

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: P252544

Luminaire Tested: **LD6B10D010 EU6B10208027 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252544  
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 EU6B10208027 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1014.0 lumens  
Efficiency: N/A  
Efficacy: 100.9 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

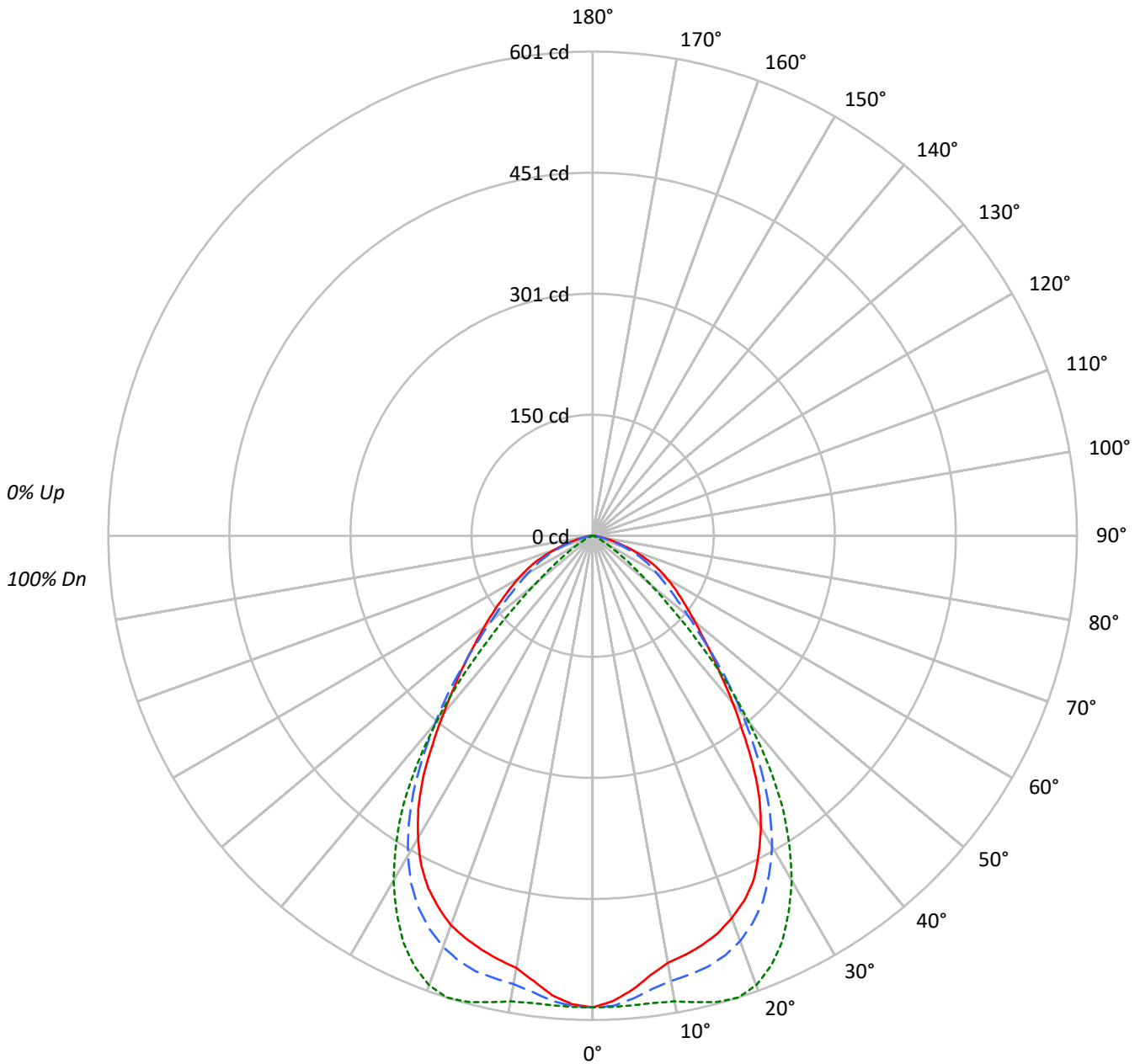
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	38192	38192	38192
5°	37054	38298	37499
10°	35648	38874	36091
15°	35520	40458	35932
20°	35054	41212	35714
25°	34006	40045	34740
30°	31459	37222	32634
35°	27597	32718	29213
40°	22995	25652	24494
45°	19357	16921	20667
50°	16757	9277	17792
55°	15162	4925	15549
60°	13948	2557	13948
65°	12643	1358	12334
70°	10205	782	9423
75°	6982	504	6478
80°	4584	263	4058
85°	3069	524	2545



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.6	5.4
10°-20°	157.9	15.6
20°-30°	233.2	23.0
30°-40°	235.6	23.2
40°-50°	162.4	16.0
50°-60°	93.3	9.2
60°-70°	54.3	5.4
70°-80°	19.8	2.0
80°-90°	3.0	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°	445.7	44.0
0°-40°	681.3	67.2
0°-60°	936.9	92.4
0°-90°	1014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1014.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	585	585	585	585	585	
5°	566	577	585	579	573	53
15°	526	554	599	560	532	148
25°	472	500	556	510	483	215
35°	346	370	411	387	367	215
45°	210	212	183	226	224	163
55°	133	117	43	122	137	120
65°	82	69	9	68	80	80
75°	28	22	2	22	26	31
85°	4	2	1	3	3	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°	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4
2.5°	578.0	578.7	579.3	578.7	579.3	582.0	580.0	581.4	581.4	582.0	584.1
5°	565.8	565.8	567.2	566.5	568.5	571.2	569.2	571.2	571.9	573.3	576.6
7.5°	550.2	550.2	550.9	550.9	553.6	556.3	555.0	557.7	560.4	563.1	567.2
10°	538.1	539.4	539.4	540.1	542.8	546.2	545.5	548.9	551.6	555.7	561.1
12.5°	532.6	533.3	533.3	534.7	537.4	540.8	540.1	543.5	547.5	552.3	557.7
15°	525.9	527.2	526.6	527.9	530.6	534.0	533.3	536.7	541.4	546.2	553.6
17.5°	517.1	517.8	518.4	518.4	521.1	523.8	523.8	527.2	532.6	538.1	546.2
20°	504.9	506.2	506.2	506.9	509.0	513.0	512.3	515.7	521.1	526.6	535.3
22.5°	490.7	491.4	491.4	492.0	495.4	497.4	498.1	500.8	505.6	511.7	519.8
25°	472.4	473.1	472.4	474.4	475.8	479.9	478.5	481.9	487.3	492.0	500.2
27.5°	446.0	447.4	447.4	448.0	451.4	454.8	454.8	458.2	462.9	466.3	474.4
30°	417.6	419.6	417.6	421.0	422.3	425.0	427.1	429.1	433.2	437.9	445.3
32.5°	385.1	384.4	385.1	386.5	390.5	392.5	393.9	395.9	400.0	404.1	410.1
35°	346.5	347.9	348.6	351.3	351.3	354.6	355.3	356.7	362.8	365.5	370.2
37.5°	305.9	307.3	307.9	309.3	312.0	313.4	315.4	317.4	321.5	326.2	328.9
40°	270.0	270.0	270.7	272.1	274.1	274.8	276.8	279.5	282.2	286.3	289.0
42.5°	236.2	236.9	236.2	237.6	239.6	242.3	241.6	245.0	245.7	248.4	250.4
45°	209.8	209.8	208.5	209.8	209.8	212.5	211.8	213.2	212.5	213.9	212.5
47.5°	184.8	185.4	184.8	185.4	185.4	185.4	186.1	184.8	185.4	183.4	179.4
50°	165.1	165.8	164.5	165.1	164.5	163.8	164.5	162.4	161.8	159.0	155.0
52.5°	148.2	147.5	146.9	146.9	146.9	146.2	145.5	143.5	141.5	138.7	134.0
55°	133.3	132.7	132.0	132.0	130.6	129.9	129.9	127.9	125.9	122.5	117.1
57.5°	119.8	119.1	118.4	118.4	117.8	116.4	116.4	114.4	111.7	107.6	102.9
60°	106.9	106.9	106.9	106.3	106.3	104.9	104.9	102.9	100.2	96.1	90.7
62.5°	95.4	94.8	94.8	94.8	94.8	94.1	93.4	92.0	89.3	85.3	80.5
65°	81.9	81.9	81.9	81.9	81.2	81.2	81.2	79.2	77.8	73.8	69.0
67.5°	67.0	67.0	67.0	67.0	66.3	67.0	67.0	65.6	64.3	60.2	56.2
70°	53.5	52.8	52.1	52.8	52.1	52.1	52.8	51.4	50.8	47.4	43.3
72.5°	39.3	39.9	39.3	39.3	39.3	38.6	39.3	38.6	37.2	34.5	31.8
75°	27.7	28.4	28.4	27.7	27.7	27.7	27.1	27.1	25.7	23.7	22.3
77.5°	19.0	19.0	19.0	19.0	18.3	18.3	18.3	17.6	16.9	15.6	14.2
80°	12.2	12.2	12.2	12.2	11.5	11.5	11.5	10.8	10.8	9.5	8.1
82.5°	7.4	7.4	7.4	7.4	7.4	7.4	6.8	6.8	6.1	5.4	4.7
85°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	3.4	3.4	2.7	2.0
87.5°	1.4	1.4	2.0	2.0	2.0	2.0	2.0	2.0	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°	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4
2.5°	582.7	583.4	583.4	583.4	585.4	586.1	584.1	582.0	586.1	585.4	586.8
5°	576.0	578.0	579.3	580.0	582.0	583.4	581.4	580.7	584.1	584.8	585.4
7.5°	567.8	571.2	574.6	576.0	578.7	580.0	579.3	579.3	583.4	584.8	584.8
10°	562.4	567.2	571.2	574.6	578.0	580.0	580.0	580.7	585.4	586.8	588.1
12.5°	561.1	567.2	572.6	577.3	580.0	583.4	584.1	586.1	590.8	592.9	592.9
15°	557.7	565.8	572.6	578.7	582.7	586.8	588.1	592.2	597.6	599.0	600.3
17.5°	551.6	559.7	567.8	575.3	580.7	584.1	588.1	592.2	599.0	601.0	601.7
20°	540.8	550.2	558.4	565.8	571.2	576.0	580.0	584.8	590.8	593.6	594.2
22.5°	524.5	534.0	542.1	550.2	555.7	559.7	563.8	569.2	575.3	578.0	578.0
25°	504.9	513.7	522.5	528.6	534.0	538.7	540.8	546.9	552.9	556.3	556.3
27.5°	479.9	488.0	496.1	502.9	506.2	510.3	513.7	519.1	523.8	526.6	529.3
30°	448.0	456.2	463.6	470.4	474.4	478.5	481.9	485.9	490.7	494.1	494.7
32.5°	413.5	420.3	427.7	434.5	438.6	439.9	443.3	447.4	451.4	454.1	454.8
35°	375.6	380.4	385.1	391.2	395.3	395.3	398.6	401.3	404.7	410.8	409.5
37.5°	331.0	337.7	341.1	343.1	345.8	348.6	349.2	352.6	356.7	358.0	360.1
40°	289.0	291.0	293.1	293.1	295.8	295.8	295.8	296.4	300.5	301.2	303.9
42.5°	247.0	247.0	245.0	243.0	243.6	243.0	239.6	239.6	241.6	244.3	244.3
45°	207.8	203.0	196.9	192.2	188.8	187.5	183.4	183.4	182.7	183.4	186.1
47.5°	174.6	166.5	156.3	146.9	143.5	140.8	134.7	132.0	130.6	131.3	132.7
50°	146.9	138.1	126.6	115.1	109.0	105.6	98.1	93.4	92.7	91.4	94.1
52.5°	126.6	115.7	103.6	90.0	83.9	78.5	70.4	66.3	63.6	63.6	64.3
55°	109.0	97.5	83.9	70.4	64.3	60.2	52.1	46.7	44.0	43.3	45.3
57.5°	94.1	83.2	69.7	56.2	50.1	45.3	37.2	32.5	30.5	29.1	29.8
60°	82.6	71.7	58.2	45.3	39.9	34.5	27.7	22.3	19.6	19.6	20.3
62.5°	71.7	61.6	49.4	37.2	32.5	27.7	20.3	15.6	13.5	12.9	13.5
65°	60.9	51.4	41.3	31.1	26.4	22.3	16.2	12.2	9.5	8.8	9.5
67.5°	49.4	42.0	33.2	25.0	21.0	17.6	12.2	8.8	6.8	6.1	6.8
70°	38.6	31.8	25.0	18.3	15.6	12.9	8.8	6.8	4.7	4.1	4.7
72.5°	27.7	23.0	17.6	12.9	10.8	8.8	6.1	4.7	3.4	2.7	3.4
75°	19.0	15.6	11.5	8.1	6.8	6.1	4.1	2.7	2.0	2.0	2.0
77.5°	12.2	9.5	7.4	5.4	4.1	3.4	2.0	1.4	1.4	1.4	1.4
80°	6.8	5.4	4.1	2.7	2.0	2.0	1.4	1.4	0.7	0.7	0.7
82.5°	4.1	2.7	2.0	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7
85°	2.0	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°	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4
2.5°	584.1	584.8	582.7	585.4	583.4	586.1	586.1	583.4	584.1	582.7	585.4
5°	582.7	582.7	581.4	583.4	580.7	583.4	582.7	578.0	579.3	576.6	579.3
7.5°	582.7	581.4	579.3	581.4	578.0	580.0	577.3	572.6	571.2	567.8	567.8
10°	584.8	582.7	580.0	580.7	577.3	578.0	573.9	567.2	565.1	561.1	559.7
12.5°	589.5	587.5	583.4	584.8	580.0	580.0	574.6	566.5	562.4	557.0	555.7
15°	596.3	592.9	588.1	588.8	584.1	581.4	574.6	565.1	559.7	552.3	550.2
17.5°	597.6	594.2	588.1	588.1	582.0	578.7	570.5	559.7	552.9	545.5	541.4
20°	590.2	586.8	580.0	579.3	573.9	569.2	560.4	549.6	542.8	534.7	531.3
22.5°	574.6	570.5	564.5	563.8	558.4	555.7	546.2	535.3	528.6	520.5	517.8
25°	551.6	549.6	543.5	542.8	538.1	534.7	526.6	516.4	510.3	502.2	499.5
27.5°	524.5	522.5	516.4	516.4	511.0	509.0	501.5	492.0	487.3	479.9	476.5
30°	492.0	489.3	485.9	485.3	480.5	478.5	471.7	462.9	458.2	452.1	450.7
32.5°	453.5	451.4	449.4	448.7	444.0	442.0	437.2	428.4	424.4	418.9	416.9
35°	408.8	407.4	405.4	404.7	402.7	400.7	395.9	389.2	387.1	383.1	381.0
37.5°	357.4	358.7	357.4	357.4	355.3	356.0	351.9	347.9	345.8	343.1	341.8
40°	301.9	304.6	306.6	306.6	305.9	308.6	307.9	304.6	303.9	302.5	301.9
42.5°	245.7	247.0	251.1	253.8	253.1	259.9	260.6	263.3	265.3	264.0	264.6
45°	186.8	190.9	196.3	199.0	202.4	211.2	215.9	221.3	226.1	228.8	228.1
47.5°	134.7	139.4	145.5	149.6	155.7	166.5	178.7	185.4	192.2	195.6	199.0
50°	97.5	102.2	109.6	115.7	119.8	134.7	147.5	156.3	163.8	168.5	171.9
52.5°	68.4	73.8	81.9	87.3	93.4	107.6	122.5	132.7	140.8	146.9	150.2
55°	47.4	53.5	60.9	66.3	73.1	88.0	102.2	113.0	121.8	127.2	131.3
57.5°	33.2	38.6	46.0	50.8	57.5	71.7	86.0	96.8	105.6	111.0	115.7
60°	22.3	27.7	35.2	39.9	45.3	59.6	72.4	83.9	92.0	97.5	102.2
62.5°	15.6	20.3	27.7	32.5	37.2	49.4	61.6	71.7	79.9	86.0	90.0
65°	12.2	16.2	22.3	26.4	31.1	41.3	51.4	60.2	68.4	74.4	77.2
67.5°	8.8	12.9	17.6	21.0	24.4	33.2	42.0	48.7	56.2	60.9	64.3
70°	6.1	8.8	12.9	15.6	18.3	25.0	31.8	37.9	43.3	46.7	49.4
72.5°	4.7	6.1	8.8	10.8	12.9	17.6	23.0	27.7	31.8	34.5	37.2
75°	2.7	4.1	6.1	7.4	8.8	12.2	15.6	19.0	21.7	23.7	25.0
77.5°	1.4	2.0	3.4	4.1	5.4	7.4	10.2	12.2	14.2	15.6	16.9
80°	1.4	1.4	2.0	2.0	2.7	4.1	5.4	6.8	8.1	9.5	10.2
82.5°	0.7	0.7	1.4	1.4	1.4	2.0	2.7	4.1	4.7	5.4	6.1
85°	0.7	0.7	0.7	0.7	0.7	1.4	1.4	2.0	2.7	3.4	3.4
87.5°	0.0	0.0	0.7	0.7	0.7	0.7	0.7	1.4	1.4	1.4	2.0
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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	585.4	585.4	585.4	585.4	585.4	585.4	585.4	585.4
2.5°	583.4	584.8	584.1	585.4	583.4	582.7	584.1	582.0
5°	576.0	576.6	576.0	576.0	574.6	573.3	574.6	572.6
7.5°	564.5	564.5	562.4	562.4	559.7	558.4	558.4	557.7
10°	555.0	552.9	550.9	551.6	547.5	546.2	545.5	544.8
12.5°	550.2	548.9	545.5	545.5	541.4	540.1	539.4	538.7
15°	544.8	542.1	539.4	538.7	535.3	534.0	533.3	532.0
17.5°	535.3	533.3	529.9	529.9	526.6	525.9	524.5	523.8
20°	525.2	522.5	519.8	519.8	515.7	515.7	513.7	514.4
22.5°	511.0	509.0	506.2	506.2	502.9	502.2	500.2	499.5
25°	494.1	491.4	489.3	488.7	485.9	484.6	483.9	482.6
27.5°	471.7	469.7	467.7	466.3	462.9	462.3	460.2	460.9
30°	444.0	442.6	442.0	440.6	436.5	435.2	435.2	433.2
32.5°	413.5	411.5	410.1	408.1	404.7	404.1	402.0	402.7
35°	376.3	373.6	371.6	372.2	368.2	367.5	366.1	366.8
37.5°	337.7	335.0	332.3	331.6	328.2	328.2	326.2	326.2
40°	297.8	295.1	293.7	293.7	289.7	290.3	288.3	287.6
42.5°	261.9	259.2	258.5	257.9	255.8	255.2	253.1	253.8
45°	228.1	227.4	227.4	226.1	224.0	223.3	224.0	224.0
47.5°	198.3	199.0	198.3	198.3	196.9	198.3	196.9	197.6
50°	173.3	174.6	174.6	174.6	173.9	174.6	174.6	175.3
52.5°	152.3	154.3	153.6	154.3	153.6	155.0	154.3	155.0
55°	134.0	135.4	136.0	136.7	136.7	136.7	136.7	136.7
57.5°	117.1	119.1	119.8	120.5	120.5	121.8	120.5	120.5
60°	103.6	105.6	106.3	106.9	106.9	107.6	106.3	106.9
62.5°	91.4	93.4	93.4	94.1	94.1	94.1	92.7	93.4
65°	79.2	79.9	80.5	80.5	79.9	79.9	79.2	79.9
67.5°	65.6	66.3	65.6	65.6	65.0	65.0	63.6	64.3
70°	50.8	50.8	51.4	50.8	50.1	50.8	50.1	49.4
72.5°	37.9	37.9	37.9	37.2	37.2	36.5	37.2	37.2
75°	25.7	25.7	26.4	26.4	26.4	26.4	25.7	25.7
77.5°	16.9	16.9	16.9	16.9	17.6	16.9	16.9	16.9
80°	10.8	10.8	11.5	11.5	10.8	10.8	10.8	10.8
82.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
85°	4.1	4.1	4.1	4.1	3.4	3.4	3.4	3.4
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	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)