



Appendix F. Sim-Tx SAR consideration

F.1 Sim-Tx Configuration

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



Exposure Condition	Tx mode	Capable TX Configurations	WWAN Power Index	WiFi Power Index	BT Power Index
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	Index 3
		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 6 / Index 4 (Hotspot)	Index 7
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)			
		WWAN + WiFi 5G MIMO (Ant4+3)			
		WWAN + WiFi 6E MIMO (Ant4+3)			
		WWAN + WiFi 2.4G SISO (Ant3) + WiFi 5G SISO(Ant4)		Index 8 (SDB)	
		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)	Index 9
		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)			
		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:

1. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz and WLAN 6GHz VLP supports Hotspot operation and Bluetooth support tethering applications.
2. 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.
3. The NFC mainly operate in hand-held extremity condition; therefore, the NFC Sim-Tx analysis was including in section F6.
4. The SAR summation is calculated based on the same exposure configuration and test position from each transmit antenna worst case reported SAR results.
5. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) Scalar SAR summation < 1.6W/kg.
 - ii) SPLSR = $(\text{SAR1} + \text{SAR2})^{1.5} / (\text{min. separation distance, mm})$, 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.
 - iii) If $\text{SPLSR} \leq 0.04$, simultaneously transmission SAR measurement is not necessary.
 - iv) 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, AG1, AG2 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 WIF/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



FCC SAR TEST REPORT

Report No.:FA451606B

F.3 Head Sim-Tx analysis

<WLAN Index1, BT Index1>

Exposure Position	1		2		3		4		5		6		4+5 Summed 1g SAR (W/kg)		4+6 Summed 1g SAR (W/kg)					
	WLAN2.4GHz Ant 4		WLAN2.4GHz Ant 3		WLAN2.4GHz Ant 4+3		WLAN5G / 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)									
Right Cheek	0.136		1.143		1.171		1.176		0.038		0.238		1.214		1.414					
Right Tilted	0.136		0.203		0.285		0.708		0.035		0.037		0.743		0.745					
Left Cheek	0.584		0.351		0.446		1.065		0.001		0.087		1.066		1.152					
Left Tilted	0.311		0.077		0.333		1.000		0.001		0.029		1.001		1.029					

<WLAN Index2, BT Index1>

Exposure Position	1		2		3		4		1+2 Summed 1g SAR (W/kg)		2+3 Summed 1g SAR (W/kg)		2+4 Summed 1g SAR (W/kg)		SPLSR		Case No											
	WLAN2.4GHz Ant 3		WLAN5G / 6GHz Ant 4		Bluetooth Ant 4		Bluetooth Ant 3																					
	1g SAR (W/kg)		1g SAR (W/kg)		1g SAR (W/kg)		1g SAR (W/kg)																					
Right Cheek	1.143		0.645		0.038		0.238		1.788		0.683		0.883		0.040		Case 1											
Right Tilted	0.203		0.638		0.035		0.037		0.841		0.673		0.675															
Left Cheek	0.351		1.128		0.001		0.087		1.479		1.129		1.215															
Left Tilted	0.077		1.085		0.001		0.029		1.162		1.086		1.114															

<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	Ant 5+6 SPLSR	Ant 5+6 Case No
	WWAN	WWAN	WWAN	WWAN	WWAN														
Right Cheek at 0mm	0.418	0.991	0.983	0.369	0.409	1.409	1.401	0.787	1.974	1.400	1.352	1.392	0.778		0.04	Case 2			
Right Tilted at 0mm	0.298	0.971	0.348	0.246	0.443	1.269	0.646	0.544	1.319	1.414	0.594	0.791	0.689						
Left Cheek at 0mm	0.684	0.696	0.504	0.977	0.767	1.380	1.188	1.661	1.200	1.463	1.481	1.271	1.744	0.03	Case 3		0.03 Case 4		
Left Tilted at 0mm	0.311	0.626	0.420	0.528	0.311	0.937	0.731	0.839	1.046	0.937	0.948	0.731	0.839						



FCC SAR TEST REPORT

Report No. :FA451606B

WWAN Index3, WLAN Index3, BT Index1

WWAN Band	Exposure Position	0	1	2	3	4	5	6	7	0+1+2 Summed 1g SAR (W/kg)	0+1+3 Summed 1g SAR (W/kg)	0+1+4 Summed 1g SAR (W/kg)	0+1+5+6 Summed 1g SAR (W/kg)	0+1+5+7 Summed 1g SAR (W/kg)	0+1+5+6 SPLSR	0+1+5+6 Case No.	0+1+5+7 SPLSR	0+1+5+7 Case No.
		Maximum WWAN	Maximum WWAN	WLan2.4GHz Ant 4	WLan2.4GHz Ant 3	WLan2.4GHz Ant 4+3	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)	SPLSR	Case No.	SPLSR	Case No.
		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)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(W/kg)			
Ant 0+1	Right Cheek	0.298	0.599	0.028	0.283	0.336	0.438	0.038	0.238	0.925	1.180	1.233	1.373	1.573				
	Right Tilted	0.237	0.666	0.028	0.048	0.071	0.201	0.035	0.037	0.931	0.951	0.974	1.139	1.141				
	Left Cheek	0.550	0.467	0.126	0.116	0.141	0.356	0.001	0.087	1.143	1.133	1.158	1.374	1.460				
	Left Tilted	0.262	0.446	0.110	0.043	0.110	0.424	0.001	0.029	0.818	0.751	0.818	1.133	1.161				
Ant 0+2	Right Cheek	0.298	0.606	0.028	0.283	0.336	0.438	0.038	0.238	0.932	1.187	1.240	1.380	1.580				
	Right Tilted	0.237	0.264	0.028	0.048	0.071	0.201	0.035	0.037	0.529	0.549	0.572	0.737	0.739				
	Left Cheek	0.550	0.324	0.126	0.116	0.141	0.356	0.001	0.087	1.000	0.990	1.015	1.231	1.317				
	Left Tilted	0.262	0.315	0.110	0.043	0.110	0.424	0.001	0.029	0.687	0.620	0.687	1.002	1.030				
Ant 0+5	Right Cheek	0.298	0.280	0.028	0.283	0.336	0.438	0.038	0.238	0.606	0.861	0.914	1.054	1.254				
	Right Tilted	0.237	0.187	0.028	0.048	0.071	0.201	0.035	0.037	0.452	0.472	0.495	0.660	0.662				
	Left Cheek	0.550	0.746	0.126	0.116	0.141	0.356	0.001	0.087	1.422	1.412	1.437	1.653	1.739	0.03	Case 5	0.04	Case 6
	Left Tilted	0.262	0.400	0.110	0.043	0.110	0.424	0.001	0.029	0.772	0.705	0.772	1.087	1.115				
Ant 1+2	Right Cheek	0.599	0.606	0.028	0.283	0.336	0.438	0.038	0.238	1.233	1.488	1.541	1.681	1.881	0.04	Case 7	0.03	Case 8
	Right Tilted	0.666	0.264	0.028	0.048	0.071	0.201	0.035	0.037	0.958	0.978	1.001	1.166	1.168				
	Left Cheek	0.467	0.324	0.126	0.116	0.141	0.356	0.001	0.087	0.917	0.907	0.932	1.148	1.234				
	Left Tilted	0.446	0.315	0.110	0.043	0.110	0.424	0.001	0.029	0.871	0.804	0.871	1.186	1.214				
Ant 1+6	Right Cheek	0.599	0.299	0.028	0.283	0.336	0.438	0.038	0.238	0.926	1.181	1.234	1.374	1.574				
	Right Tilted	0.666	0.309	0.028	0.048	0.071	0.201	0.035	0.037	1.003	1.023	1.046	1.211	1.213				
	Left Cheek	0.467	0.598	0.126	0.116	0.141	0.356	0.001	0.087	1.191	1.181	1.206	1.422	1.508				
	Left Tilted	0.446	0.217	0.110	0.043	0.110	0.424	0.001	0.029	0.773	0.706	0.773	1.088	1.116				
Ant 2+5	Right Cheek	0.606	0.280	0.028	0.283	0.336	0.438	0.038	0.238	0.914	1.169	1.222	1.362	1.562				
	Right Tilted	0.264	0.187	0.028	0.048	0.071	0.201	0.035	0.037	0.479	0.499	0.522	0.687	0.689				
	Left Cheek	0.324	0.746	0.126	0.116	0.141	0.356	0.001	0.087	1.196	1.186	1.211	1.427	1.513				
	Left Tilted	0.315	0.400	0.110	0.043	0.110	0.424	0.001	0.029	0.825	0.758	0.825	1.140	1.168				
Ant 2+6	Right Cheek	0.606	0.299	0.028	0.283	0.336	0.438	0.038	0.238	0.933	1.188	1.241	1.381	1.581				
	Right Tilted	0.264	0.309	0.028	0.048	0.071	0.201	0.035	0.037	0.601	0.621	0.644	0.809	0.811				
	Left Cheek	0.324	0.598	0.126	0.116	0.141	0.356	0.001	0.087	1.048	1.038	1.063	1.279	1.365				
	Left Tilted	0.315	0.217	0.110	0.043	0.110	0.424	0.001	0.029	0.642	0.575	0.642	0.957	0.985				
Ant 5+6	Right Cheek	0.280	0.299	0.028	0.283	0.336	0.438	0.038	0.238	0.607	0.862	0.915	1.055	1.255				
	Right Tilted	0.187	0.309	0.028	0.048	0.071	0.201	0.035	0.037	0.524	0.544	0.567	0.732	0.734				
	Left Cheek	0.746	0.598	0.126	0.116	0.141	0.356	0.001	0.087	1.470	1.460	1.485	1.701	1.787	0.03	Case 9	0.04	Case 10
	Left Tilted	0.400	0.217	0.110	0.043	0.110	0.424	0.001	0.029	0.727	0.660	0.727	1.042	1.070				



FCC SAR TEST REPORT

Report No. :FA451606B

<WWAN Index3, WLAN Index4, BT Index1>

WWAN Band	Exposure Position	0	1	2	3	4	5	0+1+2+3 Summed 1g SAR (W/kg)	0+1+3+4 Summed 1g SAR (W/kg)	0+1+3+5 Summed 1g SAR (W/kg)	0+1+2+3 SPLSR	0+1+2+3 Case No.	0+1+3+4 SPLSR	0+1+3+4 Case No.	0+1+3+5 SPLSR	0+1+3+5 Case No.	
		Maximum WWAN	Maximum WWAN	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	Bluetooth Ant 4	Bluetooth Ant 3										
Ant 0+1	Right Cheek	0.298	0.599	0.283	0.195	0.038	0.238	1.375	1.130	1.330							
	Right Tilted	0.237	0.666	0.048	0.202	0.035	0.037	1.153	1.140	1.142							
	Left Cheek	0.550	0.467	0.116	0.405	0.001	0.087	1.538	1.423	1.509							
	Left Tilted	0.262	0.446	0.043	0.337	0.001	0.029	1.088	1.046	1.074							
Ant 0+2	Right Cheek	0.298	0.606	0.283	0.195	0.038	0.238	1.382	1.137	1.337							
	Right Tilted	0.237	0.264	0.048	0.202	0.035	0.037	0.751	0.738	0.740							
	Left Cheek	0.550	0.324	0.116	0.405	0.001	0.087	1.395	1.280	1.366							
	Left Tilted	0.262	0.315	0.043	0.337	0.001	0.029	0.957	0.915	0.943							
Ant 0+5	Right Cheek	0.298	0.280	0.283	0.195	0.038	0.238	1.056	0.811	1.011							
	Right Tilted	0.237	0.187	0.048	0.202	0.035	0.037	0.674	0.661	0.663							
	Left Cheek	0.550	0.746	0.116	0.405	0.001	0.087	1.817	1.702	1.788	0.04	Case 11	0.03	Case 12	0.04	Case 13	
	Left Tilted	0.262	0.400	0.043	0.337	0.001	0.029	1.042	1.000	1.028							
Ant 1+2	Right Cheek	0.599	0.606	0.283	0.195	0.038	0.238	1.683	1.438	1.638	0.03	Case 14			0.03	Case 15	
	Right Tilted	0.666	0.264	0.048	0.202	0.035	0.037	1.180	1.167	1.169							
	Left Cheek	0.467	0.324	0.116	0.405	0.001	0.087	1.312	1.197	1.283							
	Left Tilted	0.446	0.315	0.043	0.337	0.001	0.029	1.141	1.099	1.127							
Ant 1+6	Right Cheek	0.599	0.299	0.283	0.195	0.038	0.238	1.376	1.131	1.331							
	Right Tilted	0.666	0.309	0.048	0.202	0.035	0.037	1.225	1.212	1.214							
	Left Cheek	0.467	0.598	0.116	0.405	0.001	0.087	1.586	1.471	1.557							
	Left Tilted	0.446	0.217	0.043	0.337	0.001	0.029	1.043	1.001	1.029							
Ant 2+5	Right Cheek	0.606	0.280	0.283	0.195	0.038	0.238	1.364	1.119	1.319							
	Right Tilted	0.264	0.187	0.048	0.202	0.035	0.037	0.701	0.688	0.690							
	Left Cheek	0.324	0.746	0.116	0.405	0.001	0.087	1.591	1.476	1.562							
	Left Tilted	0.315	0.400	0.043	0.337	0.001	0.029	1.095	1.053	1.081							
Ant 2+6	Right Cheek	0.606	0.299	0.283	0.195	0.038	0.238	1.383	1.138	1.338							
	Right Tilted	0.264	0.309	0.048	0.202	0.035	0.037	0.823	0.810	0.812							
	Left Cheek	0.324	0.598	0.116	0.405	0.001	0.087	1.443	1.328	1.414							
	Left Tilted	0.315	0.217	0.043	0.337	0.001	0.029	0.912	0.870	0.898							
Ant 5+6	Right Cheek	0.280	0.299	0.283	0.195	0.038	0.238	1.057	0.812	1.012							
	Right Tilted	0.187	0.309	0.048	0.202	0.035	0.037	0.746	0.733	0.735							
	Left Cheek	0.746	0.598	0.116	0.405	0.001	0.087	1.865	1.750	1.836	0.03	Case 16	0.03	Case 17	0.03	Case 18	
	Left Tilted	0.400	0.217	0.043	0.337	0.001	0.029	0.997	0.955	0.983							



FCC SAR TEST REPORT

Report No. :FA451606B

F.4 Hotspot Sim-Tx analysis

<WWAN Index4, WLAN Index7>

	Exposure Position	0	1	2	3	4	5	0+1+2 Summed 1g SAR (W/kg)	0+1+3 Summed 1g SAR (W/kg)	0+1+4 Summed 1g SAR (W/kg)	0+1+5 Summed 1g SAR (W/kg)	0+1+2 SPLSR	0+1+2 Case No.	0+1+5 SPLSR	0+1+5 Case No.
		Maximum WWAN	Maximum WWAN	WLAN2.4GHz Ant 4	WLAN2.4GHz Ant 3	WLAN2.4GHz Ant 4+3	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	0.490	0.458	0.097	0.180	0.166	0.335	1.045	1.128	1.114	1.283				
	Back	0.458	0.459	0.093	0.201	0.193	0.439	1.010	1.118	1.110	1.356				
	Left side	0.658	0.374	0.001	0.288	0.295	0.205	1.033	1.320	1.327	1.237				
	Right side	0.403	0.261	0.080	0.001	0.061	0.115	0.744	0.665	0.725	0.779				
	Top side		0.578	0.032	0.071	0.097	0.493	0.610	0.649	0.675	1.071				
	Bottom side	0.614						0.614	0.614	0.614	0.614				
Ant 0+2	Front	0.490	0.650	0.097	0.180	0.166	0.335	1.237	1.320	1.306	1.475				
	Back	0.458	0.739	0.093	0.201	0.193	0.439	1.290	1.398	1.390	1.636		0.04	Case 19	
	Left side	0.658	0.138	0.001	0.288	0.295	0.205	0.797	1.084	1.091	1.001				
	Right side	0.403	0.847	0.080	0.001	0.061	0.115	1.330	1.251	1.311	1.365				
	Top side			0.032	0.071	0.097	0.493	0.032	0.071	0.097	0.493				
	Bottom side	0.614	0.667					1.281	1.281	1.281	1.281				
Ant 0+5	Front	0.490	0.540	0.097	0.180	0.166	0.335	1.127	1.210	1.196	1.365				
	Back	0.458	0.445	0.093	0.201	0.193	0.439	0.996	1.104	1.096	1.342				
	Left side	0.658	0.073	0.001	0.288	0.295	0.205	0.732	1.019	1.026	0.936				
	Right side	0.403	0.686	0.080	0.001	0.061	0.115	1.169	1.090	1.150	1.204				
	Top side		0.363	0.032	0.071	0.097	0.493	0.395	0.434	0.460	0.856				
	Bottom side	0.614						0.614	0.614	0.614	0.614				
Ant 1+2	Front	0.458	0.650	0.097	0.180	0.166	0.335	1.205	1.288	1.274	1.443				
	Back	0.459	0.739	0.093	0.201	0.193	0.439	1.291	1.399	1.391	1.637		0.02	Case 20	
	Left side	0.374	0.138	0.001	0.288	0.295	0.205	0.513	0.800	0.807	0.717				
	Right side	0.261	0.847	0.080	0.001	0.061	0.115	1.188	1.109	1.169	1.223				
	Top side	0.578		0.032	0.071	0.097	0.493	0.610	0.649	0.675	1.071				
	Bottom side		0.667					0.667	0.667	0.667	0.667				
Ant 1+6	Front	0.458	0.518	0.097	0.180	0.166	0.335	1.073	1.156	1.142	1.311				
	Back	0.459	0.438	0.093	0.201	0.193	0.439	0.990	1.098	1.090	1.336				
	Left side	0.374	0.809	0.001	0.288	0.295	0.205	1.184	1.471	1.478	1.388				
	Right side	0.261	0.088	0.080	0.001	0.061	0.115	0.429	0.350	0.410	0.464				
	Top side	0.578		0.032	0.071	0.097	0.493	0.610	0.649	0.675	1.071				
	Bottom side		0.244					0.244	0.244	0.244	0.244				
Ant 2+5	Front	0.650	0.540	0.097	0.180	0.166	0.335	1.287	1.370	1.356	1.525				
	Back	0.739	0.445	0.093	0.201	0.193	0.439	1.277	1.385	1.377	1.623		0.02	Case 21	
	Left side	0.138	0.073	0.001	0.288	0.295	0.205	0.212	0.499	0.506	0.416				
	Right side	0.847	0.686	0.080	0.001	0.061	0.115	1.613	1.534	1.594	1.648	0.02	Case 22	0.03	Case 23
	Top side		0.363	0.032	0.071	0.097	0.493	0.395	0.434	0.460	0.856				
	Bottom side	0.667						0.667	0.667	0.667	0.667				
Ant 2+6	Front	0.650	0.518	0.097	0.180	0.166	0.335	1.265	1.348	1.334	1.503				
	Back	0.739	0.438	0.093	0.201	0.193	0.439	1.270	1.378	1.370	1.616		0.03	Case 24	
	Left side	0.138	0.809	0.001	0.288	0.295	0.205	0.948	1.235	1.242	1.152				
	Right side	0.847	0.088	0.080	0.001	0.061	0.115	1.015	0.936	0.996	1.050				
	Top side			0.032	0.071	0.097	0.493	0.032	0.071	0.097	0.493				
	Bottom side	0.667	0.244					0.911	0.911	0.911	0.911				
Ant 5+6	Front	0.540	0.518	0.097	0.180	0.166	0.335	1.155	1.238	1.224	1.393				
	Back	0.445	0.438	0.093	0.201	0.193	0.439	0.976	1.084	1.076	1.322				
	Left side	0.073	0.809	0.001	0.288	0.295	0.205	0.883	1.170	1.177	1.087				
	Right side	0.686	0.088	0.080	0.001	0.061	0.115	0.854	0.775	0.835	0.889				
	Top side	0.363		0.032	0.071	0.097	0.493	0.395	0.434	0.460	0.856				
	Bottom side		0.244					0.244	0.244	0.244	0.244				



FCC SAR TEST REPORT

Report No. :FA451606B

<WWAN Index4, WLAN Index8, BT Index4>

	Exposure Position	0	1	2	3	4	5	0+1+2+3 Summed 1g SAR (W/kg)	0+1+3+4 Summed 1g SAR (W/kg)	0+1+3+5 Summed 1g SAR (W/kg)	0+1+2+3 SPLSR	0+1+2+3 Case No.	0+1+3+4 SPLSR	0+1+3+4 Case No.	0+1+3+5 SPLSR	0+1+3+5 Case No.	
		Maximum WWAN	Maximum WWAN	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	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)										
Ant 0+1	Front	0.490	0.458	0.180	0.292	0.054	0.139	1.420	1.294	1.379							
	Back	0.458	0.459	0.201	0.427	0.064	0.165	1.545	1.408	1.509							
	Left side	0.658	0.374	0.288	0.006	0.001	0.228	1.326	1.039	1.266							
	Right side	0.403	0.261	0.001	0.105	0.038	0.001	0.770	0.807	0.770							
	Top side		0.578	0.071	0.445	0.035	0.052	1.094	1.058	1.075							
	Bottom side	0.614						0.614	0.614	0.614							
Ant 0+2	Front	0.490	0.650	0.180	0.292	0.054	0.139	1.612	1.486	1.571	0.04	Case 25					
	Back	0.458	0.739	0.201	0.427	0.064	0.165	1.825	1.688	1.789	0.03	Case 26	0.03	Case 27	0.03	Case 28	
	Left side	0.658	0.138	0.288	0.006	0.001	0.228	1.090	0.803	1.030							
	Right side	0.403	0.847	0.001	0.105	0.038	0.001	1.356	1.393	1.356							
	Top side			0.071	0.445	0.035	0.052	0.516	0.480	0.497							
	Bottom side	0.614	0.667					1.281	1.281	1.281							
Ant 0+5	Front	0.490	0.540	0.180	0.292	0.054	0.139	1.502	1.376	1.461							
	Back	0.458	0.445	0.201	0.427	0.064	0.165	1.531	1.394	1.495							
	Left side	0.658	0.073	0.288	0.006	0.001	0.228	1.025	0.738	0.965							
	Right side	0.403	0.686	0.001	0.105	0.038	0.001	1.195	1.232	1.195							
	Top side		0.363	0.071	0.445	0.035	0.052	0.879	0.843	0.860							
	Bottom side	0.614						0.614	0.614	0.614							
Ant 1+2	Front	0.458	0.650	0.180	0.292	0.054	0.139	1.580	1.454	1.539							
	Back	0.459	0.739	0.201	0.427	0.064	0.165	1.826	1.689	1.790	0.03	Case 29	0.03	Case 30	0.03	Case 31	
	Left side	0.374	0.138	0.288	0.006	0.001	0.228	0.806	0.519	0.746							
	Right side	0.261	0.847	0.001	0.105	0.038	0.001	1.214	1.251	1.214							
	Top side	0.578		0.071	0.445	0.035	0.052	1.094	1.058	1.075							
	Bottom side		0.667					0.667	0.667	0.667							
Ant 1+6	Front	0.458	0.518	0.180	0.292	0.054	0.139	1.448	1.322	1.407							
	Back	0.459	0.438	0.201	0.427	0.064	0.165	1.525	1.388	1.489							
	Left side	0.374	0.809	0.288	0.006	0.001	0.228	1.477	1.190	1.417							
	Right side	0.261	0.088	0.001	0.105	0.038	0.001	0.455	0.492	0.455							
	Top side	0.578		0.071	0.445	0.035	0.052	1.094	1.058	1.075							
	Bottom side		0.244					0.244	0.244	0.244							
Ant 2+5	Front	0.650	0.540	0.180	0.292	0.054	0.139	1.662	1.536	1.621	0.02	Case 32			0.02	Case 33	
	Back	0.739	0.445	0.201	0.427	0.064	0.165	1.812	1.675	1.776	0.03	Case 34	0.02	Case 35	0.03	Case 36	
	Left side	0.138	0.073	0.288	0.006	0.001	0.228	0.505	0.218	0.445							
	Right side	0.847	0.686	0.001	0.105	0.038	0.001	1.639	1.676	1.639	0.03	Case 37	0.03	Case 38	0.03	Case 39	
	Top side		0.363	0.071	0.445	0.035	0.052	0.879	0.843	0.860							
	Bottom side	0.667						0.667	0.667	0.667							
Ant 2+6	Front	0.650	0.518	0.180	0.292	0.054	0.139	1.640	1.514	1.599	0.04	Case 40			0.04	Case 41	
	Back	0.739	0.438	0.201	0.427	0.064	0.165	1.805	1.668	1.769	0.04	Case 42	0.03	Case 43	0.03	Case 44	
	Left side	0.138	0.809	0.288	0.006	0.001	0.228	1.241	0.954	1.181							
	Right side	0.847	0.088	0.001	0.105	0.038	0.001	1.041	1.078	1.041							
	Top side			0.071	0.445	0.035	0.052	0.516	0.480	0.497							
	Bottom side	0.667	0.244					0.911	0.911	0.911							
Ant 5+6	Front	0.540	0.518	0.180	0.292	0.054	0.139	1.530	1.404	1.489							
	Back	0.445	0.438	0.201	0.427	0.064	0.165	1.511	1.374	1.475							
	Left side	0.073	0.809	0.288	0.006	0.001	0.228	1.176	0.889	1.116							
	Right side	0.686	0.088	0.001	0.105	0.038	0.001	0.880	0.917	0.880							
	Top side	0.363		0.071	0.445	0.035	0.052	0.879	0.843	0.860							
	Bottom side		0.244					0.244	0.244	0.244							



FCC SAR TEST REPORT

Report No. :FA451606B

<WWAN Index4, WLAN Index9, BT Index4>

Exposure Position	0	1	2	3	4	0+1+2+3 Summed 1g SAR (W/kg)	0+1+2+4 Summed 1g SAR (W/kg)	0+1+2+3 SPLSR	0+1+2+3 Case No.	0+1+2+4 SPLSR	0+1+2+4 Case No.	
	Maximum WWAN	Maximum WWAN	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)							
Ant 0+1	Front	0.490	0.458	0.196	0.054	0.139	1.198	1.283				
	Back	0.458	0.459	0.259	0.064	0.165	1.240	1.341				
	Left side	0.658	0.374	0.205	0.001	0.228	1.238	1.465				
	Right side	0.403	0.261	0.084	0.038	0.001	0.786	0.749				
	Top side		0.578	0.366	0.035	0.052	0.979	0.996				
	Bottom side	0.614					0.614	0.614				
Ant 0+2	Front	0.490	0.650	0.196	0.054	0.139	1.390	1.475				
	Back	0.458	0.739	0.259	0.064	0.165	1.520	1.621		0.04	Case 45	
	Left side	0.658	0.138	0.205	0.001	0.228	1.002	1.229				
	Right side	0.403	0.847	0.084	0.038	0.001	1.372	1.335				
	Top side			0.366	0.035	0.052	0.401	0.418				
	Bottom side	0.614	0.667				1.281	1.281				
Ant 0+5	Front	0.490	0.540	0.196	0.054	0.139	1.280	1.365				
	Back	0.458	0.445	0.259	0.064	0.165	1.226	1.327				
	Left side	0.658	0.073	0.205	0.001	0.228	0.937	1.164				
	Right side	0.403	0.686	0.084	0.038	0.001	1.211	1.174				
	Top side		0.363	0.366	0.035	0.052	0.764	0.781				
	Bottom side	0.614					0.614	0.614				
Ant 1+2	Front	0.458	0.650	0.196	0.054	0.139	1.358	1.443				
	Back	0.459	0.739	0.259	0.064	0.165	1.521	1.622		0.02	Case 46	
	Left side	0.374	0.138	0.205	0.001	0.228	0.718	0.945				
	Right side	0.261	0.847	0.084	0.038	0.001	1.230	1.193				
	Top side	0.578		0.366	0.035	0.052	0.979	0.996				
	Bottom side		0.667				0.667	0.667				
Ant 1+6	Front	0.458	0.518	0.196	0.054	0.139	1.226	1.311				
	Back	0.459	0.438	0.259	0.064	0.165	1.220	1.321				
	Left side	0.374	0.809	0.205	0.001	0.228	1.389	1.616		0.04	Case 47	
	Right side	0.261	0.088	0.084	0.038	0.001	0.471	0.434				
	Top side	0.578		0.366	0.035	0.052	0.979	0.996				
	Bottom side		0.244				0.244	0.244				
Ant 2+5	Front	0.650	0.540	0.196	0.054	0.139	1.440	1.525				
	Back	0.739	0.445	0.259	0.064	0.165	1.507	1.608		0.02	Case 48	
	Left side	0.138	0.073	0.205	0.001	0.228	0.417	0.644				
	Right side	0.847	0.686	0.084	0.038	0.001	1.655	1.618	0.03	Case 49	0.02	Case 50
	Top side		0.363	0.366	0.035	0.052	0.764	0.781				
	Bottom side	0.667					0.667	0.667				
Ant 2+6	Front	0.650	0.518	0.196	0.054	0.139	1.418	1.503				
	Back	0.739	0.438	0.259	0.064	0.165	1.500	1.601		0.03	Case 51	
	Left side	0.138	0.809	0.205	0.001	0.228	1.153	1.380				
	Right side	0.847	0.088	0.084	0.038	0.001	1.057	1.020				
	Top side			0.366	0.035	0.052	0.401	0.418				
	Bottom side	0.667	0.244				0.911	0.911				
Ant 5+6	Front	0.540	0.518	0.196	0.054	0.139	1.308	1.393				
	Back	0.445	0.438	0.259	0.064	0.165	1.206	1.307				
	Left side	0.073	0.809	0.205	0.001	0.228	1.088	1.315				
	Right side	0.686	0.088	0.084	0.038	0.001	0.896	0.859				
	Top side	0.363		0.366	0.035	0.052	0.764	0.781				
	Bottom side		0.244				0.244	0.244				

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

Exposure Position	1	2	3	4	5	6	4+5 Summed 1g SAR (W/kg)	4+6 Summed 1g SAR (W/kg)
	WLAN2.4GHz Ant 4	WLAN2.4GHz Ant 3	WLAN2.4GHz Ant 4+3	WLAN5G / 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)		
Front	0.282	0.607	0.551	0.633	0.054	0.139	0.687	0.772
Back	0.322	0.701	0.732	0.764	0.064	0.165	0.828	0.929

<WLAN Index6, BT Index 3>

Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	2+3 Summed 1g SAR (W/kg)	2+4 Summed 1g SAR (W/kg)
	WLAN2.4GHz Ant 3	WLAN5G / 6GHz Ant 4	Bluetooth Ant 4	Bluetooth Ant 3			
	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
Front	0.607	0.661	0.054	0.139	1.268	0.715	0.800
Back	0.701	0.768	0.064	0.165	1.469	0.832	0.933

<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+1 SPLSR	Ant 0+1 Case No	Ant 0+2 SPLSR	Ant 0+2 Case No	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)																				
Front at 10mm	0.985	0.675	0.650	0.926	0.518	1.660	1.635	1.911	1.325	1.193	1.576	1.168	1.444	0.02	Case 52	0.04	Case 53	0.04	Case 54		
Back at 10mm	0.926	0.904	0.810	0.782	0.438	1.830	1.736	1.708	1.714	1.342	1.592	1.248	1.220	0.04	Case 55	0.04	Case 56	0.02	Case 57	0.02	Case 58

<WWAN Index6, WLAN Index7>

	Exposure Position	0	1	2	3	4	5	0+1+2 Summed 1g SAR (W/kg)	0+1+3 Summed 1g SAR (W/kg)	0+1+4 Summed 1g SAR (W/kg)	0+1+5 Summed 1g SAR (W/kg)	0+1+5 SPLSR	0+1+5 Case No.				
		Maximum WWAN	Maximum WWAN	WLAN2.4GHz Ant 4	WLAN2.4GHz Ant 3	WLAN2.4GHz Ant 4+3	WLAN5/6GHz Ant 4+3	1.063	1.146	1.132	1.599	0.03	Case 59				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	0.458	0.459	0.093	0.201	0.193	0.764	1.010	1.118	1.110	1.681
Ant 0+1	Front	0.508	0.458	0.097	0.180	0.166	0.633	1.063	1.146	1.132	1.599	0.03	Case 59				
	Back	0.458	0.459	0.093	0.201	0.193	0.764	1.010	1.118	1.110	1.681	0.04	Case 60				
Ant 0+2	Front	0.508	0.650	0.097	0.180	0.166	0.633	1.255	1.338	1.324	1.791	0.04	Case 61				
	Back	0.458	0.739	0.093	0.201	0.193	0.764	1.290	1.398	1.390	1.961	0.03	Case 62				
Ant 0+5	Front	0.508	0.540	0.097	0.180	0.166	0.633	1.145	1.228	1.214	1.681	0.04	Case 63				
	Back	0.458	0.445	0.093	0.201	0.193	0.764	0.996	1.104	1.096	1.667	0.04	Case 64				
Ant 1+2	Front	0.458	0.650	0.097	0.180	0.166	0.633	1.205	1.288	1.274	1.741	0.02	Case 65				
	Back	0.459	0.739	0.093	0.201	0.193	0.764	1.291	1.399	1.391	1.962	0.02	Case 66				
Ant 1+6	Front	0.458	0.518	0.097	0.180	0.166	0.633	1.073	1.156	1.142	1.609	0.02	Case 67				
	Back	0.459	0.438	0.093	0.201	0.193	0.764	0.990	1.098	1.090	1.661	0.02	Case 68				
Ant 2+5	Front	0.650	0.540	0.097	0.180	0.166	0.633	1.287	1.370	1.356	1.823	0.02	Case 69				
	Back	0.739	0.445	0.093	0.201	0.193	0.764	1.277	1.385	1.377	1.948	0.03	Case 70				
Ant 2+6	Front	0.650	0.518	0.097	0.180	0.166	0.633	1.265	1.348	1.334	1.801	0.03	Case 71				
	Back	0.739	0.438	0.093	0.201	0.193	0.764	1.270	1.378	1.370	1.941	0.04	Case 72				
Ant 5+6	Front	0.540	0.518	0.097	0.180	0.166	0.633	1.155	1.238	1.224	1.691	0.02	Case 73				
	Back	0.445	0.438	0.093	0.201	0.193	0.764	0.976	1.084	1.076	1.647	0.02	Case 74				

<WWAN Index6, BT Index 3>

	Exposure Position	0	1	2	3	0+1+2 Summed 1g SAR (W/kg)	0+1+3 Summed 1g SAR (W/kg)	0+1+3 SPLSR	0+1+3 Case No.
		Maximum WWAN	Maximum WWAN	Bluetooth Ant 4	Bluetooth Ant 3				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)				
Ant 0+1	Front	0.508	0.458	0.207	0.397	1.173	1.363		
	Back	0.458	0.459	0.210	0.524	1.127	1.441		
Ant 0+2	Front	0.508	0.650	0.207	0.397	1.365	1.555		
	Back	0.458	0.739	0.210	0.524	1.407	1.721	0.03	Case 75
Ant 0+5	Front	0.508	0.540	0.207	0.397	1.255	1.445		
	Back	0.458	0.445	0.210	0.524	1.113	1.427		
Ant 1+2	Front	0.458	0.650	0.207	0.397	1.315	1.505		
	Back	0.459	0.739	0.210	0.524	1.408	1.722	0.02	Case 76
Ant 1+6	Front	0.458	0.518	0.207	0.397	1.183	1.373		
	Back	0.459	0.438	0.210	0.524	1.107	1.421		
Ant 2+5	Front	0.650	0.540	0.207	0.397	1.397	1.587		
	Back	0.739	0.445	0.210	0.524	1.394	1.708	0.04	Case 77
Ant 2+6	Front	0.650	0.518	0.207	0.397	1.375	1.565		
	Back	0.739	0.438	0.210	0.524	1.387	1.701	0.03	Case 78
Ant 5+6	Front	0.540	0.518	0.207	0.397	1.265	1.455		
	Back	0.445	0.438	0.210	0.524	1.093	1.407		

<WWAN Index6, WLAN Index8, BT Index 4>

	Exposure Position	0	1	2	3	4	5	0+1+2+3 Summed 1g SAR (W/kg)	0+1+3+4 Summed 1g SAR (W/kg)	0+1+3+5 Summed 1g SAR (W/kg)	0+1+2+3 SPLSR	0+1+2+3 Case No.	0+1+3+4 SPLSR	0+1+3+4 Case No.	0+1+3+5 SPLSR	0+1+3+5 Case No.
		Maximum WWAN	Maximum WWAN	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	Bluetooth Ant 4	Bluetooth Ant 3	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Case No.	Case No.	Case No.	Case No.	Case No.	Case No.
Ant 0+1	Front	0.508	0.458	0.180	0.519	0.054	0.139	1.665	1.539	1.624	0.02	Case 79			0.04	Case 80
	Back	0.458	0.459	0.201	0.576	0.064	0.165	1.694	1.557	1.658	0.03	Case 81			0.02	Case 82
Ant 0+2	Front	0.508	0.650	0.180	0.519	0.054	0.139	1.857	1.731	1.816	0.02	Case 83	0.02	Case 84	0.02	Case 85
	Back	0.458	0.739	0.201	0.576	0.064	0.165	1.974	1.837	1.938	0.03	Case 86	0.03	Case 87	0.03	Case 88
Ant 0+5	Front	0.508	0.540	0.180	0.519	0.054	0.139	1.747	1.621	1.706	0.04	Case 89	0.03	Case 90	0.04	Case 91
	Back	0.458	0.445	0.201	0.576	0.064	0.165	1.680	1.543	1.644	0.04	Case 92			0.04	Case 93
Ant 1+2	Front	0.458	0.650	0.180	0.519	0.054	0.139	1.807	1.681	1.766	0.02	Case 94	0.02	Case 95	0.02	Case 96
	Back	0.459	0.739	0.201	0.576	0.064	0.165	1.975	1.838	1.939	0.02	Case 97	0.02	Case 98	0.02	Case 99
Ant 1+6	Front	0.458	0.518	0.180	0.519	0.054	0.139	1.675	1.549	1.634	0.02	Case 100			0.02	Case 101
	Back	0.459	0.438	0.201	0.576	0.064	0.165	1.674	1.537	1.638	0.02	Case 102			0.02	Case 103
Ant 2+5	Front	0.650	0.540	0.180	0.519	0.054	0.139	1.889	1.763	1.848	0.03	Case 104	0.02	Case 105	0.02	Case 106
	Back	0.739	0.445	0.201	0.576	0.064	0.165	1.961	1.824	1.925	0.03	Case 107	0.02	Case 108	0.03	Case 109
Ant 2+6	Front	0.650	0.518	0.180	0.519	0.054	0.139	1.867	1.741	1.826	0.03	Case 110	0.04	Case 111	0.03	Case 112
	Back	0.739	0.438	0.201	0.576	0.064	0.165	1.954	1.817	1.918	0.04	Case 113	0.03	Case 114	0.04	Case 115
Ant 5+6	Front	0.540	0.518	0.180	0.519	0.054	0.139	1.757	1.631	1.716	0.02	Case 116	0.02	Case 117	0.02	Case 118
	Back	0.445	0.438	0.201	0.576	0.064	0.165	1.660	1.523	1.624	0.02	Case 119			0.02	Case 120

<WWAN Index6, WLAN Index9, BT Index4>

	Exposure Position	0	1	2	3	4	0+1+2+3 Summed 1g SAR (W/kg)	0+1+2+4 Summed 1g SAR (W/kg)	0+1+2+3 SPLSR	0+1+2+3 Case No.	0+1+2+4 SPLSR	0+1+2+4 Case No.
		Maximum WWAN	Maximum WWAN	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	Bluetooth Ant 3	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	Case No.	Case No.	Case No.
Ant 0+1	Front	0.508	0.458	0.364	0.054	0.139	1.384	1.469				
	Back	0.458	0.459	0.448	0.064	0.165	1.429	1.530				
Ant 0+2	Front	0.508	0.650	0.364	0.054	0.139	1.576	1.661			0.04	Case 121
	Back	0.458	0.739	0.448	0.064	0.165	1.709	1.810	0.03	Case 122	0.03	Case 123
Ant 0+5	Front	0.508	0.540	0.364	0.054	0.139	1.466	1.551				
	Back	0.458	0.445	0.448	0.064	0.165	1.415	1.516				
Ant 1+2	Front	0.458	0.650	0.364	0.054	0.139	1.526	1.611			0.02	Case 124
	Back	0.459	0.739	0.448	0.064	0.165	1.710	1.811	0.02	Case 125	0.02	Case 126
Ant 1+6	Front	0.458	0.518	0.364	0.054	0.139	1.394	1.479				
	Back	0.459	0.438	0.448	0.064	0.165	1.409	1.510				
Ant 2+5	Front	0.650	0.540	0.364	0.054	0.139	1.608	1.693	0.02	Case 127	0.02	Case 128
	Back	0.739	0.445	0.448	0.064	0.165	1.696	1.797	0.02	Case 129	0.02	Case 130
Ant 2+6	Front	0.650	0.518	0.364	0.054	0.139	1.586	1.671			0.04	Case 131
	Back	0.739	0.438	0.448	0.064	0.165	1.689	1.790	0.03	Case 132	0.03	Case 133
Ant 5+6	Front	0.540	0.518	0.364	0.054	0.139	1.476	1.561				
	Back	0.445	0.438	0.448	0.064	0.165	1.395	1.496				

**F.6 Product Specific Sim-Tx analysis****<WLAN Index5, NFC>**

Exposure Position	4	19	4+19 Summed 10g SAR (W/kg)
	WLAN5G / 6GHz Ant 4+3	NFC	
	10g SAR (W/kg)	10g SAR (W/kg)	
Front	2.790	0.001	2.791
Back	2.073	0.062	2.135
Left side	0.902	0.001	0.903
Right side	0.263	0.001	0.264
Top side	1.703	0.001	1.704
Bottom side			0.000

<WLAN Index6, NFC>

Exposure Position	2	19	2+19 Summed 10g SAR (W/kg)
	WLAN5G / 6GHz Ant 4	NFC	
	10g SAR (W/kg)	10g SAR (W/kg)	
Front	2.745	0.001	2.746
Back	1.830	0.062	1.892
Left side	0.029	0.001	0.030
Right side	0.299	0.001	0.300
Top side	1.666	0.001	1.667
Bottom side			0.000

<WLAN Index7, NFC>

Exposure Position	6	19	6+19 Summed 10g SAR (W/kg)
	WLAN5G / 6GHz Ant 4+3	NFC	
	10g SAR (W/kg)	10g SAR (W/kg)	
Front	2.790	0.001	2.791
Back	2.073	0.062	2.135
Left side	0.902	0.001	0.903
Right side	0.263	0.001	0.264
Top side	1.703	0.001	1.704
Bottom side			0.000

<WLAN Index8, NFC>

Exposure Position	6	19	6+19 Summed 10g SAR (W/kg)
	WLAN5G / 6GHz Ant 4	NFC	
	10g SAR (W/kg)	10g SAR (W/kg)	
Front	2.745	0.001	2.746
Back	1.830	0.062	1.892
Left side	0.029	0.001	0.030
Right side	0.299	0.001	0.300
Top side	1.666	0.001	1.667
Bottom side			0.000

<WLAN Index9, NFC>

Exposure Position	3	19	3+19 Summed 10g SAR (W/kg)
	WLAN5G / 6GHz Ant 4+3	NFC	
	10g SAR (W/kg)	10g SAR (W/kg)	
Front	1.714	0.001	1.715
Back	1.142	0.062	1.204
Left side	0.902	0.001	0.903
Right side	0.136	0.001	0.137
Top side	0.988	0.001	0.989
Bottom side			0.000



FCC SAR TEST REPORT

Report No.: FA451606B

F.7 SAR SPSLR analysis

<Case 1>

Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				X	Y	Z				
WLAN2.4GHz	Right Cheek	1.143	0	50.3	-327.0	-174.3	58.2	1.79	0.04	Not required
WLAN5GHz		0.645	0	1.5	-295.5	-171.1				

<Case 2>

SAR summation (blue colored) for each band of antenna 1,2

Exposure Position	WWAN SAR	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right Cheek	1g SAR (W/kg)	0.477	0.799	0.629	0.954	0.578	0.665	0.712	0.587	0.519	0.853	0.840	0.662	0.949	0.823	0.600	0.602	0.983
GSM850_Ant 1	0.989	1.466	1.788	1.618	1.943	1.567	1.654	1.701	1.576	1.508	1.842	1.829	1.651	1.938	1.812	1.589	1.591	1.972
WCDMA V_Ant 1	0.985	1.462	1.784	1.614	1.939	1.563	1.650	1.697	1.572	1.504	1.838	1.825	1.647	1.934	1.808	1.585	1.587	1.968
LTE Band 2_Ant 1	0.917	1.394	1.716	1.546	1.871	1.495	1.582	1.629	1.504	1.436	1.770	1.757	1.579	1.866	1.740	1.517	1.519	1.900
LTE Band 12_Ant 1	0.827	1.304	1.626	1.456	1.781	1.405	1.492	1.539	1.414	1.346	1.680	1.667	1.489	1.776	1.650	1.427	1.429	1.810
LTE Band 13_Ant 1	0.903	1.380	1.702	1.532	1.857	1.481	1.568	1.615	1.490	1.422	1.756	1.743	1.565	1.852	1.726	1.503	1.505	1.886
LTE Band 14_Ant 1	0.827	1.304	1.626	1.456	1.781	1.405	1.492	1.539	1.414	1.346	1.680	1.667	1.489	1.776	1.650	1.427	1.429	1.810
LTE Band 26_Ant 1	0.978	1.455	1.777	1.607	1.932	1.556	1.643	1.690	1.565	1.497	1.831	1.818	1.640	1.927	1.801	1.578	1.580	1.961
LTE Band 66_Ant 1	0.718	1.195	1.517	1.347	1.672	1.296	1.383	1.430	1.305	1.237	1.571	1.558	1.380	1.667	1.541	1.318	1.320	1.701
LTE Band 71_Ant 1	0.991	1.468	1.790	1.620	1.945	1.569	1.656	1.703	1.578	1.510	1.844	1.831	1.653	1.940	1.814	1.591	1.593	1.974
FR1 n12_Ant 1	0.867	1.344	1.666	1.496	1.821	1.445	1.532	1.579	1.454	1.386	1.720	1.707	1.529	1.816	1.690	1.467	1.469	1.850
FR1 n14_Ant 1	0.790	1.267	1.589	1.419	1.744	1.368	1.455	1.502	1.377	1.309	1.643	1.630	1.452	1.739	1.613	1.390	1.392	1.773
FR1 n26_Ant 1	0.883	1.360	1.682	1.512	1.837	1.461	1.548	1.595	1.470	1.402	1.736	1.723	1.545	1.832	1.706	1.483	1.485	1.866
FR1 n41_Ant 1	0.809	1.286	1.608	1.438	1.763	1.387	1.474	1.521	1.396	1.328	1.662	1.649	1.471	1.758	1.632	1.409	1.411	1.792
FR1 n48_Ant 1	0.967	1.444	1.766	1.596	1.921	1.545	1.632	1.679	1.554	1.486	1.820	1.807	1.629	1.916	1.790	1.567	1.569	1.950
FR1 n71_Ant 1	0.866	1.343	1.665	1.495	1.820	1.444	1.531	1.578	1.453	1.385	1.719	1.706	1.528	1.815	1.689	1.466	1.468	1.849
FR1 n77_Ant 1	0.729	1.206	1.528	1.358	1.683	1.307	1.394	1.441	1.316	1.248	1.582	1.569	1.391	1.678	1.552	1.329	1.331	1.712

Hybrid 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				
Max WWAN Ant 1	0.991	31.0	-326.5	-175.1	77.8	1.97	0.04	Not required
Max WWAN Ant 2	0.983	49.9	-251.0	-174.9				



FCC SAR TEST REPORT

Report No.:FA451606B

<Case 3>

SAR summation (blue colored) for each band of antenna 0,5

Exposure Position	WWAN SAR	LTE Band 2_Ant 5	LTE Band 66_Ant 5	FR1 n41_Ant 5	FR1 n48_Ant 5	FR1 n77_Ant 5
Left Cheek	1g SAR (W/kg)	0.970	0.977	0.939	0.838	0.726
GSM850_Ant 0	0.539	1.509	1.516	1.478	1.377	1.265
GSM1900_Ant 0	0.454	1.424	1.431	1.393	1.292	1.180
WCDMA II_Ant 0	0.684	1.654	1.661	1.623	1.522	1.410
WCDMA IV_Ant 0	0.489	1.459	1.466	1.428	1.327	1.215
WCDMA V_Ant 0	0.426	1.396	1.403	1.365	1.264	1.152
LTE Band 7_Ant 0	0.583	1.553	1.560	1.522	1.421	1.309
LTE Band 12_Ant 0	0.241	1.211	1.218	1.180	1.079	0.967
LTE Band 13_Ant 0	0.338	1.308	1.315	1.277	1.176	1.064
LTE Band 14_Ant 0	0.363	1.333	1.340	1.302	1.201	1.089
LTE Band 25_Ant 0	0.545	1.515	1.522	1.484	1.383	1.271
LTE Band 26_Ant 0	0.401	1.371	1.378	1.340	1.239	1.127
LTE Band 30_Ant 0	0.354	1.324	1.331	1.293	1.192	1.080
LTE Band 41_Ant 0	0.245	1.215	1.222	1.184	1.083	0.971
LTE Band 66_Ant 0	0.462	1.432	1.439	1.401	1.300	1.188
LTE Band 71_Ant 0	0.223	1.193	1.200	1.162	1.061	0.949
FR1 n7_Ant 0	0.601	1.571	1.578	1.540	1.439	1.327
FR1 n12_Ant 0	0.293	1.263	1.270	1.232	1.131	1.019
FR1 n14_Ant 0	0.361	1.331	1.338	1.300	1.199	1.087
FR1 n25_Ant 0	0.677	1.647	1.654	1.616	1.515	1.403
FR1 n26_Ant 0	0.414	1.384	1.391	1.353	1.252	1.140
FR1 n30_Ant 0	0.338	1.308	1.315	1.277	1.176	1.064
FR1 n41_Ant 0	0.538	1.508	1.515	1.477	1.376	1.264
FR1 n66_Ant 0	0.547	1.517	1.524	1.486	1.385	1.273
FR1 n70_Ant 0	0.282	1.252	1.259	1.221	1.120	1.008
FR1 n71_Ant 0	0.239	1.209	1.216	1.178	1.077	0.965

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				
Max WWAN Ant 0	0.684	54.5	247.6	-174.1	78.5	1.66	0.03	Not required
Max WWAN Ant 5	0.977	42.4	325.2	-175.2				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 4>

SAR summation (blue colored) for each band of antenna 5,6

Exposure Position	WWAN SAR	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Left Cheek	1g SAR (W/kg)	0.414	0.480	0.767
LTE Band 2_Ant 5	0.970	1.384	1.450	1.737
LTE Band 66_Ant 5	0.977	1.391	1.457	1.744
FR1 n41_Ant 5	0.939	1.353	1.419	1.706
FR1 n48_Ant 5	0.838	1.252	1.318	1.605
FR1 n77_Ant 5	0.726	1.140	1.206	1.493

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				
Max WWAN Ant 5	0.977	41.6	324.5	-175.3	81.8	1.74	0.03	Not required
Max WWAN Ant 6	0.767	52.6	243.5	-173.8				

<Case 5>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	GSM850_Ant 0	GSM1900_Ant 0	WCDMA I_Ant 0	WCDMA IV_Ant 0	LTE Band 7_Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 25_Ant 0	LTE Band 26_Ant 0	LTE Band 30_Ant 0	LTE Band 41_Ant 0	LTE Band 66_Ant 0	LTE Band 71_Ant 0	FR1 n7_Ant 0	FR1 n12_Ant 0	FR1 n14_Ant 0	FR1 n25_Ant 0	FR1 n26_Ant 0	FR1 n30_Ant 0	FR1 n41_Ant 0	FR1 n66_Ant 0	FR1 n70_Ant 0	FR1 n71_Ant 0	
Left Cheek	1g SAR (W/kg)	0.381	0.454	0.543	0.489	0.363	0.544	0.241	0.338	0.354	0.533	0.374	0.354	0.245	0.462	0.223	0.548	0.293	0.321	0.550	0.396	0.338	0.538	0.547	0.282	0.239	
LTE Band 2_Ant 5	0.736	0.356	1.474	1.547	1.636	1.582	1.456	1.637	1.334	1.431	1.447	1.626	1.467	1.447	1.338	1.555	1.316	1.641	1.386	1.414	1.643	1.489	1.431	1.631	1.640	1.375	1.332
LTE Band 66_Ant 5	0.741	0.356	1.479	1.552	1.641	1.587	1.461	1.642	1.339	1.436	1.452	1.631	1.472	1.452	1.343	1.560	1.321	1.646	1.391	1.419	1.648	1.494	1.436	1.636	1.645	1.380	1.337
FR1 n41_Ant 5	0.746	0.356	1.484	1.557	1.646	1.592	1.466	1.647	1.344	1.441	1.457	1.636	1.477	1.457	1.348	1.565	1.326	1.651	1.396	1.424	1.653	1.499	1.441	1.641	1.650	1.385	1.342
FR1 n48_Ant 5	0.681	0.356	1.419	1.492	1.581	1.527	1.401	1.582	1.279	1.376	1.392	1.571	1.412	1.392	1.283	1.500	1.261	1.586	1.331	1.359	1.588	1.434	1.376	1.576	1.585	1.320	1.277
FR1 n77_Ant 5	0.618	0.356	1.356	1.429	1.518	1.464	1.338	1.519	1.216	1.313	1.329	1.508	1.349	1.329	1.220	1.437	1.198	1.523	1.268	1.296	1.525	1.371	1.313	1.513	1.522	1.257	1.214

Hybrid 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				
Max WWAN Ant 0	0.550	53.8	251.3	-174.6	74.8	1.65	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 4	1.103	42.4	325.2	-175.2				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 6>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN_SAR	WLAN5/6GHz_Ant 4+3	Bluetooth_Ant 3	GSM850_Ant 0	GSM1900_Ant 0	WCDMA_II_Ant 0	WCDMA_IV_Ant 0	WCNMA_V_Ant 0	LTE Band 7_Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 25_Ant 0	LTE Band 30_Ant 0	LTE Band 41_Ant 0	LTE Band 68_Ant 0	LTE Band 71_Ant 0	FR1_n7_Ant 0	FR1_n12_Ant 0	FR1_n14_Ant 0	FR1_n25_Ant 0	FR1_n30_Ant 0	FR1_n41_Ant 0	FR1_n66_Ant 0	FR1_n70_Ant 0	FR1_n71_Ant 0		
Left Cheek	1g SAR (W/kg)			0.381	0.454	0.543	0.489	0.363	0.544	0.241	0.338	0.354	0.533	0.374	0.354	0.245	0.462	0.223	0.548	0.293	0.321	0.550	0.396	0.338	0.538	0.547	0.282	0.239
LTE Band 2_Ant 5	0.736	0.356	0.087	1.560	1.633	1.722	1.668	1.542	1.723	1.420	1.517	1.533	1.712	1.553	1.533	1.424	1.641	1.402	1.727	1.472	1.500	1.729	1.575	1.517	1.717	1.726	1.461	1.418
LTE Band 68_Ant 5	0.741	0.356	0.087	1.565	1.638	1.727	1.673	1.547	1.728	1.425	1.522	1.538	1.717	1.558	1.538	1.429	1.646	1.407	1.732	1.477	1.505	1.734	1.580	1.522	1.722	1.731	1.466	1.423
FR1_n41_Ant 5	0.746	0.356	0.087	1.570	1.643	1.732	1.678	1.552	1.733	1.430	1.527	1.543	1.722	1.563	1.543	1.434	1.651	1.412	1.737	1.482	1.510	1.739	1.585	1.527	1.727	1.736	1.471	1.428
FR1_n48_Ant 5	0.681	0.356	0.087	1.505	1.578	1.667	1.613	1.487	1.668	1.365	1.462	1.478	1.657	1.498	1.478	1.369	1.586	1.347	1.672	1.417	1.445	1.674	1.520	1.462	1.662	1.671	1.406	1.363
FR1_n77_Ant 5	0.618	0.356	0.087	1.442	1.515	1.604	1.550	1.424	1.605	1.302	1.399	1.415	1.594	1.435	1.415	1.306	1.523	1.284	1.609	1.354	1.382	1.611	1.457	1.399	1.599	1.608	1.343	1.300

Hybrid 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				
Max WWAN Ant 0	0.550	53.8	251.3	-174.6	74.2	1.30	0.02	Not required
Max WWAN Ant 5	0.746	41.6	324.5	-175.3				
Max WWAN Ant 0	0.550	53.8	251.3	-174.6	72.6	0.91	0.01	Not required
WLAN5/6GHz Ant 4+3	0.356	-0.5	299.4	-171.2				
Max WWAN Ant 0	0.550	54.1	246.9	-176.8	32.4	0.64	0.02	Not required
Bluetooth Ant 3	0.087	25.1	260.3	-171.7				
Max WWAN Ant 5	0.746	41.0	332.9	-174.4	31.1	1.10	0.04	Not required
WLAN5/6GHz Ant 4+3	0.356	10.1	329.1	-173.7				
Max WWAN Ant 5	0.746	41.6	324.5	-175.3	66.4	0.83	0.01	Not required
Bluetooth Ant 3	0.087	25.1	260.3	-171.7				
WLAN5/6GHz Ant 4+3	0.356	-0.5	299.4	-171.2	46.7	0.44	0.01	Not required
Bluetooth Ant 3	0.087	25.1	260.3	-171.7				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 7>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	GSM1900_Ant 2	WCDMA_II_Ant 2	WCDMA_IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 68_Ant 2	FR1_n7_Ant 2	FR1_n25_Ant 2	FR1_n30_Ant 2	FR1_n41_Ant 2	FR1_n48_Ant 2	FR1_n66_Ant 2	FR1_n70_Ant 2	FR1_n77_Ant 2
Right Cheek		1g SAR (W/kg)		0.477	0.606	0.600	0.581	0.578	0.606	0.606	0.587	0.519	0.604	0.603	0.603	0.586	0.585	0.600	0.588	0.592
GSM850_Ant 1	0.598	0.438	0.038	1.551	1.680	1.674	1.655	1.652	1.680	1.680	1.661	1.593	1.678	1.677	1.677	1.660	1.659	1.674	1.662	1.666
WCDMA_V_Ant 1	0.596	0.438	0.038	1.549	1.678	1.672	1.653	1.650	1.678	1.678	1.659	1.591	1.676	1.675	1.675	1.658	1.657	1.672	1.660	1.664
LTE Band 12_Ant 1	0.598	0.438	0.038	1.551	1.680	1.674	1.655	1.652	1.680	1.680	1.661	1.593	1.678	1.677	1.677	1.660	1.659	1.674	1.662	1.666
LTE Band 12_Ant 1	0.599	0.438	0.038	1.552	1.681	1.675	1.656	1.653	1.681	1.681	1.662	1.594	1.679	1.678	1.678	1.661	1.660	1.675	1.663	1.667
LTE Band 13_Ant 1	0.595	0.438	0.038	1.548	1.677	1.671	1.652	1.649	1.677	1.677	1.658	1.590	1.675	1.674	1.674	1.657	1.656	1.671	1.659	1.663
LTE Band 14_Ant 1	0.599	0.438	0.038	1.552	1.681	1.675	1.656	1.653	1.681	1.681	1.662	1.594	1.679	1.678	1.678	1.661	1.660	1.675	1.663	1.667
LTE Band 26_Ant 1	0.596	0.438	0.038	1.549	1.678	1.672	1.653	1.650	1.678	1.678	1.659	1.591	1.676	1.675	1.675	1.658	1.657	1.672	1.660	1.664
LTE Band 66_Ant 1	0.597	0.438	0.038	1.550	1.679	1.673	1.654	1.651	1.679	1.679	1.660	1.592	1.677	1.676	1.676	1.659	1.658	1.673	1.661	1.665
LTE Band 71_Ant 1	0.597	0.438	0.038	1.550	1.679	1.673	1.654	1.651	1.679	1.679	1.660	1.592	1.677	1.676	1.676	1.659	1.658	1.673	1.661	1.665
FR1_n12_Ant 1	0.599	0.438	0.038	1.552	1.681	1.675	1.656	1.653	1.681	1.681	1.662	1.594	1.679	1.678	1.678	1.661	1.660	1.675	1.663	1.667
FR1_n14_Ant 1	0.599	0.438	0.038	1.552	1.681	1.675	1.656	1.653	1.681	1.681	1.662	1.594	1.679	1.678	1.678	1.661	1.660	1.675	1.663	1.667
FR1_n26_Ant 1	0.588	0.438	0.038	1.541	1.670	1.664	1.645	1.642	1.670	1.670	1.651	1.583	1.668	1.667	1.667	1.650	1.649	1.664	1.652	1.656
FR1_n41_Ant 1	0.594	0.438	0.038	1.547	1.676	1.670	1.651	1.648	1.676	1.676	1.657	1.589	1.674	1.673	1.673	1.656	1.655	1.670	1.658	1.662
FR1_n48_Ant 1	0.585	0.438	0.038	1.538	1.667	1.661	1.642	1.639	1.667	1.667	1.648	1.580	1.665	1.664	1.664	1.647	1.646	1.661	1.649	1.653
FR1_n71_Ant 1	0.599	0.438	0.038	1.552	1.681	1.675	1.656	1.653	1.681	1.681	1.662	1.594	1.679	1.678	1.678	1.661	1.660	1.675	1.663	1.667
FR1_n77_Ant 1	0.471	0.438	0.038	1.424	1.553	1.547	1.528	1.525	1.553	1.553	1.534	1.466	1.551	1.550	1.550	1.533	1.532	1.547	1.535	1.539

Hybrid 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				
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3(3)	1.037	46.5	-323.9	-175.1	73.0	1.64	0.03	Not required
Max WWAN Ant 2	0.606	49.9	-251.0	-174.9				
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3(3)	1.037	15.8	-323.3	-174.4	31.1	1.25	0.04	Not required
WLAN5/6GHz Ant 4+3(4)	0.212	-6.9	-302.4	-170.3				
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3(3)	1.037	15.8	-323.3	-174.4	51.9	1.08	0.02	Not required
Bluetooth Ant 4	0.038	27.4	-272.7	-173.7				
Max WWAN Ant 2	0.606	49.9	-251.0	-174.9	76.7	0.82	0.01	Not required
WLAN5/6GHz Ant 4+3(4)	0.212	-6.9	-302.4	-170.3				
Max WWAN Ant 2	0.606	49.9	-251.0	-174.9	31.3	0.64	0.02	Not required
Bluetooth Ant 4	0.038	27.4	-272.7	-173.7				
WLAN5/6GHz Ant 4+3(4)	0.212	-6.9	-302.4	-170.3	45.5	0.25	0.00	Not required
Bluetooth Ant 4	0.038	27.4	-272.7	-173.7				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 8>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA_II_Ant 2	WCDMA_IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1_n7_Ant 2	FR1_n25_Ant 2	FR1_n30_Ant 2	FR1_n41_Ant 2	FR1_n48_Ant 2	FR1_n66_Ant 2	FR1_n70_Ant 2	FR1_n77_Ant 2	
Right Cheek		1g SAR (W/kg)		0.477	0.606	0.600	0.581	0.578	0.606	0.606	0.587	0.519	0.604	0.603	0.603	0.586	0.585	0.600	0.588	0.592	
GSM850_Ant 1	0.598	0.438	0.238	1.751	1.880	1.874	1.855	1.852	1.880	1.880	1.861	1.793	1.878	1.877	1.877	1.860	1.859	1.874	1.862	1.866	
WCDMA_V_Ant 1	0.596	0.438	0.238	1.749	1.878	1.872	1.853	1.850	1.878	1.878	1.859	1.791	1.876	1.875	1.875	1.875	1.858	1.857	1.872	1.860	1.864
LTE Band 2_Ant 1	0.598	0.438	0.238	1.751	1.880	1.874	1.855	1.852	1.880	1.880	1.861	1.793	1.878	1.877	1.877	1.860	1.859	1.874	1.862	1.866	
LTE Band 12_Ant 1	0.599	0.438	0.238	1.752	1.881	1.875	1.856	1.853	1.881	1.881	1.862	1.794	1.879	1.878	1.878	1.861	1.860	1.875	1.863	1.867	
LTE Band 13_Ant 1	0.595	0.438	0.238	1.748	1.877	1.871	1.852	1.849	1.877	1.877	1.858	1.790	1.875	1.874	1.874	1.857	1.856	1.871	1.859	1.863	
LTE Band 14_Ant 1	0.599	0.438	0.238	1.752	1.881	1.875	1.856	1.853	1.881	1.881	1.862	1.794	1.879	1.878	1.878	1.861	1.860	1.875	1.863	1.867	
LTE Band 26_Ant 1	0.596	0.438	0.238	1.749	1.878	1.872	1.853	1.850	1.878	1.878	1.859	1.791	1.876	1.875	1.875	1.858	1.857	1.872	1.860	1.864	
LTE Band 66_Ant 1	0.597	0.438	0.238	1.750	1.879	1.873	1.854	1.851	1.879	1.879	1.860	1.792	1.877	1.876	1.876	1.859	1.858	1.873	1.861	1.865	
LTE Band 71_Ant 1	0.597	0.438	0.238	1.750	1.879	1.873	1.854	1.851	1.879	1.879	1.860	1.792	1.877	1.876	1.876	1.859	1.858	1.873	1.861	1.865	
FR1_n12_Ant 1	0.599	0.438	0.238	1.752	1.881	1.875	1.856	1.853	1.881	1.881	1.862	1.794	1.879	1.878	1.878	1.861	1.860	1.875	1.863	1.867	
FR1_n14_Ant 1	0.599	0.438	0.238	1.752	1.881	1.875	1.856	1.853	1.881	1.881	1.862	1.794	1.879	1.878	1.878	1.861	1.860	1.875	1.863	1.867	
FR1_n26_Ant 1	0.588	0.438	0.238	1.741	1.870	1.864	1.845	1.842	1.870	1.870	1.851	1.783	1.868	1.867	1.867	1.850	1.849	1.864	1.852	1.856	
FR1_n41_Ant 1	0.594	0.438	0.238	1.747	1.876	1.870	1.851	1.848	1.876	1.876	1.857	1.789	1.874	1.873	1.873	1.856	1.855	1.870	1.858	1.862	
FR1_n48_Ant 1	0.585	0.438	0.238	1.738	1.867	1.861	1.842	1.839	1.867	1.867	1.848	1.780	1.865	1.864	1.864	1.847	1.846	1.861	1.849	1.853	
FR1_n71_Ant 1	0.599	0.438	0.238	1.752	1.881	1.875	1.856	1.853	1.881	1.881	1.862	1.794	1.879	1.878	1.878	1.861	1.860	1.875	1.863	1.867	
FR1_n77_Ant 1	0.471	0.438	0.238	1.624	1.753	1.747	1.728	1.725	1.753	1.753	1.734	1.666	1.751	1.750	1.750	1.733	1.732	1.747	1.735	1.739	

Hybrid 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				
Max WWAN Ant 2	0.606	49.9	-251.0	-174.9	75.3	1.88	0.03	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	1.275	50.5	-326.3	-177.1				

<Case 9>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Left Cheek		1g SAR (W/kg)		0.414	0.480	0.598
LTE Band 2_Ant 5	0.736	0.356	0.001	1.507	1.573	1.691
LTE Band 66_Ant 5	0.741	0.356	0.001	1.512	1.578	1.696
FR1 n41_Ant 5	0.746	0.356	0.001	1.517	1.583	1.701
FR1 n48_Ant 5	0.681	0.356	0.001	1.452	1.518	1.636
FR1 n77_Ant 5	0.618	0.356	0.001	1.389	1.455	1.573

Hybrid 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				
Max WWAN Ant 6	0.598	52.6	243.5	-173.8	81.8	1.70	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 4	1.103	41.6	324.5	-175.3				



FCC SAR TEST REPORT

Report No.:FA451606B

<Case 10>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Left Cheek	1g SAR (W/kg)			0.414	0.480	0.598
LTE Band 2_Ant 5	0.736	0.356	0.087	1.593	1.659	1.777
LTE Band 66_Ant 5	0.741	0.356	0.087	1.598	1.664	1.782
FR1 n41_Ant 5	0.746	0.356	0.087	1.603	1.669	1.787
FR1 n48_Ant 5	0.681	0.356	0.087	1.538	1.604	1.722
FR1 n77_Ant 5	0.618	0.356	0.087	1.475	1.541	1.659

Hybrid 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				
Max WWAN Ant 6	0.550	41.6	324.5	-175.3	76.6	1.30	0.02	Not required
Max WWAN Ant 5	0.746	49.3	248.3	-174.5				
Max WWAN Ant 6	0.550	49.3	248.3	-174.5	71.4	0.91	0.01	Not required
WLAN5/6GHz Ant 4+3	0.356	-0.5	299.4	-171.2				
Max WWAN Ant 6	0.550	49.3	248.3	-174.5	27.2	0.64	0.02	Not required
Bluetooth Ant 3	0.087	25.1	260.3	-171.7				
Max WWAN Ant 5	0.746	41.0	323.9	-174.4	31.1	1.10	0.04	Not required
WLAN5/6GHz Ant 4+3	0.356	10.1	329.1	-173.7				
Max WWAN Ant 5	0.746	41.6	324.5	-175.3	66.4	0.83	0.01	Not required
Bluetooth Ant 3	0.087	25.1	260.3	-171.7				
WLAN5/6GHz Ant 4+3	0.356	-0.5	299.4	-171.2	46.7	0.44	0.01	Not required
Bluetooth Ant 3	0.087	25.1	260.3	-171.7				

<Case 11>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN SAR	WLAN2.4GHz H2_Ant 3	WLAN5/6GHz H2_Ant 4	GSM/UMTS Ant 0	GSM/UMTS II_Ant 0	WC/OMA I_V_Ant 0	WC/OMA II_V_Ant 0	WC/OMA V_Ant 0	LTE Band 7_Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 25_Ant 0	LTE Band 26_Ant 0	LTE Band 30_Ant 0	LTE Band 41_Ant 0	LTE Band 66_Ant 0	LTE Band 71_Ant 0	FR1 n12_Ant 0	FR1 n14_Ant 0	FR1 n25_Ant 0	FR1 n30_Ant 0	FR1 n41_Ant 0	FR1 n66_Ant 0	FR1 n70_Ant 0	FR1 n71_Ant 0		
Left Cheek	1g SAR (W/kg)			0.381	0.454	0.543	0.489	0.363	0.544	0.241	0.338	0.354	0.533	0.374	0.354	0.245	0.462	0.223	0.548	0.293	0.321	0.550	0.396	0.338	0.538	0.547	0.282	0.239
LTE Band 2_Ant 5	0.736	0.116	0.405	1.638	1.711	1.800	1.746	1.620	1.801	1.498	1.595	1.611	1.790	1.631	1.611	1.502	1.719	1.480	1.805	1.550	1.578	1.807	1.653	1.595	1.795	1.804	1.539	1.496
LTE Band 66_Ant 5	0.741	0.116	0.405	1.643	1.716	1.805	1.751	1.625	1.806	1.503	1.600	1.616	1.795	1.636	1.616	1.507	1.724	1.485	1.810	1.555	1.583	1.812	1.658	1.600	1.800	1.809	1.544	1.501
FR1 n41_Ant 5	0.746	0.116	0.405	1.648	1.721	1.810	1.756	1.630	1.811	1.508	1.605	1.621	1.800	1.641	1.621	1.512	1.729	1.490	1.815	1.560	1.580	1.817	1.663	1.605	1.805	1.814	1.549	1.506
FR1 n48_Ant 5	0.681	0.116	0.405	1.583	1.656	1.745	1.691	1.565	1.746	1.443	1.540	1.556	1.735	1.576	1.556	1.447	1.664	1.425	1.750	1.495	1.523	1.752	1.598	1.540	1.740	1.749	1.484	1.441
FR1 n77_Ant 5	0.618	0.116	0.405	1.520	1.593	1.682	1.628	1.502	1.683	1.380	1.477	1.493	1.672	1.513	1.493	1.384	1.601	1.362	1.687	1.432	1.460	1.689	1.535	1.477	1.677	1.686	1.421	1.378

Hybrid 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				
Max WWAN Ant 0	0.550	52.2	275.2	-176.4	63.1	1.70	0.04	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4	1.151	16.6	327.2	-174.3				
WLAN2.4GHz Ant 3	0.116	26.7	257.3	-171.7	68.9	1.27	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4	1.151	41.6	324.5	-175.3				
Max WWAN Ant 0	0.550	53.8	251.3	-174.6	27.9	0.67	0.02	Not required
WLAN2.4GHz Ant 3	0.116	26.7	257.3	-171.7				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 12>

SAR summation (blue colored) for each band of antenna 0,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM850,0,Ant 0	GSM1900,Ant 0	WCDMA II,Ant 0	WCDMA IV,Ant 0	WCDMA V,Ant 0	LTE Band 7,Ant 0	LTE Band 12,Ant 0	LTE Band 13,Ant 0	LTE Band 14,Ant 0	LTE Band 25,Ant 0	LTE Band 26,Ant 0	LTE Band 30,Ant 0	LTE Band 41,Ant 0	LTE Band 66,Ant 0	LTE Band 71,Ant 0	FR1 n7,Ant 0	FR1 n12,Ant 0	FR1 n14,Ant 0	FR1 n25,Ant 0	FR1 n26,Ant 0	FR1 n30,Ant 0	FR1 n41,Ant 0	FR1 n66,Ant 0	FR1 n70,Ant 0	FR1 n71,Ant 0
Left Cheek	1g SAR (W/kg)			0.381	0.454	0.543	0.489	0.363	0.544	0.241	0.388	0.354	0.533	0.374	0.354	0.245	0.462	0.223	0.548	0.293	0.321	0.550	0.396	0.338	0.538	0.547	0.282	0.239
LTE Band 2,Ant 5	0.756	0.405	0.001	1.523	1.596	1.685	1.631	1.505	1.666	1.383	1.480	1.496	1.675	1.516	1.496	1.387	1.604	1.365	1.690	1.435	1.463	1.692	1.535	1.480	1.680	1.689	1.424	1.381
LTE Band 66,Ant 5	0.741	0.405	0.001	1.528	1.601	1.690	1.636	1.510	1.691	1.388	1.485	1.501	1.680	1.521	1.501	1.392	1.609	1.370	1.695	1.440	1.468	1.697	1.543	1.485	1.685	1.694	1.429	1.386
FR1 n41,Ant 5	0.746	0.405	0.001	1.533	1.606	1.695	1.641	1.515	1.696	1.393	1.490	1.506	1.685	1.526	1.506	1.397	1.614	1.375	1.700	1.445	1.473	1.702	1.548	1.490	1.690	1.699	1.434	1.391
FR1 n48,Ant 5	0.681	0.405	0.001	1.468	1.541	1.630	1.576	1.450	1.631	1.328	1.425	1.441	1.620	1.461	1.441	1.332	1.549	1.310	1.635	1.380	1.408	1.637	1.483	1.425	1.625	1.634	1.369	1.326
FR1 n77,Ant 5	0.618	0.405	0.001	1.405	1.478	1.567	1.513	1.387	1.568	1.265	1.362	1.378	1.557	1.398	1.378	1.269	1.486	1.247	1.572	1.317	1.345	1.574	1.420	1.362	1.562	1.571	1.306	1.263

Hybrid 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				
Max WWAN Ant 0	0.550	53.8	251.3	-174.6				
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	1.152	41.6	324.5	-175.3	74.2	1.70	0.03	Not required

<Case 13>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM850,0,Ant 0	GSM1900,Ant 0	WCDMA II,Ant 0	WCDMA IV,Ant 0	WCDMA V,Ant 0	LTE Band 7,Ant 0	LTE Band 12,Ant 0	LTE Band 13,Ant 0	LTE Band 14,Ant 0	LTE Band 25,Ant 0	LTE Band 26,Ant 0	LTE Band 30,Ant 0	LTE Band 41,Ant 0	LTE Band 66,Ant 0	LTE Band 71,Ant 0	FR1 n7,Ant 0	FR1 n12,Ant 0	FR1 n14,Ant 0	FR1 n25,Ant 0	FR1 n26,Ant 0	FR1 n30,Ant 0	FR1 n41,Ant 0	FR1 n66,Ant 0	FR1 n70,Ant 0	FR1 n71,Ant 0
Left Cheek	1g SAR (W/kg)			0.381	0.454	0.543	0.489	0.363	0.544	0.241	0.388	0.354	0.533	0.374	0.354	0.245	0.462	0.223	0.548	0.293	0.321	0.550	0.396	0.338	0.538	0.547	0.282	0.239
LTE Band 2,Ant 5	0.756	0.405	0.087	1.609	1.682	1.771	1.717	1.591	1.772	1.469	1.566	1.582	1.761	1.602	1.582	1.473	1.690	1.451	1.776	1.521	1.549	1.778	1.624	1.566	1.766	1.775	1.510	1.467
LTE Band 66,Ant 5	0.741	0.405	0.087	1.614	1.687	1.776	1.722	1.596	1.777	1.474	1.571	1.587	1.766	1.607	1.587	1.478	1.695	1.456	1.781	1.526	1.554	1.783	1.629	1.571	1.771	1.780	1.515	1.472
FR1 n41,Ant 5	0.746	0.405	0.087	1.619	1.692	1.781	1.727	1.601	1.782	1.479	1.576	1.592	1.771	1.612	1.592	1.483	1.700	1.461	1.786	1.531	1.559	1.788	1.634	1.576	1.776	1.785	1.520	1.477
FR1 n48,Ant 5	0.681	0.405	0.087	1.554	1.627	1.716	1.662	1.536	1.717	1.414	1.511	1.527	1.706	1.547	1.527	1.418	1.635	1.396	1.721	1.466	1.494	1.723	1.565	1.511	1.711	1.720	1.455	1.412
FR1 n77,Ant 5	0.618	0.405	0.087	1.491	1.564	1.653	1.599	1.473	1.654	1.351	1.448	1.464	1.643	1.484	1.464	1.355	1.572	1.333	1.658	1.403	1.431	1.660	1.506	1.448	1.648	1.657	1.392	1.349

Hybrid 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				
Max WWAN Ant 0	0.550	52.2	275.2	-176.4				
Max WWAN Ant 5 + WLAN5/6GHz Ant 4	1.151	16.6	327.2	-174.3	63.1	1.70	0.04	Not required
Bluetooth Ant 3	0.087	25.1	260.3	-171.7				
Max WWAN Ant 5 + WLAN5/6GHz Ant 4	1.151	41.6	324.5	-175.3	66.4	1.24	0.02	Not required
Max WWAN Ant 0	0.550	54.6	263.9	-175.6				
Bluetooth Ant 3	0.087	25.1	260.3	-171.7	30.0	0.64	0.02	Not required



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 14>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right Cheek		1g SAR (W/kg)		0.477	0.606	0.600	0.581	0.578	0.606	0.606	0.587	0.519	0.604	0.603	0.603	0.586	0.600	0.588	0.592	
GSM850_Ant 1	0.598	0.283	0.195	1.553	1.682	1.676	1.657	1.654	1.682	1.682	1.663	1.595	1.680	1.679	1.679	1.662	1.661	1.676	1.664	1.668
WCDMA V_Ant 1	0.602	0.283	0.195	1.557	1.686	1.680	1.661	1.658	1.686	1.686	1.667	1.599	1.684	1.683	1.683	1.666	1.665	1.680	1.668	1.672
LTE Band 2_Ant 1	0.601	0.283	0.195	1.556	1.685	1.679	1.660	1.657	1.685	1.685	1.666	1.598	1.683	1.682	1.682	1.665	1.664	1.679	1.667	1.671
LTE Band 12_Ant 1	0.607	0.283	0.195	1.562	1.691	1.685	1.666	1.663	1.691	1.691	1.672	1.604	1.689	1.688	1.688	1.671	1.670	1.685	1.673	1.677
LTE Band 13_Ant 1	0.595	0.283	0.195	1.550	1.679	1.673	1.654	1.651	1.679	1.679	1.660	1.592	1.677	1.676	1.676	1.659	1.658	1.673	1.661	1.665
LTE Band 14_Ant 1	0.605	0.283	0.195	1.560	1.689	1.683	1.664	1.661	1.689	1.689	1.670	1.602	1.687	1.686	1.686	1.669	1.668	1.683	1.671	1.675
LTE Band 28_Ant 1	0.602	0.283	0.195	1.557	1.686	1.680	1.661	1.658	1.686	1.686	1.667	1.599	1.684	1.683	1.683	1.666	1.665	1.680	1.668	1.672
LTE Band 66_Ant 1	0.600	0.283	0.195	1.555	1.684	1.678	1.659	1.656	1.684	1.684	1.665	1.597	1.682	1.681	1.681	1.664	1.663	1.678	1.666	1.670
LTE Band 71_Ant 1	0.597	0.283	0.195	1.552	1.681	1.675	1.656	1.653	1.681	1.681	1.662	1.594	1.679	1.678	1.678	1.661	1.660	1.675	1.663	1.667
FR1 n12_Ant 1	0.604	0.283	0.195	1.559	1.688	1.682	1.663	1.660	1.688	1.688	1.669	1.601	1.686	1.685	1.685	1.668	1.667	1.682	1.670	1.674
FR1 n14_Ant 1	0.610	0.283	0.195	1.565	1.694	1.688	1.669	1.666	1.694	1.694	1.675	1.607	1.692	1.691	1.691	1.674	1.673	1.688	1.676	1.680
FR1 n26_Ant 1	0.588	0.283	0.195	1.543	1.672	1.666	1.647	1.644	1.672	1.672	1.653	1.585	1.670	1.669	1.669	1.652	1.651	1.666	1.654	1.658
FR1 n41_Ant 1	0.590	0.283	0.195	1.545	1.674	1.668	1.649	1.646	1.674	1.674	1.655	1.587	1.672	1.671	1.671	1.654	1.653	1.668	1.656	1.660
FR1 n48_Ant 1	0.585	0.283	0.195	1.540	1.669	1.663	1.644	1.641	1.669	1.669	1.650	1.582	1.667	1.666	1.666	1.649	1.648	1.663	1.651	1.655
FR1 n71_Ant 1	0.599	0.283	0.195	1.554	1.683	1.677	1.658	1.655	1.683	1.683	1.664	1.596	1.681	1.680	1.680	1.663	1.662	1.677	1.665	1.669
FR1 n77_Ant 1	0.471	0.283	0.195	1.426	1.555	1.549	1.530	1.527	1.555	1.555	1.536	1.468	1.553	1.552	1.552	1.535	1.534	1.549	1.537	1.541

Hybrid 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				
Max WWAN Ant 2	0.610	49.9	-251.0	-174.9	68.1	1.69	0.03	Not required
Max WWAN Ant 1 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.084	0.1	-297.3	-171.1				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 15>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 65_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right_Cheek		1g SAR (W/kg)		0.477	0.606	0.600	0.581	0.578	0.606	0.606	0.587	0.519	0.604	0.603	0.603	0.586	0.585	0.600	0.588	0.592
GSM850_Ant 1	0.598	0.195	0.238	1.508	1.637	1.631	1.612	1.609	1.637	1.637	1.618	1.550	1.635	1.634	1.634	1.617	1.616	1.631	1.619	1.623
WCDMA V_Ant 1	0.602	0.195	0.238	1.512	1.641	1.635	1.616	1.613	1.641	1.641	1.622	1.554	1.639	1.638	1.638	1.621	1.620	1.635	1.623	1.627
LTE Band 2_Ant 1	0.601	0.195	0.238	1.511	1.640	1.634	1.615	1.612	1.640	1.640	1.621	1.553	1.638	1.637	1.637	1.620	1.619	1.634	1.622	1.626
LTE Band 12_Ant 1	0.607	0.195	0.238	1.517	1.646	1.640	1.621	1.618	1.646	1.646	1.627	1.559	1.644	1.643	1.643	1.626	1.625	1.640	1.628	1.632
LTE Band 13_Ant 1	0.595	0.195	0.238	1.505	1.634	1.628	1.609	1.606	1.634	1.634	1.615	1.547	1.632	1.631	1.631	1.614	1.613	1.628	1.616	1.620
LTE Band 14_Ant 1	0.605	0.195	0.238	1.515	1.644	1.638	1.619	1.616	1.644	1.644	1.625	1.557	1.642	1.641	1.641	1.624	1.623	1.638	1.626	1.630
LTE Band 28_Ant 1	0.602	0.195	0.238	1.512	1.641	1.635	1.616	1.613	1.641	1.641	1.622	1.554	1.639	1.638	1.638	1.621	1.620	1.635	1.623	1.627
LTE Band 66_Ant 1	0.600	0.195	0.238	1.510	1.639	1.633	1.614	1.611	1.639	1.639	1.620	1.552	1.637	1.636	1.636	1.619	1.618	1.633	1.621	1.625
LTE Band 71_Ant 1	0.597	0.195	0.238	1.507	1.636	1.630	1.611	1.608	1.636	1.636	1.617	1.549	1.634	1.633	1.633	1.616	1.615	1.630	1.618	1.622
FR1 n12_Ant 1	0.604	0.195	0.238	1.514	1.643	1.637	1.618	1.615	1.643	1.643	1.624	1.556	1.641	1.640	1.640	1.623	1.622	1.637	1.625	1.629
FR1 n14_Ant 1	0.610	0.195	0.238	1.520	1.649	1.643	1.624	1.621	1.649	1.649	1.630	1.562	1.647	1.646	1.646	1.629	1.628	1.643	1.631	1.635
FR1 n26_Ant 1	0.588	0.195	0.238	1.498	1.627	1.621	1.602	1.599	1.627	1.627	1.608	1.540	1.625	1.624	1.624	1.607	1.606	1.621	1.609	1.613
FR1 n41_Ant 1	0.590	0.195	0.238	1.500	1.629	1.623	1.604	1.601	1.629	1.629	1.610	1.542	1.627	1.626	1.626	1.609	1.608	1.623	1.611	1.615
FR1 n48_Ant 1	0.585	0.195	0.238	1.495	1.624	1.618	1.599	1.596	1.624	1.624	1.605	1.537	1.622	1.621	1.621	1.604	1.603	1.618	1.606	1.610
FR1 n71_Ant 1	0.599	0.195	0.238	1.509	1.638	1.632	1.613	1.610	1.638	1.638	1.619	1.551	1.636	1.635	1.635	1.618	1.617	1.632	1.620	1.624
FR1 n77_Ant 1	0.471	0.195	0.238	1.381	1.510	1.504	1.485	1.482	1.510	1.510	1.491	1.423	1.508	1.507	1.507	1.490	1.489	1.504	1.492	1.496

Hybrid 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				
Max WWAN Ant 2	0.610	52.5	-251.0	-174.7	70.0	1.65	0.03	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.039	0.1	-297.3	-171.1				

<Case 16>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6	
Left_Cheek		1g SAR (W/kg)			0.414	0.480	0.598
LTE Band 2_Ant 5	0.736	0.116	0.405	1.671	1.737	1.855	
LTE Band 66_Ant 5	0.741	0.116	0.405	1.676	1.742	1.860	
FR1 n41_Ant 5	0.746	0.116	0.405	1.681	1.747	1.865	
FR1 n48_Ant 5	0.681	0.116	0.405	1.616	1.682	1.800	
FR1 n77_Ant 5	0.618	0.116	0.405	1.553	1.619	1.737	

Hybrid 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				
Max WWAN Ant 6	0.598	41.6	324.5	-175.3	76.6	1.75	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4	1.151	49.3	248.3	-174.5				
WLAN2.4GHz Ant 3	0.116	26.7	257.3	-171.7	68.9	1.27	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4	1.151	41.6	324.5	-175.3				
Max WWAN Ant 6	0.598	49.3	248.3	-174.5	24.5	0.71	0.02	Not required
WLAN2.4GHz Ant 3	0.116	26.7	257.3	-171.7				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 17>

SAR summation (blue colored) for each band of antenna 4,5,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Left Cheek	1g SAR (W/kg)			0.414	0.480	0.598
LTE Band 2_Ant 5	0.736	0.405	0.001	1.556	1.622	1.740
LTE Band 66_Ant 5	0.741	0.405	0.001	1.561	1.627	1.745
FR1 n41_Ant 5	0.746	0.405	0.001	1.566	1.632	1.750
FR1 n48_Ant 5	0.681	0.405	0.001	1.501	1.567	1.685
FR1 n77_Ant 5	0.618	0.405	0.001	1.438	1.504	1.622

Hybrid 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				
Max WWAN Ant 6	0.598	49.3	248.3	-174.5	77.2	1.75	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	1.152	42.4	325.2	-175.2				

<Case 18>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Left Cheek	1g SAR (W/kg)			0.414	0.480	0.598
LTE Band 2_Ant 5	0.736	0.405	0.087	1.642	1.708	1.826
LTE Band 66_Ant 5	0.741	0.405	0.087	1.647	1.713	1.831
FR1 n41_Ant 5	0.746	0.405	0.087	1.652	1.718	1.836
FR1 n48_Ant 5	0.681	0.405	0.087	1.587	1.653	1.771
FR1 n77_Ant 5	0.618	0.405	0.087	1.524	1.590	1.708

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				
Max WWAN Ant 6	0.598	41.6	324.5	-175.3	76.6	1.75	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4	1.151	49.3	248.3	-174.5				
Bluetooth Ant 3	0.087	25.1	260.3	-171.7	66.4	1.24	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4	1.151	41.6	324.5	-175.3				
Max WWAN Ant 6	0.598	49.3	248.3	-174.5	27.2	0.69	0.02	Not required
Bluetooth Ant 3	0.087	25.1	260.3	-171.7				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 19>

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

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back		1g SAR (W/kg)	0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
GSM850_Ant 0	0.446	0.439	1.624	1.492	1.492	1.535	1.602	1.584	1.524	1.277	1.460	1.575	1.617	1.523	1.540	1.227	1.438	1.518	1.206
GSM1800_Ant 0	0.450	0.439	1.628	1.496	1.496	1.539	1.606	1.588	1.528	1.281	1.464	1.579	1.621	1.527	1.544	1.231	1.442	1.522	1.210
WCDMA II_Ant 0	0.412	0.439	1.590	1.458	1.458	1.501	1.568	1.550	1.490	1.243	1.426	1.541	1.583	1.489	1.506	1.193	1.404	1.484	1.172
WCDMA IV_Ant 0	0.451	0.439	1.629	1.497	1.497	1.540	1.607	1.589	1.529	1.282	1.465	1.580	1.622	1.528	1.545	1.232	1.443	1.523	1.211
WCDMA V_Ant 0	0.454	0.439	1.632	1.500	1.500	1.543	1.610	1.592	1.532	1.285	1.468	1.583	1.625	1.531	1.548	1.235	1.446	1.526	1.214
LTE Band 7_Ant 0	0.386	0.439	1.564	1.432	1.432	1.475	1.542	1.524	1.464	1.217	1.400	1.515	1.557	1.463	1.480	1.167	1.378	1.458	1.146
LTE Band 12_Ant 0	0.367	0.439	1.545	1.413	1.413	1.456	1.523	1.505	1.445	1.198	1.381	1.496	1.538	1.444	1.461	1.148	1.359	1.439	1.127
LTE Band 13_Ant 0	0.448	0.439	1.626	1.494	1.494	1.537	1.604	1.586	1.526	1.279	1.462	1.577	1.619	1.525	1.542	1.229	1.440	1.520	1.208
LTE Band 14_Ant 0	0.406	0.439	1.584	1.452	1.452	1.495	1.562	1.544	1.484	1.237	1.420	1.535	1.577	1.483	1.500	1.167	1.398	1.478	1.166
LTE Band 25_Ant 0	0.456	0.439	1.634	1.502	1.502	1.545	1.612	1.594	1.534	1.287	1.470	1.585	1.627	1.533	1.550	1.237	1.448	1.528	1.216
LTE Band 26_Ant 0	0.421	0.439	1.599	1.467	1.467	1.510	1.577	1.559	1.499	1.252	1.435	1.550	1.592	1.498	1.515	1.202	1.413	1.493	1.181
LTE Band 30_Ant 0	0.457	0.439	1.635	1.503	1.503	1.546	1.613	1.595	1.535	1.288	1.471	1.586	1.628	1.534	1.551	1.238	1.449	1.529	1.217
LTE Band 41_Ant 0	0.453	0.439	1.631	1.499	1.499	1.542	1.609	1.591	1.531	1.284	1.467	1.582	1.624	1.530	1.547	1.234	1.445	1.525	1.213
LTE Band 66_Ant 0	0.453	0.439	1.631	1.499	1.499	1.542	1.609	1.591	1.531	1.284	1.467	1.582	1.624	1.530	1.547	1.234	1.445	1.525	1.213
LTE Band 71_Ant 0	0.410	0.439	1.588	1.456	1.456	1.499	1.566	1.548	1.488	1.241	1.424	1.539	1.581	1.487	1.504	1.191	1.402	1.482	1.170
FR1 n7_Ant 0	0.418	0.439	1.596	1.464	1.464	1.507	1.574	1.556	1.496	1.249	1.432	1.547	1.589	1.495	1.512	1.199	1.410	1.490	1.178
FR1 n12_Ant 0	0.339	0.439	1.517	1.385	1.385	1.428	1.495	1.477	1.417	1.170	1.353	1.468	1.510	1.416	1.433	1.120	1.331	1.411	1.099
FR1 n14_Ant 0	0.457	0.439	1.635	1.503	1.503	1.546	1.613	1.595	1.535	1.288	1.471	1.586	1.628	1.534	1.551	1.238	1.449	1.529	1.217
FR1 n25_Ant 0	0.458	0.439	1.636	1.504	1.504	1.547	1.614	1.596	1.536	1.289	1.472	1.587	1.629	1.535	1.552	1.239	1.450	1.530	1.218
FR1 n26_Ant 0	0.436	0.439	1.614	1.482	1.482	1.525	1.592	1.574	1.514	1.267	1.450	1.565	1.607	1.513	1.530	1.217	1.428	1.508	1.196
FR1 n30_Ant 0	0.337	0.439	1.515	1.383	1.383	1.426	1.493	1.475	1.415	1.168	1.351	1.466	1.508	1.414	1.431	1.118	1.329	1.409	1.097
FR1 n41_Ant 0	0.445	0.439	1.623	1.491	1.491	1.534	1.601	1.583	1.523	1.276	1.459	1.574	1.616	1.522	1.539	1.226	1.437	1.517	1.205
FR1 n66_Ant 0	0.363	0.439	1.541	1.409	1.409	1.452	1.519	1.501	1.441	1.194	1.377	1.492	1.534	1.440	1.457	1.144	1.355	1.435	1.123
FR1 n70_Ant 0	0.457	0.439	1.635	1.503	1.503	1.546	1.613	1.595	1.535	1.288	1.471	1.586	1.628	1.534	1.551	1.238	1.449	1.529	1.217
FR1 n71_Ant 0	0.369	0.439	1.567	1.435	1.435	1.478	1.545	1.527	1.467	1.220	1.403	1.518	1.560	1.466	1.483	1.170	1.381	1.461	1.149

Hybrid 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				
Max WWAN Ant 2	0.739	-55.0	-73.5	-207.0	47.8	1.64	0.04	Not required
Max WWAN Ant 0 + WLAN5/6GHz Ant 4+3	0.897	-7.2	-75.4	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 20>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)	0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321	
GSM850_Ant 1	0.427	0.439	1.605	1.473	1.473	1.516	1.583	1.565	1.505	1.258	1.441	1.556	1.598	1.504	1.521	1.208	1.419	1.499	1.187
WCDMA V_Ant 1	0.355	0.439	1.533	1.401	1.401	1.444	1.511	1.493	1.433	1.186	1.369	1.484	1.526	1.432	1.449	1.136	1.347	1.427	1.115
LTE Band 2_Ant 1	0.409	0.439	1.587	1.455	1.455	1.498	1.565	1.547	1.487	1.240	1.423	1.538	1.580	1.486	1.503	1.190	1.401	1.481	1.169
LTE Band 12_Ant 1	0.447	0.439	1.625	1.493	1.493	1.536	1.603	1.585	1.525	1.278	1.461	1.576	1.618	1.524	1.541	1.228	1.439	1.519	1.207
LTE Band 13_Ant 1	0.385	0.439	1.563	1.431	1.431	1.474	1.541	1.523	1.463	1.216	1.399	1.514	1.556	1.462	1.479	1.166	1.377	1.457	1.145
LTE Band 14_Ant 1	0.442	0.439	1.620	1.488	1.488	1.531	1.598	1.580	1.520	1.273	1.456	1.571	1.613	1.519	1.536	1.223	1.434	1.514	1.202
LTE Band 26_Ant 1	0.385	0.439	1.563	1.431	1.431	1.474	1.541	1.523	1.463	1.216	1.399	1.514	1.556	1.462	1.479	1.166	1.377	1.457	1.145
LTE Band 66_Ant 1	0.429	0.439	1.607	1.475	1.475	1.518	1.585	1.567	1.507	1.260	1.443	1.558	1.600	1.506	1.523	1.210	1.421	1.501	1.189
LTE Band 71_Ant 1	0.444	0.439	1.622	1.490	1.490	1.533	1.600	1.582	1.522	1.275	1.458	1.573	1.615	1.521	1.538	1.225	1.436	1.516	1.204
FR1 n12_Ant 1	0.373	0.439	1.551	1.419	1.419	1.462	1.529	1.511	1.451	1.204	1.387	1.502	1.544	1.450	1.467	1.154	1.365	1.445	1.133
FR1 n14_Ant 1	0.447	0.439	1.625	1.493	1.493	1.536	1.603	1.585	1.525	1.278	1.461	1.576	1.618	1.524	1.541	1.228	1.439	1.519	1.207
FR1 n26_Ant 1	0.406	0.439	1.584	1.452	1.452	1.495	1.562	1.544	1.484	1.237	1.420	1.535	1.577	1.483	1.500	1.187	1.398	1.478	1.166
FR1 n41_Ant 1	0.444	0.439	1.622	1.490	1.490	1.533	1.600	1.582	1.522	1.275	1.458	1.573	1.615	1.521	1.538	1.225	1.436	1.516	1.204
FR1 n48_Ant 1	0.459	0.439	1.637	1.505	1.505	1.548	1.615	1.597	1.537	1.290	1.473	1.588	1.630	1.536	1.553	1.240	1.451	1.531	1.219
FR1 n71_Ant 1	0.393	0.439	1.571	1.439	1.439	1.482	1.549	1.531	1.471	1.224	1.407	1.522	1.564	1.470	1.487	1.174	1.385	1.465	1.153
FR1 n77_Ant 1	0.446	0.439	1.624	1.492	1.492	1.535	1.602	1.584	1.524	1.277	1.460	1.575	1.617	1.523	1.540	1.227	1.438	1.518	1.206

Hybrid 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				
Max WWAN Ant 2	0.739	-61.4	-62.1	-207.0	135.1	1.64	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	0.898	-2.2	59.3	-207.0				

<Case 21>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)	0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321	
LTE Band 2_Ant 5	0.407	0.439	1.585	1.453	1.453	1.496	1.563	1.545	1.485	1.238	1.421	1.536	1.578	1.484	1.501	1.188	1.399	1.479	1.167
LTE Band 66_Ant 5	0.434	0.439	1.612	1.480	1.480	1.523	1.590	1.572	1.512	1.265	1.448	1.563	1.605	1.511	1.528	1.215	1.426	1.506	1.194
FR1 n41_Ant 5	0.363	0.439	1.541	1.409	1.409	1.452	1.519	1.501	1.441	1.194	1.377	1.492	1.534	1.440	1.457	1.144	1.355	1.435	1.123
FR1 n48_Ant 5	0.428	0.439	1.606	1.474	1.474	1.517	1.584	1.566	1.506	1.259	1.442	1.557	1.599	1.505	1.522	1.209	1.420	1.500	1.188
FR1 n77_Ant 5	0.445	0.439	1.623	1.491	1.491	1.534	1.601	1.583	1.523	1.276	1.459	1.574	1.616	1.522	1.539	1.226	1.437	1.517	1.205

Hybrid 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				
Max WWAN Ant 2	0.739	-61.4	-62.1	-207.0	105.7	1.62	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3	0.884	-64.4	43.6	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 22>

SAR summation (blue colored) for each band of antenna 2,4,5

Exposure Position	WWAN SAR	WLAN2.4GHz z_Ant 4	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right Side	1g SAR (W/kg)	0.686	0.691	0.618	0.826	0.847	0.569	0.823	0.810	0.585	0.744	0.791	0.448	0.842	0.716	0.637	0.703	0.811	
LTE Band 2_Ant 5	0.672	0.080	1.438	1.443	1.370	1.578	1.599	1.321	1.575	1.562	1.337	1.496	1.543	1.200	1.594	1.468	1.389	1.455	1.563
LTE Band 66_Ant 5	0.686	0.080	1.452	1.457	1.384	1.592	1.613	1.335	1.589	1.576	1.351	1.510	1.557	1.214	1.608	1.482	1.403	1.469	1.577
FR1 n41_Ant 5	0.130	0.080	0.896	0.901	0.828	1.036	1.057	0.779	1.033	1.020	0.795	0.954	1.001	0.658	1.052	0.926	0.847	0.913	1.021
FR1 n48_Ant 5	0.226	0.080	0.992	0.997	0.924	1.132	1.153	0.875	1.129	1.116	0.891	1.050	1.097	0.754	1.148	1.022	0.943	1.009	1.117
FR1 n77_Ant 5	0.309	0.080	1.075	1.080	1.007	1.215	1.236	0.958	1.212	1.199	0.974	1.133	1.180	0.837	1.231	1.105	1.026	1.092	1.200

Hybrid 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				
Max WWAN Ant 2	0.847	-27.7	49.5	-207.0	91.9	1.61	0.02	Not required
Max WWAN Ant 5 + WLAN2.4GHz Ant 4	0.766	-27.6	-42.4	-207.0				

<Case 23>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right Side	1g SAR (W/kg)	0.686	0.691	0.618	0.826	0.847	0.569	0.823	0.810	0.585	0.744	0.791	0.448	0.842	0.716	0.637	0.703	0.811	
LTE Band 2_Ant 5	0.672	0.115	1.473	1.478	1.405	1.613	1.634	1.356	1.610	1.597	1.372	1.531	1.578	1.235	1.629	1.503	1.424	1.490	1.598
LTE Band 66_Ant 5	0.686	0.115	1.487	1.492	1.419	1.627	1.648	1.370	1.624	1.611	1.386	1.545	1.592	1.249	1.643	1.517	1.438	1.504	1.612
FR1 n41_Ant 5	0.130	0.115	0.931	0.936	0.863	1.071	1.092	0.814	1.068	1.055	0.830	0.989	1.036	0.693	1.087	0.961	0.882	0.948	1.056
FR1 n48_Ant 5	0.226	0.115	1.027	1.032	0.959	1.167	1.188	0.910	1.164	1.151	0.926	1.085	1.132	0.789	1.183	1.057	0.978	1.044	1.152
FR1 n77_Ant 5	0.309	0.115	1.110	1.115	1.042	1.250	1.271	0.993	1.247	1.234	1.009	1.168	1.215	0.872	1.266	1.140	1.061	1.127	1.235

Hybrid 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				
Max WWAN Ant 2	0.847	-22.7	31.5	-207.0	73.0	1.65	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3	0.801	-25.8	-41.4	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 24>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)		0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.439	1.594	1.575	1.616
WCDMA II_Ant 2	0.607	0.439	1.462	1.443	1.484
WCDMA IV_Ant 2	0.607	0.439	1.462	1.443	1.484
LTE Band 7_Ant 2	0.650	0.439	1.505	1.486	1.527
LTE Band 25_Ant 2	0.717	0.439	1.572	1.553	1.594
LTE Band 30_Ant 2	0.699	0.439	1.554	1.535	1.576
LTE Band 41_Ant 2	0.639	0.439	1.494	1.475	1.516
LTE Band 48_Ant 2	0.392	0.439	1.247	1.228	1.269
LTE Band 66_Ant 2	0.575	0.439	1.430	1.411	1.452
FR1 n7_Ant 2	0.690	0.439	1.545	1.526	1.567
FR1 n25_Ant 2	0.732	0.439	1.587	1.568	1.609
FR1 n30_Ant 2	0.638	0.439	1.493	1.474	1.515
FR1 n41_Ant 2	0.655	0.439	1.510	1.491	1.532
FR1 n48_Ant 2	0.342	0.439	1.197	1.178	1.219
FR1 n66_Ant 2	0.553	0.439	1.408	1.389	1.430
FR1 n70_Ant 2	0.633	0.439	1.488	1.469	1.510
FR1 n77_Ant 2	0.321	0.439	1.176	1.157	1.198

Hybrid 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				
Max WWAN Ant 6	0.438	12.0	-42.0	-207.0	75.8	1.62	0.03	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 3+4	1.178	-60.4	-64.6	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 25>

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

Exposure	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front		1g SAR (W/kg)		0.493	0.567	0.513	0.520	0.610	0.596	0.502	0.374	0.497	0.515	0.650	0.462	0.569	0.383	0.479	0.547	0.287
GSM850_Ant 0	0.429	0.180	0.292	1.394	1.468	1.414	1.421	1.511	1.497	1.403	1.275	1.398	1.416	1.551	1.363	1.470	1.284	1.380	1.448	1.188
GSM1900_Ant 0	0.304	0.180	0.292	1.269	1.343	1.289	1.296	1.386	1.372	1.278	1.150	1.273	1.291	1.426	1.238	1.345	1.159	1.255	1.323	1.063
WCDMA II_Ant 0	0.232	0.180	0.292	1.197	1.271	1.217	1.224	1.314	1.300	1.206	1.078	1.201	1.219	1.354	1.166	1.273	1.087	1.183	1.251	0.991
WCDMA IV_Ant 0	0.391	0.180	0.292	1.356	1.430	1.376	1.383	1.473	1.459	1.365	1.237	1.360	1.378	1.513	1.325	1.432	1.246	1.342	1.410	1.150
WCDMA V_Ant 0	0.447	0.180	0.292	1.412	1.486	1.432	1.439	1.529	1.515	1.421	1.293	1.416	1.434	1.569	1.381	1.488	1.302	1.398	1.466	1.206
LTE Band 7_Ant 0	0.406	0.180	0.292	1.371	1.445	1.391	1.398	1.488	1.474	1.380	1.252	1.375	1.393	1.528	1.340	1.447	1.261	1.357	1.425	1.165
LTE Band 12_Ant 0	0.332	0.180	0.292	1.297	1.371	1.317	1.324	1.414	1.400	1.306	1.178	1.301	1.319	1.454	1.266	1.373	1.187	1.283	1.351	1.091
LTE Band 13_Ant 0	0.460	0.180	0.292	1.425	1.499	1.445	1.452	1.542	1.528	1.434	1.306	1.429	1.447	1.582	1.394	1.501	1.315	1.411	1.479	1.219
LTE Band 14_Ant 0	0.453	0.180	0.292	1.418	1.492	1.438	1.445	1.535	1.521	1.427	1.299	1.422	1.440	1.575	1.387	1.494	1.308	1.404	1.472	1.212
LTE Band 25_Ant 0	0.320	0.180	0.292	1.285	1.359	1.305	1.312	1.402	1.388	1.294	1.166	1.289	1.307	1.442	1.254	1.361	1.175	1.271	1.339	1.079
LTE Band 26_Ant 0	0.403	0.180	0.292	1.368	1.442	1.388	1.395	1.485	1.471	1.377	1.249	1.372	1.390	1.525	1.337	1.444	1.258	1.354	1.422	1.162
LTE Band 30_Ant 0	0.490	0.180	0.292	1.455	1.529	1.475	1.482	1.572	1.558	1.464	1.336	1.459	1.477	1.612	1.424	1.531	1.345	1.441	1.509	1.249
LTE Band 41_Ant 0	0.392	0.180	0.292	1.357	1.431	1.377	1.384	1.474	1.460	1.366	1.238	1.361	1.379	1.514	1.326	1.433	1.247	1.343	1.411	1.151
LTE Band 66_Ant 0	0.402	0.180	0.292	1.367	1.441	1.387	1.394	1.484	1.470	1.376	1.248	1.371	1.389	1.524	1.336	1.443	1.257	1.353	1.421	1.161
LTE Band 71_Ant 0	0.332	0.180	0.292	1.297	1.371	1.317	1.324	1.414	1.400	1.306	1.178	1.301	1.319	1.454	1.266	1.373	1.187	1.283	1.351	1.091
FR1 n7_Ant 0	0.451	0.180	0.292	1.416	1.490	1.436	1.443	1.533	1.519	1.425	1.297	1.420	1.438	1.573	1.385	1.492	1.306	1.402	1.470	1.210
FR1 n12_Ant 0	0.323	0.180	0.292	1.288	1.362	1.308	1.315	1.405	1.391	1.297	1.169	1.292	1.310	1.445	1.257	1.364	1.178	1.274	1.342	1.082
FR1 n14_Ant 0	0.438	0.180	0.292	1.403	1.477	1.423	1.430	1.520	1.506	1.412	1.284	1.407	1.425	1.560	1.372	1.479	1.293	1.389	1.457	1.197
FR1 n25_Ant 0	0.302	0.180	0.292	1.267	1.341	1.287	1.294	1.384	1.370	1.276	1.148	1.271	1.289	1.424	1.236	1.343	1.157	1.253	1.321	1.061
FR1 n26_Ant 0	0.406	0.180	0.292	1.371	1.445	1.391	1.398	1.488	1.474	1.380	1.252	1.375	1.393	1.528	1.340	1.447	1.261	1.357	1.425	1.165
FR1 n30_Ant 0	0.421	0.180	0.292	1.386	1.460	1.406	1.413	1.503	1.489	1.395	1.267	1.390	1.408	1.543	1.355	1.462	1.276	1.372	1.440	1.180
FR1 n41_Ant 0	0.440	0.180	0.292	1.405	1.479	1.425	1.432	1.522	1.508	1.414	1.286	1.409	1.427	1.562	1.374	1.481	1.295	1.391	1.459	1.199
FR1 n66_Ant 0	0.266	0.180	0.292	1.231	1.305	1.251	1.258	1.348	1.334	1.240	1.112	1.235	1.253	1.388	1.200	1.307	1.121	1.217	1.285	1.025
FR1 n70_Ant 0	0.412	0.180	0.292	1.377	1.451	1.397	1.404	1.494	1.480	1.386	1.258	1.381	1.399	1.534	1.346	1.453	1.267	1.363	1.431	1.171
FR1 n71_Ant 0	0.346	0.180	0.292	1.311	1.385	1.331	1.338	1.428	1.414	1.320	1.192	1.315	1.333	1.468	1.280	1.387	1.201	1.297	1.365	1.105

Hybrid 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				
Max WWAN Ant 2	0.650	7.9	-71.6	-207.0	55.0	1.61	0.04	Not required
Max WWAN Ant 0 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	0.962	-46.5	-63.5	-207.0				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 26>

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

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back		1g SAR (W/kg)		0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
GSM850_Ant 0	0.446	0.201	0.427	1.813	1.681	1.681	1.724	1.791	1.773	1.713	1.466	1.649	1.764	1.806	1.712	1.729	1.416	1.627	1.707	1.395
GSM1900_Ant 0	0.450	0.201	0.427	1.817	1.685	1.685	1.728	1.795	1.777	1.717	1.470	1.653	1.768	1.810	1.716	1.733	1.420	1.631	1.711	1.399
WCDMA II_Ant 0	0.412	0.201	0.427	1.779	1.647	1.647	1.690	1.757	1.739	1.679	1.432	1.615	1.730	1.772	1.678	1.695	1.382	1.593	1.673	1.361
WCDMA IV_Ant 0	0.451	0.201	0.427	1.818	1.686	1.686	1.729	1.796	1.778	1.718	1.471	1.654	1.769	1.811	1.717	1.734	1.421	1.632	1.712	1.400
WCDMA V_Ant 0	0.454	0.201	0.427	1.821	1.689	1.689	1.732	1.799	1.781	1.721	1.474	1.657	1.772	1.814	1.720	1.737	1.424	1.635	1.715	1.403
LTE Band 7_Ant 0	0.386	0.201	0.427	1.753	1.621	1.621	1.664	1.731	1.713	1.653	1.406	1.589	1.704	1.746	1.652	1.669	1.356	1.567	1.647	1.335
LTE Band 12_Ant 0	0.367	0.201	0.427	1.734	1.602	1.602	1.645	1.712	1.694	1.634	1.387	1.570	1.685	1.727	1.633	1.650	1.337	1.548	1.628	1.316
LTE Band 13_Ant 0	0.448	0.201	0.427	1.815	1.683	1.683	1.726	1.793	1.775	1.715	1.468	1.651	1.766	1.808	1.714	1.731	1.418	1.629	1.709	1.397
LTE Band 14_Ant 0	0.406	0.201	0.427	1.773	1.641	1.641	1.684	1.751	1.733	1.673	1.426	1.609	1.724	1.766	1.672	1.689	1.376	1.587	1.667	1.355
LTE Band 25_Ant 0	0.456	0.201	0.427	1.823	1.691	1.691	1.734	1.801	1.783	1.723	1.476	1.659	1.774	1.816	1.722	1.739	1.426	1.637	1.717	1.405
LTE Band 26_Ant 0	0.421	0.201	0.427	1.788	1.656	1.656	1.699	1.766	1.748	1.688	1.441	1.624	1.739	1.781	1.687	1.704	1.391	1.602	1.682	1.370
LTE Band 30_Ant 0	0.457	0.201	0.427	1.824	1.692	1.692	1.735	1.802	1.784	1.724	1.477	1.660	1.775	1.817	1.723	1.740	1.427	1.638	1.718	1.406
LTE Band 41_Ant 0	0.453	0.201	0.427	1.820	1.688	1.688	1.731	1.798	1.780	1.720	1.473	1.656	1.771	1.813	1.719	1.736	1.423	1.634	1.714	1.402
LTE Band 66_Ant 0	0.453	0.201	0.427	1.820	1.688	1.688	1.731	1.798	1.780	1.720	1.473	1.656	1.771	1.813	1.719	1.736	1.423	1.634	1.714	1.402
LTE Band 71_Ant 0	0.410	0.201	0.427	1.777	1.645	1.645	1.688	1.755	1.737	1.677	1.430	1.613	1.728	1.770	1.676	1.693	1.380	1.591	1.671	1.359
FR1 n7_Ant 0	0.418	0.201	0.427	1.785	1.653	1.653	1.696	1.763	1.745	1.685	1.438	1.621	1.736	1.778	1.684	1.701	1.388	1.599	1.679	1.367
FR1 n12_Ant 0	0.339	0.201	0.427	1.706	1.574	1.574	1.617	1.684	1.666	1.606	1.359	1.542	1.657	1.699	1.605	1.622	1.309	1.520	1.600	1.288
FR1 n14_Ant 0	0.457	0.201	0.427	1.824	1.692	1.692	1.735	1.802	1.784	1.724	1.477	1.660	1.775	1.817	1.723	1.740	1.427	1.638	1.718	1.406
FR1 n25_Ant 0	0.458	0.201	0.427	1.825	1.693	1.693	1.736	1.803	1.785	1.725	1.478	1.661	1.776	1.818	1.724	1.741	1.428	1.639	1.719	1.407
FR1 n26_Ant 0	0.436	0.201	0.427	1.803	1.671	1.671	1.714	1.781	1.763	1.703	1.456	1.639	1.754	1.796	1.702	1.719	1.406	1.617	1.697	1.385
FR1 n30_Ant 0	0.337	0.201	0.427	1.704	1.572	1.572	1.615	1.682	1.664	1.604	1.357	1.540	1.655	1.697	1.603	1.620	1.307	1.518	1.598	1.286
FR1 n41_Ant 0	0.445	0.201	0.427	1.812	1.680	1.680	1.723	1.790	1.772	1.712	1.465	1.648	1.763	1.805	1.711	1.728	1.415	1.626	1.706	1.394
FR1 n66_Ant 0	0.363	0.201	0.427	1.730	1.598	1.598	1.641	1.708	1.690	1.630	1.383	1.566	1.681	1.723	1.629	1.646	1.333	1.544	1.624	1.312
FR1 n70_Ant 0	0.457	0.201	0.427	1.824	1.692	1.692	1.735	1.802	1.784	1.724	1.477	1.660	1.775	1.817	1.723	1.740	1.427	1.638	1.718	1.406
FR1 n71_Ant 0	0.389	0.201	0.427	1.756	1.624	1.624	1.667	1.734	1.716	1.656	1.409	1.592	1.707	1.749	1.655	1.672	1.359	1.570	1.650	1.338

Hybrid 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				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-55.0	-73.5	-207.0				
Max WWAN Ant 0	0.458	-7.2	-75.4	-207.0	121.1	0.66	0.00	Not required
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	93.3	0.89	0.01	Not required
WLAN5/6GHz Ant 4	0.427	-24.3	16.9	-207.0				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	124.1	0.94	0.01	Not required
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	82.4	1.17	0.02	Not required
WLAN5/6GHz Ant 4	0.427	-24.3	16.9	-207.0				
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0	44.0	0.63	0.01	Not required
WLAN5/6GHz Ant 4	0.427	-24.3	16.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 27>

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

Exposure Position	WWAN SAR	WLANS/6GH z_Ant 4	Bluetooth Ant 4	GSM1900 _Ant 2	WCDMA II,_Ant 2	WCDMA IV,_Ant 2	LTE Band 7,_Ant 2	LTE Band 25,_Ant 2	LTE Band 30,_Ant 2	LTE Band 41,_Ant 2	LTE Band 48,_Ant 2	LTE Band 66,_Ant 2	FR1 n7,_Ant 2	FR1 n25,_Ant 2	FR1 n30,_Ant 2	FR1 n41,_Ant 2	FR1 n48,_Ant 2	FR1 n66,_Ant 2	FR1 n70,_Ant 2	FR1 n77,_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
GSM850_Ant 0	0.446	0.427	0.064	1.676	1.544	1.544	1.587	1.654	1.636	1.576	1.329	1.512	1.627	1.669	1.575	1.592	1.279	1.490	1.570	1.258
GSM1900_Ant 0	0.450	0.427	0.064	1.680	1.548	1.548	1.591	1.658	1.640	1.580	1.333	1.516	1.631	1.673	1.579	1.596	1.283	1.494	1.574	1.262
WCDMA II,_Ant 0	0.412	0.427	0.064	1.642	1.510	1.510	1.553	1.620	1.602	1.542	1.295	1.478	1.593	1.635	1.541	1.558	1.245	1.456	1.536	1.224
WCDMA IV,_Ant 0	0.451	0.427	0.064	1.681	1.549	1.549	1.592	1.659	1.641	1.581	1.334	1.517	1.632	1.674	1.580	1.597	1.284	1.495	1.575	1.263
WCDMA V,_Ant 0	0.454	0.427	0.064	1.684	1.552	1.552	1.595	1.662	1.644	1.584	1.337	1.520	1.635	1.677	1.583	1.600	1.287	1.498	1.578	1.266
LTE Band 7,_Ant 0	0.386	0.427	0.064	1.616	1.484	1.484	1.527	1.594	1.576	1.516	1.269	1.452	1.567	1.609	1.515	1.532	1.219	1.430	1.510	1.198
LTE Band 12,_Ant 0	0.367	0.427	0.064	1.597	1.465	1.465	1.508	1.575	1.557	1.497	1.250	1.433	1.548	1.590	1.496	1.513	1.200	1.411	1.491	1.179
LTE Band 13,_Ant 0	0.448	0.427	0.064	1.678	1.546	1.546	1.589	1.656	1.638	1.578	1.331	1.514	1.629	1.671	1.577	1.594	1.281	1.492	1.572	1.260
LTE Band 14,_Ant 0	0.406	0.427	0.064	1.636	1.504	1.504	1.547	1.614	1.596	1.536	1.289	1.472	1.587	1.629	1.535	1.552	1.239	1.450	1.530	1.218
LTE Band 25,_Ant 0	0.456	0.427	0.064	1.686	1.554	1.554	1.597	1.664	1.646	1.586	1.339	1.522	1.637	1.679	1.585	1.602	1.289	1.500	1.580	1.268
LTE Band 26,_Ant 0	0.421	0.427	0.064	1.651	1.519	1.519	1.562	1.629	1.611	1.551	1.304	1.487	1.602	1.644	1.550	1.567	1.254	1.465	1.545	1.233
LTE Band 30,_Ant 0	0.457	0.427	0.064	1.687	1.555	1.555	1.598	1.665	1.647	1.587	1.340	1.523	1.638	1.680	1.586	1.603	1.290	1.501	1.581	1.269
LTE Band 41,_Ant 0	0.453	0.427	0.064	1.683	1.551	1.551	1.594	1.661	1.643	1.583	1.336	1.519	1.634	1.676	1.582	1.599	1.286	1.497	1.577	1.265
LTE Band 66,_Ant 0	0.453	0.427	0.064	1.683	1.551	1.551	1.594	1.661	1.643	1.583	1.336	1.519	1.634	1.676	1.582	1.599	1.286	1.497	1.577	1.265
LTE Band 71,_Ant 0	0.410	0.427	0.064	1.640	1.508	1.508	1.551	1.618	1.600	1.540	1.293	1.476	1.591	1.633	1.539	1.556	1.243	1.454	1.534	1.222
FR1 n7,_Ant 0	0.418	0.427	0.064	1.648	1.516	1.516	1.559	1.626	1.608	1.548	1.301	1.484	1.599	1.641	1.547	1.564	1.251	1.462	1.542	1.230
FR1 n12,_Ant 0	0.339	0.427	0.064	1.569	1.437	1.437	1.480	1.547	1.529	1.469	1.222	1.405	1.520	1.562	1.468	1.485	1.172	1.383	1.463	1.151
FR1 n14,_Ant 0	0.457	0.427	0.064	1.687	1.555	1.555	1.598	1.665	1.647	1.587	1.340	1.523	1.638	1.680	1.586	1.603	1.290	1.501	1.581	1.269
FR1 n25,_Ant 0	0.458	0.427	0.064	1.688	1.556	1.556	1.599	1.666	1.648	1.588	1.341	1.524	1.639	1.681	1.587	1.604	1.291	1.502	1.582	1.270
FR1 n26,_Ant 0	0.436	0.427	0.064	1.666	1.534	1.534	1.577	1.644	1.626	1.566	1.319	1.502	1.617	1.659	1.565	1.582	1.269	1.480	1.560	1.248
FR1 n30,_Ant 0	0.337	0.427	0.064	1.567	1.435	1.435	1.478	1.545	1.527	1.467	1.220	1.403	1.518	1.560	1.466	1.483	1.170	1.381	1.461	1.149
FR1 n41,_Ant 0	0.445	0.427	0.064	1.675	1.543	1.543	1.586	1.653	1.635	1.575	1.328	1.511	1.626	1.668	1.574	1.591	1.278	1.489	1.569	1.257
FR1 n66,_Ant 0	0.363	0.427	0.064	1.593	1.461	1.461	1.504	1.571	1.553	1.493	1.246	1.429	1.544	1.586	1.492	1.509	1.196	1.407	1.487	1.175
FR1 n70,_Ant 0	0.457	0.427	0.064	1.687	1.555	1.555	1.598	1.665	1.647	1.587	1.340	1.523	1.638	1.680	1.586	1.603	1.290	1.501	1.581	1.269
FR1 n71,_Ant 0	0.389	0.427	0.064	1.619	1.487	1.487	1.530	1.597	1.579	1.519	1.272	1.455	1.570	1.612	1.518	1.535	1.222	1.433	1.513	1.201

Hybrid 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				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-55.0	-73.5	-207.0				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	157.6	0.52	0.00	Not required
Bluetooth Ant 4	0.064	-58.5	75.0	-207.0				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	93.3	0.89	0.01	Not required
WLAN5/6GHz Ant 4	0.427	-24.3	16.9	-207.0				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	131.0	0.80	0.01	Not required
Bluetooth Ant 4	0.064	-58.5	75.0	-207.0				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	82.4	1.17	0.02	Not required
WLAN5/6GHz Ant 4	0.427	-24.3	16.9	-207.0				
Bluetooth Ant 4	0.064	-58.5	75.0	-207.0	67.4	0.49	0.01	Not required
WLAN5/6GHz Ant 4	0.427	-24.3	16.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 28>

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 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 65_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321	
GSM850_Ant 0	0.446	0.427	0.165	1.777	1.645	1.645	1.688	1.755	1.737	1.677	1.430	1.613	1.728	1.770	1.676	1.693	1.380	1.591	1.671	1.359
GSM1900_Ant 0	0.450	0.427	0.165	1.781	1.649	1.649	1.692	1.759	1.741	1.681	1.434	1.617	1.732	1.774	1.680	1.697	1.384	1.595	1.675	1.363
WCDMA II_Ant 0	0.412	0.427	0.165	1.743	1.611	1.611	1.654	1.721	1.703	1.643	1.396	1.579	1.694	1.736	1.642	1.659	1.346	1.557	1.637	1.325
WCDMA IV_Ant 0	0.451	0.427	0.165	1.782	1.650	1.650	1.693	1.760	1.742	1.682	1.435	1.618	1.733	1.775	1.681	1.698	1.385	1.596	1.676	1.364
WCDMA V_Ant 0	0.454	0.427	0.165	1.785	1.653	1.653	1.696	1.763	1.745	1.685	1.438	1.621	1.736	1.776	1.684	1.701	1.388	1.599	1.679	1.367
LTE Band 7_Ant 0	0.386	0.427	0.165	1.717	1.585	1.585	1.628	1.695	1.677	1.617	1.370	1.553	1.668	1.710	1.616	1.633	1.320	1.531	1.611	1.299
LTE Band 12_Ant 0	0.367	0.427	0.165	1.698	1.566	1.566	1.609	1.676	1.658	1.598	1.351	1.534	1.649	1.691	1.597	1.614	1.301	1.512	1.592	1.280
LTE Band 13_Ant 0	0.448	0.427	0.165	1.779	1.647	1.647	1.690	1.757	1.739	1.679	1.432	1.615	1.730	1.772	1.678	1.695	1.382	1.593	1.673	1.361
LTE Band 14_Ant 0	0.406	0.427	0.165	1.737	1.605	1.605	1.648	1.715	1.697	1.637	1.390	1.573	1.688	1.730	1.636	1.653	1.340	1.551	1.631	1.319
LTE Band 25_Ant 0	0.456	0.427	0.165	1.787	1.655	1.655	1.698	1.765	1.747	1.687	1.440	1.623	1.738	1.780	1.686	1.703	1.390	1.601	1.681	1.369
LTE Band 26_Ant 0	0.421	0.427	0.165	1.752	1.620	1.620	1.663	1.730	1.712	1.652	1.405	1.588	1.703	1.745	1.651	1.668	1.355	1.566	1.646	1.334
LTE Band 30_Ant 0	0.457	0.427	0.165	1.788	1.656	1.656	1.699	1.766	1.748	1.688	1.441	1.624	1.739	1.781	1.687	1.704	1.391	1.602	1.682	1.370
LTE Band 41_Ant 0	0.453	0.427	0.165	1.784	1.652	1.652	1.695	1.762	1.744	1.684	1.437	1.620	1.735	1.777	1.683	1.700	1.387	1.598	1.678	1.366
LTE Band 66_Ant 0	0.453	0.427	0.165	1.784	1.652	1.652	1.695	1.762	1.744	1.684	1.437	1.620	1.735	1.777	1.683	1.700	1.387	1.598	1.678	1.366
LTE Band 71_Ant 0	0.410	0.427	0.165	1.741	1.609	1.609	1.652	1.719	1.701	1.641	1.394	1.577	1.692	1.734	1.640	1.657	1.344	1.555	1.635	1.323
FR1 n7_Ant 0	0.418	0.427	0.165	1.749	1.617	1.617	1.660	1.727	1.709	1.649	1.402	1.585	1.700	1.742	1.648	1.665	1.352	1.563	1.643	1.331
FR1 n12_Ant 0	0.339	0.427	0.165	1.670	1.538	1.538	1.581	1.648	1.630	1.570	1.323	1.506	1.621	1.663	1.569	1.586	1.273	1.484	1.564	1.252
FR1 n14_Ant 0	0.457	0.427	0.165	1.788	1.656	1.656	1.699	1.766	1.748	1.688	1.441	1.624	1.739	1.781	1.687	1.704	1.391	1.602	1.682	1.370
FR1 n25_Ant 0	0.458	0.427	0.165	1.789	1.657	1.657	1.700	1.767	1.749	1.689	1.442	1.625	1.740	1.782	1.688	1.705	1.392	1.603	1.683	1.371
FR1 n26_Ant 0	0.436	0.427	0.165	1.767	1.635	1.635	1.678	1.745	1.727	1.667	1.420	1.603	1.718	1.760	1.666	1.683	1.370	1.581	1.661	1.349
FR1 n30_Ant 0	0.337	0.427	0.165	1.668	1.536	1.536	1.579	1.646	1.628	1.568	1.321	1.504	1.619	1.661	1.567	1.584	1.271	1.482	1.562	1.250
FR1 n41_Ant 0	0.445	0.427	0.165	1.776	1.644	1.644	1.687	1.754	1.736	1.676	1.429	1.612	1.727	1.769	1.675	1.692	1.379	1.590	1.670	1.358
FR1 n66_Ant 0	0.363	0.427	0.165	1.694	1.562	1.562	1.605	1.672	1.654	1.594	1.347	1.530	1.645	1.687	1.593	1.610	1.297	1.508	1.588	1.276
FR1 n70_Ant 0	0.457	0.427	0.165	1.788	1.656	1.656	1.699	1.766	1.748	1.688	1.441	1.624	1.739	1.781	1.687	1.704	1.391	1.602	1.682	1.370
FR1 n71_Ant 0	0.389	0.427	0.165	1.720	1.588	1.588	1.631	1.698	1.680	1.620	1.373	1.556	1.671	1.713	1.619	1.636	1.323	1.534	1.614	1.302

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				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-55.0	-73.5	-207.0				
Max WWAN Ant 0	0.458	-5.0	-75.2	-207.0	118.8	0.62	0.00	Not required
Bluetooth Ant 3	0.165	11.0	42.5	-207.0				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	93.3	0.89	0.01	Not required
WLAN5/6GHz Ant 4	0.427	-24.3	16.9	-207.0				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	123.1	0.90	0.01	Not required
Bluetooth Ant 3	0.165	11.0	42.5	-207.0				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	82.4	1.17	0.02	Not required
WLAN5/6GHz Ant 4	0.427	-24.3	16.9	-207.0				
Bluetooth Ant 3	0.165	11.0	42.5	-207.0	43.6	0.59	0.01	Not required
WLAN5/6GHz Ant 4	0.427	-24.3	16.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 29>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back		1g SAR (W/kg)		0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
GSM850_Ant 1	0.427	0.201	0.427	1.794	1.662	1.662	1.705	1.772	1.754	1.694	1.447	1.630	1.745	1.787	1.693	1.710	1.397	1.608	1.688	1.376
WCDMA V_Ant 1	0.355	0.201	0.427	1.722	1.590	1.590	1.633	1.700	1.682	1.622	1.375	1.558	1.673	1.715	1.621	1.638	1.325	1.536	1.616	1.304
LTE Band 2_Ant 1	0.409	0.201	0.427	1.776	1.644	1.644	1.687	1.754	1.736	1.676	1.429	1.612	1.727	1.769	1.675	1.692	1.379	1.590	1.670	1.358
LTE Band 12_Ant 1	0.447	0.201	0.427	1.814	1.682	1.682	1.725	1.792	1.774	1.714	1.467	1.650	1.765	1.807	1.713	1.730	1.417	1.628	1.708	1.396
LTE Band 13_Ant 1	0.385	0.201	0.427	1.752	1.620	1.620	1.663	1.730	1.712	1.652	1.405	1.588	1.703	1.745	1.651	1.668	1.355	1.566	1.646	1.334
LTE Band 14_Ant 1	0.442	0.201	0.427	1.809	1.677	1.677	1.720	1.787	1.769	1.709	1.462	1.645	1.760	1.802	1.708	1.725	1.412	1.623	1.703	1.391
LTE Band 28_Ant 1	0.385	0.201	0.427	1.752	1.620	1.620	1.663	1.730	1.712	1.652	1.405	1.588	1.703	1.745	1.651	1.668	1.355	1.566	1.646	1.334
LTE Band 66_Ant 1	0.429	0.201	0.427	1.796	1.664	1.664	1.707	1.774	1.756	1.696	1.449	1.632	1.747	1.789	1.695	1.712	1.399	1.610	1.690	1.378
LTE Band 71_Ant 1	0.444	0.201	0.427	1.811	1.679	1.679	1.722	1.789	1.771	1.711	1.464	1.647	1.762	1.804	1.710	1.727	1.414	1.625	1.705	1.393
FR1 n12_Ant 1	0.373	0.201	0.427	1.740	1.608	1.608	1.651	1.718	1.700	1.640	1.393	1.576	1.691	1.733	1.639	1.656	1.343	1.554	1.634	1.322
FR1 n14_Ant 1	0.447	0.201	0.427	1.814	1.682	1.682	1.725	1.792	1.774	1.714	1.467	1.650	1.765	1.807	1.713	1.730	1.417	1.628	1.708	1.396
FR1 n26_Ant 1	0.406	0.201	0.427	1.773	1.641	1.641	1.684	1.751	1.733	1.673	1.426	1.609	1.724	1.766	1.672	1.689	1.376	1.587	1.667	1.355
FR1 n41_Ant 1	0.444	0.201	0.427	1.811	1.679	1.679	1.722	1.789	1.771	1.711	1.464	1.647	1.762	1.804	1.710	1.727	1.414	1.625	1.705	1.393
FR1 n48_Ant 1	0.459	0.201	0.427	1.826	1.694	1.694	1.737	1.804	1.786	1.726	1.479	1.662	1.777	1.819	1.725	1.742	1.429	1.640	1.720	1.408
FR1 n71_Ant 1	0.393	0.201	0.427	1.760	1.628	1.628	1.671	1.738	1.720	1.660	1.413	1.596	1.711	1.753	1.659	1.676	1.363	1.574	1.654	1.342
FR1 n77_Ant 1	0.446	0.201	0.427	1.813	1.681	1.681	1.724	1.791	1.773	1.713	1.466	1.649	1.764	1.806	1.712	1.729	1.416	1.627	1.707	1.395

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				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	82.4	1.83	0.03	Not required
Max WWAN Ant 1 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.087	-24.3	16.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 30>

SAR summation (blue colored) for each band of antenna 1,2,4

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 65_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321	
GSM850_Ant 1	0.427	0.427	0.064	1.657	1.525	1.525	1.568	1.635	1.617	1.557	1.310	1.493	1.608	1.650	1.556	1.573	1.260	1.471	1.551	1.239
WCDMA V_Ant 1	0.355	0.427	0.064	1.585	1.453	1.453	1.496	1.563	1.545	1.485	1.238	1.421	1.536	1.578	1.484	1.501	1.188	1.399	1.479	1.167
LTE Band 2_Ant 1	0.409	0.427	0.064	1.639	1.507	1.507	1.550	1.617	1.599	1.539	1.292	1.475	1.590	1.632	1.538	1.555	1.242	1.453	1.533	1.221
LTE Band 12_Ant 1	0.447	0.427	0.064	1.677	1.545	1.545	1.588	1.655	1.637	1.577	1.330	1.513	1.628	1.670	1.576	1.593	1.280	1.491	1.571	1.259
LTE Band 13_Ant 1	0.385	0.427	0.064	1.615	1.483	1.483	1.526	1.593	1.575	1.515	1.268	1.451	1.566	1.608	1.514	1.531	1.218	1.429	1.509	1.197
LTE Band 14_Ant 1	0.442	0.427	0.064	1.672	1.540	1.540	1.583	1.650	1.632	1.572	1.325	1.508	1.623	1.665	1.571	1.588	1.275	1.486	1.566	1.254
LTE Band 26_Ant 1	0.385	0.427	0.064	1.615	1.483	1.483	1.526	1.593	1.575	1.515	1.268	1.451	1.566	1.608	1.514	1.531	1.218	1.429	1.509	1.197
LTE Band 66_Ant 1	0.429	0.427	0.064	1.659	1.527	1.527	1.570	1.637	1.619	1.559	1.312	1.495	1.610	1.652	1.558	1.575	1.262	1.473	1.553	1.241
LTE Band 71_Ant 1	0.444	0.427	0.064	1.674	1.542	1.542	1.585	1.652	1.634	1.574	1.327	1.510	1.625	1.667	1.573	1.590	1.277	1.488	1.568	1.256
FR1 n12_Ant 1	0.373	0.427	0.064	1.603	1.471	1.471	1.514	1.581	1.563	1.503	1.256	1.439	1.554	1.596	1.502	1.519	1.206	1.417	1.497	1.185
FR1 n14_Ant 1	0.447	0.427	0.064	1.677	1.545	1.545	1.588	1.655	1.637	1.577	1.330	1.513	1.628	1.670	1.576	1.593	1.280	1.491	1.571	1.259
FR1 n26_Ant 1	0.406	0.427	0.064	1.636	1.504	1.504	1.547	1.614	1.596	1.536	1.289	1.472	1.587	1.629	1.535	1.552	1.239	1.450	1.530	1.218
FR1 n41_Ant 1	0.444	0.427	0.064	1.674	1.542	1.542	1.585	1.652	1.634	1.574	1.327	1.510	1.625	1.667	1.573	1.590	1.277	1.488	1.568	1.256
FR1 n48_Ant 1	0.459	0.427	0.064	1.689	1.557	1.557	1.600	1.667	1.649	1.589	1.342	1.525	1.640	1.682	1.588	1.605	1.292	1.503	1.583	1.271
FR1 n71_Ant 1	0.393	0.427	0.064	1.623	1.491	1.491	1.534	1.601	1.583	1.523	1.276	1.459	1.574	1.616	1.522	1.539	1.226	1.437	1.517	1.205
FR1 n77_Ant 1	0.446	0.427	0.064	1.676	1.544	1.544	1.587	1.654	1.636	1.576	1.329	1.512	1.627	1.669	1.575	1.592	1.279	1.490	1.570	1.258

Hybrid 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				
Max WWAN Ant 2	0.739	-61.4	-62.1	-207.0	87.3	1.69	0.03	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	0.950	-24.3	16.9	-207.0				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 31>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321	
GSM850_Ant 1	0.427	0.427	0.165	1.758	1.626	1.626	1.669	1.736	1.718	1.658	1.411	1.594	1.709	1.751	1.657	1.674	1.361	1.572	1.652	1.340
WCDMA V_Ant 1	0.355	0.427	0.165	1.686	1.554	1.554	1.597	1.664	1.646	1.586	1.339	1.522	1.637	1.679	1.585	1.602	1.289	1.500	1.580	1.268
LTE Band 2_Ant 1	0.409	0.427	0.165	1.740	1.608	1.608	1.651	1.718	1.700	1.640	1.393	1.576	1.691	1.733	1.639	1.656	1.343	1.554	1.634	1.322
LTE Band 12_Ant 1	0.447	0.427	0.165	1.778	1.646	1.646	1.689	1.756	1.738	1.678	1.431	1.614	1.729	1.771	1.677	1.694	1.381	1.592	1.672	1.360
LTE Band 13_Ant 1	0.385	0.427	0.165	1.716	1.584	1.584	1.627	1.694	1.676	1.616	1.369	1.552	1.667	1.709	1.615	1.632	1.319	1.530	1.610	1.298
LTE Band 14_Ant 1	0.442	0.427	0.165	1.773	1.641	1.641	1.684	1.751	1.733	1.673	1.426	1.609	1.724	1.766	1.672	1.689	1.376	1.587	1.667	1.355
LTE Band 26_Ant 1	0.385	0.427	0.165	1.716	1.584	1.584	1.627	1.694	1.676	1.616	1.369	1.552	1.667	1.709	1.615	1.632	1.319	1.530	1.610	1.298
LTE Band 66_Ant 1	0.429	0.427	0.165	1.760	1.628	1.628	1.671	1.738	1.720	1.660	1.413	1.596	1.711	1.753	1.659	1.676	1.363	1.574	1.654	1.342
LTE Band 71_Ant 1	0.444	0.427	0.165	1.775	1.643	1.643	1.686	1.753	1.735	1.675	1.428	1.611	1.726	1.768	1.674	1.691	1.378	1.589	1.669	1.357
FR1 n12_Ant 1	0.373	0.427	0.165	1.704	1.572	1.572	1.615	1.682	1.664	1.604	1.357	1.540	1.655	1.697	1.603	1.620	1.307	1.518	1.598	1.286
FR1 n14_Ant 1	0.447	0.427	0.165	1.778	1.646	1.646	1.689	1.756	1.738	1.678	1.431	1.614	1.729	1.771	1.677	1.694	1.381	1.592	1.672	1.360
FR1 n26_Ant 1	0.406	0.427	0.165	1.737	1.605	1.605	1.648	1.715	1.697	1.637	1.390	1.573	1.688	1.730	1.636	1.653	1.340	1.551	1.631	1.319
FR1 n41_Ant 1	0.444	0.427	0.165	1.775	1.643	1.643	1.686	1.753	1.735	1.675	1.428	1.611	1.726	1.768	1.674	1.691	1.378	1.589	1.669	1.357
FR1 n48_Ant 1	0.459	0.427	0.165	1.790	1.658	1.658	1.701	1.768	1.750	1.690	1.443	1.626	1.741	1.783	1.689	1.706	1.393	1.604	1.684	1.372
FR1 n71_Ant 1	0.393	0.427	0.165	1.724	1.592	1.592	1.635	1.702	1.684	1.624	1.377	1.560	1.675	1.717	1.623	1.640	1.327	1.538	1.618	1.306
FR1 n77_Ant 1	0.446	0.427	0.165	1.777	1.645	1.645	1.688	1.755	1.737	1.677	1.430	1.613	1.728	1.770	1.676	1.693	1.380	1.591	1.671	1.359

Hybrid 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				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	82.4	1.79	0.03	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.051	-24.3	16.9	-207.0				

<Case 32>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)			0.493	0.567	0.513	0.520	0.610	0.596	0.502	0.374	0.497	0.515	0.650	0.462	0.569	0.383	0.479	0.547	0.287
LTE Band 2_Ant 5	0.326	0.180	0.292	1.291	1.365	1.311	1.318	1.408	1.394	1.300	1.172	1.295	1.313	1.448	1.260	1.367	1.181	1.277	1.345	1.085
LTE Band 66_Ant 5	0.396	0.180	0.292	1.361	1.435	1.381	1.388	1.478	1.464	1.370	1.242	1.365	1.383	1.518	1.330	1.437	1.251	1.347	1.415	1.155
FR1 n41_Ant 5	0.200	0.180	0.292	1.165	1.239	1.185	1.192	1.282	1.268	1.174	1.046	1.169	1.187	1.322	1.134	1.241	1.055	1.151	1.219	0.959
FR1 n48_Ant 5	0.540	0.180	0.292	1.505	1.579	1.525	1.532	1.622	1.608	1.514	1.386	1.509	1.527	1.662	1.474	1.581	1.395	1.491	1.559	1.299
FR1 n77_Ant 5	0.531	0.180	0.292	1.496	1.570	1.516	1.523	1.613	1.599	1.505	1.377	1.500	1.518	1.653	1.465	1.572	1.386	1.482	1.550	1.290

Hybrid 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				
Max WWAN Ant 2	0.650	9.9	-68.1	-207.0	125.2	1.66	0.02	Not required
Max WWAN Ant 5 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.012	5.0	57.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 33>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)			0.493	0.567	0.513	0.520	0.610	0.596	0.502	0.374	0.497	0.515	0.650	0.462	0.569	0.383	0.479	0.547	0.287
LTE Band 2_Ant 5	0.326	0.292	0.139	1.250	1.324	1.270	1.277	1.367	1.353	1.259	1.131	1.254	1.272	1.407	1.219	1.326	1.140	1.236	1.304	1.044
LTE Band 66_Ant 5	0.396	0.292	0.139	1.320	1.394	1.340	1.347	1.437	1.423	1.329	1.201	1.324	1.342	1.477	1.289	1.396	1.210	1.306	1.374	1.114
FR1 n41_Ant 5	0.200	0.292	0.139	1.124	1.198	1.144	1.151	1.241	1.227	1.133	1.005	1.128	1.146	1.281	1.093	1.200	1.014	1.110	1.178	0.918
FR1 n48_Ant 5	0.540	0.292	0.139	1.464	1.538	1.484	1.491	1.581	1.567	1.473	1.345	1.468	1.486	1.621	1.433	1.540	1.354	1.450	1.518	1.258
FR1 n77_Ant 5	0.531	0.292	0.139	1.455	1.529	1.475	1.482	1.572	1.558	1.464	1.336	1.459	1.477	1.612	1.424	1.531	1.345	1.441	1.509	1.249

Hybrid 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				
Max WWAN Ant 2	0.650	7.9	-71.6	-207.0	128.6	1.62	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	0.971	5.0	57.0	-207.0				

<Case 34>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/4GHz Ant 3	WLANS/6GHz Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
LTE Band 2_Ant 5	0.407	0.201	0.427	1.774	1.642	1.642	1.685	1.752	1.734	1.674	1.427	1.610	1.725	1.767	1.673	1.690	1.377	1.588	1.668	1.356
LTE Band 66_Ant 5	0.434	0.201	0.427	1.801	1.669	1.669	1.712	1.779	1.761	1.701	1.454	1.637	1.752	1.794	1.700	1.717	1.404	1.615	1.695	1.383
FR1 n41_Ant 5	0.363	0.201	0.427	1.730	1.598	1.598	1.641	1.708	1.690	1.630	1.383	1.566	1.681	1.723	1.629	1.646	1.333	1.544	1.624	1.312
FR1 n48_Ant 5	0.428	0.201	0.427	1.795	1.663	1.663	1.706	1.773	1.755	1.695	1.448	1.631	1.746	1.788	1.694	1.711	1.398	1.609	1.689	1.377
FR1 n77_Ant 5	0.445	0.201	0.427	1.812	1.680	1.680	1.723	1.790	1.772	1.712	1.465	1.648	1.763	1.805	1.711	1.728	1.415	1.626	1.706	1.394

Hybrid 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				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	82.4	1.81	0.03	Not required
Max WWAN Ant 5 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.073	-24.3	16.9	-207.0				

<Case 35>

SAR summation (blue colored) for each band of antenna 2,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
LTE Band 2_Ant 5	0.407	0.427	0.064	1.637	1.505	1.505	1.548	1.615	1.597	1.537	1.290	1.473	1.588	1.630	1.536	1.553	1.240	1.451	1.531	1.219
LTE Band 66_Ant 5	0.434	0.427	0.064	1.664	1.532	1.532	1.575	1.642	1.624	1.564	1.317	1.500	1.615	1.657	1.563	1.580	1.267	1.478	1.558	1.246
FR1 n41_Ant 5	0.363	0.427	0.064	1.593	1.461	1.461	1.504	1.571	1.553	1.493	1.246	1.429	1.544	1.586	1.492	1.509	1.196	1.407	1.487	1.175
FR1 n48_Ant 5	0.428	0.427	0.064	1.658	1.526	1.526	1.569	1.636	1.618	1.558	1.311	1.494	1.609	1.651	1.557	1.574	1.261	1.472	1.552	1.240
FR1 n77_Ant 5	0.445	0.427	0.064	1.675	1.543	1.543	1.586	1.653	1.635	1.575	1.328	1.511	1.626	1.668	1.574	1.591	1.278	1.489	1.569	1.257

Hybrid 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				
Max WWAN Ant 2	0.739	-61.4	-62.1	-207.0	87.3	1.68	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	0.936	-24.3	16.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 36>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
LTE Band 2_Ant 5	0.407	0.427	0.165	1.738	1.606	1.606	1.649	1.716	1.698	1.638	1.391	1.574	1.689	1.731	1.637	1.654	1.341	1.552	1.632	1.320
LTE Band 66_Ant 5	0.434	0.427	0.165	1.765	1.633	1.633	1.676	1.743	1.725	1.665	1.418	1.601	1.716	1.758	1.664	1.681	1.368	1.579	1.659	1.347
FR1 n41_Ant 5	0.363	0.427	0.165	1.694	1.562	1.562	1.605	1.672	1.654	1.594	1.347	1.530	1.645	1.687	1.593	1.610	1.297	1.508	1.588	1.276
FR1 n48_Ant 5	0.428	0.427	0.165	1.759	1.627	1.627	1.670	1.737	1.719	1.659	1.412	1.595	1.710	1.752	1.658	1.675	1.362	1.573	1.653	1.341
FR1 n77_Ant 5	0.445	0.427	0.165	1.776	1.644	1.644	1.687	1.754	1.736	1.676	1.429	1.612	1.727	1.769	1.675	1.692	1.379	1.590	1.670	1.358

Hybrid 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				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	82.4	1.78	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.037	-24.3	16.9	-207.0				

<Case 37>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/4GHz Ant 3	WLANS/6GHz Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right Side	1g SAR (W/kg)			0.686	0.691	0.618	0.826	0.847	0.569	0.823	0.810	0.585	0.744	0.791	0.448	0.842	0.716	0.637	0.703	0.811
LTE Band 2_Ant 5	0.672	0.001	0.105	1.464	1.469	1.396	1.604	1.625	1.347	1.601	1.588	1.363	1.522	1.569	1.226	1.620	1.494	1.415	1.481	1.589
LTE Band 66_Ant 5	0.686	0.001	0.105	1.478	1.483	1.410	1.618	1.639	1.361	1.615	1.602	1.377	1.536	1.583	1.240	1.634	1.508	1.429	1.495	1.603
FR1 n41_Ant 5	0.130	0.001	0.105	0.922	0.927	0.854	1.062	1.063	0.805	1.059	1.046	0.821	0.980	1.027	0.684	1.078	0.952	0.873	0.939	1.047
FR1 n48_Ant 5	0.226	0.001	0.105	1.018	1.023	0.950	1.158	1.179	0.901	1.155	1.142	0.917	1.076	1.123	0.780	1.174	1.048	0.969	1.035	1.143
FR1 n77_Ant 5	0.309	0.001	0.105	1.101	1.106	1.033	1.241	1.262	0.984	1.238	1.225	1.000	1.159	1.206	0.863	1.257	1.131	1.052	1.118	1.226

Hybrid 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				
Max WWAN Ant 2	0.847	-22.7	31.5	-207.0	73.0	1.64	0.03	Not required
Max WWAN Ant 5 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	0.792	-25.8	-41.4	-207.0				

<Case 38>

SAR summation (blue colored) for each band of antenna 2,4,5

Exposure Position	WWAN SAR	WLANS/4GHz Ant 4	WLANS/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right Side	1g SAR (W/kg)			0.686	0.691	0.618	0.826	0.847	0.569	0.823	0.810	0.585	0.744	0.791	0.448	0.842	0.716	0.637	0.703	0.811	
LTE Band 2_Ant 5	0.672	0.105	0.038	1.501	1.506	1.433	1.641	1.662	1.384	1.638	1.625	1.400	1.559	1.606	1.263	1.657	1.531	1.452	1.518	1.626	
LTE Band 66_Ant 5	0.686	0.105	0.038	1.515	1.520	1.447	1.655	1.676	1.398	1.652	1.639	1.414	1.573	1.620	1.277	1.671	1.545	1.466	1.532	1.640	
FR1 n41_Ant 5	0.130	0.105	0.038	0.959	0.964	0.891	1.099	1.120	0.842	1.096	1.083	0.858	1.017	1.064	0.721	1.115	0.989	0.910	0.976	1.084	
FR1 n48_Ant 5	0.226	0.105	0.038	1.055	1.060	0.987	1.195	1.216	0.938	1.192	1.179	0.954	1.113	1.160	0.817	1.211	1.085	1.006	1.072	1.180	
FR1 n77_Ant 5	0.309	0.105	0.038	1.138	1.143	1.070	1.278	1.299	1.021	1.275	1.262	1.037	1.196	1.243	0.900	1.294	1.168	1.089	1.155	1.263	

Hybrid 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				
Max WWAN Ant 2	0.847	-22.7	31.5	-207.0	73.0	1.68	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	0.829	-25.8	-41.4	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 39>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right Side	1g SAR (W/kg)			0.686	0.691	0.618	0.826	0.847	0.569	0.823	0.810	0.585	0.744	0.791	0.448	0.842	0.716	0.637	0.703	0.811
LTE Band 2_Ant 5	0.672	0.105	0.001	1.464	1.469	1.396	1.604	1.625	1.347	1.601	1.588	1.363	1.522	1.569	1.226	1.620	1.494	1.415	1.481	1.589
LTE Band 66_Ant 5	0.686	0.105	0.001	1.478	1.483	1.410	1.618	1.639	1.361	1.615	1.602	1.377	1.536	1.583	1.240	1.634	1.508	1.429	1.495	1.603
FR1 n41_Ant 5	0.130	0.105	0.001	0.922	0.927	0.854	1.062	1.083	0.805	1.059	1.046	0.821	0.980	1.027	0.684	1.078	0.952	0.873	0.939	1.047
FR1 n48_Ant 5	0.226	0.105	0.001	1.018	1.023	0.950	1.158	1.179	0.901	1.155	1.142	0.917	1.076	1.123	0.780	1.174	1.048	0.969	1.035	1.143
FR1 n77_Ant 5	0.309	0.105	0.001	1.101	1.106	1.033	1.241	1.262	0.984	1.238	1.225	1.000	1.159	1.206	0.863	1.257	1.131	1.052	1.118	1.226

Hybrid 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				
Max WWAN Ant 2	0.847	-22.7	31.5	-207.0	73.0	1.64	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	0.792	-25.8	-41.4	-207.0				

<Case 40>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
GSM1900_Ant 2	0.493	0.180	0.292	1.483	1.391	1.346
WCDMA II_Ant 2	0.567	0.180	0.292	1.557	1.465	1.420
WCDMA IV_Ant 2	0.513	0.180	0.292	1.503	1.411	1.366
LTE Band 7_Ant 2	0.520	0.180	0.292	1.510	1.418	1.373
LTE Band 25_Ant 2	0.610	0.180	0.292	1.600	1.508	1.463
LTE Band 30_Ant 2	0.596	0.180	0.292	1.586	1.494	1.449
LTE Band 41_Ant 2	0.502	0.180	0.292	1.492	1.400	1.355
LTE Band 48_Ant 2	0.374	0.180	0.292	1.364	1.272	1.227
LTE Band 66_Ant 2	0.497	0.180	0.292	1.487	1.395	1.350
FR1 n7_Ant 2	0.515	0.180	0.292	1.505	1.413	1.368
FR1 n25_Ant 2	0.650	0.180	0.292	1.640	1.548	1.503
FR1 n30_Ant 2	0.462	0.180	0.292	1.452	1.360	1.315
FR1 n41_Ant 2	0.569	0.180	0.292	1.559	1.467	1.422
FR1 n48_Ant 2	0.383	0.180	0.292	1.373	1.281	1.236
FR1 n66_Ant 2	0.479	0.180	0.292	1.469	1.377	1.332
FR1 n70_Ant 2	0.547	0.180	0.292	1.537	1.445	1.400
FR1 n77_Ant 2	0.287	0.180	0.292	1.277	1.185	1.140

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	56.3	1.64	0.04	Not required
Max WWAN Ant 2 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.122	7.9	-71.6	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 41>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
GSM1900_Ant 2	0.493	0.292	0.139	1.442	1.350	1.305
WCDMA II_Ant 2	0.567	0.292	0.139	1.516	1.424	1.379
WCDMA IV_Ant 2	0.513	0.292	0.139	1.462	1.370	1.325
LTE Band 7_Ant 2	0.520	0.292	0.139	1.469	1.377	1.332
LTE Band 25_Ant 2	0.610	0.292	0.139	1.559	1.467	1.422
LTE Band 30_Ant 2	0.596	0.292	0.139	1.545	1.453	1.408
LTE Band 41_Ant 2	0.502	0.292	0.139	1.451	1.359	1.314
LTE Band 48_Ant 2	0.374	0.292	0.139	1.323	1.231	1.186
LTE Band 66_Ant 2	0.497	0.292	0.139	1.446	1.354	1.309
FR1 n7_Ant 2	0.515	0.292	0.139	1.464	1.372	1.327
FR1 n25_Ant 2	0.650	0.292	0.139	1.599	1.507	1.462
FR1 n30_Ant 2	0.462	0.292	0.139	1.411	1.319	1.274
FR1 n41_Ant 2	0.569	0.292	0.139	1.518	1.426	1.381
FR1 n48_Ant 2	0.383	0.292	0.139	1.332	1.240	1.195
FR1 n66_Ant 2	0.479	0.292	0.139	1.428	1.336	1.291
FR1 n70_Ant 2	0.547	0.292	0.139	1.496	1.404	1.359
FR1 n77_Ant 2	0.287	0.292	0.139	1.236	1.144	1.099

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	56.3	1.60	0.04	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.081	7.9	-71.6	-207.0				



FCC SAR TEST REPORT

Report No.:FA451606B

<Case 42>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.201	0.427	1.783	1.764	1.805
WCDMA II_Ant 2	0.607	0.201	0.427	1.651	1.632	1.673
WCDMA IV_Ant 2	0.607	0.201	0.427	1.651	1.632	1.673
LTE Band 7_Ant 2	0.650	0.201	0.427	1.694	1.675	1.716
LTE Band 25_Ant 2	0.717	0.201	0.427	1.761	1.742	1.783
LTE Band 30_Ant 2	0.699	0.201	0.427	1.743	1.724	1.765
LTE Band 41_Ant 2	0.639	0.201	0.427	1.683	1.664	1.705
LTE Band 48_Ant 2	0.392	0.201	0.427	1.436	1.417	1.458
LTE Band 66_Ant 2	0.575	0.201	0.427	1.619	1.600	1.641
FR1 n7_Ant 2	0.690	0.201	0.427	1.734	1.715	1.756
FR1 n25_Ant 2	0.732	0.201	0.427	1.776	1.757	1.798
FR1 n30_Ant 2	0.638	0.201	0.427	1.682	1.663	1.704
FR1 n41_Ant 2	0.655	0.201	0.427	1.699	1.680	1.721
FR1 n48_Ant 2	0.342	0.201	0.427	1.386	1.367	1.408
FR1 n66_Ant 2	0.553	0.201	0.427	1.597	1.578	1.619
FR1 n70_Ant 2	0.633	0.201	0.427	1.677	1.658	1.699
FR1 n77_Ant 2	0.321	0.201	0.427	1.365	1.346	1.387

Hybrid 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				
Max WWAN Ant 6	0.438	12.0	-42.0	-207.0	69.2	1.81	0.04	Not required
Max WWAN Ant 2 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.367	-24.3	16.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 43>

SAR summation (blue colored) for each band of antenna 2,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.427	0.064	1.646	1.627	1.668
WCDMA II_Ant 2	0.607	0.427	0.064	1.514	1.495	1.536
WCDMA IV_Ant 2	0.607	0.427	0.064	1.514	1.495	1.536
LTE Band 7_Ant 2	0.650	0.427	0.064	1.557	1.538	1.579
LTE Band 25_Ant 2	0.717	0.427	0.064	1.624	1.605	1.646
LTE Band 30_Ant 2	0.699	0.427	0.064	1.606	1.587	1.628
LTE Band 41_Ant 2	0.639	0.427	0.064	1.546	1.527	1.568
LTE Band 48_Ant 2	0.392	0.427	0.064	1.299	1.280	1.321
LTE Band 66_Ant 2	0.575	0.427	0.064	1.482	1.463	1.504
FR1 n7_Ant 2	0.690	0.427	0.064	1.597	1.578	1.619
FR1 n25_Ant 2	0.732	0.427	0.064	1.639	1.620	1.661
FR1 n30_Ant 2	0.638	0.427	0.064	1.545	1.526	1.567
FR1 n41_Ant 2	0.655	0.427	0.064	1.562	1.543	1.584
FR1 n48_Ant 2	0.342	0.427	0.064	1.249	1.230	1.271
FR1 n66_Ant 2	0.553	0.427	0.064	1.460	1.441	1.482
FR1 n70_Ant 2	0.633	0.427	0.064	1.540	1.521	1.562
FR1 n77_Ant 2	0.321	0.427	0.064	1.228	1.209	1.250

Hybrid 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				
Max WWAN Ant 6	0.438	12.0	-42.0	-207.0	69.2	1.67	0.03	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	1.230	-24.3	16.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 44>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.427	0.165	1.747	1.728	1.769
WCDMA II_Ant 2	0.607	0.427	0.165	1.615	1.596	1.637
WCDMA IV_Ant 2	0.607	0.427	0.165	1.615	1.596	1.637
LTE Band 7_Ant 2	0.650	0.427	0.165	1.658	1.639	1.680
LTE Band 25_Ant 2	0.717	0.427	0.165	1.725	1.706	1.747
LTE Band 30_Ant 2	0.699	0.427	0.165	1.707	1.688	1.729
LTE Band 41_Ant 2	0.639	0.427	0.165	1.647	1.628	1.669
LTE Band 48_Ant 2	0.392	0.427	0.165	1.400	1.381	1.422
LTE Band 66_Ant 2	0.575	0.427	0.165	1.583	1.564	1.605
FR1 n7_Ant 2	0.690	0.427	0.165	1.698	1.679	1.720
FR1 n25_Ant 2	0.732	0.427	0.165	1.740	1.721	1.762
FR1 n30_Ant 2	0.638	0.427	0.165	1.646	1.627	1.668
FR1 n41_Ant 2	0.655	0.427	0.165	1.663	1.644	1.685
FR1 n48_Ant 2	0.342	0.427	0.165	1.350	1.331	1.372
FR1 n66_Ant 2	0.553	0.427	0.165	1.561	1.542	1.583
FR1 n70_Ant 2	0.633	0.427	0.165	1.641	1.622	1.663
FR1 n77_Ant 2	0.321	0.427	0.165	1.329	1.310	1.351

Hybrid 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				
Max WWAN Ant 6	0.438	12.0	-42.0	-207.0	69.2	1.77	0.03	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.331	-24.3	16.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 45>

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

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
GSM850_Ant 0	0.446	0.259	0.165	1.609	1.477	1.477	1.520	1.587	1.569	1.509	1.262	1.445	1.560	1.602	1.508	1.525	1.212	1.423	1.503	1.191
GSM1900_Ant 0	0.450	0.259	0.165	1.613	1.481	1.481	1.524	1.591	1.573	1.513	1.266	1.449	1.564	1.606	1.512	1.529	1.216	1.427	1.507	1.195
WCDMA II_Ant 0	0.412	0.259	0.165	1.575	1.443	1.443	1.486	1.553	1.535	1.475	1.228	1.411	1.526	1.568	1.474	1.491	1.178	1.389	1.469	1.157
WCDMA IV_Ant 0	0.451	0.259	0.165	1.614	1.482	1.482	1.525	1.592	1.574	1.514	1.267	1.450	1.565	1.607	1.513	1.530	1.217	1.428	1.508	1.196
WCDMA V_Ant 0	0.454	0.259	0.165	1.617	1.485	1.485	1.528	1.595	1.577	1.517	1.270	1.453	1.568	1.610	1.516	1.533	1.220	1.431	1.511	1.199
LTE Band 7_Ant 0	0.386	0.259	0.165	1.549	1.417	1.417	1.460	1.527	1.509	1.449	1.202	1.385	1.500	1.542	1.448	1.465	1.152	1.363	1.443	1.131
LTE Band 12_Ant 0	0.367	0.259	0.165	1.530	1.398	1.398	1.441	1.508	1.490	1.430	1.183	1.366	1.481	1.523	1.429	1.446	1.133	1.344	1.424	1.112
LTE Band 13_Ant 0	0.448	0.259	0.165	1.611	1.479	1.479	1.522	1.589	1.571	1.511	1.284	1.447	1.562	1.604	1.510	1.527	1.214	1.425	1.505	1.193
LTE Band 14_Ant 0	0.406	0.259	0.165	1.569	1.437	1.437	1.480	1.547	1.529	1.469	1.222	1.405	1.520	1.562	1.468	1.485	1.172	1.383	1.463	1.151
LTE Band 25_Ant 0	0.456	0.259	0.165	1.619	1.487	1.487	1.530	1.597	1.579	1.519	1.272	1.455	1.570	1.612	1.518	1.535	1.222	1.433	1.513	1.201
LTE Band 26_Ant 0	0.421	0.259	0.165	1.584	1.452	1.452	1.495	1.562	1.544	1.484	1.237	1.420	1.535	1.577	1.483	1.500	1.187	1.398	1.478	1.166
LTE Band 30_Ant 0	0.457	0.259	0.165	1.620	1.488	1.488	1.531	1.598	1.580	1.520	1.273	1.456	1.571	1.613	1.519	1.536	1.223	1.434	1.514	1.202
LTE Band 41_Ant 0	0.453	0.259	0.165	1.616	1.484	1.484	1.527	1.594	1.576	1.516	1.269	1.452	1.567	1.609	1.515	1.532	1.219	1.430	1.510	1.198
LTE Band 66_Ant 0	0.453	0.259	0.165	1.616	1.484	1.484	1.527	1.594	1.576	1.516	1.269	1.452	1.567	1.609	1.515	1.532	1.219	1.430	1.510	1.198
LTE Band 71_Ant 0	0.410	0.259	0.165	1.573	1.441	1.441	1.484	1.551	1.533	1.473	1.226	1.409	1.524	1.566	1.472	1.489	1.176	1.387	1.467	1.155
FR1 n7_Ant 0	0.418	0.259	0.165	1.581	1.449	1.449	1.492	1.559	1.541	1.481	1.234	1.417	1.532	1.574	1.480	1.497	1.184	1.395	1.475	1.163
FR1 n12_Ant 0	0.339	0.259	0.165	1.502	1.370	1.370	1.413	1.480	1.462	1.402	1.155	1.338	1.453	1.495	1.401	1.418	1.105	1.316	1.396	1.084
FR1 n14_Ant 0	0.457	0.259	0.165	1.620	1.488	1.488	1.531	1.598	1.580	1.520	1.273	1.456	1.571	1.613	1.519	1.536	1.223	1.434	1.514	1.202
FR1 n25_Ant 0	0.458	0.259	0.165	1.621	1.489	1.489	1.532	1.599	1.581	1.521	1.274	1.457	1.572	1.614	1.520	1.537	1.224	1.435	1.515	1.203
FR1 n26_Ant 0	0.436	0.259	0.165	1.599	1.467	1.467	1.510	1.577	1.559	1.499	1.252	1.435	1.550	1.592	1.498	1.515	1.202	1.413	1.493	1.181
FR1 n30_Ant 0	0.337	0.259	0.165	1.500	1.368	1.368	1.411	1.478	1.460	1.400	1.153	1.336	1.451	1.493	1.399	1.416	1.103	1.314	1.394	1.082
FR1 n41_Ant 0	0.445	0.259	0.165	1.608	1.476	1.476	1.519	1.586	1.568	1.508	1.261	1.444	1.559	1.601	1.507	1.524	1.211	1.422	1.502	1.190
FR1 n66_Ant 0	0.363	0.259	0.165	1.526	1.394	1.394	1.437	1.504	1.486	1.426	1.179	1.362	1.477	1.519	1.425	1.442	1.129	1.340	1.420	1.108
FR1 n70_Ant 0	0.457	0.259	0.165	1.620	1.488	1.488	1.531	1.598	1.580	1.520	1.273	1.456	1.571	1.613	1.519	1.536	1.223	1.434	1.514	1.202
FR1 n71_Ant 0	0.389	0.259	0.165	1.552	1.420	1.420	1.463	1.530	1.512	1.452	1.205	1.388	1.503	1.545	1.451	1.468	1.155	1.366	1.446	1.134

Hybrid 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				
Max WWAN Ant 2	0.739	-60.4	-64.6	-207.0	49.6	1.62	0.04	Not required
Max WWAN Ant 0 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	0.882	-12.0	-75.6	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 46>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
GSM850_Ant 1	0.427	0.259	0.165	1.590	1.458	1.458	1.501	1.568	1.550	1.490	1.243	1.426	1.541	1.583	1.489	1.506	1.193	1.404	1.484	1.172
WCDMA V_Ant 1	0.355	0.259	0.165	1.518	1.386	1.386	1.429	1.496	1.478	1.418	1.171	1.354	1.469	1.511	1.417	1.434	1.121	1.332	1.412	1.100
LTE Band 2_Ant 1	0.409	0.259	0.165	1.572	1.440	1.440	1.483	1.550	1.532	1.472	1.225	1.408	1.523	1.565	1.471	1.488	1.175	1.386	1.466	1.154
LTE Band 12_Ant 1	0.447	0.259	0.165	1.610	1.478	1.478	1.521	1.588	1.570	1.510	1.263	1.446	1.561	1.603	1.509	1.526	1.213	1.424	1.504	1.192
LTE Band 13_Ant 1	0.385	0.259	0.165	1.548	1.416	1.416	1.459	1.526	1.508	1.448	1.201	1.384	1.499	1.541	1.447	1.464	1.151	1.362	1.442	1.130
LTE Band 14_Ant 1	0.442	0.259	0.165	1.605	1.473	1.473	1.516	1.583	1.565	1.505	1.258	1.441	1.556	1.598	1.504	1.521	1.208	1.419	1.499	1.187
LTE Band 28_Ant 1	0.385	0.259	0.165	1.548	1.416	1.416	1.459	1.526	1.508	1.448	1.201	1.384	1.499	1.541	1.447	1.464	1.151	1.362	1.442	1.130
LTE Band 66_Ant 1	0.429	0.259	0.165	1.592	1.460	1.460	1.503	1.570	1.552	1.492	1.245	1.428	1.543	1.585	1.491	1.508	1.195	1.406	1.486	1.174
LTE Band 71_Ant 1	0.444	0.259	0.165	1.607	1.475	1.475	1.518	1.585	1.567	1.507	1.260	1.443	1.558	1.600	1.506	1.523	1.210	1.421	1.501	1.189
FR1 n12_Ant 1	0.373	0.259	0.165	1.536	1.404	1.404	1.447	1.514	1.496	1.436	1.189	1.372	1.487	1.529	1.435	1.452	1.139	1.350	1.430	1.118
FR1 n14_Ant 1	0.447	0.259	0.165	1.610	1.478	1.478	1.521	1.588	1.570	1.510	1.263	1.446	1.561	1.603	1.509	1.526	1.213	1.424	1.504	1.192
FR1 n26_Ant 1	0.406	0.259	0.165	1.569	1.437	1.437	1.480	1.547	1.529	1.469	1.222	1.405	1.520	1.562	1.468	1.485	1.172	1.383	1.463	1.151
FR1 n41_Ant 1	0.444	0.259	0.165	1.607	1.475	1.475	1.518	1.585	1.567	1.507	1.260	1.443	1.558	1.600	1.506	1.523	1.210	1.421	1.501	1.189
FR1 n48_Ant 1	0.459	0.259	0.165	1.622	1.490	1.490	1.533	1.600	1.582	1.522	1.275	1.458	1.573	1.615	1.521	1.538	1.225	1.436	1.516	1.204
FR1 n71_Ant 1	0.393	0.259	0.165	1.556	1.424	1.424	1.467	1.534	1.516	1.456	1.209	1.392	1.507	1.549	1.455	1.472	1.159	1.370	1.450	1.138
FR1 n77_Ant 1	0.446	0.259	0.165	1.609	1.477	1.477	1.520	1.587	1.569	1.509	1.262	1.445	1.560	1.602	1.508	1.525	1.212	1.423	1.503	1.191

Hybrid 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						
Max WWAN Ant 2	0.739	-61.4	-62.1	-207.0	127.2			Not required		
Max WWAN Ant 1 + WLANS/6GHz Ant 4+3 + Bluetooth Ant 3	0.883	11.0	42.5	-207.0						



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 47>

SAR summation (blue colored) for each band of antenna 1,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Left Side	1g SAR (W/kg)			0.809	0.606	0.605
GSM850_Ant 1	0.133	0.205	0.228	1.375	1.172	1.171
WCDMA V_Ant 1	0.083	0.205	0.228	1.325	1.122	1.121
LTE Band 2_Ant 1	0.273	0.205	0.228	1.515	1.312	1.311
LTE Band 12_Ant 1	0.374	0.205	0.228	1.616	1.413	1.412
LTE Band 13_Ant 1	0.213	0.205	0.228	1.455	1.252	1.251
LTE Band 14_Ant 1	0.168	0.205	0.228	1.410	1.207	1.206
LTE Band 26_Ant 1	0.136	0.205	0.228	1.378	1.175	1.174
LTE Band 66_Ant 1	0.267	0.205	0.228	1.509	1.306	1.305
LTE Band 71_Ant 1	0.325	0.205	0.228	1.567	1.364	1.363
FR1 n12_Ant 1	0.285	0.205	0.228	1.527	1.324	1.323
FR1 n14_Ant 1	0.177	0.205	0.228	1.419	1.216	1.215
FR1 n26_Ant 1	0.114	0.205	0.228	1.356	1.153	1.152
FR1 n41_Ant 1	0.325	0.205	0.228	1.567	1.364	1.363
FR1 n48_Ant 1	0.104	0.205	0.228	1.346	1.143	1.142
FR1 n71_Ant 1	0.341	0.205	0.228	1.583	1.380	1.379
FR1 n77_Ant 1	0.217	0.205	0.228	1.459	1.256	1.255

Hybrid 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				
Max WWAN Ant 6	0.809	-25.9	-49.5	-207.0	49.8	1.62	0.04	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	0.807	-22.6	0.2	-207.0				

<Case 48>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n77_Ant 2	FR1 n7_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.650	0.717	0.699	0.639	0.392	0.575	0.690	0.732	0.638	0.655	0.342	0.553	0.633	0.321
LTE Band 2_Ant 5	0.407	0.259	0.165	1.570	1.438	1.438	1.481	1.548	1.530	1.470	1.223	1.406	1.521	1.563	1.469	1.486	1.173	1.384	1.464	1.152
LTE Band 66_Ant 5	0.434	0.259	0.165	1.597	1.465	1.465	1.508	1.575	1.557	1.497	1.250	1.433	1.548	1.590	1.496	1.513	1.200	1.411	1.491	1.179
FR1 n41_Ant 5	0.363	0.259	0.165	1.526	1.394	1.394	1.437	1.504	1.486	1.426	1.179	1.362	1.477	1.519	1.425	1.442	1.129	1.340	1.420	1.108
FR1 n48_Ant 5	0.428	0.259	0.165	1.591	1.459	1.459	1.502	1.569	1.551	1.491	1.244	1.427	1.542	1.584	1.490	1.507	1.194	1.405	1.485	1.173
FR1 n77_Ant 5	0.445	0.259	0.165	1.608	1.476	1.476	1.519	1.586	1.568	1.508	1.261	1.444	1.559	1.601	1.507	1.524	1.211	1.422	1.502	1.190

Hybrid 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				
Max WWAN Ant 2	0.739	-60.4	-64.6	-207.0	108.3	1.61	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	0.869	-64.4	43.6	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 49>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 4	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right Side	1g SAR (W/kg)			0.686	0.691	0.618	0.826	0.847	0.569	0.823	0.810	0.585	0.744	0.791	0.448	0.842	0.716	0.637	0.703	0.811
LTE Band 2_Ant 5	0.672	0.084	0.038	1.480	1.485	1.412	1.620	1.641	1.363	1.617	1.604	1.379	1.538	1.585	1.242	1.636	1.510	1.431	1.497	1.605
LTE Band 66_Ant 5	0.686	0.084	0.038	1.494	1.499	1.426	1.634	1.655	1.377	1.631	1.618	1.393	1.552	1.599	1.256	1.650	1.524	1.445	1.511	1.619
FR1 n41_Ant 5	0.130	0.084	0.038	0.938	0.943	0.870	1.078	1.099	0.821	1.075	1.062	0.837	0.996	1.043	0.700	1.094	0.968	0.889	0.955	1.063
FR1 n48_Ant 5	0.226	0.084	0.038	1.034	1.039	0.966	1.174	1.195	0.917	1.171	1.158	0.933	1.092	1.139	0.796	1.190	1.064	0.985	1.051	1.159
FR1 n77_Ant 5	0.309	0.084	0.038	1.117	1.122	1.049	1.257	1.278	1.000	1.254	1.241	1.016	1.175	1.222	0.879	1.273	1.147	1.068	1.134	1.242

Hybrid 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				
Max WWAN Ant 2	0.847	-22.7	31.5	-207.0	73.0	1.66	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 4	0.808	-25.8	-41.4	-207.0				

<Case 50>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Right Side	1g SAR (W/kg)			0.686	0.691	0.618	0.826	0.847	0.569	0.823	0.810	0.585	0.744	0.791	0.448	0.842	0.716	0.637	0.703	0.811
LTE Band 2_Ant 5	0.672	0.084	0.001	1.443	1.448	1.375	1.583	1.604	1.326	1.580	1.567	1.342	1.501	1.548	1.205	1.599	1.473	1.394	1.460	1.568
LTE Band 66_Ant 5	0.686	0.084	0.001	1.457	1.462	1.389	1.597	1.618	1.340	1.594	1.581	1.356	1.515	1.562	1.219	1.613	1.487	1.408	1.474	1.582
FR1 n41_Ant 5	0.130	0.084	0.001	0.901	0.906	0.833	1.041	1.062	0.784	1.038	1.025	0.800	0.959	1.006	0.663	1.057	0.931	0.852	0.918	1.026
FR1 n48_Ant 5	0.226	0.084	0.001	0.997	1.002	0.929	1.137	1.158	0.880	1.134	1.121	0.896	1.055	1.102	0.759	1.153	1.027	0.948	1.014	1.122
FR1 n77_Ant 5	0.309	0.084	0.001	1.080	1.085	1.012	1.220	1.241	0.963	1.217	1.204	0.979	1.138	1.185	0.842	1.236	1.110	1.031	1.097	1.205

Hybrid 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				
Max WWAN Ant 2	0.847	-27.7	49.5	-207.0	90.9	1.62	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	0.771	-25.8	-41.4	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 51>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.259	0.165	1.579	1.560	1.601
WCDMA II_Ant 2	0.607	0.259	0.165	1.447	1.428	1.469
WCDMA IV_Ant 2	0.607	0.259	0.165	1.447	1.428	1.469
LTE Band 7_Ant 2	0.650	0.259	0.165	1.490	1.471	1.512
LTE Band 25_Ant 2	0.717	0.259	0.165	1.557	1.538	1.579
LTE Band 30_Ant 2	0.699	0.259	0.165	1.539	1.520	1.561
LTE Band 41_Ant 2	0.639	0.259	0.165	1.479	1.460	1.501
LTE Band 48_Ant 2	0.392	0.259	0.165	1.232	1.213	1.254
LTE Band 66_Ant 2	0.575	0.259	0.165	1.415	1.396	1.437
FR1 n7_Ant 2	0.690	0.259	0.165	1.530	1.511	1.552
FR1 n25_Ant 2	0.732	0.259	0.165	1.572	1.553	1.594
FR1 n30_Ant 2	0.638	0.259	0.165	1.478	1.459	1.500
FR1 n41_Ant 2	0.655	0.259	0.165	1.495	1.476	1.517
FR1 n48_Ant 2	0.342	0.259	0.165	1.182	1.163	1.204
FR1 n66_Ant 2	0.553	0.259	0.165	1.393	1.374	1.415
FR1 n70_Ant 2	0.633	0.259	0.165	1.473	1.454	1.495
FR1 n77_Ant 2	0.321	0.259	0.165	1.161	1.142	1.183

Hybrid 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				
Max WWAN Ant 6	0.438	12.0	-42.0	-207.0	75.8	1.60	0.03	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	1.163	-60.4	-64.6	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 52>

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

Exposure Position	WWAN SAR	GSM850_A nt 1	WCDMA V_Ant 1	LTE Band 2_Ant 1	LTE Band 12_Ant 1	LTE Band 13_Ant 1	LTE Band 14_Ant 1	LTE Band 26_Ant 1	LTE Band 68_Ant 1	LTE Band 71_Ant 1	FR1 n12_Ant 1	FR1 n14_Ant 1	FR1 n26_Ant 1	FR1 n41_Ant 1	FR1 n46_Ant 1	FR1 n71_Ant 1	FR1 n77_Ant 1
	1g SAR (W/kg)	0.659	0.529	0.675	0.319	0.536	0.517	0.534	0.665	0.193	0.249	0.429	0.432	0.611	0.458	0.280	0.610
GSM850_Ant 0	0.688	1.347	1.217	1.363	1.007	1.224	1.205	1.222	1.353	0.881	0.937	1.117	1.120	1.299	1.146	0.968	1.298
GSM1900_Ant 0	0.427	1.086	0.956	1.102	0.746	0.963	0.944	0.961	1.092	0.620	0.676	0.856	0.859	1.038	0.885	0.707	1.037
WCDMA II_Ant 0	0.415	1.074	0.944	1.090	0.734	0.951	0.932	0.949	1.080	0.608	0.664	0.844	0.847	1.026	0.873	0.695	1.025
WCDMA IV_Ant 0	0.506	1.165	1.035	1.181	0.825	1.042	1.023	1.040	1.171	0.699	0.755	0.935	0.938	1.117	0.964	0.786	1.116
WCDMA V_Ant 0	0.468	1.127	0.997	1.143	0.787	1.004	0.985	1.002	1.133	0.661	0.717	0.897	0.900	1.079	0.926	0.748	1.078
LTE Band 7_Ant 0	0.882	1.541	1.411	1.557	1.201	1.418	1.399	1.416	1.547	1.075	1.131	1.311	1.314	1.493	1.340	1.162	1.492
LTE Band 12_Ant 0	0.332	0.991	0.861	1.007	0.651	0.868	0.849	0.866	0.997	0.525	0.581	0.761	0.764	0.943	0.790	0.612	0.942
LTE Band 13_Ant 0	0.516	1.175	1.045	1.191	0.835	1.052	1.033	1.050	1.181	0.709	0.765	0.945	0.948	1.127	0.974	0.796	1.126
LTE Band 14_Ant 0	0.520	1.179	1.049	1.195	0.839	1.056	1.037	1.054	1.185	0.713	0.769	0.949	0.952	1.131	0.978	0.800	1.130
LTE Band 25_Ant 0	0.440	1.099	0.969	1.115	0.759	0.976	0.957	0.974	1.105	0.633	0.689	0.869	0.872	1.051	0.898	0.720	1.050
LTE Band 26_Ant 0	0.422	1.081	0.951	1.097	0.741	0.958	0.939	0.956	1.087	0.615	0.671	0.851	0.854	1.033	0.880	0.702	1.032
LTE Band 30_Ant 0	0.563	1.222	1.092	1.238	0.882	1.099	1.080	1.097	1.228	0.756	0.812	0.992	0.995	1.174	1.021	0.843	1.173
LTE Band 41_Ant 0	0.577	1.236	1.106	1.252	0.896	1.113	1.094	1.111	1.242	0.770	0.826	1.006	1.009	1.188	1.035	0.857	1.187
LTE Band 66_Ant 0	0.527	1.186	1.056	1.202	0.846	1.063	1.044	1.061	1.192	0.720	0.776	0.956	0.959	1.138	0.985	0.807	1.137
LTE Band 71_Ant 0	0.332	0.991	0.861	1.007	0.651	0.868	0.849	0.866	0.997	0.525	0.581	0.761	0.764	0.943	0.790	0.612	0.942
FR1 n7_Ant 0	0.985	1.644	1.514	1.660	1.304	1.521	1.502	1.519	1.650	1.178	1.234	1.414	1.417	1.596	1.443	1.265	1.595
FR1 n12_Ant 0	0.323	0.982	0.852	0.998	0.642	0.859	0.840	0.857	0.988	0.516	0.572	0.752	0.755	0.934	0.781	0.603	0.933
FR1 n14_Ant 0	0.481	1.140	1.010	1.156	0.800	1.017	0.998	1.015	1.146	0.674	0.730	0.910	0.913	1.092	0.939	0.761	1.091
FR1 n25_Ant 0	0.417	1.076	0.946	1.092	0.736	0.953	0.934	0.951	1.082	0.610	0.666	0.846	0.849	1.028	0.875	0.697	1.027
FR1 n26_Ant 0	0.406	1.065	0.935	1.081	0.725	0.942	0.923	0.940	1.071	0.599	0.655	0.835	0.838	1.017	0.864	0.686	1.016
FR1 n30_Ant 0	0.744	1.403	1.273	1.419	1.063	1.280	1.261	1.278	1.409	0.937	0.993	1.173	1.176	1.355	1.202	1.024	1.354
FR1 n41_Ant 0	0.884	1.543	1.413	1.559	1.203	1.420	1.401	1.418	1.549	1.077	1.133	1.313	1.316	1.495	1.342	1.164	1.494
FR1 n66_Ant 0	0.608	1.267	1.137	1.283	0.927	1.144	1.125	1.142	1.273	0.801	0.857	1.037	1.040	1.219	1.066	0.888	1.218
FR1 n70_Ant 0	0.788	1.447	1.317	1.463	1.107	1.324	1.305	1.322	1.453	0.981	1.037	1.217	1.220	1.399	1.246	1.068	1.398
FR1 n71_Ant 0	0.346	1.005	0.875	1.021	0.665	0.882	0.863	0.880	1.011	0.539	0.595	0.775	0.778	0.957	0.804	0.626	0.956

Hybrid 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				
Max WWAN Ant 0	0.675	-46.5	-61.0	-207.0	122.2	1.66	0.02	Not required
Max WWAN Ant 1	0.985	-52.1	61.1	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 53>

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

Exposure Position	WWAN SAR	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n7_Ant 2
Front	1g SAR (W/kg)	0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.605	0.650	0.543	0.582	0.454	0.479	0.547	0.354
GSM850_Ant 0	0.688	1.181	1.255	1.201	1.245	1.298	1.284	1.239	1.119	1.185	1.293	1.338	1.231	1.270	1.142	1.167	1.235	1.042
GSM1900_Ant 10	0.427	0.920	0.994	0.940	0.984	1.037	1.023	0.978	0.858	0.924	1.032	1.077	0.970	1.009	0.881	0.906	0.974	0.781
WCDMA II_Ant 0	0.415	0.908	0.982	0.928	0.972	1.025	1.011	0.966	0.846	0.912	1.020	1.065	0.958	0.997	0.869	0.894	0.962	0.769
WCDMA IV_Ant 0	0.506	0.999	1.073	1.019	1.063	1.116	1.102	1.057	0.937	1.003	1.111	1.156	1.049	1.088	0.960	0.985	1.053	0.860
WCDMA V_Ant 0	0.468	0.961	1.035	0.981	1.025	1.078	1.064	1.019	0.899	0.965	1.073	1.118	1.011	1.050	0.922	0.947	1.015	0.822
LTE Band 7_Ant 0	0.882	1.375	1.449	1.395	1.439	1.492	1.478	1.433	1.313	1.379	1.487	1.532	1.425	1.464	1.336	1.361	1.429	1.236
LTE Band 12_Ant 0	0.332	0.825	0.899	0.845	0.889	0.942	0.928	0.883	0.763	0.829	0.937	0.982	0.875	0.914	0.786	0.811	0.879	0.686
LTE Band 13_Ant 0	0.516	1.008	1.083	1.029	1.073	1.126	1.112	1.067	0.947	1.013	1.121	1.166	1.059	1.098	0.970	0.995	1.063	0.870
LTE Band 14_Ant 0	0.520	1.013	1.087	1.033	1.077	1.130	1.116	1.071	0.951	1.017	1.125	1.170	1.063	1.102	0.974	0.999	1.067	0.874
LTE Band 25_Ant 0	0.440	0.933	1.007	0.953	0.997	1.050	1.036	0.991	0.871	0.937	1.045	1.090	0.983	1.022	0.894	0.919	0.987	0.794
LTE Band 26_Ant 0	0.422	0.915	0.989	0.935	0.979	1.032	1.018	0.973	0.853	0.919	1.027	1.072	0.965	1.004	0.876	0.901	0.969	0.776
LTE Band 30_Ant 0	0.563	1.056	1.130	1.076	1.120	1.173	1.159	1.114	0.994	1.060	1.168	1.213	1.106	1.145	1.017	1.042	1.110	0.917
LTE Band 41_Ant 0	0.577	1.070	1.144	1.090	1.134	1.187	1.173	1.128	1.008	1.074	1.182	1.227	1.120	1.159	1.031	1.056	1.124	0.931
LTE Band 66_Ant 0	0.527	1.020	1.094	1.040	1.084	1.137	1.123	1.078	0.958	1.024	1.132	1.177	1.070	1.109	0.981	1.006	1.074	0.881
LTE Band 71_Ant 0	0.332	0.825	0.899	0.845	0.889	0.942	0.928	0.883	0.763	0.829	0.937	0.982	0.875	0.914	0.786	0.811	0.879	0.686
FR1 n7_Ant 0	0.985	1.478	1.552	1.498	1.542	1.595	1.581	1.536	1.416	1.482	1.590	1.635	1.528	1.567	1.439	1.464	1.532	1.339
FR1 n12_Ant 0	0.323	0.816	0.890	0.836	0.880	0.933	0.919	0.874	0.754	0.820	0.928	0.973	0.866	0.905	0.777	0.802	0.870	0.677
FR1 n14_Ant 0	0.481	0.974	1.048	0.994	1.038	1.091	1.077	1.032	0.912	0.978	1.086	1.131	1.024	1.063	0.935	0.960	1.028	0.835
FR1 n25_Ant 0	0.417	0.910	0.984	0.930	0.974	1.027	1.013	0.968	0.848	0.914	1.022	1.067	0.960	0.999	0.871	0.896	0.964	0.771
FR1 n26_Ant 0	0.406	0.899	0.973	0.919	0.963	1.016	1.002	0.957	0.837	0.903	1.011	1.056	0.949	0.988	0.860	0.885	0.953	0.760
FR1 n30_Ant 0	0.744	1.237	1.311	1.257	1.301	1.354	1.340	1.295	1.175	1.241	1.349	1.394	1.287	1.326	1.198	1.223	1.291	1.098
FR1 n41_Ant 0	0.884	1.377	1.451	1.397	1.441	1.494	1.480	1.435	1.315	1.381	1.489	1.534	1.427	1.466	1.338	1.363	1.431	1.238
FR1 n66_Ant 0	0.581	1.074	1.148	1.094	1.138	1.191	1.177	1.132	1.012	1.078	1.186	1.231	1.124	1.163	1.035	1.060	1.128	0.935
FR1 n70_Ant 0	0.788	1.281	1.355	1.301	1.345	1.398	1.384	1.339	1.219	1.285	1.393	1.438	1.331	1.370	1.242	1.267	1.335	1.142
FR1 n71_Ant 0	0.346	0.839	0.913	0.859	0.903	0.956	0.942	0.897	0.777	0.843	0.951	0.996	0.889	0.928	0.800	0.825	0.893	0.700

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				
Max WWAN Ant 0	0.985	-46.5	-61.0	-207.0	55.4	1.64	0.04	Not required
Max WWAN Ant 2	0.650	7.9	-71.6	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 54>

SAR summation (blue colored) for each band of antenna 0,5

Exposure Position	WWAN SAR	LTE Band 2_Ant 5	LTE Band 66_Ant 5	FR1 n41_Ant 5	FR1 n48_Ant 5	FR1 n77_Ant 5
Front	1g SAR (W/kg)	0.577	0.396	0.434	0.926	0.700
GSM850_Ant 0	0.688	1.265	1.084	1.122	1.614	1.388
GSM1900_Ant 0	0.427	1.004	0.823	0.861	1.353	1.127
WCDMA II_Ant 0	0.415	0.992	0.811	0.849	1.341	1.115
WCDMA IV_Ant 0	0.506	1.083	0.902	0.940	1.432	1.206
WCDMA V_Ant 0	0.468	1.045	0.864	0.902	1.394	1.168
LTE Band 7_Ant 0	0.882	1.459	1.278	1.316	1.808	1.582
LTE Band 12_Ant 0	0.332	0.909	0.728	0.766	1.258	1.032
LTE Band 13_Ant 0	0.516	1.093	0.912	0.950	1.442	1.216
LTE Band 14_Ant 0	0.520	1.097	0.916	0.954	1.446	1.220
LTE Band 25_Ant 0	0.440	1.017	0.836	0.874	1.366	1.140
LTE Band 26_Ant 0	0.422	0.999	0.818	0.856	1.348	1.122
LTE Band 30_Ant 0	0.563	1.140	0.959	0.997	1.489	1.263
LTE Band 41_Ant 0	0.577	1.154	0.973	1.011	1.503	1.277
LTE Band 66_Ant 0	0.527	1.104	0.923	0.961	1.453	1.227
LTE Band 71_Ant 0	0.332	0.909	0.728	0.766	1.258	1.032
FR1 n7_Ant 0	0.985	1.562	1.381	1.419	1.911	1.685
FR1 n12_Ant 0	0.323	0.900	0.719	0.757	1.249	1.023
FR1 n14_Ant 0	0.481	1.058	0.877	0.915	1.407	1.181
FR1 n25_Ant 0	0.417	0.994	0.813	0.851	1.343	1.117
FR1 n26_Ant 0	0.406	0.983	0.802	0.840	1.332	1.106
FR1 n30_Ant 0	0.744	1.321	1.140	1.178	1.670	1.444
FR1 n41_Ant 0	0.884	1.461	1.280	1.318	1.810	1.584
FR1 n66_Ant 0	0.581	1.158	0.977	1.015	1.507	1.281
FR1 n70_Ant 0	0.788	1.365	1.184	1.222	1.714	1.488
FR1 n71_Ant 0	0.346	0.923	0.742	0.780	1.272	1.046

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				
FR1 n48_Ant 5	0.926	5.0	57.0	-207.0	54.9	1.61	0.04	Not required
GSM850_Ant 0	0.688	-22.5	9.5	-207.0				
FR1 n48_Ant 5	0.926	5.0	57.0	-207.0	129.7	1.81	0.02	Not required
LTE Band 7_Ant 0	0.882	-50.0	-60.5	-207.0				
FR1 n48_Ant 5	0.926	5.0	57.0	-207.0	128.7	1.91	0.02	Not required
FR1 n7_Ant 0	0.985	-46.5	-61.0	-207.0				
FR1 n48_Ant 5	0.926	5.0	57.0	-207.0	128.3	1.67	0.02	Not required
FR1 n30_Ant 0	0.744	-46.5	-60.5	-207.0				
FR1 n48_Ant 5	0.926	5.0	57.0	-207.0	122.8	1.81	0.02	Not required
FR1 n41_Ant 0	0.884	-38.0	-58.0	-207.0				
FR1 n48_Ant 5	0.926	5.0	57.0	-207.0	144.8	1.71	0.02	Not required
FR1 n70_Ant 0	0.788	-46.3	-78.4	-207.0				
FR1 n77_Ant 5	0.926	5.0	57.0	-207.0	128.7	1.91	0.02	Not required
FR1 n7_Ant 0	0.985	-46.5	-61.0	-207.0				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 55>

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

Exposure Position	WWAN SAR	GSM850_Ant 1	WCDMA V_Ant 1	LTE Band 2_Ant 1	LTE Band 12_Ant 1	LTE Band 13_Ant 1	LTE Band 14_Ant 1	LTE Band 26_Ant 1	LTE Band 66_Ant 1	LTE Band 71_Ant 1	FR1 n12_Ant 1	FR1 n14_Ant 1	FR1 n26_Ant 1	FR1 n41_Ant 1	FR1 n48_Ant 1	FR1 n71_Ant 1	FR1 n77_Ant 1
Back	1q SAR (W/kg)	0.904	0.823	0.849	0.457	0.788	0.758	0.783	0.748	0.444	0.373	0.654	0.726	0.796	0.459	0.393	0.703
GSM850_Ant 0	0.708	1.612	1.531	1.557	1.165	1.496	1.466	1.491	1.456	1.152	1.081	1.362	1.434	1.504	1.167	1.101	1.411
GSM1900_Ant 0	0.630	1.534	1.453	1.479	1.087	1.418	1.388	1.413	1.378	1.074	1.003	1.284	1.356	1.426	1.089	1.023	1.333
WCDMA II_Ant 0	0.731	1.635	1.554	1.580	1.188	1.519	1.489	1.514	1.479	1.175	1.104	1.385	1.457	1.527	1.190	1.124	1.434
WCDMA IV_Ant 0	0.585	1.489	1.408	1.434	1.042	1.373	1.343	1.368	1.333	1.029	0.958	1.239	1.311	1.381	1.044	0.978	1.288
WCDMA V_Ant 0	0.476	1.380	1.299	1.325	0.933	1.264	1.234	1.259	1.224	0.920	0.849	1.130	1.202	1.272	0.935	0.869	1.179
LTE Band 7_Ant 0	0.835	1.739	1.658	1.684	1.292	1.623	1.593	1.618	1.583	1.279	1.208	1.489	1.561	1.631	1.294	1.228	1.538
LTE Band 12_Ant 0	0.367	1.271	1.190	1.216	0.824	1.155	1.125	1.150	1.115	0.811	0.740	1.021	1.093	1.163	0.826	0.760	1.070
LTE Band 13_Ant 0	0.502	1.406	1.325	1.351	0.959	1.290	1.260	1.285	1.250	0.946	0.875	1.156	1.228	1.298	0.961	0.895	1.205
LTE Band 14_Ant 0	0.466	1.370	1.289	1.315	0.923	1.254	1.224	1.249	1.214	0.910	0.839	1.120	1.192	1.262	0.925	0.859	1.169
LTE Band 25_Ant 0	0.624	1.528	1.447	1.473	1.081	1.412	1.382	1.407	1.372	1.068	0.997	1.278	1.350	1.420	1.083	1.017	1.327
LTE Band 28_Ant 0	0.441	1.345	1.264	1.290	0.898	1.229	1.199	1.224	1.189	0.885	0.814	1.095	1.167	1.237	0.900	0.834	1.144
LTE Band 30_Ant 0	0.525	1.429	1.348	1.374	0.982	1.313	1.283	1.308	1.273	0.969	0.898	1.179	1.251	1.321	0.984	0.918	1.228
LTE Band 41_Ant 0	0.661	1.565	1.484	1.510	1.118	1.449	1.419	1.444	1.409	1.105	1.034	1.315	1.387	1.457	1.120	1.054	1.364
LTE Band 66_Ant 0	0.595	1.499	1.418	1.444	1.052	1.383	1.353	1.378	1.343	1.039	0.968	1.249	1.321	1.391	1.054	0.988	1.298
LTE Band 71_Ant 0	0.410	1.314	1.233	1.259	0.867	1.198	1.168	1.193	1.158	0.854	0.783	1.064	1.136	1.206	0.869	0.803	1.113
FR1 n7_Ant 0	0.917	1.821	1.740	1.766	1.374	1.705	1.675	1.700	1.665	1.361	1.290	1.571	1.643	1.713	1.376	1.310	1.620
FR1 n12_Ant 0	0.339	1.243	1.162	1.188	0.796	1.127	1.097	1.122	1.087	0.783	0.712	0.993	1.065	1.135	0.798	0.732	1.042
FR1 n14_Ant 0	0.501	1.405	1.324	1.350	0.958	1.289	1.259	1.284	1.249	0.945	0.874	1.155	1.227	1.297	0.960	0.894	1.204
FR1 n25_Ant 0	0.632	1.536	1.455	1.481	1.089	1.420	1.390	1.415	1.380	1.076	1.005	1.286	1.358	1.428	1.091	1.025	1.335
FR1 n26_Ant 0	0.436	1.340	1.259	1.285	0.893	1.224	1.194	1.219	1.184	0.880	0.809	1.090	1.162	1.232	0.895	0.829	1.139
FR1 n30_Ant 0	0.599	1.503	1.422	1.448	1.056	1.387	1.357	1.382	1.347	1.043	0.972	1.253	1.325	1.395	1.058	0.992	1.302
FR1 n41_Ant 0	0.886	1.790	1.709	1.735	1.343	1.674	1.644	1.669	1.634	1.330	1.259	1.540	1.612	1.682	1.345	1.279	1.589
FR1 n66_Ant 0	0.767	1.671	1.590	1.616	1.224	1.555	1.525	1.550	1.515	1.211	1.140	1.421	1.493	1.563	1.226	1.160	1.470
FR1 n70_Ant 0	0.926	1.830	1.749	1.775	1.383	1.714	1.684	1.709	1.674	1.370	1.299	1.580	1.652	1.722	1.385	1.319	1.629
FR1 n71_Ant 0	0.369	1.293	1.212	1.238	0.846	1.177	1.147	1.172	1.137	0.833	0.762	1.043	1.115	1.185	0.848	0.782	1.092

Hybrid 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				
GSM850_Ant 1	0.904	-2.2	59.3	-207.0				
GSM850_Ant 0	0.708	-19.8	16.0	-207.0	46.7	1.61	0.04	Not required
GSM850_Ant 1	0.904	-2.2	59.3	-207.0				
WCDMA II_Ant 0	0.731	0.9	-72.1	-207.0	131.4	1.64	0.02	Not required
GSM850_Ant 1	0.904	-2.2	59.3	-207.0				
LTE Band 7_Ant 0	0.835	-4.5	-57.0	-207.0	116.3	1.74	0.02	Not required
GSM850_Ant 1	0.904	-2.2	59.3	-207.0				
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0	118.8	1.82	0.02	Not required
GSM850_Ant 1	0.904	-2.2	59.3	-207.0				
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0	118.8	1.79	0.02	Not required
GSM850_Ant 1	0.904	-2.2	59.3	-207.0				
FR1 n66_Ant 0	0.767	3.6	-36.3	-207.0	95.8	1.67	0.02	Not required
GSM850_Ant 1	0.904	-2.2	59.3	-207.0				
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0	134.8	1.83	0.02	Not required
WCDMA V_Ant 1	0.823	-15.5	62.0	-207.0				
LTE Band 7_Ant 0	0.835	-4.5	-57.0	-207.0	119.5	1.66	0.02	Not required
WCDMA V_Ant 1	0.823	-15.5	62.0	-207.0				
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0	122.1	1.74	0.02	Not required
WCDMA V_Ant 1	0.823	-15.5	62.0	-207.0				
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0	122.2	1.71	0.02	Not required
WCDMA V_Ant 1	0.823	-15.5	62.0	-207.0				
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0	137.7	1.75	0.02	Not required
LTE Band 2_Ant 1	0.849	3.9	78.8	-207.0	136.1	1.68	0.02	Not required



FCC SAR TEST REPORT

Report No.:FA451606B

LTE Band 7_Ant 0	0.835	-4.5	-57.0	-207.0				
LTE Band 2_Ant 1	0.849	3.9	78.8	-207.0				
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0	138.5	1.77	0.02	Not required
LTE Band 2_Ant 1	0.849	3.9	78.8	-207.0	138.4	1.74	0.02	Not required
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
LTE Band 2_Ant 1	0.849	3.9	78.8	-207.0	115.1	1.62	0.02	Not required
FR1 n66_Ant 0	0.767	3.6	-36.3	-207.0				
LTE Band 2_Ant 1	0.849	3.9	78.8	-207.0	154.6	1.78	0.02	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
LTE Band 13_Ant 1	0.788	-0.2	58.1	-207.0	115.2	1.62	0.02	Not required
LTE Band 7_Ant 0	0.835	-4.5	-57.0	-207.0				
LTE Band 13_Ant 1	0.788	-0.2	58.1	-207.0	117.6	1.71	0.02	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
LTE Band 13_Ant 1	0.788	-0.2	58.1	-207.0	117.6	1.67	0.02	Not required
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
LTE Band 13_Ant 1	0.788	-0.2	58.1	-207.0	133.7	1.71	0.02	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
LTE Band 14_Ant 1	0.758	5.1	64.2	-207.0	124.0	1.68	0.02	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
LTE Band 14_Ant 1	0.758	5.1	64.2	-207.0	123.9	1.64	0.02	Not required
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
LTE Band 14_Ant 1	0.758	5.1	64.2	-207.0	140.1	1.68	0.02	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
LTE Band 26_Ant 1	0.783	-2.4	63.1	-207.0	120.1	1.62	0.02	Not required
LTE Band 7_Ant 0	0.835	-4.5	-57.0	-207.0				
LTE Band 26_Ant 1	0.783	-2.4	63.1	-207.0	122.6	1.70	0.02	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
LTE Band 26_Ant 1	0.783	-2.4	63.1	-207.0	122.6	1.67	0.02	Not required
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
LTE Band 26_Ant 1	0.783	-2.4	63.1	-207.0	138.6	1.71	0.02	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
LTE Band 66_Ant 1	0.748	2.1	79.9	-207.0	139.5	1.67	0.02	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
LTE Band 66_Ant 1	0.748	2.1	79.9	-207.0	139.5	1.63	0.01	Not required
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
LTE Band 66_Ant 1	0.748	2.1	79.9	-207.0	155.6	1.67	0.01	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
FR1 n26_Ant 1	0.726	-2.7	64.8	-207.0	124.3	1.64	0.02	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
FR1 n26_Ant 1	0.726	-2.7	64.8	-207.0	124.3	1.61	0.02	Not required
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
FR1 n26_Ant 1	0.726	-2.7	64.8	-207.0	140.3	1.65	0.02	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
FR1 n41_Ant 1	0.796	9.5	72.5	-207.0	130.3	1.63	0.02	Not required
LTE Band 7_Ant 0	0.835	-4.5	-57.0	-207.0				
FR1 n41_Ant 1	0.796	9.5	72.5	-207.0	132.6	1.71	0.02	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
FR1 n41_Ant 1	0.796	9.5	72.5	-207.0	132.5	1.68	0.02	Not required
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
FR1 n41_Ant 1	0.796	9.5	72.5	-207.0	148.8	1.72	0.02	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
FR1 n77_Ant 1	0.703	-3.5	82.0	-207.0	141.5	1.62	0.01	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
FR1 n77_Ant 1	0.703	-3.5	82.0	-207.0	157.4	1.63	0.01	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 56>

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

Exposure Position	WWAN SAR	GSM1900_Ant 1_2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n7_Ant 2
Back	1g SAR (W/kg)	0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.810	0.732	0.750	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 0	0.708	1.447	1.315	1.315	1.404	1.425	1.407	1.408	1.182	1.283	1.518	1.440	1.458	1.379	1.178	1.261	1.341	1.225
GSM1900_Ant 0	0.630	1.369	1.237	1.237	1.326	1.347	1.329	1.330	1.104	1.205	1.440	1.362	1.380	1.301	1.100	1.183	1.263	1.147
WCDMA II_Ant 0	0.731	1.470	1.338	1.338	1.427	1.448	1.430	1.431	1.205	1.306	1.541	1.463	1.481	1.402	1.201	1.284	1.364	1.248
WCDMA IV_Ant 0	0.585	1.324	1.192	1.192	1.281	1.302	1.284	1.285	1.059	1.160	1.395	1.317	1.335	1.256	1.055	1.138	1.218	1.102
WCDMA V_Ant 0	0.476	1.215	1.083	1.083	1.172	1.193	1.175	1.176	0.960	1.051	1.286	1.208	1.226	1.147	0.946	1.029	1.109	0.993
LTE Band 7_Ant 0	0.835	1.574	1.442	1.442	1.531	1.552	1.534	1.535	1.309	1.410	1.645	1.567	1.585	1.506	1.305	1.388	1.468	1.352
LTE Band 12_Ant 0	0.367	1.106	0.974	0.974	1.063	1.084	1.066	1.067	0.841	0.942	1.177	1.099	1.117	1.038	0.837	0.920	1.000	0.884
LTE Band 13_Ant 0	0.502	1.241	1.109	1.109	1.198	1.219	1.201	1.202	0.976	1.077	1.312	1.234	1.252	1.173	0.972	1.055	1.135	1.019
LTE Band 14_Ant 0	0.466	1.205	1.073	1.073	1.162	1.183	1.165	1.166	0.940	1.041	1.276	1.198	1.216	1.137	0.936	1.019	1.099	0.983
LTE Band 25_Ant 0	0.624	1.363	1.231	1.231	1.320	1.341	1.323	1.324	1.098	1.199	1.434	1.356	1.374	1.295	1.094	1.177	1.257	1.141
LTE Band 26_Ant 0	0.441	1.180	1.048	1.048	1.137	1.158	1.140	1.141	0.915	1.016	1.251	1.173	1.191	1.112	0.911	0.994	1.074	0.958
LTE Band 30_Ant 0	0.525	1.264	1.132	1.132	1.221	1.242	1.224	1.225	0.999	1.100	1.335	1.257	1.275	1.196	0.995	1.078	1.158	1.042
LTE Band 41_Ant 0	0.661	1.400	1.268	1.268	1.357	1.378	1.360	1.361	1.195	1.236	1.471	1.393	1.411	1.332	1.131	1.214	1.294	1.178
LTE Band 66_Ant 0	0.595	1.334	1.202	1.202	1.291	1.312	1.294	1.295	1.069	1.170	1.405	1.327	1.345	1.266	1.065	1.148	1.228	1.112
LTE Band 71_Ant 0	0.410	1.149	1.017	1.017	1.106	1.127	1.109	1.110	0.884	0.985	1.220	1.142	1.160	1.081	0.880	0.963	1.043	0.927
FR1 n7_Ant 0	0.917	1.656	1.524	1.524	1.613	1.634	1.616	1.617	1.391	1.492	1.727	1.649	1.667	1.588	1.387	1.470	1.550	1.434
FR1 n12_Ant 0	0.339	1.078	0.946	0.946	1.035	1.056	1.038	1.039	0.813	0.914	1.149	1.071	1.089	1.010	0.809	0.892	0.972	0.856
FR1 n14_Ant 0	0.501	1.240	1.108	1.108	1.197	1.218	1.200	1.201	0.975	1.076	1.311	1.233	1.251	1.172	0.971	1.054	1.134	1.018
FR1 n25_Ant 0	0.632	1.371	1.239	1.239	1.328	1.349	1.331	1.332	1.106	1.207	1.442	1.364	1.382	1.303	1.102	1.185	1.265	1.149
FR1 n26_Ant 0	0.436	1.175	1.043	1.043	1.132	1.153	1.135	1.136	0.910	1.011	1.246	1.168	1.186	1.107	0.906	0.989	1.069	0.953
FR1 n30_Ant 0	0.599	1.338	1.206	1.206	1.295	1.316	1.298	1.299	1.073	1.174	1.409	1.331	1.349	1.270	1.069	1.152	1.232	1.116
FR1 n41_Ant 0	0.886	1.625	1.493	1.493	1.582	1.603	1.585	1.586	1.360	1.461	1.696	1.618	1.636	1.557	1.356	1.439	1.519	1.403
FR1 n66_Ant 0	0.767	1.506	1.374	1.374	1.463	1.484	1.466	1.467	1.241	1.342	1.577	1.499	1.517	1.438	1.237	1.320	1.400	1.284
FR1 n70_Ant 0	0.926	1.665	1.533	1.533	1.622	1.643	1.625	1.626	1.400	1.501	1.736	1.658	1.676	1.597	1.396	1.479	1.559	1.443
FR1 n71_Ant 0	0.389	1.128	0.966	0.966	1.085	1.106	1.088	1.089	0.863	0.964	1.199	1.121	1.139	1.060	0.859	0.942	1.022	0.906

Hybrid 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				
GSM1900_Ant 2	0.739	-60.4	-64.6	-207.0	57.1	1.66	0.04	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
GSM1900_Ant 2	0.739	-60.4	-64.6	-207.0	58.6	1.63	0.04	Not required
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
GSM1900_Ant 2	0.739	-60.4	-64.6	-207.0	54.3	1.67	0.04	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
LTE Band 7_Ant 2	0.696	-56.0	-70.5	-207.0	53.6	1.61	0.04	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
LTE Band 7_Ant 2	0.696	-56.0	-70.5	-207.0	49.0	1.62	0.04	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
LTE Band 25_Ant 2	0.717	-62.9	-64.6	-207.0	59.6	1.63	0.04	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
LTE Band 25_Ant 2	0.717	-62.9	-64.6	-207.0	61.1	1.60	0.03	Not required
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
LTE Band 25_Ant 2	0.717	-62.9	-64.6	-207.0	56.7	1.64	0.04	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
LTE Band 30_Ant 2	0.699	-55.0	-73.5	-207.0	53.4	1.62	0.04	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
LTE Band 30_Ant 2	0.699	-55.0	-73.5	-207.0	47.8	1.63	0.04	Not required
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
LTE Band 41_Ant 2	0.700	-60.5	-70.0	-207.0	58.0	1.62	0.04	Not required
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
LTE Band 41_Ant 2	0.700	-60.5	-70.0	-207.0	53.6	1.63	0.04	Not required

**FCC SAR TEST REPORT**

Report No. :FA451606B

FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
FR1 n7_Ant 2	0.810	-58.0	-73.0	-207.0				
LTE Band 7_Ant 0	0.835	-4.5	-57.0	-207.0				
FR1 n7_Ant 2	0.810	-58.0	-73.0	-207.0				
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
FR1 n7_Ant 2	0.810	-58.0	-73.0	-207.0				
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
FR1 n7_Ant 2	0.810	-58.0	-73.0	-207.0				
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
FR1 n25_Ant 2	0.732	-61.4	-62.1	-207.0				
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
FR1 n25_Ant 2	0.732	-61.4	-62.1	-207.0				
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
FR1 n25_Ant 2	0.732	-61.4	-62.1	-207.0				
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
FR1 n30_Ant 2	0.750	-58.0	-69.0	-207.0				
FR1 n7_Ant 0	0.917	-3.5	-59.5	-207.0				
FR1 n30_Ant 2	0.750	-58.0	-69.0	-207.0				
FR1 n41_Ant 0	0.886	-2.0	-59.5	-207.0				
FR1 n30_Ant 2	0.750	-58.0	-69.0	-207.0				
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				
FR1 n41_Ant 2	0.671	-58.0	-73.0	-207.0				
FR1 n70_Ant 0	0.926	-7.2	-75.4	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 57>

SAR summation (blue colored) for each band of antenna 0,5

Exposure Position	WWAN SAR	LTE Band 2_Ant 5	LTE Band 66_Ant 5	FR1 n41_Ant 5	FR1 n48_Ant 5	FR1 n77_Ant 5
Back	1g SAR (W/kg)	0.665	0.434	0.782	0.728	0.587
GSM850_Ant 0	0.708	1.373	1.142	1.490	1.436	1.295
GSM1900_Ant 0	0.630	1.295	1.064	1.412	1.358	1.217
WCDMA II_Ant 0	0.731	1.396	1.165	1.513	1.459	1.318
WCDMA IV_Ant 0	0.585	1.250	1.019	1.367	1.313	1.172
WCDMA V_Ant 0	0.476	1.141	0.910	1.258	1.204	1.063
LTE Band 7_Ant 0	0.835	1.500	1.269	1.617	1.563	1.422
LTE Band 12_Ant 0	0.367	1.032	0.801	1.149	1.095	0.954
LTE Band 13_Ant 0	0.502	1.167	0.936	1.284	1.230	1.089
LTE Band 14_Ant 0	0.466	1.131	0.900	1.248	1.194	1.053
LTE Band 25_Ant 0	0.624	1.289	1.058	1.406	1.352	1.211
LTE Band 26_Ant 0	0.441	1.106	0.875	1.223	1.169	1.028
LTE Band 30_Ant 0	0.525	1.190	0.959	1.307	1.253	1.112
LTE Band 41_Ant 0	0.661	1.326	1.095	1.443	1.389	1.248
LTE Band 66_Ant 0	0.595	1.260	1.029	1.377	1.323	1.182
LTE Band 71_Ant 0	0.410	1.075	0.844	1.192	1.138	0.997
FR1 n7_Ant 0	0.917	1.582	1.351	1.699	1.645	1.504
FR1 n12_Ant 0	0.339	1.004	0.773	1.121	1.067	0.926
FR1 n14_Ant 0	0.501	1.166	0.935	1.283	1.229	1.088
FR1 n25_Ant 0	0.632	1.297	1.066	1.414	1.360	1.219
FR1 n26_Ant 0	0.436	1.101	0.870	1.218	1.164	1.023
FR1 n30_Ant 0	0.599	1.264	1.033	1.381	1.327	1.186
FR1 n41_Ant 0	0.886	1.551	1.320	1.668	1.614	1.473
FR1 n66_Ant 0	0.767	1.432	1.201	1.549	1.495	1.354
FR1 n70_Ant 0	0.926	1.591	1.360	1.708	1.654	1.513
FR1 n71_Ant 0	0.389	1.054	0.823	1.171	1.117	0.976

Hybrid 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				
Max WWAN Ant 0	0.926	-4.5	-57.0	-207.0	120.3	1.71	0.02	Not required
Max WWAN Ant 5	0.782	-51.0	54.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 58>

SAR summation (blue colored) for each band of antenna 1,2

Exposure Position	WWAN SAR	GSM1900_Ant 1_2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)	0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.810	0.732	0.750	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 1	0.904	1.643	1.511	1.511	1.600	1.621	1.603	1.604	1.378	1.479	1.714	1.636	1.654	1.575	1.374	1.457	1.537	1.421
WCDMA V_Ant 1	0.823	1.562	1.430	1.430	1.519	1.540	1.522	1.523	1.297	1.398	1.633	1.555	1.573	1.494	1.293	1.376	1.456	1.340
LTE Band 2_Ant 1	0.849	1.588	1.456	1.456	1.545	1.566	1.548	1.549	1.323	1.424	1.659	1.581	1.599	1.520	1.319	1.402	1.482	1.366
LTE Band 12_Ant 1	0.457	1.196	1.064	1.064	1.153	1.174	1.156	1.157	0.931	1.032	1.267	1.189	1.207	1.128	0.927	1.010	1.090	0.974
LTE Band 13_Ant 1	0.788	1.527	1.395	1.395	1.484	1.505	1.487	1.488	1.262	1.363	1.598	1.520	1.538	1.459	1.258	1.341	1.421	1.305
LTE Band 14_Ant 1	0.758	1.497	1.365	1.365	1.454	1.475	1.457	1.458	1.232	1.333	1.568	1.490	1.508	1.429	1.228	1.311	1.391	1.275
LTE Band 26_Ant 1	0.783	1.522	1.390	1.390	1.479	1.500	1.482	1.483	1.257	1.358	1.593	1.515	1.533	1.454	1.253	1.336	1.416	1.300
LTE Band 66_Ant 1	0.748	1.487	1.355	1.355	1.444	1.465	1.447	1.448	1.222	1.323	1.558	1.480	1.498	1.419	1.218	1.301	1.381	1.265
LTE Band 71_Ant 1	0.444	1.183	1.051	1.051	1.140	1.161	1.143	1.144	0.918	1.019	1.254	1.176	1.194	1.115	0.914	0.997	1.077	0.961
FR1 n12_Ant 1	0.373	1.112	0.980	0.980	1.069	1.090	1.072	1.073	0.847	0.948	1.183	1.105	1.123	1.044	0.843	0.926	1.006	0.890
FR1 n14_Ant 1	0.654	1.393	1.261	1.261	1.350	1.371	1.353	1.354	1.128	1.229	1.464	1.386	1.404	1.325	1.124	1.207	1.287	1.171
FR1 n26_Ant 1	0.726	1.465	1.333	1.333	1.422	1.443	1.425	1.426	1.200	1.301	1.536	1.458	1.476	1.397	1.196	1.279	1.359	1.243
FR1 n41_Ant 1	0.796	1.535	1.403	1.403	1.492	1.513	1.495	1.496	1.270	1.371	1.606	1.528	1.546	1.467	1.266	1.349	1.429	1.313
FR1 n48_Ant 1	0.459	1.198	1.066	1.066	1.155	1.176	1.158	1.159	0.933	1.034	1.269	1.191	1.209	1.130	0.929	1.012	1.092	0.976
FR1 n71_Ant 1	0.393	1.132	1.000	1.000	1.089	1.110	1.092	1.093	0.867	0.968	1.203	1.125	1.143	1.064	0.863	0.946	1.026	0.910
FR1 n77_Ant 1	0.703	1.442	1.310	1.310	1.399	1.420	1.402	1.403	1.177	1.278	1.513	1.435	1.453	1.374	1.173	1.256	1.336	1.220

Hybrid 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				
Max WWAN Ant 1	0.904	-2.2	59.3	-207.0	135.1	1.71	0.02	Not required
Max WWAN Ant 2	0.810	-61.4	-62.1	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 59>

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

Exposure Position	WWAN SAR	WLAN5/6G Hz Ant 4+3	GSM850_0_Ant 0	GSM190_0_Ant 0	WCDMA II_Ant 0	WCDMA IV_Ant 0	WCDMA V_Ant 0	LTE Band 7_Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 25_Ant 0	LTE Band 26_Ant 0	LTE Band 30_Ant 0	LTE Band 41_Ant 0	LTE Band 68_Ant 0	LTE Band 71_Ant 0	FR1 n7_Ant 0	FR1 n12_Ant 0	FR1 n14_Ant 0	FR1 n25_Ant 0	FR1 n26_Ant 0	FR1 n30_Ant 0	FR1 n41_Ant 0	FR1 n66_Ant 0	FR1 n70_Ant 0	FR1 n71_Ant 0
Front	1g SAR (W/kg)	0.429	0.000	0.000	0.391	0.447	0.406	0.332	0.471	0.508	0.320	0.422	0.490	0.346	0.402	0.332	0.451	0.323	0.438	0.302	0.406	0.421	0.440	0.266	0.412	0.346	
GSM850_Ant 1	0.310	0.633	1.372	0.943	0.943	1.334	1.390	1.349	1.275	1.414	1.451	1.263	1.365	1.433	1.289	1.345	1.275	1.394	1.266	1.381	1.245	1.349	1.364	1.383	1.209	1.355	1.289
WCDMA V_Ant 1	0.230	0.633	1.292	0.863	0.863	1.254	1.310	1.269	1.195	1.334	1.371	1.183	1.285	1.353	1.209	1.265	1.195	1.314	1.186	1.301	1.165	1.269	1.284	1.303	1.129	1.275	1.209
LTE Band 2_Ant 1	0.327	0.633	1.389	0.960	0.960	1.351	1.407	1.366	1.292	1.431	1.468	1.280	1.382	1.450	1.306	1.362	1.292	1.411	1.283	1.398	1.262	1.366	1.381	1.400	1.226	1.372	1.306
LTE Band 12_Ant 1	0.312	0.633	1.374	0.945	0.945	1.336	1.392	1.351	1.277	1.416	1.453	1.265	1.367	1.435	1.291	1.347	1.277	1.396	1.268	1.383	1.247	1.351	1.366	1.385	1.211	1.357	1.291
LTE Band 13_Ant 1	0.274	0.633	1.336	0.907	0.907	1.298	1.354	1.313	1.239	1.378	1.415	1.227	1.329	1.397	1.253	1.309	1.239	1.358	1.230	1.345	1.209	1.313	1.328	1.347	1.173	1.319	1.253
LTE Band 14_Ant 1	0.288	0.633	1.350	0.921	0.921	1.312	1.368	1.327	1.253	1.392	1.429	1.241	1.343	1.411	1.267	1.323	1.253	1.372	1.244	1.359	1.223	1.327	1.342	1.361	1.187	1.333	1.267
LTE Band 26_Ant 1	0.261	0.633	1.323	0.894	0.894	1.285	1.341	1.300	1.226	1.365	1.402	1.214	1.316	1.384	1.240	1.296	1.226	1.345	1.217	1.332	1.196	1.300	1.315	1.334	1.160	1.306	1.240
LTE Band 66_Ant 1	0.329	0.633	1.391	0.962	0.962	1.353	1.409	1.368	1.294	1.433	1.470	1.282	1.384	1.452	1.308	1.364	1.294	1.413	1.285	1.400	1.264	1.368	1.383	1.402	1.228	1.374	1.308
LTE Band 71_Ant 1	0.193	0.633	1.255	0.826	0.826	1.217	1.273	1.232	1.158	1.297	1.334	1.146	1.248	1.316	1.172	1.228	1.158	1.277	1.149	1.264	1.128	1.232	1.247	1.266	1.092	1.238	1.172
FR1 n12_Ant 1	0.249	0.633	1.311	0.882	0.882	1.273	1.329	1.288	1.214	1.353	1.390	1.202	1.304	1.372	1.228	1.284	1.214	1.333	1.205	1.320	1.184	1.288	1.303	1.322	1.148	1.294	1.228
FR1 n14_Ant 1	0.300	0.633	1.362	0.933	0.933	1.324	1.380	1.339	1.265	1.404	1.441	1.253	1.355	1.423	1.279	1.335	1.265	1.384	1.256	1.371	1.235	1.339	1.354	1.373	1.199	1.345	1.279
FR1 n26_Ant 1	0.242	0.633	1.304	0.875	0.875	1.266	1.322	1.281	1.207	1.346	1.383	1.195	1.297	1.365	1.221	1.277	1.207	1.326	1.198	1.313	1.177	1.281	1.296	1.315	1.141	1.287	1.221
FR1 n41_Ant 1	0.341	0.633	1.403	0.974	0.974	1.365	1.421	1.380	1.306	1.445	1.482	1.294	1.396	1.464	1.320	1.376	1.306	1.425	1.297	1.412	1.276	1.380	1.395	1.414	1.240	1.386	1.320
FR1 n48_Ant 1	0.458	0.633	1.520	1.091	1.091	1.482	1.538	1.497	1.423	1.562	1.599	1.411	1.513	1.581	1.437	1.493	1.423	1.542	1.414	1.529	1.393	1.497	1.512	1.531	1.357	1.503	1.437
FR1 n71_Ant 1	0.280	0.633	1.342	0.913	0.913	1.304	1.360	1.319	1.245	1.384	1.421	1.233	1.335	1.403	1.259	1.315	1.245	1.364	1.236	1.351	1.215	1.319	1.334	1.353	1.179	1.325	1.259
FR1 n77_Ant 1	0.406	0.633	1.468	1.039	1.039	1.430	1.486	1.445	1.371	1.510	1.547	1.359	1.461	1.529	1.385	1.441	1.371	1.490	1.362	1.477	1.341	1.445	1.460	1.479	1.305	1.451	1.385

Hybrid 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				
Max WWAN Ant 0	0.508	-30.5	-2.0	-207.0	73.5	1.60	0.03	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3	1.091	-49.5	69.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 60>

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

Exposure Position	WWAN SAR	WLANS/6GHz SAR	GSM850 Hz Ant 4+3	GSM1900 Hz Ant 0	WCDMA UL_Ant 0	WCDMA UL_Ant 0	WCDMA UL_Ant 0	LTE Band F_Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 20_Ant 0	LTE Band 26_Ant 0	LTE Band 41_Ant 0	LTE Band 47_Ant 0	LTE Band 68_Ant 0	LTE Band 71_Ant 0	FR1 n7_Ant 0	FR1 n12_Ant 0	FR1 n14_Ant 0	FR1 n25_Ant 0	FR1 n26_Ant 0	FR1 n30_Ant 0	FR1 n41_Ant 0	FR1 n66_Ant 0	FR1 n70_Ant 0	FR1 n71_Ant 0		
Back	1g SAR (W/kg)	0.446	0.450	0.412	0.451	0.454	0.388	0.367	0.458	0.456	0.456	0.441	0.398	0.457	0.368	0.453	0.410	0.418	0.339	0.457	0.458	0.436	0.410	0.337	0.445	0.363	0.457	0.389	
GSM850_Ant 1	0.427	0.764	1.637	1.641	1.603	1.642	1.645	1.577	1.558	1.649	1.647	1.647	1.632	1.589	1.648	1.560	1.644	1.601	1.609	1.530	1.648	1.649	1.627	1.601	1.528	1.636	1.554	1.648	1.580
WCDMA_V_Ant 1	0.355	0.764	1.565	1.569	1.531	1.570	1.573	1.505	1.486	1.577	1.575	1.575	1.560	1.517	1.576	1.488	1.572	1.529	1.537	1.458	1.576	1.577	1.555	1.529	1.456	1.564	1.482	1.576	1.508
LTE Band 2_Ant 1	0.409	0.764	1.619	1.623	1.585	1.624	1.627	1.559	1.540	1.631	1.629	1.614	1.571	1.630	1.542	1.626	1.583	1.591	1.512	1.630	1.631	1.609	1.583	1.510	1.618	1.536	1.630	1.562	
LTE Band 12_Ant 1	0.447	0.764	1.657	1.661	1.623	1.662	1.665	1.597	1.578	1.669	1.667	1.667	1.652	1.609	1.668	1.580	1.664	1.621	1.629	1.550	1.668	1.669	1.647	1.621	1.548	1.656	1.574	1.668	1.600
LTE Band 13_Ant 1	0.386	0.764	1.595	1.599	1.561	1.600	1.603	1.535	1.516	1.607	1.605	1.605	1.590	1.547	1.606	1.518	1.602	1.559	1.567	1.488	1.606	1.607	1.585	1.559	1.486	1.594	1.512	1.606	1.538
LTE Band 14_Ant 1	0.401	0.764	1.611	1.615	1.577	1.616	1.619	1.551	1.532	1.623	1.621	1.621	1.608	1.563	1.622	1.534	1.618	1.575	1.583	1.504	1.622	1.623	1.601	1.575	1.502	1.610	1.528	1.622	1.554
LTE Band 20_Ant 1	0.388	0.764	1.595	1.599	1.561	1.600	1.603	1.535	1.516	1.607	1.605	1.605	1.590	1.547	1.606	1.518	1.602	1.559	1.567	1.488	1.606	1.607	1.585	1.559	1.486	1.594	1.512	1.606	1.538
LTE Band 66_Ant 1	0.429	0.764	1.639	1.643	1.605	1.644	1.647	1.579	1.560	1.651	1.649	1.649	1.634	1.591	1.650	1.562	1.646	1.603	1.611	1.532	1.650	1.651	1.629	1.603	1.530	1.638	1.556	1.650	1.582
LTE Band 71_Ant 1	0.444	0.764	1.654	1.658	1.620	1.659	1.662	1.594	1.575	1.666	1.664	1.664	1.649	1.606	1.665	1.577	1.661	1.618	1.626	1.547	1.665	1.666	1.644	1.618	1.545	1.653	1.571	1.665	1.597
FR1_n12_Ant 1	0.373	0.764	1.583	1.587	1.549	1.588	1.591	1.523	1.504	1.595	1.593	1.593	1.578	1.535	1.594	1.506	1.590	1.547	1.555	1.476	1.594	1.595	1.573	1.547	1.474	1.582	1.500	1.594	1.526
FR1_n14_Ant 1	0.447	0.764	1.657	1.661	1.623	1.662	1.665	1.597	1.578	1.669	1.667	1.667	1.652	1.609	1.668	1.580	1.664	1.621	1.629	1.550	1.668	1.669	1.647	1.621	1.548	1.656	1.574	1.668	1.600
FR1_n26_Ant 1	0.406	0.764	1.616	1.620	1.582	1.621	1.624	1.556	1.537	1.628	1.626	1.626	1.611	1.568	1.627	1.539	1.623	1.580	1.588	1.509	1.627	1.628	1.606	1.580	1.507	1.615	1.533	1.627	1.559
FR1_n41_Ant 1	0.444	0.764	1.654	1.658	1.620	1.659	1.662	1.594	1.575	1.666	1.664	1.664	1.649	1.606	1.665	1.577	1.661	1.618	1.626	1.547	1.665	1.666	1.644	1.618	1.545	1.653	1.571	1.665	1.597
FR1_n45_Ant 1	0.459	0.764	1.669	1.673	1.635	1.674	1.677	1.609	1.590	1.681	1.679	1.679	1.664	1.621	1.680	1.592	1.678	1.633	1.641	1.562	1.680	1.681	1.659	1.633	1.560	1.668	1.586	1.680	1.612
FR1_n71_Ant 1	0.393	0.764	1.603	1.607	1.569	1.608	1.611	1.543	1.524	1.615	1.613	1.613	1.598	1.555	1.614	1.526	1.610	1.567	1.575	1.496	1.614	1.615	1.593	1.567	1.494	1.602	1.520	1.614	1.546
FR1_n77_Ant 1	0.446	0.764	1.656	1.660	1.622	1.661	1.664	1.596	1.577	1.668	1.666	1.666	1.651	1.608	1.667	1.579	1.663	1.620	1.628	1.549	1.667	1.668	1.646	1.620	1.547	1.655	1.573	1.667	1.599

Hybrid 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				
Max WWAN Ant 0	0.446	-19.8 16.0 -207.0			46.4	1.60	0.04	Not required
Max WWAN Ant 1 + WLANS/6GHz Ant 4+3	1.149	-0.2 58.1 -207.0						



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 61>

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

Exposure Position	WWAN_SAR	WLAN5GHz_Ant 4+3	GSM900_Ant 2	WCDMA_II_Ant 2	WCDMA_IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1_n7_Ant 2	FR1_n25_Ant 2	FR1_n30_Ant 2	FR1_n41_Ant 2	FR1_n48_Ant 2	FR1_n66_Ant 2	FR1_n70_Ant 2	FR1_n77_Ant 2
Front	1g SAR (W/kg)	0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354	
GSM850_Ant 0	0.429	0.633	1.555	1.629	1.575	1.619	1.672	1.658	1.613	1.493	1.559	1.577	1.712	1.524	1.644	1.516	1.541	1.609	1.416
GSM1900_Ant 0	0.304	0.633	1.430	1.504	1.450	1.494	1.547	1.533	1.488	1.368	1.434	1.452	1.587	1.399	1.519	1.391	1.416	1.484	1.291
WCDMA_II_Ant 0	0.232	0.633	1.358	1.432	1.378	1.422	1.475	1.461	1.416	1.296	1.362	1.380	1.515	1.327	1.447	1.319	1.344	1.412	1.219
WCDMA_IV_Ant 0	0.391	0.633	1.517	1.591	1.537	1.581	1.634	1.620	1.575	1.455	1.521	1.539	1.674	1.486	1.606	1.478	1.503	1.571	1.378
WCDMA_V_Ant 0	0.447	0.633	1.573	1.647	1.593	1.637	1.690	1.676	1.631	1.511	1.577	1.595	1.730	1.542	1.662	1.534	1.559	1.627	1.434
LTE Band 7_Ant 0	0.406	0.633	1.532	1.606	1.552	1.596	1.649	1.635	1.590	1.470	1.536	1.554	1.689	1.501	1.621	1.493	1.518	1.586	1.393
LTE Band 12_Ant 0	0.332	0.633	1.458	1.532	1.478	1.522	1.575	1.561	1.516	1.396	1.462	1.480	1.615	1.427	1.547	1.419	1.444	1.512	1.319
LTE Band 13_Ant 0	0.471	0.633	1.597	1.671	1.617	1.661	1.714	1.700	1.655	1.535	1.601	1.619	1.754	1.566	1.686	1.558	1.583	1.651	1.458
LTE Band 14_Ant 0	0.508	0.633	1.634	1.708	1.654	1.698	1.751	1.737	1.692	1.572	1.638	1.656	1.791	1.603	1.723	1.595	1.620	1.688	1.495
LTE Band 25_Ant 0	0.320	0.633	1.446	1.520	1.466	1.510	1.563	1.549	1.504	1.384	1.450	1.468	1.603	1.415	1.535	1.407	1.432	1.500	1.307
LTE Band 26_Ant 0	0.422	0.633	1.548	1.622	1.568	1.612	1.665	1.651	1.606	1.486	1.552	1.570	1.705	1.517	1.637	1.509	1.534	1.602	1.409
LTE Band 30_Ant 0	0.490	0.633	1.616	1.690	1.636	1.680	1.733	1.719	1.674	1.554	1.620	1.638	1.773	1.585	1.705	1.577	1.602	1.670	1.477
LTE Band 41_Ant 0	0.346	0.633	1.472	1.546	1.492	1.536	1.589	1.575	1.530	1.410	1.476	1.494	1.629	1.441	1.561	1.433	1.458	1.526	1.333
LTE Band 66_Ant 0	0.402	0.633	1.528	1.602	1.548	1.592	1.645	1.631	1.586	1.466	1.532	1.550	1.685	1.497	1.617	1.489	1.514	1.582	1.389
LTE Band 71_Ant 0	0.332	0.633	1.458	1.532	1.478	1.522	1.575	1.561	1.516	1.396	1.462	1.480	1.615	1.427	1.547	1.419	1.444	1.512	1.319
FR1_n7_Ant 0	0.451	0.633	1.577	1.651	1.597	1.641	1.694	1.680	1.635	1.515	1.581	1.599	1.734	1.546	1.666	1.538	1.563	1.631	1.438
FR1_n12_Ant 0	0.323	0.633	1.449	1.523	1.469	1.513	1.566	1.552	1.507	1.387	1.453	1.471	1.606	1.418	1.538	1.410	1.435	1.503	1.310
FR1_n14_Ant 0	0.438	0.633	1.564	1.638	1.584	1.628	1.681	1.667	1.622	1.502	1.568	1.586	1.721	1.533	1.653	1.525	1.550	1.618	1.425
FR1_n25_Ant 0	0.302	0.633	1.428	1.502	1.448	1.492	1.545	1.531	1.486	1.366	1.432	1.450	1.585	1.397	1.517	1.389	1.414	1.482	1.289
FR1_n26_Ant 0	0.406	0.633	1.532	1.606	1.552	1.596	1.649	1.635	1.590	1.470	1.536	1.554	1.689	1.501	1.621	1.493	1.518	1.586	1.393
FR1_n30_Ant 0	0.421	0.633	1.547	1.621	1.567	1.611	1.664	1.650	1.605	1.485	1.551	1.569	1.704	1.516	1.636	1.508	1.533	1.601	1.408
FR1_n41_Ant 0	0.440	0.633	1.566	1.640	1.586	1.630	1.683	1.669	1.624	1.504	1.570	1.588	1.723	1.535	1.655	1.527	1.552	1.620	1.427
FR1_n66_Ant 0	0.266	0.633	1.392	1.466	1.412	1.456	1.509	1.495	1.450	1.330	1.396	1.414	1.549	1.361	1.481	1.353	1.378	1.446	1.253
FR1_n70_Ant 0	0.412	0.633	1.538	1.612	1.558	1.602	1.655	1.641	1.596	1.476	1.542	1.560	1.695	1.507	1.627	1.499	1.524	1.592	1.399
FR1_n71_Ant 0	0.346	0.633	1.472	1.546	1.492	1.536	1.589	1.575	1.530	1.410	1.476	1.494	1.629	1.441	1.561	1.433	1.458	1.526	1.333

Hybrid 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				
Max WWAN Ant 0	0.508	-22.9	-58.8	-207.0	31.2	1.16	0.04	Not required
Max WWAN Ant 2	0.650	7.5	-66.0	-207.0	42.1	0.96	0.02	Not required
Max WWAN Ant 0	0.508	-34.5	16.8	-207.0	67.2	1.14	0.02	Not required
WLAN5/6GHz Ant 4+3(3)	0.455	-56.2	52.9	-207.0	123.8	1.11	0.01	Not required
Max WWAN Ant 0	0.508	-34.5	16.8	-207.0	130.8	1.28	0.01	Not required
WLAN5/6GHz Ant 4+3(4)	0.633	-11.4	79.9	-207.0	52.3	1.09	0.02	Not required
Max WWAN Ant 2	0.650	-0.8	-57.8	-207.0				
WLAN5/6GHz Ant 4+3(3)	0.455	-56.2	52.9	-207.0				
Max WWAN Ant 2	0.650	16.0	-48.0	-207.0				
WLAN5/6GHz Ant 4+3(4)	0.633	-11.4	79.9	-207.0				
WLAN5/6GHz Ant 4+3(3)	0.455	-56.2	52.9	-207.0				
WLAN5/6GHz Ant 4+3(4)	0.633	-11.4	79.9	-207.0				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 62>

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

Exposure Position	WWAN_SAR	WLAN5GHz_Ant 4+3	GSM900_Ant 2	WCDMA_II_Ant 2	WCDMA_IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1_n7_Ant 2	FR1_n25_Ant 2	FR1_n30_Ant 2	FR1_n41_Ant 2	FR1_n48_Ant 2	FR1_n66_Ant 2	FR1_n70_Ant 2	FR1_n77_Ant 2
Back	1g SAR (W/kg)	0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517	
GSM850_Ant 0	0.446	0.764	1.949	1.817	1.817	1.906	1.927	1.909	1.910	1.684	1.785	1.900	1.942	1.848	1.881	1.680	1.763	1.843	1.727
GSM1900_Ant 0	0.450	0.764	1.953	1.821	1.821	1.910	1.931	1.913	1.914	1.688	1.789	1.904	1.946	1.852	1.885	1.684	1.767	1.847	1.731
WCDMA_II_Ant 0	0.412	0.764	1.915	1.783	1.783	1.872	1.893	1.875	1.876	1.650	1.751	1.866	1.908	1.814	1.847	1.646	1.729	1.809	1.693
WCDMA_IV_Ant 0	0.451	0.764	1.954	1.822	1.822	1.911	1.932	1.914	1.915	1.689	1.700	1.905	1.947	1.853	1.886	1.685	1.768	1.848	1.732
WCDMA_V_Ant 0	0.454	0.764	1.957	1.825	1.825	1.914	1.935	1.917	1.918	1.692	1.793	1.908	1.950	1.856	1.889	1.688	1.771	1.851	1.735
LTE Band 7_Ant 0	0.386	0.764	1.889	1.757	1.757	1.846	1.867	1.849	1.850	1.624	1.725	1.840	1.882	1.788	1.821	1.620	1.703	1.783	1.667
LTE Band 12_Ant 0	0.367	0.764	1.870	1.738	1.738	1.827	1.848	1.830	1.831	1.605	1.706	1.821	1.863	1.769	1.802	1.601	1.684	1.764	1.648
LTE Band 13_Ant 0	0.458	0.764	1.961	1.829	1.829	1.918	1.939	1.921	1.922	1.696	1.797	1.912	1.954	1.860	1.893	1.692	1.775	1.855	1.739
LTE Band 14_Ant 0	0.456	0.764	1.959	1.827	1.827	1.916	1.937	1.919	1.920	1.694	1.795	1.910	1.952	1.858	1.891	1.690	1.773	1.853	1.737
LTE Band 25_Ant 0	0.456	0.764	1.959	1.827	1.827	1.916	1.937	1.919	1.920	1.694	1.795	1.910	1.952	1.858	1.891	1.690	1.773	1.853	1.737
LTE Band 26_Ant 0	0.441	0.764	1.944	1.812	1.812	1.901	1.922	1.904	1.905	1.679	1.780	1.895	1.937	1.843	1.876	1.675	1.758	1.838	1.722
LTE Band 30_Ant 0	0.457	0.764	1.960	1.828	1.828	1.917	1.938	1.920	1.921	1.695	1.796	1.911	1.953	1.859	1.892	1.691	1.774	1.854	1.738
LTE Band 41_Ant 0	0.369	0.764	1.872	1.740	1.740	1.829	1.850	1.832	1.833	1.607	1.708	1.823	1.865	1.771	1.804	1.603	1.686	1.766	1.650
LTE Band 66_Ant 0	0.453	0.764	1.956	1.824	1.824	1.913	1.934	1.916	1.917	1.691	1.792	1.907	1.949	1.855	1.888	1.687	1.770	1.850	1.734
LTE Band 71_Ant 0	0.410	0.764	1.913	1.781	1.781	1.870	1.891	1.873	1.874	1.648	1.749	1.864	1.906	1.812	1.845	1.644	1.727	1.807	1.691
FR1_n7_Ant 0	0.418	0.764	1.921	1.789	1.789	1.878	1.899	1.881	1.882	1.656	1.757	1.872	1.914	1.820	1.853	1.652	1.735	1.815	1.699
FR1_n12_Ant 0	0.339	0.764	1.842	1.710	1.710	1.799	1.820	1.802	1.803	1.577	1.678	1.793	1.835	1.741	1.774	1.573	1.656	1.736	1.620
FR1_n14_Ant 0	0.457	0.764	1.960	1.828	1.828	1.917	1.938	1.920	1.921	1.695	1.796	1.911	1.953	1.859	1.892	1.691	1.774	1.854	1.738
FR1_n25_Ant 0	0.458	0.764	1.961	1.829	1.829	1.918	1.939	1.921	1.922	1.696	1.797	1.912	1.954	1.860	1.893	1.692	1.775	1.855	1.739
FR1_n26_Ant 0	0.436	0.764	1.939	1.807	1.807	1.896	1.917	1.899	1.900	1.674	1.775	1.890	1.932	1.838	1.871	1.670	1.753	1.833	1.717
FR1_n30_Ant 0	0.337	0.764	1.840	1.708	1.708	1.797	1.818	1.800	1.801	1.575	1.676	1.791	1.833	1.739	1.772	1.571	1.654	1.734	1.618
FR1_n41_Ant 0	0.445	0.764	1.948	1.816	1.816	1.905	1.926	1.908	1.909	1.683	1.784	1.899	1.941	1.847	1.880	1.679	1.762	1.842	1.726
FR1_n66_Ant 0	0.363	0.764	1.866	1.734	1.734	1.823	1.844	1.826	1.827	1.601	1.702	1.817	1.859	1.765	1.798	1.597	1.680	1.760	1.644
FR1_n70_Ant 0	0.457	0.764	1.960	1.828	1.828	1.917	1.938	1.920	1.921	1.695	1.796	1.911	1.953	1.859	1.892	1.691	1.774	1.854	1.738
FR1_n71_Ant 0	0.389	0.764	1.892	1.760	1.760	1.849	1.870	1.852	1.853	1.627	1.728	1.843	1.885	1.791	1.824	1.623	1.706	1.786	1.670

Hybrid 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				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-55.0	-73.5	-207.0	43.9	0.80	0.02	Not required
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	67.3	1.22	0.02	Not required
WLAN5/6GHz Ant 4+3(3)	0.346	10.8	47.5	-207.0	114.9	1.09	0.01	Not required
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	119.1	1.50	0.02	Not required
WLAN5/6GHz Ant 4+3(4)	0.764	-47.9	77.2	-207.0	65.8	1.11	0.02	Not required
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0				
WLAN5/6GHz Ant 4+3(3)	0.346	10.8	47.5	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0				
WLAN5/6GHz Ant 4+3(4)	0.764	-47.9	77.2	-207.0				
WLAN5/6GHz Ant 4+3(3)	0.346	10.8	47.5	-207.0				
WLAN5/6GHz Ant 4+3(4)	0.764	-47.9	77.2	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 63>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN SAR	WLAN5/6G Hz Ant 4+3	GSM850, Ant 0	GSM1900, Ant 0	WCDMA II, Ant 0	WCDMA IV, Ant 0	WCDMA V, Ant 0	LTE Band 7, Ant 0	LTE Band 12, Ant 0	LTE Band 13, Ant 0	LTE Band 14, Ant 0	LTE Band 25, Ant 0	LTE Band 26, Ant 0	LTE Band 30, Ant 0	LTE Band 41, Ant 0	LTE Band 66, Ant 0	LTE Band 71, Ant 0	FR1 n7, Ant 0	FR1 n12, Ant 0	FR1 n14, Ant 0	FR1 n25, Ant 0	FR1 n26, Ant 0	FR1 n30, Ant 0	FR1 n41, Ant 0	FR1 n66, Ant 0	FR1 n70, Ant 0	FR1 n71, Ant 0
Front	1g SAR (W/kg)	0.429	0.304	0.232	0.391	0.447	0.406	0.332	0.471	0.508	0.320	0.422	0.490	0.346	0.402	0.332	0.451	0.323	0.438	0.302	0.406	0.421	0.440	0.266	0.412	0.346	
LTE Band 2, Ant 5	0.326	0.633	1.388	1.263	1.191	1.350	1.406	1.365	1.291	1.430	1.467	1.279	1.381	1.449	1.305	1.361	1.291	1.410	1.282	1.397	1.261	1.365	1.380	1.399	1.225	1.371	1.305
LTE Band 66, Ant 5	0.396	0.633	1.458	1.333	1.261	1.420	1.476	1.435	1.361	1.500	1.537	1.349	1.451	1.519	1.375	1.431	1.361	1.480	1.352	1.467	1.331	1.435	1.450	1.469	1.295	1.441	1.375
FR1 n41, Ant 5	0.200	0.633	1.262	1.137	1.065	1.224	1.280	1.239	1.165	1.304	1.341	1.153	1.255	1.323	1.179	1.235	1.165	1.284	1.156	1.271	1.135	1.239	1.254	1.273	1.099	1.245	1.179
FR1 n48, Ant 5	0.540	0.633	1.602	1.477	1.405	1.564	1.620	1.579	1.505	1.644	1.681	1.493	1.595	1.663	1.519	1.575	1.505	1.624	1.496	1.611	1.475	1.579	1.594	1.613	1.439	1.585	1.519
FR1 n77, Ant 5	0.531	0.633	1.593	1.468	1.396	1.555	1.611	1.570	1.496	1.635	1.672	1.484	1.586	1.654	1.510	1.566	1.496	1.615	1.487	1.602	1.466	1.570	1.585	1.604	1.430	1.576	1.510

Hybrid 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				
Max WWAN Ant 0					0.508	-22.5	9.5	-207.0	55.5	1.68	0.04	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3					1.173	2.5	59.0	-207.0				

<Case 64>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN SAR	WLAN5/6G Hz Ant 4+3	GSM850, Ant 0	GSM1900, Ant 0	WCDMA II, Ant 0	WCDMA IV, Ant 0	WCDMA V, Ant 0	LTE Band 7, Ant 0	LTE Band 12, Ant 0	LTE Band 13, Ant 0	LTE Band 14, Ant 0	LTE Band 25, Ant 0	LTE Band 26, Ant 0	LTE Band 30, Ant 0	LTE Band 41, Ant 0	LTE Band 66, Ant 0	LTE Band 71, Ant 0	FR1 n7, Ant 0	FR1 n12, Ant 0	FR1 n14, Ant 0	FR1 n25, Ant 0	FR1 n26, Ant 0	FR1 n30, Ant 0	FR1 n41, Ant 0	FR1 n66, Ant 0	FR1 n70, Ant 0	FR1 n71, Ant 0
Back	1g SAR (W/kg)	0.446	0.450	0.412	0.451	0.454	0.386	0.367	0.458	0.456	0.456	0.441	0.457	0.369	0.453	0.410	0.418	0.339	0.457	0.458	0.436	0.337	0.445	0.363	0.457	0.389	
LTE Band 2, Ant 5	0.407	0.764	1.617	1.621	1.583	1.622	1.625	1.557	1.538	1.629	1.627	1.627	1.612	1.628	1.540	1.624	1.581	1.589	1.510	1.628	1.629	1.607	1.508	1.616	1.534	1.628	1.560
LTE Band 66, Ant 5	0.434	0.764	1.644	1.648	1.610	1.649	1.652	1.584	1.565	1.656	1.654	1.654	1.639	1.655	1.567	1.651	1.608	1.616	1.537	1.655	1.656	1.634	1.535	1.643	1.561	1.655	1.587
FR1 n41, Ant 5	0.363	0.764	1.573	1.577	1.539	1.578	1.581	1.513	1.494	1.585	1.583	1.583	1.568	1.584	1.496	1.580	1.537	1.545	1.466	1.584	1.585	1.563	1.464	1.572	1.490	1.584	1.516
FR1 n48, Ant 5	0.428	0.764	1.638	1.642	1.604	1.643	1.646	1.578	1.559	1.650	1.648	1.648	1.633	1.649	1.561	1.645	1.602	1.610	1.531	1.649	1.650	1.628	1.529	1.637	1.555	1.649	1.581
FR1 n77, Ant 5	0.445	0.764	1.655	1.659	1.621	1.660	1.663	1.595	1.576	1.667	1.665	1.665	1.650	1.666	1.578	1.662	1.619	1.627	1.548	1.666	1.667	1.645	1.546	1.654	1.572	1.666	1.598

Hybrid 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				
Max WWAN Ant 0					0.458	-19.8	16.0	-207.0	50.9	1.67	0.04	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3					1.209	-40.5	62.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 65>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)	0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354	
GSM850_Ant 1	0.310	0.633	1.436	1.510	1.456	1.500	1.553	1.539	1.494	1.374	1.440	1.458	1.593	1.405	1.525	1.397	1.422	1.490	1.297
WCDMA V_Ant 1	0.230	0.633	1.356	1.430	1.376	1.420	1.473	1.459	1.414	1.294	1.360	1.378	1.513	1.325	1.445	1.317	1.342	1.410	1.217
LTE Band 2_Ant 1	0.327	0.633	1.453	1.527	1.473	1.517	1.570	1.556	1.511	1.391	1.457	1.475	1.610	1.422	1.542	1.414	1.439	1.507	1.314
LTE Band 12_Ant 1	0.312	0.633	1.438	1.512	1.458	1.502	1.555	1.541	1.496	1.376	1.442	1.460	1.595	1.407	1.527	1.399	1.424	1.492	1.299
LTE Band 13_Ant 1	0.274	0.633	1.400	1.474	1.420	1.464	1.517	1.503	1.458	1.338	1.404	1.422	1.557	1.369	1.489	1.361	1.386	1.454	1.261
LTE Band 14_Ant 1	0.288	0.633	1.414	1.488	1.434	1.478	1.531	1.517	1.472	1.352	1.418	1.436	1.571	1.383	1.503	1.375	1.400	1.468	1.275
LTE Band 26_Ant 1	0.261	0.633	1.387	1.461	1.407	1.451	1.504	1.490	1.445	1.325	1.391	1.409	1.544	1.356	1.476	1.348	1.373	1.441	1.248
LTE Band 66_Ant 1	0.329	0.633	1.455	1.529	1.475	1.519	1.572	1.558	1.513	1.393	1.459	1.477	1.612	1.424	1.544	1.416	1.441	1.509	1.316
LTE Band 71_Ant 1	0.193	0.633	1.319	1.393	1.339	1.383	1.436	1.422	1.377	1.257	1.323	1.341	1.476	1.288	1.408	1.280	1.305	1.373	1.180
FR1 n12_Ant 1	0.249	0.633	1.375	1.449	1.395	1.439	1.492	1.478	1.433	1.313	1.379	1.397	1.532	1.344	1.464	1.336	1.361	1.429	1.236
FR1 n14_Ant 1	0.300	0.633	1.426	1.500	1.446	1.490	1.543	1.529	1.484	1.364	1.430	1.448	1.583	1.395	1.515	1.387	1.412	1.480	1.287
FR1 n26_Ant 1	0.242	0.633	1.368	1.442	1.388	1.432	1.485	1.471	1.426	1.306	1.372	1.390	1.525	1.337	1.457	1.329	1.354	1.422	1.229
FR1 n41_Ant 1	0.341	0.633	1.467	1.541	1.487	1.531	1.584	1.570	1.525	1.405	1.471	1.489	1.624	1.436	1.556	1.428	1.453	1.521	1.328
FR1 n48_Ant 1	0.458	0.633	1.584	1.658	1.604	1.648	1.701	1.687	1.642	1.522	1.588	1.606	1.741	1.553	1.673	1.545	1.570	1.638	1.445
FR1 n71_Ant 1	0.280	0.633	1.406	1.480	1.426	1.470	1.523	1.509	1.464	1.344	1.410	1.428	1.563	1.375	1.495	1.367	1.392	1.460	1.267
FR1 n77_Ant 1	0.406	0.633	1.532	1.606	1.552	1.596	1.649	1.635	1.590	1.470	1.536	1.554	1.689	1.501	1.621	1.493	1.518	1.586	1.393

Hybrid 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				
Max WWAN Ant 2	0.650	7.9	-71.6	-207.0	139.4	1.74	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3	1.091	-44.4	57.6	-207.0				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 66>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back		1g SAR (W/kg)	0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 1	0.427	0.764	1.930	1.798	1.798	1.887	1.908	1.890	1.891	1.665	1.766	1.881	1.923	1.829	1.862	1.661	1.744	1.824	1.708
WCDMA V_Ant 1	0.355	0.764	1.858	1.726	1.726	1.815	1.836	1.818	1.819	1.593	1.694	1.809	1.851	1.757	1.790	1.589	1.672	1.752	1.636
LTE Band 2_Ant 1	0.409	0.764	1.912	1.780	1.780	1.869	1.890	1.872	1.873	1.647	1.748	1.863	1.905	1.811	1.844	1.643	1.726	1.806	1.690
LTE Band 12_Ant 1	0.447	0.764	1.950	1.818	1.818	1.907	1.928	1.910	1.911	1.685	1.786	1.901	1.943	1.849	1.882	1.681	1.764	1.844	1.728
LTE Band 13_Ant 1	0.385	0.764	1.888	1.756	1.756	1.845	1.866	1.848	1.849	1.623	1.724	1.839	1.881	1.787	1.820	1.619	1.702	1.782	1.666
LTE Band 14_Ant 1	0.401	0.764	1.904	1.772	1.772	1.861	1.882	1.864	1.865	1.639	1.740	1.855	1.897	1.803	1.836	1.635	1.718	1.798	1.682
LTE Band 26_Ant 1	0.385	0.764	1.888	1.756	1.756	1.845	1.866	1.848	1.849	1.623	1.724	1.839	1.881	1.787	1.820	1.619	1.702	1.782	1.666
LTE Band 66_Ant 1	0.429	0.764	1.932	1.800	1.800	1.889	1.910	1.892	1.893	1.667	1.768	1.883	1.925	1.831	1.864	1.663	1.746	1.826	1.710
LTE Band 71_Ant 1	0.444	0.764	1.947	1.815	1.815	1.904	1.925	1.907	1.908	1.682	1.783	1.898	1.940	1.846	1.879	1.678	1.761	1.841	1.725
FR1 n12_Ant 1	0.373	0.764	1.876	1.744	1.744	1.833	1.854	1.836	1.837	1.611	1.712	1.827	1.869	1.775	1.808	1.607	1.690	1.770	1.654
FR1 n14_Ant 1	0.447	0.764	1.950	1.818	1.818	1.907	1.928	1.910	1.911	1.685	1.786	1.901	1.943	1.849	1.882	1.681	1.764	1.844	1.728
FR1 n26_Ant 1	0.406	0.764	1.909	1.777	1.777	1.866	1.887	1.869	1.870	1.644	1.745	1.860	1.902	1.808	1.841	1.640	1.723	1.803	1.687
FR1 n41_Ant 1	0.444	0.764	1.947	1.815	1.815	1.904	1.925	1.907	1.908	1.682	1.783	1.898	1.940	1.846	1.879	1.678	1.761	1.841	1.725
FR1 n48_Ant 1	0.459	0.764	1.962	1.830	1.830	1.919	1.940	1.922	1.923	1.697	1.798	1.913	1.955	1.861	1.894	1.693	1.776	1.856	1.740
FR1 n71_Ant 1	0.393	0.764	1.896	1.764	1.764	1.853	1.874	1.856	1.857	1.631	1.732	1.847	1.889	1.795	1.828	1.627	1.710	1.790	1.674
FR1 n77_Ant 1	0.446	0.764	1.949	1.817	1.817	1.906	1.927	1.909	1.910	1.684	1.785	1.900	1.942	1.848	1.881	1.680	1.763	1.843	1.727

Hybrid 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				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0	117.0	1.96	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3	1.223	-2.2	59.3	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 67>

SAR summation (blue colored) for each band of antenna 1,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)		0.518	0.426	0.381
GSM850_Ant 1	0.310	0.633	1.461	1.369	1.324
WCDMA V_Ant 1	0.230	0.633	1.381	1.289	1.244
LTE Band 2_Ant 1	0.327	0.633	1.478	1.386	1.341
LTE Band 12_Ant 1	0.312	0.633	1.463	1.371	1.326
LTE Band 13_Ant 1	0.274	0.633	1.425	1.333	1.288
LTE Band 14_Ant 1	0.288	0.633	1.439	1.347	1.302
LTE Band 26_Ant 1	0.261	0.633	1.412	1.320	1.275
LTE Band 66_Ant 1	0.329	0.633	1.480	1.388	1.343
LTE Band 71_Ant 1	0.193	0.633	1.344	1.252	1.207
FR1 n12_Ant 1	0.249	0.633	1.400	1.308	1.263
FR1 n14_Ant 1	0.300	0.633	1.451	1.359	1.314
FR1 n26_Ant 1	0.242	0.633	1.393	1.301	1.256
FR1 n41_Ant 1	0.341	0.633	1.492	1.400	1.355
FR1 n48_Ant 1	0.458	0.633	1.609	1.517	1.472
FR1 n71_Ant 1	0.280	0.633	1.431	1.339	1.294
FR1 n77_Ant 1	0.406	0.633	1.557	1.465	1.420

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	134.0	1.61	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3	1.091	-49.5	69.0	-207.0				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 68>

SAR summation (blue colored) for each band of antenna 1,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)		0.416	0.397	0.438
GSM850_Ant 1	0.427	0.764	1.607	1.588	1.629
WCDMA V_Ant 1	0.355	0.764	1.535	1.516	1.557
LTE Band 2_Ant 1	0.409	0.764	1.589	1.570	1.611
LTE Band 12_Ant 1	0.447	0.764	1.627	1.608	1.649
LTE Band 13_Ant 1	0.385	0.764	1.565	1.546	1.587
LTE Band 14_Ant 1	0.401	0.764	1.581	1.562	1.603
LTE Band 26_Ant 1	0.385	0.764	1.565	1.546	1.587
LTE Band 66_Ant 1	0.429	0.764	1.609	1.590	1.631
LTE Band 71_Ant 1	0.444	0.764	1.624	1.605	1.646
FR1 n12_Ant 1	0.373	0.764	1.553	1.534	1.575
FR1 n14_Ant 1	0.447	0.764	1.627	1.608	1.649
FR1 n26_Ant 1	0.406	0.764	1.586	1.567	1.608
FR1 n41_Ant 1	0.444	0.764	1.624	1.605	1.646
FR1 n48_Ant 1	0.449	0.764	1.629	1.610	1.651
FR1 n71_Ant 1	0.393	0.764	1.573	1.554	1.595
FR1 n77_Ant 1	0.446	0.764	1.626	1.607	1.648

Hybrid 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				
Max WWAN Ant 6	0.438	11.5	-47.5	-207.0	107.7	1.65	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3	1.213	-2.2	59.3	-207.0				

<Case 69>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	GSM1900_Ant 2	WCDMA_I_Ant 2	WCDMA_II_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)		0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354
LTE Band 2_Ant 5	0.326	0.633	1.452	1.526	1.472	1.516	1.569	1.555	1.510	1.390	1.456	1.474	1.609	1.421	1.541	1.413	1.438	1.506	1.313
LTE Band 66_Ant 5	0.396	0.633	1.522	1.596	1.542	1.586	1.639	1.625	1.580	1.460	1.526	1.544	1.679	1.491	1.611	1.483	1.508	1.576	1.383
FR1 n41_Ant 5	0.200	0.633	1.326	1.400	1.346	1.390	1.443	1.429	1.384	1.264	1.330	1.348	1.483	1.295	1.415	1.287	1.312	1.380	1.187
FR1 n48_Ant 5	0.540	0.633	1.666	1.740	1.686	1.730	1.783	1.769	1.724	1.604	1.670	1.688	1.823	1.635	1.755	1.627	1.652	1.720	1.527
FR1 n77_Ant 5	0.531	0.633	1.657	1.731	1.677	1.721	1.774	1.760	1.715	1.595	1.661	1.679	1.814	1.626	1.746	1.618	1.643	1.711	1.518

Hybrid 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				
Max WWAN Ant 2	0.650	10.4	-66.1	-207.0	105.2	1.82	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3	1.173	11.9	39.1	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 70>

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

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back		1g SAR (W/kg)	0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
LTE Band 2_Ant 5	0.407	0.764	1.910	1.778	1.778	1.867	1.888	1.870	1.871	1.645	1.746	1.861	1.903	1.809	1.842	1.641	1.724	1.804	1.688
LTE Band 66_Ant 5	0.434	0.764	1.937	1.805	1.805	1.894	1.915	1.897	1.898	1.672	1.773	1.888	1.930	1.836	1.869	1.668	1.751	1.831	1.715
FR1 n41_Ant 5	0.363	0.764	1.866	1.734	1.734	1.823	1.844	1.826	1.827	1.601	1.702	1.817	1.859	1.765	1.798	1.597	1.680	1.760	1.644
FR1 n48_Ant 5	0.428	0.764	1.931	1.799	1.799	1.888	1.909	1.891	1.892	1.666	1.767	1.882	1.924	1.830	1.863	1.662	1.745	1.825	1.709
FR1 n77_Ant 5	0.445	0.764	1.948	1.816	1.816	1.905	1.926	1.908	1.909	1.683	1.784	1.899	1.941	1.847	1.880	1.679	1.762	1.842	1.726

Hybrid 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				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-55.0	-73.5	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	43.9	0.80	0.02	Not required
WLAN5/6GHz Ant 4+3(3)	0.346	10.8	47.5	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	67.3	1.22	0.02	Not required
WLAN5/6GHz Ant 4+3(4)	0.764	-47.9	77.2	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0	114.9	1.09	0.01	Not required
WLAN5/6GHz Ant 4+3(3)	0.346	10.8	47.5	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0	119.1	1.50	0.02	Not required
WLAN5/6GHz Ant 4+3(4)	0.764	-47.9	77.2	-207.0				
WLAN5/6GHz Ant 4+3(3)	0.346	10.8	47.5	-207.0	65.8	1.11	0.02	Not required
WLAN5/6GHz Ant 4+3(4)	0.764	-47.9	77.2	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 71>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)		0.518	0.426	0.381
GSM1900_Ant 2	0.493	0.633	1.644	1.552	1.507
WCDMA II_Ant 2	0.567	0.633	1.718	1.626	1.581
WCDMA IV_Ant 2	0.513	0.633	1.664	1.572	1.527
LTE Band 7_Ant 2	0.557	0.633	1.708	1.616	1.571
LTE Band 25_Ant 2	0.610	0.633	1.761	1.669	1.624
LTE Band 30_Ant 2	0.596	0.633	1.747	1.655	1.610
LTE Band 41_Ant 2	0.551	0.633	1.702	1.610	1.565
LTE Band 48_Ant 2	0.431	0.633	1.582	1.490	1.445
LTE Band 66_Ant 2	0.497	0.633	1.648	1.556	1.511
FR1 n7_Ant 2	0.515	0.633	1.666	1.574	1.529
FR1 n25_Ant 2	0.650	0.633	1.801	1.709	1.664
FR1 n30_Ant 2	0.462	0.633	1.613	1.521	1.476
FR1 n41_Ant 2	0.582	0.633	1.733	1.641	1.596
FR1 n48_Ant 2	0.454	0.633	1.605	1.513	1.468
FR1 n66_Ant 2	0.479	0.633	1.630	1.538	1.493
FR1 n70_Ant 2	0.547	0.633	1.698	1.606	1.561
FR1 n77_Ant 2	0.354	0.633	1.505	1.413	1.368

Hybrid 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				
Max WWAN Ant 2	0.650	3.0	-77.5	-207.0	43.9	1.17	0.03	Not required
Max WWAN Ant 6	0.518	-40.5	-71.5	-207.0				
Max WWAN Ant 2	0.650	-0.8	-57.8	-207.0	123.8	1.11	0.01	Not required
WLAN5/6GHz Ant 4+3(3)	0.455	-56.2	52.9	-207.0				
Max WWAN Ant 2	0.650	16.0	-48.0	-207.0	130.8	1.28	0.01	Not required
WLAN5/6GHz Ant 4+3(4)	0.633	-11.4	79.9	-207.0				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	118.2	0.97	0.01	Not required
WLAN5/6GHz Ant 4+3(3)	0.455	-56.2	52.9	-207.0				
Max WWAN Ant 6	0.518	-44.0	-65.0	-207.0	148.5	1.15	0.01	Not required
WLAN5/6GHz Ant 4+3(4)	0.633	-11.4	79.9	-207.0				
WLAN5/6GHz Ant 4+3(4)	0.633	-11.4	79.9	-207.0	52.3	1.09	0.02	Not required
WLAN5/6GHz Ant 4+3(3)	0.455	-56.2	52.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 72>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)				
GSM1900_Ant 2	0.739	0.764	1.919	1.900	1.941
WCDMA II_Ant 2	0.607	0.764	1.787	1.768	1.809
WCDMA IV_Ant 2	0.607	0.764	1.787	1.768	1.809
LTE Band 7_Ant 2	0.696	0.764	1.876	1.857	1.898
LTE Band 25_Ant 2	0.717	0.764	1.897	1.878	1.919
LTE Band 30_Ant 2	0.699	0.764	1.879	1.860	1.901
LTE Band 41_Ant 2	0.700	0.764	1.880	1.861	1.902
LTE Band 48_Ant 2	0.474	0.764	1.654	1.635	1.676
LTE Band 66_Ant 2	0.575	0.764	1.755	1.736	1.777
FR1 n7_Ant 2	0.690	0.764	1.870	1.851	1.892
FR1 n25_Ant 2	0.732	0.764	1.912	1.893	1.934
FR1 n30_Ant 2	0.638	0.764	1.818	1.799	1.840
FR1 n41_Ant 2	0.671	0.764	1.851	1.832	1.873
FR1 n48_Ant 2	0.470	0.764	1.650	1.631	1.672
FR1 n66_Ant 2	0.553	0.764	1.733	1.714	1.755
FR1 n70_Ant 2	0.633	0.764	1.813	1.794	1.835
FR1 n77_Ant 2	0.517	0.764	1.697	1.678	1.719

Hybrid 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				
Max WWAN Ant 6	0.438	11.0	-50.0	-207.0	70.1	1.94	0.04	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 3+4	1.503	-55.0	-73.5	-207.0				

<Case 73>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)				
LTE Band 2_Ant 5	0.326	0.633	1.477	1.385	1.340
LTE Band 66_Ant 5	0.396	0.633	1.547	1.455	1.410
FR1 n41_Ant 5	0.200	0.633	1.351	1.259	1.214
FR1 n48_Ant 5	0.540	0.633	1.691	1.599	1.554
FR1 n77_Ant 5	0.531	0.633	1.682	1.590	1.545

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	133.0	1.69	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3	1.173	5.0	57.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 74>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)		0.416	0.397	0.438
LTE Band 2_Ant 5	0.407	0.764	1.587	1.568	1.609
LTE Band 66_Ant 5	0.434	0.764	1.614	1.595	1.636
FR1 n41_Ant 5	0.363	0.764	1.543	1.524	1.565
FR1 n48_Ant 5	0.428	0.764	1.608	1.589	1.630
FR1 n77_Ant 5	0.445	0.764	1.625	1.606	1.647

Hybrid 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				
Max WWAN Ant 6	0.438	11.5	-47.5	-207.0	118.6	1.65	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3	1.209	-64.4	43.6	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 75>

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

Exposure Position	WWAN SAR	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)	0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517	
GSM850_Ant 0	0.446	0.524	1.709	1.577	1.577	1.666	1.687	1.669	1.670	1.444	1.545	1.660	1.702	1.608	1.641	1.440	1.523	1.603	1.487
GSM1900_Ant 0	0.450	0.524	1.713	1.581	1.581	1.670	1.691	1.673	1.674	1.448	1.549	1.664	1.706	1.612	1.645	1.444	1.527	1.607	1.491
WCDMA II_Ant 0	0.412	0.524	1.675	1.543	1.543	1.632	1.653	1.635	1.636	1.410	1.511	1.626	1.668	1.574	1.607	1.406	1.489	1.569	1.453
WCDMA IV_Ant 0	0.451	0.524	1.714	1.582	1.582	1.671	1.692	1.674	1.675	1.449	1.550	1.665	1.707	1.613	1.646	1.445	1.528	1.608	1.492
WCDMA V_Ant 0	0.454	0.524	1.717	1.585	1.585	1.674	1.695	1.677	1.678	1.452	1.553	1.668	1.710	1.616	1.649	1.448	1.531	1.611	1.495
LTE Band 7_Ant 0	0.386	0.524	1.649	1.517	1.517	1.606	1.627	1.609	1.610	1.384	1.485	1.600	1.642	1.548	1.581	1.380	1.463	1.543	1.427
LTE Band 12_Ant 0	0.367	0.524	1.630	1.498	1.498	1.587	1.608	1.590	1.591	1.365	1.466	1.581	1.623	1.529	1.562	1.361	1.444	1.524	1.408
LTE Band 13_Ant 0	0.458	0.524	1.721	1.589	1.589	1.678	1.699	1.681	1.682	1.456	1.557	1.672	1.714	1.620	1.653	1.452	1.535	1.615	1.499
LTE Band 14_Ant 0	0.456	0.524	1.719	1.587	1.587	1.676	1.697	1.679	1.680	1.454	1.555	1.670	1.712	1.618	1.651	1.450	1.533	1.613	1.497
LTE Band 25_Ant 0	0.456	0.524	1.719	1.587	1.587	1.676	1.697	1.679	1.680	1.454	1.555	1.670	1.712	1.618	1.651	1.450	1.533	1.613	1.497
LTE Band 26_Ant 0	0.441	0.524	1.704	1.572	1.572	1.661	1.682	1.664	1.665	1.439	1.540	1.655	1.697	1.603	1.636	1.435	1.518	1.598	1.482
LTE Band 30_Ant 0	0.457	0.524	1.720	1.588	1.588	1.677	1.698	1.680	1.681	1.455	1.556	1.671	1.713	1.619	1.652	1.451	1.534	1.614	1.498
LTE Band 41_Ant 0	0.369	0.524	1.632	1.500	1.500	1.589	1.610	1.592	1.593	1.367	1.468	1.583	1.625	1.531	1.564	1.363	1.446	1.526	1.410
LTE Band 66_Ant 0	0.453	0.524	1.716	1.584	1.584	1.673	1.694	1.676	1.677	1.451	1.552	1.667	1.709	1.615	1.648	1.447	1.530	1.610	1.494
LTE Band 71_Ant 0	0.410	0.524	1.673	1.541	1.541	1.630	1.651	1.633	1.634	1.408	1.509	1.624	1.666	1.572	1.605	1.404	1.487	1.567	1.451
FR1 n7_Ant 0	0.418	0.524	1.681	1.549	1.549	1.638	1.659	1.641	1.642	1.416	1.517	1.632	1.674	1.580	1.613	1.412	1.495	1.575	1.459
FR1 n12_Ant 0	0.339	0.524	1.602	1.470	1.470	1.559	1.580	1.562	1.563	1.337	1.438	1.553	1.595	1.501	1.534	1.333	1.416	1.496	1.380
FR1 n14_Ant 0	0.457	0.524	1.720	1.588	1.588	1.677	1.698	1.680	1.681	1.455	1.556	1.671	1.713	1.619	1.652	1.451	1.534	1.614	1.498
FR1 n25_Ant 0	0.458	0.524	1.721	1.589	1.589	1.678	1.699	1.681	1.682	1.456	1.557	1.672	1.714	1.620	1.653	1.452	1.535	1.615	1.499
FR1 n26_Ant 0	0.436	0.524	1.699	1.567	1.567	1.656	1.677	1.659	1.660	1.434	1.535	1.650	1.692	1.598	1.631	1.430	1.513	1.593	1.477
FR1 n30_Ant 0	0.337	0.524	1.600	1.468	1.468	1.557	1.578	1.560	1.561	1.335	1.436	1.551	1.593	1.499	1.532	1.331	1.414	1.494	1.378
FR1 n41_Ant 0	0.445	0.524	1.708	1.576	1.576	1.665	1.686	1.668	1.669	1.443	1.544	1.659	1.701	1.607	1.640	1.439	1.522	1.602	1.486
FR1 n66_Ant 0	0.363	0.524	1.626	1.494	1.494	1.583	1.604	1.586	1.587	1.361	1.462	1.577	1.619	1.525	1.558	1.357	1.440	1.520	1.404
FR1 n70_Ant 0	0.457	0.524	1.720	1.588	1.588	1.677	1.698	1.680	1.681	1.455	1.556	1.671	1.713	1.619	1.652	1.451	1.534	1.614	1.498
FR1 n71_Ant 0	0.389	0.524	1.652	1.520	1.520	1.609	1.630	1.612	1.613	1.387	1.488	1.603	1.645	1.551	1.584	1.383	1.466	1.546	1.430

Hybrid 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				
Max WWAN Ant 0	0.458	-55.0	-73.5	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-12.0	-75.6	-207.0	40.8	0.98	0.02	Not required
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	111.1	1.26	0.01	Not required
Bluetooth Ant 3	0.524	12.5	41.0	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0				
Bluetooth Ant 3	0.524	12.5	41.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 76>

SAR summation (blue colored) for each band of antenna 1,2,3

Exposure Position	WWAN SAR	Bluetooth Ant 3	GSM1900_A nt 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)		0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 1	0.427	0.524	1.690	1.558	1.558	1.647	1.668	1.650	1.651	1.425	1.526	1.641	1.683	1.589	1.622	1.421	1.504	1.584	1.468
WCDMA V_Ant 1	0.355	0.524	1.618	1.486	1.486	1.575	1.596	1.578	1.579	1.353	1.454	1.569	1.611	1.517	1.550	1.349	1.432	1.512	1.396
LTE Band 2_Ant 1	0.409	0.524	1.672	1.540	1.540	1.629	1.650	1.632	1.633	1.407	1.508	1.623	1.665	1.571	1.604	1.403	1.486	1.566	1.450
LTE Band 12_Ant 1	0.447	0.524	1.710	1.578	1.578	1.667	1.688	1.670	1.671	1.445	1.546	1.661	1.703	1.609	1.642	1.441	1.524	1.604	1.488
LTE Band 13_Ant 1	0.385	0.524	1.648	1.516	1.516	1.605	1.626	1.608	1.609	1.383	1.484	1.599	1.641	1.547	1.580	1.379	1.462	1.542	1.426
LTE Band 14_Ant 1	0.401	0.524	1.664	1.532	1.532	1.621	1.642	1.624	1.625	1.399	1.500	1.615	1.657	1.563	1.596	1.395	1.478	1.558	1.442
LTE Band 26_Ant 1	0.385	0.524	1.648	1.516	1.516	1.605	1.626	1.608	1.609	1.383	1.484	1.599	1.641	1.547	1.580	1.379	1.462	1.542	1.426
LTE Band 66_Ant 1	0.429	0.524	1.692	1.560	1.560	1.649	1.670	1.652	1.653	1.427	1.528	1.643	1.685	1.591	1.624	1.423	1.506	1.586	1.470
LTE Band 71_Ant 1	0.444	0.524	1.707	1.575	1.575	1.664	1.685	1.667	1.668	1.442	1.543	1.658	1.700	1.606	1.639	1.438	1.521	1.601	1.485
FR1 n12_Ant 1	0.373	0.524	1.636	1.504	1.504	1.593	1.614	1.596	1.597	1.371	1.472	1.587	1.629	1.535	1.568	1.367	1.450	1.530	1.414
FR1 n14_Ant 1	0.447	0.524	1.710	1.578	1.578	1.667	1.688	1.670	1.671	1.445	1.546	1.661	1.703	1.609	1.642	1.441	1.524	1.604	1.488
FR1 n26_Ant 1	0.406	0.524	1.669	1.537	1.537	1.626	1.647	1.629	1.630	1.404	1.505	1.620	1.662	1.568	1.601	1.400	1.483	1.563	1.447
FR1 n41_Ant 1	0.444	0.524	1.707	1.575	1.575	1.664	1.685	1.667	1.668	1.442	1.543	1.658	1.700	1.606	1.639	1.438	1.521	1.601	1.485
FR1 n48_Ant 1	0.459	0.524	1.722	1.590	1.590	1.679	1.700	1.682	1.683	1.457	1.558	1.673	1.715	1.621	1.654	1.453	1.536	1.616	1.500
FR1 n71_Ant 1	0.393	0.524	1.656	1.524	1.524	1.613	1.634	1.616	1.617	1.391	1.492	1.607	1.649	1.555	1.588	1.387	1.470	1.550	1.434
FR1 n77_Ant 1	0.446	0.524	1.709	1.577	1.577	1.666	1.687	1.669	1.670	1.444	1.545	1.660	1.702	1.608	1.641	1.440	1.523	1.603	1.487

Hybrid 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				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	122.8	1.72	0.02	Not required
Max WWAN Ant 1 + Bluetooth Ant 3	0.983	12.5	41.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 77>

SAR summation (blue colored) for each band of antenna 2,3,5

Exposure Position	WWAN SAR	Bluetooth Ant 3	LTE Band 2_Ant 5	LTE Band 66_Ant 5	FR1 n41_Ant 5	FR1 n48_Ant 5	FR1 n77_Ant 5
Back	1g SAR (W/kg)		0.407	0.434	0.363	0.428	0.445
GSM1900_Ant 2	0.739	0.524	1.670	1.697	1.626	1.691	1.708
WCDMA II_Ant 2	0.607	0.524	1.538	1.565	1.494	1.559	1.576
WCDMA IV_Ant 2	0.607	0.524	1.538	1.565	1.494	1.559	1.576
LTE Band 7_Ant 2	0.696	0.524	1.627	1.654	1.583	1.648	1.665
LTE Band 25_Ant 2	0.717	0.524	1.648	1.675	1.604	1.669	1.686
LTE Band 30_Ant 2	0.699	0.524	1.630	1.657	1.586	1.651	1.668
LTE Band 41_Ant 2	0.700	0.524	1.631	1.658	1.587	1.652	1.669
LTE Band 48_Ant 2	0.474	0.524	1.405	1.432	1.361	1.426	1.443
LTE Band 66_Ant 2	0.575	0.524	1.506	1.533	1.462	1.527	1.544
FR1 n7_Ant 2	0.690	0.524	1.621	1.648	1.577	1.642	1.659
FR1 n25_Ant 2	0.732	0.524	1.663	1.690	1.619	1.684	1.701
FR1 n30_Ant 2	0.638	0.524	1.569	1.596	1.525	1.590	1.607
FR1 n41_Ant 2	0.671	0.524	1.602	1.629	1.558	1.623	1.640
FR1 n48_Ant 2	0.470	0.524	1.401	1.428	1.357	1.422	1.439
FR1 n66_Ant 2	0.553	0.524	1.484	1.511	1.440	1.505	1.522
FR1 n70_Ant 2	0.633	0.524	1.564	1.591	1.520	1.585	1.602
FR1 n77_Ant 2	0.517	0.524	1.448	1.475	1.404	1.469	1.486

Hybrid 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				
Max WWAN Ant 5	0.445	-40.5	62.5	-207.0	57.2	1.71	0.04	Not required
Max WWAN Ant 2 + Bluetooth Ant 3	1.263	12.5	41.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 78>

SAR summation (blue colored) for each band of antenna 2,3,6

Exposure Position	WWAN SAR	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)				
GSM1900_Ant 2	0.739	0.524	1.679	1.660	1.701
WCDMA II_Ant 2	0.607	0.524	1.547	1.528	1.569
WCDMA IV_Ant 2	0.607	0.524	1.547	1.528	1.569
LTE Band 7_Ant 2	0.696	0.524	1.636	1.617	1.658
LTE Band 25_Ant 2	0.717	0.524	1.657	1.638	1.679
LTE Band 30_Ant 2	0.699	0.524	1.639	1.620	1.661
LTE Band 41_Ant 2	0.700	0.524	1.640	1.621	1.662
LTE Band 48_Ant 2	0.474	0.524	1.414	1.395	1.436
LTE Band 66_Ant 2	0.575	0.524	1.515	1.496	1.537
FR1 n7_Ant 2	0.690	0.524	1.630	1.611	1.652
FR1 n25_Ant 2	0.732	0.524	1.672	1.653	1.694
FR1 n30_Ant 2	0.638	0.524	1.578	1.559	1.600
FR1 n41_Ant 2	0.671	0.524	1.611	1.592	1.633
FR1 n48_Ant 2	0.470	0.524	1.410	1.391	1.432
FR1 n66_Ant 2	0.553	0.524	1.493	1.474	1.515
FR1 n70_Ant 2	0.633	0.524	1.573	1.554	1.595
FR1 n77_Ant 2	0.517	0.524	1.457	1.438	1.479

Hybrid 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				
Max WWAN Ant 6	0.438	11.0	-50.0	-207.0	70.1	1.70	0.03	Not required
Max WWAN Ant 2 + Bluetooth Ant 3	1.263	-55.0	-73.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 79>

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

Exposure Position	WWAN_SAR	WLAN2.4G_Hz_Ant 3	WLAN5/GHz_Ant 4	GSM800_Ant 0	GSM1900_Ant 0	WCDMA Il_Ant 0	WCDMA Iv_Ant 0	WCDMA V_Ant 0	LTE Band F_Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 25_Ant 0	LTE Band 26_Ant 0	LTE Band 30_Ant 0	LTE Band 41_Ant 0	LTE Band 66_Ant 0	LTE Band 71_Ant 0	FR1 n7_Ant 0	FR1 n12_Ant 0	FR1 n14_Ant 0	FR1 n25_Ant 0	FR1 n30_Ant 0	FR1 n41_Ant 0	FR1 n66_Ant 0	FR1 n70_Ant 0	FR1 n71_Ant 0	
Front	1g SAR (W/kg)	0.429	0.304	0.232	0.381	0.447	0.406	0.332	0.471	0.508	0.320	0.422	0.490	0.346	0.402	0.332	0.451	0.323	0.438	0.302	0.406	0.421	0.440	0.266	0.412	0.346		
GSM800_Ant 0	0.310	0.180	0.519	1.438	1.313	1.241	1.400	1.456	1.415	1.341	1.480	1.517	1.329	1.431	1.499	1.355	1.411	1.341	1.460	1.332	1.447	1.311	1.415	1.430	1.449	1.275	1.421	1.355
WCDMA V_Ant 1	0.230	0.180	0.519	1.358	1.233	1.161	1.320	1.376	1.335	1.261	1.400	1.437	1.249	1.351	1.419	1.275	1.331	1.261	1.380	1.252	1.367	1.231	1.336	1.350	1.369	1.195	1.341	1.275
LTE Band 2_Ant 1	0.327	0.180	0.519	1.455	1.330	1.298	1.417	1.473	1.432	1.358	1.497	1.534	1.346	1.448	1.516	1.372	1.428	1.358	1.477	1.349	1.464	1.328	1.432	1.447	1.466	1.292	1.438	1.372
LTE Band 12_Ant 1	0.312	0.180	0.519	1.440	1.315	1.243	1.402	1.458	1.417	1.343	1.482	1.519	1.331	1.433	1.501	1.357	1.413	1.343	1.462	1.334	1.449	1.313	1.417	1.432	1.451	1.277	1.423	1.357
LTE Band 13_Ant 1	0.274	0.180	0.519	1.402	1.277	1.205	1.364	1.420	1.379	1.305	1.444	1.481	1.293	1.395	1.463	1.319	1.375	1.305	1.424	1.296	1.411	1.275	1.379	1.394	1.413	1.239	1.385	1.319
LTE Band 14_Ant 1	0.288	0.180	0.519	1.416	1.291	1.219	1.378	1.434	1.393	1.319	1.458	1.495	1.307	1.409	1.477	1.333	1.389	1.319	1.438	1.310	1.425	1.289	1.393	1.408	1.427	1.253	1.399	1.333
LTE Band 20_Ant 1	0.261	0.180	0.519	1.389	1.264	1.192	1.351	1.407	1.366	1.292	1.431	1.468	1.280	1.382	1.450	1.306	1.362	1.292	1.411	1.283	1.398	1.262	1.366	1.381	1.400	1.226	1.372	1.306
LTE Band 66_Ant 1	0.329	0.180	0.519	1.457	1.332	1.260	1.419	1.475	1.434	1.360	1.499	1.536	1.348	1.450	1.518	1.374	1.430	1.360	1.479	1.351	1.466	1.330	1.434	1.449	1.468	1.294	1.440	1.374
LTE Band 71_Ant 1	0.193	0.180	0.519	1.321	1.196	1.124	1.283	1.339	1.296	1.224	1.363	1.400	1.212	1.314	1.382	1.238	1.294	1.224	1.343	1.215	1.330	1.194	1.298	1.313	1.332	1.158	1.304	1.238
FR1 n12_Ant 1	0.249	0.180	0.519	1.377	1.252	1.180	1.339	1.395	1.354	1.280	1.419	1.456	1.268	1.370	1.438	1.294	1.350	1.280	1.399	1.271	1.388	1.250	1.354	1.369	1.388	1.214	1.360	1.294
FR1 n14_Ant 1	0.300	0.180	0.519	1.428	1.303	1.231	1.390	1.446	1.405	1.331	1.470	1.507	1.319	1.421	1.489	1.345	1.401	1.331	1.450	1.322	1.437	1.301	1.405	1.420	1.439	1.265	1.411	1.345
FR1 n26_Ant 1	0.242	0.180	0.519	1.370	1.245	1.173	1.332	1.388	1.347	1.273	1.412	1.449	1.261	1.363	1.431	1.287	1.343	1.273	1.392	1.264	1.379	1.243	1.347	1.362	1.381	1.207	1.353	1.287
FR1 n41_Ant 1	0.341	0.180	0.519	1.469	1.344	1.272	1.431	1.487	1.446	1.372	1.511	1.548	1.360	1.462	1.530	1.386	1.442	1.372	1.491	1.363	1.478	1.342	1.446	1.461	1.480	1.306	1.452	1.386
FR1 n48_Ant 1	0.458	0.180	0.519	1.586	1.461	1.389	1.548	1.604	1.563	1.489	1.628	1.665	1.477	1.579	1.647	1.503	1.559	1.489	1.608	1.480	1.595	1.459	1.563	1.578	1.597	1.423	1.569	1.503
FR1 n71_Ant 1	0.280	0.180	0.519	1.408	1.283	1.211	1.370	1.426	1.385	1.311	1.450	1.487	1.299	1.401	1.469	1.325	1.381	1.311	1.430	1.302	1.417	1.281	1.386	1.400	1.419	1.245	1.391	1.325
FR1 n77_Ant 1	0.406	0.180	0.519	1.534	1.409	1.337	1.496	1.552	1.511	1.437	1.576	1.613	1.425	1.527	1.595	1.451	1.507	1.437	1.556	1.428	1.543	1.407	1.511	1.526	1.545	1.371	1.517	1.451

Hybrid 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				
WCDMA V_Ant 0	0.447	-36.0	5.5	-207.0	64.9	0.91	0.01	Not required
FR1 n48_Ant 1	0.458	-49.5	69.0	-207.0	80.9	0.97	0.01	Not required
WCDMA V_Ant 0	0.447	-36.0	5.5	-207.0	43.0	0.63	0.01	Not required
WLAN5/GHz Ant 4	0.519	-9.4	81.9	-207.0	42.1	0.98	0.02	Not required
WCDMA V_Ant 0	0.447	-36.0	5.5	-207.0	30.7	0.64	0.02	Not required
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0	66.2	0.70	0.01	Not required
FR1 n48_Ant 1	0.458	-49.5	69.0	-207.0				
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0				
WLAN5/GHz Ant 4	0.519	-9.4	81.9	-207.0				
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 80>

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

Exposure Position	WWAN SAR	WLAN5/6G	Bluetooth Ant 3	GSM850_Ant 0	GSM190_B-Ant 0	WCDMA_U-Ant 0	WCDMA_V-Ant 0	LTE Band 1-Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 25_Ant 0	LTE Band 30_Ant 0	LTE Band 41_Ant 0	LTE Band 66_Ant 0	LTE Band 71_Ant 0	FR1 n7_Ant 0	FR1 n12_Ant 0	FR1 n14_Ant 0	FR1 n25_Ant 0	FR1 n26_Ant 0	FR1 n30_Ant 0	FR1 n41_Ant 0	FR1 n66_Ant 0	FR1 n70_Ant 0	FR1 n71_Ant 0		
Front	1g SAR (W/kg)			0.429	0.304	0.232	0.381	0.447	0.406	0.332	0.471	0.508	0.320	0.422	0.490	0.346	0.402	0.332	0.451	0.323	0.438	0.302	0.406	0.421	0.440	0.266	0.412	0.346
GSM850_Ant 0	0.310	0.519	0.139	1.397	1.272	1.200	1.359	1.415	1.374	1.300	1.439	1.476	1.288	1.390	1.458	1.314	1.370	1.300	1.419	1.291	1.406	1.270	1.374	1.389	1.408	1.234	1.380	1.314
WCDMA_V-Ant 1	0.230	0.519	0.139	1.317	1.192	1.120	1.279	1.335	1.294	1.220	1.359	1.396	1.208	1.310	1.378	1.234	1.290	1.220	1.339	1.211	1.326	1.190	1.294	1.309	1.328	1.154	1.300	1.234
LTE Band 2_Ant 1	0.327	0.519	0.139	1.414	1.289	1.217	1.376	1.432	1.381	1.317	1.456	1.493	1.305	1.407	1.475	1.331	1.387	1.317	1.436	1.308	1.423	1.287	1.391	1.406	1.425	1.251	1.397	1.331
LTE Band 12_Ant 1	0.312	0.519	0.139	1.399	1.274	1.202	1.361	1.417	1.376	1.302	1.441	1.478	1.290	1.392	1.460	1.316	1.372	1.302	1.421	1.293	1.408	1.272	1.376	1.391	1.410	1.236	1.382	1.316
LTE Band 13_Ant 1	0.274	0.519	0.139	1.361	1.236	1.164	1.323	1.379	1.338	1.264	1.403	1.440	1.252	1.354	1.422	1.278	1.334	1.264	1.383	1.255	1.370	1.234	1.338	1.353	1.372	1.198	1.344	1.278
LTE Band 14_Ant 1	0.288	0.519	0.139	1.375	1.250	1.178	1.337	1.393	1.362	1.278	1.417	1.454	1.266	1.368	1.436	1.292	1.348	1.278	1.397	1.269	1.384	1.248	1.352	1.367	1.386	1.212	1.368	1.292
LTE Band 25_Ant 1	0.261	0.519	0.139	1.348	1.223	1.151	1.310	1.366	1.325	1.251	1.390	1.427	1.239	1.341	1.409	1.265	1.321	1.251	1.370	1.242	1.357	1.221	1.325	1.340	1.359	1.185	1.331	1.265
LTE Band 66_Ant 1	0.329	0.519	0.139	1.416	1.291	1.219	1.378	1.434	1.393	1.319	1.458	1.495	1.307	1.409	1.477	1.333	1.389	1.319	1.438	1.310	1.425	1.288	1.393	1.408	1.427	1.253	1.399	1.333
LTE Band 71_Ant 1	0.193	0.519	0.139	1.280	1.155	1.083	1.242	1.298	1.257	1.183	1.322	1.359	1.171	1.273	1.341	1.197	1.253	1.183	1.302	1.174	1.289	1.153	1.257	1.272	1.291	1.117	1.263	1.197
FR1 n12_Ant 1	0.249	0.519	0.139	1.336	1.211	1.139	1.298	1.354	1.313	1.239	1.378	1.415	1.227	1.329	1.397	1.253	1.309	1.239	1.358	1.230	1.345	1.208	1.313	1.328	1.347	1.173	1.319	1.253
FR1 n14_Ant 1	0.300	0.519	0.139	1.387	1.262	1.190	1.349	1.405	1.364	1.290	1.429	1.466	1.278	1.380	1.448	1.304	1.360	1.290	1.409	1.281	1.398	1.260	1.364	1.379	1.398	1.224	1.370	1.304
FR1 n26_Ant 1	0.242	0.519	0.139	1.329	1.204	1.132	1.291	1.347	1.306	1.232	1.371	1.408	1.220	1.322	1.390	1.246	1.302	1.232	1.351	1.223	1.338	1.202	1.306	1.321	1.340	1.166	1.312	1.246
FR1 n41_Ant 1	0.341	0.519	0.139	1.428	1.303	1.231	1.390	1.446	1.405	1.331	1.470	1.507	1.319	1.421	1.489	1.345	1.401	1.331	1.450	1.322	1.437	1.301	1.405	1.420	1.439	1.265	1.411	1.345
FR1 n56_Ant 1	0.458	0.519	0.139	1.545	1.420	1.348	1.507	1.563	1.522	1.448	1.587	1.624	1.436	1.538	1.606	1.462	1.518	1.448	1.567	1.439	1.554	1.418	1.522	1.537	1.556	1.382	1.528	1.462
FR1 n71_Ant 1	0.280	0.519	0.139	1.367	1.242	1.170	1.329	1.385	1.344	1.270	1.409	1.446	1.258	1.360	1.428	1.284	1.340	1.270	1.389	1.261	1.376	1.240	1.344	1.359	1.378	1.204	1.350	1.284
FR1 n77_Ant 1	0.406	0.519	0.139	1.493	1.368	1.296	1.455	1.511	1.470	1.396	1.535	1.572	1.384	1.486	1.554	1.410	1.466	1.396	1.515	1.387	1.502	1.366	1.470	1.485	1.504	1.330	1.476	1.410

Hybrid 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												
Max WWAN Ant 0	0.508	-30.5	-2.0	-207.0	54.8			1.62			0.04	Not required				
Max WWAN Ant 1 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.116	-64.5	41.0	-207.0												



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 81>

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

Exposure Position	WWAN_SAR	WLAN2.4G_Hz_Ant 3	WLAN5/G_Hz_Ant 4	GSM850_Ant 0	GSM190_0_Ant 0	WCDMA_II_Ant 0	WCDMA_IV_Ant 0	WCDMA_V_Ant 0	LTE Band_F_Ant 0	LTE Band_12_Ant 0	LTE Band_13_Ant 0	LTE Band_14_Ant 0	LTE Band_25_Ant 0	LTE Band_26_Ant 0	LTE Band_30_Ant 0	LTE Band_41_Ant 0	LTE Band_66_Ant 0	LTE Band_F1_Ant 0	FR1_n7_Ant 0	FR1_n12_Ant 0	FR1_n14_Ant 0	FR1_n25_Ant 0	FR1_n30_Ant 0	FR1_n41_Ant 0	FR1_n66_Ant 0	FR1_n70_Ant 0	FR1_n71_Ant 0	
Back	1g SAR (W/kg)		0.446	0.450	0.412	0.451	0.454	0.386	0.367	0.458	0.456	0.441	0.457	0.369	0.453	0.410	0.418	0.339	0.457	0.458	0.436	0.337	0.445	0.363	0.457	0.389		
GSM850_Ant 0	0.427	0.201	0.576	1.650	1.654	1.616	1.655	1.658	1.590	1.571	1.662	1.660	1.660	1.645	1.661	1.573	1.657	1.614	1.622	1.543	1.661	1.662	1.640	1.541	1.649	1.567	1.661	1.593
WCDMA_V_Ant 1	0.355	0.201	0.576	1.578	1.582	1.544	1.583	1.586	1.518	1.499	1.590	1.588	1.588	1.573	1.589	1.501	1.585	1.542	1.550	1.471	1.589	1.590	1.568	1.469	1.577	1.495	1.589	1.521
LTE Band_2_Ant 1	0.409	0.201	0.576	1.632	1.636	1.598	1.637	1.640	1.572	1.553	1.644	1.642	1.642	1.627	1.643	1.555	1.639	1.596	1.604	1.525	1.643	1.644	1.622	1.523	1.631	1.549	1.643	1.575
LTE Band_12_Ant 1	0.447	0.201	0.576	1.670	1.674	1.636	1.675	1.678	1.610	1.591	1.682	1.680	1.680	1.665	1.681	1.593	1.677	1.634	1.642	1.563	1.681	1.682	1.660	1.561	1.669	1.587	1.681	1.613
LTE Band_13_Ant 1	0.385	0.201	0.576	1.608	1.612	1.574	1.613	1.616	1.548	1.529	1.620	1.618	1.618	1.603	1.619	1.531	1.615	1.572	1.580	1.501	1.619	1.620	1.596	1.499	1.607	1.525	1.619	1.551
LTE Band_14_Ant 1	0.401	0.201	0.576	1.624	1.628	1.590	1.629	1.632	1.564	1.545	1.636	1.634	1.634	1.619	1.635	1.547	1.631	1.588	1.596	1.517	1.633	1.636	1.614	1.515	1.623	1.541	1.635	1.567
LTE Band_20_Ant 1	0.385	0.201	0.576	1.608	1.612	1.574	1.613	1.616	1.548	1.529	1.620	1.618	1.618	1.603	1.619	1.531	1.615	1.572	1.580	1.501	1.619	1.620	1.598	1.499	1.607	1.525	1.619	1.551
LTE Band_66_Ant 1	0.429	0.201	0.576	1.652	1.656	1.618	1.657	1.660	1.592	1.573	1.664	1.662	1.662	1.647	1.663	1.575	1.659	1.616	1.624	1.545	1.663	1.664	1.642	1.543	1.651	1.569	1.663	1.595
LTE Band_71_Ant 1	0.444	0.201	0.576	1.667	1.671	1.633	1.672	1.675	1.607	1.588	1.679	1.677	1.677	1.662	1.678	1.590	1.674	1.631	1.639	1.560	1.678	1.679	1.657	1.558	1.666	1.584	1.678	1.610
FR1_n12_Ant 1	0.373	0.201	0.576	1.596	1.600	1.562	1.601	1.604	1.536	1.517	1.608	1.606	1.606	1.591	1.607	1.519	1.603	1.560	1.568	1.489	1.607	1.608	1.596	1.487	1.595	1.513	1.607	1.539
FR1_n14_Ant 1	0.447	0.201	0.576	1.670	1.674	1.636	1.675	1.678	1.610	1.591	1.682	1.680	1.680	1.665	1.681	1.593	1.677	1.634	1.642	1.563	1.681	1.682	1.660	1.561	1.669	1.587	1.681	1.613
FR1_n26_Ant 1	0.406	0.201	0.576	1.629	1.633	1.595	1.634	1.637	1.569	1.550	1.641	1.639	1.639	1.624	1.640	1.552	1.636	1.593	1.601	1.522	1.640	1.641	1.619	1.520	1.628	1.546	1.640	1.572
FR1_n41_Ant 1	0.444	0.201	0.576	1.667	1.671	1.633	1.672	1.675	1.607	1.588	1.679	1.677	1.677	1.662	1.678	1.590	1.674	1.631	1.639	1.560	1.678	1.679	1.657	1.558	1.666	1.584	1.678	1.610
FR1_n46_Ant 1	0.459	0.201	0.576	1.682	1.686	1.648	1.687	1.690	1.622	1.603	1.694	1.692	1.692	1.677	1.693	1.605	1.689	1.646	1.654	1.575	1.693	1.694	1.672	1.573	1.681	1.599	1.693	1.625
FR1_n71_Ant 1	0.393	0.201	0.576	1.616	1.620	1.582	1.621	1.624	1.556	1.537	1.628	1.626	1.626	1.611	1.627	1.539	1.623	1.580	1.588	1.509	1.627	1.628	1.606	1.507	1.615	1.533	1.627	1.559
FR1_n77_Ant 1	0.446	0.201	0.576	1.669	1.673	1.635	1.674	1.677	1.609	1.590	1.681	1.679	1.679	1.664	1.680	1.592	1.676	1.633	1.641	1.562	1.680	1.681	1.659	1.560	1.668	1.586	1.680	1.612

Hybrid 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				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	46.4	0.92	0.02	Not required
Max WWAN Ant 1	0.459	-0.2	58.1	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	41.2	0.66	0.01	Not required
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	69.4	1.03	0.02	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				
Max WWAN Ant 1	0.459	-0.2	58.1	-207.0	17.0	0.66	0.03	Not required
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0				
Max WWAN Ant 1	0.459	-0.2	58.1	-207.0	56.4	1.04	0.02	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0	71.1	0.78	0.01	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 82>

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

Exposure Position	WWAN_SAR	WLAN5/6G_Band 4	Bluetooth_H.Ant 3	GSM850_Ant 0	GSM190_Ant 0	WCDMA_V.Ant 0	WCDMA_V.Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 25_Ant 0	LTE Band 26_Ant 0	LTE Band 30_Ant 0	LTE Band 41_Ant 0	LTE Band 66_Ant 0	LTE Band 71_Ant 0	FR1_n7_Ant 0	FR1_n12_Ant 0	FR1_n14_Ant 0	FR1_n25_Ant 0	FR1_n26_Ant 0	FR1_n30_Ant 0	FR1_n41_Ant 0	FR1_n66_Ant 0	FR1_n70_Ant 0	FR1_n71_Ant 0		
Back	1g SAR (W/kg)			0.446	0.450	0.412	0.451	0.454	0.398	0.367	0.458	0.456	0.456	0.441	0.457	0.369	0.453	0.410	0.418	0.339	0.457	0.458	0.436	0.337	0.445	0.363	0.457	0.389
GSM850_Ant 1	0.427	0.576	0.165	1.614	1.618	1.580	1.619	1.622	1.554	1.535	1.626	1.624	1.624	1.609	1.625	1.537	1.621	1.578	1.586	1.507	1.625	1.626	1.604	1.505	1.613	1.531	1.625	1.557
WCDMA_V.Ant 1	0.395	0.576	0.165	1.542	1.546	1.508	1.547	1.550	1.482	1.463	1.554	1.552	1.552	1.537	1.553	1.465	1.549	1.508	1.514	1.435	1.553	1.554	1.532	1.433	1.541	1.459	1.553	1.485
LTE Band 2_Ant 1	0.409	0.576	0.165	1.596	1.600	1.562	1.601	1.604	1.538	1.517	1.608	1.606	1.606	1.591	1.607	1.519	1.603	1.560	1.568	1.489	1.607	1.608	1.588	1.487	1.595	1.513	1.607	1.539
LTE Band 12_Ant 1	0.447	0.576	0.165	1.634	1.638	1.600	1.639	1.642	1.574	1.555	1.646	1.644	1.644	1.629	1.645	1.557	1.641	1.598	1.606	1.527	1.645	1.646	1.624	1.525	1.633	1.551	1.645	1.577
LTE Band 13_Ant 1	0.385	0.576	0.165	1.572	1.576	1.538	1.577	1.580	1.512	1.493	1.584	1.582	1.582	1.567	1.583	1.495	1.579	1.536	1.544	1.465	1.583	1.584	1.562	1.463	1.571	1.489	1.563	1.515
LTE Band 14_Ant 1	0.401	0.576	0.165	1.588	1.592	1.554	1.593	1.596	1.528	1.509	1.600	1.598	1.598	1.583	1.599	1.511	1.595	1.552	1.560	1.481	1.599	1.600	1.578	1.479	1.587	1.505	1.599	1.531
LTE Band 20_Ant 1	0.385	0.576	0.165	1.572	1.576	1.538	1.577	1.580	1.512	1.493	1.584	1.582	1.582	1.567	1.583	1.495	1.579	1.533	1.544	1.465	1.583	1.584	1.562	1.463	1.571	1.489	1.563	1.515
LTE Band 66_Ant 1	0.429	0.576	0.165	1.616	1.620	1.582	1.621	1.624	1.556	1.537	1.628	1.626	1.626	1.611	1.627	1.539	1.623	1.580	1.588	1.509	1.627	1.628	1.606	1.507	1.615	1.533	1.627	1.559
LTE Band 71_Ant 1	0.444	0.576	0.165	1.631	1.635	1.597	1.636	1.639	1.571	1.552	1.643	1.641	1.641	1.626	1.642	1.554	1.638	1.595	1.603	1.524	1.642	1.643	1.621	1.522	1.630	1.548	1.642	1.574
FR1_n12_Ant 1	0.373	0.576	0.165	1.560	1.564	1.526	1.565	1.568	1.500	1.481	1.572	1.570	1.570	1.555	1.571	1.483	1.567	1.524	1.532	1.453	1.571	1.572	1.550	1.451	1.559	1.477	1.571	1.503
FR1_n14_Ant 1	0.447	0.576	0.165	1.634	1.638	1.600	1.639	1.642	1.574	1.555	1.646	1.644	1.644	1.629	1.645	1.557	1.641	1.598	1.606	1.527	1.645	1.646	1.624	1.525	1.633	1.551	1.645	1.577
FR1_n26_Ant 1	0.406	0.576	0.165	1.593	1.597	1.559	1.598	1.601	1.533	1.514	1.605	1.603	1.603	1.588	1.604	1.516	1.600	1.557	1.565	1.486	1.604	1.605	1.583	1.484	1.592	1.510	1.604	1.536
FR1_n41_Ant 1	0.444	0.576	0.165	1.631	1.635	1.597	1.636	1.639	1.571	1.552	1.643	1.641	1.641	1.626	1.642	1.554	1.638	1.595	1.603	1.524	1.642	1.643	1.621	1.522	1.630	1.548	1.642	1.574
FR1_n58_Ant 1	0.459	0.576	0.165	1.646	1.650	1.612	1.651	1.654	1.586	1.567	1.658	1.656	1.656	1.641	1.657	1.569	1.653	1.610	1.618	1.539	1.657	1.658	1.636	1.537	1.645	1.563	1.657	1.589
FR1_n71_Ant 1	0.393	0.576	0.165	1.580	1.584	1.546	1.585	1.588	1.520	1.501	1.592	1.590	1.590	1.575	1.591	1.503	1.587	1.544	1.552	1.473	1.591	1.592	1.570	1.471	1.579	1.497	1.591	1.523
FR1_n77_Ant 1	0.446	0.576	0.165	1.633	1.637	1.599	1.638	1.641	1.573	1.554	1.645	1.643	1.643	1.628	1.644	1.556	1.640	1.597	1.605	1.526	1.644	1.645	1.623	1.524	1.632	1.550	1.644	1.576

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				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	46.4	0.92	0.02	Not required
Max WWAN Ant 1	0.459	-0.2	58.1	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	40.6	0.62	0.01	Not required
Bluetooth(2.0) Ant 3	0.165	11.0	42.5	-207.0				
Max WWAN _Ant 0	0.458	-19.8	16.0	-207.0	69.4	1.03	0.02	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				
Max WWAN Ant 1	0.459	-2.2	59.3	-207.0	21.4	0.62	0.02	Not required
Bluetooth(2.0) Ant 3	0.165	11.0	42.5	-207.0				
Max WWAN Ant 1	0.459	-0.2	58.1	-207.0	56.4	1.04	0.02	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0	72.9	0.74	0.01	Not required
Bluetooth(2.0) Ant 3	0.165	11.0	42.5	-207.0				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 83>

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

Exposure Position	WWAN_SAR	WLAN2.4GHz_Ant 3	WLAN5/6GHz_Ant 4	GSM1900_Ant 2	WCDMA_II_Ant 2	WCDMA_IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 45_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front			1g SAR (W/kg)	0.493	0.567	0.613	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.690	0.462	0.582	0.454	0.479	0.547	0.354
GSM950_Ant 0	0.429	0.180	0.519	1.621	1.695	1.641	1.685	1.738	1.724	1.679	1.559	1.625	1.643	1.778	1.590	1.710	1.582	1.607	1.675	1.482
GSM1900_Ant 0	0.304	0.180	0.519	1.496	1.570	1.516	1.560	1.613	1.599	1.554	1.434	1.500	1.518	1.653	1.465	1.585	1.457	1.482	1.550	1.357
WCDMA II_Ant 0	0.232	0.180	0.519	1.424	1.498	1.444	1.488	1.541	1.527	1.482	1.362	1.428	1.446	1.581	1.393	1.513	1.385	1.410	1.478	1.285
WCDMA IV_Ant 0	0.391	0.180	0.519	1.583	1.657	1.603	1.647	1.700	1.686	1.641	1.521	1.587	1.605	1.740	1.552	1.672	1.544	1.569	1.637	1.444
WCDMA V_Ant 0	0.447	0.180	0.519	1.639	1.713	1.659	1.703	1.756	1.742	1.697	1.577	1.643	1.661	1.796	1.608	1.728	1.600	1.625	1.693	1.500
LTE Band 7_Ant 0	0.406	0.180	0.519	1.598	1.672	1.618	1.662	1.715	1.701	1.656	1.536	1.602	1.620	1.755	1.567	1.687	1.559	1.584	1.652	1.459
LTE Band 12_Ant 0	0.332	0.180	0.519	1.524	1.598	1.544	1.588	1.641	1.627	1.582	1.462	1.528	1.546	1.681	1.493	1.613	1.485	1.510	1.578	1.385
LTE Band 13_Ant 0	0.471	0.180	0.519	1.663	1.737	1.683	1.727	1.780	1.766	1.721	1.601	1.667	1.685	1.820	1.632	1.752	1.624	1.649	1.717	1.524
LTE Band 14_Ant 0	0.508	0.180	0.519	1.700	1.774	1.720	1.764	1.817	1.803	1.758	1.638	1.704	1.722	1.857	1.669	1.789	1.661	1.686	1.754	1.561
LTE Band 25_Ant 0	0.320	0.180	0.519	1.512	1.588	1.532	1.576	1.629	1.615	1.570	1.450	1.516	1.534	1.669	1.481	1.601	1.473	1.498	1.566	1.373
LTE Band 26_Ant 0	0.422	0.180	0.519	1.614	1.688	1.634	1.678	1.731	1.717	1.672	1.552	1.618	1.636	1.771	1.583	1.703	1.575	1.600	1.668	1.475
LTE Band 30_Ant 0	0.490	0.180	0.519	1.682	1.756	1.702	1.746	1.799	1.785	1.740	1.620	1.686	1.704	1.839	1.651	1.771	1.643	1.668	1.736	1.543
LTE Band 41_Ant 0	0.346	0.180	0.519	1.536	1.612	1.558	1.602	1.655	1.641	1.596	1.476	1.542	1.560	1.695	1.507	1.627	1.499	1.524	1.592	1.399
LTE Band 68_Ant 0	0.402	0.180	0.519	1.594	1.668	1.614	1.658	1.711	1.697	1.652	1.532	1.598	1.616	1.751	1.563	1.683	1.555	1.580	1.648	1.455
LTE Band 71_Ant 0	0.332	0.180	0.519	1.524	1.598	1.544	1.588	1.641	1.627	1.582	1.462	1.528	1.546	1.681	1.493	1.613	1.485	1.510	1.578	1.385
FR1 n7_Ant 0	0.451	0.180	0.519	1.643	1.717	1.663	1.707	1.760	1.746	1.701	1.581	1.647	1.665	1.800	1.612	1.732	1.604	1.629	1.697	1.504
FR1 n12_Ant 0	0.323	0.180	0.519	1.515	1.589	1.535	1.579	1.632	1.618	1.573	1.453	1.519	1.537	1.672	1.484	1.604	1.476	1.501	1.569	1.376
FR1 n14_Ant 0	0.438	0.180	0.519	1.630	1.704	1.650	1.694	1.747	1.733	1.688	1.568	1.634	1.652	1.787	1.599	1.719	1.591	1.616	1.684	1.491
FR1 n25_Ant 0	0.302	0.180	0.519	1.494	1.568	1.514	1.558	1.611	1.597	1.552	1.432	1.498	1.516	1.651	1.463	1.583	1.455	1.480	1.548	1.355
FR1 n26_Ant 0	0.406	0.180	0.519	1.598	1.672	1.618	1.662	1.715	1.701	1.656	1.536	1.602	1.620	1.755	1.567	1.687	1.559	1.584	1.652	1.459
FR1 n30_Ant 0	0.421	0.180	0.519	1.613	1.687	1.633	1.677	1.730	1.716	1.671	1.551	1.617	1.635	1.770	1.582	1.702	1.574	1.599	1.667	1.474
FR1 n41_Ant 0	0.440	0.180	0.519	1.632	1.706	1.652	1.696	1.749	1.735	1.690	1.570	1.636	1.654	1.789	1.601	1.721	1.593	1.618	1.686	1.493
FR1 n66_Ant 0	0.268	0.180	0.519	1.458	1.532	1.478	1.522	1.575	1.561	1.518	1.398	1.462	1.480	1.615	1.427	1.547	1.419	1.444	1.512	1.319
FR1 n70_Ant 0	0.412	0.180	0.519	1.604	1.678	1.624	1.668	1.721	1.707	1.662	1.542	1.608	1.626	1.761	1.573	1.693	1.565	1.590	1.658	1.465
FR1 n71_Ant 0	0.346	0.180	0.519	1.538	1.612	1.558	1.602	1.655	1.641	1.596	1.476	1.542	1.560	1.695	1.507	1.627	1.499	1.524	1.592	1.399

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				
Max WWAN Ant 0 + Max WWAN Ant 2	1.158	-38.0	-58.0	-207.0	101.1	1.34	0.02	Not required
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0	138.7	1.68	0.02	Not required
Max WWAN Ant 0 + Max WWAN Ant 2	1.158	2.4	-56.3	-207.0	66.2	0.70	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0				
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 84>

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

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 65_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front		1g SAR (W/kg)		0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354
GSM850_Ant 0	0.429	0.519	0.054	1.495	1.569	1.515	1.559	1.612	1.598	1.553	1.433	1.499	1.517	1.652	1.464	1.584	1.456	1.481	1.549	1.356
GSM1900_Ant 0	0.304	0.519	0.054	1.370	1.444	1.390	1.434	1.487	1.473	1.428	1.308	1.374	1.392	1.527	1.339	1.459	1.331	1.356	1.424	1.231
WCDMA II_Ant 0	0.232	0.519	0.054	1.298	1.372	1.318	1.362	1.415	1.401	1.356	1.236	1.302	1.320	1.455	1.267	1.387	1.259	1.284	1.352	1.159
WCDMA IV_Ant 0	0.391	0.519	0.054	1.457	1.531	1.477	1.521	1.574	1.560	1.515	1.395	1.461	1.479	1.614	1.426	1.546	1.418	1.443	1.511	1.318
WCDMA V_Ant 0	0.447	0.519	0.054	1.513	1.587	1.533	1.577	1.630	1.616	1.571	1.451	1.517	1.535	1.670	1.482	1.602	1.474	1.499	1.567	1.374
LTE Band 7_Ant 0	0.406	0.519	0.054	1.472	1.546	1.492	1.536	1.589	1.575	1.530	1.410	1.476	1.494	1.629	1.441	1.561	1.433	1.458	1.526	1.333
LTE Band 12_Ant 0	0.332	0.519	0.054	1.398	1.472	1.418	1.462	1.515	1.501	1.456	1.336	1.402	1.420	1.555	1.367	1.487	1.359	1.384	1.452	1.259
LTE Band 13_Ant 0	0.471	0.519	0.054	1.537	1.611	1.557	1.601	1.654	1.640	1.595	1.475	1.541	1.559	1.694	1.506	1.626	1.498	1.523	1.591	1.398
LTE Band 14_Ant 0	0.508	0.519	0.054	1.574	1.648	1.594	1.638	1.691	1.677	1.632	1.512	1.578	1.596	1.731	1.543	1.663	1.535	1.560	1.628	1.435
LTE Band 25_Ant 0	0.320	0.519	0.054	1.386	1.460	1.406	1.450	1.503	1.489	1.444	1.324	1.390	1.408	1.543	1.355	1.475	1.347	1.372	1.440	1.247
LTE Band 26_Ant 0	0.422	0.519	0.054	1.488	1.562	1.508	1.552	1.605	1.591	1.546	1.426	1.492	1.510	1.645	1.457	1.577	1.449	1.474	1.542	1.349
LTE Band 30_Ant 0	0.490	0.519	0.054	1.556	1.630	1.576	1.620	1.673	1.659	1.614	1.494	1.560	1.578	1.713	1.525	1.645	1.517	1.542	1.610	1.417
LTE Band 41_Ant 0	0.346	0.519	0.054	1.412	1.486	1.432	1.476	1.529	1.515	1.470	1.350	1.416	1.434	1.569	1.381	1.501	1.373	1.398	1.466	1.273
LTE Band 66_Ant 0	0.402	0.519	0.054	1.468	1.542	1.488	1.532	1.585	1.571	1.526	1.406	1.472	1.490	1.625	1.437	1.557	1.429	1.454	1.522	1.329
LTE Band 71_Ant 0	0.332	0.519	0.054	1.398	1.472	1.418	1.462	1.515	1.501	1.456	1.336	1.402	1.420	1.555	1.367	1.487	1.359	1.384	1.452	1.259
FR1 n7_Ant 0	0.451	0.519	0.054	1.517	1.591	1.537	1.581	1.634	1.620	1.575	1.455	1.521	1.539	1.674	1.486	1.606	1.478	1.503	1.571	1.378
FR1 n12_Ant 0	0.323	0.519	0.054	1.389	1.463	1.409	1.453	1.506	1.492	1.447	1.327	1.393	1.411	1.546	1.358	1.478	1.350	1.375	1.443	1.250
FR1 n14_Ant 0	0.438	0.519	0.054	1.504	1.578	1.524	1.568	1.621	1.607	1.562	1.442	1.508	1.526	1.661	1.473	1.593	1.465	1.490	1.558	1.365
FR1 n25_Ant 0	0.302	0.519	0.054	1.368	1.442	1.388	1.432	1.485	1.471	1.426	1.306	1.372	1.390	1.525	1.337	1.457	1.329	1.354	1.422	1.229
FR1 n26_Ant 0	0.406	0.519	0.054	1.472	1.546	1.492	1.536	1.589	1.575	1.530	1.410	1.476	1.494	1.629	1.441	1.561	1.433	1.458	1.526	1.333
FR1 n30_Ant 0	0.421	0.519	0.054	1.487	1.561	1.507	1.551	1.604	1.590	1.545	1.425	1.491	1.509	1.644	1.456	1.576	1.448	1.473	1.541	1.348
FR1 n41_Ant 0	0.440	0.519	0.054	1.506	1.580	1.526	1.570	1.623	1.609	1.564	1.444	1.510	1.528	1.663	1.475	1.595	1.467	1.492	1.560	1.367
FR1 n66_Ant 0	0.266	0.519	0.054	1.332	1.406	1.352	1.396	1.449	1.435	1.390	1.270	1.336	1.354	1.489	1.301	1.421	1.293	1.318	1.386	1.193
FR1 n70_Ant 0	0.412	0.519	0.054	1.478	1.552	1.498	1.542	1.595	1.581	1.536	1.416	1.482	1.500	1.635	1.447	1.567	1.439	1.464	1.532	1.339
FR1 n71_Ant 0	0.346	0.519	0.054	1.412	1.486	1.432	1.476	1.529	1.515	1.470	1.350	1.416	1.434	1.569	1.381	1.501	1.373	1.398	1.466	1.273

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				
Max WWAN Ant 0 + Max WWAN Ant 2	1.158	-22.9	-58.8	-207.0	137.9	1.21	0.01	Not required
Bluetooth Ant 4	0.054	10.5	75.0	-207.0				
Max WWAN Ant 0 + Max WWAN Ant 2	1.158	-22.9	-58.8	-207.0	141.3	1.68	0.02	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
Bluetooth Ant 4	0.054	10.5	75.0	-207.0	21.1	0.57	0.02	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 85>

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 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 65_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)			0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354
GSM850_Ant 0	0.429	0.519	0.139	1.580	1.654	1.600	1.644	1.697	1.683	1.638	1.518	1.584	1.602	1.737	1.549	1.669	1.541	1.566	1.634	1.441
GSM1900_Ant 0	0.304	0.519	0.139	1.455	1.529	1.475	1.519	1.572	1.558	1.513	1.393	1.459	1.477	1.612	1.424	1.544	1.416	1.441	1.509	1.316
WCDMA II_Ant 0	0.232	0.519	0.139	1.383	1.457	1.403	1.447	1.500	1.486	1.441	1.321	1.387	1.405	1.540	1.352	1.472	1.344	1.369	1.437	1.244
WCDMA IV_Ant 0	0.391	0.519	0.139	1.542	1.616	1.562	1.606	1.659	1.645	1.600	1.480	1.546	1.564	1.699	1.511	1.631	1.503	1.528	1.596	1.403
WCDMA V_Ant 0	0.447	0.519	0.139	1.598	1.672	1.618	1.662	1.715	1.701	1.656	1.536	1.602	1.620	1.755	1.567	1.687	1.559	1.584	1.652	1.459
LTE Band 7_Ant 0	0.406	0.519	0.139	1.557	1.631	1.577	1.621	1.674	1.660	1.615	1.495	1.561	1.579	1.714	1.526	1.646	1.518	1.543	1.611	1.418
LTE Band 12_Ant 0	0.332	0.519	0.139	1.483	1.557	1.503	1.547	1.600	1.586	1.541	1.421	1.487	1.505	1.640	1.452	1.572	1.444	1.469	1.537	1.344
LTE Band 13_Ant 0	0.471	0.519	0.139	1.622	1.696	1.642	1.686	1.739	1.725	1.680	1.560	1.626	1.644	1.779	1.591	1.711	1.583	1.608	1.676	1.483
LTE Band 14_Ant 0	0.508	0.519	0.139	1.659	1.733	1.679	1.723	1.776	1.762	1.717	1.597	1.663	1.681	1.816	1.628	1.748	1.620	1.645	1.713	1.520
LTE Band 25_Ant 0	0.320	0.519	0.139	1.471	1.545	1.491	1.535	1.588	1.574	1.529	1.409	1.475	1.493	1.628	1.440	1.560	1.432	1.457	1.525	1.332
LTE Band 26_Ant 0	0.422	0.519	0.139	1.573	1.647	1.593	1.637	1.690	1.676	1.631	1.511	1.577	1.595	1.730	1.542	1.662	1.534	1.559	1.627	1.434
LTE Band 30_Ant 0	0.490	0.519	0.139	1.641	1.715	1.661	1.705	1.758	1.744	1.699	1.579	1.645	1.663	1.798	1.610	1.730	1.602	1.627	1.695	1.502
LTE Band 41_Ant 0	0.346	0.519	0.139	1.497	1.571	1.517	1.561	1.614	1.600	1.555	1.435	1.501	1.519	1.654	1.466	1.586	1.458	1.483	1.551	1.358
LTE Band 66_Ant 0	0.402	0.519	0.139	1.553	1.627	1.573	1.617	1.670	1.656	1.611	1.491	1.557	1.575	1.710	1.522	1.642	1.514	1.539	1.607	1.414
LTE Band 71_Ant 0	0.332	0.519	0.139	1.483	1.557	1.503	1.547	1.600	1.586	1.541	1.421	1.487	1.505	1.640	1.452	1.572	1.444	1.469	1.537	1.344
FR1 n7_Ant 0	0.451	0.519	0.139	1.602	1.676	1.622	1.666	1.719	1.705	1.660	1.540	1.624	1.759	1.571	1.691	1.563	1.588	1.656	1.463	
FR1 n12_Ant 0	0.323	0.519	0.139	1.474	1.548	1.494	1.538	1.591	1.577	1.532	1.412	1.478	1.496	1.631	1.443	1.563	1.435	1.460	1.528	1.335
FR1 n14_Ant 0	0.438	0.519	0.139	1.589	1.663	1.609	1.653	1.706	1.692	1.647	1.527	1.593	1.611	1.746	1.558	1.678	1.550	1.575	1.643	1.450
FR1 n25_Ant 0	0.302	0.519	0.139	1.453	1.527	1.473	1.517	1.570	1.556	1.511	1.391	1.457	1.475	1.610	1.422	1.542	1.414	1.439	1.507	1.314
FR1 n26_Ant 0	0.406	0.519	0.139	1.557	1.631	1.577	1.621	1.674	1.660	1.615	1.495	1.561	1.579	1.714	1.526	1.646	1.518	1.543	1.611	1.418
FR1 n30_Ant 0	0.421	0.519	0.139	1.572	1.646	1.592	1.636	1.689	1.675	1.630	1.510	1.576	1.594	1.729	1.541	1.661	1.533	1.558	1.626	1.433
FR1 n41_Ant 0	0.440	0.519	0.139	1.591	1.665	1.611	1.655	1.708	1.694	1.649	1.529	1.595	1.613	1.748	1.560	1.680	1.552	1.577	1.645	1.452
FR1 n66_Ant 0	0.266	0.519	0.139	1.417	1.491	1.437	1.481	1.534	1.520	1.475	1.355	1.421	1.439	1.574	1.386	1.506	1.378	1.403	1.471	1.278
FR1 n70_Ant 0	0.412	0.519	0.139	1.563	1.637	1.583	1.627	1.680	1.666	1.621	1.501	1.567	1.585	1.720	1.532	1.652	1.524	1.549	1.617	1.424
FR1 n71_Ant 0	0.346	0.519	0.139	1.497	1.571	1.517	1.561	1.614	1.600	1.555	1.435	1.501	1.519	1.654	1.466	1.586	1.458	1.483	1.551	1.358

Hybrid 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				
Max WWAN Ant 0 + Max WWAN Ant 2	1.158	-38.0	-58.0	-207.0	102.5	1.30	0.01	Not required
Bluetooth Ant 3	0.139	-64.5	41.0	-207.0	138.7	1.68	0.02	Not required
Max WWAN Ant 0 + Max WWAN Ant 2	1.158	2.4	-56.3	-207.0	68.6	0.66	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
Bluetooth Ant 3	0.139	-64.5	41.0	-207.0				
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 86>

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

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2	
	1g SAR (W/kg)																				
Back				0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517	
GSM850_Ant 0	0.446	0.201	0.576	1.962	1.830	1.830	1.919	1.940	1.922	1.923	1.697	1.798	1.913	1.955	1.861	1.894	1.693	1.776	1.856	1.740	
GSM1900_Ant 0	0.450	0.201	0.576	1.966	1.834	1.834	1.923	1.944	1.926	1.927	1.701	1.802	1.917	1.959	1.865	1.898	1.697	1.780	1.860	1.744	
WCDMA II_Ant 0	0.412	0.201	0.576	1.928	1.796	1.796	1.885	1.906	1.888	1.889	1.663	1.764	1.879	1.921	1.827	1.860	1.659	1.742	1.822	1.706	
WCDMA IV_Ant 0	0.451	0.201	0.576	1.967	1.835	1.835	1.924	1.945	1.927	1.928	1.702	1.803	1.918	1.960	1.866	1.899	1.698	1.781	1.861	1.745	
WCDMA V_Ant 0	0.454	0.201	0.576	1.970	1.838	1.838	1.927	1.948	1.930	1.931	1.705	1.806	1.921	1.963	1.869	1.902	1.701	1.784	1.864	1.748	
LTE Band 7_Ant 0	0.386	0.201	0.576	1.902	1.770	1.770	1.859	1.880	1.862	1.863	1.637	1.738	1.853	1.895	1.801	1.834	1.633	1.716	1.796	1.680	
LTE Band 12_Ant 0	0.367	0.201	0.576	1.883	1.751	1.751	1.840	1.861	1.843	1.844	1.618	1.719	1.834	1.876	1.782	1.815	1.614	1.697	1.777	1.661	
LTE Band 13_Ant 0	0.458	0.201	0.576	1.974	1.842	1.842	1.931	1.952	1.934	1.935	1.709	1.810	1.925	1.967	1.873	1.906	1.705	1.788	1.868	1.752	
LTE Band 14_Ant 0	0.456	0.201	0.576	1.972	1.840	1.840	1.929	1.950	1.932	1.933	1.707	1.808	1.923	1.965	1.871	1.904	1.703	1.786	1.866	1.750	
LTE Band 25_Ant 0	0.456	0.201	0.576	1.972	1.840	1.840	1.929	1.950	1.932	1.933	1.707	1.808	1.923	1.965	1.871	1.904	1.703	1.786	1.866	1.750	
LTE Band 26_Ant 0	0.441	0.201	0.576	1.957	1.825	1.825	1.914	1.935	1.917	1.918	1.692	1.793	1.908	1.950	1.856	1.889	1.688	1.771	1.851	1.735	
LTE Band 30_Ant 0	0.457	0.201	0.576	1.973	1.841	1.841	1.930	1.951	1.933	1.934	1.708	1.809	1.924	1.966	1.872	1.905	1.704	1.787	1.867	1.751	
LTE Band 41_Ant 0	0.369	0.201	0.576	1.885	1.753	1.753	1.842	1.863	1.845	1.846	1.620	1.721	1.836	1.878	1.784	1.817	1.616	1.699	1.779	1.663	
LTE Band 66_Ant 0	0.453	0.201	0.576	1.969	1.837	1.837	1.926	1.947	1.929	1.930	1.704	1.805	1.920	1.962	1.868	1.901	1.700	1.783	1.863	1.747	
LTE Band 71_Ant 0	0.410	0.201	0.576	1.926	1.794	1.794	1.883	1.904	1.886	1.887	1.661	1.762	1.877	1.919	1.825	1.858	1.657	1.740	1.820	1.704	
FR1 n7_Ant 0	0.418	0.201	0.576	1.934	1.802	1.802	1.891	1.912	1.894	1.895	1.669	1.770	1.885	1.927	1.833	1.866	1.665	1.748	1.828	1.712	
FR1 n12_Ant 0	0.339	0.201	0.576	1.855	1.723	1.723	1.812	1.833	1.815	1.816	1.590	1.691	1.806	1.848	1.754	1.787	1.586	1.669	1.749	1.633	
FR1 n14_Ant 0	0.457	0.201	0.576	1.973	1.841	1.841	1.930	1.951	1.933	1.934	1.708	1.809	1.924	1.966	1.872	1.905	1.704	1.787	1.867	1.751	
FR1 n25_Ant 0	0.458	0.201	0.576	1.974	1.842	1.842	1.931	1.952	1.934	1.935	1.709	1.810	1.925	1.967	1.873	1.906	1.705	1.788	1.868	1.752	
FR1 n26_Ant 0	0.436	0.201	0.576	1.952	1.820	1.820	1.909	1.930	1.912	1.913	1.687	1.788	1.903	1.945	1.851	1.884	1.683	1.766	1.846	1.730	
FR1 n30_Ant 0	0.337	0.201	0.576	1.853	1.721	1.721	1.810	1.831	1.813	1.814	1.588	1.689	1.804	1.846	1.752	1.785	1.584	1.667	1.747	1.631	
FR1 n41_Ant 0	0.445	0.201	0.576	1.961	1.829	1.829	1.918	1.939	1.921	1.922	1.696	1.797	1.912	1.954	1.860	1.893	1.692	1.775	1.855	1.739	
FR1 n66_Ant 0	0.363	0.201	0.576	1.879	1.747	1.747	1.836	1.857	1.839	1.840	1.614	1.715	1.830	1.872	1.778	1.811	1.610	1.693	1.773	1.657	
FR1 n70_Ant 0	0.457	0.201	0.576	1.973	1.841	1.841	1.930	1.951	1.933	1.934	1.708	1.809	1.924	1.966	1.872	1.905	1.704	1.787	1.867	1.751	
FR1 n71_Ant 0	0.389	0.201	0.576	1.905	1.773	1.773	1.862	1.883	1.865	1.866	1.640	1.741	1.856	1.898	1.804	1.837	1.636	1.719	1.799	1.683	

Hybrid 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				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-55.0	-73.5	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	41.2	0.66	0.01	Not required
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	69.4	1.03	0.02	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0	112.1	0.94	0.01	Not required
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0	118.1	1.32	0.01	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0	71.1	0.78	0.01	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 87>

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

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 65_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back		1g SAR (W/kg)			0.739	0.607	0.696	0.717	0.699	0.700	0.674	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 0	0.446	0.576	0.064	1.825	1.693	1.693	1.782	1.803	1.785	1.786	1.560	1.661	1.776	1.818	1.724	1.757	1.556	1.639	1.719	1.603
GSM1900_Ant 0	0.450	0.576	0.064	1.829	1.697	1.697	1.786	1.807	1.789	1.790	1.564	1.665	1.780	1.822	1.728	1.761	1.560	1.643	1.723	1.607
WCDMA II_Ant 0	0.412	0.576	0.064	1.791	1.659	1.659	1.748	1.769	1.751	1.752	1.526	1.627	1.742	1.784	1.690	1.723	1.522	1.605	1.685	1.569
WCDMA IV_Ant 0	0.451	0.576	0.064	1.830	1.698	1.698	1.787	1.808	1.790	1.791	1.565	1.666	1.781	1.823	1.729	1.762	1.561	1.644	1.724	1.608
WCDMA V_Ant 0	0.454	0.576	0.064	1.833	1.701	1.701	1.790	1.811	1.793	1.794	1.568	1.669	1.784	1.826	1.732	1.765	1.564	1.647	1.727	1.611
LTE Band 7_Ant 0	0.386	0.576	0.064	1.765	1.633	1.633	1.722	1.743	1.725	1.726	1.500	1.601	1.716	1.758	1.664	1.697	1.496	1.579	1.659	1.543
LTE Band 12_Ant 0	0.367	0.576	0.064	1.746	1.614	1.614	1.703	1.724	1.706	1.707	1.481	1.582	1.697	1.739	1.645	1.678	1.477	1.560	1.640	1.524
LTE Band 13_Ant 0	0.458	0.576	0.064	1.837	1.705	1.705	1.794	1.815	1.797	1.798	1.572	1.673	1.788	1.830	1.736	1.769	1.568	1.651	1.731	1.615
LTE Band 14_Ant 0	0.456	0.576	0.064	1.835	1.703	1.703	1.792	1.813	1.795	1.796	1.570	1.671	1.786	1.828	1.734	1.767	1.566	1.649	1.729	1.613
LTE Band 25_Ant 0	0.456	0.576	0.064	1.835	1.703	1.703	1.792	1.813	1.795	1.796	1.570	1.671	1.786	1.828	1.734	1.767	1.566	1.649	1.729	1.613
LTE Band 26_Ant 0	0.441	0.576	0.064	1.820	1.688	1.688	1.777	1.798	1.780	1.781	1.555	1.656	1.771	1.813	1.719	1.752	1.551	1.634	1.714	1.598
LTE Band 30_Ant 0	0.457	0.576	0.064	1.836	1.704	1.704	1.793	1.814	1.796	1.797	1.571	1.672	1.787	1.829	1.735	1.768	1.567	1.650	1.730	1.614
LTE Band 41_Ant 0	0.369	0.576	0.064	1.748	1.616	1.616	1.705	1.726	1.708	1.709	1.483	1.584	1.699	1.741	1.647	1.680	1.479	1.562	1.642	1.526
LTE Band 66_Ant 0	0.453	0.576	0.064	1.832	1.700	1.700	1.789	1.810	1.792	1.793	1.567	1.668	1.783	1.825	1.731	1.764	1.563	1.646	1.726	1.610
LTE Band 71_Ant 0	0.410	0.576	0.064	1.789	1.657	1.657	1.746	1.767	1.749	1.750	1.524	1.625	1.740	1.782	1.688	1.721	1.520	1.603	1.683	1.567
FR1 n7_Ant 0	0.418	0.576	0.064	1.797	1.665	1.665	1.754	1.775	1.757	1.758	1.532	1.633	1.748	1.790	1.696	1.729	1.528	1.611	1.691	1.575
FR1 n12_Ant 0	0.339	0.576	0.064	1.718	1.586	1.586	1.675	1.696	1.678	1.679	1.453	1.554	1.669	1.711	1.617	1.650	1.449	1.532	1.612	1.496
FR1 n14_Ant 0	0.457	0.576	0.064	1.836	1.704	1.704	1.793	1.814	1.796	1.797	1.571	1.672	1.787	1.829	1.735	1.768	1.567	1.650	1.730	1.614
FR1 n25_Ant 0	0.458	0.576	0.064	1.837	1.705	1.705	1.794	1.815	1.797	1.798	1.572	1.673	1.788	1.830	1.736	1.769	1.568	1.651	1.731	1.615
FR1 n26_Ant 0	0.436	0.576	0.064	1.815	1.683	1.683	1.772	1.793	1.775	1.776	1.550	1.651	1.766	1.808	1.714	1.747	1.546	1.629	1.709	1.593
FR1 n30_Ant 0	0.337	0.576	0.064	1.716	1.584	1.584	1.673	1.694	1.676	1.677	1.451	1.552	1.667	1.709	1.615	1.648	1.447	1.530	1.610	1.494
FR1 n41_Ant 0	0.445	0.576	0.064	1.824	1.692	1.692	1.781	1.802	1.784	1.785	1.559	1.660	1.775	1.817	1.723	1.756	1.555	1.638	1.718	1.602
FR1 n66_Ant 0	0.363	0.576	0.064	1.742	1.610	1.610	1.699	1.720	1.702	1.703	1.477	1.578	1.693	1.735	1.641	1.674	1.473	1.556	1.636	1.520
FR1 n70_Ant 0	0.457	0.576	0.064	1.836	1.704	1.704	1.793	1.814	1.796	1.797	1.571	1.672	1.787	1.829	1.735	1.768	1.567	1.650	1.730	1.614
FR1 n71_Ant 0	0.389	0.576	0.064	1.768	1.636	1.636	1.725	1.746	1.728	1.729	1.503	1.604	1.719	1.761	1.667	1.700	1.499	1.582	1.662	1.546

Hybrid 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				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-55.0	-73.5	-207.0	69.4	1.10	0.02	Not required
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	116.1	1.10	0.01	Not required
WLANS/6GHz Ant 4 + Bluetooth Ant 4	0.640	-53.4	76.7	-207.0				
Max WWAN Ant 0	0.458	-62.5	-41.0	-207.0				
WLANS/6GHz Ant 4 + Bluetooth Ant 4	0.640	-58.5	75.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 88>

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

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 65_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.696	0.717	0.699	0.700	0.674	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517	
GSM850_Ant 0	0.446	0.576	0.165	1.926	1.794	1.794	1.883	1.904	1.886	1.887	1.661	1.762	1.877	1.919	1.825	1.858	1.657	1.740	1.820	1.704
GSM1800_Ant 0	0.450	0.576	0.165	1.930	1.798	1.798	1.887	1.908	1.890	1.891	1.665	1.766	1.881	1.923	1.829	1.862	1.661	1.744	1.824	1.708
WCDMA II_Ant 0	0.412	0.576	0.165	1.892	1.760	1.760	1.849	1.870	1.852	1.853	1.627	1.728	1.843	1.885	1.791	1.824	1.623	1.706	1.786	1.670
WCDMA IV_Ant 0	0.451	0.576	0.165	1.931	1.799	1.799	1.888	1.909	1.891	1.892	1.666	1.767	1.882	1.924	1.830	1.863	1.662	1.745	1.825	1.709
WCDMA V_Ant 0	0.454	0.576	0.165	1.934	1.802	1.802	1.891	1.912	1.894	1.895	1.669	1.770	1.885	1.927	1.833	1.866	1.665	1.748	1.828	1.712
LTE Band 7_Ant 0	0.386	0.576	0.165	1.866	1.734	1.734	1.823	1.844	1.826	1.827	1.601	1.702	1.817	1.859	1.765	1.798	1.597	1.680	1.760	1.644
LTE Band 12_Ant 0	0.367	0.576	0.165	1.847	1.715	1.715	1.804	1.825	1.807	1.808	1.582	1.683	1.798	1.840	1.746	1.779	1.578	1.661	1.741	1.625
LTE Band 13_Ant 0	0.458	0.576	0.165	1.938	1.806	1.806	1.895	1.916	1.898	1.899	1.673	1.774	1.889	1.931	1.837	1.870	1.669	1.752	1.832	1.716
LTE Band 14_Ant 0	0.456	0.576	0.165	1.936	1.804	1.804	1.893	1.914	1.896	1.897	1.671	1.772	1.887	1.929	1.835	1.868	1.667	1.750	1.830	1.714
LTE Band 25_Ant 0	0.456	0.576	0.165	1.936	1.804	1.804	1.893	1.914	1.896	1.897	1.671	1.772	1.887	1.929	1.835	1.868	1.667	1.750	1.830	1.714
LTE Band 26_Ant 0	0.441	0.576	0.165	1.921	1.789	1.789	1.878	1.899	1.881	1.882	1.656	1.757	1.872	1.914	1.820	1.853	1.652	1.735	1.815	1.699
LTE Band 30_Ant 0	0.457	0.576	0.165	1.937	1.805	1.805	1.894	1.915	1.897	1.898	1.672	1.773	1.888	1.930	1.836	1.869	1.668	1.751	1.831	1.715
LTE Band 41_Ant 0	0.369	0.576	0.165	1.849	1.717	1.717	1.806	1.827	1.809	1.810	1.584	1.685	1.800	1.842	1.748	1.781	1.580	1.663	1.743	1.627
LTE Band 66_Ant 0	0.453	0.576	0.165	1.933	1.801	1.801	1.890	1.911	1.893	1.894	1.668	1.769	1.884	1.926	1.832	1.865	1.664	1.747	1.827	1.711
LTE Band 71_Ant 0	0.410	0.576	0.165	1.890	1.758	1.758	1.847	1.868	1.850	1.851	1.625	1.726	1.841	1.883	1.789	1.822	1.621	1.704	1.784	1.668
FR1 n7_Ant 0	0.418	0.576	0.165	1.898	1.766	1.766	1.855	1.876	1.858	1.859	1.633	1.734	1.849	1.891	1.797	1.830	1.629	1.712	1.792	1.676
FR1 n12_Ant 0	0.339	0.576	0.165	1.819	1.687	1.687	1.776	1.797	1.779	1.780	1.554	1.655	1.770	1.812	1.718	1.751	1.550	1.633	1.713	1.597
FR1 n14_Ant 0	0.457	0.576	0.165	1.937	1.805	1.805	1.894	1.915	1.897	1.898	1.672	1.773	1.888	1.930	1.836	1.869	1.668	1.751	1.831	1.715
FR1 n25_Ant 0	0.458	0.576	0.165	1.938	1.806	1.806	1.895	1.916	1.898	1.899	1.673	1.774	1.889	1.931	1.837	1.870	1.669	1.752	1.832	1.716
FR1 n26_Ant 0	0.436	0.576	0.165	1.916	1.784	1.784	1.873	1.894	1.876	1.877	1.651	1.752	1.867	1.909	1.815	1.848	1.647	1.730	1.810	1.694
FR1 n30_Ant 0	0.337	0.576	0.165	1.817	1.685	1.685	1.774	1.795	1.777	1.778	1.552	1.653	1.768	1.810	1.716	1.749	1.548	1.631	1.711	1.595
FR1 n41_Ant 0	0.445	0.576	0.165	1.925	1.793	1.793	1.882	1.903	1.885	1.886	1.660	1.761	1.876	1.918	1.824	1.857	1.656	1.739	1.819	1.703
FR1 n66_Ant 0	0.363	0.576	0.165	1.843	1.711	1.711	1.800	1.821	1.803	1.804	1.578	1.679	1.794	1.836	1.742	1.775	1.574	1.657	1.737	1.621
FR1 n70_Ant 0	0.457	0.576	0.165	1.937	1.805	1.805	1.894	1.915	1.897	1.898	1.672	1.773	1.888	1.930	1.836	1.869	1.668	1.751	1.831	1.715
FR1 n71_Ant 0	0.389	0.576	0.165	1.869	1.737	1.737	1.826	1.847	1.829	1.830	1.604	1.705	1.820	1.862	1.768	1.801	1.600	1.683	1.763	1.647

Hybrid 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				
Max WWAN Ant 0	0.458	-12.0	-75.6	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-55.0	-73.5	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	40.6	0.62	0.01	Not required
Bluetooth Ant 3	0.165	11.0	42.5	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	69.4	1.03	0.02	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0	111.2	0.90	0.01	Not required
Bluetooth Ant 3	0.165	11.0	42.5	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0	118.1	1.32	0.01	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				
Bluetooth Ant 3	0.165	11.0	42.5	-207.0	72.9	0.74	0.01	Not required
WLAN5/6GHz Ant 4	0.576	-53.4	76.7	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 89>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN SAR	WLAN2.4G Hz Ant 3	WLAN5/6G Hz Ant 4	GSM850 Ant 0	GSM190 Ant 0	WCDMA II_Ant 0	WCDMA IV_Ant 0	WCDMA V_Ant 0	LTE Band 7_Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 25_Ant 0	LTE Band 26_Ant 0	LTE Band 30_Ant 0	LTE Band 41_Ant 0	LTE Band 66_Ant 0	LTE Band 71_Ant 0	FR1 n12_Ant 0	FR1 n14_Ant 0	FR1 n25_Ant 0	FR1 n30_Ant 0	FR1 n41_Ant 0	FR1 n66_Ant 0	FR1 n70_Ant 0	FR1 n71_Ant 0		
Front	1g SAR (W/kg)	0.429	0.304	0.232	0.391	0.447	0.406	0.332	0.471	0.508	0.320	0.422	0.490	0.346	0.402	0.332	0.451	0.323	0.438	0.302	0.406	0.421	0.440	0.266	0.412	0.346		
LTE Band 2_Ant 5	0.326	0.180	0.519	1.454	1.329	1.257	1.416	1.472	1.431	1.357	1.496	1.533	1.345	1.447	1.515	1.371	1.427	1.357	1.476	1.348	1.463	1.327	1.431	1.446	1.465	1.291	1.437	1.371
LTE Band 66_Ant 5	0.396	0.180	0.519	1.524	1.399	1.327	1.486	1.542	1.501	1.427	1.566	1.603	1.415	1.517	1.585	1.441	1.497	1.427	1.548	1.418	1.533	1.397	1.501	1.516	1.535	1.361	1.507	1.441
FR1 n41_Ant 5	0.200	0.180	0.519	1.328	1.203	1.131	1.290	1.346	1.305	1.231	1.370	1.407	1.219	1.321	1.389	1.245	1.301	1.231	1.350	1.222	1.337	1.201	1.305	1.320	1.339	1.165	1.311	1.245
FR1 n48_Ant 5	0.540	0.180	0.519	1.668	1.543	1.471	1.630	1.686	1.645	1.571	1.710	1.747	1.559	1.661	1.729	1.585	1.641	1.571	1.690	1.562	1.677	1.541	1.645	1.660	1.679	1.505	1.651	1.585
FR1 n77_Ant 5	0.531	0.180	0.519	1.659	1.534	1.462	1.621	1.677	1.636	1.562	1.701	1.738	1.550	1.652	1.720	1.576	1.632	1.562	1.681	1.553	1.668	1.532	1.636	1.651	1.670	1.496	1.642	1.576

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				
Max WWAN Ant 0	0.508	-34.5	16.8	-207.0	56.1	1.05	0.02	Not required
Max WWAN Ant 5	0.540	2.5	59.0	-207.0				
Max WWAN Ant 0	0.508	-34.5	16.8	-207.0	69.8	1.03	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
Max WWAN Ant 0	0.508	-34.5	16.8	-207.0	35.6	0.69	0.02	Not required
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0				
Max WWAN Ant 5	0.540	2.5	59.0	-207.0	25.8	1.06	0.04	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
Max WWAN Ant 5	0.540	2.5	59.0	-207.0	66.1	0.72	0.01	Not required
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0				
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0	66.2	0.70	0.01	Not required
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0				

<Case 90>

SAR summation (blue colored) for each band of antenna 0,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	GSM850 Ant 0	GSM190 Ant 0	WCDMA II_Ant 0	WCDMA IV_Ant 0	WCDMA V_Ant 0	LTE Band 7_Ant 0	LTE Band 12_Ant 0	LTE Band 13_Ant 0	LTE Band 14_Ant 0	LTE Band 25_Ant 0	LTE Band 26_Ant 0	LTE Band 30_Ant 0	LTE Band 41_Ant 0	LTE Band 66_Ant 0	LTE Band 71_Ant 0	FR1 n12_Ant 0	FR1 n14_Ant 0	FR1 n25_Ant 0	FR1 n30_Ant 0	FR1 n41_Ant 0	FR1 n66_Ant 0	FR1 n70_Ant 0	FR1 n71_Ant 0		
Front	1g SAR (W/kg)	0.429	0.304	0.232	0.391	0.447	0.406	0.332	0.471	0.508	0.320	0.422	0.490	0.346	0.402	0.332	0.451	0.323	0.438	0.302	0.406	0.421	0.440	0.266	0.412	0.346		
LTE Band 2_Ant 5	0.326	0.519	0.054	1.328	1.203	1.131	1.290	1.346	1.305	1.231	1.370	1.407	1.219	1.321	1.389	1.245	1.301	1.231	1.350	1.222	1.337	1.201	1.305	1.320	1.339	1.165	1.311	1.245
LTE Band 66_Ant 5	0.396	0.519	0.054	1.398	1.273	1.201	1.360	1.416	1.375	1.301	1.440	1.477	1.289	1.391	1.459	1.315	1.371	1.301	1.420	1.292	1.407	1.271	1.375	1.390	1.409	1.235	1.381	1.315
FR1 n41_Ant 5	0.200	0.519	0.054	1.202	1.077	1.005	1.164	1.220	1.179	1.105	1.244	1.281	1.093	1.195	1.263	1.119	1.175	1.105	1.224	1.096	1.211	1.075	1.179	1.194	1.213	1.039	1.185	1.119
FR1 n48_Ant 5	0.540	0.519	0.054	1.542	1.417	1.345	1.504	1.560	1.519	1.445	1.584	1.621	1.433	1.535	1.603	1.459	1.515	1.445	1.564	1.436	1.551	1.415	1.519	1.534	1.553	1.379	1.525	1.459
FR1 n77_Ant 5	0.531	0.519	0.054	1.533	1.408	1.336	1.495	1.551	1.510	1.436	1.575	1.612	1.424	1.526	1.594	1.450	1.506	1.436	1.555	1.427	1.542	1.406	1.510	1.525	1.544	1.370	1.516	1.450

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				
Max WWAN Ant 0	0.508	-30.5	-2.0	-207.0	69.4	1.62	0.03	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	1.113	2.5	59.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 91>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN N SAR	WLAN5/6 GHz Ant 4	Bluetooth Ant 3	GSM850 0, Ant 0	GSM1900, Ant 0	WCDMA II, Ant 0	WCDMA IV, Ant 0	WCDMA V, Ant 0	LTE Band 7, Ant 0	LTE Band 12, Ant 0	LTE Band 13, Ant 0	LTE Band 14, Ant 0	LTE Band 25, Ant 0	LTE Band 26, Ant 0	LTE Band 30, Ant 0	LTE Band 41, Ant 0	LTE Band 68, Ant 0	LTE Band 71, Ant 0	FR1 n7, Ant 0	FR1 n12, Ant 0	FR1 n14, Ant 0	FR1 n25, Ant 0	FR1 n30, Ant 0	FR1 n41, Ant 0	FR1 n66, Ant 0	FR1 n70, Ant 0	FR1 n71, Ant 0	
Front	1g SAR (W/kg)	0.429	0.304	0.232	0.391	0.447	0.406	0.332	0.471	0.508	0.320	0.422	0.490	0.346	0.402	0.332	0.451	0.323	0.438	0.302	0.406	0.421	0.440	0.266	0.412	0.346		
LTE Band 2, Ant 5	0.326	0.519	0.139	1.413	1.288	1.216	1.375	1.431	1.390	1.316	1.455	1.492	1.304	1.406	1.474	1.330	1.386	1.316	1.435	1.307	1.422	1.286	1.390	1.405	1.424	1.250	1.395	1.330
LTE Band 66, Ant 5	0.396	0.519	0.139	1.483	1.358	1.286	1.445	1.501	1.460	1.386	1.525	1.562	1.374	1.476	1.544	1.400	1.456	1.386	1.505	1.377	1.492	1.356	1.460	1.475	1.494	1.320	1.466	1.400
FR1 n41, Ant 5	0.200	0.519	0.139	1.287	1.162	1.090	1.249	1.305	1.264	1.190	1.329	1.366	1.178	1.280	1.348	1.204	1.260	1.190	1.309	1.181	1.296	1.160	1.264	1.279	1.298	1.124	1.270	1.204
FR1 n48, Ant 5	0.540	0.519	0.139	1.627	1.502	1.430	1.589	1.645	1.604	1.530	1.669	1.706	1.518	1.620	1.688	1.544	1.600	1.530	1.649	1.521	1.636	1.500	1.604	1.619	1.638	1.464	1.610	1.544
FR1 n77, Ant 5	0.531	0.519	0.139	1.618	1.493	1.421	1.580	1.636	1.595	1.521	1.660	1.697	1.509	1.611	1.679	1.535	1.591	1.521	1.640	1.512	1.627	1.491	1.595	1.610	1.629	1.455	1.601	1.535

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				
Max WWAN Ant 0	0.508	-34.5	16.8	-207.0	56.1	1.05	0.02	Not required
Max WWAN Ant 5	0.540	2.5	59.0	-207.0				
Max WWAN Ant 0	0.508	-34.5	16.8	-207.0	69.8	1.03	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
Max WWAN Ant 0	0.508	-34.5	16.8	-207.0	38.5	0.65	0.01	Not required
Bluetooth(2.0) Ant 3	0.139	-64.5	41.0	-207.0				
Max WWAN Ant 5	0.540	2.5	59.0	-207.0	25.8	1.06	0.04	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
Max WWAN Ant 5	0.540	2.5	59.0	-207.0	69.4	0.68	0.01	Not required
Bluetooth(2.0) Ant 3	0.139	-64.5	41.0	-207.0				
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0	68.6	0.66	0.01	Not required
Bluetooth(2.0) Ant 3	0.139	-64.5	41.0	-207.0				

<Case 92>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN N SAR	WLAN2.4 GHz Ant 3	WLAN5/6 GHz Ant 4	GSM850 0, Ant 0	GSM1900 0, Ant 0	WCDMA II, Ant 0	WCDMA IV, Ant 0	WCDMA V, Ant 0	LTE Band 7, Ant 0	LTE Band 12, Ant 0	LTE Band 13, Ant 0	LTE Band 14, Ant 0	LTE Band 25, Ant 0	LTE Band 26, Ant 0	LTE Band 30, Ant 0	LTE Band 41, Ant 0	LTE Band 68, Ant 0	LTE Band 71, Ant 0	FR1 n7, Ant 0	FR1 n12, Ant 0	FR1 n14, Ant 0	FR1 n25, Ant 0	FR1 n30, Ant 0	FR1 n41, Ant 0	FR1 n66, Ant 0	FR1 n71, Ant 0		
Back	1g SAR (W/kg)	0.446	0.450	0.412	0.451	0.454	0.386	0.367	0.458	0.456	0.456	0.441	0.457	0.369	0.453	0.410	0.418	0.339	0.457	0.458	0.436	0.337	0.445	0.363	0.457	0.389		
LTE Band 2, Ant 5	0.407	0.201	0.576	1.630	1.634	1.596	1.635	1.638	1.570	1.551	1.642	1.640	1.640	1.625	1.641	1.553	1.637	1.594	1.602	1.523	1.641	1.642	1.620	1.521	1.629	1.547	1.641	1.573
LTE Band 66, Ant 5	0.434	0.201	0.576	1.657	1.661	1.623	1.662	1.665	1.597	1.578	1.669	1.667	1.667	1.652	1.668	1.580	1.664	1.621	1.629	1.550	1.668	1.669	1.647	1.548	1.656	1.574	1.668	1.600
FR1 n41, Ant 5	0.363	0.201	0.576	1.586	1.590	1.552	1.591	1.594	1.526	1.507	1.598	1.596	1.596	1.581	1.597	1.509	1.593	1.550	1.558	1.479	1.597	1.598	1.576	1.477	1.585	1.503	1.597	1.529
FR1 n48, Ant 5	0.428	0.201	0.576	1.651	1.655	1.617	1.656	1.659	1.591	1.572	1.663	1.661	1.661	1.662	1.674	1.658	1.615	1.623	1.544	1.662	1.663	1.641	1.542	1.650	1.568	1.662	1.594	
FR1 n77, Ant 5	0.445	0.201	0.576	1.668	1.672	1.634	1.673	1.676	1.608	1.589	1.680	1.678	1.678	1.663	1.679	1.591	1.675	1.632	1.640	1.561	1.679	1.680	1.658	1.559	1.667	1.585	1.679	1.611

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				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	50.9	1.48	0.04	Not required
Max WWAN Ant 5+WLAN5/6GHz Ant 4	1.021	-40.5	62.5	-207.0				
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0	53.6	1.22	0.03	Not required
Max WWAN Ant 5+WLAN5/6GHz Ant 4	1.021	-40.5	62.5	-207.0				
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	41.2	0.66	0.01	Not required
WLAN2.4GHz Ant 3	0.201	10.0	44.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 93>

SAR summation (blue colored) for each band of antenna 0,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM850 0,Ant 0	GSM1900 0,Ant 0	WCDMA II,Ant 2	WCDMA IV,Ant 2	LTE Band 7,Ant 2	LTE Band 12,Ant 0	LTE Band 13,Ant 0	LTE Band 14,Ant 0	LTE Band 25,Ant 0	LTE Band 26,Ant 0	LTE Band 30,Ant 0	LTE Band 41,Ant 0	LTE Band 66,Ant 0	LTE Band 71,Ant 0	FR1 n7,Ant 0	FR1 n12,Ant 0	FR1 n14,Ant 0	FR1 n25,Ant 0	FR1 n30,Ant 0	FR1 n41,Ant 0	FR1 n66,Ant 0	FR1 n70,Ant 0	FR1 n71,Ant 0		
Back	1g SAR (W/kg)	0.446	0.450	0.412	0.451	0.454	0.386	0.367	0.468	0.456	0.456	0.441	0.457	0.369	0.453	0.410	0.418	0.339	0.457	0.458	0.436	0.337	0.445	0.363	0.457	0.389		
LTE Band 2,Ant 5	0.407	0.576	0.165	1.594	1.598	1.560	1.599	1.602	1.534	1.515	1.606	1.604	1.604	1.589	1.605	1.517	1.601	1.558	1.566	1.487	1.609	1.606	1.584	1.485	1.593	1.511	1.605	1.537
LTE Band 66,Ant 5	0.434	0.576	0.165	1.621	1.625	1.587	1.626	1.629	1.561	1.542	1.633	1.631	1.631	1.616	1.632	1.544	1.628	1.585	1.593	1.514	1.632	1.633	1.611	1.512	1.620	1.538	1.632	1.564
FR1 n41,Ant 5	0.363	0.576	0.165	1.550	1.554	1.516	1.555	1.558	1.490	1.471	1.562	1.560	1.560	1.545	1.561	1.473	1.557	1.514	1.522	1.443	1.561	1.562	1.540	1.441	1.549	1.467	1.561	1.493
FR1 n48,Ant 5	0.428	0.576	0.165	1.615	1.619	1.581	1.620	1.623	1.555	1.536	1.627	1.625	1.625	1.610	1.626	1.538	1.622	1.579	1.587	1.508	1.626	1.627	1.605	1.506	1.614	1.532	1.626	1.558
FR1 n77,Ant 5	0.445	0.576	0.165	1.632	1.636	1.598	1.637	1.640	1.572	1.553	1.644	1.642	1.642	1.627	1.643	1.555	1.639	1.596	1.604	1.525	1.643	1.644	1.622	1.523	1.631	1.549	1.643	1.575

Hybrid 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								
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0			50.9	1.48	0.04	Not required
Max WWAN Ant 5+WLAN5/6GHz Ant 4	1.021	-40.5	62.5	-207.0			59.1	1.19	0.02	Not required
Bluetooth Ant 3	0.165	11.0	42.5	-207.0			40.6	0.62	0.01	Not required
Max WWAN Ant 5+WLAN5/6GHz Ant 4	1.021	-45.0	61.5	-207.0						
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0						
Bluetooth Ant 3	0.165	11.0	42.5	-207.0						

<Case 94>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM850 0,Ant 2	GSM1900 0,Ant 2	WCDMA II,Ant 2	WCDMA IV,Ant 2	LTE Band 7,Ant 2	LTE Band 12,Ant 2	LTE Band 25,Ant 2	LTE Band 30,Ant 2	LTE Band 41,Ant 2	LTE Band 66,Ant 2	FR1 n7,Ant 2	FR1 n25,Ant 2	FR1 n30,Ant 2	FR1 n41,Ant 2	FR1 n66,Ant 2	FR1 n70,Ant 2	FR1 n71,Ant 2		
Front	1g SAR (W/kg)	0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354				
GSM850_Ant_1	0.310	0.180	0.519	1.502	1.576	1.522	1.566	1.619	1.605	1.560	1.440	1.506	1.524	1.659	1.471	1.591	1.463	1.488	1.556	1.363		
WCDMA_V_Ant_1	0.230	0.180	0.519	1.422	1.496	1.442	1.486	1.539	1.525	1.480	1.360	1.426	1.444	1.579	1.391	1.511	1.383	1.408	1.476	1.283		
LTE Band 2,Ant 1	0.327	0.180	0.519	1.519	1.593	1.539	1.583	1.636	1.622	1.577	1.457	1.523	1.541	1.676	1.488	1.608	1.480	1.505	1.573	1.380		
LTE Band 12,Ant 1	0.312	0.180	0.519	1.504	1.578	1.524	1.568	1.621	1.607	1.562	1.442	1.508	1.526	1.661	1.473	1.593	1.465	1.490	1.558	1.365		
LTE Band 13,Ant 1	0.274	0.180	0.519	1.466	1.540	1.486	1.530	1.583	1.569	1.524	1.404	1.470	1.488	1.623	1.435	1.555	1.427	1.452	1.520	1.327		
LTE Band 14,Ant 1	0.288	0.180	0.519	1.480	1.554	1.500	1.544	1.597	1.583	1.538	1.418	1.484	1.502	1.637	1.449	1.569	1.441	1.466	1.534	1.341		
LTE Band 26,Ant 1	0.261	0.180	0.519	1.453	1.527	1.473	1.517	1.570	1.556	1.511	1.391	1.457	1.475	1.610	1.422	1.542	1.414	1.439	1.507	1.314		
LTE Band 66,Ant 1	0.329	0.180	0.519	1.521	1.595	1.541	1.585	1.638	1.624	1.579	1.459	1.525	1.543	1.678	1.490	1.610	1.482	1.507	1.575	1.382		
LTE Band 71,Ant 1	0.193	0.180	0.519	1.385	1.459	1.405	1.449	1.502	1.488	1.443	1.323	1.389	1.407	1.542	1.354	1.474	1.346	1.371	1.439	1.246		
FR1 n12,Ant 1	0.249	0.180	0.519	1.441	1.515	1.461	1.505	1.558	1.544	1.499	1.379	1.445	1.463	1.598	1.410	1.530	1.402	1.427	1.495	1.302		
FR1 n14,Ant 1	0.300	0.180	0.519	1.492	1.566	1.512	1.556	1.609	1.595	1.550	1.430	1.496	1.514	1.649	1.461	1.581	1.453	1.478	1.546	1.353		
FR1 n26,Ant 1	0.242	0.180	0.519	1.434	1.508	1.454	1.498	1.551	1.537	1.492	1.372	1.438	1.456	1.591	1.403	1.523	1.395	1.420	1.488	1.295		
FR1 n41,Ant 1	0.341	0.180	0.519	1.533	1.607	1.553	1.597	1.650	1.636	1.591	1.471	1.537	1.555	1.690	1.502	1.622	1.494	1.519	1.587	1.394		
FR1 n48,Ant 1	0.458	0.180	0.519	1.650	1.724	1.670	1.714	1.767	1.753	1.708	1.588	1.654	1.672	1.807	1.619	1.739	1.611	1.636	1.704	1.511		
FR1 n71,Ant 1	0.280	0.180	0.519	1.472	1.546	1.492	1.536	1.589	1.575	1.530	1.410	1.476	1.494	1.629	1.441	1.561	1.433	1.458	1.526	1.333		
FR1 n77,Ant 1	0.406	0.180	0.519	1.598	1.672	1.618	1.662	1.715	1.701	1.656	1.536	1.602	1.620	1.755	1.567	1.687	1.559	1.584	1.652	1.459		

Hybrid 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								
Max WWAN Ant 2	0.650	-0.8	-57.8	-207.0			115.3	1.81	0.02	Not required
Max WWAN Ant 1 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.157	-61.0	40.5	-207.0						



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 95>

SAR summation (blue colored) for each band of antenna 1,2,4

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)			0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354
GSM850_Ant 1	0.310	0.519	0.054	1.376	1.450	1.396	1.440	1.493	1.479	1.434	1.314	1.380	1.398	1.533	1.345	1.465	1.337	1.362	1.430	1.237
WCDMA V_Ant 1	0.230	0.519	0.054	1.296	1.370	1.316	1.360	1.413	1.399	1.354	1.234	1.300	1.318	1.453	1.265	1.385	1.257	1.282	1.350	1.157
LTE Band 2_Ant 1	0.327	0.519	0.054	1.393	1.467	1.413	1.457	1.510	1.496	1.451	1.331	1.397	1.415	1.550	1.362	1.482	1.354	1.379	1.447	1.254
LTE Band 12_Ant 1	0.312	0.519	0.054	1.378	1.452	1.398	1.442	1.495	1.481	1.436	1.316	1.382	1.400	1.535	1.347	1.467	1.339	1.364	1.432	1.239
LTE Band 13_Ant 1	0.274	0.519	0.054	1.340	1.414	1.360	1.404	1.457	1.443	1.398	1.278	1.344	1.362	1.497	1.309	1.429	1.301	1.326	1.394	1.201
LTE Band 14_Ant 1	0.288	0.519	0.054	1.354	1.428	1.374	1.418	1.471	1.457	1.412	1.292	1.358	1.376	1.511	1.323	1.443	1.315	1.340	1.408	1.215
LTE Band 26_Ant 1	0.261	0.519	0.054	1.327	1.401	1.347	1.391	1.444	1.430	1.385	1.265	1.331	1.349	1.484	1.296	1.416	1.288	1.313	1.381	1.188
LTE Band 66_Ant 1	0.329	0.519	0.054	1.395	1.469	1.415	1.459	1.512	1.498	1.453	1.333	1.399	1.417	1.552	1.364	1.484	1.356	1.381	1.449	1.256
LTE Band 71_Ant 1	0.193	0.519	0.054	1.259	1.333	1.279	1.323	1.376	1.362	1.317	1.197	1.263	1.281	1.416	1.228	1.348	1.220	1.245	1.313	1.120
FR1 n12_Ant 1	0.249	0.519	0.054	1.315	1.389	1.335	1.379	1.432	1.418	1.373	1.253	1.319	1.337	1.472	1.284	1.404	1.276	1.301	1.369	1.176
FR1 n14_Ant 1	0.300	0.519	0.054	1.366	1.440	1.386	1.430	1.483	1.469	1.424	1.304	1.370	1.388	1.523	1.335	1.455	1.327	1.352	1.420	1.227
FR1 n26_Ant 1	0.242	0.519	0.054	1.308	1.382	1.328	1.372	1.425	1.411	1.366	1.246	1.312	1.330	1.465	1.277	1.397	1.269	1.294	1.362	1.169
FR1 n41_Ant 1	0.341	0.519	0.054	1.407	1.481	1.427	1.471	1.524	1.510	1.465	1.345	1.411	1.429	1.564	1.376	1.496	1.368	1.393	1.461	1.268
FR1 n48_Ant 1	0.458	0.519	0.054	1.524	1.598	1.544	1.588	1.641	1.627	1.582	1.462	1.528	1.546	1.681	1.493	1.613	1.485	1.510	1.578	1.385
FR1 n71_Ant 1	0.280	0.519	0.054	1.346	1.420	1.366	1.410	1.463	1.449	1.404	1.284	1.350	1.368	1.503	1.315	1.435	1.307	1.332	1.400	1.207
FR1 n77_Ant 1	0.406	0.519	0.054	1.472	1.546	1.492	1.536	1.589	1.575	1.530	1.410	1.476	1.494	1.629	1.441	1.561	1.433	1.458	1.526	1.333

Hybrid 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				
Max WWAN Ant 2	0.650	9.9	-68.1	-207.0	143.1	1.68	0.02	Not required
Max WWAN Ant 1 + WLANS/6GHz Ant 4 + Bluetooth Ant 4	1.031	10.5	75.0	-207.0				

<Case 96>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)			0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354
GSM850_Ant 1	0.310	0.519	0.139	1.461	1.535	1.481	1.525	1.578	1.564	1.519	1.399	1.465	1.483	1.618	1.430	1.550	1.422	1.447	1.515	1.322
WCDMA V_Ant 1	0.230	0.519	0.139	1.381	1.455	1.401	1.445	1.498	1.484	1.439	1.319	1.385	1.403	1.538	1.350	1.470	1.342	1.367	1.435	1.242
LTE Band 2_Ant 1	0.327	0.519	0.139	1.478	1.552	1.498	1.542	1.595	1.581	1.536	1.416	1.482	1.500	1.635	1.447	1.567	1.439	1.464	1.532	1.339
LTE Band 12_Ant 1	0.312	0.519	0.139	1.463	1.537	1.483	1.527	1.580	1.566	1.521	1.401	1.467	1.485	1.620	1.432	1.552	1.424	1.449	1.517	1.324
LTE Band 13_Ant 1	0.274	0.519	0.139	1.425	1.499	1.445	1.489	1.542	1.528	1.483	1.363	1.429	1.447	1.582	1.394	1.514	1.386	1.411	1.479	1.286
LTE Band 14_Ant 1	0.288	0.519	0.139	1.439	1.513	1.459	1.503	1.556	1.542	1.497	1.377	1.443	1.461	1.596	1.408	1.528	1.400	1.425	1.493	1.300
LTE Band 26_Ant 1	0.261	0.519	0.139	1.412	1.486	1.432	1.476	1.529	1.515	1.470	1.350	1.416	1.434	1.569	1.381	1.501	1.373	1.398	1.466	1.273
LTE Band 66_Ant 1	0.329	0.519	0.139	1.480	1.554	1.500	1.544	1.597	1.583	1.538	1.418	1.484	1.502	1.637	1.449	1.569	1.441	1.466	1.534	1.341
LTE Band 71_Ant 1	0.193	0.519	0.139	1.344	1.418	1.364	1.408	1.461	1.447	1.402	1.282	1.348	1.366	1.501	1.313	1.433	1.305	1.330	1.398	1.205
FR1 n12_Ant 1	0.249	0.519	0.139	1.400	1.474	1.420	1.464	1.517	1.503	1.458	1.338	1.404	1.422	1.557	1.369	1.489	1.361	1.386	1.454	1.261
FR1 n14_Ant 1	0.300	0.519	0.139	1.451	1.525	1.471	1.515	1.568	1.554	1.509	1.389	1.455	1.473	1.608	1.420	1.540	1.412	1.437	1.505	1.312
FR1 n26_Ant 1	0.242	0.519	0.139	1.393	1.467	1.413	1.457	1.510	1.496	1.451	1.331	1.397	1.415	1.550	1.362	1.482	1.354	1.379	1.447	1.254
FR1 n41_Ant 1	0.341	0.519	0.139	1.492	1.566	1.512	1.556	1.609	1.595	1.550	1.430	1.496	1.514	1.649	1.461	1.581	1.453	1.478	1.546	1.353
FR1 n48_Ant 1	0.458	0.519	0.139	1.609	1.683	1.629	1.673	1.726	1.712	1.667	1.547	1.613	1.631	1.766	1.578	1.698	1.570	1.595	1.663	1.470
FR1 n71_Ant 1	0.280	0.519	0.139	1.431	1.505	1.451	1.495	1.548	1.534	1.489	1.369	1.435	1.453	1.588	1.400	1.520	1.392	1.417	1.485	1.292
FR1 n77_Ant 1	0.406	0.519	0.139	1.557	1.631	1.577	1.621	1.674	1.660	1.615	1.495	1.561	1.579	1.714	1.526	1.646	1.518	1.543	1.611	1.418

Hybrid 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				
Max WWAN Ant 2	0.650	-0.8	-57.8	-207.0	117.6	1.77	0.02	Not required
Max WWAN Ant 1 + WLANS/6GHz Ant 4 + Bluetooth Ant 3	1.116	-64.5	41.0	-207.0				



FCC SAR TEST REPORT

Report No.: FA451606B

<Case 97>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back		1g SAR (W/kg)		0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 1	0.427	0.201	0.576	1.943	1.811	1.811	1.900	1.921	1.903	1.904	1.678	1.779	1.894	1.936	1.842	1.875	1.674	1.757	1.837	1.721
WCDMA V_Ant 1	0.355	0.201	0.576	1.871	1.739	1.739	1.828	1.849	1.831	1.832	1.606	1.707	1.822	1.864	1.770	1.803	1.602	1.685	1.765	1.649
LTE Band 2_Ant 1	0.409	0.201	0.576	1.925	1.793	1.793	1.882	1.903	1.885	1.886	1.660	1.761	1.876	1.918	1.824	1.857	1.656	1.739	1.819	1.703
LTE Band 12_Ant 1	0.447	0.201	0.576	1.963	1.831	1.831	1.920	1.941	1.923	1.924	1.698	1.799	1.914	1.956	1.862	1.895	1.694	1.777	1.857	1.741
LTE Band 13_Ant 1	0.385	0.201	0.576	1.901	1.769	1.769	1.858	1.879	1.861	1.862	1.636	1.737	1.852	1.894	1.800	1.833	1.632	1.715	1.795	1.679
LTE Band 14_Ant 1	0.401	0.201	0.576	1.917	1.785	1.785	1.874	1.895	1.877	1.878	1.652	1.753	1.868	1.910	1.816	1.849	1.648	1.731	1.811	1.695
LTE Band 26_Ant 1	0.385	0.201	0.576	1.901	1.769	1.769	1.858	1.879	1.861	1.862	1.636	1.737	1.852	1.894	1.800	1.833	1.632	1.715	1.795	1.679
LTE Band 66_Ant 1	0.429	0.201	0.576	1.945	1.813	1.813	1.902	1.923	1.905	1.906	1.680	1.781	1.896	1.938	1.844	1.877	1.676	1.759	1.839	1.723
LTE Band 71_Ant 1	0.444	0.201	0.576	1.960	1.828	1.828	1.917	1.938	1.920	1.921	1.695	1.796	1.911	1.953	1.859	1.892	1.691	1.774	1.854	1.738
FR1 n12_Ant 1	0.373	0.201	0.576	1.889	1.757	1.757	1.846	1.867	1.849	1.850	1.624	1.725	1.840	1.882	1.788	1.821	1.620	1.703	1.783	1.667
FR1 n14_Ant 1	0.447	0.201	0.576	1.963	1.831	1.831	1.920	1.941	1.923	1.924	1.698	1.799	1.914	1.956	1.862	1.895	1.694	1.777	1.857	1.741
FR1 n26_Ant 1	0.406	0.201	0.576	1.922	1.790	1.790	1.879	1.900	1.882	1.883	1.657	1.758	1.873	1.915	1.821	1.854	1.653	1.736	1.816	1.700
FR1 n41_Ant 1	0.444	0.201	0.576	1.960	1.828	1.828	1.917	1.938	1.920	1.921	1.695	1.796	1.911	1.953	1.859	1.892	1.691	1.774	1.854	1.738
FR1 n48_Ant 1	0.459	0.201	0.576	1.975	1.843	1.843	1.932	1.953	1.935	1.936	1.710	1.811	1.926	1.968	1.874	1.907	1.706	1.789	1.869	1.753
FR1 n71_Ant 1	0.393	0.201	0.576	1.909	1.777	1.777	1.866	1.887	1.869	1.870	1.644	1.745	1.860	1.902	1.808	1.841	1.640	1.723	1.803	1.687
FR1 n77_Ant 1	0.446	0.201	0.576	1.962	1.830	1.830	1.919	1.940	1.922	1.923	1.697	1.798	1.913	1.955	1.861	1.894	1.693	1.776	1.856	1.740

Hybrid 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				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0	112.1	1.98	0.02	Not required
Max WWAN Ant 1 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.236	10.0	44.5	-207.0				

<Case 98>

SAR summation (blue colored) for each band of antenna 1,2,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back		1g SAR (W/kg)		0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 1	0.427	0.576	0.064	1.806	1.674	1.674	1.763	1.784	1.766	1.767	1.541	1.642	1.757	1.799	1.705	1.738	1.537	1.620	1.700	1.584
WCDMA V_Ant 1	0.355	0.576	0.064	1.734	1.602	1.602	1.691	1.712	1.694	1.695	1.469	1.570	1.685	1.727	1.633	1.666	1.465	1.548	1.628	1.512
LTE Band 2_Ant 1	0.409	0.576	0.064	1.788	1.656	1.656	1.745	1.766	1.748	1.749	1.523	1.624	1.739	1.781	1.687	1.720	1.519	1.602	1.682	1.566
LTE Band 12_Ant 1	0.447	0.576	0.064	1.826	1.694	1.694	1.783	1.804	1.786	1.787	1.561	1.662	1.777	1.819	1.725	1.758	1.557	1.640	1.720	1.604
LTE Band 13_Ant 1	0.385	0.576	0.064	1.764	1.632	1.632	1.721	1.742	1.724	1.725	1.499	1.600	1.715	1.757	1.663	1.696	1.495	1.578	1.658	1.542
LTE Band 14_Ant 1	0.401	0.576	0.064	1.780	1.648	1.648	1.737	1.758	1.740	1.741	1.515	1.616	1.731	1.773	1.679	1.712	1.511	1.594	1.674	1.558
LTE Band 26_Ant 1	0.385	0.576	0.064	1.764	1.632	1.632	1.721	1.742	1.724	1.725	1.499	1.600	1.715	1.757	1.663	1.696	1.495	1.578	1.658	1.542
LTE Band 66_Ant 1	0.429	0.576	0.064	1.808	1.676	1.676	1.765	1.786	1.768	1.769	1.543	1.644	1.759	1.801	1.707	1.740	1.539	1.622	1.702	1.586
LTE Band 71_Ant 1	0.444	0.576	0.064	1.823	1.691	1.691	1.780	1.801	1.783	1.784	1.558	1.659	1.774	1.816	1.722	1.755	1.554	1.637	1.717	1.601
FR1 n12_Ant 1	0.373	0.576	0.064	1.752	1.620	1.620	1.709	1.730	1.712	1.713	1.487	1.588	1.703	1.745	1.651	1.684	1.483	1.566	1.646	1.530
FR1 n14_Ant 1	0.447	0.576	0.064	1.826	1.694	1.694	1.783	1.804	1.786	1.787	1.561	1.662	1.777	1.819	1.725	1.758	1.557	1.640	1.720	1.604
FR1 n26_Ant 1	0.406	0.576	0.064	1.785	1.653	1.653	1.742	1.763	1.745	1.746	1.520	1.621	1.736	1.778	1.684	1.717	1.516	1.599	1.679	1.563
FR1 n41_Ant 1	0.444	0.576	0.064	1.823	1.691	1.691	1.780	1.801	1.783	1.784	1.558	1.659	1.774	1.816	1.722	1.755	1.554	1.637	1.717	1.601
FR1 n48_Ant 1	0.459	0.576	0.064	1.838	1.706	1.706	1.795	1.816	1.798	1.799	1.573	1.674	1.789	1.831	1.737	1.779	1.569	1.652	1.732	1.616
FR1 n71_Ant 1	0.393	0.576	0.064	1.772	1.640	1.640	1.729	1.750	1.732	1.733	1.507	1.608	1.723	1.765	1.671	1.704	1.503	1.586	1.666	1.550
FR1 n77_Ant 1	0.446	0.576	0.064	1.825	1.693	1.693	1.782	1.803	1.785	1.786	1.560	1.661	1.776	1.818	1.724	1.757	1.556	1.639	1.719	1.603

Hybrid 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				
Max WWAN Ant 2	0.739	-61.0	-51.0	-207.0	126.0	1.84	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	1.099	-58.5	75.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 99>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 65_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.674	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 1	0.427	0.576	0.165	1.907	1.775	1.775	1.864	1.885	1.867	1.868	1.642	1.743	1.858	1.900	1.806	1.839	1.638	1.721	1.801	1.685
WCDMA V_Ant 1	0.355	0.576	0.165	1.835	1.703	1.703	1.792	1.813	1.795	1.796	1.570	1.671	1.786	1.828	1.734	1.767	1.566	1.649	1.729	1.613
LTE Band 2_Ant 1	0.409	0.576	0.165	1.889	1.757	1.757	1.846	1.867	1.849	1.850	1.624	1.725	1.840	1.882	1.788	1.821	1.620	1.703	1.783	1.667
LTE Band 12_Ant 1	0.447	0.576	0.165	1.927	1.795	1.795	1.884	1.905	1.887	1.888	1.662	1.763	1.878	1.920	1.826	1.859	1.658	1.741	1.821	1.705
LTE Band 13_Ant 1	0.385	0.576	0.165	1.865	1.733	1.733	1.822	1.843	1.825	1.826	1.600	1.701	1.816	1.858	1.764	1.797	1.596	1.679	1.759	1.643
LTE Band 14_Ant 1	0.401	0.576	0.165	1.881	1.749	1.749	1.838	1.859	1.841	1.842	1.616	1.717	1.832	1.874	1.780	1.813	1.612	1.695	1.775	1.659
LTE Band 26_Ant 1	0.385	0.576	0.165	1.865	1.733	1.733	1.822	1.843	1.825	1.826	1.600	1.701	1.816	1.858	1.764	1.797	1.596	1.679	1.759	1.643
LTE Band 66_Ant 1	0.429	0.576	0.165	1.909	1.777	1.777	1.866	1.887	1.869	1.870	1.644	1.745	1.860	1.902	1.808	1.841	1.640	1.723	1.803	1.687
LTE Band 71_Ant 1	0.444	0.576	0.165	1.924	1.792	1.792	1.881	1.902	1.884	1.885	1.659	1.760	1.875	1.917	1.823	1.856	1.655	1.738	1.818	1.702
FR1 n12_Ant 1	0.373	0.576	0.165	1.853	1.721	1.721	1.810	1.831	1.813	1.814	1.588	1.689	1.804	1.846	1.752	1.785	1.584	1.667	1.747	1.631
FR1 n14_Ant 1	0.447	0.576	0.165	1.927	1.795	1.795	1.884	1.905	1.887	1.888	1.662	1.763	1.878	1.920	1.826	1.859	1.658	1.741	1.821	1.705
FR1 n26_Ant 1	0.406	0.576	0.165	1.886	1.754	1.754	1.843	1.864	1.846	1.847	1.621	1.722	1.837	1.879	1.785	1.818	1.617	1.700	1.780	1.664
FR1 n41_Ant 1	0.444	0.576	0.165	1.924	1.792	1.792	1.881	1.902	1.884	1.885	1.659	1.760	1.875	1.917	1.823	1.856	1.655	1.738	1.818	1.702
FR1 n48_Ant 1	0.459	0.576	0.165	1.939	1.807	1.807	1.896	1.917	1.899	1.900	1.674	1.775	1.890	1.932	1.838	1.871	1.670	1.753	1.833	1.717
FR1 n71_Ant 1	0.393	0.576	0.165	1.873	1.741	1.741	1.830	1.851	1.833	1.834	1.608	1.709	1.824	1.866	1.722	1.805	1.604	1.687	1.767	1.651
FR1 n77_Ant 1	0.446	0.576	0.165	1.926	1.794	1.794	1.883	1.904	1.886	1.887	1.661	1.762	1.877	1.919	1.825	1.858	1.657	1.740	1.820	1.704

Hybrid 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				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0	111.2	1.94	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.2	11.0	42.5	-207.0				

<Case 100>

SAR summation (blue colored) for each band of antenna 1,3,4,6

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)					
GSM850_Ant 1	0.310	0.180	0.519	1.527	1.435	1.390
WCDMA V_Ant 1	0.230	0.180	0.519	1.447	1.355	1.310
LTE Band 2_Ant 1	0.327	0.180	0.519	1.544	1.452	1.407
LTE Band 12_Ant 1	0.312	0.180	0.519	1.529	1.437	1.392
LTE Band 13_Ant 1	0.274	0.180	0.519	1.491	1.399	1.354
LTE Band 14_Ant 1	0.288	0.180	0.519	1.505	1.413	1.368
LTE Band 26_Ant 1	0.261	0.180	0.519	1.478	1.386	1.341
LTE Band 66_Ant 1	0.329	0.180	0.519	1.546	1.454	1.409
LTE Band 71_Ant 1	0.193	0.180	0.519	1.410	1.318	1.273
FR1 n12_Ant 1	0.249	0.180	0.519	1.466	1.374	1.329
FR1 n14_Ant 1	0.300	0.180	0.519	1.517	1.425	1.380
FR1 n26_Ant 1	0.242	0.180	0.519	1.459	1.367	1.322
FR1 n41_Ant 1	0.341	0.180	0.519	1.558	1.466	1.421
FR1 n48_Ant 1	0.458	0.180	0.519	1.675	1.583	1.538
FR1 n71_Ant 1	0.280	0.180	0.519	1.497	1.405	1.360
FR1 n77_Ant 1	0.406	0.180	0.519	1.623	1.531	1.486

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	106.3	1.68	0.02	Not required
Max WWAN Ant 1 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.157	-61.0	40.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 101>

SAR summation (blue colored) for each band of antenna 1,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
GSM850_Ant 1	0.310	0.519	0.139	1.486	1.394	1.349
WCDMA V_Ant 1	0.230	0.519	0.139	1.406	1.314	1.269
LTE Band 2_Ant 1	0.327	0.519	0.139	1.503	1.411	1.366
LTE Band 12_Ant 1	0.312	0.519	0.139	1.488	1.396	1.351
LTE Band 13_Ant 1	0.274	0.519	0.139	1.450	1.358	1.313
LTE Band 14_Ant 1	0.288	0.519	0.139	1.464	1.372	1.327
LTE Band 26_Ant 1	0.261	0.519	0.139	1.437	1.345	1.300
LTE Band 66_Ant 1	0.329	0.519	0.139	1.505	1.413	1.368
LTE Band 71_Ant 1	0.193	0.519	0.139	1.369	1.277	1.232
FR1 n12_Ant 1	0.249	0.519	0.139	1.425	1.333	1.288
FR1 n14_Ant 1	0.300	0.519	0.139	1.476	1.384	1.339
FR1 n26_Ant 1	0.242	0.519	0.139	1.418	1.326	1.281
FR1 n41_Ant 1	0.341	0.519	0.139	1.517	1.425	1.380
FR1 n48_Ant 1	0.458	0.519	0.139	1.634	1.542	1.497
FR1 n71_Ant 1	0.280	0.519	0.139	1.456	1.364	1.319
FR1 n77_Ant 1	0.406	0.519	0.139	1.582	1.490	1.445

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	107.3	1.63	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.116	-64.5	41.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 102>

SAR summation (blue colored) for each band of antenna 1,3,4,6

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM850_Ant 1	0.427	0.201	0.576	1.620	1.601	1.642
WCDMA V_Ant 1	0.355	0.201	0.576	1.548	1.529	1.570
LTE Band 2_Ant 1	0.409	0.201	0.576	1.602	1.583	1.624
LTE Band 12_Ant 1	0.447	0.201	0.576	1.640	1.621	1.662
LTE Band 13_Ant 1	0.385	0.201	0.576	1.578	1.559	1.600
LTE Band 14_Ant 1	0.401	0.201	0.576	1.594	1.575	1.616
LTE Band 26_Ant 1	0.385	0.201	0.576	1.578	1.559	1.600
LTE Band 66_Ant 1	0.429	0.201	0.576	1.622	1.603	1.644
LTE Band 71_Ant 1	0.444	0.201	0.576	1.637	1.618	1.659
FR1 n12_Ant 1	0.373	0.201	0.576	1.566	1.547	1.588
FR1 n14_Ant 1	0.447	0.201	0.576	1.640	1.621	1.662
FR1 n26_Ant 1	0.406	0.201	0.576	1.599	1.580	1.621
FR1 n41_Ant 1	0.444	0.201	0.576	1.637	1.618	1.659
FR1 n48_Ant 1	0.459	0.201	0.576	1.652	1.633	1.674
FR1 n71_Ant 1	0.393	0.201	0.576	1.586	1.567	1.608
FR1 n77_Ant 1	0.446	0.201	0.576	1.639	1.620	1.661

Hybrid 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				
Max WWAN Ant 6	0.438	11.5	-47.5	-207.0	92.0	1.67	0.02	Not required
Max WWAN Ant 1 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.236	10.0	44.5	-207.0				

<Case 103>

SAR summation (blue colored) for each band of antenna 1,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM850_Ant 1	0.427	0.576	0.165	1.584	1.565	1.606
WCDMA V_Ant 1	0.355	0.576	0.165	1.512	1.493	1.534
LTE Band 2_Ant 1	0.409	0.576	0.165	1.566	1.547	1.588
LTE Band 12_Ant 1	0.447	0.576	0.165	1.604	1.585	1.626
LTE Band 13_Ant 1	0.385	0.576	0.165	1.542	1.523	1.564
LTE Band 14_Ant 1	0.401	0.576	0.165	1.558	1.539	1.580
LTE Band 26_Ant 1	0.385	0.576	0.165	1.542	1.523	1.564
LTE Band 66_Ant 1	0.429	0.576	0.165	1.586	1.567	1.608
LTE Band 71_Ant 1	0.444	0.576	0.165	1.601	1.582	1.623
FR1 n12_Ant 1	0.373	0.576	0.165	1.530	1.511	1.552
FR1 n14_Ant 1	0.447	0.576	0.165	1.604	1.585	1.626
FR1 n26_Ant 1	0.406	0.576	0.165	1.563	1.544	1.585
FR1 n41_Ant 1	0.444	0.576	0.165	1.601	1.582	1.623
FR1 n48_Ant 1	0.459	0.576	0.165	1.616	1.597	1.638
FR1 n71_Ant 1	0.393	0.576	0.165	1.550	1.531	1.572
FR1 n77_Ant 1	0.446	0.576	0.165	1.603	1.584	1.625

Hybrid 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				
Max WWAN Ant 6	0.438	11.5	-47.5	-207.0	90.0	1.64	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.2	11.0	42.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 104>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)		0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354	
LTE Band 2_Ant 5	0.326	0.180	0.519	1.518	1.592	1.538	1.582	1.635	1.621	1.576	1.456	1.522	1.540	1.675	1.487	1.607	1.479	1.504	1.572	1.379
LTE Band 66_Ant 5	0.396	0.180	0.519	1.588	1.662	1.608	1.652	1.705	1.691	1.646	1.526	1.592	1.610	1.745	1.557	1.677	1.549	1.574	1.642	1.449
FR1 n41_Ant 5	0.200	0.180	0.519	1.392	1.466	1.412	1.456	1.509	1.495	1.450	1.330	1.396	1.414	1.549	1.361	1.481	1.353	1.378	1.446	1.253
FR1 n48_Ant 5	0.540	0.180	0.519	1.732	1.806	1.752	1.796	1.849	1.835	1.790	1.670	1.736	1.754	1.889	1.701	1.821	1.693	1.718	1.786	1.593
FR1 n77_Ant 5	0.531	0.180	0.519	1.723	1.797	1.743	1.787	1.840	1.826	1.781	1.661	1.727	1.745	1.880	1.692	1.812	1.684	1.709	1.777	1.584

Hybrid 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				
Max WWAN Ant 2	0.650	-0.8	-57.8	-207.0	97.7	1.89	0.03	Not required
Max WWAN Ant 5 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.239	11.9	39.1	-207.0				

<Case 105>

SAR summation (blue colored) for each band of antenna 2,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)		0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354	
LTE Band 2_Ant 5	0.326	0.519	0.054	1.392	1.466	1.412	1.456	1.509	1.495	1.450	1.330	1.396	1.414	1.549	1.361	1.481	1.353	1.378	1.446	1.253
LTE Band 66_Ant 5	0.396	0.519	0.054	1.462	1.536	1.482	1.526	1.579	1.565	1.520	1.400	1.466	1.484	1.619	1.431	1.551	1.423	1.448	1.516	1.323
FR1 n41_Ant 5	0.200	0.519	0.054	1.266	1.340	1.286	1.330	1.383	1.369	1.324	1.204	1.270	1.288	1.423	1.235	1.355	1.227	1.252	1.320	1.127
FR1 n48_Ant 5	0.540	0.519	0.054	1.606	1.680	1.626	1.670	1.723	1.709	1.664	1.544	1.610	1.628	1.763	1.575	1.695	1.567	1.592	1.660	1.467
FR1 n77_Ant 5	0.531	0.519	0.054	1.597	1.671	1.617	1.661	1.714	1.700	1.655	1.535	1.601	1.619	1.754	1.566	1.686	1.558	1.583	1.651	1.458

Hybrid 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				
Max WWAN Ant 2	0.650	7.9	-71.6	-207.0	110.8	1.76	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	1.113	11.9	39.1	-207.0				

<Case 106>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)		0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354	
LTE Band 2_Ant 5	0.326	0.519	0.139	1.477	1.551	1.497	1.541	1.594	1.580	1.535	1.415	1.481	1.499	1.634	1.446	1.566	1.438	1.463	1.531	1.338
LTE Band 66_Ant 5	0.396	0.519	0.139	1.547	1.621	1.567	1.611	1.664	1.650	1.605	1.485	1.551	1.568	1.704	1.516	1.636	1.508	1.533	1.601	1.408
FR1 n41_Ant 5	0.200	0.519	0.139	1.351	1.425	1.371	1.415	1.468	1.454	1.409	1.289	1.355	1.373	1.508	1.320	1.440	1.312	1.337	1.405	1.212
FR1 n48_Ant 5	0.540	0.519	0.139	1.691	1.765	1.711	1.755	1.808	1.794	1.749	1.629	1.695	1.713	1.848	1.660	1.780	1.652	1.677	1.745	1.552
FR1 n77_Ant 5	0.531	0.519	0.139	1.682	1.756	1.702	1.746	1.799	1.785	1.740	1.620	1.686	1.704	1.839	1.651	1.771	1.643	1.668	1.736	1.543

Hybrid 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				
Max WWAN Ant 2	0.650	9.1	-61.6	-207.0	100.7	1.85	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.198	11.9	39.1	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 107>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
	1g SAR (W/kg)																			
Back				0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
LTE Band 2_Ant 5	0.407	0.201	0.576	1.923	1.791	1.791	1.880	1.901	1.883	1.884	1.658	1.759	1.874	1.916	1.822	1.855	1.654	1.737	1.817	1.701
LTE Band 66_Ant 5	0.434	0.201	0.576	1.950	1.818	1.818	1.907	1.928	1.910	1.911	1.685	1.786	1.901	1.943	1.849	1.882	1.681	1.764	1.844	1.728
FR1 n41_Ant 5	0.363	0.201	0.576	1.879	1.747	1.747	1.836	1.857	1.839	1.840	1.614	1.715	1.830	1.872	1.778	1.811	1.610	1.693	1.773	1.657
FR1 n48_Ant 5	0.428	0.201	0.576	1.944	1.812	1.812	1.901	1.922	1.904	1.905	1.679	1.780	1.895	1.937	1.843	1.876	1.675	1.758	1.838	1.722
FR1 n77_Ant 5	0.445	0.201	0.576	1.961	1.829	1.829	1.918	1.939	1.921	1.922	1.696	1.797	1.912	1.954	1.860	1.893	1.692	1.775	1.855	1.739

Hybrid 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				
Max WWAN Ant 2				0.739	-62.5	-41.0	-207.0				
Max WWAN Ant 5 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4				1.222	-64.4	43.6	-207.0	84.6	1.96	0.03	Not required

<Case 108>

SAR summation (blue colored) for each band of antenna 2,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
	1g SAR (W/kg)																			
Back				0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
LTE Band 2_Ant 5	0.407	0.576	0.064	1.786	1.654	1.654	1.743	1.764	1.746	1.747	1.521	1.622	1.737	1.779	1.685	1.718	1.517	1.600	1.680	1.564
LTE Band 66_Ant 5	0.434	0.576	0.064	1.813	1.681	1.681	1.770	1.791	1.773	1.774	1.548	1.649	1.764	1.806	1.712	1.745	1.544	1.627	1.707	1.591
FR1 n41_Ant 5	0.363	0.576	0.064	1.742	1.610	1.610	1.699	1.720	1.702	1.703	1.477	1.578	1.693	1.735	1.641	1.674	1.473	1.556	1.636	1.520
FR1 n48_Ant 5	0.428	0.576	0.064	1.807	1.675	1.675	1.764	1.785	1.767	1.768	1.542	1.643	1.758	1.800	1.706	1.739	1.538	1.621	1.701	1.585
FR1 n77_Ant 5	0.445	0.576	0.064	1.824	1.692	1.692	1.781	1.802	1.784	1.785	1.559	1.660	1.775	1.817	1.723	1.756	1.555	1.638	1.718	1.602

Hybrid 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				
Max WWAN Ant 2				0.739	-62.9	-55.9	-207.0				
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4				1.085	-64.4	43.6	-207.0	99.5	1.82	0.02	Not required

<Case 109>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
	1g SAR (W/kg)																			
Back				0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
LTE Band 2_Ant 5	0.407	0.576	0.165	1.887	1.755	1.755	1.844	1.865	1.847	1.848	1.622	1.723	1.838	1.880	1.786	1.819	1.618	1.701	1.781	1.665
LTE Band 66_Ant 5	0.434	0.576	0.165	1.914	1.782	1.782	1.871	1.892	1.874	1.875	1.649	1.750	1.865	1.907	1.813	1.846	1.645	1.728	1.808	1.692
FR1 n41_Ant 5	0.363	0.576	0.165	1.843	1.711	1.711	1.800	1.821	1.803	1.804	1.578	1.679	1.794	1.836	1.742	1.775	1.574	1.657	1.737	1.621
FR1 n48_Ant 5	0.428	0.576	0.165	1.908	1.776	1.776	1.865	1.886	1.868	1.869	1.643	1.744	1.859	1.901	1.807	1.840	1.639	1.722	1.802	1.686
FR1 n77_Ant 5	0.445	0.576	0.165	1.925	1.793	1.793	1.882	1.903	1.885	1.886	1.660	1.761	1.876	1.918	1.824	1.857	1.656	1.739	1.819	1.703

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				
Max WWAN Ant 2				0.739	-62.5	-41.0	-207.0				
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3				1.186	-64.4	43.6	-207.0	84.6	1.93	0.03	Not required



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 110>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
GSM1900_Ant 2	0.493	0.180	0.519	1.710	1.618	1.573
WCDMA II_Ant 2	0.567	0.180	0.519	1.784	1.692	1.647
WCDMA IV_Ant 2	0.513	0.180	0.519	1.730	1.638	1.593
LTE Band 7_Ant 2	0.557	0.180	0.519	1.774	1.682	1.637
LTE Band 25_Ant 2	0.610	0.180	0.519	1.827	1.735	1.690
LTE Band 30_Ant 2	0.596	0.180	0.519	1.813	1.721	1.676
LTE Band 41_Ant 2	0.551	0.180	0.519	1.768	1.676	1.631
LTE Band 48_Ant 2	0.431	0.180	0.519	1.648	1.556	1.511
LTE Band 66_Ant 2	0.497	0.180	0.519	1.714	1.622	1.577
FR1 n7_Ant 2	0.515	0.180	0.519	1.732	1.640	1.595
FR1 n25_Ant 2	0.650	0.180	0.519	1.867	1.775	1.730
FR1 n30_Ant 2	0.462	0.180	0.519	1.679	1.587	1.542
FR1 n41_Ant 2	0.582	0.180	0.519	1.799	1.707	1.662
FR1 n48_Ant 2	0.454	0.180	0.519	1.671	1.579	1.534
FR1 n66_Ant 2	0.479	0.180	0.519	1.696	1.604	1.559
FR1 n70_Ant 2	0.547	0.180	0.519	1.764	1.672	1.627
FR1 n77_Ant 2	0.354	0.180	0.519	1.571	1.479	1.434

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				
Max WWAN Ant 2	0.650	-0.8	-57.8	-207.0	43.8	1.17	0.03	Not required
Max WWAN Ant 6	0.518	-44.0	-65.0	-207.0				
Max WWAN Ant 2	0.650	-0.8	-57.8	-207.0	115.3	0.83	0.01	Not required
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0				
Max WWAN Ant 2	0.650	16.0	-48.0	-207.0	132.4	1.17	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	106.3	0.70	0.01	Not required
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0				
Max WWAN Ant 6	0.518	-44.0	-65.0	-207.0	150.9	1.04	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
WLAN2.4GHz Ant 3	0.180	-61.0	40.5	-207.0	66.2	0.70	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 111>

SAR summation (blue colored) for each band of antenna 2,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
GSM1900_Ant 2	0.493	0.519	0.054	1.584	1.492	1.447
WCDMA II_Ant 2	0.567	0.519	0.054	1.658	1.566	1.521
WCDMA IV_Ant 2	0.513	0.519	0.054	1.604	1.512	1.467
LTE Band 7_Ant 2	0.557	0.519	0.054	1.648	1.556	1.511
LTE Band 25_Ant 2	0.610	0.519	0.054	1.701	1.609	1.564
LTE Band 30_Ant 2	0.596	0.519	0.054	1.687	1.595	1.550
LTE Band 41_Ant 2	0.551	0.519	0.054	1.642	1.550	1.505
LTE Band 48_Ant 2	0.431	0.519	0.054	1.522	1.430	1.385
LTE Band 66_Ant 2	0.497	0.519	0.054	1.588	1.496	1.451
FR1 n7_Ant 2	0.515	0.519	0.054	1.606	1.514	1.469
FR1 n25_Ant 2	0.650	0.519	0.054	1.741	1.649	1.604
FR1 n30_Ant 2	0.462	0.519	0.054	1.553	1.461	1.416
FR1 n41_Ant 2	0.582	0.519	0.054	1.673	1.581	1.536
FR1 n48_Ant 2	0.454	0.519	0.054	1.545	1.453	1.408
FR1 n66_Ant 2	0.479	0.519	0.054	1.570	1.478	1.433
FR1 n70_Ant 2	0.547	0.519	0.054	1.638	1.546	1.501
FR1 n77_Ant 2	0.354	0.519	0.054	1.445	1.353	1.308

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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	47.7	1.60	0.04	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	1.086	-0.8	-57.8	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 112>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
GSM1900_Ant 2	0.493	0.519	0.139	1.669	1.577	1.532
WCDMA II_Ant 2	0.567	0.519	0.139	1.743	1.651	1.606
WCDMA IV_Ant 2	0.513	0.519	0.139	1.689	1.597	1.552
LTE Band 7_Ant 2	0.557	0.519	0.139	1.733	1.641	1.596
LTE Band 25_Ant 2	0.610	0.519	0.139	1.786	1.694	1.649
LTE Band 30_Ant 2	0.596	0.519	0.139	1.772	1.680	1.635
LTE Band 41_Ant 2	0.551	0.519	0.139	1.727	1.635	1.590
LTE Band 48_Ant 2	0.431	0.519	0.139	1.607	1.515	1.470
LTE Band 66_Ant 2	0.497	0.519	0.139	1.673	1.581	1.536
FR1 n7_Ant 2	0.515	0.519	0.139	1.691	1.599	1.554
FR1 n25_Ant 2	0.650	0.519	0.139	1.826	1.734	1.689
FR1 n30_Ant 2	0.462	0.519	0.139	1.638	1.546	1.501
FR1 n41_Ant 2	0.582	0.519	0.139	1.758	1.666	1.621
FR1 n48_Ant 2	0.454	0.519	0.139	1.630	1.538	1.493
FR1 n66_Ant 2	0.479	0.519	0.139	1.655	1.563	1.518
FR1 n70_Ant 2	0.547	0.519	0.139	1.723	1.631	1.586
FR1 n77_Ant 2	0.354	0.519	0.139	1.530	1.438	1.393

Hybrid 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				
Max WWAN Ant 2	0.650	-0.8	-57.8	-207.0	43.8	1.17	0.03	Not required
Max WWAN Ant 6	0.518	-44.0	-65.0	-207.0				
Max WWAN Ant 2	0.650	-0.8	-57.8	-207.0	117.6	0.79	0.01	Not required
Bluetooth Ant 3	0.139	-64.5	41.0	-207.0				
Max WWAN Ant 2	0.650	16.0	-48.0	-207.0	132.4	1.17	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	107.3	0.66	0.00	Not required
Bluetooth Ant 3	0.139	-64.5	41.0	-207.0				
Max WWAN Ant 6	0.518	-44.0	-65.0	-207.0	150.9	1.04	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				
Bluetooth Ant 3	0.139	-64.5	41.0	-207.0	68.6	0.66	0.01	Not required
WLAN5/6GHz Ant 4	0.519	-9.4	81.9	-207.0				



FCC SAR TEST REPORT

Report No.:FA451606B

<Case 113>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.201	0.576	1.932	1.913	1.954
WCDMA II_Ant 2	0.607	0.201	0.576	1.800	1.781	1.822
WCDMA IV_Ant 2	0.607	0.201	0.576	1.800	1.781	1.822
LTE Band 7_Ant 2	0.696	0.201	0.576	1.889	1.870	1.911
LTE Band 25_Ant 2	0.717	0.201	0.576	1.910	1.891	1.932
LTE Band 30_Ant 2	0.699	0.201	0.576	1.892	1.873	1.914
LTE Band 41_Ant 2	0.700	0.201	0.576	1.893	1.874	1.915
LTE Band 48_Ant 2	0.474	0.201	0.576	1.667	1.648	1.689
LTE Band 66_Ant 2	0.575	0.201	0.576	1.768	1.749	1.790
FR1 n7_Ant 2	0.690	0.201	0.576	1.883	1.864	1.905
FR1 n25_Ant 2	0.732	0.201	0.576	1.925	1.906	1.947
FR1 n30_Ant 2	0.638	0.201	0.576	1.831	1.812	1.853
FR1 n41_Ant 2	0.671	0.201	0.576	1.864	1.845	1.886
FR1 n48_Ant 2	0.470	0.201	0.576	1.663	1.644	1.685
FR1 n66_Ant 2	0.553	0.201	0.576	1.746	1.727	1.768
FR1 n70_Ant 2	0.633	0.201	0.576	1.826	1.807	1.848
FR1 n77_Ant 2	0.517	0.201	0.576	1.710	1.691	1.732

Hybrid 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				
Max WWAN Ant 6	0.438	11.0	-50.0	-207.0	70.1	1.95	0.04	Not required
Max WWAN Ant 2 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.516	-56.0	-70.5	-207.0				



FCC SAR TEST REPORT

Report No.:FA451606B

<Case 114>

SAR summation (blue colored) for each band of antenna 2,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.576	0.064	1.795	1.776	1.817
WCDMA II_Ant 2	0.607	0.576	0.064	1.663	1.644	1.685
WCDMA IV_Ant 2	0.607	0.576	0.064	1.663	1.644	1.685
LTE Band 7_Ant 2	0.696	0.576	0.064	1.752	1.733	1.774
LTE Band 25_Ant 2	0.717	0.576	0.064	1.773	1.754	1.795
LTE Band 30_Ant 2	0.699	0.576	0.064	1.755	1.736	1.777
LTE Band 41_Ant 2	0.700	0.576	0.064	1.756	1.737	1.778
LTE Band 48_Ant 2	0.474	0.576	0.064	1.530	1.511	1.552
LTE Band 66_Ant 2	0.575	0.576	0.064	1.631	1.612	1.653
FR1 n7_Ant 2	0.690	0.576	0.064	1.746	1.727	1.768
FR1 n25_Ant 2	0.732	0.576	0.064	1.788	1.769	1.810
FR1 n30_Ant 2	0.638	0.576	0.064	1.694	1.675	1.716
FR1 n41_Ant 2	0.671	0.576	0.064	1.727	1.708	1.749
FR1 n48_Ant 2	0.470	0.576	0.064	1.526	1.507	1.548
FR1 n66_Ant 2	0.553	0.576	0.064	1.609	1.590	1.631
FR1 n70_Ant 2	0.633	0.576	0.064	1.689	1.670	1.711
FR1 n77_Ant 2	0.517	0.576	0.064	1.573	1.554	1.595

Hybrid 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				
Max WWAN Ant 6	0.438	11.0	-50.0	-207.0	70.1	1.82	0.03	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	1.379	-56.0	-70.5	-207.0				



FCC SAR TEST REPORT

Report No.:FA451606B

<Case 115>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.576	0.165	1.896	1.877	1.918
WCDMA II_Ant 2	0.607	0.576	0.165	1.764	1.745	1.786
WCDMA IV_Ant 2	0.607	0.576	0.165	1.764	1.745	1.786
LTE Band 7_Ant 2	0.696	0.576	0.165	1.853	1.834	1.875
LTE Band 25_Ant 2	0.717	0.576	0.165	1.874	1.855	1.896
LTE Band 30_Ant 2	0.699	0.576	0.165	1.856	1.837	1.878
LTE Band 41_Ant 2	0.700	0.576	0.165	1.857	1.838	1.879
LTE Band 48_Ant 2	0.474	0.576	0.165	1.631	1.612	1.653
LTE Band 66_Ant 2	0.575	0.576	0.165	1.732	1.713	1.754
FR1 n7_Ant 2	0.690	0.576	0.165	1.847	1.828	1.869
FR1 n25_Ant 2	0.732	0.576	0.165	1.889	1.870	1.911
FR1 n30_Ant 2	0.638	0.576	0.165	1.795	1.776	1.817
FR1 n41_Ant 2	0.671	0.576	0.165	1.828	1.809	1.850
FR1 n48_Ant 2	0.470	0.576	0.165	1.627	1.608	1.649
FR1 n66_Ant 2	0.553	0.576	0.165	1.710	1.691	1.732
FR1 n70_Ant 2	0.633	0.576	0.165	1.790	1.771	1.812
FR1 n77_Ant 2	0.517	0.576	0.165	1.674	1.655	1.696

Hybrid 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				
Max WWAN Ant 6	0.438	11.0	-50.0	-207.0	70.1	1.92	0.04	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.480	-55.0	-73.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 116>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
LTE Band 2_Ant 5	0.326	0.180	0.519	1.543	1.451	1.406
LTE Band 66_Ant 5	0.396	0.180	0.519	1.613	1.521	1.476
FR1 n41_Ant 5	0.200	0.180	0.519	1.417	1.325	1.280
FR1 n48_Ant 5	0.540	0.180	0.519	1.757	1.665	1.620
FR1 n77_Ant 5	0.531	0.180	0.519	1.748	1.656	1.611

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	106.3	1.76	0.02	Not required
Max WWAN Ant 5 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.239	-61.0	40.5	-207.0				

<Case 117>

SAR summation (blue colored) for each band of antenna 4,5,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
LTE Band 2_Ant 5	0.326	0.519	0.054	1.417	1.325	1.280
LTE Band 66_Ant 5	0.396	0.519	0.054	1.487	1.395	1.350
FR1 n41_Ant 5	0.200	0.519	0.054	1.291	1.199	1.154
FR1 n48_Ant 5	0.540	0.519	0.054	1.631	1.539	1.494
FR1 n77_Ant 5	0.531	0.519	0.054	1.622	1.530	1.485

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	133.0	1.63	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 4	1.113	5.0	57.0	-207.0				

<Case 118>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
LTE Band 2_Ant 5	0.326	0.519	0.139	1.502	1.410	1.365
LTE Band 66_Ant 5	0.396	0.519	0.139	1.572	1.480	1.435
FR1 n41_Ant 5	0.200	0.519	0.139	1.376	1.284	1.239
FR1 n48_Ant 5	0.540	0.519	0.139	1.716	1.624	1.579
FR1 n77_Ant 5	0.531	0.519	0.139	1.707	1.615	1.570

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	107.3	1.72	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.198	-64.5	41.0	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 119>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN2.4GHz Ant 3	WLAN5/6GHz Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
LTE Band 2_Ant 5	0.407	0.201	0.576	1.600	1.581	1.622
LTE Band 66_Ant 5	0.434	0.201	0.576	1.627	1.608	1.649
FR1 n41_Ant 5	0.363	0.201	0.576	1.556	1.537	1.578
FR1 n48_Ant 5	0.428	0.201	0.576	1.621	1.602	1.643
FR1 n77_Ant 5	0.445	0.201	0.576	1.638	1.619	1.660

Hybrid 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				
Max WWAN Ant 6	0.438	11.5	-47.5	-207.0	92.0	1.66	0.02	Not required
Max WWAN Ant 5 + WLAN2.4GHz Ant 3 + WLAN5/6GHz Ant 4	1.222	10.0	44.5	-207.0				

<Case 120>

SAR summation (blue colored) for each band of antenna 3,4,5,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
LTE Band 2_Ant 5	0.407	0.576	0.165	1.564	1.545	1.586
LTE Band 66_Ant 5	0.434	0.576	0.165	1.591	1.572	1.613
FR1 n41_Ant 5	0.363	0.576	0.165	1.520	1.501	1.542
FR1 n48_Ant 5	0.428	0.576	0.165	1.585	1.566	1.607
FR1 n77_Ant 5	0.445	0.576	0.165	1.602	1.583	1.624

Hybrid 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				
Max WWAN Ant 6	0.438	11.5	-47.5	-207.0	90.0	1.62	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4 + Bluetooth Ant 3	1.186	11.0	42.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 121>

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

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)			0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354
GSM850_Ant 0	0.429	0.364	0.139	1.425	1.499	1.445	1.489	1.542	1.528	1.483	1.363	1.429	1.447	1.582	1.394	1.514	1.386	1.411	1.479	1.286
GSM1900_Ant 0	0.304	0.364	0.139	1.300	1.374	1.320	1.364	1.417	1.403	1.358	1.238	1.304	1.322	1.457	1.269	1.389	1.261	1.286	1.354	1.161
WCDMA II_Ant 0	0.232	0.364	0.139	1.228	1.302	1.248	1.292	1.345	1.331	1.286	1.166	1.232	1.250	1.385	1.197	1.317	1.189	1.214	1.282	1.089
WCDMA IV_Ant 0	0.391	0.364	0.139	1.387	1.461	1.407	1.451	1.504	1.490	1.445	1.325	1.391	1.409	1.544	1.356	1.476	1.348	1.373	1.441	1.248
WCDMA V_Ant 0	0.447	0.364	0.139	1.443	1.517	1.463	1.507	1.560	1.546	1.501	1.381	1.447	1.465	1.600	1.412	1.532	1.404	1.429	1.497	1.304
LTE Band 7_Ant 0	0.406	0.364	0.139	1.402	1.476	1.422	1.466	1.519	1.505	1.460	1.340	1.406	1.424	1.559	1.371	1.491	1.363	1.388	1.456	1.263
LTE Band 12_Ant 0	0.332	0.364	0.139	1.328	1.402	1.348	1.392	1.445	1.431	1.386	1.266	1.332	1.350	1.485	1.297	1.417	1.289	1.314	1.382	1.189
LTE Band 13_Ant 0	0.471	0.364	0.139	1.467	1.541	1.487	1.531	1.584	1.570	1.525	1.405	1.471	1.489	1.624	1.436	1.556	1.428	1.453	1.521	1.328
LTE Band 14_Ant 0	0.508	0.364	0.139	1.504	1.578	1.524	1.568	1.621	1.607	1.562	1.442	1.508	1.526	1.661	1.473	1.593	1.465	1.490	1.558	1.365
LTE Band 25_Ant 0	0.320	0.364	0.139	1.316	1.390	1.336	1.380	1.433	1.419	1.374	1.254	1.320	1.338	1.473	1.285	1.405	1.277	1.302	1.370	1.177
LTE Band 26_Ant 0	0.422	0.364	0.139	1.418	1.492	1.438	1.482	1.535	1.521	1.476	1.356	1.422	1.440	1.575	1.387	1.507	1.379	1.404	1.472	1.279
LTE Band 30_Ant 0	0.490	0.364	0.139	1.486	1.560	1.506	1.550	1.603	1.589	1.544	1.424	1.490	1.508	1.643	1.455	1.575	1.447	1.472	1.540	1.347
LTE Band 41_Ant 0	0.346	0.364	0.139	1.342	1.416	1.362	1.406	1.459	1.445	1.400	1.280	1.346	1.364	1.499	1.311	1.431	1.303	1.328	1.396	1.203
LTE Band 66_Ant 0	0.402	0.364	0.139	1.398	1.472	1.418	1.462	1.515	1.501	1.456	1.336	1.402	1.420	1.555	1.367	1.487	1.359	1.384	1.452	1.259
LTE Band 71_Ant 0	0.332	0.364	0.139	1.328	1.402	1.348	1.392	1.445	1.431	1.386	1.266	1.332	1.350	1.485	1.297	1.417	1.289	1.314	1.382	1.189
FR1 n7_Ant 0	0.451	0.364	0.139	1.447	1.521	1.467	1.511	1.564	1.550	1.505	1.385	1.451	1.469	1.604	1.416	1.536	1.408	1.433	1.501	1.308
FR1 n12_Ant 0	0.323	0.364	0.139	1.319	1.393	1.339	1.383	1.436	1.422	1.377	1.257	1.323	1.341	1.476	1.288	1.408	1.280	1.305	1.373	1.180
FR1 n14_Ant 0	0.438	0.364	0.139	1.434	1.508	1.454	1.498	1.551	1.537	1.492	1.372	1.438	1.456	1.591	1.403	1.523	1.395	1.420	1.488	1.295
FR1 n25_Ant 0	0.302	0.364	0.139	1.298	1.372	1.318	1.362	1.415	1.401	1.356	1.236	1.302	1.320	1.455	1.267	1.387	1.259	1.284	1.352	1.159
FR1 n26_Ant 0	0.406	0.364	0.139	1.402	1.476	1.422	1.466	1.519	1.505	1.460	1.340	1.406	1.424	1.559	1.371	1.491	1.363	1.388	1.456	1.263
FR1 n30_Ant 0	0.421	0.364	0.139	1.417	1.491	1.437	1.481	1.534	1.520	1.475	1.355	1.421	1.439	1.574	1.386	1.506	1.378	1.403	1.471	1.278
FR1 n41_Ant 0	0.440	0.364	0.139	1.436	1.510	1.456	1.500	1.553	1.539	1.494	1.374	1.440	1.458	1.593	1.405	1.525	1.397	1.422	1.490	1.297
FR1 n66_Ant 0	0.266	0.364	0.139	1.262	1.336	1.282	1.326	1.379	1.365	1.320	1.200	1.266	1.284	1.419	1.231	1.351	1.223	1.248	1.316	1.123
FR1 n70_Ant 0	0.412	0.364	0.139	1.408	1.482	1.428	1.472	1.525	1.511	1.466	1.346	1.412	1.430	1.565	1.377	1.497	1.369	1.394	1.462	1.269
FR1 n71_Ant 0	0.346	0.364	0.139	1.342	1.416	1.362	1.406	1.459	1.445	1.400	1.280	1.346	1.364	1.499	1.311	1.431	1.303	1.328	1.396	1.203

Hybrid 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				
Max WWAN Ant 2	0.650	7.9	-71.6	-207.0	55.0	1.66	0.04	Not required
Max WWAN Ant 0 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	1.011	-46.5	-63.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 122>

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

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 4	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 0	0.446	0.448	0.064	1.697	1.565	1.565	1.654	1.675	1.657	1.658	1.432	1.533	1.648	1.690	1.596	1.629	1.428	1.511	1.591	1.475
GSM1900_Ant 0	0.450	0.448	0.064	1.701	1.569	1.569	1.658	1.679	1.661	1.662	1.436	1.537	1.652	1.694	1.600	1.633	1.432	1.515	1.595	1.479
WCDMA II_Ant 0	0.412	0.448	0.064	1.663	1.531	1.531	1.620	1.641	1.623	1.624	1.398	1.499	1.614	1.656	1.562	1.595	1.394	1.477	1.557	1.441
WCDMA IV_Ant 0	0.451	0.448	0.064	1.702	1.570	1.570	1.659	1.680	1.662	1.663	1.437	1.538	1.653	1.695	1.601	1.634	1.433	1.516	1.596	1.480
WCDMA V_Ant 0	0.454	0.448	0.064	1.705	1.573	1.573	1.662	1.683	1.665	1.666	1.440	1.541	1.656	1.698	1.604	1.637	1.436	1.519	1.599	1.483
LTE Band 7_Ant 0	0.386	0.448	0.064	1.637	1.505	1.505	1.594	1.615	1.597	1.598	1.372	1.473	1.588	1.630	1.536	1.569	1.368	1.451	1.531	1.415
LTE Band 12_Ant 0	0.367	0.448	0.064	1.618	1.486	1.486	1.575	1.596	1.578	1.579	1.353	1.454	1.569	1.611	1.517	1.550	1.349	1.432	1.512	1.396
LTE Band 13_Ant 0	0.458	0.448	0.064	1.709	1.577	1.577	1.666	1.687	1.669	1.670	1.444	1.545	1.660	1.702	1.608	1.641	1.440	1.523	1.603	1.487
LTE Band 14_Ant 0	0.456	0.448	0.064	1.707	1.575	1.575	1.664	1.685	1.667	1.668	1.442	1.543	1.658	1.700	1.606	1.639	1.438	1.521	1.601	1.485
LTE Band 25_Ant 0	0.456	0.448	0.064	1.707	1.575	1.575	1.664	1.685	1.667	1.668	1.442	1.543	1.658	1.700	1.606	1.639	1.438	1.521	1.601	1.485
LTE Band 26_Ant 0	0.441	0.448	0.064	1.692	1.560	1.560	1.649	1.670	1.652	1.653	1.427	1.528	1.643	1.685	1.591	1.624	1.423	1.506	1.586	1.470
LTE Band 30_Ant 0	0.457	0.448	0.064	1.708	1.576	1.576	1.665	1.686	1.668	1.669	1.443	1.544	1.659	1.701	1.607	1.640	1.439	1.522	1.602	1.486
LTE Band 41_Ant 0	0.369	0.448	0.064	1.620	1.488	1.488	1.577	1.598	1.580	1.581	1.355	1.456	1.571	1.613	1.519	1.552	1.351	1.434	1.514	1.398
LTE Band 66_Ant 0	0.453	0.448	0.064	1.704	1.572	1.572	1.661	1.682	1.664	1.665	1.439	1.540	1.655	1.697	1.603	1.636	1.435	1.518	1.598	1.482
LTE Band 71_Ant 0	0.410	0.448	0.064	1.661	1.529	1.529	1.618	1.639	1.621	1.622	1.396	1.497	1.612	1.654	1.560	1.593	1.392	1.475	1.555	1.439
FR1 n7_Ant 0	0.418	0.448	0.064	1.669	1.537	1.537	1.626	1.647	1.629	1.630	1.404	1.505	1.620	1.662	1.568	1.601	1.400	1.483	1.563	1.447
FR1 n12_Ant 0	0.339	0.448	0.064	1.590	1.458	1.458	1.547	1.568	1.550	1.551	1.325	1.426	1.541	1.583	1.489	1.522	1.321	1.404	1.484	1.368
FR1 n14_Ant 0	0.457	0.448	0.064	1.708	1.576	1.576	1.665	1.686	1.668	1.669	1.443	1.544	1.659	1.701	1.607	1.640	1.439	1.522	1.602	1.486
FR1 n25_Ant 0	0.458	0.448	0.064	1.709	1.577	1.577	1.666	1.687	1.669	1.670	1.444	1.545	1.660	1.702	1.608	1.641	1.440	1.523	1.603	1.487
FR1 n26_Ant 0	0.436	0.448	0.064	1.687	1.555	1.555	1.644	1.665	1.647	1.648	1.422	1.523	1.638	1.680	1.586	1.619	1.418	1.501	1.581	1.465
FR1 n30_Ant 0	0.337	0.448	0.064	1.588	1.456	1.456	1.545	1.566	1.548	1.549	1.323	1.424	1.539	1.581	1.487	1.520	1.319	1.402	1.482	1.366
FR1 n41_Ant 0	0.445	0.448	0.064	1.696	1.564	1.564	1.653	1.674	1.656	1.657	1.431	1.532	1.647	1.689	1.595	1.628	1.427	1.510	1.590	1.474
FR1 n66_Ant 0	0.363	0.448	0.064	1.614	1.482	1.482	1.571	1.592	1.574	1.575	1.349	1.450	1.565	1.607	1.513	1.546	1.345	1.428	1.508	1.392
FR1 n70_Ant 0	0.457	0.448	0.064	1.708	1.576	1.576	1.665	1.686	1.668	1.669	1.443	1.544	1.659	1.701	1.607	1.640	1.439	1.522	1.602	1.486
FR1 n71_Ant 0	0.389	0.448	0.064	1.640	1.508	1.508	1.597	1.618	1.600	1.601	1.375	1.476	1.591	1.633	1.539	1.572	1.371	1.454	1.534	1.418

Hybrid 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				
Max WWAN Ant 0	0.458	-55.0	-73.5	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-12.0	-75.6	-207.0	44.4	0.77	0.02	Not required
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	66.5	0.97	0.01	Not required
WLAN5/6GHz Ant 4+3(3)	0.313	8.3	50.4	-207.0	115.6	1.05	0.01	Not required
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	116.1	1.25	0.01	Not required
WLAN5/6GHz Ant 4+3(4) + Bluetooth Ant 4	0.512	-48.7	75.9	-207.0	62.4	0.83	0.01	Not required
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0				
WLAN5/6GHz Ant 4+3(3)	0.313	8.3	50.4	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0				
WLAN5/6GHz Ant 4+3(4) + Bluetooth Ant 4	0.512	-58.5	75.0	-207.0				
WLAN5/6GHz Ant 4+3(3)	0.313	8.3	50.4	-207.0				
WLAN5/6GHz Ant 4+3(4) + Bluetooth Ant 4	0.512	-48.7	75.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 123>

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

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.696	0.717	0.693	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 0	0.446	0.448	0.165	1.798	1.666	1.666	1.755	1.776	1.758	1.759	1.533	1.634	1.749	1.791	1.697	1.730	1.529	1.612	1.692	1.576
GSM1900_Ant 0	0.450	0.448	0.165	1.802	1.670	1.670	1.759	1.780	1.762	1.763	1.537	1.638	1.753	1.795	1.701	1.734	1.533	1.616	1.696	1.580
WCDMA II_Ant 0	0.412	0.448	0.165	1.764	1.632	1.632	1.721	1.742	1.724	1.725	1.499	1.600	1.715	1.757	1.663	1.696	1.495	1.578	1.658	1.542
WCDMA IV_Ant 0	0.451	0.448	0.165	1.803	1.671	1.671	1.760	1.781	1.763	1.764	1.538	1.639	1.754	1.796	1.702	1.735	1.534	1.617	1.697	1.581
WCDMA V_Ant 0	0.454	0.448	0.165	1.806	1.674	1.674	1.763	1.784	1.766	1.767	1.541	1.642	1.757	1.799	1.705	1.738	1.537	1.620	1.700	1.584
LTE Band 7_Ant 0	0.386	0.448	0.165	1.738	1.606	1.606	1.695	1.716	1.698	1.699	1.473	1.574	1.689	1.731	1.637	1.670	1.469	1.552	1.632	1.516
LTE Band 12_Ant 0	0.367	0.448	0.165	1.719	1.587	1.587	1.676	1.697	1.679	1.680	1.454	1.555	1.670	1.712	1.618	1.651	1.450	1.533	1.613	1.497
LTE Band 13_Ant 0	0.458	0.448	0.165	1.810	1.678	1.678	1.767	1.788	1.770	1.771	1.545	1.646	1.761	1.803	1.709	1.742	1.541	1.624	1.704	1.588
LTE Band 14_Ant 0	0.456	0.448	0.165	1.808	1.676	1.676	1.765	1.786	1.768	1.769	1.543	1.644	1.759	1.801	1.707	1.740	1.539	1.622	1.702	1.586
LTE Band 25_Ant 0	0.456	0.448	0.165	1.808	1.676	1.676	1.765	1.786	1.768	1.769	1.543	1.644	1.759	1.801	1.707	1.740	1.539	1.622	1.702	1.586
LTE Band 26_Ant 0	0.441	0.448	0.165	1.793	1.661	1.661	1.750	1.771	1.753	1.754	1.528	1.629	1.744	1.786	1.692	1.725	1.524	1.607	1.687	1.571
LTE Band 30_Ant 0	0.457	0.448	0.165	1.809	1.677	1.677	1.766	1.787	1.769	1.770	1.544	1.645	1.760	1.802	1.708	1.741	1.540	1.623	1.703	1.587
LTE Band 41_Ant 0	0.369	0.448	0.165	1.721	1.589	1.589	1.678	1.699	1.681	1.682	1.456	1.557	1.672	1.714	1.620	1.653	1.452	1.535	1.615	1.499
LTE Band 66_Ant 0	0.453	0.448	0.165	1.805	1.673	1.673	1.762	1.783	1.765	1.766	1.540	1.641	1.756	1.798	1.704	1.737	1.536	1.619	1.699	1.583
LTE Band 71_Ant 0	0.410	0.448	0.165	1.762	1.630	1.630	1.719	1.740	1.722	1.723	1.497	1.598	1.713	1.755	1.661	1.694	1.493	1.576	1.656	1.540
FR1 n7_Ant 0	0.418	0.448	0.165	1.770	1.638	1.638	1.727	1.748	1.730	1.731	1.505	1.606	1.721	1.763	1.669	1.702	1.501	1.584	1.664	1.548
FR1 n12_Ant 0	0.339	0.448	0.165	1.691	1.559	1.559	1.648	1.669	1.651	1.652	1.426	1.527	1.642	1.684	1.590	1.623	1.422	1.505	1.585	1.469
FR1 n14_Ant 0	0.457	0.448	0.165	1.809	1.677	1.677	1.766	1.787	1.769	1.770	1.544	1.645	1.760	1.802	1.708	1.741	1.540	1.623	1.703	1.587
FR1 n25_Ant 0	0.458	0.448	0.165	1.810	1.678	1.678	1.767	1.788	1.770	1.771	1.545	1.646	1.761	1.803	1.709	1.742	1.541	1.624	1.704	1.588
FR1 n26_Ant 0	0.436	0.448	0.165	1.788	1.656	1.656	1.745	1.766	1.748	1.749	1.523	1.624	1.739	1.781	1.687	1.720	1.519	1.602	1.682	1.566
FR1 n30_Ant 0	0.337	0.448	0.165	1.689	1.557	1.557	1.646	1.667	1.649	1.650	1.424	1.525	1.640	1.682	1.588	1.621	1.420	1.503	1.583	1.467
FR1 n41_Ant 0	0.445	0.448	0.165	1.797	1.665	1.665	1.754	1.775	1.757	1.758	1.532	1.633	1.748	1.790	1.696	1.729	1.528	1.611	1.691	1.575
FR1 n66_Ant 0	0.363	0.448	0.165	1.715	1.583	1.583	1.672	1.693	1.675	1.676	1.450	1.551	1.666	1.708	1.614	1.647	1.446	1.529	1.609	1.493
FR1 n70_Ant 0	0.457	0.448	0.165	1.809	1.677	1.677	1.766	1.787	1.769	1.770	1.544	1.645	1.760	1.802	1.708	1.741	1.540	1.623	1.703	1.587
FR1 n71_Ant 0	0.389	0.448	0.165	1.741	1.609	1.609	1.698	1.719	1.701	1.702	1.476	1.577	1.692	1.734	1.640	1.673	1.472	1.555	1.635	1.519

Hybrid 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				
Max WWAN Ant 0	0.458	-55.0	-73.5	-207.0	43.1	1.20	0.03	Not required
Max WWAN Ant 2	0.739	-12.0	-75.6	-207.0	40.6	0.94	0.02	Not required
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	66.5	0.91	0.01	Not required
WLAN5/6GHz Ant 4+3(3) + Bluetooth Ant 3	0.478	11.0	42.5	-207.0	111.2	1.22	0.01	Not required
Max WWAN Ant 0	0.458	-19.8	16.0	-207.0	117.7	1.19	0.01	Not required
WLAN5/6GHz Ant 4+3(4)	0.448	-48.7	75.9	-207.0	62.4	0.93	0.01	Not required
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0				
WLAN5/6GHz Ant 4+3(3) + Bluetooth Ant 3	0.478	11.0	42.5	-207.0				
Max WWAN Ant 2	0.739	-62.5	-41.0	-207.0				
WLAN5/6GHz Ant 4+3(4)	0.448	-48.7	75.9	-207.0				
WLAN5/6GHz Ant 4+3(3) + Bluetooth Ant 3	0.478	8.3	50.4	-207.0				
WLAN5/6GHz Ant 4+3(4)	0.448	-48.7	75.9	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 124>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)			0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354
GSM850_Ant 1	0.310	0.364	0.139	1.306	1.380	1.326	1.370	1.423	1.409	1.364	1.244	1.310	1.328	1.463	1.275	1.395	1.267	1.292	1.360	1.167
WCDMA V_Ant 1	0.230	0.364	0.139	1.226	1.300	1.246	1.290	1.343	1.329	1.284	1.164	1.230	1.248	1.383	1.195	1.315	1.187	1.212	1.280	1.087
LTE Band 2_Ant 1	0.327	0.364	0.139	1.323	1.397	1.343	1.387	1.440	1.426	1.381	1.261	1.327	1.345	1.480	1.292	1.412	1.284	1.309	1.377	1.184
LTE Band 12_Ant 1	0.312	0.364	0.139	1.308	1.382	1.328	1.372	1.425	1.411	1.366	1.246	1.312	1.330	1.465	1.277	1.397	1.269	1.294	1.362	1.169
LTE Band 13_Ant 1	0.274	0.364	0.139	1.270	1.344	1.290	1.334	1.387	1.373	1.328	1.208	1.274	1.292	1.427	1.239	1.359	1.231	1.256	1.324	1.131
LTE Band 14_Ant 1	0.288	0.364	0.139	1.284	1.358	1.304	1.348	1.401	1.387	1.342	1.222	1.288	1.306	1.441	1.253	1.373	1.245	1.270	1.338	1.145
LTE Band 28_Ant 1	0.261	0.364	0.139	1.257	1.331	1.277	1.321	1.374	1.360	1.315	1.195	1.261	1.279	1.414	1.226	1.346	1.218	1.243	1.311	1.118
LTE Band 66_Ant 1	0.329	0.364	0.139	1.325	1.399	1.345	1.389	1.442	1.428	1.383	1.263	1.329	1.347	1.482	1.294	1.414	1.286	1.311	1.379	1.186
LTE Band 71_Ant 1	0.193	0.364	0.139	1.189	1.263	1.209	1.253	1.306	1.292	1.247	1.127	1.193	1.211	1.346	1.158	1.278	1.150	1.175	1.243	1.050
FR1 n12_Ant 1	0.249	0.364	0.139	1.245	1.319	1.265	1.309	1.362	1.348	1.303	1.183	1.249	1.267	1.402	1.214	1.334	1.206	1.231	1.299	1.106
FR1 n14_Ant 1	0.300	0.364	0.139	1.296	1.370	1.316	1.360	1.413	1.399	1.354	1.234	1.300	1.318	1.453	1.265	1.385	1.257	1.282	1.350	1.157
FR1 n26_Ant 1	0.242	0.364	0.139	1.238	1.312	1.258	1.302	1.355	1.341	1.296	1.176	1.242	1.260	1.395	1.207	1.327	1.199	1.224	1.292	1.099
FR1 n41_Ant 1	0.341	0.364	0.139	1.337	1.411	1.357	1.401	1.454	1.440	1.395	1.275	1.341	1.359	1.494	1.306	1.426	1.298	1.323	1.391	1.198
FR1 n48_Ant 1	0.458	0.364	0.139	1.454	1.528	1.474	1.518	1.571	1.557	1.512	1.392	1.458	1.476	1.611	1.423	1.543	1.415	1.440	1.508	1.315
FR1 n71_Ant 1	0.280	0.364	0.139	1.276	1.350	1.296	1.340	1.393	1.379	1.334	1.214	1.280	1.298	1.433	1.245	1.365	1.237	1.262	1.330	1.137
FR1 n77_Ant 1	0.406	0.364	0.139	1.402	1.476	1.422	1.466	1.519	1.505	1.460	1.340	1.406	1.424	1.559	1.371	1.491	1.363	1.388	1.456	1.263

Hybrid 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				
Max WWAN Ant 2	0.650	7.9	-71.6	-207.0	133.9	1.61	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	0.961	-64.5	41.0	-207.0				



FCC SAR TEST REPORT

Report No.:FA451606B

<Case 125>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 1	0.427	0.448	0.064	1.678	1.546	1.546	1.635	1.656	1.638	1.639	1.413	1.514	1.629	1.671	1.577	1.610	1.409	1.492	1.572	1.456
WCDMA V_Ant 1	0.355	0.448	0.064	1.606	1.474	1.474	1.563	1.584	1.566	1.567	1.341	1.442	1.557	1.599	1.505	1.538	1.337	1.420	1.500	1.384
LTE Band 2_Ant 1	0.409	0.448	0.064	1.660	1.528	1.528	1.617	1.638	1.620	1.621	1.395	1.496	1.611	1.653	1.559	1.592	1.391	1.474	1.554	1.438
LTE Band 12_Ant 1	0.447	0.448	0.064	1.698	1.566	1.566	1.655	1.676	1.658	1.659	1.433	1.534	1.649	1.691	1.597	1.630	1.429	1.512	1.592	1.476
LTE Band 13_Ant 1	0.385	0.448	0.064	1.636	1.504	1.504	1.593	1.614	1.596	1.597	1.371	1.472	1.587	1.629	1.535	1.568	1.367	1.450	1.530	1.414
LTE Band 14_Ant 1	0.401	0.448	0.064	1.652	1.520	1.520	1.609	1.630	1.612	1.613	1.387	1.488	1.603	1.645	1.551	1.584	1.383	1.466	1.546	1.430
LTE Band 26_Ant 1	0.385	0.448	0.064	1.636	1.504	1.504	1.593	1.614	1.596	1.597	1.371	1.472	1.587	1.629	1.535	1.568	1.367	1.450	1.530	1.414
LTE Band 66_Ant 1	0.429	0.448	0.064	1.680	1.548	1.548	1.637	1.658	1.640	1.641	1.415	1.516	1.631	1.673	1.579	1.612	1.411	1.494	1.574	1.458
LTE Band 71_Ant 1	0.444	0.448	0.064	1.695	1.563	1.563	1.652	1.673	1.655	1.656	1.430	1.531	1.646	1.688	1.594	1.627	1.426	1.509	1.589	1.473
FR1 n12_Ant 1	0.373	0.448	0.064	1.624	1.492	1.492	1.581	1.602	1.584	1.585	1.359	1.460	1.575	1.617	1.523	1.556	1.355	1.438	1.518	1.402
FR1 n14_Ant 1	0.447	0.448	0.064	1.698	1.566	1.566	1.655	1.676	1.658	1.659	1.433	1.534	1.649	1.691	1.597	1.630	1.429	1.512	1.592	1.476
FR1 n26_Ant 1	0.406	0.448	0.064	1.657	1.525	1.525	1.614	1.635	1.617	1.618	1.392	1.493	1.608	1.650	1.556	1.589	1.388	1.471	1.551	1.435
FR1 n41_Ant 1	0.444	0.448	0.064	1.695	1.563	1.563	1.652	1.673	1.655	1.656	1.430	1.531	1.646	1.688	1.594	1.627	1.426	1.509	1.589	1.473
FR1 n48_Ant 1	0.459	0.448	0.064	1.710	1.578	1.578	1.667	1.688	1.670	1.671	1.445	1.546	1.661	1.703	1.609	1.642	1.441	1.524	1.604	1.488
FR1 n71_Ant 1	0.393	0.448	0.064	1.644	1.512	1.512	1.601	1.622	1.604	1.605	1.379	1.480	1.595	1.637	1.543	1.576	1.375	1.458	1.538	1.422
FR1 n77_Ant 1	0.446	0.448	0.064	1.697	1.565	1.565	1.654	1.675	1.657	1.658	1.432	1.533	1.648	1.690	1.596	1.629	1.428	1.511	1.591	1.475

Hybrid 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				
Max WWAN Ant 2	0.739	-61.4	-62.1	-207.0	132.3	1.71	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 4	0.971	-15.5	62.0	-207.0				

<Case 126>

SAR summation (blue colored) for each band of antenna 1,2,3,4

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900 Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
GSM850_Ant 1	0.427	0.448	0.165	1.779	1.647	1.647	1.736	1.757	1.739	1.740	1.514	1.615	1.730	1.772	1.678	1.711	1.510	1.593	1.673	1.557
WCDMA V_Ant 1	0.355	0.448	0.165	1.707	1.575	1.575	1.664	1.685	1.667	1.668	1.442	1.543	1.658	1.700	1.606	1.639	1.438	1.521	1.601	1.485
LTE Band 2_Ant 1	0.409	0.448	0.165	1.761	1.629	1.629	1.718	1.739	1.721	1.722	1.496	1.597	1.712	1.754	1.660	1.693	1.492	1.575	1.655	1.539
LTE Band 12_Ant 1	0.447	0.448	0.165	1.799	1.667	1.667	1.756	1.777	1.759	1.760	1.534	1.635	1.750	1.792	1.698	1.731	1.530	1.613	1.693	1.577
LTE Band 13_Ant 1	0.385	0.448	0.165	1.737	1.605	1.605	1.694	1.715	1.697	1.698	1.472	1.573	1.688	1.730	1.636	1.669	1.468	1.551	1.631	1.515
LTE Band 14_Ant 1	0.401	0.448	0.165	1.753	1.621	1.621	1.710	1.731	1.713	1.714	1.488	1.589	1.704	1.746	1.652	1.685	1.484	1.567	1.647	1.531
LTE Band 26_Ant 1	0.385	0.448	0.165	1.737	1.605	1.605	1.694	1.715	1.697	1.698	1.472	1.573	1.688	1.730	1.636	1.669	1.468	1.551	1.631	1.515
LTE Band 66_Ant 1	0.429	0.448	0.165	1.781	1.649	1.649	1.738	1.759	1.741	1.742	1.516	1.617	1.732	1.774	1.680	1.713	1.512	1.595	1.675	1.559
LTE Band 71_Ant 1	0.444	0.448	0.165	1.796	1.664	1.664	1.753	1.774	1.756	1.757	1.531	1.632	1.747	1.789	1.695	1.728	1.527	1.610	1.690	1.574
FR1 n12_Ant 1	0.373	0.448	0.165	1.725	1.593	1.593	1.682	1.703	1.685	1.686	1.460	1.561	1.676	1.718	1.624	1.657	1.456	1.539	1.619	1.503
FR1 n14_Ant 1	0.447	0.448	0.165	1.799	1.667	1.667	1.756	1.777	1.759	1.760	1.534	1.635	1.750	1.792	1.698	1.731	1.530	1.613	1.693	1.577
FR1 n26_Ant 1	0.406	0.448	0.165	1.758	1.626	1.626	1.715	1.736	1.718	1.719	1.493	1.594	1.709	1.751	1.657	1.690	1.489	1.572	1.652	1.536
FR1 n41_Ant 1	0.444	0.448	0.165	1.796	1.664	1.664	1.753	1.774	1.756	1.757	1.531	1.632	1.747	1.789	1.695	1.728	1.527	1.610	1.690	1.574
FR1 n48_Ant 1	0.459	0.448	0.165	1.811	1.679	1.679	1.768	1.789	1.771	1.772	1.546	1.647	1.762	1.804	1.710	1.743	1.542	1.625	1.705	1.589
FR1 n71_Ant 1	0.393	0.448	0.165	1.745	1.613	1.613	1.702	1.723	1.705	1.706	1.480	1.581	1.696	1.738	1.644	1.677	1.476	1.559	1.639	1.523
FR1 n77_Ant 1	0.446	0.448	0.165	1.798	1.666	1.666	1.755	1.776	1.758	1.759	1.533	1.634	1.749	1.791	1.697	1.730	1.529	1.612	1.692	1.576

Hybrid 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				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	123.1	1.81	0.02	Not required
Max WWAN Ant 1 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	1.072	11.0	42.5					



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 127>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 4	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)			0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354
LTE Band 2_Ant 5	0.326	0.364	0.054	1.237	1.311	1.257	1.301	1.354	1.340	1.295	1.175	1.241	1.259	1.394	1.206	1.326	1.198	1.223	1.291	1.098
LTE Band 66_Ant 5	0.396	0.364	0.054	1.307	1.381	1.327	1.371	1.424	1.410	1.365	1.245	1.311	1.329	1.464	1.276	1.396	1.268	1.293	1.361	1.168
FR1 n41_Ant 5	0.200	0.364	0.054	1.111	1.185	1.131	1.175	1.228	1.214	1.169	1.049	1.115	1.133	1.268	1.080	1.200	1.072	1.097	1.165	0.972
FR1 n48_Ant 5	0.540	0.364	0.054	1.451	1.525	1.471	1.515	1.568	1.554	1.509	1.389	1.455	1.473	1.608	1.420	1.540	1.412	1.437	1.505	1.312
FR1 n77_Ant 5	0.531	0.364	0.054	1.442	1.516	1.462	1.506	1.559	1.545	1.500	1.380	1.446	1.464	1.599	1.411	1.531	1.403	1.428	1.496	1.303

Hybrid 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				
Max WWAN Ant 2	0.650	7.9	-71.6	-207.0	128.6	1.61	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 4	0.958	5.0	57.0	-207.0				

<Case 128>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Front	1g SAR (W/kg)			0.493	0.567	0.513	0.557	0.610	0.596	0.551	0.431	0.497	0.515	0.650	0.462	0.582	0.454	0.479	0.547	0.354
LTE Band 2_Ant 5	0.326	0.364	0.139	1.322	1.396	1.342	1.386	1.439	1.425	1.380	1.260	1.326	1.344	1.479	1.291	1.411	1.283	1.308	1.376	1.183
LTE Band 66_Ant 5	0.396	0.364	0.139	1.392	1.466	1.412	1.456	1.509	1.495	1.450	1.330	1.396	1.414	1.549	1.361	1.481	1.353	1.378	1.446	1.253
FR1 n41_Ant 5	0.200	0.364	0.139	1.196	1.270	1.216	1.260	1.313	1.299	1.254	1.134	1.200	1.218	1.353	1.165	1.285	1.157	1.182	1.250	1.057
FR1 n48_Ant 5	0.540	0.364	0.139	1.536	1.610	1.556	1.600	1.653	1.639	1.594	1.474	1.540	1.558	1.693	1.505	1.625	1.497	1.522	1.590	1.397
FR1 n77_Ant 5	0.531	0.364	0.139	1.527	1.601	1.547	1.591	1.644	1.630	1.585	1.465	1.531	1.549	1.684	1.496	1.616	1.488	1.513	1.581	1.388

Hybrid 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				
Max WWAN Ant 2	0.650	10.4	-66.1	-207.0	123.2	1.69	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	1.043	5.0	57.0	-207.0				

<Case 129>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 4	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
LTE Band 2_Ant 5	0.407	0.448	0.064	1.658	1.526	1.526	1.615	1.636	1.618	1.619	1.393	1.494	1.609	1.651	1.557	1.590	1.389	1.472	1.552	1.436
LTE Band 66_Ant 5	0.434	0.448	0.064	1.685	1.553	1.553	1.642	1.663	1.645	1.646	1.420	1.521	1.636	1.678	1.584	1.617	1.416	1.499	1.579	1.463
FR1 n41_Ant 5	0.363	0.448	0.064	1.614	1.482	1.482	1.571	1.592	1.574	1.575	1.349	1.450	1.565	1.607	1.513	1.546	1.345	1.428	1.508	1.392
FR1 n48_Ant 5	0.428	0.448	0.064	1.679	1.547	1.547	1.636	1.657	1.639	1.640	1.414	1.515	1.630	1.672	1.578	1.611	1.410	1.493	1.573	1.457
FR1 n77_Ant 5	0.445	0.448	0.064	1.696	1.564	1.564	1.653	1.674	1.656	1.657	1.431	1.532	1.647	1.689	1.595	1.628	1.427	1.510	1.590	1.474

Hybrid 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				
Max WWAN Ant 2	0.739	-61.4	-62.1	-207.0	105.7	1.70	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 4	0.957	-64.4	43.6	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 130>

SAR summation (blue colored) for each band of antenna 2,3,4,5

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 3	GSM1900_Ant 2	WCDMA II_Ant 2	WCDMA IV_Ant 2	LTE Band 7_Ant 2	LTE Band 25_Ant 2	LTE Band 30_Ant 2	LTE Band 41_Ant 2	LTE Band 48_Ant 2	LTE Band 66_Ant 2	FR1 n7_Ant 2	FR1 n25_Ant 2	FR1 n30_Ant 2	FR1 n41_Ant 2	FR1 n48_Ant 2	FR1 n66_Ant 2	FR1 n70_Ant 2	FR1 n77_Ant 2
Back	1g SAR (W/kg)			0.739	0.607	0.607	0.696	0.717	0.699	0.700	0.474	0.575	0.690	0.732	0.638	0.671	0.470	0.553	0.633	0.517
LTE Band 2_Ant 5	0.407	0.448	0.165	1.759	1.627	1.627	1.716	1.737	1.719	1.720	1.494	1.595	1.710	1.752	1.658	1.691	1.490	1.573	1.653	1.537
LTE Band 66_Ant 5	0.434	0.448	0.165	1.786	1.654	1.654	1.743	1.764	1.746	1.747	1.521	1.622	1.737	1.779	1.685	1.718	1.517	1.600	1.680	1.564
FR1 n41_Ant 5	0.363	0.448	0.165	1.715	1.583	1.583	1.672	1.693	1.675	1.676	1.450	1.551	1.666	1.708	1.614	1.647	1.446	1.529	1.609	1.493
FR1 n48_Ant 5	0.428	0.448	0.165	1.780	1.648	1.648	1.737	1.758	1.740	1.741	1.515	1.616	1.731	1.773	1.679	1.712	1.511	1.594	1.674	1.558
FR1 n77_Ant 5	0.445	0.448	0.165	1.797	1.665	1.665	1.754	1.775	1.757	1.758	1.532	1.633	1.748	1.790	1.696	1.729	1.528	1.611	1.691	1.575

Hybrid 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				
Max WWAN Ant 2	0.739	-62.9	-55.9	-207.0	99.5	1.80	0.02	Not required
Max WWAN Ant 5 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	1.058	-64.4	43.6	-207.0				

<Case 131>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLANS/6GHz Ant 4+3	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Front	1g SAR (W/kg)			0.518	0.426	0.381
GSM1900_Ant 2	0.493	0.364	0.139	1.514	1.422	1.377
WCDMA II_Ant 2	0.567	0.364	0.139	1.588	1.496	1.451
WCDMA IV_Ant 2	0.513	0.364	0.139	1.534	1.442	1.397
LTE Band 7_Ant 2	0.557	0.364	0.139	1.578	1.486	1.441
LTE Band 25_Ant 2	0.610	0.364	0.139	1.631	1.539	1.494
LTE Band 30_Ant 2	0.596	0.364	0.139	1.617	1.525	1.480
LTE Band 41_Ant 2	0.551	0.364	0.139	1.572	1.480	1.435
LTE Band 48_Ant 2	0.431	0.364	0.139	1.452	1.360	1.315
LTE Band 66_Ant 2	0.497	0.364	0.139	1.518	1.426	1.381
FR1 n7_Ant 2	0.515	0.364	0.139	1.536	1.444	1.399
FR1 n25_Ant 2	0.650	0.364	0.139	1.671	1.579	1.534
FR1 n30_Ant 2	0.462	0.364	0.139	1.483	1.391	1.346
FR1 n41_Ant 2	0.582	0.364	0.139	1.603	1.511	1.466
FR1 n48_Ant 2	0.454	0.364	0.139	1.475	1.383	1.338
FR1 n66_Ant 2	0.479	0.364	0.139	1.500	1.408	1.363
FR1 n70_Ant 2	0.547	0.364	0.139	1.568	1.476	1.431
FR1 n77_Ant 2	0.354	0.364	0.139	1.375	1.283	1.238

Hybrid 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				
Max WWAN Ant 6	0.518	-48.0	-65.0	-207.0	52.5	1.67	0.04	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	1.153	3.0	-77.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 132>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 4	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.448	0.064	1.667	1.648	1.689
WCDMA II_Ant 2	0.607	0.448	0.064	1.535	1.516	1.557
WCDMA IV_Ant 2	0.607	0.448	0.064	1.535	1.516	1.557
LTE Band 7_Ant 2	0.696	0.448	0.064	1.624	1.605	1.646
LTE Band 25_Ant 2	0.717	0.448	0.064	1.645	1.626	1.667
LTE Band 30_Ant 2	0.699	0.448	0.064	1.627	1.608	1.649
LTE Band 41_Ant 2	0.700	0.448	0.064	1.628	1.609	1.650
LTE Band 48_Ant 2	0.474	0.448	0.064	1.402	1.383	1.424
LTE Band 66_Ant 2	0.575	0.448	0.064	1.503	1.484	1.525
FR1 n7_Ant 2	0.690	0.448	0.064	1.618	1.599	1.640
FR1 n25_Ant 2	0.732	0.448	0.064	1.660	1.641	1.682
FR1 n30_Ant 2	0.638	0.448	0.064	1.566	1.547	1.588
FR1 n41_Ant 2	0.671	0.448	0.064	1.599	1.580	1.621
FR1 n48_Ant 2	0.470	0.448	0.064	1.398	1.379	1.420
FR1 n66_Ant 2	0.553	0.448	0.064	1.481	1.462	1.503
FR1 n70_Ant 2	0.633	0.448	0.064	1.561	1.542	1.583
FR1 n77_Ant 2	0.517	0.448	0.064	1.445	1.426	1.467

Hybrid 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				
Max WWAN Ant 6	0.416	11.0	-50.0	-207.0	70.1	1.60	0.03	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 4	1.187	-56.0	-70.5	-207.0				



FCC SAR TEST REPORT

Report No. :FA451606B

<Case 133>

SAR summation (blue colored) for each band of antenna 2,3,4,6

Exposure Position	WWAN SAR	WLAN5/6GHz Ant 4+3	Bluetooth Ant 3	LTE Band 48_Ant 6	FR1 n48_Ant 6	FR1 n77_Ant 6
Back	1g SAR (W/kg)			0.416	0.397	0.438
GSM1900_Ant 2	0.739	0.448	0.165	1.768	1.749	1.790
WCDMA II_Ant 2	0.607	0.448	0.165	1.636	1.617	1.658
WCDMA IV_Ant 2	0.607	0.448	0.165	1.636	1.617	1.658
LTE Band 7_Ant 2	0.696	0.448	0.165	1.725	1.706	1.747
LTE Band 25_Ant 2	0.717	0.448	0.165	1.746	1.727	1.768
LTE Band 30_Ant 2	0.699	0.448	0.165	1.728	1.709	1.750
LTE Band 41_Ant 2	0.700	0.448	0.165	1.729	1.710	1.751
LTE Band 48_Ant 2	0.474	0.448	0.165	1.503	1.484	1.525
LTE Band 66_Ant 2	0.575	0.448	0.165	1.604	1.585	1.626
FR1 n7_Ant 2	0.690	0.448	0.165	1.719	1.700	1.741
FR1 n25_Ant 2	0.732	0.448	0.165	1.761	1.742	1.783
FR1 n30_Ant 2	0.638	0.448	0.165	1.667	1.648	1.689
FR1 n41_Ant 2	0.671	0.448	0.165	1.700	1.681	1.722
FR1 n48_Ant 2	0.470	0.448	0.165	1.499	1.480	1.521
FR1 n66_Ant 2	0.553	0.448	0.165	1.582	1.563	1.604
FR1 n70_Ant 2	0.633	0.448	0.165	1.662	1.643	1.684
FR1 n77_Ant 2	0.517	0.448	0.165	1.546	1.527	1.568

Hybrid 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				
Max WWAN Ant 6	0.416	11.0	-50.0	-207.0	70.1	1.77	0.03	Not required
Max WWAN Ant 2 + WLAN5/6GHz Ant 4+3 + Bluetooth Ant 3	1.352	-56.0	-70.5	-207.0				