8
20°	4504.8	4570.6	4622.6	4683.9	4727.0	4772.3	4815.4	4860.7	4908.4	4965.0	5017.2
22.5°	4441.3	4518.4	4577.4	4643.1	4693.0	4738.3	4781.4	4826.7	4878.9	4933.3	4987.7
25°	4357.4	4429.9	4493.5	4561.4	4611.3	4661.2	4702.0	4754.2	4801.8	4854.0	4897.0
27.5°	4230.4	4307.5	4368.7	4439.1	4484.3	4532.0	4566.0	4609.1	4654.5	4697.5	4731.5
30°	4040.1	4110.3	4173.8	4237.2	4282.6	4316.6	4352.9	4386.9	4416.4	4445.8	4475.3
32.5°	3761.1	3824.7	3885.9	3944.8	3981.1	4010.6	4037.7	4058.2	4074.0	4089.9	4092.1
35°	3378.1	3430.1	3468.7	3520.8	3554.9	3582.1	3582.1	3591.1	3588.9	3582.1	3575.2
37.5°	2949.6	2969.9	2985.8	3006.2	3008.4	3008.4	2994.9	2983.5	2965.4	2960.8	2947.2
40°	2502.9	2475.7	2455.3	2428.1	2412.2	2378.2	2348.8	2328.3	2298.9	2294.4	2289.8
42.5°	2078.9	2015.5	1958.8	1911.2	1856.8	1809.1	1766.1	1734.4	1711.7	1709.4	1711.7
45°	1734.4	1661.8	1577.9	1512.2	1451.0	1392.0	1335.4	1296.8	1276.4	1271.8	1276.4
47.5°	1473.7	1389.8	1308.1	1233.3	1167.6	1101.8	1045.1	993.0	968.1	961.3	959.0
50°	1267.3	1181.2	1095.0	1017.9	945.4	879.6	809.3	759.5	727.8	716.4	707.3
52.5°	1065.6	988.5	900.0	820.7	748.1	671.0	598.5	541.8	510.1	496.5	487.4
55°	888.7	811.7	730.0	652.9	575.9	498.8	426.2	371.8	337.8	321.9	310.6
57.5°	709.6	637.1	566.8	489.7	426.2	351.4	278.8	231.2	201.8	183.6	174.6
60°	548.6	492.0	430.8	367.3	306.1	244.9	185.9	140.5	117.9	104.3	92.9
62.5°	414.9	367.3	326.4	272.0	224.4	172.3	127.0	90.7	70.3	59.0	54.4
65°	299.3	263.0	226.7	192.7	158.7	120.2	86.1	59.0	40.8	34.0	31.7
67.5°	213.1	183.6	156.4	133.7	108.8	86.1	61.2	40.8	31.7	27.2	24.9
70°	149.6	127.0	108.8	88.5	72.5	56.6	47.6	29.5	18.1	20.4	15.9
72.5°	99.8	83.9	74.8	61.2	49.8	40.8	29.5	20.4	20.4	15.9	13.6
75°	54.4	49.8	38.5	29.5	24.9	22.7	9.1	4.6	2.2	6.8	2.2
77.5°	38.5	34.0	29.5	24.9	20.4	15.9	9.1	9.1	6.8	9.1	4.6
80°	24.9	20.4	18.1	18.1	11.3	6.8	4.6	4.6	6.8	2.2	2.2
82.5°	15.9	13.6	11.3	11.3	11.3	6.8	6.8	6.8	6.8	4.6	4.6
85°	9.1	6.8	4.6	4.6	2.2	4.6	0.0	2.2	2.2	0.0	0.0
87.5°	4.6	2.2	2.2	2.2	2.2	0.0	0.0	2.2	0.0	2.2	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°	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6	4851.6
2.5°	4890.2	4899.2	4910.6	4919.7	4940.1	4944.6	4953.7	4962.8	4969.6	4976.3	4978.6
5°	4921.9	4956.0	4987.7	5021.7	5064.8	5094.3	5128.2	5157.7	5187.2	5212.1	5230.2
7.5°	4931.0	4983.1	5030.8	5089.7	5153.1	5207.6	5264.3	5320.9	5379.9	5425.3	5463.8
10°	4949.1	5012.6	5073.8	5144.1	5225.7	5298.2	5368.5	5443.4	5518.2	5581.7	5638.4
12.5°	4980.9	5051.1	5116.9	5194.0	5277.9	5359.5	5436.5	5520.4	5599.8	5670.1	5733.6
15°	5033.0	5098.7	5162.3	5234.8	5318.7	5393.5	5470.6	5552.2	5631.6	5704.1	5763.1
17.5°	5067.0	5128.2	5191.7	5257.5	5327.7	5395.8	5468.3	5540.9	5613.4	5679.2	5733.6
20°	5067.0	5126.0	5173.6	5232.6	5298.2	5357.2	5416.2	5479.7	5543.1	5597.5	5649.7
22.5°	5026.2	5082.9	5119.2	5164.5	5221.2	5271.1	5302.8	5373.1	5420.7	5468.3	5506.8
25°	4931.0	4971.8	5001.3	5033.0	5078.4	5112.4	5139.6	5180.4	5228.0	5246.2	5273.3
27.5°	4758.7	4788.2	4804.0	4810.9	4833.5	4851.6	4856.2	4874.3	4894.7	4899.2	4910.6
30°	4486.7	4488.9	4482.1	4479.9	4468.5	4454.9	4452.6	4450.4	4441.3	4432.3	4434.5
32.5°	4076.3	4065.0	4037.7	4008.3	3978.8	3947.1	3928.9	3906.2	3892.6	3879.1	3863.2
35°	3545.8	3518.6	3480.1	3443.8	3409.8	3384.8	3344.0	3330.4	3316.9	3298.7	3294.2
37.5°	2922.3	2906.4	2870.1	2843.0	2824.9	2813.5	2793.1	2779.5	2779.5	2772.7	2768.1
40°	2278.4	2273.9	2260.3	2267.1	2258.1	2262.6	2260.3	2255.7	2267.1	2267.1	2271.7
42.5°	1709.4	1711.7	1718.5	1723.0	1736.6	1738.9	1750.2	1750.2	1757.1	1763.8	1768.4
45°	1271.8	1281.0	1281.0	1290.0	1303.6	1305.9	1310.4	1312.7	1317.2	1328.6	1333.0
47.5°	954.4	956.7	956.7	959.0	963.5	968.1	965.8	968.1	974.9	970.3	974.9
50°	705.1	707.3	700.5	693.7	700.5	700.5	698.3	691.5	698.3	689.2	693.7
52.5°	480.7	478.3	471.5	473.9	469.3	467.1	467.1	462.5	462.5	462.5	453.4
55°	303.8	303.8	299.3	299.3	297.0	292.5	290.2	287.9	285.6	283.4	283.4
57.5°	170.0	172.3	165.5	163.2	165.5	163.2	158.7	158.7	158.7	151.9	156.4
60°	92.9	90.7	88.5	86.1	83.9	86.1	86.1	81.7	81.7	81.7	83.9
62.5°	49.8	49.8	47.6	47.6	45.4	45.4	49.8	43.1	45.4	43.1	45.4
65°	27.2	34.0	24.9	24.9	31.7	29.5	27.2	27.2	29.5	24.9	27.2
67.5°	29.5	20.4	18.1	20.4	18.1	18.1	18.1	22.7	20.4	15.9	20.4
70°	13.6	15.9	15.9	11.3	18.1	9.1	15.9	9.1	13.6	11.3	13.6
72.5°	13.6	13.6	13.6	9.1	13.6	9.1	11.3	11.3	9.1	9.1	13.6
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°	4.6	4.6	2.2	2.2	2.2	2.2	4.6	4.6	4.6	0.0	2.2
80°	4.6	4.6	0.0	2.2	0.0	0.0	2.2	0.0	2.2	0.0	4.6
82.5°	2.2	4.6	2.2	2.2	4.6	4.6	4.6	2.2	2.2	2.2	2.2
85°	0.0	2.2	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	2.2
87.5°	0.0	2.2	0.0	0.0	0.0	0.0	2.2	2.2	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: P250211

CATALOG NUMBER: LSR8B80D010 EC8B80830 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4851.6	4851.6	4851.6	4851.6
2.5°	4980.9	4983.1	4987.7	4985.5
5°	5243.8	5262.0	5271.1	5268.9
7.5°	5490.9	5522.8	5540.9	5540.9
10°	5681.4	5717.7	5744.9	5749.4
12.5°	5783.4	5824.3	5860.6	5851.4
15°	5812.9	5853.8	5890.0	5883.2
17.5°	5778.9	5819.7	5847.0	5842.4
20°	5686.0	5719.9	5747.2	5744.9
22.5°	5540.9	5570.4	5593.0	5590.7
25°	5296.0	5316.4	5334.5	5325.5
27.5°	4919.7	4926.5	4937.8	4924.2
30°	4418.6	4423.1	4427.7	4425.5
32.5°	3856.4	3854.1	3849.6	3845.0
35°	3287.4	3287.4	3289.6	3276.0
37.5°	2770.4	2768.1	2775.0	2768.1
40°	2276.2	2273.9	2283.0	2271.7
42.5°	1775.2	1782.0	1784.2	1784.2
45°	1335.4	1337.6	1339.8	1339.8
47.5°	974.9	977.1	988.5	974.9
50°	689.2	691.5	693.7	689.2
52.5°	455.7	458.0	455.7	448.9
55°	278.8	281.2	281.2	281.2
57.5°	149.6	151.9	151.9	149.6
60°	81.7	79.3	81.7	77.1
62.5°	43.1	47.6	45.4	40.8
65°	27.2	27.2	27.2	31.7
67.5°	22.7	18.1	20.4	15.9
70°	13.6	15.9	15.9	11.3
72.5°	11.3	11.3	11.3	13.6
75°	0.0	0.0	0.0	0.0
77.5°	4.6	4.6	4.6	2.2
80°	2.2	0.0	2.2	0.0
82.5°	2.2	2.2	4.6	2.2
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)