

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: P252445

Luminaire Tested: **LD6B10D010 EU6B10209024 6LBLWW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252445  
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: LD6B10D010 EU6B10209024 6LBLWW1H  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 652.0 lumens  
Efficiency: N/A  
Efficacy: 64.9 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

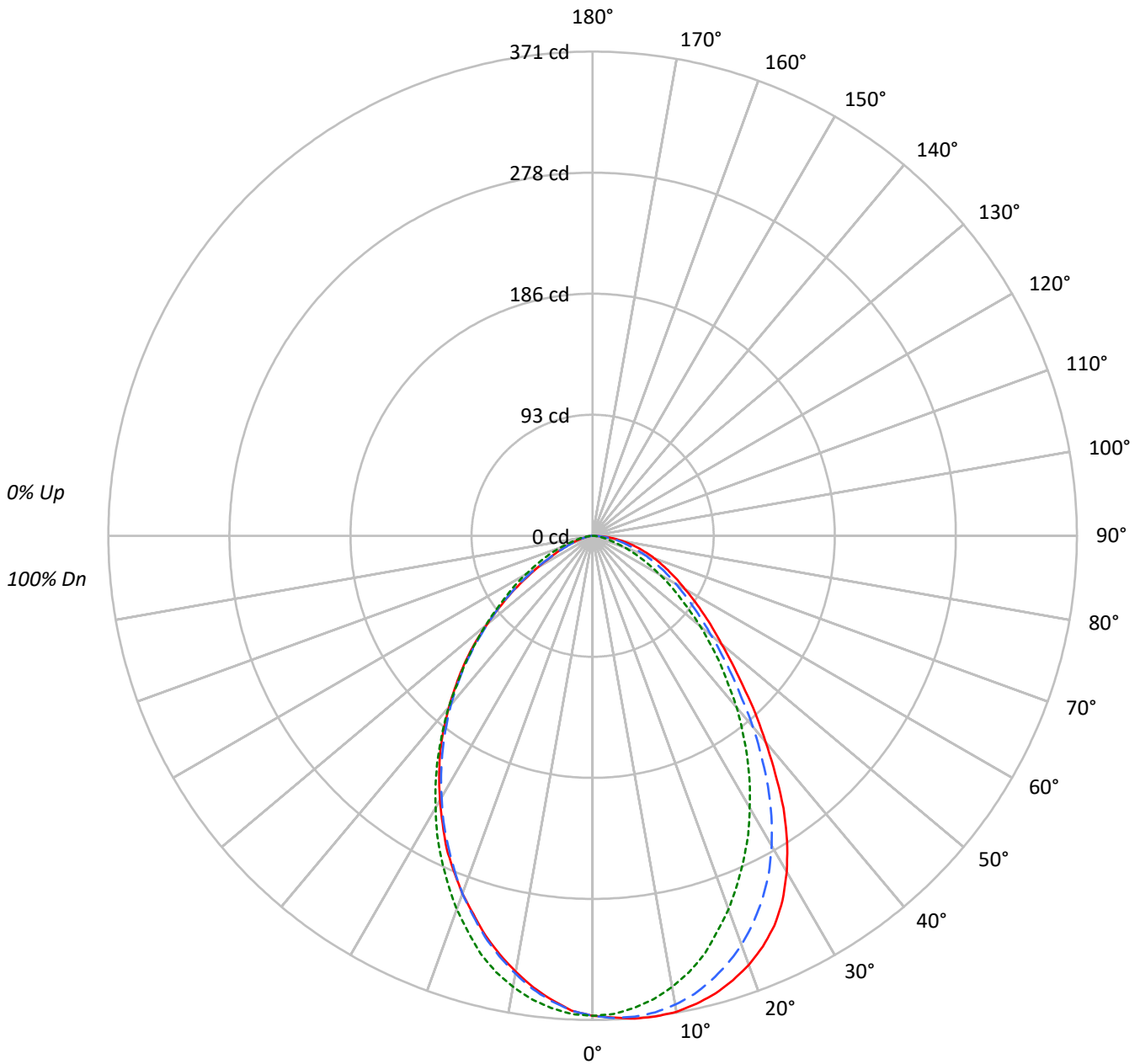
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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°	23996	23996	23996
5°	24323	23786	23386
10°	24538	23253	22471
15°	24531	22397	21424
20°	24293	21141	20252
25°	23719	19710	19047
30°	22397	18125	17628
35°	20301	16439	16231
40°	17536	14623	14572
45°	15039	12723	12825
50°	13063	10891	10728
55°	11738	9179	8599
60°	10660	7738	6328
65°	10019	6391	4647
70°	9557	4979	3414
75°	9150	3605	2319
80°	8641	2480	1540
85°	7635	1497	749



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.4	5.3
10°-20°	94.2	14.5
20°-30°	130.8	20.1
30°-40°	135.5	20.8
40°-50°	111.4	17.1
50°-60°	76.5	11.7
60°-70°	44.0	6.7
70°-80°	20.2	3.1
80°-90°	4.9	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°	259.5	39.8
0°-40°	395.0	60.6
0°-60°	582.9	89.4
0°-90°	652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	652.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	368	368	368	368	368	
5°	371	370	363	358	357	35
15°	363	352	332	318	317	102
25°	330	308	274	262	265	151
35°	255	234	206	200	204	158
45°	163	151	138	136	139	127
55°	103	94	81	76	76	93
65°	65	57	41	29	30	65
75°	36	29	14	9	9	38
85°	10	7	2	1	1	11
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°	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8
2.5°	369.4	372.4	370.4	369.9	370.9	370.9	370.9	369.4	370.4	368.8	369.9
5°	371.4	374.0	371.9	370.9	371.9	372.4	370.9	369.9	371.4	369.4	369.9
7.5°	371.4	374.0	371.9	371.4	371.9	371.9	371.4	369.4	370.4	368.3	368.3
10°	370.4	372.4	370.4	369.4	369.9	369.4	369.4	366.8	367.3	364.8	364.8
12.5°	367.3	369.9	367.3	366.3	366.3	366.3	364.8	362.7	363.2	360.2	359.7
15°	363.2	365.3	362.7	361.7	361.7	361.2	360.2	357.1	357.1	354.0	352.5
17.5°	357.1	359.1	357.1	355.6	355.1	354.0	353.0	349.9	348.9	345.3	343.8
20°	349.9	351.5	349.4	347.9	346.9	345.9	343.8	340.7	339.7	336.2	333.6
22.5°	340.7	342.8	339.7	338.2	337.2	335.6	333.6	330.5	329.0	324.4	321.3
25°	329.5	330.5	328.0	326.4	324.4	323.4	321.8	317.8	316.2	311.1	307.5
27.5°	315.2	316.2	313.2	312.1	309.6	308.6	306.5	302.9	300.9	295.8	292.2
30°	297.3	298.3	296.3	294.8	292.7	290.7	289.2	285.6	282.5	277.4	274.3
32.5°	277.4	278.9	276.9	274.8	271.3	271.8	269.2	265.7	263.1	258.5	254.9
35°	254.9	255.9	253.4	252.9	250.8	248.8	246.2	243.7	242.2	237.0	234.0
37.5°	229.9	232.4	229.9	227.8	226.8	225.3	223.8	220.2	219.2	216.1	212.0
40°	205.9	207.4	205.9	203.8	202.3	202.3	200.3	198.2	195.7	192.6	191.1
42.5°	184.4	183.4	182.9	181.9	179.8	179.3	178.8	176.2	174.7	171.7	169.1
45°	163.0	163.5	162.5	161.9	160.4	159.4	158.4	156.3	155.8	152.7	150.7
47.5°	145.1	144.6	143.6	143.6	142.5	141.5	140.5	139.0	138.4	135.9	133.8
50°	128.7	129.2	128.7	128.2	126.7	126.2	125.2	124.1	123.1	120.6	118.5
52.5°	115.5	114.9	114.4	114.4	112.9	112.4	111.4	110.3	109.3	106.8	105.2
55°	103.2	103.2	102.7	102.2	100.6	100.1	99.6	98.6	97.1	95.0	93.5
57.5°	92.0	92.0	91.4	90.9	89.9	89.9	88.9	87.9	86.8	84.8	82.8
60°	81.7	82.2	81.7	81.2	80.2	80.2	79.7	78.2	77.7	75.1	73.6
62.5°	73.1	73.1	73.1	72.5	72.0	71.0	71.0	69.5	68.5	66.9	64.9
65°	64.9	64.9	64.9	64.4	63.3	62.8	62.3	61.3	60.3	58.7	56.7
67.5°	57.2	57.2	57.2	56.7	55.7	55.2	54.7	54.2	52.6	51.1	49.0
70°	50.1	50.1	49.6	49.0	48.5	48.0	47.5	46.5	45.5	43.4	41.9
72.5°	42.9	42.9	42.9	41.9	41.4	41.4	40.4	39.8	38.8	36.8	35.2
75°	36.3	35.8	35.8	35.2	34.7	34.2	33.7	33.2	31.7	30.7	28.6
77.5°	29.6	29.6	29.1	28.6	28.6	28.1	27.6	26.6	26.1	24.5	23.0
80°	23.0	23.0	23.0	23.0	22.5	22.0	22.0	20.9	20.4	18.9	17.9
82.5°	17.4	16.9	16.9	16.9	16.3	15.8	15.8	15.3	14.8	13.8	12.8
85°	10.2	9.7	9.7	9.7	9.2	9.2	8.7	8.7	8.2	7.2	7.2
87.5°	3.1	3.1	3.6	3.6	3.1	3.1	3.1	3.1	3.1	2.6	2.6
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°	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8
2.5°	368.8	370.4	368.3	367.8	369.9	368.8	368.3	367.3	367.8	366.8	365.3
5°	368.3	370.4	367.8	366.3	368.8	367.3	366.3	365.3	365.3	363.2	362.2
7.5°	366.8	367.8	365.3	363.7	365.3	363.7	362.7	361.2	360.7	358.1	356.6
10°	362.7	363.7	360.7	358.6	360.2	358.1	356.6	355.1	354.0	351.0	348.9
12.5°	357.1	357.6	354.0	351.5	352.5	351.0	348.4	346.4	345.3	342.3	339.7
15°	349.4	349.9	345.9	342.3	343.3	341.3	338.2	336.2	334.6	331.6	328.0
17.5°	340.2	339.7	335.1	331.6	332.1	329.5	326.4	323.4	321.3	317.8	315.2
20°	330.0	328.5	323.4	319.3	319.8	316.7	313.2	310.1	307.5	304.5	300.9
22.5°	317.2	315.2	310.6	305.5	306.0	303.5	298.3	295.8	293.2	289.2	286.1
25°	303.5	300.4	295.8	290.7	290.7	287.6	283.5	280.5	277.9	273.8	270.2
27.5°	287.1	285.6	279.4	275.4	274.8	271.8	268.2	264.6	261.6	258.0	254.4
30°	269.2	266.7	262.1	257.5	256.5	253.9	250.3	246.2	244.2	240.6	237.6
32.5°	250.3	247.8	242.7	238.1	237.6	235.5	232.4	228.4	226.3	223.8	221.7
35°	228.9	227.8	222.7	219.2	219.2	217.1	214.1	210.5	208.9	206.4	203.8
37.5°	208.4	206.9	202.3	199.2	199.2	196.7	193.6	192.1	190.6	188.5	187.0
40°	187.0	186.0	182.4	179.3	179.8	177.8	175.7	173.7	172.7	171.7	170.1
42.5°	167.1	166.0	163.5	160.9	160.9	159.4	157.3	155.8	154.8	153.3	152.7
45°	149.2	147.6	145.6	143.0	143.0	141.5	140.5	139.5	139.0	137.9	136.4
47.5°	131.8	130.8	128.7	126.2	126.2	126.2	124.1	122.6	122.6	121.6	121.1
50°	117.0	115.5	113.9	111.9	111.9	110.9	109.3	107.8	107.8	107.3	106.3
52.5°	103.2	102.2	100.1	98.1	98.1	97.1	95.5	95.0	94.5	93.0	92.5
55°	91.4	90.4	88.9	86.3	85.8	85.3	83.8	82.8	82.2	80.7	80.7
57.5°	80.7	79.7	77.1	75.6	75.1	74.1	72.5	71.5	71.0	70.0	69.0
60°	71.5	70.0	67.9	65.9	65.4	64.4	62.8	61.8	61.3	59.3	58.2
62.5°	62.8	61.3	59.3	57.2	56.7	55.7	53.6	52.6	51.6	49.6	48.5
65°	54.7	53.1	51.1	49.0	48.0	47.5	45.5	43.9	42.9	41.4	39.3
67.5°	47.0	45.5	43.4	40.9	40.9	39.3	37.8	36.3	34.7	33.2	31.7
70°	39.8	38.3	36.3	34.2	33.7	32.7	31.2	29.1	28.1	26.1	24.5
72.5°	33.2	31.7	29.6	27.6	27.1	26.1	24.5	22.5	20.9	19.4	17.9
75°	27.1	25.5	23.5	22.0	21.5	20.4	18.9	16.9	15.3	14.3	12.8
77.5°	21.5	19.9	18.4	16.9	16.3	15.3	13.8	12.8	11.2	10.2	8.7
80°	16.3	15.3	13.8	12.8	12.3	11.2	10.2	8.7	7.7	6.6	6.1
82.5°	11.7	10.7	9.7	8.2	8.2	7.2	6.6	5.6	4.6	4.1	3.6
85°	6.6	5.6	5.1	4.6	4.1	4.1	3.6	3.1	2.6	2.0	2.0
87.5°	2.0	2.0	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0
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°	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8
2.5°	365.3	365.8	364.8	365.8	364.8	365.3	364.2	365.3	364.2	365.3	363.2
5°	361.7	361.7	360.2	361.2	360.2	360.7	358.6	359.1	358.1	359.1	357.1
7.5°	355.6	356.1	353.5	354.5	353.0	353.0	351.5	352.0	350.5	351.0	349.4
10°	348.4	347.9	345.3	346.4	344.3	344.3	342.8	342.8	340.7	341.3	339.2
12.5°	338.2	337.7	334.6	335.6	333.6	333.6	332.1	332.1	330.0	331.0	329.0
15°	326.4	325.9	322.9	323.4	321.3	321.3	319.3	319.8	318.3	319.3	317.2
17.5°	313.2	312.7	309.6	310.1	307.5	308.1	306.5	306.0	305.0	305.5	304.0
20°	299.4	298.3	295.3	295.8	294.8	293.2	292.2	292.7	291.7	292.7	291.2
22.5°	285.1	283.0	280.5	280.5	279.4	279.4	277.9	278.9	276.9	278.4	277.4
25°	268.7	267.2	265.1	266.2	264.1	264.1	262.6	263.1	262.1	263.1	262.1
27.5°	252.9	251.9	248.8	249.8	248.3	248.8	247.3	247.8	247.3	248.3	247.3
30°	236.0	235.5	233.5	233.5	233.0	232.4	231.9	231.9	231.4	233.0	231.9
32.5°	220.2	218.7	216.6	218.1	215.6	217.1	216.1	217.1	216.1	217.1	216.6
35°	203.8	203.3	200.8	201.3	200.8	200.8	200.3	200.3	200.3	201.8	201.8
37.5°	186.5	186.0	184.4	184.9	183.9	183.4	183.4	184.4	184.4	185.4	185.4
40°	169.6	170.1	168.6	168.6	168.1	168.1	168.1	169.1	168.6	169.6	169.1
42.5°	152.7	152.7	151.2	151.7	151.2	151.7	151.7	152.7	152.7	153.3	152.7
45°	136.9	136.9	136.4	136.9	135.9	136.4	135.9	136.9	136.4	136.9	136.9
47.5°	121.1	121.1	121.1	120.6	120.6	120.6	120.6	120.6	120.1	121.1	120.6
50°	106.3	106.8	106.3	106.3	105.7	106.3	105.7	105.7	104.7	105.2	105.2
52.5°	93.0	93.0	92.0	92.0	92.0	91.4	91.4	91.4	90.9	90.9	89.9
55°	80.2	80.2	79.2	79.2	78.7	78.2	77.7	77.7	76.1	76.1	74.6
57.5°	68.5	67.9	66.4	66.4	65.4	64.9	64.4	63.9	62.8	61.8	61.3
60°	57.7	56.7	55.7	55.2	54.2	53.1	52.1	51.1	50.1	49.6	49.0
62.5°	47.5	46.0	45.0	44.4	43.4	41.9	40.9	39.8	38.8	38.3	37.3
65°	38.3	36.8	35.2	34.7	33.7	32.7	31.2	30.1	29.1	28.6	28.6
67.5°	30.1	28.6	26.6	26.6	25.5	24.5	23.5	22.5	22.0	22.5	22.5
70°	22.5	21.5	19.9	19.4	18.4	17.4	16.9	16.9	16.9	17.4	16.9
72.5°	16.9	15.3	14.3	13.8	13.3	12.8	12.8	12.8	12.3	12.8	12.8
75°	11.7	10.7	9.7	9.7	9.2	9.2	9.2	9.2	9.2	9.2	9.2
77.5°	8.2	7.2	6.6	6.6	6.6	6.1	6.1	6.1	6.1	6.1	6.1
80°	5.1	5.1	4.6	4.6	4.1	4.1	4.1	4.1	4.1	4.1	4.1
82.5°	3.1	3.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	1.5	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0
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 EU6B10209024 6LBLWW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	367.8	367.8	367.8	367.8	367.8	367.8	367.8	367.8
2.5°	363.2	364.8	362.7	364.2	363.7	363.2	362.2	364.2
5°	357.1	357.6	355.6	357.6	357.1	356.1	355.1	357.1
7.5°	348.4	349.9	347.4	349.4	348.9	347.9	346.9	348.9
10°	338.7	340.2	338.2	339.7	339.7	338.7	337.2	339.2
12.5°	328.0	329.0	327.0	329.0	328.5	327.5	327.0	328.5
15°	316.2	317.8	315.7	317.2	316.7	316.2	315.7	317.2
17.5°	303.5	305.0	303.5	305.0	305.0	303.5	302.9	304.0
20°	290.7	291.7	290.2	291.7	291.2	291.2	290.2	291.7
22.5°	276.4	277.9	276.9	277.9	277.4	277.4	276.9	277.9
25°	262.1	263.6	262.1	263.6	263.1	263.1	262.1	264.6
27.5°	247.8	248.8	247.3	249.3	248.8	247.8	248.3	248.8
30°	232.4	233.5	232.4	234.0	234.0	234.0	233.0	234.0
32.5°	217.1	218.7	217.1	218.7	218.1	218.1	217.6	218.7
35°	201.8	202.3	201.3	202.8	202.8	203.3	202.3	203.8
37.5°	186.0	186.5	186.0	186.5	187.5	186.0	187.0	187.5
40°	169.6	170.6	170.1	170.6	170.6	171.1	170.6	171.1
42.5°	153.3	154.3	153.3	154.8	154.3	154.3	154.8	154.8
45°	136.4	137.9	136.9	137.9	138.4	137.9	137.9	139.0
47.5°	120.6	121.6	121.1	121.6	121.6	121.6	121.6	122.6
50°	104.7	105.2	105.2	105.7	105.7	106.3	105.2	105.7
52.5°	88.9	89.9	89.9	89.9	89.4	89.9	89.9	89.9
55°	74.6	75.1	74.1	75.1	75.1	74.6	74.6	75.6
57.5°	60.8	60.8	60.8	60.8	60.8	60.3	60.8	60.8
60°	48.0	48.5	48.0	48.0	48.0	48.0	47.5	48.5
62.5°	37.3	37.3	36.8	37.3	37.3	37.3	37.8	37.8
65°	29.1	29.6	29.1	29.6	29.6	29.6	29.6	30.1
67.5°	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
70°	17.4	17.4	17.4	17.9	17.4	17.4	17.4	17.9
72.5°	12.8	12.8	12.8	12.8	12.8	12.8	13.3	13.3
75°	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
77.5°	6.1	6.1	6.1	6.6	6.1	6.6	6.1	6.1
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
87.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5
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)