

Cross Dragone

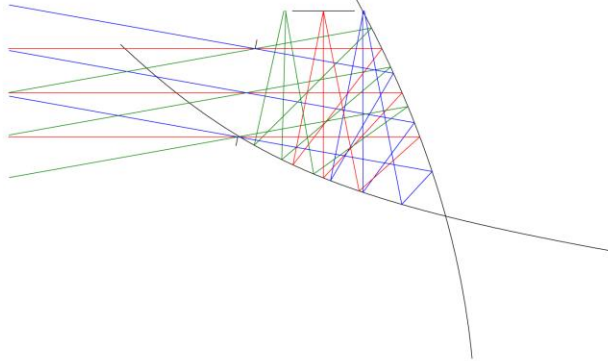
-updates on finding solution for
“direct view of sky” and “sidelobes”

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Sep. 19th, 2017

- Goal:
 - finding a Cross Dragone design in which the focal plane does not have direct view of sky and significant sidelobes
- Methods:
 - Given aperture size, increase F# to increase effective focal length
 - Then two paths:
 - 1) without a 3rd mirror, put baffles at proper places (today);
 - 2) with a 3rd folding mirror, possibly like CORE.
 - Put the model into the rocket envelope to see if it can fit

D = 140 cm, F# = 2.5



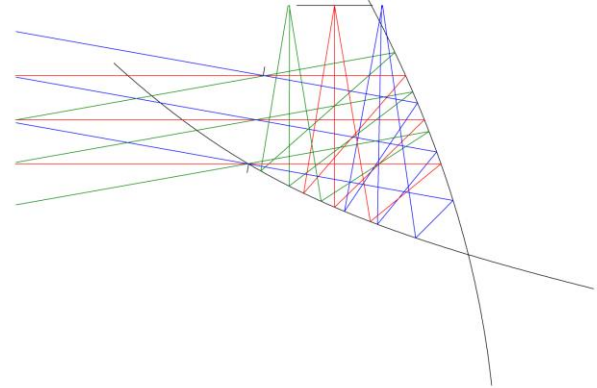
147.06 CM

New lens from CVMACRO:cvnewlens.seq

Scale: 0.02

08-Sep-17

D = 140 cm, F# = 3



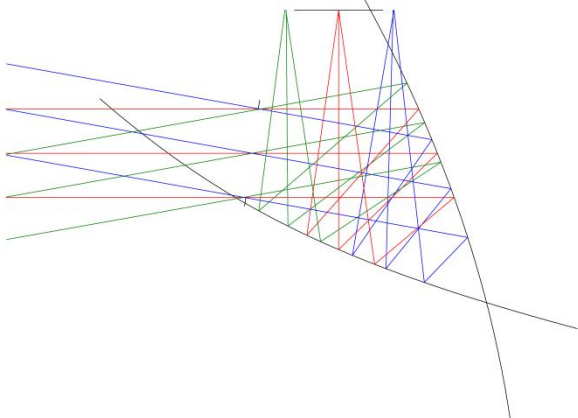
147.06 CM

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Scale: 0.02

08-Sep-17

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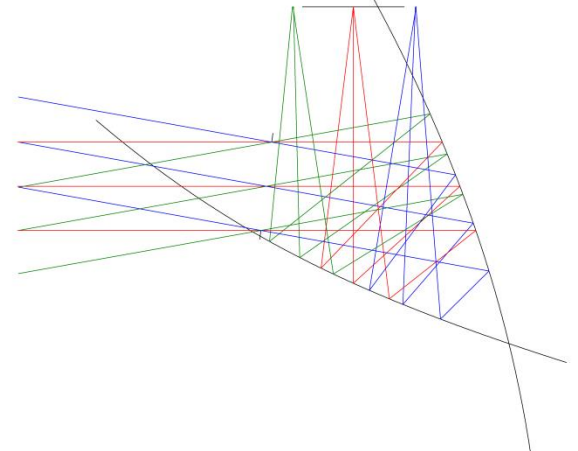
147.06 CM

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Scale: 0.02

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147.06 CM

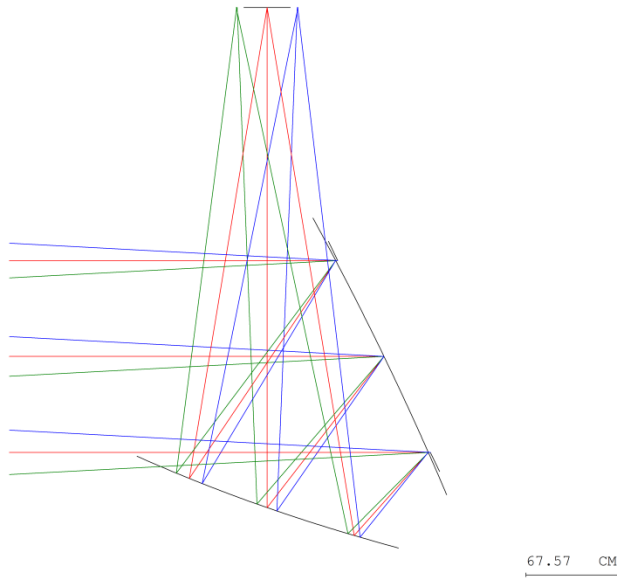
New lens from CVMACRO:cvnewlens.seq

Scale: 0.02

08-Sep-17

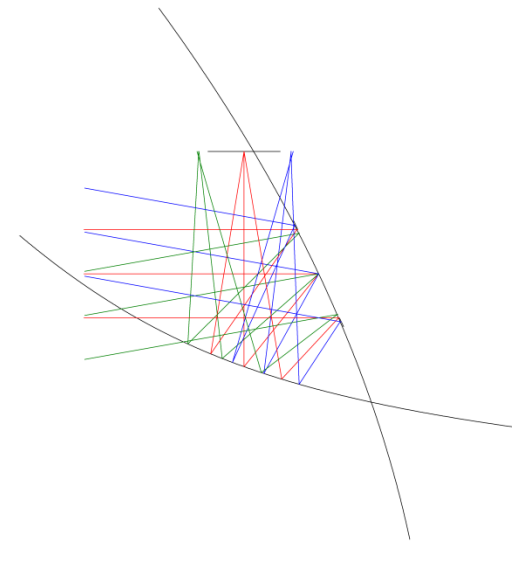
D = 140 cm, F# = 3

FOV = +/- 3 deg



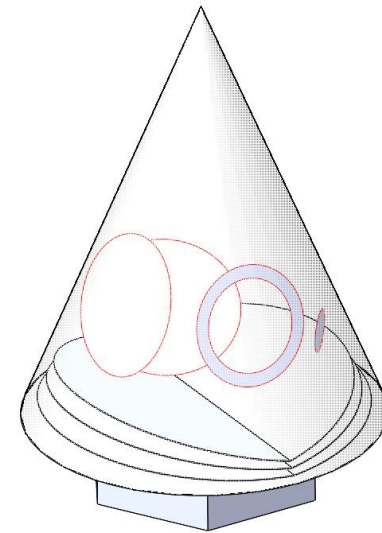
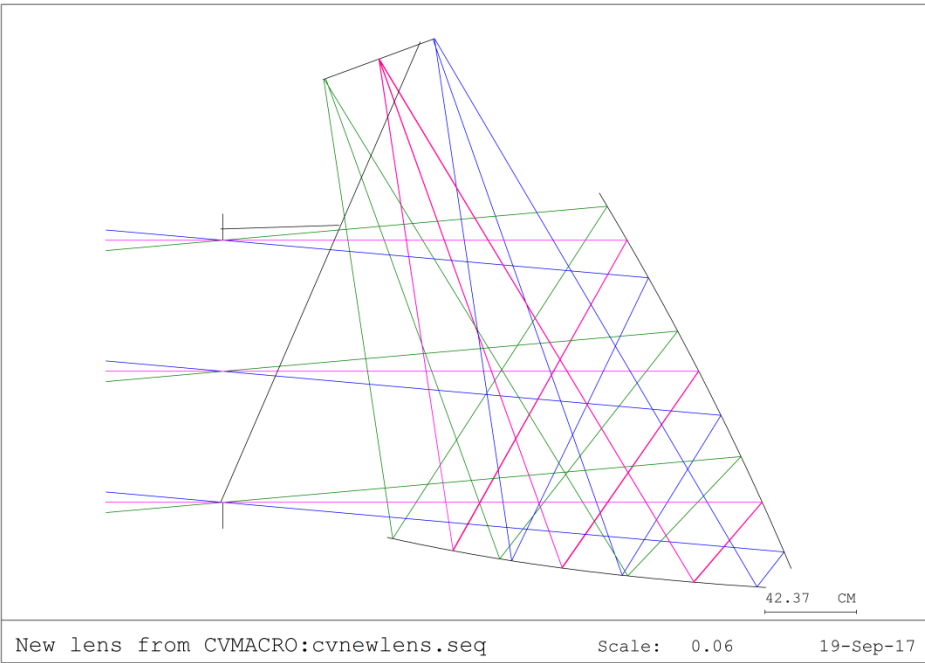
New lens from CVMACRO:cvnewlens.seq Scale: 0.04 07-Sep-17

FOV = +/- 10 deg

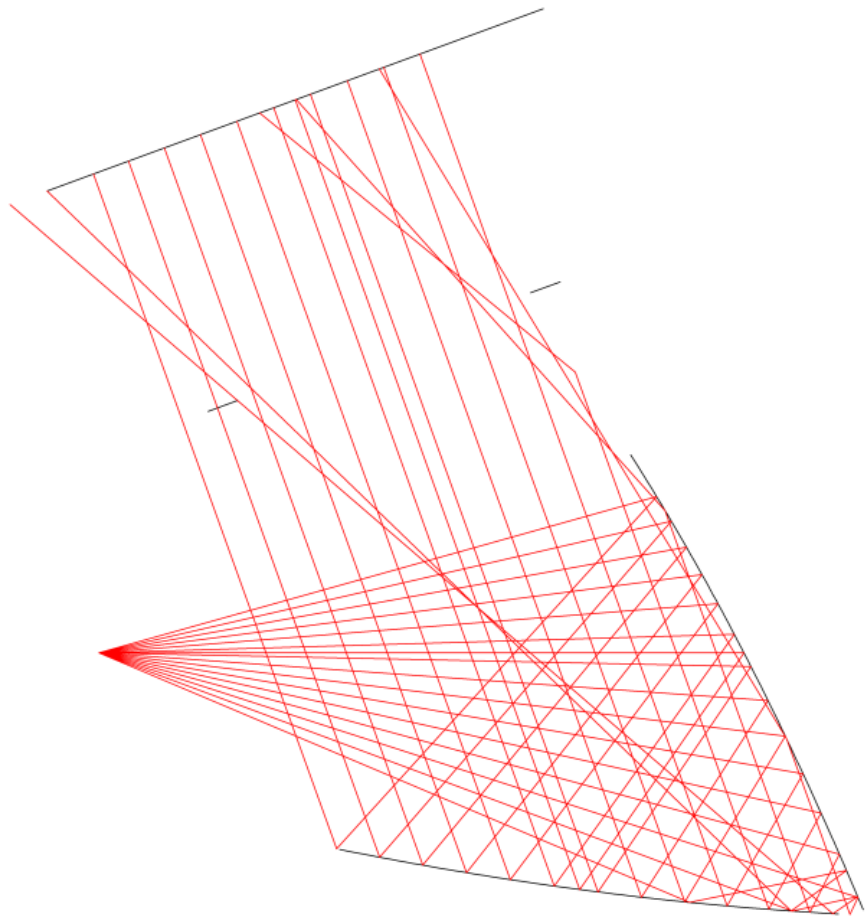


New lens from CVMACRO:cvnewlens.seq Scale: 0.02 07-Sep-17

$D = 1.2 \text{ m}$, $F\# = 2.5$, $\text{FOV}_y = \pm 5 \text{ deg}$



7.5 cm / 55 cm can still see the sky directly



58.14 CM