

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: P252546

Luminaire Tested: **LD6B10D010 EU6B10208035 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252546
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 EU6B10208035 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1086.0 lumens
Efficiency: N/A
Efficacy: 108.1 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

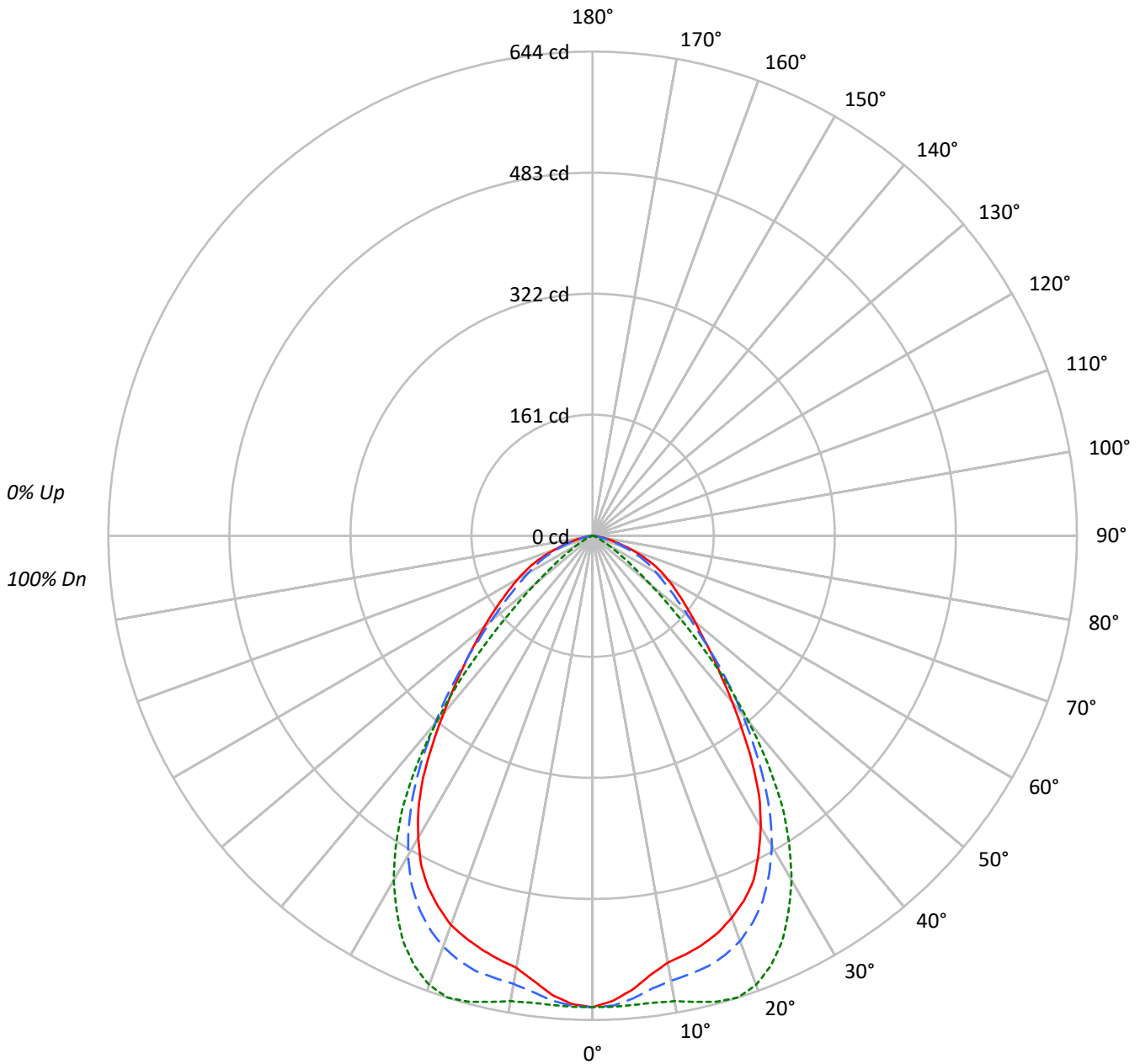
Input Watts (W): 10.05
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	40906	40906	40906
5°	39687	41016	40158
10°	38178	41636	38655
15°	38040	43328	38479
20°	37540	44135	38248
25°	36424	42889	37202
30°	33689	39859	34947
35°	29556	35043	31292
40°	24630	27474	26240
45°	20732	18121	22134
50°	17955	9936	19051
55°	16243	5278	16652
60°	14940	2740	14940
65°	13538	1451	13199
70°	10930	820	10091
75°	7486	555	6932
80°	4884	263	4358
85°	3219	524	2695



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	5.4
10°-20°	169.1	15.6
20°-30°	249.8	23.0
30°-40°	252.3	23.2
40°-50°	173.9	16.0
50°-60°	99.9	9.2
60°-70°	58.1	5.4
70°-80°	21.2	2.0
80°-90°	3.2	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°	477.3	44.0
0°-40°	729.6	67.2
0°-60°	1003.4	92.4
0°-90°	1086.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1086.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	627	627	627	627	627	
5°	606	618	626	620	613	57
15°	563	593	642	600	570	159
25°	506	536	596	546	517	231
35°	371	396	440	415	393	230
45°	225	228	196	242	240	175
55°	143	125	46	130	146	129
65°	88	74	9	73	86	86
75°	30	24	2	23	28	33
85°	4	2	1	3	4	5
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°	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0
2.5°	619.0	619.8	620.5	619.8	620.5	623.4	621.2	622.7	622.7	623.4	625.6
5°	606.0	606.0	607.4	606.7	608.9	611.8	609.6	611.8	612.5	614.0	617.6
7.5°	589.3	589.3	590.0	590.0	592.9	595.8	594.4	597.3	600.2	603.1	607.4
10°	576.3	577.7	577.7	578.4	581.3	585.0	584.2	587.9	590.8	595.1	600.9
12.5°	570.5	571.2	571.2	572.6	575.5	579.2	578.4	582.1	586.4	591.5	597.3
15°	563.2	564.7	563.9	565.4	568.3	571.9	571.2	574.8	579.9	585.0	592.9
17.5°	553.8	554.5	555.2	555.2	558.1	561.0	561.0	564.7	570.5	576.3	585.0
20°	540.7	542.2	542.2	542.9	545.1	549.4	548.7	552.3	558.1	563.9	573.4
22.5°	525.5	526.2	526.2	527.0	530.6	532.8	533.5	536.4	541.5	548.0	556.7
25°	506.0	506.7	506.0	508.1	509.6	513.9	512.5	516.1	521.9	527.0	535.7
27.5°	477.7	479.1	479.1	479.9	483.5	487.1	487.1	490.7	495.8	499.4	508.1
30°	447.2	449.4	447.2	450.9	452.3	455.2	457.4	459.6	463.9	469.0	477.0
32.5°	412.4	411.7	412.4	413.9	418.2	420.4	421.9	424.0	428.4	432.7	439.3
35°	371.1	372.6	373.3	376.2	376.2	379.8	380.6	382.0	388.5	391.4	396.5
37.5°	327.6	329.1	329.8	331.3	334.2	335.6	337.8	340.0	344.3	349.4	352.3
40°	289.2	289.2	289.9	291.4	293.6	294.3	296.5	299.4	302.3	306.6	309.5
42.5°	253.0	253.7	253.0	254.4	256.6	259.5	258.8	262.4	263.1	266.0	268.2
45°	224.7	224.7	223.3	224.7	224.7	227.6	226.9	228.3	227.6	229.1	227.6
47.5°	197.9	198.6	197.9	198.6	198.6	198.6	199.3	197.9	198.6	196.4	192.1
50°	176.9	177.6	176.1	176.9	176.1	175.4	176.1	174.0	173.2	170.3	166.0
52.5°	158.7	158.0	157.3	157.3	157.3	156.6	155.8	153.7	151.5	148.6	143.5
55°	142.8	142.1	141.3	141.3	139.9	139.2	139.2	137.0	134.8	131.2	125.4
57.5°	128.3	127.6	126.9	126.9	126.1	124.7	124.7	122.5	119.6	115.3	110.2
60°	114.5	114.5	114.5	113.8	113.8	112.4	112.4	110.2	107.3	102.9	97.1
62.5°	102.2	101.5	101.5	101.5	101.5	100.8	100.0	98.6	95.7	91.3	86.3
65°	87.7	87.7	87.7	87.7	87.0	87.0	87.0	84.8	83.4	79.0	73.9
67.5°	71.8	71.8	71.8	71.8	71.0	71.8	71.8	70.3	68.9	64.5	60.2
70°	57.3	56.5	55.8	56.5	55.8	55.8	56.5	55.1	54.4	50.7	46.4
72.5°	42.0	42.8	42.0	42.0	42.0	41.3	42.0	41.3	39.9	37.0	34.1
75°	29.7	30.4	30.4	29.7	29.7	29.7	29.0	29.0	27.5	25.4	23.9
77.5°	20.3	20.3	20.3	20.3	19.6	19.6	19.6	18.8	18.1	16.7	15.2
80°	13.0	13.0	13.0	13.0	12.3	12.3	12.3	11.6	11.6	10.1	8.7
82.5°	8.0	8.0	8.0	8.0	8.0	8.0	7.2	7.2	6.5	5.8	5.1
85°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	3.6	3.6	2.9	2.2
87.5°	1.4	1.4	2.2	2.2	2.2	2.2	2.2	2.2	1.4	1.4	1.4
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°	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0
2.5°	624.1	624.8	624.8	624.8	627.0	627.7	625.6	623.4	627.7	627.0	628.5
5°	616.9	619.0	620.5	621.2	623.4	624.8	622.7	621.9	625.6	626.3	627.0
7.5°	608.2	611.8	615.4	616.9	619.8	621.2	620.5	620.5	624.8	626.3	626.3
10°	602.4	607.4	611.8	615.4	619.0	621.2	621.2	621.9	627.0	628.5	629.9
12.5°	600.9	607.4	613.2	618.3	621.2	624.8	625.6	627.7	632.8	635.0	635.0
15°	597.3	606.0	613.2	619.8	624.1	628.5	629.9	634.3	640.0	641.5	642.9
17.5°	590.8	599.5	608.2	616.1	621.9	625.6	629.9	634.3	641.5	643.7	644.4
20°	579.2	589.3	598.0	606.0	611.8	616.9	621.2	626.3	632.8	635.7	636.4
22.5°	561.8	571.9	580.6	589.3	595.1	599.5	603.8	609.6	616.1	619.0	619.0
25°	540.7	550.2	559.6	566.1	571.9	577.0	579.2	585.7	592.2	595.8	595.8
27.5°	513.9	522.6	531.3	538.6	542.2	546.5	550.2	556.0	561.0	563.9	566.8
30°	479.9	488.6	496.5	503.8	508.1	512.5	516.1	520.4	525.5	529.1	529.9
32.5°	442.9	450.1	458.1	465.4	469.7	471.2	474.8	479.1	483.5	486.4	487.1
35°	402.3	407.4	412.4	419.0	423.3	423.3	426.9	429.8	433.5	440.0	438.5
37.5°	354.5	361.7	365.3	367.5	370.4	373.3	374.0	377.7	382.0	383.4	385.6
40°	309.5	311.7	313.9	313.9	316.8	316.8	316.8	317.5	321.8	322.6	325.5
42.5°	264.6	264.6	262.4	260.2	260.9	260.2	256.6	256.6	258.8	261.7	261.7
45°	222.5	217.5	210.9	205.9	202.2	200.8	196.4	196.4	195.7	196.4	199.3
47.5°	187.0	178.3	167.4	157.3	153.7	150.8	144.2	141.3	139.9	140.6	142.1
50°	157.3	147.9	135.5	123.2	116.7	113.1	105.1	100.0	99.3	97.9	100.8
52.5°	135.5	124.0	110.9	96.4	89.9	84.1	75.4	71.0	68.1	68.1	68.9
55°	116.7	104.4	89.9	75.4	68.9	64.5	55.8	50.0	47.1	46.4	48.6
57.5°	100.8	89.2	74.7	60.2	53.6	48.6	39.9	34.8	32.6	31.2	31.9
60°	88.4	76.8	62.3	48.6	42.8	37.0	29.7	23.9	21.0	21.0	21.7
62.5°	76.8	66.0	52.9	39.9	34.8	29.7	21.7	16.7	14.5	13.8	14.5
65°	65.2	55.1	44.2	33.3	28.3	23.9	17.4	13.0	10.1	9.4	10.1
67.5°	52.9	44.9	35.5	26.8	22.5	18.8	13.0	9.4	7.2	6.5	7.2
70°	41.3	34.1	26.8	19.6	16.7	13.8	9.4	7.2	5.1	4.3	5.1
72.5°	29.7	24.6	18.8	13.8	11.6	9.4	6.5	5.1	3.6	2.9	3.6
75°	20.3	16.7	12.3	8.7	7.2	6.5	4.3	2.9	2.2	2.2	2.2
77.5°	13.0	10.1	8.0	5.8	4.3	3.6	2.2	1.4	1.4	1.4	1.4
80°	7.2	5.8	4.3	2.9	2.2	2.2	1.4	1.4	0.7	0.7	0.7
82.5°	4.3	2.9	2.2	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
85°	2.2	1.4	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°	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0
2.5°	625.6	626.3	624.1	627.0	624.8	627.7	627.7	624.8	625.6	624.1	627.0
5°	624.1	624.1	622.7	624.8	621.9	624.8	624.1	619.0	620.5	617.6	620.5
7.5°	624.1	622.7	620.5	622.7	619.0	621.2	618.3	613.2	611.8	608.2	608.2
10°	626.3	624.1	621.2	621.9	618.3	619.0	614.7	607.4	605.3	600.9	599.5
12.5°	631.4	629.2	624.8	626.3	621.2	621.2	615.4	606.7	602.4	596.6	595.1
15°	638.6	635.0	629.9	630.6	625.6	622.7	615.4	605.3	599.5	591.5	589.3
17.5°	640.0	636.4	629.9	629.9	623.4	619.8	611.1	599.5	592.2	584.2	579.9
20°	632.1	628.5	621.2	620.5	614.7	609.6	600.2	588.6	581.3	572.6	569.0
22.5°	615.4	611.1	604.5	603.8	598.0	595.1	585.0	573.4	566.1	557.4	554.5
25°	590.8	588.6	582.1	581.3	576.3	572.6	563.9	553.1	546.5	537.8	534.9
27.5°	561.8	559.6	553.1	553.1	547.3	545.1	537.1	527.0	521.9	513.9	510.3
30°	527.0	524.1	520.4	519.7	514.6	512.5	505.2	495.8	490.7	484.2	482.8
32.5°	485.7	483.5	481.3	480.6	475.5	473.3	468.3	458.8	454.5	448.7	446.5
35°	437.8	436.4	434.2	433.5	431.3	429.1	424.0	416.8	414.6	410.3	408.1
37.5°	382.7	384.2	382.7	382.7	380.6	381.3	376.9	372.6	370.4	367.5	366.1
40°	323.3	326.2	328.4	328.4	327.6	330.5	329.8	326.2	325.5	324.0	323.3
42.5°	263.1	264.6	268.9	271.8	271.1	278.3	279.1	282.0	284.1	282.7	283.4
45°	200.1	204.4	210.2	213.1	216.7	226.2	231.2	237.0	242.1	245.0	244.3
47.5°	144.2	149.3	155.8	160.2	166.7	178.3	191.4	198.6	205.9	209.5	213.1
50°	104.4	109.5	117.4	124.0	128.3	144.2	158.0	167.4	175.4	180.5	184.1
52.5°	73.2	79.0	87.7	93.5	100.0	115.3	131.2	142.1	150.8	157.3	160.9
55°	50.7	57.3	65.2	71.0	78.3	94.2	109.5	121.1	130.5	136.3	140.6
57.5°	35.5	41.3	49.3	54.4	61.6	76.8	92.1	103.7	113.1	118.9	124.0
60°	23.9	29.7	37.7	42.8	48.6	63.8	77.6	89.9	98.6	104.4	109.5
62.5°	16.7	21.7	29.7	34.8	39.9	52.9	66.0	76.8	85.5	92.1	96.4
65°	13.0	17.4	23.9	28.3	33.3	44.2	55.1	64.5	73.2	79.7	82.6
67.5°	9.4	13.8	18.8	22.5	26.1	35.5	44.9	52.2	60.2	65.2	68.9
70°	6.5	9.4	13.8	16.7	19.6	26.8	34.1	40.6	46.4	50.0	52.9
72.5°	5.1	6.5	9.4	11.6	13.8	18.8	24.6	29.7	34.1	37.0	39.9
75°	2.9	4.3	6.5	8.0	9.4	13.0	16.7	20.3	23.2	25.4	26.8
77.5°	1.4	2.2	3.6	4.3	5.8	8.0	10.9	13.0	15.2	16.7	18.1
80°	1.4	1.4	2.2	2.2	2.9	4.3	5.8	7.2	8.7	10.1	10.9
82.5°	0.7	0.7	1.4	1.4	1.4	2.2	2.9	4.3	5.1	5.8	6.5
85°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	2.2	2.9	3.6	3.6
87.5°	0.0	0.0	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4	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°	627.0	627.0	627.0	627.0	627.0	627.0	627.0	627.0
2.5°	624.8	626.3	625.6	627.0	624.8	624.1	625.6	623.4
5°	616.9	617.6	616.9	616.9	615.4	614.0	615.4	613.2
7.5°	604.5	604.5	602.4	602.4	599.5	598.0	598.0	597.3
10°	594.4	592.2	590.0	590.8	586.4	585.0	584.2	583.5
12.5°	589.3	587.9	584.2	584.2	579.9	578.4	577.7	577.0
15°	583.5	580.6	577.7	577.0	573.4	571.9	571.2	569.7
17.5°	573.4	571.2	567.6	567.6	563.9	563.2	561.8	561.0
20°	562.5	559.6	556.7	556.7	552.3	552.3	550.2	550.9
22.5°	547.3	545.1	542.2	542.2	538.6	537.8	535.7	534.9
25°	529.1	526.2	524.1	523.3	520.4	519.0	518.3	516.8
27.5°	505.2	503.1	500.9	499.4	495.8	495.1	492.9	493.6
30°	475.5	474.1	473.3	471.9	467.5	466.1	466.1	463.9
32.5°	442.9	440.7	439.3	437.1	433.5	432.7	430.6	431.3
35°	403.0	400.1	397.9	398.7	394.3	393.6	392.1	392.9
37.5°	361.7	358.8	355.9	355.2	351.6	351.6	349.4	349.4
40°	318.9	316.0	314.6	314.6	310.2	311.0	308.8	308.1
42.5°	280.5	277.6	276.9	276.2	274.0	273.3	271.1	271.8
45°	244.3	243.6	243.6	242.1	239.9	239.2	239.9	239.9
47.5°	212.4	213.1	212.4	212.4	210.9	212.4	210.9	211.7
50°	185.6	187.0	187.0	187.0	186.3	187.0	187.0	187.7
52.5°	163.1	165.3	164.5	165.3	164.5	166.0	165.3	166.0
55°	143.5	145.0	145.7	146.4	146.4	146.4	146.4	146.4
57.5°	125.4	127.6	128.3	129.0	129.0	130.5	129.0	129.0
60°	110.9	113.1	113.8	114.5	114.5	115.3	113.8	114.5
62.5°	97.9	100.0	100.0	100.8	100.8	100.8	99.3	100.0
65°	84.8	85.5	86.3	86.3	85.5	85.5	84.8	85.5
67.5°	70.3	71.0	70.3	70.3	69.6	69.6	68.1	68.9
70°	54.4	54.4	55.1	54.4	53.6	54.4	53.6	52.9
72.5°	40.6	40.6	40.6	39.9	39.9	39.1	39.9	39.9
75°	27.5	27.5	28.3	28.3	28.3	28.3	27.5	27.5
77.5°	18.1	18.1	18.1	18.1	18.8	18.1	18.1	18.1
80°	11.6	11.6	12.3	12.3	11.6	11.6	11.6	11.6
82.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
85°	4.3	4.3	4.3	4.3	3.6	3.6	3.6	3.6
87.5°	2.2	2.2	2.2	2.2	2.2	2.2	1.4	1.4
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)