

R²E



Update on Fraunhofer Tests

CERN R2E Project

RadWG Meeting November 14th 2013

M. Brugger for the R2E Project

Test campaigns started (some finished)

Finished:

- Ⓢ Optical sensors, Piezos, Load sensors, Magnet materials, HLD samples, 3D printer materials, Scotch, RF 1st trial, Suppressor diodes, nanoFIPdiag,

On-Going:

- Ⓢ RadFet(s) 2nd campaign, RadMon components (problem with cable/connector size!)

Next:

- Ⓢ LED safety lights, Fire alarm system, RadMon components, humidity sensor?, collimation components, Cable holder (2nd), RF 2nd campaign, EPC components (to be decided after PSI results)

Ⓢ **Budget:**

- Ⓢ Fully integrated into R2E project
- Ⓢ Dedicated code as from 2014+
- Ⓢ Requests through M. Brugger

@ TWiki Page operational

<https://twiki.cern.ch/twiki/bin/view/FraunhoferRadTests/WebHome>

- @ Update to be performed by:
 - @ Equipment group in charge
(for specifications, final analysis and reports)
 - @ Fraunhofer INT
(for preparation, implementation, results)
- @ All communication (documents, descriptions) **MUST** go through the TWiki
- @ **Only few updated since migration!!! -> HELP!!!**
- @ General planning sheet will be provided by Fraunhofer INT

Ⓢ Active or Passive tests

- Ⓢ please carefully evaluate if active tests are required
 - Ⓢ Usually requiring a complex setup (thus additional costs if outsourced to Fraunhofer INT)
 - Ⓢ If it's 'simple' components, the additional information gain is limited
 - Ⓢ Example: QPS components where step-wise measurements would have 'saved' a few man-weeks

Ⓢ High-Dose location

- Ⓢ Tests will be possible to be performed there
- Ⓢ Even 'active' in case volume remains small and cables can extend to 60m
- Ⓢ Costs per 10MGy will be comparable (below) 1MGy in standard location

Ⓢ High-level dosimetry project

- Ⓢ Agreement with Fraunhofer INT and Pisa University
- Ⓢ Doctoral student will start in December
- Ⓢ Promising 1st trials at CHARM