

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: P249087

Luminaire Tested: **LSR8B120D010 EC8B120827 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249087
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 EC8B120827 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11730.0 lumens
Efficiency: N/A
Efficacy: 99.2 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

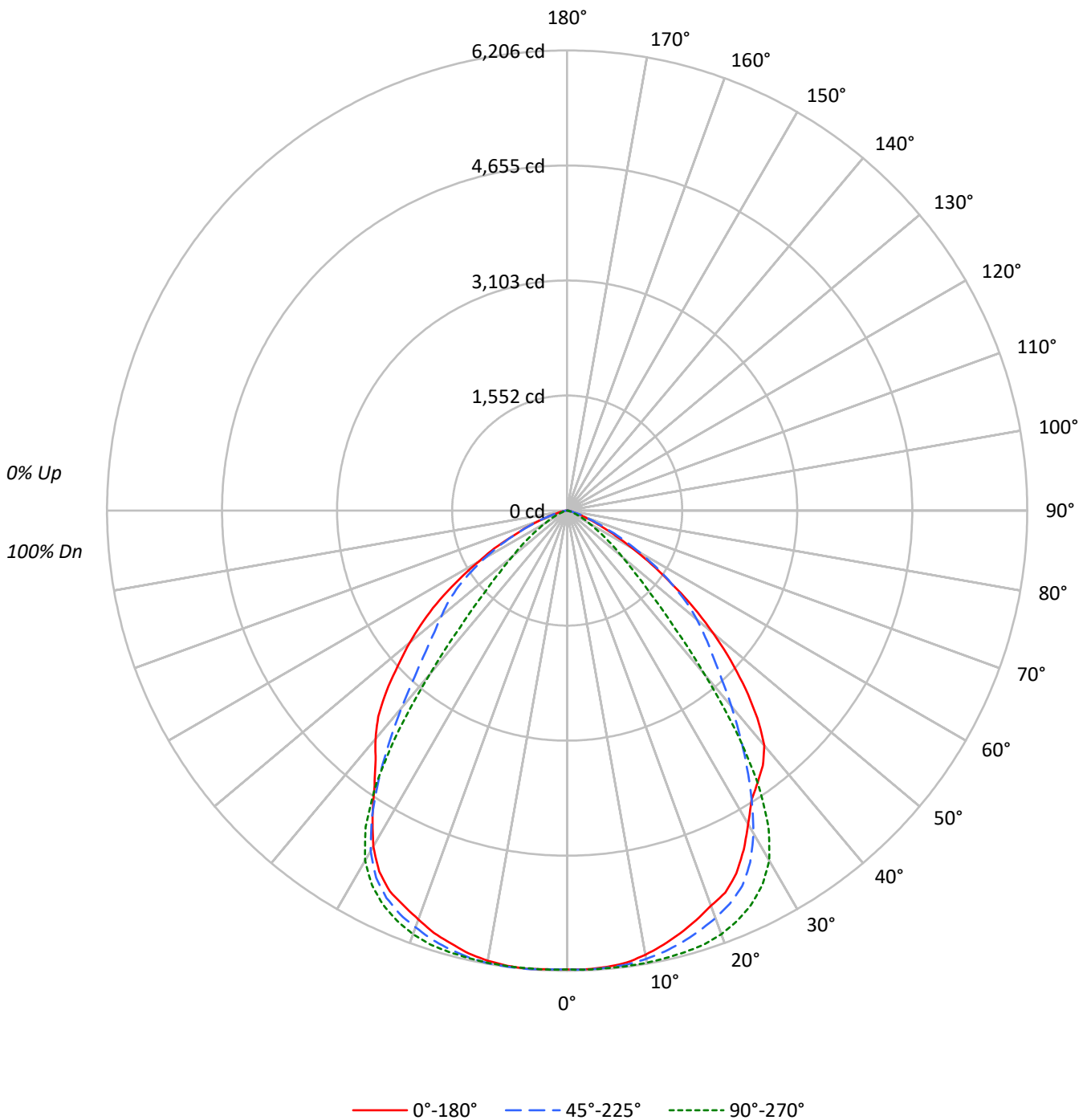
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	190846	190846	190846
5°	191265	191779	191987
10°	190462	193893	193060
15°	188349	196729	193020
20°	186089	199494	192521
25°	183672	199725	192716
30°	173764	194110	186184
35°	168578	168699	170453
40°	166490	116072	161809
45°	148350	69683	150377
50°	123352	46375	132913
55°	92513	31972	112695
60°	62696	21308	85028
65°	37818	13820	58416
70°	20971	7492	35938
75°	9496	3169	18598
80°	8257	3534	12981
85°	9411	4706	12949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	590.7	5.0
10°-20°	1715.3	14.6
20°-30°	2603.5	22.2
30°-40°	2734.5	23.3
40°-50°	2050.1	17.5
50°-60°	1315.4	11.2
60°-70°	562.7	4.8
70°-80°	132.9	1.1
80°-90°	24.7	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°	4909.5	41.9
0°-40°	7644.0	65.2
0°-60°	11009.6	93.9
0°-90°	11730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11730.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6189	6189	6189	6189	6189	
5°	6179	6189	6196	6206	6202	587
15°	5900	6023	6162	6123	6046	1664
25°	5398	5588	5870	5764	5664	2466
35°	4478	4229	4481	4428	4528	2811
45°	3402	2780	1598	2701	3448	2605
55°	1721	1721	595	1794	2096	1561
65°	518	611	189	787	801	553
75°	80	93	27	160	156	116
85°	27	17	13	27	37	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°	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0
2.5°	6192.3	6199.0	6195.6	6195.6	6192.3	6195.6	6195.6	6202.3	6202.3	6195.6	6192.3
5°	6179.0	6185.6	6185.6	6179.0	6179.0	6195.6	6185.6	6192.3	6192.3	6189.0	6189.0
7.5°	6149.1	6149.1	6162.4	6152.5	6152.5	6162.4	6159.1	6165.7	6172.4	6175.7	6175.7
10°	6082.7	6089.3	6092.7	6092.7	6096.0	6105.9	6112.6	6125.9	6132.5	6139.2	6142.5
12.5°	5999.7	6009.6	6012.9	6009.6	6019.6	6032.8	6049.5	6066.1	6076.1	6089.3	6099.3
15°	5899.9	5899.9	5906.6	5916.6	5923.3	5943.2	5959.8	5979.7	6006.3	6022.9	6039.5
17.5°	5790.4	5797.0	5806.9	5806.9	5820.3	5853.4	5863.4	5893.3	5923.3	5939.8	5973.1
20°	5670.8	5677.4	5687.4	5694.0	5710.6	5737.2	5757.1	5783.7	5816.9	5846.8	5880.0
22.5°	5577.7	5564.5	5571.0	5577.7	5594.4	5617.6	5640.9	5674.0	5707.3	5737.2	5770.4
25°	5398.3	5401.6	5411.6	5418.2	5438.2	5458.1	5484.7	5524.6	5554.5	5587.7	5624.2
27.5°	5155.8	5159.2	5175.8	5175.8	5192.3	5225.6	5242.2	5275.4	5315.3	5348.5	5391.7
30°	4880.1	4886.7	4886.7	4900.0	4910.0	4926.6	4943.2	4976.4	4996.4	5026.3	5086.1
32.5°	4627.6	4634.2	4630.9	4627.6	4617.7	4614.3	4611.0	4617.7	4624.3	4634.2	4657.5
35°	4478.2	4461.5	4448.3	4425.0	4398.4	4365.2	4335.3	4295.4	4258.9	4228.9	4195.8
37.5°	4335.3	4331.9	4312.0	4278.8	4225.6	4165.9	4096.1	4009.7	3923.3	3830.3	3740.7
40°	4136.0	4126.0	4109.4	4062.9	4003.1	3930.0	3837.0	3730.7	3591.1	3448.3	3302.1
42.5°	3797.1	3800.4	3780.5	3743.9	3687.5	3617.7	3521.4	3405.1	3255.6	3086.2	2896.8
45°	3401.8	3401.8	3395.1	3365.2	3325.4	3268.9	3195.8	3099.5	2953.3	2780.5	2577.9
47.5°	2989.8	2993.2	2983.2	2976.6	2959.9	2923.4	2870.3	2797.2	2694.2	2528.1	2325.4
50°	2571.3	2571.3	2587.9	2584.5	2584.5	2571.3	2548.0	2504.8	2415.1	2282.2	2092.9
52.5°	2152.7	2159.3	2169.3	2182.6	2199.2	2225.8	2199.2	2179.3	2122.8	2019.8	1857.0
55°	1720.8	1727.5	1744.1	1767.3	1787.3	1813.9	1820.5	1820.5	1790.6	1720.8	1597.9
57.5°	1352.1	1342.1	1355.4	1375.3	1401.9	1428.5	1448.4	1471.7	1468.3	1421.8	1322.2
60°	1016.6	1019.9	1029.8	1049.8	1069.7	1093.0	1119.5	1139.5	1149.5	1126.2	1063.0
62.5°	740.8	740.8	754.1	774.0	784.0	817.2	833.8	843.8	853.7	850.4	810.6
65°	518.3	524.9	531.5	541.5	551.4	571.4	581.4	601.3	607.9	611.3	581.4
67.5°	365.5	355.5	362.1	368.7	378.7	392.0	412.0	412.0	421.9	421.9	402.0
70°	232.6	232.6	235.9	245.8	252.5	255.8	262.5	269.1	279.1	275.7	275.7
72.5°	156.1	152.8	156.1	159.5	162.8	172.7	172.7	176.1	182.7	186.1	172.7
75°	79.7	83.1	89.7	86.4	96.3	89.7	93.0	103.0	99.7	93.0	93.0
77.5°	66.4	66.4	66.4	63.2	69.7	69.7	66.4	73.1	69.7	69.7	66.4
80°	46.5	49.8	46.5	43.2	46.5	43.2	43.2	43.2	43.2	43.2	39.8
82.5°	36.6	29.9	33.2	29.9	33.2	33.2	29.9	26.6	26.6	29.9	26.6
85°	26.6	19.9	23.2	23.2	19.9	19.9	19.9	19.9	19.9	16.6	16.6
87.5°	16.6	10.0	10.0	10.0	13.3	13.3	13.3	10.0	13.3	13.3	6.7
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°	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0
2.5°	6199.0	6195.6	6202.3	6199.0	6199.0	6195.6	6199.0	6195.6	6202.3	6189.0	6192.3
5°	6199.0	6192.3	6195.6	6199.0	6202.3	6195.6	6195.6	6195.6	6202.3	6195.6	6199.0
7.5°	6185.6	6182.3	6192.3	6199.0	6195.6	6192.3	6199.0	6195.6	6202.3	6199.0	6205.6
10°	6159.1	6162.4	6169.1	6179.0	6182.3	6185.6	6192.3	6192.3	6202.3	6189.0	6195.6
12.5°	6119.2	6132.5	6149.1	6155.7	6169.1	6169.1	6175.7	6179.0	6185.6	6182.3	6192.3
15°	6069.4	6086.0	6105.9	6122.6	6139.2	6149.1	6159.1	6162.4	6172.4	6162.4	6165.7
17.5°	6009.6	6029.5	6059.4	6079.3	6105.9	6115.9	6129.2	6135.8	6145.8	6139.2	6142.5
20°	5926.5	5949.8	5983.0	6012.9	6029.5	6052.7	6069.4	6079.3	6086.0	6079.3	6082.7
22.5°	5810.3	5843.5	5886.7	5909.9	5943.2	5963.1	5966.4	5989.7	6006.3	5989.7	5996.3
25°	5674.0	5707.3	5740.5	5790.4	5820.3	5843.5	5866.8	5870.1	5886.7	5883.3	5880.0
27.5°	5448.1	5491.4	5547.8	5587.7	5627.5	5664.1	5690.7	5697.3	5713.9	5707.3	5710.6
30°	5139.2	5185.8	5238.9	5302.0	5358.5	5395.0	5428.2	5451.5	5468.1	5458.1	5454.8
32.5°	4700.7	4747.2	4803.7	4866.8	4933.3	4986.4	5026.3	5056.2	5076.1	5069.4	5052.9
35°	4199.1	4212.4	4248.9	4298.8	4355.2	4411.7	4448.3	4481.4	4504.7	4511.3	4511.3
37.5°	3684.2	3641.0	3614.4	3614.4	3647.6	3670.8	3704.1	3724.0	3760.6	3773.8	3783.8
40°	3185.8	3086.2	2993.2	2923.4	2876.9	2873.6	2873.6	2883.5	2916.8	2959.9	2999.8
42.5°	2740.7	2581.2	2438.4	2308.8	2215.8	2162.7	2139.4	2142.8	2169.3	2209.2	2275.6
45°	2385.2	2185.9	2006.5	1850.4	1724.1	1641.1	1601.2	1597.9	1617.8	1664.3	1737.5
47.5°	2109.5	1896.9	1694.2	1514.8	1378.7	1288.9	1242.4	1229.2	1242.4	1285.6	1372.0
50°	1880.3	1661.1	1451.8	1265.7	1119.5	1026.5	983.3	966.7	983.3	1019.9	1106.2
52.5°	1667.6	1441.8	1245.8	1066.4	910.2	830.5	784.0	774.0	784.0	827.2	897.0
55°	1421.8	1229.2	1036.5	857.1	720.9	641.2	604.6	594.7	604.6	644.5	717.6
57.5°	1179.4	1013.2	843.8	681.0	564.8	494.9	461.8	448.5	471.7	498.3	584.7
60°	953.4	820.6	677.7	534.9	438.5	375.4	348.8	345.5	352.1	385.4	445.1
62.5°	747.5	637.8	524.9	408.6	328.9	302.3	269.1	265.8	272.4	292.3	338.9
65°	538.2	468.4	382.0	299.0	235.9	199.3	186.1	189.4	196.0	209.3	252.5
67.5°	375.4	325.5	265.8	209.3	162.8	146.2	132.9	129.6	132.9	156.1	179.4
70°	252.5	222.6	179.4	159.5	113.0	89.7	93.0	83.1	96.3	96.3	116.2
72.5°	166.1	146.2	119.6	93.0	79.7	63.2	63.2	59.8	66.4	69.7	86.4
75°	86.4	66.4	66.4	46.5	33.2	16.6	29.9	26.6	23.2	26.6	33.2
77.5°	59.8	49.8	46.5	36.6	33.2	26.6	26.6	26.6	26.6	29.9	33.2
80°	36.6	36.6	26.6	23.2	19.9	16.6	19.9	19.9	19.9	19.9	23.2
82.5°	23.2	19.9	19.9	16.6	16.6	13.3	13.3	13.3	13.3	13.3	19.9
85°	19.9	13.3	13.3	10.0	13.3	23.2	10.0	13.3	13.3	13.3	10.0
87.5°	6.7	10.0	10.0	10.0	6.7	3.3	6.7	10.0	10.0	16.6	13.3
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0	6189.0
2.5°	6199.0	6202.3	6202.3	6199.0	6199.0	6192.3	6205.6	6195.6	6199.0	6212.2	6202.3
5°	6205.6	6208.9	6208.9	6205.6	6205.6	6205.6	6208.9	6208.9	6205.6	6202.3	6208.9
7.5°	6218.9	6215.6	6215.6	6208.9	6208.9	6202.3	6208.9	6199.0	6205.6	6199.0	6208.9
10°	6202.3	6205.6	6202.3	6199.0	6199.0	6195.6	6195.6	6185.6	6189.0	6179.0	6185.6
12.5°	6192.3	6189.0	6189.0	6182.3	6175.7	6169.1	6165.7	6155.7	6155.7	6132.5	6142.5
15°	6165.7	6169.1	6159.1	6145.8	6139.2	6122.6	6115.9	6102.6	6089.3	6072.7	6076.1
17.5°	6142.5	6132.5	6119.2	6105.9	6079.3	6066.1	6052.7	6032.8	6026.2	6006.3	5999.7
20°	6072.7	6066.1	6049.5	6026.2	6009.6	5979.7	5966.4	5946.5	5929.8	5909.9	5899.9
22.5°	5983.0	5976.3	5956.4	5933.2	5906.6	5893.3	5880.0	5843.5	5826.9	5806.9	5803.6
25°	5870.1	5860.1	5840.2	5813.6	5800.3	5763.8	5750.4	5723.9	5717.3	5697.3	5694.0
27.5°	5697.3	5684.0	5660.8	5627.5	5604.3	5581.0	5567.8	5547.8	5541.2	5521.2	5518.0
30°	5438.2	5421.6	5375.1	5361.8	5321.9	5298.7	5298.7	5272.1	5275.4	5262.2	5262.2
32.5°	5029.6	5003.0	4966.4	4939.9	4913.3	4900.0	4900.0	4890.0	4896.7	4896.7	4903.4
35°	4488.1	4451.6	4431.6	4415.0	4415.0	4428.3	4468.2	4478.2	4498.1	4514.7	4528.0
37.5°	3793.7	3790.5	3813.7	3833.7	3883.5	3940.0	4009.7	4069.5	4126.0	4165.9	4205.7
40°	3043.0	3126.1	3192.5	3285.5	3361.9	3471.5	3597.8	3700.8	3797.1	3866.9	3940.0
42.5°	2375.2	2481.6	2621.1	2757.3	2893.5	3043.0	3209.1	3352.0	3478.2	3574.5	3650.9
45°	1850.4	1996.5	2166.0	2338.7	2514.8	2700.9	2873.6	3019.7	3152.6	3252.3	3328.7
47.5°	1491.6	1651.1	1843.7	2033.1	2232.4	2428.4	2621.1	2747.4	2856.9	2936.7	3006.5
50°	1232.4	1401.9	1604.6	1820.5	2019.8	2215.8	2381.9	2504.8	2594.5	2664.3	2707.5
52.5°	1029.8	1209.2	1425.2	1641.1	1840.4	2019.8	2169.3	2262.3	2335.4	2385.2	2425.1
55°	850.4	1023.2	1225.9	1428.5	1624.5	1793.9	1916.8	1986.6	2043.0	2072.9	2096.2
57.5°	694.3	853.7	1039.8	1225.9	1395.3	1534.8	1631.2	1700.9	1727.5	1750.7	1747.4
60°	544.9	694.3	863.7	1023.2	1169.4	1282.3	1352.1	1391.9	1411.8	1421.8	1415.2
62.5°	428.5	564.8	694.3	833.8	940.1	1036.5	1103.0	1103.0	1112.9	1116.2	1126.2
65°	318.9	421.9	534.9	637.8	724.2	787.3	823.9	833.8	847.2	843.8	837.2
67.5°	235.9	312.3	395.3	471.7	531.5	571.4	597.9	621.3	617.9	611.3	607.9
70°	162.8	212.6	285.7	332.2	375.4	415.3	421.9	425.2	428.5	431.9	425.2
72.5°	113.0	149.5	189.4	229.2	255.8	272.4	289.0	292.3	292.3	292.3	289.0
75°	56.5	76.4	113.0	129.6	152.8	159.5	172.7	172.7	182.7	169.4	166.1
77.5°	49.8	59.8	79.7	93.0	103.0	113.0	116.2	126.2	122.9	116.2	119.6
80°	29.9	36.6	49.8	56.5	69.7	73.1	76.4	79.7	76.4	79.7	79.7
82.5°	23.2	26.6	33.2	33.2	43.2	43.2	46.5	46.5	49.8	49.8	49.8
85°	13.3	23.2	19.9	39.8	26.6	26.6	33.2	39.8	33.2	33.2	39.8
87.5°	13.3	13.3	10.0	13.3	13.3	13.3	16.6	19.9	19.9	23.2	19.9
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: P249087

CATALOG NUMBER: LSR8B120D010 EC8B120827 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6189.0	6189.0	6189.0	6189.0
2.5°	6199.0	6205.6	6195.6	6192.3
5°	6208.9	6208.9	6202.3	6202.3
7.5°	6208.9	6208.9	6199.0	6192.3
10°	6182.3	6182.3	6172.4	6165.7
12.5°	6132.5	6132.5	6129.2	6119.2
15°	6069.4	6069.4	6056.1	6046.2
17.5°	5983.0	5989.7	5973.1	5973.1
20°	5890.0	5886.7	5873.4	5866.8
22.5°	5793.7	5787.0	5783.7	5763.8
25°	5690.7	5684.0	5674.0	5664.1
27.5°	5514.6	5511.3	5501.3	5488.1
30°	5245.5	5242.2	5228.9	5228.9
32.5°	4896.7	4893.4	4880.1	4883.5
35°	4534.6	4547.9	4541.2	4528.0
37.5°	4232.3	4242.3	4248.9	4242.3
40°	3979.8	4009.7	4013.1	4019.7
42.5°	3710.8	3750.6	3763.9	3770.5
45°	3388.5	3425.0	3454.9	3448.3
47.5°	3059.6	3086.2	3112.7	3092.8
50°	2744.0	2760.6	2770.6	2770.6
52.5°	2445.1	2445.1	2441.7	2445.1
55°	2102.9	2102.9	2089.6	2096.2
57.5°	1744.1	1750.7	1740.7	1724.1
60°	1411.8	1395.3	1388.6	1378.7
62.5°	1099.6	1099.6	1076.4	1106.2
65°	823.9	813.9	803.9	800.6
67.5°	597.9	594.7	584.7	581.4
70°	421.9	408.6	405.3	398.6
72.5°	282.4	282.4	275.7	275.7
75°	172.7	156.1	152.8	156.1
77.5°	119.6	116.2	116.2	113.0
80°	79.7	76.4	83.1	73.1
82.5°	49.8	53.2	49.8	53.2
85°	33.2	39.8	36.6	36.6
87.5°	19.9	19.9	19.9	19.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)