

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: P252670

Luminaire Tested: **LD6B15D010 EU6B10209040 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252670  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B15D010 EU6B10209040 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE 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: 1188.0 lumens  
Efficiency: N/A  
Efficacy: 82.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

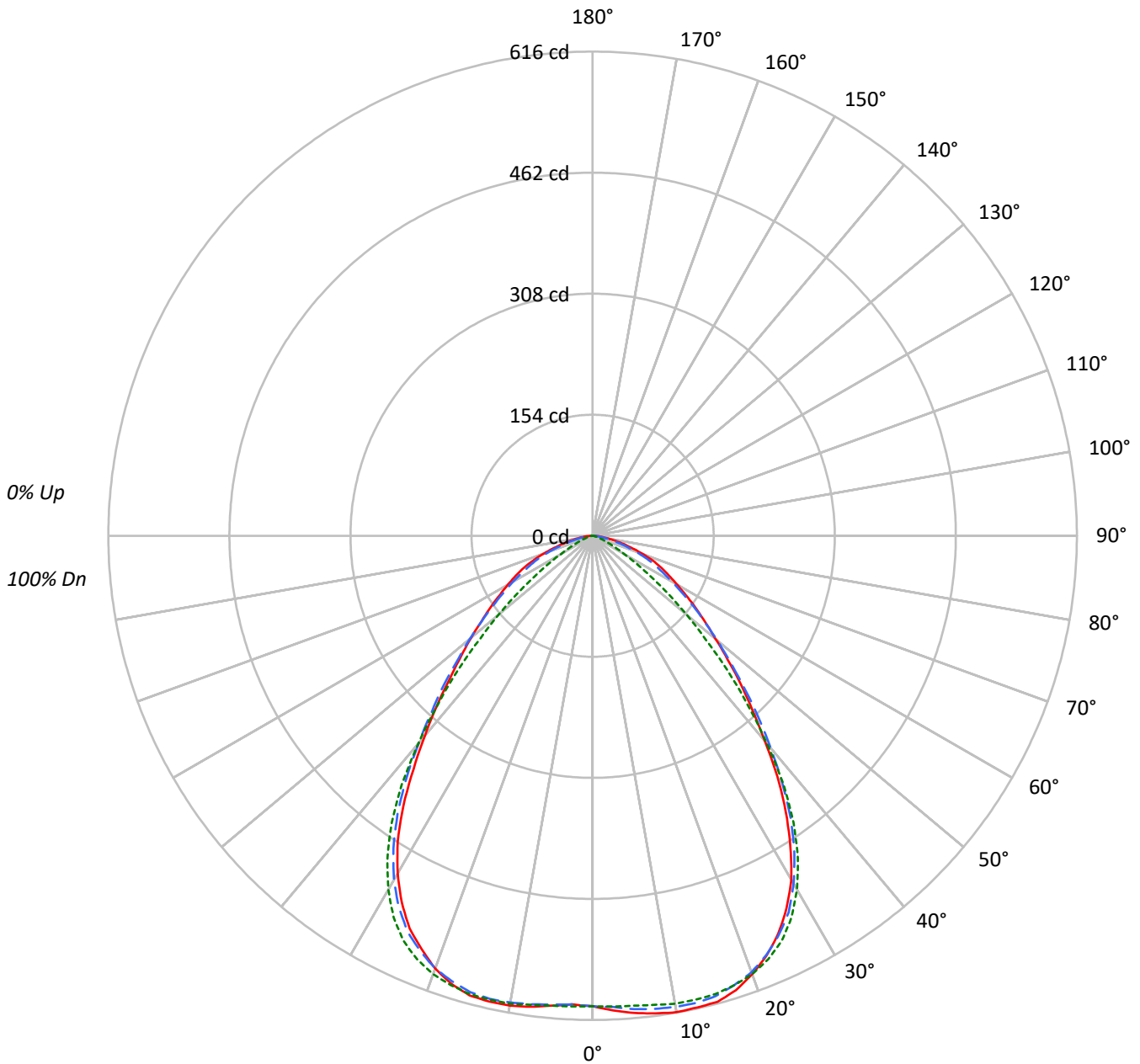
Input Watts (W): 14.39  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20					20					20					20					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								
1	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89								
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78								
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68								
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61								
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54								
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48								
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44								
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40								
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36								
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	39047	39047	39047
5°	39916	39307	39307
10°	40775	40046	40212
15°	41457	40768	40883
20°	41205	41205	40671
25°	40225	40952	39671
30°	38073	39158	37373
35°	34120	35466	33443
40°	28982	29348	28266
45°	24524	22420	23666
50°	20705	15813	20452
55°	18199	10203	18006
60°	16127	6080	16232
65°	14897	3659	14897
70°	12914	2098	12590
75°	10234	1286	9604
80°	7627	939	7326
85°	6962	599	6363



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.6	4.9
10°-20°	170.5	14.4
20°-30°	256.5	21.6
30°-40°	269.7	22.7
40°-50°	201.5	17.0
50°-60°	125.4	10.6
60°-70°	71.3	6.0
70°-80°	29.4	2.5
80°-90°	6.1	0.5
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°	484.7	40.8
0°-40°	754.3	63.5
0°-60°	1081.2	91.0
0°-90°	1188.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1188.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	598	598	598	598	598	
5°	610	604	600	598	600	58
15°	614	606	604	601	605	173
25°	559	560	569	556	551	256
35°	428	439	445	433	420	266
45°	266	272	243	267	256	206
55°	160	157	90	154	158	144
65°	96	86	24	86	96	95
75°	41	32	5	31	38	44
85°	9	6	1	5	8	10
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°	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5
2.5°	604.5	603.6	604.5	602.8	601.9	601.9	602.8	601.1	600.2	601.1	600.2
5°	609.5	607.9	608.7	607.9	606.2	606.2	607.0	604.5	604.5	605.3	604.5
7.5°	612.9	612.9	612.9	611.2	610.4	609.5	611.2	608.7	607.9	607.9	607.0
10°	615.5	614.6	615.5	613.8	612.1	611.2	612.9	611.2	609.5	611.2	608.7
12.5°	614.6	614.6	614.6	613.8	612.1	611.2	612.9	610.4	609.5	610.4	608.7
15°	613.8	611.2	612.1	611.2	608.7	608.7	609.5	607.0	605.3	607.9	606.2
17.5°	606.2	604.5	605.3	603.6	601.9	601.1	601.9	601.1	599.4	601.1	599.4
20°	593.5	593.5	594.3	592.6	590.9	590.1	591.8	590.1	588.4	590.9	590.9
22.5°	578.2	578.2	578.2	577.4	576.5	576.5	576.5	575.7	574.8	576.5	577.4
25°	558.8	557.9	558.8	559.6	558.8	557.9	558.8	558.8	557.1	560.4	560.4
27.5°	534.2	534.2	535.9	535.0	535.0	534.2	535.9	535.9	535.0	537.6	540.1
30°	505.4	503.7	505.4	505.4	506.3	506.3	507.1	507.1	507.1	509.6	511.3
32.5°	468.2	469.0	471.6	470.7	469.9	472.4	472.4	474.1	474.9	476.6	477.5
35°	428.4	429.2	429.2	430.1	431.8	430.1	434.3	433.5	434.3	437.7	439.4
37.5°	386.0	383.5	387.7	386.0	386.9	386.9	388.6	389.4	392.0	396.2	396.2
40°	340.3	341.2	342.9	343.7	344.6	344.6	344.6	347.1	347.9	353.0	352.2
42.5°	300.5	300.5	302.2	303.1	303.1	303.1	303.1	305.6	307.3	309.0	310.7
45°	265.8	263.3	265.0	265.0	266.7	265.8	267.5	269.2	270.1	272.6	271.8
47.5°	232.8	232.0	232.8	233.7	232.8	233.7	234.5	235.4	236.2	236.2	236.2
50°	204.0	204.0	204.9	205.7	205.7	205.7	205.7	206.6	206.6	208.3	206.6
52.5°	180.3	181.2	181.2	180.3	181.2	181.2	182.0	182.0	181.2	181.2	178.6
55°	160.0	159.2	160.0	159.2	160.0	160.0	159.2	159.2	158.3	157.5	156.6
57.5°	140.5	140.5	140.5	140.5	139.7	140.5	139.7	138.8	138.8	137.1	134.6
60°	123.6	123.6	123.6	123.6	123.6	122.8	123.6	122.8	121.1	119.4	116.0
62.5°	109.2	108.4	109.2	108.4	108.4	107.5	107.5	106.7	105.0	103.3	99.9
65°	96.5	97.4	96.5	96.5	95.7	94.8	94.8	94.0	91.4	89.7	86.4
67.5°	83.0	82.1	82.1	82.1	81.3	81.3	81.3	79.6	77.9	75.3	72.0
70°	67.7	67.7	67.7	66.9	66.9	66.0	66.0	65.2	63.5	61.8	57.6
72.5°	53.3	53.3	53.3	51.6	52.5	51.6	51.6	49.9	49.1	46.6	44.0
75°	40.6	40.6	39.8	39.8	38.9	38.1	38.1	37.3	36.4	34.7	32.2
77.5°	29.6	29.6	29.6	28.8	27.9	27.1	27.1	26.2	25.4	24.6	22.9
80°	20.3	20.3	20.3	20.3	19.5	18.6	18.6	17.8	17.8	16.9	15.2
82.5°	13.5	13.5	13.5	13.5	12.7	12.7	12.7	11.9	11.0	11.0	9.3
85°	9.3	9.3	8.5	8.5	8.5	8.5	7.6	7.6	6.8	5.9	5.9
87.5°	5.1	5.1	5.1	5.1	4.2	4.2	4.2	4.2	3.4	3.4	2.5
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°	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5
2.5°	602.8	602.8	601.9	599.4	600.2	599.4	600.2	599.4	596.8	599.4	596.8
5°	606.2	607.0	605.3	601.9	602.8	601.9	601.9	601.1	598.5	600.2	598.5
7.5°	609.5	608.7	607.9	604.5	605.3	604.5	604.5	602.8	600.2	601.9	599.4
10°	611.2	611.2	609.5	606.2	606.2	605.3	606.2	605.3	601.9	604.5	602.8
12.5°	611.2	610.4	610.4	606.2	607.0	606.2	607.0	605.3	602.8	604.5	603.6
15°	608.7	608.7	607.9	603.6	604.5	604.5	605.3	603.6	601.1	603.6	601.9
17.5°	603.6	603.6	602.8	599.4	601.1	601.1	601.9	600.2	597.7	599.4	599.4
20°	593.5	594.3	594.3	591.8	593.5	593.5	594.3	593.5	592.6	593.5	591.8
22.5°	581.6	583.3	583.3	580.8	582.5	582.5	585.0	584.1	582.5	583.3	582.5
25°	563.8	565.5	567.2	565.5	567.2	567.2	569.8	568.9	567.2	568.9	566.4
27.5°	543.5	544.4	546.1	544.4	546.9	546.1	548.6	547.7	545.2	547.7	546.9
30°	514.7	518.1	520.7	518.1	520.7	520.7	522.3	521.5	520.7	519.8	519.8
32.5°	482.6	485.9	485.9	485.1	486.8	486.8	487.6	485.9	485.1	485.9	486.8
35°	442.8	444.5	446.2	445.3	446.2	447.0	446.2	447.0	444.5	445.3	445.3
37.5°	399.6	401.3	401.3	398.7	400.4	400.4	398.7	398.7	397.1	398.7	395.4
40°	353.9	352.2	353.0	351.3	349.6	349.6	348.8	345.4	343.7	344.6	345.4
42.5°	309.0	309.0	306.5	302.2	298.0	298.0	295.5	293.8	290.4	292.1	291.2
45°	270.9	266.7	263.3	256.5	254.0	252.3	248.1	243.8	242.1	243.0	242.1
47.5°	234.5	231.1	222.7	213.3	210.8	208.3	203.2	198.1	196.4	194.7	194.7
50°	204.0	198.1	188.8	178.6	174.4	170.2	163.4	158.3	154.9	155.8	155.8
52.5°	176.1	169.3	158.3	145.6	140.5	135.5	129.5	123.6	121.1	120.2	120.2
55°	151.5	143.9	132.9	118.5	114.3	108.4	100.7	94.0	90.6	89.7	91.4
57.5°	129.5	122.8	110.1	95.7	90.6	84.7	77.0	71.1	66.9	66.0	66.9
60°	111.8	102.4	91.4	77.9	71.1	66.0	57.6	52.5	48.3	46.6	47.4
62.5°	94.0	85.5	74.5	61.0	55.9	50.8	43.2	37.3	33.9	33.0	33.9
65°	80.4	72.0	61.8	49.9	44.9	39.8	33.0	27.1	24.6	23.7	24.6
67.5°	66.9	59.3	50.8	39.8	35.6	31.3	24.6	20.3	16.9	16.1	16.9
70°	54.2	47.4	38.9	31.3	27.1	23.7	18.6	14.4	11.9	11.0	11.9
72.5°	40.6	35.6	29.6	22.9	20.3	17.8	13.5	10.2	8.5	7.6	8.5
75°	29.6	25.4	21.2	16.1	14.4	12.7	9.3	6.8	5.9	5.1	5.9
77.5°	20.3	17.8	14.4	11.0	9.3	8.5	5.9	5.1	4.2	3.4	3.4
80°	13.5	11.9	9.3	7.6	6.8	5.9	4.2	3.4	2.5	2.5	2.5
82.5°	8.5	6.8	5.9	4.2	3.4	3.4	2.5	1.7	1.7	1.7	1.7
85°	5.1	4.2	3.4	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8
87.5°	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.8
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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5
2.5°	598.5	596.8	596.8	597.7	598.5	599.4	597.7	596.8	596.8	599.4	597.7
5°	598.5	597.7	597.7	597.7	599.4	600.2	598.5	597.7	598.5	601.1	600.2
7.5°	601.1	599.4	600.2	600.2	601.1	602.8	601.1	600.2	601.1	603.6	601.9
10°	602.8	601.1	601.9	601.1	603.6	604.5	602.8	601.9	602.8	606.2	605.3
12.5°	603.6	602.8	602.8	601.9	604.5	605.3	603.6	602.8	603.6	606.2	605.3
15°	601.9	601.1	601.1	601.1	602.8	604.5	601.9	601.1	601.1	603.6	602.8
17.5°	598.5	596.8	596.8	596.8	597.7	598.5	596.0	595.2	594.3	596.8	596.0
20°	592.6	590.9	589.2	589.2	590.1	590.1	588.4	585.8	585.8	586.7	585.0
22.5°	581.6	580.8	579.1	578.2	579.9	579.1	575.7	573.1	572.3	573.1	571.4
25°	566.4	564.7	563.8	563.0	563.8	563.0	559.6	556.2	556.2	556.2	553.7
27.5°	545.2	543.5	542.7	542.7	543.5	541.8	538.4	535.0	533.4	533.4	530.8
30°	518.1	518.1	517.3	516.4	515.6	515.6	510.5	507.1	505.4	506.3	504.6
32.5°	485.1	484.3	483.4	480.9	481.7	480.9	476.6	474.1	471.6	469.9	469.0
35°	442.8	442.8	441.9	441.9	441.9	441.1	436.8	434.3	432.6	431.8	429.2
37.5°	396.2	395.4	394.5	394.5	394.5	394.5	392.0	389.4	389.4	388.6	386.9
40°	343.7	344.6	345.4	344.6	347.1	349.6	346.3	344.6	343.7	346.3	342.9
42.5°	292.9	292.1	296.3	297.2	297.2	301.4	302.2	303.1	302.2	303.9	303.9
45°	243.8	243.0	247.2	248.9	253.1	258.2	260.8	265.0	266.7	268.4	266.7
47.5°	197.3	200.6	204.0	208.3	211.6	220.1	225.2	229.4	231.1	233.7	233.7
50°	158.3	161.7	167.6	171.0	175.2	185.4	193.9	199.8	203.2	205.7	204.9
52.5°	121.9	127.8	135.5	138.8	144.8	156.6	165.9	172.7	176.9	179.5	180.3
55°	94.0	99.1	106.7	111.8	117.7	130.4	142.2	149.8	154.1	157.5	159.2
57.5°	69.4	75.3	83.8	88.0	94.8	109.2	119.4	128.7	133.8	138.0	138.8
60°	50.8	56.7	64.3	69.4	76.2	90.6	102.4	110.9	116.8	120.2	121.9
62.5°	36.4	42.3	49.9	55.0	61.0	73.7	85.5	94.0	99.9	104.1	106.7
65°	26.2	32.2	39.8	44.0	49.1	61.0	72.0	80.4	86.4	91.4	93.1
67.5°	19.5	23.7	30.5	34.7	39.8	49.1	58.4	66.0	72.0	76.2	77.9
70°	14.4	17.8	23.7	26.2	29.6	38.1	45.7	52.5	57.6	61.0	62.6
72.5°	10.2	12.7	16.9	19.5	22.0	28.8	34.7	39.8	43.2	46.6	48.3
75°	6.8	8.5	11.9	13.5	15.2	20.3	24.6	28.8	31.3	33.9	34.7
77.5°	4.2	5.9	8.5	9.3	11.0	13.5	16.9	19.5	21.2	22.9	24.6
80°	2.5	3.4	5.1	5.9	6.8	9.3	11.0	12.7	14.4	16.1	16.9
82.5°	1.7	2.5	3.4	3.4	4.2	5.1	6.8	8.5	9.3	10.2	11.0
85°	0.8	0.8	1.7	1.7	2.5	2.5	3.4	4.2	5.1	5.9	6.8
87.5°	0.8	0.8	0.8	0.8	1.7	1.7	2.5	2.5	2.5	3.4	3.4
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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	598.5	598.5	598.5	598.5	598.5	598.5	598.5	598.5
2.5°	596.0	598.5	596.0	597.7	596.8	596.8	596.0	596.8
5°	598.5	601.9	598.5	601.1	599.4	599.4	599.4	600.2
7.5°	601.1	604.5	601.9	604.5	603.6	602.8	602.8	604.5
10°	603.6	606.2	604.5	607.0	606.2	605.3	605.3	607.0
12.5°	603.6	607.0	605.3	607.9	607.0	606.2	606.2	607.0
15°	601.1	605.3	602.8	605.3	604.5	603.6	603.6	605.3
17.5°	593.5	596.8	595.2	596.8	596.8	596.0	596.8	597.7
20°	583.3	585.8	584.1	585.8	585.8	584.1	585.0	585.8
22.5°	568.9	571.4	569.8	571.4	570.6	569.8	569.8	568.9
25°	551.1	554.5	552.0	553.7	552.0	550.3	550.3	551.1
27.5°	529.1	531.7	528.3	530.0	528.3	526.6	526.6	525.7
30°	500.3	501.2	498.6	500.3	498.6	497.8	496.1	496.1
32.5°	465.6	466.5	463.9	463.9	462.2	462.2	458.9	461.4
35°	425.0	425.8	425.0	424.1	421.6	420.8	419.9	419.9
37.5°	382.7	382.7	380.1	379.3	377.6	375.9	376.7	374.2
40°	339.5	338.6	336.1	336.9	336.1	333.6	332.7	331.9
42.5°	298.8	298.8	296.3	297.2	295.5	294.6	292.1	292.9
45°	263.3	263.3	260.8	260.8	259.9	257.4	258.2	256.5
47.5°	231.1	231.1	230.3	230.3	227.7	226.9	226.9	226.9
50°	203.2	203.2	203.2	203.2	202.3	201.5	200.6	201.5
52.5°	179.5	181.2	180.3	180.3	179.5	178.6	177.8	177.8
55°	158.3	159.2	159.2	160.0	159.2	158.3	159.2	158.3
57.5°	139.7	141.4	141.4	141.4	141.4	141.4	140.5	139.7
60°	123.6	124.4	124.4	125.3	125.3	125.3	124.4	124.4
62.5°	107.5	109.2	110.1	110.1	110.9	110.1	110.1	110.1
65°	94.8	96.5	97.4	96.5	97.4	97.4	96.5	96.5
67.5°	79.6	81.3	81.3	81.3	81.3	82.1	81.3	81.3
70°	64.3	66.0	65.2	66.0	66.0	66.0	66.0	66.0
72.5°	49.1	49.9	50.8	50.8	51.6	50.8	50.8	50.8
75°	35.6	37.3	37.3	37.3	37.3	38.1	38.1	38.1
77.5°	25.4	26.2	26.2	27.1	27.1	27.1	27.1	27.9
80°	17.8	17.8	18.6	18.6	19.5	19.5	19.5	19.5
82.5°	11.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7
85°	6.8	7.6	7.6	7.6	7.6	8.5	8.5	8.5
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	3.4	3.4
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)