

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: P252678

Luminaire Tested: **LD6B20D010 EU6B10208050 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252678
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 EU6B10208050 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: 1970.0 lumens
Efficiency: N/A
Efficacy: 94.7 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

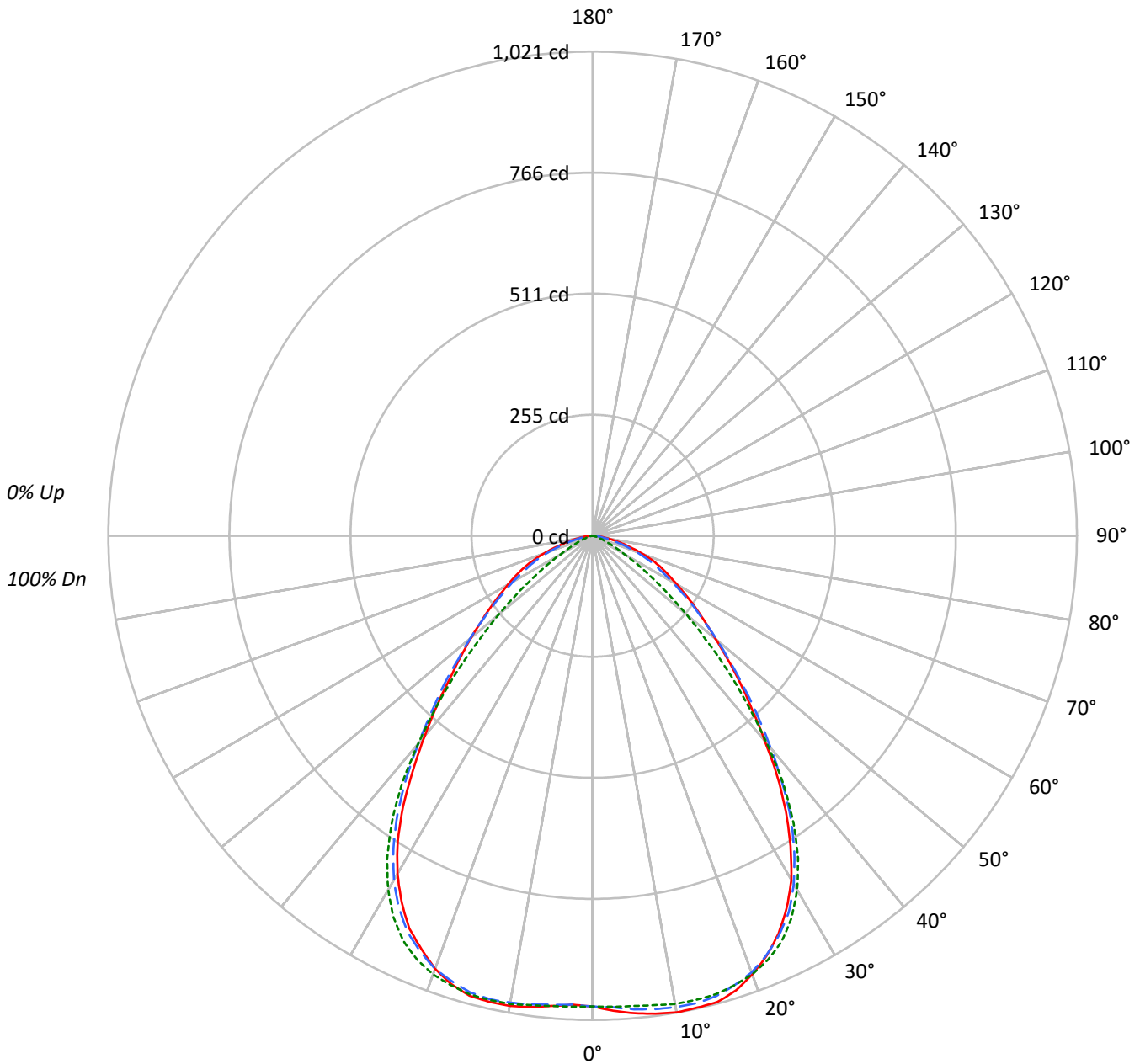
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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°	64751	64751	64751
5°	66197	65182	65182
10°	67612	66406	66684
15°	68744	67610	67799
20°	68324	68324	67449
25°	66694	67911	65787
30°	63137	64937	61977
35°	56579	58809	55456
40°	48067	48664	46867
45°	40670	37173	39249
50°	34336	26217	33910
55°	30176	16925	29858
60°	26749	10073	26931
65°	24700	6067	24700
70°	21421	3491	20887
75°	16990	2117	15931
80°	12661	1578	12135
85°	11528	1048	10480



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.6	4.9
10°-20°	282.8	14.4
20°-30°	425.3	21.6
30°-40°	447.2	22.7
40°-50°	334.1	17.0
50°-60°	208.0	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°	803.7	40.8
0°-40°	1250.9	63.5
0°-60°	1792.9	91.0
0°-90°	1970.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1970.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	992	992	992	992	992	
5°	1011	1002	995	992	995	97
15°	1018	1005	1001	997	1004	286
25°	926	929	943	922	914	424
35°	710	729	738	717	696	441
45°	441	451	403	442	425	342
55°	265	260	149	256	262	239
65°	160	143	39	143	160	158
75°	67	53	8	52	63	73
85°	15	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°	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5
2.5°	1002.4	1001.0	1002.4	999.5	998.1	998.1	999.5	996.7	995.3	996.7	995.3
5°	1010.8	1008.0	1009.4	1008.0	1005.2	1005.2	1006.6	1002.4	1002.4	1003.8	1002.4
7.5°	1016.4	1016.4	1016.4	1013.6	1012.2	1010.8	1013.6	1009.4	1008.0	1008.0	1006.6
10°	1020.6	1019.2	1020.6	1017.8	1015.0	1013.6	1016.4	1013.6	1010.8	1013.6	1009.4
12.5°	1019.2	1019.2	1019.2	1017.8	1015.0	1013.6	1016.4	1012.2	1010.8	1012.2	1009.4
15°	1017.8	1013.6	1015.0	1013.6	1009.4	1009.4	1010.8	1006.6	1003.8	1008.0	1005.2
17.5°	1005.2	1002.4	1003.8	1001.0	998.1	996.7	998.1	996.7	993.9	996.7	993.9
20°	984.1	984.1	985.5	982.7	979.9	978.5	981.3	978.5	975.7	979.9	979.9
22.5°	958.8	958.8	958.8	957.4	956.0	956.0	956.0	954.6	953.2	956.0	957.4
25°	926.5	925.1	926.5	928.0	926.5	925.1	926.5	926.5	923.7	929.4	929.4
27.5°	885.8	885.8	888.6	887.2	887.2	885.8	888.6	888.6	887.2	891.5	895.7
30°	838.1	835.3	838.1	838.1	839.5	839.5	840.9	840.9	840.9	845.1	847.9
32.5°	776.3	777.7	781.9	780.5	779.1	783.4	783.4	786.2	787.6	790.4	791.8
35°	710.4	711.8	711.8	713.2	716.0	713.2	720.2	718.8	720.2	725.8	728.6
37.5°	640.2	635.9	643.0	640.2	641.6	641.6	644.4	645.8	650.0	657.0	657.0
40°	564.4	565.8	568.6	570.0	571.4	571.4	571.4	575.6	577.0	585.4	584.0
42.5°	498.4	498.4	501.2	502.6	502.6	502.6	502.6	506.8	509.6	512.4	515.2
45°	440.8	436.6	439.4	439.4	442.2	440.8	443.6	446.4	447.8	452.0	450.6
47.5°	386.1	384.7	386.1	387.5	386.1	387.5	388.9	390.3	391.7	391.7	391.7
50°	338.3	338.3	339.7	341.1	341.1	341.1	341.1	342.5	342.5	345.3	342.5
52.5°	299.0	300.4	300.4	299.0	300.4	300.4	301.8	301.8	300.4	300.4	296.2
55°	265.3	263.9	265.3	263.9	265.3	265.3	263.9	263.9	262.5	261.1	259.7
57.5°	233.0	233.0	233.0	233.0	231.6	233.0	231.6	230.2	230.2	227.4	223.2
60°	205.0	205.0	205.0	205.0	205.0	203.6	205.0	203.6	200.8	197.9	192.3
62.5°	181.1	179.7	181.1	179.7	179.7	178.3	178.3	176.9	174.1	171.3	165.7
65°	160.0	161.4	160.0	160.0	158.6	157.2	157.2	155.8	151.6	148.8	143.2
67.5°	137.6	136.2	136.2	136.2	134.8	134.8	134.8	132.0	129.2	124.9	119.3
70°	112.3	112.3	112.3	110.9	110.9	109.5	109.5	108.1	105.3	102.5	95.5
72.5°	88.4	88.4	88.4	85.6	87.0	85.6	85.6	82.8	81.4	77.2	73.0
75°	67.4	67.4	66.0	66.0	64.6	63.2	63.2	61.8	60.4	57.6	53.3
77.5°	49.1	49.1	49.1	47.7	46.3	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	15.4
85°	15.4	15.4	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°	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5
2.5°	999.5	999.5	998.1	993.9	995.3	993.9	995.3	993.9	989.7	993.9	989.7
5°	1005.2	1006.6	1003.8	998.1	999.5	998.1	998.1	996.7	992.5	995.3	992.5
7.5°	1010.8	1009.4	1008.0	1002.4	1003.8	1002.4	1002.4	999.5	995.3	998.1	993.9
10°	1013.6	1013.6	1010.8	1005.2	1005.2	1003.8	1005.2	1003.8	998.1	1002.4	999.5
12.5°	1013.6	1012.2	1012.2	1005.2	1006.6	1005.2	1006.6	1003.8	999.5	1002.4	1001.0
15°	1009.4	1009.4	1008.0	1001.0	1002.4	1002.4	1003.8	1001.0	996.7	1001.0	998.1
17.5°	1001.0	1001.0	999.5	993.9	996.7	996.7	998.1	995.3	991.1	993.9	993.9
20°	984.1	985.5	985.5	981.3	984.1	984.1	985.5	984.1	982.7	984.1	981.3
22.5°	964.5	967.3	967.3	963.0	965.9	965.9	970.1	968.7	965.9	967.3	965.9
25°	935.0	937.8	940.6	937.8	940.6	940.6	944.8	943.4	940.6	943.4	939.2
27.5°	901.3	902.7	905.5	902.7	906.9	905.5	909.7	908.3	904.1	908.3	906.9
30°	853.5	859.2	863.4	859.2	863.4	863.4	866.2	864.8	863.4	862.0	862.0
32.5°	800.2	805.8	805.8	804.4	807.2	807.2	808.6	805.8	804.4	805.8	807.2
35°	734.2	737.0	739.8	738.4	739.8	741.2	739.8	741.2	737.0	738.4	738.4
37.5°	662.6	665.4	665.4	661.2	664.0	664.0	661.2	661.2	658.4	661.2	655.6
40°	586.8	584.0	585.4	582.6	579.8	579.8	578.4	572.8	570.0	571.4	572.8
42.5°	512.4	512.4	508.2	501.2	494.2	494.2	489.9	487.1	481.5	484.3	482.9
45°	449.2	442.2	436.6	425.4	421.2	418.3	411.3	404.3	401.5	402.9	401.5
47.5°	388.9	383.3	369.2	353.8	349.6	345.3	336.9	328.5	325.7	322.9	322.9
50°	338.3	328.5	313.1	296.2	289.2	282.2	270.9	262.5	256.9	258.3	258.3
52.5°	292.0	280.8	262.5	241.5	233.0	224.6	214.8	205.0	200.8	199.3	199.3
55°	251.3	238.7	220.4	196.5	189.5	179.7	167.1	155.8	150.2	148.8	151.6
57.5°	214.8	203.6	182.5	158.6	150.2	140.4	127.8	117.9	110.9	109.5	110.9
60°	185.3	169.9	151.6	129.2	117.9	109.5	95.5	87.0	80.0	77.2	78.6
62.5°	155.8	141.8	123.5	101.1	92.7	84.2	71.6	61.8	56.2	54.8	56.2
65°	133.4	119.3	102.5	82.8	74.4	66.0	54.8	44.9	40.7	39.3	40.7
67.5°	110.9	98.3	84.2	66.0	59.0	51.9	40.7	33.7	28.1	26.7	28.1
70°	89.8	78.6	64.6	51.9	44.9	39.3	30.9	23.9	19.7	18.3	19.7
72.5°	67.4	59.0	49.1	37.9	33.7	29.5	22.5	16.8	14.0	12.6	14.0
75°	49.1	42.1	35.1	26.7	23.9	21.1	15.4	11.2	9.8	8.4	9.8
77.5°	33.7	29.5	23.9	18.3	15.4	14.0	9.8	8.4	7.0	5.6	5.6
80°	22.5	19.7	15.4	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°	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5
2.5°	992.5	989.7	989.7	991.1	992.5	993.9	991.1	989.7	989.7	993.9	991.1
5°	992.5	991.1	991.1	991.1	993.9	995.3	992.5	991.1	992.5	996.7	995.3
7.5°	996.7	993.9	995.3	995.3	996.7	999.5	996.7	995.3	996.7	1001.0	998.1
10°	999.5	996.7	998.1	996.7	1001.0	1002.4	999.5	998.1	999.5	1005.2	1003.8
12.5°	1001.0	999.5	999.5	998.1	1002.4	1003.8	1001.0	999.5	1001.0	1005.2	1003.8
15°	998.1	996.7	996.7	996.7	999.5	1002.4	998.1	996.7	996.7	1001.0	999.5
17.5°	992.5	989.7	989.7	989.7	991.1	992.5	988.3	986.9	985.5	989.7	988.3
20°	982.7	979.9	977.1	977.1	978.5	978.5	975.7	971.5	971.5	972.9	970.1
22.5°	964.5	963.0	960.2	958.8	961.6	960.2	954.6	950.4	949.0	950.4	947.6
25°	939.2	936.4	935.0	933.6	935.0	933.6	928.0	922.3	922.3	922.3	918.1
27.5°	904.1	901.3	899.9	899.9	901.3	898.5	892.9	887.2	884.4	884.4	880.2
30°	859.2	859.2	857.8	856.4	854.9	854.9	846.5	840.9	838.1	839.5	836.7
32.5°	804.4	803.0	801.6	797.4	798.8	797.4	790.4	786.2	781.9	779.1	777.7
35°	734.2	734.2	732.8	732.8	732.8	731.4	724.4	720.2	717.4	716.0	711.8
37.5°	657.0	655.6	654.2	654.2	654.2	654.2	650.0	645.8	645.8	644.4	641.6
40°	570.0	571.4	572.8	571.4	575.6	579.8	574.2	571.4	570.0	574.2	568.6
42.5°	485.7	484.3	491.4	492.8	492.8	499.8	501.2	502.6	501.2	504.0	504.0
45°	404.3	402.9	409.9	412.7	419.8	428.2	432.4	439.4	442.2	445.0	442.2
47.5°	327.1	332.7	338.3	345.3	351.0	365.0	373.4	380.4	383.3	387.5	387.5
50°	262.5	268.1	278.0	283.6	290.6	307.4	321.5	331.3	336.9	341.1	339.7
52.5°	202.2	212.0	224.6	230.2	240.1	259.7	275.2	286.4	293.4	297.6	299.0
55°	155.8	164.3	176.9	185.3	195.1	216.2	235.8	248.5	255.5	261.1	263.9
57.5°	115.1	124.9	139.0	146.0	157.2	181.1	197.9	213.4	221.8	228.8	230.2
60°	84.2	94.1	106.7	115.1	126.3	150.2	169.9	183.9	193.7	199.3	202.2
62.5°	60.4	70.2	82.8	91.3	101.1	122.1	141.8	155.8	165.7	172.7	176.9
65°	43.5	53.3	66.0	73.0	81.4	101.1	119.3	133.4	143.2	151.6	154.4
67.5°	32.3	39.3	50.5	57.6	66.0	81.4	96.9	109.5	119.3	126.3	129.2
70°	23.9	29.5	39.3	43.5	49.1	63.2	75.8	87.0	95.5	101.1	103.9
72.5°	16.8	21.1	28.1	32.3	36.5	47.7	57.6	66.0	71.6	77.2	80.0
75°	11.2	14.0	19.7	22.5	25.3	33.7	40.7	47.7	51.9	56.2	57.6
77.5°	7.0	9.8	14.0	15.4	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	15.4	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	15.4	16.8	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°	992.5	992.5	992.5	992.5	992.5	992.5	992.5	992.5
2.5°	988.3	992.5	988.3	991.1	989.7	989.7	988.3	989.7
5°	992.5	998.1	992.5	996.7	993.9	993.9	993.9	995.3
7.5°	996.7	1002.4	998.1	1002.4	1001.0	999.5	999.5	1002.4
10°	1001.0	1005.2	1002.4	1006.6	1005.2	1003.8	1003.8	1006.6
12.5°	1001.0	1006.6	1003.8	1008.0	1006.6	1005.2	1005.2	1006.6
15°	996.7	1003.8	999.5	1003.8	1002.4	1001.0	1001.0	1003.8
17.5°	984.1	989.7	986.9	989.7	989.7	988.3	989.7	991.1
20°	967.3	971.5	968.7	971.5	971.5	968.7	970.1	971.5
22.5°	943.4	947.6	944.8	947.6	946.2	944.8	944.8	943.4
25°	913.9	919.5	915.3	918.1	915.3	912.5	912.5	913.9
27.5°	877.4	881.6	876.0	878.8	876.0	873.2	873.2	871.8
30°	829.7	831.1	826.9	829.7	826.9	825.5	822.7	822.7
32.5°	772.1	773.5	769.3	769.3	766.5	766.5	760.9	765.1
35°	704.7	706.1	704.7	703.3	699.1	697.7	696.3	696.3
37.5°	634.5	634.5	630.3	628.9	626.1	623.3	624.7	620.5
40°	562.9	561.5	557.3	558.7	557.3	553.1	551.7	550.3
42.5°	495.6	495.6	491.4	492.8	489.9	488.5	484.3	485.7
45°	436.6	436.6	432.4	432.4	431.0	426.8	428.2	425.4
47.5°	383.3	383.3	381.8	381.8	377.6	376.2	376.2	376.2
50°	336.9	336.9	336.9	336.9	335.5	334.1	332.7	334.1
52.5°	297.6	300.4	299.0	299.0	297.6	296.2	294.8	294.8
55°	262.5	263.9	263.9	265.3	263.9	262.5	263.9	262.5
57.5°	231.6	234.4	234.4	234.4	234.4	234.4	233.0	231.6
60°	205.0	206.4	206.4	207.8	207.8	207.8	206.4	206.4
62.5°	178.3	181.1	182.5	182.5	183.9	182.5	182.5	182.5
65°	157.2	160.0	161.4	160.0	161.4	161.4	160.0	160.0
67.5°	132.0	134.8	134.8	134.8	134.8	136.2	134.8	134.8
70°	106.7	109.5	108.1	109.5	109.5	109.5	109.5	109.5
72.5°	81.4	82.8	84.2	84.2	85.6	84.2	84.2	84.2
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	46.3
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)