

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: PORTFOLIO

Report Number: P252653

Luminaire Tested: **LE\_6B10D010 EC6B10209024 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252653  
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: PORTFOLIO  
Catalog Number: LE\_6B10D010 EC6B10209024 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 896.2 lumens  
Efficiency: N/A  
Efficacy: 89.6 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

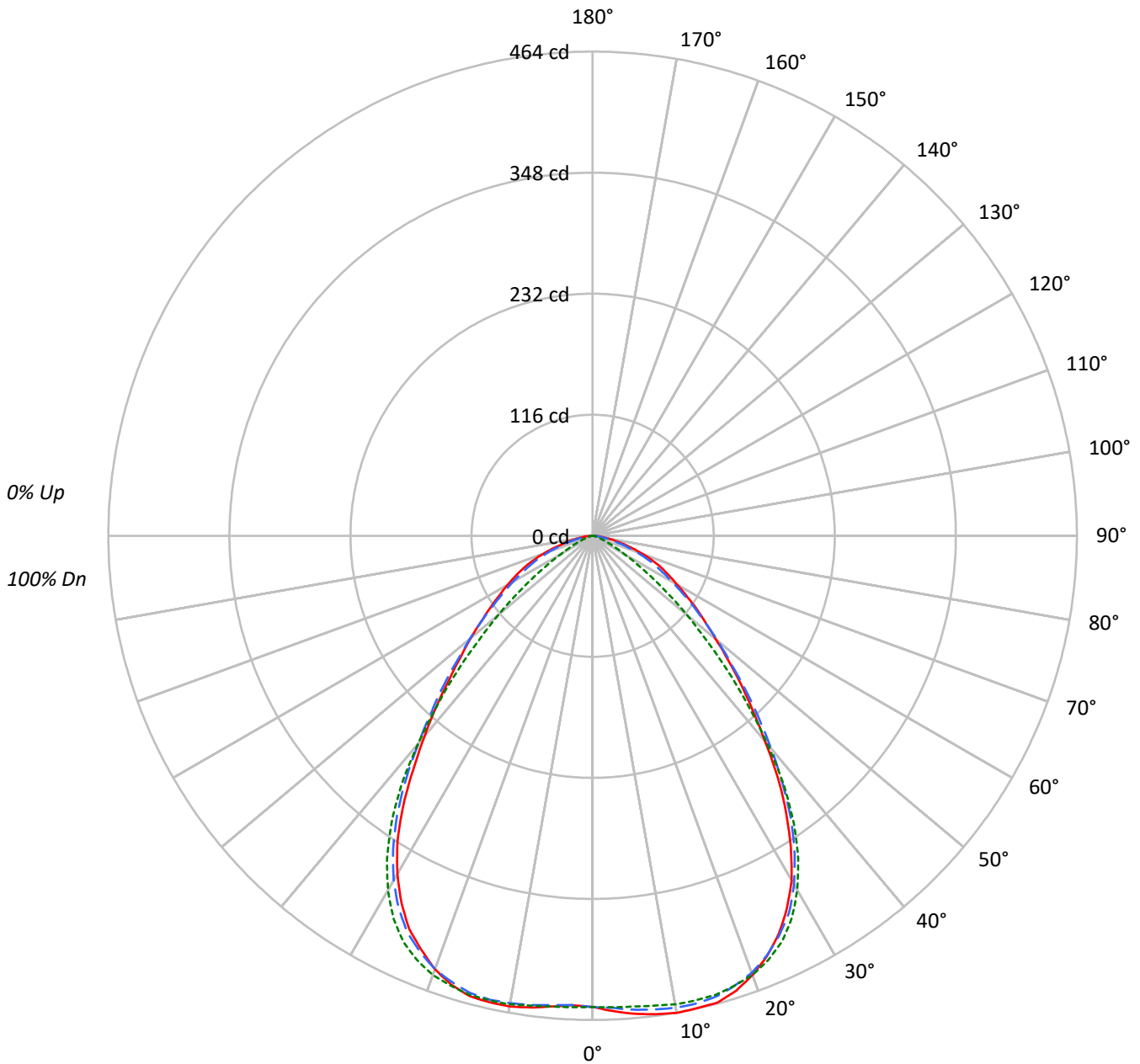
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	29456	29456	29456
5°	30119	29660	29660
10°	30765	30209	30335
15°	31272	30759	30840
20°	31090	31090	30687
25°	30342	30896	29931
30°	28717	29538	28190
35°	25733	26760	25231
40°	21871	22143	21325
45°	18499	16903	17853
50°	15620	11926	15427
55°	13740	7712	13581
60°	12161	4580	12252
65°	11238	2763	11238
70°	9747	1564	9518
75°	7713	983	7260
80°	5786	714	5560
85°	5240	449	4791



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.5	4.9
10°-20°	128.7	14.4
20°-30°	193.5	21.6
30°-40°	203.5	22.7
40°-50°	152.0	17.0
50°-60°	94.6	10.6
60°-70°	53.8	6.0
70°-80°	22.2	2.5
80°-90°	4.6	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°	365.6	40.8
0°-40°	569.1	63.5
0°-60°	815.7	91.0
0°-90°	896.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	896.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	452	452	452	452	452	
5°	460	456	453	452	453	44
15°	463	457	455	454	457	130
25°	422	423	429	420	416	193
35°	323	332	336	326	317	201
45°	200	205	183	201	194	155
55°	121	118	68	116	119	109
65°	73	65	18	65	73	72
75°	31	24	4	24	29	33
85°	7	4	1	4	6	8
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°	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5
2.5°	456.0	455.4	456.0	454.8	454.1	454.1	454.8	453.5	452.9	453.5	452.9
5°	459.9	458.6	459.2	458.6	457.2	457.2	457.9	456.0	456.0	456.6	456.0
7.5°	462.4	462.4	462.4	461.1	460.5	459.9	461.1	459.2	458.6	458.6	457.9
10°	464.4	463.6	464.4	463.0	461.8	461.1	462.4	461.1	459.9	461.1	459.2
12.5°	463.6	463.6	463.6	463.0	461.8	461.1	462.4	460.5	459.9	460.5	459.2
15°	463.0	461.1	461.8	461.1	459.2	459.2	459.9	457.9	456.6	458.6	457.2
17.5°	457.2	456.0	456.6	455.4	454.1	453.5	454.1	453.5	452.2	453.5	452.2
20°	447.8	447.8	448.4	447.1	445.8	445.1	446.5	445.1	443.9	445.8	445.8
22.5°	436.2	436.2	436.2	435.6	435.0	435.0	435.0	434.2	433.6	435.0	435.6
25°	421.5	420.9	421.5	422.1	421.5	420.9	421.5	421.5	420.2	422.8	422.8
27.5°	403.0	403.0	404.2	403.6	403.6	403.0	404.2	404.2	403.6	405.6	407.5
30°	381.2	380.0	381.2	381.2	381.9	381.9	382.6	382.6	382.6	384.5	385.8
32.5°	353.2	353.9	355.8	355.1	354.5	356.4	356.4	357.6	358.2	359.6	360.2
35°	323.1	323.9	323.9	324.5	325.8	324.5	327.6	327.0	327.6	330.2	331.5
37.5°	291.2	289.4	292.5	291.2	291.9	291.9	293.1	293.8	295.8	298.9	298.9
40°	256.8	257.4	258.6	259.2	260.0	260.0	260.0	261.9	262.5	266.4	265.8
42.5°	226.8	226.8	228.0	228.6	228.6	228.6	228.6	230.6	231.9	233.1	234.4
45°	200.5	198.6	199.9	199.9	201.1	200.5	201.9	203.1	203.8	205.6	205.0
47.5°	175.6	175.0	175.6	176.2	175.6	176.2	176.9	177.5	178.2	178.2	178.2
50°	153.9	153.9	154.5	155.2	155.2	155.2	155.2	155.9	155.9	157.1	155.9
52.5°	136.0	136.6	136.6	136.0	136.6	136.6	137.4	137.4	136.6	136.6	134.8
55°	120.8	120.1	120.8	120.1	120.8	120.8	120.1	120.1	119.4	118.8	118.1
57.5°	106.0	106.0	106.0	106.0	105.4	106.0	105.4	104.8	104.8	103.5	101.5
60°	93.2	93.2	93.2	93.2	93.2	92.6	93.2	92.6	91.4	90.0	87.5
62.5°	82.4	81.8	82.4	81.8	81.8	81.1	81.1	80.5	79.2	77.9	75.4
65°	72.8	73.5	72.8	72.8	72.1	71.5	71.5	70.9	69.0	67.8	65.1
67.5°	62.6	62.0	62.0	62.0	61.4	61.4	61.4	60.0	58.8	56.9	54.2
70°	51.1	51.1	51.1	50.5	50.5	49.9	49.9	49.1	47.9	46.6	43.4
72.5°	40.2	40.2	40.2	39.0	39.6	39.0	39.0	37.6	37.0	35.1	33.2
75°	30.6	30.6	30.0	30.0	29.4	28.8	28.8	28.1	27.5	26.1	24.2
77.5°	22.4	22.4	22.4	21.8	21.1	20.5	20.5	19.8	19.1	18.5	17.2
80°	15.4	15.4	15.4	15.4	14.8	14.0	14.0	13.4	13.4	12.8	11.5
82.5°	10.2	10.2	10.2	10.2	9.6	9.6	9.6	9.0	8.2	8.2	7.0
85°	7.0	7.0	6.4	6.4	6.4	6.4	5.8	5.8	5.1	4.5	4.5
87.5°	3.9	3.9	3.9	3.9	3.2	3.2	3.2	3.2	2.5	2.5	1.9
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°	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5
2.5°	454.8	454.8	454.1	452.2	452.9	452.2	452.9	452.2	450.2	452.2	450.2
5°	457.2	457.9	456.6	454.1	454.8	454.1	454.1	453.5	451.5	452.9	451.5
7.5°	459.9	459.2	458.6	456.0	456.6	456.0	456.0	454.8	452.9	454.1	452.2
10°	461.1	461.1	459.9	457.2	457.2	456.6	457.2	456.6	454.1	456.0	454.8
12.5°	461.1	460.5	460.5	457.2	457.9	457.2	457.9	456.6	454.8	456.0	455.4
15°	459.2	459.2	458.6	455.4	456.0	456.0	456.6	455.4	453.5	455.4	454.1
17.5°	455.4	455.4	454.8	452.2	453.5	453.5	454.1	452.9	450.9	452.2	452.2
20°	447.8	448.4	448.4	446.5	447.8	447.8	448.4	447.8	447.1	447.8	446.5
22.5°	438.8	440.0	440.0	438.1	439.4	439.4	441.4	440.8	439.4	440.0	439.4
25°	425.4	426.6	427.9	426.6	427.9	427.9	429.9	429.2	427.9	429.2	427.2
27.5°	410.0	410.6	412.0	410.6	412.6	412.0	413.9	413.2	411.4	413.2	412.6
30°	388.4	390.9	392.8	390.9	392.8	392.8	394.1	393.4	392.8	392.1	392.1
32.5°	364.0	366.6	366.6	366.0	367.2	367.2	367.9	366.6	366.0	366.6	367.2
35°	334.0	335.2	336.6	336.0	336.6	337.2	336.6	337.2	335.2	336.0	336.0
37.5°	301.5	302.8	302.8	300.9	302.1	302.1	300.9	300.9	299.5	300.9	298.2
40°	267.0	265.8	266.4	265.0	263.8	263.8	263.1	260.6	259.2	260.0	260.6
42.5°	233.1	233.1	231.2	228.0	224.9	224.9	222.9	221.6	219.1	220.4	219.8
45°	204.4	201.1	198.6	193.5	191.6	190.4	187.1	184.0	182.6	183.2	182.6
47.5°	176.9	174.4	168.0	161.0	159.0	157.1	153.2	149.5	148.1	146.9	146.9
50°	153.9	149.5	142.4	134.8	131.6	128.4	123.2	119.4	116.9	117.5	117.5
52.5°	132.9	127.8	119.4	109.9	106.0	102.2	97.8	93.2	91.4	90.8	90.8
55°	114.4	108.6	100.2	89.4	86.2	81.8	76.0	70.9	68.4	67.8	69.0
57.5°	97.8	92.6	83.0	72.1	68.4	63.9	58.1	53.6	50.5	49.9	50.5
60°	84.2	77.2	69.0	58.8	53.6	49.9	43.4	39.6	36.4	35.1	35.8
62.5°	70.9	64.5	56.2	46.0	42.1	38.4	32.6	28.1	25.5	24.9	25.5
65°	60.6	54.2	46.6	37.6	33.9	30.0	24.9	20.5	18.5	17.9	18.5
67.5°	50.5	44.8	38.4	30.0	26.9	23.6	18.5	15.4	12.8	12.1	12.8
70°	40.9	35.8	29.4	23.6	20.5	17.9	14.0	10.9	9.0	8.2	9.0
72.5°	30.6	26.9	22.4	17.2	15.4	13.4	10.2	7.6	6.4	5.8	6.4
75°	22.4	19.1	16.0	12.1	10.9	9.6	7.0	5.1	4.5	3.9	4.5
77.5°	15.4	13.4	10.9	8.2	7.0	6.4	4.5	3.9	3.2	2.5	2.5
80°	10.2	9.0	7.0	5.8	5.1	4.5	3.2	2.5	1.9	1.9	1.9
82.5°	6.4	5.1	4.5	3.2	2.5	2.5	1.9	1.2	1.2	1.2	1.2
85°	3.9	3.2	2.5	1.9	1.2	1.2	0.6	0.6	0.6	0.6	0.6
87.5°	1.9	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.6
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°	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5
2.5°	451.5	450.2	450.2	450.9	451.5	452.2	450.9	450.2	450.2	452.2	450.9
5°	451.5	450.9	450.9	450.9	452.2	452.9	451.5	450.9	451.5	453.5	452.9
7.5°	453.5	452.2	452.9	452.9	453.5	454.8	453.5	452.9	453.5	455.4	454.1
10°	454.8	453.5	454.1	453.5	455.4	456.0	454.8	454.1	454.8	457.2	456.6
12.5°	455.4	454.8	454.8	454.1	456.0	456.6	455.4	454.8	455.4	457.2	456.6
15°	454.1	453.5	453.5	453.5	454.8	456.0	454.1	453.5	453.5	455.4	454.8
17.5°	451.5	450.2	450.2	450.2	450.9	451.5	449.6	449.0	448.4	450.2	449.6
20°	447.1	445.8	444.5	444.5	445.1	445.1	443.9	442.0	442.0	442.6	441.4
22.5°	438.8	438.1	436.9	436.2	437.5	436.9	434.2	432.4	431.8	432.4	431.1
25°	427.2	426.0	425.4	424.8	425.4	424.8	422.1	419.6	419.6	419.6	417.8
27.5°	411.4	410.0	409.4	409.4	410.0	408.8	406.2	403.6	402.4	402.4	400.5
30°	390.9	390.9	390.2	389.6	389.0	389.0	385.1	382.6	381.2	381.9	380.6
32.5°	366.0	365.4	364.8	362.8	363.4	362.8	359.6	357.6	355.8	354.5	353.9
35°	334.0	334.0	333.4	333.4	333.4	332.8	329.5	327.6	326.4	325.8	323.9
37.5°	298.9	298.2	297.6	297.6	297.6	297.6	295.8	293.8	293.8	293.1	291.9
40°	259.2	260.0	260.6	260.0	261.9	263.8	261.2	260.0	259.2	261.2	258.6
42.5°	221.0	220.4	223.5	224.1	224.1	227.4	228.0	228.6	228.0	229.2	229.2
45°	184.0	183.2	186.5	187.8	191.0	194.8	196.8	199.9	201.1	202.5	201.1
47.5°	148.9	151.4	153.9	157.1	159.6	166.0	169.9	173.1	174.4	176.2	176.2
50°	119.4	122.0	126.5	129.0	132.2	139.9	146.2	150.8	153.2	155.2	154.5
52.5°	92.0	96.5	102.2	104.8	109.2	118.1	125.1	130.2	133.5	135.4	136.0
55°	70.9	74.8	80.5	84.2	88.8	98.4	107.2	113.0	116.2	118.8	120.1
57.5°	52.4	56.9	63.2	66.4	71.5	82.4	90.0	97.1	100.9	104.1	104.8
60°	38.4	42.8	48.5	52.4	57.5	68.4	77.2	83.6	88.1	90.8	92.0
62.5°	27.5	31.9	37.6	41.5	46.0	55.6	64.5	70.9	75.4	78.5	80.5
65°	19.8	24.2	30.0	33.2	37.0	46.0	54.2	60.6	65.1	69.0	70.2
67.5°	14.8	17.9	23.0	26.1	30.0	37.0	44.1	49.9	54.2	57.5	58.8
70°	10.9	13.4	17.9	19.8	22.4	28.8	34.5	39.6	43.4	46.0	47.2
72.5°	7.6	9.6	12.8	14.8	16.6	21.8	26.1	30.0	32.6	35.1	36.4
75°	5.1	6.4	9.0	10.2	11.5	15.4	18.5	21.8	23.6	25.5	26.1
77.5°	3.2	4.5	6.4	7.0	8.2	10.2	12.8	14.8	16.0	17.2	18.5
80°	1.9	2.5	3.9	4.5	5.1	7.0	8.2	9.6	10.9	12.1	12.8
82.5°	1.2	1.9	2.5	2.5	3.2	3.9	5.1	6.4	7.0	7.6	8.2
85°	0.6	0.6	1.2	1.2	1.9	1.9	2.5	3.2	3.9	4.5	5.1
87.5°	0.6	0.6	0.6	0.6	1.2	1.2	1.9	1.9	1.9	2.5	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°	451.5	451.5	451.5	451.5	451.5	451.5	451.5	451.5
2.5°	449.6	451.5	449.6	450.9	450.2	450.2	449.6	450.2
5°	451.5	454.1	451.5	453.5	452.2	452.2	452.2	452.9
7.5°	453.5	456.0	454.1	456.0	455.4	454.8	454.8	456.0
10°	455.4	457.2	456.0	457.9	457.2	456.6	456.6	457.9
12.5°	455.4	457.9	456.6	458.6	457.9	457.2	457.2	457.9
15°	453.5	456.6	454.8	456.6	456.0	455.4	455.4	456.6
17.5°	447.8	450.2	449.0	450.2	450.2	449.6	450.2	450.9
20°	440.0	442.0	440.8	442.0	442.0	440.8	441.4	442.0
22.5°	429.2	431.1	429.9	431.1	430.5	429.9	429.9	429.2
25°	415.8	418.4	416.4	417.8	416.4	415.1	415.1	415.8
27.5°	399.1	401.1	398.5	399.9	398.5	397.2	397.2	396.6
30°	377.5	378.1	376.1	377.5	376.1	375.5	374.2	374.2
32.5°	351.2	351.9	350.0	350.0	348.8	348.8	346.1	348.1
35°	320.6	321.2	320.6	320.0	318.1	317.4	316.8	316.8
37.5°	288.6	288.6	286.8	286.1	284.9	283.6	284.2	282.2
40°	256.1	255.5	253.5	254.2	253.5	251.6	251.0	250.4
42.5°	225.5	225.5	223.5	224.1	222.9	222.2	220.4	221.0
45°	198.6	198.6	196.8	196.8	196.1	194.1	194.8	193.5
47.5°	174.4	174.4	173.8	173.8	171.8	171.1	171.1	171.1
50°	153.2	153.2	153.2	153.2	152.6	152.0	151.4	152.0
52.5°	135.4	136.6	136.0	136.0	135.4	134.8	134.1	134.1
55°	119.4	120.1	120.1	120.8	120.1	119.4	120.1	119.4
57.5°	105.4	106.6	106.6	106.6	106.6	106.6	106.0	105.4
60°	93.2	93.9	93.9	94.5	94.5	94.5	93.9	93.9
62.5°	81.1	82.4	83.0	83.0	83.6	83.0	83.0	83.0
65°	71.5	72.8	73.5	72.8	73.5	73.5	72.8	72.8
67.5°	60.0	61.4	61.4	61.4	61.4	62.0	61.4	61.4
70°	48.5	49.9	49.1	49.9	49.9	49.9	49.9	49.9
72.5°	37.0	37.6	38.4	38.4	39.0	38.4	38.4	38.4
75°	26.9	28.1	28.1	28.1	28.1	28.8	28.8	28.8
77.5°	19.1	19.8	19.8	20.5	20.5	20.5	20.5	21.1
80°	13.4	13.4	14.0	14.0	14.8	14.8	14.8	14.8
82.5°	9.0	9.6	9.6	9.6	9.6	9.6	9.6	9.6
85°	5.1	5.8	5.8	5.8	5.8	6.4	6.4	6.4
87.5°	3.2	3.2	3.2	3.2	3.2	3.2	2.5	2.5
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)