

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: P879342

Luminaire Tested: **LD4C08D010 EU4089035 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: P879342
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: LD4C08D010 EU4089035 4LBDWWH
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS AND 4LBDWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

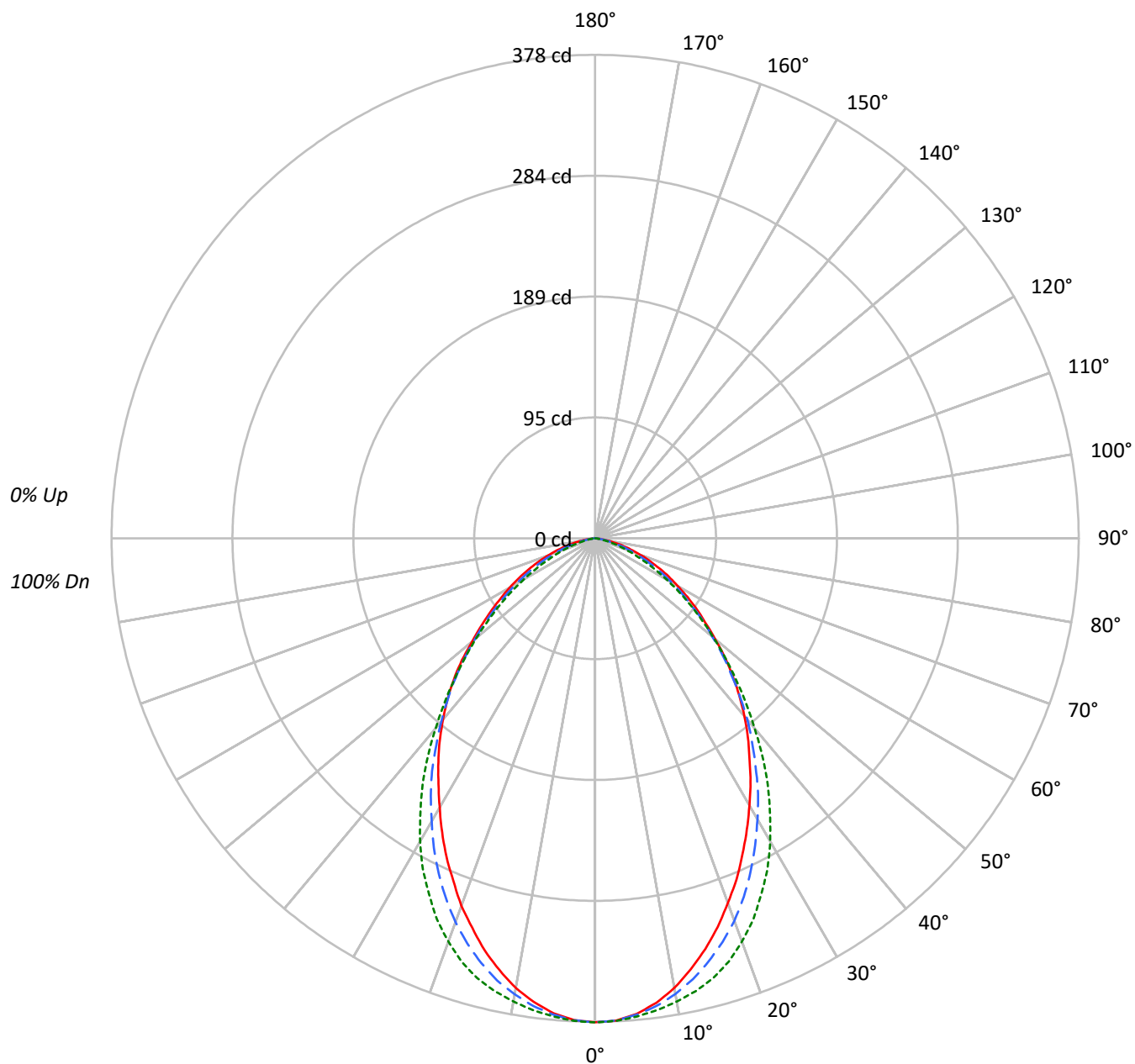
Lumens per Lamp: N/A
Luminaire Lumens: 677.0 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.1 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.87
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	100	108	105	102	99		101	98	96		97	95	93		93	92	90
2	103	96	90	85	100	94	89	84		90	86	82		87	84	80		84	81	79
3	95	86	79	73	92	84	78	73		81	76	71		79	74	70		76	72	69
4	88	77	70	64	86	76	69	63		74	68	63		71	66	62		69	65	61
5	81	70	62	56	80	69	62	56		67	61	56		65	59	55		63	58	54
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	44		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°	46500	46500	46500
5°	46024	46283	45975
10°	44535	45883	44548
15°	42302	45291	42442
20°	39653	43863	39980
25°	36925	41629	37264
30°	34216	38827	34472
35°	31555	35289	32035
40°	29108	31096	29653
45°	26374	26947	27173
50°	23375	23088	23967
55°	20841	19448	21312
60°	18231	15774	18919
65°	15959	12209	16541
70°	13434	8944	14117
75°	10490	5791	11107
80°	6863	3042	7570
85°	2396	1410	3101



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.3	5.2
10°-20°	96.5	14.3
20°-30°	132.8	19.6
30°-40°	138.5	20.5
40°-50°	118.5	17.5
50°-60°	84.8	12.5
60°-70°	49.2	7.3
70°-80°	19.0	2.8
80°-90°	2.4	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°	264.7	39.1
0°-40°	403.2	59.6
0°-60°	606.4	89.6
0°-90°	677.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	677.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	378	378	378	378	378	
5°	373	374	375	374	373	35
15°	333	343	356	344	334	93
25°	272	288	307	289	275	125
35°	210	219	235	222	214	132
45°	152	150	155	154	156	117
55°	97	92	91	95	100	87
65°	55	48	42	50	57	55
75°	22	16	12	18	23	24
85°	2	1	1	1	2	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°	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5
2.5°	377.5	377.2	377.4	377.4	377.4	377.2	377.5	377.5	377.4	377.4	377.4
5°	373.2	372.9	373.1	373.2	373.2	373.2	373.4	373.5	373.6	373.8	373.9
7.5°	366.3	365.8	366.3	366.8	366.8	367.0	367.1	367.2	367.7	368.4	368.8
10°	357.0	357.0	357.1	357.5	358.2	358.1	358.5	359.2	360.0	361.0	361.7
12.5°	345.1	345.4	345.8	346.3	346.9	347.4	348.1	348.9	350.3	351.7	353.2
15°	332.6	332.8	332.9	333.9	334.6	335.5	336.1	337.8	339.0	341.0	342.6
17.5°	318.6	318.5	318.9	319.7	321.4	321.8	322.5	324.3	326.1	328.7	331.0
20°	303.3	304.1	304.7	305.8	306.8	307.9	308.4	310.7	312.8	315.3	318.2
22.5°	288.8	288.1	289.1	290.4	291.2	292.0	293.0	295.4	297.6	300.7	303.6
25°	272.4	272.9	273.6	274.5	275.6	276.8	277.9	280.4	281.6	284.8	287.5
27.5°	256.9	257.6	257.8	259.1	260.1	260.9	261.5	264.4	265.5	268.3	270.9
30°	241.2	241.9	241.9	243.3	243.9	244.8	246.2	248.1	249.8	251.7	253.7
32.5°	226.0	226.0	226.6	227.8	228.5	229.5	229.9	231.3	233.0	234.9	237.0
35°	210.4	210.9	211.4	211.4	212.7	213.2	213.8	215.2	216.3	217.1	218.8
37.5°	196.1	196.1	195.7	196.4	197.2	197.1	197.9	198.6	199.3	200.3	201.7
40°	181.5	181.5	181.0	181.4	182.0	181.8	181.5	182.2	182.8	183.5	184.9
42.5°	166.7	166.4	166.2	166.2	166.5	166.2	166.5	166.7	166.7	166.7	167.5
45°	151.8	152.5	151.6	151.4	151.0	150.5	150.4	150.5	151.1	150.4	150.5
47.5°	137.2	137.5	136.9	136.5	136.1	135.8	136.1	135.2	135.5	135.7	135.1
50°	122.3	121.8	121.8	121.3	121.5	121.3	121.1	120.8	120.8	120.1	119.7
52.5°	108.6	108.8	109.1	108.1	108.3	107.6	107.7	107.0	107.0	106.2	106.5
55°	97.3	96.9	96.9	96.5	96.3	95.6	95.5	95.1	94.1	93.5	92.4
57.5°	85.6	85.5	84.9	85.1	84.2	84.1	83.8	83.1	82.4	81.7	80.5
60°	74.2	74.4	74.4	74.1	73.7	73.0	73.1	72.1	71.2	69.9	68.8
62.5°	64.8	64.4	64.2	63.9	63.1	63.1	62.4	61.7	60.7	59.5	58.5
65°	54.9	55.0	54.6	54.2	53.4	53.2	52.7	52.1	51.2	49.9	48.5
67.5°	46.0	45.7	45.6	45.2	44.3	44.2	43.8	42.5	41.7	40.4	39.3
70°	37.4	37.1	37.3	36.6	35.7	35.3	35.2	34.2	32.9	32.0	30.9
72.5°	29.3	29.3	29.2	28.5	28.1	27.8	27.2	26.1	25.4	24.3	23.5
75°	22.1	22.0	21.7	21.3	20.7	20.4	20.2	19.5	18.5	17.2	16.5
77.5°	15.3	15.4	15.2	15.0	14.3	13.9	13.8	13.3	12.5	11.7	11.0
80°	9.7	9.6	9.5	9.2	9.0	8.9	8.5	8.2	7.4	7.0	6.5
82.5°	5.3	5.0	5.0	4.9	4.6	4.4	4.3	4.0	3.9	3.6	3.3
85°	1.7	1.8	1.7	1.7	1.7	1.5	1.5	1.5	1.4	1.4	1.3
87.5°	0.1	0.3	0.1	0.1	0.3	0.1	0.1	0.3	0.1	0.1	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°	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5
2.5°	377.4	377.5	377.5	377.7	377.7	377.7	377.7	377.7	377.7	377.7	377.7
5°	374.3	374.3	374.6	374.9	374.9	374.9	375.0	375.3	375.3	375.3	375.2
7.5°	369.3	369.9	370.4	371.0	371.1	371.3	371.5	372.1	372.1	372.1	372.1
10°	362.8	364.0	364.7	365.6	366.0	366.3	367.1	367.2	367.7	367.8	367.7
12.5°	354.5	356.1	357.6	359.0	359.6	360.2	361.0	361.8	362.2	362.7	362.5
15°	345.1	346.9	349.3	350.8	351.9	352.8	354.0	355.1	355.8	356.1	356.1
17.5°	333.9	336.1	338.6	341.1	341.8	343.2	344.6	346.1	346.9	347.1	346.9
20°	321.4	323.9	326.0	328.5	330.0	330.7	332.6	334.6	335.4	335.5	335.4
22.5°	306.5	308.9	311.6	314.3	315.5	316.8	318.9	320.8	321.9	322.8	321.9
25°	290.0	293.3	295.9	298.2	300.0	301.2	303.9	305.4	307.2	307.1	307.2
27.5°	273.7	276.5	279.4	282.0	283.1	284.5	286.6	289.1	290.7	291.6	291.5
30°	257.0	259.2	261.7	264.1	265.9	267.0	270.1	271.2	273.1	273.7	273.3
32.5°	239.4	240.9	243.4	246.6	247.3	248.4	250.3	253.1	253.8	254.1	254.2
35°	220.6	223.5	225.6	227.5	228.1	229.1	231.3	233.4	234.1	235.3	234.8
37.5°	203.2	204.9	205.9	207.8	209.5	210.3	211.4	212.8	214.2	214.8	214.6
40°	185.8	186.7	187.5	189.6	189.7	189.7	191.4	193.3	193.3	193.9	193.9
42.5°	168.1	168.2	169.3	170.4	170.7	171.0	172.6	172.9	173.8	174.2	174.7
45°	150.8	151.6	152.3	152.5	153.2	153.3	153.7	154.2	155.4	155.1	155.4
47.5°	135.1	135.5	135.9	135.9	136.4	136.2	136.9	136.5	137.3	137.6	138.0
50°	119.7	120.4	120.0	120.2	120.1	120.5	120.2	120.2	120.2	120.8	121.2
52.5°	105.5	105.6	105.2	105.4	105.4	105.1	105.4	105.2	105.1	105.1	105.2
55°	92.4	91.9	91.6	91.0	90.4	91.2	90.8	90.5	91.0	90.8	91.0
57.5°	79.8	79.1	78.5	78.3	77.3	77.8	77.3	77.0	77.0	77.0	77.7
60°	67.8	67.1	66.4	65.6	65.5	65.2	64.9	64.2	64.4	64.2	64.5
62.5°	57.4	56.0	55.0	54.3	54.2	53.8	53.4	52.7	52.8	52.8	53.0
65°	47.8	46.3	44.9	43.9	43.9	43.2	42.5	42.5	41.7	42.0	42.1
67.5°	38.2	37.0	35.6	34.9	34.5	33.9	33.5	33.2	32.8	32.8	33.1
70°	29.6	28.4	27.7	26.5	26.4	26.0	25.4	25.0	24.9	24.9	24.7
72.5°	22.4	21.3	20.4	19.7	19.3	18.9	18.3	18.2	17.9	17.9	18.2
75°	15.6	14.9	14.2	13.5	13.2	13.1	12.6	12.4	12.4	12.2	12.4
77.5°	10.4	9.7	9.0	8.8	8.5	8.2	8.1	7.9	7.5	7.5	7.5
80°	6.0	5.7	5.4	5.0	5.0	4.9	4.6	4.4	4.3	4.3	4.3
82.5°	3.1	2.9	2.6	2.5	2.5	2.5	2.4	2.4	2.2	2.2	2.2
85°	1.3	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.1
87.5°	0.1	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°	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5
2.5°	377.7	377.5	377.5	377.5	377.5	377.5	377.4	377.4	377.2	377.2	377.2
5°	375.3	375.2	375.0	374.9	374.7	374.6	374.5	374.3	373.9	373.8	373.5
7.5°	372.0	371.7	371.3	371.1	370.9	370.4	369.9	369.6	369.0	368.4	368.1
10°	367.5	367.0	366.5	365.8	365.7	365.2	363.8	363.1	362.1	361.3	360.3
12.5°	362.1	361.5	360.6	359.6	359.0	357.8	356.5	355.4	354.2	352.4	351.0
15°	355.4	354.6	352.6	352.4	351.5	349.6	347.9	345.8	343.9	341.9	340.3
17.5°	346.5	344.7	343.7	342.5	341.5	339.0	337.2	334.9	332.2	330.0	327.6
20°	334.9	332.9	331.2	330.5	329.3	327.1	324.8	321.9	319.3	316.5	314.4
22.5°	321.0	319.7	317.2	316.4	314.8	312.6	310.0	307.2	304.7	301.6	298.9
25°	306.1	304.3	302.3	300.7	299.5	297.5	294.1	292.0	289.3	285.9	283.8
27.5°	290.2	288.1	285.4	284.3	283.3	280.5	277.7	275.1	272.9	269.9	268.1
30°	271.9	270.4	268.5	267.2	265.8	263.5	261.0	258.0	255.6	254.2	251.7
32.5°	253.3	252.0	249.6	249.0	247.4	245.6	243.8	241.6	239.1	237.0	235.1
35°	233.4	232.1	230.5	229.2	228.7	227.4	225.5	223.5	222.3	219.9	218.9
37.5°	213.5	213.1	211.4	210.2	209.8	208.2	207.2	205.9	204.1	203.5	202.4
40°	193.1	192.8	191.8	191.7	190.8	190.4	189.0	187.9	187.1	186.7	186.0
42.5°	174.3	174.0	173.2	173.3	172.5	172.2	172.1	171.1	170.4	169.6	169.7
45°	155.8	155.5	155.0	154.7	155.1	155.0	154.7	154.3	154.3	154.4	154.0
47.5°	138.0	138.3	137.7	138.0	138.0	137.6	137.6	138.2	138.3	138.6	138.9
50°	121.2	122.0	121.8	122.2	122.3	122.5	122.0	122.7	122.6	123.8	123.6
52.5°	105.9	106.1	106.6	106.8	106.9	107.0	107.7	108.3	108.4	109.0	109.9
55°	91.2	91.3	92.4	92.4	93.1	93.3	94.2	94.5	94.9	96.5	96.7
57.5°	77.3	78.1	78.7	79.0	79.4	80.1	80.6	81.9	82.6	83.5	84.5
60°	64.8	65.7	66.4	66.7	67.3	68.1	68.8	70.2	71.4	72.6	73.3
62.5°	53.2	54.1	54.6	55.6	55.6	56.3	58.0	58.8	60.2	61.2	62.4
65°	43.0	43.5	44.5	44.5	45.0	46.1	47.5	48.8	50.2	51.6	52.8
67.5°	33.6	34.1	34.6	35.2	35.4	36.8	37.9	39.8	41.0	42.0	43.5
70°	25.4	25.7	26.4	27.0	27.4	28.4	29.6	30.9	32.1	33.2	34.8
72.5°	18.2	18.8	19.5	19.9	20.2	20.9	22.1	23.4	24.5	25.6	26.4
75°	12.5	12.9	13.2	13.6	14.0	14.6	15.4	16.3	17.5	18.6	19.6
77.5°	7.8	8.2	8.6	8.8	8.9	9.5	10.0	10.8	11.7	12.5	13.2
80°	4.6	4.7	4.9	5.0	5.3	5.7	6.0	6.5	7.1	7.6	8.3
82.5°	2.4	2.5	2.6	2.6	2.6	2.8	3.2	3.5	3.6	3.9	4.3
85°	1.0	1.0	1.0	1.1	1.1	1.3	1.3	1.4	1.4	1.5	1.7
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



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CATALOG NUMBER: LD4C08D010 EU4089035 4LBLDWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	378.5	378.5	378.5	378.5	378.5	378.5	378.5	378.5
2.5°	377.1	377.1	377.1	377.0	377.1	377.1	377.1	377.0
5°	373.5	373.2	373.2	373.1	372.9	372.9	373.1	372.8
7.5°	367.5	367.1	366.8	366.8	366.7	366.5	366.5	365.8
10°	359.7	358.9	358.9	358.6	357.5	357.4	357.1	357.1
12.5°	350.0	349.0	348.5	347.8	347.1	346.5	346.4	345.8
15°	338.5	337.2	336.2	336.0	334.9	334.0	334.0	333.7
17.5°	326.0	324.0	323.3	322.6	321.1	321.0	320.7	319.4
20°	311.8	310.0	309.0	308.3	307.3	305.9	305.7	305.8
22.5°	296.9	294.4	293.6	292.9	291.9	290.7	290.7	289.7
25°	281.5	279.3	278.4	277.6	276.1	275.5	274.8	274.9
27.5°	265.8	263.7	263.0	261.5	260.5	259.8	259.1	259.1
30°	249.4	248.3	247.1	247.0	245.1	244.2	243.5	243.0
32.5°	233.5	232.1	231.6	231.0	230.0	228.9	228.8	227.8
35°	218.0	216.6	215.9	215.3	214.2	213.8	213.4	213.6
37.5°	201.6	201.3	200.9	200.2	199.5	199.3	198.8	199.5
40°	185.4	185.3	184.7	184.9	184.9	184.6	184.9	184.9
42.5°	169.9	169.9	169.3	169.6	169.7	170.0	170.4	170.7
45°	154.7	154.6	154.7	155.0	154.7	155.4	156.0	156.4
47.5°	139.1	139.3	139.8	140.0	140.3	141.2	141.2	141.2
50°	124.3	125.0	124.7	125.5	125.4	125.9	125.4	125.4
52.5°	110.1	110.8	110.9	111.1	111.9	112.0	112.0	111.9
55°	97.4	98.4	98.0	98.7	99.1	99.4	99.8	99.5
57.5°	85.8	86.2	86.6	86.7	87.3	87.6	87.8	87.6
60°	74.2	75.1	75.8	75.9	76.2	76.5	76.6	77.0
62.5°	63.4	64.8	65.1	65.2	65.9	66.3	66.6	66.9
65°	53.8	54.8	55.5	55.9	56.4	56.4	56.9	56.9
67.5°	44.5	45.5	45.9	46.1	47.0	47.1	47.8	47.8
70°	36.0	36.7	37.0	37.4	38.2	38.8	39.1	39.3
72.5°	27.8	28.6	29.1	29.6	30.2	30.6	30.7	31.1
75°	20.3	21.5	21.7	22.2	22.7	23.2	23.5	23.4
77.5°	14.2	14.6	15.2	15.4	15.8	16.3	16.7	16.7
80°	8.8	9.3	9.5	9.6	10.1	10.4	10.7	10.7
82.5°	4.6	4.9	5.1	5.3	5.6	5.6	5.7	5.8
85°	1.8	1.9	1.9	1.9	2.1	2.2	2.2	2.2
87.5°	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4
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)