

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: P249501

Luminaire Tested: **LSR8B120D010 EC8B1209727 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249501  
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 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: 7704.0 lumens  
Efficiency: N/A  
Efficacy: 65.1 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

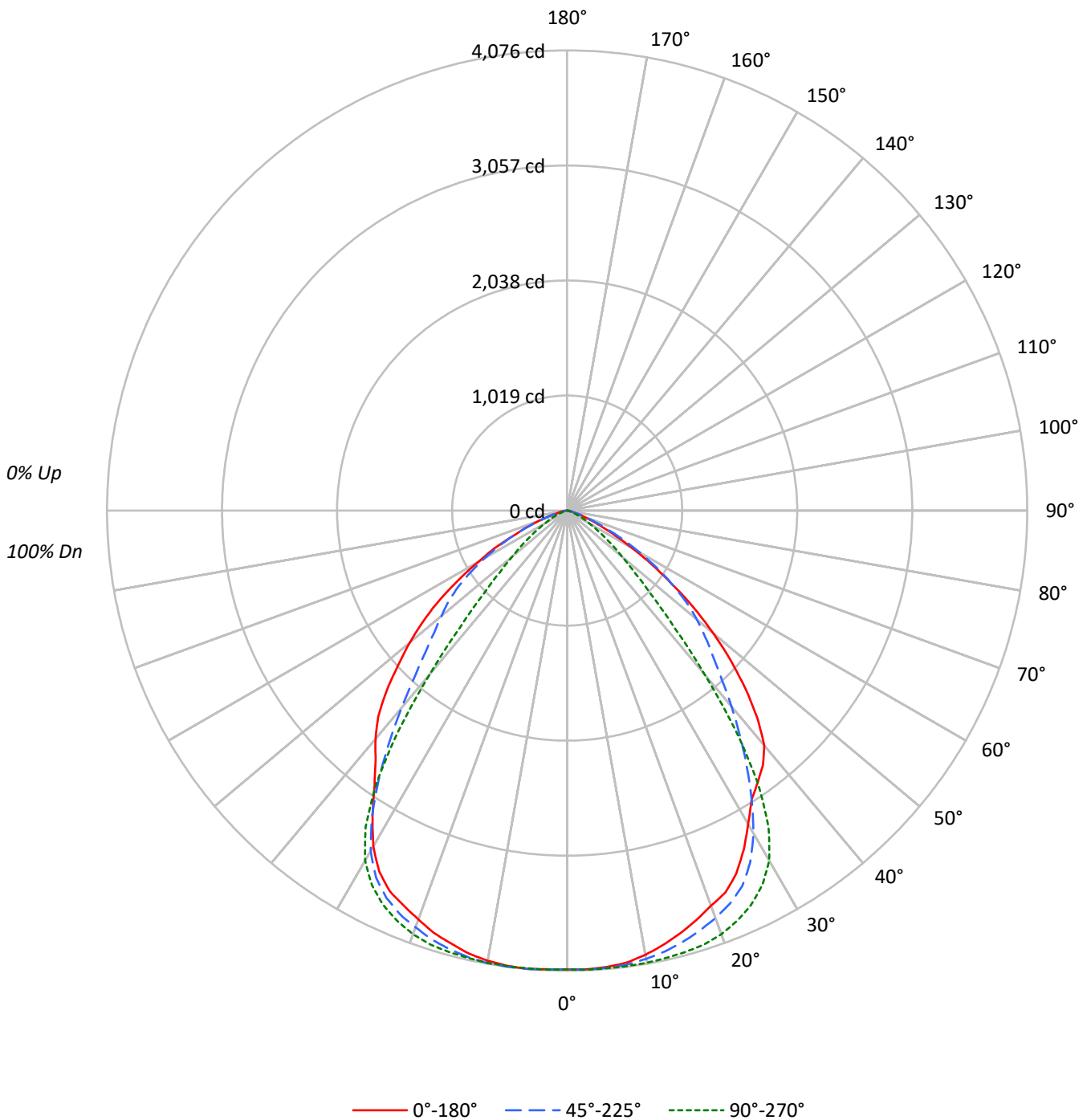
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	387.9	5.0
10°-20°	1126.6	14.6
20°-30°	1710.0	22.2
30°-40°	1796.0	23.3
40°-50°	1346.5	17.5
50°-60°	863.9	11.2
60°-70°	369.6	4.8
70°-80°	87.3	1.1
80°-90°	16.2	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°	3224.5	41.9
0°-40°	5020.4	65.2
0°-60°	7230.9	93.9
0°-90°	7704.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7704.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4065	4065	4065	4065	4065	
5°	4058	4065	4069	4076	4074	385
15°	3875	3956	4047	4021	3971	1093
25°	3546	3670	3855	3786	3720	1620
35°	2941	2778	2943	2908	2974	1846
45°	2234	1826	1050	1774	2265	1711
55°	1130	1130	391	1178	1377	1025
65°	340	402	124	517	526	363
75°	52	61	18	105	103	76
85°	18	11	9	18	24	18
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°	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8
2.5°	4067.0	4071.3	4069.2	4069.2	4067.0	4069.2	4069.2	4073.5	4073.5	4069.2	4067.0
5°	4058.2	4062.6	4062.6	4058.2	4058.2	4069.2	4062.6	4067.0	4067.0	4064.8	4064.8
7.5°	4038.6	4038.6	4047.3	4040.8	4040.8	4047.3	4045.1	4049.5	4053.9	4056.1	4056.1
10°	3995.0	3999.3	4001.5	4001.5	4003.7	4010.2	4014.6	4023.4	4027.7	4032.1	4034.2
12.5°	3940.4	3947.0	3949.1	3947.0	3953.5	3962.2	3973.2	3984.1	3990.6	3999.3	4005.9
15°	3874.9	3874.9	3879.3	3885.9	3890.3	3903.3	3914.2	3927.3	3944.8	3955.7	3966.6
17.5°	3803.0	3807.4	3813.9	3813.9	3822.6	3844.4	3851.0	3870.6	3890.3	3901.2	3923.0
20°	3724.4	3728.8	3735.3	3739.7	3750.6	3768.1	3781.1	3798.6	3820.4	3840.1	3861.9
22.5°	3663.3	3654.6	3658.9	3663.3	3674.3	3689.5	3704.8	3726.6	3748.4	3768.1	3789.9
25°	3545.5	3547.7	3554.2	3558.6	3571.7	3584.8	3602.2	3628.4	3648.0	3669.9	3693.9
27.5°	3386.2	3388.4	3399.3	3399.3	3410.2	3432.0	3442.9	3464.8	3491.0	3512.8	3541.2
30°	3205.2	3209.5	3209.5	3218.2	3224.7	3235.7	3246.6	3268.4	3281.5	3301.1	3340.4
32.5°	3039.3	3043.7	3041.5	3039.3	3032.8	3030.6	3028.4	3032.8	3037.1	3043.7	3058.9
35°	2941.2	2930.2	2921.5	2906.2	2888.8	2867.0	2847.3	2821.1	2797.1	2777.5	2755.7
37.5°	2847.3	2845.1	2832.0	2810.2	2775.3	2736.0	2690.2	2633.5	2576.7	2515.7	2456.8
40°	2716.4	2709.8	2698.9	2668.4	2629.1	2581.1	2520.0	2450.2	2358.6	2264.8	2168.8
42.5°	2493.8	2496.0	2482.9	2458.9	2421.9	2376.0	2312.7	2236.4	2138.2	2026.9	1902.6
45°	2234.2	2234.2	2229.8	2210.2	2184.0	2146.9	2098.9	2035.7	1939.7	1826.2	1693.1
47.5°	1963.7	1965.8	1959.3	1955.0	1944.0	1920.0	1885.1	1837.1	1769.5	1660.4	1527.3
50°	1688.8	1688.8	1699.7	1697.5	1697.5	1688.8	1673.5	1645.1	1586.2	1498.9	1374.6
52.5°	1413.8	1418.2	1424.8	1433.5	1444.4	1461.8	1444.4	1431.3	1394.2	1326.5	1219.7
55°	1130.2	1134.6	1145.5	1160.7	1173.9	1191.3	1195.6	1195.6	1176.0	1130.2	1049.5
57.5°	888.0	881.5	890.2	903.3	920.8	938.2	951.3	966.6	964.4	933.8	868.4
60°	667.6	669.8	676.4	689.5	702.6	717.8	735.3	748.4	754.9	739.7	698.2
62.5°	486.6	486.6	495.3	508.3	514.9	536.7	547.6	554.2	560.7	558.5	532.4
65°	340.4	344.7	349.1	355.7	362.2	375.3	381.8	394.9	399.3	401.5	381.8
67.5°	240.0	233.5	237.8	242.2	248.7	257.5	270.6	270.6	277.1	277.1	264.0
70°	152.7	152.7	154.9	161.4	165.8	168.0	172.4	176.7	183.3	181.1	181.1
72.5°	102.6	100.4	102.6	104.7	106.9	113.4	113.4	115.6	120.0	122.2	113.4
75°	52.4	54.6	58.9	56.7	63.3	58.9	61.1	67.6	65.5	61.1	61.1
77.5°	43.6	43.6	43.6	41.5	45.8	45.8	43.6	48.0	45.8	45.8	43.6
80°	30.5	32.7	30.5	28.3	30.5	28.3	28.3	28.3	28.3	28.3	26.2
82.5°	24.0	19.6	21.8	19.6	21.8	21.8	19.6	17.5	17.5	19.6	17.5
85°	17.5	13.1	15.3	15.3	13.1	13.1	13.1	13.1	13.1	10.9	10.9
87.5°	10.9	6.6	6.6	6.6	8.7	8.7	8.7	6.6	8.7	8.7	4.4
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°	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8
2.5°	4071.3	4069.2	4073.5	4071.3	4071.3	4069.2	4071.3	4069.2	4073.5	4064.8	4067.0
5°	4071.3	4067.0	4069.2	4071.3	4073.5	4069.2	4069.2	4069.2	4073.5	4069.2	4071.3
7.5°	4062.6	4060.4	4067.0	4071.3	4069.2	4067.0	4071.3	4069.2	4073.5	4071.3	4075.7
10°	4045.1	4047.3	4051.7	4058.2	4060.4	4062.6	4067.0	4067.0	4073.5	4064.8	4069.2
12.5°	4019.0	4027.7	4038.6	4042.9	4051.7	4051.7	4056.1	4058.2	4062.6	4060.4	4067.0
15°	3986.3	3997.1	4010.2	4021.2	4032.1	4038.6	4045.1	4047.3	4053.9	4047.3	4049.5
17.5°	3947.0	3960.0	3979.7	3992.8	4010.2	4016.8	4025.5	4029.9	4036.4	4032.1	4034.2
20°	3892.4	3907.7	3929.5	3949.1	3960.0	3975.3	3986.3	3992.8	3997.1	3992.8	3995.0
22.5°	3816.1	3837.9	3866.2	3881.5	3903.3	3916.4	3918.6	3933.9	3944.8	3933.9	3938.3
25°	3726.6	3748.4	3770.2	3803.0	3822.6	3837.9	3853.2	3855.3	3866.2	3864.0	3861.9
27.5°	3578.2	3606.6	3643.7	3669.9	3696.0	3720.1	3737.5	3741.8	3752.8	3748.4	3750.6
30°	3375.3	3405.9	3440.8	3482.2	3519.3	3543.3	3565.1	3580.4	3591.3	3584.8	3582.6
32.5°	3087.3	3117.9	3155.0	3196.4	3240.1	3274.9	3301.1	3320.8	3333.9	3329.5	3318.6
35°	2757.9	2766.6	2790.6	2823.3	2860.4	2897.5	2921.5	2943.3	2958.6	2962.9	2962.9
37.5°	2419.7	2391.3	2373.9	2373.9	2395.7	2410.9	2432.8	2445.8	2469.9	2478.6	2485.1
40°	2092.4	2026.9	1965.8	1920.0	1889.5	1887.3	1887.3	1893.8	1915.7	1944.0	1970.2
42.5°	1800.0	1695.3	1601.5	1516.4	1455.3	1420.4	1405.1	1407.3	1424.8	1450.9	1494.6
45°	1566.6	1435.7	1317.8	1215.3	1132.4	1077.8	1051.7	1049.5	1062.5	1093.1	1141.1
47.5°	1385.5	1245.8	1112.7	994.9	905.5	846.5	816.0	807.3	816.0	844.4	901.1
50°	1234.9	1090.9	953.5	831.3	735.3	674.2	645.8	634.9	645.8	669.8	726.5
52.5°	1095.3	946.9	818.2	700.4	597.8	545.4	514.9	508.3	514.9	543.3	589.1
55°	933.8	807.3	680.7	562.9	473.5	421.1	397.1	390.6	397.1	423.3	471.3
57.5°	774.6	665.5	554.2	447.3	370.9	325.1	303.3	294.5	309.8	327.3	384.0
60°	626.2	538.9	445.1	351.3	288.0	246.5	229.1	226.9	231.3	253.1	292.3
62.5°	490.9	418.9	344.7	268.4	216.0	198.5	176.7	174.6	178.9	192.0	222.6
65°	353.5	307.7	250.9	196.4	154.9	130.9	122.2	124.4	128.7	137.5	165.8
67.5°	246.5	213.8	174.6	137.5	106.9	96.0	87.3	85.1	87.3	102.6	117.8
70°	165.8	146.2	117.8	104.7	74.2	58.9	61.1	54.6	63.3	63.3	76.3
72.5°	109.1	96.0	78.5	61.1	52.4	41.5	41.5	39.3	43.6	45.8	56.7
75°	56.7	43.6	43.6	30.5	21.8	10.9	19.6	17.5	15.3	17.5	21.8
77.5°	39.3	32.7	30.5	24.0	21.8	17.5	17.5	17.5	17.5	19.6	21.8
80°	24.0	24.0	17.5	15.3	13.1	10.9	13.1	13.1	13.1	13.1	15.3
82.5°	15.3	13.1	13.1	10.9	10.9	8.7	8.7	8.7	8.7	8.7	13.1
85°	13.1	8.7	8.7	6.6	8.7	15.3	6.6	8.7	8.7	8.7	6.6
87.5°	4.4	6.6	6.6	6.6	4.4	2.2	4.4	6.6	6.6	10.9	8.7
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°	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8	4064.8
2.5°	4071.3	4073.5	4073.5	4071.3	4071.3	4067.0	4075.7	4069.2	4071.3	4080.1	4073.5
5°	4075.7	4077.9	4077.9	4075.7	4075.7	4075.7	4077.9	4077.9	4075.7	4073.5	4077.9
7.5°	4084.4	4082.2	4082.2	4077.9	4077.9	4073.5	4077.9	4071.3	4075.7	4071.3	4077.9
10°	4073.5	4075.7	4073.5	4071.3	4071.3	4069.2	4069.2	4062.6	4064.8	4058.2	4062.6
12.5°	4067.0	4064.8	4064.8	4060.4	4056.1	4051.7	4049.5	4042.9	4042.9	4027.7	4034.2
15°	4049.5	4051.7	4045.1	4036.4	4032.1	4021.2	4016.8	4008.0	3999.3	3988.4	3990.6
17.5°	4034.2	4027.7	4019.0	4010.2	3992.8	3984.1	3975.3	3962.2	3957.9	3944.8	3940.4
20°	3988.4	3984.1	3973.2	3957.9	3947.0	3927.3	3918.6	3905.5	3894.6	3881.5	3874.9
22.5°	3929.5	3925.1	3912.0	3896.8	3879.3	3870.6	3861.9	3837.9	3826.9	3813.9	3811.7
25°	3855.3	3848.8	3835.7	3818.2	3809.5	3785.5	3776.8	3759.3	3755.0	3741.8	3739.7
27.5°	3741.8	3733.1	3717.9	3696.0	3680.8	3665.5	3656.8	3643.7	3639.3	3626.2	3624.1
30°	3571.7	3560.8	3530.2	3521.5	3495.3	3480.0	3480.0	3462.6	3464.8	3456.1	3456.1
32.5°	3303.3	3285.9	3261.9	3244.4	3226.9	3218.2	3218.2	3211.7	3216.0	3216.0	3220.4
35°	2947.7	2923.7	2910.6	2899.7	2899.7	2908.4	2934.6	2941.2	2954.2	2965.1	2973.9
37.5°	2491.6	2489.5	2504.8	2517.9	2550.6	2587.7	2633.5	2672.8	2709.8	2736.0	2762.2
40°	1998.6	2053.1	2096.7	2157.9	2208.0	2280.0	2362.9	2430.6	2493.8	2539.7	2587.7
42.5°	1560.0	1629.8	1721.5	1810.9	1900.4	1998.6	2107.7	2201.5	2284.4	2347.7	2397.8
45°	1215.3	1311.3	1422.6	1536.0	1651.7	1773.9	1887.3	1983.3	2070.6	2136.0	2186.2
47.5°	979.6	1084.4	1210.9	1335.3	1466.2	1594.9	1721.5	1804.4	1876.4	1928.7	1974.6
50°	809.4	920.8	1053.8	1195.6	1326.5	1455.3	1564.4	1645.1	1704.0	1749.8	1778.2
52.5°	676.4	794.2	936.0	1077.8	1208.7	1326.5	1424.8	1485.8	1533.8	1566.6	1592.7
55°	558.5	672.0	805.1	938.2	1066.9	1178.2	1258.9	1304.8	1341.8	1361.5	1376.7
57.5°	456.0	560.7	682.9	805.1	916.4	1008.0	1071.3	1117.1	1134.6	1149.8	1147.6
60°	357.8	456.0	567.3	672.0	768.0	842.2	888.0	914.2	927.3	933.8	929.5
62.5°	281.5	370.9	456.0	547.6	617.5	680.7	724.4	724.4	730.9	733.1	739.7
65°	209.4	277.1	351.3	418.9	475.6	517.1	541.1	547.6	556.4	554.2	549.8
67.5°	154.9	205.1	259.6	309.8	349.1	375.3	392.7	408.0	405.8	401.5	399.3
70°	106.9	139.7	187.7	218.2	246.5	272.7	277.1	279.3	281.5	283.6	279.3
72.5°	74.2	98.2	124.4	150.5	168.0	178.9	189.8	192.0	192.0	192.0	189.8
75°	37.1	50.2	74.2	85.1	100.4	104.7	113.4	113.4	120.0	111.3	109.1
77.5°	32.7	39.3	52.4	61.1	67.6	74.2	76.3	82.9	80.7	76.3	78.5
80°	19.6	24.0	32.7	37.1	45.8	48.0	50.2	52.4	50.2	52.4	52.4
82.5°	15.3	17.5	21.8	21.8	28.3	28.3	30.5	30.5	32.7	32.7	32.7
85°	8.7	15.3	13.1	26.2	17.5	17.5	21.8	26.2	21.8	21.8	26.2
87.5°	8.7	8.7	6.6	8.7	8.7	8.7	10.9	13.1	13.1	15.3	13.1
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: P249501

CATALOG NUMBER: LSR8B120D010 EC8B1209727 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4064.8	4064.8	4064.8	4064.8
2.5°	4071.3	4075.7	4069.2	4067.0
5°	4077.9	4077.9	4073.5	4073.5
7.5°	4077.9	4077.9	4071.3	4067.0
10°	4060.4	4060.4	4053.9	4049.5
12.5°	4027.7	4027.7	4025.5	4019.0
15°	3986.3	3986.3	3977.5	3971.0
17.5°	3929.5	3933.9	3923.0	3923.0
20°	3868.4	3866.2	3857.5	3853.2
22.5°	3805.2	3800.8	3798.6	3785.5
25°	3737.5	3733.1	3726.6	3720.1
27.5°	3621.9	3619.7	3613.1	3604.4
30°	3445.1	3442.9	3434.2	3434.2
32.5°	3216.0	3213.9	3205.2	3207.3
35°	2978.2	2987.0	2982.6	2973.9
37.5°	2779.7	2786.2	2790.6	2786.2
40°	2613.8	2633.5	2635.7	2640.1
42.5°	2437.1	2463.3	2472.1	2476.4
45°	2225.5	2249.5	2269.1	2264.8
47.5°	2009.5	2026.9	2044.4	2031.3
50°	1802.2	1813.1	1819.7	1819.7
52.5°	1605.9	1605.9	1603.7	1605.9
55°	1381.1	1381.1	1372.4	1376.7
57.5°	1145.5	1149.8	1143.3	1132.4
60°	927.3	916.4	912.0	905.5
62.5°	722.2	722.2	706.9	726.5
65°	541.1	534.6	528.0	525.8
67.5°	392.7	390.6	384.0	381.8
70°	277.1	268.4	266.2	261.8
72.5°	185.5	185.5	181.1	181.1
75°	113.4	102.6	100.4	102.6
77.5°	78.5	76.3	76.3	74.2
80°	52.4	50.2	54.6	48.0
82.5°	32.7	34.9	32.7	34.9
85°	21.8	26.2	24.0	24.0
87.5°	13.1	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)