

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P252639

Luminaire Tested: **LD6B70D010TE EU6B60708050 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252639  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B70D010TE EU6B60708050 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

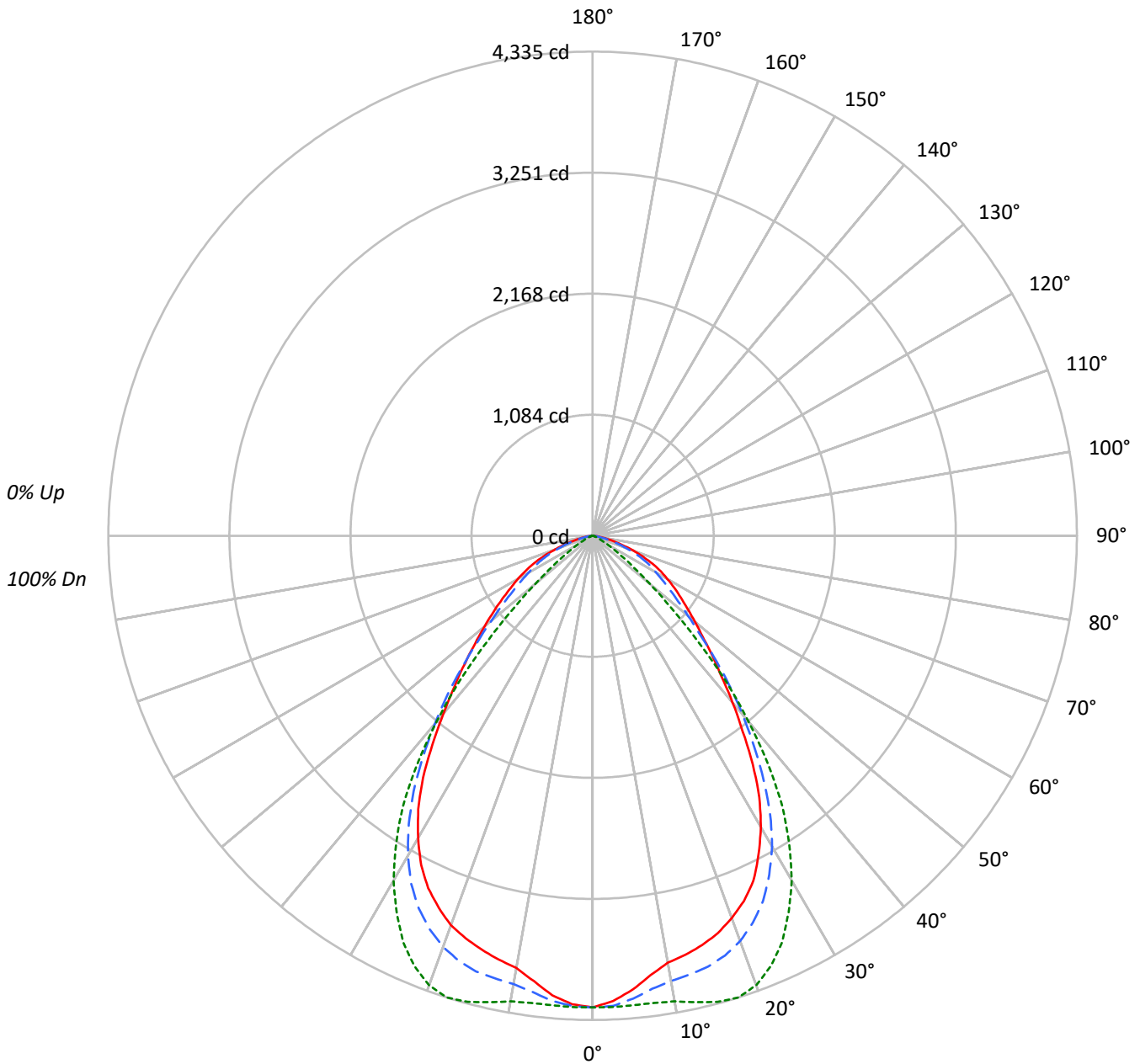
Lumens per Lamp: N/A  
Luminaire Lumens: 7314.0 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 79.45  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage 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									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	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	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	275492	275492	275492
5°	267277	276230	270473
10°	257105	280391	260338
15°	256194	291809	259166
20°	252842	297240	257590
25°	245289	288862	250558
30°	226912	268466	235364
35°	199070	236001	210730
40°	165886	185014	176702
45°	139633	122066	149090
50°	120903	66886	128332
55°	109387	35533	112163
60°	100640	18476	100640
65°	91188	9803	88919
70°	73573	5589	67984
75°	50464	3680	46759
80°	33025	1841	29343
85°	21933	3668	18265



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	393.8	5.4
10°-20°	1138.6	15.6
20°-30°	1682.3	23.0
30°-40°	1699.2	23.2
40°-50°	1171.2	16.0
50°-60°	672.7	9.2
60°-70°	391.5	5.4
70°-80°	142.8	2.0
80°-90°	21.8	0.3
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°	3214.7	44.0
0°-40°	4913.9	67.2
0°-60°	6757.8	92.4
0°-90°	7314.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7314.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4223	4223	4223	4223	4223	
5°	4081	4159	4218	4179	4130	383
15°	3793	3993	4320	4037	3837	1069
25°	3408	3608	4013	3681	3481	1553
35°	2500	2670	2963	2792	2646	1551
45°	1513	1533	1323	1630	1616	1177
55°	962	844	312	879	986	866
65°	591	498	64	493	576	578
75°	200	161	15	156	186	225
85°	29	15	5	20	24	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7
2.5°	4169.0	4173.9	4178.8	4173.9	4178.8	4198.3	4183.7	4193.4	4193.4	4198.3	4213.0
5°	4081.2	4081.2	4090.9	4086.0	4100.7	4120.2	4105.6	4120.2	4125.1	4134.9	4159.3
7.5°	3968.9	3968.9	3973.8	3973.8	3993.3	4012.8	4003.1	4022.6	4042.1	4061.6	4090.9
10°	3881.0	3890.8	3890.8	3895.7	3915.2	3939.6	3934.7	3959.1	3978.6	4007.9	4047.0
12.5°	3842.0	3846.8	3846.8	3856.6	3876.1	3900.5	3895.7	3920.1	3949.4	3983.5	4022.6
15°	3793.1	3802.9	3798.0	3807.8	3827.3	3851.7	3846.8	3871.2	3905.4	3939.6	3993.3
17.5°	3729.7	3734.6	3739.4	3739.4	3759.0	3778.5	3778.5	3802.9	3842.0	3881.0	3939.6
20°	3641.8	3651.6	3651.6	3656.5	3671.1	3700.4	3695.5	3719.9	3759.0	3798.0	3861.5
22.5°	3539.3	3544.2	3544.2	3549.1	3573.5	3588.1	3593.0	3612.5	3646.7	3690.6	3749.2
25°	3407.5	3412.4	3407.5	3422.1	3431.9	3461.2	3451.4	3475.8	3514.9	3549.1	3607.6
27.5°	3217.1	3226.9	3226.9	3231.7	3256.1	3280.6	3280.6	3305.0	3339.1	3363.5	3422.1
30°	3012.1	3026.7	3012.1	3036.5	3046.2	3065.8	3080.4	3095.0	3124.3	3158.5	3212.2
32.5°	2777.7	2772.8	2777.7	2787.5	2816.8	2831.4	2841.2	2855.8	2885.1	2914.4	2958.4
35°	2499.5	2509.2	2514.1	2533.6	2533.6	2558.1	2562.9	2572.7	2616.6	2636.2	2670.3
37.5°	2206.6	2216.3	2221.2	2231.0	2250.5	2260.3	2274.9	2289.6	2318.8	2353.0	2372.5
40°	1947.8	1947.8	1952.7	1962.5	1977.1	1982.0	1996.6	2016.2	2035.7	2065.0	2084.5
42.5°	1703.7	1708.6	1703.7	1713.5	1728.1	1747.7	1742.8	1767.2	1772.1	1791.6	1806.3
45°	1513.4	1513.4	1503.6	1513.4	1513.4	1532.9	1528.0	1537.8	1532.9	1542.6	1532.9
47.5°	1332.7	1337.6	1332.7	1337.6	1337.6	1337.6	1342.5	1332.7	1337.6	1323.0	1293.7
50°	1191.2	1196.0	1186.3	1191.2	1186.3	1181.4	1186.3	1171.6	1166.7	1147.2	1117.9
52.5°	1069.1	1064.2	1059.3	1059.3	1059.3	1054.5	1049.6	1034.9	1020.3	1000.8	966.6
55°	961.7	956.8	951.9	951.9	942.2	937.3	937.3	922.7	908.0	883.6	844.5
57.5°	864.1	859.2	854.3	854.3	849.4	839.7	839.7	825.0	805.5	776.2	742.0
60°	771.3	771.3	771.3	766.4	766.4	756.7	756.7	742.0	722.5	693.2	654.2
62.5°	688.3	683.4	683.4	683.4	683.4	678.6	673.7	663.9	644.4	615.1	580.9
65°	590.7	590.7	590.7	590.7	585.8	585.8	585.8	571.2	561.4	532.1	497.9
67.5°	483.3	483.3	483.3	483.3	478.4	483.3	483.3	473.5	463.8	434.5	405.2
70°	385.7	380.8	375.9	380.8	375.9	375.9	380.8	371.0	366.1	341.7	312.4
72.5°	283.1	288.0	283.1	283.1	283.1	278.3	283.1	278.3	268.5	249.0	229.4
75°	200.2	205.0	205.0	200.2	200.2	200.2	195.3	195.3	185.5	170.9	161.1
77.5°	136.7	136.7	136.7	136.7	131.8	131.8	131.8	126.9	122.0	112.3	102.5
80°	87.9	87.9	87.9	87.9	83.0	83.0	83.0	78.1	78.1	68.3	58.6
82.5°	53.7	53.7	53.7	53.7	53.7	53.7	48.8	48.8	43.9	39.1	34.2
85°	29.3	29.3	29.3	29.3	29.3	29.3	29.3	24.4	24.4	19.5	14.6
87.5°	9.8	9.8	14.6	14.6	14.6	14.6	14.6	14.6	9.8	9.8	9.8
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7
2.5°	4203.2	4208.1	4208.1	4208.1	4222.7	4227.6	4213.0	4198.3	4227.6	4222.7	4232.5
5°	4154.4	4169.0	4178.8	4183.7	4198.3	4208.1	4193.4	4188.6	4213.0	4217.9	4222.7
7.5°	4095.8	4120.2	4144.6	4154.4	4173.9	4183.7	4178.8	4178.8	4208.1	4217.9	4217.9
10°	4056.8	4090.9	4120.2	4144.6	4169.0	4183.7	4183.7	4188.6	4222.7	4232.5	4242.3
12.5°	4047.0	4090.9	4130.0	4164.2	4183.7	4208.1	4213.0	4227.6	4261.8	4276.4	4276.4
15°	4022.6	4081.2	4130.0	4173.9	4203.2	4232.5	4242.3	4271.6	4310.6	4320.4	4330.1
17.5°	3978.6	4037.2	4095.8	4149.5	4188.6	4213.0	4242.3	4271.6	4320.4	4335.0	4339.9
20°	3900.5	3968.9	4027.5	4081.2	4120.2	4154.4	4183.7	4217.9	4261.8	4281.3	4286.2
22.5°	3783.4	3851.7	3910.3	3968.9	4007.9	4037.2	4066.5	4105.6	4149.5	4169.0	4169.0
25°	3641.8	3705.3	3768.7	3812.7	3851.7	3885.9	3900.5	3944.5	3988.4	4012.8	4012.8
27.5°	3461.2	3519.8	3578.3	3627.2	3651.6	3680.9	3705.3	3744.3	3778.5	3798.0	3817.5
30°	3231.7	3290.3	3344.0	3392.8	3422.1	3451.4	3475.8	3505.1	3539.3	3563.7	3568.6
32.5°	2982.8	3031.6	3085.3	3134.1	3163.4	3173.2	3197.6	3226.9	3256.1	3275.7	3280.6
35°	2709.4	2743.6	2777.7	2821.7	2851.0	2851.0	2875.4	2894.9	2919.3	2963.2	2953.5
37.5°	2387.2	2436.0	2460.4	2475.1	2494.6	2514.1	2519.0	2543.4	2572.7	2582.5	2597.1
40°	2084.5	2099.2	2113.8	2113.8	2133.3	2133.3	2133.3	2138.2	2167.5	2172.4	2191.9
42.5°	1781.8	1781.8	1767.2	1752.6	1757.4	1752.6	1728.1	1728.1	1742.8	1762.3	1762.3
45°	1498.7	1464.5	1420.6	1386.4	1362.0	1352.3	1323.0	1323.0	1318.1	1323.0	1342.5
47.5°	1259.5	1200.9	1127.7	1059.3	1034.9	1015.4	971.5	951.9	942.2	947.1	956.8
50°	1059.3	995.9	912.9	829.9	786.0	761.6	707.9	673.7	668.8	659.0	678.6
52.5°	912.9	834.8	746.9	649.3	605.3	566.3	507.7	478.4	458.9	458.9	463.8
55°	786.0	703.0	605.3	507.7	463.8	434.5	375.9	336.8	317.3	312.4	327.1
57.5°	678.6	600.5	502.8	405.2	361.3	327.1	268.5	234.3	219.7	209.9	214.8
60°	595.6	517.5	419.8	327.1	288.0	249.0	200.2	161.1	141.6	141.6	146.5
62.5°	517.5	444.2	356.4	268.5	234.3	200.2	146.5	112.3	97.6	92.8	97.6
65°	439.4	371.0	297.8	224.6	190.4	161.1	117.2	87.9	68.3	63.5	68.3
67.5°	356.4	302.7	239.2	180.6	151.3	126.9	87.9	63.5	48.8	43.9	48.8
70°	278.3	229.4	180.6	131.8	112.3	92.8	63.5	48.8	34.2	29.3	34.2
72.5°	200.2	166.0	126.9	92.8	78.1	63.5	43.9	34.2	24.4	19.5	24.4
75°	136.7	112.3	83.0	58.6	48.8	43.9	29.3	19.5	14.6	14.6	14.6
77.5°	87.9	68.3	53.7	39.1	29.3	24.4	14.6	9.8	9.8	9.8	9.8
80°	48.8	39.1	29.3	19.5	14.6	14.6	9.8	9.8	4.9	4.9	4.9
82.5°	29.3	19.5	14.6	9.8	9.8	4.9	4.9	4.9	4.9	4.9	4.9
85°	14.6	9.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
87.5°	4.9	4.9	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7
2.5°	4213.0	4217.9	4203.2	4222.7	4208.1	4227.6	4227.6	4208.1	4213.0	4203.2	4222.7
5°	4203.2	4203.2	4193.4	4208.1	4188.6	4208.1	4203.2	4169.0	4178.8	4159.3	4178.8
7.5°	4203.2	4193.4	4178.8	4193.4	4169.0	4183.7	4164.2	4130.0	4120.2	4095.8	4095.8
10°	4217.9	4203.2	4183.7	4188.6	4164.2	4169.0	4139.7	4090.9	4076.3	4047.0	4037.2
12.5°	4252.0	4237.4	4208.1	4217.9	4183.7	4183.7	4144.6	4086.0	4056.8	4017.7	4007.9
15°	4300.8	4276.4	4242.3	4247.1	4213.0	4193.4	4144.6	4076.3	4037.2	3983.5	3968.9
17.5°	4310.6	4286.2	4242.3	4242.3	4198.3	4173.9	4115.3	4037.2	3988.4	3934.7	3905.4
20°	4256.9	4232.5	4183.7	4178.8	4139.7	4105.6	4042.1	3964.0	3915.2	3856.6	3832.2
22.5°	4144.6	4115.3	4071.4	4066.5	4027.5	4007.9	3939.6	3861.5	3812.7	3754.1	3734.6
25°	3978.6	3964.0	3920.1	3915.2	3881.0	3856.6	3798.0	3724.8	3680.9	3622.3	3602.8
27.5°	3783.4	3768.7	3724.8	3724.8	3685.7	3671.1	3617.4	3549.1	3514.9	3461.2	3436.8
30°	3549.1	3529.5	3505.1	3500.2	3466.1	3451.4	3402.6	3339.1	3305.0	3261.0	3251.3
32.5°	3270.8	3256.1	3241.5	3236.6	3202.4	3187.8	3153.6	3090.2	3060.9	3021.8	3007.2
35°	2948.6	2938.8	2924.2	2919.3	2904.7	2890.0	2855.8	2807.0	2792.4	2763.1	2748.4
37.5°	2577.6	2587.3	2577.6	2577.6	2562.9	2567.8	2538.5	2509.2	2494.6	2475.1	2465.3
40°	2177.3	2196.8	2211.4	2211.4	2206.6	2226.1	2221.2	2196.8	2191.9	2182.2	2177.3
42.5°	1772.1	1781.8	1811.1	1830.7	1825.8	1874.6	1879.5	1899.0	1913.7	1903.9	1908.8
45°	1347.4	1376.7	1415.7	1435.2	1459.7	1523.1	1557.3	1596.3	1630.5	1650.0	1645.2
47.5°	971.5	1005.6	1049.6	1078.9	1122.8	1200.9	1288.8	1337.6	1386.4	1410.8	1435.2
50°	703.0	737.1	790.8	834.8	864.1	971.5	1064.2	1127.7	1181.4	1215.6	1240.0
52.5°	493.1	532.1	590.7	629.7	673.7	776.2	883.6	956.8	1015.4	1059.3	1083.8
55°	341.7	385.7	439.4	478.4	527.2	634.6	737.1	815.3	878.7	917.8	947.1
57.5°	239.2	278.3	332.0	366.1	415.0	517.5	620.0	698.1	761.6	800.6	834.8
60°	161.1	200.2	253.9	288.0	327.1	429.6	522.4	605.3	663.9	703.0	737.1
62.5°	112.3	146.5	200.2	234.3	268.5	356.4	444.2	517.5	576.0	620.0	649.3
65°	87.9	117.2	161.1	190.4	224.6	297.8	371.0	434.5	493.1	537.0	556.5
67.5°	63.5	92.8	126.9	151.3	175.7	239.2	302.7	351.5	405.2	439.4	463.8
70°	43.9	63.5	92.8	112.3	131.8	180.6	229.4	273.4	312.4	336.8	356.4
72.5°	34.2	43.9	63.5	78.1	92.8	126.9	166.0	200.2	229.4	249.0	268.5
75°	19.5	29.3	43.9	53.7	63.5	87.9	112.3	136.7	156.2	170.9	180.6
77.5°	9.8	14.6	24.4	29.3	39.1	53.7	73.2	87.9	102.5	112.3	122.0
80°	9.8	9.8	14.6	14.6	19.5	29.3	39.1	48.8	58.6	68.3	73.2
82.5°	4.9	4.9	9.8	9.8	9.8	14.6	19.5	29.3	34.2	39.1	43.9
85°	4.9	4.9	4.9	4.9	4.9	9.8	9.8	14.6	19.5	24.4	24.4
87.5°	0.0	0.0	4.9	4.9	4.9	4.9	4.9	9.8	9.8	9.8	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: P252639

CATALOG NUMBER: LD6B70D010TE EU6B60708050 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7	4222.7
2.5°	4208.1	4217.9	4213.0	4222.7	4208.1	4203.2	4213.0	4198.3
5°	4154.4	4159.3	4154.4	4154.4	4144.6	4134.9	4144.6	4130.0
7.5°	4071.4	4071.4	4056.8	4056.8	4037.2	4027.5	4027.5	4022.6
10°	4003.1	3988.4	3973.8	3978.6	3949.4	3939.6	3934.7	3929.8
12.5°	3968.9	3959.1	3934.7	3934.7	3905.4	3895.7	3890.8	3885.9
15°	3929.8	3910.3	3890.8	3885.9	3861.5	3851.7	3846.8	3837.1
17.5°	3861.5	3846.8	3822.4	3822.4	3798.0	3793.1	3783.4	3778.5
20°	3788.3	3768.7	3749.2	3749.2	3719.9	3719.9	3705.3	3710.2
22.5°	3685.7	3671.1	3651.6	3651.6	3627.2	3622.3	3607.6	3602.8
25°	3563.7	3544.2	3529.5	3524.6	3505.1	3495.4	3490.5	3480.7
27.5°	3402.6	3388.0	3373.3	3363.5	3339.1	3334.3	3319.6	3324.5
30°	3202.4	3192.7	3187.8	3178.0	3148.7	3139.0	3139.0	3124.3
32.5°	2982.8	2968.1	2958.4	2943.7	2919.3	2914.4	2899.8	2904.7
35°	2714.3	2694.7	2680.1	2685.0	2655.7	2650.8	2641.0	2645.9
37.5°	2436.0	2416.5	2397.0	2392.1	2367.7	2367.7	2353.0	2353.0
40°	2148.0	2128.5	2118.7	2118.7	2089.4	2094.3	2079.6	2074.8
42.5°	1889.2	1869.7	1864.8	1860.0	1845.3	1840.4	1825.8	1830.7
45°	1645.2	1640.3	1640.3	1630.5	1615.9	1611.0	1615.9	1615.9
47.5°	1430.4	1435.2	1430.4	1430.4	1420.6	1430.4	1420.6	1425.5
50°	1249.7	1259.5	1259.5	1259.5	1254.6	1259.5	1259.5	1264.4
52.5°	1098.4	1113.0	1108.2	1113.0	1108.2	1117.9	1113.0	1117.9
55°	966.6	976.4	981.2	986.1	986.1	986.1	986.1	986.1
57.5°	844.5	859.2	864.1	869.0	869.0	878.7	869.0	869.0
60°	746.9	761.6	766.4	771.3	771.3	776.2	766.4	771.3
62.5°	659.0	673.7	673.7	678.6	678.6	678.6	668.8	673.7
65°	571.2	576.0	580.9	580.9	576.0	576.0	571.2	576.0
67.5°	473.5	478.4	473.5	473.5	468.7	468.7	458.9	463.8
70°	366.1	366.1	371.0	366.1	361.3	366.1	361.3	356.4
72.5°	273.4	273.4	273.4	268.5	268.5	263.6	268.5	268.5
75°	185.5	185.5	190.4	190.4	190.4	190.4	185.5	185.5
77.5°	122.0	122.0	122.0	122.0	126.9	122.0	122.0	122.0
80°	78.1	78.1	83.0	83.0	78.1	78.1	78.1	78.1
82.5°	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
85°	29.3	29.3	29.3	29.3	24.4	24.4	24.4	24.4
87.5°	14.6	14.6	14.6	14.6	14.6	14.6	9.8	9.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)