



Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 50	LTE Band 13 Cube0	Back	1.735	0mm	1.2	-82	-0.58	153.5	4.66	0.07	Not required
	WLAN5GHz Cube0		2.921	0mm	-16.8	70.4	-3.33				
	LTE Band 13 Cube0	Back	1.735	0mm	1.2	-82	-0.58	130.4	4.24	0.07	Not required
	WLAN5GHz Cube1		2.503	0mm	-19	46.8	-3.48				
	LTE Band 13 Cube1	Back	1.426	0mm	-32.3	-83.5	-0.72	154.7	4.35	0.06	Not required
	WLAN5GHz Cube0		2.921	0mm	-16.8	70.4	-3.33				
	LTE Band 13 Cube1	Back	1.426	0mm	-32.3	-83.5	-0.72	131.0	3.93	0.06	Not required
	WLAN5GHz Cube1		2.503	0mm	-19	46.8	-3.48				
Case 51	LTE Band 26	Back	1.902	0mm	1.2	-78.9	-1.31	150.4	4.82	0.07	Not required
	WLAN5GHz Cube0		2.921	0mm	-16.8	70.4	-3.33				
	LTE Band 26	Back	1.902	0mm	1.2	-78.9	-1.31	127.3	4.41	0.07	Not required
	WLAN5GHz Cube1		2.503	0mm	-19	46.8	-3.48				
Case 52	LTE Band 66	Front	3.057	0mm	-15.4	-80.3	-0.27	158.8	4.29	0.06	Not required
	WLAN2.4GHz		1.232	0mm	16.2	75.3	-2.88				
Case 53	LTE Band 66	Back	2.637	0mm	-15.1	-77.4	0.35	147.9	5.56	0.09	Not required
	WLAN5GHz Cube0		2.921	0mm	-16.8	70.4	-3.33				
	LTE Band 66	Back	2.637	0mm	-15.1	-77.4	0.35	124.3	5.14	0.09	Not required
	WLAN5GHz Cube1		2.503	0mm	-19	46.8	-3.48				
Case 54	LTE Band 25	Front	2.78	0mm	-7.5	-80.3	0.42	157.4	4.01	0.05	Not required
	WLAN2.4GHz		1.232	0mm	16.2	75.3	-2.88				



Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 55	LTE Band 25	Back	2.585	0mm	-15.1	-77.4	0.6	147.9	5.51	0.09	Not required
	WLAN5GHz Cube0		2.921	0mm	-16.8	70.4	-3.33				
	LTE Band 25	Back	2.585	0mm	-15.1	-77.4	0.6	124.3	5.09	0.09	Not required
	WLAN5GHz Cube1		2.503	0mm	-19	46.8	-3.48				
Case 56	LTE Band 7	Back	2.767	0mm	-16.4	-83.4	0.84	153.9	5.69	0.09	Not required
	WLAN5GHz Cube0		2.921	0mm	-16.8	70.4	-3.33				
	LTE Band 7	Back	2.767	0mm	-16.4	-83.4	0.84	130.3	5.27	0.09	Not required
	WLAN5GHz Cube1		2.503	0mm	-19	46.8	-3.48				
Case 58	LTE Band 41 Cube0	Back	2.646	0mm	-14.4	-83.4	0.39	153.9	5.57	0.09	Not required
	WLAN5GHz Cube0		2.921	0mm	-16.8	70.4	-3.33				
	LTE Band 41 Cube1	Back	2.164	0mm	12.6	-78.6	0.39	151.9	5.09	0.08	Not required
	WLAN5GHz Cube0		2.921	0mm	-16.8	70.4	-3.33				
	LTE Band 41 Cube0	Back	2.646	0mm	-14.4	-83.4	0.39	130.3	5.15	0.09	Not required
	WLAN5GHz Cube1		2.503	0mm	-19	46.8	-3.48				
	LTE Band 41 Cube1	Back	2.164	0mm	12.6	-78.6	0.39	129.4	4.67	0.08	Not required
	WLAN5GHz Cube1		2.503	0mm	-19	46.8	-3.48				



<5G NR>

Hotspot / Body Worn											
	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 59	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	57.1	0.92	0.02	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	FR1 n5	Back	0.710	5mm	16.40	-72.00	1.87	116.4	1.05	0.01	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	147.4	1.29	0.01	Not required
	FR1 n5		0.710	5mm	16.40	-72.00	1.87				
Case 60	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	55.6	0.92	0.02	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	WLAN2.4GHz	Back	0.339	5mm	-17.20	39.40	-1.74	116.4	1.05	0.01	Not required
	FR1 n5		0.710	5mm	16.40	-72.00	1.87				
	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	148.8	1.29	0.01	Not required
	FR1 n5		0.710	5mm	16.40	-72.00	1.87				
Case61	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	44.9	0.95	0.02	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	FR1 n5	Back	0.710	5mm	16.40	-72.00	1.87	144.2	1.08	0.01	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	147.4	1.29	0.01	Not required
	FR1 n5		0.710	5mm	16.40	-72.00	1.87				



	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case62	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	42.0	0.95	0.02	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	WLAN5GHz	Back	0.369	5mm	-17.00	68.20	-1.47	144.2	1.08	0.01	Not required
	FR1 n5		0.710	5mm	16.40	-72.00	1.87				
	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	148.8	1.29	0.01	Not required
	FR1 n5		0.710	5mm	16.40	-72.00	1.87				
Case63	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	57.1	0.92	0.02	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	FR1 n12	Back	0.798	5mm	25.70	-75.40	-1.64	122.6	1.14	0.01	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	150.4	1.38	0.01	Not required
	FR1 n12		0.798	5mm	25.70	-75.40	-1.64				
Case 64	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	55.6	0.92	0.02	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	WLAN2.4GHz	Back	0.339	5mm	-17.20	39.40	-1.74	122.6	1.14	0.01	Not required
	FR1 n12		0.798	5mm	25.70	-75.40	-1.64				
	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	152.0	1.38	0.01	Not required
	FR1 n12		0.798	5mm	25.70	-75.40	-1.64				
Case 65	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	44.9	0.95	0.02	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	FR1 n12	Back	0.798	5mm	25.70	-75.40	-1.64	149.8	1.17	0.01	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	150.4	1.38	0.01	Not required
	FR1 n12		0.798	5mm	25.70	-75.40	-1.64				



Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case66	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	42.0	0.95	0.02	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	WLAN5GHz	Back	0.369	5mm	-17.00	68.20	-1.47	149.8	1.17	0.01	Not required
	FR1 n12		0.798	5mm	25.70	-75.40	-1.64				
	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	152.0	1.38	0.01	Not required
	FR1 n12		0.798	5mm	25.70	-75.40	-1.64				
Case 67	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	57.1	0.92	0.02	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	FR1 n71	Back	0.691	5mm	24.20	-78.50	-1.61	125.0	1.03	0.01	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	153.6	1.27	0.01	Not required
	FR1 n71		0.691	5mm	24.20	-78.50	-1.61				
Case68	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	55.6	0.92	0.02	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	WLAN2.4GHz	Back	0.339	5mm	-17.20	39.40	-1.74	125.0	1.03	0.01	Not required
	FR1 n71		0.691	5mm	24.20	-78.50	-1.61				
	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	155.1	1.27	0.01	Not required
	FR1 n71		0.691	5mm	24.20	-78.50	-1.61				
Case69	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	44.9	0.95	0.02	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	FR1 n71	Back	0.691	5mm	24.20	-78.50	-1.61	152.4	1.06	0.01	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	LTE Band 2-UAT	Back	0.579	5mm	27.30	75.00	0.95	153.6	1.27	0.01	Not required



Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	FR1 n71		0.691	5mm	24.20	-78.50	-1.61				
Case 70	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	42.0	0.95	0.02	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	WLAN5GHz	Back	0.369	5mm	-17.00	68.20	-1.47	152.4	1.06	0.01	Not required
	FR1 n71		0.691	5mm	24.20	-78.50	-1.61				
	LTE Band 66-UAT	Back	0.577	5mm	24.10	76.60	0.94	155.1	1.27	0.01	Not required
	FR1 n71		0.691	5mm	24.20	-78.50	-1.61				
Case 71	LTE Band 25	Back	0.653	5mm	-7.60	-80.40	1.89	120.2	0.99	0.01	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	FR1 n41	Back	0.694	5mm	30.80	71.80	-1.52	57.9	1.03	0.02	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	LTE Band 25	Back	0.653	5mm	-7.60	-80.40	1.89	157.0	1.35	0.01	Not required
	FR1 n41		0.694	5mm	30.80	71.80	-1.52				
Case 72	LTE Band 25	Back	0.653	5mm	-7.60	-80.40	1.89	148.9	1.02	0.01	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	FR1 n41	Back	0.694	5mm	30.80	71.80	-1.52	47.9	1.06	0.02	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	LTE Band 25	Back	0.653	5mm	-7.60	-80.40	1.89	157.0	1.35	0.01	Not required
	FR1 n41		0.694	5mm	30.80	71.80	-1.52				
Case 73	LTE Band 41	Back	0.732	5mm	-12.00	-82.20	0.84	159.9	1.43	0.01	Not required
	FR1 n41		0.694	5mm	30.80	71.80	-1.52				
	WLAN2.4GHz	Back	0.339	5mm	-17.20	39.40	-1.74	121.7	1.07	0.01	Not required
	LTE Band 41		0.732	5mm	-12.00	-82.20	0.84				



Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z					
	WLAN2.4GHz	Back	0.339	5mm	-17.20	39.40	-1.74	57.9	1.03	0.02	Not required
	FR1 n41		0.694	5mm	30.80	71.80	-1.52				
Case 74	LTE Band 41	Back	0.732	5mm	-12.00	-82.20	0.84	159.9	1.43	0.01	Not required
	FR1 n41		0.694	5mm	30.80	71.80	-1.52				
	WLAN5GHz	Back	0.369	5mm	-17.00	68.20	-1.47	150.5	1.10	0.01	Not required
	LTE Band 41		0.732	5mm	-12.00	-82.20	0.84				
	WLAN5GHz	Back	0.369	5mm	-17.00	68.20	-1.47	47.9	1.06	0.02	Not required
	FR1 n41		0.694	5mm	30.80	71.80	-1.52				
Case 75	LTE Band 66	Back	0.693	5mm	-7.50	-77.40	1.83	156.9	1.29	0.01	Not required
	FR1 n25		0.599	5mm	18.00	77.40	-1.47				
	WLAN2.4GHz	Back	0.339	5mm	-17.20	39.40	-1.74	117.3	1.03	0.01	Not required
	LTE Band 66		0.693	5mm	-7.50	-77.40	1.83				
	WLAN2.4GHz	Back	0.339	5mm	-17.20	39.40	-1.74	51.8	0.94	0.02	Not required
	FR1 n25		0.599	5mm	18.00	77.40	-1.47				
Case 76	LTE Band 66	Back	0.693	5mm	-7.50	-77.40	1.83	156.9	1.29	0.01	Not required
	FR1 n25		0.599	5mm	18.00	77.40	-1.47				
	WLAN5GHz	Back	0.369	5mm	-17.00	68.20	-1.47	145.9	1.06	0.01	Not required
	LTE Band 66		0.693	5mm	-7.50	-77.40	1.83				
	WLAN5GHz	Back	0.369	5mm	-17.00	68.20	-1.47	36.2	0.97	0.03	Not required
	FR1 n25		0.599	5mm	18.00	77.40	-1.47				
Case 77	LTE Band 25	Back	0.653	5mm	-7.60	-80.40	1.89	159.9	1.32	0.01	Not required
	FR1 n66		0.671	5mm	18.00	77.40	-1.46				
	LTE Band 25	Back	0.653	5mm	-7.60	-80.40	1.89	120.2	0.99	0.01	Not required



	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	FR1 n66	Back	0.671	5mm	18.00	77.40	-1.46	51.8	1.01	0.02	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
Case 78	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)						
	LTE Band 25	Back	0.653	5mm	-7.60	-80.40	1.89	159.9	1.32	0.01	Not required
	FR1 n66		0.671	5mm	18.00	77.40	-1.46				
	LTE Band 25	Back	0.653	5mm	-7.60	-80.40	1.89	148.9	1.02	0.01	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	FR1 n66	Back	0.671	5mm	18.00	77.40	-1.46	36.2	1.04	0.03	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
Case79	Band	Position	SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 5	Back	0.775	5mm	19.50	-69.00	0.36	146.4	1.45	0.01	Not required
	FR1 n66		0.671	5mm	18.00	77.40	-1.46				
	LTE Band 5	Back	0.775	5mm	19.50	-69.00	0.36	114.5	1.11	0.01	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	FR1 n66	Back	0.671	5mm	18.00	77.40	-1.46	51.8	1.01	0.02	Not required
WLAN2.4GHz	0.339		5mm	-17.20	39.40	-1.74					
Case 80	Band	Position	SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 5	Back	0.775	5mm	19.50	-69.00	0.36	146.4	1.45	0.01	Not required
	FR1 n66		0.671	5mm	18.00	77.40	-1.46				
	LTE Band 5	Back	0.775	5mm	19.50	-69.00	0.36	142.0	1.14	0.01	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	FR1 n66	Back	0.671	5mm	18.00	77.40	-1.46	36.2	1.04	0.03	Not required
WLAN5GHz	0.369		5mm	-17.00	68.20	-1.47					
Case81	Band	Position	SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 12	Back	0.735	5mm	21.00	-72.00	0.42	149.4	1.41	0.01	Not required
FR1 n66	0.671		5mm	18.00	77.40	-1.46					



	LTE Band 12	Back	0.735	5mm	21.00	-72.00	0.42	117.8	1.07	0.01	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
	FR1 n66	Back	0.671	5mm	18.00	77.40	-1.46	51.8	1.01	0.02	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
Case 82	LTE Band 12	Back	0.735	5mm	21.00	-72.00	0.42	149.4	1.41	0.01	Not required
	FR1 n66		0.671	5mm	18.00	77.40	-1.46				
	LTE Band 12	Back	0.735	5mm	21.00	-72.00	0.42	145.3	1.10	0.01	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
	FR1 n66	Back	0.671	5mm	18.00	77.40	-1.46	36.2	1.04	0.03	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
Case 83	LTE Band 12	Back	0.735	5mm	21.00	-72.00	0.42	149.4	1.33	0.01	Not required
	FR1 n2		0.599	5mm	18.00	77.40	-1.47				
	WLAN2.4GHz	Back	0.339	5mm	-17.20	39.40	-1.74	51.8	0.94	0.02	Not required
	FR1 n2		0.599	5mm	18.00	77.40	-1.47				
	LTE Band 12	Back	0.735	5mm	21.00	-72.00	0.42	117.8	1.07	0.01	Not required
	WLAN2.4GHz		0.339	5mm	-17.20	39.40	-1.74				
Case 84	LTE Band 12	Back	0.735	5mm	21.00	-72.00	0.42	149.4	1.33	0.01	Not required
	FR1 n2		0.599	5mm	18.00	77.40	-1.47				
	WLAN5GHz	Back	0.369	5mm	-17.00	68.20	-1.47	36.2	0.97	0.03	Not required
	FR1 n2		0.599	5mm	18.00	77.40	-1.47				
	LTE Band 12	Back	0.735	5mm	21.00	-72.00	0.42	145.3	1.10	0.01	Not required
	WLAN5GHz		0.369	5mm	-17.00	68.20	-1.47				
Case 85	LTE Band 25	Back	0.759	18mm	-1.50	-77.40	-2.19	148.1	1.38	0.01	Not required
	WLAN5GHz		0.616	18mm	-15.80	70.00	-3.20				
	LTE Band 25	Back	0.759	18mm	-1.50	-77.40	-2.19	150.6	1.11	0.01	Not required



FCC SAR Test Report

Report No. : FA010812-01

	FR1 n41		0.351	18mm	27.40	70.40	-1.56				
	WLAN5GHz	Back	0.616	18mm	-15.80	70.00	-3.20	43.2	0.97	0.02	Not required
	FR1 n41		0.351	18mm	27.40	70.40	-1.56				



Case 86	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 86	LTE Band 25	Back	0.759	18mm	-1.50	-77.40	-2.19	148.1	1.38	0.01	Not required
	WLAN5GHz		0.616	18mm	-15.80	70.00	-3.20				
Case 86	LTE Band 25	Back	0.759	18mm	-1.50	-77.40	-2.19	156.0	1.24	0.01	Not required
	FR1 n66		0.479	18mm	18.00	77.40	-1.46				
Case 86	WLAN5GHz	Back	0.616	18mm	-15.80	70.00	-3.20	34.6	1.10	0.03	Not required
	FR1 n66		0.479	18mm	18.00	77.40	-1.46				

10g SAR											
Case 87	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 87	LTE Band 25	Back	1.64	0mm	-9.10	-80.40	1.87	117.8	2.28	0.03	Not required
	WLAN2.4GHz		0.644	0mm	-15.20	37.20	-1.73				
Case 87	LTE Band 25	Back	1.64	0mm	-9.10	-80.40	1.87	155.0	3.62	0.04	Not required
	FR1 n41		1.975	0mm	27.60	70.20	-1.51				
Case 87	WLAN2.4GHz	Back	0.644	0mm	-15.20	37.20	-1.73	54.0	2.62	0.08	Not required
	FR1 n41		1.975	0mm	27.60	70.20	-1.51				

Case 88	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 88	LTE Band 25	Back	1.64	0mm	-9.10	-80.40	1.87	142.2	2.33	0.02	Not required
	WLAN5GHz		0.687	0mm	-19.20	61.40	-1.50				
Case 88	LTE Band 25	Back	1.64	0mm	-9.10	-80.40	1.87	155.0	3.62	0.04	Not required
	FR1 n41		1.975	0mm	27.60	70.20	-1.51				
Case 88	WLAN5GHz	Back	0.687	0mm	-19.20	61.40	-1.50	47.6	2.66	0.09	Not required
	FR1 n41		1.975	0mm	27.60	70.20	-1.51				

Case 89	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 89	LTE Band 41	Back	1.447	0mm	-14.60	-81.20	0.82	118.4	2.09	0.03	Not required
	WLAN2.4GHz		0.644	0mm	-15.20	37.20	-1.73				
Case 89	FR1 n41	Back	1.975	0mm	27.60	70.20	-1.51	54.0	2.62	0.08	Not required
	WLAN2.4GHz		0.644	0mm	-15.20	37.20	-1.73				
Case 89	LTE Band 41	Back	1.447	0mm	-14.60	-81.20	0.82	157.2	3.42	0.04	Not required
	FR1 n41		1.975	0mm	27.60	70.20	-1.51				

Case 90	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 90	LTE Band 41	Back	1.447	0mm	-14.60	-81.20	0.82	142.7	2.13	0.02	Not required
	WLAN5GHz		0.687	0mm	-19.20	61.40	-1.50				
Case 90	FR1 n41	Back	1.975	0mm	27.60	70.20	-1.51	47.6	2.66	0.09	Not required
	WLAN5GHz		0.687	0mm	-19.20	61.40	-1.50				
Case 90	LTE Band 41	Back	1.447	0mm	-14.60	-81.20	0.82	157.2	3.42	0.04	Not required
	FR1 n41		1.975	0mm	27.60	70.20	-1.51				



Case 91	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 91	LTE Band 5	Back	1.749	0mm	18.00	-72.10	0.48	138.6	2.44	0.03	Not required
	WLAN5GHz		0.687	0mm	-19.20	61.40	-1.50				
	LTE Band 5	Back	1.749	0mm	18.00	-72.10	0.48	147.6	3.33	0.04	Not required
	FR1 n66		1.585	0mm	19.50	75.50	-1.23				
	WLAN5GHz	Back	0.687	0mm	-19.20	61.40	-1.50	41.2	2.27	0.08	Not required
	FR1 n66		1.585	0mm	19.50	75.50	-1.23				

17. Supplemental Tuner Tests Results

General Note:

1. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence to the antenna characteristics, other than impedance matching.
2. To evaluate all of the tuner states, the 144 tuner states are divided evenly among bands (except for GSM850/1900, LTE B7/38/41 and 5GNR n2/n25/n66/n41), mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single point time-sweep measurements will be performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state will be established remotely so that the device is not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe will remain stationary at the same position throughout the entire series of single point measurements for each combination.
3. This device supports LTE B2 / B4 / B5 / B17 and B25 / B66 / B26 / B12. Since the supported frequency span for LTE B4 / B5 / B17 falls completely within the supports frequency span for LTE B25 / B66 / B26 / B12, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, chose LTE B25 / B66 / B26 / B12 for dynamic antenna analysis.
4. According to workshop 2019, if any single point SAR measurement result is $> 1.2 \text{ W/kg}$ for a band/exposure condition combination set, all supported tuner states are evaluated with single point SAR measurements for the combination. So we verified the single point SAR that bands with SAR value high than 1.2 W/Kg .
5. The operational decryption contains more information about the design and implementation of the dynamic antenna tuning.

17.1 Supplemental Tuner Head & Body SAR Results

Please refer to Appendix F.

Test Engineer : Nick Hu, Yuan Zhao, Jiaying Chang, Yuankai Kong



18. Uncertainty Assessment

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.

19. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [6] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [7] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [8] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [9] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [10] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [11] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [12] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [13] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [14] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.

-----THE END-----



Appendix A. Plots of System Performance Check

The plots are shown as follows.

System Check_Head_750MHz

DUT: D750V3 - SN:1087

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
Medium: HSL_750 Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.896 \text{ S/m}$; $\epsilon_r = 41.73$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature : $23.2 \text{ }^\circ\text{C}$; Liquid Temperature : $22.7 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(9.77, 9.77, 9.77); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.65 W/kg

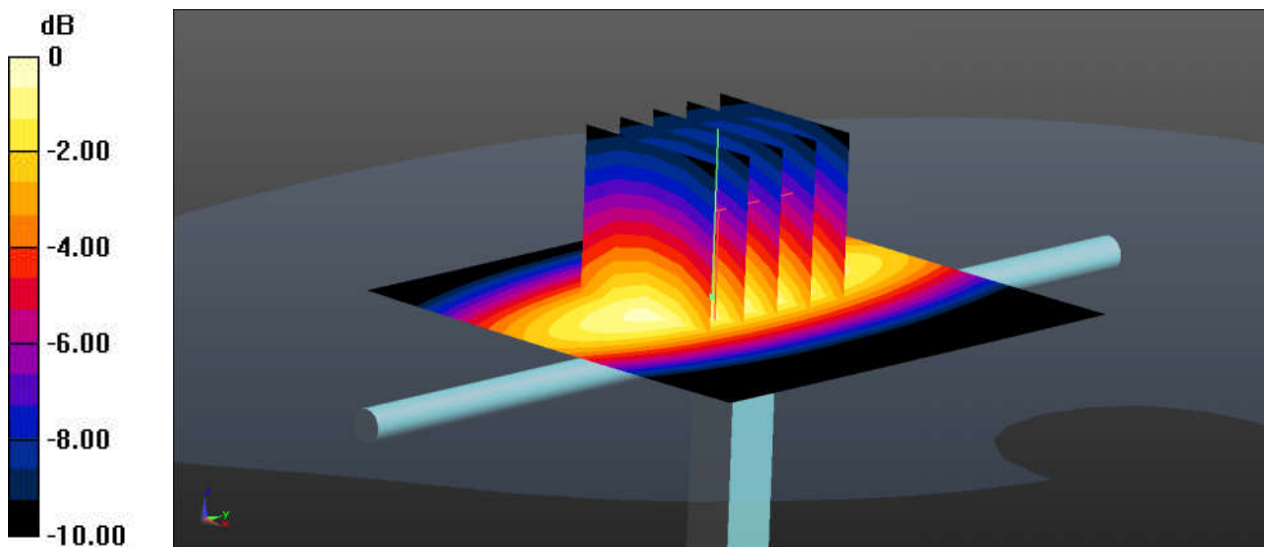
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.01 V/m ; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 3.12 W/kg

SAR(1 g) = 2.18 W/kg ; SAR(10 g) = 1.44 W/kg

Maximum value of SAR (measured) = 2.69 W/kg



0 dB = $2.69 \text{ W/kg} = 4.30 \text{ dBW/kg}$

System Check_Head_750MHz

DUT: D750V3 - SN:1087

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
Medium: HSL_750 Medium parameters used: $f = 750$ MHz; $\sigma = 0.87$ S/m; $\epsilon_r = 41.879$; $\rho = 1000$ kg/m³

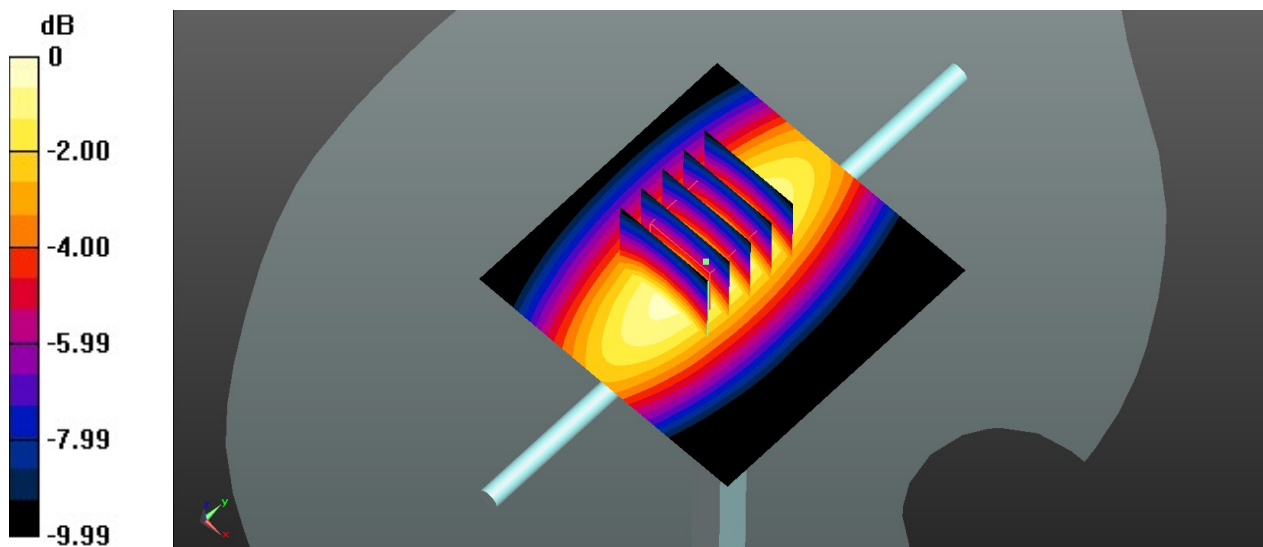
Ambient Temperature : 23.1 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(9.77, 9.77, 9.77); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 2.57 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 56.01 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 3.04 W/kg
SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.39 W/kg
Maximum value of SAR (measured) = 2.61 W/kg



0 dB = 2.61 W/kg = 4.17 dBW/kg

System Check_Head_835MHz

DUT: D835V2 - SN:4d151

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL_835 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.905 \text{ S/m}$; $\epsilon_r = 41.662$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : $23.4 \text{ }^\circ\text{C}$; Liquid Temperature : $22.8 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(9.48, 9.48, 9.48); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.80 W/kg

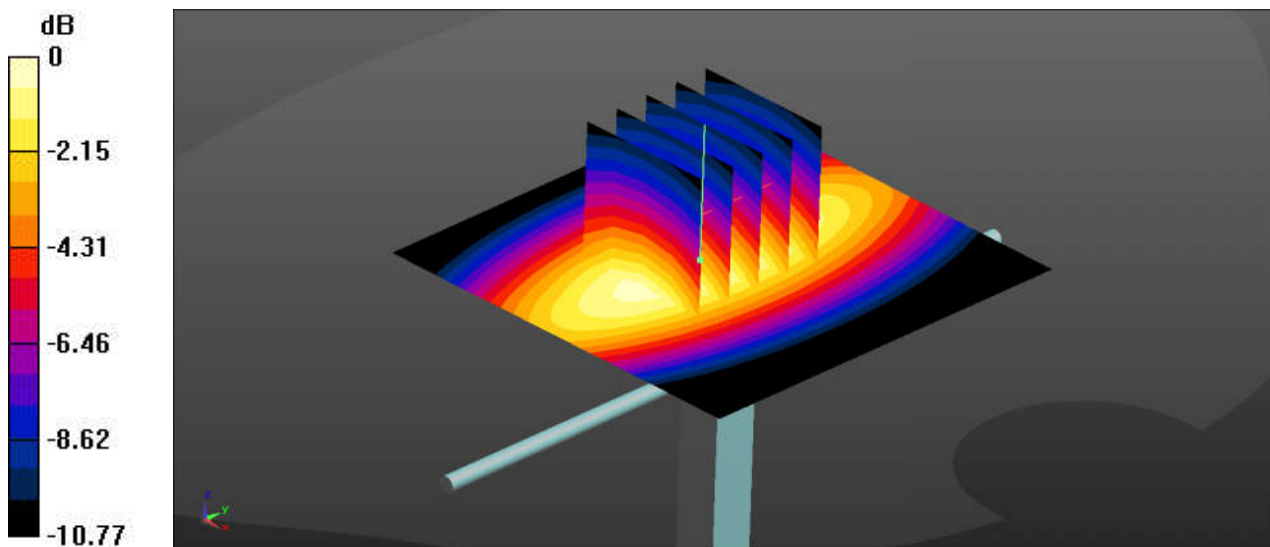
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.98 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.58 W/kg

SAR(1 g) = 2.4 W/kg ; SAR(10 g) = 1.56 W/kg

Maximum value of SAR (measured) = 2.82 W/kg



0 dB = $2.80 \text{ W/kg} = 4.47 \text{ dBW/kg}$

System Check_Head_835MHz

DUT: D835V2 - SN:4d151

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL_835 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.92 \text{ S/m}$; $\epsilon_r = 40.553$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature : $23.4 \text{ }^\circ\text{C}$; Liquid Temperature : $22.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(9.48, 9.48, 9.48); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.95 W/kg

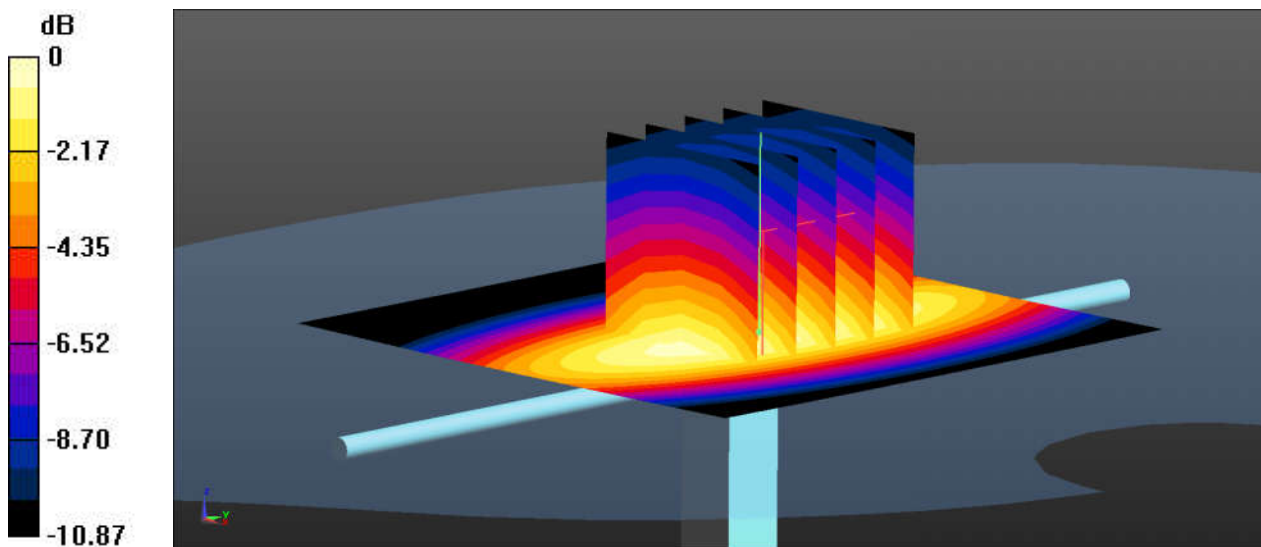
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.37 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.86 W/kg

SAR(1 g) = 2.54 W/kg ; SAR(10 g) = 1.65 W/kg

Maximum value of SAR (measured) = 2.97 W/kg



$0 \text{ dB} = 2.97 \text{ W/kg} = 4.73 \text{ dBW/kg}$

System Check_Head_1750MHz

DUT: D1750V2 - SN:1090

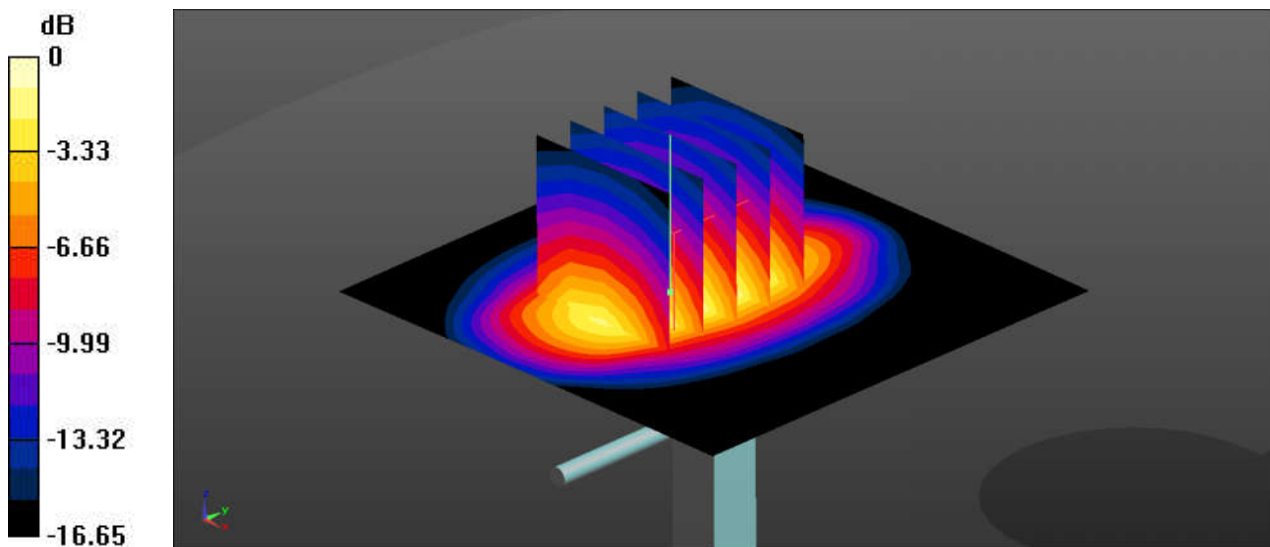
Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1
Medium: HSL_1750 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.359$ S/m; $\epsilon_r = 41.039$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.1 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(8.46, 8.46, 8.46); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 12.1 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 90.30 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 16.6 W/kg
SAR(1 g) = 9.28 W/kg; SAR(10 g) = 4.95 W/kg
Maximum value of SAR (measured) = 11.7 W/kg



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

System Check_Head_1900MHz

DUT: D1900V2 - SN:5d170

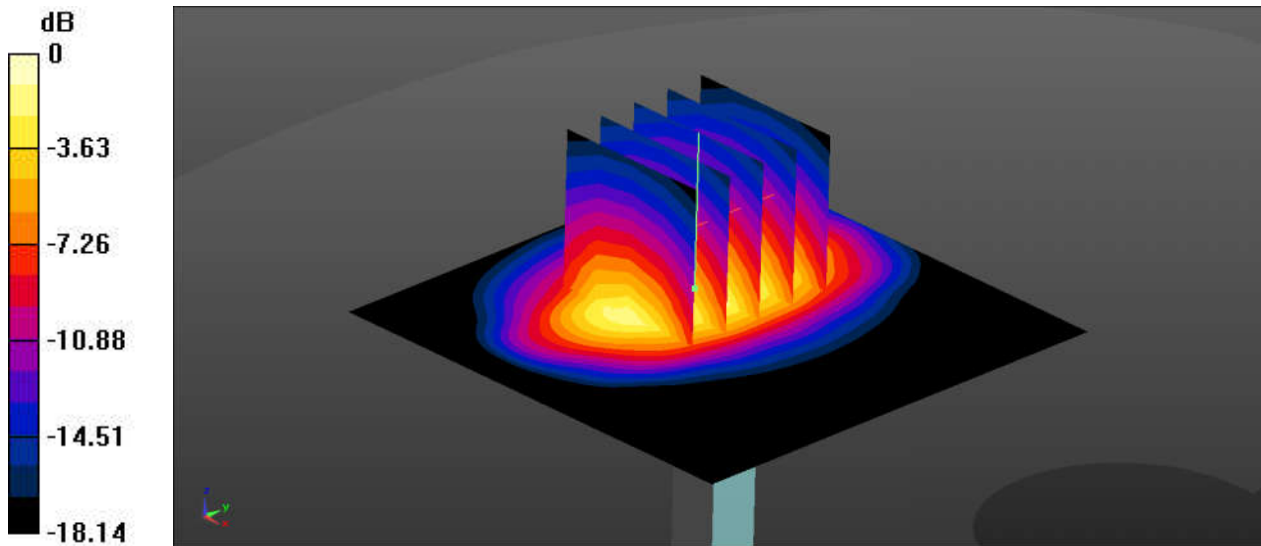
Communication System: UID 0, CW (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL 1900 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.413$ S/m; $\epsilon_r = 39.041$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.2 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(8.1, 8.1, 8.1); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 14.4 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 58.90 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 18.7 W/kg
SAR(1 g) = 9.93 W/kg; SAR(10 g) = 5.12 W/kg
Maximum value of SAR (measured) = 14.4 W/kg



0 dB = 14.4 W/kg = 11.58 dBW/kg

System Check_Head_1900MHz

DUT: D1900V2 - SN:5d170

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HSL_1900 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ S/m; $\epsilon_r = 38.83$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.3 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3293; ConvF(5.32, 5.32, 5.32); Calibrated: 2019.11.25
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn799; Calibrated: 2020.2.10
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 12.6 W/kg

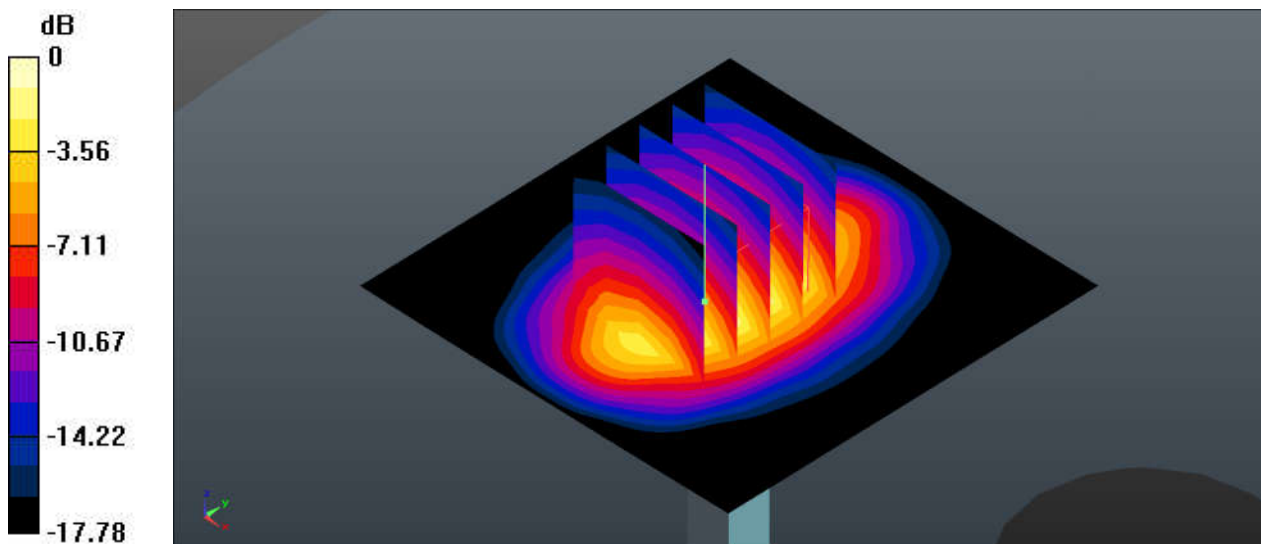
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 96.61 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 17.1 W/kg

SAR(1 g) = 9.67 W/kg; SAR(10 g) = 5.11 W/kg

Maximum value of SAR (measured) = 12.0 W/kg



0 dB = 12.0 W/kg = 10.79 dBW/kg

System Check_Head_2450MHz

DUT: D2450V2 - SN:908

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: HSL_2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.746$ S/m; $\epsilon_r = 39.247$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.1 °C; Liquid Temperature : 22.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(7.5, 7.5, 7.5); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 19.7 W/kg

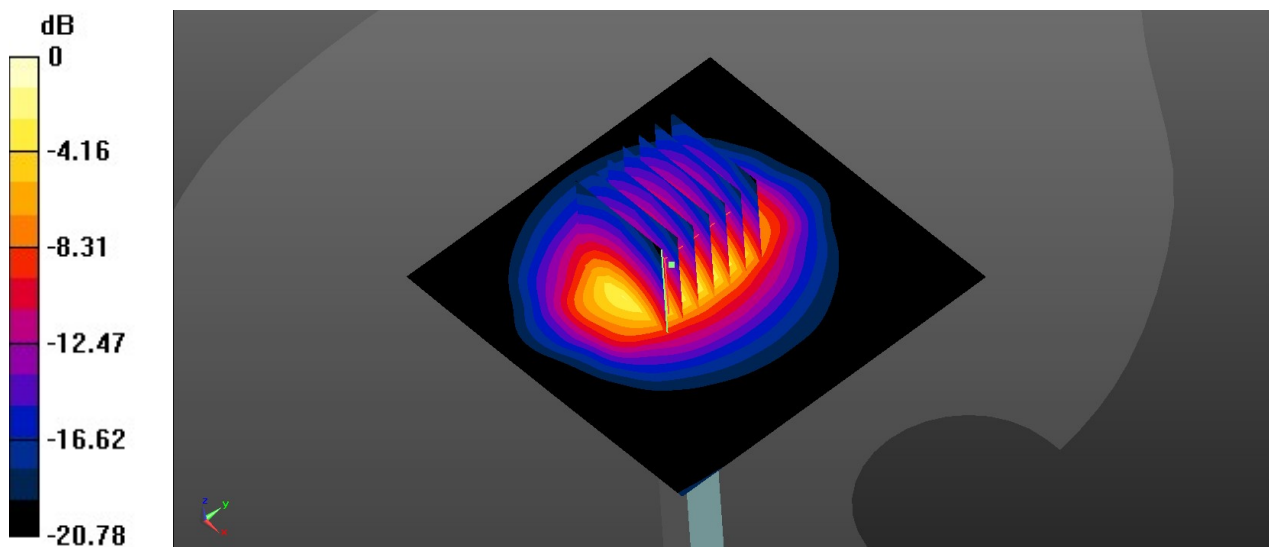
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.61 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 26.9 W/kg

SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.15 W/kg

Maximum value of SAR (measured) = 20.0 W/kg



0 dB = 20.0 W/kg = 13.01 dBW/kg

System Check_Head_2600MHz

DUT: D2600V2 - SN:1061

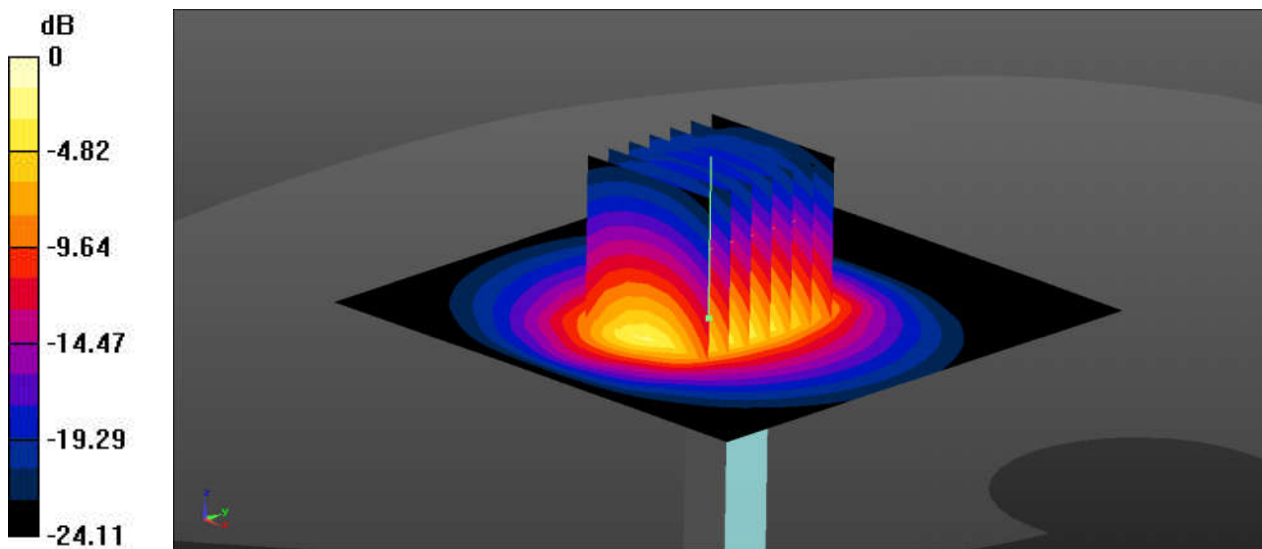
Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: HSL_2600 Medium parameters used: $f = 2600$ MHz; $\sigma = 1.978$ S/m; $\epsilon_r = 40$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.2 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(7.31, 7.31, 7.31); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 19.8 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 98.63 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 31.9 W/kg
SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.28 W/kg
Maximum value of SAR (measured) = 19.5 W/kg



0 dB = 19.5 W/kg = 12.90 dBW/kg

System Check_Head_2600MHz

DUT: D2600V2 - SN:1061

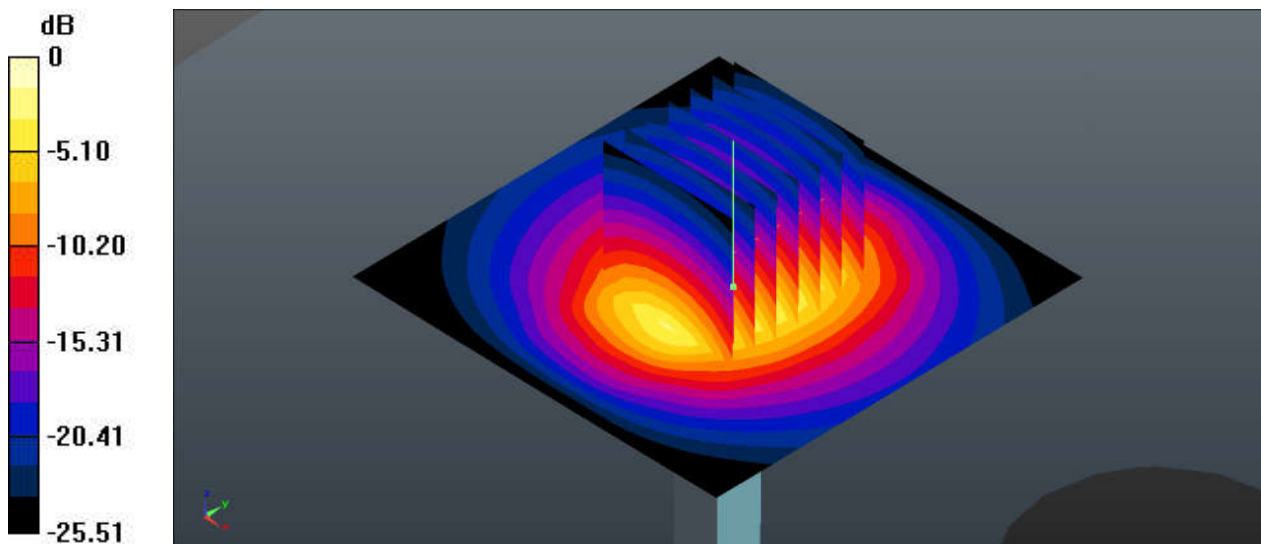
Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
Medium: HSL_2600 Medium parameters used: $f = 2600$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 40.043$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.2 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3293; ConvF(4.39, 4.39, 4.39); Calibrated: 2019.11.25
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn799; Calibrated: 2020.2.10
- Phantom: SAM2; Type: SAM; Serial: TP-1754
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 21.4 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 101.5 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 36.1 W/kg
SAR(1 g) = 15.2 W/kg; SAR(10 g) = 6.6 W/kg
Maximum value of SAR (measured) = 20.6 W/kg



0 dB = 20.6 W/kg = 13.14 dBW/kg

System Check_Head_2600MHz

DUT: D2600V2 - SN:1061

Communication System: UID 0, CW (0); Frequency: 2600 MHz;Duty Cycle: 1:1
Medium: HSL_2600 Medium parameters used: $f = 2600$ MHz; $\sigma = 1.937$ S/m; $\epsilon_r = 40.111$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.3 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3293; ConvF(4.39, 4.39, 4.39); Calibrated: 2019.11.25
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn799; Calibrated: 2020.2.10
- Phantom: SAM2; Type: SAM; Serial: TP-1754
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Pin=250mW/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 20.1 W/kg

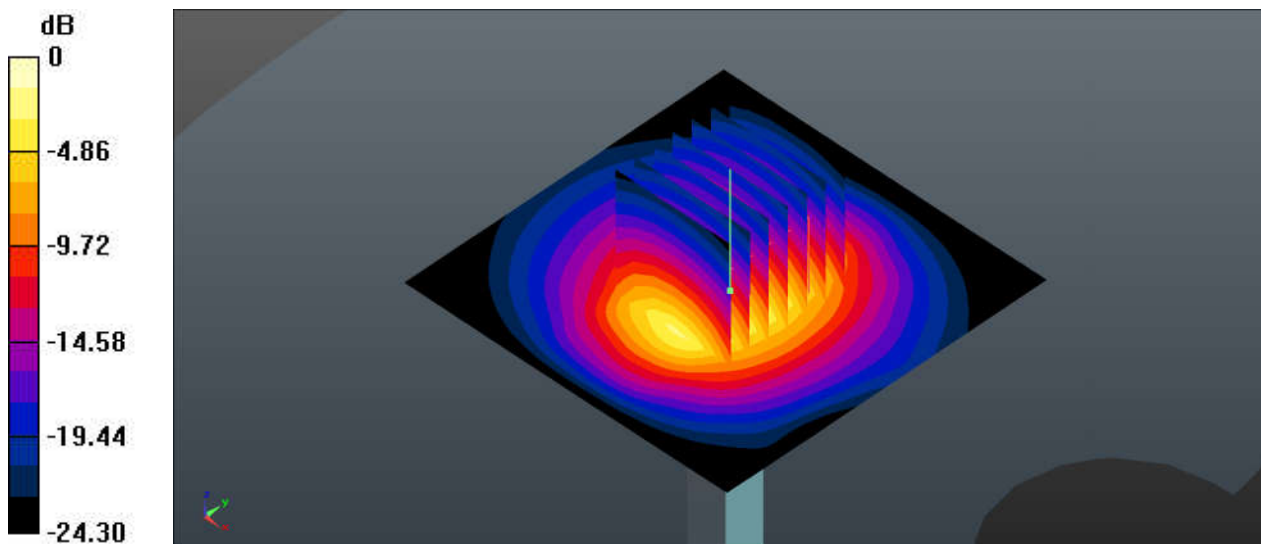
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 99.75 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 31.7 W/kg

SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.45 W/kg

Maximum value of SAR (measured) = 19.7 W/kg



0 dB = 19.7 W/kg = 12.94 dBW/kg

System Check_Head_5250MHz

DUT: D5GHzV2 - SN:1113

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: HSL_5000 Medium parameters used: $f = 5250$ MHz; $\sigma = 4.555$ S/m; $\epsilon_r = 34.768$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(5.19, 5.19, 5.19); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 15.1 W/kg

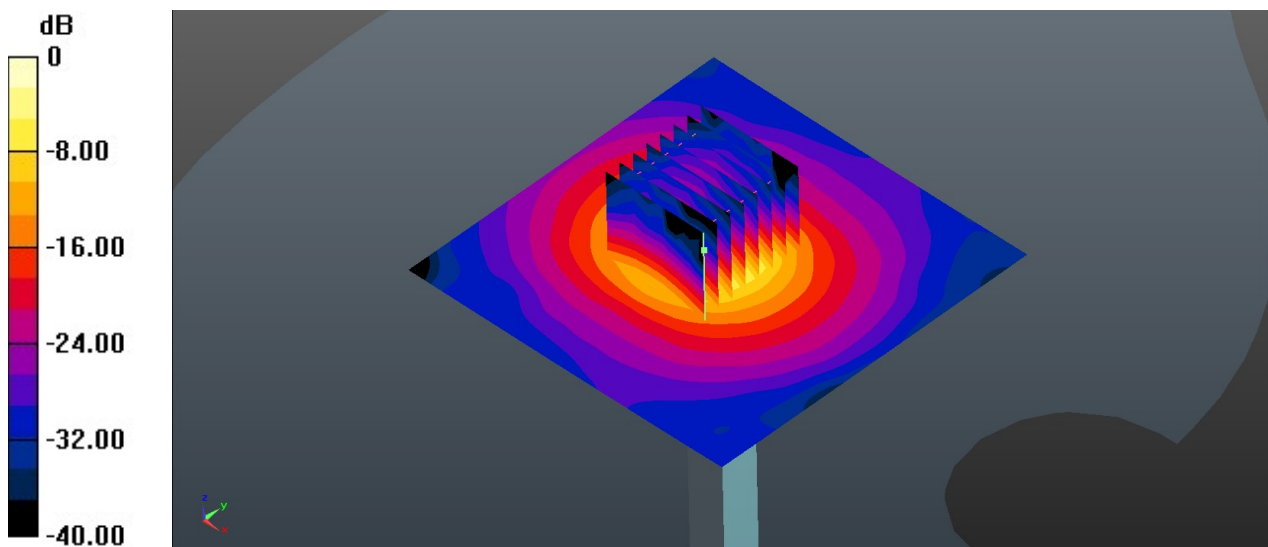
Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 38.78 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 30.9 W/kg

SAR(1 g) = 7.52 W/kg; SAR(10 g) = 2.14 W/kg

Maximum value of SAR (measured) = 18.3 W/kg



0 dB = 18.3 W/kg = 12.62 dBW/kg

System Check_Head_5600MHz

DUT: D5GHzV2 - SN:1113

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL_5000 Medium parameters used: $f = 5600$ MHz; $\sigma = 4.897$ S/m; $\epsilon_r = 34.294$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(4.92, 4.92, 4.92); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 20.0 W/kg

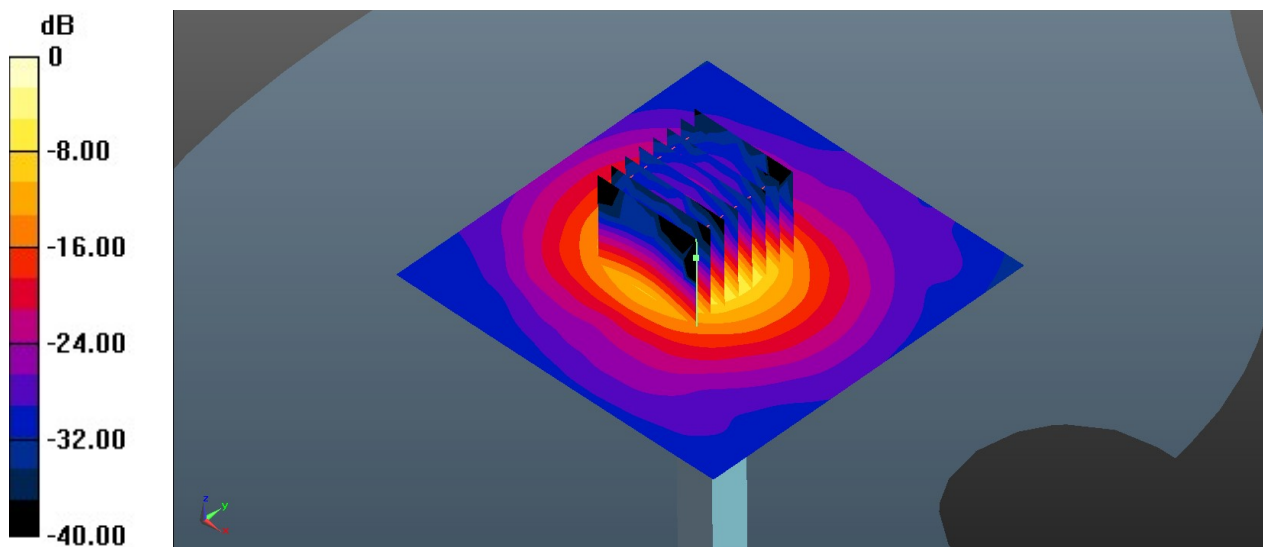
Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 38.22 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 35.3 W/kg

SAR(1 g) = 7.93 W/kg; SAR(10 g) = 2.23 W/kg

Maximum value of SAR (measured) = 20.0 W/kg



0 dB = 20.0 W/kg = 13.01 dBW/kg

System Check_Head_5750MHz

DUT: D5GHzV2 - SN:1113

Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: HSL_5000 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.048$ S/m; $\epsilon_r = 34.066$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(5.17, 5.17, 5.17); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 19.2 W/kg

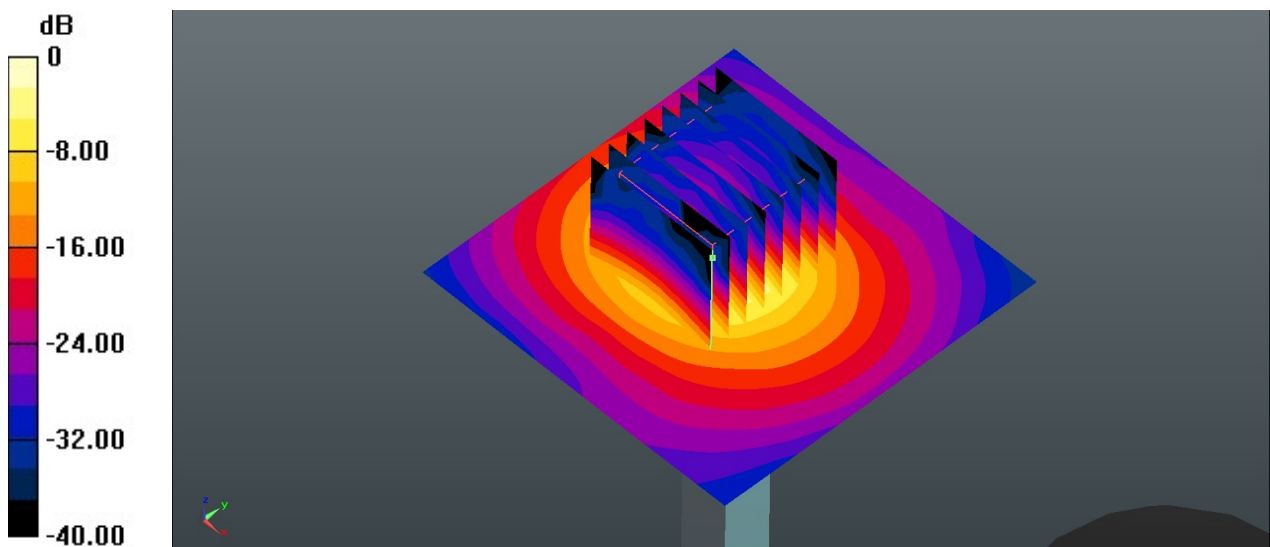
Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 36.51 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 35.6 W/kg

SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.16 W/kg

Maximum value of SAR (measured) = 19.0 W/kg



0 dB = 19.0 W/kg = 12.79 dBW/kg

System Check_Head_750MHz

DUT: D750V3 - SN:1087

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
Medium: HSL_750 Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.905 \text{ S/m}$; $\epsilon_r = 42.737$; $\rho = 1000 \text{ kg/m}^3$

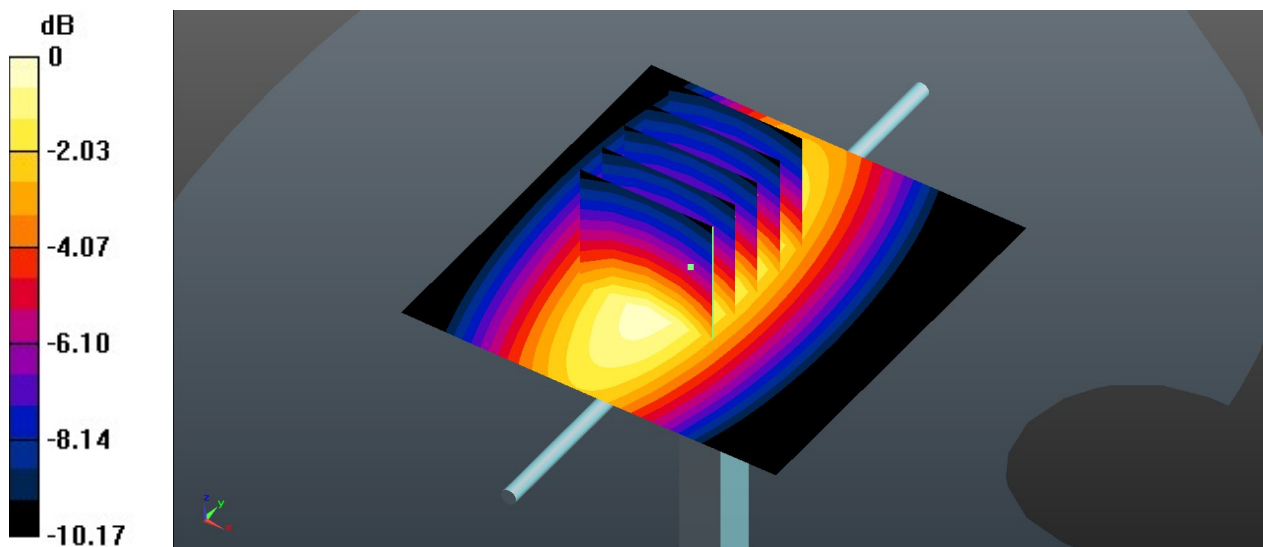
Ambient Temperature : 23.3 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3166; ConvF(6.43, 6.43, 6.43); Calibrated: 2020.3.2
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 2.55 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 53.47 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 3.33 W/kg
SAR(1 g) = 2.21 W/kg; SAR(10 g) = 1.46 W/kg
Maximum value of SAR (measured) = 2.58 W/kg



0 dB = 2.58 W/kg = 4.12 dBW/kg

System Check_Head_835MHz

DUT: D835V2 - SN:4d151

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
Medium: HSL_835 Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.915 \text{ S/m}$; $\epsilon_r = 41.263$; $\rho = 1000 \text{ kg/m}^3$

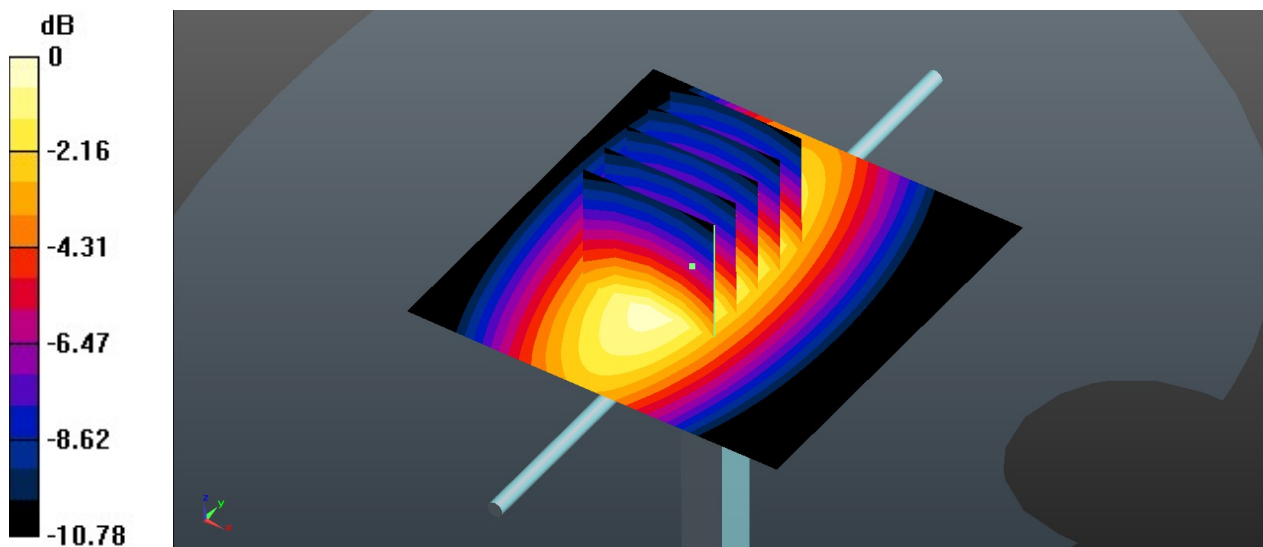
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3166; ConvF(6.29, 6.29, 6.29); Calibrated: 2020.3.2
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 2.92 W/kg

Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 56.68 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 3.72 W/kg
SAR(1 g) = 2.5 W/kg; SAR(10 g) = 1.63 W/kg
Maximum value of SAR (measured) = 2.94 W/kg



0 dB = 2.94 W/kg = 4.68 dBW/kg

System Check_Head_1750MHz

DUT: D1750V2 - SN:1090

Communication System: UID 0, CW (0); Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: HSL_1750 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.343$ S/m; $\epsilon_r = 39.241$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3166; ConvF(5.35, 5.35, 5.35); Calibrated: 2020.3.2
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 11.4 W/kg

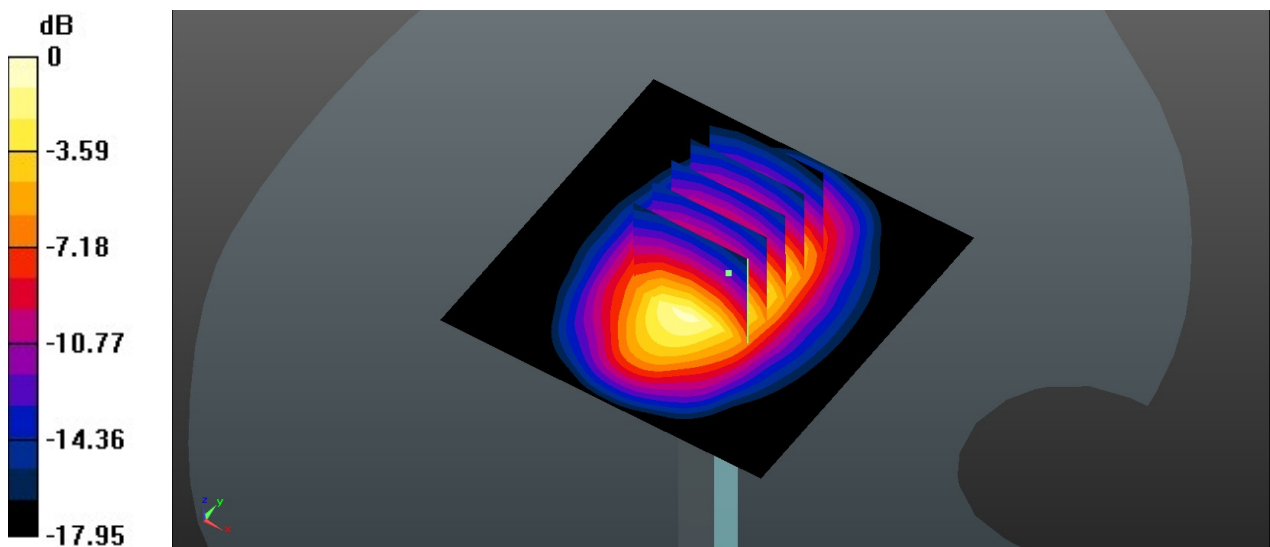
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 94.06 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 8.96 W/kg; SAR(10 g) = 4.71 W/kg

Maximum value of SAR (measured) = 11.2 W/kg



0 dB = 11.2 W/kg = 10.49 dBW/kg

System Check_Head_1900MHz

DUT: D1900V2 - SN:5d170

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL_1900 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.429$ S/m; $\epsilon_r = 38.596$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.9 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3166; ConvF(5.16, 5.16, 5.16); Calibrated: 2020.3.2
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 13.5 W/kg

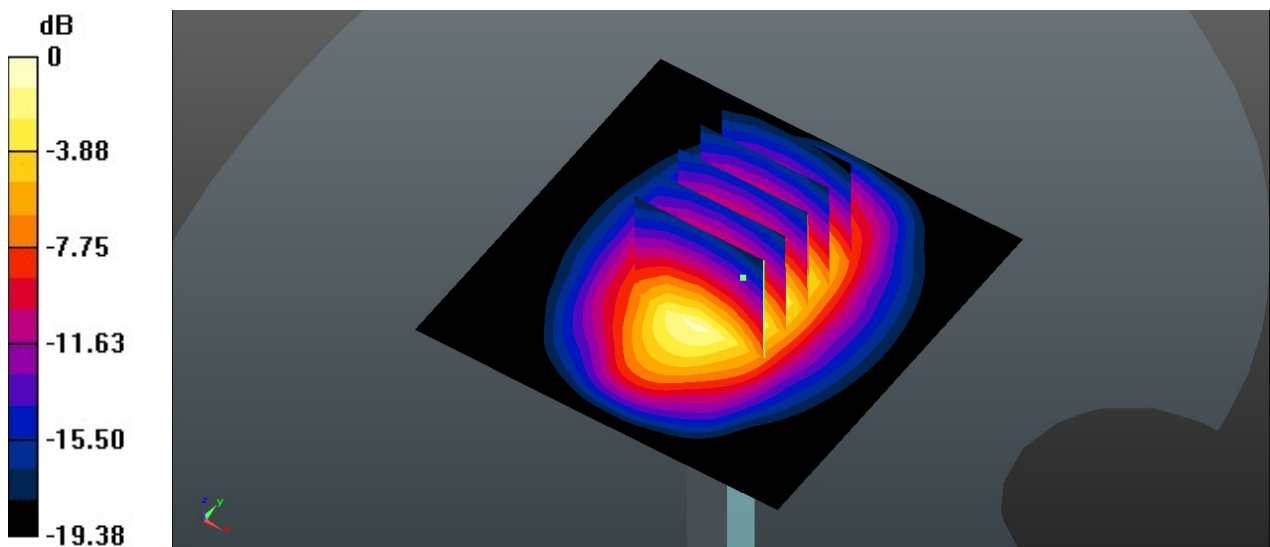
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 96.69 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 19.6 W/kg

SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.21 W/kg

Maximum value of SAR (measured) = 13.1 W/kg



0 dB = 13.1 W/kg = 11.17 dBW/kg

System Check_Head_2600MHz

DUT: D2600V2 - SN:1061

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1

Medium: HSL_2600 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.052$ S/m; $\epsilon_r = 37.849$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3166; ConvF(4.63, 4.63, 4.63); Calibrated: 2020.3.2
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 21.2 W/kg

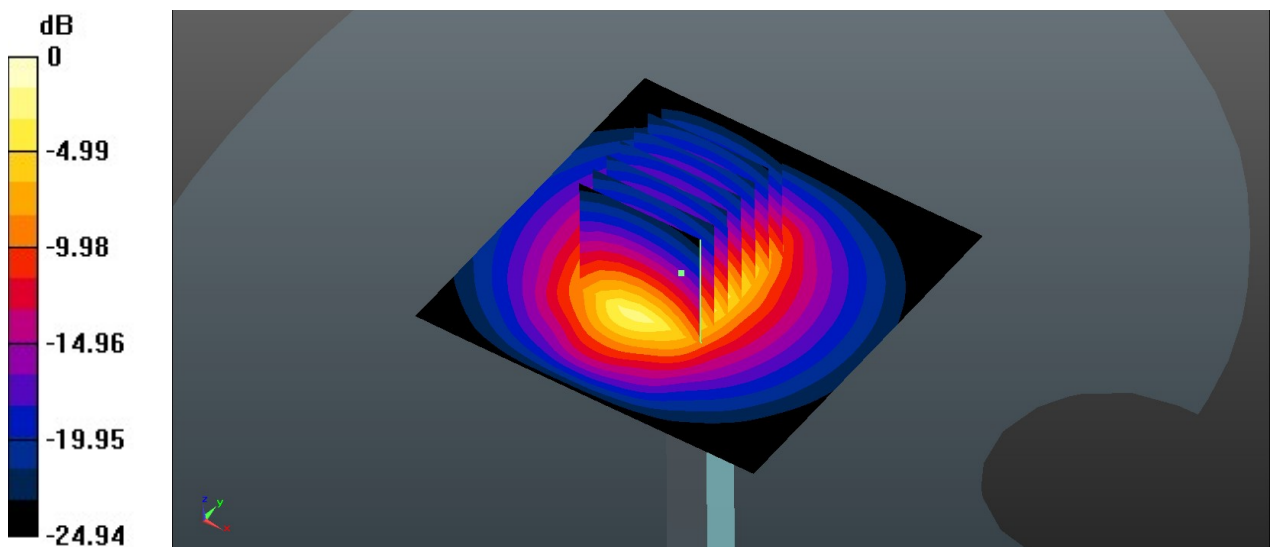
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.63 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 35.8 W/kg

SAR(1 g) = 15.3 W/kg; SAR(10 g) = 6.59 W/kg

Maximum value of SAR (measured) = 20.6 W/kg



0 dB = 20.6 W/kg = 13.14 dBW/kg



Appendix B. Plots of High SAR Measurement

The plots are shown as follows.

01_GSM850_GPRS 3 Tx slots_Right Cheek_0mm_Ch189

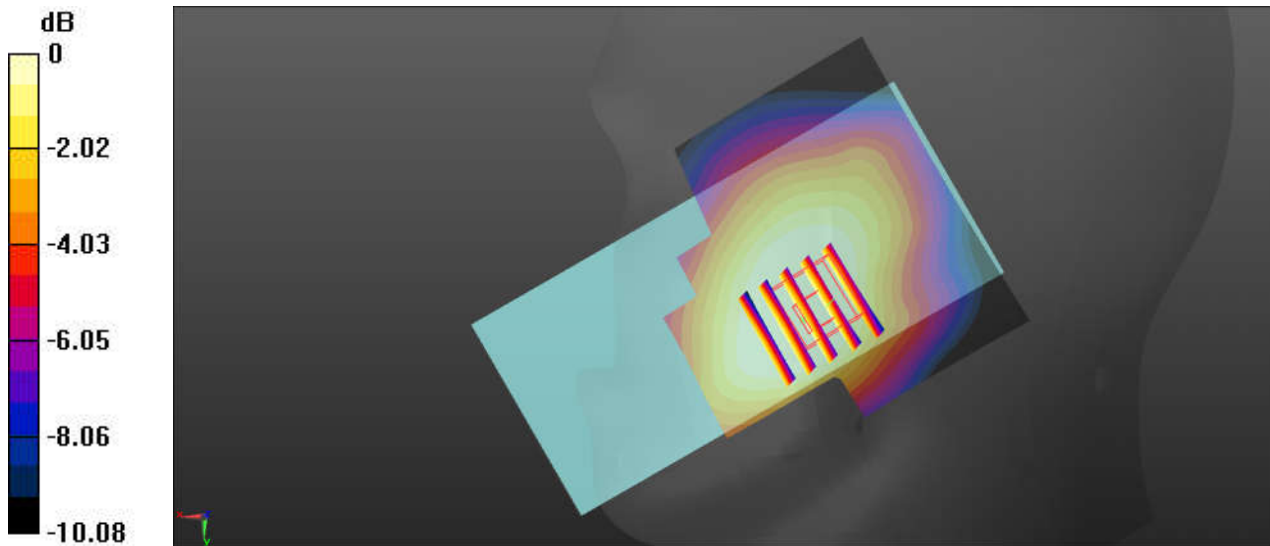
Communication System: UID 0, GSM850 (0); Frequency: 836.4 MHz; Duty Cycle: 1:2.77
Medium: HSL_835 Medium parameters used: $f = 836.4$ MHz; $\sigma = 0.921$ S/m; $\epsilon_r = 40.535$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.4 °C ; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(9.48, 9.48, 9.48); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.268 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.103 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.239 W/kg
SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.134 W/kg
Maximum value of SAR (measured) = 0.200 W/kg



0 dB = 0.200 W/kg = -6.99 dBW/kg

02_GSM1900_GPRS 3 Tx slots_Right Cheek_0mm_Ch810

Communication System: UID 0, PCS (0); Frequency: 1909.8 MHz; Duty Cycle: 1:2.77
Medium: HSL 1900 Medium parameters used: $f = 1910$ MHz; $\sigma = 1.424$ S/m; $\epsilon_r = 38.995$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.2 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(8.1, 8.1, 8.1); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0716 W/kg

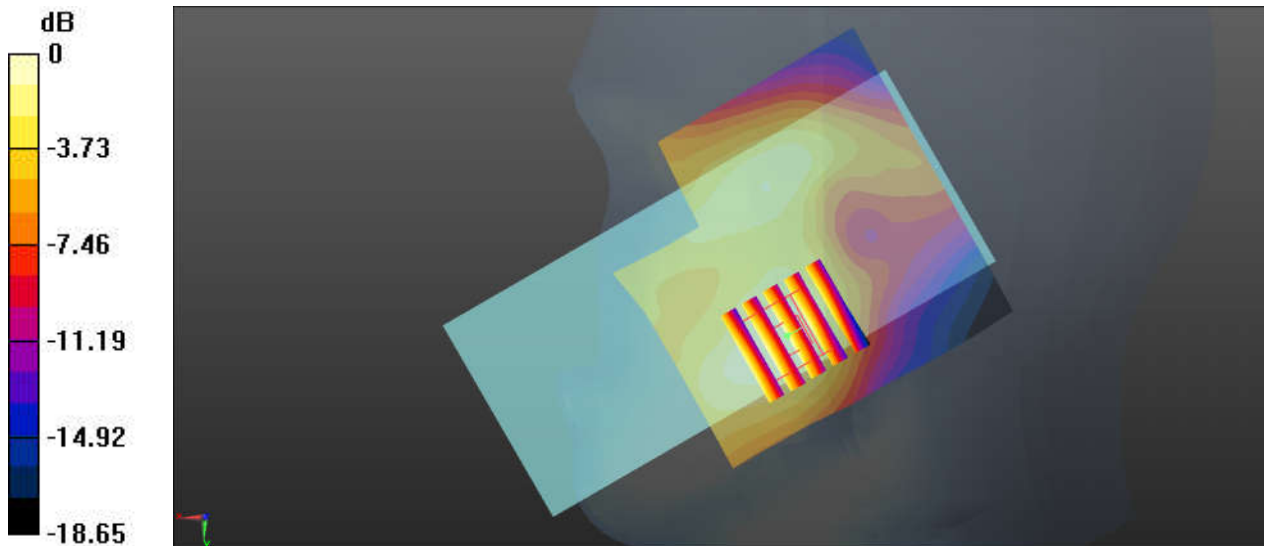
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.560 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.0970 W/kg

SAR(1 g) = 0.059 W/kg; SAR(10 g) = 0.035 W/kg

Maximum value of SAR (measured) = 0.0714 W/kg



0 dB = 0.0714 W/kg = -11.46 dBW/kg

03_WCDMA V_RMC12.2Kbps_Right Cheek_0mm_Ch4132

Communication System: UID 0, WCDMA (0); Frequency: 826.4 MHz; Duty Cycle: 1:1
Medium: HSL_835 Medium parameters used: $f = 826.4$ MHz; $\sigma = 0.911$ S/m; $\epsilon_r = 40.656$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.4 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(9.48, 9.48, 9.48); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Area Scan (71x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.278 W/kg

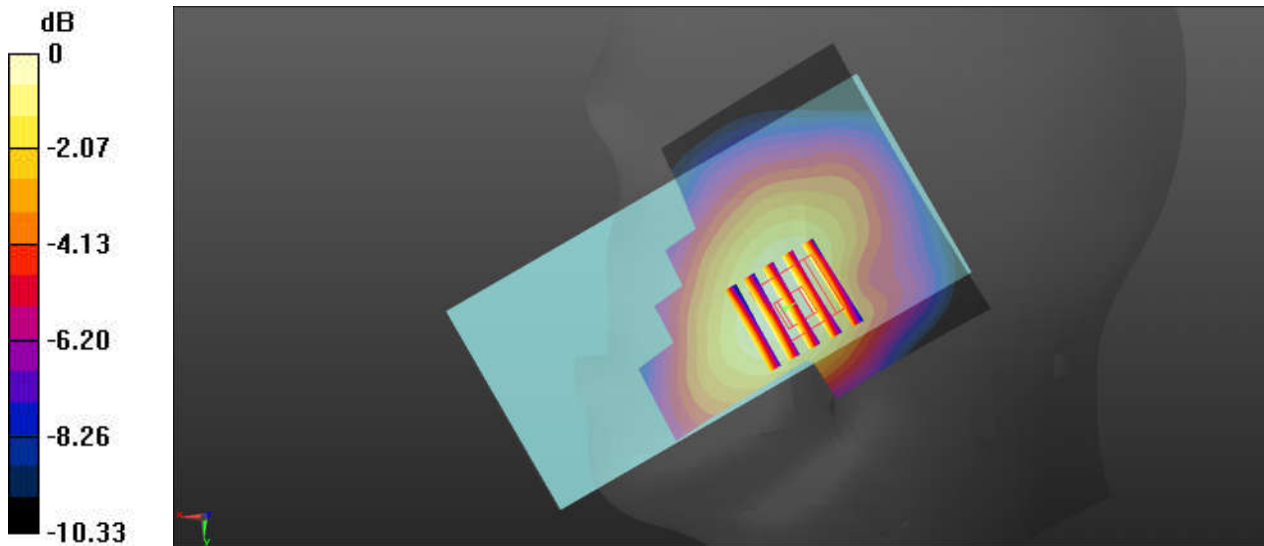
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.824 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.336 W/kg

SAR(1 g) = 0.257 W/kg; SAR(10 g) = 0.188 W/kg

Maximum value of SAR (measured) = 0.284 W/kg



0 dB = 0.284 W/kg = -5.47 dBW/kg

04_WCDMA IV_RMC12.2Kbps_Right Cheek_0mm_Ch1513

Communication System: UID 0, WCDMA (0); Frequency: 1752.6 MHz; Duty Cycle: 1:1
Medium: HSL_1750 Medium parameters used: $f = 1753$ MHz; $\sigma = 1.362$ S/m; $\epsilon_r = 41.025$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.1 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(8.46, 8.46, 8.46); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.167 W/kg

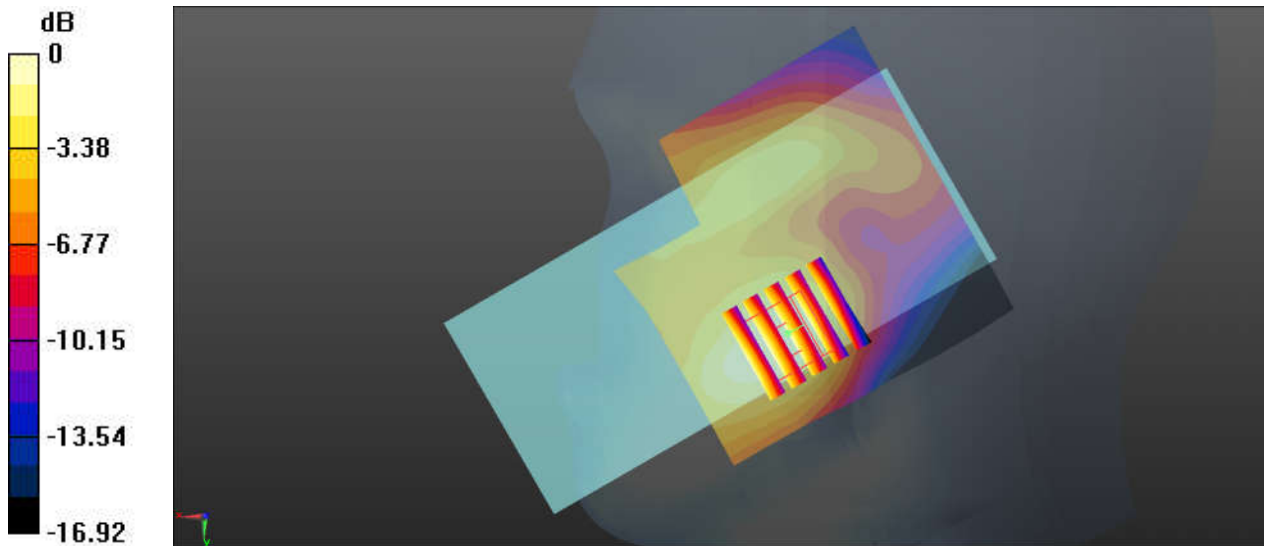
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.339 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.215 W/kg

SAR(1 g) = 0.143 W/kg; SAR(10 g) = 0.090 W/kg

Maximum value of SAR (measured) = 0.167 W/kg



0 dB = 0.167 W/kg = -7.77 dBW/kg

05_WCDMA II_RMC12.2Kbps_Right Cheek_0mm_Ch9400

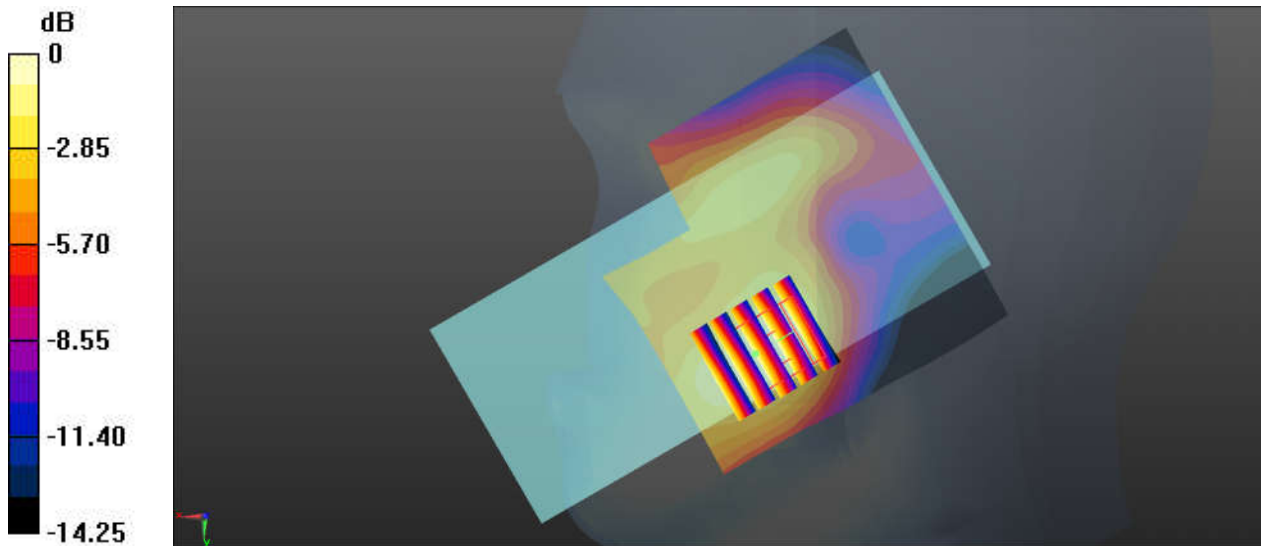
Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: HSL 1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.393$ S/m; $\epsilon_r = 39.139$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.3 °C ; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3293; ConvF(5.32, 5.32, 5.32); Calibrated: 2019.11.25
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn799; Calibrated: 2020.2.10
- Phantom: SAM1; Type: SAM; Serial: TP-1753
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Area Scan (71x71x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.111 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.920 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.154 W/kg
SAR(1 g) = 0.096 W/kg; SAR(10 g) = 0.058 W/kg
Maximum value of SAR (measured) = 0.113 W/kg



0 dB = 0.113 W/kg = -9.47 dBW/kg

06_CDMA BC0_RC3 SO55_Right Cheek_0mm_Ch1013

Communication System: UID 0, CDMA (0); Frequency: 824.7 MHz; Duty Cycle: 1:1
Medium: HSL_835 Medium parameters used: $f = 825 \text{ MHz}$; $\sigma = 0.91 \text{ S/m}$; $\epsilon_r = 40.679$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature : $23.4 \text{ }^\circ\text{C}$; Liquid Temperature : $22.8 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(9.48, 9.48, 9.48); Calibrated: 2019.5.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2019.11.20
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Area Scan (71x71x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.231 W/kg

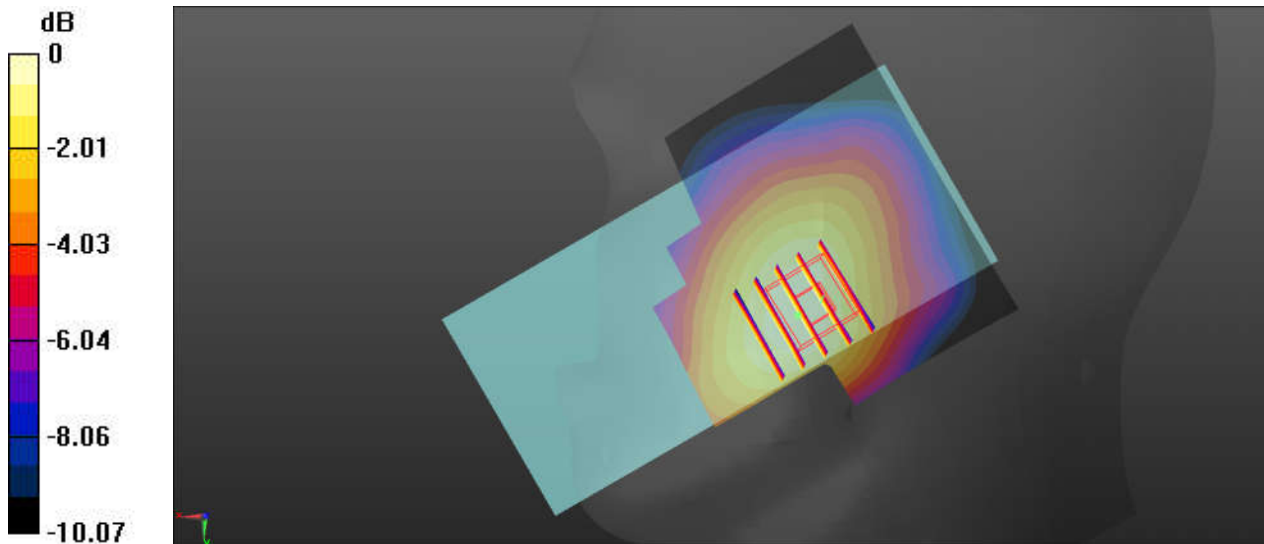
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.837 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.270 W/kg

SAR(1 g) = 0.210 W/kg ; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (measured) = 0.233 W/kg



0 dB = $0.233 \text{ W/kg} = -6.33 \text{ dBW/kg}$