

Friday, January 06, 2023, Time 16:04

Wintherm32v3 Version 3.31.143 Uni

Instrument: F200s

Instrument Program Version 290

Instrument Serial Number: 2520

Sample Name: vap4-s1-2023-01-06

Thickness: 29.39mm

Rear Left : 29.16 mm

Rear Right : 29.54 mm

Front Left: 29.26 mm

Front Right: 29.59 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: 46 min

Block Averages for setpoint 1 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	15.57	24.31	-9355	9181	0.8086
-ne-	15.01	25.00	-6846	6257	0.5007
-te-	15.01	25.01	-6554	6189	0.4860
-te-	15.00	25.01	-6501	6232	0.4856
-te-	15.01	25.01	-6476	6254	0.4855
-pe-	15.00	25.01	-6471	6261	0.4855
-pe-	15.00	25.01	-6459	6274	0.4856
-pe-	15.00	25.01	-6451	6281	0.4855
-pe-	15.00	25.01	-6447	6284	0.4855
-pe-	15.00	25.01	-6446	6282	0.4854
-pe-	15.01	25.01	-6448	6282	0.4855

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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: 0.4925 W/mK

Temperature Lower: 25.01 °C

CalibFactor Lower: 0.025934

Results Lower: 0.4784 W/mK

Percent Difference: 2.90%

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: 89 min

Block Averages for setpoint 2 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	10.16	20.06	-15130	-4103	0.7489
-te-	9.99	20.00	-10309	1826	0.4679
-te-	10.00	19.99	-8686	3565	0.4721
-te-	10.00	20.00	-7715	4615	0.4745

-te-	10.00	20.00	-7151	5232	0.4760
-te-	10.00	20.00	-6816	5598	0.4771
-te-	10.00	20.00	-6619	5816	0.4778
-te-	10.00	20.00	-6502	5945	0.4782
-te-	10.00	20.00	-6425	6023	0.4783
-te-	10.00	20.00	-6382	6070	0.4783
-pe-	10.00	20.00	-6363	6092	0.4784
-pe-	10.00	20.00	-6342	6116	0.4785
-pe-	10.00	20.00	-6326	6132	0.4785
-pe-	10.00	20.00	-6318	6143	0.4786
-pe-	10.00	20.01	-6317	6142	0.4785
-pe-	10.00	20.00	-6311	6148	0.4785
-pe-	10.00	20.01	-6311	6146	0.4785
-pe-	10.00	20.00	-6310	6149	0.4785
-pe-	10.00	20.01	-6310	6147	0.4784
-pe-	10.00	20.00	-6307	6151	0.4785
-pe-	10.01	20.01	-6309	6148	0.4785

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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: 0.4878 W/mK  
Temperature Lower: 20.01 °C  
CalibFactor Lower: 0.025969  
Results Lower: 0.4692 W/mK  
Percent Difference: 3.88%

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: 80 min

Block Averages for setpoint 3 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	5.24	15.07	-14836	-4007	0.7459
-te-	4.99	14.99	-10125	1761	0.4629
-te-	4.99	15.00	-8524	3460	0.4653
-te-	5.00	15.00	-7568	4492	0.4673
-te-	5.00	15.00	-7007	5098	0.4685
-te-	5.00	15.01	-6678	5454	0.4693
-te-	5.00	15.00	-6474	5675	0.4697
-te-	5.00	15.00	-6360	5797	0.4700
-te-	5.00	15.00	-6291	5875	0.4702
-te-	5.00	15.01	-6244	5924	0.4703
-te-	5.00	15.01	-6220	5949	0.4703
-pe-	5.00	15.00	-6207	5964	0.4704
-pe-	5.00	15.00	-6198	5974	0.4704
-pe-	5.00	15.00	-6189	5984	0.4704
-pe-	5.00	15.00	-6186	5988	0.4704
-pe-	5.00	15.00	-6182	5992	0.4704
-pe-	5.00	15.00	-6177	5997	0.4704
-pe-	5.00	15.00	-6177	5997	0.4705
-pe-	5.00	15.01	-6178	5995	0.4704

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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: 0.4828 W/mK  
Temperature Lower: 15.00 °C  
CalibFactor Lower: 0.026003

Results Lower: 0.4580 W/mK  
Percent Difference: 5.28%

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	0.4925	0.4784	0.4855
15.00	0.4878	0.4692	0.4785
10.00	0.4828	0.4580	0.4704