

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: P252553

Luminaire Tested: **LD6B10D010 EU6B10209040 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252553  
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 EU6B10209040 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 919.0 lumens  
Efficiency: N/A  
Efficacy: 91.4 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

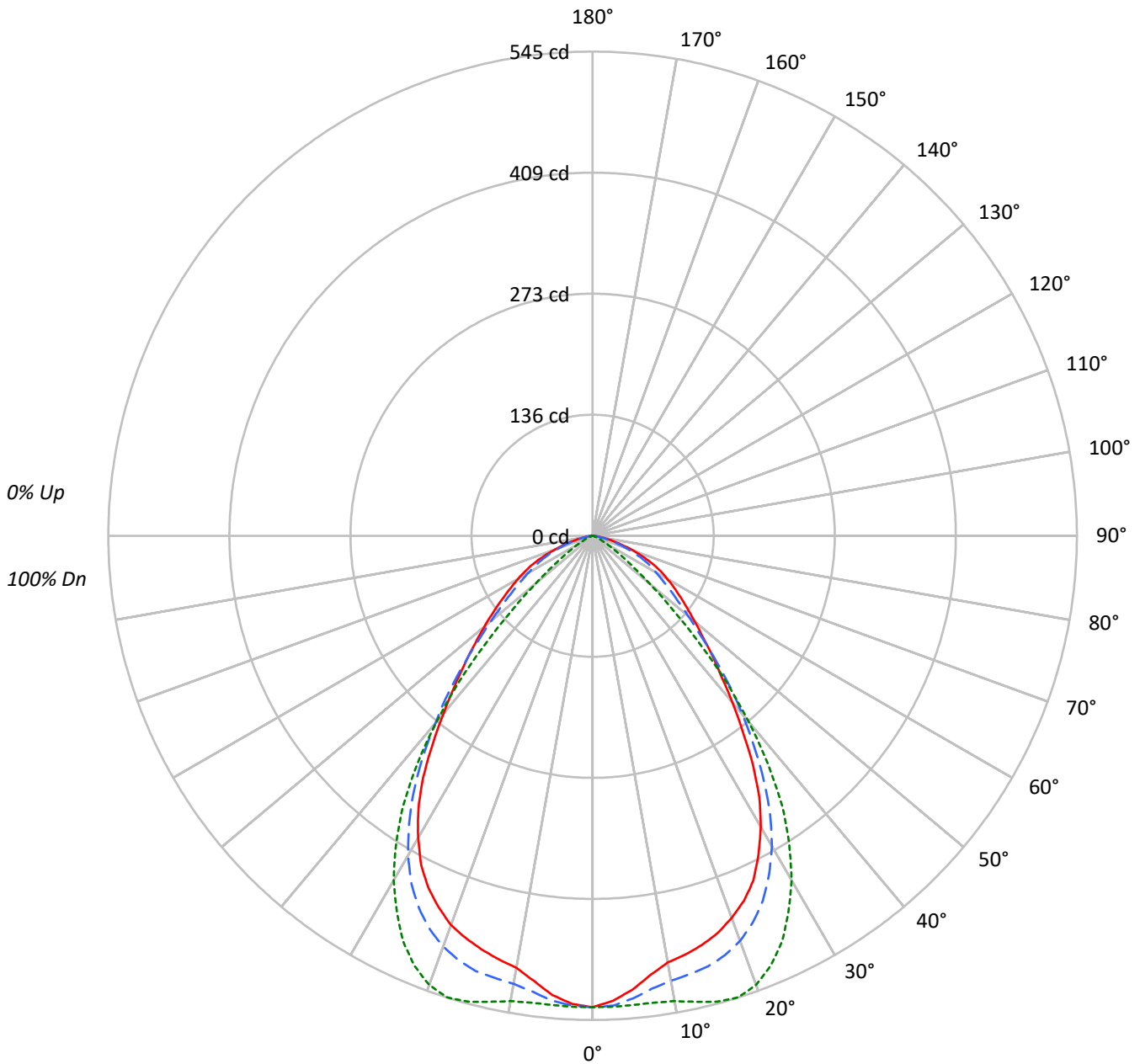
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	34617	34617	34617
5°	33583	34710	33983
10°	32302	35230	32713
15°	32191	36669	32562
20°	31770	37345	32367
25°	30817	36295	31479
30°	28514	33734	29576
35°	25016	29651	26482
40°	20840	23250	22203
45°	17549	15334	18730
50°	15194	8404	16128
55°	13740	4470	14093
60°	12644	2323	12644
65°	11454	1235	11177
70°	9251	706	8546
75°	6327	454	5873
80°	4133	225	3682
85°	2770	449	2321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.5	5.4
10°-20°	143.1	15.6
20°-30°	211.4	23.0
30°-40°	213.5	23.2
40°-50°	147.2	16.0
50°-60°	84.5	9.2
60°-70°	49.2	5.4
70°-80°	17.9	2.0
80°-90°	2.7	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°	403.9	44.0
0°-40°	617.4	67.2
0°-60°	849.1	92.4
0°-90°	919.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	919.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	531	531	531	531	531	
5°	513	523	530	525	519	48
15°	477	502	543	507	482	134
25°	428	453	504	462	437	195
35°	314	336	372	351	332	195
45°	190	193	166	205	203	148
55°	121	106	39	110	124	109
65°	74	63	8	62	72	73
75°	25	20	2	20	23	28
85°	4	2	1	2	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°	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6
2.5°	523.8	524.5	525.1	524.5	525.1	527.5	525.7	526.9	526.9	527.5	529.4
5°	512.8	512.8	514.0	513.4	515.2	517.7	515.9	517.7	518.3	519.5	522.6
7.5°	498.7	498.7	499.3	499.3	501.8	504.2	503.0	505.4	507.9	510.3	514.0
10°	487.6	488.9	488.9	489.5	491.9	495.0	494.4	497.5	499.9	503.6	508.5
12.5°	482.7	483.4	483.4	484.6	487.0	490.1	489.5	492.6	496.2	500.5	505.4
15°	476.6	477.8	477.2	478.4	480.9	484.0	483.4	486.4	490.7	495.0	501.8
17.5°	468.6	469.2	469.9	469.9	472.3	474.8	474.8	477.8	482.7	487.6	495.0
20°	457.6	458.8	458.8	459.4	461.3	465.0	464.3	467.4	472.3	477.2	485.2
22.5°	444.7	445.3	445.3	445.9	449.0	450.8	451.5	453.9	458.2	463.7	471.1
25°	428.1	428.8	428.1	430.0	431.2	434.9	433.7	436.7	441.6	445.9	453.3
27.5°	404.2	405.5	405.5	406.1	409.1	412.2	412.2	415.3	419.6	422.6	430.0
30°	378.5	380.3	378.5	381.5	382.8	385.2	387.1	388.9	392.6	396.9	403.6
32.5°	349.0	348.4	349.0	350.2	353.9	355.8	357.0	358.8	362.5	366.2	371.7
35°	314.1	315.3	315.9	318.4	318.4	321.4	322.0	323.3	328.8	331.2	335.5
37.5°	277.3	278.5	279.1	280.3	282.8	284.0	285.8	287.7	291.4	295.7	298.1
40°	244.7	244.7	245.4	246.6	248.4	249.0	250.9	253.3	255.8	259.5	261.9
42.5°	214.1	214.7	214.1	215.3	217.1	219.6	219.0	222.0	222.7	225.1	227.0
45°	190.2	190.2	188.9	190.2	190.2	192.6	192.0	193.2	192.6	193.8	192.6
47.5°	167.5	168.1	167.5	168.1	168.1	168.1	168.7	167.5	168.1	166.2	162.5
50°	149.7	150.3	149.1	149.7	149.1	148.4	149.1	147.2	146.6	144.1	140.5
52.5°	134.3	133.7	133.1	133.1	133.1	132.5	131.9	130.0	128.2	125.7	121.5
55°	120.8	120.2	119.6	119.6	118.4	117.8	117.8	115.9	114.1	111.0	106.1
57.5°	108.6	108.0	107.3	107.3	106.7	105.5	105.5	103.7	101.2	97.5	93.2
60°	96.9	96.9	96.9	96.3	96.3	95.1	95.1	93.2	90.8	87.1	82.2
62.5°	86.5	85.9	85.9	85.9	85.9	85.3	84.6	83.4	81.0	77.3	73.0
65°	74.2	74.2	74.2	74.2	73.6	73.6	73.6	71.8	70.5	66.9	62.6
67.5°	60.7	60.7	60.7	60.7	60.1	60.7	60.7	59.5	58.3	54.6	50.9
70°	48.5	47.8	47.2	47.8	47.2	47.2	47.8	46.6	46.0	42.9	39.3
72.5°	35.6	36.2	35.6	35.6	35.6	35.0	35.6	35.0	33.7	31.3	28.8
75°	25.1	25.8	25.8	25.1	25.1	25.1	24.5	24.5	23.3	21.5	20.2
77.5°	17.2	17.2	17.2	17.2	16.6	16.6	16.6	15.9	15.3	14.1	12.9
80°	11.0	11.0	11.0	11.0	10.4	10.4	10.4	9.8	9.8	8.6	7.4
82.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.1	6.1	5.5	4.9	4.3
85°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.1	3.1	2.5	1.8
87.5°	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.2
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6
2.5°	528.1	528.7	528.7	528.7	530.6	531.2	529.4	527.5	531.2	530.6	531.8
5°	522.0	523.8	525.1	525.7	527.5	528.7	526.9	526.3	529.4	530.0	530.6
7.5°	514.6	517.7	520.8	522.0	524.5	525.7	525.1	525.1	528.7	530.0	530.0
10°	509.7	514.0	517.7	520.8	523.8	525.7	525.7	526.3	530.6	531.8	533.0
12.5°	508.5	514.0	518.9	523.2	525.7	528.7	529.4	531.2	535.5	537.3	537.3
15°	505.4	512.8	518.9	524.5	528.1	531.8	533.0	536.7	541.6	542.9	544.1
17.5°	499.9	507.3	514.6	521.4	526.3	529.4	533.0	536.7	542.9	544.7	545.3
20°	490.1	498.7	506.0	512.8	517.7	522.0	525.7	530.0	535.5	537.9	538.6
22.5°	475.4	484.0	491.3	498.7	503.6	507.3	511.0	515.9	521.4	523.8	523.8
25°	457.6	465.6	473.5	479.1	484.0	488.3	490.1	495.6	501.1	504.2	504.2
27.5°	434.9	442.3	449.6	455.8	458.8	462.5	465.6	470.5	474.8	477.2	479.7
30°	406.1	413.4	420.2	426.3	430.0	433.7	436.7	440.4	444.7	447.8	448.4
32.5°	374.8	380.9	387.7	393.8	397.5	398.7	401.8	405.5	409.1	411.6	412.2
35°	340.4	344.7	349.0	354.5	358.2	358.2	361.3	363.7	366.8	372.3	371.1
37.5°	299.9	306.1	309.1	311.0	313.4	315.9	316.5	319.6	323.3	324.5	326.3
40°	261.9	263.8	265.6	265.6	268.1	268.1	268.1	268.7	272.3	273.0	275.4
42.5°	223.9	223.9	222.0	220.2	220.8	220.2	217.1	217.1	219.0	221.4	221.4
45°	188.3	184.0	178.5	174.2	171.1	169.9	166.2	166.2	165.6	166.2	168.7
47.5°	158.3	150.9	141.7	133.1	130.0	127.6	122.1	119.6	118.4	119.0	120.2
50°	133.1	125.1	114.7	104.3	98.8	95.7	88.9	84.6	84.0	82.8	85.3
52.5°	114.7	104.9	93.8	81.6	76.1	71.2	63.8	60.1	57.7	57.7	58.3
55°	98.8	88.3	76.1	63.8	58.3	54.6	47.2	42.3	39.9	39.3	41.1
57.5°	85.3	75.4	63.2	50.9	45.4	41.1	33.7	29.4	27.6	26.4	27.0
60°	74.8	65.0	52.8	41.1	36.2	31.3	25.1	20.2	17.8	17.8	18.4
62.5°	65.0	55.8	44.8	33.7	29.4	25.1	18.4	14.1	12.3	11.7	12.3
65°	55.2	46.6	37.4	28.2	23.9	20.2	14.7	11.0	8.6	8.0	8.6
67.5°	44.8	38.0	30.1	22.7	19.0	15.9	11.0	8.0	6.1	5.5	6.1
70°	35.0	28.8	22.7	16.6	14.1	11.7	8.0	6.1	4.3	3.7	4.3
72.5°	25.1	20.9	15.9	11.7	9.8	8.0	5.5	4.3	3.1	2.5	3.1
75°	17.2	14.1	10.4	7.4	6.1	5.5	3.7	2.5	1.8	1.8	1.8
77.5°	11.0	8.6	6.7	4.9	3.7	3.1	1.8	1.2	1.2	1.2	1.2
80°	6.1	4.9	3.7	2.5	1.8	1.8	1.2	1.2	0.6	0.6	0.6
82.5°	3.7	2.5	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6
85°	1.8	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
87.5°	0.6	0.6	0.6	0.6	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°	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6
2.5°	529.4	530.0	528.1	530.6	528.7	531.2	531.2	528.7	529.4	528.1	530.6
5°	528.1	528.1	526.9	528.7	526.3	528.7	528.1	523.8	525.1	522.6	525.1
7.5°	528.1	526.9	525.1	526.9	523.8	525.7	523.2	518.9	517.7	514.6	514.6
10°	530.0	528.1	525.7	526.3	523.2	523.8	520.2	514.0	512.2	508.5	507.3
12.5°	534.3	532.4	528.7	530.0	525.7	525.7	520.8	513.4	509.7	504.8	503.6
15°	540.4	537.3	533.0	533.7	529.4	526.9	520.8	512.2	507.3	500.5	498.7
17.5°	541.6	538.6	533.0	533.0	527.5	524.5	517.1	507.3	501.1	494.4	490.7
20°	534.9	531.8	525.7	525.1	520.2	515.9	507.9	498.1	491.9	484.6	481.5
22.5°	520.8	517.1	511.6	511.0	506.0	503.6	495.0	485.2	479.1	471.7	469.2
25°	499.9	498.1	492.6	491.9	487.6	484.6	477.2	468.0	462.5	455.1	452.7
27.5°	475.4	473.5	468.0	468.0	463.1	461.3	454.5	445.9	441.6	434.9	431.8
30°	445.9	443.5	440.4	439.8	435.5	433.7	427.5	419.6	415.3	409.7	408.5
32.5°	411.0	409.1	407.3	406.7	402.4	400.5	396.3	388.3	384.6	379.7	377.8
35°	370.5	369.3	367.4	366.8	365.0	363.1	358.8	352.7	350.9	347.2	345.3
37.5°	323.9	325.1	323.9	323.9	322.0	322.6	319.0	315.3	313.4	311.0	309.8
40°	273.6	276.0	277.9	277.9	277.3	279.7	279.1	276.0	275.4	274.2	273.6
42.5°	222.7	223.9	227.6	230.0	229.4	235.5	236.2	238.6	240.4	239.2	239.8
45°	169.3	173.0	177.9	180.3	183.4	191.4	195.7	200.6	204.9	207.3	206.7
47.5°	122.1	126.4	131.9	135.6	141.1	150.9	161.9	168.1	174.2	177.3	180.3
50°	88.3	92.6	99.4	104.9	108.6	122.1	133.7	141.7	148.4	152.7	155.8
52.5°	62.0	66.9	74.2	79.1	84.6	97.5	111.0	120.2	127.6	133.1	136.2
55°	42.9	48.5	55.2	60.1	66.2	79.7	92.6	102.4	110.4	115.3	119.0
57.5°	30.1	35.0	41.7	46.0	52.1	65.0	77.9	87.7	95.7	100.6	104.9
60°	20.2	25.1	31.9	36.2	41.1	54.0	65.6	76.1	83.4	88.3	92.6
62.5°	14.1	18.4	25.1	29.4	33.7	44.8	55.8	65.0	72.4	77.9	81.6
65°	11.0	14.7	20.2	23.9	28.2	37.4	46.6	54.6	62.0	67.5	69.9
67.5°	8.0	11.7	15.9	19.0	22.1	30.1	38.0	44.2	50.9	55.2	58.3
70°	5.5	8.0	11.7	14.1	16.6	22.7	28.8	34.3	39.3	42.3	44.8
72.5°	4.3	5.5	8.0	9.8	11.7	15.9	20.9	25.1	28.8	31.3	33.7
75°	2.5	3.7	5.5	6.7	8.0	11.0	14.1	17.2	19.6	21.5	22.7
77.5°	1.2	1.8	3.1	3.7	4.9	6.7	9.2	11.0	12.9	14.1	15.3
80°	1.2	1.2	1.8	1.8	2.5	3.7	4.9	6.1	7.4	8.6	9.2
82.5°	0.6	0.6	1.2	1.2	1.2	1.8	2.5	3.7	4.3	4.9	5.5
85°	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.8	2.5	3.1	3.1
87.5°	0.0	0.0	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.2	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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	530.6	530.6	530.6	530.6	530.6	530.6	530.6	530.6
2.5°	528.7	530.0	529.4	530.6	528.7	528.1	529.4	527.5
5°	522.0	522.6	522.0	522.0	520.8	519.5	520.8	518.9
7.5°	511.6	511.6	509.7	509.7	507.3	506.0	506.0	505.4
10°	503.0	501.1	499.3	499.9	496.2	495.0	494.4	493.8
12.5°	498.7	497.5	494.4	494.4	490.7	489.5	488.9	488.3
15°	493.8	491.3	488.9	488.3	485.2	484.0	483.4	482.1
17.5°	485.2	483.4	480.3	480.3	477.2	476.6	475.4	474.8
20°	476.0	473.5	471.1	471.1	467.4	467.4	465.6	466.2
22.5°	463.1	461.3	458.8	458.8	455.8	455.1	453.3	452.7
25°	447.8	445.3	443.5	442.9	440.4	439.2	438.6	437.3
27.5°	427.5	425.7	423.9	422.6	419.6	418.9	417.1	417.7
30°	402.4	401.2	400.5	399.3	395.6	394.4	394.4	392.6
32.5°	374.8	372.9	371.7	369.9	366.8	366.2	364.4	365.0
35°	341.0	338.6	336.8	337.4	333.7	333.1	331.8	332.5
37.5°	306.1	303.6	301.2	300.6	297.5	297.5	295.7	295.7
40°	269.9	267.4	266.2	266.2	262.5	263.1	261.3	260.7
42.5°	237.4	234.9	234.3	233.7	231.9	231.2	229.4	230.0
45°	206.7	206.1	206.1	204.9	203.0	202.4	203.0	203.0
47.5°	179.7	180.3	179.7	179.7	178.5	179.7	178.5	179.1
50°	157.0	158.3	158.3	158.3	157.6	158.3	158.3	158.9
52.5°	138.0	139.9	139.2	139.9	139.2	140.5	139.9	140.5
55°	121.5	122.7	123.3	123.9	123.9	123.9	123.9	123.9
57.5°	106.1	108.0	108.6	109.2	109.2	110.4	109.2	109.2
60°	93.8	95.7	96.3	96.9	96.9	97.5	96.3	96.9
62.5°	82.8	84.6	84.6	85.3	85.3	85.3	84.0	84.6
65°	71.8	72.4	73.0	73.0	72.4	72.4	71.8	72.4
67.5°	59.5	60.1	59.5	59.5	58.9	58.9	57.7	58.3
70°	46.0	46.0	46.6	46.0	45.4	46.0	45.4	44.8
72.5°	34.3	34.3	34.3	33.7	33.7	33.1	33.7	33.7
75°	23.3	23.3	23.9	23.9	23.9	23.9	23.3	23.3
77.5°	15.3	15.3	15.3	15.3	15.9	15.3	15.3	15.3
80°	9.8	9.8	10.4	10.4	9.8	9.8	9.8	9.8
82.5°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
85°	3.7	3.7	3.7	3.7	3.1	3.1	3.1	3.1
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2
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)