

Vibration/Shock

This test subjects the camera to a sine wave test. The cameras are then verified as operational, disassembled and inspected for damage, reassembled and tested again.

Pass/Fail Criteria

- All cameras must be functionally operational with no internal damage (such as solder cracks or loose components) after the test.

Test Configuration - Mechanical Shock

Specification	Description
Pulse Shape	Half-sine
Test Level	50G (490 m/s ²)
Pulse Duration	3 msec
Inputs per orientation	3 (18 in total)
Orientations	+/-X, +/-Y, +/-Z

Test Configuration - Random Vibration

Specification	Description
Frequency range	15-500 Hz
Vibration intensity	4.9 G rms (48.4 m/s ² rms)
PSD (G ² /Hz)	0.05
ASD (m ² /s ²)	4.80852
Total duration	90 minutes
Orientation	X, Y, Z - 30 minutes each

Test Configuration - Sine Vibration

Specification	Description
Frequency range	10-500 Hz
Vibration intensity	5.0 G (10 m/s ²)
Sweep rate	1 octave per minute
Total duration	90 minutes
Orientation	X, Y, Z - 30 minutes each

Additional Configuration

- None.