

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: P248363

Luminaire Tested: **LSR8B70D010 EC8B70850 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248363
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 EC8B70850 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8012.0 lumens
Efficiency: N/A
Efficacy: 105.6 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

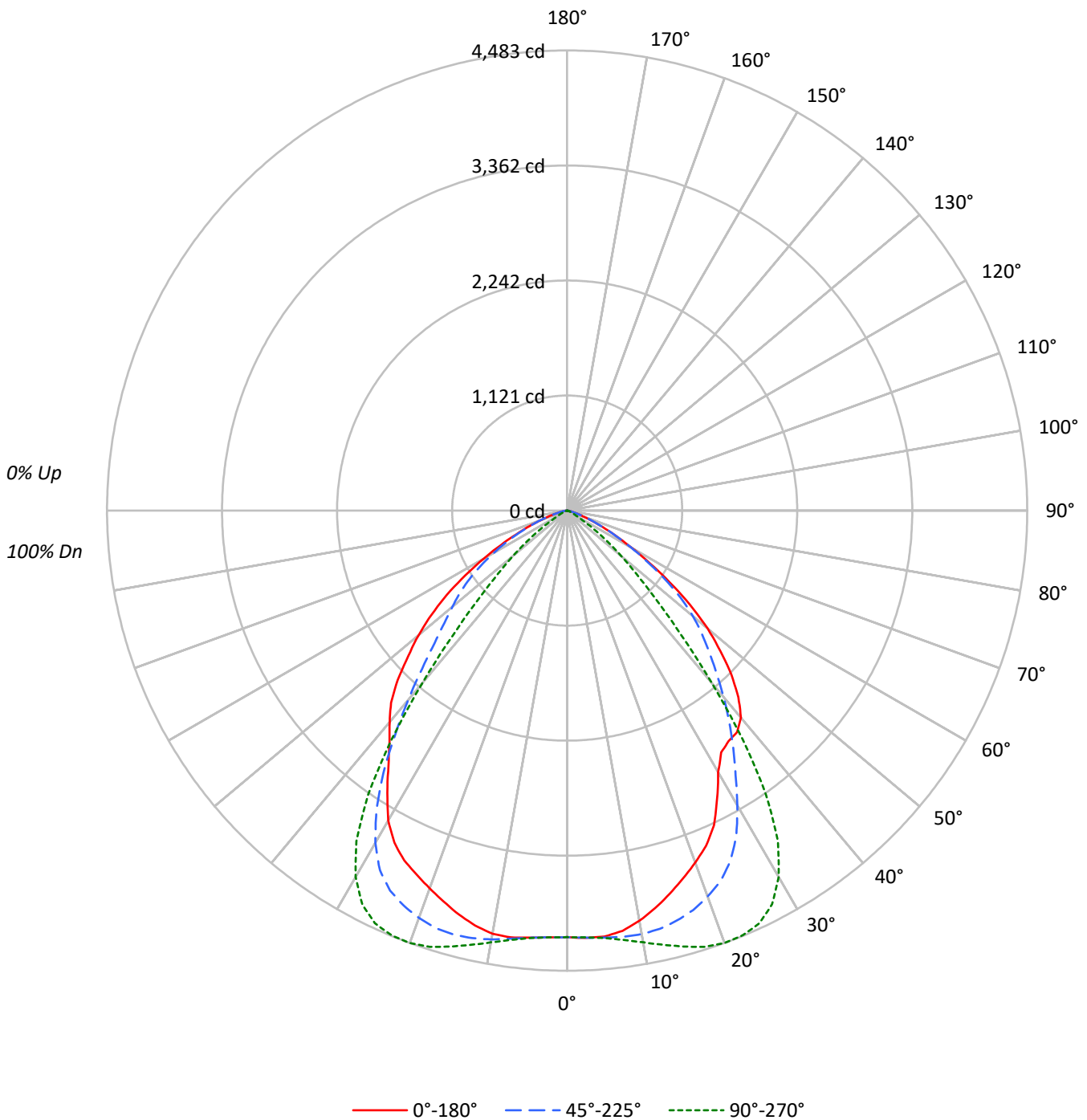
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	128165	128165	128165
5°	128930	129407	129271
10°	127036	133737	131113
15°	123323	140364	130081
20°	119743	147108	128502
25°	115144	150873	127907
30°	104791	146739	124114
35°	103228	127147	114190
40°	106033	88184	108255
45°	98709	53299	101788
50°	85622	32914	90702
55°	65707	17198	76976
60°	44762	6938	58096
65°	27843	3539	40080
70°	15120	2191	24469
75°	7887	1048	14452
80°	3534	1172	7831
85°	2335	778	7041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	399.7	5.0
10°-20°	1184.1	14.8
20°-30°	1806.4	22.5
30°-40°	1885.1	23.5
40°-50°	1415.9	17.7
50°-60°	871.2	10.9
60°-70°	354.5	4.4
70°-80°	83.5	1.0
80°-90°	11.5	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°	3390.3	42.3
0°-40°	5275.3	65.8
0°-60°	7562.4	94.4
0°-90°	8012.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8012.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4156	4156	4156	4156	4156	
5°	4165	4176	4181	4176	4176	394
15°	3863	4134	4397	4276	4075	1088
25°	3384	3764	4434	4084	3759	1539
35°	2742	2820	3378	3122	3033	1731
45°	2264	1959	1222	1824	2334	1727
55°	1222	1160	320	1160	1432	1099
65°	382	386	48	518	549	398
75°	66	66	9	117	121	80
85°	7	7	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°	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3
2.5°	4167.4	4160.8	4167.4	4167.4	4169.6	4165.2	4167.4	4169.6	4165.2	4165.2	4165.2
5°	4165.2	4160.8	4165.2	4163.0	4167.4	4167.4	4171.8	4171.8	4176.2	4176.2	4182.8
7.5°	4129.9	4121.1	4129.9	4136.5	4140.9	4149.8	4160.8	4169.6	4178.4	4187.3	4198.3
10°	4057.1	4057.1	4063.7	4076.9	4090.2	4105.6	4125.5	4147.5	4169.6	4189.4	4209.3
12.5°	3966.7	3960.0	3973.2	3990.9	4010.8	4035.0	4065.9	4099.0	4134.3	4174.0	4204.9
15°	3863.0	3856.3	3871.8	3889.4	3913.7	3949.0	3986.5	4030.6	4081.4	4134.3	4185.1
17.5°	3757.0	3754.8	3770.3	3794.6	3814.4	3851.9	3900.5	3953.4	4010.8	4081.4	4147.5
20°	3649.0	3646.8	3662.2	3682.1	3708.5	3743.8	3792.4	3854.1	3922.5	4002.0	4079.2
22.5°	3536.4	3538.6	3551.9	3573.9	3596.0	3633.5	3684.2	3746.0	3821.0	3907.1	3993.1
25°	3384.2	3373.2	3390.8	3412.9	3450.4	3481.3	3529.8	3596.0	3673.2	3763.7	3865.2
27.5°	3163.6	3161.4	3176.9	3196.7	3229.8	3267.3	3320.2	3388.6	3470.2	3569.5	3668.8
30°	2943.0	2947.4	2954.0	2973.9	2995.9	3033.4	3086.4	3143.8	3221.0	3315.8	3421.7
32.5°	2793.0	2793.0	2801.8	2815.0	2830.5	2850.3	2887.9	2929.7	2989.3	3055.5	3132.7
35°	2742.2	2733.4	2742.2	2744.4	2746.6	2751.1	2757.7	2770.9	2790.7	2819.5	2848.1
37.5°	2720.2	2713.5	2713.5	2704.7	2693.7	2680.5	2662.8	2642.9	2620.9	2592.2	2570.2
40°	2634.1	2629.7	2625.3	2616.5	2592.2	2565.8	2537.0	2490.7	2440.0	2369.4	2298.8
42.5°	2468.7	2464.3	2462.1	2444.4	2422.3	2391.4	2358.4	2309.8	2245.9	2155.4	2053.9
45°	2263.5	2254.7	2248.1	2232.6	2217.1	2190.7	2159.8	2115.7	2051.7	1959.1	1837.7
47.5°	2025.2	2020.8	2018.6	2012.0	1996.6	1981.1	1961.3	1926.0	1868.6	1780.3	1654.6
50°	1784.8	1776.0	1780.3	1778.2	1771.5	1760.5	1747.2	1723.0	1678.9	1599.4	1484.7
52.5°	1509.0	1509.0	1506.8	1513.4	1515.6	1513.4	1515.6	1489.2	1451.6	1392.1	1295.0
55°	1222.2	1222.2	1228.8	1237.7	1246.5	1248.7	1246.5	1235.5	1208.9	1160.4	1074.4
57.5°	953.0	948.7	961.9	975.1	984.0	992.8	986.1	977.3	961.9	922.2	856.0
60°	725.8	725.8	734.6	743.5	752.3	761.1	758.9	756.7	743.5	717.0	664.1
62.5°	533.9	536.1	536.1	542.7	551.5	560.4	567.0	560.4	553.7	536.1	500.8
65°	381.6	379.4	381.6	388.3	394.9	403.7	408.1	405.9	399.3	386.1	359.6
67.5°	255.9	253.7	262.5	264.7	269.1	278.0	275.8	278.0	275.8	264.7	242.7
70°	167.7	163.2	167.7	165.5	172.1	174.3	178.7	180.9	178.7	172.1	165.5
72.5°	103.7	101.5	103.7	105.9	108.1	110.3	114.7	114.7	112.5	108.1	99.3
75°	66.2	59.5	61.8	57.4	61.8	61.8	66.2	68.4	66.2	66.2	61.8
77.5°	39.7	39.7	39.7	39.7	39.7	39.7	39.7	41.9	44.1	39.7	37.5
80°	19.9	19.9	22.1	22.1	22.1	24.3	22.1	22.1	22.1	24.3	17.7
82.5°	15.4	13.2	13.2	13.2	15.4	13.2	13.2	13.2	13.2	13.2	13.2
85°	6.6	8.8	6.6	4.4	6.6	6.6	8.8	6.6	6.6	6.6	8.8
87.5°	2.2	2.2	0.0	0.0	0.0	2.2	0.0	2.2	2.2	4.4	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°	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3
2.5°	4167.4	4163.0	4163.0	4160.8	4165.2	4160.8	4163.0	4160.8	4160.8	4165.2	4160.8
5°	4182.8	4185.1	4180.6	4178.4	4185.1	4185.1	4185.1	4180.6	4180.6	4182.8	4180.6
7.5°	4204.9	4209.3	4211.5	4213.7	4218.1	4220.4	4220.4	4218.1	4215.9	4222.6	4213.7
10°	4229.2	4235.8	4249.0	4255.7	4266.7	4266.7	4271.1	4271.1	4266.7	4271.1	4268.9
12.5°	4220.4	4260.0	4282.1	4297.6	4313.0	4326.2	4330.6	4332.9	4330.6	4339.5	4330.6
15°	4235.8	4268.9	4304.2	4330.6	4359.3	4374.7	4379.2	4396.8	4401.3	4403.5	4390.2
17.5°	4211.5	4271.1	4308.6	4348.3	4390.2	4418.9	4445.4	4456.4	4458.6	4463.0	4445.4
20°	4156.3	4222.6	4279.9	4337.3	4385.8	4429.9	4452.0	4482.9	4474.1	4491.7	4467.4
22.5°	4081.4	4156.3	4229.2	4304.2	4354.9	4407.9	4454.2	4476.2	4487.3	4487.3	4460.8
25°	3962.2	4050.5	4129.9	4207.1	4284.3	4348.3	4401.3	4434.3	4441.0	4438.8	4407.9
27.5°	3776.9	3871.8	3964.4	4052.7	4147.5	4222.6	4284.3	4324.0	4335.1	4335.1	4302.0
30°	3521.0	3622.5	3712.9	3818.8	3915.9	3999.7	4085.8	4121.1	4140.9	4140.9	4103.4
32.5°	3216.5	3302.6	3386.4	3490.1	3596.0	3690.9	3772.5	3821.0	3845.3	3843.1	3810.0
35°	2885.6	2927.5	2991.5	3068.7	3163.6	3251.8	3331.3	3377.6	3419.5	3417.3	3386.4
37.5°	2554.7	2543.7	2550.3	2579.0	2638.5	2700.3	2762.1	2806.2	2841.5	2857.0	2850.3
40°	2230.4	2173.0	2117.9	2098.1	2102.4	2124.5	2157.6	2190.7	2230.4	2250.3	2259.1
42.5°	1939.2	1842.1	1745.0	1672.3	1630.3	1617.1	1632.5	1643.5	1667.8	1696.5	1725.2
45°	1705.4	1575.2	1447.2	1334.7	1264.1	1222.2	1213.4	1222.2	1235.5	1264.1	1301.6
47.5°	1513.4	1361.2	1217.8	1092.0	988.3	933.2	917.8	913.4	926.6	953.0	1003.8
50°	1343.5	1191.3	1032.5	886.8	778.8	717.0	694.9	686.1	701.5	721.4	767.7
52.5°	1158.2	1008.2	845.0	703.7	591.2	527.3	503.0	489.8	498.6	525.1	571.4
55°	957.5	818.5	670.7	525.1	416.9	357.4	328.7	319.9	328.7	357.4	403.7
57.5°	756.7	639.8	516.2	379.4	282.4	222.8	194.1	185.3	209.6	220.6	269.1
60°	591.2	496.4	390.5	278.0	194.1	147.8	119.1	112.5	123.6	143.4	183.1
62.5°	443.4	383.9	300.0	198.5	143.4	94.8	79.4	72.8	79.4	94.8	125.8
65°	322.1	275.8	209.6	145.6	97.1	70.6	53.0	48.5	55.2	66.2	92.7
67.5°	220.6	185.3	145.6	101.5	66.2	44.1	37.5	37.5	39.7	48.5	68.4
70°	143.4	121.3	92.7	66.2	44.1	33.1	28.7	24.3	28.7	35.3	46.3
72.5°	90.5	77.2	59.5	46.3	33.1	24.3	19.9	17.7	22.1	26.5	35.3
75°	55.2	41.9	30.9	24.3	17.7	17.7	17.7	8.8	11.0	17.7	22.1
77.5°	33.1	28.7	24.3	19.9	15.4	8.8	8.8	8.8	11.0	13.2	19.9
80°	17.7	15.4	11.0	11.0	8.8	6.6	8.8	6.6	4.4	11.0	13.2
82.5°	11.0	8.8	8.8	8.8	11.0	4.4	6.6	4.4	6.6	8.8	6.6
85°	6.6	6.6	6.6	4.4	11.0	4.4	4.4	2.2	2.2	4.4	4.4
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°	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3	4156.3
2.5°	4163.0	4160.8	4163.0	4160.8	4160.8	4160.8	4163.0	4163.0	4160.8	4160.8	4165.2
5°	4180.6	4180.6	4180.6	4178.4	4176.2	4176.2	4180.6	4180.6	4174.0	4180.6	4180.6
7.5°	4218.1	4211.5	4218.1	4209.3	4204.9	4207.1	4209.3	4204.9	4200.5	4202.7	4202.7
10°	4266.7	4260.0	4260.0	4253.5	4246.8	4242.4	4238.0	4226.9	4215.9	4213.7	4204.9
12.5°	4324.0	4313.0	4306.4	4293.1	4282.1	4266.7	4253.5	4235.8	4213.7	4198.3	4182.8
15°	4381.4	4363.7	4348.3	4326.2	4302.0	4275.5	4246.8	4218.1	4182.8	4152.0	4125.5
17.5°	4427.7	4403.5	4374.7	4339.5	4304.2	4264.5	4222.6	4180.6	4129.9	4090.2	4059.3
20°	4443.1	4407.9	4370.4	4324.0	4277.7	4222.6	4169.6	4114.5	4057.1	4015.2	3979.9
22.5°	4423.3	4381.4	4335.1	4286.5	4224.7	4165.2	4103.4	4039.4	3988.7	3931.4	3898.3
25°	4368.2	4317.4	4266.7	4209.3	4149.8	4083.6	4017.4	3951.2	3889.4	3858.5	3816.6
27.5°	4255.7	4200.5	4145.3	4085.8	4017.4	3951.2	3882.8	3818.8	3765.9	3724.0	3699.7
30°	4057.1	3993.1	3929.1	3865.2	3805.6	3737.2	3673.2	3620.3	3567.3	3534.2	3510.0
32.5°	3752.6	3695.3	3631.3	3569.5	3514.4	3457.0	3404.1	3357.8	3320.2	3298.2	3280.5
35°	3342.3	3284.9	3236.4	3192.3	3145.9	3121.7	3088.6	3062.1	3046.7	3037.9	3035.7
37.5°	2826.0	2793.0	2777.5	2768.7	2759.9	2753.3	2757.7	2768.7	2777.5	2793.0	2810.6
40°	2274.5	2303.2	2312.0	2342.9	2371.6	2409.1	2451.0	2499.6	2539.2	2590.0	2625.3
42.5°	1771.5	1824.5	1886.2	1952.4	2023.0	2091.4	2175.3	2252.4	2323.1	2387.0	2442.2
45°	1361.2	1442.8	1535.5	1630.3	1725.2	1824.5	1926.0	2020.8	2104.6	2173.0	2230.4
47.5°	1061.2	1151.6	1270.8	1387.7	1502.4	1619.3	1731.8	1831.1	1901.7	1967.9	2018.6
50°	840.5	944.2	1074.4	1208.9	1334.7	1458.2	1577.4	1670.1	1740.7	1793.6	1831.1
52.5°	650.8	774.4	906.7	1047.9	1182.5	1317.1	1427.4	1513.4	1570.8	1617.1	1645.8
55°	485.3	606.7	747.9	893.5	1030.3	1160.4	1264.1	1339.1	1389.9	1416.3	1431.8
57.5°	350.8	461.1	602.3	747.9	871.4	995.0	1078.8	1147.2	1175.9	1191.3	1197.9
60°	255.9	357.4	483.1	608.9	725.8	825.1	897.9	944.2	966.3	975.1	972.9
62.5°	187.5	275.8	383.9	489.8	584.6	666.2	723.6	754.5	765.6	769.9	763.3
65°	143.4	211.8	304.5	386.1	458.9	518.4	560.4	580.2	586.8	584.6	580.2
67.5°	105.9	158.9	227.3	289.0	342.0	388.3	410.4	428.0	432.4	425.8	419.2
70°	75.0	116.9	165.5	207.4	247.1	273.6	297.8	300.0	300.0	297.8	293.4
72.5°	53.0	81.6	112.5	141.2	165.5	185.3	194.1	200.8	198.5	196.3	192.0
75°	35.3	50.7	81.6	88.3	110.3	116.9	125.8	125.8	127.9	121.3	121.3
77.5°	22.1	35.3	48.5	57.4	66.2	75.0	79.4	79.4	81.6	79.4	79.4
80°	13.2	22.1	26.5	39.7	39.7	46.3	48.5	50.7	46.3	53.0	46.3
82.5°	8.8	13.2	19.9	19.9	24.3	28.7	28.7	30.9	30.9	28.7	28.7
85°	6.6	8.8	11.0	13.2	13.2	15.4	13.2	13.2	15.4	17.7	15.4
87.5°	2.2	4.4	2.2	4.4	4.4	8.8	6.6	6.6	6.6	8.8	8.8
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: P248363

CATALOG NUMBER: LSR8B70D010 EC8B70850 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4156.3	4156.3	4156.3	4156.3
2.5°	4160.8	4163.0	4160.8	4160.8
5°	4180.6	4178.4	4180.6	4176.2
7.5°	4196.1	4196.1	4193.9	4193.9
10°	4196.1	4187.3	4187.3	4187.3
12.5°	4163.0	4152.0	4145.3	4140.9
15°	4105.6	4085.8	4076.9	4074.7
17.5°	4030.6	4013.0	4002.0	3995.3
20°	3944.6	3926.9	3913.7	3915.9
22.5°	3869.5	3849.7	3840.9	3836.5
25°	3794.6	3770.3	3763.7	3759.3
27.5°	3673.2	3660.0	3653.4	3646.8
30°	3487.9	3481.3	3470.2	3485.7
32.5°	3273.9	3262.9	3254.1	3260.7
35°	3037.9	3031.2	3037.9	3033.4
37.5°	2821.7	2828.3	2837.1	2841.5
40°	2651.8	2676.0	2684.9	2689.3
42.5°	2481.9	2510.6	2528.2	2539.2
45°	2272.3	2301.0	2320.8	2334.1
47.5°	2056.1	2080.4	2100.2	2098.1
50°	1859.8	1873.0	1881.8	1890.7
52.5°	1661.2	1661.2	1663.4	1663.4
55°	1436.2	1431.8	1429.6	1431.8
57.5°	1189.1	1184.7	1182.5	1175.9
60°	964.1	950.9	942.0	942.0
62.5°	754.5	739.0	732.5	730.2
65°	567.0	564.7	551.5	549.3
67.5°	410.4	401.5	392.7	394.9
70°	289.0	275.8	275.8	271.4
72.5°	187.5	180.9	178.7	178.7
75°	116.9	116.9	112.5	121.3
77.5°	77.2	77.2	75.0	77.2
80°	46.3	46.3	46.3	44.1
82.5°	28.7	30.9	28.7	28.7
85°	15.4	17.7	13.2	19.9
87.5°	8.8	11.0	8.8	11.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)