

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 25/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.25
Actual Amplitude:	0.25
Actual Power:	0.0624999
Distortion 2H-22H:	0.00146142%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	7.0483	end:	4.1087	delta:	-2.9396
P2 start:	7.0253	end:	10.3626	delta:	3.3373
P3 start:	21.1469	end:	18.8868	delta:	-2.2601
P4 start:	21.2554	end:	24.6682	delta:	3.4128
P5 start:	38.7446	end:	41.1132	delta:	2.3687
P6 start:	52.9747	end:	55.8913	delta:	2.9165
P7 start:	67.0484	end:	70.3626	delta:	3.3142
P8 start:	81.1469	end:	84.6682	delta:	3.5213

H3: 4.04752e-07	H19: -9.15485e-06	H19f: -4.81834e-07
H5: 4.79631e-06	H21: 3.4693e-07	H21f: 1.65205e-08
H7: -1.21426e-06	H23: 2.13815e-06	H23f: 9.29629e-08
H9: 1.01188e-07	H25: -1.58739	H25f: -0.0634957
H11: -3.44959e-06	H27: -5.62156e-07	H27f: -2.08206e-08
H13: 9.38714e-06	H29: -0.36955	H29f: -0.0127431
H15: -6.07128e-07	H31: -0.202473	H31f: -0.00653137
H17: 1.78567e-07	H33: -9.19891e-08	H33f: -2.78755e-09

c2sd = -1.6311
c2ed = 1.516
c3sd = 0.0919
c3ed = -2.726
c4sd = -2.1318
c4ed = 0.7232
c5sd = 2.1318
c5ed = 2.726
varx = 6.4954%.

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Desired Amplitude:	0.26
Actual Amplitude:	0.26
Actual Power:	0.0676
Distortion 2H-22H:	0.00181679%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.979	end: 4.0535	delta: -2.9255
P2 start: 7.0863	end: 10.4261	delta: 3.3398
P3 start: 21.0749	end: 18.8395	delta: -2.2355
P4 start: 21.3018	end: 24.7379	delta: 3.4361
P5 start: 38.6982	end: 41.1605	delta: 2.4623
P6 start: 52.9137	end: 55.9465	delta: 3.0328
P7 start: 66.979	end: 70.4261	delta: 3.4471
P8 start: 81.0749	end: 84.7378	delta: 3.6629

H3: 2.91888e-07	H19: -8.97173e-06	H19f: -4.72196e-07
H5: 8.23126e-06	H21: -5.0038e-07	H21f: -2.38276e-08
H7: -6.12966e-06	H23: -8.62975e-07	H23f: -3.75206e-08
H9: -4.21617e-07	H25: -1.57658	H25f: -0.0630631
H11: -4.59061e-06	H27: -4.32427e-08	H27f: -1.60158e-09
H13: 1.09795e-05	H29: -0.362558	H29f: -0.012502
H15: -5.25399e-07	H31: -0.19974	H31f: -0.00644322
H17: 1.04736e-06	H33: 8.1375e-07	H33f: 2.46591e-08

c2sd = -1.6385
c2ed = 1.4997
c3sd = 0.1056
c3ed = -2.7207
c4sd = -2.138
c4ed = 0.7072
c5sd = 2.138
c5ed = 2.7207
varx = 6.4477%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.27
Actual Amplitude:	0.27
Actual Power:	0.0729001
Distortion 2H-22H:	0.000878274%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.9095	end: 3.9984	delta: -2.9111
P2 start: 7.1475	end: 10.4894	delta: 3.342
P3 start: 21.0028	end: 18.7921	delta: -2.2107
P4 start: 21.348	end: 24.8074	delta: 3.4594
P5 start: 38.652	end: 41.2079	delta: 2.5558
P6 start: 52.8525	end: 56.0016	delta: 3.149
P7 start: 66.9095	end: 70.4894	delta: 3.5799
P8 start: 81.0028	end: 84.8074	delta: 3.8046

H3: 9.36925e-08	H19: -4.03864e-06	H19f: -2.1256e-07
H5: 4.49724e-06	H21: 3.21232e-07	H21f: 1.52967e-08
H7: -3.37293e-06	H23: -1.41761e-06	H23f: -6.16352e-08
H9: -4.68463e-07	H25: -1.56538	H25f: -0.0626153
H11: -4.24172e-06	H27: 5.82976e-07	H27f: 2.15917e-08
H13: 2.39997e-06	H29: -0.355342	H29f: -0.0122532
H15: -2.43601e-07	H31: -0.196941	H31f: -0.00635292
H17: 1.7526e-06	H33: 4.25875e-07	H33f: 1.29053e-08

c2sd = -1.6851
c2ed = 1.4377
c3sd = 0.168
c3ed = -2.6854
c4sd = -2.1745
c4ed = 0.6422
c5sd = 2.1745
c5ed = 2.6854
varx = 6.3983%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.28
Actual Amplitude:	0.28
Actual Power:	0.0783999
Distortion 2H-22H:	0.000184699%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.8398	end: 3.9435	delta: -2.8963
P2 start: 7.2087	end: 10.5526	delta: 3.3439
P3 start: 20.9306	end: 18.7449	delta: -2.1857
P4 start: 21.3941	end: 24.8769	delta: 3.4828
P5 start: 38.6059	end: 41.2551	delta: 2.6492
P6 start: 52.7913	end: 56.0565	delta: 3.2652
P7 start: 66.8398	end: 70.5527	delta: 3.7128
P8 start: 80.9306	end: 84.8769	delta: 3.9463

H3: -2.71039e-07	H19: -1.18401e-06	H19f: -6.23165e-08
H5: 5.96287e-07	H21: 1.80693e-07	H21f: 8.60442e-09
H7: -7.35678e-07	H23: -3.06392e-07	H23f: -1.33214e-08
H9: 9.03465e-08	H25: -1.55381	H25f: -0.0621525
H11: -6.40638e-07	H27: -8.0308e-07	H27f: -2.97437e-08
H13: -6.46325e-07	H29: -0.347901	H29f: -0.0119966
H15: 5.42079e-08	H31: -0.194042	H31f: -0.00625941
H17: 2.71039e-07	H33: 4.59946e-07	H33f: 1.39377e-08

c2sd = -1.6257
c2ed = 1.4987
c3sd = 0.0982
c3ed = -2.7312
c4sd = -2.1298
c4ed = 0.7093
c5sd = 2.1298
c5ed = 2.7312
varx = 6.3474%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.29
Actual Amplitude:	0.29
Actual Power:	0.0841
Distortion 2H-22H:	0.000131779%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.77	end: 3.8888	delta: -2.8812
P2 start: 7.2701	end: 10.6157	delta: 3.3456
P3 start: 20.8584	end: 18.6978	delta: -2.1606
P4 start: 21.4402	end: 24.9465	delta: 3.5063
P5 start: 38.5598	end: 41.3022	delta: 2.7425
P6 start: 52.7299	end: 56.1112	delta: 3.3813
P7 start: 66.77	end: 70.6157	delta: 3.8458
P8 start: 80.8584	end: 84.9465	delta: 4.0881

H3: 2.61693e-07	H19: 5.50933e-08	H19f: 2.89965e-09
H5: -1.09911e-06	H21: 0.0	H21f: 0.0
H7: 3.73847e-07	H23: 2.27559e-08	H23f: 9.89388e-10
H9: 3.19847e-07	H25: -1.54187	H25f: -0.0616749
H11: -4.28225e-07	H27: -6.78464e-07	H27f: -2.51283e-08
H13: 1.40912e-07	H29: -0.340243	H29f: -0.0117325
H15: 1.04677e-07	H31: -0.191042	H31f: -0.00616265
H17: -1.53937e-08	H33: -3.17204e-07	H33f: -9.61224e-09

c2sd = -1.6215
c2ed = 1.4952
c3sd = 0.0974
c3ed = -2.7344
c4sd = -2.1276
c4ed = 0.7074
c5sd = 2.1276
c5ed = 2.7344
varx = 6.2949%.

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Desired Amplitude:	0.3
Actual Amplitude:	0.3
Actual Power:	0.09
Distortion 2H-22H:	0.000576102%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.6999	end: 3.8343	delta: -2.8657
P2 start: 7.3316	end: 10.6787	delta: 3.3471
P3 start: 20.786	end: 18.6507	delta: -2.1352
P4 start: 21.4863	end: 25.0161	delta: 3.5298
P5 start: 38.5137	end: 41.3493	delta: 2.8355
P6 start: 52.6684	end: 56.1657	delta: 3.4973
P7 start: 66.7	end: 70.6787	delta: 3.9788
P8 start: 80.786	end: 85.0161	delta: 4.2301

H3: 4.21617e-07	H19: -2.7161e-06	H19f: -1.42953e-07
H5: 1.51782e-06	H21: 8.43233e-07	H21f: 4.0154e-08
H7: -1.4094e-06	H23: 1.75979e-07	H23f: 7.65126e-09
H9: -3.65401e-07	H25: -1.52957	H25f: -0.0611828
H11: -6.89918e-07	H27: -1.87385e-07	H27f: -6.94019e-09
H13: 4.35887e-06	H29: -0.332373	H29f: -0.0114611
H15: -1.68647e-07	H31: -0.187937	H31f: -0.00606248
H17: -9.82118e-07	H33: 1.68647e-07	H33f: 5.1105e-09

c2sd = -1.6608
c2ed = 1.4407
c3sd = 0.151
c3ed = -2.7041
c4sd = -2.1589
c4ed = 0.651
c5sd = 2.1589
c5ed = 2.7041
varx = 6.2409%.

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Desired Amplitude:	0.31
Actual Amplitude:	0.31
Actual Power:	0.0961002
Distortion 2H-22H:	0.000250731%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.6298	end: 3.7799	delta: -2.8499
P2 start: 7.3932	end: 10.7415	delta: 3.3483
P3 start: 20.7134	end: 18.6037	delta: -2.1098
P4 start: 21.5321	end: 25.0856	delta: 3.5535
P5 start: 38.4679	end: 41.3963	delta: 2.9284
P6 start: 52.6068	end: 56.2201	delta: 3.6133
P7 start: 66.6298	end: 70.7415	delta: 4.1118
P8 start: 80.7134	end: 85.0856	delta: 4.3722

H3: 0.0	H19: -7.60198e-07	H19f: -4.00104e-08
H5: 1.76263e-06	H21: -8.16031e-07	H21f: -3.88586e-08
H7: -1.08416e-06	H23: 7.6636e-07	H23f: 3.332e-08
H9: -1.90407e-07	H25: -1.51691	H25f: -0.0606762
H11: -1.78043e-07	H27: 9.06702e-08	H27f: 3.35815e-09
H13: 0.0	H29: -0.324299	H29f: -0.0111827
H15: -2.28489e-07	H31: -0.184754	H31f: -0.00595982
H17: 2.30409e-07	H33: 2.81902e-07	H33f: 8.54248e-09

c2sd = -1.5571
c2ed = 1.5527
c3sd = 0.0258
c3ed = -2.7835
c4sd = -2.0807
c4ed = 0.7732
c5sd = 2.0807
c5ed = 2.7835
varx = 6.1854%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.32
Actual Amplitude:	0.32
Actual Power:	0.1024
Distortion 2H-22H:	0.000179596%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	6.5594	end:	3.7257	delta:	-2.8337
P2 start:	7.455	end:	10.8042	delta:	3.3493
P3 start:	20.6408	end:	18.5568	delta:	-2.0841
P4 start:	21.578	end:	25.1551	delta:	3.5772
P5 start:	38.4221	end:	41.4432	delta:	3.0212
P6 start:	52.545	end:	56.2743	delta:	3.7292
P7 start:	66.5594	end:	70.8042	delta:	4.2448
P8 start:	80.6408	end:	85.1551	delta:	4.5143

H3: 7.90531e-08	H19: -2.49641e-07	H19f: -1.3139e-08
H5: 9.96069e-07	H21: -2.25866e-08	H21f: -1.07555e-09
H7: -4.74319e-07	H23: 5.36186e-07	H23f: 2.33125e-08
H9: 5.27021e-08	H25: -1.50389	H25f: -0.0601556
H11: -7.54598e-07	H27: 3.51347e-07	H27f: 1.30129e-08
H13: 8.93908e-07	H29: -0.316025	H29f: -0.0108974
H15: 4.58508e-07	H31: -0.18148	H31f: -0.00585421
H17: -2.6506e-07	H33: 6.61172e-07	H33f: 2.00355e-08

c2sd = -1.5465
c2ed = 1.5557
c3sd = 0.0172
c3ed = -2.7911
c4sd = -2.0742
c4ed = 0.7788
c5sd = 2.0742
c5ed = 2.7911
varx = 6.1284%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.33
Actual Amplitude:	0.33
Actual Power:	0.1089
Distortion 2H-22H:	0.00061623%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	6.4888	end:	3.6718	delta:	-2.8171
P2 start:	7.5168	end:	10.8668	delta:	3.3499
P3 start:	20.5681	end:	18.5099	delta:	-2.0581
P4 start:	21.6237	end:	25.2247	delta:	3.601
P5 start:	38.3763	end:	41.4901	delta:	3.1138
P6 start:	52.4832	end:	56.3283	delta:	3.8451
P7 start:	66.4888	end:	70.8668	delta:	4.3779
P8 start:	80.5681	end:	85.2247	delta:	4.6566

H3: 2.29973e-07	H19: -3.86112e-06	H19f: -2.03217e-07
H5: 1.05787e-06	H21: -1.75217e-07	H21f: -8.34368e-09
H7: -7.88478e-07	H23: 2.35972e-06	H23f: 1.02597e-07
H9: -2.55525e-08	H25: -1.49053	H25f: -0.059621
H11: -1.9025e-06	H27: -3.91805e-07	H27f: -1.45113e-08
H13: 2.58277e-06	H29: -0.307552	H29f: -0.0106052
H15: 5.82597e-07	H31: -0.17811	H31f: -0.00574548
H17: 2.24562e-06	H33: 2.36942e-07	H33f: 7.18005e-09

c2sd = -1.6041
c2ed = 1.4792
c3sd = 0.0937
c3ed = -2.7463
c4sd = -2.1201
c4ed = 0.6991
c5sd = 2.1201
c5ed = 2.7463
varx = 6.0699%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.34
Actual Amplitude:	0.34
Actual Power:	0.1156
Distortion 2H-22H:	0.000916096%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.4181	end: 3.618	delta: -2.8001
P2 start: 7.5788	end: 10.9292	delta: 3.3503
P3 start: 20.4952	end: 18.4632	delta: -2.032
P4 start: 21.6693	end: 25.2942	delta: 3.6249
P5 start: 38.3307	end: 41.5368	delta: 3.2062
P6 start: 52.4212	end: 56.382	delta: 3.9609
P7 start: 66.4181	end: 70.9292	delta: 4.5111
P8 start: 80.4952	end: 85.2942	delta: 4.799

H3: -1.48806e-07	H19: -6.15586e-06	H19f: -3.23993e-07
H5: 2.36601e-06	H21: 0.0	H21f: 0.0
H7: -3.02926e-06	H23: 1.97976e-06	H23f: 8.60767e-08
H9: -5.70423e-07	H25: -1.47682	H25f: -0.0590728
H11: -1.25809e-06	H27: -2.64544e-07	H27f: -9.79792e-09
H13: 4.9621e-06	H29: -0.298893	H29f: -0.0103067
H15: -3.12492e-07	H31: -0.174653	H31f: -0.00563398
H17: 8.27186e-07	H33: 3.38195e-07	H33f: 1.02483e-08

c2sd = -1.645
c2ed = 1.4217
c3sd = 0.1494
c3ed = -2.7141
c4sd = -2.1534
c4ed = 0.64
c5sd = 2.1534
c5ed = 2.7141
varx = 6.0101%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 35/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.35
Actual Amplitude:	0.35
Actual Power:	0.1225
Distortion 2H-22H:	0.000127875%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.3472	end: 3.5644	delta: -2.7828
P2 start: 7.6409	end: 10.9914	delta: 3.3505
P3 start: 20.4221	end: 18.4164	delta: -2.0057
P4 start: 21.7148	end: 25.3637	delta: 3.6489
P5 start: 38.2852	end: 41.5836	delta: 3.2984
P6 start: 52.3591	end: 56.4356	delta: 4.0766
P7 start: 66.3472	end: 70.9914	delta: 4.6442
P8 start: 80.4221	end: 85.3637	delta: 4.9416

H3: 0.0	H19: -4.10839e-07	H19f: -2.16231e-08
H5: 3.90297e-07	H21: -3.3041e-07	H21f: -1.57338e-08
H7: -2.16831e-07	H23: -6.97631e-07	H23f: -3.03318e-08
H9: 4.57755e-07	H25: -1.46278	H25f: -0.0585112
H11: -3.54815e-07	H27: 2.73047e-07	H27f: 1.01129e-08
H13: 5.1706e-07	H29: -0.290062	H29f: -0.0100021
H15: -5.78217e-08	H31: -0.171134	H31f: -0.00552046
H17: 2.55096e-07	H33: -3.41674e-07	H33f: -1.03537e-08

c2sd = -1.5533
c2ed = 1.5185
c3sd = 0.0394
c3ed = -2.7836
c4sd = -2.0852
c4ed = 0.7465
c5sd = 2.0852
c5ed = 2.7836
varx = 5.9489%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.36
Actual Amplitude:	0.36
Actual Power:	0.1296
Distortion 2H-22H:	0.000608924%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.276	end: 3.511	delta: -2.765
P2 start: 7.7032	end: 11.0535	delta: 3.3503
P3 start: 20.349	end: 18.3698	delta: -1.9791
P4 start: 21.7602	end: 25.4333	delta: 3.673
P5 start: 38.2398	end: 41.6302	delta: 3.3904
P6 start: 52.2968	end: 56.489	delta: 4.1922
P7 start: 66.276	end: 71.0535	delta: 4.7775
P8 start: 80.349	end: 85.4333	delta: 5.0843

H3: -1.40539e-07	H19: -4.21617e-06	H19f: -2.21903e-07
H5: 1.4335e-06	H21: -6.22386e-07	H21f: -2.96374e-08
H7: -1.566e-06	H23: -4.39948e-07	H23f: -1.91282e-08
H9: 7.02694e-08	H25: -1.44841	H25f: -0.0579364
H11: -4.40781e-07	H27: 1.87385e-07	H27f: 6.94019e-09
H13: 2.36754e-06	H29: -0.281044	H29f: -0.00969116
H15: 3.37293e-07	H31: -0.167507	H31f: -0.00540344
H17: 2.87691e-06	H33: 3.57735e-07	H33f: 1.08405e-08

c2sd = -1.5499
c2ed = 1.5119
c3sd = 0.0399
c3ed = -2.7849
c4sd = -2.085
c4ed = 0.7424
c5sd = 2.085
c5ed = 2.7849
varx = 5.8864%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude: 0.37
 Actual Amplitude: 0.37
 Actual Power: 0.1369
 Distortion 2H-22H: 0.00049271717%
 First strong harmonics: 25 and 29
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: Yes

P1 start: 6.2047 end: 3.4579 delta: -2.7468
 P2 start: 7.7656 end: 11.1154 delta: 3.3499
 P3 start: 20.2756 end: 18.3233 delta: -1.9523
 P4 start: 21.8056 end: 25.5028 delta: 3.6972
 P5 start: 38.1944 end: 41.6767 delta: 3.4822
 P6 start: 52.2344 end: 56.5421 delta: 4.3077
 P7 start: 66.2047 end: 71.1154 delta: 4.9108
 P8 start: 80.2756 end: 85.5028 delta: 5.2271

H3: -6.83703e-08	H19: -2.95791e-06	H19f: -1.5568e-07
H5: 1.18964e-06	H21: 1.95344e-07	H21f: 9.30208e-09
H7: -2.34412e-07	H23: 1.28417e-06	H23f: 5.58336e-08
H9: -4.55802e-08	H25: -1.43371	H25f: -0.0573485
H11: -1.08149e-06	H27: 4.25415e-07	H27f: 1.57561e-08
H13: 3.32911e-06	H29: -0.271862	H29f: -0.00937456
H15: 2.87155e-07	H31: -0.163811	H31f: -0.00528423
H17: 1.68915e-07	H33: 3.23205e-07	H33f: 9.79409e-09

c2sd = -1.5131
 c2ed = 1.5441
 c3sd = -0.0015
 c3ed = -2.8118
 c4sd = -2.0593
 c4ed = 0.7799
 c5sd = 2.0593
 c5ed = 2.8118
 varx = 5.8226%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.38
Actual Amplitude:	0.38
Actual Power:	0.1444
Distortion 2H-22H:	0.000264127%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.1331	end: 3.4049	delta: -2.7282
P2 start: 7.8281	end: 11.1772	delta: 3.3491
P3 start: 20.2021	end: 18.2769	delta: -1.9252
P4 start: 21.8508	end: 25.5723	delta: 3.7215
P5 start: 38.1492	end: 41.7231	delta: 3.5738
P6 start: 52.1719	end: 56.5951	delta: 4.4232
P7 start: 66.1331	end: 71.1772	delta: 5.0441
P8 start: 80.2021	end: 85.5723	delta: 5.3701

H3: 5.99139e-07	H19: -2.18633e-06	H19f: -1.1507e-07
H5: 9.1868e-07	H21: 3.04325e-07	H21f: 1.44917e-08
H7: -2.56774e-07	H23: -4.51525e-07	H23f: -1.96315e-08
H9: -3.10665e-07	H25: -1.4187	H25f: -0.0567481
H11: 1.08934e-07	H27: -8.87614e-08	H27f: -3.28746e-09
H13: 6.29865e-07	H29: -0.262519	H29f: -0.00905238
H15: 3.99426e-08	H31: -0.160033	H31f: -0.00516237
H17: -3.52435e-07	H33: 2.42077e-08	H33f: 7.33565e-10

c2sd = -1.5007
c2ed = 1.5475
c3sd = -0.0124
c3ed = -2.8198
c4sd = -2.0525
c4ed = 0.7868
c5sd = 2.0525
c5ed = 2.8198
varx = 5.7575%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.39
Actual Amplitude:	0.39
Actual Power:	0.1521
Distortion 2H-22H:	0.000381838%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 6.0613	end: 3.3522	delta: -2.7091
P2 start: 7.8908	end: 11.2388	delta: 3.348
P3 start: 20.1285	end: 18.2306	delta: -1.8979
P4 start: 21.8959	end: 25.6418	delta: 3.7459
P5 start: 38.1042	end: 41.7694	delta: 3.6652
P6 start: 52.1092	end: 56.6478	delta: 4.5385
P7 start: 66.0613	end: 71.2388	delta: 5.1775
P8 start: 80.1285	end: 85.6418	delta: 5.5133

H3: 1.94592e-07	H19: -2.25317e-06	H19f: -1.18588e-07
H5: 2.1016e-06	H21: -9.2663e-08	H21f: -4.41252e-09
H7: -4.16983e-07	H23: -5.07632e-08	H23f: -2.20709e-09
H9: 4.32427e-08	H25: -1.40338	H25f: -0.0561352
H11: -6.36847e-07	H27: -1.29728e-07	H27f: -4.80475e-09
H13: 1.96089e-06	H29: -0.253018	H29f: -0.00872477
H15: 4.92967e-07	H31: -0.156174	H31f: -0.00503786
H17: 6.0667e-07	H33: 1.76902e-07	H33f: 5.36067e-09

c2sd = -1.5329
c2ed = 1.4987
c3sd = 0.0325
c3ed = -2.7933
c4sd = -2.0802
c4ed = 0.7378
c5sd = 2.0802
c5ed = 2.7933
varx = 5.6912%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 40/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.4
Actual Amplitude:	0.399999
Actual Power:	0.159999
Distortion 2H-22H:	0.000431252%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.9893	end: 3.2998	delta: -2.6895
P2 start: 7.9536	end: 11.3002	delta: 3.3466
P3 start: 20.0547	end: 18.1844	delta: -1.8703
P4 start: 21.9408	end: 25.7113	delta: 3.7704
P5 start: 38.0592	end: 41.8156	delta: 3.7564
P6 start: 52.0464	end: 56.7002	delta: 4.6538
P7 start: 65.9893	end: 71.3002	delta: 5.3109
P8 start: 80.0547	end: 85.7113	delta: 5.6566

H3: 3.16213e-07	H19: -2.29671e-06	H19f: -1.20879e-07
H5: 1.36604e-06	H21: 1.26485e-07	H21f: 6.02311e-09
H7: -1.16547e-06	H23: 1.13837e-06	H23f: 4.94942e-08
H9: 1.26485e-07	H25: -1.38776	H25f: -0.0555102
H11: -1.22461e-06	H27: 2.24863e-07	H27f: 8.32824e-09
H13: 2.42268e-06	H29: -0.243369	H29f: -0.00839202
H15: 3.92104e-07	H31: -0.152238	H31f: -0.00491091
H17: -1.0714e-06	H33: 2.64469e-07	H33f: 8.01422e-09

c2sd = -1.539
c2ed = 1.4798
c3sd = 0.0448
c3ed = -2.7866
c4sd = -2.0882
c4ed = 0.7211
c5sd = 2.0882
c5ed = 2.7866
varx = 5.6237%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.41
Actual Amplitude:	0.41
Actual Power:	0.1681
Distortion 2H-22H:	0.000317074%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.9171	end: 3.2476	delta: -2.6695
P2 start: 8.0166	end: 11.3615	delta: 3.3449
P3 start: 19.9807	end: 18.1383	delta: -1.8424
P4 start: 21.9857	end: 25.7808	delta: 3.7951
P5 start: 38.0143	end: 41.8617	delta: 3.8473
P6 start: 51.9834	end: 56.7524	delta: 4.769
P7 start: 65.9171	end: 71.3615	delta: 5.4444
P8 start: 79.9807	end: 85.7808	delta: 5.8

H3: 6.78701e-07	H19: -1.79255e-06	H19f: -9.43447e-08
H5: -1.59186e-06	H21: 2.468e-07	H21f: 1.17524e-08
H7: -6.34629e-07	H23: 2.41435e-07	H23f: 1.04972e-08
H9: -6.17e-08	H25: -1.37183	H25f: -0.0548733
H11: 6.56264e-07	H27: -3.01645e-07	H27f: -1.1172e-08
H13: 2.27816e-07	H29: -0.233577	H29f: -0.00805436
H15: 1.6042e-07	H31: -0.148229	H31f: -0.00478157
H17: 1.67679e-06	H33: -3.36546e-08	H33f: -1.01984e-09

c2sd = -1.4223
c2ed = 1.6036
c3sd = -0.0963
c3ed = -2.8739
c4sd = -2.0021
c4ed = 0.8578
c5sd = 2.0021
c5ed = 2.8739
varx = 5.5551%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 42/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.42
Actual Amplitude:	0.42
Actual Power:	0.1764
Distortion 2H-22H:	0.000303907%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.8446	end: 3.1956	delta: -2.6489
P2 start: 8.0797	end: 11.4225	delta: 3.3428
P3 start: 19.9065	end: 18.0924	delta: -1.8141
P4 start: 22.0304	end: 25.8503	delta: 3.8199
P5 start: 37.9696	end: 41.9076	delta: 3.938
P6 start: 51.9203	end: 56.8044	delta: 4.884
P7 start: 65.8446	end: 71.4225	delta: 5.5779
P8 start: 79.9065	end: 85.8503	delta: 5.9437

H3: 1.20462e-07	H19: -1.36946e-06	H19f: -7.20769e-08
H5: 3.25247e-07	H21: -5.16265e-08	H21f: -2.45841e-09
H7: 4.64639e-07	H23: 1.72837e-07	H23f: 7.51464e-09
H9: -1.20462e-07	H25: -1.35562	H25f: -0.0542248
H11: -1.28128e-06	H27: 3.07847e-07	H27f: 1.14017e-08
H13: 1.98762e-06	H29: -0.223652	H29f: -0.00771214
H15: 3.73432e-07	H31: -0.144144	H31f: -0.00464982
H17: 1.11604e-06	H33: 1.75217e-07	H33f: 5.30961e-09

c2sd = -1.4752
c2ed = 1.5295
c3sd = -0.0255
c3ed = -2.8308
c4sd = -2.0464
c4ed = 0.7823
c5sd = 2.0464
c5ed = 2.8308
varx = 5.4854%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.43
Actual Amplitude:	0.43
Actual Power:	0.1849
Distortion 2H-22H:	0.000245084%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.7718	end: 3.144	delta: -2.6278
P2 start: 8.1429	end: 11.4834	delta: 3.3404
P3 start: 19.8322	end: 18.0466	delta: -1.7856
P4 start: 22.075	end: 25.9198	delta: 3.8447
P5 start: 37.925	end: 41.9534	delta: 4.0285
P6 start: 51.8571	end: 56.856	delta: 4.999
P7 start: 65.7718	end: 71.4834	delta: 5.7116
P8 start: 79.8322	end: 85.9198	delta: 6.0876

H3: 6.47133e-07	H19: -1.57913e-06	H19f: -8.3112e-08
H5: -1.41193e-07	H21: -3.02556e-07	H21f: -1.44074e-08
H7: -6.30324e-07	H23: -2.76246e-07	H23f: -1.20107e-08
H9: 7.84403e-08	H25: -1.33912	H25f: -0.053565
H11: 3.20892e-07	H27: 1.30734e-07	H27f: 4.842e-09
H13: 1.52054e-06	H29: -0.213598	H29f: -0.00736543
H15: 5.88303e-08	H31: -0.139987	H31f: -0.00451569
H17: 2.90691e-07	H33: 1.28357e-07	H33f: 3.8896e-09

c2sd = -1.4677
c2ed = 1.5255
c3sd = -0.0302
c3ed = -2.8339
c4sd = -2.0445
c4ed = 0.7822
c5sd = 2.0445
c5ed = 2.8339
varx = 5.4146%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.44
Actual Amplitude:	0.44
Actual Power:	0.1936
Distortion 2H-22H:	0.000217371%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.6988	end: 3.0926	delta: -2.6062
P2 start: 8.2064	end: 11.544	delta: 3.3376
P3 start: 19.7576	end: 18.0009	delta: -1.7567
P4 start: 22.1195	end: 25.9893	delta: 3.8698
P5 start: 37.8805	end: 41.9991	delta: 4.1187
P6 start: 51.7936	end: 56.9074	delta: 5.1138
P7 start: 65.6988	end: 71.544	delta: 5.8452
P8 start: 79.7576	end: 85.9893	delta: 6.2317

H3: 6.32425e-07	H19: -9.07786e-07	H19f: -4.77782e-08
H5: 7.58909e-07	H21: -1.4784e-07	H21f: -7.03998e-09
H7: -9.11677e-07	H23: 3.44959e-07	H23f: 1.49982e-08
H9: -3.83288e-08	H25: -1.32235	H25f: -0.052894
H11: -5.17438e-07	H27: -1.27763e-08	H27f: -4.73195e-10
H13: 1.28696e-06	H29: -0.203422	H29f: -0.00701455
H15: -3.44959e-08	H31: -0.135758	H31f: -0.00437928
H17: 1.62334e-07	H33: 6.06291e-07	H33f: 1.83725e-08

c2sd = -1.4114
c2ed = 1.5778
c3sd = -0.0958
c3ed = -2.8741
c4sd = -2.0055
c4ed = 0.8427
c5sd = 2.0055
c5ed = 2.8741
varx = 5.3428%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 45/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.45
Actual Amplitude:	0.45
Actual Power:	0.2025
Distortion 2H-22H:	0.00012016%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.6255	end: 3.0415	delta: -2.584
P2 start: 8.27	end: 11.6044	delta: 3.3345
P3 start: 19.6828	end: 17.9553	delta: -1.7275
P4 start: 22.1639	end: 26.0588	delta: 3.8949
P5 start: 37.8361	end: 42.0447	delta: 4.2086
P6 start: 51.73	end: 56.9585	delta: 5.2285
P7 start: 65.6255	end: 71.6044	delta: 5.979
P8 start: 79.6828	end: 86.0588	delta: 6.376

H3: -1.12431e-07	H19: -9.76375e-07	H19f: -5.13882e-08
H5: 3.71023e-07	H21: 0.0	H21f: 0.0
H7: 2.65016e-07	H23: -1.90644e-07	H23f: -8.28887e-09
H9: -3.7477e-08	H25: -1.30531	H25f: -0.0522124
H11: 1.53315e-08	H27: 4.99694e-08	H27f: 1.85072e-09
H13: 2.46484e-07	H29: -0.193136	H29f: -0.00665987
H15: 1.91133e-07	H31: -0.131463	H31f: -0.00424074
H17: 3.67054e-07	H33: 8.17681e-08	H33f: 2.47782e-09

c2sd = -1.4081
c2ed = 1.568
c3sd = -0.0952
c3ed = -2.8734
c4sd = -2.0074
c4ed = 0.8369
c5sd = 2.0074
c5ed = 2.8734
varx = 5.27%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.46
Actual Amplitude:	0.46
Actual Power:	0.2116
Distortion 2H-22H:	0.00013891%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.5519	end: 2.9907	delta: -2.5612
P2 start: 8.3337	end: 11.6647	delta: 3.3309
P3 start: 19.6078	end: 17.9099	delta: -1.6979
P4 start: 22.2082	end: 26.1283	delta: 3.9202
P5 start: 37.7918	end: 42.0901	delta: 4.2982
P6 start: 51.6663	end: 57.0093	delta: 5.3431
P7 start: 65.5519	end: 71.6647	delta: 6.1128
P8 start: 79.6078	end: 86.1283	delta: 6.5205

H3: -2.19974e-07	H19: -5.38357e-07	H19f: -2.83346e-08
H5: 9.56886e-07	H21: -2.82823e-07	H21f: -1.34678e-08
H7: -6.36353e-07	H23: 2.15192e-07	H23f: 9.35616e-09
H9: -2.19974e-07	H25: -1.28801	H25f: -0.0515203
H11: -5.99929e-08	H27: 4.88831e-08	H27f: 1.81048e-09
H13: 2.66507e-07	H29: -0.182741	H29f: -0.0063014
H15: 5.49934e-08	H31: -0.127097	H31f: -0.0040999
H17: -1.35866e-07	H33: 2.79967e-07	H33f: 8.48384e-09

c2sd = -1.4117
c2ed = 1.5498
c3sd = -0.086
c3ed = -2.8671
c4sd = -2.0148
c4ed = 0.8222
c5sd = 2.0148
c5ed = 2.8671
varx = 5.1963%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.47
Actual Amplitude:	0.47
Actual Power:	0.2209
Distortion 2H-22H:	9.79246e-05%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.478	end: 2.9402	delta: -2.5378
P2 start: 8.3977	end: 11.7246	delta: 3.3269
P3 start: 19.5326	end: 17.8647	delta: -1.668
P4 start: 22.2523	end: 26.1979	delta: 3.9456
P5 start: 37.7478	end: 42.1353	delta: 4.3876
P6 start: 51.6023	end: 57.0598	delta: 5.4575
P7 start: 65.478	end: 71.7246	delta: 6.2466
P8 start: 79.5326	end: 86.1979	delta: 6.6652

H3: 1.07647e-07	H19: -3.2294e-07	H19f: -1.69969e-08
H5: 3.2294e-08	H21: -2.15294e-07	H21f: -1.02521e-08
H7: -2.30672e-07	H23: -3.51022e-07	H23f: -1.52618e-08
H9: 2.15294e-07	H25: -1.27045	H25f: -0.050818
H11: -5.87164e-08	H27: -2.27254e-07	H27f: -8.41683e-09
H13: 1.6147e-07	H29: -0.172248	H29f: -0.00593959
H15: -3.55234e-07	H31: -0.122668	H31f: -0.00395703
H17: 6.45881e-07	H33: -1.95721e-08	H33f: -5.93095e-10

c2sd = -1.3783
c2ed = 1.5742
c3sd = -0.1231
c3ed = -2.8889
c4sd = -1.9942
c4ed = 0.8535
c5sd = 1.9942
c5ed = 2.8889
varx = 5.1217%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.48
Actual Amplitude:	0.48
Actual Power:	0.2304
Distortion 2H-22H:	0.000108032%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	5.4038	end:	2.89	delta:	-2.5138
P2 start:	8.4618	end:	11.7844	delta:	3.3225
P3 start:	19.4572	end:	17.8196	delta:	-1.6376
P4 start:	22.2962	end:	26.2674	delta:	3.9712
P5 start:	37.7038	end:	42.1804	delta:	4.4767
P6 start:	51.5382	end:	57.11	delta:	5.5718
P7 start:	65.4038	end:	71.7844	delta:	6.3806
P8 start:	79.4572	end:	86.2674	delta:	6.8102

H3: 4.21617e-07	H19: -1.49785e-07	H19f: -7.88341e-09
H5: -2.84591e-07	H21: -2.10808e-07	H21f: -1.00385e-08
H7: -2.48453e-07	H23: 7.83657e-07	H23f: 3.4072e-08
H9: 0.0	H25: -1.25265	H25f: -0.0501059
H11: -2.73093e-07	H27: -4.68463e-08	H27f: -1.73505e-09
H13: 2.31078e-07	H29: -0.161663	H29f: -0.0055746
H15: -1.79187e-07	H31: -0.118174	H31f: -0.00381208
H17: -7.44029e-08	H33: 0.0	H33f: 0.0

c2sd = -1.3453
c2ed = 1.5977
c3sd = -0.1597
c3ed = -2.9101
c4sd = -1.9741
c4ed = 0.8842
c5sd = 1.9741
c5ed = 2.9101
varx = 5.0462%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.49
Actual Amplitude:	0.489999
Actual Power:	0.240099
Distortion 2H-22H:	0.000174066%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.3293	end: 2.8402	delta: -2.4891
P2 start: 8.5262	end: 11.8439	delta: 3.3177
P3 start: 19.3815	end: 17.7747	delta: -1.6068
P4 start: 22.3401	end: 26.3369	delta: 3.9969
P5 start: 37.6599	end: 42.2253	delta: 4.5654
P6 start: 51.4738	end: 57.1598	delta: 5.6859
P7 start: 65.3293	end: 71.8439	delta: 6.5146
P8 start: 79.3815	end: 86.3369	delta: 6.9554

H3: 3.61386e-07	H19: -9.45582e-07	H19f: -4.97675e-08
H5: -9.9123e-07	H21: 2.21257e-07	H21f: 1.0536e-08
H7: -3.76137e-07	H23: 5.38712e-08	H23f: 2.34223e-09
H9: -8.60443e-08	H25: -1.2346	H25f: -0.0493842
H11: 2.5344e-07	H27: 0.0	H27f: 0.0
H13: 8.45882e-07	H29: -0.150996	H29f: -0.00520675
H15: 1.44554e-07	H31: -0.113617	H31f: -0.00366506
H17: 1.45769e-07	H33: 3.94239e-07	H33f: 1.19466e-08

c2sd = -1.328
c2ed = 1.6024
c3sd = -0.1765
c3ed = -2.9189
c4sd = -1.9664
c4ed = 0.8949
c5sd = 1.9664
c5ed = 2.9189
varx = 4.97%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 50/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.5
Actual Amplitude:	0.5
Actual Power:	0.25
Distortion 2H-22H:	0.000329518%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.2544	end: 2.7907	delta: -2.4637
P2 start: 8.5907	end: 11.9031	delta: 3.3124
P3 start: 19.3055	end: 17.7299	delta: -1.5755
P4 start: 22.3838	end: 26.4065	delta: 4.0227
P5 start: 37.6162	end: 42.2701	delta: 4.6538
P6 start: 51.4093	end: 57.2093	delta: 5.7999
P7 start: 65.2544	end: 71.9031	delta: 6.6487
P8 start: 79.3055	end: 86.4065	delta: 7.101

H3: 7.5891e-07	H19: -1.07046e-06	H19f: -5.63401e-08
H5: 9.71405e-07	H21: 3.61386e-07	H21f: 1.72088e-08
H7: -1.71297e-06	H23: 6.07128e-07	H23f: 2.63969e-08
H9: 5.0594e-08	H25: -1.21633	H25f: -0.0486531
H11: -4.41548e-07	H27: 1.4616e-07	H27f: 5.41335e-09
H13: 1.92646e-06	H29: -0.14025	H29f: -0.00483622
H15: 2.63089e-07	H31: -0.108998	H31f: -0.00351607
H17: -8.83907e-07	H33: -1.83978e-08	H33f: -5.5751e-10

c2sd = -1.2938
c2ed = 1.6263
c3sd = -0.2146
c3ed = -2.9404
c4sd = -1.9459
c4ed = 0.9266
c5sd = 1.9459
c5ed = 2.9404
varx = 4.893%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.51
Actual Amplitude:	0.51
Actual Power:	0.2601
Distortion 2H-22H:	0.000139275%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.1792	end: 2.7416	delta: -2.4376
P2 start: 8.6554	end: 11.9621	delta: 3.3067
P3 start: 19.2292	end: 17.6854	delta: -1.5439
P4 start: 22.4273	end: 26.476	delta: 4.0487
P5 start: 37.5727	end: 42.3146	delta: 4.7419
P6 start: 51.3446	end: 57.2584	delta: 5.9137
P7 start: 65.1792	end: 71.9621	delta: 6.7828
P8 start: 79.2292	end: 86.476	delta: 7.2468

H3: 1.48806e-07	H19: -6.10887e-07	H19f: -3.2152e-08
H5: -1.48806e-07	H21: 0.0	H21f: 0.0
H7: -4.67676e-07	H23: 4.14069e-07	H23f: 1.8003e-08
H9: -4.9602e-08	H25: -1.19783	H25f: -0.0479131
H11: 5.14057e-07	H27: 2.75566e-07	H27f: 1.02062e-08
H13: 8.01262e-07	H29: -0.129438	H29f: -0.0044634
H15: 3.17453e-07	H31: -0.104324	H31f: -0.00336529
H17: -3.50131e-07	H33: 4.05834e-08	H33f: 1.2298e-09

c2sd = -1.2791
c2ed = 1.6271
c3sd = -0.2284
c3ed = -2.9466
c4sd = -1.9407
c4ed = 0.9337
c5sd = 1.9407
c5ed = 2.9466
varx = 4.8152%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 52/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.52
Actual Amplitude:	0.52
Actual Power:	0.2704
Distortion 2H-22H:	0.000107781%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 5.1037	end: 2.6929	delta: -2.4107
P2 start: 8.7203	end: 12.0207	delta: 3.3004
P3 start: 19.1527	end: 17.641	delta: -1.5117
P4 start: 22.4707	end: 26.5456	delta: 4.0749
P5 start: 37.5293	end: 42.359	delta: 4.8297
P6 start: 51.2797	end: 57.3071	delta: 6.0274
P7 start: 65.1037	end: 72.0207	delta: 6.9171
P8 start: 79.1527	end: 86.5456	delta: 7.3929

H3: 2.91888e-07	H19: -5.53052e-07	H19f: -2.9108e-08
H5: -3.50266e-07	H21: 9.72962e-08	H21f: 4.63315e-09
H7: -1.04246e-07	H23: 5.33014e-07	H23f: 2.31745e-08
H9: -3.89185e-07	H25: -1.17911	H25f: -0.0471645
H11: -9.28736e-08	H27: -2.81078e-07	H27f: -1.04103e-08
H13: 3.70474e-07	H29: -0.118565	H29f: -0.00408844
H15: 1.16755e-07	H31: -0.0995898	H31f: -0.00321257
H17: 1.80284e-07	H33: 2.96311e-07	H33f: 8.97912e-09

c2sd = -1.2755
c2ed = 1.6142
c3sd = -0.2283
c3ed = -2.9438
c4sd = -1.9444
c4ed = 0.9266
c5sd = 1.9444
c5ed = 2.9438
varx = 4.7368%.

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STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 53/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.53
Actual Amplitude:	0.53
Actual Power:	0.2809
Distortion 2H-22H:	0.000247188%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	5.0277	end:	2.6446	delta:	-2.3831
P2 start:	8.7855	end:	12.0791	delta:	3.2936
P3 start:	19.0758	end:	17.5969	delta:	-1.479
P4 start:	22.514	end:	26.6152	delta:	4.1012
P5 start:	37.486	end:	42.4031	delta:	4.9171
P6 start:	51.2145	end:	57.3554	delta:	6.1408
P7 start:	65.0277	end:	72.0791	delta:	7.0514
P8 start:	79.0758	end:	86.6152	delta:	7.5393

H3: 5.72763e-07	H19: -1.1606e-06	H19f: -6.10841e-08
H5: -5.44124e-07	H21: 6.8186e-08	H21f: 3.24695e-09
H7: 4.29572e-07	H23: 1.34475e-06	H23f: 5.84672e-08
H9: -1.27281e-07	H25: -1.16019	H25f: -0.0464075
H11: 5.33711e-07	H27: 1.06067e-08	H27f: 3.92841e-10
H13: 1.33277e-06	H29: -0.107637	H29f: -0.00371163
H15: 1.52737e-07	H31: -0.0947997	H31f: -0.00305806
H17: 2.02151e-07	H33: -1.60547e-07	H33f: -4.86506e-09

c2sd = -1.2231
c2ed = 1.6578
c3sd = -0.2892
c3ed = -2.9782
c4sd = -1.9109
c4ed = 0.9802
c5sd = 1.9109
c5ed = 2.9782
varx = 4.6578%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.54
Actual Amplitude:	0.54
Actual Power:	0.2916
Distortion 2H-22H:	0.000110334%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.9513	end: 2.5967	delta: -2.3546
P2 start: 8.8508	end: 12.1371	delta: 3.2863
P3 start: 18.9987	end: 17.5529	delta: -1.4457
P4 start: 22.5571	end: 26.6848	delta: 4.1277
P5 start: 37.4429	end: 42.4471	delta: 5.0041
P6 start: 51.1492	end: 57.4033	delta: 6.2541
P7 start: 64.9514	end: 72.1371	delta: 7.1858
P8 start: 78.9987	end: 86.6848	delta: 7.6861

H3: -9.36926e-08	H19: -5.76949e-07	H19f: -3.03657e-08
H5: 3.65401e-07	H21: -6.69233e-08	H21f: -3.18682e-09
H7: -2.0077e-07	H23: -5.25493e-07	H23f: -2.28475e-08
H9: -2.81078e-07	H25: -1.14106	H25f: -0.0456424
H11: -1.40539e-07	H27: -6.24617e-08	H27f: -2.3134e-09
H13: 3.89185e-07	H29: -0.0966662	H29f: -0.00333332
H15: 4.12247e-07	H31: -0.0899572	H31f: -0.00290185
H17: -3.3068e-08	H33: 4.30134e-07	H33f: 1.30344e-08

c2sd = -1.2432
c2ed = 1.6163
c3sd = -0.2596
c3ed = -2.9566
c4sd = -1.9334
c4ed = 0.943
c5sd = 1.9334
c5ed = 2.9566
varx = 4.5783%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 55/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.55
Actual Amplitude:	0.55
Actual Power:	0.3025
Distortion 2H-22H:	0.000210349%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.8746	end: 2.5493	delta: -2.3253
P2 start: 8.9164	end: 12.1948	delta: 3.2784
P3 start: 18.9211	end: 17.5092	delta: -1.4119
P4 start: 22.6	end: 26.7544	delta: 4.1544
P5 start: 37.4	end: 42.4908	delta: 5.0908
P6 start: 51.0836	end: 57.4507	delta: 6.3671
P7 start: 64.8746	end: 72.1948	delta: 7.3203
P8 start: 78.9211	end: 86.7544	delta: 7.8332

H3: -4.59945e-08	H19: -1.19102e-06	H19f: -6.26851e-08
H5: 8.27902e-07	H21: -2.23402e-07	H21f: -1.06382e-08
H7: 1.97119e-08	H23: 5.0394e-07	H23f: 2.19104e-08
H9: 9.19891e-08	H25: -1.12174	H25f: -0.0448696
H11: -8.65534e-07	H27: -1.32873e-07	H27f: -4.92123e-09
H13: 1.08264e-06	H29: -0.0856552	H29f: -0.00295363
H15: 9.19891e-08	H31: -0.0850604	H31f: -0.00274388
H17: 2.75967e-07	H33: 4.59945e-08	H33f: 1.39377e-09

c2sd = -1.2145
c2ed = 1.631
c3sd = -0.291
c3ed = -2.9719
c4sd = -1.9188
c4ed = 0.9665
c5sd = 1.9188
c5ed = 2.9719
varx = 4.4982%.

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STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 56/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.56
Actual Amplitude:	0.56
Actual Power:	0.3136
Distortion 2H-22H:	0.000118416%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.7974	end: 2.5023	delta: -2.295
P2 start: 8.9823	end: 12.2522	delta: 3.2699
P3 start: 18.8433	end: 17.4658	delta: -1.3775
P4 start: 22.6428	end: 26.824	delta: 4.1812
P5 start: 37.3572	end: 42.5342	delta: 5.177
P6 start: 51.0177	end: 57.4977	delta: 6.48
P7 start: 64.7974	end: 72.2522	delta: 7.4548
P8 start: 78.8433	end: 86.824	delta: 7.9807

H3: 4.51732e-08	H19: -7.27526e-07	H19f: -3.82909e-08
H5: 5.14974e-07	H21: 1.29066e-07	H21f: 6.14601e-09
H7: -3.87199e-07	H23: 1.06059e-07	H23f: 4.61125e-09
H9: 1.05404e-07	H25: -1.10224	H25f: -0.0440894
H11: -2.46399e-07	H27: 2.10808e-07	H27f: 7.80771e-09
H13: 3.12738e-07	H29: -0.074615	H29f: -0.00257293
H15: 3.43316e-07	H31: -0.0801142	H31f: -0.00258433
H17: -3.74672e-07	H33: 3.73706e-07	H33f: 1.13244e-08

c2sd = -1.1677
c2ed = 1.6662
c3sd = -0.345
c3ed = -3.0008
c4sd = -1.8906
c4ed = 1.0123
c5sd = 1.8906
c5ed = 3.0008
varx = 4.4176%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.57
Actual Amplitude:	0.57
Actual Power:	0.3249
Distortion 2H-22H:	0.000160155%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.7197	end: 2.4558	delta: -2.2638
P2 start: 9.0484	end: 12.3092	delta: 3.2608
P3 start: 18.765	end: 17.4225	delta: -1.3425
P4 start: 22.6854	end: 26.8936	delta: 4.2082
P5 start: 37.3146	end: 42.5775	delta: 5.2629
P6 start: 50.9516	end: 57.5442	delta: 6.5926
P7 start: 64.7197	end: 72.3092	delta: 7.5895
P8 start: 78.765	end: 86.8936	delta: 8.1286

H3: 3.10665e-07	H19: -1.03711e-06	H19f: -5.45846e-08
H5: -7.18967e-07	H21: -2.78964e-07	H21f: -1.3284e-08
H7: 2.66284e-07	H23: 3.58905e-07	H23f: 1.56046e-08
H9: -5.91743e-08	H25: -1.08255	H25f: -0.0433021
H11: 2.66284e-07	H27: -1.57798e-07	H27f: -5.84437e-09
H13: 6.45227e-07	H29: -0.0635525	H29f: -0.00219147
H15: -9.76376e-08	H31: -0.0751167	H31f: -0.00242312
H17: 3.13276e-07	H33: 4.35738e-07	H33f: 1.32042e-08

c2sd = -1.1291
c2ed = 1.6911
c3sd = -0.3889
c3ed = -3.0229
c4sd = -1.8691
c4ed = 1.0475
c5sd = 1.8691
c5ed = 3.0229
varx = 4.3366%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 58/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.58
Actual Amplitude:	0.58
Actual Power:	0.3364
Distortion 2H-22H:	0.000570824%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.6415	end: 2.4098	delta: -2.2317
P2 start: 9.1148	end: 12.3657	delta: 3.251
P3 start: 18.6863	end: 17.3796	delta: -1.3067
P4 start: 22.7279	end: 26.9633	delta: 4.2354
P5 start: 37.2721	end: 42.6204	delta: 5.3483
P6 start: 50.8852	end: 57.5902	delta: 6.7049
P7 start: 64.6415	end: 72.3657	delta: 7.7242
P8 start: 78.6863	end: 86.9633	delta: 8.2769

H3: -2.18078e-07	H19: -3.36069e-06	H19f: -1.76878e-07
H5: 4.18709e-07	H21: -2.3677e-07	H21f: -1.12748e-08
H7: 7.85079e-07	H23: 2.63969e-06	H23f: 1.14769e-07
H9: -2.61693e-07	H25: -1.0627	H25f: -0.042508
H11: -1.77238e-06	H27: 2.71385e-07	H27f: 1.00513e-08
H13: 2.95914e-06	H29: -0.0524741	H29f: -0.00180945
H15: 0.0	H31: -0.0700698	H31f: -0.00226032
H17: -1.20841e-06	H33: 4.04435e-07	H33f: 1.22556e-08

c2sd = -1.1037
c2ed = 1.7
c3sd = -0.4164
c3ed = -3.0344
c4sd = -1.8581
c4ed = 1.066
c5sd = 1.8581
c5ed = 3.0344
varx = 4.2552%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.59
Actual Amplitude:	0.59
Actual Power:	0.3481
Distortion 2H-22H:	0.000164715%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.5628	end: 2.3644	delta: -2.1984
P2 start: 9.1814	end: 12.4219	delta: 3.2405
P3 start: 18.6072	end: 17.3369	delta: -1.2704
P4 start: 22.7702	end: 27.0329	delta: 4.2628
P5 start: 37.2298	end: 42.6631	delta: 5.4333
P6 start: 50.8186	end: 57.6356	delta: 6.817
P7 start: 64.5628	end: 72.4219	delta: 7.8591
P8 start: 78.6072	end: 87.0329	delta: 8.4257

H3: 2.14381e-07	H19: -9.34251e-07	H19f: -4.91711e-08
H5: -2.82983e-07	H21: -6.12518e-08	H21f: -2.91675e-09
H7: -6.43144e-07	H23: 3.57924e-07	H23f: 1.55619e-08
H9: 4.28763e-08	H25: -1.04269	H25f: -0.0417075
H11: 1.16935e-08	H27: 1.23865e-07	H27f: 4.58758e-09
H13: 8.90507e-07	H29: -0.041392	H29f: -0.00142731
H15: -8.57525e-08	H31: -0.0649813	H31f: -0.00209617
H17: 6.05312e-07	H33: 2.96236e-07	H33f: 8.97685e-09

c2sd = -1.0957
c2ed = 1.6879
c3sd = -0.4223
c3ed = -3.0322
c4sd = -1.8607
c4ed = 1.0625
c5sd = 1.8607
c5ed = 3.0322
varx = 4.1736%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 60/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.6
Actual Amplitude:	0.6
Actual Power:	0.36
Distortion 2H-22H:	0.000309227%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.4836	end: 2.3195	delta: -2.1641
P2 start: 9.2483	end: 12.4776	delta: 3.2293
P3 start: 18.5277	end: 17.2945	delta: -1.2332
P4 start: 22.8123	end: 27.1026	delta: 4.2903
P5 start: 37.1877	end: 42.7055	delta: 5.5178
P6 start: 50.7517	end: 57.6805	delta: 6.9288
P7 start: 64.4836	end: 72.4776	delta: 7.994
P8 start: 78.5277	end: 87.1026	delta: 8.5749

H3: -4.21617e-07	H19: -1.71753e-06	H19f: -9.03965e-08
H5: -1.26485e-07	H21: -1.44554e-07	H21f: -6.88354e-09
H7: -9.03464e-07	H23: 1.18786e-06	H23f: 5.1646e-08
H9: -2.24862e-07	H25: -1.02252	H25f: -0.0409007
H11: 1.09237e-06	H27: 1.49908e-07	H27f: 5.55215e-09
H13: 1.58593e-06	H29: -0.0303087	H29f: -0.00104513
H15: 3.28861e-07	H31: -0.0598444	H31f: -0.00193046
H17: -5.50582e-07	H33: 1.91644e-07	H33f: 5.80739e-09

c2sd = -1.0208
c2ed = 1.7529
c3sd = -0.5118
c3ed = -3.0807
c4sd = -1.8125
c4ed = 1.1421
c5sd = 1.8125
c5ed = 3.0807
varx = 4.0916%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.61
Actual Amplitude:	0.61
Actual Power:	0.372101
Distortion 2H-22H:	0.000105299%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.4039	end: 2.2752	delta: -2.1286
P2 start: 9.3156	end: 12.5329	delta: 3.2173
P3 start: 18.4476	end: 17.2524	delta: -1.1953
P4 start: 22.8542	end: 27.1723	delta: 4.3181
P5 start: 37.1458	end: 42.7476	delta: 5.6019
P6 start: 50.6844	end: 57.7248	delta: 7.0403
P7 start: 64.4039	end: 72.5329	delta: 8.129
P8 start: 78.4476	end: 87.1723	delta: 8.7247

H3: 8.29409e-08	H19: -6.41701e-07	H19f: -3.37737e-08
H5: 1.49294e-07	H21: -3.08066e-07	H21f: -1.46698e-08
H7: -4.97645e-07	H23: -1.62276e-07	H23f: -7.05547e-09
H9: -1.38235e-07	H25: -1.0022	H25f: -0.0400881
H11: -2.48823e-07	H27: -1.56666e-07	H27f: -5.80245e-09
H13: 1.24411e-07	H29: -0.0192355	H29f: -0.000663294
H15: 1.49294e-07	H31: -0.0546664	H31f: -0.00176343
H17: 4.24462e-07	H33: -1.01791e-07	H33f: -3.08458e-09

c2sd = -0.8924
c2ed = 1.8794
c3sd = -0.6682
c3ed = -3.1697
c4sd = -1.7237
c4ed = 1.2882
c5sd = 1.7237
c5ed = 3.1697
varx = 4.0094%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude: 0.62
 Actual Amplitude: 0.62
 Actual Power: 0.3844
 Distortion 2H-22H: 0.0002492%
 First strong harmonics: 25 and 29
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: Yes

P1 start: 4.3235	end: 2.2316	delta: -2.0919
P2 start: 9.3831	end: 12.5876	delta: 3.2045
P3 start: 18.3671	end: 17.2106	delta: -1.1565
P4 start: 22.896	end: 27.2421	delta: 4.346
P5 start: 37.104	end: 42.7894	delta: 5.6854
P6 start: 50.6169	end: 57.7684	delta: 7.1515
P7 start: 64.3235	end: 72.5876	delta: 8.2641
P8 start: 78.3671	end: 87.2421	delta: 8.875

H3: 3.26413e-07	H19: -1.36578e-06	H19f: -7.18832e-08
H5: 1.05268e-06	H21: -1.63206e-07	H21f: -7.77174e-09
H7: 8.7432e-08	H23: 6.91853e-07	H23f: 3.00806e-08
H9: 5.44021e-08	H25: -0.98175	H25f: -0.03927
H11: -1.35758e-06	H27: -3.62681e-08	H27f: -1.34326e-09
H13: 7.53261e-07	H29: -0.00817858	H29f: -0.00028202
H15: 1.30565e-07	H31: -0.0494433	H31f: -0.00159495
H17: 4.32017e-07	H33: 2.04008e-07	H33f: 6.18206e-09

c2sd = -0.936
 c2ed = 1.8047
 c3sd = -0.6099
 c3ed = -3.1262
 c4sd = -1.7671
 c4ed = 1.2191
 c5sd = 1.7671
 c5ed = 3.1262
 varx = 3.9271%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.63
Actual Amplitude:	0.63
Actual Power:	0.3969
Distortion 2H-22H:	0.00039947%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.2425	end: 2.1886	delta: -2.0539
P2 start: 9.451	end: 12.6418	delta: 3.1908
P3 start: 18.286	end: 17.1692	delta: -1.1169
P4 start: 22.9376	end: 27.3118	delta: 4.3742
P5 start: 37.0624	end: 42.8308	delta: 5.7685
P6 start: 50.549	end: 57.8114	delta: 7.2624
P7 start: 64.2425	end: 72.6418	delta: 8.3993
P8 start: 78.286	end: 87.3118	delta: 9.0258

H3: -1.20462e-07	H19: -2.95449e-06	H19f: -1.55499e-07
H5: 8.19141e-07	H21: -1.26198e-07	H21f: -6.00944e-09
H7: 1.96181e-06	H23: 7.54196e-07	H23f: 3.27911e-08
H9: -4.55078e-07	H25: -0.961167	H25f: -0.0384467
H11: -2.19022e-08	H27: -1.78462e-07	H27f: -6.60971e-09
H13: 1.66793e-07	H29: 0.00285324	H29f: 9.83874e-05
H15: -1.52585e-07	H31: -0.0441772	H31f: -0.00142507
H17: 1.36051e-06	H33: -1.71567e-07	H33f: -5.199e-09

c2sd = -0.9051
c2ed = 1.8158
c3sd = -0.6448
c3ed = -3.1393
c4sd = -1.7539
c4ed = 1.2426
c5sd = 1.7539
c5ed = 3.1393
varx = 3.8447%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 64/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.64
Actual Amplitude:	0.64
Actual Power:	0.4096
Distortion 2H-22H:	0.000274477%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.1608	end: 2.1463	delta: -2.0145
P2 start: 9.5192	end: 12.6954	delta: 3.1762
P3 start: 18.2043	end: 17.128	delta: -1.0763
P4 start: 22.979	end: 27.3816	delta: 4.4025
P5 start: 37.021	end: 42.872	delta: 5.851
P6 start: 50.4808	end: 57.8537	delta: 7.3729
P7 start: 64.1608	end: 72.6954	delta: 8.5346
P8 start: 78.2043	end: 87.3816	delta: 9.1772

H3: 7.90531e-08	H19: -2.12195e-06	H19f: -1.11682e-07
H5: -3.55739e-07	H21: -9.03464e-08	H21f: -4.30221e-09
H7: -1.694e-08	H23: -3.50583e-07	H23f: -1.52428e-08
H9: -5.27021e-08	H25: -0.94046	H25f: -0.0376184
H11: 2.04819e-07	H27: 0.0	H27f: 0.0
H13: 1.45944e-06	H29: 0.0138535	H29f: 0.000477706
H15: 2.13443e-07	H31: -0.0388747	H31f: -0.00125402
H17: 7.39379e-07	H33: -1.11393e-07	H33f: -3.37555e-09

c2sd = -0.8157
c2ed = 1.8941
c3sd = -0.7529
c3ed = -3.1966
c4sd = -1.6963
c4ed = 1.3388
c5sd = 1.6963
c5ed = 3.1966
varx = 3.7622%.

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STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 65/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.65
Actual Amplitude:	0.65
Actual Power:	0.4225
Distortion 2H-22H:	0.000472283%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 4.0785	end: 2.1048	delta: -1.9737
P2 start: 9.5878	end: 12.7485	delta: 3.1607
P3 start: 18.122	end: 17.0873	delta: -1.0347
P4 start: 23.0203	end: 27.4514	delta: 4.4311
P5 start: 36.9797	end: 42.9127	delta: 5.933
P6 start: 50.4122	end: 57.8952	delta: 7.483
P7 start: 64.0785	end: 72.7485	delta: 8.67
P8 start: 78.122	end: 87.4514	delta: 9.3294

H3: 7.78369e-08	H19: -3.2077e-06	H19f: -1.68826e-07
H5: -4.90373e-07	H21: -2.22391e-07	H21f: -1.05901e-08
H7: -6.00456e-07	H23: 9.34043e-07	H23f: 4.06106e-08
H9: -2.20538e-07	H25: -0.919637	H25f: -0.0367855
H11: 3.92723e-07	H27: -6.91884e-08	H27f: -2.56253e-09
H13: 3.1524e-06	H29: 0.0248158	H29f: 0.000855716
H15: 3.5805e-07	H31: -0.0335302	H31f: -0.00108162
H17: 4.67022e-07	H33: -1.76902e-07	H33f: -5.36067e-09

c2sd = -0.7961
c2ed = 1.8901
c3sd = -0.7741
c3ed = -3.1998
c4sd = -1.6926
c4ed = 1.3475
c5sd = 1.6926
c5ed = 3.1998
varx = 3.6797%.

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STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 66/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.66
Actual Amplitude:	0.66
Actual Power:	0.4356
Distortion 2H-22H:	0.000118482%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	3.9954	end:	2.064	delta:	-1.9313
P2 start:	9.6568	end:	12.8008	delta:	3.144
P3 start:	18.039	end:	17.047	delta:	-0.992
P4 start:	23.0613	end:	27.5212	delta:	4.4599
P5 start:	36.9387	end:	42.953	delta:	6.0144
P6 start:	50.3432	end:	57.936	delta:	7.5927
P7 start:	63.9954	end:	72.8008	delta:	8.8054
P8 start:	78.039	end:	87.5212	delta:	9.4822

H3: 1.53315e-07	H19: -3.99426e-07	H19f: -2.10224e-08
H5: -1.14986e-07	H21: -2.19022e-08	H21f: -1.04296e-09
H7: -5.25652e-07	H23: 4.09951e-07	H23f: 1.7824e-08
H9: 1.27763e-07	H25: -0.898708	H25f: -0.0359483
H11: -3.97226e-07	H27: -3.91805e-07	H27f: -1.45113e-08
H13: 2.91889e-07	H29: 0.0357283	H29f: 0.00123201
H15: 2.5297e-07	H31: -0.0281528	H31f: -0.000908155
H17: 6.62863e-07	H33: 1.70737e-07	H33f: 5.17386e-09

c2sd = -0.7755
c2ed = 1.8861
c3sd = -0.7966
c3ed = -3.2031
c4sd = -1.6887
c4ed = 1.3568
c5sd = 1.6887
c5ed = 3.2031
varx = 3.5973%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude: 0.67
 Actual Amplitude: 0.67
 Actual Power: 0.4489
 Distortion 2H-22H: 0.000115507%
 First strong harmonics: 25 and 29
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: Yes

P1 start: 3.9114	end: 2.0241	delta: -1.8873
P2 start: 9.7261	end: 12.8525	delta: 3.1263
P3 start: 17.9553	end: 17.007	delta: -0.9483
P4 start: 23.1022	end: 27.5911	delta: 4.4889
P5 start: 36.8978	end: 42.993	delta: 6.0952
P6 start: 50.2739	end: 57.9759	delta: 7.702
P7 start: 63.9114	end: 72.8525	delta: 8.941
P8 start: 77.9553	end: 87.5911	delta: 9.6358

H3: 0.0	H19: -9.777e-07	H19f: -5.14579e-08
H5: -9.06161e-08	H21: 0.0	H21f: 0.0
H7: 0.0	H23: -2.95487e-08	H23f: -1.28473e-09
H9: 1.1327e-07	H25: -0.877677	H25f: -0.0351071
H11: 3.50108e-07	H27: -2.51711e-08	H27f: -9.32265e-10
H13: 1.48122e-07	H29: 0.0465868	H29f: 0.00160644
H15: 1.35924e-07	H31: -0.0227337	H31f: -0.000733345
H17: 4.39755e-07	H33: 2.81459e-07	H33f: 8.52906e-09

c2sd = -0.7913
 c2ed = 1.8385
 c3sd = -0.7738
 c3ed = -3.1776
 c4sd = -1.7132
 c4ed = 1.3202
 c5sd = 1.7132
 c5ed = 3.1776
 varx = 3.5149%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.68
Actual Amplitude:	0.68
Actual Power:	0.4624
Distortion 2H-22H:	0.000181838%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 3.8267	end: 1.9851	delta: -1.8416
P2 start: 9.7959	end: 12.9033	delta: 3.1074
P3 start: 17.8708	end: 16.9675	delta: -0.9033
P4 start: 23.1429	end: 27.661	delta: 4.5181
P5 start: 36.8571	end: 43.0325	delta: 6.1753
P6 start: 50.2041	end: 58.0149	delta: 7.8108
P7 start: 63.8267	end: 72.9033	delta: 9.0766
P8 start: 77.8708	end: 87.661	delta: 9.7902

H3: -1.48806e-07	H19: -8.106e-07	H19f: -4.26632e-08
H5: 4.24097e-07	H21: 3.1887e-08	H21f: 1.51843e-09
H7: -9.56609e-08	H23: -3.29961e-07	H23f: -1.43461e-08
H9: -8.68034e-08	H25: -0.856553	H25f: -0.0342621
H11: -4.87001e-07	H27: -1.32272e-07	H27f: -4.89896e-09
H13: 9.5293e-07	H29: 0.0573834	H29f: 0.00197874
H15: 4.24097e-07	H31: -0.0172779	H31f: -0.000557352
H17: 9.97874e-07	H33: 1.72479e-07	H33f: 5.22665e-09

c2sd = -0.5613
c2ed = 2.0761
c3sd = -1.0586
c3ed = -3.3401
c4sd = -1.5495
c4ed = 1.5904
c5sd = 1.5495
c5ed = 3.3401
varx = 3.4328%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.69
Actual Amplitude:	0.69
Actual Power:	0.4761
Distortion 2H-22H:	0.000115726%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 3.741	end: 1.947	delta: -1.794
P2 start: 9.8661	end: 12.9534	delta: 3.0873
P3 start: 17.7855	end: 16.9285	delta: -0.857
P4 start: 23.1833	end: 27.7309	delta: 4.5475
P5 start: 36.8167	end: 43.0715	delta: 6.2548
P6 start: 50.1339	end: 58.053	delta: 7.9191
P7 start: 63.741	end: 72.9534	delta: 9.2124
P8 start: 77.7855	end: 87.7309	delta: 9.9454

H3: 0.0	H19: -5.90456e-07	H19f: -3.10766e-08
H5: 3.51958e-07	H21: -1.99024e-07	H21f: -9.47733e-09
H7: 6.12784e-07	H23: 3.63435e-07	H23f: 1.58015e-08
H9: 2.44415e-08	H25: -0.835344	H25f: -0.0334137
H11: -4.99941e-08	H27: 1.14061e-07	H27f: 4.22446e-09
H13: 1.6075e-07	H29: 0.0681097	H29f: 0.00234861
H15: 2.71301e-07	H31: -0.0117863	H31f: -0.000380203
H17: 4.65827e-07	H33: 9.66552e-08	H33f: 2.92895e-09

c2sd = -0.7079
c2ed = 1.8736
c3sd = -0.873
c3ed = -3.2127
c4sd = -1.6754
c4ed = 1.3893
c5sd = 1.6754
c5ed = 3.2127
varx = 3.3509%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 70/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.7
Actual Amplitude:	0.7
Actual Power:	0.49
Distortion 2H-22H:	0.000125384%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 3.6544	end: 1.91	delta: -1.7445
P2 start: 9.9368	end: 13.0026	delta: 3.0657
P3 start: 17.6992	end: 16.8899	delta: -0.8093
P4 start: 23.2236	end: 27.8008	delta: 4.5772
P5 start: 36.7764	end: 43.1101	delta: 6.3337
P6 start: 50.0632	end: 58.0901	delta: 8.0269
P7 start: 63.6544	end: 73.0026	delta: 9.3481
P8 start: 77.6992	end: 87.8008	delta: 10.1016

H3: 3.61386e-08	H19: -7.64616e-07	H19f: -4.02429e-08
H5: 2.60198e-07	H21: -7.22771e-08	H21f: -3.44177e-09
H7: -4.02687e-07	H23: 5.65647e-08	H23f: 2.45934e-09
H9: 2.40924e-08	H25: -0.814056	H25f: -0.0325622
H11: 4.92799e-07	H27: 2.32893e-07	H27f: 8.62567e-09
H13: 6.83853e-07	H29: 0.0787584	H29f: 0.00271581
H15: -1.44554e-08	H31: -0.00625878	H31f: -0.000201896
H17: 1.91322e-07	H33: -3.61386e-08	H33f: -1.09511e-09

c2sd = -0.6979
c2ed = 1.8521
c3sd = -0.8834
c3ed = -3.2047
c4sd = -1.6817
c4ed = 1.3834
c5sd = 1.6817
c5ed = 3.2047
varx = 3.2693%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.71
Actual Amplitude:	0.71
Actual Power:	0.5041
Distortion 2H-22H:	0.000119661%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 3.5668	end: 1.874	delta: -1.6928
P2 start: 10.008	end: 13.0508	delta: 3.0427
P3 start: 17.612	end: 16.8519	delta: -0.7601
P4 start: 23.2637	end: 27.8708	delta: 4.6071
P5 start: 36.7363	end: 43.1481	delta: 6.4118
P6 start: 49.992	end: 58.126	delta: 8.1341
P7 start: 63.5668	end: 73.0508	delta: 9.484
P8 start: 77.612	end: 87.8708	delta: 10.2588

H3: 3.20666e-07	H19: -6.07578e-07	H19f: -3.19778e-08
H5: -3.63422e-07	H21: -1.01799e-08	H21f: -4.84756e-10
H7: -7.63491e-07	H23: 3.71787e-08	H23f: 1.61646e-09
H9: 0.0	H25: -0.792696	H25f: -0.0317078
H11: 5.8303e-08	H27: 2.29613e-07	H27f: 8.50418e-09
H13: 4.43999e-07	H29: 0.0893226	H29f: 0.00308009
H15: 8.5511e-08	H31: -0.000695439	H31f: -2.24335e-05
H17: -1.88627e-07	H33: 2.26734e-08	H33f: 6.87072e-10

c2sd = -0.628
c2ed = 1.8988
c3sd = -0.9689
c3ed = -3.2417
c4sd = -1.6427
c4ed = 1.4517
c5sd = 1.6427
c5ed = 3.2417
varx = 3.188%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 72/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.72
Actual Amplitude:	0.72
Actual Power:	0.5184
Distortion 2H-22H:	0.000180845%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 3.4781	end: 1.8391	delta: -1.6389
P2 start: 10.0798	end: 13.0979	delta: 3.0182
P3 start: 17.5237	end: 16.8144	delta: -0.7093
P4 start: 23.3036	end: 27.9409	delta: 4.6373
P5 start: 36.6964	end: 43.1856	delta: 6.4892
P6 start: 49.9202	end: 58.1609	delta: 8.2406
P7 start: 63.4781	end: 73.0979	delta: 9.6199
P8 start: 77.5237	end: 87.9409	delta: 10.4171

H3: -1.40539e-07	H19: -1.29814e-06	H19f: -6.83229e-08
H5: -2.10808e-07	H21: -1.00385e-07	H21f: -4.78023e-09
H7: 3.61386e-07	H23: 6.04928e-07	H23f: 2.63012e-08
H9: 1.63962e-07	H25: -0.771269	H25f: -0.0308508
H11: -3.9287e-07	H27: -1.7177e-07	H27f: -6.36184e-09
H13: 8.83773e-07	H29: 0.0997955	H29f: 0.00344122
H15: 4.91886e-08	H31: 0.00490611	H31f: 0.000158262
H17: -2.23209e-07	H33: 1.69285e-07	H33f: 5.12986e-09

c2sd = -0.3553
c2ed = 2.18
c3sd = -1.3084
c3ed = -3.4335
c4sd = -1.4485
c4ed = 1.773
c5sd = 1.4485
c5ed = 3.4335
varx = 3.1071%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude: 0.73
 Actual Amplitude: 0.73
 Actual Power: 0.5329
 Distortion 2H-22H: 6.41218e-05%
 First strong harmonics: 25 and 29
 Pulses per sine cycle: 32
 Total weighting events: 64
 Delta Friendly: Yes

P1 start: 3.3882	end: 1.8056	delta: -1.5826
P2 start: 10.152	end: 13.1439	delta: 2.9919
P3 start: 17.4343	end: 16.7775	delta: -0.6568
P4 start: 23.3433	end: 28.0109	delta: 4.6677
P5 start: 36.6567	end: 43.2225	delta: 6.5658
P6 start: 49.848	end: 58.1944	delta: 8.3465
P7 start: 63.3882	end: 73.1439	delta: 9.7557
P8 start: 77.4343	end: 88.0109	delta: 10.5767

H3: 6.93068e-08	H19: -2.84523e-07	H19f: -1.49749e-08
H5: 3.53465e-07	H21: -6.93068e-08	H21f: -3.30033e-09
H7: -2.07921e-07	H23: 6.32802e-08	H23f: 2.75131e-09
H9: -1.61716e-07	H25: -0.749785	H25f: -0.0299914
H11: 1.89019e-08	H27: 2.77227e-07	H27f: 1.02677e-08
H13: 1.75933e-07	H29: 0.110169	H29f: 0.00379892
H15: 6.93068e-08	H31: 0.0105412	H31f: 0.000340039
H17: 2.93535e-07	H33: -2.17371e-07	H33f: -6.58701e-09

c2sd = -0.3881
 c2ed = 2.1036
 c3sd = -1.2665
 c3ed = -3.3898
 c4sd = -1.4895
 c4ed = 1.7117
 c5sd = 1.4895
 c5ed = 3.3898
 varx = 3.0268%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.74
Actual Amplitude:	0.74
Actual Power:	0.5476
Distortion 2H-22H:	0.000190925%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 3.297	end: 1.7733	delta: -1.5237
P2 start: 10.2249	end: 13.1887	delta: 2.9638
P3 start: 17.3436	end: 16.7412	delta: -0.6024
P4 start: 23.3828	end: 28.0811	delta: 4.6983
P5 start: 36.6172	end: 43.2588	delta: 6.6416
P6 start: 49.7751	end: 58.2267	delta: 8.4516
P7 start: 63.297	end: 73.1887	delta: 9.8917
P8 start: 77.3436	end: 88.0811	delta: 10.7375

H3: 1.36741e-07	H19: -4.96584e-07	H19f: -2.6136e-08
H5: -4.71755e-07	H21: -6.83703e-08	H21f: -3.25573e-09
H7: -1.02555e-07	H23: 8.91786e-08	H23f: 3.87733e-09
H9: -1.36741e-07	H25: -0.728248	H25f: -0.0291299
H11: 1.39848e-07	H27: 0.0	H27f: 0.0
H13: 1.69611e-06	H29: 0.120436	H29f: 0.00415295
H15: 2.25622e-07	H31: 0.0162161	H31f: 0.000523101
H17: 4.10222e-07	H33: 1.80249e-07	H33f: 5.46209e-09

c2sd = -0.4126
c2ed = 2.0349
c3sd = -1.2355
c3ed = -3.3513
c4sd = -1.5248
c4ed = 1.6601
c5sd = 1.5248
c5ed = 3.3513
varx = 2.9469%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 75/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude: 0.75
Actual Amplitude: 0.75
Actual Power: 0.562499
Distortion 2H-22H: 8.03115e-05%
First strong harmonics: 25 and 29
Pulses per sine cycle: 32
Total weighting events: 64
Delta Friendly: Yes

P1 start: 3.2045	end: 1.7425	delta: -1.462
P2 start: 10.2984	end: 13.2321	delta: 2.9336
P3 start: 17.2515	end: 16.7055	delta: -0.546
P4 start: 23.4221	end: 28.1512	delta: 4.7292
P5 start: 36.5779	end: 43.2945	delta: 6.7166
P6 start: 49.7016	end: 58.2575	delta: 8.5559
P7 start: 63.2045	end: 73.2321	delta: 10.0276
P8 start: 77.2515	end: 88.1512	delta: 10.8998

H3: -6.74587e-08	H19: -6.07128e-07	H19f: -3.19541e-08
H5: -2.83327e-07	H21: -3.85478e-08	H21f: -1.83561e-09
H7: -2.89109e-08	H23: -1.84778e-07	H23f: -8.03383e-09
H9: 1.12431e-07	H25: -0.706664	H25f: -0.0282666
H11: 3.67957e-08	H27: -8.24495e-08	H27f: -3.05369e-09
H13: 2.1016e-07	H29: 0.130589	H29f: 0.00450308
H15: 3.37293e-08	H31: 0.0219279	H31f: 0.000707352
H17: 3.09516e-07	H33: 1.71713e-07	H33f: 5.20343e-09

c2sd = -0.3211
c2ed = 2.0993
c3sd = -1.3501
c3ed = -3.4008
c4sd = -1.4716
c4ed = 1.7528
c5sd = 1.4716
c5ed = 3.4008
varx = 2.8677%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.76
Actual Amplitude:	0.76
Actual Power:	0.5776
Distortion 2H-22H:	0.000164783%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 3.1105	end: 1.7133	delta: -1.3972
P2 start: 10.3726	end: 13.2739	delta: 2.9013
P3 start: 17.1578	end: 16.6705	delta: -0.4873
P4 start: 23.4611	end: 28.2215	delta: 4.7603
P5 start: 36.5389	end: 43.3295	delta: 6.7906
P6 start: 49.6274	end: 58.2867	delta: 8.6594
P7 start: 63.1105	end: 73.2739	delta: 10.1634
P8 start: 77.1578	end: 88.2215	delta: 11.0636

H3: 6.6571e-08	H19: -7.98853e-07	H19f: -4.20449e-08
H5: 3.19541e-07	H21: -1.52162e-07	H21f: -7.24583e-09
H7: -7.84587e-07	H23: -1.12881e-07	H23f: -4.90788e-09
H9: -1.99713e-07	H25: -0.685037	H25f: -0.0274015
H11: -7.62541e-07	H27: 3.69839e-08	H27f: 1.36977e-09
H13: 7.60446e-07	H29: 0.140624	H29f: 0.00484911
H15: 1.06514e-07	H31: 0.0276799	H31f: 0.000892899
H17: 3.28939e-07	H33: 0.0	H33f: 0.0

c2sd = -0.3092
c2ed = 2.0686
c3sd = -1.3658
c3ed = -3.3879
c4sd = -1.4804
c4ed = 1.7451
c5sd = 1.4804
c5ed = 3.3879
varx = 2.7892%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.77
Actual Amplitude:	0.77
Actual Power:	0.5929
Distortion 2H-22H:	0.000210045%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	3.0149	end:	1.6857	delta:	-1.3292
P2 start:	10.4476	end:	13.3141	delta:	2.8665
P3 start:	17.0625	end:	16.6363	delta:	-0.4262
P4 start:	23.5	end:	28.2917	delta:	4.7917
P5 start:	36.5	end:	43.3637	delta:	6.8637
P6 start:	49.5524	end:	58.3143	delta:	8.7618
P7 start:	63.0149	end:	73.3141	delta:	10.2992
P8 start:	77.0625	end:	88.2917	delta:	11.2292

H3: -1.64266e-07	H19: -1.56658e-06	H19f: -8.24516e-08
H5: 1.18272e-07	H21: -1.59573e-07	H21f: -7.59871e-09
H7: -2.81599e-08	H23: 1.01131e-06	H23f: 4.39699e-08
H9: 0.0	H25: -0.663373	H25f: -0.0265349
H11: -6.63038e-07	H27: 4.38043e-08	H27f: 1.62238e-09
H13: 6.21685e-07	H29: 0.150532	H29f: 0.00519074
H15: 2.0369e-07	H31: 0.0334756	H31f: 0.00107986
H17: 1.15953e-08	H33: 1.82186e-07	H33f: 5.52079e-09

c2sd = -0.3955
c2ed = 1.921
c3sd = -1.2597
c3ed = -3.2984
c4sd = -1.5652
c4ed = 1.6139
c5sd = 1.5652
c5ed = 3.2984
varx = 2.7114%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.78
Actual Amplitude:	0.78
Actual Power:	0.6084
Distortion 2H-22H:	0.000326527%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 2.9176	end: 1.66	delta: -1.2576
P2 start: 10.5232	end: 13.3524	delta: 2.8292
P3 start: 16.9653	end: 16.6029	delta: -0.3624
P4 start: 23.5387	end: 28.362	delta: 4.8234
P5 start: 36.4613	end: 43.3971	delta: 6.9358
P6 start: 49.4768	end: 58.34	delta: 8.8633
P7 start: 62.9176	end: 73.3525	delta: 10.4349
P8 start: 76.9653	end: 88.362	delta: 11.3967

H3: 9.72962e-08	H19: -1.94592e-06	H19f: -1.02417e-07
H5: -1.94592e-07	H21: 3.70652e-08	H21f: 1.76501e-09
H7: 2.04322e-06	H23: -5.92237e-07	H23f: -2.57495e-08
H9: 7.56748e-08	H25: -0.64168	H25f: -0.0256672
H11: 4.3341e-07	H27: -2.45042e-07	H27f: -9.07564e-09
H13: -2.7692e-07	H29: 0.160303	H29f: 0.00552768
H15: 2.20538e-07	H31: 0.0393165	H31f: 0.00126827
H17: 1.40793e-06	H33: 1.47418e-07	H33f: 4.46722e-09

c2sd = -0.3266
c2ed = 1.9515
c3sd = -1.3484
c3ed = -3.3267
c4sd = -1.5317
c4ed = 1.6758
c5sd = 1.5317
c5ed = 3.3267
varx = 2.6345%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.79
Actual Amplitude:	0.79
Actual Power:	0.6241
Distortion 2H-22H:	0.000273568%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 2.8184	end: 1.6362	delta: -1.1822
P2 start: 10.5998	end: 13.3887	delta: 2.7889
P3 start: 16.866	end: 16.5703	delta: -0.2957
P4 start: 23.5772	end: 28.4325	delta: 4.8553
P5 start: 36.4228	end: 43.4297	delta: 7.0069
P6 start: 49.4002	end: 58.3638	delta: 8.9636
P7 start: 62.8184	end: 73.3887	delta: 10.5703
P8 start: 76.866	end: 88.4325	delta: 11.5664

H3: 3.20215e-08	H19: -1.53703e-06	H19f: -8.08965e-08
H5: -2.68981e-07	H21: -1.00639e-07	H21f: -4.79234e-09
H7: 1.09788e-07	H23: -3.17431e-07	H23f: -1.38013e-08
H9: -1.06738e-07	H25: -0.619955	H25f: -0.0247982
H11: -5.06522e-07	H27: 8.53907e-08	H27f: 3.16262e-09
H13: 1.31535e-06	H29: 0.169937	H29f: 0.00585989
H15: 2.30555e-07	H31: 0.0452014	H31f: 0.00145811
H17: 1.69526e-06	H33: 1.63019e-07	H33f: 4.93996e-09

c2sd = -0.2406
c2ed = 1.9988
c3sd = -1.4596
c3ed = -3.3666
c4sd = -1.4859
c4ed = 1.7581
c5sd = 1.4859
c5ed = 3.3666
varx = 2.5584%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 80/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.8
Actual Amplitude:	0.8
Actual Power:	0.64
Distortion 2H-22H:	0.000267112%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 2.7172	end: 1.6146	delta: -1.1026
P2 start: 10.6772	end: 13.4226	delta: 2.7454
P3 start: 16.7644	end: 16.5387	delta: -0.2258
P4 start: 23.6155	end: 28.5029	delta: 4.8874
P5 start: 36.3845	end: 43.4613	delta: 7.0768
P6 start: 49.3228	end: 58.3854	delta: 9.0626
P7 start: 62.7172	end: 73.4226	delta: 10.7054
P8 start: 76.7644	end: 88.5029	delta: 11.7384

H3: 2.5297e-07	H19: -1.71753e-06	H19f: -9.03965e-08
H5: -9.86583e-06	H21: 0.0	H21f: 0.0
H7: 1.24678e-06	H23: -6.51673e-07	H23f: -2.83336e-08
H9: -7.37829e-08	H25: -0.598206	H25f: -0.0239282
H11: 2.15599e-07	H27: 4.91886e-08	H27f: 1.8218e-09
H13: 4.81616e-07	H29: 0.179422	H29f: 0.00618697
H15: 7.5891e-08	H31: 0.0511412	H31f: 0.00164971
H17: 9.37477e-07	H33: 1.09237e-07	H33f: 3.31021e-09

c2sd = -1.0509
c2ed = 0.9989
c3sd = -0.4517
c3ed = -2.717
c4sd = -2.1289
c4ed = 0.7191
c5sd = 2.1289
c5ed = 2.717
varx = 2.4834%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.81
Actual Amplitude:	0.81
Actual Power:	0.6561
Distortion 2H-22H:	8.61528e-05%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 2.6137	end: 1.5953	delta: -1.0184
P2 start: 10.7556	end: 13.4539	delta: 2.6983
P3 start: 16.6602	end: 16.508	delta: -0.1522
P4 start: 23.6535	end: 28.5734	delta: 4.9199
P5 start: 36.3465	end: 43.492	delta: 7.1456
P6 start: 49.2444	end: 58.4047	delta: 9.1602
P7 start: 62.6137	end: 73.4539	delta: 10.8402
P8 start: 76.6602	end: 88.5734	delta: 11.9132

H3: 1.56154e-07	H19: -1.87385e-07	H19f: -9.86238e-09
H5: -6.74587e-07	H21: -2.67693e-08	H21f: -1.27473e-09
H7: 8.03079e-08	H23: 8.9619e-08	H23f: 3.89648e-09
H9: -7.2872e-08	H25: -0.576432	H25f: -0.0230573
H11: -8.51751e-09	H27: 9.02225e-08	H27f: 3.34157e-09
H13: 4.2522e-07	H29: 0.188758	H29f: 0.0065089
H15: 9.36926e-08	H31: 0.0571334	H31f: 0.00184301
H17: 1.32272e-07	H33: 1.0221e-07	H33f: 3.09728e-09

c2sd = -0.9839
c2ed = 1.0169
c3sd = -0.5417
c3ed = -2.7389
c4sd = -2.0996
c4ed = 0.7753
c5sd = 2.0996
c5ed = 2.7389
varx = 2.4094%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.82
Actual Amplitude:	0.82
Actual Power:	0.6724
Distortion 2H-22H:	0.000436116%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 2.5078	end: 1.5787	delta: -0.9291
P2 start: 10.835	end: 13.4823	delta: 2.6473
P3 start: 16.5531	end: 16.4784	delta: -0.0747
P4 start: 23.6915	end: 28.644	delta: 4.9526
P5 start: 36.3085	end: 43.5216	delta: 7.2131
P6 start: 49.165	end: 58.4213	delta: 9.2563
P7 start: 62.5078	end: 73.4823	delta: 10.9745
P8 start: 76.5531	end: 88.644	delta: 12.0909

H3: 3.085e-07	H19: -2.85444e-06	H19f: -1.50234e-07
H5: -2.07312e-06	H21: -5.28857e-08	H21f: -2.51837e-09
H7: 2.90871e-07	H23: 6.76017e-07	H23f: 2.93921e-08
H9: -1.95383e-07	H25: -0.554637	H25f: -0.0221855
H11: 1.12743e-06	H27: 2.33089e-07	H27f: 8.63292e-09
H13: 2.10017e-06	H29: 0.197932	H29f: 0.00682524
H15: 2.468e-07	H31: 0.0631953	H31f: 0.00203856
H17: 3.91976e-07	H33: -1.48641e-07	H33f: -4.50427e-09

c2sd = -0.2828
c2ed = 1.7692
c3sd = -1.4257
c3ed = -3.2455
c4sd = -1.5846
c4ed = 1.6228
c5sd = 1.5846
c5ed = 3.2455
varx = 2.3365%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.83
Actual Amplitude:	0.83
Actual Power:	0.6889
Distortion 2H-22H:	0.000108456%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	2.3991	end:	1.5649	delta:	-0.8342
P2 start:	10.9156	end:	13.5073	delta:	2.5917
P3 start:	16.4425	end:	16.4499	delta:	0.0074
P4 start:	23.7291	end:	28.7147	delta:	4.9856
P5 start:	36.2709	end:	43.5501	delta:	7.2792
P6 start:	49.0844	end:	58.4351	delta:	9.3507
P7 start:	62.3991	end:	73.5073	delta:	11.1082
P8 start:	76.4425	end:	88.7147	delta:	12.2722

H3: -6.09566e-08	H19: -8.37352e-07	H19f: -4.40711e-08
H5: -2.92592e-07	H21: 1.13205e-07	H21f: 5.39072e-09
H7: -3.00429e-07	H23: 2.86231e-07	H23f: 1.24448e-08
H9: -2.03189e-07	H25: -0.532819	H25f: -0.0213128
H11: 1.16372e-07	H27: 2.03189e-07	H27f: 7.52551e-09
H13: 3.44639e-07	H29: 0.206944	H29f: 0.007136
H15: 6.70523e-08	H31: 0.0693203	H31f: 0.00223614
H17: 1.50599e-07	H33: -1.30226e-07	H33f: -3.94623e-09

c2sd = -0.312
c2ed = 1.6663
c3sd = -1.399
c3ed = -3.1897
c4sd = -1.6312
c4ed = 1.5563
c5sd = 1.6312
c5ed = 3.1897
varx = 2.2649%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 84/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.84
Actual Amplitude:	0.84
Actual Power:	0.7056
Distortion 2H-22H:	0.000169566%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	2.2875	end:	1.5543	delta:	-0.7332
P2 start:	10.9975	end:	13.5285	delta:	2.531
P3 start:	16.3282	end:	16.4227	delta:	0.0945
P4 start:	23.7667	end:	28.7855	delta:	5.0188
P5 start:	36.2333	end:	43.5773	delta:	7.344
P6 start:	49.0025	end:	58.4457	delta:	9.4432
P7 start:	62.2875	end:	73.5285	delta:	11.241
P8 start:	76.3282	end:	88.7855	delta:	12.4573

H3: -1.80693e-07	H19: -9.31995e-07	H19f: -4.90523e-08
H5: -8.67326e-07	H21: 1.37671e-07	H21f: 6.55575e-09
H7: -4.77545e-07	H23: 1.25699e-07	H23f: 5.46519e-09
H9: 1.10423e-07	H25: -0.510978	H25f: -0.0204391
H11: 4.92799e-07	H27: 1.80693e-07	H27f: 6.69233e-09
H13: 8.13118e-07	H29: 0.215783	H29f: 0.00744078
H15: 7.83002e-08	H31: 0.075529	H31f: 0.00243642
H17: 1.91322e-07	H33: 3.01155e-08	H33f: 9.1259e-10

c2sd = -0.325
c2ed = 1.5772
c3sd = -1.3949
c3ed = -3.1442
c4sd = -1.6664
c4ed = 1.5086
c5sd = 1.6664
c5ed = 3.1442
varx = 2.1946%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude: 0.85
 Actual Amplitude: 0.85
 Actual Power: 0.7225
 Distortion 2H-22H: 0.000666259%
 First strong harmonics: 25 and 29
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: Yes

P1 start: 2.1725	end: 1.5472	delta: -0.6253
P2 start: 11.0807	end: 13.5454	delta: 2.4647
P3 start: 16.2097	end: 16.3969	delta: 0.1873
P4 start: 23.804	end: 28.8564	delta: 5.0523
P5 start: 36.196	end: 43.6031	delta: 7.4071
P6 start: 48.9193	end: 58.4528	delta: 9.5335
P7 start: 62.1725	end: 73.5454	delta: 11.3729
P8 start: 76.2097	end: 88.8564	delta: 12.6467

H3: 2.97612e-08	H19: -3.82509e-06	H19f: -2.01321e-07
H5: -2.5178e-06	H21: 4.2516e-08	H21f: 2.02457e-09
H7: 3.50757e-06	H23: -1.21891e-06	H23f: -5.29963e-08
H9: -6.94427e-08	H25: -0.489113	H25f: -0.0195645
H11: 6.49335e-07	H27: -2.11635e-07	H27f: -7.83833e-09
H13: 4.18946e-07	H29: 0.22444	H29f: 0.00773932
H15: -3.57134e-08	H31: 0.081838	H31f: 0.00263994
H17: 3.00413e-06	H33: 3.1114e-07	H33f: 9.42847e-09

c2sd = -0.7971
 c2ed = 0.9473
 c3sd = -0.8195
 c3ed = -2.7439
 c4sd = -2.0552
 c4ed = 0.8855
 c5sd = 2.0552
 c5ed = 2.7439
 varx = 2.1257%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude: 0.86
 Actual Amplitude: 0.860001
 Actual Power: 0.739602
 Distortion 2H-22H: 0.000113004%
 First strong harmonics: 25 and 29
 Pulses per sine cycle: 32
 Total switching events: 64
 Delta Friendly: Yes

P1 start: 2.0538	end: 1.5441	delta: -0.5097
P2 start: 11.1654	end: 13.5569	delta: 2.3915
P3 start: 16.0858	end: 16.3726	delta: 0.2868
P4 start: 23.8412	end: 28.9274	delta: 5.0861
P5 start: 36.1588	end: 43.6274	delta: 7.4687
P6 start: 48.8346	end: 58.4559	delta: 9.6214
P7 start: 62.0538	end: 73.5569	delta: 11.5031
P8 start: 76.0857	end: 88.9274	delta: 12.8416

H3: -5.88302e-08	H19: -4.27293e-07	H19f: -2.24891e-08
H5: -1.58841e-07	H21: 0.0	H21f: 0.0
H7: 4.2862e-07	H23: -7.6735e-08	H23f: -3.3363e-09
H9: 3.92201e-08	H25: -0.467206	H25f: -0.0186883
H11: 6.49806e-07	H27: -1.60149e-07	H27f: -5.93144e-09
H13: 2.5116e-07	H29: 0.232928	H29f: 0.00803199
H15: -3.52981e-08	H31: 0.0882359	H31f: 0.00284632
H17: 6.22908e-07	H33: -1.06964e-07	H33f: -3.24133e-09

c2sd = -0.5187
 c2ed = 1.1844
 c3sd = -1.1854
 c3ed = -2.9168
 c4sd = -1.8693
 c4ed = 1.1985
 c5sd = 1.8693
 c5ed = 2.9168
 varx = 2.0583%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.87
Actual Amplitude:	0.87
Actual Power:	0.7569
Distortion 2H-22H:	0.000237081%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 1.9309	end: 1.5453	delta: -0.3856
P2 start: 11.2518	end: 13.5625	delta: 2.3106
P3 start: 15.956	end: 16.35	delta: 0.394
P4 start: 23.8783	end: 28.9985	delta: 5.1202
P5 start: 36.1217	end: 43.65	delta: 7.5283
P6 start: 48.7482	end: 58.4547	delta: 9.7065
P7 start: 61.9309	end: 73.5625	delta: 11.6316
P8 start: 75.956	end: 88.9985	delta: 13.0425

H3: -1.16308e-07	H19: -5.50933e-07	H19f: -2.89965e-08
H5: 9.24649e-07	H21: -3.32309e-08	H21f: -1.58242e-09
H7: 4.98463e-07	H23: 1.43362e-06	H23f: 6.23314e-08
H9: 2.9077e-08	H25: -0.445263	H25f: -0.0178105
H11: -1.22916e-06	H27: -1.55077e-07	H27f: -5.74361e-09
H13: -6.03907e-08	H29: 0.241224	H29f: 0.00831805
H15: -6.39694e-08	H31: 0.0947633	H31f: 0.00305688
H17: -7.90211e-07	H33: 1.85036e-08	H33f: 5.60714e-10

c2sd = 0.8094
c2ed = 2.6359
c3sd = -2.8669
c3ed = -3.8922
c4sd = -0.8795
c4ed = 2.8213
c5sd = 0.8795
c5ed = 3.8922
varx = 1.9926%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude: 0.88
 Actual Amplitude: 0.88
 Actual Power: 0.7744
 Distortion 2H-22H: 5.714e-05%
 First strong harmonics: 25 and 29
 Pulses per sine cycle: 32
 Total weighting events: 64
 Delta Friendly: Yes

P1 start: 1.8033	end: 1.5516	delta: -0.2517
P2 start: 11.3401	end: 13.561	delta: 2.2209
P3 start: 15.8193	end: 16.3291	delta: 0.5099
P4 start: 23.9153	end: 29.0697	delta: 5.1544
P5 start: 36.0848	end: 43.6709	delta: 7.5861
P6 start: 48.6599	end: 58.4484	delta: 9.7886
P7 start: 61.8033	end: 73.561	delta: 11.7577
P8 start: 75.8193	end: 89.0697	delta: 13.2504

H3: 0.0	H19: 8.17008e-08	H19f: 4.30004e-09
H5: 3.27711e-07	H21: -1.97119e-07	H21f: -9.38664e-09
H7: 4.92799e-08	H23: 2.09975e-07	H23f: 9.12935e-09
H9: 3.83288e-08	H25: -0.423267	H25f: -0.0169307
H11: -1.7248e-07	H27: 2.55525e-08	H27f: 9.4639e-10
H13: -2.98522e-07	H29: 0.249325	H29f: 0.00859743
H15: 1.14986e-08	H31: 0.101438	H31f: 0.00327218
H17: -8.11668e-08	H33: -2.32586e-07	H33f: -7.04806e-09

c2sd = 1.1762
 c2ed = 2.9588
 c3sd = -3.3517
 c3ed = -4.1268
 c4sd = -0.6289
 c4ed = 3.2406
 c5sd = 0.6289
 c5ed = 4.1268
 varx = 1.9285%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 89/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.89
Actual Amplitude:	0.89
Actual Power:	0.7921
Distortion 2H-22H:	9.51515e-05%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total locking events:	64
Delta Friendly:	Yes

P1 start: 1.6702	end: 1.5635	delta: -0.1067
P2 start: 11.4306	end: 13.5511	delta: 2.1205
P3 start: 15.6742	end: 16.3104	delta: 0.6362
P4 start: 23.9521	end: 29.1411	delta: 5.189
P5 start: 36.0479	end: 43.6896	delta: 7.6417
P6 start: 48.5694	end: 58.4365	delta: 9.8671
P7 start: 61.6702	end: 73.5511	delta: 11.8809
P8 start: 75.6742	end: 89.1411	delta: 13.4669

H3: 2.84236e-08	H19: -5.56504e-07	H19f: -2.92897e-08
H5: 5.11625e-08	H21: 9.74523e-08	H21f: 4.64059e-09
H7: 3.65446e-08	H23: 2.33568e-07	H23f: 1.01551e-08
H9: -2.84236e-08	H25: -0.401199	H25f: -0.016048
H11: -3.48835e-07	H27: -1.16853e-07	H27f: -4.32787e-09
H13: 5.64099e-07	H29: 0.25723	H29f: 0.00886999
H15: 8.52708e-08	H31: 0.108288	H31f: 0.00349315
H17: 2.80892e-07	H33: 3.87595e-08	H33f: 1.17453e-09

c2sd = 0.14
c2ed = 1.6369
c3sd = -2.0888
c3ed = -3.281
c4sd = -1.4565
c4ed = 1.9041
c5sd = 1.4565
c5ed = 3.281
varx = 1.8663%.

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STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 90/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.9
Actual Amplitude:	0.9
Actual Power:	0.81
Distortion 2H-22H:	0.000218623%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 1.531	end: 1.582	delta: 0.051
P2 start: 11.5234	end: 13.5309	delta: 2.0075
P3 start: 15.5191	end: 16.294	delta: 0.775
P4 start: 23.9889	end: 29.2126	delta: 5.2237
P5 start: 36.0111	end: 43.706	delta: 7.6949
P6 start: 48.4766	end: 58.418	delta: 9.9415
P7 start: 61.531	end: 73.5309	delta: 11.9999
P8 start: 75.5191	end: 89.2126	delta: 13.6936

H3: 2.81078e-08	H19: -1.1894e-06	H19f: -6.26001e-08
H5: -7.75775e-07	H21: -4.0154e-08	H21f: -1.91209e-09
H7: 1.04802e-06	H23: 6.78253e-07	H23f: 2.94893e-08
H9: 0.0	H25: -0.379036	H25f: -0.0151615
H11: -8.04905e-07	H27: 1.84262e-07	H27f: 6.82452e-09
H13: 1.68647e-07	H29: 0.264933	H29f: 0.00913562
H15: 3.93509e-08	H31: 0.11535	H31f: 0.00372096
H17: 7.24189e-07	H33: -2.55525e-08	H33f: -7.74319e-10

c2sd = -0.09
c2ed = 1.2407
c3sd = -1.8405
c3ed = -3.0496
c4sd = -1.6674
c4ed = 1.5721
c5sd = 1.6674
c5ed = 3.0496
varx = 1.806%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.91
Actual Amplitude:	0.91
Actual Power:	0.8281
Distortion 2H-22H:	9.09856e-05%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 1.3845	end: 1.608	delta: 0.2235
P2 start: 11.619	end: 13.4981	delta: 1.879
P3 start: 15.3515	end: 16.2803	delta: 0.9288
P4 start: 24.0257	end: 29.2844	delta: 5.2586
P5 start: 35.9743	end: 43.7197	delta: 7.7454
P6 start: 48.381	end: 58.392	delta: 10.011
P7 start: 61.3845	end: 73.4981	delta: 12.1136
P8 start: 75.3515	end: 89.2844	delta: 13.9329

H3: 1.11196e-07	H19: -2.54579e-07	H19f: -1.33989e-08
H5: -1.16755e-07	H21: -7.94254e-07	H21f: -3.78216e-10
H7: 1.5488e-07	H23: 4.85876e-07	H23f: 2.11251e-08
H9: 5.55978e-08	H25: -0.356744	H25f: -0.0142698
H11: -6.67174e-07	H27: 5.55978e-08	H27f: 2.05918e-09
H13: 0.0	H29: 0.272434	H29f: 0.00939427
H15: 1.44554e-07	H31: 0.122667	H31f: 0.003957
H17: -8.83024e-08	H33: 2.52717e-09	H33f: 7.6581e-11

c2sd = -0.1371
c2ed = 1.0417
c3sd = -1.8297
c3ed = -2.9539
c4sd = -1.7401
c4ed = 1.4656
c5sd = 1.7401
c5ed = 2.9539
varx = 1.7477%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.92
Actual Amplitude:	0.92
Actual Power:	0.8464
Distortion 2H-22H:	0.000304043%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	1.2296	end:	1.643	delta:	0.4134
P2 start:	11.7179	end:	13.4497	delta:	1.7318
P3 start:	15.1686	end:	16.2697	delta:	1.1011
P4 start:	24.0626	end:	29.3563	delta:	5.2937
P5 start:	35.9374	end:	43.7303	delta:	7.7929
P6 start:	48.2821	end:	58.357	delta:	10.0749
P7 start:	61.2296	end:	73.4497	delta:	12.2201
P8 start:	75.1686	end:	89.3563	delta:	14.1877

H3: 5.49935e-08	H19: -1.23301e-06	H19f: -6.48953e-08
H5: 1.02288e-06	H21: -1.61052e-07	H21f: -7.66916e-09
H7: 1.44947e-06	H23: 1.72153e-06	H23f: 7.48493e-08
H9: 0.0	H25: -0.334281	H25f: -0.0133712
H11: -1.13986e-06	H27: 0.0	H27f: 0.0
H13: 5.71086e-08	H29: 0.279723	H29f: 0.00964563
H15: 8.24902e-08	H31: 0.130312	H31f: 0.00420362
H17: -5.24055e-07	H33: -7.49911e-09	H33f: -2.27246e-10

c2sd = -0.0504
c2ed = 0.9791
c3sd = -1.9973
c3ed = -2.9551
c4sd = -1.7126
c4ed = 1.5222
c5sd = 1.7126
c5ed = 2.9551
varx = 1.6915%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 93/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.93
Actual Amplitude:	0.93
Actual Power:	0.8649
Distortion 2H-22H:	5.80339e-05%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 1.0646	end: 1.6885	delta: 0.6239
P2 start: 11.8206	end: 13.3814	delta: 1.5608
P3 start: 14.9663	end: 16.2626	delta: 1.2963
P4 start: 24.0996	end: 29.4285	delta: 5.3289
P5 start: 35.9004	end: 43.7374	delta: 7.837
P6 start: 48.1794	end: 58.3115	delta: 10.1321
P7 start: 61.0646	end: 73.3814	delta: 12.3168
P8 start: 74.9663	end: 89.4285	delta: 14.4622

H3: -2.72011e-08	H19: -2.83464e-07	H19f: -1.49191e-08
H5: -2.4481e-07	H21: -1.7875e-07	H21f: -8.5119e-09
H7: 2.4481e-07	H23: 4.96715e-08	H23f: 2.15963e-09
H9: -4.53351e-08	H25: -0.311586	H25f: -0.0124634
H11: 2.74484e-07	H27: 2.62944e-07	H27f: 9.73866e-09
H13: 1.25543e-08	H29: 0.286794	H29f: 0.00988945
H15: 7.6163e-08	H31: 0.138366	H31f: 0.00446343
H17: 1.34405e-07	H33: 7.41847e-09	H33f: 2.24802e-10

c2sd = -0.3054
c2ed = 0.4944
c3sd = -1.7526
c3ed = -2.6878
c4sd = -1.95
c4ed = 1.1475
c5sd = 1.95
c5ed = 2.6878
varx = 1.6376%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.94
Actual Amplitude:	0.94
Actual Power:	0.8836
Distortion 2H-22H:	0.000141073%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 0.8873	end: 1.7469	delta: 0.8596
P2 start: 11.928	end: 13.2874	delta: 1.3594
P3 start: 14.7389	end: 16.26	delta: 1.5211
P4 start: 24.137	end: 29.5011	delta: 5.3641
P5 start: 35.863	end: 43.74	delta: 7.877
P6 start: 48.072	end: 58.2531	delta: 10.1811
P7 start: 60.8873	end: 73.2874	delta: 12.4001
P8 start: 74.7389	end: 89.5011	delta: 14.7622

H3: -2.42205e-07	H19: -9.26329e-07	H19f: -4.87542e-08
H5: 3.87529e-07	H21: 4.61343e-08	H21f: 2.19687e-09
H7: 8.07351e-08	H23: 4.14206e-07	H23f: 1.8009e-08
H9: -8.97057e-08	H25: -0.288566	H25f: -0.0115426
H11: -7.41295e-07	H27: 5.08332e-08	H27f: 1.88271e-09
H13: 3.41572e-07	H29: 0.293643	H29f: 0.0101256
H15: 2.26058e-07	H31: 0.14696	H31f: 0.00474065
H17: 1.32975e-07	H33: -3.76764e-07	H33f: -1.14171e-08

c2sd = -0.4008
c2ed = 0.1641
c3sd = -1.7266
c3ed = -2.5348
c4sd = -2.0683
c4ed = 0.9666
c5sd = 2.0683
c5ed = 2.5348
varx = 1.5859%.

STEP-LOCKED MAGIC SINEWAVE

ANDC32 - 95/100

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.95
Actual Amplitude:	0.95
Actual Power:	0.9025
Distortion 2H-22H:	6.55437e-05%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 0.6947	end: 1.8212	delta: 1.1266
P2 start: 12.0412	end: 13.1591	delta: 1.1179
P3 start: 14.478	end: 16.2626	delta: 1.7846
P4 start: 24.1748	end: 29.574	delta: 5.3992
P5 start: 35.8252	end: 43.7374	delta: 7.9121
P6 start: 47.9588	end: 58.1788	delta: 10.2199
P7 start: 60.6947	end: 73.1591	delta: 12.4644
P8 start: 74.478	end: 89.574	delta: 15.096

H3: -2.66284e-08	H19: -2.18633e-07	H19f: -1.1507e-08
H5: 4.79312e-07	H21: 7.60812e-09	H21f: 3.62291e-10
H7: -7.98853e-08	H23: 1.04198e-07	H23f: 4.53036e-09
H9: 1.06514e-07	H25: -0.265095	H25f: -0.0106038
H11: 2.17869e-08	H27: 3.25458e-08	H27f: 1.2054e-09
H13: -1.96641e-07	H29: 0.300252	H29f: 0.0103535
H15: 1.38468e-07	H31: 0.156278	H31f: 0.00504122
H17: 2.53753e-07	H33: -2.08186e-07	H33f: -6.30866e-09

c2sd = -0.0627
c2ed = 0.2978
c3sd = -2.2686
c3ed = -2.7047
c4sd = -1.8579
c4ed = 1.3206
c5sd = 1.8579
c5ed = 2.7047
varx = 1.5366%.

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SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.96
Actual Amplitude:	0.96
Actual Power:	0.9216
Distortion 2H-22H:	0.000542444%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start: 0.4825	end: 1.9161	delta: 1.4336
P2 start: 12.1619	end: 12.984	delta: 0.8221
P3 start: 14.1717	end: 16.2723	delta: 2.1006
P4 start: 24.2134	end: 29.6473	delta: 5.4339
P5 start: 35.7866	end: 43.7277	delta: 7.9412
P6 start: 47.8381	end: 58.0839	delta: 10.2458
P7 start: 60.4825	end: 72.984	delta: 12.5016
P8 start: 74.1717	end: 89.6473	delta: 15.4757

H3: -1.31755e-07	H19: -3.06227e-06	H19f: -1.61172e-07
H5: -2.48227e-06	H21: 1.20462e-07	H21f: 5.73628e-09
H7: 7.67945e-07	H23: -4.81193e-07	H23f: -2.09214e-08
H9: -1.75674e-08	H25: -0.240983	H25f: -0.00963931
H11: 3.66519e-07	H27: 6.44137e-08	H27f: 2.38569e-09
H13: 3.12564e-06	H29: 0.306581	H29f: 0.0105718
H15: -7.37829e-08	H31: 0.166601	H31f: 0.00537423
H17: 1.76707e-06	H33: -1.67688e-07	H33f: -5.08147e-09

c2sd = -0.7079
c2ed = -0.7692
c3sd = -1.6178
c3ed = -2.1074
c4sd = -2.4069
c4ed = 0.4368
c5sd = 2.4069
c5ed = 2.1074
varx = 1.4895%.

SUMMARY: This steplock-32 "constant amplitude increments" magic sinewave is fully delta friendly. Harmonics 2 through 24 are virtually zero. The first major harmonics are the 25th and 29th. Harmonic amplitudes are relative to the fundamental. Filtered "f" harmonics assume a filter of an "integrating" or 1/H or 1/f response. An 0.001 degree timing accuracy is required. Some amplitudes require interleaving.

Desired Amplitude:	0.97
Actual Amplitude:	0.97
Actual Power:	0.9409
Distortion 2H-22H:	0.000682037%
First strong harmonics:	25 and 29
Pulses per sine cycle:	32
Total switching events:	64
Delta Friendly:	Yes

P1 start:	0.2437	end:	2.0384	delta:	1.7947
P2 start:	12.2929	end:	12.7414	delta:	0.4485
P3 start:	13.7997	end:	16.2912	delta:	2.4914
P4 start:	24.2535	end:	29.7213	delta:	5.4678
P5 start:	35.7465	end:	43.7088	delta:	7.9623
P6 start:	47.7071	end:	57.9616	delta:	10.2545
P7 start:	60.2437	end:	72.7414	delta:	12.4977
P8 start:	73.7997	end:	89.7213	delta:	15.9216

H3: -1.56476e-07	H19: -4.0025e-06	H19f: -2.10658e-07
H5: -3.03564e-06	H21: 1.30397e-07	H21f: 6.20937e-09
H7: -1.7883e-07	H23: -6.19102e-07	H23f: -2.69175e-08
H9: 8.69313e-09	H25: -0.215909	H25f: -0.00863637
H11: 0.0	H27: 1.91249e-07	H27f: 7.08329e-09
H13: 3.60497e-06	H29: 0.312572	H29f: 0.0107783
H15: -5.21588e-09	H31: 0.178384	H31f: 0.00575434
H17: 2.79816e-06	H33: -2.60794e-08	H33f: -7.90284e-10

c2sd = -0.9471
c2ed = -1.443
c3sd = -1.5271
c3ed = -1.8044
c4sd = -2.651
c4ed = 0.048
c5sd = 2.651
c5ed = 1.8044
varx = 1.4443%.