

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: P252685

Luminaire Tested: **LD6B20D010 EU6B10209727 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252685
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20D010 EU6B10209727 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1359.0 lumens
Efficiency: N/A
Efficacy: 65.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

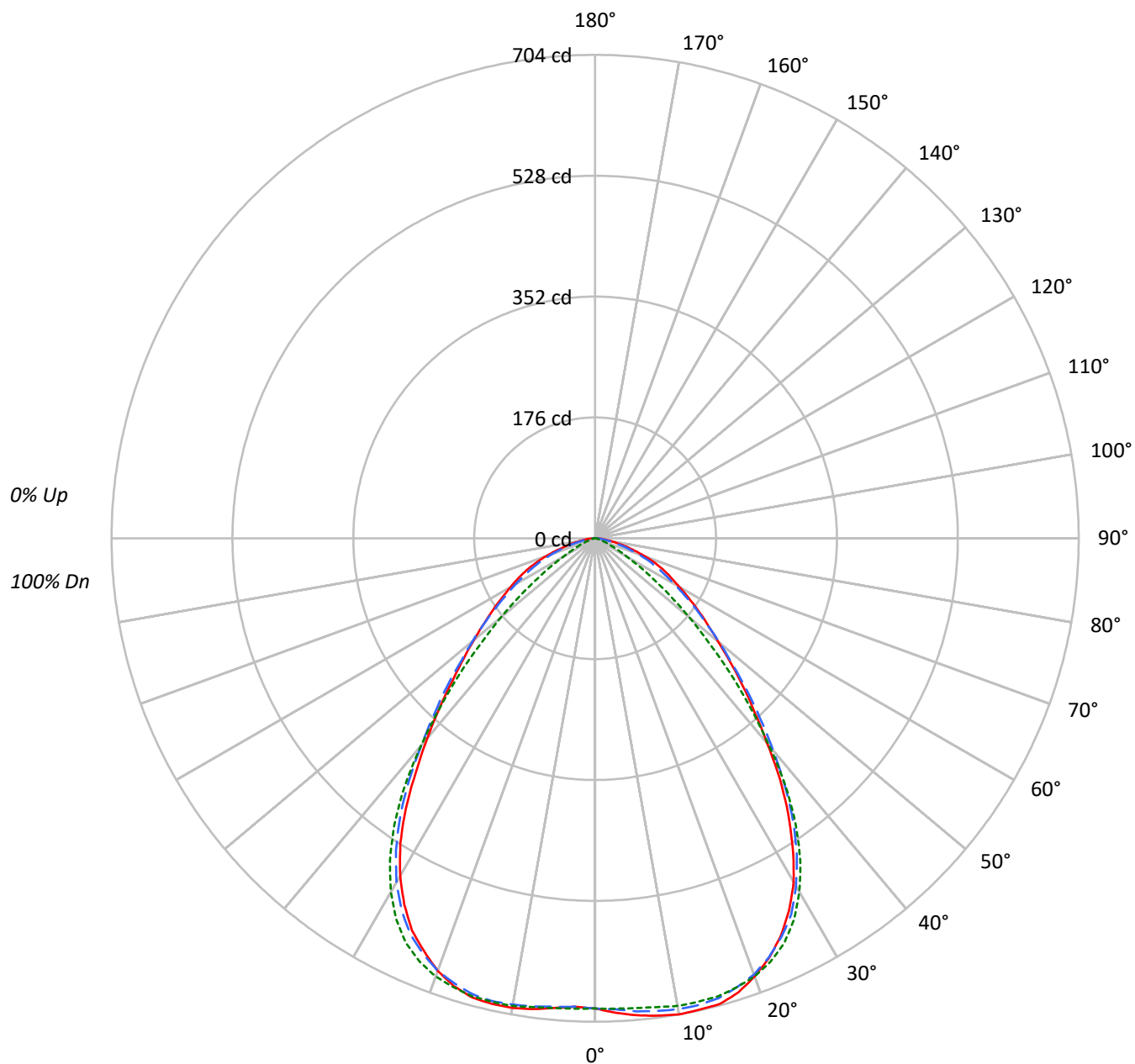
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	107	104	101	109	105	102	99		101	98	96		97	95	93		94	92	91
2	103	96	91	86	101	95	89	85		91	87	83		88	84	81		85	82	80
3	95	87	80	75	93	85	79	74		82	77	73		80	75	71		77	74	70
4	89	78	71	65	87	77	70	65		75	69	64		73	67	63		71	66	62
5	82	71	64	58	80	70	63	58		68	62	57		66	61	56		65	60	56
6	77	65	57	52	75	64	57	51		63	56	51		61	55	51		59	54	50
7	72	60	52	47	70	59	52	46		58	51	46		56	50	46		55	50	45
8	67	55	47	42	66	54	47	42		53	47	42		52	46	42		51	45	41
9	63	51	43	38	62	50	43	38		49	43	38		48	42	38		47	42	38
10	59	47	40	35	58	47	40	35		46	39	35		45	39	35		44	39	35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	44670	44670	44670
5°	45666	44965	44965
10°	46645	45810	46002
15°	47421	46638	46766
20°	47134	47134	46530
25°	46013	46848	45387
30°	43558	44793	42752
35°	39026	40571	38261
40°	33155	33572	32329
45°	28058	25640	27070
50°	23689	18087	23395
55°	20815	11681	20599
60°	18450	6955	18581
65°	17043	4183	17043
70°	14783	2403	14402
75°	11721	1462	10990
80°	8716	1090	8378
85°	8010	749	7261



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	4.9
10°-20°	195.1	14.4
20°-30°	293.4	21.6
30°-40°	308.5	22.7
40°-50°	230.5	17.0
50°-60°	143.5	10.6
60°-70°	81.6	6.0
70°-80°	33.6	2.5
80°-90°	6.9	0.5
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°	554.4	40.8
0°-40°	862.9	63.5
0°-60°	1236.9	91.0
0°-90°	1359.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1359.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	685	685	685	685	685	
5°	697	692	687	685	687	67
15°	702	693	690	688	692	197
25°	639	641	651	636	630	293
35°	490	503	509	495	480	304
45°	304	311	278	305	293	236
55°	183	179	103	176	181	165
65°	110	99	27	99	110	109
75°	46	37	6	36	44	51
85°	11	7	1	6	10	12
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°	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7
2.5°	691.5	690.5	691.5	689.5	688.6	688.6	689.5	687.6	686.6	687.6	686.6
5°	697.3	695.3	696.3	695.3	693.4	693.4	694.4	691.5	691.5	692.4	691.5
7.5°	701.2	701.2	701.2	699.2	698.3	697.3	699.2	696.3	695.3	695.3	694.4
10°	704.1	703.1	704.1	702.1	700.2	699.2	701.2	699.2	697.3	699.2	696.3
12.5°	703.1	703.1	703.1	702.1	700.2	699.2	701.2	698.3	697.3	698.3	696.3
15°	702.1	699.2	700.2	699.2	696.3	696.3	697.3	694.4	692.4	695.3	693.4
17.5°	693.4	691.5	692.4	690.5	688.6	687.6	688.6	687.6	685.7	687.6	685.7
20°	678.9	678.9	679.9	677.9	676.0	675.0	676.9	675.0	673.1	676.0	676.0
22.5°	661.5	661.5	661.5	660.5	659.5	659.5	659.5	658.5	657.6	659.5	660.5
25°	639.2	638.2	639.2	640.1	639.2	638.2	639.2	639.2	637.2	641.1	641.1
27.5°	611.1	611.1	613.0	612.1	612.1	611.1	613.0	613.0	612.1	615.0	617.9
30°	578.2	576.2	578.2	578.2	579.1	579.1	580.1	580.1	580.1	583.0	584.9
32.5°	535.6	536.5	539.4	538.5	537.5	540.4	540.4	542.3	543.3	545.2	546.2
35°	490.0	491.0	491.0	492.0	493.9	492.0	496.8	495.8	496.8	500.7	502.6
37.5°	441.6	438.7	443.5	441.6	442.6	442.6	444.5	445.5	448.4	453.2	453.2
40°	389.3	390.3	392.2	393.2	394.2	394.2	394.2	397.1	398.0	403.8	402.9
42.5°	343.8	343.8	345.7	346.7	346.7	346.7	346.7	349.6	351.5	353.5	355.4
45°	304.1	301.2	303.1	303.1	305.1	304.1	306.0	308.0	308.9	311.8	310.9
47.5°	266.3	265.4	266.3	267.3	266.3	267.3	268.3	269.2	270.2	270.2	270.2
50°	233.4	233.4	234.4	235.3	235.3	235.3	235.3	236.3	236.3	238.2	236.3
52.5°	206.3	207.2	207.2	206.3	207.2	207.2	208.2	208.2	207.2	207.2	204.3
55°	183.0	182.1	183.0	182.1	183.0	183.0	182.1	182.1	181.1	180.1	179.2
57.5°	160.8	160.8	160.8	160.8	159.8	160.8	159.8	158.8	158.8	156.9	154.0
60°	141.4	141.4	141.4	141.4	141.4	140.4	141.4	140.4	138.5	136.6	132.7
62.5°	124.9	124.0	124.9	124.0	124.0	123.0	123.0	122.0	120.1	118.2	114.3
65°	110.4	111.4	110.4	110.4	109.4	108.5	108.5	107.5	104.6	102.7	98.8
67.5°	94.9	93.9	93.9	93.9	93.0	93.0	93.0	91.0	89.1	86.2	82.3
70°	77.5	77.5	77.5	76.5	76.5	75.5	75.5	74.6	72.6	70.7	65.9
72.5°	61.0	61.0	61.0	59.1	60.0	59.1	59.1	57.1	56.2	53.3	50.4
75°	46.5	46.5	45.5	45.5	44.5	43.6	43.6	42.6	41.6	39.7	36.8
77.5°	33.9	33.9	33.9	32.9	32.0	31.0	31.0	30.0	29.1	28.1	26.1
80°	23.2	23.2	23.2	23.2	22.3	21.3	21.3	20.3	20.3	19.4	17.4
82.5°	15.5	15.5	15.5	15.5	14.5	14.5	14.5	13.6	12.6	12.6	10.7
85°	10.7	10.7	9.7	9.7	9.7	9.7	8.7	8.7	7.7	6.8	6.8
87.5°	5.8	5.8	5.8	5.8	4.8	4.8	4.8	4.8	3.9	3.9	2.9
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°	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7
2.5°	689.5	689.5	688.6	685.7	686.6	685.7	686.6	685.7	682.8	685.7	682.8
5°	693.4	694.4	692.4	688.6	689.5	688.6	688.6	687.6	684.7	686.6	684.7
7.5°	697.3	696.3	695.3	691.5	692.4	691.5	691.5	689.5	686.6	688.6	685.7
10°	699.2	699.2	697.3	693.4	693.4	692.4	693.4	692.4	688.6	691.5	689.5
12.5°	699.2	698.3	698.3	693.4	694.4	693.4	694.4	692.4	689.5	691.5	690.5
15°	696.3	696.3	695.3	690.5	691.5	691.5	692.4	690.5	687.6	690.5	688.6
17.5°	690.5	690.5	689.5	685.7	687.6	687.6	688.6	686.6	683.7	685.7	685.7
20°	678.9	679.9	679.9	676.9	678.9	678.9	679.9	678.9	677.9	678.9	676.9
22.5°	665.3	667.3	667.3	664.4	666.3	666.3	669.2	668.2	666.3	667.3	666.3
25°	645.0	646.9	648.9	646.9	648.9	648.9	651.8	650.8	648.9	650.8	647.9
27.5°	621.7	622.7	624.6	622.7	625.6	624.6	627.6	626.6	623.7	626.6	625.6
30°	588.8	592.7	595.6	592.7	595.6	595.6	597.5	596.6	595.6	594.6	594.6
32.5°	552.0	555.9	555.9	554.9	556.9	556.9	557.8	555.9	554.9	555.9	556.9
35°	506.5	508.4	510.4	509.4	510.4	511.3	510.4	511.3	508.4	509.4	509.4
37.5°	457.1	459.0	459.0	456.1	458.1	458.1	456.1	456.1	454.2	456.1	452.3
40°	404.8	402.9	403.8	401.9	400.0	400.0	399.0	395.1	393.2	394.2	395.1
42.5°	353.5	353.5	350.6	345.7	340.9	340.9	338.0	336.1	332.2	334.1	333.1
45°	309.9	305.1	301.2	293.4	290.5	288.6	283.8	278.9	277.0	277.9	277.0
47.5°	268.3	264.4	254.7	244.0	241.1	238.2	232.4	226.6	224.7	222.7	222.7
50°	233.4	226.6	216.0	204.3	199.5	194.7	186.9	181.1	177.2	178.2	178.2
52.5°	201.4	193.7	181.1	166.6	160.8	155.0	148.2	141.4	138.5	137.5	137.5
55°	173.4	164.6	152.0	135.6	130.7	124.0	115.2	107.5	103.6	102.7	104.6
57.5°	148.2	140.4	125.9	109.4	103.6	96.8	88.1	81.3	76.5	75.5	76.5
60°	127.8	117.2	104.6	89.1	81.3	75.5	65.9	60.0	55.2	53.3	54.2
62.5°	107.5	97.8	85.2	69.7	63.9	58.1	49.4	42.6	38.7	37.8	38.7
65°	92.0	82.3	70.7	57.1	51.3	45.5	37.8	31.0	28.1	27.1	28.1
67.5°	76.5	67.8	58.1	45.5	40.7	35.8	28.1	23.2	19.4	18.4	19.4
70°	62.0	54.2	44.5	35.8	31.0	27.1	21.3	16.5	13.6	12.6	13.6
72.5°	46.5	40.7	33.9	26.1	23.2	20.3	15.5	11.6	9.7	8.7	9.7
75°	33.9	29.1	24.2	18.4	16.5	14.5	10.7	7.7	6.8	5.8	6.8
77.5°	23.2	20.3	16.5	12.6	10.7	9.7	6.8	5.8	4.8	3.9	3.9
80°	15.5	13.6	10.7	8.7	7.7	6.8	4.8	3.9	2.9	2.9	2.9
82.5°	9.7	7.7	6.8	4.8	3.9	3.9	2.9	1.9	1.9	1.9	1.9
85°	5.8	4.8	3.9	2.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0
87.5°	2.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0
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°	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7
2.5°	684.7	682.8	682.8	683.7	684.7	685.7	683.7	682.8	682.8	685.7	683.7
5°	684.7	683.7	683.7	683.7	685.7	686.6	684.7	683.7	684.7	687.6	686.6
7.5°	687.6	685.7	686.6	686.6	687.6	689.5	687.6	686.6	687.6	690.5	688.6
10°	689.5	687.6	688.6	687.6	690.5	691.5	689.5	688.6	689.5	693.4	692.4
12.5°	690.5	689.5	689.5	688.6	691.5	692.4	690.5	689.5	690.5	693.4	692.4
15°	688.6	687.6	687.6	687.6	689.5	691.5	688.6	687.6	687.6	690.5	689.5
17.5°	684.7	682.8	682.8	682.8	683.7	684.7	681.8	680.8	679.9	682.8	681.8
20°	677.9	676.0	674.0	674.0	675.0	675.0	673.1	670.2	670.2	671.1	669.2
22.5°	665.3	664.4	662.4	661.5	663.4	662.4	658.5	655.6	654.7	655.6	653.7
25°	647.9	646.0	645.0	644.0	645.0	644.0	640.1	636.3	636.3	636.3	633.4
27.5°	623.7	621.7	620.8	620.8	621.7	619.8	615.9	612.1	610.1	610.1	607.2
30°	592.7	592.7	591.7	590.8	589.8	589.8	584.0	580.1	578.2	579.1	577.2
32.5°	554.9	554.0	553.0	550.1	551.0	550.1	545.2	542.3	539.4	537.5	536.5
35°	506.5	506.5	505.5	505.5	505.5	504.6	499.7	496.8	494.9	493.9	491.0
37.5°	453.2	452.3	451.3	451.3	451.3	451.3	448.4	445.5	445.5	444.5	442.6
40°	393.2	394.2	395.1	394.2	397.1	400.0	396.1	394.2	393.2	396.1	392.2
42.5°	335.1	334.1	339.0	339.9	339.9	344.8	345.7	346.7	345.7	347.7	347.7
45°	278.9	277.9	282.8	284.7	289.6	295.4	298.3	303.1	305.1	307.0	305.1
47.5°	225.6	229.5	233.4	238.2	242.1	251.8	257.6	262.4	264.4	267.3	267.3
50°	181.1	185.0	191.8	195.6	200.5	212.1	221.8	228.6	232.4	235.3	234.4
52.5°	139.5	146.2	155.0	158.8	165.6	179.2	189.8	197.6	202.4	205.3	206.3
55°	107.5	113.3	122.0	127.8	134.6	149.1	162.7	171.4	176.3	180.1	182.1
57.5°	79.4	86.2	95.9	100.7	108.5	124.9	136.6	147.2	153.0	157.9	158.8
60°	58.1	64.9	73.6	79.4	87.2	103.6	117.2	126.9	133.6	137.5	139.5
62.5°	41.6	48.4	57.1	62.9	69.7	84.3	97.8	107.5	114.3	119.1	122.0
65°	30.0	36.8	45.5	50.4	56.2	69.7	82.3	92.0	98.8	104.6	106.5
67.5°	22.3	27.1	34.9	39.7	45.5	56.2	66.8	75.5	82.3	87.2	89.1
70°	16.5	20.3	27.1	30.0	33.9	43.6	52.3	60.0	65.9	69.7	71.7
72.5°	11.6	14.5	19.4	22.3	25.2	32.9	39.7	45.5	49.4	53.3	55.2
75°	7.7	9.7	13.6	15.5	17.4	23.2	28.1	32.9	35.8	38.7	39.7
77.5°	4.8	6.8	9.7	10.7	12.6	15.5	19.4	22.3	24.2	26.1	28.1
80°	2.9	3.9	5.8	6.8	7.7	10.7	12.6	14.5	16.5	18.4	19.4
82.5°	1.9	2.9	3.9	3.9	4.8	5.8	7.7	9.7	10.7	11.6	12.6
85°	1.0	1.0	1.9	1.9	2.9	2.9	3.9	4.8	5.8	6.8	7.7
87.5°	1.0	1.0	1.0	1.0	1.9	1.9	2.9	2.9	2.9	3.9	3.9
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°	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7
2.5°	681.8	684.7	681.8	683.7	682.8	682.8	681.8	682.8
5°	684.7	688.6	684.7	687.6	685.7	685.7	685.7	686.6
7.5°	687.6	691.5	688.6	691.5	690.5	689.5	689.5	691.5
10°	690.5	693.4	691.5	694.4	693.4	692.4	692.4	694.4
12.5°	690.5	694.4	692.4	695.3	694.4	693.4	693.4	694.4
15°	687.6	692.4	689.5	692.4	691.5	690.5	690.5	692.4
17.5°	678.9	682.8	680.8	682.8	682.8	681.8	682.8	683.7
20°	667.3	670.2	668.2	670.2	670.2	668.2	669.2	670.2
22.5°	650.8	653.7	651.8	653.7	652.7	651.8	651.8	650.8
25°	630.5	634.3	631.4	633.4	631.4	629.5	629.5	630.5
27.5°	605.3	608.2	604.3	606.2	604.3	602.4	602.4	601.4
30°	572.4	573.3	570.4	572.4	570.4	569.4	567.5	567.5
32.5°	532.6	533.6	530.7	530.7	528.8	528.8	524.9	527.8
35°	486.2	487.1	486.2	485.2	482.3	481.3	480.4	480.4
37.5°	437.7	437.7	434.8	433.9	431.9	430.0	431.0	428.1
40°	388.3	387.4	384.5	385.4	384.5	381.6	380.6	379.6
42.5°	341.9	341.9	339.0	339.9	338.0	337.0	334.1	335.1
45°	301.2	301.2	298.3	298.3	297.3	294.4	295.4	293.4
47.5°	264.4	264.4	263.4	263.4	260.5	259.5	259.5	259.5
50°	232.4	232.4	232.4	232.4	231.5	230.5	229.5	230.5
52.5°	205.3	207.2	206.3	206.3	205.3	204.3	203.4	203.4
55°	181.1	182.1	182.1	183.0	182.1	181.1	182.1	181.1
57.5°	159.8	161.7	161.7	161.7	161.7	161.7	160.8	159.8
60°	141.4	142.4	142.4	143.3	143.3	143.3	142.4	142.4
62.5°	123.0	124.9	125.9	125.9	126.9	125.9	125.9	125.9
65°	108.5	110.4	111.4	110.4	111.4	111.4	110.4	110.4
67.5°	91.0	93.0	93.0	93.0	93.0	93.9	93.0	93.0
70°	73.6	75.5	74.6	75.5	75.5	75.5	75.5	75.5
72.5°	56.2	57.1	58.1	58.1	59.1	58.1	58.1	58.1
75°	40.7	42.6	42.6	42.6	42.6	43.6	43.6	43.6
77.5°	29.1	30.0	30.0	31.0	31.0	31.0	31.0	32.0
80°	20.3	20.3	21.3	21.3	22.3	22.3	22.3	22.3
82.5°	13.6	14.5	14.5	14.5	14.5	14.5	14.5	14.5
85°	7.7	8.7	8.7	8.7	8.7	9.7	9.7	9.7
87.5°	4.8	4.8	4.8	4.8	4.8	4.8	3.9	3.9
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)