

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: P252449

Luminaire Tested: **LD6B10D010 EU6B10209040 6LBLWW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252449  
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 EU6B10209040 6LBLWW1H  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 783.0 lumens  
Efficiency: N/A  
Efficacy: 77.9 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

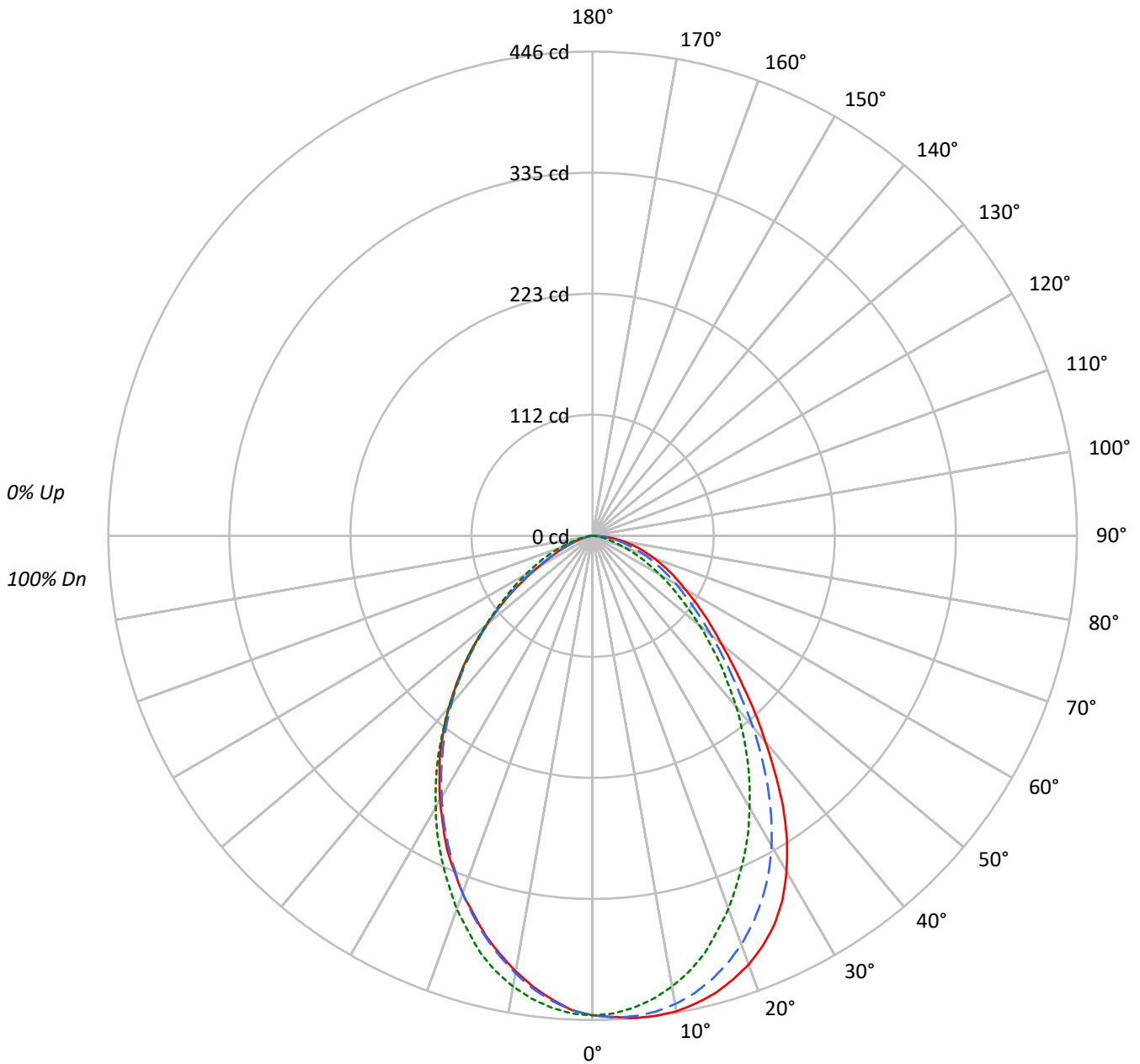
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	28817	28817	28817
5°	29208	28567	28082
10°	29467	27923	26989
15°	29462	26895	25734
20°	29180	25390	24320
25°	28484	23669	22877
30°	26902	21771	21169
35°	24379	19744	19497
40°	21053	17553	17502
45°	18056	15279	15399
50°	15691	13073	12890
55°	14093	11022	10328
60°	12813	9290	7607
65°	12026	7672	5588
70°	11464	5971	4101
75°	10990	4336	2773
80°	10369	3006	1841
85°	9207	1871	898



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.3	5.3
10°-20°	113.2	14.5
20°-30°	157.1	20.1
30°-40°	162.7	20.8
40°-50°	133.7	17.1
50°-60°	91.9	11.7
60°-70°	52.8	6.7
70°-80°	24.3	3.1
80°-90°	5.9	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°	311.6	39.8
0°-40°	474.3	60.6
0°-60°	700.0	89.4
0°-90°	783.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	783.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	442	442	442	442	442	
5°	446	444	436	430	429	43
15°	436	423	398	382	381	123
25°	396	369	329	315	318	181
35°	306	281	248	240	245	190
45°	196	181	166	164	167	152
55°	124	112	97	91	91	112
65°	78	68	50	35	36	78
75°	44	34	17	11	11	46
85°	12	9	2	1	1	14
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°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	443.6	447.2	444.8	444.2	445.4	445.4	445.4	443.6	444.8	443.0	444.2
5°	446.0	449.1	446.6	445.4	446.6	447.2	445.4	444.2	446.0	443.6	444.2
7.5°	446.0	449.1	446.6	446.0	446.6	446.6	446.0	443.6	444.8	442.3	442.3
10°	444.8	447.2	444.8	443.6	444.2	443.6	443.6	440.5	441.1	438.0	438.0
12.5°	441.1	444.2	441.1	439.9	439.9	439.9	438.0	435.6	436.2	432.5	431.9
15°	436.2	438.7	435.6	434.4	434.4	433.8	432.5	428.8	428.8	425.2	423.3
17.5°	428.8	431.3	428.8	427.0	426.4	425.2	423.9	420.3	419.0	414.7	412.9
20°	420.3	422.1	419.6	417.8	416.6	415.3	412.9	409.2	408.0	403.7	400.6
22.5°	409.2	411.7	408.0	406.1	404.9	403.1	400.6	396.9	395.1	389.6	385.9
25°	395.7	396.9	393.9	392.0	389.6	388.4	386.5	381.6	379.8	373.6	369.3
27.5°	378.5	379.8	376.1	374.9	371.8	370.6	368.1	363.8	361.4	355.2	350.9
30°	357.1	358.3	355.8	354.0	351.5	349.1	347.2	343.0	339.3	333.1	329.5
32.5°	333.1	335.0	332.5	330.1	325.8	326.4	323.3	319.0	316.0	310.4	306.1
35°	306.1	307.4	304.3	303.7	301.2	298.8	295.7	292.6	290.8	284.7	281.0
37.5°	276.1	279.1	276.1	273.6	272.4	270.6	268.7	264.4	263.2	259.5	254.6
40°	247.2	249.1	247.2	244.8	243.0	243.0	240.5	238.0	235.0	231.3	229.5
42.5°	221.5	220.3	219.6	218.4	216.0	215.3	214.7	211.7	209.8	206.1	203.1
45°	195.7	196.3	195.1	194.5	192.6	191.4	190.2	187.7	187.1	183.4	181.0
47.5°	174.2	173.6	172.4	172.4	171.2	169.9	168.7	166.9	166.3	163.2	160.7
50°	154.6	155.2	154.6	154.0	152.2	151.5	150.3	149.1	147.9	144.8	142.3
52.5°	138.7	138.0	137.4	137.4	135.6	135.0	133.7	132.5	131.3	128.2	126.4
55°	123.9	123.9	123.3	122.7	120.9	120.2	119.6	118.4	116.6	114.1	112.3
57.5°	110.4	110.4	109.8	109.2	108.0	108.0	106.8	105.5	104.3	101.8	99.4
60°	98.2	98.8	98.2	97.5	96.3	96.3	95.7	93.9	93.3	90.2	88.3
62.5°	87.7	87.7	87.7	87.1	86.5	85.3	85.3	83.4	82.2	80.4	77.9
65°	77.9	77.9	77.9	77.3	76.1	75.5	74.8	73.6	72.4	70.6	68.1
67.5°	68.7	68.7	68.7	68.1	66.9	66.3	65.6	65.0	63.2	61.4	58.9
70°	60.1	60.1	59.5	58.9	58.3	57.7	57.1	55.8	54.6	52.1	50.3
72.5°	51.5	51.5	51.5	50.3	49.7	49.7	48.5	47.9	46.6	44.2	42.3
75°	43.6	42.9	42.9	42.3	41.7	41.1	40.5	39.9	38.0	36.8	34.4
77.5°	35.6	35.6	35.0	34.4	34.4	33.7	33.1	31.9	31.3	29.4	27.6
80°	27.6	27.6	27.6	27.6	27.0	26.4	26.4	25.2	24.5	22.7	21.5
82.5°	20.9	20.2	20.2	20.2	19.6	19.0	19.0	18.4	17.8	16.6	15.3
85°	12.3	11.7	11.7	11.7	11.0	11.0	10.4	10.4	9.8	8.6	8.6
87.5°	3.7	3.7	4.3	4.3	3.7	3.7	3.7	3.7	3.7	3.1	3.1
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	443.0	444.8	442.3	441.7	444.2	443.0	442.3	441.1	441.7	440.5	438.7
5°	442.3	444.8	441.7	439.9	443.0	441.1	439.9	438.7	438.7	436.2	435.0
7.5°	440.5	441.7	438.7	436.8	438.7	436.8	435.6	433.8	433.1	430.1	428.2
10°	435.6	436.8	433.1	430.7	432.5	430.1	428.2	426.4	425.2	421.5	419.0
12.5°	428.8	429.5	425.2	422.1	423.3	421.5	418.4	416.0	414.7	411.1	408.0
15°	419.6	420.3	415.3	411.1	412.3	409.8	406.1	403.7	401.8	398.2	393.9
17.5°	408.6	408.0	402.5	398.2	398.8	395.7	392.0	388.4	385.9	381.6	378.5
20°	396.3	394.5	388.4	383.4	384.1	380.4	376.1	372.4	369.3	365.7	361.4
22.5°	381.0	378.5	373.0	366.9	367.5	364.4	358.3	355.2	352.2	347.2	343.6
25°	364.4	360.7	355.2	349.1	349.1	345.4	340.5	336.8	333.7	328.8	324.5
27.5°	344.8	343.0	335.6	330.7	330.1	326.4	322.1	317.8	314.1	309.8	305.5
30°	323.3	320.3	314.7	309.2	308.0	304.9	300.6	295.7	293.3	289.0	285.3
32.5°	300.6	297.6	291.4	285.9	285.3	282.8	279.1	274.2	271.8	268.7	266.3
35°	274.9	273.6	267.5	263.2	263.2	260.7	257.1	252.8	250.9	247.9	244.8
37.5°	250.3	248.5	243.0	239.3	239.3	236.2	232.5	230.7	228.8	226.4	224.5
40°	224.5	223.3	219.0	215.3	216.0	213.5	211.0	208.6	207.4	206.1	204.3
42.5°	200.6	199.4	196.3	193.3	193.3	191.4	189.0	187.1	185.9	184.1	183.4
45°	179.1	177.3	174.9	171.8	171.8	169.9	168.7	167.5	166.9	165.6	163.8
47.5°	158.3	157.1	154.6	151.5	151.5	151.5	149.1	147.2	147.2	146.0	145.4
50°	140.5	138.7	136.8	134.4	134.4	133.1	131.3	129.5	129.5	128.8	127.6
52.5°	123.9	122.7	120.2	117.8	117.8	116.6	114.7	114.1	113.5	111.7	111.0
55°	109.8	108.6	106.8	103.7	103.1	102.5	100.6	99.4	98.8	96.9	96.9
57.5°	96.9	95.7	92.6	90.8	90.2	89.0	87.1	85.9	85.3	84.1	82.8
60°	85.9	84.1	81.6	79.1	78.5	77.3	75.5	74.2	73.6	71.2	69.9
62.5°	75.5	73.6	71.2	68.7	68.1	66.9	64.4	63.2	62.0	59.5	58.3
65°	65.6	63.8	61.4	58.9	57.7	57.1	54.6	52.8	51.5	49.7	47.2
67.5°	56.4	54.6	52.1	49.1	49.1	47.2	45.4	43.6	41.7	39.9	38.0
70°	47.9	46.0	43.6	41.1	40.5	39.3	37.4	35.0	33.7	31.3	29.4
72.5°	39.9	38.0	35.6	33.1	32.5	31.3	29.4	27.0	25.2	23.3	21.5
75°	32.5	30.7	28.2	26.4	25.8	24.5	22.7	20.2	18.4	17.2	15.3
77.5°	25.8	23.9	22.1	20.2	19.6	18.4	16.6	15.3	13.5	12.3	10.4
80°	19.6	18.4	16.6	15.3	14.7	13.5	12.3	10.4	9.2	8.0	7.4
82.5°	14.1	12.9	11.7	9.8	9.8	8.6	8.0	6.7	5.5	4.9	4.3
85°	8.0	6.7	6.1	5.5	4.9	4.9	4.3	3.7	3.1	2.5	2.5
87.5°	2.5	2.5	1.8	1.8	1.8	1.8	1.2	1.2	1.2	1.2	1.2
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°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	438.7	439.3	438.0	439.3	438.0	438.7	437.4	438.7	437.4	438.7	436.2
5°	434.4	434.4	432.5	433.8	432.5	433.1	430.7	431.3	430.1	431.3	428.8
7.5°	427.0	427.6	424.5	425.8	423.9	423.9	422.1	422.7	420.9	421.5	419.6
10°	418.4	417.8	414.7	416.0	413.5	413.5	411.7	411.7	409.2	409.8	407.4
12.5°	406.1	405.5	401.8	403.1	400.6	400.6	398.8	398.8	396.3	397.6	395.1
15°	392.0	391.4	387.7	388.4	385.9	385.9	383.4	384.1	382.2	383.4	381.0
17.5°	376.1	375.5	371.8	372.4	369.3	369.9	368.1	367.5	366.3	366.9	365.0
20°	359.5	358.3	354.6	355.2	354.0	352.2	350.9	351.5	350.3	351.5	349.7
22.5°	342.3	339.9	336.8	336.8	335.6	335.6	333.7	335.0	332.5	334.4	333.1
25°	322.7	320.9	318.4	319.6	317.2	317.2	315.3	316.0	314.7	316.0	314.7
27.5°	303.7	302.5	298.8	300.0	298.2	298.8	296.9	297.6	296.9	298.2	296.9
30°	283.4	282.8	280.4	280.4	279.8	279.1	278.5	278.5	277.9	279.8	278.5
32.5°	264.4	262.6	260.1	262.0	258.9	260.7	259.5	260.7	259.5	260.7	260.1
35°	244.8	244.2	241.1	241.7	241.1	241.1	240.5	240.5	240.5	242.3	242.3
37.5°	223.9	223.3	221.5	222.1	220.9	220.3	220.3	221.5	221.5	222.7	222.7
40°	203.7	204.3	202.5	202.5	201.8	201.8	201.8	203.1	202.5	203.7	203.1
42.5°	183.4	183.4	181.6	182.2	181.6	182.2	182.2	183.4	183.4	184.1	183.4
45°	164.4	164.4	163.8	164.4	163.2	163.8	163.2	164.4	163.8	164.4	164.4
47.5°	145.4	145.4	145.4	144.8	144.8	144.8	144.8	144.8	144.2	145.4	144.8
50°	127.6	128.2	127.6	127.6	127.0	127.6	127.0	127.0	125.8	126.4	126.4
52.5°	111.7	111.7	110.4	110.4	110.4	109.8	109.8	109.8	109.2	109.2	108.0
55°	96.3	96.3	95.1	95.1	94.5	93.9	93.3	93.3	91.4	91.4	89.6
57.5°	82.2	81.6	79.8	79.8	78.5	77.9	77.3	76.7	75.5	74.2	73.6
60°	69.3	68.1	66.9	66.3	65.0	63.8	62.6	61.4	60.1	59.5	58.9
62.5°	57.1	55.2	54.0	53.4	52.1	50.3	49.1	47.9	46.6	46.0	44.8
65°	46.0	44.2	42.3	41.7	40.5	39.3	37.4	36.2	35.0	34.4	34.4
67.5°	36.2	34.4	31.9	31.9	30.7	29.4	28.2	27.0	26.4	27.0	27.0
70°	27.0	25.8	23.9	23.3	22.1	20.9	20.2	20.2	20.2	20.9	20.2
72.5°	20.2	18.4	17.2	16.6	16.0	15.3	15.3	15.3	14.7	15.3	15.3
75°	14.1	12.9	11.7	11.7	11.0	11.0	11.0	11.0	11.0	11.0	11.0
77.5°	9.8	8.6	8.0	8.0	8.0	7.4	7.4	7.4	7.4	7.4	7.4
80°	6.1	6.1	5.5	5.5	4.9	4.9	4.9	4.9	4.9	4.9	4.9
82.5°	3.7	3.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.2	1.2
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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	441.7	441.7	441.7	441.7	441.7	441.7	441.7	441.7
2.5°	436.2	438.0	435.6	437.4	436.8	436.2	435.0	437.4
5°	428.8	429.5	427.0	429.5	428.8	427.6	426.4	428.8
7.5°	418.4	420.3	417.2	419.6	419.0	417.8	416.6	419.0
10°	406.8	408.6	406.1	408.0	408.0	406.8	404.9	407.4
12.5°	393.9	395.1	392.6	395.1	394.5	393.3	392.6	394.5
15°	379.8	381.6	379.1	381.0	380.4	379.8	379.1	381.0
17.5°	364.4	366.3	364.4	366.3	366.3	364.4	363.8	365.0
20°	349.1	350.3	348.5	350.3	349.7	349.7	348.5	350.3
22.5°	331.9	333.7	332.5	333.7	333.1	333.1	332.5	333.7
25°	314.7	316.6	314.7	316.6	316.0	316.0	314.7	317.8
27.5°	297.6	298.8	296.9	299.4	298.8	297.6	298.2	298.8
30°	279.1	280.4	279.1	281.0	281.0	281.0	279.8	281.0
32.5°	260.7	262.6	260.7	262.6	262.0	262.0	261.4	262.6
35°	242.3	243.0	241.7	243.6	243.6	244.2	243.0	244.8
37.5°	223.3	223.9	223.3	223.9	225.2	223.3	224.5	225.2
40°	203.7	204.9	204.3	204.9	204.9	205.5	204.9	205.5
42.5°	184.1	185.3	184.1	185.9	185.3	185.3	185.9	185.9
45°	163.8	165.6	164.4	165.6	166.3	165.6	165.6	166.9
47.5°	144.8	146.0	145.4	146.0	146.0	146.0	146.0	147.2
50°	125.8	126.4	126.4	127.0	127.0	127.6	126.4	127.0
52.5°	106.8	108.0	108.0	108.0	107.4	108.0	108.0	108.0
55°	89.6	90.2	89.0	90.2	90.2	89.6	89.6	90.8
57.5°	73.0	73.0	73.0	73.0	73.0	72.4	73.0	73.0
60°	57.7	58.3	57.7	57.7	57.7	57.7	57.1	58.3
62.5°	44.8	44.8	44.2	44.8	44.8	44.8	45.4	45.4
65°	35.0	35.6	35.0	35.6	35.6	35.6	35.6	36.2
67.5°	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
70°	20.9	20.9	20.9	21.5	20.9	20.9	20.9	21.5
72.5°	15.3	15.3	15.3	15.3	15.3	15.3	16.0	16.0
75°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
77.5°	7.4	7.4	7.4	8.0	7.4	8.0	7.4	7.4
80°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6
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)