

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: P252713

Luminaire Tested: **LD6B50D010TE EU6B30508027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B50D010TE EU6B30508027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4773.0 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

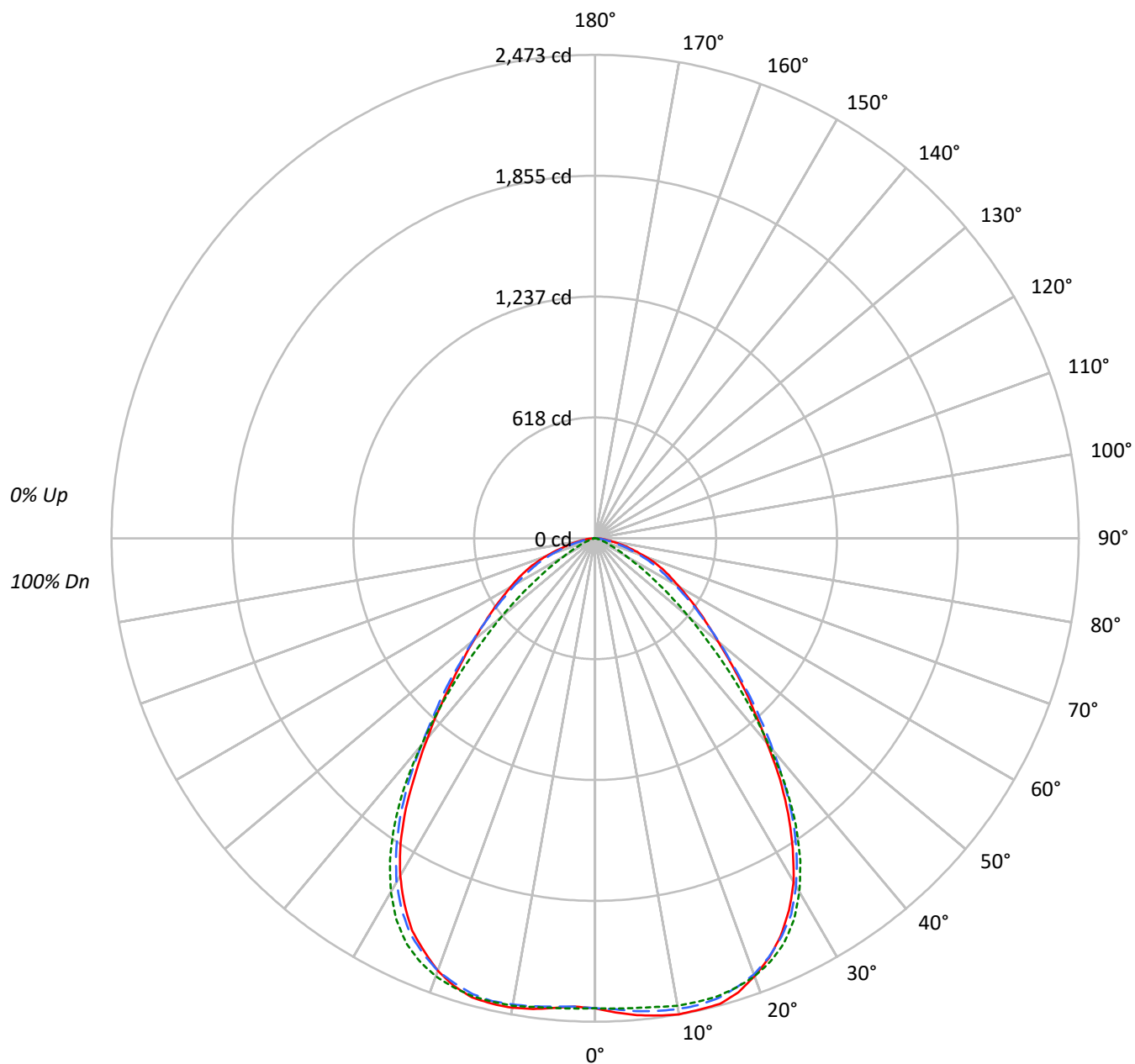
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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	111	107	104	101		109	105	102	99		101	98	96		97	95	93		94	92	91
2	103	96	91	86		101	95	89	85		91	87	83		88	84	81		85	82	80
3	95	87	80	75		93	85	79	74		82	77	73		80	75	71		77	74	70
4	89	78	71	65		87	77	70	65		75	69	64		73	67	63		71	66	62
5	82	71	64	58		80	70	63	58		68	62	57		66	61	56		65	60	56
6	77	65	57	52		75	64	57	51		63	56	51		61	55	51		59	54	50
7	72	60	52	47		70	59	52	46		58	51	46		56	50	46		55	50	45
8	67	55	47	42		66	54	47	42		53	47	42		52	46	42		51	45	41
9	63	51	43	38		62	50	43	38		49	43	38		48	42	38		47	42	38
10	59	47	40	35		58	47	40	35		46	39	35		45	39	35		44	39	35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	156884	156884	156884
5°	160385	157929	157929
10°	163816	160881	161563
15°	166559	163796	164262
20°	165536	165536	163412
25°	161599	164536	159397
30°	152972	157326	150155
35°	137075	142491	134368
40°	116447	117895	113551
45°	98538	90068	95087
50°	83197	63516	82161
55°	73126	41005	72341
60°	64797	24413	65241
65°	59866	14696	59866
70°	51903	8431	50606
75°	41163	5142	38592
80°	30658	3832	29380
85°	27996	2545	25451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.5	4.9
10°-20°	685.2	14.4
20°-30°	1030.5	21.6
30°-40°	1083.5	22.7
40°-50°	809.4	17.0
50°-60°	503.9	10.6
60°-70°	286.6	6.0
70°-80°	118.0	2.5
80°-90°	24.4	0.5
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°	1947.2	40.8
0°-40°	3030.7	63.5
0°-60°	4344.0	91.0
0°-90°	4773.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4773.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2405	2405	2405	2405	2405	
5°	2449	2428	2412	2405	2412	234
15°	2466	2435	2425	2415	2432	693
25°	2245	2252	2286	2235	2214	1028
35°	1721	1765	1789	1738	1687	1068
45°	1068	1092	976	1071	1031	828
55°	643	629	360	619	636	578
65°	388	347	95	347	388	382
75°	163	129	20	126	153	177
85°	37	24	3	20	34	42
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°	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7
2.5°	2428.5	2425.1	2428.5	2421.7	2418.3	2418.3	2421.7	2414.9	2411.5	2414.9	2411.5
5°	2449.0	2442.2	2445.6	2442.2	2435.4	2435.4	2438.8	2428.5	2428.5	2432.0	2428.5
7.5°	2462.6	2462.6	2462.6	2455.8	2452.4	2449.0	2455.8	2445.6	2442.2	2442.2	2438.8
10°	2472.8	2469.4	2472.8	2466.0	2459.2	2455.8	2462.6	2455.8	2449.0	2455.8	2445.6
12.5°	2469.4	2469.4	2469.4	2466.0	2459.2	2455.8	2462.6	2452.4	2449.0	2452.4	2445.6
15°	2466.0	2455.8	2459.2	2455.8	2445.6	2445.6	2449.0	2438.8	2432.0	2442.2	2435.4
17.5°	2435.4	2428.5	2432.0	2425.1	2418.3	2414.9	2418.3	2414.9	2408.1	2414.9	2408.1
20°	2384.3	2384.3	2387.7	2380.9	2374.1	2370.7	2377.5	2370.7	2363.9	2374.1	2374.1
22.5°	2323.1	2323.1	2323.1	2319.7	2316.3	2316.3	2316.3	2312.9	2309.5	2316.3	2319.7
25°	2244.9	2241.5	2244.9	2248.3	2244.9	2241.5	2244.9	2244.9	2238.1	2251.7	2251.7
27.5°	2146.2	2146.2	2153.0	2149.6	2149.6	2146.2	2153.0	2153.0	2149.6	2159.8	2170.0
30°	2030.6	2023.8	2030.6	2030.6	2034.0	2034.0	2037.4	2037.4	2037.4	2047.6	2054.4
32.5°	1880.9	1884.3	1894.5	1891.1	1887.7	1897.9	1897.9	1904.7	1908.1	1914.9	1918.3
35°	1721.1	1724.5	1724.5	1727.9	1734.7	1727.9	1744.9	1741.5	1744.9	1758.5	1765.3
37.5°	1551.0	1540.8	1557.8	1551.0	1554.4	1554.4	1561.2	1564.6	1574.8	1591.8	1591.8
40°	1367.3	1370.7	1377.5	1380.9	1384.3	1384.3	1384.3	1394.5	1397.9	1418.4	1415.0
42.5°	1207.5	1207.5	1214.3	1217.7	1217.7	1217.7	1217.7	1227.9	1234.7	1241.5	1248.3
45°	1068.0	1057.8	1064.6	1064.6	1071.4	1068.0	1074.8	1081.6	1085.0	1095.2	1091.8
47.5°	935.4	932.0	935.4	938.8	935.4	938.8	942.2	945.6	949.0	949.0	949.0
50°	819.7	819.7	823.1	826.5	826.5	826.5	826.5	829.9	829.9	836.7	829.9
52.5°	724.5	727.9	727.9	724.5	727.9	727.9	731.3	731.3	727.9	727.9	717.7
55°	642.9	639.4	642.9	639.4	642.9	642.9	639.4	639.4	636.0	632.6	629.2
57.5°	564.6	564.6	564.6	564.6	561.2	564.6	561.2	557.8	557.8	551.0	540.8
60°	496.6	496.6	496.6	496.6	496.6	493.2	496.6	493.2	486.4	479.6	466.0
62.5°	438.8	435.4	438.8	435.4	435.4	432.0	432.0	428.6	421.8	415.0	401.4
65°	387.8	391.2	387.8	387.8	384.4	380.9	380.9	377.5	367.3	360.5	346.9
67.5°	333.3	329.9	329.9	329.9	326.5	326.5	326.5	319.7	312.9	302.7	289.1
70°	272.1	272.1	272.1	268.7	268.7	265.3	265.3	261.9	255.1	248.3	231.3
72.5°	214.3	214.3	214.3	207.5	210.9	207.5	207.5	200.7	197.3	187.1	176.9
75°	163.3	163.3	159.9	159.9	156.5	153.1	153.1	149.7	146.3	139.5	129.3
77.5°	119.0	119.0	119.0	115.6	112.2	108.8	108.8	105.4	102.0	98.6	91.8
80°	81.6	81.6	81.6	81.6	78.2	74.8	74.8	71.4	71.4	68.0	61.2
82.5°	54.4	54.4	54.4	54.4	51.0	51.0	51.0	47.6	44.2	44.2	37.4
85°	37.4	37.4	34.0	34.0	34.0	34.0	30.6	30.6	27.2	23.8	23.8
87.5°	20.4	20.4	20.4	20.4	17.0	17.0	17.0	17.0	13.6	13.6	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7
2.5°	2421.7	2421.7	2418.3	2408.1	2411.5	2408.1	2411.5	2408.1	2397.9	2408.1	2397.9
5°	2435.4	2438.8	2432.0	2418.3	2421.7	2418.3	2418.3	2414.9	2404.7	2411.5	2404.7
7.5°	2449.0	2445.6	2442.2	2428.5	2432.0	2428.5	2428.5	2421.7	2411.5	2418.3	2408.1
10°	2455.8	2455.8	2449.0	2435.4	2435.4	2432.0	2435.4	2432.0	2418.3	2428.5	2421.7
12.5°	2455.8	2452.4	2452.4	2435.4	2438.8	2435.4	2438.8	2432.0	2421.7	2428.5	2425.1
15°	2445.6	2445.6	2442.2	2425.1	2428.5	2428.5	2432.0	2425.1	2414.9	2425.1	2418.3
17.5°	2425.1	2425.1	2421.7	2408.1	2414.9	2414.9	2418.3	2411.5	2401.3	2408.1	2408.1
20°	2384.3	2387.7	2387.7	2377.5	2384.3	2384.3	2387.7	2384.3	2380.9	2384.3	2377.5
22.5°	2336.7	2343.5	2343.5	2333.3	2340.1	2340.1	2350.3	2346.9	2340.1	2343.5	2340.1
25°	2265.3	2272.1	2278.9	2272.1	2278.9	2278.9	2289.1	2285.7	2278.9	2285.7	2275.5
27.5°	2183.7	2187.1	2193.9	2187.1	2197.3	2193.9	2204.1	2200.7	2190.5	2200.7	2197.3
30°	2068.0	2081.6	2091.8	2081.6	2091.8	2091.8	2098.6	2095.2	2091.8	2088.4	2088.4
32.5°	1938.8	1952.4	1952.4	1949.0	1955.8	1955.8	1959.2	1952.4	1949.0	1952.4	1955.8
35°	1778.9	1785.7	1792.5	1789.1	1792.5	1795.9	1792.5	1795.9	1785.7	1789.1	1789.1
37.5°	1605.4	1612.2	1612.2	1602.0	1608.8	1608.8	1602.0	1602.0	1595.2	1602.0	1588.4
40°	1421.8	1415.0	1418.4	1411.6	1404.7	1404.7	1401.3	1387.7	1380.9	1384.3	1387.7
42.5°	1241.5	1241.5	1231.3	1214.3	1197.3	1197.3	1187.1	1180.3	1166.7	1173.5	1170.1
45°	1088.4	1071.4	1057.8	1030.6	1020.4	1013.6	996.6	979.6	972.8	976.2	972.8
47.5°	942.2	928.6	894.5	857.1	846.9	836.7	816.3	795.9	789.1	782.3	782.3
50°	819.7	795.9	758.5	717.7	700.7	683.7	656.5	636.0	622.4	625.8	625.8
52.5°	707.5	680.3	636.0	585.0	564.6	544.2	520.4	496.6	486.4	483.0	483.0
55°	608.8	578.2	534.0	476.2	459.2	435.4	404.8	377.5	363.9	360.5	367.3
57.5°	520.4	493.2	442.2	384.4	363.9	340.1	309.5	285.7	268.7	265.3	268.7
60°	449.0	411.6	367.3	312.9	285.7	265.3	231.3	210.9	193.9	187.1	190.5
62.5°	377.5	343.5	299.3	244.9	224.5	204.1	173.5	149.7	136.1	132.7	136.1
65°	323.1	289.1	248.3	200.7	180.3	159.9	132.7	108.8	98.6	95.2	98.6
67.5°	268.7	238.1	204.1	159.9	142.9	125.8	98.6	81.6	68.0	64.6	68.0
70°	217.7	190.5	156.5	125.8	108.8	95.2	74.8	57.8	47.6	44.2	47.6
72.5°	163.3	142.9	119.0	91.8	81.6	71.4	54.4	40.8	34.0	30.6	34.0
75°	119.0	102.0	85.0	64.6	57.8	51.0	37.4	27.2	23.8	20.4	23.8
77.5°	81.6	71.4	57.8	44.2	37.4	34.0	23.8	20.4	17.0	13.6	13.6
80°	54.4	47.6	37.4	30.6	27.2	23.8	17.0	13.6	10.2	10.2	10.2
82.5°	34.0	27.2	23.8	17.0	13.6	13.6	10.2	6.8	6.8	6.8	6.8
85°	20.4	17.0	13.6	10.2	6.8	6.8	3.4	3.4	3.4	3.4	3.4
87.5°	10.2	6.8	6.8	3.4	3.4	3.4	3.4	3.4	0.0	0.0	3.4
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7
2.5°	2404.7	2397.9	2397.9	2401.3	2404.7	2408.1	2401.3	2397.9	2397.9	2408.1	2401.3
5°	2404.7	2401.3	2401.3	2401.3	2408.1	2411.5	2404.7	2401.3	2404.7	2414.9	2411.5
7.5°	2414.9	2408.1	2411.5	2411.5	2414.9	2421.7	2414.9	2411.5	2414.9	2425.1	2418.3
10°	2421.7	2414.9	2418.3	2414.9	2425.1	2428.5	2421.7	2418.3	2421.7	2435.4	2432.0
12.5°	2425.1	2421.7	2421.7	2418.3	2428.5	2432.0	2425.1	2421.7	2425.1	2435.4	2432.0
15°	2418.3	2414.9	2414.9	2414.9	2421.7	2428.5	2418.3	2414.9	2414.9	2425.1	2421.7
17.5°	2404.7	2397.9	2397.9	2397.9	2401.3	2404.7	2394.5	2391.1	2387.7	2397.9	2394.5
20°	2380.9	2374.1	2367.3	2367.3	2370.7	2370.7	2363.9	2353.7	2353.7	2357.1	2350.3
22.5°	2336.7	2333.3	2326.5	2323.1	2329.9	2326.5	2312.9	2302.7	2299.3	2302.7	2295.9
25°	2275.5	2268.7	2265.3	2261.9	2265.3	2261.9	2248.3	2234.7	2234.7	2234.7	2224.5
27.5°	2190.5	2183.7	2180.3	2180.3	2183.7	2176.9	2163.2	2149.6	2142.8	2142.8	2132.6
30°	2081.6	2081.6	2078.2	2074.8	2071.4	2071.4	2051.0	2037.4	2030.6	2034.0	2027.2
32.5°	1949.0	1945.6	1942.2	1932.0	1935.4	1932.0	1914.9	1904.7	1894.5	1887.7	1884.3
35°	1778.9	1778.9	1775.5	1775.5	1775.5	1772.1	1755.1	1744.9	1738.1	1734.7	1724.5
37.5°	1591.8	1588.4	1585.0	1585.0	1585.0	1585.0	1574.8	1564.6	1564.6	1561.2	1554.4
40°	1380.9	1384.3	1387.7	1384.3	1394.5	1404.7	1391.1	1384.3	1380.9	1391.1	1377.5
42.5°	1176.9	1173.5	1190.5	1193.9	1193.9	1210.9	1214.3	1217.7	1214.3	1221.1	1221.1
45°	979.6	976.2	993.2	1000.0	1017.0	1037.4	1047.6	1064.6	1071.4	1078.2	1071.4
47.5°	792.5	806.1	819.7	836.7	850.3	884.3	904.8	921.8	928.6	938.8	938.8
50°	636.0	649.7	673.5	687.1	704.1	744.9	778.9	802.7	816.3	826.5	823.1
52.5°	489.8	513.6	544.2	557.8	581.6	629.2	666.7	693.9	710.9	721.1	724.5
55°	377.5	398.0	428.6	449.0	472.8	523.8	571.4	602.0	619.0	632.6	639.4
57.5°	278.9	302.7	336.7	353.7	380.9	438.8	479.6	517.0	537.4	554.4	557.8
60°	204.1	227.9	258.5	278.9	306.1	363.9	411.6	445.6	469.4	483.0	489.8
62.5°	146.3	170.1	200.7	221.1	244.9	295.9	343.5	377.5	401.4	418.4	428.6
65°	105.4	129.3	159.9	176.9	197.3	244.9	289.1	323.1	346.9	367.3	374.1
67.5°	78.2	95.2	122.4	139.5	159.9	197.3	234.7	265.3	289.1	306.1	312.9
70°	57.8	71.4	95.2	105.4	119.0	153.1	183.7	210.9	231.3	244.9	251.7
72.5°	40.8	51.0	68.0	78.2	88.4	115.6	139.5	159.9	173.5	187.1	193.9
75°	27.2	34.0	47.6	54.4	61.2	81.6	98.6	115.6	125.8	136.1	139.5
77.5°	17.0	23.8	34.0	37.4	44.2	54.4	68.0	78.2	85.0	91.8	98.6
80°	10.2	13.6	20.4	23.8	27.2	37.4	44.2	51.0	57.8	64.6	68.0
82.5°	6.8	10.2	13.6	13.6	17.0	20.4	27.2	34.0	37.4	40.8	44.2
85°	3.4	3.4	6.8	6.8	10.2	10.2	13.6	17.0	20.4	23.8	27.2
87.5°	3.4	3.4	3.4	3.4	6.8	6.8	10.2	10.2	10.2	13.6	13.6
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: P252713

CATALOG NUMBER: LD6B50D010TE EU6B30508027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7	2404.7
2.5°	2394.5	2404.7	2394.5	2401.3	2397.9	2397.9	2394.5	2397.9
5°	2404.7	2418.3	2404.7	2414.9	2408.1	2408.1	2408.1	2411.5
7.5°	2414.9	2428.5	2418.3	2428.5	2425.1	2421.7	2421.7	2428.5
10°	2425.1	2435.4	2428.5	2438.8	2435.4	2432.0	2432.0	2438.8
12.5°	2425.1	2438.8	2432.0	2442.2	2438.8	2435.4	2435.4	2438.8
15°	2414.9	2432.0	2421.7	2432.0	2428.5	2425.1	2425.1	2432.0
17.5°	2384.3	2397.9	2391.1	2397.9	2397.9	2394.5	2397.9	2401.3
20°	2343.5	2353.7	2346.9	2353.7	2353.7	2346.9	2350.3	2353.7
22.5°	2285.7	2295.9	2289.1	2295.9	2292.5	2289.1	2289.1	2285.7
25°	2214.3	2227.9	2217.7	2224.5	2217.7	2210.9	2210.9	2214.3
27.5°	2125.8	2136.0	2122.4	2129.2	2122.4	2115.6	2115.6	2112.2
30°	2010.2	2013.6	2003.4	2010.2	2003.4	2000.0	1993.2	1993.2
32.5°	1870.7	1874.1	1863.9	1863.9	1857.1	1857.1	1843.5	1853.7
35°	1707.5	1710.9	1707.5	1704.1	1693.9	1690.5	1687.1	1687.1
37.5°	1537.4	1537.4	1527.2	1523.8	1517.0	1510.2	1513.6	1503.4
40°	1363.9	1360.5	1350.3	1353.7	1350.3	1340.1	1336.7	1333.3
42.5°	1200.7	1200.7	1190.5	1193.9	1187.1	1183.7	1173.5	1176.9
45°	1057.8	1057.8	1047.6	1047.6	1044.2	1034.0	1037.4	1030.6
47.5°	928.6	928.6	925.2	925.2	915.0	911.6	911.6	911.6
50°	816.3	816.3	816.3	816.3	812.9	809.5	806.1	809.5
52.5°	721.1	727.9	724.5	724.5	721.1	717.7	714.3	714.3
55°	636.0	639.4	639.4	642.9	639.4	636.0	639.4	636.0
57.5°	561.2	568.0	568.0	568.0	568.0	568.0	564.6	561.2
60°	496.6	500.0	500.0	503.4	503.4	503.4	500.0	500.0
62.5°	432.0	438.8	442.2	442.2	445.6	442.2	442.2	442.2
65°	380.9	387.8	391.2	387.8	391.2	391.2	387.8	387.8
67.5°	319.7	326.5	326.5	326.5	326.5	329.9	326.5	326.5
70°	258.5	265.3	261.9	265.3	265.3	265.3	265.3	265.3
72.5°	197.3	200.7	204.1	204.1	207.5	204.1	204.1	204.1
75°	142.9	149.7	149.7	149.7	149.7	153.1	153.1	153.1
77.5°	102.0	105.4	105.4	108.8	108.8	108.8	108.8	112.2
80°	71.4	71.4	74.8	74.8	78.2	78.2	78.2	78.2
82.5°	47.6	51.0	51.0	51.0	51.0	51.0	51.0	51.0
85°	27.2	30.6	30.6	30.6	30.6	34.0	34.0	34.0
87.5°	17.0	17.0	17.0	17.0	17.0	17.0	13.6	13.6
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)