

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: P226268

Luminaire Tested: **LD2B15D010 EU2B15WW9730 2LBSW***

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P226268
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: LD2B15D010 EU2B15WW9730 2LBSW*
Description: 1500 Lumen, 2inch Portfolio LED Downlight
WALL WASH OPTIC
WALL WASH LENSED TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 730.9 lumens
Efficiency: N/A
Efficacy: 51.1 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

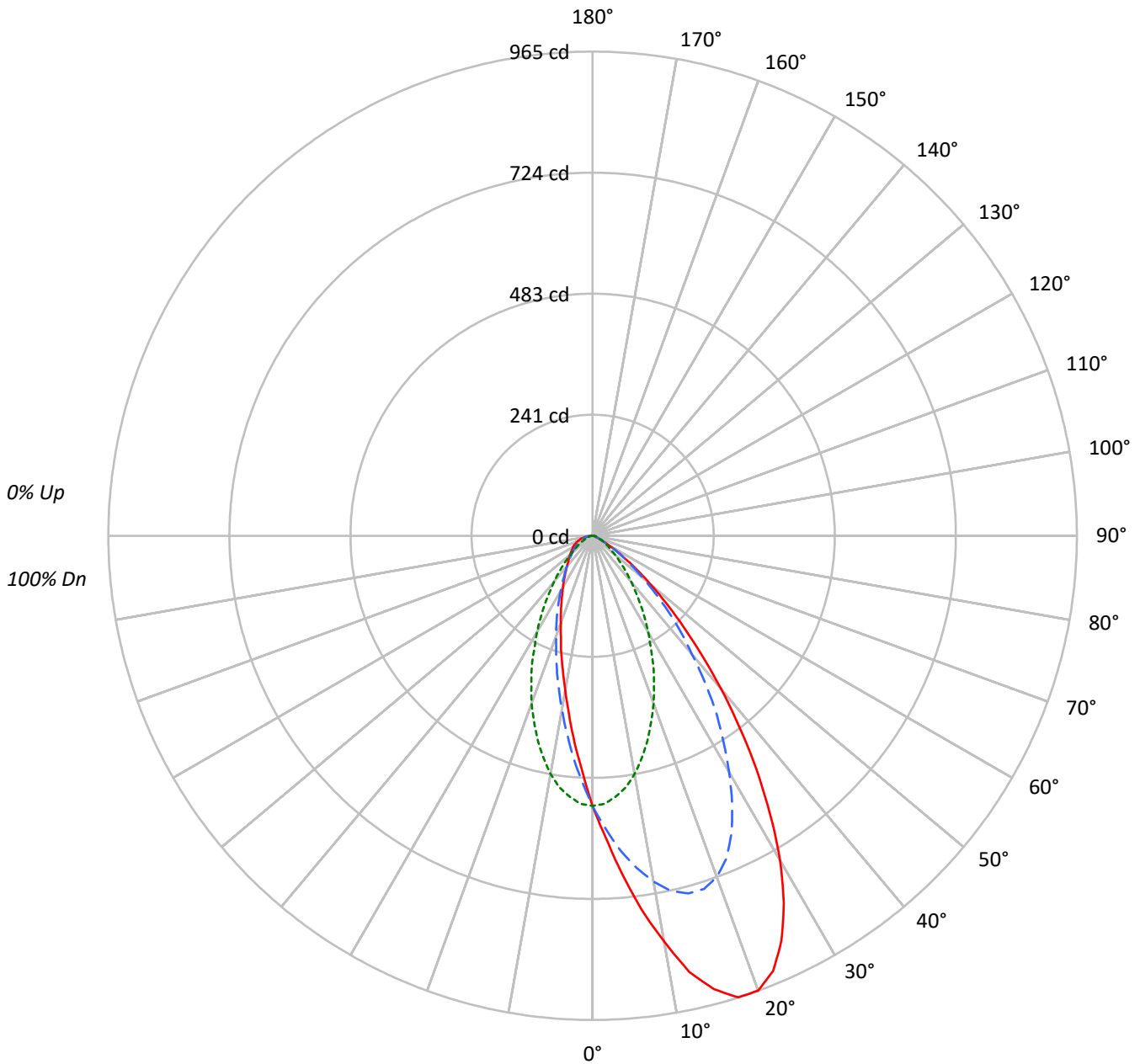
Input Watts (W): 14.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	208586	208586	208586
5°	262963	203045	160740
10°	323035	189699	123385
15°	375185	169387	96684
20°	397613	146498	76217
25°	380462	122447	62783
30°	334110	98936	52733
35°	269200	78022	45442
40°	200791	60526	40350
45°	139029	45686	36757
50°	89607	33866	34951
55°	52675	25730	34306
60°	28121	21072	35094
65°	13290	16589	34920
70°	6116	14383	34882
75°	8082	13619	38013
80°	8030	12045	36359
85°	8000	15999	32443



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.9	7.0
10°-20°	142.0	19.4
20°-30°	185.3	25.3
30°-40°	160.4	21.9
40°-50°	101.5	13.9
50°-60°	50.9	7.0
60°-70°	23.4	3.2
70°-80°	12.5	1.7
80°-90°	4.0	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°	378.1	51.7
0°-40°	538.5	73.7
0°-60°	690.9	94.5
0°-90°	730.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	730.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	538	538	538	538	538	
5°	676	629	522	442	413	69
15°	936	738	422	276	241	263
25°	890	654	286	165	147	403
35°	569	428	165	100	96	354
45°	254	212	83	65	67	200
55°	78	72	38	44	51	75
65°	14	16	18	31	38	17
75°	5	5	9	18	25	5
85°	2	2	4	5	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°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	601.9	605.6	605.6	607.4	600.1	601.9	601.9	598.3	592.9	589.3	583.8
5°	676.3	676.3	674.5	676.3	670.8	667.2	669.0	661.8	647.3	640.0	629.1
7.5°	752.4	748.8	748.8	747.0	737.9	732.5	730.7	718.0	698.0	683.5	667.2
10°	821.3	821.3	817.7	814.1	801.4	794.1	788.7	768.7	747.0	723.4	699.9
12.5°	890.2	886.6	881.2	873.9	855.8	848.5	839.5	815.9	783.3	756.1	725.2
15°	935.6	937.4	928.3	919.2	899.3	888.4	877.5	848.5	810.5	776.0	737.9
17.5°	964.6	962.8	953.7	942.8	921.0	908.4	895.7	861.2	821.3	779.6	737.9
20°	964.6	964.6	953.7	942.8	919.2	904.7	892.0	855.8	812.3	768.7	723.4
22.5°	939.2	935.6	928.3	917.4	893.9	881.2	866.7	830.4	785.1	743.4	696.2
25°	890.2	890.2	881.2	868.5	848.5	834.0	821.3	785.1	741.6	699.9	654.5
27.5°	825.0	823.1	814.1	805.0	783.3	772.4	759.7	725.2	687.2	649.1	601.9
30°	747.0	743.4	739.7	725.2	710.7	701.7	690.8	660.0	621.9	585.6	543.9
32.5°	658.2	663.6	654.5	645.5	632.8	623.7	614.6	591.1	556.6	524.0	484.1
35°	569.3	572.9	567.5	560.2	547.6	542.1	533.0	513.1	487.7	456.9	427.9
37.5°	480.5	480.5	480.5	475.0	467.8	462.3	456.9	438.8	417.0	393.4	366.2
40°	397.1	402.5	395.3	393.4	388.0	386.2	380.7	368.1	349.9	333.6	308.2
42.5°	320.9	320.9	322.7	319.1	317.3	313.7	310.0	302.8	290.1	275.6	259.3
45°	253.8	255.6	257.5	252.0	252.0	252.0	250.2	243.0	232.1	223.0	212.1
47.5°	197.6	197.6	199.4	197.6	197.6	197.6	194.0	194.0	186.7	177.7	168.6
50°	148.7	150.5	152.3	152.3	152.3	150.5	150.5	146.9	143.2	139.6	130.5
52.5°	112.4	112.4	110.6	112.4	112.4	112.4	112.4	110.6	108.8	105.2	99.7
55°	78.0	78.0	79.8	79.8	79.8	81.6	81.6	81.6	79.8	78.0	72.5
57.5°	54.4	54.4	54.4	56.2	58.0	58.0	58.0	58.0	56.2	54.4	52.6
60°	36.3	36.3	36.3	38.1	38.1	38.1	38.1	39.9	38.1	38.1	36.3
62.5°	23.6	23.6	23.6	23.6	23.6	25.4	25.4	25.4	25.4	25.4	23.6
65°	14.5	14.5	14.5	14.5	14.5	14.5	16.3	16.3	16.3	16.3	16.3
67.5°	9.1	9.1	9.1	9.1	9.1	10.9	10.9	10.9	10.9	10.9	10.9
70°	5.4	5.4	5.4	5.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3
72.5°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
75°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
77.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	5.4	5.4	5.4
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6	3.6	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°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	583.8	576.6	572.9	563.9	562.1	554.8	554.8	547.6	538.5	534.9	525.8
5°	621.9	607.4	600.1	583.8	578.4	567.5	562.1	547.6	533.0	522.2	509.5
7.5°	654.5	632.8	618.3	596.5	587.4	571.1	560.2	542.1	522.2	505.9	487.7
10°	679.9	650.9	629.1	600.1	589.3	569.3	553.0	527.6	502.2	482.3	460.5
12.5°	696.2	661.8	631.0	596.5	582.0	560.2	536.7	507.7	478.7	453.3	429.7
15°	703.5	661.8	625.5	583.8	567.5	543.9	516.7	482.3	449.6	422.4	397.1
17.5°	698.0	649.1	611.0	563.9	545.7	518.5	487.7	451.5	417.0	388.0	362.6
20°	679.9	629.1	585.6	536.7	516.7	489.5	455.1	418.8	384.4	355.4	328.2
22.5°	649.1	596.5	551.2	502.2	482.3	455.1	418.8	382.6	348.1	319.1	293.7
25°	611.0	554.8	509.5	462.3	440.6	417.0	380.7	344.5	311.9	286.5	261.1
27.5°	560.2	511.3	466.0	418.8	398.9	377.1	340.9	308.2	275.6	250.2	228.4
30°	505.9	458.7	420.6	375.3	357.2	335.4	304.6	272.0	244.8	221.2	201.3
32.5°	451.5	406.1	369.9	331.8	315.5	293.7	266.5	237.5	212.1	192.2	175.9
35°	395.3	357.2	322.7	286.5	273.8	255.6	230.3	204.9	183.1	165.0	148.7
37.5°	339.0	308.2	277.4	248.4	233.9	219.4	195.8	174.1	154.1	139.6	126.9
40°	288.3	261.1	235.7	208.5	195.8	184.9	165.0	146.9	132.4	119.7	108.8
42.5°	239.3	217.6	195.8	174.1	163.2	154.1	137.8	121.5	108.8	99.7	90.7
45°	195.8	179.5	161.4	141.4	136.0	125.1	112.4	101.5	90.7	83.4	76.1
47.5°	157.7	143.2	128.7	114.2	108.8	101.5	90.7	81.6	74.3	68.9	63.5
50°	123.3	112.4	103.3	90.7	87.0	79.8	72.5	65.3	59.8	56.2	52.6
52.5°	94.3	85.2	78.0	70.7	67.1	63.5	56.2	52.6	49.0	47.1	45.3
55°	68.9	63.5	58.0	52.6	50.8	47.1	43.5	39.9	38.1	38.1	38.1
57.5°	49.0	45.3	41.7	38.1	38.1	36.3	34.4	32.6	30.8	30.8	30.8
60°	34.4	32.6	30.8	29.0	27.2	27.2	25.4	27.2	25.4	27.2	27.2
62.5°	23.6	21.8	21.8	19.9	19.9	19.9	19.9	19.9	21.8	21.8	23.6
65°	14.5	14.5	14.5	14.5	14.5	14.5	16.3	16.3	16.3	18.1	18.1
67.5°	10.9	10.9	10.9	12.7	12.7	12.7	12.7	14.5	14.5	14.5	16.3
70°	7.3	9.1	9.1	9.1	9.1	9.1	10.9	10.9	10.9	12.7	12.7
72.5°	7.3	7.3	7.3	7.3	7.3	7.3	9.1	9.1	9.1	10.9	10.9
75°	5.4	7.3	7.3	7.3	7.3	7.3	7.3	9.1	9.1	9.1	10.9
77.5°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	7.3	7.3	7.3	7.3
80°	3.6	3.6	3.6	5.4	5.4	5.4	5.4	5.4	5.4	5.4	7.3
82.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	5.4
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6	1.8	3.6	3.6
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°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	522.2	516.7	518.5	507.7	509.5	502.2	498.6	493.2	489.5	484.1	485.9
5°	500.4	491.3	487.7	475.0	476.8	466.0	458.7	449.6	442.4	433.3	431.5
7.5°	473.2	458.7	453.3	440.6	438.8	424.3	415.2	404.3	395.3	386.2	382.6
10°	442.4	426.1	415.2	402.5	400.7	384.4	373.5	362.6	351.7	342.7	339.0
12.5°	409.8	391.6	378.9	364.4	360.8	346.3	333.6	322.7	311.9	302.8	297.3
15°	375.3	355.4	342.7	328.2	324.5	308.2	297.3	284.7	275.6	266.5	262.9
17.5°	340.9	320.9	306.4	293.7	290.1	273.8	261.1	252.0	241.1	235.7	230.3
20°	306.4	286.5	272.0	261.1	255.6	243.0	230.3	221.2	212.1	206.7	201.3
22.5°	272.0	253.8	241.1	230.3	226.6	213.9	203.1	194.0	188.6	181.3	177.7
25°	241.1	223.0	212.1	201.3	197.6	186.7	179.5	170.4	165.0	159.6	155.9
27.5°	212.1	195.8	184.9	175.9	174.1	165.0	155.9	150.5	145.0	141.4	139.6
30°	183.1	170.4	161.4	154.1	152.3	143.2	136.0	132.4	126.9	125.1	123.3
32.5°	161.4	148.7	141.4	134.2	132.4	125.1	121.5	116.0	112.4	110.6	110.6
35°	137.8	128.7	121.5	117.9	116.0	110.6	105.2	103.3	99.7	97.9	97.9
37.5°	117.9	110.6	105.2	99.7	99.7	96.1	92.5	90.7	88.8	88.8	87.0
40°	101.5	94.3	92.5	88.8	87.0	85.2	83.4	81.6	79.8	79.8	79.8
42.5°	85.2	81.6	78.0	76.1	76.1	74.3	72.5	72.5	70.7	72.5	72.5
45°	72.5	68.9	67.1	65.3	67.1	65.3	65.3	63.5	65.3	65.3	65.3
47.5°	61.6	59.8	58.0	58.0	58.0	58.0	58.0	58.0	58.0	59.8	59.8
50°	52.6	50.8	50.8	50.8	50.8	50.8	52.6	52.6	52.6	54.4	54.4
52.5°	43.5	43.5	43.5	43.5	45.3	45.3	47.1	47.1	49.0	49.0	50.8
55°	38.1	38.1	38.1	38.1	39.9	39.9	41.7	43.5	43.5	45.3	47.1
57.5°	32.6	32.6	34.4	34.4	36.3	36.3	38.1	39.9	39.9	41.7	43.5
60°	27.2	29.0	30.8	30.8	30.8	32.6	34.4	36.3	36.3	38.1	39.9
62.5°	23.6	25.4	27.2	27.2	27.2	29.0	30.8	32.6	32.6	34.4	36.3
65°	19.9	21.8	23.6	23.6	23.6	25.4	27.2	29.0	30.8	30.8	32.6
67.5°	18.1	18.1	19.9	19.9	21.8	23.6	23.6	25.4	27.2	29.0	30.8
70°	14.5	16.3	18.1	18.1	18.1	19.9	21.8	23.6	23.6	25.4	27.2
72.5°	12.7	12.7	14.5	14.5	16.3	18.1	18.1	19.9	21.8	21.8	23.6
75°	10.9	12.7	12.7	12.7	14.5	14.5	16.3	18.1	18.1	19.9	19.9
77.5°	9.1	9.1	10.9	10.9	10.9	12.7	12.7	14.5	14.5	16.3	16.3
80°	7.3	7.3	9.1	9.1	9.1	9.1	10.9	10.9	12.7	12.7	12.7
82.5°	5.4	5.4	5.4	5.4	7.3	7.3	7.3	7.3	9.1	9.1	9.1
85°	3.6	3.6	3.6	3.6	3.6	5.4	5.4	5.4	5.4	5.4	7.3
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°	538.5	538.5	538.5	538.5	538.5	538.5	538.5	538.5
2.5°	480.5	480.5	478.7	476.8	475.0	473.2	471.4	469.6
5°	426.1	427.9	420.6	418.8	418.8	415.2	417.0	413.4
7.5°	375.3	375.3	369.9	368.1	366.2	362.6	360.8	359.0
10°	330.0	328.2	324.5	322.7	319.1	317.3	317.3	313.7
12.5°	290.1	288.3	284.7	282.8	279.2	277.4	275.6	273.8
15°	255.6	253.8	250.2	248.4	246.6	243.0	243.0	241.1
17.5°	223.0	221.2	219.4	215.8	215.8	212.1	210.3	210.3
20°	197.6	195.8	192.2	190.4	190.4	188.6	188.6	184.9
22.5°	174.1	172.2	170.4	168.6	168.6	166.8	165.0	165.0
25°	154.1	152.3	150.5	150.5	148.7	146.9	146.9	146.9
27.5°	136.0	136.0	134.2	134.2	134.2	132.4	132.4	130.5
30°	121.5	121.5	119.7	119.7	119.7	117.9	119.7	117.9
32.5°	108.8	108.8	108.8	108.8	108.8	107.0	107.0	107.0
35°	97.9	97.9	97.9	97.9	97.9	96.1	97.9	96.1
37.5°	87.0	88.8	87.0	87.0	88.8	87.0	87.0	87.0
40°	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8
42.5°	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
45°	65.3	67.1	67.1	67.1	67.1	67.1	67.1	67.1
47.5°	61.6	61.6	61.6	61.6	63.5	61.6	63.5	63.5
50°	56.2	56.2	56.2	58.0	58.0	58.0	58.0	58.0
52.5°	52.6	52.6	52.6	52.6	54.4	54.4	54.4	54.4
55°	47.1	49.0	49.0	49.0	50.8	50.8	50.8	50.8
57.5°	45.3	45.3	45.3	47.1	47.1	47.1	49.0	47.1
60°	41.7	41.7	43.5	43.5	43.5	45.3	45.3	45.3
62.5°	38.1	39.9	39.9	39.9	39.9	41.7	41.7	41.7
65°	34.4	36.3	36.3	36.3	38.1	38.1	38.1	38.1
67.5°	30.8	32.6	32.6	34.4	34.4	34.4	34.4	34.4
70°	27.2	29.0	29.0	29.0	30.8	30.8	30.8	30.8
72.5°	25.4	25.4	25.4	27.2	27.2	27.2	29.0	27.2
75°	21.8	23.6	23.6	23.6	23.6	23.6	25.4	25.4
77.5°	18.1	18.1	18.1	18.1	19.9	19.9	19.9	19.9
80°	14.5	14.5	14.5	14.5	16.3	16.3	16.3	16.3
82.5°	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
85°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
87.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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)