

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: P274442

Luminaire Tested: **LD6B20DE010W2N2765 EU6B1020W2N902765 6LBLWW0H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P274442  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B20DE010W2N2765 EU6B1020W2N902765 6LBLWW0H  
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, LENSED WALLWASH WITH HAZE FINISH  
Light Source: W2N 2700K-6500K CCT TUNING RANGE  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1387.4 lumens  
Efficiency: N/A  
Efficacy: 49.5 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

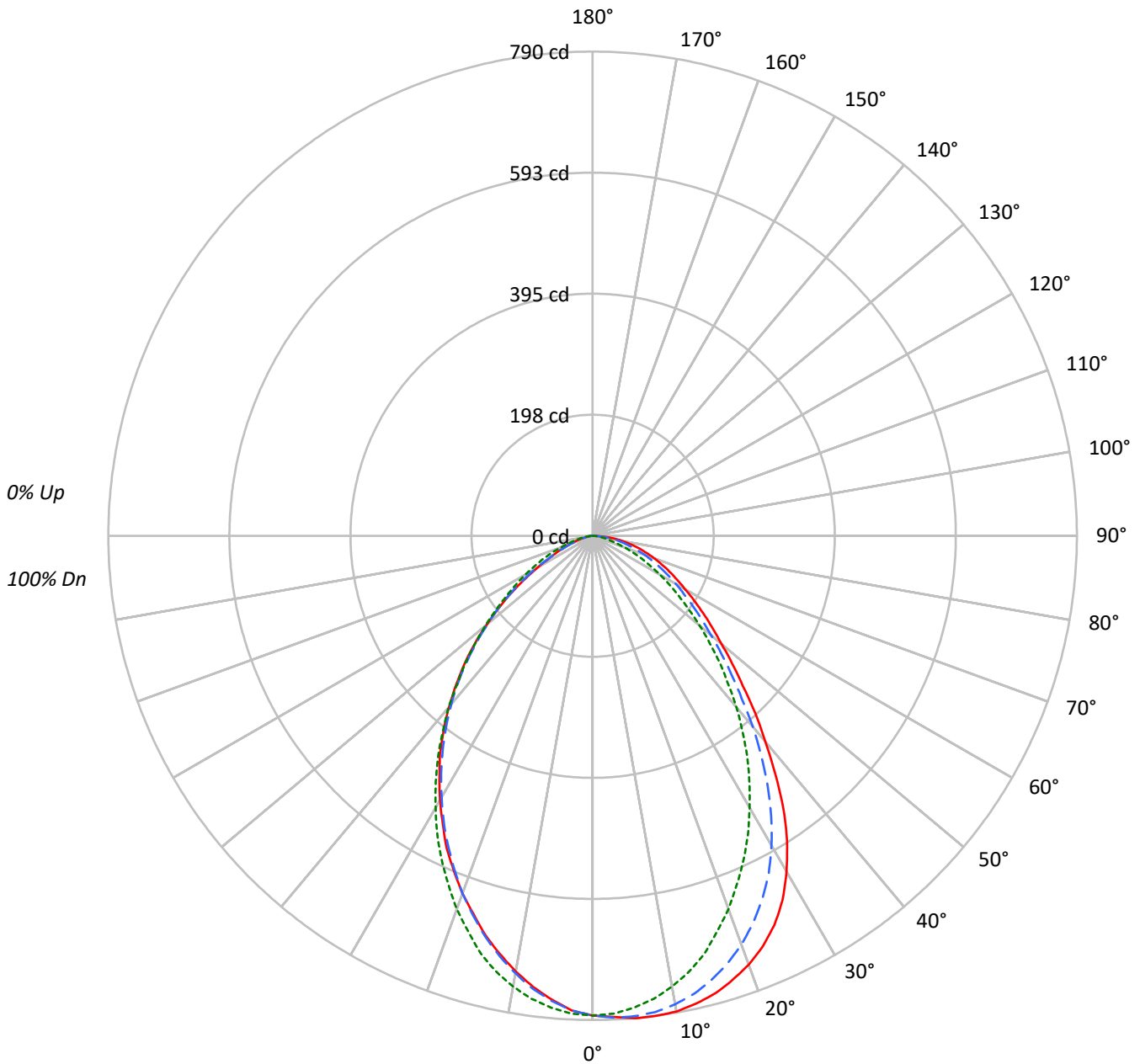
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P274442

CATALOG NUMBER: LD6B20DE010W2N2765 EU6B1020W2N902765 6LBLWW0H

**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	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88																			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77																			
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	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	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47																			
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43																			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39																			
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35																			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33																			

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

	0°	90°	180°
0°	51064	51064	51064
5°	51757	50617	49759
10°	52209	49473	47817
15°	52203	47651	45598
20°	51696	44982	43094
25°	50469	41946	40535
30°	47663	38571	37508
35°	43199	34980	34542
40°	37311	31102	31017
45°	31997	27080	27283
50°	27800	23172	22837
55°	24978	19541	18301
60°	22691	16454	13479
65°	21319	13600	9895
70°	20315	10568	7249
75°	19460	7663	4941
80°	18372	5297	3269
85°	16244	3219	1647



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.2	5.3
10°-20°	200.5	14.5
20°-30°	278.4	20.1
30°-40°	288.3	20.8
40°-50°	236.9	17.1
50°-60°	162.8	11.7
60°-70°	93.6	6.7
70°-80°	43.0	3.1
80°-90°	10.5	0.8
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°	552.1	39.8
0°-40°	840.4	60.6
0°-60°	1240.2	89.4
0°-90°	1387.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1387.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	783	783	783	783	783	
5°	790	787	773	762	760	75
15°	773	750	706	677	675	218
25°	701	654	583	558	563	321
35°	542	498	439	426	434	336
45°	347	321	294	290	296	270
55°	220	199	172	162	161	198
65°	138	121	88	62	64	137
75°	77	61	30	20	20	82
85°	22	15	4	2	2	24
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°	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7
2.5°	785.9	792.5	788.1	787.0	789.2	789.2	789.2	785.9	788.1	784.8	787.0
5°	790.3	795.7	791.4	789.2	791.4	792.5	789.2	787.0	790.3	785.9	787.0
7.5°	790.3	795.7	791.4	790.3	791.4	791.4	790.3	785.9	788.1	783.8	783.8
10°	788.1	792.5	788.1	785.9	787.0	785.9	785.9	780.5	781.6	776.2	776.2
12.5°	781.6	787.0	781.6	779.4	779.4	779.4	776.2	771.8	772.9	766.4	765.3
15°	772.9	777.2	771.8	769.6	769.6	768.5	766.4	759.8	759.8	753.3	750.1
17.5°	759.8	764.2	759.8	756.6	755.5	753.3	751.2	744.6	742.5	734.8	731.6
20°	744.6	747.9	743.5	740.3	738.1	735.9	731.6	725.1	722.9	715.3	709.8
22.5°	725.1	729.4	722.9	719.6	717.5	714.2	709.8	703.3	700.1	690.3	683.8
25°	701.1	703.3	697.9	694.6	690.3	688.1	684.8	676.1	672.9	662.0	654.4
27.5°	670.7	672.9	666.4	664.2	658.8	656.6	652.2	644.6	640.3	629.4	621.8
30°	632.7	634.8	630.5	627.2	622.9	618.5	615.3	607.7	601.1	590.3	583.7
32.5°	590.3	593.5	589.2	584.8	577.2	578.3	572.9	565.3	559.8	550.0	542.4
35°	542.4	544.6	539.2	538.1	533.7	529.4	524.0	518.5	515.3	504.4	497.9
37.5°	489.2	494.6	489.2	484.8	482.6	479.4	476.1	468.5	466.3	459.8	451.1
40°	438.1	441.3	438.1	433.7	430.5	430.5	426.1	421.8	416.3	409.8	406.6
42.5°	392.4	390.3	389.2	387.0	382.6	381.6	380.5	375.0	371.8	365.2	359.8
45°	346.8	347.9	345.7	344.6	341.3	339.2	337.0	332.6	331.5	325.0	320.7
47.5°	308.7	307.6	305.5	305.5	303.3	301.1	298.9	295.7	294.6	289.2	284.8
50°	273.9	275.0	273.9	272.8	269.6	268.5	266.3	264.2	262.0	256.5	252.2
52.5°	245.7	244.6	243.5	243.5	240.2	239.2	237.0	234.8	232.6	227.2	223.9
55°	219.6	219.6	218.5	217.4	214.1	213.1	212.0	209.8	206.5	202.2	198.9
57.5°	195.7	195.7	194.6	193.5	191.3	191.3	189.1	187.0	184.8	180.5	176.1
60°	173.9	175.0	173.9	172.8	170.7	170.7	169.6	166.3	165.2	159.8	156.5
62.5°	155.4	155.4	155.4	154.4	153.3	151.1	151.1	147.8	145.7	142.4	138.1
65°	138.1	138.1	138.1	137.0	134.8	133.7	132.6	130.4	128.3	125.0	120.7
67.5°	121.7	121.7	121.7	120.7	118.5	117.4	116.3	115.2	112.0	108.7	104.4
70°	106.5	106.5	105.4	104.4	103.3	102.2	101.1	98.9	96.7	92.4	89.1
72.5°	91.3	91.3	91.3	89.1	88.1	88.1	85.9	84.8	82.6	78.3	75.0
75°	77.2	76.1	76.1	75.0	73.9	72.8	71.7	70.7	67.4	65.2	60.9
77.5°	63.0	63.0	62.0	60.9	60.9	59.8	58.7	56.5	55.4	52.2	48.9
80°	48.9	48.9	48.9	48.9	47.8	46.7	46.7	44.6	43.5	40.2	38.0
82.5°	37.0	35.9	35.9	35.9	34.8	33.7	33.7	32.6	31.5	29.4	27.2
85°	21.7	20.7	20.7	20.7	19.6	19.6	18.5	18.5	17.4	15.2	15.2
87.5°	6.5	6.5	7.6	7.6	6.5	6.5	6.5	6.5	6.5	5.4	5.4
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7
2.5°	784.8	788.1	783.8	782.7	787.0	784.8	783.8	781.6	782.7	780.5	777.2
5°	783.8	788.1	782.7	779.4	784.8	781.6	779.4	777.2	777.2	772.9	770.7
7.5°	780.5	782.7	777.2	774.0	777.2	774.0	771.8	768.5	767.5	762.0	758.8
10°	771.8	774.0	767.5	763.1	766.4	762.0	758.8	755.5	753.3	746.8	742.5
12.5°	759.8	760.9	753.3	747.9	750.1	746.8	741.4	737.0	734.8	728.3	722.9
15°	743.5	744.6	735.9	728.3	730.5	726.1	719.6	715.3	712.0	705.5	697.9
17.5°	724.0	722.9	713.1	705.5	706.6	701.1	694.6	688.1	683.8	676.1	670.7
20°	702.2	699.0	688.1	679.4	680.5	674.0	666.4	659.8	654.4	647.9	640.3
22.5°	675.1	670.7	660.9	650.1	651.1	645.7	634.8	629.4	624.0	615.3	608.7
25°	645.7	639.2	629.4	618.5	618.5	612.0	603.3	596.8	591.4	582.7	575.0
27.5°	610.9	607.7	594.6	585.9	584.8	578.3	570.7	563.1	556.6	549.0	541.4
30°	572.9	567.4	557.7	547.9	545.7	540.3	532.7	524.0	519.6	512.0	505.5
32.5°	532.7	527.2	516.3	506.6	505.5	501.1	494.6	485.9	481.6	476.1	471.8
35°	487.0	484.8	474.0	466.3	466.3	462.0	455.5	447.9	444.6	439.2	433.7
37.5°	443.5	440.3	430.5	423.9	423.9	418.5	412.0	408.7	405.5	401.1	397.9
40°	397.9	395.7	388.1	381.6	382.6	378.3	373.9	369.6	367.4	365.2	362.0
42.5°	355.5	353.3	347.9	342.4	342.4	339.2	334.8	331.5	329.4	326.1	325.0
45°	317.4	314.2	309.8	304.4	304.4	301.1	298.9	296.8	295.7	293.5	290.2
47.5°	280.5	278.3	273.9	268.5	268.5	268.5	264.2	260.9	260.9	258.7	257.6
50°	248.9	245.7	242.4	238.1	238.1	235.9	232.6	229.4	229.4	228.3	226.1
52.5°	219.6	217.4	213.1	208.7	208.7	206.5	203.3	202.2	201.1	197.8	196.8
55°	194.6	192.4	189.1	183.7	182.6	181.5	178.3	176.1	175.0	171.8	171.8
57.5°	171.8	169.6	164.1	160.9	159.8	157.6	154.4	152.2	151.1	148.9	146.8
60°	152.2	148.9	144.6	140.2	139.1	137.0	133.7	131.5	130.4	126.1	123.9
62.5°	133.7	130.4	126.1	121.7	120.7	118.5	114.1	112.0	109.8	105.4	103.3
65°	116.3	113.1	108.7	104.4	102.2	101.1	96.7	93.5	91.3	88.1	83.7
67.5°	100.0	96.7	92.4	87.0	87.0	83.7	80.4	77.2	73.9	70.7	67.4
70°	84.8	81.5	77.2	72.8	71.7	69.6	66.3	62.0	59.8	55.4	52.2
72.5°	70.7	67.4	63.0	58.7	57.6	55.4	52.2	47.8	44.6	41.3	38.0
75°	57.6	54.4	50.0	46.7	45.7	43.5	40.2	35.9	32.6	30.4	27.2
77.5°	45.7	42.4	39.1	35.9	34.8	32.6	29.4	27.2	23.9	21.7	18.5
80°	34.8	32.6	29.4	27.2	26.1	23.9	21.7	18.5	16.3	14.1	13.0
82.5°	25.0	22.8	20.7	17.4	17.4	15.2	14.1	12.0	9.8	8.7	7.6
85°	14.1	12.0	10.9	9.8	8.7	8.7	7.6	6.5	5.4	4.3	4.3
87.5°	4.3	4.3	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7
2.5°	777.2	778.3	776.2	778.3	776.2	777.2	775.1	777.2	775.1	777.2	772.9
5°	769.6	769.6	766.4	768.5	766.4	767.5	763.1	764.2	762.0	764.2	759.8
7.5°	756.6	757.7	752.2	754.4	751.2	751.2	747.9	749.0	745.7	746.8	743.5
10°	741.4	740.3	734.8	737.0	732.7	732.7	729.4	729.4	725.1	726.1	721.8
12.5°	719.6	718.5	712.0	714.2	709.8	709.8	706.6	706.6	702.2	704.4	700.1
15°	694.6	693.5	687.0	688.1	683.8	683.8	679.4	680.5	677.2	679.4	675.1
17.5°	666.4	665.3	658.8	659.8	654.4	655.5	652.2	651.1	649.0	650.1	646.8
20°	637.0	634.8	628.3	629.4	627.2	624.0	621.8	622.9	620.7	622.9	619.6
22.5°	606.6	602.2	596.8	596.8	594.6	594.6	591.4	593.5	589.2	592.4	590.3
25°	571.8	568.5	564.2	566.4	562.0	562.0	558.7	559.8	557.7	559.8	557.7
27.5°	538.1	535.9	529.4	531.6	528.3	529.4	526.1	527.2	526.1	528.3	526.1
30°	502.2	501.1	496.8	496.8	495.7	494.6	493.5	493.5	492.4	495.7	493.5
32.5°	468.5	465.3	460.9	464.2	458.7	462.0	459.8	462.0	459.8	462.0	460.9
35°	433.7	432.6	427.2	428.3	427.2	427.2	426.1	426.1	426.1	429.4	429.4
37.5°	396.8	395.7	392.4	393.5	391.3	390.3	390.3	392.4	392.4	394.6	394.6
40°	360.9	362.0	358.7	358.7	357.6	357.6	357.6	359.8	358.7	360.9	359.8
42.5°	325.0	325.0	321.8	322.9	321.8	322.9	322.9	325.0	325.0	326.1	325.0
45°	291.3	291.3	290.2	291.3	289.2	290.2	289.2	291.3	290.2	291.3	291.3
47.5°	257.6	257.6	257.6	256.5	256.5	256.5	256.5	256.5	255.5	257.6	256.5
50°	226.1	227.2	226.1	226.1	225.0	226.1	225.0	225.0	222.8	223.9	223.9
52.5°	197.8	197.8	195.7	195.7	195.7	194.6	194.6	194.6	193.5	193.5	191.3
55°	170.7	170.7	168.5	168.5	167.4	166.3	165.2	165.2	162.0	162.0	158.7
57.5°	145.7	144.6	141.3	141.3	139.1	138.1	137.0	135.9	133.7	131.5	130.4
60°	122.8	120.7	118.5	117.4	115.2	113.1	110.9	108.7	106.5	105.4	104.4
62.5°	101.1	97.8	95.7	94.6	92.4	89.1	87.0	84.8	82.6	81.5	79.4
65°	81.5	78.3	75.0	73.9	71.7	69.6	66.3	64.1	62.0	60.9	60.9
67.5°	64.1	60.9	56.5	56.5	54.4	52.2	50.0	47.8	46.7	47.8	47.8
70°	47.8	45.7	42.4	41.3	39.1	37.0	35.9	35.9	35.9	37.0	35.9
72.5°	35.9	32.6	30.4	29.4	28.3	27.2	27.2	27.2	26.1	27.2	27.2
75°	25.0	22.8	20.7	20.7	19.6	19.6	19.6	19.6	19.6	19.6	19.6
77.5°	17.4	15.2	14.1	14.1	14.1	13.0	13.0	13.0	13.0	13.0	13.0
80°	10.9	10.9	9.8	9.8	8.7	8.7	8.7	8.7	8.7	8.7	8.7
82.5°	6.5	6.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
85°	3.3	3.3	3.3	3.3	3.3	2.2	2.2	2.2	2.2	2.2	2.2
87.5°	1.1	1.1	1.1	1.1	1.1	2.2	2.2	2.2	2.2	2.2	2.2
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: P274442

CATALOG NUMBER: LD6B20DE010W2N2765 EU6B1020W2N902765 6LBLWW0H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	782.7	782.7	782.7	782.7	782.7	782.7	782.7	782.7
2.5°	772.9	776.2	771.8	775.1	774.0	772.9	770.7	775.1
5°	759.8	760.9	756.6	760.9	759.8	757.7	755.5	759.8
7.5°	741.4	744.6	739.2	743.5	742.5	740.3	738.1	742.5
10°	720.7	724.0	719.6	722.9	722.9	720.7	717.5	721.8
12.5°	697.9	700.1	695.7	700.1	699.0	696.8	695.7	699.0
15°	672.9	676.1	671.8	675.1	674.0	672.9	671.8	675.1
17.5°	645.7	649.0	645.7	649.0	649.0	645.7	644.6	646.8
20°	618.5	620.7	617.4	620.7	619.6	619.6	617.4	620.7
22.5°	588.1	591.4	589.2	591.4	590.3	590.3	589.2	591.4
25°	557.7	560.9	557.7	560.9	559.8	559.8	557.7	563.1
27.5°	527.2	529.4	526.1	530.5	529.4	527.2	528.3	529.4
30°	494.6	496.8	494.6	497.9	497.9	497.9	495.7	497.9
32.5°	462.0	465.3	462.0	465.3	464.2	464.2	463.1	465.3
35°	429.4	430.5	428.3	431.6	431.6	432.6	430.5	433.7
37.5°	395.7	396.8	395.7	396.8	398.9	395.7	397.9	398.9
40°	360.9	363.1	362.0	363.1	363.1	364.2	363.1	364.2
42.5°	326.1	328.3	326.1	329.4	328.3	328.3	329.4	329.4
45°	290.2	293.5	291.3	293.5	294.6	293.5	293.5	295.7
47.5°	256.5	258.7	257.6	258.7	258.7	258.7	258.7	260.9
50°	222.8	223.9	223.9	225.0	225.0	226.1	223.9	225.0
52.5°	189.1	191.3	191.3	191.3	190.2	191.3	191.3	191.3
55°	158.7	159.8	157.6	159.8	159.8	158.7	158.7	160.9
57.5°	129.4	129.4	129.4	129.4	129.4	128.3	129.4	129.4
60°	102.2	103.3	102.2	102.2	102.2	102.2	101.1	103.3
62.5°	79.4	79.4	78.3	79.4	79.4	79.4	80.4	80.4
65°	62.0	63.0	62.0	63.0	63.0	63.0	63.0	64.1
67.5°	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9
70°	37.0	37.0	37.0	38.0	37.0	37.0	37.0	38.0
72.5°	27.2	27.2	27.2	27.2	27.2	27.2	28.3	28.3
75°	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
77.5°	13.0	13.0	13.0	14.1	13.0	14.1	13.0	13.0
80°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
82.5°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
85°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
87.5°	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1
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)