

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: P249502

Luminaire Tested: **LSR8B150D010 EC8B1509727 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249502
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: LSR8B150D010 EC8B1509727 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10146.0 lumens
Efficiency: N/A
Efficacy: 64.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

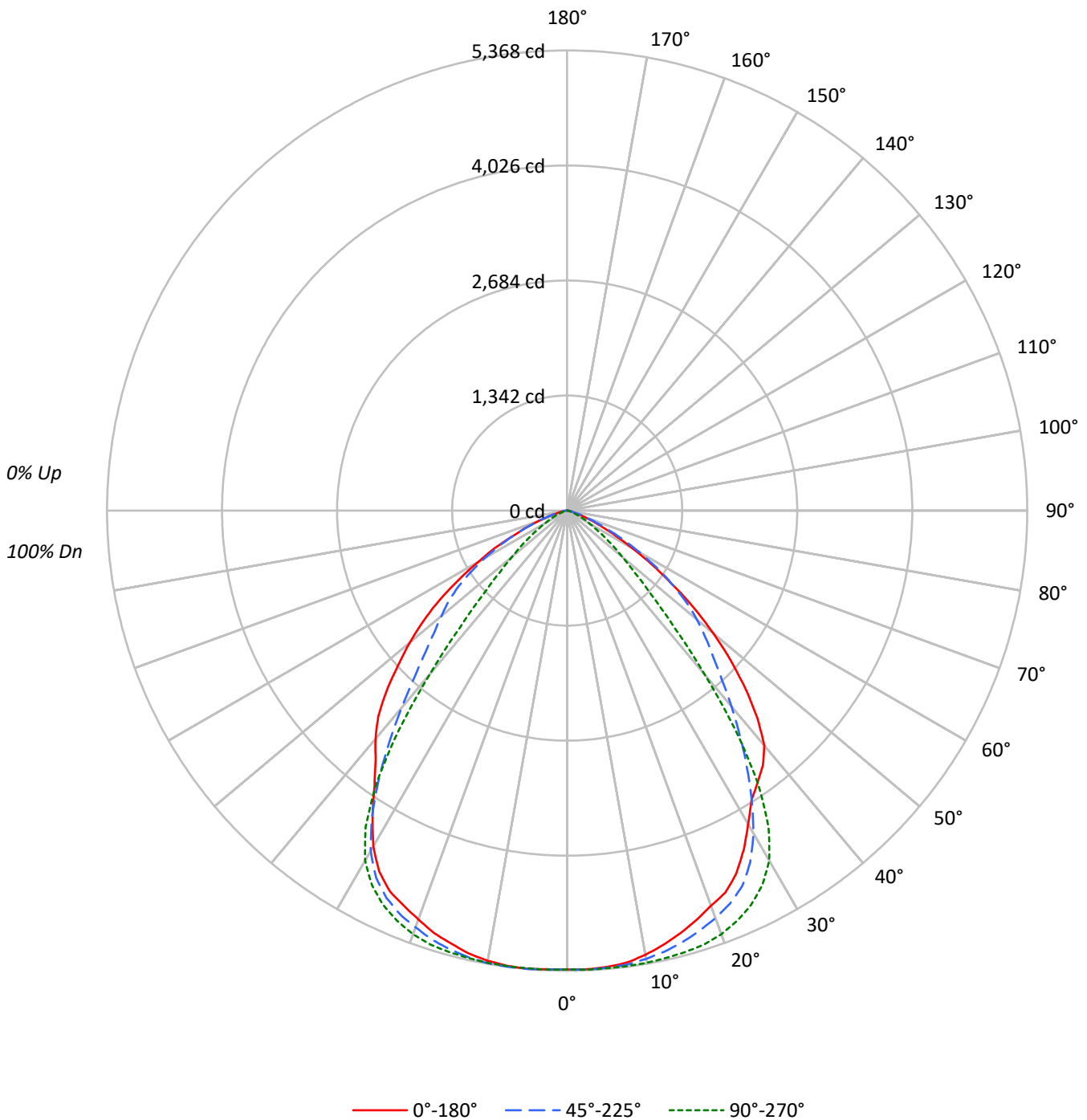
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	510.9	5.0
10°-20°	1483.7	14.6
20°-30°	2252.0	22.2
30°-40°	2365.2	23.3
40°-50°	1773.3	17.5
50°-60°	1137.8	11.2
60°-70°	486.7	4.8
70°-80°	115.0	1.1
80°-90°	21.4	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°	4246.6	41.9
0°-40°	6611.8	65.2
0°-60°	9522.9	93.9
0°-90°	10146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10146.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5353	5353	5353	5353	5353	
5°	5345	5353	5359	5368	5365	508
15°	5103	5210	5330	5296	5230	1439
25°	4669	4833	5077	4985	4899	2133
35°	3873	3658	3876	3830	3916	2431
45°	2942	2405	1382	2336	2983	2253
55°	1488	1488	514	1552	1813	1350
65°	448	529	164	681	692	479
75°	69	80	23	138	135	100
85°	23	14	12	23	32	24
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°	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2
2.5°	5356.1	5361.9	5359.0	5359.0	5356.1	5359.0	5359.0	5364.8	5364.8	5359.0	5356.1
5°	5344.6	5350.3	5350.3	5344.6	5344.6	5359.0	5350.3	5356.1	5356.1	5353.2	5353.2
7.5°	5318.8	5318.8	5330.2	5321.7	5321.7	5330.2	5327.4	5333.1	5338.9	5341.8	5341.8
10°	5261.3	5267.0	5269.9	5269.9	5272.8	5281.4	5287.1	5298.7	5304.4	5310.1	5313.0
12.5°	5189.5	5198.1	5200.9	5198.1	5206.7	5218.2	5232.6	5246.9	5255.6	5267.0	5275.7
15°	5103.2	5103.2	5109.0	5117.6	5123.4	5140.6	5155.0	5172.2	5195.2	5209.6	5223.9
17.5°	5008.4	5014.2	5022.8	5022.8	5034.3	5063.0	5071.6	5097.5	5123.4	5137.7	5166.5
20°	4905.0	4910.7	4919.4	4925.1	4939.5	4962.5	4979.7	5002.7	5031.4	5057.3	5086.0
22.5°	4824.5	4813.0	4818.7	4824.5	4838.9	4859.0	4879.1	4907.8	4936.6	4962.5	4991.2
25°	4669.3	4672.2	4680.9	4686.6	4703.9	4721.1	4744.1	4778.5	4804.4	4833.2	4864.7
27.5°	4459.6	4462.5	4476.8	4476.8	4491.2	4519.9	4534.3	4563.0	4597.6	4626.2	4663.6
30°	4221.1	4226.8	4226.8	4238.3	4246.9	4261.3	4275.7	4304.4	4321.7	4347.5	4399.3
32.5°	4002.7	4008.4	4005.6	4002.7	3994.1	3991.2	3988.3	3994.1	3999.9	4008.4	4028.5
35°	3873.4	3859.0	3847.6	3827.5	3804.5	3775.7	3749.8	3715.4	3683.8	3657.9	3629.2
37.5°	3749.8	3747.0	3729.7	3701.0	3655.0	3603.3	3543.0	3468.3	3393.5	3313.1	3235.5
40°	3577.4	3568.8	3554.5	3514.2	3462.5	3399.3	3318.8	3226.9	3106.2	2982.6	2856.2
42.5°	3284.3	3287.2	3270.0	3238.3	3189.6	3129.2	3045.8	2945.3	2816.0	2669.4	2505.7
45°	2942.4	2942.4	2936.7	2910.8	2876.3	2827.5	2764.3	2680.9	2554.5	2405.0	2229.8
47.5°	2586.1	2589.0	2580.3	2574.6	2560.2	2528.6	2482.7	2419.5	2330.4	2186.7	2011.4
50°	2224.1	2224.1	2238.4	2235.5	2235.5	2224.1	2204.0	2166.6	2089.0	1974.1	1810.3
52.5°	1862.0	1867.7	1876.4	1887.9	1902.2	1925.2	1902.2	1885.0	1836.1	1747.0	1606.3
55°	1488.4	1494.2	1508.5	1528.7	1545.9	1568.9	1574.6	1574.6	1548.8	1488.4	1382.1
57.5°	1169.5	1160.9	1172.4	1189.6	1212.6	1235.6	1252.8	1272.9	1270.1	1229.8	1143.6
60°	879.3	882.2	890.7	908.0	925.3	945.4	968.4	985.6	994.2	974.1	919.5
62.5°	640.8	640.8	652.3	669.5	678.1	706.9	721.2	729.9	738.5	735.6	701.1
65°	448.3	454.0	459.7	468.4	477.0	494.2	502.8	520.1	525.8	528.7	502.8
67.5°	316.1	307.5	313.2	318.9	327.6	339.1	356.3	356.3	364.9	364.9	347.7
70°	201.2	201.2	204.0	212.6	218.4	221.3	227.0	232.7	241.4	238.5	238.5
72.5°	135.1	132.2	135.1	137.9	140.8	149.4	149.4	152.3	158.1	160.9	149.4
75°	69.0	71.9	77.6	74.7	83.3	77.6	80.4	89.1	86.2	80.4	80.4
77.5°	57.4	57.4	57.4	54.6	60.3	60.3	57.4	63.2	60.3	60.3	57.4
80°	40.2	43.1	40.2	37.3	40.2	37.3	37.3	37.3	37.3	37.3	34.5
82.5°	31.6	25.9	28.8	25.9	28.8	28.8	25.9	23.0	23.0	25.9	23.0
85°	23.0	17.2	20.1	20.1	17.2	17.2	17.2	17.2	17.2	14.3	14.3
87.5°	14.3	8.6	8.6	8.6	11.5	11.5	11.5	8.6	11.5	11.5	5.8
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°	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2
2.5°	5361.9	5359.0	5364.8	5361.9	5361.9	5359.0	5361.9	5359.0	5364.8	5353.2	5356.1
5°	5361.9	5356.1	5359.0	5361.9	5364.8	5359.0	5359.0	5359.0	5364.8	5359.0	5361.9
7.5°	5350.3	5347.5	5356.1	5361.9	5359.0	5356.1	5361.9	5359.0	5364.8	5361.9	5367.6
10°	5327.4	5330.2	5336.0	5344.6	5347.5	5350.3	5356.1	5356.1	5364.8	5353.2	5359.0
12.5°	5292.9	5304.4	5318.8	5324.5	5336.0	5336.0	5341.8	5344.6	5350.3	5347.5	5356.1
15°	5249.8	5264.1	5281.4	5295.8	5310.1	5318.8	5327.4	5330.2	5338.9	5330.2	5333.1
17.5°	5198.1	5215.3	5241.2	5258.4	5281.4	5290.0	5301.5	5307.2	5315.9	5310.1	5313.0
20°	5126.2	5146.4	5175.1	5200.9	5215.3	5235.4	5249.8	5258.4	5264.1	5258.4	5261.3
22.5°	5025.7	5054.4	5091.8	5111.9	5140.6	5157.8	5160.7	5180.8	5195.2	5180.8	5186.6
25°	4907.8	4936.6	4965.3	5008.4	5034.3	5054.4	5074.5	5077.4	5091.8	5088.9	5086.0
27.5°	4712.4	4749.8	4798.6	4833.2	4867.6	4899.2	4922.2	4927.9	4942.3	4936.6	4939.5
30°	4445.2	4485.5	4531.5	4586.0	4634.9	4666.5	4695.2	4715.3	4729.7	4721.1	4718.2
32.5°	4065.9	4106.2	4155.0	4209.6	4267.1	4313.0	4347.5	4373.4	4390.6	4384.9	4370.5
35°	3632.1	3643.5	3675.2	3718.3	3767.1	3815.9	3847.6	3876.3	3896.4	3902.1	3902.1
37.5°	3186.7	3149.3	3126.3	3126.3	3155.0	3175.1	3203.9	3221.1	3252.8	3264.2	3272.9
40°	2755.6	2669.4	2589.0	2528.6	2488.4	2485.5	2485.5	2494.1	2522.9	2560.2	2594.7
42.5°	2370.6	2232.7	2109.1	1997.0	1916.6	1870.6	1850.5	1853.4	1876.4	1910.8	1968.3
45°	2063.1	1890.7	1735.6	1600.5	1491.3	1419.5	1385.0	1382.1	1399.4	1439.6	1502.8
47.5°	1824.6	1640.7	1465.4	1310.3	1192.5	1114.9	1074.7	1063.2	1074.7	1112.0	1186.7
50°	1626.4	1436.8	1255.7	1094.8	968.4	887.9	850.5	836.2	850.5	882.2	956.8
52.5°	1442.5	1247.1	1077.5	922.4	787.3	718.3	678.1	669.5	678.1	715.5	775.9
55°	1229.8	1063.2	896.5	741.3	623.6	554.6	523.0	514.4	523.0	557.5	620.7
57.5°	1020.1	876.4	729.9	589.0	488.5	428.1	399.4	387.9	408.0	431.0	505.7
60°	824.7	709.8	586.2	462.6	379.3	324.7	301.7	298.8	304.6	333.3	385.0
62.5°	646.6	551.7	454.0	353.4	284.5	261.5	232.7	229.9	235.6	252.8	293.1
65°	465.5	405.2	330.5	258.6	204.0	172.4	160.9	163.8	169.5	181.0	218.4
67.5°	324.7	281.6	229.9	181.0	140.8	126.4	115.0	112.1	115.0	135.1	155.2
70°	218.4	192.5	155.2	137.9	97.7	77.6	80.4	71.9	83.3	83.3	100.5
72.5°	143.6	126.4	103.4	80.4	69.0	54.6	54.6	51.7	57.4	60.3	74.7
75°	74.7	57.4	57.4	40.2	28.8	14.3	25.9	23.0	20.1	23.0	28.8
77.5°	51.7	43.1	40.2	31.6	28.8	23.0	23.0	23.0	23.0	25.9	28.8
80°	31.6	31.6	23.0	20.1	17.2	14.3	17.2	17.2	17.2	17.2	20.1
82.5°	20.1	17.2	17.2	14.3	14.3	11.5	11.5	11.5	11.5	11.5	17.2
85°	17.2	11.5	11.5	8.6	11.5	20.1	8.6	11.5	11.5	11.5	8.6
87.5°	5.8	8.6	8.6	8.6	5.8	2.9	5.8	8.6	8.6	14.3	11.5
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°	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2	5353.2
2.5°	5361.9	5364.8	5364.8	5361.9	5361.9	5356.1	5367.6	5359.0	5361.9	5373.3	5364.8
5°	5367.6	5370.5	5370.5	5367.6	5367.6	5367.6	5370.5	5370.5	5367.6	5364.8	5370.5
7.5°	5379.1	5376.2	5376.2	5370.5	5370.5	5364.8	5370.5	5361.9	5367.6	5361.9	5370.5
10°	5364.8	5367.6	5364.8	5361.9	5361.9	5359.0	5359.0	5350.3	5353.2	5344.6	5350.3
12.5°	5356.1	5353.2	5353.2	5347.5	5341.8	5336.0	5333.1	5324.5	5324.5	5304.4	5313.0
15°	5333.1	5336.0	5327.4	5315.9	5310.1	5295.8	5290.0	5278.5	5267.0	5252.7	5255.6
17.5°	5313.0	5304.4	5292.9	5281.4	5258.4	5246.9	5235.4	5218.2	5212.4	5195.2	5189.5
20°	5252.7	5246.9	5232.6	5212.4	5198.1	5172.2	5160.7	5143.5	5129.1	5111.9	5103.2
22.5°	5175.1	5169.3	5152.1	5132.0	5109.0	5097.5	5086.0	5054.4	5040.0	5022.8	5019.9
25°	5077.4	5068.8	5051.5	5028.5	5017.0	4985.4	4973.9	4950.9	4945.2	4927.9	4925.1
27.5°	4927.9	4916.5	4896.4	4867.6	4847.5	4827.4	4815.9	4798.6	4792.9	4775.6	4772.8
30°	4703.9	4689.4	4649.2	4637.8	4603.2	4583.1	4583.1	4560.1	4563.0	4551.6	4551.6
32.5°	4350.4	4327.4	4295.8	4272.8	4249.8	4238.3	4238.3	4229.7	4235.5	4235.5	4241.2
35°	3882.0	3850.5	3833.2	3818.8	3818.8	3830.3	3864.8	3873.4	3890.7	3905.0	3916.5
37.5°	3281.4	3278.6	3298.7	3316.0	3359.1	3407.9	3468.3	3520.0	3568.8	3603.3	3637.8
40°	2632.1	2703.9	2761.4	2841.9	2907.9	3002.7	3111.9	3201.0	3284.3	3344.7	3407.9
42.5°	2054.5	2146.5	2267.2	2384.9	2502.8	2632.1	2775.8	2899.3	3008.5	3091.8	3157.9
45°	1600.5	1726.9	1873.5	2022.9	2175.2	2336.1	2485.5	2612.0	2726.9	2813.1	2879.2
47.5°	1290.2	1428.1	1594.7	1758.6	1931.0	2100.5	2267.2	2376.4	2471.1	2540.1	2600.5
50°	1066.0	1212.6	1387.9	1574.6	1747.0	1916.6	2060.3	2166.6	2244.2	2304.5	2341.8
52.5°	890.7	1045.9	1232.7	1419.5	1591.9	1747.0	1876.4	1956.8	2020.0	2063.1	2097.6
55°	735.6	885.0	1060.3	1235.6	1405.1	1551.6	1657.9	1718.3	1767.1	1793.0	1813.1
57.5°	600.6	738.5	899.4	1060.3	1206.8	1327.6	1410.9	1471.2	1494.2	1514.3	1511.4
60°	471.3	600.6	747.1	885.0	1011.5	1109.1	1169.5	1204.0	1221.2	1229.8	1224.1
62.5°	370.7	488.5	600.6	721.2	813.2	896.5	954.0	954.0	962.6	965.5	974.1
65°	275.8	364.9	462.6	551.7	626.4	681.0	712.6	721.2	732.8	729.9	724.1
67.5°	204.0	270.1	341.9	408.0	459.7	494.2	517.2	537.4	534.5	528.7	525.8
70°	140.8	183.9	247.1	287.4	324.7	359.2	364.9	367.8	370.7	373.5	367.8
72.5°	97.7	129.3	163.8	198.3	221.3	235.6	250.0	252.8	252.8	252.8	250.0
75°	48.9	66.1	97.7	112.1	132.2	137.9	149.4	149.4	158.1	146.5	143.6
77.5°	43.1	51.7	69.0	80.4	89.1	97.7	100.5	109.2	106.3	100.5	103.4
80°	25.9	31.6	43.1	48.9	60.3	63.2	66.1	69.0	66.1	69.0	69.0
82.5°	20.1	23.0	28.8	28.8	37.3	37.3	40.2	40.2	43.1	43.1	43.1
85°	11.5	20.1	17.2	34.5	23.0	23.0	28.8	34.5	28.8	28.8	34.5
87.5°	11.5	11.5	8.6	11.5	11.5	11.5	14.3	17.2	17.2	20.1	17.2
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: P249502

CATALOG NUMBER: LSR8B150D010 EC8B1509727 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5353.2	5353.2	5353.2	5353.2
2.5°	5361.9	5367.6	5359.0	5356.1
5°	5370.5	5370.5	5364.8	5364.8
7.5°	5370.5	5370.5	5361.9	5356.1
10°	5347.5	5347.5	5338.9	5333.1
12.5°	5304.4	5304.4	5301.5	5292.9
15°	5249.8	5249.8	5238.3	5229.7
17.5°	5175.1	5180.8	5166.5	5166.5
20°	5094.6	5091.8	5080.3	5074.5
22.5°	5011.3	5005.6	5002.7	4985.4
25°	4922.2	4916.5	4907.8	4899.2
27.5°	4769.9	4767.1	4758.4	4747.0
30°	4537.2	4534.3	4522.8	4522.8
32.5°	4235.5	4232.6	4221.1	4224.0
35°	3922.2	3933.8	3928.0	3916.5
37.5°	3660.8	3669.4	3675.2	3669.4
40°	3442.4	3468.3	3471.1	3476.9
42.5°	3209.7	3244.1	3255.6	3261.3
45°	2930.9	2962.5	2988.4	2982.6
47.5°	2646.4	2669.4	2692.4	2675.2
50°	2373.5	2387.8	2396.5	2396.5
52.5°	2114.9	2114.9	2112.0	2114.9
55°	1818.9	1818.9	1807.4	1813.1
57.5°	1508.5	1514.3	1505.7	1491.3
60°	1221.2	1206.8	1201.1	1192.5
62.5°	951.1	951.1	931.0	956.8
65°	712.6	704.0	695.4	692.5
67.5°	517.2	514.4	505.7	502.8
70°	364.9	353.4	350.6	344.8
72.5°	244.3	244.3	238.5	238.5
75°	149.4	135.1	132.2	135.1
77.5°	103.4	100.5	100.5	97.7
80°	69.0	66.1	71.9	63.2
82.5°	43.1	46.0	43.1	46.0
85°	28.8	34.5	31.6	31.6
87.5°	17.2	17.2	17.2	17.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)