

<Full Power Mode>

<2.4GHz WLAN>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	16.88	18.00	100
		6	2437	19.91	20.00	
		11	2462	17.98	19.00	
	802.11g 6Mbps	1	2412	18.98	19.50	98.28
		6	2437	19.18	19.50	
		11	2462	18.92	19.50	
	802.11n-HT20 MCS0	1	2412	17.85	18.50	97.79
		6	2437	18.05	18.50	
		11	2462	18.08	18.50	
	802.11n-HT40 MCS0	3	2422	16.74	17.00	94.93
		6	2437	16.75	17.00	
		9	2452	16.82	17.00	

<5GHz WLAN>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	18.67	20.00	98.28
		40	5200	19.02	20.00	
		44	5220	19.04	20.00	
		48	5240	19.06	20.00	
	802.11n-HT20 MCS0	36	5180	18.54	19.50	98.16
		40	5200	18.95	19.50	
		44	5220	19.01	19.50	
		48	5240	19.08	19.50	
	802.11n-HT40 MCS0	38	5190	18.96	19.50	96.32
		46	5230	19.11	19.50	
	802.11ac-VHT20 MCS0	36	5180	18.51	19.50	96.16
		40	5200	18.97	19.50	
		44	5220	19.01	19.50	
		48	5240	19.02	19.50	
	802.11ac-VHT40 MCS0	38	5190	18.94	19.50	96.32
		46	5230	19.09	19.50	
	802.11ac-VHT80 MCS0	42	5210	17.86	18.00	92.49

5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	52	5260	18.81	20.00	98.28
		56	5280	19.03	20.00	
		60	5300	18.83	20.00	
		64	5320	18.40	20.00	
	802.11n-HT20 MCS0	52	5260	18.62	19.50	98.16
		56	5280	19.09	19.50	
		60	5300	18.86	19.50	
		64	5320	18.31	19.50	
	802.11n-HT40 MCS0	54	5270	18.75	19.50	96.32
		62	5310	17.82	19.50	
	802.11ac-VHT20 MCS0	52	5260	18.67	19.50	96.16
		56	5280	19.06	19.50	
		60	5300	18.80	19.50	
		64	5320	18.25	19.50	
	802.11ac-VHT40 MCS0	54	5270	18.65	19.50	96.32
		62	5310	17.85	19.50	
	802.11ac-VHT80 MCS0	58	5290	17.90	18.00	92.49

5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	100	5500	17.89	19.50	98.28
		116	5580	18.13	19.50	
		132	5660	18.14	19.50	
		140	5700	17.93	19.50	
	802.11n-HT20 MCS0	100	5500	18.09	19.50	98.16
		116	5580	18.70	19.50	
		132	5660	18.69	19.50	
		140	5700	18.42	19.50	
	802.11n-HT40 MCS0	102	5510	19.09	19.50	96.32
		110	5550	19.25	19.50	
		134	5670	17.94	19.50	
	802.11ac-VHT20 MCS0	100	5500	18.20	19.50	96.16
		116	5580	18.63	19.50	
		132	5660	18.63	19.50	
		140	5700	18.49	19.50	
	802.11ac-VHT40 MCS0	102	5510	19.07	19.50	96.32
		110	5550	19.21	19.50	
		134	5670	17.91	19.50	
	802.11ac-VHT80 MCS0	106	5530	17.63	18.00	92.49

5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a MCS0	149	5745	18.10	19.50	98.28
		157	5785	18.50	19.50	
		165	5825	18.91	19.50	
	802.11n-HT20 MCS0	149	5745	18.54	19.50	98.16
		157	5785	18.79	19.50	
		165	5825	19.18	19.50	
	802.11n-HT40 MCS0	151	5755	17.82	19.00	96.32
		159	5795	18.78	19.00	
	802.11ac-VHT20 MCS0	149	5745	18.49	19.50	96.16
		157	5785	18.73	19.50	
		165	5825	19.16	19.50	
	802.11ac-VHT40 MCS0	151	5755	17.81	19.00	96.32
		159	5795	18.73	19.00	
	802.11ac-VHT80 MCS0	155	5775	18.01	19.00	92.49

<Reduced Power Mode for Receiver On>

<2.4GHz WLAN>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	16.88	18.00	100.00
		6	2437	18.07	18.50	
		11	2462	17.98	19.00	
	802.11g 6Mbps	1	2412	15.45	17.00	98.28
		6	2437	16.63	17.00	
		11	2462	16.61	17.00	
	802.11n-HT20 MCS0	1	2412	15.32	17.00	97.79
		6	2437	16.53	17.00	
		11	2462	16.49	17.00	
	802.11n-HT40 MCS0	3	2422	15.71	17.00	94.93
		6	2437	16.71	17.00	
		9	2452	16.68	17.00	

<5GHz WLAN>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	16.49	17.50	98.28
		40	5200	16.93	17.50	
		44	5220	16.97	17.50	
		48	5240	17.02	17.50	
	802.11n-HT20 MCS0	36	5180	16.30	17.00	98.16
		40	5200	16.72	17.00	
		44	5220	16.75	17.00	
		48	5240	16.90	17.00	
	802.11n-HT40 MCS0	38	5190	17.37	17.50	96.32
		46	5230	17.34	17.50	
	802.11ac-VHT20 MCS0	36	5180	16.40	17.00	98.16
		40	5200	16.73	17.00	
		44	5220	16.81	17.00	
		48	5240	16.85	17.00	
	802.11ac-VHT40 MCS0	38	5190	17.34	17.50	96.32
		46	5230	17.28	17.50	
	802.11ac-VHT80 MCS0	42	5210	16.06	17.00	92.49

5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	52	5260	16.76	17.50	98.28
		56	5280	17.09	17.50	
		60	5300	16.75	17.50	
		64	5320	16.46	17.50	
	802.11n-HT20 MCS0	52	5260	16.41	17.00	98.16
		56	5280	16.91	17.00	
		60	5300	16.63	17.00	
		64	5320	16.30	17.00	
	802.11n-HT40 MCS0	54	5270	16.88	17.00	96.32
		62	5310	16.15	17.00	
	802.11ac-VHT20 MCS0	52	5260	16.55	17.00	98.16
		56	5280	16.89	17.00	
		60	5300	16.80	17.00	
		64	5320	16.23	17.00	
	802.11ac-VHT40 MCS0	54	5270	16.88	17.00	96.32
		62	5310	16.20	17.00	
	802.11ac-VHT80 MCS0	58	5290	16.09	17.00	92.49

5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	100	5500	15.84	17.50	98.28
		116	5580	15.92	17.50	
		132	5660	15.57	17.50	
		140	5700	15.73	17.50	
	802.11n-HT20 MCS0	100	5500	16.13	17.50	98.16
		116	5580	16.20	17.50	
		132	5660	15.97	17.50	
		140	5700	16.03	17.50	
	802.11n-HT40 MCS0	102	5510	16.72	17.50	96.32
		110	5550	16.79	17.50	
		134	5670	15.43	16.50	
	802.11ac-VHT20 MCS0	100	5500	16.22	17.50	98.16
		116	5580	16.22	17.50	
		132	5660	15.95	17.50	
		140	5700	16.02	17.50	
	802.11ac-VHT40 MCS0	102	5510	16.72	17.50	96.32
		110	5550	16.77	17.50	
		134	5670	15.45	17.00	
	802.11ac-VHT80 MCS0	106	5530	15.33	16.00	92.49

5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a MCS0	149	5745	14.69	16.50	98.28
		157	5785	15.35	16.50	
		165	5825	15.56	16.50	
	802.11n-HT20 MCS0	149	5745	15.19	16.50	98.16
		157	5785	15.61	16.50	
		165	5825	15.94	16.50	
	802.11n-HT40 MCS0	151	5755	14.63	16.00	96.32
		159	5795	15.55	16.00	
	802.11ac-VHT20 MCS0	149	5745	15.19	16.50	98.16
		157	5785	15.64	16.50	
		165	5825	15.93	16.50	
	802.11ac-VHT40 MCS0	151	5755	14.61	16.00	96.32
		159	5795	15.51	16.00	
	802.11ac-VHT80 MCS0	155	5775	14.82	16.00	92.49

<Reduced Power Mode for P-Sensor On>

<5GHz WLAN>

5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	100	5500	15.26	17.00	98.28
		116	5580	15.30	17.00	
		132	5660	14.72	16.50	
		140	5700	15.07	17.00	
	802.11n-HT20 MCS0	100	5500	15.76	17.00	98.16
		116	5580	15.73	17.00	
		132	5660	15.34	17.00	
		140	5700	15.50	17.00	
	802.11n-HT40 MCS0	102	5510	16.07	17.50	96.32
		110	5550	16.20	17.50	
		134	5670	14.95	16.50	
	802.11ac-VHT20 MCS0	100	5500	15.74	17.00	98.16
		116	5580	15.71	17.00	
		132	5660	15.36	17.00	
		140	5700	15.51	17.00	
	802.11ac-VHT40 MCS0	102	5510	16.12	17.00	96.32
		110	5550	16.18	17.00	
		134	5670	14.92	16.50	
	802.11ac-VHT80 MCS0	106	5530	15.03	15.50	92.49

5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a MCS0	149	5745	15.84	17.50	98.28
		157	5785	16.30	17.50	
		165	5825	16.63	17.50	
	802.11n-HT20 MCS0	149	5745	16.20	17.50	98.16
		157	5785	16.74	17.50	
		165	5825	17.10	17.50	
	802.11n-HT40 MCS0	151	5755	15.61	17.00	96.32
		159	5795	16.69	17.00	
	802.11ac-VHT20 MCS0	149	5745	16.23	17.50	98.16
		157	5785	16.66	17.50	
		165	5825	17.09	17.50	
	802.11ac-VHT40 MCS0	151	5755	15.62	17.00	96.32
		159	5795	16.65	17.00	
	802.11ac-VHT80 MCS0	155	5775	15.91	17.00	92.49

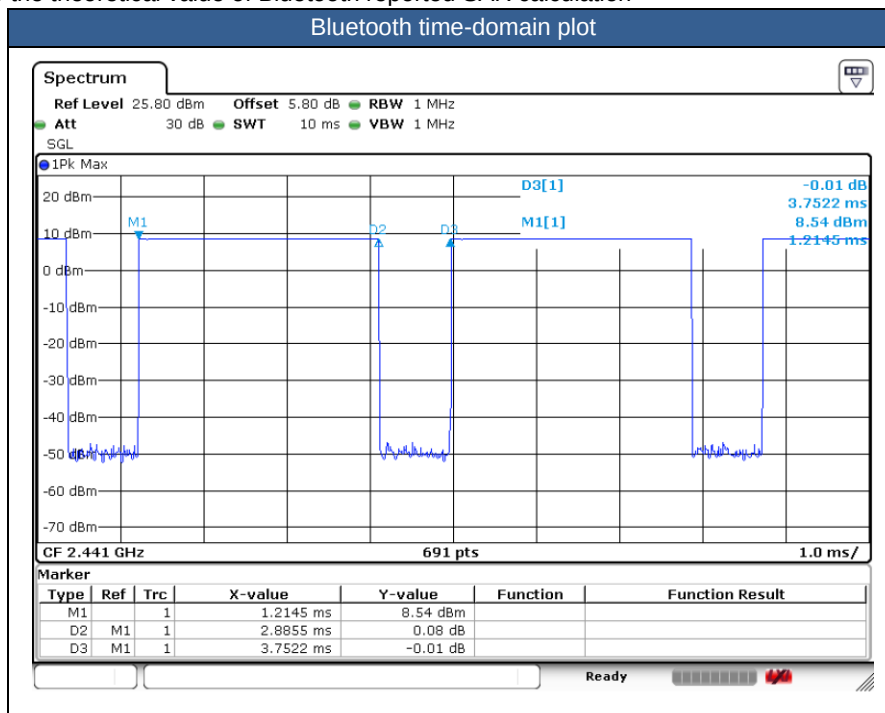
<Reduced Power Mode for Hotspot On>
<5GHz WLAN>

5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a MCS0	149	5745	15.84	17.50	98.28
		157	5785	16.30	17.50	
		165	5825	16.63	17.50	
	802.11n-HT20 MCS0	149	5745	16.20	17.50	98.16
		157	5785	16.74	17.50	
		165	5825	17.10	17.50	
	802.11n-HT40 MCS0	151	5755	15.61	17.00	96.32
		159	5795	16.69	17.00	
	802.11ac-VHT20 MCS0	149	5745	16.23	17.50	98.16
		157	5785	16.66	17.50	
		165	5825	17.09	17.50	
	802.11ac-VHT40 MCS0	151	5755	15.62	17.00	96.32
		159	5795	16.65	17.00	
	802.11ac-VHT80 MCS0	155	5775	15.91	17.00	92.49

<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle is 76.90 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation

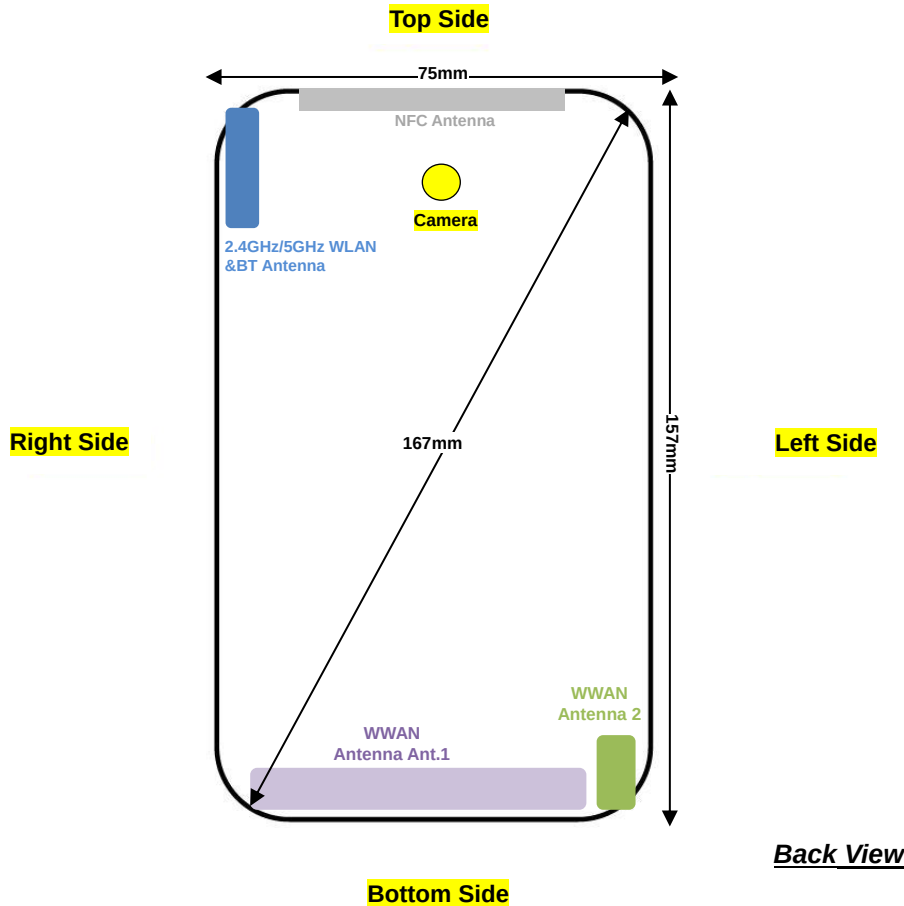


Mode	Channel	Frequency (MHz)	Average power (dBm)
			1Mbps
BR/EDR	CH 00	2402	9.43
	CH 39	2441	9.09
	CH 78	2480	8.35
Tune-up limit (dBm)			10.00

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
v4.2 LE	CH 00	2402	4.38
	CH 19	2440	4.12
	CH 39	2480	4.82
Tune-up limit (dBm)			6.00

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
v5.0 LE	CH 00	2402	4.28
	CH 19	2440	4.08
	CH 39	2480	4.86
Tune-up limit (dBm)			6.00

14. Antenna Location



Distance of the Antenna to the EUT surface/edge						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Antenna 1	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	≤ 25mm
WWAN Antenna 2	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm	≤ 25mm
2.4GHz/5GHz WLAN & BT	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm

Positions for SAR tests; Hotspot mode						
Antennas	Back	Front	Top Side	Bottom Side	Right Side	Left Side
WWAN Antenna 1	Yes	Yes	No	Yes	Yes	Yes
WWAN Antenna 2	Yes	Yes	No	Yes	No	Yes
2.4GHz/5GHz WLAN & BT	Yes	Yes	Yes	No	Yes	No

General Note:

- This device has two WWAN transmitter antennas. WWAN antenna 1 is located at the right side of bottom edge of the device and WWAN antenna 2 is located at the left side of bottom edge of the device which can refer to antenna location chapter. WWAN antenna 1 frequency bands include GSM850/1900, WCDMA B2 / B4 / B5, CDMA2000 BC0 / BC1 / BC10, LTE B2 / B4 / B5 / B12 / B13 / B17 / B25 / B26 / B66 / B71, WWAN antenna 2 frequency bands include LTE B7 / B30 / B38 / B41.
- Referring to KDB 941225 D06 v02r01, when the overall device length and width are $\geq 9\text{cm} \times 5\text{cm}$, the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.

15. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
 - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
 - d. For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
 - e. For TDD LTE SAR measurement, the duty cycle 1:2.33 (42.9 %) for power class 2 and 1:1.59 (62.9 %) for power class 3 were used perform testing and considering the theoretical duty cycle of 43.3% for power class 2 and 63.3% for power class 3 for extended cyclic prefix in the uplink, and the theoretical duty cycle of 42.9% for power class 2 and 62.9% for power class 3 for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 43.3%/42.9% = 1.009 for power class 2 and 63.3%/62.9% = 1.006 for power class 3 is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)* Tune-up Scaling Factor* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
 - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
 - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
 - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required when the measured SAR is ≥ 0.8 W/kg. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.
4. Pre KDB648474 D04v01r03, when the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.
5. When the phone is in talking mode and receiver worked, then power reduction will be implemented immediately at WLAN2.4/5.2/5.3/5.5/5.8GHz.
6. The device employs proximity sensors that detect the presence of the user's body at the front or back faces of the device. When front or back body worn condition is detected, GSM850/1900, WCDMA B2 / B4 / B5, CDMA2000 BC0 / BC1 / BC10, LTE B2 / B4 / B5 / B7 / B12 / B13 / B17 / B25 / B26 / B30 / B38 / B41 / B66 and WLAN5.5/5.8GHz reduced power will be active. (P-sensor can't work at detecting presence of the user's body at the four edges of the device.)
7. When hotspot mode is enabled, power reduction will be activated to limit the maximum power of GSM850/1900, WCDMA B2 / B4 / B5, CDMA2000 BC0 / BC1 / BC10, LTE B2 / B4 / B5 / B7 / B12 / B13 / B17 / B25 / B26 / B30 / B38 / B41/ B66 and WLAN5.8GHz.
8. This device hotspot reduced power and P-sensor reduced power level are the same for GSM850, WCDMA B5, CDMA2000 BC0 / BC10, LTE B5 / B7 / B12 / B13 / B17 / B26 / B30 / LTE B38 / LTE B41 and WLAN5.8GHz. And for other bands are different.
9. For P-sensor reduced power level is higher than hotspot reduced power, so for front/back P-sensor SAR can represent conservatively for front/back hotspot SAR.
10. P-sensor can detect handheld state, GSM1900, WCDMA B2 / B4, CDMA2000 BC1, LTE B2 / B4 / B7 / B25 / B30 / LTE B41 (power class 2) / B66 for front/back/bottom sides of product specific 10g SAR condition reduced powers will be active.
11. This device has two WWAN transmitter antennas. WWAN antenna 1 is located at the right side of bottom edge of the device and WWAN antenna 2 is located at the left side of bottom edge of the device which can refer to antenna location chapter. WWAN antenna 1 frequency bands include GSM850/1900, WCDMA B2 / B4 / B5, CDMA2000 BC0 / BC1 / BC10, LTE B2 / B4 / B5 / B12 / B13 / B17 / B25 / B26 / B66 / B71, WWAN antenna 2 frequency bands include LTE B7 / B30 / B38 / B41.
12. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power (for handheld on state, the maximum full power means reduced power), including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
 - a. For this device SAR for WWAN transmitter scaled to the maximum output power mode for product specific 10g SAR is higher than 1.2W/kg of GSM850/1900, WCDMA B2 / B4 / B5, CDMA2000 BC0 / BC1 / BC10, LTE B2 / B4 / B5 / B7 / B12



- / B13 / B17 / B25 / B26 / B30 / B38 / B41 / B66, therefore product specific 10g SAR is necessary.
- WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
 - When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.

GSM Note:

- Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. Therefore, the GPRS 2 Tx slots for GSM850/GSM1900 are considered as the primary mode.
- Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode, SAR measurement is not required for the secondary mode.
- Power reduction which is triggered by hotspot mode/p-sensor on are implemented in GSM850/1900 band, for SAR testing EUT was set in reduced power mode and GPRS 2 Tx slots due to its highest frame-average power.

WCDMA Note:

- Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
- Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA) are less than $\frac{1}{4}$ dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

CDMA Note:

- Per KDB 941225 D01v03r01, SAR for next to the ear head exposure is measured in RC3 with the handset configured to transmit at full rate in SO55.
- Per KDB 941225 D01v03r01, in Hotspot mode EUT is treated as data device and SAR is tested with Ev-Do Rev 0 (RTAP 153.6kbps) as the primary mode.
- Per KDB 941225 D01v03r01, for Body-worn accessory SAR is measured in RC3 with the handset configured in TDSO/SO32 to transmit at full rate on FCH only with all other code channels disabled. The body-worn accessory procedures in KDB Publication 447498 are applied. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCH), with FCH only as the primary mode.

LTE Note:

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM/64QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, 16QAM/64QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. This device supports HPUE for LTE band 41 with class 2 level, so HPUE SAR has been performed.
7. According to November 2017 TCB workshop, the following applied to intra-band contiguous UL CA only;
 - a. Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05. The required test channel should be associated with the UL PCC. For channels at the ends of a frequency band, the SCC and subsequent CCs are added to the side within the transmission band. Otherwise, the CCs should be added alternatively to either side of the PCC.
 - b. UL CA SAR is measured for each exposure condition in each frequency band using the highest SAR configuration tested in standalone LTE mode to establish the UL CA PCC. The SCC and subsequent CC must use configurations similar to the PCC to establish conservative or worst case equivalent SAR test conditions.
 - c. When the SAR configuration tested in step b) has a maximum output power specification more than $\frac{1}{4}$ dB lower than the highest maximum output power conditions measured in the power measurements in step a) above and the reported SAR in step b) is larger than 1.2 W/kg, SAR measurement is also required for the configuration in step a)
 - d. All standalone SAR configurations with SAR > 1.2 W/kg must also be tested by applying the procedures in step b)
8. For LTE B4 / B5 / B12 / B17 / B26 / B38 / B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
9. LTE band B17 / B2 / B5 / B38 / B4 SAR test was covered by B12 / B25 / B26 / B41 / B66; according to April 2015 TCB workshop, SAR test for overlapping LTE bands can be reduced if
 - a. the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion
 - b. the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band

WLAN Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
2. For head SAR testing, Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.
3. When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
4. For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

15.1 Head SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
01	GSM850	GPRS 2 Tx slots	Right Cheek	Full	128	824.2	32.03	33.00	1.250	0.09	0.286	0.358
	GSM850	GPRS 2 Tx slots	Right Tilted	Full	128	824.2	32.03	33.00	1.250	0.02	0.152	0.190
	GSM850	GPRS 2 Tx slots	Left Cheek	Full	128	824.2	32.03	33.00	1.250	0.08	0.205	0.256
	GSM850	GPRS 2 Tx slots	Left Tilted	Full	128	824.2	32.03	33.00	1.250	-0.02	0.140	0.175
	GSM850	GPRS 2 Tx slots	Right Cheek	Full	189	836.4	31.84	33.00	1.306	0.05	0.269	0.351
	GSM850	GPRS 2 Tx slots	Right Cheek	Full	251	848.8	31.86	33.00	1.300	0.08	0.260	0.338
	GSM1900	GPRS 2 Tx slots	Right Cheek	Full	661	1880	28.53	30.00	1.403	-0.08	0.061	0.086
	GSM1900	GPRS 2 Tx slots	Right Tilted	Full	661	1880	28.53	30.00	1.403	-0.02	0.047	0.066
02	GSM1900	GPRS 2 Tx slots	Left Cheek	Full	661	1880	28.53	30.00	1.403	0.09	0.080	0.113
	GSM1900	GPRS 2 Tx slots	Left Tilted	Full	661	1880	28.53	30.00	1.403	-0.03	0.052	0.073
	GSM1900	GPRS 2 Tx slots	Left Cheek	Full	512	1850.2	28.29	30.00	1.483	0.05	0.072	0.107
	GSM1900	GPRS 2 Tx slots	Left Cheek	Full	810	1909.8	28.53	30.00	1.403	-0.09	0.066	0.092

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Full	4132	826.4	23.95	24.00	1.012	-0.01	0.260	0.263
	WCDMA Band V	RMC 12.2Kbps	Right Tilted	Full	4132	826.4	23.95	24.00	1.012	-0.09	0.119	0.120
	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Full	4132	826.4	23.95	24.00	1.012	0.01	0.172	0.174
	WCDMA Band V	RMC 12.2Kbps	Left Tilted	Full	4132	826.4	23.95	24.00	1.012	-0.05	0.125	0.126
	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Full	4182	836.4	23.90	24.00	1.023	0.02	0.193	0.197
03	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Full	4233	846.6	23.88	24.00	1.028	0.14	0.282	0.290
	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Full	1513	1752.6	23.92	24.00	1.019	-0.01	0.160	0.163
	WCDMA Band IV	RMC 12.2Kbps	Right Tilted	Full	1513	1752.6	23.92	24.00	1.019	0.01	0.093	0.095
	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Full	1513	1752.6	23.92	24.00	1.019	-0.02	0.186	0.189
	WCDMA Band IV	RMC 12.2Kbps	Left Tilted	Full	1513	1752.6	23.92	24.00	1.019	0.02	0.104	0.106
	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Full	1312	1712.4	23.73	24.00	1.064	0.05	0.195	0.208
04	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Full	1413	1732.6	23.81	24.00	1.045	-0.06	0.232	0.242
	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Full	9262	1852.4	23.90	24.00	1.023	-0.03	0.122	0.125
	WCDMA Band II	RMC 12.2Kbps	Right Tilted	Full	9262	1852.4	23.90	24.00	1.023	0.06	0.080	0.082
05	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Full	9262	1852.4	23.90	24.00	1.023	0.02	0.134	0.137
	WCDMA Band II	RMC 12.2Kbps	Left Tilted	Full	9262	1852.4	23.90	24.00	1.023	0.1	0.087	0.089
	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Full	9400	1880	23.82	24.00	1.042	0.08	0.131	0.137
	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Full	9538	1907.6	23.84	24.00	1.038	-0.02	0.108	0.112



<CDMA2000 SAR>

Plot No.	Band	Mode	Test Position	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	CDMA2000 BC10	RC3 SO55	Right Cheek	Full	476	817.9	25.23	25.50	1.064	0.06	0.287	0.305
	CDMA2000 BC10	RC3 SO55	Right Tilted	Full	476	817.9	25.23	25.50	1.064	-0.02	0.140	0.149
	CDMA2000 BC10	RC3 SO55	Left Cheek	Full	476	817.9	25.23	25.50	1.064	-0.11	0.183	0.195
	CDMA2000 BC10	RC3 SO55	Left Tilted	Full	476	817.9	25.23	25.50	1.064	0.02	0.136	0.145
	CDMA2000 BC10	RC3 SO55	Right Cheek	Full	580	820.5	25.22	25.50	1.067	0.04	0.290	0.309
06	CDMA2000 BC10	RC3 SO55	Right Cheek	Full	684	823.1	25.18	25.50	1.076	-0.01	0.302	0.325
07	CDMA2000 BC0	RC3 SO55	Right Cheek	Full	1013	824.7	25.07	25.50	1.104	0.05	0.287	0.317
	CDMA2000 BC0	RC3 SO55	Right Tilted	Full	1013	824.7	25.07	25.50	1.104	0.01	0.138	0.152
	CDMA2000 BC0	RC3 SO55	Left Cheek	Full	1013	824.7	25.07	25.50	1.104	0.05	0.176	0.194
	CDMA2000 BC0	RC3 SO55	Left Tilted	Full	1013	824.7	25.07	25.50	1.104	-0.09	0.130	0.144
	CDMA2000 BC0	RC3 SO55	Right Cheek	Full	384	836.52	25.00	25.50	1.122	0.02	0.263	0.295
	CDMA2000 BC0	RC3 SO55	Right Cheek	Full	777	848.31	24.99	25.50	1.125	-0.06	0.259	0.291
	CDMA2000 BC1	RC3 SO55	Right Cheek	Full	25	1851.25	24.99	25.50	1.125	0.08	0.101	0.114
	CDMA2000 BC1	RC3 SO55	Right Tilted	Full	25	1851.25	24.99	25.50	1.125	-0.03	0.063	0.071
08	CDMA2000 BC1	RC3 SO55	Left Cheek	Full	25	1851.25	24.99	25.50	1.125	0.09	0.155	0.174
	CDMA2000 BC1	RC3 SO55	Left Tilted	Full	25	1851.25	24.99	25.50	1.125	0.06	0.099	0.112
	CDMA2000 BC1	RC3 SO55	Left Cheek	Full	600	1880	24.94	25.50	1.138	0.05	0.138	0.157
	CDMA2000 BC1	RC3 SO55	Left Cheek	Full	1175	1908.75	24.96	25.50	1.132	-0.04	0.139	0.157



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
09	LTE Band 71	20M	QPSK	1	0	Right Cheek	Full	133322	683	23.27	24.00	1.183	0.01	0.104	0.123
	LTE Band 71	20M	QPSK	50	0	Right Cheek	Full	133322	683	22.33	23.00	1.167	-0.05	0.071	0.083
	LTE Band 71	20M	QPSK	1	0	Right Tilted	Full	133322	683	23.27	24.00	1.183	0.05	<0.001	<0.001
	LTE Band 71	20M	QPSK	50	0	Right Tilted	Full	133322	683	22.33	23.00	1.167	0.01	<0.001	<0.001
	LTE Band 71	20M	QPSK	1	0	Left Cheek	Full	133322	683	23.27	24.00	1.183	0.09	0.078	0.092
	LTE Band 71	20M	QPSK	50	0	Left Cheek	Full	133322	683	22.33	23.00	1.167	0.05	0.051	0.060
	LTE Band 71	20M	QPSK	1	0	Left Tilted	Full	133322	683	23.27	24.00	1.183	-0.12	<0.001	<0.001
	LTE Band 71	20M	QPSK	50	0	Left Tilted	Full	133322	683	22.33	23.00	1.167	0.03	<0.001	<0.001
10	LTE Band 12	10M	QPSK	1	0	Right Cheek	Full	23095	707.5	22.68	24.00	1.355	0.02	0.216	0.293
	LTE Band 12	10M	QPSK	25	0	Right Cheek	Full	23095	707.5	21.82	23.00	1.312	-0.02	0.120	0.157
	LTE Band 12	10M	QPSK	1	0	Right Tilted	Full	23095	707.5	22.68	24.00	1.355	0.16	0.105	0.142
	LTE Band 12	10M	QPSK	25	0	Right Tilted	Full	23095	707.5	21.82	23.00	1.312	0.03	0.058	0.077
	LTE Band 12	10M	QPSK	1	0	Left Cheek	Full	23095	707.5	22.68	24.00	1.355	0.17	0.163	0.221
	LTE Band 12	10M	QPSK	25	0	Left Cheek	Full	23095	707.5	21.82	23.00	1.312	0.02	0.092	0.120
	LTE Band 12	10M	QPSK	1	0	Left Tilted	Full	23095	707.5	22.68	24.00	1.355	0.01	0.096	0.130
	LTE Band 12	10M	QPSK	25	0	Left Tilted	Full	23095	707.5	21.82	23.00	1.312	0.13	0.053	0.069
11	LTE Band 13	10M	QPSK	1	0	Right Cheek	Full	23230	782	22.85	24.00	1.303	0.05	0.232	0.302
	LTE Band 13	10M	QPSK	25	0	Right Cheek	Full	23230	782	21.78	23.00	1.324	0.03	0.146	0.193
	LTE Band 13	10M	QPSK	1	0	Right Tilted	Full	23230	782	22.85	24.00	1.303	0.04	0.106	0.138
	LTE Band 13	10M	QPSK	25	0	Right Tilted	Full	23230	782	21.78	23.00	1.324	0.08	0.067	0.089
	LTE Band 13	10M	QPSK	1	0	Left Cheek	Full	23230	782	22.85	24.00	1.303	0.11	0.151	0.197
	LTE Band 13	10M	QPSK	25	0	Left Cheek	Full	23230	782	21.78	23.00	1.324	-0.16	0.094	0.124
	LTE Band 13	10M	QPSK	1	0	Left Tilted	Full	23230	782	22.85	24.00	1.303	0.07	0.083	0.108
	LTE Band 13	10M	QPSK	25	0	Left Tilted	Full	23230	782	21.78	23.00	1.324	0.04	0.053	0.070
12	LTE Band 26	15M	QPSK	1	0	Right Cheek	Full	26865	831.5	23.05	24.00	1.245	0.05	0.268	0.334
	LTE Band 26	15M	QPSK	36	0	Right Cheek	Full	26865	831.5	21.99	23.00	1.262	0.13	0.154	0.194
	LTE Band 26	15M	QPSK	1	0	Right Tilted	Full	26865	831.5	23.05	24.00	1.245	0.19	0.122	0.152
	LTE Band 26	15M	QPSK	36	0	Right Tilted	Full	26865	831.5	21.99	23.00	1.262	-0.14	0.066	0.083
	LTE Band 26	15M	QPSK	1	0	Left Cheek	Full	26865	831.5	23.05	24.00	1.245	0.03	0.172	0.214
	LTE Band 26	15M	QPSK	36	0	Left Cheek	Full	26865	831.5	21.99	23.00	1.262	0.04	0.097	0.123
	LTE Band 26	15M	QPSK	1	0	Left Tilted	Full	26865	831.5	23.05	24.00	1.245	0.15	0.089	0.111
	LTE Band 26	15M	QPSK	36	0	Left Tilted	Full	26865	831.5	21.99	23.00	1.262	0.19	0.051	0.064
	LTE Band 5	10M	QPSK	1	0	Right Cheek	Full	20476(PCC) + 20575(SCC)	831.6(PCC) + 841.5(SCC)	23.50	24.00	1.122	-0.03	0.250	0.281
	LTE Band 66	20M	QPSK	1	0	Right Cheek	Full	132572	1770	23.02	24.00	1.253	0.13	0.148	0.185
	LTE Band 66	20M	QPSK	50	24	Right Cheek	Full	132572	1770	22.44	23.00	1.138	0.06	0.107	0.122
	LTE Band 66	20M	QPSK	1	0	Right Tilted	Full	132572	1770	23.02	24.00	1.253	-0.11	0.082	0.103
	LTE Band 66	20M	QPSK	50	24	Right Tilted	Full	132572	1770	22.44	23.00	1.138	-0.07	0.069	0.078
	LTE Band 66	20M	QPSK	1	0	Left Cheek	Full	132572	1770	23.02	24.00	1.253	0.08	0.216	0.271
	LTE Band 66	20M	QPSK	50	24	Left Cheek	Full	132572	1770	22.44	23.00	1.138	0.01	0.129	0.147
	LTE Band 66	20M	QPSK	1	0	Left Tilted	Full	132572	1770	23.02	24.00	1.253	0.01	0.108	0.135
	LTE Band 66	20M	QPSK	50	24	Left Tilted	Full	132572	1770	22.44	23.00	1.138	0.09	0.067	0.076
	LTE Band 66	20M	QPSK	1	0	Left Cheek	Full	132072	1720	22.38	24.00	1.452	0.04	0.226	0.328
13	LTE Band 66	20M	QPSK	1	0	Left Cheek	Full	132322	1745	22.79	24.00	1.321	0.04	0.251	0.328



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 25	20M	QPSK	1	0	Right Cheek	Full	26340	1880	23.41	24.00	1.146	0.09	0.093	0.106
	LTE Band 25	20M	QPSK	50	0	Right Cheek	Full	26340	1880	22.15	23.00	1.216	-0.03	0.064	0.078
	LTE Band 25	20M	QPSK	1	0	Right Tilted	Full	26340	1880	23.41	24.00	1.146	0.09	0.056	0.064
	LTE Band 25	20M	QPSK	50	0	Right Tilted	Full	26340	1880	22.15	23.00	1.216	0.07	0.040	0.048
	LTE Band 25	20M	QPSK	1	0	Left Cheek	Full	26340	1880	23.41	24.00	1.146	0.19	0.142	0.163
	LTE Band 25	20M	QPSK	50	0	Left Cheek	Full	26340	1880	22.15	23.00	1.216	0.15	0.096	0.116
	LTE Band 25	20M	QPSK	1	0	Left Tilted	Full	26340	1880	23.41	24.00	1.146	0.06	0.096	0.110
	LTE Band 25	20M	QPSK	50	0	Left Tilted	Full	26340	1880	22.15	23.00	1.216	0.02	0.064	0.078
14	LTE Band 25	20M	QPSK	1	0	Left Cheek	Full	26140	1860	23.01	24.00	1.256	0.01	0.137	0.172
	LTE Band 25	20M	QPSK	1	0	Left Cheek	Full	26590	1905	23.11	24.00	1.227	-0.09	0.121	0.149
	LTE Band 30	10M	QPSK	1	0	Right Cheek	Full	27710	2310	22.70	24.00	1.349	0.01	0.212	0.286
	LTE Band 30	10M	QPSK	25	0	Right Cheek	Full	27710	2310	21.67	23.00	1.358	-0.06	0.113	0.153
	LTE Band 30	10M	QPSK	1	0	Right Tilted	Full	27710	2310	22.70	24.00	1.349	-0.15	0.126	0.170
	LTE Band 30	10M	QPSK	25	0	Right Tilted	Full	27710	2310	21.67	23.00	1.358	0.15	0.071	0.097
15	LTE Band 30	10M	QPSK	1	0	Left Cheek	Full	27710	2310	22.70	24.00	1.349	0.07	0.242	0.326
	LTE Band 30	10M	QPSK	25	0	Left Cheek	Full	27710	2310	21.67	23.00	1.358	0.09	0.136	0.185
	LTE Band 30	10M	QPSK	1	0	Left Tilted	Full	27710	2310	22.70	24.00	1.349	0.04	0.111	0.150
	LTE Band 30	10M	QPSK	25	0	Left Tilted	Full	27710	2310	21.67	23.00	1.358	0.08	0.063	0.086
	LTE Band 7	20M	QPSK	1	0	Right Cheek	Full	21350	2560	22.82	24.00	1.312	0.08	0.143	0.188
	LTE Band 7	20M	QPSK	50	0	Right Cheek	Full	21350	2560	21.79	23.00	1.321	0.02	0.114	0.151
	LTE Band 7	20M	QPSK	1	0	Right Tilted	Full	21350	2560	22.82	24.00	1.312	-0.09	0.096	0.126
	LTE Band 7	20M	QPSK	50	0	Right Tilted	Full	21350	2560	21.79	23.00	1.321	0.03	0.087	0.115
16	LTE Band 7	20M	QPSK	1	0	Left Cheek	Full	21350	2560	22.82	24.00	1.312	0.06	0.185	0.243
	LTE Band 7	20M	QPSK	50	0	Left Cheek	Full	21350	2560	21.79	23.00	1.321	0.02	0.149	0.197
	LTE Band 7	20M	QPSK	1	0	Left Tilted	Full	21350	2560	22.82	24.00	1.312	0.01	0.056	0.074
	LTE Band 7	20M	QPSK	50	0	Left Tilted	Full	21350	2560	21.79	23.00	1.321	-0.03	0.050	0.066
	LTE Band 7	20M	QPSK	1	0	Left Cheek	Full	20850	2510	22.60	24.00	1.380	0.09	0.162	0.224
	LTE Band 7	20M	QPSK	1	0	Left Cheek	Full	21100	2535	22.60	24.00	1.380	-0.02	0.166	0.229



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Power Mode	Power Class	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41	20M	QPSK	1	0	Right Cheek	Full	3	40185	2549.5	23.50	24.00	1.122	62.9	1.006	0.06	0.084	0.095
	LTE Band 41	20M	QPSK	50	0	Right Cheek	Full	3	40185	2549.5	21.51	23.00	1.409	62.9	1.006	0.05	0.057	0.081
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	3	40185	2549.5	23.50	24.00	1.122	62.9	1.006	0.03	0.059	0.067
	LTE Band 41	20M	QPSK	50	0	Right Tilted	Full	3	40185	2549.5	21.51	23.00	1.409	62.9	1.006	-0.06	0.044	0.062
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	3	40185	2549.5	23.50	24.00	1.122	62.9	1.006	0.06	0.115	0.130
	LTE Band 41	20M	QPSK	50	0	Left Cheek	Full	3	40185	2549.5	21.51	23.00	1.409	62.9	1.006	0.02	0.073	0.103
	LTE Band 41	20M	QPSK	1	0	Left Tilted	Full	3	40185	2549.5	23.50	24.00	1.122	62.9	1.006	-0.05	0.035	0.039
	LTE Band 41	20M	QPSK	50	0	Left Tilted	Full	3	40185	2549.5	21.51	23.00	1.409	62.9	1.006	0.02	0.028	0.039
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	3	39750	2506	23.43	24.00	1.140	62.9	1.006	0.07	0.099	0.114
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	3	40620	2593	23.46	24.00	1.132	62.9	1.006	-0.03	0.109	0.124
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	3	41055	2636.5	23.35	24.00	1.161	62.9	1.006	0.06	0.115	0.134
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	3	41490	2680	23.37	24.00	1.156	62.9	1.006	0.14	0.130	0.151
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	3	41490(PCC) + 41292(SCC)	2680(PCC) + 2660.2(SCC)	23.47	24.00	1.130	62.9	1.006	0.07	0.119	0.135
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	2	40185	2549.5	26.58	27.50	1.236	42.9	1.009	-0.08	0.179	0.223
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	2	39750	2506	26.27	27.50	1.327	42.9	1.009	0.03	0.160	0.214
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	2	40620	2593	26.52	27.50	1.253	42.9	1.009	-0.07	0.174	0.220
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	2	41055	2636.5	26.53	27.50	1.250	42.9	1.009	-0.02	0.194	0.245
17	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	2	41490	2680	26.52	27.50	1.253	42.9	1.009	0.11	0.198	0.250

<WLAN 2.4GHz SAR>

Plot No.	Band	Mode	Test Position	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Max Area Scan SAR	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Right Cheek	Receiver on	6	2437	18.07	18.50	1.104	100	1.000		0.348		
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Receiver on	6	2437	18.07	18.50	1.104	100	1.000		0.240		
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Receiver on	6	2437	18.07	18.50	1.104	100	1.000	0.13	1.527	0.857	0.946
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Receiver on	6	2437	18.07	18.50	1.104	100	1.000	0.15	0.795	0.429	0.474
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Receiver on	1	2412	16.88	18.00	1.294	100	1.000	-0.09		0.513	0.664
18	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Receiver on	11	2462	17.98	19.00	1.265	100	1.000	-0.17		0.793	1.003



<WLAN 5GHz SAR>

Plot No.	Band	Mode	Test Position	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Max Area Scan SAR	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5.3GHz	802.11a 6Mbps	Right Cheek	Receiver on	56	5280	17.09	17.50	1.099	98.28	1.018		0.652		
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Receiver on	56	5280	17.09	17.50	1.099	98.28	1.018		0.531		
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Receiver on	56	5280	17.09	17.50	1.099	98.28	1.018	-0.02	1.723	0.726	0.812
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Receiver on	56	5280	17.09	17.50	1.099	98.28	1.018	-0.03	1.005	0.465	0.520
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Receiver on	52	5260	16.76	17.50	1.186	98.28	1.018	-0.01		0.736	0.888
19	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Receiver on	64	5320	16.46	17.50	1.271	98.28	1.018	0.07		0.861	1.114
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Cheek	Receiver on	110	5550	16.79	17.50	1.178	96.32	1.038		0.602		
	WLAN5.5GHz	802.11n-HT40 MCS0	Right Tilted	Receiver on	110	5550	16.79	17.50	1.178	96.32	1.038		0.529		
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Receiver on	110	5550	16.79	17.50	1.178	96.32	1.038	0.02	2.219	0.836	1.022
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Tilted	Receiver on	110	5550	16.79	17.50	1.178	96.32	1.038	0.09	1.584	0.615	0.752
20	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Receiver on	102	5510	16.72	17.50	1.196	96.32	1.038	-0.09		0.917	1.138
	WLAN5.5GHz	802.11n-HT40 MCS0	Left Cheek	Receiver on	134	5670	15.43	16.50	1.279	96.32	1.038	0.16		0.650	0.863
	WLAN 5.8GHz	802.11a 6Mbps	Right Cheek	Receiver on	165	5825	15.56	16.50	1.242	98.28	1.018		0.456		
	WLAN 5.8GHz	802.11a 6Mbps	Right Tilted	Receiver on	165	5825	15.56	16.50	1.242	98.28	1.018		0.461		
	WLAN 5.8GHz	802.11a 6Mbps	Left Cheek	Receiver on	165	5825	15.56	16.50	1.242	98.28	1.018	-0.06	1.173	0.663	0.838
	WLAN 5.8GHz	802.11a 6Mbps	Left Tilted	Receiver on	165	5825	15.56	16.50	1.242	98.28	1.018	-0.05	1.028	0.354	0.447
	WLAN 5.8GHz	802.11a 6Mbps	Left Cheek	Receiver on	157	5785	15.35	16.50	1.305	98.28	1.018	0.04		0.591	0.785
21	WLAN 5.8GHz	802.11a 6Mbps	Left Cheek	Receiver on	149	5745	14.69	16.50	1.519	98.28	1.018	-0.17		0.547	0.846

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Right Cheek	Full	0	2402	9.43	10.00	1.140	76.9	1.083	0.16	0.019	0.024
	Bluetooth	1Mbps	Right Tilted	Full	0	2402	9.43	10.00	1.140	76.9	1.083	-0.01	0.021	0.026
	Bluetooth	1Mbps	Left Cheek	Full	0	2402	9.43	10.00	1.140	76.9	1.083	0.04	0.056	0.069
	Bluetooth	1Mbps	Left Tilted	Full	0	2402	9.43	10.00	1.140	76.9	1.083	-0.05	0.031	0.038
	Bluetooth	1Mbps	Left Cheek	Full	39	2441	9.09	10.00	1.233	76.9	1.083	-0.03	0.058	0.078
22	Bluetooth	1Mbps	Left Cheek	Full	78	2480	8.35	10.00	1.462	76.9	1.083	-0.06	0.061	0.096

**15.2 Hotspot SAR****<GSM SAR>**

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	GPRS 2 Tx slots	Front	5	Hotspot On	128	824.2	29.37	30.00	1.156	-0.06	0.922	1.066
	GSM850	GPRS 2 Tx slots	Front	5	Hotspot On	189	836.4	29.35	30.00	1.161	0.09	0.703	0.816
	GSM850	GPRS 2 Tx slots	Front	5	Hotspot On	251	848.8	29.28	30.00	1.180	0.18	0.739	0.872
23	GSM850	GPRS 2 Tx slots	Back	5	Hotspot On	128	824.2	29.37	30.00	1.156	0.05	1.240	1.434
	GSM850	GPRS 2 Tx slots	Back	5	Hotspot On	189	836.4	29.35	30.00	1.161	-0.04	1.140	1.324
	GSM850	GPRS 2 Tx slots	Back	5	Hotspot On	251	848.8	29.28	30.00	1.180	0.04	1.150	1.357
	GSM850	GPRS 2 Tx slots	Left Side	5	Hotspot On	128	824.2	29.37	30.00	1.156	-0.08	0.105	0.121
	GSM850	GPRS 2 Tx slots	Right Side	5	Hotspot On	128	824.2	29.37	30.00	1.156	-0.02	0.330	0.382
	GSM850	GPRS 2 Tx slots	Bottom Side	5	Hotspot On	128	824.2	29.37	30.00	1.156	0.09	0.717	0.829
	GSM850	GPRS 2 Tx slots	Bottom Side	5	Hotspot On	189	836.4	29.35	30.00	1.161	0.08	0.732	0.850
	GSM850	GPRS 2 Tx slots	Bottom Side	5	Hotspot On	251	848.8	29.28	30.00	1.180	0.06	0.696	0.822
	GSM1900	GPRS 2 Tx slots	Front	5	Hotspot On	661	1880	25.19	26.00	1.205	-0.17	0.744	0.897
	GSM1900	GPRS 2 Tx slots	Front	5	Hotspot On	512	1850.2	25.15	26.00	1.216	0.05	0.782	0.951
	GSM1900	GPRS 2 Tx slots	Front	5	Hotspot On	810	1909.8	25.14	26.00	1.219	0.01	0.693	0.845
24	GSM1900	GPRS 2 Tx slots	Back	5	Hotspot On	661	1880	25.19	26.00	1.205	0.09	1.130	1.362
	GSM1900	GPRS 2 Tx slots	Back	5	Hotspot On	512	1850.2	25.15	26.00	1.216	0.07	0.955	1.161
	GSM1900	GPRS 2 Tx slots	Back	5	Hotspot On	810	1909.8	25.14	26.00	1.219	0.04	0.721	0.879
	GSM1900	GPRS 2 Tx slots	Left Side	5	Hotspot On	661	1880	23.18	24.50	1.355	0.09	0.053	0.071
	GSM1900	GPRS 2 Tx slots	Right Side	5	Hotspot On	661	1880	23.18	24.50	1.355	0.07	0.038	0.051
	GSM1900	GPRS 2 Tx slots	Bottom Side	5	Hotspot On	661	1880	23.18	24.50	1.355	0.01	0.836	1.133
	GSM1900	GPRS 2 Tx slots	Bottom Side	5	Hotspot On	512	1850.2	23.15	24.50	1.365	0.02	0.942	1.285
	GSM1900	GPRS 2 Tx slots	Bottom Side	5	Hotspot On	810	1909.8	23.14	24.50	1.368	0.04	0.818	1.119



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA Band V	RMC 12.2Kbps	Front	5	Hotspot On	4132	826.4	20.95	21.00	1.012	-0.04	0.723	0.731
	WCDMA Band V	RMC 12.2Kbps	Back	5	Hotspot On	4132	826.4	20.95	21.00	1.012	0.06	1.200	1.214
	WCDMA Band V	RMC 12.2Kbps	Back	5	Hotspot On	4182	836.4	20.90	21.00	1.023	0.03	1.270	1.300
25	WCDMA Band V	RMC 12.2Kbps	Back	5	Hotspot On	4233	846.6	20.91	21.00	1.021	0.06	1.370	1.399
	WCDMA Band V	RMC 12.2Kbps	Left Side	5	Hotspot On	4132	826.4	20.95	21.00	1.012	0.06	0.099	0.100
	WCDMA Band V	RMC 12.2Kbps	Right Side	5	Hotspot On	4132	826.4	20.95	21.00	1.012	0.03	0.325	0.329
	WCDMA Band V	RMC 12.2Kbps	Bottom Side	5	Hotspot On	4132	826.4	20.95	21.00	1.012	0.07	0.616	0.623
	WCDMA Band IV	RMC 12.2Kbps	Front	5	Hotspot On	1513	1752.6	16.49	16.50	1.002	0	1.040	1.042
	WCDMA Band IV	RMC 12.2Kbps	Front	5	Hotspot On	1312	1712.4	16.42	16.50	1.019	0.16	1.050	1.070
	WCDMA Band IV	RMC 12.2Kbps	Front	5	Hotspot On	1413	1732.6	16.46	16.50	1.009	0.04	1.050	1.060
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Hotspot On	1513	1752.6	16.49	16.50	1.002	0.05	1.210	1.213
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Hotspot On	1312	1712.4	16.42	16.50	1.019	0.08	1.340	1.365
26	WCDMA Band IV	RMC 12.2Kbps	Back	5	Hotspot On	1413	1732.6	16.46	16.50	1.009	0.12	1.370	1.383
	WCDMA Band IV	RMC 12.2Kbps	Left Side	5	Hotspot On	1513	1752.6	15.38	15.50	1.028	0.09	0.111	0.114
	WCDMA Band IV	RMC 12.2Kbps	Right Side	5	Hotspot On	1513	1752.6	15.38	15.50	1.028	0.09	0.078	0.080
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	5	Hotspot On	1513	1752.6	15.38	15.50	1.028	0.03	1.200	1.234
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	5	Hotspot On	1312	1712.4	15.27	15.50	1.054	-0.06	1.120	1.181
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	5	Hotspot On	1413	1732.6	15.30	15.50	1.047	0.04	1.260	1.319
	WCDMA Band II	RMC 12.2Kbps	Front	5	Hotspot On	9262	1852.4	17.81	18.00	1.045	0.16	0.786	0.821
	WCDMA Band II	RMC 12.2Kbps	Front	5	Hotspot On	9400	1880	17.80	18.00	1.047	0.02	0.810	0.848
	WCDMA Band II	RMC 12.2Kbps	Front	5	Hotspot On	9538	1907.6	17.79	18.00	1.050	0.07	0.718	0.754
	WCDMA Band II	RMC 12.2Kbps	Back	5	Hotspot On	9262	1852.4	17.81	18.00	1.045	0.07	1.090	1.139
27	WCDMA Band II	RMC 12.2Kbps	Back	5	Hotspot On	9400	1880	17.80	18.00	1.047	0.06	1.170	1.225
	WCDMA Band II	RMC 12.2Kbps	Back	5	Hotspot On	9538	1907.6	17.79	18.00	1.050	-0.07	1.040	1.092
	WCDMA Band II	RMC 12.2Kbps	Left Side	5	Hotspot On	9262	1852.4	15.93	16.00	1.016	0.01	0.056	0.057
	WCDMA Band II	RMC 12.2Kbps	Right Side	5	Hotspot On	9262	1852.4	15.93	16.00	1.016	0.18	0.057	0.058
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	5	Hotspot On	9262	1852.4	15.93	16.00	1.016	0.08	1.010	1.026
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	5	Hotspot On	9400	1880	15.89	16.00	1.026	0.07	1.140	1.169
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	5	Hotspot On	9538	1907.6	15.88	16.00	1.028	0.09	0.956	0.983



<CDMA2000 SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	CDMA2000 BC10	RTAP 153.6Kbps	Front	5	Hotspot On	476	817.9	21.71	22.00	1.069	-0.13	0.647	0.692
	CDMA2000 BC10	RTAP 153.6Kbps	Back	5	Hotspot On	476	817.9	21.71	22.00	1.069	0.01	0.998	1.067
	CDMA2000 BC10	RTAP 153.6Kbps	Back	5	Hotspot On	580	820.5	21.70	22.00	1.072	0.04	1.000	1.072
28	CDMA2000 BC10	RTAP 153.6Kbps	Back	5	Hotspot On	684	823.1	21.65	22.00	1.084	0.07	1.040	1.127
	CDMA2000 BC10	RTAP 153.6Kbps	Left Side	5	Hotspot On	476	817.9	21.71	22.00	1.069	0.03	0.088	0.094
	CDMA2000 BC10	RTAP 153.6Kbps	Right Side	5	Hotspot On	476	817.9	21.71	22.00	1.069	0.03	0.279	0.298
	CDMA2000 BC10	RTAP 153.6Kbps	Bottom Side	5	Hotspot On	476	817.9	21.71	22.00	1.069	0.03	0.579	0.619
	CDMA2000 BC0	RTAP 153.6Kbps	Front	5	Hotspot On	1013	824.7	21.56	22.00	1.107	0.08	0.647	0.716
	CDMA2000 BC0	RTAP 153.6Kbps	Back	5	Hotspot On	1013	824.7	21.56	22.00	1.107	0.08	1.010	1.118
29	CDMA2000 BC0	RTAP 153.6Kbps	Back	5	Hotspot On	384	836.52	21.51	22.00	1.119	0.03	1.070	1.198
	CDMA2000 BC0	RTAP 153.6Kbps	Back	5	Hotspot On	777	848.31	21.50	22.00	1.122	0.1	1.060	1.189
	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	5	Hotspot On	1013	824.7	21.56	22.00	1.107	-0.01	0.090	0.100
	CDMA2000 BC0	RTAP 153.6Kbps	Right Side	5	Hotspot On	1013	824.7	21.56	22.00	1.107	0	0.285	0.315
	CDMA2000 BC0	RTAP 153.6Kbps	Bottom Side	5	Hotspot On	1013	824.7	21.56	22.00	1.107	-0.03	0.581	0.643
	CDMA2000 BC1	RTAP 153.6Kbps	Front	5	Hotspot On	600	1880	19.30	19.50	1.047	0.07	0.939	0.983
	CDMA2000 BC1	RTAP 153.6Kbps	Front	5	Hotspot On	25	1851.25	19.24	19.50	1.062	0.05	0.882	0.936
	CDMA2000 BC1	RTAP 153.6Kbps	Front	5	Hotspot On	1175	1908.75	19.12	19.50	1.091	0.15	0.875	0.955
	CDMA2000 BC1	RTAP 153.6Kbps	Back	5	Hotspot On	600	1880	19.30	19.50	1.047	0.03	1.300	1.361
	CDMA2000 BC1	RTAP 153.6Kbps	Back	5	Hotspot On	25	1851.25	19.24	19.50	1.062	-0.02	1.240	1.317
	CDMA2000 BC1	RTAP 153.6Kbps	Back	5	Hotspot On	1175	1908.75	19.12	19.50	1.091	0.11	1.220	1.332
	CDMA2000 BC1	RTAP 153.6Kbps	Left Side	5	Hotspot On	600	1880	17.70	18.00	1.072	0.06	0.072	0.077
	CDMA2000 BC1	RTAP 153.6Kbps	Right Side	5	Hotspot On	600	1880	17.70	18.00	1.072	0.09	0.058	0.062
	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	5	Hotspot On	600	1880	17.70	18.00	1.072	0.08	1.300	1.393
	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	5	Hotspot On	25	1851.25	17.64	18.00	1.086	0.03	1.270	1.380
30	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	5	Hotspot On	1175	1908.75	17.64	18.00	1.086	0.06	1.320	1.434



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 71	20M	QPSK	1	0	Front	5	Full	133322	683	23.27	24.00	1.183	0.03	0.450	0.532
	LTE Band 71	20M	QPSK	50	0	Front	5	Full	133322	683	22.33	23.00	1.167	0.02	0.320	0.373
31	LTE Band 71	20M	QPSK	1	0	Back	5	Full	133322	683	23.27	24.00	1.183	0.09	0.759	0.898
	LTE Band 71	20M	QPSK	50	0	Back	5	Full	133322	683	22.33	23.00	1.167	-0.03	0.523	0.610
	LTE Band 71	20M	QPSK	100	0	Back	5	Full	133322	683	22.27	23.00	1.183	-0.12	0.541	0.640
	LTE Band 71	20M	QPSK	1	0	Left Side	5	Full	133322	683	23.27	24.00	1.183	0.05	0.157	0.186
	LTE Band 71	20M	QPSK	50	0	Left Side	5	Full	133322	683	22.33	23.00	1.167	0.08	0.116	0.135
	LTE Band 71	20M	QPSK	1	0	Right Side	5	Full	133322	683	23.27	24.00	1.183	0.01	0.293	0.347
	LTE Band 71	20M	QPSK	50	0	Right Side	5	Full	133322	683	22.33	23.00	1.167	0.12	0.172	0.201
	LTE Band 71	20M	QPSK	1	0	Bottom Side	5	Full	133322	683	23.27	24.00	1.183	0.03	0.573	0.678
	LTE Band 71	20M	QPSK	50	0	Bottom Side	5	Full	133322	683	22.33	23.00	1.167	-0.02	0.368	0.429
	LTE Band 12	10M	QPSK	1	0	Front	5	Hotspot On	23095	707.5	21.10	22.00	1.230	-0.18	0.595	0.732
	LTE Band 12	10M	QPSK	25	0	Front	5	Hotspot On	23095	707.5	21.25	22.00	1.189	-0.04	0.515	0.612
32	LTE Band 12	10M	QPSK	1	0	Back	5	Hotspot On	23095	707.5	21.10	22.00	1.230	-0.04	0.907	1.116
	LTE Band 12	10M	QPSK	25	0	Back	5	Hotspot On	23095	707.5	21.25	22.00	1.189	0.01	0.851	1.011
	LTE Band 12	10M	QPSK	50	0	Back	5	Hotspot On	23095	707.5	21.21	22.00	1.199	0.04	0.841	1.009
	LTE Band 12	10M	QPSK	1	0	Left Side	5	Hotspot On	23095	707.5	21.10	22.00	1.230	0.03	0.154	0.189
	LTE Band 12	10M	QPSK	25	0	Left Side	5	Hotspot On	23095	707.5	21.25	22.00	1.189	-0.11	0.140	0.166
	LTE Band 12	10M	QPSK	1	0	Right Side	5	Hotspot On	23095	707.5	21.10	22.00	1.230	-0.03	0.309	0.380
	LTE Band 12	10M	QPSK	25	0	Right Side	5	Hotspot On	23095	707.5	21.25	22.00	1.189	-0.12	0.277	0.329
	LTE Band 12	10M	QPSK	1	0	Bottom Side	5	Hotspot On	23095	707.5	21.10	22.00	1.230	-0.01	0.465	0.572
	LTE Band 12	10M	QPSK	25	0	Bottom Side	5	Hotspot On	23095	707.5	21.25	22.00	1.189	-0.08	0.420	0.499
	LTE Band 13	10M	QPSK	1	0	Front	5	Hotspot On	23230	782	21.23	22.00	1.194	-0.01	0.681	0.813
	LTE Band 13	10M	QPSK	25	0	Front	5	Hotspot On	23230	782	21.26	22.00	1.186	-0.17	0.663	0.786
	LTE Band 13	10M	QPSK	50	0	Front	5	Hotspot On	23230	782	21.24	22.00	1.191	0.01	0.658	0.784
33	LTE Band 13	10M	QPSK	1	0	Back	5	Hotspot On	23230	782	21.23	22.00	1.194	0.04	1.040	1.242
	LTE Band 13	10M	QPSK	25	0	Back	5	Hotspot On	23230	782	21.26	22.00	1.186	-0.06	1.030	1.221
	LTE Band 13	10M	QPSK	50	0	Back	5	Hotspot On	23230	782	21.24	22.00	1.191	-0.09	1.040	1.239
	LTE Band 13	10M	QPSK	1	0	Left Side	5	Hotspot On	23230	782	21.23	22.00	1.194	-0.09	0.173	0.207
	LTE Band 13	10M	QPSK	25	0	Left Side	5	Hotspot On	23230	782	21.26	22.00	1.186	-0.04	0.170	0.202
	LTE Band 13	10M	QPSK	1	0	Right Side	5	Hotspot On	23230	782	21.23	22.00	1.194	-0.11	0.316	0.377
	LTE Band 13	10M	QPSK	25	0	Right Side	5	Hotspot On	23230	782	21.26	22.00	1.186	0.03	0.320	0.379
	LTE Band 13	10M	QPSK	1	0	Bottom Side	5	Hotspot On	23230	782	21.23	22.00	1.194	-0.16	0.516	0.616
	LTE Band 13	10M	QPSK	25	0	Bottom Side	5	Hotspot On	23230	782	21.26	22.00	1.186	0.08	0.511	0.606



FCC SAR Test Report

Report No. : FA8D2801

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 26	15M	QPSK	1	0	Front	5	Hotspot On	26865	831.5	20.25	21.00	1.189	0.07	0.667	0.793
	LTE Band 26	15M	QPSK	36	0	Front	5	Hotspot On	26865	831.5	20.32	21.00	1.169	0.15	0.696	0.814
	LTE Band 26	15M	QPSK	75	0	Front	5	Hotspot On	26865	831.5	20.31	21.00	1.172	-0.09	0.648	0.760
	LTE Band 26	15M	QPSK	1	0	Back	5	Hotspot On	26865	831.5	20.25	21.00	1.189	0.17	0.987	1.173
	LTE Band 26	15M	QPSK	36	0	Back	5	Hotspot On	26865	831.5	20.32	21.00	1.169	0.04	1.130	1.322
34	LTE Band 26	15M	QPSK	75	0	Back	5	Hotspot On	26865	831.5	20.31	21.00	1.172	0.08	1.180	1.383
	LTE Band 26	15M	QPSK	1	0	Left Side	5	Hotspot On	26865	831.5	20.25	21.00	1.189	-0.12	0.080	0.094
	LTE Band 26	15M	QPSK	36	0	Left Side	5	Hotspot On	26865	831.5	20.32	21.00	1.169	-0.08	0.081	0.094
	LTE Band 26	15M	QPSK	1	0	Right Side	5	Hotspot On	26865	831.5	20.25	21.00	1.189	-0.13	0.274	0.326
	LTE Band 26	15M	QPSK	36	0	Right Side	5	Hotspot On	26865	831.5	20.32	21.00	1.169	0.03	0.275	0.322
	LTE Band 26	15M	QPSK	1	0	Bottom Side	5	Hotspot On	26865	831.5	20.25	21.00	1.189	0.02	0.538	0.639
	LTE Band 26	15M	QPSK	36	0	Bottom Side	5	Hotspot On	26865	831.5	20.32	21.00	1.169	-0.12	0.550	0.643
	LTE Band 5	10M	QPSK	1	0	Back	5	Hotspot On	20476(PCC) + 20575(SCC)	831.6(PCC) + 841.5(SCC)	20.89	21.00	1.026	-0.19	0.950	0.974
	LTE Band 66	20M	QPSK	1	0	Front	5	Hotspot On	132572	1770	16.26	16.50	1.057	0.16	0.903	0.954
	LTE Band 66	20M	QPSK	1	0	Front	5	Hotspot On	132072	1720	16.25	16.50	1.059	0.15	0.939	0.995
	LTE Band 66	20M	QPSK	1	0	Front	5	Hotspot On	132322	1745	16.13	16.50	1.089	0.01	0.892	0.971
	LTE Band 66	20M	QPSK	50	24	Front	5	Hotspot On	132572	1770	16.22	16.50	1.067	0.16	0.875	0.933
	LTE Band 66	20M	QPSK	50	24	Front	5	Hotspot On	132072	1720	16.20	16.50	1.072	0.13	0.893	0.957
	LTE Band 66	20M	QPSK	50	24	Front	5	Hotspot On	132322	1745	16.05	16.50	1.109	-0.08	0.839	0.931
	LTE Band 66	20M	QPSK	100	0	Front	5	Hotspot On	132572	1770	16.12	16.50	1.091	-0.07	0.899	0.981
	LTE Band 66	20M	QPSK	1	0	Back	5	Hotspot On	132572	1770	16.26	16.50	1.057	-0.09	1.190	1.258
	LTE Band 66	20M	QPSK	1	0	Back	5	Hotspot On	132072	1720	16.25	16.50	1.059	-0.03	1.160	1.229
	LTE Band 66	20M	QPSK	1	0	Back	5	Hotspot On	132322	1745	16.13	16.50	1.089	-0.12	1.160	1.263
	LTE Band 66	20M	QPSK	50	24	Back	5	Hotspot On	132572	1770	16.22	16.50	1.067	0.02	1.140	1.216
35	LTE Band 66	20M	QPSK	50	24	Back	5	Hotspot On	132072	1720	16.20	16.50	1.072	0.04	1.240	1.329
	LTE Band 66	20M	QPSK	50	24	Back	5	Hotspot On	132322	1745	16.05	16.50	1.109	-0.06	1.150	1.276
	LTE Band 66	20M	QPSK	100	0	Back	5	Hotspot On	132572	1770	16.12	16.50	1.091	0.07	1.190	1.299
	LTE Band 66	20M	QPSK	1	0	Left Side	5	Hotspot On	132572	1770	15.14	15.50	1.086	0.02	0.076	0.082
	LTE Band 66	20M	QPSK	50	24	Left Side	5	Hotspot On	132572	1770	15.10	15.50	1.096	0.07	0.074	0.081
	LTE Band 66	20M	QPSK	1	0	Right Side	5	Hotspot On	132572	1770	15.14	15.50	1.086	0.03	0.078	0.084
	LTE Band 66	20M	QPSK	50	24	Right Side	5	Hotspot On	132572	1770	15.10	15.50	1.096	0.04	0.073	0.080
	LTE Band 66	20M	QPSK	1	0	Bottom Side	5	Hotspot On	132572	1770	15.14	15.50	1.086	0.02	1.020	1.108
	LTE Band 66	20M	QPSK	1	0	Bottom Side	5	Hotspot On	132072	1720	15.13	15.50	1.089	0.02	1.030	1.122
	LTE Band 66	20M	QPSK	1	0	Bottom Side	5	Hotspot On	132322	1745	14.98	15.50	1.127	0.04	1.010	1.138
	LTE Band 66	20M	QPSK	50	24	Bottom Side	5	Hotspot On	132572	1770	15.10	15.50	1.096	0.07	1.030	1.129
	LTE Band 66	20M	QPSK	50	24	Bottom Side	5	Hotspot On	132072	1720	15.08	15.50	1.102	0.07	0.965	1.063
	LTE Band 66	20M	QPSK	50	24	Bottom Side	5	Hotspot On	132322	1745	14.93	15.50	1.140	0.03	0.988	1.127
	LTE Band 66	20M	QPSK	100	0	Bottom Side	5	Hotspot On	132572	1770	14.98	15.50	1.127	0.09	1.070	1.206



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 25	20M	QPSK	1	0	Front	5	Hotspot On	26340	1880	17.84	18.00	1.038	0.15	0.950	0.986
	LTE Band 25	20M	QPSK	1	0	Front	5	Hotspot On	26140	1860	17.71	18.00	1.069	0.19	0.878	0.939
	LTE Band 25	20M	QPSK	1	0	Front	5	Hotspot On	26590	1905	17.57	18.00	1.104	0.03	0.843	0.931
	LTE Band 25	20M	QPSK	50	0	Front	5	Hotspot On	26340	1880	17.70	18.00	1.072	0.17	0.894	0.958
	LTE Band 25	20M	QPSK	50	0	Front	5	Hotspot On	26140	1860	17.54	18.00	1.112	0.03	0.824	0.916
	LTE Band 25	20M	QPSK	50	0	Front	5	Hotspot On	26590	1905	17.53	18.00	1.114	0.01	0.850	0.947
	LTE Band 25	20M	QPSK	100	0	Front	5	Hotspot On	26340	1880	17.59	18.00	1.099	0.14	0.087	0.096
	LTE Band 25	20M	QPSK	1	0	Back	5	Hotspot On	26340	1880	17.84	18.00	1.038	-0.07	1.250	1.297
	LTE Band 25	20M	QPSK	1	0	Back	5	Hotspot On	26140	1860	17.71	18.00	1.069	0.05	1.210	1.294
	LTE Band 25	20M	QPSK	1	0	Back	5	Hotspot On	26590	1905	17.57	18.00	1.104	0.01	1.150	1.270
36	LTE Band 25	20M	QPSK	50	0	Back	5	Hotspot On	26340	1880	17.70	18.00	1.072	0.15	1.240	1.329
	LTE Band 25	20M	QPSK	50	0	Back	5	Hotspot On	26140	1860	17.54	18.00	1.112	-0.03	1.150	1.278
	LTE Band 25	20M	QPSK	50	0	Back	5	Hotspot On	26590	1905	17.53	18.00	1.114	0.09	1.170	1.304
	LTE Band 25	20M	QPSK	100	0	Back	5	Hotspot On	26340	1880	17.59	18.00	1.099	0.05	1.170	1.286
	LTE Band 25	20M	QPSK	1	0	Left Side	5	Hotspot On	26340	1880	16.43	16.50	1.016	-0.02	0.061	0.062
	LTE Band 25	20M	QPSK	50	0	Left Side	5	Hotspot On	26340	1880	16.24	16.50	1.062	-0.05	0.060	0.064
	LTE Band 25	20M	QPSK	1	0	Right Side	5	Hotspot On	26340	1880	16.43	16.50	1.016	-0.02	0.040	0.040
	LTE Band 25	20M	QPSK	50	0	Right Side	5	Hotspot On	26340	1880	16.24	16.50	1.062	-0.01	0.038	0.040
	LTE Band 25	20M	QPSK	1	0	Bottom Side	5	Hotspot On	26340	1880	16.43	16.50	1.016	-0.03	1.290	1.311
	LTE Band 25	20M	QPSK	1	0	Bottom Side	5	Hotspot On	26140	1860	16.31	16.50	1.045	0.01	1.160	1.212
	LTE Band 25	20M	QPSK	1	0	Bottom Side	5	Hotspot On	26590	1905	16.14	16.50	1.086	0.03	1.150	1.249
	LTE Band 25	20M	QPSK	50	0	Bottom Side	5	Hotspot On	26340	1880	16.24	16.50	1.062	-0.03	1.200	1.274
	LTE Band 25	20M	QPSK	50	0	Bottom Side	5	Hotspot On	26140	1860	16.10	16.50	1.096	-0.01	1.100	1.206
	LTE Band 25	20M	QPSK	50	0	Bottom Side	5	Hotspot On	26590	1905	16.13	16.50	1.089	0.05	1.170	1.274
	LTE Band 25	20M	QPSK	100	0	Bottom Side	5	Hotspot On	26340	1880	16.23	16.50	1.064	-0.03	1.180	1.256
	LTE Band 30	10M	QPSK	1	0	Front	5	Hotspot On	27710	2310	16.39	17.00	1.151	0.01	0.349	0.402
	LTE Band 30	10M	QPSK	25	0	Front	5	Hotspot On	27710	2310	16.39	17.00	1.151	-0.18	0.360	0.414
37	LTE Band 30	10M	QPSK	1	0	Back	5	Hotspot On	27710	2310	16.39	17.00	1.151	0.13	0.954	1.098
	LTE Band 30	10M	QPSK	25	0	Back	5	Hotspot On	27710	2310	16.39	17.00	1.151	0.02	0.940	1.082
	LTE Band 30	10M	QPSK	50	0	Back	5	Hotspot On	27710	2310	16.40	17.00	1.148	-0.02	0.926	1.063
	LTE Band 30	10M	QPSK	1	0	Left Side	5	Hotspot On	27710	2310	16.39	17.00	1.151	0.04	0.368	0.423
	LTE Band 30	10M	QPSK	25	0	Left Side	5	Hotspot On	27710	2310	16.39	17.00	1.151	0.02	0.378	0.435
	LTE Band 30	10M	QPSK	1	0	Bottom Side	5	Hotspot On	27710	2310	16.39	17.00	1.151	0.05	0.557	0.641
	LTE Band 30	10M	QPSK	25	0	Bottom Side	5	Hotspot On	27710	2310	16.39	17.00	1.151	-0.02	0.558	0.642
	LTE Band 7	20M	QPSK	1	0	Front	5	Hotspot On	21350	2560	19.61	20.00	1.094	0.06	0.591	0.647
	LTE Band 7	20M	QPSK	50	0	Front	5	Hotspot On	21350	2560	19.64	20.00	1.086	0.07	0.496	0.539
	LTE Band 7	20M	QPSK	1	0	Back	5	Hotspot On	21350	2560	19.61	20.00	1.094	0.08	1.160	1.269
	LTE Band 7	20M	QPSK	1	0	Back	5	Hotspot On	20850	2510	19.51	20.00	1.119	0.07	1.090	1.220
	LTE Band 7	20M	QPSK	1	0	Back	5	Hotspot On	21100	2535	19.52	20.00	1.117	-0.09	1.120	1.251
	LTE Band 7	20M	QPSK	50	0	Back	5	Hotspot On	21350	2560	19.64	20.00	1.086	-0.13	1.140	1.239
	LTE Band 7	20M	QPSK	50	0	Back	5	Hotspot On	20850	2510	19.60	20.00	1.096	0.18	1.140	1.250
	LTE Band 7	20M	QPSK	50	0	Back	5	Hotspot On	21100	2535	19.52	20.00	1.117	0.08	1.120	1.251
38	LTE Band 7	20M	QPSK	100	0	Back	5	Hotspot On	21350	2560	19.61	20.00	1.094	-0.15	1.180	1.291
	LTE Band 7	20M	QPSK	1	0	Left Side	5	Hotspot On	21350	2560	19.61	20.00	1.094	0.11	0.487	0.533
	LTE Band 7	20M	QPSK	50	0	Left Side	5	Hotspot On	21350	2560	19.64	20.00	1.086	0.02	0.485	0.527
	LTE Band 7	20M	QPSK	1	0	Bottom Side	5	Hotspot On	21350	2560	19.61	20.00	1.094	0.04	0.388	0.424
	LTE Band 7	20M	QPSK	50	0	Bottom Side	5	Hotspot On	21350	2560	19.64	20.00	1.086	0.02	0.405	0.440



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	Power Class	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41	20M	QPSK	1	0	Front	5	Hotspot On	3	40185	2549.5	22.04	22.50	1.112	62.9	1.006	-0.1	0.471	0.527
	LTE Band 41	20M	QPSK	50	0	Front	5	Hotspot On	3	40185	2549.5	21.49	22.00	1.125	62.9	1.006	-0.01	0.415	0.470
39	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	40185	2549.5	22.04	22.50	1.112	62.9	1.006	0.13	1.250	1.398
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	39750	2506	21.85	22.50	1.161	62.9	1.006	-0.14	1.070	1.250
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	40620	2593	22.03	22.50	1.114	62.9	1.006	0.02	1.150	1.289
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	41055	2636.5	21.95	22.50	1.135	62.9	1.006	-0.1	1.130	1.290
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	41490	2680	22.00	22.50	1.122	62.9	1.006	-0.02	1.110	1.253
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	40185	2549.5	21.49	22.00	1.125	62.9	1.006	0.06	0.992	1.122
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	39750	2506	21.35	22.00	1.161	62.9	1.006	0.02	1.040	1.215
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	40620	2593	21.44	22.00	1.138	62.9	1.006	0.12	1.110	1.270
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	41055	2636.5	21.48	22.00	1.127	62.9	1.006	0.07	1.100	1.247
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	41490	2680	21.49	22.00	1.125	62.9	1.006	-0.03	1.130	1.278
	LTE Band 41	20M	QPSK	100	0	Back	5	Hotspot On	3	40185	2549.5	21.48	22.00	1.127	62.9	1.006	0.02	1.090	1.236
	LTE Band 41	20M	QPSK	1	0	Left Side	5	Hotspot On	3	40185	2549.5	22.04	22.50	1.112	62.9	1.006	0.14	0.513	0.574
	LTE Band 41	20M	QPSK	50	0	Left Side	5	Hotspot On	3	40185	2549.5	21.49	22.00	1.125	62.9	1.006	0.05	0.428	0.484
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	40185	2549.5	22.04	22.50	1.112	62.9	1.006	0.05	0.424	0.474
	LTE Band 41	20M	QPSK	50	0	Bottom Side	5	Hotspot On	3	40185	2549.5	21.49	22.00	1.125	62.9	1.006	0.01	0.381	0.431
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	39750(PCC) + 39948(SCC)	2506(PCC) + 2525.8(SCC)	21.76	22.50	1.186	62.9	1.006	0.08	1.110	1.324
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	40185(PCC) + 39987(SCC)	2549.5(PCC) + 2529.7(SCC)	22.01	22.50	1.119	62.9	1.006	0.09	1.200	1.351
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	40620(PCC) + 40422(SCC)	2593(PCC) + 2573.2(SCC)	22.18	22.50	1.076	62.9	1.006	0.04	1.230	1.332
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	21.98	22.50	1.127	62.9	1.006	0.03	1.180	1.338
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	41490(PCC) + 41292(SCC)	2680(PCC) + 2660.2(SCC)	22.05	22.50	1.109	62.9	1.006	0.04	1.180	1.317
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	40185	2549.5	22.03	22.50	1.114	42.9	1.009	-0.18	0.737	0.829
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	39750	2506	21.82	22.50	1.169	42.9	1.009	0.04	0.726	0.857
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	40620	2593	22.02	22.50	1.117	42.9	1.009	-0.09	0.762	0.859
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	41055	2636.5	21.92	22.50	1.143	42.9	1.009	-0.06	0.739	0.852
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	41490	2680	22.01	22.50	1.119	42.9	1.009	-0.05	0.803	0.907
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	2	40185	2549.5	22.10	22.50	1.096	42.9	1.009	-0.08	0.786	0.870
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	2	39750	2506	21.86	22.50	1.159	42.9	1.009	-0.06	0.783	0.915
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	2	40620	2593	22.06	22.50	1.107	42.9	1.009	0.08	0.826	0.922
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	2	41055	2636.5	22.02	22.50	1.117	42.9	1.009	-0.01	0.766	0.863
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	2	41490	2680	22.09	22.50	1.099	42.9	1.009	-0.16	0.776	0.861
	LTE Band 41	20M	QPSK	100	0	Back	5	Hotspot On	2	40185	2549.5	22.09	22.50	1.099	42.9	1.009	0.02	0.779	0.864

<WLAN 2.4GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Max Area Scan SAR	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	5	Full	6	2437	19.91	20.00	1.021	100	1.000	0.01	0.639	0.383	0.391
40	WLAN2.4GHz	802.11b 1Mbps	Back	5	Full	6	2437	19.91	20.00	1.021	100	1.000	0.18	1.071	0.711	0.726
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5	Full	6	2437	19.91	20.00	1.021	100	1.000	-0.05	0.768	0.411	0.420
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5	Full	6	2437	19.91	20.00	1.021	100	1.000		0.399		
	WLAN2.4GHz	802.11b 1Mbps	Back	5	Full	1	2412	16.88	18.00	1.294	100	1.000	0		0.269	0.348
	WLAN2.4GHz	802.11b 1Mbps	Back	5	Full	11	2462	17.98	19.00	1.265	100	1.000	0.04		0.435	0.550

<WLAN 5GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Max Area Scan SAR	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5.2GHz	802.11a 6Mbps	Front	5	Full	48	5240	19.06	20.00	1.242	98.28	1.018	0.01	1.230	0.380	0.480
	WLAN5.2GHz	802.11a 6Mbps	Back	5	Full	48	5240	19.06	20.00	1.242	98.28	1.018	-0.04	1.964	0.832	1.052
	WLAN5.2GHz	802.11a 6Mbps	Right Side	5	Full	48	5240	19.06	20.00	1.242	98.28	1.018		0.232		
	WLAN5.2GHz	802.11a 6Mbps	Top Side	5	Full	48	5240	19.06	20.00	1.242	98.28	1.018		0.452		
41	WLAN5.2GHz	802.11a 6Mbps	Back	5	Full	36	5180	18.67	20.00	1.358	98.28	1.018	0.05		0.804	1.112
	WLAN5.2GHz	802.11a 6Mbps	Back	5	Full	44	5220	19.04	20.00	1.247	98.28	1.018	-0.19		0.831	1.055
	WLAN 5.8GHz	802.11a 6Mbps	Front	5	Hotspot On	165	5825	16.63	17.50	1.222	98.28	1.018	-0.01	0.691	0.244	0.303
	WLAN 5.8GHz	802.11a 6Mbps	Back	5	Hotspot On	165	5825	16.63	17.50	1.222	98.28	1.018	-0.05	1.605	0.683	0.850
	WLAN 5.8GHz	802.11a 6Mbps	Right Side	5	Hotspot On	165	5825	16.63	17.50	1.222	98.28	1.018		0.236		
	WLAN 5.8GHz	802.11a 6Mbps	Top Side	5	Hotspot On	165	5825	16.63	17.50	1.222	98.28	1.018		0.343		
42	WLAN 5.8GHz	802.11a 6Mbps	Back	5	Hotspot On	149	5745	15.84	17.50	1.466	98.28	1.018	0.02		0.603	0.900
	WLAN 5.8GHz	802.11a 6Mbps	Back	5	Hotspot On	157	5785	16.30	17.50	1.318	98.28	1.018	0.03	1.233	0.590	0.792

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	5	Full	0	2402	9.43	10.00	1.140	76.9	1.083	0.08	0.035	0.044
	Bluetooth	1Mbps	Back	5	Full	0	2402	9.43	10.00	1.140	76.9	1.083	-0.08	0.038	0.047
	Bluetooth	1Mbps	Right Side	5	Full	0	2402	9.43	10.00	1.140	76.9	1.083	0.16	0.030	0.037
	Bluetooth	1Mbps	Top Side	5	Full	0	2402	9.43	10.00	1.140	76.9	1.083	0.05	0.014	0.017
	Bluetooth	1Mbps	Back	5	Full	39	2441	9.09	10.00	1.233	76.9	1.083	0.05	0.046	0.061
43	Bluetooth	1Mbps	Back	5	Full	78	2480	8.35	10.00	1.462	76.9	1.083	-0.06	0.047	0.075

15.3 Body Worn Accessory SAR

<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Headset	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	GSM850	GPRS 2 Tx slots	Front	5	-	P-Sensor On	128	824.2	29.37	30.00	1.156	-0.06	0.922	1.066
	GSM850	GPRS 2 Tx slots	Front	5	-	P-Sensor On	189	836.4	29.35	30.00	1.161	0.09	0.703	0.816
	GSM850	GPRS 2 Tx slots	Front	5	-	P-Sensor On	251	848.8	29.28	30.00	1.180	0.18	0.739	0.872
44	GSM850	GPRS 2 Tx slots	Back	5	-	P-Sensor On	128	824.2	29.37	30.00	1.156	0.05	1.240	1.434
	GSM850	GPRS 2 Tx slots	Back	5	-	P-Sensor On	189	836.4	29.35	30.00	1.161	-0.04	1.140	1.324
	GSM850	GPRS 2 Tx slots	Back	5	-	P-Sensor On	251	848.8	29.28	30.00	1.180	0.04	1.150	1.357
	GSM850	GPRS 2 Tx slots	Back	5	Headset	P-Sensor On	128	824.2	29.37	30.00	1.156	0.01	0.391	0.452
	GSM1900	GPRS 2 Tx slots	Front	5	-	P-Sensor On	661	1880	25.19	26.00	1.205	-0.17	0.744	0.897
	GSM1900	GPRS 2 Tx slots	Front	5	-	P-Sensor On	512	1850.2	25.15	26.00	1.216	0.05	0.782	0.951
	GSM1900	GPRS 2 Tx slots	Front	5	-	P-Sensor On	810	1909.8	25.14	26.00	1.219	0.01	0.693	0.845
45	GSM1900	GPRS 2 Tx slots	Back	5	-	P-Sensor On	661	1880	25.19	26.00	1.205	0.09	1.130	1.362
	GSM1900	GPRS 2 Tx slots	Back	5	-	P-Sensor On	512	1850.2	25.15	26.00	1.216	0.07	0.955	1.161
	GSM1900	GPRS 2 Tx slots	Back	5	-	P-Sensor On	810	1909.8	25.14	26.00	1.219	0.04	0.721	0.879
	GSM1900	GPRS 2 Tx slots	Back	5	Headset	P-Sensor On	661	1880	25.19	26.00	1.205	-0.05	0.589	0.710

<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Headset	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WCDMA Band V	RMC 12.2Kbps	Front	5	-	P-Sensor On	4132	826.4	20.95	21.00	1.012	-0.04	0.723	0.731
	WCDMA Band V	RMC 12.2Kbps	Back	5	-	P-Sensor On	4132	826.4	20.95	21.00	1.012	0.06	1.200	1.214
	WCDMA Band V	RMC 12.2Kbps	Back	5	-	P-Sensor On	4182	836.4	20.90	21.00	1.023	0.03	1.270	1.300
46	WCDMA Band V	RMC 12.2Kbps	Back	5	-	P-Sensor On	4233	846.6	20.91	21.00	1.021	0.06	1.370	1.399
	WCDMA Band V	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	4233	846.6	20.91	21.00	1.021	-0.12	0.965	0.985
	WCDMA Band V	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	4132	826.4	20.95	21.00	1.012	-0.01	0.898	0.908
	WCDMA Band V	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	4182	836.4	20.90	21.00	1.023	-0.02	0.967	0.990
	WCDMA Band IV	RMC 12.2Kbps	Front	5	-	P-Sensor On	1513	1752.6	16.49	16.50	1.002	0	1.040	1.042
	WCDMA Band IV	RMC 12.2Kbps	Front	5	-	P-Sensor On	1312	1712.4	16.42	16.50	1.019	0.16	1.050	1.070
	WCDMA Band IV	RMC 12.2Kbps	Front	5	-	P-Sensor On	1413	1732.6	16.46	16.50	1.009	0.04	1.050	1.060
	WCDMA Band IV	RMC 12.2Kbps	Back	5	-	P-Sensor On	1513	1752.6	16.49	16.50	1.002	0.05	1.210	1.213
	WCDMA Band IV	RMC 12.2Kbps	Back	5	-	P-Sensor On	1312	1712.4	16.42	16.50	1.019	0.08	1.340	1.365
47	WCDMA Band IV	RMC 12.2Kbps	Back	5	-	P-Sensor On	1413	1732.6	16.46	16.50	1.009	0.12	1.370	1.383
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	1413	1732.6	16.46	16.50	1.009	-0.02	0.794	0.801
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	1312	1712.4	16.42	16.50	1.019	-0.04	0.724	0.737
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	1513	1752.6	16.49	16.50	1.002	-0.06	0.806	0.808
	WCDMA Band II	RMC 12.2Kbps	Front	5	-	P-Sensor On	9262	1852.4	17.81	18.00	1.045	0.16	0.786	0.821
	WCDMA Band II	RMC 12.2Kbps	Front	5	-	P-Sensor On	9400	1880	17.80	18.00	1.047	0.02	0.810	0.848
	WCDMA Band II	RMC 12.2Kbps	Front	5	-	P-Sensor On	9538	1907.6	17.79	18.00	1.050	0.07	0.718	0.754
	WCDMA Band II	RMC 12.2Kbps	Back	5	-	P-Sensor On	9262	1852.4	17.81	18.00	1.045	0.07	1.090	1.139
48	WCDMA Band II	RMC 12.2Kbps	Back	5	-	P-Sensor On	9400	1880	17.80	18.00	1.047	0.06	1.170	1.225
	WCDMA Band II	RMC 12.2Kbps	Back	5	-	P-Sensor On	9538	1907.6	17.79	18.00	1.050	-0.07	1.040	1.092
	WCDMA Band II	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	9400	1880	17.80	18.00	1.047	-0.06	0.651	0.682



<CDMA2000 SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Headset	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	476	817.9	21.73	22.00	1.064	-0.03	0.728	0.775
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	476	817.9	21.73	22.00	1.064	0.01	1.050	1.117
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	580	820.5	21.72	22.00	1.067	-0.02	1.100	1.173
49	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	684	823.1	21.72	22.00	1.067	-0.01	1.130	1.205
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	Headset	P-Sensor On	684	823.1	21.72	22.00	1.067	-0.01	0.838	0.894
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	Headset	P-Sensor On	476	817.9	21.73	22.00	1.064	-0.03	0.793	0.844
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	Headset	P-Sensor On	580	820.5	21.72	22.00	1.067	-0.03	0.811	0.865
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	1013	824.7	21.57	22.00	1.104	-0.01	0.759	0.838
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	384	836.52	21.56	22.00	1.107	-0.07	0.662	0.733
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	777	848.31	21.49	22.00	1.125	-0.04	0.666	0.749
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	1013	824.7	21.57	22.00	1.104	-0.04	1.050	1.159
50	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	384	836.52	21.56	22.00	1.107	0.02	1.100	1.217
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	777	848.31	21.49	22.00	1.125	0.01	0.990	1.113
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	Headset	P-Sensor On	384	836.52	21.56	22.00	1.107	-0.03	0.811	0.897
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	Headset	P-Sensor On	777	848.31	21.49	22.00	1.125	-0.03	0.771	0.867
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	Headset	P-Sensor On	1013	824.7	21.57	22.00	1.104	-0.03	0.806	0.890
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	600	1880	19.33	19.50	1.040	-0.07	0.875	0.910
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	25	1851.25	19.23	19.50	1.064	0.03	0.871	0.927
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	1175	1908.75	19.08	19.50	1.102	0.02	0.842	0.927
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	600	1880	19.33	19.50	1.040	0.06	1.300	1.352
51	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	25	1851.25	19.23	19.50	1.064	-0.09	1.290	1.373
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	1175	1908.75	19.08	19.50	1.102	-0.02	1.220	1.344
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	5	Headset	P-Sensor On	25	1851.25	19.23	19.50	1.064	0.03	0.787	0.837
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	5	Headset	P-Sensor On	600	1880	19.33	19.50	1.040	0.03	0.711	0.739
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	5	Headset	P-Sensor On	1175	1908.75	19.08	19.50	1.102	0.08	0.678	0.747



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Headset	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 71	20M	QPSK	1	0	Front	5	-	Full	133322	683	23.27	24.00	1.183	0.03	0.450	0.532
	LTE Band 71	20M	QPSK	50	0	Front	5	-	Full	133322	683	22.33	23.00	1.167	0.02	0.320	0.373
52	LTE Band 71	20M	QPSK	1	0	Back	5	-	Full	133322	683	23.27	24.00	1.183	0.09	0.759	0.898
	LTE Band 71	20M	QPSK	50	0	Back	5	-	Full	133322	683	22.33	23.00	1.167	-0.03	0.523	0.610
	LTE Band 71	20M	QPSK	100	0	Back	5	-	Full	133322	683	22.27	23.00	1.183	-0.12	0.541	0.640
	LTE Band 12	10M	QPSK	1	0	Front	5	-	P-Sensor On	23095	707.5	21.10	22.00	1.230	-0.18	0.595	0.732
	LTE Band 12	10M	QPSK	25	0	Front	5	-	P-Sensor On	23095	707.5	21.25	22.00	1.189	-0.04	0.515	0.612
53	LTE Band 12	10M	QPSK	1	0	Back	5	-	P-Sensor On	23095	707.5	21.10	22.00	1.230	-0.04	0.907	1.116
	LTE Band 12	10M	QPSK	25	0	Back	5	-	P-Sensor On	23095	707.5	21.25	22.00	1.189	0.01	0.851	1.011
	LTE Band 12	10M	QPSK	50	0	Back	5	-	P-Sensor On	23095	707.5	21.21	22.00	1.199	0.04	0.841	1.009
	LTE Band 13	10M	QPSK	1	0	Front	5	-	P-Sensor On	23230	782	21.23	22.00	1.194	-0.01	0.681	0.813
	LTE Band 13	10M	QPSK	25	0	Front	5	-	P-Sensor On	23230	782	21.26	22.00	1.186	-0.17	0.663	0.786
	LTE Band 13	10M	QPSK	50	0	Front	5	-	P-Sensor On	23230	782	21.24	22.00	1.191	0.01	0.658	0.784
54	LTE Band 13	10M	QPSK	1	0	Back	5	-	P-Sensor On	23230	782	21.23	22.00	1.194	0.04	1.040	1.242
	LTE Band 13	10M	QPSK	25	0	Back	5	-	P-Sensor On	23230	782	21.26	22.00	1.186	-0.06	1.030	1.221
	LTE Band 13	10M	QPSK	50	0	Back	5	-	P-Sensor On	23230	782	21.24	22.00	1.191	-0.09	1.040	1.239
	LTE Band 13	10M	QPSK	1	0	Back	5	Headset	P-Sensor On	23230	782	21.23	22.00	1.194	-0.02	1.000	1.194
	LTE Band 26	15M	QPSK	1	0	Front	5	-	P-Sensor On	26865	831.5	20.25	21.00	1.189	0.07	0.667	0.793
	LTE Band 26	15M	QPSK	36	0	Front	5	-	P-Sensor On	26865	831.5	20.32	21.00	1.169	0.15	0.696	0.814
	LTE Band 26	15M	QPSK	75	0	Front	5	-	P-Sensor On	26865	831.5	20.31	21.00	1.172	-0.09	0.648	0.760
	LTE Band 26	15M	QPSK	1	0	Back	5	-	P-Sensor On	26865	831.5	20.25	21.00	1.189	0.17	0.987	1.173
	LTE Band 26	15M	QPSK	36	0	Back	5	-	P-Sensor On	26865	831.5	20.32	21.00	1.169	0.04	1.130	1.322
55	LTE Band 26	15M	QPSK	75	0	Back	5	-	P-Sensor On	26865	831.5	20.31	21.00	1.172	0.08	1.180	1.383
	LTE Band 26	15M	QPSK	75	0	Back	5	Headset	P-Sensor On	26865	831.5	20.31	21.00	1.172	-0.01	1.070	1.254
	LTE Band 5	10M	QPSK	1	0	Back	5	-	P-Sensor On	20476(PCC) + 20575(SCC)	831.6(PCC) + 841.5(SCC)	20.89	21.00	1.026	-0.19	0.950	0.974
	LTE Band 66	20M	QPSK	1	0	Front	5	-	P-Sensor On	132572	1770	16.26	16.50	1.057	0.16	0.903	0.954
	LTE Band 66	20M	QPSK	1	0	Front	5	-	P-Sensor On	132072	1720	16.25	16.50	1.059	0.15	0.939	0.995
	LTE Band 66	20M	QPSK	1	0	Front	5	-	P-Sensor On	132322	1745	16.13	16.50	1.089	0.01	0.892	0.971
	LTE Band 66	20M	QPSK	50	24	Front	5	-	P-Sensor On	132572	1770	16.22	16.50	1.067	0.16	0.875	0.933
	LTE Band 66	20M	QPSK	50	24	Front	5	-	P-Sensor On	132072	1720	16.20	16.50	1.072	0.13	0.893	0.957
	LTE Band 66	20M	QPSK	50	24	Front	5	-	P-Sensor On	132322	1745	16.05	16.50	1.109	-0.08	0.839	0.931
	LTE Band 66	20M	QPSK	100	0	Front	5	-	P-Sensor On	132572	1770	16.12	16.50	1.091	-0.07	0.899	0.981
	LTE Band 66	20M	QPSK	1	0	Back	5	-	P-Sensor On	132572	1770	16.26	16.50	1.057	-0.09	1.190	1.258
	LTE Band 66	20M	QPSK	1	0	Back	5	-	P-Sensor On	132072	1720	16.25	16.50	1.059	-0.03	1.160	1.229
	LTE Band 66	20M	QPSK	1	0	Back	5	-	P-Sensor On	132322	1745	16.13	16.50	1.089	-0.12	1.160	1.263
	LTE Band 66	20M	QPSK	50	24	Back	5	-	P-Sensor On	132572	1770	16.22	16.50	1.067	0.02	1.140	1.216
56	LTE Band 66	20M	QPSK	50	24	Back	5	-	P-Sensor On	132072	1720	16.20	16.50	1.072	0.04	1.240	1.329
	LTE Band 66	20M	QPSK	50	24	Back	5	-	P-Sensor On	132322	1745	16.05	16.50	1.109	-0.06	1.150	1.276
	LTE Band 66	20M	QPSK	100	0	Back	5	-	P-Sensor On	132572	1770	16.12	16.50	1.091	0.07	1.190	1.299
	LTE Band 66	20M	QPSK	50	24	Back	5	Headset	P-Sensor On	132072	1720	16.22	16.50	1.067	-0.01	0.556	0.593



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Headset	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 25	20M	QPSK	1	0	Front	5	-	P-Sensor On	26340	1880	17.84	18.00	1.038	0.15	0.950	0.986
	LTE Band 25	20M	QPSK	1	0	Front	5	-	P-Sensor On	26140	1860	17.71	18.00	1.069	0.19	0.878	0.939
	LTE Band 25	20M	QPSK	1	0	Front	5	-	P-Sensor On	26590	1905	17.57	18.00	1.104	0.03	0.843	0.931
	LTE Band 25	20M	QPSK	50	0	Front	5	-	P-Sensor On	26340	1880	17.70	18.00	1.072	0.17	0.894	0.958
	LTE Band 25	20M	QPSK	50	0	Front	5	-	P-Sensor On	26140	1860	17.54	18.00	1.112	0.03	0.824	0.916
	LTE Band 25	20M	QPSK	50	0	Front	5	-	P-Sensor On	26590	1905	17.53	18.00	1.114	0.01	0.850	0.947
	LTE Band 25	20M	QPSK	100	0	Front	5	-	P-Sensor On	26340	1880	17.59	18.00	1.099	0.14	0.870	0.956
	LTE Band 25	20M	QPSK	1	0	Back	5	-	P-Sensor On	26340	1880	17.84	18.00	1.038	-0.07	1.250	1.297
	LTE Band 25	20M	QPSK	1	0	Back	5	-	P-Sensor On	26140	1860	17.71	18.00	1.069	0.05	1.210	1.294
	LTE Band 25	20M	QPSK	1	0	Back	5	-	P-Sensor On	26590	1905	17.57	18.00	1.104	0.01	1.150	1.270
57	LTE Band 25	20M	QPSK	50	0	Back	5	-	P-Sensor On	26340	1880	17.70	18.00	1.072	0.15	1.240	1.329
	LTE Band 25	20M	QPSK	50	0	Back	5	-	P-Sensor On	26140	1860	17.54	18.00	1.112	-0.03	1.150	1.278
	LTE Band 25	20M	QPSK	50	0	Back	5	-	P-Sensor On	26590	1905	17.53	18.00	1.114	0.09	1.170	1.304
	LTE Band 25	20M	QPSK	100	0	Back	5	-	P-Sensor On	26340	1880	17.59	18.00	1.099	0.05	1.170	1.286
	LTE Band 25	20M	QPSK	50	0	Back	5	Headset	P-Sensor On	26340	1880	17.70	18.00	1.072	0.12	0.669	0.717
	LTE Band 30	10M	QPSK	1	0	Front	5	-	P-Sensor On	27710	2310	16.39	17.00	1.151	0.01	0.349	0.402
	LTE Band 30	10M	QPSK	25	0	Front	5	-	P-Sensor On	27710	2310	16.39	17.00	1.151	-0.18	0.360	0.414
58	LTE Band 30	10M	QPSK	1	0	Back	5	-	P-Sensor On	27710	2310	16.39	17.00	1.151	0.13	0.954	1.098
	LTE Band 30	10M	QPSK	25	0	Back	5	-	P-Sensor On	27710	2310	16.39	17.00	1.151	0.02	0.940	1.082
	LTE Band 30	10M	QPSK	50	0	Back	5	-	P-Sensor On	27710	2310	16.40	17.00	1.148	-0.02	0.926	1.063
	LTE Band 7	20M	QPSK	1	0	Front	5	-	P-Sensor On	21350	2560	19.61	20.00	1.094	0.06	0.591	0.647
	LTE Band 7	20M	QPSK	50	0	Front	5	-	P-Sensor On	21350	2560	19.64	20.00	1.086	0.07	0.496	0.539
	LTE Band 7	20M	QPSK	1	0	Back	5	-	P-Sensor On	21350	2560	19.61	20.00	1.094	0.08	1.160	1.269
	LTE Band 7	20M	QPSK	1	0	Back	5	-	P-Sensor On	20850	2510	19.51	20.00	1.119	0.07	1.090	1.220
	LTE Band 7	20M	QPSK	1	0	Back	5	-	P-Sensor On	21100	2535	19.52	20.00	1.117	-0.09	1.120	1.251
	LTE Band 7	20M	QPSK	50	0	Back	5	-	P-Sensor On	21350	2560	19.64	20.00	1.086	-0.13	1.140	1.239
	LTE Band 7	20M	QPSK	50	0	Back	5	-	P-Sensor On	20850	2510	19.60	20.00	1.096	0.18	1.140	1.250
	LTE Band 7	20M	QPSK	50	0	Back	5	-	P-Sensor On	21100	2535	19.52	20.00	1.117	0.08	1.120	1.251
	LTE Band 7	20M	QPSK	100	0	Back	5	-	P-Sensor On	21350	2560	19.61	20.00	1.094	-0.15	1.180	1.291
	LTE Band 7	20M	QPSK	100	0	Back	5	Headset	P-Sensor On	21350	2560	19.61	20.00	1.094	0	1.130	1.236
	LTE Band 7	20M	QPSK	100	0	Back	5	Headset	P-Sensor On	20850	2510	19.58	20.00	1.102	0.02	1.170	1.289
59	LTE Band 7	20M	QPSK	100	0	Back	5	Headset	P-Sensor On	21100	2535	19.52	20.00	1.117	0.01	1.160	1.296



<TDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Headset	Power Mode	Power Class	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	LTE Band 41	20M	QPSK	1	0	Front	5	-	P-Sensor On	3	40185	2549.5	22.04	22.50	1.112	62.9	1.006	-0.1	0.471	0.527
	LTE Band 41	20M	QPSK	50	0	Front	5	-	P-Sensor On	3	40185	2549.5	21.49	22.00	1.125	62.9	1.006	-0.01	0.415	0.470
60	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	40185	2549.5	22.04	22.50	1.112	62.9	1.006	0.13	1.250	1.398
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	39750	2506	21.85	22.50	1.161	62.9	1.006	-0.14	1.070	1.250
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	40620	2593	22.03	22.50	1.114	62.9	1.006	0.02	1.150	1.289
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	41055	2636.5	21.95	22.50	1.135	62.9	1.006	-0.1	1.130	1.290
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	41490	2680	22.00	22.50	1.122	62.9	1.006	-0.02	1.110	1.253
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	40185	2549.5	21.49	22.00	1.125	62.9	1.006	0.06	0.992	1.122
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	39750	2506	21.35	22.00	1.161	62.9	1.006	0.02	1.040	1.215
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	40620	2593	21.44	22.00	1.138	62.9	1.006	0.12	1.110	1.270
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	41055	2636.5	21.48	22.00	1.127	62.9	1.006	0.07	1.100	1.247
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	41490	2680	21.49	22.00	1.125	62.9	1.006	-0.03	1.130	1.278
	LTE Band 41	20M	QPSK	100	0	Back	5	-	P-Sensor On	3	40185	2549.5	21.48	22.00	1.127	62.9	1.006	0.02	1.090	1.236
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	40185	2549.5	22.04	22.50	1.112	62.9	1.006	0.16	1.200	1.342
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	39750	2506	21.85	22.50	1.161	62.9	1.006	-0.19	1.160	1.355
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	40620	2593	22.03	22.50	1.114	62.9	1.006	-0.04	1.200	1.345
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	41055	2636.5	21.95	22.50	1.135	62.9	1.006	-0.11	1.200	1.370
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	41490	2680	22.00	22.50	1.122	62.9	1.006	0.06	1.150	1.298
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	39750(PCC) + 39948(SCC)	2506(PCC) + 2525.8(SCC)	21.76	22.50	1.186	62.9	1.006	0.08	1.110	1.324
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	40185(PCC) + 39987(SCC)	2549.5(PCC) + 2529.7(SCC)	22.01	22.50	1.119	62.9	1.006	0.09	1.200	1.351
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	40620(PCC) + 40422(SCC)	2593(PCC) + 2573.2(SCC)	22.18	22.50	1.076	62.9	1.006	0.04	1.230	1.332
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	21.98	22.50	1.127	62.9	1.006	0.03	1.180	1.338
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	41490(PCC) + 41292(SCC)	2680(PCC) + 2660.2(SCC)	22.05	22.50	1.109	62.9	1.006	0.04	1.180	1.317
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	40185	2549.5	22.03	22.50	1.114	42.9	1.009	-0.18	0.737	0.829
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	39750	2506	21.82	22.50	1.169	42.9	1.009	0.04	0.726	0.857
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	40620	2593	22.02	22.50	1.117	42.9	1.009	-0.09	0.762	0.859
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	41055	2636.5	21.92	22.50	1.143	42.9	1.009	-0.06	0.739	0.852
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	41490	2680	22.01	22.50	1.119	42.9	1.009	-0.05	0.803	0.907
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	2	40185	2549.5	22.10	22.50	1.096	42.9	1.009	-0.08	0.786	0.870
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	2	39790	2510	21.85	22.50	1.161	42.9	1.009	0.01	0.779	0.913
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	2	39750	2506	21.86	22.50	1.159	42.9	1.009	-0.06	0.783	0.915
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	2	40620	2593	22.06	22.50	1.107	42.9	1.009	0.08	0.826	0.922
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	2	41055	2636.5	22.02	22.50	1.117	42.9	1.009	-0.01	0.766	0.863
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	2	41490	2680	22.09	22.50	1.099	42.9	1.009	-0.16	0.776	0.861
	LTE Band 41	20M	QPSK	100	0	Back	5	-	P-Sensor On	2	40185	2549.5	22.09	22.50	1.099	42.9	1.009	0.02	0.779	0.864



<WLAN 2.4GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Headset	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Max Area Scan SAR	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN2.4GHz	802.11b 1Mbps	Front	5	-	Full	6	2437	19.91	20.00	1.021	100	1.000	0.01	0.639	0.383	0.391
61	WLAN2.4GHz	802.11b 1Mbps	Back	5	-	Full	6	2437	19.91	20.00	1.021	100	1.000	0.18	1.071	0.711	0.726
	WLAN2.4GHz	802.11b 1Mbps	Back	5	-	Full	1	2412	16.88	18.00	1.294	100	1.000	0		0.269	0.348
	WLAN2.4GHz	802.11b 1Mbps	Back	5	-	Full	11	2462	17.98	19.00	1.265	100	1.000	0.04		0.435	0.550

<WLAN 5GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Headset	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Max Area Scan SAR	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	WLAN5.3GHz	802.11a 6Mbps	Front	5	-	Full	56	5280	19.03	20.00	1.250	98.28	1.018	0.01	1.013	0.360	0.458
	WLAN5.3GHz	802.11a 6Mbps	Back	5	-	Full	56	5280	19.03	20.00	1.250	98.28	1.018	-0.02	1.764	0.797	1.014
	WLAN5.3GHz	802.11a 6Mbps	Back	5	-	Full	52	5260	18.81	20.00	1.315	98.28	1.018	-0.04		0.620	0.830
62	WLAN5.3GHz	802.11a 6Mbps	Back	5	-	Full	64	5320	18.40	20.00	1.445	98.28	1.018	0.01		0.712	1.048
	WLAN5.5GHz	802.11n-HT40 MCS0	Front	5	-	P-Sensor On	110	5550	16.20	17.50	1.349	96.32	1.038	-0.03	0.835	0.328	0.459
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	5	-	P-Sensor On	110	5550	16.20	17.50	1.349	96.32	1.038	0.01	1.483	0.766	1.073
63	WLAN5.5GHz	802.11n-HT40 MCS0	Back	5	-	P-Sensor On	102	5510	16.07	17.50	1.390	96.32	1.038	0.01		0.804	1.160
	WLAN5.5GHz	802.11n-HT40 MCS0	Back	5	-	P-Sensor On	134	5670	14.95	16.50	1.429	96.32	1.038	0.03		0.569	0.844
	WLAN 5.8GHz	802.11a 6Mbps	Front	5	-	P-Sensor On	165	5825	16.63	17.50	1.222	98.28	1.018	-0.01	0.691	0.244	0.303
	WLAN 5.8GHz	802.11a 6Mbps	Back	5	-	P-Sensor On	165	5825	16.63	17.50	1.222	98.28	1.018	-0.05	1.605	0.683	0.850
64	WLAN 5.8GHz	802.11a 6Mbps	Back	5	-	P-Sensor On	149	5745	15.84	17.50	1.466	98.28	1.018	0.02		0.603	0.900
	WLAN 5.8GHz	802.11a 6Mbps	Back	5	-	P-Sensor On	157	5785	16.30	17.50	1.318	98.28	1.018	0.03		0.590	0.792

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Headset	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front	5	-	Full	0	2402	9.43	10.00	1.140	76.9	1.083	0.08	0.035	0.044
	Bluetooth	1Mbps	Back	5	-	Full	0	2402	9.43	10.00	1.140	76.9	1.083	-0.08	0.038	0.047
	Bluetooth	1Mbps	Back	5	-	Full	39	2441	9.09	10.00	1.233	76.9	1.083	0.05	0.046	0.061
65	Bluetooth	1Mbps	Back	5	-	Full	78	2480	8.35	10.00	1.462	76.9	1.083	-0.06	0.047	0.075

15.4 Product specific 10g SAR
<GSM SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	GSM850	GPRS 2 Tx slots	Front	0	Full	128	824.2	32.03	33.00	1.250	0.07	1.930	2.413
	GSM850	GPRS 2 Tx slots	Front	0	Full	189	836.4	31.84	33.00	1.306	0.08	1.890	2.469
	GSM850	GPRS 2 Tx slots	Front	0	Full	251	848.8	31.86	33.00	1.300	0.01	1.840	2.392
	GSM850	GPRS 2 Tx slots	Back	0	Full	128	824.2	32.03	33.00	1.250	0.05	2.130	2.663
	GSM850	GPRS 2 Tx slots	Back	0	Full	189	836.4	31.84	33.00	1.306	-0.02	1.940	2.534
66	GSM850	GPRS 2 Tx slots	Back	0	Full	251	848.8	31.86	33.00	1.300	0.14	2.330	3.029
	GSM850	GPRS 2 Tx slots	Bottom Side	0	Full	128	824.2	32.03	33.00	1.250	0.06	0.987	1.234
	GSM1900	GPRS 2 Tx slots	Front	0	Handheld On	661	1880	26.79	28.00	1.321	0.06	1.640	2.167
	GSM1900	GPRS 2 Tx slots	Front	0	Handheld On	512	1850.2	26.73	28.00	1.340	0.02	1.680	2.251
	GSM1900	GPRS 2 Tx slots	Front	0	Handheld On	810	1909.8	26.75	28.00	1.334	0.08	1.590	2.120
	GSM1900	GPRS 2 Tx slots	Back	0	Handheld On	661	1880	26.79	28.00	1.321	-0.02	2.100	2.775
	GSM1900	GPRS 2 Tx slots	Back	0	Handheld On	512	1850.2	26.73	28.00	1.340	-0.05	2.240	3.001
	GSM1900	GPRS 2 Tx slots	Back	0	Handheld On	810	1909.8	26.75	28.00	1.334	-0.07	1.670	2.227
67	GSM1900	GPRS 2 Tx slots	Bottom Side	0	Handheld On	512	1850.2	26.73	28.00	1.340	0.09	2.630	3.523
	GSM1900	GPRS 2 Tx slots	Bottom Side	0	Handheld On	661	1880	26.79	28.00	1.321	0.03	2.330	3.079
	GSM1900	GPRS 2 Tx slots	Bottom Side	0	Handheld On	810	1909.8	26.75	28.00	1.334	0.09	2.250	3.000



<WCDMA SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	WCDMA Band V	RMC 12.2Kbps	Front	0	Full	4132	826.4	23.95	24.00	1.012	0.06	2.480	2.509
	WCDMA Band V	RMC 12.2Kbps	Front	0	Full	4182	836.4	23.90	24.00	1.023	0.09	2.560	2.620
	WCDMA Band V	RMC 12.2Kbps	Front	0	Full	4233	846.6	23.88	24.00	1.028	0.11	2.720	2.796
	WCDMA Band V	RMC 12.2Kbps	Back	0	Full	4132	826.4	23.95	24.00	1.012	0.06	3.050	3.085
68	WCDMA Band V	RMC 12.2Kbps	Back	0	Full	4182	836.4	23.90	24.00	1.023	0.11	3.160	3.234
	WCDMA Band V	RMC 12.2Kbps	Back	0	Full	4233	846.6	23.88	24.00	1.028	-0.01	2.920	3.002
	WCDMA Band V	RMC 12.2Kbps	Bottom Side	0	Full	4132	826.4	23.95	24.00	1.012	0.09	1.370	1.386
	WCDMA Band IV	RMC 12.2Kbps	Front	0	Handheld On	1513	1752.6	18.99	19.00	1.002	0.04	2.500	2.506
	WCDMA Band IV	RMC 12.2Kbps	Front	0	Handheld On	1312	1712.4	18.97	19.00	1.007	0.06	2.560	2.578
	WCDMA Band IV	RMC 12.2Kbps	Front	0	Handheld On	1413	1732.6	18.97	19.00	1.007	0.04	2.580	2.598
	WCDMA Band IV	RMC 12.2Kbps	Back	0	Handheld On	1513	1752.6	18.99	19.00	1.002	0.06	2.910	2.917
	WCDMA Band IV	RMC 12.2Kbps	Back	0	Handheld On	1312	1712.4	18.97	19.00	1.007	0.06	2.870	2.890
	WCDMA Band IV	RMC 12.2Kbps	Back	0	Handheld On	1413	1732.6	18.97	19.00	1.007	0.04	2.530	2.548
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Handheld On	1513	1752.6	18.99	19.00	1.002	0.05	2.840	2.847
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Handheld On	1312	1712.4	18.97	19.00	1.007	0.08	2.980	3.001
69	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Handheld On	1413	1732.6	18.97	19.00	1.007	0.08	3.060	3.081
	WCDMA Band II	RMC 12.2Kbps	Front	0	Handheld On	9262	1852.4	20.44	20.50	1.014	0.06	2.650	2.687
	WCDMA Band II	RMC 12.2Kbps	Front	0	Handheld On	9400	1880	20.39	20.50	1.026	-0.03	2.420	2.482
	WCDMA Band II	RMC 12.2Kbps	Front	0	Handheld On	9538	1907.6	20.38	20.50	1.028	0.07	2.310	2.375
	WCDMA Band II	RMC 12.2Kbps	Back	0	Handheld On	9262	1852.4	20.44	20.50	1.014	0.14	3.080	3.123
	WCDMA Band II	RMC 12.2Kbps	Back	0	Handheld On	9400	1880	20.39	20.50	1.026	0.05	2.080	2.133
	WCDMA Band II	RMC 12.2Kbps	Back	0	Handheld On	9538	1907.6	20.38	20.50	1.028	0.07	1.900	1.953
70	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Handheld On	9262	1852.4	20.44	20.50	1.014	0.02	3.250	3.295
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Handheld On	9400	1880	20.39	20.50	1.026	0.06	3.060	3.138
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Handheld On	9538	1907.6	20.38	20.50	1.028	0.08	3.020	3.105



<CDMA2000 SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	CDMA2000 BC10	RTAP 153.6Kbps	Front	0	Full	476	817.9	25.23	25.50	1.064	-0.05	2.470	2.628
	CDMA2000 BC10	RTAP 153.6Kbps	Front	0	Full	580	820.5	25.20	25.50	1.072	-0.16	2.540	2.722
	CDMA2000 BC10	RTAP 153.6Kbps	Front	0	Full	684	823.1	25.17	25.50	1.079	-0.06	2.580	2.784
	CDMA2000 BC10	RTAP 153.6Kbps	Back	0	Full	476	817.9	25.23	25.50	1.064	0.06	2.980	3.171
71	CDMA2000 BC10	RTAP 153.6Kbps	Back	0	Full	580	820.5	25.20	25.50	1.072	-0.09	3.020	3.236
	CDMA2000 BC10	RTAP 153.6Kbps	Back	0	Full	684	823.1	25.17	25.50	1.079	-0.03	2.580	2.784
	CDMA2000 BC10	RTAP 153.6Kbps	Bottom Side	0	Full	476	817.9	25.23	25.50	1.064	0.05	1.260	1.341
	CDMA2000 BC0	RTAP 153.6Kbps	Front	0	Full	1013	824.7	25.04	25.50	1.112	-0.03	2.490	2.768
	CDMA2000 BC0	RTAP 153.6Kbps	Front	0	Full	384	836.52	25.00	25.50	1.122	-0.17	2.640	2.962
	CDMA2000 BC0	RTAP 153.6Kbps	Front	0	Full	777	848.31	24.97	25.50	1.130	-0.01	2.630	2.971
	CDMA2000 BC0	RTAP 153.6Kbps	Back	0	Full	1013	824.7	25.04	25.50	1.112	-0.12	2.940	3.268
72	CDMA2000 BC0	RTAP 153.6Kbps	Back	0	Full	384	836.52	25.00	25.50	1.122	0.04	3.050	3.422
	CDMA2000 BC0	RTAP 153.6Kbps	Back	0	Full	777	848.31	24.97	25.50	1.130	-0.01	2.480	2.802
	CDMA2000 BC0	RTAP 153.6Kbps	Bottom Side	0	Full	1013	824.7	25.04	25.50	1.112	-0.03	1.210	1.345
	CDMA2000 BC1	RTAP 153.6Kbps	Front	0	Handheld On	600	1880	21.50	22.00	1.122	0.01	2.280	2.558
	CDMA2000 BC1	RTAP 153.6Kbps	Front	0	Handheld On	25	1851.25	21.39	22.00	1.151	0.06	2.350	2.704
	CDMA2000 BC1	RTAP 153.6Kbps	Front	0	Handheld On	1175	1908.75	21.49	22.00	1.125	0.02	2.200	2.474
	CDMA2000 BC1	RTAP 153.6Kbps	Back	0	Handheld On	600	1880	21.50	22.00	1.122	0.15	2.740	3.074
	CDMA2000 BC1	RTAP 153.6Kbps	Back	0	Handheld On	25	1851.25	21.39	22.00	1.151	-0.07	2.860	3.291
	CDMA2000 BC1	RTAP 153.6Kbps	Back	0	Handheld On	1175	1908.75	21.49	22.00	1.125	0.02	2.460	2.767
	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	0	Handheld On	600	1880	21.50	22.00	1.122	0.08	3.130	3.512
	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	0	Handheld On	25	1851.25	21.39	22.00	1.151	0.06	3.010	3.464
73	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	0	Handheld On	1175	1908.75	21.49	22.00	1.125	0.01	3.160	3.554



<FDD LTE SAR>

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
74	LTE Band 12	10M	QPSK	1	0	Back	0	Full	23095	707.5	22.68	24.00	1.355	0.12	2.180	2.954
	LTE Band 12	10M	QPSK	25	0	Back	0	Full	23095	707.5	21.82	23.00	1.312	-0.07	1.210	1.588
	LTE Band 12	10M	QPSK	50	0	Back	0	Full	23095	707.5	21.79	23.00	1.321	0.01	1.220	1.612
	LTE Band 13	10M	QPSK	1	0	Front	0	Full	23230	782	22.85	24.00	1.303	-0.17	1.490	1.942
	LTE Band 13	10M	QPSK	25	0	Front	0	Full	23230	782	21.78	23.00	1.324	0.01	0.991	1.312
75	LTE Band 13	10M	QPSK	1	0	Back	0	Full	23230	782	22.85	24.00	1.303	0.08	2.360	3.075
	LTE Band 13	10M	QPSK	25	0	Back	0	Full	23230	782	21.78	23.00	1.324	-0.01	1.550	2.053
	LTE Band 13	10M	QPSK	50	0	Back	0	Full	23230	782	21.75	23.00	1.334	-0.02	1.540	2.054
	LTE Band 26	15M	QPSK	1	0	Front	0	Full	26865	831.5	23.05	24.00	1.245	0.01	1.930	2.402
	LTE Band 26	15M	QPSK	36	0	Front	0	Full	26865	831.5	21.99	23.00	1.262	0.03	1.430	1.804
	LTE Band 26	15M	QPSK	75	0	Front	0	Full	26865	831.5	21.95	23.00	1.274	-0.01	1.430	1.821
76	LTE Band 26	15M	QPSK	1	0	Back	0	Full	26865	831.5	23.05	24.00	1.245	0.19	2.740	3.410
	LTE Band 26	15M	QPSK	36	0	Back	0	Full	26865	831.5	21.99	23.00	1.262	0.06	1.420	1.792
	LTE Band 26	15M	QPSK	75	0	Back	0	Full	26865	831.5	21.95	23.00	1.274	-0.08	1.410	1.796
	LTE Band 26	15M	QPSK	1	0	Bottom Side	0	Full	26865	831.5	23.05	24.00	1.245	0.08	0.931	1.159
	LTE Band 26	15M	QPSK	36	0	Bottom Side	0	Full	26865	831.5	21.99	23.00	1.262	0.02	0.673	0.849
	LTE Band 5	10M	QPSK	1	0	Back	0	Full	20476(PCC) + 20575(SCC)	831.6(PCC) + 841.5(SCC)	23.50	24.00	1.122	0.09	1.500	1.683
	LTE Band 66	20M	QPSK	1	0	Front	0	Handheld On	132572	1770	18.68	19.00	1.076	0.04	1.710	1.841
	LTE Band 66	20M	QPSK	50	24	Front	0	Handheld On	132572	1770	18.54	19.00	1.112	0.06	1.730	1.923
	LTE Band 66	20M	QPSK	1	0	Back	0	Handheld On	132572	1770	18.68	19.00	1.076	0.09	2.590	2.788
	LTE Band 66	20M	QPSK	1	0	Back	0	Handheld On	132072	1720	18.68	19.00	1.076	-0.04	2.450	2.637
	LTE Band 66	20M	QPSK	1	0	Back	0	Handheld On	132322	1745	18.53	19.00	1.114	0.05	2.560	2.853
	LTE Band 66	20M	QPSK	50	24	Back	0	Handheld On	132072	1720	18.63	19.00	1.089	0.06	2.680	2.918
	LTE Band 66	20M	QPSK	50	24	Back	0	Handheld On	132572	1770	18.54	19.00	1.112	0.07	2.610	2.902
77	LTE Band 66	20M	QPSK	50	24	Back	0	Handheld On	132322	1745	18.49	19.00	1.125	0.03	2.600	2.924
	LTE Band 66	20M	QPSK	100	0	Back	0	Handheld On	132572	1770	18.57	19.00	1.104	0.05	2.610	2.882
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0	Handheld On	132572	1770	18.68	19.00	1.076	0.06	2.530	2.723
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0	Handheld On	132072	1720	18.68	19.00	1.076	0.08	2.500	2.691
	LTE Band 66	20M	QPSK	1	0	Bottom Side	0	Handheld On	132322	1745	18.53	19.00	1.114	0.03	2.500	2.786
	LTE Band 66	20M	QPSK	50	24	Bottom Side	0	Handheld On	132072	1720	18.63	19.00	1.089	0.06	2.470	2.690
	LTE Band 66	20M	QPSK	50	24	Bottom Side	0	Handheld On	132572	1770	18.54	19.00	1.112	0.02	2.530	2.813
	LTE Band 66	20M	QPSK	50	24	Bottom Side	0	Handheld On	132322	1745	18.49	19.00	1.125	0.04	2.510	2.823
	LTE Band 66	20M	QPSK	100	0	Bottom Side	0	Handheld On	132572	1770	18.57	19.00	1.104	0.08	2.500	2.760



FCC SAR Test Report

Report No. : FA8D2801

Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	LTE Band 25	20M	QPSK	1	0	Front	0	Handheld On	26340	1880	20.30	20.50	1.047	0.03	2.420	2.534
	LTE Band 25	20M	QPSK	1	0	Front	0	Handheld On	26140	1860	20.20	20.50	1.072	0.08	2.430	2.604
	LTE Band 25	20M	QPSK	1	0	Front	0	Handheld On	26590	1905	19.97	20.50	1.130	0.04	2.270	2.565
	LTE Band 25	20M	QPSK	50	0	Front	0	Handheld On	26340	1880	20.14	20.50	1.086	-0.01	2.450	2.662
	LTE Band 25	20M	QPSK	50	0	Front	0	Handheld On	26140	1860	20.03	20.50	1.114	-0.04	2.420	2.697
	LTE Band 25	20M	QPSK	50	0	Front	0	Handheld On	26590	1905	19.90	20.50	1.148	0.04	2.250	2.583
	LTE Band 25	20M	QPSK	100	0	Front	0	Handheld On	26340	1880	20.07	20.50	1.104	0.03	2.290	2.528
	LTE Band 25	20M	QPSK	1	0	Back	0	Handheld On	26340	1880	20.30	20.50	1.047	0.08	2.890	3.026
	LTE Band 25	20M	QPSK	1	0	Back	0	Handheld On	26140	1860	20.20	20.50	1.072	0.02	2.890	3.097
	LTE Band 25	20M	QPSK	1	0	Back	0	Handheld On	26590	1905	19.97	20.50	1.130	0.03	2.620	2.960
	LTE Band 25	20M	QPSK	50	0	Back	0	Handheld On	26340	1880	20.14	20.50	1.086	0.03	2.850	3.096
	LTE Band 25	20M	QPSK	50	0	Back	0	Handheld On	26140	1860	20.03	20.50	1.114	0.16	2.820	3.142
	LTE Band 25	20M	QPSK	50	0	Back	0	Handheld On	26590	1905	19.90	20.50	1.148	0.02	2.610	2.997
	LTE Band 25	20M	QPSK	100	0	Back	0	Handheld On	26340	1880	20.07	20.50	1.104	0.04	2.800	3.091
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0	Handheld On	26340	1880	20.30	20.50	1.047	0.09	3.010	3.152
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0	Handheld On	26140	1860	20.20	20.50	1.072	-0.07	2.860	3.065
	LTE Band 25	20M	QPSK	1	0	Bottom Side	0	Handheld On	26590	1905	19.97	20.50	1.130	0.03	2.850	3.220
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0	Handheld On	26340	1880	20.14	20.50	1.086	0.02	2.910	3.161
	LTE Band 25	20M	QPSK	50	0	Bottom Side	0	Handheld On	26140	1860	20.03	20.50	1.114	0.07	2.800	3.120
78	LTE Band 25	20M	QPSK	50	0	Bottom Side	0	Handheld On	26590	1905	19.90	20.50	1.148	0.01	2.830	3.249
	LTE Band 25	20M	QPSK	100	0	Bottom Side	0	Handheld On	26340	1880	20.07	20.50	1.104	0.01	2.890	3.191
	LTE Band 30	10M	QPSK	1	0	Front	0	Handheld On	27710	2310	19.67	20.00	1.079	0.09	1.310	1.413
	LTE Band 30	10M	QPSK	25	0	Front	0	Handheld On	27710	2310	19.66	20.00	1.081	-0.07	1.440	1.557
	LTE Band 30	10M	QPSK	1	0	Back	0	Handheld On	27710	2310	19.67	20.00	1.079	0.04	2.490	2.687
79	LTE Band 30	10M	QPSK	25	0	Back	0	Handheld On	27710	2310	19.66	20.00	1.081	0.09	2.710	2.931
	LTE Band 30	10M	QPSK	50	0	Back	0	Handheld On	27710	2310	19.63	20.00	1.089	0.04	2.680	2.918
	LTE Band 30	10M	QPSK	1	0	Bottom Side	0	Handheld On	27710	2310	19.67	20.00	1.079	0.13	1.430	1.543
	LTE Band 30	10M	QPSK	25	0	Bottom Side	0	Handheld On	27710	2310	19.66	20.00	1.081	0.06	1.510	1.633
	LTE Band 7	20M	QPSK	1	0	Front	0	Handheld On	21350	2560	20.53	21.00	1.114	0.02	1.040	1.159
	LTE Band 7	20M	QPSK	50	0	Front	0	Handheld On	21350	2560	20.53	21.00	1.114	0.08	1.040	1.159
	LTE Band 7	20M	QPSK	1	0	Back	0	Handheld On	21350	2560	20.53	21.00	1.114	0.04	2.090	2.329
80	LTE Band 7	20M	QPSK	1	0	Back	0	Handheld On	20850	2510	20.44	21.00	1.138	-0.12	2.120	2.412
	LTE Band 7	20M	QPSK	1	0	Back	0	Handheld On	21100	2535	20.52	21.00	1.117	-0.07	2.070	2.312
	LTE Band 7	20M	QPSK	50	0	Back	0	Handheld On	21350	2560	20.53	21.00	1.114	0.02	2.070	2.307
	LTE Band 7	20M	QPSK	50	0	Back	0	Handheld On	20850	2510	20.49	21.00	1.125	0.03	2.120	2.384
	LTE Band 7	20M	QPSK	50	0	Back	0	Handheld On	21100	2535	20.49	21.00	1.125	0.1	2.050	2.305
	LTE Band 7	20M	QPSK	100	0	Back	0	Handheld On	21350	2560	20.55	21.00	1.109	-0.05	2.040	2.263



Plot No.	Band	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Class	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	40185	2549.5	23.50	24.00	1.122	62.9	1.006	0.19	2.450	2.765
	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	39750	2506	23.43	24.00	1.140	62.9	1.006	0.18	2.470	2.833
	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	40620	2593	23.46	24.00	1.132	62.9	1.006	-0.08	2.560	2.916
	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	41055	2636.5	23.35	24.00	1.161	62.9	1.006	-0.11	2.600	3.038
81	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	41490	2680	23.37	24.00	1.156	62.9	1.006	-0.01	2.910	3.384
	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	41490(PCC) + 41292(SCC)	2680(PCC) + 2660.2(SCC)	23.47	24.00	1.130	62.9	1.006	-0.09	2.260	2.569
	LTE Band 41	20M	QPSK	1	0	Back	0	2	Handheld On	40185	2549.5	23.70	24.00	1.072	42.9	1.009	0.01	2.140	2.314
	LTE Band 41	20M	QPSK	1	0	Back	0	2	Handheld On	39750	2506	23.50	24.00	1.122	42.9	1.009	0.02	2.150	2.434
	LTE Band 41	20M	QPSK	1	0	Back	0	2	Handheld On	40620	2593	23.69	24.00	1.074	42.9	1.009	0.05	2.170	2.352
	LTE Band 41	20M	QPSK	1	0	Back	0	2	Handheld On	41055	2636.5	23.57	24.00	1.104	42.9	1.009	0.03	2.210	2.462
	LTE Band 41	20M	QPSK	1	0	Back	0	2	Handheld On	41490	2680	23.62	24.00	1.091	42.9	1.009	0.02	2.300	2.533
	LTE Band 41	20M	QPSK	50	0	Back	0	2	Handheld On	40185	2549.5	23.80	24.00	1.047	42.9	1.009	0.03	2.180	2.303
	LTE Band 41	20M	QPSK	50	0	Back	0	2	Handheld On	39790	2510	23.69	24.00	1.074	42.9	1.009	0.06	2.180	2.362
	LTE Band 41	20M	QPSK	50	0	Back	0	2	Handheld On	39750	2506	23.62	24.00	1.091	42.9	1.009	0.06	2.200	2.423
	LTE Band 41	20M	QPSK	50	0	Back	0	2	Handheld On	40620	2593	23.78	24.00	1.052	42.9	1.009	0.06	2.210	2.346
	LTE Band 41	20M	QPSK	50	0	Back	0	2	Handheld On	41055	2636.5	23.72	24.00	1.067	42.9	1.009	0.01	2.120	2.282
	LTE Band 41	20M	QPSK	50	0	Back	0	2	Handheld On	41490	2680	23.73	24.00	1.064	42.9	1.009	0.09	2.270	2.437
	LTE Band 41	20M	QPSK	100	0	Back	0	2	Handheld On	40185	2549.5	23.73	24.00	1.064	42.9	1.009	0.08	2.030	2.180

<WLAN 5GHz SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Max Area Scan SAR	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
82	WLAN5.3GHz	802.11a 6Mbps	Front	0	Full	56	5280	19.03	20.00	1.250	98.28	1.018	-0.09	8.105	0.880	1.120
	WLAN5.3GHz	802.11a 6Mbps	Back	0	Full	56	5280	19.03	20.00	1.250	98.28	1.018	0.01	5.509	0.520	0.662
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0	Full	56	5280	19.03	20.00	1.250	98.28	1.018		0.451		
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0	Full	56	5280	19.03	20.00	1.250	98.28	1.018		1.221		
	WLAN5.3GHz	802.11a 6Mbps	Front	0	Full	52	5260	18.81	20.00	1.315	98.28	1.018	0		0.566	0.758
	WLAN5.3GHz	802.11a 6Mbps	Front	0	Full	64	5320	18.40	20.00	1.445	98.28	1.018	0.02		0.681	1.002
83	WLAN 5.5GHz	802.11n-HT40 MCS0	Front	0	Full	110	5550	19.25	19.50	1.059	96.32	1.038	-0.08	10.668	1.210	1.330
	WLAN 5.5GHz	802.11n-HT40 MCS0	Back	0	Full	110	5550	19.25	19.50	1.059	96.32	1.038	0.12	11.676	0.892	0.981
	WLAN 5.5GHz	802.11n-HT40 MCS0	Right Side	0	Full	110	5550	19.25	19.50	1.059	96.32	1.038		0.474		
	WLAN 5.5GHz	802.11n-HT40 MCS0	Top Side	0	Full	110	5550	19.25	19.50	1.059	96.32	1.038		1.511		
	WLAN 5.5GHz	802.11n-HT40 MCS0	Front	0	Full	102	5510	19.09	19.50	1.099	96.32	1.038	0.03		0.733	0.836
	WLAN 5.5GHz	802.11n-HT40 MCS0	Front	0	Full	134	5670	14.95	16.50	1.429	96.32	1.038	0.05		0.589	0.874

15.5 TDD LTE Band 41(HPUE) Linearity Data Analysis

LTE Band 41(HPUE)-Linearity Data for Head		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	27.50
Reported 1g SAR (W/kg)	0.151	0.250
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	243.49
Linearity SAR (W/kg)	0.231	
% deviation from expected linearity		8.11%

LTE Band 41(HPUE)-Linearity Data for Hotspot		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	22.50
Reported 1g SAR (W/kg)	1.398	0.922
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	112.57	77.00
Linearity SAR (W/kg)	0.956	
% deviation from expected linearity		-3.59%

LTE Band 41(HPUE)-Linearity Data for Body-worn		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	22.50	22.50
Reported 1g SAR (W/kg)	1.398	0.922
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	112.57	77.00
Linearity SAR (W/kg)	0.956	
% deviation from expected linearity		-3.59%

LTE Band 41(HPUE)-Linearity Data for Product specific 10g SAR		
	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	24.00	24.00
Reported 1g SAR (W/kg)	3.384	2.533
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	108.76
Linearity SAR (W/kg)	2.315	
% deviation from expected linearity		9.43%

General Note:

1. The device can adjust uplink/downlink configuration automatically according to the transmitting power class level for LTE band 41.
2. According to TCB Workshop May 2017, Rel. 14 has introduced HPUE Power Class 2 for Band 41. HPUE Power Class 2 does not support uplink downlink configurations 0 and 6.
3. Power class 3 is expected to be the dominant use configuration; therefore, SAR should be tested as normally required.
4. Power class 2 is tested using the highest SAR test configuration in power class 3 of each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in power class 2.
5. Separate SAR testing for Power Class 2 is not required when
 - the reported SAR vs. output power can be linearly scaled with < 10%
 - discrepancy between power classes and all *reported* 1g SAR are < 1.4 W/kg (The same procedures should be adapted for measurements according to extremity limits by applying a factor of 2.5 for extremity exposure.)

**15.6 Repeated SAR Measurement****<1g SAR>**

No.	Band	Mode	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Class	Headset	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	LTE Band 13	-	10M	QPSK	1	0	Back	5	-	-	Hotspot On/ P-Sensor On	23230	782	21.23	22.00	1.194	-	-	0.04	1.040	1	1.242
2nd	LTE Band 13	-	10M	QPSK	1	0	Back	5	-	-	Hotspot On/ P-Sensor On	23230	782	21.23	22.00	1.194	-	-	-0.05	1.020	1.020	1.218
1st	WCDMA Band V	RMC 12.2Kbps	-	-	-	-	Back	5	-	-	Hotspot On/ P-Sensor On	4233	846.6	20.91	21.00	1.021	-	-	0.06	1.370	1	1.399
2nd	WCDMA Band V	RMC 12.2Kbps	-	-	-	-	Back	5	-	-	Hotspot On/ P-Sensor On	4233	846.6	20.91	21.00	1.021	-	-	-0.02	1.330	1.030	1.358
1st	WCDMA Band IV	RMC 12.2Kbps	-	-	-	-	Back	5	-	-	Hotspot On/ P-Sensor On	1413	1732.6	16.46	16.50	1.009	-	-	0.12	1.370	1	1.383
2nd	WCDMA Band IV	RMC 12.2Kbps	-	-	-	-	Back	5	-	-	Hotspot On/ P-Sensor On	1413	1732.6	16.46	16.50	1.009	-	-	0.08	1.340	1.022	1.352
1st	CDMA 2000 BC1	RTAP 153.6Kbps	-	-	-	-	Bottom Side	5	-	-	Hotspot On	1175	1908.75	17.64	18.00	1.086	-	-	0.06	1.320	1	1.434
2nd	CDMA 2000 BC1	RTAP 153.6Kbps	-	-	-	-	Bottom Side	5	-	-	Hotspot On	1175	1908.75	17.64	18.00	1.086	-	-	0.01	1.300	1.015	1.412
1st	LTE Band 30	-	10M	QPSK	1	0	Back	5	-	-	P-Sensor On	27710	2310	16.39	17.00	1.151			0.13	0.954	1	1.098
2nd	LTE Band 30	-	10M	QPSK	1	0	Back	5	-	-	P-Sensor On	27710	2310	16.39	17.00	1.151			0.01	0.948	1.006	1.091
1st	LTE Band 41	-	20M	QPSK	1	0	Back	5	3	-	P-Sensor On	40185	2549.5	22.04	22.50	1.112	62.9	1.006	0.13	1.250	1	1.398
2nd	LTE Band 41	-	20M	QPSK	1	0	Back	5	3	-	P-Sensor On	40185	2549.5	22.04	22.50	1.112	62.9	1.006	0.02	1.210	1.033	1.353
1st	WLAN 2.4GHz	802.11b 1Mbps	-	-	-	-	Left Cheek	0	-	-	Receiver on	6	2437	18.07	18.50	1.104	100	1.000	0.13	0.857	1	0.946
2nd	WLAN 2.4GHz	802.11b 1Mbps	-	-	-	-	Left Cheek	0	-	-	Receiver on	6	2437	18.07	18.50	1.104	100	1.000	0.01	0.838	1.023	0.925
1st	WLAN5.3GHz	802.11a 6Mbps	-	-	-	-	Left Cheek	0	-	-	Receiver on	64	5320	16.46	17.50	1.271	98.28	1.018	0.07	0.861	1	1.114
2nd	WLAN5.3GHz	802.11a 6Mbps	-	-	-	-	Left Cheek	0	-	-	Receiver on	64	5320	16.46	17.50	1.271	98.28	1.018	0.05	0.853	1.009	1.103
1st	WLAN5.5GHz	802.11n-HT40 MCS0	-	-	-	-	Left Cheek	0	-	-	Receiver on	102	5510	16.72	17.50	1.196	96.32	1.038	-0.09	0.917	1	1.138
2nd	WLAN5.5GHz	802.11n-HT40 MCS0	-	-	-	-	Left Cheek	0	-	-	Receiver on	102	5510	16.72	17.50	1.196	96.32	1.038	0.01	0.906	1.012	1.125

<10g SAR>

No.	Band	Mode	BW (MHz)	Modulation	RB Size	RB Offset	Test Position	Gap (mm)	Power Class	Power Mode	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	LTE Band 13	-	10M	QPSK	1	0	Back	0	-	-	23230	782	22.85	24.00	1.303	-	-	0.08	2.360	1	3.075
2nd	LTE Band 13	-	10M	QPSK	1	0	Back	0	-	-	23230	782	22.85	24.00	1.303	-	-	0.1	2.280	1.035	2.971
1st	WCDMA Band V	RMC 12.2Kbps	-	-	-	-	Back	0	-	Full	4182	836.4	23.90	24.00	1.023	-	-	0.11	3.160	1	3.234
2nd	WCDMA Band V	RMC 12.2Kbps	-	-	-	-	Back	0	-	Full	4182	836.4	23.90	24.00	1.023	-	-	0.11	3.130	1.010	3.203
1st	WCDMA Band IV	RMC 12.2Kbps	-	-	-	-	Bottom Side	0	-	Handheld On	1413	1732.6	18.97	19.00	1.007	-	-	0.08	3.060	1	3.081
2nd	WCDMA Band IV	RMC 12.2Kbps	-	-	-	-	Bottom Side	0	-	Handheld On	1413	1732.6	18.97	19.00	1.007	-	-	0.08	3.010	1.017	3.031
1st	WCDMA Band II	RMC 12.2Kbps	-	-	-	-	Bottom Side	0	-	Handheld On	9262	1852.4	20.44	20.50	1.014	-	-	0.02	3.250	1	3.295
2nd	WCDMA Band II	RMC 12.2Kbps	-	-	-	-	Bottom Side	0	-	Handheld On	9262	1852.4	20.44	20.50	1.014	-	-	-0.01	3.220	1.009	3.265
1st	LTE Band 30	-	10M	QPSK	25	0	Back	0	-	Handheld On	27710	2310	19.66	20.00	1.081	-	-	0.09	2.710	1	2.931
2nd	LTE Band 30	-	10M	QPSK	25	0	Back	0	-	Handheld On	27710	2310	19.66	20.00	1.081	-	-	0.18	2.700	1.004	2.920
1st	LTE Band 41	-	20M	QPSK	1	0	Back	0	3	Full	41490	2680	23.37	24.00	1.156	62.9	1.006	-0.01	2.910	1	3.384
2nd	LTE Band 41	-	20M	QPSK	1	0	Back	0	3	Full	41490	2680	23.37	24.00	1.156	62.9	1.006	0.06	2.870	1.014	3.338

General Note:

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

16. Simultaneous Transmission Analysis

No.	Simultaneous Transmission Configurations	Portable Handset		
		Head	Body-worn	Hotspot
1.	GSM Voice + WLAN2.4GHz	Yes	Yes	
2.	GPRS/EDGE + WLAN2.4GHz	Yes	Yes	Yes
3.	WCDMA + WLAN2.4GHz	Yes	Yes	Yes
4.	CDMA + WLAN2.4GHz	Yes	Yes	Yes
5.	LTE + WLAN2.4GHz	Yes	Yes	Yes
6.	GSM Voice + WLAN5.3/5.5GHz	Yes	Yes	
7.	GPRS/EDGE + WLAN5.3/5.5GHz	Yes	Yes	
8.	WCDMA + WLAN5.3/5.5GHz	Yes	Yes	
9.	CDMA + WLAN5.3/5.5GHz	Yes	Yes	
10.	LTE + WLAN5.3/5.5GHz	Yes	Yes	
11.	GSM Voice + WLAN5.2/5.8GHz	Yes	Yes	
12.	GPRS/EDGE + WLAN5.2/5.8GHz	Yes	Yes	Yes
13.	WCDMA + WLAN5.2/5.8GHz	Yes	Yes	Yes
14.	CDMA + WLAN5.2/5.8GHz	Yes	Yes	Yes
15.	LTE + WLAN5.2/5.8GHz	Yes	Yes	Yes
16.	GSM Voice + Bluetooth	Yes	Yes	
17.	GPRS/EDGE + Bluetooth	Yes	Yes	Yes
18.	WCDMA + Bluetooth	Yes	Yes	Yes
19.	CDMA + Bluetooth	Yes	Yes	Yes
20.	LTE + Bluetooth	Yes	Yes	Yes

General Note:

1. This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
2. EUT will choose each GSM, WCDMA and LTE according to the network signal condition; therefore, they will not operate simultaneously at any moment.
3. This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
4. This device 2.4GHz WLAN/ 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WLAN Direct (GC/GO), and 5.3GHz / 5.5GHz supports WLAN Direct (GC only).
5. EUT will choose either WLAN 2.4GHz or WLAN 5GHz according to the network signal condition; therefore, 2.4GHz WLAN and 5GHz WLAN will not operate simultaneously at any moment though they have independent antenna.
6. WLAN 2.4GHz and Bluetooth share the same antenna so can't transmit simultaneously.
7. According to the character of the EUT, WLAN 5GHz and Bluetooth can't transmit simultaneously.
8. The reported SAR summation is calculated based on the same configuration and test position.
9. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - iii) If $SPLSR \leq 0.04$ for 1g SAR, $SPLSR \leq 0.10$ for 10g SAR simultaneously transmission SAR measurement is not necessary.
 - iv) Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
 - v) The SPLSR calculated results please refer to section 16.5.

16.1 Head Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth			
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
GSM	GSM850	Right Cheek	0.358	1.003	1.138	0.024	1.36	1.50	0.38
		Right Tilted	0.190	1.003	1.138	0.026	1.19	1.33	0.22
		Left Cheek	0.256	1.003	1.138	0.096	1.26	1.39	0.35
		Left Tilted	0.175	0.474	0.752	0.038	0.65	0.93	0.21
	GSM1900	Right Cheek	0.086	1.003	1.138	0.024	1.09	1.22	0.11
		Right Tilted	0.066	1.003	1.138	0.026	1.07	1.20	0.09
		Left Cheek	0.113	1.003	1.138	0.096	1.12	1.25	0.21
		Left Tilted	0.073	0.474	0.752	0.038	0.55	0.83	0.11
WCDMA	Band V	Right Cheek	0.290	1.003	1.138	0.024	1.29	1.43	0.31
		Right Tilted	0.120	1.003	1.138	0.026	1.12	1.26	0.15
		Left Cheek	0.174	1.003	1.138	0.096	1.18	1.31	0.27
		Left Tilted	0.126	0.474	0.752	0.038	0.60	0.88	0.16
	Band IV	Right Cheek	0.163	1.003	1.138	0.024	1.17	1.30	0.19
		Right Tilted	0.095	1.003	1.138	0.026	1.10	1.23	0.12
		Left Cheek	0.242	1.003	1.138	0.096	1.25	1.38	0.34
		Left Tilted	0.106	0.474	0.752	0.038	0.58	0.86	0.14
	Band II	Right Cheek	0.125	1.003	1.138	0.024	1.13	1.26	0.15
		Right Tilted	0.082	1.003	1.138	0.026	1.09	1.22	0.11
		Left Cheek	0.137	1.003	1.138	0.096	1.14	1.28	0.23
		Left Tilted	0.089	0.474	0.752	0.038	0.56	0.84	0.13
CDMA2000	BC10	Right Cheek	0.325	1.003	1.138	0.024	1.33	1.46	0.35
		Right Tilted	0.149	1.003	1.138	0.026	1.15	1.29	0.18
		Left Cheek	0.195	1.003	1.138	0.096	1.20	1.33	0.29
		Left Tilted	0.145	0.474	0.752	0.038	0.62	0.90	0.18
	BC0	Right Cheek	0.317	1.003	1.138	0.024	1.32	1.46	0.34
		Right Tilted	0.152	1.003	1.138	0.026	1.16	1.29	0.18
		Left Cheek	0.194	1.003	1.138	0.096	1.20	1.33	0.29
		Left Tilted	0.144	0.474	0.752	0.038	0.62	0.90	0.18
	BC1	Right Cheek	0.114	1.003	1.138	0.024	1.12	1.25	0.14
		Right Tilted	0.071	1.003	1.138	0.026	1.07	1.21	0.10
		Left Cheek	0.174	1.003	1.138	0.096	1.18	1.31	0.27
		Left Tilted	0.112	0.474	0.752	0.038	0.59	0.86	0.15



WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth			
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)			
LTE	Band 71	Right Cheek	0.123	1.003	1.138	0.024	1.13	1.26	0.15
		Right Tilted	<0.001	1.003	1.138	0.026	1.00	1.14	0.03
		Left Cheek	0.092	1.003	1.138	0.096	1.10	1.23	0.19
		Left Tilted	<0.001	0.474	0.752	0.038	0.48	0.75	0.04
	Band 12	Right Cheek	0.293	1.003	1.138	0.024	1.30	1.43	0.32
		Right Tilted	0.142	1.003	1.138	0.026	1.15	1.28	0.17
		Left Cheek	0.221	1.003	1.138	0.096	1.22	1.36	0.32
		Left Tilted	0.130	0.474	0.752	0.038	0.60	0.88	0.17
	Band 13	Right Cheek	0.302	1.003	1.138	0.024	1.31	1.44	0.33
		Right Tilted	0.138	1.003	1.138	0.026	1.14	1.28	0.16
		Left Cheek	0.197	1.003	1.138	0.096	1.20	1.34	0.29
		Left Tilted	0.108	0.474	0.752	0.038	0.58	0.86	0.15
	Band 26	Right Cheek	0.334	1.003	1.138	0.024	1.34	1.47	0.36
		Right Tilted	0.152	1.003	1.138	0.026	1.16	1.29	0.18
		Left Cheek	0.214	1.003	1.138	0.096	1.22	1.35	0.31
		Left Tilted	0.111	0.474	0.752	0.038	0.59	0.86	0.15
	Band 66	Right Cheek	0.185	1.003	1.138	0.024	1.19	1.32	0.21
		Right Tilted	0.103	1.003	1.138	0.026	1.11	1.24	0.13
		Left Cheek	0.332	1.003	1.138	0.096	1.34	1.47	0.43
		Left Tilted	0.135	0.474	0.752	0.038	0.61	0.89	0.17
	Band 25	Right Cheek	0.106	1.003	1.138	0.024	1.11	1.24	0.13
		Right Tilted	0.064	1.003	1.138	0.026	1.07	1.20	0.09
		Left Cheek	0.172	1.003	1.138	0.096	1.18	1.31	0.27
		Left Tilted	0.110	0.474	0.752	0.038	0.58	0.86	0.15
	Band 30	Right Cheek	0.286	1.003	1.138	0.024	1.29	1.42	0.31
		Right Tilted	0.170	1.003	1.138	0.026	1.17	1.31	0.20
		Left Cheek	0.326	1.003	1.138	0.096	1.33	1.46	0.42
		Left Tilted	0.150	0.474	0.752	0.038	0.62	0.90	0.19
	Band 7	Right Cheek	0.188	1.003	1.138	0.024	1.19	1.33	0.21
		Right Tilted	0.126	1.003	1.138	0.026	1.13	1.26	0.15
		Left Cheek	0.243	1.003	1.138	0.096	1.25	1.38	0.34
		Left Tilted	0.074	0.474	0.752	0.038	0.55	0.83	0.11
	Band 41	Right Cheek	0.095	1.003	1.138	0.024	1.10	1.23	0.12
		Right Tilted	0.067	1.003	1.138	0.026	1.07	1.21	0.09
		Left Cheek	0.250	1.003	1.138	0.096	1.25	1.39	0.35
		Left Tilted	0.039	0.474	0.752	0.038	0.51	0.79	0.08



16.2 Hotspot Exposure Conditions

WWAN Band	Exposure Position	1	2	3	4	1+2			1+3			1+4		
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	Summed 1g SAR (W/kg)	SPLSR	Case No	Summed 1g SAR (W/kg)	SPLSR	Case No	Summed 1g SAR (W/kg)	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)		
GSM	GSM850	Front	1.066	0.391	0.480	0.044	1.46		1.55			1.11		
		Back	1.434	0.726	1.112	0.075	2.16	0.02	2.55	0.03	#37	1.51		
		Left Side	0.121				0.12		0.12			0.12		
		Right Side	0.382	0.420	1.112	0.037	0.80		1.49			0.42		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	0.850				0.85		0.85			0.85		
	GSM1900	Front	0.951	0.391	0.480	0.044	1.34		1.43			1.00		
		Back	1.362	0.726	1.112	0.075	2.09	0.02	2.47	0.03	#38	1.44		
		Left Side	0.071				0.07		0.07			0.07		
		Right Side	0.051	0.420	1.112	0.037	0.47		1.16			0.09		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
WCDMA	Band V	Front	0.731	0.391	0.480	0.044	1.12		1.21			0.78		
		Back	1.399	0.726	1.112	0.075	2.13	0.02	2.51	0.03	#39	1.47		
		Left Side	0.100				0.10		0.10			0.10		
		Right Side	0.329	0.420	1.112	0.037	0.75		1.44			0.37		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
	Band IV	Bottom Side	0.623				0.62		0.62			0.62		
		Front	1.070	0.391	0.480	0.044	1.46		1.55			1.11		
		Back	1.383	0.726	1.112	0.075	2.11	0.02	2.50	0.03	#40	1.46		
		Left Side	0.114				0.11		0.11			0.11		
		Right Side	0.080	0.420	1.112	0.037	0.50		1.19			0.12		
	Band II	Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	1.319				1.32		1.32			1.32		
		Front	0.848	0.391	0.480	0.044	1.24		1.33			0.89		
		Back	1.225	0.726	1.112	0.075	1.95	0.02	2.34	0.02	#41	1.30		
		Left Side	0.057				0.06		0.06			0.06		
CDMA2000	BC10	Right Side	0.058	0.420	1.112	0.037	0.48		1.17			0.10		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	1.169				1.17		1.17			1.17		
	BC0	Front	0.692	0.391	0.480	0.044	1.08		1.17			0.74		
		Back	1.127	0.726	1.112	0.075	1.85	0.02	2.24	0.02	#72	1.20		
		Left Side	0.094				0.09		0.09			0.09		
		Right Side	0.298	0.420	1.112	0.037	0.72		1.41			0.34		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
	BC1	Bottom Side	0.619				0.62		0.62			0.62		
		Front	0.716	0.391	0.480	0.044	1.11		1.20			0.76		
		Back	1.198	0.726	1.112	0.075	1.92	0.02	2.31	0.02	#74	1.27		
		Left Side	0.100				0.10		0.10			0.10		
		Right Side	0.315	0.420	1.112	0.037	0.74		1.43			0.35		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
	BC1	Bottom Side	0.643				0.64		0.64			0.64		
		Front	0.983	0.391	0.480	0.044	1.37		1.46			1.03		
		Back	1.361	0.726	1.112	0.075	2.09	0.02	2.47	0.02	#75	1.44		
		Left Side	0.077				0.08		0.08			0.08		
		Right Side	0.062	0.420	1.112	0.037	0.48		1.17			0.10		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	1.434				1.43		1.43			1.43		



WWAN Band	Exposure Position	1	2	3	4	1+2			1+3			1+4		
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	Summed 1g SAR (W/kg)	SPLSR	Case No	Summed 1g SAR (W/kg)	SPLSR	Case No	Summed 1g SAR (W/kg)	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)		
LTE	Band 71	Front	0.532	0.391	0.480	0.044	0.92		1.01			0.58		
		Back	0.898	0.726	1.112	0.075	1.62	0.01	2.01	0.02	#48	0.97		
		Left Side	0.186				0.19		0.19			0.19		
		Right Side	0.347	0.420	1.112	0.037	0.77		1.46			0.38		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	0.678				0.68		0.68			0.68		
	Band 12	Front	0.732	0.391	0.480	0.044	1.12		1.21			0.78		
		Back	1.116	0.726	1.112	0.075	1.84	0.02	2.23	0.02	#49	1.19		
		Left Side	0.189				0.19		0.19			0.19		
		Right Side	0.380	0.420	1.112	0.037	0.80		1.49			0.42		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	0.572				0.57		0.57			0.57		
	Band 13	Front	0.813	0.391	0.480	0.044	1.20		1.29			0.86		
		Back	1.242	0.726	1.112	0.075	1.97	0.02	2.35	0.02	#50	1.32		
		Left Side	0.207				0.21		0.21			0.21		
		Right Side	0.379	0.420	1.112	0.037	0.80		1.49			0.42		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	0.616				0.62		0.62			0.62		
	Band 26	Front	0.814	0.391	0.480	0.044	1.21		1.29			0.86		
		Back	1.383	0.726	1.112	0.075	2.11	0.02	2.50	0.02	#51	1.46		
		Left Side	0.094				0.09		0.09			0.09		
		Right Side	0.326	0.420	1.112	0.037	0.75		1.44			0.36		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	0.643				0.64		0.64			0.64		
	Band 66	Front	0.995	0.391	0.480	0.044	1.39		1.48			1.04		
		Back	1.329	0.726	1.112	0.075	2.06	0.02	2.44	0.03	#52	1.40		
		Left Side	0.082				0.08		0.08			0.08		
		Right Side	0.084	0.420	1.112	0.037	0.50		1.20			0.12		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	1.206				1.21		1.21			1.21		
	Band 25	Front	0.986	0.391	0.480	0.044	1.38		1.47			1.03		
		Back	1.329	0.726	1.112	0.075	2.06	0.02	2.44	0.03	#53	1.40		
		Left Side	0.064				0.06		0.06			0.06		
		Right Side	0.040	0.420	1.112	0.037	0.46		1.15			0.08		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	1.311				1.31		1.31			1.31		
	Band 30	Front	0.414	0.391	0.480	0.044	0.81		0.89			0.46		
		Back	1.098	0.726	1.112	0.075	1.82	0.02	2.21	0.02	#54	1.17		
		Left Side	0.435				0.44		0.44			0.44		
		Right Side		0.420	1.112	0.037	0.42		1.11			0.04		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	0.642				0.64		0.64			0.64		
	Band 7	Front	0.647	0.391	0.480	0.044	1.04		1.13			0.69		
		Back	1.291	0.726	1.112	0.075	2.02	0.02	2.40	0.03	#76	1.37		
		Left Side	0.533				0.53		0.53			0.53		
		Right Side		0.420	1.112	0.037	0.42		1.11			0.04		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	0.440				0.44		0.44			0.44		
	Band 41	Front	0.527	0.391	0.480	0.044	0.92		1.01			0.57		
		Back	1.398	0.726	1.112	0.075	2.12	0.02	2.51	0.03	#55	1.47		
		Left Side	0.574				0.57		0.57			0.57		
		Right Side		0.420	1.112	0.037	0.42		1.11			0.04		
		Top Side		0.726	1.112	0.017	0.73		1.11			0.02		
		Bottom Side	0.474				0.47		0.47			0.47		



16.3 Body-Worn Accessory Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	1+2			1+3			1+4		
			WWAN 1g SAR (W/kg)	2.4GHz WLAN 1g SAR (W/kg)	5GHz WLAN 1g SAR (W/kg)	Bluetooth h 1g SAR (W/kg)	Summed 1g SAR (W/kg)	SPLSR	Case No	Summed 1g SAR (W/kg)	SPLSR	Case No	Summed 1g SAR (W/kg)	SPLSR	Case No
GSM	GSM850	Front	1.066	0.391	0.459	0.044	1.46			1.53			1.11		
		Back	1.434	0.726	1.160	0.075	2.16	0.02	#01	2.59	0.03	#02	1.51		
		Back with Headset	0.452				0.45			0.45			0.45		
	GSM1900	Front	0.951	0.391	0.459	0.044	1.34			1.41			1.00		
		Back	1.362	0.726	1.160	0.075	2.09	0.02	#03	2.52	0.03	#04	1.44		
		Back with Headset	0.710				0.71			0.71			0.71		
WCDMA	Band V	Front	0.731	0.391	0.459	0.044	1.12			1.19			0.78		
		Back	1.399	0.726	1.160	0.075	2.13	0.02	#05	2.56	0.03	#06	1.47		
		Back with Headset	0.990				0.99			0.99			0.99		
	Band IV	Front	1.070	0.391	0.459	0.044	1.46			1.53			1.11		
		Back	1.383	0.726	1.160	0.075	2.11	0.02	#07	2.54	0.03	#08	1.46		
		Back with Headset	0.808				0.81			0.81			0.81		
	Band II	Front	0.848	0.391	0.459	0.044	1.24			1.31			0.89		
		Back	1.225	0.726	1.160	0.075	1.95	0.02	#09	2.39	0.02	#10	1.30		
		Back with Headset	0.682				0.68			0.68			0.68		
CDMA2000	BC10	Front	0.775	0.391	0.459	0.044	1.17			1.23			0.82		
		Back	1.205	0.726	1.160	0.075	1.93	0.02	#11	2.37	0.02	#12	1.28		
		Back with Headset	0.894				0.89			0.89			0.89		
	BC0	Front	0.838	0.391	0.459	0.044	1.23			1.30			0.88		
		Back	1.217	0.726	1.160	0.075	1.94	0.02	#13	2.38	0.02	#14	1.29		
		Back with Headset	0.897				0.90			0.90			0.90		
	BC1	Front	0.927	0.391	0.459	0.044	1.32			1.39			0.97		
		Back	1.373	0.726	1.160	0.075	2.10	0.02	#15	2.53	0.03	#16	1.45		
		Back with Headset	0.837				0.84			0.84			0.84		
LTE	Band 71	Front	0.532	0.391	0.459	0.044	0.92			0.99			0.58		
		Back	0.898	0.726	1.160	0.075	1.62	0.01	#17	2.06	0.02	#18	0.97		
	Band 12	Front	0.732	0.391	0.459	0.044	1.12			1.19			0.78		
		Back	1.116	0.726	1.160	0.075	1.84	0.02	#19	2.28	0.02	#20	1.19		
	Band 13	Front	0.813	0.391	0.459	0.044	1.20			1.27			0.86		
		Back	1.242	0.726	1.160	0.075	1.97	0.02	#21	2.40	0.02	#22	1.32		
	Band 26	Back with Headset	1.194				1.19			1.19			1.19		
		Front	0.814	0.391	0.459	0.044	1.21			1.27			0.86		
		Back	1.383	0.726	1.160	0.075	2.11	0.02	#23	2.54	0.02	#24	1.46		
	Band 66	Back with Headset	1.254				1.25			1.25			1.25		
		Front	0.995	0.391	0.459	0.044	1.39			1.45			1.04		
		Back	1.329	0.726	1.160	0.075	2.06	0.02	#25	2.49	0.03	#26	1.40		
	Band 25	Back with Headset	0.593				0.59			0.59			0.59		
		Front	0.986	0.391	0.459	0.044	1.38			1.45			1.03		
		Back	1.329	0.726	1.160	0.075	2.06	0.02	#27	2.49	0.03	#28	1.40		
	Band 30	Back with Headset	0.717				0.72			0.72			0.72		
		Front	0.414	0.391	0.459	0.044	0.81			0.87			0.46		
		Back	1.098	0.726	1.160	0.075	1.82	0.02	#29	2.26	0.02	#30	1.17		
	Band 7	Front	0.647	0.391	0.459	0.044	1.04			1.11			0.69		
		Back	1.291	0.726	1.160	0.075	2.02	0.02	#31	2.45	0.03	#32	1.37		
		Back with Headset	1.296				1.30			1.30			1.30		
	Band 41	Front	0.527	0.391	0.459	0.044	0.92			0.99			0.57		
		Back	1.398	0.726	1.160	0.075	2.12	0.02	#33	2.56	0.03	#34	1.47		
	Band 41	Back with Headset	1.370				1.37			1.37			1.37		

16.4 Product specific 10g SAR Exposure Conditions

WWAN Band		Exposure Position	1	2	1+2		
			WWAN Bottom	5GHz WLAN	Summed 10g SAR (W/kg)	SPLSR	Case No
			10g SAR (W/kg)	10g SAR (W/kg)			
GSM	GSM850	Front	2.469	1.330	3.80		
		Back	3.029	0.981	4.01	0.05	#56
		Bottom Side	1.234		1.23		
	GSM1900	Front	2.251	1.330	3.58		
		Back	3.001	0.981	3.98		
		Bottom Side	3.523		3.52		
WCDMA	Band V	Front	2.796	1.330	4.13	0.05	#59
		Back	3.234	0.981	4.22	0.06	#60
		Bottom Side	1.386		1.39		
	Band IV	Front	2.598	1.330	3.93		
		Back	2.917	0.981	3.90		
		Bottom Side	3.081		3.08		
	Band II	Front	2.687	1.330	4.02	0.05	#57
		Back	3.123	0.981	4.10	0.05	#58
		Bottom Side	3.295		3.30		
CDMA2000	BC10	Front	2.784	1.330	4.11	0.05	#65
		Back	3.236	0.981	4.22	0.06	#66
		Bottom Side	1.341		1.34		
	BC0	Front	2.971	1.330	4.30	0.05	#61
		Back	3.422	0.981	4.40	0.06	#62
		Bottom Side	1.345		1.35		
	BC1	Front	2.704	1.330	4.03	0.05	#63
		Back	3.291	0.981	4.27	0.06	#64
		Bottom Side	3.554		3.55		
	Band 13	Front	2.954	0.981	3.94		
		Back	1.942	1.330	3.27		
		Bottom Side	3.075	0.981	4.06	0.05	#67
	Band 26	Front	2.402	1.330	3.73		
		Back	3.410	0.981	4.39	0.06	#70
		Bottom Side	1.159		1.16		
	Band 66	Front	1.923	1.330	3.25		
		Back	2.924	0.981	3.91		
		Bottom Side	2.823		2.82		
	Band 25	Front	2.697	1.330	4.03	0.05	#68
		Back	3.142	0.981	4.12	0.05	#69
		Bottom Side	3.249		3.25		
	Band 30	Front	1.557	1.330	2.89		
		Back	2.931	0.981	3.91		
		Bottom Side	1.633		1.63		
	Band 7	Front	1.159	1.330	2.49		
		Back	2.412	0.981	3.39		
	Band 41	Back	3.384	0.981	4.37	0.06	#71

Remark:

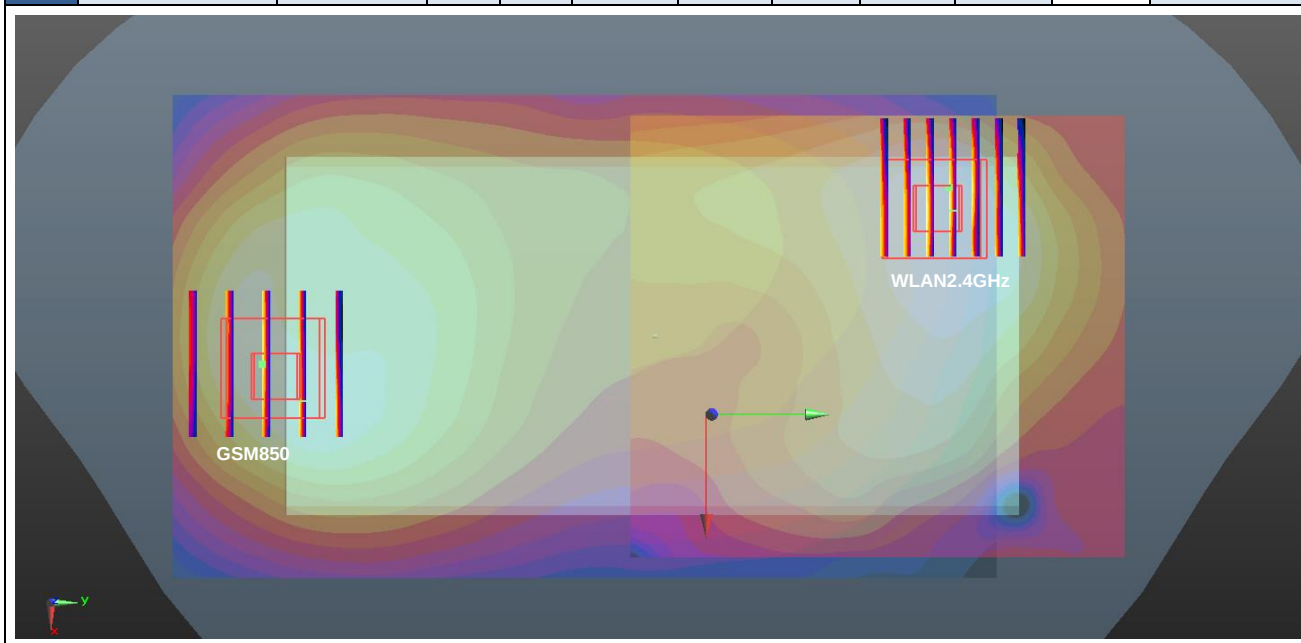
- For Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.
- If SPLSR ≤ 0.10 for 10g SAR, simultaneously transmission SAR measurement is not necessary.

16.5 SPLSR Evaluation and Analysis

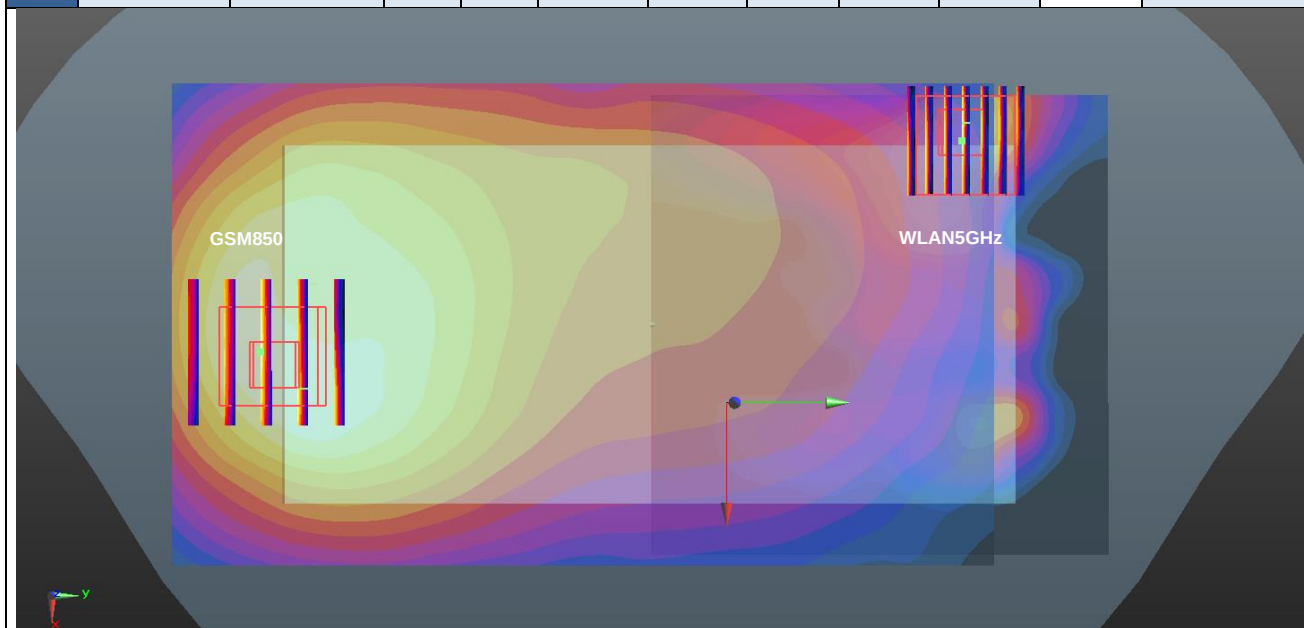
General Note:

1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of $[(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2]$, where (x_1, y_1, z_1) and (x_2, y_2, z_2) are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2. $SPLSR = (SAR_1 + SAR_2)1.5 / (\text{min. separation distance, mm})$. If $SPLSR \leq 0.04$ for 1g SAR and $SPLSR \leq 0.10$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.

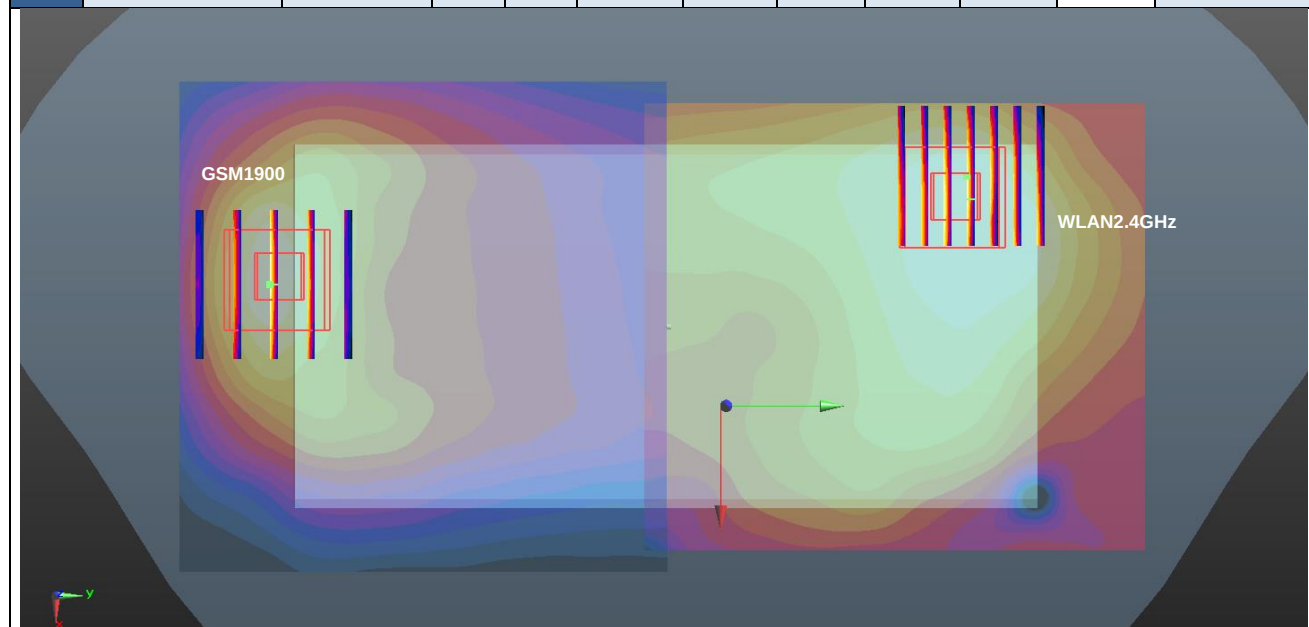
Case #1	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	GSM850	Back	1.434	5mm	12.4	-79.1	-0.96	149.7	2.16	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				



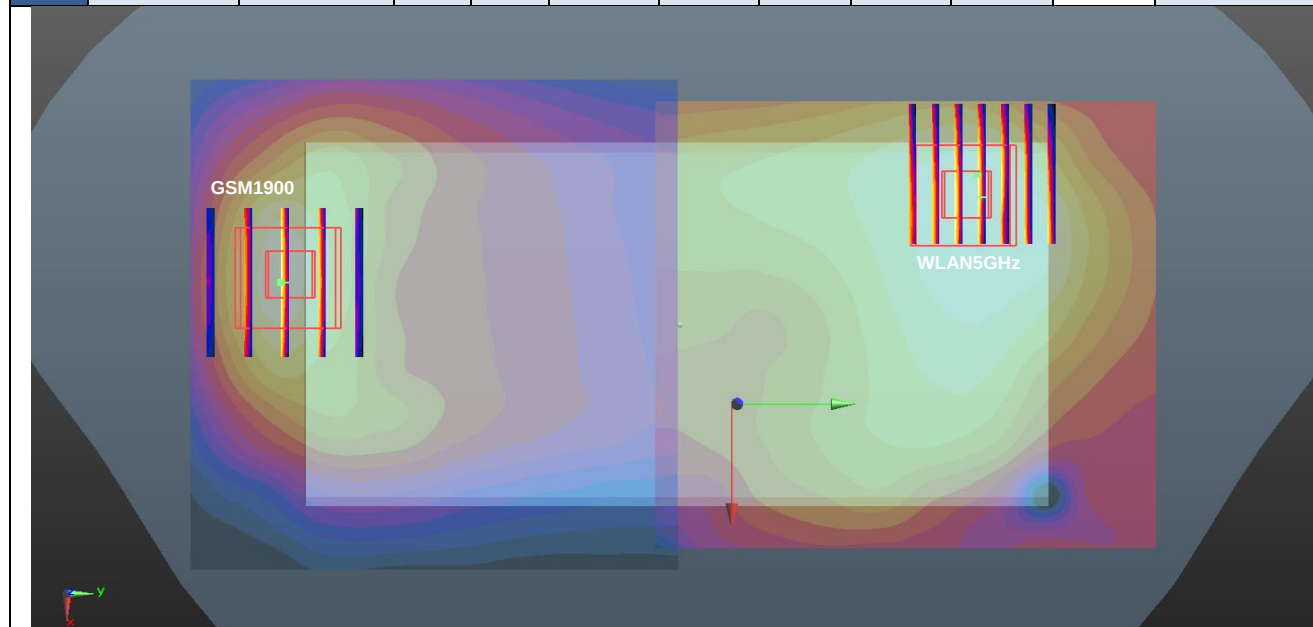
Case #2	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	GSM850	Back	1.434	5mm	12.4	-79.1	-0.96	157.0	2.59	0.03	Not required
	WLAN5GHz		1.160	5mm	-42.4	68	-0.88				



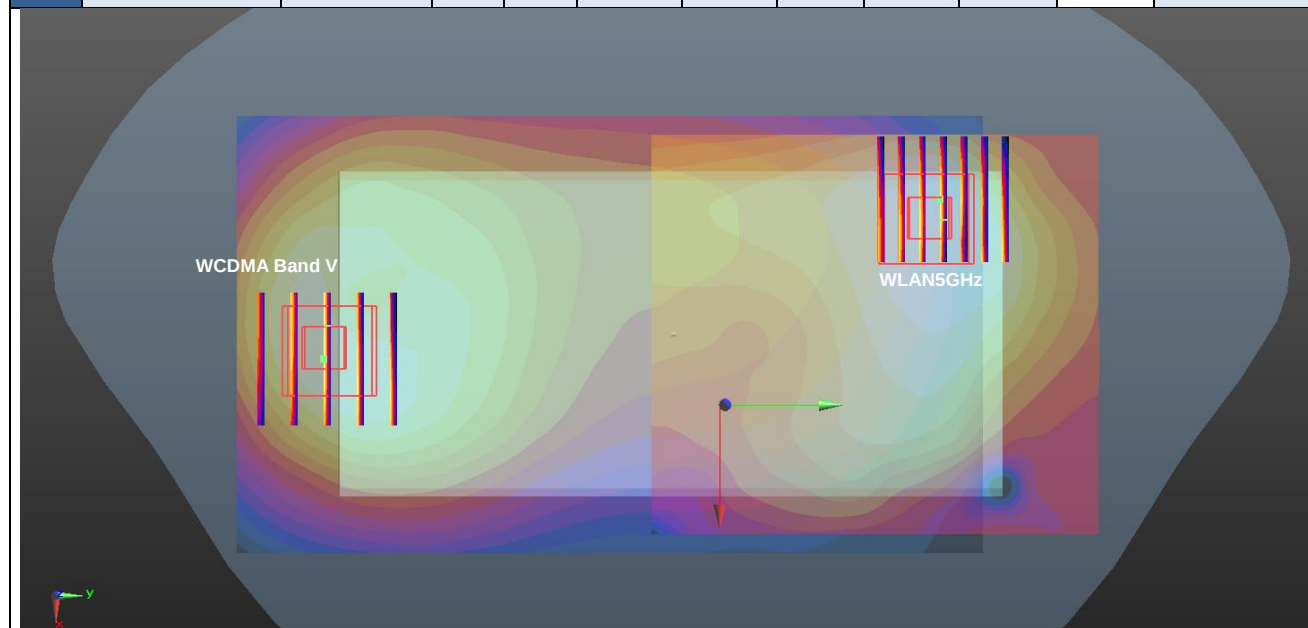
Case #3	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	GSM1900		1.362	5mm	X	Y	Z				
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				
		Back			-12.2	-82.3	-0.77	147.9	2.09	0.02	Not required



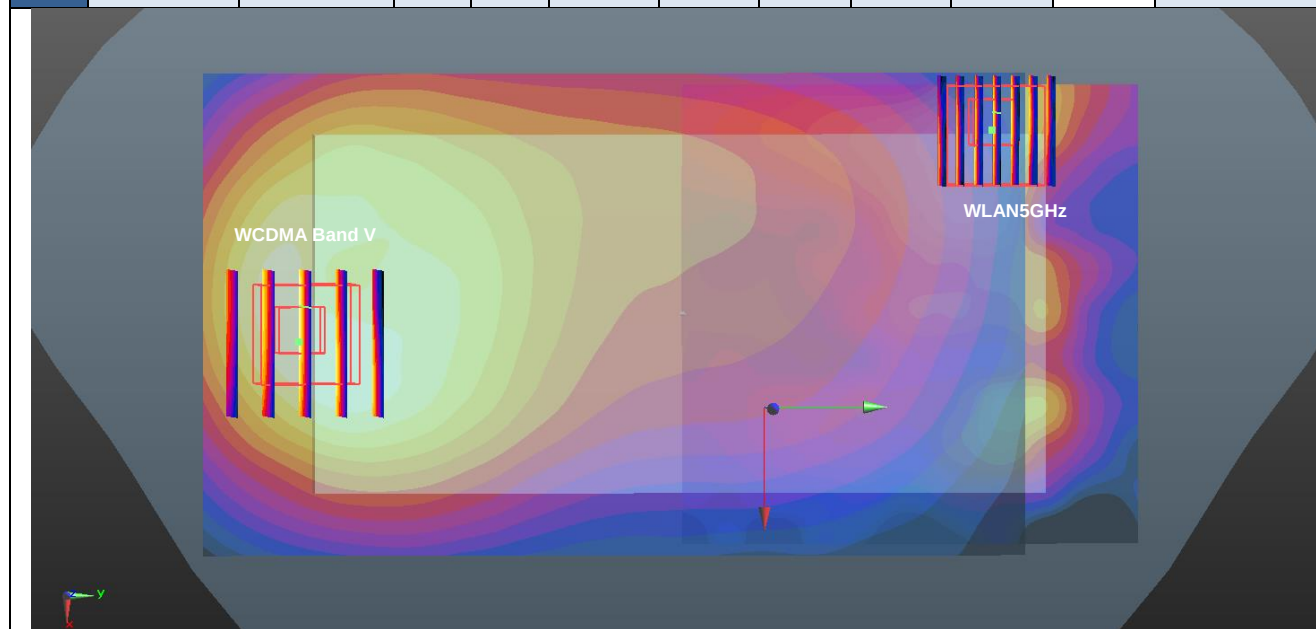
Case #4	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	GSM1900	Back	1.362	5mm	-12.2	-82.3	-0.77	153.3	2.52	0.03	Not required
	WLAN5GHz		1.160	5mm	-42.4	68	-0.88				



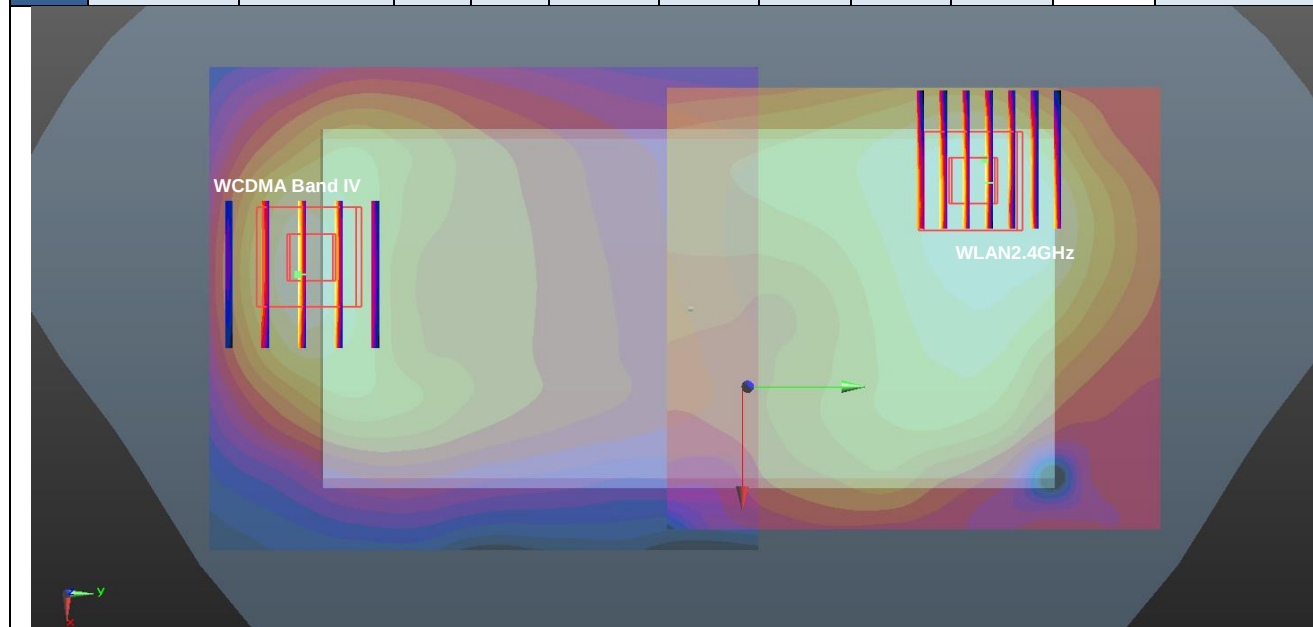
Case #5	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA Band V	Back	1.399	5mm	6	-82.4	-1	151.2	2.13	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				

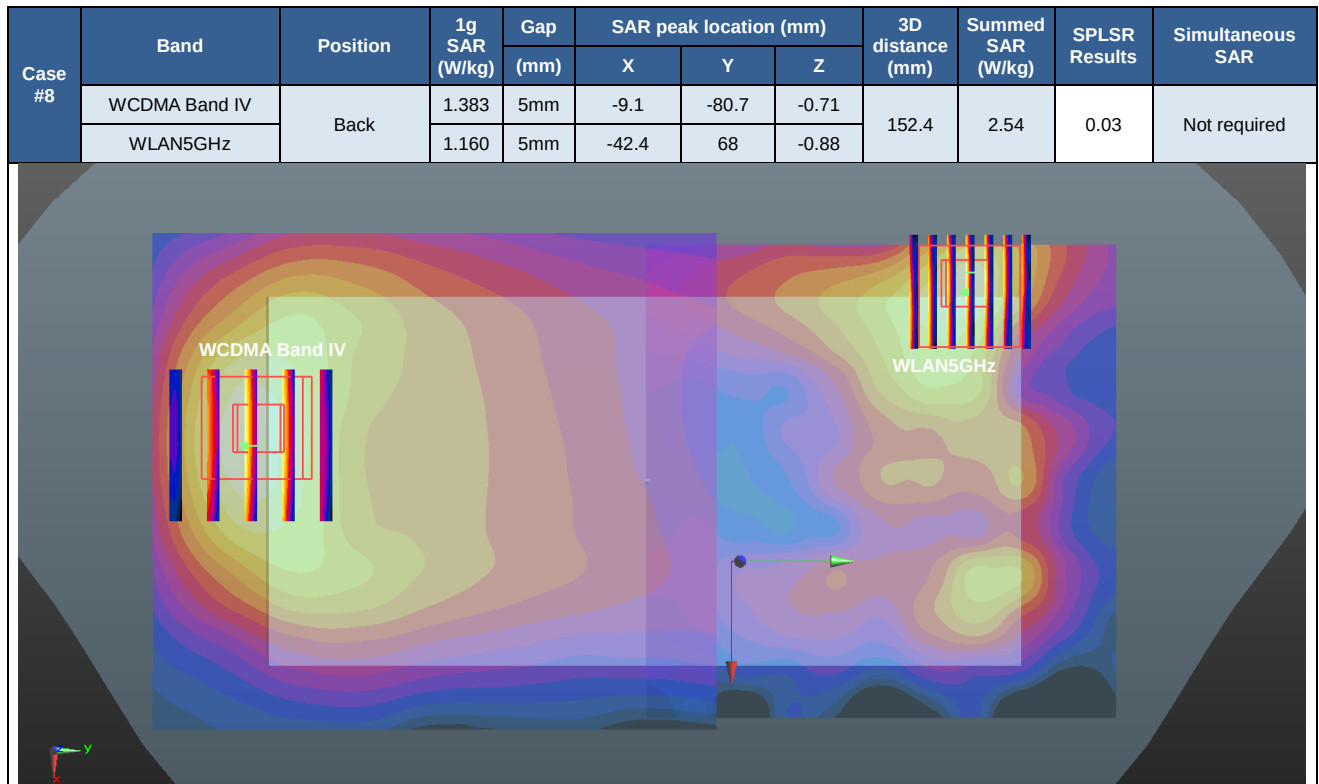


Case #6	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA Band V	Front	1.399	5mm	X	Y	Z	158.0	2.56	0.03	Not required
	WLAN5GHz		1.160	5mm	-42.4	68	-0.88				

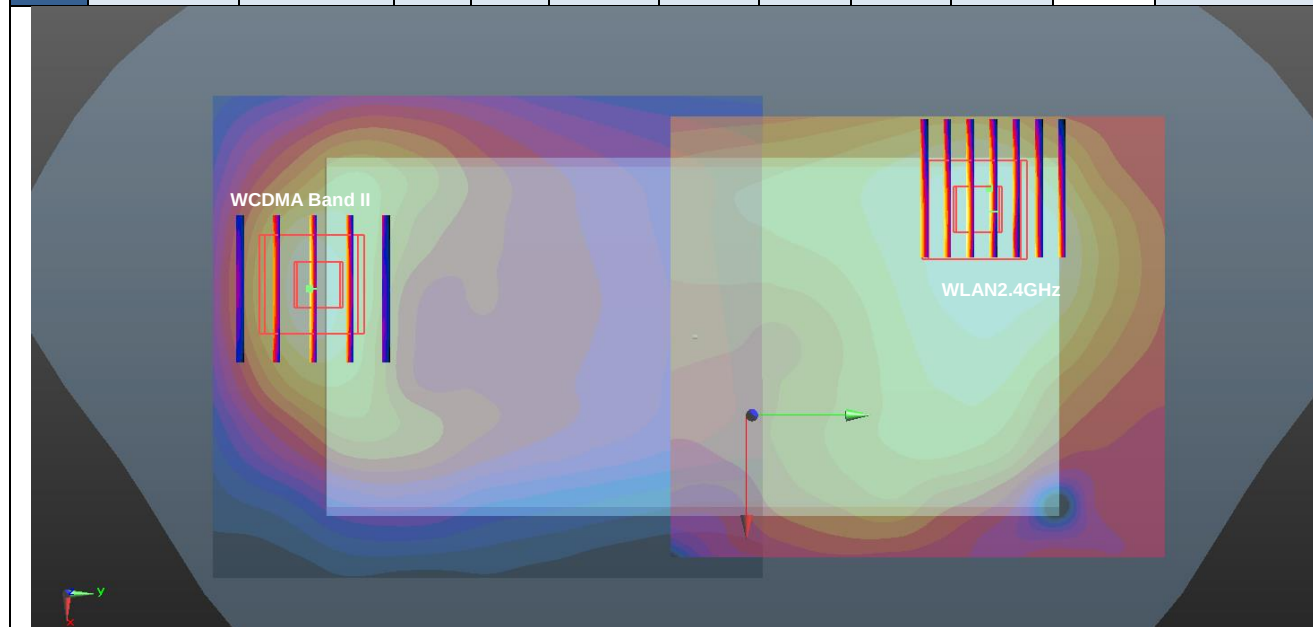


Case #7	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA Band IV	Back	1.383	5mm	-9.1	-80.7	-0.71	146.7	2.11	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				

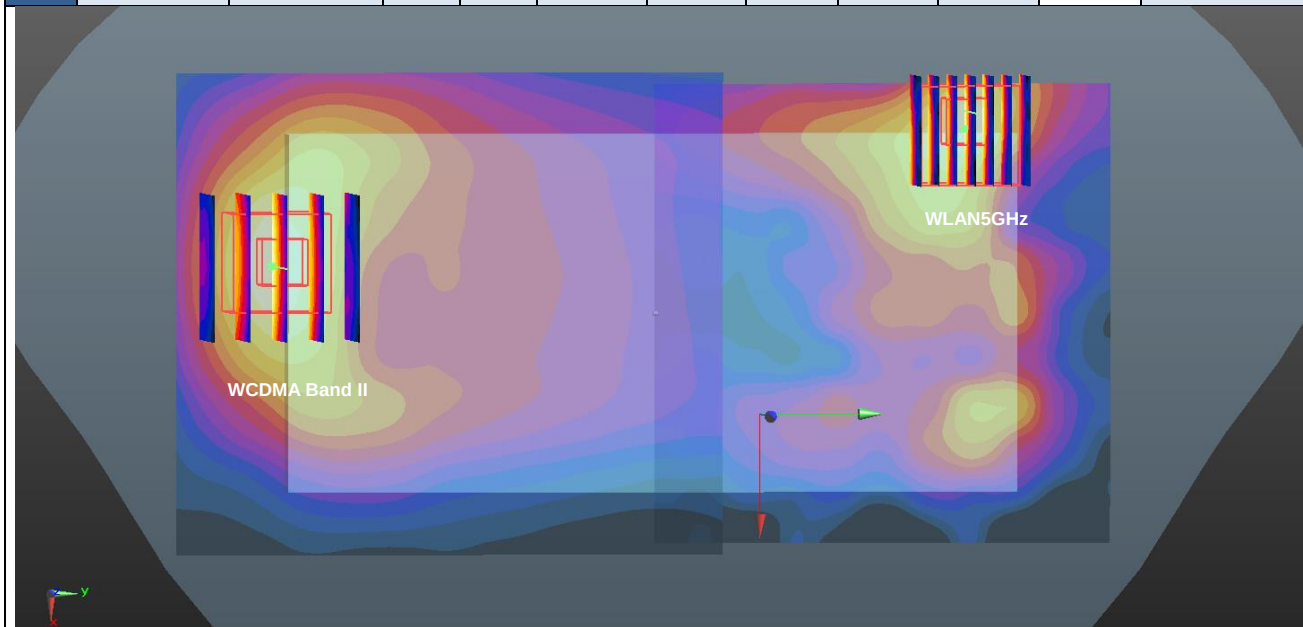




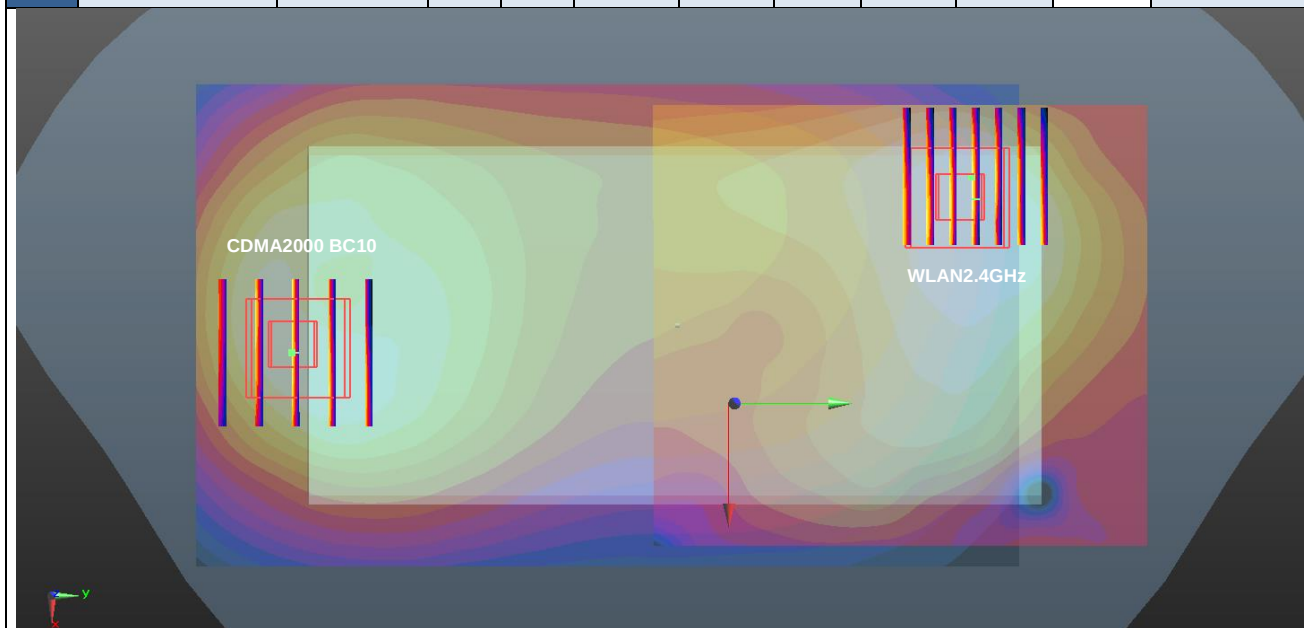
Case #9	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA Band II	Back	1.225	5mm	X	Y	Z	146.4	1.95	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				



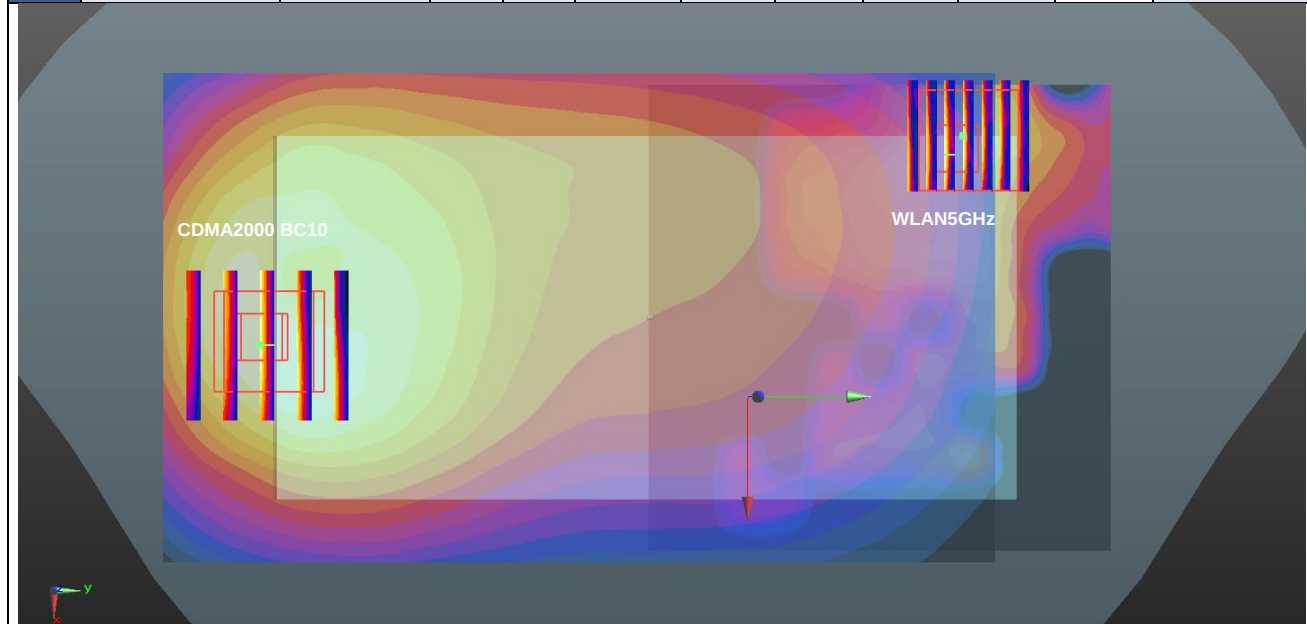
Case #10	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA Band II	Back	1.225	5mm	-12.1	-80.8	-0.72	151.9	2.39	0.02	Not required
	WLAN5GHz		1.16	5mm	-42.4	68	-0.88				



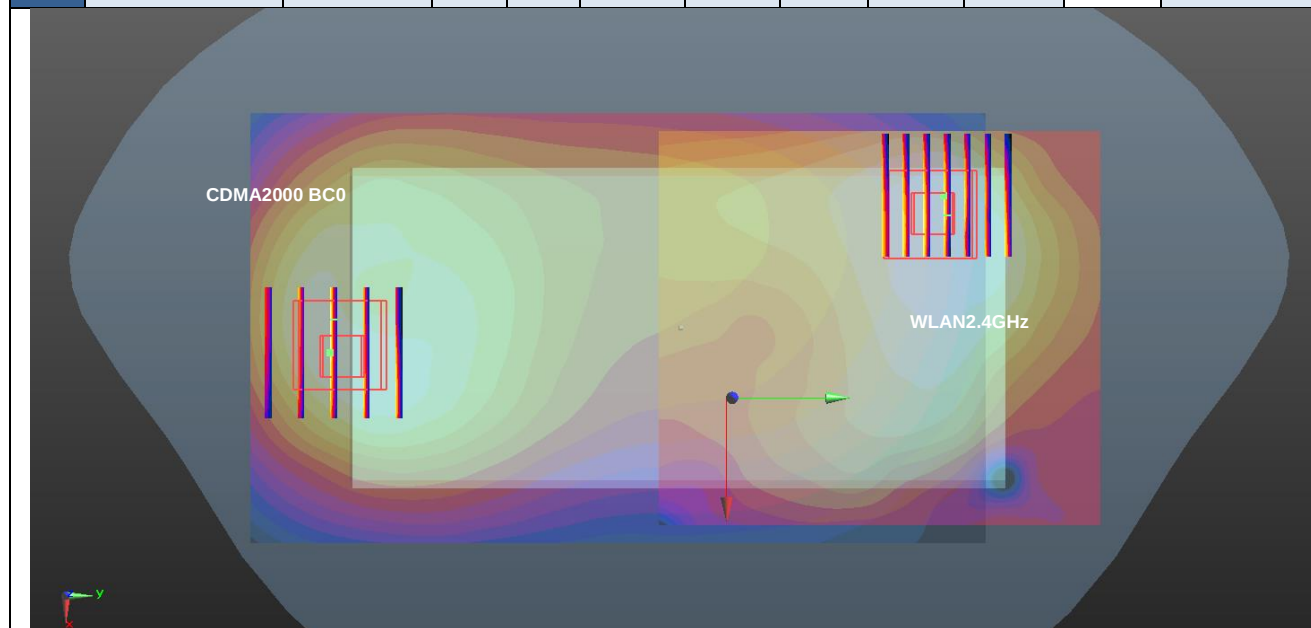
Case #11	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC10	Back	1.205	5mm	6	-82.4	-0.98	151.2	1.93	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				



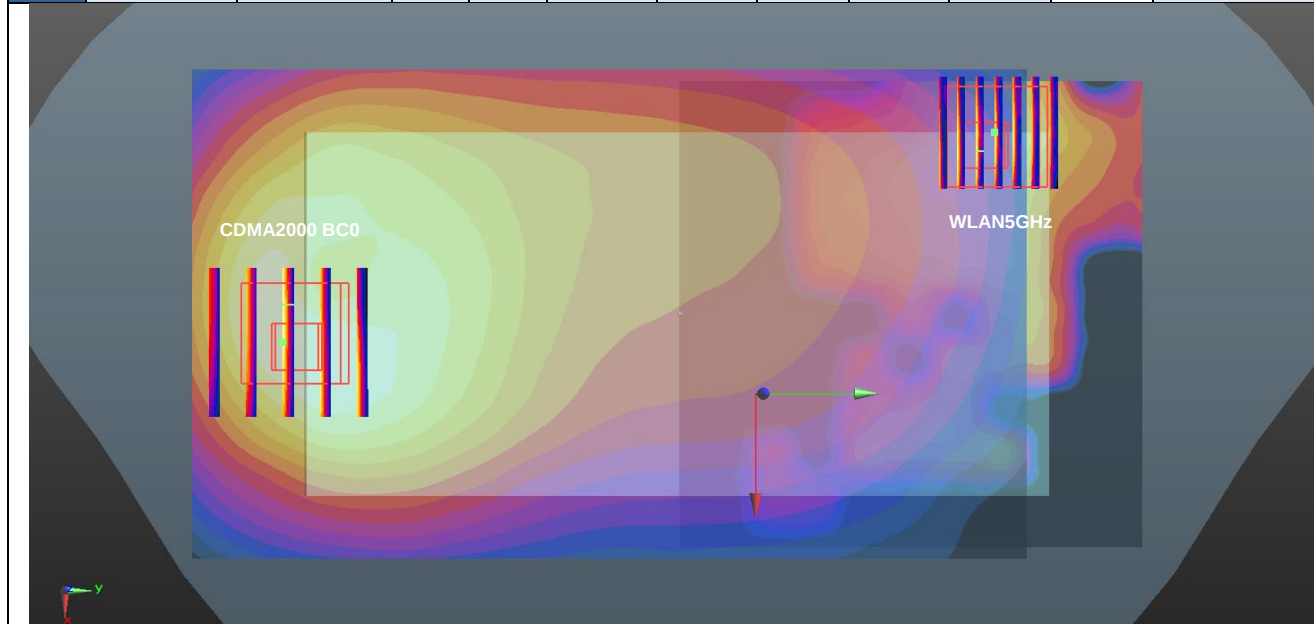
Case #12	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	CDMA2000 BC10		1.205	5mm	X	Y	Z				
	WLAN5GHz		1.160	5mm	-35.8	66.4	-1.7				
		Back			6	-82.4	-0.98	154.6	2.37	0.02	Not required



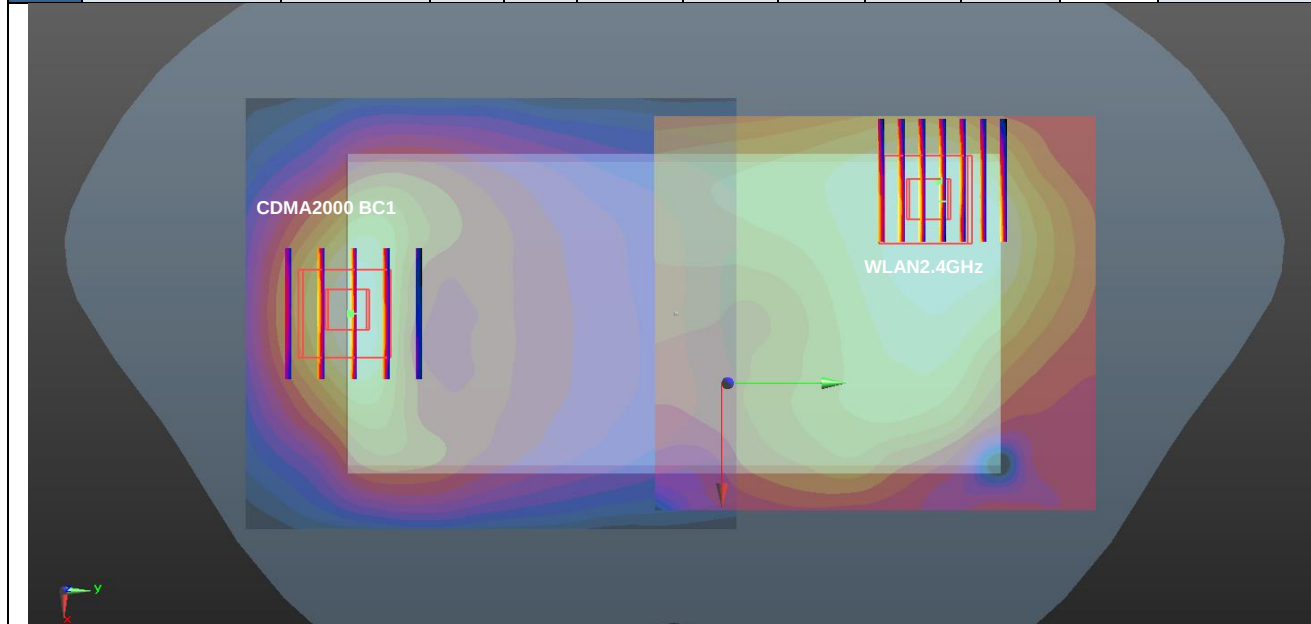
Case #13	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Back	1.217	5mm	10.8	-79.1	-0.96	149.2	1.94	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				



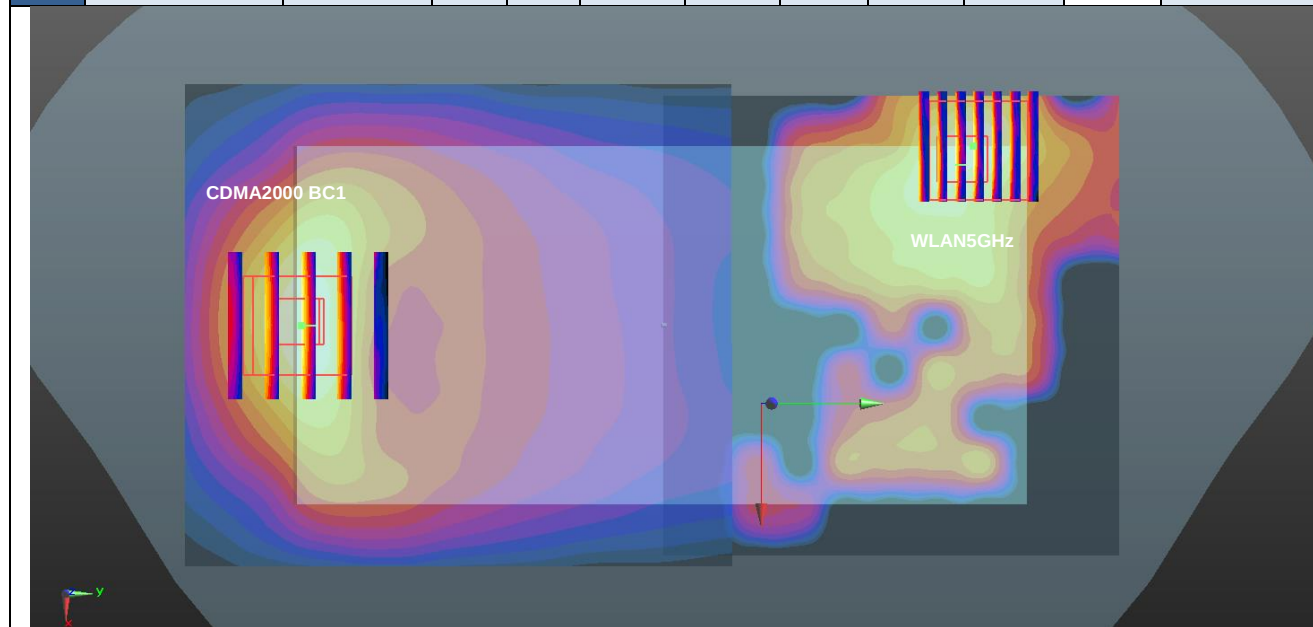
Case #14	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Back	1.217	5mm	10.8	-79.1	-0.96	152.8	2.38	0.02	Not required
	WLAN5GHz		1.160	5mm	-35.8	66.4	-1.7				



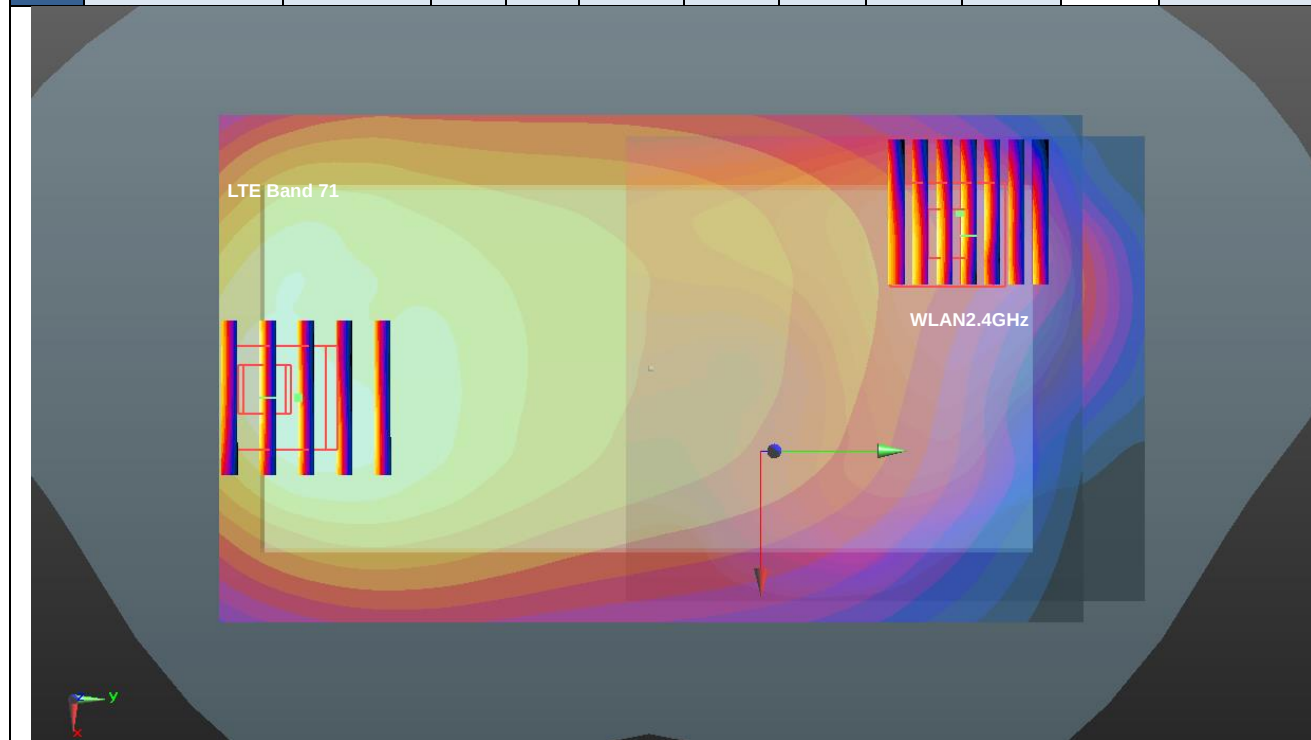
Case #15	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC1	Back	1.373	5mm	0	-79.5	-1.43	147.1	2.10	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				



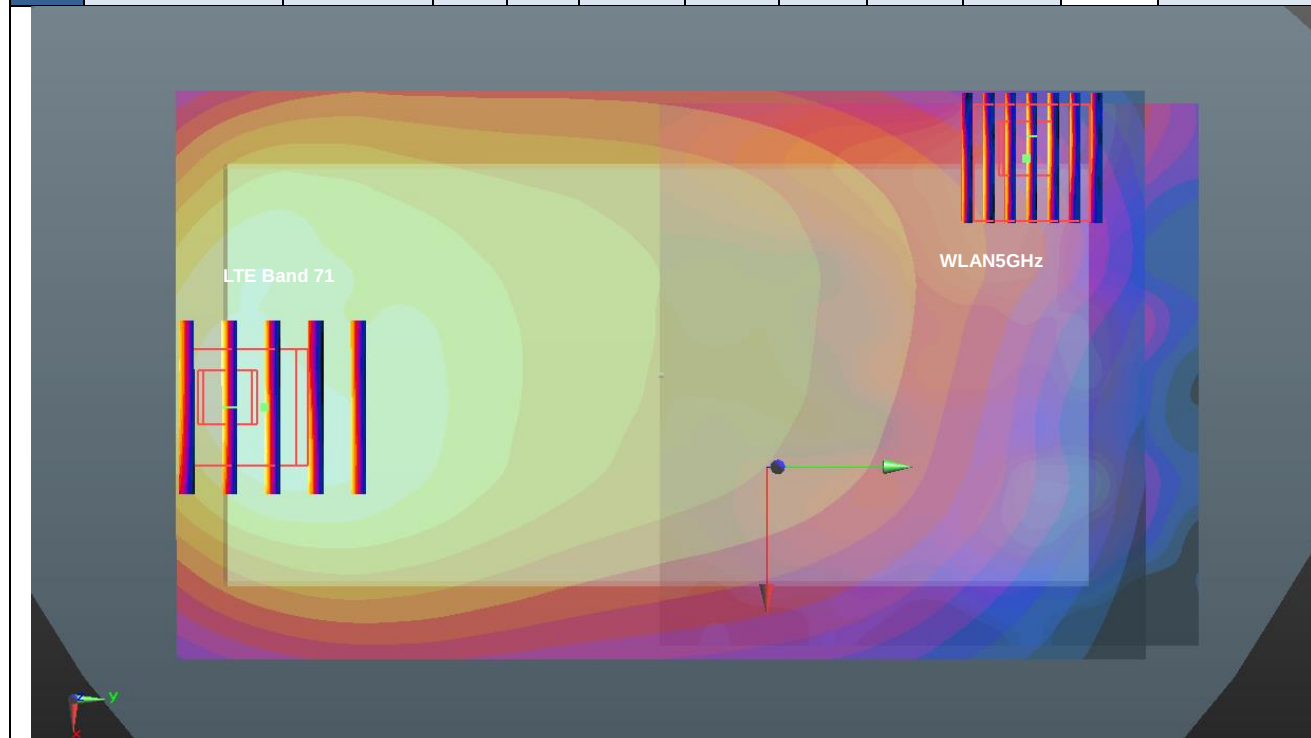
Case #16	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC1	Back	1.373	5mm	0	-79.5	-1.43	150.2	2.53	0.03	Not required
	WLAN5GHz		1.160	5mm	-35.8	66.4	-1.7				

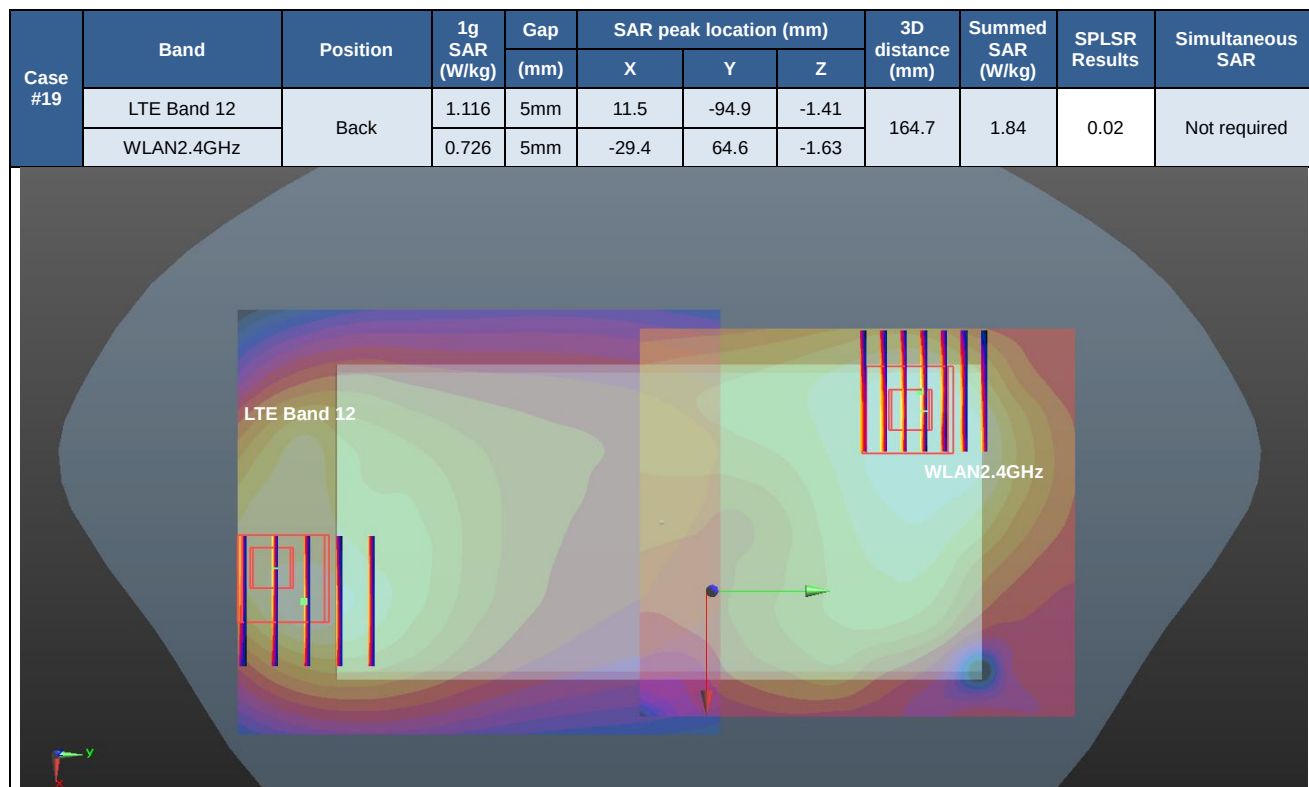


Case #17	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 71	Back	0.898	5mm	4.4	-79.9	-0.84	148.4	1.62	0.01	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				

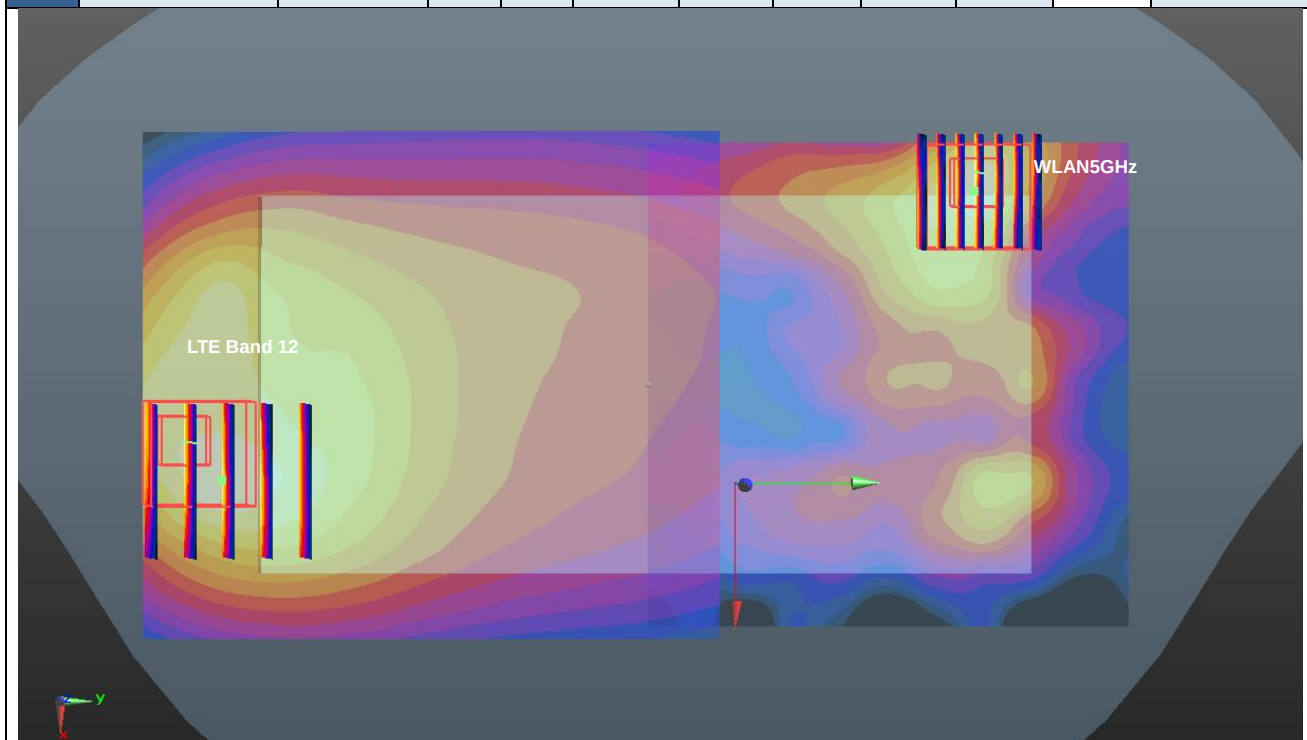


Case #18	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 71	Back	0.898	5mm	4.4	-79.9	-0.84	155.1	2.06	0.02	Not required
	WLAN5GHz		1.160	5mm	-42.4	68	-0.88				

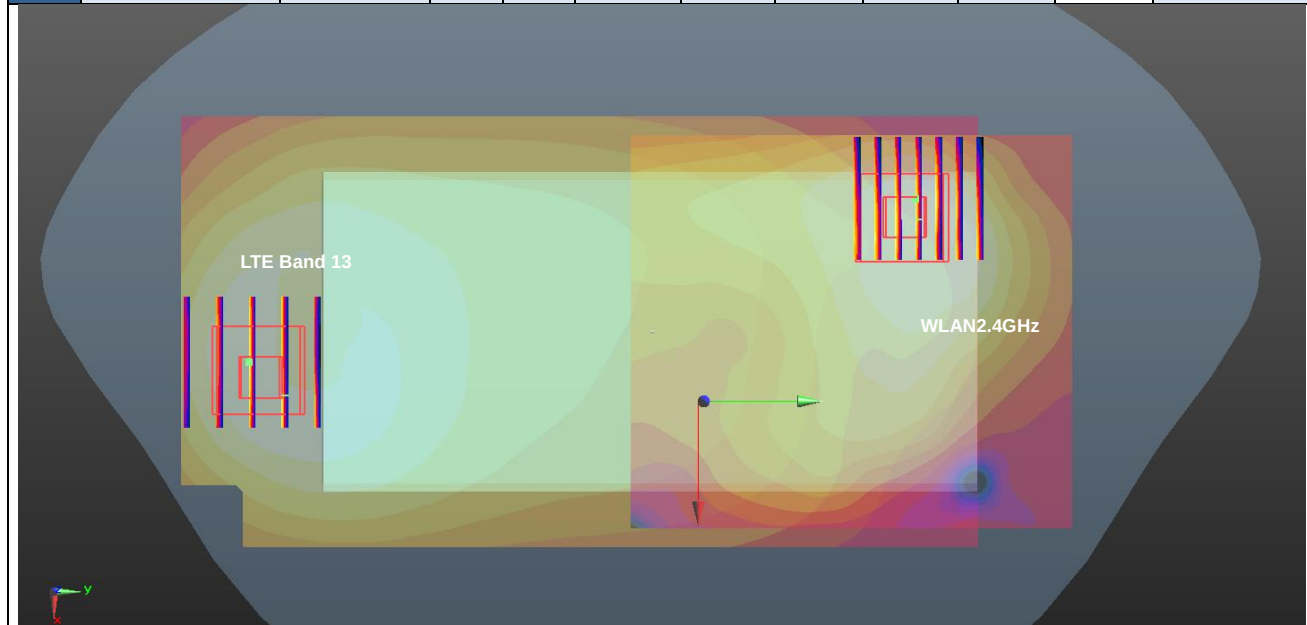




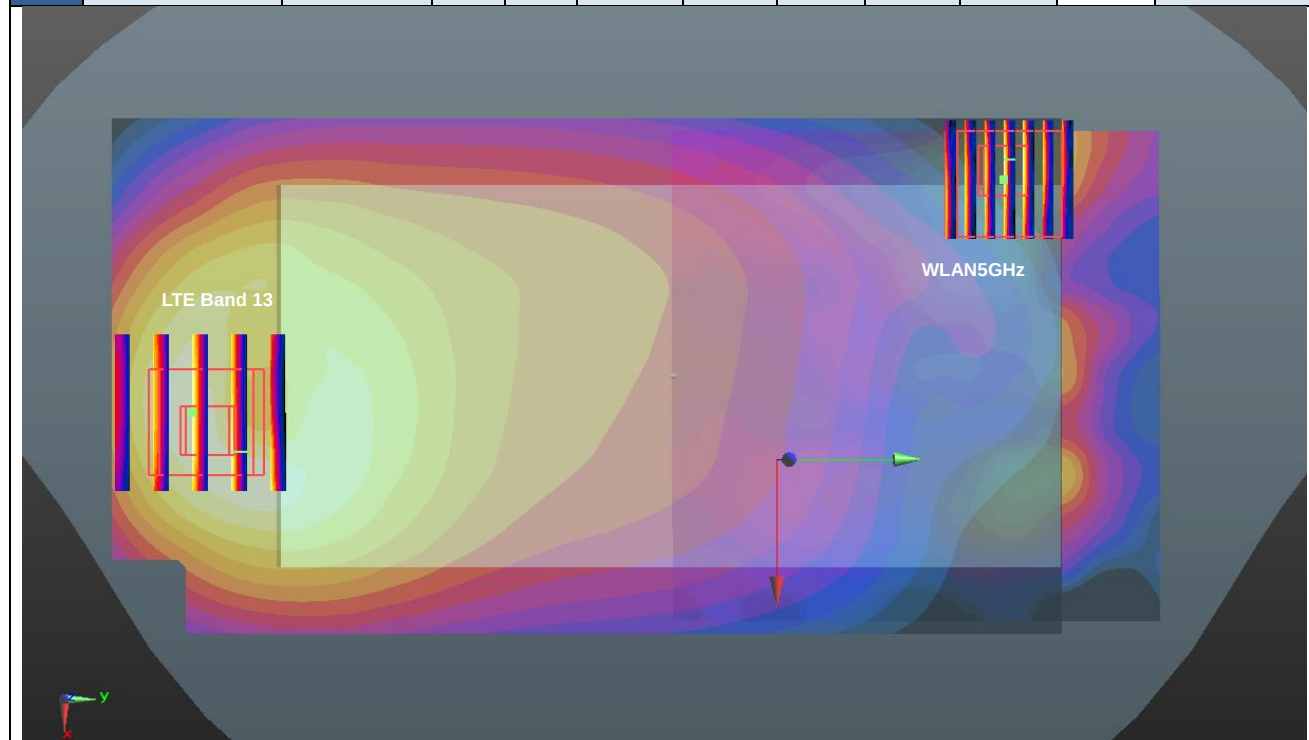
Case #20	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 12	Back	1.116	5mm	11.5	-94.9	-1.41	171.6	2.28	0.02	Not required
	WLAN5GHz		1.160	5mm	-42.4	68	-0.88				



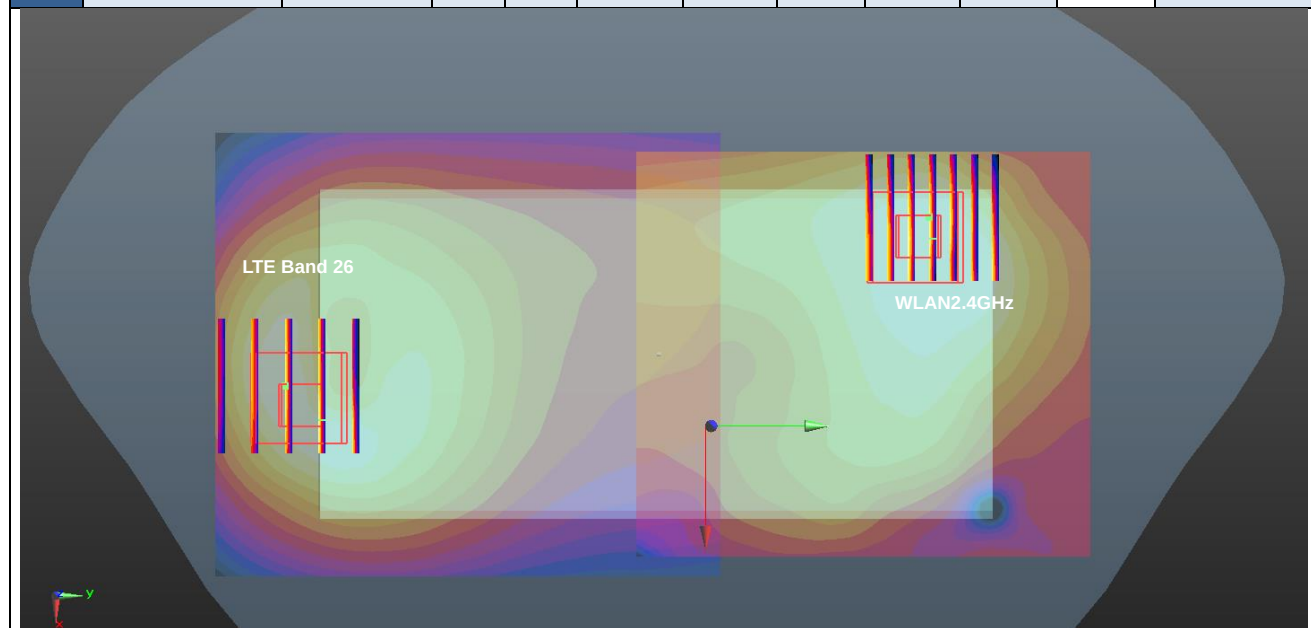
Case #21	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 13	Back	1.242	5mm	13.9	-93.7	-1.44	164.1	1.97	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				



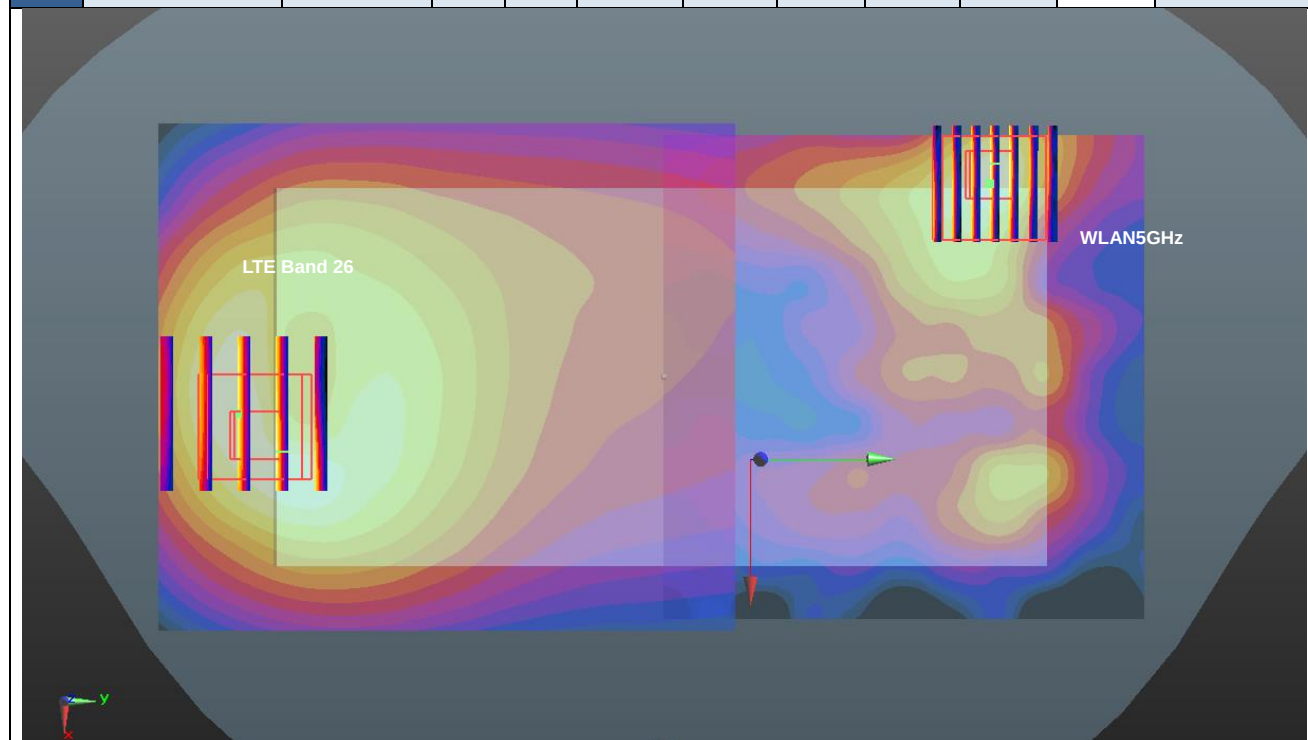
Case #22	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 13	Back	1.242	5mm	13.9	-93.7	-1.44	171.2	2.40	0.02	Not required
	WLAN5GHz		1.160	5mm	-42.4	68	-0.88				



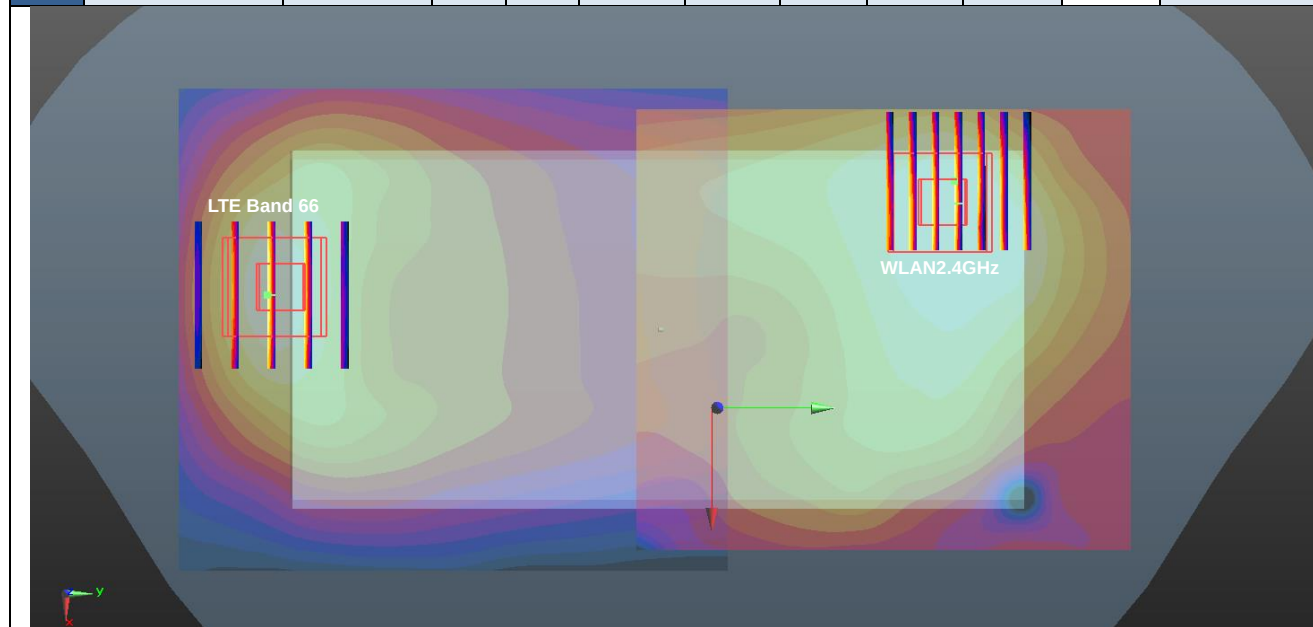
Case #23	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 26	Back	1.383	5mm	13.9	-82.1	-3.72	153.0	2.11	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				

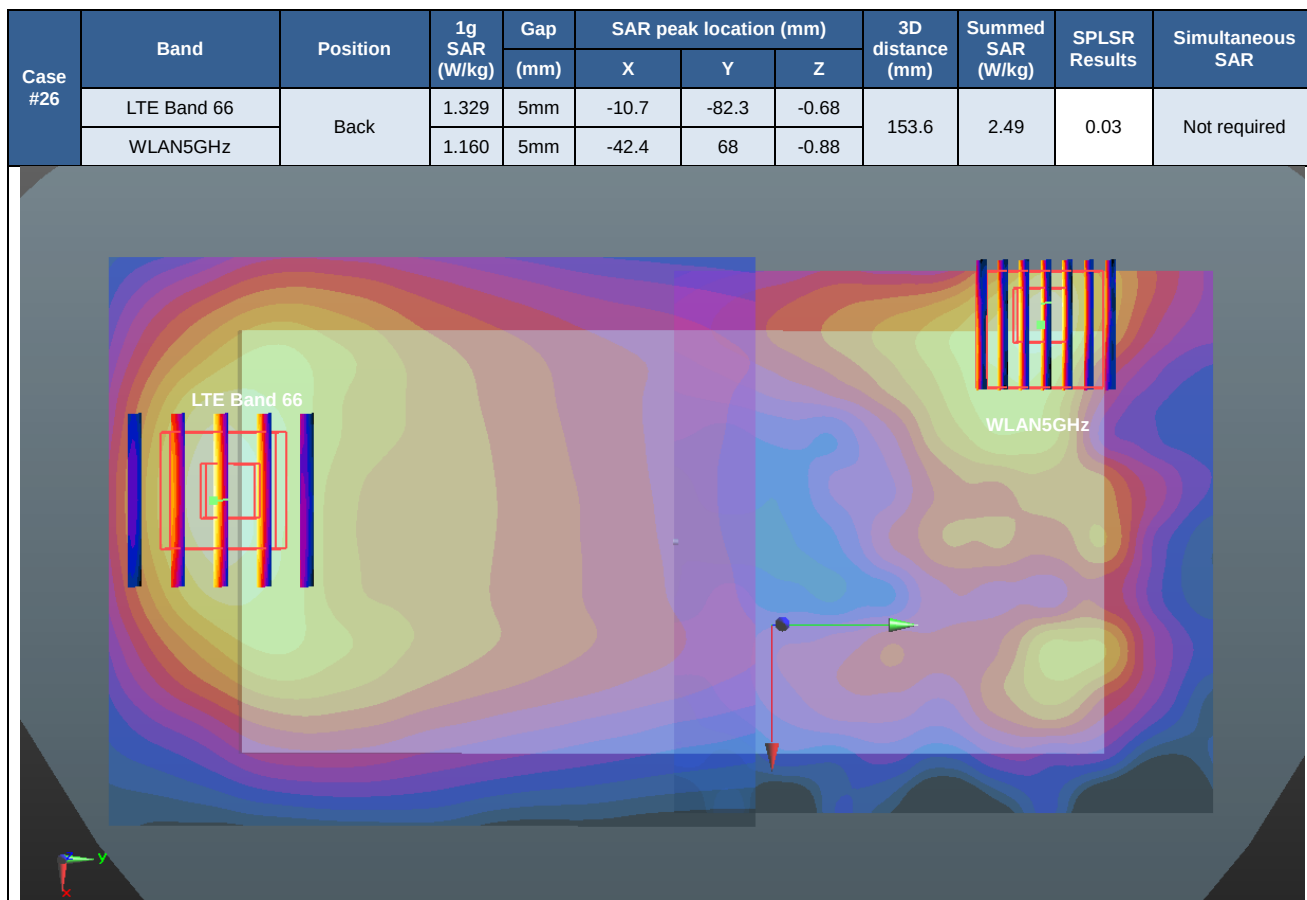


Case #24	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 26	Back	1.383	5mm	13.9	-93.7	-1.44	171.2	2.54	0.02	Not required
	WLAN5GHz		1.160	5mm	-42.4	68	-0.88				

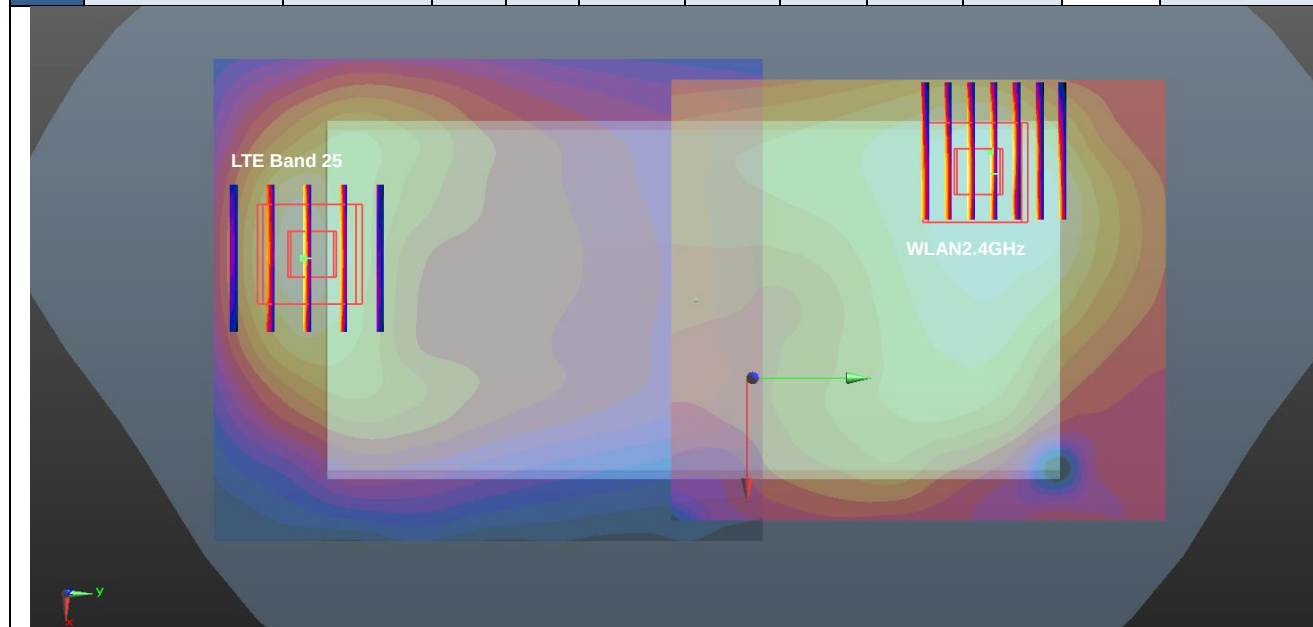


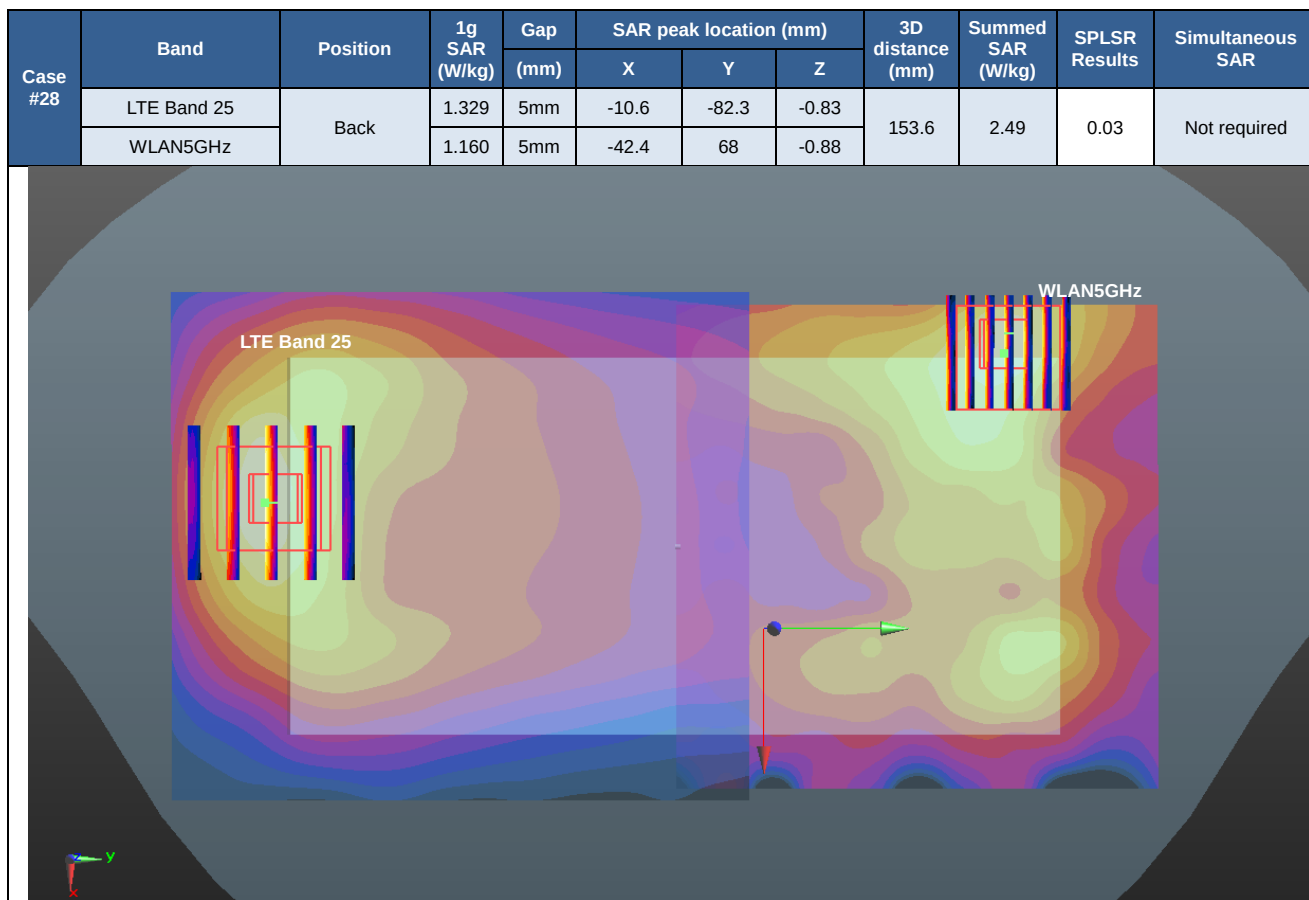
Case #25	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 66	Back	1.329	5mm	-10.7	-82.3	-0.68	148.1	2.06	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				



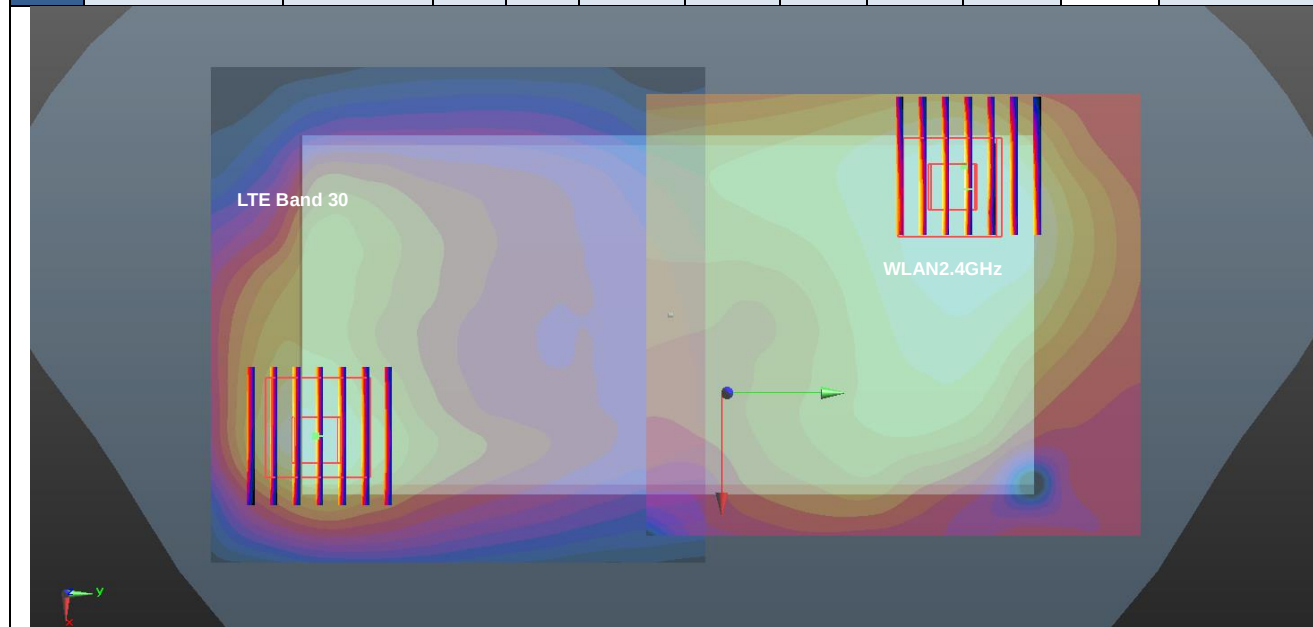


Case #27	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 25	Back	1.329	5mm	-10.6	-82.3	-0.83	148.1	2.06	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				

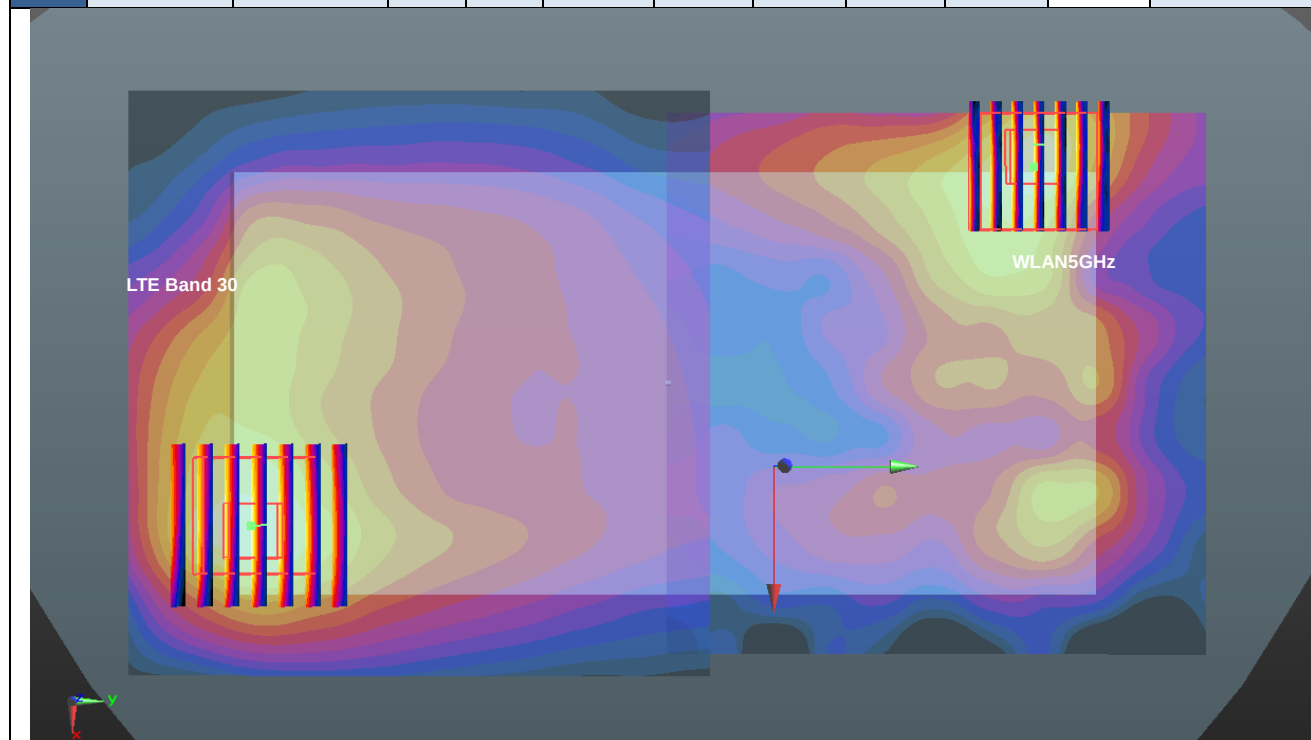




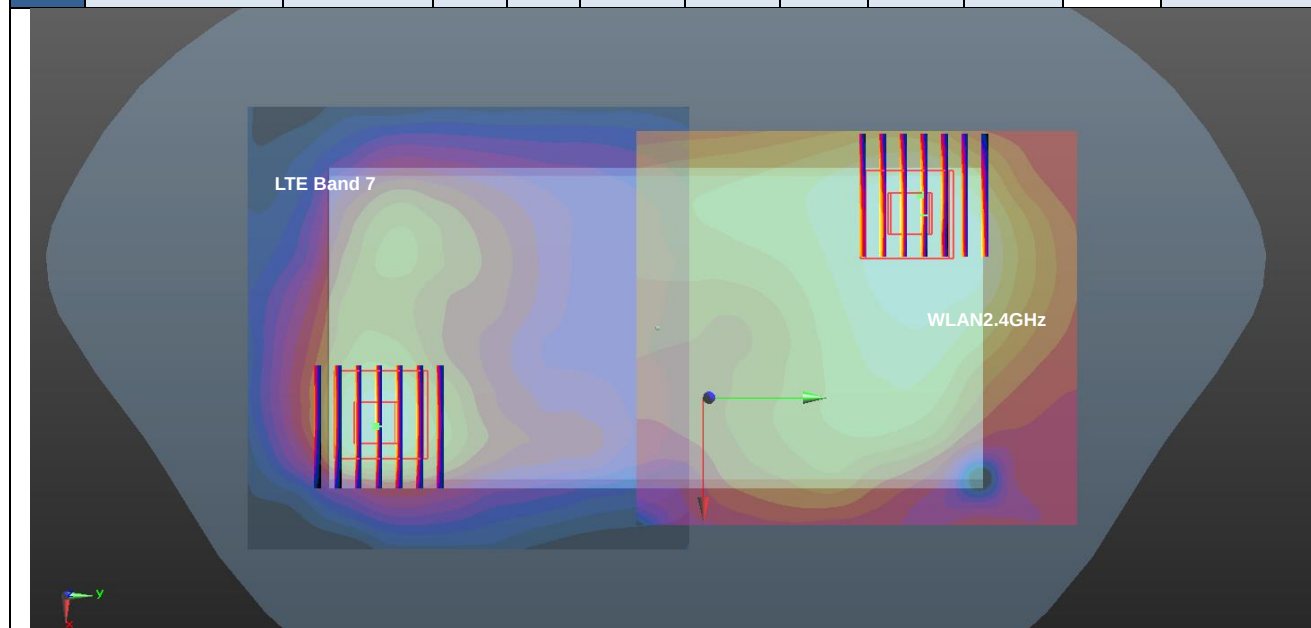
Case #29	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 30	Back	1.098	5mm	28.4	-77.2	-1.2	153.1	1.82	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				



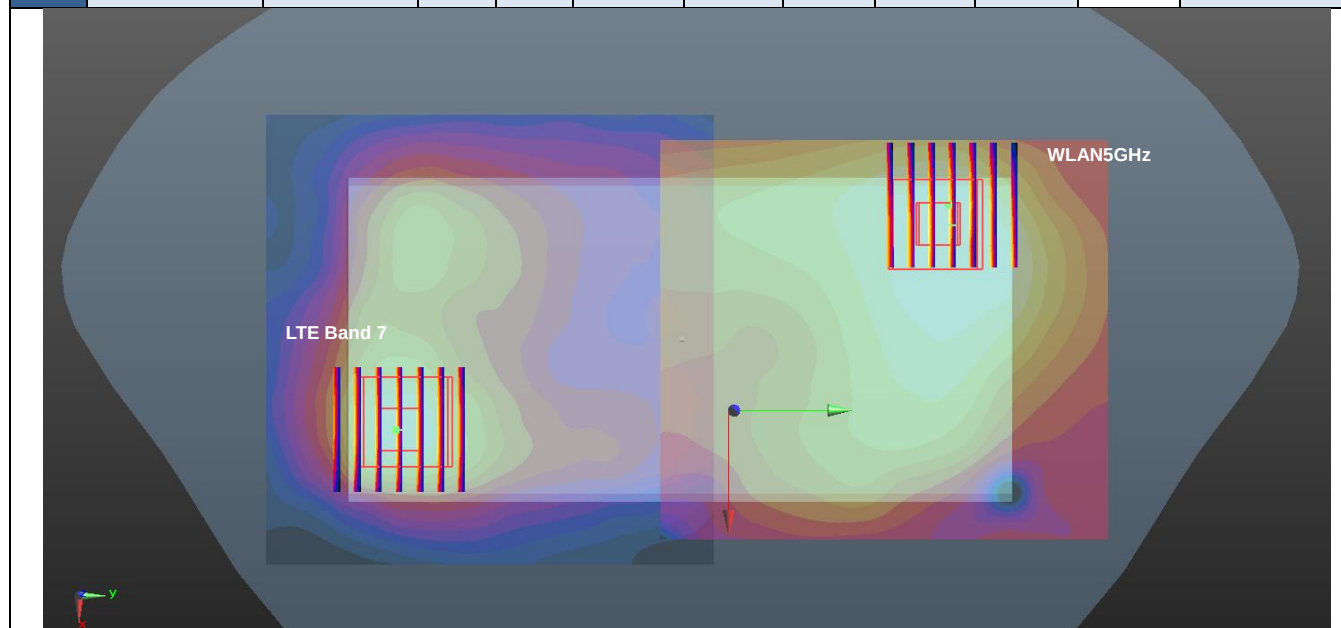
Case #30	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 30	Back	1.098	5mm	28.4	-77.2	-1.2	161.5	2.26	0.02	Not required
	WLAN5GHz		1.160	5mm	-42.4	68	-0.88				



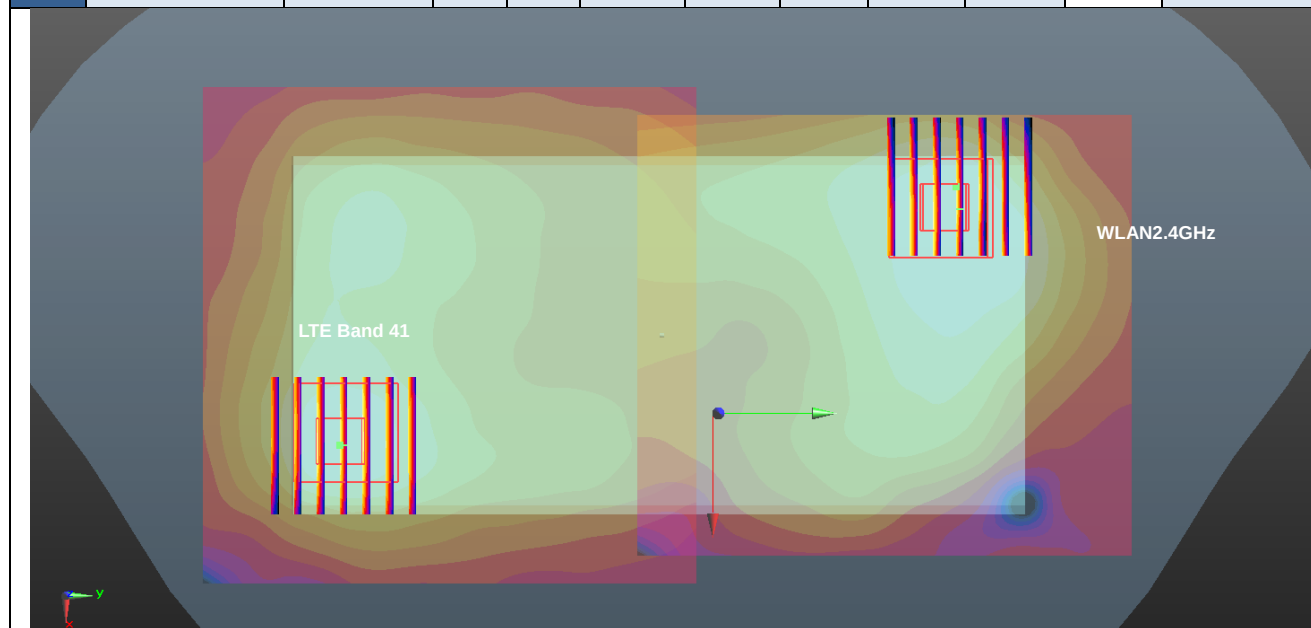
Case #31	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 7	Back	1.291	5mm	-23	-69.8	-0.66	134.6	2.02	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				

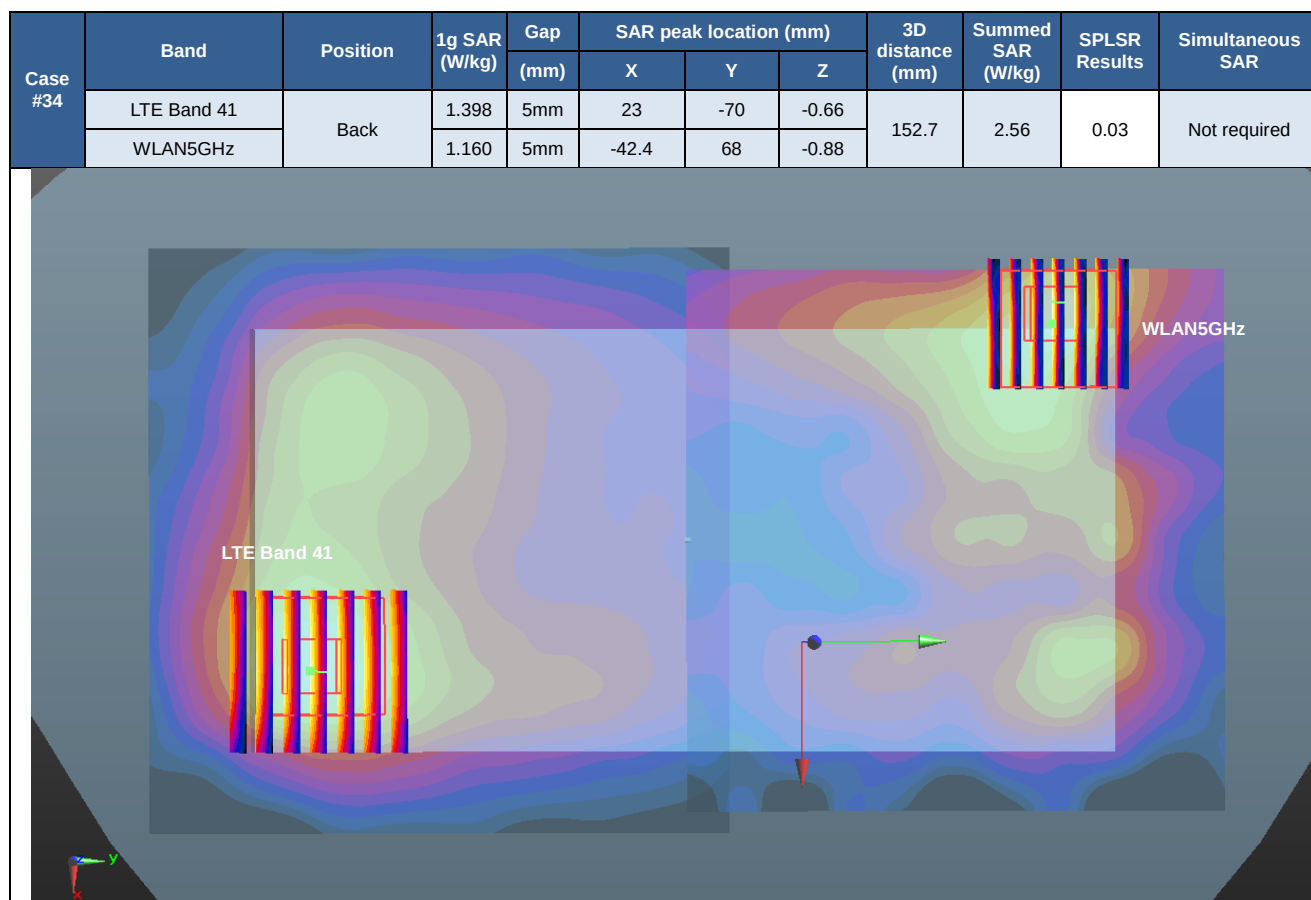


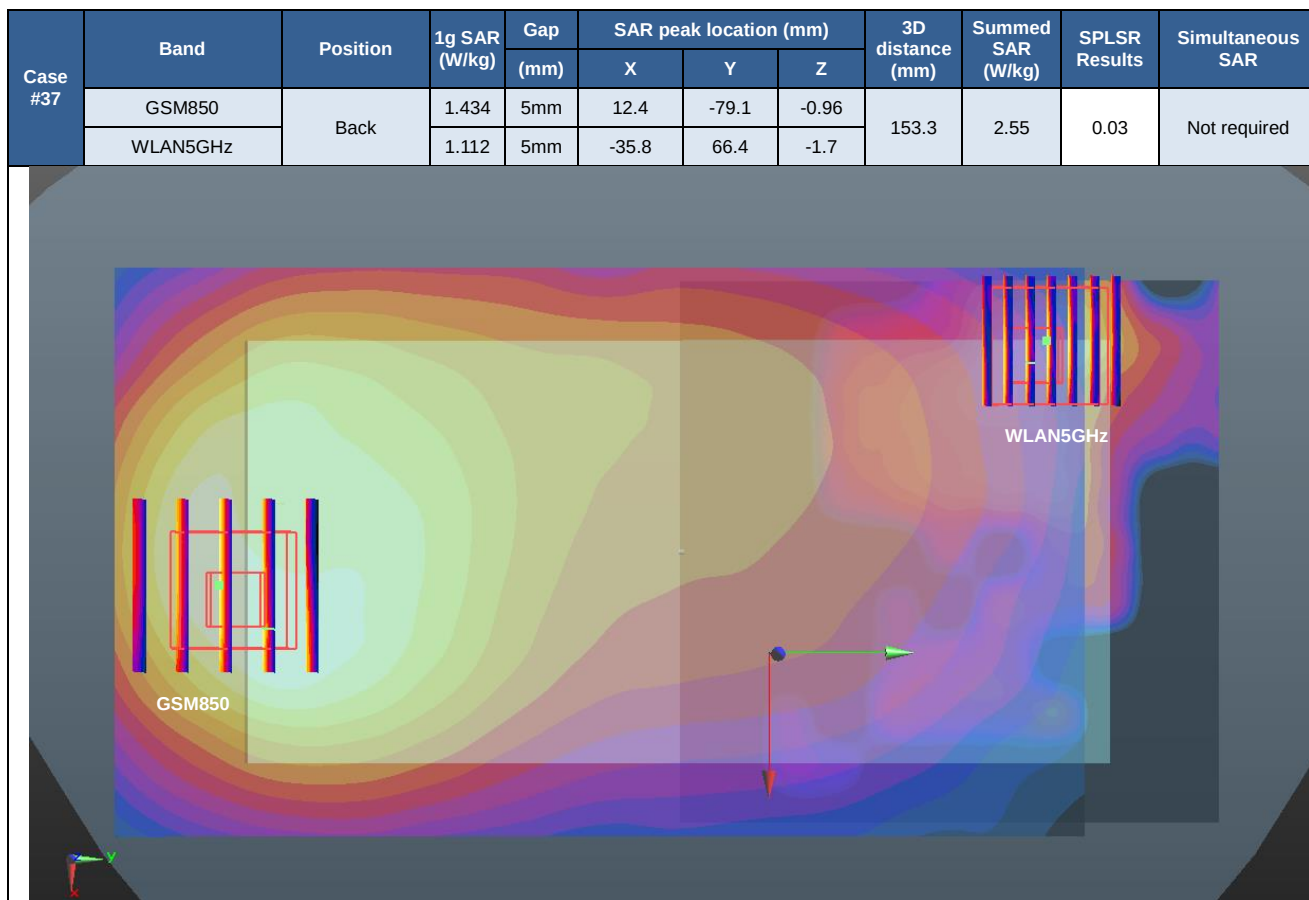
Case #32	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 7	Back	1.291	5mm	-23	-69.8	-0.66	139.2	2.45	0.03	Not required
	WLAN5GHz		1.160	5mm	-42.4	68	-0.88				

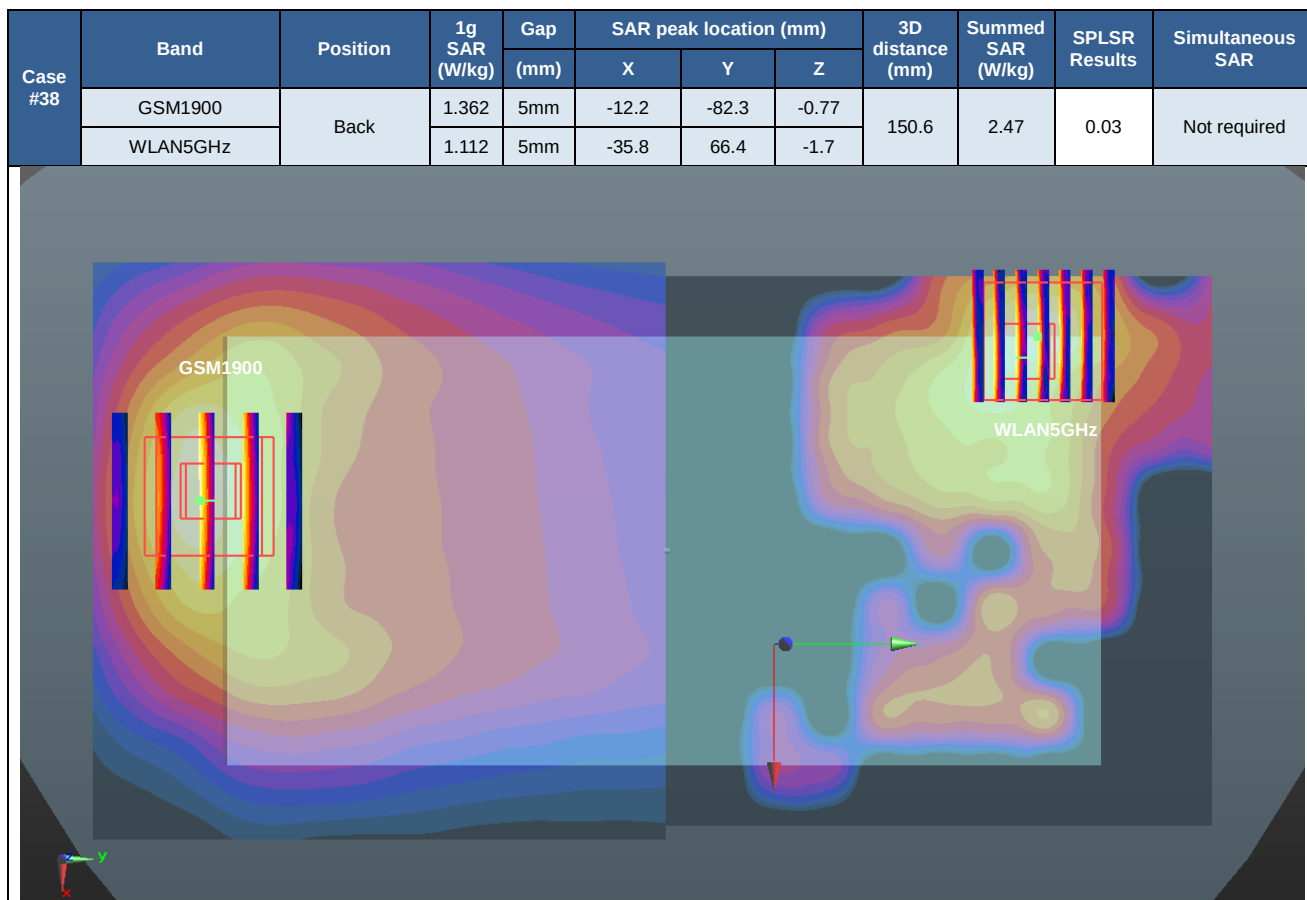


Case #33	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 41	Back	1.398	5mm	23	-70	-0.66	144.4	2.12	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				

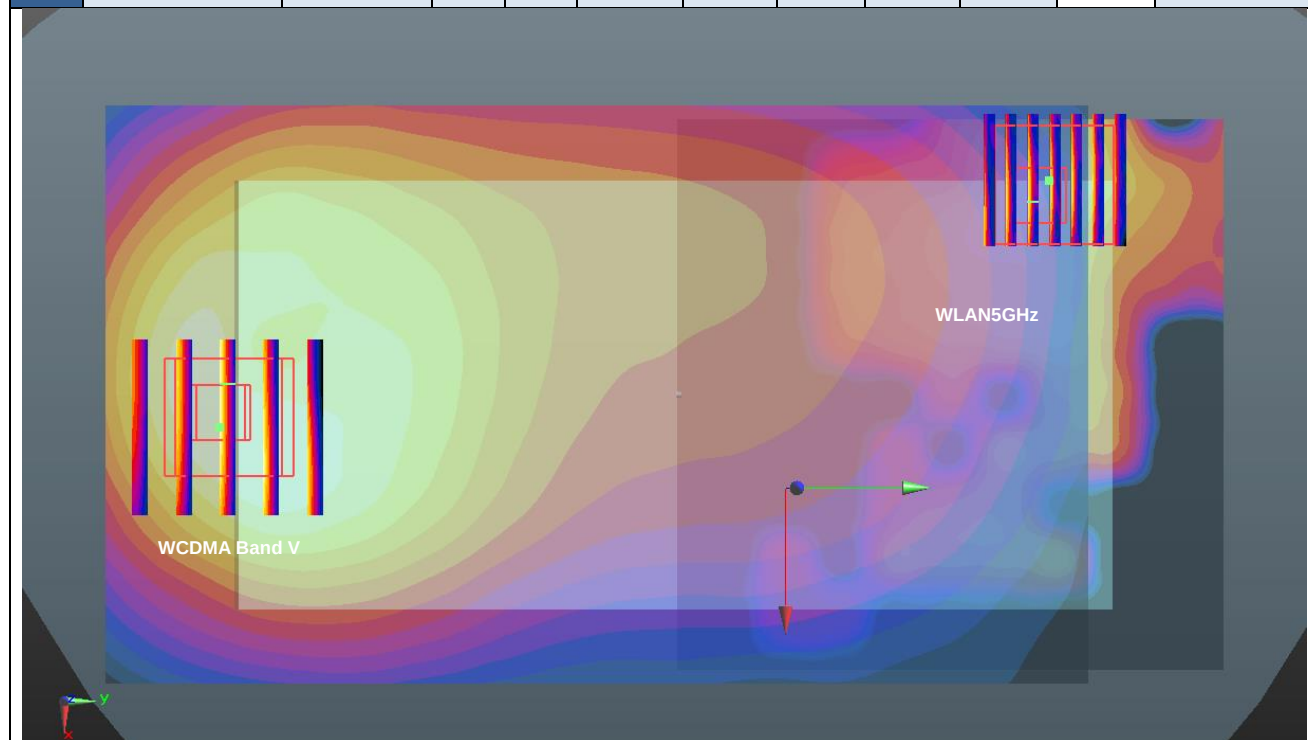


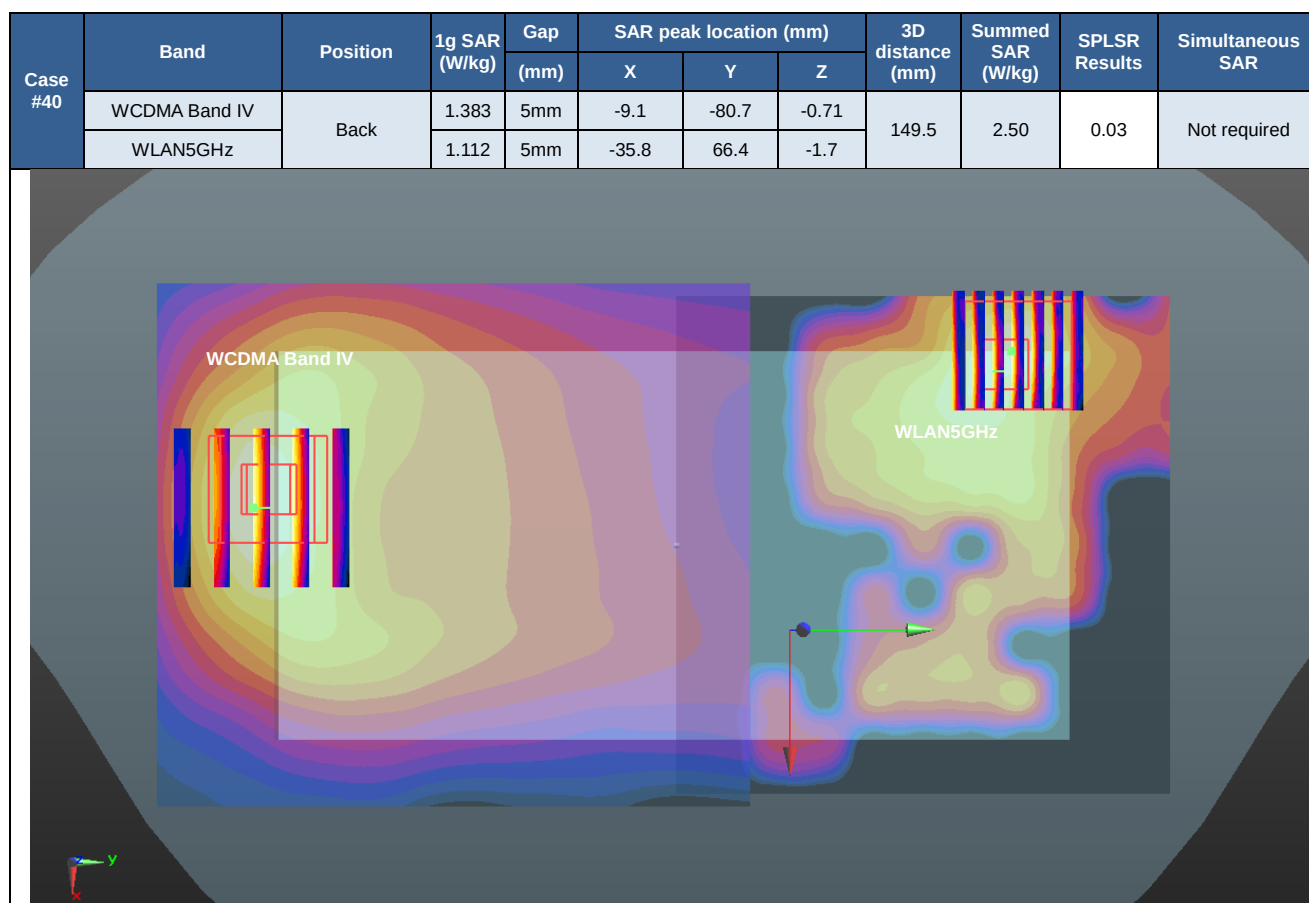


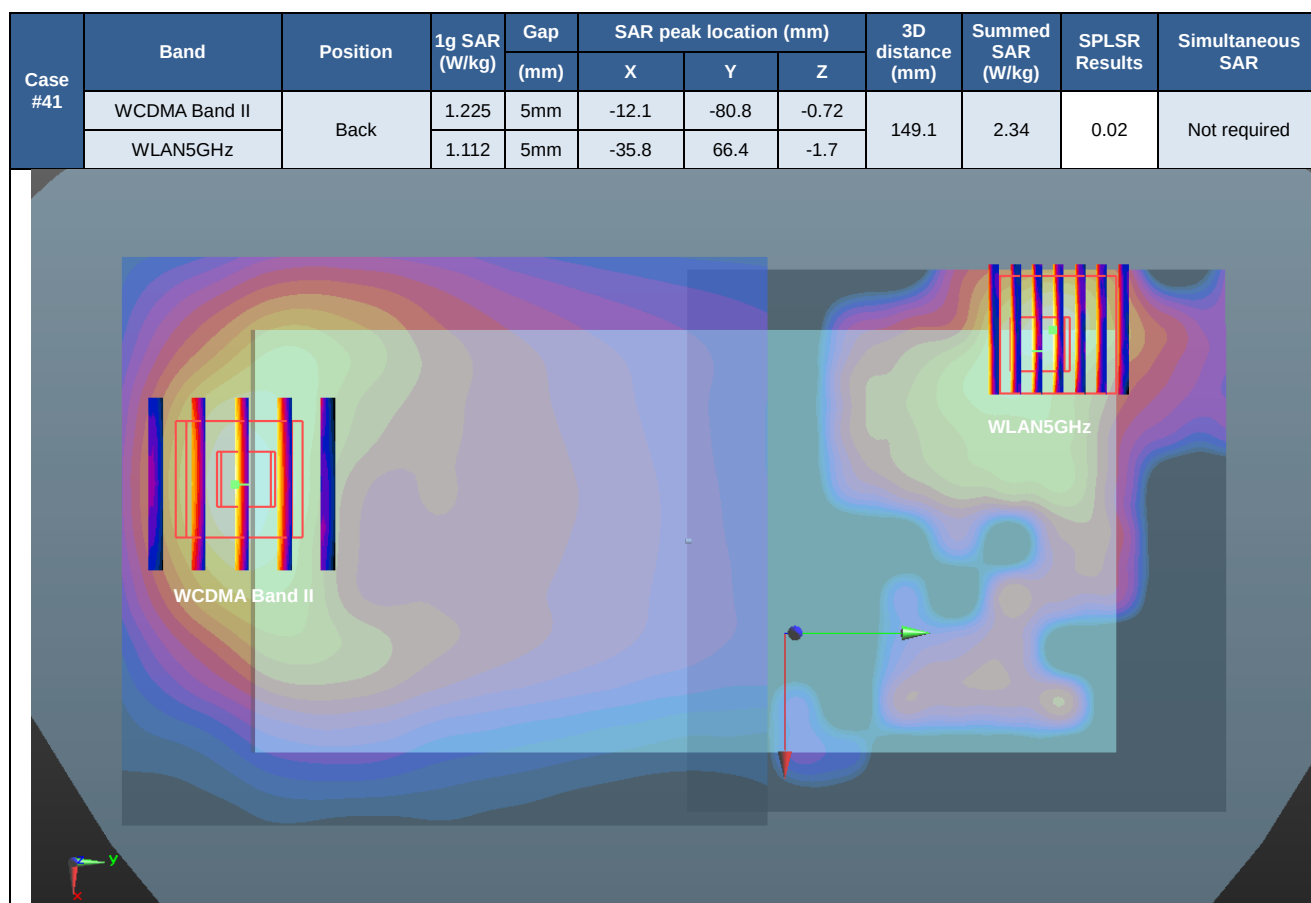




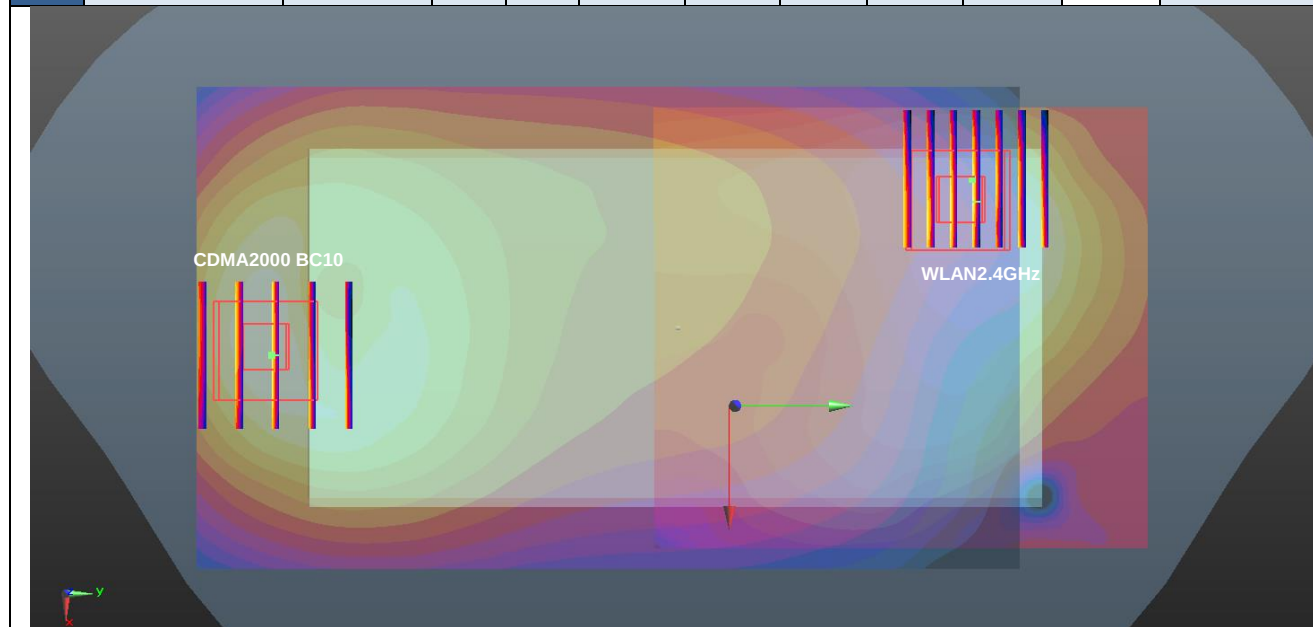
Case #39	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA Band V	Back	1.399	5mm	6	-82.4	-1	154.6	2.51	0.03	Not required
	WLAN5GHz		1.112	5mm	-35.8	66.4	-1.7				



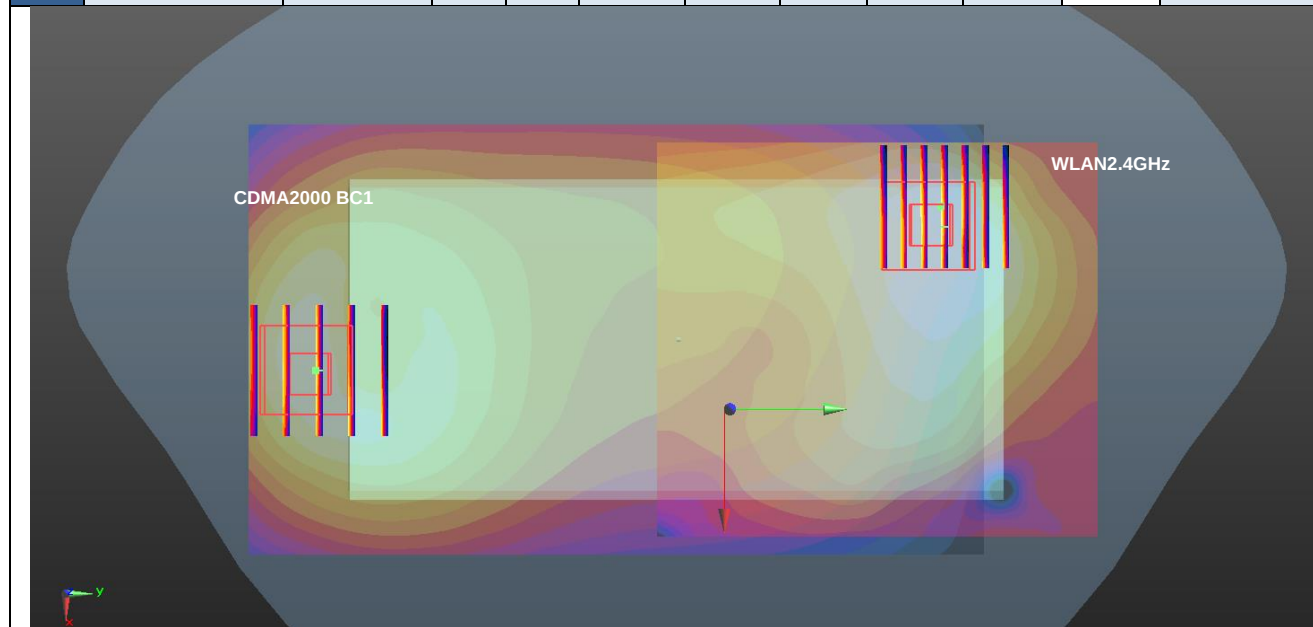


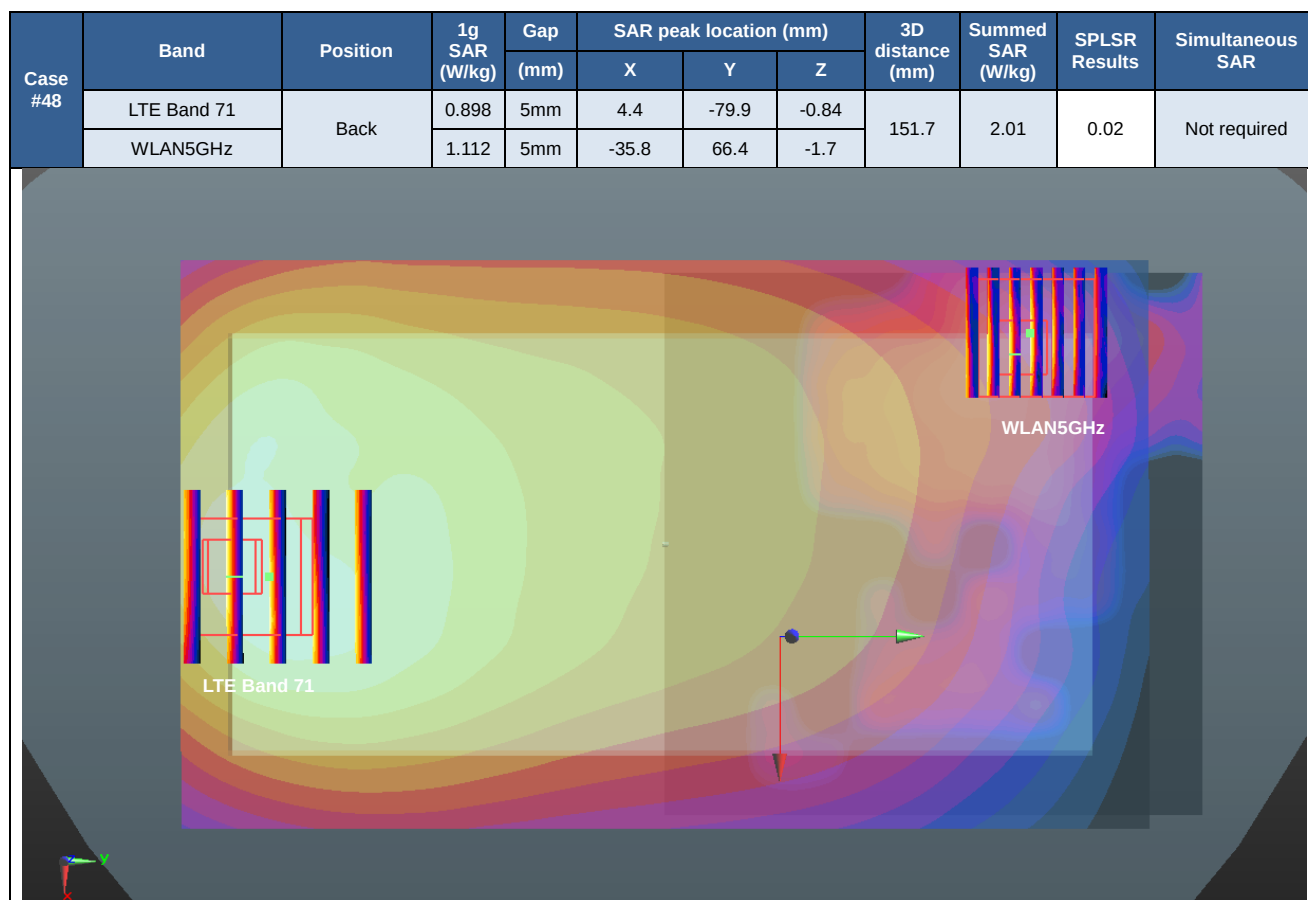


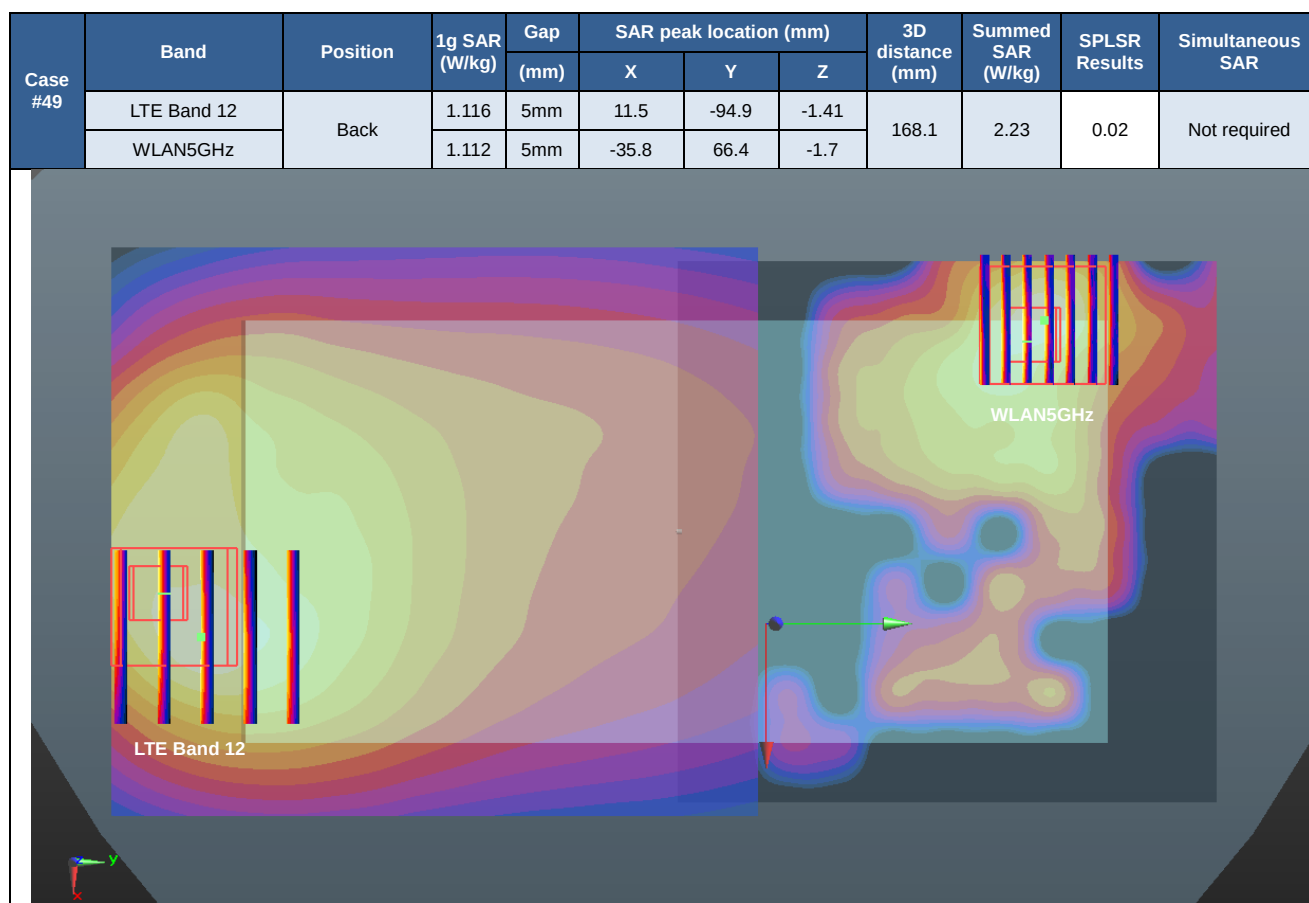
Case #42	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC10	Back	1.127	5mm	6	-88.5	-1.46	157.1	1.85	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				

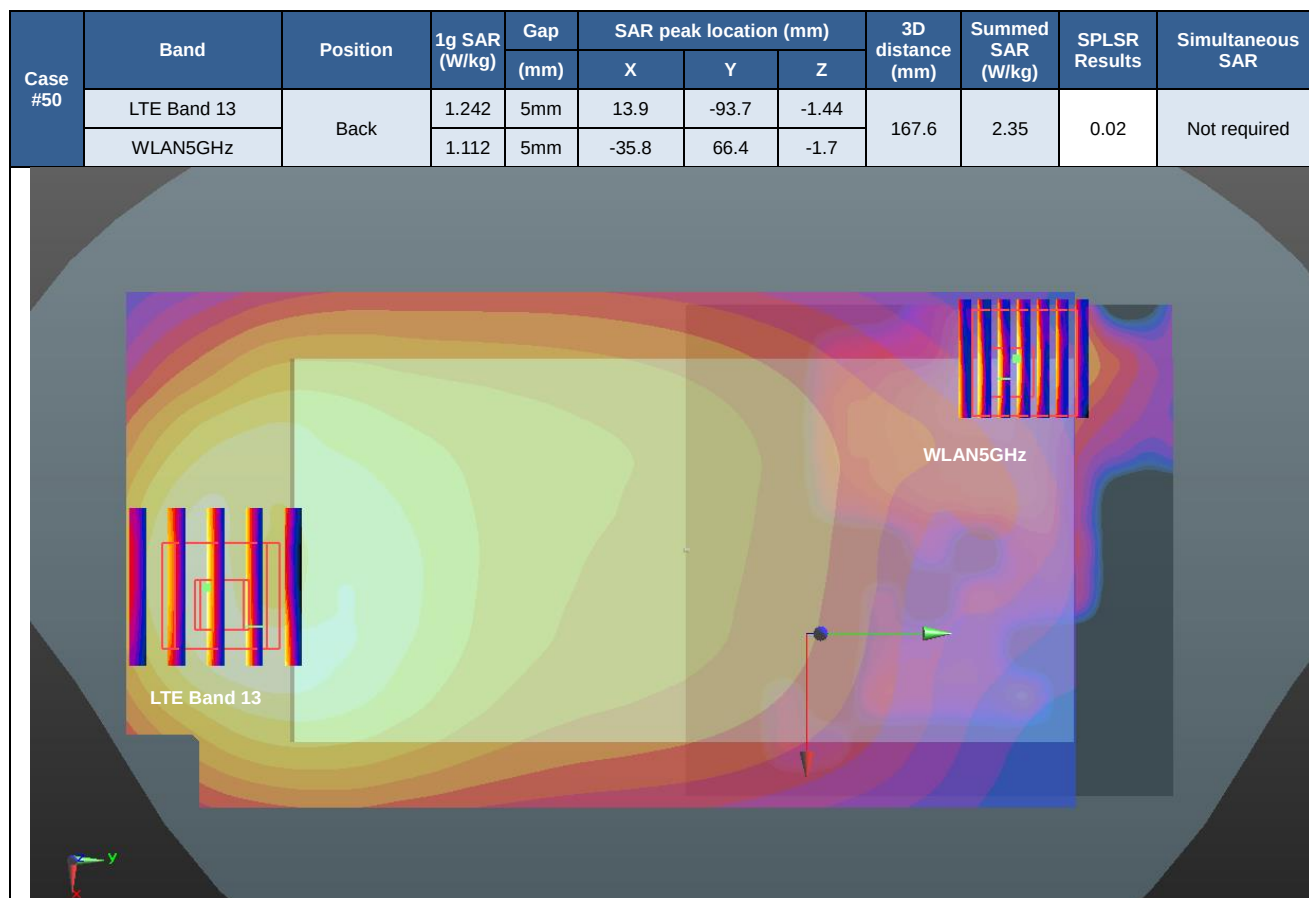


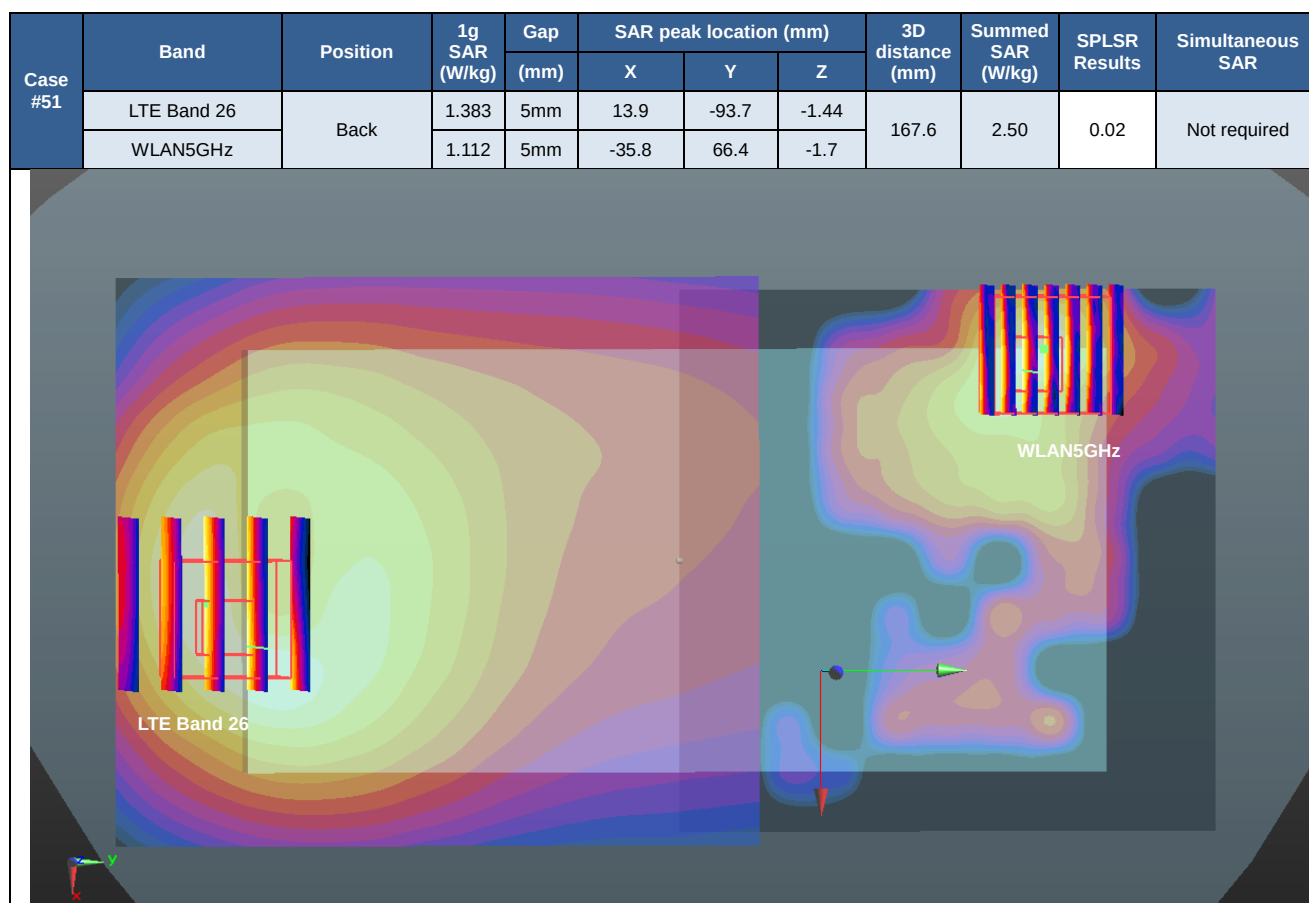
Case #43	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC1	Back	1.361	5mm	7.5	-90.1	-1.49	159.0	2.09	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				

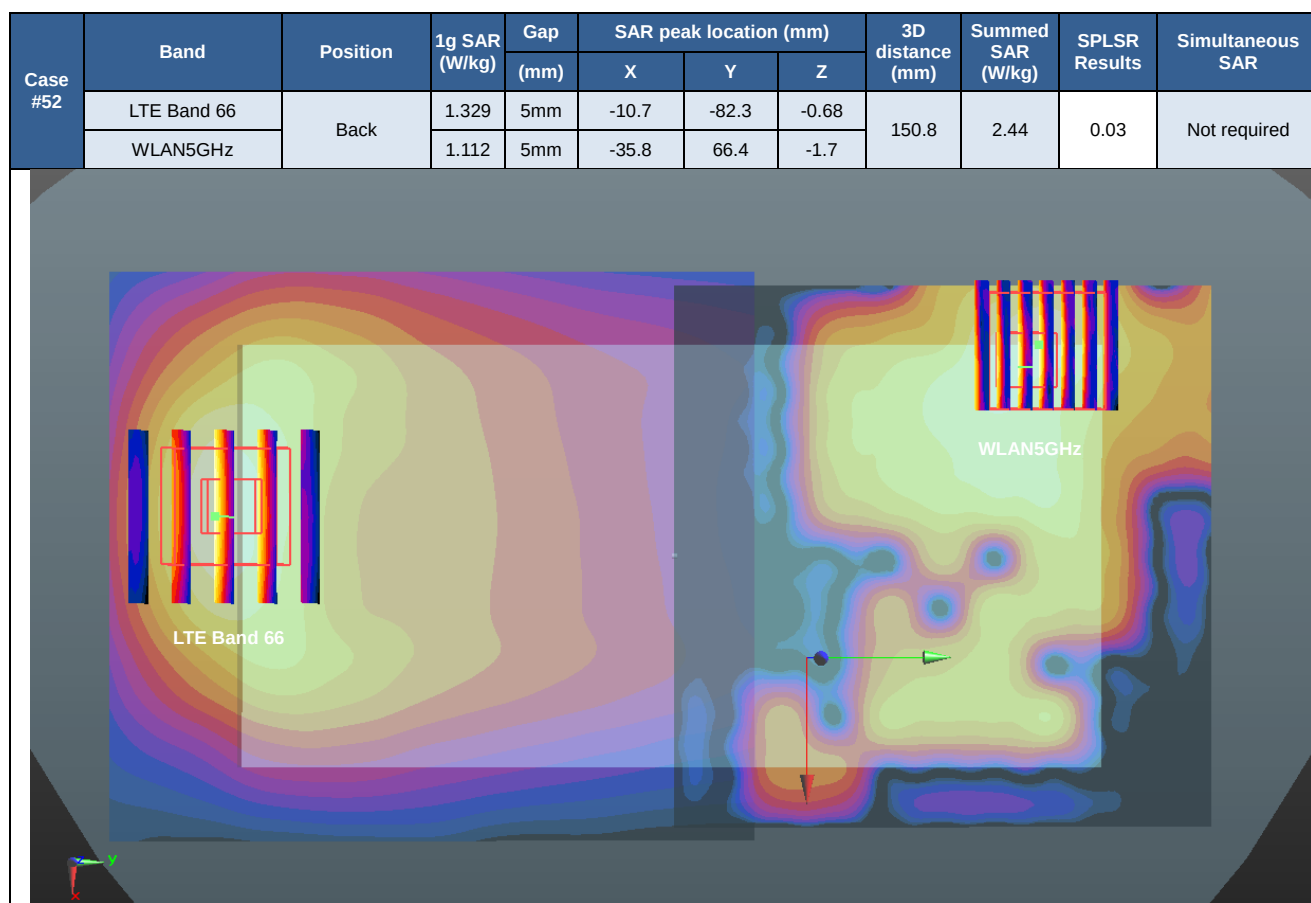


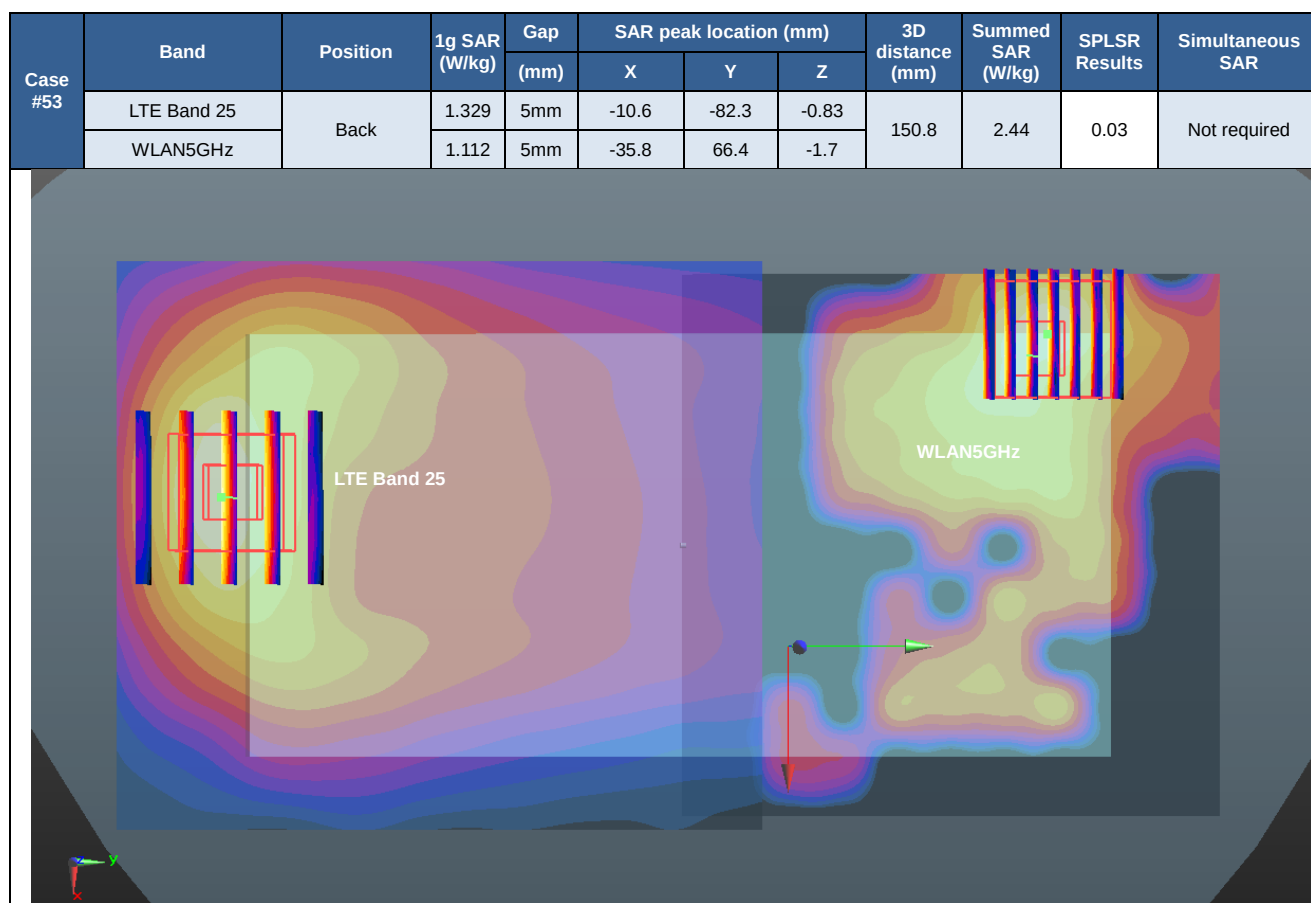


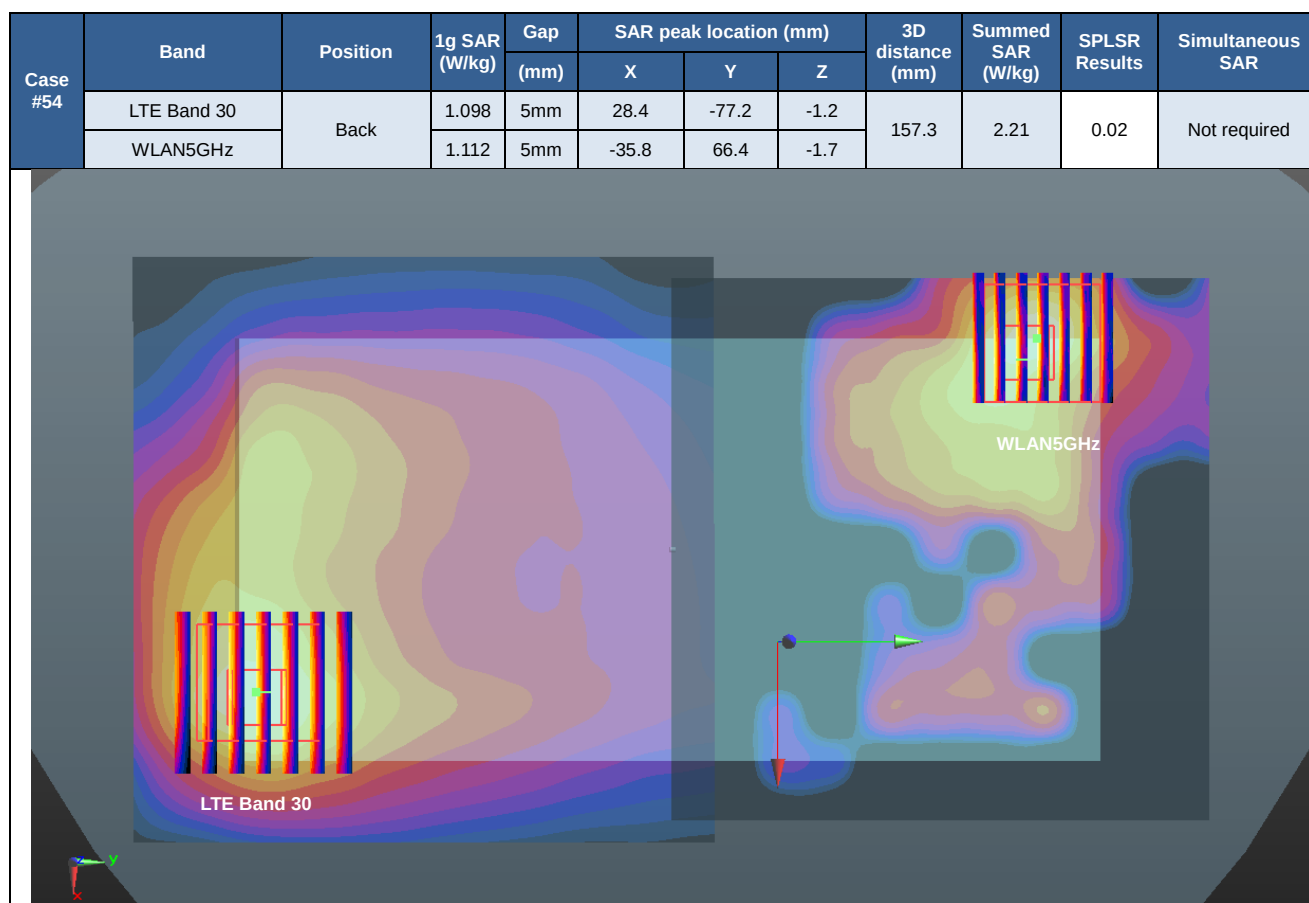




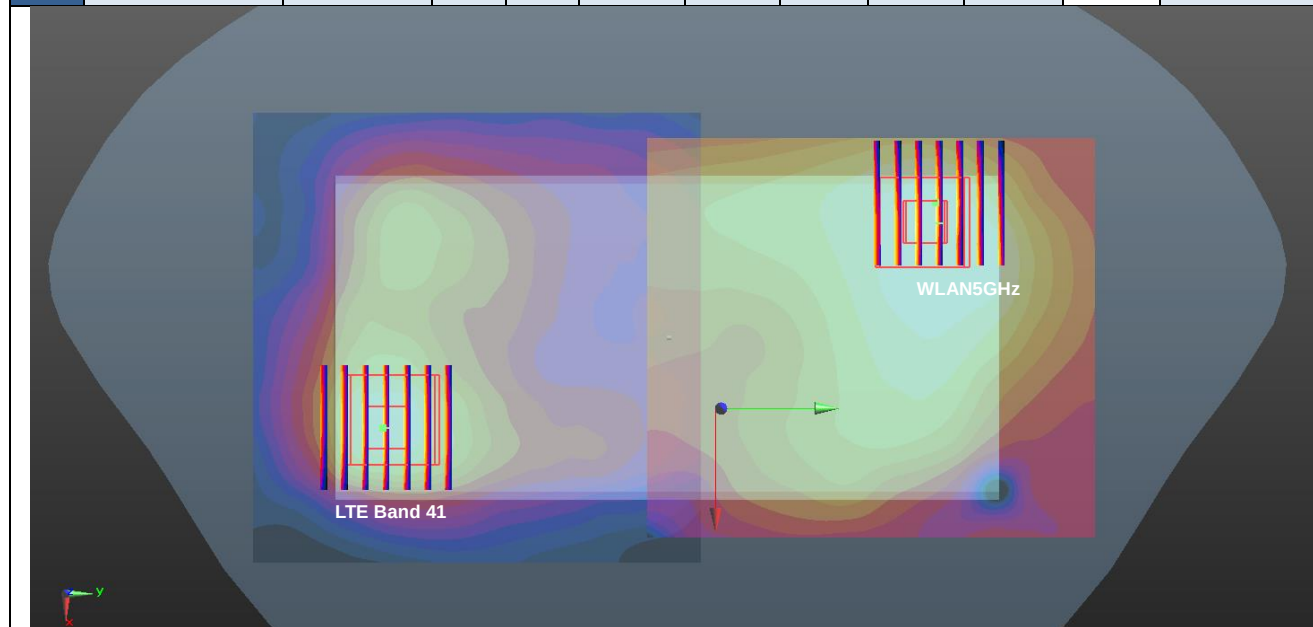




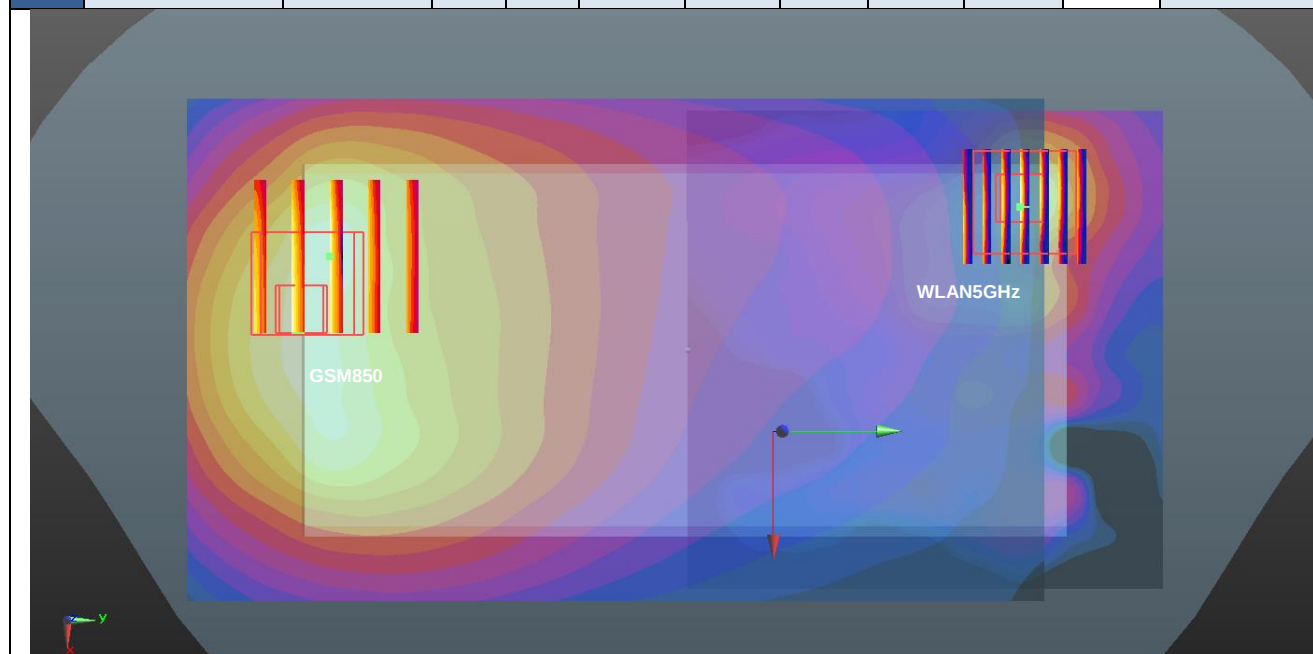




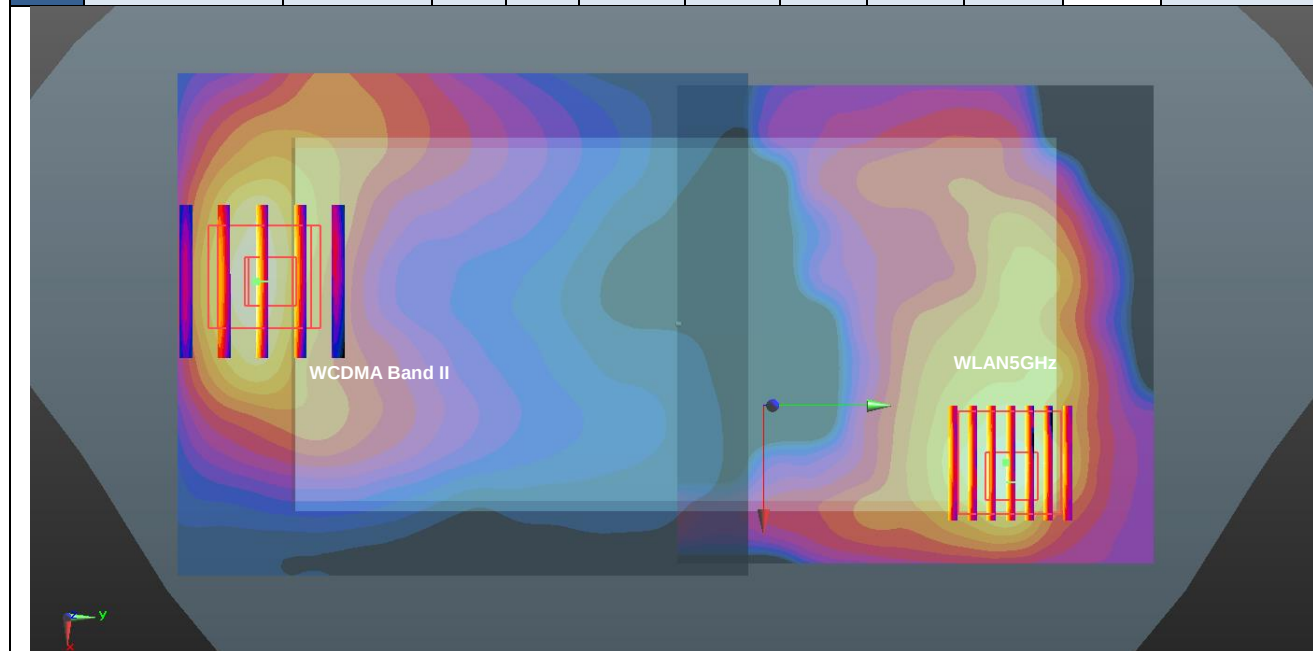
Case #55	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 41	Back	1.398	5mm	23	-70	-0.66	148.5	2.51	0.03	Not required
	WLAN5GHz		1.112	5mm	-35.8	66.4	-1.7				



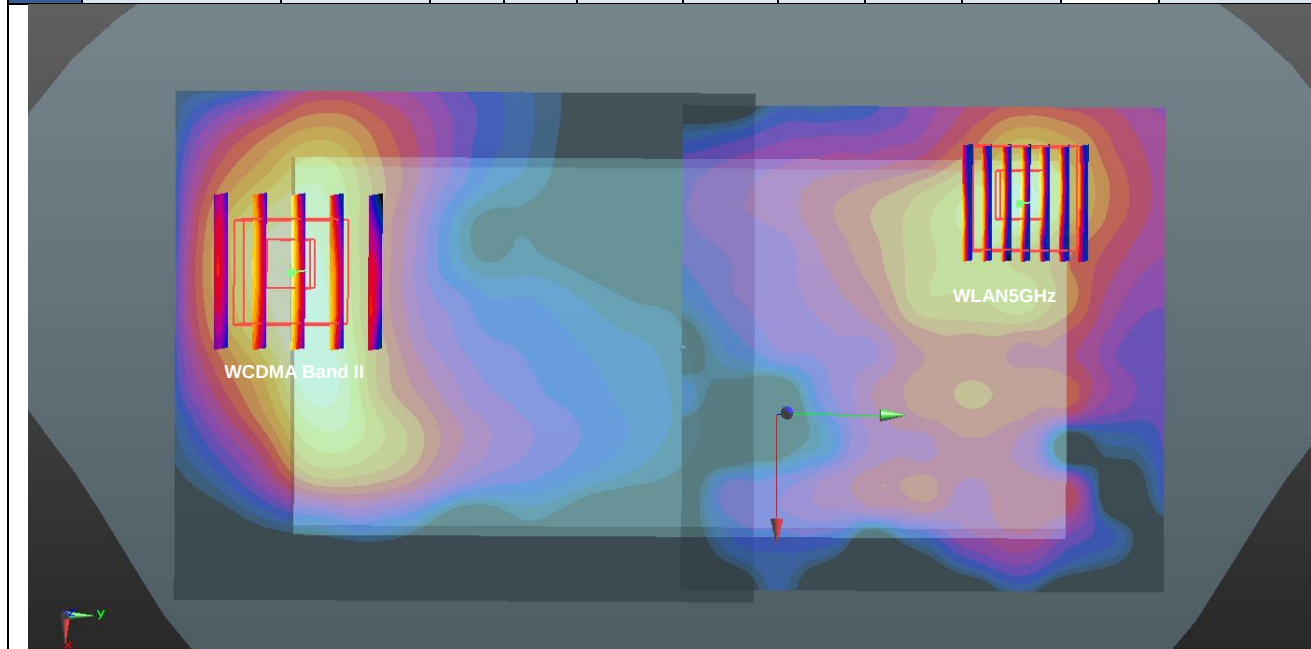
Case #56	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	GSM850	Back	3.029	0mm	-24.3	-76.6	-1.07	147.6	4.01	0.05	Not required
	WLAN5GHz		0.981	0mm	-31.6	70.8	-1.39				

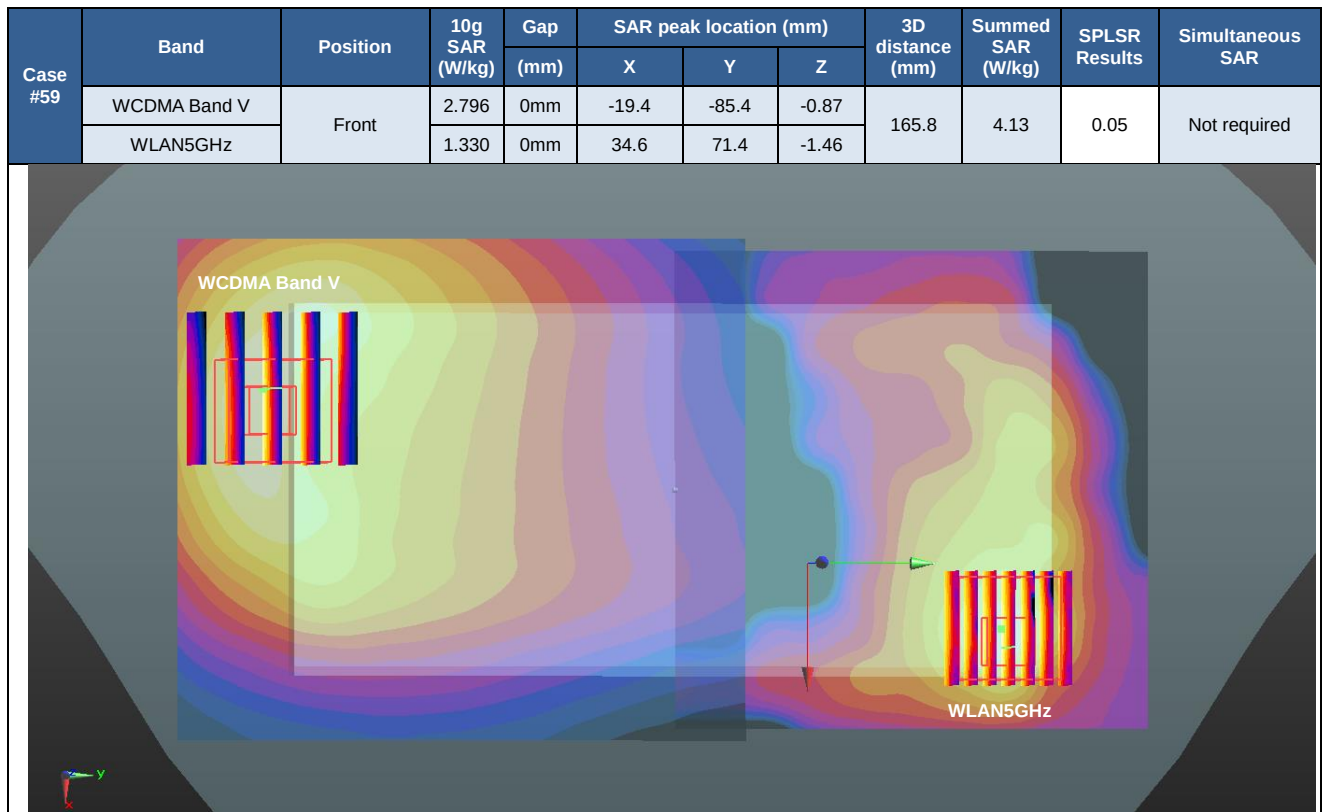


Case #57	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA Band II	Front	2.687	0mm	-7.4	-85.3	-0.54	162.2	4.02	0.05	Not required
	WLAN5GHz		1.330	0mm	34.6	71.4	-1.46				

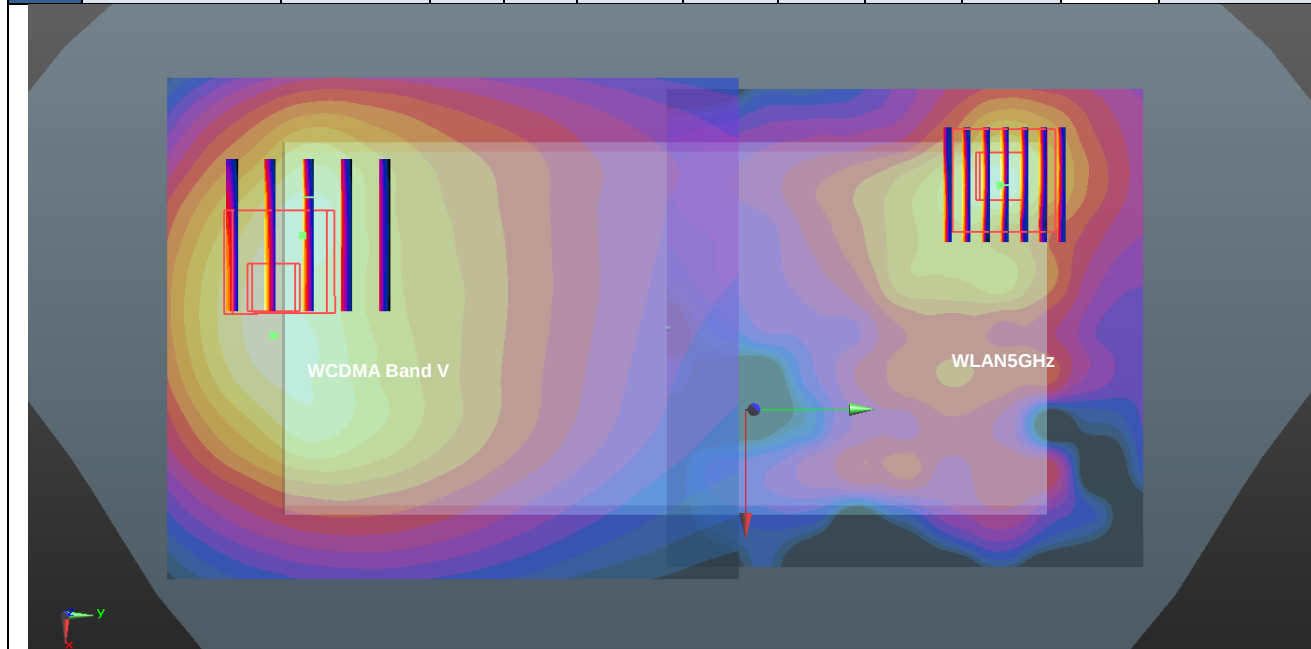


Case #58	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA Band II	Back	3.123	0mm	-15	-81	-0.63	152.7	4.10	0.05	Not required
	WLAN5GHz		0.981	0mm	-31.6	70.8	-1.39				

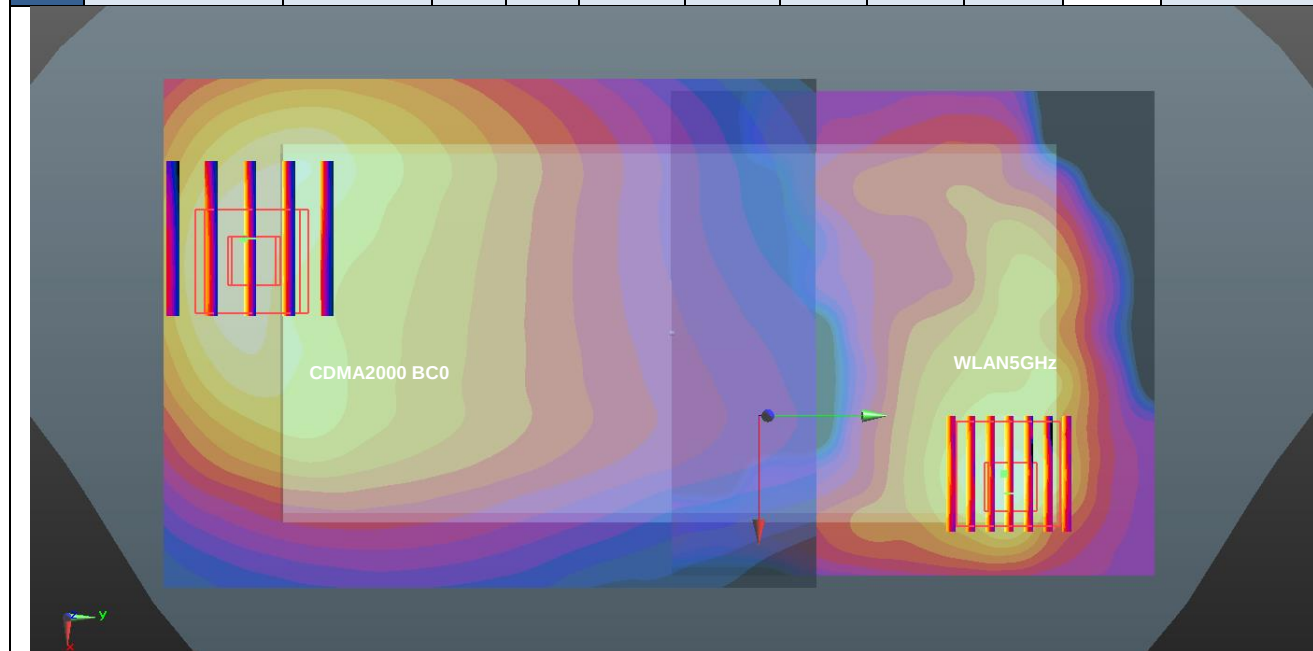


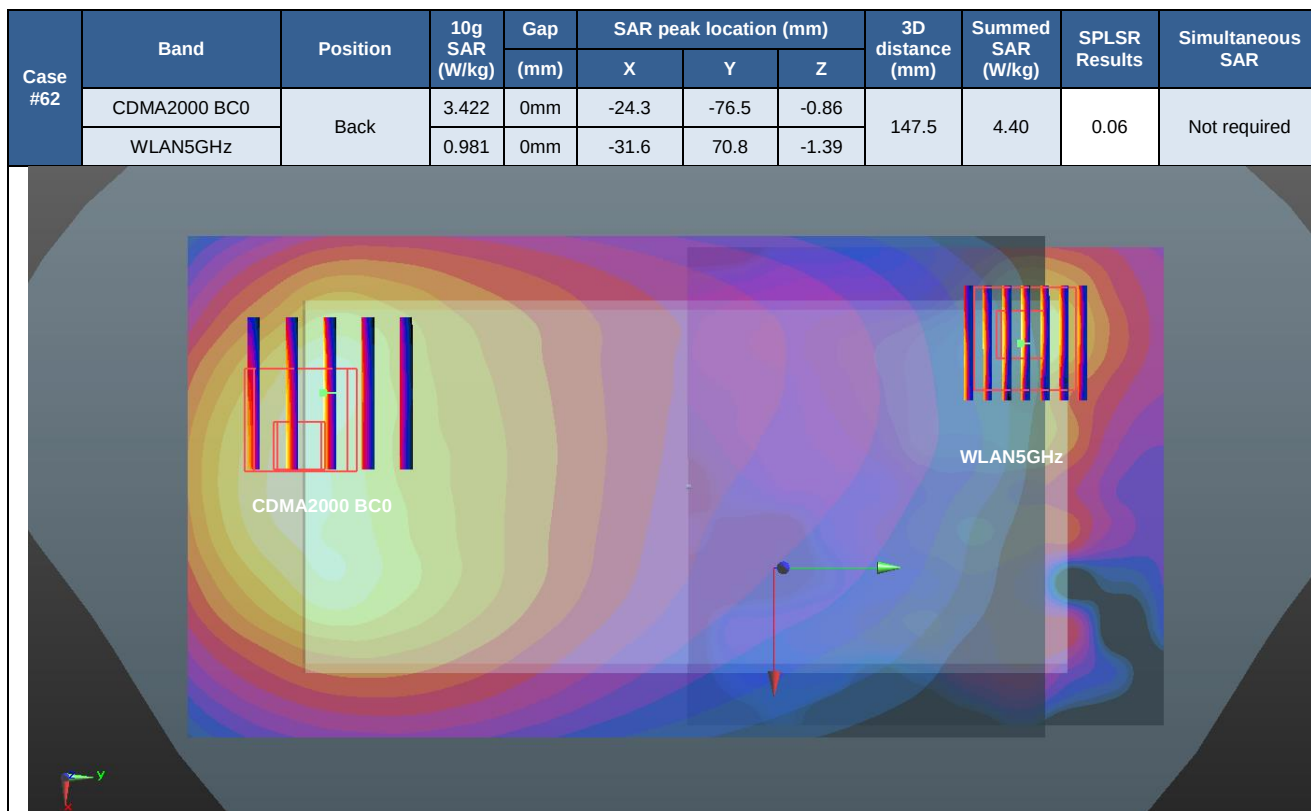


Case #60	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA Band V	Back	3.234	0mm	-25.9	-76.5	-0.93	147.4	4.22	0.06	Not required
	WLAN5GHz		0.981	0mm	-31.6	70.8	-1.39				

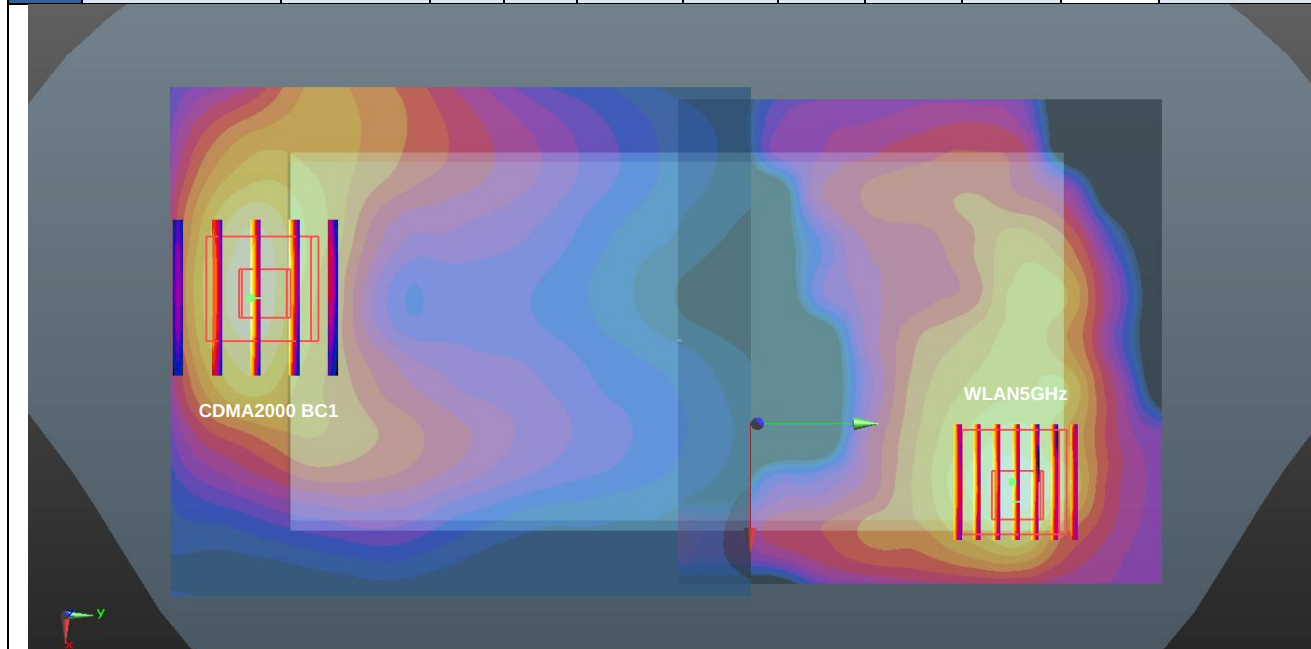


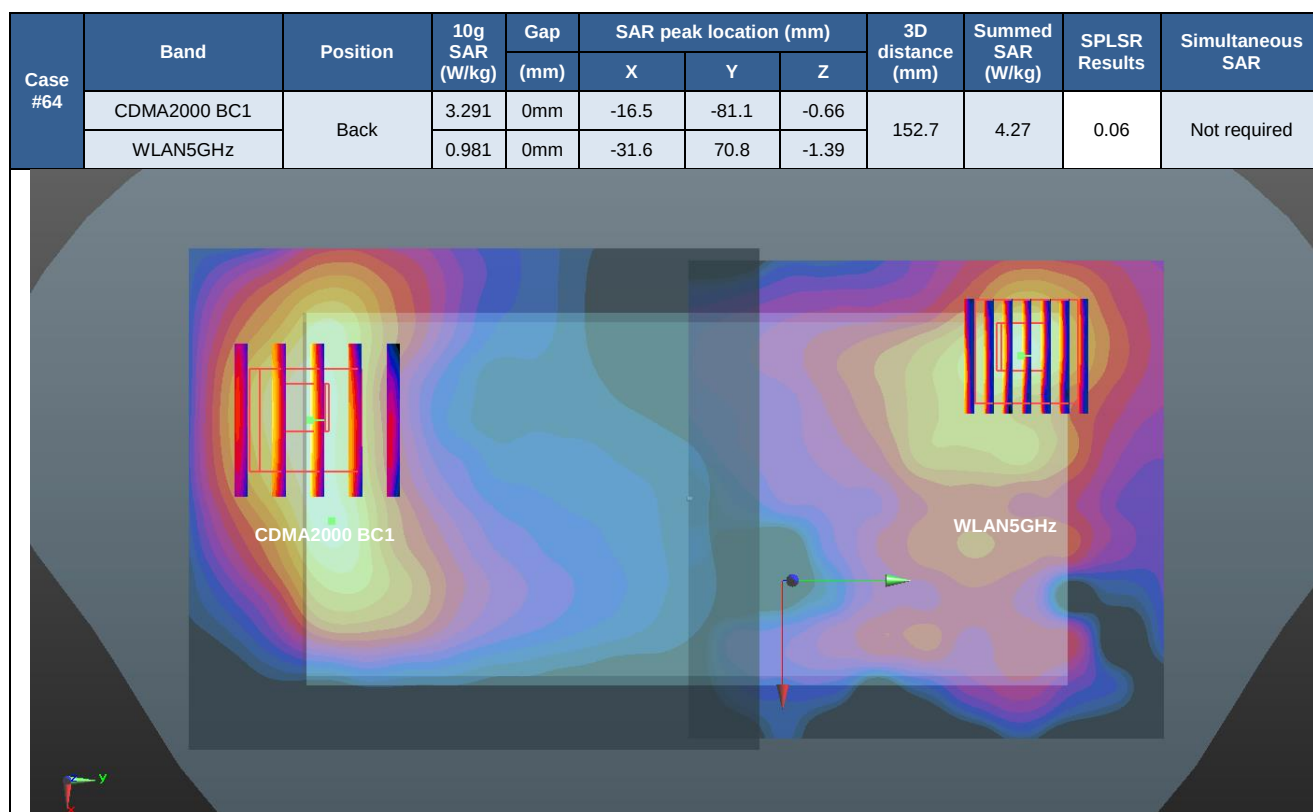
Case #61	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Front	2.971	0mm	-14.7	-85.3	-0.87	164.3	4.30	0.05	Not required
	WLAN5GHz		1.330	0mm	34.6	71.4	-1.46				

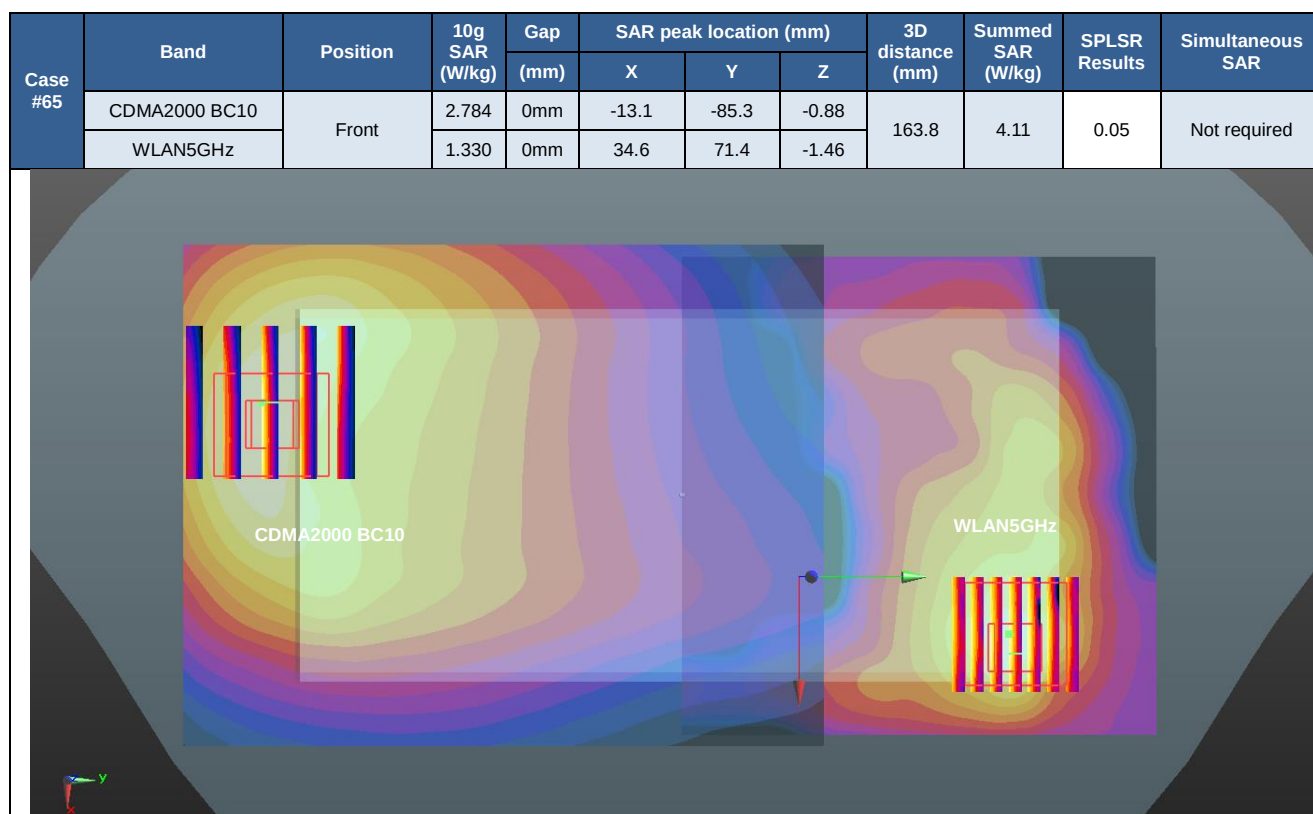




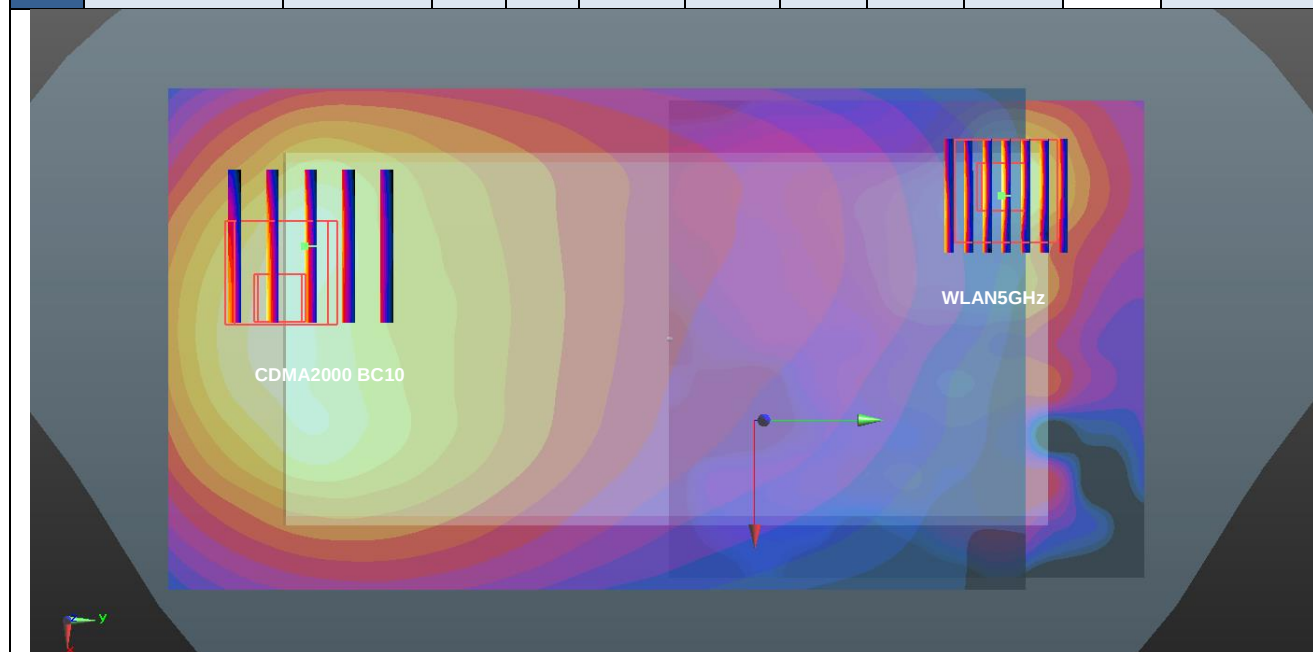
Case #63	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC1	Front	2.704	0mm	-9	-83.7	-0.59	161.1	4.03	0.05	Not required
	WLAN5GHz		1.330	0mm	34.6	71.4	-1.46				



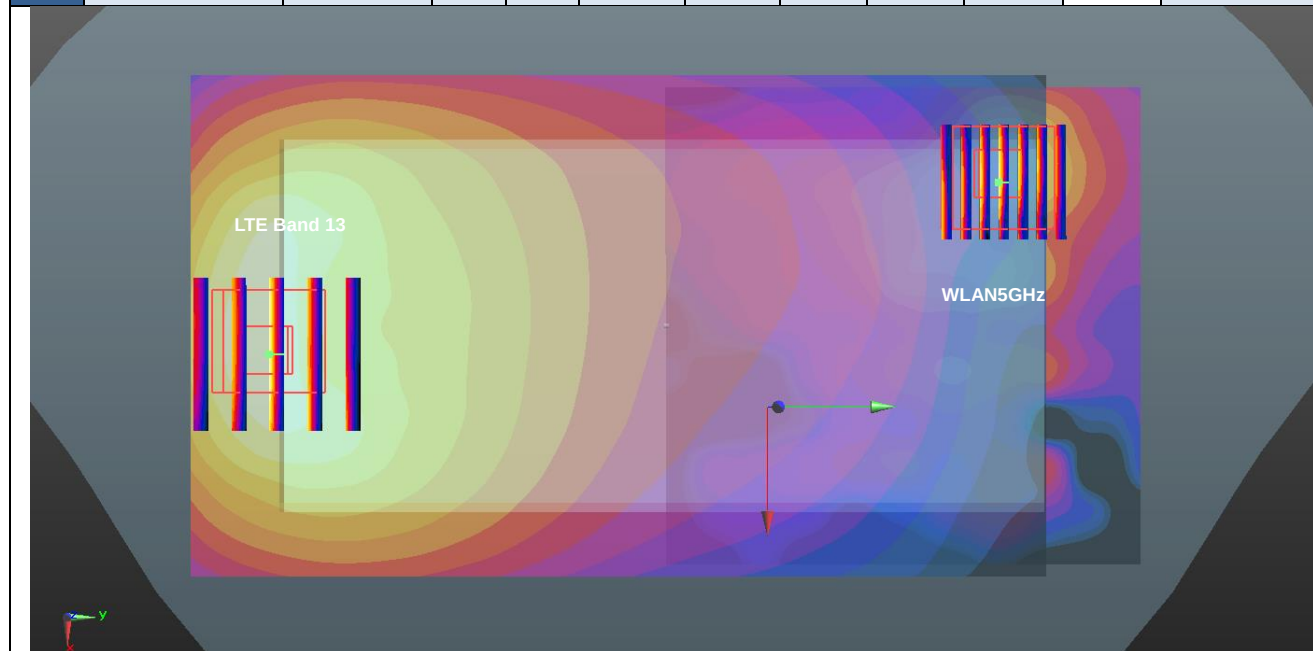




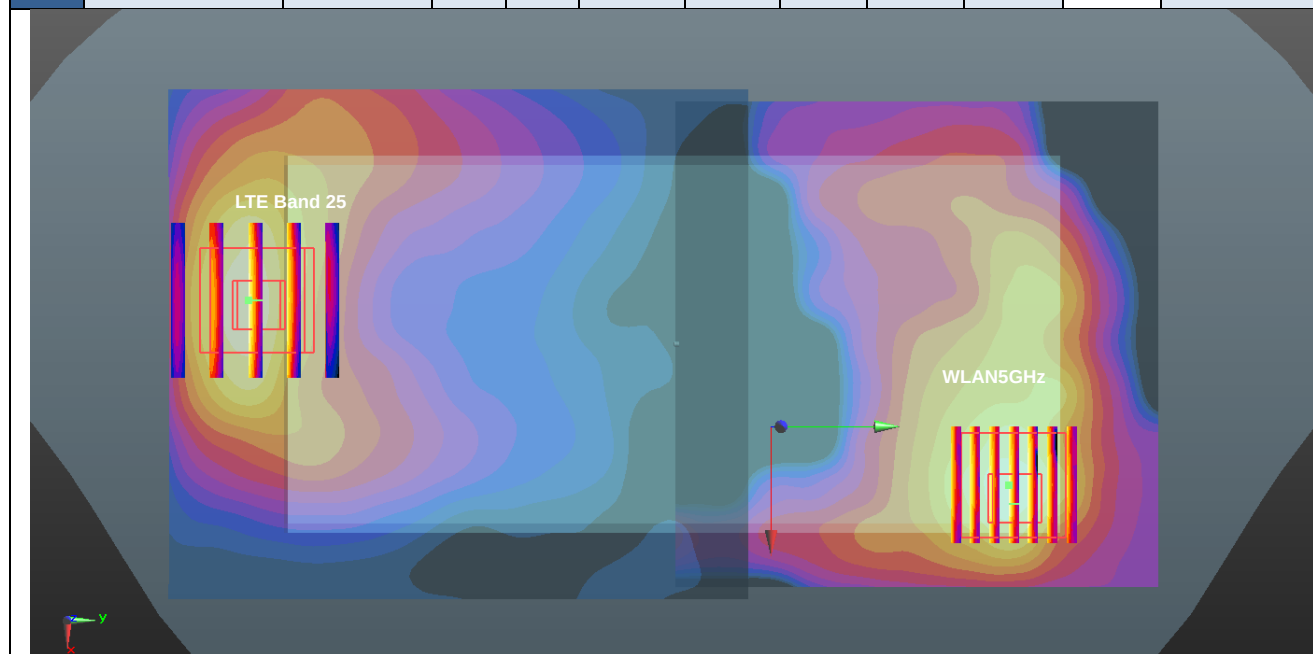
Case #66	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC10	Back	3.236	0mm	-24.3	-76.5	-0.09	147.5	4.22	0.06	Not required
	WLAN5GHz		0.981	0mm	-31.6	70.8	-1.39				

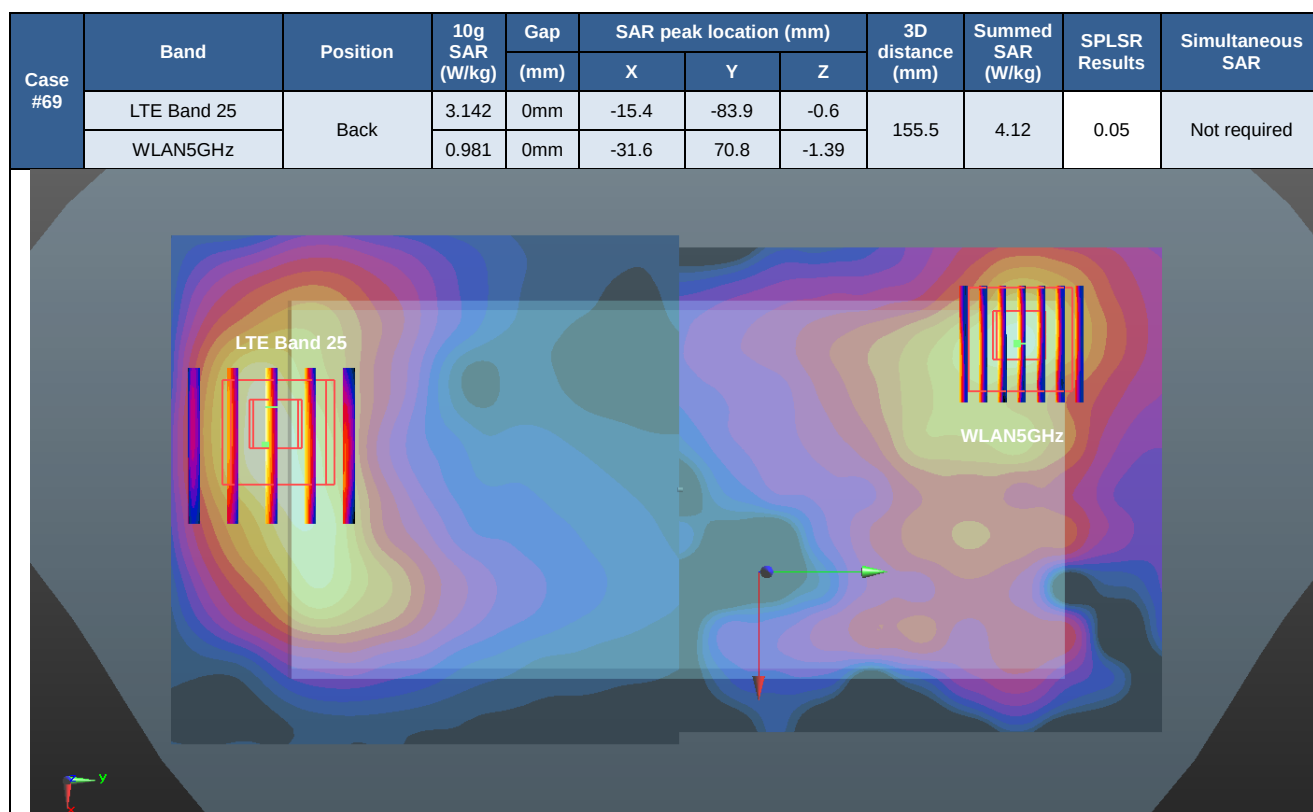


Case #67	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 13	Back	3.075	0mm	6	-83.5	-1.28	158.8	4.06	0.05	Not required
	WLAN5GHz		0.981	0mm	-31.6	70.8	-1.39				

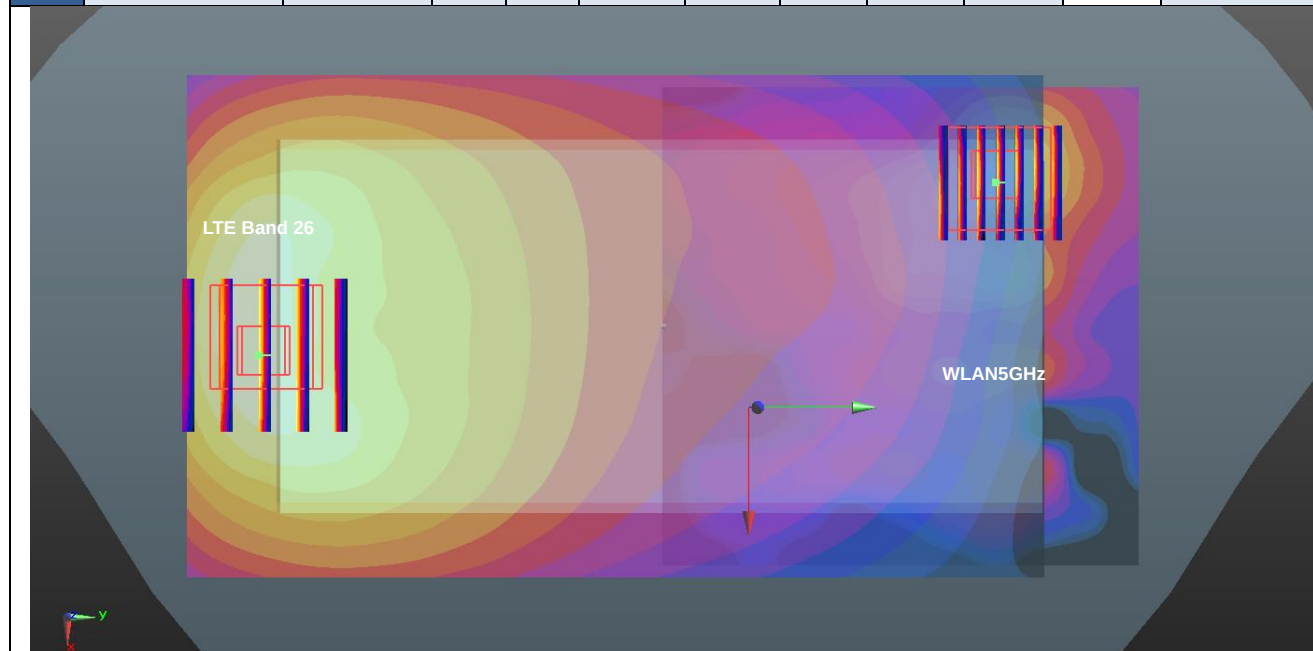


Case #68	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 25	Front	2.697	0mm	-7.4	-85.3	-0.53	162.2	4.03	0.05	Not required
	WLAN5GHz		1.330	0mm	34.6	71.4	-1.46				

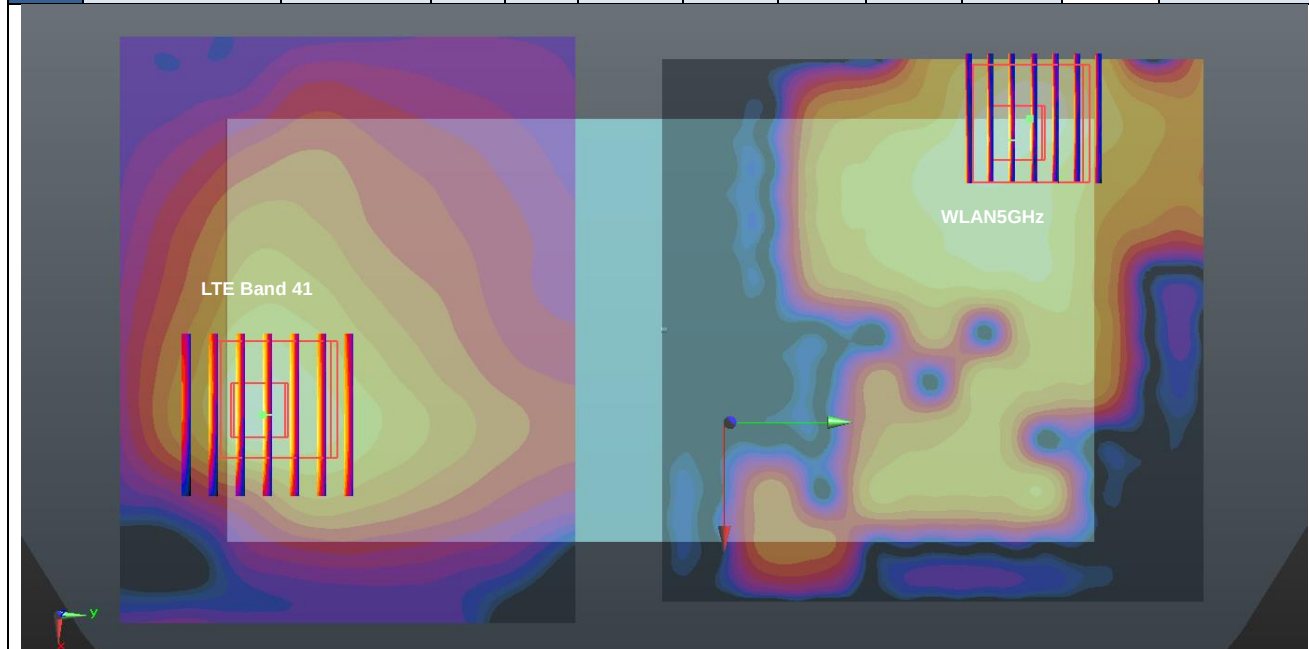




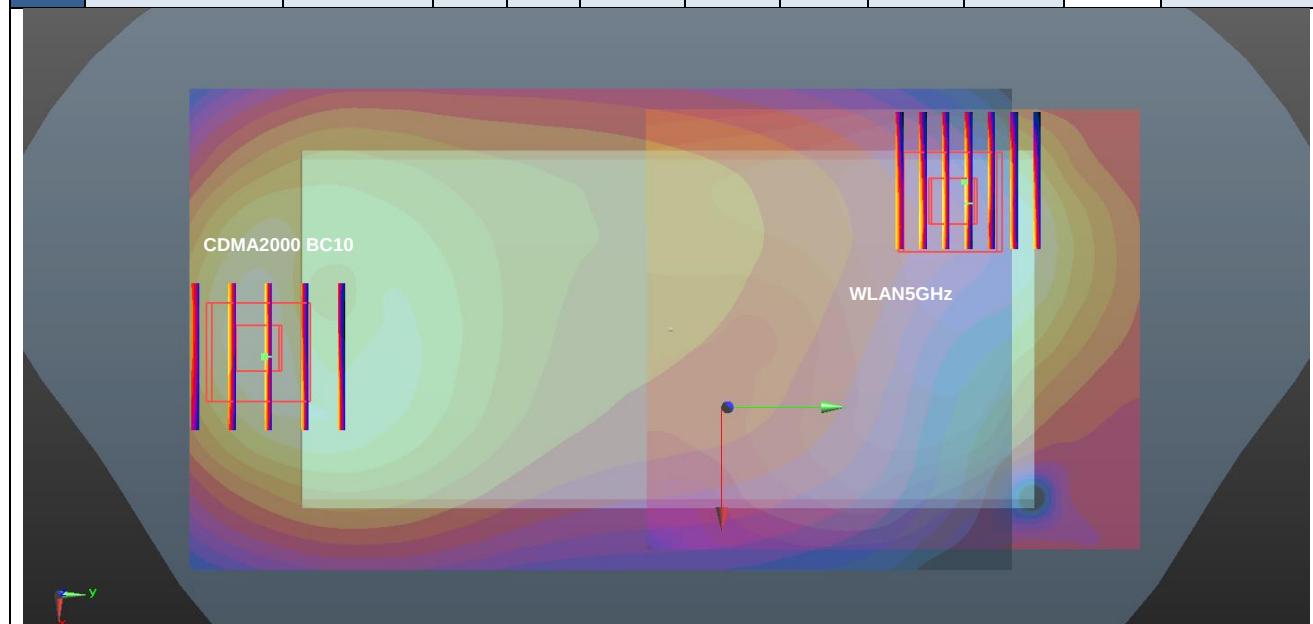
Case #70	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 26	Back	3.410	0mm	7.6	-83.4	-1.29	159.1	4.39	0.06	Not required
	WLAN5GHz		0.981	0mm	-31.6	70.8	-1.39				



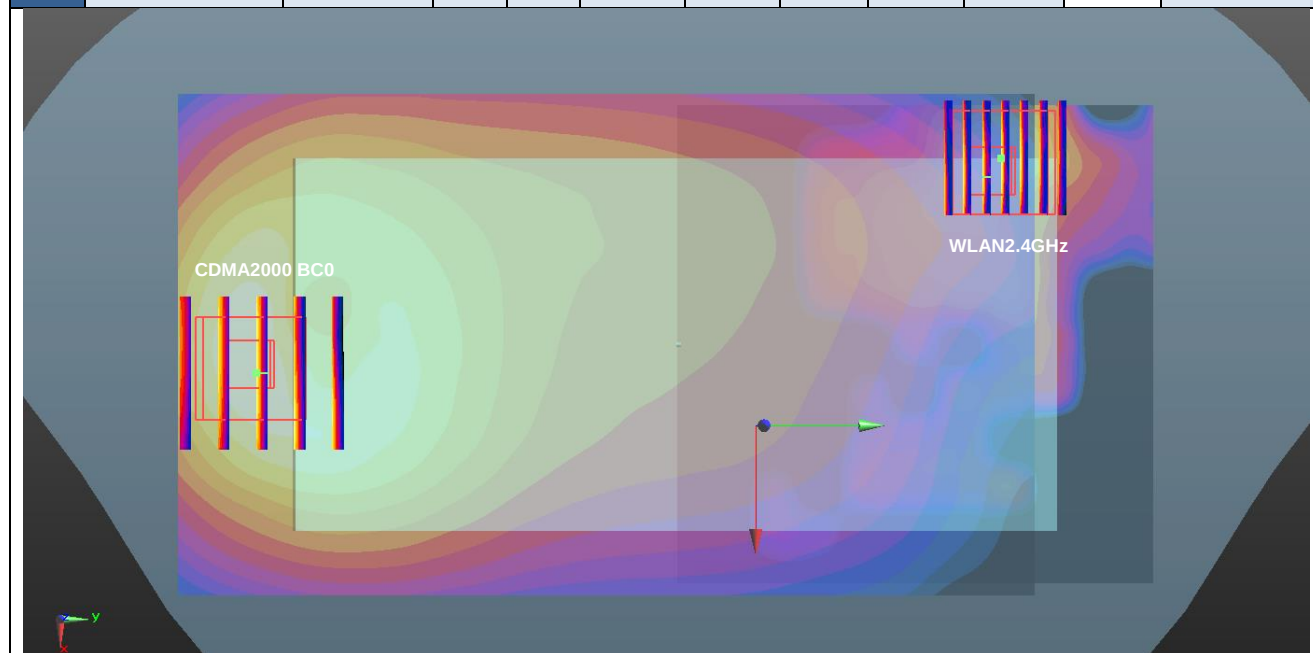
Case #71	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 41	Back	3.384	0mm	21.4	-68.8	-0.74	149.3	4.37	0.06	Not required
	WLAN5GHz		0.981	0mm	-31.6	70.8	-1.39				



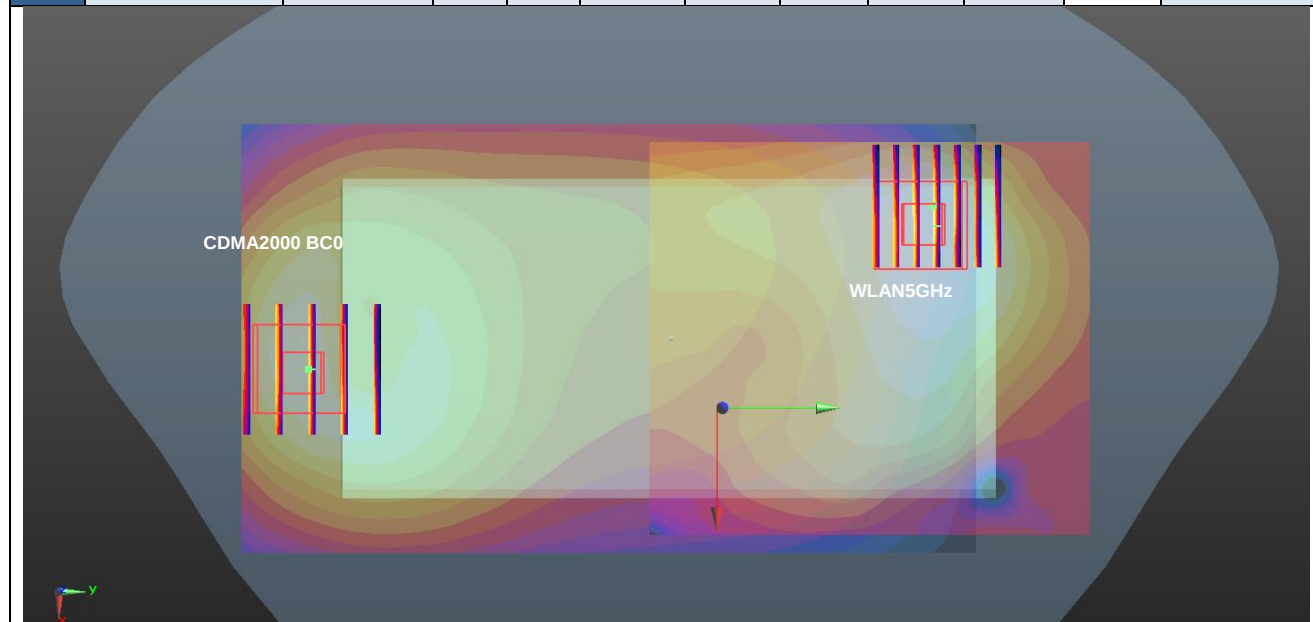
Case #72	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC10	Back	1.127	5mm	6	-88.5	-1.46	160.4	2.24	0.02	Not required
	WLAN5GHz		1.112	5mm	-35.8	66.4	-1.7				



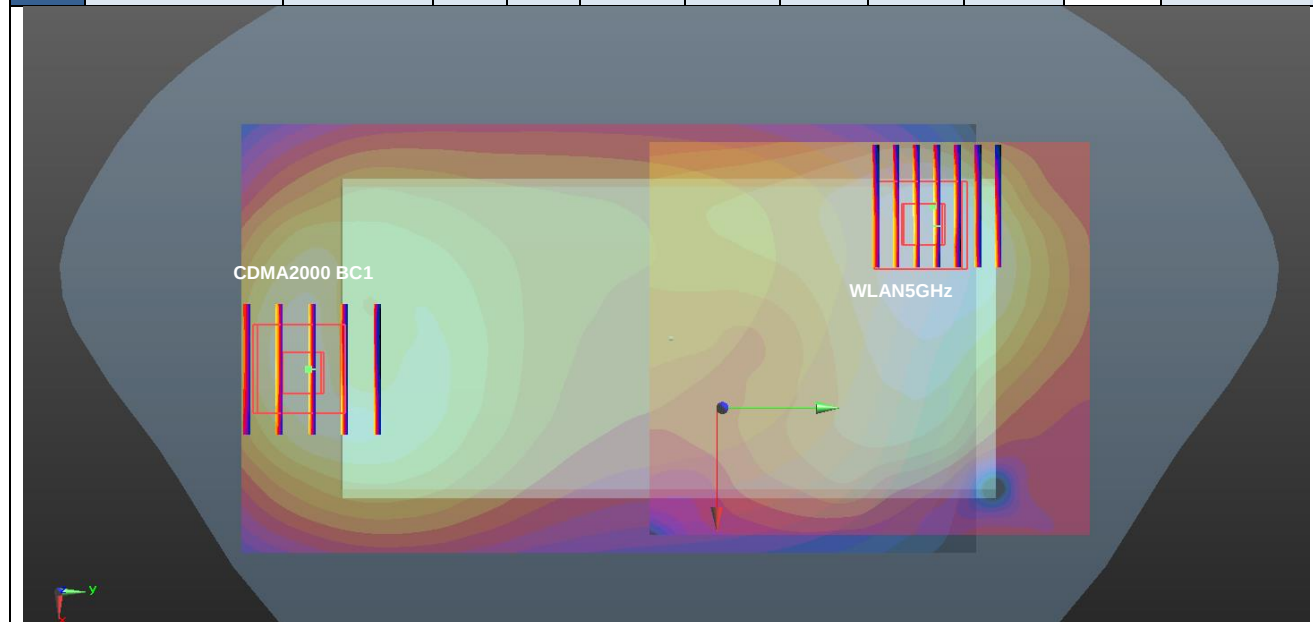
Case #73	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Back	1.198	5mm	7.5	-90.1	-1.49	159.0	1.92	0.02	Not required
	WLAN2.4GHz		0.726	5mm	-29.4	64.6	-1.63				



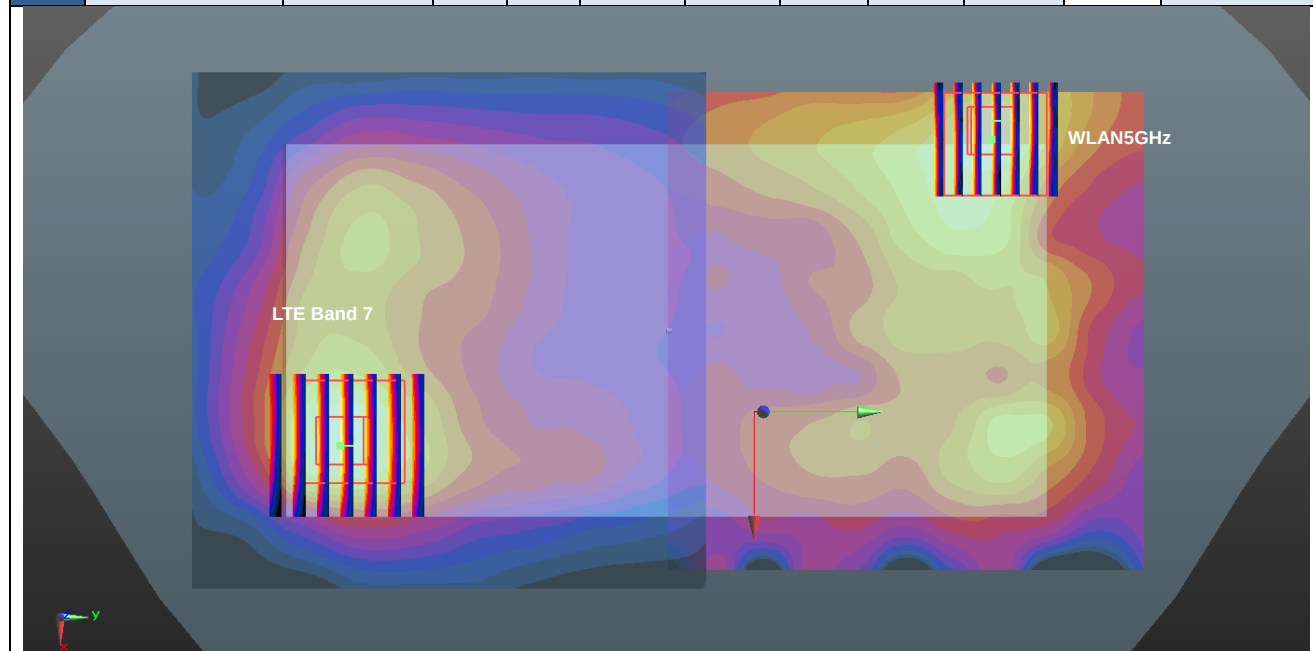
Case #74	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Back	1.198	5mm	7.5	-90.1	-1.49	162.4	2.31	0.02	Not required
	WLAN5GHz		1.112	5mm	-35.8	66.4	-1.7				



Case #75	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC1	Back	1.361	5mm	7.5	-90.1	-1.49	162.4	2.47	0.02	Not required
	WLAN5GHz		1.112	5mm	-35.8	66.4	-1.7				



Case #76	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 7	Back	1.291	5mm	-23	-69.8	-0.66	139.2	2.40	0.03	Not required
	WLAN5GHz		1.112	5mm	-42.4	68	-0.88				



17. Supplemental Tuner Tests Results

General Note:

1. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence to the antenna characteristics, other than impedance matching.
2. To evaluate all of the tuner states, the 144 tuner states are divided evenly among band, mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single point time-sweep measurements will be performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state will be established remotely so that the device is not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe will remain stationary at the same position throughout the entire series of single point measurements for each combination. The bands which are dynamically tuned are split into two separate antennas, so each antenna system will have its own test plan to cover the corresponding 144 tuner states.
3. The operational decryption contains more information about the design and implementation of the dynamic antenna tuning.

17.1 Supplemental Tuner Head & Body SAR Results

Please refer to Appendix C.

Test Engineer: Nick Hu

18. Uncertainty Assessment

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

19. References

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



Appendix A. Plots of System Performance Check

The plots are shown as follows.

System Check_Head_750MHz**DUT: D750V3 - 1087**

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL_750 Medium parameters used: $f = 750$ MHz; $\sigma = 0.903$ S/m; $\epsilon_r = 42.105$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: ES3DV3 - SN3293; ConvF(6.78, 6.78, 6.78); Calibrated: 2018.10.25
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn915; Calibrated: 2018.6.20
- Phantom: SAM2; Type: SAM; Serial: TP-1542
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

Maximum value of SAR (interpolated) = 2.34 W/kg

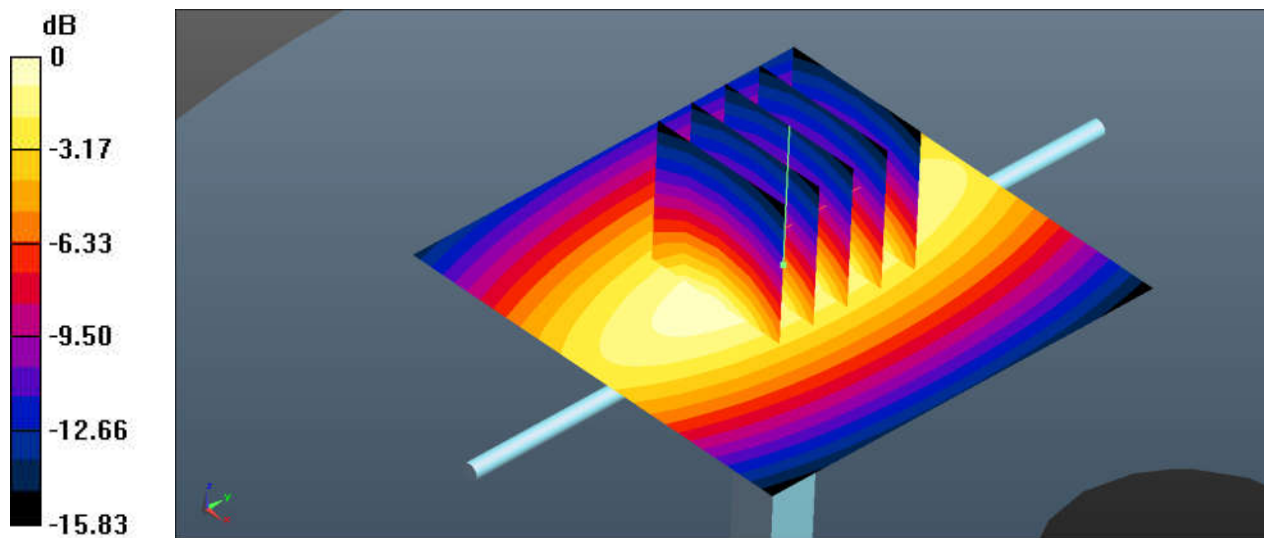
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 52.46 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.93 W/kg

SAR(1 g) = 2.03 W/kg; SAR(10 g) = 1.36 W/kg

Maximum value of SAR (measured) = 2.36 W/kg



0 dB = 2.34 W/kg = 3.69 dBW/kg

System Check_Head_835MHz**DUT: D835V2 - 4d151**

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

Medium: HSL_850 Medium parameters used: $f = 835$ MHz; $\sigma = 0.915$ S/m; $\epsilon_r = 41.269$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3293; ConvF(6.47, 6.47, 6.47); Calibrated: 2018.10.25
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn915; Calibrated: 2018.6.20
- Phantom: SAM2; Type: SAM; Serial: TP-1542
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

Maximum value of SAR (interpolated) = 2.68 W/kg

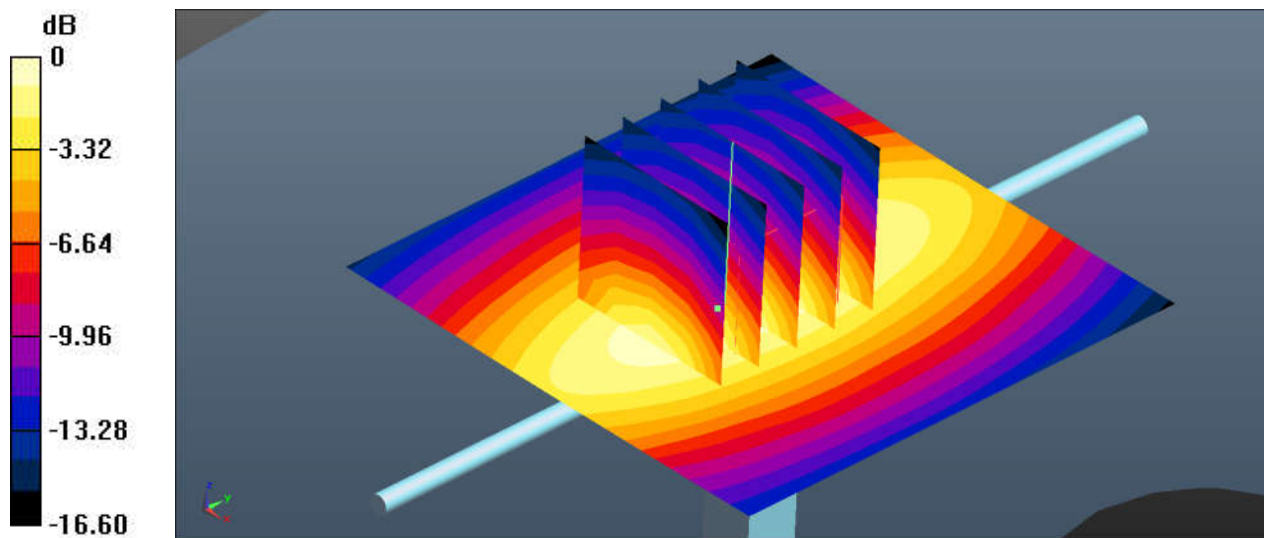
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.87 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 2.78 W/kg

SAR(1 g) = 2.23 W/kg; SAR(10 g) = 1.55 W/kg

Maximum value of SAR (measured) = 2.63 W/kg



0 dB = 2.68 W/kg = 4.28 dBW/kg

System Check_Head_1750MHz**DUT: D1750V2 - 1090**

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

Medium: HSL_1750 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 41.08$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3293; ConvF(5.4, 5.4, 5.4); Calibrated: 2018.10.25
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn915; Calibrated: 2018.6.20
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

Maximum value of SAR (interpolated) = 13.3 W/kg

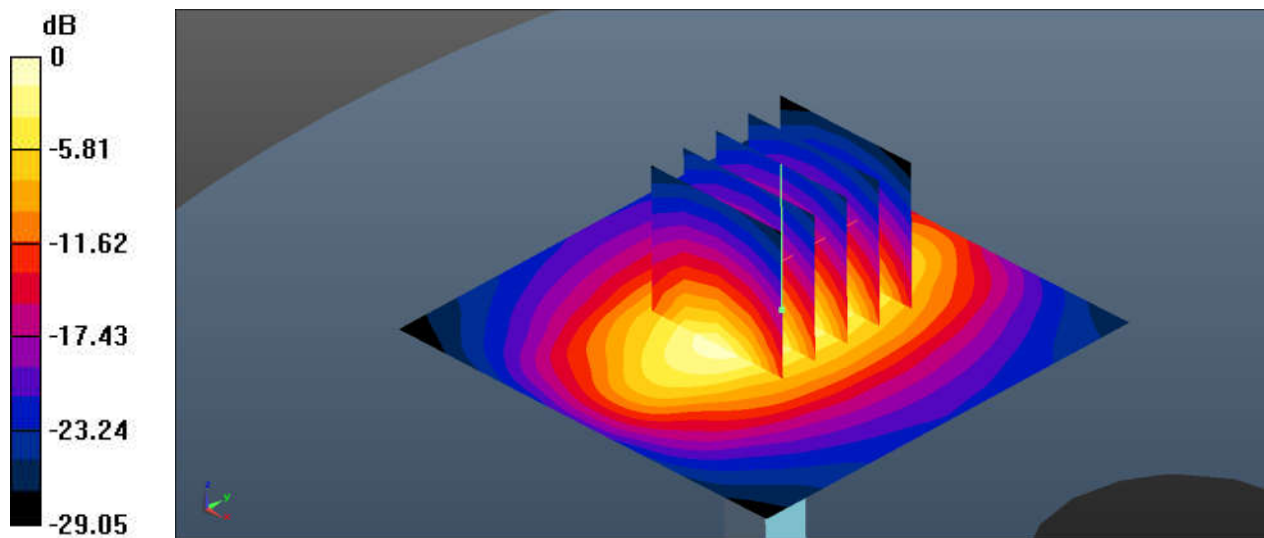
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 84.23 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 17.1 W/kg

SAR(1 g) = 9.03 W/kg; SAR(10 g) = 4.72 W/kg

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



0 dB = 13.3 W/kg = 11.24 dBW/kg

System Check_Head_1900MHz**DUT: D1900V2 - 5d170**

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

Medium: HSL_1900 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.434$ S/m; $\epsilon_r = 40.047$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.6 °C

DASY5 Configuration:

- Probe: ES3DV3 - SN3293; ConvF(5.19, 5.19, 5.19); Calibrated: 2018.10.25
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn915; Calibrated: 2018.6.20
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

Maximum value of SAR (interpolated) = 12.5 W/kg

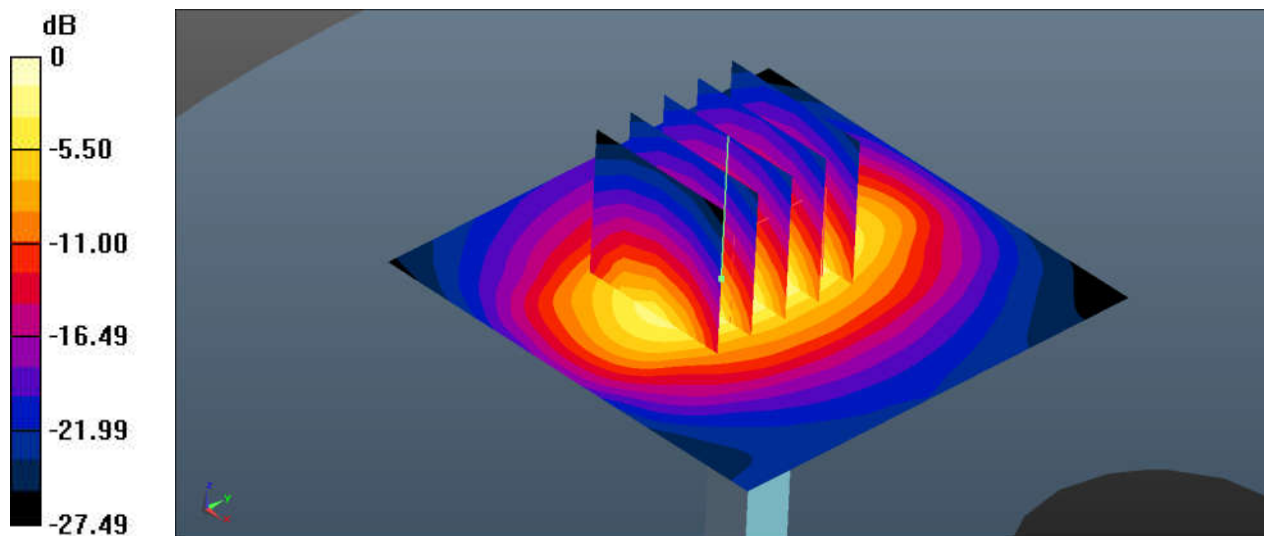
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 90.01 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 9.73 W/kg; SAR(10 g) = 5.16 W/kg

Maximum value of SAR (measured) = 12.1 W/kg



0 dB = 12.5 W/kg = 10.97 dBW/kg

System Check_Head_2300MHz**DUT: D2300V2 - 1055**

Communication System: UID 0, CW (0); Frequency: 2300 MHz; Duty Cycle: 1:1

Medium: HSL_2300 Medium parameters used: $f = 2300$ MHz; $\sigma = 1.677$ S/m; $\epsilon_r = 38.802$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.9 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3843; ConvF(7.31, 7.31, 7.31); Calibrated: 2018.9.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2018.12.3
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

Maximum value of SAR (interpolated) = 29.6 W/kg

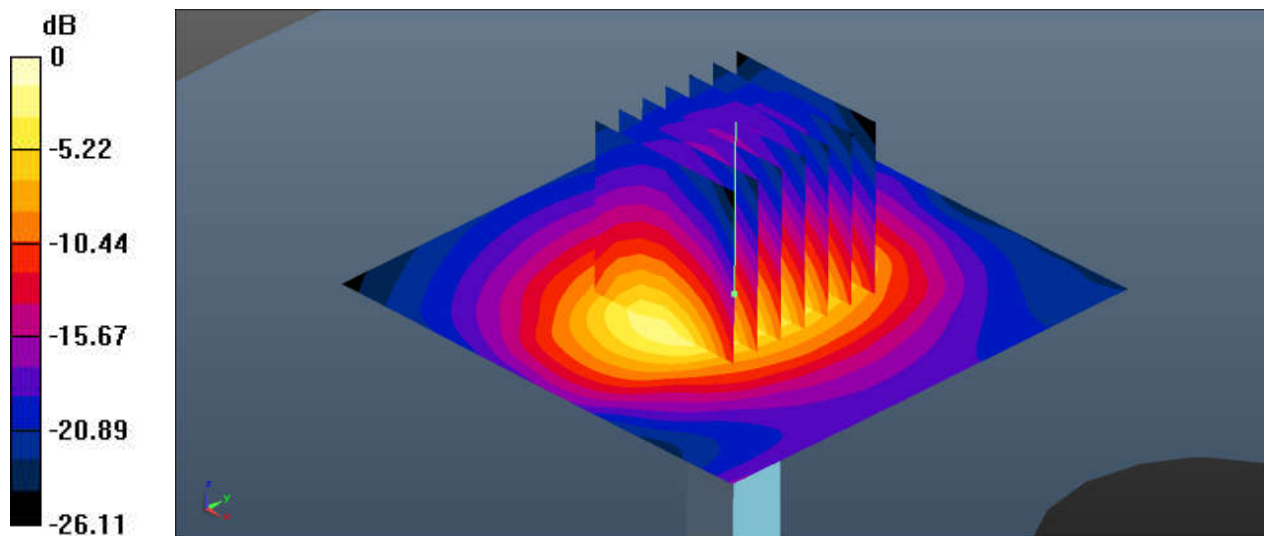
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.0 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 37.1 W/kg

SAR(1 g) = 11.9 W/kg; SAR(10 g) = 5.54 W/kg

Maximum value of SAR (measured) = 29.0 W/kg



0 dB = 29.6 W/kg = 14.71 dBW/kg

System Check_Head_2450MHz**DUT: D2450V2 - 908**

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

Medium: HSL_2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.845$ S/m; $\epsilon_r = 38.195$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: ES3DV3 - SN3293; ConvF(4.53, 4.53, 4.53); Calibrated: 2018.10.25
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn915; Calibrated: 2018.6.20
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

Maximum value of SAR (interpolated) = 20.7 W/kg

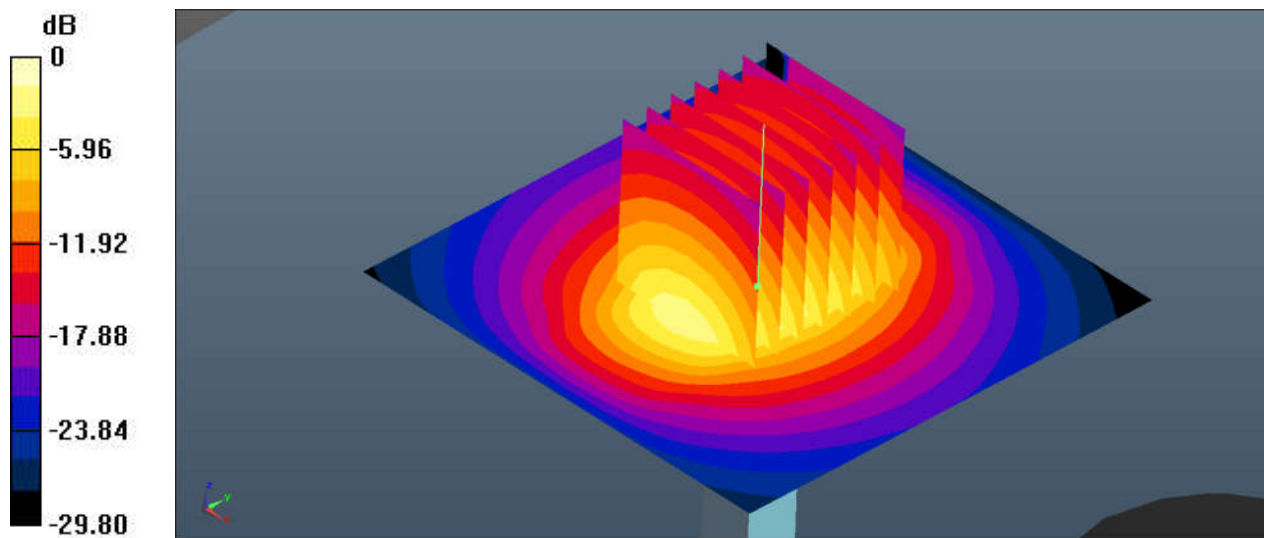
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 86.1 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 29.7 W/kg

SAR(1 g) = 12.9 W/kg; SAR(10 g) = 5.75 W/kg

Maximum value of SAR (measured) = 20.3 W/kg



0 dB = 8.73 W/kg = 9.41 dBW/kg

System Check_Head_2600MHz**DUT: D2600V2 - 1061**

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

Medium: HSL_2600 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.012$ S/m; $\epsilon_r = 37.658$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3843; ConvF(6.86, 6.86, 6.86); Calibrated: 2018.9.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1338; Calibrated: 2018.12.3
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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

Maximum value of SAR (interpolated) = 34.4 W/kg

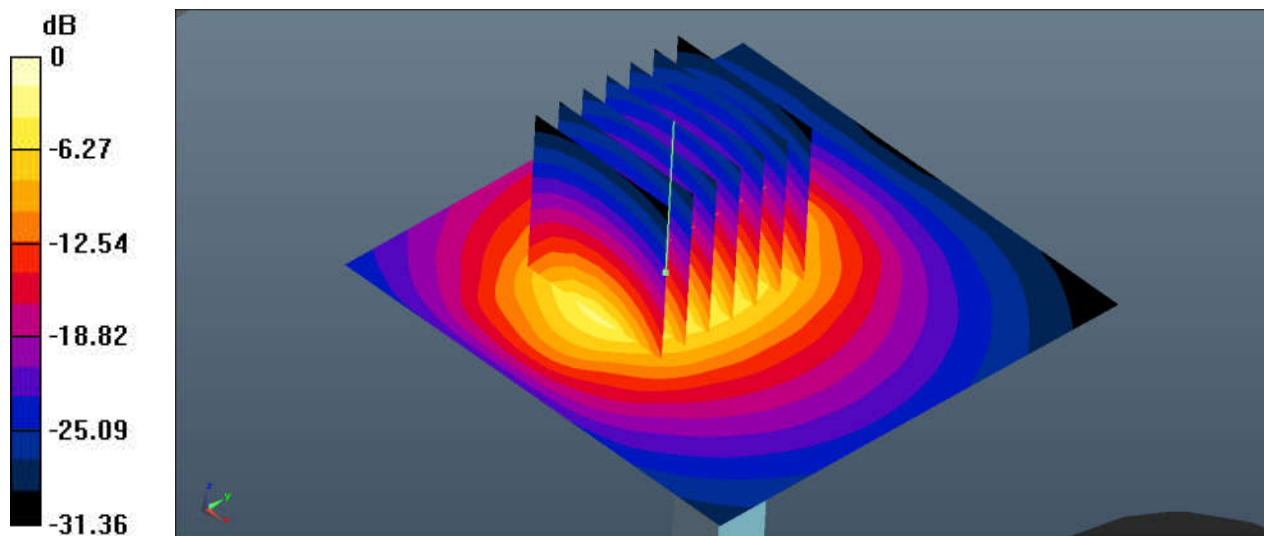
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 75.62 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 62.2 W/kg

SAR(1 g) = 15.1W/kg; SAR(10 g) = 6.7 W/kg

Maximum value of SAR (measured) = 34.4 W/kg



0 dB = 34.4 W/kg = 15.37 dBW/kg