

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: P252211

Luminaire Tested: **LD6B60D010TE EU6B60709024 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252211
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B60D010TE EU6B60709024 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5493.0 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

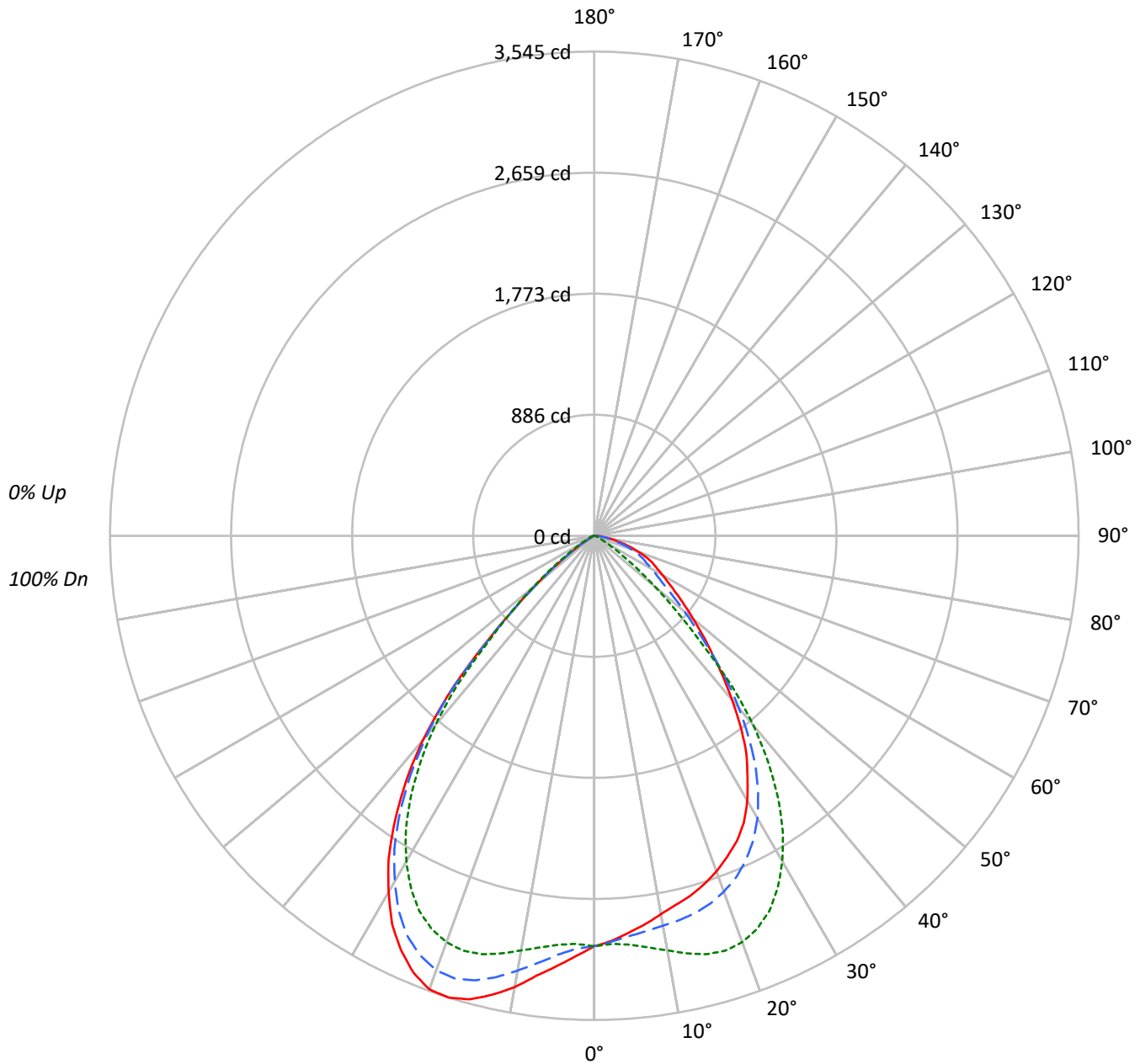
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80		
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72		
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65		
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58		
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53		
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48		
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44		
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40		
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	196055	196055	196055
5°	190968	196804	207151
10°	186327	204220	222299
15°	184147	214223	237316
20°	181512	219808	245336
25°	177652	218187	240934
30°	168815	207340	226821
35°	154446	186941	202503
40°	133591	154388	166133
45°	112655	101260	108678
50°	95640	58614	55113
55°	82999	28106	21236
60°	74975	13126	5245
65°	72740	7533	1775
70°	65218	6028	1640
75°	53590	4336	731
80°	39938	2142	0
85°	34433	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.3	5.3
10°-20°	884.6	16.1
20°-30°	1351.6	24.6
30°-40°	1413.7	25.7
40°-50°	917.1	16.7
50°-60°	364.1	6.6
60°-70°	172.7	3.1
70°-80°	82.1	1.5
80°-90°	16.8	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°	2526.5	46.0
0°-40°	3940.2	71.7
0°-60°	5221.4	95.1
0°-90°	5493.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5493.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3005	3005	3005	3005	3005	
5°	2916	2942	3005	3080	3163	275
15°	2726	2859	3172	3370	3514	768
25°	2468	2623	3031	3235	3347	1130
35°	1939	2057	2347	2485	2543	1199
45°	1221	1210	1098	1164	1178	950
55°	730	621	247	192	187	661
65°	471	391	49	12	12	460
75°	213	172	17	6	3	229
85°	46	29	0	0	0	54
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°	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1
2.5°	2967.8	2973.5	2941.9	2933.3	2956.3	2964.9	2967.8	2959.1	2962.0	2973.5	2973.5
5°	2916.0	2921.8	2893.1	2884.4	2907.4	2913.2	2921.8	2918.9	2927.5	2944.8	2941.9
7.5°	2867.2	2875.8	2844.2	2832.7	2861.5	2875.8	2881.6	2881.6	2893.1	2916.0	2918.9
10°	2812.6	2824.1	2795.4	2789.6	2821.2	2835.6	2838.5	2844.2	2861.5	2893.1	2898.8
12.5°	2766.6	2778.1	2758.0	2749.4	2783.9	2798.3	2804.0	2815.5	2835.6	2875.8	2881.6
15°	2726.4	2735.0	2712.1	2706.3	2740.8	2758.0	2760.9	2778.1	2804.0	2850.0	2858.6
17.5°	2674.7	2680.5	2663.2	2657.5	2692.0	2709.2	2712.1	2732.2	2763.8	2809.7	2824.1
20°	2614.4	2620.1	2602.9	2597.1	2631.6	2651.7	2654.6	2671.8	2709.2	2758.0	2772.4
22.5°	2542.6	2554.1	2533.9	2528.2	2562.7	2579.9	2588.5	2602.9	2640.2	2689.1	2709.2
25°	2467.9	2467.9	2453.5	2450.6	2482.2	2502.3	2499.5	2519.6	2556.9	2605.8	2623.0
27.5°	2370.2	2367.3	2352.9	2350.1	2384.5	2401.8	2396.0	2416.1	2450.6	2499.5	2516.7
30°	2240.9	2246.6	2226.5	2220.8	2249.5	2278.2	2275.4	2295.5	2330.0	2375.9	2387.4
32.5°	2085.8	2091.5	2088.6	2080.0	2105.9	2120.2	2128.9	2143.2	2171.9	2220.8	2232.3
35°	1939.2	1930.6	1919.1	1919.1	1945.0	1968.0	1959.4	1976.6	2005.3	2054.2	2057.0
37.5°	1758.2	1755.4	1749.6	1743.9	1772.6	1778.4	1781.2	1792.7	1818.6	1858.8	1853.1
40°	1568.6	1571.5	1568.6	1557.1	1574.4	1597.4	1594.5	1600.2	1623.2	1651.9	1643.3
42.5°	1390.5	1390.5	1390.5	1379.0	1399.1	1410.6	1416.4	1413.5	1419.2	1445.1	1433.6
45°	1221.0	1223.9	1221.0	1218.1	1221.0	1226.7	1221.0	1218.1	1218.1	1226.7	1209.5
47.5°	1074.5	1074.5	1065.9	1057.2	1065.9	1068.7	1060.1	1051.5	1048.6	1045.8	1017.0
50°	942.3	939.5	936.6	922.2	930.8	933.7	922.2	916.5	905.0	890.6	856.1
52.5°	827.4	824.5	821.7	807.3	813.0	815.9	804.4	792.9	778.6	767.1	724.0
55°	729.7	726.9	726.9	718.2	712.5	718.2	706.7	698.1	678.0	663.7	620.6
57.5°	646.4	646.4	640.7	632.0	634.9	634.9	623.4	611.9	594.7	577.5	543.0
60°	574.6	574.6	574.6	566.0	566.0	566.0	560.2	548.7	534.4	517.1	482.7
62.5°	517.1	517.1	514.3	505.6	508.5	508.5	502.8	491.3	476.9	465.4	430.9
65°	471.2	471.2	471.2	462.5	462.5	465.4	459.7	448.2	436.7	422.3	390.7
67.5°	413.7	410.8	410.8	405.1	408.0	410.8	405.1	396.5	382.1	373.5	344.8
70°	341.9	344.8	347.6	339.0	341.9	341.9	339.0	330.4	321.8	313.2	287.3
72.5°	278.7	278.7	275.8	272.9	272.9	275.8	270.1	261.4	255.7	249.9	229.8
75°	212.6	209.7	212.6	206.9	206.9	206.9	201.1	198.2	195.4	186.7	172.4
77.5°	155.1	152.3	152.3	146.5	149.4	149.4	146.5	140.8	135.0	132.2	120.7
80°	106.3	106.3	106.3	103.4	103.4	100.6	100.6	97.7	91.9	89.1	83.3
82.5°	71.8	71.8	71.8	69.0	69.0	69.0	66.1	63.2	60.3	57.5	51.7
85°	46.0	46.0	46.0	43.1	43.1	43.1	40.2	40.2	37.3	34.5	28.7
87.5°	25.9	25.9	25.9	23.0	23.0	23.0	23.0	23.0	20.1	17.2	14.4
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°	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1
2.5°	2993.6	2953.4	2979.2	2979.2	2970.6	2993.6	3008.0	3019.5	3016.6	2990.7	2987.9
5°	2970.6	2936.2	2964.9	2967.8	2959.1	2990.7	3010.9	3025.2	3028.1	3005.1	3008.0
7.5°	2953.4	2924.7	2962.0	2973.5	2970.6	2999.4	3022.3	3045.3	3056.8	3039.6	3042.5
10°	2944.8	2921.8	2962.0	2979.2	2982.1	3013.7	3048.2	3079.8	3094.2	3082.7	3091.3
12.5°	2933.3	2918.9	2964.9	2990.7	3002.2	3033.8	3076.9	3114.3	3137.3	3131.5	3148.8
15°	2921.8	2910.3	2964.9	3002.2	3016.6	3045.3	3094.2	3148.8	3174.6	3171.7	3194.7
17.5°	2893.1	2890.2	2947.6	2987.9	3008.0	3042.5	3088.4	3154.5	3180.4	3186.1	3214.8
20°	2847.1	2847.1	2910.3	2953.4	2976.4	3008.0	3065.4	3128.6	3160.2	3166.0	3197.6
22.5°	2783.9	2789.6	2850.0	2893.1	2927.5	2950.5	3010.9	3076.9	3105.7	3114.3	3148.8
25°	2700.6	2706.3	2763.8	2806.9	2844.2	2870.1	2927.5	2987.9	3022.3	3031.0	3056.8
27.5°	2591.4	2602.9	2657.5	2700.6	2732.2	2749.4	2809.7	2872.9	2898.8	2907.4	2933.3
30°	2465.0	2467.9	2522.4	2559.8	2591.4	2605.8	2657.5	2723.6	2743.7	2752.3	2789.6
32.5°	2309.9	2307.0	2358.7	2393.2	2419.0	2436.3	2490.8	2533.9	2554.1	2568.4	2588.5
35°	2123.1	2120.2	2157.6	2197.8	2217.9	2223.7	2278.2	2324.2	2335.7	2347.2	2373.1
37.5°	1913.4	1913.4	1945.0	1965.1	1988.1	1996.7	2022.6	2074.3	2094.4	2091.5	2111.6
40°	1692.2	1680.7	1703.7	1723.8	1729.5	1732.4	1758.2	1798.5	1812.8	1812.8	1827.2
42.5°	1459.5	1442.2	1445.1	1456.6	1462.3	1442.2	1459.5	1485.3	1476.7	1488.2	1491.1
45°	1212.4	1186.5	1175.0	1149.2	1154.9	1134.8	1123.3	1129.1	1126.2	1097.5	1103.2
47.5°	1011.3	965.3	945.2	907.9	899.2	876.2	861.9	836.0	813.0	813.0	798.7
50°	841.8	795.8	755.6	712.5	698.1	678.0	646.4	611.9	594.7	577.5	563.1
52.5°	706.7	657.9	609.1	563.1	543.0	517.1	474.0	439.6	408.0	390.7	373.5
55°	597.6	543.0	491.3	442.4	416.6	390.7	347.6	307.4	270.1	247.1	232.7
57.5°	514.3	462.5	408.0	356.2	333.3	304.5	258.6	215.5	181.0	155.1	140.8
60°	453.9	402.2	353.4	298.8	275.8	247.1	198.2	158.0	123.5	100.6	83.3
62.5°	402.2	356.2	304.5	255.7	232.7	204.0	158.0	117.8	86.2	63.2	48.8
65°	364.9	318.9	275.8	227.0	206.9	178.1	135.0	97.7	69.0	48.8	34.5
67.5°	321.8	281.5	238.5	198.2	178.1	155.1	114.9	83.3	57.5	40.2	28.7
70°	270.1	238.5	201.1	163.8	149.4	129.3	94.8	69.0	46.0	31.6	23.0
72.5°	215.5	189.6	160.9	132.2	120.7	100.6	77.6	54.6	34.5	23.0	17.2
75°	163.8	143.6	120.7	100.6	89.1	77.6	57.5	40.2	25.9	17.2	11.5
77.5°	112.0	103.4	86.2	69.0	63.2	54.6	37.3	25.9	17.2	11.5	5.7
80°	77.6	69.0	57.5	46.0	40.2	34.5	23.0	17.2	8.6	5.7	2.9
82.5°	48.8	40.2	34.5	28.7	25.9	20.1	14.4	8.6	5.7	2.9	2.9
85°	25.9	23.0	20.1	14.4	14.4	11.5	8.6	5.7	2.9	0.0	0.0
87.5°	14.4	11.5	8.6	5.7	5.7	2.9	2.9	2.9	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°	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1
2.5°	3022.3	3022.3	3019.5	3053.9	3013.7	3053.9	3033.8	3053.9	3025.2	3022.3	3025.2
5°	3045.3	3053.9	3056.8	3088.4	3051.1	3099.9	3082.7	3099.9	3079.8	3085.5	3094.2
7.5°	3091.3	3105.7	3102.8	3143.0	3105.7	3160.2	3148.8	3174.6	3154.5	3160.2	3171.7
10°	3143.0	3160.2	3163.1	3203.3	3168.9	3234.9	3220.6	3249.3	3232.1	3240.7	3255.1
12.5°	3203.3	3223.4	3226.3	3272.3	3234.9	3303.9	3295.3	3324.0	3309.6	3318.3	3335.5
15°	3249.3	3278.0	3283.8	3329.7	3289.5	3361.4	3355.6	3393.0	3370.0	3384.3	3398.7
17.5°	3272.3	3298.1	3309.6	3352.7	3318.3	3390.1	3384.3	3415.9	3398.7	3413.1	3430.3
20°	3257.9	3289.5	3298.1	3341.2	3306.8	3378.6	3370.0	3401.6	3384.3	3395.8	3413.1
22.5°	3206.2	3237.8	3249.3	3289.5	3257.9	3324.0	3321.1	3349.9	3326.9	3341.2	3355.6
25°	3114.3	3148.8	3154.5	3191.8	3157.4	3226.3	3220.6	3252.2	3234.9	3243.6	3263.7
27.5°	2982.1	3022.3	3031.0	3062.6	3036.7	3094.2	3094.2	3120.0	3099.9	3099.9	3120.0
30°	2824.1	2864.3	2870.1	2895.9	2872.9	2924.7	2927.5	2953.4	2921.8	2939.0	2941.9
32.5°	2631.6	2657.5	2674.7	2697.7	2663.2	2729.3	2720.7	2740.8	2723.6	2723.6	2737.9
35°	2398.9	2430.5	2439.1	2467.9	2439.1	2490.8	2490.8	2502.3	2485.1	2485.1	2508.1
37.5°	2146.1	2169.1	2171.9	2200.7	2177.7	2220.8	2217.9	2226.5	2209.3	2220.8	2220.8
40°	1850.2	1867.4	1873.2	1887.5	1884.7	1916.3	1913.4	1919.1	1910.5	1913.4	1919.1
42.5°	1505.4	1528.4	1539.9	1551.4	1534.2	1577.2	1568.6	1577.2	1574.4	1577.2	1585.9
45°	1109.0	1126.2	1134.8	1137.7	1131.9	1157.8	1177.9	1160.7	1163.5	1157.8	1169.3
47.5°	801.6	804.4	798.7	815.9	801.6	813.0	818.8	821.7	804.4	801.6	813.0
50°	548.7	563.1	543.0	551.6	548.7	560.2	554.5	557.4	540.1	548.7	543.0
52.5°	364.9	362.0	356.2	359.1	353.4	353.4	353.4	359.1	347.6	341.9	336.1
55°	221.2	215.5	204.0	201.1	201.1	204.0	198.2	192.5	192.5	189.6	189.6
57.5°	129.3	120.7	114.9	112.0	106.3	103.4	100.6	100.6	94.8	94.8	94.8
60°	71.8	63.2	57.5	51.7	51.7	48.8	46.0	43.1	43.1	43.1	40.2
62.5°	37.3	31.6	25.9	23.0	23.0	20.1	17.2	17.2	17.2	17.2	14.4
65°	25.9	20.1	17.2	14.4	14.4	11.5	11.5	11.5	11.5	11.5	11.5
67.5°	20.1	17.2	14.4	11.5	11.5	11.5	8.6	8.6	8.6	8.6	8.6
70°	17.2	11.5	11.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
72.5°	11.5	11.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
75°	8.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0
80°	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	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



TEST NUMBER: P252211

CATALOG NUMBER: LD6B60D010TE EU6B60709024 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1	3005.1
2.5°	3051.1	3048.2	3051.1	3056.8	3045.3	3079.8	3062.6	3079.8
5°	3117.1	3120.0	3122.9	3131.5	3117.1	3160.2	3137.3	3163.1
7.5°	3203.3	3206.2	3209.1	3217.7	3209.1	3252.2	3226.3	3249.3
10°	3292.4	3298.1	3298.1	3312.5	3303.9	3344.1	3326.9	3355.6
12.5°	3375.7	3381.5	3387.2	3395.8	3390.1	3433.2	3418.8	3441.8
15°	3441.8	3453.3	3456.2	3467.6	3461.9	3507.9	3490.6	3513.6
17.5°	3473.4	3484.9	3484.9	3499.3	3493.5	3542.3	3519.4	3545.2
20°	3456.2	3464.8	3467.6	3482.0	3476.3	3525.1	3502.1	3533.7
22.5°	3401.6	3404.4	3407.3	3421.7	3418.8	3461.9	3441.8	3461.9
25°	3301.0	3309.6	3306.8	3318.3	3318.3	3352.7	3329.7	3347.0
27.5°	3157.4	3166.0	3166.0	3180.4	3168.9	3203.3	3180.4	3206.2
30°	2982.1	2990.7	2985.0	2996.5	2985.0	3019.5	3002.2	3010.9
32.5°	2772.4	2772.4	2775.3	2778.1	2772.4	2804.0	2786.8	2804.0
35°	2522.4	2528.2	2531.1	2533.9	2528.2	2551.2	2531.1	2542.6
37.5°	2240.9	2255.3	2252.4	2255.3	2246.6	2275.4	2258.1	2263.9
40°	1939.2	1939.2	1936.4	1942.1	1933.5	1956.5	1945.0	1950.7
42.5°	1588.7	1597.4	1585.9	1600.2	1577.2	1608.9	1597.4	1588.7
45°	1192.3	1180.8	1177.9	1180.8	1172.2	1175.0	1183.7	1177.9
47.5°	813.0	813.0	807.3	798.7	810.2	813.0	801.6	801.6
50°	545.9	545.9	540.1	537.2	543.0	540.1	534.4	543.0
52.5°	347.6	336.1	336.1	341.9	336.1	330.4	339.0	333.3
55°	189.6	183.9	183.9	189.6	183.9	183.9	181.0	186.7
57.5°	91.9	94.8	91.9	91.9	91.9	91.9	89.1	91.9
60°	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
62.5°	17.2	17.2	14.4	14.4	14.4	14.4	14.4	14.4
65°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
67.5°	8.6	8.6	8.6	8.6	8.6	11.5	8.6	8.6
70°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
72.5°	8.6	8.6	11.5	11.5	11.5	11.5	11.5	11.5
75°	5.7	5.7	5.7	2.9	2.9	2.9	2.9	2.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)