

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: P274450

Luminaire Tested: **LD6B15DE010W2N2050 EU6B1020W2N902050 6LBSW0H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBSW0H
Description: PORTFOLIO 6" W2N RN DOWNLIGHT, SINGLE WALLWASH WITH HAZE FINISH
Light Source: W2N 2000K-5000K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1147.9 lumens
Efficiency: N/A
Efficacy: 52.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

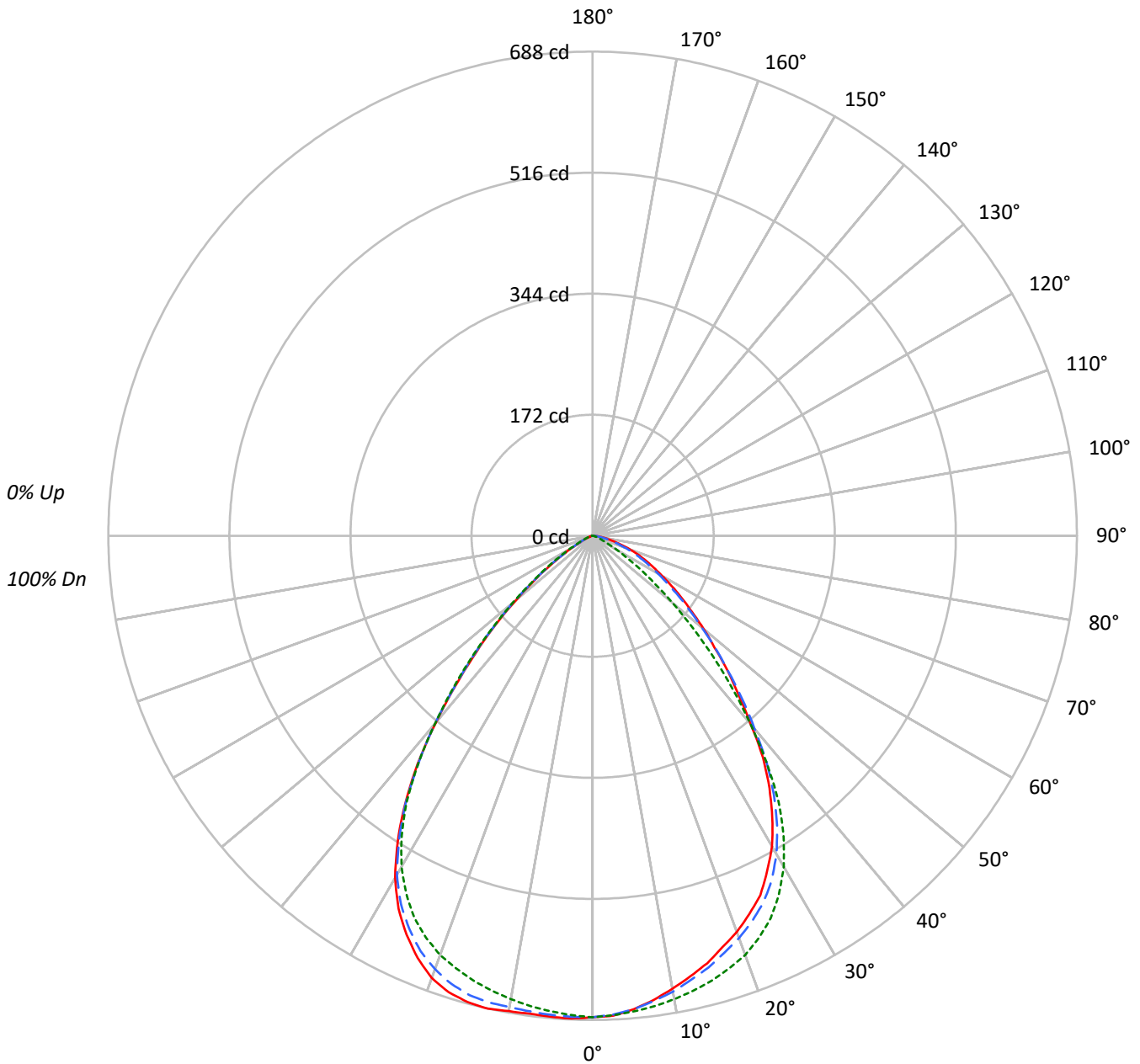
Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P274450

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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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	44638	44638	44638
5°	44212	44428	44919
10°	43299	44286	45439
15°	42470	44206	46327
20°	41594	44003	46412
25°	40571	43126	45027
30°	38405	40898	42270
35°	34884	36660	36987
40°	29765	29629	29484
45°	25004	22190	21498
50°	20888	15011	14260
55°	17573	9213	8360
60°	14875	4854	4201
65°	12890	2547	2038
70°	10720	1583	1106
75°	7915	1033	630
80°	6199	639	301
85°	4940	599	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.5	5.6
10°-20°	184.6	16.1
20°-30°	272.6	23.8
30°-40°	281.0	24.5
40°-50°	194.1	16.9
50°-60°	95.7	8.3
60°-70°	38.8	3.4
70°-80°	13.8	1.2
80°-90°	2.8	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°	521.7	45.5
0°-40°	802.7	69.9
0°-60°	1092.4	95.2
0°-90°	1147.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1147.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	684	684	684	684	684	
5°	675	675	678	683	686	64
15°	629	635	654	676	686	177
25°	564	574	599	616	626	258
35°	438	449	460	463	464	271
45°	271	273	240	237	233	210
55°	154	149	81	76	74	140
65°	84	75	16	13	13	83
75°	31	26	4	2	2	35
85°	7	5	1	0	0	8
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°	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2
2.5°	682.5	680.1	681.7	678.4	682.5	678.4	679.2	680.1	679.2	680.1	680.9
5°	675.1	672.6	675.1	671.0	675.1	672.6	672.6	673.5	673.5	674.3	675.1
7.5°	665.2	662.7	665.2	661.1	666.0	663.5	663.5	665.2	664.4	665.2	666.8
10°	653.6	650.3	652.8	650.3	655.3	652.0	653.6	653.6	653.6	656.1	657.8
12.5°	641.2	637.9	641.2	637.1	642.1	639.6	640.4	642.9	643.7	645.4	646.2
15°	628.8	624.7	626.4	623.9	628.8	626.4	627.2	630.5	630.5	633.0	635.4
17.5°	613.1	609.8	613.1	609.8	614.0	612.3	614.0	616.4	616.4	618.9	621.4
20°	599.1	595.8	598.3	595.8	600.7	598.3	599.1	602.4	603.2	605.7	608.2
22.5°	581.7	579.3	580.9	578.4	583.4	581.7	582.6	585.9	586.7	588.3	592.5
25°	563.6	558.6	561.1	559.4	564.4	561.9	563.6	566.9	568.5	571.0	574.3
27.5°	537.1	534.6	536.3	536.3	540.4	537.9	538.8	542.1	544.6	547.0	551.2
30°	509.8	505.7	507.4	508.2	511.5	509.8	511.5	514.8	515.6	518.9	522.2
32.5°	475.1	473.5	476.8	475.1	476.8	476.8	477.6	480.1	481.8	483.4	487.5
35°	438.0	434.6	438.0	436.3	440.4	438.0	440.4	442.9	442.9	446.2	448.7
37.5°	397.5	393.3	395.0	395.0	396.6	395.8	395.8	399.9	400.8	403.2	405.7
40°	349.5	347.9	351.2	350.4	351.2	351.2	352.0	354.5	356.1	357.0	357.8
42.5°	306.6	307.4	308.2	308.2	308.2	308.2	308.2	311.5	310.7	313.2	314.0
45°	271.0	267.7	269.4	268.6	271.0	268.6	271.0	273.5	271.9	274.3	272.7
47.5°	234.7	234.7	234.7	233.9	235.5	234.7	236.3	237.2	237.2	237.2	236.3
50°	205.8	203.3	204.1	204.1	204.9	204.1	205.8	206.6	206.6	204.9	201.6
52.5°	177.7	176.8	176.8	178.5	178.5	177.7	177.7	177.7	177.7	175.2	173.5
55°	154.5	152.9	153.7	153.7	153.7	153.7	154.5	153.7	153.7	151.2	148.7
57.5°	133.9	132.2	132.2	132.2	133.0	132.2	132.2	132.2	131.4	128.9	125.6
60°	114.0	113.2	114.0	114.0	114.9	114.0	114.0	114.0	112.4	109.9	106.6
62.5°	97.5	97.5	97.5	98.3	98.3	97.5	97.5	96.7	95.9	92.5	89.2
65°	83.5	82.6	83.5	83.5	84.3	84.3	83.5	82.6	81.8	78.5	75.2
67.5°	69.4	68.6	69.4	69.4	70.2	69.4	69.4	69.4	66.9	65.3	62.0
70°	56.2	55.4	55.4	55.4	56.2	54.5	55.4	55.4	53.7	51.2	47.9
72.5°	43.0	43.0	43.0	43.0	43.0	43.0	42.1	42.1	40.5	38.0	36.4
75°	31.4	31.4	32.2	32.2	31.4	31.4	31.4	30.6	29.7	28.1	26.4
77.5°	23.1	23.1	23.1	23.1	22.3	22.3	22.3	21.5	20.7	19.8	18.2
80°	16.5	16.5	16.5	15.7	16.5	15.7	15.7	15.7	14.0	13.2	12.4
82.5°	11.6	10.7	10.7	10.7	10.7	10.7	10.7	9.9	9.9	9.1	8.3
85°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	5.8	5.0	5.0
87.5°	3.3	4.1	4.1	4.1	4.1	4.1	4.1	3.3	3.3	3.3	2.5
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°	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2
2.5°	680.9	680.9	682.5	680.1	684.2	681.7	680.9	685.0	682.5	681.7	683.4
5°	675.1	675.9	676.8	675.1	679.2	676.8	676.8	680.9	679.2	678.4	680.9
7.5°	667.7	668.5	670.2	669.3	672.6	671.0	671.8	675.9	674.3	674.3	676.8
10°	658.6	660.2	661.9	661.9	666.0	664.4	664.4	669.3	667.7	668.5	671.8
12.5°	647.8	650.3	652.8	653.6	657.8	655.3	656.1	661.9	661.1	661.9	665.2
15°	636.3	639.6	642.1	642.1	647.0	644.5	647.0	652.8	651.1	654.5	658.6
17.5°	623.1	626.4	629.7	630.5	635.4	633.8	637.1	642.9	642.9	644.5	649.5
20°	610.7	614.8	616.4	618.9	623.9	623.1	624.7	631.3	631.3	633.8	638.8
22.5°	594.1	598.3	601.6	604.0	608.2	608.2	610.7	616.4	616.4	618.1	623.1
25°	576.0	580.9	583.4	585.9	590.0	589.2	591.7	596.6	597.4	599.1	604.0
27.5°	552.8	556.9	560.3	561.9	567.7	564.4	566.9	572.6	571.8	573.5	577.6
30°	523.9	528.0	531.3	531.3	536.3	536.3	538.8	541.2	541.2	542.9	546.2
32.5°	490.0	495.0	495.0	497.5	500.8	497.5	500.8	504.1	502.4	504.9	507.4
35°	451.2	453.7	454.5	454.5	457.0	456.1	455.3	457.8	456.1	460.3	462.7
37.5°	404.1	407.4	405.7	407.4	406.6	404.1	404.1	408.2	404.9	405.7	408.2
40°	358.6	358.6	357.8	353.7	354.5	352.0	351.2	352.0	348.7	347.9	351.2
42.5°	311.5	310.7	308.2	302.4	303.3	299.1	295.8	295.8	294.2	293.3	294.2
45°	269.4	266.9	262.8	256.2	254.5	251.2	244.6	242.9	240.5	240.5	241.3
47.5°	230.5	227.2	220.6	213.2	209.1	204.9	198.3	195.8	191.7	190.1	191.7
50°	198.3	192.5	184.3	173.5	169.4	164.4	157.8	153.7	149.6	147.9	147.1
52.5°	168.6	160.3	152.0	138.8	135.5	130.6	121.5	117.3	113.2	109.9	109.9
55°	143.0	135.5	123.9	111.6	106.6	101.6	92.5	86.8	82.6	81.0	79.3
57.5°	119.8	111.6	100.8	87.6	82.6	77.7	68.6	62.8	58.7	56.2	54.5
60°	100.8	91.7	81.0	69.4	63.6	58.7	49.6	43.8	39.7	37.2	35.5
62.5°	82.6	75.2	64.5	53.7	48.8	43.8	36.4	30.6	26.4	24.8	22.3
65°	69.4	62.0	52.1	43.0	38.8	33.9	27.3	22.3	19.0	16.5	14.9
67.5°	56.2	50.4	42.1	33.9	29.7	26.4	20.7	16.5	13.2	11.6	10.7
70°	44.6	38.8	32.2	25.6	23.1	19.8	15.7	11.6	9.9	8.3	7.4
72.5°	33.1	28.9	24.0	19.0	16.5	14.9	10.7	9.1	6.6	5.8	5.0
75°	24.0	20.7	17.4	13.2	11.6	10.7	8.3	5.8	5.0	4.1	3.3
77.5°	16.5	14.9	11.6	9.1	8.3	7.4	5.8	4.1	3.3	2.5	2.5
80°	10.7	9.1	7.4	5.8	5.8	5.0	3.3	2.5	2.5	1.7	1.7
82.5°	6.6	5.8	5.0	4.1	3.3	3.3	2.5	1.7	1.7	0.8	0.8
85°	4.1	3.3	2.5	2.5	1.7	1.7	1.7	0.8	0.8	0.8	0.8
87.5°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	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°	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2
2.5°	683.4	683.4	685.0	682.5	684.2	684.2	685.9	682.5	684.2	685.0	686.7
5°	680.1	680.9	682.5	681.7	682.5	682.5	684.2	680.1	683.4	683.4	685.9
7.5°	676.8	676.8	678.4	677.6	679.2	680.1	681.7	678.4	681.7	681.7	684.2
10°	672.6	672.6	675.1	674.3	676.8	677.6	680.1	676.8	680.1	680.9	683.4
12.5°	666.8	667.7	670.2	670.2	672.6	674.3	676.8	675.1	679.2	680.1	683.4
15°	660.2	661.9	665.2	664.4	666.8	669.3	672.6	670.2	675.9	677.6	680.9
17.5°	652.0	653.6	656.1	656.1	658.6	660.2	664.4	662.7	667.7	668.5	672.6
20°	639.6	642.1	645.4	644.5	647.0	648.7	652.0	650.3	655.3	656.9	661.1
22.5°	624.7	626.4	628.8	628.8	631.3	633.0	636.3	633.8	638.8	639.6	642.9
25°	604.9	606.5	608.2	609.0	611.5	612.3	614.0	612.3	616.4	617.3	621.4
27.5°	579.3	580.1	582.6	582.6	584.2	585.0	587.5	584.2	590.0	590.0	592.5
30°	548.7	547.9	551.2	549.5	551.2	551.2	553.6	552.0	556.1	554.5	556.9
32.5°	508.2	509.8	509.8	508.2	511.5	510.7	510.7	509.0	511.5	512.3	514.0
35°	461.1	463.6	463.6	464.4	465.2	462.7	463.6	458.6	462.7	463.6	464.4
37.5°	409.9	407.4	409.0	406.6	410.7	405.7	405.7	402.4	405.7	405.7	406.6
40°	351.2	350.4	352.0	350.4	349.5	348.7	347.1	344.6	347.9	346.2	348.7
42.5°	295.8	295.0	295.0	293.3	292.5	292.5	290.9	289.2	288.4	288.4	292.5
45°	238.8	240.5	238.8	238.0	239.6	238.0	238.8	235.5	237.2	235.5	237.2
47.5°	190.9	191.7	190.1	188.4	190.9	188.4	188.4	185.9	189.2	189.2	187.6
50°	147.9	147.1	145.4	147.1	146.3	146.3	146.3	143.8	145.4	143.0	144.6
52.5°	109.1	108.2	108.2	107.4	108.2	107.4	107.4	106.6	106.6	105.8	106.6
55°	79.3	78.5	76.8	76.8	76.8	77.7	76.8	76.0	76.0	75.2	76.0
57.5°	53.7	52.1	52.1	52.1	52.1	51.2	51.2	50.4	51.2	50.4	51.2
60°	34.7	34.7	33.1	33.1	33.1	33.1	33.1	32.2	33.1	33.1	33.1
62.5°	21.5	21.5	20.7	19.8	20.7	19.8	19.8	19.8	20.7	19.8	20.7
65°	14.0	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
67.5°	9.9	9.1	9.1	9.1	9.1	9.1	9.1	8.3	9.1	9.1	9.1
70°	6.6	6.6	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
72.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	3.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
77.5°	2.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
85°	0.8	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	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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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CATALOG NUMBER: LD6B15DE010W2N2050 EU6B1020W2N902050 6LBSW0H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	684.2	684.2	684.2	684.2	684.2	684.2	684.2	684.2
2.5°	684.2	685.0	683.4	684.2	682.5	684.2	685.0	686.7
5°	682.5	683.4	681.7	683.4	681.7	683.4	684.2	685.9
7.5°	680.9	682.5	680.9	682.5	680.9	682.5	683.4	685.0
10°	680.9	683.4	681.7	684.2	681.7	683.4	685.0	685.9
12.5°	680.9	683.4	682.5	684.2	683.4	685.0	686.7	688.3
15°	679.2	681.7	680.1	682.5	681.7	682.5	685.9	685.9
17.5°	670.2	672.6	672.6	674.3	674.3	676.8	678.4	680.1
20°	658.6	661.1	660.2	662.7	662.7	665.2	666.8	668.5
22.5°	641.2	644.5	643.7	646.2	645.4	647.0	650.3	649.5
25°	618.9	623.1	622.2	623.9	623.1	623.1	624.7	625.5
27.5°	591.7	594.1	593.3	595.0	593.3	595.0	596.6	597.4
30°	556.1	557.8	556.9	557.8	556.9	558.6	559.4	561.1
32.5°	513.2	515.6	513.2	514.8	514.0	514.0	517.3	515.6
35°	461.9	462.7	463.6	463.6	461.9	462.7	464.4	464.4
37.5°	404.9	409.0	404.1	406.6	405.7	405.7	405.7	408.2
40°	345.4	346.2	344.6	344.6	344.6	343.8	347.1	346.2
42.5°	289.2	290.0	289.2	286.7	287.6	287.6	290.0	286.7
45°	234.7	236.3	235.5	235.5	233.9	233.9	234.7	233.0
47.5°	185.9	187.6	185.1	185.9	184.3	185.9	185.1	186.8
50°	141.3	143.0	142.1	143.0	143.0	141.3	143.8	140.5
52.5°	105.8	106.6	105.8	104.9	104.1	104.1	105.8	104.9
55°	75.2	74.4	74.4	74.4	75.2	75.2	74.4	73.5
57.5°	50.4	50.4	49.6	49.6	50.4	48.8	49.6	48.8
60°	32.2	32.2	32.2	32.2	31.4	32.2	32.2	32.2
62.5°	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
65°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
67.5°	8.3	9.1	9.1	9.1	8.3	8.3	8.3	8.3
70°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
72.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	0.8	0.8	0.8	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)