Camera Design Using Locus of Unit Monochromats

- James A. Worthey, Gaithersburg, Maryland
- Michael H. Brill, Datacolor, Lawrenceville, NJ
- http://www.jimworthey.com
Maxwell-Ives
Linear Xfmn

Nikon D1 Sensitivities
rgb peaks = 595, 536, 474 nm

Cone Sensitivities
rgb peaks = 566, 543, 446

Ref: DiCarlo, Montgomery & Trovinger, CIC 12

Human LUM = edge of colored surface
Nikon D1’s LUM = spheres
Best fit = arrowheads

If the LUMs were the same, the Maxwell-Ives criterion would be met. Departures from M-I have intuitive meaning.