

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: P250225

Luminaire Tested: **LSR8B80D010 EC8B80840 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P250225  
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 EC8B80840 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8476.0 lumens  
Efficiency: N/A  
Efficacy: 113.9 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

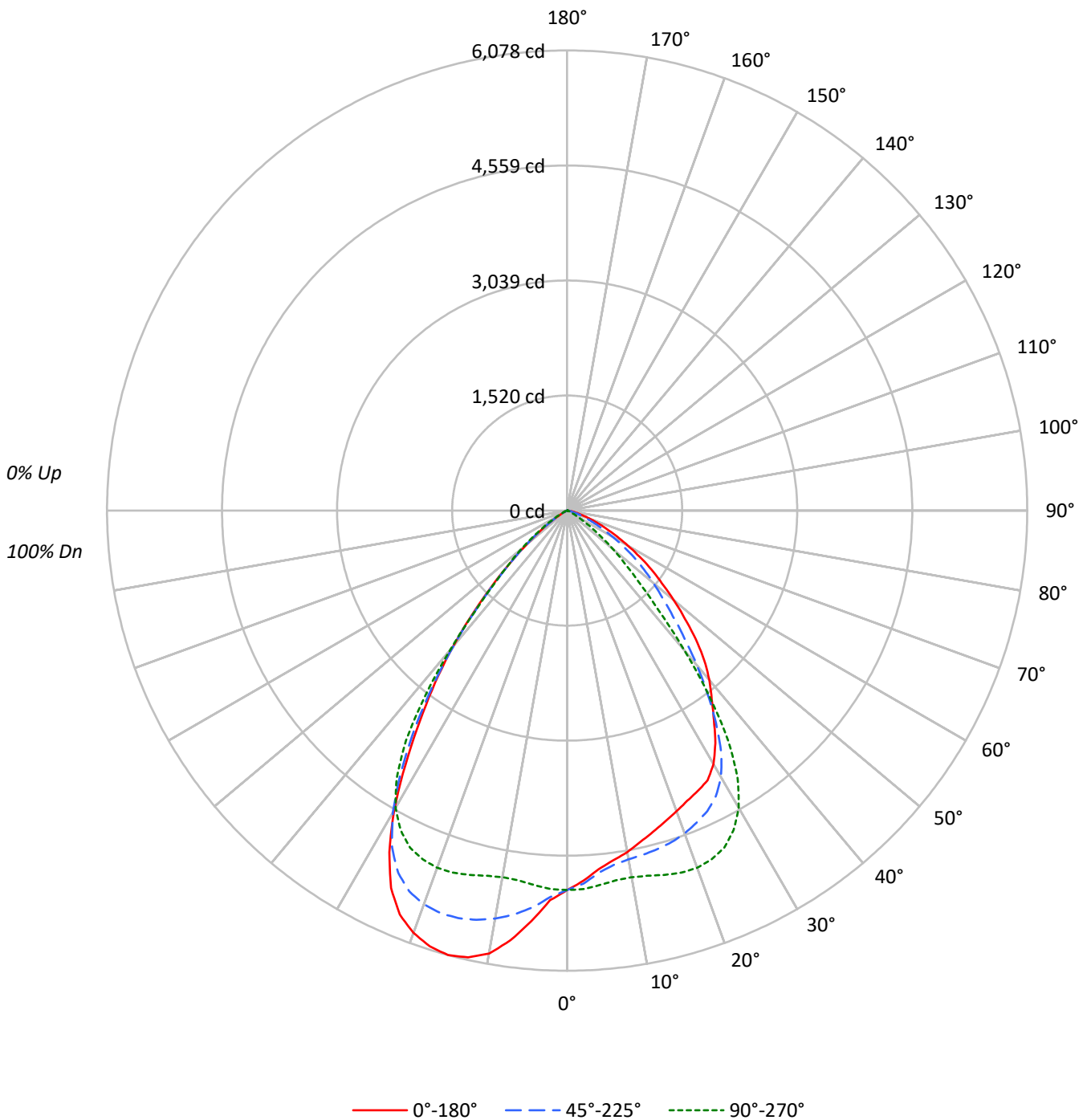
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	154549	154549	154549
5°	147236	153687	168480
10°	143440	153927	185971
15°	140188	159027	194019
20°	138645	164772	194746
25°	138968	167099	187180
30°	137680	161362	162780
35°	127222	139649	127395
40°	117562	96819	94464
45°	104684	58423	60359
50°	88083	37639	34157
55°	73282	20650	15612
60°	57201	8955	4909
65°	42210	4444	2393
70°	29347	2750	1055
75°	17859	560	0
80°	12892	835	0
85°	8279	814	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	481.8	5.7
10°-20°	1442.0	17.0
20°-30°	2208.3	26.1
30°-40°	2164.9	25.5
40°-50°	1303.7	15.4
50°-60°	600.0	7.1
60°-70°	210.8	2.5
70°-80°	55.1	0.7
80°-90°	9.4	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°	4132.1	48.8
0°-40°	6297.0	74.3
0°-60°	8200.7	96.8
0°-90°	8476.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8476.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5012	5012	5012	5012	5012	
5°	4757	4801	4965	5262	5443	449
15°	4391	4628	4981	5572	6078	1241
25°	4084	4380	4911	5281	5501	1881
35°	3380	3426	3710	3497	3384	2117
45°	2400	1977	1340	1349	1384	1841
55°	1363	1080	384	302	290	1216
65°	578	400	61	30	33	589
75°	150	87	5	0	0	182
85°	23	12	2	0	0	32
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°	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9
2.5°	4894.8	4899.5	4899.5	4899.5	4908.8	4911.2	4908.8	4911.2	4915.9	4932.3	4939.3
5°	4756.6	4749.6	4754.3	4751.9	4763.6	4770.7	4766.0	4773.0	4789.4	4801.1	4812.8
7.5°	4658.3	4658.3	4658.3	4662.9	4669.9	4684.0	4681.7	4686.3	4702.7	4719.1	4735.5
10°	4581.0	4578.7	4578.7	4590.3	4599.7	4616.1	4620.8	4634.9	4655.9	4677.0	4695.7
12.5°	4480.2	4482.6	4494.3	4506.1	4527.1	4552.8	4566.9	4585.7	4618.5	4653.6	4674.7
15°	4391.3	4393.6	4403.0	4426.3	4452.2	4482.6	4513.0	4543.5	4583.3	4627.8	4665.3
17.5°	4304.6	4306.9	4313.9	4339.8	4372.6	4412.4	4447.5	4487.3	4538.8	4590.3	4637.2
20°	4225.0	4222.7	4234.3	4257.7	4300.0	4337.4	4372.6	4419.4	4475.6	4538.8	4592.6
22.5°	4147.7	4147.7	4159.4	4182.8	4220.3	4257.7	4295.2	4344.4	4400.6	4461.5	4524.8
25°	4084.4	4082.1	4098.5	4110.3	4138.3	4175.8	4215.6	4255.4	4311.6	4379.6	4440.4
27.5°	4016.6	4014.2	4016.6	4030.6	4056.4	4084.4	4114.9	4150.1	4196.9	4253.1	4311.6
30°	3866.7	3869.0	3869.0	3880.7	3894.8	3925.2	3941.6	3976.7	4018.9	4065.7	4117.3
32.5°	3644.2	3646.5	3646.5	3651.2	3662.9	3676.9	3691.0	3716.8	3749.5	3789.3	3836.2
35°	3379.6	3379.6	3377.1	3379.6	3386.6	3386.6	3398.3	3386.6	3403.0	3426.4	3461.5
37.5°	3136.0	3131.2	3126.6	3121.9	3114.8	3103.2	3086.8	3058.6	3051.6	3042.3	3044.6
40°	2920.5	2918.2	2904.1	2892.4	2868.9	2840.9	2801.1	2751.9	2712.1	2665.2	2625.4
42.5°	2681.6	2679.2	2667.6	2646.4	2620.7	2578.6	2515.3	2449.8	2370.2	2299.9	2227.3
45°	2400.5	2407.6	2391.2	2367.8	2337.3	2297.5	2227.3	2147.6	2067.9	1976.7	1885.3
47.5°	2107.8	2105.4	2093.8	2079.7	2054.0	2014.2	1967.3	1880.6	1796.3	1712.0	1618.3
50°	1836.1	1826.8	1822.0	1808.1	1791.7	1758.9	1709.6	1639.4	1564.5	1484.8	1398.2
52.5°	1578.5	1578.5	1566.8	1557.4	1543.3	1517.6	1475.5	1419.3	1356.0	1281.0	1189.8
55°	1363.1	1358.4	1346.7	1334.9	1320.9	1304.5	1267.1	1220.2	1152.3	1079.7	1000.0
57.5°	1133.6	1131.1	1126.5	1112.4	1105.4	1089.0	1046.9	1000.0	941.5	878.3	812.6
60°	927.5	918.1	908.7	899.3	887.6	871.3	843.1	803.3	754.1	697.9	632.4
62.5°	742.5	756.4	728.4	728.4	705.0	690.9	665.2	641.7	590.2	538.7	482.5
65°	578.5	578.5	566.7	557.4	543.3	526.9	501.2	477.8	440.3	400.4	360.6
67.5°	442.7	440.3	428.6	419.2	407.5	398.1	379.4	351.3	323.2	290.4	257.6
70°	325.5	323.2	320.8	304.4	295.1	283.4	269.3	250.6	229.5	206.1	175.6
72.5°	234.2	234.2	227.2	220.2	210.8	201.4	187.4	175.6	156.9	140.5	119.4
75°	149.9	147.6	147.6	135.8	135.8	121.8	112.4	105.4	96.0	86.7	68.0
77.5°	107.8	105.4	103.1	98.3	93.7	89.0	81.9	72.6	65.6	56.2	49.2
80°	72.6	68.0	65.6	65.6	58.5	56.2	58.5	44.5	42.1	35.1	30.5
82.5°	44.5	44.5	42.1	42.1	39.8	37.5	30.5	30.5	28.1	25.7	21.1
85°	23.4	30.5	21.1	23.4	21.1	23.4	21.1	16.4	14.1	11.7	11.7
87.5°	14.1	9.4	9.4	14.1	11.7	9.4	9.4	9.4	7.0	4.7	4.7
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°	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9
2.5°	4934.7	4951.0	4948.6	4969.8	4976.8	4993.2	4993.2	5004.8	5011.9	5028.3	5042.3
5°	4817.5	4843.3	4850.3	4876.1	4897.2	4922.9	4939.3	4965.0	4988.5	5023.6	5056.4
7.5°	4744.9	4766.0	4780.0	4810.5	4833.9	4862.0	4890.1	4925.2	4958.0	5000.2	5047.1
10°	4709.8	4737.9	4758.9	4789.4	4817.5	4848.0	4876.1	4915.9	4953.4	5007.2	5058.7
12.5°	4700.4	4733.2	4758.9	4801.1	4829.2	4862.0	4894.8	4939.3	4979.1	5035.3	5093.9
15°	4700.4	4744.9	4780.0	4826.9	4859.7	4901.8	4937.0	4981.4	5026.0	5084.5	5140.7
17.5°	4691.1	4744.9	4789.4	4843.3	4885.4	4927.6	4972.1	5014.3	5061.0	5117.3	5180.5
20°	4653.6	4721.5	4775.3	4838.6	4883.1	4929.9	4974.5	5021.2	5070.5	5129.0	5182.9
22.5°	4588.0	4667.6	4728.6	4796.4	4848.0	4894.8	4939.3	4986.1	5040.0	5096.2	5152.4
25°	4501.3	4576.3	4641.9	4712.1	4763.6	4815.1	4857.3	4911.2	4960.4	5014.3	5058.7
27.5°	4370.1	4449.8	4513.0	4585.7	4632.5	4681.7	4716.8	4761.3	4808.2	4852.6	4887.8
30°	4173.5	4246.1	4311.6	4377.2	4424.0	4459.2	4496.6	4531.8	4562.3	4592.6	4623.1
32.5°	3885.4	3951.0	4014.2	4075.1	4112.6	4143.0	4171.1	4192.2	4208.6	4225.0	4227.3
35°	3489.6	3543.4	3583.2	3637.1	3672.3	3700.4	3700.4	3709.7	3707.4	3700.4	3693.3
37.5°	3047.0	3068.0	3084.4	3105.5	3107.8	3107.8	3093.8	3082.1	3063.4	3058.6	3044.6
40°	2585.6	2557.5	2536.4	2508.3	2491.9	2456.7	2426.4	2405.2	2374.8	2370.2	2365.4
42.5°	2147.6	2082.0	2023.5	1974.3	1918.1	1868.9	1824.4	1791.7	1768.2	1765.8	1768.2
45°	1791.7	1716.7	1630.0	1562.1	1498.9	1438.0	1379.5	1339.7	1318.5	1313.8	1318.5
47.5°	1522.3	1435.7	1351.3	1274.0	1206.1	1138.2	1079.7	1025.8	1000.0	993.0	990.7
50°	1309.2	1220.2	1131.1	1051.5	976.6	908.7	836.1	784.6	751.8	740.1	730.7
52.5°	1100.8	1021.2	929.8	847.8	772.8	693.2	618.3	559.7	526.9	512.9	503.5
55°	918.1	838.5	754.1	674.5	594.9	515.3	440.3	384.1	349.0	332.6	320.8
57.5°	733.0	658.1	585.5	505.9	440.3	363.0	288.0	238.9	208.4	189.7	180.4
60°	566.7	508.2	445.0	379.4	316.2	253.0	192.0	145.2	121.8	107.8	96.0
62.5°	428.6	379.4	337.2	281.0	231.8	178.0	131.2	93.7	72.6	60.9	56.2
65°	309.2	271.7	234.2	199.1	164.0	124.2	89.0	60.9	42.1	35.1	32.8
67.5°	220.2	189.7	161.6	138.1	112.4	89.0	63.2	42.1	32.8	28.1	25.7
70°	154.5	131.2	112.4	91.4	74.9	58.5	49.2	30.5	18.7	21.1	16.4
72.5°	103.1	86.7	77.3	63.2	51.5	42.1	30.5	21.1	21.1	16.4	14.1
75°	56.2	51.5	39.8	30.5	25.7	23.4	9.4	4.7	2.3	7.0	2.3
77.5°	39.8	35.1	30.5	25.7	21.1	16.4	9.4	9.4	7.0	9.4	4.7
80°	25.7	21.1	18.7	18.7	11.7	7.0	4.7	4.7	7.0	2.3	2.3
82.5°	16.4	14.1	11.7	11.7	11.7	7.0	7.0	7.0	7.0	4.7	4.7
85°	9.4	7.0	4.7	4.7	2.3	4.7	0.0	2.3	2.3	0.0	0.0
87.5°	4.7	2.3	2.3	2.3	2.3	0.0	0.0	2.3	0.0	2.3	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°	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9	5011.9
2.5°	5051.7	5061.0	5072.8	5082.2	5103.3	5107.9	5117.3	5126.7	5133.7	5140.7	5143.1
5°	5084.5	5119.7	5152.4	5187.5	5232.1	5262.5	5297.6	5328.1	5358.5	5384.3	5403.0
7.5°	5093.9	5147.7	5197.0	5257.8	5323.3	5379.6	5438.2	5496.7	5557.6	5604.4	5644.3
10°	5112.6	5178.2	5241.4	5314.0	5398.3	5473.2	5545.8	5623.1	5700.5	5766.0	5824.6
12.5°	5145.4	5218.0	5285.9	5365.6	5452.2	5536.5	5616.1	5702.8	5784.8	5857.4	5922.9
15°	5199.3	5267.1	5332.8	5407.7	5494.4	5571.7	5651.3	5735.5	5817.6	5892.5	5953.4
17.5°	5234.4	5297.6	5363.2	5431.1	5503.7	5574.0	5648.9	5723.9	5798.8	5866.7	5922.9
20°	5234.4	5295.3	5344.5	5405.4	5473.2	5534.2	5595.1	5660.6	5726.2	5782.4	5836.3
22.5°	5192.2	5250.8	5288.3	5335.1	5393.6	5445.2	5478.0	5550.6	5599.7	5648.9	5688.7
25°	5093.9	5136.0	5166.5	5199.3	5246.1	5281.2	5309.4	5351.5	5400.7	5419.5	5447.5
27.5°	4915.9	4946.3	4962.7	4969.8	4993.2	5011.9	5016.6	5035.3	5056.4	5061.0	5072.8
30°	4634.9	4637.2	4630.1	4627.8	4616.1	4602.1	4599.7	4597.4	4588.0	4578.7	4581.0
32.5°	4210.9	4199.2	4171.1	4140.7	4110.3	4077.5	4058.7	4035.3	4021.2	4007.2	3990.8
35°	3662.9	3634.8	3595.0	3557.5	3522.4	3496.6	3454.5	3440.4	3426.4	3407.6	3403.0
37.5°	3018.8	3002.4	2964.9	2936.9	2918.2	2906.4	2885.3	2871.3	2871.3	2864.3	2859.6
40°	2353.7	2349.0	2335.0	2342.0	2332.7	2337.3	2335.0	2330.3	2342.0	2342.0	2346.7
42.5°	1765.8	1768.2	1775.3	1779.9	1794.0	1796.3	1808.1	1808.1	1815.1	1822.0	1826.8
45°	1313.8	1323.3	1323.3	1332.6	1346.7	1349.0	1353.6	1356.0	1360.7	1372.4	1377.1
47.5°	986.0	988.3	988.3	990.7	995.3	1000.0	997.7	1000.0	1007.1	1002.4	1007.1
50°	728.4	730.7	723.7	716.6	723.7	723.7	721.4	714.3	721.4	712.0	716.6
52.5°	496.6	494.1	487.1	489.5	484.8	482.5	482.5	477.8	477.8	477.8	468.4
55°	313.9	313.9	309.2	309.2	306.8	302.1	299.8	297.4	295.1	292.8	292.8
57.5°	175.6	178.0	171.0	168.6	171.0	168.6	164.0	164.0	164.0	156.9	161.6
60°	96.0	93.7	91.4	89.0	86.7	89.0	89.0	84.3	84.3	84.3	86.7
62.5°	51.5	51.5	49.2	49.2	46.8	46.8	51.5	44.5	46.8	44.5	46.8
65°	28.1	35.1	25.7	25.7	32.8	30.5	28.1	28.1	30.5	25.7	28.1
67.5°	30.5	21.1	18.7	21.1	18.7	18.7	18.7	23.4	21.1	16.4	21.1
70°	14.1	16.4	16.4	11.7	18.7	9.4	16.4	9.4	14.1	11.7	14.1
72.5°	14.1	14.1	14.1	9.4	14.1	9.4	11.7	11.7	9.4	9.4	14.1
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°	4.7	4.7	2.3	2.3	2.3	2.3	4.7	4.7	4.7	0.0	2.3
80°	4.7	4.7	0.0	2.3	0.0	0.0	2.3	0.0	2.3	0.0	4.7
82.5°	2.3	4.7	2.3	2.3	4.7	4.7	4.7	2.3	2.3	2.3	2.3
85°	0.0	2.3	0.0	0.0	0.0	0.0	4.7	0.0	0.0	0.0	2.3
87.5°	0.0	2.3	0.0	0.0	0.0	0.0	2.3	2.3	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: P250225

CATALOG NUMBER: LSR8B80D010 EC8B80840 8LBSW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5011.9	5011.9	5011.9	5011.9
2.5°	5145.4	5147.7	5152.4	5150.1
5°	5417.0	5435.8	5445.2	5442.9
7.5°	5672.3	5705.2	5723.9	5723.9
10°	5869.1	5906.6	5934.6	5939.3
12.5°	5974.4	6016.6	6054.1	6044.7
15°	6004.9	6047.1	6084.5	6077.5
17.5°	5969.8	6011.9	6040.1	6035.3
20°	5873.8	5908.9	5937.0	5934.6
22.5°	5723.9	5754.3	5777.8	5775.4
25°	5470.9	5492.0	5510.7	5501.4
27.5°	5082.2	5089.2	5100.9	5086.9
30°	4564.6	4569.2	4573.9	4571.6
32.5°	3983.8	3981.4	3976.7	3972.0
35°	3395.9	3395.9	3398.3	3384.2
37.5°	2861.9	2859.6	2866.6	2859.6
40°	2351.4	2349.0	2358.4	2346.7
42.5°	1833.8	1840.8	1843.1	1843.1
45°	1379.5	1381.8	1384.1	1384.1
47.5°	1007.1	1009.4	1021.2	1007.1
50°	712.0	714.3	716.6	712.0
52.5°	470.7	473.1	470.7	463.7
55°	288.0	290.4	290.4	290.4
57.5°	154.5	156.9	156.9	154.5
60°	84.3	81.9	84.3	79.6
62.5°	44.5	49.2	46.8	42.1
65°	28.1	28.1	28.1	32.8
67.5°	23.4	18.7	21.1	16.4
70°	14.1	16.4	16.4	11.7
72.5°	11.7	11.7	11.7	14.1
75°	0.0	0.0	0.0	0.0
77.5°	4.7	4.7	4.7	2.3
80°	2.3	0.0	2.3	0.0
82.5°	2.3	2.3	4.7	2.3
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)