

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: P252720

Luminaire Tested: **LD6B50D010TE EU6B30509030 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252720
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 EU6B30509030 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4262.0 lumens
Efficiency: N/A
Efficacy: 72.5 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

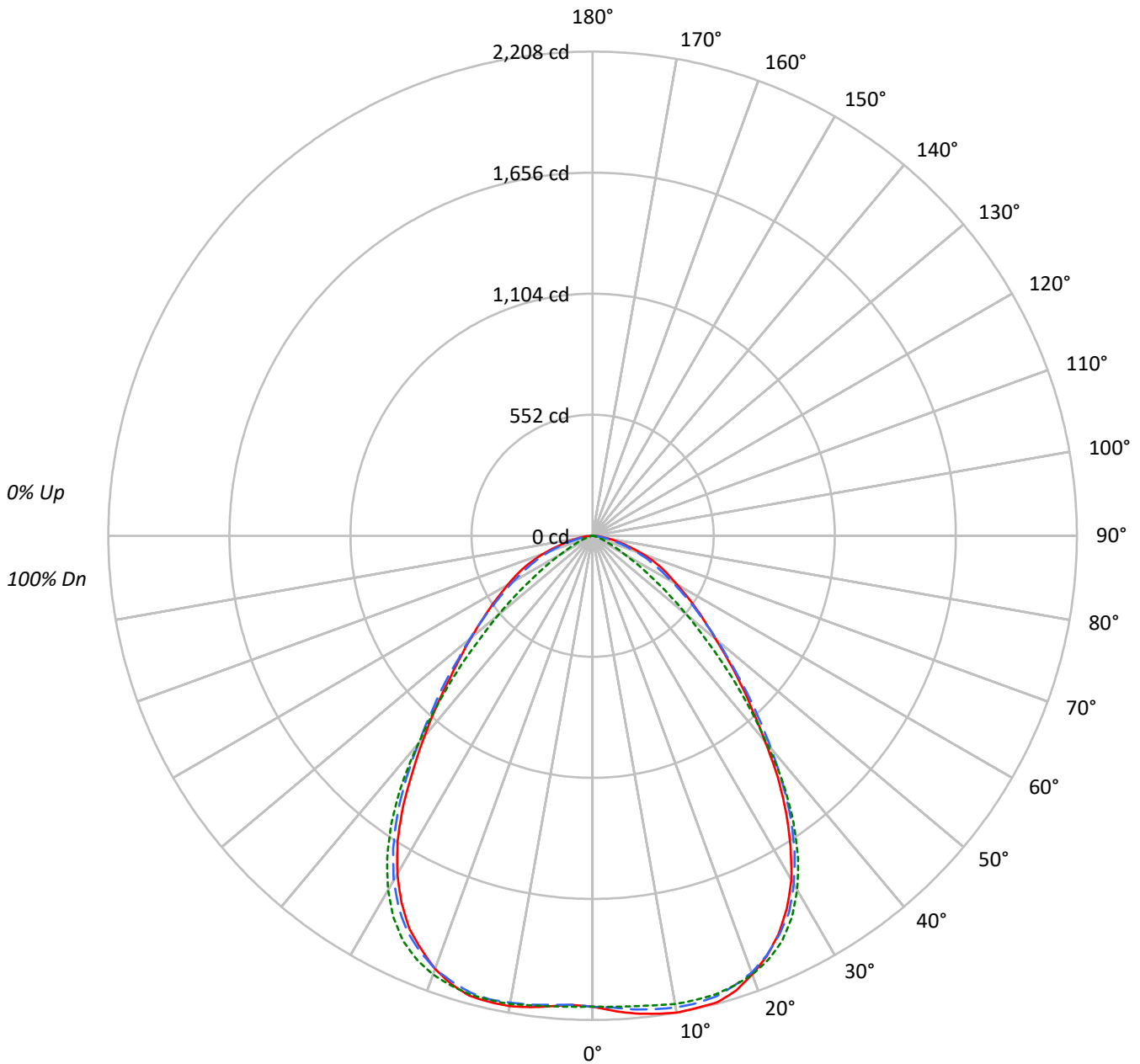
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89								
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78								
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68								
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61								
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54								
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48								
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44								
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40								
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36								
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	140091	140091	140091
5°	143213	141026	141026
10°	146274	143657	144266
15°	148728	146262	146674
20°	147818	147818	145916
25°	144294	146922	142329
30°	136594	140482	134078
35°	122397	127239	119976
40°	103979	105273	101398
45°	87992	80427	84911
50°	74295	56716	73362
55°	65289	36614	64606
60°	57855	21790	58260
65°	53444	13122	53444
70°	46352	7535	45189
75°	36752	4588	34458
80°	27389	3419	26262
85°	25002	2246	22756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.7	4.9
10°-20°	611.8	14.4
20°-30°	920.2	21.6
30°-40°	967.5	22.7
40°-50°	722.7	17.0
50°-60°	449.9	10.6
60°-70°	255.9	6.0
70°-80°	105.4	2.5
80°-90°	21.8	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°	1738.8	40.8
0°-40°	2706.2	63.5
0°-60°	3878.9	91.0
0°-90°	4262.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4262.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2147	2147	2147	2147	2147	
5°	2187	2168	2153	2147	2153	209
15°	2202	2175	2166	2156	2172	619
25°	2004	2011	2041	1995	1977	918
35°	1537	1576	1598	1552	1506	954
45°	954	975	872	957	920	739
55°	574	562	322	553	568	516
65°	346	310	85	310	346	341
75°	146	115	18	112	137	158
85°	33	21	3	18	30	37
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°	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3
2.5°	2168.5	2165.5	2168.5	2162.5	2159.4	2159.4	2162.5	2156.4	2153.4	2156.4	2153.4
5°	2186.8	2180.7	2183.7	2180.7	2174.6	2174.6	2177.7	2168.5	2168.5	2171.6	2168.5
7.5°	2198.9	2198.9	2198.9	2192.8	2189.8	2186.8	2192.8	2183.7	2180.7	2180.7	2177.7
10°	2208.0	2205.0	2208.0	2202.0	2195.9	2192.8	2198.9	2192.8	2186.8	2192.8	2183.7
12.5°	2205.0	2205.0	2205.0	2202.0	2195.9	2192.8	2198.9	2189.8	2186.8	2189.8	2183.7
15°	2202.0	2192.8	2195.9	2192.8	2183.7	2183.7	2186.8	2177.7	2171.6	2180.7	2174.6
17.5°	2174.6	2168.5	2171.6	2165.5	2159.4	2156.4	2159.4	2156.4	2150.3	2156.4	2150.3
20°	2129.1	2129.1	2132.1	2126.0	2120.0	2116.9	2123.0	2116.9	2110.8	2120.0	2120.0
22.5°	2074.4	2074.4	2074.4	2071.4	2068.3	2068.3	2068.3	2065.3	2062.2	2068.3	2071.4
25°	2004.5	2001.5	2004.5	2007.6	2004.5	2001.5	2004.5	2004.5	1998.5	2010.6	2010.6
27.5°	1916.5	1916.5	1922.5	1919.5	1919.5	1916.5	1922.5	1922.5	1919.5	1928.6	1937.7
30°	1813.2	1807.1	1813.2	1813.2	1816.2	1816.2	1819.3	1819.3	1819.3	1828.4	1834.5
32.5°	1679.6	1682.6	1691.7	1688.7	1685.6	1694.7	1694.7	1700.8	1703.9	1709.9	1713.0
35°	1536.8	1539.9	1539.9	1542.9	1549.0	1542.9	1558.1	1555.0	1558.1	1570.2	1576.3
37.5°	1385.0	1375.8	1391.0	1385.0	1388.0	1388.0	1394.1	1397.1	1406.2	1421.4	1421.4
40°	1220.9	1224.0	1230.1	1233.1	1236.1	1236.1	1236.1	1245.2	1248.3	1266.5	1263.5
42.5°	1078.2	1078.2	1084.3	1087.3	1087.3	1087.3	1087.3	1096.4	1102.5	1108.6	1114.6
45°	953.7	944.6	950.6	950.6	956.7	953.7	959.7	965.8	968.9	978.0	974.9
47.5°	835.2	832.2	835.2	838.3	835.2	838.3	841.3	844.3	847.4	847.4	847.4
50°	732.0	732.0	735.0	738.0	738.0	738.0	738.0	741.1	741.1	747.1	741.1
52.5°	646.9	650.0	650.0	646.9	650.0	650.0	653.0	653.0	650.0	650.0	640.8
55°	574.0	571.0	574.0	571.0	574.0	574.0	571.0	571.0	568.0	564.9	561.9
57.5°	504.2	504.2	504.2	504.2	501.1	504.2	501.1	498.1	498.1	492.0	482.9
60°	443.4	443.4	443.4	443.4	443.4	440.4	443.4	440.4	434.3	428.2	416.1
62.5°	391.8	388.8	391.8	388.8	388.8	385.7	385.7	382.7	376.6	370.5	358.4
65°	346.2	349.3	346.2	346.2	343.2	340.2	340.2	337.1	328.0	321.9	309.8
67.5°	297.6	294.6	294.6	294.6	291.6	291.6	291.6	285.5	279.4	270.3	258.2
70°	243.0	243.0	243.0	239.9	239.9	236.9	236.9	233.9	227.8	221.7	206.5
72.5°	191.3	191.3	191.3	185.3	188.3	185.3	185.3	179.2	176.2	167.0	157.9
75°	145.8	145.8	142.7	142.7	139.7	136.7	136.7	133.6	130.6	124.5	115.4
77.5°	106.3	106.3	106.3	103.3	100.2	97.2	97.2	94.2	91.1	88.1	82.0
80°	72.9	72.9	72.9	72.9	69.9	66.8	66.8	63.8	63.8	60.7	54.7
82.5°	48.6	48.6	48.6	48.6	45.6	45.6	45.6	42.5	39.5	39.5	33.4
85°	33.4	33.4	30.4	30.4	30.4	30.4	27.3	27.3	24.3	21.3	21.3
87.5°	18.2	18.2	18.2	18.2	15.2	15.2	15.2	15.2	12.1	12.1	9.1
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°	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3
2.5°	2162.5	2162.5	2159.4	2150.3	2153.4	2150.3	2153.4	2150.3	2141.2	2150.3	2141.2
5°	2174.6	2177.7	2171.6	2159.4	2162.5	2159.4	2159.4	2156.4	2147.3	2153.4	2147.3
7.5°	2186.8	2183.7	2180.7	2168.5	2171.6	2168.5	2168.5	2162.5	2153.4	2159.4	2150.3
10°	2192.8	2192.8	2186.8	2174.6	2174.6	2171.6	2174.6	2171.6	2159.4	2168.5	2162.5
12.5°	2192.8	2189.8	2189.8	2174.6	2177.7	2174.6	2177.7	2171.6	2162.5	2168.5	2165.5
15°	2183.7	2183.7	2180.7	2165.5	2168.5	2168.5	2171.6	2165.5	2156.4	2165.5	2159.4
17.5°	2165.5	2165.5	2162.5	2150.3	2156.4	2156.4	2159.4	2153.4	2144.2	2150.3	2150.3
20°	2129.1	2132.1	2132.1	2123.0	2129.1	2129.1	2132.1	2129.1	2126.0	2129.1	2123.0
22.5°	2086.5	2092.6	2092.6	2083.5	2089.6	2089.6	2098.7	2095.7	2089.6	2092.6	2089.6
25°	2022.8	2028.8	2034.9	2028.8	2034.9	2034.9	2044.0	2041.0	2034.9	2041.0	2031.9
27.5°	1949.9	1952.9	1959.0	1952.9	1962.0	1959.0	1968.1	1965.1	1955.9	1965.1	1962.0
30°	1846.6	1858.8	1867.9	1858.8	1867.9	1867.9	1873.9	1870.9	1867.9	1864.8	1864.8
32.5°	1731.2	1743.3	1743.3	1740.3	1746.4	1746.4	1749.4	1743.3	1740.3	1743.3	1746.4
35°	1588.4	1594.5	1600.6	1597.6	1600.6	1603.6	1600.6	1603.6	1594.5	1597.6	1597.6
37.5°	1433.5	1439.6	1439.6	1430.5	1436.6	1436.6	1430.5	1430.5	1424.4	1430.5	1418.4
40°	1269.5	1263.5	1266.5	1260.4	1254.4	1254.4	1251.3	1239.2	1233.1	1236.1	1239.2
42.5°	1108.6	1108.6	1099.5	1084.3	1069.1	1069.1	1060.0	1053.9	1041.8	1047.8	1044.8
45°	971.9	956.7	944.6	920.3	911.2	905.1	889.9	874.7	868.6	871.7	868.6
47.5°	841.3	829.2	798.8	765.4	756.3	747.1	728.9	710.7	704.6	698.6	698.6
50°	732.0	710.7	677.3	640.8	625.7	610.5	586.2	568.0	555.8	558.8	558.8
52.5°	631.7	607.4	568.0	522.4	504.2	485.9	464.7	443.4	434.3	431.3	431.3
55°	543.7	516.3	476.8	425.2	410.0	388.8	361.4	337.1	325.0	321.9	328.0
57.5°	464.7	440.4	394.8	343.2	325.0	303.7	276.4	255.1	239.9	236.9	239.9
60°	400.9	367.5	328.0	279.4	255.1	236.9	206.5	188.3	173.1	167.0	170.1
62.5°	337.1	306.8	267.3	218.7	200.5	182.2	154.9	133.6	121.5	118.5	121.5
65°	288.5	258.2	221.7	179.2	161.0	142.7	118.5	97.2	88.1	85.0	88.1
67.5°	239.9	212.6	182.2	142.7	127.6	112.4	88.1	72.9	60.7	57.7	60.7
70°	194.4	170.1	139.7	112.4	97.2	85.0	66.8	51.6	42.5	39.5	42.5
72.5°	145.8	127.6	106.3	82.0	72.9	63.8	48.6	36.4	30.4	27.3	30.4
75°	106.3	91.1	75.9	57.7	51.6	45.6	33.4	24.3	21.3	18.2	21.3
77.5°	72.9	63.8	51.6	39.5	33.4	30.4	21.3	18.2	15.2	12.1	12.1
80°	48.6	42.5	33.4	27.3	24.3	21.3	15.2	12.1	9.1	9.1	9.1
82.5°	30.4	24.3	21.3	15.2	12.1	12.1	9.1	6.1	6.1	6.1	6.1
85°	18.2	15.2	12.1	9.1	6.1	6.1	3.0	3.0	3.0	3.0	3.0
87.5°	9.1	6.1	6.1	3.0	3.0	3.0	3.0	3.0	0.0	0.0	3.0
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°	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3
2.5°	2147.3	2141.2	2141.2	2144.2	2147.3	2150.3	2144.2	2141.2	2141.2	2150.3	2144.2
5°	2147.3	2144.2	2144.2	2144.2	2150.3	2153.4	2147.3	2144.2	2147.3	2156.4	2153.4
7.5°	2156.4	2150.3	2153.4	2153.4	2156.4	2162.5	2156.4	2153.4	2156.4	2165.5	2159.4
10°	2162.5	2156.4	2159.4	2156.4	2165.5	2168.5	2162.5	2159.4	2162.5	2174.6	2171.6
12.5°	2165.5	2162.5	2162.5	2159.4	2168.5	2171.6	2165.5	2162.5	2165.5	2174.6	2171.6
15°	2159.4	2156.4	2156.4	2156.4	2162.5	2168.5	2159.4	2156.4	2156.4	2165.5	2162.5
17.5°	2147.3	2141.2	2141.2	2141.2	2144.2	2147.3	2138.2	2135.1	2132.1	2141.2	2138.2
20°	2126.0	2120.0	2113.9	2113.9	2116.9	2116.9	2110.8	2101.7	2101.7	2104.8	2098.7
22.5°	2086.5	2083.5	2077.4	2074.4	2080.5	2077.4	2065.3	2056.2	2053.1	2056.2	2050.1
25°	2031.9	2025.8	2022.8	2019.7	2022.8	2019.7	2007.6	1995.4	1995.4	1995.4	1986.3
27.5°	1955.9	1949.9	1946.8	1946.8	1949.9	1943.8	1931.6	1919.5	1913.4	1913.4	1904.3
30°	1858.8	1858.8	1855.7	1852.7	1849.6	1849.6	1831.4	1819.3	1813.2	1816.2	1810.2
32.5°	1740.3	1737.3	1734.2	1725.1	1728.2	1725.1	1709.9	1700.8	1691.7	1685.6	1682.6
35°	1588.4	1588.4	1585.4	1585.4	1585.4	1582.4	1567.2	1558.1	1552.0	1549.0	1539.9
37.5°	1421.4	1418.4	1415.3	1415.3	1415.3	1415.3	1406.2	1397.1	1397.1	1394.1	1388.0
40°	1233.1	1236.1	1239.2	1236.1	1245.2	1254.4	1242.2	1236.1	1233.1	1242.2	1230.1
42.5°	1050.9	1047.8	1063.0	1066.1	1066.1	1081.2	1084.3	1087.3	1084.3	1090.3	1090.3
45°	874.7	871.7	886.9	892.9	908.1	926.3	935.5	950.6	956.7	962.8	956.7
47.5°	707.7	719.8	732.0	747.1	759.3	789.7	807.9	823.1	829.2	838.3	838.3
50°	568.0	580.1	601.4	613.5	628.7	665.1	695.5	716.8	728.9	738.0	735.0
52.5°	437.4	458.6	485.9	498.1	519.4	561.9	595.3	619.6	634.8	643.9	646.9
55°	337.1	355.4	382.7	400.9	422.2	467.7	510.2	537.6	552.8	564.9	571.0
57.5°	249.0	270.3	300.7	315.9	340.2	391.8	428.2	461.7	479.9	495.1	498.1
60°	182.2	203.5	230.8	249.0	273.3	325.0	367.5	397.9	419.1	431.3	437.4
62.5°	130.6	151.9	179.2	197.4	218.7	264.2	306.8	337.1	358.4	373.6	382.7
65°	94.2	115.4	142.7	157.9	176.2	218.7	258.2	288.5	309.8	328.0	334.1
67.5°	69.9	85.0	109.3	124.5	142.7	176.2	209.6	236.9	258.2	273.3	279.4
70°	51.6	63.8	85.0	94.2	106.3	136.7	164.0	188.3	206.5	218.7	224.8
72.5°	36.4	45.6	60.7	69.9	79.0	103.3	124.5	142.7	154.9	167.0	173.1
75°	24.3	30.4	42.5	48.6	54.7	72.9	88.1	103.3	112.4	121.5	124.5
77.5°	15.2	21.3	30.4	33.4	39.5	48.6	60.7	69.9	75.9	82.0	88.1
80°	9.1	12.1	18.2	21.3	24.3	33.4	39.5	45.6	51.6	57.7	60.7
82.5°	6.1	9.1	12.1	12.1	15.2	18.2	24.3	30.4	33.4	36.4	39.5
85°	3.0	3.0	6.1	6.1	9.1	9.1	12.1	15.2	18.2	21.3	24.3
87.5°	3.0	3.0	3.0	3.0	6.1	6.1	9.1	9.1	9.1	12.1	12.1
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: P252720

CATALOG NUMBER: LD6B50D010TE EU6B30509030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3	2147.3
2.5°	2138.2	2147.3	2138.2	2144.2	2141.2	2141.2	2138.2	2141.2
5°	2147.3	2159.4	2147.3	2156.4	2150.3	2150.3	2150.3	2153.4
7.5°	2156.4	2168.5	2159.4	2168.5	2165.5	2162.5	2162.5	2168.5
10°	2165.5	2174.6	2168.5	2177.7	2174.6	2171.6	2171.6	2177.7
12.5°	2165.5	2177.7	2171.6	2180.7	2177.7	2174.6	2174.6	2177.7
15°	2156.4	2171.6	2162.5	2171.6	2168.5	2165.5	2165.5	2171.6
17.5°	2129.1	2141.2	2135.1	2141.2	2141.2	2138.2	2141.2	2144.2
20°	2092.6	2101.7	2095.7	2101.7	2101.7	2095.7	2098.7	2101.7
22.5°	2041.0	2050.1	2044.0	2050.1	2047.1	2044.0	2044.0	2041.0
25°	1977.2	1989.4	1980.2	1986.3	1980.2	1974.2	1974.2	1977.2
27.5°	1898.2	1907.3	1895.2	1901.3	1895.2	1889.1	1889.1	1886.1
30°	1795.0	1798.0	1788.9	1795.0	1788.9	1785.9	1779.8	1779.8
32.5°	1670.4	1673.5	1664.4	1664.4	1658.3	1658.3	1646.2	1655.3
35°	1524.7	1527.7	1524.7	1521.6	1512.5	1509.5	1506.4	1506.4
37.5°	1372.8	1372.8	1363.7	1360.7	1354.6	1348.5	1351.5	1342.4
40°	1217.9	1214.9	1205.8	1208.8	1205.8	1196.6	1193.6	1190.6
42.5°	1072.1	1072.1	1063.0	1066.1	1060.0	1056.9	1047.8	1050.9
45°	944.6	944.6	935.5	935.5	932.4	923.3	926.3	920.3
47.5°	829.2	829.2	826.1	826.1	817.0	814.0	814.0	814.0
50°	728.9	728.9	728.9	728.9	725.9	722.8	719.8	722.8
52.5°	643.9	650.0	646.9	646.9	643.9	640.8	637.8	637.8
55°	568.0	571.0	571.0	574.0	571.0	568.0	571.0	568.0
57.5°	501.1	507.2	507.2	507.2	507.2	507.2	504.2	501.1
60°	443.4	446.5	446.5	449.5	449.5	449.5	446.5	446.5
62.5°	385.7	391.8	394.8	394.8	397.9	394.8	394.8	394.8
65°	340.2	346.2	349.3	346.2	349.3	349.3	346.2	346.2
67.5°	285.5	291.6	291.6	291.6	291.6	294.6	291.6	291.6
70°	230.8	236.9	233.9	236.9	236.9	236.9	236.9	236.9
72.5°	176.2	179.2	182.2	182.2	185.3	182.2	182.2	182.2
75°	127.6	133.6	133.6	133.6	133.6	136.7	136.7	136.7
77.5°	91.1	94.2	94.2	97.2	97.2	97.2	97.2	100.2
80°	63.8	63.8	66.8	66.8	69.9	69.9	69.9	69.9
82.5°	42.5	45.6	45.6	45.6	45.6	45.6	45.6	45.6
85°	24.3	27.3	27.3	27.3	27.3	30.4	30.4	30.4
87.5°	15.2	15.2	15.2	15.2	15.2	15.2	12.1	12.1
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)