The L3Harris Model H-411 AOM represents a significant departure from conventional AOM technology. By changing only the phase of the RF source waveform to modulate optical intensity, the H-411 AOM assures constant input power is always applied to the device regardless of data rate conditions. As a result, transient thermal conditions that occur with conventional AOM drive techniques are largely eliminated, and beam-pointing stability is significantly improved.

The H-411 AOM focuses light from a coherent optical source to a suitable beam waist within the optical medium, which is composed of low-loss, optical-grade tellurium dioxide crystal. The light is proportionally directed into a primary intense diffraction order at an angle that depends on the frequency of the applied RF source waveform. Advanced coherent transducer array technology, employed with precise digital drive technology, allows the H-411 AOM to be operated in either the RF phase modulation mode or a conventional on/off pulse RF mode for extended on/off contrast where beam-pointing stability is not critical. An L3Harris H-400 series compatible driver and interface cable are required for operation.



PERFORMANCE PARAMETERS

TYPICAL PERFORMANCE AT 532 NM USING H-401D DRIVER

The following plots show measured and/or simulated performance for the H-411 AOM when used with an H-400 AOM series compatible

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