

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P879379

Luminaire Tested: **LD4C20D010 EU4209027 4LBLDWWLI**

Issue Date: 10/1/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P879379
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C20D010 EU4209027 4LBLDWWLI
Description: 4 INCH 2000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBLDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

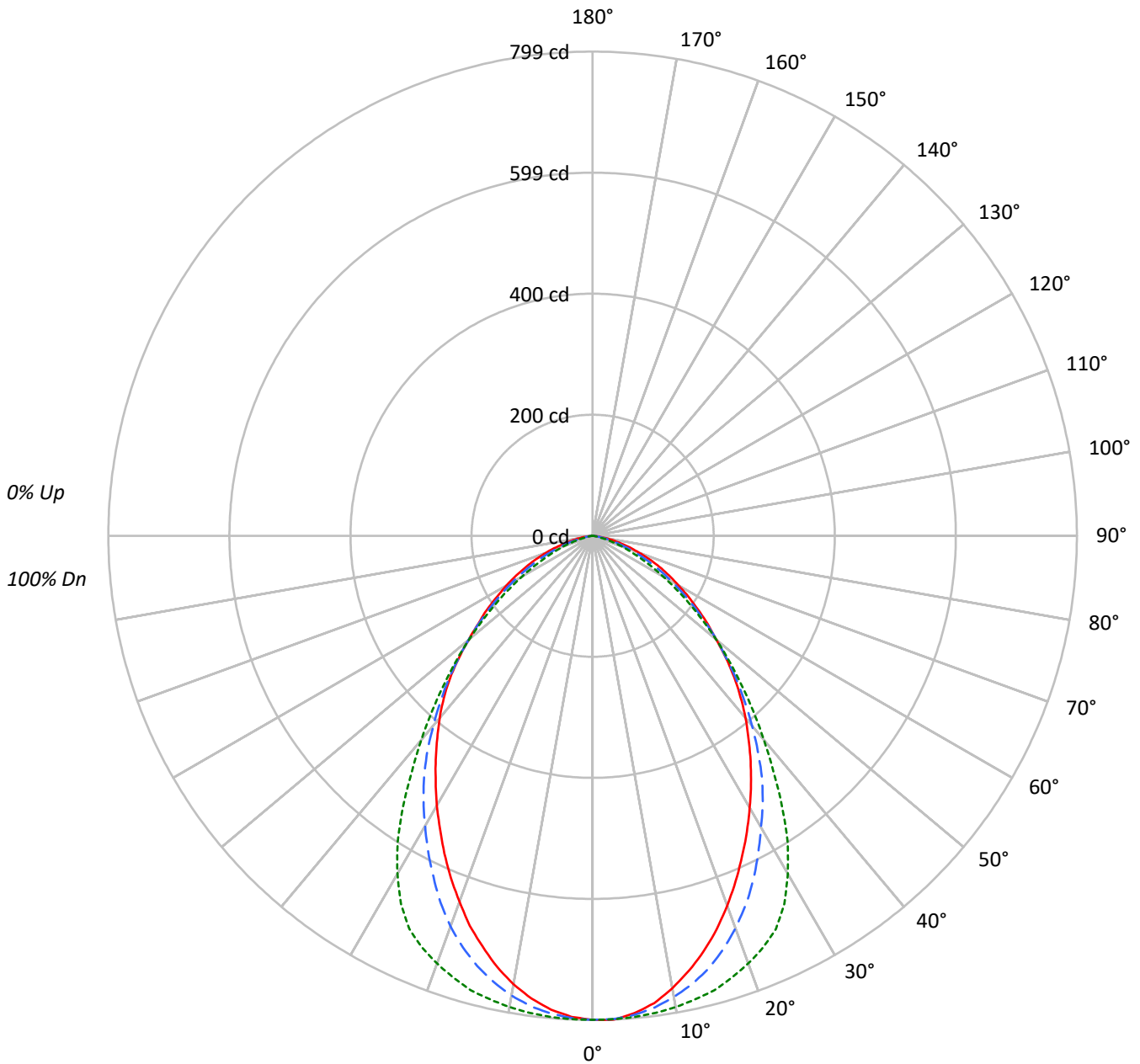
Lumens per Lamp: N/A
Luminaire Lumens: 1467.0 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
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			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	108	105	102	99	101	98	96	97	95	93	93	92	90	88			
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77			
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	77	73	69	67			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47			
7	71	59	51	45	69	58	50	45	56	50	45	55	49	45	54	48	44	42			
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35			
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	98135	98135	98135
5°	97548	98288	96808
10°	94572	98527	93761
15°	90239	98748	89247
20°	84901	98184	83960
25°	79082	97016	78431
30°	73483	91357	72887
35°	68149	81722	67654
40°	62995	70468	62947
45°	57404	60149	57873
50°	50706	50878	50992
55°	45429	41595	45622
60°	40149	33023	40222
65°	35349	25174	35000
70°	29311	18032	29311
75°	22832	10348	21977
80°	14786	2547	14150
85°	5497	846	4229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.0	5.1
10°-20°	207.5	14.1
20°-30°	290.0	19.8
30°-40°	305.9	20.9
40°-50°	260.2	17.7
50°-60°	183.6	12.5
60°-70°	104.1	7.1
70°-80°	37.1	2.5
80°-90°	3.6	0.2
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°	572.4	39.0
0°-40°	878.3	59.9
0°-60°	1322.2	90.1
0°-90°	1467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1467.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	799	799	799	799	799	
5°	791	794	797	791	785	74
15°	710	739	776	735	702	199
25°	583	627	716	621	579	268
35°	454	487	545	484	451	284
45°	330	335	346	337	333	254
55°	212	205	194	206	213	191
65°	122	104	87	105	120	120
75°	48	33	22	32	46	52
85°	4	2	1	2	3	7
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°	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8
2.5°	799.4	797.9	797.9	797.9	797.9	797.9	797.9	797.9	797.9	798.2	798.2
5°	791.0	790.4	790.1	790.1	790.1	790.1	790.4	791.6	792.2	793.1	793.7
7.5°	777.9	776.7	777.3	777.3	777.9	778.5	779.4	780.6	782.3	783.5	785.0
10°	758.1	757.0	758.4	759.0	760.8	761.7	763.2	765.0	768.6	770.4	772.8
12.5°	735.1	734.5	735.1	737.5	739.3	740.5	742.3	746.2	749.8	753.7	757.8
15°	709.5	708.0	708.9	711.8	714.8	716.9	718.4	723.5	728.3	734.2	739.3
17.5°	680.8	678.7	681.1	683.5	687.4	689.1	691.2	696.9	703.5	710.1	715.7
20°	649.4	648.8	650.3	653.6	657.5	659.9	661.7	667.9	673.6	682.6	689.1
22.5°	616.9	617.5	618.6	622.2	624.9	628.2	630.9	636.6	643.1	651.5	659.9
25°	583.4	584.3	586.4	588.8	593.3	595.0	598.3	604.3	610.0	617.7	627.0
27.5°	551.1	551.4	553.8	555.0	559.2	563.1	564.6	570.9	577.4	583.4	591.5
30°	518.0	518.9	520.4	523.7	527.8	529.3	531.1	536.8	541.9	549.3	555.6
32.5°	486.3	485.7	487.5	489.3	494.1	496.8	497.7	504.2	508.7	516.2	522.2
35°	454.4	452.9	455.5	457.3	461.5	463.9	465.1	470.2	474.4	480.6	487.2
37.5°	422.4	423.6	424.8	426.3	428.4	429.0	432.5	433.7	439.1	443.9	447.5
40°	392.8	392.2	391.6	393.1	395.8	397.0	397.3	400.6	401.8	406.6	409.2
42.5°	361.2	361.4	361.2	361.4	362.9	362.9	363.8	365.9	366.8	368.3	371.6
45°	330.4	330.4	329.5	329.8	330.1	329.8	330.1	331.0	332.8	332.8	335.2
47.5°	298.4	297.8	299.0	298.1	297.5	297.2	298.1	297.2	299.0	299.0	299.6
50°	265.3	265.3	266.8	266.5	267.1	265.9	266.2	266.2	266.5	266.2	267.4
52.5°	239.6	239.0	238.4	236.9	237.5	236.3	236.3	236.6	235.7	235.4	233.9
55°	212.1	212.7	211.8	211.2	211.2	210.0	209.7	207.9	206.7	205.8	204.9
57.5°	187.3	187.9	187.6	186.1	184.3	184.6	184.0	182.2	179.5	177.7	176.2
60°	163.4	164.0	163.4	161.9	161.3	160.1	159.8	157.4	155.3	152.9	151.2
62.5°	141.9	141.9	141.6	139.5	138.0	138.3	136.8	135.0	132.3	129.0	126.4
65°	121.6	121.3	119.8	118.9	117.7	116.2	115.3	112.6	110.5	107.8	104.3
67.5°	101.3	100.4	99.8	98.9	96.2	95.9	94.7	92.3	89.3	87.2	84.2
70°	81.6	81.3	80.1	80.1	78.0	77.1	75.3	73.2	70.5	67.5	65.1
72.5°	64.5	63.9	62.7	61.5	59.7	59.1	57.7	55.6	53.2	50.2	47.2
75°	48.1	47.5	47.2	45.7	44.2	42.7	42.1	40.0	37.6	35.5	32.9
77.5°	33.8	33.2	32.3	31.4	30.5	29.6	28.7	26.9	24.8	23.0	20.6
80°	20.9	20.3	19.7	19.4	18.5	18.2	17.0	16.1	14.3	13.1	11.7
82.5°	10.8	10.8	10.2	9.9	9.3	9.0	8.7	7.8	6.9	6.0	5.1
85°	3.9	3.9	3.6	3.3	3.3	3.0	3.0	2.7	2.1	2.1	1.5
87.5°	0.3	0.3	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8
2.5°	798.5	798.2	798.5	798.5	798.8	798.8	798.8	798.5	798.8	798.5	798.5
5°	793.7	794.6	795.2	795.8	796.1	796.4	796.4	796.7	797.0	797.0	796.7
7.5°	786.2	788.0	789.8	791.0	791.6	792.2	793.1	793.7	794.3	794.0	793.7
10°	776.4	779.4	781.7	784.1	785.3	786.2	787.7	788.9	789.5	789.8	788.9
12.5°	762.3	766.5	770.4	774.3	776.1	777.3	780.3	782.3	783.5	783.5	782.6
15°	744.7	750.7	756.4	761.4	764.4	766.2	770.7	773.7	775.5	776.4	774.9
17.5°	723.5	730.4	737.2	743.8	746.8	749.5	755.8	759.9	763.8	764.4	762.6
20°	696.3	705.0	712.7	720.8	724.1	728.3	735.4	742.3	748.3	751.0	745.9
22.5°	665.8	675.4	682.6	692.4	696.9	701.4	710.7	719.3	729.8	735.4	726.5
25°	634.2	642.2	650.9	660.5	666.7	671.5	682.3	693.3	707.4	715.7	703.2
27.5°	600.1	607.3	617.7	628.2	633.0	639.0	651.8	663.8	677.2	684.7	675.4
30°	564.9	573.8	583.7	593.3	600.1	605.8	616.3	626.4	637.8	644.0	637.2
32.5°	529.9	538.6	547.0	557.4	561.3	566.4	575.6	584.3	593.0	598.6	590.6
35°	493.2	501.0	508.7	515.9	517.7	523.7	531.1	536.2	540.4	544.9	539.5
37.5°	453.2	459.1	463.0	470.8	473.8	474.7	480.6	484.2	488.7	489.6	489.3
40°	412.5	417.9	421.2	426.0	428.4	428.4	432.5	435.8	439.1	439.4	439.1
42.5°	374.6	377.3	380.0	383.0	382.4	385.9	387.7	389.2	391.6	391.6	392.2
45°	336.4	338.4	340.8	341.4	343.8	343.8	345.3	345.9	347.1	346.2	345.0
47.5°	300.8	301.7	302.0	304.7	305.3	303.2	305.0	305.3	305.0	305.0	304.4
50°	267.1	267.7	267.4	266.5	266.8	267.7	266.8	265.6	266.2	266.2	266.8
52.5°	234.2	233.0	232.4	232.4	231.2	231.2	229.7	229.1	228.8	227.6	229.1
55°	204.0	202.2	199.5	198.9	198.1	197.8	196.0	194.5	193.9	194.2	193.9
57.5°	175.0	172.4	170.6	170.0	169.1	167.3	165.2	163.7	163.4	162.8	162.8
60°	148.8	145.8	143.1	140.4	140.7	139.5	137.4	136.5	135.6	134.4	135.3
62.5°	124.9	121.6	118.6	115.9	114.1	113.2	111.7	110.2	109.3	108.4	109.6
65°	101.3	98.6	95.3	92.6	91.7	90.8	89.3	86.9	86.6	86.6	87.2
67.5°	80.1	77.1	74.1	72.3	71.1	69.9	69.3	68.1	67.2	66.6	66.9
70°	61.5	58.5	56.2	54.4	53.5	53.2	51.1	50.8	50.5	50.2	49.9
72.5°	44.8	42.4	40.3	39.1	37.9	37.0	36.4	35.5	35.2	35.2	35.2
75°	30.8	29.0	26.6	25.1	24.5	23.6	22.7	22.1	21.5	21.8	21.8
77.5°	18.5	16.7	15.2	14.0	13.7	12.8	11.9	11.4	10.5	10.5	10.8
80°	10.2	8.7	7.5	6.6	6.0	5.7	4.8	4.5	3.9	3.6	3.6
82.5°	4.5	3.6	3.0	2.7	2.4	2.1	1.8	1.5	1.5	1.2	1.5
85°	1.5	1.2	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
87.5°	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8
2.5°	798.2	798.2	797.9	797.9	797.9	797.3	797.3	797.0	796.7	796.4	795.8
5°	796.1	795.8	795.2	794.9	794.6	793.7	792.8	792.2	791.3	790.1	789.5
7.5°	793.1	792.2	791.0	790.4	789.5	787.4	785.9	784.4	782.9	780.8	778.5
10°	788.0	786.2	784.4	783.2	781.7	779.1	776.1	773.7	770.4	767.4	764.1
12.5°	780.8	778.8	775.2	773.4	771.6	767.7	763.8	758.7	754.3	750.1	746.2
15°	771.9	768.0	763.8	761.4	758.7	752.5	746.5	741.1	735.1	730.1	723.8
17.5°	758.7	753.1	747.1	744.4	740.8	733.7	726.5	719.0	712.1	705.9	698.1
20°	739.0	732.8	725.0	720.8	717.8	708.3	701.4	693.0	685.9	678.1	669.4
22.5°	716.0	707.4	698.7	692.7	689.4	679.9	670.6	663.2	655.4	646.4	640.2
25°	690.0	679.3	668.8	662.9	657.8	647.6	638.7	630.9	621.3	613.6	607.3
27.5°	660.8	648.5	636.3	630.3	625.5	614.5	604.9	596.8	587.6	580.7	574.1
30°	625.8	614.8	603.1	598.3	592.7	581.3	570.3	563.1	552.9	545.8	538.6
32.5°	582.2	575.0	565.8	559.2	556.2	545.8	536.5	527.8	519.2	513.5	506.3
35°	534.4	528.1	520.4	516.8	512.9	506.3	498.9	491.4	484.5	479.1	472.6
37.5°	486.0	479.7	475.0	471.1	468.7	462.7	458.2	452.6	447.8	442.7	439.1
40°	435.8	434.0	429.0	427.2	426.6	420.0	416.1	411.6	408.6	405.7	403.6
42.5°	391.3	388.3	384.5	384.7	383.0	379.4	376.7	373.7	371.6	370.1	368.0
45°	347.4	345.0	343.2	344.7	341.7	340.5	338.4	338.1	336.7	334.0	333.1
47.5°	305.6	305.3	305.6	304.7	304.1	303.5	303.8	302.3	300.8	299.9	298.7
50°	267.4	267.7	268.2	269.1	267.1	268.0	267.7	267.4	267.4	266.5	267.1
52.5°	230.3	230.6	231.2	232.1	232.4	232.4	233.3	233.9	235.1	236.6	236.6
55°	195.4	197.5	198.6	200.1	199.2	201.0	201.9	204.6	205.5	205.5	206.7
57.5°	164.3	166.4	167.3	169.1	169.7	171.2	173.6	175.0	177.1	178.9	180.7
60°	135.9	136.8	139.2	141.9	141.3	144.9	146.7	149.1	151.7	152.9	155.3
62.5°	110.5	111.7	113.5	114.4	116.5	118.3	122.5	124.9	127.3	130.2	132.6
65°	87.8	89.0	90.8	92.6	93.5	96.2	98.3	102.5	104.6	107.8	110.5
67.5°	67.2	69.0	70.5	71.7	72.3	75.0	78.3	80.1	83.9	87.2	89.3
70°	50.2	51.7	53.5	53.2	54.4	56.5	58.8	61.5	64.5	67.5	69.9
72.5°	35.0	36.4	37.6	37.9	39.1	40.6	42.4	44.5	46.9	49.9	53.2
75°	22.1	22.4	23.6	24.2	24.8	26.6	28.1	30.2	32.3	34.7	36.7
77.5°	11.1	11.9	12.5	13.1	13.4	14.9	16.4	18.2	20.0	22.4	24.5
80°	4.2	4.5	5.4	5.7	6.3	7.2	8.4	9.3	10.8	12.5	13.7
82.5°	1.5	1.8	2.1	2.1	2.4	3.0	3.3	4.2	5.1	5.7	6.3
85°	0.6	0.6	0.6	0.6	0.6	0.9	0.9	1.2	1.5	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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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CATALOG NUMBER: LD4C20D010 EU4209027 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8
2.5°	795.5	795.5	795.2	794.9	794.9	794.9	794.6	794.6
5°	788.3	787.4	787.1	786.5	786.2	785.9	785.0	785.0
7.5°	776.7	775.5	774.6	773.7	772.5	771.6	771.6	770.4
10°	761.1	758.7	757.5	756.4	754.9	753.1	752.5	751.6
12.5°	742.3	737.5	736.3	734.2	731.9	730.7	728.6	728.6
15°	719.0	713.9	711.2	710.1	707.1	705.0	704.1	701.7
17.5°	691.8	687.9	683.8	682.0	678.7	676.0	674.8	674.5
20°	664.3	658.1	655.4	652.7	648.8	646.4	644.6	642.2
22.5°	632.7	627.0	623.1	621.3	618.0	613.9	610.9	610.9
25°	599.2	594.2	592.1	588.2	584.3	582.8	579.2	578.6
27.5°	567.3	562.2	558.0	555.9	551.4	549.3	546.4	545.2
30°	534.1	528.1	525.1	524.8	519.5	517.4	515.0	513.8
32.5°	501.0	495.9	492.9	491.1	488.7	485.1	483.0	481.8
35°	468.1	464.8	462.1	460.0	456.1	454.4	452.6	451.1
37.5°	433.7	430.8	429.6	427.8	426.0	422.7	422.1	420.9
40°	400.6	396.7	396.7	395.5	393.7	393.4	392.5	392.5
42.5°	365.9	364.1	363.8	364.1	362.9	362.3	361.4	363.5
45°	331.6	332.5	331.0	331.3	330.7	331.9	331.9	333.1
47.5°	299.9	298.7	299.3	299.9	300.8	300.8	300.5	300.2
50°	266.2	267.4	268.5	267.1	267.7	268.0	266.5	266.8
52.5°	237.2	237.5	238.4	237.5	238.4	238.1	238.7	237.5
55°	209.1	209.1	210.3	210.6	210.9	211.8	212.1	213.0
57.5°	181.9	183.4	184.9	184.6	185.8	187.0	186.1	187.0
60°	158.3	159.5	161.0	161.6	162.5	163.1	163.1	163.7
62.5°	134.4	136.8	138.0	139.2	139.2	140.4	141.6	141.9
65°	112.9	115.6	116.5	117.4	118.0	119.2	120.7	120.4
67.5°	92.6	94.4	95.6	96.2	98.0	98.6	99.8	101.0
70°	72.6	75.0	75.9	77.1	78.6	79.8	81.0	81.6
72.5°	55.6	57.4	58.0	59.1	60.6	61.8	62.4	63.3
75°	38.8	41.8	42.1	43.0	44.2	45.7	46.6	46.3
77.5°	25.7	27.8	28.1	29.3	30.5	31.7	32.0	32.3
80°	15.2	16.4	16.7	17.3	18.2	18.8	19.4	20.0
82.5°	7.2	7.8	8.4	8.4	9.0	9.6	9.6	9.9
85°	2.4	2.4	2.7	2.7	3.0	3.0	3.3	3.0
87.5°	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3
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)