

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: P252547

Luminaire Tested: **LD6B10D010 EU6B10208040 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252547
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B10D010 EU6B10208040 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1098.0 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

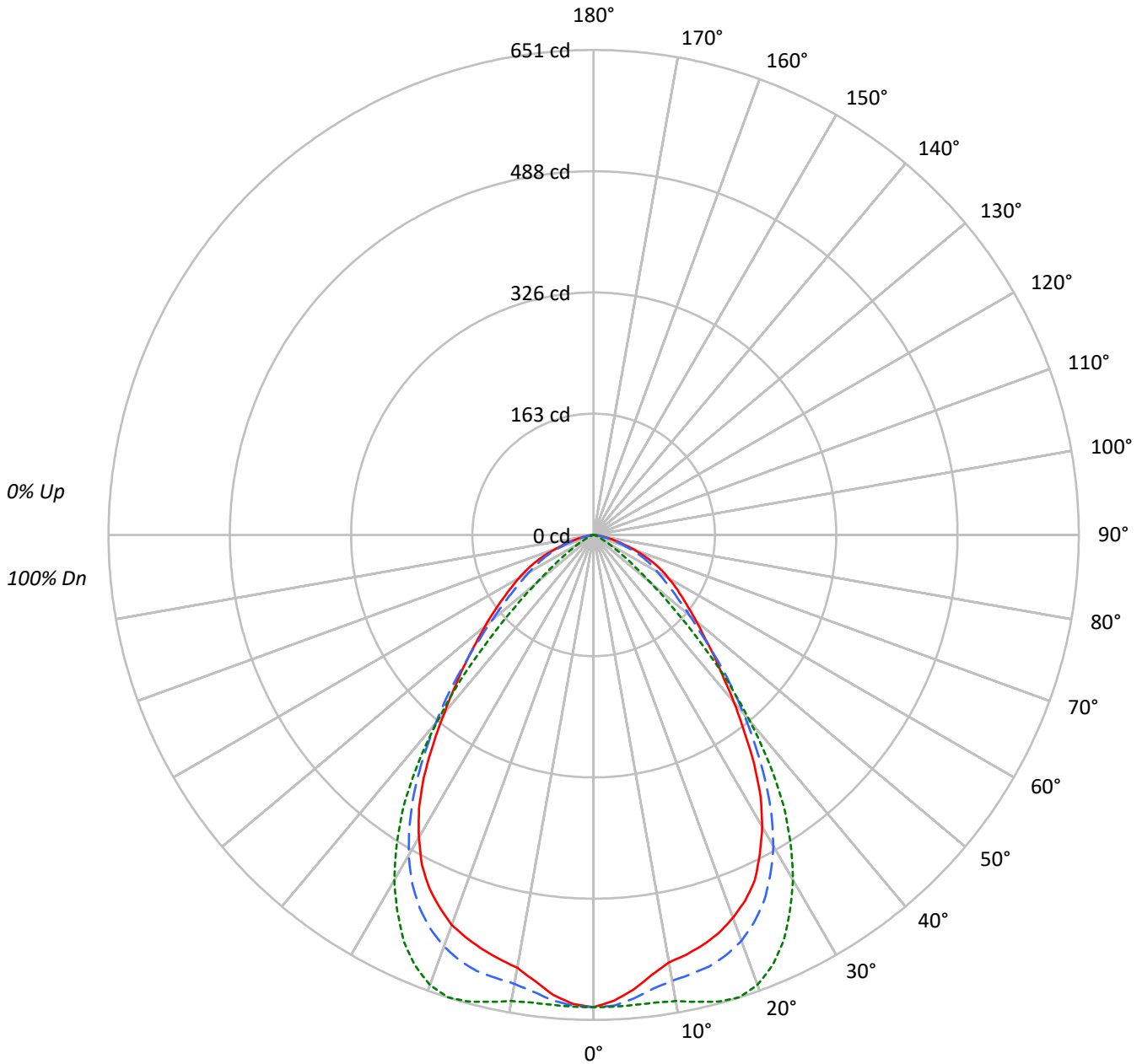
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				100				
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89				
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79				
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70				
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62				62				
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56				56				
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50				50				
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46				46				
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42				42				
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38				38				
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35				35				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	41356	41356	41356
5°	40126	41468	40604
10°	38596	42093	39086
15°	38458	43808	38904
20°	37956	44621	38671
25°	36820	43364	37612
30°	34066	40303	35331
35°	29882	35434	31635
40°	24902	27772	26529
45°	20962	18324	22383
50°	18148	10038	19264
55°	16425	5335	16834
60°	15110	2779	15110
65°	13693	1467	13353
70°	11044	839	10205
75°	7562	555	7008
80°	4959	263	4396
85°	3294	524	2770



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.1	5.4
10°-20°	170.9	15.6
20°-30°	252.6	23.0
30°-40°	255.1	23.2
40°-50°	175.8	16.0
50°-60°	101.0	9.2
60°-70°	58.8	5.4
70°-80°	21.4	2.0
80°-90°	3.3	0.3
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°	482.6	44.0
0°-40°	737.7	67.2
0°-60°	1014.5	92.4
0°-90°	1098.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	634	634	634	634	634	
5°	613	624	633	627	620	57
15°	569	600	649	606	576	160
25°	512	542	602	553	522	233
35°	375	401	445	419	397	233
45°	227	230	199	245	243	177
55°	144	127	47	132	148	130
65°	89	75	10	74	86	87
75°	30	24	2	24	28	34
85°	4	2	1	3	4	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°	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9
2.5°	625.9	626.6	627.3	626.6	627.3	630.3	628.1	629.5	629.5	630.3	632.5
5°	612.7	612.7	614.1	613.4	615.6	618.5	616.3	618.5	619.3	620.7	624.4
7.5°	595.8	595.8	596.6	596.6	599.5	602.4	601.0	603.9	606.8	609.7	614.1
10°	582.6	584.1	584.1	584.8	587.8	591.4	590.7	594.4	597.3	601.7	607.5
12.5°	576.8	577.5	577.5	579.0	581.9	585.6	584.8	588.5	592.9	598.0	603.9
15°	569.4	570.9	570.2	571.6	574.6	578.2	577.5	581.2	586.3	591.4	599.5
17.5°	559.9	560.6	561.4	561.4	564.3	567.2	567.2	570.9	576.8	582.6	591.4
20°	546.7	548.2	548.2	548.9	551.1	555.5	554.8	558.4	564.3	570.2	579.7
22.5°	531.3	532.1	532.1	532.8	536.5	538.7	539.4	542.3	547.5	554.0	562.8
25°	511.5	512.3	511.5	513.7	515.2	519.6	518.1	521.8	527.7	532.8	541.6
27.5°	483.0	484.4	484.4	485.2	488.8	492.5	492.5	496.2	501.3	504.9	513.7
30°	452.2	454.4	452.2	455.8	457.3	460.2	462.4	464.6	469.0	474.2	482.2
32.5°	417.0	416.3	417.0	418.5	422.9	425.1	426.5	428.7	433.1	437.5	444.1
35°	375.2	376.7	377.4	380.4	380.4	384.0	384.8	386.2	392.8	395.7	400.9
37.5°	331.3	332.7	333.5	334.9	337.9	339.3	341.5	343.7	348.1	353.2	356.2
40°	292.4	292.4	293.1	294.6	296.8	297.5	299.7	302.7	305.6	310.0	312.9
42.5°	255.8	256.5	255.8	257.2	259.4	262.4	261.6	265.3	266.0	269.0	271.2
45°	227.2	227.2	225.7	227.2	227.2	230.1	229.4	230.9	230.1	231.6	230.1
47.5°	200.1	200.8	200.1	200.8	200.8	200.8	201.5	200.1	200.8	198.6	194.2
50°	178.8	179.6	178.1	178.8	178.1	177.4	178.1	175.9	175.2	172.2	167.8
52.5°	160.5	159.8	159.0	159.0	159.0	158.3	157.6	155.4	153.2	150.2	145.1
55°	144.4	143.6	142.9	142.9	141.4	140.7	140.7	138.5	136.3	132.6	126.8
57.5°	129.7	129.0	128.3	128.3	127.5	126.1	126.1	123.9	120.9	116.5	111.4
60°	115.8	115.8	115.8	115.1	115.1	113.6	113.6	111.4	108.5	104.1	98.2
62.5°	103.3	102.6	102.6	102.6	102.6	101.9	101.1	99.7	96.7	92.3	87.2
65°	88.7	88.7	88.7	88.7	87.9	87.9	87.9	85.7	84.3	79.9	74.8
67.5°	72.6	72.6	72.6	72.6	71.8	72.6	72.6	71.1	69.6	65.2	60.8
70°	57.9	57.2	56.4	57.2	56.4	56.4	57.2	55.7	55.0	51.3	46.9
72.5°	42.5	43.2	42.5	42.5	42.5	41.8	42.5	41.8	40.3	37.4	34.4
75°	30.0	30.8	30.8	30.0	30.0	30.0	29.3	29.3	27.8	25.7	24.2
77.5°	20.5	20.5	20.5	20.5	19.8	19.8	19.8	19.1	18.3	16.9	15.4
80°	13.2	13.2	13.2	13.2	12.5	12.5	12.5	11.7	11.7	10.3	8.8
82.5°	8.1	8.1	8.1	8.1	8.1	8.1	7.3	7.3	6.6	5.9	5.1
85°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	3.7	3.7	2.9	2.2
87.5°	1.5	1.5	2.2	2.2	2.2	2.2	2.2	2.2	1.5	1.5	1.5
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°	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9
2.5°	631.0	631.7	631.7	631.7	633.9	634.7	632.5	630.3	634.7	633.9	635.4
5°	623.7	625.9	627.3	628.1	630.3	631.7	629.5	628.8	632.5	633.2	633.9
7.5°	614.9	618.5	622.2	623.7	626.6	628.1	627.3	627.3	631.7	633.2	633.2
10°	609.0	614.1	618.5	622.2	625.9	628.1	628.1	628.8	633.9	635.4	636.9
12.5°	607.5	614.1	620.0	625.1	628.1	631.7	632.5	634.7	639.8	642.0	642.0
15°	603.9	612.7	620.0	626.6	631.0	635.4	636.9	641.3	647.1	648.6	650.1
17.5°	597.3	606.1	614.9	622.9	628.8	632.5	636.9	641.3	648.6	650.8	651.5
20°	585.6	595.8	604.6	612.7	618.5	623.7	628.1	633.2	639.8	642.7	643.5
22.5°	568.0	578.2	587.0	595.8	601.7	606.1	610.5	616.3	622.9	625.9	625.9
25°	546.7	556.2	565.8	572.4	578.2	583.4	585.6	592.2	598.8	602.4	602.4
27.5°	519.6	528.4	537.2	544.5	548.2	552.6	556.2	562.1	567.2	570.2	573.1
30°	485.2	494.0	502.0	509.3	513.7	518.1	521.8	526.2	531.3	535.0	535.7
32.5°	447.8	455.1	463.2	470.5	474.9	476.4	480.0	484.4	488.8	491.8	492.5
35°	406.7	411.9	417.0	423.6	428.0	428.0	431.7	434.6	438.3	444.9	443.4
37.5°	358.4	365.7	369.4	371.6	374.5	377.4	378.2	381.8	386.2	387.7	389.9
40°	312.9	315.1	317.3	317.3	320.3	320.3	320.3	321.0	325.4	326.1	329.1
42.5°	267.5	267.5	265.3	263.1	263.8	263.1	259.4	259.4	261.6	264.6	264.6
45°	225.0	219.9	213.3	208.1	204.5	203.0	198.6	198.6	197.9	198.6	201.5
47.5°	189.1	180.3	169.3	159.0	155.4	152.4	145.8	142.9	141.4	142.2	143.6
50°	159.0	149.5	137.0	124.6	118.0	114.3	106.3	101.1	100.4	98.9	101.9
52.5°	137.0	125.3	112.1	97.5	90.9	85.0	76.2	71.8	68.9	68.9	69.6
55°	118.0	105.5	90.9	76.2	69.6	65.2	56.4	50.6	47.6	46.9	49.1
57.5°	101.9	90.1	75.5	60.8	54.2	49.1	40.3	35.2	33.0	31.5	32.2
60°	89.4	77.7	63.0	49.1	43.2	37.4	30.0	24.2	21.3	21.3	22.0
62.5°	77.7	66.7	53.5	40.3	35.2	30.0	22.0	16.9	14.7	13.9	14.7
65°	66.0	55.7	44.7	33.7	28.6	24.2	17.6	13.2	10.3	9.5	10.3
67.5°	53.5	45.4	35.9	27.1	22.7	19.1	13.2	9.5	7.3	6.6	7.3
70°	41.8	34.4	27.1	19.8	16.9	13.9	9.5	7.3	5.1	4.4	5.1
72.5°	30.0	24.9	19.1	13.9	11.7	9.5	6.6	5.1	3.7	2.9	3.7
75°	20.5	16.9	12.5	8.8	7.3	6.6	4.4	2.9	2.2	2.2	2.2
77.5°	13.2	10.3	8.1	5.9	4.4	3.7	2.2	1.5	1.5	1.5	1.5
80°	7.3	5.9	4.4	2.9	2.2	2.2	1.5	1.5	0.7	0.7	0.7
82.5°	4.4	2.9	2.2	1.5	1.5	0.7	0.7	0.7	0.7	0.7	0.7
85°	2.2	1.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.7	0.7	0.7	0.7	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°	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9
2.5°	632.5	633.2	631.0	633.9	631.7	634.7	634.7	631.7	632.5	631.0	633.9
5°	631.0	631.0	629.5	631.7	628.8	631.7	631.0	625.9	627.3	624.4	627.3
7.5°	631.0	629.5	627.3	629.5	625.9	628.1	625.1	620.0	618.5	614.9	614.9
10°	633.2	631.0	628.1	628.8	625.1	625.9	621.5	614.1	611.9	607.5	606.1
12.5°	638.3	636.1	631.7	633.2	628.1	628.1	622.2	613.4	609.0	603.1	601.7
15°	645.7	642.0	636.9	637.6	632.5	629.5	622.2	611.9	606.1	598.0	595.8
17.5°	647.1	643.5	636.9	636.9	630.3	626.6	617.8	606.1	598.8	590.7	586.3
20°	639.1	635.4	628.1	627.3	621.5	616.3	606.8	595.1	587.8	579.0	575.3
22.5°	622.2	617.8	611.2	610.5	604.6	601.7	591.4	579.7	572.4	563.6	560.6
25°	597.3	595.1	588.5	587.8	582.6	579.0	570.2	559.2	552.6	543.8	540.9
27.5°	568.0	565.8	559.2	559.2	553.3	551.1	543.1	532.8	527.7	519.6	515.9
30°	532.8	529.9	526.2	525.5	520.3	518.1	510.8	501.3	496.2	489.6	488.1
32.5°	491.0	488.8	486.6	485.9	480.8	478.6	473.4	463.9	459.5	453.6	451.4
35°	442.7	441.2	439.0	438.3	436.1	433.9	428.7	421.4	419.2	414.8	412.6
37.5°	387.0	388.4	387.0	387.0	384.8	385.5	381.1	376.7	374.5	371.6	370.1
40°	326.9	329.8	332.0	332.0	331.3	334.2	333.5	329.8	329.1	327.6	326.9
42.5°	266.0	267.5	271.9	274.8	274.1	281.4	282.2	285.1	287.3	285.8	286.6
45°	202.3	206.7	212.5	215.5	219.1	228.7	233.8	239.6	244.8	247.7	247.0
47.5°	145.8	151.0	157.6	162.0	168.6	180.3	193.5	200.8	208.1	211.8	215.5
50°	105.5	110.7	118.7	125.3	129.7	145.8	159.8	169.3	177.4	182.5	186.1
52.5°	74.0	79.9	88.7	94.5	101.1	116.5	132.6	143.6	152.4	159.0	162.7
55°	51.3	57.9	66.0	71.8	79.1	95.3	110.7	122.4	131.9	137.8	142.2
57.5°	35.9	41.8	49.8	55.0	62.3	77.7	93.1	104.8	114.3	120.2	125.3
60°	24.2	30.0	38.1	43.2	49.1	64.5	78.4	90.9	99.7	105.5	110.7
62.5°	16.9	22.0	30.0	35.2	40.3	53.5	66.7	77.7	86.5	93.1	97.5
65°	13.2	17.6	24.2	28.6	33.7	44.7	55.7	65.2	74.0	80.6	83.5
67.5°	9.5	13.9	19.1	22.7	26.4	35.9	45.4	52.8	60.8	66.0	69.6
70°	6.6	9.5	13.9	16.9	19.8	27.1	34.4	41.0	46.9	50.6	53.5
72.5°	5.1	6.6	9.5	11.7	13.9	19.1	24.9	30.0	34.4	37.4	40.3
75°	2.9	4.4	6.6	8.1	9.5	13.2	16.9	20.5	23.5	25.7	27.1
77.5°	1.5	2.2	3.7	4.4	5.9	8.1	11.0	13.2	15.4	16.9	18.3
80°	1.5	1.5	2.2	2.2	2.9	4.4	5.9	7.3	8.8	10.3	11.0
82.5°	0.7	0.7	1.5	1.5	1.5	2.2	2.9	4.4	5.1	5.9	6.6
85°	0.7	0.7	0.7	0.7	0.7	1.5	1.5	2.2	2.9	3.7	3.7
87.5°	0.0	0.0	0.7	0.7	0.7	0.7	0.7	1.5	1.5	1.5	2.2
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°	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9
2.5°	631.7	633.2	632.5	633.9	631.7	631.0	632.5	630.3
5°	623.7	624.4	623.7	623.7	622.2	620.7	622.2	620.0
7.5°	611.2	611.2	609.0	609.0	606.1	604.6	604.6	603.9
10°	601.0	598.8	596.6	597.3	592.9	591.4	590.7	590.0
12.5°	595.8	594.4	590.7	590.7	586.3	584.8	584.1	583.4
15°	590.0	587.0	584.1	583.4	579.7	578.2	577.5	576.0
17.5°	579.7	577.5	573.8	573.8	570.2	569.4	568.0	567.2
20°	568.7	565.8	562.8	562.8	558.4	558.4	556.2	557.0
22.5°	553.3	551.1	548.2	548.2	544.5	543.8	541.6	540.9
25°	535.0	532.1	529.9	529.1	526.2	524.7	524.0	522.5
27.5°	510.8	508.6	506.4	504.9	501.3	500.5	498.3	499.1
30°	480.8	479.3	478.6	477.1	472.7	471.2	471.2	469.0
32.5°	447.8	445.6	444.1	441.9	438.3	437.5	435.3	436.1
35°	407.5	404.5	402.3	403.1	398.7	397.9	396.5	397.2
37.5°	365.7	362.8	359.8	359.1	355.4	355.4	353.2	353.2
40°	322.5	319.5	318.1	318.1	313.7	314.4	312.2	311.5
42.5°	283.6	280.7	280.0	279.2	277.0	276.3	274.1	274.8
45°	247.0	246.2	246.2	244.8	242.6	241.8	242.6	242.6
47.5°	214.7	215.5	214.7	214.7	213.3	214.7	213.3	214.0
50°	187.6	189.1	189.1	189.1	188.3	189.1	189.1	189.8
52.5°	164.9	167.1	166.4	167.1	166.4	167.8	167.1	167.8
55°	145.1	146.6	147.3	148.0	148.0	148.0	148.0	148.0
57.5°	126.8	129.0	129.7	130.5	130.5	131.9	130.5	130.5
60°	112.1	114.3	115.1	115.8	115.8	116.5	115.1	115.8
62.5°	98.9	101.1	101.1	101.9	101.9	101.9	100.4	101.1
65°	85.7	86.5	87.2	87.2	86.5	86.5	85.7	86.5
67.5°	71.1	71.8	71.1	71.1	70.4	70.4	68.9	69.6
70°	55.0	55.0	55.7	55.0	54.2	55.0	54.2	53.5
72.5°	41.0	41.0	41.0	40.3	40.3	39.6	40.3	40.3
75°	27.8	27.8	28.6	28.6	28.6	28.6	27.8	27.8
77.5°	18.3	18.3	18.3	18.3	19.1	18.3	18.3	18.3
80°	11.7	11.7	12.5	12.5	11.7	11.7	11.7	11.7
82.5°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
85°	4.4	4.4	4.4	4.4	3.7	3.7	3.7	3.7
87.5°	2.2	2.2	2.2	2.2	2.2	2.2	1.5	1.5
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)