

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: P252704

Luminaire Tested: **LD6B40D010 EU6B30508050 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252704
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: LD6B40D010 EU6B30508050 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4038.0 lumens
Efficiency: N/A
Efficacy: 93.9 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

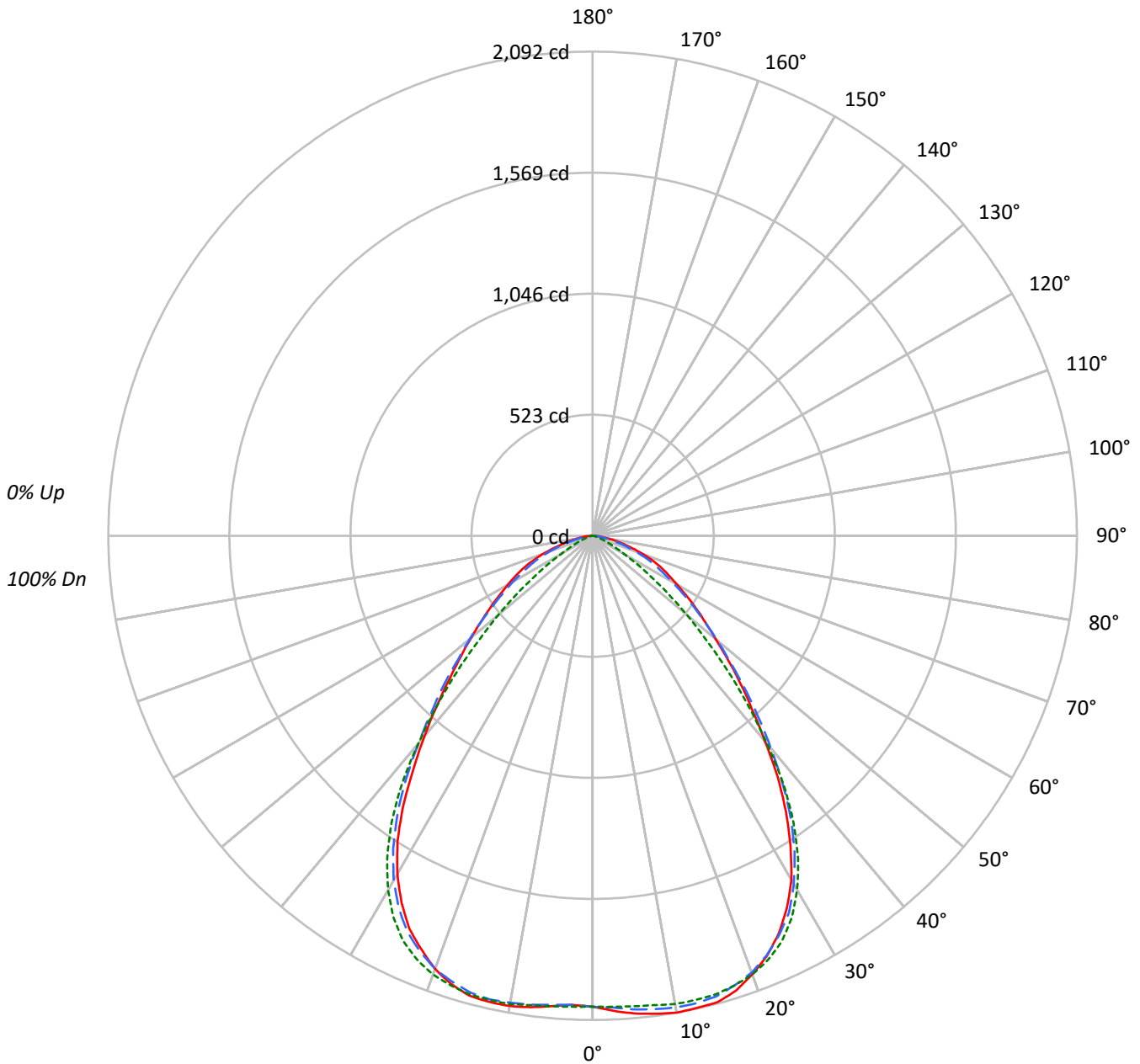
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	132726	132726	132726
5°	135682	133612	133612
10°	138589	136111	136681
15°	140906	138576	138968
20°	140049	140049	138251
25°	136714	139198	134850
30°	129415	133099	127027
35°	115962	120549	113676
40°	98520	99746	96067
45°	83370	76201	80445
50°	70388	53742	69515
55°	61865	34692	61205
60°	54815	20655	55194
65°	50634	12442	50634
70°	43911	7134	42804
75°	34811	4361	32643
80°	25961	3231	24872
85°	23729	2171	21558



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.9	4.9
10°-20°	579.7	14.4
20°-30°	871.8	21.6
30°-40°	916.6	22.7
40°-50°	684.8	17.0
50°-60°	426.3	10.6
60°-70°	242.4	6.0
70°-80°	99.8	2.5
80°-90°	20.6	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°	1647.4	40.8
0°-40°	2564.0	63.5
0°-60°	3675.1	91.0
0°-90°	4038.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4038.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2034	2034	2034	2034	2034	
5°	2072	2055	2040	2034	2040	198
15°	2086	2060	2052	2043	2058	587
25°	1899	1905	1934	1891	1873	869
35°	1456	1494	1514	1470	1427	904
45°	904	924	826	906	872	700
55°	544	532	305	524	538	489
65°	328	294	81	294	328	323
75°	138	109	17	106	130	150
85°	32	20	3	17	29	35
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°	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4
2.5°	2054.6	2051.7	2054.6	2048.8	2045.9	2045.9	2048.8	2043.1	2040.2	2043.1	2040.2
5°	2071.8	2066.1	2069.0	2066.1	2060.3	2060.3	2063.2	2054.6	2054.6	2057.5	2054.6
7.5°	2083.3	2083.3	2083.3	2077.6	2074.7	2071.8	2077.6	2069.0	2066.1	2066.1	2063.2
10°	2092.0	2089.1	2092.0	2086.2	2080.5	2077.6	2083.3	2077.6	2071.8	2077.6	2069.0
12.5°	2089.1	2089.1	2089.1	2086.2	2080.5	2077.6	2083.3	2074.7	2071.8	2074.7	2069.0
15°	2086.2	2077.6	2080.5	2077.6	2069.0	2069.0	2071.8	2063.2	2057.5	2066.1	2060.3
17.5°	2060.3	2054.6	2057.5	2051.7	2045.9	2043.1	2045.9	2043.1	2037.3	2043.1	2037.3
20°	2017.2	2017.2	2020.0	2014.3	2008.5	2005.7	2011.4	2005.7	1999.9	2008.5	2008.5
22.5°	1965.4	1965.4	1965.4	1962.5	1959.6	1959.6	1959.6	1956.7	1953.9	1959.6	1962.5
25°	1899.2	1896.3	1899.2	1902.1	1899.2	1896.3	1899.2	1899.2	1893.4	1904.9	1904.9
27.5°	1815.7	1815.7	1821.5	1818.6	1818.6	1815.7	1821.5	1821.5	1818.6	1827.2	1835.9
30°	1717.9	1712.1	1717.9	1717.9	1720.8	1720.8	1723.7	1723.7	1723.7	1732.3	1738.0
32.5°	1591.3	1594.2	1602.8	1599.9	1597.0	1605.7	1605.7	1611.4	1614.3	1620.1	1622.9
35°	1456.0	1458.9	1458.9	1461.8	1467.6	1461.8	1476.2	1473.3	1476.2	1487.7	1493.5
37.5°	1312.2	1303.5	1317.9	1312.2	1315.0	1315.0	1320.8	1323.7	1332.3	1346.7	1346.7
40°	1156.8	1159.7	1165.4	1168.3	1171.2	1171.2	1171.2	1179.8	1182.7	1199.9	1197.1
42.5°	1021.5	1021.5	1027.3	1030.2	1030.2	1030.2	1030.2	1038.8	1044.6	1050.3	1056.1
45°	903.6	894.9	900.7	900.7	906.4	903.6	909.3	915.1	917.9	926.6	923.7
47.5°	791.3	788.4	791.3	794.2	791.3	794.2	797.1	800.0	802.8	802.8	802.8
50°	693.5	693.5	696.4	699.2	699.2	699.2	699.2	702.1	702.1	707.9	702.1
52.5°	612.9	615.8	615.8	612.9	615.8	615.8	618.7	618.7	615.8	615.8	607.2
55°	543.9	541.0	543.9	541.0	543.9	543.9	541.0	541.0	538.1	535.2	532.3
57.5°	477.7	477.7	477.7	477.7	474.8	477.7	474.8	471.9	471.9	466.2	457.5
60°	420.1	420.1	420.1	420.1	420.1	417.2	420.1	417.2	411.5	405.7	394.2
62.5°	371.2	368.3	371.2	368.3	368.3	365.4	365.4	362.6	356.8	351.1	339.6
65°	328.0	330.9	328.0	328.0	325.2	322.3	322.3	319.4	310.8	305.0	293.5
67.5°	282.0	279.1	279.1	279.1	276.2	276.2	276.2	270.5	264.7	256.1	244.6
70°	230.2	230.2	230.2	227.3	227.3	224.4	224.4	221.6	215.8	210.1	195.7
72.5°	181.3	181.3	181.3	175.5	178.4	175.5	175.5	169.8	166.9	158.3	149.6
75°	138.1	138.1	135.2	135.2	132.4	129.5	129.5	126.6	123.7	118.0	109.3
77.5°	100.7	100.7	100.7	97.8	95.0	92.1	92.1	89.2	86.3	83.4	77.7
80°	69.1	69.1	69.1	69.1	66.2	63.3	63.3	60.4	60.4	57.6	51.8
82.5°	46.0	46.0	46.0	46.0	43.2	43.2	43.2	40.3	37.4	37.4	31.7
85°	31.7	31.7	28.8	28.8	28.8	28.8	25.9	25.9	23.0	20.1	20.1
87.5°	17.3	17.3	17.3	17.3	14.4	14.4	14.4	14.4	11.5	11.5	8.6
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°	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4
2.5°	2048.8	2048.8	2045.9	2037.3	2040.2	2037.3	2040.2	2037.3	2028.7	2037.3	2028.7
5°	2060.3	2063.2	2057.5	2045.9	2048.8	2045.9	2045.9	2043.1	2034.4	2040.2	2034.4
7.5°	2071.8	2069.0	2066.1	2054.6	2057.5	2054.6	2054.6	2048.8	2040.2	2045.9	2037.3
10°	2077.6	2077.6	2071.8	2060.3	2060.3	2057.5	2060.3	2057.5	2045.9	2054.6	2048.8
12.5°	2077.6	2074.7	2074.7	2060.3	2063.2	2060.3	2063.2	2057.5	2048.8	2054.6	2051.7
15°	2069.0	2069.0	2066.1	2051.7	2054.6	2054.6	2057.5	2051.7	2043.1	2051.7	2045.9
17.5°	2051.7	2051.7	2048.8	2037.3	2043.1	2043.1	2045.9	2040.2	2031.6	2037.3	2037.3
20°	2017.2	2020.0	2020.0	2011.4	2017.2	2017.2	2020.0	2017.2	2014.3	2017.2	2011.4
22.5°	1976.9	1982.6	1982.6	1974.0	1979.8	1979.8	1988.4	1985.5	1979.8	1982.6	1979.8
25°	1916.5	1922.2	1928.0	1922.2	1928.0	1928.0	1936.6	1933.7	1928.0	1933.7	1925.1
27.5°	1847.4	1850.3	1856.0	1850.3	1858.9	1856.0	1864.7	1861.8	1853.1	1861.8	1858.9
30°	1749.6	1761.1	1769.7	1761.1	1769.7	1769.7	1775.5	1772.6	1769.7	1766.8	1766.8
32.5°	1640.2	1651.7	1651.7	1648.8	1654.6	1654.6	1657.5	1651.7	1648.8	1651.7	1654.6
35°	1505.0	1510.7	1516.5	1513.6	1516.5	1519.3	1516.5	1519.3	1510.7	1513.6	1513.6
37.5°	1358.2	1364.0	1364.0	1355.3	1361.1	1361.1	1355.3	1355.3	1349.6	1355.3	1343.8
40°	1202.8	1197.1	1199.9	1194.2	1188.4	1188.4	1185.6	1174.0	1168.3	1171.2	1174.0
42.5°	1050.3	1050.3	1041.7	1027.3	1012.9	1012.9	1004.3	998.5	987.0	992.8	989.9
45°	920.8	906.4	894.9	871.9	863.3	857.5	843.1	828.7	823.0	825.9	823.0
47.5°	797.1	785.6	756.8	725.1	716.5	707.9	690.6	673.3	667.6	661.8	661.8
50°	693.5	673.3	641.7	607.2	592.8	578.4	555.4	538.1	526.6	529.5	529.5
52.5°	598.5	575.5	538.1	494.9	477.7	460.4	440.3	420.1	411.5	408.6	408.6
55°	515.1	489.2	451.8	402.9	388.5	368.3	342.4	319.4	307.9	305.0	310.8
57.5°	440.3	417.2	374.1	325.2	307.9	287.8	261.9	241.7	227.3	224.4	227.3
60°	379.8	348.2	310.8	264.7	241.7	224.4	195.7	178.4	164.0	158.3	161.1
62.5°	319.4	290.6	253.2	207.2	189.9	172.7	146.8	126.6	115.1	112.2	115.1
65°	273.4	244.6	210.1	169.8	152.5	135.2	112.2	92.1	83.4	80.6	83.4
67.5°	227.3	201.4	172.7	135.2	120.9	106.5	83.4	69.1	57.6	54.7	57.6
70°	184.2	161.1	132.4	106.5	92.1	80.6	63.3	48.9	40.3	37.4	40.3
72.5°	138.1	120.9	100.7	77.7	69.1	60.4	46.0	34.5	28.8	25.9	28.8
75°	100.7	86.3	71.9	54.7	48.9	43.2	31.7	23.0	20.1	17.3	20.1
77.5°	69.1	60.4	48.9	37.4	31.7	28.8	20.1	17.3	14.4	11.5	11.5
80°	46.0	40.3	31.7	25.9	23.0	20.1	14.4	11.5	8.6	8.6	8.6
82.5°	28.8	23.0	20.1	14.4	11.5	11.5	8.6	5.8	5.8	5.8	5.8
85°	17.3	14.4	11.5	8.6	5.8	5.8	2.9	2.9	2.9	2.9	2.9
87.5°	8.6	5.8	5.8	2.9	2.9	2.9	2.9	2.9	0.0	0.0	2.9
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°	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4
2.5°	2034.4	2028.7	2028.7	2031.6	2034.4	2037.3	2031.6	2028.7	2028.7	2037.3	2031.6
5°	2034.4	2031.6	2031.6	2031.6	2037.3	2040.2	2034.4	2031.6	2034.4	2043.1	2040.2
7.5°	2043.1	2037.3	2040.2	2040.2	2043.1	2048.8	2043.1	2040.2	2043.1	2051.7	2045.9
10°	2048.8	2043.1	2045.9	2043.1	2051.7	2054.6	2048.8	2045.9	2048.8	2060.3	2057.5
12.5°	2051.7	2048.8	2048.8	2045.9	2054.6	2057.5	2051.7	2048.8	2051.7	2060.3	2057.5
15°	2045.9	2043.1	2043.1	2043.1	2048.8	2054.6	2045.9	2043.1	2043.1	2051.7	2048.8
17.5°	2034.4	2028.7	2028.7	2028.7	2031.6	2034.4	2025.8	2022.9	2020.0	2028.7	2025.8
20°	2014.3	2008.5	2002.8	2002.8	2005.7	2005.7	1999.9	1991.3	1991.3	1994.1	1988.4
22.5°	1976.9	1974.0	1968.2	1965.4	1971.1	1968.2	1956.7	1948.1	1945.2	1948.1	1942.3
25°	1925.1	1919.3	1916.5	1913.6	1916.5	1913.6	1902.1	1890.6	1890.6	1890.6	1881.9
27.5°	1853.1	1847.4	1844.5	1844.5	1847.4	1841.6	1830.1	1818.6	1812.9	1812.9	1804.2
30°	1761.1	1761.1	1758.2	1755.3	1752.4	1752.4	1735.2	1723.7	1717.9	1720.8	1715.0
32.5°	1648.8	1646.0	1643.1	1634.5	1637.3	1634.5	1620.1	1611.4	1602.8	1597.0	1594.2
35°	1505.0	1505.0	1502.1	1502.1	1502.1	1499.2	1484.8	1476.2	1470.4	1467.6	1458.9
37.5°	1346.7	1343.8	1340.9	1340.9	1340.9	1340.9	1332.3	1323.7	1323.7	1320.8	1315.0
40°	1168.3	1171.2	1174.0	1171.2	1179.8	1188.4	1176.9	1171.2	1168.3	1176.9	1165.4
42.5°	995.6	992.8	1007.1	1010.0	1010.0	1024.4	1027.3	1030.2	1027.3	1033.0	1033.0
45°	828.7	825.9	840.2	846.0	860.4	877.7	886.3	900.7	906.4	912.2	906.4
47.5°	670.5	682.0	693.5	707.9	719.4	748.2	765.4	779.8	785.6	794.2	794.2
50°	538.1	549.6	569.8	581.3	595.7	630.2	659.0	679.1	690.6	699.2	696.4
52.5°	414.4	434.5	460.4	471.9	492.1	532.3	564.0	587.0	601.4	610.0	612.9
55°	319.4	336.7	362.6	379.8	400.0	443.1	483.4	509.3	523.7	535.2	541.0
57.5°	236.0	256.1	284.9	299.3	322.3	371.2	405.7	437.4	454.7	469.0	471.9
60°	172.7	192.8	218.7	236.0	259.0	307.9	348.2	377.0	397.1	408.6	414.4
62.5°	123.7	143.9	169.8	187.0	207.2	250.3	290.6	319.4	339.6	353.9	362.6
65°	89.2	109.3	135.2	149.6	166.9	207.2	244.6	273.4	293.5	310.8	316.5
67.5°	66.2	80.6	103.6	118.0	135.2	166.9	198.6	224.4	244.6	259.0	264.7
70°	48.9	60.4	80.6	89.2	100.7	129.5	155.4	178.4	195.7	207.2	212.9
72.5°	34.5	43.2	57.6	66.2	74.8	97.8	118.0	135.2	146.8	158.3	164.0
75°	23.0	28.8	40.3	46.0	51.8	69.1	83.4	97.8	106.5	115.1	118.0
77.5°	14.4	20.1	28.8	31.7	37.4	46.0	57.6	66.2	71.9	77.7	83.4
80°	8.6	11.5	17.3	20.1	23.0	31.7	37.4	43.2	48.9	54.7	57.6
82.5°	5.8	8.6	11.5	11.5	14.4	17.3	23.0	28.8	31.7	34.5	37.4
85°	2.9	2.9	5.8	5.8	8.6	8.6	11.5	14.4	17.3	20.1	23.0
87.5°	2.9	2.9	2.9	2.9	5.8	5.8	8.6	8.6	8.6	11.5	11.5
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: P252704

CATALOG NUMBER: LD6B40D010 EU6B30508050 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4	2034.4
2.5°	2025.8	2034.4	2025.8	2031.6	2028.7	2028.7	2025.8	2028.7
5°	2034.4	2045.9	2034.4	2043.1	2037.3	2037.3	2037.3	2040.2
7.5°	2043.1	2054.6	2045.9	2054.6	2051.7	2048.8	2048.8	2054.6
10°	2051.7	2060.3	2054.6	2063.2	2060.3	2057.5	2057.5	2063.2
12.5°	2051.7	2063.2	2057.5	2066.1	2063.2	2060.3	2060.3	2063.2
15°	2043.1	2057.5	2048.8	2057.5	2054.6	2051.7	2051.7	2057.5
17.5°	2017.2	2028.7	2022.9	2028.7	2028.7	2025.8	2028.7	2031.6
20°	1982.6	1991.3	1985.5	1991.3	1991.3	1985.5	1988.4	1991.3
22.5°	1933.7	1942.3	1936.6	1942.3	1939.5	1936.6	1936.6	1933.7
25°	1873.3	1884.8	1876.2	1881.9	1876.2	1870.4	1870.4	1873.3
27.5°	1798.5	1807.1	1795.6	1801.3	1795.6	1789.8	1789.8	1787.0
30°	1700.6	1703.5	1694.9	1700.6	1694.9	1692.0	1686.2	1686.2
32.5°	1582.7	1585.5	1576.9	1576.9	1571.1	1571.1	1559.6	1568.3
35°	1444.5	1447.4	1444.5	1441.7	1433.0	1430.1	1427.3	1427.3
37.5°	1300.7	1300.7	1292.0	1289.1	1283.4	1277.6	1280.5	1271.9
40°	1153.9	1151.0	1142.4	1145.3	1142.4	1133.8	1130.9	1128.0
42.5°	1015.8	1015.8	1007.1	1010.0	1004.3	1001.4	992.8	995.6
45°	894.9	894.9	886.3	886.3	883.4	874.8	877.7	871.9
47.5°	785.6	785.6	782.7	782.7	774.1	771.2	771.2	771.2
50°	690.6	690.6	690.6	690.6	687.7	684.9	682.0	684.9
52.5°	610.0	615.8	612.9	612.9	610.0	607.2	604.3	604.3
55°	538.1	541.0	541.0	543.9	541.0	538.1	541.0	538.1
57.5°	474.8	480.6	480.6	480.6	480.6	480.6	477.7	474.8
60°	420.1	423.0	423.0	425.9	425.9	425.9	423.0	423.0
62.5°	365.4	371.2	374.1	374.1	377.0	374.1	374.1	374.1
65°	322.3	328.0	330.9	328.0	330.9	330.9	328.0	328.0
67.5°	270.5	276.2	276.2	276.2	276.2	279.1	276.2	276.2
70°	218.7	224.4	221.6	224.4	224.4	224.4	224.4	224.4
72.5°	166.9	169.8	172.7	172.7	175.5	172.7	172.7	172.7
75°	120.9	126.6	126.6	126.6	126.6	129.5	129.5	129.5
77.5°	86.3	89.2	89.2	92.1	92.1	92.1	92.1	95.0
80°	60.4	60.4	63.3	63.3	66.2	66.2	66.2	66.2
82.5°	40.3	43.2	43.2	43.2	43.2	43.2	43.2	43.2
85°	23.0	25.9	25.9	25.9	25.9	28.8	28.8	28.8
87.5°	14.4	14.4	14.4	14.4	14.4	14.4	11.5	11.5
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)