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Liège, April 21, 2009.

TEST REPORT

Nr 721/2009

EUROPEAN STANDARD

CENELEC prEN 50399 2007	Common test methods for cables under fire conditions Heat release and smoke production measurement on cables during flame spread test
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1. Test applied by: Dr. LEVI, FTC – Fabbrica Trentina Conduttori S.r.l., Via Pineta 21/B, 38068 Rovereto (TN), Italy.
2. Type of cable (*: information given by the sponsor):
ISSeP nr: RI/EE/09/29/3.
Product reference: EUROSAFE FE 180 4x1.5
Cable marking: EUROSAFE FE 180 4G1.5 UNSCR. FIRE RESISTANT BS6387 CWZ, EN 50200 PH 120, EN 60332-1-2, EN 61034-2, FIPEC (EN)50399-2-1 CE 09/08
Diameter: ~ 9.6 mm.
Colour: Red.
Date of sample reception: March 20, 2009.
3. Sampling: not carried out by the Laboratory.
4. Procedure: see § 6 of prEN 50399: 2008.
5. Date of the test: March 30, 2009.
6. Test Conditions:
 - Cable length: ~ 3.5 m.
 - Number of cable lengths: 15.
 - Cables mounting: 1 layer with the cables spaced by one cable diameter.
 - Width of the mounted cables: ~ 300 mm.
 - Backing board: no.
 - Burner power: 20.5 kW.
 - Air flow through the chamber: $500 \pm 50 \text{ m}^3/\text{h}$.



RÉGION WALLONNE

Remarks: - Tests results are valid only for materials up to tested samples.
- This report can only be reproduced in full, except with the laboratory's agreement.

7. Results

Test nr: NAP/1506

NB: Times are counted from the burner ignition.
Heat release rate and total heat released are given without the burner part.

- ☐ THR_{1200} (Total Heat Released after 20 min): 19.7 MJ
- ☐ HRR_{peak} (peak of Heat Release Rate): 38.7 kW
- ☐ Time to HRR_{peak} : 660 s
- ☐ FIGRA (Fire Growth Rate): 123.4 W/s
- ☐ TSP_{1200} (Smoke Production after 20 min): 24.34 m²
- ☐ SPR_{peak} (Peak of smoke production): 0.037 m²/s
- ☐ Time to SPR_{peak} : 609 s

- ☐ Overall distance of damage to the jacket above the level of the burner: 1.90 m.
- ☐ Flaming droplets: No

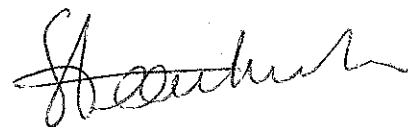
8. Classification

According the 2006/751/CE document of the Official Journal of the European Communities, the tested cable sample belongs to the following classification:

Reaction to fire: C_{ca}

Smoke production: s1

Flaming droplets/particles: d0



T. Steenhuizen,
Test Executive.

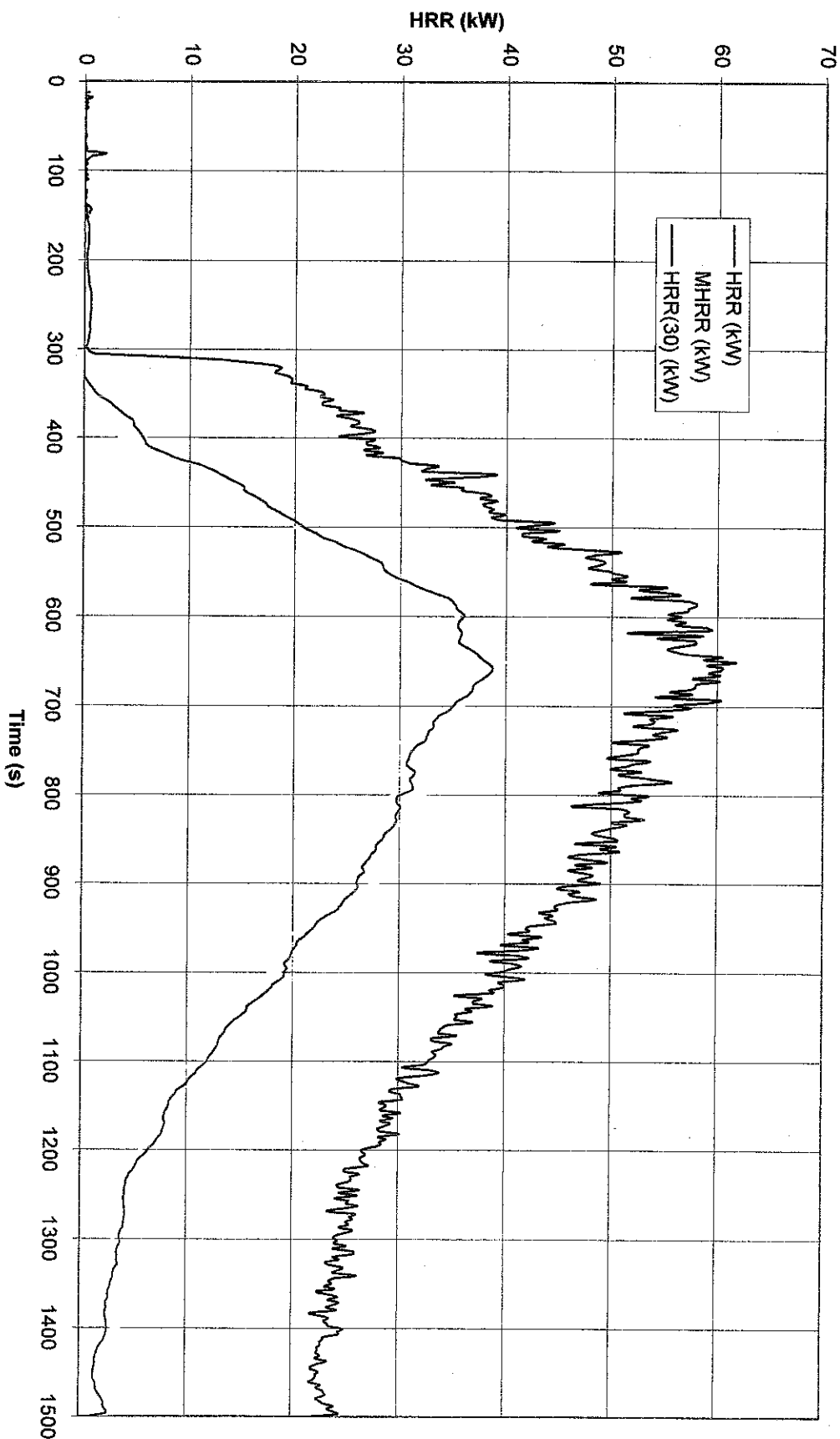
Cable : EUROSAFE FE 180 4x1.5
ISSEP Nr : RI/EE/09/29/3

prEN 50399 HRR graph

Test Nr NAP/1506
Burner output: 20.5 kW
Diameter: ~ 9.6 mm
Layer Width: ~ 300 mm
No backing board

30/03/2009

Number of cable lengths
Front of the ladder: 15
One diameter spacing

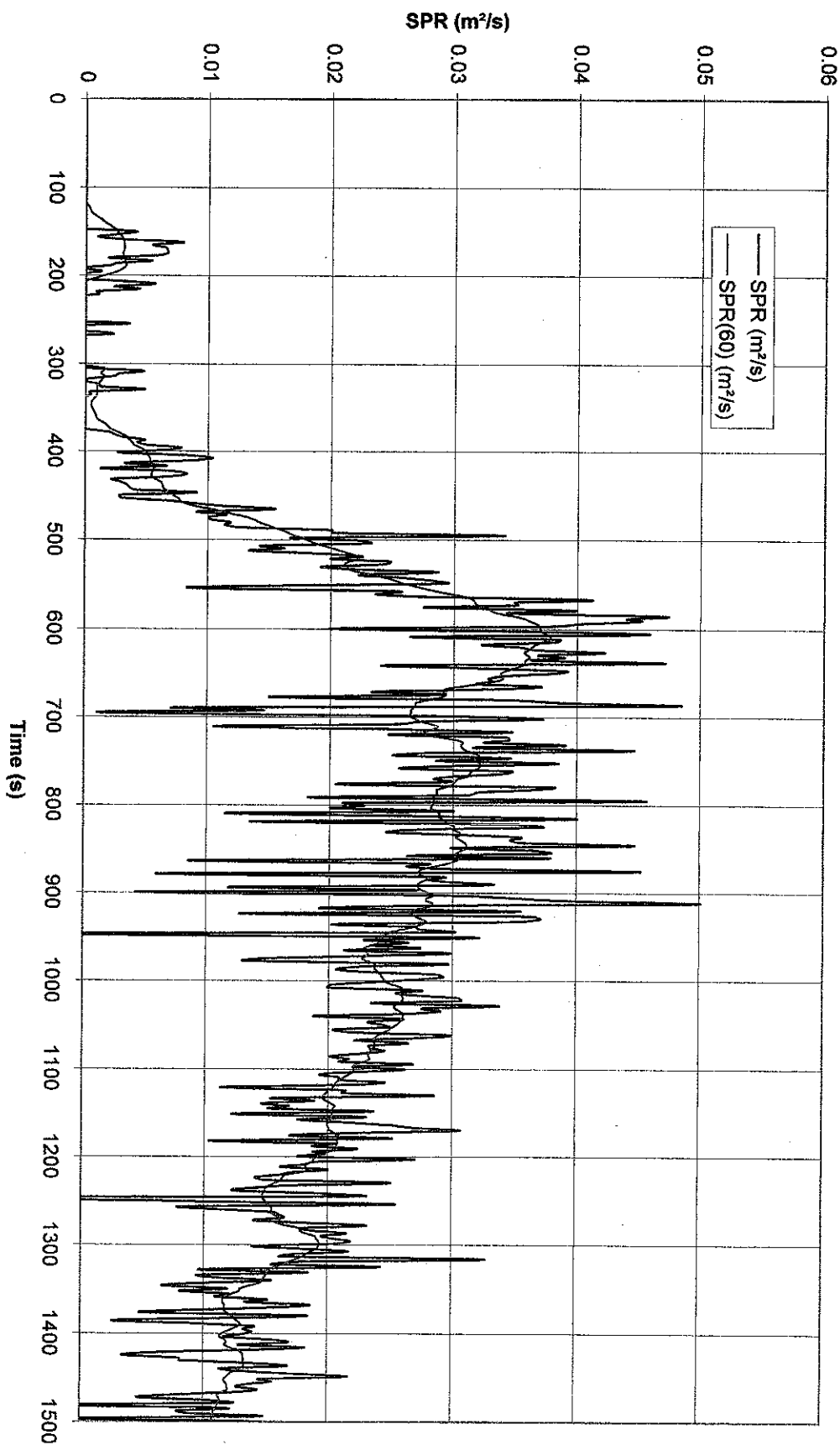


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Cable : EUROSAFE FE 180 4x1.5
ISSEP Nr : RI/EE/09/29/3

prEN 50399 SPR graph

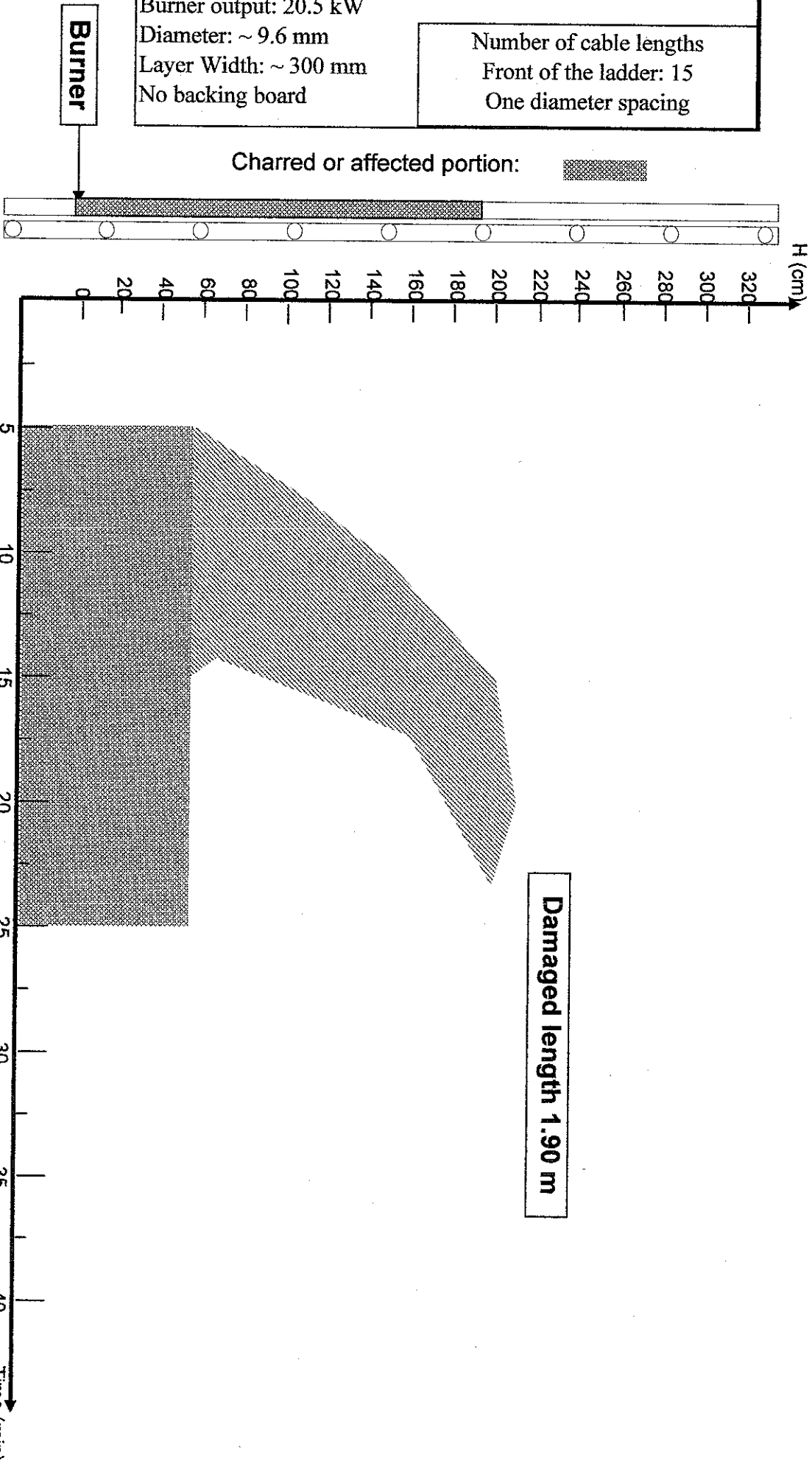
Test Nr NAP/1506	30/03/2009
Burner output: 20.5 kW	
Diameter: ~ 9.6 mm	
Layer Width: ~ 300 mm	
No backing board	
	Number of cable lengths Front of the ladder: 15 One diameter spacing



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prEN 50399 flame spread

Test Nr NAP/1506	30/03/2009
Burner output: 20.5 kW	
Diameter: ~ 9.6 mm	
Layer Width: ~ 300 mm	
No backing board	
Number of cable lengths	
Front of the ladder: 15	
One diameter spacing	



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