

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: P226257

Luminaire Tested: **LD2B15D010 EU2B15WW8030 2LBSW***

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P226257
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 EU2B15WW8030 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: 987.2 lumens
Efficiency: N/A
Efficacy: 69.0 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

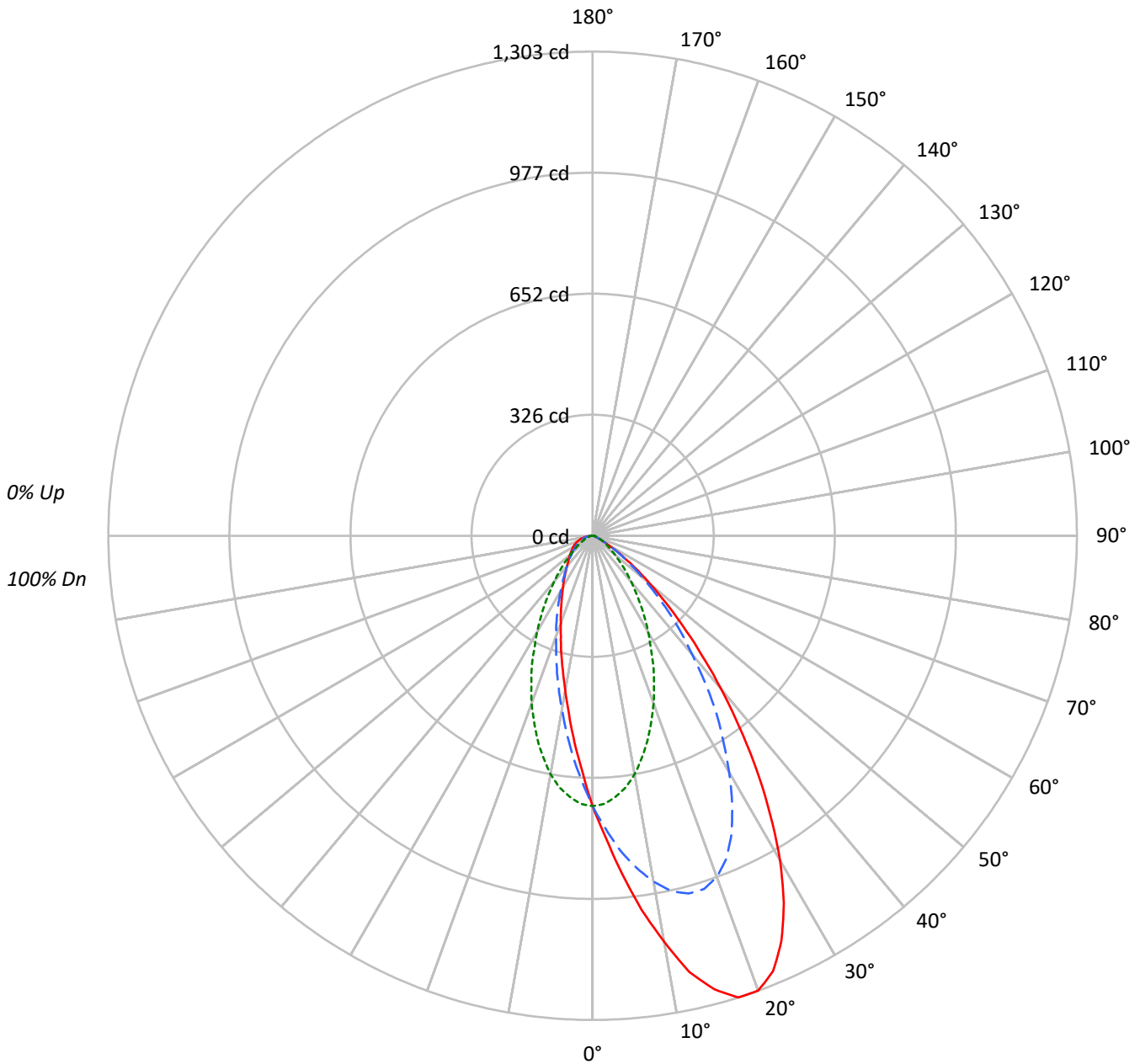
Input Watts (W): 14.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	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°	281717	281717	281717
5°	355153	274239	217081
10°	436311	256210	166650
15°	506716	228816	130609
20°	537021	197858	102969
25°	513893	165357	84794
30°	451249	133644	71205
35°	363631	105354	61378
40°	271177	81712	54508
45°	187782	61681	49630
50°	121003	45738	47244
55°	71111	34711	46327
60°	37960	28431	47411
65°	17964	22455	47110
70°	8267	19366	47113
75°	10925	18258	51333
80°	10930	16284	49074
85°	10666	21777	43554



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.7	7.0
10°-20°	191.8	19.4
20°-30°	250.2	25.3
30°-40°	216.6	21.9
40°-50°	137.1	13.9
50°-60°	68.7	7.0
60°-70°	31.6	3.2
70°-80°	16.9	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°	510.8	51.7
0°-40°	727.4	73.7
0°-60°	933.2	94.5
0°-90°	987.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	987.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	727	727	727	727	727	
5°	913	850	705	598	558	93
15°	1264	997	571	372	326	355
25°	1202	884	387	223	198	545
35°	769	578	223	135	130	478
45°	343	286	113	88	91	270
55°	105	98	51	59	69	101
65°	20	22	24	42	51	23
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°	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3
2.5°	813.0	817.9	817.9	820.4	810.6	813.0	813.0	808.1	800.8	795.9	788.5
5°	913.4	913.4	911.0	913.4	906.1	901.2	903.6	893.8	874.3	864.5	849.8
7.5°	1016.3	1011.4	1011.4	1008.9	996.7	989.4	986.9	969.8	942.8	923.2	901.2
10°	1109.3	1109.3	1104.4	1099.6	1082.4	1072.6	1065.3	1038.3	1008.9	977.1	945.3
12.5°	1202.4	1197.5	1190.2	1180.4	1155.9	1146.1	1133.8	1102.0	1057.9	1021.2	979.6
15°	1263.6	1266.1	1253.8	1241.6	1214.6	1200.0	1185.3	1146.1	1094.7	1048.1	996.7
17.5°	1302.8	1300.4	1288.1	1273.4	1244.0	1226.9	1209.8	1163.2	1109.3	1053.0	996.7
20°	1302.8	1302.8	1288.1	1273.4	1241.6	1222.0	1204.9	1155.9	1097.1	1038.3	977.1
22.5°	1268.5	1263.6	1253.8	1239.1	1207.3	1190.2	1170.6	1121.6	1060.4	1004.0	940.4
25°	1202.4	1202.4	1190.2	1173.0	1146.1	1126.5	1109.3	1060.4	1001.6	945.3	884.0
27.5°	1114.2	1111.8	1099.6	1087.3	1057.9	1043.2	1026.1	979.6	928.1	876.7	813.0
30°	1008.9	1004.0	999.1	979.6	960.0	947.7	933.0	891.4	840.0	791.0	734.7
32.5°	888.9	896.3	884.0	871.8	854.7	842.4	830.2	798.3	751.8	707.7	653.9
35°	769.0	773.8	766.5	756.7	739.6	732.2	720.0	693.0	658.8	617.1	577.9
37.5°	649.0	649.0	649.0	641.6	631.8	624.5	617.1	592.6	563.2	531.4	494.7
40°	536.3	543.7	533.9	531.4	524.1	521.6	514.3	497.1	472.6	450.6	416.3
42.5°	433.5	433.5	435.9	431.0	428.6	423.7	418.8	409.0	391.8	372.2	350.2
45°	342.8	345.3	347.7	340.4	340.4	340.4	337.9	328.2	313.5	301.2	286.5
47.5°	266.9	266.9	269.4	266.9	266.9	266.9	262.0	262.0	252.2	240.0	227.7
50°	200.8	203.3	205.7	205.7	205.7	203.3	203.3	198.4	193.5	188.6	176.3
52.5°	151.8	151.8	149.4	151.8	151.8	151.8	151.8	149.4	146.9	142.0	134.7
55°	105.3	105.3	107.8	107.8	107.8	110.2	110.2	110.2	107.8	105.3	98.0
57.5°	73.5	73.5	73.5	75.9	78.4	78.4	78.4	78.4	75.9	73.5	71.0
60°	49.0	49.0	49.0	51.4	51.4	51.4	51.4	53.9	51.4	51.4	49.0
62.5°	31.8	31.8	31.8	31.8	31.8	34.3	34.3	34.3	34.3	34.3	31.8
65°	19.6	19.6	19.6	19.6	19.6	19.6	22.0	22.0	22.0	22.0	22.0
67.5°	12.2	12.2	12.2	12.2	12.2	14.7	14.7	14.7	14.7	14.7	14.7
70°	7.3	7.3	7.3	7.3	9.8	9.8	9.8	9.8	9.8	9.8	9.8
72.5°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
75°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
77.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	7.3	7.3	7.3
80°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
82.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	4.9	4.9	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°	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3
2.5°	788.5	778.7	773.8	761.6	759.2	749.4	749.4	739.6	727.3	722.4	710.2
5°	840.0	820.4	810.6	788.5	781.2	766.5	759.2	739.6	720.0	705.3	688.1
7.5°	884.0	854.7	835.1	805.7	793.4	771.4	756.7	732.2	705.3	683.2	658.8
10°	918.3	879.2	849.8	810.6	795.9	769.0	746.9	712.6	678.3	651.4	622.0
12.5°	940.4	893.8	852.2	805.7	786.1	756.7	724.9	685.7	646.5	612.2	580.4
15°	950.2	893.8	844.9	788.5	766.5	734.7	697.9	651.4	607.3	570.6	536.3
17.5°	942.8	876.7	825.3	761.6	737.1	700.4	658.8	609.8	563.2	524.1	489.8
20°	918.3	849.8	791.0	724.9	697.9	661.2	614.7	565.7	519.2	480.0	443.2
22.5°	876.7	805.7	744.5	678.3	651.4	614.7	565.7	516.7	470.2	431.0	396.7
25°	825.3	749.4	688.1	624.5	595.1	563.2	514.3	465.3	421.2	386.9	352.6
27.5°	756.7	690.6	629.4	565.7	538.8	509.4	460.4	416.3	372.2	337.9	308.6
30°	683.2	619.6	568.1	506.9	482.4	453.0	411.4	367.3	330.6	298.8	271.8
32.5°	609.8	548.6	499.6	448.1	426.1	396.7	360.0	320.8	286.5	259.6	237.5
35°	533.9	482.4	435.9	386.9	369.8	345.3	311.0	276.7	247.3	222.8	200.8
37.5°	457.9	416.3	374.7	335.5	315.9	296.3	264.5	235.1	208.2	188.6	171.4
40°	389.4	352.6	318.4	281.6	264.5	249.8	222.8	198.4	178.8	161.6	146.9
42.5°	323.3	293.9	264.5	235.1	220.4	208.2	186.1	164.1	146.9	134.7	122.4
45°	264.5	242.4	218.0	191.0	183.7	169.0	151.8	137.1	122.4	112.6	102.9
47.5°	213.1	193.5	173.9	154.3	146.9	137.1	122.4	110.2	100.4	93.1	85.7
50°	166.5	151.8	139.6	122.4	117.5	107.8	98.0	88.2	80.8	75.9	71.0
52.5°	127.3	115.1	105.3	95.5	90.6	85.7	75.9	71.0	66.1	63.7	61.2
55°	93.1	85.7	78.4	71.0	68.6	63.7	58.8	53.9	51.4	51.4	51.4
57.5°	66.1	61.2	56.3	51.4	51.4	49.0	46.5	44.1	41.6	41.6	41.6
60°	46.5	44.1	41.6	39.2	36.7	36.7	34.3	36.7	34.3	36.7	36.7
62.5°	31.8	29.4	29.4	26.9	26.9	26.9	26.9	26.9	29.4	29.4	31.8
65°	19.6	19.6	19.6	19.6	19.6	19.6	22.0	22.0	22.0	24.5	24.5
67.5°	14.7	14.7	14.7	17.1	17.1	17.1	17.1	19.6	19.6	19.6	22.0
70°	9.8	12.2	12.2	12.2	12.2	12.2	14.7	14.7	14.7	17.1	17.1
72.5°	9.8	9.8	9.8	9.8	9.8	9.8	12.2	12.2	12.2	14.7	14.7
75°	7.3	9.8	9.8	9.8	9.8	9.8	9.8	12.2	12.2	12.2	14.7
77.5°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	9.8	9.8	9.8	9.8
80°	4.9	4.9	4.9	7.3	7.3	7.3	7.3	7.3	7.3	7.3	9.8
82.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	7.3
85°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	4.9	2.4	4.9	4.9
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°	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3
2.5°	705.3	697.9	700.4	685.7	688.1	678.3	673.4	666.1	661.2	653.9	656.3
5°	675.9	663.6	658.8	641.6	644.1	629.4	619.6	607.3	597.5	585.3	582.8
7.5°	639.2	619.6	612.2	595.1	592.6	573.0	560.8	546.1	533.9	521.6	516.7
10°	597.5	575.5	560.8	543.7	541.2	519.2	504.5	489.8	475.1	462.8	457.9
12.5°	553.4	529.0	511.8	492.2	487.3	467.7	450.6	435.9	421.2	409.0	401.6
15°	506.9	480.0	462.8	443.2	438.4	416.3	401.6	384.5	372.2	360.0	355.1
17.5°	460.4	433.5	413.9	396.7	391.8	369.8	352.6	340.4	325.7	318.4	311.0
20°	413.9	386.9	367.3	352.6	345.3	328.2	311.0	298.8	286.5	279.2	271.8
22.5°	367.3	342.8	325.7	311.0	306.1	289.0	274.3	262.0	254.7	244.9	240.0
25°	325.7	301.2	286.5	271.8	266.9	252.2	242.4	230.2	222.8	215.5	210.6
27.5°	286.5	264.5	249.8	237.5	235.1	222.8	210.6	203.3	195.9	191.0	188.6
30°	247.3	230.2	218.0	208.2	205.7	193.5	183.7	178.8	171.4	169.0	166.5
32.5°	218.0	200.8	191.0	181.2	178.8	169.0	164.1	156.7	151.8	149.4	149.4
35°	186.1	173.9	164.1	159.2	156.7	149.4	142.0	139.6	134.7	132.2	132.2
37.5°	159.2	149.4	142.0	134.7	134.7	129.8	124.9	122.4	120.0	120.0	117.5
40°	137.1	127.3	124.9	120.0	117.5	115.1	112.6	110.2	107.8	107.8	107.8
42.5°	115.1	110.2	105.3	102.9	102.9	100.4	98.0	98.0	95.5	98.0	98.0
45°	98.0	93.1	90.6	88.2	90.6	88.2	88.2	85.7	88.2	88.2	88.2
47.5°	83.3	80.8	78.4	78.4	78.4	78.4	78.4	78.4	78.4	80.8	80.8
50°	71.0	68.6	68.6	68.6	68.6	68.6	71.0	71.0	71.0	73.5	73.5
52.5°	58.8	58.8	58.8	58.8	61.2	61.2	63.7	63.7	66.1	66.1	68.6
55°	51.4	51.4	51.4	51.4	53.9	53.9	56.3	58.8	58.8	61.2	63.7
57.5°	44.1	44.1	46.5	46.5	49.0	49.0	51.4	53.9	53.9	56.3	58.8
60°	36.7	39.2	41.6	41.6	41.6	44.1	46.5	49.0	49.0	51.4	53.9
62.5°	31.8	34.3	36.7	36.7	36.7	39.2	41.6	44.1	44.1	46.5	49.0
65°	26.9	29.4	31.8	31.8	31.8	34.3	36.7	39.2	41.6	41.6	44.1
67.5°	24.5	24.5	26.9	26.9	29.4	31.8	31.8	34.3	36.7	39.2	41.6
70°	19.6	22.0	24.5	24.5	24.5	26.9	29.4	31.8	31.8	34.3	36.7
72.5°	17.1	17.1	19.6	19.6	22.0	24.5	24.5	26.9	29.4	29.4	31.8
75°	14.7	17.1	17.1	17.1	19.6	19.6	22.0	24.5	24.5	26.9	26.9
77.5°	12.2	12.2	14.7	14.7	14.7	17.1	17.1	19.6	19.6	22.0	22.0
80°	9.8	9.8	12.2	12.2	12.2	12.2	14.7	14.7	17.1	17.1	17.1
82.5°	7.3	7.3	7.3	7.3	9.8	9.8	9.8	9.8	12.2	12.2	12.2
85°	4.9	4.9	4.9	4.9	4.9	7.3	7.3	7.3	7.3	7.3	9.8
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°	727.3	727.3	727.3	727.3	727.3	727.3	727.3	727.3
2.5°	649.0	649.0	646.5	644.1	641.6	639.2	636.7	634.3
5°	575.5	577.9	568.1	565.7	565.7	560.8	563.2	558.3
7.5°	506.9	506.9	499.6	497.1	494.7	489.8	487.3	484.9
10°	445.7	443.2	438.4	435.9	431.0	428.6	428.6	423.7
12.5°	391.8	389.4	384.5	382.0	377.1	374.7	372.2	369.8
15°	345.3	342.8	337.9	335.5	333.0	328.2	328.2	325.7
17.5°	301.2	298.8	296.3	291.4	291.4	286.5	284.1	284.1
20°	266.9	264.5	259.6	257.1	257.1	254.7	254.7	249.8
22.5°	235.1	232.6	230.2	227.7	227.7	225.3	222.8	222.8
25°	208.2	205.7	203.3	203.3	200.8	198.4	198.4	198.4
27.5°	183.7	183.7	181.2	181.2	181.2	178.8	178.8	176.3
30°	164.1	164.1	161.6	161.6	161.6	159.2	161.6	159.2
32.5°	146.9	146.9	146.9	146.9	146.9	144.5	144.5	144.5
35°	132.2	132.2	132.2	132.2	132.2	129.8	132.2	129.8
37.5°	117.5	120.0	117.5	117.5	120.0	117.5	117.5	117.5
40°	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8
42.5°	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
45°	88.2	90.6	90.6	90.6	90.6	90.6	90.6	90.6
47.5°	83.3	83.3	83.3	83.3	85.7	83.3	85.7	85.7
50°	75.9	75.9	75.9	78.4	78.4	78.4	78.4	78.4
52.5°	71.0	71.0	71.0	71.0	73.5	73.5	73.5	73.5
55°	63.7	66.1	66.1	66.1	68.6	68.6	68.6	68.6
57.5°	61.2	61.2	61.2	63.7	63.7	63.7	66.1	63.7
60°	56.3	56.3	58.8	58.8	58.8	61.2	61.2	61.2
62.5°	51.4	53.9	53.9	53.9	53.9	56.3	56.3	56.3
65°	46.5	49.0	49.0	49.0	51.4	51.4	51.4	51.4
67.5°	41.6	44.1	44.1	46.5	46.5	46.5	46.5	46.5
70°	36.7	39.2	39.2	39.2	41.6	41.6	41.6	41.6
72.5°	34.3	34.3	34.3	36.7	36.7	36.7	39.2	36.7
75°	29.4	31.8	31.8	31.8	31.8	31.8	34.3	34.3
77.5°	24.5	24.5	24.5	24.5	26.9	26.9	26.9	26.9
80°	19.6	19.6	19.6	19.6	22.0	22.0	22.0	22.0
82.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
85°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
87.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
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)