

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: P226256

Luminaire Tested: **LD2B15D010 EU2B15WW8027 2LBSW***

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P226256
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 EU2B15WW8027 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: 968.5 lumens
Efficiency: N/A
Efficacy: 67.7 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

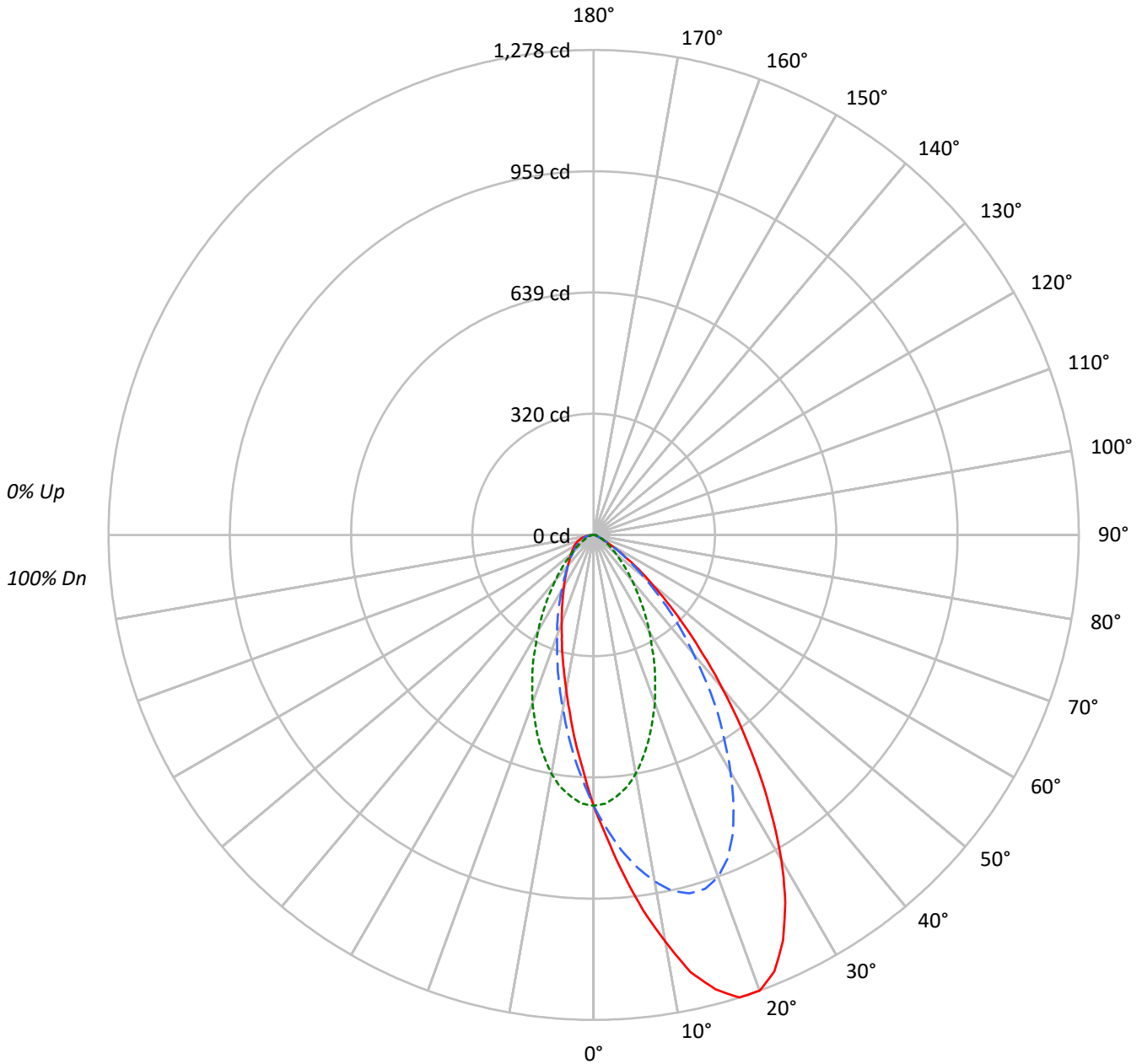
Input Watts (W): 14.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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								
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°	276410	276410	276410
5°	348465	269028	212999
10°	428091	251372	163464
15°	497132	224485	128123
20°	526880	194107	101031
25°	504191	162237	83170
30°	442751	131094	69863
35°	356727	103368	60195
40°	266070	80195	53447
45°	184277	60531	48699
50°	118713	44894	46340
55°	69760	34104	45449
60°	37263	27889	46559
65°	17598	21997	46285
70°	8154	19026	46207
75°	10775	17959	50285
80°	10707	16061	48182
85°	10666	21333	42665



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	7.0
10°-20°	188.2	19.4
20°-30°	245.5	25.3
30°-40°	212.5	21.9
40°-50°	134.5	13.9
50°-60°	67.4	7.0
60°-70°	31.0	3.2
70°-80°	16.6	1.7
80°-90°	5.4	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°	501.1	51.7
0°-40°	713.6	73.7
0°-60°	915.6	94.5
0°-90°	968.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	968.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	714	714	714	714	714	
5°	896	834	692	586	548	91
15°	1240	978	560	365	320	349
25°	1180	867	380	219	195	534
35°	754	567	219	132	127	469
45°	336	281	110	86	89	265
55°	103	96	50	58	67	99
65°	19	22	24	41	50	22
75°	7	7	12	24	34	7
85°	2	2	5	7	10	2
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°	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6
2.5°	797.7	802.5	802.5	804.9	795.2	797.7	797.7	792.8	785.6	780.8	773.6
5°	896.2	896.2	893.8	896.2	888.9	884.1	886.5	876.9	857.7	848.1	833.7
7.5°	997.1	992.3	992.3	989.9	977.8	970.6	968.2	951.4	925.0	905.8	884.1
10°	1088.4	1088.4	1083.6	1078.8	1061.9	1052.3	1045.1	1018.7	989.9	958.6	927.4
12.5°	1179.7	1174.9	1167.6	1158.0	1134.0	1124.4	1112.4	1081.2	1037.9	1001.9	961.0
15°	1239.7	1242.1	1230.1	1218.1	1191.7	1177.3	1162.8	1124.4	1073.9	1028.3	977.8
17.5°	1278.2	1275.8	1263.7	1249.3	1220.5	1203.7	1186.9	1141.2	1088.4	1033.1	977.8
20°	1278.2	1278.2	1263.7	1249.3	1218.1	1198.9	1182.1	1134.0	1076.3	1018.7	958.6
22.5°	1244.5	1239.7	1230.1	1215.7	1184.5	1167.6	1148.4	1100.4	1040.3	985.1	922.6
25°	1179.7	1179.7	1167.6	1150.8	1124.4	1105.2	1088.4	1040.3	982.6	927.4	867.3
27.5°	1093.2	1090.8	1078.8	1066.7	1037.9	1023.5	1006.7	961.0	910.6	860.1	797.7
30°	989.9	985.1	980.2	961.0	941.8	929.8	915.4	874.5	824.1	776.0	720.8
32.5°	872.1	879.3	867.3	855.3	838.5	826.5	814.5	783.2	737.6	694.3	641.5
35°	754.4	759.2	752.0	742.4	725.6	718.4	706.4	679.9	646.3	605.4	567.0
37.5°	636.7	636.7	636.7	629.5	619.9	612.7	605.4	581.4	552.6	521.4	485.3
40°	526.2	533.4	523.8	521.4	514.1	511.7	504.5	487.7	463.7	442.1	408.4
42.5°	425.3	425.3	427.7	422.9	420.4	415.6	410.8	401.2	384.4	365.2	343.6
45°	336.4	338.8	341.2	334.0	334.0	334.0	331.6	321.9	307.5	295.5	281.1
47.5°	261.9	261.9	264.3	261.9	261.9	261.9	257.1	257.1	247.5	235.5	223.4
50°	197.0	199.4	201.8	201.8	201.8	199.4	199.4	194.6	189.8	185.0	173.0
52.5°	149.0	149.0	146.6	149.0	149.0	149.0	149.0	146.6	144.2	139.3	132.1
55°	103.3	103.3	105.7	105.7	105.7	108.1	108.1	108.1	105.7	103.3	96.1
57.5°	72.1	72.1	72.1	74.5	76.9	76.9	76.9	76.9	74.5	72.1	69.7
60°	48.1	48.1	48.1	50.5	50.5	50.5	50.5	52.9	50.5	50.5	48.1
62.5°	31.2	31.2	31.2	31.2	31.2	33.6	33.6	33.6	33.6	33.6	31.2
65°	19.2	19.2	19.2	19.2	19.2	19.2	21.6	21.6	21.6	21.6	21.6
67.5°	12.0	12.0	12.0	12.0	12.0	14.4	14.4	14.4	14.4	14.4	14.4
70°	7.2	7.2	7.2	7.2	9.6	9.6	9.6	9.6	9.6	9.6	9.6
72.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
75°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
77.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	7.2	7.2	7.2
80°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
82.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	4.8	4.8	2.4
85°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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°	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6
2.5°	773.6	764.0	759.2	747.2	744.8	735.2	735.2	725.6	713.6	708.8	696.7
5°	824.1	804.9	795.2	773.6	766.4	752.0	744.8	725.6	706.4	691.9	675.1
7.5°	867.3	838.5	819.3	790.4	778.4	756.8	742.4	718.4	691.9	670.3	646.3
10°	901.0	862.5	833.7	795.2	780.8	754.4	732.8	699.1	665.5	639.1	610.3
12.5°	922.6	876.9	836.1	790.4	771.2	742.4	711.2	672.7	634.3	600.6	569.4
15°	932.2	876.9	828.9	773.6	752.0	720.8	684.7	639.1	595.8	559.8	526.2
17.5°	925.0	860.1	809.7	747.2	723.2	687.1	646.3	598.2	552.6	514.1	480.5
20°	901.0	833.7	776.0	711.2	684.7	648.7	603.0	555.0	509.3	470.9	434.9
22.5°	860.1	790.4	730.4	665.5	639.1	603.0	555.0	506.9	461.3	422.9	389.2
25°	809.7	735.2	675.1	612.7	583.8	552.6	504.5	456.5	413.2	379.6	346.0
27.5°	742.4	677.5	617.5	555.0	528.6	499.7	451.7	408.4	365.2	331.6	302.7
30°	670.3	607.8	557.4	497.3	473.3	444.5	403.6	360.4	324.3	293.1	266.7
32.5°	598.2	538.2	490.1	439.7	418.0	389.2	353.2	314.7	281.1	254.7	233.0
35°	523.8	473.3	427.7	379.6	362.8	338.8	305.1	271.5	242.7	218.6	197.0
37.5°	449.3	408.4	367.6	329.2	309.9	290.7	259.5	230.6	204.2	185.0	168.2
40°	382.0	346.0	312.3	276.3	259.5	245.1	218.6	194.6	175.4	158.6	144.2
42.5°	317.1	288.3	259.5	230.6	216.2	204.2	182.6	161.0	144.2	132.1	120.1
45°	259.5	237.9	213.8	187.4	180.2	165.8	149.0	134.5	120.1	110.5	100.9
47.5°	209.0	189.8	170.6	151.4	144.2	134.5	120.1	108.1	98.5	91.3	84.1
50°	163.4	149.0	136.9	120.1	115.3	105.7	96.1	86.5	79.3	74.5	69.7
52.5°	124.9	112.9	103.3	93.7	88.9	84.1	74.5	69.7	64.9	62.5	60.1
55°	91.3	84.1	76.9	69.7	67.3	62.5	57.7	52.9	50.5	50.5	50.5
57.5°	64.9	60.1	55.3	50.5	50.5	48.1	45.6	43.2	40.8	40.8	40.8
60°	45.6	43.2	40.8	38.4	36.0	36.0	33.6	36.0	33.6	36.0	36.0
62.5°	31.2	28.8	28.8	26.4	26.4	26.4	26.4	26.4	28.8	28.8	31.2
65°	19.2	19.2	19.2	19.2	19.2	19.2	21.6	21.6	21.6	24.0	24.0
67.5°	14.4	14.4	14.4	16.8	16.8	16.8	16.8	19.2	19.2	19.2	21.6
70°	9.6	12.0	12.0	12.0	12.0	12.0	14.4	14.4	14.4	16.8	16.8
72.5°	9.6	9.6	9.6	9.6	9.6	9.6	12.0	12.0	12.0	14.4	14.4
75°	7.2	9.6	9.6	9.6	9.6	9.6	9.6	12.0	12.0	12.0	14.4
77.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	9.6	9.6	9.6	9.6
80°	4.8	4.8	4.8	7.2	7.2	7.2	7.2	7.2	7.2	7.2	9.6
82.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	7.2
85°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	4.8	2.4	4.8	4.8
87.5°	0.0	0.0	0.0	2.4	0.0	2.4	2.4	2.4	2.4	2.4	2.4
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°	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6
2.5°	691.9	684.7	687.1	672.7	675.1	665.5	660.7	653.5	648.7	641.5	643.9
5°	663.1	651.1	646.3	629.5	631.9	617.5	607.8	595.8	586.2	574.2	571.8
7.5°	627.1	607.8	600.6	583.8	581.4	562.2	550.2	535.8	523.8	511.7	506.9
10°	586.2	564.6	550.2	533.4	531.0	509.3	494.9	480.5	466.1	454.1	449.3
12.5°	543.0	519.0	502.1	482.9	478.1	458.9	442.1	427.7	413.2	401.2	394.0
15°	497.3	470.9	454.1	434.9	430.1	408.4	394.0	377.2	365.2	353.2	348.4
17.5°	451.7	425.3	406.0	389.2	384.4	362.8	346.0	334.0	319.5	312.3	305.1
20°	406.0	379.6	360.4	346.0	338.8	321.9	305.1	293.1	281.1	273.9	266.7
22.5°	360.4	336.4	319.5	305.1	300.3	283.5	269.1	257.1	249.9	240.3	235.5
25°	319.5	295.5	281.1	266.7	261.9	247.5	237.9	225.8	218.6	211.4	206.6
27.5°	281.1	259.5	245.1	233.0	230.6	218.6	206.6	199.4	192.2	187.4	185.0
30°	242.7	225.8	213.8	204.2	201.8	189.8	180.2	175.4	168.2	165.8	163.4
32.5°	213.8	197.0	187.4	177.8	175.4	165.8	161.0	153.8	149.0	146.6	146.6
35°	182.6	170.6	161.0	156.2	153.8	146.6	139.3	136.9	132.1	129.7	129.7
37.5°	156.2	146.6	139.3	132.1	132.1	127.3	122.5	120.1	117.7	117.7	115.3
40°	134.5	124.9	122.5	117.7	115.3	112.9	110.5	108.1	105.7	105.7	105.7
42.5°	112.9	108.1	103.3	100.9	100.9	98.5	96.1	96.1	93.7	96.1	96.1
45°	96.1	91.3	88.9	86.5	88.9	86.5	86.5	84.1	86.5	86.5	86.5
47.5°	81.7	79.3	76.9	76.9	76.9	76.9	76.9	76.9	76.9	79.3	79.3
50°	69.7	67.3	67.3	67.3	67.3	67.3	69.7	69.7	69.7	72.1	72.1
52.5°	57.7	57.7	57.7	57.7	60.1	60.1	62.5	62.5	64.9	64.9	67.3
55°	50.5	50.5	50.5	50.5	52.9	52.9	55.3	57.7	57.7	60.1	62.5
57.5°	43.2	43.2	45.6	45.6	48.1	48.1	50.5	52.9	52.9	55.3	57.7
60°	36.0	38.4	40.8	40.8	40.8	43.2	45.6	48.1	48.1	50.5	52.9
62.5°	31.2	33.6	36.0	36.0	36.0	38.4	40.8	43.2	43.2	45.6	48.1
65°	26.4	28.8	31.2	31.2	31.2	33.6	36.0	38.4	40.8	40.8	43.2
67.5°	24.0	24.0	26.4	26.4	28.8	31.2	31.2	33.6	36.0	38.4	40.8
70°	19.2	21.6	24.0	24.0	24.0	26.4	28.8	31.2	31.2	33.6	36.0
72.5°	16.8	16.8	19.2	19.2	21.6	24.0	24.0	26.4	28.8	28.8	31.2
75°	14.4	16.8	16.8	16.8	19.2	19.2	21.6	24.0	24.0	26.4	26.4
77.5°	12.0	12.0	14.4	14.4	14.4	16.8	16.8	19.2	19.2	21.6	21.6
80°	9.6	9.6	12.0	12.0	12.0	12.0	14.4	14.4	16.8	16.8	16.8
82.5°	7.2	7.2	7.2	7.2	9.6	9.6	9.6	9.6	12.0	12.0	12.0
85°	4.8	4.8	4.8	4.8	4.8	7.2	7.2	7.2	7.2	7.2	9.6
87.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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°	713.6	713.6	713.6	713.6	713.6	713.6	713.6	713.6
2.5°	636.7	636.7	634.3	631.9	629.5	627.1	624.7	622.3
5°	564.6	567.0	557.4	555.0	555.0	550.2	552.6	547.8
7.5°	497.3	497.3	490.1	487.7	485.3	480.5	478.1	475.7
10°	437.3	434.9	430.1	427.7	422.9	420.4	420.4	415.6
12.5°	384.4	382.0	377.2	374.8	370.0	367.6	365.2	362.8
15°	338.8	336.4	331.6	329.2	326.7	321.9	321.9	319.5
17.5°	295.5	293.1	290.7	285.9	285.9	281.1	278.7	278.7
20°	261.9	259.5	254.7	252.3	252.3	249.9	249.9	245.1
22.5°	230.6	228.2	225.8	223.4	223.4	221.0	218.6	218.6
25°	204.2	201.8	199.4	199.4	197.0	194.6	194.6	194.6
27.5°	180.2	180.2	177.8	177.8	177.8	175.4	175.4	173.0
30°	161.0	161.0	158.6	158.6	158.6	156.2	158.6	156.2
32.5°	144.2	144.2	144.2	144.2	144.2	141.8	141.8	141.8
35°	129.7	129.7	129.7	129.7	129.7	127.3	129.7	127.3
37.5°	115.3	117.7	115.3	115.3	117.7	115.3	115.3	115.3
40°	105.7	105.7	105.7	105.7	105.7	105.7	105.7	105.7
42.5°	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
45°	86.5	88.9	88.9	88.9	88.9	88.9	88.9	88.9
47.5°	81.7	81.7	81.7	81.7	84.1	81.7	84.1	84.1
50°	74.5	74.5	74.5	76.9	76.9	76.9	76.9	76.9
52.5°	69.7	69.7	69.7	69.7	72.1	72.1	72.1	72.1
55°	62.5	64.9	64.9	64.9	67.3	67.3	67.3	67.3
57.5°	60.1	60.1	60.1	62.5	62.5	62.5	64.9	62.5
60°	55.3	55.3	57.7	57.7	57.7	60.1	60.1	60.1
62.5°	50.5	52.9	52.9	52.9	52.9	55.3	55.3	55.3
65°	45.6	48.1	48.1	48.1	50.5	50.5	50.5	50.5
67.5°	40.8	43.2	43.2	45.6	45.6	45.6	45.6	45.6
70°	36.0	38.4	38.4	38.4	40.8	40.8	40.8	40.8
72.5°	33.6	33.6	33.6	36.0	36.0	36.0	38.4	36.0
75°	28.8	31.2	31.2	31.2	31.2	31.2	33.6	33.6
77.5°	24.0	24.0	24.0	24.0	26.4	26.4	26.4	26.4
80°	19.2	19.2	19.2	19.2	21.6	21.6	21.6	21.6
82.5°	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
85°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
87.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
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)