

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: P252248

Luminaire Tested: **LD6B15D010 EU6B10208040 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252248  
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: LD6B15D010 EU6B10208040 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1404.0 lumens  
Efficiency: N/A  
Efficacy: 97.6 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

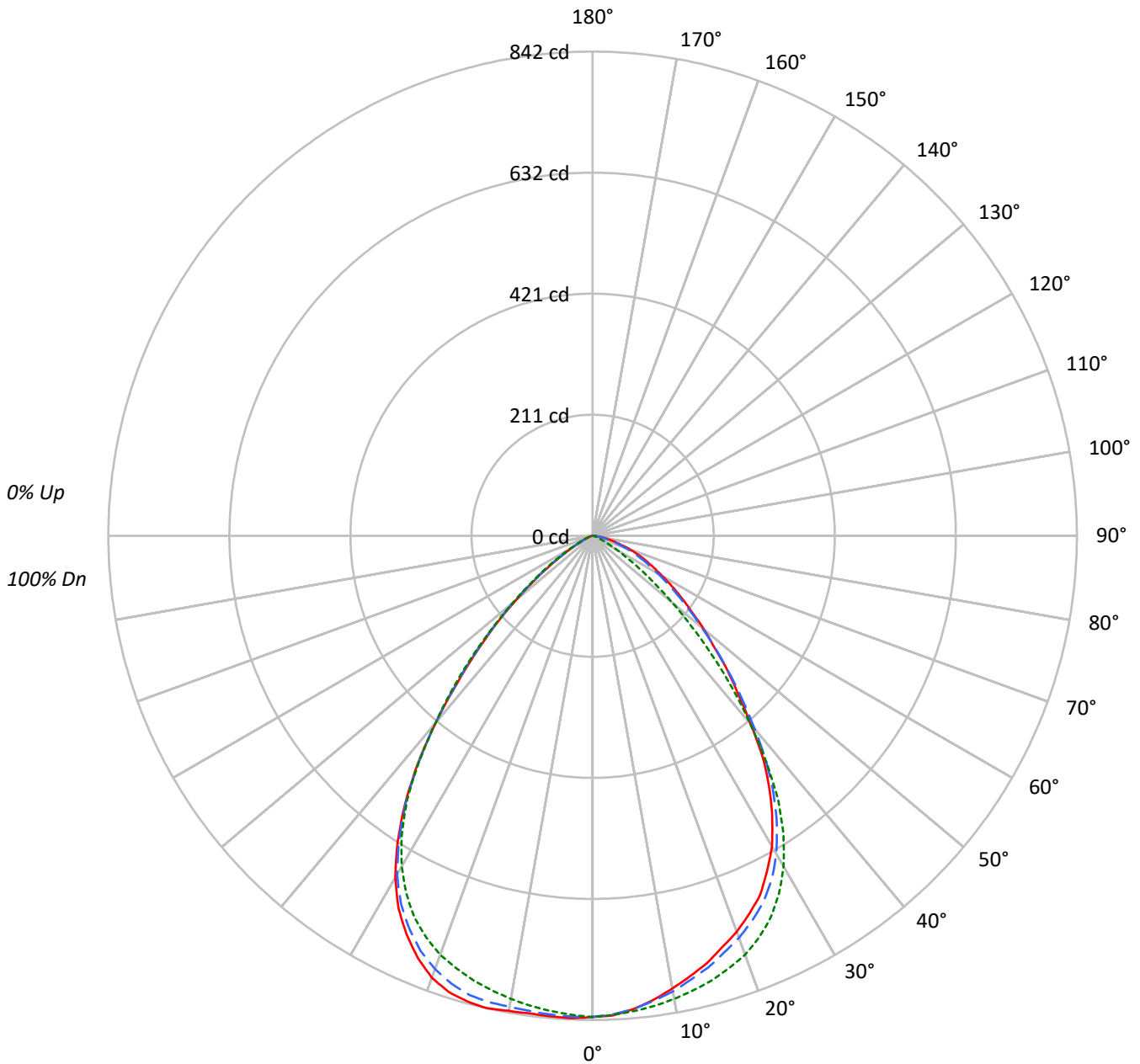
Input Watts (W): 14.39  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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	102	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°	54600	54600	54600
5°	54082	54343	54939
10°	52965	54170	55575
15°	51953	54067	56661
20°	50877	53820	56771
25°	49619	52751	55076
30°	46978	50021	51701
35°	42665	44840	45238
40°	36408	36238	36068
45°	30586	27135	26295
50°	25547	18361	17437
55°	21498	11261	10237
60°	18202	5937	5141
65°	15761	3118	2501
70°	13105	1927	1354
75°	9680	1286	756
80°	7589	751	376
85°	6063	749	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.9	5.6
10°-20°	225.8	16.1
20°-30°	333.5	23.8
30°-40°	343.7	24.5
40°-50°	237.4	16.9
50°-60°	117.0	8.3
60°-70°	47.4	3.4
70°-80°	16.9	1.2
80°-90°	3.5	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°	638.2	45.5
0°-40°	981.8	69.9
0°-60°	1336.2	95.2
0°-90°	1404.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1404.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	837	837	837	837	837	
5°	826	826	830	836	839	78
15°	769	777	800	827	839	217
25°	689	702	733	754	765	315
35°	536	549	563	566	568	332
45°	332	334	294	290	285	256
55°	189	182	99	93	90	171
65°	102	92	20	16	16	101
75°	38	32	5	3	3	43
85°	8	6	1	0	0	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°	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9
2.5°	834.8	831.8	833.8	829.8	834.8	829.8	830.8	831.8	830.8	831.8	832.8
5°	825.8	822.7	825.8	820.7	825.8	822.7	822.7	823.7	823.7	824.7	825.8
7.5°	813.6	810.6	813.6	808.6	814.6	811.6	811.6	813.6	812.6	813.6	815.6
10°	799.5	795.4	798.5	795.4	801.5	797.5	799.5	799.5	799.5	802.5	804.5
12.5°	784.3	780.3	784.3	779.3	785.3	782.3	783.3	786.3	787.3	789.4	790.4
15°	769.2	764.1	766.1	763.1	769.2	766.1	767.1	771.2	771.2	774.2	777.2
17.5°	749.9	745.9	749.9	745.9	751.0	748.9	751.0	754.0	754.0	757.0	760.1
20°	732.8	728.7	731.8	728.7	734.8	731.8	732.8	736.8	737.8	740.9	743.9
22.5°	711.5	708.5	710.5	707.5	713.6	711.5	712.6	716.6	717.6	719.6	724.7
25°	689.3	683.2	686.3	684.3	690.3	687.3	689.3	693.3	695.4	698.4	702.4
27.5°	657.0	653.9	656.0	656.0	661.0	658.0	659.0	663.0	666.1	669.1	674.1
30°	623.6	618.6	620.6	621.6	625.6	623.6	625.6	629.7	630.7	634.7	638.8
32.5°	581.2	579.1	583.2	581.2	583.2	583.2	584.2	587.2	589.2	591.3	596.3
35°	535.7	531.6	535.7	533.7	538.7	535.7	538.7	541.7	541.7	545.8	548.8
37.5°	486.2	481.1	483.1	483.1	485.1	484.1	484.1	489.2	490.2	493.2	496.3
40°	427.5	425.5	429.6	428.5	429.6	429.6	430.6	433.6	435.6	436.6	437.6
42.5°	375.0	376.0	377.0	377.0	377.0	377.0	377.0	381.0	380.0	383.1	384.1
45°	331.5	327.5	329.5	328.5	331.5	328.5	331.5	334.5	332.5	335.6	333.5
47.5°	287.0	287.0	287.0	286.0	288.1	287.0	289.1	290.1	290.1	290.1	289.1
50°	251.7	248.6	249.6	249.6	250.7	249.6	251.7	252.7	252.7	250.7	246.6
52.5°	217.3	216.3	216.3	218.3	218.3	217.3	217.3	217.3	217.3	214.3	212.2
55°	189.0	187.0	188.0	188.0	188.0	188.0	189.0	188.0	188.0	185.0	181.9
57.5°	163.7	161.7	161.7	161.7	162.7	161.7	161.7	161.7	160.7	157.7	153.6
60°	139.5	138.5	139.5	139.5	140.5	139.5	139.5	139.5	137.5	134.4	130.4
62.5°	119.3	119.3	119.3	120.3	120.3	119.3	119.3	118.3	117.2	113.2	109.2
65°	102.1	101.1	102.1	102.1	103.1	103.1	102.1	101.1	100.1	96.0	92.0
67.5°	84.9	83.9	84.9	84.9	85.9	84.9	84.9	84.9	81.9	79.8	75.8
70°	68.7	67.7	67.7	67.7	68.7	66.7	67.7	67.7	65.7	62.7	58.6
72.5°	52.6	52.6	52.6	52.6	52.6	52.6	51.5	51.5	49.5	46.5	44.5
75°	38.4	38.4	39.4	39.4	38.4	38.4	38.4	37.4	36.4	34.4	32.3
77.5°	28.3	28.3	28.3	28.3	27.3	27.3	27.3	26.3	25.3	24.3	22.2
80°	20.2	20.2	20.2	19.2	20.2	19.2	19.2	19.2	17.2	16.2	15.2
82.5°	14.1	13.1	13.1	13.1	13.1	13.1	13.1	12.1	12.1	11.1	10.1
85°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	7.1	6.1	6.1
87.5°	4.0	5.1	5.1	5.1	5.1	5.1	5.1	4.0	4.0	4.0	3.0
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9
2.5°	832.8	832.8	834.8	831.8	836.9	833.8	832.8	837.9	834.8	833.8	835.9
5°	825.8	826.8	827.8	825.8	830.8	827.8	827.8	832.8	830.8	829.8	832.8
7.5°	816.7	817.7	819.7	818.7	822.7	820.7	821.7	826.8	824.7	824.7	827.8
10°	805.5	807.6	809.6	809.6	814.6	812.6	812.6	818.7	816.7	817.7	821.7
12.5°	792.4	795.4	798.5	799.5	804.5	801.5	802.5	809.6	808.6	809.6	813.6
15°	778.2	782.3	785.3	785.3	791.4	788.4	791.4	798.5	796.4	800.5	805.5
17.5°	762.1	766.1	770.2	771.2	777.2	775.2	779.3	786.3	786.3	788.4	794.4
20°	746.9	752.0	754.0	757.0	763.1	762.1	764.1	772.2	772.2	775.2	781.3
22.5°	726.7	731.8	735.8	738.8	743.9	743.9	746.9	754.0	754.0	756.0	762.1
25°	704.5	710.5	713.6	716.6	721.6	720.6	723.7	729.7	730.7	732.8	738.8
27.5°	676.2	681.2	685.3	687.3	694.4	690.3	693.3	700.4	699.4	701.4	706.5
30°	640.8	645.8	649.9	649.9	656.0	656.0	659.0	662.0	662.0	664.0	668.1
32.5°	599.4	605.4	605.4	608.4	612.5	608.4	612.5	616.5	614.5	617.5	620.6
35°	551.8	554.9	555.9	555.9	558.9	557.9	556.9	559.9	557.9	563.0	566.0
37.5°	494.2	498.3	496.3	498.3	497.3	494.2	494.2	499.3	495.2	496.3	499.3
40°	438.6	438.6	437.6	432.6	433.6	430.6	429.6	430.6	426.5	425.5	429.6
42.5°	381.0	380.0	377.0	369.9	370.9	365.9	361.8	361.8	359.8	358.8	359.8
45°	329.5	326.5	321.4	313.3	311.3	307.3	299.2	297.1	294.1	294.1	295.1
47.5°	282.0	277.9	269.9	260.8	255.7	250.7	242.6	239.5	234.5	232.5	234.5
50°	242.6	235.5	225.4	212.2	207.2	201.1	193.0	188.0	182.9	180.9	179.9
52.5°	206.2	196.1	186.0	169.8	165.8	159.7	148.6	143.5	138.5	134.4	134.4
55°	174.9	165.8	151.6	136.4	130.4	124.3	113.2	106.1	101.1	99.0	97.0
57.5°	146.6	136.4	123.3	107.1	101.1	95.0	83.9	76.8	71.8	68.7	66.7
60°	123.3	112.2	99.0	84.9	77.8	71.8	60.6	53.6	48.5	45.5	43.5
62.5°	101.1	92.0	78.8	65.7	59.6	53.6	44.5	37.4	32.3	30.3	27.3
65°	84.9	75.8	63.7	52.6	47.5	41.4	33.4	27.3	23.2	20.2	18.2
67.5°	68.7	61.7	51.5	41.4	36.4	32.3	25.3	20.2	16.2	14.1	13.1
70°	54.6	47.5	39.4	31.3	28.3	24.3	19.2	14.1	12.1	10.1	9.1
72.5°	40.4	35.4	29.3	23.2	20.2	18.2	13.1	11.1	8.1	7.1	6.1
75°	29.3	25.3	21.2	16.2	14.1	13.1	10.1	7.1	6.1	5.1	4.0
77.5°	20.2	18.2	14.1	11.1	10.1	9.1	7.1	5.1	4.0	3.0	3.0
80°	13.1	11.1	9.1	7.1	7.1	6.1	4.0	3.0	3.0	2.0	2.0
82.5°	8.1	7.1	6.1	5.1	4.0	4.0	3.0	2.0	2.0	1.0	1.0
85°	5.1	4.0	3.0	3.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0
87.5°	2.0	2.0	2.0	1.0	1.0	1.0	1.0	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°	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9
2.5°	835.9	835.9	837.9	834.8	836.9	836.9	838.9	834.8	836.9	837.9	839.9
5°	831.8	832.8	834.8	833.8	834.8	834.8	836.9	831.8	835.9	835.9	838.9
7.5°	827.8	827.8	829.8	828.8	830.8	831.8	833.8	829.8	833.8	833.8	836.9
10°	822.7	822.7	825.8	824.7	827.8	828.8	831.8	827.8	831.8	832.8	835.9
12.5°	815.6	816.7	819.7	819.7	822.7	824.7	827.8	825.8	830.8	831.8	835.9
15°	807.6	809.6	813.6	812.6	815.6	818.7	822.7	819.7	826.8	828.8	832.8
17.5°	797.5	799.5	802.5	802.5	805.5	807.6	812.6	810.6	816.7	817.7	822.7
20°	782.3	785.3	789.4	788.4	791.4	793.4	797.5	795.4	801.5	803.5	808.6
22.5°	764.1	766.1	769.2	769.2	772.2	774.2	778.2	775.2	781.3	782.3	786.3
25°	739.8	741.9	743.9	744.9	747.9	748.9	751.0	748.9	754.0	755.0	760.1
27.5°	708.5	709.5	712.6	712.6	714.6	715.6	718.6	714.6	721.6	721.6	724.7
30°	671.1	670.1	674.1	672.1	674.1	674.1	677.2	675.2	680.2	678.2	681.2
32.5°	621.6	623.6	623.6	621.6	625.6	624.6	624.6	622.6	625.6	626.6	628.7
35°	564.0	567.0	567.0	568.0	569.0	566.0	567.0	560.9	566.0	567.0	568.0
37.5°	501.3	498.3	500.3	497.3	502.3	496.3	496.3	492.2	496.3	496.3	497.3
40°	429.6	428.5	430.6	428.5	427.5	426.5	424.5	421.5	425.5	423.5	426.5
42.5°	361.8	360.8	360.8	358.8	357.8	357.8	355.8	353.7	352.7	352.7	357.8
45°	292.1	294.1	292.1	291.1	293.1	291.1	292.1	288.1	290.1	288.1	290.1
47.5°	233.5	234.5	232.5	230.4	233.5	230.4	230.4	227.4	231.5	231.5	229.4
50°	180.9	179.9	177.9	179.9	178.9	178.9	178.9	175.9	177.9	174.9	176.9
52.5°	133.4	132.4	132.4	131.4	132.4	131.4	131.4	130.4	130.4	129.4	130.4
55°	97.0	96.0	94.0	94.0	94.0	95.0	94.0	93.0	93.0	92.0	93.0
57.5°	65.7	63.7	63.7	63.7	63.7	62.7	62.7	61.7	62.7	61.7	62.7
60°	42.4	42.4	40.4	40.4	40.4	40.4	40.4	39.4	40.4	40.4	40.4
62.5°	26.3	26.3	25.3	24.3	25.3	24.3	24.3	24.3	25.3	24.3	25.3
65°	17.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
67.5°	12.1	11.1	11.1	11.1	11.1	11.1	11.1	10.1	11.1	11.1	11.1
70°	8.1	8.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
72.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
75°	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
77.5°	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	1.0	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	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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°	836.9	836.9	836.9	836.9	836.9	836.9	836.9	836.9
2.5°	836.9	837.9	835.9	836.9	834.8	836.9	837.9	839.9
5°	834.8	835.9	833.8	835.9	833.8	835.9	836.9	838.9
7.5°	832.8	834.8	832.8	834.8	832.8	834.8	835.9	837.9
10°	832.8	835.9	833.8	836.9	833.8	835.9	837.9	838.9
12.5°	832.8	835.9	834.8	836.9	835.9	837.9	839.9	841.9
15°	830.8	833.8	831.8	834.8	833.8	834.8	838.9	838.9
17.5°	819.7	822.7	822.7	824.7	824.7	827.8	829.8	831.8
20°	805.5	808.6	807.6	810.6	810.6	813.6	815.6	817.7
22.5°	784.3	788.4	787.3	790.4	789.4	791.4	795.4	794.4
25°	757.0	762.1	761.1	763.1	762.1	762.1	764.1	765.1
27.5°	723.7	726.7	725.7	727.7	725.7	727.7	729.7	730.7
30°	680.2	682.2	681.2	682.2	681.2	683.2	684.3	686.3
32.5°	627.7	630.7	627.7	629.7	628.7	628.7	632.7	630.7
35°	565.0	566.0	567.0	567.0	565.0	566.0	568.0	568.0
37.5°	495.2	500.3	494.2	497.3	496.3	496.3	496.3	499.3
40°	422.5	423.5	421.5	421.5	421.5	420.5	424.5	423.5
42.5°	353.7	354.8	353.7	350.7	351.7	351.7	354.8	350.7
45°	287.0	289.1	288.1	288.1	286.0	286.0	287.0	285.0
47.5°	227.4	229.4	226.4	227.4	225.4	227.4	226.4	228.4
50°	172.8	174.9	173.8	174.9	174.9	172.8	175.9	171.8
52.5°	129.4	130.4	129.4	128.4	127.3	127.3	129.4	128.4
55°	92.0	91.0	91.0	91.0	92.0	92.0	91.0	90.0
57.5°	61.7	61.7	60.6	60.6	61.7	59.6	60.6	59.6
60°	39.4	39.4	39.4	39.4	38.4	39.4	39.4	39.4
62.5°	24.3	24.3	24.3	24.3	24.3	24.3	24.3	24.3
65°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
67.5°	10.1	11.1	11.1	11.1	10.1	10.1	10.1	10.1
70°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
72.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
75°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	1.0	1.0	1.0	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)