

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: P249780

Luminaire Tested: **LSR8B120D010 EC8B1209730 8LBSW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249780  
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: LSR8B120D010 EC8B1209730 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9602.0 lumens  
Efficiency: N/A  
Efficacy: 81.2 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

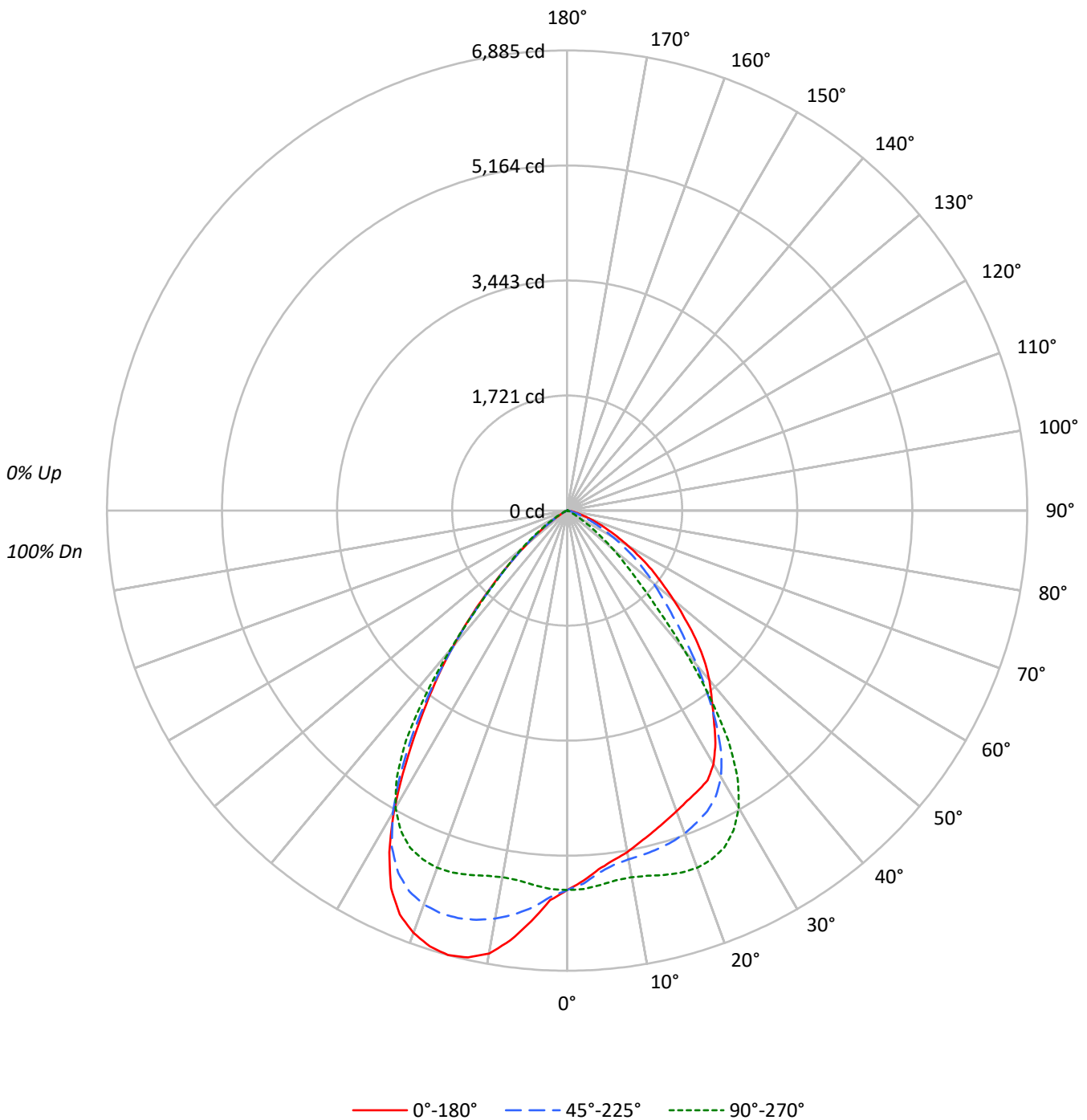
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10				
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100				
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91	91	91				
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82	82	82				
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73	73	73				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66	66	66				
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60	60	60				
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54	54	54				
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49	49	49				
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45	45	45				
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42	42	42				
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38	38	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°	545.8	5.7
10°-20°	1633.6	17.0
20°-30°	2501.6	26.1
30°-40°	2452.4	25.5
40°-50°	1476.9	15.4
50°-60°	679.8	7.1
60°-70°	238.8	2.5
70°-80°	62.5	0.7
80°-90°	10.6	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°	4681.0	48.8
0°-40°	7133.5	74.3
0°-60°	9290.1	96.8
0°-90°	9602.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9602.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5678	5678	5678	5678	5678	
5°	5388	5439	5625	5962	6166	509
15°	4975	5243	5643	6312	6885	1405
25°	4627	4961	5564	5983	6232	2131
35°	3828	3882	4202	3961	3834	2398
45°	2719	2239	1518	1528	1568	2085
55°	1544	1223	435	342	329	1378
65°	655	454	69	34	37	668
75°	170	98	5	0	0	206
85°	26	13	3	0	0	36
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°	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7
2.5°	5545.0	5550.3	5550.3	5550.3	5560.9	5563.7	5560.9	5563.7	5568.9	5587.5	5595.5
5°	5388.5	5380.5	5385.9	5383.2	5396.5	5404.5	5399.1	5407.1	5425.6	5439.0	5452.2
7.5°	5277.1	5277.1	5277.1	5282.4	5290.3	5306.3	5303.7	5308.9	5327.5	5346.0	5364.6
10°	5189.5	5186.9	5186.9	5200.1	5210.7	5229.3	5234.6	5250.6	5274.4	5298.3	5319.5
12.5°	5075.4	5078.1	5091.4	5104.7	5128.5	5157.6	5173.6	5194.9	5232.0	5271.8	5295.7
15°	4974.6	4977.2	4987.9	5014.4	5043.6	5078.1	5112.5	5147.1	5192.2	5242.6	5285.1
17.5°	4876.4	4879.1	4887.0	4916.3	4953.4	4998.5	5038.3	5083.4	5141.8	5200.1	5253.2
20°	4786.2	4783.6	4796.8	4823.4	4871.2	4913.6	4953.4	5006.5	5070.2	5141.8	5202.7
22.5°	4698.7	4698.7	4712.0	4738.5	4781.0	4823.4	4865.9	4921.5	4985.2	5054.2	5125.9
25°	4627.0	4624.4	4643.0	4656.3	4688.1	4730.5	4775.6	4820.8	4884.4	4961.4	5030.3
27.5°	4550.1	4547.5	4550.1	4566.1	4595.2	4627.0	4661.5	4701.4	4754.5	4818.1	4884.4
30°	4380.3	4382.9	4382.9	4396.3	4412.2	4446.6	4465.2	4505.0	4552.8	4605.8	4664.3
32.5°	4128.3	4130.9	4130.9	4136.3	4149.5	4165.4	4181.4	4210.5	4247.6	4292.7	4345.8
35°	3828.5	3828.5	3825.8	3828.5	3836.5	3836.5	3849.7	3836.5	3855.0	3881.6	3921.3
37.5°	3552.6	3547.2	3542.0	3536.6	3528.6	3515.4	3496.9	3465.0	3457.0	3446.4	3449.0
40°	3308.5	3305.9	3289.9	3276.6	3250.1	3218.3	3173.2	3117.5	3072.4	3019.3	2974.2
42.5°	3037.9	3035.1	3021.9	2998.0	2968.9	2921.1	2849.5	2775.2	2685.0	2605.4	2523.2
45°	2719.4	2727.4	2708.8	2682.3	2647.8	2602.7	2523.2	2432.9	2342.7	2239.3	2135.7
47.5°	2387.8	2385.1	2371.9	2356.0	2326.8	2281.7	2228.7	2130.5	2034.9	1939.5	1833.3
50°	2080.0	2069.4	2064.1	2048.3	2029.7	1992.6	1936.8	1857.1	1772.3	1682.1	1583.9
52.5°	1788.2	1788.2	1774.9	1764.3	1748.4	1719.2	1671.5	1607.8	1536.2	1451.2	1347.8
55°	1544.2	1538.8	1525.6	1512.3	1496.3	1477.8	1435.4	1382.3	1305.3	1223.1	1132.9
57.5°	1284.1	1281.4	1276.2	1260.2	1252.3	1233.7	1186.0	1132.9	1066.6	995.0	920.6
60°	1050.7	1040.1	1029.4	1018.8	1005.6	987.0	955.1	910.0	854.3	790.6	716.4
62.5°	841.1	856.9	825.2	825.2	798.6	782.7	753.5	727.0	668.6	610.2	546.6
65°	655.3	655.3	642.0	631.4	615.5	596.9	567.8	541.2	498.7	453.6	408.5
67.5°	501.5	498.7	485.5	474.9	461.6	451.0	429.8	397.9	366.2	329.0	291.8
70°	368.8	366.2	363.4	344.9	334.3	321.1	305.1	283.9	260.0	233.5	199.0
72.5°	265.3	265.3	257.4	249.4	238.8	228.1	212.3	199.0	177.8	159.2	135.3
75°	169.8	167.2	167.2	153.9	153.9	137.9	127.3	119.4	108.8	98.2	77.0
77.5°	122.1	119.4	116.7	111.4	106.1	100.8	92.8	82.2	74.3	63.7	55.7
80°	82.2	77.0	74.3	74.3	66.3	63.7	66.3	50.5	47.7	39.8	34.5
82.5°	50.5	50.5	47.7	47.7	45.1	42.5	34.5	34.5	31.9	29.2	23.9
85°	26.5	34.5	23.9	26.5	23.9	26.5	23.9	18.6	15.9	13.2	13.2
87.5°	15.9	10.6	10.6	15.9	13.2	10.6	10.6	10.6	8.0	5.4	5.4
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7
2.5°	5590.2	5608.8	5606.0	5630.0	5637.9	5656.5	5656.5	5669.7	5677.7	5696.2	5712.2
5°	5457.5	5486.7	5494.7	5523.8	5547.7	5576.9	5595.5	5624.6	5651.1	5691.0	5728.1
7.5°	5375.3	5399.1	5415.0	5449.6	5476.1	5507.9	5539.8	5579.5	5616.6	5664.5	5717.5
10°	5335.4	5367.3	5391.1	5425.6	5457.5	5492.0	5523.8	5568.9	5611.4	5672.4	5730.8
12.5°	5324.8	5362.0	5391.1	5439.0	5470.7	5507.9	5545.0	5595.5	5640.6	5704.2	5770.6
15°	5324.8	5362.0	5391.1	5439.0	5470.7	5507.9	5545.0	5595.5	5640.6	5704.2	5770.6
17.5°	5314.2	5375.3	5425.6	5486.7	5534.4	5582.2	5632.6	5680.4	5733.4	5797.2	5868.7
20°	5271.8	5348.8	5409.7	5481.3	5531.8	5584.9	5635.3	5688.3	5744.1	5810.4	5871.4
22.5°	5197.5	5287.7	5356.7	5433.6	5492.0	5545.0	5595.5	5648.5	5709.6	5773.2	5836.9
25°	5099.3	5184.2	5258.6	5338.1	5396.5	5454.8	5502.6	5563.7	5619.4	5680.4	5730.8
27.5°	4950.7	5040.9	5112.5	5194.9	5247.9	5303.7	5343.4	5393.9	5446.9	5497.3	5537.1
30°	4727.9	4810.2	4884.4	4958.7	5011.8	5051.6	5094.0	5133.8	5168.4	5202.7	5237.3
32.5°	4401.5	4475.9	4547.5	4616.4	4658.9	4693.4	4725.2	4749.1	4767.7	4786.2	4788.9
35°	3953.2	4014.2	4059.3	4120.3	4160.2	4191.9	4191.9	4202.5	4199.9	4191.9	4184.0
37.5°	3451.8	3475.6	3494.1	3518.0	3520.7	3520.7	3504.8	3491.5	3470.3	3465.0	3449.0
40°	2929.1	2897.2	2873.3	2841.5	2823.0	2783.1	2748.7	2724.8	2690.3	2685.0	2679.7
42.5°	2432.9	2358.6	2292.3	2236.6	2173.0	2117.2	2066.8	2029.7	2003.1	2000.4	2003.1
45°	2029.7	1944.7	1846.5	1769.7	1698.0	1629.0	1562.7	1517.6	1493.7	1488.4	1493.7
47.5°	1724.6	1626.4	1530.8	1443.3	1366.4	1289.4	1223.1	1162.1	1132.9	1124.9	1122.3
50°	1483.1	1382.3	1281.4	1191.2	1106.4	1029.4	947.1	888.8	851.7	838.4	827.8
52.5°	1247.0	1156.8	1053.3	960.5	875.5	785.3	700.4	634.0	596.9	581.1	570.4
55°	1040.1	949.9	854.3	764.1	673.9	583.7	498.7	435.1	395.3	376.8	363.4
57.5°	830.4	745.5	663.3	573.1	498.7	411.3	326.3	270.6	236.1	214.9	204.3
60°	642.0	575.7	504.1	429.8	358.2	286.6	217.5	164.5	137.9	122.1	108.8
62.5°	485.5	429.8	382.0	318.3	262.6	201.6	148.6	106.1	82.2	69.0	63.7
65°	350.2	307.7	265.3	225.5	185.8	140.7	100.8	69.0	47.7	39.8	37.1
67.5°	249.4	214.9	183.0	156.5	127.3	100.8	71.6	47.7	37.1	31.9	29.2
70°	175.1	148.6	127.3	103.5	84.9	66.3	55.7	34.5	21.2	23.9	18.6
72.5°	116.7	98.2	87.6	71.6	58.3	47.7	34.5	23.9	23.9	18.6	15.9
75°	63.7	58.3	45.1	34.5	29.2	26.5	10.6	5.4	2.6	8.0	2.6
77.5°	45.1	39.8	34.5	29.2	23.9	18.6	10.6	10.6	8.0	10.6	5.4
80°	29.2	23.9	21.2	21.2	13.2	8.0	5.4	5.4	8.0	2.6	2.6
82.5°	18.6	15.9	13.2	13.2	13.2	8.0	8.0	8.0	8.0	5.4	5.4
85°	10.6	8.0	5.4	5.4	2.6	5.4	0.0	2.6	2.6	0.0	0.0
87.5°	5.4	2.6	2.6	2.6	2.6	0.0	0.0	2.6	0.0	2.6	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°	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7	5677.7
2.5°	5722.8	5733.4	5746.7	5757.3	5781.2	5786.5	5797.2	5807.7	5815.7	5823.6	5826.3
5°	5759.9	5799.8	5836.9	5876.7	5927.1	5961.6	6001.4	6035.9	6070.4	6099.5	6120.7
7.5°	5770.6	5831.6	5887.4	5956.3	6030.5	6094.3	6160.6	6226.9	6295.9	6349.0	6394.1
10°	5791.8	5866.1	5937.7	6019.9	6115.5	6200.3	6282.6	6370.2	6457.7	6532.0	6598.4
12.5°	5828.9	5911.2	5988.2	6078.4	6176.5	6272.0	6362.2	6460.4	6553.3	6635.5	6709.8
15°	5890.0	5966.9	6041.2	6126.1	6224.3	6311.8	6402.0	6497.5	6590.4	6675.3	6744.3
17.5°	5929.7	6001.4	6075.6	6152.6	6234.8	6314.5	6399.3	6484.3	6569.1	6646.1	6709.8
20°	5929.7	5998.7	6054.4	6123.5	6200.3	6269.4	6338.4	6412.6	6486.9	6550.6	6611.6
22.5°	5882.0	5948.3	5990.8	6043.8	6110.1	6168.6	6205.7	6287.9	6343.6	6399.3	6444.4
25°	5770.6	5818.3	5852.8	5890.0	5943.1	5982.8	6014.7	6062.4	6118.1	6139.4	6171.2
27.5°	5568.9	5603.4	5622.0	5630.0	5656.5	5677.7	5683.0	5704.2	5728.1	5733.4	5746.7
30°	5250.6	5253.2	5245.2	5242.6	5229.3	5213.5	5210.7	5208.1	5197.5	5186.9	5189.5
32.5°	4770.3	4757.1	4725.2	4690.8	4656.3	4619.2	4597.9	4571.3	4555.4	4539.5	4521.0
35°	4149.5	4117.7	4072.6	4030.1	3990.4	3961.1	3913.4	3897.4	3881.6	3860.3	3855.0
37.5°	3419.9	3401.3	3358.8	3327.0	3305.9	3292.5	3268.6	3252.8	3252.8	3244.8	3239.5
40°	2666.4	2661.1	2645.2	2653.1	2642.5	2647.8	2645.2	2639.8	2653.1	2653.1	2658.5
42.5°	2000.4	2003.1	2011.1	2016.4	2032.3	2034.9	2048.3	2048.3	2056.2	2064.1	2069.4
45°	1488.4	1499.1	1499.1	1509.7	1525.6	1528.2	1533.5	1536.2	1541.4	1554.8	1560.0
47.5°	1116.9	1119.6	1119.6	1122.3	1127.5	1132.9	1130.3	1132.9	1140.9	1135.5	1140.9
50°	825.2	827.8	819.8	811.8	819.8	819.8	817.2	809.2	817.2	806.6	811.8
52.5°	562.5	559.8	551.8	554.5	549.2	546.6	546.6	541.2	541.2	541.2	530.6
55°	355.6	355.6	350.2	350.2	347.6	342.2	339.6	336.9	334.3	331.7	331.7
57.5°	199.0	201.6	193.7	191.0	193.7	191.0	185.8	185.8	185.8	177.8	183.0
60°	108.8	106.1	103.5	100.8	98.2	100.8	100.8	95.6	95.6	95.6	98.2
62.5°	58.3	58.3	55.7	55.7	53.1	53.1	58.3	50.5	53.1	50.5	53.1
65°	31.9	39.8	29.2	29.2	37.1	34.5	31.9	31.9	34.5	29.2	31.9
67.5°	34.5	23.9	21.2	23.9	21.2	21.2	21.2	26.5	23.9	18.6	23.9
70°	15.9	18.6	18.6	13.2	21.2	10.6	18.6	10.6	15.9	13.2	15.9
72.5°	15.9	15.9	15.9	10.6	15.9	10.6	13.2	13.2	10.6	10.6	15.9
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°	5.4	5.4	2.6	2.6	2.6	2.6	5.4	5.4	5.4	0.0	2.6
80°	5.4	5.4	0.0	2.6	0.0	0.0	2.6	0.0	2.6	0.0	5.4
82.5°	2.6	5.4	2.6	2.6	5.4	5.4	5.4	2.6	2.6	2.6	2.6
85°	0.0	2.6	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	2.6
87.5°	0.0	2.6	0.0	0.0	0.0	0.0	2.6	2.6	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: P249780

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5677.7	5677.7	5677.7	5677.7
2.5°	5828.9	5831.6	5836.9	5834.3
5°	6136.7	6158.0	6168.6	6165.9
7.5°	6425.8	6463.1	6484.3	6484.3
10°	6648.7	6691.2	6723.0	6728.3
12.5°	6768.1	6815.9	6858.4	6847.7
15°	6802.6	6850.4	6892.8	6884.8
17.5°	6762.9	6810.6	6842.5	6837.1
20°	6654.1	6693.8	6725.7	6723.0
22.5°	6484.3	6518.8	6545.3	6542.6
25°	6197.7	6221.6	6242.8	6232.2
27.5°	5757.3	5765.3	5778.5	5762.6
30°	5171.0	5176.2	5181.6	5178.9
32.5°	4513.0	4510.3	4505.0	4499.7
35°	3847.1	3847.1	3849.7	3833.8
37.5°	3242.1	3239.5	3247.4	3239.5
40°	2663.7	2661.1	2671.7	2658.5
42.5°	2077.4	2085.4	2088.0	2088.0
45°	1562.7	1565.3	1568.0	1568.0
47.5°	1140.9	1143.5	1156.8	1140.9
50°	806.6	809.2	811.8	806.6
52.5°	533.2	536.0	533.2	525.3
55°	326.3	329.0	329.0	329.0
57.5°	175.1	177.8	177.8	175.1
60°	95.6	92.8	95.6	90.2
62.5°	50.5	55.7	53.1	47.7
65°	31.9	31.9	31.9	37.1
67.5°	26.5	21.2	23.9	18.6
70°	15.9	18.6	18.6	13.2
72.5°	13.2	13.2	13.2	15.9
75°	0.0	0.0	0.0	0.0
77.5°	5.4	5.4	5.4	2.6
80°	2.6	0.0	2.6	0.0
82.5°	2.6	2.6	5.4	2.6
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)