



15.1 Head SAR

Plot No.	No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
835MHz																							
01	1st	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 0	ECI 2	189	836.4	1	29.32	30.50	1.312	-	-	-0.07	0.491	0.644	-27.33%
	2nd	GSM850	-	-	-	-	GPRS (4 Tx slots)	Right Cheek	0mm	Ant 0	ECI 2	189	836.4	1	29.32	30.50	1.312	-	-	-0.03	0.357	0.468	
02	1st	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	ECI 2	4182	836.4	1	22.93	24.00	1.279	-	-	-0.03	0.344	0.440	-6.59%
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Cheek	0mm	Ant 0	ECI 2	4182	836.4	1	22.93	24.00	1.279	-	-	0.05	0.321	0.411	
03	1st	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	26865	831.5	1	23.03	24.00	1.250	-	-	0.05	0.272	0.340	-10.00%
	2nd	LTE Band 26	15M	QPSK	1	0	-	Right Cheek	0mm	Ant 0	ECI 2	26865	831.5	1	23.03	24.00	1.250	-	-	-0.02	0.245	0.306	
04	1st	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	166300	831.5	1	22.89	24.00	1.291	-	-	-0.04	0.201	0.260	-6.15%
	2nd	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	166300	831.5	1	22.89	24.00	1.291	-	-	0.07	0.189	0.244	
05	1st	FR1 n5	25M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	167300	836.5	1	22.92	24.00	1.282	-	-	0.02	0.179	0.230	-4.78%
	2nd	FR1 n5	25M	QPSK	1	1	DFT-SCS-15KHz	Right Cheek	0mm	Ant 0	ECI 2	167300	836.5	1	22.92	24.00	1.282	-	-	-0.06	0.171	0.219	
1900MHz																							
06	1st	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 0	ECI 2	661	1880	1	25.33	26.50	1.309	-	-	-0.01	0.059	0.077	-2.60%
	2nd	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Left Cheek	0mm	Ant 0	ECI 2	661	1880	1	25.33	26.50	1.309	-	-	0.09	0.057	0.075	
07	1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	ECI 2	9400	1880	1	22.65	24.00	1.365	-	-	-0.07	0.100	0.136	-26.47%
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Left Cheek	0mm	Ant 0	ECI 2	9400	1880	1	22.65	24.00	1.365	-	-	0.01	0.073	0.100	
08	1st	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	18900	1880	1	22.66	24.00	1.361	-	-	0.06	0.095	0.129	-8.53%
	2nd	LTE Band 2	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 0	ECI 2	18900	1880	1	22.66	24.00	1.361	-	-	-0.05	0.087	0.118	
2600MHz																							
	1st	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	21100	2535	1	23.04	24.00	1.247	-	-	0.06	0.412	0.514	-2.14%
	2nd	LTE Band 7	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	21100	2535	1	23.04	24.00	1.247	-	-	0.04	0.403	0.503	
09	1st	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	21350	2560	1	13.43	14.50	1.279	-	-	0.11	0.730	0.934	-7.17%
	2nd	LTE Band 7	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	21350	2560	1	13.43	14.50	1.279	-	-	0.09	0.678	0.867	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 1	ECI 2	40620	2593	1	22.97	24.00	1.268	-	-	-0.16	0.400	0.507	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 1	ECI 2	40620	2593	1	21.93	23.00	1.279	-	-	0.05	0.320	0.409	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 1	ECI 2	40620	2593	1	22.97	24.00	1.268	-	-	-0.05	0.298	0.378	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 1	ECI 2	40620	2593	1	21.93	23.00	1.279	-	-	0.12	0.233	0.298	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	40620	2593	1	22.97	24.00	1.268	-	-	0.02	0.649	0.823	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	39750	2506	1	22.93	24.00	1.279	-	-	-0.08	0.637	0.815	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	40185	2549.5	1	22.84	24.00	1.306	-	-	0.01	0.625	0.816	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	41055	2636.5	1	22.91	24.00	1.285	-	-	-0.13	0.596	0.766	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 1	ECI 2	41490	2680	1	22.79	24.00	1.321	-	-	-0.05	0.622	0.822	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	40620	2593	1	21.93	23.00	1.279	-	-	0.14	0.514	0.658	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	39750	2506	1	21.78	23.00	1.324	-	-	0.16	0.504	0.667	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	40185	2549.5	1	21.85	23.00	1.303	-	-	0.18	0.495	0.645	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	41055	2636.5	1	21.76	23.00	1.330	-	-	-0.09	0.472	0.628	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 1	ECI 2	41490	2680	1	21.80	23.00	1.318	-	-	-0.18	0.493	0.650	
	2nd	LTE Band 41	20M	QPSK	100	0	-	Left Cheek	0mm	Ant 1	ECI 2	40620	2593	1	21.91	23.00	1.285	-	-	0.09	0.483	0.621	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 1	ECI 2	40620	2593	1	22.97	24.00	1.268	-	-	-0.08	0.202	0.256	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 1	ECI 2	40620	2593	1	21.93	23.00	1.279	-	-	-0.14	0.163	0.209	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	ECI 2	40620	2593	1	13.68	14.50	1.208	62.9	1.006	-0.06	0.424	0.515	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	ECI 2	40620	2593	1	13.61	14.50	1.227	62.9	1.006	-0.12	0.359	0.443	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	40620	2593	1	13.68	14.50	1.208	62.9	1.006	-0.07	0.549	0.667	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	39750	2506	1	13.51	14.50	1.256	62.9	1.006	-0.16	0.539	0.681	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	40185	2549.5	1	13.59	14.50	1.233	62.9	1.006	-0.01	0.544	0.675	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	41055	2636.5	1	13.56	14.50	1.242	62.9	1.006	-0.12	0.581	0.726	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	41490	2680	1	13.63	14.50	1.222	62.9	1.006	-0.14	0.492	0.605	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	ECI 2	40620	2593	1	13.61	14.50	1.227	62.9	1.006	0.19	0.454	0.561	
	2nd	LTE Band 41	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 4	ECI 2	40620	2593	1	13.56	14.50	1.242	62.9	1.006	-0.16	0.427	0.533	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	ECI 2	40620	2593	1	13.68	14.50	1.208	62.9	1.006	-0.12	0.165	0.200	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	ECI 2	40620	2593	1	13.61	14.50	1.227	62.9	1.006	-0.14	0.137	0.169	



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	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	ECI 2	40620	2593	1	13.68	14.50	1.208	62.9	1.006	-0.11	0.165	0.200	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	ECI 2	40620	2593	1	13.61	14.50	1.227	62.9	1.006	0.01	0.178	0.220	
10	2nd	LTE Band 41_HPUE	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	41055	2636.5	1	16.36	17.50	1.300	42.9	1.009	-0.16	0.689	0.904	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Right Cheek	0mm	Ant 4	ECI 2	38000	2595	1	14.93	16.00	1.279	62.9	1.006	0.04	0.568	0.731	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Right Cheek	0mm	Ant 4	ECI 2	38000	2595	1	14.88	16.00	1.294	62.9	1.006	-0.19	0.482	0.628	
	2nd	LTE Band 38	20M	QPSK	100	0	-	Right Cheek	0mm	Ant 4	ECI 2	38000	2595	1	14.77	16.00	1.327	62.9	1.006	0.03	0.420	0.561	
11	2nd	LTE Band 38	20M	QPSK	1	0	-	Right Tilted	0mm	Ant 4	ECI 2	38000	2595	1	14.93	16.00	1.279	62.9	1.006	0.02	0.742	0.955	
	2nd	LTE Band 38C	20M	QPSK	1	99	-	Right Tilted	0mm	Ant 4	ECI 2	37901+38099	2585.1+2604.9	1	14.88	16.00	1.294	62.9	1.006	0.03	0.705	0.918	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Right Tilted	0mm	Ant 4	ECI 2	38000	2595	1	14.88	16.00	1.294	62.9	1.006	-0.15	0.611	0.795	
	2nd	LTE Band 38	20M	QPSK	100	0	-	Right Tilted	0mm	Ant 4	ECI 2	38000	2595	1	14.77	16.00	1.327	62.9	1.006	-0.08	0.573	0.765	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Left Cheek	0mm	Ant 4	ECI 2	38000	2595	1	14.93	16.00	1.279	62.9	1.006	0.04	0.217	0.279	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Left Cheek	0mm	Ant 4	ECI 2	38000	2595	1	14.88	16.00	1.294	62.9	1.006	0.04	0.176	0.229	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 4	ECI 2	38000	2595	1	14.93	16.00	1.279	62.9	1.006	0.06	0.220	0.283	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Left Tilted	0mm	Ant 4	ECI 2	38000	2595	1	14.88	16.00	1.294	62.9	1.006	0.17	0.238	0.310	
	1st	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	507000	2535	1	22.93	24.00	1.279	-	-	0.01	0.401	0.513	-18.52%
12	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Cheek	0mm	Ant 1	ECI 2	507000	2535	1	22.93	24.00	1.279	-	-	0.07	0.327	0.418	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	ECI 2	518598	2592.99	1	15.05	16.00	1.245	-	-	0.07	0.665	0.828	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	ECI 2	518598	2592.99	1	14.97	16.00	1.268	-	-	0.17	0.569	0.721	
	2nd	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Cheek	0mm	Ant 4	ECI 2	518598	2592.99	1	14.84	16.00	1.306	-	-	-0.06	0.458	0.598	
13	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	ECI 2	518598	2592.99	1	15.05	16.00	1.245	-	-	-0.03	0.782	0.973	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	ECI 2	518598	2592.99	1	14.97	16.00	1.268	-	-	-0.17	0.704	0.892	
	2nd	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Right Tilted	0mm	Ant 4	ECI 2	518598	2592.99	1	14.84	16.00	1.306	-	-	-0.09	0.558	0.729	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	ECI 2	518598	2592.99	1	15.05	16.00	1.245	-	-	-0.03	0.249	0.310	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 4	ECI 2	518598	2592.99	1	14.97	16.00	1.268	-	-	0.04	0.212	0.269	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	ECI 2	518598	2592.99	1	15.05	16.00	1.245	-	-	0.14	0.329	0.409	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 4	ECI 2	518598	2592.99	1	14.97	16.00	1.268	-	-	0.05	0.277	0.351	
3500MHz																							
	1st	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	ECI 2	42190	3460	1	15.87	17.50	1.455	62.9	1.006	-0.02	0.613	0.898	-3.34%
14	2nd	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	ECI 2	42190	3460	1	15.87	17.50	1.455	62.9	1.006	-0.08	0.593	0.868	
	2nd	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	ECI 2	42190	3460	2	15.87	17.50	1.455	62.9	1.006	0.03	0.587	0.859	
	2nd	LTE Band 42	20M	QPSK	1	0	-	Left Tilted	0mm	Ant 5	ECI 2	42190	3460	3	15.87	17.50	1.455	62.9	1.006	0.01	0.559	0.818	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	ECI 2	656000	3840	1	21.75	23.50	1.496	-	-	0.09	0.040	0.060	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 1	ECI 2	656000	3840	1	21.52	23.50	1.578	-	-	0.19	0.050	0.079	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	656000	3840	1	21.75	23.50	1.496	-	-	0.06	0.030	0.045	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 1	ECI 2	656000	3840	1	21.52	23.50	1.578	-	-	0.01	0.045	0.071	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	ECI 2	656000	3840	1	21.75	23.50	1.496	-	-	-0.15	0.064	0.096	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 1	ECI 2	656000	3840	1	21.52	23.50	1.578	-	-	-0.09	0.085	0.134	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	ECI 2	656000	3840	1	21.75	23.50	1.496	-	-	0.18	0.034	0.051	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 1	ECI 2	656000	3840	1	21.52	23.50	1.578	-	-	0.19	0.041	0.065	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	ECI 2	656000	3840	1	22.73	24.50	1.503	-	-	-0.04	0.152	0.228	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 2	ECI 2	656000	3840	1	22.65	24.50	1.531	-	-	-0.03	0.188	0.288	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	ECI 2	656000	3840	1	22.73	24.50	1.503	-	-	0.07	0.101	0.152	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 2	ECI 2	656000	3840	1	22.65	24.50	1.531	-	-	-0.07	0.135	0.207	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	ECI 2	656000	3840	1	22.73	24.50	1.503	-	-	0.11	0.076	0.114	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 2	ECI 2	656000	3840	1	22.65	24.50	1.531	-	-	0.11	0.105	0.161	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	ECI 2	656000	3840	1	22.73	24.50	1.503	-	-	0.19	0.046	0.069	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 2	ECI 2	656000	3840	1	22.65	24.50	1.531	-	-	0.07	0.065	0.100	
	2nd	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	ECI 2	656000	3840	1	16.07	16.50	1.104	-	-	-0.08	0.443	0.489	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 5	ECI 2	656000	3840	1	15.87	16.50	1.156	-	-	-0.05	0.577	0.667	
	2nd	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	ECI 2	656000	3840	1	16.07	16.50	1.104	-	-	0.17	0.456	0.503	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 5	ECI 2	656000	3840	1	15.87	16.50	1.156	-	-	0.02	0.628	0.726	
	2nd	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	ECI 2	656000	3840	1	16.07	16.50	1.104	-	-	0.14	0.562	0.620	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 5	ECI 2	656000	3840	1	15.87	16.50	1.156	-	-	-0.07	0.675	0.780	
	2nd	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	ECI 2	656000	3840	1	16.07	16.50	1.104	-	-	-0.09	0.562	0.620	
15	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	ECI 2	656000	3840	1	15.87	16.50	1.156	-	-	-0.03	0.781	0.903	



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2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Tilted	0mm	Ant 5	EI 2	656000	3840	1	16.07	16.50	1.104	-	-	0.04	0.572	0.632	
2nd	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	EI 2	656000	3840	1	18.93	19.00	1.016	-	-	0.13	0.200	0.203	
2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Cheek	0mm	Ant 7	EI 2	656000	3840	1	18.88	19.00	1.028	-	-	0.15	0.263	0.270	
2nd	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	EI 2	656000	3840	1	18.93	19.00	1.016	-	-	0.14	0.161	0.164	
2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Tilted	0mm	Ant 7	EI 2	656000	3840	1	18.88	19.00	1.028	-	-	0.12	0.213	0.219	
2nd	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	EI 2	656000	3840	1	18.93	19.00	1.016	-	-	-0.12	0.569	0.578	
2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Cheek	0mm	Ant 7	EI 2	656000	3840	1	18.88	19.00	1.028	-	-	0.01	0.776	0.798	
2nd	FR1 n77	100M	QPSK	1	1	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	EI 2	656000	3840	1	18.93	19.00	1.016	-	-	0.07	0.315	0.320	
2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Tilted	0mm	Ant 7	EI 2	656000	3840	1	18.88	19.00	1.028	-	-	-0.18	0.412	0.424	

Plot No.	No	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
WIFI&BT																			
	1st	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6	standalone	6	2437	1	16.94	17.50	1.138	100	1.000	0.02	0.813	0.925	
16	2nd	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6	standalone	6	2437	1	16.94	17.50	1.138	100	1.000	0.07	0.807	0.918	-0.76%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6	standalone	6	2437	2	16.94	17.50	1.138	100	1.000	0.02	0.802	0.912	
	2nd	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	0mm	Ant 6	standalone	6	2437	3	16.94	17.50	1.138	100	1.000	-0.01	0.699	0.795	
	1st	Bluetooth	1Mbps	Left Tilted	0mm	Ant 6	Full Power	0	2402	1	14.67	15.50	1.211	76.73	1.086	-0.13	0.360	0.473	
17	2nd	Bluetooth	1Mbps	Left Tilted	0mm	Ant 6	Full Power	0	2402	1	14.67	15.50	1.211	76.73	1.086	-0.09	0.351	0.461	-2.54%
	1st	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6	standalone	58	5290	1	14.27	16.00	1.489	100	1.000	-0.08	0.752	1.120	
18	2nd	WLAN5.3GHz	802.11ac-VHT80 MCS0	Left Cheek	0mm	Ant 6	standalone	58	5290	1	14.27	16.00	1.489	100	1.000	0.05	0.594	0.885	-20.98
	1st	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6	standalone	142	5710	1	15.43	17.00	1.435	100	1.000	-0.07	0.699	1.003	
19	2nd	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	0mm	Ant 6	standalone	142	5710	1	15.43	17.00	1.435	100	1.000	0.02	0.551	0.791	-21.14%
	1st	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 6	standalone	157	5785	1	17.51	19.00	1.409	100	1.000	0.19	0.842	1.187	
20	2nd	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 6	standalone	157	5785	1	17.51	19.00	1.409	100	1.000	0.02	0.767	1.081	-8.93%
	2nd	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 6	standalone	157	5785	2	17.51	19.00	1.409	100	1.000	0.03	0.712	1.003	
	2nd	WLAN5.8GHz	802.11a 6Mbps	Left Tilted	0mm	Ant 6	standalone	157	5785		17.51	19.00	1.409	100	1.000	0.01	0.598	0.843	



15.2 Hotspot SAR

Plot No.	No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
835MHz																							
	1st	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	ECI 7	189	836.4	1	26.22	27.50	1.343	-	-	0.09	0.893	1.199	-11.84%
21	2nd	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	ECI 7	189	836.4	1	26.22	27.50	1.343	-	-	0.06	0.787	1.057	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	ECI 7	4182	836.4	1	21.39	22.50	1.291	-	-	0.13	0.455	0.588	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4182	836.4	1	21.39	22.50	1.291	-	-	0.15	0.992	1.281	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4132	826.4	1	21.31	22.50	1.315	-	-	0.08	0.862	1.134	
22	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4233	846.6	1	21.34	22.50	1.306	-	-	0.03	1.07	1.398	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4233	846.6	2	21.34	22.50	1.306	-	-	0.01	0.833	1.088	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4233	846.6	3	21.34	22.50	1.306	-	-	0.09	0.805	1.051	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Left Side	5mm	Ant 0	ECI 7	4182	836.4	1	21.39	22.50	1.291	-	-	0.06	0.233	0.301	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Right Side	5mm	Ant 0	ECI 7	4182	836.4	1	21.39	22.50	1.291	-	-	-0.04	0.423	0.546	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4182	836.4	1	21.39	22.50	1.291	-	-	0.02	0.888	1.147	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4132	826.4	1	21.31	22.50	1.315	-	-	0.03	0.751	0.988	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	4233	846.6	1	21.34	22.50	1.306	-	-	0.01	0.965	1.260	
	1st	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	26865	831.5	1	23.03	24.00	1.250	-	-	0.05	0.927	1.159	
23	2nd	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	26865	831.5	1	23.03	24.00	1.250	-	-	-0.03	0.901	1.126	-2.85%
	1st	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	166300	831.5	1	22.89	24.00	1.291	-	-	0.03	0.922	1.191	-7.98%
24	2nd	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	166300	831.5	1	22.89	24.00	1.291	-	-	-0.09	0.849	1.096	
	1st	FR1 n5	25M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	167300	836.5	1	22.92	24.00	1.282	-	-	0.09	0.669	0.858	-8.62%
25	2nd	FR1 n5	25M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	ECI 7	167300	836.5	1	22.92	24.00	1.282	-	-	0.04	0.611	0.784	
1900MHz																							
	1st	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	ECI 7	512	1850.2	1	18.46	19.50	1.271	-	-	-0.04	0.891	1.132	-2.83%
	2nd	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	ECI 7	512	1850.2	1	18.46	19.50	1.271	-	-	0.02	0.866	1.100	
	1st	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	ECI 7	512	1850.2	1	18.46	19.50	1.271	-	-	-0.07	1.01	1.283	-3.12%
26	2nd	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	5mm	Ant 0	ECI 7	512	1850.2	1	18.46	19.50	1.271	-	-	0.06	0.978	1.243	
	1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	9400	1880	1	14.18	15.50	1.355	-	-	-0.19	0.796	1.079	-5.19%
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	9400	1880	1	14.18	15.50	1.355	-	-	0.02	0.755	1.023	
	1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9400	1880	1	14.18	15.50	1.355	-	-	0.07	0.953	1.291	-0.39%
27	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	5mm	Ant 0	ECI 7	9400	1880	1	14.18	15.50	1.355	-	-	-0.06	0.949	1.286	
	1st	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	19100	1900	1	13.48	15.00	1.419	-	-	0.02	0.624	0.885	-14.58%
	2nd	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	ECI 7	19100	1900	1	13.48	15.00	1.419	-	-	-0.06	0.533	0.756	
	1st	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	19100	1900	1	13.48	15.00	1.419	-	-	0.03	0.863	1.225	-10.12%
28	2nd	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 0	ECI 7	19100	1900	1	13.48	15.00	1.419	-	-	0.09	0.776	1.101	
2600MHz																							
	2nd	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	21100	2535	1	18.06	19.00	1.242	-	-	0.03	0.500	0.621	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	21100	2535	1	18.01	19.00	1.256	-	-	-0.13	0.470	0.590	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	21100	2535	1	18.06	19.00	1.242	-	-	0.03	0.980	1.217	
29	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	20850	2510	1	17.99	19.00	1.262	-	-	-0.05	1.09	1.375	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	20850	2510	2	17.99	19.00	1.262	-	-	0.03	1.01	1.274	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	20850	2510	3	17.99	19.00	1.262	-	-	0.01	0.96	1.205	
	2nd	LTE Band 7C	20M	QPSK	1	99	-	Back	5mm	Ant 1	ECI 7	20850+21048	2510+2529.8	1	17.88	19.00	1.294	-	-	0.02	0.908	1.175	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	21350	2560	1	17.95	19.00	1.274	-	-	0.06	0.876	1.116	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	21100	2535	1	18.01	19.00	1.256	-	-	0.02	0.839	1.054	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	20850	2510	1	17.98	19.00	1.265	-	-	0.09	0.856	1.083	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	21350	2560	1	17.94	19.00	1.276	-	-	-0.01	0.710	0.906	
	2nd	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 1	ECI 7	21100	2535	1	17.93	19.00	1.279	-	-	-0.07	0.819	1.048	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	21100	2535	1	18.06	19.00	1.242	-	-	0.04	0.649	0.806	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	20850	2510	1	17.99	19.00	1.262	-	-	0.16	0.697	0.879	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	21350	2560	1	17.95	19.00	1.274	-	-	0.02	0.608	0.774	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	21100	2535	1	18.01	19.00	1.256	-	-	0.05	0.551	0.692	
	2nd	LTE Band 7	20M	QPSK	100	0	-	Left Side	5mm	Ant 1	ECI 7	21100	2535	1	17.93	19.00	1.279	-	-	-0.14	0.539	0.690	



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	2nd	LTE Band 7	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 1	ECI 7	21100	2535	1	18.06	19.00	1.242	-	-	0.02	0.458	0.569	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 1	ECI 7	21100	2535	1	18.01	19.00	1.256	-	-	0.05	0.377	0.474	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 4	ECI 7	21100	2535	1	11.46	12.50	1.271	-	-	-0.01	0.169	0.215	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 4	ECI 7	21100	2535	1	11.43	12.50	1.279	-	-	-0.01	0.132	0.169	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 4	ECI 7	21100	2535	1	11.46	12.50	1.271	-	-	0.07	0.226	0.287	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 4	ECI 7	21100	2535	1	11.43	12.50	1.279	-	-	0.02	0.197	0.252	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Left Side	5mm	Ant 4	ECI 7	21100	2535	1	11.46	12.50	1.271	-	-	0.04	0.046	0.058	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Left Side	5mm	Ant 4	ECI 7	21100	2535	1	11.43	12.50	1.279	-	-	0.05	0.041	0.052	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	21100	2535	1	11.46	12.50	1.271	-	-	0.01	0.506	0.643	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Top Side	5mm	Ant 4	ECI 7	21100	2535	1	11.43	12.50	1.279	-	-	-0.01	0.366	0.468	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Front	5mm	Ant 4	ECI 7	38000	2595	1	11.97	13.00	1.268	62.9	1.006	0.02	0.197	0.251	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Front	5mm	Ant 4	ECI 7	38000	2595	1	11.91	13.00	1.285	62.9	1.006	0.06	0.171	0.221	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Back	5mm	Ant 4	ECI 7	38000	2595	1	11.97	13.00	1.268	62.9	1.006	-0.02	0.355	0.453	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Back	5mm	Ant 4	ECI 7	38000	2595	1	11.91	13.00	1.285	62.9	1.006	-0.04	0.303	0.392	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Left Side	5mm	Ant 4	ECI 7	38000	2595	1	11.97	13.00	1.268	62.9	1.006	0.11	0.115	0.147	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Left Side	5mm	Ant 4	ECI 7	38000	2595	1	11.91	13.00	1.285	62.9	1.006	0.05	0.114	0.147	
30	2nd	LTE Band 38	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	38000	2595	1	11.97	13.00	1.268	62.9	1.006	0.17	0.540	0.689	
	2nd	LTE Band 38C	20M	QPSK	1	99	-	Top Side	5mm	Ant 4	ECI 7	37901+38099	2585.1+2604.9	1	11.79	13.00	1.321	62.9	1.006	0.03	0.499	0.663	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Top Side	5mm	Ant 4	ECI 7	38000	2595	1	11.91	13.00	1.285	62.9	1.006	0.07	0.467	0.604	
	2nd	LTE Band 38	20M	QPSK	100	0	-	Top Side	5mm	Ant 4	ECI 7	38000	2595	1	11.87	13.00	1.297	62.9	1.006	-0.05	0.087	0.114	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	ECI 7	40620	2593	1	18.95	20.00	1.274	-	-	-0.06	0.456	0.581	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	ECI 7	40620	2593	1	18.90	20.00	1.288	-	-	0.18	0.390	0.502	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	40620	2593	1	18.95	20.00	1.274	-	-	-0.03	0.750	0.955	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	39750	2506	1	18.82	20.00	1.312	-	-	0.11	0.846	1.110	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	40185	2549.5	1	18.89	20.00	1.291	-	-	0.08	0.750	0.968	
31	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	41055	2636.5	1	18.84	20.00	1.306	-	-	0.19	1.02	1.332	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	41490	2680	1	18.93	20.00	1.279	-	-	0.18	0.972	1.244	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	40620	2593	1	18.90	20.00	1.288	-	-	0.05	0.622	0.801	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	39750	2506	1	18.88	20.00	1.294	-	-	0.15	0.672	0.870	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	40185	2549.5	1	18.77	20.00	1.327	-	-	0.04	0.606	0.804	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	41055	2636.5	1	18.81	20.00	1.315	-	-	0.12	0.816	1.073	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	ECI 7	41490	2680	1	18.76	20.00	1.330	-	-	-0.05	0.756	1.006	
	2nd	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 1	ECI 7	40620	2593	1	18.84	20.00	1.306	-	-	0.16	0.587	0.767	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 1	ECI 7	40620	2593	1	18.95	20.00	1.274	-	-	-0.13	0.443	0.564	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 1	ECI 7	40620	2593	1	18.90	20.00	1.288	-	-	-0.06	0.424	0.546	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Bottom Side	5mm	Ant 1	ECI 7	40620	2593	1	18.95	20.00	1.274	-	-	-0.1	0.231	0.294	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Bottom Side	5mm	Ant 1	ECI 7	40620	2593	1	18.90	20.00	1.288	-	-	-0.13	0.181	0.233	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 4	ECI 7	40620	2593	1	10.75	11.50	1.189	62.9	1.006	-0.15	0.160	0.191	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 4	ECI 7	40620	2593	1	10.71	11.50	1.199	62.9	1.006	0.15	0.133	0.160	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 4	ECI 7	40620	2593	1	10.75	11.50	1.189	62.9	1.006	0.13	0.289	0.346	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 4	ECI 7	40620	2593	1	10.71	11.50	1.199	62.9	1.006	0.19	0.244	0.294	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Left Side	5mm	Ant 4	ECI 7	40620	2593	1	10.75	11.50	1.189	62.9	1.006	-0.1	0.070	0.084	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Left Side	5mm	Ant 4	ECI 7	40620	2593	1	10.71	11.50	1.199	62.9	1.006	0.17	0.060	0.072	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	40620	2593	1	10.75	11.50	1.189	62.9	1.006	0.06	0.459	0.549	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Top Side	5mm	Ant 4	ECI 7	40620	2593	1	10.71	11.50	1.199	62.9	1.006	-0.15	0.390	0.471	
	2nd	LTE Band 41_HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	40620	2593	1	13.64	14.50	1.219	42.9	1.009	0.01	0.519	0.638	
	2nd	LTE Band 41_HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	39750	2506	1	13.42	14.50	1.282	42.9	1.009	-0.12	0.403	0.521	
	2nd	LTE Band 41_HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	40185	2549.5	1	13.49	14.50	1.262	42.9	1.009	0.06	0.491	0.625	
	2nd	LTE Band 41_HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	41055	2636.5	1	13.43	14.50	1.279	42.9	1.009	0.06	0.535	0.691	
	2nd	LTE Band 41_HPUE	20M	QPSK	1	0	-	Top Side	5mm	Ant 4	ECI 7	41490	2680	1	13.37	14.50	1.297	42.9	1.009	0.13	0.474	0.620	
	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI7	507000	2535	1	18.52	19.50	1.253	-	-	0.03	0.554	0.694	
	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 1	ECI7	507000	2535	1	18.42	19.50	1.282	-	-	-0.04	0.588	0.754	
	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI7	507000	2535	1	18.52	19.50	1.253	-	-	-0.01	0.97	1.219	
32	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI7	507000	2535	1	18.42	19.50	1.282	-	-	-0.09	1.05	1.346	
	2nd	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant 1	ECI7	507000	2535	1	18.39	19.50	1.291	-	-	0.04	0.697	0.900	
	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI7	507000	2535	1	18.52	19.50	1.253	-	-	0.05	0.733	0.919	



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	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	507000	2535	1	18.42	19.50	1.282	-	-	0.06	0.718	0.921	
	2nd	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Left Side	5mm	Ant 1	ECI 7	507000	2535	1	18.39	19.50	1.291	-	-	0.01	0.499	0.644	
	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Bottom Side	5mm	Ant 1	ECI 7	507000	2535	1	18.52	19.50	1.253	-	-	0.01	0.377	0.472	
	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Bottom Side	5mm	Ant 1	ECI 7	507000	2535	1	18.42	19.50	1.282	-	-	-0.01	0.363	0.465	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	ECI 7	518598	2592.99	1	11.54	12.50	1.247	-	-	-0.05	0.223	0.278	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	ECI 7	518598	2592.99	1	11.51	12.50	1.256	-	-	-0.11	0.216	0.271	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	ECI 7	518598	2592.99	1	11.54	12.50	1.247	-	-	-0.1	0.420	0.524	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	ECI 7	518598	2592.99	1	11.51	12.50	1.256	-	-	0.06	0.320	0.402	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Left Side	5mm	Ant 4	ECI 7	518598	2592.99	1	11.54	12.50	1.247	-	-	-0.06	0.092	0.115	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 4	ECI 7	518598	2592.99	1	11.51	12.50	1.256	-	-	-0.15	0.100	0.126	
33	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	5mm	Ant 4	ECI 7	518598	2592.99	1	11.54	12.50	1.247	-	-	0.06	0.573	0.715	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 4	ECI 7	518598	2592.99	1	11.51	12.50	1.256	-	-	0.09	0.521	0.654	
3500MHz																							
	1st	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 5	ECI 7	42990	3540	1	14.39	16.00	1.449	62.9	1.006	-0.05	0.446	0.650	-2.92%
34	2nd	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 5	ECI 7	42990	3540	1	14.39	16.00	1.449	62.9	1.006	0.02	0.433	0.631	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant 1	ECI 7	656000	3840	1	21.75	23.50	1.496	-	-	0.05	0.277	0.414	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 1	ECI 7	656000	3840	1	21.52	23.50	1.578	-	-	0.05	0.407	0.642	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant 1	ECI 7	656000	3840	1	21.75	23.50	1.496	-	-	-0.05	0.362	0.541	
35	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	ECI 7	656000	3840	1	21.52	23.50	1.578	-	-	-0.09	0.618	0.975	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	ECI 7	656000	3840	2	21.52	23.50	1.578	-	-	0.01	0.595	0.939	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	ECI 7	656000	3840	3	21.52	23.50	1.578	-	-	0.03	0.588	0.928	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 1	ECI 7	656000	3840	1	20.59	22.50	1.552	-	-	0.06	0.474	0.736	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant 1	ECI 7	656000	3840	1	21.75	23.50	1.496	-	-	-0.14	0.352	0.526	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 1	ECI 7	656000	3840	1	21.52	23.50	1.578	-	-	0.03	0.550	0.868	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Left Side	5mm	Ant 1	ECI 7	656000	3840	1	20.59	22.50	1.552	-	-	0.03	0.480	0.746	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Bottom Side	5mm	Ant 1	ECI 7	656000	3840	1	21.75	23.50	1.496	-	-	0.11	0.167	0.250	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Bottom Side	5mm	Ant 1	ECI 7	656000	3840	1	21.52	23.50	1.578	-	-	0.04	0.195	0.307	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant 2	ECI 7	656000	3840	1	14.95	16.50	1.429	-	-	0.05	0.025	0.036	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	ECI 7	656000	3840	1	14.91	16.50	1.442	-	-	-0.13	0.032	0.046	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant 2	ECI 7	656000	3840	1	14.95	16.50	1.429	-	-	-0.17	0.320	0.457	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	ECI 7	656000	3840	1	14.91	16.50	1.442	-	-	0.14	0.454	0.655	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	5mm	Ant 2	ECI 7	656000	3840	1	14.95	16.50	1.429	-	-	0.08	0.152	0.217	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	5mm	Ant 2	ECI 7	656000	3840	1	14.91	16.50	1.442	-	-	0.16	0.190	0.274	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant 2	ECI 7	656000	3840	1	14.95	16.50	1.429	-	-	0.14	0.016	0.023	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 2	ECI 7	656000	3840	1	14.91	16.50	1.442	-	-	0.14	0.021	0.030	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant 5	ECI 7	656000	3840	1	12.51	14.00	1.409	-	-	-0.17	0.149	0.210	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 5	ECI 7	656000	3840	1	12.45	14.00	1.429	-	-	-0.11	0.249	0.356	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant 5	ECI 7	656000	3840	1	12.51	14.00	1.409	-	-	0.09	0.346	0.488	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	ECI 7	656000	3840	1	12.45	14.00	1.429	-	-	-0.09	0.477	0.682	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant 5	ECI 7	656000	3840	1	12.51	14.00	1.409	-	-	0.07	0.029	0.041	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 5	ECI 7	656000	3840	1	12.45	14.00	1.429	-	-	0.08	0.042	0.060	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant 5	ECI 7	656000	3840	1	12.51	14.00	1.409	-	-	-0.04	0.207	0.292	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 5	ECI 7	656000	3840	1	12.45	14.00	1.429	-	-	0.02	0.320	0.457	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant 7	ECI 7	656000	3840	1	16.39	16.50	1.026	-	-	0.1	0.163	0.167	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	ECI 7	656000	3840	1	16.35	16.50	1.035	-	-	-0.01	0.200	0.207	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant 7	ECI 7	656000	3840	1	16.39	16.50	1.026	-	-	0.12	0.375	0.385	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	ECI 7	656000	3840	1	16.35	16.50	1.035	-	-	-0.07	0.475	0.492	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	5mm	Ant 7	ECI 7	656000	3840	1	16.39	16.50	1.026	-	-	-0.13	0.267	0.274	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	5mm	Ant 7	ECI 7	656000	3840	1	16.35	16.50	1.035	-	-	0.13	0.321	0.332	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	5mm	Ant 7	ECI 7	656000	3840	1	16.39	16.50	1.026	-	-	0.07	0.060	0.062	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	5mm	Ant 7	ECI 7	656000	3840	1	16.35	16.50	1.035	-	-	-0.15	0.100	0.104	



Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
2450MHz																			
	1st	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 6	standalone	11	2462	1	14.14	15.50	1.368	100	1.000	-0.03	0.477	0.652	-3.22%
36	2nd	WLAN2.4GHz	802.11b 1Mbps	Top Side	5mm	Ant 6	standalone	11	2462	1	14.14	15.50	1.368	100	1.000	0.03	0.461	0.631	
	1st	Bluetooth	1Mbps	Top Side	5mm	Ant 6	Full Power	0	2402	1	14.67	15.50	1.211	76.73	1.086	-0.03	0.373	0.490	-5.92%
37	2nd	Bluetooth	1Mbps	Top Side	5mm	Ant 6	Full Power	0	2402	1	14.67	15.50	1.211	76.73	1.086	0.01	0.351	0.461	
5000MHz																			
	1st	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 6	standalone	42	5210	1	13.41	15.00	1.442	100	1.000	0.02	0.429	0.619	-17.77%
38	2nd	WLAN5.2GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 6	standalone	42	5210	1	13.41	15.00	1.442	100	1.000	0.09	0.353	0.509	
	1st	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 6	standalone	155	5775	1	9.77	11.00	1.327	100	1.000	-0.01	0.531	0.705	-20.43%
39	2nd	WLAN5.8GHz	802.11ac-VHT80 MCS0	Top Side	5mm	Ant 6	standalone	155	5775	1	9.77	11.00	1.327	100	1.000	0.04	0.423	0.561	



15.3 Body Worn Accessory SAR

Plot No.	No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
835MHz																								
40	1st	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	189	836.4	1	26.22	27.50	1.343	-	-	0.09	0.893	1.199	-2.42%
	2nd	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	189	836.4	1	26.22	27.50	1.343	-	-	0.03	0.871	1.170	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	ECI 3	4182	836.4	1	21.39	22.50	1.291	-	-	0.13	0.455	0.588	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	4182	836.4	1	21.39	22.50	1.291	-	-	0.15	0.992	1.281	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	4132	826.4	1	21.31	22.50	1.315	-	-	0.08	0.862	1.134	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	4233	846.6	1	21.34	22.50	1.306	-	-	0.03	1.07	1.398	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	Headset	ECI 3	4233	846.6	1	21.34	22.50	1.306	-	-	0.02	0.911	1.190	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Front	12mm	Ant 0	-	ECI 4	4182	836.4	1	22.93	24.00	1.279	-	-	-0.16	0.266	0.340	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	17mm	Ant 0	-	ECI 4	4233	846.6	1	22.88	24.00	1.294	-	-	0.02	0.298	0.386	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	17mm	Ant 0	-	ECI 4	4233	846.6	1	22.88	24.00	1.294	-	-	0.02	0.298	0.386	
42	1st	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	26865	831.5	1	23.03	24.00	1.250	-	-	0.05	0.927	1.159	-22.69%
	2nd	LTE Band 26	15M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	26865	831.5	1	23.03	24.00	1.250	-	-	0.06	0.717	0.896	
43	1st	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	166300	831.5	1	22.89	24.00	1.291	-	-	0.03	0.922	1.191	-21.49%
	2nd	FR1 n26	20M	QPSK	50	28	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	166300	831.5	1	22.89	24.00	1.291	-	-	0.01	0.724	0.935	
44	1st	FR1 n5	25M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	167300	836.5	1	22.92	24.00	1.282	-	-	0.09	0.669	0.858	-26.22%
	2nd	FR1 n5	25M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 0	-	ECI 3	167300	836.5	1	22.92	24.00	1.282	-	-	0.03	0.494	0.633	
1900MHz																								
45	1st	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	512	1850.2	1	18.46	19.50	1.271	-	-	-0.04	0.891	1.132	-0.80%
	2nd	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	5mm	Ant 0	-	ECI 3	512	1850.2	1	18.46	19.50	1.271	-	-	0.03	0.884	1.123	
	1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	ECI 3	9400	1880	1	15.76	17.00	1.330	-	-	0.09	0.263	0.350	-9.14%
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Front	5mm	Ant 0	-	ECI 3	9400	1880	1	15.76	17.00	1.330	-	-	0.03	0.239	0.318	
	1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	9400	1880	1	15.76	17.00	1.330	-	-	0.15	1.040	1.384	-1.95%
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	9400	1880	1	15.76	17.00	1.330	-	-	0.06	1.020	1.357	
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	9400	1880	2	15.76	17.00	1.330	-	-	0.03	1.00	1.330	
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	-	ECI 3	9400	1880	3	15.76	17.00	1.330	-	-	0.01	0.988	1.314	
	1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	Headset	ECI 3	9400	1880	1	15.76	17.00	1.330	-	-	0.01	0.888	1.181	-2.54%
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	Headset	ECI 3	9400	1880	1	15.76	17.00	1.330	-	-	0.09	0.865	1.151	
	1st	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	18900	1880	1	15.31	16.50	1.315	-	-	0.05	0.296	0.389	-2.57%
	2nd	LTE Band 2	20M	QPSK	1	0	-	Front	5mm	Ant 0	-	ECI 3	18900	1880	1	15.31	16.50	1.315	-	-	-0.02	0.288	0.379	
47	1st	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	19100	1900	1	15.26	16.50	1.330	-	-	0.09	1.020	1.357	-11.20%
	2nd	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	-	ECI 3	19100	1900	1	15.26	16.50	1.330	-	-	0.02	0.906	1.205	
	1st	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	19100	1900	1	15.26	16.50	1.330	-	-	0.01	0.877	1.167	-2.66%
	2nd	LTE Band 2	20M	QPSK	1	0	-	Back	5mm	Ant 0	Headset	ECI 3	19100	1900	1	15.26	16.50	1.330	-	-	0.09	0.854	1.136	
2600MHz																								
	2nd	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	21100	2535	1	18.06	19.00	1.242	-	-	0.03	0.500	0.621	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	21100	2535	1	18.01	19.00	1.256	-	-	-0.13	0.470	0.590	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	21100	2535	1	18.06	19.00	1.242	-	-	0.03	0.980	1.217	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	20850	2510	1	17.99	19.00	1.262	-	-	-0.05	1.090	1.375	
	2nd	LTE Band 7C	20M	QPSK	1	99	-	Back	5mm	Ant 1		ECI 3	20850+21048	2510+2529.8	1	17.88	19.00	1.294	-	-	0.02	0.908	1.175	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	Headset	ECI 3	20850	2510	1	17.99	19.00	1.262	-	-	0.02	0.950	1.199	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	21350	2560	1	17.95	19.00	1.274	-	-	0.06	0.876	1.116	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	21100	2535	1	18.01	19.00	1.256	-	-	0.02	0.839	1.054	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	20850	2510	1	17.98	19.00	1.265	-	-	0.09	0.856	1.083	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	21350	2560	1	17.94	19.00	1.276	-	-	-0.01	0.710	0.906	
	2nd	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	21100	2535	1	17.93	19.00	1.279	-	-	-0.07	0.819	1.048	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Front	12mm	Ant 1	-	ECI 4	21100	2535	1	23.04	24.00	1.247	-	-	0.04	0.464	0.579	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	17mm	Ant 1	-	ECI 4	20850	2510	1	22.93	24.00	1.279	-	-	-0.06	0.240	0.307	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Front	5mm	Ant 4	-	ECI 3	21100	2535	1	16.07	17.00	1.239	-	-	-0.01	0.385	0.477	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Front	5mm	Ant 4	-	ECI 3	21100	2535	1	15.91	17.00	1.285	-	-	-0.01	0.309	0.397	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	21100	2535	1	16.07	17.00	1.239	-	-	0.07	0.648	0.803	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	20850	2510	1	16.02	17.00	1.253	-	-	-0.01	0.497	0.623	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	20850	2510	1	16.02	17.00	1.253	-	-	-0.01	0.497	0.623	



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	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	21350	2560	1	15.97	17.00	1.268	-	-	0.03	0.799	1.013	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	21100	2535	1	15.91	17.00	1.285	-	-	0.02	0.550	0.707	
	2nd	LTE Band 7	20M	QPSK	100	0	-	Back	5mm	Ant 4	-	ECI 3	21100	2535	1	15.87	17.00	1.297	-	-	-0.01	0.588	0.763	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Front	12mm	Ant 4	-	ECI 4	21100	2535	1	16.07	17.00	1.239	-	-	0.04	0.645	0.799	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	17mm	Ant 4	-	ECI 4	21350	2560	1	15.97	17.00	1.268	-	-	-0.13	0.647	0.820	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 1	-	ECI 3	40620	2593	1	18.95	20.00	1.274	-	-	-0.06	0.456	0.581	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 1	-	ECI 3	40620	2593	1	18.90	20.00	1.288	-	-	0.18	0.390	0.502	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	1	18.95	20.00	1.274	-	-	-0.03	0.750	0.955	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	39750	2506	1	18.82	20.00	1.312	-	-	0.11	0.846	1.110	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	40185	2549.5	1	18.89	20.00	1.291	-	-	0.08	0.750	0.968	
49	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	41055	2636.5	1	18.84	20.00	1.306	-	-	0.19	1.020	1.332	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	Headset	ECI 3	41055	2636.5	1	18.84	20.00	1.306	-	-	0.03	0.911	1.190	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 1	-	ECI 3	41490	2680	1	18.93	20.00	1.279	-	-	0.18	0.972	1.244	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	1	18.90	20.00	1.288	-	-	0.05	0.622	0.801	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	39750	2506	1	18.88	20.00	1.294	-	-	0.15	0.672	0.870	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	40185	2549.5	1	18.77	20.00	1.327	-	-	0.04	0.606	0.804	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	41055	2636.5	1	18.81	20.00	1.315	-	-	0.12	0.816	1.073	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 1	-	ECI 3	41490	2680	1	18.76	20.00	1.330	-	-	-0.05	0.756	1.006	
	2nd	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 1	-	ECI 3	40620	2593	1	18.84	20.00	1.306	-	-	0.16	0.587	0.767	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	12mm	Ant 1	-	ECI 4	41055	2636.5	1	22.91	24.00	1.285	-	-	0.06	0.511	0.657	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	17mm	Ant 1	-	ECI 4	41055	2636.5	1	22.91	24.00	1.285	-	-	0.01	0.256	0.329	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	5mm	Ant 4	-	ECI 3	40620	2593	1	14.69	15.50	1.205	62.9	1.006	-0.12	0.382	0.463	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Front	5mm	Ant 4	-	ECI 3	40620	2593	1	14.61	15.50	1.227	62.9	1.006	0.17	0.316	0.390	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	40620	2593	1	14.69	15.50	1.205	62.9	1.006	0.01	0.689	0.835	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	39750	2506	1	14.57	15.50	1.239	62.9	1.006	-0.05	0.313	0.390	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	40185	2549.5	1	14.59	15.50	1.233	62.9	1.006	0.02	0.464	0.576	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	41055	2636.5	1	14.44	15.50	1.276	62.9	1.006	0.04	0.671	0.862	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	41490	2680	1	14.65	15.50	1.216	62.9	1.006	0.18	0.626	0.766	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	40620	2593	1	14.61	15.50	1.227	62.9	1.006	0.15	0.582	0.719	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	39750	2506	1	14.58	15.50	1.236	62.9	1.006	-0.15	0.265	0.329	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	40185	2549.5	1	14.45	15.50	1.274	62.9	1.006	0.17	0.408	0.523	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	41055	2636.5	1	14.52	15.50	1.253	62.9	1.006	0.06	0.669	0.843	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	41490	2680	1	14.45	15.50	1.274	62.9	1.006	-0.14	0.617	0.790	
	2nd	LTE Band 41	20M	QPSK	100	0	-	Back	5mm	Ant 4	-	ECI 3	40620	2593	1	14.54	15.50	1.247	62.9	1.006	0.12	0.155	0.195	
	2nd	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	41055	2636.5	1	17.41	18.50	1.285	42.9	1.009	0.03	0.822	1.066	
	2nd	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	41055	2636.5	2	17.41	18.50	1.285	42.9	1.009	0.01	0.759	0.984	
	2nd	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	41055	2636.5	3	17.41	18.50	1.285	42.9	1.009	0.06	0.722	0.936	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	12mm	Ant 4	-	ECI 4	40620	2593	1	23.15	24.00	1.216	62.9	1.006	0.06	0.623	0.762	
	2nd	LTE Band 41 HPUE	20M	QPSK	1	0	-	Front	12mm	Ant 4	-	ECI 4	40620	2593	1	26.05	27.00	1.245	42.9	1.009	0.01	0.601	0.755	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	17mm	Ant 4	-	ECI 4	41055	2636.5	1	23.04	24.00	1.247	62.9	1.006	0.01	0.575	0.722	
	2nd	LTE Band 41 HPUE	20M	QPSK	1	0	-	Back	17mm	Ant 4	-	ECI 4	41055	2636.5	1	25.97	27.00	1.268	42.9	1.009	0.06	0.553	0.707	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Front	5mm	Ant 4	-	ECI 3	38000	2595	1	15.81	17.00	1.315	62.9	1.006	-0.01	0.408	0.540	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Front	5mm	Ant 4	-	ECI 3	38000	2595	1	15.72	17.00	1.343	62.9	1.006	0.07	0.331	0.447	
50	2nd	LTE Band 38	20M	QPSK	1	0	-	Back	5mm	Ant 4	-	ECI 3	38000	2595	1	15.81	17.00	1.315	62.9	1.006	0.04	0.726	0.961	
	2nd	LTE Band 38C	20M	QPSK	1	99	-	Back	5mm	Ant 4	-	ECI 3	37901+38099	2585.1+2604.9	1	15.77	17.00	1.327	62.9	1.006	0.09	0.688	0.919	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Back	5mm	Ant 4	-	ECI 3	38000	2595	1	15.72	17.00	1.343	62.9	1.006	0.06	0.604	0.816	
	2nd	LTE Band 38	20M	QPSK	100	0	-	Back	5mm	Ant 4	-	ECI 3	38000	2595	1	15.74	17.00	1.337	62.9	1.006	0.03	0.595	0.800	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Front	12mm	Ant 4	-	ECI 4	38000	2595	1	22.89	24.00	1.291	62.9	1.006	0.03	0.622	0.808	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Back	17mm	Ant 4	-	ECI 4	38000	2595	1	22.89	24.00	1.291	62.9	1.006	0.1	0.595	0.773	
	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	507000	2535	1	18.52	19.50	1.253	-	-	0.03	0.554	0.694	
	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	5mm	Ant 1	-	ECI 3	507000	2535	1	18.42	19.50	1.282	-	-	-0.04	0.588	0.754	
	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	1	18.52	19.50	1.253	-	-	-0.01	0.973	1.219	
51	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	1	18.42	19.50	1.282	-	-	-0.09	1.050	1.346	
	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	5mm	Ant 1	Headset	ECI 3	507000	2535	1	18.42	19.50	1.282	-	-	-0.01	0.933	1.196	
	2nd	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	5mm	Ant 1	-	ECI 3	507000	2535	1	18.39	19.50	1.291	-	-	0.04	0.659	0.851	



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	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Front	12mm	Ant 1	-	ECI 4	507000	2535	1	22.98	24.00	1.265	-	-	0.01	0.201	0.254	
	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Front	12mm	Ant 1	-	ECI 4	507000	2535	1	22.93	24.00	1.279	-	-	0.05	0.234	0.299	
	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	17mm	Ant 1	-	ECI 4	507000	2535	1	22.98	24.00	1.265	-	-	0.04	0.105	0.133	
	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	17mm	Ant 1	-	ECI 4	507000	2535	1	22.93	24.00	1.279	-	-	-0.05	0.128	0.164	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	5mm	Ant 4	-	ECI 3	518598	2592.99	1	14.59	15.50	1.233	-	-	0.08	0.417	0.514	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 4	-	ECI 3	518598	2592.99	1	14.58	15.50	1.236	-	-	0.15	0.403	0.498	
52	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	518598	2592.99	1	14.59	15.50	1.233	-	-	-0.12	0.790	0.974	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	5mm	Ant 4	Headset	ECI 3	518598	2592.99	1	14.59	15.50	1.233	-	-	0.03	0.738	0.910	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	518598	2592.99	1	14.58	15.50	1.236	-	-	0.17	0.784	0.969	
	2nd	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 4	-	ECI 3	518598	2592.99	1	14.49	15.50	1.262	-	-	0.02	0.598	0.755	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	12mm	Ant 4	-	ECI 4	518598	2592.99	1	23.08	24.00	1.236	-	-	0.05	0.512	0.633	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	17mm	Ant 4	-	ECI 4	518598	2592.99	1	23.08	24.00	1.236	-	-	0.01	0.495	0.612	
3500MHz																								
	1st	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 5	-	ECI 3	42990	3540	1	15.81	17.50	1.476	62.9	1.006	-0.04	0.576	0.855	-14.04%
53	2nd	LTE Band 42	20M	QPSK	1	0	-	Back	5mm	Ant 5	-	ECI 3	42990	3540	1	15.81	17.50	1.476	62.9	1.006	0.06	0.495	0.735	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant 1	-	ECI 3	656000	3840	1	21.75	23.50	1.496	-	-	0.09	0.277	0.414	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 1	-	ECI 3	656000	3840	1	21.52	23.50	1.578	-	-	0.05	0.407	0.642	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	656000	3840	1	21.75	23.50	1.496	-	-	-0.13	0.362	0.542	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	656000	3840	1	21.52	23.50	1.578	-	-	-0.09	0.618	0.975	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 1	-	ECI 3	656000	3840	1	20.59	22.50	1.552	-	-	0.19	0.474	0.736	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant 2	-	ECI 3	656000	3840	1	16.57	18.00	1.390	-	-	-0.13	0.042	0.058	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 2	-	ECI 3	656000	3840	1	16.53	18.00	1.403	-	-	0.07	0.054	0.076	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant 2	-	ECI 3	656000	3840	1	16.57	18.00	1.390	-	-	0.11	0.544	0.756	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 2	-	ECI 3	656000	3840	1	16.53	18.00	1.403	-	-	0.15	0.669	0.938	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	ECI 3	656000	3840	1	16.48	18.00	1.419	-	-	-0.07	0.772	1.096	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	ECI 3	656000	3840	2	16.48	18.00	1.419	-	-	0.06	0.722	1.025	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 2	-	ECI 3	656000	3840	3	16.48	18.00	1.419	-	-	0.01	0.715	1.015	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	12mm	Ant 2	-	ECI 4	656000	3840	1	22.73	24.50	1.503	-	-	0.03	0.029	0.044	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	17mm	Ant 2	-	ECI 4	656000	3840	1	22.73	24.50	1.503	-	-	0.05	0.452	0.679	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	17mm	Ant 2	-	ECI 4	656000	3840	1	22.65	24.50	1.531	-	-	0.09	0.476	0.729	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	17mm	Ant 2	-	ECI 4	656000	3840	1	21.53	23.50	1.574	-	-	-0.11	0.482	0.759	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant 5	-	ECI 3	656000	3840	1	14.99	16.50	1.416	-	-	-0.17	0.247	0.350	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 5	-	ECI 3	656000	3840	1	14.90	16.50	1.445	-	-	-0.11	0.412	0.596	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant 5	-	ECI 3	656000	3840	1	14.99	16.50	1.416	-	-	0.09	0.573	0.811	
54	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	-	ECI 3	656000	3840	1	14.90	16.50	1.445	-	-	-0.09	0.790	1.142	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	-	ECI 3	656000	3840	2	14.90	16.50	1.445	-	-	0.03	0.752	1.087	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 5	-	ECI 3	656000	3840	3	14.90	16.50	1.445	-	-	0.01	0.741	1.071	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 5	-	ECI 3	656000	3840	1	14.88	16.50	1.452	-	-	0.15	0.716	1.040	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	12mm	Ant 5	-	ECI 4	656000	3840	1	24.80	26.50	1.479	-	-	-0.11	0.525	0.777	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	12mm	Ant 5	-	ECI 4	656000	3840	1	24.73	26.50	1.503	-	-	-0.01	0.511	0.768	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	17mm	Ant 5	-	ECI 4	656000	3840	1	24.80	26.50	1.479	-	-	-0.13	0.425	0.629	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	17mm	Ant 5	-	ECI 4	656000	3840	1	24.73	26.50	1.503	-	-	-0.03	0.295	0.443	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	5mm	Ant 7	-	ECI 3	656000	3840	1	18.93	19.00	1.016	-	-	0.15	0.274	0.278	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	5mm	Ant 7	-	ECI 3	656000	3840	1	18.88	19.00	1.028	-	-	-0.04	0.336	0.345	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	1	18.93	19.00	1.016	-	-	0.13	0.631	0.641	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	1	18.88	19.00	1.028	-	-	-0.06	0.799	0.821	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	2	18.88	19.00	1.028	-	-	0.03	0.751	0.772	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	3	18.88	19.00	1.028	-	-	0.01	0.744	0.765	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	5mm	Ant 7	-	ECI 3	656000	3840	1	17.77	19.00	1.327	-	-	0.06	0.610	0.810	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	12mm	Ant 7	-	ECI 4	656000	3840	1	22.65	24.50	1.531	-	-	0.03	0.152	0.233	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	12mm	Ant 7	-	ECI 4	656000	3840	1	22.63	24.50	1.538	-	-	-0.16	0.162	0.249	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	17mm	Ant 7	-	ECI 4	656000	3840	1	22.65	24.50	1.531	-	-	0.01	0.292	0.447	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	17mm	Ant 7	-	ECI 4	656000	3840	1	22.63	24.50	1.538	-	-	0.05	0.301	0.463	



Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Headset	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Deviation
WLAN&BT																				
	1st	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6	-	Standalone	11	2462	1	19.16	20.50	1.361	100	1.000	0.04	0.631	0.859	-6.75%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Front	5mm	Ant 6	-	Standalone	11	2462	1	19.16	20.50	1.361	100	1.000	-0.01	0.588	0.801	
	1st	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6	-	Standalone	11	2462	1	19.16	20.50	1.361	100	1.000	0.18	1.020	1.389	-14.61%
55	2nd	WLAN2.4GHz	802.11b 1Mbps	Back	5mm	Ant 6	-	Standalone	11	2462	1	19.16	20.50	1.361	100	1.000	0.03	0.871	1.186	
	1st	Bluetooth	1Mbps	Back	5mm	Ant 6	-	Full Power	0	2402	1	14.67	15.50	1.211	76.73	1.086	-0.05	0.337	0.443	-21.44%
56	2nd	Bluetooth	1Mbps	Back	5mm	Ant 6	-	Full Power	0	2402	1	14.67	15.50	1.211	76.73	1.086	0.09	0.265	0.348	
	1st	WLAN5.3GHz	802.11a 6Mbps	Back	5mm	Ant 6	-	Standalone	60	5300	1	17.38	19.00	1.452	100	1.000	0.01	0.776	1.127	-16.24%
	2nd	WLAN5.3GHz	802.11a 6Mbps	Back	5mm	Ant 6	-	Standalone	60	5300	1	17.38	19.00	1.452	100	1.000	0.08	0.650	0.944	
57	1st	WLAN5.3GHz	802.11a 6Mbps	Back	5mm	Ant 6	-	Standalone	60	5300	2	17.38	19.00	1.452	100	1.000	0.01	0.697	1.012	
	2nd	WLAN5.3GHz	802.11a 6Mbps	Back	5mm	Ant 6	-	Standalone	60	5300	3	17.38	19.00	1.452	100	1.000	0.02	0.629	0.913	
	1st	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	-	Standalone	138	5690	1	12.68	14.00	1.355	100	1.000	-0.06	0.783	1.061	-0.47%
58	2nd	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	-	Standalone	138	5690	1	12.68	14.00	1.355	100	1.000	0.03	0.779	1.056	
	1st	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	-	Standalone	138	5690	2	12.68	14.00	1.355	100	1.000	0.02	0.609	0.825	
	2nd	WLAN5.5GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	-	Standalone	138	5690	3	12.68	14.00	1.355	100	1.000	0.03	0.769	1.042	
	1st	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	-	Standalone	155	5775	1	12.87	14.00	1.297	100	1.000	-0.07	0.813	1.055	-1.04%
59	2nd	WLAN5.8GHz	802.11ac-VHT80 MCS0	Back	5mm	Ant 6	-	Standalone	155	5775	1	12.87	14.00	1.297	100	1.000	0.08	0.805	1.044	



15.4 Product specific 10g SAR

Plot No.	No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Deviation
835MHz																							
	1st	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 0	ECI 6	189	836.4	1	28.90	30.00	1.288	-	-	0.04	1.18	1.520	-14.41%
	2nd	GSM850	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 0	ECI 6	189	836.4	1	28.90	30.00	1.288	-	-	0.01	1.01	1.301	
	1st	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	128	824.2	1	28.83	30.00	1.309	-	-	-0.01	2.56	3.352	-2.73%
60	2nd	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	128	824.2	1	28.83	30.00	1.309	-	-	0.08	2.49	3.260	
	2nd	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	128	824.2	2	28.83	30.00	1.309	-	-	0.01	2.26	2.959	
	2nd	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	128	824.2	3	28.83	30.00	1.309	-	-	0.02	2.41	3.155	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	4182	836.4	1	21.50	22.50	1.259	-	-	0.01	1.26	1.586	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	4182	836.4	1	21.50	22.50	1.259	-	-	0.06	1.77	2.228	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	4132	826.4	1	21.42	22.50	1.282	-	-	0.05	1.75	2.244	
61	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	4233	846.6	1	21.45	22.50	1.274	-	-	0.09	1.91	2.432	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	16mm	Ant 0	ECI 4	4182	836.4	1	22.93	24.00	1.279	-	-	0.03	0.332	0.425	
	2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Bottom Side	13mm	Ant 0	ECI 4	4233	846.6	1	22.88	24.00	1.294	-	-	-0.05	0.412	0.533	
1900MHz																							
	1st	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 0	ECI 6	512	1850.2	1	22.65	24.00	1.365	-	-	-0.12	1.94	2.647	-6.19%
	2nd	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Back	0mm	Ant 0	ECI 6	512	1850.2	1	22.65	24.00	1.365	-	-	-0.01	1.82	2.484	
	1st	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	512	1850.2	1	22.65	24.00	1.365	-	-	0.03	2.53	3.452	-0.79%
62	2nd	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	512	1850.2	1	22.65	24.00	1.365	-	-	0.03	2.51	3.425	
	1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	9262	1852.4	1	18.08	19.50	1.387	-	-	0.08	2.02	2.801	-6.44%
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	0mm	Ant 0	ECI 6	9262	1852.4	1	18.08	19.50	1.387	-	-	0.05	1.89	2.621	
	1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	9262	1852.4	1	18.08	19.50	1.387	-	-	0.01	2.51	3.481	-1.59%
63	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	9262	1852.4	1	18.08	19.50	1.387	-	-	0.08	2.47	3.425	
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	9262	1852.4	2	18.08	19.50	1.387	-	-	0.02	2.13	2.954	
	2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Bottom Side	0mm	Ant 0	ECI 6	9262	1852.4	3	18.08	19.50	1.387	-	-	0.01	2.47	3.425	
	1st	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	18900	1880	1	15.51	17.00	1.409	-	-	0.04	1.71	2.410	-10.53%
	2nd	LTE Band 2	20M	QPSK	1	0	-	Back	0mm	Ant 0	ECI 6	18900	1880	1	15.51	17.00	1.409	-	-	0.01	1.53	2.156	
	1st	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	19100	1900	1	15.48	17.00	1.419	-	-	0.03	1.91	2.710	-3.66%
64	2nd	LTE Band 2	20M	QPSK	1	0	-	Bottom Side	0mm	Ant 0	ECI 6	19100	1900	1	15.48	17.00	1.419	-	-	-0.04	1.84	2.611	
2600MHz																							
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	21100	2535	1	19.06	20.00	1.242	-	-	0.06	1.85	2.297	
65	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	20850	2510	1	19.02	20.00	1.253	-	-	-0.05	1.91	2.393	
	2nd	LTE Band 7C	20M	QPSK	1	99	-	Back	0mm	Ant 1	ECI 6	20850+21048	2510+2529.8	1	18.62	20.00	1.374	-	-	0.01	1.67	2.295	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	21350	2560	1	18.97	20.00	1.268	-	-	0.05	1.70	2.155	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	21100	2535	1	19.01	20.00	1.256	-	-	0.05	1.64	2.060	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	20850	2510	1	18.95	20.00	1.274	-	-	0.05	1.66	2.114	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	21350	2560	1	18.98	20.00	1.265	-	-	-0.02	1.38	1.745	
	2nd	LTE Band 7	20M	QPSK	100	0	-	Back	0mm	Ant 1	ECI 6	21100	2535	1	18.97	20.00	1.268	-	-	0.06	1.60	2.028	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Back	9mm	Ant 1	ECI 4	20850	2510	1	22.93	24.00	1.279	-	-	0.03	0.660	0.844	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	ECI 6	21100	2535	1	18.09	19.00	1.233	-	-	0.04	1.30	1.603	
	2nd	LTE Band 7	20M	QPSK	50	0	-	Top Side	0mm	Ant 4	ECI 6	21100	2535	1	18.03	19.00	1.250	-	-	0.02	1.03	1.288	
	2nd	LTE Band 7	20M	QPSK	1	0	-	Top Side	14mm	Ant 4	ECI 4	21100	2535	1	22.93	24.00	1.279	-	-	0.19	0.738	0.944	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Front	0mm	Ant 4	ECI 6	38000	2595	1	20.50	21.50	1.259	62.9	1.006	-0.06	1.390	1.760	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Front	0mm	Ant 4	ECI 6	38000	2595	1	20.39	21.50	1.291	62.9	1.006	-0.18	1.200	1.559	
	2nd	LTE Band 38	20M	QPSK	100	0	-	Front	0mm	Ant 4	ECI 6	38000	2595	1	20.36	21.50	1.300	62.9	1.006	-0.12	1.070	1.400	
66	2nd	LTE Band 38	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	38000	2595	1	20.50	21.50	1.259	62.9	1.006	0.12	2.190	2.774	
	2nd	LTE Band 38C	20M	QPSK	1	99	-	Back	0mm	Ant 4	ECI 6	37901+38099	2585.1+2604.9	1	20.41	21.50	1.285	62.9	1.006	0.06	1.78	2.302	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	38000	2595	2	20.50	21.50	1.259	62.9	1.006	0.06	1.85	2.343	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	38000	2595	3	20.50	21.50	1.259	62.9	1.006	0.06	1.77	2.242	
	2nd	LTE Band 38	20M	QPSK	50	0	-	Back	0mm	Ant 4	ECI 6	38000	2595	1	20.39	21.50	1.291	62.9	1.006	0.04	1.630	2.117	
	2nd	LTE Band 38	20M	QPSK	100	0	-	Back	0mm	Ant 4	ECI 6	38000	2595	1	20.36	21.50	1.300	62.9	1.006	0.02	1.590	2.080	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	ECI 6	38000	2595	1	20.50	21.50	1.259	62.9	1.006	-0.12	1.370	1.735	



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	2nd	LTE Band 38	20M	QPSK	50	0	-	Top Side	0mm	Ant 4	ECI 6	38000	2595	1	20.39	21.50	1.291	62.9	1.006	0.06	1.070	1.390	
	2nd	LTE Band 38	20M	QPSK	100	0	-	Top Side	0mm	Ant 4	ECI 6	38000	2595	1	20.36	21.50	1.300	62.9	1.006	0.03	1.060	1.386	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Front	7mm	Ant 4	ECI 4	38000	2595	1	22.89	24.00	1.291	62.9	1.006	0.03	0.595	0.773	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Back	11mm	Ant 4	ECI 4	38000	2595	1	22.89	24.00	1.291	62.9	1.006	0.05	0.621	0.807	
	2nd	LTE Band 38	20M	QPSK	1	0	-	Top Side	14mm	Ant 4	ECI 4	38000	2595	1	22.89	24.00	1.291	62.9	1.006	0.01	0.711	0.924	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	40620	2593	1	20.10	21.00	1.230	-	-	0.15	1.540	1.895	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	39750	2506	1	20.08	21.00	1.236	-	-	0.01	1.890	2.336	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	39750	2506	2	20.08	21.00	1.236	-	-	0.01	1.780	2.200	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	39750	2506	3	20.08	21.00	1.236	-	-	0.01	1.580	1.953	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	40185	2549.5	1	20.02	21.00	1.253	-	-	-0.04	1.570	1.967	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	41055	2636.5	1	19.96	21.00	1.271	-	-	-0.03	1.660	2.109	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 1	ECI 6	41490	2680	1	19.92	21.00	1.282	-	-	-0.09	1.710	2.193	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	40620	2593	1	20.04	21.00	1.247	-	-	-0.12	1.300	1.622	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	39750	2506	1	19.84	21.00	1.306	-	-	-0.12	1.450	1.894	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	40185	2549.5	1	19.96	21.00	1.271	-	-	-0.01	1.260	1.601	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	41055	2636.5	1	20.01	21.00	1.256	-	-	-0.09	1.300	1.633	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 1	ECI 6	41490	2680	1	20.03	21.00	1.250	-	-	0.11	1.330	1.663	
	2nd	LTE Band 41	20M	QPSK	100	0	-	Back	0mm	Ant 1	ECI 6	40620	2593	1	20.00	21.00	1.259	-	-	-0.1	1.130	1.423	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	9mm	Ant 1	ECI 4	39750	2506	1	22.93	24.00	1.279	-	-	0.07	0.546	0.699	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	0mm	Ant 4	ECI 6	40620	2593	1	19.17	20.00	1.211	62.9	1.006	-0.13	1.270	1.547	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	0mm	Ant 4	ECI 6	39750	2506	1	19.12	20.00	1.225	62.9	1.006	0.1	0.724	0.892	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	0mm	Ant 4	ECI 6	40185	2549.5	1	18.93	20.00	1.279	62.9	1.006	0.04	0.967	1.245	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	0mm	Ant 4	ECI 6	41055	2636.5	1	19.10	20.00	1.230	62.9	1.006	-0.15	1.320	1.634	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	0mm	Ant 4	ECI 6	41490	2680	1	19.06	20.00	1.242	62.9	1.006	0.1	1.260	1.574	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Front	0mm	Ant 4	ECI 6	40620	2593	1	19.09	20.00	1.233	62.9	1.006	0.17	1.050	1.303	
	2nd	LTE Band 41	20M	QPSK	100	0	-	Front	0mm	Ant 4	ECI 6	40620	2593	1	18.96	20.00	1.271	62.9	1.006	0.13	1.020	1.304	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	40620	2593	1	19.17	20.00	1.211	62.9	1.006	-0.14	1.620	1.973	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	39750	2506	1	19.12	20.00	1.225	62.9	1.006	-0.04	1.080	1.331	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	40185	2549.5	1	18.93	20.00	1.279	62.9	1.006	-0.11	1.450	1.866	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	41055	2636.5	1	19.10	20.00	1.230	62.9	1.006	0.1	1.640	2.030	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	41490	2680	1	19.06	20.00	1.242	62.9	1.006	0.14	1.610	2.011	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 4	ECI 6	40620	2593	1	19.09	20.00	1.233	62.9	1.006	0.14	1.440	1.786	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 4	ECI 6	39750	2506	1	18.88	20.00	1.294	62.9	1.006	0.13	0.823	1.072	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 4	ECI 6	40185	2549.5	1	18.89	20.00	1.291	62.9	1.006	-0.04	1.120	1.455	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 4	ECI 6	41055	2636.5	1	18.90	20.00	1.288	62.9	1.006	0.03	1.500	1.944	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Back	0mm	Ant 4	ECI 6	41490	2680	1	18.91	20.00	1.285	62.9	1.006	-0.15	1.460	1.888	
	2nd	LTE Band 41	20M	QPSK	100	0	-	Back	0mm	Ant 4	ECI 6	40620	2593	1	18.96	20.00	1.271	62.9	1.006	0.03	1.430	1.828	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	ECI 6	40620	2593	1	19.17	20.00	1.211	62.9	1.006	-0.11	1.250	1.522	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	ECI 6	39750	2506	1	19.12	20.00	1.225	62.9	1.006	-0.07	1.250	1.540	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	ECI 6	40185	2549.5	1	18.93	20.00	1.279	62.9	1.006	0.04	1.190	1.532	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	ECI 6	41055	2636.5	1	19.10	20.00	1.230	62.9	1.006	0.01	1.220	1.510	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Top Side	0mm	Ant 4	ECI 6	41490	2680	1	19.06	20.00	1.242	62.9	1.006	-0.09	1.230	1.536	
	2nd	LTE Band 41	20M	QPSK	50	0	-	Top Side	0mm	Ant 4	ECI 6	40620	2593	1	19.09	20.00	1.233	62.9	1.006	0.05	0.977	1.212	
	2nd	LTE Band 41	20M	QPSK	100	0	-	Top Side	0mm	Ant 4	ECI 6	40620	2593	1	18.96	20.00	1.271	62.9	1.006	-0.07	0.957	1.223	
67	2nd	LTE Band 41_HPUE	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	41055	2636.5	1	21.89	23.00	1.291	42.9	1.009	0.06	1.920	2.501	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Front	7mm	Ant 4	ECI 4	41055	2636.5	1	23.04	24.00	1.247	62.9	1.006	0.03	0.498	0.625	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Back	11mm	Ant 4	ECI 4	41055	2636.5	1	23.04	24.00	1.247	62.9	1.006	-0.15	0.376	0.472	
	2nd	LTE Band 41_HPUE	20M	QPSK	1	0	-	Back	11mm	Ant 4	ECI 4	41055	2636.5	1	25.97	27.00	1.268	42.9	1.009	-0.07	0.559	0.715	
	2nd	LTE Band 41	20M	QPSK	1	0	-	Top Side	14mm	Ant 4	ECI 4	39750	2506	1	22.86	24.00	1.300	62.9	1.006	-0.11	0.213	0.279	
68	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	1	18.99	20.00	1.262	-	-	0.05	2.03	2.562	
	2nd	FR1 n7	50M	QPSK	135	68	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	1	18.92	20.00	1.282	-	-	-0.01	1.89	2.424	
	2nd	FR1 n7	50M	QPSK	270	0	DFT-SCS-15KHz	Back	0mm	Ant 1	ECI 6	507000	2535	1	18.89	20.00	1.291	-	-	0.07	1.93	2.492	
	2nd	FR1 n7	50M	QPSK	1	1	DFT-SCS-15KHz	Back	9mm	Ant 1	ECI 4	507000	2535	1	22.98	24.00	1.265	-	-	0.05	0.322	0.407	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	0mm	Ant 4	ECI 6	518598	2592.99	1	19.65	20.50	1.216	-	-	-0.11	1.420	1.727	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 4	ECI 6	518598	2592.99	1	19.54	20.50	1.247	-	-	0.16	1.360	1.696	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Back	0mm	Ant 4	ECI 6	518598	2592.99	1	19.65	20.50	1.216	-	-	0.11	1.800	2.189	



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69	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 4	ECI 6	518598	2592.99	1	19.54	20.50	1.247	-	-	-0.03	1.880	2.345	
	2nd	FR1 n41	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 4	ECI 6	518598	2592.99	1	19.49	20.50	1.262	-	-	0.14	1.460	1.842	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	0mm	Ant 4	ECI 6	518598	2592.99	1	19.65	20.50	1.216	-	-	0.17	1.470	1.788	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 4	ECI 6	518598	2592.99	1	19.54	20.50	1.247	-	-	-0.09	1.410	1.759	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Front	7mm	Ant 4	ECI 4	518598	2592.99	1	23.08	24.00	1.236	-	-	0.06	0.671	0.829	
	2nd	FR1 n41	100M	QPSK	135	69	DFT-SCS-30KHz	Back	11mm	Ant 4	ECI 4	518598	2592.99	1	23.01	24.00	1.256	-	-	-0.15	0.561	0.705	
	2nd	FR1 n41	100M	QPSK	1	1	DFT-SCS-30KHz	Top Side	14mm	Ant 4	ECI 4	518598	2592.99	1	23.08	24.00	1.236	-	-	0.03	0.667	0.824	
3500MHz																							
	2nd	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 5	ECI 6	42990	3540	1	19.72	21.50	1.507	62.9	1.006	0.04	1.38	2.092	-6.52%
70	2nd	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 5	ECI 6	42990	3540	1	19.72	21.50	1.507	62.9	1.006	0.08	1.29	1.955	
	2nd	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 5	ECI 6	42990	3540	2	19.72	21.50	1.507	62.9	1.006	0.04	1.15	1.743	
	2nd	LTE Band 42	20M	QPSK	1	0	-	Back	0mm	Ant 5	ECI 6	42990	3540	3	19.72	21.50	1.507	62.9	1.006	0.04	0.945	1.432	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	0mm	Ant 2	ECI 4	556000	3840	1	18.29	20.00	1.483	-	-	-0.16	1.200	1.779	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 2	ECI 4	556000	3840	1	18.25	20.00	1.496	-	-	-0.03	1.670	2.499	
71	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 2	ECI 4	556000	3840	1	18.21	20.00	1.510	-	-	-0.02	1.840	2.779	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 2	ECI 4	556000	3840	2	18.21	20.00	1.510	-	-	0.03	1.550	2.341	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 2	ECI 4	556000	3840	3	18.21	20.00	1.510	-	-	0.01	1.610	2.431	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Left Side	0mm	Ant 2	ECI 4	556000	3840	1	18.29	20.00	1.483	-	-	0.14	0.617	0.915	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Left Side	0mm	Ant 2	ECI 4	556000	3840	1	18.25	20.00	1.496	-	-	0.15	0.790	1.182	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	0mm	Ant 5	ECI 6	556000	3840	1	18.51	19.00	1.119	-	-	0.08	1.130	1.265	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 5	ECI 6	556000	3840	1	18.48	19.00	1.127	-	-	0.17	1.780	2.006	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 5	ECI 6	556000	3840	1	18.43	19.00	1.140	-	-	-0.09	1.900	2.166	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 5	ECI 6	556000	3840	2	18.43	19.00	1.140	-	-	-0.09	1.810	2.064	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	0mm	Ant 5	ECI 6	556000	3840	3	18.43	19.00	1.140	-	-	-0.09	1.770	2.018	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	0mm	Ant 5	ECI 6	556000	3840	1	18.51	19.00	1.119	-	-	-0.15	0.959	1.074	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	0mm	Ant 5	ECI 6	556000	3840	1	18.48	19.00	1.127	-	-	-0.14	0.983	1.108	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	13mm	Ant 5	ECI 4	556000	3840	1	24.80	26.50	1.479	-	-	-0.16	0.332	0.491	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	13mm	Ant 5	ECI 4	556000	3840	1	24.73	26.50	1.503	-	-	-0.12	0.295	0.443	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Back	13mm	Ant 5	ECI 4	556000	3840	1	23.55	25.50	1.567	-	-	0.04	0.356	0.558	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Top Side	15mm	Ant 5	ECI 4	556000	3840	1	24.80	26.50	1.479	-	-	0.15	0.112	0.166	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Top Side	15mm	Ant 5	ECI 4	556000	3840	1	24.73	26.50	1.503	-	-	0.01	0.119	0.179	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Front	0mm	Ant 7	ECI 4	556000	3840	1	22.65	24.50	1.531	-	-	-0.06	0.533	0.816	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Front	0mm	Ant 7	ECI 4	556000	3840	1	22.63	24.50	1.538	-	-	-0.14	0.820	1.261	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Back	0mm	Ant 7	ECI 4	556000	3840	1	22.65	24.50	1.531	-	-	0.01	0.729	1.116	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Back	0mm	Ant 7	ECI 4	556000	3840	1	22.63	24.50	1.538	-	-	0.18	1.100	1.692	
	2nd	FR1 n77	100M	QPSK	1	137	DFT-SCS-30KHz	Right Side	0mm	Ant 7	ECI 4	556000	3840	1	22.65	24.50	1.531	-	-	-0.1	0.929	1.422	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 7	ECI 4	556000	3840	1	22.63	24.50	1.538	-	-	-0.01	1.310	2.015	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 7	ECI 4	556000	3840	2	22.63	24.50	1.538	-	-	0.06	1.110	1.707	
	2nd	FR1 n77	100M	QPSK	135	69	DFT-SCS-30KHz	Right Side	0mm	Ant 7	ECI 4	556000	3840	3	22.63	24.50	1.538	-	-	0.02	1.130	1.738	
	2nd	FR1 n77	100M	QPSK	270	0	DFT-SCS-30KHz	Right Side	0mm	Ant 7	ECI 4	556000	3840	1	21.55	23.50	1.567	-	-	-0.01	0.891	1.396	



Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Deviation
2450MHz																			
72	1st	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 6	Full Power	11	2462	1	19.16	20.50	1.361	100	1.000	-0.01	1.540	2.097	-3.90%
	2nd	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 6	Full Power	11	2462	1	19.16	20.50	1.361	100	1.000	-0.03	1.480	2.015	
	2nd	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 6	Full Power	11	2462	2	19.16	20.50	1.361	100	1.000	0.01	1.24	1.688	
73	2nd	WLAN2.4GHz	802.11b 1Mbps	Top Side	0mm	Ant 6	Full Power	11	2462	3	19.16	20.50	1.361	100	1.000	0.05	1.18	1.607	-0.93%
	1st	WLAN5.2GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	44	5220	1	17.96	19.50	1.426	100	1.000	-0.07	1.080	1.540	
	2nd	WLAN5.2GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	44	5220	1	17.96	19.50	1.426	100	1.000	-0.08	1.070	1.525	
74	1st	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	56	5280	1	18.51	20.00	1.409	100	1.000	-0.04	1.270	1.790	-3.15%
	2nd	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	56	5280	1	18.51	20.00	1.409	100	1.000	0.08	1.230	1.733	
	2nd	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	56	5280	2	18.51	20.00	1.409	100	1.000	0.02	1.10	1.550	
75	2nd	WLAN5.3GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	56	5280	3	18.51	20.00	1.409	100	1.000	0.01	1.01	1.423	-4.42%
	1st	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	100	5500	1	17.63	19.00	1.371	100	1.000	0.09	1.130	1.549	
	2nd	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	100	5500	1	17.63	19.00	1.371	100	1.000	-0.03	1.080	1.481	
76	2nd	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	100	5500	2	17.63	19.00	1.371	100	1.000	0.02	1.08	1.481	-9.42%
	2nd	WLAN5.5GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	100	5500	3	17.63	19.00	1.371	100	1.000	0.04	1.04	1.426	
	1st	WLAN5.8GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	149	5745	1	17.59	19.00	1.384	100	1.000	0.07	1.380	1.909	
77	2nd	WLAN5.8GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	149	5745	1	17.59	19.00	1.384	100	1.000	-0.09	1.250	1.729	-9.42%
	2nd	WLAN5.8GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	149	5745	2	17.59	19.00	1.384	100	1.000	-0.05	1.27	1.757	
	2nd	WLAN5.8GHz	802.11a 6Mbps	Top Side	0mm	Ant 6	Full Power	149	5745	3	17.59	19.00	1.384	100	1.000	0.07	0.976	1.350	

Plot No.	No.	Band	Mode	Test Position	Gap (mm)	Power State	Ch.	Freq. (MHz)	Sample	Power Drift (dB)	Measured 10g SAR (W/kg)	Deviation
	1st	NFC	ASK	Back	0mm	Full Power	13	13.56	1	0.01	0.022	-22.73%
77	2nd	NFC	ASK	Back	0mm	Full Power	13	13.56	1	0.01	0.017	

15.5 Repeated SAR Measurement

<1g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4233	846.6	1	21.34	22.50	1.306	-	-	0.03	1.07	1.0	1.398
2nd	WCDMA V	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 7	4233	846.6	1	21.34	22.50	1.306	-	-	0.02	1.01	1.059	1.319
1st	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	20850	2510	1	17.99	19.00	1.262	-	-	-0.05	1.09	1.0	1.375
2nd	LTE Band 7	20M	QPSK	1	0	-	Back	5mm	Ant 1	ECI 7	20850	2510	1	17.99	19.00	1.262	-	-	0.05	1.05	1.038	1.325
1st	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	9400	1880	1	15.76	17.00	1.330	-	-	0.06	1.02	1	1.357
2nd	WCDMA II	-	-	-	-	RMC 12.2Kbps	Back	5mm	Ant 0	ECI 3	9400	1880	1	15.76	17.00	1.330	-	-	0.01	0.957	1.066	1.273
1st	WLAN5.8GHz	-	-	-	-	802.11a 6Mbps	Left Tilted	5mm	Ant 6	Standalone	157	5785	1	17.51	19.00	1.409	-	-	0.02	0.767	1	1.081
2nd	WLAN5.8GHz	-	-	-	-	802.11a 6Mbps	Left Tilted	5mm	Ant 6	Standalone	157	5785	1	17.51	19.00	1.409	-	-	-0.08	0.755	1.016	1.064
1st	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Back	5mm	Ant 6	Standalone	11	2462	1	19.16	20.50	1.361	100	1.000	0.03	0.871	1	1.186
2nd	WLAN2.4GHz	-	-	-	-	802.11b 1Mbps	Back	5mm	Ant 6	Standalone	11	2462	1	19.16	20.50	1.361	100	1.000	0.18	0.863	1.009	1.175

<10g>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB offset	Mode	Test Position	Gap (mm)	Antenna	Power State	Ch.	Freq. (MHz)	Sample	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	128	824.2	1	28.83	30.00	1.309	-	-	0.08	2.49	1	3.260
2nd	GSM850	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	128	824.2	1	28.83	30.00	1.309	-	-	0.03	2.45	1.016	3.207
1st	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	512	1850.2	1	22.65	24.00	1.365	-	-	0.03	2.53	1	3.452
2nd	GSM1900	-	-	-	-	GPRS (4 Tx slots)	Bottom Side	0mm	Ant 0	ECI 6	512	1850.2	1	22.65	24.00	1.365	-	-	0.01	2.42	1.045	3.302
1st	LTE Band 38	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	38000	2595	1	20.50	21.50	1.259	62.9	1.006	0.12	2.190	1	2.774
2nd	LTE Band 38	20M	QPSK	1	0	-	Back	0mm	Ant 4	ECI 6	38000	2595	1	20.50	21.50	1.259	62.9	1.006	0.03	2.040	1.074	2.584

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/kg}$.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR $< 1.45\text{W/kg}$, only one repeated measurement is required.
3. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The ratio is the difference in percentage between original and repeated *measured* SAR.
5. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

15.6 TDD LTE Linearity Data Analysis

General Note:

This device support Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg for 1g and < 3.5 W/kg for 10g, Separate SAR testing for Power Class 2 is not required.

LTE B41-Linearity Data for Head Ant4		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	14.50	17.50
Reported 1g SAR (W/kg)	0.726	0.904
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	17.84	24.35
Linearity SAR (W/kg)	0.991	
% deviation from expected linearity		-8.77%
LTE B41-Linearity Data for Body-worn Ant4		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	15.50	18.50
Reported 1g SAR (W/kg)	0.862	1.066
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	22.46	30.65
Linearity SAR (W/kg)	1.176	
% deviation from expected linearity		-9.39%
LTE B41-Linearity Data for Hotspot Ant4		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	11.50	14.50
Reported 1g SAR (W/kg)	0.549	0.691
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	8.94	12.20
Linearity SAR (W/kg)	0.749	
% deviation from expected linearity		-7.78%
LTE B41-Linearity Data for Extremity Ant4		
	LTE B41 (Power Class 3)	LTE B41 (Power Class 2)
Maximum Tune up Power (dBm)	20.00	23.00
Reported 10g SAR (W/kg)	2.030	2.501
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	63.30	86.39
Linearity SAR (W/kg)	2.771	
% deviation from expected linearity		-9.73%

16. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product specific 10g SAR
1.	WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
2.	WWAN + WLAN5GHz	Yes	Yes	Yes	Yes
3.	WWAN + Bluetooth	Yes	Yes	Yes	Yes
4.	WWAN + WLAN2.4GHz + NFC				Yes
5.	WWAN + WLAN5GHz + NFC				Yes
6.	WWAN + Bluetooth + NFC				Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- WWAN above includes 5G NR bands and EN-DC combination.
- EUT will choose each GSM, WCDMA, LTE and 5GNR according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
- According to the EUT characteristic, WLAN 5GHz and Bluetooth can not transmit simultaneously.
- According to the EUT characteristic, WLAN 5GHz and WLAN 2.4GHz can not transmit simultaneously.
- WLAN 2.4GHz and Bluetooth share the same antenna and they cannot transmit simultaneously.
- NFC can transmit simultaneously with other Radios in extremity exposure condition.
- The worst case 5 GHz WLAN SAR for each configuration was used for SAR summation.
- For Headset SAR and non-Headset SAR always chose higher SAR to do co-located analysis.
- For 5GNR EN-DC mode, standalone SAR performed for 5GNR NSA band with the maximum power, EN-DC SAR summed EN-DC mode 5GNR standalone SAR and LTE standalone SAR, the result of EN-DC SAR is more conservatively.
- When stand-alone SAR is not required for a transmitter or antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
- For standalone WWAN, always choose the highest SAR among the selected bands within the selected antennas for each exposure position to perform simultaneous transmission analysis with WLAN/BT. This is the worst co-located analysis and can represent each bands.
- For EN-DC SAR co-located with WLAN/Bluetooth, chose the worst SAR among the selected LTE bands within the selected antenna per each test position and also the worst SAR of the selected 5GNR Bands within the selected antenna to do co-located with WLAN/Bluetooth. This is the worst co-located analysis and can represent each LTE bands and each 5GNR bands.
- The maximum SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
 - The SPLSR calculated results please refer to section 16.5.


Conclusion:

- For the verified maximum SAR from chapter 16.1 to 16.4, when the SAR test results were less than reference model SAR results (Sporton SAR report no.: FA352916), there is no need to consider co-located SAR for reference model SAR report had been performed conservatively. For the SAR results were higher than original SAR results and full tested bands, WWAN/WLAN/BT SAR Chose higher SAR between reference model SAR results and variant model SAR results for each exposure position to perform co-located SAR analysis.

16.1 Head Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3	1+4
		WWAN	WLAN2.4GHz Ant 6	WLAN5GHz Ant 6	Bluetooth Ant 6	Summed	Summed	Summed
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850 Ant 0	Right Cheek	0.644	0.095	0.339	0.124	0.74	0.98	0.77
	Right Tilted	0.342	0.119	0.371	0.158	0.46	0.71	0.50
	Left Cheek	0.567	0.299	0.404	0.393	0.87	0.97	0.96
	Left Tilted	0.310	0.372	0.366	0.473	0.68	0.68	0.78
GSM1900 Ant 0	Right Cheek	0.056	0.095	0.339	0.124	0.15	0.40	0.18
	Right Tilted	0.001	0.119	0.371	0.158	0.12	0.37	0.16
	Left Cheek	0.077	0.299	0.404	0.393	0.38	0.48	0.47
	Left Tilted	0.001	0.372	0.366	0.473	0.37	0.37	0.47
WCDMA II Ant 0	Right Cheek	0.082	0.095	0.339	0.124	0.18	0.42	0.21
	Right Tilted	0.060	0.119	0.371	0.158	0.18	0.43	0.22
	Left Cheek	0.136	0.299	0.404	0.393	0.44	0.54	0.53
	Left Tilted	0.059	0.372	0.366	0.473	0.43	0.43	0.53
WCDMA V Ant 0	Right Cheek	0.440	0.095	0.339	0.124	0.54	0.78	0.56
	Right Tilted	0.248	0.119	0.371	0.158	0.37	0.62	0.41
	Left Cheek	0.404	0.299	0.404	0.393	0.70	0.81	0.80
	Left Tilted	0.243	0.372	0.366	0.473	0.62	0.61	0.72
LTE Band 2 Ant 0	Right Cheek	0.079	0.095	0.339	0.124	0.17	0.42	0.20
	Right Tilted	0.065	0.119	0.371	0.158	0.18	0.44	0.22
	Left Cheek	0.129	0.299	0.404	0.393	0.43	0.53	0.52
	Left Tilted	0.064	0.372	0.366	0.473	0.44	0.43	0.54
LTE Band 7 Ant 1	Right Cheek	0.304	0.095	0.339	0.124	0.40	0.64	0.43
	Right Tilted	0.252	0.119	0.371	0.158	0.37	0.62	0.41
	Left Cheek	0.514	0.299	0.404	0.393	0.81	0.92	0.91
	Left Tilted	0.168	0.372	0.366	0.473	0.54	0.53	0.64
LTE Band 7 Ant 4	Right Cheek	0.767	0.095	0.339	0.124	0.86	1.11	0.89
	Right Tilted	0.934	0.119	0.371	0.158	1.05	1.31	1.09
	Left Cheek	0.335	0.299	0.404	0.393	0.63	0.74	0.73
	Left Tilted	0.430	0.372	0.366	0.473	0.80	0.80	0.90
LTE Band 26 Ant 0	Right Cheek	0.340	0.095	0.339	0.124	0.44	0.68	0.46
	Right Tilted	0.194	0.119	0.371	0.158	0.31	0.57	0.35
	Left Cheek	0.326	0.299	0.404	0.393	0.63	0.73	0.72
	Left Tilted	0.199	0.372	0.366	0.473	0.57	0.57	0.67
LTE Band 41 Ant 1	Right Cheek	0.507	0.095	0.339	0.124	0.60	0.85	0.63
	Right Tilted	0.378	0.119	0.371	0.158	0.50	0.75	0.54
	Left Cheek	0.823	0.299	0.404	0.393	1.12	1.23	1.22
	Left Tilted	0.256	0.372	0.366	0.473	0.63	0.62	0.73
LTE Band 41 Ant 4	Right Cheek	0.515	0.095	0.339	0.124	0.61	0.85	0.64
	Right Tilted	0.726	0.119	0.371	0.158	0.85	1.10	0.88
	Left Cheek	0.200	0.299	0.404	0.393	0.50	0.60	0.59
	Left Tilted	0.220	0.372	0.366	0.473	0.59	0.59	0.69
LTE Band 42 Ant 5	Right Cheek	0.496	0.095	0.339	0.124	0.59	0.84	0.62
	Right Tilted	0.573	0.119	0.371	0.158	0.69	0.94	0.73
	Left Cheek	0.588	0.299	0.404	0.393	0.89	0.99	0.98



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	Left Tilted	0.898	0.372	0.366	0.473	1.27	1.26	1.37
FR1 n7 Ant 1	Right Cheek	0.297	0.095	0.339	0.124	0.39	0.64	0.42
	Right Tilted	0.273	0.119	0.371	0.158	0.39	0.64	0.43
	Left Cheek	0.513	0.299	0.404	0.393	0.81	0.92	0.91
	Left Tilted	0.166	0.372	0.366	0.473	0.54	0.53	0.64
FR1 n26 Ant 0	Right Cheek	0.260	0.095	0.339	0.124	0.36	0.60	0.38
	Right Tilted	0.156	0.119	0.371	0.158	0.28	0.53	0.31
	Left Cheek	0.234	0.299	0.404	0.393	0.53	0.64	0.63
	Left Tilted	0.142	0.372	0.366	0.473	0.51	0.51	0.62
FR1 n41 Ant 4	Right Cheek	0.828	0.095	0.339	0.124	0.92	1.17	0.95
	Right Tilted	0.973	0.119	0.371	0.158	1.09	1.34	1.13
	Left Cheek	0.310	0.299	0.404	0.393	0.61	0.71	0.70
	Left Tilted	0.409	0.372	0.366	0.473	0.78	0.78	0.88
FR1 n77 Ant 1	Right Cheek	0.079	0.095	0.339	0.124	0.17	0.42	0.20
	Right Tilted	0.071	0.119	0.371	0.158	0.19	0.44	0.23
	Left Cheek	0.134	0.299	0.404	0.393	0.43	0.54	0.53
	Left Tilted	0.065	0.372	0.366	0.473	0.44	0.43	0.54
FR1 n77 Ant 2	Right Cheek	0.288	0.095	0.339	0.124	0.38	0.63	0.41
	Right Tilted	0.207	0.119	0.371	0.158	0.33	0.58	0.37
	Left Cheek	0.161	0.299	0.404	0.393	0.46	0.57	0.55
	Left Tilted	0.100	0.372	0.366	0.473	0.47	0.47	0.57
FR1 n77 Ant 5	Right Cheek	0.667	0.095	0.339	0.124	0.76	1.01	0.79
	Right Tilted	0.726	0.119	0.371	0.158	0.85	1.10	0.88
	Left Cheek	0.780	0.299	0.404	0.393	1.08	1.18	1.17
	Left Tilted	0.903	0.372	0.366	0.473	1.28	1.27	1.38
FR1 n77 Ant 7	Right Cheek	0.270	0.095	0.339	0.124	0.37	0.61	0.39
	Right Tilted	0.219	0.119	0.371	0.158	0.34	0.59	0.38
	Left Cheek	0.798	0.299	0.404	0.393	1.10	1.20	1.19
	Left Tilted	0.424	0.372	0.366	0.473	0.80	0.79	0.90
LTE Band 38 Ant 4	Right Cheek	0.731	0.095	0.339	0.124	0.826	1.070	0.86
	Right Tilted	0.955	0.119	0.371	0.158	1.074	1.326	1.11
	Left Cheek	0.279	0.299	0.404	0.393	0.578	0.683	0.67
	Left Tilted	0.310	0.372	0.366	0.473	0.682	0.676	0.78

EN-DC

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5	Case No
			WWAN	FR1	WLAN2.4GHz Ant 6	WLAN5GHz Ant 6	Bluetooth Ant 6	Summed	Summed	Summed	
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 41 Ant 1	FR1 n77 Ant 5	Right Cheek	0.507	0.667	0.095	0.339	0.124	1.27	1.51	1.30	
		Right Tilted	0.378	0.726	0.119	0.371	0.158	1.22	1.48	1.26	
		Left Cheek	0.823	0.780	0.299	0.404	0.393	1.90	2.01	2.00	1&2&3
		Left Tilted	0.256	0.903	0.372	0.366	0.473	1.53	1.53	1.63	4
LTE Band 26 Ant 0	FR1 n77 Ant 5	Right Cheek	0.340	0.667	0.095	0.339	0.124	1.10	1.35	1.13	
		Right Tilted	0.194	0.726	0.119	0.371	0.158	1.04	1.29	1.08	
		Left Cheek	0.326	0.780	0.299	0.404	0.393	1.41	1.51	1.50	
		Left Tilted	0.199	0.903	0.372	0.366	0.473	1.47	1.47	1.58	
LTE Band 7 Ant 4	FR1 n5 Ant 0	Right Cheek	0.767	0.230	0.095	0.339	0.124	1.09	1.34	1.12	
		Right Tilted	0.934	0.138	0.119	0.371	0.158	1.19	1.44	1.23	
		Left Cheek	0.335	0.191	0.299	0.404	0.393	0.83	0.93	0.92	
		Left Tilted	0.430	0.117	0.372	0.366	0.473	0.92	0.91	1.02	
LTE Band 7 Ant 1	FR1 n77 Ant 5	Right Cheek	0.304	0.667	0.095	0.339	0.124	1.07	1.31	1.10	
		Right Tilted	0.252	0.726	0.119	0.371	0.158	1.10	1.35	1.14	
		Left Cheek	0.514	0.780	0.299	0.404	0.393	1.59	1.70	1.69	5&6
		Left Tilted	0.168	0.903	0.372	0.366	0.473	1.44	1.44	1.54	



16.2 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3	1+4	Case No
		WWAN 1g SAR (W/kg)	WLAN2.4G Ant 6 1g SAR (W/kg)	WLAN5G Ant 6 1g SAR (W/kg)	Bluetooth Ant 6 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	
GSM850 Ant 0	Front	0.624	0.245	0.395	0.183	0.87	1.02	0.81	
	Back	1.199	0.408	0.487	0.310	1.61	1.69	1.51	54&55
	Left side	0.227				0.23	0.23	0.23	
	Right side	0.475	0.220	0.415	0.151	0.70	0.89	0.63	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	1.191				1.19	1.19	1.19	
GSM1900 Ant 0	Front	0.268	0.245	0.395	0.183	0.51	0.66	0.45	
	Back	1.132	0.408	0.487	0.310	1.54	1.62	1.44	56
	Left side	0.029				0.03	0.03	0.03	
	Right side	0.054	0.220	0.415	0.151	0.27	0.47	0.21	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	1.283				1.28	1.28	1.28	
WCDMA II Ant 0	Front	0.272	0.245	0.395	0.183	0.52	0.67	0.46	
	Back	1.079	0.408	0.487	0.310	1.49	1.57	1.39	
	Left side	0.037				0.04	0.04	0.04	
	Right side	0.053	0.220	0.415	0.151	0.27	0.47	0.20	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	1.291				1.29	1.29	1.29	
WCDMA V Ant 0	Front	0.588	0.245	0.395	0.183	0.83	0.98	0.77	
	Back	1.398	0.408	0.487	0.310	1.81	1.89	1.71	57&58&59
	Left side	0.301				0.30	0.30	0.30	
	Right side	0.546	0.220	0.415	0.151	0.77	0.96	0.70	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	1.260				1.26	1.26	1.26	
LTE Band 2 Ant 0	Front	0.254	0.245	0.395	0.183	0.50	0.65	0.44	
	Back	0.885	0.408	0.487	0.310	1.29	1.37	1.20	
	Left side	0.037				0.04	0.04	0.04	
	Right side	0.046	0.220	0.415	0.151	0.27	0.46	0.20	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	1.225				1.23	1.23	1.23	
LTE Band 7 Ant 1	Front	0.621	0.245	0.395	0.183	0.87	1.02	0.80	
	Back	1.375	0.408	0.487	0.310	1.78	1.86	1.69	60&61&62
	Left side	0.879				0.88	0.88	0.88	
	Right side		0.220	0.415	0.151	0.22	0.42	0.15	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	0.569				0.57	0.57	0.57	
LTE Band 26 Ant 0	Front	0.549	0.245	0.395	0.183	0.79	0.94	0.73	
	Back	1.159	0.408	0.487	0.310	1.57	1.65	1.47	63
	Left side	0.271				0.27	0.27	0.27	
	Right side	0.513	0.220	0.415	0.151	0.73	0.93	0.66	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	1.141				1.14	1.14	1.14	
LTE Band 41 Ant 4	Front	0.191	0.245	0.395	0.183	0.44	0.59	0.37	
	Back	0.346	0.408	0.487	0.310	0.75	0.83	0.66	
	Left side	0.084				0.08	0.08	0.08	
	Right side		0.220	0.415	0.151	0.22	0.42	0.15	
	Top side	0.691	0.652	0.705	0.490	1.34	1.40	1.18	
	Bottom side					0.00	0.00	0.00	
LTE Band 42 Ant 5	Front	0.289	0.245	0.395	0.183	0.53	0.68	0.47	
	Back	0.650	0.408	0.487	0.310	1.06	1.14	0.96	



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	Left side					0.00	0.00	0.00	
	Right side	0.062	0.220	0.415	0.151	0.28	0.48	0.21	
	Top side	0.389	0.652	0.705	0.490	1.04	1.09	0.88	
	Bottom side					0.00	0.00	0.00	
FR1 n7 Ant 1	Front	0.754	0.245	0.395	0.183	1.00	1.15	0.94	
	Back	1.346	0.408	0.487	0.310	1.75	1.83	1.66	64&65&66
	Left side	0.921				0.92	0.92	0.92	
	Right side		0.220	0.415	0.151	0.22	0.42	0.15	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	0.472				0.47	0.47	0.47	
FR1 n26 Ant 0	Front	0.571	0.245	0.395	0.183	0.82	0.97	0.75	
	Back	1.191	0.408	0.487	0.310	1.60	1.68	1.50	67&68
	Left side	0.289				0.29	0.29	0.29	
	Right side	0.558	0.220	0.415	0.151	0.78	0.97	0.71	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	0.974				0.97	0.97	0.97	
FR1 n41 Ant 4	Front	0.278	0.245	0.395	0.183	0.52	0.67	0.46	
	Back	0.524	0.408	0.487	0.310	0.93	1.01	0.83	
	Left side	0.126				0.13	0.13	0.13	
	Right side		0.220	0.415	0.151	0.22	0.42	0.15	
	Top side	0.715	0.652	0.705	0.490	1.37	1.42	1.21	
	Bottom side					0.00	0.00	0.00	
FR1 n77 Ant 1	Front	0.642	0.245	0.395	0.183	0.89	1.04	0.83	
	Back	0.975	0.408	0.487	0.310	1.38	1.46	1.29	
	Left side	0.868				0.87	0.87	0.87	
	Right side		0.220	0.415	0.151	0.22	0.42	0.15	
	Top side		0.652	0.705	0.490	0.65	0.71	0.49	
	Bottom side	0.307				0.31	0.31	0.31	
FR1 n77 Ant 2	Front	0.046	0.245	0.395	0.183	0.29	0.44	0.23	
	Back	0.655	0.408	0.487	0.310	1.06	1.14	0.97	
	Left side	0.274				0.27	0.27	0.27	
	Right side		0.220	0.415	0.151	0.22	0.42	0.15	
	Top side	0.030	0.652	0.705	0.490	0.68	0.74	0.52	
	Bottom side					0.00	0.00	0.00	
FR1 n77 Ant 5	Front	0.356	0.245	0.395	0.183	0.60	0.75	0.54	
	Back	0.682	0.408	0.487	0.310	1.09	1.17	0.99	
	Left side					0.00	0.00	0.00	
	Right side	0.060	0.220	0.415	0.151	0.28	0.48	0.21	
	Top side	0.457	0.652	0.705	0.490	1.11	1.16	0.95	
	Bottom side					0.00	0.00	0.00	
FR1 n77 Ant 7	Front	0.207	0.245	0.395	0.183	0.45	0.60	0.39	
	Back	0.492	0.408	0.487	0.310	0.90	0.98	0.80	
	Left side					0.00	0.00	0.00	
	Right side	0.332	0.220	0.415	0.151	0.55	0.75	0.48	
	Top side	0.104	0.652	0.705	0.490	0.76	0.81	0.59	
	Bottom side					0.00	0.00	0.00	
LTE Band 38 Ant 4	Front	0.251	0.245	0.395	0.183	0.50	0.65	0.43	
	Back	0.453	0.408	0.487	0.310	0.86	0.94	0.76	
	Left side	0.147				0.15	0.15	0.15	
	Right side		0.220	0.415	0.151	0.22	0.42	0.15	
	Top side	0.689	0.652	0.705	0.490	1.34	1.39	1.18	
	Bottom side					0.00	0.00	0.00	

EN-DC

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5	Case No
			WWAN	FR1	WLAN2.4G Ant 6	WLAN5G Ant 6	Bluetooth Ant 6	Summed	Summed	Summed	
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 41 Ant 1	FR1 n78 Ant 5	Front	0.581	0.356	0.245	0.395	0.183	1.18	1.33	1.12	
		Back	1.332	0.682	0.408	0.487	0.310	2.42	2.50	2.32	69&70&71
		Left side	0.564					0.56	0.56	0.56	
		Right side		0.060	0.220	0.415	0.151	0.28	0.48	0.21	
		Top side		0.457	0.652	0.705	0.490	1.11	1.16	0.95	
		Bottom side	0.294					0.29	0.29	0.29	
LTE Band 5 Ant 0	FR1 n78 Ant 5	Front		0.356	0.245	0.395	0.183	0.60	0.75	0.54	
		Back		0.682	0.408	0.487	0.310	1.09	1.17	0.99	
		Left side						0.00	0.00	0.00	
		Right side		0.060	0.220	0.415	0.151	0.28	0.48	0.21	
		Top side		0.457	0.652	0.705	0.490	1.11	1.16	0.95	
		Bottom side						0.00	0.00	0.00	
LTE Band 7 Ant 4	FR1 n5 Ant 0	Front	0.215	0.421	0.245	0.395	0.183	0.88	1.03	0.82	
		Back	0.287	0.858	0.408	0.487	0.310	1.55	1.63	1.46	72
		Left side	0.058	0.212				0.27	0.27	0.27	
		Right side		0.180	0.220	0.415	0.151	0.40	0.60	0.33	
		Top side	0.643		0.652	0.705	0.490	1.30	1.35	1.13	
		Bottom side		0.693				0.69	0.69	0.69	
LTE Band 7 Ant 1	FR1 n78 Ant 5	Front	0.621	0.356	0.245	0.395	0.183	1.22	1.37	1.16	
		Back	1.375	0.682	0.408	0.487	0.310	2.47	2.54	2.37	73&74&75
		Left side	0.879					0.88	0.88	0.88	
		Right side		0.060	0.220	0.415	0.151	0.28	0.48	0.21	
		Top side		0.457	0.652	0.705	0.490	1.11	1.16	0.95	
		Bottom side	0.569					0.57	0.57	0.57	



16.3 Body-Worn Accessory Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3	1+4	Case No
		WWAN	WLAN2.4G Ant 6	WLAN5G Ant 6	Bluetooth Ant 6	Summed	Summed	Summed	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
GSM850 Ant 0	Front	0.624	0.318	0.383	0.260	0.94	1.01	0.88	
	Back	1.199	0.440	0.431	0.443	1.64	1.63	1.64	7&8&9
GSM1900 Ant 0	Front	0.268	0.318	0.383	0.260	0.59	0.65	0.53	
	Back	1.132	0.440	0.431	0.443	1.57	1.56	1.58	
WCDMA II Ant 0	Front	0.350	0.318	0.383	0.260	0.67	0.73	0.61	
	Back	1.384	0.440	0.431	0.443	1.82	1.82	1.83	10&11&12
WCDMA V Ant 0	Front	0.588	0.318	0.383	0.260	0.91	0.97	0.85	
	Back	1.398	0.440	0.431	0.443	1.84	1.83	1.84	13&14&15
LTE Band 2 Ant 0	Front	0.389	0.318	0.383	0.260	0.71	0.77	0.65	
	Back	1.357	0.440	0.431	0.443	1.80	1.79	1.80	16&17&18
LTE Band 7 Ant 1	Front	0.621	0.318	0.383	0.260	0.94	1.00	0.88	
	Back	1.375	0.440	0.431	0.443	1.82	1.81	1.82	19&20&21
LTE Band 7 Ant 4	Front	0.477	0.318	0.383	0.260	0.80	0.86	0.74	
	Back	1.013	0.440	0.431	0.443	1.45	1.44	1.46	
LTE Band 26 Ant 0	Front	0.549	0.318	0.383	0.260	0.87	0.93	0.81	
	Back	1.159	0.440	0.431	0.443	1.60	1.59	1.60	22&23
LTE Band 41 Ant 1	Front	0.581	0.318	0.383	0.260	0.90	0.96	0.84	
	Back	1.332	0.440	0.431	0.443	1.77	1.76	1.78	24&25&26
LTE Band 38 Ant 4	Front	0.540	0.318	0.383	0.260	0.86	0.92	0.80	
	Back	0.961	0.440	0.431	0.443	1.40	1.39	1.40	
LTE Band 41 Ant 4	Front	0.463	0.318	0.383	0.260	0.78	0.85	0.72	
	Back	1.066	0.440	0.431	0.443	1.51	1.50	1.51	
LTE Band 42 Ant 5	Front	0.369	0.318	0.383	0.260	0.69	0.75	0.63	
	Back	0.855	0.440	0.431	0.443	1.30	1.29	1.30	
FR1 n7 Ant 1	Front	0.754	0.318	0.383	0.260	1.07	1.14	1.01	
	Back	1.346	0.440	0.431	0.443	1.79	1.78	1.79	27&28&29
FR1 n26 Ant 0	Front	0.571	0.318	0.383	0.260	0.89	0.95	0.83	
	Back	1.191	0.440	0.431	0.443	1.63	1.62	1.63	30&31&32
FR1 n41 Ant 4	Front	0.514	0.318	0.383	0.260	0.83	0.90	0.77	
	Back	0.974	0.440	0.431	0.443	1.41	1.41	1.42	
FR1 n77 Ant 1	Front	0.642	0.318	0.383	0.260	0.96	1.03	0.90	
	Back	0.975	0.440	0.431	0.443	1.42	1.41	1.42	
FR1 n77 Ant 2	Front	0.076	0.318	0.383	0.260	0.39	0.46	0.34	
	Back	1.096	0.440	0.431	0.443	1.54	1.53	1.54	
FR1 n77 Ant 5	Front	0.596	0.318	0.383	0.260	0.91	0.98	0.86	
	Back	1.142	0.440	0.431	0.443	1.58	1.57	1.59	
FR1 n77 Ant 7	Front	0.345	0.318	0.383	0.260	0.66	0.73	0.61	
	Back	0.821	0.440	0.431	0.443	1.26	1.25	1.26	

EN-DC

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5	Case No
			WWAN	FR1	WLAN2.4G Ant 6	WLAN5G Ant 6	Bluetooth Ant 6	Summed	Summed	Summed	
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 41 Ant 1	FR1 n78 Ant 5	Front	0.581	0.596	0.318	0.383	0.260	1.50	1.56	1.44	
		Back	1.332	1.142	0.440	0.431	0.443	2.91	2.91	2.92	41&42&43
LTE Band 26 Ant 0	FR1 n78 Ant 5	Front	0.549	0.596	0.318	0.383	0.260	1.46	1.53	1.41	
		Back	1.159	1.142	0.440	0.431	0.443	2.74	2.73	2.74	44&45&46
LTE Band 7 Ant 4	FR1 n5 Ant 0	Front	0.477	0.421	0.318	0.383	0.260	1.22	1.28	1.16	
		Back	1.013	0.858	0.440	0.431	0.443	2.31	2.30	2.31	47&48&49
LTE Band 7 Ant 1	FR1 n78 Ant 5	Front	0.621	0.596	0.318	0.383	0.260	1.54	1.60	1.48	50
		Back	1.375	1.142	0.440	0.431	0.443	2.96	2.95	2.96	51&52&53

Sensor-Off

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3	1+4	Case No
		WWAN	WLAN2.4G Ant 6	WLAN5G Ant 6	Bluetooth Ant 6	Summed	Summed	Summed	
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
All Band Ant1&2&4&5&7	Front	0.808	0.244	0.389	0.013	1.05	1.20	0.82	
	Back	0.820	0.125	0.654	0.042	0.95	1.47	0.86	
GSM850 Ant 0	Front	0.428	0.244	0.389	0.013	0.67	0.82	0.44	
	Back	0.512	0.125	0.654	0.042	0.64	1.17	0.55	
GSM1900 Ant 0	Front	0.542	0.244	0.389	0.013	0.79	0.93	0.56	
	Back	0.905	0.125	0.654	0.042	1.03	1.56	0.95	
WCDMA II Ant 0	Front	0.674	0.244	0.389	0.013	0.92	1.06	0.69	
	Back	1.127	0.125	0.654	0.042	1.25	1.78	1.17	33
WCDMA V Ant 0	Front	0.340	0.244	0.389	0.013	0.58	0.73	0.35	
	Back	0.386	0.125	0.654	0.042	0.51	1.04	0.43	
LTE Band 2 Ant 0	Front	0.656	0.244	0.389	0.013	0.90	1.05	0.67	
	Back	1.158	0.125	0.654	0.042	1.28	1.81	1.20	34
LTE Band 26 Ant 0	Front	0.233	0.244	0.389	0.013	0.48	0.62	0.25	
	Back	0.280	0.125	0.654	0.042	0.41	0.93	0.32	

EN-DC

WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	1+2+3	1+2+4	1+2+5	Case No
			WWAN	FR1	WLAN2.4G Ant 6	WLAN5G Ant 6	Bluetooth Ant 6	Summed	Summed	Summed	
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	
LTE Band 41 Ant 1	FR1 n78 Ant 5	Front	0.657	0.777	0.244	0.389	0.013	1.68	1.82	1.45	35&36
		Back	0.329	0.629	0.125	0.654	0.042	1.08	1.61	1.00	37
LTE Band 26 Ant 0	FR1 n78 Ant 5	Front	0.233	0.777	0.244	0.389	0.013	1.25	1.40	1.02	
		Back	0.280	0.629	0.125	0.654	0.042	1.03	1.56	0.95	
LTE Band 7 Ant 4	FR1 n5 Ant 0	Front	0.799	0.277	0.244	0.389	0.013	1.32	1.47	1.09	
		Back	0.820	0.296	0.125	0.654	0.042	1.24	1.77	1.16	38
LTE Band 7 Ant 1	FR1 n78 Ant 5	Front	0.579	0.777	0.244	0.389	0.013	1.60	1.75	1.37	39&40
		Back	0.307	0.629	0.125	0.654	0.042	1.06	1.59	0.98	



16.4 Product specific 10g SAR Exposure Conditions

Remark:

1. For Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.

WWAN Band	Exposure Position	1	2	3	4	5	1+2+5	1+3+5	1+4+5
		WWAN	WLAN2.4G Ant 6	WLAN5G Ant 6	Bluetooth Ant 6	NFC	Summed	Summed	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
GSM850 Ant 0	Front			0.809		0.001	0.00	0.81	0.00
	Back	1.520	0.868	0.863		0.022	2.41	2.41	1.54
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side	3.352				0.010	3.36	3.36	3.36
GSM1900 Ant 0	Front			0.809		0.001	0.00	0.81	0.00
	Back	2.647	0.868	0.863		0.022	3.54	3.53	2.67
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side	3.452				0.010	3.46	3.46	3.46
WCDMA II Ant 0	Front			0.809		0.001	0.00	0.81	0.00
	Back	2.801	0.868	0.863		0.022	3.69	3.69	2.82
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side	3.481				0.010	3.49	3.49	3.49
WCDMA V Ant 0	Front			0.809		0.001	0.00	0.81	0.00
	Back	1.586	0.868	0.863		0.022	2.48	2.47	1.61
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side	2.432				0.010	2.44	2.44	2.44
LTE Band 2 Ant 0	Front			0.809		0.001	0.00	0.81	0.00
	Back	2.410	0.868	0.863		0.022	3.30	3.30	2.43
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side	2.710				0.010	2.72	2.72	2.72
LTE Band 7 Ant 1	Front			0.809		0.001	0.00	0.81	0.00
	Back	2.393	0.868	0.863		0.022	3.28	3.28	2.42
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side					0.010	0.01	0.01	0.01
LTE Band 26 Ant 0	Front			0.809		0.001	0.00	0.81	0.00
	Back		0.868	0.863		0.022	0.89	0.89	0.02
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side					0.010	0.01	0.01	0.01
LTE Band 41 Ant 4	Front	1.634		0.809		0.001	1.64	2.44	1.64
	Back	2.501	0.868	0.863		0.022	3.39	3.39	2.52
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side	1.540	1.179	1.025			2.72	2.57	1.54
	Bottom side					0.010	0.01	0.01	0.01



FCC SAR Test Report

Report No. : FA352916-01

LTE Band 42 Ant 5	Front			0.809		0.001	0.00	0.81	0.00
	Back	2.092	0.868	0.863		0.022	2.98	2.98	2.11
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side	1.356	1.179	1.025			2.54	2.38	1.36
	Bottom side					0.010	0.01	0.01	0.01
FR1 n7 Ant 1	Front			0.809		0.001	0.00	0.81	0.00
	Back	2.562	0.868	0.863		0.022	3.45	3.45	2.58
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side					0.010	0.01	0.01	0.01
FR1 n26 Ant 0	Front			0.809		0.001	0.00	0.81	0.00
	Back		0.868	0.863		0.022	0.89	0.89	0.02
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side					0.010	0.01	0.01	0.01
FR1 n41 Ant 4	Front	1.727		0.809		0.001	1.73	2.54	1.73
	Back	2.345	0.868	0.863		0.022	3.24	3.23	2.37
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side	1.788	1.179	1.025			2.97	2.81	1.79
	Bottom side					0.010	0.01	0.01	0.01
FR1 n77 Ant 1	Front			0.809		0.001	0.00	0.81	0.00
	Back		0.868	0.863		0.022	0.89	0.89	0.02
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side					0.010	0.01	0.01	0.01
FR1 n77 Ant 2	Front			0.809		0.001	0.00	0.81	0.00
	Back	2.779	0.868	0.863		0.022	3.67	3.66	2.80
	Left side	1.182					1.18	1.18	1.18
	Right side			0.843			0.00	0.84	0.00
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side					0.010	0.01	0.01	0.01
FR1 n77 Ant 5	Front			0.809		0.001	0.00	0.81	0.00
	Back	2.166	0.868	0.863		0.022	3.06	3.05	2.19
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side	1.108	1.179	1.025			2.29	2.13	1.11
	Bottom side					0.010	0.01	0.01	0.01
FR1 n77 Ant 7	Front	1.261		0.809		0.001	1.26	2.07	1.26
	Back	1.692	0.868	0.863		0.022	2.58	2.58	1.71
	Left side						0.00	0.00	0.00
	Right side	2.015		0.843			2.02	2.86	2.02
	Top side		1.179	1.025			1.18	1.03	0.00
	Bottom side					0.010	0.01	0.01	0.01
LTE Band 38 Ant 4	Front	1.760		0.809		0.001	1.76	2.57	1.76
	Back	2.774	0.868	0.863		0.022	3.66	3.66	2.80
	Left side						0.00	0.00	0.00
	Right side			0.843			0.00	0.84	0.00
	Top side	1.735	1.179	1.025			2.91	2.76	1.74
	Bottom side					0.010	0.01	0.01	0.01

EN-DC

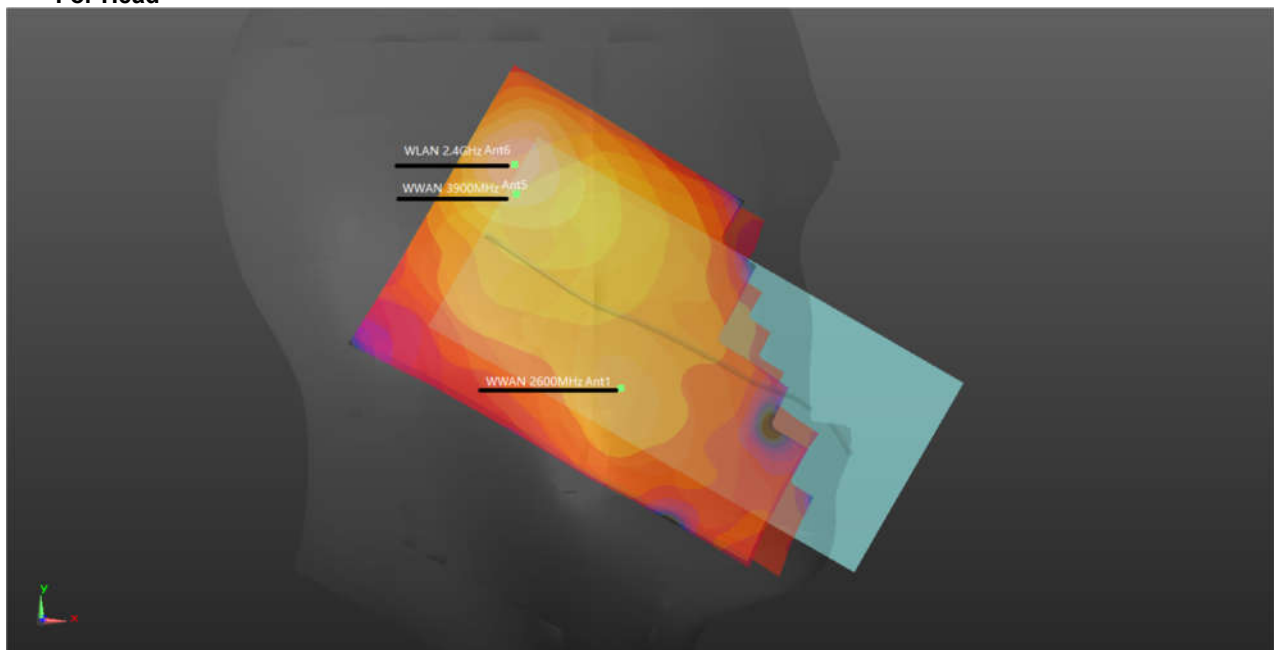
WWAN Band	FR1 Band	Exposure Position	1	2	3	4	5	6	1+2+3+6	1+2+4+6	1+2+5+6	Case No
			WWAN	FR1	WLAN2.4G Ant 6	WLAN5G Ant 6	Bluetooth Ant 6	NFC	Summed	Summed	Summed	
			10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	
LTE Band 41 Ant 1	FR1 n78 Ant 5	Front				0.809		0.001	0.00	0.81	0.00	
		Back	2.336	2.166	0.868	0.863		0.022	5.39	5.39	4.52	76&77&78
		Left side							0.00	0.00	0.00	
		Right side				0.843			0.00	0.84	0.00	
		Top side		1.108	1.179	1.025			2.29	2.13	1.11	
		Bottom side						0.010	0.01	0.01	0.01	
LTE Band 5 Ant 0	FR1 n78 Ant 5	Front				0.809		0.001	0.00	0.81	0.00	
		Back		2.166	0.868	0.863		0.022	3.06	3.05	2.19	
		Left side							0.00	0.00	0.00	
		Right side				0.843			0.00	0.84	0.00	
		Top side		1.108	1.179	1.025			2.29	2.13	1.11	
		Bottom side						0.010	0.01	0.01	0.01	
LTE Band 7 Ant 4	FR1 n5 Ant 0	Front				0.809		0.001	0.00	0.81	0.00	
		Back			0.868	0.863		0.022	0.89	0.89	0.02	
		Left side							0.00	0.00	0.00	
		Right side				0.843			0.00	0.84	0.00	
		Top side	1.603		1.179	1.025			2.78	2.63	1.60	
		Bottom side						0.010	0.01	0.01	0.01	
LTE Band 7 Ant 1	FR1 n78 Ant 5	Front				0.809		0.001	0.00	0.81	0.00	
		Back	2.393	2.166	0.868	0.863		0.022	5.45	5.44	4.58	79&80&81
		Left side							0.00	0.00	0.00	
		Right side				0.843			0.00	0.84	0.00	
		Top side		1.108	1.179	1.025			2.29	2.13	1.11	
		Bottom side						0.010	0.01	0.01	0.01	

16.5 SPLSR Evaluation and Analysis

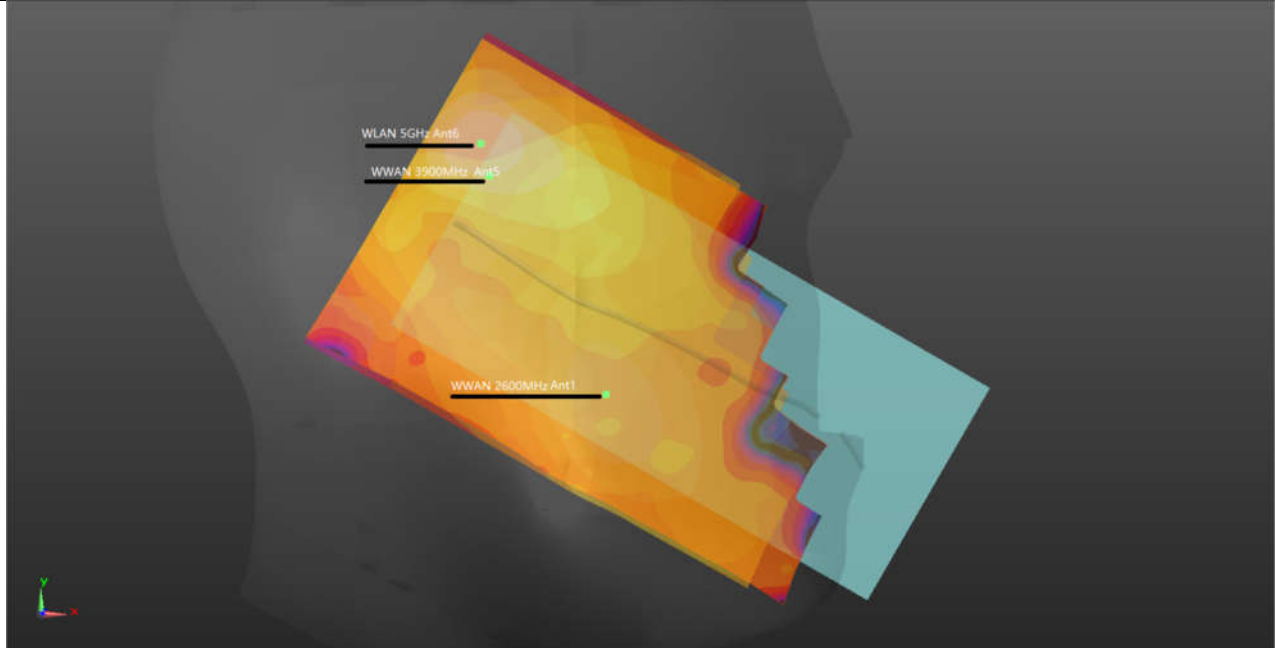
General Note:

1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where $(x1, y1, z1)$ and $(x2, y2, z2)$ are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2. $SPLSR = (SAR1 + SAR2)1.5 / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
3. Per April 2022 TCB Workshop Notes, WWAN band antenna 4/5 was summed algebraically with the NFC and BT/WIFI Antenna 6 separately for the purposes of hybrid SPLSR combination and they are located at the top of the device.
4. Per April 2022 TCB Workshop, instead of doing a small volume scan over a co-located antenna pair, used summing the SAR values of the co-located pair and using that value in SPLSR calculation. In the calculation used the minimum distance between the spatially separated antenna and the closest antenna of the co-located antenna pair to be conservative.

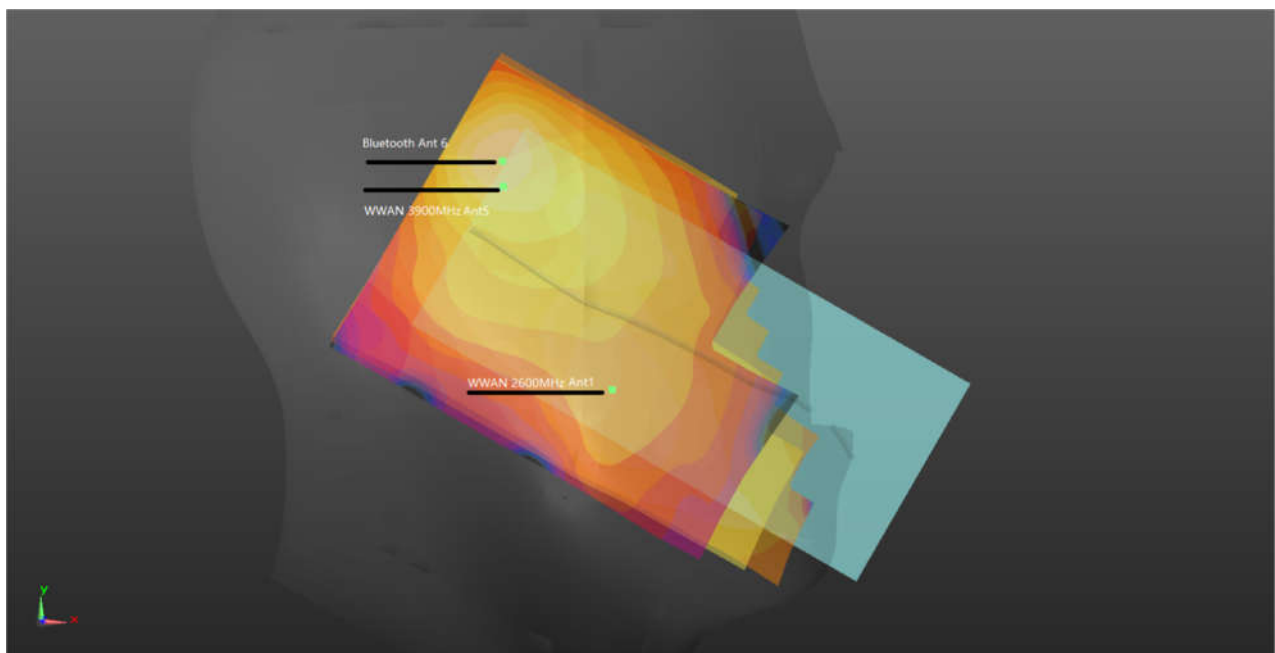
For Head



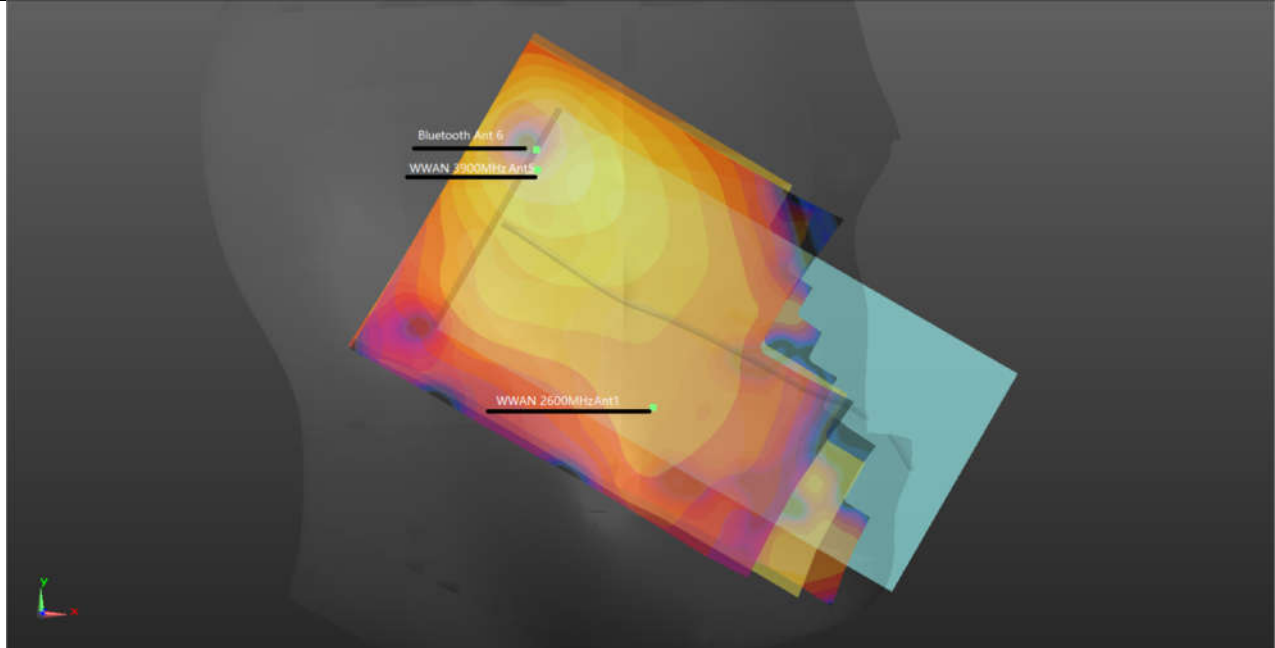
WWAN+ 2.4GHz WIFI Left Cheek



WWAN+ 5GHz WIFI Left Cheek

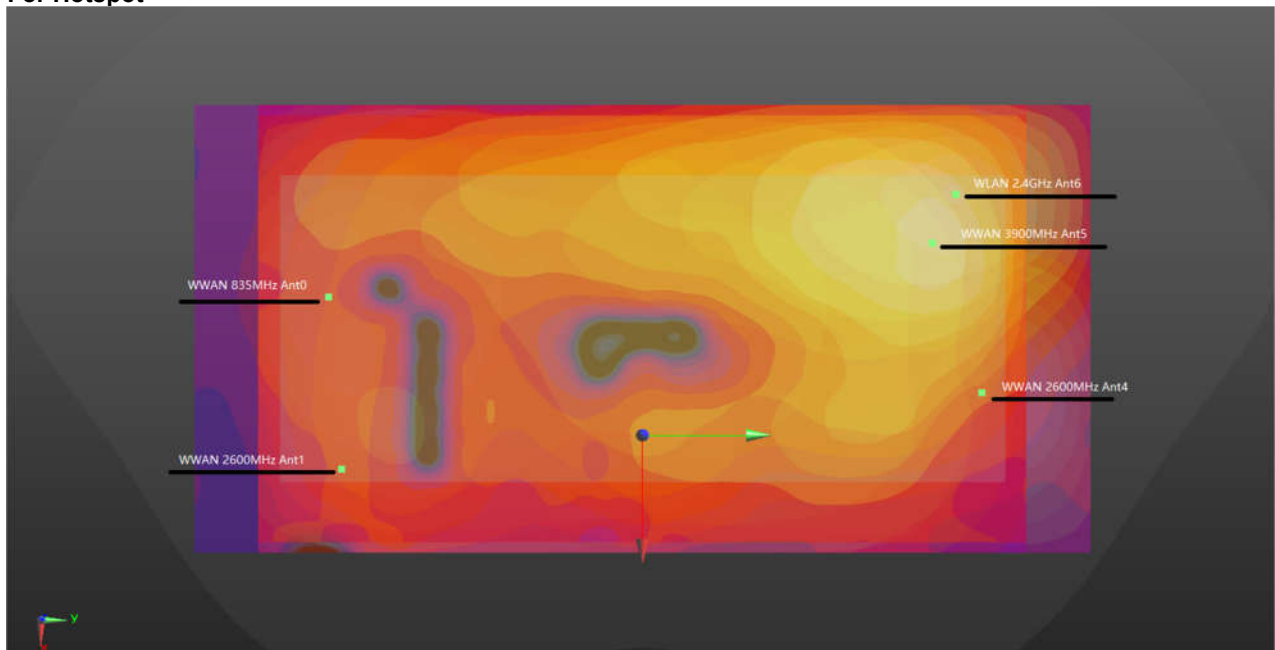


WWAN +BT Left Cheek

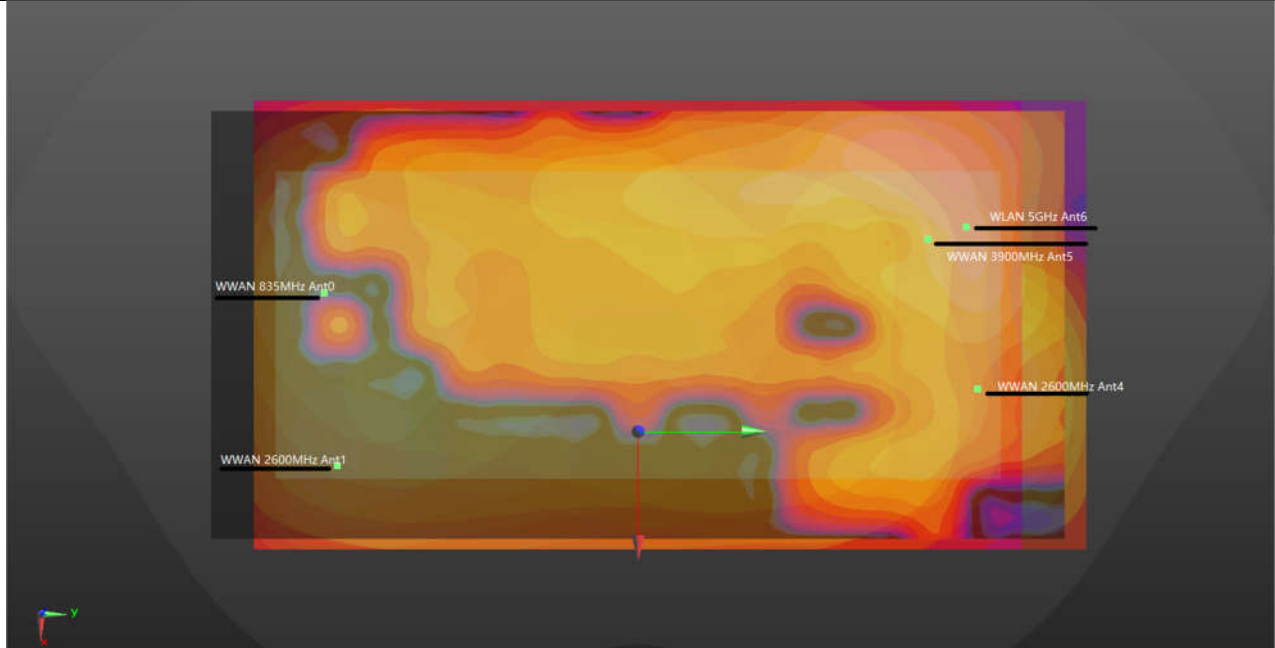


WWAN +BT Left Tilted

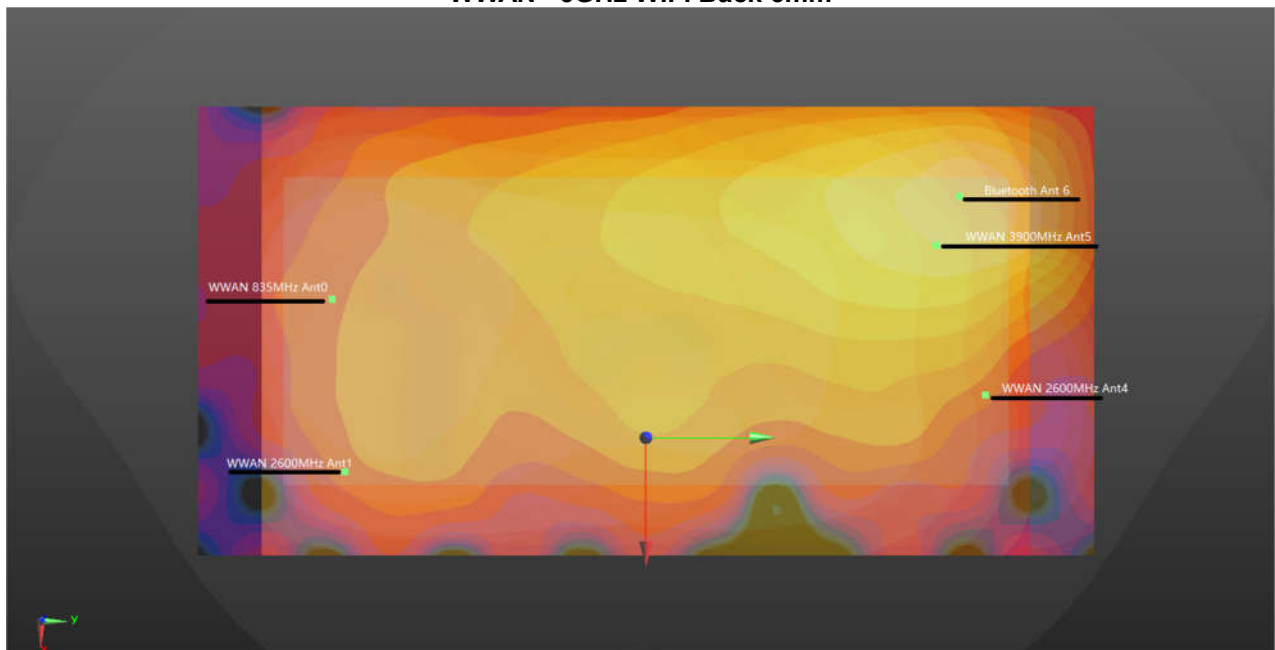
For Hotspot



WWAN +2.4GHz WIFI Back 5mm

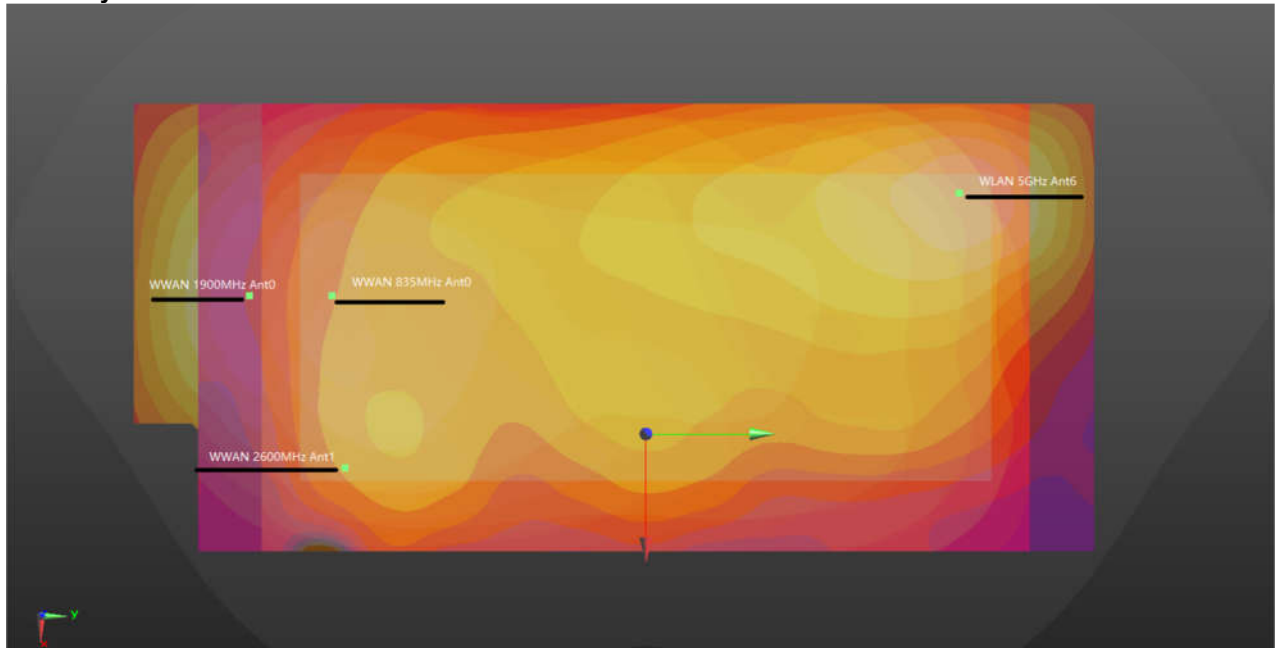


WWAN +5GHz WIFI Back 5mm

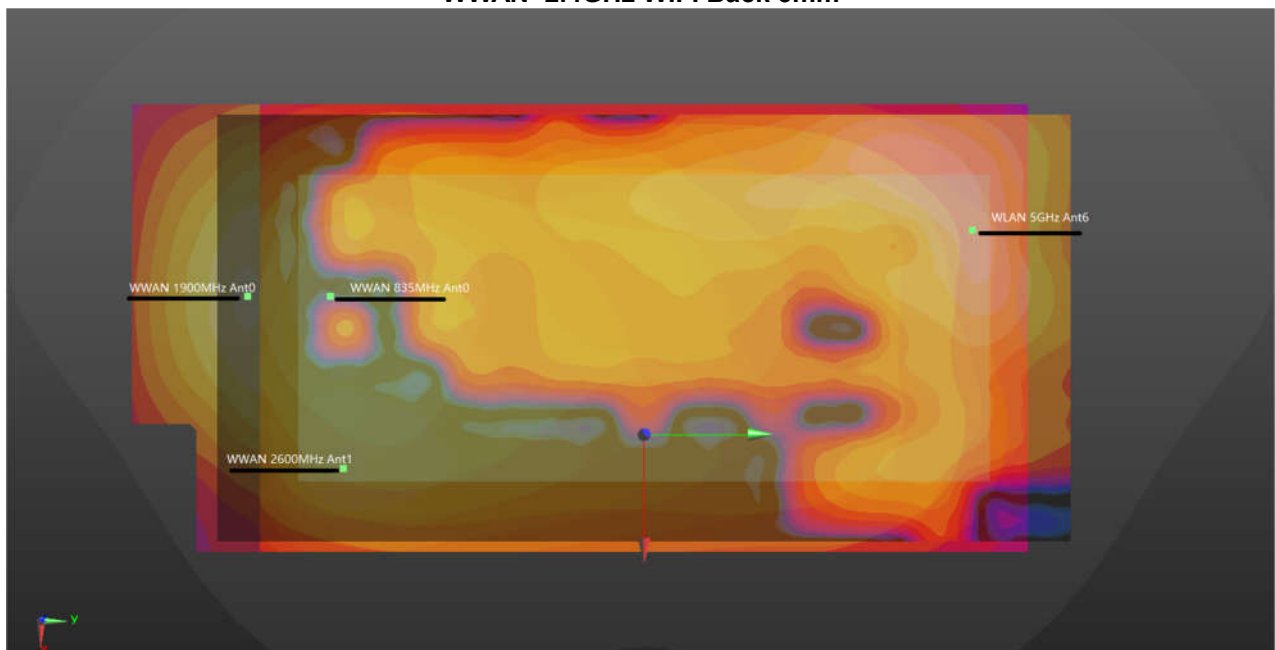


WWAN +BT Back 5mm

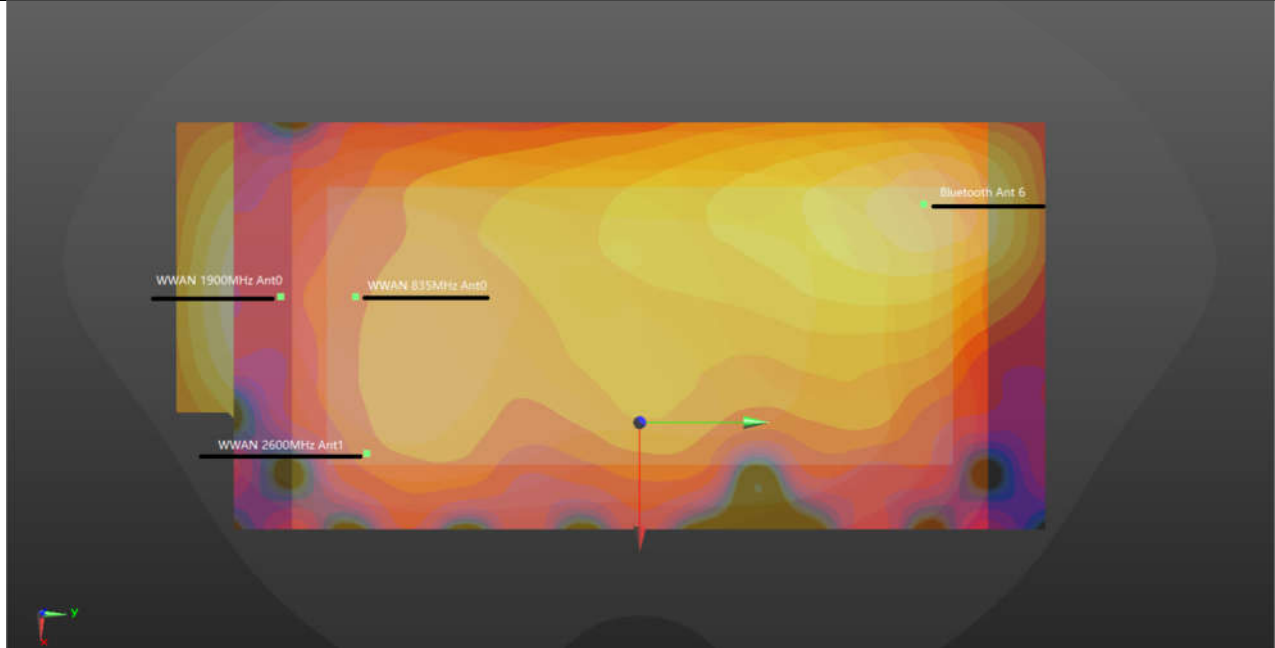
For Body



WWAN+2.4GHz WIFI Back 5mm

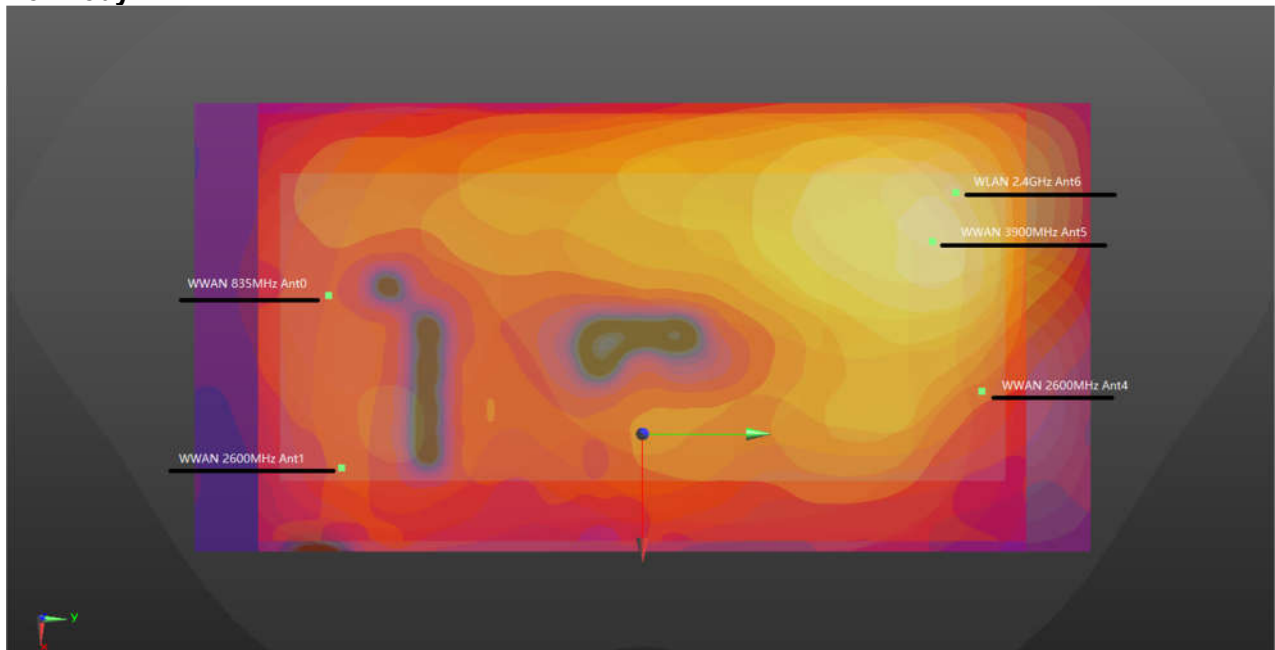


WWAN+5GHz WIFI Back 5mm

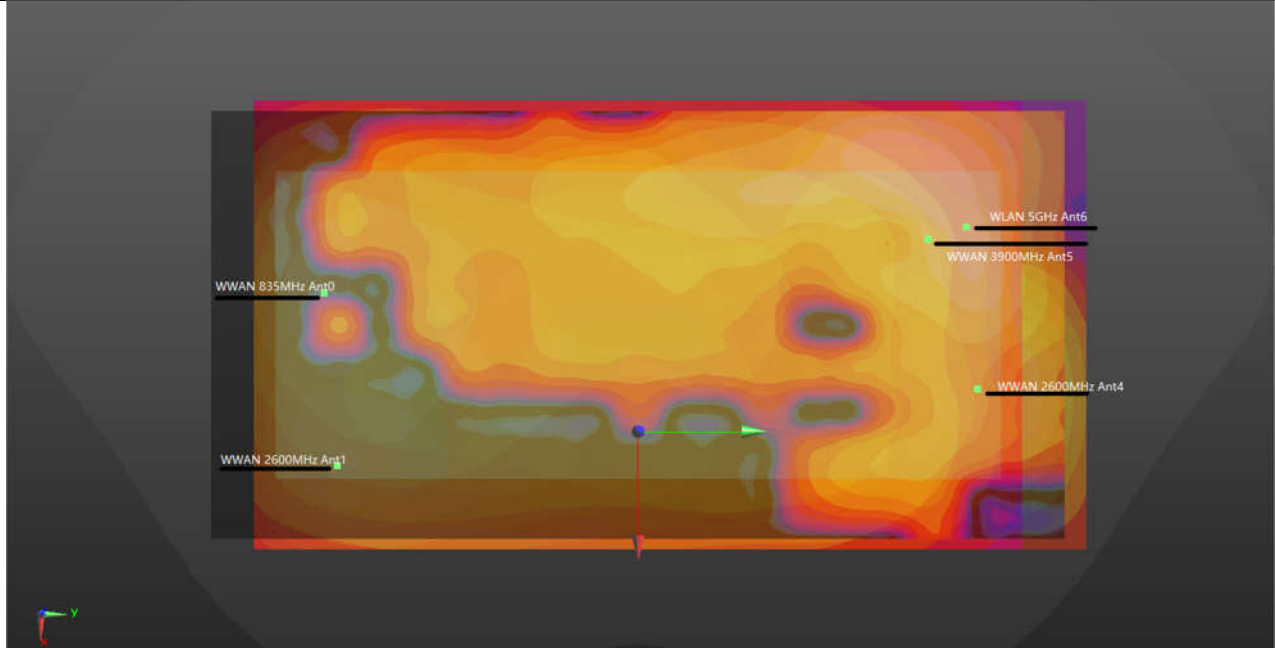


WWAN+BT Back 5mm

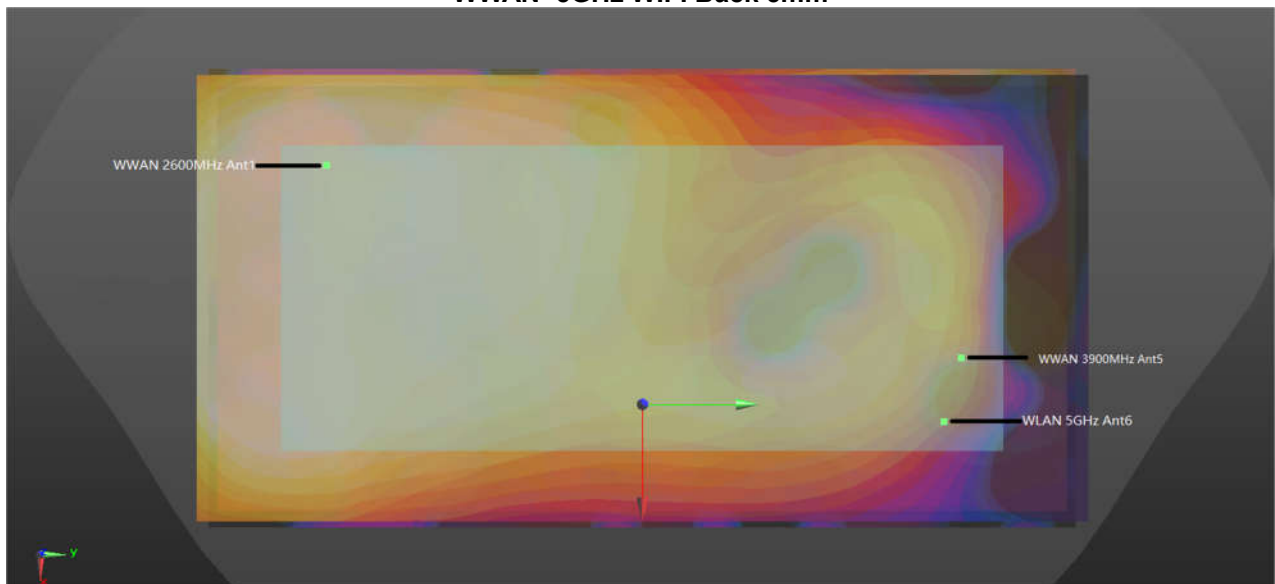
For Body ENDC



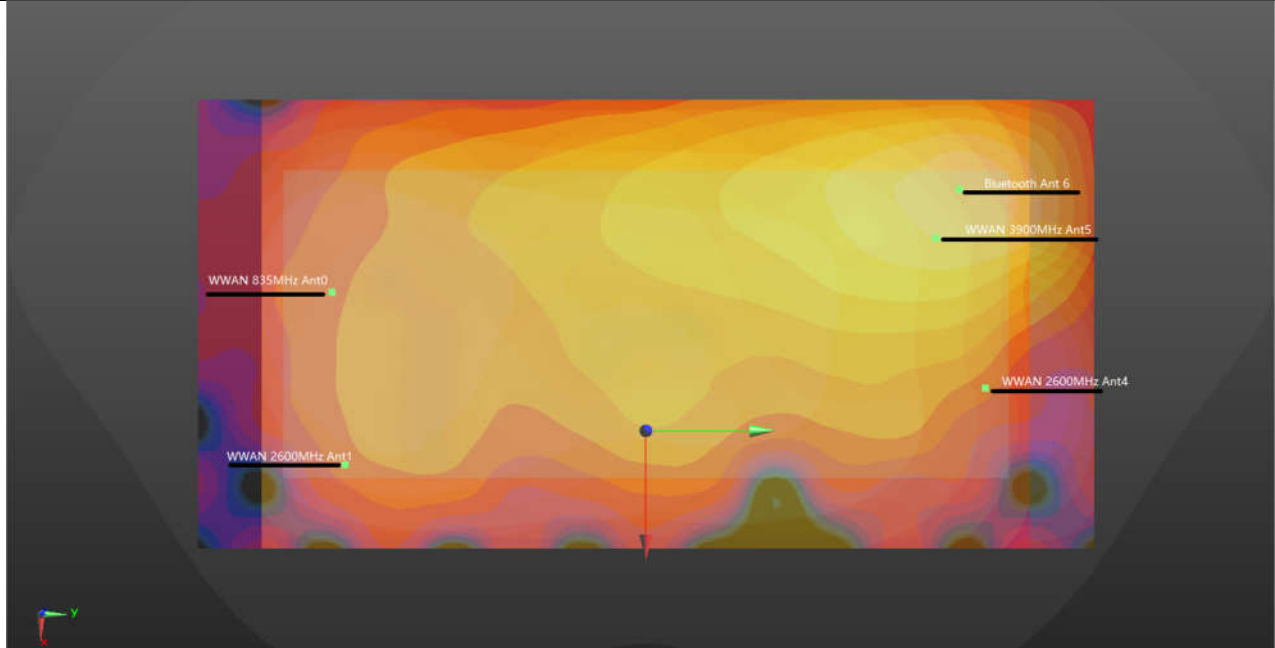
WWAN+2.4GHz WIFI Back 5mm



WWAN+5GHz WIFI Back 5mm

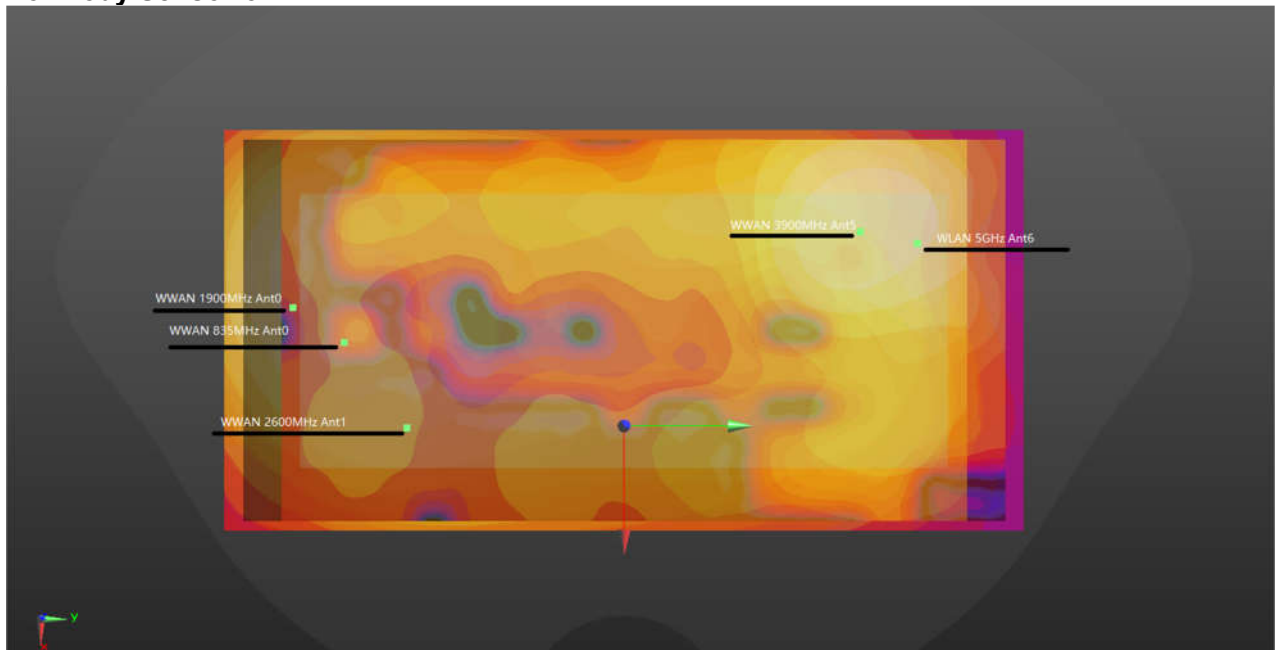


WWAN+5GHz WIFI Front 5mm

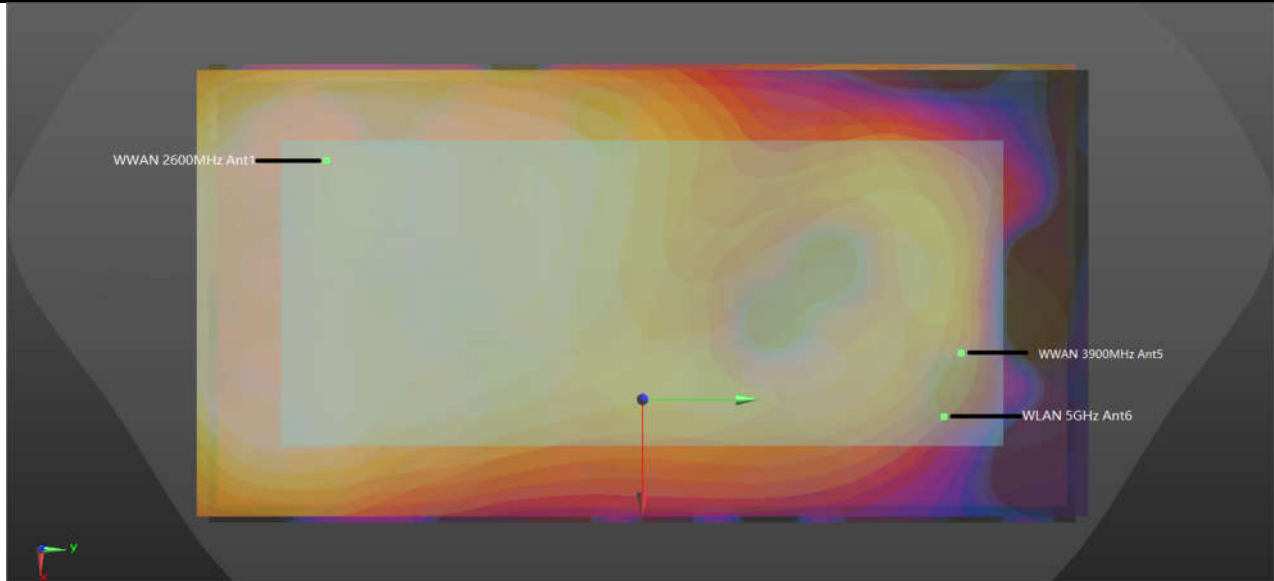


WWAN+BT Back 5mm

For Body Sensor-off

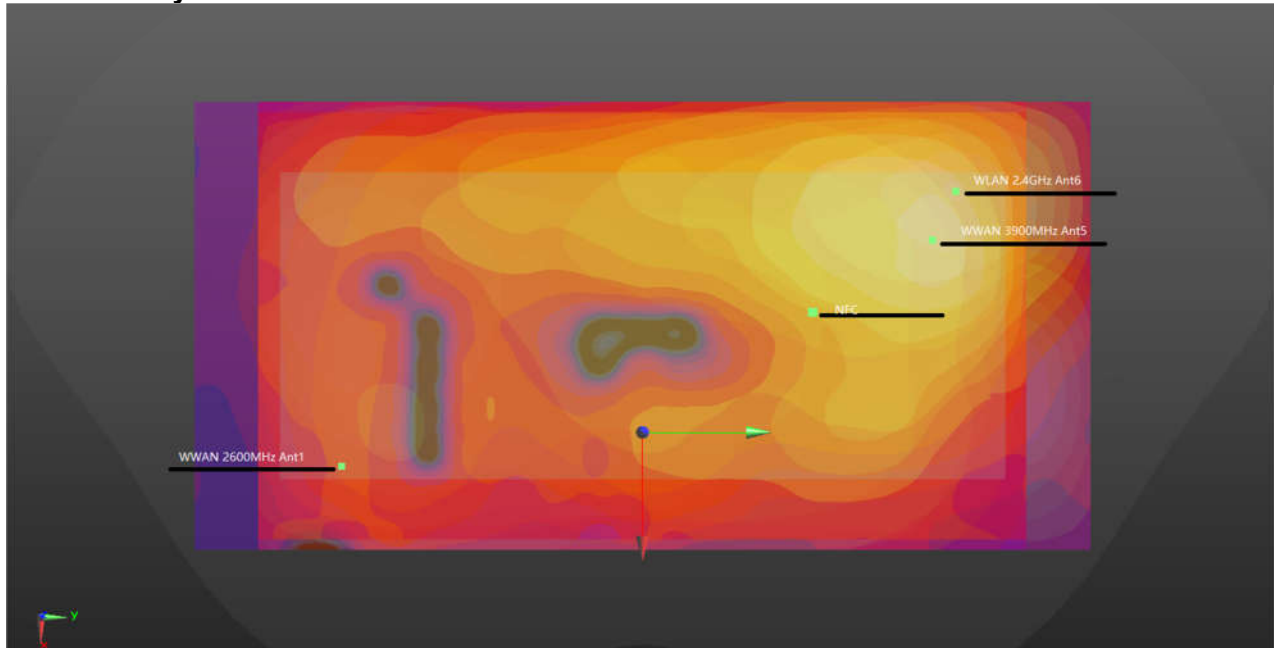


WWAN +5GHz WIFI Back 17mm

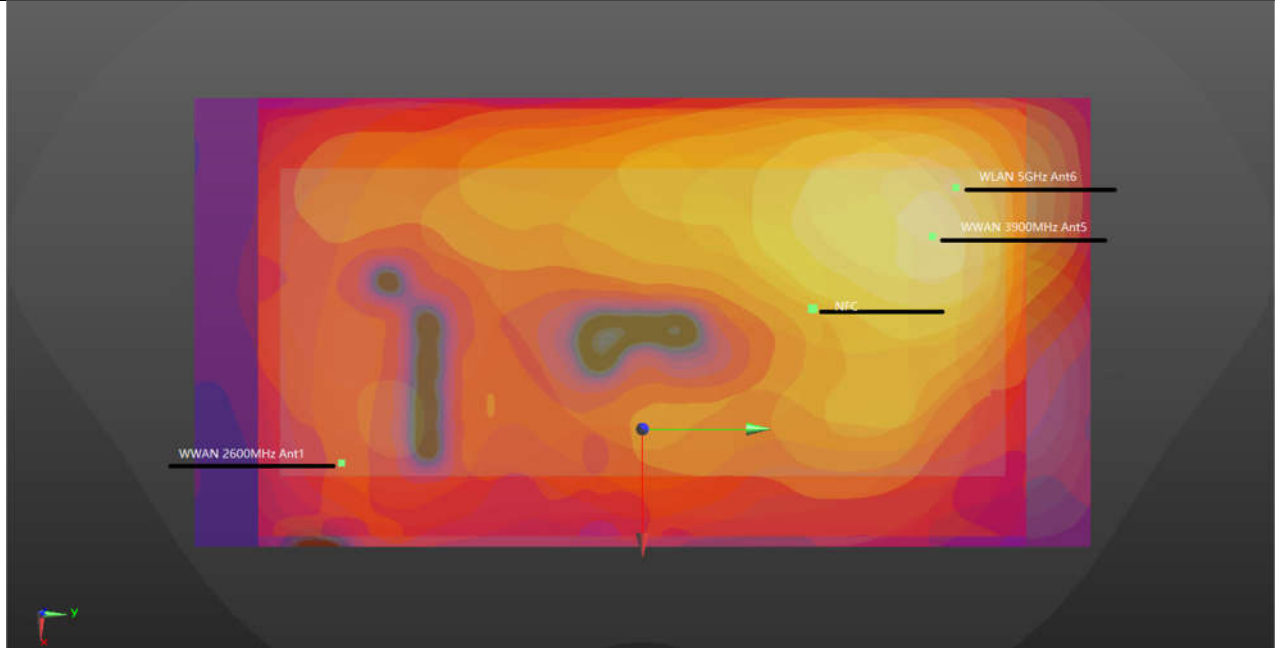


WWAN +5GHz WIFI Front 12mm

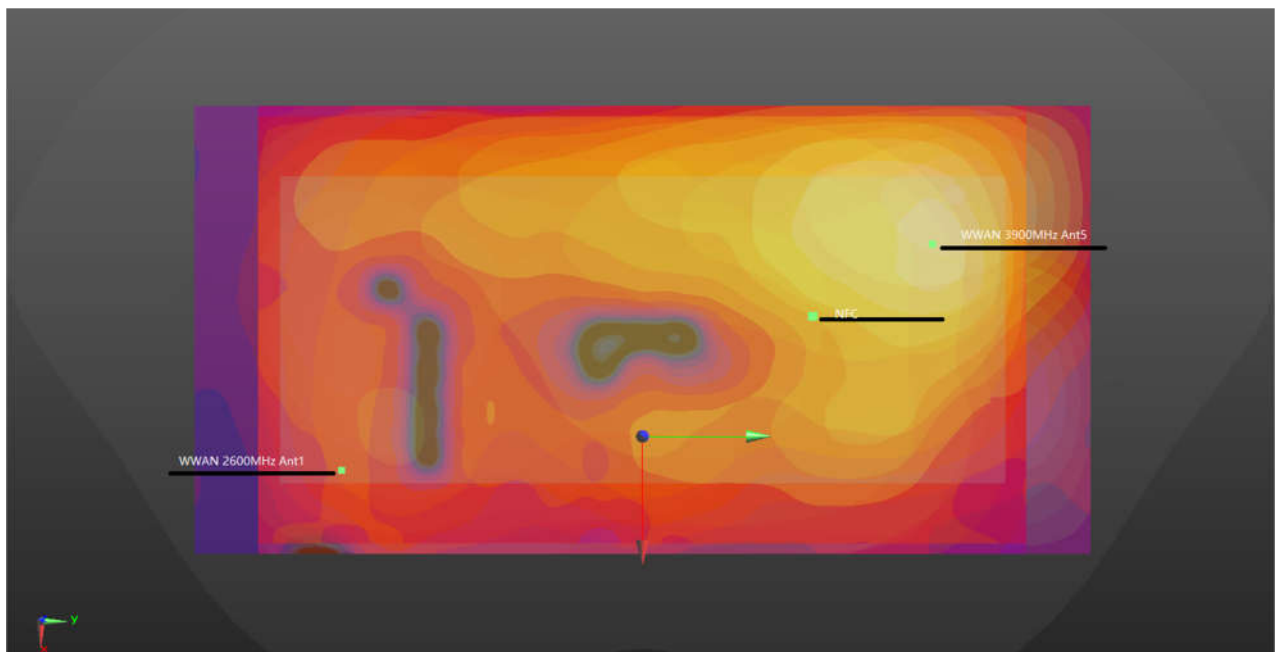
For Extremity



WWAN +2.4G Back 0mm



WWAN +5G Back 0mm



WWAN +BT Back 0mm



For Head

Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 1	LTE Band 41 Ant 1	Left Cheek	0.823	0.823	0mm	47.5	-60.51	-1.47	79.5	1.90	0.03	Not required
	FR1 n77 Ant 5		0.780	1.079	0mm	7.6	8.19	-0.45				
	WLAN2.4G Ant 6		0.299		0mm							
	LTE Band 41 Ant 1	Left Cheek	0.823	0.823	0mm	47.5	-60.51	-1.47	95.3	1.90	0.03	Not required
	FR1 n77 Ant 5		0.780	1.079	0mm							
	WLAN2.4G Ant 6		0.299		0mm	8.31	26.37	0.11				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 2	LTE Band 41 Ant 1	Left Cheek	0.823	0.823	0mm	47.5	-60.51	-1.47	79.5	2.01	0.04	Not required
	FR1 n77 Ant 5		0.780	1.184	0mm	7.6	8.19	-0.45				
	WLAN5G Ant 6		0.404		0mm							
	LTE Band 41 Ant 1	Left Cheek	0.823	0.823	0mm	47.5	-60.51	-1.47	109.4	2.01	0.03	Not required
	FR1 n77 Ant 5		0.780	1.184	0mm							
	WLAN5G Ant 6		0.404		0mm	9.31	42.03	0.72				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 3	LTE Band 41 Ant 1	Left Cheek	0.823	0.823	0mm	47.5	-60.51	-1.47	79.5	2.00	0.04	Not required
	FR1 n77 Ant 5		0.780	1.173	0mm	7.6	8.19	-0.45				
	Bluetooth Ant 6		0.393		0mm							
	LTE Band 41 Ant 1	Left Cheek	0.823	0.823	0mm	47.5	-60.51	-1.47	90.5	2.00	0.03	Not required
	FR1 n77 Ant 5		0.780	1.173	0mm							
	Bluetooth Ant 6		0.393		0mm	12.71	23.03	-0.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 4	LTE Band 41 Ant 1	Left Tilted	0.256	0.256	0mm	41.17	-58.78	-2.19	78.8	1.63	0.03	Not required
	FR1 n77 Ant 5		0.903	1.376	0mm	4.32	10.84	-0.98				
	Bluetooth Ant 6		0.473		0mm							
	LTE Band 41 Ant 1	Left Tilted	0.256	0.256	0mm	41.17	-58.78	-2.19	91.0	1.63	0.02	Not required
	FR1 n77 Ant 5		0.903	1.376	0mm							
	Bluetooth Ant 6		0.473		0mm	10.06	26.76	-0.84				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 5	LTE Band 7 Ant 1	Left Cheek	0.514	0.514	0mm	47.86	-61.87	-1.28	80.8	1.70	0.03	Not required
	FR1 n77 Ant 5		0.780	1.184	0mm	7.6	8.19	-0.45				
	WLAN5G Ant 6		0.404		0mm							
	LTE Band 7 Ant 1	Left Cheek	0.514	0.514	0mm	47.86	-61.87	-1.28	110.8	1.70	0.02	Not required
	FR1 n77 Ant 5		0.780	1.184	0mm							
	WLAN5G Ant 6		0.404		0mm	9.31	42.03	0.72				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 6	LTE Band 7 Ant 1	Left Cheek	0.514	0.514	0mm	47.86	-61.87	-1.28	80.8	1.69	0.03	Not required
	FR1 n77 Ant 5		0.780	1.173	0mm	7.6	8.19	-0.45				
	Bluetooth Ant 6		0.393		0mm							
	LTE Band 7 Ant 1	Left Cheek	0.514	0.514	0mm	47.86	-61.87	-1.28	91.9	1.69	0.02	Not required
	FR1 n77 Ant 5		0.780	1.173	0mm							
	Bluetooth Ant 6		0.393		0mm	12.71	23.03	-0.48				



For Hotspot

SA												
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 54	GSM850 Ant 0	Back	1.199	1.199	5mm	-6.9	-78.5	-1.57	157.1	1.61	0.01	Not required
	WLAN2.4G Ant 6		0.408	0.408	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g 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	GSM850 Ant 0	Back	1.199	1.199	5mm	-6.9	-78.5	-1.57	156.6	1.69	0.01	Not required
	WLAN5G Ant 6		0.487	0.487	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 56	GSM1900 Ant 0	Back	1.132	1.132	5mm	-4.1	-81.2	-1.54	159.6	1.62	0.01	Not required
	WLAN5G Ant 6		0.487	0.487	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 57	WCDMA V Ant 0	Back	1.398	1.398	5mm	-8.2	-81.5	-1.4	159.9	1.81	0.02	Not required
	WLAN2.4G Ant 6		0.408	0.408	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 58	WCDMA V Ant 0	Back	1.398	1.398	5mm	-8.2	-81.5	-1.4	159.5	1.89	0.02	Not required
	WLAN5G Ant 6		0.487	0.487	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g 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	WCDMA V Ant 0	Back	1.398	1.398	5mm	-8.2	-81.5	-1.4	162.5	1.71	0.01	Not required
	Bluetooth Ant 6		0.310	0.310	5mm	-28.2	79.8	-1.35				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 60	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	154.5	1.78	0.02	Not required
	WLAN2.4G Ant 6		0.408	0.408	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 61	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	152.4	1.86	0.02	Not required
	WLAN5G Ant 6		0.487	0.487	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 62	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	156.6	1.69	0.01	Not required
	Bluetooth Ant 6		0.310	0.310	5mm	-28.2	79.8	-1.35				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 63	LTE Band 26 Ant 0	Back	1.159	1.159	5mm	-5	-79.9	-1.4	158.2	1.65	0.01	Not required
	WLAN5G Ant 6		0.487	0.487	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 64	FR1 n7 Ant 1	Back	1.346	1.346	5mm	26.2	-67.8	-1.31	155.2	1.75	0.02	Not required
	WLAN2.4G Ant 6		0.408	0.408	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 65	FR1 n7 Ant 1	Back	1.346	1.346	5mm	26.2	-67.8	-1.31	153.0	1.83	0.02	Not required
	WLAN5G Ant 6		0.487	0.487	5mm	-22	77.4	-1.48				



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Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 66	FR1 n7 Ant 1	Back	1.346	1.346	5mm	26.2	-67.8	-1.31	157.3	1.66	0.01	Not required
	Bluetooth Ant 6		0.310	0.310	5mm	-28.2	79.8	-1.35				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 67	FR1 n26 Ant 0	Back	1.191	1.191	5mm	-8.7	-87	-1.42	165.3	1.60	0.01	Not required
	WLAN2.4G Ant 6		0.408	0.408	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 68	FR1 n26 Ant 0	Back	1.191	1.191	5mm	-8.7	-87	-1.42	164.9	1.68	0.01	Not required
	WLAN5G Ant 6		0.487	0.487	5mm	-22	77.4	-1.48				
ENDC												
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 69	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	146.5	2.42	0.03	Not required
	FR1 n78 Ant 5		0.682	5mm	-11.2	70.6	-1.53					
	WLAN2.4G Ant 6		0.408	5mm								
	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	158.3	2.42	0.02	Not required
	FR1 n78 Ant 5		0.682	1.090	5mm							
	WLAN2.4G Ant 6		0.408	5mm	-30	76.9	-1.47					
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 70	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	146.5	2.50	0.03	Not required
	FR1 n78 Ant 5		0.682	1.169	5mm	-11.2	70.6	-1.53				
	WLAN5G Ant 6		0.487	5mm								
	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	156.1	2.50	0.03	Not required
	FR1 n78 Ant 5		0.682	1.169	5mm							
	WLAN5G Ant 6		0.487	5mm	-22	77.4	-1.48					
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 71	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	146.5	2.32	0.02	Not required
	FR1 n78 Ant 5		0.682	0.992	5mm	-11.2	70.6	-1.53				
	Bluetooth Ant 6		0.310	5mm								
	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	160.4	2.32	0.02	Not required
	FR1 n78 Ant 5		0.682	0.992	5mm							
	Bluetooth Ant 6		0.310	5mm	-28.2	79.8	-1.35					
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 72	FR1 n5 Ant 0	Back	0.858	0.858	5mm	-8.8	-85	-1.42	165.3	1.63	0.01	Not required
	LTE Band 7 Ant 4		0.287	0.774	5mm	17.4	78.2	-1.13				
	WLAN5G Ant 6		0.487	5mm								
	FR1 n5 Ant 0	Back	0.858	0.858	5mm	-8.8	-85	-1.42	162.9	1.63	0.01	Not required
	LTE Band 7 Ant 4		0.287	0.774	5mm							
	WLAN5G Ant 6		0.487	5mm	-22	77.4	-1.48					
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 73	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	142.9	2.47	0.03	Not required
	FR1 n78 Ant 5		0.682	1.090	5mm	-11.2	70.6	-1.53				
	WLAN2.4G Ant 6		0.408	5mm								
	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	154.5	2.47	0.03	Not required
	FR1 n78 Ant 5		0.682	1.090	5mm							
	WLAN2.4G Ant 6		0.408	5mm	-30	76.9	-1.47					



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Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 74	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	142.9	2.54	0.03	Not required
	FR1 n78 Ant 5		0.682	1.169	5mm	-11.2	70.6	-1.53				
	WLAN5G Ant 6		0.487		5mm							
	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	152.4	2.54	0.03	Not required
	FR1 n78 Ant 5		0.682	1.169	5mm							
	WLAN5G Ant 6		0.487		5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 75	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	142.9	2.37	0.03	Not required
	FR1 n78 Ant 5		0.682	0.992	5mm	-11.2	70.6	-1.53				
	Bluetooth Ant 6		0.310		5mm							
	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	156.6	2.37	0.02	Not required
	FR1 n78 Ant 5		0.682	0.992	5mm							
	Bluetooth Ant 6		0.310		5mm	-28.2	79.8	-1.35				

For Body

SA												
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 7	GSM850 Ant 0	Back	1.199	1.199	5mm	-6.9	-78.5	-1.57	157.1	1.64	0.01	Not required
	WLAN2.4G Ant 6		0.440	0.440	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 8	GSM850 Ant 0	Back	1.199	1.199	5mm	-6.9	-78.5	-1.57	156.6	1.63	0.01	Not required
	WLAN5G Ant 6		0.431	0.431	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 9	GSM850 Ant 0	Back	1.199	1.199	5mm	-6.9	-78.5	-1.57	159.7	1.64	0.01	Not required
	Bluetooth Ant 6		0.443	0.443	5mm	-28.2	79.8	-1.35				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 10	WCDMA II Ant 0	Back	1.384	1.384	5mm	-8.9	-82.4	-1.52	160.7	1.82	0.02	Not required
	WLAN2.4G Ant 6		0.440	0.440	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 11	WCDMA II Ant 0	Back	1.384	1.384	5mm	-8.9	-82.4	-1.52	160.3	1.82	0.02	Not required
	WLAN5G Ant 6		0.431	0.431	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 12	WCDMA II Ant 0	Back	1.384	1.384	5mm	-8.9	-82.4	-1.52	163.3	1.83	0.02	Not required
	Bluetooth Ant 6		0.443	0.443	5mm	-28.2	79.8	-1.35				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 13	WCDMA V Ant 0	Back	1.398	1.398	5mm	-8.2	-81.5	-1.4	159.9	1.84	0.02	Not required
	WLAN2.4G Ant 6		0.440	0.440	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 14	WCDMA V Ant 0	Back	1.398	1.398	5mm	-8.2	-81.5	-1.4	159.5	1.83	0.02	Not required
	WLAN5G Ant 6		0.431	0.431	5mm	-22	77.4	-1.48				
Case	Band	Position	SAR	Summed	Gap	SAR peak location (mm)			3D	Summed	SPLSR	Simultaneous
						X	Y	Z				



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No			1g SAR (W/kg)	1g SAR (W/kg)	(mm)	X	Y	Z	distance (mm)	SAR (W/kg)		SAR
Case 15	WCDMA V Ant 0	Back	1.398	1.398	5mm	-8.2	-81.5	-1.4	162.5	1.84	0.02	Not required
	Bluetooth Ant 6		0.443	0.443	5mm	-28.2	79.8	-1.35				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
						X	Y	Z				
Case 16	LTE Band 2 Ant 0	Back	1.357	1.357	5mm	-8.9	-81	-1.37	159.3	1.80	0.02	Not required
	WLAN2.4G Ant 6		0.440	0.440	5mm	-30	76.9	-1.47				
Case 17	LTE Band 2 Ant 0	Back	1.357	1.357	5mm	-8.9	-81	-1.37	158.9	1.79	0.02	Not required
	WLAN5G Ant 6		0.431	0.431	5mm	-22	77.4	-1.48				
Case 18	LTE Band 2 Ant 0	Back	1.357	1.357	5mm	-8.9	-81	-1.37	162.0	1.80	0.01	Not required
	Bluetooth Ant 6		0.443	0.443	5mm	-28.2	79.8	-1.35				
Case 19	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	154.5	1.82	0.02	Not required
	WLAN2.4G Ant 6		0.440	0.440	5mm	-30	76.9	-1.47				
Case 20	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	152.4	1.81	0.02	Not required
	WLAN5G Ant 6		0.431	0.431	5mm	-22	77.4	-1.48				
Case 21	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	156.6	1.82	0.02	Not required
	Bluetooth Ant 6		0.443	0.443	5mm	-28.2	79.8	-1.35				
Case 22	LTE Band 26 Ant 0	Back	1.159	1.159	5mm	-5	-79.9	-1.4	158.8	1.60	0.01	Not required
	WLAN2.4G Ant 6		0.440	0.440	5mm	-30	76.9	-1.47				
Case 23	LTE Band 26 Ant 0	Back	1.159	1.159	5mm	-5	-79.9	-1.4	161.4	1.60	0.01	Not required
	Bluetooth Ant 6		0.443	0.443	5mm	-28.2	79.8	-1.35				
Case 24	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	158.3	1.77	0.01	Not required
	WLAN2.4G Ant 6		0.440	0.440	5mm	-30	76.9	-1.47				
Case 25	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	156.1	1.76	0.02	Not required
	WLAN5G Ant 6		0.431	0.431	5mm	-22	77.4	-1.48				
Case 26	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	160.4	1.78	0.01	Not required
	Bluetooth Ant 6		0.443	0.443	5mm	-28.2	79.8	-1.35				
Case 27	FR1 n7 Ant 1	Back	1.346	1.346	5mm	26.2	-67.8	-1.31	155.2	1.79	0.02	Not required
	WLAN2.4G Ant 6		0.440	0.440	5mm	-30	76.9	-1.47				



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Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 28	FR1 n7 Ant 1	Back	1.346	1.346	5mm	26.2	-67.8	-1.31	153.0	1.78	0.02	Not required
	WLAN5G Ant 6		0.431	0.431	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 29	FR1 n7 Ant 1	Back	1.346	1.346	5mm	26.2	-67.8	-1.31	157.3	1.79	0.02	Not required
	Bluetooth Ant 6		0.443	0.443	5mm	-28.2	79.8	-1.35				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 30	FR1 n26 Ant 0	Back	1.191	1.191	5mm	-8.7	-87	-1.42	165.3	1.63	0.01	Not required
	WLAN2.4G Ant 6		0.440	0.440	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 31	FR1 n26 Ant 0	Back	1.191	1.191	5mm	-8.7	-87	-1.42	164.9	1.62	0.01	Not required
	WLAN5G Ant 6		0.431	0.431	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 32	FR1 n26 Ant 0	Back	1.191	1.191	5mm	-8.7	-87	-1.42	167.9	1.63	0.01	Not required
	Bluetooth Ant 6		0.443	0.443	5mm	-28.2	79.8	-1.35				
Sensor-off SAR												
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 33	WCDMA II Ant 0	Back	1.127	1.127	17mm	-6.5	-80.1	-1.33	156.9	1.78	0.02	Not required
	WLAN5G Ant 6		0.654	0.654	17mm	-20	76.2	-1.16				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 34	LTE Band 2 Ant 0	Back	1.158	1.158	17mm	-7.6	-80	-1.22	156.7	1.81	0.02	Not required
	WLAN5G Ant 6		0.654	0.654	17mm	-20	76.2	-1.16				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 35	LTE Band 41 Ant 1	Front	0.657	0.657	12mm	-32.2	-76.4	-1.4	157.4	1.68	0.01	Not required
	FR1 n78 Ant 5		0.777	1.021	12mm	10.8	75	-1.05				
	WLAN2.4G Ant 6		0.244		12mm							
	LTE Band 41 Ant 1	Front	0.657	0.657	12mm	-32.2	-76.4	-1.4	164.2	1.68	0.01	Not required
	FR1 n78 Ant 5		0.777	1.021	12mm							
	WLAN2.4G Ant 6		0.244		12mm	22.5	78.4	-0.88				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 36	LTE Band 41 Ant 1	Front	0.657	0.657	12mm	-32.2	-76.4	-1.4	157.4	1.82	0.02	Not required
	FR1 n78 Ant 5		0.777	1.166	12mm	10.8	75	-1.05				
	WLAN5G Ant 6		0.389		12mm							
	LTE Band 41 Ant 1	Front	0.657	0.657	12mm	-32.2	-76.4	-1.4	154.9	1.82	0.02	Not required
	FR1 n78 Ant 5		0.777	1.166	12mm							
	WLAN5G Ant 6		0.389		12mm	28.2	66.2	-0.91				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	X	Y	Z	3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 37	LTE Band 41 Ant 1	Back	0.329	0.329	17mm	25.3	-70	-1.36	146.1	1.61	0.01	Not required
	FR1 n78 Ant 5		0.629	1.283	17mm	-11.9	71.3	-1.46				
	WLAN5G Ant 6		0.654		17mm							
	LTE Band 41 Ant 1	Back	0.329	0.329	17mm	25.3	-70	-1.36	153.1	1.61	0.01	Not required
	FR1 n78 Ant 5		0.629	1.283	17mm							



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	WLAN5G Ant 6		0.654		17mm	-20	76.2	-1.16				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 38	LTE Band 7 Ant 4	Back	0.820	0.820	17mm	15.1	76	-1.11	155.3	1.77	0.02	Not required
	FR1 n5 Ant 0		0.296	17mm	-4.1	-78.1	-1.42					
	WLAN5G Ant 6		0.654	17mm								
	FR1 n5 Ant 0	Back	0.296	0.296	17mm	-4.1	-78.1	-1.42	155.1	1.77	0.02	Not required
	LTE Band 7 Ant 4		0.820	17mm								
	WLAN5G Ant 6		0.654	17mm	-20	76.2	-1.16					
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 39	LTE Band 7 Ant 1	Front	0.579	0.579	12mm	-33.6	-78	-1.4	159.3	1.60	0.01	Not required
	FR1 n78 Ant 5		0.777	12mm	10.8	75	-1.05					
	WLAN2.4G Ant 6		0.244	12mm								
	LTE Band 7 Ant 1	Front	0.579	0.579	12mm	-33.6	-78	-1.4	166.2	1.60	0.01	Not required
	FR1 n78 Ant 5		0.777	12mm								
	WLAN2.4G Ant 6		0.244	12mm	22.5	78.4	-0.88					
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 40	LTE Band 7 Ant 1	Front	0.579	0.579	12mm	-33.6	-78	-1.4	159.3	1.75	0.01	Not required
	FR1 n78 Ant 5		0.777	12mm	10.8	75	-1.05					
	WLAN5G Ant 6		0.389	12mm								
	LTE Band 7 Ant 1	Front	0.579	0.579	12mm	-33.6	-78	-1.4	156.9	1.75	0.01	Not required
	FR1 n78 Ant 5		0.777	12mm								
	WLAN5G Ant 6		0.389	12mm	28.2	66.2	-0.91					
ENDC												
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 41	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	146.5	2.91	0.03	Not required
	FR1 n78 Ant 5		1.142	5mm	-11.2	70.6	-1.53					
	WLAN2.4G Ant 6		0.440	5mm								
	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	158.3	2.91	0.03	Not required
	FR1 n78 Ant 5		1.142	5mm								
	WLAN2.4G Ant 6		0.440	5mm	-30	76.9	-1.47					
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 42	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	146.5	2.91	0.03	Not required
	FR1 n78 Ant 5		1.142	5mm	-11.2	70.6	-1.53					
	WLAN5G Ant 6		0.431	5mm								
	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	156.1	2.91	0.03	Not required
	FR1 n78 Ant 5		1.142	5mm								
	WLAN5G Ant 6		0.431	5mm	-22	77.4	-1.48					
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 43	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	146.5	2.92	0.03	Not required
	FR1 n78 Ant 5		1.142	5mm	-11.2	70.6	-1.53					
	Bluetooth Ant 6		0.443	5mm								
	LTE Band 41 Ant 1	Back	1.332	1.332	5mm	26.4	-71	-1.36	160.4	2.92	0.03	Not required
	FR1 n78 Ant 5		1.142	5mm								
	Bluetooth Ant 6		0.443	5mm	-28.2	79.8	-1.35					
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 44	LTE Band 26 Ant 0	Back	1.159	1.159	5mm	-5	-79.9	-1.4	150.6	2.74	0.03	Not required



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	FR1 n78 Ant 5		1.142	1.582	5mm	-11.2	70.6	-1.53				
	WLAN2.4G Ant 6		0.440		5mm							
	LTE Band 26 Ant 0		1.159	1.159	5mm	-5	-79.9	-1.4				
	FR1 n78 Ant 5	Back	1.142	1.582	5mm				158.8	2.74	0.03	Not required
	WLAN2.4G Ant 6		0.440		5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26 Ant 0		1.159	1.159	5mm	-5	-79.9	-1.4				
	FR1 n78 Ant 5	Back	1.142		5mm	-11.2	70.6	-1.53	150.6	2.73	0.03	Not required
	WLAN5G Ant 6		0.431	1.573	5mm							
	LTE Band 26 Ant 0		1.159	1.159	5mm	-5	-79.9	-1.4				
	FR1 n78 Ant 5	Back	1.142		5mm				158.2	2.73	0.03	Not required
	WLAN5G Ant 6		0.431	1.573	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26 Ant 0		1.159	1.159	5mm	-5	-79.9	-1.4				
	FR1 n78 Ant 5	Back	1.142		5mm	-11.2	70.6	-1.53	150.6	2.74	0.03	Not required
	Bluetooth Ant 6		0.443	1.585	5mm							
	LTE Band 26 Ant 0		1.159	1.159	5mm	-5	-79.9	-1.4				
	FR1 n78 Ant 5	Back	1.142		5mm				161.4	2.74	0.03	Not required
	Bluetooth Ant 6		0.443	1.585	5mm	-28.2	79.8	-1.35				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	FR1 n5 Ant 0		0.858	0.858	5mm	-8.8	-85	-1.42				
	LTE Band 7 Ant 4	Back	1.013		5mm	17.4	78.2	-1.13	165.3	2.31	0.02	Not required
	WLAN2.4G Ant 6		0.440	1.453	5mm							
	FR1 n5 Ant 0		0.858	0.858	5mm	-8.8	-85	-1.42				
	LTE Band 7 Ant 4	Back	1.013		5mm				163.3	2.31	0.02	Not required
	WLAN2.4G Ant 6		0.440	1.453	5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	FR1 n5 Ant 0		0.858	0.858	5mm	-8.8	-85	-1.42				
	LTE Band 7 Ant 4	Back	1.013		5mm	17.4	78.2	-1.13	165.3	2.30	0.02	Not required
	WLAN5G Ant 6		0.431	1.444	5mm							
	FR1 n5 Ant 0		0.858	0.858	5mm	-8.8	-85	-1.42				
	LTE Band 7 Ant 4	Back	1.013		5mm				162.9	2.30	0.02	Not required
	WLAN5G Ant 6		0.431	1.444	5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	FR1 n5 Ant 0		0.858	0.858	5mm	-8.8	-85	-1.42				
	LTE Band 7 Ant 4	Back	1.013		5mm	17.4	78.2	-1.13	165.3	2.31	0.02	Not required
	Bluetooth Ant 6		0.443	1.456	5mm							
	FR1 n5 Ant 0		0.858	0.858	5mm	-8.8	-85	-1.42				
	LTE Band 7 Ant 4	Back	1.013		5mm				165.9	2.31	0.02	Not required
	Bluetooth Ant 6		0.443	1.456	5mm	-28.2	79.8	-1.35				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 7 Ant 1		0.621	0.621	5mm	-32.2	-76.4	-1.4				
	FR1 n78 Ant 5	Front	0.596		5mm	10.8	75	-1.05	157.4	1.60	0.01	Not required
	WLAN5G Ant 6		0.383	0.979	5mm							
	LTE Band 7 Ant 1		0.621	0.621	5mm	-32.2	-76.4	-1.4				
	FR1 n78 Ant 5	Front	0.596		5mm				154.9	1.60	0.01	Not required
	WLAN5G Ant 6		0.383	0.979	5mm	28.2	66.2	-0.91				
Case	Band	Position	SAR	Summed	Gap	SAR peak location (mm)			3D	Summed	SPLSR	Simultaneous



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No			1g SAR (W/kg)	1g SAR (W/kg)	(mm)	X	Y	Z	distance (mm)	SAR (W/kg)		
Case 51	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	142.9	2.96	0.04	Not required
	FR1 n78 Ant 5		1.142	1.582	5mm	-11.2	70.6	-1.53				
	WLAN2.4G Ant 6		0.440		5mm							
	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	154.5	2.96	0.03	Not required
	FR1 n78 Ant 5		1.142	1.582	5mm							
	WLAN2.4G Ant 6		0.440		5mm	-30	76.9	-1.47				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 52	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	142.9	2.95	0.04	Not required
	FR1 n78 Ant 5		1.142	1.573	5mm	-11.2	70.6	-1.53				
	WLAN5G Ant 6		0.431		5mm							
	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	152.4	2.95	0.03	Not required
	FR1 n78 Ant 5		1.142	1.573	5mm							
	WLAN5G Ant 6		0.431		5mm	-22	77.4	-1.48				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 53	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	142.9	2.96	0.04	Not required
	FR1 n78 Ant 5		1.142	1.585	5mm	-11.2	70.6	-1.53				
	Bluetooth Ant 6		0.443		5mm							
	LTE Band 7 Ant 1	Back	1.375	1.375	5mm	24.2	-67.8	-1.27	156.6	2.96	0.03	Not required
	FR1 n78 Ant 5		1.142	1.585	5mm							
	Bluetooth Ant 6		0.443		5mm	-28.2	79.8	-1.35				

For Extremity

Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 76	LTE Band 41 Ant 1	Back	2.336	2.336	0mm	29.8	-73.1	-1.17	151.1	5.39	0.08	Not required
	FR1 n78 Ant 5		2.166	3.056	0mm	-14.2	71.4	-1.38				
	WLAN2.4G Ant 6		0.868		0mm							
	NFC		0.022		0mm							
	LTE Band 41 Ant 1	Back	2.336	2.336	0mm	29.8	-73.1	-1.17	160.9	5.39	0.08	Not required
	FR1 n78 Ant 5		2.166	3.056	0mm							
	WLAN2.4G Ant 6		0.868		0mm	-34.4	74.4	-1.35				
	NFC		0.022		0mm							
	LTE Band 41 Ant 1	Back	2.336	2.336	0mm	29.8	-73.1	-1.17	127.5	5.39	0.10	Not required
	FR1 n78 Ant 5		2.166	3.056	0mm							
	WLAN2.4G Ant 6		0.868		0mm							
	NFC		0.022		0mm	-3.1	50.1	-1.57				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 77	LTE Band 41 Ant 1	Back	2.336	2.336	0mm	29.8	-73.1	-1.17	151.1	5.39	0.08	Not required
	FR1 n78 Ant 5		2.166	3.051	0mm	-14.2	71.4	-1.38				
	WLAN5G Ant 6		0.863		0mm							
	NFC		0.022		0mm							
	LTE Band 41 Ant 1	Back	2.336	2.336	0mm	29.8	-73.1	-1.17	155.6	5.39	0.08	Not required
	FR1 n78 Ant 5		2.166	3.051	0mm							
	WLAN5G Ant 6		0.863		0mm	-28.7	71.1	-0.96				
	NFC		0.022		0mm							
	LTE Band 41 Ant 1	Back	2.336	2.336	0mm	29.8	-73.1	-1.17	127.5	5.39	0.10	Not required
	FR1 n78 Ant 5		2.166	3.051	0mm							
	WLAN5G Ant 6		0.863		0mm							
	NFC		0.022		0mm	-3.1	50.1	-1.57				
Case	Band	Position	SAR	Summed	Gap	SAR peak location (mm)			3D	Summed	SPLSR	Simultaneous



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No			1g SAR (W/kg)	10g SAR (W/kg)	(mm)	X	Y	Z	distance (mm)	SAR (W/kg)		
Case 78	LTE Band 41 Ant 1	Back	2.336	2.336	0mm	29.8	-73.1	-1.17	151.1	4.52	0.06	Not required
	FR1 n78 Ant 5		2.166	2.188	0mm	-14.2	71.4	-1.38				
	NFC		0.022		0mm							
	LTE Band 41 Ant 1	Back	2.336	2.336	0mm	29.8	-73.1	-1.17	127.5	4.52	0.08	Not required
	FR1 n78 Ant 5		2.166	2.188	0mm							
	NFC		0.022		0mm	-3.1	50.1	-1.57				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 79	LTE Band 7 Ant 1	Back	2.393	2.393	0mm	35	-77	-1.35	156.3	5.45	0.08	Not required
	FR1 n78 Ant 5		2.166	3.056	0mm	-14.2	71.4	-1.38				
	WLAN2.4G Ant 6		0.868		0mm							
	NFC		0.022		0mm							
	LTE Band 7 Ant 1	Back	2.393	2.393	0mm	35	-77	-1.35	166.5	5.45	0.08	Not required
	FR1 n78 Ant 5		2.166	3.056	0mm							
	WLAN2.4G Ant 6		0.868		0mm	-34.4	74.4	-1.35				
	NFC		0.022		0mm							
	LTE Band 7 Ant 1	Back	2.393	2.393	0mm	35	-77	-1.35	132.7	5.45	0.10	Not required
	FR1 n78 Ant 5		2.166	3.056	0mm							
	WLAN2.4G Ant 6		0.868		0mm							
	NFC		0.022		0mm	-3.1	50.1	-1.57				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 80	LTE Band 7 Ant 1	Back	2.393	2.393	0mm	35	-77	-1.35	156.3	5.44	0.08	Not required
	FR1 n78 Ant 5		2.166	3.051	0mm	-14.2	71.4	-1.38				
	WLAN5G Ant 6		0.863		0mm							
	NFC		0.022		0mm							
	LTE Band 7 Ant 1	Back	2.393	2.393	0mm	35	-77	-1.35	161.2	5.44	0.08	Not required
	FR1 n78 Ant 5		2.166	3.051	0mm							
	WLAN5G Ant 6		0.863		0mm	-28.7	71.1	-0.96				
	NFC		0.022		0mm							
	LTE Band 7 Ant 1	Back	2.393	2.393	0mm	35	-77	-1.35	132.7	5.44	0.10	Not required
	FR1 n78 Ant 5		2.166	3.051	0mm							
	WLAN5G Ant 6		0.863		0mm							
	NFC		0.022		0mm	-3.1	50.1	-1.57				
Case No	Band	Position	SAR 1g SAR (W/kg)	Summed 10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
Case 81	LTE Band 7 Ant 1	Back	2.393	2.393	0mm	35	-77	-1.35	156.3	4.58	0.06	Not required
	FR1 n78 Ant 5		2.166	2.188	0mm	-14.2	71.4	-1.38				
	NFC		0.022		0mm							
	LTE Band 7 Ant 1	Back	2.393	2.393	0mm	35	-77	-1.35	132.7	4.58	0.07	Not required
	FR1 n78 Ant 5		2.166	2.188	0mm							
	NFC		0.022		0mm	-3.1	50.1	-1.57				

Test Engineer : Martin Li, Varus Wang, Ricky Gu, Light Wang

17. 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.

Declaration of Conformity:

The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

The component of uncertainty may generally be categorized according to the methods used to evaluate them. The evaluation of uncertainty by the statistical analysis of a series of observations is termed a Type A evaluation of uncertainty. The evaluation of uncertainty by means other than the statistical analysis of a series of observation is termed a Type B evaluation of uncertainty. Each component of uncertainty, however evaluated, is represented by an estimated standard deviation, termed standard uncertainty, which is determined by the positive square root of the estimated variance.

A Type A evaluation of standard uncertainty may be based on any valid statistical method for treating data. This includes calculating the standard deviation of the mean of a series of independent observations; using the method of least squares to fit a curve to the data in order to estimate the parameter of the curve and their standard deviations; or carrying out an analysis of variance in order to identify and quantify random effects in certain kinds of measurement.

A type B evaluation of standard uncertainty is typically based on scientific judgment using all of the relevant information available. These may include previous measurement data, experience, and knowledge of the behavior and properties of relevant materials and instruments, manufacture's specification, data provided in calibration reports and uncertainties assigned to reference data taken from handbooks. Broadly speaking, the uncertainty is either obtained from an outdoor source or obtained from an assumed distribution, such as the normal distribution, rectangular or triangular distributions indicated in table below.

Uncertainty Distributions	Normal	Rectangular	Triangular	U-Shape
Multi-plying Factor ^(a)	$1/k^{(b)}$	$1/\sqrt{3}$	$1/\sqrt{6}$	$1/\sqrt{2}$

(a) standard uncertainty is determined as the product of the multiplying factor and the estimated range of variations in the measured quantity

(b) k is the coverage factor

Standard Uncertainty for Assumed Distribution

The combined standard uncertainty of the measurement result represents the estimated standard deviation of the result. It is obtained by combining the individual standard uncertainties of both Type A and Type B evaluation using the usual "root-sum-squares" (RSS) methods of combining standard deviations by taking the positive square root of the estimated variances.

Expanded uncertainty is a measure of uncertainty that defines an interval about the measurement result within which the measured value is confidently believed to lie. It is obtained by multiplying the combined standard uncertainty by a coverage factor. Typically, the coverage factor ranges from 2 to 3. Using a coverage factor allows the true value of a measured quantity to be specified with a defined probability within the specified uncertainty range. For purpose of this document, a coverage factor two is used, which corresponds to confidence interval of about 95 %. The DASY uncertainty Budget is shown in the following tables.

The judgment of conformity in the report is based on the measurement results excluding the measurement uncertainty.

Uncertainty Budget According to IEC/IEEE 62209-1528 (Frequency band: 4 MHz - 10 GHz range)							
Error Description	Uncert. Value (±%)	Prob. Dist.	Div.	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)
Measurement System errors							
Probe calibration	18.6	N	2	1	1	9.3	9.3
Probe calibration drift	1.7	R	1.732	1	1	1.0	1.0
Probe linearity and detection Limit	4.7	R	1.732	1	1	2.7	2.7
Broadband signal	2.8	R	1.732	1	1	1.6	1.6
Probe isotropy	7.6	R	1.732	1	1	4.4	4.4
Other probe and data acquisition errors	2.4	N	1	1	1	2.4	2.4
RF ambient and noise	1.8	N	1	1	1	1.8	1.8
Probe positioning errors	0.006	N	1	0.5	0.5	0.0	0.0
Data processing errors	4.0	N	1	1	1	4.0	4.0
Phantom and Device Errors							
Measurement of phantom conductivity (σ)	2.5	N	1	0.78	0.71	2.0	1.8
Temperature effects (medium)	5.4	R	1.732	0.78	0.71	2.4	2.2
Shell permittivity	14.0	R	1.732	0.5	0.5	4.0	4.0
Distance between the radiating element of the DUT and the phantom medium	2.0	N	1	2	2	4.0	4.0
Repeatability of positioning the DUT or source against the phantom	1.0	N	1	1	1	1.0	1.0
Device holder effects	3.6	N	1	1	1	3.6	3.6
Effect of operating mode on probe sensitivity	2.4	R	1.732	1	1	1.4	1.4
Time-average SAR	1.7	R	1.732	1	1	1.0	1.0
Variation in SAR due to drift in output of DUT	2.5	N	1	1	1	2.5	2.5
Validation antenna uncertainty (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Uncertainty in accepted power (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Correction to the SAR results							
Phantom deviation from target (ϵ', σ)	1.9	N	1	1	0.84	1.9	1.6
SAR scaling	0.0	R	1.732	1	1	0.0	0.0
Combined Std. Uncertainty						14.5%	14.4%
Coverage Factor for 95 %						K=2	K=2
Expanded STD Uncertainty						29.0%	28.8%

18. 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 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [9] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [10] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [11] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [12] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [13] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [14] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [15] IEC/IEEE 62209-1528:2020, "Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)", Oct. 2020

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