

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: P252241

Luminaire Tested: **LD6B10D010 EU6B10209040 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252241  
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: LD6B10D010 EU6B10209040 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 852.0 lumens  
Efficiency: N/A  
Efficacy: 84.8 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

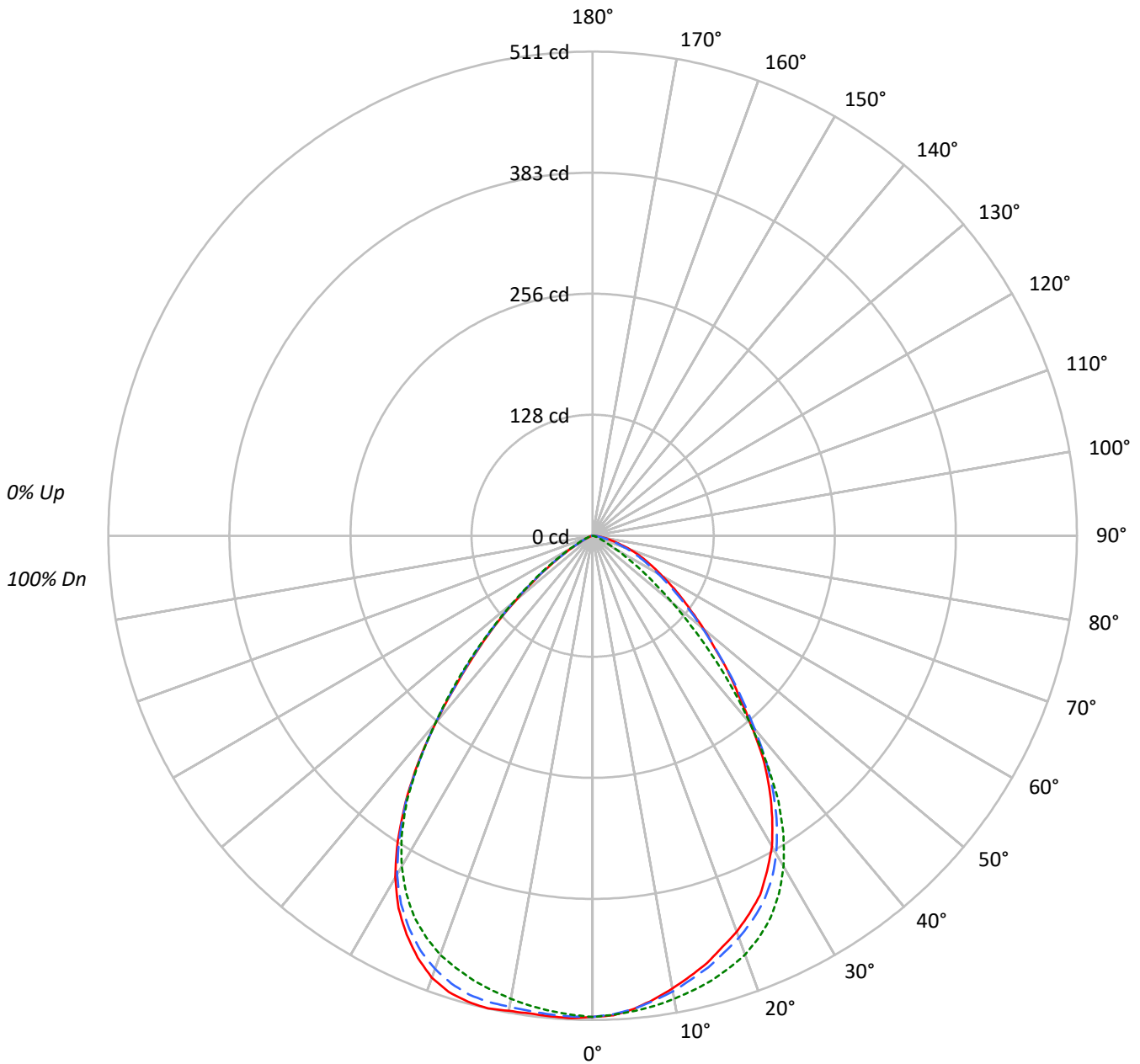
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
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	103	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°	33129	33129	33129
5°	32817	32981	33341
10°	32143	32872	33726
15°	31529	32812	34386
20°	30874	32659	34450
25°	30111	32012	33423
30°	28506	30359	31376
35°	25892	27206	27453
40°	22092	21990	21888
45°	18564	16469	15962
50°	15498	11144	10586
55°	13046	6836	6210
60°	11039	3601	3119
65°	9556	1899	1513
70°	7954	1164	820
75°	5873	781	454
80°	4621	451	225
85°	3668	449	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.9	5.6
10°-20°	137.0	16.1
20°-30°	202.4	23.8
30°-40°	208.6	24.5
40°-50°	144.0	16.9
50°-60°	71.0	8.3
60°-70°	28.8	3.4
70°-80°	10.3	1.2
80°-90°	2.1	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°	387.3	45.5
0°-40°	595.8	69.9
0°-60°	810.9	95.2
0°-90°	852.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	852.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	508	508	508	508	508	
5°	501	501	504	507	509	47
15°	467	472	486	502	509	131
25°	418	426	445	458	464	191
35°	325	333	342	344	345	201
45°	201	202	178	176	173	155
55°	115	110	60	56	55	104
65°	62	56	12	10	10	62
75°	23	20	3	2	2	26
85°	5	4	1	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°	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8
2.5°	506.6	504.8	506.0	503.6	506.6	503.6	504.2	504.8	504.2	504.8	505.4
5°	501.1	499.3	501.1	498.0	501.1	499.3	499.3	499.9	499.9	500.5	501.1
7.5°	493.7	491.9	493.7	490.7	494.4	492.5	492.5	493.7	493.1	493.7	495.0
10°	485.2	482.7	484.5	482.7	486.4	483.9	485.2	485.2	485.2	487.0	488.2
12.5°	476.0	473.5	476.0	472.9	476.6	474.7	475.3	477.2	477.8	479.0	479.6
15°	466.8	463.7	464.9	463.1	466.8	464.9	465.5	468.0	468.0	469.8	471.7
17.5°	455.1	452.6	455.1	452.6	455.7	454.5	455.7	457.6	457.6	459.4	461.2
20°	444.7	442.2	444.1	442.2	445.9	444.1	444.7	447.1	447.7	449.6	451.4
22.5°	431.8	430.0	431.2	429.3	433.0	431.8	432.4	434.9	435.5	436.7	439.8
25°	418.3	414.6	416.5	415.2	418.9	417.1	418.3	420.8	422.0	423.8	426.3
27.5°	398.7	396.8	398.1	398.1	401.1	399.3	399.9	402.4	404.2	406.0	409.1
30°	378.4	375.4	376.6	377.2	379.7	378.4	379.7	382.1	382.7	385.2	387.6
32.5°	352.7	351.4	353.9	352.7	353.9	353.9	354.5	356.3	357.6	358.8	361.9
35°	325.1	322.6	325.1	323.8	326.9	325.1	326.9	328.7	328.7	331.2	333.0
37.5°	295.0	291.9	293.2	293.2	294.4	293.8	293.8	296.9	297.5	299.3	301.1
40°	259.4	258.2	260.7	260.1	260.7	260.7	261.3	263.1	264.3	265.0	265.6
42.5°	227.5	228.2	228.8	228.8	228.8	228.8	228.8	231.2	230.6	232.5	233.1
45°	201.2	198.7	199.9	199.3	201.2	199.3	201.2	203.0	201.8	203.6	202.4
47.5°	174.2	174.2	174.2	173.6	174.8	174.2	175.4	176.0	176.0	176.0	175.4
50°	152.7	150.9	151.5	151.5	152.1	151.5	152.7	153.3	153.3	152.1	149.7
52.5°	131.9	131.3	131.3	132.5	132.5	131.9	131.9	131.9	131.9	130.0	128.8
55°	114.7	113.5	114.1	114.1	114.1	114.1	114.7	114.1	114.1	112.2	110.4
57.5°	99.4	98.1	98.1	98.1	98.7	98.1	98.1	98.1	97.5	95.7	93.2
60°	84.6	84.0	84.6	84.6	85.3	84.6	84.6	84.6	83.4	81.6	79.1
62.5°	72.4	72.4	72.4	73.0	73.0	72.4	72.4	71.8	71.1	68.7	66.2
65°	61.9	61.3	61.9	61.9	62.6	62.6	61.9	61.3	60.7	58.3	55.8
67.5°	51.5	50.9	51.5	51.5	52.1	51.5	51.5	51.5	49.7	48.5	46.0
70°	41.7	41.1	41.1	41.1	41.7	40.5	41.1	41.1	39.9	38.0	35.6
72.5°	31.9	31.9	31.9	31.9	31.9	31.9	31.3	31.3	30.1	28.2	27.0
75°	23.3	23.3	23.9	23.9	23.3	23.3	23.3	22.7	22.1	20.9	19.6
77.5°	17.2	17.2	17.2	17.2	16.6	16.6	16.6	15.9	15.3	14.7	13.5
80°	12.3	12.3	12.3	11.7	12.3	11.7	11.7	11.7	10.4	9.8	9.2
82.5°	8.6	8.0	8.0	8.0	8.0	8.0	8.0	7.4	7.4	6.7	6.1
85°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.3	3.7	3.7
87.5°	2.5	3.1	3.1	3.1	3.1	3.1	3.1	2.5	2.5	2.5	1.8
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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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8
2.5°	505.4	505.4	506.6	504.8	507.8	506.0	505.4	508.5	506.6	506.0	507.2
5°	501.1	501.7	502.3	501.1	504.2	502.3	502.3	505.4	504.2	503.6	505.4
7.5°	495.6	496.2	497.4	496.8	499.3	498.0	498.6	501.7	500.5	500.5	502.3
10°	488.8	490.1	491.3	491.3	494.4	493.1	493.1	496.8	495.6	496.2	498.6
12.5°	480.9	482.7	484.5	485.2	488.2	486.4	487.0	491.3	490.7	491.3	493.7
15°	472.3	474.7	476.6	476.6	480.2	478.4	480.2	484.5	483.3	485.8	488.8
17.5°	462.5	464.9	467.4	468.0	471.7	470.4	472.9	477.2	477.2	478.4	482.1
20°	453.3	456.3	457.6	459.4	463.1	462.5	463.7	468.6	468.6	470.4	474.1
22.5°	441.0	444.1	446.5	448.4	451.4	451.4	453.3	457.6	457.6	458.8	462.5
25°	427.5	431.2	433.0	434.9	437.9	437.3	439.2	442.8	443.4	444.7	448.4
27.5°	410.3	413.4	415.8	417.1	421.4	418.9	420.8	425.0	424.4	425.7	428.7
30°	388.9	391.9	394.4	394.4	398.1	398.1	399.9	401.7	401.7	403.0	405.4
32.5°	363.7	367.4	367.4	369.2	371.7	369.2	371.7	374.1	372.9	374.7	376.6
35°	334.9	336.7	337.3	337.3	339.2	338.6	337.9	339.8	338.6	341.6	343.5
37.5°	299.9	302.4	301.1	302.4	301.8	299.9	299.9	303.0	300.5	301.1	303.0
40°	266.2	266.2	265.6	262.5	263.1	261.3	260.7	261.3	258.8	258.2	260.7
42.5°	231.2	230.6	228.8	224.5	225.1	222.0	219.6	219.6	218.3	217.7	218.3
45°	199.9	198.1	195.0	190.1	188.9	186.5	181.5	180.3	178.5	178.5	179.1
47.5°	171.1	168.7	163.8	158.2	155.2	152.1	147.2	145.4	142.3	141.1	142.3
50°	147.2	142.9	136.8	128.8	125.7	122.1	117.1	114.1	111.0	109.8	109.2
52.5°	125.1	119.0	112.9	103.0	100.6	96.9	90.2	87.1	84.0	81.6	81.6
55°	106.1	100.6	92.0	82.8	79.1	75.4	68.7	64.4	61.3	60.1	58.9
57.5°	88.9	82.8	74.8	65.0	61.3	57.7	50.9	46.6	43.5	41.7	40.5
60°	74.8	68.1	60.1	51.5	47.2	43.5	36.8	32.5	29.4	27.6	26.4
62.5°	61.3	55.8	47.8	39.9	36.2	32.5	27.0	22.7	19.6	18.4	16.6
65°	51.5	46.0	38.6	31.9	28.8	25.1	20.2	16.6	14.1	12.3	11.0
67.5°	41.7	37.4	31.3	25.1	22.1	19.6	15.3	12.3	9.8	8.6	8.0
70°	33.1	28.8	23.9	19.0	17.2	14.7	11.7	8.6	7.4	6.1	5.5
72.5°	24.5	21.5	17.8	14.1	12.3	11.0	8.0	6.7	4.9	4.3	3.7
75°	17.8	15.3	12.9	9.8	8.6	8.0	6.1	4.3	3.7	3.1	2.5
77.5°	12.3	11.0	8.6	6.7	6.1	5.5	4.3	3.1	2.5	1.8	1.8
80°	8.0	6.7	5.5	4.3	4.3	3.7	2.5	1.8	1.8	1.2	1.2
82.5°	4.9	4.3	3.7	3.1	2.5	2.5	1.8	1.2	1.2	0.6	0.6
85°	3.1	2.5	1.8	1.8	1.2	1.2	1.2	0.6	0.6	0.6	0.6
87.5°	1.2	1.2	1.2	0.6	0.6	0.6	0.6	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°	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8
2.5°	507.2	507.2	508.5	506.6	507.8	507.8	509.1	506.6	507.8	508.5	509.7
5°	504.8	505.4	506.6	506.0	506.6	506.6	507.8	504.8	507.2	507.2	509.1
7.5°	502.3	502.3	503.6	502.9	504.2	504.8	506.0	503.6	506.0	506.0	507.8
10°	499.3	499.3	501.1	500.5	502.3	502.9	504.8	502.3	504.8	505.4	507.2
12.5°	495.0	495.6	497.4	497.4	499.3	500.5	502.3	501.1	504.2	504.8	507.2
15°	490.1	491.3	493.7	493.1	495.0	496.8	499.3	497.4	501.7	502.9	505.4
17.5°	483.9	485.2	487.0	487.0	488.8	490.1	493.1	491.9	495.6	496.2	499.3
20°	474.7	476.6	479.0	478.4	480.2	481.5	483.9	482.7	486.4	487.6	490.7
22.5°	463.7	464.9	466.8	466.8	468.6	469.8	472.3	470.4	474.1	474.7	477.2
25°	449.0	450.2	451.4	452.0	453.9	454.5	455.7	454.5	457.6	458.2	461.2
27.5°	430.0	430.6	432.4	432.4	433.6	434.2	436.1	433.6	437.9	437.9	439.8
30°	407.3	406.6	409.1	407.9	409.1	409.1	410.9	409.7	412.8	411.6	413.4
32.5°	377.2	378.4	378.4	377.2	379.7	379.0	379.0	377.8	379.7	380.3	381.5
35°	342.2	344.1	344.1	344.7	345.3	343.5	344.1	340.4	343.5	344.1	344.7
37.5°	304.2	302.4	303.6	301.8	304.8	301.1	301.1	298.7	301.1	301.1	301.8
40°	260.7	260.1	261.3	260.1	259.4	258.8	257.6	255.8	258.2	257.0	258.8
42.5°	219.6	219.0	219.0	217.7	217.1	217.1	215.9	214.7	214.1	214.1	217.1
45°	177.3	178.5	177.3	176.6	177.9	176.6	177.3	174.8	176.0	174.8	176.0
47.5°	141.7	142.3	141.1	139.8	141.7	139.8	139.8	138.0	140.5	140.5	139.2
50°	109.8	109.2	107.9	109.2	108.6	108.6	108.6	106.7	107.9	106.1	107.3
52.5°	81.0	80.3	80.3	79.7	80.3	79.7	79.7	79.1	79.1	78.5	79.1
55°	58.9	58.3	57.0	57.0	57.0	57.7	57.0	56.4	56.4	55.8	56.4
57.5°	39.9	38.6	38.6	38.6	38.6	38.0	38.0	37.4	38.0	37.4	38.0
60°	25.8	25.8	24.5	24.5	24.5	24.5	24.5	23.9	24.5	24.5	24.5
62.5°	15.9	15.9	15.3	14.7	15.3	14.7	14.7	14.7	15.3	14.7	15.3
65°	10.4	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
67.5°	7.4	6.7	6.7	6.7	6.7	6.7	6.7	6.1	6.7	6.7	6.7
70°	4.9	4.9	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
72.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
75°	2.5	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.6	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	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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°	507.8	507.8	507.8	507.8	507.8	507.8	507.8	507.8
2.5°	507.8	508.5	507.2	507.8	506.6	507.8	508.5	509.7
5°	506.6	507.2	506.0	507.2	506.0	507.2	507.8	509.1
7.5°	505.4	506.6	505.4	506.6	505.4	506.6	507.2	508.5
10°	505.4	507.2	506.0	507.8	506.0	507.2	508.5	509.1
12.5°	505.4	507.2	506.6	507.8	507.2	508.5	509.7	510.9
15°	504.2	506.0	504.8	506.6	506.0	506.6	509.1	509.1
17.5°	497.4	499.3	499.3	500.5	500.5	502.3	503.6	504.8
20°	488.8	490.7	490.1	491.9	491.9	493.7	495.0	496.2
22.5°	476.0	478.4	477.8	479.6	479.0	480.2	482.7	482.1
25°	459.4	462.5	461.8	463.1	462.5	462.5	463.7	464.3
27.5°	439.2	441.0	440.4	441.6	440.4	441.6	442.8	443.4
30°	412.8	414.0	413.4	414.0	413.4	414.6	415.2	416.5
32.5°	380.9	382.7	380.9	382.1	381.5	381.5	384.0	382.7
35°	342.9	343.5	344.1	344.1	342.9	343.5	344.7	344.7
37.5°	300.5	303.6	299.9	301.8	301.1	301.1	301.1	303.0
40°	256.4	257.0	255.8	255.8	255.8	255.1	257.6	257.0
42.5°	214.7	215.3	214.7	212.8	213.4	213.4	215.3	212.8
45°	174.2	175.4	174.8	174.8	173.6	173.6	174.2	173.0
47.5°	138.0	139.2	137.4	138.0	136.8	138.0	137.4	138.6
50°	104.9	106.1	105.5	106.1	106.1	104.9	106.7	104.3
52.5°	78.5	79.1	78.5	77.9	77.3	77.3	78.5	77.9
55°	55.8	55.2	55.2	55.2	55.8	55.8	55.2	54.6
57.5°	37.4	37.4	36.8	36.8	37.4	36.2	36.8	36.2
60°	23.9	23.9	23.9	23.9	23.3	23.9	23.9	23.9
62.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
65°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
67.5°	6.1	6.7	6.7	6.7	6.1	6.1	6.1	6.1
70°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
72.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
75°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	0.6	0.6	0.6	0.6	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)