Dichroics for the Next Generation Adaptive Optics System for W. M. Keck Observatory:

We would like all dichroics to have as sharp a transition between reflection and absorption as possible, while, we would like to avoid ripples in the transmission curve. I would like to know what the largest optic that your facility can coat is and what coating you would use for the following with typical transmission curves. I would like to get quotes for 12" optics with the following specifications:

- 1. Reflects 400-900 nm and transmits all IR wavelengths above 900 nm Angle of Incidence = 10 degrees, Unpolarized light
- 2. Reflects 400-1000 nm and transmits all IR wavelengths Angle of Incidence = 10 degrees, Unpolarized light
- 3. Reflects 1.13-1.37 microns (J-band) and transmits over 1.37 microns Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 4. Reflects 1.5-1.80 microns (H-band) and transmits over 1.80 microns Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 5. Reflects 1.5-2.42 microns (k and H-band) and transmits over 2.42 microns Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 6. Reflects .6-.99 microns (R to Z-band) and transmits over 1 micron Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 7. Reflects 1.13-1.37 microns (J-band) and transmits over 1.37 microns Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 8. Reflects 1.5-1.80 microns (H-band) and transmits over 1.80 microns Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 9. Reflects 1.5-2.42 microns (k and H-band) and transmits over 2.42 microns Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 10. Reflects .81-.99 microns (Z-band) and transmits over 1 micron Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 11. Reflects .7-.9 microns (I-band) and transmits over .9 micron Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 12. Reflects .58-.66 microns (R-band) and transmits over .66 micron Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 13. Reflects .49-.59 microns (V-band) and transmits over .9 micron Angle of Incidence = 22.5 or 45 degrees, Unpolarized light
- 14. Reflects < .1 microns and transmits over .1 micron Angle of Incidence = 22.5 or 45 degrees, Unpolarized light

I look forward to hearing from you.