Lubin Model Implementation Documentation

how\_to\_run.txt describes how the model can be experimented or tested. The following description will help to understand the implementation or source code in lubin.m

1. Reding reference and distorted images.

2. Applying PSF on images: To be specific, 2D gaussian filter is applied. 2D gaussian is one of PSF.

3. Resampling: Images were resampled at scale 85%.

4. Applying several orientations: We apply four orientations (0 or pi/4 or pi/2 or 3pi/4

) on the images and find decomposed images

5. Error normalization: We find the difference between decomposed signals of reference and distorted images.

6. Error pooling: Not done.

7. Converting pooled error to probability of detection map: not done.