Measurements began: 1-28-2005 @ 9:23 p.m., ended 1-29-2005 about 1:45 a.m.

Outdoor Conditions: Temp 38° at beginning; 35° at end. Temp at 5:00 p.m. before test began: 41°. Wind: calm. Sky: overcast.

Boiler (Vitodens 6-24) temp: 120° at beginning; 122° at end. Continuous burner operation through the period.

Measured temp (on surface of 1" black iron piping about 3' from boiler): Supply = 109°-111° ; Return = 96°-97°

TRVs on ALL radiators—settings unchanged for at least 5 days.

Radiator	EDR	Avg. Surface Temp	Return Temp	Room Temp	Estimated Heat Loss	Estimated Output *	Estimated Flow
Family (NW)	66	103°	98°	61°	open to-	4,158 btu/hr	0.36 gpm
Family (NE)	66	72°		61°	open to-	1,452 btu/hr	0.05
Family (W)	55	61°		61°	open to-	0	
Library	95	71°		61°	open to-	1,900 btu/hr	0.07
Hall	84	63°	68°**	61°	open to-	336 btu/hr	0.01
Dining	59	79°	72°	61°	10 mbh	2,124 btu/hr (10 mbh total)	0.09
Laundry	30	59°		55°	open to	240 btu/hr	0.01
Kitchen	98	65°		55°	4 mbh	1,960 btu/hr (2 mbh total)	0.06
Office	75	78°	68°	68°	2 mbh	1,500 btu/hr	0.06
MBR	70	81°		66°	open to	2,100 btu/hr	0.08
Sleeping Porch	108	81°		66°	5 mbh	3,024 btu/hr (5 mbh total)	0.12
SE BR	75	59°	59°	59°	1 mbh	0	
NE BR	95	68°		61°	1 mbh	1,330 btu/hr	0.05
Master Bath ***	28	69°		66°	1 mbh	168 btu/hr	0.01
Original Bath ****		75°	99°	65°		1,000 btu/hr	0.09
TOTALS:					23 mbh	21 mbh	1.06 gpm

* 1.5 btu/hr per degree difference btwn average & room per sf EDR—**2.0 btu/hr used for avg. rad. temp BELOW 90°**!!

** Checked and re-checked. Temp measured top/center of radiator WAS below the return temp!

*** Uses electric radiant floor in major portion, hydronic radiant floor in shower plus the TRVd iron rad.

**** Hydronic radiant floor—constant circulation with no mixing valve, digital valve, t-stat, etc. ***Output & flow estimates for 4 similar baths.***