

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: P249429

Luminaire Tested: **LSR8B120D010 EC8B120835 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249429
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 EC8B120835 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11065.0 lumens
Efficiency: N/A
Efficacy: 93.5 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

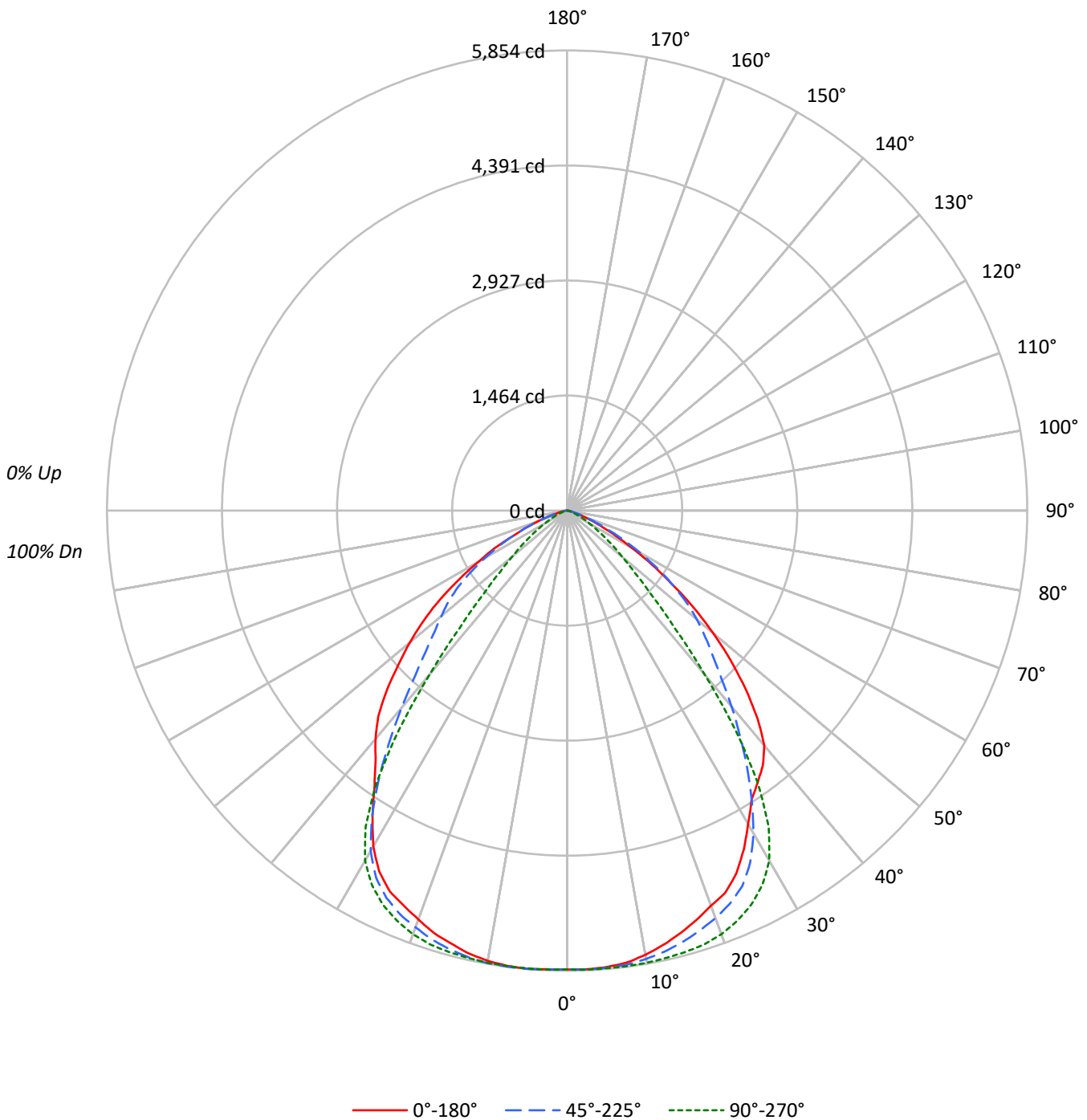
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	180025	180025	180025
5°	180422	180908	181103
10°	179662	182903	182117
15°	177670	185575	182076
20°	175539	188186	181607
25°	173261	188402	181791
30°	163915	183104	175630
35°	159020	159137	160790
40°	157051	109491	152635
45°	139937	65732	141852
50°	116358	43746	125377
55°	87271	30160	106303
60°	59138	20099	80205
65°	35673	13039	55103
70°	19781	7068	33900
75°	8960	2990	17550
80°	7796	3338	12235
85°	8881	4423	12206



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	557.2	5.0
10°-20°	1618.1	14.6
20°-30°	2455.9	22.2
30°-40°	2579.5	23.3
40°-50°	1933.9	17.5
50°-60°	1240.8	11.2
60°-70°	530.8	4.8
70°-80°	125.4	1.1
80°-90°	23.3	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
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0°-30°	4631.2	41.9
0°-40°	7210.7	65.2
0°-60°	10385.5	93.9
0°-90°	11065.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11065.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5838	5838	5838	5838	5838	
5°	5829	5838	5844	5854	5851	554
15°	5565	5682	5813	5776	5703	1570
25°	5092	5271	5537	5437	5343	2326
35°	4224	3989	4227	4177	4271	2651
45°	3209	2623	1507	2548	3253	2458
55°	1623	1623	561	1692	1977	1472
65°	489	577	179	743	755	522
75°	75	88	25	150	147	110
85°	25	16	12	25	34	26
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°	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1
2.5°	5841.3	5847.5	5844.4	5844.4	5841.3	5844.4	5844.4	5850.7	5850.7	5844.4	5841.3
5°	5828.7	5835.0	5835.0	5828.7	5828.7	5844.4	5835.0	5841.3	5841.3	5838.1	5838.1
7.5°	5800.5	5800.5	5813.0	5803.7	5803.7	5813.0	5809.9	5816.2	5822.5	5825.6	5825.6
10°	5737.8	5744.1	5747.2	5747.2	5750.4	5759.7	5766.0	5778.6	5784.8	5791.1	5794.3
12.5°	5659.5	5668.9	5672.0	5668.9	5678.3	5690.8	5706.5	5722.2	5731.6	5744.1	5753.5
15°	5565.4	5565.4	5571.7	5581.2	5587.5	5606.2	5621.9	5640.7	5665.7	5681.5	5697.1
17.5°	5462.1	5468.4	5477.7	5477.7	5490.3	5521.6	5531.0	5559.2	5587.5	5603.1	5634.5
20°	5349.3	5355.5	5364.9	5371.2	5386.9	5411.9	5430.7	5455.8	5487.2	5515.4	5546.7
22.5°	5261.5	5249.0	5255.2	5261.5	5277.2	5299.1	5321.1	5352.4	5383.7	5411.9	5443.3
25°	5092.3	5095.4	5104.8	5111.1	5129.9	5148.7	5173.8	5211.4	5239.6	5270.9	5305.4
27.5°	4863.5	4866.7	4882.3	4882.3	4898.0	4929.3	4945.0	4976.3	5014.0	5045.3	5086.1
30°	4603.5	4609.7	4609.7	4622.2	4631.6	4647.3	4663.0	4694.3	4713.1	4741.3	4797.8
32.5°	4365.3	4371.5	4368.4	4365.3	4355.9	4352.7	4349.6	4355.9	4362.2	4371.5	4393.4
35°	4224.3	4208.6	4196.1	4174.1	4149.1	4117.7	4089.5	4051.9	4017.4	3989.2	3957.9
37.5°	4089.5	4086.3	4067.6	4036.2	3986.1	3929.7	3863.9	3782.4	3700.9	3613.2	3528.6
40°	3901.5	3892.1	3876.4	3832.5	3776.1	3707.2	3619.5	3519.2	3387.5	3252.8	3114.9
42.5°	3581.8	3585.0	3566.2	3531.7	3478.5	3412.6	3321.7	3212.1	3071.1	2911.2	2732.6
45°	3208.9	3208.9	3202.6	3174.4	3136.9	3083.6	3014.6	2923.8	2785.9	2622.9	2431.7
47.5°	2820.3	2823.5	2814.0	2807.8	2792.1	2757.7	2707.5	2638.6	2541.5	2384.7	2193.6
50°	2425.5	2425.5	2441.2	2438.0	2438.0	2425.5	2403.6	2362.8	2278.2	2152.9	1974.3
52.5°	2030.6	2036.9	2046.4	2058.9	2074.5	2099.6	2074.5	2055.7	2002.4	1905.3	1751.8
55°	1623.3	1629.5	1645.2	1667.1	1686.0	1711.0	1717.3	1717.3	1689.0	1623.3	1507.3
57.5°	1275.4	1266.0	1278.6	1297.4	1322.4	1347.5	1366.3	1388.2	1385.1	1341.2	1247.2
60°	958.9	962.1	971.4	990.3	1009.1	1031.0	1056.1	1074.9	1084.3	1062.4	1002.8
62.5°	698.8	698.8	711.3	730.1	739.6	770.9	786.6	796.0	805.3	802.2	764.6
65°	488.9	495.1	501.4	510.8	520.2	539.0	548.4	567.2	573.5	576.6	548.4
67.5°	344.7	335.3	341.6	347.8	357.2	369.8	388.6	388.6	398.0	398.0	379.2
70°	219.4	219.4	222.5	231.9	238.2	241.3	247.6	253.8	263.2	260.1	260.1
72.5°	147.3	144.2	147.3	150.4	153.6	162.9	162.9	166.1	172.4	175.5	162.9
75°	75.2	78.4	84.6	81.5	90.9	84.6	87.7	97.1	94.0	87.7	87.7
77.5°	62.6	62.6	62.6	59.6	65.8	65.8	62.6	68.9	65.8	65.8	62.6
80°	43.9	47.0	43.9	40.7	43.9	40.7	40.7	40.7	40.7	40.7	37.6
82.5°	34.5	28.2	31.4	28.2	31.4	31.4	28.2	25.1	25.1	28.2	25.1
85°	25.1	18.8	21.9	21.9	18.8	18.8	18.8	18.8	18.8	15.6	15.6
87.5°	15.6	9.4	9.4	9.4	12.5	12.5	12.5	9.4	12.5	12.5	6.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1
2.5°	5847.5	5844.4	5850.7	5847.5	5847.5	5844.4	5847.5	5844.4	5850.7	5838.1	5841.3
5°	5847.5	5841.3	5844.4	5847.5	5850.7	5844.4	5844.4	5844.4	5850.7	5844.4	5847.5
7.5°	5835.0	5831.8	5841.3	5847.5	5844.4	5841.3	5847.5	5844.4	5850.7	5847.5	5853.8
10°	5809.9	5813.0	5819.3	5828.7	5831.8	5835.0	5841.3	5841.3	5850.7	5838.1	5844.4
12.5°	5772.3	5784.8	5800.5	5806.8	5819.3	5819.3	5825.6	5828.7	5835.0	5831.8	5841.3
15°	5725.3	5741.0	5759.7	5775.5	5791.1	5800.5	5809.9	5813.0	5822.5	5813.0	5816.2
17.5°	5668.9	5687.7	5715.9	5734.7	5759.7	5769.2	5781.7	5788.0	5797.4	5791.1	5794.3
20°	5590.5	5612.5	5643.8	5672.0	5687.7	5709.6	5725.3	5734.7	5741.0	5734.7	5737.8
22.5°	5480.9	5512.2	5552.9	5574.9	5606.2	5625.0	5628.2	5650.1	5665.7	5650.1	5656.4
25°	5352.4	5383.7	5415.1	5462.1	5490.3	5512.2	5534.2	5537.3	5552.9	5549.8	5546.7
27.5°	5139.3	5180.1	5233.3	5270.9	5308.5	5343.0	5368.1	5374.3	5390.0	5383.7	5386.9
30°	4847.8	4891.8	4941.9	5001.4	5054.7	5089.1	5120.5	5142.4	5158.1	5148.7	5145.6
32.5°	4434.2	4478.1	4531.4	4590.9	4653.6	4703.7	4741.3	4769.5	4788.3	4782.0	4766.4
35°	3961.1	3973.6	4008.1	4055.1	4108.3	4161.6	4196.1	4227.4	4249.3	4255.6	4255.6
37.5°	3475.3	3434.6	3409.5	3409.5	3440.8	3462.7	3494.1	3512.9	3547.4	3559.9	3569.3
40°	3005.2	2911.2	2823.5	2757.7	2713.8	2710.7	2710.7	2720.0	2751.4	2792.1	2829.8
42.5°	2585.3	2434.9	2300.2	2177.9	2090.2	2040.1	2018.1	2021.3	2046.4	2083.9	2146.6
45°	2250.0	2062.0	1892.8	1745.5	1626.4	1548.0	1510.5	1507.3	1526.1	1570.0	1639.0
47.5°	1989.9	1789.3	1598.2	1429.0	1300.5	1215.9	1172.0	1159.5	1172.0	1212.7	1294.2
50°	1773.7	1566.9	1369.5	1193.9	1056.1	968.4	927.6	911.9	927.6	962.1	1043.5
52.5°	1573.1	1360.0	1175.2	1005.9	858.6	783.4	739.6	730.1	739.6	780.3	846.1
55°	1341.2	1159.5	977.7	808.5	680.0	604.8	570.3	561.0	570.3	608.0	676.9
57.5°	1112.5	955.8	796.0	642.4	532.8	466.9	435.6	423.0	445.0	470.0	551.5
60°	899.3	774.1	639.3	504.5	413.7	354.1	329.0	325.9	332.2	363.5	419.9
62.5°	705.1	601.7	495.1	385.5	310.2	285.2	253.8	250.7	256.9	275.7	319.7
65°	507.7	441.9	360.4	282.0	222.5	188.0	175.5	178.7	184.9	197.4	238.2
67.5°	354.1	307.1	250.7	197.4	153.6	137.9	125.4	122.2	125.4	147.3	169.2
70°	238.2	209.9	169.2	150.4	106.6	84.6	87.7	78.4	90.9	90.9	109.6
72.5°	156.7	137.9	112.8	87.7	75.2	59.6	59.6	56.4	62.6	65.8	81.5
75°	81.5	62.6	62.6	43.9	31.4	15.6	28.2	25.1	21.9	25.1	31.4
77.5°	56.4	47.0	43.9	34.5	31.4	25.1	25.1	25.1	25.1	28.2	31.4
80°	34.5	34.5	25.1	21.9	18.8	15.6	18.8	18.8	18.8	18.8	21.9
82.5°	21.9	18.8	18.8	15.6	15.6	12.5	12.5	12.5	12.5	12.5	18.8
85°	18.8	12.5	12.5	9.4	12.5	21.9	9.4	12.5	12.5	12.5	9.4
87.5°	6.3	9.4	9.4	9.4	6.3	3.1	6.3	9.4	9.4	15.6	12.5
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°	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1	5838.1
2.5°	5847.5	5850.7	5850.7	5847.5	5847.5	5841.3	5853.8	5844.4	5847.5	5860.0	5850.7
5°	5853.8	5856.9	5856.9	5853.8	5853.8	5853.8	5856.9	5856.9	5853.8	5850.7	5856.9
7.5°	5866.3	5863.2	5863.2	5856.9	5856.9	5850.7	5856.9	5847.5	5853.8	5847.5	5856.9
10°	5850.7	5853.8	5850.7	5847.5	5847.5	5844.4	5844.4	5835.0	5838.1	5828.7	5835.0
12.5°	5841.3	5838.1	5838.1	5831.8	5825.6	5819.3	5816.2	5806.8	5806.8	5784.8	5794.3
15°	5816.2	5819.3	5809.9	5797.4	5791.1	5775.5	5769.2	5756.6	5744.1	5728.5	5731.6
17.5°	5794.3	5784.8	5772.3	5759.7	5734.7	5722.2	5709.6	5690.8	5684.5	5665.7	5659.5
20°	5728.5	5722.2	5706.5	5684.5	5668.9	5640.7	5628.2	5609.4	5593.7	5574.9	5565.4
22.5°	5643.8	5637.5	5618.7	5596.8	5571.7	5559.2	5546.7	5512.2	5496.5	5477.7	5474.6
25°	5537.3	5527.9	5509.1	5484.0	5471.4	5437.0	5424.4	5399.4	5393.2	5374.3	5371.2
27.5°	5374.3	5361.8	5339.9	5308.5	5286.6	5264.6	5252.1	5233.3	5227.1	5208.2	5205.1
30°	5129.9	5114.2	5070.3	5057.8	5020.2	4998.3	4998.3	4973.2	4976.3	4963.8	4963.8
32.5°	4744.5	4719.4	4684.9	4659.8	4634.7	4622.2	4622.2	4612.8	4619.1	4619.1	4625.4
35°	4233.6	4199.2	4180.4	4164.7	4164.7	4177.2	4214.9	4224.3	4243.1	4258.7	4271.3
37.5°	3578.7	3575.6	3597.5	3616.3	3663.3	3716.6	3782.4	3838.8	3892.1	3929.7	3967.3
40°	2870.5	2948.8	3011.5	3099.3	3171.3	3274.7	3393.8	3491.0	3581.8	3647.7	3716.6
42.5°	2240.6	2340.9	2472.5	2601.0	2729.5	2870.5	3027.2	3161.9	3281.0	3371.9	3443.9
45°	1745.5	1883.3	2043.2	2206.2	2372.2	2547.7	2710.7	2848.6	2973.9	3067.9	3140.0
47.5°	1407.0	1557.5	1739.2	1917.8	2105.9	2290.7	2472.5	2591.6	2695.0	2770.2	2836.1
50°	1162.6	1322.4	1513.6	1717.3	1905.3	2090.2	2246.9	2362.8	2447.5	2513.2	2554.0
52.5°	971.4	1140.6	1344.4	1548.0	1736.0	1905.3	2046.4	2134.1	2203.0	2250.0	2287.6
55°	802.2	965.2	1156.4	1347.5	1532.4	1692.2	1808.1	1874.0	1927.2	1955.4	1977.3
57.5°	655.0	805.3	980.9	1156.4	1316.2	1447.8	1538.7	1604.5	1629.5	1651.5	1648.3
60°	514.0	655.0	814.8	965.2	1103.1	1209.6	1275.4	1313.0	1331.8	1341.2	1334.9
62.5°	404.2	532.8	655.0	786.6	886.8	977.7	1040.4	1040.4	1049.8	1052.9	1062.4
65°	300.8	398.0	504.5	601.7	683.1	742.7	777.2	786.6	799.1	796.0	789.7
67.5°	222.5	294.6	372.9	445.0	501.4	539.0	564.0	586.0	582.9	576.6	573.5
70°	153.6	200.6	269.5	313.4	354.1	391.7	398.0	401.1	404.2	407.4	401.1
72.5°	106.6	141.0	178.7	216.2	241.3	256.9	272.7	275.7	275.7	275.7	272.7
75°	53.3	72.1	106.6	122.2	144.2	150.4	162.9	162.9	172.4	159.8	156.7
77.5°	47.0	56.4	75.2	87.7	97.1	106.6	109.6	119.1	115.9	109.6	112.8
80°	28.2	34.5	47.0	53.3	65.8	68.9	72.1	75.2	72.1	75.2	75.2
82.5°	21.9	25.1	31.4	31.4	40.7	40.7	43.9	43.9	47.0	47.0	47.0
85°	12.5	21.9	18.8	37.6	25.1	25.1	31.4	37.6	31.4	31.4	37.6
87.5°	12.5	12.5	9.4	12.5	12.5	12.5	15.6	18.8	18.8	21.9	18.8
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: P249429

CATALOG NUMBER: LSR8B120D010 EC8B120835 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5838.1	5838.1	5838.1	5838.1
2.5°	5847.5	5853.8	5844.4	5841.3
5°	5856.9	5856.9	5850.7	5850.7
7.5°	5856.9	5856.9	5847.5	5841.3
10°	5831.8	5831.8	5822.5	5816.2
12.5°	5784.8	5784.8	5781.7	5772.3
15°	5725.3	5725.3	5712.7	5703.4
17.5°	5643.8	5650.1	5634.5	5634.5
20°	5556.1	5552.9	5540.4	5534.2
22.5°	5465.2	5458.9	5455.8	5437.0
25°	5368.1	5361.8	5352.4	5343.0
27.5°	5202.0	5198.9	5189.4	5176.9
30°	4948.1	4945.0	4932.5	4932.5
32.5°	4619.1	4616.0	4603.5	4606.6
35°	4277.5	4290.1	4283.8	4271.3
37.5°	3992.3	4001.8	4008.1	4001.8
40°	3754.2	3782.4	3785.5	3791.8
42.5°	3500.4	3538.0	3550.5	3556.7
45°	3196.4	3230.9	3259.1	3252.8
47.5°	2886.1	2911.2	2936.3	2917.5
50°	2588.5	2604.1	2613.5	2613.5
52.5°	2306.4	2306.4	2303.3	2306.4
55°	1983.6	1983.6	1971.1	1977.3
57.5°	1645.2	1651.5	1642.0	1626.4
60°	1331.8	1316.2	1309.9	1300.5
62.5°	1037.3	1037.3	1015.4	1043.5
65°	777.2	767.8	758.3	755.2
67.5°	564.0	561.0	551.5	548.4
70°	398.0	385.5	382.3	376.0
72.5°	266.4	266.4	260.1	260.1
75°	162.9	147.3	144.2	147.3
77.5°	112.8	109.6	109.6	106.6
80°	75.2	72.1	78.4	68.9
82.5°	47.0	50.1	47.0	50.1
85°	31.4	37.6	34.5	34.5
87.5°	18.8	18.8	18.8	18.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)