

Response letter for TC318361

Question 1: For this application, there is a question concerning the Simultaneous Transmission SAR. If you look at Page 5 of the SAR test report, it would appear that the simultaneous Hotspot SAR is the same as the single PCE SAR. Is this correct?

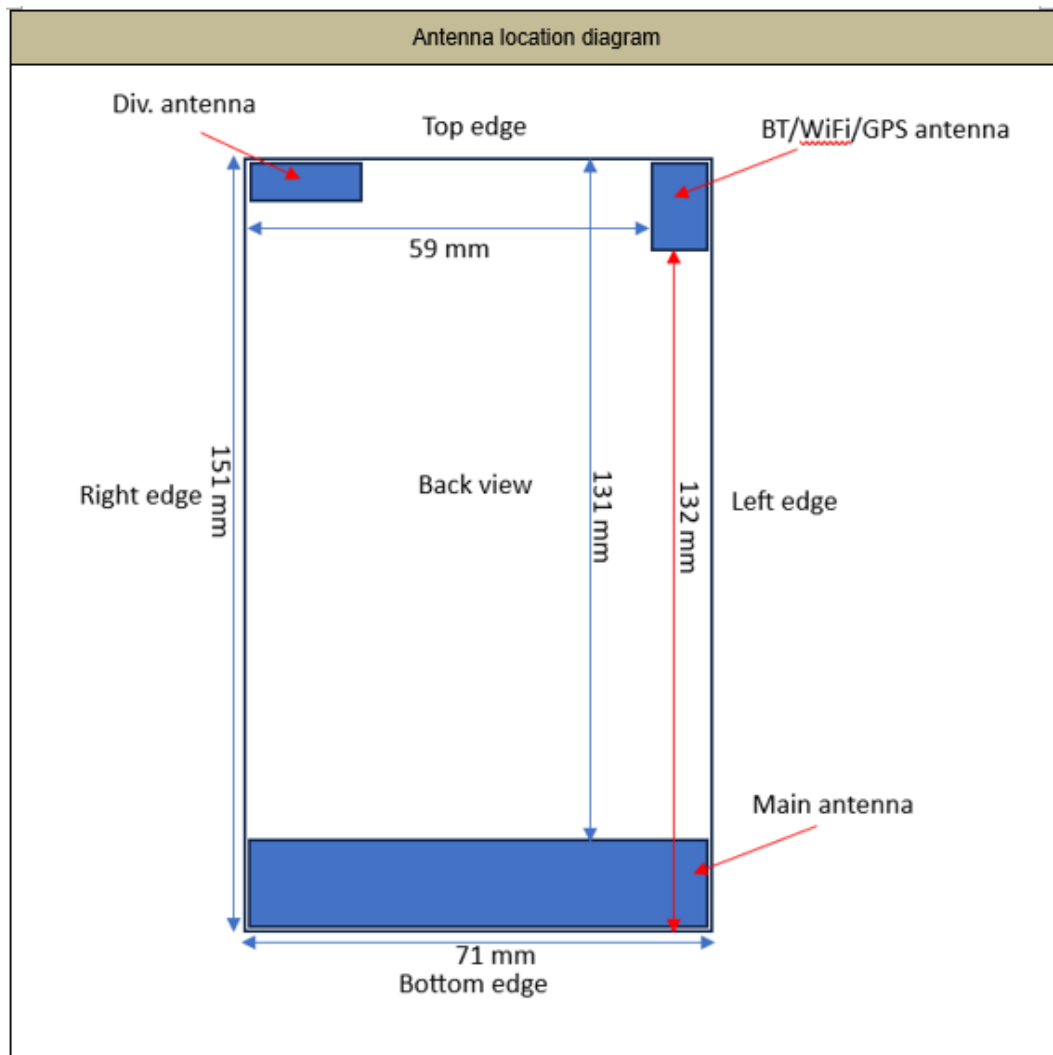
Answer : On page 75 of SAR report (4791394016-1-SAR-1_FCC SAR Report), the simultaneous transmission scenario and analysis are tabulated as below. It shows bottom edge is not tested for 2.4G Wi-Fi, U-NII band and BT. As per 941225 D06 Hotspot Mode v02r01, Hotspot Mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge. The antenna location diagram is found in document named '4791394016-1-SAR-1_App A Photo', the distance from the 2.4G Wi-Fi/U-NII band/BT antenna to bottom edge is 132 mm, it is greater than 25 mm, so SAR evaluation is not required for 2.4G Wi-Fi, U-NII band and BT. SAR Value 1.187 happens to be the largest SAR of standalone and simultaneous transmission for hotspot mode, that why the largest SAR of standalone is the same with SAR of simultaneous transmission.

12. Simultaneous Transmission SAR Analysis

Simultaneous transmission possibilities				
NO	Simultaneous TX Combination	Head	Body- worn	Hotspot
1	WWAN+BT	Y	Y	Y
2	WWAN+2.4GHz Wi-Fi	Y	Y	Y
3	WWAN+U-NII	Y	Y	Y

12.1. Analysis for WWAN & Wi-Fi & U-NII-1 & BT

RF Exposure Condition	Test Position	WWAN Max	2.4G Wi-Fi	U-NII	BT	WWAN Max+2.4G Wi-Fi	WWAN Max+U-NII	WWAN Max+BT
Head	Left Cheek	0.569	0.519	0.759	0.034	1.088	1.328	0.603
	Left Tilt	0.424	0.541	0.752	0.039	0.965	1.176	0.463
	Right Cheek	0.603	0.986	0.993	0.071	1.589	1.596	0.674
	Right Tilt	0.426	0.653	0.736	0.045	1.079	1.162	0.471
Body-worn & Hotspot	Front Surface	0.567	0.24	0.151	0.015	0.807	0.718	0.582
	Back Surface	0.778	0.242	0.221	0.016	1.020	0.999	0.794
Hotspot	Left Edge	0.474	0.241	0.165	0.017	0.715	0.639	0.491
	Right Edge	0.273	/	/	/	0.273	0.273	0.273
	Top Edge	/	0.212	0.062	0.016	0.212	0.062	0.016
	Bottom Edge	1.187	/	/	/	1.187	1.187	1.187



Question 2: Also, in the Grant Comments, the simultaneous Head SAR is listed as 1.59 W/kg. Rounding up from the value listed in the SAR test report summary, 1.596 W/kg would round up to 1.6 W/kg

Answer: Yes, the grant comments have been updated, the Value should round up to 1.6 W/kg. Thanks

BLE power is peak conducted and WLAN is conducted. This device supports BLE and WLAN bandwidth 20 MHz, 40 MHz operations as described in this filing. The highest reported SAR values for head, body-worn, product specific (hot spot) and simultaneous transmission exposure for head, body-worn, product specific (hot spot) conditions are 0.99 W/kg, 0.24 W/kg, 0.24 W/kg, and 1.60 W/kg, 1.02 W/kg, 1.19 W/kg respectively. To satisfy FCC RF exposure compliance requirements, body-worn operations are restricted to belt-clips, holsters or similar accessories that have no metallic component in the assembly and must provide at least 10 mm separation between the device and the user's body. End-users must be informed of the body-worn operating requirements for satisfying RF exposure compliance.