

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: P252644

Luminaire Tested: **LD6B70D010TE EU6B60709040 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252644  
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 EU6B60709040 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

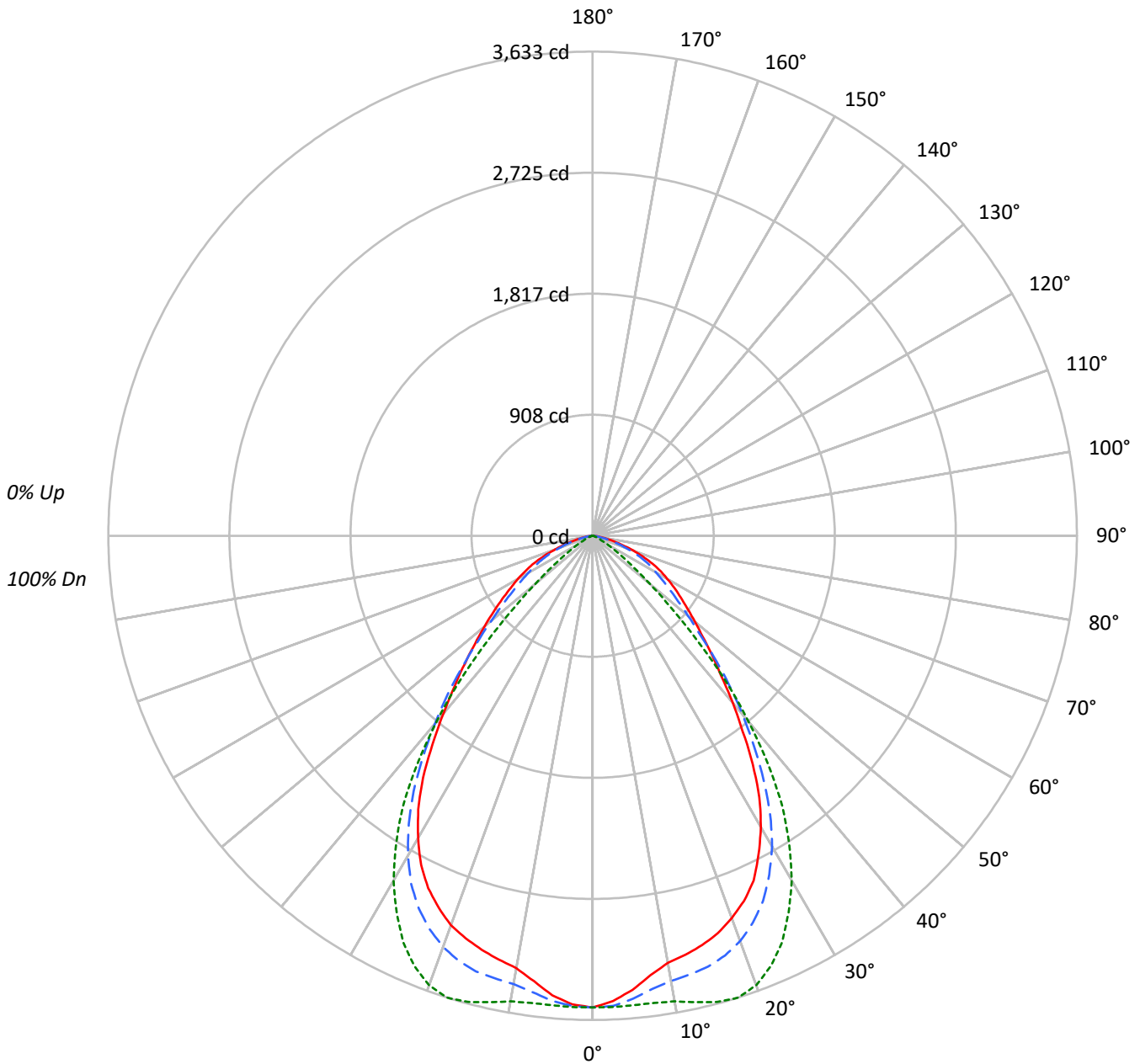
Lumens per Lamp: N/A  
Luminaire Lumens: 6130.0 lumens  
Efficiency: N/A  
Efficacy: 77.2 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 79.45  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage 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				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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89	89	89	89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79	79	79	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70	70	70	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62	62	62	62
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56	56	56	56
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50	50	50	50
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46	46	46	46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42	42	42	42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38	38	38	38
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35	35	35	35

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

	0°	90°	180°
0°	230900	230900	230900
5°	224008	231513	226687
10°	215482	234998	218198
15°	214723	244570	217209
20°	211914	249127	215885
25°	205582	242100	209995
30°	190179	225006	197268
35°	166846	197796	176619
40°	139033	155061	148094
45°	117028	102303	124953
50°	101324	56067	107556
55°	91677	29789	94009
60°	84356	15488	84356
65°	76430	8213	74531
70°	61651	4673	56977
75°	42297	3100	39197
80°	27652	1540	24609
85°	18340	3069	15345



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	330.0	5.4
10°-20°	954.3	15.6
20°-30°	1410.0	23.0
30°-40°	1424.2	23.2
40°-50°	981.6	16.0
50°-60°	563.8	9.2
60°-70°	328.1	5.4
70°-80°	119.7	2.0
80°-90°	18.3	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°	2694.3	44.0
0°-40°	4118.5	67.2
0°-60°	5663.8	92.4
0°-90°	6130.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6130.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3539	3539	3539	3539	3539	
5°	3420	3486	3535	3502	3461	321
15°	3179	3347	3621	3384	3216	896
25°	2856	3024	3363	3085	2917	1301
35°	2095	2238	2484	2340	2218	1300
45°	1268	1285	1109	1367	1354	986
55°	806	708	262	736	826	726
65°	495	417	53	413	483	485
75°	168	135	12	131	156	189
85°	24	12	4	16	20	31
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°	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2
2.5°	3494.1	3498.2	3502.3	3498.2	3502.3	3518.7	3506.4	3514.6	3514.6	3518.7	3531.0
5°	3420.5	3420.5	3428.7	3424.6	3436.9	3453.2	3441.0	3453.2	3457.3	3465.5	3486.0
7.5°	3326.4	3326.4	3330.5	3330.5	3346.9	3363.2	3355.0	3371.4	3387.8	3404.1	3428.7
10°	3252.7	3260.9	3260.9	3265.0	3281.4	3301.8	3297.8	3318.2	3334.6	3359.1	3391.9
12.5°	3220.0	3224.1	3224.1	3232.3	3248.7	3269.1	3265.0	3285.5	3310.0	3338.7	3371.4
15°	3179.1	3187.3	3183.2	3191.4	3207.7	3228.2	3224.1	3244.6	3273.2	3301.8	3346.9
17.5°	3125.9	3130.0	3134.1	3134.1	3150.5	3166.8	3166.8	3187.3	3220.0	3252.7	3301.8
20°	3052.3	3060.4	3060.4	3064.5	3076.8	3101.4	3097.3	3117.7	3150.5	3183.2	3236.4
22.5°	2966.3	2970.4	2970.4	2974.5	2995.0	3007.3	3011.3	3027.7	3056.4	3093.2	3142.3
25°	2855.9	2860.0	2855.9	2868.1	2876.3	2900.9	2892.7	2913.2	2945.9	2974.5	3023.6
27.5°	2696.3	2704.5	2704.5	2708.6	2729.0	2749.5	2749.5	2770.0	2798.6	2819.0	2868.1
30°	2524.5	2536.7	2524.5	2544.9	2553.1	2569.5	2581.7	2594.0	2618.6	2647.2	2692.2
32.5°	2328.1	2324.0	2328.1	2336.3	2360.8	2373.1	2381.3	2393.5	2418.1	2442.6	2479.5
35°	2094.9	2103.0	2107.1	2123.5	2123.5	2144.0	2148.0	2156.2	2193.0	2209.4	2238.1
37.5°	1849.4	1857.5	1861.6	1869.8	1886.2	1894.4	1906.6	1918.9	1943.5	1972.1	1988.5
40°	1632.5	1632.5	1636.6	1644.8	1657.1	1661.2	1673.4	1689.8	1706.2	1730.7	1747.1
42.5°	1427.9	1432.0	1427.9	1436.1	1448.4	1464.8	1460.7	1481.1	1485.2	1501.6	1513.9
45°	1268.4	1268.4	1260.2	1268.4	1268.4	1284.7	1280.6	1288.8	1284.7	1292.9	1284.7
47.5°	1117.0	1121.1	1117.0	1121.1	1121.1	1121.1	1125.2	1117.0	1121.1	1108.8	1084.2
50°	998.3	1002.4	994.2	998.3	994.2	990.1	994.2	982.0	977.9	961.5	937.0
52.5°	896.0	891.9	887.9	887.9	887.9	883.8	879.7	867.4	855.1	838.8	810.1
55°	806.0	801.9	797.8	797.8	789.7	785.6	785.6	773.3	761.0	740.6	707.8
57.5°	724.2	720.1	716.0	716.0	711.9	703.7	703.7	691.5	675.1	650.5	621.9
60°	646.5	646.5	646.5	642.4	642.4	634.2	634.2	621.9	605.5	581.0	548.3
62.5°	576.9	572.8	572.8	572.8	572.8	568.7	564.6	556.4	540.1	515.5	486.9
65°	495.1	495.1	495.1	495.1	491.0	491.0	491.0	478.7	470.5	446.0	417.3
67.5°	405.1	405.1	405.1	405.1	401.0	405.1	405.1	396.9	388.7	364.1	339.6
70°	323.2	319.1	315.0	319.1	315.0	315.0	319.1	311.0	306.9	286.4	261.9
72.5°	237.3	241.4	237.3	237.3	237.3	233.2	237.3	233.2	225.0	208.7	192.3
75°	167.8	171.8	171.8	167.8	167.8	167.8	163.7	163.7	155.5	143.2	135.0
77.5°	114.6	114.6	114.6	114.6	110.5	110.5	110.5	106.4	102.3	94.1	85.9
80°	73.6	73.6	73.6	73.6	69.6	69.6	69.6	65.5	65.5	57.3	49.1
82.5°	45.0	45.0	45.0	45.0	45.0	45.0	40.9	40.9	36.8	32.7	28.6
85°	24.5	24.5	24.5	24.5	24.5	24.5	24.5	20.5	20.5	16.4	12.3
87.5°	8.2	8.2	12.3	12.3	12.3	12.3	12.3	12.3	8.2	8.2	8.2
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2
2.5°	3522.8	3526.9	3526.9	3526.9	3539.2	3543.2	3531.0	3518.7	3543.2	3539.2	3547.3
5°	3481.9	3494.1	3502.3	3506.4	3518.7	3526.9	3514.6	3510.5	3531.0	3535.1	3539.2
7.5°	3432.8	3453.2	3473.7	3481.9	3498.2	3506.4	3502.3	3502.3	3526.9	3535.1	3535.1
10°	3400.0	3428.7	3453.2	3473.7	3494.1	3506.4	3506.4	3510.5	3539.2	3547.3	3555.5
12.5°	3391.9	3428.7	3461.4	3490.1	3506.4	3526.9	3531.0	3543.2	3571.9	3584.2	3584.2
15°	3371.4	3420.5	3461.4	3498.2	3522.8	3547.3	3555.5	3580.1	3612.8	3621.0	3629.2
17.5°	3334.6	3383.7	3432.8	3477.8	3510.5	3531.0	3555.5	3580.1	3621.0	3633.3	3637.4
20°	3269.1	3326.4	3375.5	3420.5	3453.2	3481.9	3506.4	3535.1	3571.9	3588.3	3592.3
22.5°	3170.9	3228.2	3277.3	3326.4	3359.1	3383.7	3408.2	3441.0	3477.8	3494.1	3494.1
25°	3052.3	3105.5	3158.6	3195.5	3228.2	3256.8	3269.1	3305.9	3342.8	3363.2	3363.2
27.5°	2900.9	2950.0	2999.1	3040.0	3060.4	3085.0	3105.5	3138.2	3166.8	3183.2	3199.6
30°	2708.6	2757.7	2802.7	2843.6	2868.1	2892.7	2913.2	2937.7	2966.3	2986.8	2990.9
32.5°	2499.9	2540.8	2585.8	2626.7	2651.3	2659.5	2679.9	2704.5	2729.0	2745.4	2749.5
35°	2270.8	2299.4	2328.1	2364.9	2389.4	2389.4	2409.9	2426.3	2446.7	2483.5	2475.4
37.5°	2000.7	2041.7	2062.1	2074.4	2090.8	2107.1	2111.2	2131.7	2156.2	2164.4	2176.7
40°	1747.1	1759.3	1771.6	1771.6	1788.0	1788.0	1788.0	1792.1	1816.6	1820.7	1837.1
42.5°	1493.4	1493.4	1481.1	1468.9	1472.9	1468.9	1448.4	1448.4	1460.7	1477.0	1477.0
45°	1256.1	1227.5	1190.6	1162.0	1141.5	1133.3	1108.8	1108.8	1104.7	1108.8	1125.2
47.5°	1055.6	1006.5	945.1	887.9	867.4	851.0	814.2	797.8	789.7	793.8	801.9
50°	887.9	834.7	765.1	695.6	658.7	638.3	593.3	564.6	560.5	552.4	568.7
52.5°	765.1	699.6	626.0	544.2	507.3	474.6	425.5	401.0	384.6	384.6	388.7
55°	658.7	589.2	507.3	425.5	388.7	364.1	315.0	282.3	265.9	261.9	274.1
57.5°	568.7	503.3	421.4	339.6	302.8	274.1	225.0	196.4	184.1	175.9	180.0
60°	499.2	433.7	351.9	274.1	241.4	208.7	167.8	135.0	118.7	118.7	122.7
62.5°	433.7	372.3	298.7	225.0	196.4	167.8	122.7	94.1	81.8	77.7	81.8
65°	368.2	311.0	249.6	188.2	159.6	135.0	98.2	73.6	57.3	53.2	57.3
67.5°	298.7	253.7	200.5	151.4	126.8	106.4	73.6	53.2	40.9	36.8	40.9
70°	233.2	192.3	151.4	110.5	94.1	77.7	53.2	40.9	28.6	24.5	28.6
72.5°	167.8	139.1	106.4	77.7	65.5	53.2	36.8	28.6	20.5	16.4	20.5
75°	114.6	94.1	69.6	49.1	40.9	36.8	24.5	16.4	12.3	12.3	12.3
77.5°	73.6	57.3	45.0	32.7	24.5	20.5	12.3	8.2	8.2	8.2	8.2
80°	40.9	32.7	24.5	16.4	12.3	12.3	8.2	8.2	4.1	4.1	4.1
82.5°	24.5	16.4	12.3	8.2	8.2	4.1	4.1	4.1	4.1	4.1	4.1
85°	12.3	8.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
87.5°	4.1	4.1	4.1	4.1	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°	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2
2.5°	3531.0	3535.1	3522.8	3539.2	3526.9	3543.2	3543.2	3526.9	3531.0	3522.8	3539.2
5°	3522.8	3522.8	3514.6	3526.9	3510.5	3526.9	3522.8	3494.1	3502.3	3486.0	3502.3
7.5°	3522.8	3514.6	3502.3	3514.6	3494.1	3506.4	3490.1	3461.4	3453.2	3432.8	3432.8
10°	3535.1	3522.8	3506.4	3510.5	3490.1	3494.1	3469.6	3428.7	3416.4	3391.9	3383.7
12.5°	3563.7	3551.4	3526.9	3535.1	3506.4	3506.4	3473.7	3424.6	3400.0	3367.3	3359.1
15°	3604.6	3584.2	3555.5	3559.6	3531.0	3514.6	3473.7	3416.4	3383.7	3338.7	3326.4
17.5°	3612.8	3592.3	3555.5	3555.5	3518.7	3498.2	3449.1	3383.7	3342.8	3297.8	3273.2
20°	3567.8	3547.3	3506.4	3502.3	3469.6	3441.0	3387.8	3322.3	3281.4	3232.3	3211.8
22.5°	3473.7	3449.1	3412.3	3408.2	3375.5	3359.1	3301.8	3236.4	3195.5	3146.4	3130.0
25°	3334.6	3322.3	3285.5	3281.4	3252.7	3232.3	3183.2	3121.8	3085.0	3035.9	3019.5
27.5°	3170.9	3158.6	3121.8	3121.8	3089.1	3076.8	3031.8	2974.5	2945.9	2900.9	2880.4
30°	2974.5	2958.2	2937.7	2933.6	2905.0	2892.7	2851.8	2798.6	2770.0	2733.1	2724.9
32.5°	2741.3	2729.0	2716.8	2712.7	2684.0	2671.8	2643.1	2589.9	2565.4	2532.6	2520.4
35°	2471.3	2463.1	2450.8	2446.7	2434.4	2422.2	2393.5	2352.6	2340.3	2315.8	2303.5
37.5°	2160.3	2168.5	2160.3	2160.3	2148.0	2152.1	2127.6	2103.0	2090.8	2074.4	2066.2
40°	1824.8	1841.2	1853.5	1853.5	1849.4	1865.7	1861.6	1841.2	1837.1	1828.9	1824.8
42.5°	1485.2	1493.4	1517.9	1534.3	1530.2	1571.1	1575.2	1591.6	1603.9	1595.7	1599.8
45°	1129.3	1153.8	1186.5	1202.9	1223.4	1276.6	1305.2	1337.9	1366.6	1382.9	1378.8
47.5°	814.2	842.9	879.7	904.2	941.0	1006.5	1080.2	1121.1	1162.0	1182.4	1202.9
50°	589.2	617.8	662.8	699.6	724.2	814.2	891.9	945.1	990.1	1018.8	1039.2
52.5°	413.2	446.0	495.1	527.8	564.6	650.5	740.6	801.9	851.0	887.9	908.3
55°	286.4	323.2	368.2	401.0	441.9	531.9	617.8	683.3	736.5	769.2	793.8
57.5°	200.5	233.2	278.2	306.9	347.8	433.7	519.6	585.1	638.3	671.0	699.6
60°	135.0	167.8	212.8	241.4	274.1	360.1	437.8	507.3	556.4	589.2	617.8
62.5°	94.1	122.7	167.8	196.4	225.0	298.7	372.3	433.7	482.8	519.6	544.2
65°	73.6	98.2	135.0	159.6	188.2	249.6	311.0	364.1	413.2	450.1	466.4
67.5°	53.2	77.7	106.4	126.8	147.3	200.5	253.7	294.6	339.6	368.2	388.7
70°	36.8	53.2	77.7	94.1	110.5	151.4	192.3	229.1	261.9	282.3	298.7
72.5°	28.6	36.8	53.2	65.5	77.7	106.4	139.1	167.8	192.3	208.7	225.0
75°	16.4	24.5	36.8	45.0	53.2	73.6	94.1	114.6	130.9	143.2	151.4
77.5°	8.2	12.3	20.5	24.5	32.7	45.0	61.4	73.6	85.9	94.1	102.3
80°	8.2	8.2	12.3	12.3	16.4	24.5	32.7	40.9	49.1	57.3	61.4
82.5°	4.1	4.1	8.2	8.2	8.2	12.3	16.4	24.5	28.6	32.7	36.8
85°	4.1	4.1	4.1	4.1	4.1	8.2	8.2	12.3	16.4	20.5	20.5
87.5°	0.0	0.0	4.1	4.1	4.1	4.1	4.1	8.2	8.2	8.2	12.3
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: P252644

CATALOG NUMBER: LD6B70D010TE EU6B60709040 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2	3539.2
2.5°	3526.9	3535.1	3531.0	3539.2	3526.9	3522.8	3531.0	3518.7
5°	3481.9	3486.0	3481.9	3481.9	3473.7	3465.5	3473.7	3461.4
7.5°	3412.3	3412.3	3400.0	3400.0	3383.7	3375.5	3375.5	3371.4
10°	3355.0	3342.8	3330.5	3334.6	3310.0	3301.8	3297.8	3293.7
12.5°	3326.4	3318.2	3297.8	3297.8	3273.2	3265.0	3260.9	3256.8
15°	3293.7	3277.3	3260.9	3256.8	3236.4	3228.2	3224.1	3215.9
17.5°	3236.4	3224.1	3203.7	3203.7	3183.2	3179.1	3170.9	3166.8
20°	3175.0	3158.6	3142.3	3142.3	3117.7	3117.7	3105.5	3109.5
22.5°	3089.1	3076.8	3060.4	3060.4	3040.0	3035.9	3023.6	3019.5
25°	2986.8	2970.4	2958.2	2954.1	2937.7	2929.5	2925.4	2917.2
27.5°	2851.8	2839.5	2827.2	2819.0	2798.6	2794.5	2782.2	2786.3
30°	2684.0	2675.8	2671.8	2663.6	2639.0	2630.8	2630.8	2618.6
32.5°	2499.9	2487.6	2479.5	2467.2	2446.7	2442.6	2430.4	2434.4
35°	2274.9	2258.5	2246.2	2250.3	2225.8	2221.7	2213.5	2217.6
37.5°	2041.7	2025.3	2008.9	2004.8	1984.4	1984.4	1972.1	1972.1
40°	1800.3	1783.9	1775.7	1775.7	1751.2	1755.3	1743.0	1738.9
42.5°	1583.4	1567.0	1563.0	1558.9	1546.6	1542.5	1530.2	1534.3
45°	1378.8	1374.7	1374.7	1366.6	1354.3	1350.2	1354.3	1354.3
47.5°	1198.8	1202.9	1198.8	1198.8	1190.6	1198.8	1190.6	1194.7
50°	1047.4	1055.6	1055.6	1055.6	1051.5	1055.6	1055.6	1059.7
52.5°	920.6	932.9	928.8	932.9	928.8	937.0	932.9	937.0
55°	810.1	818.3	822.4	826.5	826.5	826.5	826.5	826.5
57.5°	707.8	720.1	724.2	728.3	728.3	736.5	728.3	728.3
60°	626.0	638.3	642.4	646.5	646.5	650.5	642.4	646.5
62.5°	552.4	564.6	564.6	568.7	568.7	568.7	560.5	564.6
65°	478.7	482.8	486.9	486.9	482.8	482.8	478.7	482.8
67.5°	396.9	401.0	396.9	396.9	392.8	392.8	384.6	388.7
70°	306.9	306.9	311.0	306.9	302.8	306.9	302.8	298.7
72.5°	229.1	229.1	229.1	225.0	225.0	220.9	225.0	225.0
75°	155.5	155.5	159.6	159.6	159.6	159.6	155.5	155.5
77.5°	102.3	102.3	102.3	102.3	106.4	102.3	102.3	102.3
80°	65.5	65.5	69.6	69.6	65.5	65.5	65.5	65.5
82.5°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
85°	24.5	24.5	24.5	24.5	20.5	20.5	20.5	20.5
87.5°	12.3	12.3	12.3	12.3	12.3	12.3	8.2	8.2
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)