

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: P252609

Luminaire Tested: **LD6B50D010TE EU6B30508027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252609
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: LD6B50D010TE EU6B30508027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5097.0 lumens
Efficiency: N/A
Efficacy: 86.7 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

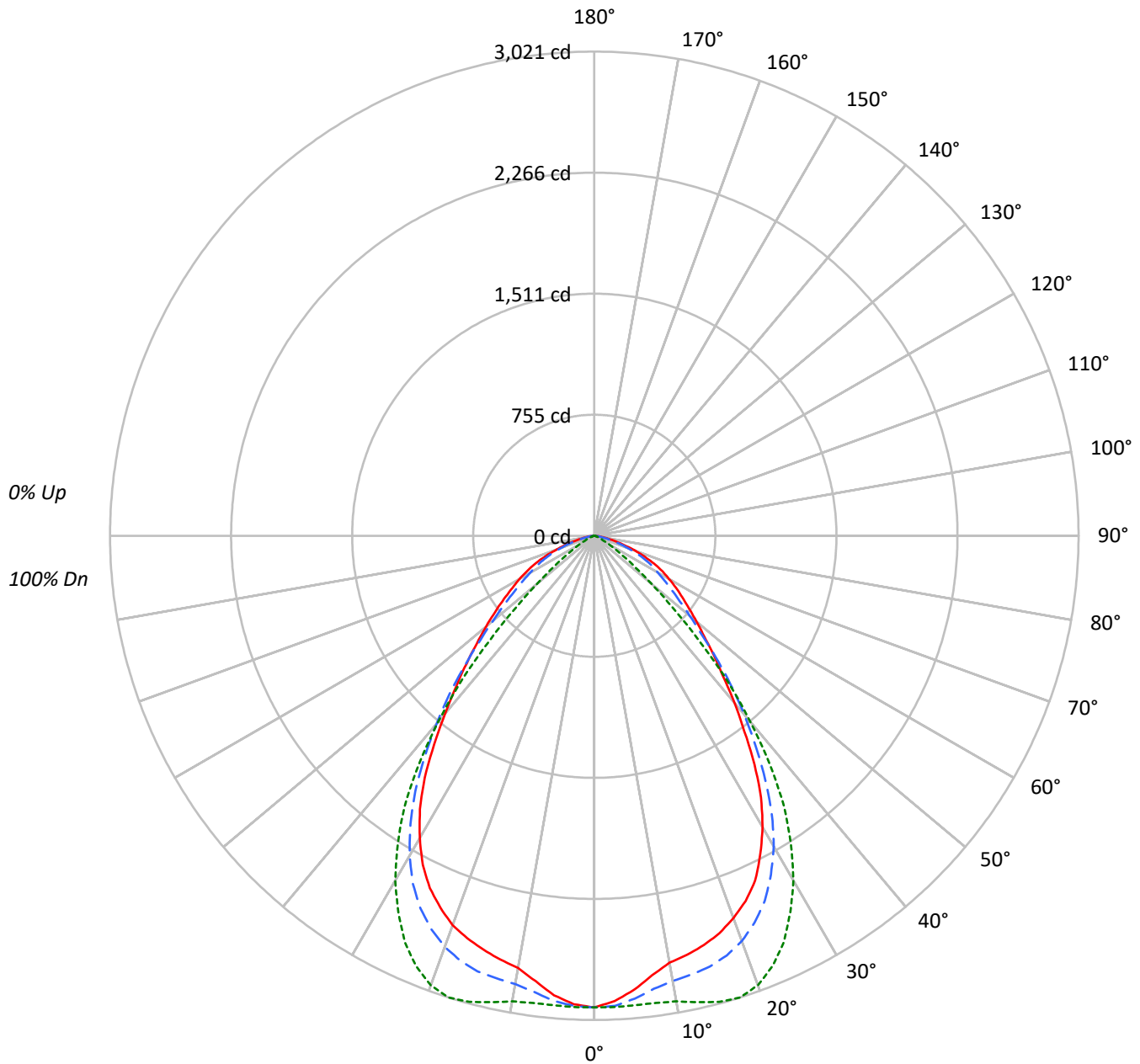
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	191990	191990	191990
5°	186260	192501	188486
10°	179172	195402	181424
15°	178541	203356	180607
20°	176200	207144	179505
25°	170936	201306	174607
30°	158125	187090	164023
35°	138724	164465	146856
40°	115604	128932	123141
45°	97302	85058	103899
50°	84252	46617	89428
55°	76231	24762	78165
60°	70134	12878	70134
65°	63540	6823	61965
70°	51274	3891	47363
75°	35164	2571	32593
80°	22993	1277	20438
85°	15270	2545	12725



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.4	5.4
10°-20°	793.5	15.6
20°-30°	1172.4	23.0
30°-40°	1184.2	23.2
40°-50°	816.2	16.0
50°-60°	468.8	9.2
60°-70°	272.8	5.4
70°-80°	99.5	2.0
80°-90°	15.2	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°	2240.3	44.0
0°-40°	3424.4	67.2
0°-60°	4709.4	92.4
0°-90°	5097.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5097.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2943	2943	2943	2943	2943	
5°	2844	2898	2939	2912	2878	267
15°	2643	2783	3011	2814	2674	745
25°	2375	2514	2796	2565	2426	1082
35°	1742	1861	2065	1946	1844	1081
45°	1055	1068	922	1136	1126	820
55°	670	589	218	612	687	603
65°	412	347	44	344	401	403
75°	140	112	10	109	129	157
85°	20	10	3	14	17	26
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°	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8
2.5°	2905.3	2908.7	2912.1	2908.7	2912.1	2925.7	2915.5	2922.3	2922.3	2925.7	2935.9
5°	2844.1	2844.1	2850.9	2847.5	2857.7	2871.3	2861.1	2871.3	2874.7	2881.5	2898.5
7.5°	2765.8	2765.8	2769.2	2769.2	2782.9	2796.5	2789.7	2803.3	2816.9	2830.5	2850.9
10°	2704.6	2711.4	2711.4	2714.8	2728.4	2745.4	2742.0	2759.0	2772.7	2793.1	2820.3
12.5°	2677.4	2680.8	2680.8	2687.6	2701.2	2718.2	2714.8	2731.8	2752.2	2776.1	2803.3
15°	2643.4	2650.2	2646.8	2653.6	2667.2	2684.2	2680.8	2697.8	2721.6	2745.4	2782.9
17.5°	2599.1	2602.5	2606.0	2606.0	2619.6	2633.2	2633.2	2650.2	2677.4	2704.6	2745.4
20°	2537.9	2544.7	2544.7	2548.1	2558.3	2578.7	2575.3	2592.3	2619.6	2646.8	2691.0
22.5°	2466.5	2469.9	2469.9	2473.3	2490.3	2500.5	2503.9	2517.5	2541.3	2571.9	2612.8
25°	2374.6	2378.0	2374.6	2384.8	2391.6	2412.0	2405.2	2422.2	2449.5	2473.3	2514.1
27.5°	2241.9	2248.7	2248.7	2252.1	2269.2	2286.2	2286.2	2303.2	2327.0	2344.0	2384.8
30°	2099.0	2109.3	2099.0	2116.1	2122.9	2136.5	2146.7	2156.9	2177.3	2201.1	2238.5
32.5°	1935.8	1932.4	1935.8	1942.6	1963.0	1973.2	1980.0	1990.2	2010.6	2031.0	2061.6
35°	1741.8	1748.6	1752.0	1765.7	1765.7	1782.7	1786.1	1792.9	1823.5	1837.1	1860.9
37.5°	1537.7	1544.5	1547.9	1554.7	1568.3	1575.1	1585.3	1595.5	1616.0	1639.8	1653.4
40°	1357.4	1357.4	1360.8	1367.6	1377.8	1381.2	1391.4	1405.0	1418.6	1439.1	1452.7
42.5°	1187.3	1190.7	1187.3	1194.1	1204.3	1217.9	1214.5	1231.5	1234.9	1248.5	1258.7
45°	1054.6	1054.6	1047.8	1054.6	1054.6	1068.2	1064.8	1071.6	1068.2	1075.0	1068.2
47.5°	928.8	932.2	928.8	932.2	932.2	932.2	935.6	928.8	932.2	921.9	901.5
50°	830.1	833.5	826.7	830.1	826.7	823.3	826.7	816.5	813.1	799.5	779.1
52.5°	745.0	741.6	738.2	738.2	738.2	734.8	731.4	721.2	711.0	697.4	673.6
55°	670.2	666.8	663.4	663.4	656.6	653.2	653.2	643.0	632.8	615.8	588.6
57.5°	602.2	598.8	595.4	595.4	592.0	585.1	585.1	574.9	561.3	540.9	517.1
60°	537.5	537.5	537.5	534.1	534.1	527.3	527.3	517.1	503.5	483.1	455.9
62.5°	479.7	476.3	476.3	476.3	476.3	472.9	469.5	462.7	449.1	428.7	404.8
65°	411.6	411.6	411.6	411.6	408.2	408.2	408.2	398.0	391.2	370.8	347.0
67.5°	336.8	336.8	336.8	336.8	333.4	336.8	336.8	330.0	323.2	302.8	282.4
70°	268.8	265.4	262.0	265.4	262.0	262.0	265.4	258.6	255.2	238.1	217.7
72.5°	197.3	200.7	197.3	197.3	197.3	193.9	197.3	193.9	187.1	173.5	159.9
75°	139.5	142.9	142.9	139.5	139.5	139.5	136.1	136.1	129.3	119.1	112.3
77.5°	95.3	95.3	95.3	95.3	91.9	91.9	91.9	88.5	85.1	78.2	71.4
80°	61.2	61.2	61.2	61.2	57.8	57.8	57.8	54.4	54.4	47.6	40.8
82.5°	37.4	37.4	37.4	37.4	37.4	37.4	34.0	34.0	30.6	27.2	23.8
85°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	17.0	17.0	13.6	10.2
87.5°	6.8	6.8	10.2	10.2	10.2	10.2	10.2	10.2	6.8	6.8	6.8
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°	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8
2.5°	2929.1	2932.5	2932.5	2932.5	2942.8	2946.2	2935.9	2925.7	2946.2	2942.8	2949.6
5°	2895.1	2905.3	2912.1	2915.5	2925.7	2932.5	2922.3	2918.9	2935.9	2939.4	2942.8
7.5°	2854.3	2871.3	2888.3	2895.1	2908.7	2915.5	2912.1	2912.1	2932.5	2939.4	2939.4
10°	2827.1	2850.9	2871.3	2888.3	2905.3	2915.5	2915.5	2918.9	2942.8	2949.6	2956.4
12.5°	2820.3	2850.9	2878.1	2901.9	2915.5	2932.5	2935.9	2946.2	2970.0	2980.2	2980.2
15°	2803.3	2844.1	2878.1	2908.7	2929.1	2949.6	2956.4	2976.8	3004.0	3010.8	3017.6
17.5°	2772.7	2813.5	2854.3	2891.7	2918.9	2935.9	2956.4	2976.8	3010.8	3021.0	3024.4
20°	2718.2	2765.8	2806.7	2844.1	2871.3	2895.1	2915.5	2939.4	2970.0	2983.6	2987.0
22.5°	2636.6	2684.2	2725.0	2765.8	2793.1	2813.5	2833.9	2861.1	2891.7	2905.3	2905.3
25°	2537.9	2582.1	2626.4	2657.0	2684.2	2708.0	2718.2	2748.8	2779.5	2796.5	2796.5
27.5°	2412.0	2452.9	2493.7	2527.7	2544.7	2565.1	2582.1	2609.4	2633.2	2646.8	2660.4
30°	2252.1	2293.0	2330.4	2364.4	2384.8	2405.2	2422.2	2442.7	2466.5	2483.5	2486.9
32.5°	2078.6	2112.7	2150.1	2184.1	2204.5	2211.3	2228.3	2248.7	2269.2	2282.8	2286.2
35°	1888.1	1911.9	1935.8	1966.4	1986.8	1986.8	2003.8	2017.4	2034.4	2065.0	2058.2
37.5°	1663.6	1697.6	1714.6	1724.8	1738.4	1752.0	1755.4	1772.5	1792.9	1799.7	1809.9
40°	1452.7	1462.9	1473.1	1473.1	1486.7	1486.7	1486.7	1490.1	1510.5	1513.9	1527.5
42.5°	1241.7	1241.7	1231.5	1221.3	1224.7	1221.3	1204.3	1204.3	1214.5	1228.1	1228.1
45°	1044.4	1020.6	990.0	966.2	949.2	942.4	921.9	921.9	918.5	921.9	935.6
47.5°	877.7	836.9	785.9	738.2	721.2	707.6	677.0	663.4	656.6	660.0	666.8
50°	738.2	694.0	636.2	578.3	547.7	530.7	493.3	469.5	466.1	459.3	472.9
52.5°	636.2	581.7	520.5	452.5	421.9	394.6	353.8	333.4	319.8	319.8	323.2
55°	547.7	489.9	421.9	353.8	323.2	302.8	262.0	234.7	221.1	217.7	227.9
57.5°	472.9	418.4	350.4	282.4	251.7	227.9	187.1	163.3	153.1	146.3	149.7
60°	415.0	360.6	292.6	227.9	200.7	173.5	139.5	112.3	98.7	98.7	102.1
62.5°	360.6	309.6	248.3	187.1	163.3	139.5	102.1	78.2	68.0	64.6	68.0
65°	306.2	258.6	207.5	156.5	132.7	112.3	81.6	61.2	47.6	44.2	47.6
67.5°	248.3	210.9	166.7	125.9	105.5	88.5	61.2	44.2	34.0	30.6	34.0
70°	193.9	159.9	125.9	91.9	78.2	64.6	44.2	34.0	23.8	20.4	23.8
72.5°	139.5	115.7	88.5	64.6	54.4	44.2	30.6	23.8	17.0	13.6	17.0
75°	95.3	78.2	57.8	40.8	34.0	30.6	20.4	13.6	10.2	10.2	10.2
77.5°	61.2	47.6	37.4	27.2	20.4	17.0	10.2	6.8	6.8	6.8	6.8
80°	34.0	27.2	20.4	13.6	10.2	10.2	6.8	6.8	3.4	3.4	3.4
82.5°	20.4	13.6	10.2	6.8	6.8	3.4	3.4	3.4	3.4	3.4	3.4
85°	10.2	6.8	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
87.5°	3.4	3.4	3.4	3.4	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°	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8
2.5°	2935.9	2939.4	2929.1	2942.8	2932.5	2946.2	2946.2	2932.5	2935.9	2929.1	2942.8
5°	2929.1	2929.1	2922.3	2932.5	2918.9	2932.5	2929.1	2905.3	2912.1	2898.5	2912.1
7.5°	2929.1	2922.3	2912.1	2922.3	2905.3	2915.5	2901.9	2878.1	2871.3	2854.3	2854.3
10°	2939.4	2929.1	2915.5	2918.9	2901.9	2905.3	2884.9	2850.9	2840.7	2820.3	2813.5
12.5°	2963.2	2953.0	2932.5	2939.4	2915.5	2915.5	2888.3	2847.5	2827.1	2799.9	2793.1
15°	2997.2	2980.2	2956.4	2959.8	2935.9	2922.3	2888.3	2840.7	2813.5	2776.1	2765.8
17.5°	3004.0	2987.0	2956.4	2956.4	2925.7	2908.7	2867.9	2813.5	2779.5	2742.0	2721.6
20°	2966.6	2949.6	2915.5	2912.1	2884.9	2861.1	2816.9	2762.4	2728.4	2687.6	2670.6
22.5°	2888.3	2867.9	2837.3	2833.9	2806.7	2793.1	2745.4	2691.0	2657.0	2616.2	2602.5
25°	2772.7	2762.4	2731.8	2728.4	2704.6	2687.6	2646.8	2595.7	2565.1	2524.3	2510.7
27.5°	2636.6	2626.4	2595.7	2595.7	2568.5	2558.3	2520.9	2473.3	2449.5	2412.0	2395.0
30°	2473.3	2459.7	2442.7	2439.3	2415.4	2405.2	2371.2	2327.0	2303.2	2272.6	2265.7
32.5°	2279.4	2269.2	2258.9	2255.5	2231.7	2221.5	2197.7	2153.5	2133.1	2105.9	2095.6
35°	2054.8	2048.0	2037.8	2034.4	2024.2	2014.0	1990.2	1956.2	1946.0	1925.5	1915.3
37.5°	1796.3	1803.1	1796.3	1796.3	1786.1	1789.5	1769.1	1748.6	1738.4	1724.8	1718.0
40°	1517.3	1530.9	1541.1	1541.1	1537.7	1551.3	1547.9	1530.9	1527.5	1520.7	1517.3
42.5°	1234.9	1241.7	1262.2	1275.8	1272.4	1306.4	1309.8	1323.4	1333.6	1326.8	1330.2
45°	939.0	959.4	986.6	1000.2	1017.2	1061.4	1085.2	1112.5	1136.3	1149.9	1146.5
47.5°	677.0	700.8	731.4	751.8	782.5	836.9	898.1	932.2	966.2	983.2	1000.2
50°	489.9	513.7	551.1	581.7	602.2	677.0	741.6	785.9	823.3	847.1	864.1
52.5°	343.6	370.8	411.6	438.9	469.5	540.9	615.8	666.8	707.6	738.2	755.2
55°	238.1	268.8	306.2	333.4	367.4	442.3	513.7	568.1	612.4	639.6	660.0
57.5°	166.7	193.9	231.3	255.2	289.2	360.6	432.1	486.5	530.7	557.9	581.7
60°	112.3	139.5	176.9	200.7	227.9	299.4	364.0	421.9	462.7	489.9	513.7
62.5°	78.2	102.1	139.5	163.3	187.1	248.3	309.6	360.6	401.4	432.1	452.5
65°	61.2	81.6	112.3	132.7	156.5	207.5	258.6	302.8	343.6	374.2	387.8
67.5°	44.2	64.6	88.5	105.5	122.5	166.7	210.9	244.9	282.4	306.2	323.2
70°	30.6	44.2	64.6	78.2	91.9	125.9	159.9	190.5	217.7	234.7	248.3
72.5°	23.8	30.6	44.2	54.4	64.6	88.5	115.7	139.5	159.9	173.5	187.1
75°	13.6	20.4	30.6	37.4	44.2	61.2	78.2	95.3	108.9	119.1	125.9
77.5°	6.8	10.2	17.0	20.4	27.2	37.4	51.0	61.2	71.4	78.2	85.1
80°	6.8	6.8	10.2	10.2	13.6	20.4	27.2	34.0	40.8	47.6	51.0
82.5°	3.4	3.4	6.8	6.8	6.8	10.2	13.6	20.4	23.8	27.2	30.6
85°	3.4	3.4	3.4	3.4	3.4	6.8	6.8	10.2	13.6	17.0	17.0
87.5°	0.0	0.0	3.4	3.4	3.4	3.4	3.4	6.8	6.8	6.8	10.2
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: P252609

CATALOG NUMBER: LD6B50D010TE EU6B30508027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8	2942.8
2.5°	2932.5	2939.4	2935.9	2942.8	2932.5	2929.1	2935.9	2925.7
5°	2895.1	2898.5	2895.1	2895.1	2888.3	2881.5	2888.3	2878.1
7.5°	2837.3	2837.3	2827.1	2827.1	2813.5	2806.7	2806.7	2803.3
10°	2789.7	2779.5	2769.2	2772.7	2752.2	2745.4	2742.0	2738.6
12.5°	2765.8	2759.0	2742.0	2742.0	2721.6	2714.8	2711.4	2708.0
15°	2738.6	2725.0	2711.4	2708.0	2691.0	2684.2	2680.8	2674.0
17.5°	2691.0	2680.8	2663.8	2663.8	2646.8	2643.4	2636.6	2633.2
20°	2640.0	2626.4	2612.8	2612.8	2592.3	2592.3	2582.1	2585.5
22.5°	2568.5	2558.3	2544.7	2544.7	2527.7	2524.3	2514.1	2510.7
25°	2483.5	2469.9	2459.7	2456.3	2442.7	2435.9	2432.4	2425.6
27.5°	2371.2	2361.0	2350.8	2344.0	2327.0	2323.6	2313.4	2316.8
30°	2231.7	2224.9	2221.5	2214.7	2194.3	2187.5	2187.5	2177.3
32.5°	2078.6	2068.4	2061.6	2051.4	2034.4	2031.0	2020.8	2024.2
35°	1891.5	1877.9	1867.7	1871.1	1850.7	1847.3	1840.5	1843.9
37.5°	1697.6	1684.0	1670.4	1667.0	1650.0	1650.0	1639.8	1639.8
40°	1496.9	1483.3	1476.5	1476.5	1456.1	1459.5	1449.3	1445.9
42.5°	1316.6	1303.0	1299.6	1296.2	1286.0	1282.6	1272.4	1275.8
45°	1146.5	1143.1	1143.1	1136.3	1126.1	1122.7	1126.1	1126.1
47.5°	996.8	1000.2	996.8	996.8	990.0	996.8	990.0	993.4
50°	870.9	877.7	877.7	877.7	874.3	877.7	877.7	881.1
52.5°	765.5	775.7	772.3	775.7	772.3	779.1	775.7	779.1
55°	673.6	680.4	683.8	687.2	687.2	687.2	687.2	687.2
57.5°	588.6	598.8	602.2	605.6	605.6	612.4	605.6	605.6
60°	520.5	530.7	534.1	537.5	537.5	540.9	534.1	537.5
62.5°	459.3	469.5	469.5	472.9	472.9	472.9	466.1	469.5
65°	398.0	401.4	404.8	404.8	401.4	401.4	398.0	401.4
67.5°	330.0	333.4	330.0	330.0	326.6	326.6	319.8	323.2
70°	255.2	255.2	258.6	255.2	251.7	255.2	251.7	248.3
72.5°	190.5	190.5	190.5	187.1	187.1	183.7	187.1	187.1
75°	129.3	129.3	132.7	132.7	132.7	132.7	129.3	129.3
77.5°	85.1	85.1	85.1	85.1	88.5	85.1	85.1	85.1
80°	54.4	54.4	57.8	57.8	54.4	54.4	54.4	54.4
82.5°	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
85°	20.4	20.4	20.4	20.4	17.0	17.0	17.0	17.0
87.5°	10.2	10.2	10.2	10.2	10.2	10.2	6.8	6.8
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)