Southern African Large Telescope

Prime Focus Imaging Spectrograph

Instrument Acceptance Testing Report

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I. Scope

This document describes the results of the Prime Focus Imaging Spectrograph (PFIS) acceptance testing as described in the Instrument Acceptance Testing Plan (ATP: SALT-3160AP0003), which outlines the calibration activities, demonstrations and tests leading to the acceptance of PFIS consistent with the requirements of the instrument as defined in the Functional Performance Requirements Document (FPRD: SALT-3170AE0003). This document and the results herein pertain only to those requirements listed in the FPRD, which are mostly on the optical performance of the spectrograph, and do not necessarily reflect the maturity and/or readiness of the spectrograph with regard to the mechanical, software or operational requirements.

II. Verification Matrix

The matrix below lists for each FPRD requirement the specification and the results of acceptance testing. The results are divided up into three time periods. Pre-Delivery measurements were made in Madison, before the shipment of the instrument to South Africa. Post-Delivery measurements cover the period of testing at the SAAO headquarters in Cape Town before shipment of the instrument to the telescope. On-telescope measurements refer to those measurements made on the telescope. The results include a statement of the level of acceptance:

A. “PASS” – this means that the testing produced results that show the instrument meets the specification. If the word is italicized, it indicates that the results may be preliminary or conditional, but indicate that the instrument will meet the specification.

B. “FAIL” – this means that the instrument did not meet the specification during the time period covered. Further testing will be performed until the specification is either passed or conceded.

C. “CONCEDE” – this means that the specification was not met, and no further effort will be made to make the instrument conform to specification. The instrument will be accepted as is.

D. “LATER” – this means that initial tests may have been performed but there is no conclusive information regarding the status of acceptance.

E. “NO TEST” – this means that no test was performed during the time period covered.