

APLUS TRADERS PTY LTD.

Prüfprotokoll / Test protocol

Entzündbarkeit von Produkten bei direkter Flammeneinwirkung - Teil 2: Einzelflammentest nach **EN ISO 11925-2:2010**

Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test acc. to EN ISO 11925-2:2010

Auftrags-Nr.: **2718166** Datum der Prüfung: 13.05.202
Order-No.: **2718166** Date of testing:

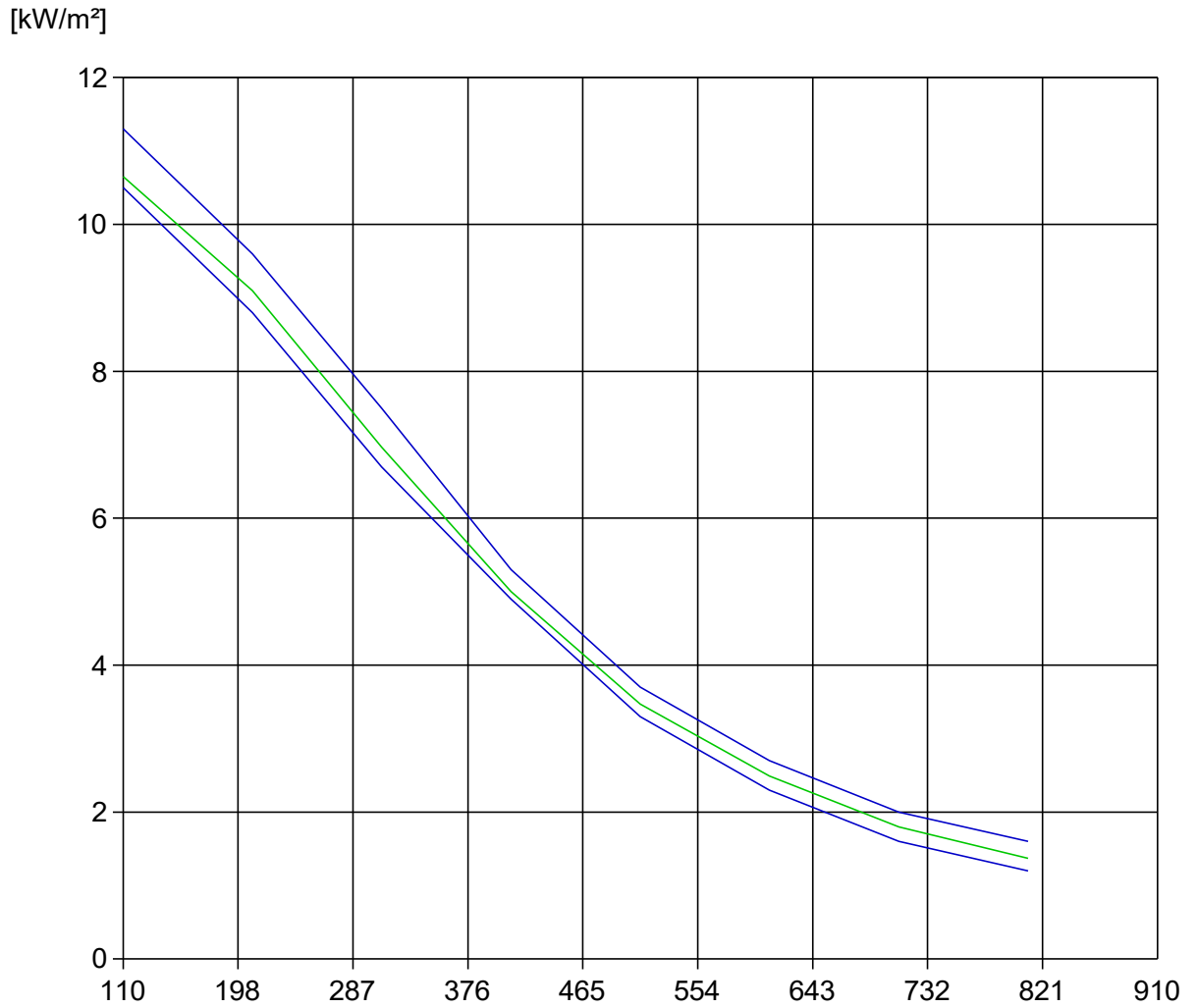
Auftragnehmer: *Development and Examination Laboratory for Wood Technology Ltd. – EPH*
Testing institute: *Laboratory Surface Testing*
Hart-PVC-Boden / SPC; 6/7 mm
Rigid Vinyl Floor / SPC; 6/7 mm
Prüfmaterial: 9 mm Sperrholz
Test object: *9 mm plywood*

Art der Beflammung <i>Kind of impingement</i>	Probe / Sample					
	L1 - längs	L2 - längs	L3 - längs	Q1 - quer	Q2 - quer	Q3 - quer crosswise
Flächenbeflammung 15 s (20 s) <i>Surface impingement</i>						
Zeitpunkt der Entzündung [s] <i>Time of ignition [s]</i>	7	7	6	6	6	6
maximale Flammenhöhe [mm] <i>max. extent of flame [mm]</i>	27	29	28	28	24	28
Zeitpunkt des Auftretens [s] <i>Moment of max. extent of flame [s]</i>	15	15	15	15	15	15
150 mm Flammenhöhe erreicht (J/N) <i>150 mm extent reached (Y/N)</i>	N/N	N/N	N/N	N/N	N/N	N/N
Flamme erloschen vor Versuchsende (J/N) <i>Extinction of flame before end of test (Y/N)</i>	J/Y	J/Y	J/Y	J/Y	J/Y	J/Y
Weiterbrennen nach Versuchsende (J/N) <i>Burning on after the end of test (Y/N)</i>	N/N	N/N	N/N	N/N	N/N	N/N
Entzündung des Filterpapiers (J/N) <i>Ignition of the filter paper (Y/N)</i>	N/N	N/N	N/N	N/N	N/N	N/N
Aussehen der Probe nach der Prüfung: <i>Appearance of the specimen after the test:</i>	k. A. <i>n/s</i>					
Rauchentwicklung (visuell): <i>Smoke production (visual):</i>	ohne / gering / normal / stark / sehr stark no / low / normal / intense / extrem					
* Probe wurde nach - s gelöscht! / *Specimen was removed after - s						

Die Prüfergebnisse beziehen sich nur auf das Verhalten der Proben von einem Bauprodukt unter den speziellen Prüfbedingungen bei der Prüfung. Sie sind nicht als einziges Kriterium zur Bewertung der potentiellen Brandgefahr des Bauproduktes im Anwendungsfall zu verstehen.

The test results only apply to the reaction to fire behaviour of the specified building product under the described testing conditions during the test. Those are not allowed to be the only one criterion for the evaluation of the potential fire hazard of the building product in use case.

Heat Flow Profile



Black body temp. calibration

= 437 °C

Black body temp. test

cf. Test protocols

Test chamber temp. calibration

= 113 °C

Test chamber temp. test

cf. Test protocols

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

13.05.2025

Test protocol Reference

2718166-1-L1

Manufacturer/Supplier

cf. custom

Date of Sample receipt

28.04.2025

Sampling Procedure

by the customer

Product Identification

Resilient floor covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Rigid Vinyl Floor / SPC
Thickness [mm]: 6
Backing Board: 20 mm particleboard
Kind of mounting: mechanical
Mass per area unit [kg/m²]: 10.5
Sample lengthwise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 390 mm
Futher observations: bulging of the heated up floor covering

Date of Testing

13.05.2025

Conditions before Testing

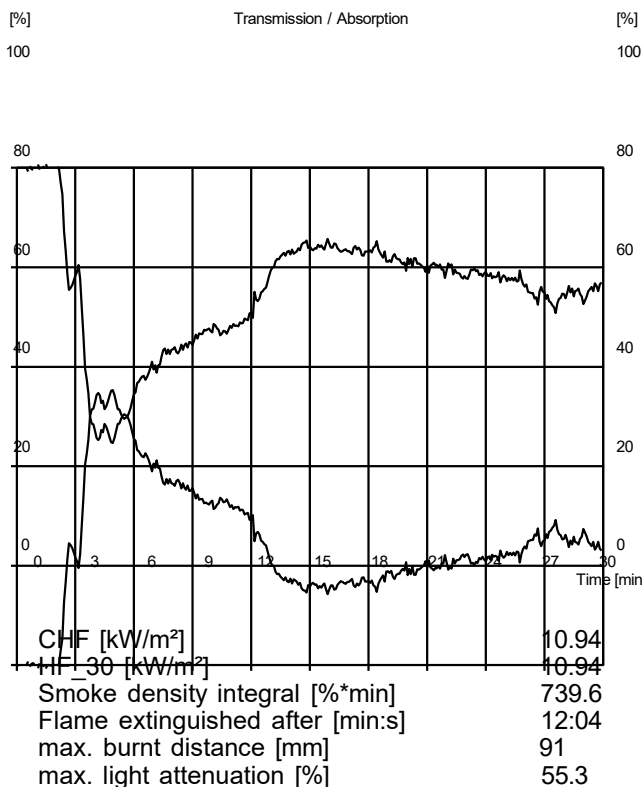
Radiant temperature = 437 °C
Test chamber temperatur = 115 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m ²]
50	231	11.58
100	-	-
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Time [min]	Position [mm]	Heat Flow [kW/m ²]
10	91	10.94
20	91	10.94
30	91	10.94

Light Transmission / Absorption



The test results relate to the behavior of the test specimen of a product under the particular conditions of the test. They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

13.05.2025

Test protocol Reference

2718166-1-Q1

Manufacturer/Supplier

cf. customer

Date of Sample receipt

28.04.2025

Sampling Procedure

by the customer

Product Identification

Resilient floor covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Rigid Vinyl Floor / SPC
Thickness [mm]: 6
Backing Board: 20 mm particleboard
Kind of mounting: mechanical
Mass per area unit [kg/m²]: 10.5
Sample crosswise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 380 mm
Futher observations: bulging of the heated up floor covering

Date of Testing

13.05.2025

Conditions before Testing

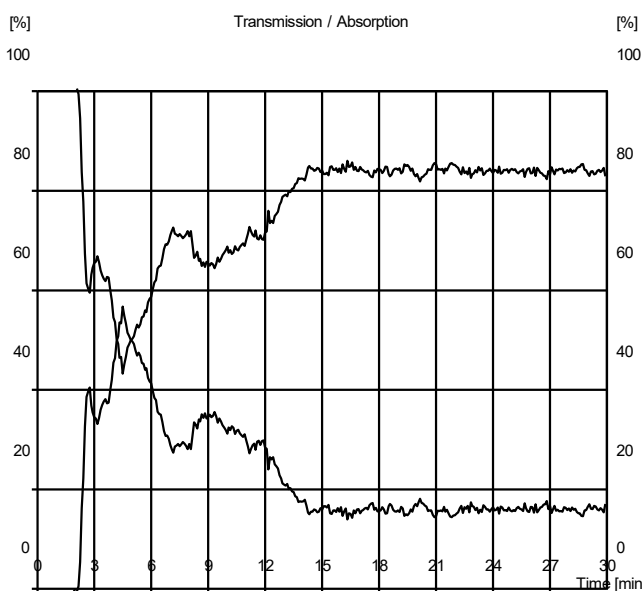
Radiant temperature = 440 °C
Test chamber temperatur = 113 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m ²]
50	249	11.58
100	-	-
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Time [min]	Position [mm]	Heat Flow [kW/m ²]
10	89	10.98
20	94	10.90
30	94	10.90

Light Transmission / Absorption



CHF [kW/m ²]	10.90
HF_30 [kW/m ²]	10.90
Smoke density integral [%*min]	648.4
Flame extinguished after [min:s]	12:04
max. burnt distance [mm]	94
max. light attenuation [%]	56.7

The test results relate to the behavior of the test specimen of a product under the particular conditions of the test. They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

13.05.2025

Test protocol Reference

2718166-2-L1
cf. customer

Date of Sample receipt

28.04.2025

Sampling Procedure

by the customer

Product Identification

Resilient floor covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Rigid Vinyl Floor / SPC
Thickness [mm]: 7
Backing Board: 20 mm particleboard
Kind of mounting: mechanical
Mass per area unit [kg/m²]: 11.5
Sample lengthwise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 350 mm
Futher observations: bulgin of the heated up floor covering

Date of Testing

13.05.2025

Conditions before Testing

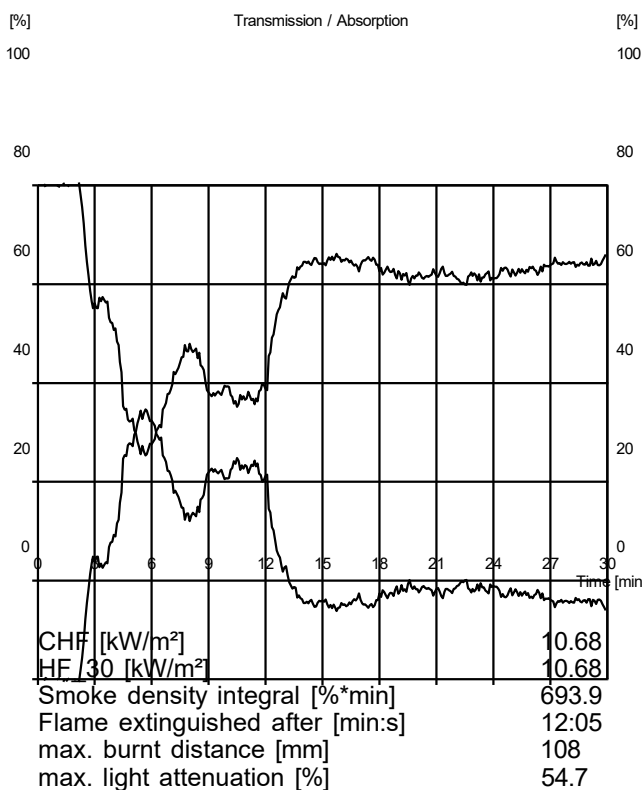
Radiant temperature = 439 °C
Test chamber temperatur = 116 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m ²]
50	328	11.58
100	617	10.81
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Time [min]	Position [mm]	Heat Flow [kW/m ²]
10	94	10.90
20	108	10.68
30	108	10.68

Light Transmission / Absorption



The test results relate to the behavior of the test specimen of a product under the particular conditions of the test. They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

13.05.2025

Test protocol Reference

2718166-2-Q1

Manufacturer/Supplier

cf. customer

Date of Sample receipt

28.04.2025

Sampling Procedure

by the customer

Product Identification

Resilient floor covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Rigid Vinyl Floor / SPC
Thickness [mm]: 7
Backing Board: 20 mm particleboard
Kind of mounting: mechanical
Mass per area unit [kg/m²]: 11.5
Sample crosswise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 350 mm
Futher observations: bulging of the heated up floor covering

Date of Testing

13.05.2025

Conditions before Testing

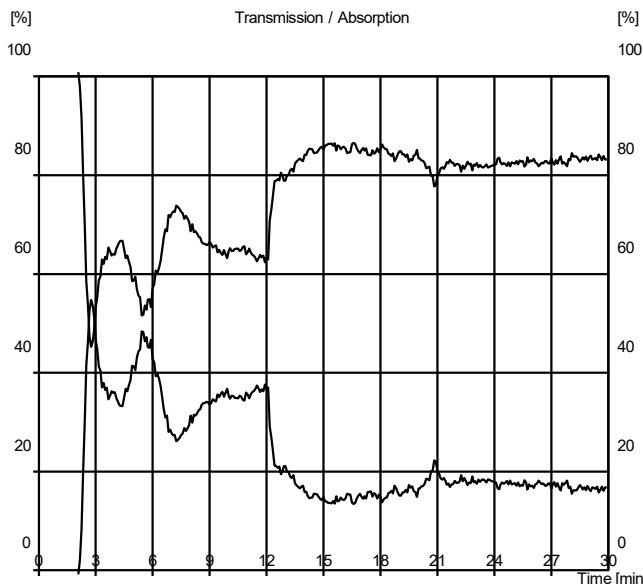
Radiant temperature = 440 °C
Test chamber temperatur = 113 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m ²]
50	300	11.58
100	653	10.81
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Time [min]	Position [mm]	Heat Flow [kW/m ²]
10	90	10.96
20	112	10.62
30	112	10.62

Light Transmission / Absorption

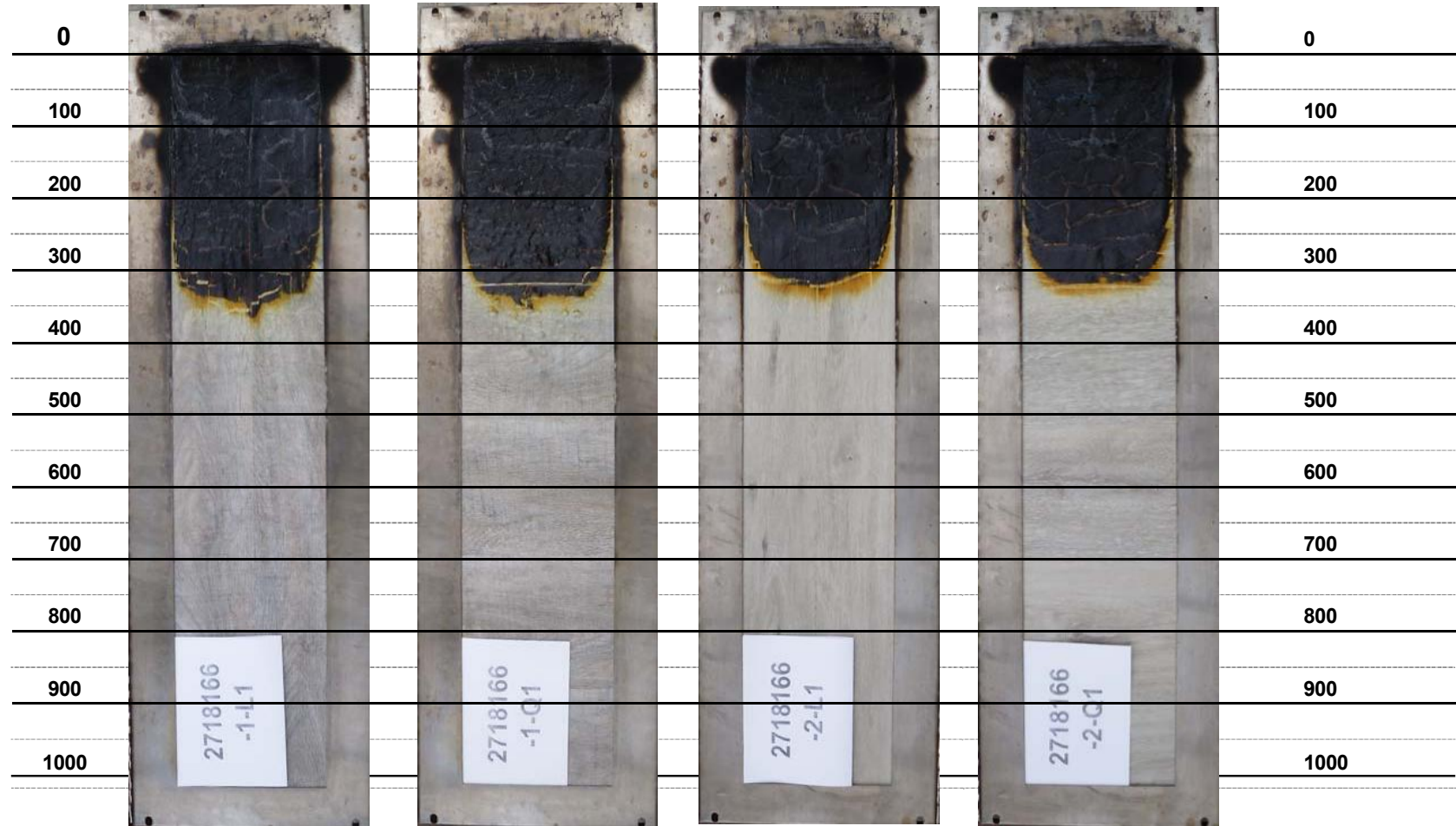


CHF [kW/m ²]	10.62
HF_30 [kW/m ²]	10.62
Smoke density integral [%*min]	673.6
Flame extinguished after [min:s]	12:08
max. burnt distance [mm]	112
max. light attenuation [%]	54.8

The test results relate to the behavior of the test specimen of a product under the particular conditions of the test. They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

Order-No.:
2718166

Flame spread
L [mm]



		2718166-1-L1	2718166-1-Q1	2718166-2-L1	2718166-2-Q1
Critical heat flow	CHF	10,94 kW/m ²	10,90 kW/m ²	10,68 kW/m ²	10,62 kW/m ²
Smoke production	∫R	739,6 % * min	648,4 % * min	693,9 % * min	673,6 % * min
Duration of Flame spreading	t_{Max}	724 s	724 s	725 s	728 s
max. Flame spread	L_{Max}	91 mm	94 mm	108 mm	112 mm
max. Light absorption	R_{Max}	55,3 %	56,7 %	54,7 %	54,8 %

The test was performed according to EN ISO 9239-1.

Testing Institution

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Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

13.05.2025

Test protocol Reference

2718166-2-L1

Manufacturer/Supplier

cf. customer

Date of Sample receipt

28.04.2025

Sampling Procedure

by the customer

Product Identification

Resilient floor covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Rigid Vinyl Floor / SPC
Thickness [mm]: 6
Backing Board: 20 mm particleboard
Kind of mounting: mechanical
Mass per area unit [kg/m²]: 10.5
Sample lengthwise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 350 mm
Futher observations: bulgin of the heated up floor covering

Date of Testing

13.05.2025

Conditions before Testing

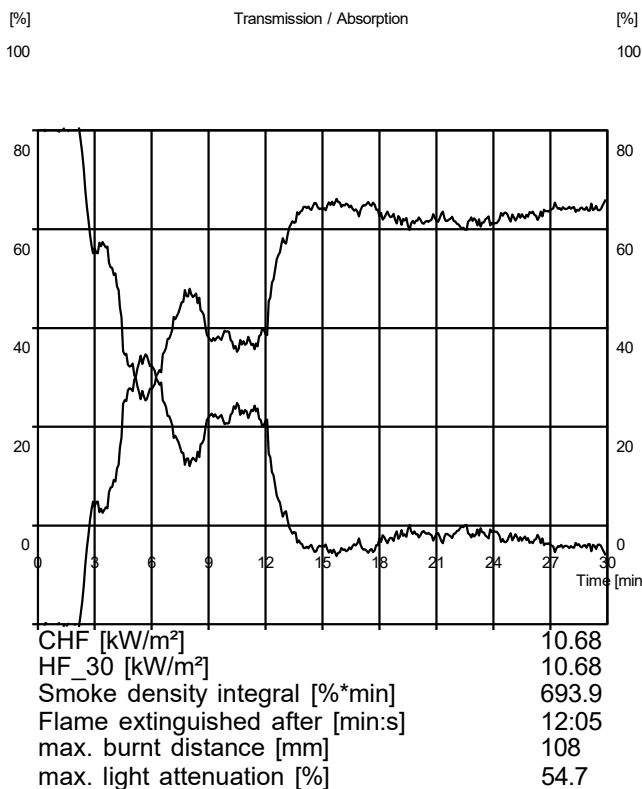
Radiant temperature = 439 °C
Test chamber temperatur = 116 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m ²]
50	328	11.58
100	617	10.81
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Time [min]	Position [mm]	Heat Flow [kW/m ²]
10	94	10.90
20	108	10.68
30	108	10.68

Light Transmission / Absorption



The test results relate to the behavior of the test specimen of a product under the particular conditions of the test.

They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

13.05.2025

Test protocol Reference

2718166-2-Q1

Manufacturer/Supplier

cf. customer

Date of Sample receipt

28.04.2025

Sampling Procedure

by the customer

Product Identification

Resilient floor covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Rigid Vinyl Floor / SPC
Thickness [mm]: 6
Backing Board: 20 mm particleboard
Kind of mounting: mechanical
Mass per area unit [kg/m²]: 10.5
Sample crosswise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 350 mm
Futher observations: bulging of the heated up floor covering

Date of Testing

13.05.2025

Conditions before Testing

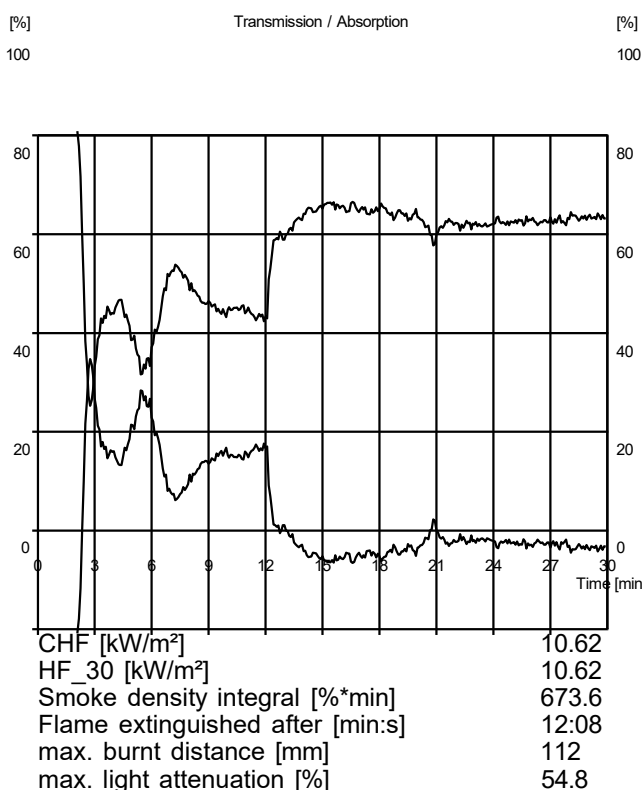
Radiant temperature = 440 °C
Test chamber temperatur = 113 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m²]
50	300	11.58
100	653	10.81
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Time [min]	Position [mm]	Heat Flow [kW/m²]
10	90	10.96
20	112	10.62
30	112	10.62

Light Transmission / Absorption



The test results relate to the behavior of the test specimen of a product under the particular conditions of the test.

They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

13.05.2025

Test protocol Reference

2718166-2-Q2

Manufacturer/Supplier

cf. customer

Date of Sample receipt

28.04.2025

Sampling Procedure

by the customer

Product Identification

Resilient floor covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Rigid Vinyl Floor / SPC
Thickness [mm]: 7
Backing Board: 20 mm particleboard
Kind of mounting: mechanical
Mass per area unit [kg/m²]: 11.5
Sample crosswise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 350 mm
Futher observations: bulging of the heated up floor covering

Date of Testing

13.05.2025

Conditions before Testing

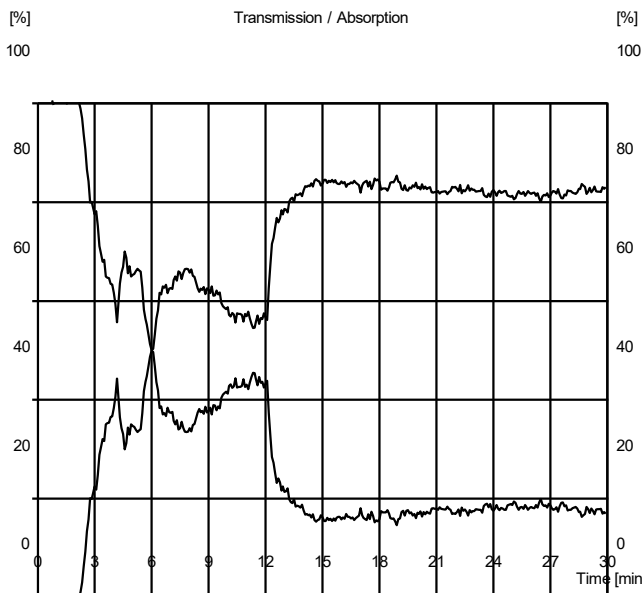
Radiant temperature = 439 °C
Test chamber temperatur = 114 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m ²]
50	321	11.58
100	674	10.81
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Time [min]	Position [mm]	Heat Flow [kW/m ²]
10	87	11.01
20	104	10.74
30	104	10.74

Light Transmission / Absorption



CHF [kW/m ²]	10.74
HF_30 [kW/m ²]	10.74
Smoke density integral [%*min]	682.2
Flame extinguished after [min:s]	12:12
max. burnt distance [mm]	104
max. light attenuation [%]	49.9

The test results relate to the behavior of the test specimen of a product under the particular conditions of the test. They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

The test was performed according to EN ISO 9239-1.

Testing Institution

EPH - Entwicklungs- und Prueflabor Holztechnologie
Dresden
Zellescher Weg 24
01217 Dresden

Differences to the Standard Test Procedure

acc. to EN ISO 9239-1

Date of Test protocol

13.05.2025

Test protocol Reference

2718166-2-Q3

Manufacturer/Supplier

cf. customer

Date of Sample receipt

28.04.2025

Sampling Procedure

by the customer

Product Identification

Resilient floor covering

Details of Conditioning

acc. to DIN EN 13238, article 4

General Product Characterization

Rigid Vinyl Floor / SPC
Thickness [mm]: 7
Backing Board: 20 mm particleboard
Kind of mounting: mechanical
Mass per area unit [kg/m²]: 11.5
Sample crosswise

Observations

Blistering: No
Molten/ fluid droplets: No
Burning up to backing board: No
Glowing after extinguishment: No
Staining / charring to: 350 mm
Futher observations: bulging of the heated up floor covering

Date of Testing

13.05.2025

Conditions before Testing

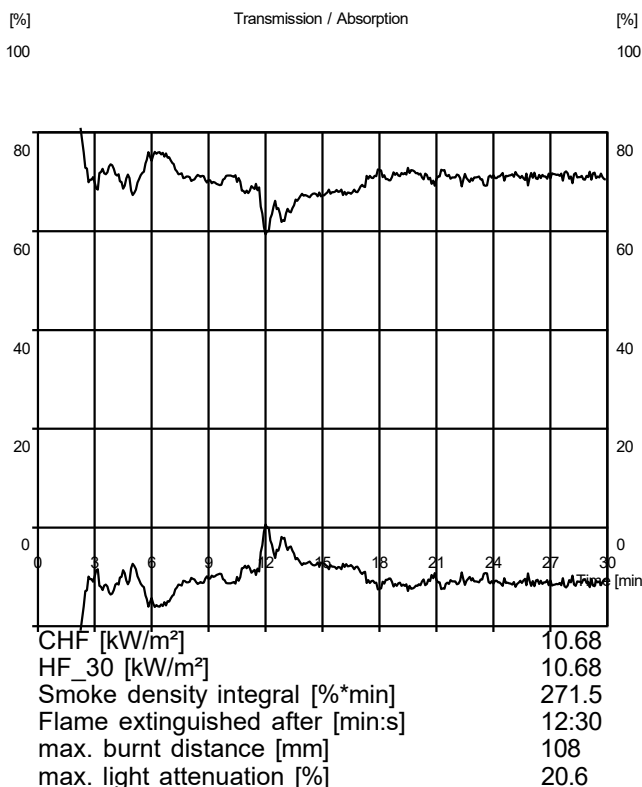
Radiant temperature = 438 °C
Test chamber temperatur = 113 °C

Test Results

Position [mm]	Time [s]	Heat Flow [kW/m²]
50	279	11.58
100	653	10.81
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-
650	-	-
700	-	-
750	-	-
800	-	-
850	-	-
900	-	-
950	-	-
1000	-	-

Time [min]	Position [mm]	Heat Flow [kW/m²]
10	92	10.93
20	108	10.68
30	108	10.68

Light Transmission / Absorption

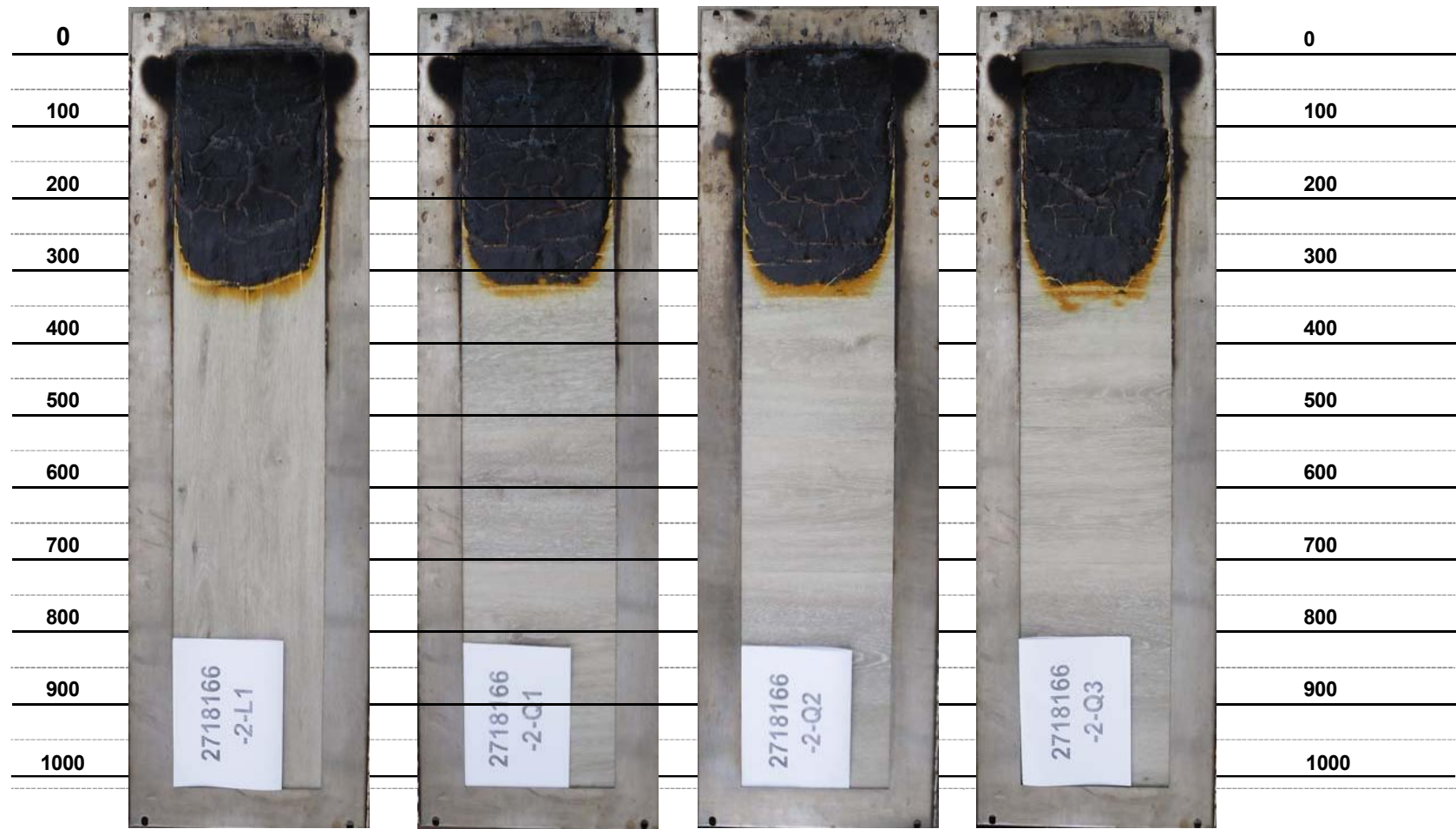


The test results relate to the behavior of the test specimen of a product under the particular conditions of the test.

They are not intended to be the sole criterion in order to assess the potential fire hazard of the product in real use.

Order-No.:
2718166

Flame spread
L [mm]



		2718166-2-L1	2718166-2-Q1	2718166-2-Q2	2718166-2-Q3	Mean Q1-Q3
Critical heat flow	CHF	10,68 kW/m ²	10,62 kW/m ²	10,74 kW/m ²	10,68 kW/m ²	10,68 kW/m ²
Smoke production	∫R	693,9 % * min	673,6 % * min	682,2 % * min	271,5 % * min	542,4 % * min
Duration of Flame spreading	t_{Max}	725 s	728 s	732 s	750 s	737 s
max. Flame spread	L_{Max}	108 mm	112 mm	104 mm	108 mm	108 mm
max. Light absorption	R_{Max}	54,7 %	54,8 %	49,9 %	20,6 %	41,8 %
Reaction to fire class						
						B_{fl}-s1