

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: P249204

Luminaire Tested: **LSR8B120D010 EC8B120830 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249204  
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 EC8B120830 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 3000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11961.0 lumens  
Efficiency: N/A  
Efficacy: 101.1 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

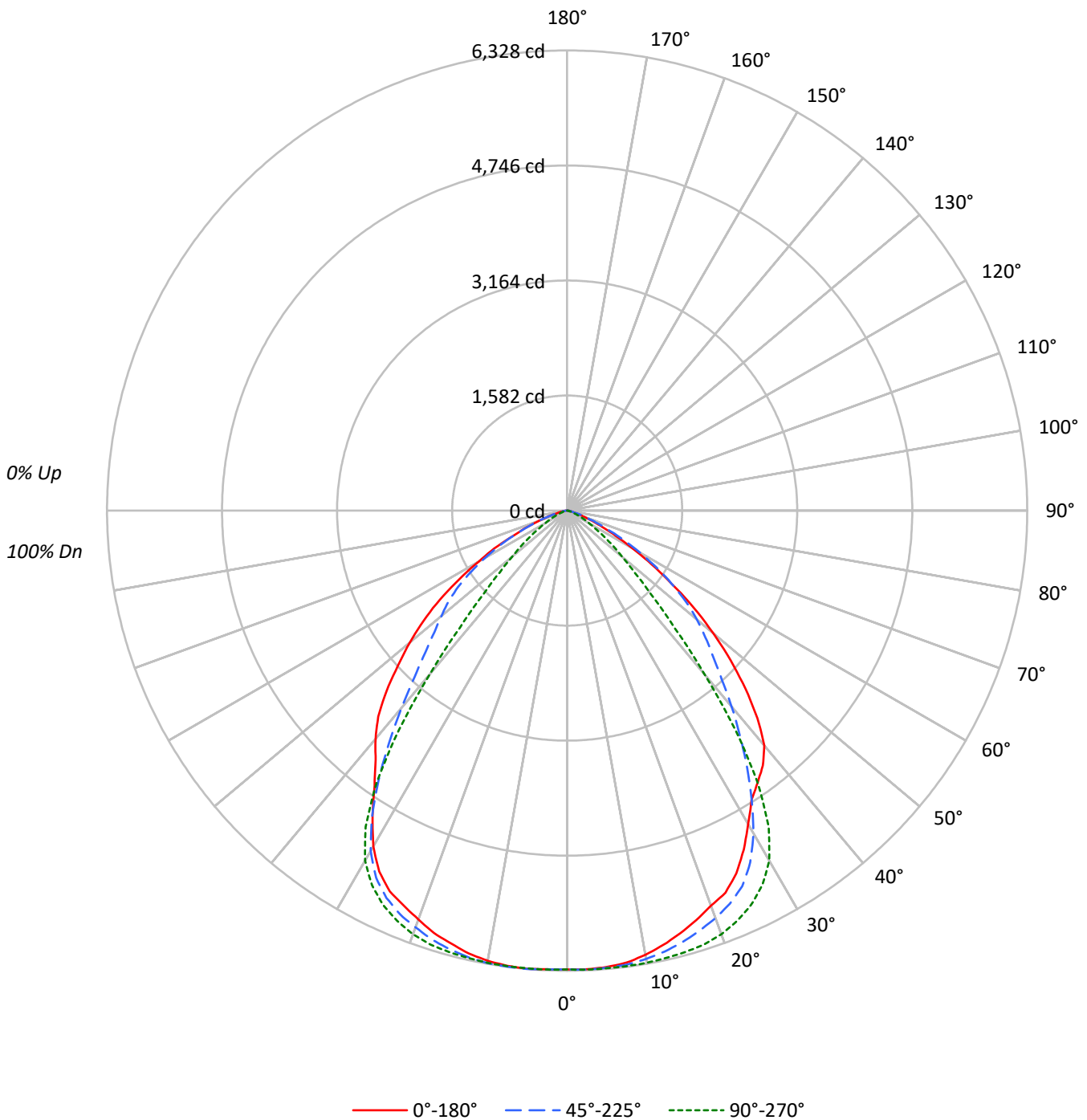
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

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

	0°	90°	180°
0°	194605	194605	194605
5°	195033	195559	195769
10°	194210	197713	196865
15°	192059	200605	196818
20°	189755	203422	196311
25°	187289	203658	196513
30°	177186	197931	189851
35°	171898	172023	173811
40°	169767	118359	164997
45°	151271	71057	153338
50°	125780	47292	135533
55°	94335	32601	114915
60°	63930	21727	86699
65°	38562	14090	59561
70°	21377	7636	36650
75°	9686	3229	18967
80°	8417	3605	13230
85°	9588	4776	13197



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	602.3	5.0
10°-20°	1749.1	14.6
20°-30°	2654.8	22.2
30°-40°	2788.4	23.3
40°-50°	2090.5	17.5
50°-60°	1341.3	11.2
60°-70°	573.8	4.8
70°-80°	135.5	1.1
80°-90°	25.2	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°	5006.2	41.9
0°-40°	7794.6	65.2
0°-60°	11226.4	93.9
0°-90°	11961.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11961.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6311	6311	6311	6311	6311	
5°	6301	6311	6318	6328	6324	598
15°	6016	6142	6284	6243	6165	1697
25°	5505	5698	5986	5877	5776	2515
35°	4566	4312	4570	4516	4617	2866
45°	3469	2835	1629	2754	3516	2657
55°	1755	1755	606	1829	2138	1592
65°	528	623	193	803	816	564
75°	81	95	27	163	159	118
85°	27	17	14	27	37	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°	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9
2.5°	6314.3	6321.1	6317.7	6317.7	6314.3	6317.7	6317.7	6324.5	6324.5	6317.7	6314.3
5°	6300.7	6307.5	6307.5	6300.7	6300.7	6317.7	6307.5	6314.3	6314.3	6310.9	6310.9
7.5°	6270.2	6270.2	6283.8	6273.6	6273.6	6283.8	6280.4	6287.2	6293.9	6297.3	6297.3
10°	6202.4	6209.2	6212.6	6212.6	6216.0	6226.2	6232.9	6246.5	6253.3	6260.0	6263.4
12.5°	6117.8	6127.9	6131.3	6127.9	6138.1	6151.6	6168.6	6185.5	6195.7	6209.2	6219.4
15°	6016.1	6016.1	6022.9	6033.1	6039.9	6060.2	6077.1	6097.4	6124.5	6141.5	6158.4
17.5°	5904.4	5911.2	5921.3	5921.3	5934.9	5968.7	5978.9	6009.4	6039.9	6056.8	6090.7
20°	5782.5	5789.2	5799.4	5806.2	5823.1	5850.2	5870.5	5897.6	5931.5	5962.0	5995.8
22.5°	5687.6	5674.0	5680.8	5687.6	5704.5	5728.3	5752.0	5785.8	5819.7	5850.2	5884.1
25°	5504.6	5508.0	5518.2	5524.9	5545.3	5565.6	5592.7	5633.3	5663.9	5697.7	5735.0
27.5°	5257.4	5260.8	5277.7	5277.7	5294.6	5328.5	5345.4	5379.3	5420.0	5453.8	5497.9
30°	4976.2	4982.9	4982.9	4996.5	5006.6	5023.6	5040.5	5074.4	5094.8	5125.3	5186.3
32.5°	4718.8	4725.5	4722.1	4718.8	4708.6	4705.2	4701.8	4708.6	4715.4	4725.5	4749.2
35°	4566.4	4549.4	4535.9	4512.1	4485.0	4451.1	4420.6	4380.0	4342.7	4312.2	4278.4
37.5°	4420.6	4417.2	4396.9	4363.0	4308.8	4247.9	4176.8	4088.7	4000.6	3905.8	3814.3
40°	4217.4	4207.2	4190.3	4142.9	4081.9	4007.4	3912.6	3804.1	3661.8	3516.2	3367.2
42.5°	3871.9	3875.3	3854.9	3817.6	3760.1	3688.9	3590.7	3472.2	3319.7	3146.9	2953.9
45°	3468.8	3468.8	3462.0	3431.5	3390.9	3333.3	3258.7	3160.5	3011.5	2835.3	2628.6
47.5°	3048.7	3052.1	3041.9	3035.2	3018.2	2981.0	2926.8	2852.3	2747.3	2577.8	2371.2
50°	2621.9	2621.9	2638.8	2635.4	2635.4	2621.9	2598.2	2554.1	2462.7	2327.2	2134.1
52.5°	2195.1	2201.9	2212.1	2225.6	2242.5	2269.6	2242.5	2222.2	2164.6	2059.6	1893.6
55°	1754.7	1761.5	1778.4	1802.1	1822.5	1849.6	1856.3	1856.3	1825.8	1754.7	1629.4
57.5°	1378.7	1368.5	1382.1	1402.4	1429.5	1456.6	1476.9	1500.7	1497.3	1449.8	1348.2
60°	1036.6	1040.0	1050.1	1070.5	1090.8	1114.5	1141.6	1161.9	1172.1	1148.4	1084.0
62.5°	755.4	755.4	768.9	789.2	799.4	833.3	850.2	860.4	870.6	867.2	826.5
65°	528.5	535.2	542.0	552.2	562.3	582.6	592.8	613.1	619.9	623.3	592.8
67.5°	372.7	362.5	369.3	376.0	386.2	399.8	420.1	420.1	430.2	430.2	409.9
70°	237.1	237.1	240.5	250.6	257.4	260.8	267.6	274.4	284.5	281.1	281.1
72.5°	159.2	155.8	159.2	162.6	166.0	176.1	176.1	179.5	186.3	189.7	176.1
75°	81.3	84.7	91.4	88.1	98.2	91.4	94.8	105.0	101.6	94.8	94.8
77.5°	67.7	67.7	67.7	64.4	71.1	71.1	67.7	74.5	71.1	71.1	67.7
80°	47.4	50.8	47.4	44.0	47.4	44.0	44.0	44.0	44.0	44.0	40.6
82.5°	37.3	30.5	33.9	30.5	33.9	33.9	30.5	27.1	27.1	30.5	27.1
85°	27.1	20.3	23.7	23.7	20.3	20.3	20.3	20.3	20.3	16.9	16.9
87.5°	16.9	10.2	10.2	10.2	13.5	13.5	13.5	10.2	13.5	13.5	6.8
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°	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9
2.5°	6321.1	6317.7	6324.5	6321.1	6321.1	6317.7	6321.1	6317.7	6324.5	6310.9	6314.3
5°	6321.1	6314.3	6317.7	6321.1	6324.5	6317.7	6317.7	6317.7	6324.5	6317.7	6321.1
7.5°	6307.5	6304.1	6314.3	6321.1	6317.7	6314.3	6321.1	6317.7	6324.5	6321.1	6327.8
10°	6280.4	6283.8	6290.6	6300.7	6304.1	6307.5	6314.3	6314.3	6324.5	6310.9	6317.7
12.5°	6239.7	6253.3	6270.2	6277.0	6290.6	6290.6	6297.3	6300.7	6307.5	6304.1	6314.3
15°	6188.9	6205.8	6226.2	6243.1	6260.0	6270.2	6280.4	6283.8	6293.9	6283.8	6287.2
17.5°	6127.9	6148.2	6178.7	6199.0	6226.2	6236.3	6249.9	6256.7	6266.8	6260.0	6263.4
20°	6043.2	6067.0	6100.8	6131.3	6148.2	6171.9	6188.9	6199.0	6205.8	6199.0	6202.4
22.5°	5924.7	5958.6	6002.6	6026.3	6060.2	6080.5	6083.9	6107.6	6124.5	6107.6	6114.4
25°	5785.8	5819.7	5853.6	5904.4	5934.9	5958.6	5982.3	5985.7	6002.6	5999.2	5995.8
27.5°	5555.4	5599.5	5657.1	5697.7	5738.4	5775.7	5802.8	5809.5	5826.5	5819.7	5823.1
30°	5240.4	5287.9	5342.1	5406.4	5464.0	5501.2	5535.1	5558.8	5575.7	5565.6	5562.2
32.5°	4793.3	4840.7	4898.3	4962.6	5030.4	5084.6	5125.3	5155.8	5176.1	5169.3	5152.4
35°	4281.8	4295.3	4332.6	4383.4	4441.0	4498.6	4535.9	4569.7	4593.4	4600.2	4600.2
37.5°	3756.7	3712.7	3685.6	3685.6	3719.4	3743.1	3777.0	3797.3	3834.6	3848.2	3858.3
40°	3248.6	3146.9	3052.1	2981.0	2933.6	2930.2	2930.2	2940.3	2974.2	3018.2	3058.9
42.5°	2794.7	2632.0	2486.4	2354.3	2259.5	2205.3	2181.6	2185.0	2212.1	2252.7	2320.4
45°	2432.2	2229.0	2046.0	1886.8	1758.1	1673.4	1632.8	1629.4	1649.7	1697.1	1771.7
47.5°	2151.1	1934.2	1727.6	1544.7	1405.8	1314.3	1266.9	1253.4	1266.9	1310.9	1399.0
50°	1917.3	1693.8	1480.3	1290.6	1141.6	1046.8	1002.7	985.8	1002.7	1040.0	1128.0
52.5°	1700.5	1470.2	1270.3	1087.4	928.2	846.8	799.4	789.2	799.4	843.4	914.6
55°	1449.8	1253.4	1056.9	874.0	735.1	653.8	616.5	606.4	616.5	657.2	731.7
57.5°	1202.6	1033.2	860.4	694.4	575.9	504.7	470.9	457.3	481.0	508.1	596.2
60°	972.2	836.7	691.0	545.4	447.2	382.8	355.7	352.3	359.1	393.0	453.9
62.5°	762.2	650.4	535.2	416.7	335.4	308.3	274.4	271.0	277.8	298.1	345.6
65°	548.8	477.7	389.6	304.9	240.5	203.2	189.7	193.1	199.8	213.4	257.4
67.5°	382.8	332.0	271.0	213.4	166.0	149.0	135.5	132.1	135.5	159.2	182.9
70°	257.4	226.9	182.9	162.6	115.2	91.4	94.8	84.7	98.2	98.2	118.5
72.5°	169.3	149.0	121.9	94.8	81.3	64.4	64.4	61.0	67.7	71.1	88.1
75°	88.1	67.7	67.7	47.4	33.9	16.9	30.5	27.1	23.7	27.1	33.9
77.5°	61.0	50.8	47.4	37.3	33.9	27.1	27.1	27.1	27.1	30.5	33.9
80°	37.3	37.3	27.1	23.7	20.3	16.9	20.3	20.3	20.3	20.3	23.7
82.5°	23.7	20.3	20.3	16.9	16.9	13.5	13.5	13.5	13.5	13.5	20.3
85°	20.3	13.5	13.5	10.2	13.5	23.7	10.2	13.5	13.5	13.5	10.2
87.5°	6.8	10.2	10.2	10.2	6.8	3.4	6.8	10.2	10.2	16.9	13.5
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°	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9	6310.9
2.5°	6321.1	6324.5	6324.5	6321.1	6321.1	6314.3	6327.8	6317.7	6321.1	6334.6	6324.5
5°	6327.8	6331.2	6331.2	6327.8	6327.8	6327.8	6331.2	6331.2	6327.8	6324.5	6331.2
7.5°	6341.4	6338.0	6338.0	6331.2	6331.2	6324.5	6331.2	6321.1	6327.8	6321.1	6331.2
10°	6324.5	6327.8	6324.5	6321.1	6321.1	6317.7	6317.7	6307.5	6310.9	6300.7	6307.5
12.5°	6314.3	6310.9	6310.9	6304.1	6297.3	6290.6	6287.2	6277.0	6277.0	6253.3	6263.4
15°	6287.2	6290.6	6280.4	6266.8	6260.0	6243.1	6236.3	6222.8	6209.2	6192.3	6195.7
17.5°	6263.4	6253.3	6239.7	6226.2	6199.0	6185.5	6171.9	6151.6	6144.8	6124.5	6117.8
20°	6192.3	6185.5	6168.6	6144.8	6127.9	6097.4	6083.9	6063.6	6046.6	6026.3	6016.1
22.5°	6100.8	6094.0	6073.7	6050.0	6022.9	6009.4	5995.8	5958.6	5941.6	5921.3	5917.9
25°	5985.7	5975.5	5955.2	5928.1	5914.5	5877.3	5863.7	5836.6	5829.9	5809.5	5806.2
27.5°	5809.5	5796.0	5772.3	5738.4	5714.7	5691.0	5677.4	5657.1	5650.3	5630.0	5626.6
30°	5545.3	5528.3	5480.9	5467.4	5426.7	5403.0	5403.0	5375.9	5379.3	5365.8	5365.8
32.5°	5128.7	5101.6	5064.3	5037.2	5010.0	4996.5	4996.5	4986.3	4993.1	4993.1	4999.9
35°	4576.5	4539.3	4518.9	4502.0	4502.0	4515.5	4556.2	4566.4	4586.7	4603.6	4617.2
37.5°	3868.5	3865.1	3888.8	3909.2	3960.0	4017.6	4088.7	4149.7	4207.2	4247.9	4288.5
40°	3102.9	3187.6	3255.3	3350.3	3428.1	3539.9	3668.6	3773.6	3871.9	3943.1	4017.6
42.5°	2422.0	2530.4	2672.7	2811.6	2950.5	3102.9	3272.3	3418.0	3546.7	3644.9	3722.8
45°	1886.8	2035.8	2208.7	2384.8	2564.3	2754.1	2930.2	3079.2	3214.7	3316.4	3394.3
47.5°	1521.0	1683.6	1880.0	2073.1	2276.4	2476.2	2672.7	2801.5	2913.2	2994.5	3065.7
50°	1256.7	1429.5	1636.2	1856.3	2059.6	2259.5	2428.8	2554.1	2645.6	2716.8	2760.8
52.5°	1050.1	1233.0	1453.2	1673.4	1876.6	2059.6	2212.1	2306.9	2381.4	2432.2	2472.8
55°	867.2	1043.4	1250.0	1456.6	1656.5	1829.2	1954.5	2025.7	2083.3	2113.8	2137.5
57.5°	708.0	870.6	1060.3	1250.0	1422.7	1565.1	1663.3	1734.4	1761.5	1785.2	1781.8
60°	555.6	708.0	880.7	1043.4	1192.4	1307.5	1378.7	1419.3	1439.6	1449.8	1443.0
62.5°	437.0	575.9	708.0	850.2	958.7	1056.9	1124.7	1124.7	1134.8	1138.2	1148.4
65°	325.2	430.2	545.4	650.4	738.4	802.8	840.1	850.2	863.8	860.4	853.6
67.5°	240.5	318.4	403.1	481.0	542.0	582.6	609.7	633.5	630.1	623.3	619.9
70°	166.0	216.8	291.3	338.8	382.8	423.5	430.2	433.6	437.0	440.4	433.6
72.5°	115.2	152.4	193.1	233.7	260.8	277.8	294.7	298.1	298.1	298.1	294.7
75°	57.6	77.9	115.2	132.1	155.8	162.6	176.1	176.1	186.3	172.7	169.3
77.5°	50.8	61.0	81.3	94.8	105.0	115.2	118.5	128.7	125.3	118.5	121.9
80°	30.5	37.3	50.8	57.6	71.1	74.5	77.9	81.3	77.9	81.3	81.3
82.5°	23.7	27.1	33.9	33.9	44.0	44.0	47.4	47.4	50.8	50.8	50.8
85°	13.5	23.7	20.3	40.6	27.1	27.1	33.9	40.6	33.9	33.9	40.6
87.5°	13.5	13.5	10.2	13.5	13.5	13.5	16.9	20.3	20.3	23.7	20.3
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: P249204

CATALOG NUMBER: LSR8B120D010 EC8B120830 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6310.9	6310.9	6310.9	6310.9
2.5°	6321.1	6327.8	6317.7	6314.3
5°	6331.2	6331.2	6324.5	6324.5
7.5°	6331.2	6331.2	6321.1	6314.3
10°	6304.1	6304.1	6293.9	6287.2
12.5°	6253.3	6253.3	6249.9	6239.7
15°	6188.9	6188.9	6175.3	6165.2
17.5°	6100.8	6107.6	6090.7	6090.7
20°	6006.0	6002.6	5989.1	5982.3
22.5°	5907.8	5901.0	5897.6	5877.3
25°	5802.8	5796.0	5785.8	5775.7
27.5°	5623.2	5619.8	5609.6	5596.1
30°	5348.8	5345.4	5331.9	5331.9
32.5°	4993.1	4989.7	4976.2	4979.6
35°	4623.9	4637.5	4630.7	4617.2
37.5°	4315.6	4325.8	4332.6	4325.8
40°	4058.2	4088.7	4092.1	4098.9
42.5°	3783.8	3824.4	3838.0	3844.8
45°	3455.2	3492.5	3523.0	3516.2
47.5°	3119.8	3146.9	3174.0	3153.7
50°	2798.1	2815.0	2825.2	2825.2
52.5°	2493.2	2493.2	2489.8	2493.2
55°	2144.3	2144.3	2130.7	2137.5
57.5°	1778.4	1785.2	1775.0	1758.1
60°	1439.6	1422.7	1415.9	1405.8
62.5°	1121.3	1121.3	1097.6	1128.0
65°	840.1	829.9	819.7	816.3
67.5°	609.7	606.4	596.2	592.8
70°	430.2	416.7	413.3	406.5
72.5°	287.9	287.9	281.1	281.1
75°	176.1	159.2	155.8	159.2
77.5°	121.9	118.5	118.5	115.2
80°	81.3	77.9	84.7	74.5
82.5°	50.8	54.2	50.8	54.2
85°	33.9	40.6	37.3	37.3
87.5°	20.3	20.3	20.3	20.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)