

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: P274431

Luminaire Tested: **LD6B10DE010W2N2050 EU6B1020W2N902050 6LBSW0LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1808-906-18)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B10DE010W2N2050 EU6B1020W2N902050 6LBSW0LI
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, SINGLE WALLWASH WITH SPECULAR FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 827.0 lumens
Efficiency: N/A
Efficacy: 59.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.16
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

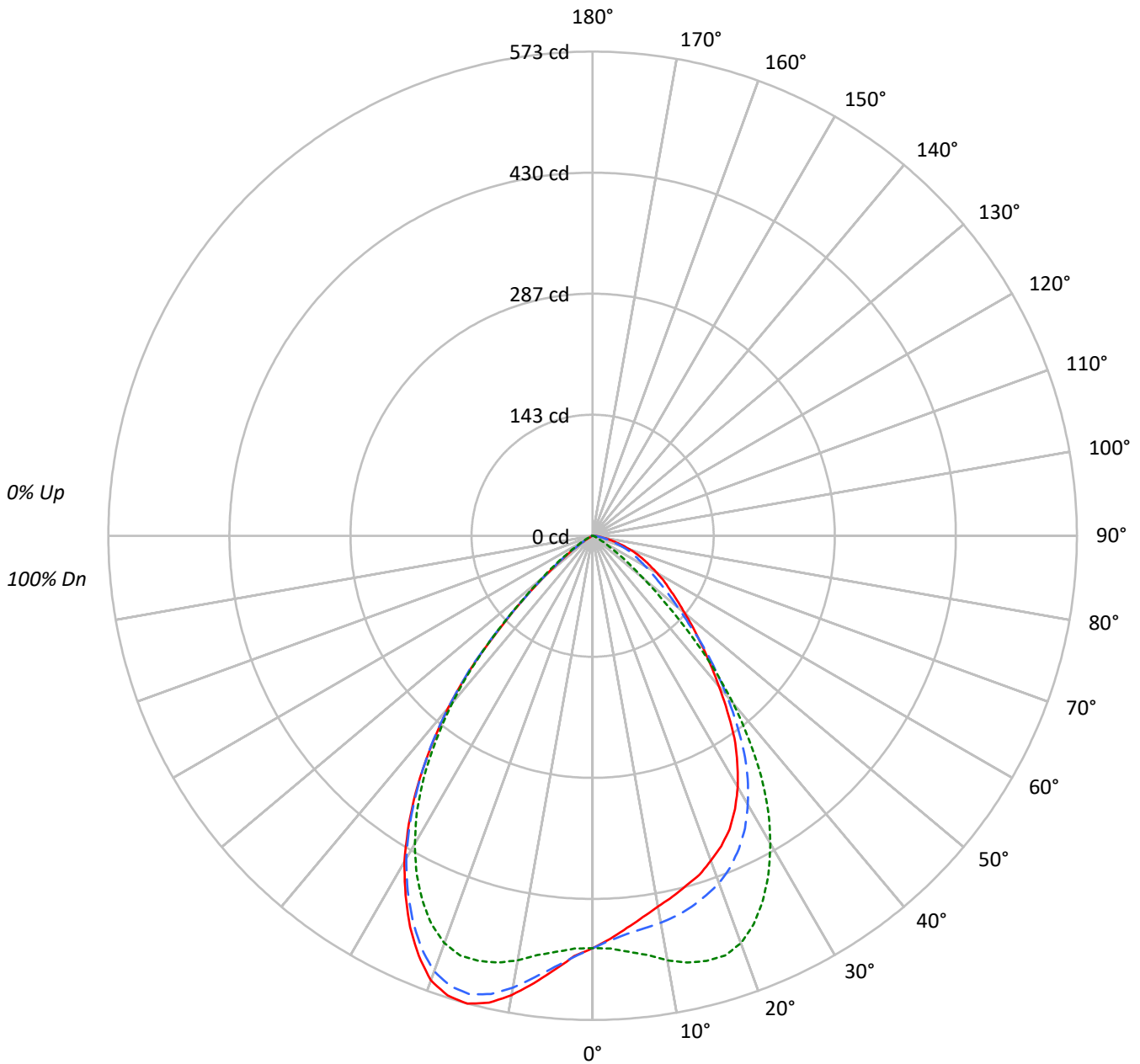
Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P274431

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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	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81																			
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73																			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66																			
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59																			
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54																			
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	60	55	51	49																			
8	71	59	52	47	69	59	52	47	58	51	47	57	51	47	55	50	47	45																			
9	67	55	48	44	65	55	48	43	54	48	43	53	47	43	52	47	43	41																			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	48	43	40	38																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	26752	26752	26752
5°	25633	27196	28368
10°	24794	28401	30722
15°	24325	29563	32531
20°	23866	29922	32664
25°	23185	28822	30915
30°	21738	26624	28194
35°	19595	23276	24166
40°	16638	18477	19050
45°	14102	12311	12040
50°	12110	6661	5978
55°	10685	3307	2456
60°	9626	1458	581
65°	8626	687	233
70°	7389	561	144
75°	5634	381	0
80°	3915	284	0
85°	3334	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	5.7
10°-20°	143.2	17.3
20°-30°	209.9	25.4
30°-40°	208.1	25.2
40°-50°	130.5	15.8
50°-60°	53.0	6.4
60°-70°	23.6	2.9
70°-80°	9.7	1.2
80°-90°	1.7	0.2
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°	400.5	48.4
0°-40°	608.6	73.6
0°-60°	792.0	95.8
0°-90°	827.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	827.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	488	488	488	488	488	
5°	466	473	494	512	516	44
15°	429	454	521	562	573	121
25°	383	409	476	503	511	175
35°	293	312	348	359	361	181
45°	182	185	159	159	155	142
55°	112	96	35	28	26	101
65°	66	54	5	2	2	66
75°	27	20	2	1	0	29
85°	5	3	0	0	0	6
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°	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0
2.5°	477.4	476.5	476.5	477.4	477.4	477.4	477.4	478.3	478.3	479.1	479.1
5°	465.8	465.0	465.8	467.6	467.6	467.6	468.5	469.4	471.2	471.2	472.9
7.5°	455.2	455.2	457.0	457.9	458.7	458.7	458.7	461.4	463.2	466.7	468.5
10°	445.4	444.5	448.1	449.0	451.6	450.8	451.6	454.3	457.9	460.5	465.0
12.5°	437.4	437.4	440.1	440.1	442.8	444.5	443.7	448.1	450.8	455.2	460.5
15°	428.6	428.6	430.3	432.1	433.9	434.8	435.7	440.1	443.7	448.1	454.3
17.5°	420.6	418.8	420.6	422.4	425.0	425.0	427.7	430.3	435.7	440.1	446.3
20°	409.1	409.1	410.8	411.7	414.4	416.1	417.0	420.6	425.0	430.3	437.4
22.5°	397.5	397.5	399.3	400.2	402.8	403.7	404.6	409.1	412.6	417.9	425.0
25°	383.3	383.3	385.1	386.0	388.6	388.6	391.3	394.0	397.5	403.7	409.1
27.5°	364.7	366.5	366.5	368.2	370.0	370.9	372.7	375.3	378.9	384.2	390.4
30°	343.4	342.5	345.2	346.1	348.7	349.6	352.3	354.0	357.6	362.9	367.3
32.5°	318.5	320.3	321.2	322.1	323.9	324.8	326.5	329.2	332.7	336.3	341.6
35°	292.8	292.8	292.8	293.7	295.5	297.2	298.1	300.8	304.3	308.8	312.3
37.5°	261.8	262.6	264.4	264.4	267.1	268.0	268.9	271.5	275.1	277.7	279.5
40°	232.5	233.4	234.3	234.3	236.0	237.8	236.9	240.5	242.2	244.9	246.7
42.5°	205.9	205.0	207.6	208.5	208.5	210.3	211.2	212.1	213.0	214.7	214.7
45°	181.9	181.0	182.8	182.8	183.7	183.7	184.6	184.6	184.6	186.3	184.6
47.5°	161.5	159.7	160.6	160.6	159.7	160.6	160.6	159.7	158.8	157.1	154.4
50°	142.0	142.0	142.0	141.1	141.1	141.1	140.2	140.2	137.5	135.8	131.3
52.5°	126.0	126.0	126.0	125.1	123.3	124.2	124.2	121.6	119.8	117.1	112.7
55°	111.8	111.8	111.8	110.9	110.0	109.1	108.3	107.4	103.8	102.0	95.8
57.5°	100.3	98.5	98.5	98.5	96.7	96.7	95.8	93.2	90.5	87.8	83.4
60°	87.8	87.8	87.8	86.1	86.1	85.2	84.3	81.6	79.9	76.3	71.9
62.5°	76.3	76.3	75.4	75.4	74.5	73.6	72.8	71.0	69.2	66.5	62.1
65°	66.5	66.5	65.7	65.7	64.8	63.9	63.9	62.1	60.3	57.7	54.1
67.5°	56.8	56.8	55.9	55.9	55.0	54.1	54.1	52.4	50.6	48.8	46.1
70°	46.1	45.3	45.3	45.3	44.4	43.5	43.5	42.6	40.8	39.0	37.3
72.5°	35.5	35.5	35.5	34.6	34.6	33.7	33.7	32.8	31.9	30.2	28.4
75°	26.6	26.6	26.6	25.7	25.7	24.8	24.8	24.0	23.1	22.2	20.4
77.5°	19.5	18.6	18.6	17.7	17.7	17.7	17.7	16.0	16.0	15.1	14.2
80°	12.4	12.4	12.4	12.4	11.5	11.5	11.5	10.6	10.6	9.8	8.9
82.5°	8.0	8.0	8.0	8.0	8.0	7.1	7.1	7.1	6.2	6.2	5.3
85°	5.3	5.3	4.4	4.4	4.4	4.4	4.4	3.5	3.5	3.5	2.7
87.5°	2.7	2.7	2.7	2.7	1.8	1.8	1.8	1.8	1.8	1.8	0.9
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0
2.5°	480.9	480.9	484.5	483.6	484.5	483.6	486.2	487.1	488.0	488.9	489.8
5°	476.5	477.4	480.0	481.8	482.7	482.7	487.1	488.9	491.6	494.2	496.0
7.5°	472.9	475.6	479.1	482.7	484.5	484.5	490.7	493.3	497.8	500.4	504.0
10°	470.3	474.7	479.1	484.5	488.9	488.9	496.9	501.3	505.8	510.2	515.5
12.5°	465.0	472.0	477.4	484.5	488.9	488.9	499.6	505.8	511.1	517.3	524.4
15°	461.4	466.7	475.6	482.7	487.1	488.9	500.4	507.5	513.8	520.9	528.0
17.5°	454.3	460.5	469.4	478.3	483.6	486.2	496.9	504.0	512.9	520.9	525.3
20°	444.5	451.6	460.5	470.3	474.7	477.4	489.8	496.0	504.9	512.9	518.2
22.5°	432.1	439.2	448.1	457.0	461.4	465.8	476.5	483.6	490.7	497.8	502.2
25°	415.3	424.1	431.2	440.1	444.5	448.1	457.0	464.1	470.3	476.5	482.7
27.5°	394.9	402.8	410.8	418.8	422.4	425.0	433.0	440.1	446.3	450.8	456.1
30°	373.6	378.9	386.9	394.0	396.6	398.4	404.6	409.1	416.1	420.6	423.2
32.5°	346.1	352.3	356.7	362.9	365.6	367.3	373.6	377.1	382.4	386.9	390.4
35°	317.7	318.5	323.9	329.2	329.2	331.9	337.2	340.7	343.4	347.8	350.5
37.5°	282.2	283.9	289.3	291.9	291.9	291.0	296.4	298.1	302.6	303.5	306.1
40°	248.4	250.2	251.1	252.0	252.0	252.0	253.8	252.9	257.3	258.2	259.1
42.5°	214.7	213.8	214.7	211.2	211.2	209.4	207.6	207.6	207.6	210.3	211.2
45°	181.9	179.2	173.9	169.5	170.4	166.8	162.4	160.6	158.8	158.8	158.8
47.5°	150.8	145.5	139.3	133.1	129.5	126.0	120.7	116.2	113.6	112.7	111.8
50°	126.0	120.7	112.7	103.8	100.3	95.8	89.6	83.4	80.7	78.1	77.2
52.5°	106.5	99.4	90.5	80.7	76.3	71.9	65.7	60.3	55.9	53.2	51.5
55°	89.6	82.5	72.8	63.0	59.4	54.1	47.0	41.7	37.3	34.6	31.9
57.5°	78.1	70.1	60.3	50.6	46.1	41.7	33.7	28.4	24.0	21.3	19.5
60°	66.5	59.4	50.6	40.8	36.4	31.9	24.8	19.5	15.1	13.3	10.6
62.5°	56.8	50.6	42.6	32.8	28.4	24.8	18.6	13.3	9.8	8.0	6.2
65°	49.7	43.5	36.4	28.4	24.0	20.4	15.1	10.6	8.0	5.3	4.4
67.5°	41.7	36.4	30.2	23.1	20.4	16.9	12.4	8.9	6.2	4.4	3.5
70°	33.7	29.3	24.0	18.6	16.0	13.3	9.8	7.1	4.4	3.5	2.7
72.5°	24.8	22.2	17.7	14.2	11.5	9.8	7.1	5.3	3.5	2.7	1.8
75°	17.7	16.0	12.4	9.8	8.0	7.1	5.3	3.5	2.7	1.8	0.9
77.5°	12.4	10.6	8.9	7.1	5.3	5.3	3.5	2.7	1.8	0.9	0.9
80°	8.0	7.1	5.3	4.4	3.5	2.7	1.8	0.9	0.9	0.9	0.0
82.5°	4.4	3.5	3.5	2.7	1.8	1.8	0.9	0.9	0.0	0.0	0.0
85°	2.7	1.8	1.8	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0
87.5°	0.9	0.9	0.9	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0
2.5°	490.7	491.6	492.5	493.3	494.2	494.2	494.2	496.9	498.7	498.7	499.6
5°	497.8	500.4	500.4	503.1	504.0	504.9	505.8	509.3	512.0	510.2	512.9
7.5°	506.7	512.9	512.9	515.5	517.3	518.2	521.7	525.3	527.1	528.0	528.8
10°	519.1	524.4	527.1	528.0	530.6	532.4	536.8	540.4	543.0	544.8	546.6
12.5°	528.0	533.3	535.9	540.4	542.1	544.8	548.4	551.9	555.5	558.1	560.8
15°	533.3	538.6	542.1	544.8	547.5	550.1	553.7	559.0	561.7	563.4	566.1
17.5°	530.6	536.8	539.5	543.9	546.6	548.4	551.9	555.5	559.0	559.9	561.7
20°	521.7	527.1	531.5	533.3	535.9	538.6	541.3	544.8	548.4	548.4	551.9
22.5°	507.5	512.9	515.5	516.4	518.2	522.6	522.6	527.1	528.8	529.7	532.4
25°	485.4	489.8	492.5	494.2	496.0	496.9	499.6	503.1	503.1	504.9	505.8
27.5°	459.6	462.3	465.0	466.7	468.5	468.5	470.3	473.8	473.8	474.7	475.6
30°	428.6	432.1	433.0	434.8	433.9	435.7	438.3	440.1	441.0	440.1	442.8
32.5°	392.2	394.9	396.6	398.4	398.4	399.3	399.3	401.1	402.0	402.8	404.6
35°	351.4	354.0	354.9	355.8	358.5	356.7	357.6	359.4	359.4	361.1	359.4
37.5°	307.0	310.6	313.2	310.6	311.4	313.2	313.2	313.2	315.0	314.1	314.1
40°	261.8	261.8	262.6	264.4	263.5	266.2	265.3	266.2	265.3	266.2	267.1
42.5°	213.0	210.3	213.8	212.1	213.8	213.8	213.8	214.7	215.6	214.7	213.0
45°	157.1	158.8	156.2	156.2	157.1	157.9	157.9	157.9	158.8	157.1	157.9
47.5°	110.9	110.0	109.1	109.1	110.0	109.1	109.1	110.9	109.1	109.1	108.3
50°	77.2	75.4	75.4	73.6	74.5	73.6	74.5	74.5	72.8	73.6	72.8
52.5°	49.7	49.7	47.9	47.9	47.9	47.9	47.0	47.0	47.0	45.3	45.3
55°	31.1	30.2	28.4	28.4	28.4	27.5	26.6	26.6	27.5	26.6	26.6
57.5°	17.7	16.9	15.1	15.1	15.1	14.2	14.2	13.3	13.3	13.3	13.3
60°	9.8	8.0	7.1	7.1	7.1	6.2	6.2	6.2	5.3	5.3	5.3
62.5°	4.4	3.5	3.5	2.7	2.7	2.7	2.7	2.7	1.8	1.8	1.8
65°	3.5	2.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
67.5°	2.7	1.8	1.8	1.8	1.8	1.8	1.8	0.9	0.9	1.8	0.9
70°	1.8	1.8	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9
72.5°	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
75°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9
77.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	488.0	488.0	488.0	488.0	488.0	488.0	488.0	488.0
2.5°	500.4	501.3	499.6	500.4	500.4	501.3	499.6	497.8
5°	515.5	515.5	514.6	515.5	514.6	515.5	516.4	515.5
7.5°	532.4	533.3	534.2	533.3	533.3	534.2	535.0	534.2
10°	549.2	550.1	551.9	551.0	552.8	553.7	551.9	551.9
12.5°	561.7	563.4	565.2	564.3	566.1	567.0	567.0	566.1
15°	567.9	571.4	571.4	570.5	572.3	574.1	574.1	573.2
17.5°	565.2	567.9	567.9	568.8	569.7	571.4	570.5	570.5
20°	554.6	557.2	556.3	556.3	557.2	559.9	559.0	559.9
22.5°	535.0	535.9	536.8	536.8	536.8	539.5	538.6	537.7
25°	509.3	511.1	511.1	511.1	512.0	512.0	512.0	511.1
27.5°	479.1	480.0	480.9	479.1	479.1	480.9	480.9	479.1
30°	445.4	444.5	445.4	444.5	445.4	445.4	445.4	445.4
32.5°	406.4	405.5	406.4	404.6	405.5	405.5	406.4	404.6
35°	361.1	361.1	363.8	362.0	362.0	361.1	360.2	361.1
37.5°	316.8	315.9	315.9	314.1	314.1	316.8	315.0	313.2
40°	266.2	265.3	266.2	265.3	265.3	266.2	266.2	266.2
42.5°	216.5	215.6	216.5	214.7	214.7	215.6	213.8	213.0
45°	157.9	157.1	158.8	158.8	157.9	157.9	157.1	155.3
47.5°	108.3	108.3	109.1	108.3	108.3	109.1	108.3	109.1
50°	71.9	71.9	72.8	71.9	71.9	71.9	71.0	70.1
52.5°	46.1	45.3	45.3	45.3	45.3	45.3	44.4	44.4
55°	25.7	25.7	25.7	25.7	25.7	24.8	25.7	25.7
57.5°	12.4	12.4	12.4	12.4	12.4	12.4	11.5	12.4
60°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
62.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
65°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
67.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
70°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
72.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	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



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)