Test Report: STEM Moiré GPA

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1 Revision History

Date	Version	Notes
18/12/2017	1.0	First incomplete version to meet deadline

2 Symbols, Abbreviations and Acronyms

symbol	description
T	Test

[symbols, abbreviations or acronyms – you can reference the SRS tables if needed —SS]

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This document is providing information of STEM Moiré GPA implementation by assessing the results of the tests designed in the TestPlan document. Regarding the size of STEM Moiré GPA program, only a small part of the code has been tested in the required time frame therefore, only a few functional requirements have been evaluated. An important update to the document is planed once the implementation of the other tests are done.

For the moment, only a specific focus has been put on the **GPA Module** (M 6 in the MG document and section 10 in the MIS document) and the modules used by GPA which are: the **Data Structure Module** (M 15 in MG document and section 19 in the MIS document) and the **Mask Module** (M 7 in the MG document and section 11 in the MIS document.

3 Functional Requirements Evaluation

Test R 7 in IM 2: Correctness of the GPA method application.
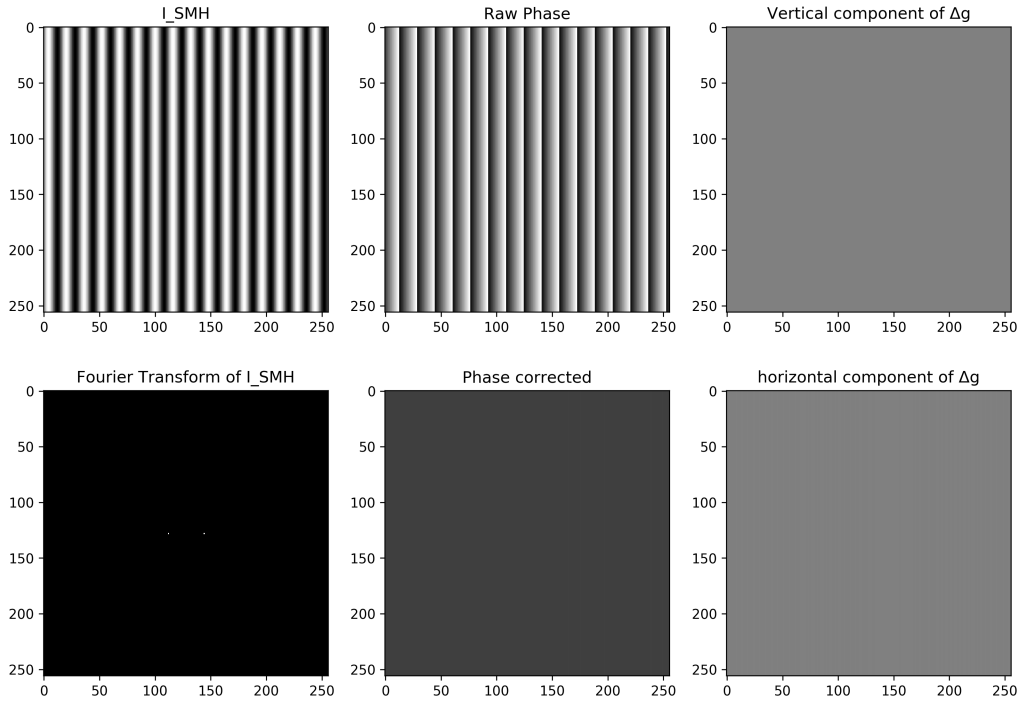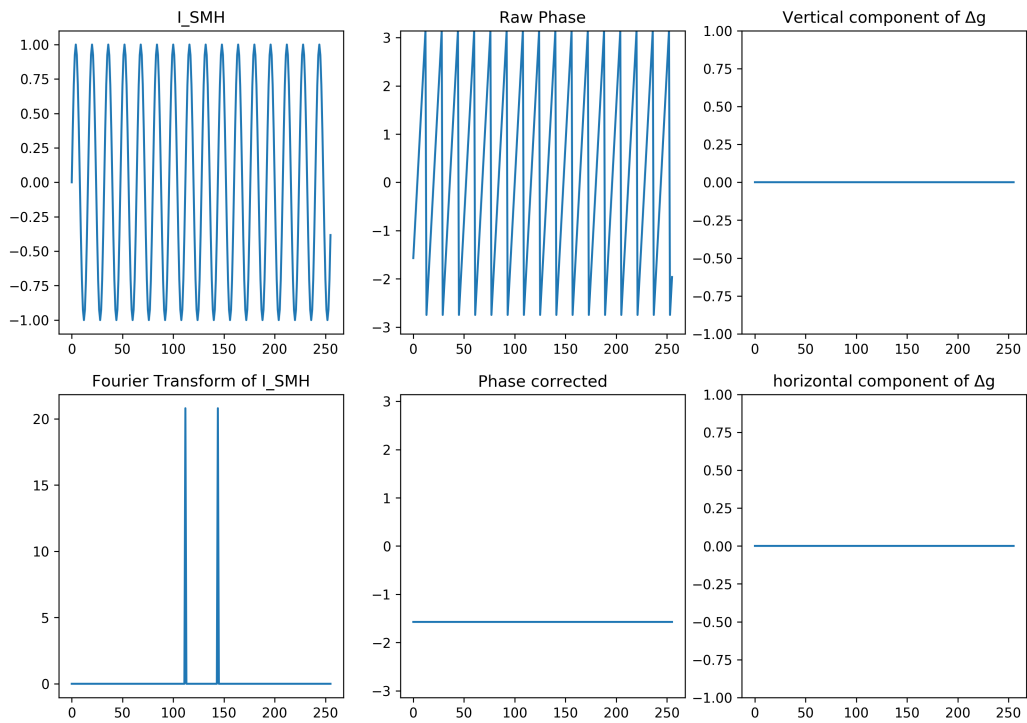
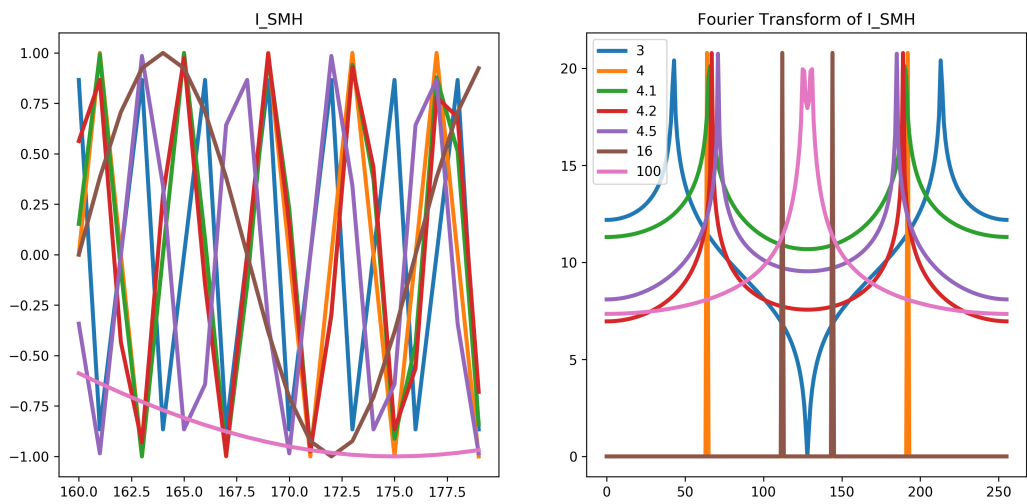**Test 2** from TestPlan document
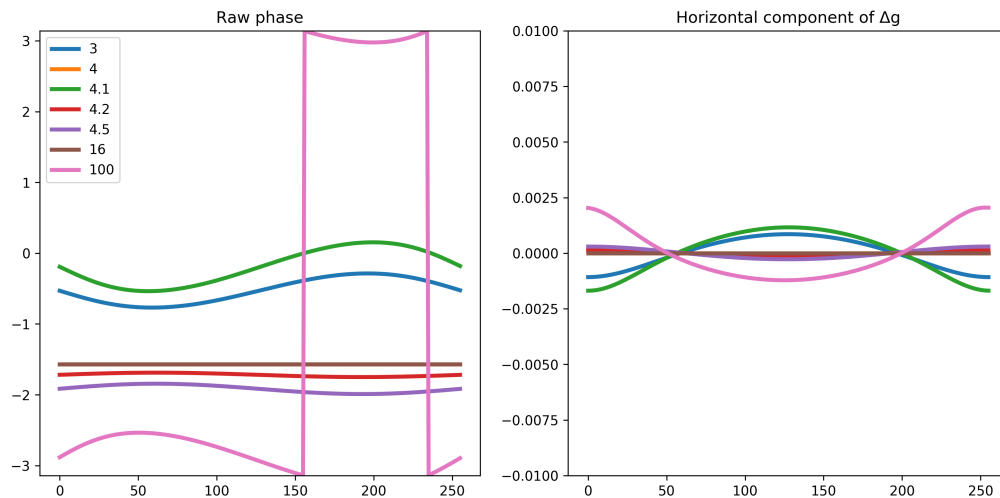

Figure 1

Figure 2

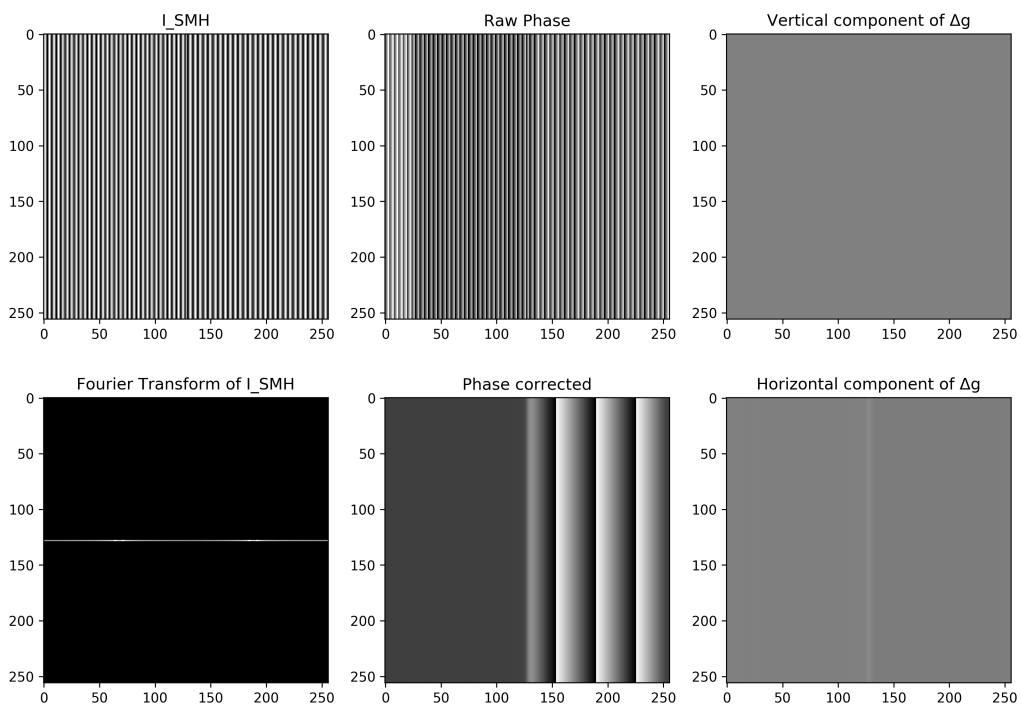Figure 3

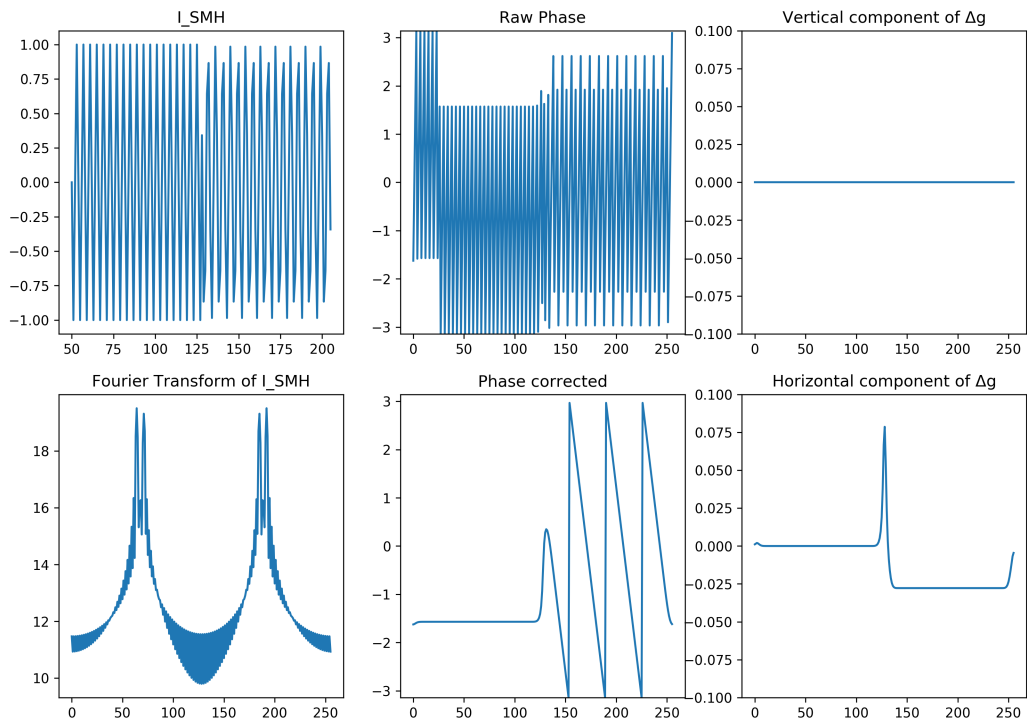Figure 4

Test 3 from TestPlan document

Figure 5

Figure 6

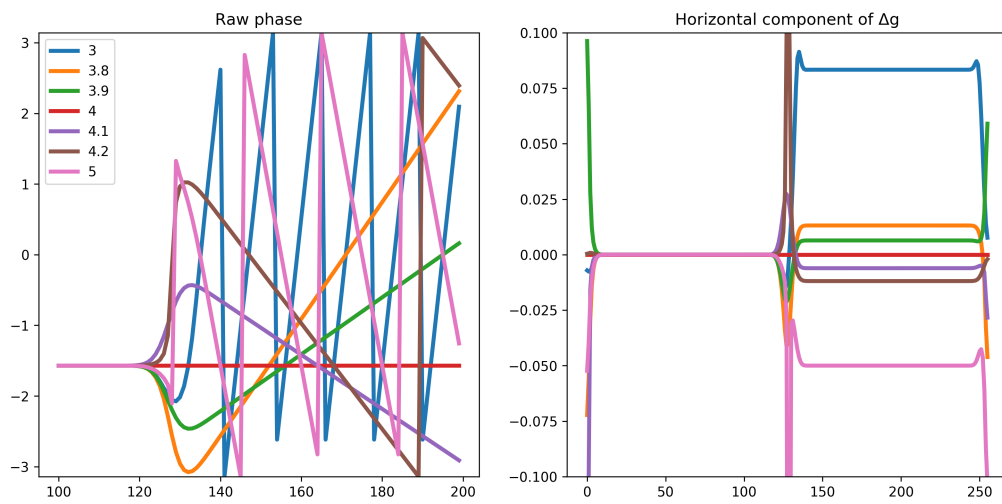Figure 7

4 Nonfunctional Requirements Evaluation

Nonfunctional Requirements have not been addressed for the moment.

5 Comparison to Existing Implementation

No other equivalent open-access software has been identified for a comparison. sMoiré program (available on HREM website) is a good candidate but a licence must be bought in order to use the software. The licence purchase is not an option, moreover all aspects of STEM Moiré GPA are not covered by sMoiré.

The GPA algorithm used in STEM Moiré GPA could be however compared to other open-access GPA software and is planned to be performed. Nevertheless, most of them are plug-ins for Digital Micrograph software therefore an interface must be designed to perform a comparison with STEM Moiré GPA.

6 Unit Testing

7 Changes Due to Testing

Mask function

8 Automated Testing

9 Trace to Requirements

10 Trace to Modules

11 Code Coverage Metrics