

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: P252452

Luminaire Tested: **LD6B10D010 EU6B10209730 6LBLWW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252452  
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 EU6B10209730 6LBLWW1H  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 674.0 lumens  
Efficiency: N/A  
Efficacy: 67.1 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

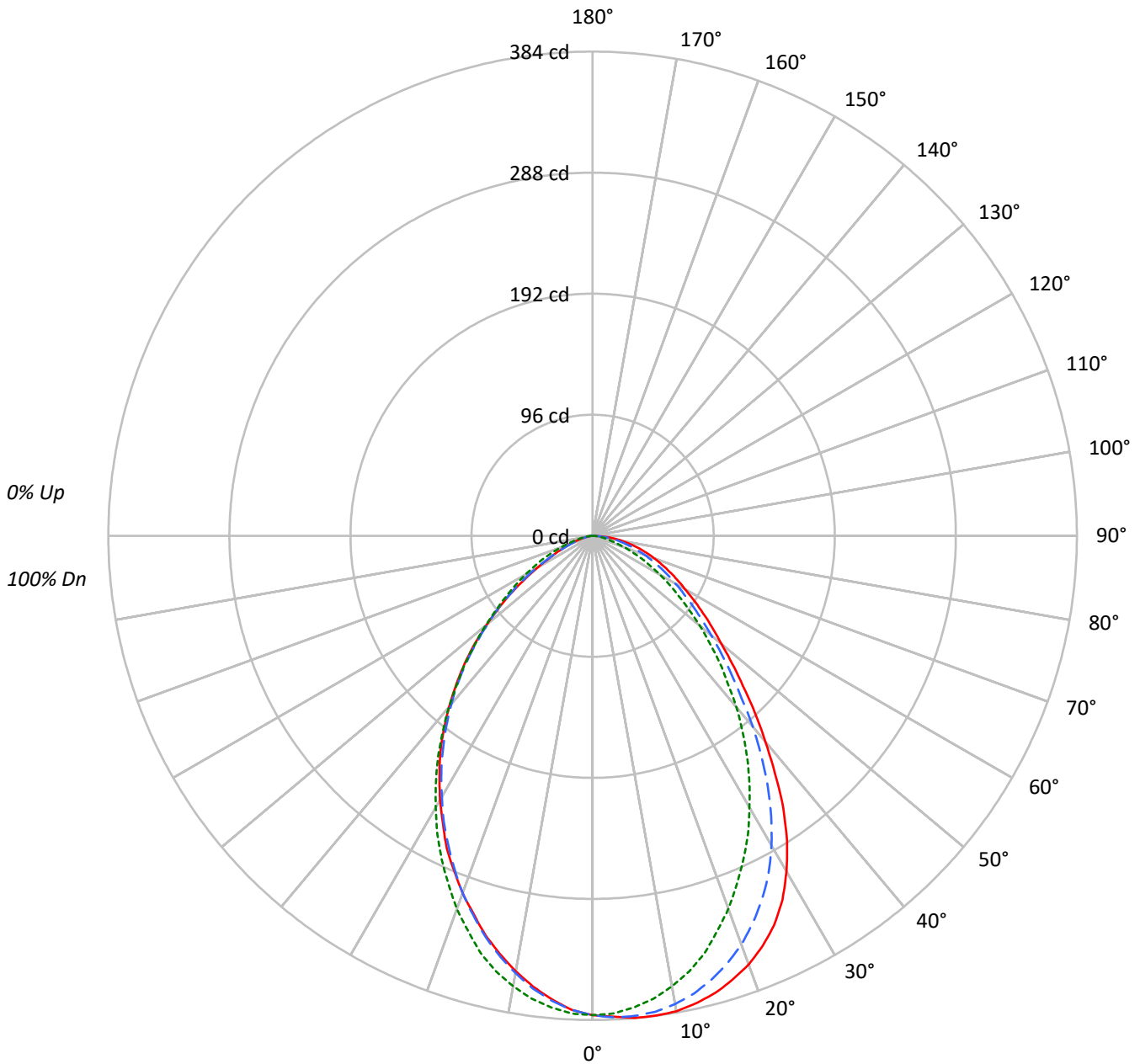
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	24804	24804	24804
5°	25142	24591	24172
10°	25366	24034	23233
15°	25362	23147	22154
20°	25119	21856	20932
25°	24518	20379	19695
30°	23157	18735	18223
35°	20986	16996	16781
40°	18123	15108	15066
45°	15547	13157	13249
50°	13509	11256	11094
55°	12136	9486	8895
60°	11026	7999	6550
65°	10358	6607	4816
70°	9881	5131	3529
75°	9453	3731	2395
80°	8942	2592	1578
85°	7935	1572	823



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.6	5.3
10°-20°	97.4	14.5
20°-30°	135.2	20.1
30°-40°	140.1	20.8
40°-50°	115.1	17.1
50°-60°	79.1	11.7
60°-70°	45.5	6.7
70°-80°	20.9	3.1
80°-90°	5.1	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°	268.2	39.8
0°-40°	408.3	60.6
0°-60°	602.5	89.4
0°-90°	674.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	674.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	380	380	380	380	380	
5°	384	382	376	370	369	37
15°	376	364	343	329	328	106
25°	341	318	283	271	274	156
35°	264	242	213	207	211	163
45°	168	156	143	141	144	131
55°	107	97	83	79	78	96
65°	67	59	43	30	31	67
75°	38	30	15	10	10	40
85°	11	7	2	1	1	12
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°	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2
2.5°	381.8	385.0	382.9	382.3	383.4	383.4	383.4	381.8	382.9	381.3	382.3
5°	383.9	386.6	384.5	383.4	384.5	385.0	383.4	382.3	383.9	381.8	382.3
7.5°	383.9	386.6	384.5	383.9	384.5	384.5	383.9	381.8	382.9	380.8	380.8
10°	382.9	385.0	382.9	381.8	382.3	381.8	381.8	379.2	379.7	377.1	377.1
12.5°	379.7	382.3	379.7	378.7	378.7	378.7	377.1	375.0	375.5	372.3	371.8
15°	375.5	377.6	375.0	373.9	373.9	373.4	372.3	369.1	369.1	366.0	364.4
17.5°	369.1	371.3	369.1	367.6	367.0	366.0	364.9	361.8	360.7	357.0	355.4
20°	361.8	363.3	361.2	359.6	358.6	357.5	355.4	352.2	351.2	347.5	344.9
22.5°	352.2	354.4	351.2	349.6	348.5	347.0	344.9	341.7	340.1	335.3	332.2
25°	340.6	341.7	339.0	337.5	335.3	334.3	332.7	328.5	326.9	321.6	317.9
27.5°	325.8	326.9	323.7	322.7	320.0	319.0	316.9	313.2	311.1	305.8	302.1
30°	307.4	308.4	306.3	304.7	302.6	300.5	298.9	295.2	292.0	286.8	283.6
32.5°	286.8	288.3	286.2	284.1	280.4	281.0	278.3	274.6	272.0	267.2	263.5
35°	263.5	264.6	261.9	261.4	259.3	257.2	254.5	251.9	250.3	245.0	241.9
37.5°	237.6	240.3	237.6	235.5	234.5	232.9	231.3	227.6	226.6	223.4	219.2
40°	212.8	214.4	212.8	210.7	209.1	209.1	207.0	204.9	202.3	199.1	197.5
42.5°	190.6	189.6	189.1	188.0	185.9	185.4	184.8	182.2	180.6	177.4	174.8
45°	168.5	169.0	167.9	167.4	165.8	164.8	163.7	161.6	161.1	157.9	155.8
47.5°	150.0	149.5	148.4	148.4	147.3	146.3	145.2	143.6	143.1	140.5	138.4
50°	133.1	133.6	133.1	132.6	131.0	130.4	129.4	128.3	127.3	124.6	122.5
52.5°	119.4	118.8	118.3	118.3	116.7	116.2	115.1	114.1	113.0	110.4	108.8
55°	106.7	106.7	106.1	105.6	104.0	103.5	103.0	101.9	100.3	98.2	96.6
57.5°	95.1	95.1	94.5	94.0	92.9	92.9	91.9	90.8	89.8	87.7	85.6
60°	84.5	85.0	84.5	84.0	82.9	82.9	82.4	80.8	80.3	77.6	76.0
62.5°	75.5	75.5	75.5	75.0	74.5	73.4	73.4	71.8	70.8	69.2	67.1
65°	67.1	67.1	67.1	66.5	65.5	65.0	64.4	63.4	62.3	60.7	58.6
67.5°	59.1	59.1	59.1	58.6	57.6	57.0	56.5	56.0	54.4	52.8	50.7
70°	51.8	51.8	51.2	50.7	50.2	49.6	49.1	48.1	47.0	44.9	43.3
72.5°	44.4	44.4	44.4	43.3	42.8	42.8	41.7	41.2	40.1	38.0	36.4
75°	37.5	37.0	37.0	36.4	35.9	35.4	34.9	34.3	32.7	31.7	29.6
77.5°	30.6	30.6	30.1	29.6	29.6	29.0	28.5	27.5	26.9	25.3	23.8
80°	23.8	23.8	23.8	23.8	23.2	22.7	22.7	21.7	21.1	19.5	18.5
82.5°	18.0	17.4	17.4	17.4	16.9	16.4	16.4	15.8	15.3	14.3	13.2
85°	10.6	10.0	10.0	10.0	9.5	9.5	9.0	9.0	8.4	7.4	7.4
87.5°	3.2	3.2	3.7	3.7	3.2	3.2	3.2	3.2	3.2	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°	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2
2.5°	381.3	382.9	380.8	380.2	382.3	381.3	380.8	379.7	380.2	379.2	377.6
5°	380.8	382.9	380.2	378.7	381.3	379.7	378.7	377.6	377.6	375.5	374.4
7.5°	379.2	380.2	377.6	376.0	377.6	376.0	375.0	373.4	372.8	370.2	368.6
10°	375.0	376.0	372.8	370.7	372.3	370.2	368.6	367.0	366.0	362.8	360.7
12.5°	369.1	369.7	366.0	363.3	364.4	362.8	360.2	358.1	357.0	353.8	351.2
15°	361.2	361.8	357.5	353.8	354.9	352.8	349.6	347.5	345.9	342.7	339.0
17.5°	351.7	351.2	346.4	342.7	343.3	340.6	337.5	334.3	332.2	328.5	325.8
20°	341.2	339.6	334.3	330.1	330.6	327.4	323.7	320.6	317.9	314.8	311.1
22.5°	328.0	325.8	321.1	315.8	316.3	313.7	308.4	305.8	303.1	298.9	295.7
25°	313.7	310.5	305.8	300.5	300.5	297.3	293.1	289.9	287.3	283.1	279.4
27.5°	296.8	295.2	288.9	284.6	284.1	281.0	277.3	273.6	270.4	266.7	263.0
30°	278.3	275.7	270.9	266.2	265.1	262.5	258.8	254.5	252.4	248.7	245.6
32.5°	258.8	256.1	250.9	246.1	245.6	243.5	240.3	236.1	234.0	231.3	229.2
35°	236.6	235.5	230.3	226.6	226.6	224.4	221.3	217.6	216.0	213.4	210.7
37.5°	215.5	213.9	209.1	206.0	206.0	203.3	200.2	198.6	197.0	194.9	193.3
40°	193.3	192.2	188.5	185.4	185.9	183.8	181.7	179.6	178.5	177.4	175.9
42.5°	172.7	171.6	169.0	166.4	166.4	164.8	162.7	161.1	160.0	158.4	157.9
45°	154.2	152.6	150.5	147.9	147.9	146.3	145.2	144.2	143.6	142.6	141.0
47.5°	136.3	135.2	133.1	130.4	130.4	130.4	128.3	126.7	126.7	125.7	125.2
50°	120.9	119.4	117.8	115.7	115.7	114.6	113.0	111.4	111.4	110.9	109.8
52.5°	106.7	105.6	103.5	101.4	101.4	100.3	98.8	98.2	97.7	96.1	95.6
55°	94.5	93.5	91.9	89.2	88.7	88.2	86.6	85.6	85.0	83.4	83.4
57.5°	83.4	82.4	79.7	78.2	77.6	76.6	75.0	73.9	73.4	72.4	71.3
60°	73.9	72.4	70.2	68.1	67.6	66.5	65.0	63.9	63.4	61.3	60.2
62.5°	65.0	63.4	61.3	59.1	58.6	57.6	55.5	54.4	53.3	51.2	50.2
65°	56.5	54.9	52.8	50.7	49.6	49.1	47.0	45.4	44.4	42.8	40.7
67.5°	48.6	47.0	44.9	42.2	42.2	40.7	39.1	37.5	35.9	34.3	32.7
70°	41.2	39.6	37.5	35.4	34.9	33.8	32.2	30.1	29.0	26.9	25.3
72.5°	34.3	32.7	30.6	28.5	28.0	26.9	25.3	23.2	21.7	20.1	18.5
75°	28.0	26.4	24.3	22.7	22.2	21.1	19.5	17.4	15.8	14.8	13.2
77.5°	22.2	20.6	19.0	17.4	16.9	15.8	14.3	13.2	11.6	10.6	9.0
80°	16.9	15.8	14.3	13.2	12.7	11.6	10.6	9.0	7.9	6.9	6.3
82.5°	12.1	11.1	10.0	8.4	8.4	7.4	6.9	5.8	4.8	4.2	3.7
85°	6.9	5.8	5.3	4.8	4.2	4.2	3.7	3.2	2.6	2.1	2.1
87.5°	2.1	2.1	1.6	1.6	1.6	1.6	1.1	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	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°	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2
2.5°	377.6	378.1	377.1	378.1	377.1	377.6	376.5	377.6	376.5	377.6	375.5
5°	373.9	373.9	372.3	373.4	372.3	372.8	370.7	371.3	370.2	371.3	369.1
7.5°	367.6	368.1	365.4	366.5	364.9	364.9	363.3	363.9	362.3	362.8	361.2
10°	360.2	359.6	357.0	358.1	355.9	355.9	354.4	354.4	352.2	352.8	350.7
12.5°	349.6	349.1	345.9	347.0	344.9	344.9	343.3	343.3	341.2	342.2	340.1
15°	337.5	336.9	333.8	334.3	332.2	332.2	330.1	330.6	329.0	330.1	328.0
17.5°	323.7	323.2	320.0	320.6	317.9	318.4	316.9	316.3	315.3	315.8	314.2
20°	309.5	308.4	305.2	305.8	304.7	303.1	302.1	302.6	301.5	302.6	301.0
22.5°	294.7	292.6	289.9	289.9	288.9	288.9	287.3	288.3	286.2	287.8	286.8
25°	277.8	276.2	274.1	275.1	273.0	273.0	271.4	272.0	270.9	272.0	270.9
27.5°	261.4	260.4	257.2	258.2	256.7	257.2	255.6	256.1	255.6	256.7	255.6
30°	244.0	243.5	241.3	241.3	240.8	240.3	239.8	239.8	239.2	240.8	239.8
32.5°	227.6	226.0	223.9	225.5	222.9	224.4	223.4	224.4	223.4	224.4	223.9
35°	210.7	210.2	207.5	208.1	207.5	207.5	207.0	207.0	207.0	208.6	208.6
37.5°	192.8	192.2	190.6	191.2	190.1	189.6	189.6	190.6	190.6	191.7	191.7
40°	175.3	175.9	174.3	174.3	173.7	173.7	173.7	174.8	174.3	175.3	174.8
42.5°	157.9	157.9	156.3	156.8	156.3	156.8	156.8	157.9	157.9	158.4	157.9
45°	141.5	141.5	141.0	141.5	140.5	141.0	140.5	141.5	141.0	141.5	141.5
47.5°	125.2	125.2	125.2	124.6	124.6	124.6	124.6	124.6	124.1	125.2	124.6
50°	109.8	110.4	109.8	109.8	109.3	109.8	109.3	109.3	108.3	108.8	108.8
52.5°	96.1	96.1	95.1	95.1	95.1	94.5	94.5	94.5	94.0	94.0	92.9
55°	82.9	82.9	81.9	81.9	81.3	80.8	80.3	80.3	78.7	78.7	77.1
57.5°	70.8	70.2	68.7	68.7	67.6	67.1	66.5	66.0	65.0	63.9	63.4
60°	59.7	58.6	57.6	57.0	56.0	54.9	53.9	52.8	51.8	51.2	50.7
62.5°	49.1	47.5	46.5	45.9	44.9	43.3	42.2	41.2	40.1	39.6	38.6
65°	39.6	38.0	36.4	35.9	34.9	33.8	32.2	31.2	30.1	29.6	29.6
67.5°	31.2	29.6	27.5	27.5	26.4	25.3	24.3	23.2	22.7	23.2	23.2
70°	23.2	22.2	20.6	20.1	19.0	18.0	17.4	17.4	17.4	18.0	17.4
72.5°	17.4	15.8	14.8	14.3	13.7	13.2	13.2	13.2	12.7	13.2	13.2
75°	12.1	11.1	10.0	10.0	9.5	9.5	9.5	9.5	9.5	9.5	9.5
77.5°	8.4	7.4	6.9	6.9	6.9	6.3	6.3	6.3	6.3	6.3	6.3
80°	5.3	5.3	4.8	4.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2
82.5°	3.2	3.2	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1	1.1	1.1	1.1
87.5°	0.5	0.5	0.5	0.5	0.5	1.1	1.1	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	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	380.2	380.2	380.2	380.2	380.2	380.2	380.2	380.2
2.5°	375.5	377.1	375.0	376.5	376.0	375.5	374.4	376.5
5°	369.1	369.7	367.6	369.7	369.1	368.1	367.0	369.1
7.5°	360.2	361.8	359.1	361.2	360.7	359.6	358.6	360.7
10°	350.1	351.7	349.6	351.2	351.2	350.1	348.5	350.7
12.5°	339.0	340.1	338.0	340.1	339.6	338.5	338.0	339.6
15°	326.9	328.5	326.4	328.0	327.4	326.9	326.4	328.0
17.5°	313.7	315.3	313.7	315.3	315.3	313.7	313.2	314.2
20°	300.5	301.5	300.0	301.5	301.0	301.0	300.0	301.5
22.5°	285.7	287.3	286.2	287.3	286.8	286.8	286.2	287.3
25°	270.9	272.5	270.9	272.5	272.0	272.0	270.9	273.6
27.5°	256.1	257.2	255.6	257.7	257.2	256.1	256.7	257.2
30°	240.3	241.3	240.3	241.9	241.9	241.9	240.8	241.9
32.5°	224.4	226.0	224.4	226.0	225.5	225.5	225.0	226.0
35°	208.6	209.1	208.1	209.7	209.7	210.2	209.1	210.7
37.5°	192.2	192.8	192.2	192.8	193.8	192.2	193.3	193.8
40°	175.3	176.4	175.9	176.4	176.4	176.9	176.4	176.9
42.5°	158.4	159.5	158.4	160.0	159.5	159.5	160.0	160.0
45°	141.0	142.6	141.5	142.6	143.1	142.6	142.6	143.6
47.5°	124.6	125.7	125.2	125.7	125.7	125.7	125.7	126.7
50°	108.3	108.8	108.8	109.3	109.3	109.8	108.8	109.3
52.5°	91.9	92.9	92.9	92.9	92.4	92.9	92.9	92.9
55°	77.1	77.6	76.6	77.6	77.6	77.1	77.1	78.2
57.5°	62.8	62.8	62.8	62.8	62.8	62.3	62.8	62.8
60°	49.6	50.2	49.6	49.6	49.6	49.6	49.1	50.2
62.5°	38.6	38.6	38.0	38.6	38.6	38.6	39.1	39.1
65°	30.1	30.6	30.1	30.6	30.6	30.6	30.6	31.2
67.5°	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
70°	18.0	18.0	18.0	18.5	18.0	18.0	18.0	18.5
72.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.7	13.7
75°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
77.5°	6.3	6.3	6.3	6.9	6.3	6.9	6.3	6.3
80°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
87.5°	1.1	1.1	1.1	1.1	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)