

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: P249510

Luminaire Tested: **LSR8B120D010 EC8B1209730 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249510
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 EC8B1209730 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8151.0 lumens
Efficiency: N/A
Efficacy: 68.9 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

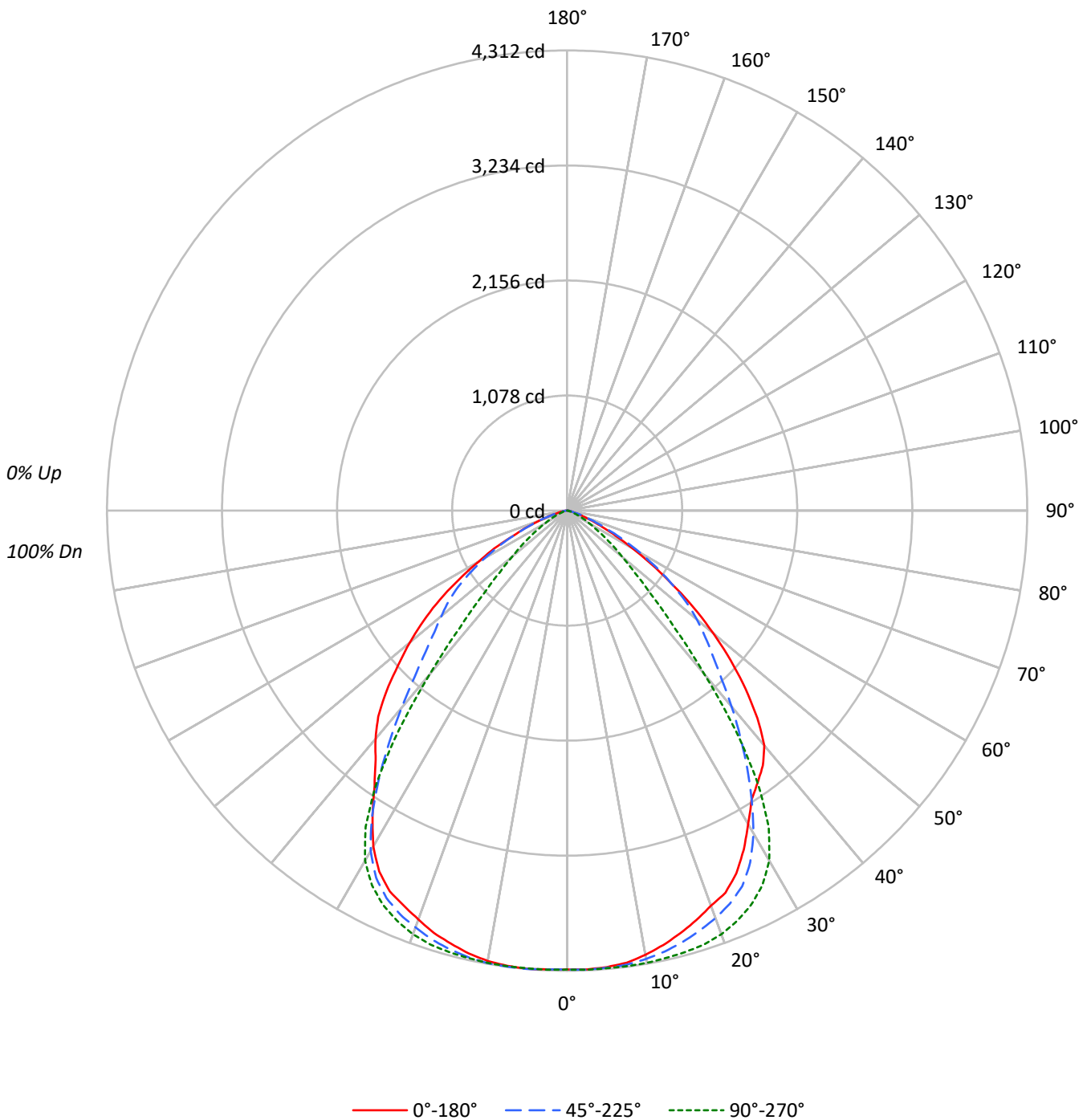
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249510

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0B

Luminous Intensity Polar Plot





TEST NUMBER: P249510

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0B

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	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°			



TEST NUMBER: P249510

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.4	5.0
10°-20°	1192.0	14.6
20°-30°	1809.2	22.2
30°-40°	1900.2	23.3
40°-50°	1424.6	17.5
50°-60°	914.1	11.2
60°-70°	391.0	4.8
70°-80°	92.4	1.1
80°-90°	17.2	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°	3411.6	41.9
0°-40°	5311.7	65.2
0°-60°	7650.4	93.9
0°-90°	8151.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8151.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4301	4301	4301	4301	4301	
5°	4294	4301	4305	4312	4310	408
15°	4100	4185	4282	4254	4201	1156
25°	3751	3883	4079	4005	3936	1714
35°	3112	2939	3114	3077	3146	1953
45°	2364	1932	1110	1877	2396	1810
55°	1196	1196	413	1246	1457	1085
65°	360	425	132	547	556	384
75°	55	65	18	111	108	81
85°	18	12	9	18	25	19
90°	0	0	0	0	0	



TEST NUMBER: P249510

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0B

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6
2.5°	4302.9	4307.6	4305.3	4305.3	4302.9	4305.3	4305.3	4309.9	4309.9	4305.3	4302.9
5°	4293.7	4298.3	4298.3	4293.7	4293.7	4305.3	4298.3	4302.9	4302.9	4300.6	4300.6
7.5°	4272.9	4272.9	4282.2	4275.3	4275.3	4282.2	4279.8	4284.5	4289.1	4291.4	4291.4
10°	4226.7	4231.4	4233.7	4233.7	4236.0	4242.9	4247.5	4256.8	4261.4	4266.0	4268.3
12.5°	4169.1	4176.0	4178.3	4176.0	4182.9	4192.1	4203.7	4215.2	4222.2	4231.4	4238.3
15°	4099.8	4099.8	4104.4	4111.3	4116.0	4129.8	4141.3	4155.2	4173.7	4185.2	4196.8
17.5°	4023.6	4028.3	4035.2	4035.2	4044.4	4067.5	4074.4	4095.2	4116.0	4127.5	4150.6
20°	3940.5	3945.1	3952.1	3956.7	3968.2	3986.7	4000.5	4019.0	4042.1	4062.9	4085.9
22.5°	3875.9	3866.7	3871.2	3875.9	3887.4	3903.6	3919.8	3942.8	3965.9	3986.7	4009.8
25°	3751.2	3753.5	3760.5	3765.0	3778.9	3792.8	3811.3	3838.9	3859.7	3882.8	3908.2
27.5°	3582.7	3585.0	3596.6	3596.6	3608.1	3631.2	3642.7	3665.8	3693.5	3716.6	3746.6
30°	3391.1	3395.7	3395.7	3405.0	3411.9	3423.4	3435.0	3458.1	3471.9	3492.7	3534.3
32.5°	3215.7	3220.3	3217.9	3215.7	3208.7	3206.4	3204.1	3208.7	3213.4	3220.3	3236.4
35°	3111.8	3100.2	3091.0	3074.9	3056.4	3033.3	3012.5	2984.8	2959.4	2938.6	2915.6
37.5°	3012.5	3010.2	2996.4	2973.3	2936.3	2894.8	2846.3	2786.3	2726.3	2661.6	2599.3
40°	2874.0	2867.1	2855.5	2823.2	2781.7	2730.9	2666.3	2592.4	2495.4	2396.2	2294.6
42.5°	2638.5	2640.8	2627.0	2601.6	2562.4	2513.9	2446.9	2366.2	2262.3	2144.5	2013.0
45°	2363.9	2363.9	2359.2	2338.4	2310.8	2271.5	2220.7	2153.8	2052.2	1932.1	1791.3
47.5°	2077.6	2079.9	2073.0	2068.4	2056.8	2031.4	1994.5	1943.7	1872.2	1756.7	1615.9
50°	1786.8	1786.8	1798.3	1796.0	1796.0	1786.8	1770.6	1740.6	1678.2	1585.9	1454.3
52.5°	1495.9	1500.5	1507.4	1516.6	1528.2	1546.6	1528.2	1514.3	1475.1	1403.5	1290.4
55°	1195.8	1200.4	1211.9	1228.1	1242.0	1260.4	1265.0	1265.0	1244.2	1195.8	1110.4
57.5°	939.6	932.6	941.9	955.7	974.2	992.6	1006.5	1022.6	1020.3	988.0	918.8
60°	706.4	708.7	715.6	729.5	743.3	759.5	778.0	791.8	798.7	782.6	738.7
62.5°	514.8	514.8	524.0	537.8	544.8	567.9	579.4	586.4	593.3	590.9	563.3
65°	360.1	364.7	369.3	376.3	383.2	397.0	404.0	417.8	422.4	424.8	404.0
67.5°	254.0	247.0	251.6	256.2	263.2	272.4	286.3	286.3	293.2	293.2	279.3
70°	161.6	161.6	163.9	170.8	175.4	177.8	182.4	187.0	193.9	191.6	191.6
72.5°	108.5	106.2	108.5	110.8	113.1	120.0	120.0	122.3	127.0	129.3	120.0
75°	55.4	57.7	62.3	60.0	66.9	62.3	64.6	71.6	69.2	64.6	64.6
77.5°	46.1	46.1	46.1	43.9	48.5	48.5	46.1	50.8	48.5	48.5	46.1
80°	32.3	34.6	32.3	30.0	32.3	30.0	30.0	30.0	30.0	30.0	27.7
82.5°	25.4	20.8	23.1	20.8	23.1	23.1	20.8	18.5	18.5	20.8	18.5
85°	18.5	13.8	16.2	16.2	13.8	13.8	13.8	13.8	13.8	11.5	11.5
87.5°	11.5	6.9	6.9	6.9	9.2	9.2	9.2	6.9	9.2	9.2	4.6
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: P249510

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6
2.5°	4307.6	4305.3	4309.9	4307.6	4307.6	4305.3	4307.6	4305.3	4309.9	4300.6	4302.9
5°	4307.6	4302.9	4305.3	4307.6	4309.9	4305.3	4305.3	4305.3	4309.9	4305.3	4307.6
7.5°	4298.3	4296.0	4302.9	4307.6	4305.3	4302.9	4307.6	4305.3	4309.9	4307.6	4312.2
10°	4279.8	4282.2	4286.8	4293.7	4296.0	4298.3	4302.9	4302.9	4309.9	4300.6	4305.3
12.5°	4252.2	4261.4	4272.9	4277.5	4286.8	4286.8	4291.4	4293.7	4298.3	4296.0	4302.9
15°	4217.5	4229.1	4242.9	4254.5	4266.0	4272.9	4279.8	4282.2	4289.1	4282.2	4284.5
17.5°	4176.0	4189.8	4210.6	4224.4	4242.9	4249.8	4259.1	4263.7	4270.6	4266.0	4268.3
20°	4118.2	4134.5	4157.5	4178.3	4189.8	4206.0	4217.5	4224.4	4229.1	4224.4	4226.7
22.5°	4037.5	4060.6	4090.6	4106.7	4129.8	4143.7	4146.0	4162.1	4173.7	4162.1	4166.8
25°	3942.8	3965.9	3989.0	4023.6	4044.4	4060.6	4076.7	4079.0	4090.6	4088.2	4085.9
27.5°	3785.8	3815.9	3855.1	3882.8	3910.5	3935.9	3954.4	3959.0	3970.5	3965.9	3968.2
30°	3571.1	3603.5	3640.4	3684.3	3723.5	3748.9	3772.0	3788.1	3799.7	3792.8	3790.5
32.5°	3266.5	3298.8	3338.0	3381.9	3428.1	3464.9	3492.7	3513.5	3527.3	3522.7	3511.2
35°	2917.9	2927.1	2952.5	2987.2	3026.4	3065.6	3091.0	3114.1	3130.2	3134.9	3134.9
37.5°	2560.1	2530.1	2511.6	2511.6	2534.7	2550.8	2573.9	2587.8	2613.2	2622.4	2629.3
40°	2213.8	2144.5	2079.9	2031.4	1999.1	1996.8	1996.8	2003.7	2026.8	2056.8	2084.5
42.5°	1904.5	1793.6	1694.4	1604.4	1539.8	1502.8	1486.7	1489.0	1507.4	1535.1	1581.3
45°	1657.5	1519.0	1394.3	1285.8	1198.1	1140.4	1112.7	1110.4	1124.2	1156.5	1207.3
47.5°	1465.9	1318.1	1177.3	1052.6	958.0	895.7	863.4	854.1	863.4	893.4	953.4
50°	1306.6	1154.2	1008.8	879.5	778.0	713.3	683.3	671.8	683.3	708.7	768.7
52.5°	1158.8	1001.9	865.7	741.0	632.5	577.1	544.8	537.8	544.8	574.8	623.3
55°	988.0	854.1	720.2	595.6	501.0	445.5	420.1	413.2	420.1	447.9	498.6
57.5°	819.5	704.1	586.4	473.2	392.4	343.9	320.9	311.6	327.8	346.2	406.3
60°	662.5	570.2	470.9	371.7	304.7	260.8	242.4	240.1	244.7	267.8	309.3
62.5°	519.4	443.2	364.7	283.9	228.5	210.1	187.0	184.7	189.3	203.1	235.5
65°	374.0	325.5	265.5	207.7	163.9	138.5	129.3	131.6	136.2	145.4	175.4
67.5°	260.8	226.2	184.7	145.4	113.1	101.6	92.4	90.0	92.4	108.5	124.7
70°	175.4	154.7	124.7	110.8	78.5	62.3	64.6	57.7	66.9	66.9	80.8
72.5°	115.4	101.6	83.1	64.6	55.4	43.9	43.9	41.6	46.1	48.5	60.0
75°	60.0	46.1	46.1	32.3	23.1	11.5	20.8	18.5	16.2	18.5	23.1
77.5°	41.6	34.6	32.3	25.4	23.1	18.5	18.5	18.5	18.5	20.8	23.1
80°	25.4	25.4	18.5	16.2	13.8	11.5	13.8	13.8	13.8	13.8	16.2
82.5°	16.2	13.8	13.8	11.5	11.5	9.2	9.2	9.2	9.2	9.2	13.8
85°	13.8	9.2	9.2	6.9	9.2	16.2	6.9	9.2	9.2	9.2	6.9
87.5°	4.6	6.9	6.9	6.9	4.6	2.3	4.6	6.9	6.9	11.5	9.2
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: P249510

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6	4300.6
2.5°	4307.6	4309.9	4309.9	4307.6	4307.6	4302.9	4312.2	4305.3	4307.6	4316.8	4309.9
5°	4312.2	4314.5	4314.5	4312.2	4312.2	4312.2	4314.5	4314.5	4312.2	4309.9	4314.5
7.5°	4321.4	4319.1	4319.1	4314.5	4314.5	4309.9	4314.5	4307.6	4312.2	4307.6	4314.5
10°	4309.9	4312.2	4309.9	4307.6	4307.6	4305.3	4305.3	4298.3	4300.6	4293.7	4298.3
12.5°	4302.9	4300.6	4300.6	4296.0	4291.4	4286.8	4284.5	4277.5	4277.5	4261.4	4268.3
15°	4284.5	4286.8	4279.8	4270.6	4266.0	4254.5	4249.8	4240.6	4231.4	4219.9	4222.2
17.5°	4268.3	4261.4	4252.2	4242.9	4224.4	4215.2	4206.0	4192.1	4187.5	4173.7	4169.1
20°	4219.9	4215.2	4203.7	4187.5	4176.0	4155.2	4146.0	4132.1	4120.6	4106.7	4099.8
22.5°	4157.5	4152.9	4139.0	4122.9	4104.4	4095.2	4085.9	4060.6	4049.0	4035.2	4032.8
25°	4079.0	4072.1	4058.3	4039.8	4030.5	4005.2	3995.9	3977.4	3972.9	3959.0	3956.7
27.5°	3959.0	3949.7	3933.6	3910.5	3894.3	3878.2	3869.0	3855.1	3850.5	3836.6	3834.4
30°	3778.9	3767.4	3735.1	3725.8	3698.1	3682.0	3682.0	3663.5	3665.8	3656.6	3656.6
32.5°	3495.0	3476.5	3451.1	3432.6	3414.2	3405.0	3405.0	3398.0	3402.6	3402.6	3407.3
35°	3118.7	3093.3	3079.4	3067.9	3067.9	3077.1	3104.9	3111.8	3125.6	3137.2	3146.4
37.5°	2636.2	2634.0	2650.1	2664.0	2698.6	2737.8	2786.3	2827.9	2867.1	2894.8	2922.5
40°	2114.5	2172.3	2218.4	2283.1	2336.1	2412.3	2500.0	2571.6	2638.5	2687.1	2737.8
42.5°	1650.5	1724.4	1821.4	1916.0	2010.7	2114.5	2230.0	2329.2	2416.9	2483.9	2537.0
45°	1285.8	1387.4	1505.1	1625.2	1747.5	1876.8	1996.8	2098.4	2190.7	2260.0	2313.1
47.5°	1036.5	1147.3	1281.2	1412.8	1551.3	1687.5	1821.4	1909.1	1985.2	2040.7	2089.2
50°	856.4	974.2	1115.0	1265.0	1403.5	1539.8	1655.1	1740.6	1802.9	1851.4	1881.4
52.5°	715.6	840.3	990.3	1140.4	1278.9	1403.5	1507.4	1572.1	1622.8	1657.5	1685.1
55°	590.9	711.0	851.8	992.6	1128.8	1246.5	1331.9	1380.5	1419.7	1440.5	1456.6
57.5°	482.5	593.3	722.5	851.8	969.5	1066.5	1133.5	1181.9	1200.4	1216.6	1214.2
60°	378.6	482.5	600.2	711.0	812.6	891.0	939.6	967.2	981.1	988.0	983.4
62.5°	297.8	392.4	482.5	579.4	653.3	720.2	766.4	766.4	773.3	775.6	782.6
65°	221.6	293.2	371.7	443.2	503.2	547.1	572.5	579.4	588.7	586.4	581.7
67.5°	163.9	217.0	274.7	327.8	369.3	397.0	415.5	431.7	429.4	424.8	422.4
70°	113.1	147.8	198.5	230.8	260.8	288.6	293.2	295.5	297.8	300.1	295.5
72.5°	78.5	103.9	131.6	159.3	177.8	189.3	200.9	203.1	203.1	203.1	200.9
75°	39.3	53.1	78.5	90.0	106.2	110.8	120.0	120.0	127.0	117.7	115.4
77.5°	34.6	41.6	55.4	64.6	71.6	78.5	80.8	87.7	85.4	80.8	83.1
80°	20.8	25.4	34.6	39.3	48.5	50.8	53.1	55.4	53.1	55.4	55.4
82.5°	16.2	18.5	23.1	23.1	30.0	30.0	32.3	32.3	34.6	34.6	34.6
85°	9.2	16.2	13.8	27.7	18.5	18.5	23.1	27.7	23.1	23.1	27.7
87.5°	9.2	9.2	6.9	9.2	9.2	9.2	11.5	13.8	13.8	16.2	13.8
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: P249510

CATALOG NUMBER: LSR8B120D010 EC8B1209730 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4300.6	4300.6	4300.6	4300.6
2.5°	4307.6	4312.2	4305.3	4302.9
5°	4314.5	4314.5	4309.9	4309.9
7.5°	4314.5	4314.5	4307.6	4302.9
10°	4296.0	4296.0	4289.1	4284.5
12.5°	4261.4	4261.4	4259.1	4252.2
15°	4217.5	4217.5	4208.3	4201.4
17.5°	4157.5	4162.1	4150.6	4150.6
20°	4092.9	4090.6	4081.4	4076.7
22.5°	4025.9	4021.3	4019.0	4005.2
25°	3954.4	3949.7	3942.8	3935.9
27.5°	3832.0	3829.7	3822.8	3813.6
30°	3645.0	3642.7	3633.5	3633.5
32.5°	3402.6	3400.3	3391.1	3393.4
35°	3151.0	3160.3	3155.6	3146.4
37.5°	2940.9	2947.9	2952.5	2947.9
40°	2765.5	2786.3	2788.6	2793.2
42.5°	2578.5	2606.2	2615.5	2620.1
45°	2354.6	2380.0	2400.8	2396.2
47.5°	2126.1	2144.5	2163.0	2149.2
50°	1906.8	1918.3	1925.3	1925.3
52.5°	1699.0	1699.0	1696.7	1699.0
55°	1461.2	1461.2	1452.0	1456.6
57.5°	1211.9	1216.6	1209.6	1198.1
60°	981.1	969.5	964.9	958.0
62.5°	764.1	764.1	748.0	768.7
65°	572.5	565.6	558.6	556.3
67.5°	415.5	413.2	406.3	404.0
70°	293.2	283.9	281.6	277.0
72.5°	196.2	196.2	191.6	191.6
75°	120.0	108.5	106.2	108.5
77.5°	83.1	80.8	80.8	78.5
80°	55.4	53.1	57.7	50.8
82.5°	34.6	36.9	34.6	36.9
85°	23.1	27.7	25.4	25.4
87.5°	13.8	13.8	13.8	13.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)