

Thursday, June 10, 2021, Time 09:05

Wintherm32v3 Version 3.31.143 Uni

Instrument: F200s

Instrument Program Version 290

Instrument Serial Number: 2520

Sample Name: A1-F3-20210610

Thickness: 37.62mm

Rear Left : 37.54 mm

Rear Right : 37.85 mm

Front Left: 37.39 mm

Front Right: 37.72 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: 76 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-	16.01	24.57	-10352	5517	1.533	18.39	23.42
-ne-	15.00	24.97	-5878	3070	0.5930	16.75	24.11
-te-	15.00	25.01	-4907	3152	0.5154	16.48	24.11
-te-	15.00	25.01	-4579	3352	0.5049	16.38	24.05
-te-	15.00	25.01	-4384	3529	0.5033	16.33	24.00
-te-	15.00	25.01	-4266	3644	0.5027	16.29	23.96
-te-	15.00	25.01	-4187	3723	0.5028	16.26	23.94
-te-	15.00	25.01	-4132	3768	0.5019	16.25	23.93
-te-	15.00	25.01	-4097	3803	0.5018	16.23	23.92
-pe-	15.00	25.01	-4085	3816	0.5019	16.23	23.91
-pe-	15.00	25.01	-4071	3835	0.5018	16.22	23.91
-pe-	15.00	25.01	-4060	3842	0.5015	16.22	23.91
-pe-	15.00	25.01	-4054	3846	0.5014	16.21	23.90
-pe-	15.01	25.02	-4051	3845	0.5012	16.22	23.91
-pe-	15.01	25.01	-4050	3845	0.5010	16.21	23.91
-pe-	15.00	25.01	-4043	3849	0.5008	16.22	23.91
-pe-	15.00	25.01	-4040	3850	0.5007	16.22	23.91
-pe-	15.01	25.02	-4043	3847	0.5006	16.22	23.91

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Setpoint No. 1

Setpoint Upper: 15.00 °C

Setpoint Lower: 25.00 °C

Temperature Upper: 16.22 °C

CalibFactor Upper: 0.025945

Results Upper: 0.5130 W/mK

Temperature Lower: 23.91 °C

CalibFactor Lower: 0.025942

Results Lower: 0.4884 W/mK

Percent Difference: 4.91%

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	Tlower	Qupper	Qlower	Lambda	SampleU	SampleL
	[°C]	[°C]	[μV]	[μV]	[W/mK]	[°C]	[°C]
-ne-	10.20	20.08	-12292	-5271	1.142	13.40	20.94
-te-	10.00	20.00	-7369	390	0.5015	12.29	19.91
-te-	10.00	20.00	-6224	1473	0.4960	11.93	19.57
-te-	10.00	20.00	-5439	2257	0.4949	11.70	19.34
-te-	10.00	20.00	-4927	2774	0.4946	11.54	19.20
-te-	10.00	20.01	-4596	3110	0.4944	11.44	19.10
-te-	10.00	20.01	-4373	3337	0.4944	11.37	19.03
-te-	10.00	20.01	-4237	3474	0.4942	11.32	18.99
-te-	10.00	20.00	-4144	3569	0.4943	11.29	18.96
-te-	10.00	20.01	-4083	3629	0.4940	11.28	18.94
-te-	10.00	20.01	-4048	3665	0.4942	11.26	18.93
-pe-	10.00	20.00	-4029	3683	0.4941	11.26	18.92
-pe-	10.00	20.00	-4008	3702	0.4942	11.25	18.91
-pe-	10.00	20.00	-3995	3717	0.4939	11.24	18.91
-pe-	10.00	20.00	-3984	3727	0.4940	11.24	18.91
-pe-	10.00	20.00	-3977	3734	0.4938	11.24	18.91
-pe-	10.00	20.00	-3975	3735	0.4940	11.24	18.91
-pe-	10.00	20.00	-3972	3736	0.4938	11.24	18.91
-pe-	10.00	20.00	-3970	3740	0.4938	11.24	18.91
-pe-	10.00	20.00	-3968	3741	0.4936	11.24	18.91
-pe-	10.00	20.01	-3970	3739	0.4937	11.24	18.91

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Setpoint No. 2  
Setpoint Upper: 10.00 °C  
Setpoint Lower: 20.00 °C  
Temperature Upper: 11.24 °C  
CalibFactor Upper: 0.026239  
Results Upper: 0.5108 W/mK  
Temperature Lower: 18.91 °C  
CalibFactor Lower: 0.025977  
Results Lower: 0.4766 W/mK  
Percent Difference: 6.95%

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	Tlower	Qupper	Qlower	Lambda	SampleU	SampleL
	[°C]	[°C]	[μV]	[μV]	[W/mK]	[°C]	[°C]
-ne-	5.29	15.13	-12064	-5140	1.138	8.51	15.99
-ne-	4.94	14.92	-7308	267	0.4981	7.31	14.87
-te-	5.00	15.00	-6111	1453	0.4933	6.97	14.58
-te-	5.00	15.00	-5333	2210	0.4903	6.73	14.36
-te-	5.00	15.00	-4829	2717	0.4895	6.57	14.20
-te-	5.00	15.01	-4504	3049	0.4893	6.46	14.11
-te-	5.00	15.00	-4292	3261	0.4888	6.40	14.04
-te-	5.00	15.01	-4153	3400	0.4886	6.35	14.00
-te-	5.00	15.00	-4071	3492	0.4891	6.33	13.97
-te-	5.00	15.00	-4012	3549	0.4889	6.31	13.95
-te-	5.00	15.01	-3971	3589	0.4887	6.29	13.94
-pe-	5.00	15.00	-3958	3601	0.4888	6.29	13.93
-pe-	5.00	15.00	-3942	3620	0.4888	6.28	13.93
-pe-	4.99	15.00	-3925	3638	0.4890	6.28	13.92
-pe-	5.00	15.00	-3915	3646	0.4888	6.28	13.92
-pe-	5.00	15.00	-3911	3649	0.4888	6.28	13.92
-pe-	5.00	15.01	-3911	3648	0.4888	6.28	13.92
-pe-	5.00	15.00	-3906	3652	0.4887	6.28	13.92
-pe-	5.00	15.00	-3905	3656	0.4888	6.28	13.92
-pe-	5.00	15.01	-3905	3654	0.4888	6.28	13.92
-pe-	5.00	15.01	-3906	3653	0.4889	6.28	13.92

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Setpoint No. 3  
Setpoint Upper: 5.00 °C  
Setpoint Lower: 15.00 °C  
Temperature Upper: 6.28 °C  
CalibFactor Upper: 0.026534  
Results Upper: 0.5099 W/mK  
Temperature Lower: 13.92 °C  
CalibFactor Lower: 0.026009  
Results Lower: 0.4677 W/mK  
Percent Difference: 8.63%

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
20.06	0.5130	0.4884	0.5007
15.08	0.5108	0.4766	0.4937
10.10	0.5099	0.4677	0.4888