

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: P248331

Luminaire Tested: **LSR8B120D010 EC8B120827 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B120D010 EC8B120827 8LBDWOLI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12156.0 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

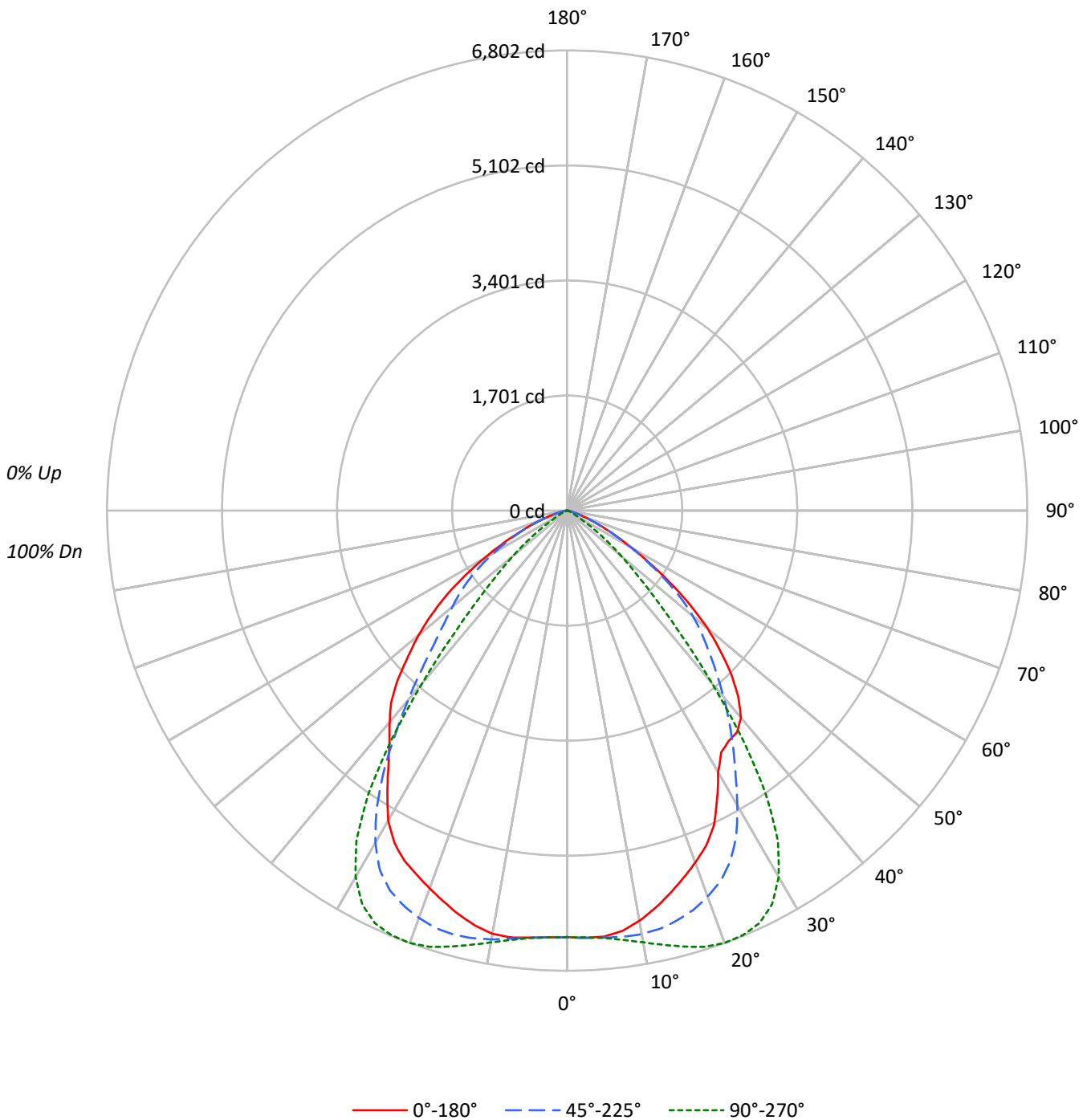
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	194457	194457	194457
5°	195614	196342	196131
10°	192741	202908	198925
15°	187107	212966	197364
20°	181675	223193	194966
25°	174700	228911	194060
30°	158988	222635	188310
35°	156622	192911	173254
40°	160879	133796	164244
45°	149767	80864	154437
50°	129906	49940	137615
55°	99690	26090	116786
60°	67914	10528	88143
65°	42247	5370	60809
70°	22937	3327	37119
75°	11962	1597	21934
80°	5345	1794	11880
85°	3573	1203	10650



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	606.4	5.0
10°-20°	1796.5	14.8
20°-30°	2740.8	22.5
30°-40°	2860.1	23.5
40°-50°	2148.3	17.7
50°-60°	1321.8	10.9
60°-70°	537.9	4.4
70°-80°	126.7	1.0
80°-90°	17.5	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°	5143.8	42.3
0°-40°	8003.8	65.8
0°-60°	11473.9	94.4
0°-90°	12156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12156.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6306	6306	6306	6306	6306	
5°	6320	6336	6343	6336	6336	598
15°	5861	6273	6671	6487	6182	1651
25°	5135	5710	6728	6196	5704	2334
35°	4161	4278	5125	4736	4602	2627
45°	3434	2972	1854	2768	3541	2620
55°	1854	1761	485	1761	2172	1667
65°	579	586	74	787	833	604
75°	100	100	13	177	184	121
85°	10	10	3	23	30	14
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°	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1
2.5°	6322.9	6312.8	6322.9	6322.9	6326.2	6319.5	6322.9	6326.2	6319.5	6319.5	6319.5
5°	6319.5	6312.8	6319.5	6316.2	6322.9	6322.9	6329.6	6329.6	6336.2	6336.2	6346.3
7.5°	6266.0	6252.6	6266.0	6276.0	6282.7	6296.1	6312.8	6326.2	6339.6	6353.0	6369.7
10°	6155.5	6155.5	6165.6	6185.6	6205.7	6229.1	6259.3	6292.8	6326.2	6356.3	6386.4
12.5°	6018.3	6008.2	6028.3	6055.1	6085.2	6122.1	6168.9	6219.1	6272.7	6332.9	6379.8
15°	5861.0	5850.9	5874.3	5901.1	5938.0	5991.5	6048.4	6115.4	6192.3	6272.7	6349.7
17.5°	5700.3	5696.9	5720.4	5757.2	5787.3	5844.2	5917.9	5998.2	6085.2	6192.3	6292.8
20°	5536.3	5533.0	5556.4	5586.5	5626.7	5680.2	5753.8	5847.5	5951.3	6071.9	6189.0
22.5°	5365.6	5368.9	5389.0	5422.5	5456.0	5512.8	5589.8	5683.6	5797.3	5927.9	6058.4
25°	5134.6	5117.9	5144.7	5178.2	5235.0	5281.9	5355.6	5456.0	5573.1	5710.4	5864.3
27.5°	4799.9	4796.5	4820.0	4850.1	4900.3	4957.2	5037.5	5141.3	5265.1	5415.8	5566.4
30°	4465.1	4471.9	4481.9	4512.1	4545.5	4602.4	4682.8	4769.8	4886.9	5030.8	5191.5
32.5°	4237.5	4237.5	4251.0	4271.0	4294.5	4324.6	4381.5	4445.1	4535.5	4635.9	4753.0
35°	4160.6	4147.2	4160.6	4163.9	4167.3	4174.0	4184.0	4204.1	4234.2	4277.8	4321.2
37.5°	4127.1	4117.1	4117.1	4103.7	4086.9	4066.9	4040.1	4009.9	3976.5	3933.0	3899.5
40°	3996.6	3989.9	3983.2	3969.8	3933.0	3892.8	3849.2	3779.0	3702.0	3594.9	3487.8
42.5°	3745.6	3738.8	3735.5	3708.7	3675.2	3628.4	3578.2	3504.5	3407.5	3270.2	3116.2
45°	3434.3	3420.8	3410.8	3387.4	3363.9	3323.8	3276.9	3209.9	3112.9	2972.3	2788.2
47.5°	3072.7	3066.0	3062.7	3052.7	3029.3	3005.8	2975.7	2922.1	2835.1	2701.2	2510.4
50°	2707.9	2694.5	2701.2	2697.9	2687.8	2671.1	2651.0	2614.2	2547.2	2426.7	2252.7
52.5°	2289.5	2289.5	2286.2	2296.2	2299.5	2296.2	2299.5	2259.4	2202.5	2112.1	1964.8
55°	1854.3	1854.3	1864.4	1877.8	1891.2	1894.5	1891.2	1874.5	1834.2	1760.6	1630.1
57.5°	1446.0	1439.3	1459.4	1479.5	1492.9	1506.2	1496.2	1482.8	1459.4	1399.1	1298.7
60°	1101.2	1101.2	1114.6	1128.0	1141.4	1154.8	1151.4	1148.1	1128.0	1087.8	1007.5
62.5°	810.0	813.4	813.4	823.4	836.8	850.2	860.2	850.2	840.1	813.4	759.8
65°	579.0	575.7	579.0	589.1	599.2	612.5	619.2	615.9	605.8	585.8	545.6
67.5°	388.3	384.9	398.3	401.6	408.4	421.8	418.4	421.8	418.4	401.6	368.2
70°	254.4	247.7	254.4	251.0	261.1	264.5	271.1	274.5	271.1	261.1	251.0
72.5°	157.3	154.0	157.3	160.7	164.0	167.3	174.0	174.0	170.7	164.0	150.6
75°	100.4	90.3	93.7	87.1	93.7	93.7	100.4	103.8	100.4	100.4	93.7
77.5°	60.3	60.3	60.3	60.3	60.3	60.3	60.3	63.6	66.9	60.3	56.9
80°	30.1	30.1	33.5	33.5	33.5	36.9	33.5	33.5	33.5	36.9	26.8
82.5°	23.4	20.1	20.1	20.1	23.4	20.1	20.1	20.1	20.1	20.1	20.1
85°	10.1	13.4	10.1	6.7	10.1	10.1	13.4	10.1	10.1	10.1	13.4
87.5°	3.4	3.4	0.0	0.0	0.0	3.4	0.0	3.4	3.4	6.7	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1
2.5°	6322.9	6316.2	6316.2	6312.8	6319.5	6312.8	6316.2	6312.8	6312.8	6319.5	6312.8
5°	6346.3	6349.7	6343.0	6339.6	6349.7	6349.7	6349.7	6343.0	6343.0	6346.3	6343.0
7.5°	6379.8	6386.4	6389.8	6393.2	6399.9	6403.2	6403.2	6399.9	6396.5	6406.6	6393.2
10°	6416.6	6426.7	6446.7	6456.8	6473.5	6473.5	6480.2	6480.2	6473.5	6480.2	6476.9
12.5°	6403.2	6463.4	6496.9	6520.4	6543.8	6563.8	6570.6	6573.9	6570.6	6584.0	6570.6
15°	6426.7	6476.9	6530.4	6570.6	6614.1	6637.5	6644.2	6671.0	6677.7	6681.0	6661.0
17.5°	6389.8	6480.2	6537.1	6597.3	6661.0	6704.5	6744.6	6761.4	6764.7	6771.4	6744.6
20°	6306.1	6406.6	6493.6	6580.6	6654.3	6721.2	6754.7	6801.5	6788.2	6814.9	6778.1
22.5°	6192.3	6306.1	6416.6	6530.4	6607.4	6687.8	6758.0	6791.4	6808.2	6808.2	6768.0
25°	6011.6	6145.5	6266.0	6383.1	6500.3	6597.3	6677.7	6727.9	6738.0	6734.6	6687.8
27.5°	5730.4	5874.3	6014.9	6148.9	6292.8	6406.6	6500.3	6560.5	6577.3	6577.3	6527.1
30°	5342.1	5496.1	5633.4	5794.0	5941.3	6068.5	6199.1	6252.6	6282.7	6282.7	6225.8
32.5°	4880.2	5010.8	5138.0	5295.3	5456.0	5599.9	5723.7	5797.3	5834.2	5830.8	5780.6
35°	4378.2	4441.7	4538.8	4656.0	4799.9	4933.8	5054.3	5124.6	5188.2	5184.8	5138.0
37.5°	3876.0	3859.3	3869.4	3912.9	4003.2	4097.0	4190.7	4257.7	4311.2	4334.7	4324.6
40°	3384.1	3297.0	3213.3	3183.2	3189.9	3223.4	3273.6	3323.8	3384.1	3414.2	3427.5
42.5°	2942.2	2794.9	2647.6	2537.2	2473.6	2453.5	2476.9	2493.6	2530.5	2574.0	2617.5
45°	2587.4	2389.9	2195.8	2025.1	1917.9	1854.3	1841.0	1854.3	1874.5	1917.9	1974.9
47.5°	2296.2	2065.2	1847.7	1656.9	1499.5	1415.9	1392.5	1385.8	1405.8	1446.0	1522.9
50°	2038.4	1807.5	1566.5	1345.5	1181.6	1087.8	1054.4	1041.0	1064.4	1094.5	1164.8
52.5°	1757.3	1529.7	1282.0	1067.7	897.1	800.0	763.2	743.1	756.4	796.6	866.9
55°	1452.7	1241.8	1017.5	796.6	632.6	542.3	498.7	485.3	498.7	542.3	612.5
57.5°	1148.1	970.7	783.2	575.7	428.4	338.1	294.5	281.2	318.0	334.7	408.4
60°	897.1	753.2	592.5	421.8	294.5	224.2	180.8	170.7	187.5	217.5	277.8
62.5°	672.8	582.4	455.2	301.2	217.5	143.9	120.5	110.5	120.5	143.9	190.8
65°	488.7	418.4	318.0	220.9	147.3	107.1	80.3	73.6	83.7	100.4	140.6
67.5°	334.7	281.2	220.9	154.0	100.4	66.9	56.9	56.9	60.3	73.6	103.8
70°	217.5	184.1	140.6	100.4	66.9	50.2	43.5	36.9	43.5	53.6	70.3
72.5°	137.3	117.1	90.3	70.3	50.2	36.9	30.1	26.8	33.5	40.1	53.6
75°	83.7	63.6	46.8	36.9	26.8	26.8	26.8	13.4	16.7	26.8	33.5
77.5°	50.2	43.5	36.9	30.1	23.4	13.4	13.4	13.4	16.7	20.1	30.1
80°	26.8	23.4	16.7	16.7	13.4	10.1	13.4	10.1	6.7	16.7	20.1
82.5°	16.7	13.4	13.4	13.4	16.7	6.7	10.1	6.7	10.1	13.4	10.1
85°	10.1	10.1	10.1	6.7	16.7	6.7	6.7	3.4	3.4	6.7	6.7
87.5°	0.0	3.4	3.4	0.0	3.4	0.0	3.4	3.4	3.4	3.4	3.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1	6306.1
2.5°	6316.2	6312.8	6316.2	6312.8	6312.8	6312.8	6316.2	6316.2	6312.8	6312.8	6319.5
5°	6343.0	6343.0	6343.0	6339.6	6336.2	6336.2	6343.0	6343.0	6332.9	6343.0	6343.0
7.5°	6399.9	6389.8	6399.9	6386.4	6379.8	6383.1	6386.4	6379.8	6373.1	6376.5	6376.5
10°	6473.5	6463.4	6463.4	6453.4	6443.4	6436.7	6430.0	6413.2	6396.5	6393.2	6379.8
12.5°	6560.5	6543.8	6533.8	6513.6	6496.9	6473.5	6453.4	6426.7	6393.2	6369.7	6346.3
15°	6647.5	6620.8	6597.3	6563.8	6527.1	6486.9	6443.4	6399.9	6346.3	6299.5	6259.3
17.5°	6717.8	6681.0	6637.5	6584.0	6530.4	6470.2	6406.6	6343.0	6266.0	6205.7	6158.8
20°	6741.2	6687.8	6630.8	6560.5	6490.2	6406.6	6326.2	6242.5	6155.5	6091.9	6038.4
22.5°	6711.2	6647.5	6577.3	6503.6	6409.9	6319.5	6225.8	6128.7	6051.7	5964.7	5914.5
25°	6627.5	6550.5	6473.5	6386.4	6296.1	6195.7	6095.3	5994.9	5901.1	5854.3	5790.7
27.5°	6456.8	6373.1	6289.4	6199.1	6095.3	5994.9	5891.1	5794.0	5713.7	5650.1	5613.3
30°	6155.5	6058.4	5961.4	5864.3	5773.9	5670.1	5573.1	5492.7	5412.4	5362.2	5325.4
32.5°	5693.6	5606.6	5509.5	5415.8	5332.1	5245.1	5164.7	5094.5	5037.5	5004.0	4977.3
35°	5071.0	4984.0	4910.4	4843.4	4773.1	4736.3	4686.1	4645.9	4622.5	4609.1	4605.8
37.5°	4287.7	4237.5	4214.1	4200.8	4187.3	4177.3	4184.0	4200.8	4214.1	4237.5	4264.3
40°	3451.0	3494.5	3507.9	3554.7	3598.2	3655.1	3718.8	3792.4	3852.6	3929.6	3983.2
42.5°	2687.8	2768.2	2861.9	2962.3	3069.4	3173.2	3300.3	3417.5	3524.6	3621.6	3705.3
45°	2065.2	2189.0	2329.7	2473.6	2617.5	2768.2	2922.1	3066.0	3193.2	3297.0	3384.1
47.5°	1610.0	1747.3	1928.0	2105.4	2279.5	2456.9	2627.5	2778.2	2885.3	2985.7	3062.7
50°	1275.3	1432.6	1630.1	1834.2	2025.1	2212.5	2393.2	2533.8	2641.0	2721.3	2778.2
52.5°	987.4	1174.9	1375.7	1589.9	1794.1	1998.3	2165.6	2296.2	2383.2	2453.5	2497.0
55°	736.4	920.5	1134.7	1355.6	1563.2	1760.6	1917.9	2031.8	2108.8	2148.9	2172.3
57.5°	532.2	699.6	913.8	1134.7	1322.1	1509.6	1636.8	1740.6	1784.0	1807.5	1817.5
60°	388.3	542.3	733.0	923.8	1101.2	1251.9	1362.3	1432.6	1466.1	1479.5	1476.1
62.5°	284.5	418.4	582.4	743.1	887.0	1010.8	1097.9	1144.7	1161.5	1168.1	1158.2
65°	217.5	321.3	461.9	585.8	696.2	786.6	850.2	880.3	890.3	887.0	880.3
67.5°	160.7	241.0	344.8	438.5	518.8	589.1	622.6	649.4	656.0	646.0	636.0
70°	113.8	177.4	251.0	314.7	374.9	415.1	451.8	455.2	455.2	451.8	445.2
72.5°	80.3	123.8	170.7	214.3	251.0	281.2	294.5	304.6	301.2	297.9	291.2
75°	53.6	77.0	123.8	133.9	167.3	177.4	190.8	190.8	194.1	184.1	184.1
77.5°	33.5	53.6	73.6	87.1	100.4	113.8	120.5	120.5	123.8	120.5	120.5
80°	20.1	33.5	40.1	60.3	60.3	70.3	73.6	77.0	70.3	80.3	70.3
82.5°	13.4	20.1	30.1	30.1	36.9	43.5	43.5	46.8	46.8	43.5	43.5
85°	10.1	13.4	16.7	20.1	20.1	23.4	20.1	20.1	23.4	26.8	23.4
87.5°	3.4	6.7	3.4	6.7	6.7	13.4	10.1	10.1	10.1	13.4	13.4
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: P248331

CATALOG NUMBER: LSR8B120D010 EC8B120827 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6306.1	6306.1	6306.1	6306.1
2.5°	6312.8	6316.2	6312.8	6312.8
5°	6343.0	6339.6	6343.0	6336.2
7.5°	6366.4	6366.4	6363.0	6363.0
10°	6366.4	6353.0	6353.0	6353.0
12.5°	6316.2	6299.5	6289.4	6282.7
15°	6229.1	6199.1	6185.6	6182.3
17.5°	6115.4	6088.6	6071.9	6061.8
20°	5984.8	5958.0	5938.0	5941.3
22.5°	5871.0	5840.9	5827.5	5820.8
25°	5757.2	5720.4	5710.4	5703.6
27.5°	5573.1	5553.0	5543.0	5533.0
30°	5291.9	5281.9	5265.1	5288.6
32.5°	4967.3	4950.5	4937.1	4947.2
35°	4609.1	4599.0	4609.1	4602.4
37.5°	4281.1	4291.1	4304.5	4311.2
40°	4023.4	4060.1	4073.6	4080.2
42.5°	3765.6	3809.1	3835.9	3852.6
45°	3447.6	3491.1	3521.2	3541.4
47.5°	3119.6	3156.4	3186.5	3183.2
50°	2821.7	2841.8	2855.1	2868.6
52.5°	2520.4	2520.4	2523.8	2523.8
55°	2179.0	2172.3	2169.0	2172.3
57.5°	1804.1	1797.5	1794.1	1784.0
60°	1462.7	1442.7	1429.2	1429.2
62.5°	1144.7	1121.3	1111.3	1108.0
65°	860.2	856.8	836.8	833.4
67.5°	622.6	609.2	595.8	599.2
70°	438.5	418.4	418.4	411.7
72.5°	284.5	274.5	271.1	271.1
75°	177.4	177.4	170.7	184.1
77.5°	117.1	117.1	113.8	117.1
80°	70.3	70.3	70.3	66.9
82.5°	43.5	46.8	43.5	43.5
85°	23.4	26.8	20.1	30.1
87.5°	13.4	16.7	13.4	16.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)