

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: P252677

Luminaire Tested: **LD6B20D010 EU6B10208040 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252677
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: LD6B20D010 EU6B10208040 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1971.0 lumens
Efficiency: N/A
Efficacy: 94.8 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

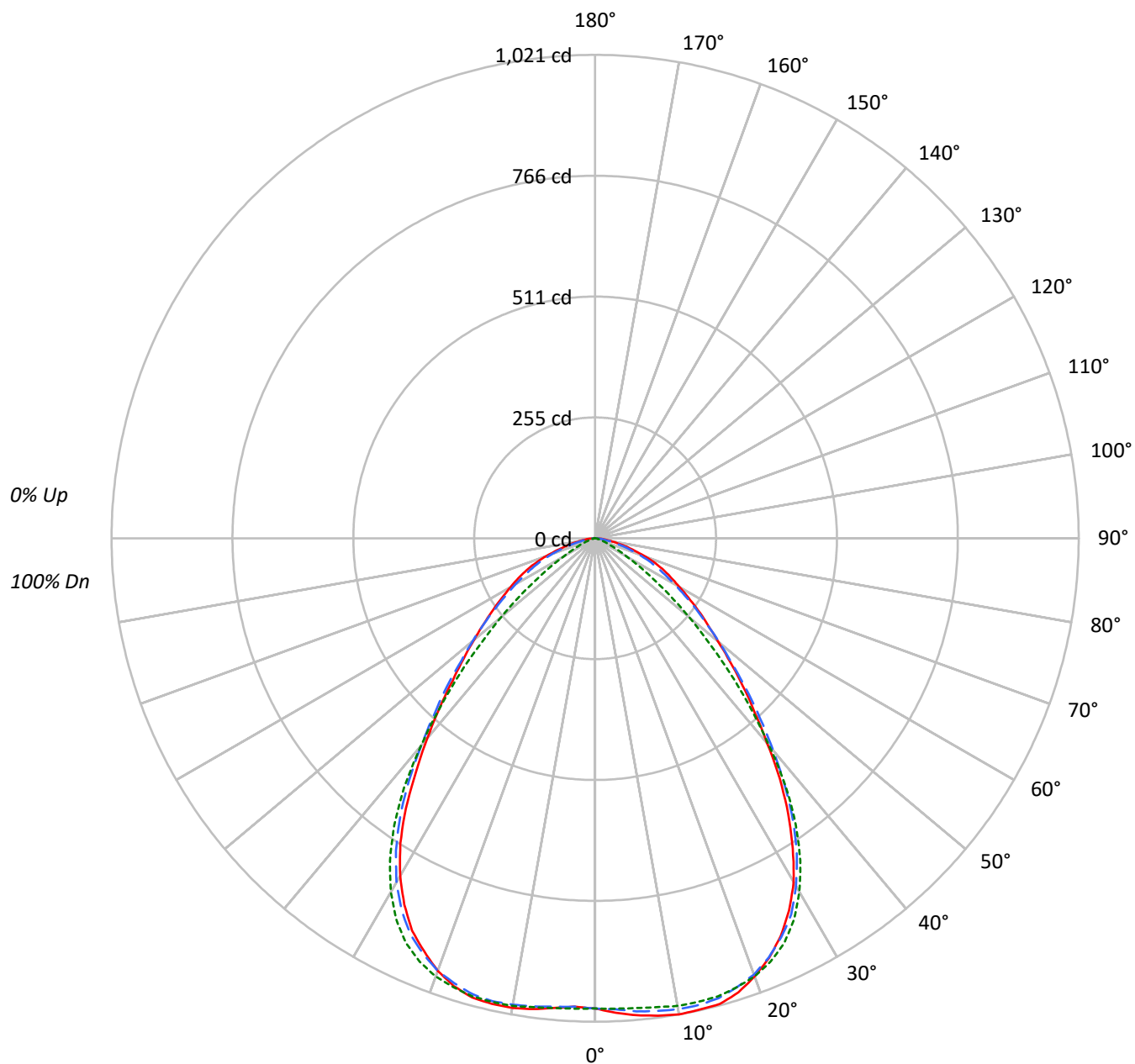
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
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°	64784	64784	64784
5°	66230	65215	65215
10°	67645	66439	66717
15°	68778	67643	67832
20°	68358	68358	67484
25°	66730	67947	65823
30°	63167	64968	62007
35°	56603	58841	55488
40°	48084	48689	46892
45°	40689	37192	39268
50°	34357	26227	33930
55°	30199	16936	29880
60°	26762	10086	26944
65°	24715	6067	24715
70°	21440	3491	20906
75°	16990	2117	15931
80°	12661	1578	12135
85°	11603	1048	10480



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.6	4.9
10°-20°	283.0	14.4
20°-30°	425.5	21.6
30°-40°	447.4	22.7
40°-50°	334.2	17.0
50°-60°	208.1	10.6
60°-70°	118.3	6.0
70°-80°	48.7	2.5
80°-90°	10.1	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°	804.1	40.8
0°-40°	1251.5	63.5
0°-60°	1793.9	91.0
0°-90°	1971.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1971.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	993	993	993	993	993	
5°	1011	1003	996	993	996	97
15°	1018	1006	1002	997	1004	286
25°	927	930	944	923	914	424
35°	711	729	739	718	697	441
45°	441	451	403	442	426	342
55°	266	260	149	256	263	239
65°	160	143	39	143	160	158
75°	67	53	8	52	63	73
85°	16	10	1	8	14	17
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°	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0
2.5°	1002.9	1001.5	1002.9	1000.1	998.7	998.7	1000.1	997.2	995.8	997.2	995.8
5°	1011.3	1008.5	1009.9	1008.5	1005.7	1005.7	1007.1	1002.9	1002.9	1004.3	1002.9
7.5°	1016.9	1016.9	1016.9	1014.1	1012.7	1011.3	1014.1	1009.9	1008.5	1008.5	1007.1
10°	1021.1	1019.7	1021.1	1018.3	1015.5	1014.1	1016.9	1014.1	1011.3	1014.1	1009.9
12.5°	1019.7	1019.7	1019.7	1018.3	1015.5	1014.1	1016.9	1012.7	1011.3	1012.7	1009.9
15°	1018.3	1014.1	1015.5	1014.1	1009.9	1009.9	1011.3	1007.1	1004.3	1008.5	1005.7
17.5°	1005.7	1002.9	1004.3	1001.5	998.7	997.2	998.7	997.2	994.4	997.2	994.4
20°	984.6	984.6	986.0	983.2	980.4	979.0	981.8	979.0	976.2	980.4	980.4
22.5°	959.3	959.3	959.3	957.9	956.5	956.5	956.5	955.1	953.7	956.5	957.9
25°	927.0	925.6	927.0	928.4	927.0	925.6	927.0	927.0	924.2	929.8	929.8
27.5°	886.3	886.3	889.1	887.7	887.7	886.3	889.1	889.1	887.7	891.9	896.1
30°	838.5	835.7	838.5	838.5	839.9	839.9	841.3	841.3	841.3	845.6	848.4
32.5°	776.7	778.1	782.3	780.9	779.5	783.8	783.8	786.6	788.0	790.8	792.2
35°	710.7	712.1	712.1	713.5	716.3	713.5	720.5	719.1	720.5	726.2	729.0
37.5°	640.5	636.3	643.3	640.5	641.9	641.9	644.7	646.1	650.3	657.3	657.3
40°	564.6	566.0	568.9	570.3	571.7	571.7	571.7	575.9	577.3	585.7	584.3
42.5°	498.6	498.6	501.4	502.8	502.8	502.8	502.8	507.1	509.9	512.7	515.5
45°	441.0	436.8	439.6	439.6	442.4	441.0	443.8	446.7	448.1	452.3	450.9
47.5°	386.3	384.9	386.3	387.7	386.3	387.7	389.1	390.5	391.9	391.9	391.9
50°	338.5	338.5	339.9	341.3	341.3	341.3	341.3	342.7	342.7	345.5	342.7
52.5°	299.2	300.6	300.6	299.2	300.6	300.6	302.0	302.0	300.6	300.6	296.4
55°	265.5	264.1	265.5	264.1	265.5	265.5	264.1	264.1	262.7	261.3	259.8
57.5°	233.2	233.2	233.2	233.2	231.8	233.2	231.8	230.3	230.3	227.5	223.3
60°	205.1	205.1	205.1	205.1	205.1	203.7	205.1	203.7	200.9	198.0	192.4
62.5°	181.2	179.8	181.2	179.8	179.8	178.4	178.4	177.0	174.2	171.4	165.7
65°	160.1	161.5	160.1	160.1	158.7	157.3	157.3	155.9	151.7	148.9	143.3
67.5°	137.6	136.2	136.2	136.2	134.8	134.8	134.8	132.0	129.2	125.0	119.4
70°	112.4	112.4	112.4	111.0	111.0	109.6	109.6	108.2	105.3	102.5	95.5
72.5°	88.5	88.5	88.5	85.7	87.1	85.7	85.7	82.9	81.5	77.3	73.0
75°	67.4	67.4	66.0	66.0	64.6	63.2	63.2	61.8	60.4	57.6	53.4
77.5°	49.2	49.2	49.2	47.8	46.4	44.9	44.9	43.5	42.1	40.7	37.9
80°	33.7	33.7	33.7	33.7	32.3	30.9	30.9	29.5	29.5	28.1	25.3
82.5°	22.5	22.5	22.5	22.5	21.1	21.1	21.1	19.7	18.3	18.3	15.5
85°	15.5	15.5	14.0	14.0	14.0	14.0	12.6	12.6	11.2	9.8	9.8
87.5°	8.4	8.4	8.4	8.4	7.0	7.0	7.0	7.0	5.6	5.6	4.2
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°	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0
2.5°	1000.1	1000.1	998.7	994.4	995.8	994.4	995.8	994.4	990.2	994.4	990.2
5°	1005.7	1007.1	1004.3	998.7	1000.1	998.7	998.7	997.2	993.0	995.8	993.0
7.5°	1011.3	1009.9	1008.5	1002.9	1004.3	1002.9	1002.9	1000.1	995.8	998.7	994.4
10°	1014.1	1014.1	1011.3	1005.7	1005.7	1004.3	1005.7	1004.3	998.7	1002.9	1000.1
12.5°	1014.1	1012.7	1012.7	1005.7	1007.1	1005.7	1007.1	1004.3	1000.1	1002.9	1001.5
15°	1009.9	1009.9	1008.5	1001.5	1002.9	1002.9	1004.3	1001.5	997.2	1001.5	998.7
17.5°	1001.5	1001.5	1000.1	994.4	997.2	997.2	998.7	995.8	991.6	994.4	994.4
20°	984.6	986.0	986.0	981.8	984.6	984.6	986.0	984.6	983.2	984.6	981.8
22.5°	964.9	967.7	967.7	963.5	966.3	966.3	970.6	969.2	966.3	967.7	966.3
25°	935.4	938.3	941.1	938.3	941.1	941.1	945.3	943.9	941.1	943.9	939.7
27.5°	901.7	903.1	905.9	903.1	907.4	905.9	910.2	908.8	904.5	908.8	907.4
30°	854.0	859.6	863.8	859.6	863.8	863.8	866.6	865.2	863.8	862.4	862.4
32.5°	800.6	806.2	806.2	804.8	807.6	807.6	809.0	806.2	804.8	806.2	807.6
35°	734.6	737.4	740.2	738.8	740.2	741.6	740.2	741.6	737.4	738.8	738.8
37.5°	663.0	665.8	665.8	661.6	664.4	664.4	661.6	661.6	658.7	661.6	655.9
40°	587.1	584.3	585.7	582.9	580.1	580.1	578.7	573.1	570.3	571.7	573.1
42.5°	512.7	512.7	508.5	501.4	494.4	494.4	490.2	487.4	481.8	484.6	483.2
45°	449.5	442.4	436.8	425.6	421.4	418.6	411.5	404.5	401.7	403.1	401.7
47.5°	389.1	383.4	369.4	354.0	349.7	345.5	337.1	328.7	325.9	323.1	323.1
50°	338.5	328.7	313.2	296.4	289.3	282.3	271.1	262.7	257.0	258.4	258.4
52.5°	292.2	280.9	262.7	241.6	233.2	224.7	214.9	205.1	200.9	199.4	199.4
55°	251.4	238.8	220.5	196.6	189.6	179.8	167.1	155.9	150.3	148.9	151.7
57.5°	214.9	203.7	182.6	158.7	150.3	140.5	127.8	118.0	111.0	109.6	111.0
60°	185.4	170.0	151.7	129.2	118.0	109.6	95.5	87.1	80.1	77.3	78.7
62.5°	155.9	141.9	123.6	101.1	92.7	84.3	71.6	61.8	56.2	54.8	56.2
65°	133.4	119.4	102.5	82.9	74.4	66.0	54.8	44.9	40.7	39.3	40.7
67.5°	111.0	98.3	84.3	66.0	59.0	52.0	40.7	33.7	28.1	26.7	28.1
70°	89.9	78.7	64.6	52.0	44.9	39.3	30.9	23.9	19.7	18.3	19.7
72.5°	67.4	59.0	49.2	37.9	33.7	29.5	22.5	16.9	14.0	12.6	14.0
75°	49.2	42.1	35.1	26.7	23.9	21.1	15.5	11.2	9.8	8.4	9.8
77.5°	33.7	29.5	23.9	18.3	15.5	14.0	9.8	8.4	7.0	5.6	5.6
80°	22.5	19.7	15.5	12.6	11.2	9.8	7.0	5.6	4.2	4.2	4.2
82.5°	14.0	11.2	9.8	7.0	5.6	5.6	4.2	2.8	2.8	2.8	2.8
85°	8.4	7.0	5.6	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4
87.5°	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	0.0	0.0	1.4
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°	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0
2.5°	993.0	990.2	990.2	991.6	993.0	994.4	991.6	990.2	990.2	994.4	991.6
5°	993.0	991.6	991.6	991.6	994.4	995.8	993.0	991.6	993.0	997.2	995.8
7.5°	997.2	994.4	995.8	995.8	997.2	1000.1	997.2	995.8	997.2	1001.5	998.7
10°	1000.1	997.2	998.7	997.2	1001.5	1002.9	1000.1	998.7	1000.1	1005.7	1004.3
12.5°	1001.5	1000.1	1000.1	998.7	1002.9	1004.3	1001.5	1000.1	1001.5	1005.7	1004.3
15°	998.7	997.2	997.2	997.2	1000.1	1002.9	998.7	997.2	997.2	1001.5	1000.1
17.5°	993.0	990.2	990.2	990.2	991.6	993.0	988.8	987.4	986.0	990.2	988.8
20°	983.2	980.4	977.6	977.6	979.0	979.0	976.2	972.0	972.0	973.4	970.6
22.5°	964.9	963.5	960.7	959.3	962.1	960.7	955.1	950.9	949.5	950.9	948.1
25°	939.7	936.8	935.4	934.0	935.4	934.0	928.4	922.8	922.8	922.8	918.6
27.5°	904.5	901.7	900.3	900.3	901.7	898.9	893.3	887.7	884.9	884.9	880.7
30°	859.6	859.6	858.2	856.8	855.4	855.4	847.0	841.3	838.5	839.9	837.1
32.5°	804.8	803.4	802.0	797.8	799.2	797.8	790.8	786.6	782.3	779.5	778.1
35°	734.6	734.6	733.2	733.2	733.2	731.8	724.8	720.5	717.7	716.3	712.1
37.5°	657.3	655.9	654.5	654.5	654.5	654.5	650.3	646.1	646.1	644.7	641.9
40°	570.3	571.7	573.1	571.7	575.9	580.1	574.5	571.7	570.3	574.5	568.9
42.5°	486.0	484.6	491.6	493.0	493.0	500.0	501.4	502.8	501.4	504.2	504.2
45°	404.5	403.1	410.1	412.9	420.0	428.4	432.6	439.6	442.4	445.2	442.4
47.5°	327.3	332.9	338.5	345.5	351.1	365.2	373.6	380.6	383.4	387.7	387.7
50°	262.7	268.3	278.1	283.7	290.7	307.6	321.6	331.5	337.1	341.3	339.9
52.5°	202.3	212.1	224.7	230.3	240.2	259.8	275.3	286.5	293.6	297.8	299.2
55°	155.9	164.3	177.0	185.4	195.2	216.3	236.0	248.6	255.6	261.3	264.1
57.5°	115.2	125.0	139.1	146.1	157.3	181.2	198.0	213.5	221.9	228.9	230.3
60°	84.3	94.1	106.7	115.2	126.4	150.3	170.0	184.0	193.8	199.4	202.3
62.5°	60.4	70.2	82.9	91.3	101.1	122.2	141.9	155.9	165.7	172.8	177.0
65°	43.5	53.4	66.0	73.0	81.5	101.1	119.4	133.4	143.3	151.7	154.5
67.5°	32.3	39.3	50.6	57.6	66.0	81.5	96.9	109.6	119.4	126.4	129.2
70°	23.9	29.5	39.3	43.5	49.2	63.2	75.8	87.1	95.5	101.1	103.9
72.5°	16.9	21.1	28.1	32.3	36.5	47.8	57.6	66.0	71.6	77.3	80.1
75°	11.2	14.0	19.7	22.5	25.3	33.7	40.7	47.8	52.0	56.2	57.6
77.5°	7.0	9.8	14.0	15.5	18.3	22.5	28.1	32.3	35.1	37.9	40.7
80°	4.2	5.6	8.4	9.8	11.2	15.5	18.3	21.1	23.9	26.7	28.1
82.5°	2.8	4.2	5.6	5.6	7.0	8.4	11.2	14.0	15.5	16.9	18.3
85°	1.4	1.4	2.8	2.8	4.2	4.2	5.6	7.0	8.4	9.8	11.2
87.5°	1.4	1.4	1.4	1.4	2.8	2.8	4.2	4.2	4.2	5.6	5.6
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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	993.0	993.0	993.0	993.0	993.0	993.0	993.0	993.0
2.5°	988.8	993.0	988.8	991.6	990.2	990.2	988.8	990.2
5°	993.0	998.7	993.0	997.2	994.4	994.4	994.4	995.8
7.5°	997.2	1002.9	998.7	1002.9	1001.5	1000.1	1000.1	1002.9
10°	1001.5	1005.7	1002.9	1007.1	1005.7	1004.3	1004.3	1007.1
12.5°	1001.5	1007.1	1004.3	1008.5	1007.1	1005.7	1005.7	1007.1
15°	997.2	1004.3	1000.1	1004.3	1002.9	1001.5	1001.5	1004.3
17.5°	984.6	990.2	987.4	990.2	990.2	988.8	990.2	991.6
20°	967.7	972.0	969.2	972.0	972.0	969.2	970.6	972.0
22.5°	943.9	948.1	945.3	948.1	946.7	945.3	945.3	943.9
25°	914.4	920.0	915.8	918.6	915.8	913.0	913.0	914.4
27.5°	877.9	882.1	876.5	879.3	876.5	873.6	873.6	872.2
30°	830.1	831.5	827.3	830.1	827.3	825.9	823.1	823.1
32.5°	772.5	773.9	769.7	769.7	766.9	766.9	761.3	765.5
35°	705.1	706.5	705.1	703.7	699.5	698.1	696.7	696.7
37.5°	634.9	634.9	630.7	629.2	626.4	623.6	625.0	620.8
40°	563.2	561.8	557.6	559.0	557.6	553.4	552.0	550.6
42.5°	495.8	495.8	491.6	493.0	490.2	488.8	484.6	486.0
45°	436.8	436.8	432.6	432.6	431.2	427.0	428.4	425.6
47.5°	383.4	383.4	382.0	382.0	377.8	376.4	376.4	376.4
50°	337.1	337.1	337.1	337.1	335.7	334.3	332.9	334.3
52.5°	297.8	300.6	299.2	299.2	297.8	296.4	295.0	295.0
55°	262.7	264.1	264.1	265.5	264.1	262.7	264.1	262.7
57.5°	231.8	234.6	234.6	234.6	234.6	234.6	233.2	231.8
60°	205.1	206.5	206.5	207.9	207.9	207.9	206.5	206.5
62.5°	178.4	181.2	182.6	182.6	184.0	182.6	182.6	182.6
65°	157.3	160.1	161.5	160.1	161.5	161.5	160.1	160.1
67.5°	132.0	134.8	134.8	134.8	134.8	136.2	134.8	134.8
70°	106.7	109.6	108.2	109.6	109.6	109.6	109.6	109.6
72.5°	81.5	82.9	84.3	84.3	85.7	84.3	84.3	84.3
75°	59.0	61.8	61.8	61.8	61.8	63.2	63.2	63.2
77.5°	42.1	43.5	43.5	44.9	44.9	44.9	44.9	46.4
80°	29.5	29.5	30.9	30.9	32.3	32.3	32.3	32.3
82.5°	19.7	21.1	21.1	21.1	21.1	21.1	21.1	21.1
85°	11.2	12.6	12.6	12.6	12.6	14.0	14.0	14.0
87.5°	7.0	7.0	7.0	7.0	7.0	7.0	5.6	5.6
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)