

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: P226262

Luminaire Tested: **LD2B15D010 EU2B15WW9027 2LBSW***

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P226262
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 EU2B15WW9027 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: 763.3 lumens
Efficiency: N/A
Efficacy: 53.4 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

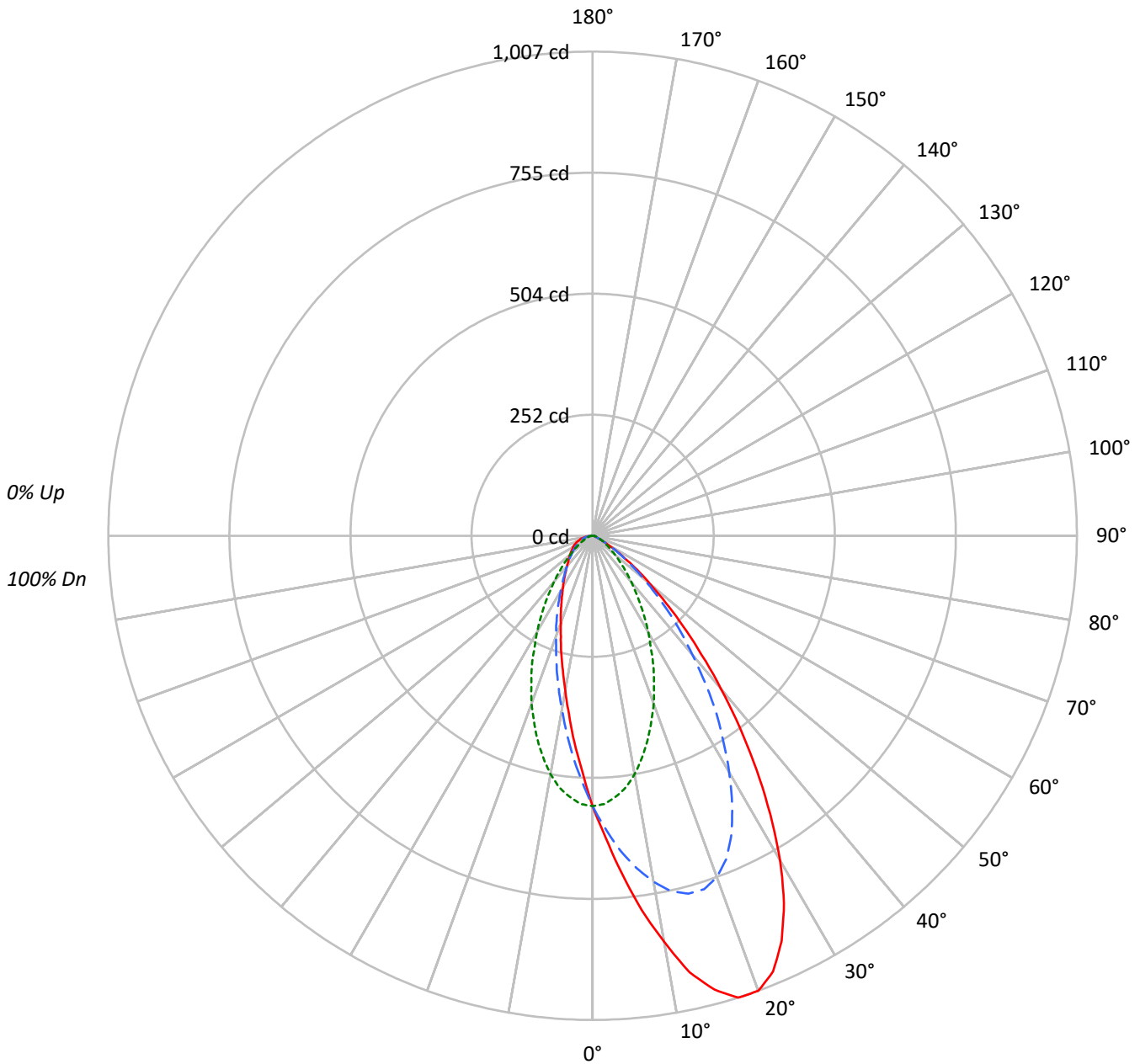
Input Watts (W): 14.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	217805	217805	217805
5°	274589	212027	167856
10°	337352	198077	128813
15°	391787	176886	100974
20°	415173	152969	79597
25°	397301	127832	65561
30°	348870	103319	55059
35°	281117	81474	47428
40°	209640	63206	42120
45°	145219	47713	38400
50°	93584	35373	36518
55°	54971	26878	35792
60°	29361	22001	36643
65°	13840	17323	36478
70°	6455	15063	36467
75°	8531	14218	39660
80°	8476	12715	37921
85°	8444	16888	33777



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	7.0
10°-20°	148.3	19.4
20°-30°	193.5	25.3
30°-40°	167.5	21.9
40°-50°	106.0	13.9
50°-60°	53.1	7.0
60°-70°	24.4	3.2
70°-80°	13.1	1.7
80°-90°	4.2	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°	394.9	51.7
0°-40°	562.4	73.7
0°-60°	721.5	94.5
0°-90°	763.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	763.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	562	562	562	562	562	
5°	706	657	545	462	432	72
15°	977	771	441	288	252	275
25°	930	684	299	172	153	421
35°	594	447	172	104	100	369
45°	265	222	87	68	70	209
55°	81	76	40	45	53	78
65°	15	17	19	32	40	17
75°	6	6	10	19	26	5
85°	2	2	4	6	8	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°	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3
2.5°	628.6	632.4	632.4	634.3	626.7	628.6	628.6	624.8	619.1	615.3	609.6
5°	706.2	706.2	704.3	706.2	700.5	696.7	698.6	691.1	675.9	668.3	657.0
7.5°	785.7	781.9	781.9	780.0	770.6	764.9	763.0	749.8	728.9	713.8	696.7
10°	857.7	857.7	853.9	850.1	836.8	829.3	823.6	802.8	780.0	755.4	730.8
12.5°	929.6	925.8	920.2	912.6	893.6	886.1	876.6	852.0	817.9	789.5	757.3
15°	977.0	978.8	969.4	959.9	939.1	927.7	916.4	886.1	846.3	810.3	770.6
17.5°	1007.2	1005.4	995.9	984.5	961.8	948.6	935.3	899.3	857.7	814.1	770.6
20°	1007.2	1007.2	995.9	984.5	959.9	944.8	931.5	893.6	848.2	802.8	755.4
22.5°	980.7	977.0	969.4	958.0	933.4	920.2	905.0	867.1	819.8	776.3	727.0
25°	929.6	929.6	920.2	906.9	886.1	870.9	857.7	819.8	774.4	730.8	683.5
27.5°	861.5	859.6	850.1	840.6	817.9	806.6	793.3	757.3	717.6	677.8	628.6
30°	780.0	776.3	772.5	757.3	742.2	732.7	721.4	689.2	649.4	611.5	568.0
32.5°	687.3	693.0	683.5	674.0	660.8	651.3	641.8	617.2	581.2	547.2	505.5
35°	594.5	598.3	592.6	585.0	571.8	566.1	556.6	535.8	509.3	477.1	446.8
37.5°	501.7	501.7	501.7	496.0	488.5	482.8	477.1	458.2	435.5	410.9	382.5
40°	414.6	420.3	412.7	410.9	405.2	403.3	397.6	384.3	365.4	348.4	321.9
42.5°	335.1	335.1	337.0	333.2	331.3	327.5	323.8	316.2	302.9	287.8	270.7
45°	265.1	267.0	268.9	263.2	263.2	263.2	261.3	253.7	242.3	232.9	221.5
47.5°	206.4	206.4	208.3	206.4	206.4	206.4	202.6	202.6	195.0	185.5	176.1
50°	155.3	157.1	159.0	159.0	159.0	157.1	157.1	153.4	149.6	145.8	136.3
52.5°	117.4	117.4	115.5	117.4	117.4	117.4	117.4	115.5	113.6	109.8	104.1
55°	81.4	81.4	83.3	83.3	83.3	85.2	85.2	85.2	83.3	81.4	75.7
57.5°	56.8	56.8	56.8	58.7	60.6	60.6	60.6	60.6	58.7	56.8	54.9
60°	37.9	37.9	37.9	39.8	39.8	39.8	39.8	41.7	39.8	39.8	37.9
62.5°	24.6	24.6	24.6	24.6	24.6	26.5	26.5	26.5	26.5	26.5	24.6
65°	15.1	15.1	15.1	15.1	15.1	15.1	17.0	17.0	17.0	17.0	17.0
67.5°	9.5	9.5	9.5	9.5	9.5	11.4	11.4	11.4	11.4	11.4	11.4
70°	5.7	5.7	5.7	5.7	7.6	7.6	7.6	7.6	7.6	7.6	7.6
72.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
75°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
77.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	5.7	5.7	5.7
80°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
82.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.8	3.8	1.9
85°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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°	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3
2.5°	609.6	602.1	598.3	588.8	586.9	579.4	579.4	571.8	562.3	558.5	549.1
5°	649.4	634.3	626.7	609.6	604.0	592.6	586.9	571.8	556.6	545.3	532.0
7.5°	683.5	660.8	645.6	622.9	613.4	596.4	585.0	566.1	545.3	528.2	509.3
10°	710.0	679.7	657.0	626.7	615.3	594.5	577.5	551.0	524.4	503.6	480.9
12.5°	727.0	691.1	658.9	622.9	607.8	585.0	560.4	530.1	499.8	473.3	448.7
15°	734.6	691.1	653.2	609.6	592.6	568.0	539.6	503.6	469.5	441.1	414.6
17.5°	728.9	677.8	638.0	588.8	569.9	541.5	509.3	471.4	435.5	405.2	378.7
20°	710.0	657.0	611.5	560.4	539.6	511.2	475.2	437.4	401.4	371.1	342.7
22.5°	677.8	622.9	575.6	524.4	503.6	475.2	437.4	399.5	363.5	333.2	306.7
25°	638.0	579.4	532.0	482.8	460.1	435.5	397.6	359.7	325.7	299.1	272.6
27.5°	585.0	533.9	486.6	437.4	416.5	393.8	355.9	321.9	287.8	261.3	238.6
30°	528.2	479.0	439.3	391.9	373.0	350.3	318.1	284.0	255.6	231.0	210.2
32.5°	471.4	424.1	386.2	346.5	329.4	306.7	278.3	248.0	221.5	200.7	183.7
35°	412.7	373.0	337.0	299.1	285.9	267.0	240.5	213.9	191.2	172.3	155.3
37.5°	354.1	321.9	289.7	259.4	244.2	229.1	204.5	181.8	160.9	145.8	132.5
40°	301.0	272.6	246.1	217.7	204.5	193.1	172.3	153.4	138.2	125.0	113.6
42.5°	249.9	227.2	204.5	181.8	170.4	160.9	143.9	126.9	113.6	104.1	94.7
45°	204.5	187.4	168.5	147.7	142.0	130.6	117.4	106.0	94.7	87.1	79.5
47.5°	164.7	149.6	134.4	119.3	113.6	106.0	94.7	85.2	77.6	71.9	66.3
50°	128.7	117.4	107.9	94.7	90.9	83.3	75.7	68.2	62.5	58.7	54.9
52.5°	98.5	89.0	81.4	73.8	70.1	66.3	58.7	54.9	51.1	49.2	47.3
55°	71.9	66.3	60.6	54.9	53.0	49.2	45.4	41.7	39.8	39.8	39.8
57.5°	51.1	47.3	43.5	39.8	39.8	37.9	36.0	34.1	32.2	32.2	32.2
60°	36.0	34.1	32.2	30.3	28.4	28.4	26.5	28.4	26.5	28.4	28.4
62.5°	24.6	22.7	22.7	20.8	20.8	20.8	20.8	20.8	22.7	22.7	24.6
65°	15.1	15.1	15.1	15.1	15.1	15.1	17.0	17.0	17.0	18.9	18.9
67.5°	11.4	11.4	11.4	13.3	13.3	13.3	13.3	15.1	15.1	15.1	17.0
70°	7.6	9.5	9.5	9.5	9.5	9.5	11.4	11.4	11.4	13.3	13.3
72.5°	7.6	7.6	7.6	7.6	7.6	7.6	9.5	9.5	9.5	11.4	11.4
75°	5.7	7.6	7.6	7.6	7.6	7.6	7.6	9.5	9.5	9.5	11.4
77.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	7.6	7.6	7.6	7.6
80°	3.8	3.8	3.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7	7.6
82.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	5.7
85°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.8	1.9	3.8	3.8
87.5°	0.0	0.0	0.0	1.9	0.0	1.9	1.9	1.9	1.9	1.9	1.9
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°	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3
2.5°	545.3	539.6	541.5	530.1	532.0	524.4	520.7	515.0	511.2	505.5	507.4
5°	522.6	513.1	509.3	496.0	497.9	486.6	479.0	469.5	462.0	452.5	450.6
7.5°	494.2	479.0	473.3	460.1	458.2	443.0	433.6	422.2	412.7	403.3	399.5
10°	462.0	444.9	433.6	420.3	418.4	401.4	390.0	378.7	367.3	357.8	354.1
12.5°	427.9	409.0	395.7	380.6	376.8	361.6	348.4	337.0	325.7	316.2	310.5
15°	391.9	371.1	357.8	342.7	338.9	321.9	310.5	297.3	287.8	278.3	274.5
17.5°	355.9	335.1	320.0	306.7	302.9	285.9	272.6	263.2	251.8	246.1	240.5
20°	320.0	299.1	284.0	272.6	267.0	253.7	240.5	231.0	221.5	215.8	210.2
22.5°	284.0	265.1	251.8	240.5	236.7	223.4	212.1	202.6	196.9	189.3	185.5
25°	251.8	232.9	221.5	210.2	206.4	195.0	187.4	178.0	172.3	166.6	162.8
27.5°	221.5	204.5	193.1	183.7	181.8	172.3	162.8	157.1	151.5	147.7	145.8
30°	191.2	178.0	168.5	160.9	159.0	149.6	142.0	138.2	132.5	130.6	128.7
32.5°	168.5	155.3	147.7	140.1	138.2	130.6	126.9	121.2	117.4	115.5	115.5
35°	143.9	134.4	126.9	123.1	121.2	115.5	109.8	107.9	104.1	102.2	102.2
37.5°	123.1	115.5	109.8	104.1	104.1	100.3	96.6	94.7	92.8	92.8	90.9
40°	106.0	98.5	96.6	92.8	90.9	89.0	87.1	85.2	83.3	83.3	83.3
42.5°	89.0	85.2	81.4	79.5	79.5	77.6	75.7	75.7	73.8	75.7	75.7
45°	75.7	71.9	70.1	68.2	70.1	68.2	68.2	66.3	68.2	68.2	68.2
47.5°	64.4	62.5	60.6	60.6	60.6	60.6	60.6	60.6	60.6	62.5	62.5
50°	54.9	53.0	53.0	53.0	53.0	53.0	54.9	54.9	54.9	56.8	56.8
52.5°	45.4	45.4	45.4	45.4	47.3	47.3	49.2	49.2	51.1	51.1	53.0
55°	39.8	39.8	39.8	39.8	41.7	41.7	43.5	45.4	45.4	47.3	49.2
57.5°	34.1	34.1	36.0	36.0	37.9	37.9	39.8	41.7	41.7	43.5	45.4
60°	28.4	30.3	32.2	32.2	32.2	34.1	36.0	37.9	37.9	39.8	41.7
62.5°	24.6	26.5	28.4	28.4	28.4	30.3	32.2	34.1	34.1	36.0	37.9
65°	20.8	22.7	24.6	24.6	24.6	26.5	28.4	30.3	32.2	32.2	34.1
67.5°	18.9	18.9	20.8	20.8	22.7	24.6	24.6	26.5	28.4	30.3	32.2
70°	15.1	17.0	18.9	18.9	18.9	20.8	22.7	24.6	24.6	26.5	28.4
72.5°	13.3	13.3	15.1	15.1	17.0	18.9	18.9	20.8	22.7	22.7	24.6
75°	11.4	13.3	13.3	13.3	15.1	15.1	17.0	18.9	18.9	20.8	20.8
77.5°	9.5	9.5	11.4	11.4	11.4	13.3	13.3	15.1	15.1	17.0	17.0
80°	7.6	7.6	9.5	9.5	9.5	9.5	11.4	11.4	13.3	13.3	13.3
82.5°	5.7	5.7	5.7	5.7	7.6	7.6	7.6	7.6	9.5	9.5	9.5
85°	3.8	3.8	3.8	3.8	3.8	5.7	5.7	5.7	5.7	5.7	7.6
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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°	562.3	562.3	562.3	562.3	562.3	562.3	562.3	562.3
2.5°	501.7	501.7	499.8	497.9	496.0	494.2	492.3	490.4
5°	444.9	446.8	439.3	437.4	437.4	433.6	435.5	431.7
7.5°	391.9	391.9	386.2	384.3	382.5	378.7	376.8	374.9
10°	344.6	342.7	338.9	337.0	333.2	331.3	331.3	327.5
12.5°	302.9	301.0	297.3	295.4	291.6	289.7	287.8	285.9
15°	267.0	265.1	261.3	259.4	257.5	253.7	253.7	251.8
17.5°	232.9	231.0	229.1	225.3	225.3	221.5	219.6	219.6
20°	206.4	204.5	200.7	198.8	198.8	196.9	196.9	193.1
22.5°	181.8	179.9	178.0	176.1	176.1	174.2	172.3	172.3
25°	160.9	159.0	157.1	157.1	155.3	153.4	153.4	153.4
27.5°	142.0	142.0	140.1	140.1	140.1	138.2	138.2	136.3
30°	126.9	126.9	125.0	125.0	125.0	123.1	125.0	123.1
32.5°	113.6	113.6	113.6	113.6	113.6	111.7	111.7	111.7
35°	102.2	102.2	102.2	102.2	102.2	100.3	102.2	100.3
37.5°	90.9	92.8	90.9	90.9	92.8	90.9	90.9	90.9
40°	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
42.5°	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7
45°	68.2	70.1	70.1	70.1	70.1	70.1	70.1	70.1
47.5°	64.4	64.4	64.4	64.4	66.3	64.4	66.3	66.3
50°	58.7	58.7	58.7	60.6	60.6	60.6	60.6	60.6
52.5°	54.9	54.9	54.9	54.9	56.8	56.8	56.8	56.8
55°	49.2	51.1	51.1	51.1	53.0	53.0	53.0	53.0
57.5°	47.3	47.3	47.3	49.2	49.2	49.2	51.1	49.2
60°	43.5	43.5	45.4	45.4	45.4	47.3	47.3	47.3
62.5°	39.8	41.7	41.7	41.7	41.7	43.5	43.5	43.5
65°	36.0	37.9	37.9	37.9	39.8	39.8	39.8	39.8
67.5°	32.2	34.1	34.1	36.0	36.0	36.0	36.0	36.0
70°	28.4	30.3	30.3	30.3	32.2	32.2	32.2	32.2
72.5°	26.5	26.5	26.5	28.4	28.4	28.4	30.3	28.4
75°	22.7	24.6	24.6	24.6	24.6	24.6	26.5	26.5
77.5°	18.9	18.9	18.9	18.9	20.8	20.8	20.8	20.8
80°	15.1	15.1	15.1	15.1	17.0	17.0	17.0	17.0
82.5°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
85°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
87.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
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)