

Friday, January 06, 2023, Time 11:03

Wintherm32v3 Version 3.31.143 Uni

Instrument: F200s

Instrument Program Version 290

Instrument Serial Number: 2520

Sample Name: vap4-s3-2023-01-06

Thickness: 29.20mm

Rear Left : 28.91 mm

Rear Right : 29.36 mm

Front Left: 29.03 mm

Front Right: 29.49 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: 72 min

Block Averages for setpoint 1 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	15.61	24.22	-9230	8040	0.7596
-ne-	15.00	24.98	-6621	5663	0.4667
-te-	15.00	25.01	-6219	5674	0.4506
-te-	15.00	25.01	-6109	5786	0.4507
-te-	15.00	25.01	-6047	5871	0.4515
-te-	15.00	25.01	-6005	5911	0.4515
-pe-	15.00	25.01	-5990	5929	0.4516
-pe-	15.00	25.01	-5975	5951	0.4519
-pe-	15.00	25.01	-5961	5967	0.4519
-pe-	15.00	25.01	-5953	5978	0.4521
-pe-	15.00	25.01	-5949	5981	0.4519
-pe-	15.01	25.02	-5949	5983	0.4521
-pe-	15.00	25.01	-5945	5984	0.4519
-pe-	15.01	25.01	-5945	5984	0.4520
-pe-	15.01	25.01	-5944	5984	0.4519
-pe-	15.01	25.01	-5944	5984	0.4520
-pe-	15.01	25.02	-5947	5980	0.4518

Friday, January 06, 2023, Time 12:15

Setpoint No. 1

Setpoint Upper: 15.00 °C

Setpoint Lower: 25.00 °C

Temperature Upper: 15.01 °C

CalibFactor Upper: 0.026016

Results Upper: 0.4512 W/mK

Temperature Lower: 25.01 °C

CalibFactor Lower: 0.025934

Results Lower: 0.4526 W/mK

Percent Difference: 0.31%

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 2 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	10.16	20.07	-13797	-4802	0.7187
-te-	9.99	20.00	-9452	1351	0.4140
-te-	10.00	19.99	-7980	3164	0.4267
-te-	10.00	20.00	-7096	4265	0.4344
-te-	10.00	20.00	-6581	4911	0.4389
-te-	10.00	20.00	-6284	5286	0.4417
-te-	10.00	20.00	-6100	5515	0.4434
-te-	10.00	20.00	-5989	5657	0.4444
-te-	10.00	20.00	-5926	5735	0.4450
-te-	10.00	20.00	-5887	5784	0.4453
-pe-	10.00	20.00	-5873	5799	0.4454
-pe-	10.00	20.00	-5855	5821	0.4455
-pe-	10.00	20.00	-5839	5842	0.4457
-pe-	10.00	20.00	-5833	5849	0.4458
-pe-	10.00	20.00	-5827	5855	0.4457
-pe-	10.00	20.01	-5827	5856	0.4458
-pe-	10.00	20.01	-5826	5856	0.4457
-pe-	10.00	20.00	-5825	5858	0.4458
-pe-	10.00	20.01	-5827	5853	0.4457

Friday, January 06, 2023, Time 13:36

Setpoint No. 2  
Setpoint Upper: 10.00 °C  
Setpoint Lower: 20.00 °C  
Temperature Upper: 10.00 °C  
CalibFactor Upper: 0.026312  
Results Upper: 0.4475 W/mK  
Temperature Lower: 20.00 °C  
CalibFactor Lower: 0.025969  
Results Lower: 0.4439 W/mK  
Percent Difference: 0.80%

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 3 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	5.23	15.07	-13357	-4714	0.7089
-te-	4.99	14.99	-9262	1289	0.4085
-te-	4.99	15.00	-7823	3061	0.4199
-te-	5.00	15.00	-6956	4145	0.4274
-te-	5.00	15.00	-6446	4781	0.4317
-te-	5.00	15.00	-6146	5156	0.4343
-te-	5.00	15.00	-5965	5384	0.4359
-te-	5.00	15.00	-5859	5519	0.4369
-te-	5.00	15.00	-5801	5588	0.4373
-te-	5.00	15.00	-5758	5645	0.4377
-te-	5.00	15.01	-5736	5671	0.4379
-pe-	5.00	15.00	-5728	5680	0.4379
-pe-	4.99	15.00	-5713	5696	0.4380
-pe-	5.00	15.00	-5705	5708	0.4382
-pe-	5.00	15.00	-5703	5711	0.4381
-pe-	5.00	15.01	-5703	5710	0.4381
-pe-	5.00	15.00	-5700	5714	0.4381
-pe-	5.00	15.01	-5699	5715	0.4381
-pe-	5.00	15.00	-5698	5717	0.4381
-pe-	5.00	15.00	-5696	5719	0.4382
-pe-	5.00	15.00	-5696	5720	0.4382

Friday, January 06, 2023, Time 15:05

Setpoint No. 3  
Setpoint Upper: 5.00 °C

Setpoint Lower: 15.00 °C  
Temperature Upper: 5.00 °C  
CalibFactor Upper: 0.026610  
Results Upper: 0.4424 W/mK  
Temperature Lower: 15.00 °C  
CalibFactor Lower: 0.026003  
Results Lower: 0.4340 W/mK  
Percent Difference: 1.92%

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	0.4512	0.4526	0.4519
15.00	0.4475	0.4439	0.4457
10.00	0.4424	0.4340	0.4382