

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: P252232

Luminaire Tested: **LD6B10D010 EU6B10208027 6LBSW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252232  
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: LD6B10D010 EU6B10208027 6LBSW1H  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 940.0 lumens  
Efficiency: N/A  
Efficacy: 93.5 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

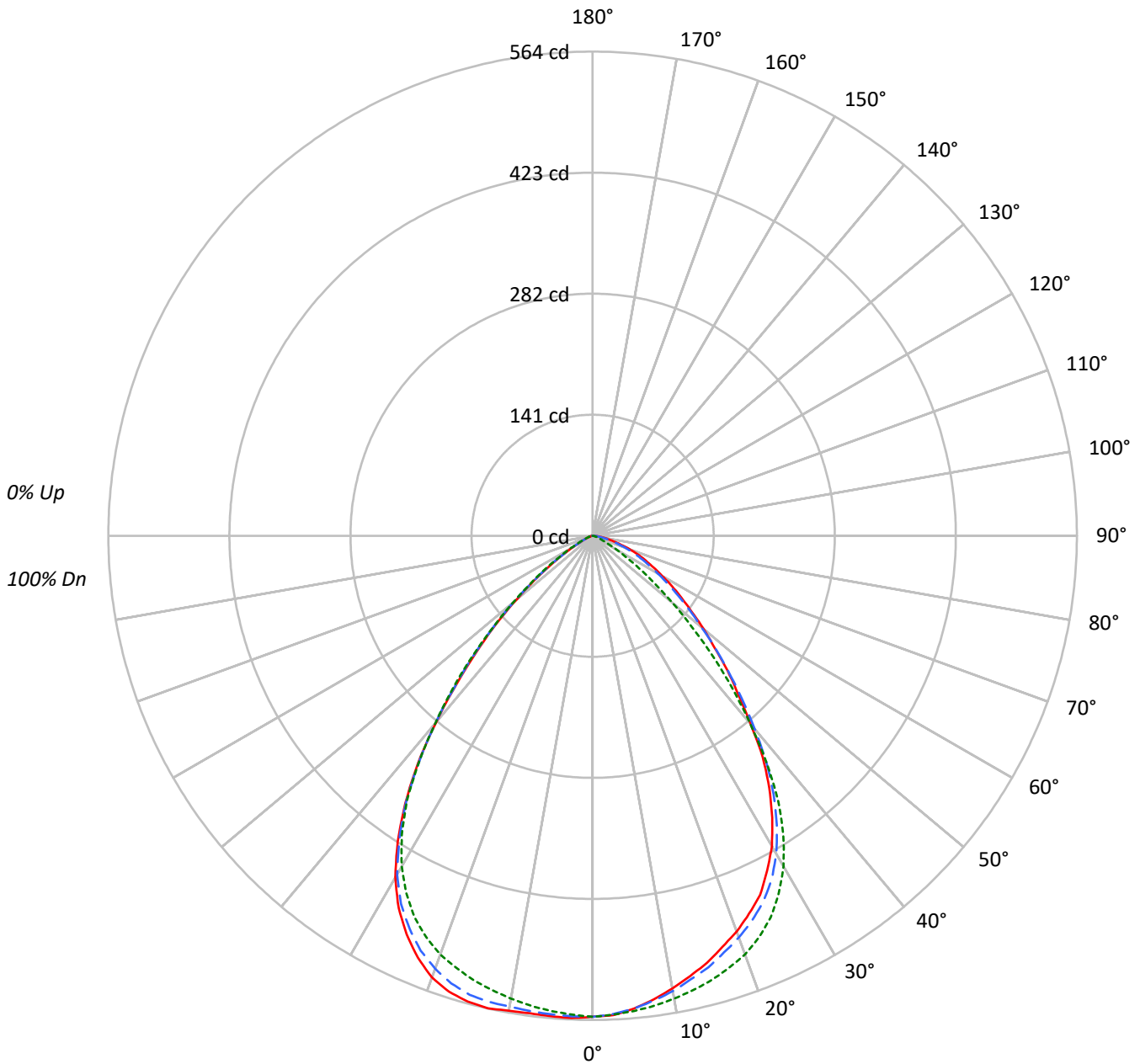
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	36554	36554	36554
5°	36209	36386	36786
10°	35462	36264	37211
15°	34784	36196	37938
20°	34061	36033	38005
25°	33221	35316	36878
30°	31452	33493	34616
35°	28560	30018	30289
40°	24374	24264	24144
45°	20483	18167	17604
50°	17102	12291	11672
55°	14389	7541	6847
60°	12187	3980	3445
65°	10544	2084	1667
70°	8775	1297	897
75°	6478	857	504
80°	5072	526	263
85°	4042	524	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.8	5.6
10°-20°	151.2	16.1
20°-30°	223.3	23.8
30°-40°	230.1	24.5
40°-50°	158.9	16.9
50°-60°	78.3	8.3
60°-70°	31.7	3.4
70°-80°	11.3	1.2
80°-90°	2.3	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°	427.3	45.5
0°-40°	657.4	69.9
0°-60°	894.6	95.2
0°-90°	940.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	940.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	560	560	560	560	560	
5°	553	553	556	560	562	52
15°	515	520	536	554	562	145
25°	462	470	491	505	512	211
35°	359	367	377	379	380	222
45°	222	223	197	194	191	172
55°	126	122	66	62	60	114
65°	68	62	14	11	11	68
75°	26	22	3	2	2	29
85°	5	4	1	0	0	7
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°	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3
2.5°	558.9	556.9	558.3	555.6	558.9	555.6	556.2	556.9	556.2	556.9	557.6
5°	552.9	550.8	552.9	549.5	552.9	550.8	550.8	551.5	551.5	552.2	552.9
7.5°	544.7	542.7	544.7	541.4	545.4	543.4	543.4	544.7	544.1	544.7	546.1
10°	535.3	532.6	534.6	532.6	536.6	533.9	535.3	535.3	535.3	537.3	538.6
12.5°	525.1	522.4	525.1	521.7	525.8	523.8	524.4	526.5	527.1	528.5	529.2
15°	515.0	511.6	512.9	510.9	515.0	512.9	513.6	516.3	516.3	518.3	520.4
17.5°	502.1	499.4	502.1	499.4	502.8	501.4	502.8	504.8	504.8	506.8	508.9
20°	490.6	487.9	489.9	487.9	492.0	489.9	490.6	493.3	494.0	496.0	498.0
22.5°	476.4	474.4	475.7	473.7	477.7	476.4	477.1	479.8	480.4	481.8	485.2
25°	461.5	457.4	459.5	458.1	462.2	460.1	461.5	464.2	465.6	467.6	470.3
27.5°	439.8	437.8	439.2	439.2	442.6	440.5	441.2	443.9	445.9	448.0	451.4
30°	417.5	414.1	415.5	416.2	418.9	417.5	418.9	421.6	422.3	425.0	427.7
32.5°	389.1	387.7	390.4	389.1	390.4	390.4	391.1	393.2	394.5	395.9	399.2
35°	358.6	355.9	358.6	357.3	360.7	358.6	360.7	362.7	362.7	365.4	367.4
37.5°	325.5	322.1	323.5	323.5	324.8	324.1	324.1	327.5	328.2	330.2	332.3
40°	286.2	284.9	287.6	286.9	287.6	287.6	288.3	290.3	291.7	292.3	293.0
42.5°	251.1	251.7	252.4	252.4	252.4	252.4	252.4	255.1	254.4	256.5	257.1
45°	222.0	219.2	220.6	219.9	222.0	219.9	222.0	224.0	222.6	224.7	223.3
47.5°	192.2	192.2	192.2	191.5	192.9	192.2	193.5	194.2	194.2	194.2	193.5
50°	168.5	166.5	167.1	167.1	167.8	167.1	168.5	169.2	169.2	167.8	165.1
52.5°	145.5	144.8	144.8	146.2	146.2	145.5	145.5	145.5	145.5	143.5	142.1
55°	126.5	125.2	125.9	125.9	125.9	125.9	126.5	125.9	125.9	123.8	121.8
57.5°	109.6	108.3	108.3	108.3	108.9	108.3	108.3	108.3	107.6	105.6	102.9
60°	93.4	92.7	93.4	93.4	94.1	93.4	93.4	93.4	92.0	90.0	87.3
62.5°	79.8	79.8	79.8	80.5	80.5	79.8	79.8	79.2	78.5	75.8	73.1
65°	68.3	67.7	68.3	68.3	69.0	69.0	68.3	67.7	67.0	64.3	61.6
67.5°	56.8	56.2	56.8	56.8	57.5	56.8	56.8	56.8	54.8	53.5	50.8
70°	46.0	45.3	45.3	45.3	46.0	44.7	45.3	45.3	44.0	42.0	39.2
72.5°	35.2	35.2	35.2	35.2	35.2	35.2	34.5	34.5	33.2	31.1	29.8
75°	25.7	25.7	26.4	26.4	25.7	25.7	25.7	25.0	24.4	23.0	21.7
77.5°	18.9	18.9	18.9	18.9	18.3	18.3	18.3	17.6	16.9	16.2	14.9
80°	13.5	13.5	13.5	12.9	13.5	12.9	12.9	12.9	11.5	10.8	10.2
82.5°	9.5	8.8	8.8	8.8	8.8	8.8	8.8	8.1	8.1	7.4	6.8
85°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	4.7	4.1	4.1
87.5°	2.7	3.4	3.4	3.4	3.4	3.4	3.4	2.7	2.7	2.7	2.0
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°	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3
2.5°	557.6	557.6	558.9	556.9	560.3	558.3	557.6	561.0	558.9	558.3	559.6
5°	552.9	553.5	554.2	552.9	556.2	554.2	554.2	557.6	556.2	555.6	557.6
7.5°	546.8	547.4	548.8	548.1	550.8	549.5	550.1	553.5	552.2	552.2	554.2
10°	539.3	540.7	542.0	542.0	545.4	544.1	544.1	548.1	546.8	547.4	550.1
12.5°	530.5	532.6	534.6	535.3	538.6	536.6	537.3	542.0	541.4	542.0	544.7
15°	521.0	523.8	525.8	525.8	529.8	527.8	529.8	534.6	533.2	535.9	539.3
17.5°	510.2	512.9	515.6	516.3	520.4	519.0	521.7	526.5	526.5	527.8	531.9
20°	500.1	503.5	504.8	506.8	510.9	510.2	511.6	517.0	517.0	519.0	523.1
22.5°	486.5	489.9	492.6	494.7	498.0	498.0	500.1	504.8	504.8	506.2	510.2
25°	471.7	475.7	477.7	479.8	483.2	482.5	484.5	488.6	489.2	490.6	494.7
27.5°	452.7	456.1	458.8	460.1	464.9	462.2	464.2	468.9	468.3	469.6	473.0
30°	429.0	432.4	435.1	435.1	439.2	439.2	441.2	443.2	443.2	444.6	447.3
32.5°	401.3	405.3	405.3	407.4	410.1	407.4	410.1	412.8	411.4	413.5	415.5
35°	369.5	371.5	372.2	372.2	374.2	373.5	372.9	374.9	373.5	376.9	378.9
37.5°	330.9	333.6	332.3	333.6	332.9	330.9	330.9	334.3	331.6	332.3	334.3
40°	293.7	293.7	293.0	289.6	290.3	288.3	287.6	288.3	285.6	284.9	287.6
42.5°	255.1	254.4	252.4	247.7	248.3	245.0	242.3	242.3	240.9	240.2	240.9
45°	220.6	218.6	215.2	209.8	208.4	205.7	200.3	198.9	196.9	196.9	197.6
47.5°	188.8	186.1	180.7	174.6	171.2	167.8	162.4	160.4	157.0	155.6	157.0
50°	162.4	157.7	150.9	142.1	138.7	134.7	129.2	125.9	122.5	121.1	120.5
52.5°	138.0	131.3	124.5	113.7	111.0	106.9	99.5	96.1	92.7	90.0	90.0
55°	117.1	111.0	101.5	91.4	87.3	83.2	75.8	71.1	67.7	66.3	65.0
57.5°	98.1	91.4	82.6	71.7	67.7	63.6	56.2	51.4	48.0	46.0	44.7
60°	82.6	75.1	66.3	56.8	52.1	48.0	40.6	35.9	32.5	30.5	29.1
62.5°	67.7	61.6	52.8	44.0	39.9	35.9	29.8	25.0	21.7	20.3	18.3
65°	56.8	50.8	42.6	35.2	31.8	27.7	22.3	18.3	15.6	13.5	12.2
67.5°	46.0	41.3	34.5	27.7	24.4	21.7	16.9	13.5	10.8	9.5	8.8
70°	36.5	31.8	26.4	21.0	18.9	16.2	12.9	9.5	8.1	6.8	6.1
72.5°	27.1	23.7	19.6	15.6	13.5	12.2	8.8	7.4	5.4	4.7	4.1
75°	19.6	16.9	14.2	10.8	9.5	8.8	6.8	4.7	4.1	3.4	2.7
77.5°	13.5	12.2	9.5	7.4	6.8	6.1	4.7	3.4	2.7	2.0	2.0
80°	8.8	7.4	6.1	4.7	4.7	4.1	2.7	2.0	2.0	1.4	1.4
82.5°	5.4	4.7	4.1	3.4	2.7	2.7	2.0	1.4	1.4	0.7	0.7
85°	3.4	2.7	2.0	2.0	1.4	1.4	1.4	0.7	0.7	0.7	0.7
87.5°	1.4	1.4	1.4	0.7	0.7	0.7	0.7	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°	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3
2.5°	559.6	559.6	561.0	558.9	560.3	560.3	561.7	558.9	560.3	561.0	562.3
5°	556.9	557.6	558.9	558.3	558.9	558.9	560.3	556.9	559.6	559.6	561.7
7.5°	554.2	554.2	555.6	554.9	556.2	556.9	558.3	555.6	558.3	558.3	560.3
10°	550.8	550.8	552.9	552.2	554.2	554.9	556.9	554.2	556.9	557.6	559.6
12.5°	546.1	546.8	548.8	548.8	550.8	552.2	554.2	552.9	556.2	556.9	559.6
15°	540.7	542.0	544.7	544.1	546.1	548.1	550.8	548.8	553.5	554.9	557.6
17.5°	533.9	535.3	537.3	537.3	539.3	540.7	544.1	542.7	546.8	547.4	550.8
20°	523.8	525.8	528.5	527.8	529.8	531.2	533.9	532.6	536.6	538.0	541.4
22.5°	511.6	512.9	515.0	515.0	517.0	518.3	521.0	519.0	523.1	523.8	526.5
25°	495.3	496.7	498.0	498.7	500.7	501.4	502.8	501.4	504.8	505.5	508.9
27.5°	474.4	475.0	477.1	477.1	478.4	479.1	481.1	478.4	483.2	483.2	485.2
30°	449.3	448.6	451.4	450.0	451.4	451.4	453.4	452.0	455.4	454.1	456.1
32.5°	416.2	417.5	417.5	416.2	418.9	418.2	418.2	416.8	418.9	419.5	420.9
35°	377.6	379.6	379.6	380.3	381.0	378.9	379.6	375.6	378.9	379.6	380.3
37.5°	335.6	333.6	335.0	332.9	336.3	332.3	332.3	329.5	332.3	332.3	332.9
40°	287.6	286.9	288.3	286.9	286.2	285.6	284.2	282.2	284.9	283.5	285.6
42.5°	242.3	241.6	241.6	240.2	239.5	239.5	238.2	236.8	236.2	236.2	239.5
45°	195.6	196.9	195.6	194.9	196.2	194.9	195.6	192.9	194.2	192.9	194.2
47.5°	156.3	157.0	155.6	154.3	156.3	154.3	154.3	152.3	155.0	155.0	153.6
50°	121.1	120.5	119.1	120.5	119.8	119.8	119.8	117.7	119.1	117.1	118.4
52.5°	89.3	88.6	88.6	88.0	88.6	88.0	88.0	87.3	87.3	86.6	87.3
55°	65.0	64.3	62.9	62.9	62.9	63.6	62.9	62.3	62.3	61.6	62.3
57.5°	44.0	42.6	42.6	42.6	42.6	42.0	42.0	41.3	42.0	41.3	42.0
60°	28.4	28.4	27.1	27.1	27.1	27.1	27.1	26.4	27.1	27.1	27.1
62.5°	17.6	17.6	16.9	16.2	16.9	16.2	16.2	16.2	16.9	16.2	16.9
65°	11.5	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
67.5°	8.1	7.4	7.4	7.4	7.4	7.4	7.4	6.8	7.4	7.4	7.4
70°	5.4	5.4	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
72.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
75°	2.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
77.5°	2.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
85°	0.7	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	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3
2.5°	560.3	561.0	559.6	560.3	558.9	560.3	561.0	562.3
5°	558.9	559.6	558.3	559.6	558.3	559.6	560.3	561.7
7.5°	557.6	558.9	557.6	558.9	557.6	558.9	559.6	561.0
10°	557.6	559.6	558.3	560.3	558.3	559.6	561.0	561.7
12.5°	557.6	559.6	558.9	560.3	559.6	561.0	562.3	563.7
15°	556.2	558.3	556.9	558.9	558.3	558.9	561.7	561.7
17.5°	548.8	550.8	550.8	552.2	552.2	554.2	555.6	556.9
20°	539.3	541.4	540.7	542.7	542.7	544.7	546.1	547.4
22.5°	525.1	527.8	527.1	529.2	528.5	529.8	532.6	531.9
25°	506.8	510.2	509.5	510.9	510.2	510.2	511.6	512.3
27.5°	484.5	486.5	485.9	487.2	485.9	487.2	488.6	489.2
30°	455.4	456.8	456.1	456.8	456.1	457.4	458.1	459.5
32.5°	420.2	422.3	420.2	421.6	420.9	420.9	423.6	422.3
35°	378.3	378.9	379.6	379.6	378.3	378.9	380.3	380.3
37.5°	331.6	335.0	330.9	332.9	332.3	332.3	332.3	334.3
40°	282.9	283.5	282.2	282.2	282.2	281.5	284.2	283.5
42.5°	236.8	237.5	236.8	234.8	235.5	235.5	237.5	234.8
45°	192.2	193.5	192.9	192.9	191.5	191.5	192.2	190.8
47.5°	152.3	153.6	151.6	152.3	150.9	152.3	151.6	152.9
50°	115.7	117.1	116.4	117.1	117.1	115.7	117.7	115.0
52.5°	86.6	87.3	86.6	85.9	85.3	85.3	86.6	85.9
55°	61.6	60.9	60.9	60.9	61.6	61.6	60.9	60.2
57.5°	41.3	41.3	40.6	40.6	41.3	39.9	40.6	39.9
60°	26.4	26.4	26.4	26.4	25.7	26.4	26.4	26.4
62.5°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
65°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
67.5°	6.8	7.4	7.4	7.4	6.8	6.8	6.8	6.8
70°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
72.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
75°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
82.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	0.7	0.7	0.7	0.7	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)