

Tuesday, December 12, 2023, Time 15:36

Wintherm32v3 Version 3.31.143 Uni

Instrument: F200s

Instrument Program Version 290

Instrument Serial Number: 2520

Sample Name: 2023\_12\_12-EM hala rec\_3

Thickness: 28.19mm

Rear Left : 27.99 mm

Rear Right : 28.32 mm

Front Left: 28.04 mm

Front Right: 28.40 mm

[ ]

[ ]

Thickness obtained : from instrument

## TEST RUN

Calibration used : User Type

Calibration File Id: IRMMCalibration\_sn2520

Number of transducers per plate: 1

Number of transducers used per plate: 1

Number of Setpoints: 3

Setpoint duration: 42 min

Block Averages for setpoint 1 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	15.62	24.19	-14338	9778	1.029
-ne-	14.99	24.98	-10131	8236	0.6736
-te-	15.01	25.01	-9255	8753	0.6587
-te-	15.01	25.02	-9035	8971	0.6586
-te-	15.01	25.02	-8948	9060	0.6586
-te-	15.01	25.02	-8917	9080	0.6583
-pe-	15.00	25.02	-8908	9085	0.6580
-pe-	15.00	25.02	-8903	9087	0.6578
-pe-	15.00	25.01	-8904	9083	0.6578
-pe-	15.01	25.01	-8910	9077	0.6581

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Setpoint No. 1

Setpoint Upper: 15.00 °C

Setpoint Lower: 25.00 °C

Temperature Upper: 15.00 °C

CalibFactor Upper: 0.026016

Results Upper: 0.6525 W/mK

Temperature Lower: 25.01 °C

CalibFactor Lower: 0.025934

Results Lower: 0.6633 W/mK

Percent Difference: 1.64%

Thermal Equilibrium Criteria:

Temperature Equilibrium: 0.20

Between Block HFM Equil.: 49

HFM Percent Change: 2.00

Min Number of Blocks: 4

Calculation Blocks: 3

Setpoint duration: 46 min

Block Averages for setpoint 2 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	10.19	20.08	-18362	-4082	0.8393
-te-	9.98	19.99	-12572	4967	0.6480
-te-	10.00	19.99	-10271	7379	0.6514
-te-	10.00	20.00	-9364	8359	0.6533
-te-	10.00	20.00	-9017	8739	0.6542

	10.00	20.00	-8878	8891	0.6546
-te-	10.00	20.00	-8832	8940	0.6547
-pe-	10.00	20.00	-8817	8952	0.6545
-pe-	10.00	20.00	-8800	8970	0.6546
-pe-	10.00	20.00	-8792	8977	0.6544
-pe-	10.01	20.01	-8793	8973	0.6543

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Setpoint No. 2  
Setpoint Upper: 10.00 °C  
Setpoint Lower: 20.00 °C  
Temperature Upper: 10.00 °C  
CalibFactor Upper: 0.026312  
Results Upper: 0.6521 W/mK  
Temperature Lower: 20.00 °C  
CalibFactor Lower: 0.025969  
Results Lower: 0.6567 W/mK  
Percent Difference: 0.70%

Thermal Equilibrium Criteria:  
Temperature Equilibrium: 0.20  
Between Block HFM Equil.: 49  
HFM Percent Change: 2.00  
Min Number of Blocks: 4  
Calculation Blocks: 3

Setpoint duration: 101 min

Block Averages for setpoint 3 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	5.26	15.09	-18178	-4037	0.8438
-ne-	4.91	14.91	-12500	4675	0.6403
-te-	5.00	15.00	-9991	7355	0.6438
-te-	5.00	15.01	-9151	8245	0.6450
-te-	5.00	15.01	-8824	8584	0.6452
-te-	5.00	15.01	-8713	8710	0.6456
-te-	5.00	15.01	-8664	8763	0.6457
-te-	5.00	15.00	-8648	8782	0.6458
-pe-	5.00	15.00	-8647	8787	0.6460
-pe-	5.00	15.00	-8643	8795	0.6462
-pe-	5.00	15.00	-8637	8805	0.6462
-pe-	5.00	15.01	-8635	8802	0.6460
-pe-	5.00	15.00	-8626	8805	0.6458
-pe-	5.00	15.01	-8625	8802	0.6456
-pe-	5.00	15.01	-8622	8796	0.6453
-pe-	5.00	15.01	-8615	8792	0.6448
-pe-	5.00	15.01	-8606	8791	0.6443
-pe-	5.00	15.01	-8598	8787	0.6439
-pe-	5.00	15.01	-8597	8781	0.6438
-pe-	5.00	15.01	-8592	8773	0.6432
-pe-	5.00	15.01	-8592	8769	0.6433
-pe-	5.00	15.01	-8589	8766	0.6429
-pe-	5.00	15.00	-8584	8769	0.6429
-pe-	5.00	15.01	-8584	8763	0.6427

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Setpoint No. 3  
Setpoint Upper: 5.00 °C  
Setpoint Lower: 15.00 °C  
Temperature Upper: 5.00 °C  
CalibFactor Upper: 0.026610  
Results Upper: 0.6436 W/mK  
Temperature Lower: 15.01 °C  
CalibFactor Lower: 0.026002  
Results Lower: 0.6421 W/mK  
Percent Difference: 0.23%

Thermal Equilibrium Criteria:  
Temperature Equilibrium: 0.20

Between Block HFM Equil.:	49
HFM Percent Change:	2.00
Min Number of Blocks:	4
Calculation Blocks:	3

Results Table -- SI Units

Mean Temp	Upper Cond	Lower Cond	Average Cond
20.01	0.6525	0.6633	0.6579
15.00	0.6521	0.6567	0.6544
10.00	0.6436	0.6421	0.6428