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Liège, April 21, 2009.

TEST REPORT

Nr 722/2009

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/09/29/2.
Product reference: JE-H(ST)H 2x2x8/10
Cable marking: EUROSAFE E 30/60 JE-H(ST)H 2x2x0.8 MM SCR. FIRE RESISTANT VDE 0815, DIN 4102, EN 50200 PH 120, EN 60332-1-2, EN 61034-2, FIPEC (EN)50399-2-1 CE 09/08
Diameter: ~ 8.3 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: 19.
 - 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/1508

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

- THR₁₂₀₀ (Total Heat Released after 20 min): 17.1 MJ
- HRR_{peak} (peak of Heat Release Rate): 36.2 kW
- Time to HRR_{peak}: 636 s
- FIGRA (Fire Growth Rate): 136.1 W/s
- TSP₁₂₀₀ (Smoke Production after 20 min): 23.19 m³
- SPR_{peak} (Peak of smoke production): 0.053 m³/s
- Time to SPR_{peak}: 732 s

- Overall distance of damage to the jacket above the level of the burner: 2.30 m.
- Flaming droplets: Yes, persisting less than 10 s.

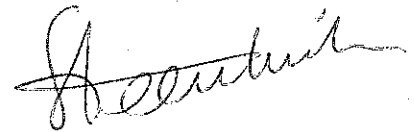
8. Classification

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: D_{ca}

Smoke production: s1

Flaming droplets/particles: d1

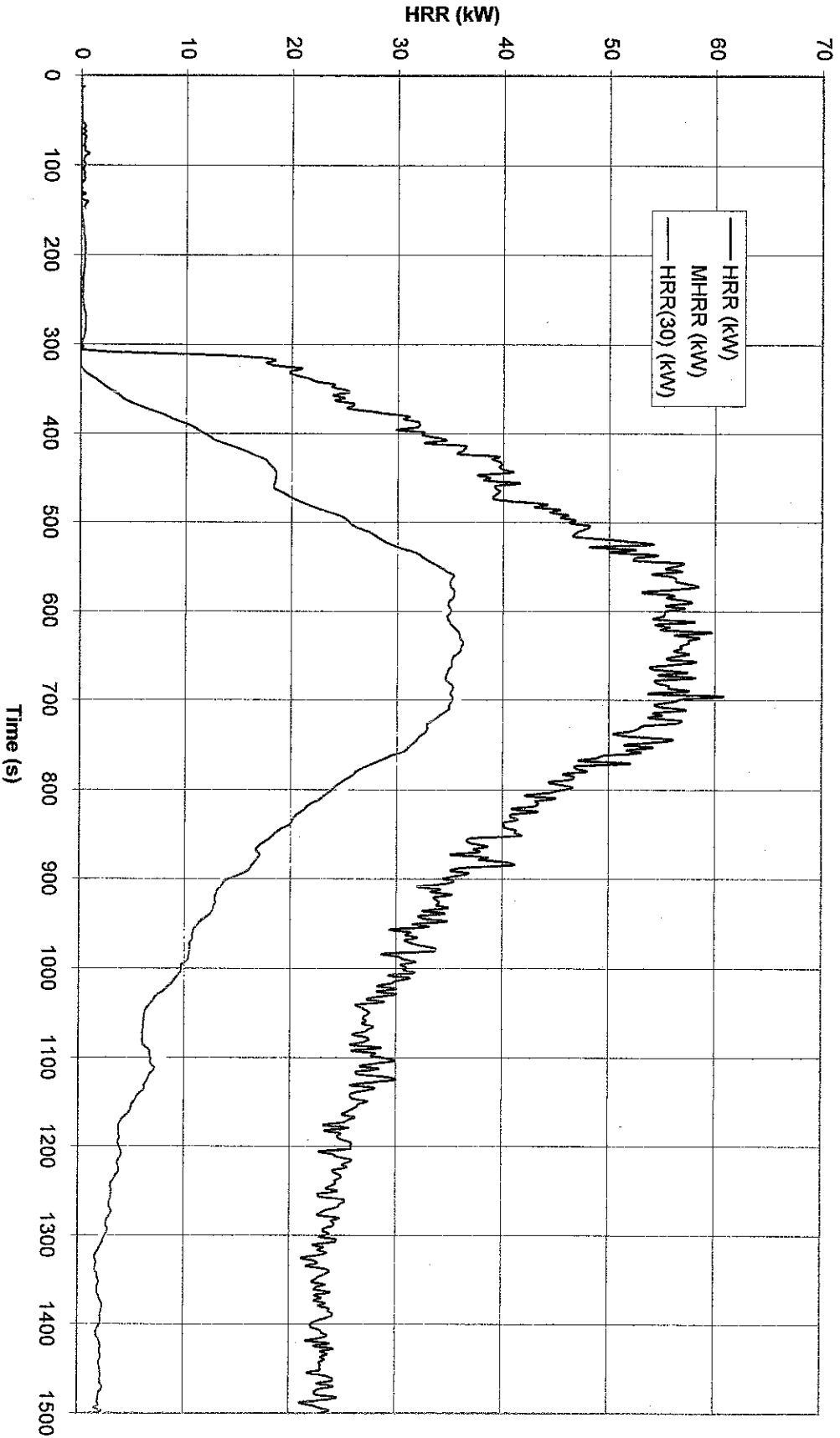


T. Steenhuizen,
Test Executive.

PREN 50399 HRR

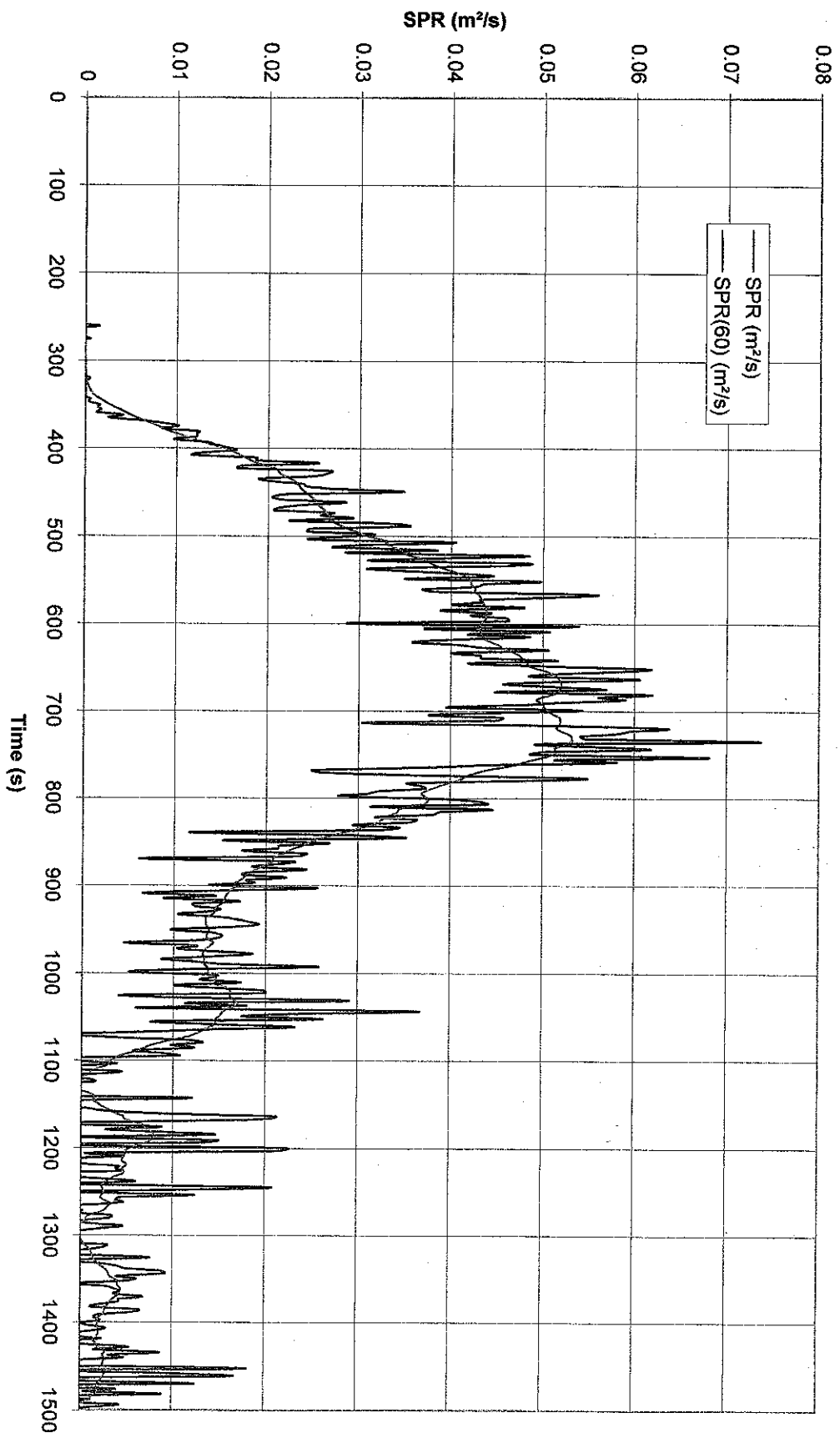
graph

Test Nr NAP/1508 30/03/2009 Burner output: 20.5 kW Diameter: ~ 8.3 mm Layer Width: ~ 300 mm No backing board	Number of cable lengths Front of the ladder: 19 One diameter spacing
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prEN 50399 SPR graph



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pr-EN 50399 flame spread

Test Nr NAP/1508 Burner output: 20.5 kW Diameter: ~8.3 mm Layer Width: ~ 300 mm No backing board	30/03//2009 Number of cable lengths Front of the ladder: 19 One diameter spacing
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Burner

Charred or affected portion: 

