Table 13.26: Bluetooth SAR Values

ANT	Power Level	RF Exposure Conditions	Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Note	Figure No.	EUT Measured Power (dBm)	Tune up (dBm)	Duty Cycle %	Duty Cycle Scaling Factor	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
8	C1/C3/C4	Head	Bluetooth	78	2480.0	GFSK	Left Cheek	0mm	\	**51**	17.68	19.00	76.70	1.30	**0.355**	0.63	0.189	**0.26**	0.06
8	C1/C3/C4	Head	Bluetooth	78	2480.0	GFSK	Left Tilt	0mm	\	\	17.68	19.00	76.70	1.30	0.354	**0.62**	0.187	**0.25**	-0.18
8	C1/C3/C4	Head	Bluetooth	78	2480.0	GFSK	Right Cheek	0mm	\	\	17.68	19.00	76.70	1.30	0.180	**0.32**	0.096	**0.13**	0.17
8	C1/C3/C4	Head	Bluetooth	78	2480.0	GFSK	Right Tilt	0mm	\	\	17.68	19.00	76.70	1.30	0.194	**0.34**	0.094	**0.13**	-0.13
8	C5	Head	Bluetooth	78	2480.0	GFSK	Left Cheek	0mm	\	\	14.65	16.00	76.70	1.30	**0.107**	0.19	0.057	**0.08**	0.03
8	C5	Head	Bluetooth	78	2480.0	GFSK	Left Tilt	0mm	\	\	14.65	16.00	76.70	1.30	0.105	**0.19**	0.054	**0.07**	-0.07
8	C5	Head	Bluetooth	78	2480.0	GFSK	Right Cheek	0mm	\	\	14.65	16.00	76.70	1.30	0.053	**0.09**	0.028	**0.04**	-0.05
8	C5	Head	Bluetooth	78	2480.0	GFSK	Right Tilt	0mm	\	\	14.65	16.00	76.70	1.30	0.057	**0.10**	0.027	**0.04**	-0.13
8	D1/D3/D4/D5	Hotspot	Bluetooth	78	2480.0	GFSK	Front	10mm	\	\	17.68	19.00	76.70	1.30	0.056	**0.10**	0.029	**0.04**	-0.01
8	D1/D3/D4/D5	Hotspot	Bluetooth	78	2480.0	GFSK	Rear	10mm	\	**52**	17.68	19.00	76.70	1.30	**0.133**	0.23	0.071	**0.10**	0.15
8	D1/D3/D4/D5	Hotspot	Bluetooth	78	2480.0	GFSK	Right	10mm	\	\	17.68	19.00	76.70	1.30	<0.01	**<0.01**	<0.01	**<0.01**	\
8	D1/D3/D4/D5	Hotspot	Bluetooth	78	2480.0	GFSK	Top	10mm	\	\	17.68	19.00	76.70	1.30	0.102	**0.18**	0.050	**0.07**	-0.17
8	D1/D3/D4/D5	Body-Worn	Bluetooth	78	2480.0	GFSK	Front	15mm	\	\	17.68	19.00	76.70	1.30	0.035	**0.06**	0.020	**0.03**	0.07
8	D1/D3/D4/D5	Body-Worn	Bluetooth	78	2480.0	GFSK	Rear	15mm	\	\	17.68	19.00	76.70	1.30	**0.062**	0.11	0.035	**0.05**	-0.08

Table 13.27: WLAN 2.4GHz SAR Values

ANT	Power Level	RF Exposure Conditions	Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Note	Figure No.	EUT Measured Power (dBm)	Tune up (dBm)	Duty Cycle %	Duty Cycle Scaling Factor	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
8	C1	Head	WLAN 2.4GHz	6	2437.0	802.11b	Left Cheek	0mm	\	\	17.15	18.50	97.81	1.02	0.764	**1.06**	0.380	**0.52**	0.07
8	C1	Head	WLAN 2.4GHz	6	2437.0	802.11b	Left Tilt	0mm	\	\	17.15	18.50	97.81	1.02	0.691	**0.96**	0.342	**0.47**	-0.02
8	C1	Head	WLAN 2.4GHz	6	2437.0	802.11b	Right Cheek	0mm	\	\	17.15	18.50	97.81	1.02	0.372	**0.52**	0.192	**0.26**	0.04
8	C1	Head	WLAN 2.4GHz	6	2437.0	802.11b	Right Tilt	0mm	\	\	17.15	18.50	97.81	1.02	0.407	**0.57**	0.186	**0.25**	0.12
8	C1	Head	WLAN 2.4GHz	1	2412.0	802.11b	Left Cheek	0mm	\	\	17.03	18.50	97.81	1.02	0.641	**0.92**	0.344	**0.48**	0.01
8	C1	Head	WLAN 2.4GHz	11	2462.0	802.11b	Left Cheek	0mm	\	**53**	16.99	18.50	97.81	1.02	**0.775**	1.12	0.392	**0.55**	0.11
8	C1	Head	WLAN 2.4GHz	1	2412.0	802.11b	Left Tilt	0mm	\	\	17.03	18.50	97.81	1.02	0.701	**1.00**	0.353	**0.50**	-0.02
8	C1	Head	WLAN 2.4GHz	11	2462.0	802.11b	Left Tilt	0mm	\	\	16.99	18.50	97.81	1.02	0.684	**0.99**	0.332	**0.47**	-0.09
8	C2	Head	WLAN 2.4GHz	6	2437.0	802.11b	Left Cheek	0mm	\	\	15.62	17.00	97.81	1.02	**0.526**	0.74	0.262	**0.36**	0.19
8	C2	Head	WLAN 2.4GHz	6	2437.0	802.11b	Left Tilt	0mm	\	\	15.62	17.00	97.81	1.02	0.476	**0.67**	0.236	**0.32**	0.05
8	C2	Head	WLAN 2.4GHz	6	2437.0	802.11b	Right Cheek	0mm	\	\	15.62	17.00	97.81	1.02	0.256	**0.36**	0.133	**0.18**	-0.01
8	C2	Head	WLAN 2.4GHz	6	2437.0	802.11b	Right Tilt	0mm	\	\	15.62	17.00	97.81	1.02	0.280	**0.39**	0.129	**0.18**	0.02
8	C4	Head	WLAN 2.4GHz	6	2437.0	802.11b	Left Cheek	0mm	\	\	14.60	16.00	97.81	1.02	**0.432**	0.61	0.212	**0.29**	0.02
8	C4	Head	WLAN 2.4GHz	6	2437.0	802.11b	Left Tilt	0mm	\	\	14.60	16.00	97.81	1.02	0.391	**0.55**	0.191	**0.26**	0.01
8	C4	Head	WLAN 2.4GHz	6	2437.0	802.11b	Right Cheek	0mm	\	\	14.60	16.00	97.81	1.02	0.211	**0.30**	0.107	**0.15**	0.11
8	C4	Head	WLAN 2.4GHz	6	2437.0	802.11b	Right Tilt	0mm	\	\	14.60	16.00	97.81	1.02	0.230	**0.32**	0.104	**0.14**	0.05
8	C6	Head	WLAN 2.4GHz	6	2437.0	802.11b	Left Cheek	0mm	\	\	12.33	13.50	97.81	1.02	**0.238**	0.32	0.118	**0.15**	-0.01
8	C6	Head	WLAN 2.4GHz	6	2437.0	802.11b	Left Tilt	0mm	\	\	12.33	13.50	97.81	1.02	0.215	**0.29**	0.106	**0.14**	0.09
8	C6	Head	WLAN 2.4GHz	6	2437.0	802.11b	Right Cheek	0mm	\	\	12.33	13.50	97.81	1.02	0.116	**0.15**	0.060	**0.08**	0.18
8	C6	Head	WLAN 2.4GHz	6	2437.0	802.11b	Right Tilt	0mm	\	\	12.33	13.50	97.81	1.02	0.127	**0.17**	0.058	**0.08**	-0.14
8	D1	Hotspot	WLAN 2.4GHz	6	2437.0	802.11b	Front	10mm	\	\	18.61	20.00	97.81	1.02	0.164	**0.23**	0.086	**0.12**	0.02
8	D1	Hotspot	WLAN 2.4GHz	6	2437.0	802.11b	Rear	10mm	\	**54**	18.61	20.00	97.81	1.02	**0.341**	0.48	0.175	**0.24**	0.05
8	D1	Hotspot	WLAN 2.4GHz	6	2437.0	802.11b	Right	10mm	\	\	18.61	20.00	97.81	1.02	0.043	**0.06**	0.022	**0.03**	-0.03
8	D1	Hotspot	WLAN 2.4GHz	6	2437.0	802.11b	Top	10mm	\	\	18.61	20.00	97.81	1.02	0.294	**0.41**	0.134	**0.18**	0.15
8	D2/D4/D6	Hotspot	WLAN 2.4GHz	6	2437.0	802.11b	Front	10mm	\	\	17.15	18.50	97.81	1.02	0.118	**0.16**	0.062	**0.08**	0.05
8	D2/D4/D6	Hotspot	WLAN 2.4GHz	6	2437.0	802.11b	Rear	10mm	\	\	17.15	18.50	97.81	1.02	**0.246**	0.34	0.126	**0.17**	-0.02
8	D2/D4/D6	Hotspot	WLAN 2.4GHz	6	2437.0	802.11b	Right	10mm	\	\	17.15	18.50	97.81	1.02	0.031	**0.04**	0.016	**0.02**	0.14
8	D2/D4/D6	Hotspot	WLAN 2.4GHz	6	2437.0	802.11b	Top	10mm	\	\	17.15	18.50	97.81	1.02	0.212	**0.30**	0.096	**0.13**	0.03
8	D1	Body-Worn	WLAN 2.4GHz	6	2437.0	802.11b	Front	15mm	\	\	18.61	20.00	97.81	1.02	0.111	**0.16**	0.061	**0.08**	0.02
8	D1	Body-Worn	WLAN 2.4GHz	6	2437.0	802.11b	Rear	15mm	\	\	18.61	20.00	97.81	1.02	**0.143**	0.20	0.076	**0.11**	-0.07
8	D2/D4/D6	Body-Worn	WLAN 2.4GHz	6	2437.0	802.11b	Front	15mm	\	\	17.15	18.50	97.81	1.02	0.080	**0.11**	0.044	**0.06**	0.06
8	D2/D4/D6	Body-Worn	WLAN 2.4GHz	6	2437.0	802.11b	Rear	15mm	\	\	17.15	18.50	97.81	1.02	**0.103**	0.14	0.057	**0.08**	0.04
9	C1C3	Head	WLAN 2.4GHz	1	2412.0	802.11b	Left Cheek	0mm	\	\	16.90	18.50	98.23	1.02	**0.288**	0.42	0.125	**0.18**	0.02
9	C1C3	Head	WLAN 2.4GHz	1	2412.0	802.11b	Left Tilt	0mm	\	\	16.90	18.50	98.23	1.02	0.035	**0.05**	0.018	**0.03**	0.03
9	C1C3	Head	WLAN 2.4GHz	1	2412.0	802.11b	Right Cheek	0mm	\	\	16.90	18.50	98.23	1.02	0.231	**0.34**	0.096	**0.14**	-0.01
9	C1C3	Head	WLAN 2.4GHz	1	2412.0	802.11b	Right Tilt	0mm	\	\	16.90	18.50	98.23	1.02	0.031	**0.05**	0.009	**0.01**	0.05
9	C4/C5	Head	WLAN 2.4GHz	1	2412.0	802.11b	Left Cheek	0mm	\	\	14.90	16.50	98.23	1.02	**0.177**	0.26	0.080	**0.12**	0.09
9	C4/C5	Head	WLAN 2.4GHz	1	2412.0	802.11b	Left Tilt	0mm	\	\	14.90	16.50	98.23	1.02	0.021	**0.03**	0.012	**0.02**	0.05
9	C4/C5	Head	WLAN 2.4GHz	1	2412.0	802.11b	Right Cheek	0mm	\	\	14.90	16.50	98.23	1.02	0.142	**0.21**	0.061	**0.09**	-0.02
9	C4/C5	Head	WLAN 2.4GHz	1	2412.0	802.11b	Right Tilt	0mm	\	\	14.90	16.50	98.23	1.02	0.019	**0.03**	0.006	**0.01**	0.01
9	D1/D3	Hotspot	WLAN 2.4GHz	1	2412.0	802.11b	Front	10mm	\	\	18.36	20.00	98.23	1.02	0.120	**0.18**	0.055	**0.08**	-0.03
9	D1/D3	Hotspot	WLAN 2.4GHz	1	2412.0	802.11b	Rear	10mm	\	\	18.36	20.00	98.23	1.02	0.205	**0.31**	0.093	**0.14**	0.02
9	D1/D3	Hotspot	WLAN 2.4GHz	1	2412.0	802.11b	Right	10mm	\	\	18.36	20.00	98.23	1.02	**0.222**	0.33	0.101	**0.15**	0.05
9	D4/D5	Hotspot	WLAN 2.4GHz	1	2412.0	802.11b	Front	10mm	\	\	16.90	18.50	98.23	1.02	0.085	**0.13**	0.039	**0.06**	0.01
9	D4/D5	Hotspot	WLAN 2.4GHz	1	2412.0	802.11b	Rear	10mm	\	\	16.90	18.50	98.23	1.02	0.146	**0.22**	0.066	**0.10**	0.03
9	D4/D5	Hotspot	WLAN 2.4GHz	1	2412.0	802.11b	Right	10mm	\	\	16.90	18.50	98.23	1.02	**0.158**	0.23	0.071	**0.10**	0.03
9	D1/D3	Body-Worn	WLAN 2.4GHz	1	2412.0	802.11b	Front	15mm	\	\	18.36	20.00	98.23	1.02	0.062	**0.09**	0.032	**0.05**	0.01
9	D1/D3	Body-Worn	WLAN 2.4GHz	1	2412.0	802.11b	Rear	15mm	\	\	18.36	20.00	98.23	1.02	**0.098**	0.15	0.052	**0.08**	-0.04
9	D4/D5	Body-Worn	WLAN 2.4GHz	1	2412.0	802.11b	Front	15mm	\	\	16.90	18.50	98.23	1.02	0.044	**0.06**	0.026	**0.04**	0.05
9	D4/D5	Body-Worn	WLAN 2.4GHz	1	2412.0	802.11b	Rear	15mm	\	\	16.90	18.50	98.23	1.02	**0.070**	0.10	0.037	**0.05**	0.08

Note:

1. According to the KDB 248227 D01, SAR is measured for 2.4GHz 802.11b DSSS using the initial test position procedure.

2. For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

3. According to the KDB 248227 D01, the reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

4. SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.

Table 13.28: WLAN 5GHz SAR Values

ANT	Power Level	RF Exposure Conditions	Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Note	Figure No.	EUT Measured Power (dBm)	Tune up (dBm)	Duty Cycle %	Duty Cycle Scaling Factor	Measured SAR 1g (W/kg)	Calculated SAR 1g (W/kg)	Measured SAR 10g (W/kg)	Calculated SAR 10g (W/kg)	Power Drift
8	C1/C4	Head	U-NII-2A	58	5290.0	802.11ac(80M)	Left Cheek	0mm	\	\	12.68	14.50	100.00	1.00	0.045	**0.07**	0.018	**0.03**	-0.05
8	C1/C4	Head	U-NII-2A	58	5290.0	802.11ac(80M)	Left Tilt	0mm	\	\	12.68	14.50	100.00	1.00	0.049	**0.07**	0.016	**0.02**	-0.05
8	C1/C4	Head	U-NII-2A	58	5290.0	802.11ac(80M)	Right Cheek	0mm	\	\	12.68	14.50	100.00	1.00	0.066	**0.10**	0.025	**0.04**	-0.05
8	C1/C4	Head	U-NII-2A	58	5290.0	802.11ac(80M)	Right Tilt	0mm	\	\	12.68	14.50	100.00	1.00	0.078	**0.12**	0.024	**0.04**	-0.02
8	C1/C4	Head	U-NII-2C	122	5610.0	802.11ac(80M)	Left Cheek	0mm	\	\	12.88	14.50	100.00	1.00	0.113	**0.16**	0.035	**0.05**	-0.12
8	C1/C4	Head	U-NII-2C	122	5610.0	802.11ac(80M)	Left Tilt	0mm	\	**55**	12.88	14.50	100.00	1.00	**0.195**	0.28	0.050	**0.07**	0.12
8	C1/C4	Head	U-NII-2C	122	5610.0	802.11ac(80M)	Right Cheek	0mm	\	\	12.88	14.50	100.00	1.00	0.079	**0.11**	0.020	**0.03**	-0.19
8	C1/C4	Head	U-NII-2C	122	5610.0	802.11ac(80M)	Right Tilt	0mm	\	\	12.88	14.50	100.00	1.00	0.109	**0.16**	0.032	**0.05**	0.05
8	C1/C4	Head	U-NII-3	155	5775.0	802.11ac(80M)	Left Cheek	0mm	\	\	12.94	14.50	100.00	1.00	0.161	**0.23**	0.045	**0.06**	0.18
8	C1/C4	Head	U-NII-3	155	5775.0	802.11ac(80M)	Left Tilt	0mm	\	\	12.94	14.50	100.00	1.00	0.191	**0.27**	0.050	**0.07**	0.03
8	C1/C4	Head	U-NII-3	155	5775.0	802.11ac(80M)	Right Cheek	0mm	\	\	12.94	14.50	100.00	1.00	0.158	**0.23**	0.042	**0.06**	0.07
8	C1/C4	Head	U-NII-3	155	5775.0	802.11ac(80M)	Right Tilt	0mm	\	\	12.94	14.50	100.00	1.00	0.136	**0.19**	0.031	**0.04**	-0.13
8	D1/D4	Hotspot	U-NII-1	42	5210.0	802.11ac(80M)	Front	10mm	\	\	13.72	15.50	100.00	1.00	0.050	**0.07**	0.025	**0.04**	-0.15
8	D1/D4	Hotspot	U-NII-1	42	5210.0	802.11ac(80M)	Rear	10mm	\	\	13.72	15.50	100.00	1.00	0.048	**0.07**	0.024	**0.04**	0.00
8	D1/D4	Hotspot	U-NII-1	42	5210.0	802.11ac(80M)	Right	10mm	\	\	13.72	15.50	100.00	1.00	0.033	**0.05**	0.011	**0.02**	-0.18
8	D1/D4	Hotspot	U-NII-1	42	5210.0	802.11ac(80M)	Top	10mm	\	\	13.72	15.50	100.00	1.00	0.056	**0.08**	0.205	**0.31**	0.09
8	D1/D4	Hotspot	U-NII-3	155	5775.0	802.11ac(80M)	Front	10mm	\	\	14.97	16.50	100.00	1.00	0.108	**0.15**	0.042	**0.06**	-0.10
8	D1/D4	Hotspot	U-NII-3	155	5775.0	802.11ac(80M)	Rear	10mm	\	\	14.97	16.50	100.00	1.00	0.089	**0.13**	0.028	**0.04**	0.13
8	D1/D4	Hotspot	U-NII-3	155	5775.0	802.11ac(80M)	Right	10mm	\	\	14.97	16.50	100.00	1.00	0.079	**0.11**	0.028	**0.04**	0.12
8	D1/D4	Hotspot	U-NII-3	155	5775.0	802.11ac(80M)	Top	10mm	\	**56**	14.97	16.50	100.00	1.00	**0.142**	0.20	0.053	**0.08**	-0.13
8	D1/D4	Body-Worn	U-NII-2A	58	5290.0	802.11ac(80M)	Front	15mm	\	\	13.63	15.50	100.00	1.00	0.014	**0.02**	0.001	**0.00**	-0.18
8	D1/D4	Body-Worn	U-NII-2A	58	5290.0	802.11ac(80M)	Rear	15mm	\	\	13.63	15.50	100.00	1.00	0.026	**0.04**	0.001	**0.00**	-0.09
8	D1/D4	Body-Worn	U-NII-2C	122	5610.0	802.11ac(80M)	Front	15mm	\	\	13.91	15.50	100.00	1.00	0.023	**0.03**	0.015	**0.02**	0.16
8	D1/D4	Body-Worn	U-NII-2C	122	5610.0	802.11ac(80M)	Rear	15mm	\	\	13.91	15.50	100.00	1.00	0.032	**0.05**	0.014	**0.02**	-0.03
8	D1/D4	Body-Worn	U-NII-3	155	5775.0	802.11ac(80M)	Front	15mm	\	\	14.97	16.50	100.00	1.00	0.024	**0.03**	0.011	**0.02**	0.15
8	D1/D4	Body-Worn	U-NII-3	155	5775.0	802.11ac(80M)	Rear	15mm	\	\	14.97	16.50	100.00	1.00	**0.045**	0.06	0.017	**0.02**	0.03
8	D1/D4	Extremity	U-NII-2A	58	5290.0	802.11ac(80M)	Front	0mm	\	\	13.63	15.50	100.00	1.00	0.230	**0.35**	0.077	**0.12**	0.18
8	D1/D4	Extremity	U-NII-2A	58	5290.0	802.11ac(80M)	Rear	0mm	\	\	13.63	15.50	100.00	1.00	0.451	**0.69**	0.126	**0.19**	-0.16
8	D1/D4	Extremity	U-NII-2A	58	5290.0	802.11ac(80M)	Right	0mm	\	\	13.63	15.50	100.00	1.00	0.269	**0.41**	0.066	**0.10**	-0.10
8	D1/D4	Extremity	U-NII-2A	58	5290.0	802.11ac(80M)	Top	0mm	\	\	13.63	15.50	100.00	1.00	0.879	**1.35**	0.193	**0.30**	-0.02
8	D1/D4	Extremity	U-NII-2C	122	5610.0	802.11ac(80M)	Front	0mm	\	\	13.91	15.50	100.00	1.00	0.374	**0.54**	0.099	**0.14**	0.14
8	D1/D4	Extremity	U-NII-2C	122	5610.0	802.11ac(80M)	Rear	0mm	\	\	13.91	15.50	100.00	1.00	0.735	**1.06**	0.166	**0.24**	-0.16
8	D1/D4	Extremity	U-NII-2C	122	5610.0	802.11ac(80M)	Right	0mm	\	\	13.91	15.50	100.00	1.00	0.424	**0.61**	0.110	**0.16**	0.19
8	D1/D4	Extremity	U-NII-2C	122	5610.0	802.11ac(80M)	Top	0mm	\	**57**	13.91	15.50	100.00	1.00	1.050	**1.51**	**0.211**	0.30	0.04
9	C1/C2/C3/C4/C5/C6	Head	U-NII-2A	58	5290.0	802.11ac(80M)	Left Cheek	0mm	\	\	13.33	14.50	100.00	1.00	0.012	**0.02**	0.006	**0.01**	-0.07
9	C1/C2/C3/C4/C5/C6	Head	U-NII-2A	58	5290.0	802.11ac(80M)	Left Tilt	0mm	\	\	13.33	14.50	100.00	1.00	0.022	**0.03**	0.006	**0.01**	-0.15
9	C1/C2/C3/C4/C5/C6	Head	U-NII-2A	58	5290.0	802.11ac(80M)	Right Cheek	0mm	\	\	13.33	14.50	100.00	1.00	0.012	**0.02**	0.005	**0.01**	-0.16
9	C1/C2/C3/C4/C5/C6	Head	U-NII-2A	58	5290.0	802.11ac(80M)	Right Tilt	0mm	\	\	13.33	14.50	100.00	1.00	0.015	**0.02**	0.005	**0.01**	0.07
9	C1/C2/C3/C4/C5/C6	Head	U-NII-2C	122	5610.0	802.11ac(80M)	Left Cheek	0mm	\	\	12.75	14.50	100.00	1.00	0.019	**0.03**	0.011	**0.02**	0.16
9	C1/C2/C3/C4/C5/C6	Head	U-NII-2C	122	5610.0	802.11ac(80M)	Left Tilt	0mm	\	\	12.75	14.50	100.00	1.00	0.023	**0.03**	0.009	**0.01**	0.18
9	C1/C2/C3/C4/C5/C6	Head	U-NII-2C	122	5610.0	802.11ac(80M)	Right Cheek	0mm	\	\	12.75	14.50	100.00	1.00	**0.034**	0.05	0.011	**0.02**	-0.06
9	C1/C2/C3/C4/C5/C6	Head	U-NII-2C	122	5610.0	802.11ac(80M)	Right Tilt	0mm	\	\	12.75	14.50	100.00	1.00	0.018	**0.03**	0.009	**0.01**	-0.16
9	C1/C2/C3/C4/C5/C6	Head	U-NII-3	155	5775.0	802.11ac(80M)	Left Cheek	0mm	\	\	13.08	14.50	100.00	1.00	0.008	**0.01**	0.005	**0.01**	-0.19
9	C1/C2/C3/C4/C5/C6	Head	U-NII-3	155	5775.0	802.11ac(80M)	Left Tilt	0mm	\	\	13.08	14.50	100.00	1.00	0.007	**0.01**	0.002	**0.00**	0.04
9	C1/C2/C3/C4/C5/C6	Head	U-NII-3	155	5775.0	802.11ac(80M)	Right Cheek	0mm	\	\	13.08	14.50	100.00	1.00	0.014	**0.02**	0.006	**0.01**	-0.14
9	C1/C2/C3/C4/C5/C6	Head	U-NII-3	155	5775.0	802.11ac(80M)	Right Tilt	0mm	\	\	13.08	14.50	100.00	1.00	0.020	**0.03**	0.008	**0.01**	0.12
9	D1/D2/D3/D4/D5/D6	Hotspot	U-NII-1	42	5210.0	802.11ac(80M)	Front	10mm	\	\	13.54	15.50	100.00	1.00	0.027	**0.04**	0.012	**0.02**	0.15
9	D1/D2/D3/D4/D5/D6	Hotspot	U-NII-1	42	5210.0	802.11ac(80M)	Rear	10mm	\	\	13.54	15.50	100.00	1.00	0.037	**0.06**	0.016	**0.03**	-0.05
9	D1/D2/D3/D4/D5/D6	Hotspot	U-NII-1	42	5210.0	802.11ac(80M)	Right	10mm	\	\	13.54	15.50	100.00	1.00	0.054	**0.09**	0.020	**0.03**	-0.03
9	D1/D2/D3/D4/D5/D6	Hotspot	U-NII-3	155	5775.0	802.11ac(80M)	Front	10mm	\	\	15.05	16.50	100.00	1.00	0.068	**0.10**	0.025	**0.03**	-0.02
9	D1/D2/D3/D4/D5/D6	Hotspot	U-NII-3	155	5775.0	802.11ac(80M)	Rear	10mm	\	\	15.05	16.50	100.00	1.00	**0.131**	0.18	0.049	**0.07**	-0.09
9	D1/D2/D3/D4/D5/D6	Hotspot	U-NII-3	155	5775.0	802.11ac(80M)	Right	10mm	\	\	15.05	16.50	100.00	1.00	0.101	**0.14**	0.039	**0.05**	0.16
9	D1/D2/D3/D4/D5/D6	Body-Worn	U-NII-2A	58	5290.0	802.11ac(80M)	Front	15mm	\	\	14.29	15.50	100.00	1.00	0.020	**0.03**	0.007	**0.01**	0.09
9	D1/D2/D3/D4/D5/D6	Body-Worn	U-NII-2A	58	5290.0	802.11ac(80M)	Rear	15mm	\	\	14.29	15.50	100.00	1.00	0.030	**0.04**	0.013	**0.02**	-0.06
9	D1/D2/D3/D4/D5/D6	Body-Worn	U-NII-2C	122	5610.0	802.11ac(80M)	Front	15mm	\	\	13.78	15.50	100.00	1.00	0.027	**0.04**	0.012	**0.02**	0.08
9	D1/D2/D3/D4/D5/D6	Body-Worn	U-NII-2C	122	5610.0	802.11ac(80M)	Rear	15mm	\	\	13.78	15.50	100.00	1.00	0.033	**0.05**	0.014	**0.02**	-0.10
9	D1/D2/D3/D4/D5/D6	Body-Worn	U-NII-3	155	5775.0	802.11ac(80M)	Front	15mm	\	\	15.05	16.50	100.00	1.00	0.023	**0.03**	0.010	**0.01**	-0.06
9	D1/D2/D3/D4/D5/D6	Body-Worn	U-NII-3	155	5775.0	802.11ac(80M)	Rear	15mm	\	\	15.05	16.50	100.00	1.00	**0.066**	0.09	0.026	**0.04**	-0.12
9	D1/D2/D3/D4/D5/D6	Extremity	U-NII-2A	58	5290.0	802.11ac(80M)	Front	0mm	\	\	14.29	15.50	100.00	1.00	0.202	**0.27**	0.064	**0.08**	0.18
9	D1/D2/D3/D4/D5/D6	Extremity	U-NII-2A	58	5290.0	802.11ac(80M)	Rear	0mm	\	\	14.29	15.50	100.00	1.00	0.257	**0.34**	0.088	**0.12**	0.11
9	D1/D2/D3/D4/D5/D6	Extremity	U-NII-2A	58	5290.0	802.11ac(80M)	Right	0mm	\	\	14.29	15.50	100.00	1.00	0.638	**0.84**	0.171	**0.23**	-0.06
9	D1/D2/D3/D4/D5/D6	Extremity	U-NII-2C	122	5610.0	802.11ac(80M)	Front	0mm	\	\	13.78	15.50	100.00	1.00	0.309	**0.46**	0.091	**0.13**	-0.11
9	D1/D2/D3/D4/D5/D6	Extremity	U-NII-2C	122	5610.0	802.11ac(80M)	Rear	0mm	\	\	13.78	15.50	100.00	1.00	0.406	**0.60**	0.127	**0.19**	0.18
9	D1/D2/D3/D4/D5/D6	Extremity	U-NII-2C	122	5610.0	802.11ac(80M)	Right	0mm	\	\	13.78	15.50	100.00	1.00	0.747	**1.11**	**0.201**	0.30	-0.19

Note:

1. U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance, SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.

2. For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

3. WLAN5GHz U-NII-2A and U-NII-2C tested the product specific 10g SAR since it has no hotspot mode.

4. According to the KDB 248227 D01, the reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

14. SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.

2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.

3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Table 14.1: SAR Measurement Variability

ANT	Power Level	RF Exposure Conditions	Frequency Band	Channel Number	Frequency (MHz)	Mode/RB	Test Position	Distance	Original	1st Repeated	Ratio	2nd Repeated
3	DSI2	Head	GSM1900	810	1909.8	Speech	Right Cheek	0mm	0.859	0.844	1.02	/
3	DSI2	Head	WCDMA Band 2	9538	1907.6	RMC	Right Cheek	0mm	0.807	0.781	1.03	/
3	DSI2	Head	WCDMA Band 4	1413	1732.6	RMC	Right Cheek	0mm	0.801	0.793	1.01	/
3	DSI2	Head	LTE Band 2	18900	1880	100RB	Right Cheek	0mm	0.943	0.910	1.04	/
6	DSI2	Head	LTE Band 2	18700	1860	1RB99	Right Cheek	0mm	0.806	0.763	1.06	/
3	DSI2	Head	LTE Band 4	20300	1745	50RB0	Right Cheek	0mm	0.830	0.807	1.03	/
6	DSI2	Head	LTE Band 7	21350	2560	1RB99	Right Cheek	0mm	0.934	0.905	1.03	/
3	DSI2	Head	LTE Band 66	132322	1745	100RB	Right Cheek	0mm	0.847	0.816	1.04	/
6	DSI2	Head	LTE Band 66	132572	1770	50RB0	Right Cheek	0mm	0.966	0.923	1.05	/
3	DSI2	Head	LTE Band 38	37850	2580	50RB50	Right Cheek	0mm	0.845	0.804	1.05	/
6	DSI2	Head	NR n7	512000	2560	108@54	Right Cheek	0mm	0.827	0.796	1.04	/
3	DSI1	Hotspot	NR n66	352000	1760	108@54	Top	10mm	0.835	0.818	1.02	/
6	DSI2	Head	NR n66	352000	1760	108@54	Right Cheek	0mm	0.901	0.889	1.01	/
3	DSI2	Head	NR n38	518000	2590	50@25	Right Cheek	0mm	0.962	0.931	1.03	/
6	DSI2	Head	NR n38	520000	2600	50@25	Right Cheek	0mm	0.870	0.835	1.04	/

15. Measurement Uncertainty

15.1. Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	12.7	N	2	1	1	6.35	6.35	∞
2	Axial isotropy	B	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	4.3	4.3	∞
3	Hemispherical isotropy	B	9.6	R	$\sqrt{3}$	1	1	4.8	4.8	∞
4	Boundary effect	B	1.1	R	$\sqrt{3}$	1	1	0.6	0.6	∞
5	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
6	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
7	Modulation response	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
8	Readout electronics	B	1.0	N	1	1	1	1.0	1.0	∞
9	Response time	B	0.8	R	$\sqrt{3}$	1	1	0.5	0.5	∞
10	Integration time	B	1.7	R	$\sqrt{3}$	1	1	1.0	1.0	∞
11	RF ambient conditions-noise	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
12	RF ambient conditions-reflection	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Probe positioned mech. restrictions	B	0.35	R	$\sqrt{3}$	1	1	0.2	0.2	∞
14	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
15	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
16	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	5
17	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
18	Power scaling	B	0	R	$\sqrt{3}$	1	1	0	0	∞
19	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
20	Phantom uncertainty	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
21	Algorithm for correcting SAR for deviations in permittivity and conductivity	B	1.9	N	1	1	0.84	1.9	1.6	∞
22	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
23	Liquid conductivity (meas.)	A	1.3	N	1	0.64	0.43	0.83	0.56	9
24	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
25	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	0.96	0.78	9
Combined standard uncertainty		$u_c^{'} = \sqrt{\sum_{i=1}^{23} c_i^2 u_i^2}$						11.6	11.4	95.5
Expanded uncertainty (Confidence interval of 95 %)		$u_e = 2u_c$						23.2	22.8	

15.2. Measurement Uncertainty for Normal SAR Tests (3GHz~6GHz)

No.	Error Description	Type	Uncertainty value	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	Degree of freedom
Measurement system										
1	Probe calibration	B	13.9	N	2	1	1	6.95	6.95	∞
2	Axial isotropy	B	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	$\sqrt{0.5}$	4.3	4.3	∞
3	Hemispherical isotropy	B	9.6	R	$\sqrt{3}$	1	1	4.8	4.8	∞
4	Boundary effect	B	1.1	R	$\sqrt{3}$	1	1	0.6	0.6	∞
5	Linearity	B	4.7	R	$\sqrt{3}$	1	1	2.7	2.7	∞
6	Detection limit	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
7	modulation response	B	4.0	R	$\sqrt{3}$	1	1	2.3	2.3	∞
8	Readout electronics	B	1.0	N	1	1	1	1.0	1.0	∞
9	Response time	B	0.0	R	$\sqrt{3}$	1	1	0.0	0.0	∞
10	Integration time	B	1.7	R	$\sqrt{3}$	1	1	1.0	1.0	∞
11	RF ambient conditions-noise	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
12	RF ambient conditions-reflection	B	3.0	R	$\sqrt{3}$	1	1	1.7	1.7	∞
13	Probe positioned mech. Restrictions	B	0.35	R	$\sqrt{3}$	1	1	0.2	0.2	∞
14	Probe positioning with respect to phantom shell	B	2.9	R	$\sqrt{3}$	1	1	1.7	1.7	∞
15	Post-processing	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
Test sample related										
16	Test sample positioning	A	3.3	N	1	1	1	3.3	3.3	5
17	Device holder uncertainty	A	3.4	N	1	1	1	3.4	3.4	5
18	Power scaling	B	0	R	$\sqrt{3}$	1	1	0	0	∞
19	Drift of output power	B	5.0	R	$\sqrt{3}$	1	1	2.9	2.9	∞
Phantom and set-up										
20	Phantom uncertainty	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6	∞
21	Algorithm for correcting SAR for deviations in permittivity and conductivity	B	1.9	N	1	1	0.84	1.9	1.6	∞
22	Liquid conductivity (target)	B	5.0	R	$\sqrt{3}$	0.64	0.43	1.8	1.2	∞
23	Liquid conductivity (meas.)	A	1.3	N	1	0.64	0.43	0.83	0.56	9
24	Liquid permittivity (target)	B	5.0	R	$\sqrt{3}$	0.6	0.49	1.7	1.4	∞
25	Liquid permittivity (meas.)	A	1.6	N	1	0.6	0.49	0.96	0.78	9
Combined standard uncertainty		$u_c^{'} = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$						11.9	11.8	95.5
Expanded uncertainty (Confidence interval of 95 %)		$u_e = 2u_c$						23.8	23.6	

16. Main Test Instruments

Table 16.1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	E5071C	MY46103759	2023-11-13	One year
02	Dielectric probe	85070E	MY44300317	/	/
03	Power meter	E4418B	MY50000366	2023-12-10	One year
04	Power sensor	E9304A	MY50000188	2023-12-10	One year
05	Power meter	NRP	102603	2023-12-28	One year
06	Power sensor	NRP-Z51	102211	2023-12-28	One year
07	Signal Generator	E8257D	MY47461211	2024-01-12	One year
08	Amplifier	VTL5400	0404	/	/
09	DAE	DAE4	1527	2023-08-07	One year
10	E-field Probe	EX3DV4	7786	2023-05-08	One year
11	Dipole Validation Kit	D750V3	1163	2022-08-22	Three years
12	Dipole Validation Kit	D835V2	4d057	2021-10-18	Three years
13	Dipole Validation Kit	D1750V2	1152	2022-08-22	Three years
14	Dipole Validation Kit	D1900V2	5d088	2021-10-18	Three years
15	Dipole Validation Kit	D2450V2	873	2021-10-21	Three years
16	Dipole Validation Kit	D2550V2	1010	2021-05-21	Three years
17	Dipole Validation Kit	D5GHzV2	1238	2022-08-17	Three years
18	BTS	E5515C	GB46110722	2024-01-12	One year
19	BTS	MT8820C	6201341853	2024-03-22	One year
20	BTS	CMW500	152499	2023-07-14	One year
21	Thermometer	51II	99250045	2023-11-22	One year
22	Software	DASY5	/	/	/

ANNEX A: Graph Results

GSM 850 Head

Date: 2024-04-01

Electronics: DAE4 Sn1527

Medium: Head 835MHz

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.906 S/m; ε_r = 40.909; ρ = 1000 kg/m^3

Communication System: UID 0, 4 slot GPRS (0) Frequency: 824.2 MHz Duty Cycle: 1:2

Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Right Cheek Low/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.765 W/kg

Right Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.57 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.479 W/kg; SAR(10 g) = 0.292 W/kg

Maximum value of SAR (measured) = 0.635 W/kg

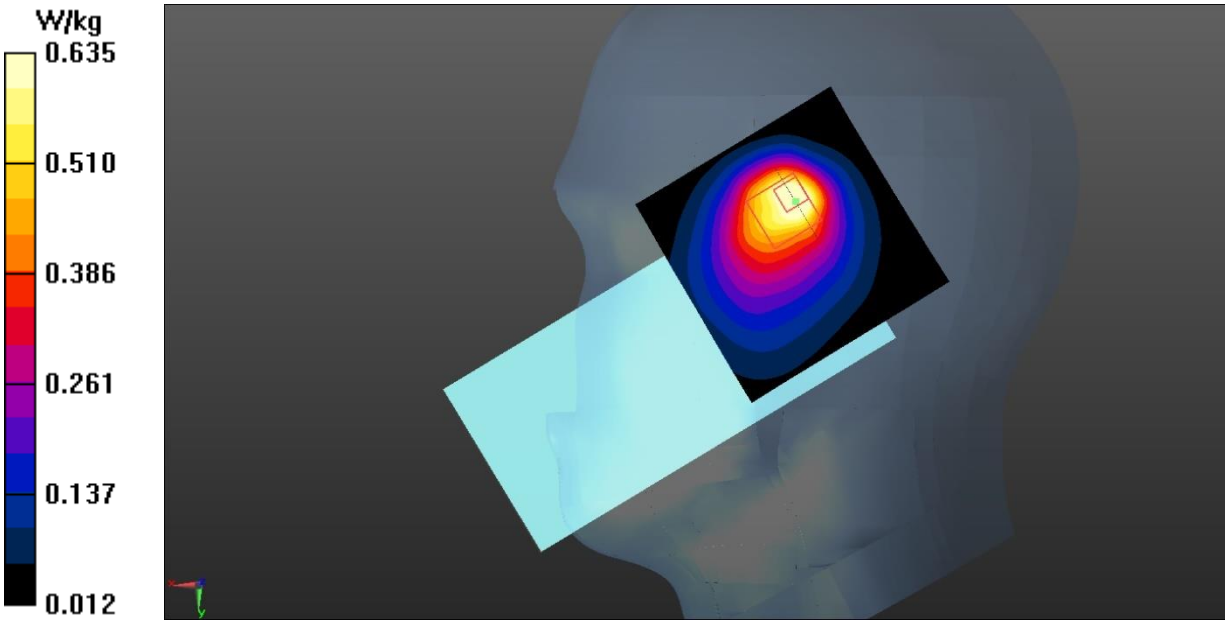


Fig.1 GSM 850 Head

GSM 850 Body
Date: 2024-04-01
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.917 S/m; ε_r = 40.76; ρ = 1000 kg/m^3
Communication System: UID 0, 4 slot GPRS (0) Frequency: 836.6 MHz Duty Cycle: 1:2
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Right Side Middle/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.283 W/kg

Right Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.16 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.334 W/kg
SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.173 W/kg
Maximum value of SAR (measured) = 0.285 W/kg

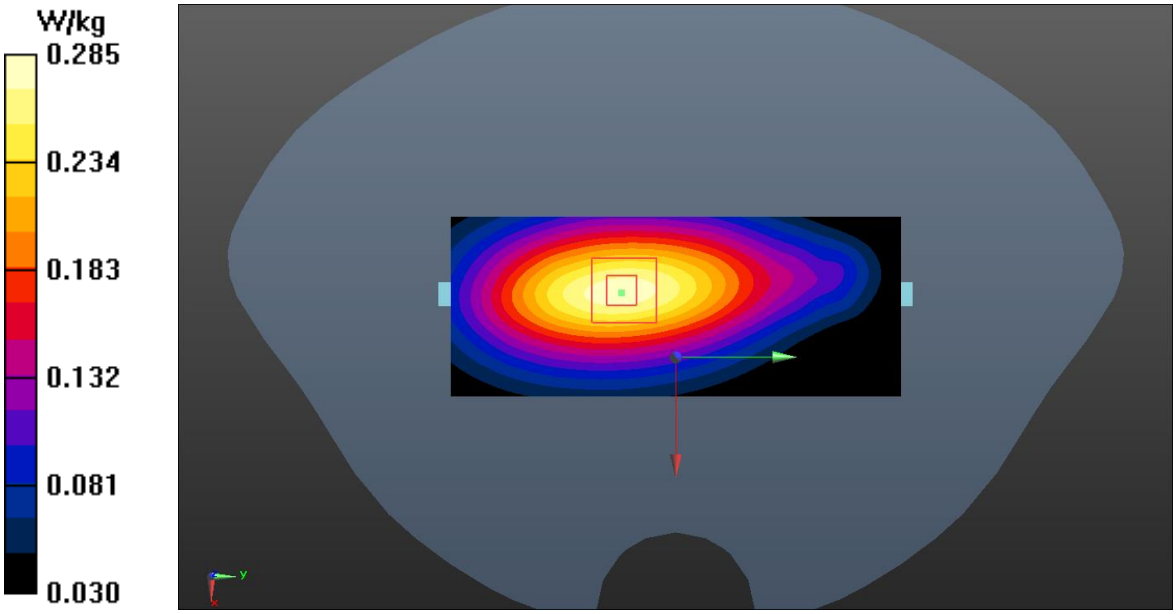


Fig.2 GSM 850 Body

GSM 900 Head
Date: 2024-04-10
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used (interpolated): f = 914.8 MHz; σ = 0.978 S/m; εr = 40.135; ρ = 1000 kg/m3
Communication System: UID 0, 4 slot GPRS (0) Frequency: 914.8 MHz Duty Cycle: 1:2
Probe: EX3DV4 - SN7786 ConvF (9.46, 9.46, 9.46)

Right Cheek High/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.903 W/kg

Right Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.59 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.11 W/kg
SAR(1 g) = 0.556 W/kg; SAR(10 g) = 0.341 W/kg
Maximum value of SAR (measured) = 0.716 W/kg

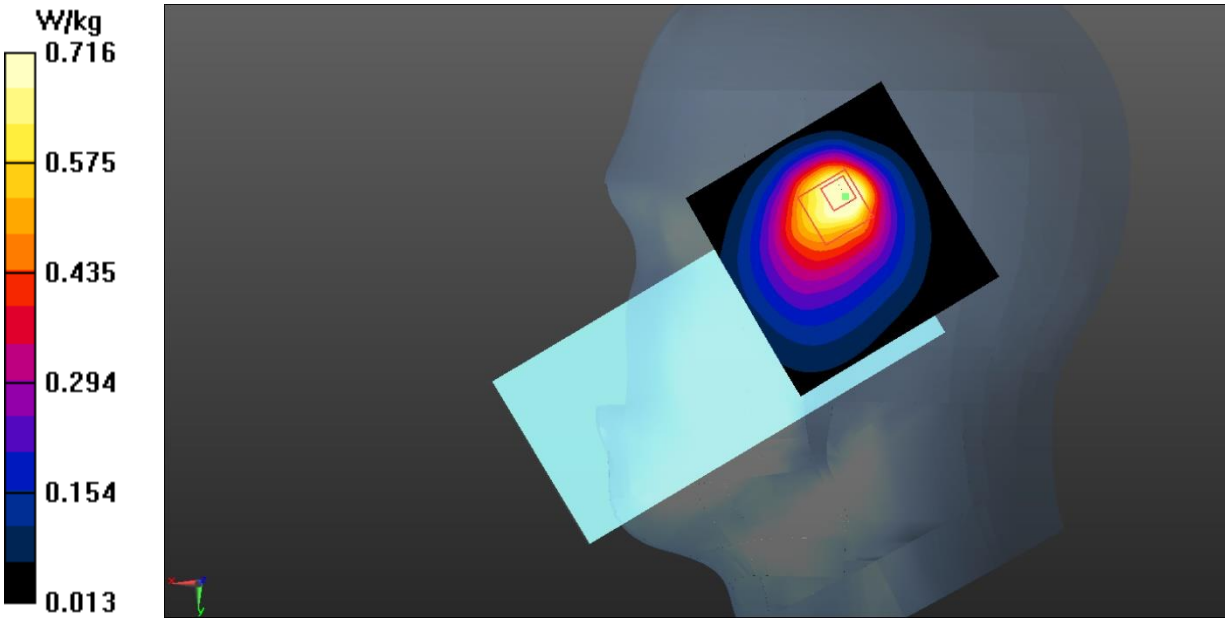


Fig.3 GSM 900 Head

GSM 900 Body
Date: 2024-04-10
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used (interpolated): f = 914.8 MHz; σ = 0.978 S/m; εr = 40.135; ρ = 1000 kg/m3
Communication System: UID 0, 4 slot GPRS (0) Frequency: 914.8 MHz Duty Cycle: 1:2
Probe: EX3DV4 - SN7786 ConvF (9.46, 9.46, 9.46)

Rear Side High/Area Scan (71x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.477 W/kg

Rear Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.51 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.577 W/kg
SAR(1 g) = 0.353 W/kg; SAR(10 g) = 0.206 W/kg
Maximum value of SAR (measured) = 0.456 W/kg

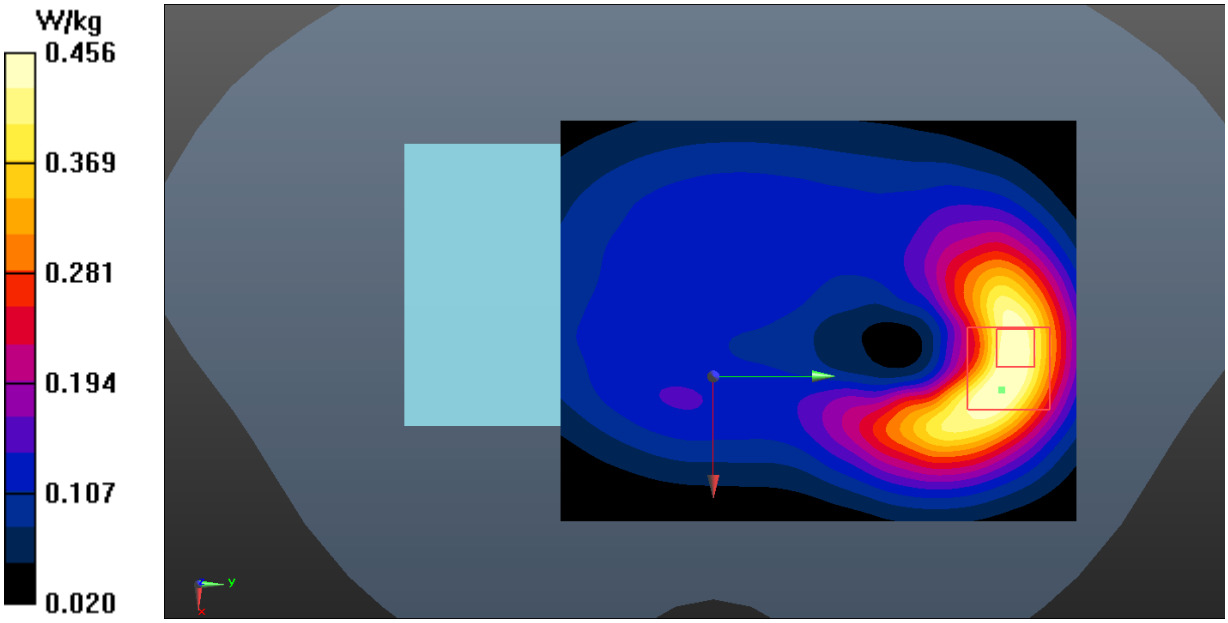


Fig.4 GSM 900 Body

GSM 1900 Head
Date: 2024-04-24
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1910 MHz; σ = 1.403 S/m; ε_r = 40.577; ρ = 1000 kg/m^3
Communication System: UID 0, 1 slot GPRS (0) Frequency: 1909.8 MHz Duty Cycle: 1:8.3
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

Right Cheek High/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.65 W/kg

Right Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.24 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.99 W/kg
SAR(1 g) = 0.911 W/kg; SAR(10 g) = 0.505 W/kg
Maximum value of SAR (measured) = 1.41 W/kg

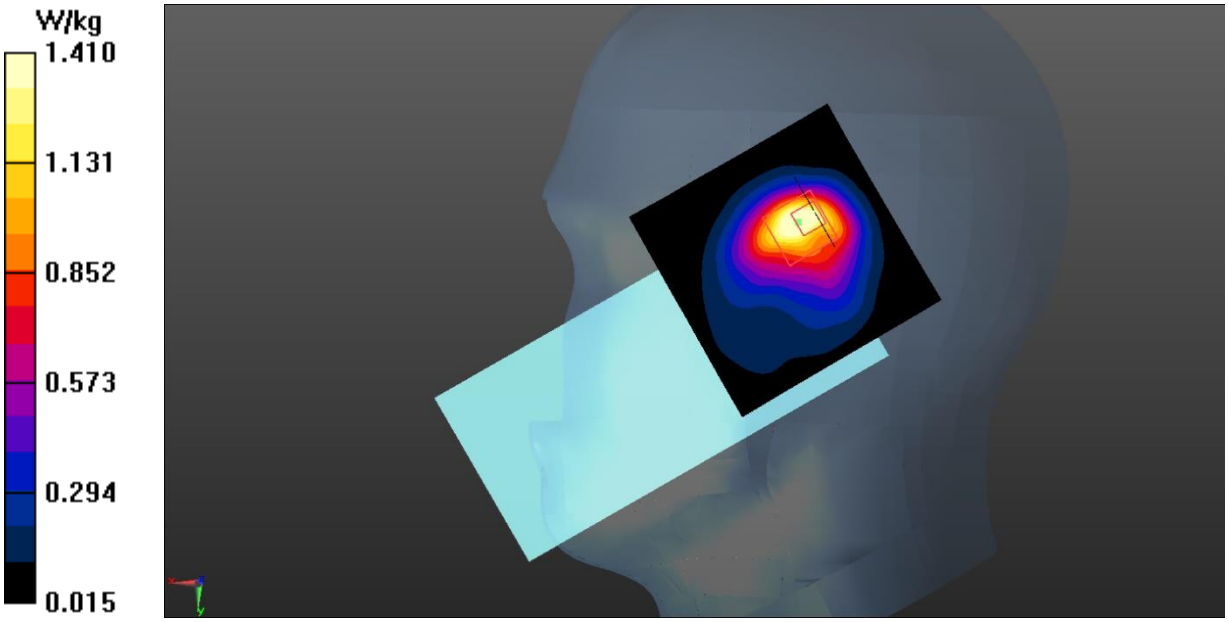


Fig.5 GSM 1900 Head

GSM 1900 Body
Date: 2024-04-24
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1910 MHz; σ = 1.403 S/m; ε_r = 40.577; ρ = 1000 kg/m^3
Communication System: UID 0, 4 slot GPRS (0) Frequency: 1909.8 MHz Duty Cycle: 1:2
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

Bottom Side High/Area Scan (41x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.841 W/kg

Bottom Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.89 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.592 W/kg; SAR(10 g) = 0.329 W/kg
Maximum value of SAR (measured) = 0.870 W/kg

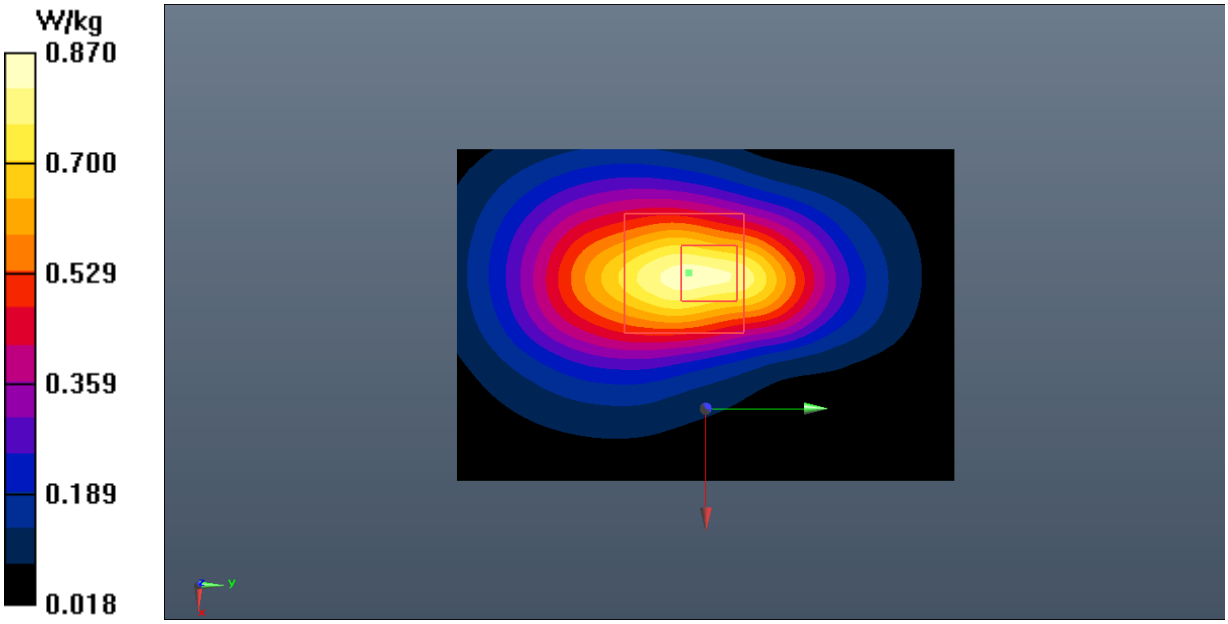


Fig.6 GSM 1900 Body

WCDMA Band 2 Head
Date: 2024-04-24
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1908 MHz; σ = 1.401 S/m; ε_r = 40.585; ρ = 1000 kg/m^3
Communication System: UID 0, WCDMA (0) Frequency: 1908 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

Right Cheek High/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.41 W/kg

Right Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.23 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 0.807 W/kg; SAR(10 g) = 0.435 W/kg
Maximum value of SAR (measured) = 1.18 W/kg

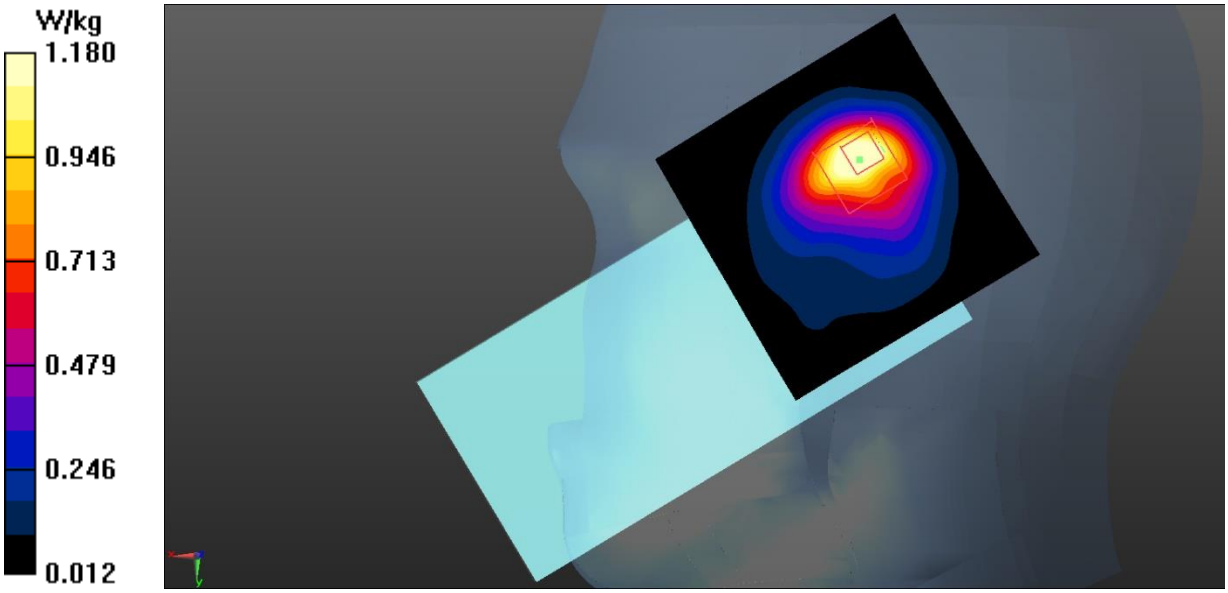


Fig.7 WCDMA Band 2 Head

WCDMA Band 2 Body
Date: 2024-04-24
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1908 MHz; σ = 1.401 S/m; ε_r = 40.585; ρ = 1000 kg/m^3
Communication System: UID 0, WCDMA (0) Frequency: 1907.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

Top Side High/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.991 W/kg

Top Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.17 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.22 W/kg
SAR(1 g) = 0.656 W/kg; SAR(10 g) = 0.372 W/kg
Maximum value of SAR (measured) = 0.984 W/kg

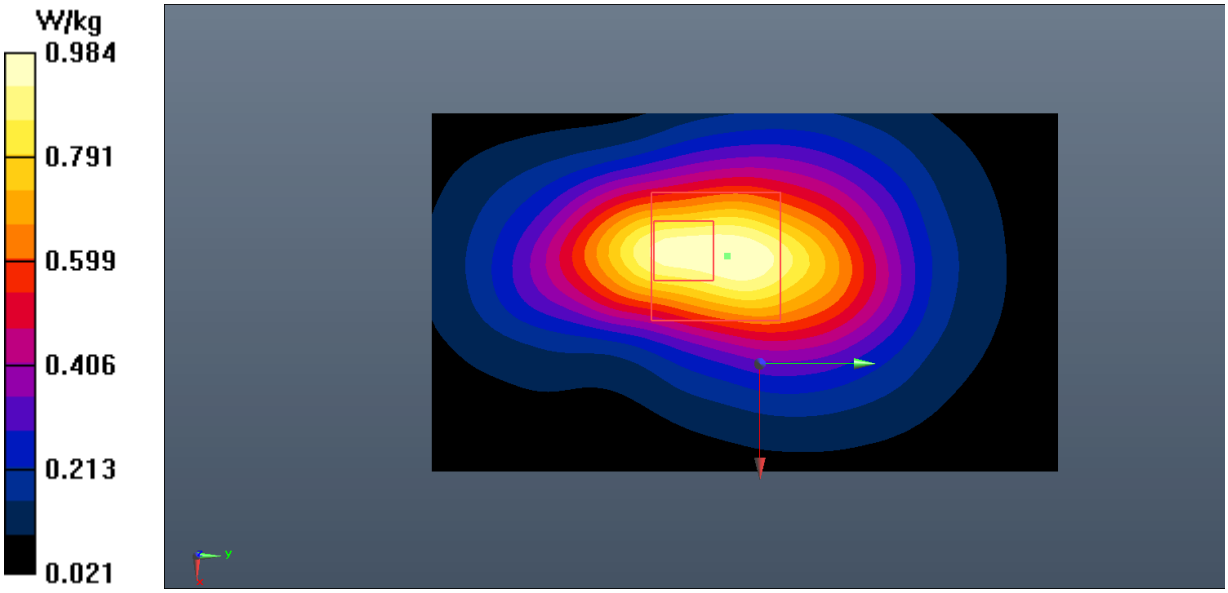


Fig.8 WCDMA Band 2 Body

WCDMA Band 4 Head
Date: 2024-03-26
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used (interpolated): f = 1732.6 MHz; σ = 1.373 S/m; ε_r = 39.332; ρ = 1000 kg/m^3
Communication System: UID 0, WCDMA (0) Frequency: 1732.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

Right Cheek Middle/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.41 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.24 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.74 W/kg
SAR(1 g) = 0.801 W/kg; SAR(10 g) = 0.421 W/kg
Maximum value of SAR (measured) = 1.20 W/kg

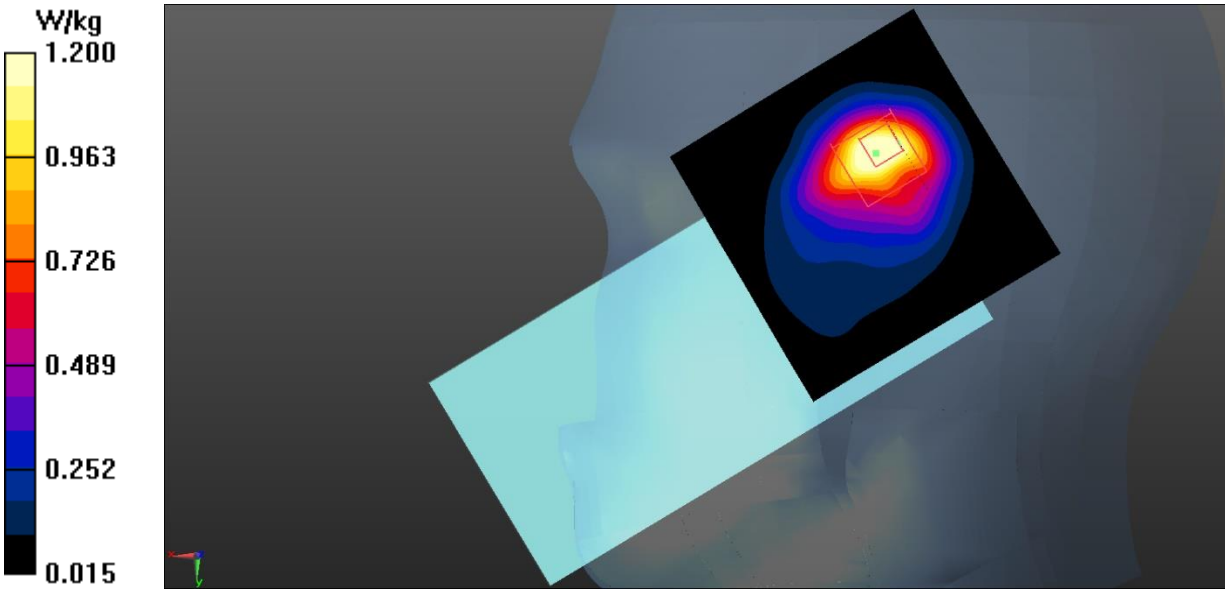


Fig.9 WCDMA Band 4 Head

WCDMA Band 4 Body
Date: 2024-03-26
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used (interpolated): f = 1732.6 MHz; σ = 1.373 S/m; ε_r = 39.332; ρ = 1000 kg/m^3
Communication System: UID 0, WCDMA (0) Frequency: 1732.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

Top Side Middle/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.894 W/kg

Top Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.46 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.693 W/kg; SAR(10 g) = 0.383 W/kg
Maximum value of SAR (measured) = 0.958 W/kg

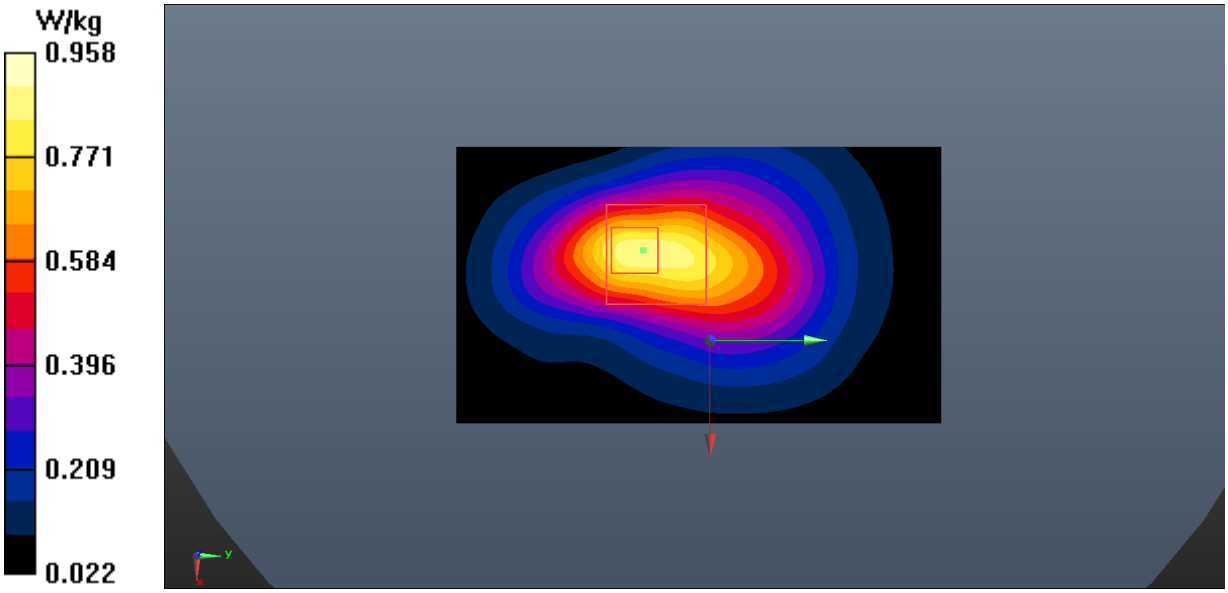


Fig.10 WCDMA Band 4 Body

WCDMA Band 5 Head
Date: 2024-04-01
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.917 S/m; ε_r = 40.76; ρ = 1000 kg/m^3
Communication System: UID 0, WCDMA (0) Frequency: 836.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Right Cheek Middle/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.872 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.85 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.531 W/kg; SAR(10 g) = 0.317 W/kg
Maximum value of SAR (measured) = 0.771 W/kg

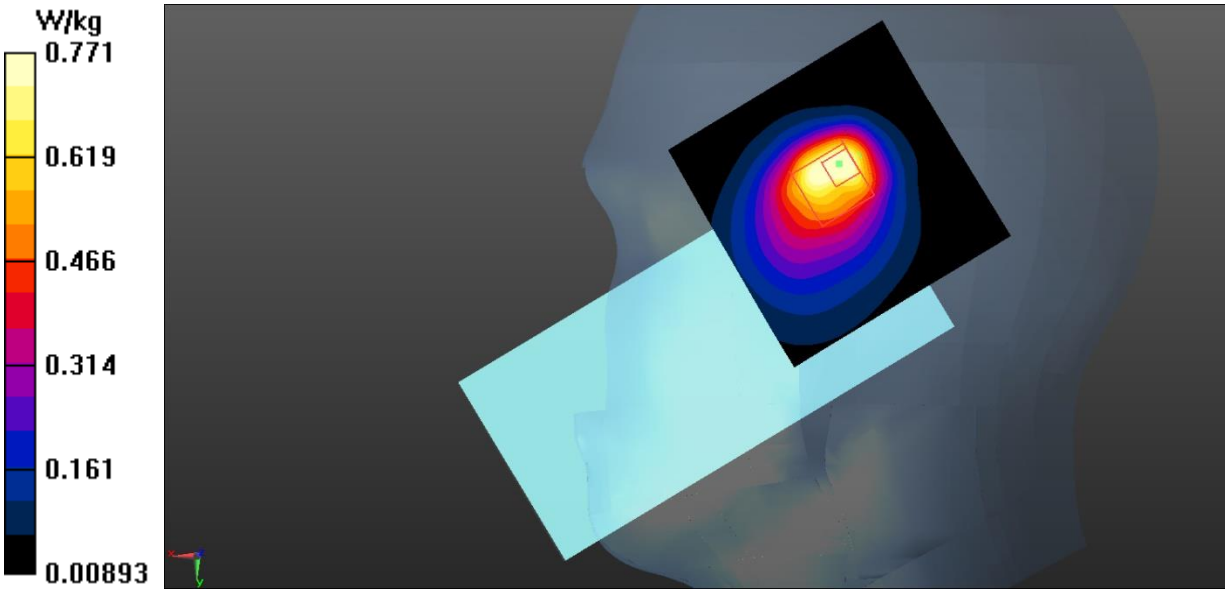


Fig.11 WCDMA Band 5 Head

WCDMA Band 5 Body
Date: 2024-04-01
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.917 S/m; ε_r = 40.76; ρ = 1000 kg/m^3
Communication System: UID 0, WCDMA (0) Frequency: 836.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Rear Side Middle/Area Scan (71x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.326 W/kg

Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.61 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.399 W/kg
SAR(1 g) = 0.253 W/kg; SAR(10 g) = 0.163 W/kg
Maximum value of SAR (measured) = 0.327 W/kg

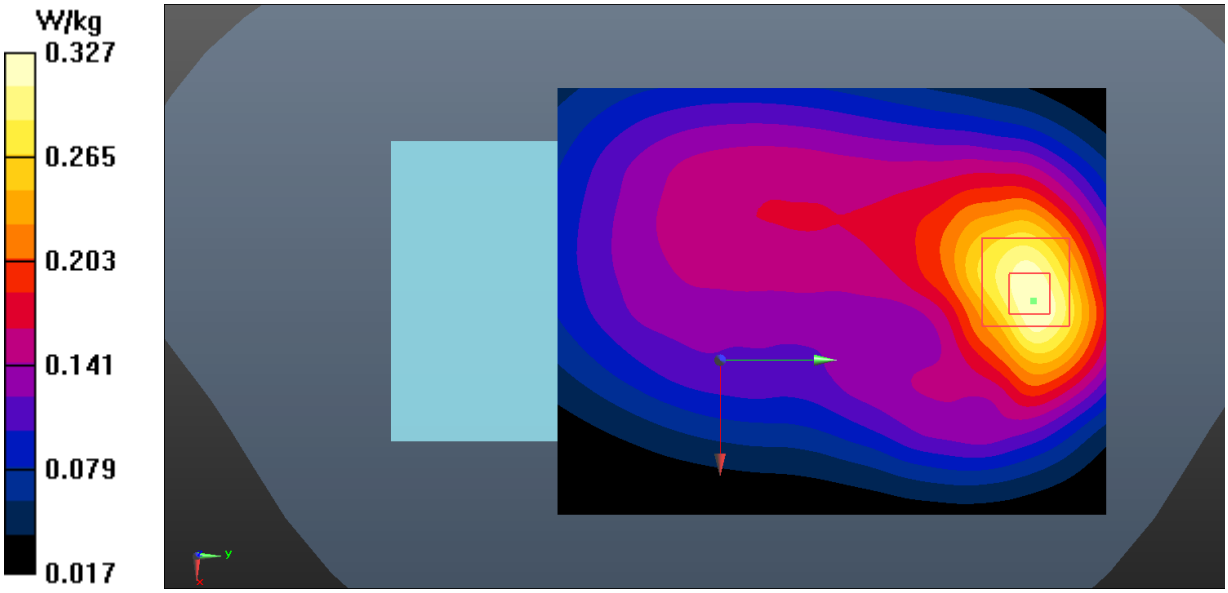


Fig.12 WCDMA Band 5 Body

WCDMA Band 8 Head
Date: 2024-04-10
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used: f = 898 MHz; σ = 0.963 S/m; ε_r = 40.337; ρ = 1000 kg/m^3
Communication System: UID 0, WCDMA (0) Frequency: 897.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.46, 9.46, 9.46)

Right Cheek Middle/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.968 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.27 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.369 W/kg
Maximum value of SAR (measured) = 0.860 W/kg

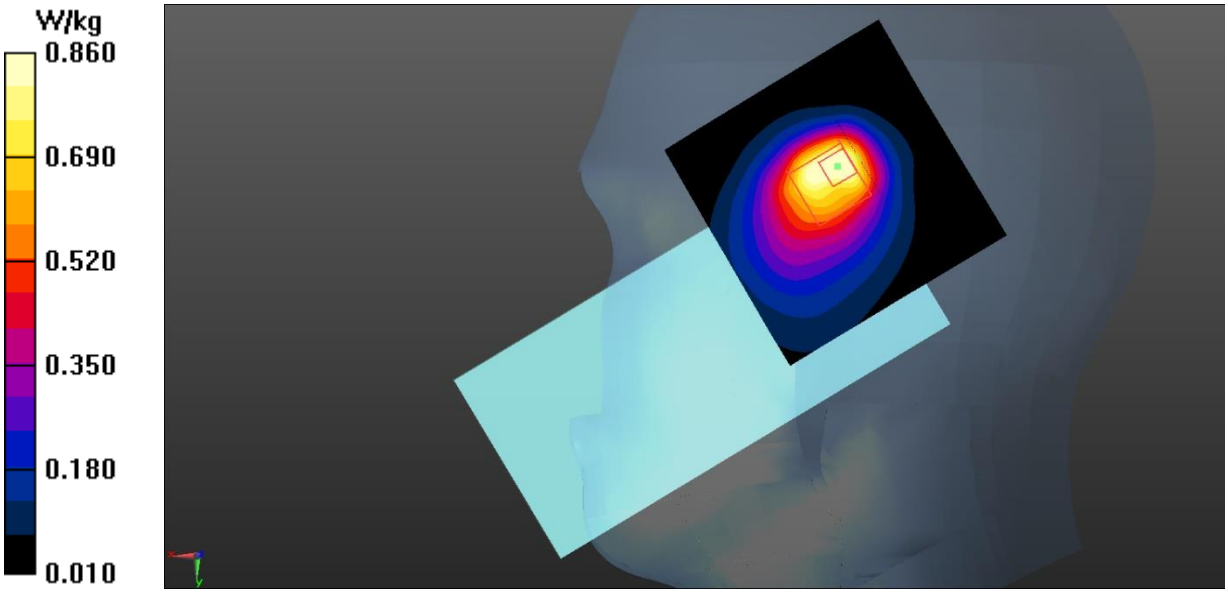


Fig.13 WCDMA Band 8 Head

WCDMA Band 8 Body
Date: 2024-04-10
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used: f = 898 MHz; σ = 0.963 S/m; ε_r = 40.337; ρ = 1000 kg/m^3
Communication System: UID 0, WCDMA (0) Frequency: 897.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.46, 9.46, 9.46)

Rear Side Middle/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.335 W/kg

Rear Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.993 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.418 W/kg
SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.154 W/kg
Maximum value of SAR (measured) = 0.336 W/kg

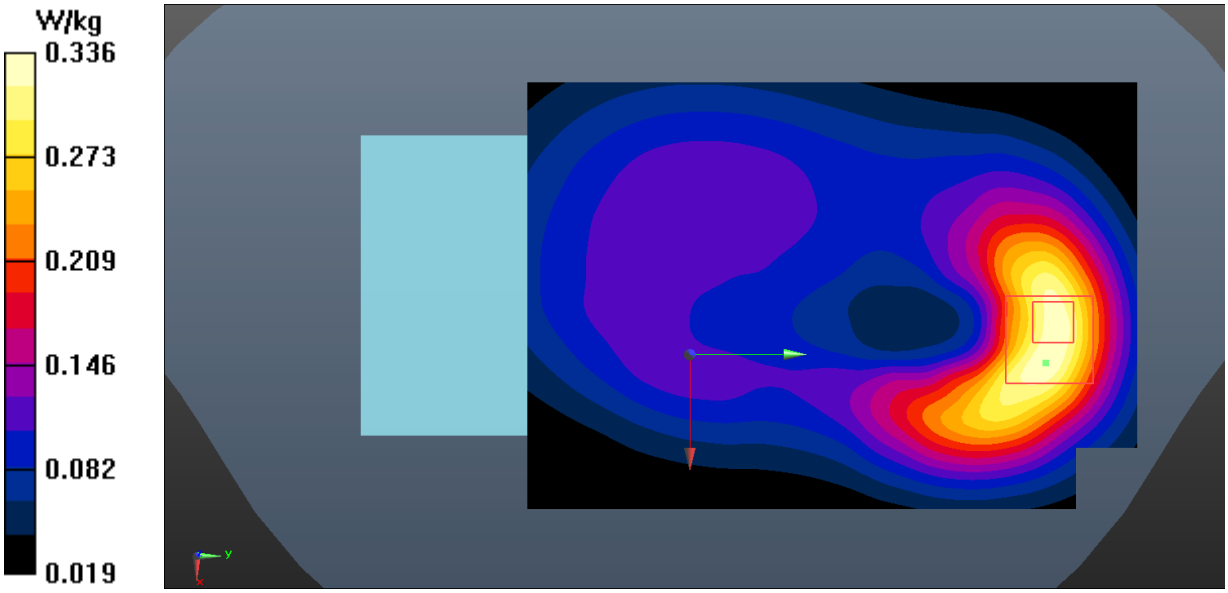


Fig.14 WCDMA Band 8 Body

LTE Band 2 Head
Date: 2024-03-25
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1880 MHz; σ = 1.415 S/m; ε_r = 38.991; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

Right Cheek Middle 100RB/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.64 W/kg

Right Cheek Middle 100RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.09 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 2.06 W/kg
SAR(1 g) = 0.943 W/kg; SAR(10 g) = 0.496 W/kg
Maximum value of SAR (measured) = 1.45 W/kg

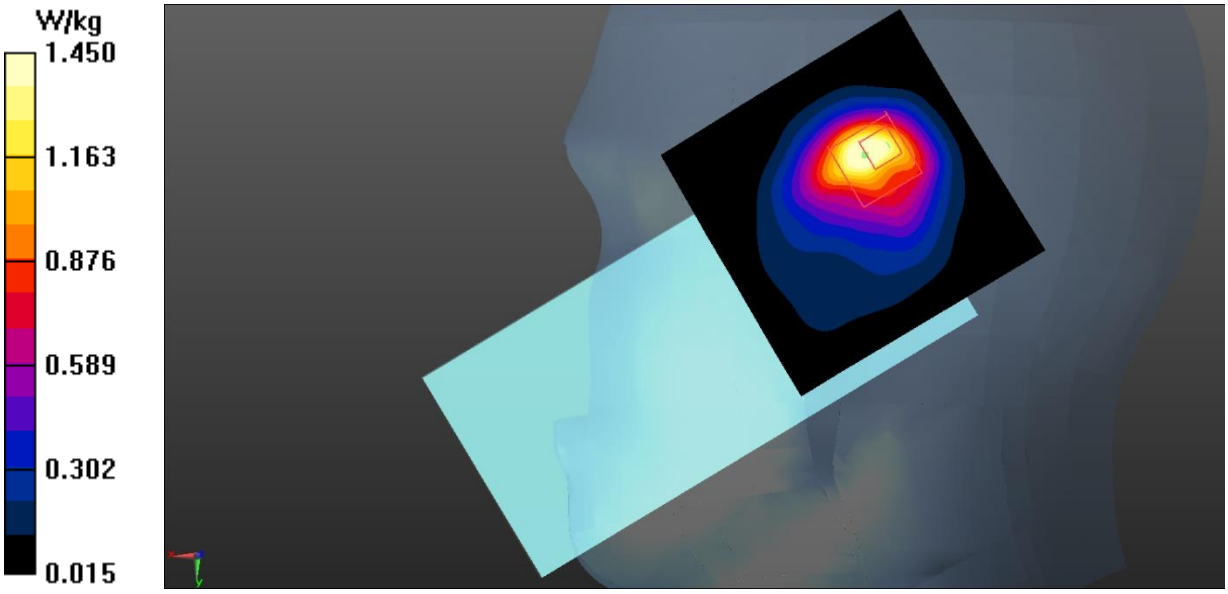


Fig.15 LTE Band 2 Head

LTE Band 2 Body
Date: 2024-03-25
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1880 MHz; σ = 1.415 S/m; ε_r = 38.991; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

Top Side Middle 50RB25/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.01 W/kg

Top Side Middle 50RB25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.51 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.26 W/kg
SAR(1 g) = 0.730 W/kg; SAR(10 g) = 0.414 W/kg
Maximum value of SAR (measured) = 0.986 W/kg

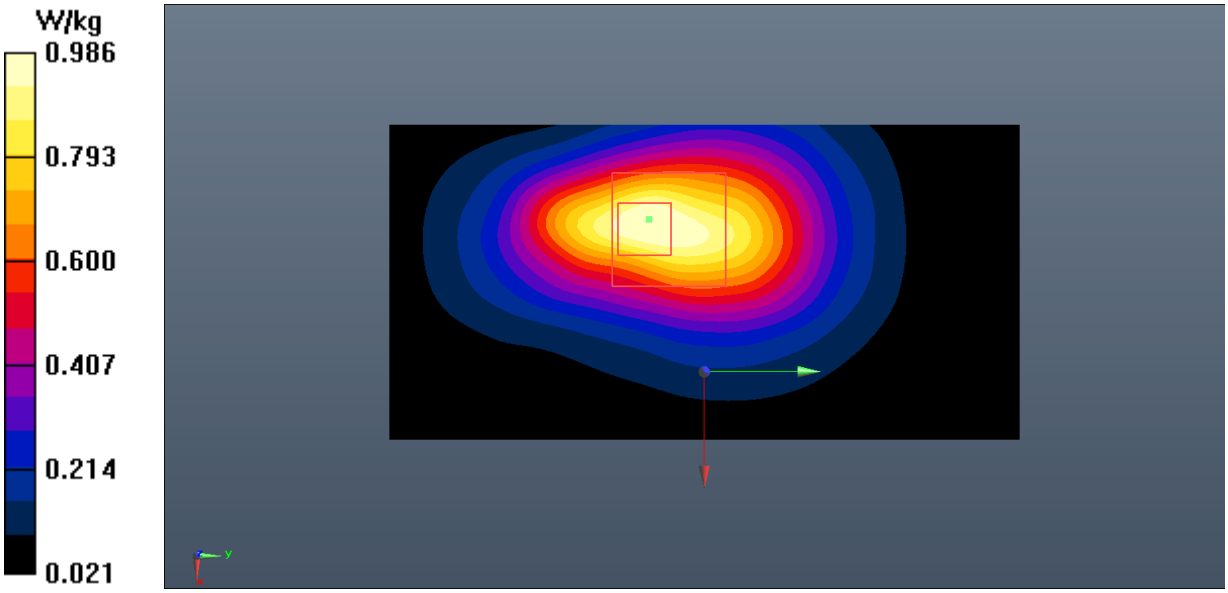


Fig.16 LTE Band 2 Body

LTE Band 4 Head
Date: 2024-03-26
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.384 S/m; ε_r = 39.284; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

Right Cheek High 50RB0/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.52 W/kg

Right Cheek High 50RB0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.17 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.80 W/kg
SAR(1 g) = 0.830 W/kg; SAR(10 g) = 0.436 W/kg
Maximum value of SAR (measured) = 1.22 W/kg

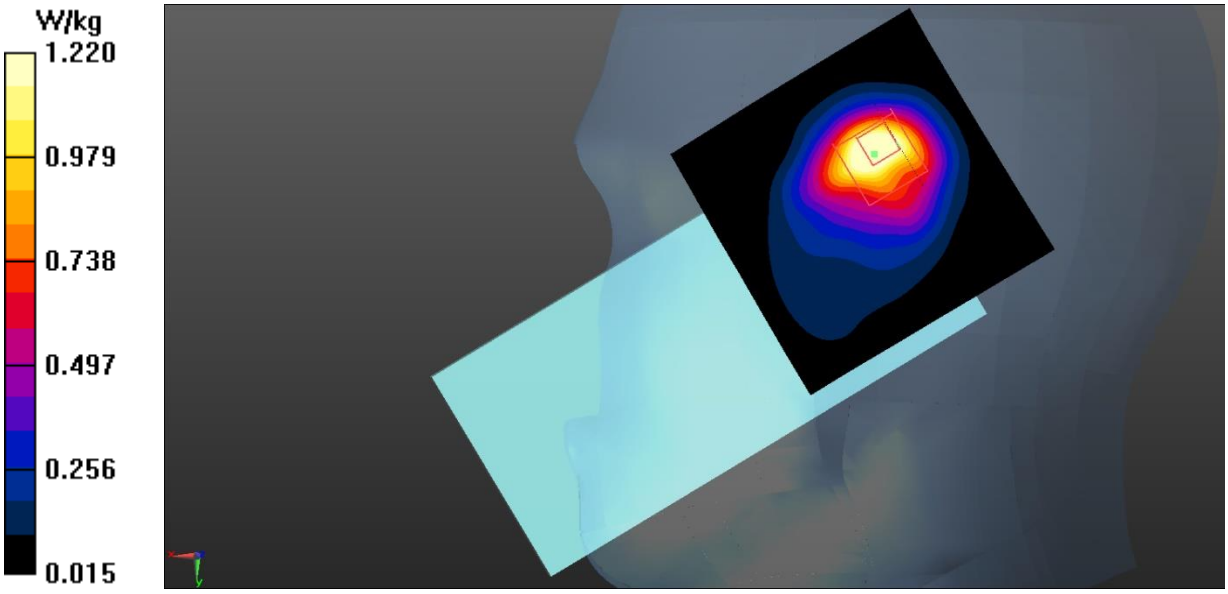


Fig.17 LTE Band 4 Head

LTE Band 4 Body
Date: 2024-03-26
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.384 S/m; ε_r = 39.284; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

Top Side High 100RB/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.981 W/kg

Top Side High 100RB/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.58 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.29 W/kg
SAR(1 g) = 0.731 W/kg; SAR(10 g) = 0.398 W/kg
Maximum value of SAR (measured) = 1.01 W/kg

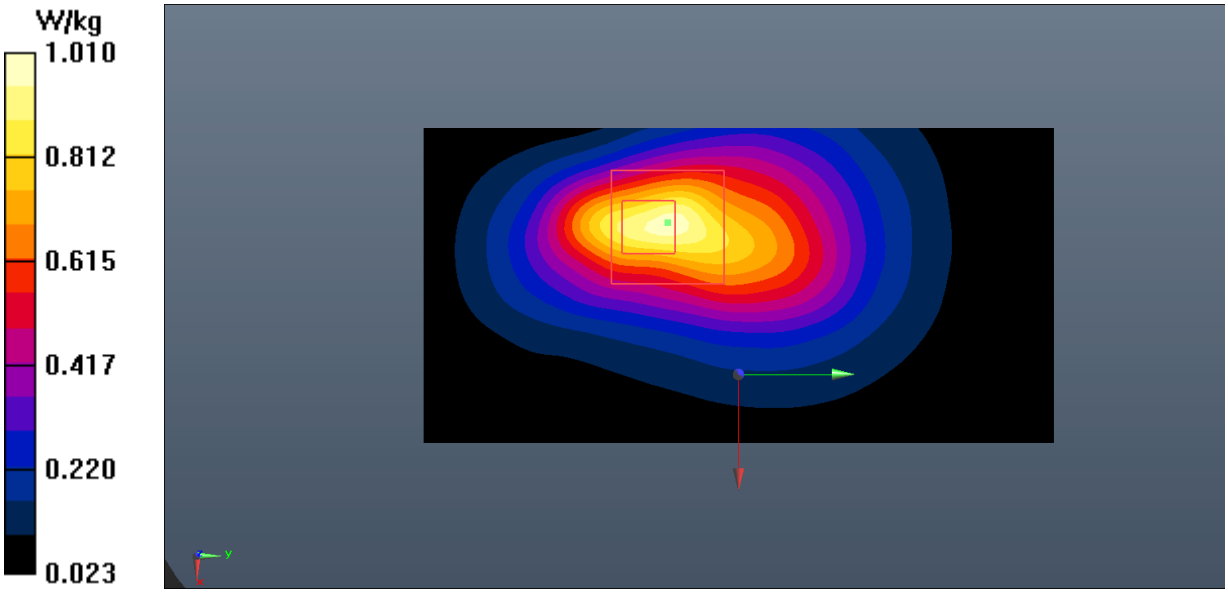


Fig.18 LTE Band 4 Body

LTE Band 7 Head
Date: 2024-03-30
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used: f = 2560 MHz; σ = 1.959 S/m; ε_r = 38.656; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 2560 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Right Cheek High 1RB99/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.76 W/kg

Right Cheek High 1RB99/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.979 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.18 W/kg
SAR(1 g) = 0.934 W/kg; SAR(10 g) = 0.408 W/kg
Maximum value of SAR (measured) = 1.54 W/kg

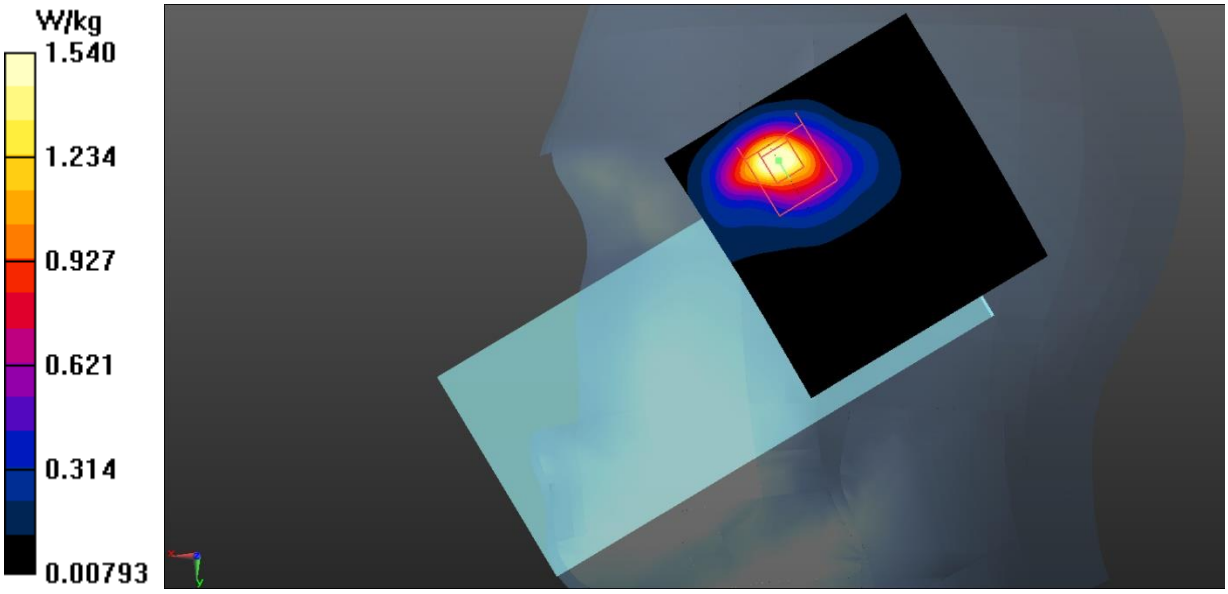


Fig.19 LTE Band 7 Head

LTE Band 7 Body
Date: 2024-03-30
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used: f = 2560 MHz; σ = 1.959 S/m; ε_r = 38.656; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 2560 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Bottom Side High 1RB99/Area Scan (61x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.08 W/kg

Bottom Side High 1RB99/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.33 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.51 W/kg
SAR(1 g) = 0.785 W/kg; SAR(10 g) = 0.378 W/kg
Maximum value of SAR (measured) = 1.15 W/kg

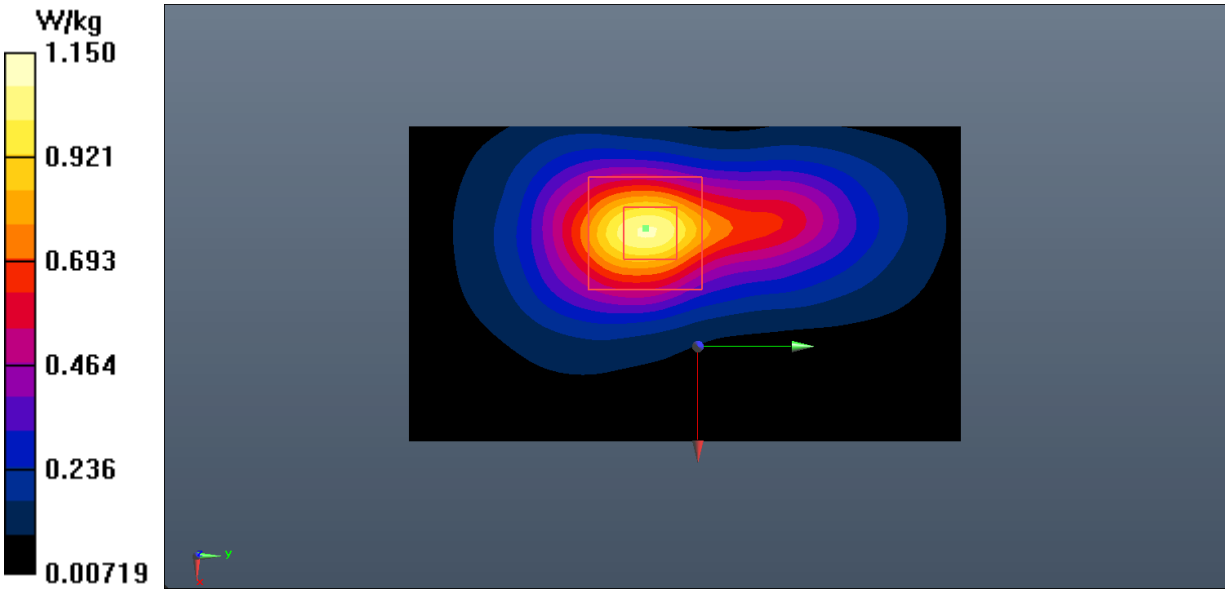


Fig.20 LTE Band 7 Body

LTE Band 8 Head
Date: 2024-04-10
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used: f = 910 MHz; σ = 0.973 S/m; ε_r = 40.193; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 910 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.46, 9.46, 9.46)

Right Cheek High 1RB49/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.824 W/kg

Right Cheek High 1RB49/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.83 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.561 W/kg; SAR(10 g) = 0.331 W/kg
Maximum value of SAR (measured) = 0.715 W/kg

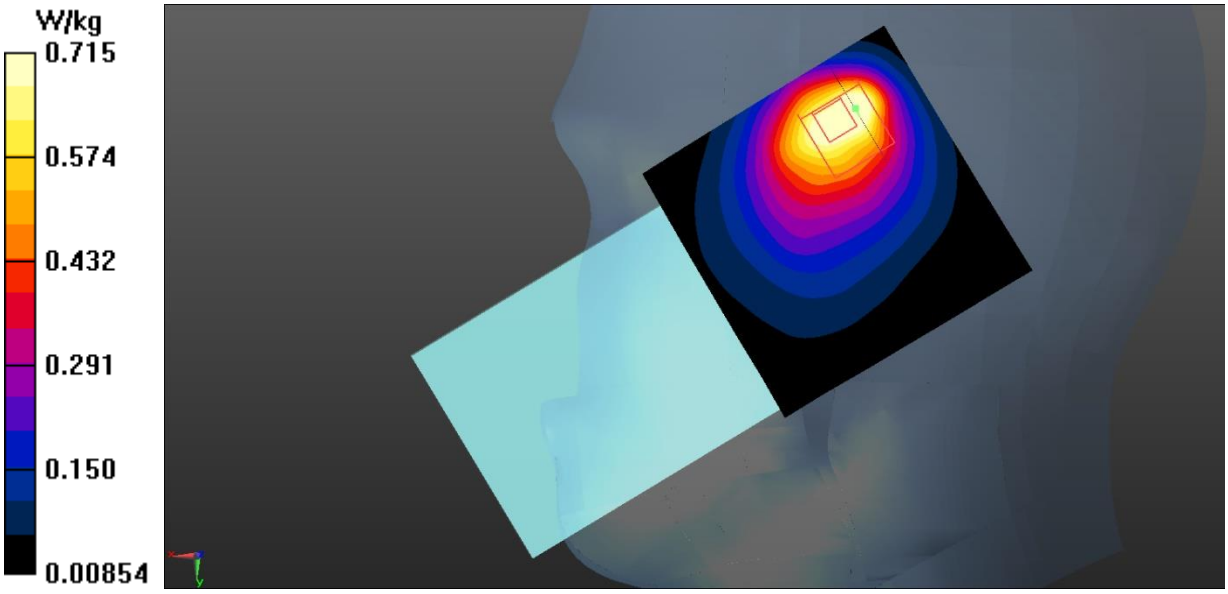


Fig.21 LTE Band 8 Head

LTE Band 8 Body
Date: 2024-04-10
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used (interpolated): f = 885 MHz; σ = 0.951 S/m; ε_r = 40.493; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 885 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.46, 9.46, 9.46)

Rear Side Low 1RB0/Area Scan (71x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.326 W/kg

Rear Side Low 1RB0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.871 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.398 W/kg
SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.157 W/kg
Maximum value of SAR (measured) = 0.326 W/kg

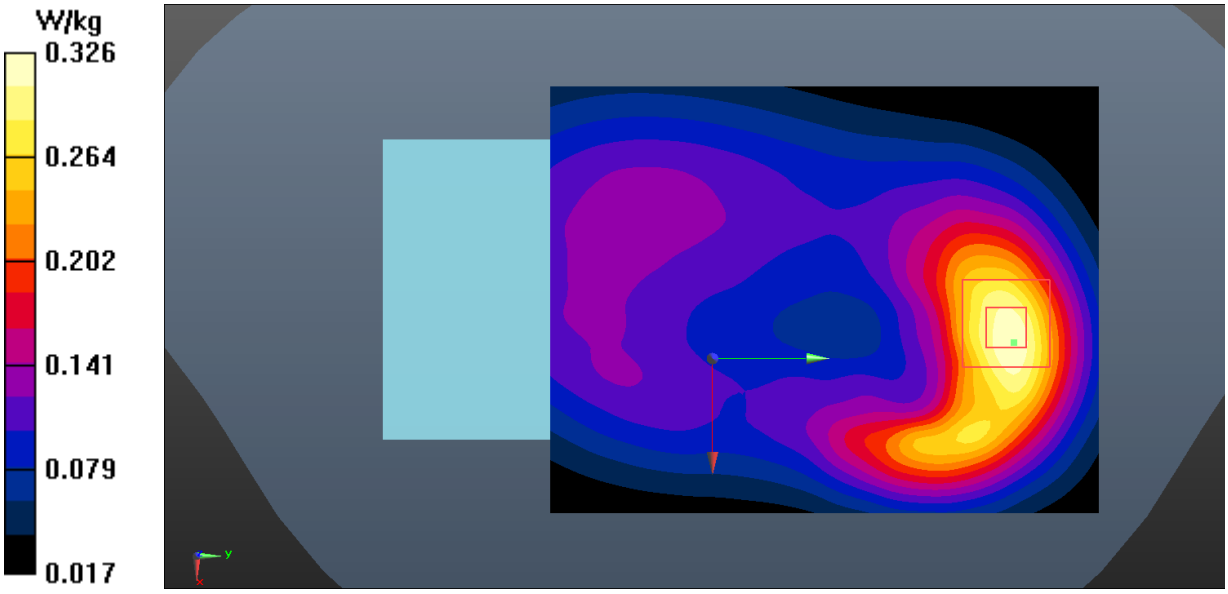


Fig.22 LTE Band 8 Body

LTE Band 12 Head
Date: 2024-03-29
Electronics: DAE4 Sn1527
Medium: Head 750MHz
Medium parameters used (interpolated): f = 711 MHz; σ = 0.878 S/m; ε_r = 41.619; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 711 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Right Cheek High 1RB49/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.983 W/kg

Right Cheek High 1RB49/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.78 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.24 W/kg
SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.347 W/kg
Maximum value of SAR (measured) = 0.852 W/kg

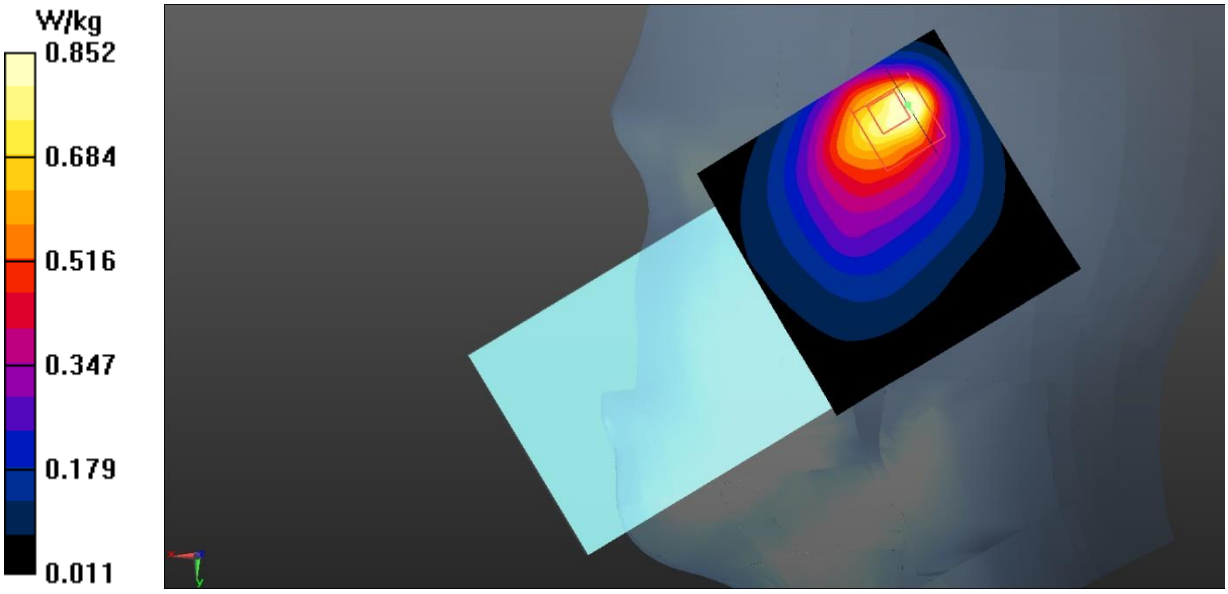


Fig.23 LTE Band 12 Head

LTE Band 12 Body
Date: 2024-03-29
Electronics: DAE4 Sn1527
Medium: Head 750MHz
Medium parameters used (interpolated): f = 711 MHz; σ = 0.878 S/m; ε_r = 41.619; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 711 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Rear Side High 1RB49/Area Scan (71x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.314 W/kg

Rear Side High 1RB49/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.12 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 0.385 W/kg
SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.177 W/kg
Maximum value of SAR (measured) = 0.311 W/kg

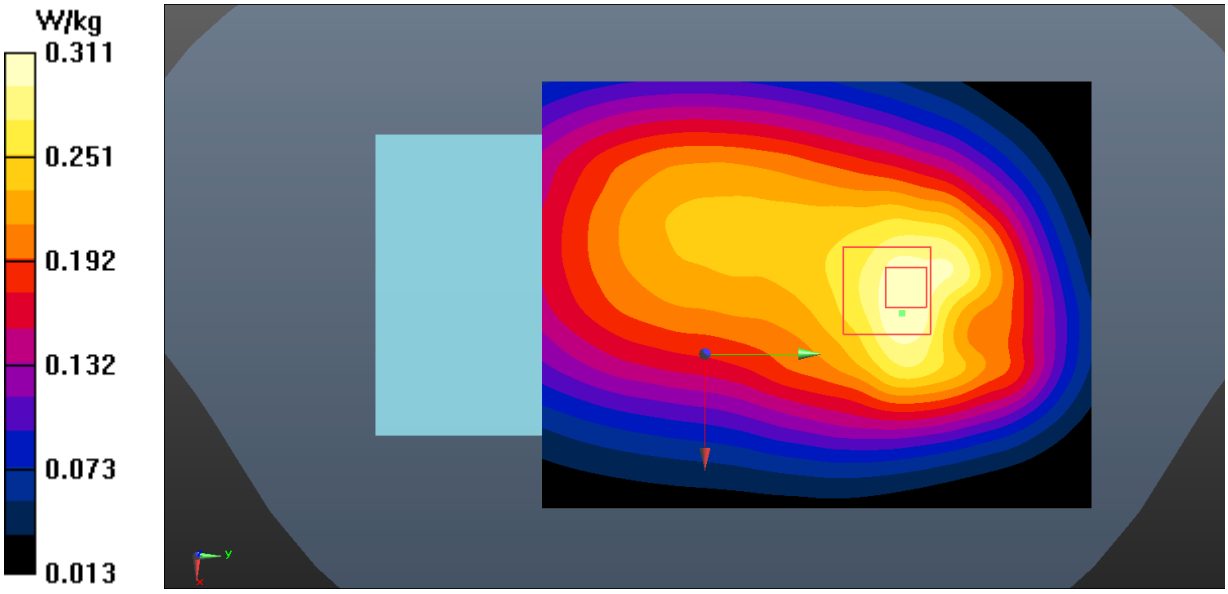


Fig.24 LTE Band 12 Body

LTE Band 13 Head
Date: 2024-03-29
Electronics: DAE4 Sn1527
Medium: Head 750MHz
Medium parameters used: f = 782 MHz; σ = 0.923 S/m; ε_r = 40.767; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 782 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Right Cheek Middle 1RB24/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.734 W/kg

Right Cheek Middle 1RB24/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.16 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.938 W/kg
SAR(1 g) = 0.473 W/kg; SAR(10 g) = 0.276 W/kg
Maximum value of SAR (measured) = 0.656 W/kg

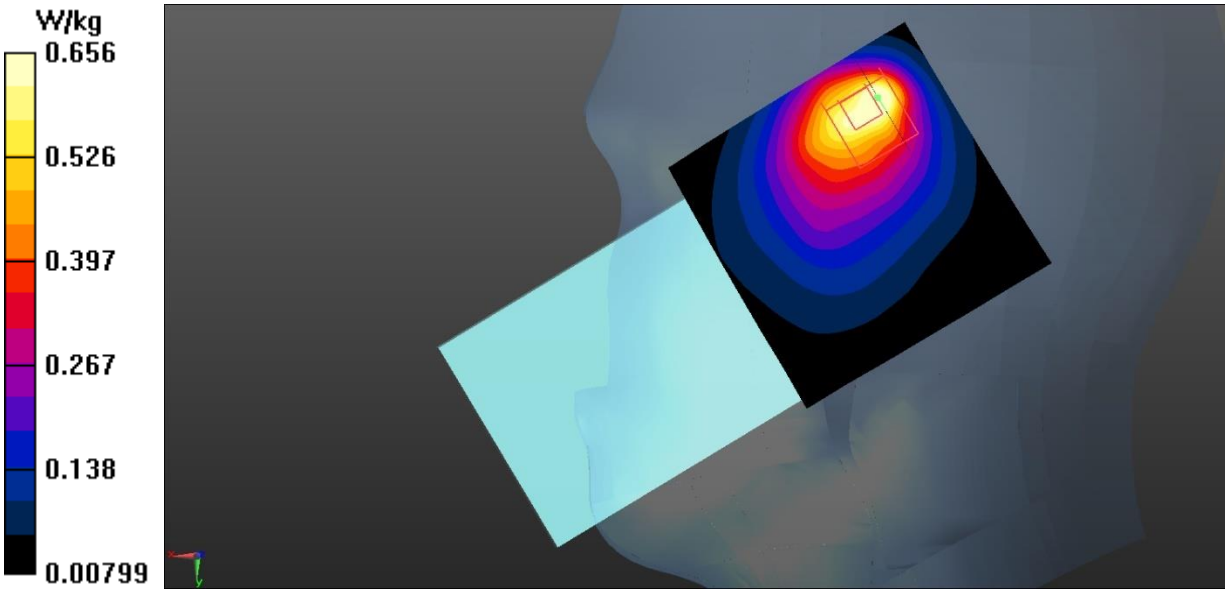


Fig.25 LTE Band 13 Head

LTE Band 13 Body
Date: 2024-03-29
Electronics: DAE4 Sn1527
Medium: Head 750MHz
Medium parameters used: f = 782 MHz; σ = 0.923 S/m; ε_r = 40.767; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 782 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Rear Side Middle 1RB49/Area Scan (71x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.160 W/kg

Rear Side Middle 1RB49/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.63 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.203 W/kg
SAR(1 g) = 0.129 W/kg; SAR(10 g) = 0.088 W/kg
Maximum value of SAR (measured) = 0.163 W/kg

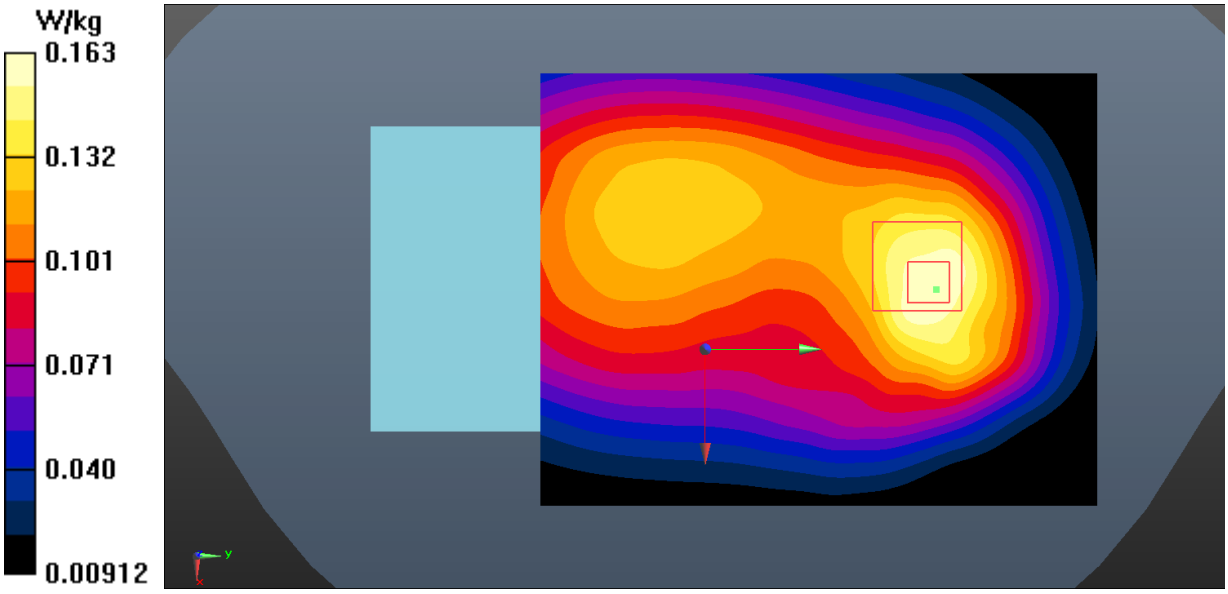


Fig.26 LTE Band 13 Body

LTE Band 26 Head
Date: 2024-04-01
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used (interpolated): f = 822.5 MHz; σ = 0.905 S/m; ε_r = 40.929; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 822.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Right Cheek Low 1RB0/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Right Cheek Low 1RB0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.45 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 0.674 W/kg; SAR(10 g) = 0.397 W/kg
Maximum value of SAR (measured) = 0.883 W/kg

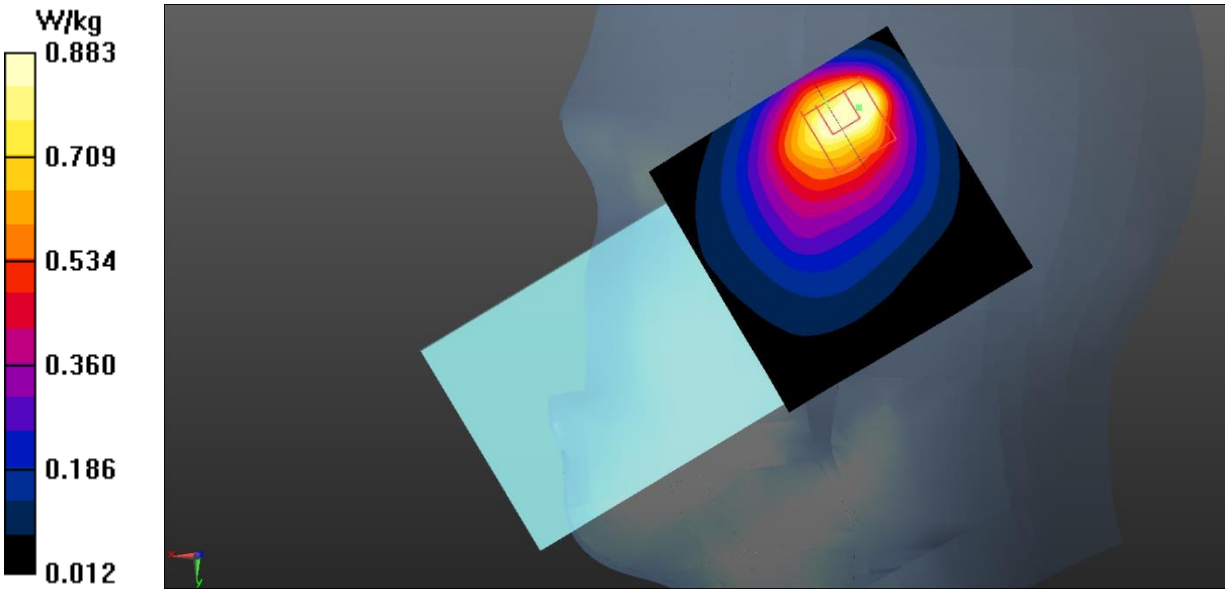


Fig.27 LTE Band 26 Head

LTE Band 26 Body
Date: 2024-04-01
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used (interpolated): f = 822.5 MHz; σ = 0.905 S/m; ε_r = 40.929; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 822.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Rear Side Low 1RB0/Area Scan (71x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.299 W/kg

Rear Side Low 1RB0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.15 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.365 W/kg
SAR(1 g) = 0.230 W/kg; SAR(10 g) = 0.152 W/kg
Maximum value of SAR (measured) = 0.293 W/kg

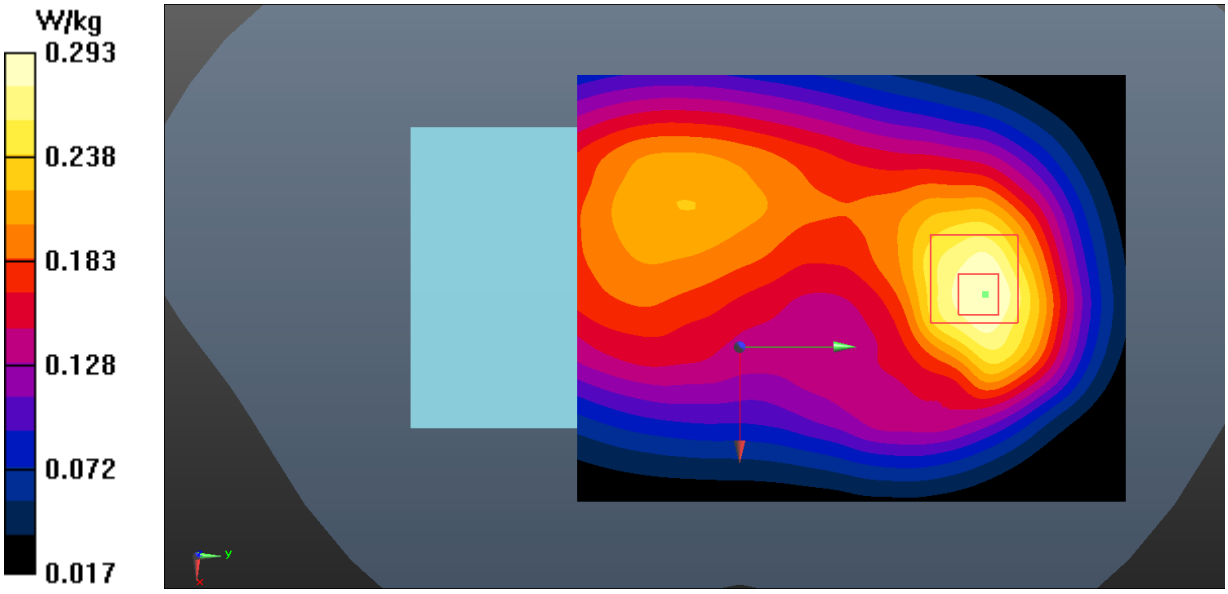


Fig.28 LTE Band 26 Body

LTE Band 28 Head
Date: 2024-03-31
Electronics: DAE4 Sn1527
Medium: Head 750MHz
Medium parameters used (interpolated): f = 713 MHz; σ = 0.857 S/m; ε_r = 42.871; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 713 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.46, 9.46, 9.46)

Right Cheek Low 1RB99/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Right Cheek Low 1RB99/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.13 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 0.633 W/kg; SAR(10 g) = 0.365 W/kg
Maximum value of SAR (measured) = 0.903 W/kg

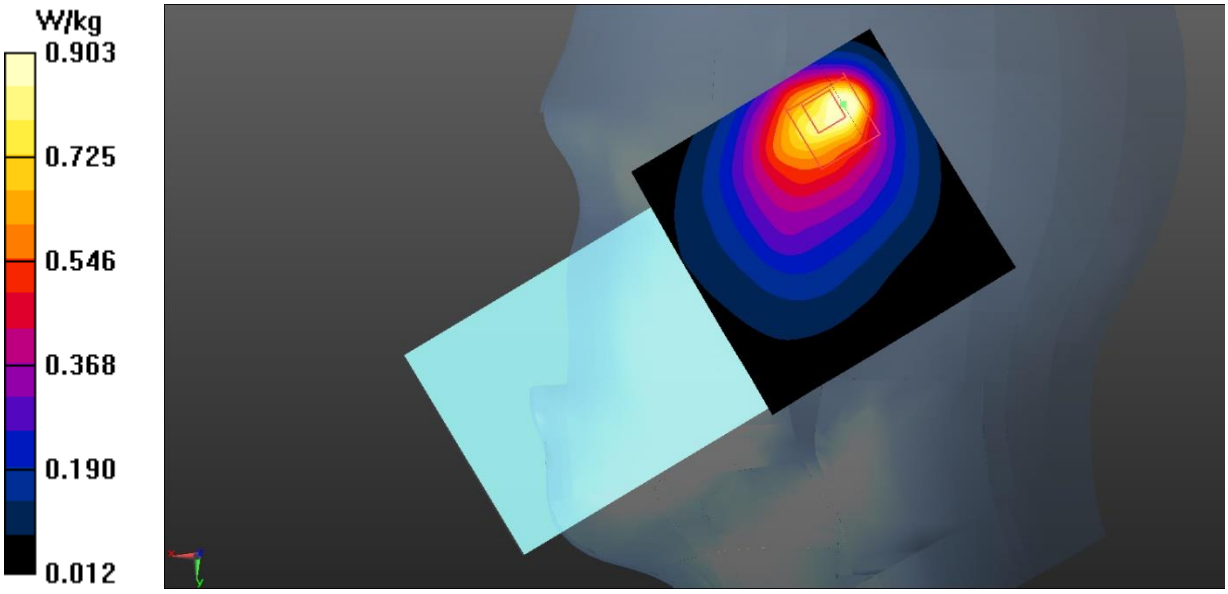


Fig.29 LTE Band 28 Head

LTE Band 28 Body
Date: 2024-03-31
Electronics: DAE4 Sn1527
Medium: Head 750MHz
Medium parameters used: f = 728 MHz; σ = 0.867 S/m; ε_r = 42.691; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 728 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.46, 9.46, 9.46)

Rear Side Middle 1RB99/Area Scan (71x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.275 W/kg

Rear Side Middle 1RB99/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.82 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.329 W/kg
SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.154 W/kg
Maximum value of SAR (measured) = 0.270 W/kg

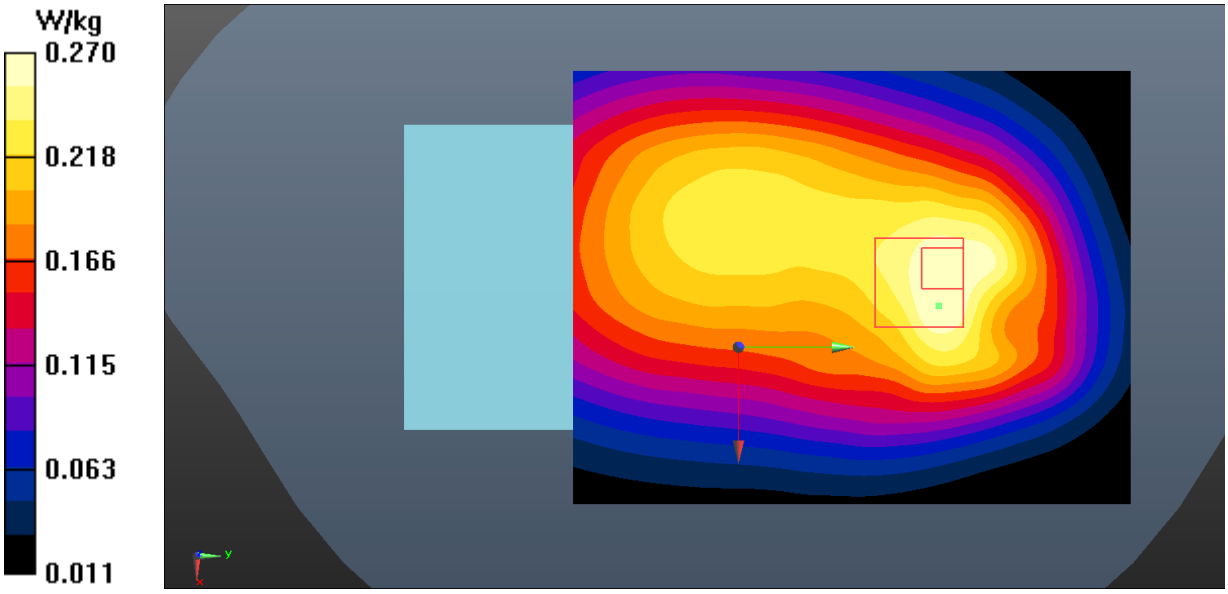


Fig.30 LTE Band 28 Body

LTE Band 66 Head
Date: 2024-04-02
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used: f = 1770 MHz; σ = 1.381 S/m; ε_r = 40.494; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 1770 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

Right Cheek High 50RB0/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.67 W/kg

Right Cheek High 50RB0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.788 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 2.22 W/kg
SAR(1 g) = 0.966 W/kg; SAR(10 g) = 0.439 W/kg
Maximum value of SAR (measured) = 1.63 W/kg

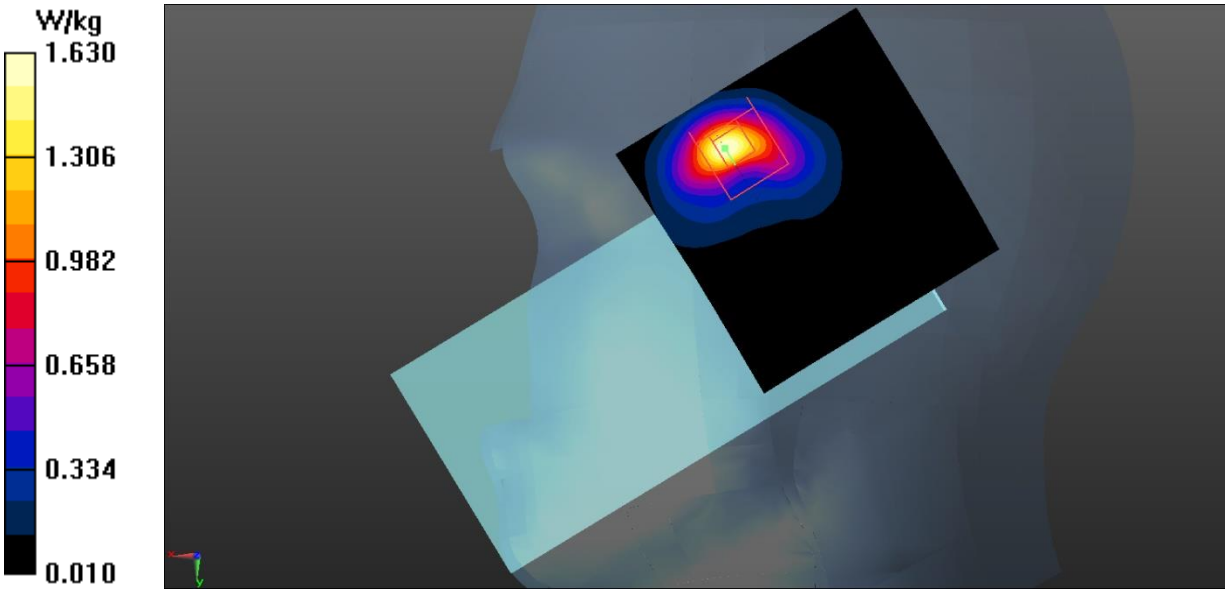


Fig.31 LTE Band 66 Head

LTE Band 66 Body
Date: 2024-04-02
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.359 S/m; ε_r = 40.592; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_FDD (0) Frequency: 1745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

Top Side Middle 50RB0/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.913 W/kg

Top Side Middle 50RB0/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.47 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.642 W/kg; SAR(10 g) = 0.349 W/kg
Maximum value of SAR (measured) = 0.890 W/kg

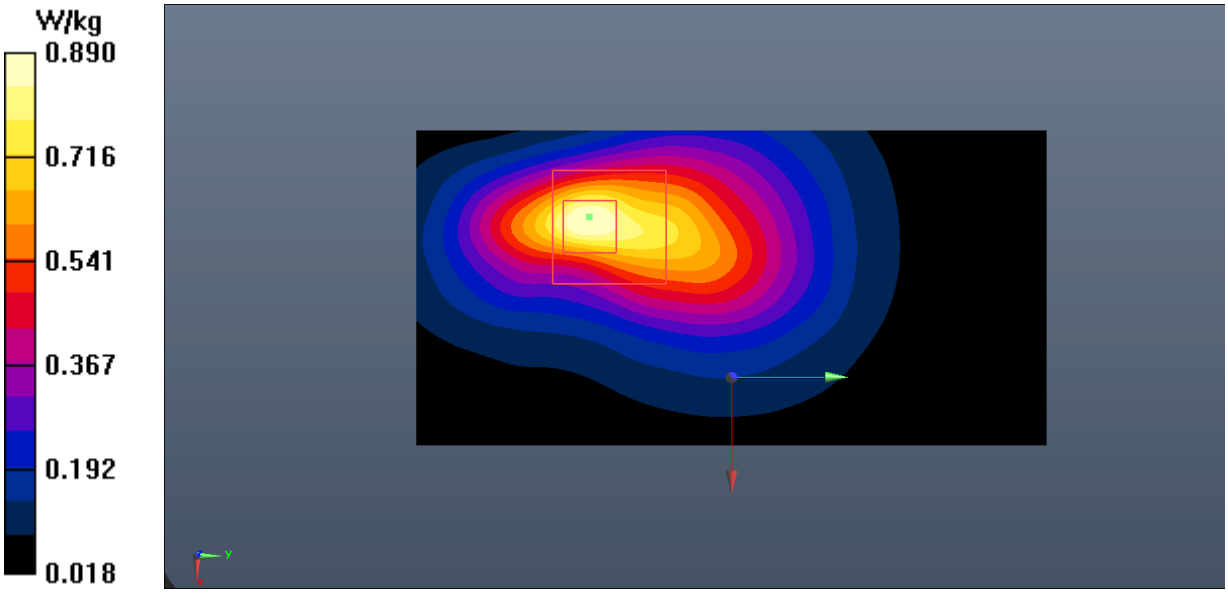


Fig.32 LTE Band 66 Body

LTE Band 38 Head
Date: 2024-03-30
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used: f = 2580 MHz; σ = 1.982 S/m; ε_r = 38.59; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_TDD (0) Frequency: 2580 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Right Cheek Low 50RB50/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.42 W/kg

Right Cheek Low 50RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.95 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 2.02 W/kg
SAR(1 g) = 0.845 W/kg; SAR(10 g) = 0.393 W/kg
Maximum value of SAR (measured) = 1.31 W/kg

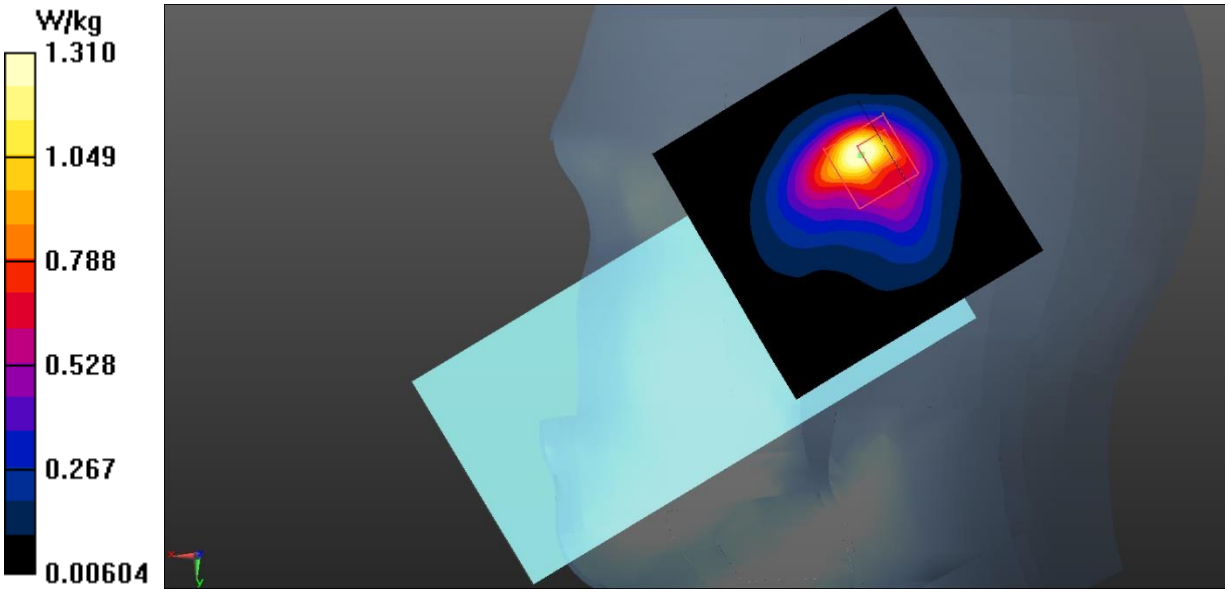


Fig.33 LTE Band 38 Head

LTE Band 38 Body
Date: 2024-03-30
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used (interpolated): f = 2595 MHz; σ = 2.001 S/m; ε_r = 39.54; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_TDD (0) Frequency: 2595 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Bottom Side Middle 50RB50/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.907 W/kg

Bottom Side Middle 50RB50/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.28 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 1.27 W/kg
SAR(1 g) = 0.648 W/kg; SAR(10 g) = 0.309 W/kg
Maximum value of SAR (measured) = 0.966 W/kg

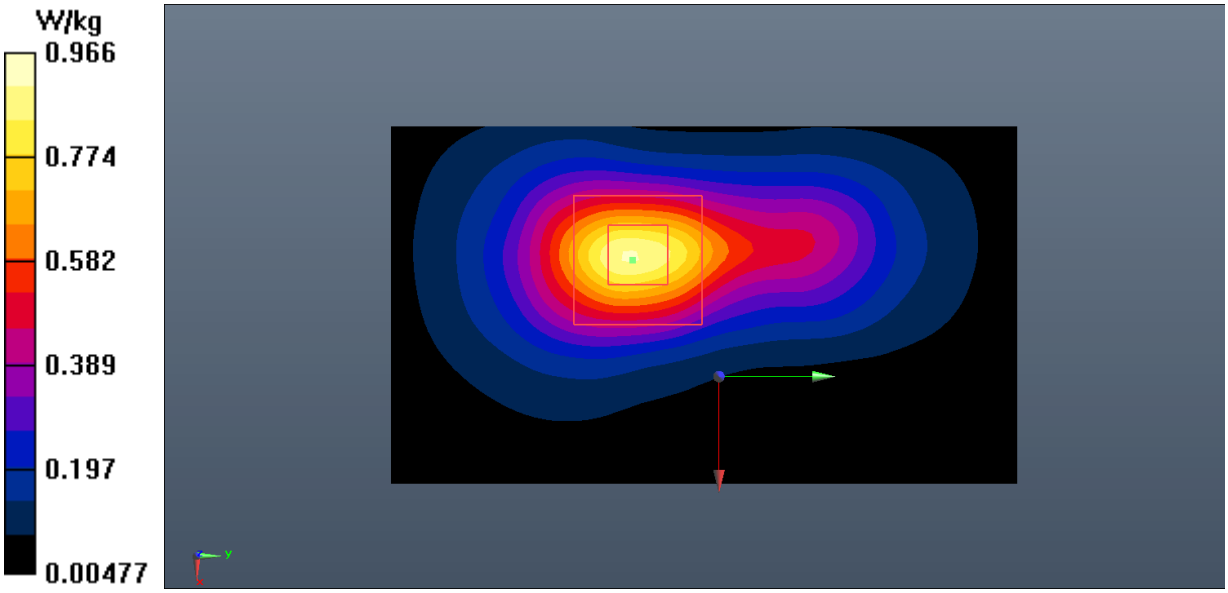


Fig.34 LTE Band 38 Body

LTE Band 41 Head
Date: 2024-03-30
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used (interpolated): f = 2636.5 MHz; σ = 2.049 S/m; ε_r = 38.404; ρ = 1000 kg/m^3
Communication System: UID 0, LTE_TDD (0) Frequency: 2636.5 MHz Duty Cycle: 1:1.58
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Right Cheek 50RB0/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.09 W/kg

Right Cheek 50RB0/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.903 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 1.41 W/kg
SAR(1 g) = 0.585 W/kg; SAR(10 g) = 0.272 W/kg
Maximum value of SAR (measured) = 0.927 W/kg

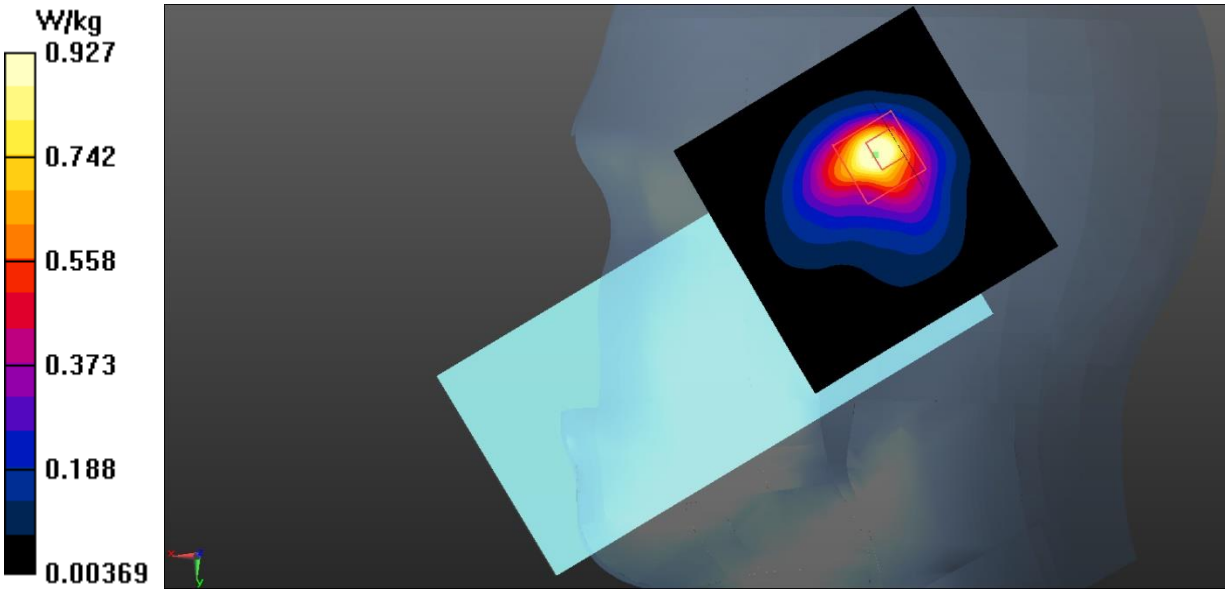


Fig.35 LTE Band 41 Head

LTE Band 41 Body
Date: 2024-03-30
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used (interpolated): f = 2636.5 MHz; σ = 2.049 S/m; ε_r = 38.404; ρ = 1000 kg/m^3
Communication System: UID 0, LTE TDD HP (0) Frequency: 2636.5 MHz Duty Cycle: 1:2.31
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Top Side Middle 1RB0/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.11 W/kg

Top Side Middle 1RB0/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.61 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.54 W/kg
SAR(1 g) = 0.778 W/kg; SAR(10 g) = 0.383 W/kg
Maximum value of SAR (measured) = 1.16 W/kg

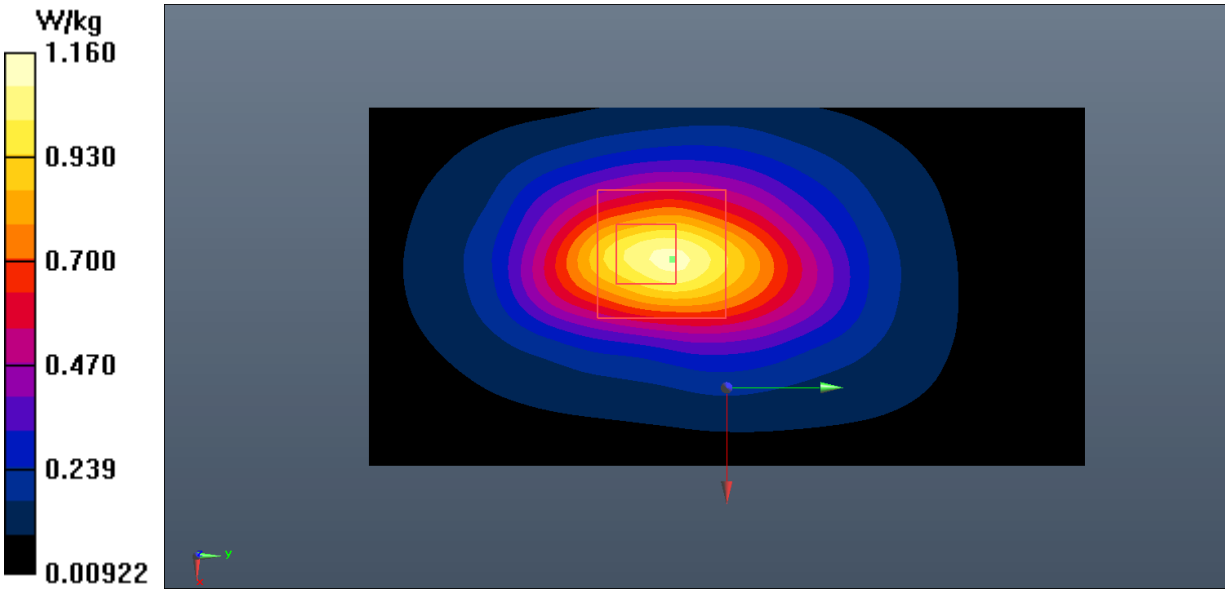


Fig.36 LTE Band 41 Body

NR n2 Head
Date: 2024-03-25
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1860 MHz; σ = 1.398 S/m; ε_r = 39.069; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 1860 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

Right Cheek Low 50@25/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.37 W/kg

Right Cheek Low 50@25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.54 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.73 W/kg
SAR(1 g) = 0.799 W/kg; SAR(10 g) = 0.426 W/kg
Maximum value of SAR (measured) = 1.22 W/kg

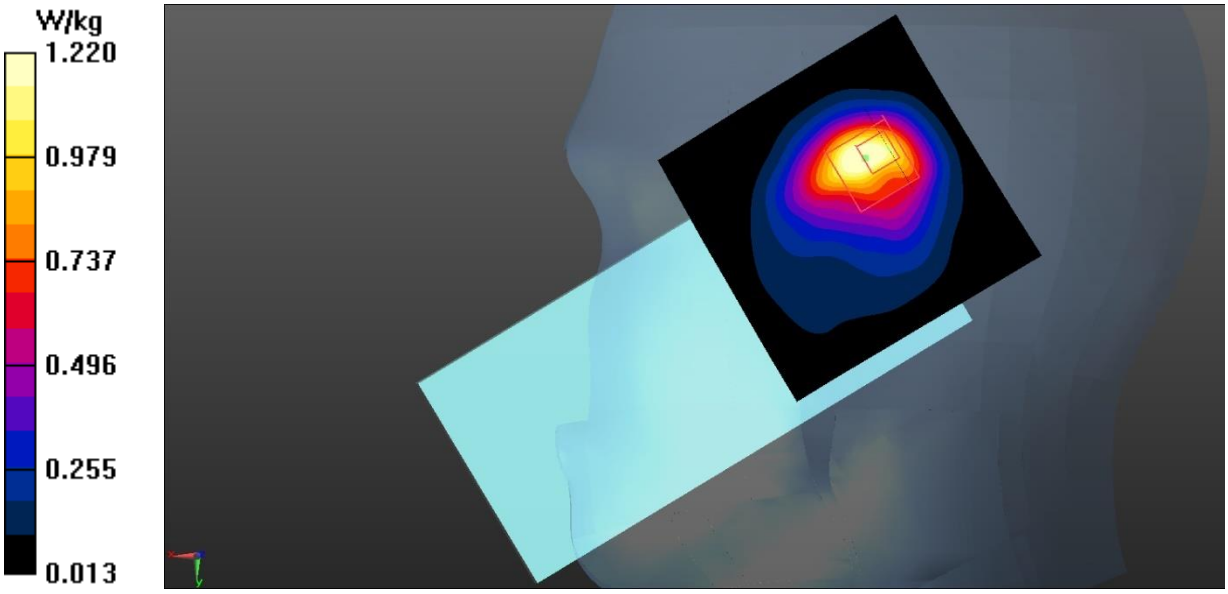


Fig.37 NR n2 Head

NR n2 Body
Date: 2024-03-25
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1880 MHz; σ = 1.415 S/m; ε_r = 38.991; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

Bottom Side Middle 50@25/Area Scan (41x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.05 W/kg

Bottom Side Middle 50@25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.27 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.777 W/kg; SAR(10 g) = 0.428 W/kg
Maximum value of SAR (measured) = 1.09 W/kg

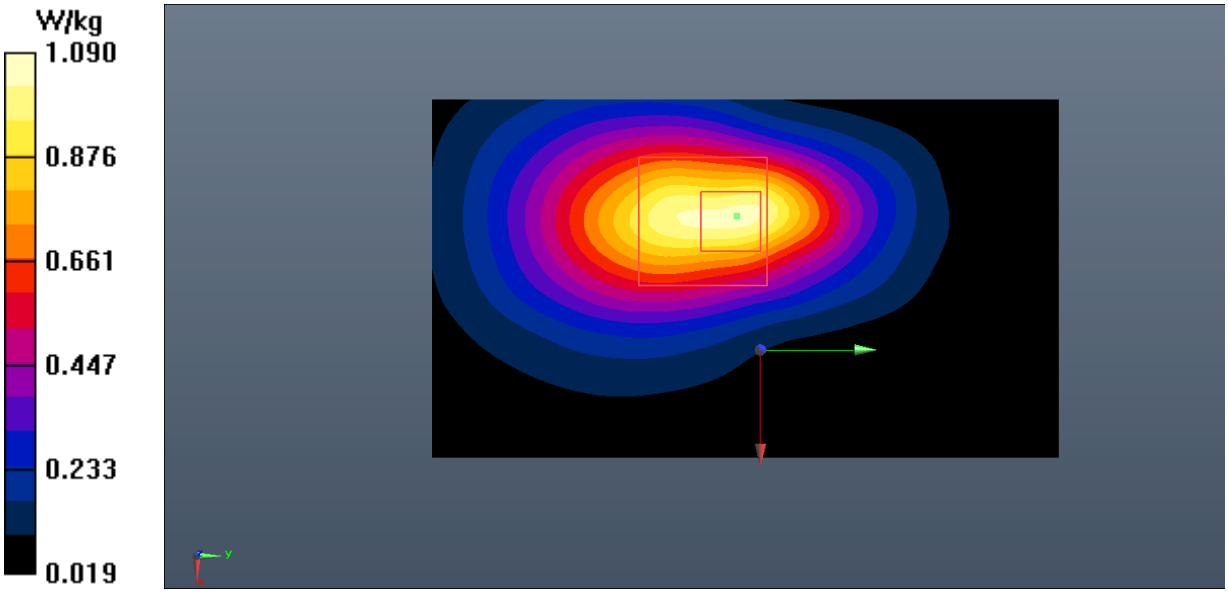


Fig.38 NR n2 Body

NR n7 Head
Date: 2024-04-15
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used: f = 2550 MHz; σ = 1.929 S/m; ε_r = 38.253; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 2550 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

Right Cheek High 50@25/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.07 W/kg

Right Cheek High 50@25/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.312 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.92 W/kg
SAR(1 g) = 0.827 W/kg; SAR(10 g) = 0.373 W/kg
Maximum value of SAR (measured) = 1.11 W/kg

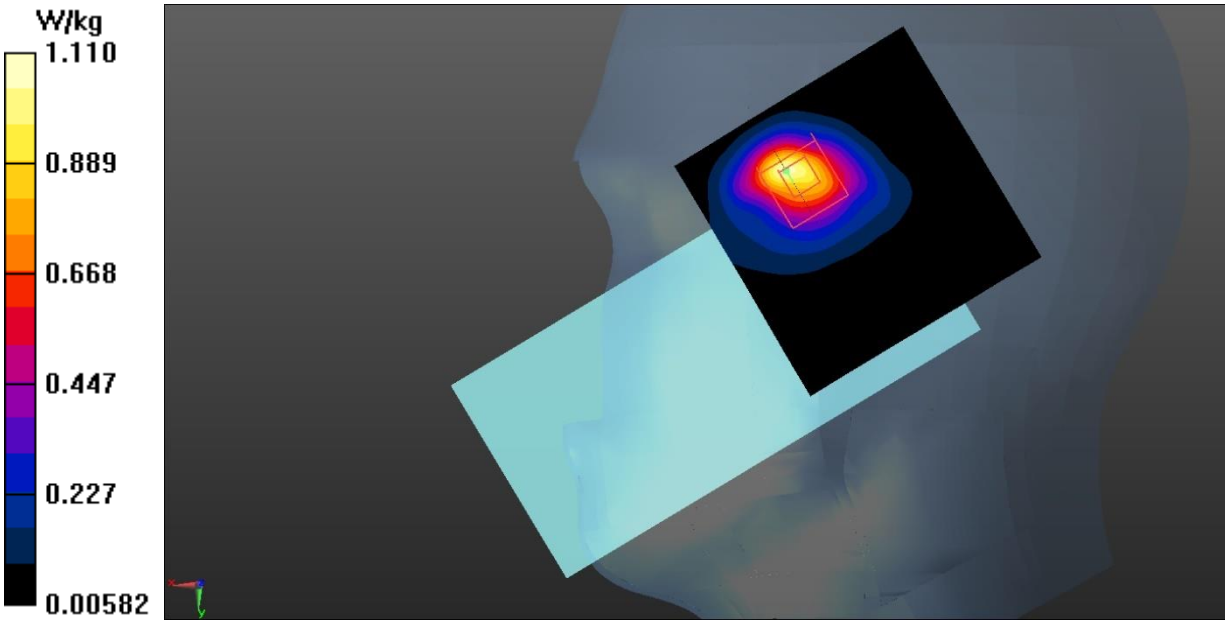


Fig.39 NR n7 Head

NR n7 Body
Date: 2024-04-15
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used (interpolated): f = 2535 MHz; σ = 1.911 S/m; ε_r = 38.303; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 2535 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

Top Side Middle 50@25/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.837 W/kg

Top Side Middle 50@25/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.93 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 0.627 W/kg; SAR(10 g) = 0.290 W/kg
Maximum value of SAR (measured) = 0.974 W/kg

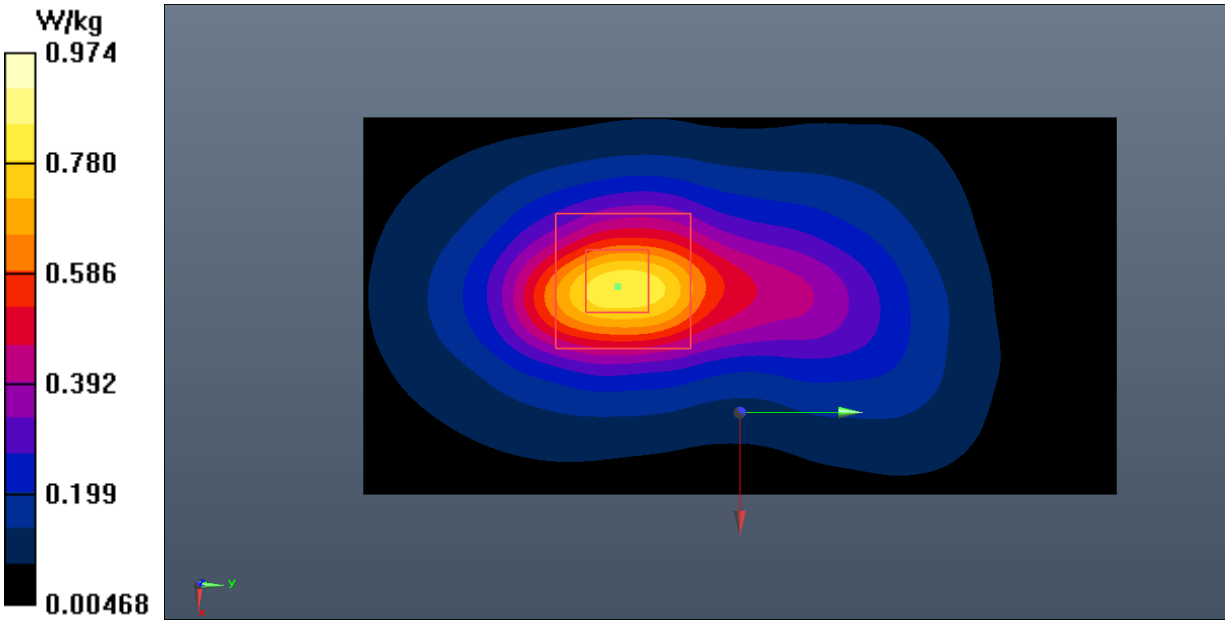


Fig.40 NR n7 Body

NR n12 Head
Date: 2024-03-29
Electronics: DAE4 Sn1527
Medium: Head 750MHz
Medium parameters used: f = 708 MHz; σ = 0.876 S/m; ε_r = 41.655; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 707.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Right Cheek Middle 36@18/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.353 W/kg

Right Cheek Middle 36@18/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.863 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.576 W/kg
SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.158 W/kg
Maximum value of SAR (measured) = 0.313 W/kg

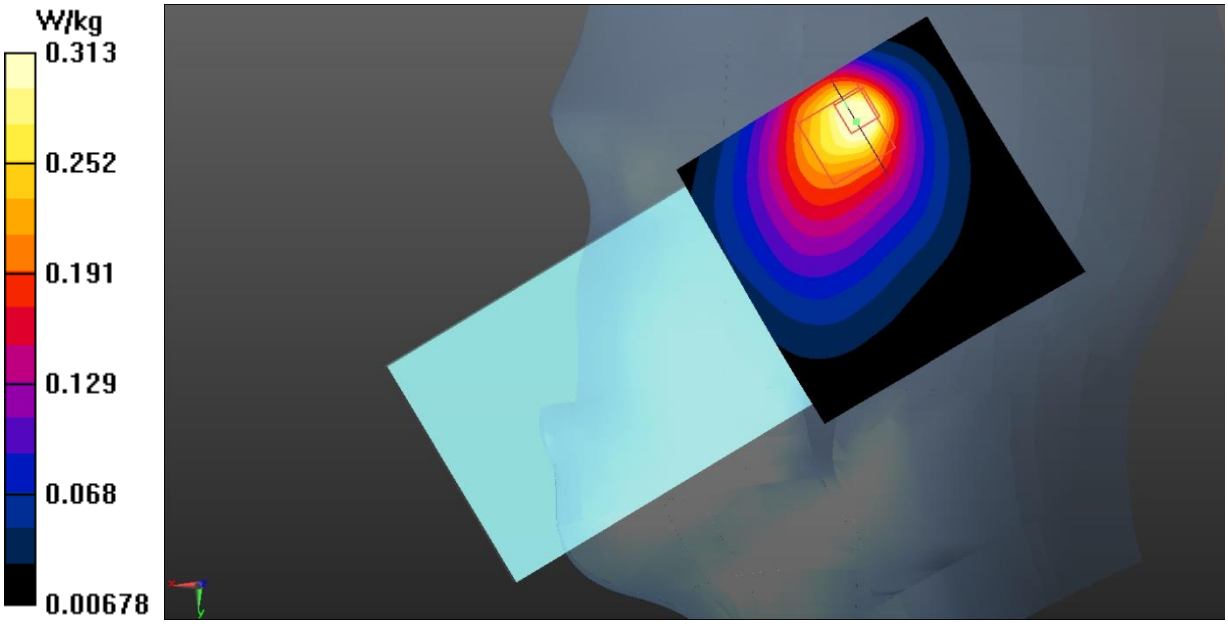


Fig.41 NR n12 Head

NR n12 Body
Date: 2024-03-29
Electronics: DAE4 Sn1527
Medium: Head 750MHz
Medium parameters used: f = 708 MHz; σ = 0.876 S/m; ε_r = 41.655; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 707.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Rear Side Middle 36@18/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.263 W/kg

Rear Side Middle 36@18/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.36 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.329 W/kg
SAR(1 g) = 0.208 W/kg; SAR(10 g) = 0.141 W/kg
Maximum value of SAR (measured) = 0.265 W/kg

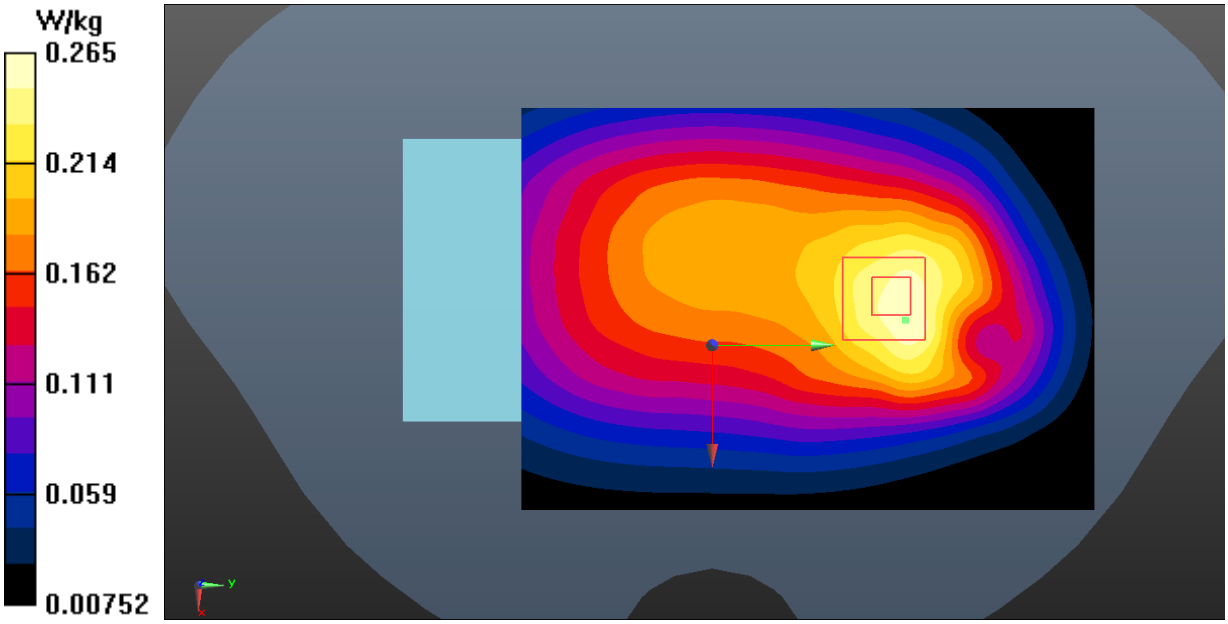


Fig.42 NR n12 Body

NR n26 Head
Date: 2024-04-01
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used: f = 832 MHz; σ = 0.913 S/m; ε_r = 40.815; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 831.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Right Cheek 50@25/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.704 W/kg

Right Cheek 50@25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.64 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.526 W/kg; SAR(10 g) = 0.320 W/kg
Maximum value of SAR (measured) = 0.592 W/kg

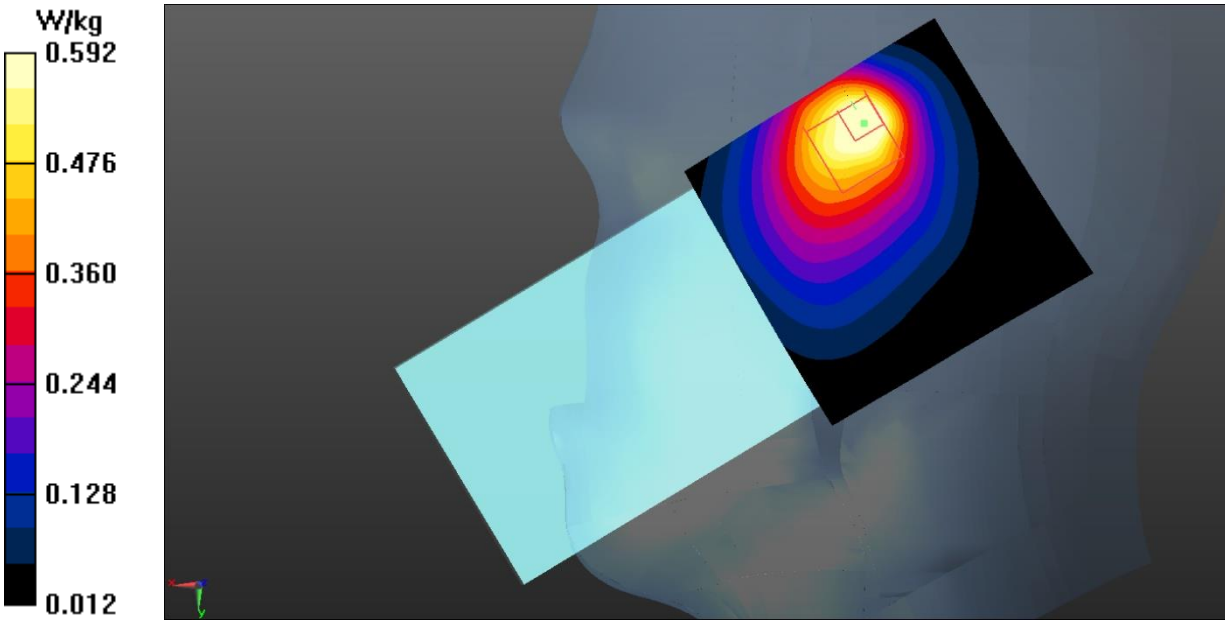


Fig.43 NR n26 Head

NR n26 Body
Date: 2024-04-01
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used: f = 832 MHz; σ = 0.913 S/m; ε_r = 40.815; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 831.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

Rear Side Middle 50@25/Area Scan (71x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.323 W/kg

Rear Side Middle 50@25/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.01 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.390 W/kg
SAR(1 g) = 0.241 W/kg; SAR(10 g) = 0.155 W/kg
Maximum value of SAR (measured) = 0.309 W/kg

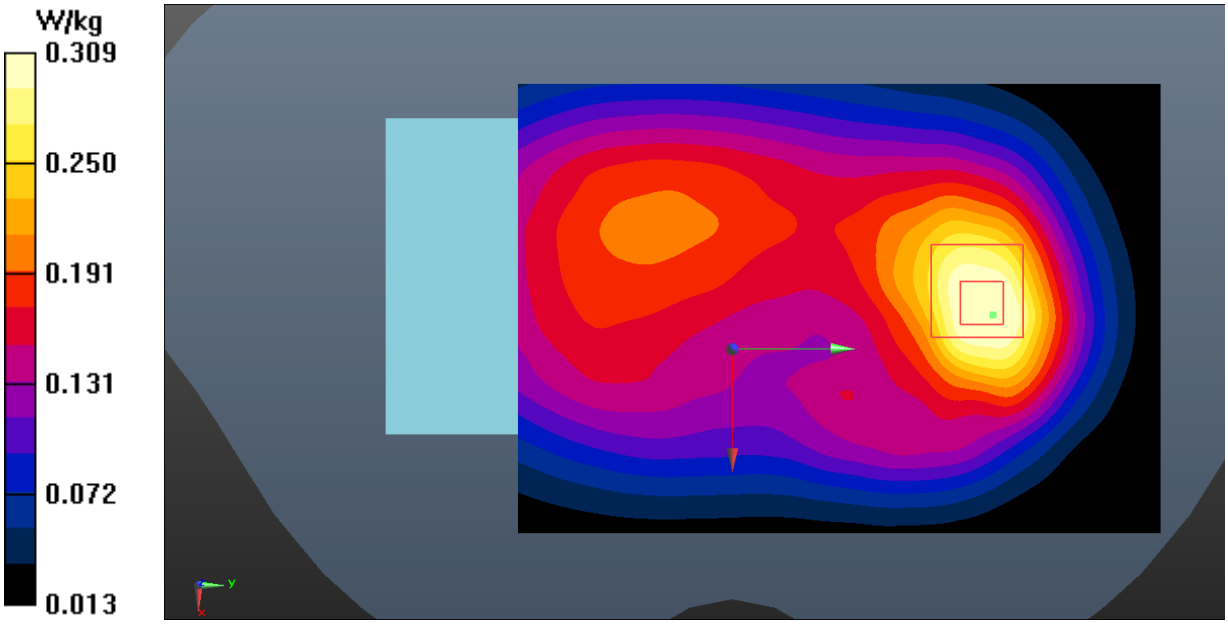


Fig.44 NR n26 Body

NR n66 Head
Date: 2024-04-02
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used: f = 1760 MHz; σ = 1.372 S/m; ε_r = 40.533; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 1760 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

Right Cheek High 108@54/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.01 W/kg

Right Cheek High 108@54/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.077 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 2.04 W/kg
SAR(1 g) = 0.901 W/kg; SAR(10 g) = 0.417 W/kg
Maximum value of SAR (measured) = 1.22 W/kg

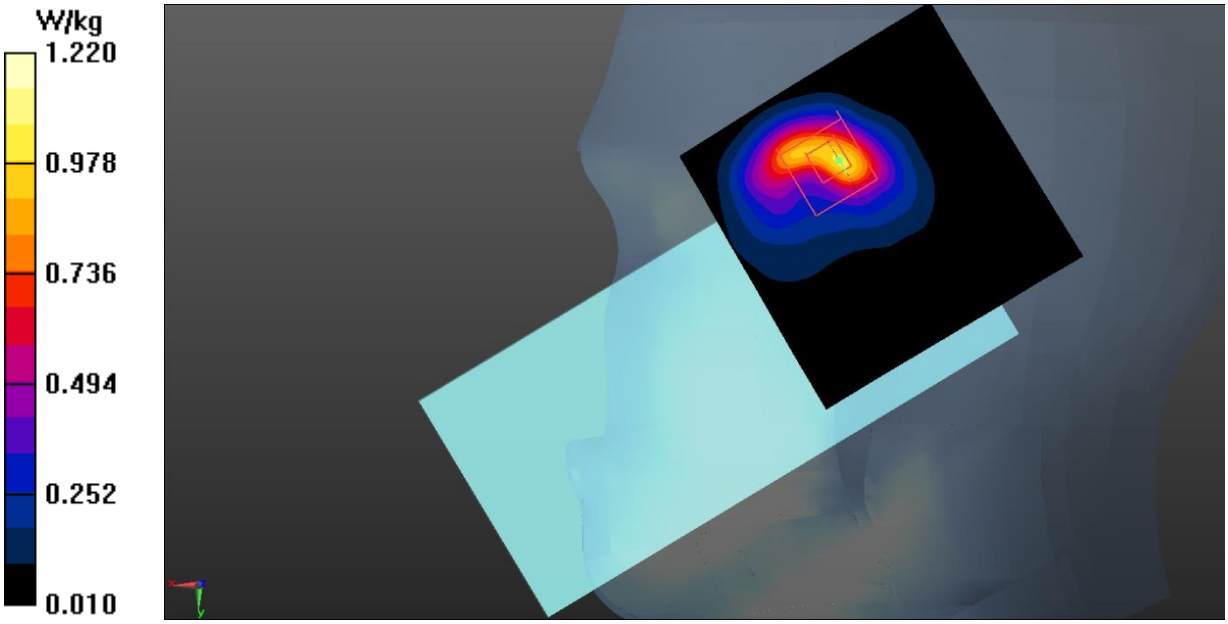


Fig.45 NR n66 Head

NR n66 Body
Date: 2024-04-02
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used: f = 1760 MHz; σ = 1.372 S/m; ε_r = 40.533; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 1760 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

Top Side High 108@54/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.04 W/kg

Top Side High 108@54/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.31 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 0.835 W/kg; SAR(10 g) = 0.445 W/kg
Maximum value of SAR (measured) = 1.17 W/kg

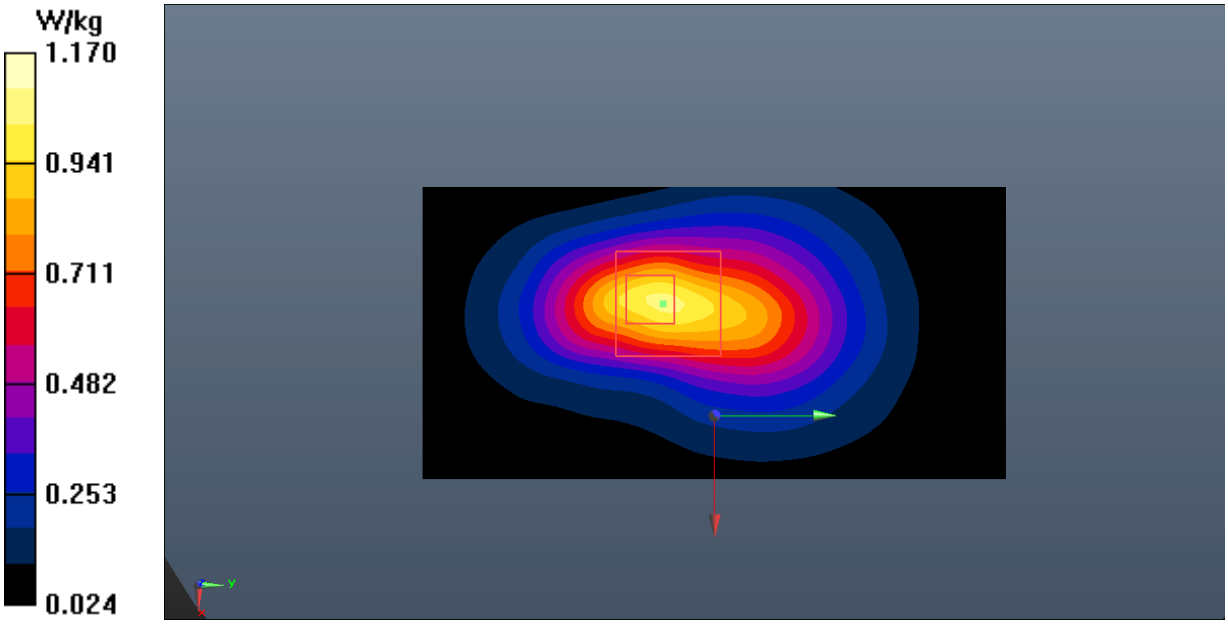


Fig.46 NR n66 Body

NR n38 Head
Date: 2024-04-15
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used: f = 2590 MHz; σ = 1.976 S/m; ε_r = 38.121; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 2590 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Right Cheek Low 50@25/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.66 W/kg

Right Cheek Low 50@25/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.55 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.32 W/kg
SAR(1 g) = 0.962 W/kg; SAR(10 g) = 0.452 W/kg
Maximum value of SAR (measured) = 1.52 W/kg

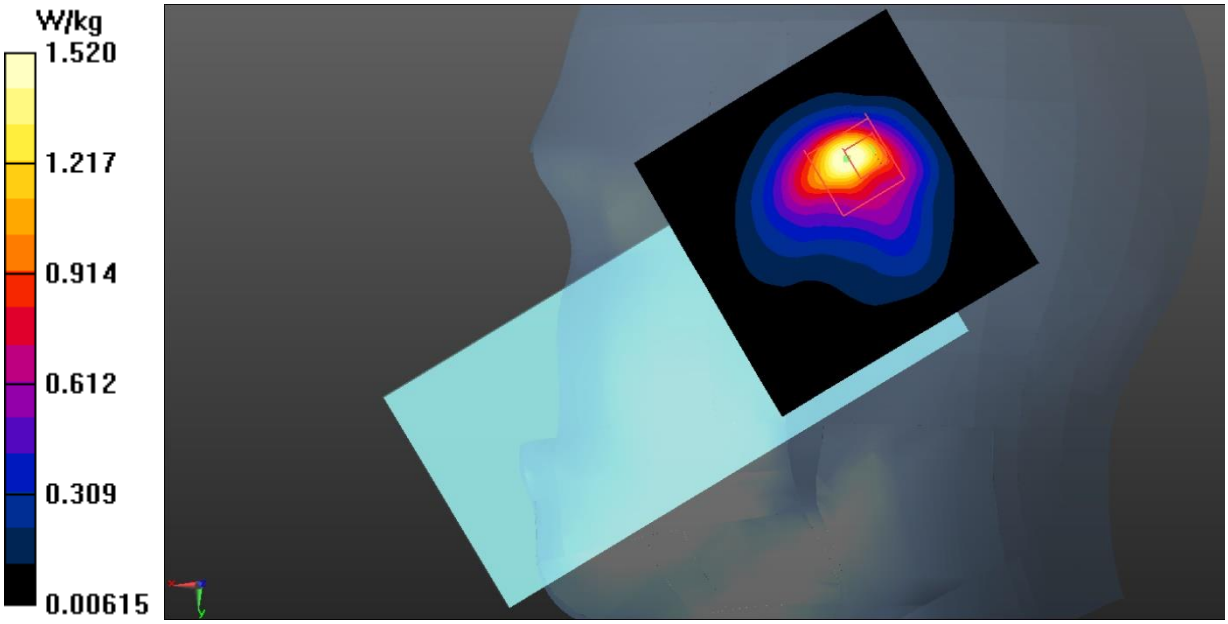


Fig.47 NR n38 Head

NR n38 Body
Date: 2024-04-15
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used (interpolated): f = 2595 MHz; σ = 1.982 S/m; ε_r = 38.104; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 2595 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Top Side Middle 50@25/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.932 W/kg

Top Side Middle 50@25/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.72 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.38 W/kg
SAR(1 g) = 0.679 W/kg; SAR(10 g) = 0.331 W/kg
Maximum value of SAR (measured) = 1.03 W/kg

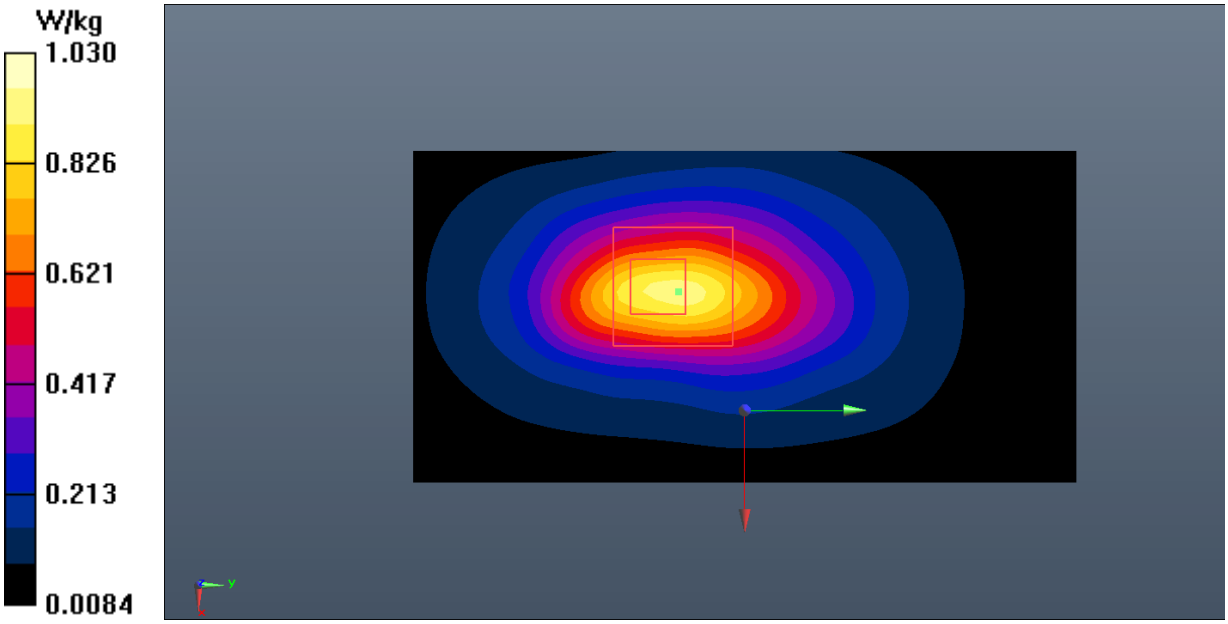


Fig.48 NR n38 Body

NR n41 Head
Date: 2024-04-15
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.98 S/m; ε_r = 38.111; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 2592.99 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Right Cheek Middle 135@67/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.22 W/kg

Right Cheek Middle 135@67/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.73 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.68 W/kg
SAR(1 g) = 0.704 W/kg; SAR(10 g) = 0.335 W/kg
Maximum value of SAR (measured) = 1.10 W/kg

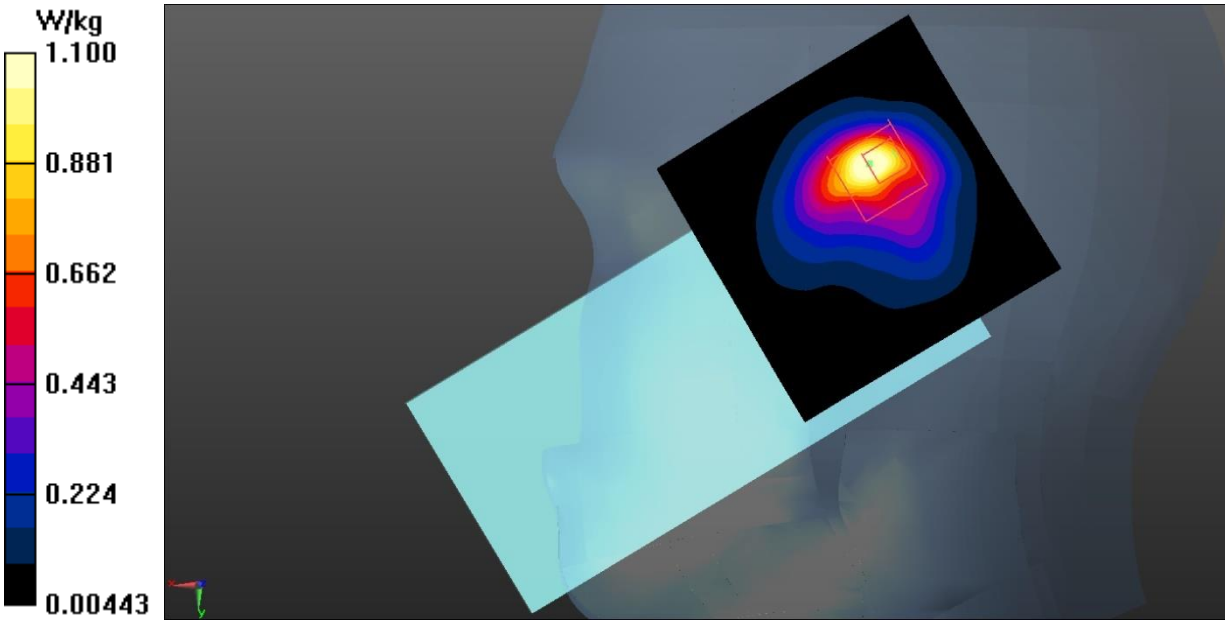


Fig.49 NR n41 Head

NR n41 Body
Date: 2024-04-15
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used (interpolated): f = 2592.99 MHz; σ = 1.98 S/m; ε_r = 38.111; ρ = 1000 kg/m^3
Communication System: UID 0, NR (0) Frequency: 2592.99 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.25, 7.25, 7.25)

Top Side Middle 135@67/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.02 W/kg

Top Side Middle 135@67/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.24 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.670 W/kg; SAR(10 g) = 0.328 W/kg
Maximum value of SAR (measured) = 1.01 W/kg

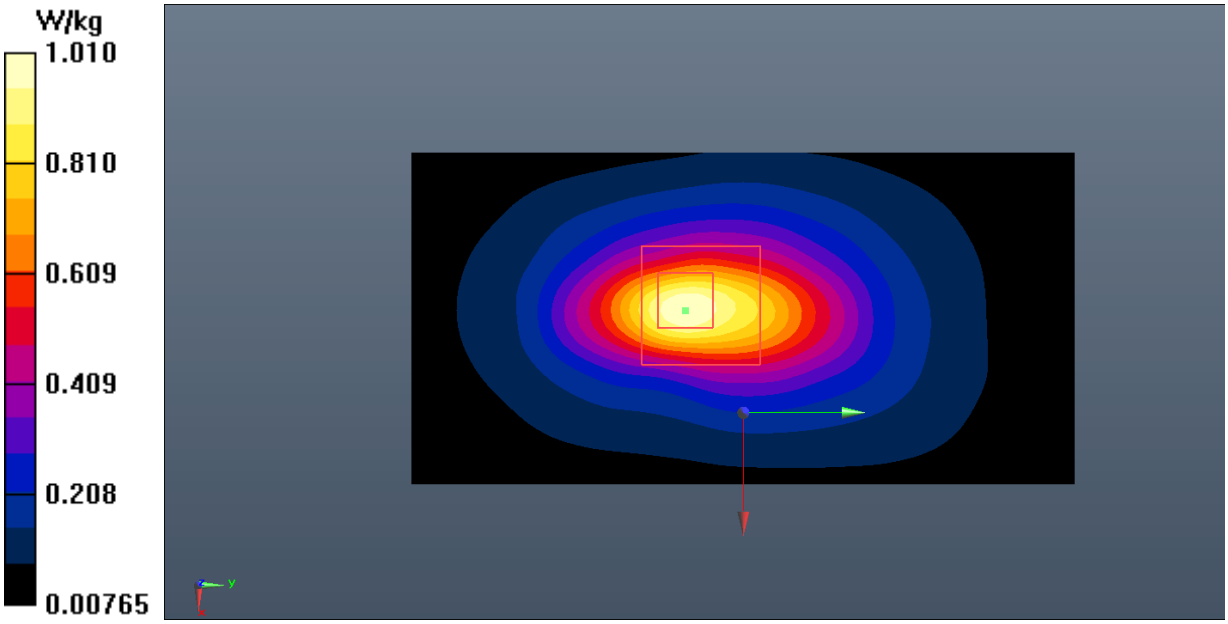


Fig.50 NR n41 Body

Bluetooth Head
Date: 2024-04-18
Electronics: DAE4 Sn1527
Medium: Head 2450MHz
Medium parameters used: f = 2480 MHz; σ = 1.868 S/m; ε_r = 38.386; ρ = 1000 kg/m^3
Communication System: UID 0, BT (0) Frequency: 2480 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

Left Cheek Ch.78/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.709 W/kg

Left Cheek Ch.78/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.971 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.834 W/kg
SAR(1 g) = 0.355 W/kg; SAR(10 g) = 0.189 W/kg
Maximum value of SAR (measured) = 0.538 W/kg

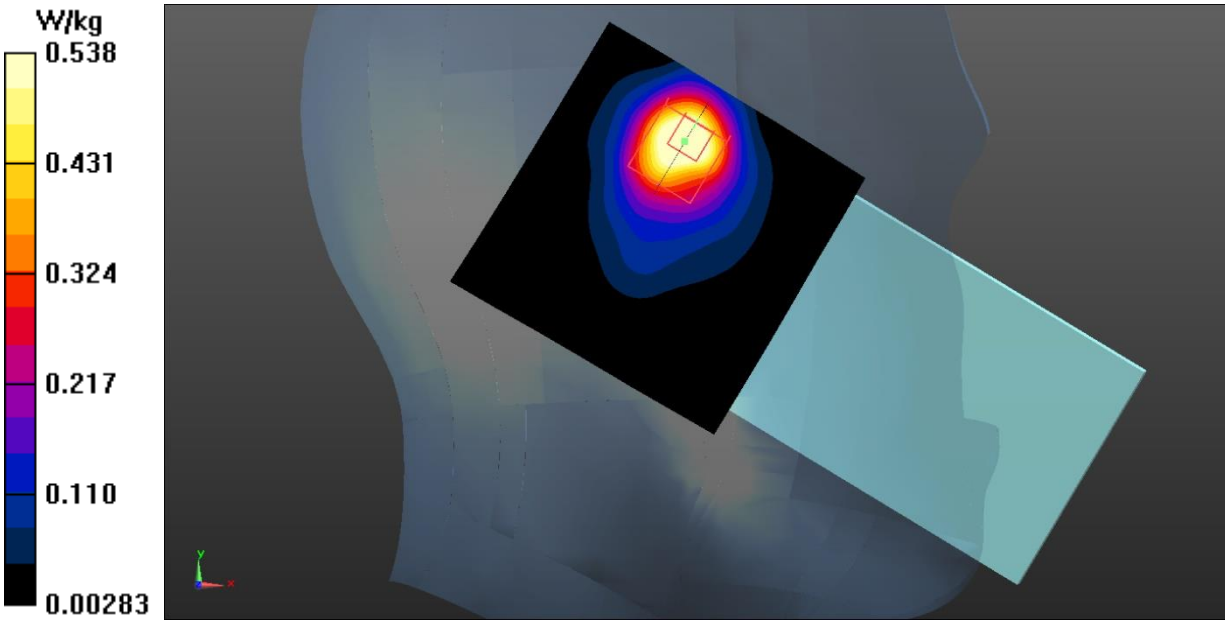


Fig.51 Bluetooth Head

Bluetooth Body
Date: 2024-04-18
Electronics: DAE4 Sn1527
Medium: Head 2450MHz
Medium parameters used: f = 2480 MHz; σ = 1.868 S/m; ε_r = 38.386; ρ = 1000 kg/m^3
Communication System: UID 0, BT (0) Frequency: 2480 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

Rear Side Ch.78/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.217 W/kg

Rear Side Ch.78/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.692 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.249 W/kg
SAR(1 g) = 0.133 W/kg; SAR(10 g) = 0.071 W/kg
Maximum value of SAR (measured) = 0.187 W/kg

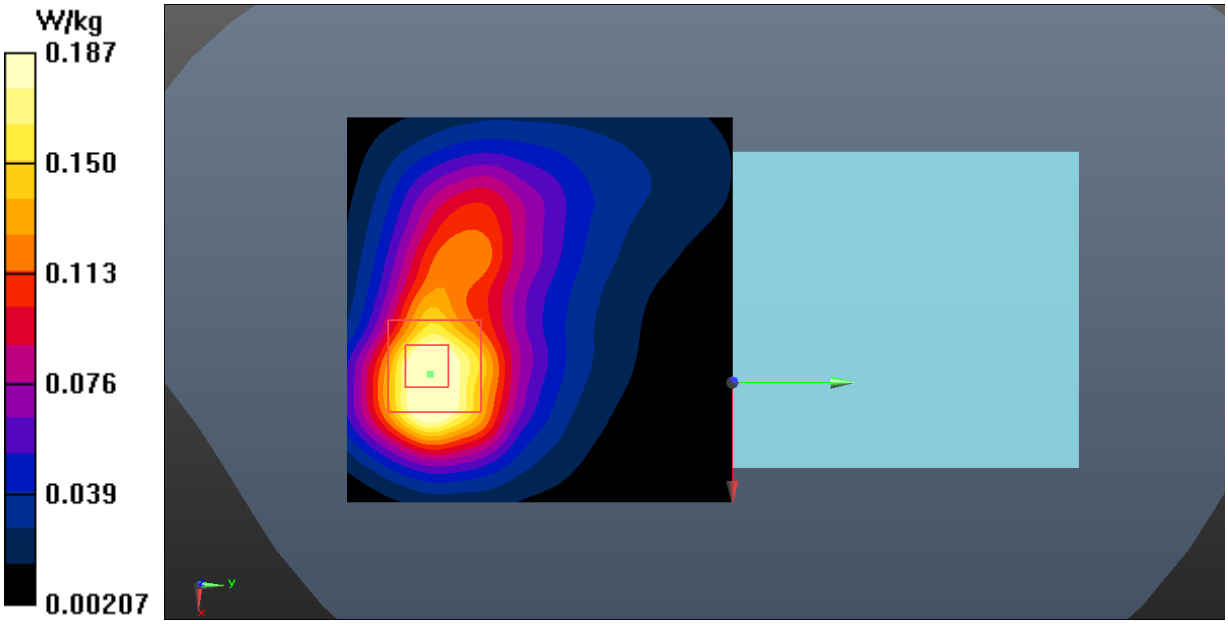


Fig.52 Bluetooth Body

WLAN 2.4GHz Head
Date: 2024-04-04
Electronics: DAE4 Sn1527
Medium: Head 2450MHz
Medium parameters used: f = 2462 MHz; σ = 1.83 S/m; ε_r = 38.742; ρ = 1000 kg/m^3
Communication System: UID 0, WLAN (0) Frequency: 2462 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

Left Cheek Ch.11/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.31 W/kg

Left Cheek Ch.11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.36 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 0.775 W/kg; SAR(10 g) = 0.392 W/kg
Maximum value of SAR (measured) = 0.911 W/kg

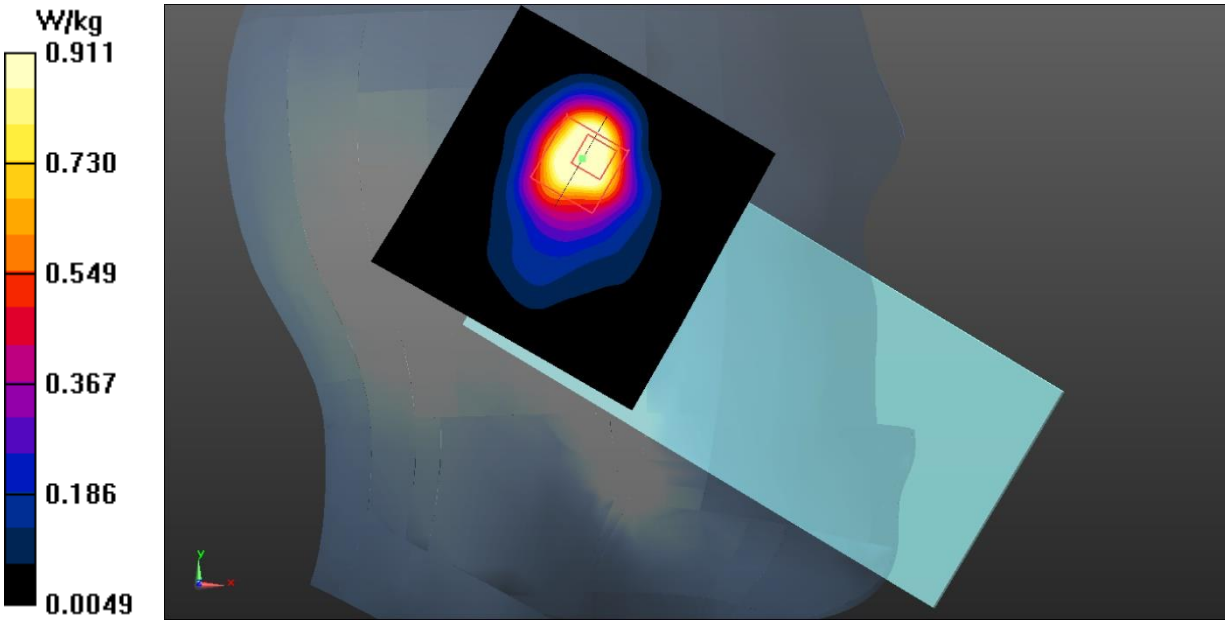


Fig.53 WLAN 2.4GHz Head

WLAN 2.4GHz Body
Date: 2024-04-04
Electronics: DAE4 Sn1527
Medium: Head 2450MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.801 S/m; ε_r = 38.825; ρ = 1000 kg/m^3
Communication System: UID 0, WLAN (0) Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

Rear Side Ch.6/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.560 W/kg

Rear Side Ch.6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.582 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.661 W/kg
SAR(1 g) = 0.341 W/kg; SAR(10 g) = 0.175 W/kg
Maximum value of SAR (measured) = 0.499 W/kg

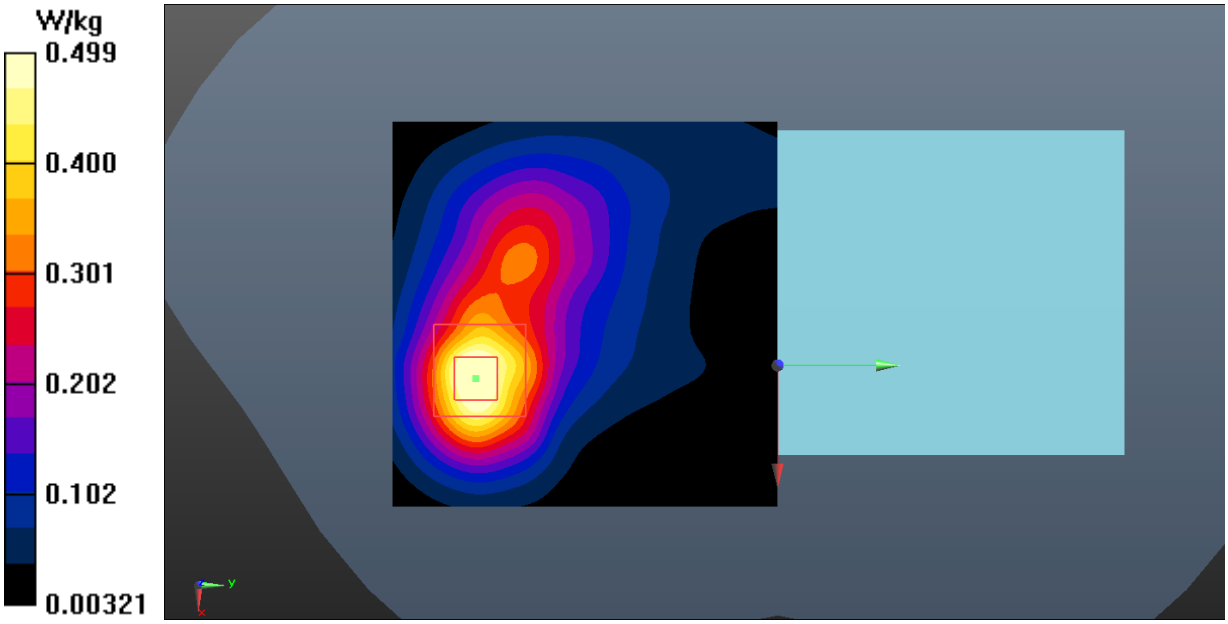


Fig.54 WLAN 2.4GHz Body

WLAN 5GHz Head
Date: 2024-04-11
Electronics: DAE4 Sn1527
Medium: Head 5600MHz
Medium parameters used: f = 5610 MHz; σ = 4.989 S/m; ε_r = 36.069; ρ = 1000 kg/m^3
Communication System: UID 0, WLAN 5G (0) Frequency: 5610 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (4.71, 4.71, 4.71)

Left Tilt Ch.122/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.403 W/kg

Left Tilt Ch.122/Zoom Scan (8x8x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 5.213 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.904 W/kg
SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.050 W/kg
Maximum value of SAR (measured) = 0.416 W/kg

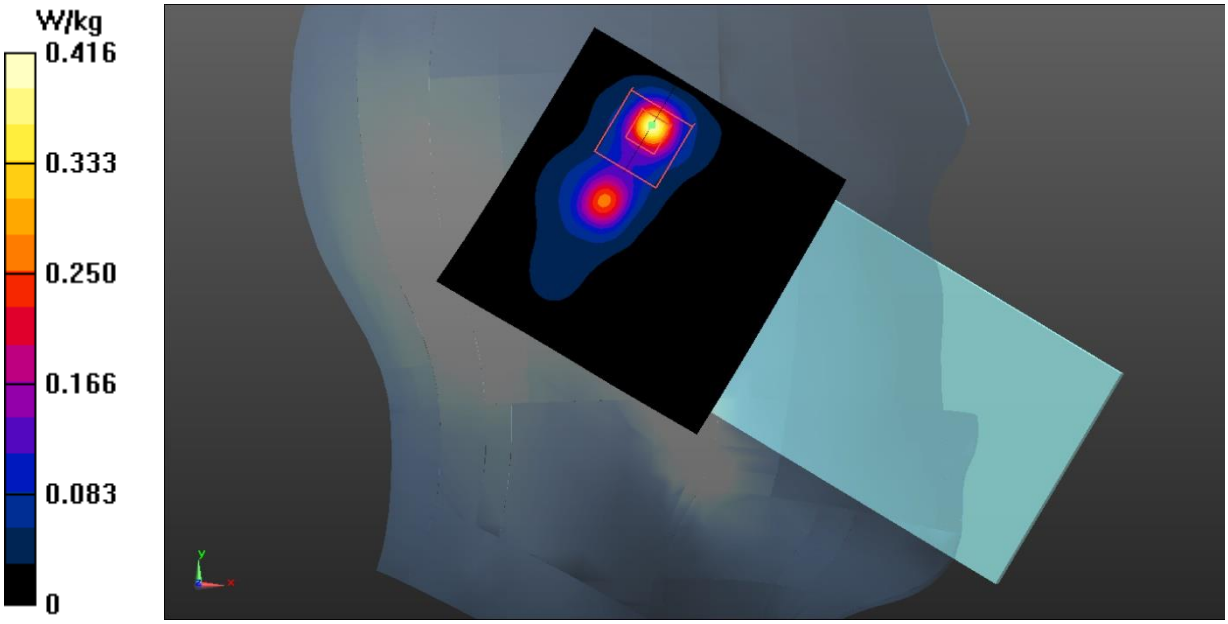


Fig.55 WLAN 5GHz Head

WLAN 5GHz Body
Date: 2024-04-11
Electronics: DAE4 Sn1527
Medium: Head 5750MHz
Medium parameters used (interpolated): f = 5775 MHz; σ = 5.345 S/m; ε_r = 34.885; ρ = 1000 kg/m^3
Communication System: UID 0, WLAN 5G (0) Frequency: 5775 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (4.78, 4.78, 4.78)

Top Side Ch.155/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.232 W/kg

Top Side Ch.155/Zoom Scan (8x8x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.533 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.553 W/kg
SAR(1 g) = 0.142 W/kg; SAR(10 g) = 0.053 W/kg
Maximum value of SAR (measured) = 0.244 W/kg

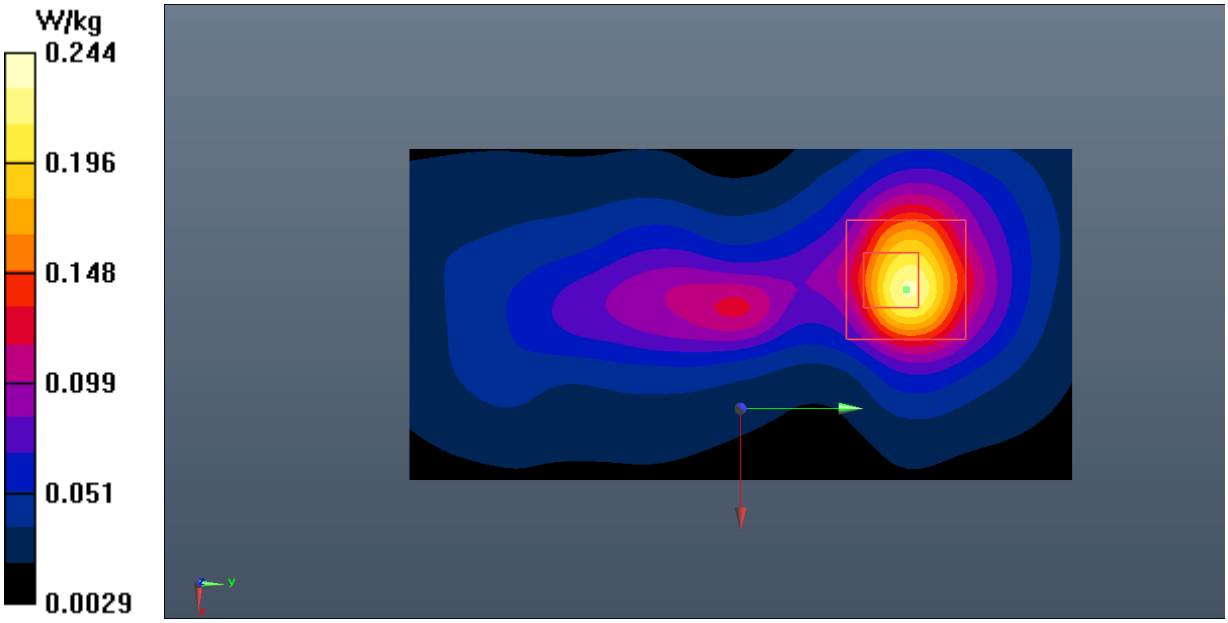


Fig.56 WLAN 5GHz Body

WLAN 5GHz Extremity
Date: 2024-04-11
Electronics: DAE4 Sn1527
Medium: Head 5600MHz
Medium parameters used: f = 5610 MHz; σ = 4.989 S/m; ε_r = 36.069; ρ = 1000 kg/m^3
Communication System: UID 0, WLAN 5G (0) Frequency: 5610 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (4.71, 4.71, 4.71)

Top Side Ch.122/Area Scan (61x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.33 W/kg

Top Side Ch.122/Zoom Scan (8x8x21)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 10.23 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 6.08 W/kg
SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.211 W/kg
Maximum value of SAR (measured) = 2.27 W/kg

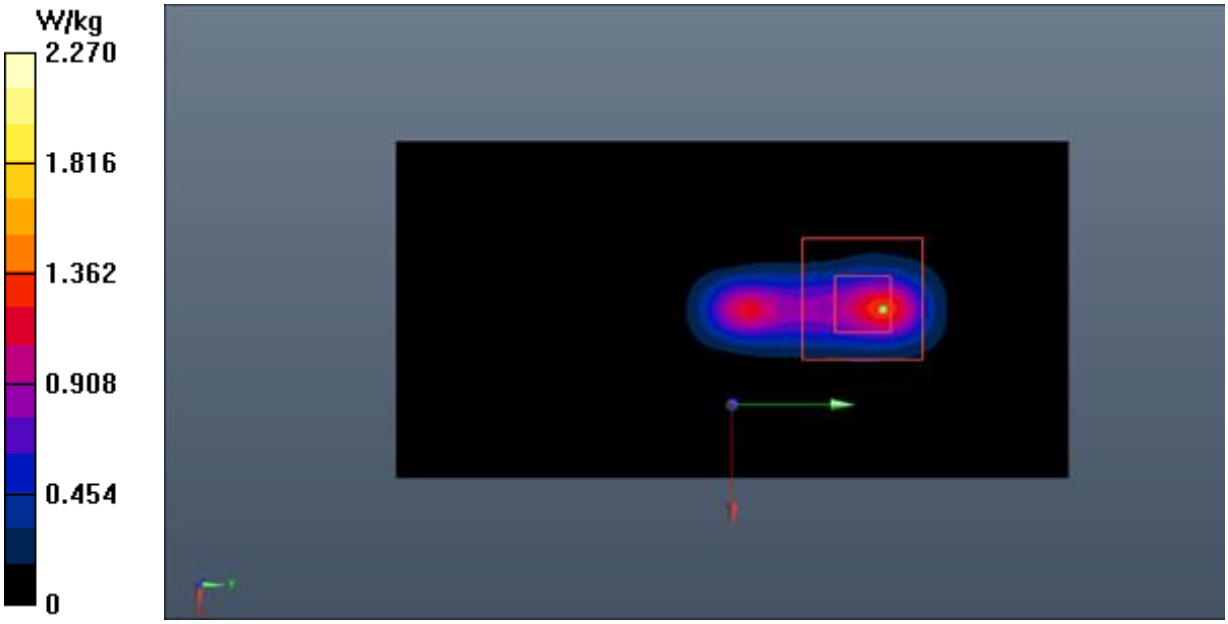


Fig.57 WLAN 5GHz Extremity

ANNEX B: SystemVerification Results

750MHz

Date: 2024-03-29

Electronics: DAE4 Sn1527

Medium: Head 750MHz

Medium parameters used: f = 750 MHz; σ = 0.903 S/m; ε_r = 41.151; ρ = 1000 kg/m^3

Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

System Validation/Area Scan (81x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 62.159 V/m; Power Drift = 0.05 dB

SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.41 W/kg

Maximum value of SAR (interpolated) = 2.85 W/kg

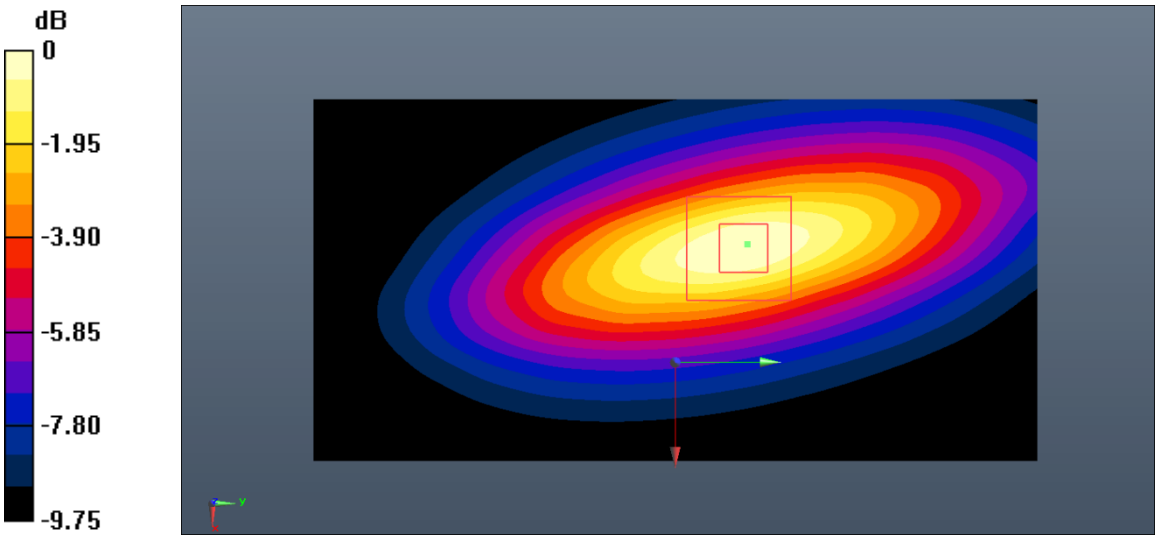
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 62.159 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 3.29 W/kg

SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.43 W/kg

Maximum value of SAR (measured) = 2.88 W/kg



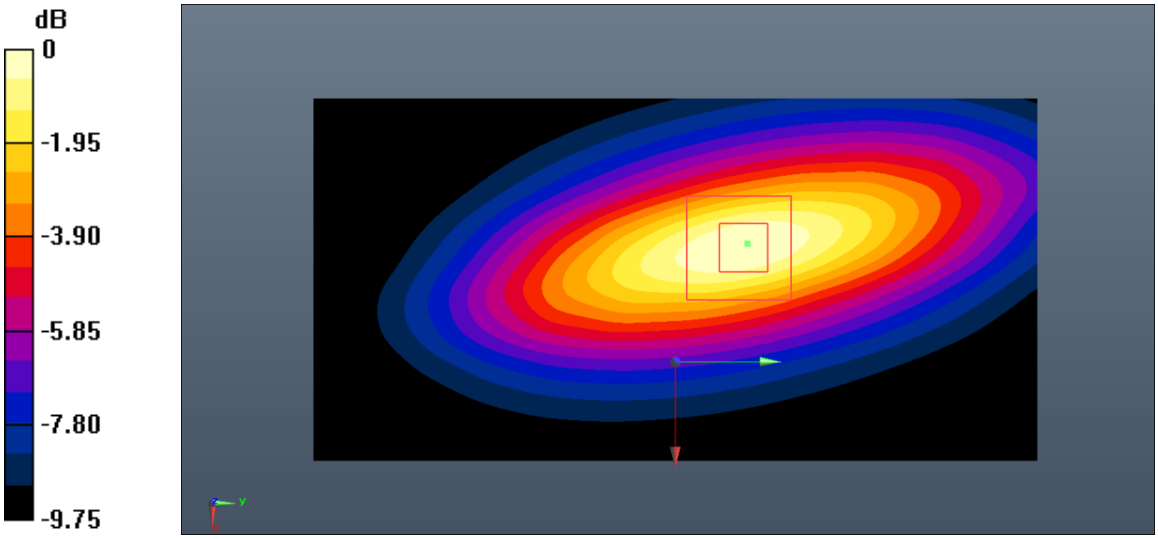
0 dB = 2.88 W/kg = 4.59 dB W/kg

Fig.B.1. Validation 750MHz 250mW

750MHz
Date: 2024-03-31
Electronics: DAE4 Sn1527
Medium: Head 750MHz
Medium parameters used: f = 750 MHz; σ = 0.881 S/m; ε_r = 42.427; ρ = 1000 kg/m^3
Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

System Validation/Area Scan (81x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 60.784 V/m; Power Drift = -0.12 dB
SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.40 W/kg
Maximum value of SAR (interpolated) = 2.79 W/kg

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 60.784 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 3.07 W/kg
SAR(1 g) = 2.06 W/kg; SAR(10 g) = 1.39 W/kg
Maximum value of SAR (measured) = 2.77 W/kg



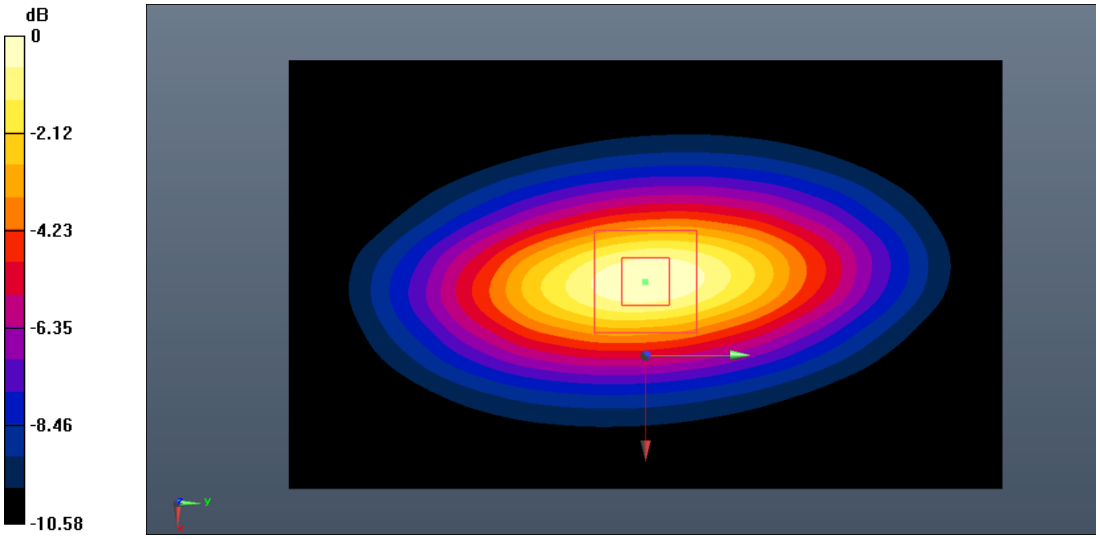
0 dB = 2.77 W/kg = 4.42 dB W/kg

Fig.B.2. Validation 750MHz 250mW

835MHz
Date: 2024-04-01
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used: f = 835 MHz; σ = 0.916 S/m; εr = 40.779; ρ = 1000 kg/m^3
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

System Validation/Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 65.409 V/m; Power Drift = 0.06 dB
SAR(1 g) = 2.43 W/kg; SAR(10 g) = 1.59 W/kg
Maximum value of SAR (interpolated) = 3.68 W/kg

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 65.409 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 4.45 W/kg
SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.63 W/kg
Maximum value of SAR (measured) = 3.71 W/kg



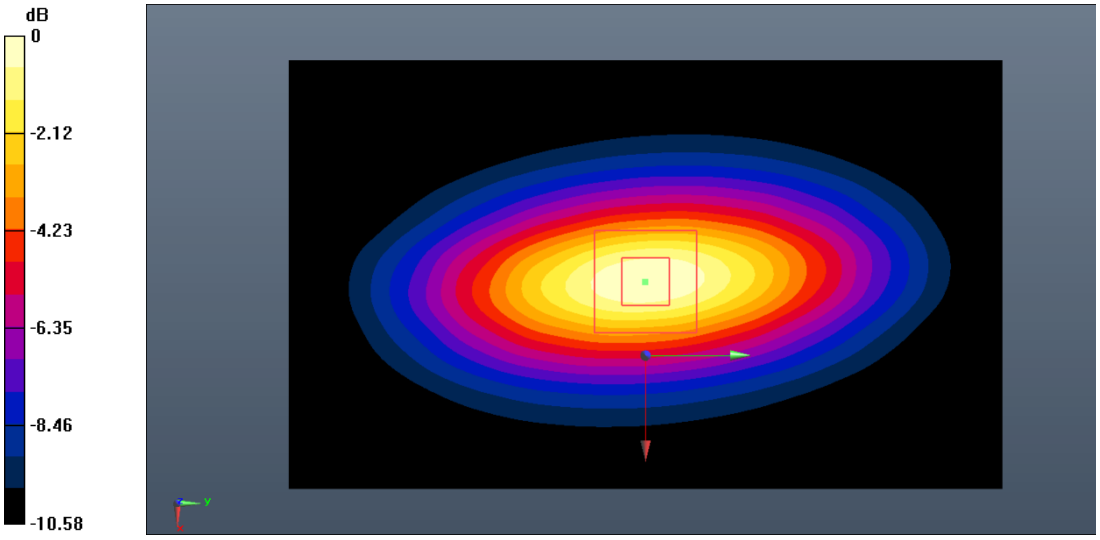
0 dB = 3.71 W/kg = 5.69 dB W/kg

Fig.B.3. Validation 835MHz 250mW

835MHz
Date: 2024-04-10
Electronics: DAE4 Sn1527
Medium: Head 835MHz
Medium parameters used: f = 835 MHz; σ = 0.905 S/m; εr = 41.093; ρ = 1000 kg/m^3
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (9.96, 9.96, 9.96)

System Validation/Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 64.748 V/m; Power Drift = -0.09 dB
SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.61 W/kg
Maximum value of SAR (interpolated) = 3.66 W/kg

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 64.748 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 4.39 W/kg
SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.58 W/kg
Maximum value of SAR (measured) = 3.64 W/kg



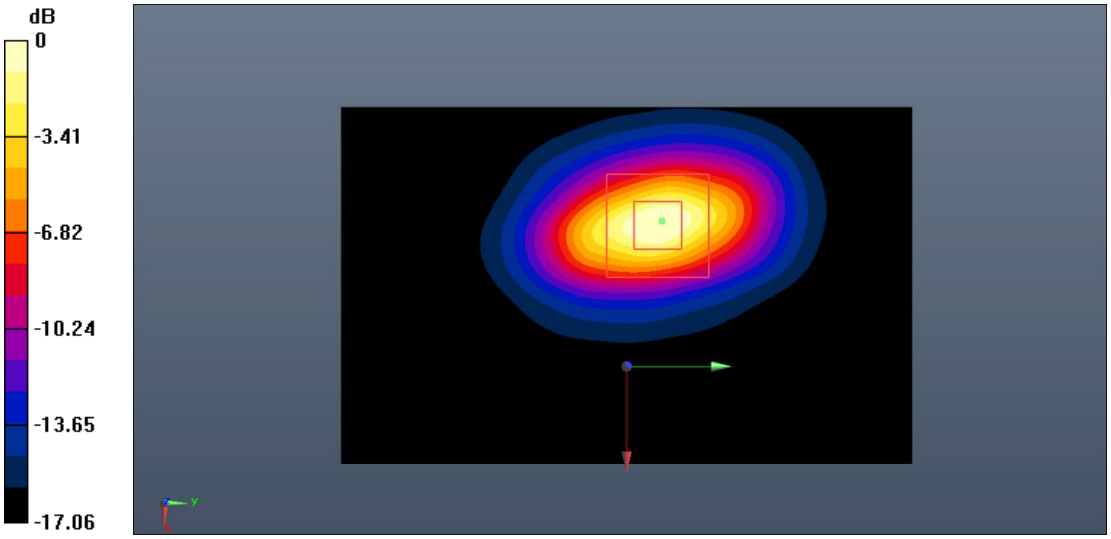
0 dB = 3.64 W/kg = 5.61 dB W/kg

Fig.B.4. Validation 835MHz 250mW

1750MHz
Date: 2024-03-26
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used: f = 1750 MHz; σ = 1.388 S/m; ε_r = 39.264; ρ = 1000 kg/m^3
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

System Validation/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 79.945 V/m; Power Drift = 0.11 dB
SAR(1 g) = 9.18 W/kg; SAR(10 g) = 4.92 W/kg
Maximum value of SAR (interpolated) = 11.4 W/kg

System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 79.945 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 22.5 W/kg
SAR(1 g) = 9.33 W/kg; SAR(10 g) = 5.00 W/kg
Maximum value of SAR (measured) = 11.6 W/kg



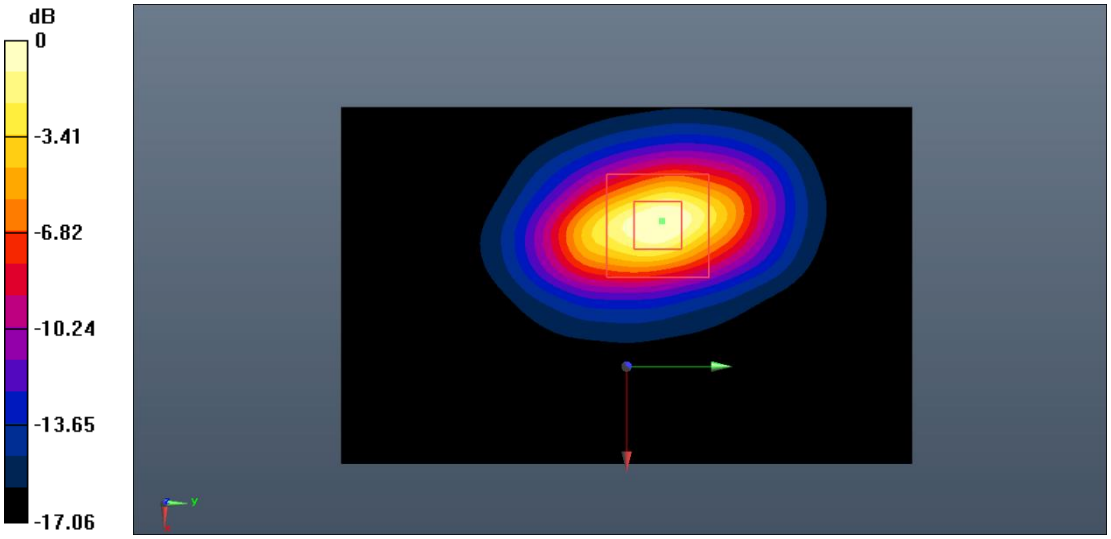
0 dB = 11.6 W/kg = 10.64 dB W/kg

Fig.B.5. Validation 1750MHz 250mW

1750MHz
Date: 2024-04-02
Electronics: DAE4 Sn1527
Medium: Head 1750MHz
Medium parameters used: f = 1750 MHz; σ = 1.363 S/m; ε_r = 40.572; ρ = 1000 kg/m^3
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (8.10, 8.10, 8.10)

System Validation/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 79.778 V/m; Power Drift = -0.11 dB
SAR(1 g) = 8.99 W/kg; SAR(10 g) = 4.95 W/kg
Maximum value of SAR (interpolated) = 11.0 W/kg

System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 79.778 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 20.5 W/kg
SAR(1 g) = 8.96 W/kg; SAR(10 g) = 4.88 W/kg
Maximum value of SAR (measured) = 10.8 W/kg



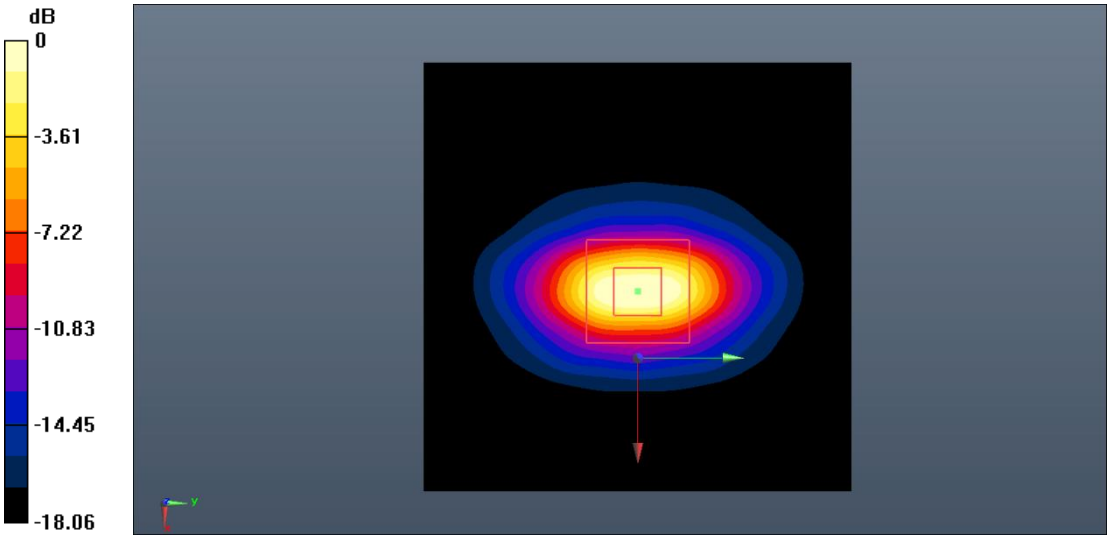
0 dB = 10.8 W/kg = 10.33 dB W/kg

Fig.B.6. Validation 1750MHz 250mW

1900MHz
Date: 2024-03-25
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1900 MHz; σ = 1.433 S/m; ε_r = 38.913; ρ = 1000 kg/m^3
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

System Validation/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 85.164 V/m; Power Drift = 0.07 dB
SAR(1 g) = 10.0 W/kg; SAR(10 g) = 5.16 W/kg
Maximum value of SAR (interpolated) = 11.9 W/kg

System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 85.164 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 26.6 W/kg
SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.21 W/kg
Maximum value of SAR (measured) = 12.2 W/kg



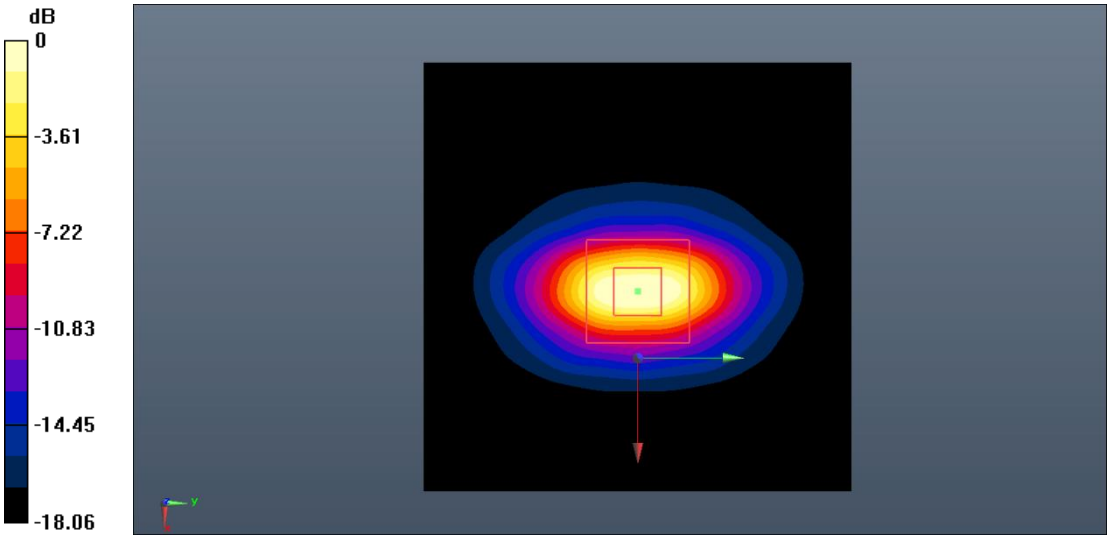
0 dB = 12.2 W/kg = 10.86 dB W/kg

Fig.B.7. Validation 1900MHz 250mW

1900MHz
Date: 2024-04-24
Electronics: DAE4 Sn1527
Medium: Head 1900MHz
Medium parameters used: f = 1900 MHz; σ = 1.394 S/m; ε_r = 40.616; ρ = 1000 kg/m^3
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.81, 7.81, 7.81)

System Validation/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 84.082 V/m; Power Drift = -0.06 dB
SAR(1 g) = 9.94 W/kg; SAR(10 g) = 5.12 W/kg
Maximum value of SAR (interpolated) = 11.9 W/kg

System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 84.082 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 24.9 W/kg
SAR(1 g) = 9.85 W/kg; SAR(10 g) = 5.07 W/kg
Maximum value of SAR (measured) = 11.7 W/kg



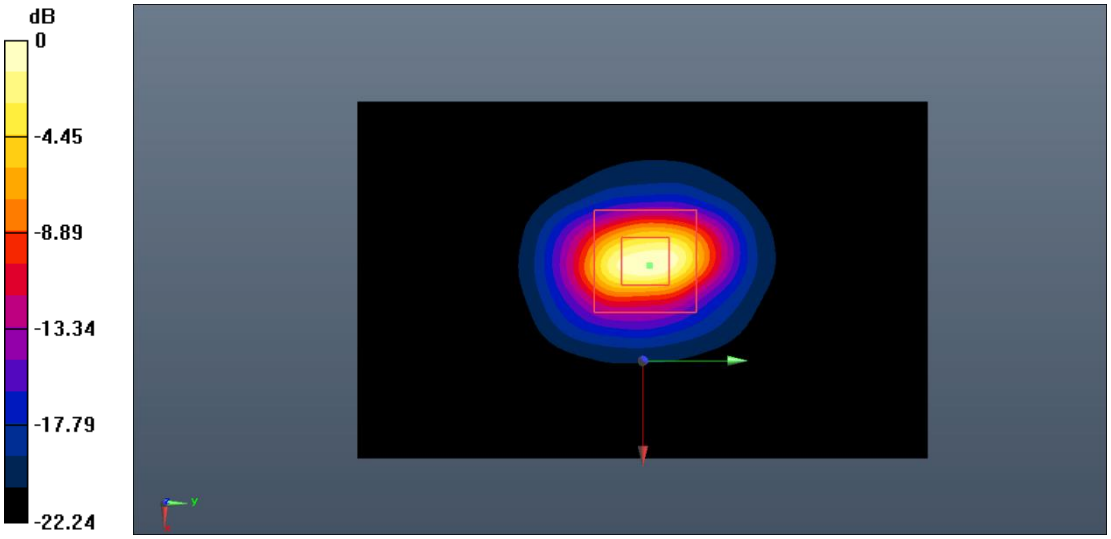
0 dB = 11.7 W/kg = 10.68 dB W/kg

Fig.B.8. Validation 1900MHz 250mW

2450MHz
Date: 2024-04-04
Electronics: DAE4 Sn1527
Medium: Head 2450MHz
Medium parameters used: f = 2450 MHz; σ = 1.816 S/m; ε_r = 38.782; ρ = 1000 kg/m^3
Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

System Validation/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 92.156 V/m; Power Drift = 0.10 dB
SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.06 W/kg
Maximum value of SAR (interpolated) = 15.5 W/kg

System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.156 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 31.7 W/kg
SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.13 W/kg
Maximum value of SAR (measured) = 15.8 W/kg



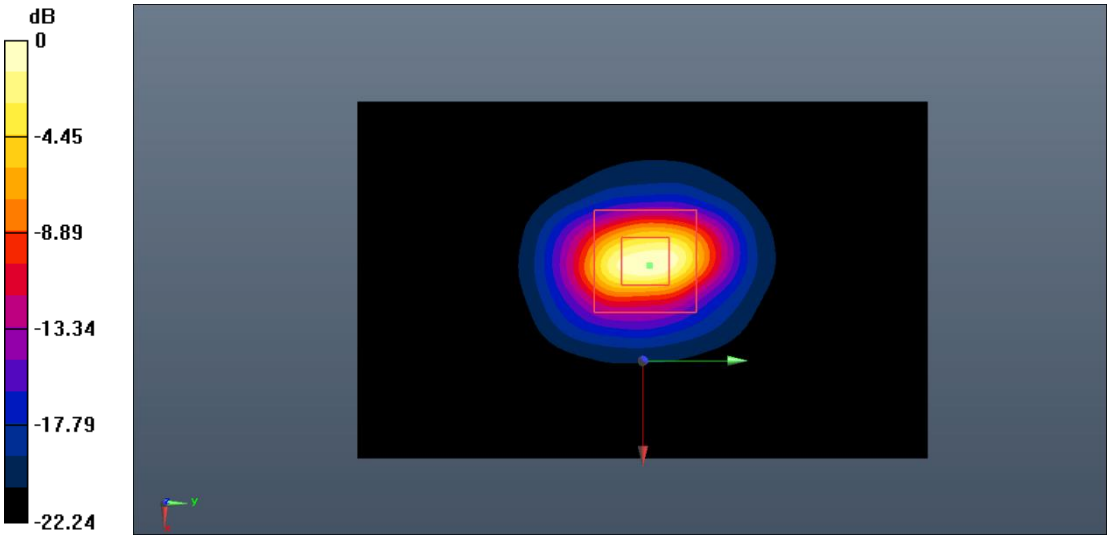
0 dB = 15.8 W/kg = 11.99 dB W/kg

Fig.B.9. Validation 2450MHz 250mW

2450MHz
Date: 2024-04-18
Electronics: DAE4 Sn1527
Medium: Head 2450MHz
Medium parameters used: f = 2450 MHz; σ = 1.833 S/m; ε_r = 38.485; ρ = 1000 kg/m^3
Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

System Validation/Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 93.577 V/m; Power Drift = 0.04 dB
SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.18 W/kg
Maximum value of SAR (interpolated) = 15.9 W/kg

System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 93.577 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 33.1 W/kg
SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.27 W/kg
Maximum value of SAR (measured) = 16.2 W/kg



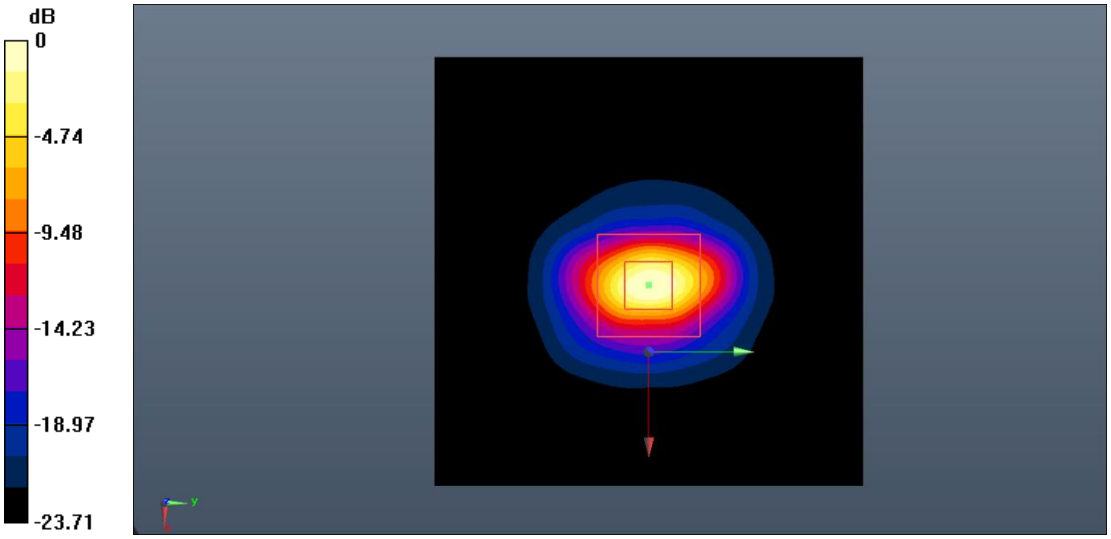
0 dB = 16.2 W/kg = 12.10 dB W/kg

Fig.B.10. Validation 2450MHz 250mW

2550MHz
Date: 2024-03-30
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used: f = 2550 MHz; σ = 1.947 S/m; ε_r = 38.689; ρ = 1000 kg/m^3
Communication System: CW Frequency: 2550 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

System Validation/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 96.234 V/m; Power Drift = 0.03 dB
SAR(1 g) = 14.4 W/kg; SAR(10 g) = 6.44 W/kg
Maximum value of SAR (interpolated) = 16.5 W/kg

System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 96.234 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 35.5 W/kg
SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.50 W/kg
Maximum value of SAR (measured) = 16.8 W/kg



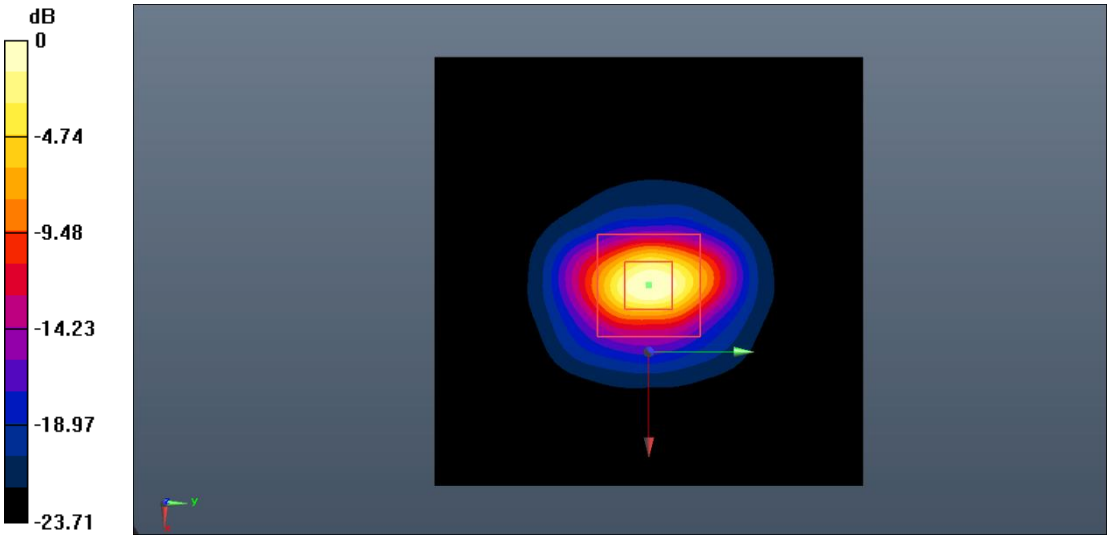
0 dB = 16.8 W/kg = 12.25 dB W/kg

Fig.B.11. Validation 2550MHz 250mW

2550MHz
Date: 2024-04-15
Electronics: DAE4 Sn1527
Medium: Head 2550MHz
Medium parameters used: f = 2550 MHz; σ = 1.929 S/m; ε_r = 38.253; ρ = 1000 kg/m^3
Communication System: CW Frequency: 2550 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (7.46, 7.46, 7.46)

System Validation/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 94.157 V/m; Power Drift = 0.05 dB
SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.27 W/kg
Maximum value of SAR (interpolated) = 16.1 W/kg

System Validation/Zoom Scan (7x7x7)/Cube0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 94.157 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 33.6 W/kg
SAR(1 g) = 14.2 W/kg; SAR(10 g) = 6.36 W/kg
Maximum value of SAR (measured) = 16.4 W/kg



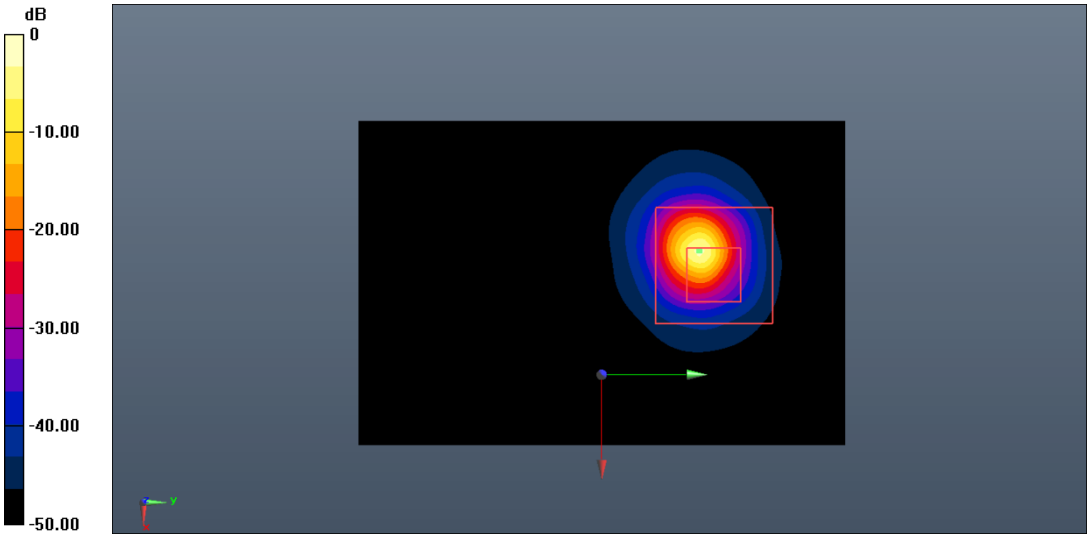
0 dB = 16.4 W/kg = 12.15 dB W/kg

Fig.B.12. Validation 2550MHz 250mW

5250MHz
Date: 2024-04-11
Electronics: DAE4 Sn1527
Medium: Head 5250MHz
Medium parameters used: f = 5250 MHz; σ = 4.668 S/m; ε_r = 36.404; ρ = 1000 kg/m^3
Communication System: CW Frequency: 5250 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (5.31, 5.31, 5.31)

System Validation/Area Scan (61x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 65.091 V/m; Power Drift = -0.13 dB
SAR(1 g) = 7.83 W/kg; SAR(10 g) = 2.29 W/kg
Maximum value of SAR (interpolated) = 17.9 W/kg

System Validation/Zoom Scan (8x8x21)/Cube0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 65.091 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 31.0 W/kg
SAR(1 g) = 7.70 W/kg; SAR(10 g) = 2.24 W/kg
Maximum value of SAR (measured) = 17.6 W/kg



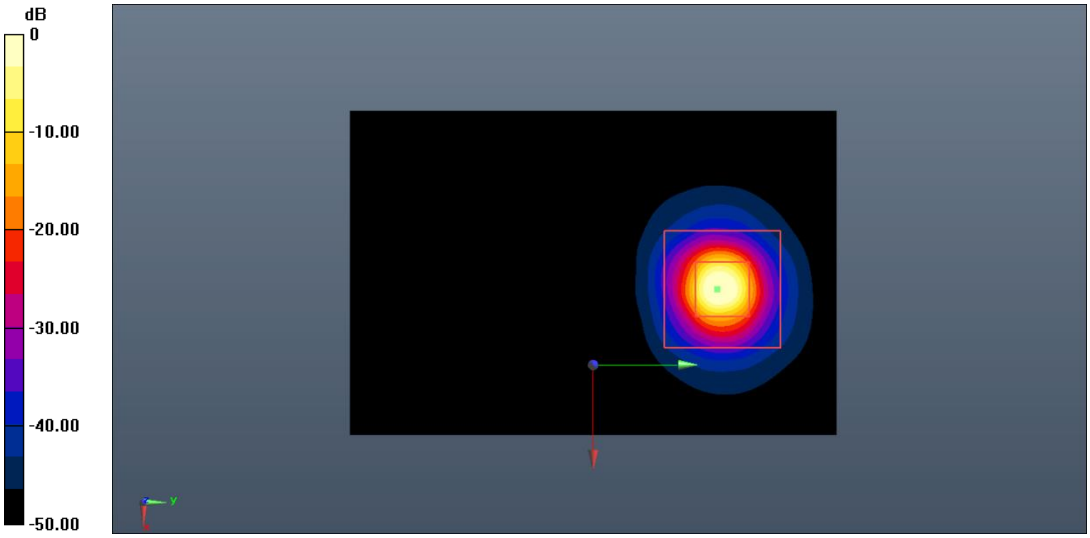
0 dB = 17.6 W/kg = 10.45 dB W/kg

Fig.B.13. Validation 5250MHz 100mW

5600MHz
Date: 2024-04-11
Electronics: DAE4 Sn1527
Medium: Head 5600MHz
Medium parameters used: f = 5600 MHz; σ = 4.975 S/m; ε_r = 36.069; ρ = 1000 kg/m^3
Communication System: CW Frequency: 5600 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (4.71, 4.71, 4.71)

System Validation/Area Scan (61x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 67.844 V/m; Power Drift = -0.02 dB
SAR(1 g) = 8.18 W/kg; SAR(10 g) = 2.36 W/kg
Maximum value of SAR (interpolated) = 19.6 W/kg

System Validation/Zoom Scan (8x8x21)/Cube0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 67.844 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 35.4 W/kg
SAR(1 g) = 8.06 W/kg; SAR(10 g) = 2.32 W/kg
Maximum value of SAR (measured) = 19.3 W/kg



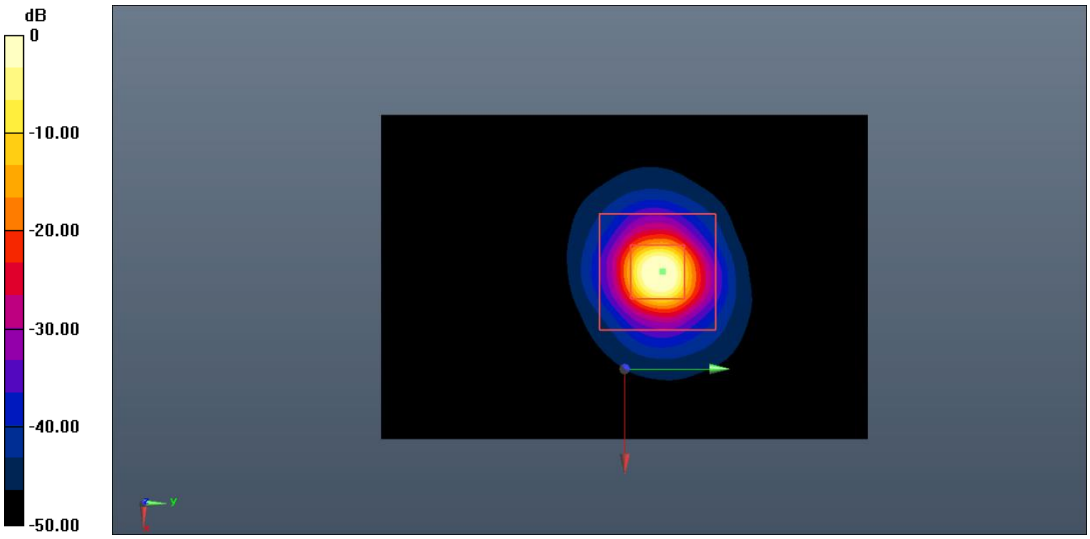
0 dB = 20.3 W/kg = 13.07 dB W/kg

Fig.B.14. Validation 5600MHz 100mW

5750MHz
Date: 2024-04-11
Electronics: DAE4 Sn1527
Medium: Head 5750MHz
Medium parameters used: f = 5750 MHz; σ = 5.311 S/m; ε_r = 34.953; ρ = 1000 kg/m^3
Communication System: CW Frequency: 5750 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7786 ConvF (4.78, 4.78, 4.78)

System Validation/Area Scan (61x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 68.485 V/m; Power Drift = 0.13 dB
SAR(1 g) = 8.04 W/kg; SAR(10 g) = 2.22 W/kg
Maximum value of SAR (interpolated) = 20.1 W/kg

System Validation/Zoom Scan (8x8x21)/Cube0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 68.485 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 36.1 W/kg
SAR(1 g) = 8.15 W/kg; SAR(10 g) = 2.27 W/kg
Maximum value of SAR (measured) = 20.3 W/kg



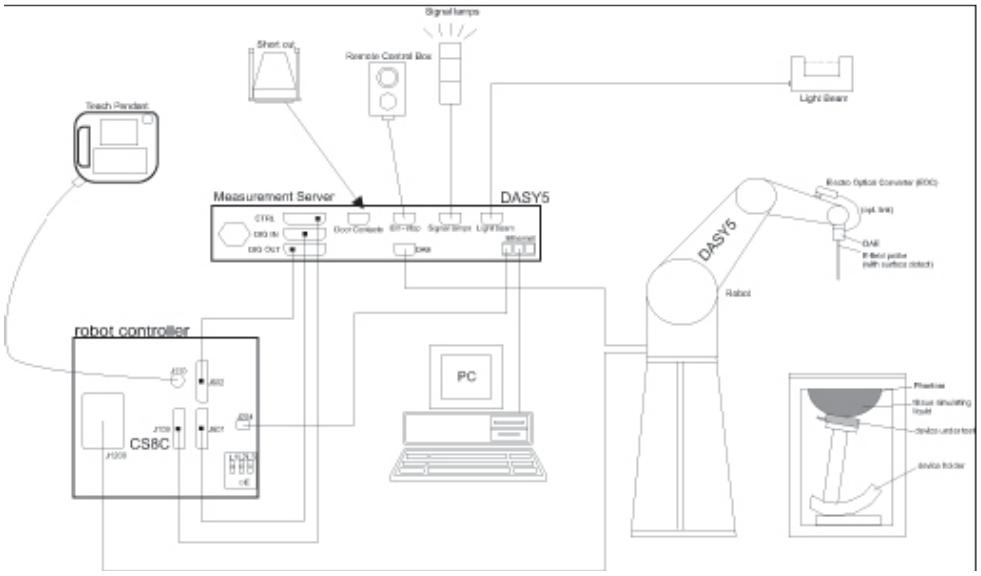
0 dB = 20.3 W/kg = 13.07 dB W/kg

Fig.B.15. Validation 5750MHz 100mW

ANNEX C: SAR Measurement Setup

C.1. Measurement Set-up

DASY5 system for performing compliance tests is illustrated above graphically. This system consists of the following items:



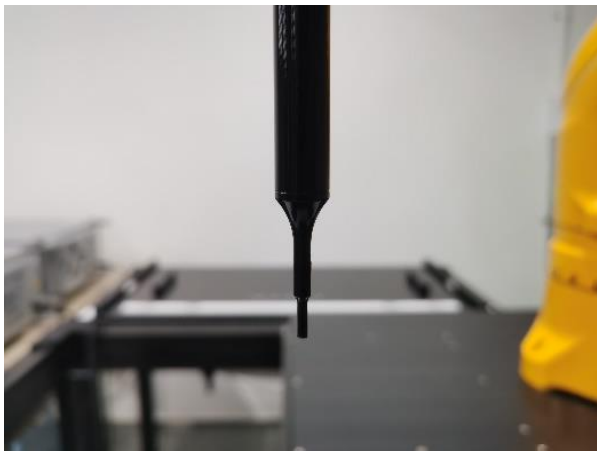
Picture C.1 SAR Lab Test Measurement Set-up

- A standard high precision 6-axis robot (Stäubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as
- warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

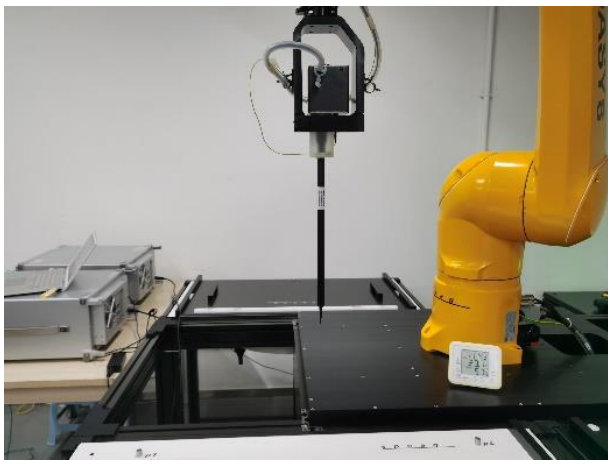
C.2. DASY E-field Probe System

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multifiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY5 OR DASY8 software reads the reflection durning a software approach and looks for the maximum using 2ndord curve fitting. The approach is stopped at reaching the maximum.

Probe Specifications:	
Model:	EX3DV4
Frequency Range:	10 MHz - 6.0 GHz
Calibration:	In head simulating tissue at Frequencies from 750 up to 5750 MHz
Linearity:	± 0.2 dB (30 MHz to 6 GHz)
Dynamic Range:	10 mW/kg - 100 W/kg
Probe Length:	337 mm
Probe Tip Length:	20 mm
Body Diameter:	12 mm
Tip Diameter:	2.5 mm
Tip-Center:	1 mm
Application:	SAR Dosimetry Testing / Compliance tests of mobile phones / Dosimetry in strong gradient fields



Picture C.2: Near-field Probe



Picture C.3: E-field Probe

C.3. E-field Probe Calibration

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm^2) using an RF Signal generator, TEM cell, and RF Power Meter.

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and inn a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/ cm^2.·

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C\frac{\Delta T}{\Delta t}$$

Where:

Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

$$SAR = \frac{|E|^2 \cdot \sigma}{\rho}$$

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

C.4. Other Test Equipment

C.4.1. Data Acquisition Electronics (DAE)

The data acquisition electronics consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

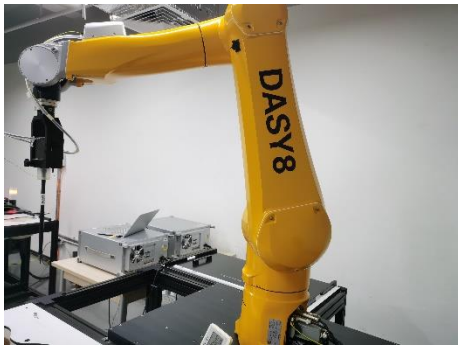
Picture C.4: DAE

C.4.2. Robot

The SPEAG DASY system uses the high precision robots (DASY5: RX90L) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchron motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)

Picture C.5: DASY 5



Picture C.6: DASY 8

C.4.3. Measurement Server

The Measurement server is based on a PC/104 CPU broad with CPU (DASY5: 400 MHz, Intel Celeron), chipdisk (DASY5:128MB), RAM (DASY5:128MB). The necessary circuits for communication with the DAE electronic box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY I/O broad, which is directly connected to the PC/104 bus of the CPU broad.

The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.

Picture C.7: Server for DASY 5

Picture C.8: Server for DASY 8

C.4.4. Device Holder for Phantom

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5mm distance, a positioning uncertainty of ±0.5mm would produce a SAR uncertainty of ±20%. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.

The DASY device holder is designed to cope with the different positions given in the standard. It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales is the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.

The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity ε =3 and loss tangent δ =0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

<Laptop Extension Kit>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin-SAM and ELI phantoms.