

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: P248354

Luminaire Tested: **LSR8B70D010 EC8B70840 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248354  
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: LSR8B70D010 EC8B70840 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7858.0 lumens  
Efficiency: N/A  
Efficacy: 103.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

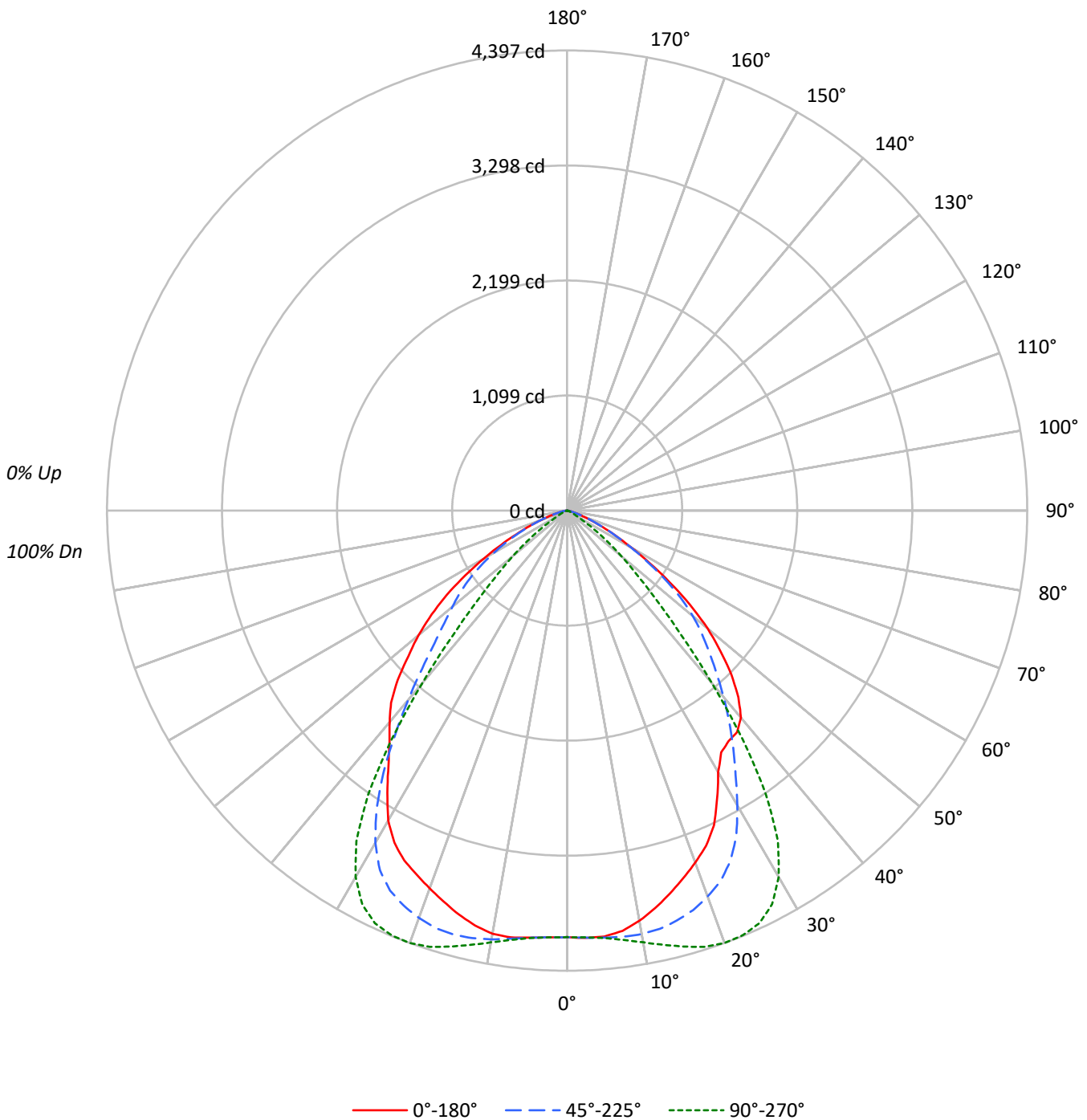
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	125704	125704	125704
5°	126451	126921	126785
10°	124594	131166	128592
15°	120951	137666	127581
20°	117439	144279	126031
25°	112933	147974	125447
30°	102775	143919	121729
35°	101244	124704	111995
40°	103996	86490	106174
45°	96812	52274	99834
50°	83976	32281	88956
55°	64444	16865	75497
60°	43905	6802	56979
65°	27311	3473	39306
70°	14822	2146	23991
75°	7732	1025	14178
80°	3463	1154	7689
85°	2300	778	6899



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	392.0	5.0
10°-20°	1161.3	14.8
20°-30°	1771.7	22.5
30°-40°	1848.8	23.5
40°-50°	1388.7	17.7
50°-60°	854.4	10.9
60°-70°	347.7	4.4
70°-80°	81.9	1.0
80°-90°	11.3	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°	3325.1	42.3
0°-40°	5173.9	65.8
0°-60°	7417.1	94.4
0°-90°	7858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7858.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4076	4076	4076	4076	4076	
5°	4085	4096	4100	4096	4096	386
15°	3789	4055	4312	4193	3996	1067
25°	3319	3691	4349	4005	3687	1509
35°	2690	2765	3313	3062	2975	1698
45°	2220	1921	1199	1789	2289	1694
55°	1199	1138	314	1138	1404	1078
65°	374	379	48	508	539	390
75°	65	65	9	115	119	78
85°	6	6	2	15	20	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°	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5
2.5°	4087.3	4080.8	4087.3	4087.3	4089.5	4085.1	4087.3	4089.5	4085.1	4085.1	4085.1
5°	4085.1	4080.8	4085.1	4083.0	4087.3	4087.3	4091.6	4091.6	4095.9	4095.9	4102.4
7.5°	4050.5	4041.9	4050.5	4057.0	4061.3	4070.0	4080.8	4089.5	4098.1	4106.8	4117.6
10°	3979.1	3979.1	3985.6	3998.6	4011.5	4026.7	4046.2	4067.8	4089.5	4108.9	4128.4
12.5°	3890.4	3883.9	3896.9	3914.2	3933.7	3957.5	3987.8	4020.2	4054.9	4093.8	4124.1
15°	3788.7	3782.2	3797.3	3814.7	3838.5	3873.1	3909.9	3953.1	4002.9	4054.9	4104.6
17.5°	3684.8	3682.7	3697.8	3721.6	3741.1	3777.9	3825.5	3877.4	3933.7	4002.9	4067.8
20°	3578.8	3576.7	3591.8	3611.3	3637.2	3671.9	3719.5	3780.0	3847.1	3925.0	4000.7
22.5°	3468.5	3470.6	3483.6	3505.3	3526.9	3563.6	3613.4	3674.0	3747.6	3832.0	3916.4
25°	3319.2	3308.4	3325.7	3347.3	3384.1	3414.3	3462.0	3526.9	3602.6	3691.3	3790.9
27.5°	3102.8	3100.6	3115.8	3135.2	3167.7	3204.5	3256.4	3323.5	3403.5	3500.9	3598.3
30°	2886.4	2890.7	2897.3	2916.7	2938.3	2975.1	3027.1	3083.3	3159.1	3252.1	3356.0
32.5°	2739.3	2739.3	2748.0	2760.9	2776.1	2795.5	2832.3	2873.4	2931.9	2996.8	3072.5
35°	2689.5	2680.9	2689.5	2691.7	2693.8	2698.2	2704.6	2717.7	2737.1	2765.3	2793.4
37.5°	2667.9	2661.4	2661.4	2652.8	2641.9	2628.9	2611.6	2592.1	2570.5	2542.4	2520.8
40°	2583.5	2579.2	2574.8	2566.2	2542.4	2516.4	2488.3	2442.8	2393.1	2323.8	2254.6
42.5°	2421.2	2416.9	2414.7	2397.4	2375.8	2345.5	2313.0	2265.4	2202.7	2114.0	2014.4
45°	2220.0	2211.3	2204.9	2189.7	2174.5	2148.6	2118.3	2075.0	2012.3	1921.4	1802.4
47.5°	1986.3	1982.0	1979.8	1973.3	1958.2	1943.0	1923.6	1889.0	1832.7	1746.1	1622.8
50°	1750.5	1741.8	1746.1	1744.0	1737.5	1726.7	1713.7	1689.9	1646.6	1568.7	1456.2
52.5°	1480.0	1480.0	1477.9	1484.3	1486.5	1484.3	1486.5	1460.5	1423.7	1365.3	1270.1
55°	1198.7	1198.7	1205.2	1213.9	1222.5	1224.7	1222.5	1211.7	1185.7	1138.1	1053.7
57.5°	934.7	930.4	943.4	956.4	965.0	973.7	967.2	958.5	943.4	904.4	839.5
60°	711.9	711.9	720.5	729.2	737.8	746.5	744.3	742.2	729.2	703.2	651.3
62.5°	523.6	525.8	525.8	532.3	540.9	549.6	556.1	549.6	543.1	525.8	491.2
65°	374.3	372.1	374.3	380.8	387.3	396.0	400.3	398.1	391.6	378.6	352.7
67.5°	251.0	248.8	257.5	259.6	264.0	272.7	270.5	272.7	270.5	259.6	238.0
70°	164.4	160.1	164.4	162.3	168.8	171.0	175.2	177.4	175.2	168.8	162.3
72.5°	101.7	99.5	101.7	103.9	106.0	108.2	112.5	112.5	110.3	106.0	97.4
75°	64.9	58.4	60.6	56.3	60.6	60.6	64.9	67.1	64.9	64.9	60.6
77.5°	39.0	39.0	39.0	39.0	39.0	39.0	39.0	41.1	43.3	39.0	36.8
80°	19.5	19.5	21.7	21.7	21.7	23.8	21.7	21.7	21.7	23.8	17.3
82.5°	15.1	13.0	13.0	13.0	15.1	13.0	13.0	13.0	13.0	13.0	13.0
85°	6.5	8.6	6.5	4.3	6.5	6.5	8.6	6.5	6.5	6.5	8.6
87.5°	2.2	2.2	0.0	0.0	0.0	2.2	0.0	2.2	2.2	4.3	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5
2.5°	4087.3	4083.0	4083.0	4080.8	4085.1	4080.8	4083.0	4080.8	4080.8	4085.1	4080.8
5°	4102.4	4104.6	4100.3	4098.1	4104.6	4104.6	4104.6	4100.3	4100.3	4102.4	4100.3
7.5°	4124.1	4128.4	4130.6	4132.7	4137.1	4139.2	4139.2	4137.1	4134.9	4141.4	4132.7
10°	4147.9	4154.4	4167.4	4173.9	4184.7	4184.7	4189.0	4189.0	4184.7	4189.0	4186.8
12.5°	4139.2	4178.2	4199.8	4215.0	4230.1	4243.1	4247.4	4249.6	4247.4	4256.1	4247.4
15°	4154.4	4186.8	4221.5	4247.4	4275.5	4290.7	4295.0	4312.3	4316.7	4318.8	4305.9
17.5°	4130.6	4189.0	4225.8	4264.7	4305.9	4334.0	4359.9	4370.8	4372.9	4377.2	4359.9
20°	4076.5	4141.4	4197.6	4253.9	4301.5	4344.8	4366.4	4396.7	4388.1	4405.4	4381.6
22.5°	4002.9	4076.5	4147.9	4221.5	4271.2	4323.2	4368.6	4390.2	4401.0	4401.0	4375.1
25°	3886.1	3972.6	4050.5	4126.2	4202.0	4264.7	4316.7	4349.1	4355.6	4353.4	4323.2
27.5°	3704.3	3797.3	3888.2	3974.8	4067.8	4141.4	4202.0	4240.9	4251.7	4251.7	4219.3
30°	3453.3	3552.8	3641.6	3745.4	3840.6	3922.9	4007.3	4041.9	4061.3	4061.3	4024.6
32.5°	3154.7	3239.1	3321.3	3423.0	3526.9	3619.9	3700.0	3747.6	3771.4	3769.2	3736.8
35°	2830.2	2871.3	2934.0	3009.8	3102.8	3189.3	3267.2	3312.7	3353.8	3351.6	3321.3
37.5°	2505.6	2494.8	2501.3	2529.4	2587.8	2648.4	2709.0	2752.3	2786.9	2802.1	2795.5
40°	2187.6	2131.3	2077.2	2057.7	2062.0	2083.7	2116.1	2148.6	2187.6	2207.0	2215.7
42.5°	1901.9	1806.7	1711.5	1640.1	1599.0	1586.0	1601.2	1612.0	1635.8	1663.9	1692.1
45°	1672.6	1544.9	1419.4	1309.1	1239.8	1198.7	1190.1	1198.7	1211.7	1239.8	1276.6
47.5°	1484.3	1335.0	1194.4	1071.0	969.3	915.3	900.1	895.8	908.8	934.7	984.5
50°	1317.7	1168.4	1012.6	869.8	763.8	703.2	681.6	672.9	688.0	707.5	753.0
52.5°	1135.9	988.8	828.7	690.2	579.9	517.1	493.3	480.4	489.0	515.0	560.4
55°	939.1	802.7	657.8	515.0	408.9	350.5	322.4	313.7	322.4	350.5	396.0
57.5°	742.2	627.5	506.3	372.1	276.9	218.5	190.4	181.8	205.6	216.4	264.0
60°	579.9	486.9	383.0	272.7	190.4	145.0	116.8	110.3	121.2	140.6	179.6
62.5°	434.9	376.5	294.3	194.7	140.6	93.0	77.9	71.4	77.9	93.0	123.4
65°	315.9	270.5	205.6	142.8	95.2	69.2	51.9	47.6	54.1	64.9	90.9
67.5°	216.4	181.8	142.8	99.5	64.9	43.3	36.8	36.8	39.0	47.6	67.1
70°	140.6	119.0	90.9	64.9	43.3	32.5	28.1	23.8	28.1	34.6	45.4
72.5°	88.7	75.7	58.4	45.4	32.5	23.8	19.5	17.3	21.7	25.9	34.6
75°	54.1	41.1	30.3	23.8	17.3	17.3	17.3	8.6	10.8	17.3	21.7
77.5°	32.5	28.1	23.8	19.5	15.1	8.6	8.6	8.6	10.8	13.0	19.5
80°	17.3	15.1	10.8	10.8	8.6	6.5	8.6	6.5	4.3	10.8	13.0
82.5°	10.8	8.6	8.6	8.6	10.8	4.3	6.5	4.3	6.5	8.6	6.5
85°	6.5	6.5	6.5	4.3	10.8	4.3	4.3	2.2	2.2	4.3	4.3
87.5°	0.0	2.2	2.2	0.0	2.2	0.0	2.2	2.2	2.2	2.2	2.2
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°	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5	4076.5
2.5°	4083.0	4080.8	4083.0	4080.8	4080.8	4080.8	4083.0	4083.0	4080.8	4080.8	4085.1
5°	4100.3	4100.3	4100.3	4098.1	4095.9	4095.9	4100.3	4100.3	4093.8	4100.3	4100.3
7.5°	4137.1	4130.6	4137.1	4128.4	4124.1	4126.2	4128.4	4124.1	4119.8	4121.9	4121.9
10°	4184.7	4178.2	4178.2	4171.7	4165.2	4160.8	4156.6	4145.7	4134.9	4132.7	4124.1
12.5°	4240.9	4230.1	4223.6	4210.6	4199.8	4184.7	4171.7	4154.4	4132.7	4117.6	4102.4
15°	4297.2	4279.9	4264.7	4243.1	4219.3	4193.3	4165.2	4137.1	4102.4	4072.2	4046.2
17.5°	4342.6	4318.8	4290.7	4256.1	4221.5	4182.5	4141.4	4100.3	4050.5	4011.5	3981.3
20°	4357.7	4323.2	4286.4	4240.9	4195.5	4141.4	4089.5	4035.4	3979.1	3938.0	3903.4
22.5°	4338.3	4297.2	4251.7	4204.2	4143.5	4085.1	4024.6	3961.8	3912.0	3855.8	3823.3
25°	4284.2	4234.4	4184.7	4128.4	4070.0	4005.1	3940.2	3875.3	3814.7	3784.4	3743.3
27.5°	4173.9	4119.8	4065.7	4007.3	3940.2	3875.3	3808.2	3745.4	3693.5	3652.4	3628.6
30°	3979.1	3916.4	3853.6	3790.9	3732.4	3665.4	3602.6	3550.7	3498.7	3466.3	3442.5
32.5°	3680.5	3624.3	3561.5	3500.9	3446.9	3390.6	3338.6	3293.2	3256.4	3234.8	3217.5
35°	3278.1	3221.8	3174.2	3130.9	3085.5	3061.7	3029.2	3003.2	2988.1	2979.5	2977.3
37.5°	2771.7	2739.3	2724.1	2715.5	2706.8	2700.4	2704.6	2715.5	2724.1	2739.3	2756.6
40°	2230.8	2258.9	2267.6	2297.9	2326.0	2362.8	2403.9	2451.5	2490.4	2540.2	2574.8
42.5°	1737.5	1789.4	1850.0	1914.9	1984.1	2051.2	2133.4	2209.2	2278.4	2341.1	2395.2
45°	1335.0	1415.1	1506.0	1599.0	1692.1	1789.4	1889.0	1982.0	2064.2	2131.3	2187.6
47.5°	1040.8	1129.5	1246.3	1361.0	1473.5	1588.2	1698.5	1795.9	1865.1	1930.0	1979.8
50°	824.4	926.1	1053.7	1185.7	1309.1	1430.2	1547.0	1638.0	1707.2	1759.1	1795.9
52.5°	638.3	759.5	889.3	1027.8	1159.8	1291.8	1399.9	1484.3	1540.6	1586.0	1614.1
55°	476.0	595.0	733.5	876.3	1010.5	1138.1	1239.8	1313.4	1363.2	1389.1	1404.3
57.5°	344.0	452.2	590.7	733.5	854.7	975.8	1058.1	1125.1	1153.3	1168.4	1174.9
60°	251.0	350.5	473.8	597.2	711.9	809.2	880.7	926.1	947.7	956.4	954.2
62.5°	183.9	270.5	376.5	480.4	573.4	653.4	709.7	740.0	750.8	755.1	748.7
65°	140.6	207.7	298.6	378.6	450.1	508.5	549.6	569.1	575.5	573.4	569.1
67.5°	103.9	155.8	222.9	283.5	335.4	380.8	402.5	419.8	424.1	417.6	411.1
70°	73.6	114.7	162.3	203.4	242.3	268.3	292.1	294.3	294.3	292.1	287.8
72.5°	51.9	80.1	110.3	138.5	162.3	181.8	190.4	196.9	194.7	192.6	188.3
75°	34.6	49.8	80.1	86.6	108.2	114.7	123.4	123.4	125.5	119.0	119.0
77.5°	21.7	34.6	47.6	56.3	64.9	73.6	77.9	77.9	80.1	77.9	77.9
80°	13.0	21.7	25.9	39.0	39.0	45.4	47.6	49.8	45.4	51.9	45.4
82.5°	8.6	13.0	19.5	19.5	23.8	28.1	28.1	30.3	30.3	28.1	28.1
85°	6.5	8.6	10.8	13.0	13.0	15.1	13.0	13.0	15.1	17.3	15.1
87.5°	2.2	4.3	2.2	4.3	4.3	8.6	6.5	6.5	6.5	8.6	8.6
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: P248354

CATALOG NUMBER: LSR8B70D010 EC8B70840 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	4076.5	4076.5	4076.5	4076.5
2.5°	4080.8	4083.0	4080.8	4080.8
5°	4100.3	4098.1	4100.3	4095.9
7.5°	4115.4	4115.4	4113.2	4113.2
10°	4115.4	4106.8	4106.8	4106.8
12.5°	4083.0	4072.2	4065.7	4061.3
15°	4026.7	4007.3	3998.6	3996.4
17.5°	3953.1	3935.8	3925.0	3918.5
20°	3868.8	3851.4	3838.5	3840.6
22.5°	3795.2	3775.7	3767.1	3762.7
25°	3721.6	3697.8	3691.3	3687.0
27.5°	3602.6	3589.6	3583.1	3576.7
30°	3420.9	3414.3	3403.5	3418.7
32.5°	3211.0	3200.1	3191.5	3198.0
35°	2979.5	2973.0	2979.5	2975.1
37.5°	2767.4	2773.9	2782.6	2786.9
40°	2600.8	2624.6	2633.3	2637.6
42.5°	2434.2	2462.3	2479.6	2490.4
45°	2228.6	2256.7	2276.2	2289.3
47.5°	2016.6	2040.4	2059.9	2057.7
50°	1824.0	1837.0	1845.6	1854.3
52.5°	1629.3	1629.3	1631.4	1631.4
55°	1408.6	1404.3	1402.1	1404.3
57.5°	1166.2	1161.9	1159.8	1153.3
60°	945.6	932.6	923.9	923.9
62.5°	740.0	724.8	718.4	716.2
65°	556.1	553.9	540.9	538.7
67.5°	402.5	393.8	385.2	387.3
70°	283.5	270.5	270.5	266.1
72.5°	183.9	177.4	175.2	175.2
75°	114.7	114.7	110.3	119.0
77.5°	75.7	75.7	73.6	75.7
80°	45.4	45.4	45.4	43.3
82.5°	28.1	30.3	28.1	28.1
85°	15.1	17.3	13.0	19.5
87.5°	8.6	10.8	8.6	10.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)