

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: P249159

Luminaire Tested: **LSR8B120D010 EC8B120940 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249159  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B120D010 EC8B120940 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11137.0 lumens  
Efficiency: N/A  
Efficacy: 94.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

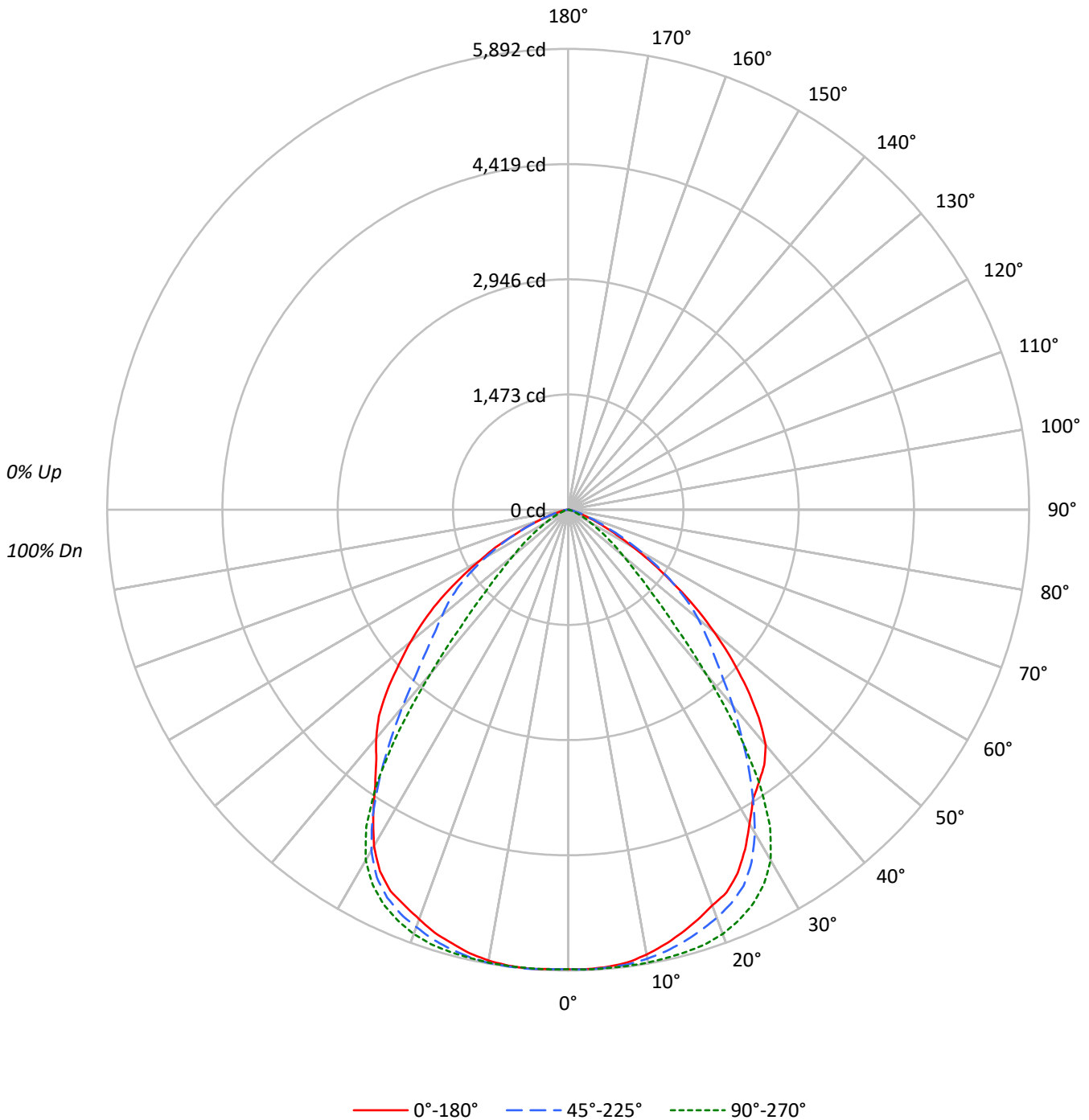
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	90°	180°
0°	181197	181197	181197
5°	181595	182084	182283
10°	180833	184093	183301
15°	178829	186785	183260
20°	176681	189410	182788
25°	174387	189627	182975
30°	164980	184297	176773
35°	160056	160172	161836
40°	158073	110203	153629
45°	140849	66159	142776
50°	117116	44034	126192
55°	87835	30354	106996
60°	59526	20229	80729
65°	35906	13119	55461
70°	19907	7114	34125
75°	9019	3002	17669
80°	7831	3356	12324
85°	8916	4458	12277



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	560.8	5.0
10°-20°	1628.6	14.6
20°-30°	2471.9	22.2
30°-40°	2596.3	23.3
40°-50°	1946.5	17.5
50°-60°	1248.9	11.2
60°-70°	534.3	4.8
70°-80°	126.2	1.1
80°-90°	23.5	0.2
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°	4661.3	41.9
0°-40°	7257.6	65.2
0°-60°	10453.0	93.9
0°-90°	11137.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11137.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5876	5876	5876	5876	5876	
5°	5867	5876	5882	5892	5889	557
15°	5602	5718	5851	5813	5740	1580
25°	5125	5305	5573	5472	5378	2342
35°	4252	4015	4255	4204	4299	2668
45°	3230	2640	1517	2564	3274	2474
55°	1634	1634	565	1703	1990	1482
65°	492	580	180	748	760	525
75°	76	88	25	151	148	110
85°	25	16	13	25	35	27
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°	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1
2.5°	5879.3	5885.6	5882.4	5882.4	5879.3	5882.4	5882.4	5888.8	5888.8	5882.4	5879.3
5°	5866.6	5872.9	5872.9	5866.6	5866.6	5882.4	5872.9	5879.3	5879.3	5876.1	5876.1
7.5°	5838.3	5838.3	5850.9	5841.4	5841.4	5850.9	5847.7	5854.0	5860.4	5863.5	5863.5
10°	5775.2	5781.5	5784.6	5784.6	5787.8	5797.2	5803.6	5816.2	5822.5	5828.8	5832.0
12.5°	5696.4	5705.8	5708.9	5705.8	5715.3	5727.8	5743.7	5759.4	5768.9	5781.5	5791.0
15°	5601.7	5601.7	5608.0	5617.5	5623.8	5642.7	5658.5	5677.4	5702.6	5718.4	5734.2
17.5°	5497.6	5504.0	5513.4	5513.4	5526.0	5557.5	5567.0	5595.4	5623.8	5639.6	5671.1
20°	5384.1	5390.4	5399.8	5406.2	5421.9	5447.2	5466.1	5491.3	5522.9	5551.3	5582.8
22.5°	5295.7	5283.2	5289.4	5295.7	5311.6	5333.6	5355.7	5387.2	5418.8	5447.2	5478.7
25°	5125.4	5128.6	5138.1	5144.3	5163.3	5182.2	5207.4	5245.3	5273.7	5305.2	5339.9
27.5°	4895.2	4898.4	4914.1	4914.1	4929.8	4961.4	4977.2	5008.7	5046.6	5078.1	5119.2
30°	4633.4	4639.7	4639.7	4652.3	4661.7	4677.6	4693.3	4724.9	4743.8	4772.2	4829.0
32.5°	4393.7	4400.0	4396.8	4393.7	4384.2	4381.0	4377.9	4384.2	4390.5	4400.0	4422.0
35°	4251.8	4236.0	4223.4	4201.3	4176.1	4144.5	4116.1	4078.3	4043.6	4015.2	3983.7
37.5°	4116.1	4112.9	4094.0	4062.5	4012.0	3955.3	3889.0	3807.0	3725.0	3636.7	3551.6
40°	3926.9	3917.4	3901.6	3857.5	3800.7	3731.3	3643.0	3542.1	3409.6	3274.0	3135.2
42.5°	3605.1	3608.3	3589.4	3554.6	3501.1	3434.8	3343.3	3233.0	3091.1	2930.1	2750.4
45°	3229.8	3229.8	3223.5	3195.1	3157.3	3103.6	3034.3	2942.8	2804.0	2640.0	2447.6
47.5°	2838.7	2841.9	2832.4	2826.1	2810.3	2775.6	2725.2	2655.8	2558.0	2400.3	2207.9
50°	2441.3	2441.3	2457.1	2453.9	2453.9	2441.3	2419.2	2378.2	2293.1	2166.9	1987.1
52.5°	2043.9	2050.2	2059.7	2072.3	2088.0	2113.2	2088.0	2069.1	2015.5	1917.7	1763.2
55°	1633.8	1640.1	1655.9	1678.0	1696.9	1722.2	1728.4	1728.4	1700.0	1633.8	1517.1
57.5°	1283.7	1274.3	1286.9	1305.8	1331.1	1356.3	1375.2	1397.3	1394.1	1350.0	1255.3
60°	965.2	968.3	977.7	996.7	1015.6	1037.7	1062.9	1081.9	1091.3	1069.3	1009.3
62.5°	703.4	703.4	716.0	734.9	744.4	775.9	791.7	801.2	810.6	807.4	769.6
65°	492.1	498.3	504.7	514.1	523.6	542.5	552.0	570.9	577.2	580.4	552.0
67.5°	347.0	337.5	343.8	350.1	359.6	372.2	391.1	391.1	400.5	400.5	381.6
70°	220.8	220.8	224.0	233.4	239.7	242.9	249.2	255.5	264.9	261.8	261.8
72.5°	148.3	145.1	148.3	151.4	154.6	164.0	164.0	167.2	173.5	176.7	164.0
75°	75.7	78.9	85.1	82.0	91.5	85.1	88.3	97.8	94.6	88.3	88.3
77.5°	63.1	63.1	63.1	60.0	66.2	66.2	63.1	69.4	66.2	66.2	63.1
80°	44.1	47.3	44.1	41.0	44.1	41.0	41.0	41.0	41.0	41.0	37.8
82.5°	34.7	28.4	31.6	28.4	31.6	31.6	28.4	25.2	25.2	28.4	25.2
85°	25.2	18.9	22.1	22.1	18.9	18.9	18.9	18.9	18.9	15.7	15.7
87.5°	15.7	9.5	9.5	9.5	12.6	12.6	12.6	9.5	12.6	12.6	6.3
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°	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1
2.5°	5885.6	5882.4	5888.8	5885.6	5885.6	5882.4	5885.6	5882.4	5888.8	5876.1	5879.3
5°	5885.6	5879.3	5882.4	5885.6	5888.8	5882.4	5882.4	5882.4	5888.8	5882.4	5885.6
7.5°	5872.9	5869.8	5879.3	5885.6	5882.4	5879.3	5885.6	5882.4	5888.8	5885.6	5891.8
10°	5847.7	5850.9	5857.2	5866.6	5869.8	5872.9	5879.3	5879.3	5888.8	5876.1	5882.4
12.5°	5809.9	5822.5	5838.3	5844.5	5857.2	5857.2	5863.5	5866.6	5872.9	5869.8	5879.3
15°	5762.6	5778.3	5797.2	5813.0	5828.8	5838.3	5847.7	5850.9	5860.4	5850.9	5854.0
17.5°	5705.8	5724.7	5753.1	5772.0	5797.2	5806.7	5819.3	5825.6	5835.1	5828.8	5832.0
20°	5626.9	5649.0	5680.5	5708.9	5724.7	5746.8	5762.6	5772.0	5778.3	5772.0	5775.2
22.5°	5516.5	5548.1	5589.1	5611.2	5642.7	5661.6	5664.8	5686.9	5702.6	5686.9	5693.2
25°	5387.2	5418.8	5450.3	5497.6	5526.0	5548.1	5570.2	5573.3	5589.1	5585.9	5582.8
27.5°	5172.7	5213.8	5267.3	5305.2	5343.0	5377.8	5403.0	5409.3	5425.1	5418.8	5421.9
30°	4879.4	4923.6	4974.1	5034.0	5087.6	5122.2	5153.8	5175.9	5191.6	5182.2	5179.0
32.5°	4463.1	4507.2	4560.9	4620.8	4683.9	4734.3	4772.2	4800.6	4819.5	4813.2	4797.4
35°	3986.8	3999.4	4034.1	4081.4	4135.0	4188.6	4223.4	4254.9	4276.9	4283.3	4283.3
37.5°	3497.9	3456.9	3431.7	3431.7	3463.2	3485.3	3516.8	3535.7	3570.5	3583.0	3592.5
40°	3024.8	2930.1	2841.9	2775.6	2731.5	2728.3	2728.3	2737.7	2769.3	2810.3	2848.2
42.5°	2602.1	2450.7	2315.1	2192.1	2103.8	2053.3	2031.3	2034.4	2059.7	2097.5	2160.5
45°	2264.7	2075.4	1905.1	1756.8	1637.0	1558.1	1520.3	1517.1	1536.0	1580.2	1649.6
47.5°	2002.9	1801.0	1608.6	1438.3	1309.0	1223.8	1179.6	1167.1	1179.6	1220.6	1302.7
50°	1785.2	1577.1	1378.4	1201.7	1062.9	974.7	933.6	917.9	933.6	968.3	1050.3
52.5°	1583.3	1368.9	1182.8	1012.5	864.2	788.5	744.4	734.9	744.4	785.3	851.6
55°	1350.0	1167.1	984.1	813.7	684.5	608.8	574.0	564.6	574.0	611.9	681.3
57.5°	1119.7	962.0	801.2	646.6	536.2	469.9	438.4	425.8	447.9	473.1	555.1
60°	905.2	779.1	643.4	507.8	416.4	356.4	331.2	328.0	334.3	365.9	422.6
62.5°	709.7	605.6	498.3	388.0	312.3	287.0	255.5	252.4	258.6	277.5	321.7
65°	511.0	444.8	362.7	283.9	224.0	189.2	176.7	179.8	186.1	198.7	239.7
67.5°	356.4	309.1	252.4	198.7	154.6	138.8	126.2	123.0	126.2	148.3	170.3
70°	239.7	211.3	170.3	151.4	107.3	85.1	88.3	78.9	91.5	91.5	110.4
72.5°	157.7	138.8	113.5	88.3	75.7	60.0	60.0	56.8	63.1	66.2	82.0
75°	82.0	63.1	63.1	44.1	31.6	15.7	28.4	25.2	22.1	25.2	31.6
77.5°	56.8	47.3	44.1	34.7	31.6	25.2	25.2	25.2	25.2	28.4	31.6
80°	34.7	34.7	25.2	22.1	18.9	15.7	18.9	18.9	18.9	18.9	22.1
82.5°	22.1	18.9	18.9	15.7	15.7	12.6	12.6	12.6	12.6	12.6	18.9
85°	18.9	12.6	12.6	9.5	12.6	22.1	9.5	12.6	12.6	12.6	9.5
87.5°	6.3	9.5	9.5	9.5	6.3	3.2	6.3	9.5	9.5	15.7	12.6
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1	5876.1
2.5°	5885.6	5888.8	5888.8	5885.6	5885.6	5879.3	5891.8	5882.4	5885.6	5898.2	5888.8
5°	5891.8	5895.0	5895.0	5891.8	5891.8	5891.8	5895.0	5895.0	5891.8	5888.8	5895.0
7.5°	5904.5	5901.3	5901.3	5895.0	5895.0	5888.8	5895.0	5885.6	5891.8	5885.6	5895.0
10°	5888.8	5891.8	5888.8	5885.6	5885.6	5882.4	5882.4	5872.9	5876.1	5866.6	5872.9
12.5°	5879.3	5876.1	5876.1	5869.8	5863.5	5857.2	5854.0	5844.5	5844.5	5822.5	5832.0
15°	5854.0	5857.2	5847.7	5835.1	5828.8	5813.0	5806.7	5794.1	5781.5	5765.7	5768.9
17.5°	5832.0	5822.5	5809.9	5797.2	5772.0	5759.4	5746.8	5727.8	5721.5	5702.6	5696.4
20°	5765.7	5759.4	5743.7	5721.5	5705.8	5677.4	5664.8	5645.9	5630.1	5611.2	5601.7
22.5°	5680.5	5674.2	5655.3	5633.2	5608.0	5595.4	5582.8	5548.1	5532.3	5513.4	5510.2
25°	5573.3	5563.8	5544.9	5519.7	5507.0	5472.4	5459.7	5434.5	5428.2	5409.3	5406.2
27.5°	5409.3	5396.7	5374.6	5343.0	5321.0	5298.9	5286.3	5267.3	5261.1	5242.1	5239.0
30°	5163.3	5147.5	5103.3	5090.8	5052.9	5030.8	5030.8	5005.6	5008.7	4996.1	4996.1
32.5°	4775.3	4750.1	4715.4	4690.1	4664.9	4652.3	4652.3	4642.8	4649.2	4649.2	4655.5
35°	4261.2	4226.5	4207.6	4191.8	4191.8	4204.4	4242.3	4251.8	4270.7	4286.4	4299.1
37.5°	3602.0	3598.9	3620.9	3639.8	3687.2	3740.8	3807.0	3863.8	3917.4	3955.3	3993.1
40°	2889.2	2968.0	3031.1	3119.5	3191.9	3296.0	3415.9	3513.7	3605.1	3671.4	3740.8
42.5°	2255.2	2356.1	2488.6	2617.9	2747.2	2889.2	3046.9	3182.5	3302.4	3393.8	3466.4
45°	1756.8	1895.6	2056.5	2220.5	2387.7	2564.3	2728.3	2867.1	2993.3	3087.9	3160.4
47.5°	1416.2	1567.6	1750.5	1930.3	2119.6	2305.6	2488.6	2608.5	2712.5	2788.2	2854.5
50°	1170.1	1331.1	1523.5	1728.4	1917.7	2103.8	2261.5	2378.2	2463.4	2529.6	2570.6
52.5°	977.7	1148.1	1353.1	1558.1	1747.3	1917.7	2059.7	2148.0	2217.3	2264.7	2302.5
55°	807.4	971.5	1163.9	1356.3	1542.4	1703.2	1819.9	1886.2	1939.7	1968.1	1990.2
57.5°	659.2	810.6	987.2	1163.9	1324.7	1457.2	1548.7	1614.9	1640.1	1662.2	1659.1
60°	517.3	659.2	820.1	971.5	1110.3	1217.5	1283.7	1321.6	1340.5	1350.0	1343.6
62.5°	406.9	536.2	659.2	791.7	892.6	984.1	1047.2	1047.2	1056.6	1059.8	1069.3
65°	302.8	400.5	507.8	605.6	687.6	747.5	782.3	791.7	804.3	801.2	794.8
67.5°	224.0	296.5	375.3	447.9	504.7	542.5	567.7	589.9	586.7	580.4	577.2
70°	154.6	201.9	271.3	315.4	356.4	394.3	400.5	403.7	406.9	410.0	403.7
72.5°	107.3	141.9	179.8	217.6	242.9	258.6	274.4	277.5	277.5	277.5	274.4
75°	53.6	72.5	107.3	123.0	145.1	151.4	164.0	164.0	173.5	160.8	157.7
77.5°	47.3	56.8	75.7	88.3	97.8	107.3	110.4	119.9	116.7	110.4	113.5
80°	28.4	34.7	47.3	53.6	66.2	69.4	72.5	75.7	72.5	75.7	75.7
82.5°	22.1	25.2	31.6	31.6	41.0	41.0	44.1	44.1	47.3	47.3	47.3
85°	12.6	22.1	18.9	37.8	25.2	25.2	31.6	37.8	31.6	31.6	37.8
87.5°	12.6	12.6	9.5	12.6	12.6	12.6	15.7	18.9	18.9	22.1	18.9
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: P249159

CATALOG NUMBER: LSR8B120D010 EC8B120940 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5876.1	5876.1	5876.1	5876.1
2.5°	5885.6	5891.8	5882.4	5879.3
5°	5895.0	5895.0	5888.8	5888.8
7.5°	5895.0	5895.0	5885.6	5879.3
10°	5869.8	5869.8	5860.4	5854.0
12.5°	5822.5	5822.5	5819.3	5809.9
15°	5762.6	5762.6	5749.9	5740.5
17.5°	5680.5	5686.9	5671.1	5671.1
20°	5592.2	5589.1	5576.5	5570.2
22.5°	5500.8	5494.5	5491.3	5472.4
25°	5403.0	5396.7	5387.2	5377.8
27.5°	5235.8	5232.7	5223.2	5210.6
30°	4980.3	4977.2	4964.6	4964.6
32.5°	4649.2	4646.0	4633.4	4636.6
35°	4305.3	4318.0	4311.7	4299.1
37.5°	4018.3	4027.8	4034.1	4027.8
40°	3778.6	3807.0	3810.2	3816.5
42.5°	3523.2	3561.0	3573.6	3579.9
45°	3217.2	3251.9	3280.3	3274.0
47.5°	2904.9	2930.1	2955.4	2936.5
50°	2605.3	2621.1	2630.5	2630.5
52.5°	2321.5	2321.5	2318.3	2321.5
55°	1996.5	1996.5	1984.0	1990.2
57.5°	1655.9	1662.2	1652.7	1637.0
60°	1340.5	1324.7	1318.4	1309.0
62.5°	1044.0	1044.0	1022.0	1050.3
65°	782.3	772.8	763.3	760.1
67.5°	567.7	564.6	555.1	552.0
70°	400.5	388.0	384.8	378.5
72.5°	268.1	268.1	261.8	261.8
75°	164.0	148.3	145.1	148.3
77.5°	113.5	110.4	110.4	107.3
80°	75.7	72.5	78.9	69.4
82.5°	47.3	50.5	47.3	50.5
85°	31.6	37.8	34.7	34.7
87.5°	18.9	18.9	18.9	18.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)