Indicative test report

Super coconut fibre plates (SCF)

Name of client:	Mr. Jegathasan Ponniah		
File no.:	PFA10953A		
Date:	2017-01-27		
Pages:	5	Encl.:	5
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ilac-MRA DANAK Test Reg.no. 12

Client information

Client:	Mr. Jegathasan Ponniah
Address:	Nørregade 30, 1sal - 43
	DK-7400 Herning
	Denmark

The results relate only to the items tested. The test report should only be reproduced in extenso - in extracts only with a written agreement with this institute.

1. Material

Coconut fibre board.

Trade name

Super coconut fibre plates (SCF).

2. Manufacturer

The client is the manufacturer.

3. Nature of test

By request of the client, the product has been subjected to an indicative test procedure of EN 13823:2010 + A1:2014.

4. Sample

On 2017-01-02 DBI - Danish Institute of Fire and Security Technology received the following sample:

8 pcs. of Super coconut fibre plates (SCF), each with dimensions 490-500 x 490-500 x 22-30 mm.

Additional on 2017-01-10 two pcs. each with dimensions 495 x 495 x 27 mm.

Density at 20°C (undried): approx. 535 kg/m³ at the state of receipt determined by weight and measures of the sample.

The following information was given by the client:

The product is made of cement, coconut fibre, water and a fire resistant product.

One test specimen was prepared from the sample to EN 13823.

5. Mounting of specimen for Single Burning Item test

A standard mounting of specimen was carried out in accordance with EN 13823 as follows:

Mounting: Standard mounting option c) in clause 5.2.2 of EN 13823.

Substrate: 10 mm calcium silicate, cf. EN 13238.

Fixing means: The product was fixed in the corners with screws to 40 mm thick spacers made of calcium silicate which were attached to the substrate.

The tip of the screws penetrating the substrate were afterwards cut away.

Joints: Standard horizontal and standard vertical, cf. option e) in clause 5.2.2 of EN 13823.

The specimens were assembled by DBI.

6. Conditioning

On 2017-01-02/10 the specimens were stored in a conditioning room with an atmosphere of relative humidity of 50 ± 5 % and a temperature of 23 ± 2 °C. The test specimens were kept in this room until the tests were performed.

7. Test method

The test was performed in accordance with:

EN 13823:2010 + A1:2014	Reaction to fire tests for building products - Building products excluding flooring exposed to the thermal attack by a single burning item

8. Test results

Date of test: 2017-01-17.

1 test was performed.

During the test the following measurements were made: Volume flow in the exhaust duct, production of carbon dioxide, concentration of oxygen, and production of light-obscuring smoke. Based on these measurements the rate of heat release and the rate of smoke production were calculated.

The graphs, enclosures 1-4, show for the test performed:

Enclosure 1

- Average Heat Release Rate $HRR_{av}(t)$
- Total Heat Release THR (t)

Enclosure 2

- Average Heat Release Rate per unit time [1000 x $HRR_{av}(t)/(t-300)$]
- $Figra_{0.2MJ}$-values

Enclosure 3

- $Figra_{0.4\ MJ}$-values
- Smoke Production Rate $SPR_{av}(t)$

Enclosure 4

- Total Smoke Production TSP(t)
- Smoke Production Rate per unit time [10000 x $SPR_{av}(t)/(t-300)$]

The test results are shown in the following table.

	Test No. 1
$FIGRA_{0.2\ MJ}$ [W/s]	**0.0**
$FIGRA_{0.4\ MJ}$ [W/s]	**0.0**
THR_{600s} [MJ]	**0.84**
SMOGRA [m^2/s^2]	**0.0**
$TSP_{600\ s}$ [m^2]	**30.0**
$FDP_{f\leq 10s}$ [yes/no]	**No**
$FDP_{f>10s}$ [yes/no]	**No**
LFS < edge of specimen [yes/no]	**Yes**

$FDP_{f\leq 10s}$: Flaming Droplets/Particles burning less than 10 seconds.
$FDP_{f>10s}$: Flaming Droplets/Particles burning more than 10 seconds.
LFS: Lateral Flame Spread on the long wing of the test specimen.

No observations of importance were recorded during the test.

Photographs of the test specimen show the effect of the damages, see enclosures 5

9. Statement

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

Potentially, the tested sample of Super coconut fibre plates (SCF), can obtain class A2/B,s1-d0.

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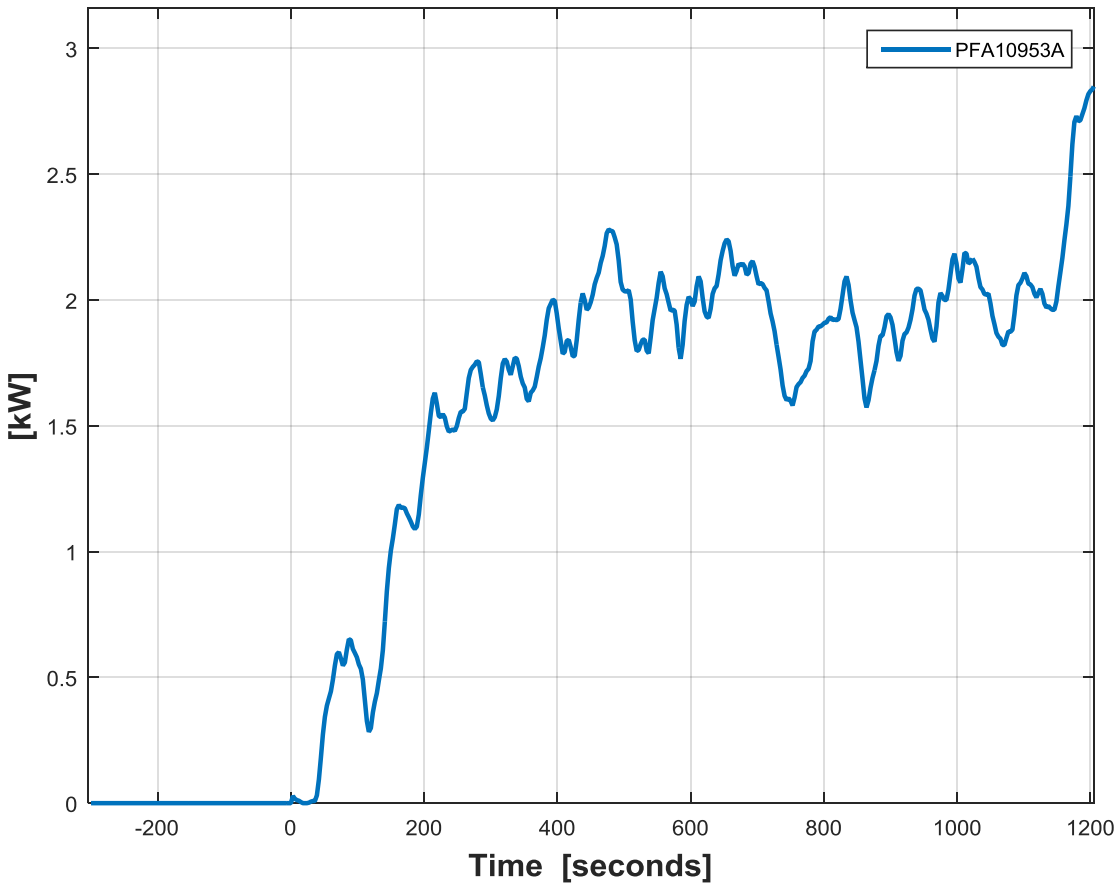
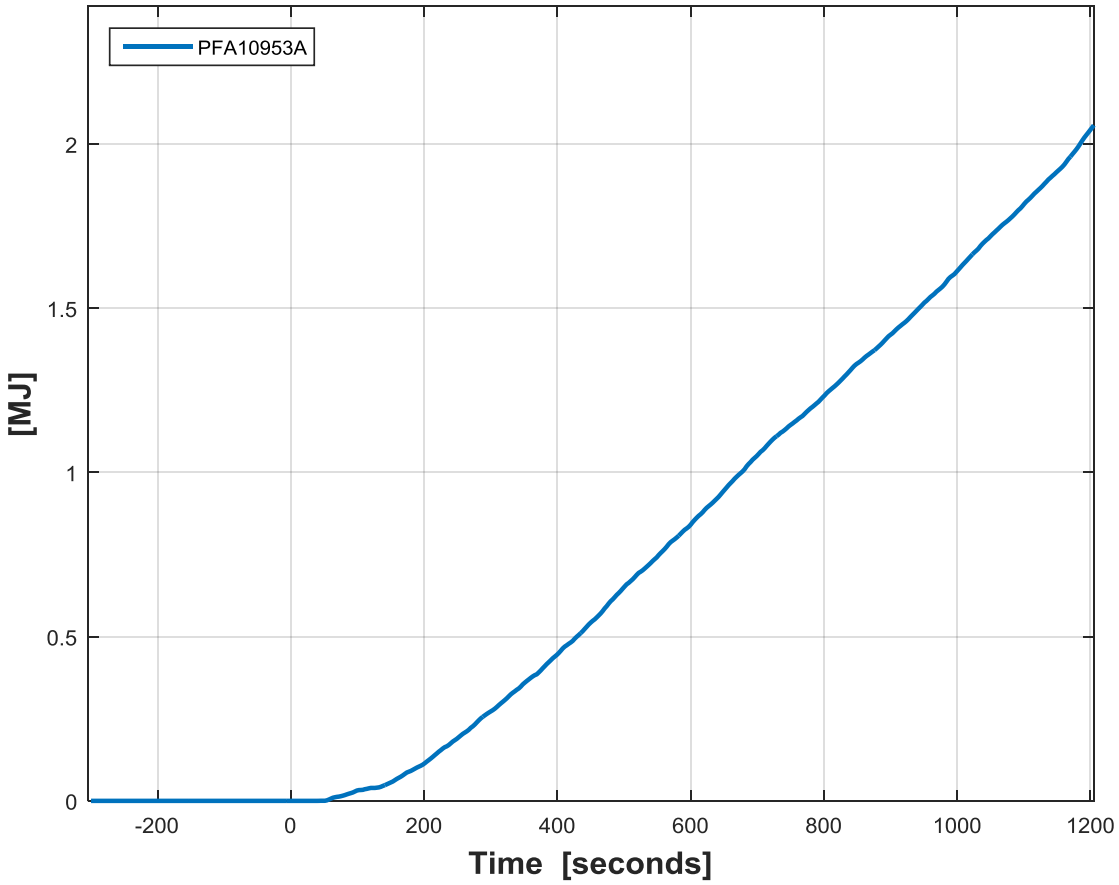
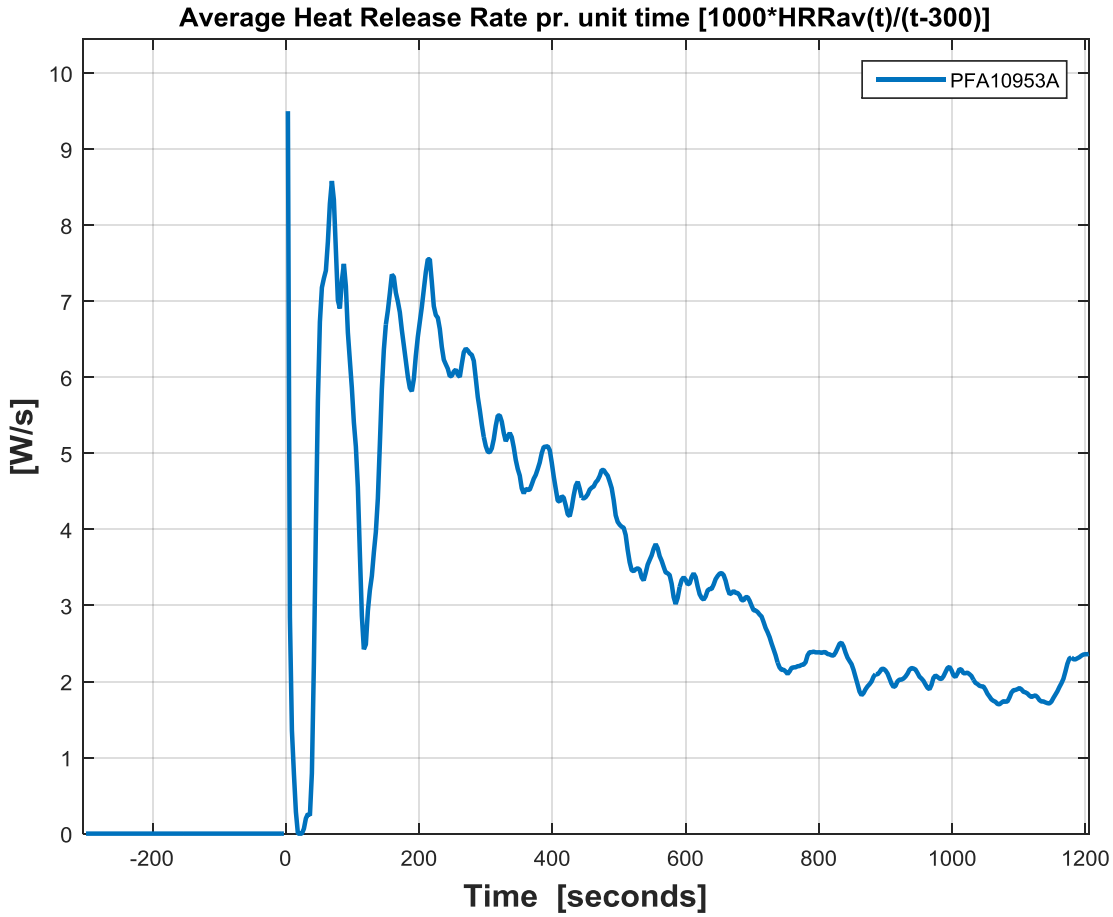
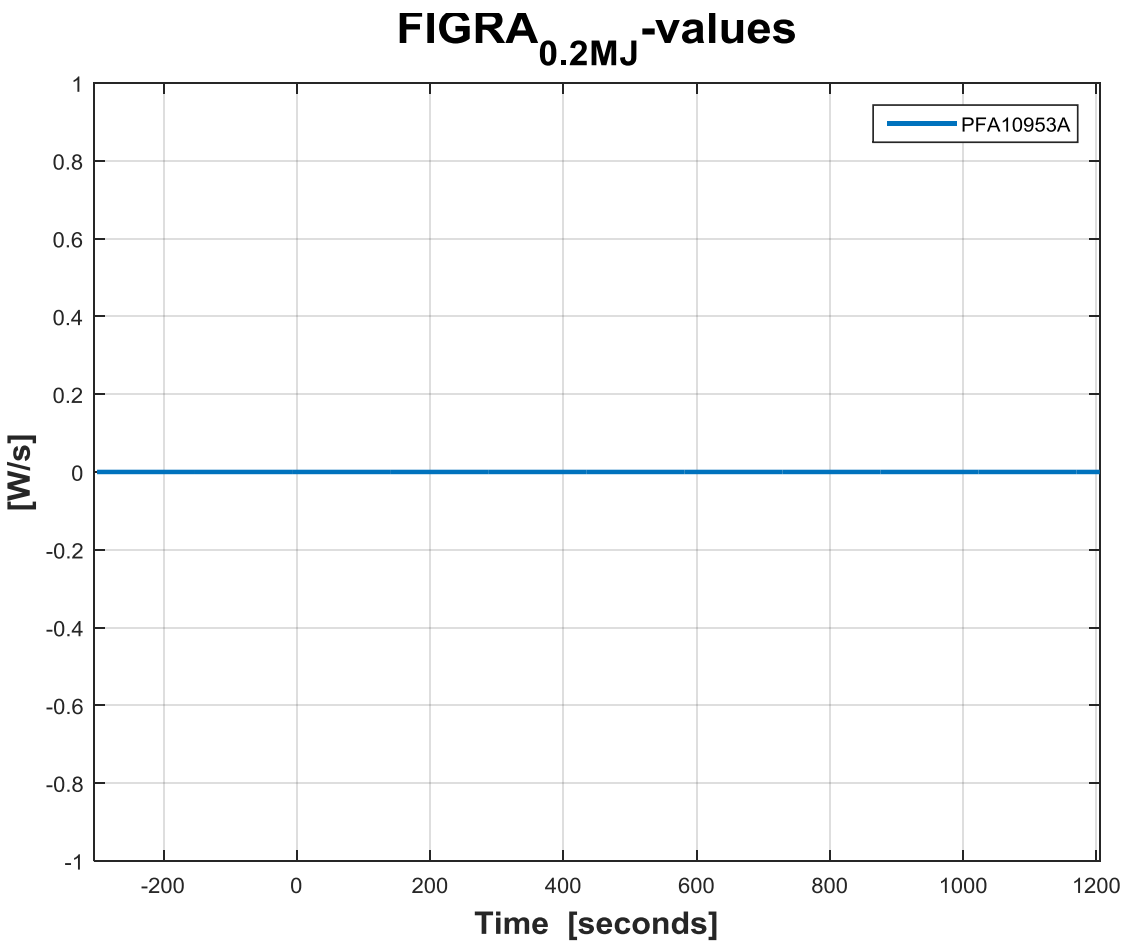
Average Heat Release Rate HRRav(t)

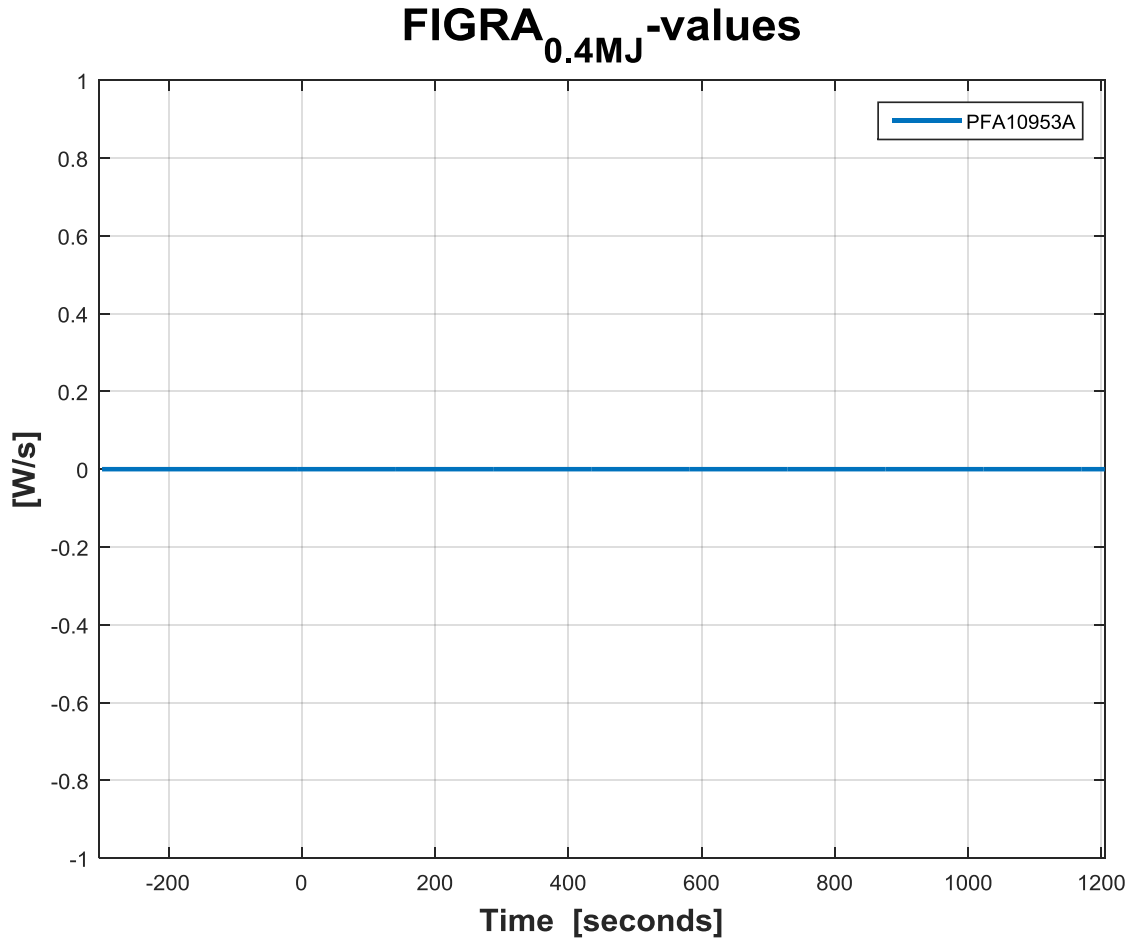


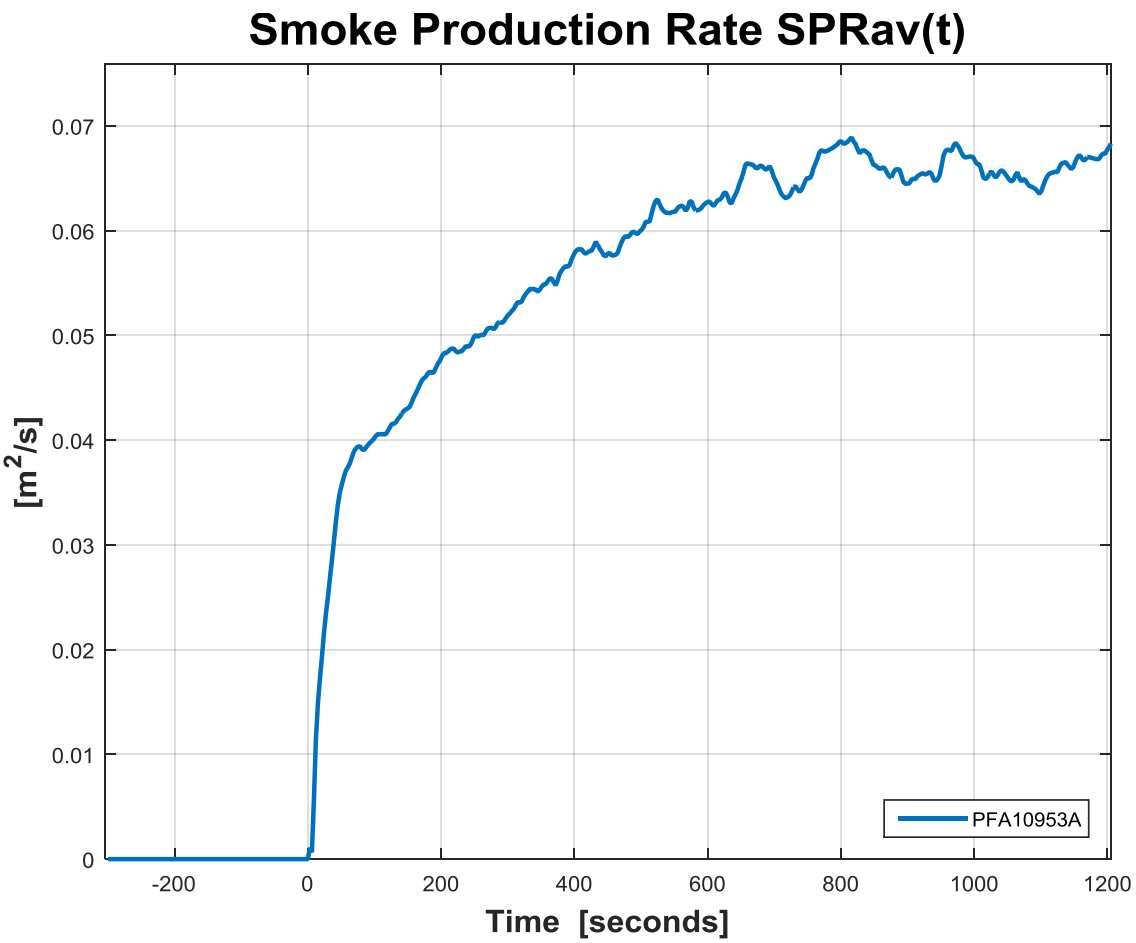
Total Heat Release THR(t)



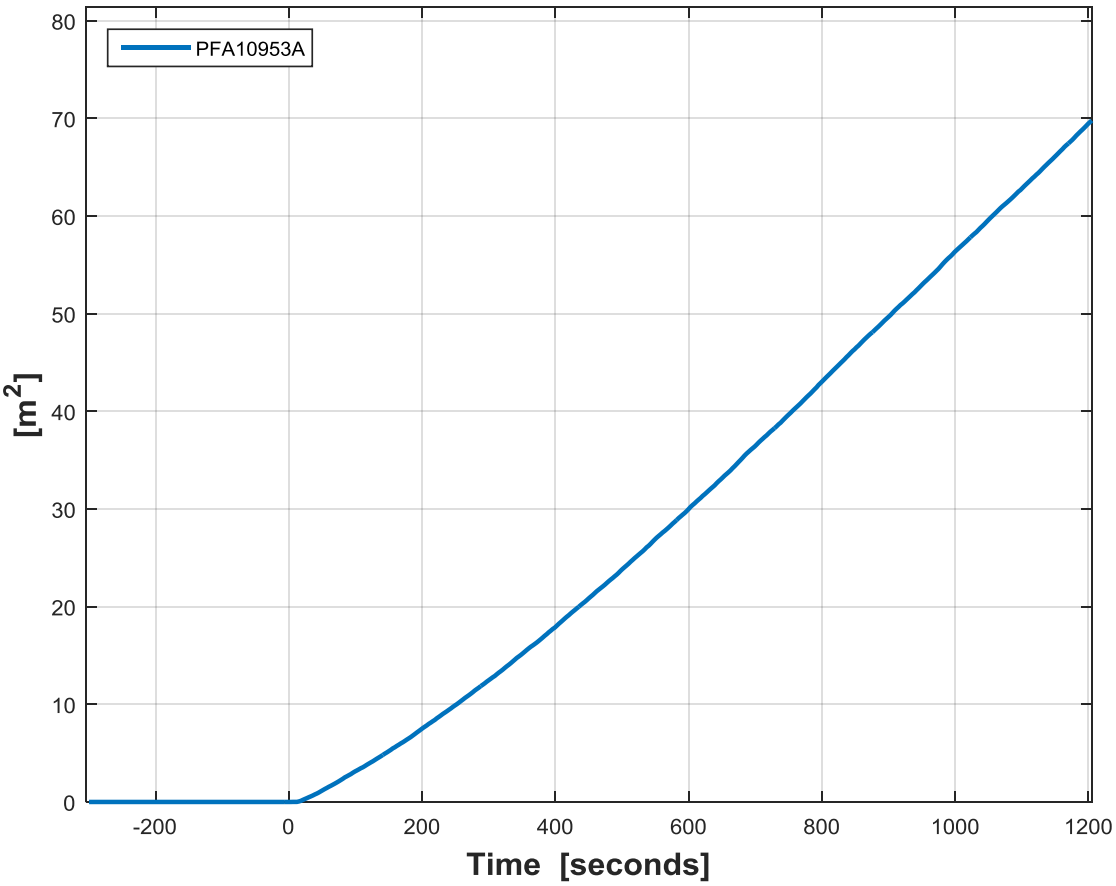

Average Heat Release Rate pr. unit time [1000*HRRav(t)/(t-300)]
PFA10953A
[W/s]
Time [seconds]


FIGRA0.2MJ-values
PFA10953A
[W/s]
Time [seconds]

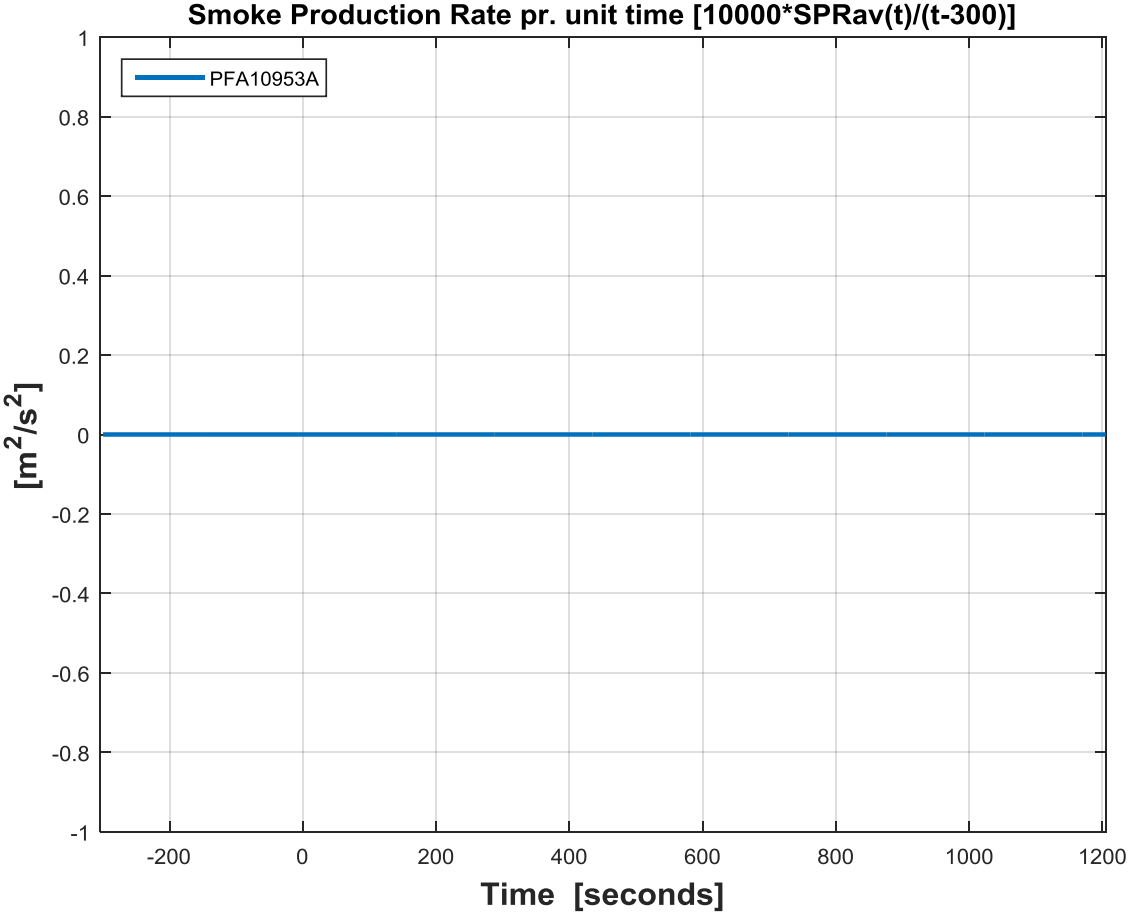

FIGRA0.4MJ-values
PFA10953A
[W/s]
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
-0.8
-1
-200
0
200
400
600
800
1000
1200
Time [seconds]


Smoke Production Rate SPRav(t)
PFA10953A
[m2/s]
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-200
0
200
400
600
800
1000
1200
Time [seconds]

Total Smoke Production TSP(t)



Smoke Production Rate pr. unit time [10000*SPRav(t)/(t-300)]



TEST NO. 1