

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: P252641

Luminaire Tested: **LD6B70D010TE EU6B60709027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252641
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 EU6B60709027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5803.0 lumens
Efficiency: N/A
Efficacy: 73.0 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

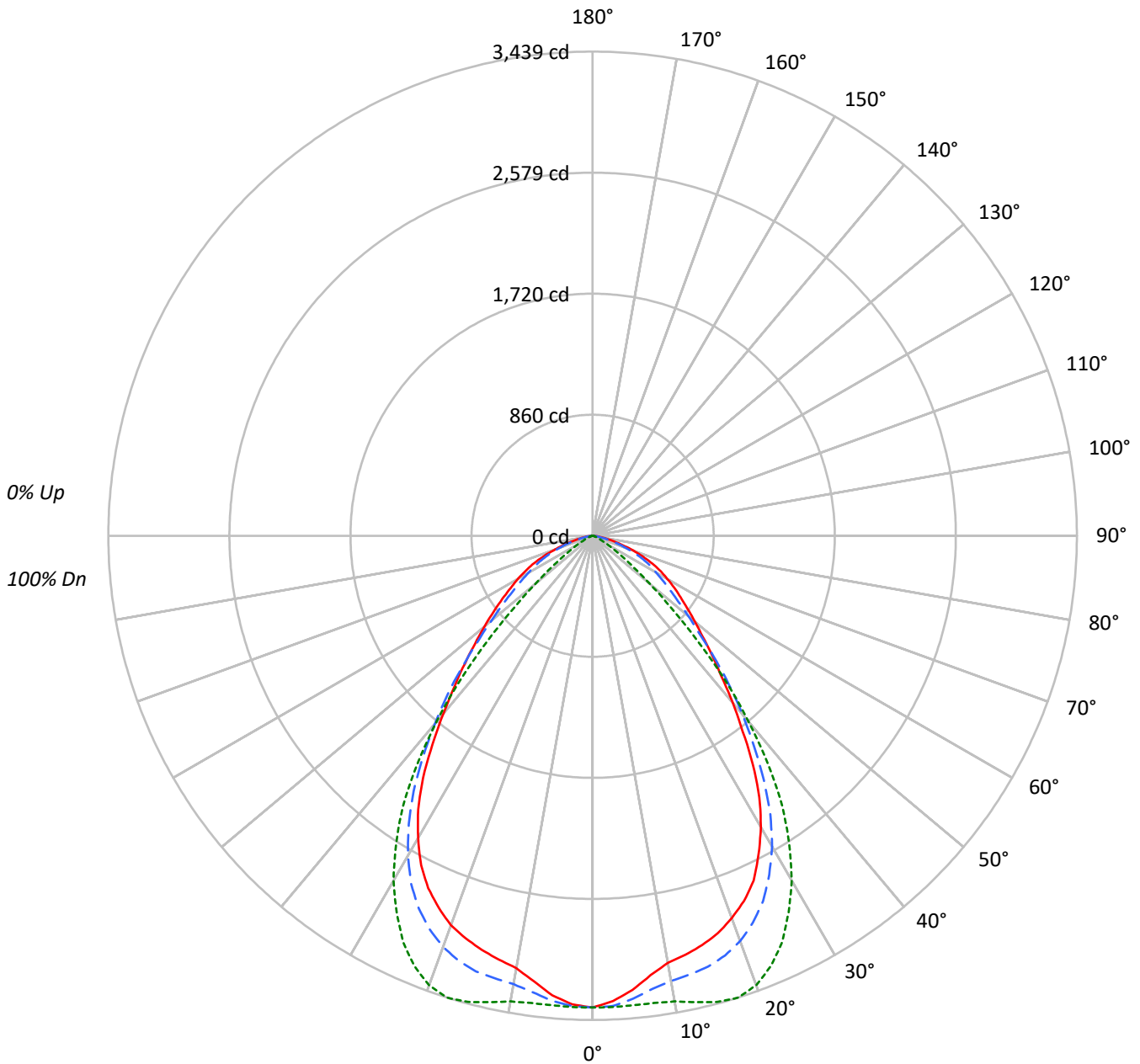
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	218582	218582	218582
5°	212056	219162	214597
10°	203988	222464	206558
15°	203268	231521	205625
20°	200604	235832	204374
25°	194612	229186	198794
30°	180032	213005	186744
35°	157942	187251	167197
40°	131615	146791	140191
45°	110782	96850	118283
50°	95924	53072	101821
55°	86786	28197	88993
60°	79855	14653	79855
65°	72354	7780	70548
70°	58370	4425	53925
75°	40029	2924	37105
80°	26187	1465	23294
85°	17366	2919	14522



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.4	5.4
10°-20°	903.4	15.6
20°-30°	1334.8	23.0
30°-40°	1348.2	23.2
40°-50°	929.3	16.0
50°-60°	533.7	9.2
60°-70°	310.6	5.4
70°-80°	113.3	2.0
80°-90°	17.3	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°	2550.6	44.0
0°-40°	3898.8	67.2
0°-60°	5361.7	92.4
0°-90°	5803.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5803.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3350	3350	3350	3350	3350	
5°	3238	3300	3346	3316	3277	304
15°	3010	3168	3428	3203	3044	848
25°	2704	2862	3184	2920	2762	1232
35°	1983	2119	2351	2216	2099	1231
45°	1201	1216	1050	1294	1282	934
55°	763	670	248	697	782	687
65°	469	395	50	391	457	459
75°	159	128	12	124	147	179
85°	23	12	4	16	19	29
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°	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4
2.5°	3307.8	3311.6	3315.5	3311.6	3315.5	3331.0	3319.4	3327.1	3327.1	3331.0	3342.6
5°	3238.0	3238.0	3245.8	3241.9	3253.5	3269.0	3257.4	3269.0	3272.9	3280.6	3300.0
7.5°	3149.0	3149.0	3152.8	3152.8	3168.3	3183.8	3176.1	3191.6	3207.1	3222.5	3245.8
10°	3079.2	3087.0	3087.0	3090.9	3106.3	3125.7	3121.8	3141.2	3156.7	3179.9	3210.9
12.5°	3048.2	3052.1	3052.1	3059.9	3075.4	3094.7	3090.9	3110.2	3133.5	3160.6	3191.6
15°	3009.5	3017.3	3013.4	3021.1	3036.6	3056.0	3052.1	3071.5	3098.6	3125.7	3168.3
17.5°	2959.2	2963.0	2966.9	2966.9	2982.4	2997.9	2997.9	3017.3	3048.2	3079.2	3125.7
20°	2889.4	2897.2	2897.2	2901.1	2912.7	2935.9	2932.1	2951.4	2982.4	3013.4	3063.7
22.5°	2808.1	2812.0	2812.0	2815.9	2835.2	2846.8	2850.7	2866.2	2893.3	2928.2	2974.7
25°	2703.5	2707.4	2703.5	2715.1	2722.9	2746.1	2738.4	2757.8	2788.7	2815.9	2862.3
27.5°	2552.5	2560.2	2560.2	2564.1	2583.5	2602.8	2602.8	2622.2	2649.3	2668.7	2715.1
30°	2389.8	2401.4	2389.8	2409.2	2416.9	2432.4	2444.0	2455.6	2478.9	2506.0	2548.6
32.5°	2203.9	2200.0	2203.9	2211.6	2234.9	2246.5	2254.2	2265.9	2289.1	2312.3	2347.2
35°	1983.1	1990.9	1994.7	2010.2	2010.2	2029.6	2033.5	2041.2	2076.1	2091.6	2118.7
37.5°	1750.7	1758.5	1762.3	1770.1	1785.6	1793.3	1804.9	1816.6	1839.8	1866.9	1882.4
40°	1545.4	1545.4	1549.3	1557.0	1568.7	1572.5	1584.2	1599.7	1615.1	1638.4	1653.9
42.5°	1351.8	1355.6	1351.8	1359.5	1371.1	1386.6	1382.8	1402.1	1406.0	1421.5	1433.1
45°	1200.7	1200.7	1193.0	1200.7	1200.7	1216.2	1212.3	1220.1	1216.2	1223.9	1216.2
47.5°	1057.4	1061.3	1057.4	1061.3	1061.3	1061.3	1065.1	1057.4	1061.3	1049.7	1026.4
50°	945.1	948.9	941.2	945.1	941.2	937.3	941.2	929.6	925.7	910.2	887.0
52.5°	848.2	844.4	840.5	840.5	840.5	836.6	832.7	821.1	809.5	794.0	766.9
55°	763.0	759.2	755.3	755.3	747.5	743.7	743.7	732.0	720.4	701.1	670.1
57.5°	685.6	681.7	677.8	677.8	673.9	666.2	666.2	654.6	639.1	615.8	588.7
60°	612.0	612.0	612.0	608.1	608.1	600.4	600.4	588.7	573.2	550.0	519.0
62.5°	546.1	542.3	542.3	542.3	542.3	538.4	534.5	526.8	511.3	488.0	460.9
65°	468.7	468.7	468.7	468.7	464.8	464.8	464.8	453.2	445.4	422.2	395.1
67.5°	383.5	383.5	383.5	383.5	379.6	383.5	383.5	375.7	368.0	344.7	321.5
70°	306.0	302.1	298.2	302.1	298.2	298.2	302.1	294.4	290.5	271.1	247.9
72.5°	224.6	228.5	224.6	224.6	224.6	220.8	224.6	220.8	213.0	197.5	182.0
75°	158.8	162.7	162.7	158.8	158.8	158.8	154.9	154.9	147.2	135.6	127.8
77.5°	108.5	108.5	108.5	108.5	104.6	104.6	104.6	100.7	96.8	89.1	81.3
80°	69.7	69.7	69.7	69.7	65.8	65.8	65.8	62.0	62.0	54.2	46.5
82.5°	42.6	42.6	42.6	42.6	42.6	42.6	38.7	38.7	34.9	31.0	27.1
85°	23.2	23.2	23.2	23.2	23.2	23.2	23.2	19.4	19.4	15.5	11.6
87.5°	7.7	7.7	11.6	11.6	11.6	11.6	11.6	11.6	7.7	7.7	7.7
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4
2.5°	3334.9	3338.7	3338.7	3338.7	3350.4	3354.2	3342.6	3331.0	3354.2	3350.4	3358.1
5°	3296.1	3307.8	3315.5	3319.4	3331.0	3338.7	3327.1	3323.2	3342.6	3346.5	3350.4
7.5°	3249.7	3269.0	3288.4	3296.1	3311.6	3319.4	3315.5	3315.5	3338.7	3346.5	3346.5
10°	3218.7	3245.8	3269.0	3288.4	3307.8	3319.4	3319.4	3323.2	3350.4	3358.1	3365.9
12.5°	3210.9	3245.8	3276.8	3303.9	3319.4	3338.7	3342.6	3354.2	3381.3	3393.0	3393.0
15°	3191.6	3238.0	3276.8	3311.6	3334.9	3358.1	3365.9	3389.1	3420.1	3427.8	3435.6
17.5°	3156.7	3203.2	3249.7	3292.3	3323.2	3342.6	3365.9	3389.1	3427.8	3439.4	3443.3
20°	3094.7	3149.0	3195.4	3238.0	3269.0	3296.1	3319.4	3346.5	3381.3	3396.8	3400.7
22.5°	3001.8	3056.0	3102.5	3149.0	3179.9	3203.2	3226.4	3257.4	3292.3	3307.8	3307.8
25°	2889.4	2939.8	2990.1	3025.0	3056.0	3083.1	3094.7	3129.6	3164.4	3183.8	3183.8
27.5°	2746.1	2792.6	2839.1	2877.8	2897.2	2920.4	2939.8	2970.8	2997.9	3013.4	3028.9
30°	2564.1	2610.6	2653.2	2691.9	2715.1	2738.4	2757.8	2781.0	2808.1	2827.5	2831.3
32.5°	2366.6	2405.3	2447.9	2486.6	2509.9	2517.6	2537.0	2560.2	2583.5	2599.0	2602.8
35°	2149.7	2176.8	2203.9	2238.7	2262.0	2262.0	2281.3	2296.8	2316.2	2351.1	2343.3
37.5°	1894.0	1932.8	1952.1	1963.7	1979.2	1994.7	1998.6	2018.0	2041.2	2048.9	2060.6
40°	1653.9	1665.5	1677.1	1677.1	1692.6	1692.6	1692.6	1696.5	1719.7	1723.6	1739.1
42.5°	1413.7	1413.7	1402.1	1390.5	1394.4	1390.5	1371.1	1371.1	1382.8	1398.2	1398.2
45°	1189.1	1162.0	1127.1	1100.0	1080.6	1072.9	1049.7	1049.7	1045.8	1049.7	1065.1
47.5°	999.3	952.8	894.7	840.5	821.1	805.6	770.8	755.3	747.5	751.4	759.2
50°	840.5	790.1	724.3	658.5	623.6	604.2	561.6	534.5	530.6	522.9	538.4
52.5°	724.3	662.3	592.6	515.1	480.3	449.3	402.8	379.6	364.1	364.1	368.0
55°	623.6	557.7	480.3	402.8	368.0	344.7	298.2	267.3	251.8	247.9	259.5
57.5°	538.4	476.4	398.9	321.5	286.6	259.5	213.0	185.9	174.3	166.5	170.4
60°	472.5	410.6	333.1	259.5	228.5	197.5	158.8	127.8	112.3	112.3	116.2
62.5°	410.6	352.5	282.7	213.0	185.9	158.8	116.2	89.1	77.5	73.6	77.5
65°	348.6	294.4	236.3	178.2	151.1	127.8	93.0	69.7	54.2	50.4	54.2
67.5°	282.7	240.1	189.8	143.3	120.1	100.7	69.7	50.4	38.7	34.9	38.7
70°	220.8	182.0	143.3	104.6	89.1	73.6	50.4	38.7	27.1	23.2	27.1
72.5°	158.8	131.7	100.7	73.6	62.0	50.4	34.9	27.1	19.4	15.5	19.4
75°	108.5	89.1	65.8	46.5	38.7	34.9	23.2	15.5	11.6	11.6	11.6
77.5°	69.7	54.2	42.6	31.0	23.2	19.4	11.6	7.7	7.7	7.7	7.7
80°	38.7	31.0	23.2	15.5	11.6	11.6	7.7	7.7	3.9	3.9	3.9
82.5°	23.2	15.5	11.6	7.7	7.7	3.9	3.9	3.9	3.9	3.9	3.9
85°	11.6	7.7	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
87.5°	3.9	3.9	3.9	3.9	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°	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4
2.5°	3342.6	3346.5	3334.9	3350.4	3338.7	3354.2	3354.2	3338.7	3342.6	3334.9	3350.4
5°	3334.9	3334.9	3327.1	3338.7	3323.2	3338.7	3334.9	3307.8	3315.5	3300.0	3315.5
7.5°	3334.9	3327.1	3315.5	3327.1	3307.8	3319.4	3303.9	3276.8	3269.0	3249.7	3249.7
10°	3346.5	3334.9	3319.4	3323.2	3303.9	3307.8	3284.5	3245.8	3234.2	3210.9	3203.2
12.5°	3373.6	3362.0	3338.7	3346.5	3319.4	3319.4	3288.4	3241.9	3218.7	3187.7	3179.9
15°	3412.3	3393.0	3365.9	3369.7	3342.6	3327.1	3288.4	3234.2	3203.2	3160.6	3149.0
17.5°	3420.1	3400.7	3365.9	3365.9	3331.0	3311.6	3265.1	3203.2	3164.4	3121.8	3098.6
20°	3377.5	3358.1	3319.4	3315.5	3284.5	3257.4	3207.1	3145.1	3106.3	3059.9	3040.5
22.5°	3288.4	3265.1	3230.3	3226.4	3195.4	3179.9	3125.7	3063.7	3025.0	2978.5	2963.0
25°	3156.7	3145.1	3110.2	3106.3	3079.2	3059.9	3013.4	2955.3	2920.4	2874.0	2858.5
27.5°	3001.8	2990.1	2955.3	2955.3	2924.3	2912.7	2870.1	2815.9	2788.7	2746.1	2726.8
30°	2815.9	2800.4	2781.0	2777.1	2750.0	2738.4	2699.7	2649.3	2622.2	2587.3	2579.6
32.5°	2595.1	2583.5	2571.8	2568.0	2540.9	2529.2	2502.1	2451.8	2428.5	2397.5	2385.9
35°	2339.4	2331.7	2320.1	2316.2	2304.6	2293.0	2265.9	2227.1	2215.5	2192.3	2180.6
37.5°	2045.1	2052.8	2045.1	2045.1	2033.5	2037.3	2014.1	1990.9	1979.2	1963.7	1956.0
40°	1727.5	1743.0	1754.6	1754.6	1750.7	1766.2	1762.3	1743.0	1739.1	1731.3	1727.5
42.5°	1406.0	1413.7	1437.0	1452.5	1448.6	1487.3	1491.2	1506.7	1518.3	1510.6	1514.4
45°	1069.0	1092.3	1123.2	1138.7	1158.1	1208.5	1235.6	1266.6	1293.7	1309.2	1305.3
47.5°	770.8	797.9	832.7	856.0	890.8	952.8	1022.5	1061.3	1100.0	1119.4	1138.7
50°	557.7	584.9	627.5	662.3	685.6	770.8	844.4	894.7	937.3	964.4	983.8
52.5°	391.2	422.2	468.7	499.6	534.5	615.8	701.1	759.2	805.6	840.5	859.9
55°	271.1	306.0	348.6	379.6	418.3	503.5	584.9	646.8	697.2	728.2	751.4
57.5°	189.8	220.8	263.4	290.5	329.2	410.6	491.9	553.9	604.2	635.2	662.3
60°	127.8	158.8	201.4	228.5	259.5	340.8	414.4	480.3	526.8	557.7	584.9
62.5°	89.1	116.2	158.8	185.9	213.0	282.7	352.5	410.6	457.0	491.9	515.1
65°	69.7	93.0	127.8	151.1	178.2	236.3	294.4	344.7	391.2	426.1	441.6
67.5°	50.4	73.6	100.7	120.1	139.4	189.8	240.1	278.9	321.5	348.6	368.0
70°	34.9	50.4	73.6	89.1	104.6	143.3	182.0	216.9	247.9	267.3	282.7
72.5°	27.1	34.9	50.4	62.0	73.6	100.7	131.7	158.8	182.0	197.5	213.0
75°	15.5	23.2	34.9	42.6	50.4	69.7	89.1	108.5	123.9	135.6	143.3
77.5°	7.7	11.6	19.4	23.2	31.0	42.6	58.1	69.7	81.3	89.1	96.8
80°	7.7	7.7	11.6	11.6	15.5	23.2	31.0	38.7	46.5	54.2	58.1
82.5°	3.9	3.9	7.7	7.7	7.7	11.6	15.5	23.2	27.1	31.0	34.9
85°	3.9	3.9	3.9	3.9	3.9	7.7	7.7	11.6	15.5	19.4	19.4
87.5°	0.0	0.0	3.9	3.9	3.9	3.9	3.9	7.7	7.7	7.7	11.6
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: P252641

CATALOG NUMBER: LD6B70D010TE EU6B60709027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4	3350.4
2.5°	3338.7	3346.5	3342.6	3350.4	3338.7	3334.9	3342.6	3331.0
5°	3296.1	3300.0	3296.1	3296.1	3288.4	3280.6	3288.4	3276.8
7.5°	3230.3	3230.3	3218.7	3218.7	3203.2	3195.4	3195.4	3191.6
10°	3176.1	3164.4	3152.8	3156.7	3133.5	3125.7	3121.8	3118.0
12.5°	3149.0	3141.2	3121.8	3121.8	3098.6	3090.9	3087.0	3083.1
15°	3118.0	3102.5	3087.0	3083.1	3063.7	3056.0	3052.1	3044.4
17.5°	3063.7	3052.1	3032.8	3032.8	3013.4	3009.5	3001.8	2997.9
20°	3005.6	2990.1	2974.7	2974.7	2951.4	2951.4	2939.8	2943.7
22.5°	2924.3	2912.7	2897.2	2897.2	2877.8	2874.0	2862.3	2858.5
25°	2827.5	2812.0	2800.4	2796.5	2781.0	2773.2	2769.4	2761.6
27.5°	2699.7	2688.0	2676.4	2668.7	2649.3	2645.4	2633.8	2637.7
30°	2540.9	2533.1	2529.2	2521.5	2498.2	2490.5	2490.5	2478.9
32.5°	2366.6	2354.9	2347.2	2335.6	2316.2	2312.3	2300.7	2304.6
35°	2153.5	2138.0	2126.4	2130.3	2107.0	2103.2	2095.4	2099.3
37.5°	1932.8	1917.3	1901.8	1897.9	1878.5	1878.5	1866.9	1866.9
40°	1704.2	1688.7	1681.0	1681.0	1657.8	1661.6	1650.0	1646.1
42.5°	1498.9	1483.5	1479.6	1475.7	1464.1	1460.2	1448.6	1452.5
45°	1305.3	1301.4	1301.4	1293.7	1282.0	1278.2	1282.0	1282.0
47.5°	1134.9	1138.7	1134.9	1134.9	1127.1	1134.9	1127.1	1131.0
50°	991.6	999.3	999.3	999.3	995.4	999.3	999.3	1003.2
52.5°	871.5	883.1	879.2	883.1	879.2	887.0	883.1	887.0
55°	766.9	774.6	778.5	782.4	782.4	782.4	782.4	782.4
57.5°	670.1	681.7	685.6	689.4	689.4	697.2	689.4	689.4
60°	592.6	604.2	608.1	612.0	612.0	615.8	608.1	612.0
62.5°	522.9	534.5	534.5	538.4	538.4	538.4	530.6	534.5
65°	453.2	457.0	460.9	460.9	457.0	457.0	453.2	457.0
67.5°	375.7	379.6	375.7	375.7	371.8	371.8	364.1	368.0
70°	290.5	290.5	294.4	290.5	286.6	290.5	286.6	282.7
72.5°	216.9	216.9	216.9	213.0	213.0	209.2	213.0	213.0
75°	147.2	147.2	151.1	151.1	151.1	151.1	147.2	147.2
77.5°	96.8	96.8	96.8	96.8	100.7	96.8	96.8	96.8
80°	62.0	62.0	65.8	65.8	62.0	62.0	62.0	62.0
82.5°	38.7	38.7	38.7	38.7	38.7	38.7	38.7	38.7
85°	23.2	23.2	23.2	23.2	19.4	19.4	19.4	19.4
87.5°	11.6	11.6	11.6	11.6	11.6	11.6	7.7	7.7
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)