

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: P859695

Luminaire Tested: **LX4C08D010 EX4C089040 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P859695
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: LX4C08D010 EX4C089040 4LBLWWH
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS AND
4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

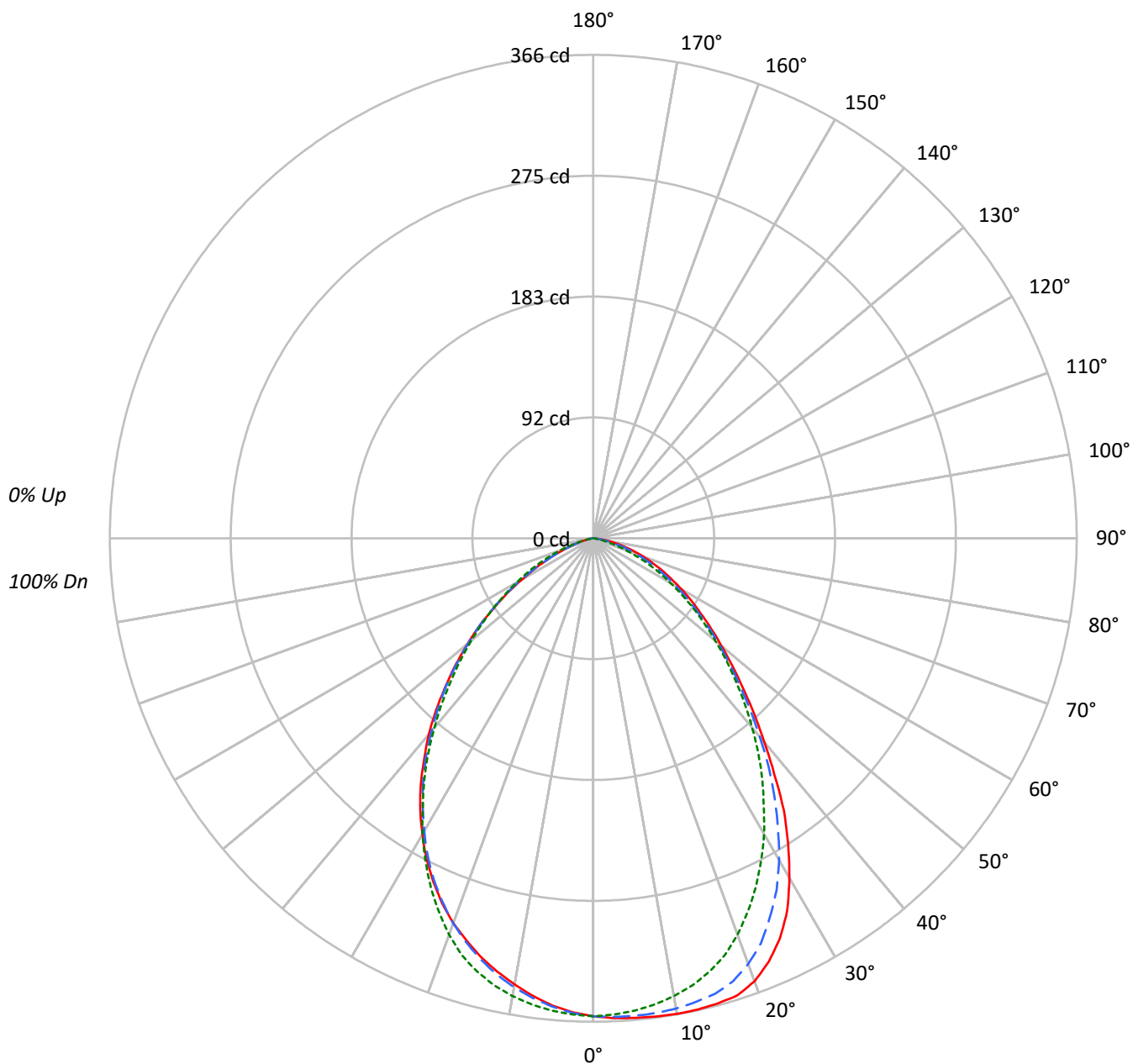
Lumens per Lamp: N/A
Luminaire Lumens: 682.0 lumens
Efficiency: N/A
Efficacy: 68.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.9
Input Voltage (V):
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	50	30	10
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	49	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°	44461	44461	44461
5°	44951	44273	43792
10°	45608	43899	42789
15°	46360	43193	41756
20°	46660	41732	40529
25°	45316	39473	38863
30°	42118	36685	36699
35°	37704	33445	34150
40°	32283	29974	31064
45°	27781	26426	27416
50°	24158	23012	23700
55°	21247	19791	19620
60°	18919	16512	15209
65°	16599	13227	11017
70°	14260	9339	7435
75°	11582	5411	4367
80°	8278	2335	2193
85°	3101	987	987



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.1	5.0
10°-20°	96.5	14.2
20°-30°	137.9	20.2
30°-40°	144.2	21.1
40°-50°	120.8	17.7
50°-60°	84.6	12.4
60°-70°	46.1	6.8
70°-80°	16.0	2.3
80°-90°	1.8	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°	268.5	39.4
0°-40°	412.7	60.5
0°-60°	618.1	90.6
0°-90°	682.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	682.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	362	362	362	362	362	
5°	364	363	359	356	355	35
15°	364	357	340	330	328	103
25°	334	316	291	286	287	153
35°	251	239	223	225	228	156
45°	160	156	152	157	158	124
55°	99	96	92	92	92	90
65°	57	52	46	38	38	57
75°	24	20	11	9	9	26
85°	2	1	1	1	1	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°	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9
2.5°	363.6	363.1	363.3	363.3	363.3	363.1	363.3	363.1	363.1	363.0	362.7
5°	364.5	364.3	364.3	364.3	364.1	364.0	364.0	363.8	363.6	363.4	362.9
7.5°	365.2	364.9	364.9	364.8	364.7	364.5	364.4	364.0	363.6	363.3	362.6
10°	365.6	365.2	365.2	364.9	364.7	364.5	364.3	363.7	363.1	362.4	361.5
12.5°	365.4	364.9	364.8	364.5	364.0	363.7	363.4	362.7	361.7	360.8	359.5
15°	364.5	364.3	364.0	363.6	362.9	362.4	362.2	361.1	359.8	358.4	356.9
17.5°	362.9	362.4	361.9	361.3	360.4	359.9	359.2	357.8	356.0	354.1	351.7
20°	356.9	356.6	356.0	355.1	353.5	353.0	352.0	350.2	347.8	345.5	343.0
22.5°	347.0	346.6	345.7	344.9	343.5	342.5	341.7	339.2	336.6	334.0	331.7
25°	334.3	333.9	332.8	331.7	330.3	328.6	327.8	325.8	323.2	320.0	316.5
27.5°	318.0	316.7	316.2	315.0	312.9	312.3	311.1	308.6	306.1	303.3	300.4
30°	296.9	296.9	296.1	295.5	293.5	293.0	291.6	289.0	287.6	283.7	281.4
32.5°	274.5	274.2	273.5	273.1	272.0	271.0	269.6	268.2	265.2	263.2	260.1
35°	251.4	249.7	250.0	249.1	248.4	247.3	247.2	245.7	242.9	241.8	239.0
37.5°	225.1	224.4	225.3	224.1	223.4	223.5	222.4	221.4	220.3	218.4	217.8
40°	201.3	201.8	201.7	200.6	201.1	200.4	199.3	198.3	197.8	196.5	196.1
42.5°	180.0	179.1	178.9	178.9	179.0	179.0	178.4	177.7	177.7	176.5	175.2
45°	159.9	159.9	159.6	160.5	159.2	159.2	158.8	158.7	158.1	157.8	156.3
47.5°	142.7	142.5	142.4	142.2	142.1	142.1	141.3	140.6	140.4	139.6	138.8
50°	126.4	127.2	126.9	126.2	126.0	126.1	125.5	125.1	125.0	123.6	123.7
52.5°	112.7	112.6	112.9	112.5	111.8	111.9	111.3	110.8	110.2	109.5	109.0
55°	99.2	99.9	99.7	99.2	99.1	98.8	98.4	97.7	97.6	96.0	95.9
57.5°	88.0	87.8	87.5	86.9	86.7	86.3	86.3	85.7	84.9	84.1	83.4
60°	77.0	77.0	76.6	76.4	75.9	75.7	75.6	75.0	74.0	73.4	72.2
62.5°	66.4	66.7	66.4	66.0	65.6	65.0	64.7	64.3	63.5	62.8	61.8
65°	57.1	56.9	56.8	56.2	56.1	55.5	55.4	54.6	53.7	53.2	52.1
67.5°	48.2	47.7	47.7	47.5	47.2	46.8	46.5	45.7	44.7	44.1	43.0
70°	39.7	39.4	39.4	39.4	38.7	38.3	38.1	37.7	36.3	35.8	34.7
72.5°	31.9	31.7	31.6	31.2	30.8	30.8	30.2	29.4	28.7	28.0	27.1
75°	24.4	24.6	24.4	23.8	23.7	23.4	23.0	22.3	21.6	20.7	19.8
77.5°	17.8	17.5	17.3	17.3	17.0	16.4	16.3	15.7	14.9	14.3	13.4
80°	11.7	11.6	11.3	11.0	10.9	10.7	10.6	10.0	9.2	8.8	7.9
82.5°	6.4	6.3	6.3	6.1	5.7	5.7	5.6	5.0	4.6	4.3	3.9
85°	2.2	2.2	2.2	2.1	2.1	2.1	1.9	1.8	1.7	1.5	1.3
87.5°	0.3	0.1	0.3	0.1	0.3	0.1	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	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°	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9
2.5°	362.4	362.2	362.0	361.9	361.7	361.6	361.5	361.2	361.1	360.9	360.6
5°	362.4	361.9	361.6	361.2	360.9	360.6	360.2	359.8	359.4	359.0	358.5
7.5°	361.9	361.1	360.5	359.7	359.4	359.0	358.1	357.6	356.9	356.0	355.1
10°	360.5	359.5	358.4	357.3	356.9	356.2	355.1	354.1	353.0	351.9	350.9
12.5°	358.3	356.7	355.3	353.8	353.0	352.3	350.8	349.4	348.0	346.7	345.0
15°	354.9	353.1	351.3	349.2	348.2	347.4	345.2	343.5	341.3	339.6	337.9
17.5°	349.5	346.7	344.5	341.8	340.5	339.5	337.5	334.9	332.8	331.0	329.0
20°	340.2	337.5	334.5	331.5	330.0	328.8	326.0	323.2	321.1	319.2	317.1
22.5°	327.9	324.6	322.4	318.7	317.5	316.0	312.6	310.1	307.7	305.8	303.8
25°	313.0	310.1	307.0	303.7	302.2	300.4	297.6	294.9	293.4	291.2	288.8
27.5°	295.9	293.5	289.8	286.9	285.3	283.9	281.3	278.9	276.7	275.2	272.9
30°	277.8	275.0	271.7	268.6	267.8	266.1	263.8	261.9	259.6	258.6	257.6
32.5°	257.9	254.7	252.2	250.3	248.6	247.2	245.9	243.0	242.6	240.1	239.8
35°	236.2	234.8	232.4	230.8	229.4	228.4	226.3	224.9	223.4	223.0	222.0
37.5°	215.7	214.1	211.8	210.3	209.3	209.2	207.7	206.8	205.7	205.2	204.0
40°	194.3	193.6	191.7	191.4	189.9	189.7	188.9	187.9	186.9	186.9	187.1
42.5°	174.5	173.7	172.9	171.9	171.1	171.1	170.6	170.4	170.1	169.7	170.4
45°	156.0	154.9	154.4	153.4	153.8	153.0	152.7	152.7	152.3	152.1	153.1
47.5°	138.8	137.5	137.0	136.7	136.7	136.8	135.6	136.0	135.8	136.1	136.5
50°	123.0	121.9	121.1	121.1	121.2	120.7	120.1	120.5	120.1	120.4	121.4
52.5°	108.4	107.3	106.9	106.9	106.1	105.9	106.2	105.6	105.8	105.9	106.5
55°	94.9	94.2	93.5	92.8	93.0	92.7	92.1	92.0	92.3	92.4	93.1
57.5°	82.8	81.8	80.9	80.6	80.3	80.3	79.6	79.5	79.8	79.1	79.1
60°	71.3	70.7	69.5	69.0	69.0	68.3	67.8	68.1	67.4	67.2	67.4
62.5°	60.5	60.1	59.3	58.5	58.2	57.9	57.2	56.9	56.6	56.1	55.3
65°	51.2	50.2	49.3	48.7	48.3	47.6	47.2	46.6	45.8	45.5	44.7
67.5°	41.9	40.9	39.9	39.5	39.1	38.7	38.0	37.3	36.3	35.2	34.2
70°	33.7	32.4	31.9	30.8	30.5	29.9	29.0	28.3	27.3	26.0	25.1
72.5°	25.7	24.9	24.1	23.1	22.4	22.0	21.2	20.0	18.9	18.2	17.3
75°	18.5	18.1	17.0	15.9	15.6	15.0	14.1	13.4	12.5	11.4	10.6
77.5°	12.5	11.7	11.0	10.0	9.7	9.2	8.6	7.9	7.4	6.7	6.1
80°	7.4	6.7	6.3	5.6	5.3	5.0	4.6	4.0	3.6	3.3	3.2
82.5°	3.6	3.1	2.9	2.5	2.4	2.2	1.9	1.8	1.5	1.5	1.5
85°	1.3	1.0	1.0	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1
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°	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9
2.5°	360.5	360.4	360.2	360.1	360.1	359.9	359.9	359.8	359.8	359.7	359.7
5°	358.0	357.6	357.3	357.0	357.0	356.6	356.3	356.0	355.9	355.9	355.6
7.5°	354.5	354.0	353.4	353.0	352.8	352.1	351.6	351.6	351.0	350.8	350.5
10°	349.9	348.9	348.1	347.7	347.1	346.7	346.0	345.6	345.2	344.5	344.3
12.5°	343.7	343.0	341.7	341.1	340.9	340.0	338.9	338.4	338.2	337.7	337.2
15°	336.6	335.0	333.9	333.2	333.2	331.8	331.3	330.4	329.9	329.5	329.3
17.5°	327.4	325.8	324.7	323.7	323.5	322.4	321.5	321.2	320.5	320.8	320.1
20°	315.5	314.3	313.4	312.2	312.2	311.5	311.2	310.5	310.2	310.0	310.2
22.5°	302.9	301.3	299.9	299.8	299.8	298.8	298.7	298.6	298.0	298.4	298.3
25°	288.0	286.9	286.0	285.9	285.9	285.3	284.8	285.1	285.5	285.3	285.8
27.5°	272.5	271.4	271.1	271.0	270.7	270.6	270.9	270.9	271.3	271.8	272.4
30°	255.8	255.5	255.1	255.0	254.7	255.4	255.7	256.1	256.0	256.8	257.4
32.5°	239.1	238.6	238.4	238.7	239.1	239.0	239.8	240.1	240.4	241.4	241.8
35°	222.3	222.1	221.9	221.9	222.0	223.1	223.1	224.1	224.6	224.9	226.0
37.5°	204.2	204.7	205.0	205.4	205.6	206.0	206.3	207.2	207.8	208.4	208.9
40°	187.6	187.3	188.6	187.8	188.0	189.3	189.9	189.7	190.5	191.4	191.9
42.5°	169.9	170.4	170.6	170.9	171.6	171.8	172.5	173.4	173.7	174.7	175.0
45°	152.8	153.0	153.5	154.1	154.5	155.6	155.9	156.3	157.1	157.1	157.6
47.5°	136.7	137.2	137.2	138.1	138.8	138.6	139.6	139.9	139.7	140.4	140.7
50°	121.2	122.1	121.9	122.5	122.8	122.9	123.7	124.0	123.5	124.2	124.3
52.5°	106.5	106.9	107.5	107.6	107.3	108.0	107.7	108.3	108.1	108.7	108.1
55°	93.0	92.8	92.8	93.1	92.8	93.1	93.4	92.8	92.4	93.0	92.8
57.5°	79.5	79.5	79.2	79.6	79.2	78.8	78.6	78.2	77.8	77.8	77.7
60°	66.8	66.5	66.0	65.8	65.8	65.1	64.9	64.3	64.3	63.7	63.2
62.5°	55.0	54.3	53.9	53.9	53.6	52.9	51.6	50.8	50.5	49.7	49.6
65°	43.8	43.1	42.7	41.9	41.2	40.9	39.7	38.7	38.3	37.4	37.6
67.5°	33.7	32.6	31.3	30.8	30.3	29.4	29.0	28.3	27.8	27.8	27.8
70°	24.2	23.2	22.0	21.6	21.3	20.5	20.0	19.9	20.3	20.2	20.3
72.5°	16.3	15.3	14.8	14.5	14.2	13.8	14.1	14.2	13.9	14.1	14.2
75°	9.9	9.6	9.2	9.0	9.0	9.2	9.0	9.0	9.2	9.2	9.3
77.5°	5.7	5.4	5.4	5.3	5.6	5.4	5.4	5.4	5.6	5.6	5.6
80°	3.1	3.1	3.1	3.1	3.2	3.1	3.2	3.2	3.2	3.2	3.2
82.5°	1.5	1.5	1.5	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.5
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.1	0.3	0.3	0.3	0.3	0.3	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	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9
2.5°	359.4	359.4	359.4	359.1	359.2	359.2	359.1	359.1
5°	355.5	355.3	355.1	355.1	354.8	355.1	354.9	355.1
7.5°	350.2	350.2	349.8	349.8	349.6	349.5	349.4	349.5
10°	343.9	343.9	343.7	343.5	343.7	343.1	343.1	343.0
12.5°	337.0	336.7	336.4	336.6	336.4	336.0	335.9	336.0
15°	328.9	328.5	328.6	328.2	328.2	328.1	328.3	328.3
17.5°	320.0	319.7	319.4	319.6	319.3	319.4	319.3	319.2
20°	310.1	310.0	310.0	309.4	309.6	309.4	309.6	310.0
22.5°	298.7	298.6	298.7	298.3	298.6	298.6	299.0	299.0
25°	286.2	286.0	286.3	286.4	286.6	287.0	286.6	286.7
27.5°	272.2	272.7	273.1	273.2	273.8	273.4	273.1	273.5
30°	258.2	258.2	258.1	258.6	259.0	259.4	258.7	258.7
32.5°	242.0	242.7	242.7	242.9	243.3	243.3	243.3	243.9
35°	226.6	227.0	227.2	226.6	226.9	226.7	227.7	227.7
37.5°	209.3	209.3	209.5	210.5	210.5	210.0	210.3	210.3
40°	192.9	193.1	192.5	192.8	193.5	193.2	193.5	193.7
42.5°	175.0	175.9	175.4	175.7	175.5	175.7	175.8	175.8
45°	157.8	158.1	158.1	158.3	158.5	158.8	158.0	157.8
47.5°	141.1	141.3	141.7	141.0	141.8	141.0	141.8	140.9
50°	124.3	124.9	124.4	124.7	124.3	124.3	124.2	124.0
52.5°	108.3	108.1	108.1	108.0	108.0	108.3	108.0	108.4
55°	92.3	92.4	92.1	92.0	91.9	92.3	91.9	91.6
57.5°	77.1	77.4	76.8	77.1	76.1	76.6	76.7	76.8
60°	63.1	62.6	62.6	62.1	62.1	62.5	61.9	61.9
62.5°	48.9	49.1	48.7	49.3	49.3	49.8	49.6	49.8
65°	37.4	37.6	37.7	37.7	37.7	38.6	38.3	37.9
67.5°	28.3	28.4	28.5	28.4	28.8	28.5	28.5	28.7
70°	20.5	20.6	20.7	20.7	20.6	20.7	20.7	20.7
72.5°	14.2	14.3	14.2	14.3	14.5	14.3	14.3	14.5
75°	9.3	9.3	9.2	9.2	9.2	9.2	9.3	9.2
77.5°	5.4	5.6	5.4	5.6	5.6	5.6	5.6	5.6
80°	3.2	3.2	3.2	3.1	3.2	3.2	3.2	3.1
82.5°	1.7	1.7	1.5	1.5	1.7	1.7	1.7	1.7
85°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
87.5°	0.1	0.1	0.1	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)