

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: P249393

Luminaire Tested: **LSR8B120D010 EC8B1209727 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249393
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 EC8B1209727 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8510.0 lumens
Efficiency: N/A
Efficacy: 71.9 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

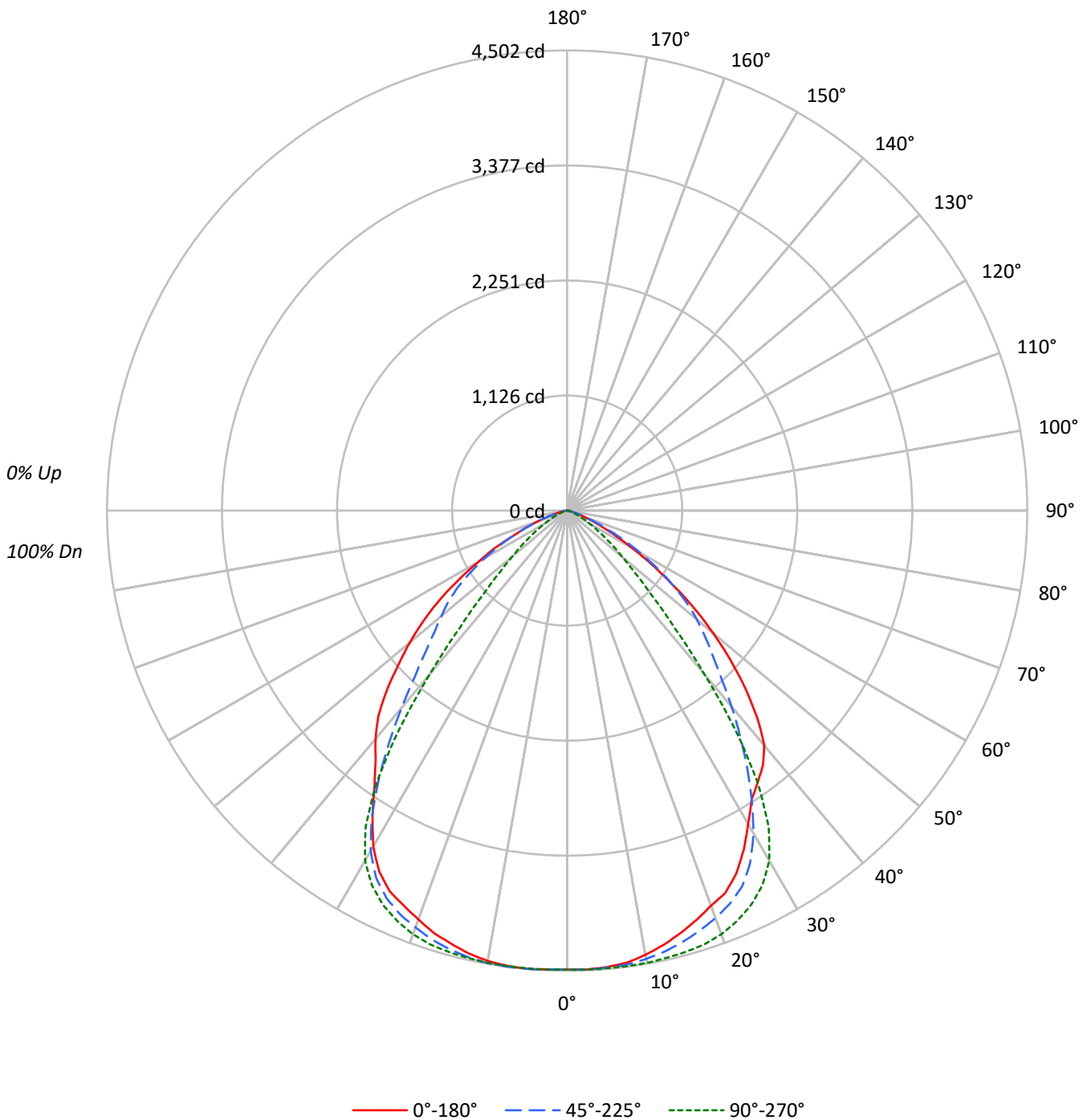
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249393

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0GPH

Luminous Intensity Polar Plot





TEST NUMBER: P249393

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0GPH

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°			



TEST NUMBER: P249393

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0GPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	428.5	5.0
10°-20°	1244.5	14.6
20°-30°	1888.8	22.2
30°-40°	1983.9	23.3
40°-50°	1487.4	17.5
50°-60°	954.3	11.2
60°-70°	408.2	4.8
70°-80°	96.4	1.1
80°-90°	17.9	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°	3561.8	41.9
0°-40°	5545.7	65.2
0°-60°	7987.4	93.9
0°-90°	8510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8510.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4490	4490	4490	4490	4490	
5°	4483	4490	4495	4502	4500	426
15°	4280	4370	4471	4442	4386	1207
25°	3916	4054	4259	4182	4109	1789
35°	3249	3068	3251	3213	3285	2039
45°	2468	2017	1159	1960	2502	1890
55°	1248	1248	431	1301	1521	1132
65°	376	444	137	571	581	401
75°	58	68	19	116	113	84
85°	19	12	10	19	26	20
90°	0	0	0	0	0	



TEST NUMBER: P249393

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0GPH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0
2.5°	4492.5	4497.3	4494.9	4494.9	4492.5	4494.9	4494.9	4499.7	4499.7	4494.9	4492.5
5°	4482.8	4487.6	4487.6	4482.8	4482.8	4494.9	4487.6	4492.5	4492.5	4490.0	4490.0
7.5°	4461.1	4461.1	4470.8	4463.6	4463.6	4470.8	4468.3	4473.2	4478.0	4480.4	4480.4
10°	4412.9	4417.7	4420.2	4420.2	4422.6	4429.8	4434.6	4444.3	4449.1	4453.9	4456.3
12.5°	4352.7	4359.9	4362.3	4359.9	4367.1	4376.8	4388.8	4400.9	4408.1	4417.7	4425.0
15°	4280.3	4280.3	4285.2	4292.4	4297.3	4311.7	4323.7	4338.2	4357.5	4369.6	4381.6
17.5°	4200.8	4205.7	4212.9	4212.9	4222.5	4246.6	4253.9	4275.6	4297.3	4309.3	4333.4
20°	4114.1	4118.9	4126.1	4131.0	4143.0	4162.3	4176.7	4196.0	4220.1	4241.8	4265.9
22.5°	4046.6	4037.0	4041.7	4046.6	4058.7	4075.5	4092.4	4116.5	4140.6	4162.3	4186.4
25°	3916.4	3918.8	3926.1	3930.9	3945.4	3959.8	3979.1	4008.0	4029.7	4053.8	4080.3
27.5°	3740.5	3742.9	3755.0	3755.0	3767.0	3791.1	3803.1	3827.3	3856.2	3880.3	3911.6
30°	3540.5	3545.3	3545.3	3554.9	3562.1	3574.2	3586.2	3610.4	3624.8	3646.5	3689.9
32.5°	3357.3	3362.1	3359.7	3357.3	3350.1	3347.6	3345.2	3350.1	3354.9	3362.1	3379.0
35°	3248.9	3236.8	3227.2	3210.3	3191.0	3166.9	3145.2	3116.3	3089.8	3068.1	3044.0
37.5°	3145.2	3142.8	3128.3	3104.2	3065.6	3022.3	2971.7	2909.0	2846.3	2778.9	2713.8
40°	3000.6	2993.3	2981.3	2947.6	2904.2	2851.2	2783.7	2706.6	2605.3	2501.7	2395.7
42.5°	2754.7	2757.2	2742.7	2716.2	2675.2	2624.6	2554.7	2470.4	2361.9	2239.0	2101.6
45°	2468.0	2468.0	2463.1	2441.4	2412.5	2371.5	2318.5	2248.6	2142.6	2017.2	1870.2
47.5°	2169.1	2171.5	2164.3	2159.5	2147.4	2120.9	2082.3	2029.3	1954.6	1834.1	1687.1
50°	1865.4	1865.4	1877.5	1875.1	1875.1	1865.4	1848.6	1817.2	1752.2	1655.7	1518.4
52.5°	1561.7	1566.6	1573.8	1583.4	1595.5	1614.8	1595.5	1581.0	1540.0	1465.3	1347.3
55°	1248.4	1253.3	1265.3	1282.2	1296.7	1316.0	1320.7	1320.7	1299.0	1248.4	1159.3
57.5°	980.9	973.7	983.4	997.8	1017.1	1036.4	1050.8	1067.7	1065.3	1031.5	959.2
60°	737.5	739.9	747.1	761.6	776.1	792.9	812.2	826.7	833.9	817.1	771.2
62.5°	537.5	537.5	547.1	561.5	568.8	592.9	604.9	612.2	619.4	617.0	588.1
65°	376.0	380.8	385.6	392.9	400.1	414.5	421.8	436.2	441.0	443.5	421.8
67.5°	265.1	257.9	262.7	267.5	274.7	284.4	298.9	298.9	306.1	306.1	291.6
70°	168.7	168.7	171.1	178.3	183.2	185.6	190.4	195.2	202.4	200.0	200.0
72.5°	113.3	110.9	113.3	115.7	118.1	125.3	125.3	127.7	132.6	135.0	125.3
75°	57.9	60.3	65.0	62.7	69.9	65.0	67.5	74.7	72.3	67.5	67.5
77.5°	48.2	48.2	48.2	45.8	50.6	50.6	48.2	53.0	50.6	50.6	48.2
80°	33.7	36.1	33.7	31.3	33.7	31.3	31.3	31.3	31.3	31.3	28.9
82.5°	26.5	21.7	24.1	21.7	24.1	24.1	21.7	19.3	19.3	21.7	19.3
85°	19.3	14.4	16.9	16.9	14.4	14.4	14.4	14.4	14.4	12.0	12.0
87.5°	12.0	7.3	7.3	7.3	9.6	9.6	9.6	7.3	9.6	9.6	4.8
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: P249393

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0
2.5°	4497.3	4494.9	4499.7	4497.3	4497.3	4494.9	4497.3	4494.9	4499.7	4490.0	4492.5
5°	4497.3	4492.5	4494.9	4497.3	4499.7	4494.9	4494.9	4494.9	4499.7	4494.9	4497.3
7.5°	4487.6	4485.2	4492.5	4497.3	4494.9	4492.5	4497.3	4494.9	4499.7	4497.3	4502.1
10°	4468.3	4470.8	4475.6	4482.8	4485.2	4487.6	4492.5	4492.5	4499.7	4490.0	4494.9
12.5°	4439.4	4449.1	4461.1	4465.9	4475.6	4475.6	4480.4	4482.8	4487.6	4485.2	4492.5
15°	4403.3	4415.3	4429.8	4441.9	4453.9	4461.1	4468.3	4470.8	4478.0	4470.8	4473.2
17.5°	4359.9	4374.3	4396.0	4410.5	4429.8	4437.0	4446.6	4451.5	4458.7	4453.9	4456.3
20°	4299.6	4316.5	4340.6	4362.3	4374.3	4391.2	4403.3	4410.5	4415.3	4410.5	4412.9
22.5°	4215.3	4239.4	4270.7	4287.6	4311.7	4326.2	4328.6	4345.4	4357.5	4345.4	4350.3
25°	4116.5	4140.6	4164.7	4200.8	4222.5	4239.4	4256.3	4258.7	4270.7	4268.3	4265.9
27.5°	3952.6	3983.9	4024.9	4053.8	4082.7	4109.3	4128.5	4133.3	4145.4	4140.6	4143.0
30°	3728.4	3762.2	3800.8	3846.5	3887.5	3914.0	3938.1	3955.0	3967.0	3959.8	3957.4
32.5°	3410.3	3444.1	3485.0	3530.8	3579.0	3617.6	3646.5	3668.2	3682.7	3677.8	3665.8
35°	3046.4	3056.0	3082.6	3118.7	3159.6	3200.6	3227.2	3251.2	3268.1	3272.9	3272.9
37.5°	2672.8	2641.5	2622.2	2622.2	2646.3	2663.2	2687.3	2701.7	2728.3	2737.9	2745.1
40°	2311.3	2239.0	2171.5	2120.9	2087.2	2084.8	2084.8	2092.0	2116.1	2147.4	2176.3
42.5°	1988.3	1872.6	1769.0	1675.0	1607.6	1569.0	1552.1	1554.6	1573.8	1602.7	1650.9
45°	1730.5	1585.9	1455.7	1342.4	1250.8	1190.6	1161.7	1159.3	1173.7	1207.4	1260.5
47.5°	1530.4	1376.2	1229.1	1099.0	1000.2	935.1	901.4	891.8	901.4	932.7	995.4
50°	1364.1	1205.1	1053.2	918.2	812.2	744.8	713.4	701.3	713.4	739.9	802.5
52.5°	1209.9	1046.0	903.8	773.6	660.4	602.5	568.8	561.5	568.8	600.1	650.8
55°	1031.5	891.8	751.9	621.8	523.0	465.2	438.6	431.4	438.6	467.6	520.6
57.5°	855.6	735.1	612.2	494.1	409.7	359.1	335.0	325.3	342.2	361.5	424.2
60°	691.7	595.3	491.6	388.0	318.2	272.3	253.0	250.6	255.5	279.6	322.9
62.5°	542.3	462.8	380.8	296.5	238.6	219.3	195.2	192.8	197.6	212.1	245.9
65°	390.5	339.9	277.2	216.9	171.1	144.6	135.0	137.4	142.2	151.9	183.2
67.5°	272.3	236.2	192.8	151.9	118.1	106.0	96.4	94.0	96.4	113.3	130.2
70°	183.2	161.5	130.2	115.7	82.0	65.0	67.5	60.3	69.9	69.9	84.3
72.5°	120.5	106.0	86.7	67.5	57.9	45.8	45.8	43.4	48.2	50.6	62.7
75°	62.7	48.2	48.2	33.7	24.1	12.0	21.7	19.3	16.9	19.3	24.1
77.5°	43.4	36.1	33.7	26.5	24.1	19.3	19.3	19.3	19.3	21.7	24.1
80°	26.5	26.5	19.3	16.9	14.4	12.0	14.4	14.4	14.4	14.4	16.9
82.5°	16.9	14.4	14.4	12.0	12.0	9.6	9.6	9.6	9.6	9.6	14.4
85°	14.4	9.6	9.6	7.3	9.6	16.9	7.3	9.6	9.6	9.6	7.3
87.5°	4.8	7.3	7.3	7.3	4.8	2.4	4.8	7.3	7.3	12.0	9.6
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: P249393

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0	4490.0
2.5°	4497.3	4499.7	4499.7	4497.3	4497.3	4492.5	4502.1	4494.9	4497.3	4506.9	4499.7
5°	4502.1	4504.5	4504.5	4502.1	4502.1	4502.1	4504.5	4504.5	4502.1	4499.7	4504.5
7.5°	4511.7	4509.3	4509.3	4504.5	4504.5	4499.7	4504.5	4497.3	4502.1	4497.3	4504.5
10°	4499.7	4502.1	4499.7	4497.3	4497.3	4494.9	4494.9	4487.6	4490.0	4482.8	4487.6
12.5°	4492.5	4490.0	4490.0	4485.2	4480.4	4475.6	4473.2	4465.9	4465.9	4449.1	4456.3
15°	4473.2	4475.6	4468.3	4458.7	4453.9	4441.9	4437.0	4427.4	4417.7	4405.7	4408.1
17.5°	4456.3	4449.1	4439.4	4429.8	4410.5	4400.9	4391.2	4376.8	4371.9	4357.5	4352.7
20°	4405.7	4400.9	4388.8	4371.9	4359.9	4338.2	4328.6	4314.1	4302.0	4287.6	4280.3
22.5°	4340.6	4335.8	4321.3	4304.5	4285.2	4275.6	4265.9	4239.4	4227.3	4212.9	4210.5
25°	4258.7	4251.4	4237.0	4217.7	4208.0	4181.6	4171.9	4152.6	4147.8	4133.3	4131.0
27.5°	4133.3	4123.7	4106.8	4082.7	4065.9	4049.0	4039.4	4024.9	4020.1	4005.6	4003.2
30°	3945.4	3933.3	3899.6	3889.9	3861.0	3844.1	3844.1	3824.8	3827.3	3817.6	3817.6
32.5°	3648.9	3629.6	3603.1	3583.8	3564.5	3554.9	3554.9	3547.7	3552.5	3552.5	3557.3
35°	3256.1	3229.6	3215.1	3203.0	3203.0	3212.7	3241.6	3248.9	3263.3	3275.3	3285.0
37.5°	2752.3	2750.0	2766.8	2781.3	2817.4	2858.4	2909.0	2952.4	2993.3	3022.3	3051.2
40°	2207.7	2267.9	2316.1	2383.6	2439.0	2518.6	2610.1	2684.9	2754.7	2805.4	2858.4
42.5°	1723.2	1800.3	1901.6	2000.4	2099.2	2207.7	2328.2	2431.8	2523.4	2593.3	2648.7
45°	1342.4	1448.5	1571.4	1696.7	1824.5	1959.5	2084.8	2190.8	2287.2	2359.5	2414.9
47.5°	1082.1	1197.8	1337.6	1475.0	1619.6	1761.8	1901.6	1993.2	2072.7	2130.5	2181.2
50°	894.1	1017.1	1164.1	1320.7	1465.3	1607.6	1728.0	1817.2	1882.3	1932.9	1964.2
52.5°	747.1	877.3	1033.9	1190.6	1335.2	1465.3	1573.8	1641.3	1694.3	1730.5	1759.4
55°	617.0	742.3	889.4	1036.4	1178.5	1301.4	1390.6	1441.3	1482.2	1503.9	1520.8
57.5°	503.7	619.4	754.4	889.4	1012.2	1113.5	1183.4	1234.0	1253.3	1270.1	1267.7
60°	395.3	503.7	626.6	742.3	848.4	930.3	980.9	1009.8	1024.3	1031.5	1026.7
62.5°	310.9	409.7	503.7	604.9	682.1	751.9	800.2	800.2	807.4	809.8	817.1
65°	231.3	306.1	388.0	462.8	525.4	571.2	597.7	604.9	614.6	612.2	607.3
67.5°	171.1	226.6	286.8	342.2	385.6	414.5	433.8	450.7	448.3	443.5	441.0
70°	118.1	154.3	207.3	241.0	272.3	301.3	306.1	308.5	310.9	313.3	308.5
72.5°	82.0	108.4	137.4	166.3	185.6	197.6	209.7	212.1	212.1	212.1	209.7
75°	41.0	55.4	82.0	94.0	110.9	115.7	125.3	125.3	132.6	122.9	120.5
77.5°	36.1	43.4	57.9	67.5	74.7	82.0	84.3	91.6	89.2	84.3	86.7
80°	21.7	26.5	36.1	41.0	50.6	53.0	55.4	57.9	55.4	57.9	57.9
82.5°	16.9	19.3	24.1	24.1	31.3	31.3	33.7	33.7	36.1	36.1	36.1
85°	9.6	16.9	14.4	28.9	19.3	19.3	24.1	28.9	24.1	24.1	28.9
87.5°	9.6	9.6	7.3	9.6	9.6	9.6	12.0	14.4	14.4	16.9	14.4
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: P249393

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4490.0	4490.0	4490.0	4490.0
2.5°	4497.3	4502.1	4494.9	4492.5
5°	4504.5	4504.5	4499.7	4499.7
7.5°	4504.5	4504.5	4497.3	4492.5
10°	4485.2	4485.2	4478.0	4473.2
12.5°	4449.1	4449.1	4446.6	4439.4
15°	4403.3	4403.3	4393.6	4386.4
17.5°	4340.6	4345.4	4333.4	4333.4
20°	4273.1	4270.7	4261.1	4256.3
22.5°	4203.3	4198.4	4196.0	4181.6
25°	4128.5	4123.7	4116.5	4109.3
27.5°	4000.8	3998.4	3991.1	3981.5
30°	3805.6	3803.1	3793.5	3793.5
32.5°	3552.5	3550.1	3540.5	3542.9
35°	3289.8	3299.5	3294.6	3285.0
37.5°	3070.5	3077.7	3082.6	3077.7
40°	2887.3	2909.0	2911.4	2916.3
42.5°	2692.1	2721.0	2730.7	2735.5
45°	2458.3	2484.8	2506.5	2501.7
47.5°	2219.7	2239.0	2258.3	2243.8
50°	1990.8	2002.8	2010.0	2010.0
52.5°	1773.9	1773.9	1771.4	1773.9
55°	1525.6	1525.6	1516.0	1520.8
57.5°	1265.3	1270.1	1262.9	1250.8
60°	1024.3	1012.2	1007.4	1000.2
62.5°	797.8	797.8	780.9	802.5
65°	597.7	590.5	583.2	580.8
67.5°	433.8	431.4	424.2	421.8
70°	306.1	296.5	294.0	289.2
72.5°	204.9	204.9	200.0	200.0
75°	125.3	113.3	110.9	113.3
77.5°	86.7	84.3	84.3	82.0
80°	57.9	55.4	60.3	53.0
82.5°	36.1	38.6	36.1	38.6
85°	24.1	28.9	26.5	26.5
87.5°	14.4	14.4	14.4	14.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)