



Appendix F. Sim-Tx SAR consideration

F.1 Sim-Tx Configuration

Exposure Condition	Tx mode	Capable TX Configurations	WWAN Power	WiFi Power	BT Power	
Head	WWAN standalone	WWAN	Index 2			
		WiFi 2.4G SISO (Ant4 or Ant3)		Index 1		
	WiFi standalone	WiFi 2.4G MIMO/CDD (Ant4+3)				
		WiFi 5G MIMO (Ant4+3)				
		WiFi 6E MIMO (Ant4+3)				
		WiFi 2.4G SISO (Ant3) + WiFi 5G SISO (Ant4)		Index 2 (SDB)		
	BT standalone	WiFi 2.4G SISO (Ant3) + WiFi 6E SISO (Ant4)		Index 1		
		Bluetooth (Ant4)				
	WiFi +BT	Bluetooth (Ant3)	Index 1	Index 1		
		WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant4)				
		WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant3)				
		WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant4)				
		WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant3)				
		WiFi 5G SISO (Ant 4) + Bluetooth (Ant 4)				
		WiFi 5G SISO (Ant 4) + Bluetooth (Ant 3)				
		WiFi 6E SISO (Ant4) + Bluetooth (Ant4)				
		WiFi 6E SISO (Ant4) + Bluetooth (Ant3)				
	WWAN + WiFi	WWAN + WiFi 2.4G SISO (Ant4 or Ant3)		Index 3		
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)				
		WWAN + WiFi 5G MIMO (Ant4+3)		Index 4 (SDB)		
		WWAN + WiFi 6E MIMO (Ant4+3)				
		WWAN + WiFi 2.4G SISO (Ant3) + WiFi 5G SISO(Ant4)				
	WWAN + BT	WWAN + WiFi 2.4G SISO (Ant3) + WiFi 6E SISO(Ant4)		Index 1	Index 1	
		WWAN + Bluetooth (Ant4)				
	WWAN + WiFi +BT	WWAN + Bluetooth (Ant3)		Index 3	Index 1	
		WWAN + WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant4)				
		WWAN + WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant3)				
		WWAN + WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant4)				
		WWAN + WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant3)				
		WWAN + WiFi 5G SISO (Ant 4) + Bluetooth (Ant 4)		Index 3	Index 1	
		WWAN + WiFi 5G SISO (Ant 4) + Bluetooth (Ant 3)				
		WWAN + WiFi 6E SISO (Ant4) + Bluetooth (Ant4)				
		WWAN + WiFi 6E SISO (Ant4) + Bluetooth (Ant3)				



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Exposure Condition	Tx mode	Capable TX Configurations	WWAN Power	WiFi Power	BT Power
Body	WWAN standalone	WWAN	Index 5		
	WiFi standalone	WiFi 2.4G SISO (Ant4 or Ant3)		Index 5	
		WiFi 2.4G MIMO/CDD (Ant4+3)			
		WiFi 5G MIMO (Ant4+3)			
		WiFi 6E MIMO (Ant4+3)			
		WiFi 2.4G SISO (Ant3) + WiFi 5G SISO (Ant4)		Index 6 (SDB)	
		WiFi 2.4G SISO (Ant3) + WiFi 6E SISO (Ant4)			
	BT standalone	Bluetooth (Ant4)			Index 2
		Bluetooth (Ant3)			
	WiFi +BT	WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant4)		Index 5	
		WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant3)			
		WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant4)			
		WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant3)			
		WiFi 5G SISO (Ant 4) + Bluetooth (Ant 4)		Index 5	Index 3
		WiFi 5G SISO (Ant 4) + Bluetooth (Ant 3)			
		WiFi 6E SISO (Ant4) + Bluetooth (Ant4)			
		WiFi 6E SISO (Ant4) + Bluetooth (Ant3)			
	WWAN + WiFi	WWAN + WiFi 2.4G SISO (Ant4 or Ant3)		Index 6 / Index 4 (Hotspot)	
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)			
		WWAN + WiFi 5G MIMO (Ant4+3)			
		WWAN + WiFi 6E MIMO (Ant4+3)		Index 8 (SDB)	
		WWAN + WiFi 2.4G SISO (Ant3) + WiFi 5G SISO(Ant4)			
		WWAN + WiFi 2.4G SISO (Ant3) + WiFi 6E SISO(Ant4)			
	WWAN + BT	WWAN + Bluetooth (Ant4)		Index 6 / Index 4 (Hotspot)	Index 3
		WWAN + Bluetooth (Ant3)			
	WWAN + WiFi +BT	WWAN + WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant4)		Index 6 / Index 4 (Hotspot)	
		WWAN + WiFi 5G MIMO (Ant4+3) + Bluetooth (Ant3)			
		WWAN + WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant4)			
		WWAN + WiFi 6E MIMO (Ant4+3) + Bluetooth (Ant3)			
		WWAN + WiFi 5G SISO (Ant 4) + Bluetooth (Ant 4)		Index 9	Index 4
		WWAN + WiFi 5G SISO (Ant 4) + Bluetooth (Ant 3)			
		WWAN + WiFi 6E SISO (Ant4) + Bluetooth (Ant4)			
		WWAN + WiFi 6E SISO (Ant4) + Bluetooth (Ant3)			

General Note:

- This device only WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
- The worst case reported SAR from each transmit antennas were using for SAR summation. Therefore, the following summations represent the absolute worst cases for simultaneous transmission configuration.
- The SAR summation is calculated based on the same exposure configuration and test position from each transmit antenna worst case reported SAR results.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - Scalar SAR summation < 1.6W/kg.
 - SPLSR = $(\text{SAR1} + \text{SAR2})/1.5$ / (min. separation distance, mm), and the peak separation distance is determined from the square root of $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$, where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If SPLSR ≤ 0.04 , simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.



F.2 5G NR + LTE + WLAN + BT Sim-Tx analysis

Samsung proprietary TAS feature manages transmitting power effectively in real time and ensures that overall average RF exposure from 3G/4G/5G NR WWAN including 5GNR EN-DC, and LTE intra-band/inter-band uplink CA are in compliance with FCC requirements, while the RF exposure from 2G and WLAN/BT radios is managed using the legacy approach, i.e., through a fixed power back-off if needed. The test device features a TAS function to keep average RF exposure below the given limit for all cases while allowing temporarily high power transmission for better performance.

For the 5GNR EN-DC, the power ratio factors are g1 and g2 for LTE and NR respectively. The purpose of these power ratio factors is to split the available SAR budget among different RATs, so $g1 + g2 \leq 1$. The value of g1 is computed based on the need of the anchor (LTE) and can be changed if the anchor changes its power request. Based on the SAR Budget portion allocated to the anchor, the value of g2 will be computed. At steady state (where all RATs are being on for a while), the allocated power ratio factors will guarantee that the total exposure ratio never exceeds the highest exposure of either one.

$$g1 * \text{LTEexposure} + g2 * \text{NRExposure} \leq 1.0,$$

$$\text{then, } g1 * \text{LTEexposure} + g2 * \text{NRExposure} \leq \max(\text{LTEexposure}, \text{NRExposure})$$

In simultaneous transmission for this device, 5G NR and LTE transmission are managed and controlled by Samsung S.LSI TAS, while the RF exposure from WLAN, BT radios are managed using legacy approach, therefore, compliance of simultaneous transmission of LTE+5GNR+WiFi+BT can be justified from the compliance of LTE+WiFi+BT and 5GNR+WiFi+BT

The device also enabled Samsung Spatial TAS to improve antenna performance by applying separate SAR budgets to each predefined antenna group. There are three predefined antenna groups of AG0(Ant0, Ant6), AG1(Ant1, Ant5), AG2(Ant2). Each antenna group is spatially separated to others. Simultaneous transmission analysis is performed per antenna group. Below analysis demonstrates the spatial separation of AG0 and AG1 and the compliance between AG0 and BT/WLAN/NFC, AG1 and BT/WLAN/NFC and between AG2 and BT/WLAN/NFC.

Thus, the concept was to split the SAR/TER on the transmitting RATs even they are transmitting on different antennas. Such approach is considered as a worst case scenario in terms of transmitting power. Thus, to enhance the performance of the transmission power of RATs, consider the spatial properties of each antenna and the correlations between the antennas transmissions.

	AG0	AG1	AG2	external radio
Antenna	Ant 0, Ant 6	Ant 1, Ant 5	Ant 2	WLAN/BT/NFC

The verification of spatial separation of the antenna groups is demonstrated through the following steps, together with WiFi/BT simultaneous transmission analysis results.

- i) The highest reported SAR at Plimit (or Pmax when Plimit > Pmax) for each antenna should be obtained out of all supported technologies and frequency bands for each power index. Demonstrate that the sum of reported SAR of one antenna from each of the antenna groups and the sum of RF exposure from all supported radios outside of TAS feature should be less than the regulatory limit as given below for each power index.
- ii) If the sum of SAR from step i) is over 1.6 W/kg for 1g, demonstrate for a given power index that every antenna from one antenna group meets SPLSR criteria with every antenna in another antenna group for all frequency bands. SPLSR criteria must be demonstrated for all antenna pair combinations irrespective of supported simultaneous transmission scenarios, SPLSR Hotspot combination procedure (Hybrid SPLSR) also be considered for simultaneous transmission analysis.
- iii) If SPLSR evaluation and analysis is needed to determine compliance for a certain power index configuration, SPLSR is performed by taking the highest summation SAR for each of the supported technologies and bands per antenna, along with the minimum of peak SAR location distance. The minimum of peak location distance are documented in the Highest Report SAR and Hotspot Location below for each power index configuration.
- iv) In section F.6 SPLSR analysis only evaluation Sim-Tx SAR configuration are rounded to two decimal higher or equal to 1.6W/kg.
- v) The analysis addresses the simultaneous transmission and the transition among non-simultaneous transmission radios



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F.3 Head Sim-Tx analysis

<WLAN Index1, BT Index1>

Exposure Position	1	2	3	4	5	6	7	1 Summed	2 Summed	3 Summed	4+6 Summed	5+6 Summed	5+7 Summed
	WLAN2.4GHz Ant 4	WLAN2.4GHz Ant 3	WLAN2.4GHz Ant 4+3	WLAN5/6GHz Ant 4	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3	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)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
Right Cheek	0.321	0.408	0.264	0.313	1.095	0.115	0.108	0.321	0.408	0.264	0.428	1.210	1.203
Right Tilted	0.329	0.066	0.300	0.288	0.238	0.135	0.017	0.329	0.066	0.300	0.423	0.373	0.255
Left Cheek	0.795	0.268	0.702	0.765	0.787	0.290	0.060	0.795	0.268	0.702	1.055	1.077	0.847
Left Tilted	0.778	0.052	0.664	0.700	0.496	0.283	0.008	0.778	0.052	0.664	0.983	0.779	0.504

<WLAN Index2>

Exposure Position	1	2	1+2 Summed 1g SAR (W/kg)
	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	
	1g SAR (W/kg)	1g SAR (W/kg)	
Right Cheek	0.408	0.313	0.721
Right Tilted	0.066	0.288	0.354
Left Cheek	0.268	0.765	1.033
Left Tilted	0.052	0.700	0.752

<WWAN Index2>

Exposure Position	Max Ant 0	Max Ant 1	Max Ant 2	Max Ant 5	Max Ant 6	Ant 0+1 Summed 1g SAR (W/kg)	Ant 0+2 Summed 1g SAR (W/kg)	Ant 0+5 Summed 1g SAR (W/kg)	Ant 1+2 Summed 1g SAR (W/kg)	Ant 1+6 Summed 1g SAR (W/kg)	Ant 2+5 Summed 1g SAR (W/kg)	Ant 2+6 Summed 1g SAR (W/kg)	Ant 5+6 Summed 1g SAR (W/kg)	Ant 0+5 SPLSR	Ant 0+5 Case No.	Ant 1+2 SPLSR	Ant 1+2 Case No.
	WWAN	WWAN	WWAN	WWAN	WWAN												
	1g SAR (W/kg)																
Right Cheek at 0mm -	0.480	0.993	0.994	0.352	0.376	1.473	1.474	0.832	1.987	1.369	1.346	1.370	0.728			0.04	Case1
Right Tilted at 0mm -	0.321	0.949	0.326	0.114	0.295	1.270	0.647	0.435	1.275	1.244	0.440	0.621	0.409				
Left Cheek at 0mm -	0.918	0.635	0.508	0.893	0.667	1.553	1.426	1.811	1.143	1.302	1.401	1.175	1.560	0.03	Case2		
Left Tilted at 0mm -	0.311	0.570	0.440	0.255	0.227	0.881	0.751	0.566	1.010	0.797	0.695	0.667	0.482				



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<WWAN Index3, WLAN Index3, BT Index1>

WWAN Band	Exposure Position	1	2	3	4	5	6	7	8	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5+7 Summed 1g SAR (W/kg)	1+5+8 Summed 1g SAR (W/kg)	1+6+7 Summed 1g SAR (W/kg)	1+6+8 Summed 1g SAR (W/kg)	1+2 SPLSR	1+2 Case No.	1+3 SPLSR	1+3 Case No.	1+6+7 SPLSR	1+6+8 SPLSR	1+6+8 Case No.	
		WWAN 2.4GHz Ant 4	WWAN 2.4GHz Ant 3	WWAN 2.4GHz Ant 4+3	WWAN 5/6GHz Ant 4	WWAN 5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3																
		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)																
Ant 0+1	Right Cheek	1.139	0.168	0.242	0.125	0.076	0.327	0.115	0.108	1.307	1.381	1.264	1.330	1.323	1.581	1.574								
	Right Tilted	1.078	0.174	0.038	0.125	0.066	0.031	0.135	0.017	1.252	1.116	1.203	1.279	1.161	1.244	1.126								
	Left Cheek	1.120	0.475	0.159	0.307	0.173	0.162	0.290	0.060	1.595	1.279	1.427	1.583	1.353	1.572	1.342	0.03	Case3						
	Left Tilted	0.663	0.379	0.031	0.318	0.107	0.114	0.283	0.008	1.042	0.694	0.981	1.053	0.778	1.060	0.785								
Ant 0+2	Right Cheek	1.110	0.168	0.242	0.125	0.076	0.327	0.115	0.108	1.278	1.352	1.235	1.301	1.294	1.552	1.545								
	Right Tilted	0.554	0.174	0.038	0.125	0.066	0.031	0.135	0.017	0.728	0.592	0.679	0.755	0.637	0.720	0.602								
	Left Cheek	1.095	0.475	0.159	0.307	0.173	0.162	0.290	0.060	1.570	1.254	1.402	1.558	1.328	1.547	1.317								
	Left Tilted	0.576	0.379	0.031	0.318	0.107	0.114	0.283	0.008	0.955	0.607	0.894	0.966	0.691	0.973	0.698								
Ant 0+5	Right Cheek	0.564	0.168	0.242	0.125	0.076	0.327	0.115	0.108	0.732	0.806	0.689	0.755	0.748	1.006	0.999								
	Right Tilted	0.333	0.174	0.038	0.125	0.066	0.031	0.135	0.017	0.507	0.371	0.458	0.534	0.416	0.499	0.381								
	Left Cheek	1.023	0.475	0.159	0.307	0.173	0.162	0.290	0.060	1.498	1.182	1.330	1.486	1.256	1.475	1.245								
	Left Tilted	0.375	0.379	0.031	0.318	0.107	0.114	0.283	0.008	0.754	0.406	0.693	0.765	0.490	0.772	0.497								
Ant 1+2	Right Cheek	1.393	0.168	0.242	0.125	0.076	0.327	0.115	0.108	1.561	1.635	1.518	1.584	1.577	1.835	1.828			0.03	Case4	0.04	Case5	0.04	Case6
	Right Tilted	1.054	0.174	0.038	0.125	0.066	0.031	0.135	0.017	1.228	1.092	1.179	1.255	1.137	1.220	1.102								
	Left Cheek	0.851	0.475	0.159	0.307	0.173	0.162	0.290	0.060	1.326	1.010	1.158	1.314	1.084	1.303	1.073								
	Left Tilted	0.683	0.379	0.031	0.318	0.107	0.114	0.283	0.008	1.062	0.714	1.001	1.073	0.798	1.080	0.805								
Ant 1+6	Right Cheek	1.024	0.168	0.242	0.125	0.076	0.327	0.115	0.108	1.192	1.266	1.149	1.215	1.208	1.466	1.459								
	Right Tilted	1.034	0.174	0.038	0.125	0.066	0.031	0.135	0.017	1.208	1.072	1.159	1.235	1.117	1.200	1.082								
	Left Cheek	0.993	0.475	0.159	0.307	0.173	0.162	0.290	0.060	1.468	1.152	1.300	1.456	1.226	1.445	1.215								
	Left Tilted	0.574	0.379	0.031	0.318	0.107	0.114	0.283	0.008	0.953	0.605	0.892	0.964	0.689	0.971	0.696								
Ant 2+5	Right Cheek	0.818	0.168	0.242	0.125	0.076	0.327	0.115	0.108	0.986	1.060	0.943	1.009	1.002	1.260	1.253								
	Right Tilted	0.309	0.174	0.038	0.125	0.066	0.031	0.135	0.017	0.483	0.347	0.434	0.510	0.392	0.475	0.357								
	Left Cheek	0.754	0.475	0.159	0.307	0.173	0.162	0.290	0.060	1.229	0.913	1.061	1.217	0.987	1.206	0.976								
	Left Tilted	0.395	0.379	0.031	0.318	0.107	0.114	0.283	0.008	0.774	0.426	0.713	0.785	0.510	0.792	0.517								
Ant 2+6	Right Cheek	0.995	0.168	0.242	0.125	0.076	0.327	0.115	0.108	1.163	1.237	1.120	1.186	1.179	1.437	1.430								
	Right Tilted	0.510	0.174	0.038	0.125	0.066	0.031	0.135	0.017	0.684	0.548	0.635	0.711	0.593	0.676	0.558								
	Left Cheek	0.968	0.475	0.159	0.307	0.173	0.162	0.290	0.060	1.443	1.127	1.275	1.431	1.201	1.420	1.190								
	Left Tilted	0.487	0.379	0.031	0.318	0.107	0.114	0.283	0.008	0.866	0.518	0.805	0.877	0.602	0.884	0.609								
Ant 5+6	Right Cheek	0.449	0.168	0.242	0.125	0.076	0.327	0.115	0.108	0.617	0.691	0.574	0.640	0.633	0.891	0.884								
	Right Tilted	0.289	0.174	0.038	0.125	0.066	0.031	0.135	0.017	0.463	0.327	0.414	0.490	0.372	0.455	0.337								
	Left Cheek	0.896	0.475	0.159	0.307	0.173	0.162	0.290	0.060	1.371	1.055	1.203	1.359	1.129	1.348	1.118								
	Left Tilted	0.286	0.379	0.031	0.318	0.107	0.114	0.283	0.008	0.665	0.317	0.604	0.676	0.401	0.683	0.408								



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<WWAN Index3, WLAN Index4>

WWAN Band	Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)	1+2+3 SPLSR	1+2+3 Case No.
		WWAN	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
Ant 0+1	Right Cheek	1.139	0.242	0.106	1.487		
	Right Tilted	1.078	0.038	0.112	1.228		
	Left Cheek	1.120	0.159	0.347	1.626	0.03	Case7
	Left Tilted	0.663	0.031	0.243	0.937		
Ant 0+2	Right Cheek	1.110	0.242	0.106	1.458		
	Right Tilted	0.554	0.038	0.112	0.704		
	Left Cheek	1.095	0.159	0.347	1.601	0.03	Case8
	Left Tilted	0.576	0.031	0.243	0.850		
Ant 0+5	Right Cheek	0.564	0.242	0.106	0.912		
	Right Tilted	0.333	0.038	0.112	0.483		
	Left Cheek	1.023	0.159	0.347	1.529		
	Left Tilted	0.375	0.031	0.243	0.649		
Ant 1+2	Right Cheek	1.393	0.242	0.106	1.741	0.04	Case9
	Right Tilted	1.054	0.038	0.112	1.204		
	Left Cheek	0.851	0.159	0.347	1.357		
	Left Tilted	0.683	0.031	0.243	0.957		
Ant 1+6	Right Cheek	1.024	0.242	0.106	1.372		
	Right Tilted	1.034	0.038	0.112	1.184		
	Left Cheek	0.993	0.159	0.347	1.499		
	Left Tilted	0.574	0.031	0.243	0.848		
Ant 2+5	Right Cheek	0.818	0.242	0.106	1.166		
	Right Tilted	0.309	0.038	0.112	0.459		
	Left Cheek	0.754	0.159	0.347	1.260		
	Left Tilted	0.395	0.031	0.243	0.669		
Ant 2+6	Right Cheek	0.995	0.242	0.106	1.343		
	Right Tilted	0.510	0.038	0.112	0.660		
	Left Cheek	0.968	0.159	0.347	1.474		
	Left Tilted	0.487	0.031	0.243	0.761		
Ant 5+6	Right Cheek	0.449	0.242	0.106	0.797		
	Right Tilted	0.289	0.038	0.112	0.439		
	Left Cheek	0.896	0.159	0.347	1.402		
	Left Tilted	0.286	0.031	0.243	0.560		

F.4 Hotspot Sim-Tx analysis

<WWAN Index4>

Exposure Position	Max Ant 0	Max Ant 1	Max Ant 2	Max Ant 5	Max Ant 6	Ant 0+1 Summed 1g SAR (W/kg)	Ant 0+2 Summed 1g SAR (W/kg)	Ant 0+5 Summed 1g SAR (W/kg)	Ant 1+2 Summed 1g SAR (W/kg)	Ant 1+6 Summed 1g SAR (W/kg)	Ant 2+5 Summed 1g SAR (W/kg)	Ant 2+6 Summed 1g SAR (W/kg)	Ant 5+6 Summed 1g SAR (W/kg)
	WWAN	WWAN	WWAN	WWAN	WWAN	1g SAR (W/kg)							
	1g SAR (W/kg)												
Front at 10mm	0.579	0.377	0.624	0.279	0.356	0.956	1.203	0.858	1.001	0.733	0.903	0.980	0.635
Back at 10mm	0.580	0.464	0.568	0.289	0.375	1.044	1.148	0.869	1.032	0.839	0.857	0.943	0.664
Left side at 10mm	0.808	0.329	0.125	0.003	0.586	1.137	0.933	0.811	0.454	0.915	0.128	0.711	0.589
Right side at 10mm	0.470	0.242	0.721	0.549	0.005	0.712	1.191	1.019	0.963	0.247	1.270	0.726	0.554
Top side at 10mm		0.614		0.076		0.614	0.000	0.076	0.614	0.614	0.076	0.000	0.076
Bottom side at 10mm	0.696		0.437		0.081	0.696	1.133	0.696	0.437	0.081	0.437	0.518	0.081



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<WWAN Index4, WLAN Index7>

WWAN Band	Exposure Position	1	2	3	4	5	6	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)	1+5 SPLSR	1+5 Case No.
		WWAN	WLAN2.4GHz Ant 4	WLAN2.4GHz Ant 3	WLAN2.4GHz Ant 4+3	WLAN5/6GHz Ant 4	WLAN5/6GHz Ant 4+3							
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)							
Ant 0+1	Front	0.925	0.363	0.120	0.274	0.130	0.285	1.288	1.053	1.199	1.055	1.210		
	Back	1.031	0.312	0.106	0.253	0.319	0.266	1.343	1.153	1.284	1.350	1.297		
	Left side	1.137	0.001	0.174	0.165	0.067	0.287	1.138	1.363	1.302	1.204	1.424		
	Right side	0.712	0.108	0.001	0.106	0.346	0.299	0.820	0.713	0.818	1.058	1.011		
	Top side	0.614	0.479	0.001	0.411	0.195	0.212	1.093	0.615	1.025	0.809	0.826		
	Bottom side	0.680						0.680	0.680	0.680	0.680	0.680		
Ant 0+2	Front	1.172	0.363	0.120	0.274	0.130	0.285	1.535	1.292	1.446	1.302	1.457		
	Back	1.135	0.312	0.106	0.253	0.319	0.266	1.447	1.241	1.388	1.454	1.401		
	Left side	0.933	0.001	0.174	0.165	0.067	0.287	0.934	1.107	1.098	1.000	1.220		
	Right side	1.191	0.108	0.001	0.106	0.346	0.299	1.299	1.192	1.297	1.537	1.490		
	Top side		0.479	0.001	0.411	0.195	0.212	0.479	0.001	0.411	0.195	0.212		
	Bottom side	1.117						1.117	1.117	1.117	1.117	1.117		
Ant 0+5	Front	0.827	0.363	0.120	0.274	0.130	0.285	1.190	0.947	1.101	0.957	1.112		
	Back	0.856	0.312	0.106	0.253	0.319	0.266	1.168	0.962	1.109	1.175	1.122		
	Left side	0.811	0.001	0.174	0.165	0.067	0.287	0.812	0.985	0.976	0.878	1.098		
	Right side	1.019	0.108	0.001	0.106	0.346	0.299	1.127	1.020	1.125	1.365	1.318		
	Top side	0.076	0.479	0.001	0.411	0.195	0.212	0.555	0.077	0.487	0.271	0.288		
	Bottom side	0.680						0.680	0.680	0.680	0.680	0.680		
Ant 1+2	Front	1.001	0.363	0.120	0.274	0.130	0.285	1.364	1.121	1.275	1.131	1.286		
	Back	1.032	0.312	0.106	0.253	0.319	0.266	1.344	1.138	1.285	1.351	1.298		
	Left side	0.454	0.001	0.174	0.165	0.067	0.287	0.455	0.628	0.619	0.521	0.741		
	Right side	0.963	0.108	0.001	0.106	0.346	0.299	1.071	0.964	1.069	1.309	1.262		
	Top side	0.614	0.479	0.001	0.411	0.195	0.212	1.093	0.615	1.025	0.809	0.826		
	Bottom side	0.437						0.437	0.437	0.437	0.437	0.437		
Ant 1+6	Front	0.733	0.363	0.120	0.274	0.130	0.285	1.096	0.853	1.007	0.863	1.018		
	Back	0.839	0.312	0.106	0.253	0.319	0.266	1.151	0.945	1.092	1.158	1.105		
	Left side	0.915	0.001	0.174	0.165	0.067	0.287	0.916	1.089	1.080	0.982	1.202		
	Right side	0.247	0.108	0.001	0.106	0.346	0.299	0.355	0.248	0.353	0.593	0.546		
	Top side	0.614	0.479	0.001	0.411	0.195	0.212	1.093	0.615	1.025	0.809	0.826		
	Bottom side	0.081						0.081	0.081	0.081	0.081	0.081		
Ant 2+5	Front	0.903	0.363	0.120	0.274	0.130	0.285	1.266	1.023	1.177	1.033	1.188		
	Back	0.857	0.312	0.106	0.253	0.319	0.266	1.169	0.963	1.110	1.176	1.123		
	Left side	0.128	0.001	0.174	0.165	0.067	0.287	0.129	0.302	0.293	0.195	0.415		
	Right side	1.270	0.108	0.001	0.106	0.346	0.299	1.378	1.271	1.376	1.616	1.569	0.02	Case10
	Top side	0.076	0.479	0.001	0.411	0.195	0.212	0.555	0.077	0.487	0.271	0.288		
	Bottom side	0.437						0.437	0.437	0.437	0.437	0.437		
Ant 2+6	Front	0.980	0.363	0.120	0.274	0.130	0.285	1.343	1.100	1.254	1.110	1.265		
	Back	0.943	0.312	0.106	0.253	0.319	0.266	1.255	1.049	1.196	1.262	1.209		
	Left side	0.711	0.001	0.174	0.165	0.067	0.287	0.712	0.885	0.876	0.778	0.998		
	Right side	0.726	0.108	0.001	0.106	0.346	0.299	0.834	0.727	0.832	1.072	1.025		
	Top side		0.479	0.001	0.411	0.195	0.212	0.479	0.001	0.411	0.195	0.212		
	Bottom side	0.518						0.518	0.518	0.518	0.518	0.518		
Ant 5+6	Front	0.635	0.363	0.120	0.274	0.130	0.285	0.998	0.755	0.909	0.765	0.920		
	Back	0.664	0.312	0.106	0.253	0.319	0.266	0.976	0.770	0.917	0.983	0.930		
	Left side	0.589	0.001	0.174	0.165	0.067	0.287	0.590	0.763	0.754	0.656	0.876		
	Right side	0.554	0.108	0.001	0.106	0.346	0.299	0.662	0.555	0.660	0.900	0.853		
	Top side	0.076	0.479	0.001	0.411	0.195	0.212	0.555	0.077	0.487	0.271	0.288		
	Bottom side	0.081						0.081	0.081	0.081	0.081	0.081		



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<WWAN Index4, WLAN Index8>

WWAN Band	Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)	1+2+3 SPLSR	1+2+3 Case No.
		WWAN	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
Ant 0+1	Front	0.925	0.128	0.185	1.238		
	Back	1.031	0.122	0.319	1.472		
	Left side	1.137	0.226	0.054	1.417		
	Right side	0.712	0.001	0.352	1.065		
	Top side	0.614	0.001	0.195	0.810		
	Bottom side	0.680			0.680		
Ant 0+2	Front	1.172	0.128	0.185	1.485		
	Back	1.135	0.122	0.319	1.576		
	Left side	0.933	0.226	0.054	1.213		
	Right side	1.191	0.001	0.352	1.544		
	Top side		0.001	0.195	0.196		
	Bottom side	1.117			1.117		
Ant 0+5	Front	0.827	0.128	0.185	1.140		
	Back	0.856	0.122	0.319	1.297		
	Left side	0.811	0.226	0.054	1.091		
	Right side	1.019	0.001	0.352	1.372		
	Top side	0.076	0.001	0.195	0.272		
	Bottom side	0.680			0.680		
Ant 1+2	Front	1.001	0.128	0.185	1.314		
	Back	1.032	0.122	0.319	1.473		
	Left side	0.454	0.226	0.054	0.734		
	Right side	0.963	0.001	0.352	1.316		
	Top side	0.614	0.001	0.195	0.810		
	Bottom side	0.437			0.437		
Ant 1+6	Front	0.733	0.128	0.185	1.046		
	Back	0.839	0.122	0.319	1.280		
	Left side	0.915	0.226	0.054	1.195		
	Right side	0.247	0.001	0.352	0.600		
	Top side	0.614	0.001	0.195	0.810		
	Bottom side	0.081			0.081		
Ant 2+5	Front	0.903	0.128	0.185	1.216		
	Back	0.857	0.122	0.319	1.298		
	Left side	0.128	0.226	0.054	0.408		
	Right side	1.270	0.001	0.352	1.623	0.02	Case11
	Top side	0.076	0.001	0.195	0.272		
	Bottom side	0.437			0.437		
Ant 2+6	Front	0.980	0.128	0.185	1.293		
	Back	0.943	0.122	0.319	1.384		
	Left side	0.711	0.226	0.054	0.991		
	Right side	0.726	0.001	0.352	1.079		
	Top side		0.001	0.195	0.196		
	Bottom side	0.518			0.518		
Ant 5+6	Front	0.635	0.128	0.185	0.948		
	Back	0.664	0.122	0.319	1.105		
	Left side	0.589	0.226	0.054	0.869		
	Right side	0.554	0.001	0.352	0.907		
	Top side	0.076	0.001	0.195	0.272		
	Bottom side	0.081			0.081		



FCC SAR TEST REPORT

Report No. :FA380308B

<WWAN Index4, WLAN Index9, BT Index3,4>

WWAN Band	Exposure Position	1	2	3	4	5	1+2+4 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+2+4 SPLSR	1+2+4 Case No.	1+2+5 SPLSR	1+3+4 SPLSR	1+3+4 Case No.	
		WWAN	WWAN 5/6GHz Ant 4	WWAN 5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3										
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)										
Ant 0+1	Front	0.925	0.091	0.150	0.192	0.087	1.208	1.103	1.267	1.162						
	Back	1.031	0.206	0.223	0.175	0.075	1.412	1.312	1.429	1.329						
	Left side	1.137	0.067	0.259	0.007	0.142	1.211	1.346	1.403	1.538						
	Right side	0.712	0.346	0.299	0.067	0.001	1.125	1.059	1.078	1.012						
	Top side	0.614	0.106	0.164	0.264	0.009	0.984	0.729	1.042	0.787						
	Bottom side	0.680					0.680	0.680	0.680	0.680						
Ant 0+2	Front	1.172	0.091	0.150	0.192	0.087	1.455	1.350	1.514	1.409						
	Back	1.135	0.206	0.223	0.175	0.075	1.516	1.416	1.533	1.433						
	Left side	0.933	0.067	0.259	0.007	0.142	1.007	1.142	1.199	1.334						
	Right side	1.191	0.346	0.299	0.067	0.001	1.604	1.538	1.557	1.491	0.04	Case12				
	Top side		0.106	0.164	0.264	0.009	0.370	0.115	0.428	0.173						
	Bottom side	1.117					1.117	1.117	1.117	1.117						
Ant 0+5	Front	0.827	0.091	0.150	0.192	0.087	1.110	1.005	1.169	1.064						
	Back	0.856	0.206	0.223	0.175	0.075	1.237	1.137	1.254	1.154						
	Left side	0.811	0.067	0.259	0.007	0.142	0.885	1.020	1.077	1.212						
	Right side	1.019	0.346	0.299	0.067	0.001	1.432	1.366	1.385	1.319						
	Top side	0.076	0.106	0.164	0.264	0.009	0.446	0.191	0.504	0.249						
	Bottom side	0.680					0.680	0.680	0.680	0.680						
Ant 1+2	Front	1.001	0.091	0.150	0.192	0.087	1.284	1.179	1.343	1.238						
	Back	1.032	0.206	0.223	0.175	0.075	1.413	1.313	1.430	1.330						
	Left side	0.454	0.067	0.259	0.007	0.142	0.528	0.663	0.720	0.855						
	Right side	0.963	0.346	0.299	0.067	0.001	1.376	1.310	1.329	1.263						
	Top side	0.614	0.106	0.164	0.264	0.009	0.984	0.729	1.042	0.787						
	Bottom side	0.437					0.437	0.437	0.437	0.437						
Ant 1+6	Front	0.733	0.091	0.150	0.192	0.087	1.016	0.911	1.075	0.970						
	Back	0.839	0.206	0.223	0.175	0.075	1.220	1.120	1.237	1.137						
	Left side	0.915	0.067	0.259	0.007	0.142	0.989	1.124	1.181	1.316						
	Right side	0.247	0.346	0.299	0.067	0.001	0.660	0.594	0.613	0.547						
	Top side	0.614	0.106	0.164	0.264	0.009	0.984	0.729	1.042	0.787						
	Bottom side	0.081					0.081	0.081	0.081	0.081						
Ant 2+5	Front	0.903	0.091	0.150	0.192	0.087	1.186	1.081	1.245	1.140						
	Back	0.857	0.206	0.223	0.175	0.075	1.238	1.138	1.255	1.155						
	Left side	0.128	0.067	0.259	0.007	0.142	0.202	0.337	0.394	0.529						
	Right side	1.270	0.346	0.299	0.067	0.001	1.683	1.617	1.636	1.570	0.02	Case13	0.02	Case14	0.02	Case15
	Top side	0.076	0.106	0.164	0.264	0.009	0.446	0.191	0.504	0.249						
	Bottom side	0.437					0.437	0.437	0.437	0.437						
Ant 2+6	Front	0.980	0.091	0.150	0.192	0.087	1.263	1.158	1.322	1.217						
	Back	0.943	0.206	0.223	0.175	0.075	1.324	1.224	1.341	1.241						
	Left side	0.711	0.067	0.259	0.007	0.142	0.785	0.920	0.977	1.112						
	Right side	0.726	0.346	0.299	0.067	0.001	1.139	1.073	1.092	1.026						
	Top side		0.106	0.164	0.264	0.009	0.370	0.115	0.428	0.173						
	Bottom side	0.518					0.518	0.518	0.518	0.518						
Ant 5+6	Front	0.635	0.091	0.150	0.192	0.087	0.918	0.813	0.977	0.872						
	Back	0.664	0.206	0.223	0.175	0.075	1.045	0.945	1.062	0.962						
	Left side	0.589	0.067	0.259	0.007	0.142	0.663	0.798	0.855	0.990						
	Right side	0.554	0.346	0.299	0.067	0.001	0.967	0.901	0.920	0.854						
	Top side	0.076	0.106	0.164	0.264	0.009	0.446	0.191	0.504	0.249						
	Bottom side	0.081					0.081	0.081	0.081	0.081						

**F.5 Body-worn Sim-Tx analysis****<WLAN Index5, BT index 3>**

Exposure Position	1	2	3	4	5	6	7	1 Summed 1g SAR (W/kg)	2 Summed 1g SAR (W/kg)	3 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)	4+7 Summed 1g SAR (W/kg)	5+6 Summed 1g SAR (W/kg)	5+7 Summed 1g SAR (W/kg)
	WLAN 2.4GHz Ant 4	WLAN 2.4GHz Ant 3	WLAN 2.4GHz Ant 4+3	WLAN 5/6GHz Ant 4	WLAN 5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3							
	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)							
Front	0.488	0.543	0.579	0.241	0.285	0.289	0.369	0.488	0.543	0.579	0.530	0.610	0.574	0.654
Back	0.464	0.252	0.573	0.344	0.385	0.285	0.279	0.464	0.252	0.573	0.629	0.623	0.670	0.664

<WLAN Index6>

Exposure Position	1		2		1+2 Summed 1g SAR (W/kg)	
	WLAN2.4GHz Ant 3		WLAN5/6GHz Ant 4			
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
Front	0.543		0.241		0.784	
Back	0.252		0.344		0.596	

<WWAN Index5>

Exposure Position	Max Ant 0	Max Ant 1	Max Ant 2	Max Ant 5	Max Ant 6	Ant 0+1 Summed 1g SAR (W/kg)	Ant 0+2 Summed 1g SAR (W/kg)	Ant 0+5 Summed 1g SAR (W/kg)	Ant 1+2 Summed 1g SAR (W/kg)	Ant 1+6 Summed 1g SAR (W/kg)	Ant 2+5 Summed 1g SAR (W/kg)	Ant 2+6 Summed 1g SAR (W/kg)	Ant 5+6 Summed 1g SAR (W/kg)	Ant 0+2 SPLSR	Ant 0+2 Case No.	Ant 0+5 SPLSR	Ant 0+5 Case No.	Ant 2+5 SPLSR	Ant 2+5 Case No.
	WWAN	WWAN	WWAN	WWAN	WWAN														
	1g SAR (W/kg)																		
Front at 10mm	0.991	0.333	0.792	0.742	0.523	1.324	1.783	1.733	1.125	0.856	1.534	1.315	1.265	0.04	Case16	0.02	Case17		
Back at 10mm	0.857	0.431	0.960	0.761	0.547	1.288	1.817	1.618	1.391	0.978	1.721	1.507	1.308	0.04	Case18	0.02	Case19	0.02	
																		Case20	



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<WWAN Index6, WLAN Index7>

WWAN Band	Exposure Position	1	2	3	4	5	6	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+5 Summed 1g SAR (W/kg)	1+6 Summed 1g SAR (W/kg)	Ant 1+2 SPLSR	Ant 1+3 Case No.	Ant 1+4 SPLSR	Ant 1+5 SPLSR	Ant 1+6 SPLSR	Ant 1+6 Case No.		
		WWAN 2.4GHz Ant 4	WWAN 2.4GHz Ant 3	WLan 2.4GHz Ant 4+3	WLan 5/6GHz Ant 4	WLan 5/6GHz Ant 4+3	WLan 5/6GHz Ant 4													
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)													
Ant 0+1	Front	1.267	0.363	0.120	0.279	0.241	0.285	1.630	1.387	1.546	1.508	1.552	0.01	Case21						
	Back	1.258	0.312	0.106	0.253	0.344	0.385	1.570	1.364	1.511	1.602	1.643					0.02	Case22	0.03 Case23	
Ant 0+2	Front	1.475	0.363	0.120	0.279	0.241	0.285	1.838	1.595	1.754	1.716	1.760	0.03	Case24	0.03	Case25	0.04	Case26	0.04 Case27	0.04 Case28
	Back	1.458	0.312	0.106	0.253	0.344	0.385	1.770	1.564	1.711	1.802	1.843	0.04	Case29			0.03	Case30	0.04 Case31	0.03 Case32
Ant 0+5	Front	1.256	0.363	0.120	0.279	0.241	0.285	1.619	1.376	1.535	1.497	1.541	0.02	Case33						
	Back	0.713	0.312	0.106	0.253	0.344	0.385	1.025	0.819	0.966	1.057	1.098								
Ant 1+2	Front	1.094	0.363	0.120	0.279	0.241	0.285	1.457	1.214	1.373	1.335	1.379								
	Back	1.290	0.312	0.106	0.253	0.344	0.385	1.602	1.396	1.543	1.634	1.675	0.01	Case34			0.02	Case35	0.02 Case36	
Ant 1+6	Front	0.878	0.363	0.120	0.279	0.241	0.285	1.241	0.998	1.157	1.119	1.163								
	Back	1.000	0.312	0.106	0.253	0.344	0.385	1.312	1.106	1.253	1.344	1.385								
Ant 2+5	Front	1.083	0.363	0.120	0.279	0.241	0.285	1.446	1.203	1.362	1.324	1.368								
	Back	0.745	0.312	0.106	0.253	0.344	0.385	1.057	0.851	0.998	1.089	1.130								
Ant 2+6	Front	1.086	0.363	0.120	0.279	0.241	0.285	1.449	1.206	1.365	1.327	1.371								
	Back	1.200	0.312	0.106	0.253	0.344	0.385	1.512	1.306	1.453	1.544	1.585								
Ant 5+6	Front	0.867	0.363	0.120	0.279	0.241	0.285	1.230	0.987	1.146	1.108	1.152								
	Back	0.455	0.312	0.106	0.253	0.344	0.385	0.767	0.561	0.708	0.799	0.840								

<WWAN Index6, WLAN Index8>

WWAN Band	Exposure Position	1	2	3	1+2+3 Summed 1g SAR (W/kg)	1+2+3 SPLSR	1+2+3 Case No.
		WWAN	WLan 2.4GHz Ant 3	WLan 5/6GHz Ant 4			
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
Ant 0+1	Front	1.267	0.128	0.181	1.576		
	Back	1.258	0.122	0.262	1.642	0.02	Case37
Ant 0+2	Front	1.475	0.128	0.181	1.784	0.04	Case38
	Back	1.458	0.122	0.262	1.842	0.03	Case39
Ant 0+5	Front	1.256	0.128	0.181	1.565		
	Back	0.713	0.122	0.262	1.097		
Ant 1+2	Front	1.094	0.128	0.181	1.403		
	Back	1.290	0.122	0.262	1.674	0.02	Case40
Ant 1+6	Front	0.878	0.128	0.181	1.187		
	Back	1.000	0.122	0.262	1.384		
Ant 2+5	Front	1.083	0.128	0.181	1.392		
	Back	0.745	0.122	0.262	1.129		
Ant 2+6	Front	1.086	0.128	0.181	1.395		
	Back	1.200	0.122	0.262	1.584		
Ant 5+6	Front	0.867	0.128	0.181	1.176		
	Back	0.455	0.122	0.262	0.839		



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<WWAN Index6, WLAN Index9, BT Index3,4>

WWAN Band	Exposure Position	1	2	3	4	5	1+2+4 Summed 1g SAR (W/kg)	1+2+5 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	1+2+4 SPLSR	1+2+4 Case No.	1+2+5 SPLSR	1+3+4 Case No.	1+3+5 SPLSR	1+3+5 Case No.		
		WWAN 5/6GHz Ant 4	WWAN 5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3													
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)												
Ant 0+1	Front	1.267	0.241	0.240	0.196	0.098	1.704	1.606	1.703	1.605	0.02	Case41	0.02	Case42	0.02	Case43	0.02	Case44
	Back	1.258	0.344	0.385	0.175	0.075	1.777	1.677	1.818	1.718	0.02	Case45	0.03	Case46	0.04	Case47	0.04	Case48
Ant 0+2	Front	1.475	0.241	0.240	0.196	0.098	1.912	1.814	1.911	1.813	0.03	Case49	0.04	Case50	0.03	Case51	0.04	Case52
	Back	1.458	0.344	0.385	0.175	0.075	1.977	1.877	2.018	1.918	0.04	Case53	0.04	Case54	0.04	Case55	0.04	Case56
Ant 0+5	Front	1.256	0.241	0.240	0.196	0.098	1.693	1.595	1.692	1.594	0.02	Case57	0.02	Case58	0.02	Case59		
	Back	0.713	0.344	0.385	0.175	0.075	1.232	1.132	1.273	1.173								
Ant 1+2	Front	1.094	0.241	0.240	0.196	0.098	1.531	1.433	1.530	1.432	0.02	Case60	0.02	Case61	0.02	Case62	0.02	Case63
	Back	1.290	0.344	0.385	0.175	0.075	1.809	1.709	1.850	1.750	0.02	Case60	0.02	Case61	0.02	Case62	0.02	Case63
Ant 1+6	Front	0.878	0.241	0.240	0.196	0.098	1.315	1.217	1.314	1.216								
	Back	1.000	0.344	0.385	0.175	0.075	1.519	1.419	1.560	1.460								
Ant 2+5	Front	1.083	0.241	0.240	0.196	0.098	1.520	1.422	1.519	1.421								
	Back	0.745	0.344	0.385	0.175	0.075	1.264	1.164	1.305	1.205								
Ant 2+6	Front	1.086	0.241	0.240	0.196	0.098	1.523	1.425	1.522	1.424	0.03	Case64	0.03	Case65	0.03	Case66	0.03	Case67
	Back	1.200	0.344	0.385	0.175	0.075	1.719	1.619	1.760	1.660	0.03	Case64	0.03	Case65	0.03	Case66	0.03	Case67
Ant 5+6	Front	0.867	0.241	0.240	0.196	0.098	1.304	1.206	1.303	1.205								
	Back	0.455	0.344	0.385	0.175	0.075	0.974	0.874	1.015	0.915								

**F.7 SAR Peak Location Distance and SPLSR analysis****<Case 1>**

SPLSR calculation for antenna 1,2

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 1	0.993	14.9	-326.6	-174.2	77.2	1.99	0.04	Not required
WWAN_Ant 2	0.994	48.9	-257.3	-175.6				

<Case 2>

SPLSR calculation for antenna 0,5

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.918	50.7	250.8	-174.8	71.9	1.81	0.03	Not required
WWAN_Ant 5	0.893	56.1	322.5	-173.9				

<Case 3>

Hybrid SPLSR calculation for antenna 0 and antenna (1+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.682	50.7	250.8	-174.8	71.0	1.60	0.03	Not required
WWAN_Ant 1 + WLAN2.4G_Ant 4	0.913	-2.3	297.8	-170.6				

<Case 4>

Hybrid SPLSR calculation for antenna 2 and antenna (1+3)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.682	48.9	-257.3	-175.6	62.7	1.64	0.03	Not required
WWAN_Ant 1 + WLAN2.4G_Ant 3	0.953	56.8	-319.5	-174.2				

<Case 5>

Hybrid SPLSR calculation for antenna 2 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.682	48.9	-257.3	-175.6	61.1	1.84	0.04	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3 + BT_Ant 4	1.153	53.5	-318.2	-174.9				

<Case 6>

Hybrid SPLSR calculation for antenna 2 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.682	48.9	-257.3	-175.6	61.1	1.83	0.04	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3 + BT_Ant 3	1.146	53.5	-318.2	-174.9				



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<Case 7>

SAR summation (blue colored) for each band of antenna 0,1,3,4

Exposure Position	WWAN SAR	WLAN 2.4GHz Ant 3	WLAN 5/6GHz Ant 4	GSM850 Ant 0	GSM1900 Ant 0	WCDMA II Ant 0	WCDMA IV Ant 0	WCDMA V Ant 0	LTE Band 2 Ant 0	LTE Band 7 Ant 0	LTE Band 12 Ant 0	LTE Band 26 Ant 0	LTE Band 41 Ant 0	LTE Band 66 Ant 0	FR1 n2_Ant 0	FR1 n7_Ant 0	FR1 n12_Ant 0	FR1 n26_Ant 0	FR1 n41_Ant 0	FR1 n66_Ant 0
Left Cheek	1g SAR (W/kg)		0.575	0.595	0.569	0.397	0.459	0.597	0.674	0.311	0.462	0.507	0.474	0.329	0.621	0.362	0.502	0.682	0.513	
GSM850_Ant 1	0.388	0.159	0.347	1.469	1.489	1.463	1.291	1.353	1.491	1.568	1.205	1.356	1.401	1.368	1.223	1.515	1.256	1.396	1.576	1.407
WCDMA V_Ant 1	0.438	0.159	0.347	1.519	1.539	1.513	1.341	1.403	1.541	1.618	1.255	1.406	1.451	1.418	1.273	1.565	1.306	1.446	1.626	1.457
LTE Band 12_Ant 1	0.293	0.159	0.347	1.374	1.394	1.368	1.196	1.258	1.396	1.473	1.110	1.261	1.306	1.273	1.128	1.420	1.161	1.301	1.481	1.312
LTE Band 26_Ant 1	0.316	0.159	0.347	1.397	1.417	1.391	1.219	1.281	1.419	1.496	1.133	1.284	1.329	1.296	1.151	1.443	1.184	1.324	1.504	1.335
FR1 n12_Ant 1	0.215	0.159	0.347	1.296	1.316	1.290	1.118	1.180	1.318	1.395	1.032	1.183	1.228	1.195	1.050	1.342	1.083	1.223	1.403	1.234
FR1 n26_Ant 1	0.341	0.159	0.347	1.422	1.442	1.416	1.244	1.306	1.444	1.521	1.158	1.309	1.354	1.321	1.176	1.468	1.209	1.349	1.529	1.360
FR1 n77_Ant 1	0.290	0.159	0.347	1.371	1.391	1.365	1.193	1.255	1.393	1.470	1.107	1.258	1.303	1.270	1.125	1.417	1.158	1.298	1.478	1.309

SPLSR calculation for above summation SAR>1.6W/kg

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.682	50.7	250.8	-174.8	71.0	1.12	0.02	Not required
WWAN_Ant 1	0.438	-2.3	297.8	-170.6				
WWAN_Ant 0	0.682	50.7	250.8	-174.8	22.9	0.84	0.03	Not required
WLAN2.4GHz Ant 3	0.159	28.4	255.2	-171.8				
WWAN_Ant 0	0.682	50.7	250.8	-174.8	89.0	1.03	0.01	Not required
WLAN5/6GHz Ant 4	0.347	22.2	335.1	-174.2				
WWAN_Ant 1	0.438	-2.3	297.8	-170.6	52.5	0.60	0.01	Not required
WLAN2.4GHz Ant 3	0.159	28.4	255.2	-171.8				
WWAN_Ant 1	0.438	-2.3	297.8	-170.6	44.8	0.79	0.02	Not required
WLAN5/6GHz Ant 4	0.347	22.2	335.1	-174.2				
WLAN2.4GHz Ant 3	0.159	28.4	255.2	-171.8	80.2	0.51	0.00	Not required
WLAN5/6GHz Ant 4	0.347	22.2	335.1	-174.2				



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<Case 8>

SAR summation (blue colored) for each band of antenna 0,2,3,4

Exposure Position	WWAN SAR	WLAN 2.4GHz Ant 3	WLAN 5/6GHz Ant 4	GSM850 Ant 0	GSM1900 Ant 0	WCDMA II Ant 0	WCDMA IV Ant 0	WCDMA V Ant 0	LTE Band 2 Ant 0	LTE Band 7 Ant 0	LTE Band 12 Ant 0	LTE Band 26 Ant 0	LTE Band 41 Ant 0	LTE Band 66 Ant 0	FR1 n2 Ant 0	FR1 n7 Ant 0	FR1 n12 Ant 0	FR1 n26 Ant 0	FR1 n41 Ant 0	FR1 n66 Ant 0
Left Cheek	1g SAR (W/kg)			0.575	0.595	0.569	0.397	0.459	0.597	0.674	0.311	0.462	0.507	0.474	0.329	0.621	0.362	0.502	0.682	0.513
GSM1900_Ant 2	0.413	0.159	0.347	1.494	1.514	1.488	1.316	1.378	1.516	1.593	1.230	1.381	1.426	1.393	1.248	1.540	1.281	1.421	1.601	1.432
WCDMA II_Ant 2	0.356	0.159	0.347	1.437	1.457	1.431	1.259	1.321	1.459	1.536	1.173	1.324	1.369	1.336	1.191	1.483	1.224	1.364	1.544	1.375
WCDMA IV_Ant 2	0.264	0.159	0.347	1.345	1.365	1.339	1.167	1.229	1.367	1.444	1.081	1.232	1.277	1.244	1.099	1.391	1.132	1.272	1.452	1.283
LTE Band 2_Ant 2	0.407	0.159	0.347	1.488	1.508	1.482	1.310	1.372	1.510	1.587	1.224	1.375	1.420	1.387	1.242	1.534	1.275	1.415	1.595	1.426
LTE Band 7_Ant 2	0.222	0.159	0.347	1.303	1.323	1.297	1.125	1.187	1.325	1.402	1.039	1.190	1.235	1.202	1.057	1.349	1.090	1.230	1.410	1.241
LTE Band 41_Ant 2	0.180	0.159	0.347	1.261	1.281	1.255	1.083	1.145	1.283	1.360	0.997	1.148	1.193	1.160	1.015	1.307	1.048	1.188	1.368	1.199
LTE Band 66_Ant 2	0.356	0.159	0.347	1.437	1.457	1.431	1.259	1.321	1.459	1.536	1.173	1.324	1.369	1.336	1.191	1.483	1.224	1.364	1.544	1.375
FR1 n2_Ant 2	0.325	0.159	0.347	1.406	1.426	1.400	1.228	1.290	1.428	1.505	1.142	1.293	1.338	1.305	1.160	1.452	1.193	1.333	1.513	1.344
FR1 n7_Ant 2	0.344	0.159	0.347	1.425	1.445	1.419	1.247	1.309	1.447	1.524	1.161	1.312	1.357	1.324	1.179	1.471	1.212	1.352	1.532	1.363
FR1 n41_Ant 2	0.272	0.159	0.347	1.353	1.373	1.347	1.175	1.237	1.375	1.452	1.089	1.240	1.285	1.252	1.107	1.399	1.140	1.280	1.460	1.291
FR1 n66_Ant 2	0.349	0.159	0.347	1.430	1.450	1.424	1.252	1.314	1.452	1.529	1.166	1.317	1.362	1.329	1.184	1.476	1.217	1.357	1.537	1.368
FR1 n77_Ant 2	0.326	0.159	0.347	1.407	1.427	1.401	1.229	1.291	1.429	1.506	1.143	1.294	1.339	1.306	1.161	1.453	1.194	1.334	1.514	1.345

SPLSR calculation for above summation SAR>1.6W/kg

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.682	50.7	250.8	-174.8	52.4	1.10	0.02	Not required
WWAN_Ant 2	0.413	63.0	301.7	-174.4				
WWAN_Ant 0	0.682	50.7	250.8	-174.8	22.9	0.84	0.03	Not required
WLAN2.4GHz Ant 3	0.159	28.4	255.2	-171.8				
WWAN_Ant 0	0.682	50.7	250.8	-174.8	89.0	1.03	0.01	Not required
WLAN5/6GHz Ant 4	0.347	22.2	335.1	-174.2				
WWAN_Ant 2	0.413	63.0	301.7	-174.4	58.0	0.57	0.01	Not required
WLAN2.4GHz Ant 3	0.159	28.4	255.2	-171.8				
WWAN_Ant 2	0.413	56.2	309.7	-175.2	42.5	0.76	0.02	Not required
WLAN5/6GHz Ant 4	0.347	22.2	335.1	-174.2				
WLAN2.4GHz Ant 3	0.159	28.4	255.2	-171.8	80.2	0.51	0.00	Not required
WLAN5/6GHz Ant 4	0.347	22.2	335.1	-174.2				

<Case 9>

Hybrid SPLSR calculation for antenna 2 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.682	48.9	-257.3	-175.6	58.4	1.74	0.04	Not required
WWAN_Ant 1 + WLAN2.4G_Ant 3 + WLAN5/6G_Ant 4	1.059	0.5	-289.5	-170.2				



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<Case 10>

Hybrid SPLSR calculation for antenna 2 and antenna (5+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.721	-25.0	51.5	-207.0	89.0	1.62	0.02	Not required
WWAN_Ant 5 + WLAN5/6G_Ant 4	0.895	-24.0	-37.5	-207.0				

<Case 11>

Hybrid SPLSR calculation for antenna 2 and antenna (5+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.721	-25.0	51.5	-207.0	89.0	1.62	0.02	Not required
WWAN_Ant 5 + WLAN2.4G_Ant 3 + WLAN5/6G_Ant 4	0.902	-24.0	-37.5	-207.0				

<Case 12>

Hybrid SPLSR calculation for antenna 0 and antenna (2+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.470	-24.9	-3.2	-207.0	51.9	1.60	0.04	Not required
WWAN_Ant 2 + WLAN5/6G_Ant 4 + BT_Ant 4	1.134	-25.4	-55.1	-207.0				

<Case 13>

Hybrid SPLSR calculation for antenna 2 and antenna (5+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.721	-25.0	51.5	-207.0	89.0	1.68	0.02	Not required
WWAN_Ant 5 + WLAN5/6G_Ant 4 + BT_Ant 4	0.962	-24.0	-37.5	-207.0				

<Case 14>

Hybrid SPLSR calculation for antenna 2 and antenna (5+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.721	-25.0	51.5	-207.0	89.0	1.62	0.02	Not required
WWAN_Ant 5 + WLAN5/6G_Ant 4 + BT_Ant 3	0.896	-24.0	-37.5	-207.0				

<Case 15>

Hybrid SPLSR calculation for antenna 2 and antenna (5+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.721	-25.0	51.5	-207.0	89.0	1.64	0.02	Not required
WWAN_Ant 5 + WLAN5/6G_Ant 4+3 + BT_Ant 4	0.915	-24.0	-37.5	-207.0				



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<Case 16>

SPLSR calculation for antenna 0,2

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.991	-48.5	-62.5	-207.0	57.1	1.78	0.04	Not required
WWAN_Ant 2	0.792	8.0	-71.0	-207.0				

<Case 17>

SPLSR calculation for antenna 0,5

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.991	-48.5	-62.5	-207.0	110.4	1.73	0.02	Not required
WWAN_Ant 5	0.742	12.5	29.5	-207.0				

<Case 18>

SPLSR calculation for antenna 0,2

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.639	-8.7	-71.8	-207.0	45.4	1.60	0.04	Not required
WWAN_Ant 2	0.960	-54.0	-68.5	-207.0				
WWAN_Ant 0	0.636	2.3	-67.4	-207.0	56.3	1.60	0.04	Not required
WWAN_Ant 2	0.960	-54.0	-68.5	-207.0				
WWAN_Ant 0	0.731	8.0	-40.5	-207.0	68.0	1.69	0.03	Not required
WWAN_Ant 2	0.960	-54.0	-68.5	-207.0				
WWAN_Ant 0	0.857	15.0	-39.5	-207.0	74.8	1.82	0.03	Not required
WWAN_Ant 2	0.960	-54.0	-68.5	-207.0				
WWAN_Ant 0	0.762	-3.5	-72.0	-207.0	50.6	1.72	0.04	Not required
WWAN_Ant 2	0.960	-54.0	-68.5	-207.0				
WWAN_Ant 0	0.857	15.0	-39.5	-207.0	76.1	1.63	0.03	Not required
WWAN_Ant 2	0.768	-54.5	-70.5	-207.0				
WWAN_Ant 0	0.762	-3.5	-72.0	-207.0	50.1	1.60	0.04	Not required
WWAN_Ant 2	0.835	-53.5	-69.0	-207.0				
WWAN_Ant 0	0.857	15.0	-39.5	-207.0	74.6	1.69	0.03	Not required
WWAN_Ant 2	0.835	-53.5	-69.0	-207.0				
WWAN_Ant 0	0.731	8.0	-40.5	-207.0	66.9	1.62	0.03	Not required
WWAN_Ant 2	0.886	-53.0	-68.0	-207.0				
WWAN_Ant 0	0.857	15.0	-39.5	-207.0	73.7	1.74	0.03	Not required
WWAN_Ant 2	0.886	-53.0	-68.0	-207.0				
WWAN_Ant 0	0.762	-3.5	-72.0	-207.0	49.7	1.65	0.04	Not required
WWAN_Ant 2	0.886	-53.0	-68.0	-207.0				

<Case 19>

SPLSR calculation for antenna 0,5

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.857	15.0	-39.5	-207.0	103.1	1.62	0.02	Not required
WWAN_Ant 5	0.761	-62.5	28.5	-207.0				

<Case 20>

SPLSR calculation for antenna 2,5

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.960	-53.0	-68.0	-207.0	97.0	1.72	0.02	Not required
WWAN_Ant 5	0.761	-62.5	28.5	-207.0				



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<Case 21>

Hybrid SPLSR calculation for antenna 0 and antenna (1+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	139.0	1.63	0.01	Not required
WWAN_Ant 1 + WLAN2.4G_Ant 4	0.806	-47.5	76.5	-207.0				

<Case 22>

Hybrid SPLSR calculation for antenna 0 and antenna (1+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	15.0	-39.5	-207.0	113.2	1.60	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4	0.889	2.5	73.0	-207.0				

<Case 23>

Hybrid SPLSR calculation for antenna 0 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	15.0	-39.5	-207.0	67.2	1.64	0.03	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3	0.930	4.8	26.9	-207.0				

<Case 24>

SPLSR calculation for antenna 0,2,4

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.651	4.5	-69.0	-207.0	53.4	1.48	0.03	Not required
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0				
WWAN_Ant 2	0.651	13.1	-56.3	-207.0	138.0	1.01	0.01	Not required
WLAN2.4G_Ant 4	0.363	-5.0	80.5	-207.0				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	149.5	1.19	0.01	Not required
WLAN2.4G_Ant 4	0.363	-5.0	80.5	-207.0				

<Case 25>

Hybrid SPLSR calculation for antenna 2 and antenna (0+3)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.651	13.5	-68.0	-207.0	62.2	1.60	0.03	Not required
WWAN_Ant 0 + WLAN2.4G_Ant 3	0.944	-48.5	-62.5	-207.0				

<Case 26>

Hybrid SPLSR calculation for antenna 2 and antenna (0+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.651	8.7	-72.0	-207.0	58.0	1.75	0.04	Not required
WWAN_Ant 0 + WLAN2.4G_Ant 4+3	1.103	-48.5	-62.5	-207.0				

<Case 27>

Hybrid SPLSR calculation for antenna 2 and antenna (0+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.651	8.7	-72.0	-207.0	58.0	1.72	0.04	Not required
WWAN_Ant 0 + WLAN5/6G_Ant 4	1.065	-48.5	-62.5	-207.0				



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<Case 28>

Hybrid SPLSR calculation for antenna 2 and antenna (0+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.651	8.7	-72.0	-207.0	58.0	1.76	0.04	Not required
WWAN_Ant 0 + WLAN5/6G_Ant 4+3	1.109	-48.5	-62.5	-207.0				

<Case 29>

Hybrid SPLSR calculation for antenna 2 and antenna (0+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	56.3	1.77	0.04	Not required
WWAN_Ant 0 + WLAN2.4G_Ant 4	1.025	2.3	-67.4	-207.0				

<Case 30>

Hybrid SPLSR calculation for antenna 2 and antenna (0+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	70.6	1.71	0.03	Not required
WWAN_Ant 0 + WLAN2.4G_Ant 4+3	0.966	3.6	-27.6	-207.0				

<Case 31>

Hybrid SPLSR calculation for antenna 2 and antenna (0+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-53.5	-69.0	-207.0	55.8	1.80	0.04	Not required
WWAN_Ant 0 + WLAN5/6G_Ant 4	1.057	2.3	-67.4	-207.0				

<Case 32>

SPLSR calculation for antenna 0,2,3,4

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	53.4	1.46	0.03	Not required
WWAN_Ant 0	0.713	-0.6	-66.6	-207.0				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	102.2	1.13	0.01	Not required
WLAN5/6G_Ant 4+3	0.385	4.8	26.9	-207.0				
WWAN_Ant 0	0.713	-7.2	6.5	-207.0	23.7	0.97	0.04	Not required
WLAN5/6G_Ant 4+3(3)	0.256	4.8	26.9	-207.0				
WWAN_Ant 0	0.713	-9.2	6.8	-207.0	64.2	1.10	0.02	Not required
WLAN5/6G_Ant 4+3(4)	0.385	-51.1	55.5	-207.0				

<Case 33>

Hybrid SPLSR calculation for antenna 0 and antenna (5+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	110.4	1.62	0.02	Not required
WWAN_Ant 5 + WLAN2.4G_Ant 4	0.795	12.5	29.5	-207.0				



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<Case 34>

Hybrid SPLSR calculation for antenna 2 and antenna (1+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	148.6	1.60	0.01	Not required
WWAN_Ant 1 + WLAN2.4G_Ant 4	0.857	-47.5	80.0	-207.0				

<Case 35>

Hybrid SPLSR calculation for antenna 2 and antenna (1+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	123.5	1.63	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4	0.889	-52.1	55.0	-207.0				

<Case 36>

Hybrid SPLSR calculation for antenna 2 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	112.1	1.68	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3	0.930	4.8	26.9	-207.0				

<Case 37>

Hybrid SPLSR calculation for antenna 0 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	15.0	-39.5	-207.0	107.9	1.64	0.02	Not required
WWAN_Ant 1 + WLAN2.4G_Ant 3 + WLAN5/6G_Ant 4	0.929	-12.0	65.0	-207.0				

<Case 38>

Hybrid SPLSR calculation for antenna 2 and antenna (0+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.651	8.7	-72.0	-207.0	58.0	1.78	0.04	Not required
WWAN_Ant 0 + WLAN2.4G_Ant 4	1.133	-48.5	-62.5	-207.0				

<Case 39>

SPLSR calculation for antenna 0,2,3,4

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	53.4	1.46	0.03	Not required
WWAN_Ant 0	0.713	-0.6	-66.6	-207.0				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	110.0	1.13	0.01	Not required
WLAN2.4G_Ant 3 + WLAN5/6G_Ant 4	0.384	-59.6	53.6	-207.0				
WWAN_Ant 0	0.713	-9.2	6.8	-207.0	58.3	1.10	0.02	Not required
WLAN2.4G_Ant 3 + WLAN5/6G_Ant 4	0.384	-12.0	65.0	-207.0				

<Case 40>

Hybrid SPLSR calculation for antenna 2 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	122.2	1.67	0.02	Not required
WWAN_Ant 1 + WLAN2.4G_Ant 3 + WLAN5/6G_Ant 4	0.929	-59.6	53.6	-207.0				



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<Case 41>

Hybrid SPLSR calculation for antenna 0 and antenna (1+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	139.0	1.70	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4 + BT_Ant 4	0.880	-47.5	76.5	-207.0				

<Case 42>

Hybrid SPLSR calculation for antenna 0 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	92.4	1.61	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4 + BT_Ant 3	0.782	-64.5	28.5	-207.0				

<Case 43>

Hybrid SPLSR calculation for antenna 0 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	103.0	1.70	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3 + BT_Ant 4	0.879	-63.1	39.5	-207.0				

<Case 44>

Hybrid SPLSR calculation for antenna 0 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	92.4	1.61	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3 + BT_Ant 3	0.781	-64.5	28.5	-207.0				

<Case 45>

Hybrid SPLSR calculation for antenna 0 and antenna (1+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	3.6	-27.6	-207.0	99.6	1.78	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4 + BT_Ant 4	1.064	-52.1	55.0	-207.0				

<Case 46>

Hybrid SPLSR calculation for antenna 0 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	15.0	-39.5	-207.0	74.0	1.68	0.03	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4 + BT_Ant 3	0.964	17.5	34.5	-207.0				



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<Case 47>

Hybrid SPLSR calculation for antenna 0 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	2.6	-23.9	-207.0	50.8	1.64	0.04	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3	0.930	4.8	26.9	-207.0				
WWAN_Ant 0	0.713	15.0	-39.5	-207.0	113.2	1.43	0.02	Not required
WWAN_Ant 1 + BT_Ant 4	0.720	2.5	73.0	-207.0				
WLAN5/6G_Ant 4+3	0.385	-51.1	55.5	-207.0	25.5	0.56	0.02	Not required
BT_Ant 4	0.175	-52.5	81.0	-207.0				

<Case 48>

Hybrid SPLSR calculation for antenna 0 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	3.6	-27.6	-207.0	54.5	1.72	0.04	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3 + BT_Ant 3	1.005	4.8	26.9	-207.0				

<Case 49>

SPLSR calculation for antenna 0,2,4

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	53.4	1.48	0.03	Not required
WWAN_Ant 2	0.651	4.5	-69.0	-207.0				
WWAN_Ant 0	0.824	-30.8	3.7	-207.0	76.5	1.26	0.02	Not required
WLAN5/6G_Ant 4 + BT_Ant 4	0.437	10.1	68.4	-207.0				
WWAN_Ant 2	0.651	13.5	3.7	-207.0	64.8	1.09	0.02	Not required
WLAN5/6G_Ant 4 + BT_Ant 4	0.437	10.1	68.4	-207.0				

<Case 50>

Hybrid SPLSR calculation for antenna 0 and antenna (2+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	57.1	1.81	0.04	Not required
WWAN_Ant 2 + WLAN5/6G_Ant 4 + BT_Ant 3	0.990	8.0	-71.0	-207.0				

<Case 51>

SPLSR calculation for antenna 0,2,3,4

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	53.4	1.48	0.03	Not required
WWAN_Ant 2	0.651	4.5	-69.0	-207.0				
WWAN_Ant 0	0.824	-30.8	3.7	-207.0	48.2	1.26	0.03	Not required
WLAN5/6G_Ant 4+3 + BT_Ant 4	0.436	-63.1	39.5	-207.0				
WWAN_Ant 2	0.651	13.5	3.7	-207.0	71.8	1.09	0.02	Not required
WLAN5/6G_Ant 4+3 + BT_Ant 4	0.436	-4.6	73.2	-207.0				

<Case 52>

Hybrid SPLSR calculation for antenna 0 and antenna (2+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	57.1	1.81	0.04	Not required
WWAN_Ant 2 + WLAN5/6G_Ant 4+3 + BT_Ant 3	0.989	8.0	-71.0	-207.0				



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<Case 53>

SAR summation (blue colored) for each band of antenna 0,2,4

Exposure Position	WWAN SAR	WLAN 5/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II Ant 2	WCDMA IV Ant 2	LTE Band 2 Ant 2	LTE Band 7 Ant 2	LTE Band 41 Ant 2	LTE Band 66 Ant 2	FR1 n2 Ant 2	FR1 n7 Ant 2	FR1 n41 Ant 2	FR1 n66 Ant 2	FR1 n77 Ant 2
Back	1g SAR (W/kg)			0.545	0.568	0.506	0.523	0.571	0.745	0.497	0.478	0.686	0.737	0.566	0.491
GSM850_Ant 0	0.487	0.344	0.175	1.551	1.574	1.512	1.529	1.577	1.751	1.503	1.484	1.692	1.743	1.572	1.497
GSM1900_Ant 0	0.497	0.344	0.175	1.561	1.584	1.522	1.539	1.587	1.761	1.513	1.494	1.702	1.753	1.582	1.507
WCDMA II_Ant 0	0.617	0.344	0.175	1.681	1.704	1.642	1.659	1.707	1.881	1.633	1.614	1.822	1.873	1.702	1.627
WCDMA IV_Ant 0	0.452	0.344	0.175	1.516	1.539	1.477	1.494	1.542	1.716	1.468	1.449	1.657	1.708	1.537	1.462
WCDMA V_Ant 0	0.351	0.344	0.175	1.415	1.438	1.376	1.393	1.441	1.615	1.367	1.348	1.556	1.607	1.436	1.361
LTE Band 2_Ant 0	0.545	0.344	0.175	1.609	1.632	1.570	1.587	1.635	1.809	1.561	1.542	1.750	1.801	1.630	1.555
LTE Band 7_Ant 0	0.418	0.344	0.175	1.482	1.505	1.443	1.460	1.508	1.682	1.434	1.415	1.623	1.674	1.503	1.428
LTE Band 12_Ant 0	0.453	0.344	0.175	1.517	1.540	1.478	1.495	1.543	1.717	1.469	1.450	1.658	1.709	1.538	1.463
LTE Band 26_Ant 0	0.479	0.344	0.175	1.543	1.566	1.504	1.521	1.569	1.743	1.495	1.476	1.684	1.735	1.564	1.489
LTE Band 41_Ant 0	0.424	0.344	0.175	1.488	1.511	1.449	1.466	1.514	1.688	1.440	1.421	1.629	1.680	1.509	1.434
LTE Band 66_Ant 0	0.442	0.344	0.175	1.506	1.529	1.467	1.484	1.532	1.706	1.458	1.439	1.647	1.698	1.527	1.452
FR1 n2_Ant 0	0.567	0.344	0.175	1.631	1.654	1.592	1.609	1.657	1.831	1.583	1.564	1.772	1.823	1.652	1.577
FR1 n7_Ant 0	0.481	0.344	0.175	1.545	1.568	1.506	1.523	1.571	1.745	1.497	1.478	1.686	1.737	1.566	1.491
FR1 n12_Ant 0	0.471	0.344	0.175	1.535	1.558	1.496	1.513	1.561	1.735	1.487	1.468	1.676	1.727	1.556	1.481
FR1 n26_Ant 0	0.482	0.344	0.175	1.546	1.569	1.507	1.524	1.572	1.746	1.498	1.479	1.687	1.738	1.567	1.492
FR1 n41_Ant 0	0.713	0.344	0.175	1.777	1.800	1.738	1.755	1.803	1.977	1.729	1.710	1.918	1.969	1.798	1.723
FR1 n66_Ant 0	0.435	0.344	0.175	1.499	1.522	1.460	1.477	1.525	1.699	1.451	1.432	1.640	1.691	1.520	1.445

SPLSR calculation for above summation SAR>1.6W/kg

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	-8.7	-71.8	-207.0	44.9	1.46	0.04	Not required
WWAN_Ant 2	0.745	-53.5	-69.0	-207.0	63.4	1.23	0.02	Not required
WWAN_Ant 0	0.713	-10	8	-207	111.3	1.26	0.01	Not required
WLAN_Ant 4+BT_Ant 4	0.519	-52.1	55.0	-207.0				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0				
WLAN_Ant 4+BT_Ant 4	0.519	-52.1	55.0	-207.0				



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<Case 54>

SAR summation (blue colored) for each band of antenna 0,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 2 Ant 2	LTE Band 7 Ant 2	LTE Band 41 Ant 2	LTE Band 66 Ant 2	FR1 n2 Ant 2	FR1 n7 Ant 2	FR1 n41 Ant 2	FR1 n66 Ant 2	FR1 n77 Ant 2
Back	1g SAR (W/kg)			0.545	0.568	0.506	0.523	0.571	0.745	0.497	0.478	0.686	0.737	0.566	0.491
GSM850_Ant 0	0.487	0.344	0.075	1.451	1.474	1.412	1.429	1.477	1.651	1.403	1.384	1.592	1.643	1.472	1.397
GSM1900_Ant 0	0.497	0.344	0.075	1.461	1.484	1.422	1.439	1.487	1.661	1.413	1.394	1.602	1.653	1.482	1.407
WCDMA II_Ant 0	0.617	0.344	0.075	1.581	1.604	1.542	1.559	1.607	1.781	1.533	1.514	1.722	1.773	1.602	1.527
WCDMA IV_Ant 0	0.452	0.344	0.075	1.416	1.439	1.377	1.394	1.442	1.616	1.368	1.349	1.557	1.608	1.437	1.362
WCDMA V_Ant 0	0.351	0.344	0.075	1.315	1.338	1.276	1.293	1.341	1.515	1.267	1.248	1.456	1.507	1.336	1.261
LTE Band 2_Ant 0	0.545	0.344	0.075	1.509	1.532	1.470	1.487	1.535	1.709	1.461	1.442	1.650	1.701	1.530	1.455
LTE Band 7_Ant 0	0.418	0.344	0.075	1.382	1.405	1.343	1.360	1.408	1.582	1.334	1.315	1.523	1.574	1.403	1.328
LTE Band 12_Ant 0	0.453	0.344	0.075	1.417	1.440	1.378	1.395	1.443	1.617	1.369	1.350	1.558	1.609	1.438	1.363
LTE Band 26_Ant 0	0.479	0.344	0.075	1.443	1.466	1.404	1.421	1.469	1.643	1.395	1.376	1.584	1.635	1.464	1.389
LTE Band 41_Ant 0	0.424	0.344	0.075	1.388	1.411	1.349	1.366	1.414	1.588	1.340	1.321	1.529	1.580	1.409	1.334
LTE Band 66_Ant 0	0.442	0.344	0.075	1.406	1.429	1.367	1.384	1.432	1.606	1.358	1.339	1.547	1.598	1.427	1.352
FR1 n2_Ant 0	0.567	0.344	0.075	1.531	1.554	1.492	1.509	1.557	1.731	1.483	1.464	1.672	1.723	1.552	1.477
FR1 n7_Ant 0	0.481	0.344	0.075	1.445	1.468	1.406	1.423	1.471	1.645	1.397	1.378	1.586	1.637	1.466	1.391
FR1 n12_Ant 0	0.471	0.344	0.075	1.435	1.458	1.396	1.413	1.461	1.635	1.387	1.368	1.576	1.627	1.456	1.381
FR1 n26_Ant 0	0.482	0.344	0.075	1.446	1.469	1.407	1.424	1.472	1.646	1.398	1.379	1.587	1.638	1.467	1.392
FR1 n41_Ant 0	0.713	0.344	0.075	1.677	1.700	1.638	1.655	1.703	1.877	1.629	1.610	1.818	1.869	1.698	1.623
FR1 n66_Ant 0	0.435	0.344	0.075	1.399	1.422	1.360	1.377	1.425	1.599	1.351	1.332	1.540	1.591	1.420	1.345

SPLSR calculation for above summation SAR>1.6W/kg

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	-8.7	-71.8	-207.0	44.9	1.46	0.04	Not required
WWAN_Ant 2	0.745	-53.5	-69.0	-207.0				
WWAN_Ant 0	0.713	-10	8	-207	63.4	1.06	0.02	Not required
WLAN_Ant 4	0.344	-52.1	55.0	-207.0				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	111.3	1.09	0.01	Not required
WLAN_Ant 4	0.344	-52.1	55.0	-207.0				
WWAN_Ant 0	0.713	-7.2	6.5	-207.0	37.3	0.79	0.02	Not required
BT_Ant 3	0.075	17.5	34.5	-207.0				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	115.9	0.82	0.01	Not required
BT_Ant 3	0.075	17.5	34.5	-207.0				
BT_Ant 3	0.075	17.5	34.5	-207.0	72.6	0.42	0.00	Not required
WLAN_Ant 4	0.344	-52.1	55.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA380308B

<Case 55>

SAR summation (blue colored) for each band of antenna 0,2,3,4

Exposure Position	WWAN SAR	WLAN 5/6GHz Ant 4+3	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II Ant 2	WCDMA IV Ant 2	LTE Band 2 Ant 2	LTE Band 7 Ant 2	LTE Band 41 Ant 2	LTE Band 66 Ant 2	FR1 n2 Ant 2	FR1 n7 Ant 2	FR1 n41 Ant 2	FR1 n66 Ant 2	FR1 n77 Ant 2
Back	1g SAR (W/kg)			0.545	0.568	0.506	0.523	0.571	0.745	0.497	0.478	0.686	0.737	0.566	0.491
GSM850_Ant 0	0.487	0.385	0.175	1.592	1.615	1.553	1.570	1.618	1.792	1.544	1.525	1.733	1.784	1.613	1.538
GSM1900_Ant 0	0.497	0.385	0.175	1.602	1.625	1.563	1.580	1.628	1.802	1.554	1.535	1.743	1.794	1.623	1.548
WCDMA II_Ant 0	0.617	0.385	0.175	1.722	1.745	1.683	1.700	1.748	1.922	1.674	1.655	1.863	1.914	1.743	1.668
WCDMA IV_Ant 0	0.452	0.385	0.175	1.557	1.580	1.518	1.535	1.583	1.757	1.509	1.490	1.698	1.749	1.578	1.503
WCDMA V_Ant 0	0.351	0.385	0.175	1.456	1.479	1.417	1.434	1.482	1.656	1.408	1.389	1.597	1.648	1.477	1.402
LTE Band 2_Ant 0	0.545	0.385	0.175	1.650	1.673	1.611	1.628	1.676	1.850	1.602	1.583	1.791	1.842	1.671	1.596
LTE Band 7_Ant 0	0.418	0.385	0.175	1.523	1.546	1.484	1.501	1.549	1.723	1.475	1.456	1.664	1.715	1.544	1.469
LTE Band 12_Ant 0	0.453	0.385	0.175	1.558	1.581	1.519	1.536	1.584	1.758	1.510	1.491	1.699	1.750	1.579	1.504
LTE Band 26_Ant 0	0.479	0.385	0.175	1.584	1.607	1.545	1.562	1.610	1.784	1.536	1.517	1.725	1.776	1.605	1.530
LTE Band 41_Ant 0	0.424	0.385	0.175	1.529	1.552	1.490	1.507	1.555	1.729	1.481	1.462	1.670	1.721	1.550	1.475
LTE Band 66_Ant 0	0.442	0.385	0.175	1.547	1.570	1.508	1.525	1.573	1.747	1.499	1.480	1.688	1.739	1.568	1.493
FR1 n2_Ant 0	0.567	0.385	0.175	1.672	1.695	1.633	1.650	1.698	1.872	1.624	1.605	1.813	1.864	1.693	1.618
FR1 n7_Ant 0	0.481	0.385	0.175	1.586	1.609	1.547	1.564	1.612	1.786	1.538	1.519	1.727	1.778	1.607	1.532
FR1 n12_Ant 0	0.471	0.385	0.175	1.576	1.599	1.537	1.554	1.602	1.776	1.528	1.509	1.717	1.768	1.597	1.522
FR1 n26_Ant 0	0.482	0.385	0.175	1.587	1.610	1.548	1.565	1.613	1.787	1.539	1.520	1.728	1.779	1.608	1.533
FR1 n41_Ant 0	0.713	0.385	0.175	1.818	1.841	1.779	1.796	1.844	2.018	1.770	1.751	1.959	2.010	1.839	1.764
FR1 n66_Ant 0	0.435	0.385	0.175	1.540	1.563	1.501	1.518	1.566	1.740	1.492	1.473	1.681	1.732	1.561	1.486

SPLSR calculation for above summation SAR>1.6W/kg

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	-8.7	-71.8	-207.0	44.9	1.46	0.04	Not required
WWAN_Ant 2	0.745	-53.5	-69.0	-207.0				
WWAN_Ant 0	0.713	-10	8	-207	63.2	1.27	0.02	Not required
WLAN_Ant 4+BT_Ant 4	0.560	-51.1	55.5	-207.0				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	111.9	1.31	0.01	Not required
WLAN_Ant 4+BT_Ant 4	0.560	-51.1	55.5	-207.0				
WWAN_Ant 0	0.713	-7.2	6.5	-207.0	23.7	0.97	0.04	Not required
WLAN_Ant 3	0.256	4.8	26.9	-207.0				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	102.2	1.00	0.01	Not required
WLAN_Ant 3	0.256	4.8	26.9	-207.0				
WLAN_Ant 3	0.256	4.8	26.9	-207.0	62.8	0.82	0.01	Not required
WLAN_Ant 4+BT_Ant 4	0.560	-51.1	55.5	-207.0				



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<Case 56>

SAR summation (blue colored) for each band of antenna 0,2,3,4

Exposure Position	WWAN SAR	WLAN 5/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II Ant 2	WCDMA IV Ant 2	LTE Band 2 Ant 2	LTE Band 7 Ant 2	LTE Band 41 Ant 2	LTE Band 66 Ant 2	FR1 n2 Ant 2	FR1 n7 Ant 2	FR1 n41 Ant 2	FR1 n66 Ant 2	FR1 n77 Ant 2
Back	1g SAR (W/kg)			0.545	0.568	0.506	0.523	0.571	0.745	0.497	0.478	0.686	0.737	0.566	0.491
GSM850_Ant 0	0.487	0.385	0.075	1.492	1.515	1.453	1.470	1.518	1.692	1.444	1.425	1.633	1.684	1.513	1.438
GSM1900_Ant 0	0.497	0.385	0.075	1.502	1.525	1.463	1.480	1.528	1.702	1.454	1.435	1.643	1.694	1.523	1.448
WCDMA II_Ant 0	0.617	0.385	0.075	1.622	1.645	1.583	1.600	1.648	1.822	1.574	1.555	1.763	1.814	1.643	1.568
WCDMA IV_Ant 0	0.452	0.385	0.075	1.457	1.480	1.418	1.435	1.483	1.657	1.409	1.390	1.598	1.649	1.478	1.403
WCDMA V_Ant 0	0.351	0.385	0.075	1.356	1.379	1.317	1.334	1.382	1.556	1.308	1.289	1.497	1.548	1.377	1.302
LTE Band 2_Ant 0	0.545	0.385	0.075	1.550	1.573	1.511	1.528	1.576	1.750	1.502	1.483	1.691	1.742	1.571	1.496
LTE Band 7_Ant 0	0.418	0.385	0.075	1.423	1.446	1.384	1.401	1.449	1.623	1.375	1.356	1.564	1.615	1.444	1.369
LTE Band 12_Ant 0	0.453	0.385	0.075	1.458	1.481	1.419	1.436	1.484	1.658	1.410	1.391	1.599	1.650	1.479	1.404
LTE Band 26_Ant 0	0.479	0.385	0.075	1.484	1.507	1.445	1.462	1.510	1.684	1.436	1.417	1.625	1.676	1.505	1.430
LTE Band 41_Ant 0	0.424	0.385	0.075	1.429	1.452	1.390	1.407	1.455	1.629	1.381	1.362	1.570	1.621	1.450	1.375
LTE Band 66_Ant 0	0.442	0.385	0.075	1.447	1.470	1.408	1.425	1.473	1.647	1.399	1.380	1.588	1.639	1.468	1.393
FR1 n2_Ant 0	0.567	0.385	0.075	1.572	1.595	1.533	1.550	1.598	1.772	1.524	1.505	1.713	1.764	1.593	1.518
FR1 n7_Ant 0	0.481	0.385	0.075	1.486	1.509	1.447	1.464	1.512	1.686	1.438	1.419	1.627	1.678	1.507	1.432
FR1 n12_Ant 0	0.471	0.385	0.075	1.476	1.499	1.437	1.454	1.502	1.676	1.428	1.409	1.617	1.668	1.497	1.422
FR1 n26_Ant 0	0.482	0.385	0.075	1.487	1.510	1.448	1.465	1.513	1.687	1.439	1.420	1.628	1.679	1.508	1.433
FR1 n41_Ant 0	0.713	0.385	0.075	1.718	1.741	1.679	1.696	1.744	1.918	1.670	1.651	1.859	1.910	1.739	1.664
FR1 n66_Ant 0	0.435	0.385	0.075	1.440	1.463	1.401	1.418	1.466	1.640	1.392	1.373	1.581	1.632	1.461	1.386

SPLSR calculation for above summation SAR>1.6W/kg

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.713	-8.7	-71.8	-207.0	44.9	1.46	0.04	Not required
WWAN_Ant 2	0.745	-53.5	-69.0	-207.0				
WWAN_Ant 0	0.713	-10	8	-207	63.2	1.10	0.02	Not required
WLAN_Ant 4	0.385	-51.1	55.5	-207.0				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	111.9	1.13	0.01	Not required
WLAN_Ant 4	0.385	-51.1	55.5	-207.0				
WWAN_Ant 0	0.713	-7.2	6.5	-207.0	23.7	0.97	0.04	Not required
WLAN_Ant 3	0.256	4.8	26.9	-207.0				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	102.2	1.00	0.01	Not required
WLAN_Ant 3	0.256	4.8	26.9	-207.0				
WLAN_Ant 3	0.256	4.8	26.9	-207.0	62.8	0.64	0.01	Not required
WLAN_Ant 4	0.385	-51.1	55.5	-207.0				
WWAN_Ant 0	0.713	-7.2	6.5	-207.0	37.3	0.79	0.02	Not required
BT_Ant 3	0.075	17.5	34.5	-207.0				
WWAN_Ant 2	0.745	-57.9	-76.1	-207.0	133.9	0.82	0.01	Not required
BT_Ant 3	0.075	17.5	34.5	-207.0				
BT_Ant 3	0.075	17.5	34.5	-207.0	71.7	0.46	0.00	Not required
WLAN_Ant 4	0.385	-51.1	55.5	-207.0				



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<Case 57>

Hybrid SPLSR calculation for antenna 0 and antenna (5+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	110.4	1.69	0.02	Not required
WWAN_Ant 5 + WLAN5/6G_Ant 4 + BT_Ant 4	0.869	12.5	29.5	-207.0				

<Case 58>

Hybrid SPLSR calculation for antenna 0 and antenna (5+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	92.4	1.60	0.02	Not required
WWAN_Ant 5 + WLAN5/6G_Ant 4 + BT_Ant 3	0.771	-64.5	28.5	-207.0				

<Case 59>

Hybrid SPLSR calculation for antenna 0 and antenna (5+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 0	0.824	-48.5	-62.5	-207.0	103.0	1.69	0.02	Not required
WWAN_Ant 5 + WLAN5/6G_Ant 4+3 + BT_Ant 4	0.868	-63.1	39.5	-207.0				

<Case 60>

Hybrid SPLSR calculation for antenna 2 and antenna (1+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	111.3	1.81	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4 + BT_Ant 4	1.064	-52.1	55.0	-207.0				

<Case 61>

Hybrid SPLSR calculation for antenna 2 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	123.5	1.71	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4 + BT_Ant 3	0.964	-52.1	55.0	-207.0				

<Case 62>

Hybrid SPLSR calculation for antenna 2 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.6	-56.3	-207.0	102.2	1.85	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3 + BT_Ant 4	1.105	4.8	26.9	-207.0				

<Case 63>

Hybrid SPLSR calculation for antenna 2 and antenna (1+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	112.1	1.75	0.02	Not required
WWAN_Ant 1 + WLAN5/6G_Ant 4+3 + BT_Ant 3	1.005	4.8	26.9	-207.0				



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<Case 64>

Hybrid SPLSR calculation for antenna 2 and antenna (6+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-53.5	-69.0	-207.0	66.8	1.72	0.03	Not required
WWAN_Ant 6 + WLAN5/6G_Ant 4 + BT_Ant 4	0.974	10.5	-50.0	-207.0				

<Case 65>

Hybrid SPLSR calculation for antenna 2 and antenna (6+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-54.0	-68.5	-207.0	67.1	1.62	0.03	Not required
WWAN_Ant 6 + WLAN5/6G_Ant 4 + BT_Ant 3	0.874	10.5	-50.0	-207.0				

<Case 66>

Hybrid SPLSR calculation for antenna 2 and antenna (6+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-53.5	-69.0	-207.0	66.8	1.76	0.03	Not required
WWAN_Ant 6 + WLAN5/6G_Ant 4+3 + BT_Ant 4	1.015	10.5	-50.0	-207.0				

<Case 67>

Hybrid SPLSR calculation for antenna 2 and antenna (6+3+4)

Combination	SAR	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
		X	Y	Z				
WWAN_Ant 2	0.745	-53.5	-69.0	-207.0	66.8	1.66	0.03	Not required
WWAN_Ant 6 + WLAN5/6G_Ant 4+3 + BT_Ant 3	0.915	10.5	-50.0	-207.0				