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Digital Micromirror Device (DMD) Holographic Data Storage Update and Optical Analysis¹ DANIEL BULLOCK, TONI SAUNCY, CHARLES ALLEN, Angelo State Physics — The current working and proposed designs for holographic data storage are based on the transmission hologram, and most of them are considering the use of a Digital Micromirror Device (DMD) as the object using the array of bits. This research project is to consider the use of reflection holography in the system for the simplicity usually associated with holograms of that type. However, issues arise in the practical application of reflection holographic data storage when minification and multiple layering are considered. Other issues include eliminating incidental writing and automating the optics to write an entire disc. The nature of these complications and the theoretical solutions are discussed in this presentation.

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