

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: P252330

Luminaire Tested: **LD6B70D010TE EU6B60709030 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252330
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B70D010TE EU6B60709030 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5595.0 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

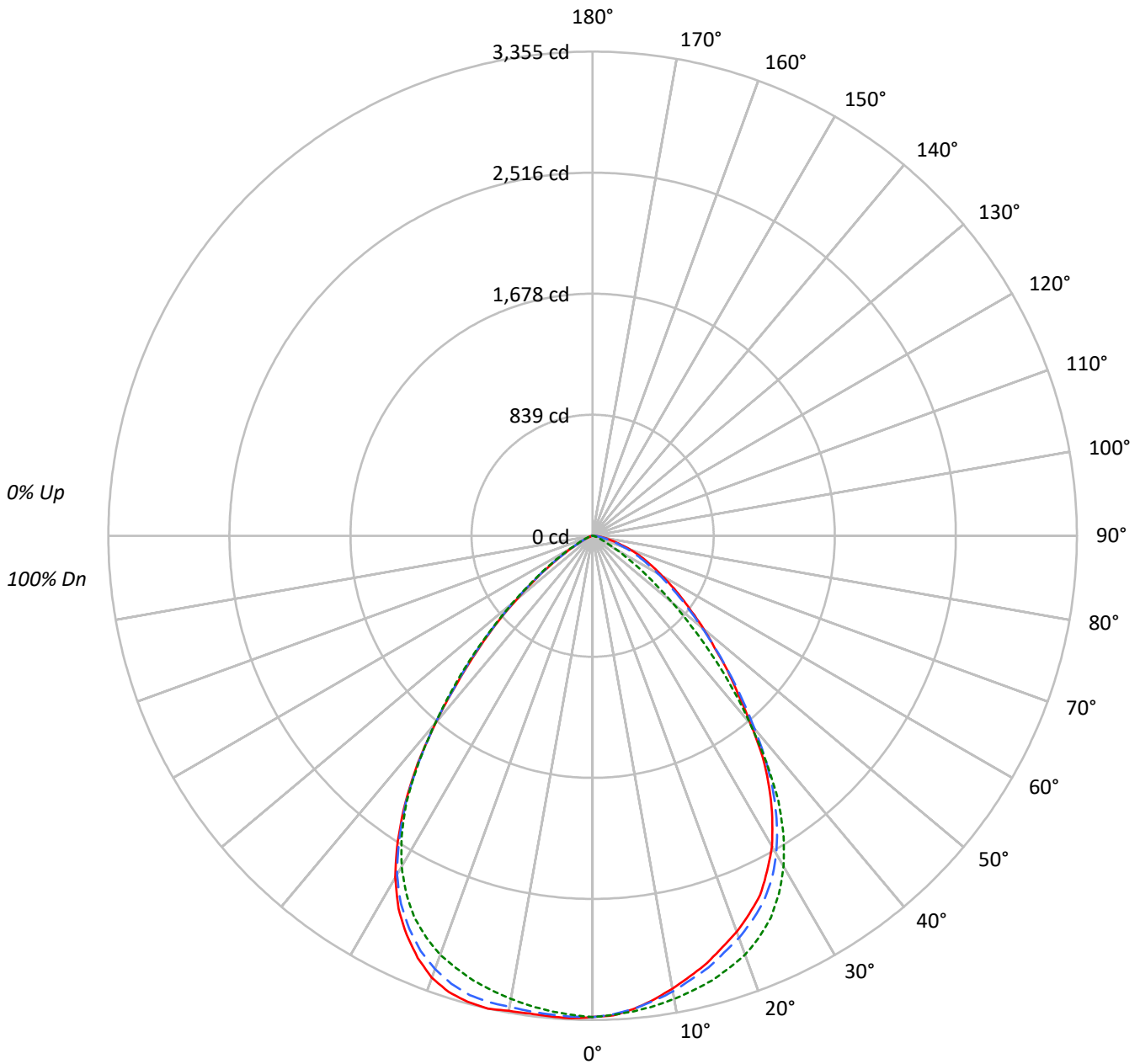
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58					58			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52					52			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47					47			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43					43			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40					40			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	217577	217577	217577
5°	215507	216562	218933
10°	211057	215859	221464
15°	207023	215459	225793
20°	202736	214483	226223
25°	197736	210204	219482
30°	187211	199347	206022
35°	170016	178674	180282
40°	145097	144415	143725
45°	121890	108143	104794
50°	101791	73179	69495
55°	85672	44895	40777
60°	72521	23643	20499
65°	62799	12442	9942
70°	52247	7687	5379
75°	38592	5067	3050
80°	30282	3043	1503
85°	24103	2994	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.3	5.6
10°-20°	899.9	16.1
20°-30°	1328.9	23.8
30°-40°	1369.5	24.5
40°-50°	945.9	16.9
50°-60°	466.2	8.3
60°-70°	188.9	3.4
70°-80°	67.3	1.2
80°-90°	13.9	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°	2543.1	45.5
0°-40°	3912.7	69.9
0°-60°	5324.8	95.2
0°-90°	5595.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5595.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3335	3335	3335	3335	3335	
5°	3291	3291	3307	3331	3343	311
15°	3065	3097	3190	3295	3343	863
25°	2747	2799	2920	3005	3049	1256
35°	2135	2187	2243	2256	2264	1323
45°	1321	1329	1172	1156	1136	1021
55°	753	725	395	371	358	681
65°	407	366	81	64	64	404
75°	153	129	20	12	12	172
85°	32	24	4	0	0	39
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°	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0
2.5°	3326.9	3314.8	3322.9	3306.8	3326.9	3306.8	3310.8	3314.8	3310.8	3314.8	3318.9
5°	3290.7	3278.6	3290.7	3270.5	3290.7	3278.6	3278.6	3282.6	3282.6	3286.6	3290.7
7.5°	3242.3	3230.2	3242.3	3222.2	3246.4	3234.3	3234.3	3242.3	3238.3	3242.3	3250.4
10°	3185.9	3169.8	3181.9	3169.8	3194.0	3177.9	3185.9	3185.9	3185.9	3185.9	3206.1
12.5°	3125.5	3109.4	3125.5	3105.4	3129.5	3117.5	3121.5	3133.6	3137.6	3145.7	3149.7
15°	3065.1	3045.0	3053.0	3040.9	3065.1	3053.0	3057.1	3073.2	3073.2	3085.2	3097.3
17.5°	2988.6	2972.5	2988.6	2972.5	2992.6	2984.6	2992.6	3004.7	3004.7	3016.8	3028.9
20°	2920.1	2904.0	2916.1	2904.0	2928.2	2916.1	2920.1	2936.2	2940.2	2952.3	2964.4
22.5°	2835.5	2823.4	2831.5	2819.4	2843.6	2835.5	2839.6	2855.7	2859.7	2867.7	2887.9
25°	2746.9	2722.7	2734.8	2726.8	2750.9	2738.9	2746.9	2763.0	2771.1	2783.2	2799.3
27.5°	2618.0	2605.9	2614.0	2614.0	2634.1	2622.1	2626.1	2642.2	2654.3	2666.4	2686.5
30°	2485.1	2465.0	2473.0	2477.1	2493.2	2485.1	2493.2	2509.3	2513.3	2529.4	2545.5
32.5°	2315.9	2307.9	2324.0	2315.9	2324.0	2324.0	2328.0	2340.1	2348.2	2356.2	2376.4
35°	2134.7	2118.6	2134.7	2126.6	2146.8	2134.7	2146.8	2158.9	2158.9	2175.0	2187.1
37.5°	1937.3	1917.2	1925.3	1925.3	1933.3	1929.3	1929.3	1949.4	1953.5	1965.5	1977.6
40°	1703.7	1695.7	1711.8	1707.8	1711.8	1711.8	1715.8	1727.9	1736.0	1740.0	1744.0
42.5°	1494.3	1498.3	1502.3	1502.3	1502.3	1502.3	1502.3	1518.5	1514.4	1526.5	1530.5
45°	1321.1	1305.0	1313.0	1309.0	1321.1	1309.0	1321.1	1333.2	1325.1	1337.2	1329.2
47.5°	1143.9	1143.9	1143.9	1139.8	1147.9	1143.9	1151.9	1156.0	1156.0	1156.0	1151.9
50°	1002.9	990.8	994.9	994.9	998.9	994.9	1002.9	1006.9	1006.9	998.9	982.8
52.5°	866.0	861.9	861.9	870.0	870.0	866.0	866.0	866.0	866.0	853.9	845.8
55°	753.2	745.1	749.2	749.2	749.2	749.2	753.2	749.2	749.2	737.1	725.0
57.5°	652.5	644.4	644.4	644.4	648.5	644.4	644.4	644.4	640.4	628.3	612.2
60°	555.8	551.8	555.8	555.8	559.9	555.8	555.8	555.8	547.8	535.7	519.6
62.5°	475.3	475.3	475.3	479.3	479.3	475.3	475.3	471.2	467.2	451.1	435.0
65°	406.8	402.8	406.8	406.8	410.8	410.8	406.8	402.8	398.7	382.6	366.5
67.5°	338.3	334.3	338.3	338.3	342.4	338.3	338.3	338.3	326.2	318.2	302.1
70°	273.9	269.9	269.9	269.9	273.9	265.8	269.9	269.9	261.8	249.7	233.6
72.5°	209.4	209.4	209.4	209.4	209.4	209.4	205.4	205.4	197.4	185.3	177.2
75°	153.1	153.1	157.1	157.1	153.1	153.1	153.1	149.0	145.0	136.9	128.9
77.5°	112.8	112.8	112.8	112.8	108.7	108.7	108.7	104.7	100.7	96.7	88.6
80°	80.6	80.6	80.6	76.5	80.6	76.5	76.5	76.5	68.5	64.4	60.4
82.5°	56.4	52.4	52.4	52.4	52.4	52.4	52.4	48.3	48.3	44.3	40.3
85°	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	28.2	24.2	24.2
87.5°	16.1	20.1	20.1	20.1	20.1	20.1	20.1	16.1	16.1	16.1	12.1
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°	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0
2.5°	3318.9	3318.9	3326.9	3314.8	3335.0	3322.9	3318.9	3339.0	3326.9	3322.9	3330.9
5°	3290.7	3294.7	3298.7	3290.7	3310.8	3298.7	3298.7	3318.9	3310.8	3306.8	3318.9
7.5°	3254.4	3258.4	3266.5	3262.5	3278.6	3270.5	3274.5	3294.7	3286.6	3286.6	3298.7
10°	3210.1	3218.2	3226.2	3226.2	3246.4	3238.3	3238.3	3262.5	3254.4	3258.4	3274.5
12.5°	3157.7	3169.8	3181.9	3185.9	3206.1	3194.0	3198.0	3226.2	3222.2	3226.2	3242.3
15°	3101.4	3117.5	3129.5	3129.5	3153.7	3141.6	3153.7	3181.9	3173.9	3190.0	3210.1
17.5°	3036.9	3053.0	3069.1	3073.2	3097.3	3089.3	3105.4	3133.6	3133.6	3141.6	3165.8
20°	2976.5	2996.6	3004.7	3016.8	3040.9	3036.9	3045.0	3077.2	3077.2	3089.3	3113.4
22.5°	2895.9	2916.1	2932.2	2944.3	2964.4	2964.4	2976.5	3004.7	3004.7	3012.7	3036.9
25°	2807.3	2831.5	2843.6	2855.7	2875.8	2871.8	2883.9	2908.0	2912.1	2920.1	2944.3
27.5°	2694.6	2714.7	2730.8	2738.9	2767.1	2750.9	2763.0	2791.2	2787.2	2795.2	2815.4
30°	2553.6	2573.7	2589.8	2589.8	2614.0	2614.0	2626.1	2638.2	2638.2	2646.2	2662.3
32.5°	2388.4	2412.6	2412.6	2424.7	2440.8	2424.7	2440.8	2456.9	2448.9	2460.9	2473.0
35°	2199.1	2211.2	2215.3	2215.3	2227.3	2223.3	2219.3	2231.4	2223.3	2243.4	2255.5
37.5°	1969.6	1985.7	1977.6	1985.7	1981.6	1969.6	1969.6	1989.7	1973.6	1977.6	1989.7
40°	1748.0	1748.0	1744.0	1723.9	1727.9	1715.8	1711.8	1715.8	1699.7	1695.7	1711.8
42.5°	1518.5	1514.4	1502.3	1474.2	1478.2	1458.0	1441.9	1441.9	1433.9	1429.8	1433.9
45°	1313.0	1301.0	1280.8	1248.6	1240.5	1224.4	1192.2	1184.2	1172.1	1172.1	1176.1
47.5°	1123.7	1107.6	1075.4	1039.2	1019.0	998.9	966.7	954.6	934.4	926.4	934.4
50°	966.7	938.5	898.2	845.8	825.7	801.5	769.3	749.2	729.0	721.0	716.9
52.5°	821.7	781.4	741.1	676.7	660.5	636.4	592.1	571.9	551.8	535.7	535.7
55°	696.8	660.5	604.2	543.7	519.6	495.4	451.1	422.9	402.8	394.7	386.7
57.5°	584.0	543.7	491.4	426.9	402.8	378.6	334.3	306.1	286.0	273.9	265.8
60°	491.4	447.1	394.7	338.3	310.1	286.0	241.7	213.5	193.3	181.2	173.2
62.5°	402.8	366.5	314.2	261.8	237.6	213.5	177.2	149.0	128.9	120.8	108.7
65°	338.3	302.1	253.7	209.4	189.3	165.1	132.9	108.7	92.6	80.6	72.5
67.5°	273.9	245.7	205.4	165.1	145.0	128.9	100.7	80.6	64.4	56.4	52.4
70°	217.5	189.3	157.1	124.9	112.8	96.7	76.5	56.4	48.3	40.3	36.2
72.5°	161.1	141.0	116.8	92.6	80.6	72.5	52.4	44.3	32.2	28.2	24.2
75°	116.8	100.7	84.6	64.4	56.4	52.4	40.3	28.2	24.2	20.1	16.1
77.5°	80.6	72.5	56.4	44.3	40.3	36.2	28.2	20.1	16.1	12.1	12.1
80°	52.4	44.3	36.2	28.2	28.2	24.2	16.1	12.1	12.1	8.1	8.1
82.5°	32.2	28.2	24.2	20.1	16.1	16.1	12.1	8.1	8.1	4.0	4.0
85°	20.1	16.1	12.1	12.1	8.1	8.1	8.1	4.0	4.0	4.0	4.0
87.5°	8.1	8.1	8.1	4.0	4.0	4.0	4.0	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°	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0
2.5°	3330.9	3330.9	3339.0	3326.9	3335.0	3335.0	3343.0	3326.9	3335.0	3339.0	3347.0
5°	3314.8	3318.9	3326.9	3322.9	3326.9	3326.9	3335.0	3314.8	3330.9	3330.9	3343.0
7.5°	3298.7	3298.7	3306.8	3302.7	3310.8	3314.8	3322.9	3306.8	3322.9	3322.9	3335.0
10°	3278.6	3278.6	3290.7	3286.6	3298.7	3302.7	3314.8	3298.7	3314.8	3318.9	3330.9
12.5°	3250.4	3254.4	3266.5	3266.5	3278.6	3286.6	3298.7	3290.7	3310.8	3314.8	3330.9
15°	3218.2	3226.2	3242.3	3238.3	3250.4	3262.5	3278.6	3266.5	3294.7	3302.7	3318.9
17.5°	3177.9	3185.9	3198.0	3198.0	3210.1	3218.2	3238.3	3230.2	3254.4	3258.4	3278.6
20°	3117.5	3129.5	3145.7	3141.6	3153.7	3161.8	3177.9	3169.8	3194.0	3202.0	3222.2
22.5°	3045.0	3053.0	3065.1	3065.1	3077.2	3085.2	3101.4	3089.3	3113.4	3117.5	3133.6
25°	2948.3	2956.4	2964.4	2968.4	2980.5	2984.6	2992.6	2984.6	3004.7	3008.7	3028.9
27.5°	2823.4	2827.5	2839.6	2839.6	2847.6	2851.6	2863.7	2847.6	2875.8	2875.8	2887.9
30°	2674.4	2670.4	2686.5	2678.4	2686.5	2686.5	2698.6	2690.5	2710.7	2702.6	2714.7
32.5°	2477.1	2485.1	2485.1	2477.1	2493.2	2489.1	2489.1	2481.1	2493.2	2497.2	2505.3
35°	2247.5	2259.6	2259.6	2263.6	2267.6	2255.5	2259.6	2235.4	2255.5	2259.6	2263.6
37.5°	1997.8	1985.7	1993.7	1981.6	2001.8	1977.6	1977.6	1961.5	1977.6	1977.6	1981.6
40°	1711.8	1707.8	1715.8	1707.8	1703.7	1699.7	1691.6	1679.6	1695.7	1687.6	1699.7
42.5°	1441.9	1437.9	1437.9	1429.8	1425.8	1425.8	1417.8	1409.7	1405.7	1405.7	1425.8
45°	1164.0	1172.1	1164.0	1160.0	1168.0	1160.0	1164.0	1147.9	1156.0	1147.9	1156.0
47.5°	930.4	934.4	926.4	918.3	930.4	918.3	918.3	906.2	922.4	922.4	914.3
50°	721.0	716.9	708.9	716.9	712.9	712.9	712.9	700.8	708.9	696.8	704.9
52.5°	531.7	527.6	527.6	523.6	527.6	523.6	523.6	519.6	519.6	515.6	519.6
55°	386.7	382.6	374.6	374.6	374.6	378.6	374.6	370.6	370.6	366.5	370.6
57.5°	261.8	253.7	253.7	253.7	253.7	249.7	249.7	245.7	249.7	245.7	249.7
60°	169.2	169.2	161.1	161.1	161.1	161.1	161.1	157.1	161.1	161.1	161.1
62.5°	104.7	104.7	100.7	96.7	100.7	96.7	96.7	96.7	100.7	96.7	100.7
65°	68.5	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
67.5°	48.3	44.3	44.3	44.3	44.3	44.3	44.3	40.3	44.3	44.3	44.3
70°	32.2	32.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
72.5°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
75°	16.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
77.5°	12.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
80°	8.1	8.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
85°	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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: P252330

CATALOG NUMBER: LD6B70D010TE EU6B60709030 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0	3335.0
2.5°	3335.0	3339.0	3330.9	3335.0	3326.9	3335.0	3339.0	3347.0
5°	3326.9	3330.9	3322.9	3330.9	3322.9	3330.9	3335.0	3343.0
7.5°	3318.9	3326.9	3318.9	3326.9	3318.9	3326.9	3330.9	3339.0
10°	3318.9	3330.9	3322.9	3335.0	3322.9	3330.9	3339.0	3343.0
12.5°	3318.9	3330.9	3326.9	3335.0	3330.9	3339.0	3347.0	3355.1
15°	3310.8	3322.9	3314.8	3326.9	3322.9	3326.9	3343.0	3343.0
17.5°	3266.5	3278.6	3278.6	3286.6	3286.6	3298.7	3306.8	3314.8
20°	3210.1	3222.2	3218.2	3230.2	3230.2	3242.3	3250.4	3258.4
22.5°	3125.5	3141.6	3137.6	3149.7	3145.7	3153.7	3169.8	3165.8
25°	3016.8	3036.9	3032.9	3040.9	3036.9	3036.9	3045.0	3049.0
27.5°	2883.9	2895.9	2891.9	2900.0	2891.9	2900.0	2908.0	2912.1
30°	2710.7	2718.7	2714.7	2718.7	2714.7	2722.7	2726.8	2734.8
32.5°	2501.2	2513.3	2501.2	2509.3	2505.3	2505.3	2521.4	2513.3
35°	2251.5	2255.5	2259.6	2259.6	2251.5	2255.5	2263.6	2263.6
37.5°	1973.6	1993.7	1969.6	1981.6	1977.6	1977.6	1977.6	1989.7
40°	1683.6	1687.6	1679.6	1679.6	1679.6	1675.5	1691.6	1687.6
42.5°	1409.7	1413.7	1409.7	1397.6	1401.7	1401.7	1413.7	1397.6
45°	1143.9	1151.9	1147.9	1147.9	1139.8	1139.8	1143.9	1135.8
47.5°	906.2	914.3	902.2	906.2	898.2	906.2	902.2	910.3
50°	688.7	696.8	692.8	696.8	696.8	688.7	700.8	684.7
52.5°	515.6	519.6	515.6	511.5	507.5	507.5	515.6	511.5
55°	366.5	362.5	362.5	362.5	366.5	366.5	362.5	358.5
57.5°	245.7	245.7	241.7	241.7	245.7	237.6	241.7	237.6
60°	157.1	157.1	157.1	157.1	153.1	157.1	157.1	157.1
62.5°	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
65°	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
67.5°	40.3	44.3	44.3	44.3	40.3	40.3	40.3	40.3
70°	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
72.5°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
75°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
77.5°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
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)