

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: P252214

Luminaire Tested: **LD6B60D010TE EU6B60709035 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252214
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 EU6B60709035 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6585.0 lumens
Efficiency: N/A
Efficacy: 105.4 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

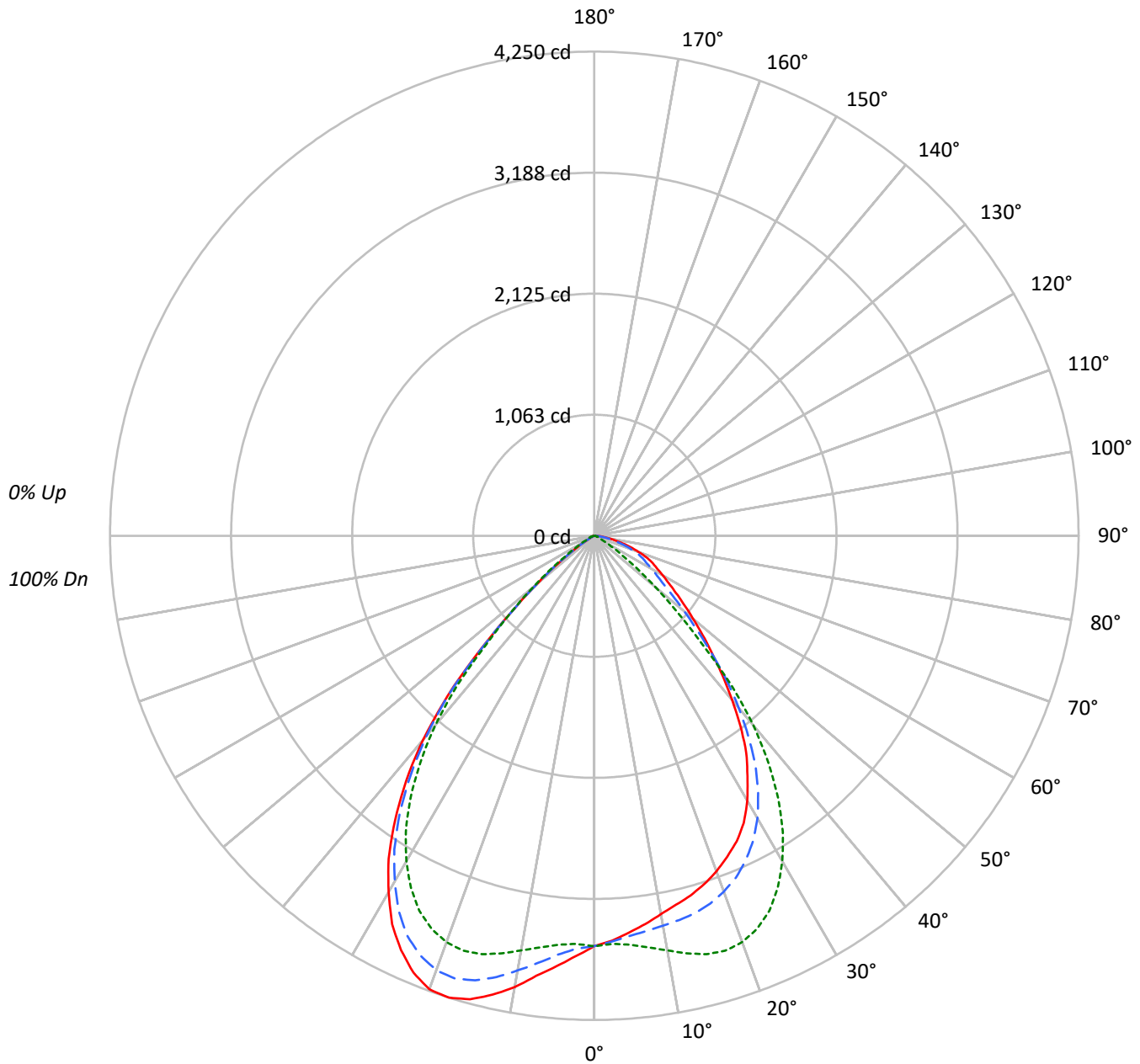
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	235029	235029	235029
5°	228933	235927	248331
10°	223372	244816	266492
15°	220754	256815	284494
20°	217593	263506	294109
25°	212968	261558	288833
30°	202376	248555	271908
35°	185157	224103	242755
40°	160154	185082	199160
45°	135047	121383	130286
50°	114660	70266	66064
55°	99503	33691	25467
60°	89875	15723	6289
65°	87190	9031	2130
70°	78170	7229	1965
75°	64253	5218	857
80°	47865	2592	0
85°	41245	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	348.0	5.3
10°-20°	1060.5	16.1
20°-30°	1620.3	24.6
30°-40°	1694.7	25.7
40°-50°	1099.4	16.7
50°-60°	436.5	6.6
60°-70°	207.1	3.1
70°-80°	98.5	1.5
80°-90°	20.1	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°	3028.8	46.0
0°-40°	4723.5	71.7
0°-60°	6259.4	95.1
0°-90°	6585.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6585.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3602	3602	3602	3602	3602	
5°	3496	3527	3602	3692	3792	330
15°	3268	3427	3802	4040	4212	921
25°	2958	3144	3634	3878	4012	1355
35°	2325	2466	2814	2979	3048	1438
45°	1464	1450	1316	1395	1412	1139
55°	875	744	296	231	224	793
65°	565	468	58	14	14	552
75°	255	207	21	7	3	275
85°	55	34	0	0	0	64
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°	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5
2.5°	3557.7	3564.6	3526.7	3516.4	3544.0	3554.3	3557.7	3547.4	3550.9	3564.6	3564.6
5°	3495.7	3502.6	3468.2	3457.9	3485.4	3492.3	3502.6	3499.2	3509.5	3530.2	3526.7
7.5°	3437.2	3447.5	3409.6	3395.9	3430.3	3447.5	3454.4	3454.4	3468.2	3495.7	3499.2
10°	3371.8	3385.5	3351.1	3344.2	3382.1	3399.3	3402.8	3409.6	3430.3	3468.2	3475.1
12.5°	3316.7	3330.4	3306.3	3296.0	3337.3	3354.5	3361.4	3375.2	3399.3	3447.5	3454.4
15°	3268.4	3278.8	3251.2	3244.3	3285.7	3306.3	3309.8	3330.4	3361.4	3416.5	3426.9
17.5°	3206.4	3213.3	3192.7	3185.8	3227.1	3247.8	3251.2	3275.3	3313.2	3368.3	3385.5
20°	3134.1	3141.0	3120.3	3113.5	3154.8	3178.9	3182.3	3203.0	3247.8	3306.3	3323.5
22.5°	3048.0	3061.8	3037.7	3030.8	3072.1	3092.8	3103.1	3120.3	3165.1	3223.7	3247.8
25°	2958.5	2958.5	2941.2	2937.8	2975.7	2999.8	2996.4	3020.5	3065.2	3123.8	3144.5
27.5°	2841.4	2837.9	2820.7	2817.3	2858.6	2879.3	2872.4	2896.5	2937.8	2996.4	3017.0
30°	2686.4	2693.3	2669.2	2662.3	2696.7	2731.2	2727.7	2751.8	2793.2	2848.3	2862.0
32.5°	2500.4	2507.3	2503.9	2493.5	2524.5	2541.7	2552.1	2569.3	2603.7	2662.3	2676.1
35°	2324.8	2314.4	2300.6	2300.6	2331.6	2359.2	2348.9	2369.5	2404.0	2462.5	2466.0
37.5°	2107.8	2104.3	2097.4	2090.6	2125.0	2131.9	2135.3	2149.1	2180.1	2228.3	2221.4
40°	1880.5	1883.9	1880.5	1866.7	1887.4	1914.9	1911.5	1918.4	1945.9	1980.3	1970.0
42.5°	1666.9	1666.9	1666.9	1653.2	1677.3	1691.0	1697.9	1694.5	1701.4	1732.4	1718.6
45°	1463.7	1467.2	1463.7	1460.3	1463.7	1470.6	1463.7	1460.3	1460.3	1470.6	1450.0
47.5°	1288.1	1288.1	1277.8	1267.4	1277.8	1281.2	1270.9	1260.5	1257.1	1253.6	1219.2
50°	1129.7	1126.2	1122.8	1105.6	1115.9	1119.3	1105.6	1098.7	1084.9	1067.7	1026.3
52.5°	991.9	988.5	985.0	967.8	974.7	978.1	964.3	950.6	933.3	919.6	867.9
55°	874.8	871.4	871.4	861.0	854.1	861.0	847.2	836.9	812.8	795.6	743.9
57.5°	774.9	774.9	768.0	757.7	761.1	761.1	747.4	733.6	712.9	692.3	650.9
60°	688.8	688.8	688.8	678.5	678.5	678.5	671.6	657.8	640.6	619.9	578.6
62.5°	619.9	619.9	616.5	606.2	609.6	609.6	602.7	588.9	571.7	557.9	516.6
65°	564.8	564.8	564.8	554.5	554.5	557.9	551.1	537.3	523.5	506.3	468.4
67.5°	495.9	492.5	492.5	485.6	489.1	492.5	485.6	475.3	458.1	447.7	413.3
70°	409.8	413.3	416.7	406.4	409.8	409.8	406.4	396.1	385.7	375.4	344.4
72.5°	334.1	334.1	330.6	327.2	327.2	330.6	323.7	313.4	306.5	299.6	275.5
75°	254.9	251.4	254.9	248.0	248.0	248.0	241.1	237.6	234.2	223.9	206.6
77.5°	186.0	182.5	182.5	175.6	179.1	179.1	175.6	168.8	161.9	158.4	144.7
80°	127.4	127.4	127.4	124.0	124.0	120.5	120.5	117.1	110.2	106.8	99.9
82.5°	86.1	86.1	86.1	82.7	82.7	82.7	79.2	75.8	72.3	68.9	62.0
85°	55.1	55.1	55.1	51.7	51.7	51.7	48.2	48.2	44.8	41.3	34.4
87.5°	31.0	31.0	31.0	27.6	27.6	27.6	27.6	27.6	24.1	20.7	17.2
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°	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5
2.5°	3588.7	3540.5	3571.5	3571.5	3561.2	3588.7	3606.0	3619.7	3616.3	3585.3	3581.9
5°	3561.2	3519.9	3554.3	3557.7	3547.4	3585.3	3609.4	3626.6	3630.1	3602.5	3606.0
7.5°	3540.5	3506.1	3550.9	3564.6	3561.2	3595.6	3623.2	3650.7	3664.5	3643.8	3647.3
10°	3530.2	3502.6	3550.9	3571.5	3575.0	3612.8	3654.2	3692.1	3709.3	3695.5	3705.8
12.5°	3516.4	3499.2	3554.3	3585.3	3599.1	3637.0	3688.6	3733.4	3760.9	3754.1	3774.7
15°	3502.6	3488.9	3554.3	3599.1	3616.3	3650.7	3709.3	3774.7	3805.7	3802.3	3829.8
17.5°	3468.2	3464.8	3533.6	3581.9	3606.0	3647.3	3702.4	3781.6	3812.6	3819.5	3853.9
20°	3413.1	3413.1	3488.9	3540.5	3568.1	3606.0	3674.8	3750.6	3788.5	3795.4	3833.3
22.5°	3337.3	3344.2	3416.5	3468.2	3509.5	3537.1	3609.4	3688.6	3723.1	3733.4	3774.7
25°	3237.4	3244.3	3313.2	3364.9	3409.6	3440.6	3509.5	3581.9	3623.2	3633.5	3664.5
27.5°	3106.6	3120.3	3185.8	3237.4	3275.3	3296.0	3368.3	3444.1	3475.1	3485.4	3516.4
30°	2955.0	2958.5	3023.9	3068.7	3106.6	3123.8	3185.8	3265.0	3289.1	3299.4	3344.2
32.5°	2769.0	2765.6	2827.6	2868.9	2899.9	2920.6	2986.0	3037.7	3061.8	3079.0	3103.1
35°	2545.2	2541.7	2586.5	2634.7	2658.8	2665.7	2731.2	2786.3	2800.0	2813.8	2844.8
37.5°	2293.8	2293.8	2331.6	2355.8	2383.3	2393.6	2424.6	2486.6	2510.7	2507.3	2531.4
40°	2028.6	2014.8	2042.3	2066.5	2073.3	2076.8	2107.8	2156.0	2173.2	2173.2	2190.4
42.5°	1749.6	1728.9	1732.4	1746.2	1753.0	1728.9	1749.6	1780.6	1770.3	1784.0	1787.5
45°	1453.4	1422.4	1408.6	1377.6	1384.5	1360.4	1346.6	1353.5	1350.1	1315.6	1322.5
47.5°	1212.3	1157.2	1133.1	1088.3	1078.0	1050.4	1033.2	1002.2	974.7	974.7	957.5
50°	1009.1	954.0	905.8	854.1	836.9	812.8	774.9	733.6	712.9	692.3	675.0
52.5°	847.2	788.7	730.1	675.0	650.9	619.9	568.3	526.9	489.1	468.4	447.7
55°	716.4	650.9	588.9	530.4	499.4	468.4	416.7	368.5	323.7	296.2	279.0
57.5°	616.5	554.5	489.1	427.1	399.5	365.1	310.0	258.3	217.0	186.0	168.8
60°	544.2	482.2	423.6	358.2	330.6	296.2	237.6	189.4	148.1	120.5	99.9
62.5°	482.2	427.1	365.1	306.5	279.0	244.5	189.4	141.2	103.3	75.8	58.5
65°	437.4	382.3	330.6	272.1	248.0	213.5	161.9	117.1	82.7	58.5	41.3
67.5°	385.7	337.5	285.9	237.6	213.5	186.0	137.8	99.9	68.9	48.2	34.4
70°	323.7	285.9	241.1	196.3	179.1	155.0	113.7	82.7	55.1	37.9	27.6
72.5°	258.3	227.3	192.9	158.4	144.7	120.5	93.0	65.4	41.3	27.6	20.7
75°	196.3	172.2	144.7	120.5	106.8	93.0	68.9	48.2	31.0	20.7	13.8
77.5°	134.3	124.0	103.3	82.7	75.8	65.4	44.8	31.0	20.7	13.8	6.9
80°	93.0	82.7	68.9	55.1	48.2	41.3	27.6	20.7	10.3	6.9	3.4
82.5°	58.5	48.2	41.3	34.4	31.0	24.1	17.2	10.3	6.9	3.4	3.4
85°	31.0	27.6	24.1	17.2	17.2	13.8	10.3	6.9	3.4	0.0	0.0
87.5°	17.2	13.8	10.3	6.9	6.9	3.4	3.4	3.4	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°	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5
2.5°	3623.2	3623.2	3619.7	3661.1	3612.8	3661.1	3637.0	3661.1	3626.6	3623.2	3626.6
5°	3650.7	3661.1	3664.5	3702.4	3657.6	3716.2	3695.5	3716.2	3692.1	3698.9	3709.3
7.5°	3705.8	3723.1	3719.6	3767.8	3723.1	3788.5	3774.7	3805.7	3781.6	3788.5	3802.3
10°	3767.8	3788.5	3791.9	3840.2	3798.8	3878.0	3860.8	3895.3	3874.6	3884.9	3902.2
12.5°	3840.2	3864.3	3867.7	3922.8	3878.0	3960.7	3950.4	3984.8	3967.6	3977.9	3998.6
15°	3895.3	3929.7	3936.6	3991.7	3943.5	4029.6	4022.7	4067.5	4039.9	4057.1	4074.4
17.5°	3922.8	3953.8	3967.6	4019.2	3977.9	4064.0	4057.1	4095.0	4074.4	4091.6	4112.2
20°	3905.6	3943.5	3953.8	4005.5	3964.1	4050.2	4039.9	4077.8	4057.1	4070.9	4091.6
22.5°	3843.6	3881.5	3895.3	3943.5	3905.6	3984.8	3981.4	4015.8	3988.3	4005.5	4022.7
25°	3733.4	3774.7	3781.6	3826.4	3785.1	3867.7	3860.8	3898.7	3878.0	3888.4	3912.5
27.5°	3575.0	3623.2	3633.5	3671.4	3640.4	3709.3	3709.3	3740.3	3716.2	3716.2	3740.3
30°	3385.5	3433.8	3440.6	3471.6	3444.1	3506.1	3509.5	3540.5	3502.6	3523.3	3526.7
32.5°	3154.8	3185.8	3206.4	3234.0	3192.7	3271.9	3261.6	3285.7	3265.0	3265.0	3282.2
35°	2875.8	2913.7	2924.0	2958.5	2924.0	2986.0	2986.0	2999.8	2979.1	2979.1	3006.7
37.5°	2572.7	2600.3	2603.7	2638.2	2610.6	2662.3	2658.8	2669.2	2648.5	2662.3	2662.3
40°	2218.0	2238.7	2245.5	2262.8	2259.3	2297.2	2293.8	2300.6	2290.3	2293.8	2300.6
42.5°	1804.7	1832.3	1846.0	1859.8	1839.1	1890.8	1880.5	1890.8	1887.4	1890.8	1901.1
45°	1329.4	1350.1	1360.4	1363.9	1357.0	1388.0	1412.1	1391.4	1394.9	1388.0	1401.7
47.5°	960.9	964.3	957.5	978.1	960.9	974.7	981.6	985.0	964.3	960.9	974.7
50°	657.8	675.0	650.9	661.3	657.8	671.6	664.7	668.2	647.5	657.8	650.9
52.5°	437.4	434.0	427.1	430.5	423.6	423.6	423.6	430.5	416.7	409.8	403.0
55°	265.2	258.3	244.5	241.1	241.1	244.5	237.6	230.8	230.8	227.3	227.3
57.5°	155.0	144.7	137.8	134.3	127.4	124.0	120.5	120.5	113.7	113.7	113.7
60°	86.1	75.8	68.9	62.0	62.0	58.5	55.1	51.7	51.7	51.7	48.2
62.5°	44.8	37.9	31.0	27.6	27.6	24.1	20.7	20.7	20.7	20.7	17.2
65°	31.0	24.1	20.7	17.2	17.2	13.8	13.8	13.8	13.8	13.8	13.8
67.5°	24.1	20.7	17.2	13.8	13.8	13.8	10.3	10.3	10.3	10.3	10.3
70°	20.7	13.8	13.8	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
72.5°	13.8	13.8	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
75°	10.3	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0
80°	3.4	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: P252214

CATALOG NUMBER: LD6B60D010TE EU6B60709035 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5	3602.5
2.5°	3657.6	3654.2	3657.6	3664.5	3650.7	3692.1	3671.4	3692.1
5°	3736.8	3740.3	3743.7	3754.1	3736.8	3788.5	3760.9	3791.9
7.5°	3840.2	3843.6	3847.0	3857.4	3847.0	3898.7	3867.7	3895.3
10°	3946.9	3953.8	3953.8	3971.0	3960.7	4008.9	3988.3	4022.7
12.5°	4046.8	4053.7	4060.6	4070.9	4064.0	4115.7	4098.5	4126.0
15°	4126.0	4139.8	4143.2	4157.0	4150.1	4205.2	4184.6	4212.1
17.5°	4163.9	4177.7	4177.7	4194.9	4188.0	4246.6	4219.0	4250.0
20°	4143.2	4153.6	4157.0	4174.2	4167.3	4225.9	4198.3	4236.2
22.5°	4077.8	4081.2	4084.7	4101.9	4098.5	4150.1	4126.0	4150.1
25°	3957.3	3967.6	3964.1	3977.9	3977.9	4019.2	3991.7	4012.4
27.5°	3785.1	3795.4	3795.4	3812.6	3798.8	3840.2	3812.6	3843.6
30°	3575.0	3585.3	3578.4	3592.2	3578.4	3619.7	3599.1	3609.4
32.5°	3323.5	3323.5	3327.0	3330.4	3323.5	3361.4	3340.8	3361.4
35°	3023.9	3030.8	3034.2	3037.7	3030.8	3058.3	3034.2	3048.0
37.5°	2686.4	2703.6	2700.2	2703.6	2693.3	2727.7	2707.1	2713.9
40°	2324.8	2324.8	2321.3	2328.2	2317.9	2345.4	2331.6	2338.5
42.5°	1904.6	1914.9	1901.1	1918.4	1890.8	1928.7	1914.9	1904.6
45°	1429.3	1415.5	1412.1	1415.5	1405.2	1408.6	1419.0	1412.1
47.5°	974.7	974.7	967.8	957.5	971.2	974.7	960.9	960.9
50°	654.4	654.4	647.5	644.0	650.9	647.5	640.6	650.9
52.5°	416.7	403.0	403.0	409.8	403.0	396.1	406.4	399.5
55°	227.3	220.4	220.4	227.3	220.4	220.4	217.0	223.9
57.5°	110.2	113.7	110.2	110.2	110.2	110.2	106.8	110.2
60°	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
62.5°	20.7	20.7	17.2	17.2	17.2	17.2	17.2	17.2
65°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
67.5°	10.3	10.3	10.3	10.3	10.3	13.8	10.3	10.3
70°	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
72.5°	10.3	10.3	13.8	13.8	13.8	13.8	13.8	13.8
75°	6.9	6.9	6.9	3.4	3.4	3.4	3.4	3.4
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)