

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: P252624

Luminaire Tested: **LD6B60D010TE EU6B60708035 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252624
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: LD6B60D010TE EU6B60708035 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6105.0 lumens
Efficiency: N/A
Efficacy: 97.7 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

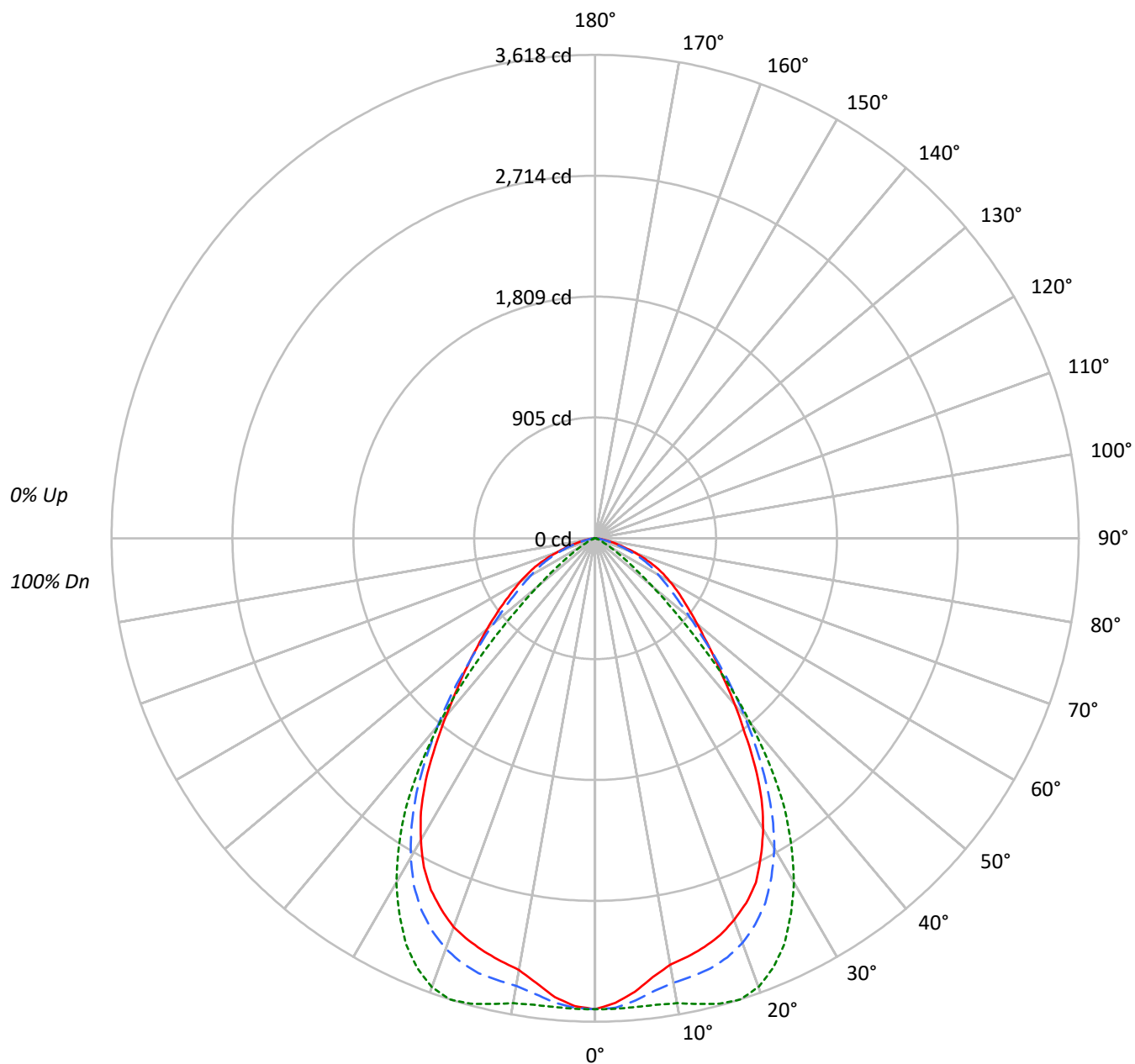
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	229954	229954	229954
5°	223098	230564	225763
10°	214607	234044	217304
15°	213845	243570	216324
20°	211046	248107	215010
25°	204740	241114	209138
30°	189403	224087	196462
35°	166161	196992	175902
40°	138471	154431	147490
45°	116548	101887	124446
50°	100918	55833	107119
55°	91302	29664	93622
60°	84004	15423	84004
65°	76121	8182	74222
70°	61403	4654	56748
75°	42121	3075	39021
80°	27539	1540	24496
85°	18265	3069	15270



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.7	5.4
10°-20°	950.4	15.6
20°-30°	1404.2	23.0
30°-40°	1418.4	23.2
40°-50°	977.6	16.0
50°-60°	561.5	9.2
60°-70°	326.8	5.4
70°-80°	119.2	2.0
80°-90°	18.2	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°	2683.3	44.0
0°-40°	4101.7	67.2
0°-60°	5640.8	92.4
0°-90°	6105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6105.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3525	3525	3525	3525	3525	
5°	3407	3472	3521	3488	3447	320
15°	3166	3333	3606	3370	3203	892
25°	2844	3011	3350	3072	2905	1296
35°	2086	2229	2473	2331	2209	1295
45°	1263	1280	1104	1361	1349	982
55°	803	705	261	734	823	723
65°	493	416	53	412	481	483
75°	167	134	12	130	155	188
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°	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7
2.5°	3479.9	3484.0	3488.0	3484.0	3488.0	3504.3	3492.1	3500.3	3500.3	3504.3	3516.6
5°	3406.6	3406.6	3414.7	3410.6	3422.9	3439.1	3426.9	3439.1	3443.2	3451.4	3471.7
7.5°	3312.8	3312.8	3316.9	3316.9	3333.2	3349.5	3341.4	3357.7	3374.0	3390.3	3414.7
10°	3239.5	3247.6	3247.6	3251.7	3268.0	3288.4	3284.3	3304.7	3321.0	3345.4	3378.0
12.5°	3206.9	3211.0	3211.0	3219.1	3235.4	3255.8	3251.7	3272.1	3296.5	3325.1	3357.7
15°	3166.1	3174.3	3170.2	3178.4	3194.7	3215.0	3211.0	3231.3	3259.9	3288.4	3333.2
17.5°	3113.2	3117.2	3121.3	3121.3	3137.6	3153.9	3153.9	3174.3	3206.9	3239.5	3288.4
20°	3039.8	3048.0	3048.0	3052.0	3064.3	3088.7	3084.6	3105.0	3137.6	3170.2	3223.2
22.5°	2954.2	2958.3	2958.3	2962.4	2982.8	2995.0	2999.1	3015.4	3043.9	3080.6	3129.5
25°	2844.2	2848.3	2844.2	2856.4	2864.6	2889.0	2880.9	2901.3	2933.9	2962.4	3011.3
27.5°	2685.3	2693.5	2693.5	2697.5	2717.9	2738.3	2738.3	2758.7	2787.2	2807.6	2856.4
30°	2514.2	2526.4	2514.2	2534.5	2542.7	2559.0	2571.2	2583.4	2607.9	2636.4	2681.2
32.5°	2318.6	2314.5	2318.6	2326.7	2351.2	2363.4	2371.5	2383.8	2408.2	2432.7	2469.3
35°	2086.3	2094.5	2098.5	2114.8	2114.8	2135.2	2139.3	2147.4	2184.1	2200.4	2228.9
37.5°	1841.8	1850.0	1854.0	1862.2	1878.5	1886.6	1898.9	1911.1	1935.5	1964.1	1980.4
40°	1625.9	1625.9	1629.9	1638.1	1650.3	1654.4	1666.6	1682.9	1699.2	1723.6	1739.9
42.5°	1422.1	1426.2	1422.1	1430.3	1442.5	1458.8	1454.7	1475.1	1479.2	1495.5	1507.7
45°	1263.2	1263.2	1255.0	1263.2	1263.2	1279.5	1275.4	1283.6	1279.5	1287.6	1279.5
47.5°	1112.4	1116.5	1112.4	1116.5	1116.5	1116.5	1120.6	1112.4	1116.5	1104.3	1079.8
50°	994.3	998.3	990.2	994.3	990.2	986.1	990.2	978.0	973.9	957.6	933.1
52.5°	892.4	888.3	884.2	884.2	884.2	880.2	876.1	863.9	851.6	835.3	806.8
55°	802.7	798.7	794.6	794.6	786.4	782.4	782.4	770.1	757.9	737.5	704.9
57.5°	721.2	717.2	713.1	713.1	709.0	700.9	700.9	688.6	672.3	647.9	619.4
60°	643.8	643.8	643.8	639.7	639.7	631.6	631.6	619.4	603.1	578.6	546.0
62.5°	574.5	570.5	570.5	570.5	570.5	566.4	562.3	554.2	537.9	513.4	484.9
65°	493.1	493.1	493.1	493.1	489.0	489.0	489.0	476.8	468.6	444.2	415.6
67.5°	403.4	403.4	403.4	403.4	399.3	403.4	403.4	395.3	387.1	362.7	338.2
70°	321.9	317.8	313.8	317.8	313.8	313.8	317.8	309.7	305.6	285.2	260.8
72.5°	236.3	240.4	236.3	236.3	236.3	232.3	236.3	232.3	224.1	207.8	191.5
75°	167.1	171.1	171.1	167.1	167.1	167.1	163.0	163.0	154.8	142.6	134.5
77.5°	114.1	114.1	114.1	114.1	110.0	110.0	110.0	105.9	101.9	93.7	85.6
80°	73.3	73.3	73.3	73.3	69.3	69.3	69.3	65.2	65.2	57.0	48.9
82.5°	44.8	44.8	44.8	44.8	44.8	44.8	40.7	40.7	36.7	32.6	28.5
85°	24.4	24.4	24.4	24.4	24.4	24.4	24.4	20.4	20.4	16.3	12.2
87.5°	8.1	8.1	12.2	12.2	12.2	12.2	12.2	12.2	8.1	8.1	8.1
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°	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7
2.5°	3508.4	3512.5	3512.5	3512.5	3524.7	3528.8	3516.6	3504.3	3528.8	3524.7	3532.9
5°	3467.7	3479.9	3488.0	3492.1	3504.3	3512.5	3500.3	3496.2	3516.6	3520.6	3524.7
7.5°	3418.8	3439.1	3459.5	3467.7	3484.0	3492.1	3488.0	3488.0	3512.5	3520.6	3520.6
10°	3386.2	3414.7	3439.1	3459.5	3479.9	3492.1	3492.1	3496.2	3524.7	3532.9	3541.0
12.5°	3378.0	3414.7	3447.3	3475.8	3492.1	3512.5	3516.6	3528.8	3557.3	3569.5	3569.5
15°	3357.7	3406.6	3447.3	3484.0	3508.4	3532.9	3541.0	3565.5	3598.1	3606.2	3614.4
17.5°	3321.0	3369.9	3418.8	3463.6	3496.2	3516.6	3541.0	3565.5	3606.2	3618.4	3622.5
20°	3255.8	3312.8	3361.7	3406.6	3439.1	3467.7	3492.1	3520.6	3557.3	3573.6	3577.7
22.5°	3158.0	3215.0	3263.9	3312.8	3345.4	3369.9	3394.3	3426.9	3463.6	3479.9	3479.9
25°	3039.8	3092.8	3145.8	3182.4	3215.0	3243.6	3255.8	3292.5	3329.1	3349.5	3349.5
27.5°	2889.0	2937.9	2986.8	3027.6	3048.0	3072.4	3092.8	3125.4	3153.9	3170.2	3186.5
30°	2697.5	2746.4	2791.3	2832.0	2856.4	2880.9	2901.3	2925.7	2954.2	2974.6	2978.7
32.5°	2489.7	2530.5	2575.3	2616.0	2640.5	2648.6	2669.0	2693.5	2717.9	2734.2	2738.3
35°	2261.5	2290.0	2318.6	2355.2	2379.7	2379.7	2400.1	2416.4	2436.7	2473.4	2465.3
37.5°	1992.6	2033.3	2053.7	2065.9	2082.2	2098.5	2102.6	2123.0	2147.4	2155.6	2167.8
40°	1739.9	1752.2	1764.4	1764.4	1780.7	1780.7	1780.7	1784.8	1809.2	1813.3	1829.6
42.5°	1487.3	1487.3	1475.1	1462.9	1466.9	1462.9	1442.5	1442.5	1454.7	1471.0	1471.0
45°	1251.0	1222.4	1185.8	1157.2	1136.9	1128.7	1104.3	1104.3	1100.2	1104.3	1120.6
47.5°	1051.3	1002.4	941.3	884.2	863.9	847.6	810.9	794.6	786.4	790.5	798.7
50°	884.2	831.3	762.0	692.7	656.0	635.7	590.8	562.3	558.3	550.1	566.4
52.5°	762.0	696.8	623.4	542.0	505.3	472.7	423.8	399.3	383.0	383.0	387.1
55°	656.0	586.8	505.3	423.8	387.1	362.7	313.8	281.2	264.9	260.8	273.0
57.5°	566.4	501.2	419.7	338.2	301.5	273.0	224.1	195.6	183.4	175.2	179.3
60°	497.1	431.9	350.4	273.0	240.4	207.8	167.1	134.5	118.2	118.2	122.2
62.5°	431.9	370.8	297.5	224.1	195.6	167.1	122.2	93.7	81.5	77.4	81.5
65°	366.7	309.7	248.6	187.4	158.9	134.5	97.8	73.3	57.0	53.0	57.0
67.5°	297.5	252.6	199.7	150.8	126.3	105.9	73.3	53.0	40.7	36.7	40.7
70°	232.3	191.5	150.8	110.0	93.7	77.4	53.0	40.7	28.5	24.4	28.5
72.5°	167.1	138.5	105.9	77.4	65.2	53.0	36.7	28.5	20.4	16.3	20.4
75°	114.1	93.7	69.3	48.9	40.7	36.7	24.4	16.3	12.2	12.2	12.2
77.5°	73.3	57.0	44.8	32.6	24.4	20.4	12.2	8.1	8.1	8.1	8.1
80°	40.7	32.6	24.4	16.3	12.2	12.2	8.1	8.1	4.1	4.1	4.1
82.5°	24.4	16.3	12.2	8.1	8.1	4.1	4.1	4.1	4.1	4.1	4.1
85°	12.2	8.1	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°	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7
2.5°	3516.6	3520.6	3508.4	3524.7	3512.5	3528.8	3528.8	3512.5	3516.6	3508.4	3524.7
5°	3508.4	3508.4	3500.3	3512.5	3496.2	3512.5	3508.4	3479.9	3488.0	3471.7	3488.0
7.5°	3508.4	3500.3	3488.0	3500.3	3479.9	3492.1	3475.8	3447.3	3439.1	3418.8	3418.8
10°	3520.6	3508.4	3492.1	3496.2	3475.8	3479.9	3455.4	3414.7	3402.5	3378.0	3369.9
12.5°	3549.2	3536.9	3512.5	3520.6	3492.1	3492.1	3459.5	3410.6	3386.2	3353.6	3345.4
15°	3589.9	3569.5	3541.0	3545.1	3516.6	3500.3	3459.5	3402.5	3369.9	3325.1	3312.8
17.5°	3598.1	3577.7	3541.0	3541.0	3504.3	3484.0	3435.1	3369.9	3329.1	3284.3	3259.9
20°	3553.2	3532.9	3492.1	3488.0	3455.4	3426.9	3374.0	3308.8	3268.0	3219.1	3198.7
22.5°	3459.5	3435.1	3398.4	3394.3	3361.7	3345.4	3288.4	3223.2	3182.4	3133.5	3117.2
25°	3321.0	3308.8	3272.1	3268.0	3239.5	3219.1	3170.2	3109.1	3072.4	3023.5	3007.2
27.5°	3158.0	3145.8	3109.1	3109.1	3076.5	3064.3	3019.4	2962.4	2933.9	2889.0	2868.7
30°	2962.4	2946.1	2925.7	2921.6	2893.1	2880.9	2840.2	2787.2	2758.7	2722.0	2713.8
32.5°	2730.1	2717.9	2705.7	2701.6	2673.1	2660.9	2632.3	2579.4	2554.9	2522.3	2510.1
35°	2461.2	2453.0	2440.8	2436.7	2424.5	2412.3	2383.8	2343.0	2330.8	2306.3	2294.1
37.5°	2151.5	2159.7	2151.5	2151.5	2139.3	2143.4	2118.9	2094.5	2082.2	2065.9	2057.8
40°	1817.4	1833.7	1845.9	1845.9	1841.8	1858.1	1854.0	1833.7	1829.6	1821.4	1817.4
42.5°	1479.2	1487.3	1511.8	1528.1	1524.0	1564.7	1568.8	1585.1	1597.3	1589.2	1593.3
45°	1124.7	1149.1	1181.7	1198.0	1218.4	1271.3	1299.9	1332.5	1361.0	1377.3	1373.2
47.5°	810.9	839.4	876.1	900.5	937.2	1002.4	1075.8	1116.5	1157.2	1177.6	1198.0
50°	586.8	615.3	660.1	696.8	721.2	810.9	888.3	941.3	986.1	1014.6	1035.0
52.5°	411.6	444.2	493.1	525.7	562.3	647.9	737.5	798.7	847.6	884.2	904.6
55°	285.2	321.9	366.7	399.3	440.1	529.7	615.3	680.5	733.5	766.1	790.5
57.5°	199.7	232.3	277.1	305.6	346.4	431.9	517.5	582.7	635.7	668.3	696.8
60°	134.5	167.1	211.9	240.4	273.0	358.6	436.0	505.3	554.2	586.8	615.3
62.5°	93.7	122.2	167.1	195.6	224.1	297.5	370.8	431.9	480.8	517.5	542.0
65°	73.3	97.8	134.5	158.9	187.4	248.6	309.7	362.7	411.6	448.2	464.5
67.5°	53.0	77.4	105.9	126.3	146.7	199.7	252.6	293.4	338.2	366.7	387.1
70°	36.7	53.0	77.4	93.7	110.0	150.8	191.5	228.2	260.8	281.2	297.5
72.5°	28.5	36.7	53.0	65.2	77.4	105.9	138.5	167.1	191.5	207.8	224.1
75°	16.3	24.4	36.7	44.8	53.0	73.3	93.7	114.1	130.4	142.6	150.8
77.5°	8.1	12.2	20.4	24.4	32.6	44.8	61.1	73.3	85.6	93.7	101.9
80°	8.1	8.1	12.2	12.2	16.3	24.4	32.6	40.7	48.9	57.0	61.1
82.5°	4.1	4.1	8.1	8.1	8.1	12.2	16.3	24.4	28.5	32.6	36.7
85°	4.1	4.1	4.1	4.1	4.1	8.1	8.1	12.2	16.3	20.4	20.4
87.5°	0.0	0.0	4.1	4.1	4.1	4.1	4.1	8.1	8.1	8.1	12.2
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: P252624

CATALOG NUMBER: LD6B60D010TE EU6B60708035 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7	3524.7
2.5°	3512.5	3520.6	3516.6	3524.7	3512.5	3508.4	3516.6	3504.3
5°	3467.7	3471.7	3467.7	3467.7	3459.5	3451.4	3459.5	3447.3
7.5°	3398.4	3398.4	3386.2	3386.2	3369.9	3361.7	3361.7	3357.7
10°	3341.4	3329.1	3316.9	3321.0	3296.5	3288.4	3284.3	3280.2
12.5°	3312.8	3304.7	3284.3	3284.3	3259.9	3251.7	3247.6	3243.6
15°	3280.2	3263.9	3247.6	3243.6	3223.2	3215.0	3211.0	3202.8
17.5°	3223.2	3211.0	3190.6	3190.6	3170.2	3166.1	3158.0	3153.9
20°	3162.1	3145.8	3129.5	3129.5	3105.0	3105.0	3092.8	3096.9
22.5°	3076.5	3064.3	3048.0	3048.0	3027.6	3023.5	3011.3	3007.2
25°	2974.6	2958.3	2946.1	2942.0	2925.7	2917.6	2913.5	2905.3
27.5°	2840.2	2827.9	2815.7	2807.6	2787.2	2783.1	2770.9	2775.0
30°	2673.1	2664.9	2660.9	2652.7	2628.3	2620.1	2620.1	2607.9
32.5°	2489.7	2477.5	2469.3	2457.1	2436.7	2432.7	2420.4	2424.5
35°	2265.6	2249.3	2237.1	2241.2	2216.7	2212.6	2204.5	2208.6
37.5°	2033.3	2017.0	2000.7	1996.7	1976.3	1976.3	1964.1	1964.1
40°	1792.9	1776.6	1768.5	1768.5	1744.0	1748.1	1735.9	1731.8
42.5°	1577.0	1560.7	1556.6	1552.5	1540.3	1536.2	1524.0	1528.1
45°	1373.2	1369.1	1369.1	1361.0	1348.8	1344.7	1348.8	1348.8
47.5°	1193.9	1198.0	1193.9	1193.9	1185.8	1193.9	1185.8	1189.8
50°	1043.2	1051.3	1051.3	1051.3	1047.2	1051.3	1051.3	1055.4
52.5°	916.8	929.1	925.0	929.1	925.0	933.1	929.1	933.1
55°	806.8	815.0	819.0	823.1	823.1	823.1	823.1	823.1
57.5°	704.9	717.2	721.2	725.3	725.3	733.5	725.3	725.3
60°	623.4	635.7	639.7	643.8	643.8	647.9	639.7	643.8
62.5°	550.1	562.3	562.3	566.4	566.4	566.4	558.3	562.3
65°	476.8	480.8	484.9	484.9	480.8	480.8	476.8	480.8
67.5°	395.3	399.3	395.3	395.3	391.2	391.2	383.0	387.1
70°	305.6	305.6	309.7	305.6	301.5	305.6	301.5	297.5
72.5°	228.2	228.2	228.2	224.1	224.1	220.0	224.1	224.1
75°	154.8	154.8	158.9	158.9	158.9	158.9	154.8	154.8
77.5°	101.9	101.9	101.9	101.9	105.9	101.9	101.9	101.9
80°	65.2	65.2	69.3	69.3	65.2	65.2	65.2	65.2
82.5°	40.7	40.7	40.7	40.7	40.7	40.7	40.7	40.7
85°	24.4	24.4	24.4	24.4	20.4	20.4	20.4	20.4
87.5°	12.2	12.2	12.2	12.2	12.2	12.2	8.1	8.1
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)