

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: P226245

Luminaire Tested: **LD2B10D010 EU2B10WW8035 2LBSW***

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P226245
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14828)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD2B10D010 EU2B10WW8035 2LBSW*
Description: 1000 Lumen, 2inch Portfolio LED Downlight
WALL WASH OPTIC
WALL WASH LENSED TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 741.6 lumens
Efficiency: N/A
Efficacy: 72.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 0.79 / 1.02
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

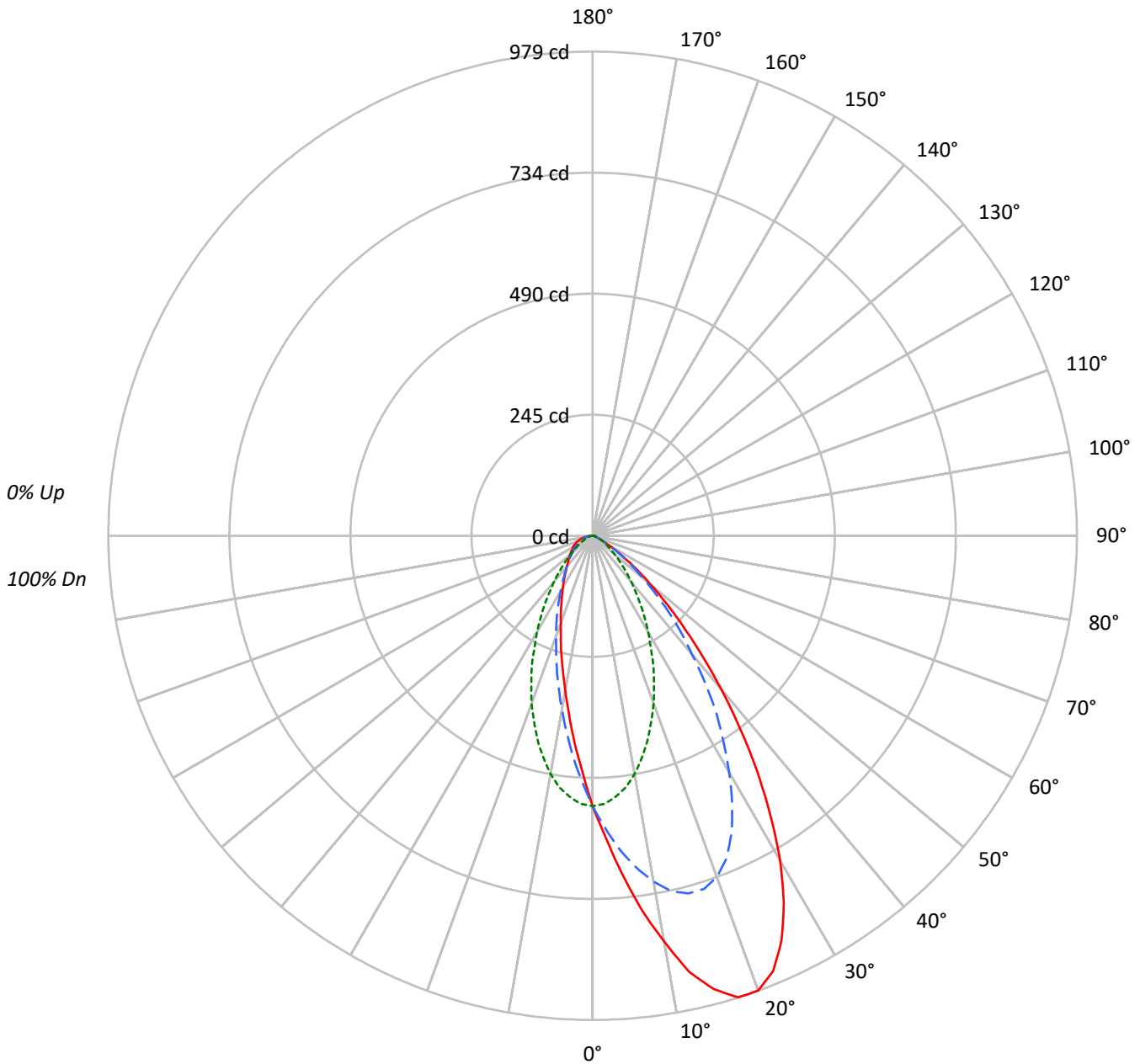
Input Watts (W): 10.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
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			
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81			
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73			
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55			
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50			
8	72	60	53	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46			
9	68	56	50	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43			
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	211646	211646	211646
5°	266812	206000	163073
10°	327755	192452	125155
15°	380639	171873	98127
20°	403384	148641	77330
25°	386018	124242	63681
30°	338985	100367	53493
35°	273125	79157	46104
40°	203724	61385	40907
45°	141056	46343	37304
50°	90873	34348	35493
55°	53418	26067	34779
60°	28509	21381	35636
65°	13473	16864	35378
70°	6229	14610	35448
75°	8231	13769	38612
80°	8253	12269	37029
85°	8000	16444	32888



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.6	7.0
10°-20°	144.1	19.4
20°-30°	188.0	25.3
30°-40°	162.7	21.9
40°-50°	103.0	13.9
50°-60°	51.6	7.0
60°-70°	23.7	3.2
70°-80°	12.7	1.7
80°-90°	4.1	0.6
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°	383.7	51.7
0°-40°	546.4	73.7
0°-60°	701.0	94.5
0°-90°	741.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	741.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	546	546	546	546	546	
5°	686	638	530	449	419	70
15°	949	749	429	280	245	267
25°	903	664	291	167	149	409
35°	578	434	167	101	98	359
45°	258	215	85	66	68	203
55°	79	74	39	44	52	76
65°	15	17	18	31	39	17
75°	6	6	9	18	26	5
85°	2	2	4	6	7	1
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°	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4
2.5°	610.7	614.4	614.4	616.3	608.9	610.7	610.7	607.1	601.5	597.9	592.3
5°	686.2	686.2	684.3	686.2	680.6	677.0	678.8	671.4	656.7	649.4	638.3
7.5°	763.4	759.7	759.7	757.9	748.7	743.2	741.3	728.5	708.2	693.5	677.0
10°	833.3	833.3	829.6	826.0	813.1	805.7	800.2	780.0	757.9	734.0	710.1
12.5°	903.2	899.5	894.0	886.7	868.3	860.9	851.7	827.8	794.7	767.1	735.8
15°	949.2	951.1	941.9	932.7	912.4	901.4	890.3	860.9	822.3	787.3	748.7
17.5°	978.6	976.8	967.6	956.6	934.5	921.6	908.7	873.8	833.3	791.0	748.7
20°	978.6	978.6	967.6	956.6	932.7	917.9	905.1	868.3	824.1	780.0	734.0
22.5°	952.9	949.2	941.9	930.8	906.9	894.0	879.3	842.5	796.5	754.2	706.4
25°	903.2	903.2	894.0	881.2	860.9	846.2	833.3	796.5	752.4	710.1	664.1
27.5°	837.0	835.2	826.0	816.8	794.7	783.7	770.8	735.8	697.2	658.6	610.7
30°	757.9	754.2	750.5	735.8	721.1	711.9	700.9	669.6	631.0	594.2	551.9
32.5°	667.8	673.3	664.1	654.9	642.0	632.8	623.6	599.7	564.7	531.6	491.2
35°	577.6	581.3	575.8	568.4	555.5	550.0	540.8	520.6	494.8	463.6	434.1
37.5°	487.5	487.5	487.5	482.0	474.6	469.1	463.6	445.2	423.1	399.2	371.6
40°	402.9	408.4	401.0	399.2	393.7	391.8	386.3	373.4	355.0	338.5	312.7
42.5°	325.6	325.6	327.4	323.8	321.9	318.2	314.6	307.2	294.3	279.6	263.1
45°	257.5	259.4	261.2	255.7	255.7	255.7	253.9	246.5	235.5	226.3	215.2
47.5°	200.5	200.5	202.4	200.5	200.5	200.5	196.8	196.8	189.5	180.3	171.1
50°	150.8	152.7	154.5	154.5	154.5	152.7	152.7	149.0	145.3	141.6	132.4
52.5°	114.1	114.1	112.2	114.1	114.1	114.1	114.1	112.2	110.4	106.7	101.2
55°	79.1	79.1	80.9	80.9	80.9	82.8	82.8	82.8	80.9	79.1	73.6
57.5°	55.2	55.2	55.2	57.0	58.9	58.9	58.9	58.9	57.0	55.2	53.3
60°	36.8	36.8	36.8	38.6	38.6	38.6	38.6	40.5	38.6	38.6	36.8
62.5°	23.9	23.9	23.9	23.9	23.9	25.8	25.8	25.8	25.8	25.8	23.9
65°	14.7	14.7	14.7	14.7	14.7	14.7	16.6	16.6	16.6	16.6	16.6
67.5°	9.2	9.2	9.2	9.2	9.2	11.0	11.0	11.0	11.0	11.0	11.0
70°	5.5	5.5	5.5	5.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4
72.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
75°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
77.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	5.5	5.5	5.5
80°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.7	3.7	1.8
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4
2.5°	592.3	585.0	581.3	572.1	570.3	562.9	562.9	555.5	546.4	542.7	533.5
5°	631.0	616.3	608.9	592.3	586.8	575.8	570.3	555.5	540.8	529.8	516.9
7.5°	664.1	642.0	627.3	605.2	596.0	579.5	568.4	550.0	529.8	513.2	494.8
10°	689.8	660.4	638.3	608.9	597.9	577.6	561.1	535.3	509.6	489.3	467.2
12.5°	706.4	671.4	640.2	605.2	590.5	568.4	544.5	515.1	485.6	459.9	436.0
15°	713.8	671.4	634.6	592.3	575.8	551.9	524.3	489.3	456.2	428.6	402.9
17.5°	708.2	658.6	619.9	572.1	553.7	526.1	494.8	458.1	423.1	393.7	367.9
20°	689.8	638.3	594.2	544.5	524.3	496.7	461.7	424.9	390.0	360.6	333.0
22.5°	658.6	605.2	559.2	509.6	489.3	461.7	424.9	388.1	353.2	323.8	298.0
25°	619.9	562.9	516.9	469.1	447.0	423.1	386.3	349.5	316.4	290.7	264.9
27.5°	568.4	518.8	472.8	424.9	404.7	382.6	345.8	312.7	279.6	253.9	231.8
30°	513.2	465.4	426.8	380.8	362.4	340.3	309.0	275.9	248.3	224.4	204.2
32.5°	458.1	412.1	375.3	336.6	320.1	298.0	270.4	241.0	215.2	195.0	178.4
35°	401.0	362.4	327.4	290.7	277.8	259.4	233.6	207.9	185.8	167.4	150.8
37.5°	344.0	312.7	281.5	252.0	237.3	222.6	198.7	176.6	156.4	141.6	128.8
40°	292.5	264.9	239.1	211.5	198.7	187.6	167.4	149.0	134.3	121.4	110.4
42.5°	242.8	220.7	198.7	176.6	165.6	156.4	139.8	123.3	110.4	101.2	92.0
45°	198.7	182.1	163.7	143.5	138.0	126.9	114.1	103.0	92.0	84.6	77.3
47.5°	160.0	145.3	130.6	115.9	110.4	103.0	92.0	82.8	75.4	69.9	64.4
50°	125.1	114.1	104.9	92.0	88.3	80.9	73.6	66.2	60.7	57.0	53.3
52.5°	95.7	86.5	79.1	71.7	68.1	64.4	57.0	53.3	49.7	47.8	46.0
55°	69.9	64.4	58.9	53.3	51.5	47.8	44.1	40.5	38.6	38.6	38.6
57.5°	49.7	46.0	42.3	38.6	38.6	36.8	35.0	33.1	31.3	31.3	31.3
60°	35.0	33.1	31.3	29.4	27.6	27.6	25.8	27.6	25.8	27.6	27.6
62.5°	23.9	22.1	22.1	20.2	20.2	20.2	20.2	20.2	22.1	22.1	23.9
65°	14.7	14.7	14.7	14.7	14.7	14.7	16.6	16.6	16.6	18.4	18.4
67.5°	11.0	11.0	11.0	12.9	12.9	12.9	12.9	14.7	14.7	14.7	16.6
70°	7.4	9.2	9.2	9.2	9.2	9.2	11.0	11.0	11.0	12.9	12.9
72.5°	7.4	7.4	7.4	7.4	7.4	7.4	9.2	9.2	9.2	11.0	11.0
75°	5.5	7.4	7.4	7.4	7.4	7.4	7.4	9.2	9.2	9.2	11.0
77.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	7.4	7.4	7.4	7.4
80°	3.7	3.7	3.7	5.5	5.5	5.5	5.5	5.5	5.5	5.5	7.4
82.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	5.5
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.7	1.8	3.7	3.7
87.5°	0.0	0.0	0.0	1.8	0.0	1.8	1.8	1.8	1.8	1.8	1.8
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°	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4
2.5°	529.8	524.3	526.1	515.1	516.9	509.6	505.9	500.4	496.7	491.2	493.0
5°	507.7	498.5	494.8	482.0	483.8	472.8	465.4	456.2	448.9	439.7	437.8
7.5°	480.1	465.4	459.9	447.0	445.2	430.5	421.3	410.2	401.0	391.8	388.1
10°	448.9	432.3	421.3	408.4	406.5	390.0	379.0	367.9	356.9	347.7	344.0
12.5°	415.7	397.3	384.5	369.8	366.1	351.4	338.5	327.4	316.4	307.2	301.7
15°	380.8	360.6	347.7	333.0	329.3	312.7	301.7	288.8	279.6	270.4	266.7
17.5°	345.8	325.6	310.9	298.0	294.3	277.8	264.9	255.7	244.7	239.1	233.6
20°	310.9	290.7	275.9	264.9	259.4	246.5	233.6	224.4	215.2	209.7	204.2
22.5°	275.9	257.5	244.7	233.6	229.9	217.1	206.0	196.8	191.3	184.0	180.3
25°	244.7	226.3	215.2	204.2	200.5	189.5	182.1	172.9	167.4	161.9	158.2
27.5°	215.2	198.7	187.6	178.4	176.6	167.4	158.2	152.7	147.2	143.5	141.6
30°	185.8	172.9	163.7	156.4	154.5	145.3	138.0	134.3	128.8	126.9	125.1
32.5°	163.7	150.8	143.5	136.1	134.3	126.9	123.3	117.7	114.1	112.2	112.2
35°	139.8	130.6	123.3	119.6	117.7	112.2	106.7	104.9	101.2	99.3	99.3
37.5°	119.6	112.2	106.7	101.2	101.2	97.5	93.8	92.0	90.1	90.1	88.3
40°	103.0	95.7	93.8	90.1	88.3	86.5	84.6	82.8	80.9	80.9	80.9
42.5°	86.5	82.8	79.1	77.3	77.3	75.4	73.6	73.6	71.7	73.6	73.6
45°	73.6	69.9	68.1	66.2	68.1	66.2	66.2	64.4	66.2	66.2	66.2
47.5°	62.5	60.7	58.9	58.9	58.9	58.9	58.9	58.9	58.9	60.7	60.7
50°	53.3	51.5	51.5	51.5	51.5	51.5	53.3	53.3	53.3	55.2	55.2
52.5°	44.1	44.1	44.1	44.1	46.0	46.0	47.8	47.8	49.7	49.7	51.5
55°	38.6	38.6	38.6	38.6	40.5	40.5	42.3	44.1	44.1	46.0	47.8
57.5°	33.1	33.1	35.0	35.0	36.8	36.8	38.6	40.5	40.5	42.3	44.1
60°	27.6	29.4	31.3	31.3	31.3	33.1	35.0	36.8	36.8	38.6	40.5
62.5°	23.9	25.8	27.6	27.6	27.6	29.4	31.3	33.1	33.1	35.0	36.8
65°	20.2	22.1	23.9	23.9	23.9	25.8	27.6	29.4	31.3	31.3	33.1
67.5°	18.4	18.4	20.2	20.2	22.1	23.9	23.9	25.8	27.6	29.4	31.3
70°	14.7	16.6	18.4	18.4	18.4	20.2	22.1	23.9	23.9	25.8	27.6
72.5°	12.9	12.9	14.7	14.7	16.6	18.4	18.4	20.2	22.1	22.1	23.9
75°	11.0	12.9	12.9	12.9	14.7	14.7	16.6	18.4	18.4	20.2	20.2
77.5°	9.2	9.2	11.0	11.0	11.0	12.9	12.9	14.7	14.7	16.6	16.6
80°	7.4	7.4	9.2	9.2	9.2	9.2	11.0	11.0	12.9	12.9	12.9
82.5°	5.5	5.5	5.5	5.5	7.4	7.4	7.4	7.4	9.2	9.2	9.2
85°	3.7	3.7	3.7	3.7	3.7	5.5	5.5	5.5	5.5	5.5	7.4
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
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°	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4
2.5°	487.5	487.5	485.6	483.8	482.0	480.1	478.3	476.4
5°	432.3	434.1	426.8	424.9	424.9	421.3	423.1	419.4
7.5°	380.8	380.8	375.3	373.4	371.6	367.9	366.1	364.2
10°	334.8	333.0	329.3	327.4	323.8	321.9	321.9	318.2
12.5°	294.3	292.5	288.8	287.0	283.3	281.5	279.6	277.8
15°	259.4	257.5	253.9	252.0	250.2	246.5	246.5	244.7
17.5°	226.3	224.4	222.6	218.9	218.9	215.2	213.4	213.4
20°	200.5	198.7	195.0	193.2	193.2	191.3	191.3	187.6
22.5°	176.6	174.8	172.9	171.1	171.1	169.2	167.4	167.4
25°	156.4	154.5	152.7	152.7	150.8	149.0	149.0	149.0
27.5°	138.0	138.0	136.1	136.1	136.1	134.3	134.3	132.4
30°	123.3	123.3	121.4	121.4	121.4	119.6	121.4	119.6
32.5°	110.4	110.4	110.4	110.4	110.4	108.5	108.5	108.5
35°	99.3	99.3	99.3	99.3	99.3	97.5	99.3	97.5
37.5°	88.3	90.1	88.3	88.3	90.1	88.3	88.3	88.3
40°	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
42.5°	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
45°	66.2	68.1	68.1	68.1	68.1	68.1	68.1	68.1
47.5°	62.5	62.5	62.5	62.5	64.4	62.5	64.4	64.4
50°	57.0	57.0	57.0	58.9	58.9	58.9	58.9	58.9
52.5°	53.3	53.3	53.3	53.3	55.2	55.2	55.2	55.2
55°	47.8	49.7	49.7	49.7	51.5	51.5	51.5	51.5
57.5°	46.0	46.0	46.0	47.8	47.8	47.8	49.7	47.8
60°	42.3	42.3	44.1	44.1	44.1	46.0	46.0	46.0
62.5°	38.6	40.5	40.5	40.5	40.5	42.3	42.3	42.3
65°	35.0	36.8	36.8	36.8	38.6	38.6	38.6	38.6
67.5°	31.3	33.1	33.1	35.0	35.0	35.0	35.0	35.0
70°	27.6	29.4	29.4	29.4	31.3	31.3	31.3	31.3
72.5°	25.8	25.8	25.8	27.6	27.6	27.6	29.4	27.6
75°	22.1	23.9	23.9	23.9	23.9	23.9	25.8	25.8
77.5°	18.4	18.4	18.4	18.4	20.2	20.2	20.2	20.2
80°	14.7	14.7	14.7	14.7	16.6	16.6	16.6	16.6
82.5°	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
85°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
87.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
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)