

Liège, February 17, 2010

TEST REPORT

Nr 590/2010

EUROPEAN STANDARD

CENELEC prEN 50399 07.2009	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 : Mr Alessandro PRISTERA for BERICA CAVI S.P.A., via della Meccanica 2, It-36040 Meledo di Sarego (VI).
2. Type of cable (*: information given by the sponsor):
ISSEP nr: RI/EE/10/6/1.
* Cable reference: EUROSAFE CONTROL 300/500 V 2x1.5 mm²
Cable marking: BERICA CAVI S.P.A. IVD-EUROSAFE-2x1.5mmq SHIELDED 300/500V BS 6387 CWZ CEI EN 50200 IEC 60332.3 CE 201007486.
Diameter: ~ 10.2 mm.
Colour: red.
Date of sample reception: January 21, 2010.
3. Sampling: not carried out by the Laboratory.
4. Procedure: see § 6 of prEN 50399: 2009. Test for Euroclasses B_{2ca}, C_{ca} and D_{ca}.
5. Date of the test: February 15, 2010.
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 ± 50 m³/h.



7. Results

Test nr: NAP/1554

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 of burner application): 13 MJ
- ☐ HRR_{peak} (peak of Heat Release Rate): 35.5 kW
- ☐ Time to HRR_{peak} : 246 s
- ☐ FIGRA (FIre Growth RAte): 150 W/s
- ☐ TSP_{1200} (Smoke Production after 20 min of burner application): 28.3 m²
- ☐ SPR_{peak} (Peak of smoke production): 0.08 m²/s
- ☐ Time to SPR_{peak} : 342 s

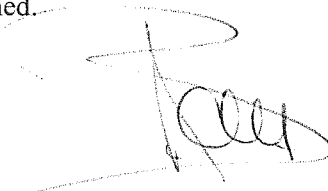
- ☐ Overall distance of damage to the jacket above the level of the burner: 1.18 m.
- ☐ Flaming droplets: None.

8. Classification

According the Commission Decision 2006/751/CE published in the Official Journal of the European Communities L 305/8 - 4.11.2006, the tested cable sample belongs to the following classes:

- Reaction to fire: C_{ca}
- Smoke production: s1
- Flaming droplets/particles: d0

Remark : Test according to EN 60332-1-2 has not been performed.

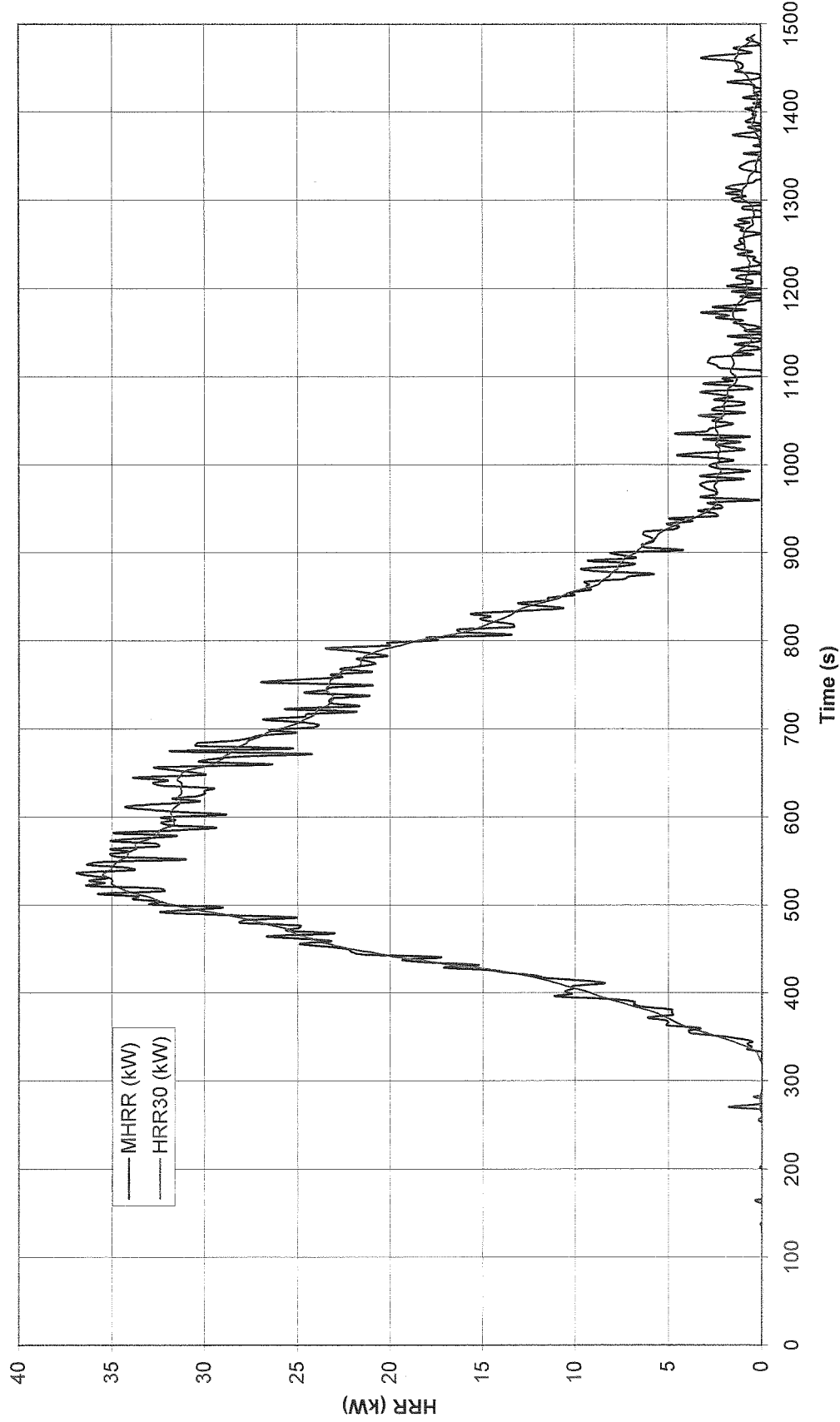


H. BREULET,
Test Executive.

prEN 50399 HRR

Cable :EUROSAFE CONTROL 300/500 V 2x1.5 mm²

ISSEP Nr : RI/EE/10/6/1



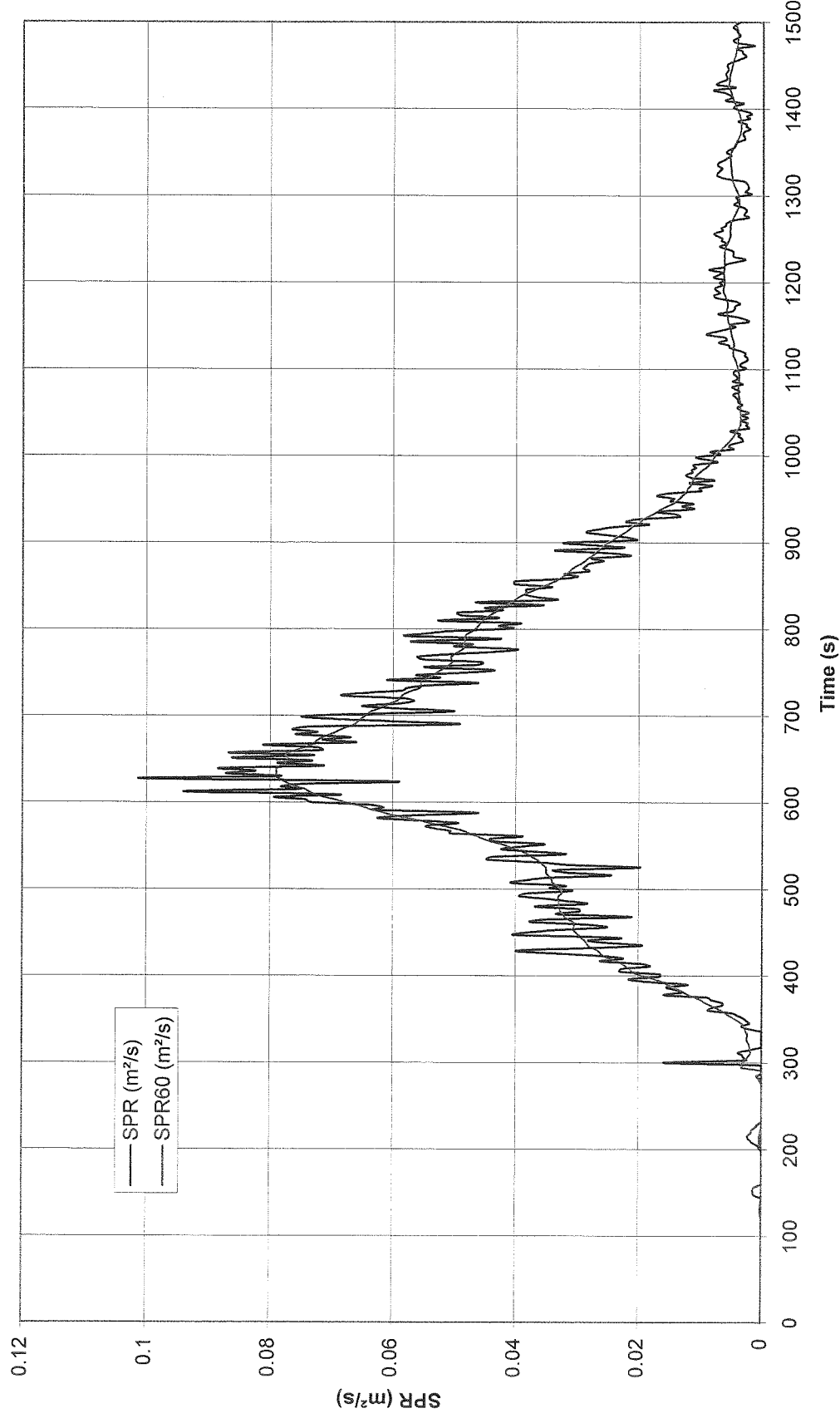
Test Nr NAP/1554	15/02/2010
Burner output: 20.5 kW	
Diameter: ~ 10.2 mm	
Layer Width: ~ 310 mm	
No backing board	
Number of cable lengths	Front of the ladder: 15
One diameter spacing	

prEN 50399 SPR

Cable :EUROSAFE CONTROL 300/500 V 2x1.5 mm²

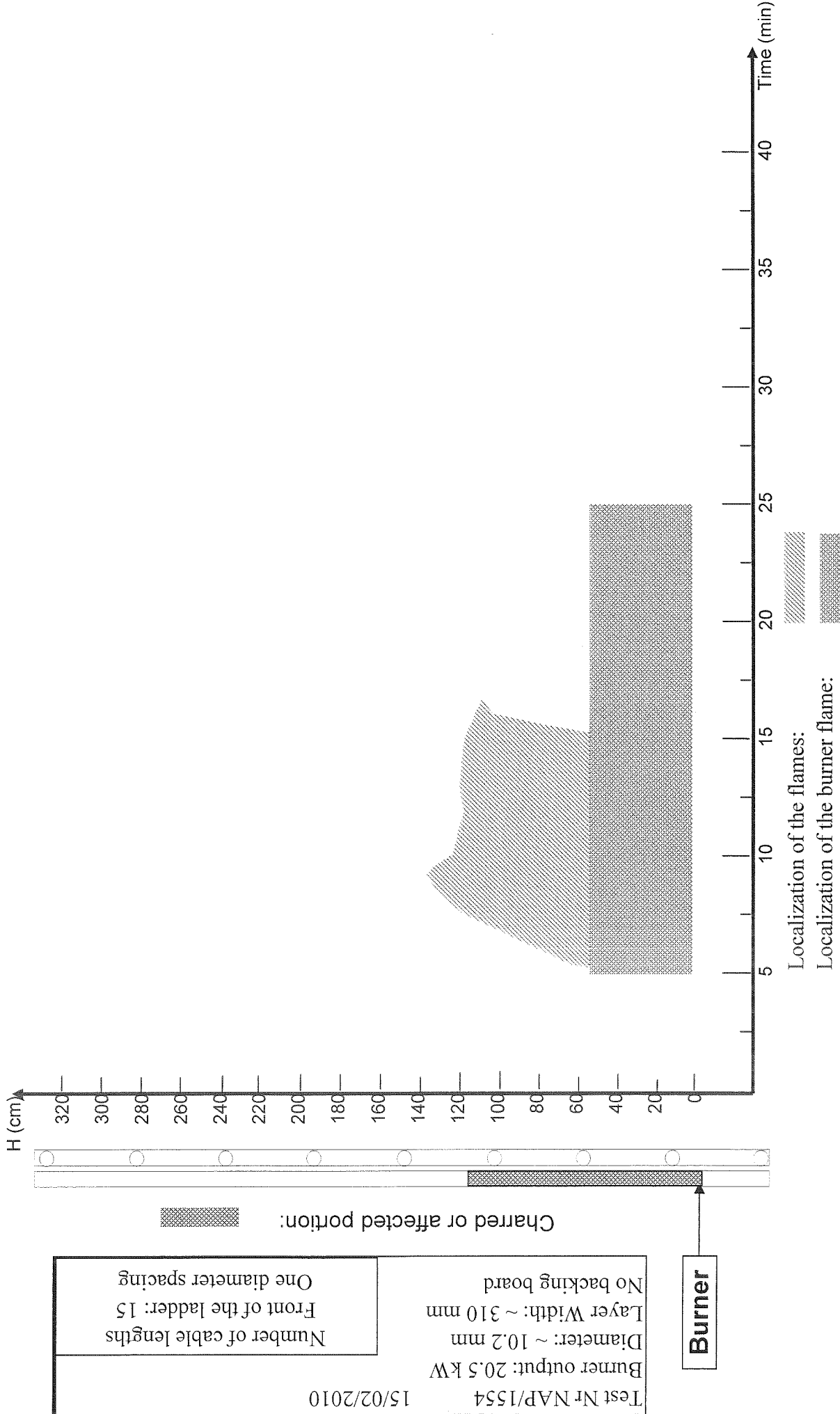
ISSEP Nr : RI/EE/10/6/1

Test Nr NAP/1554	15/02/2010
Burner output: 20.5 kW	
Diameter: ~ 10.2 mm	
Layer Width: ~ 310 mm	
No backing board	
Number of cable lengths	
Front of the ladder: 15	
One diameter spacing	



prEN 50399 flame spread

Cable :EUROSAFE CONTROL 300/500 V 2x1.5 mm²
ISSEP Nr : RI/EE/10/6/1



Test Nr NAP/1554
15/02/2010

Number of cable lengths Front of the ladder: 15 One diameter spacing	Burner output: 20.5 kW Diameter: ~ 10.2 mm Layer Width: ~ 310 mm No backing board
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Burner

Charred or affected portion: