

Wintherm32v3 Version 3.31.143 Uni  
Instrument: F200s  
Instrument Program Version 290  
Instrument Serial Number: 2520

Sample Name: 2023\_12\_11-EM hala rec\_1  
Thickness: 26.56mm  
Rear Left : 26.39 mm                      Rear Right : 26.47 mm  
Front Left: 26.64 mm                      Front Right: 26.75 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: 55 min

Block Averages for setpoint 1 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	15.60	24.19	-12615	8969	0.8669
-ne-	15.00	24.98	-8913	7285	0.5600
-te-	15.00	25.01	-8232	7661	0.5478
-te-	15.01	25.01	-8050	7833	0.5475
-te-	15.01	25.01	-7988	7893	0.5474
-te-	15.01	25.02	-7956	7919	0.5471
-pe-	15.00	25.01	-7946	7926	0.5471
-pe-	15.00	25.01	-7938	7931	0.5468
-pe-	15.00	25.01	-7933	7933	0.5468
-pe-	15.00	25.01	-7933	7933	0.5469
-pe-	15.00	25.01	-7930	7936	0.5470
-pe-	15.01	25.01	-7936	7937	0.5472
-pe-	15.00	25.01	-7938	7933	0.5471

Setpoint No. 1  
Setpoint Upper: 15.00 °C  
Setpoint Lower: 25.00 °C  
Temperature Upper: 15.00 °C  
CalibFactor Upper: 0.026016  
Results Upper: 0.5479 W/mK  
Temperature Lower: 25.01 °C  
CalibFactor Lower: 0.025934  
Results Lower: 0.5462 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: 55 min

Block Averages for setpoint 2 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	10.19	20.07	-17175	-3399	0.7256
-te-	9.99	19.99	-11202	4392	0.5429

-te-	10.00	19.99	-9186	6410	0.5424
-te-	10.00	20.00	-8363	7261	0.5428
-te-	10.00	20.00	-8039	7596	0.5428
-te-	10.00	20.01	-7913	7728	0.5429
-te-	10.00	20.01	-7852	7786	0.5429
-te-	10.00	20.01	-7837	7800	0.5428
-pe-	10.00	20.01	-7831	7800	0.5425
-pe-	10.00	20.00	-7821	7809	0.5424
-pe-	10.00	20.01	-7820	7805	0.5423
-pe-	10.00	20.01	-7814	7803	0.5419
-pe-	10.01	20.01	-7815	7800	0.5419

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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: 0.5461 W/mK  
Temperature Lower: 20.01 °C  
CalibFactor Lower: 0.025969  
Results Lower: 0.5380 W/mK  
Percent Difference: 1.49%

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: 55 min

Block Averages for setpoint 3 in SI units

	Tupper [°C]	Tlower [°C]	Qupper [μV]	Qlower [μV]	Lambda [W/mK]
-ne-	5.27	15.08	-17057	-3334	0.7309
-ne-	4.91	14.91	-11164	4176	0.5389
-te-	5.00	15.00	-8966	6386	0.5372
-te-	5.00	15.00	-8200	7156	0.5367
-te-	5.00	15.00	-7896	7468	0.5366
-te-	5.00	15.00	-7787	7586	0.5368
-te-	4.99	15.00	-7736	7631	0.5365
-te-	4.99	14.99	-7718	7640	0.5364
-pe-	4.99	15.00	-7707	7665	0.5368
-pe-	4.99	15.00	-7696	7675	0.5367
-pe-	5.00	15.00	-7694	7679	0.5369
-pe-	5.00	15.01	-7694	7678	0.5368
-pe-	5.00	15.01	-7696	7671	0.5365

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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: 0.5436 W/mK  
Temperature Lower: 15.01 °C  
CalibFactor Lower: 0.026002  
Results Lower: 0.5299 W/mK  
Percent Difference: 2.55%

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	0.5479	0.5462	0.5471
15.01	0.5461	0.5380	0.5420
10.00	0.5436	0.5299	0.5367