

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: P249168

Luminaire Tested: **LSR8B120D010 EC8B120950 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249168
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 EC8B120950 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11530.0 lumens
Efficiency: N/A
Efficacy: 97.5 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

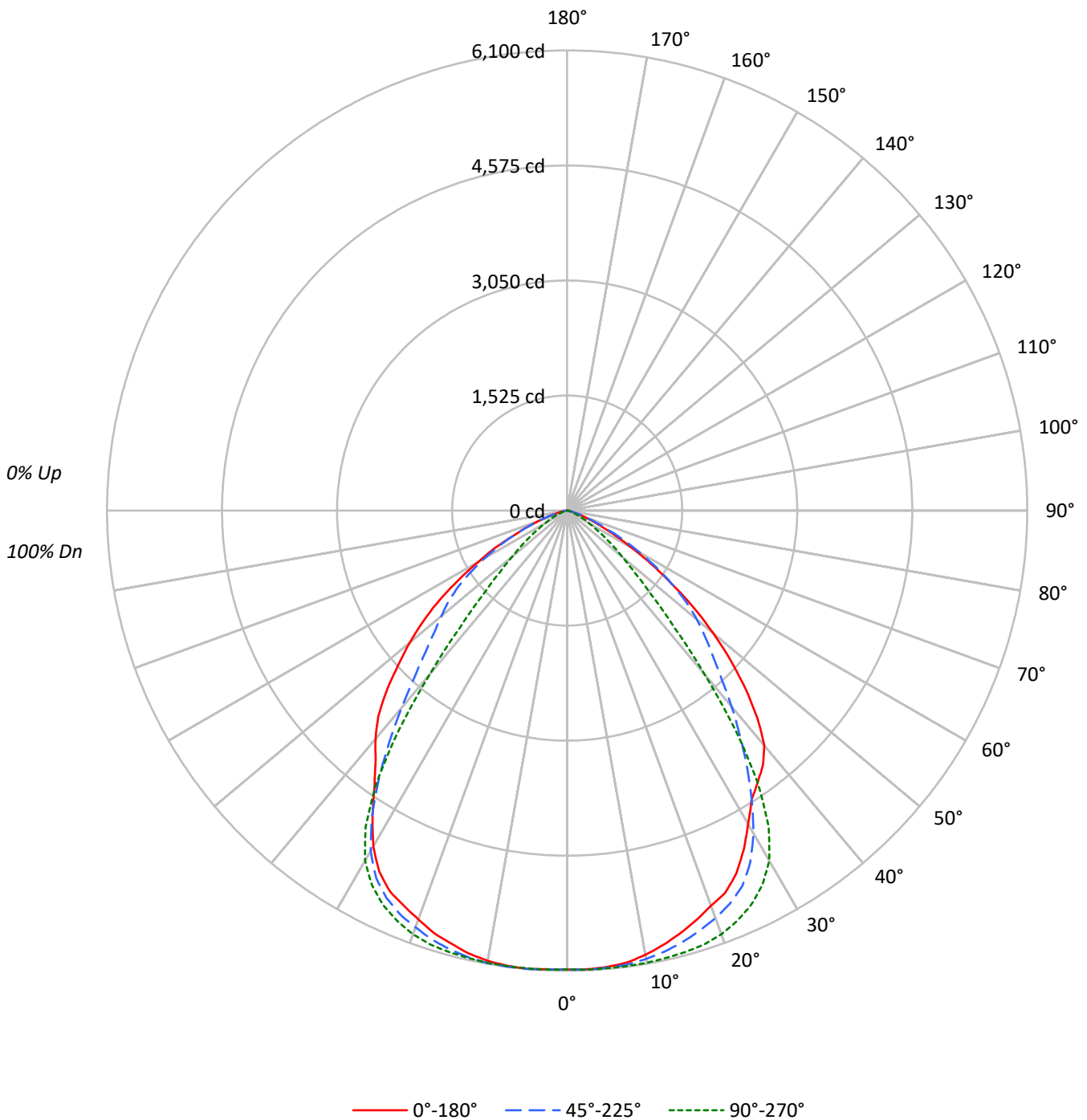
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	187593	187593	187593
5°	188003	188510	188715
10°	187211	190587	189770
15°	185137	193374	189728
20°	182916	196095	189236
25°	180542	196319	189429
30°	170802	190799	183011
35°	165702	165823	167547
40°	163648	114092	159051
45°	145820	68497	147813
50°	121251	45584	130649
55°	90938	31424	110770
60°	61623	20944	83579
65°	37168	13586	57416
70°	20610	7366	35324
75°	9341	3110	18288
80°	8115	3481	12750
85°	9234	4599	12737



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	580.6	5.0
10°-20°	1686.1	14.6
20°-30°	2559.2	22.2
30°-40°	2687.9	23.3
40°-50°	2015.2	17.5
50°-60°	1293.0	11.2
60°-70°	553.1	4.8
70°-80°	130.7	1.1
80°-90°	24.3	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°	4825.8	41.9
0°-40°	7513.7	65.2
0°-60°	10821.9	93.9
0°-90°	11530.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11530.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6084	6084	6084	6084	6084	
5°	6074	6084	6090	6100	6097	577
15°	5799	5920	6057	6018	5943	1636
25°	5306	5492	5770	5666	5568	2424
35°	4402	4157	4405	4353	4451	2763
45°	3344	2733	1571	2655	3390	2561
55°	1692	1692	584	1763	2060	1534
65°	509	601	186	774	787	544
75°	78	91	26	157	154	114
85°	26	16	13	26	36	28
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°	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5
2.5°	6086.7	6093.3	6090.0	6090.0	6086.7	6090.0	6090.0	6096.6	6096.6	6090.0	6086.7
5°	6073.6	6080.2	6080.2	6073.6	6073.6	6090.0	6080.2	6086.7	6086.7	6083.5	6083.5
7.5°	6044.3	6044.3	6057.3	6047.6	6047.6	6057.3	6054.1	6060.6	6067.2	6070.4	6070.4
10°	5978.9	5985.5	5988.8	5988.8	5992.0	6001.8	6008.3	6021.5	6027.9	6034.5	6037.8
12.5°	5897.4	5907.1	5910.4	5907.1	5916.9	5930.0	5946.3	5962.6	5972.5	5985.5	5995.3
15°	5799.3	5799.3	5805.9	5815.7	5822.3	5841.8	5858.1	5877.7	5903.8	5920.2	5936.5
17.5°	5691.6	5698.2	5707.9	5707.9	5721.0	5753.6	5763.5	5792.9	5822.3	5838.6	5871.2
20°	5574.1	5580.6	5590.4	5596.9	5613.2	5639.4	5658.9	5685.1	5717.8	5747.2	5779.8
22.5°	5482.6	5469.6	5476.1	5482.6	5499.0	5521.8	5544.7	5577.3	5610.0	5639.4	5672.1
25°	5306.3	5309.6	5319.4	5325.9	5345.5	5365.1	5391.2	5430.4	5459.8	5492.4	5528.3
27.5°	5067.9	5071.2	5087.5	5087.5	5103.8	5136.5	5152.8	5185.5	5224.7	5257.3	5299.8
30°	4796.9	4803.4	4803.4	4816.5	4826.2	4842.6	4858.9	4891.6	4911.2	4940.6	4999.4
32.5°	4548.7	4555.2	4551.9	4548.7	4538.9	4535.6	4532.4	4538.9	4545.5	4555.2	4578.1
35°	4401.8	4385.4	4372.4	4349.6	4323.4	4290.8	4261.4	4222.2	4186.2	4156.8	4124.2
37.5°	4261.4	4258.1	4238.5	4205.8	4153.6	4094.8	4026.3	3941.4	3856.4	3765.0	3676.9
40°	4065.4	4055.6	4039.3	3993.6	3934.8	3863.0	3771.6	3667.1	3529.9	3389.5	3245.8
42.5°	3732.3	3735.6	3716.0	3680.1	3624.6	3556.0	3461.3	3347.1	3200.1	3033.5	2847.5
45°	3343.8	3343.8	3337.2	3307.8	3268.7	3213.2	3141.3	3046.6	2903.0	2733.1	2533.9
47.5°	2938.9	2942.1	2932.3	2925.8	2909.5	2873.6	2821.3	2749.5	2648.3	2485.0	2285.8
50°	2527.5	2527.5	2543.8	2540.5	2540.5	2527.5	2504.6	2462.1	2374.0	2243.3	2057.2
52.5°	2116.0	2122.5	2132.4	2145.4	2161.7	2187.8	2161.7	2142.1	2086.6	1985.3	1825.4
55°	1691.5	1698.0	1714.3	1737.2	1756.8	1783.0	1789.4	1789.4	1760.0	1691.5	1570.7
57.5°	1329.0	1319.2	1332.3	1351.9	1378.0	1404.1	1423.7	1446.6	1443.3	1397.6	1299.6
60°	999.2	1002.5	1012.2	1031.9	1051.5	1074.3	1100.5	1120.0	1129.9	1107.0	1044.9
62.5°	728.2	728.2	741.2	760.8	770.6	803.3	819.6	829.4	839.2	835.9	796.8
65°	509.4	515.9	522.5	532.3	542.0	561.6	571.4	591.0	597.6	600.8	571.4
67.5°	359.2	349.4	356.0	362.4	372.3	385.4	404.9	404.9	414.7	414.7	395.1
70°	228.6	228.6	231.9	241.6	248.2	251.4	258.0	264.5	274.3	271.0	271.0
72.5°	153.5	150.2	153.5	156.8	160.0	169.8	169.8	173.1	179.6	182.9	169.8
75°	78.4	81.7	88.1	84.9	94.7	88.1	91.4	101.2	98.0	91.4	91.4
77.5°	65.3	65.3	65.3	62.1	68.6	68.6	65.3	71.8	68.6	68.6	65.3
80°	45.7	49.0	45.7	42.4	45.7	42.4	42.4	42.4	42.4	42.4	39.2
82.5°	36.0	29.4	32.7	29.4	32.7	32.7	29.4	26.1	26.1	29.4	26.1
85°	26.1	19.6	22.9	22.9	19.6	19.6	19.6	19.6	19.6	16.3	16.3
87.5°	16.3	9.8	9.8	9.8	13.0	13.0	13.0	9.8	13.0	13.0	6.6
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°	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5
2.5°	6093.3	6090.0	6096.6	6093.3	6093.3	6090.0	6093.3	6090.0	6096.6	6083.5	6086.7
5°	6093.3	6086.7	6090.0	6093.3	6096.6	6090.0	6090.0	6090.0	6096.6	6090.0	6093.3
7.5°	6080.2	6076.9	6086.7	6093.3	6090.0	6086.7	6093.3	6090.0	6096.6	6093.3	6099.8
10°	6054.1	6057.3	6063.9	6073.6	6076.9	6080.2	6086.7	6086.7	6096.6	6083.5	6090.0
12.5°	6014.9	6027.9	6044.3	6050.8	6063.9	6063.9	6070.4	6073.6	6080.2	6076.9	6086.7
15°	5965.9	5982.2	6001.8	6018.2	6034.5	6044.3	6054.1	6057.3	6067.2	6057.3	6060.6
17.5°	5907.1	5926.7	5956.1	5975.7	6001.8	6011.6	6024.7	6031.2	6041.0	6034.5	6037.8
20°	5825.5	5848.4	5881.0	5910.4	5926.7	5949.5	5965.9	5975.7	5982.2	5975.7	5978.9
22.5°	5711.2	5743.9	5786.3	5809.2	5841.8	5861.4	5864.7	5887.5	5903.8	5887.5	5894.1
25°	5577.3	5610.0	5642.6	5691.6	5721.0	5743.9	5766.7	5770.0	5786.3	5783.0	5779.8
27.5°	5355.3	5397.8	5453.2	5492.4	5531.6	5567.5	5593.7	5600.1	5616.5	5610.0	5613.2
30°	5051.6	5097.3	5149.6	5211.6	5267.1	5303.0	5335.7	5358.5	5374.8	5365.1	5361.8
32.5°	4620.6	4666.3	4721.8	4783.8	4849.2	4901.3	4940.6	4970.0	4989.6	4983.0	4966.7
35°	4127.5	4140.5	4176.5	4225.5	4280.9	4336.5	4372.4	4405.0	4427.9	4434.4	4434.4
37.5°	3621.4	3578.9	3552.8	3552.8	3585.4	3608.3	3640.9	3660.5	3696.5	3709.5	3719.3
40°	3131.5	3033.5	2942.1	2873.6	2827.9	2824.6	2824.6	2834.3	2867.0	2909.5	2948.7
42.5°	2694.0	2537.2	2396.8	2269.5	2178.1	2125.8	2102.9	2106.2	2132.4	2171.5	2236.8
45°	2344.6	2148.7	1972.3	1818.8	1694.7	1613.1	1573.9	1570.7	1590.2	1635.9	1707.8
47.5°	2073.5	1864.5	1665.3	1489.0	1355.2	1267.0	1221.3	1208.2	1221.3	1263.7	1348.6
50°	1848.2	1632.7	1427.0	1244.1	1100.5	1009.0	966.5	950.2	966.5	1002.5	1087.4
52.5°	1639.2	1417.2	1224.5	1048.2	894.7	816.3	770.6	760.8	770.6	813.1	881.7
55°	1397.6	1208.2	1018.8	842.5	708.6	630.2	594.3	584.5	594.3	633.5	705.4
57.5°	1159.3	995.9	829.4	669.4	555.1	486.5	453.9	440.8	463.7	489.8	574.7
60°	937.1	806.6	666.1	525.7	431.1	369.0	342.8	339.6	346.1	378.8	437.5
62.5°	734.8	627.0	515.9	401.7	323.3	297.1	264.5	261.3	267.7	287.3	333.1
65°	529.0	460.5	375.5	293.9	231.9	195.9	182.9	186.2	192.6	205.7	248.2
67.5°	369.0	320.0	261.3	205.7	160.0	143.7	130.6	127.4	130.6	153.5	176.3
70°	248.2	218.8	176.3	156.8	111.1	88.1	91.4	81.7	94.7	94.7	114.3
72.5°	163.2	143.7	117.5	91.4	78.4	62.1	62.1	58.8	65.3	68.6	84.9
75°	84.9	65.3	65.3	45.7	32.7	16.3	29.4	26.1	22.9	26.1	32.7
77.5°	58.8	49.0	45.7	36.0	32.7	26.1	26.1	26.1	26.1	29.4	32.7
80°	36.0	36.0	26.1	22.9	19.6	16.3	19.6	19.6	19.6	19.6	22.9
82.5°	22.9	19.6	19.6	16.3	16.3	13.0	13.0	13.0	13.0	13.0	19.6
85°	19.6	13.0	13.0	9.8	13.0	22.9	9.8	13.0	13.0	13.0	9.8
87.5°	6.6	9.8	9.8	9.8	6.6	3.3	6.6	9.8	9.8	16.3	13.0
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°	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5	6083.5
2.5°	6093.3	6096.6	6096.6	6093.3	6093.3	6086.7	6099.8	6090.0	6093.3	6106.3	6096.6
5°	6099.8	6103.0	6103.0	6099.8	6099.8	6099.8	6103.0	6103.0	6099.8	6096.6	6103.0
7.5°	6112.9	6109.6	6109.6	6103.0	6103.0	6096.6	6103.0	6093.3	6099.8	6093.3	6103.0
10°	6096.6	6099.8	6096.6	6093.3	6093.3	6090.0	6090.0	6080.2	6083.5	6073.6	6080.2
12.5°	6086.7	6083.5	6083.5	6076.9	6070.4	6063.9	6060.6	6050.8	6050.8	6027.9	6037.8
15°	6060.6	6063.9	6054.1	6041.0	6034.5	6018.2	6011.6	5998.5	5985.5	5969.2	5972.5
17.5°	6037.8	6027.9	6014.9	6001.8	5975.7	5962.6	5949.5	5930.0	5923.4	5903.8	5897.4
20°	5969.2	5962.6	5946.3	5923.4	5907.1	5877.7	5864.7	5845.1	5828.7	5809.2	5799.3
22.5°	5881.0	5874.4	5854.9	5832.0	5805.9	5792.9	5779.8	5743.9	5727.5	5707.9	5704.7
25°	5770.0	5760.2	5740.6	5714.5	5701.4	5665.5	5652.4	5626.3	5619.8	5600.1	5596.9
27.5°	5600.1	5587.1	5564.3	5531.6	5508.7	5485.9	5472.9	5453.2	5446.7	5427.1	5423.9
30°	5345.5	5329.1	5283.4	5270.4	5231.2	5208.3	5208.3	5182.2	5185.5	5172.4	5172.4
32.5°	4943.8	4917.7	4881.8	4855.6	4829.5	4816.5	4816.5	4806.7	4813.2	4813.2	4819.8
35°	4411.6	4375.7	4356.0	4339.7	4339.7	4352.8	4392.0	4401.8	4421.4	4437.7	4450.8
37.5°	3729.1	3725.9	3748.7	3768.3	3817.3	3872.8	3941.4	4000.2	4055.6	4094.8	4134.0
40°	2991.1	3072.8	3138.0	3229.5	3304.6	3412.3	3536.4	3637.7	3732.3	3801.0	3872.8
42.5°	2334.7	2439.2	2576.4	2710.3	2844.2	2991.1	3154.4	3294.8	3418.9	3513.6	3588.7
45°	1818.8	1962.5	2129.1	2298.9	2471.9	2654.8	2824.6	2968.3	3098.9	3196.9	3272.0
47.5°	1466.2	1622.9	1812.3	1998.4	2194.4	2387.0	2576.4	2700.5	2808.2	2886.6	2955.2
50°	1211.4	1378.0	1577.2	1789.4	1985.3	2178.1	2341.3	2462.1	2550.3	2618.9	2661.3
52.5°	1012.2	1188.6	1400.9	1613.1	1809.0	1985.3	2132.4	2223.8	2295.6	2344.6	2383.7
55°	835.9	1005.8	1205.0	1404.1	1596.8	1763.3	1884.1	1952.7	2008.2	2037.6	2060.4
57.5°	682.5	839.2	1022.1	1205.0	1371.5	1508.7	1603.3	1671.9	1698.0	1720.9	1717.6
60°	535.6	682.5	849.0	1005.8	1149.4	1260.4	1329.0	1368.2	1387.8	1397.6	1391.0
62.5°	421.2	555.1	682.5	819.6	924.1	1018.8	1084.2	1084.2	1093.9	1097.2	1107.0
65°	313.4	414.7	525.7	627.0	711.8	773.9	809.9	819.6	832.7	829.4	822.9
67.5°	231.9	307.0	388.6	463.7	522.5	561.6	587.7	610.7	607.4	600.8	597.6
70°	160.0	209.0	280.8	326.5	369.0	408.2	414.7	418.0	421.2	424.5	418.0
72.5°	111.1	146.9	186.2	225.3	251.4	267.7	284.1	287.3	287.3	287.3	284.1
75°	55.5	75.1	111.1	127.4	150.2	156.8	169.8	169.8	179.6	166.5	163.2
77.5°	49.0	58.8	78.4	91.4	101.2	111.1	114.3	124.1	120.8	114.3	117.5
80°	29.4	36.0	49.0	55.5	68.6	71.8	75.1	78.4	75.1	78.4	78.4
82.5°	22.9	26.1	32.7	32.7	42.4	42.4	45.7	45.7	49.0	49.0	49.0
85°	13.0	22.9	19.6	39.2	26.1	26.1	32.7	39.2	32.7	32.7	39.2
87.5°	13.0	13.0	9.8	13.0	13.0	13.0	16.3	19.6	19.6	22.9	19.6
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: P249168

CATALOG NUMBER: LSR8B120D010 EC8B120950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6083.5	6083.5	6083.5	6083.5
2.5°	6093.3	6099.8	6090.0	6086.7
5°	6103.0	6103.0	6096.6	6096.6
7.5°	6103.0	6103.0	6093.3	6086.7
10°	6076.9	6076.9	6067.2	6060.6
12.5°	6027.9	6027.9	6024.7	6014.9
15°	5965.9	5965.9	5952.8	5943.1
17.5°	5881.0	5887.5	5871.2	5871.2
20°	5789.6	5786.3	5773.3	5766.7
22.5°	5694.9	5688.4	5685.1	5665.5
25°	5593.7	5587.1	5577.3	5567.5
27.5°	5420.6	5417.3	5407.5	5394.5
30°	5156.1	5152.8	5139.8	5139.8
32.5°	4813.2	4809.9	4796.9	4800.2
35°	4457.3	4470.4	4463.8	4450.8
37.5°	4160.1	4169.9	4176.5	4169.9
40°	3912.0	3941.4	3944.6	3951.2
42.5°	3647.5	3686.6	3699.7	3706.2
45°	3330.7	3366.6	3396.0	3389.5
47.5°	3007.4	3033.5	3059.7	3040.1
50°	2697.2	2713.5	2723.4	2723.4
52.5°	2403.4	2403.4	2400.1	2403.4
55°	2067.0	2067.0	2054.0	2060.4
57.5°	1714.3	1720.9	1711.0	1694.7
60°	1387.8	1371.5	1364.9	1355.2
62.5°	1080.9	1080.9	1058.0	1087.4
65°	809.9	800.0	790.2	786.9
67.5°	587.7	584.5	574.7	571.4
70°	414.7	401.7	398.4	391.8
72.5°	277.6	277.6	271.0	271.0
75°	169.8	153.5	150.2	153.5
77.5°	117.5	114.3	114.3	111.1
80°	78.4	75.1	81.7	71.8
82.5°	49.0	52.3	49.0	52.3
85°	32.7	39.2	36.0	36.0
87.5°	19.6	19.6	19.6	19.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)