

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: P252130

Luminaire Tested: **LD6B10D010 EU6B10208035 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252130  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B10D010 EU6B10208035 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1387.0 lumens  
Efficiency: N/A  
Efficacy: 138.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

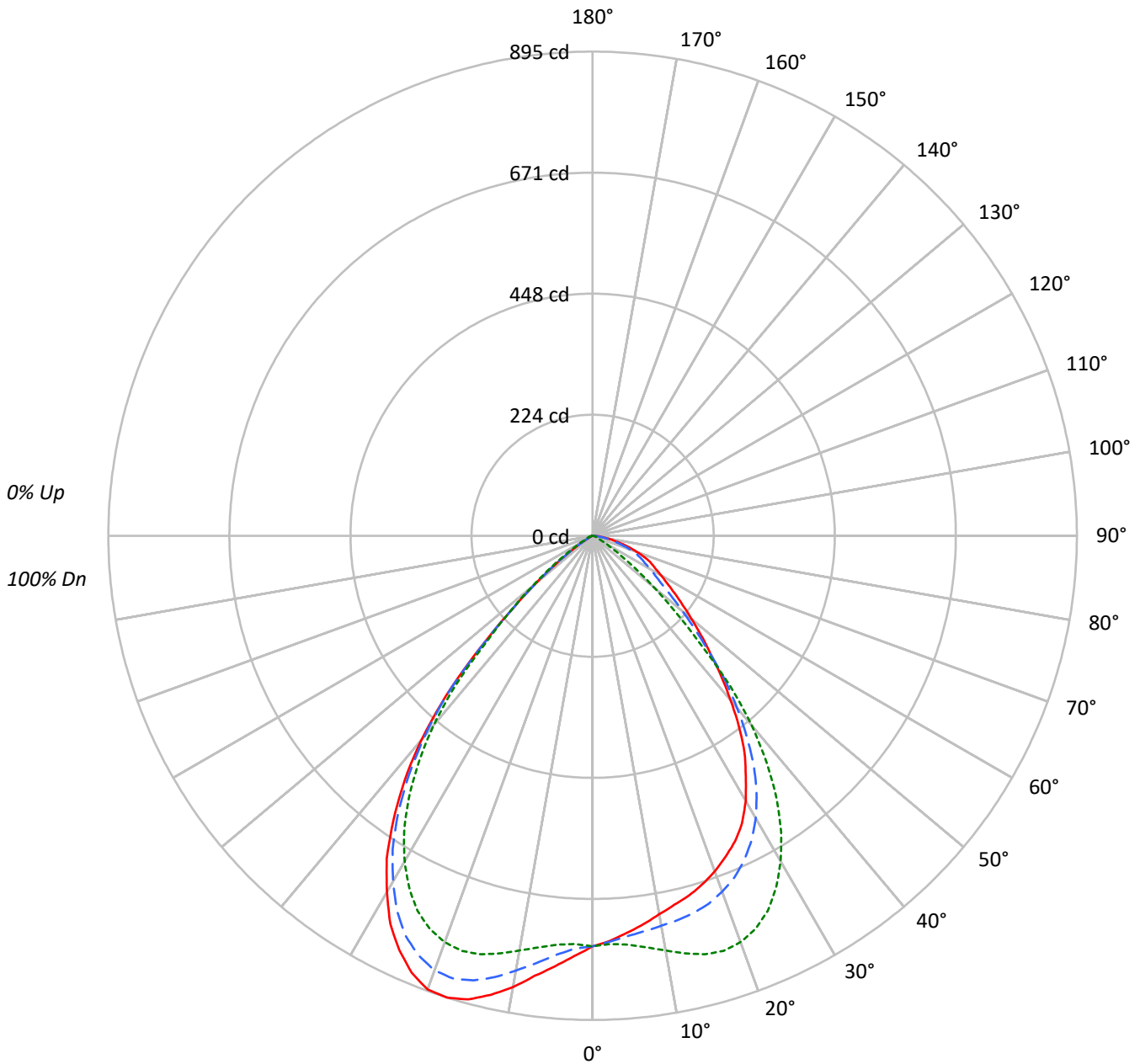
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				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				100
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65				65
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58				58
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53				53
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40				40
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37				37

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	49505	49505	49505
5°	48220	49694	52307
10°	47049	51567	56131
15°	46496	54094	59923
20°	45829	55500	61950
25°	44854	55090	60835
30°	42624	52357	57268
35°	39002	47205	51132
40°	33734	38980	41953
45°	28445	25566	27439
50°	24146	14798	13915
55°	20963	7098	5369
60°	18933	3314	1331
65°	18370	1899	448
70°	16462	1526	420
75°	13536	1109	176
80°	10069	564	0
85°	8683	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.3	5.3
10°-20°	223.4	16.1
20°-30°	341.3	24.6
30°-40°	357.0	25.7
40°-50°	231.6	16.7
50°-60°	91.9	6.6
60°-70°	43.6	3.1
70°-80°	20.7	1.5
80°-90°	4.2	0.3
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°	638.0	46.0
0°-40°	994.9	71.7
0°-60°	1318.4	95.1
0°-90°	1387.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1387.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	759	759	759	759	759	
5°	736	743	759	778	799	70
15°	688	722	801	851	887	194
25°	623	662	765	817	845	285
35°	490	519	593	628	642	303
45°	308	305	277	294	297	240
55°	184	157	62	49	47	167
65°	119	99	12	3	3	116
75°	54	44	4	2	1	58
85°	12	7	0	0	0	13
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°	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8
2.5°	749.4	750.8	742.8	740.7	746.5	748.6	749.4	747.2	747.9	750.8	750.8
5°	736.3	737.8	730.5	728.3	734.1	735.6	737.8	737.0	739.2	743.6	742.8
7.5°	724.0	726.2	718.2	715.3	722.5	726.2	727.6	727.6	730.5	736.3	737.0
10°	710.2	713.1	705.8	704.4	712.4	716.0	716.7	718.2	722.5	730.5	732.0
12.5°	698.6	701.5	696.4	694.2	702.9	706.6	708.0	710.9	716.0	726.2	727.6
15°	688.4	690.6	684.8	683.4	692.1	696.4	697.1	701.5	708.0	719.6	721.8
17.5°	675.4	676.8	672.5	671.0	679.7	684.1	684.8	689.9	697.9	709.5	713.1
20°	660.1	661.6	657.2	655.8	664.5	669.6	670.3	674.6	684.1	696.4	700.0
22.5°	642.0	644.9	639.8	638.4	647.1	651.4	653.6	657.2	666.7	679.0	684.1
25°	623.1	623.1	619.5	618.8	626.8	631.8	631.1	636.2	645.6	658.0	662.3
27.5°	598.5	597.8	594.1	593.4	602.1	606.5	605.0	610.1	618.8	631.1	635.5
30°	565.8	567.3	562.2	560.8	568.0	575.3	574.5	579.6	588.3	599.9	602.8
32.5°	526.7	528.1	527.4	525.2	531.7	535.4	537.5	541.2	548.4	560.8	563.7
35°	489.7	487.5	484.6	484.6	491.1	496.9	494.7	499.1	506.3	518.7	519.4
37.5°	444.0	443.2	441.8	440.3	447.6	449.0	449.8	452.7	459.2	469.4	467.9
40°	396.1	396.8	396.1	393.2	397.5	403.3	402.6	404.1	409.9	417.1	414.9
42.5°	351.1	351.1	351.1	348.2	353.3	356.2	357.6	356.9	358.4	364.9	362.0
45°	308.3	309.0	308.3	307.6	308.3	309.8	308.3	307.6	307.6	309.8	305.4
47.5°	271.3	271.3	269.1	267.0	269.1	269.9	267.7	265.5	264.8	264.1	256.8
50°	237.9	237.2	236.5	232.9	235.0	235.8	232.9	231.4	228.5	224.9	216.2
52.5°	208.9	208.2	207.5	203.8	205.3	206.0	203.1	200.2	196.6	193.7	182.8
55°	184.3	183.5	183.5	181.4	179.9	181.4	178.5	176.3	171.2	167.6	156.7
57.5°	163.2	163.2	161.8	159.6	160.3	160.3	157.4	154.5	150.2	145.8	137.1
60°	145.1	145.1	145.1	142.9	142.9	142.9	141.5	138.6	134.9	130.6	121.9
62.5°	130.6	130.6	129.9	127.7	128.4	128.4	127.0	124.0	120.4	117.5	108.8
65°	119.0	119.0	119.0	116.8	116.8	117.5	116.1	113.2	110.3	106.6	98.7
67.5°	104.5	103.7	103.7	102.3	103.0	103.7	102.3	100.1	96.5	94.3	87.1
70°	86.3	87.1	87.8	85.6	86.3	86.3	85.6	83.4	81.2	79.1	72.5
72.5°	70.4	70.4	69.6	68.9	68.9	69.6	68.2	66.0	64.6	63.1	58.0
75°	53.7	53.0	53.7	52.2	52.2	52.2	50.8	50.1	49.3	47.2	43.5
77.5°	39.2	38.4	38.4	37.0	37.7	37.7	37.0	35.5	34.1	33.4	30.5
80°	26.8	26.8	26.8	26.1	26.1	25.4	25.4	24.7	23.2	22.5	21.0
82.5°	18.1	18.1	18.1	17.4	17.4	17.4	16.7	16.0	15.2	14.5	13.1
85°	11.6	11.6	11.6	10.9	10.9	10.9	10.2	10.2	9.4	8.7	7.3
87.5°	6.5	6.5	6.5	5.8	5.8	5.8	5.8	5.8	5.1	4.4	3.6
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°	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8
2.5°	755.9	745.7	752.3	752.3	750.1	755.9	759.5	762.4	761.7	755.2	754.4
5°	750.1	741.4	748.6	749.4	747.2	755.2	760.2	763.9	764.6	758.8	759.5
7.5°	745.7	738.5	747.9	750.8	750.1	757.3	763.2	769.0	771.9	767.5	768.2
10°	743.6	737.8	747.9	752.3	753.0	761.0	769.7	777.7	781.3	778.4	780.6
12.5°	740.7	737.0	748.6	755.2	758.1	766.1	776.9	786.4	792.2	790.7	795.1
15°	737.8	734.9	748.6	758.1	761.7	769.0	781.3	795.1	801.6	800.9	806.7
17.5°	730.5	729.8	744.3	754.4	759.5	768.2	779.8	796.5	803.0	804.5	811.8
20°	718.9	718.9	734.9	745.7	751.5	759.5	774.0	790.0	798.0	799.4	807.4
22.5°	702.9	704.4	719.6	730.5	739.2	745.0	760.2	776.9	784.2	786.4	795.1
25°	681.9	683.4	697.9	708.7	718.2	724.7	739.2	754.4	763.2	765.3	771.9
27.5°	654.3	657.2	671.0	681.9	689.9	694.2	709.5	725.4	732.0	734.1	740.7
30°	622.4	623.1	636.9	646.4	654.3	658.0	671.0	687.7	692.8	695.0	704.4
32.5°	583.2	582.5	595.6	604.3	610.8	615.2	628.9	639.8	644.9	648.5	653.6
35°	536.1	535.4	544.8	555.0	560.0	561.5	575.3	586.9	589.8	592.7	599.2
37.5°	483.1	483.1	491.1	496.2	502.0	504.2	510.7	523.8	528.8	528.1	533.2
40°	427.3	424.4	430.2	435.3	436.7	437.4	444.0	454.1	457.7	457.7	461.4
42.5°	368.5	364.2	364.9	367.8	369.2	364.2	368.5	375.0	372.9	375.8	376.5
45°	306.1	299.6	296.7	290.2	291.6	286.5	283.6	285.1	284.4	277.1	278.6
47.5°	255.4	243.7	238.7	229.2	227.1	221.3	217.6	211.1	205.3	205.3	201.7
50°	212.6	200.9	190.8	179.9	176.3	171.2	163.2	154.5	150.2	145.8	142.2
52.5°	178.5	166.1	153.8	142.2	137.1	130.6	119.7	111.0	103.0	98.7	94.3
55°	150.9	137.1	124.0	111.7	105.2	98.7	87.8	77.6	68.2	62.4	58.8
57.5°	129.9	116.8	103.0	90.0	84.1	76.9	65.3	54.4	45.7	39.2	35.5
60°	114.6	101.6	89.2	75.4	69.6	62.4	50.1	39.9	31.2	25.4	21.0
62.5°	101.6	90.0	76.9	64.6	58.8	51.5	39.9	29.7	21.8	16.0	12.3
65°	92.1	80.5	69.6	57.3	52.2	45.0	34.1	24.7	17.4	12.3	8.7
67.5°	81.2	71.1	60.2	50.1	45.0	39.2	29.0	21.0	14.5	10.2	7.3
70°	68.2	60.2	50.8	41.3	37.7	32.6	23.9	17.4	11.6	8.0	5.8
72.5°	54.4	47.9	40.6	33.4	30.5	25.4	19.6	13.8	8.7	5.8	4.4
75°	41.3	36.3	30.5	25.4	22.5	19.6	14.5	10.2	6.5	4.4	2.9
77.5°	28.3	26.1	21.8	17.4	16.0	13.8	9.4	6.5	4.4	2.9	1.5
80°	19.6	17.4	14.5	11.6	10.2	8.7	5.8	4.4	2.2	1.5	0.7
82.5°	12.3	10.2	8.7	7.3	6.5	5.1	3.6	2.2	1.5	0.7	0.7
85°	6.5	5.8	5.1	3.6	3.6	2.9	2.2	1.5	0.7	0.0	0.0
87.5°	3.6	2.9	2.2	1.5	1.5	0.7	0.7	0.7	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°	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8
2.5°	763.2	763.2	762.4	771.1	761.0	771.1	766.1	771.1	763.9	763.2	763.9
5°	769.0	771.1	771.9	779.8	770.4	782.7	778.4	782.7	777.7	779.1	781.3
7.5°	780.6	784.2	783.5	793.6	784.2	798.0	795.1	801.6	796.5	798.0	800.9
10°	793.6	798.0	798.7	808.9	800.1	816.8	813.2	820.5	816.1	818.3	821.9
12.5°	808.9	813.9	814.7	826.3	816.8	834.2	832.1	839.3	835.7	837.9	842.2
15°	820.5	827.7	829.2	840.8	830.6	848.8	847.3	856.7	850.9	854.6	858.2
17.5°	826.3	832.8	835.7	846.6	837.9	856.0	854.6	862.5	858.2	861.8	866.2
20°	822.6	830.6	832.8	843.7	835.0	853.1	850.9	858.9	854.6	857.5	861.8
22.5°	809.6	817.6	820.5	830.6	822.6	839.3	838.6	845.8	840.0	843.7	847.3
25°	786.4	795.1	796.5	806.0	797.2	814.7	813.2	821.2	816.8	819.0	824.1
27.5°	753.0	763.2	765.3	773.3	766.8	781.3	781.3	787.8	782.7	782.7	787.8
30°	713.1	723.3	724.7	731.2	725.4	738.5	739.2	745.7	737.8	742.1	742.8
32.5°	664.5	671.0	675.4	681.2	672.5	689.2	687.0	692.1	687.7	687.7	691.3
35°	605.7	613.7	615.9	623.1	615.9	628.9	628.9	631.8	627.5	627.5	633.3
37.5°	541.9	547.7	548.4	555.7	549.9	560.8	560.0	562.2	557.9	560.8	560.8
40°	467.2	471.5	473.0	476.6	475.9	483.9	483.1	484.6	482.4	483.1	484.6
42.5°	380.1	385.9	388.8	391.7	387.4	398.3	396.1	398.3	397.5	398.3	400.4
45°	280.0	284.4	286.5	287.3	285.8	292.3	297.4	293.1	293.8	292.3	295.2
47.5°	202.4	203.1	201.7	206.0	202.4	205.3	206.7	207.5	203.1	202.4	205.3
50°	138.6	142.2	137.1	139.3	138.6	141.5	140.0	140.7	136.4	138.6	137.1
52.5°	92.1	91.4	90.0	90.7	89.2	89.2	89.2	90.7	87.8	86.3	84.9
55°	55.9	54.4	51.5	50.8	50.8	51.5	50.1	48.6	48.6	47.9	47.9
57.5°	32.6	30.5	29.0	28.3	26.8	26.1	25.4	25.4	23.9	23.9	23.9
60°	18.1	16.0	14.5	13.1	13.1	12.3	11.6	10.9	10.9	10.9	10.2
62.5°	9.4	8.0	6.5	5.8	5.8	5.1	4.4	4.4	4.4	4.4	3.6
65°	6.5	5.1	4.4	3.6	3.6	2.9	2.9	2.9	2.9	2.9	2.9
67.5°	5.1	4.4	3.6	2.9	2.9	2.9	2.2	2.2	2.2	2.2	2.2
70°	4.4	2.9	2.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
72.5°	2.9	2.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
75°	2.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
77.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0
80°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: LD6B10D010 EU6B10208035 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	758.8	758.8	758.8	758.8	758.8	758.8	758.8	758.8
2.5°	770.4	769.7	770.4	771.9	769.0	777.7	773.3	777.7
5°	787.1	787.8	788.5	790.7	787.1	798.0	792.2	798.7
7.5°	808.9	809.6	810.3	812.5	810.3	821.2	814.7	820.5
10°	831.3	832.8	832.8	836.4	834.2	844.4	840.0	847.3
12.5°	852.4	853.8	855.3	857.5	856.0	866.9	863.3	869.1
15°	869.1	872.0	872.7	875.6	874.1	885.7	881.4	887.2
17.5°	877.0	879.9	879.9	883.6	882.1	894.5	888.7	895.2
20°	872.7	874.9	875.6	879.2	877.8	890.1	884.3	892.3
22.5°	858.9	859.6	860.4	864.0	863.3	874.1	869.1	874.1
25°	833.5	835.7	835.0	837.9	837.9	846.6	840.8	845.1
27.5°	797.2	799.4	799.4	803.0	800.1	808.9	803.0	809.6
30°	753.0	755.2	753.7	756.6	753.7	762.4	758.1	760.2
32.5°	700.0	700.0	700.8	701.5	700.0	708.0	703.7	708.0
35°	636.9	638.4	639.1	639.8	638.4	644.2	639.1	642.0
37.5°	565.8	569.5	568.7	569.5	567.3	574.5	570.2	571.6
40°	489.7	489.7	488.9	490.4	488.2	494.0	491.1	492.6
42.5°	401.2	403.3	400.4	404.1	398.3	406.2	403.3	401.2
45°	301.1	298.2	297.4	298.2	296.0	296.7	298.9	297.4
47.5°	205.3	205.3	203.8	201.7	204.6	205.3	202.4	202.4
50°	137.8	137.8	136.4	135.7	137.1	136.4	134.9	137.1
52.5°	87.8	84.9	84.9	86.3	84.9	83.4	85.6	84.1
55°	47.9	46.4	46.4	47.9	46.4	46.4	45.7	47.2
57.5°	23.2	23.9	23.2	23.2	23.2	23.2	22.5	23.2
60°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
62.5°	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
65°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
67.5°	2.2	2.2	2.2	2.2	2.2	2.9	2.2	2.2
70°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
72.5°	2.2	2.2	2.9	2.9	2.9	2.9	2.9	2.9
75°	1.5	1.5	1.5	0.7	0.7	0.7	0.7	0.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	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



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— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)