

**Lunar X Predictions**  
**Friday, July 16, 2021**  
**40°N-75°W**

Reference	EDT	Altitude	Azimuth	Colongitude
358° colongitude	<b>5:48 pm</b>	45.0°	164°	358.00°
Phil Harrington	<b>6:47 pm</b>	45.9°	185°	358.50°
Dave Mitsky, DVAA	<b>7:02 pm</b>	45.4°	190°	358.63°

Altitude and Azimuth from SkyTools; Colongitude from WinJUPOS

On July 16, the moon rises at 12:29 pm, transits at 6:34 pm and sets at 12:28 am on July 17 (from USNO's MICA)

**Note:** Since the Lunar X gradually appears as the lunar terminator moves across the respective crater rims, progressively illuminating them at lunar sunrise against the unilluminated surface below them, and then the lunar surface below them is gradually illuminated, these times do not reflect an instantaneous event. It's uncertain what stage of illumination these times reflect, except that Mitsky notes "fully formed." It would be advisable to look somewhat before the earliest prediction, and ideally, look periodically thereafter to see the progress of illumination. I've been able to spot the Lunar X when completely illuminated up to a few days after the ideal point of a bright X against a dark background. Of course, it's not as impressive then.

Prepared by Joe Stieber, July 9, 2021.