

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: P249120

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249120
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: LSR8B80D010 EC8B80850 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8597.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

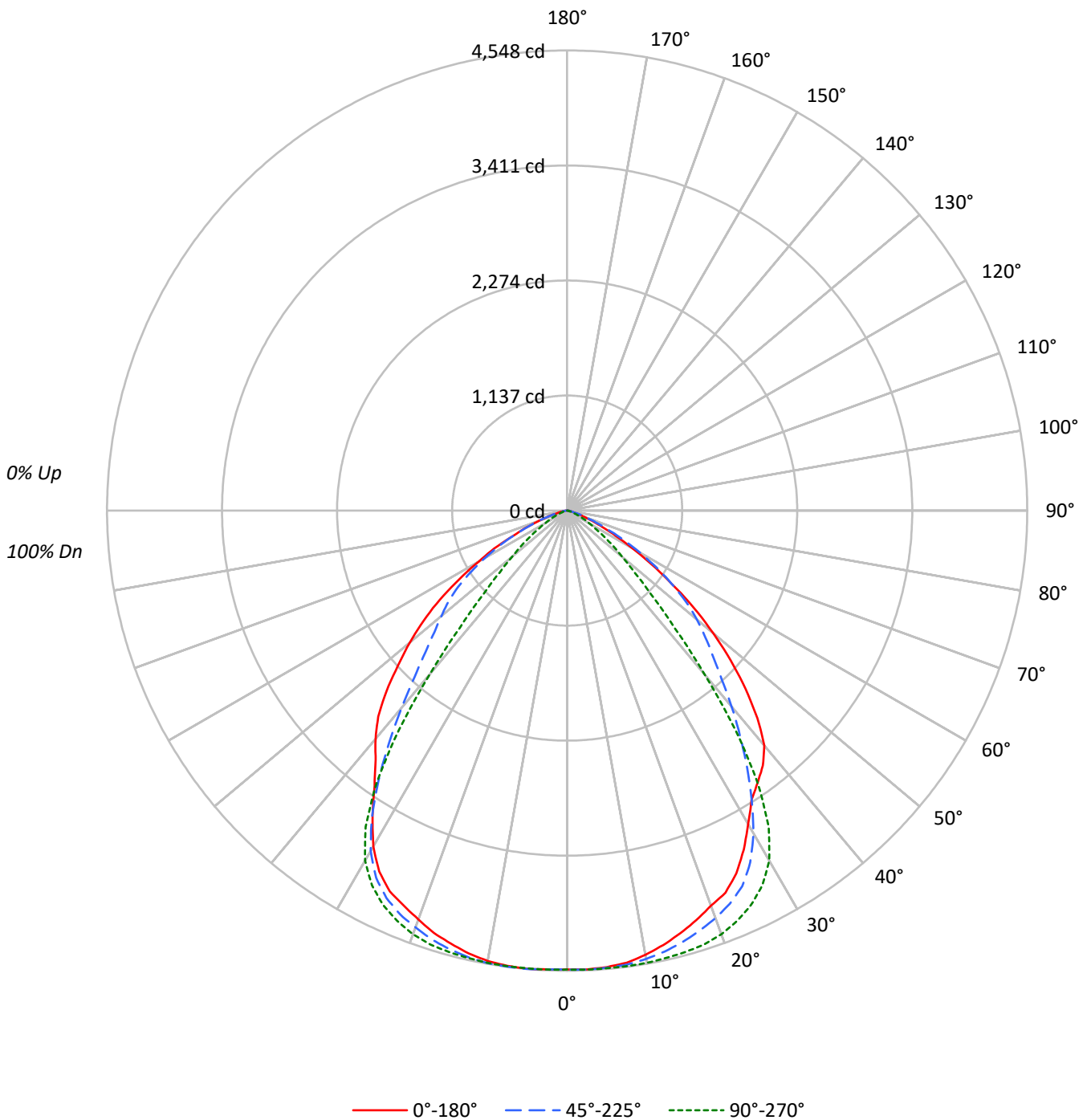
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	139870	139870	139870
5°	140179	140556	140708
10°	139589	142106	141496
15°	138043	144185	141465
20°	136387	146212	141099
25°	134616	146379	141244
30°	127355	142263	136456
35°	123552	123642	124926
40°	122022	85069	118592
45°	108726	51071	110213
50°	90405	33989	97414
55°	67804	23429	82594
60°	45946	15616	62314
65°	27712	10128	42816
70°	15363	5491	26345
75°	6958	2323	13630
80°	6055	2593	9518
85°	6899	3432	9482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	432.9	5.0
10°-20°	1257.2	14.6
20°-30°	1908.2	22.2
30°-40°	2004.1	23.3
40°-50°	1502.6	17.5
50°-60°	964.1	11.2
60°-70°	412.4	4.8
70°-80°	97.4	1.1
80°-90°	18.1	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°	3598.2	41.9
0°-40°	5602.4	65.2
0°-60°	8069.0	93.9
0°-90°	8597.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8597.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4536	4536	4536	4536	4536	
5°	4529	4536	4541	4548	4546	430
15°	4324	4414	4516	4487	4431	1220
25°	3956	4095	4302	4224	4151	1807
35°	3282	3099	3284	3246	3319	2060
45°	2493	2038	1171	1980	2527	1909
55°	1261	1261	436	1315	1536	1144
65°	380	448	139	577	587	405
75°	58	68	20	117	114	85
85°	20	12	10	20	27	21
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°	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9
2.5°	4538.4	4543.3	4540.8	4540.8	4538.4	4540.8	4540.8	4545.7	4545.7	4540.8	4538.4
5°	4528.6	4533.5	4533.5	4528.6	4528.6	4540.8	4533.5	4538.4	4538.4	4535.9	4535.9
7.5°	4506.8	4506.8	4516.5	4509.2	4509.2	4516.5	4514.0	4518.9	4523.8	4526.2	4526.2
10°	4458.0	4462.9	4465.3	4465.3	4467.8	4475.1	4479.9	4489.7	4494.5	4499.4	4501.9
12.5°	4397.2	4404.5	4406.9	4404.5	4411.8	4421.5	4433.7	4445.9	4453.2	4462.9	4470.2
15°	4324.1	4324.1	4329.0	4336.3	4341.2	4355.8	4367.9	4382.5	4402.0	4414.2	4426.4
17.5°	4243.8	4248.7	4255.9	4255.9	4265.7	4290.0	4297.3	4319.3	4341.2	4353.3	4377.7
20°	4156.2	4161.0	4168.3	4173.2	4185.3	4204.8	4219.4	4238.9	4263.3	4285.2	4309.5
22.5°	4087.9	4078.2	4083.1	4087.9	4100.2	4117.2	4134.2	4158.5	4182.9	4204.8	4229.2
25°	3956.5	3958.9	3966.2	3971.1	3985.7	4000.3	4019.8	4049.0	4070.9	4095.3	4122.0
27.5°	3778.8	3781.2	3793.3	3793.3	3805.5	3829.9	3842.0	3866.4	3895.6	3919.9	3951.6
30°	3576.7	3581.5	3581.5	3591.3	3598.5	3610.8	3622.9	3647.3	3661.9	3683.8	3727.6
32.5°	3391.6	3396.5	3394.0	3391.6	3384.3	3381.9	3379.4	3384.3	3389.2	3396.5	3413.5
35°	3282.1	3269.9	3260.2	3243.1	3223.6	3199.3	3177.3	3148.2	3121.3	3099.4	3075.1
37.5°	3177.3	3174.9	3160.3	3135.9	3097.0	3053.2	3002.1	2938.8	2875.4	2807.3	2741.6
40°	3031.3	3023.9	3011.8	2977.7	2933.9	2880.3	2812.2	2734.2	2631.9	2527.3	2420.2
42.5°	2782.9	2785.3	2770.8	2743.9	2702.6	2651.4	2580.8	2495.6	2386.1	2261.9	2123.1
45°	2493.2	2493.2	2488.3	2466.4	2437.2	2395.8	2342.2	2271.6	2164.5	2037.9	1889.3
47.5°	2191.3	2193.7	2186.4	2181.6	2169.3	2142.6	2103.6	2050.1	1974.6	1852.8	1704.3
50°	1884.5	1884.5	1896.7	1894.2	1894.2	1884.5	1867.5	1835.8	1770.1	1672.7	1533.9
52.5°	1577.7	1582.6	1589.9	1599.6	1611.8	1631.3	1611.8	1597.2	1555.8	1480.3	1361.0
55°	1261.2	1266.1	1278.2	1295.3	1309.9	1329.4	1334.2	1334.2	1312.3	1261.2	1171.1
57.5°	991.0	983.6	993.4	1008.0	1027.5	1047.0	1061.6	1078.6	1076.2	1042.1	969.0
60°	745.0	747.5	754.8	769.4	784.0	801.0	820.5	835.1	842.4	825.4	779.1
62.5°	543.0	543.0	552.7	567.3	574.6	599.0	611.1	618.4	625.7	623.3	594.1
65°	379.8	384.7	389.6	396.9	404.2	418.8	426.1	440.7	445.6	448.0	426.1
67.5°	267.8	260.5	265.4	270.2	277.6	287.3	301.9	301.9	309.2	309.2	294.6
70°	170.4	170.4	172.9	180.2	185.0	187.5	192.4	197.2	204.5	202.1	202.1
72.5°	114.4	112.0	114.4	116.9	119.3	126.6	126.6	129.0	133.9	136.4	126.6
75°	58.4	60.9	65.7	63.3	70.6	65.7	68.2	75.5	73.0	68.2	68.2
77.5°	48.7	48.7	48.7	46.3	51.1	51.1	48.7	53.6	51.1	51.1	48.7
80°	34.1	36.5	34.1	31.6	34.1	31.6	31.6	31.6	31.6	31.6	29.2
82.5°	26.8	21.9	24.4	21.9	24.4	24.4	21.9	19.5	19.5	21.9	19.5
85°	19.5	14.6	17.0	17.0	14.6	14.6	14.6	14.6	14.6	12.2	12.2
87.5°	12.2	7.3	7.3	7.3	9.7	9.7	9.7	7.3	9.7	9.7	4.9
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°	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9
2.5°	4543.3	4540.8	4545.7	4543.3	4543.3	4540.8	4543.3	4540.8	4545.7	4535.9	4538.4
5°	4543.3	4538.4	4540.8	4543.3	4545.7	4540.8	4540.8	4540.8	4545.7	4540.8	4543.3
7.5°	4533.5	4531.1	4538.4	4543.3	4540.8	4538.4	4543.3	4540.8	4545.7	4543.3	4548.1
10°	4514.0	4516.5	4521.4	4528.6	4531.1	4533.5	4538.4	4538.4	4545.7	4535.9	4540.8
12.5°	4484.8	4494.5	4506.8	4511.6	4521.4	4521.4	4526.2	4528.6	4533.5	4531.1	4538.4
15°	4448.3	4460.5	4475.1	4487.3	4499.4	4506.8	4514.0	4516.5	4523.8	4516.5	4518.9
17.5°	4404.5	4419.1	4441.0	4455.6	4475.1	4482.4	4492.1	4497.0	4504.3	4499.4	4501.9
20°	4343.6	4360.7	4385.0	4406.9	4419.1	4436.1	4448.3	4455.6	4460.5	4455.6	4458.0
22.5°	4258.4	4282.8	4314.4	4331.4	4355.8	4370.4	4372.8	4389.9	4402.0	4389.9	4394.8
25°	4158.5	4182.9	4207.3	4243.8	4265.7	4282.8	4299.8	4302.2	4314.4	4311.9	4309.5
27.5°	3993.0	4024.7	4066.0	4095.3	4124.5	4151.3	4170.8	4175.6	4187.8	4182.9	4185.3
30°	3766.5	3800.7	3839.6	3885.9	3927.3	3954.0	3978.4	3995.4	4007.6	4000.3	3997.9
32.5°	3445.2	3479.3	3520.7	3566.9	3615.6	3654.5	3683.8	3705.7	3720.3	3715.4	3703.3
35°	3077.6	3087.3	3114.1	3150.6	3191.9	3233.3	3260.2	3284.5	3301.5	3306.4	3306.4
37.5°	2700.2	2668.5	2649.0	2649.0	2673.3	2690.4	2714.8	2729.3	2756.2	2765.9	2773.2
40°	2334.9	2261.9	2193.7	2142.6	2108.5	2106.1	2106.1	2113.3	2137.7	2169.3	2198.6
42.5°	2008.7	1891.8	1787.1	1692.2	1624.0	1585.0	1568.0	1570.4	1589.9	1619.1	1667.8
45°	1748.2	1602.1	1470.6	1356.2	1263.6	1202.8	1173.6	1171.1	1185.7	1219.8	1273.4
47.5°	1546.1	1390.2	1241.7	1110.2	1010.4	944.7	910.6	900.9	910.6	942.2	1005.6
50°	1378.1	1217.4	1064.0	927.6	820.5	752.4	720.7	708.5	720.7	747.5	810.8
52.5°	1222.2	1056.7	913.0	781.6	667.1	608.7	574.6	567.3	574.6	606.2	657.4
55°	1042.1	900.9	759.6	628.2	528.4	469.9	443.1	435.8	443.1	472.4	525.9
57.5°	864.4	742.6	618.4	499.1	413.9	362.8	338.4	328.7	345.7	365.2	428.5
60°	698.8	601.4	496.7	392.0	321.4	275.1	255.6	253.2	258.1	282.4	326.2
62.5°	547.8	467.5	384.7	299.5	241.0	221.6	197.2	194.8	199.6	214.2	248.4
65°	394.4	343.3	280.0	219.1	172.9	146.1	136.4	138.8	143.6	153.4	185.0
67.5°	275.1	238.6	194.8	153.4	119.3	107.1	97.4	95.0	97.4	114.4	131.5
70°	185.0	163.1	131.5	116.9	82.8	65.7	68.2	60.9	70.6	70.6	85.2
72.5°	121.7	107.1	87.6	68.2	58.4	46.3	46.3	43.8	48.7	51.1	63.3
75°	63.3	48.7	48.7	34.1	24.4	12.2	21.9	19.5	17.0	19.5	24.4
77.5°	43.8	36.5	34.1	26.8	24.4	19.5	19.5	19.5	19.5	21.9	24.4
80°	26.8	26.8	19.5	17.0	14.6	12.2	14.6	14.6	14.6	14.6	17.0
82.5°	17.0	14.6	14.6	12.2	12.2	9.7	9.7	9.7	9.7	9.7	14.6
85°	14.6	9.7	9.7	7.3	9.7	17.0	7.3	9.7	9.7	9.7	7.3
87.5°	4.9	7.3	7.3	7.3	4.9	2.4	4.9	7.3	7.3	12.2	9.7
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°	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9	4535.9
2.5°	4543.3	4545.7	4545.7	4543.3	4543.3	4538.4	4548.1	4540.8	4543.3	4553.0	4545.7
5°	4548.1	4550.5	4550.5	4548.1	4548.1	4548.1	4550.5	4550.5	4548.1	4545.7	4550.5
7.5°	4557.9	4555.4	4555.4	4550.5	4550.5	4545.7	4550.5	4543.3	4548.1	4543.3	4550.5
10°	4545.7	4548.1	4545.7	4543.3	4543.3	4540.8	4540.8	4533.5	4535.9	4528.6	4533.5
12.5°	4538.4	4535.9	4535.9	4531.1	4526.2	4521.4	4518.9	4511.6	4511.6	4494.5	4501.9
15°	4518.9	4521.4	4514.0	4504.3	4499.4	4487.3	4482.4	4472.6	4462.9	4450.8	4453.2
17.5°	4501.9	4494.5	4484.8	4475.1	4455.6	4445.9	4436.1	4421.5	4416.6	4402.0	4397.2
20°	4450.8	4445.9	4433.7	4416.6	4404.5	4382.5	4372.8	4358.2	4346.0	4331.4	4324.1
22.5°	4385.0	4380.1	4365.5	4348.5	4329.0	4319.3	4309.5	4282.8	4270.5	4255.9	4253.5
25°	4302.2	4294.9	4280.3	4260.8	4251.1	4224.3	4214.5	4195.1	4190.2	4175.6	4173.2
27.5°	4175.6	4165.9	4148.8	4124.5	4107.4	4090.4	4080.7	4066.0	4061.2	4046.5	4044.2
30°	3985.7	3973.5	3939.4	3929.7	3900.5	3883.4	3883.4	3863.9	3866.4	3856.7	3856.7
32.5°	3686.2	3666.8	3639.9	3620.5	3601.0	3591.3	3591.3	3583.9	3588.8	3588.8	3593.7
35°	3289.3	3262.6	3247.9	3235.8	3235.8	3245.5	3274.8	3282.1	3296.7	3308.8	3318.6
37.5°	2780.5	2778.1	2795.1	2809.7	2846.2	2887.6	2938.8	2982.6	3023.9	3053.2	3082.4
40°	2230.2	2291.1	2339.8	2408.0	2463.9	2544.3	2636.8	2712.3	2782.9	2834.1	2887.6
42.5°	1740.8	1818.8	1921.0	2020.8	2120.7	2230.2	2352.0	2456.7	2549.2	2619.8	2675.8
45°	1356.2	1463.3	1587.5	1714.1	1843.1	1979.5	2106.1	2213.2	2310.6	2383.6	2439.6
47.5°	1093.2	1210.1	1351.3	1490.1	1636.2	1779.8	1921.0	2013.6	2093.9	2152.3	2203.5
50°	903.3	1027.5	1176.0	1334.2	1480.3	1624.0	1745.7	1835.8	1901.6	1952.7	1984.3
52.5°	754.8	886.2	1044.5	1202.8	1348.8	1480.3	1589.9	1658.1	1711.6	1748.2	1777.3
55°	623.3	749.9	898.4	1047.0	1190.6	1314.8	1404.8	1456.0	1497.3	1519.3	1536.3
57.5°	508.9	625.7	762.1	898.4	1022.6	1124.9	1195.5	1246.6	1266.1	1283.1	1280.7
60°	399.3	508.9	633.0	749.9	857.0	939.8	991.0	1020.2	1034.8	1042.1	1037.2
62.5°	314.1	413.9	508.9	611.1	689.0	759.6	808.4	808.4	815.6	818.1	825.4
65°	233.7	309.2	392.0	467.5	530.8	577.0	603.8	611.1	620.9	618.4	613.6
67.5°	172.9	228.9	289.7	345.7	389.6	418.8	438.2	455.3	452.9	448.0	445.6
70°	119.3	155.8	209.4	243.5	275.1	304.4	309.2	311.6	314.1	316.5	311.6
72.5°	82.8	109.6	138.8	168.0	187.5	199.6	211.8	214.2	214.2	214.2	211.8
75°	41.4	56.0	82.8	95.0	112.0	116.9	126.6	126.6	133.9	124.2	121.7
77.5°	36.5	43.8	58.4	68.2	75.5	82.8	85.2	92.5	90.1	85.2	87.6
80°	21.9	26.8	36.5	41.4	51.1	53.6	56.0	58.4	56.0	58.4	58.4
82.5°	17.0	19.5	24.4	24.4	31.6	31.6	34.1	34.1	36.5	36.5	36.5
85°	9.7	17.0	14.6	29.2	19.5	19.5	24.4	29.2	24.4	24.4	29.2
87.5°	9.7	9.7	7.3	9.7	9.7	9.7	12.2	14.6	14.6	17.0	14.6
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: P249120

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4535.9	4535.9	4535.9	4535.9
2.5°	4543.3	4548.1	4540.8	4538.4
5°	4550.5	4550.5	4545.7	4545.7
7.5°	4550.5	4550.5	4543.3	4538.4
10°	4531.1	4531.1	4523.8	4518.9
12.5°	4494.5	4494.5	4492.1	4484.8
15°	4448.3	4448.3	4438.5	4431.3
17.5°	4385.0	4389.9	4377.7	4377.7
20°	4316.8	4314.4	4304.7	4299.8
22.5°	4246.2	4241.3	4238.9	4224.3
25°	4170.8	4165.9	4158.5	4151.3
27.5°	4041.7	4039.3	4031.9	4022.2
30°	3844.5	3842.0	3832.3	3832.3
32.5°	3588.8	3586.4	3576.7	3579.1
35°	3323.4	3333.2	3328.3	3318.6
37.5°	3101.9	3109.2	3114.1	3109.2
40°	2916.8	2938.8	2941.2	2946.1
42.5°	2719.6	2748.8	2758.6	2763.4
45°	2483.4	2510.2	2532.2	2527.3
47.5°	2242.4	2261.9	2281.3	2266.8
50°	2011.1	2023.3	2030.6	2030.6
52.5°	1792.0	1792.0	1789.6	1792.0
55°	1541.2	1541.2	1531.5	1536.3
57.5°	1278.2	1283.1	1275.8	1263.6
60°	1034.8	1022.6	1017.7	1010.4
62.5°	805.9	805.9	788.9	810.8
65°	603.8	596.5	589.2	586.8
67.5°	438.2	435.8	428.5	426.1
70°	309.2	299.5	297.0	292.2
72.5°	207.0	207.0	202.1	202.1
75°	126.6	114.4	112.0	114.4
77.5°	87.6	85.2	85.2	82.8
80°	58.4	56.0	60.9	53.6
82.5°	36.5	39.0	36.5	39.0
85°	24.4	29.2	26.8	26.8
87.5°	14.6	14.6	14.6	14.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)