Req 5.6.7

**Title:**
Linearity as a function of flux

**Objective:**
Verify the linearity (ratio of input over output) of the overall detector amplification-data reduction chain for the three different observing modes as an end-to-end test.

Compare the resultant magnitudes derived by the image pipeline by taking short and long exposures of the same standard field.

**Fulfilling or fulfilled by:**
Selfstanding

**When performed/frequency:**
Commissioning

**Sources, observations, instrument configurations:**
Equatorial field in all the four key passbands; short 10 sec, 100 sec, 400 sec and 800 sec exposure. Two lens corrector.

**Outputs:**
OK flag

**Required accuracy, constraints:**
Better than 1% on the photometric scale

**Estimated time needed:**
Commissioning 6 hour

**Priority:**
desirable

**TSF:**

**Mode— Stare N=2**
**TSF— OCAM_img_obs_stare**
and

**Mode— jitter N=5**
**TSF— OCAM_img_obs_jitter**
and

**Mode— dither N=5**
**TSF— OCAM_img_obs_dither**
CA:
Run standard image pipeline and do source extraction on the calibrated image. Compare magnitudes of source lists for different exposure times in an interactive analysis.