



July 21st 2022

LLC The Good Plastic Company
ZROSHUVALNA str. 11
KIEV, 02099
UKRAINE

Project Name: 4790470538
Order Number: 14395036

Subject: Development Report of building products (excluding floorings) exposed to the thermal attack by a single burning item of products on samples submitted by LLC The Good Plastic Company.

Dear Mr. Podoinitsyn,

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

UL LLC did not select the test samples or conduct follow up inspection. The test results apply only to the actual samples tested.

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TEST LOCATION

Samples of the subject products were tested at UL International Germany GmbH, Am Oberfeld 19, 83026 Rosenheim, Germany

TEST STANDARD

EN 13823 : 2020



SAMPLES

The samples were supplied to UL International GmbH directly from LLC The Good Plastic Company.

Test No	Product Description
1	Product 1
2	Product 2
3	Product 3

TEST DATES

20th July 2022

ABBREVIATIONS AND MEANING

Total heat release from the specimen in the first 600 seconds of exposure to the main (primary) burner flames	THR _{600s}
Maximum of the quotient of heat release rate from the specimen and the time of its occurrence using a <i>THR</i> -threshold of 0,2 MJ and 0.4 MJ	FIGRA _{0.2 MJ} FIGRA _{0.4 MJ}
Total smoke production from the specimen in the first 600 s of exposure to the main (primary) burner flames	TSP _{600s}
Maximum of the quotient of smoke production rate from the specimen and the time of its occurrence	SMOGRA (m ² /s ²)



TEST RESULTS:

The results are tabulated below are considered applicable only to the specific samples tested.

Graphical plots are shown in Appendix A per product

EN 13823:2020						
Test No	THR 600s (MJ)	FIGRA (W/s)		TSP at 600s (m ²)	SMOGRA (m ² /s ²)	Potential Classification
		(0.2 MJ)	(0.4 MJ)			
*1	21.8	882.6	882.6	438.9	199.3	E, s3-d0
**2	17.5	488.4	488.4	233.8	60.2	D, s3-d2
*3	4.8	2211.6	2211.6	98.2	519.5	E, s3-d0

*According to 8.5 point of EN 13823, “Early termination of test”, if the heat release rate of the specimen exceeding 350 kW at any instant, or exceeding 280 kW over a period of 30s; or an exhaust duct temperature exceeding 400°C at any instant, or exceeding a mean value of 300°C over a period of 30s, it must consider an early termination of the test.

** According to 8.5 point of EN 13823, “Early termination of test” if half the burner is blocked by fallen material.

Fall or flaming drops or particles	NO
Flaming of fallen particle/s exceeding 10 seconds	YES (Test 1 and 2) NO (Test 3)
Lateral flame spread to end of specimen	NO

Each product and test assembly consisted of the following details for EN 13823:2020

1. Vertical and horizontal joints used on the long wall.
2. Vertical joint used on the short wall.
3. Air gap – 40mm
4. Cavity – Open
5. Calcium silicate substrate



CONCLUSION

Information conveyed by this Report relates only to the specimens actually involved in this test.

UL's test reports and data are intended solely for your internal use. You cannot use this test data or UL's name or mark in connection with any product, packaging, advertising, promotion or marketing without UL's prior written permission.

We have completed our work under the above service request and this letter will serve as a letter report of our findings. This completes the work anticipated under Project 4790470538 and we are closing the project with this letter.

If you have any questions or comments, please feel free to contact us.

Report by:

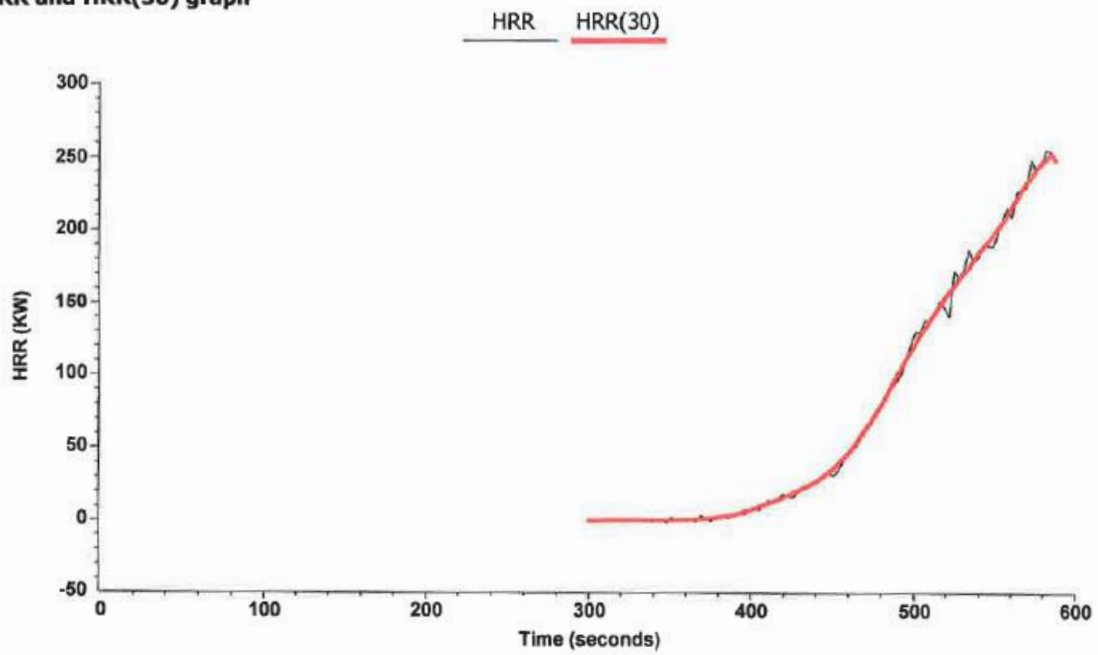
S. Haws

Staff Engineer – Reaction to Fire
Building Science Technologies

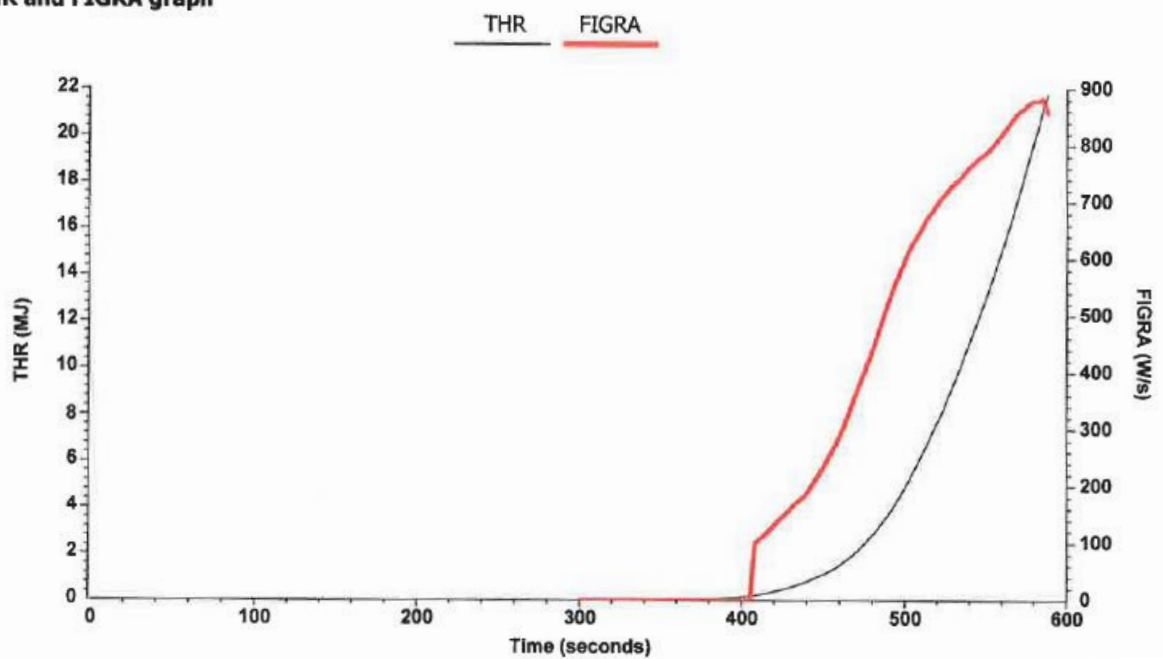
Appendix A

Test 1 – Product 1

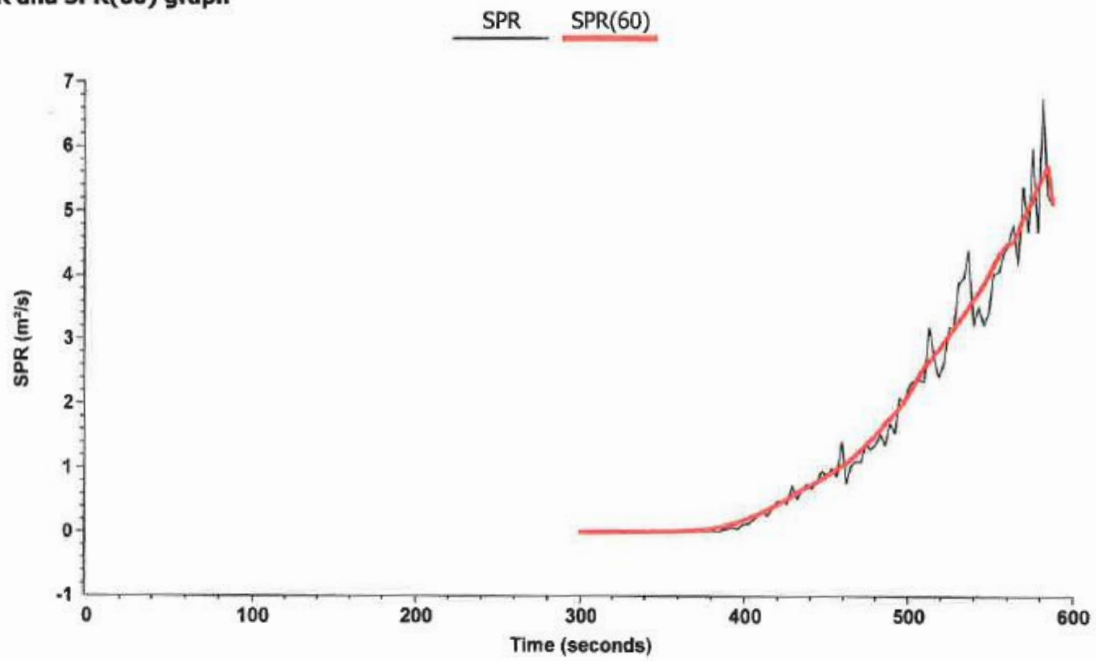
HRR and HRR(30) graph



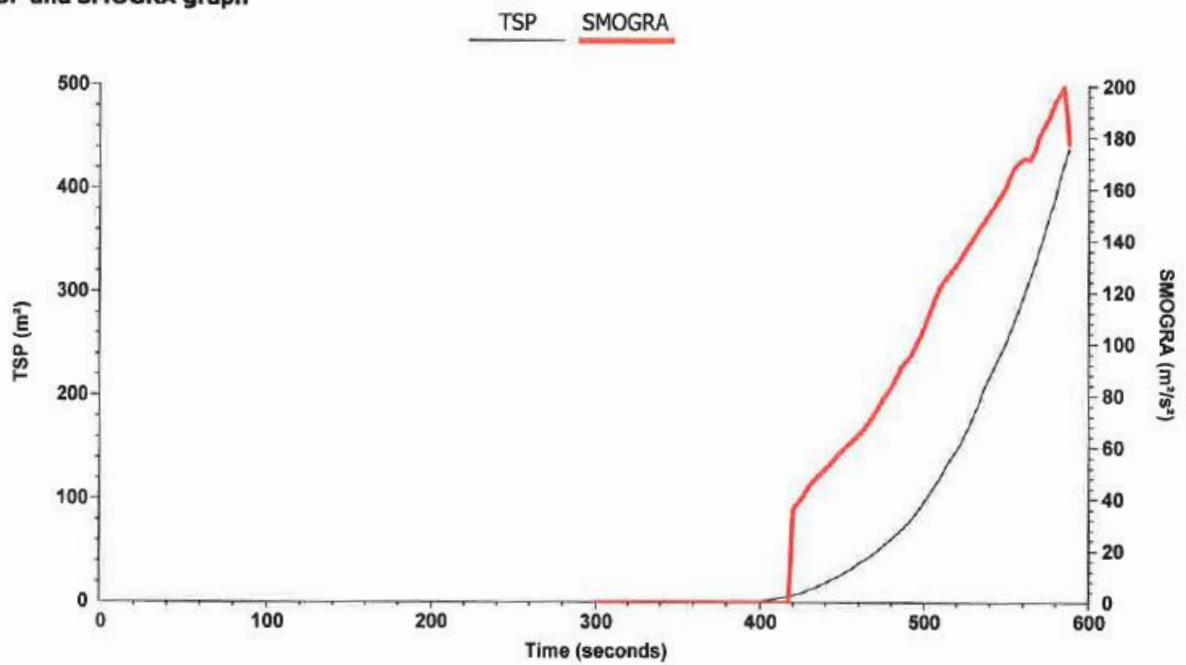
THR and FIGRA graph



SPR and SPR(60) graph

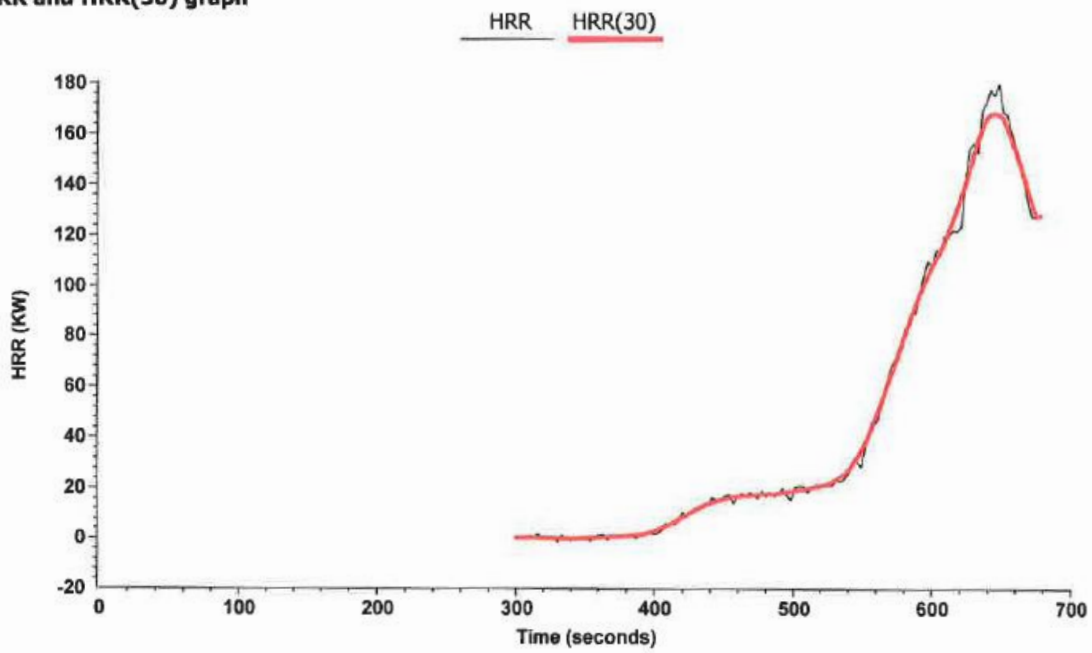


TSP and SMOGRA graph

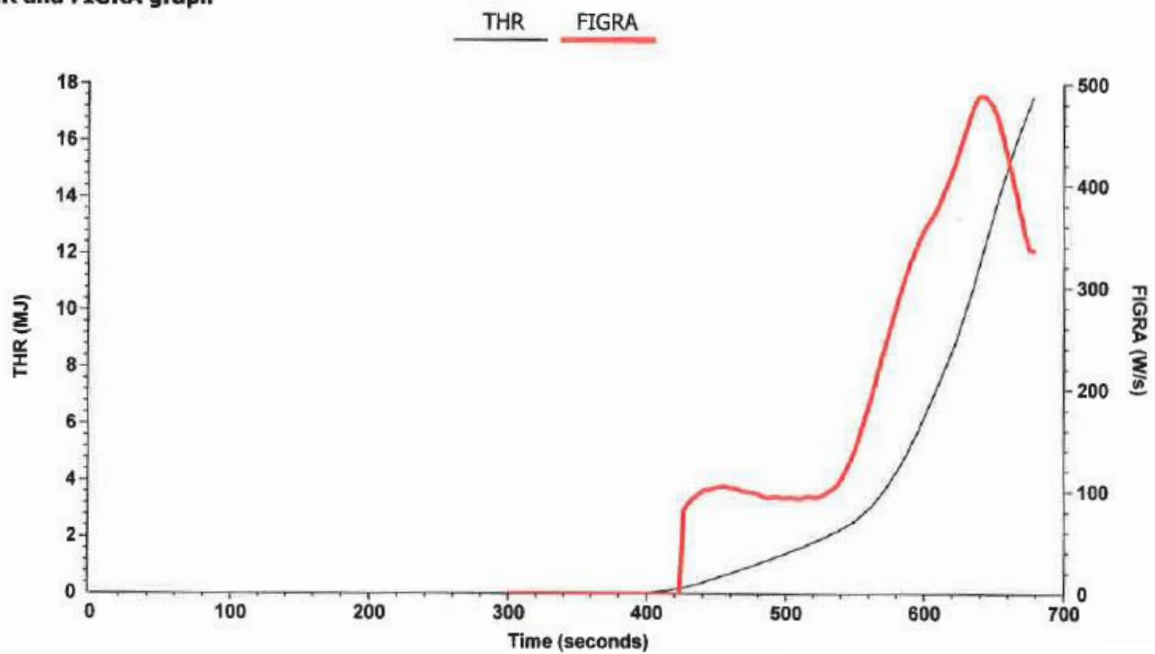


Test 2 – Product 2

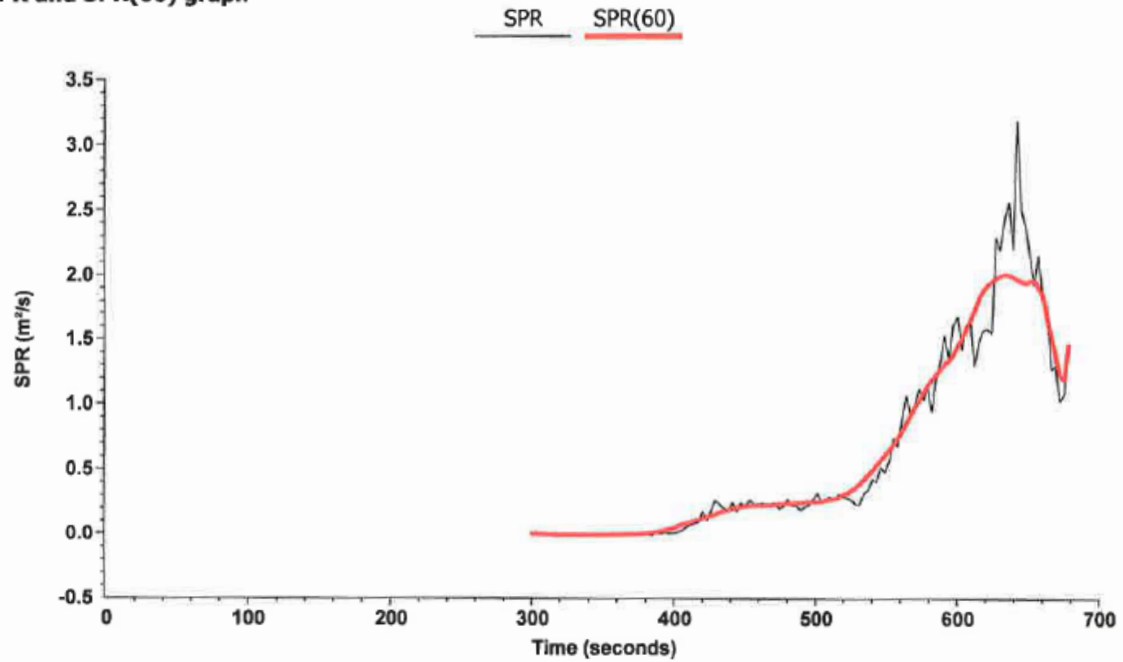
HRR and HRR(30) graph



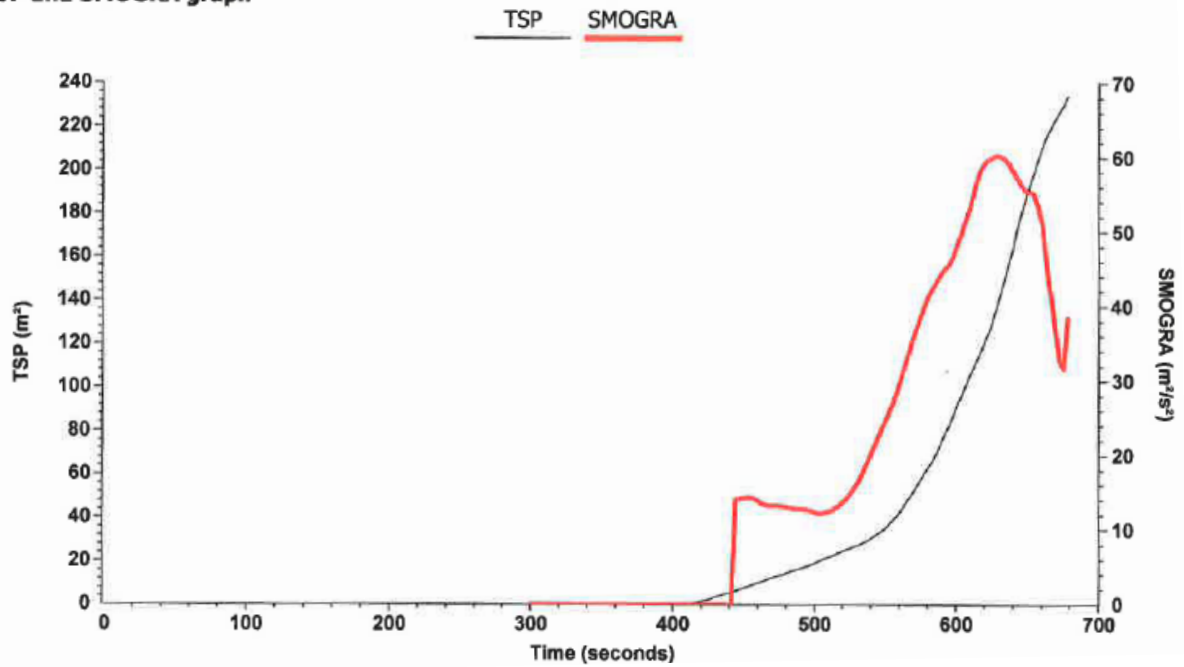
THR and FIGRA graph



SPR and SPR(60) graph

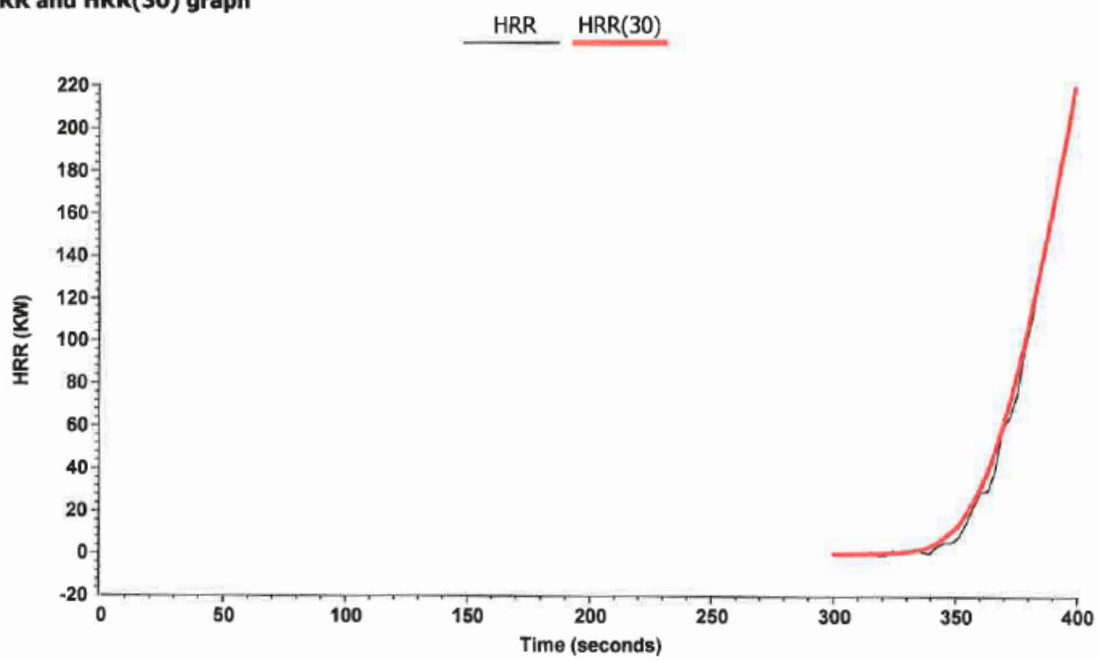


TSP and SMOGRA graph

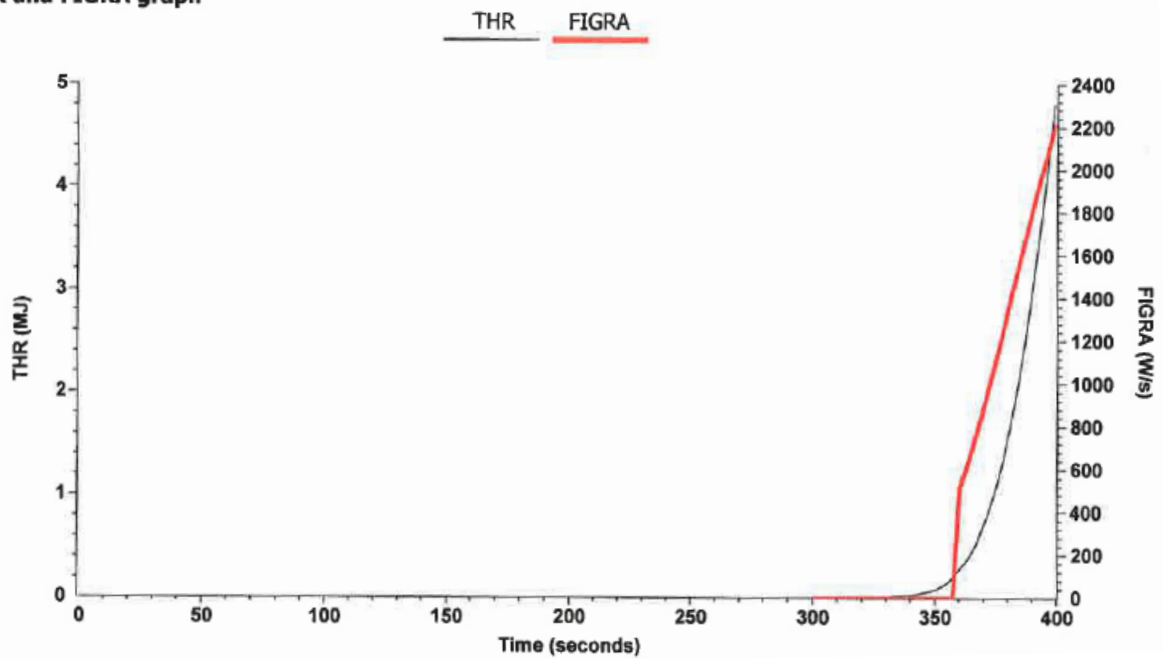


Test 3 – Product 3

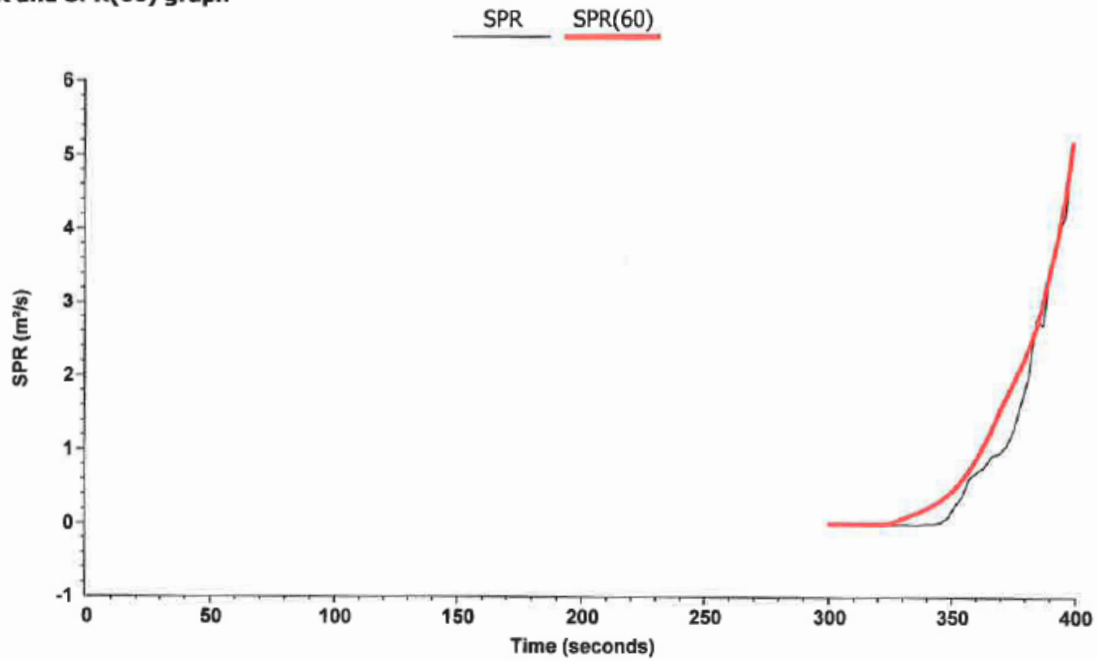
HRR and HRR(30) graph



THR and FIGRA graph



SPR and SPR(60) graph



TSP and SMOGRA graph

