

Friday, June 11, 2021, Time 10:42

Wintherm32v3 Version 3.31.143 Uni

Instrument: F200s

Instrument Program Version 290

Instrument Serial Number: 2520

Sample Name: A3-3F-20210611.tst

Thickness: 37.07mm

Rear Left : 37.06 mm

Rear Right : 37.01 mm

Front Left: 37.13 mm

Front Right: 37.08 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: 80 min

Block Averages for setpoint 1 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]	SampleU [°C]	SampleL [°C]
-ne-	16.03	24.59	-12015	4106	1.987	20.01	23.89
-ne-	14.99	24.96	-7435	2340	0.7555	18.10	24.30
-te-	15.00	25.01	-6162	2941	0.6696	17.62	24.15
-te-	15.00	25.01	-5590	3475	0.6595	17.38	23.98
-te-	15.00	25.01	-5232	3857	0.6580	17.23	23.87
-te-	15.00	25.01	-5013	4094	0.6573	17.14	23.79
-te-	15.01	25.01	-4867	4256	0.6571	17.08	23.75
-te-	15.01	25.02	-4775	4359	0.6572	17.04	23.72
-te-	15.01	25.02	-4720	4418	0.6568	17.01	23.70
-te-	15.01	25.01	-4678	4459	0.6564	17.00	23.69
-pe-	15.00	25.01	-4660	4480	0.6563	16.98	23.68
-pe-	15.00	25.01	-4640	4500	0.6563	16.98	23.67
-pe-	15.00	25.01	-4627	4514	0.6563	16.97	23.67
-pe-	15.00	25.01	-4618	4519	0.6563	16.97	23.66
-pe-	15.00	25.01	-4610	4527	0.6560	16.98	23.67
-pe-	15.00	25.01	-4605	4533	0.6561	16.97	23.66
-pe-	15.00	25.01	-4600	4535	0.6555	16.97	23.67
-pe-	15.01	25.01	-4600	4536	0.6558	16.97	23.67
-pe-	15.01	25.02	-4604	4529	0.6559	16.98	23.67

Friday, June 11, 2021, Time 12:02

Setpoint No. 1

Setpoint Upper: 15.00 °C

Setpoint Lower: 25.00 °C

Temperature Upper: 16.97 °C

CalibFactor Upper: 0.025900

Results Upper: 0.6601 W/mK

Temperature Lower: 23.67 °C

CalibFactor Lower: 0.025943

Results Lower: 0.6514 W/mK

Percent Difference: 1.33%

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: 72 min

## Block Averages for setpoint 2 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]	SampleU [°C]	SampleL [°C]
-ne-	10.21	20.09	-12354	-5331	1.385	14.77	20.92
-te-	10.00	20.00	-8065	555	0.6622	13.56	19.86
-te-	10.00	20.00	-6840	1855	0.6555	13.03	19.45
-te-	10.00	20.00	-6021	2763	0.6537	12.67	19.18
-te-	10.00	20.00	-5488	3366	0.6534	12.44	19.00
-te-	10.00	20.00	-5145	3748	0.6527	12.29	18.88
-te-	10.00	20.00	-4922	3999	0.6524	12.19	18.81
-te-	10.00	20.00	-4786	4157	0.6526	12.13	18.76
-te-	10.00	20.00	-4697	4258	0.6525	12.09	18.73
-te-	10.00	20.00	-4647	4314	0.6523	12.07	18.71
-te-	10.00	20.00	-4608	4360	0.6528	12.05	18.69
-pe-	10.00	20.00	-4591	4378	0.6519	12.03	18.69
-pe-	10.00	20.00	-4575	4397	0.6521	12.03	18.68
-pe-	10.00	20.00	-4562	4412	0.6522	12.02	18.67
-pe-	10.00	20.00	-4555	4422	0.6521	12.02	18.67
-pe-	10.00	20.00	-4544	4433	0.6519	12.01	18.67
-pe-	10.00	20.00	-4545	4433	0.6519	12.01	18.67

Friday, June 11, 2021, Time 13:14

Setpoint No. 2  
Setpoint Upper: 10.00 °C  
Setpoint Lower: 20.00 °C  
Temperature Upper: 12.01 °C  
CalibFactor Upper: 0.026193  
Results Upper: 0.6633 W/mK  
Temperature Lower: 18.67 °C  
CalibFactor Lower: 0.025978  
Results Lower: 0.6407 W/mK  
Percent Difference: 3.46%

## 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: 84 min

## Block Averages for setpoint 3 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]	SampleU [°C]	SampleL [°C]
-ne-	5.30	15.13	-11947	-5206	1.380	9.93	15.97
-ne-	4.94	14.91	-7977	401	0.6631	8.64	14.82
-te-	5.00	15.00	-6703	1833	0.6571	8.12	14.46
-te-	5.00	15.00	-5897	2710	0.6529	7.76	14.18
-te-	5.00	15.00	-5378	3286	0.6511	7.52	14.01
-te-	5.00	15.00	-5044	3661	0.6503	7.37	13.89
-te-	5.00	15.01	-4830	3902	0.6499	7.27	13.82
-te-	5.00	15.01	-4695	4052	0.6495	7.21	13.77
-te-	5.00	15.01	-4607	4155	0.6497	7.17	13.73
-te-	5.00	15.01	-4550	4221	0.6498	7.15	13.72
-te-	5.00	15.00	-4515	4257	0.6495	7.13	13.70
-pe-	5.00	15.00	-4502	4270	0.6494	7.12	13.69
-pe-	4.99	15.00	-4486	4290	0.6494	7.11	13.69
-pe-	4.99	15.00	-4473	4306	0.6496	7.10	13.68
-pe-	5.00	15.00	-4464	4319	0.6496	7.10	13.68
-pe-	5.00	15.00	-4460	4323	0.6496	7.10	13.68
-pe-	5.00	15.00	-4461	4325	0.6495	7.10	13.68
-pe-	5.00	15.00	-4462	4326	0.6496	7.10	13.68
-pe-	5.00	15.00	-4460	4329	0.6494	7.09	13.68
-pe-	5.00	15.00	-4461	4328	0.6494	7.10	13.68

Friday, June 11, 2021, Time 14:39

Setpoint No. 3  
Setpoint Upper: 5.00 °C  
Setpoint Lower: 15.00 °C

Temperature Upper:	7.10	°C
CalibFactor Upper:	0.026485	
Results Upper:	0.6652	W/mK
Temperature Lower:	13.68	°C
CalibFactor Lower:	0.026011	
Results Lower:	0.6337	W/mK
Percent Difference:	4.84%	

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
20.32	0.6601	0.6514	0.6558
15.34	0.6633	0.6407	0.6520
10.39	0.6652	0.6337	0.6494