

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: P248527

Luminaire Tested: **LSR8B90D010 EC8B90927 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248527
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B90927 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7546.5 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

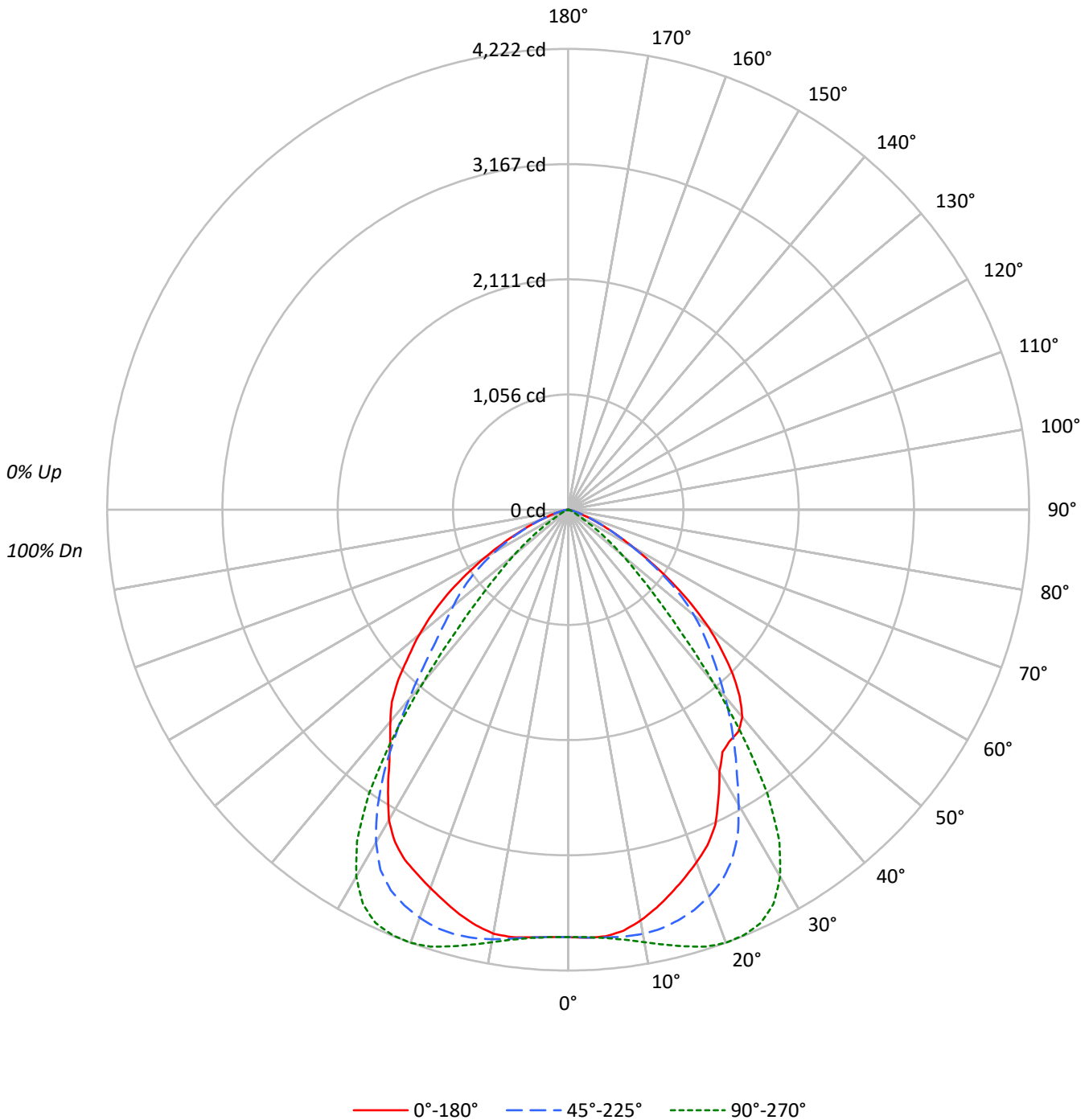
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	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°	376.5	5.0
10°-20°	1115.3	14.8
20°-30°	1701.5	22.5
30°-40°	1775.5	23.5
40°-50°	1333.7	17.7
50°-60°	820.6	10.9
60°-70°	333.9	4.4
70°-80°	78.7	1.0
80°-90°	10.9	0.1
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°	3193.3	42.3
0°-40°	4968.8	65.8
0°-60°	7123.0	94.4
0°-90°	7546.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7546.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3915	3915	3915	3915	3915	
5°	3923	3934	3938	3934	3934	371
15°	3638	3894	4141	4027	3838	1025
25°	3188	3545	4177	3846	3541	1449
35°	2583	2656	3181	2940	2857	1631
45°	2132	1845	1151	1718	2198	1627
55°	1151	1093	301	1093	1349	1035
65°	359	364	46	488	517	375
75°	62	62	8	110	114	75
85°	6	6	2	14	19	9
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°	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9
2.5°	3925.2	3919.0	3925.2	3925.2	3927.4	3923.2	3925.2	3927.4	3923.2	3923.2	3923.2
5°	3923.2	3919.0	3923.2	3921.1	3925.2	3925.2	3929.4	3929.4	3933.6	3933.6	3939.9
7.5°	3889.9	3881.7	3889.9	3896.2	3900.3	3908.7	3919.0	3927.4	3935.7	3944.0	3954.4
10°	3821.4	3821.4	3827.6	3840.1	3852.6	3867.1	3885.8	3906.6	3927.4	3946.0	3964.7
12.5°	3736.2	3729.9	3742.4	3759.1	3777.8	3800.6	3829.7	3860.9	3894.1	3931.5	3960.6
15°	3638.5	3632.3	3646.8	3663.4	3686.3	3719.6	3754.9	3796.4	3844.2	3894.1	3941.9
17.5°	3538.8	3536.7	3551.2	3574.1	3592.8	3628.1	3673.8	3723.6	3777.8	3844.2	3906.6
20°	3437.0	3434.8	3449.5	3468.2	3493.0	3526.3	3572.0	3630.2	3694.6	3769.4	3842.1
22.5°	3331.0	3333.0	3345.5	3366.3	3387.0	3422.4	3470.2	3528.3	3599.0	3680.1	3761.1
25°	3187.6	3177.2	3193.9	3214.6	3249.9	3279.0	3324.7	3387.0	3459.8	3545.0	3640.6
27.5°	2979.8	2977.6	2992.3	3011.0	3042.1	3077.4	3127.3	3191.7	3268.6	3362.2	3455.7
30°	2772.0	2776.2	2782.4	2801.1	2821.8	2857.2	2907.1	2961.1	3033.8	3123.1	3222.9
32.5°	2630.7	2630.7	2639.0	2651.5	2666.0	2684.7	2720.0	2759.5	2815.6	2878.0	2950.6
35°	2582.9	2574.6	2582.9	2585.0	2587.0	2591.2	2597.4	2609.9	2628.6	2655.7	2682.7
37.5°	2562.2	2555.9	2555.9	2547.6	2537.2	2524.7	2508.1	2489.4	2468.6	2441.6	2420.9
40°	2481.1	2476.9	2472.8	2464.4	2441.6	2416.7	2389.6	2346.0	2298.3	2231.7	2165.3
42.5°	2325.3	2321.1	2319.0	2302.4	2281.6	2252.5	2221.3	2175.6	2115.3	2030.2	1934.6
45°	2132.0	2123.7	2117.5	2103.0	2088.3	2063.4	2034.3	1992.7	1932.5	1845.2	1730.9
47.5°	1907.6	1903.4	1901.4	1895.1	1880.6	1866.0	1847.4	1814.1	1760.1	1676.9	1558.5
50°	1681.1	1672.8	1676.9	1674.9	1668.6	1658.2	1645.8	1622.9	1581.3	1506.5	1398.5
52.5°	1421.3	1421.3	1419.3	1425.5	1427.5	1425.5	1427.5	1402.6	1367.3	1311.2	1219.7
55°	1151.2	1151.2	1157.4	1165.7	1174.0	1176.1	1174.0	1163.7	1138.7	1093.0	1011.9
57.5°	897.6	893.6	906.0	918.4	926.8	935.1	928.8	920.6	906.0	868.6	806.3
60°	683.7	683.7	692.0	700.3	708.5	716.8	714.8	712.7	700.3	675.3	625.5
62.5°	502.9	504.9	504.9	511.2	519.5	527.8	534.0	527.8	521.6	504.9	471.7
65°	359.4	357.4	359.4	365.7	371.9	380.2	384.4	382.4	376.1	363.6	338.7
67.5°	241.1	239.0	247.3	249.3	253.5	261.9	259.8	261.9	259.8	249.3	228.6
70°	158.0	153.8	158.0	155.8	162.1	164.1	168.3	170.3	168.3	162.1	155.8
72.5°	97.6	95.6	97.6	99.8	101.8	103.8	108.0	108.0	106.0	101.8	93.5
75°	62.3	56.1	58.2	54.0	58.2	58.2	62.3	64.5	62.3	62.3	58.2
77.5°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	39.5	41.5	37.5	35.3
80°	18.7	18.7	20.8	20.8	20.8	22.8	20.8	20.8	20.8	22.8	16.7
82.5°	14.5	12.5	12.5	12.5	14.5	12.5	12.5	12.5	12.5	12.5	12.5
85°	6.3	8.3	6.3	4.2	6.3	6.3	8.3	6.3	6.3	6.3	8.3
87.5°	2.1	2.1	0.0	0.0	0.0	2.1	0.0	2.1	2.1	4.2	0.0
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: P248527

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9
2.5°	3925.2	3921.1	3921.1	3919.0	3923.2	3919.0	3921.1	3919.0	3919.0	3923.2	3919.0
5°	3939.9	3941.9	3937.7	3935.7	3941.9	3941.9	3941.9	3937.7	3937.7	3939.9	3937.7
7.5°	3960.6	3964.7	3966.9	3968.9	3973.0	3975.2	3975.2	3973.0	3971.0	3977.2	3968.9
10°	3983.4	3989.7	4002.2	4008.4	4018.8	4018.8	4023.0	4023.0	4018.8	4023.0	4020.9
12.5°	3975.2	4012.5	4033.4	4047.9	4062.4	4074.9	4079.0	4081.2	4079.0	4087.4	4079.0
15°	3989.7	4020.9	4054.2	4079.0	4106.0	4120.5	4124.7	4141.3	4145.5	4147.7	4135.2
17.5°	3966.9	4023.0	4058.2	4095.7	4135.2	4162.2	4187.0	4197.5	4199.6	4203.7	4187.0
20°	3914.9	3977.2	4031.2	4085.3	4131.0	4172.5	4193.3	4222.5	4214.1	4230.8	4207.8
22.5°	3844.2	3914.9	3983.4	4054.2	4101.9	4151.8	4195.5	4216.2	4226.6	4226.6	4201.7
25°	3732.1	3815.1	3889.9	3962.7	4035.4	4095.7	4145.5	4176.7	4183.0	4180.8	4151.8
27.5°	3557.5	3646.8	3734.1	3817.2	3906.6	3977.2	4035.4	4072.7	4083.2	4083.2	4052.0
30°	3316.4	3412.0	3497.2	3597.0	3688.4	3767.4	3848.4	3881.7	3900.3	3900.3	3865.0
32.5°	3029.6	3110.7	3189.7	3287.4	3387.0	3476.5	3553.3	3599.0	3621.9	3619.8	3588.6
35°	2718.0	2757.5	2817.8	2890.5	2979.8	3062.9	3137.7	3181.4	3220.9	3218.7	3189.7
37.5°	2406.3	2395.9	2402.1	2429.1	2485.2	2543.4	2601.6	2643.2	2676.4	2691.0	2684.7
40°	2100.8	2046.8	1994.8	1976.2	1980.3	2001.0	2032.2	2063.4	2100.8	2119.5	2127.8
42.5°	1826.6	1735.1	1643.6	1575.1	1535.6	1523.1	1537.6	1548.1	1571.0	1598.0	1625.0
45°	1606.3	1483.6	1363.2	1257.2	1190.7	1151.2	1142.9	1151.2	1163.7	1190.7	1226.0
47.5°	1425.5	1282.0	1147.0	1028.6	930.9	879.0	864.4	860.3	872.8	897.6	945.4
50°	1265.5	1122.1	972.4	835.3	733.5	675.3	654.5	646.2	660.8	679.5	723.2
52.5°	1090.9	949.6	795.8	662.8	556.9	496.7	473.7	461.4	469.6	494.6	538.2
55°	901.8	770.8	631.7	494.6	392.7	336.6	309.6	301.3	309.6	336.6	380.2
57.5°	712.7	602.7	486.2	357.4	266.0	209.9	182.8	174.6	197.4	207.8	253.5
60°	556.9	467.6	367.8	261.9	182.8	139.2	112.2	106.0	116.4	135.0	172.5
62.5°	417.7	361.6	282.6	187.0	135.0	89.3	74.8	68.6	74.8	89.3	118.5
65°	303.4	259.8	197.4	137.1	91.5	66.5	49.8	45.7	52.0	62.3	87.3
67.5°	207.8	174.6	137.1	95.6	62.3	41.5	35.3	35.3	37.5	45.7	64.5
70°	135.0	114.3	87.3	62.3	41.5	31.2	27.0	22.8	27.0	33.3	43.6
72.5°	85.2	72.7	56.1	43.6	31.2	22.8	18.7	16.7	20.8	24.9	33.3
75°	52.0	39.5	29.1	22.8	16.7	16.7	16.7	8.3	10.4	16.7	20.8
77.5°	31.2	27.0	22.8	18.7	14.5	8.3	8.3	8.3	10.4	12.5	18.7
80°	16.7	14.5	10.4	10.4	8.3	6.3	8.3	6.3	4.2	10.4	12.5
82.5°	10.4	8.3	8.3	8.3	10.4	4.2	6.3	4.2	6.3	8.3	6.3
85°	6.3	6.3	6.3	4.2	10.4	4.2	4.2	2.1	2.1	4.2	4.2
87.5°	0.0	2.1	2.1	0.0	2.1	0.0	2.1	2.1	2.1	2.1	2.1
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: P248527

CATALOG NUMBER: LSR8B90D010 EC8B90927 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9	3914.9
2.5°	3921.1	3919.0	3921.1	3919.0	3919.0	3919.0	3921.1	3921.1	3919.0	3919.0	3923.2
5°	3937.7	3937.7	3937.7	3935.7	3933.6	3933.6	3937.7	3937.7	3931.5	3937.7	3937.7
7.5°	3973.0	3966.9	3973.0	3964.7	3960.6	3962.7	3964.7	3960.6	3956.4	3958.5	3958.5
10°	4018.8	4012.5	4012.5	4006.4	4000.0	3995.9	3991.8	3981.4	3971.0	3968.9	3960.6
12.5°	4072.7	4062.4	4056.2	4043.7	4033.4	4018.8	4006.4	3989.7	3968.9	3954.4	3939.9
15°	4126.8	4110.2	4095.7	4074.9	4052.0	4027.0	4000.0	3973.0	3939.9	3910.7	3885.8
17.5°	4170.5	4147.7	4120.5	4087.4	4054.2	4016.7	3977.2	3937.7	3889.9	3852.6	3823.4
20°	4185.0	4151.8	4116.5	4072.7	4029.2	3977.2	3927.4	3875.4	3821.4	3781.9	3748.6
22.5°	4166.3	4126.8	4083.2	4037.5	3979.2	3923.2	3865.0	3804.8	3756.9	3702.9	3671.8
25°	4114.3	4066.5	4018.8	3964.7	3908.7	3846.3	3783.9	3721.6	3663.4	3634.3	3594.9
27.5°	4008.4	3956.4	3904.5	3848.4	3783.9	3721.6	3657.3	3597.0	3547.1	3507.6	3484.8
30°	3821.4	3761.1	3700.8	3640.6	3584.5	3520.0	3459.8	3409.9	3360.0	3328.9	3306.0
32.5°	3534.6	3480.6	3420.3	3362.2	3310.2	3256.2	3206.2	3162.7	3127.3	3106.6	3089.9
35°	3148.1	3094.1	3048.4	3006.8	2963.1	2940.3	2909.1	2884.2	2869.6	2861.3	2859.3
37.5°	2661.9	2630.7	2616.2	2607.9	2599.5	2593.4	2597.4	2607.9	2616.2	2630.7	2647.4
40°	2142.3	2169.3	2177.7	2206.8	2233.8	2269.1	2308.6	2354.4	2391.8	2439.6	2472.8
42.5°	1668.6	1718.4	1776.6	1839.0	1905.5	1969.9	2048.8	2121.5	2188.1	2248.3	2300.3
45°	1282.0	1359.0	1446.3	1535.6	1625.0	1718.4	1814.1	1903.4	1982.4	2046.8	2100.8
47.5°	999.4	1084.7	1196.9	1307.0	1415.1	1525.3	1631.1	1724.7	1791.2	1853.6	1901.4
50°	791.7	889.3	1011.9	1138.7	1257.2	1373.5	1485.7	1573.0	1639.6	1689.4	1724.7
52.5°	613.0	729.3	854.0	987.1	1113.8	1240.5	1344.4	1425.5	1479.5	1523.1	1550.1
55°	457.1	571.4	704.5	841.6	970.4	1093.0	1190.7	1261.4	1309.2	1334.0	1348.6
57.5°	330.4	434.4	567.2	704.5	820.8	937.1	1016.1	1080.6	1107.6	1122.1	1128.4
60°	241.1	336.6	455.1	573.5	683.7	777.2	845.8	889.3	910.1	918.4	916.3
62.5°	176.6	259.8	361.6	461.4	550.7	627.5	681.5	710.7	721.1	725.2	719.0
65°	135.0	199.5	286.8	363.6	432.2	488.4	527.8	546.5	552.7	550.7	546.5
67.5°	99.8	149.6	214.1	272.2	322.1	365.7	386.6	403.1	407.2	401.1	394.8
70°	70.6	110.1	155.8	195.3	232.8	257.6	280.5	282.6	282.6	280.5	276.4
72.5°	49.8	76.8	106.0	133.0	155.8	174.6	182.8	189.1	187.0	185.0	180.8
75°	33.3	47.8	76.8	83.1	103.8	110.1	118.5	118.5	120.5	114.3	114.3
77.5°	20.8	33.3	45.7	54.0	62.3	70.6	74.8	74.8	76.8	74.8	74.8
80°	12.5	20.8	24.9	37.5	37.5	43.6	45.7	47.8	43.6	49.8	43.6
82.5°	8.3	12.5	18.7	18.7	22.8	27.0	27.0	29.1	29.1	27.0	27.0
85°	6.3	8.3	10.4	12.5	12.5	14.5	12.5	12.5	14.5	16.7	14.5
87.5°	2.1	4.2	2.1	4.2	4.2	8.3	6.3	6.3	6.3	8.3	8.3
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: P248527

CATALOG NUMBER: LSR8B90D010 EC8B90927 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3914.9	3914.9	3914.9	3914.9
2.5°	3919.0	3921.1	3919.0	3919.0
5°	3937.7	3935.7	3937.7	3933.6
7.5°	3952.2	3952.2	3950.2	3950.2
10°	3952.2	3944.0	3944.0	3944.0
12.5°	3921.1	3910.7	3904.5	3900.3
15°	3867.1	3848.4	3840.1	3837.9
17.5°	3796.4	3779.8	3769.4	3763.2
20°	3715.4	3698.8	3686.3	3688.4
22.5°	3644.8	3626.1	3617.8	3613.5
25°	3574.1	3551.2	3545.0	3540.8
27.5°	3459.8	3447.3	3441.0	3434.8
30°	3285.2	3279.0	3268.6	3283.2
32.5°	3083.7	3073.3	3065.0	3071.2
35°	2861.3	2855.1	2861.3	2857.2
37.5°	2657.7	2663.9	2672.3	2676.4
40°	2497.7	2520.6	2528.9	2533.0
42.5°	2337.8	2364.8	2381.3	2391.8
45°	2140.3	2167.3	2186.0	2198.5
47.5°	1936.7	1959.5	1978.2	1976.2
50°	1751.7	1764.2	1772.4	1780.9
52.5°	1564.6	1564.6	1566.8	1566.8
55°	1352.8	1348.6	1346.5	1348.6
57.5°	1120.0	1115.9	1113.8	1107.6
60°	908.1	895.6	887.3	887.3
62.5°	710.7	696.2	689.8	687.8
65°	534.0	531.9	519.5	517.4
67.5°	386.6	378.2	369.9	371.9
70°	272.2	259.8	259.8	255.6
72.5°	176.6	170.3	168.3	168.3
75°	110.1	110.1	106.0	114.3
77.5°	72.7	72.7	70.6	72.7
80°	43.6	43.6	43.6	41.5
82.5°	27.0	29.1	27.0	27.0
85°	14.5	16.7	12.5	18.7
87.5°	8.3	10.4	8.3	10.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)