Evaluating a Lunar Eclipse

The Danjon Scale of Lunar Eclipse Brightness illustrates the range of colors and brightness the Moon can take on during a total lunar eclipse and is a useful tool to observers in characterizing the appearance of an eclipse.

The evaluation is best done with the naked eye, binoculars or a small telescope near the time of mid-totality. It is also helpful to examine the Moon's appearance just after the beginning and just before the end of totality. In making evaluations, the instrumentation and the time must also be recorded.

Use the following scale to assign an “L” value at three points during the eclipse. Consider taking a picture of the Moon to provide evidence for your evaluation.

- **L = 0 Very dark eclipse**
  (Moon is almost invisible, especially at mid-totality)
- **L = 1 Dark eclipse, gray or brownish in coloration**
  (Details are distinguishable only with difficulty)
- **L = 2 Deep red or rust-colored eclipse**
  (Very dark central shadow, while outer umbra is relatively bright)
- **L = 3 Brick-red eclipse**
  (Umbral shadow usually has a bright or yellow rim)
- **L = 4 Very bright copper-red or orange eclipse**
  (Umbral shadow has a bluish, very bright rim)

Just after totality begins

Time: _____
Instrumentation (circle one): telescope / binoculars / naked-eye
L = _____

Moment of greatest eclipse

Time: _____
Instrumentation (circle one): telescope / binoculars / naked-eye
L = _____

Just before totality ends

Time: _____
Instrumentation (circle one): telescope / binoculars / naked-eye
L = _____