

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P879366

Luminaire Tested: **LD4C10D010 EU4109050 4LBDWWH**

Issue Date: 10/1/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P879366
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C10D010 EU4109050 4LBLDWWH
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBLDWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

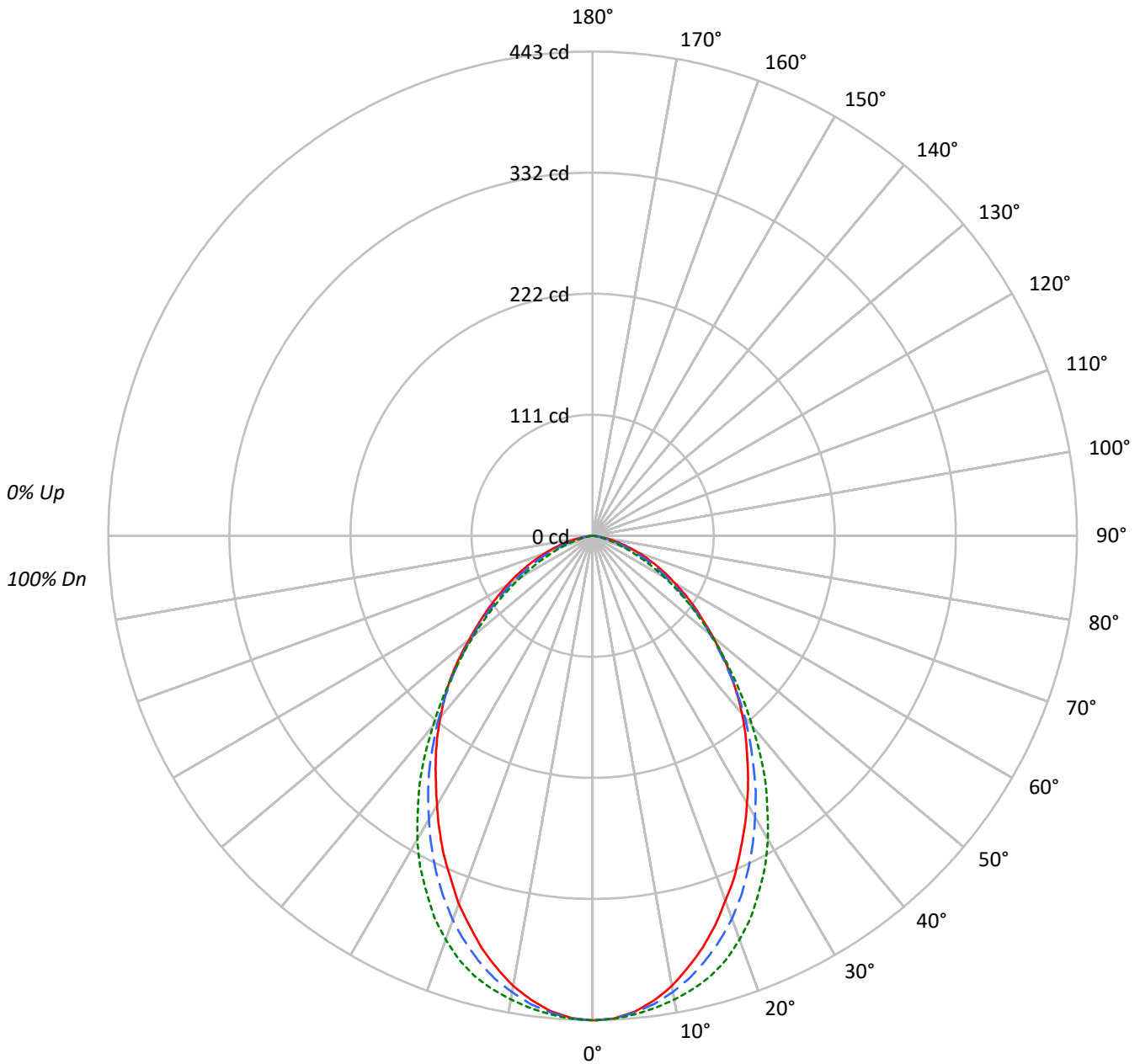
Lumens per Lamp: N/A
Luminaire Lumens: 793.0 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.1 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.75
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	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77																			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67																			
4	88	77	70	64	86	76	69	63	74	68	63	71	66	62	69	65	61	59																			
5	81	70	62	56	80	69	62	56	67	61	56	65	59	55	63	58	54	52																			
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47																			
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42																			
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38																			
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35																			
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	54473	54473	54473
5°	53917	54213	53855
10°	52157	53742	52182
15°	49552	53050	49718
20°	46451	51380	46830
25°	43255	48759	43662
30°	40075	45480	40373
35°	36969	41348	37539
40°	34095	36421	34721
45°	30891	31569	31829
50°	27388	27044	28076
55°	24417	22768	24974
60°	21352	18477	22163
65°	18692	14302	19360
70°	15733	10453	16559
75°	12294	6788	13006
80°	8065	3537	8844
85°	2819	1551	3665



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	5.2
10°-20°	113.1	14.3
20°-30°	155.5	19.6
30°-40°	162.2	20.5
40°-50°	138.8	17.5
50°-60°	99.3	12.5
60°-70°	57.6	7.3
70°-80°	22.2	2.8
80°-90°	2.8	0.4
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°	310.0	39.1
0°-40°	472.2	59.6
0°-60°	710.3	89.6
0°-90°	793.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	793.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	443	443	443	443	443	
5°	437	438	440	438	437	41
15°	390	401	417	403	391	109
25°	319	337	360	339	322	147
35°	246	256	276	260	250	154
45°	178	176	182	181	183	137
55°	114	108	106	111	117	102
65°	64	57	49	59	67	64
75°	26	19	14	20	27	28
85°	2	2	1	2	3	4
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°	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4
2.5°	442.2	441.9	442.0	442.0	442.0	441.9	442.2	442.2	442.0	442.0	442.0
5°	437.2	436.8	437.0	437.2	437.2	437.2	437.3	437.5	437.7	437.8	438.0
7.5°	429.0	428.5	429.0	429.7	429.7	429.8	430.0	430.2	430.7	431.5	432.0
10°	418.1	418.1	418.3	418.8	419.6	419.4	419.9	420.7	421.7	422.8	423.7
12.5°	404.3	404.6	405.1	405.6	406.4	406.9	407.7	408.7	410.3	411.9	413.7
15°	389.6	389.8	389.9	391.1	391.9	393.0	393.7	395.6	397.1	399.4	401.3
17.5°	373.2	373.0	373.5	374.5	376.4	376.9	377.7	379.9	382.0	385.1	387.7
20°	355.3	356.2	356.9	358.2	359.3	360.6	361.3	363.9	366.3	369.3	372.7
22.5°	338.3	337.5	338.7	340.1	341.1	342.1	343.2	346.0	348.6	352.2	355.6
25°	319.1	319.6	320.4	321.6	322.9	324.2	325.5	328.4	329.9	333.6	336.7
27.5°	300.9	301.7	302.0	303.5	304.6	305.6	306.3	309.7	311.0	314.2	317.3
30°	282.5	283.3	283.3	284.9	285.7	286.7	288.3	290.6	292.6	294.9	297.1
32.5°	264.7	264.7	265.4	266.9	267.7	268.8	269.3	270.9	272.9	275.2	277.6
35°	246.5	247.0	247.6	247.6	249.1	249.8	250.4	252.0	253.3	254.3	256.3
37.5°	229.7	229.7	229.2	230.1	231.0	230.9	231.9	232.7	233.5	234.6	236.2
40°	212.6	212.6	212.0	212.5	213.1	213.0	212.6	213.5	214.1	214.9	216.5
42.5°	195.2	194.9	194.7	194.7	195.1	194.7	195.1	195.2	195.2	195.2	196.2
45°	177.8	178.6	177.6	177.3	176.8	176.3	176.2	176.3	177.0	176.2	176.3
47.5°	160.7	161.0	160.4	159.9	159.4	159.1	159.4	158.4	158.7	158.9	158.3
50°	143.3	142.6	142.6	142.1	142.3	142.1	141.8	141.5	141.5	140.7	140.2
52.5°	127.2	127.5	127.8	126.7	126.8	126.0	126.2	125.4	125.4	124.4	124.7
55°	114.0	113.5	113.5	113.0	112.8	112.0	111.9	111.4	110.2	109.6	108.3
57.5°	100.3	100.1	99.5	99.6	98.7	98.5	98.2	97.4	96.6	95.7	94.3
60°	86.9	87.1	87.1	86.8	86.3	85.5	85.6	84.5	83.4	81.9	80.6
62.5°	75.9	75.4	75.2	74.9	73.9	73.9	73.1	72.3	71.2	69.7	68.5
65°	64.3	64.5	64.0	63.5	62.5	62.4	61.7	61.1	59.9	58.5	56.8
67.5°	53.9	53.6	53.4	52.9	51.9	51.8	51.3	49.8	48.8	47.4	46.1
70°	43.8	43.5	43.6	42.8	41.8	41.4	41.2	40.1	38.6	37.4	36.1
72.5°	34.4	34.4	34.2	33.4	32.9	32.6	31.9	30.6	29.8	28.5	27.5
75°	25.9	25.7	25.4	24.9	24.3	23.9	23.6	22.8	21.7	20.2	19.4
77.5°	17.9	18.1	17.7	17.6	16.8	16.3	16.1	15.6	14.7	13.7	12.9
80°	11.4	11.2	11.1	10.7	10.6	10.4	9.9	9.6	8.6	8.1	7.7
82.5°	6.2	5.9	5.9	5.7	5.4	5.2	5.0	4.7	4.6	4.2	3.9
85°	2.0	2.1	2.0	2.0	2.0	1.8	1.8	1.8	1.6	1.6	1.5
87.5°	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3
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°	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4
2.5°	442.0	442.2	442.2	442.4	442.4	442.4	442.4	442.4	442.4	442.4	442.4
5°	438.5	438.5	438.8	439.1	439.1	439.1	439.3	439.6	439.6	439.6	439.4
7.5°	432.6	433.3	433.9	434.6	434.7	434.9	435.2	435.9	435.9	435.9	435.9
10°	425.0	426.4	427.2	428.2	428.7	429.0	430.0	430.2	430.7	430.8	430.7
12.5°	415.2	417.1	418.9	420.6	421.2	421.9	422.8	423.8	424.3	424.8	424.6
15°	404.3	406.4	409.2	411.0	412.3	413.2	414.7	416.0	416.8	417.1	417.1
17.5°	391.1	393.7	396.6	399.6	400.4	402.0	403.6	405.4	406.4	406.6	406.4
20°	376.4	379.4	381.8	384.7	386.5	387.3	389.6	391.9	392.9	393.0	392.9
22.5°	359.0	361.8	365.0	368.1	369.6	371.1	373.5	375.8	377.1	378.1	377.1
25°	339.6	343.5	346.6	349.2	351.4	352.8	355.9	357.7	359.8	359.7	359.8
27.5°	320.6	323.8	327.3	330.4	331.7	333.3	335.7	338.7	340.5	341.6	341.4
30°	301.0	303.7	306.6	309.4	311.5	312.8	316.4	317.7	319.9	320.6	320.1
32.5°	280.4	282.2	285.1	288.8	289.7	291.0	293.2	296.5	297.3	297.6	297.8
35°	258.4	261.8	264.3	266.5	267.2	268.3	270.9	273.4	274.2	275.7	275.0
37.5°	238.0	240.0	241.1	243.4	245.4	246.3	247.6	249.3	250.9	251.6	251.4
40°	217.7	218.7	219.6	222.1	222.2	222.2	224.2	226.5	226.5	227.1	227.1
42.5°	196.8	197.0	198.3	199.6	199.9	200.3	202.2	202.5	203.5	204.0	204.7
45°	176.7	177.6	178.4	178.6	179.4	179.6	180.1	180.6	182.0	181.7	182.0
47.5°	158.3	158.7	159.2	159.2	159.7	159.6	160.4	159.9	160.9	161.2	161.7
50°	140.2	141.0	140.5	140.8	140.7	141.2	140.8	140.8	140.8	141.5	142.0
52.5°	123.6	123.7	123.3	123.4	123.4	123.1	123.4	123.3	123.1	123.1	123.3
55°	108.3	107.6	107.3	106.6	105.8	106.8	106.3	106.0	106.6	106.3	106.6
57.5°	93.5	92.6	92.0	91.7	90.5	91.2	90.5	90.2	90.2	90.2	91.0
60°	79.5	78.6	77.8	76.8	76.7	76.4	76.0	75.2	75.4	75.2	75.5
62.5°	67.2	65.6	64.5	63.7	63.5	63.0	62.5	61.7	61.9	61.9	62.0
65°	56.0	54.2	52.6	51.5	51.5	50.6	49.8	49.8	48.8	49.2	49.3
67.5°	44.8	43.3	41.7	40.9	40.4	39.7	39.2	38.9	38.4	38.4	38.8
70°	34.7	33.2	32.4	31.1	30.9	30.4	29.8	29.3	29.1	29.1	29.0
72.5°	26.2	24.9	23.9	23.1	22.6	22.1	21.5	21.3	21.0	21.0	21.3
75°	18.2	17.4	16.6	15.8	15.5	15.3	14.8	14.5	14.5	14.3	14.5
77.5°	12.2	11.4	10.6	10.3	9.9	9.6	9.4	9.3	8.8	8.8	8.8
80°	7.0	6.7	6.3	5.9	5.9	5.7	5.4	5.2	5.0	5.0	5.0
82.5°	3.6	3.4	3.1	2.9	2.9	2.9	2.8	2.8	2.6	2.6	2.6
85°	1.5	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.1	1.3
87.5°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
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°	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4
2.5°	442.4	442.2	442.2	442.2	442.2	442.2	442.0	442.0	441.9	441.9	441.9
5°	439.6	439.4	439.3	439.1	439.0	438.8	438.6	438.5	438.0	437.8	437.5
7.5°	435.7	435.4	434.9	434.7	434.4	433.9	433.3	432.9	432.3	431.5	431.1
10°	430.5	429.8	429.3	428.5	428.4	427.7	426.1	425.3	424.1	423.2	422.0
12.5°	424.1	423.5	422.3	421.2	420.6	419.1	417.6	416.3	414.9	412.7	411.1
15°	416.3	415.3	413.1	412.7	411.8	409.5	407.5	405.1	402.8	400.5	398.6
17.5°	405.9	403.8	402.6	401.2	400.0	397.1	395.0	392.2	389.1	386.5	383.8
20°	392.2	389.9	388.0	387.2	385.7	383.1	380.5	377.1	374.0	370.7	368.3
22.5°	375.9	374.5	371.5	370.6	368.8	366.2	363.1	359.8	356.9	353.3	350.1
25°	358.5	356.4	354.1	352.2	350.9	348.4	344.5	342.1	338.8	334.9	332.5
27.5°	340.0	337.5	334.3	333.0	331.8	328.6	325.3	322.2	319.6	316.2	314.1
30°	318.5	316.7	314.6	312.9	311.3	308.7	305.8	302.2	299.4	297.8	294.9
32.5°	296.7	295.2	292.4	291.6	289.8	287.7	285.6	283.0	280.0	277.6	275.3
35°	273.4	271.9	270.0	268.5	267.8	266.4	264.1	261.8	260.3	257.6	256.4
37.5°	250.1	249.6	247.6	246.2	245.7	243.9	242.8	241.1	239.0	238.4	237.1
40°	226.2	225.8	224.7	224.5	223.5	223.1	221.4	220.1	219.2	218.7	217.8
42.5°	204.2	203.8	202.9	203.0	202.1	201.7	201.6	200.4	199.6	198.6	198.8
45°	182.5	182.2	181.5	181.2	181.7	181.5	181.2	180.7	180.7	180.9	180.4
47.5°	161.7	162.0	161.4	161.7	161.7	161.2	161.2	161.8	162.0	162.3	162.7
50°	142.0	143.0	142.6	143.1	143.3	143.4	143.0	143.8	143.6	145.1	144.7
52.5°	124.1	124.2	124.9	125.0	125.2	125.4	126.2	126.8	127.0	127.6	128.8
55°	106.8	107.0	108.3	108.3	109.1	109.3	110.4	110.7	111.2	113.0	113.3
57.5°	90.5	91.5	92.2	92.5	93.0	93.8	94.4	95.9	96.7	97.9	99.0
60°	75.9	77.0	77.8	78.2	78.8	79.8	80.6	82.2	83.7	85.0	85.8
62.5°	62.4	63.3	64.0	65.1	65.1	65.9	67.9	68.9	70.5	71.6	73.1
65°	50.3	51.0	52.1	52.1	52.8	54.1	55.7	57.1	58.8	60.4	61.9
67.5°	39.4	39.9	40.5	41.2	41.5	43.1	44.4	46.6	48.0	49.2	51.0
70°	29.8	30.1	30.9	31.6	32.1	33.2	34.7	36.1	37.6	38.9	40.7
72.5°	21.3	22.0	22.8	23.3	23.6	24.4	25.9	27.4	28.7	30.0	30.9
75°	14.7	15.1	15.5	16.0	16.4	17.1	18.1	19.0	20.5	21.8	23.0
77.5°	9.1	9.6	10.1	10.3	10.4	11.1	11.7	12.7	13.7	14.7	15.5
80°	5.4	5.5	5.7	5.9	6.2	6.7	7.0	7.7	8.3	9.0	9.8
82.5°	2.8	2.9	3.1	3.1	3.1	3.3	3.7	4.1	4.2	4.6	5.0
85°	1.1	1.1	1.1	1.3	1.3	1.5	1.5	1.6	1.6	1.8	2.0
87.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P879366

CATALOG NUMBER: LD4C10D010 EU4109050 4LBLDWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4
2.5°	441.7	441.7	441.7	441.6	441.7	441.7	441.7	441.6
5°	437.5	437.2	437.2	437.0	436.8	436.8	437.0	436.7
7.5°	430.5	430.0	429.7	429.7	429.5	429.3	429.3	428.5
10°	421.4	420.4	420.4	420.1	418.8	418.6	418.3	418.3
12.5°	410.0	408.8	408.2	407.4	406.6	405.9	405.7	405.1
15°	396.5	395.0	393.9	393.5	392.2	391.3	391.3	390.9
17.5°	381.8	379.5	378.7	377.9	376.1	375.9	375.6	374.2
20°	365.2	363.1	361.9	361.1	360.0	358.4	358.0	358.2
22.5°	347.8	344.8	343.9	343.1	341.9	340.5	340.5	339.3
25°	329.7	327.1	326.1	325.1	323.4	322.7	321.9	322.1
27.5°	311.3	308.9	308.1	306.3	305.1	304.3	303.5	303.5
30°	292.1	290.8	289.5	289.3	287.0	286.1	285.3	284.6
32.5°	273.5	271.9	271.3	270.6	269.5	268.2	268.0	266.9
35°	255.3	253.7	252.9	252.2	250.9	250.4	249.9	250.3
37.5°	236.1	235.8	235.3	234.5	233.6	233.5	232.8	233.6
40°	217.2	217.0	216.4	216.5	216.5	216.2	216.5	216.5
42.5°	199.0	199.0	198.3	198.6	198.8	199.1	199.6	199.9
45°	181.2	181.1	181.2	181.5	181.2	182.0	182.7	183.2
47.5°	163.0	163.1	163.8	164.0	164.3	165.4	165.4	165.4
50°	145.6	146.4	146.0	147.0	146.9	147.5	146.9	146.9
52.5°	129.0	129.8	129.9	130.1	131.1	131.2	131.2	131.1
55°	114.1	115.3	114.8	115.6	116.1	116.4	116.9	116.6
57.5°	100.5	100.9	101.4	101.6	102.2	102.6	102.9	102.6
60°	86.9	87.9	88.7	88.9	89.2	89.5	89.7	90.2
62.5°	74.2	75.9	76.2	76.4	77.2	77.7	78.0	78.3
65°	63.0	64.2	65.0	65.5	66.1	66.1	66.6	66.6
67.5°	52.1	53.2	53.7	54.1	55.0	55.2	56.0	56.0
70°	42.2	43.0	43.3	43.8	44.8	45.4	45.8	46.1
72.5°	32.6	33.5	34.0	34.7	35.3	35.8	36.0	36.5
75°	23.8	25.2	25.4	26.1	26.5	27.2	27.5	27.4
77.5°	16.6	17.1	17.7	18.1	18.6	19.0	19.5	19.5
80°	10.3	10.9	11.1	11.2	11.9	12.2	12.5	12.5
82.5°	5.4	5.7	6.0	6.2	6.5	6.5	6.7	6.8
85°	2.1	2.3	2.3	2.3	2.4	2.6	2.6	2.6
87.5°	0.3	0.5	0.3	0.3	0.5	0.5	0.5	0.5
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)