

Wednesday, June 09, 2021, Time 09:27

Wintherm32v3 Version 3.31.143 Uni

Instrument: F200s

Instrument Program Version 290

Instrument Serial Number: 2520

Sample Name: A1-F2-20210609.tst

Thickness: 37.89mm

Rear Left : 37.97 mm

Rear Right : 37.80 mm

Front Left: 38.00 mm

Front Right: 37.80 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-	16.60	24.68	-13098	954	1.563	20.17	24.56
-ne-	15.00	24.93	-7878	927	0.6163	17.69	24.69
-te-	15.00	25.01	-6215	1748	0.5309	17.17	24.53
-te-	15.00	25.01	-5432	2420	0.5190	16.90	24.33
-te-	15.00	25.01	-4936	2923	0.5177	16.73	24.19
-te-	15.00	25.01	-4606	3264	0.5175	16.61	24.08
-te-	14.99	25.00	-4385	3491	0.5172	16.53	24.01
-te-	14.99	25.00	-4233	3649	0.5171	16.47	23.96
-te-	15.00	25.00	-4125	3767	0.5174	16.44	23.93
-te-	15.00	25.01	-4056	3837	0.5172	16.41	23.91
-te-	15.00	25.01	-4011	3882	0.5169	16.40	23.90
-pe-	15.00	25.01	-3990	3904	0.5168	16.39	23.89
-pe-	15.00	25.01	-3967	3928	0.5167	16.38	23.89
-pe-	15.00	25.01	-3952	3945	0.5167	16.38	23.89
-pe-	15.00	25.01	-3939	3956	0.5163	16.37	23.89
-pe-	15.00	25.01	-3932	3961	0.5161	16.37	23.89
-pe-	15.00	25.01	-3926	3966	0.5161	16.37	23.89
-pe-	15.01	25.02	-3928	3963	0.5159	16.37	23.89

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Setpoint No. 1

Setpoint Upper: 15.00 °C

Setpoint Lower: 25.00 °C

Temperature Upper: 16.37 °C

CalibFactor Upper: 0.025936

Results Upper: 0.5137 W/mK

Temperature Lower: 23.89 °C

CalibFactor Lower: 0.025942

Results Lower: 0.5184 W/mK

Percent Difference: 0.91%

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	-11499	-5246	1.142	13.71	20.95
-te-	10.00	20.00	-7174	392	0.5136	12.64	19.94
-te-	10.00	20.00	-6139	1407	0.5086	12.26	19.61
-te-	10.00	20.00	-5402	2179	0.5083	12.00	19.38
-te-	10.00	20.00	-4901	2707	0.5084	11.82	19.23
-te-	10.00	20.00	-4554	3072	0.5085	11.70	19.12
-te-	10.00	20.00	-4319	3323	0.5086	11.61	19.05
-te-	10.01	20.01	-4155	3494	0.5085	11.56	19.00
-te-	10.00	20.01	-4047	3607	0.5084	11.52	18.96
-te-	10.00	20.00	-3976	3686	0.5087	11.49	18.94
-te-	10.00	20.00	-3926	3739	0.5088	11.47	18.92
-te-	10.00	20.01	-3897	3767	0.5085	11.46	18.91
-pe-	10.00	20.00	-3879	3786	0.5086	11.45	18.90
-pe-	10.00	20.00	-3860	3806	0.5086	11.44	18.90
-pe-	10.00	20.00	-3845	3824	0.5088	11.44	18.89
-pe-	10.00	20.00	-3837	3830	0.5085	11.44	18.89
-pe-	10.00	20.00	-3832	3838	0.5086	11.43	18.89
-pe-	10.00	20.00	-3827	3841	0.5085	11.43	18.89
-pe-	10.00	20.00	-3825	3845	0.5085	11.43	18.89
-pe-	10.00	20.00	-3825	3843	0.5084	11.43	18.89
-pe-	10.00	20.01	-3825	3843	0.5084	11.43	18.89

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Setpoint No. 2  
Setpoint Upper: 10.00 °C  
Setpoint Lower: 20.00 °C  
Temperature Upper: 11.43 °C  
CalibFactor Upper: 0.026228  
Results Upper: 0.5096 W/mK  
Temperature Lower: 18.89 °C  
CalibFactor Lower: 0.025977  
Results Lower: 0.5072 W/mK  
Percent Difference: 0.47%

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: 106 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	-11120	-5127	1.132	8.86	16.00
-ne-	4.94	14.92	-7089	275	0.5104	7.69	14.91
-te-	5.00	15.00	-6013	1379	0.5057	7.32	14.63
-te-	5.00	15.00	-5287	2130	0.5040	7.05	14.40
-te-	5.00	15.00	-4794	2642	0.5031	6.87	14.24
-te-	5.00	15.00	-4461	3000	0.5032	6.74	14.13
-te-	5.00	15.00	-4235	3242	0.5032	6.66	14.06
-te-	5.00	15.00	-4081	3410	0.5035	6.60	14.01
-te-	5.00	15.00	-3977	3525	0.5037	6.56	13.98
-te-	5.00	15.00	-3908	3598	0.5036	6.53	13.95
-te-	5.00	15.01	-3858	3648	0.5034	6.52	13.94
-te-	5.00	15.00	-3830	3684	0.5037	6.50	13.93
-pe-	4.99	15.00	-3812	3701	0.5035	6.49	13.92
-pe-	4.99	15.00	-3793	3722	0.5037	6.49	13.91
-pe-	5.00	15.00	-3780	3736	0.5035	6.48	13.91
-pe-	5.00	15.00	-3771	3744	0.5035	6.48	13.91
-pe-	5.00	15.00	-3765	3749	0.5034	6.48	13.91
-pe-	5.00	15.00	-3761	3753	0.5036	6.48	13.91
-pe-	5.00	15.00	-3757	3757	0.5036	6.48	13.91
-pe-	5.00	15.01	-3756	3758	0.5035	6.48	13.91
-pe-	5.00	15.01	-3754	3758	0.5034	6.48	13.91
-pe-	5.00	15.01	-3752	3758	0.5034	6.48	13.91
-pe-	5.00	15.01	-3751	3760	0.5036	6.48	13.90

-pe-	5.00	15.01	-3749	3758	0.5031	6.48	13.91
-pe-	5.00	15.01	-3750	3758	0.5033	6.48	13.91

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Setpoint No. 3  
Setpoint Upper: 5.00 °C  
Setpoint Lower: 15.00 °C  
Temperature Upper: 6.48 °C  
CalibFactor Upper: 0.026522  
Results Upper: 0.5076 W/mK  
Temperature Lower: 13.91 °C  
CalibFactor Lower: 0.026009  
Results Lower: 0.4990 W/mK  
Percent Difference: 1.71%

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
20.13	0.5137	0.5184	0.5160
15.16	0.5096	0.5072	0.5084
10.19	0.5076	0.4990	0.5033