

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: P879341

Luminaire Tested: **LD4C08D010 EU4089030 4LBDWWLI**

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: P879341
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C08D010 EU4089030 4LBDWWLI
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS AND 4LBDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

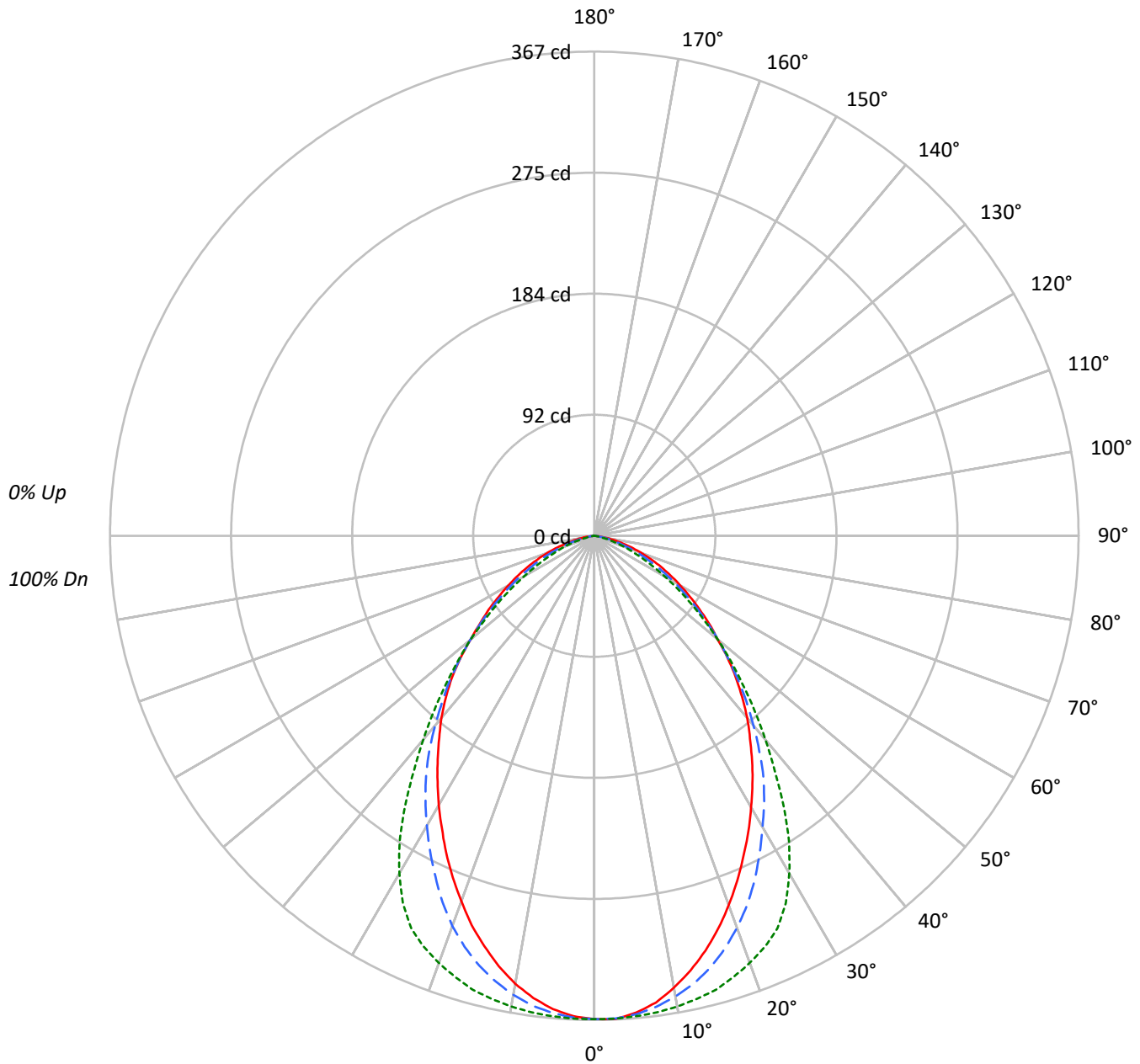
Lumens per Lamp: N/A
Luminaire Lumens: 673.0 lumens
Efficiency: N/A
Efficacy: 68.2 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.87
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					20
RC	80					70					50					30					10
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	107	104	101		108	105	102	99		101	98	96		97	95	93		93	92	90
2	103	96	90	85		100	94	89	84		91	86	83		87	84	81		85	82	79
3	95	86	79	74		93	84	78	73		82	76	72		79	74	70		77	73	69
4	88	78	70	64		86	76	69	64		74	68	63		72	66	62		70	65	61
5	82	70	62	57		80	69	62	56		67	61	56		65	60	55		64	59	55
6	76	64	56	50		74	63	56	50		61	55	50		60	54	49		58	53	49
7	71	59	51	45		69	58	50	45		56	50	45		55	49	45		54	48	44
8	66	54	46	41		65	53	46	41		52	45	41		51	45	40		50	44	40
9	62	50	42	37		61	49	42	37		48	42	37		47	41	37		46	41	37
10	59	46	39	34		57	46	39	34		45	39	34		44	38	34		43	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	45014	45014	45014
5°	44754	45087	44409
10°	43388	45196	43013
15°	41399	45304	40942
20°	38947	45039	38515
25°	36274	44502	35976
30°	33706	41919	33436
35°	31255	37494	31030
40°	28899	32331	28883
45°	26339	27590	26548
50°	23260	23336	23394
55°	20841	19084	20926
60°	18428	15160	18453
65°	16221	11541	16046
70°	13434	8262	13434
75°	10490	4747	10063
80°	6792	1132	6509
85°	2537	423	1973



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.4	5.1
10°-20°	95.2	14.1
20°-30°	133.0	19.8
30°-40°	140.3	20.9
40°-50°	119.4	17.7
50°-60°	84.2	12.5
60°-70°	47.8	7.1
70°-80°	17.0	2.5
80°-90°	1.6	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°	262.6	39.0
0°-40°	402.9	59.9
0°-60°	606.6	90.1
0°-90°	673.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	673.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	366	366	366	366	366	
5°	363	364	366	363	360	34
15°	326	339	356	337	322	91
25°	268	288	328	285	265	123
35°	208	224	250	222	207	130
45°	152	154	159	154	153	117
55°	97	94	89	94	98	87
65°	56	48	40	48	55	55
75°	22	15	10	15	21	24
85°	2	1	0	1	1	3
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°	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4
2.5°	366.7	366.0	366.0	366.0	366.0	366.0	366.0	366.0	366.0	366.2	366.2
5°	362.9	362.6	362.5	362.5	362.5	362.5	362.6	363.2	363.4	363.8	364.1
7.5°	356.9	356.3	356.6	356.6	356.9	357.1	357.5	358.1	358.9	359.5	360.1
10°	347.8	347.3	347.9	348.2	349.0	349.5	350.1	351.0	352.6	353.4	354.5
12.5°	337.3	337.0	337.3	338.4	339.2	339.7	340.5	342.3	344.0	345.8	347.7
15°	325.5	324.8	325.2	326.6	327.9	328.9	329.6	331.9	334.1	336.8	339.2
17.5°	312.3	311.4	312.5	313.5	315.3	316.2	317.1	319.7	322.7	325.7	328.3
20°	297.9	297.7	298.3	299.8	301.6	302.7	303.5	306.4	309.0	313.1	316.2
22.5°	283.0	283.3	283.8	285.5	286.7	288.2	289.4	292.0	295.0	298.9	302.7
25°	267.6	268.0	269.0	270.1	272.2	273.0	274.5	277.2	279.8	283.4	287.6
27.5°	252.8	253.0	254.1	254.6	256.5	258.3	259.0	261.9	264.9	267.6	271.3
30°	237.6	238.0	238.7	240.2	242.1	242.8	243.7	246.3	248.6	252.0	254.9
32.5°	223.1	222.8	223.6	224.5	226.7	227.9	228.3	231.3	233.4	236.8	239.5
35°	208.4	207.8	209.0	209.8	211.7	212.8	213.4	215.7	217.6	220.5	223.5
37.5°	193.8	194.3	194.9	195.6	196.5	196.8	198.4	199.0	201.4	203.6	205.3
40°	180.2	179.9	179.7	180.3	181.6	182.1	182.3	183.8	184.3	186.5	187.7
42.5°	165.7	165.8	165.7	165.8	166.5	166.5	166.9	167.9	168.3	169.0	170.5
45°	151.6	151.6	151.2	151.3	151.4	151.3	151.4	151.8	152.7	152.7	153.8
47.5°	136.9	136.6	137.2	136.8	136.5	136.4	136.8	136.4	137.2	137.2	137.5
50°	121.7	121.7	122.4	122.2	122.5	122.0	122.1	122.1	122.2	122.1	122.7
52.5°	109.9	109.6	109.4	108.7	108.9	108.4	108.4	108.5	108.1	108.0	107.3
55°	97.3	97.6	97.2	96.9	96.9	96.3	96.2	95.4	94.8	94.4	94.0
57.5°	85.9	86.2	86.1	85.4	84.6	84.7	84.4	83.6	82.4	81.5	80.9
60°	75.0	75.2	75.0	74.3	74.0	73.5	73.3	72.2	71.3	70.2	69.3
62.5°	65.1	65.1	65.0	64.0	63.3	63.4	62.8	61.9	60.7	59.2	58.0
65°	55.8	55.6	55.0	54.5	54.0	53.3	52.9	51.7	50.7	49.5	47.8
67.5°	46.5	46.0	45.8	45.4	44.1	44.0	43.4	42.3	41.0	40.0	38.6
70°	37.4	37.3	36.7	36.7	35.8	35.4	34.5	33.6	32.3	31.0	29.9
72.5°	29.6	29.3	28.8	28.2	27.4	27.1	26.4	25.5	24.4	23.0	21.7
75°	22.1	21.8	21.7	21.0	20.3	19.6	19.3	18.4	17.3	16.3	15.1
77.5°	15.5	15.2	14.8	14.4	14.0	13.6	13.2	12.3	11.4	10.6	9.5
80°	9.6	9.3	9.0	8.9	8.5	8.4	7.8	7.4	6.6	6.0	5.3
82.5°	4.9	4.9	4.7	4.5	4.2	4.1	4.0	3.6	3.2	2.7	2.3
85°	1.8	1.8	1.6	1.5	1.5	1.4	1.4	1.2	1.0	1.0	0.7
87.5°	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4
2.5°	366.3	366.2	366.3	366.3	366.4	366.4	366.4	366.3	366.4	366.3	366.3
5°	364.1	364.5	364.8	365.1	365.2	365.3	365.3	365.5	365.6	365.6	365.5
7.5°	360.7	361.5	362.3	362.9	363.2	363.4	363.8	364.1	364.4	364.3	364.1
10°	356.2	357.5	358.6	359.7	360.3	360.7	361.4	361.9	362.2	362.3	361.9
12.5°	349.7	351.6	353.4	355.2	356.0	356.6	357.9	358.9	359.5	359.5	359.0
15°	341.6	344.4	347.0	349.3	350.7	351.5	353.6	354.9	355.8	356.2	355.5
17.5°	331.9	335.1	338.2	341.2	342.6	343.8	346.7	348.6	350.4	350.7	349.9
20°	319.4	323.4	327.0	330.7	332.2	334.1	337.4	340.5	343.3	344.5	342.2
22.5°	305.5	309.8	313.1	317.7	319.7	321.8	326.0	330.0	334.8	337.4	333.3
25°	290.9	294.6	298.6	303.0	305.9	308.1	313.0	318.1	324.5	328.3	322.6
27.5°	275.3	278.6	283.4	288.2	290.4	293.1	299.0	304.5	310.7	314.1	309.8
30°	259.1	263.3	267.8	272.2	275.3	277.9	282.7	287.4	292.6	295.5	292.3
32.5°	243.1	247.1	250.9	255.7	257.5	259.8	264.1	268.0	272.0	274.6	270.9
35°	226.3	229.8	233.4	236.7	237.5	240.2	243.7	246.0	247.9	250.0	247.5
37.5°	207.9	210.6	212.4	216.0	217.3	217.8	220.5	222.1	224.2	224.6	224.5
40°	189.3	191.7	193.2	195.4	196.5	196.5	198.4	199.9	201.4	201.6	201.4
42.5°	171.8	173.1	174.3	175.7	175.4	177.1	177.9	178.6	179.7	179.7	179.9
45°	154.3	155.3	156.4	156.6	157.7	157.7	158.4	158.7	159.2	158.8	158.3
47.5°	138.0	138.4	138.5	139.8	140.1	139.1	139.9	140.1	139.9	139.9	139.6
50°	122.5	122.8	122.7	122.2	122.4	122.8	122.4	121.8	122.1	122.1	122.4
52.5°	107.4	106.9	106.6	106.6	106.1	106.1	105.4	105.1	105.0	104.4	105.1
55°	93.6	92.8	91.5	91.3	90.9	90.7	89.9	89.2	88.9	89.1	88.9
57.5°	80.3	79.1	78.2	78.0	77.6	76.7	75.8	75.1	75.0	74.7	74.7
60°	68.2	66.9	65.6	64.4	64.5	64.0	63.0	62.6	62.2	61.7	62.1
62.5°	57.3	55.8	54.4	53.2	52.3	51.9	51.3	50.6	50.2	49.7	50.3
65°	46.5	45.2	43.7	42.5	42.1	41.7	41.0	39.9	39.7	39.7	40.0
67.5°	36.7	35.4	34.0	33.2	32.6	32.1	31.8	31.2	30.8	30.6	30.7
70°	28.2	26.9	25.8	24.9	24.5	24.4	23.4	23.3	23.2	23.0	22.9
72.5°	20.6	19.5	18.5	18.0	17.4	17.0	16.7	16.3	16.2	16.2	16.2
75°	14.1	13.3	12.2	11.5	11.2	10.8	10.4	10.1	9.9	10.0	10.0
77.5°	8.5	7.7	7.0	6.4	6.3	5.9	5.5	5.2	4.8	4.8	4.9
80°	4.7	4.0	3.4	3.0	2.7	2.6	2.2	2.1	1.8	1.6	1.6
82.5°	2.1	1.6	1.4	1.2	1.1	1.0	0.8	0.7	0.7	0.5	0.7
85°	0.7	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	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°	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4
2.5°	366.2	366.2	366.0	366.0	366.0	365.8	365.8	365.6	365.5	365.3	365.1
5°	365.2	365.1	364.8	364.7	364.5	364.1	363.7	363.4	363.0	362.5	362.2
7.5°	363.8	363.4	362.9	362.6	362.2	361.2	360.6	359.9	359.2	358.2	357.1
10°	361.5	360.7	359.9	359.3	358.6	357.4	356.0	354.9	353.4	352.1	350.5
12.5°	358.2	357.3	355.6	354.8	354.0	352.2	350.4	348.1	346.0	344.1	342.3
15°	354.1	352.3	350.4	349.3	348.1	345.2	342.5	340.0	337.3	334.9	332.0
17.5°	348.1	345.5	342.7	341.5	339.9	336.6	333.3	329.9	326.7	323.8	320.3
20°	339.0	336.2	332.6	330.7	329.3	324.9	321.8	317.9	314.6	311.1	307.1
22.5°	328.5	324.5	320.5	317.8	316.3	311.9	307.7	304.2	300.7	296.6	293.7
25°	316.6	311.6	306.8	304.1	301.8	297.1	293.0	289.4	285.0	281.5	278.6
27.5°	303.1	297.5	291.9	289.2	287.0	281.9	277.5	273.8	269.6	266.4	263.4
30°	287.1	282.0	276.7	274.5	271.9	266.7	261.6	258.3	253.7	250.4	247.1
32.5°	267.1	263.8	259.6	256.5	255.2	250.4	246.1	242.1	238.2	235.6	232.3
35°	245.2	242.3	238.7	237.1	235.3	232.3	228.9	225.4	222.3	219.8	216.8
37.5°	223.0	220.1	217.9	216.1	215.0	212.3	210.2	207.6	205.4	203.1	201.4
40°	199.9	199.1	196.8	196.0	195.7	192.7	190.9	188.8	187.5	186.1	185.1
42.5°	179.5	178.2	176.4	176.5	175.7	174.0	172.8	171.4	170.5	169.8	168.8
45°	159.4	158.3	157.5	158.1	156.8	156.2	155.3	155.1	154.4	153.2	152.8
47.5°	140.2	140.1	140.2	139.8	139.5	139.2	139.4	138.7	138.0	137.6	137.0
50°	122.7	122.8	123.1	123.5	122.5	122.9	122.8	122.7	122.7	122.2	122.5
52.5°	105.7	105.8	106.1	106.5	106.6	106.6	107.0	107.3	107.9	108.5	108.5
55°	89.6	90.6	91.1	91.8	91.4	92.2	92.6	93.9	94.3	94.3	94.8
57.5°	75.4	76.3	76.7	77.6	77.8	78.5	79.6	80.3	81.3	82.1	82.9
60°	62.4	62.8	63.9	65.1	64.8	66.5	67.3	68.4	69.6	70.2	71.3
62.5°	50.7	51.3	52.1	52.5	53.4	54.3	56.2	57.3	58.4	59.7	60.8
65°	40.3	40.8	41.7	42.5	42.9	44.1	45.1	47.0	48.0	49.5	50.7
67.5°	30.8	31.7	32.3	32.9	33.2	34.4	35.9	36.7	38.5	40.0	41.0
70°	23.0	23.7	24.5	24.4	24.9	25.9	27.0	28.2	29.6	31.0	32.1
72.5°	16.0	16.7	17.3	17.4	18.0	18.6	19.5	20.4	21.5	22.9	24.4
75°	10.1	10.3	10.8	11.1	11.4	12.2	12.9	13.8	14.8	15.9	16.9
77.5°	5.1	5.5	5.8	6.0	6.2	6.9	7.5	8.4	9.2	10.3	11.2
80°	1.9	2.1	2.5	2.6	2.9	3.3	3.8	4.2	4.9	5.8	6.3
82.5°	0.7	0.8	1.0	1.0	1.1	1.4	1.5	1.9	2.3	2.6	2.9
85°	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.7	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	366.4	366.4	366.4	366.4	366.4	366.4	366.4	366.4
2.5°	364.9	364.9	364.8	364.7	364.7	364.7	364.5	364.5
5°	361.6	361.2	361.1	360.8	360.7	360.6	360.1	360.1
7.5°	356.3	355.8	355.3	354.9	354.4	354.0	354.0	353.4
10°	349.2	348.1	347.5	347.0	346.3	345.5	345.2	344.8
12.5°	340.5	338.4	337.8	336.8	335.7	335.2	334.2	334.2
15°	329.9	327.5	326.3	325.7	324.4	323.4	323.0	321.9
17.5°	317.4	315.6	313.7	312.9	311.4	310.1	309.6	309.4
20°	304.8	301.9	300.7	299.4	297.7	296.6	295.7	294.6
22.5°	290.3	287.6	285.9	285.0	283.5	281.6	280.2	280.2
25°	274.9	272.6	271.6	269.8	268.0	267.4	265.7	265.4
27.5°	260.2	257.9	256.0	255.0	253.0	252.0	250.6	250.1
30°	245.0	242.3	240.9	240.8	238.3	237.4	236.3	235.7
32.5°	229.8	227.5	226.1	225.3	224.2	222.6	221.6	221.0
35°	214.7	213.2	212.0	211.0	209.3	208.4	207.6	206.9
37.5°	199.0	197.6	197.1	196.2	195.4	193.9	193.6	193.1
40°	183.8	182.0	182.0	181.4	180.6	180.5	180.1	180.1
42.5°	167.9	167.1	166.9	167.1	166.5	166.2	165.8	166.8
45°	152.1	152.5	151.8	152.0	151.7	152.3	152.3	152.8
47.5°	137.6	137.0	137.3	137.6	138.0	138.0	137.9	137.7
50°	122.1	122.7	123.2	122.5	122.8	122.9	122.2	122.4
52.5°	108.8	108.9	109.4	108.9	109.4	109.2	109.5	108.9
55°	95.9	95.9	96.5	96.6	96.8	97.2	97.3	97.7
57.5°	83.5	84.1	84.8	84.7	85.2	85.8	85.4	85.8
60°	72.6	73.2	73.9	74.1	74.5	74.8	74.8	75.1
62.5°	61.7	62.8	63.3	63.9	63.9	64.4	65.0	65.1
65°	51.8	53.0	53.4	53.9	54.1	54.7	55.4	55.2
67.5°	42.5	43.3	43.9	44.1	44.9	45.2	45.8	46.3
70°	33.3	34.4	34.8	35.4	36.0	36.6	37.1	37.4
72.5°	25.5	26.3	26.6	27.1	27.8	28.4	28.6	29.1
75°	17.8	19.2	19.3	19.7	20.3	21.0	21.4	21.2
77.5°	11.8	12.7	12.9	13.4	14.0	14.5	14.7	14.8
80°	7.0	7.5	7.7	7.9	8.4	8.6	8.9	9.2
82.5°	3.3	3.6	3.8	3.8	4.1	4.4	4.4	4.5
85°	1.1	1.1	1.2	1.2	1.4	1.4	1.5	1.4
87.5°	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
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)