

CRaTER Verification Procedure/Report

Title: (8.3.8) Minimum D1/D6 geometrical factor Document 32-06020.28

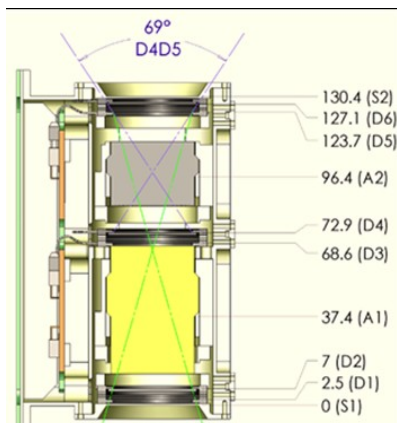
Reference: 32-01205 Instrument Requirements Document Section 8.3.8

Requirement: The geometrical factor created by the first and last detectors shall be at least $0.1 \text{ cm}^2 \text{ sr}$.

Procedure: The geometrical factor will be determined through review of the telescope mechanical drawings. The geometrical factor is a function of the separation between the detectors and the radius of the detectors.

Results:

$$G = 0.5\pi^2(r_1^2 + r_2^2 + z^2 - ((r_1^2 + r_2^2 + z^2)^2 - 4r_1^2 r_2^2)^{1/2})$$



$$R_1 = 1.75 \text{ cm}$$

$$R_2 = 1.75 \text{ cm}$$

$$Z = 12.71 - 0.25 = 12.46 \text{ cm}$$

$$G = 0.57 > 0.1 \text{ cm}^2 \text{ sr}$$

S/N: 01 & 02

Passed/Failed: Passed

Comments:

Performed by: JCKasper

R&QA: _____

Date: 15 November 2007

Date: _____