

**Supplementary Table 1. Results for all configurations showing the thermal indices for each mode and the maximum and final temperature rise measured at the nearest 3 thermocouples.**

Manufacturer	Scanner	Probe	GYN-OB	TI Bmode	TI CF	TI PW	TC <sub>1</sub> (surface)		TC <sub>2</sub> (7 mm)		TC <sub>3</sub> (14 mm)	
							dT <sub>end</sub> [°C]	dT <sub>max</sub> [°C]	dT <sub>end</sub> [°C]	dT <sub>max</sub> [°C]	dT <sub>end</sub> [°C]	dT <sub>max</sub> [°C]
GE	Logiq E9	IC5-9D	GYN	0.7	0.6	0.3	1.39	1.65	0.53	0.56	0.18	0.20
GE	Logiq E9	IC5-9D	OB	0.4	0.4	0.3	2.12	2.13	0.83	0.85	0.36	0.37
GE	Logiq S8	IC5-9D	GYN	1.1	1.6	0.3	1.28	1.43	0.53	0.54	0.22	0.22
GE	Logiq S8	IC5-9D	OB	0.7	1.6	0.3	1.42	1.52	0.64	0.65	0.30	0.32
GE	Voluson 730	IC5-9	GYN	0.2	0.6	1	1.52	1.97	0.82	0.90	0.44	0.47
GE	Voluson 730	IC5-9	OB	0.3	0.5	1	1.76	1.98	0.77	0.87	0.34	0.42
GE	Voluson 730 Expert	RIC5-9H	GYN	0.1	0.3	0.8	1.16	1.64	0.48	0.58	0.15	0.19
GE	Voluson 730 Expert	RIC5-9H	OB	0.2	0.3	0.2	2.17	2.23	1.01	1.02	0.43	0.45
GE	Voluson 730 Pro	RIC5-9W	GYN	0.1	0.1	0.5	0.99	1.03	0.41	0.41	0.17	0.25
GE	Voluson 730 Pro	RIC5-9W	OB	0.1	0.2	0.5	1.27	1.28	0.53	0.53	0.23	0.24
GE	Voluson E6	IC5-9D	GYN	0.1	0.2	0.1	1.13	1.14	0.46	0.47	0.19	0.20
GE	Voluson E6	IC5-9D	OB	0.1	0.2	0.3	1.29	1.30	0.59	0.60	0.30	0.31
GE	Voluson E6	RIC5-9D	GYN	0.1	0.2	0.2	1.47	1.53	0.63	0.64	0.23	0.24
GE	Voluson E6	RIC5-9D	OB	0.1	0.2	0.1	0.76	0.82	0.36	0.37	0.19	0.20
GE	Voluson E8	RIC6-5D	GYN	0.1	0.1	0.2	1.46	1.71	0.66	0.67	0.24	0.25
GE	Voluson E8	RIC6-5D	OB	0.1	0.1	0.2	1.62	1.88	0.82	0.83	0.36	0.37
GE	Voluson-E	IC5-9W-RS	GYN	0.1	0.1	0.2	1.72	1.73	0.63	0.64	0.22	0.27
GE	Voluson-E	IC5-9W-RS	OB	0.1	0.1	0.1	1.21	1.23	0.51	0.51	0.22	0.24
Hitachi	Ascendus	10-2	GYN	N/A	N/A	N/A	1.59	1.79	0.64	0.67	0.22	0.23
Hitachi	Ascendus	10-2	OB	N/A	N/A	N/A	1.32	1.44	0.52	0.55	0.19	0.22
Philips	CX50	C10-3V	GYN	0.3	1.5	1.7	1.25	2.68	0.66	1.09	0.34	0.67
Philips	CX50	C10-3V	OB	0.4	1.5	1.7	1.61	2.84	0.83	1.16	0.40	0.65
Philips	Envisor HD	C8-4V	GYN	0.7	0.7	0.6	2.11	2.60	0.96	1.05	0.42	0.49
Philips	Envisor HD	C8-4V	OB	0.4	0.5	1.1	1.33	1.75	0.62	0.69	0.24	0.30
Philips	iU22	3D9-3V	GYN	0.1	0.3	0.3	0.51	1.59	0.24	0.38	0.09	0.18
Philips	iU22	3D9-3V	OB	0.3	0.3	1.1	2.34	3.04	1.19	1.20	0.56	0.57
Philips	iU22	C10-3V	GYN	0.3	0.6	0.3	0.97	1.29	0.50	0.60	0.24	0.30
Philips	iU22	C10-3V	OB	0.4	0.6	0.2	1.54	1.74	0.87	0.88	0.40	0.41

Philips	iU22	C8-4V	GYN	0.1	0.4	0.4	1.39	2.36	0.65	0.85	0.23	0.29
Philips	iU22	C8-4V	GYN	0.1	0.4	0.4	0.61	1.52	0.32	0.50	0.13	0.18
Philips	iU22	C8-4V	OB	0.5	0.5	1.3	1.99	3.61	0.97	1.26	0.41	0.54
Philips	iU22	C8-4V	OB	0.2	0.5	1.1	2.10	3.21	1.05	1.20	0.39	0.44
Siemens	Acuson Antares	EC9-4	GYN	N/A	0.5	1	2.86	3.21	1.14	1.18	0.41	0.47
Siemens	Acuson Antares	EC9-4	OB	N/A	0.5	1	3.14	3.36	1.32	1.33	0.51	0.53
Siemens	Acuson S2000	MC9-4	GYN	N/A	N/A	1.8	2.65	2.96	1.11	1.19	0.41	0.52
Siemens	Acuson S2000	MC9-4	OB	0.3	0.4	1.8	2.47	2.80	1.17	1.24	0.49	0.54
Toshiba	Aplio 500	11C3	GYN	N/A	0.5	0.5	2.21	2.29	0.91	0.95	0.39	0.41
Toshiba	Aplio 500	11C3	OB	N/A	0.4	0.4	2.82	2.86	1.30	1.30	0.63	0.63
Toshiba	Aplio 500	9C3	GYN	N/A	N/A	1.2	1.98	3.28	0.96	1.09	0.46	0.52
Toshiba	Aplio 500	9C3	OB	N/A	N/A	1.2	2.09	3.36	0.88	1.05	0.34	0.44
Toshiba	Aplio 500	9CV3	GYN	N/A	N/A	0.9	1.67	1.86	0.58	0.60	0.19	0.21
Toshiba	Aplio 500	9CV3	OB	N/A	N/A	0.9	1.78	1.92	0.87	0.87	0.36	0.37
Toshiba	Aplio 500	PVT-661 VT	GYN	N/A	N/A	0.7	1.99	2.67	0.78	0.89	0.28	0.34
Toshiba	Aplio 500	PVT-661 VT	GYN	N/A	N/A	0.6	1.53	2.02	0.74	0.79	0.29	0.41
Toshiba	Aplio 500	PVT-661 VT	OB	N/A	N/A	0.6	2.27	2.60	0.96	1.00	0.38	0.41
Toshiba	Aplio 500	PVT-661 VT	OB	N/A	N/A	0.6	2.31	2.60	1.07	1.07	0.38	0.39
Toshiba	Aplio 80	PVT-661 VT	GYN	N/A	N/A	N/A	1.21	1.58	0.57	0.62	0.21	0.22
Toshiba	Aplio 80	PVT-661 VT	OB	N/A	N/A	N/A	1.03	1.57	0.50	0.58	0.21	0.22
Toshiba	Aplio MX	PVT-661 VT	GYN	N/A	N/A	N/A	1.93	2.19	0.91	0.91	0.31	0.32
Toshiba	Aplio MX	PVT-661 VT	GYN	N/A	N/A	N/A	1.98	2.32	1.05	1.08	0.38	0.38
Toshiba	Aplio MX	PVT-661 VT	OB	N/A	N/A	N/A	1.56	1.60	0.63	0.64	0.25	0.27
Toshiba	Aplio MX	PVT-661 VT	OB	N/A	N/A	0.5	1.91	2.44	0.99	1.10	0.32	0.33
Toshiba	Aplio XG	PVT-661 VT	GYN	N/A	N/A	N/A	1.24	1.37	0.45	0.45	0.14	0.14
Toshiba	Aplio XG	PVT-661 VT	GYN	N/A	N/A	N/A	1.91	1.92	0.86	0.87	0.37	0.39
Toshiba	Aplio XG	PVT-661 VT	GYN	N/A	N/A	N/A	2.45	2.45	1.17	1.18	0.50	0.50
Toshiba	Aplio XG	PVT-661 VT	GYN	N/A	N/A	N/A	2.53	2.54	1.37	1.38	0.61	0.62
Toshiba	Aplio XG	PVT-661 VT	OB	N/A	N/A	N/A	1.87	1.88	0.72	0.73	0.24	0.25
Toshiba	Aplio XG	PVT-661 VT	OB	N/A	N/A	N/A	1.89	1.89	0.82	0.83	0.31	0.31
Toshiba	Aplio XG	PVT-661 VT	OB	N/A	N/A	N/A	2.14	2.62	0.87	0.90	0.24	0.25
Toshiba	Aplio XG	PVT-661 VT	OB	N/A	N/A	N/A	2.14	2.26	1.01	1.01	0.36	0.37
Toshiba	Viamo	PVT-661 VT	GYN	0.1	0.2	0.4	0.95	1.84	0.58	0.77	0.25	0.30
Toshiba	Viamo	PVT-661 VT	OB	0.1	0.1	0.1	0.22	0.27	0.18	0.19	0.09	0.10
Toshiba	Xario	PVT-661 VT	GYN	N/A	N/A	N/A	2.69	2.71	1.24	1.25	0.48	0.50
Toshiba	Xario	PVT-661 VT	OB	N/A	N/A	N/A	1.51	1.88	0.71	0.73	0.27	0.28