

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: FAIL-SAFE

Report Number: P838101

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD**

Issue Date: 5/21/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P838101
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

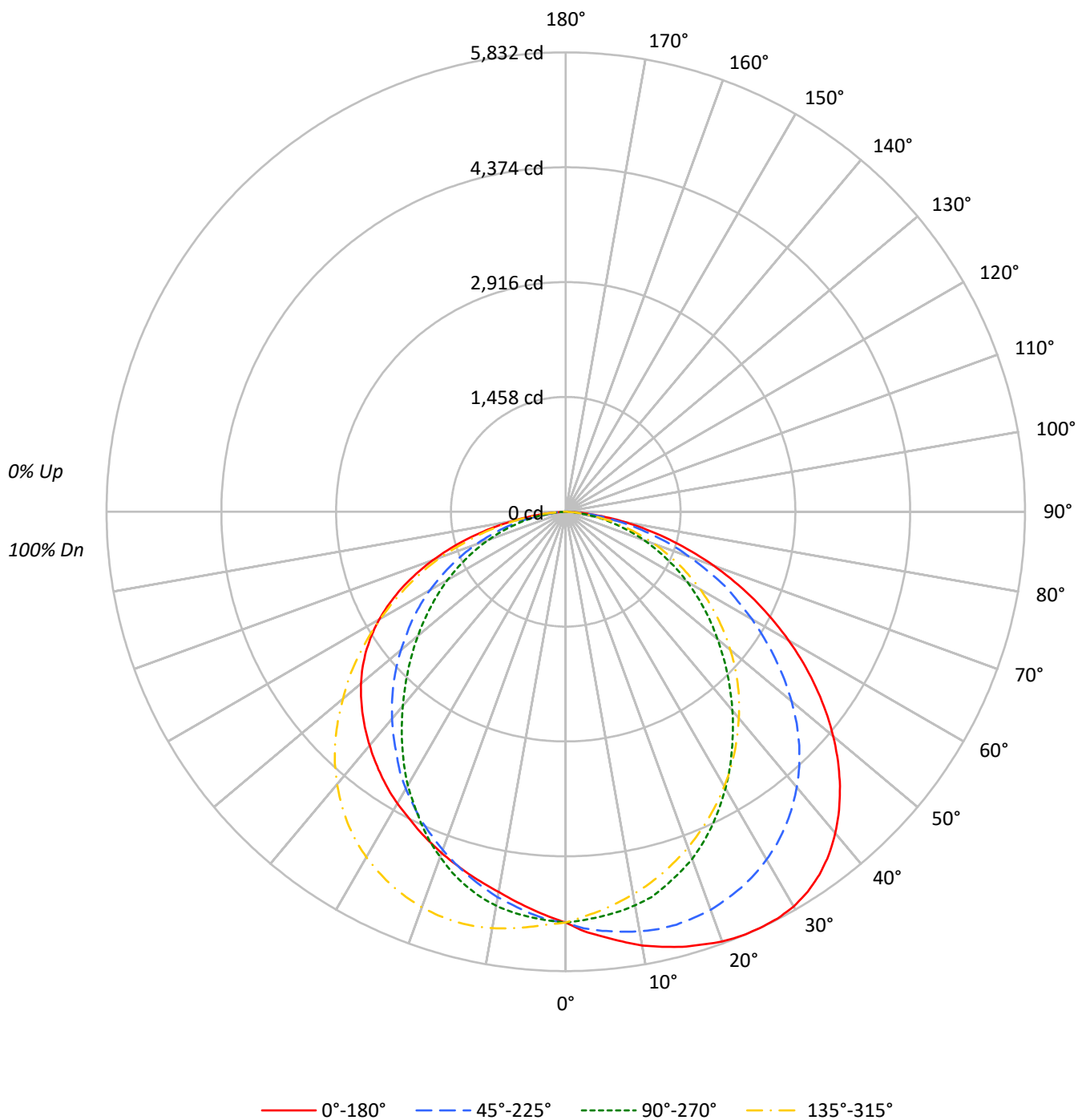
Lumens per Lamp: N/A
Luminaire Lumens: 15300.4 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 133.2
Input Voltage (V): 120
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

TEST NUMBER: P838101

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838101

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	94	97	94	91		94	91	89		90
2	99	91	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	88	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		62
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		56
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	7017	7017	7017	7017
5°	7313	6966	6835	6978
10°	7639	6931	6696	6941
15°	7966	6842	6631	6844
20°	8314	6718	6601	6680
25°	8658	6530	6601	6464
30°	8993	6303	6645	6233
35°	9231	6044	6712	5948
40°	9354	5784	6805	5654
45°	9372	5521	6937	5382
50°	9284	5268	7107	5128
55°	9092	5034	7265	4894
60°	8806	4789	7362	4665
65°	8412	4508	7324	4404
70°	7858	4178	7063	4101
75°	7070	3725	6482	3706
80°	5995	3120	5448	3167
85°	4170	2066	3455	2123

TEST NUMBER: P838101

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	495.1	3.2
10°-20°	1433.8	9.4
20°-30°	2197.4	14.4
30°-40°	2671.9	17.5
40°-50°	2777.6	18.2
50°-60°	2509.0	16.4
60°-70°	1907.5	12.5
70°-80°	1063.4	7.0
80°-90°	244.8	1.6
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°	4126.3	27.0
0°-40°	6798.2	44.4
0°-60°	12084.7	79.0
0°-90°	15300.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15300.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5215	5215	5215	5215	5215	
5°	5415	5158	5061	5166	5415	522
15°	5719	4912	4760	4913	5719	1621
25°	5832	4399	4446	4354	5832	2694
35°	5620	3680	4086	3622	5620	3510
45°	4926	2901	3646	2828	4926	3792
55°	3876	2146	3097	2086	3876	3460
65°	2642	1416	2300	1383	2642	2611
75°	1360	716	1247	713	1360	1445
85°	270	134	224	138	270	340
90°	0	0	0	0	0	

TEST NUMBER: P838101

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1
2.5°	5330.7	5252.8	5254.0	5322.2	5269.8	5295.4	5222.4	5250.4	5241.9	5248.0	5188.3
5°	5414.6	5330.7	5329.5	5387.8	5329.5	5340.4	5248.0	5266.2	5239.4	5222.4	5157.9
7.5°	5503.4	5419.5	5411.0	5462.1	5385.4	5376.9	5274.7	5274.7	5226.1	5183.5	5122.7
10°	5591.0	5504.6	5493.7	5532.6	5437.7	5409.7	5285.7	5266.2	5201.7	5138.5	5072.8
12.5°	5656.7	5569.1	5560.6	5584.9	5477.9	5426.8	5285.7	5248.0	5153.1	5064.3	5013.2
15°	5718.7	5628.7	5605.6	5617.8	5494.9	5426.8	5268.6	5210.2	5088.6	4971.8	4912.2
17.5°	5762.5	5676.2	5653.0	5651.8	5503.4	5406.1	5232.1	5151.8	5005.9	4864.8	4805.1
20°	5806.3	5720.0	5690.8	5668.9	5501.0	5378.1	5178.6	5070.3	4900.0	4741.9	4692.0
22.5°	5828.2	5739.4	5707.8	5674.9	5485.2	5327.0	5112.9	4975.5	4780.8	4592.3	4550.9
25°	5831.9	5740.6	5706.6	5659.1	5453.5	5266.2	5027.8	4861.1	4643.4	4434.1	4398.8
27.5°	5822.1	5722.4	5688.3	5631.1	5406.1	5192.0	4926.8	4730.9	4497.4	4266.2	4228.5
30°	5788.1	5687.1	5654.3	5580.1	5339.2	5100.8	4816.1	4586.2	4335.6	4089.9	4057.0
32.5°	5720.0	5621.4	5594.7	5520.4	5266.2	4994.9	4687.1	4430.5	4156.8	3922.0	3873.3
35°	5620.2	5521.7	5504.6	5426.8	5164.0	4868.4	4546.0	4260.2	3967.0	3727.3	3679.9
37.5°	5490.0	5407.3	5381.8	5305.1	5043.6	4724.9	4384.2	4075.3	3773.6	3515.7	3486.5
40°	5325.8	5248.0	5228.5	5160.4	4903.7	4565.5	4209.1	3884.3	3574.1	3334.4	3293.0
42.5°	5138.5	5065.5	5054.5	4984.0	4730.9	4389.1	4019.3	3686.0	3366.0	3134.9	3093.5
45°	4925.6	4855.0	4852.6	4785.7	4542.4	4193.3	3819.8	3485.3	3162.9	2923.2	2901.3
47.5°	4690.8	4627.5	4627.5	4565.5	4331.9	3977.9	3614.2	3276.0	2958.5	2746.8	2707.9
50°	4435.3	4375.7	4357.5	4327.1	4099.6	3743.1	3397.7	3071.6	2756.6	2554.6	2516.9
52.5°	4162.8	4111.7	4123.9	4068.0	3847.8	3498.6	3178.7	2841.7	2553.4	2369.7	2332.0
55°	3875.7	3802.8	3813.7	3793.0	3585.0	3246.8	2933.0	2652.0	2353.9	2181.2	2145.9
57.5°	3577.7	3482.8	3521.7	3509.6	3305.2	2988.9	2707.9	2436.6	2155.6	1996.3	1962.2
60°	3272.4	3181.1	3221.3	3210.3	3018.1	2731.0	2475.6	2223.7	1958.6	1813.8	1779.7
62.5°	2958.5	2874.6	2911.1	2902.6	2726.2	2467.0	2244.4	2013.3	1760.3	1630.1	1598.5
65°	2642.2	2561.9	2594.8	2588.7	2425.7	2228.6	2007.2	1795.5	1560.8	1447.6	1416.0
67.5°	2318.6	2244.4	2274.8	2274.8	2125.2	1936.7	1768.8	1575.4	1364.9	1267.6	1238.4
70°	1997.5	1928.1	1954.9	1952.5	1826.0	1672.7	1527.9	1355.2	1166.6	1086.3	1062.0
72.5°	1673.9	1613.1	1637.4	1635.0	1529.1	1430.6	1287.0	1137.4	973.2	908.7	886.8
75°	1360.0	1302.9	1326.0	1323.5	1237.2	1144.7	1048.6	924.5	783.4	738.4	716.5
77.5°	1060.8	1002.4	1021.9	1021.9	958.6	891.7	815.1	718.9	619.2	570.5	554.7
80°	773.7	745.7	736.0	737.2	694.6	650.8	611.9	519.4	446.5	413.6	402.7
82.5°	508.5	485.4	475.6	478.1	453.8	427.0	402.7	338.2	289.5	270.1	264.0
85°	270.1	253.0	244.5	250.6	245.7	231.1	219.0	175.2	144.8	137.5	133.8
87.5°	85.2	74.2	68.1	90.0	76.6	68.1	65.7	52.3	40.1	40.1	38.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838101

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1
2.5°	5207.8	5207.8	5160.4	5149.4	5144.6	5150.6	5103.2	5094.7	5162.8	5139.7	5087.4
5°	5166.4	5164.0	5097.1	5084.9	5084.9	5077.6	5024.1	5012.0	5080.1	5060.6	5003.4
7.5°	5115.4	5108.1	5029.0	5020.5	5008.3	5003.4	4943.8	4935.3	4993.7	4981.5	4928.0
10°	5053.3	5046.0	4952.3	4946.3	4932.9	4923.1	4867.2	4861.1	4920.7	4901.3	4858.7
12.5°	4971.8	4958.4	4862.3	4856.2	4845.3	4841.6	4786.9	4784.5	4850.2	4830.7	4785.7
15°	4864.8	4853.8	4746.8	4749.2	4750.4	4750.4	4706.6	4704.2	4768.7	4760.1	4711.5
17.5°	4746.8	4732.2	4630.0	4637.3	4645.8	4655.5	4621.5	4627.5	4695.7	4684.7	4640.9
20°	4612.9	4598.3	4498.6	4519.3	4537.5	4557.0	4535.1	4552.1	4615.4	4610.5	4577.7
22.5°	4463.3	4448.7	4356.3	4387.9	4418.3	4454.8	4445.1	4464.5	4531.4	4530.2	4501.0
25°	4280.8	4284.5	4203.0	4241.9	4293.0	4344.1	4347.7	4379.4	4453.6	4446.3	4419.5
27.5°	4110.5	4115.4	4029.0	4094.7	4162.8	4228.5	4244.3	4288.1	4363.6	4357.5	4334.4
30°	3931.7	3937.8	3853.9	3943.9	4026.6	4106.9	4140.9	4200.6	4277.2	4277.2	4252.9
32.5°	3745.6	3756.5	3668.9	3789.4	3885.5	3979.1	4038.8	4100.8	4188.4	4186.0	4165.3
35°	3554.6	3566.8	3486.5	3639.7	3735.9	3850.2	3924.4	4007.1	4085.0	4086.2	4070.4
37.5°	3360.0	3374.6	3301.6	3469.4	3578.9	3714.0	3808.8	3891.6	3977.9	3982.8	3968.2
40°	3166.5	3182.3	3119.1	3280.9	3419.6	3570.4	3679.9	3777.2	3872.1	3874.5	3864.8
42.5°	2973.1	2990.1	2942.7	3100.8	3257.8	3419.6	3548.5	3659.2	3756.5	3762.6	3751.7
45°	2784.6	2799.2	2765.1	2937.8	3088.7	3265.1	3413.5	3538.8	3637.3	3645.8	3642.2
47.5°	2597.2	2610.6	2580.2	2738.3	2912.3	3099.6	3271.2	3409.8	3514.4	3524.2	3521.7
50°	2413.5	2424.5	2391.6	2557.1	2729.8	2929.3	3108.1	3268.7	3385.5	3395.2	3394.0
52.5°	2231.0	2242.0	2214.0	2388.0	2544.9	2755.4	2950.0	3124.0	3239.5	3254.1	3256.6
55°	2054.7	2059.5	2037.6	2204.3	2356.3	2576.5	2800.4	2969.5	3085.0	3097.2	3104.5
57.5°	1878.3	1879.5	1861.2	2020.6	2166.6	2391.6	2626.4	2804.0	2913.5	2925.7	2936.6
60°	1703.1	1701.9	1681.2	1835.7	1975.6	2198.2	2442.7	2619.1	2724.9	2735.9	2750.5
62.5°	1529.1	1525.5	1507.2	1649.6	1780.9	2001.1	2246.9	2417.2	2518.1	2525.4	2544.9
65°	1356.4	1352.7	1335.7	1467.1	1586.3	1796.8	2037.6	2199.4	2290.7	2300.4	2296.7
67.5°	1186.1	1178.8	1165.4	1283.4	1391.7	1586.3	1817.4	1971.9	2047.4	2055.9	2079.0
70°	1015.8	1007.3	976.8	1102.1	1197.0	1371.0	1586.3	1723.8	1787.0	1795.5	1791.9
72.5°	847.9	839.4	806.5	922.1	1002.4	1154.5	1346.7	1461.0	1515.8	1523.0	1523.0
75°	684.9	680.0	659.3	746.9	813.8	937.9	1100.9	1195.8	1238.4	1246.9	1244.5
77.5°	528.0	524.3	503.6	579.1	631.4	723.8	855.2	929.4	961.0	970.8	991.4
80°	378.3	377.1	344.3	418.5	441.6	519.4	615.5	672.7	689.8	703.1	717.7
82.5°	242.1	243.3	210.5	273.7	283.4	333.3	392.9	428.2	440.4	451.3	462.3
85°	118.0	122.9	104.6	144.8	146.0	171.5	197.1	210.5	215.3	223.8	233.6
87.5°	30.4	35.3	19.5	41.4	36.5	47.4	54.7	58.4	57.2	63.3	66.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838101

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1
2.5°	5104.4	5143.3	5123.9	5187.1	5211.5	5172.5	5240.7	5241.9	5193.2	5250.4	5282.0
5°	5025.3	5065.5	5053.3	5119.0	5149.4	5115.4	5198.1	5213.9	5166.4	5230.9	5282.0
7.5°	4945.0	4992.5	4976.7	5043.6	5080.1	5053.3	5142.1	5167.7	5131.2	5201.7	5269.8
10°	4875.7	4915.8	4898.8	4969.4	5001.0	4979.1	5066.7	5114.1	5080.1	5166.4	5248.0
12.5°	4807.6	4840.4	4821.0	4879.4	4909.8	4881.8	4988.8	5032.6	5008.3	5098.3	5202.9
15°	4720.0	4756.5	4729.7	4782.0	4805.1	4780.8	4868.4	4943.8	4913.4	5012.0	5127.5
17.5°	4653.1	4673.8	4637.3	4678.6	4692.0	4659.2	4748.0	4822.2	4800.3	4907.3	5041.1
20°	4578.9	4595.9	4544.8	4567.9	4566.7	4525.4	4606.9	4679.8	4665.3	4783.3	4935.3
22.5°	4496.2	4504.7	4445.1	4449.9	4447.5	4379.4	4452.4	4526.6	4520.5	4639.7	4810.0
25°	4408.6	4409.8	4333.1	4330.7	4304.0	4223.7	4288.1	4372.1	4353.8	4482.8	4661.6
27.5°	4322.2	4310.0	4217.6	4195.7	4153.1	4057.0	4114.2	4189.6	4178.7	4305.2	4503.5
30°	4229.7	4213.9	4100.8	4060.7	3998.6	3887.9	3935.4	4005.9	4012.0	4122.7	4330.7
32.5°	4142.2	4102.0	3976.7	3918.3	3840.5	3711.5	3737.1	3808.8	3818.6	3930.5	4144.6
35°	4029.0	4002.3	3847.8	3748.0	3671.4	3530.3	3557.0	3606.9	3621.5	3731.0	3948.7
37.5°	3922.0	3879.4	3715.2	3593.5	3495.0	3346.6	3353.9	3405.0	3419.6	3530.3	3745.6
40°	3811.3	3750.4	3574.1	3431.7	3318.6	3162.9	3154.4	3207.9	3218.8	3327.1	3521.7
42.5°	3693.3	3620.3	3422.0	3266.3	3136.1	2978.0	2960.9	3007.2	3019.3	3125.2	3316.2
45°	3574.1	3486.5	3266.3	3096.0	2953.6	2791.9	2774.8	2810.1	2828.3	2928.1	3111.8
47.5°	3447.5	3345.4	3105.7	2915.9	2768.7	2606.9	2586.3	2621.5	2636.1	2734.7	2908.6
50°	3314.9	3190.9	2940.3	2731.0	2585.0	2425.7	2395.3	2436.6	2450.0	2542.5	2712.8
52.5°	3169.0	3031.5	2763.9	2544.9	2398.9	2246.9	2210.4	2250.5	2266.3	2356.3	2513.3
55°	3014.5	2866.1	2586.3	2373.4	2215.2	2066.8	2036.4	2052.2	2086.3	2171.4	2317.4
57.5°	2840.5	2693.3	2398.9	2182.4	2030.3	1888.0	1862.5	1877.0	1908.7	1991.4	2122.8
60°	2655.6	2499.9	2207.9	1991.4	1844.2	1709.2	1686.1	1699.4	1733.5	1808.9	1930.6
62.5°	2473.1	2298.0	2010.9	1795.5	1661.7	1536.4	1530.3	1525.5	1557.1	1630.1	1737.2
65°	2251.7	2083.9	1805.3	1600.9	1479.3	1366.1	1341.8	1352.7	1383.2	1450.1	1562.0
67.5°	2014.5	1862.5	1594.8	1406.3	1298.0	1197.0	1176.3	1181.2	1212.8	1271.2	1368.6
70°	1762.7	1628.9	1379.5	1210.4	1119.2	1024.3	1010.9	1012.1	1042.5	1093.6	1178.8
72.5°	1498.7	1378.3	1161.8	1017.0	941.6	873.4	861.3	846.7	874.7	918.5	991.4
75°	1229.9	1124.0	945.2	827.2	767.6	710.4	699.5	684.9	712.9	750.6	807.8
77.5°	958.6	873.4	734.8	643.5	597.3	554.7	545.0	529.2	557.2	585.1	630.1
80°	693.4	631.4	548.6	452.5	436.7	408.7	399.0	382.0	408.7	427.0	461.1
82.5°	447.7	406.3	358.9	292.0	289.5	268.8	264.0	244.5	268.8	279.8	305.3
85°	226.3	206.8	194.6	148.4	153.3	139.9	138.7	118.0	137.5	142.3	156.9
87.5°	64.5	68.1	60.8	36.5	46.2	43.8	43.8	31.6	43.8	43.8	49.9
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: P838101

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-4STD-35-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1	5215.1
2.5°	5220.0	5240.7	5245.5	5244.3	5257.7	5330.7	5306.3	5330.7
5°	5232.1	5278.4	5290.5	5307.6	5329.5	5412.2	5385.4	5414.6
7.5°	5239.4	5308.8	5335.5	5368.4	5403.7	5496.1	5474.2	5503.4
10°	5239.4	5329.5	5368.4	5423.1	5470.6	5577.6	5556.9	5591.0
12.5°	5217.5	5333.1	5387.8	5464.5	5525.3	5640.9	5632.4	5656.7
15°	5172.5	5314.9	5390.3	5488.8	5564.2	5693.2	5689.5	5718.7
17.5°	5111.7	5283.2	5374.5	5498.5	5593.4	5738.2	5746.7	5762.5
20°	5035.1	5223.6	5342.8	5494.9	5614.1	5773.5	5784.4	5806.3
22.5°	4934.1	5151.8	5295.4	5479.1	5616.5	5788.1	5807.5	5828.2
25°	4814.9	5065.5	5233.4	5448.7	5604.4	5786.9	5813.6	5831.9
27.5°	4678.6	4953.6	5154.3	5400.0	5570.3	5767.4	5800.2	5822.1
30°	4520.5	4834.3	5064.3	5336.8	5524.1	5730.9	5766.2	5788.1
32.5°	4357.5	4703.0	4957.2	5255.3	5457.2	5672.5	5702.9	5720.0
35°	4179.9	4543.6	4828.3	5150.6	5370.8	5578.8	5602.0	5620.2
37.5°	3986.4	4370.9	4681.1	5032.6	5249.2	5448.7	5469.4	5490.0
40°	3786.9	4189.6	4515.6	4887.9	5104.4	5289.3	5311.2	5325.8
42.5°	3586.2	3988.9	4339.2	4717.6	4932.9	5110.5	5123.9	5138.5
45°	3383.1	3780.9	4140.9	4529.0	4741.9	4908.6	4913.4	4925.6
47.5°	3176.3	3565.5	3923.2	4313.7	4524.1	4676.2	4681.1	4690.8
50°	2968.2	3350.2	3690.8	4081.3	4286.9	4447.5	4425.6	4435.3
52.5°	2763.9	3124.0	3471.9	3830.7	4033.9	4176.2	4182.3	4162.8
55°	2563.2	2902.6	3222.5	3568.0	3761.4	3872.1	3868.4	3875.7
57.5°	2360.0	2678.7	2971.9	3288.2	3476.7	3581.4	3603.3	3577.7
60°	2153.2	2452.5	2715.2	3001.1	3183.6	3271.2	3296.7	3272.4
62.5°	1947.6	2222.5	2461.0	2710.3	2879.4	2987.7	2985.3	2958.5
65°	1742.0	1991.4	2204.3	2416.0	2563.2	2671.4	2666.6	2642.2
67.5°	1552.2	1757.8	1948.8	2120.3	2248.1	2322.3	2347.8	2318.6
70°	1343.0	1520.6	1688.5	1826.0	1931.8	1998.7	2023.0	1997.5
72.5°	1133.8	1284.6	1402.6	1535.2	1616.7	1672.7	1698.2	1673.9
75°	927.0	1051.1	1147.2	1250.6	1307.7	1355.2	1384.4	1360.0
77.5°	726.2	822.3	899.0	974.4	1040.1	1051.1	1076.6	1060.8
80°	535.3	604.6	660.6	710.4	757.9	762.7	783.4	773.7
82.5°	356.4	402.7	417.3	469.6	500.0	495.1	515.8	508.5
85°	188.6	216.5	242.1	257.9	274.9	259.1	277.4	270.1
87.5°	63.3	66.9	58.4	82.7	91.2	77.9	88.8	85.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)