

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: P856765

Luminaire Tested: **LX4C10D010 EX4C109040 4LBLWW***

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P856765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C10D010 EX4C109040 4LBLWW*
Description: 4 INCH 1000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

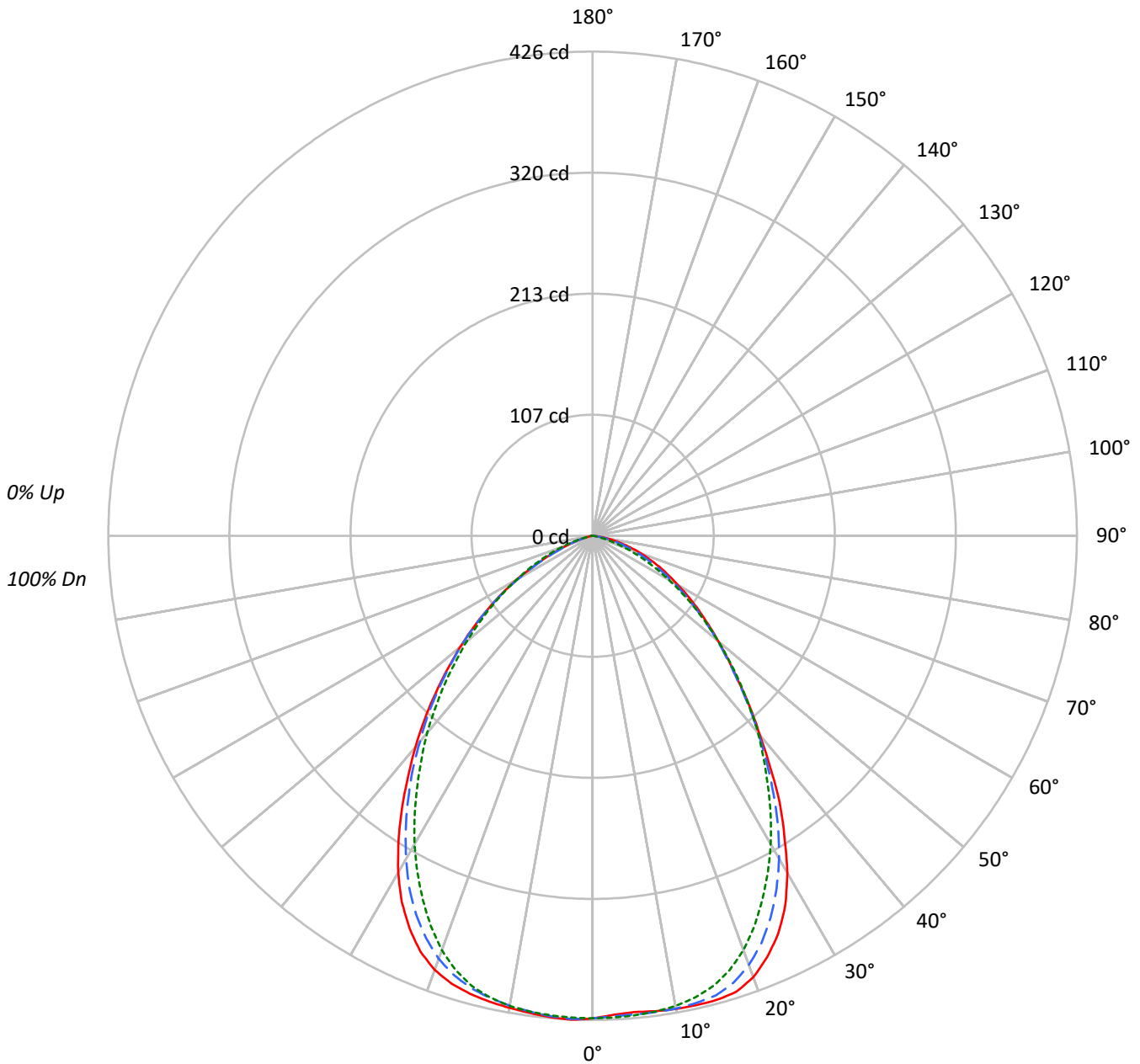
Lumens per Lamp: N/A
Luminaire Lumens: 814.0 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

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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	99	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	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68																			
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60																			
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54																			
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48																			
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43																			
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39																			
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36																			
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	52164	52164	52164
5°	51870	52227	52425
10°	52731	52407	52607
15°	53762	52172	53050
20°	54034	50713	53132
25°	52364	47891	51660
30°	48601	44444	48516
35°	43043	40314	43853
40°	36694	36309	38891
45°	31517	31881	33880
50°	27522	27579	29032
55°	24310	23282	24075
60°	21303	18993	18919
65°	18866	14738	13110
70°	16092	10129	7795
75°	13006	5459	3560
80°	8914	1344	920
85°	2678	423	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.4	5.0
10°-20°	116.8	14.4
20°-30°	168.8	20.7
30°-40°	174.5	21.4
40°-50°	144.2	17.7
50°-60°	99.5	12.2
60°-70°	52.1	6.4
70°-80°	16.4	2.0
80°-90°	1.4	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°	326.0	40.0
0°-40°	500.4	61.5
0°-60°	744.1	91.4
0°-90°	814.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	814.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	425	425	425	425	425	
5°	421	423	424	424	425	40
15°	423	419	410	412	417	119
25°	386	371	353	368	381	176
35°	287	277	269	283	292	178
45°	181	181	184	192	195	141
55°	114	110	109	112	112	102
65°	65	59	51	42	45	64
75°	27	22	12	8	8	29
85°	2	1	0	0	0	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°	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6
2.5°	421.9	422.0	422.0	422.3	422.3	422.3	422.5	422.5	422.7	422.8	423.0
5°	420.6	420.6	420.9	421.1	421.4	421.6	421.9	422.0	422.3	422.5	422.7
7.5°	421.9	421.9	422.0	422.2	422.2	422.3	422.3	422.5	422.7	422.8	422.8
10°	422.7	422.7	422.7	422.7	422.8	422.8	422.8	422.7	422.7	422.7	422.5
12.5°	423.0	423.0	422.8	422.7	422.8	422.7	422.7	422.2	421.9	421.6	421.1
15°	422.7	422.7	422.5	422.3	422.2	421.9	421.7	420.9	420.3	419.3	418.7
17.5°	420.6	420.3	420.0	419.6	419.0	418.5	418.2	416.8	415.7	414.1	412.3
20°	413.3	412.9	412.5	411.7	410.9	410.2	409.3	407.2	406.1	403.7	401.9
22.5°	401.3	401.0	401.1	399.7	398.1	397.2	396.5	394.8	392.9	389.8	387.9
25°	386.3	385.4	385.4	383.1	382.3	381.7	380.9	378.8	376.0	373.2	370.7
27.5°	366.9	365.6	365.0	364.6	362.7	361.3	360.2	358.6	356.2	353.8	350.3
30°	342.6	342.5	341.7	340.2	338.8	338.2	336.9	334.2	331.9	330.2	328.0
32.5°	314.1	313.9	313.9	313.9	313.0	312.8	310.9	309.5	307.7	305.0	303.6
35°	287.0	286.8	287.0	284.6	284.0	283.5	283.3	282.4	280.0	278.7	277.4
37.5°	256.4	256.9	256.5	255.9	256.7	255.3	256.4	254.3	253.3	253.0	251.6
40°	228.8	230.1	228.8	229.0	229.7	228.3	228.3	228.0	227.4	227.0	226.7
42.5°	205.2	203.6	204.6	203.8	204.6	204.1	203.3	203.8	203.9	203.3	203.1
45°	181.4	181.8	182.1	181.6	181.6	181.1	182.4	181.6	181.6	181.8	180.6
47.5°	162.1	161.7	162.0	161.7	161.8	161.5	161.8	162.0	161.7	161.7	160.7
50°	144.0	143.7	144.8	143.8	143.8	143.7	143.8	143.5	143.0	143.0	143.3
52.5°	128.2	127.5	127.4	128.2	127.1	127.1	127.2	126.9	126.3	126.0	125.2
55°	113.5	113.4	113.5	112.9	112.6	112.6	111.8	111.4	111.3	110.5	110.0
57.5°	99.8	99.3	99.5	99.3	98.7	98.5	97.9	97.9	97.3	96.6	95.8
60°	86.7	86.7	87.2	86.6	86.1	85.8	85.5	85.1	84.0	82.9	82.0
62.5°	75.1	75.3	75.1	74.6	74.3	74.0	73.7	72.7	71.7	71.1	70.0
65°	64.9	64.7	64.3	63.9	63.1	63.1	62.5	62.0	60.9	59.9	58.8
67.5°	54.4	54.0	54.0	54.0	53.1	52.9	52.6	51.7	50.7	49.4	48.5
70°	44.8	45.1	44.6	44.2	43.7	43.5	43.0	42.1	41.0	39.7	38.9
72.5°	35.7	36.0	35.6	35.4	34.4	34.1	34.0	33.2	31.9	31.1	29.8
75°	27.4	27.6	27.3	26.9	26.3	26.1	25.4	24.7	23.9	22.6	21.5
77.5°	19.8	19.5	19.5	18.8	18.2	18.2	18.0	17.1	15.9	15.0	14.0
80°	12.6	12.4	12.0	11.6	11.2	11.0	10.8	10.0	9.2	8.6	8.0
82.5°	6.4	6.2	6.1	5.9	5.6	5.3	5.4	4.8	4.5	3.8	3.3
85°	1.9	2.1	2.1	1.9	1.8	1.8	1.8	1.6	1.3	1.1	1.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6
2.5°	423.1	423.3	423.5	423.6	423.6	423.8	423.9	424.1	424.3	424.3	424.4
5°	422.8	423.1	423.1	423.3	423.3	423.3	423.5	423.5	423.5	423.5	423.6
7.5°	423.0	423.0	423.0	422.8	422.8	422.7	422.7	422.7	422.3	422.3	422.3
10°	422.2	422.0	421.9	421.6	421.4	421.2	420.9	420.6	420.3	420.1	419.8
12.5°	420.6	420.0	419.3	418.7	418.4	418.2	417.6	417.1	416.6	416.1	415.8
15°	417.4	416.4	415.3	414.1	413.7	413.4	412.3	411.3	410.7	410.2	409.4
17.5°	411.0	409.1	407.8	405.9	405.1	404.8	403.1	402.1	401.0	400.7	400.0
20°	399.7	398.0	395.6	393.8	392.9	391.9	390.5	389.2	387.9	387.9	387.1
22.5°	385.5	383.3	380.3	378.0	377.9	376.0	374.7	373.2	372.8	371.8	371.8
25°	367.7	365.7	362.4	360.5	359.5	359.1	357.0	355.1	354.1	353.3	354.0
27.5°	347.9	345.0	342.5	340.1	339.3	338.3	336.4	335.6	333.9	333.7	333.5
30°	325.3	322.4	319.8	318.7	317.1	316.3	314.9	313.9	313.3	313.3	313.0
32.5°	301.5	298.9	297.7	295.3	294.5	293.4	292.4	291.5	291.8	291.5	291.6
35°	275.8	275.2	272.8	271.4	271.4	271.2	269.6	269.0	268.7	268.8	269.6
37.5°	251.4	249.5	247.9	247.0	247.8	246.8	246.6	246.6	247.6	247.0	248.2
40°	225.4	225.3	224.6	225.0	225.1	224.0	224.3	224.5	225.1	226.4	226.6
42.5°	202.8	202.6	202.6	202.6	202.3	201.7	202.3	203.4	203.3	204.2	205.0
45°	181.0	180.6	181.3	180.8	181.8	182.1	181.6	181.9	182.9	183.5	184.8
47.5°	161.0	161.0	161.2	161.5	160.6	161.4	161.7	162.3	162.8	163.1	163.7
50°	142.5	142.5	142.2	142.2	142.2	142.7	142.1	142.9	143.0	144.3	145.1
52.5°	125.5	124.7	125.2	124.8	124.2	123.9	124.2	124.4	125.3	125.6	126.6
55°	109.2	109.2	107.9	107.6	108.1	107.9	107.8	107.8	108.3	108.7	109.5
57.5°	94.9	93.9	93.0	92.8	92.3	92.5	92.5	92.3	92.0	92.2	92.3
60°	81.3	80.7	79.2	79.2	79.1	78.9	78.1	78.0	77.2	77.3	76.7
62.5°	68.9	68.6	66.6	66.0	66.0	65.5	64.7	64.6	63.5	63.5	62.8
65°	57.7	56.8	55.6	54.5	54.5	53.9	53.4	52.0	51.2	50.7	49.7
67.5°	47.5	46.1	45.0	44.0	43.4	43.2	42.1	41.1	39.9	39.1	37.6
70°	37.6	36.5	35.4	34.4	33.8	33.2	32.0	30.6	29.7	28.2	27.3
72.5°	28.4	27.4	26.5	25.2	24.4	23.9	22.8	21.5	19.9	19.0	17.7
75°	20.4	19.3	18.0	16.9	16.4	15.9	14.7	13.7	12.6	11.5	10.2
77.5°	13.2	12.0	11.0	9.7	9.6	9.2	8.0	7.0	6.2	5.6	4.8
80°	7.0	6.4	5.6	4.8	4.5	4.0	3.3	2.9	2.4	1.9	1.6
82.5°	3.0	2.6	2.1	1.8	1.6	1.4	1.1	1.0	0.8	0.8	0.6
85°	0.8	0.6	0.6	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.2	0.2	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°	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6
2.5°	424.6	424.7	424.9	424.9	425.1	425.2	425.2	425.4	425.5	425.7	425.7
5°	423.8	423.8	423.8	423.9	423.9	423.9	423.9	424.3	424.3	424.4	424.6
7.5°	422.2	422.2	422.2	422.2	422.0	422.2	422.0	422.0	422.3	422.5	422.7
10°	419.6	419.5	419.5	419.3	419.3	419.3	419.5	419.6	419.8	420.0	420.4
12.5°	415.7	415.5	415.5	415.3	415.3	415.5	415.7	416.0	416.6	416.9	417.6
15°	409.3	409.1	409.3	409.4	409.8	410.2	410.7	411.2	412.1	412.9	413.7
17.5°	400.0	400.2	400.3	400.7	401.1	401.8	403.1	404.3	405.4	406.7	408.0
20°	387.3	387.9	388.1	389.2	389.5	390.9	392.4	394.3	396.0	397.6	399.4
22.5°	372.0	372.4	373.1	374.4	375.2	377.1	378.8	381.1	383.0	385.0	387.6
25°	354.6	354.7	356.7	356.7	358.6	360.2	362.2	364.6	367.5	370.2	372.0
27.5°	334.8	335.6	337.1	337.7	339.1	341.7	343.4	346.3	349.2	351.6	353.5
30°	314.1	314.7	317.1	317.4	318.6	320.8	323.2	325.9	328.1	330.8	332.6
32.5°	292.2	294.0	295.4	296.6	296.9	300.2	301.5	303.4	306.0	308.7	310.4
35°	271.0	271.8	273.9	274.6	275.5	277.4	280.0	281.6	282.8	284.6	286.7
37.5°	248.6	251.0	251.4	253.3	253.7	255.4	256.7	258.6	260.2	261.8	262.1
40°	227.7	228.5	230.2	230.7	231.0	233.4	235.0	235.5	236.3	237.7	239.6
42.5°	206.5	207.3	209.2	208.7	210.1	211.3	212.1	214.0	214.8	215.2	215.2
45°	185.6	185.9	187.2	187.8	188.6	189.3	190.7	191.6	192.0	193.4	193.9
47.5°	165.7	166.0	166.9	168.0	167.7	168.5	170.1	170.6	170.8	171.7	172.2
50°	146.0	146.8	148.1	147.8	148.8	149.2	150.7	151.0	151.0	151.1	151.3
52.5°	127.7	128.3	128.7	129.0	129.5	130.3	130.9	130.6	131.2	131.9	131.4
55°	109.5	110.0	110.8	111.1	111.1	111.3	111.0	112.4	111.8	111.6	111.8
57.5°	93.0	92.3	92.2	93.0	93.3	93.1	92.6	93.3	93.3	93.0	92.5
60°	76.8	76.4	76.2	76.4	75.7	75.3	75.6	75.3	74.5	74.1	74.3
62.5°	62.2	61.7	60.4	60.4	60.1	59.9	58.7	58.8	58.2	57.2	57.6
65°	48.6	47.4	46.7	46.6	45.4	44.5	44.2	43.0	42.1	41.9	42.1
67.5°	36.5	35.1	34.0	33.5	32.8	32.0	30.9	30.0	30.3	30.1	30.8
70°	25.4	24.4	23.3	22.5	22.8	21.8	21.2	21.2	21.4	21.5	21.8
72.5°	16.9	15.6	15.1	14.7	14.3	13.7	14.0	14.0	13.9	14.0	13.7
75°	9.6	8.9	8.5	8.3	8.0	8.0	8.0	8.0	7.8	7.7	7.7
77.5°	4.3	4.0	3.8	3.7	3.7	3.7	3.5	3.3	3.3	3.3	3.2
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	0.6	0.6	0.8	0.8	0.8	0.6	0.8	0.8	0.6	0.6	0.8
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	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



TEST NUMBER: P856765

CATALOG NUMBER: LX4C10D010 EX4C109040 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	424.6	424.6	424.6	424.6	424.6	424.6	424.6	424.6
2.5°	425.9	426.0	426.0	426.0	426.2	426.2	426.2	426.2
5°	424.7	424.9	424.9	424.9	425.1	425.1	425.1	425.1
7.5°	422.8	423.0	423.0	423.1	423.1	423.3	423.3	423.5
10°	420.6	420.9	421.1	421.2	421.4	421.6	421.6	421.7
12.5°	418.2	418.5	418.7	419.0	419.3	419.5	419.6	419.8
15°	414.7	415.3	415.7	415.8	416.4	416.8	416.9	417.1
17.5°	409.1	410.4	410.9	411.2	411.8	412.5	412.9	413.1
20°	401.1	402.6	403.2	404.0	405.0	405.8	406.1	406.4
22.5°	390.0	391.6	392.5	393.5	394.3	395.1	396.4	395.9
25°	374.0	376.7	377.9	378.3	380.1	381.1	381.7	381.1
27.5°	356.2	357.8	358.7	359.8	361.1	362.1	362.4	363.4
30°	334.7	337.4	337.2	338.3	339.9	340.9	341.2	342.0
32.5°	312.3	313.6	314.6	314.4	315.0	316.8	316.2	317.6
35°	288.6	288.7	290.3	290.2	291.5	291.5	291.5	292.4
37.5°	263.2	265.1	264.3	266.3	265.6	266.1	266.1	266.4
40°	240.1	240.8	240.8	241.4	241.9	241.4	241.7	242.5
42.5°	216.2	216.8	217.0	216.7	217.2	218.6	217.5	218.4
45°	193.9	194.4	195.0	194.5	195.3	194.8	195.3	195.0
47.5°	172.8	172.7	172.5	173.8	172.7	172.8	173.5	172.4
50°	151.3	152.3	151.6	152.1	152.4	152.4	151.9	151.9
52.5°	132.2	132.0	131.5	132.0	131.7	131.9	132.2	131.9
55°	112.4	113.0	112.7	112.6	112.7	112.7	113.7	112.4
57.5°	93.0	92.6	93.1	94.2	93.1	93.9	94.4	94.5
60°	74.5	74.5	75.4	74.9	75.9	76.7	77.3	77.0
62.5°	56.8	57.6	57.9	58.0	59.0	59.6	59.6	59.5
65°	42.1	43.2	43.2	43.8	44.2	44.2	44.5	45.1
67.5°	31.1	31.1	31.2	31.6	31.4	31.4	31.7	31.9
70°	21.7	21.4	21.8	21.7	21.7	21.5	21.7	21.7
72.5°	13.7	13.7	13.9	13.7	13.4	13.6	13.6	13.9
75°	7.3	7.7	7.3	7.3	7.5	7.2	7.3	7.5
77.5°	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3
82.5°	0.6	0.8	0.6	0.8	0.6	0.6	0.6	0.6
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.0	0.2	0.0	0.2	0.0	0.0	0.0	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)