

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: P252564

Luminaire Tested: **LD6B15D010 EU6B10209030 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252564  
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: LD6B15D010 EU6B10209030 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1248.0 lumens  
Efficiency: N/A  
Efficacy: 86.7 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

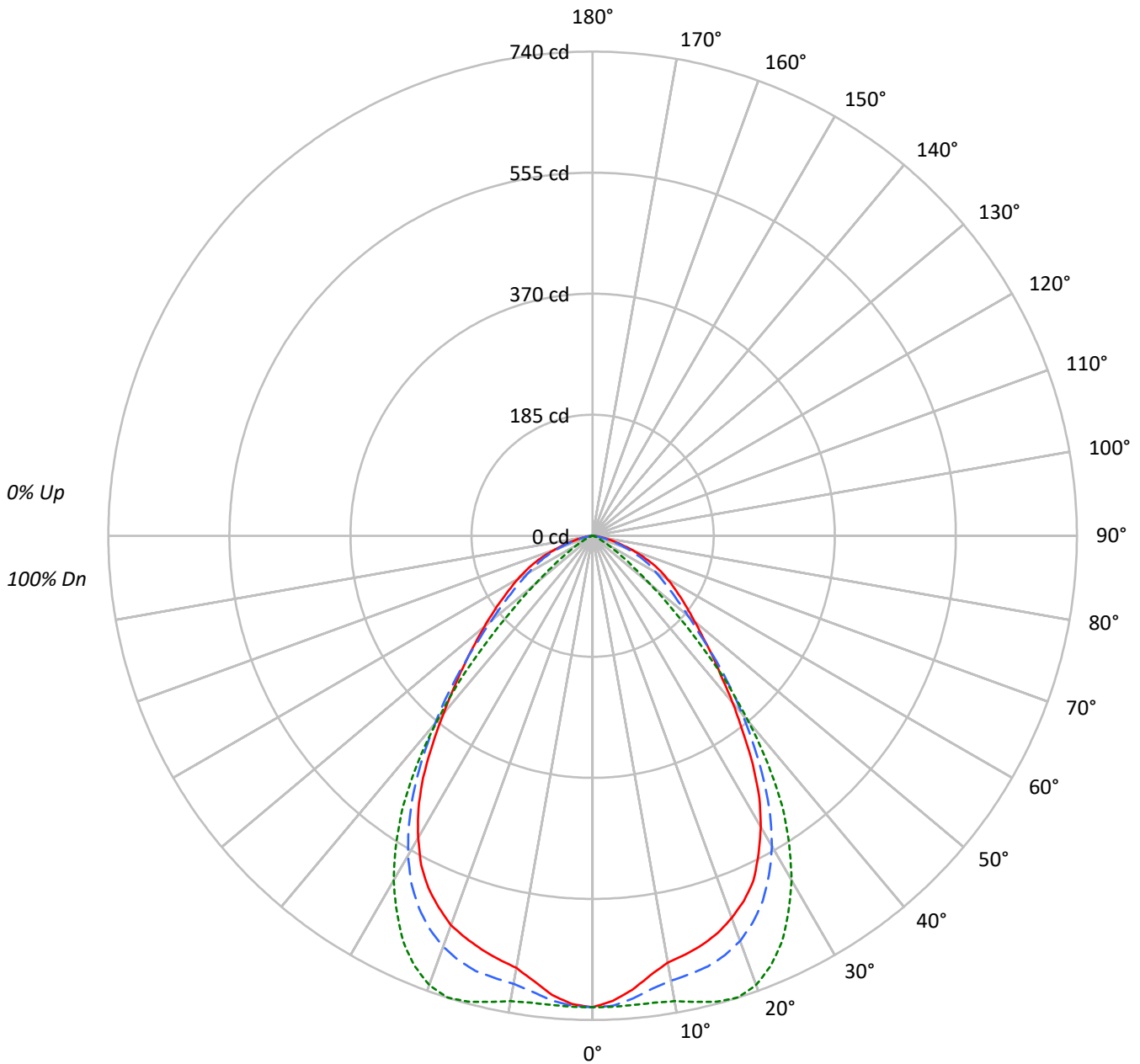
Input Watts (W): 14.39  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	47006	47006	47006
5°	45607	47133	46151
10°	43869	47844	44425
15°	43713	49792	44220
20°	43142	50717	43955
25°	41852	49288	42752
30°	38721	45810	40160
35°	33968	40268	35959
40°	28309	31571	30149
45°	23823	20824	25437
50°	20624	11418	21893
55°	18665	6063	19143
60°	17171	3158	17171
65°	15561	1667	15175
70°	12551	954	11598
75°	8621	630	7991
80°	5636	301	4997
85°	3743	599	3144



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.2	5.4
10°-20°	194.3	15.6
20°-30°	287.1	23.0
30°-40°	289.9	23.2
40°-50°	199.8	16.0
50°-60°	114.8	9.2
60°-70°	66.8	5.4
70°-80°	24.4	2.0
80°-90°	3.7	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°	548.5	44.0
0°-40°	838.5	67.2
0°-60°	1153.1	92.4
0°-90°	1248.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1248.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	720	720	720	720	720	
5°	696	710	720	713	705	65
15°	647	681	737	689	655	182
25°	581	616	685	628	594	265
35°	426	456	506	476	452	265
45°	258	262	226	278	276	201
55°	164	144	53	150	168	148
65°	101	85	11	84	98	99
75°	34	28	2	27	32	38
85°	5	2	1	3	4	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°	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5
2.5°	711.4	712.2	713.0	712.2	713.0	716.4	713.9	715.5	715.5	716.4	718.9
5°	696.4	696.4	698.0	697.2	699.7	703.0	700.5	703.0	703.9	705.5	709.7
7.5°	677.2	677.2	678.1	678.1	681.4	684.7	683.0	686.4	689.7	693.0	698.0
10°	662.2	663.9	663.9	664.7	668.1	672.2	671.4	675.6	678.9	683.9	690.5
12.5°	655.6	656.4	656.4	658.1	661.4	665.6	664.7	668.9	673.9	679.7	686.4
15°	647.2	648.9	648.1	649.7	653.1	657.2	656.4	660.6	666.4	672.2	681.4
17.5°	636.4	637.2	638.1	638.1	641.4	644.7	644.7	648.9	655.6	662.2	672.2
20°	621.4	623.1	623.1	623.9	626.4	631.4	630.6	634.7	641.4	648.1	658.9
22.5°	603.9	604.7	604.7	605.6	609.7	612.2	613.1	616.4	622.2	629.7	639.7
25°	581.4	582.3	581.4	583.9	585.6	590.6	588.9	593.1	599.7	605.6	615.6
27.5°	548.9	550.6	550.6	551.4	555.6	559.8	559.8	563.9	569.8	573.9	583.9
30°	514.0	516.5	514.0	518.1	519.8	523.1	525.6	528.1	533.1	538.9	548.1
32.5°	474.0	473.1	474.0	475.6	480.6	483.1	484.8	487.3	492.3	497.3	504.8
35°	426.5	428.2	429.0	432.3	432.3	436.5	437.3	439.0	446.5	449.8	455.6
37.5°	376.5	378.2	379.0	380.7	384.0	385.7	388.2	390.7	395.7	401.5	404.8
40°	332.4	332.4	333.2	334.9	337.4	338.2	340.7	344.0	347.4	352.4	355.7
42.5°	290.7	291.5	290.7	292.4	294.9	298.2	297.4	301.5	302.4	305.7	308.2
45°	258.2	258.2	256.6	258.2	258.2	261.6	260.7	262.4	261.6	263.2	261.6
47.5°	227.4	228.2	227.4	228.2	228.2	228.2	229.1	227.4	228.2	225.7	220.7
50°	203.2	204.1	202.4	203.2	202.4	201.6	202.4	199.9	199.1	195.8	190.8
52.5°	182.4	181.6	180.8	180.8	180.8	179.9	179.1	176.6	174.1	170.8	164.9
55°	164.1	163.3	162.4	162.4	160.8	159.9	159.9	157.4	154.9	150.8	144.1
57.5°	147.4	146.6	145.8	145.8	144.9	143.3	143.3	140.8	137.4	132.4	126.6
60°	131.6	131.6	131.6	130.8	130.8	129.1	129.1	126.6	123.3	118.3	111.6
62.5°	117.5	116.6	116.6	116.6	116.6	115.8	115.0	113.3	110.0	105.0	99.1
65°	100.8	100.8	100.8	100.8	100.0	100.0	100.0	97.5	95.8	90.8	85.0
67.5°	82.5	82.5	82.5	82.5	81.6	82.5	82.5	80.8	79.1	74.1	69.1
70°	65.8	65.0	64.1	65.0	64.1	64.1	65.0	63.3	62.5	58.3	53.3
72.5°	48.3	49.1	48.3	48.3	48.3	47.5	48.3	47.5	45.8	42.5	39.2
75°	34.2	35.0	35.0	34.2	34.2	34.2	33.3	33.3	31.7	29.2	27.5
77.5°	23.3	23.3	23.3	23.3	22.5	22.5	22.5	21.7	20.8	19.2	17.5
80°	15.0	15.0	15.0	15.0	14.2	14.2	14.2	13.3	13.3	11.7	10.0
82.5°	9.2	9.2	9.2	9.2	9.2	9.2	8.3	8.3	7.5	6.7	5.8
85°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.2	4.2	3.3	2.5
87.5°	1.7	1.7	2.5	2.5	2.5	2.5	2.5	2.5	1.7	1.7	1.7
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°	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5
2.5°	717.2	718.0	718.0	718.0	720.5	721.4	718.9	716.4	721.4	720.5	722.2
5°	708.9	711.4	713.0	713.9	716.4	718.0	715.5	714.7	718.9	719.7	720.5
7.5°	698.9	703.0	707.2	708.9	712.2	713.9	713.0	713.0	718.0	719.7	719.7
10°	692.2	698.0	703.0	707.2	711.4	713.9	713.9	714.7	720.5	722.2	723.9
12.5°	690.5	698.0	704.7	710.5	713.9	718.0	718.9	721.4	727.2	729.7	729.7
15°	686.4	696.4	704.7	712.2	717.2	722.2	723.9	728.9	735.5	737.2	738.9
17.5°	678.9	688.9	698.9	708.0	714.7	718.9	723.9	728.9	737.2	739.7	740.5
20°	665.6	677.2	687.2	696.4	703.0	708.9	713.9	719.7	727.2	730.5	731.4
22.5°	645.6	657.2	667.2	677.2	683.9	688.9	693.9	700.5	708.0	711.4	711.4
25°	621.4	632.2	643.1	650.6	657.2	663.1	665.6	673.1	680.5	684.7	684.7
27.5°	590.6	600.6	610.6	618.9	623.1	628.1	632.2	638.9	644.7	648.1	651.4
30°	551.4	561.4	570.6	578.9	583.9	588.9	593.1	598.1	603.9	608.1	608.9
32.5°	509.0	517.3	526.4	534.8	539.8	541.4	545.6	550.6	555.6	558.9	559.8
35°	462.3	468.1	474.0	481.5	486.5	486.5	490.6	494.0	498.1	505.6	504.0
37.5°	407.3	415.7	419.8	422.3	425.7	429.0	429.8	434.0	439.0	440.6	443.1
40°	355.7	358.2	360.7	360.7	364.0	364.0	364.0	364.8	369.8	370.7	374.0
42.5°	304.0	304.0	301.5	299.0	299.9	299.0	294.9	294.9	297.4	300.7	300.7
45°	255.7	249.9	242.4	236.6	232.4	230.7	225.7	225.7	224.9	225.7	229.1
47.5°	214.9	204.9	192.4	180.8	176.6	173.3	165.8	162.4	160.8	161.6	163.3
50°	180.8	169.9	155.8	141.6	134.1	129.9	120.8	115.0	114.1	112.5	115.8
52.5°	155.8	142.4	127.4	110.8	103.3	96.6	86.6	81.6	78.3	78.3	79.1
55°	134.1	119.9	103.3	86.6	79.1	74.1	64.1	57.5	54.1	53.3	55.8
57.5°	115.8	102.5	85.8	69.1	61.6	55.8	45.8	40.0	37.5	35.8	36.7
60°	101.6	88.3	71.6	55.8	49.1	42.5	34.2	27.5	24.2	24.2	25.0
62.5°	88.3	75.8	60.8	45.8	40.0	34.2	25.0	19.2	16.7	15.8	16.7
65°	75.0	63.3	50.8	38.3	32.5	27.5	20.0	15.0	11.7	10.8	11.7
67.5°	60.8	51.6	40.8	30.8	25.8	21.7	15.0	10.8	8.3	7.5	8.3
70°	47.5	39.2	30.8	22.5	19.2	15.8	10.8	8.3	5.8	5.0	5.8
72.5°	34.2	28.3	21.7	15.8	13.3	10.8	7.5	5.8	4.2	3.3	4.2
75°	23.3	19.2	14.2	10.0	8.3	7.5	5.0	3.3	2.5	2.5	2.5
77.5°	15.0	11.7	9.2	6.7	5.0	4.2	2.5	1.7	1.7	1.7	1.7
80°	8.3	6.7	5.0	3.3	2.5	2.5	1.7	1.7	0.8	0.8	0.8
82.5°	5.0	3.3	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8
85°	2.5	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.8	0.8	0.8	0.8	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°	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5
2.5°	718.9	719.7	717.2	720.5	718.0	721.4	721.4	718.0	718.9	717.2	720.5
5°	717.2	717.2	715.5	718.0	714.7	718.0	717.2	711.4	713.0	709.7	713.0
7.5°	717.2	715.5	713.0	715.5	711.4	713.9	710.5	704.7	703.0	698.9	698.9
10°	719.7	717.2	713.9	714.7	710.5	711.4	706.4	698.0	695.5	690.5	688.9
12.5°	725.5	723.0	718.0	719.7	713.9	713.9	707.2	697.2	692.2	685.5	683.9
15°	733.9	729.7	723.9	724.7	718.9	715.5	707.2	695.5	688.9	679.7	677.2
17.5°	735.5	731.4	723.9	723.9	716.4	712.2	702.2	688.9	680.5	671.4	666.4
20°	726.4	722.2	713.9	713.0	706.4	700.5	689.7	676.4	668.1	658.1	653.9
22.5°	707.2	702.2	694.7	693.9	687.2	683.9	672.2	658.9	650.6	640.6	637.2
25°	678.9	676.4	668.9	668.1	662.2	658.1	648.1	635.6	628.1	618.1	614.7
27.5°	645.6	643.1	635.6	635.6	628.9	626.4	617.2	605.6	599.7	590.6	586.4
30°	605.6	602.2	598.1	597.3	591.4	588.9	580.6	569.8	563.9	556.4	554.8
32.5°	558.1	555.6	553.1	552.3	546.4	543.9	538.1	527.3	522.3	515.6	513.1
35°	503.1	501.5	499.0	498.1	495.6	493.1	487.3	479.0	476.5	471.5	469.0
37.5°	439.8	441.5	439.8	439.8	437.3	438.2	433.2	428.2	425.7	422.3	420.7
40°	371.5	374.8	377.3	377.3	376.5	379.8	379.0	374.8	374.0	372.3	371.5
42.5°	302.4	304.0	309.0	312.4	311.5	319.9	320.7	324.0	326.5	324.9	325.7
45°	229.9	234.9	241.6	244.9	249.1	259.9	265.7	272.4	278.2	281.5	280.7
47.5°	165.8	171.6	179.1	184.1	191.6	204.9	219.9	228.2	236.6	240.7	244.9
50°	119.9	125.8	134.9	142.4	147.4	165.8	181.6	192.4	201.6	207.4	211.6
52.5°	84.1	90.8	100.8	107.5	115.0	132.4	150.8	163.3	173.3	180.8	184.9
55°	58.3	65.8	75.0	81.6	90.0	108.3	125.8	139.1	149.9	156.6	161.6
57.5°	40.8	47.5	56.6	62.5	70.8	88.3	105.8	119.1	129.9	136.6	142.4
60°	27.5	34.2	43.3	49.1	55.8	73.3	89.1	103.3	113.3	119.9	125.8
62.5°	19.2	25.0	34.2	40.0	45.8	60.8	75.8	88.3	98.3	105.8	110.8
65°	15.0	20.0	27.5	32.5	38.3	50.8	63.3	74.1	84.1	91.6	95.0
67.5°	10.8	15.8	21.7	25.8	30.0	40.8	51.6	60.0	69.1	75.0	79.1
70°	7.5	10.8	15.8	19.2	22.5	30.8	39.2	46.6	53.3	57.5	60.8
72.5°	5.8	7.5	10.8	13.3	15.8	21.7	28.3	34.2	39.2	42.5	45.8
75°	3.3	5.0	7.5	9.2	10.8	15.0	19.2	23.3	26.7	29.2	30.8
77.5°	1.7	2.5	4.2	5.0	6.7	9.2	12.5	15.0	17.5	19.2	20.8
80°	1.7	1.7	2.5	2.5	3.3	5.0	6.7	8.3	10.0	11.7	12.5
82.5°	0.8	0.8	1.7	1.7	1.7	2.5	3.3	5.0	5.8	6.7	7.5
85°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	2.5	3.3	4.2	4.2
87.5°	0.0	0.0	0.8	0.8	0.8	0.8	0.8	1.7	1.7	1.7	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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	720.5	720.5	720.5	720.5	720.5	720.5	720.5	720.5
2.5°	718.0	719.7	718.9	720.5	718.0	717.2	718.9	716.4
5°	708.9	709.7	708.9	708.9	707.2	705.5	707.2	704.7
7.5°	694.7	694.7	692.2	692.2	688.9	687.2	687.2	686.4
10°	683.0	680.5	678.1	678.9	673.9	672.2	671.4	670.6
12.5°	677.2	675.6	671.4	671.4	666.4	664.7	663.9	663.1
15°	670.6	667.2	663.9	663.1	658.9	657.2	656.4	654.7
17.5°	658.9	656.4	652.2	652.2	648.1	647.2	645.6	644.7
20°	646.4	643.1	639.7	639.7	634.7	634.7	632.2	633.1
22.5°	628.9	626.4	623.1	623.1	618.9	618.1	615.6	614.7
25°	608.1	604.7	602.2	601.4	598.1	596.4	595.6	593.9
27.5°	580.6	578.1	575.6	573.9	569.8	568.9	566.4	567.3
30°	546.4	544.8	543.9	542.3	537.3	535.6	535.6	533.1
32.5°	509.0	506.5	504.8	502.3	498.1	497.3	494.8	495.6
35°	463.1	459.8	457.3	458.1	453.1	452.3	450.6	451.5
37.5°	415.7	412.3	409.0	408.2	404.0	404.0	401.5	401.5
40°	366.5	363.2	361.5	361.5	356.5	357.4	354.9	354.0
42.5°	322.4	319.0	318.2	317.4	314.9	314.0	311.5	312.4
45°	280.7	279.9	279.9	278.2	275.7	274.9	275.7	275.7
47.5°	244.1	244.9	244.1	244.1	242.4	244.1	242.4	243.2
50°	213.2	214.9	214.9	214.9	214.1	214.9	214.9	215.7
52.5°	187.4	189.9	189.1	189.9	189.1	190.8	189.9	190.8
55°	164.9	166.6	167.4	168.3	168.3	168.3	168.3	168.3
57.5°	144.1	146.6	147.4	148.3	148.3	149.9	148.3	148.3
60°	127.4	129.9	130.8	131.6	131.6	132.4	130.8	131.6
62.5°	112.5	115.0	115.0	115.8	115.8	115.8	114.1	115.0
65°	97.5	98.3	99.1	99.1	98.3	98.3	97.5	98.3
67.5°	80.8	81.6	80.8	80.8	80.0	80.0	78.3	79.1
70°	62.5	62.5	63.3	62.5	61.6	62.5	61.6	60.8
72.5°	46.6	46.6	46.6	45.8	45.8	45.0	45.8	45.8
75°	31.7	31.7	32.5	32.5	32.5	32.5	31.7	31.7
77.5°	20.8	20.8	20.8	20.8	21.7	20.8	20.8	20.8
80°	13.3	13.3	14.2	14.2	13.3	13.3	13.3	13.3
82.5°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
85°	5.0	5.0	5.0	5.0	4.2	4.2	4.2	4.2
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	1.7	1.7
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)