

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: P249546

Luminaire Tested: **LSR8B120D010 EC8B120840 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249546
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 EC8B120840 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12282.0 lumens
Efficiency: N/A
Efficacy: 103.8 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

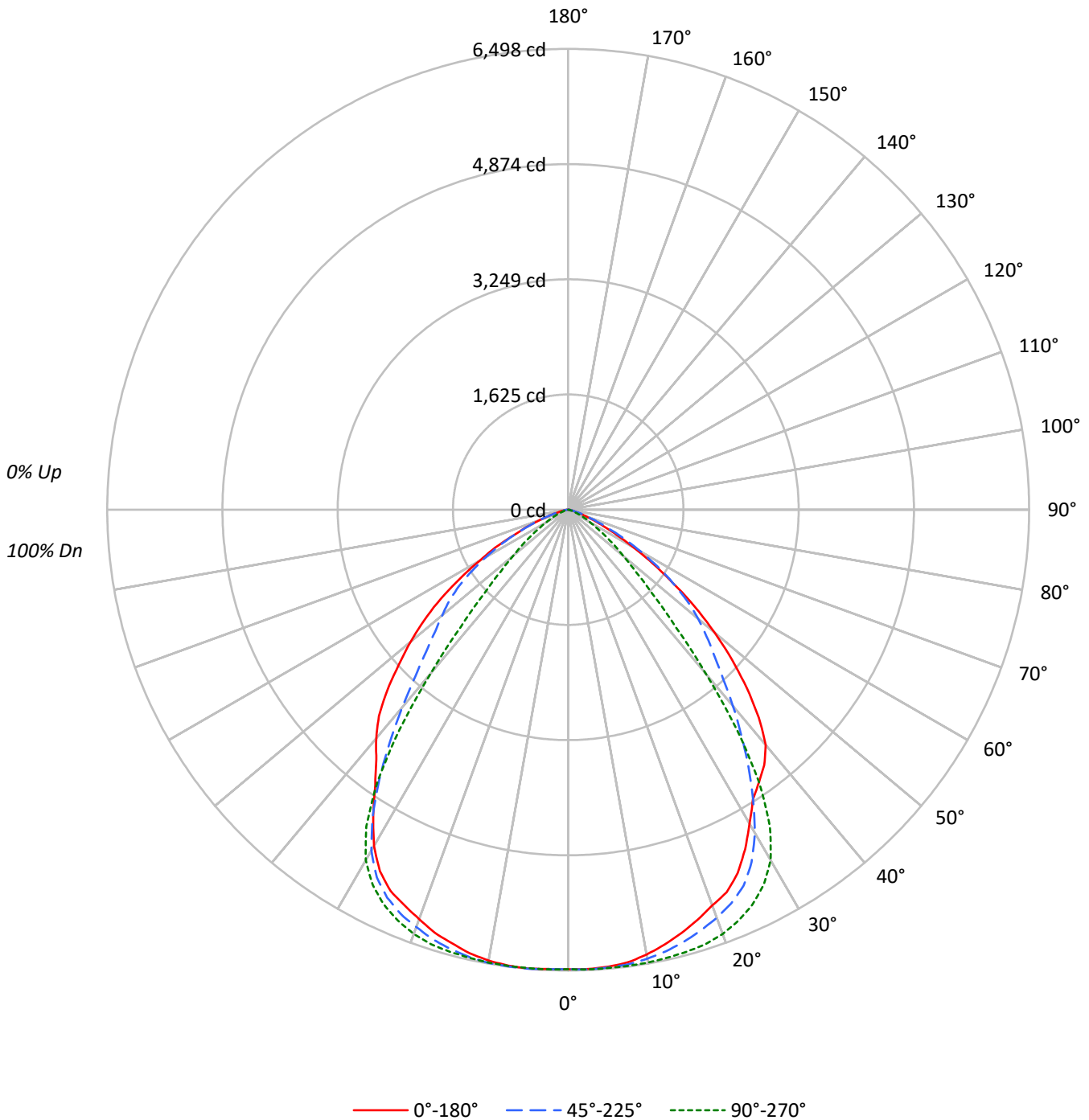
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	199825	199825	199825
5°	200267	200805	201022
10°	199423	203018	202147
15°	197214	205987	202102
20°	194844	208883	201578
25°	192318	209122	201787
30°	181943	203243	194947
35°	176510	176638	178475
40°	174324	121535	169425
45°	155331	72962	157455
50°	129157	48558	139169
55°	96867	33477	117996
60°	65644	22307	89031
65°	39598	14469	61167
70°	21954	7844	37633
75°	9948	3312	19480
80°	8648	3711	13585
85°	9836	4918	13551



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	618.4	5.0
10°-20°	1796.1	14.6
20°-30°	2726.1	22.2
30°-40°	2863.2	23.3
40°-50°	2146.6	17.5
50°-60°	1377.3	11.2
60°-70°	589.2	4.8
70°-80°	139.2	1.1
80°-90°	25.9	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°	5140.6	41.9
0°-40°	8003.8	65.2
0°-60°	11527.7	93.9
0°-90°	12282.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12282.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6480	6480	6480	6480	6480	
5°	6470	6480	6487	6498	6494	615
15°	6178	6306	6452	6411	6331	1742
25°	5652	5851	6146	6035	5931	2582
35°	4689	4428	4692	4637	4741	2943
45°	3562	2911	1673	2828	3611	2728
55°	1802	1802	623	1878	2195	1634
65°	543	640	198	824	838	579
75°	84	97	28	167	164	122
85°	28	17	14	28	38	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°	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2
2.5°	6483.7	6490.7	6487.2	6487.2	6483.7	6487.2	6487.2	6494.2	6494.2	6487.2	6483.7
5°	6469.8	6476.7	6476.7	6469.8	6469.8	6487.2	6476.7	6483.7	6483.7	6480.2	6480.2
7.5°	6438.5	6438.5	6452.4	6442.0	6442.0	6452.4	6448.9	6455.9	6462.9	6466.4	6466.4
10°	6368.9	6375.9	6379.4	6379.4	6382.9	6393.2	6400.2	6414.2	6421.1	6428.1	6431.5
12.5°	6282.0	6292.4	6295.9	6292.4	6302.9	6316.7	6334.2	6351.5	6362.0	6375.9	6386.3
15°	6177.6	6177.6	6184.6	6195.0	6202.0	6222.8	6240.2	6261.1	6288.9	6306.3	6323.7
17.5°	6062.8	6069.8	6080.2	6080.2	6094.2	6128.9	6139.4	6170.7	6202.0	6219.4	6254.2
20°	5937.6	5944.5	5955.0	5962.0	5979.3	6007.2	6028.0	6055.9	6090.7	6122.0	6156.7
22.5°	5840.2	5826.3	5833.2	5840.2	5857.6	5882.0	5906.3	5941.1	5975.9	6007.2	6042.0
25°	5652.4	5655.8	5666.3	5673.2	5694.1	5715.0	5742.8	5784.5	5815.9	5850.7	5888.9
27.5°	5398.5	5402.0	5419.3	5419.3	5436.7	5471.5	5488.9	5523.7	5565.5	5600.2	5645.5
30°	5109.8	5116.7	5116.7	5130.6	5141.0	5158.5	5175.8	5210.6	5231.5	5262.8	5325.4
32.5°	4845.4	4852.3	4848.8	4845.4	4835.0	4831.5	4828.0	4835.0	4841.9	4852.3	4876.7
35°	4688.9	4671.5	4657.6	4633.2	4605.4	4570.6	4539.3	4497.6	4459.3	4428.0	4393.2
37.5°	4539.3	4535.8	4514.9	4480.1	4424.5	4361.9	4288.9	4198.4	4107.9	4010.6	3916.7
40°	4330.6	4320.1	4302.8	4254.1	4191.4	4114.9	4017.6	3906.2	3760.1	3610.6	3457.5
42.5°	3975.8	3979.3	3958.4	3920.1	3861.0	3787.9	3687.1	3565.4	3408.8	3231.4	3033.2
45°	3561.9	3561.9	3554.9	3523.6	3481.9	3422.7	3346.2	3245.3	3092.3	2911.4	2699.2
47.5°	3130.5	3134.0	3123.6	3116.7	3099.2	3061.0	3005.3	2928.8	2821.0	2647.0	2434.8
50°	2692.3	2692.3	2709.7	2706.2	2706.2	2692.3	2668.0	2622.7	2528.8	2389.6	2191.4
52.5°	2254.0	2261.0	2271.4	2285.3	2302.7	2330.5	2302.7	2281.8	2222.7	2114.8	1944.4
55°	1801.8	1808.8	1826.1	1850.5	1871.4	1899.2	1906.1	1906.1	1874.8	1801.8	1673.1
57.5°	1415.7	1405.3	1419.2	1440.1	1467.9	1495.7	1516.6	1540.9	1537.4	1488.8	1384.4
60°	1064.4	1067.9	1078.3	1099.2	1120.1	1144.4	1172.2	1193.1	1203.5	1179.2	1113.1
62.5°	775.7	775.7	789.6	810.4	820.9	855.7	873.1	883.5	893.9	890.4	848.7
65°	542.7	549.6	556.5	567.0	577.4	598.2	608.7	629.6	636.5	640.0	608.7
67.5°	382.7	372.2	379.2	386.1	396.5	410.5	431.3	431.3	441.7	441.7	420.9
70°	243.5	243.5	247.0	257.4	264.4	267.8	274.8	281.7	292.2	288.7	288.7
72.5°	163.5	160.0	163.5	167.0	170.5	180.9	180.9	184.3	191.3	194.8	180.9
75°	83.5	87.0	93.9	90.5	100.9	93.9	97.4	107.8	104.3	97.4	97.4
77.5°	69.5	69.5	69.5	66.1	73.0	73.0	69.5	76.5	73.0	73.0	69.5
80°	48.7	52.2	48.7	45.2	48.7	45.2	45.2	45.2	45.2	45.2	41.7
82.5°	38.3	31.3	34.8	31.3	34.8	34.8	31.3	27.8	27.8	31.3	27.8
85°	27.8	20.9	24.3	24.3	20.9	20.9	20.9	20.9	20.9	17.4	17.4
87.5°	17.4	10.5	10.5	10.5	13.9	13.9	13.9	10.5	13.9	13.9	7.0
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°	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2
2.5°	6490.7	6487.2	6494.2	6490.7	6490.7	6487.2	6490.7	6487.2	6494.2	6480.2	6483.7
5°	6490.7	6483.7	6487.2	6490.7	6494.2	6487.2	6487.2	6487.2	6494.2	6487.2	6490.7
7.5°	6476.7	6473.2	6483.7	6490.7	6487.2	6483.7	6490.7	6487.2	6494.2	6490.7	6497.6
10°	6448.9	6452.4	6459.4	6469.8	6473.2	6476.7	6483.7	6483.7	6494.2	6480.2	6487.2
12.5°	6407.2	6421.1	6438.5	6445.4	6459.4	6459.4	6466.4	6469.8	6476.7	6473.2	6483.7
15°	6355.0	6372.4	6393.2	6410.7	6428.1	6438.5	6448.9	6452.4	6462.9	6452.4	6455.9
17.5°	6292.4	6313.2	6344.6	6365.4	6393.2	6403.7	6417.6	6424.6	6435.0	6428.1	6431.5
20°	6205.4	6229.8	6264.6	6295.9	6313.2	6337.6	6355.0	6365.4	6372.4	6365.4	6368.9
22.5°	6083.7	6118.5	6163.7	6188.0	6222.8	6243.7	6247.2	6271.5	6288.9	6271.5	6278.5
25°	5941.1	5975.9	6010.7	6062.8	6094.2	6118.5	6142.8	6146.3	6163.7	6160.2	6156.7
27.5°	5704.5	5749.8	5808.9	5850.7	5892.4	5930.7	5958.5	5965.4	5982.8	5975.9	5979.3
30°	5381.0	5429.8	5485.5	5551.5	5610.7	5648.9	5683.7	5708.0	5725.4	5715.0	5711.5
32.5°	4921.9	4970.6	5029.8	5095.8	5165.4	5221.0	5262.8	5294.1	5315.0	5308.0	5290.6
35°	4396.7	4410.6	4448.9	4501.1	4560.1	4619.3	4657.6	4692.3	4716.7	4723.6	4723.6
37.5°	3857.5	3812.4	3784.5	3784.5	3819.2	3843.6	3878.4	3899.3	3937.5	3951.4	3961.9
40°	3335.7	3231.4	3134.0	3061.0	3012.3	3008.8	3008.8	3019.2	3054.0	3099.2	3141.0
42.5°	2869.7	2702.7	2553.1	2417.5	2320.1	2264.4	2240.1	2243.6	2271.4	2313.1	2382.7
45°	2497.5	2288.8	2101.0	1937.5	1805.3	1718.3	1676.6	1673.1	1694.0	1742.6	1819.2
47.5°	2208.8	1986.1	1774.0	1586.1	1443.6	1349.6	1300.9	1287.0	1300.9	1346.1	1436.6
50°	1968.8	1739.2	1520.1	1325.3	1172.2	1074.9	1029.6	1012.2	1029.6	1067.9	1158.3
52.5°	1746.1	1509.6	1304.4	1116.6	953.1	869.6	820.9	810.4	820.9	866.1	939.2
55°	1488.8	1287.0	1085.2	897.4	754.8	671.4	633.1	622.7	633.1	674.8	751.4
57.5°	1234.9	1060.9	883.5	713.1	591.3	518.2	483.5	469.6	493.9	521.7	612.2
60°	998.3	859.2	709.6	560.0	459.2	393.0	365.2	361.7	368.7	403.5	466.1
62.5°	782.7	667.9	549.6	427.8	344.4	316.5	281.7	278.3	285.2	306.1	354.8
65°	563.5	490.5	400.0	313.0	247.0	208.7	194.8	198.3	205.2	219.2	264.4
67.5°	393.0	340.9	278.3	219.2	170.5	153.0	139.2	135.7	139.2	163.5	187.8
70°	264.4	233.0	187.8	167.0	118.3	93.9	97.4	87.0	100.9	100.9	121.7
72.5°	173.9	153.0	125.2	97.4	83.5	66.1	66.1	62.6	69.5	73.0	90.5
75°	90.5	69.5	69.5	48.7	34.8	17.4	31.3	27.8	24.3	27.8	34.8
77.5°	62.6	52.2	48.7	38.3	34.8	27.8	27.8	27.8	27.8	31.3	34.8
80°	38.3	38.3	27.8	24.3	20.9	17.4	20.9	20.9	20.9	20.9	24.3
82.5°	24.3	20.9	20.9	17.4	17.4	13.9	13.9	13.9	13.9	13.9	20.9
85°	20.9	13.9	13.9	10.5	13.9	24.3	10.5	13.9	13.9	13.9	10.5
87.5°	7.0	10.5	10.5	10.5	7.0	3.5	7.0	10.5	10.5	17.4	13.9
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°	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2	6480.2
2.5°	6490.7	6494.2	6494.2	6490.7	6490.7	6483.7	6497.6	6487.2	6490.7	6504.6	6494.2
5°	6497.6	6501.1	6501.1	6497.6	6497.6	6497.6	6501.1	6501.1	6497.6	6494.2	6501.1
7.5°	6511.5	6508.1	6508.1	6501.1	6501.1	6494.2	6501.1	6490.7	6497.6	6490.7	6501.1
10°	6494.2	6497.6	6494.2	6490.7	6490.7	6487.2	6487.2	6476.7	6480.2	6469.8	6476.7
12.5°	6483.7	6480.2	6480.2	6473.2	6466.4	6459.4	6455.9	6445.4	6445.4	6421.1	6431.5
15°	6455.9	6459.4	6448.9	6435.0	6428.1	6410.7	6403.7	6389.8	6375.9	6358.5	6362.0
17.5°	6431.5	6421.1	6407.2	6393.2	6365.4	6351.5	6337.6	6316.7	6309.8	6288.9	6282.0
20°	6358.5	6351.5	6334.2	6309.8	6292.4	6261.1	6247.2	6226.3	6208.9	6188.0	6177.6
22.5°	6264.6	6257.6	6236.7	6212.4	6184.6	6170.7	6156.7	6118.5	6101.1	6080.2	6076.7
25°	6146.3	6135.9	6115.0	6087.2	6073.2	6035.0	6021.1	5993.2	5986.3	5965.4	5962.0
27.5°	5965.4	5951.5	5927.2	5892.4	5868.0	5843.7	5829.8	5808.9	5802.0	5781.0	5777.6
30°	5694.1	5676.7	5628.0	5614.1	5572.4	5548.0	5548.0	5520.2	5523.7	5509.8	5509.8
32.5°	5266.3	5238.5	5200.2	5172.3	5144.5	5130.6	5130.6	5120.2	5127.1	5127.1	5134.1
35°	4699.3	4661.1	4640.1	4622.8	4622.8	4636.6	4678.4	4688.9	4709.8	4727.1	4741.1
37.5°	3972.3	3968.9	3993.2	4014.1	4066.2	4125.4	4198.4	4261.1	4320.1	4361.9	4403.6
40°	3186.2	3273.2	3342.7	3440.2	3520.1	3634.9	3767.1	3874.9	3975.8	4048.9	4125.4
42.5°	2487.0	2598.3	2744.5	2887.0	3029.7	3186.2	3360.2	3509.7	3641.9	3742.7	3822.7
45°	1937.5	2090.5	2267.9	2448.8	2633.1	2828.0	3008.8	3161.9	3301.0	3405.4	3485.4
47.5°	1561.8	1728.8	1930.5	2128.8	2337.5	2542.7	2744.5	2876.6	2991.4	3074.9	3148.0
50°	1290.4	1467.9	1680.1	1906.1	2114.8	2320.1	2494.0	2622.7	2716.6	2789.7	2834.9
52.5°	1078.3	1266.1	1492.2	1718.3	1927.0	2114.8	2271.4	2368.8	2445.3	2497.5	2539.2
55°	890.4	1071.4	1283.5	1495.7	1700.9	1878.3	2007.0	2080.1	2139.2	2170.5	2194.8
57.5°	727.0	893.9	1088.7	1283.5	1460.9	1607.1	1707.9	1780.9	1808.8	1833.1	1829.6
60°	570.5	727.0	904.4	1071.4	1224.4	1342.6	1415.7	1457.4	1478.3	1488.8	1481.8
62.5°	448.7	591.3	727.0	873.1	984.4	1085.2	1154.9	1154.9	1165.2	1168.7	1179.2
65°	333.9	441.7	560.0	667.9	758.3	824.4	862.7	873.1	887.0	883.5	876.6
67.5°	247.0	327.0	413.9	493.9	556.5	598.2	626.1	650.5	647.0	640.0	636.5
70°	170.5	222.6	299.2	347.8	393.0	434.8	441.7	445.2	448.7	452.2	445.2
72.5°	118.3	156.5	198.3	240.0	267.8	285.2	302.7	306.1	306.1	306.1	302.7
75°	59.2	80.0	118.3	135.7	160.0	167.0	180.9	180.9	191.3	177.4	173.9
77.5°	52.2	62.6	83.5	97.4	107.8	118.3	121.7	132.2	128.7	121.7	125.2
80°	31.3	38.3	52.2	59.2	73.0	76.5	80.0	83.5	80.0	83.5	83.5
82.5°	24.3	27.8	34.8	34.8	45.2	45.2	48.7	48.7	52.2	52.2	52.2
85°	13.9	24.3	20.9	41.7	27.8	27.8	34.8	41.7	34.8	34.8	41.7
87.5°	13.9	13.9	10.5	13.9	13.9	13.9	17.4	20.9	20.9	24.3	20.9
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: P249546

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6480.2	6480.2	6480.2	6480.2
2.5°	6490.7	6497.6	6487.2	6483.7
5°	6501.1	6501.1	6494.2	6494.2
7.5°	6501.1	6501.1	6490.7	6483.7
10°	6473.2	6473.2	6462.9	6455.9
12.5°	6421.1	6421.1	6417.6	6407.2
15°	6355.0	6355.0	6341.1	6330.7
17.5°	6264.6	6271.5	6254.2	6254.2
20°	6167.2	6163.7	6149.8	6142.8
22.5°	6066.3	6059.4	6055.9	6035.0
25°	5958.5	5951.5	5941.1	5930.7
27.5°	5774.1	5770.7	5760.2	5746.3
30°	5492.3	5488.9	5475.0	5475.0
32.5°	5127.1	5123.6	5109.8	5113.3
35°	4748.0	4761.9	4755.0	4741.1
37.5°	4431.4	4441.9	4448.9	4441.9
40°	4167.1	4198.4	4201.9	4208.9
42.5°	3885.4	3927.1	3941.0	3947.9
45°	3547.9	3586.2	3617.5	3610.6
47.5°	3203.6	3231.4	3259.2	3238.4
50°	2873.2	2890.5	2901.0	2901.0
52.5°	2560.1	2560.1	2556.6	2560.1
55°	2201.8	2201.8	2187.9	2194.8
57.5°	1826.1	1833.1	1822.6	1805.3
60°	1478.3	1460.9	1453.9	1443.6
62.5°	1151.4	1151.4	1127.0	1158.3
65°	862.7	852.2	841.7	838.3
67.5°	626.1	622.7	612.2	608.7
70°	441.7	427.8	424.4	417.4
72.5°	295.7	295.7	288.7	288.7
75°	180.9	163.5	160.0	163.5
77.5°	125.2	121.7	121.7	118.3
80°	83.5	80.0	87.0	76.5
82.5°	52.2	55.7	52.2	55.7
85°	34.8	41.7	38.3	38.3
87.5°	20.9	20.9	20.9	20.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)