

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: P856766

Luminaire Tested: **LX4C10D010 EX4C109040 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P856766
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)
Test Lab: INNOVATION CENTER
Issue Date: 2/14/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C10D010 EX4C109040 4LBLWWH
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

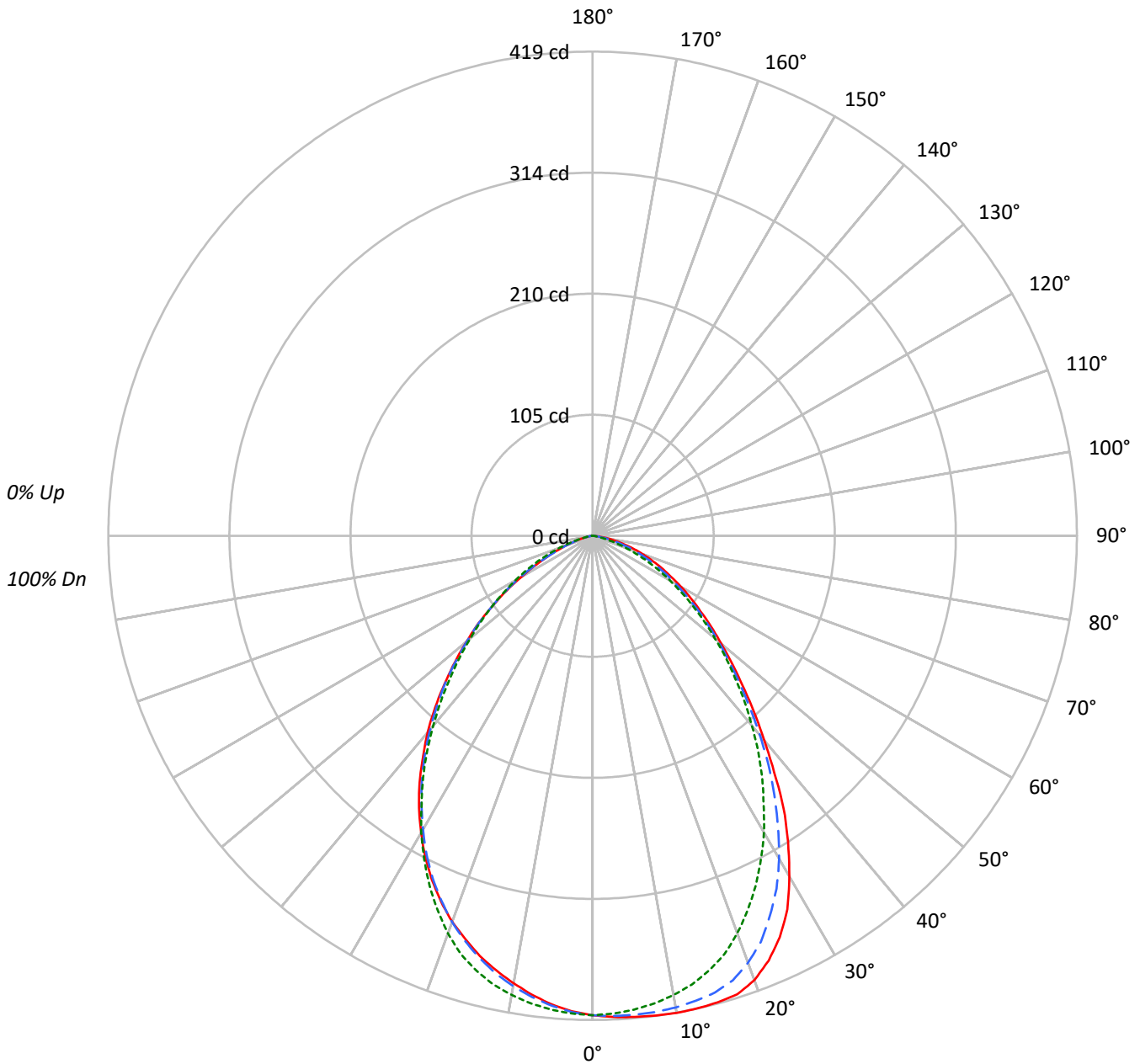
Lumens per Lamp: N/A
Luminaire Lumens: 782.0 lumens
Efficiency: N/A
Efficacy: 79.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.8
Input Voltage (V):
Input Current (A_{in}): 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

TEST NUMBER: P856766

CATALOG NUMBER: LX4C10D010 EX4C109040 4LBLWWH

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	108	105	102	99	101	98	96	97	95	93	94	92	90	88																			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77																			
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68																			
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60																			
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53																			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47																			
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43																			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39																			
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	47	41	37	35																			
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	50972	50972	50972
5°	51549	50760	50205
10°	52307	50336	49051
15°	53164	49527	47886
20°	53498	47850	46464
25°	51958	45261	44570
30°	48289	42061	42090
35°	43223	38349	39159
40°	37014	34368	35635
45°	31864	30300	31447
50°	27694	26395	27178
55°	24375	22704	22490
60°	21696	18944	17445
65°	19012	15174	12616
70°	16344	10704	8549
75°	13243	6218	4984
80°	9480	2688	2476
85°	3665	1128	1128



TEST NUMBER: P856766

CATALOG NUMBER: LX4C10D010 EX4C109040 4LBLWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.1	5.0
10°-20°	110.7	14.2
20°-30°	158.1	20.2
30°-40°	165.4	21.1
40°-50°	138.6	17.7
50°-60°	97.0	12.4
60°-70°	52.8	6.8
70°-80°	18.3	2.3
80°-90°	2.1	0.3
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°	307.9	39.4
0°-40°	473.2	60.5
0°-60°	708.8	90.6
0°-90°	782.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	782.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	415	415	415	415	415	
5°	418	416	412	408	407	40
15°	418	409	389	378	376	118
25°	383	363	334	327	329	175
35°	288	274	256	258	261	179
45°	183	179	174	180	181	143
55°	114	110	106	106	105	103
65°	65	60	52	44	43	65
75°	28	23	13	10	10	30
85°	3	1	1	1	1	5
90°	0	0	0	0	0	



TEST NUMBER: P856766

CATALOG NUMBER: LX4C10D010 EX4C109040 4LBLWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9
2.5°	416.9	416.4	416.5	416.5	416.5	416.4	416.5	416.4	416.4	416.2	415.9
5°	418.0	417.7	417.7	417.7	417.5	417.3	417.3	417.2	416.9	416.7	416.1
7.5°	418.8	418.5	418.5	418.3	418.1	418.0	417.8	417.3	416.9	416.5	415.7
10°	419.3	418.8	418.8	418.5	418.1	418.0	417.7	417.0	416.4	415.6	414.5
12.5°	418.9	418.5	418.3	418.0	417.3	417.0	416.7	415.9	414.8	413.7	412.2
15°	418.0	417.7	417.3	416.9	416.1	415.6	415.3	414.0	412.6	411.0	409.2
17.5°	416.1	415.6	414.9	414.3	413.2	412.7	411.9	410.3	408.2	406.0	403.3
20°	409.2	408.9	408.2	407.1	405.4	404.7	403.6	401.5	398.8	396.1	393.2
22.5°	397.9	397.4	396.4	395.5	393.9	392.8	391.8	388.9	385.9	383.0	380.3
25°	383.3	382.9	381.6	380.3	378.7	376.8	375.8	373.6	370.6	366.9	362.9
27.5°	364.7	363.1	362.6	361.2	358.8	358.1	356.7	353.8	351.0	347.8	344.4
30°	340.4	340.4	339.5	338.8	336.6	335.9	334.4	331.3	329.7	325.3	322.7
32.5°	314.7	314.4	313.6	313.1	311.8	310.7	309.1	307.5	304.0	301.8	298.3
35°	288.2	286.3	286.6	285.7	284.9	283.6	283.4	281.7	278.5	277.2	274.0
37.5°	258.1	257.3	258.4	256.9	256.2	256.3	255.0	253.9	252.6	250.4	249.8
40°	230.8	231.4	231.3	230.0	230.6	229.8	228.5	227.4	226.8	225.3	224.9
42.5°	206.4	205.4	205.1	205.1	205.2	205.2	204.6	203.8	203.8	202.4	200.9
45°	183.4	183.4	183.1	184.0	182.6	182.6	182.1	181.9	181.3	181.0	179.2
47.5°	163.6	163.4	163.3	163.1	162.9	162.9	162.0	161.2	161.0	160.1	159.1
50°	144.9	145.9	145.6	144.8	144.4	144.6	144.0	143.5	143.3	141.7	141.9
52.5°	129.3	129.1	129.4	129.0	128.2	128.3	127.7	127.0	126.4	125.6	125.0
55°	113.8	114.6	114.3	113.8	113.6	113.3	112.8	112.0	111.9	110.1	110.0
57.5°	100.9	100.7	100.4	99.6	99.4	98.9	98.9	98.3	97.4	96.4	95.6
60°	88.3	88.3	87.8	87.6	87.0	86.8	86.7	86.0	84.9	84.1	82.8
62.5°	76.1	76.4	76.1	75.6	75.2	74.5	74.2	73.7	72.8	72.0	70.9
65°	65.4	65.3	65.1	64.5	64.3	63.7	63.5	62.6	61.6	61.0	59.7
67.5°	55.2	54.7	54.7	54.4	54.1	53.6	53.3	52.3	51.2	50.6	49.3
70°	45.5	45.2	45.2	45.2	44.4	43.9	43.7	43.3	41.7	41.0	39.7
72.5°	36.5	36.4	36.2	35.7	35.3	35.3	34.6	33.7	32.9	32.1	31.1
75°	27.9	28.2	27.9	27.3	27.1	26.8	26.3	25.5	24.7	23.8	22.7
77.5°	20.4	20.1	19.8	19.8	19.5	18.8	18.7	18.0	17.1	16.4	15.3
80°	13.4	13.2	12.9	12.6	12.4	12.3	12.1	11.5	10.5	10.1	9.1
82.5°	7.3	7.2	7.2	7.0	6.5	6.5	6.4	5.7	5.3	4.9	4.5
85°	2.6	2.6	2.6	2.4	2.4	2.4	2.2	2.1	1.9	1.8	1.4
87.5°	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
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: P856766

CATALOG NUMBER: LX4C10D010 EX4C109040 4LBLWWH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9
2.5°	415.6	415.3	415.1	414.9	414.8	414.6	414.5	414.2	414.0	413.8	413.5
5°	415.6	414.9	414.6	414.2	413.8	413.5	413.0	412.6	412.1	411.6	411.1
7.5°	414.9	414.0	413.4	412.4	412.1	411.6	410.6	410.0	409.2	408.2	407.1
10°	413.4	412.2	411.0	409.7	409.2	408.4	407.1	406.0	404.7	403.5	402.3
12.5°	410.8	409.0	407.4	405.7	404.7	403.9	402.2	400.6	399.0	397.6	395.6
15°	407.0	404.9	402.8	400.4	399.3	398.4	395.8	393.9	391.3	389.4	387.5
17.5°	400.7	397.6	395.0	392.0	390.4	389.3	387.0	384.0	381.6	379.5	377.3
20°	390.1	387.0	383.5	380.2	378.4	377.0	373.8	370.6	368.2	366.0	363.6
22.5°	376.0	372.2	369.6	365.5	364.0	362.3	358.5	355.6	352.9	350.6	348.4
25°	358.9	355.6	352.1	348.2	346.5	344.4	341.2	338.2	336.4	333.9	331.2
27.5°	339.3	336.6	332.3	328.9	327.2	325.6	322.5	319.8	317.3	315.5	313.0
30°	318.6	315.4	311.5	308.0	307.1	305.1	302.4	300.4	297.6	296.5	295.4
32.5°	295.7	292.1	289.2	287.0	285.0	283.4	282.0	278.7	278.2	275.3	275.0
35°	270.8	269.2	266.5	264.6	263.0	261.9	259.5	257.9	256.2	255.7	254.6
37.5°	247.4	245.5	242.9	241.1	240.0	239.9	238.1	237.2	235.9	235.2	234.0
40°	222.8	222.0	219.8	219.4	217.7	217.5	216.6	215.5	214.3	214.3	214.5
42.5°	200.1	199.2	198.2	197.1	196.1	196.1	195.7	195.3	195.0	194.5	195.3
45°	178.9	177.6	177.0	175.9	176.4	175.4	175.1	175.1	174.6	174.4	175.6
47.5°	159.1	157.7	157.0	156.7	156.7	156.9	155.4	155.9	155.8	156.1	156.6
50°	141.1	139.8	138.8	138.8	139.0	138.4	137.7	138.2	137.7	138.1	139.2
52.5°	124.3	123.0	122.6	122.6	121.6	121.5	121.8	121.1	121.3	121.5	122.1
55°	108.8	108.0	107.2	106.5	106.6	106.3	105.7	105.5	105.8	106.0	106.8
57.5°	95.0	93.8	92.7	92.4	92.1	92.1	91.3	91.1	91.4	90.7	90.7
60°	81.7	81.1	79.6	79.2	79.2	78.4	77.7	78.0	77.2	77.1	77.2
62.5°	69.4	68.9	68.0	67.0	66.7	66.4	65.6	65.3	65.0	64.3	63.4
65°	58.7	57.6	56.5	55.9	55.4	54.6	54.1	53.5	52.5	52.2	51.2
67.5°	48.0	46.9	45.8	45.3	44.8	44.4	43.6	42.8	41.7	40.4	39.3
70°	38.6	37.2	36.5	35.3	35.0	34.3	33.2	32.4	31.3	29.8	28.7
72.5°	29.5	28.6	27.6	26.5	25.7	25.2	24.3	23.0	21.7	20.9	19.8
75°	21.2	20.7	19.5	18.2	17.9	17.2	16.1	15.3	14.4	13.1	12.1
77.5°	14.4	13.4	12.6	11.5	11.2	10.5	9.9	9.1	8.5	7.7	7.0
80°	8.5	7.7	7.2	6.4	6.1	5.7	5.3	4.6	4.1	3.8	3.7
82.5°	4.1	3.5	3.4	2.9	2.7	2.6	2.2	2.1	1.8	1.8	1.8
85°	1.4	1.1	1.1	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
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: P856766

CATALOG NUMBER: LX4C10D010 EX4C109040 4LBLWWH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9
2.5°	413.4	413.2	413.0	412.9	412.9	412.7	412.7	412.6	412.6	412.4	412.4
5°	410.5	410.0	409.7	409.4	409.4	408.9	408.6	408.2	408.1	408.1	407.8
7.5°	406.5	405.9	405.2	404.7	404.6	403.8	403.1	403.1	402.5	402.2	401.9
10°	401.2	400.1	399.1	398.7	398.0	397.6	396.8	396.3	395.8	395.0	394.8
12.5°	394.0	393.2	391.8	391.2	390.8	389.9	388.6	388.0	387.8	387.2	386.7
15°	385.9	384.1	382.9	382.1	382.1	380.5	379.8	378.9	378.2	377.8	377.6
17.5°	375.4	373.6	372.3	371.2	370.9	369.6	368.7	368.3	367.5	367.9	367.1
20°	361.8	360.4	359.4	358.0	358.0	357.2	356.9	356.1	355.7	355.4	355.7
22.5°	347.3	345.5	343.9	343.8	343.8	342.7	342.5	342.3	341.7	342.2	342.0
25°	330.2	328.9	328.0	327.8	327.8	327.2	326.5	326.9	327.3	327.2	327.6
27.5°	312.5	311.2	310.9	310.7	310.4	310.3	310.6	310.6	311.1	311.7	312.3
30°	293.3	293.0	292.5	292.4	292.1	292.9	293.2	293.7	293.5	294.5	295.1
32.5°	274.2	273.5	273.4	273.7	274.2	274.0	275.0	275.3	275.6	276.7	277.2
35°	254.9	254.7	254.4	254.4	254.6	255.8	255.8	256.9	257.6	257.9	259.2
37.5°	234.1	234.8	235.1	235.6	235.7	236.2	236.5	237.6	238.3	238.9	239.6
40°	215.1	214.8	216.3	215.3	215.6	217.0	217.7	217.5	218.5	219.4	220.1
42.5°	194.9	195.3	195.7	196.0	196.8	196.9	197.7	198.9	199.2	200.3	200.6
45°	175.2	175.4	176.0	176.7	177.2	178.4	178.7	179.2	180.2	180.2	180.7
47.5°	156.7	157.4	157.4	158.3	159.1	159.0	160.1	160.4	160.2	161.0	161.4
50°	139.0	140.0	139.8	140.4	140.8	140.9	141.9	142.2	141.6	142.4	142.5
52.5°	122.1	122.6	123.2	123.4	123.0	123.8	123.5	124.2	124.0	124.6	124.0
55°	106.6	106.5	106.5	106.8	106.5	106.8	107.1	106.5	106.0	106.6	106.5
57.5°	91.1	91.1	90.8	91.3	90.8	90.3	90.2	89.7	89.2	89.2	89.1
60°	76.6	76.3	75.6	75.5	75.5	74.7	74.4	73.7	73.7	73.1	72.5
62.5°	63.0	62.2	61.8	61.8	61.4	60.6	59.2	58.3	57.9	57.0	56.8
65°	50.3	49.5	49.0	48.0	47.2	46.9	45.5	44.4	43.9	42.9	43.1
67.5°	38.6	37.3	35.9	35.3	34.8	33.7	33.2	32.4	31.9	31.9	31.9
70°	27.8	26.7	25.2	24.7	24.4	23.5	23.0	22.8	23.3	23.1	23.3
72.5°	18.7	17.6	16.9	16.6	16.3	15.8	16.1	16.3	16.0	16.1	16.3
75°	11.3	11.0	10.5	10.4	10.4	10.5	10.4	10.4	10.5	10.5	10.7
77.5°	6.5	6.2	6.2	6.1	6.4	6.2	6.2	6.2	6.4	6.4	6.4
80°	3.5	3.5	3.5	3.5	3.7	3.5	3.7	3.7	3.7	3.7	3.7
82.5°	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
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: P856766

CATALOG NUMBER: LX4C10D010 EX4C109040 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9
2.5°	412.1	412.1	412.1	411.8	411.9	411.9	411.8	411.8
5°	407.6	407.4	407.1	407.1	406.8	407.1	407.0	407.1
7.5°	401.5	401.5	401.1	401.1	400.9	400.7	400.6	400.7
10°	394.4	394.4	394.0	393.9	394.0	393.4	393.4	393.2
12.5°	386.4	386.1	385.7	385.9	385.7	385.3	385.1	385.3
15°	377.1	376.6	376.8	376.3	376.3	376.2	376.5	376.5
17.5°	366.9	366.6	366.3	366.4	366.1	366.3	366.1	366.0
20°	355.6	355.4	355.4	354.8	354.9	354.8	354.9	355.4
22.5°	342.5	342.3	342.5	342.0	342.3	342.3	342.8	342.8
25°	328.1	328.0	328.3	328.4	328.6	329.1	328.6	328.8
27.5°	312.2	312.6	313.1	313.3	313.9	313.4	313.1	313.6
30°	296.0	296.0	295.9	296.5	297.0	297.5	296.7	296.7
32.5°	277.5	278.3	278.3	278.5	279.0	279.0	279.0	279.6
35°	259.8	260.3	260.5	259.8	260.1	260.0	261.1	261.1
37.5°	240.0	240.0	240.2	241.3	241.3	240.8	241.1	241.1
40°	221.2	221.4	220.7	221.0	221.8	221.5	221.8	222.2
42.5°	200.6	201.7	201.1	201.4	201.2	201.4	201.6	201.6
45°	181.0	181.3	181.3	181.5	181.8	182.1	181.1	181.0
47.5°	161.8	162.0	162.5	161.7	162.6	161.7	162.6	161.5
50°	142.5	143.2	142.7	143.0	142.5	142.5	142.4	142.2
52.5°	124.2	124.0	124.0	123.8	123.8	124.2	123.8	124.3
55°	105.8	106.0	105.7	105.5	105.3	105.8	105.3	105.0
57.5°	88.4	88.7	88.1	88.4	87.3	87.8	87.9	88.1
60°	72.3	71.8	71.8	71.2	71.2	71.7	71.0	71.0
62.5°	56.0	56.3	55.9	56.5	56.5	57.1	56.8	57.1
65°	42.9	43.1	43.3	43.3	43.3	44.2	43.9	43.4
67.5°	32.4	32.6	32.7	32.6	33.0	32.7	32.7	32.9
70°	23.5	23.6	23.8	23.8	23.6	23.8	23.8	23.8
72.5°	16.3	16.4	16.3	16.4	16.6	16.4	16.4	16.6
75°	10.7	10.7	10.5	10.5	10.5	10.5	10.7	10.5
77.5°	6.2	6.4	6.2	6.4	6.4	6.4	6.4	6.4
80°	3.7	3.7	3.7	3.5	3.7	3.7	3.7	3.5
82.5°	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
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)