

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: P252270

Luminaire Tested: **LD6B20D010 EU6B10209730 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252270  
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: LD6B20D010 EU6B10209730 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1406.0 lumens  
Efficiency: N/A  
Efficacy: 67.6 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

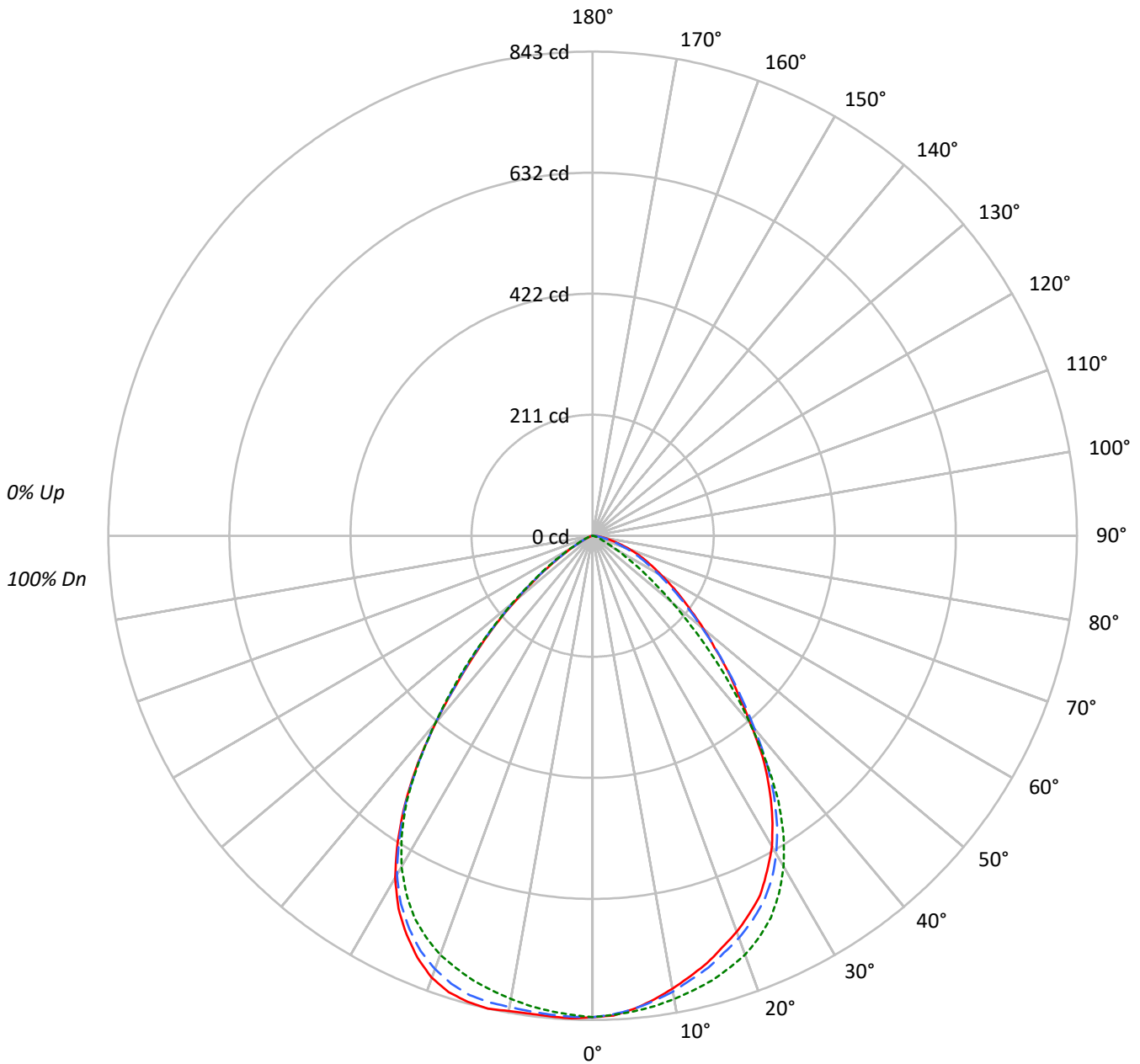
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	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°	54678	54678	54678
5°	54154	54422	55018
10°	53037	54243	55654
15°	52021	54142	56742
20°	50946	53897	56847
25°	49691	52823	55155
30°	47046	50097	51777
35°	42721	44903	45302
40°	36459	36289	36119
45°	30632	27172	26332
50°	25577	18391	17468
55°	21532	11283	10248
60°	18228	5937	5154
65°	15777	3118	2501
70°	13124	1927	1354
75°	9705	1286	756
80°	7589	751	376
85°	6063	749	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.0	5.6
10°-20°	226.1	16.1
20°-30°	333.9	23.8
30°-40°	344.2	24.5
40°-50°	237.7	16.9
50°-60°	117.2	8.3
60°-70°	47.5	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°	639.1	45.5
0°-40°	983.2	69.9
0°-60°	1338.1	95.2
0°-90°	1406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1406.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	838	838	838	838	838	
5°	827	827	831	837	840	78
15°	770	778	802	828	840	217
25°	690	703	734	755	766	316
35°	536	550	564	567	569	332
45°	332	334	294	290	285	257
55°	189	182	99	93	90	171
65°	102	92	20	16	16	102
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°	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1
2.5°	836.0	833.0	835.0	831.0	836.0	831.0	832.0	833.0	832.0	833.0	834.0
5°	826.9	823.9	826.9	821.9	826.9	823.9	823.9	824.9	824.9	825.9	826.9
7.5°	814.8	811.7	814.8	809.7	815.8	812.8	812.8	814.8	813.8	814.8	816.8
10°	800.6	796.6	799.6	796.6	802.6	798.6	800.6	800.6	800.6	803.6	805.7
12.5°	785.4	781.4	785.4	780.4	786.4	783.4	784.4	787.5	788.5	790.5	791.5
15°	770.2	765.2	767.2	764.2	770.2	767.2	768.2	772.3	772.3	775.3	778.3
17.5°	751.0	747.0	751.0	747.0	752.0	750.0	752.0	755.1	755.1	758.1	761.1
20°	733.8	729.8	732.8	729.8	735.8	732.8	733.8	737.9	738.9	741.9	744.9
22.5°	712.6	709.5	711.5	708.5	714.6	712.6	713.6	717.6	718.6	720.7	725.7
25°	690.3	684.2	687.3	685.2	691.3	688.3	690.3	694.3	696.4	699.4	703.4
27.5°	657.9	654.9	656.9	656.9	661.9	658.9	659.9	664.0	667.0	670.0	675.1
30°	624.5	619.4	621.5	622.5	626.5	624.5	626.5	630.6	631.6	635.6	639.7
32.5°	582.0	580.0	584.0	582.0	584.0	584.0	585.0	588.1	590.1	592.1	597.2
35°	536.4	532.4	536.4	534.4	539.5	536.4	539.5	542.5	542.5	546.6	549.6
37.5°	486.8	481.8	483.8	483.8	485.8	484.8	484.8	489.9	490.9	493.9	497.0
40°	428.1	426.1	430.2	429.2	430.2	430.2	431.2	434.2	436.2	437.3	438.3
42.5°	375.5	376.5	377.5	377.5	377.5	377.5	377.5	381.6	380.6	383.6	384.6
45°	332.0	327.9	330.0	328.9	332.0	328.9	332.0	335.0	333.0	336.0	334.0
47.5°	287.5	287.5	287.5	286.4	288.5	287.5	289.5	290.5	290.5	290.5	289.5
50°	252.0	249.0	250.0	250.0	251.0	250.0	252.0	253.0	253.0	251.0	247.0
52.5°	217.6	216.6	216.6	218.6	218.6	217.6	217.6	217.6	217.6	214.6	212.6
55°	189.3	187.2	188.3	188.3	188.3	188.3	189.3	188.3	188.3	185.2	182.2
57.5°	164.0	161.9	161.9	161.9	163.0	161.9	161.9	161.9	160.9	157.9	153.8
60°	139.7	138.7	139.7	139.7	140.7	139.7	139.7	139.7	137.7	134.6	130.6
62.5°	119.4	119.4	119.4	120.4	120.4	119.4	119.4	118.4	117.4	113.4	109.3
65°	102.2	101.2	102.2	102.2	103.2	103.2	102.2	101.2	100.2	96.2	92.1
67.5°	85.0	84.0	85.0	85.0	86.0	85.0	85.0	85.0	82.0	80.0	75.9
70°	68.8	67.8	67.8	67.8	68.8	66.8	67.8	67.8	65.8	62.8	58.7
72.5°	52.6	52.6	52.6	52.6	52.6	52.6	51.6	51.6	49.6	46.6	44.5
75°	38.5	38.5	39.5	39.5	38.5	38.5	38.5	37.4	36.4	34.4	32.4
77.5°	28.3	28.3	28.3	28.3	27.3	27.3	27.3	26.3	25.3	24.3	22.3
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°	14.2	13.2	13.2	13.2	13.2	13.2	13.2	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°	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1
2.5°	834.0	834.0	836.0	833.0	838.1	835.0	834.0	839.1	836.0	835.0	837.1
5°	826.9	827.9	829.0	826.9	832.0	829.0	829.0	834.0	832.0	831.0	834.0
7.5°	817.8	818.8	820.9	819.8	823.9	821.9	822.9	827.9	825.9	825.9	829.0
10°	806.7	808.7	810.7	810.7	815.8	813.8	813.8	819.8	817.8	818.8	822.9
12.5°	793.5	796.6	799.6	800.6	805.7	802.6	803.6	810.7	809.7	810.7	814.8
15°	779.4	783.4	786.4	786.4	792.5	789.5	792.5	799.6	797.6	801.6	806.7
17.5°	763.2	767.2	771.3	772.3	778.3	776.3	780.4	787.5	787.5	789.5	795.6
20°	748.0	753.0	755.1	758.1	764.2	763.2	765.2	773.3	773.3	776.3	782.4
22.5°	727.7	732.8	736.8	739.9	744.9	744.9	748.0	755.1	755.1	757.1	763.2
25°	705.5	711.5	714.6	717.6	722.7	721.7	724.7	730.8	731.8	733.8	739.9
27.5°	677.1	682.2	686.2	688.3	695.3	691.3	694.3	701.4	700.4	702.4	707.5
30°	641.7	646.8	650.8	650.8	656.9	656.9	659.9	663.0	663.0	665.0	669.0
32.5°	600.2	606.3	606.3	609.3	613.4	609.3	613.4	617.4	615.4	618.4	621.5
35°	552.6	555.7	556.7	556.7	559.7	558.7	557.7	560.7	558.7	563.8	566.8
37.5°	494.9	499.0	497.0	499.0	498.0	494.9	494.9	500.0	496.0	497.0	500.0
40°	439.3	439.3	438.3	433.2	434.2	431.2	430.2	431.2	427.1	426.1	430.2
42.5°	381.6	380.6	377.5	370.4	371.5	366.4	362.4	362.4	360.3	359.3	360.3
45°	330.0	326.9	321.9	313.8	311.7	307.7	299.6	297.6	294.5	294.5	295.5
47.5°	282.4	278.3	270.2	261.1	256.1	251.0	242.9	239.9	234.8	232.8	234.8
50°	242.9	235.8	225.7	212.6	207.5	201.4	193.3	188.3	183.2	181.2	180.2
52.5°	206.5	196.4	186.2	170.0	166.0	159.9	148.8	143.7	138.7	134.6	134.6
55°	175.1	166.0	151.8	136.6	130.6	124.5	113.4	106.3	101.2	99.2	97.2
57.5°	146.8	136.6	123.5	107.3	101.2	95.1	84.0	76.9	71.9	68.8	66.8
60°	123.5	112.3	99.2	85.0	77.9	71.9	60.7	53.6	48.6	45.5	43.5
62.5°	101.2	92.1	78.9	65.8	59.7	53.6	44.5	37.4	32.4	30.4	27.3
65°	85.0	75.9	63.8	52.6	47.6	41.5	33.4	27.3	23.3	20.2	18.2
67.5°	68.8	61.7	51.6	41.5	36.4	32.4	25.3	20.2	16.2	14.2	13.2
70°	54.7	47.6	39.5	31.4	28.3	24.3	19.2	14.2	12.1	10.1	9.1
72.5°	40.5	35.4	29.4	23.3	20.2	18.2	13.2	11.1	8.1	7.1	6.1
75°	29.4	25.3	21.3	16.2	14.2	13.2	10.1	7.1	6.1	5.1	4.0
77.5°	20.2	18.2	14.2	11.1	10.1	9.1	7.1	5.1	4.0	3.0	3.0
80°	13.2	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°	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1
2.5°	837.1	837.1	839.1	836.0	838.1	838.1	840.1	836.0	838.1	839.1	841.1
5°	833.0	834.0	836.0	835.0	836.0	836.0	838.1	833.0	837.1	837.1	840.1
7.5°	829.0	829.0	831.0	830.0	832.0	833.0	835.0	831.0	835.0	835.0	838.1
10°	823.9	823.9	826.9	825.9	829.0	830.0	833.0	829.0	833.0	834.0	837.1
12.5°	816.8	817.8	820.9	820.9	823.9	825.9	829.0	826.9	832.0	833.0	837.1
15°	808.7	810.7	814.8	813.8	816.8	819.8	823.9	820.9	827.9	830.0	834.0
17.5°	798.6	800.6	803.6	803.6	806.7	808.7	813.8	811.7	817.8	818.8	823.9
20°	783.4	786.4	790.5	789.5	792.5	794.5	798.6	796.6	802.6	804.7	809.7
22.5°	765.2	767.2	770.2	770.2	773.3	775.3	779.4	776.3	782.4	783.4	787.5
25°	740.9	742.9	744.9	746.0	749.0	750.0	752.0	750.0	755.1	756.1	761.1
27.5°	709.5	710.5	713.6	713.6	715.6	716.6	719.6	715.6	722.7	722.7	725.7
30°	672.1	671.1	675.1	673.1	675.1	675.1	678.1	676.1	681.2	679.2	682.2
32.5°	622.5	624.5	624.5	622.5	626.5	625.5	625.5	623.5	626.5	627.5	629.6
35°	564.8	567.8	567.8	568.8	569.8	566.8	567.8	561.7	566.8	567.8	568.8
37.5°	502.0	499.0	501.0	498.0	503.0	497.0	497.0	492.9	497.0	497.0	498.0
40°	430.2	429.2	431.2	429.2	428.1	427.1	425.1	422.1	426.1	424.1	427.1
42.5°	362.4	361.3	361.3	359.3	358.3	358.3	356.3	354.3	353.2	353.2	358.3
45°	292.5	294.5	292.5	291.5	293.5	291.5	292.5	288.5	290.5	288.5	290.5
47.5°	233.8	234.8	232.8	230.8	233.8	230.8	230.8	227.7	231.8	231.8	229.8
50°	181.2	180.2	178.1	180.2	179.2	179.2	179.2	176.1	178.1	175.1	177.1
52.5°	133.6	132.6	132.6	131.6	132.6	131.6	131.6	130.6	130.6	129.6	130.6
55°	97.2	96.2	94.1	94.1	94.1	95.1	94.1	93.1	93.1	92.1	93.1
57.5°	65.8	63.8	63.8	63.8	63.8	62.8	62.8	61.7	62.8	61.7	62.8
60°	42.5	42.5	40.5	40.5	40.5	40.5	40.5	39.5	40.5	40.5	40.5
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°	838.1	838.1	838.1	838.1	838.1	838.1	838.1	838.1
2.5°	838.1	839.1	837.1	838.1	836.0	838.1	839.1	841.1
5°	836.0	837.1	835.0	837.1	835.0	837.1	838.1	840.1
7.5°	834.0	836.0	834.0	836.0	834.0	836.0	837.1	839.1
10°	834.0	837.1	835.0	838.1	835.0	837.1	839.1	840.1
12.5°	834.0	837.1	836.0	838.1	837.1	839.1	841.1	843.1
15°	832.0	835.0	833.0	836.0	835.0	836.0	840.1	840.1
17.5°	820.9	823.9	823.9	825.9	825.9	829.0	831.0	833.0
20°	806.7	809.7	808.7	811.7	811.7	814.8	816.8	818.8
22.5°	785.4	789.5	788.5	791.5	790.5	792.5	796.6	795.6
25°	758.1	763.2	762.2	764.2	763.2	763.2	765.2	766.2
27.5°	724.7	727.7	726.7	728.8	726.7	728.8	730.8	731.8
30°	681.2	683.2	682.2	683.2	682.2	684.2	685.2	687.3
32.5°	628.5	631.6	628.5	630.6	629.6	629.6	633.6	631.6
35°	565.8	566.8	567.8	567.8	565.8	566.8	568.8	568.8
37.5°	496.0	501.0	494.9	498.0	497.0	497.0	497.0	500.0
40°	423.1	424.1	422.1	422.1	422.1	421.1	425.1	424.1
42.5°	354.3	355.3	354.3	351.2	352.2	352.2	355.3	351.2
45°	287.5	289.5	288.5	288.5	286.4	286.4	287.5	285.4
47.5°	227.7	229.8	226.7	227.7	225.7	227.7	226.7	228.7
50°	173.1	175.1	174.1	175.1	175.1	173.1	176.1	172.1
52.5°	129.6	130.6	129.6	128.5	127.5	127.5	129.6	128.5
55°	92.1	91.1	91.1	91.1	92.1	92.1	91.1	90.1
57.5°	61.7	61.7	60.7	60.7	61.7	59.7	60.7	59.7
60°	39.5	39.5	39.5	39.5	38.5	39.5	39.5	39.5
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)