Serial No.	Position Profile	File Name	Parameters	Load Profile (load is in lbs)	Max. Velocity (m/s)	Comments
1-6	Step	step11 through step16	Steps: 0, 40, and 80 mm	Steps: -70, -40, -10, 0, 10, 40, 70	---	Evaluates step response of actuator
7	Sinusoidal	sine11	40 mm, 0.5Hz	Const at -70	0.04	Parameters represent amplitude and frequency of sine wave
8		sine12		Const at -40		
9		sine13		Const at -10		
10		sine14		Const at 0		
11		sine15		Const at 10		
12		sine16		Const at 40		
13		sine17		Const at 70		
14		sine21	40 mm, 1Hz	Const at -70	0.08	
15		sine22		Const at -40		
16		sine23		Const at -10		
17		sine24		Const at 0		
18		sine25		Const at 10		
19		sine26		Const at 40		
20		sine27		Const at 70		
21		sine31	80 mm, 0.25 Hz	Const at -70	0.04	
22		sine32		Const at -40		
23		sine33		Const at -10		
24		sine34		Const at 0		
25		sine35		Const at 10		
26		sine36		Const at 40		
27		sine37		Const at 70		
28	Trapezoidal	trap11	40 mm, 22 s (1+1 seconds motion, 10+10 seconds hold)	Const at -70	0.04	Parameters represent amplitude and time period of trapezoidal wave
29		trap12		Const at -40		
30		trap13		Const at -10		
31		trap14		Const at 0		
32		trap15		Const at 10		
33		trap16		Const at 40		
34		trap17		Const at 70		
35		trap21	40 mm, 21 s (0.5+0.5 seconds motion, 10+10 seconds hold)	Const at -70	0.08	
36		trap22		Const at -40		
37		trap23		Const at -10		
38		trap24		Const at 0		
39		trap25		Const at 10		
40		trap26		Const at 40		
41		trap27		Const at 70		
42		trap31	80 mm, 24 s (2+2 seconds motion, 10+10 seconds hold)	Const at -70	0.04	
43		trap32		Const at -40		
44		trap33		Const at -10		
45		trap44		Const at 0		
46		trap35		Const at 10		
47		trap36		Const at 40		
48		trap37		Const at 70		
49	Triangular	triang11	40 mm, 2 s	Const at -70	0.04	Parameters represent amplitude and time period of triangular wave
50		triang12		Const at -40		
51		triang13		Const at -10		
52		triang14		Const at 0		
53		triang15		Const at 10		

54		triang16		Const at 40		
55		triang17		Const at 70		
56		triang21		Const at -70		
57		triang22		Const at -40		
58		triang23		Const at -10		
59		triang24	40 mm, 1 s	Const at 0	0.08	
60		triang25		Const at 10		
61		triang26		Const at 40		
62		triang27		Const at 70		
63		triang31		Const at -70		
64		triang32		Const at -40		
65		triang33		Const at -10		
66		triang34	80 mm, 4 s	Const at 0	0.04	
67		triang35		Const at 10		
68		triang36		Const at 40		
69		triang37		Const at 70		
70		sweep11		Const at -70		Parameters represent amplitude, and initial and final frequencies
71	Sine Sweep	sweep12	80 mm, 0.0625 Hz, 0.5 Hz	Const at 0	0.08	
72		sweep13		Const at 70		

- Max velocity of the actuator – 0.1 m/s
- Max stroke – 4 in (~0.1m)
- Max load – ~75 lbs
- Duration of a trapezoidal wave scenario is as specified in the table
- Scenarios marked with '-2m' after the scenario name (e.g. 'sine15-2m') are special-purpose 2 minute duration scenarios
- All other scenarios are 30 seconds in duration
- At least a 30 second break for cool-down is introduced between scenarios during execution