

2 June 1999

LENA Performance Requirements - Responses

REQID	PARA #	TITLE	EVALUATION
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LENA001	3.1	Functional Requirements	requirements satisfied
LENA003	3.2.1.2.1	Pixel Resolution	calibration data in lab notebook (copy at SwRI) indicate pixel size about 8 deg x 8 deg. Instrument paper also addresses this issue.
LENA004	3.2.1.2.2	Energy Resolution	energy resolution exceeds requirement using stepping controller.
LENA005	3.2.1.2.3	Mass Discrimination	mass discrimination exceeds requirements. Anticipate, for example, resolving O from S.
LENA006	3.2.1.3	Energy Ranges	we have no reason to believe energy resolution is not as specified in the requirement
LENA008	3.2.1.5	Sensitivity	physical aperture about 1 square centimeter. Solid angle is about $2 \times 10^{-2}$ ster. Geometrical factor is greater than $2 \times 10^{-6}$ cm <sup>2</sup> sr for O at greater than a couple hundred eV at optics level of 20 kV.
LENA009	3.2.1.6	Rejection of Noise	LENA has zero count rate for ten solar units UV with optics off. Simulations show specified level of electron and ion rejection.
LENA010/030	3.3.1.6	Field of View	requirement satisfied