

LTE Carrier Aggregation Conducted Power (Uplink)

1. This device supports uplink carrier aggregation for LTE CA_41C only for power class 3 with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. For the non-contiguously allocated resource blocks which the MPR level is determined by various RB separation and RB sizes requirement, and the allowed MPR levels, settings and the conducted powers are permanently implemented in this device per the 3GPP 36.101 section 6.2.3A.1.3 requirements.
2. According to FCC guidance, the output power with uplink CA active was measured for the high / middle / low channel configuration with the highest reported SAR for each exposure condition, the power was measured with wideband signal integration over both component carriers.
3. In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs
4. 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.



<Full Power>

<LTE Band 41 Power Class 3>

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	23.44	24.50
40185	40383	QPSK	1	0	0	0	1	0	23.60	24.50
40620	40422	QPSK	1	0	0	0	1	0	23.88	24.50
41055	40857	QPSK	1	0	0	0	1	0	23.63	24.50
41490	41292	QPSK	1	0	0	0	1	0	23.68	24.50

<Reduced Power Mode for P-Sensor On>

<LTE Band 41 Power Class 3>

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	23.44	24.00
40185	40383	QPSK	1	0	0	0	1	0	23.60	24.00
40620	40422	QPSK	1	0	0	0	1	0	23.88	24.00
41055	40857	QPSK	1	0	0	0	1	0	23.63	24.00
41490	41292	QPSK	1	0	0	0	1	0	23.68	24.00

<Reduced Power Mode for Hotspot On>

<LTE Band 41 Power Class 3>

CA_41C										
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset				
39750	39948	QPSK	1	0	0	0	1	0	22.10	23.00
40185	40383	QPSK	1	0	0	0	1	0	22.25	23.00
40620	40422	QPSK	1	0	0	0	1	0	21.94	23.00
41055	40857	QPSK	1	0	0	0	1	0	21.97	23.00
41490	41292	QPSK	1	0	0	0	1	0	22.11	23.00

<WLAN Conducted Power>**General Note:**

1. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
2. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
3. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
4. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
 - a. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
 - b. 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.
 - c. 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.

<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	18.04	19.00	97.60
		6	2437	17.89	19.00	
		11	2462	17.96	19.00	
	802.11g 6Mbps	1	2412	15.75	17.00	87.04
		6	2437	16.16	17.00	
		11	2462	16.13	17.00	
	802.11n-HT20 MCS0	1	2412	13.97	15.00	86.70
		6	2437	13.98	15.00	
		11	2462	13.90	15.00	
	802.11n-HT40 MCS0	3	2422	12.38	14.00	85.79
		6	2437	14.22	15.00	
		9	2452	14.06	15.00	

<5GHz WLAN>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	16.91	18.00	87.44
		40	5200	17.21	18.00	
		44	5220	16.96	18.00	
		48	5240	17.12	18.00	
	802.11n-HT20 MCS0	36	5180	15.78	17.00	86.70
		40	5200	16.07	17.00	
		44	5220	15.68	17.00	
		48	5240	15.97	17.00	
	802.11n-HT40 MCS0	38	5190	16.25	17.00	85.79
		46	5230	16.12	17.00	

5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	52	5260	17.19	18.00	87.44
		56	5280	17.26	18.00	
		60	5300	16.96	18.00	
		64	5320	17.07	18.00	
	802.11n-HT20 MCS0	52	5260	15.90	17.00	86.70
		56	5280	16.14	17.00	
		60	5300	15.80	17.00	
		64	5320	16.01	17.00	
	802.11n-HT40 MCS0	54	5270	15.85	17.00	85.79
		62	5310	16.22	17.00	

5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	100	5500	17.23	18.00	87.44
		116	5580	16.92	18.00	
		132	5660	16.95	18.00	
		140	5700	17.05	18.00	
	802.11n-HT20 MCS0	100	5500	15.98	17.00	86.70
		116	5580	16.31	17.00	
		132	5660	15.80	17.00	
		140	5700	15.79	17.00	
	802.11n-HT40 MCS0	102	5510	16.28	17.00	85.79
		110	5550	16.35	17.00	
		134	5670	16.15	17.00	

5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a MCS0	149	5745	17.03	18.00	87.44
		157	5785	17.00	18.00	
		165	5825	17.26	18.00	
	802.11n-HT20 MCS0	149	5745	15.95	17.00	86.70
		157	5785	15.78	17.00	
		165	5825	15.97	17.00	
	802.11n-HT40 MCS0	151	5755	15.95	17.00	85.79
		159	5795	16.14	17.00	

<Reduced Power Mode for P-Sensor On>
<5GHz WLAN>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.46	13.50	87.44
		40	5200	13.48	13.50	
		44	5220	13.11	13.50	
		48	5240	13.40	13.50	
	802.11n-HT20 MCS0	36	5180	12.50	13.00	86.70
		40	5200	12.54	13.00	
		44	5220	11.70	13.00	
		48	5240	11.68	13.00	
	802.11n-HT40 MCS0	38	5190	12.85	13.00	85.79
		46	5230	11.98	13.00	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	12.46	12.50	87.44
		56	5280	12.48	12.50	
		60	5300	11.80	12.50	
		64	5320	11.67	12.50	
	802.11n-HT20 MCS0	52	5260	11.28	12.00	86.70
		56	5280	11.31	12.00	
		60	5300	10.68	12.00	
		64	5320	10.50	12.00	
	802.11n-HT40 MCS0	54	5270	10.72	12.00	85.79
		62	5310	10.79	12.00	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.49	13.50	87.44
		116	5580	12.70	13.50	
		132	5660	13.40	13.50	
		140	5700	13.47	13.50	
	802.11n-HT20 MCS0	100	5500	11.18	13.00	86.70
		116	5580	12.21	13.00	
		132	5660	12.45	13.00	
		140	5700	12.53	13.00	
	802.11n-HT40 MCS0	102	5510	11.13	13.00	85.79
		110	5550	11.82	13.00	
		134	5670	12.90	13.00	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a MCS0	149	5745	12.91	13.00	87.44
		157	5785	12.47	13.00	
		165	5825	12.98	13.00	
	802.11n-HT20 MCS0	149	5745	11.87	12.50	86.70
		157	5785	11.14	12.50	
		165	5825	11.91	12.50	
	802.11n-HT40 MCS0	151	5755	11.66	12.50	85.79
		159	5795	11.69	12.50	

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

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.46	13.50	87.44
		40	5200	13.48	13.50	
		44	5220	13.11	13.50	
		48	5240	13.40	13.50	
	802.11n-HT20 MCS0	36	5180	12.50	13.00	86.70
		40	5200	12.54	13.00	
		44	5220	11.70	13.00	
		48	5240	11.68	13.00	
	802.11n-HT40 MCS0	38	5190	12.85	13.00	85.79
		46	5230	11.98	13.00	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a MCS0	149	5745	12.91	13.00	87.44
		157	5785	12.47	13.00	
		165	5825	12.98	13.00	
	802.11n-HT20 MCS0	149	5745	11.87	12.50	86.70
		157	5785	11.14	12.50	
		165	5825	11.91	12.50	
	802.11n-HT40 MCS0	151	5755	11.66	12.50	85.79
		159	5795	11.69	12.50	

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

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.46	13.50	87.44
		40	5200	13.48	13.50	
		44	5220	13.11	13.50	
		48	5240	13.40	13.50	
	802.11n-HT20 MCS0	36	5180	12.50	13.00	86.70
		40	5200	12.54	13.00	
		44	5220	11.70	13.00	
		48	5240	11.68	13.00	
	802.11n-HT40 MCS0	38	5190	12.85	13.00	85.79
		46	5230	11.98	13.00	

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	12.46	12.50	87.44
		56	5280	12.48	12.50	
		60	5300	11.80	12.50	
		64	5320	11.67	12.50	
	802.11n-HT20 MCS0	52	5260	11.28	12.00	86.70
		56	5280	11.31	12.00	
		60	5300	10.68	12.00	
		64	5320	10.50	12.00	
	802.11n-HT40 MCS0	54	5270	10.72	12.00	85.79
		62	5310	10.79	12.00	

5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	100	5500	13.49	13.50	87.44
		116	5580	12.70	13.50	
		132	5660	13.40	13.50	
		140	5700	13.47	13.50	
	802.11n-HT20 MCS0	100	5500	11.18	13.00	86.70
		116	5580	12.21	13.00	
		132	5660	12.45	13.00	
		140	5700	12.53	13.00	
	802.11n-HT40 MCS0	102	5510	11.13	13.00	85.79
		110	5550	11.82	13.00	
		134	5670	12.90	13.00	

5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a MCS0	149	5745	12.91	13.00	87.44
		157	5785	12.47	13.00	
		165	5825	12.98	13.00	
	802.11n-HT20 MCS0	149	5745	11.87	12.50	86.70
		157	5785	11.14	12.50	
		165	5825	11.91	12.50	
	802.11n-HT40 MCS0	151	5755	11.66	12.50	85.79
		159	5795	11.69	12.50	

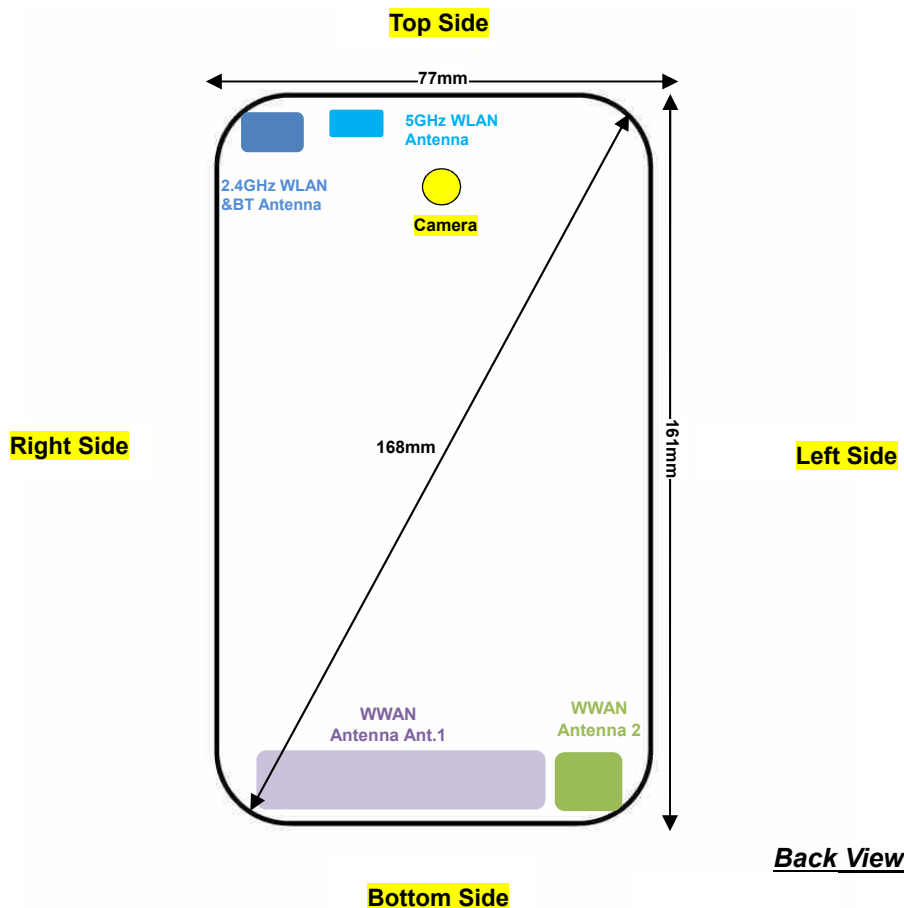
<2.4GHz Bluetooth>
General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle is 76.78 %, 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	10.00
	CH 39	2441	10.40
	CH 78	2480	9.97
Tune-up limit (dBm)			11.00

Mode	Channel	Frequency (MHz)	Average power (dBm)
			GFSK
LE	CH 00	2402	0.07
	CH 19	2440	0.53
	CH 39	2480	0.27
Tune-up Limit			1.50

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 WLAN & BT	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	>25mm
5GHz WLAN	≤ 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 WLAN & BT	Yes	Yes	Yes	No	Yes	No
5GHz WLAN	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 / B14 / 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. 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, GSM1900, WCDMA B2 / B4 / B5, CDMA2000 BC1, LTE B2 / B4 / B7 / B25 / B30 / B41 / B66 and WLAN5.2/5.3/5.5/5.8GHz 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.)
6. When hotspot mode is enabled, power reduction will be activated to limit the maximum power of GSM1900, WCDMA B2 / B4 / B5, CDMA2000 BC1, LTE B2 / B4 / B7 / B25 / B30 / B38 / B41 / B66 and WLAN5.2/5.8GHz.
7. This device hotspot reduced power and P-sensor reduced power level are the same for WCDMA B5, LTE B30 and WLAN5.2/5.8GHz. And for other bands are different.
8. 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.
9. P-sensor can detect handheld state, GSM1900, WCDMA B2 / B4, CDMA2000 BC1, LTE B2 / B4 / B7 / B25 / B30 / B66 for front/back/bottom sides, and WLAN 5.2/5.3/5.5/5.8GHz for front/back sides of product specific 10g SAR condition reduced powers will be active.
10. 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 / B14 / B17 / B25 / B26 / B66 / B71, WWAN antenna 2 frequency bands include LTE B7 / B30 / B38 / B41.
11. 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, 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 full or reduced 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 B7 / B13 / B14 / B25 / B26 / B30 / B41 / B66, therefore product specific 10g SAR is necessary.
 - b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.

- c. 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:

1. 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 4 Tx slots for GSM850/GSM1900 are considered as the primary mode.
2. 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.
3. Power reduction which is triggered by hotspot mode/p-sensor on are implemented in GSM1900 band, for SAR testing EUT was set in reduced power mode and GPRS 4 Tx slots due to its highest frame-average power.

WCDMA Note:

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. 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:

1. 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.
2. 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.
3. 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. For body-worn SAR testing, Per KDB 248227 D01v02r02, SAR is not required for U-NII-2A band since U-NII-1 band tune-up power is higher than U-NII-2A band.
4. 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.
5. 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.
6. 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)
	GSM850	GPRS (4 Tx slots)	Right Cheek	Full	128	824.2	26.12	27.50	1.374	-0.02	0.165	0.227
	GSM850	GPRS (4 Tx slots)	Right Tilted	Full	128	824.2	26.12	27.50	1.374	0.02	0.084	0.115
	GSM850	GPRS (4 Tx slots)	Left Cheek	Full	128	824.2	26.12	27.50	1.374	0.06	0.128	0.176
	GSM850	GPRS (4 Tx slots)	Left Tilted	Full	128	824.2	26.12	27.50	1.374	0.02	0.085	0.117
	GSM850	GPRS (4 Tx slots)	Right Cheek	Full	189	836.4	26.03	27.50	1.403	0.09	0.212	0.297
01	GSM850	GPRS (4 Tx slots)	Right Cheek	Full	251	848.8	26.09	27.50	1.384	-0.09	0.242	0.335
	GSM1900	GPRS (4 Tx slots)	Right Cheek	Full	512	1850.2	24.09	24.50	1.099	-0.03	0.037	0.041
	GSM1900	GPRS (4 Tx slots)	Right Tilted	Full	512	1850.2	24.09	24.50	1.099	-0.06	0.027	0.030
02	GSM1900	GPRS (4 Tx slots)	Left Cheek	Full	512	1850.2	24.09	24.50	1.099	-0.09	0.047	0.052
	GSM1900	GPRS (4 Tx slots)	Left Tilted	Full	512	1850.2	24.09	24.50	1.099	0.02	0.030	0.033
	GSM1900	GPRS (4 Tx slots)	Left Cheek	Full	661	1880	23.89	24.50	1.151	-0.03	0.038	0.044
	GSM1900	GPRS (4 Tx slots)	Left Cheek	Full	810	1909.8	23.85	24.50	1.161	-0.03	0.036	0.042

<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	4233	846.6	23.26	24.00	1.186	0.02	0.145	0.172
	WCDMA Band V	RMC 12.2Kbps	Right Tilted	Full	4233	846.6	23.26	24.00	1.186	0.06	0.077	0.092
	WCDMA Band V	RMC 12.2Kbps	Left Cheek	Full	4233	846.6	23.26	24.00	1.186	0.04	0.094	0.112
	WCDMA Band V	RMC 12.2Kbps	Left Tilted	Full	4233	846.6	23.26	24.00	1.186	0.08	0.056	0.066
	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Full	4132	826.4	23.21	24.00	1.199	-0.01	0.326	0.391
03	WCDMA Band V	RMC 12.2Kbps	Right Cheek	Full	4182	836.4	23.08	24.00	1.236	0.02	0.339	0.419
	WCDMA Band IV	RMC 12.2Kbps	Right Cheek	Full	1513	1752.6	22.69	24.00	1.352	-0.18	0.058	0.079
	WCDMA Band IV	RMC 12.2Kbps	Right Tilted	Full	1513	1752.6	22.69	24.00	1.352	-0.08	0.079	0.107
	WCDMA Band IV	RMC 12.2Kbps	Left Cheek	Full	1513	1752.6	22.69	24.00	1.352	-0.14	0.027	0.036
	WCDMA Band IV	RMC 12.2Kbps	Left Tilted	Full	1513	1752.6	22.69	24.00	1.352	0.02	0.015	0.020
04	WCDMA Band IV	RMC 12.2Kbps	Right Tilted	Full	1312	1712.4	22.35	24.00	1.462	-0.05	0.113	0.165
	WCDMA Band IV	RMC 12.2Kbps	Right Tilted	Full	1413	1732.6	22.50	24.00	1.413	-0.02	0.091	0.129
05	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Full	9262	1852.4	23.03	24.00	1.250	-0.04	0.070	0.087
	WCDMA Band II	RMC 12.2Kbps	Right Tilted	Full	9262	1852.4	23.03	24.00	1.250	0.02	0.050	0.062
	WCDMA Band II	RMC 12.2Kbps	Left Cheek	Full	9262	1852.4	23.03	24.00	1.250	-0.18	0.028	0.035
	WCDMA Band II	RMC 12.2Kbps	Left Tilted	Full	9262	1852.4	23.03	24.00	1.250	-0.03	0.021	0.027
	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Full	9400	1880	22.94	24.00	1.276	-0.03	0.059	0.075
	WCDMA Band II	RMC 12.2Kbps	Right Cheek	Full	9538	1907.6	22.83	24.00	1.309	-0.05	0.055	0.071



<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	580	820.5	24.67	25.00	1.079	0.08	0.259	0.279
	CDMA2000 BC10	RC3 SO55	Right Tilted	Full	580	820.5	24.67	25.00	1.079	0.01	0.127	0.137
	CDMA2000 BC10	RC3 SO55	Left Cheek	Full	580	820.5	24.67	25.00	1.079	-0.03	0.209	0.225
	CDMA2000 BC10	RC3 SO55	Left Tilted	Full	580	820.5	24.67	25.00	1.079	0.01	0.145	0.156
	CDMA2000 BC10	RC3 SO55	Right Cheek	Full	476	817.9	24.45	25.00	1.135	0.01	0.262	0.297
06	CDMA2000 BC10	RC3 SO55	Right Cheek	Full	684	823.1	24.52	25.00	1.117	0.07	0.267	0.298
	CDMA2000 BC0	RC3 SO55	Right Cheek	Full	1013	824.7	24.47	25.00	1.130	0.03	0.248	0.280
	CDMA2000 BC0	RC3 SO55	Right Tilted	Full	1013	824.7	24.47	25.00	1.130	0.01	0.128	0.145
	CDMA2000 BC0	RC3 SO55	Left Cheek	Full	1013	824.7	24.47	25.00	1.130	0.07	0.220	0.249
	CDMA2000 BC0	RC3 SO55	Left Tilted	Full	1013	824.7	24.47	25.00	1.130	0.02	0.143	0.162
	CDMA2000 BC0	RC3 SO55	Right Cheek	Full	384	836.52	24.44	25.00	1.138	0.02	0.296	0.337
07	CDMA2000 BC0	RC3 SO55	Right Cheek	Full	777	848.31	24.44	25.00	1.138	0.03	0.349	0.397
	CDMA2000 BC1	RC3 SO55	Right Cheek	Full	25	1851.25	24.36	25.00	1.159	0.03	0.061	0.071
	CDMA2000 BC1	RC3 SO55	Right Tilted	Full	25	1851.25	24.36	25.00	1.159	-0.09	0.052	0.060
08	CDMA2000 BC1	RC3 SO55	Left Cheek	Full	25	1851.25	24.36	25.00	1.159	-0.06	0.088	0.101
	CDMA2000 BC1	RC3 SO55	Left Tilted	Full	25	1851.25	24.36	25.00	1.159	-0.02	0.056	0.065
	CDMA2000 BC1	RC3 SO55	Left Cheek	Full	600	1880	24.13	25.00	1.222	-0.07	0.078	0.096
	CDMA2000 BC1	RC3 SO55	Left Cheek	Full	1175	1908.75	24.12	25.00	1.225	-0.01	0.072	0.088



<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 12	10M	QPSK	1	49	Right Cheek	Full	23095	707.5	22.88	24.00	1.294	-0.05	0.245	0.317
	LTE Band 12	10M	QPSK	25	12	Right Cheek	Full	23095	707.5	21.92	23.00	1.282	0.1	0.125	0.160
	LTE Band 12	10M	QPSK	1	49	Right Tilted	Full	23095	707.5	22.88	24.00	1.294	0.06	0.128	0.166
	LTE Band 12	10M	QPSK	25	12	Right Tilted	Full	23095	707.5	21.92	23.00	1.282	0.1	0.065	0.083
	LTE Band 12	10M	QPSK	1	49	Left Cheek	Full	23095	707.5	22.88	24.00	1.294	0.01	0.210	0.272
	LTE Band 12	10M	QPSK	25	12	Left Cheek	Full	23095	707.5	21.92	23.00	1.282	-0.08	0.112	0.144
	LTE Band 12	10M	QPSK	1	49	Left Tilted	Full	23095	707.5	22.88	24.00	1.294	0.02	0.123	0.159
	LTE Band 12	10M	QPSK	25	12	Left Tilted	Full	23095	707.5	21.92	23.00	1.282	-0.06	0.032	0.042
10	LTE Band 13	10M	QPSK	1	49	Right Cheek	Full	23230	782	22.73	24.00	1.340	0.07	0.246	0.330
	LTE Band 13	10M	QPSK	25	0	Right Cheek	Full	23230	782	22.13	23.00	1.222	0.01	0.131	0.160
	LTE Band 13	10M	QPSK	1	49	Right Tilted	Full	23230	782	22.73	24.00	1.340	0.03	0.138	0.185
	LTE Band 13	10M	QPSK	25	0	Right Tilted	Full	23230	782	22.13	23.00	1.222	0.05	0.079	0.097
	LTE Band 13	10M	QPSK	1	49	Left Cheek	Full	23230	782	22.73	24.00	1.340	-0.06	0.185	0.248
	LTE Band 13	10M	QPSK	25	0	Left Cheek	Full	23230	782	22.13	23.00	1.222	0.02	0.068	0.082
	LTE Band 13	10M	QPSK	1	49	Left Tilted	Full	23230	782	22.73	24.00	1.340	0.01	0.093	0.124
	LTE Band 13	10M	QPSK	25	0	Left Tilted	Full	23230	782	22.13	23.00	1.222	0.01	0.095	0.115
11	LTE Band 14	10M	QPSK	1	0	Right Cheek	Full	23330	793	22.94	24.00	1.276	-0.01	0.261	0.333
	LTE Band 14	10M	QPSK	25	0	Right Cheek	Full	23330	793	21.75	23.00	1.334	0.01	0.136	0.181
	LTE Band 14	10M	QPSK	1	0	Right Tilted	Full	23330	793	22.94	24.00	1.276	0.06	0.141	0.180
	LTE Band 14	10M	QPSK	25	0	Right Tilted	Full	23330	793	21.75	23.00	1.334	0.02	0.074	0.098
	LTE Band 14	10M	QPSK	1	0	Left Cheek	Full	23330	793	22.94	24.00	1.276	0.01	0.235	0.300
	LTE Band 14	10M	QPSK	25	0	Left Cheek	Full	23330	793	21.75	23.00	1.334	0.1	0.121	0.161
	LTE Band 14	10M	QPSK	1	0	Left Tilted	Full	23330	793	22.94	24.00	1.276	0.06	0.176	0.225
	LTE Band 14	10M	QPSK	25	0	Left Tilted	Full	23330	793	21.75	23.00	1.334	0.02	0.095	0.127
12	LTE Band 26	15M	QPSK	1	0	Right Cheek	Full	26865	831.5	23.13	24.00	1.222	0.01	0.284	0.347
	LTE Band 26	15M	QPSK	36	0	Right Cheek	Full	26865	831.5	22.11	23.00	1.227	0.1	0.203	0.249
	LTE Band 26	15M	QPSK	1	0	Right Tilted	Full	26865	831.5	23.13	24.00	1.222	0.02	0.127	0.155
	LTE Band 26	15M	QPSK	36	0	Right Tilted	Full	26865	831.5	22.11	23.00	1.227	0.01	0.098	0.120
	LTE Band 26	15M	QPSK	1	0	Left Cheek	Full	26865	831.5	23.13	24.00	1.222	0.06	0.182	0.222
	LTE Band 26	15M	QPSK	36	0	Left Cheek	Full	26865	831.5	22.11	23.00	1.227	0.05	0.134	0.164
	LTE Band 26	15M	QPSK	1	0	Left Tilted	Full	26865	831.5	23.13	24.00	1.222	-0.02	0.120	0.147
	LTE Band 26	15M	QPSK	36	0	Left Tilted	Full	26865	831.5	22.11	23.00	1.227	0.06	0.093	0.114
13	LTE Band 71	20M	QPSK	1	0	Right Cheek	Full	133322	683	23.10	24.00	1.230	0.16	0.121	0.149
	LTE Band 71	20M	QPSK	50	0	Right Cheek	Full	133322	683	21.69	23.00	1.352	0.02	0.072	0.097
	LTE Band 71	20M	QPSK	1	0	Right Tilted	Full	133322	683	23.10	24.00	1.230	0.02	0.048	0.059
	LTE Band 71	20M	QPSK	50	0	Right Tilted	Full	133322	683	21.69	23.00	1.352	0.02	0.034	0.045
	LTE Band 71	20M	QPSK	1	0	Left Cheek	Full	133322	683	23.10	24.00	1.230	0.01	0.093	0.114
	LTE Band 71	20M	QPSK	50	0	Left Cheek	Full	133322	683	21.69	23.00	1.352	0.01	0.062	0.084
	LTE Band 71	20M	QPSK	1	0	Left Tilted	Full	133322	683	23.10	24.00	1.230	0.02	0.048	0.058
	LTE Band 71	20M	QPSK	50	0	Left Tilted	Full	133322	683	21.69	23.00	1.352	0.03	0.035	0.047
	LTE Band 66	20M	QPSK	1	99	Right Cheek	Full	132572	1770	23.10	24.00	1.230	-0.08	0.066	0.081
	LTE Band 66	20M	QPSK	50	24	Right Cheek	Full	132572	1770	22.02	23.00	1.253	-0.09	0.039	0.048
	LTE Band 66	20M	QPSK	1	99	Right Tilted	Full	132572	1770	23.10	24.00	1.230	-0.07	0.047	0.058
	LTE Band 66	20M	QPSK	50	24	Right Tilted	Full	132572	1770	22.02	23.00	1.253	-0.15	0.026	0.033
	LTE Band 66	20M	QPSK	1	99	Left Cheek	Full	132572	1770	23.10	24.00	1.230	-0.02	0.086	0.106
	LTE Band 66	20M	QPSK	50	24	Left Cheek	Full	132572	1770	22.02	23.00	1.253	-0.05	0.049	0.061
	LTE Band 66	20M	QPSK	1	99	Left Tilted	Full	132572	1770	23.10	24.00	1.230	-0.03	0.057	0.070
	LTE Band 66	20M	QPSK	50	24	Left Tilted	Full	132572	1770	22.02	23.00	1.253	-0.05	0.032	0.040
	LTE Band 66	20M	QPSK	1	99	Left Cheek	Full	132072	1720	22.93	24.00	1.279	-0.02	0.098	0.125
14	LTE Band 66	20M	QPSK	1	99	Left Cheek	Full	132322	1745	23.06	24.00	1.242	-0.09	0.112	0.139



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	49	Right Cheek	Full	26140	1860	22.71	24.00	1.346	-0.04	0.036	0.049
	LTE Band 25	20M	QPSK	50	24	Right Cheek	Full	26140	1860	21.82	23.00	1.312	-0.08	0.022	0.029
	LTE Band 25	20M	QPSK	1	49	Right Tilted	Full	26140	1860	22.71	24.00	1.346	-0.12	0.022	0.030
	LTE Band 25	20M	QPSK	50	24	Right Tilted	Full	26140	1860	21.82	23.00	1.312	-0.07	0.015	0.019
15	LTE Band 25	20M	QPSK	1	49	Left Cheek	Full	26140	1860	22.71	24.00	1.346	-0.16	0.058	0.078
	LTE Band 25	20M	QPSK	50	24	Left Cheek	Full	26140	1860	21.82	23.00	1.312	-0.06	0.035	0.045
	LTE Band 25	20M	QPSK	1	49	Left Tilted	Full	26140	1860	22.71	24.00	1.346	-0.02	0.029	0.039
	LTE Band 25	20M	QPSK	50	24	Left Tilted	Full	26140	1860	21.82	23.00	1.312	-0.06	0.018	0.023
	LTE Band 25	20M	QPSK	1	49	Left Cheek	Full	26340	1880	22.64	24.00	1.368	-0.02	0.051	0.070
	LTE Band 25	20M	QPSK	1	49	Left Cheek	Full	26590	1905	22.48	24.00	1.419	-0.06	0.050	0.071
	LTE Band 30	10M	QPSK	1	49	Right Cheek	Full	27710	2310	23.29	24.00	1.178	-0.07	0.123	0.145
	LTE Band 30	10M	QPSK	25	12	Right Cheek	Full	27710	2310	21.85	23.00	1.303	0.02	0.059	0.077
16	LTE Band 30	10M	QPSK	1	49	Right Tilted	Full	27710	2310	23.29	24.00	1.178	-0.02	0.129	0.152
	LTE Band 30	10M	QPSK	25	12	Right Tilted	Full	27710	2310	21.85	23.00	1.303	0.06	0.067	0.087
	LTE Band 30	10M	QPSK	1	49	Left Cheek	Full	27710	2310	23.29	24.00	1.178	-0.03	0.114	0.134
	LTE Band 30	10M	QPSK	25	12	Left Cheek	Full	27710	2310	21.85	23.00	1.303	-0.04	0.073	0.095
	LTE Band 30	10M	QPSK	1	49	Left Tilted	Full	27710	2310	23.29	24.00	1.178	-0.03	0.085	0.100
	LTE Band 30	10M	QPSK	25	12	Left Tilted	Full	27710	2310	21.85	23.00	1.303	-0.03	0.039	0.050
	LTE Band 7	20M	QPSK	1	49	Right Cheek	Full	21350	2560	23.67	24.00	1.079	0.02	0.130	0.140
	LTE Band 7	20M	QPSK	50	24	Right Cheek	Full	21350	2560	22.40	23.00	1.148	0.02	0.073	0.084
	LTE Band 7	20M	QPSK	1	49	Right Tilted	Full	21350	2560	23.67	24.00	1.079	-0.01	0.222	0.240
	LTE Band 7	20M	QPSK	50	24	Right Tilted	Full	21350	2560	22.40	23.00	1.148	-0.04	0.129	0.148
	LTE Band 7	20M	QPSK	1	49	Left Cheek	Full	21350	2560	23.67	24.00	1.079	-0.03	0.208	0.224
	LTE Band 7	20M	QPSK	50	24	Left Cheek	Full	21350	2560	22.40	23.00	1.148	-0.05	0.128	0.147
	LTE Band 7	20M	QPSK	1	49	Left Tilted	Full	21350	2560	23.67	24.00	1.079	-0.01	0.087	0.094
	LTE Band 7	20M	QPSK	50	24	Left Tilted	Full	21350	2560	22.40	23.00	1.148	-0.02	0.051	0.058
17	LTE Band 7	20M	QPSK	1	49	Right Tilted	Full	20850	2510	23.62	24.00	1.091	-0.06	0.255	0.278
	LTE Band 7	20M	QPSK	1	49	Right Tilted	Full	21100	2535	23.54	24.00	1.112	-0.05	0.238	0.265



<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	40620	2593	23.06	24.50	1.393	62.9	1.006	0.08	0.081	0.113
	LTE Band 41	20M	QPSK	50	0	Right Cheek	Full	3	40620	2593	21.74	23.50	1.500	62.9	1.006	0.02	0.058	0.088
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	3	40620	2593	23.06	24.50	1.393	62.9	1.006	0.08	0.114	0.160
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	3	40620+40422	2593+2573.2	23.88	24.50	1.153	62.9	1.006	0.07	0.069	0.080
	LTE Band 41	20M	QPSK	50	0	Right Tilted	Full	3	40620	2593	21.74	23.50	1.500	62.9	1.006	0.01	0.086	0.129
	LTE Band 41	20M	QPSK	1	0	Left Cheek	Full	3	40620	2593	23.06	24.50	1.393	62.9	1.006	0.02	0.104	0.146
	LTE Band 41	20M	QPSK	50	0	Left Cheek	Full	3	40620	2593	21.74	23.50	1.500	62.9	1.006	0.03	0.073	0.109
	LTE Band 41	20M	QPSK	1	0	Left Tilted	Full	3	40620	2593	23.06	24.50	1.393	62.9	1.006	0.02	0.044	0.062
	LTE Band 41	20M	QPSK	50	0	Left Tilted	Full	3	40620	2593	21.74	23.50	1.500	62.9	1.006	0.05	0.035	0.052
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	3	39750	2506	22.79	24.50	1.483	62.9	1.006	0.02	0.106	0.158
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	3	40185	2549.5	22.91	24.50	1.442	62.9	1.006	0.02	0.103	0.149
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	3	41055	2636.5	22.61	24.50	1.545	62.9	1.006	0.02	0.066	0.103
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	3	41490	2680	22.77	24.50	1.489	62.9	1.006	0.03	0.049	0.073
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	2	40620	2593	26.60	27.00	1.096	42.9	1.009	0.02	0.161	0.178
18	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	2	39750	2506	26.51	27.00	1.119	42.9	1.009	0.17	0.180	0.203
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	2	40185	2549.5	26.34	27.00	1.164	42.9	1.009	0.02	0.172	0.202
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	2	41055	2636.5	26.57	27.00	1.104	42.9	1.009	0.02	0.104	0.116
	LTE Band 41	20M	QPSK	1	0	Right Tilted	Full	2	41490	2680	26.45	27.00	1.135	42.9	1.009	0.06	0.084	0.097

<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	Full	1	2412	18.04	19.00	1.249	97.6	1.025		0.416		
	WLAN2.4GHz	802.11b 1Mbps	Right Tilted	Full	1	2412	18.04	19.00	1.249	97.6	1.025		0.507		
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Full	1	2412	18.04	19.00	1.249	97.6	1.025	0.04	1.050	0.542	0.694
	WLAN2.4GHz	802.11b 1Mbps	Left Tilted	Full	1	2412	18.04	19.00	1.249	97.6	1.025	-0.01	0.935	0.495	0.634
19	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Full	6	2437	17.89	19.00	1.293	97.6	1.025	-0.07		0.652	0.864
	WLAN2.4GHz	802.11b 1Mbps	Left Cheek	Full	11	2462	17.96	19.00	1.272	97.6	1.025	0.07		0.340	0.443



<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	Full	56	5280	17.26	18.00	1.185	87.44	1.144		0.56		
	WLAN5.3GHz	802.11a 6Mbps	Right Tilted	Full	56	5280	17.26	18.00	1.185	87.44	1.144		0.66		
	WLAN5.3GHz	802.11a 6Mbps	Left Cheek	Full	56	5280	17.26	18.00	1.185	87.44	1.144		0.563		
20	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Full	56	5280	17.26	18.00	1.185	87.44	1.144	-0.03	0.68	0.263	0.357
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Full	52	5260	17.19	18.00	1.204	87.44	1.144	-0.08		0.247	0.340
	WLAN5.3GHz	802.11a 6Mbps	Left Tilted	Full	64	5320	17.07	18.00	1.238	87.44	1.144	0.03		0.182	0.258
	WLAN5.5GHz	802.11a 6Mbps	Right Cheek	Full	100	5500	17.23	18.00	1.193	87.44	1.144		0.237		
	WLAN5.5GHz	802.11a 6Mbps	Right Tilted	Full	100	5500	17.23	18.00	1.193	87.44	1.144		0.273		
	WLAN5.5GHz	802.11a 6Mbps	Left Cheek	Full	100	5500	17.23	18.00	1.193	87.44	1.144		0.361		
21	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Full	100	5500	17.23	18.00	1.193	87.44	1.144	-0.01	0.396	0.096	0.131
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Full	116	5580	16.92	18.00	1.281	87.44	1.144	-0.03		0.082	0.120
	WLAN5.5GHz	802.11a 6Mbps	Left Tilted	Full	140	5700	17.05	18.00	1.245	87.44	1.144	-0.18		0.079	0.113
22	WLAN 5.8GHz	802.11a 6Mbps	Right Cheek	Full	165	5825	17.26	18.00	1.185	87.44	1.144	-0.12	0.560	0.147	0.199
	WLAN 5.8GHz	802.11a 6Mbps	Right Tilted	Full	165	5825	17.26	18.00	1.185	87.44	1.144		0.473		
	WLAN 5.8GHz	802.11a 6Mbps	Left Cheek	Full	165	5825	17.26	18.00	1.185	87.44	1.144		0.420		
	WLAN 5.8GHz	802.11a 6Mbps	Left Tilted	Full	165	5825	17.26	18.00	1.185	87.44	1.144		0.386		
	WLAN 5.8GHz	802.11a 6Mbps	Right Cheek	Full	149	5745	17.03	18.00	1.249	87.44	1.144	-0.08		0.109	0.156
	WLAN 5.8GHz	802.11a 6Mbps	Right Cheek	Full	157	5785	17.00	18.00	1.258	87.44	1.144	-0.02		0.134	0.193

<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	39	2441	10.40	11.00	1.149	76.78	1.085	-0.1	0.035	0.043
	Bluetooth	1Mbps	Right Tilted	Full	39	2441	10.40	11.00	1.149	76.78	1.085	0.01	0.038	0.047
	Bluetooth	1Mbps	Left Cheek	Full	39	2441	10.40	11.00	1.149	76.78	1.085	0.13	0.066	0.083
	Bluetooth	1Mbps	Left Tilted	Full	39	2441	10.40	11.00	1.149	76.78	1.085	0.06	0.061	0.076
	Bluetooth	1Mbps	Left Cheek	Full	0	2402	10.00	11.00	1.260	76.78	1.085	0.08	0.070	0.095
23	Bluetooth	1Mbps	Left Cheek	Full	78	2480	9.97	11.00	1.268	76.78	1.085	-0.02	0.076	0.104

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 (4 Tx slots)	Front	5	Full	128	824.2	26.12	27.50	1.374	-0.14	0.765	1.051
	GSM850	GPRS (4 Tx slots)	Front	5	Full	189	836.4	26.03	27.50	1.403	0.02	0.778	1.091
	GSM850	GPRS (4 Tx slots)	Front	5	Full	251	848.8	26.09	27.50	1.384	-0.02	0.828	1.146
	GSM850	GPRS (4 Tx slots)	Back	5	Full	128	824.2	26.12	27.50	1.374	-0.05	0.797	1.095
	GSM850	GPRS (4 Tx slots)	Back	5	Full	189	836.4	26.03	27.50	1.403	-0.16	0.881	1.236
24	GSM850	GPRS (4 Tx slots)	Back	5	Full	251	848.8	26.09	27.50	1.384	-0.02	0.951	1.316
	GSM850	GPRS (4 Tx slots)	Left Side	5	Full	128	824.2	26.12	27.50	1.374	-0.02	0.319	0.438
	GSM850	GPRS (4 Tx slots)	Right Side	5	Full	128	824.2	26.12	27.50	1.374	0.02	0.060	0.082
	GSM850	GPRS (4 Tx slots)	Bottom Side	5	Full	128	824.2	26.12	27.50	1.374	-0.08	0.605	0.831
	GSM850	GPRS (4 Tx slots)	Bottom Side	5	Full	189	836.4	26.03	27.50	1.403	-0.01	0.698	0.979
	GSM850	GPRS (4 Tx slots)	Bottom Side	5	Full	251	848.8	26.09	27.50	1.384	0.02	0.720	0.996
25	GSM1900	GPRS (4 Tx slots)	Front	5	Hotspot On	512	1850.2	19.88	20.50	1.153	0.02	1.040	1.200
	GSM1900	GPRS (4 Tx slots)	Front	5	Hotspot On	661	1880	19.72	20.50	1.197	0.06	0.975	1.167
	GSM1900	GPRS (4 Tx slots)	Front	5	Hotspot On	810	1909.8	19.62	20.50	1.225	0.02	0.896	1.097
	GSM1900	GPRS (4 Tx slots)	Back	5	Hotspot On	512	1850.2	19.88	20.50	1.153	-0.03	0.973	1.122
	GSM1900	GPRS (4 Tx slots)	Back	5	Hotspot On	661	1880	19.72	20.50	1.197	0.02	0.913	1.093
	GSM1900	GPRS (4 Tx slots)	Back	5	Hotspot On	810	1909.8	19.62	20.50	1.225	0.02	0.882	1.080
	GSM1900	GPRS (4 Tx slots)	Left Side	5	Hotspot On	512	1850.2	17.86	18.50	1.159	-0.03	0.033	0.038
	GSM1900	GPRS (4 Tx slots)	Right Side	5	Hotspot On	512	1850.2	17.86	18.50	1.159	0.05	0.054	0.062
	GSM1900	GPRS (4 Tx slots)	Bottom Side	5	Hotspot On	512	1850.2	17.86	18.50	1.159	-0.01	1.030	1.194
	GSM1900	GPRS (4 Tx slots)	Bottom Side	5	Hotspot On	661	1880	17.61	18.50	1.227	-0.03	0.968	1.188
	GSM1900	GPRS (4 Tx slots)	Bottom Side	5	Hotspot On	810	1909.8	17.50	18.50	1.259	-0.01	0.913	1.149



<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	4233	846.6	22.35	23.00	1.161	0.03	1.040	1.208
	WCDMA Band V	RMC 12.2Kbps	Front	5	Hotspot On	4132	826.4	22.17	23.00	1.211	-0.02	0.932	1.128
	WCDMA Band V	RMC 12.2Kbps	Front	5	Hotspot On	4182	836.4	22.08	23.00	1.236	-0.16	0.995	1.230
26	WCDMA Band V	RMC 12.2Kbps	Back	5	Hotspot On	4233	846.6	22.35	23.00	1.161	-0.07	1.120	1.301
	WCDMA Band V	RMC 12.2Kbps	Back	5	Hotspot On	4132	826.4	22.17	23.00	1.211	-0.07	1.040	1.259
	WCDMA Band V	RMC 12.2Kbps	Back	5	Hotspot On	4182	836.4	22.08	23.00	1.236	-0.05	1.010	1.248
	WCDMA Band V	RMC 12.2Kbps	Left Side	5	Hotspot On	4233	846.6	22.35	23.00	1.161	-0.08	0.140	0.163
	WCDMA Band V	RMC 12.2Kbps	Right Side	5	Hotspot On	4233	846.6	22.35	23.00	1.161	-0.05	0.480	0.557
	WCDMA Band V	RMC 12.2Kbps	Bottom Side	5	Hotspot On	4233	846.6	22.35	23.00	1.161	-0.04	0.870	1.010
	WCDMA Band V	RMC 12.2Kbps	Bottom Side	5	Hotspot On	4132	826.4	22.17	23.00	1.211	-0.01	0.770	0.932
	WCDMA Band V	RMC 12.2Kbps	Bottom Side	5	Hotspot On	4182	836.4	22.08	23.00	1.236	-0.03	0.783	0.968
27	WCDMA Band IV	RMC 12.2Kbps	Front	5	Hotspot On	1513	1752.6	16.15	17.50	1.365	-0.16	1.050	1.433
	WCDMA Band IV	RMC 12.2Kbps	Front	5	Hotspot On	1312	1712.4	15.79	17.50	1.483	0.02	0.859	1.273
	WCDMA Band IV	RMC 12.2Kbps	Front	5	Hotspot On	1413	1732.6	15.88	17.50	1.452	-0.02	0.885	1.285
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Hotspot On	1513	1752.6	16.15	17.50	1.365	-0.1	1.050	1.433
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Hotspot On	1312	1712.4	15.79	17.50	1.483	0.06	0.947	1.404
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Hotspot On	1413	1732.6	15.88	17.50	1.452	0.02	0.961	1.395
	WCDMA Band IV	RMC 12.2Kbps	Left Side	5	Hotspot On	1513	1752.6	14.51	16.00	1.409	-0.01	0.033	0.047
	WCDMA Band IV	RMC 12.2Kbps	Right Side	5	Hotspot On	1513	1752.6	14.51	16.00	1.409	-0.03	0.066	0.094
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	5	Hotspot On	1513	1752.6	14.51	16.00	1.409	-0.08	0.901	1.270
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	5	Hotspot On	1312	1712.4	14.25	16.00	1.496	-0.02	0.810	1.212
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	5	Hotspot On	1413	1732.6	14.40	16.00	1.445	-0.05	0.975	1.409
	WCDMA Band II	RMC 12.2Kbps	Front	5	Hotspot On	9262	1852.4	17.79	18.50	1.178	-0.03	1.220	1.437
28	WCDMA Band II	RMC 12.2Kbps	Front	5	Hotspot On	9400	1880	17.74	18.50	1.191	0.16	1.210	1.441
	WCDMA Band II	RMC 12.2Kbps	Front	5	Hotspot On	9538	1907.6	17.62	18.50	1.225	0.03	1.100	1.347
	WCDMA Band II	RMC 12.2Kbps	Back	5	Hotspot On	9262	1852.4	17.79	18.50	1.178	0.02	1.210	1.425
	WCDMA Band II	RMC 12.2Kbps	Back	5	Hotspot On	9400	1880	17.74	18.50	1.191	-0.14	1.180	1.406
	WCDMA Band II	RMC 12.2Kbps	Back	5	Hotspot On	9538	1907.6	17.62	18.50	1.225	0.01	1.090	1.335
	WCDMA Band II	RMC 12.2Kbps	Left Side	5	Hotspot On	9262	1852.4	15.82	16.50	1.169	-0.03	0.043	0.050
	WCDMA Band II	RMC 12.2Kbps	Right Side	5	Hotspot On	9262	1852.4	15.82	16.50	1.169	-0.01	0.079	0.092
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	5	Hotspot On	9262	1852.4	15.82	16.50	1.169	-0.02	1.070	1.251
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	5	Hotspot On	9400	1880	15.78	16.50	1.180	0.02	1.220	1.440
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	5	Hotspot On	9538	1907.6	15.52	16.50	1.253	0.01	1.040	1.303



<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	Full	580	820.5	24.65	25.00	1.084	0.02	1.020	1.106
	CDMA2000 BC10	RTAP 153.6Kbps	Front	5	Full	476	817.9	24.46	25.00	1.132	-0.05	1.050	1.189
	CDMA2000 BC10	RTAP 153.6Kbps	Front	5	Full	684	823.1	24.53	25.00	1.114	-0.15	1.040	1.159
	CDMA2000 BC10	RTAP 153.6Kbps	Back	5	Full	580	820.5	24.65	25.00	1.084	-0.08	1.070	1.160
29	CDMA2000 BC10	RTAP 153.6Kbps	Back	5	Full	476	817.9	24.46	25.00	1.132	-0.03	1.080	1.223
	CDMA2000 BC10	RTAP 153.6Kbps	Back	5	Full	684	823.1	24.53	25.00	1.114	-0.02	1.050	1.170
	CDMA2000 BC10	RTAP 153.6Kbps	Left Side	5	Full	580	820.5	24.65	25.00	1.084	-0.03	0.205	0.222
	CDMA2000 BC10	RTAP 153.6Kbps	Right Side	5	Full	580	820.5	24.65	25.00	1.084	-0.04	0.519	0.563
	CDMA2000 BC10	RTAP 153.6Kbps	Bottom Side	5	Full	580	820.5	24.65	25.00	1.084	0.19	0.939	1.018
	CDMA2000 BC10	RTAP 153.6Kbps	Bottom Side	5	Full	476	817.9	24.46	25.00	1.132	-0.08	0.692	0.784
	CDMA2000 BC10	RTAP 153.6Kbps	Bottom Side	5	Full	684	823.1	24.53	25.00	1.114	-0.08	0.729	0.812
	CDMA2000 BC0	RTAP 153.6Kbps	Front	5	Full	1013	824.7	24.48	25.00	1.127	0.03	1.110	1.251
	CDMA2000 BC0	RTAP 153.6Kbps	Front	5	Full	384	836.52	24.44	25.00	1.138	0.08	1.120	1.274
30	CDMA2000 BC0	RTAP 153.6Kbps	Front	5	Full	777	848.31	24.42	25.00	1.143	-0.17	1.220	1.394
	CDMA2000 BC0	RTAP 153.6Kbps	Back	5	Full	1013	824.7	24.48	25.00	1.127	-0.06	1.150	1.296
	CDMA2000 BC0	RTAP 153.6Kbps	Back	5	Full	384	836.52	24.44	25.00	1.138	-0.09	1.180	1.342
	CDMA2000 BC0	RTAP 153.6Kbps	Back	5	Full	777	848.31	24.42	25.00	1.143	-0.06	1.210	1.383
	CDMA2000 BC0	RTAP 153.6Kbps	Left Side	5	Full	1013	824.7	24.48	25.00	1.127	-0.01	0.171	0.193
	CDMA2000 BC0	RTAP 153.6Kbps	Right Side	5	Full	1013	824.7	24.48	25.00	1.127	-0.02	0.443	0.499
	CDMA2000 BC0	RTAP 153.6Kbps	Bottom Side	5	Full	1013	824.7	24.48	25.00	1.127	-0.02	0.764	0.861
	CDMA2000 BC0	RTAP 153.6Kbps	Bottom Side	5	Full	384	836.52	24.44	25.00	1.138	0.17	0.979	1.114
	CDMA2000 BC0	RTAP 153.6Kbps	Bottom Side	5	Full	777	848.31	24.42	25.00	1.143	-0.05	0.786	0.898
	CDMA2000 BC1	RTAP 153.6Kbps	Front	5	Hotspot On	25	1851.25	16.69	17.50	1.205	-0.01	0.660	0.795
	CDMA2000 BC1	RTAP 153.6Kbps	Back	5	Hotspot On	25	1851.25	16.69	17.50	1.205	-0.02	0.655	0.789
	CDMA2000 BC1	RTAP 153.6Kbps	Left Side	5	Hotspot On	25	1851.25	16.69	17.50	1.205	0.02	0.043	0.052
	CDMA2000 BC1	RTAP 153.6Kbps	Right Side	5	Hotspot On	25	1851.25	16.69	17.50	1.205	-0.06	0.073	0.087
31	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	5	Hotspot On	25	1851.25	16.69	17.50	1.205	-0.01	1.110	1.338
	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	5	Hotspot On	600	1880	16.51	17.50	1.256	-0.05	0.941	1.182
	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	5	Hotspot On	1175	1908.75	16.47	17.50	1.268	-0.04	0.981	1.244

<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 12	10M	QPSK	1	49	Front	5	Full	23095	707.5	22.88	24.00	1.294	-0.07	0.799	1.034
	LTE Band 12	10M	QPSK	25	12	Front	5	Full	23095	707.5	21.92	23.00	1.282	-0.19	0.453	0.581
	LTE Band 12	10M	QPSK	50	0	Front	5	Full	23095	707.5	21.75	23.00	1.334	-0.19	0.436	0.581
32	LTE Band 12	10M	QPSK	1	49	Back	5	Full	23095	707.5	22.88	24.00	1.294	-0.01	0.851	1.101
	LTE Band 12	10M	QPSK	25	12	Back	5	Full	23095	707.5	21.92	23.00	1.282	-0.09	0.469	0.601
	LTE Band 12	10M	QPSK	50	0	Back	5	Full	23095	707.5	21.75	23.00	1.334	-0.02	0.458	0.611
	LTE Band 12	10M	QPSK	1	49	Left Side	5	Full	23095	707.5	22.88	24.00	1.294	-0.01	0.265	0.343
	LTE Band 12	10M	QPSK	25	12	Left Side	5	Full	23095	707.5	21.92	23.00	1.282	-0.07	0.153	0.196
	LTE Band 12	10M	QPSK	1	49	Right Side	5	Full	23095	707.5	22.88	24.00	1.294	-0.03	0.514	0.665
	LTE Band 12	10M	QPSK	25	12	Right Side	5	Full	23095	707.5	21.92	23.00	1.282	-0.09	0.276	0.354
	LTE Band 12	10M	QPSK	1	49	Bottom Side	5	Full	23095	707.5	22.88	24.00	1.294	-0.03	0.590	0.764
	LTE Band 12	10M	QPSK	25	12	Bottom Side	5	Full	23095	707.5	21.92	23.00	1.282	-0.07	0.305	0.391
	LTE Band 13	10M	QPSK	1	49	Front	5	Full	23230	782	22.73	24.00	1.340	-0.04	0.956	1.281
	LTE Band 13	10M	QPSK	25	0	Front	5	Full	23230	782	22.13	23.00	1.222	-0.01	0.573	0.700
	LTE Band 13	10M	QPSK	50	0	Front	5	Full	23230	782	22.06	23.00	1.242	-0.02	0.564	0.700
33	LTE Band 13	10M	QPSK	1	49	Back	5	Full	23230	782	22.73	24.00	1.340	-0.07	1.010	1.353
	LTE Band 13	10M	QPSK	25	0	Back	5	Full	23230	782	22.13	23.00	1.222	-0.03	0.602	0.736
	LTE Band 13	10M	QPSK	50	0	Back	5	Full	23230	782	22.06	23.00	1.242	-0.06	0.597	0.741
	LTE Band 13	10M	QPSK	1	49	Left Side	5	Full	23230	782	22.73	24.00	1.340	-0.02	0.268	0.359
	LTE Band 13	10M	QPSK	25	0	Left Side	5	Full	23230	782	22.13	23.00	1.222	-0.06	0.160	0.195
	LTE Band 13	10M	QPSK	1	49	Right Side	5	Full	23230	782	22.73	24.00	1.340	-0.06	0.589	0.789
	LTE Band 13	10M	QPSK	25	0	Right Side	5	Full	23230	782	22.13	23.00	1.222	-0.08	0.336	0.411
	LTE Band 13	10M	QPSK	1	49	Bottom Side	5	Full	23230	782	22.73	24.00	1.340	-0.03	0.676	0.906
	LTE Band 13	10M	QPSK	25	0	Bottom Side	5	Full	23230	782	22.13	23.00	1.222	-0.03	0.385	0.470
	LTE Band 13	10M	QPSK	50	0	Bottom Side	5	Full	23230	782	22.06	23.00	1.242	-0.09	0.388	0.482



FCC SAR Test Report

Report No. : FA892801

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 14	10M	QPSK	1	0	Front	5	Full	23330	793	22.94	24.00	1.276	-0.18	1.010	1.289
	LTE Band 14	10M	QPSK	25	0	Front	5	Full	23330	793	21.75	23.00	1.334	-0.18	0.563	0.751
	LTE Band 14	10M	QPSK	50	0	Front	5	Full	23330	793	21.67	23.00	1.358	-0.07	0.514	0.698
34	LTE Band 14	10M	QPSK	1	0	Back	5	Full	23330	793	22.94	24.00	1.276	-0.01	1.090	1.391
	LTE Band 14	10M	QPSK	25	0	Back	5	Full	23330	793	21.75	23.00	1.334	-0.09	0.585	0.780
	LTE Band 14	10M	QPSK	50	0	Back	5	Full	23330	793	21.67	23.00	1.358	-0.04	0.515	0.700
	LTE Band 14	10M	QPSK	1	0	Left Side	5	Full	23330	793	22.94	24.00	1.276	-0.04	0.275	0.351
	LTE Band 14	10M	QPSK	25	0	Left Side	5	Full	23330	793	21.75	23.00	1.334	-0.02	0.150	0.200
	LTE Band 14	10M	QPSK	1	0	Right Side	5	Full	23330	793	22.94	24.00	1.276	-0.01	0.642	0.819
	LTE Band 14	10M	QPSK	25	0	Right Side	5	Full	23330	793	21.75	23.00	1.334	-0.01	0.339	0.452
	LTE Band 14	10M	QPSK	50	0	Right Side	5	Full	23330	793	21.67	23.00	1.358	-0.02	0.329	0.447
	LTE Band 14	10M	QPSK	1	0	Bottom Side	5	Full	23330	793	22.94	24.00	1.276	-0.04	0.718	0.916
	LTE Band 14	10M	QPSK	25	0	Bottom Side	5	Full	23330	793	21.75	23.00	1.334	-0.09	0.383	0.511
	LTE Band 14	10M	QPSK	50	0	Bottom Side	5	Full	23330	793	21.67	23.00	1.358	-0.04	0.358	0.486
	LTE Band 26	15M	QPSK	1	0	Front	5	Full	26865	831.5	23.13	24.00	1.222	-0.04	0.914	1.117
	LTE Band 26	15M	QPSK	36	0	Front	5	Full	26865	831.5	22.11	23.00	1.227	-0.18	0.742	0.911
	LTE Band 26	15M	QPSK	75	0	Front	5	Full	26865	831.5	22.05	23.00	1.245	-0.01	0.728	0.906
35	LTE Band 26	15M	QPSK	1	0	Back	5	Full	26865	831.5	23.13	24.00	1.222	-0.18	1.030	1.258
	LTE Band 26	15M	QPSK	36	0	Back	5	Full	26865	831.5	22.11	23.00	1.227	-0.01	0.732	0.898
	LTE Band 26	15M	QPSK	75	0	Back	5	Full	26865	831.5	22.05	23.00	1.245	-0.02	0.714	0.889
	LTE Band 26	15M	QPSK	1	0	Left Side	5	Full	26865	831.5	23.13	24.00	1.222	-0.05	0.155	0.189
	LTE Band 26	15M	QPSK	36	0	Left Side	5	Full	26865	831.5	22.11	23.00	1.227	-0.01	0.114	0.140
	LTE Band 26	15M	QPSK	1	0	Right Side	5	Full	26865	831.5	23.13	24.00	1.222	-0.07	0.432	0.528
	LTE Band 26	15M	QPSK	36	0	Right Side	5	Full	26865	831.5	22.11	23.00	1.227	-0.07	0.322	0.395
	LTE Band 26	15M	QPSK	1	0	Bottom Side	5	Full	26865	831.5	23.13	24.00	1.222	-0.07	0.725	0.886
	LTE Band 26	15M	QPSK	36	0	Bottom Side	5	Full	26865	831.5	22.11	23.00	1.227	-0.03	0.561	0.689
	LTE Band 26	15M	QPSK	75	0	Bottom Side	5	Full	26865	831.5	22.05	23.00	1.245	-0.02	0.535	0.666
	LTE Band 71	20M	QPSK	1	0	Front	5	Full	133322	683	23.10	24.00	1.230	-0.16	0.435	0.535
	LTE Band 71	20M	QPSK	50	0	Front	5	Full	133322	683	21.69	23.00	1.352	-0.17	0.307	0.415
36	LTE Band 71	20M	QPSK	1	0	Back	5	Full	133322	683	23.10	24.00	1.230	-0.02	0.471	0.579
	LTE Band 71	20M	QPSK	50	0	Back	5	Full	133322	683	21.69	23.00	1.352	-0.07	0.326	0.441
	LTE Band 71	20M	QPSK	1	0	Left Side	5	Full	133322	683	23.10	24.00	1.230	-0.03	0.124	0.153
	LTE Band 71	20M	QPSK	50	0	Left Side	5	Full	133322	683	21.69	23.00	1.352	-0.04	0.114	0.154
	LTE Band 71	20M	QPSK	1	0	Right Side	5	Full	133322	683	23.10	24.00	1.230	-0.06	0.269	0.331
	LTE Band 71	20M	QPSK	50	0	Right Side	5	Full	133322	683	21.69	23.00	1.352	-0.05	0.181	0.245
	LTE Band 71	20M	QPSK	1	0	Bottom Side	5	Full	133322	683	23.10	24.00	1.230	-0.07	0.313	0.385
	LTE Band 71	20M	QPSK	50	0	Bottom Side	5	Full	133322	683	21.69	23.00	1.352	-0.03	0.206	0.279



FCC SAR Test Report

Report No. : FA892801

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 66	20M	QPSK	1	99	Front	5	Hotspot On	132572	1770	17.90	18.50	1.148	-0.02	1.180	1.355
	LTE Band 66	20M	QPSK	1	99	Front	5	Hotspot On	132072	1720	17.56	18.50	1.242	0.01	0.920	1.142
	LTE Band 66	20M	QPSK	1	99	Front	5	Hotspot On	132322	1745	17.82	18.50	1.169	-0.02	1.040	1.216
	LTE Band 66	20M	QPSK	50	24	Front	5	Hotspot On	132572	1770	17.56	18.50	1.242	0.03	0.993	1.233
	LTE Band 66	20M	QPSK	50	24	Front	5	Hotspot On	132072	1720	17.52	18.50	1.253	0.02	0.765	0.959
	LTE Band 66	20M	QPSK	50	24	Front	5	Hotspot On	132322	1745	17.54	18.50	1.247	-0.01	0.913	1.139
	LTE Band 66	20M	QPSK	100	0	Front	5	Hotspot On	132572	1770	17.51	18.50	1.256	0.02	1.000	1.256
	LTE Band 66	20M	QPSK	1	99	Back	5	Hotspot On	132572	1770	17.90	18.50	1.148	-0.15	1.160	1.332
	LTE Band 66	20M	QPSK	1	99	Back	5	Hotspot On	132072	1720	17.56	18.50	1.242	0.02	0.931	1.156
	LTE Band 66	20M	QPSK	1	99	Back	5	Hotspot On	132322	1745	17.82	18.50	1.169	-0.01	1.060	1.240
	LTE Band 66	20M	QPSK	50	24	Back	5	Hotspot On	132572	1770	17.56	18.50	1.242	0.02	1.020	1.266
	LTE Band 66	20M	QPSK	50	24	Back	5	Hotspot On	132072	1720	17.52	18.50	1.253	-0.03	0.789	0.989
	LTE Band 66	20M	QPSK	50	24	Back	5	Hotspot On	132322	1745	17.54	18.50	1.247	0.02	0.929	1.159
	LTE Band 66	20M	QPSK	100	0	Back	5	Hotspot On	132572	1770	17.51	18.50	1.256	-0.06	1.040	1.306
	LTE Band 66	20M	QPSK	1	99	Left Side	5	Hotspot On	132572	1770	16.30	16.50	1.047	-0.03	0.048	0.050
	LTE Band 66	20M	QPSK	50	24	Left Side	5	Hotspot On	132572	1770	16.02	16.50	1.117	0.01	0.039	0.044
	LTE Band 66	20M	QPSK	1	99	Right Side	5	Hotspot On	132572	1770	16.30	16.50	1.047	-0.06	0.093	0.098
	LTE Band 66	20M	QPSK	50	24	Right Side	5	Hotspot On	132572	1770	16.02	16.50	1.117	-0.03	0.088	0.098
	LTE Band 66	20M	QPSK	1	99	Bottom Side	5	Hotspot On	132572	1770	16.30	16.50	1.047	-0.04	1.220	1.277
	LTE Band 66	20M	QPSK	1	99	Bottom Side	5	Hotspot On	132072	1720	15.67	16.50	1.211	-0.07	1.070	1.295
	LTE Band 66	20M	QPSK	1	99	Bottom Side	5	Hotspot On	132322	1745	16.20	16.50	1.072	-0.16	1.240	1.329
	LTE Band 66	20M	QPSK	50	24	Bottom Side	5	Hotspot On	132572	1770	16.02	16.50	1.117	-0.01	1.240	1.385
	LTE Band 66	20M	QPSK	50	24	Bottom Side	5	Hotspot On	132072	1720	15.94	16.50	1.138	-0.15	0.969	1.102
	LTE Band 66	20M	QPSK	50	24	Bottom Side	5	Hotspot On	132322	1745	15.98	16.50	1.127	-0.18	1.080	1.217
37	LTE Band 66	20M	QPSK	100	0	Bottom Side	5	Hotspot On	132572	1770	15.95	16.50	1.135	-0.04	1.250	1.419



FCC SAR Test Report

Report No. : FA892801

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	49	Front	5	Hotspot On	26140	1860	18.00	18.50	1.122	-0.16	1.080	1.212
	LTE Band 25	20M	QPSK	1	49	Front	5	Hotspot On	26340	1880	17.82	18.50	1.169	0	1.010	1.181
	LTE Band 25	20M	QPSK	1	49	Front	5	Hotspot On	26590	1905	17.75	18.50	1.189	0.02	0.877	1.042
	LTE Band 25	20M	QPSK	50	24	Front	5	Hotspot On	26140	1860	17.97	18.50	1.130	-0.06	0.995	1.124
	LTE Band 25	20M	QPSK	50	24	Front	5	Hotspot On	26340	1880	17.83	18.50	1.167	0.02	0.987	1.152
	LTE Band 25	20M	QPSK	50	24	Front	5	Hotspot On	26590	1905	17.94	18.50	1.138	-0.13	0.853	0.970
	LTE Band 25	20M	QPSK	100	0	Front	5	Hotspot On	26140	1860	17.82	18.50	1.169	-0.18	0.992	1.160
	LTE Band 25	20M	QPSK	1	49	Back	5	Hotspot On	26140	1860	18.00	18.50	1.122	-0.17	1.000	1.122
	LTE Band 25	20M	QPSK	1	49	Back	5	Hotspot On	26340	1880	17.82	18.50	1.169	0.04	1.030	1.205
	LTE Band 25	20M	QPSK	1	49	Back	5	Hotspot On	26590	1905	17.75	18.50	1.189	0.02	0.895	1.064
	LTE Band 25	20M	QPSK	50	24	Back	5	Hotspot On	26140	1860	17.97	18.50	1.130	0.01	1.050	1.186
	LTE Band 25	20M	QPSK	50	24	Back	5	Hotspot On	26340	1880	17.83	18.50	1.167	0.03	1.050	1.225
	LTE Band 25	20M	QPSK	50	24	Back	5	Hotspot On	26590	1905	17.94	18.50	1.138	0.06	0.922	1.049
	LTE Band 25	20M	QPSK	100	0	Back	5	Hotspot On	26140	1860	17.82	18.50	1.169	-0.02	1.080	1.263
	LTE Band 25	20M	QPSK	1	49	Left Side	5	Hotspot On	26140	1860	16.10	16.50	1.096	-0.01	0.030	0.033
	LTE Band 25	20M	QPSK	50	24	Left Side	5	Hotspot On	26140	1860	15.95	16.50	1.135	0.03	0.031	0.036
	LTE Band 25	20M	QPSK	1	49	Right Side	5	Hotspot On	26140	1860	16.10	16.50	1.096	-0.03	0.068	0.074
	LTE Band 25	20M	QPSK	50	24	Right Side	5	Hotspot On	26140	1860	15.95	16.50	1.135	-0.02	0.068	0.077
	LTE Band 25	20M	QPSK	1	49	Bottom Side	5	Hotspot On	26140	1860	16.10	16.50	1.096	-0.06	1.050	1.151
	LTE Band 25	20M	QPSK	1	49	Bottom Side	5	Hotspot On	26340	1880	15.94	16.50	1.138	-0.01	1.070	1.217
	LTE Band 25	20M	QPSK	1	49	Bottom Side	5	Hotspot On	26590	1905	15.73	16.50	1.194	-0.13	1.130	1.349
38	LTE Band 25	20M	QPSK	50	24	Bottom Side	5	Hotspot On	26140	1860	15.95	16.50	1.135	-0.06	1.200	1.362
	LTE Band 25	20M	QPSK	50	24	Bottom Side	5	Hotspot On	26340	1880	15.94	16.50	1.138	-0.14	1.120	1.274
	LTE Band 25	20M	QPSK	50	24	Bottom Side	5	Hotspot On	26590	1905	15.83	16.50	1.167	-0.04	1.150	1.342
	LTE Band 25	20M	QPSK	100	0	Bottom Side	5	Hotspot On	26590	1905	16.03	16.50	1.114	-0.03	1.210	1.348
	LTE Band 30	10M	QPSK	1	49	Front	5	Hotspot On	27710	2310	21.75	22.50	1.189	-0.06	0.859	1.021
	LTE Band 30	10M	QPSK	25	12	Front	5	Hotspot On	27710	2310	21.64	22.50	1.219	0.03	0.653	0.796
	LTE Band 30	10M	QPSK	50	0	Front	5	Hotspot On	27710	2310	21.64	22.50	1.219	-0.03	0.673	0.820
	LTE Band 30	10M	QPSK	1	49	Back	5	Hotspot On	27710	2310	21.75	22.50	1.189	-0.08	1.080	1.284
	LTE Band 30	10M	QPSK	25	12	Back	5	Hotspot On	27710	2310	21.64	22.50	1.219	-0.05	0.775	0.945
	LTE Band 30	10M	QPSK	50	0	Back	5	Hotspot On	27710	2310	21.64	22.50	1.219	-0.01	0.853	1.040
	LTE Band 30	10M	QPSK	1	49	Left Side	5	Hotspot On	27710	2310	21.75	22.50	1.189	-0.08	0.802	0.953
	LTE Band 30	10M	QPSK	25	12	Left Side	5	Hotspot On	27710	2310	21.64	22.50	1.219	-0.09	0.579	0.706
	LTE Band 30	10M	QPSK	50	0	Left Side	5	Hotspot On	27710	2310	21.64	22.50	1.219	-0.05	0.577	0.703
39	LTE Band 30	10M	QPSK	1	49	Bottom Side	5	Hotspot On	27710	2310	21.75	22.50	1.189	-0.06	1.170	1.391
	LTE Band 30	10M	QPSK	25	12	Bottom Side	5	Hotspot On	27710	2310	21.64	22.50	1.219	-0.08	0.873	1.064
	LTE Band 30	10M	QPSK	50	0	Bottom Side	5	Hotspot On	27710	2310	21.64	22.50	1.219	-0.09	0.871	1.062



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 7	20M	QPSK	1	49	Front	5	Hotspot On	21350	2560	20.26	21.00	1.186	-0.08	0.934	1.108
	LTE Band 7	20M	QPSK	1	49	Front	5	Hotspot On	20850	2510	20.11	21.00	1.227	-0.08	0.963	1.182
	LTE Band 7	20M	QPSK	1	49	Front	5	Hotspot On	21100	2535	20.18	21.00	1.208	-0.04	0.886	1.070
	LTE Band 7	20M	QPSK	50	24	Front	5	Hotspot On	21350	2560	20.25	21.00	1.189	-0.08	0.966	1.148
	LTE Band 7	20M	QPSK	50	24	Front	5	Hotspot On	20850	2510	20.23	21.00	1.194	-0.04	0.949	1.133
	LTE Band 7	20M	QPSK	50	24	Front	5	Hotspot On	21100	2535	20.07	21.00	1.239	-0.05	0.913	1.131
	LTE Band 7	20M	QPSK	100	0	Front	5	Hotspot On	21350	2560	20.20	21.00	1.202	-0.09	0.954	1.147
	LTE Band 7	20M	QPSK	1	49	Back	5	Hotspot On	21350	2560	20.26	21.00	1.186	-0.05	1.010	1.198
	LTE Band 7	20M	QPSK	1	49	Back	5	Hotspot On	20850	2510	20.11	21.00	1.227	-0.01	0.975	1.197
	LTE Band 7	20M	QPSK	1	49	Back	5	Hotspot On	21100	2535	20.18	21.00	1.208	-0.07	1.020	1.232
	LTE Band 7	20M	QPSK	50	24	Back	5	Hotspot On	21350	2560	20.25	21.00	1.189	-0.05	1.090	1.295
	LTE Band 7	20M	QPSK	50	24	Back	5	Hotspot On	20850	2510	20.23	21.00	1.194	-0.02	1.010	1.206
	LTE Band 7	20M	QPSK	50	24	Back	5	Hotspot On	21100	2535	20.07	21.00	1.239	-0.03	0.995	1.233
	LTE Band 7	20M	QPSK	100	0	Back	5	Hotspot On	21350	2560	20.20	21.00	1.202	-0.02	0.980	1.178
	LTE Band 7	20M	QPSK	1	49	Left Side	5	Hotspot On	20850	2510	18.36	19.50	1.300	-0.15	0.363	0.472
	LTE Band 7	20M	QPSK	50	24	Left Side	5	Hotspot On	20850	2510	18.37	19.50	1.297	-0.13	0.367	0.476
	LTE Band 7	20M	QPSK	1	49	Bottom Side	5	Hotspot On	20850	2510	18.36	19.50	1.300	-0.08	1.080	1.404
	LTE Band 7	20M	QPSK	1	49	Bottom Side	5	Hotspot On	21100	2535	18.21	19.50	1.346	-0.1	0.948	1.276
	LTE Band 7	20M	QPSK	1	49	Bottom Side	5	Hotspot On	21350	2560	18.30	19.50	1.318	-0.15	0.365	0.481
40	LTE Band 7	20M	QPSK	50	24	Bottom Side	5	Hotspot On	20850	2510	18.37	19.50	1.297	-0.06	1.090	1.414
	LTE Band 7	20M	QPSK	50	24	Bottom Side	5	Hotspot On	21100	2535	18.24	19.50	1.337	-0.08	0.966	1.291
	LTE Band 7	20M	QPSK	50	24	Bottom Side	5	Hotspot On	21350	2560	18.28	19.50	1.324	-0.1	0.373	0.494
	LTE Band 7	20M	QPSK	100	0	Bottom Side	5	Hotspot On	20850	2510	18.34	19.50	1.306	-0.15	1.010	1.319



<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	40620	2593	23.06	24.00	1.242	62.9	1.006	-0.02	0.757	0.946
	LTE Band 41	20M	QPSK	1	0	Front	5	Hotspot On	3	39750	2506	22.79	24.00	1.321	62.9	1.006	0.02	0.606	0.806
	LTE Band 41	20M	QPSK	1	0	Front	5	Hotspot On	3	40185	2549.5	22.91	24.00	1.285	62.9	1.006	0.02	0.631	0.816
	LTE Band 41	20M	QPSK	1	0	Front	5	Hotspot On	3	41055	2636.5	22.61	24.00	1.377	62.9	1.006	0.02	0.641	0.888
	LTE Band 41	20M	QPSK	1	0	Front	5	Hotspot On	3	41490	2680	22.77	24.00	1.327	62.9	1.006	-0.08	0.532	0.710
	LTE Band 41	20M	QPSK	50	0	Front	5	Hotspot On	3	40620	2593	21.74	23.00	1.337	62.9	1.006	-0.02	0.445	0.598
	LTE Band 41	20M	QPSK	100	0	Front	5	Hotspot On	3	40620	2593	21.70	23.00	1.349	62.9	1.006	0.02	0.473	0.642
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	40620	2593	23.06	24.00	1.242	62.9	1.006	-0.03	0.966	1.207
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	39750	2506	22.79	24.00	1.321	62.9	1.006	-0.02	0.960	1.276
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	40185	2549.5	22.91	24.00	1.285	62.9	1.006	-0.03	1.030	1.332
41	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	41055	2636.5	22.61	24.00	1.377	62.9	1.006	-0.04	1.010	1.399
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	23.63	24.00	1.089	62.9	1.006	-0.09	1.190	1.304
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	39750(PCC) + 39948(SCC)	2506(PCC) + 2525.8(SCC)	23.44	24.00	1.138	62.9	1.006	0.03	0.990	1.133
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	40185(PCC) + 40383(SCC)	2549.5(PCC) + 2569.3(SCC)	23.60	24.00	1.096	62.9	1.006	0.12	1.250	1.379
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	40620(PCC) + 40422(SCC)	2593(PCC) + 2573.2(SCC)	23.88	24.00	1.028	62.9	1.006	0.04	1.280	1.324
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	41490(PCC) + 41292(SCC)	2680(PCC) + 2660.2(SCC)	23.68	24.00	1.076	62.9	1.006	-0.01	1.100	1.191
	LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	3	41490	2680	22.77	24.00	1.327	62.9	1.006	-0.03	0.828	1.106
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	40620	2593	21.74	23.00	1.337	62.9	1.006	-0.07	0.729	0.980
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	39750	2506	21.47	23.00	1.422	62.9	1.006	0.02	0.646	0.924
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	40185	2549.5	21.52	23.00	1.406	62.9	1.006	0.02	0.697	0.986
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	41055	2636.5	21.26	23.00	1.493	62.9	1.006	0.02	0.670	1.006
	LTE Band 41	20M	QPSK	50	0	Back	5	Hotspot On	3	41490	2680	21.50	23.00	1.413	62.9	1.006	0.02	0.559	0.794
	LTE Band 41	20M	QPSK	100	0	Back	5	Hotspot On	3	40620	2593	21.70	23.00	1.349	62.9	1.006	-0.03	0.671	0.911
	LTE Band 41	20M	QPSK	1	0	Left Side	5	Hotspot On	3	40620	2593	22.54	23.00	1.112	62.9	1.006	-0.11	0.460	0.514
	LTE Band 41	20M	QPSK	50	0	Left Side	5	Hotspot On	3	40620	2593	22.68	23.00	1.076	62.9	1.006	-0.18	0.363	0.393
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	40620	2593	22.54	23.00	1.112	62.9	1.006	0.02	0.750	0.839
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	39750	2506	22.34	23.00	1.164	62.9	1.006	-0.13	1.150	1.347
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	40185	2549.5	22.24	23.00	1.191	62.9	1.006	-0.15	1.020	1.222
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	41055	2636.5	22.30	23.00	1.175	62.9	1.006	0.02	0.397	0.469
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	41490	2680	22.24	23.00	1.191	62.9	1.006	0.02	0.309	0.370
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	39750(PCC) + 39948(SCC)	2506(PCC) + 2525.8(SCC)	22.10	23.00	1.230	62.9	1.006	-0.06	1.070	1.324
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	40185(PCC) + 40383(SCC)	2549.5(PCC) + 2569.3(SCC)	22.25	23.00	1.189	62.9	1.006	-0.11	1.020	1.220
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	40620(PCC) + 40422(SCC)	2593(PCC) + 2573.2(SCC)	21.94	23.00	1.276	62.9	1.006	-0.10	0.708	0.909
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	21.97	23.00	1.268	62.9	1.006	-0.03	0.321	0.409
	LTE Band 41	20M	QPSK	1	0	Bottom Side	5	Hotspot On	3	41490(PCC) + 41292(SCC)	2680(PCC) + 2660.2(SCC)	22.11	23.00	1.227	62.9	1.006	-0.03	0.242	0.299



FCC SAR Test Report

Report No. : FA892801

LTE Band 41	20M	QPSK	50	0	Bottom Side	5	Hotspot On	3	40620	2593	22.68	23.00	1.076	62.9	1.006	0.09	0.570	0.617
LTE Band 41	20M	QPSK	50	0	Bottom Side	5	Hotspot On	3	39750	2506	22.40	23.00	1.148	62.9	1.006	-0.13	0.942	1.088
LTE Band 41	20M	QPSK	50	0	Bottom Side	5	Hotspot On	3	40185	2549.5	22.54	23.00	1.112	62.9	1.006	-0.11	0.799	0.894
LTE Band 41	20M	QPSK	50	0	Bottom Side	5	Hotspot On	3	41055	2636.5	22.61	23.00	1.094	62.9	1.006	-0.15	0.280	0.308
LTE Band 41	20M	QPSK	50	0	Bottom Side	5	Hotspot On	3	41490	2680	22.57	23.00	1.104	62.9	1.006	-0.01	0.218	0.242
LTE Band 41	20M	QPSK	100	0	Bottom Side	5	Hotspot On	3	40620	2593	22.70	23.00	1.072	62.9	1.006	-0.18	0.544	0.586
LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	40620	2593	23.81	24.00	1.045	42.9	1.009	-0.03	0.990	1.044
LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	39750	2506	23.80	24.00	1.047	42.9	1.009	0.05	0.958	1.012
LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	40185	2549.5	23.78	24.00	1.052	42.9	1.009	-0.02	0.990	1.051
LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	41055	2636.5	23.79	24.00	1.050	42.9	1.009	0.04	0.987	1.045
LTE Band 41	20M	QPSK	1	0	Back	5	Hotspot On	2	41490	2680	23.70	24.00	1.072	42.9	1.009	-0.06	0.805	0.870

<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	1	2412	18.04	19.00	1.249	97.6	1.025	0.01	0.363	0.239	0.306
	WLAN2.4GHz	802.11b 1Mbps	Back	5	Full	1	2412	18.04	19.00	1.249	97.6	1.025	-0.02	0.550	0.355	0.454
	WLAN2.4GHz	802.11b 1Mbps	Right Side	5	Full	1	2412	18.04	19.00	1.249	97.6	1.025	0.02	0.425	0.228	0.292
	WLAN2.4GHz	802.11b 1Mbps	Top Side	5	Full	1	2412	18.04	19.00	1.249	97.6	1.025		0.326		
42	WLAN2.4GHz	802.11b 1Mbps	Back	5	Full	6	2437	17.89	19.00	1.293	97.6	1.025	0.04		0.348	0.461
	WLAN2.4GHz	802.11b 1Mbps	Back	5	Full	11	2462	17.96	19.00	1.272	97.6	1.025	0.02		0.248	0.323

<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	Hotspot On	40	5200	13.48	13.50	1.005	87.44	1.144	0.02	0.108	0.045	0.052
	WLAN5.2GHz	802.11a 6Mbps	Back	5	Hotspot On	40	5200	13.48	13.50	1.005	87.44	1.144	-0.01	2.075	0.945	1.086
	WLAN5.2GHz	802.11a 6Mbps	Right Side	5	Hotspot On	40	5200	13.48	13.50	1.005	87.44	1.144	0.03	0.114	0.050	0.057
	WLAN5.2GHz	802.11a 6Mbps	Top Side	5	Hotspot On	40	5200	13.48	13.50	1.005	87.44	1.144	-0.04	0.593	0.261	0.300
	WLAN5.2GHz	802.11a 6Mbps	Back	5	Hotspot On	36	5180	13.46	13.50	1.009	87.44	1.144	-0.02		0.955	1.103
43	WLAN5.2GHz	802.11a 6Mbps	Back	5	Hotspot On	48	5240	13.40	13.50	1.023	87.44	1.144	-0.04		0.997	1.167
	WLAN 5.8GHz	802.11a 6Mbps	Front	5	Hotspot On	165	5825	12.98	13.00	1.005	87.44	1.144		0.080		
	WLAN 5.8GHz	802.11a 6Mbps	Back	5	Hotspot On	165	5825	12.98	13.00	1.005	87.44	1.144	-0.08	2.139	0.843	0.969
	WLAN 5.8GHz	802.11a 6Mbps	Right Side	5	Hotspot On	165	5825	12.98	13.00	1.005	87.44	1.144		0.109		
	WLAN 5.8GHz	802.11a 6Mbps	Top Side	5	Hotspot On	165	5825	12.98	13.00	1.005	87.44	1.144	0.02	0.602	0.235	0.270
	WLAN 5.8GHz	802.11a 6Mbps	Back	5	Hotspot On	149	5745	12.91	13.00	1.021	87.44	1.144	-0.16		0.897	1.048
44	WLAN 5.8GHz	802.11a 6Mbps	Back	5	Hotspot On	157	5785	12.47	13.00	1.130	87.44	1.144	-0.05		0.849	1.097

<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	39	2441	10.40	11.00	1.149	76.78	1.085	-0.09	0.014	0.017
	Bluetooth	1Mbps	Back	5	Full	39	2441	10.40	11.00	1.149	76.78	1.085	-0.03	0.022	0.027
	Bluetooth	1Mbps	Right Side	5	Full	39	2441	10.40	11.00	1.149	76.78	1.085	-0.02	0.003	0.003
	Bluetooth	1Mbps	Top Side	5	Full	39	2441	10.40	11.00	1.149	76.78	1.085	-0.03	0.014	0.017
45	Bluetooth	1Mbps	Back	5	Full	0	2402	10.00	11.00	1.260	76.78	1.085	-0.07	0.028	0.039
	Bluetooth	1Mbps	Back	5	Full	78	2480	9.97	11.00	1.268	76.78	1.085	-0.01	0.007	0.010

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 (4 Tx slots)	Front	5	-	Full	128	824.2	26.12	27.50	1.374	-0.14	0.765	1.051
	GSM850	GPRS (4 Tx slots)	Front	5	-	Full	189	836.4	26.03	27.50	1.403	0.02	0.778	1.091
	GSM850	GPRS (4 Tx slots)	Front	5	-	Full	251	848.8	26.09	27.50	1.384	-0.02	0.828	1.146
	GSM850	GPRS (4 Tx slots)	Back	5	-	Full	128	824.2	26.12	27.50	1.374	-0.05	0.797	1.095
	GSM850	GPRS (4 Tx slots)	Back	5	-	Full	189	836.4	26.03	27.50	1.403	-0.16	0.881	1.236
46	GSM850	GPRS (4 Tx slots)	Back	5	-	Full	251	848.8	26.09	27.50	1.384	-0.02	0.951	1.316
	GSM850	GPRS (4 Tx slots)	Back	5	Headset	Full	128	824.2	26.12	27.50	1.374	-0.02	0.748	1.028
	GSM850	GPRS (4 Tx slots)	Back	5	Headset	Full	189	836.4	26.03	27.50	1.403	-0.15	0.833	1.169
	GSM850	GPRS (4 Tx slots)	Back	5	Headset	Full	251	848.8	26.09	27.50	1.384	-0.18	0.900	1.245
47	GSM1900	GPRS (4 Tx slots)	Front	5	-	P-Sensor On	512	1850.2	19.88	20.50	1.153	0.02	1.040	1.200
	GSM1900	GPRS (4 Tx slots)	Front	5	-	P-Sensor On	661	1880	19.72	20.50	1.197	0.06	0.975	1.167
	GSM1900	GPRS (4 Tx slots)	Front	5	-	P-Sensor On	810	1909.8	19.62	20.50	1.225	0.02	0.896	1.097
	GSM1900	GPRS (4 Tx slots)	Back	5	-	P-Sensor On	512	1850.2	19.88	20.50	1.153	-0.03	0.973	1.122
	GSM1900	GPRS (4 Tx slots)	Back	5	-	P-Sensor On	661	1880	19.72	20.50	1.197	0.02	0.913	1.093
	GSM1900	GPRS (4 Tx slots)	Back	5	-	P-Sensor On	810	1909.8	19.62	20.50	1.225	0.02	0.882	1.080
	GSM1900	GPRS (4 Tx slots)	Front	5	Headset	P-Sensor On	512	1850.2	19.88	20.50	1.153	0.02	0.730	0.842
	GSM1900	GPRS (4 Tx slots)	Front	5	Headset	P-Sensor On	661	1880	19.72	20.50	1.197	0.03	0.687	0.822
	GSM1900	GPRS (4 Tx slots)	Front	5	Headset	P-Sensor On	810	1909.8	19.62	20.50	1.225	0.06	0.645	0.790



<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	4233	846.6	22.35	23.00	1.161	0.03	1.040	1.208
	WCDMA Band V	RMC 12.2Kbps	Front	5	-	P-Sensor On	4132	826.4	22.17	23.00	1.211	-0.02	0.932	1.128
	WCDMA Band V	RMC 12.2Kbps	Front	5	-	P-Sensor On	4182	836.4	22.08	23.00	1.236	-0.16	0.995	1.230
	WCDMA Band V	RMC 12.2Kbps	Back	5	-	P-Sensor On	4233	846.6	22.35	23.00	1.161	-0.07	1.120	1.301
	WCDMA Band V	RMC 12.2Kbps	Back	5	-	P-Sensor On	4132	826.4	22.17	23.00	1.211	-0.07	1.040	1.259
	WCDMA Band V	RMC 12.2Kbps	Back	5	-	P-Sensor On	4182	836.4	22.08	23.00	1.236	-0.05	1.010	1.248
	WCDMA Band V	RMC 12.2Kbps	Front	5	Headset	P-Sensor On	4233	846.6	22.35	23.00	1.161	-0.08	1.110	1.289
	WCDMA Band V	RMC 12.2Kbps	Front	5	Headset	P-Sensor On	4132	826.4	22.17	23.00	1.211	-0.02	0.998	1.208
	WCDMA Band V	RMC 12.2Kbps	Front	5	Headset	P-Sensor On	4182	836.4	22.08	23.00	1.236	-0.04	0.974	1.204
	WCDMA Band V	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	4233	846.6	22.35	23.00	1.161	-0.04	1.130	1.312
	WCDMA Band V	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	4132	826.4	22.17	23.00	1.211	-0.02	1.030	1.247
48	WCDMA Band V	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	4182	836.4	22.08	23.00	1.236	-0.04	1.090	1.347
49	WCDMA Band IV	RMC 12.2Kbps	Front	5	-	P-Sensor On	1513	1752.6	16.15	17.50	1.365	-0.16	1.050	1.433
	WCDMA Band IV	RMC 12.2Kbps	Front	5	-	P-Sensor On	1312	1712.4	15.79	17.50	1.483	0.02	0.859	1.273
	WCDMA Band IV	RMC 12.2Kbps	Front	5	-	P-Sensor On	1413	1732.6	15.88	17.50	1.452	-0.02	0.885	1.285
	WCDMA Band IV	RMC 12.2Kbps	Back	5	-	P-Sensor On	1513	1752.6	16.15	17.50	1.365	-0.1	1.050	1.433
	WCDMA Band IV	RMC 12.2Kbps	Back	5	-	P-Sensor On	1312	1712.4	15.79	17.50	1.483	0.06	0.947	1.404
	WCDMA Band IV	RMC 12.2Kbps	Back	5	-	P-Sensor On	1413	1732.6	15.88	17.50	1.452	0.02	0.961	1.395
	WCDMA Band IV	RMC 12.2Kbps	Front	5	Headset	P-Sensor On	1513	1752.6	16.15	17.50	1.365	-0.16	0.985	1.344
	WCDMA Band IV	RMC 12.2Kbps	Front	5	Headset	P-Sensor On	1312	1712.4	15.79	17.50	1.483	0.02	0.936	1.388
	WCDMA Band IV	RMC 12.2Kbps	Front	5	Headset	P-Sensor On	1413	1732.6	15.88	17.50	1.452	-0.02	0.946	1.374
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	1513	1752.6	16.15	17.50	1.365	-0.1	1.020	1.392
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	1312	1712.4	15.79	17.50	1.483	0.06	0.935	1.386
	WCDMA Band IV	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	1413	1732.6	15.88	17.50	1.452	0.02	0.941	1.366
	WCDMA Band II	RMC 12.2Kbps	Front	5	-	P-Sensor On	9262	1852.4	17.79	18.50	1.178	-0.03	1.220	1.437
50	WCDMA Band II	RMC 12.2Kbps	Front	5	-	P-Sensor On	9400	1880	17.74	18.50	1.191	0.16	1.210	1.441
	WCDMA Band II	RMC 12.2Kbps	Front	5	-	P-Sensor On	9538	1907.6	17.62	18.50	1.225	0.03	1.100	1.347
	WCDMA Band II	RMC 12.2Kbps	Back	5	-	P-Sensor On	9262	1852.4	17.79	18.50	1.178	0.02	1.210	1.425
	WCDMA Band II	RMC 12.2Kbps	Back	5	-	P-Sensor On	9400	1880	17.74	18.50	1.191	-0.14	1.180	1.406
	WCDMA Band II	RMC 12.2Kbps	Back	5	-	P-Sensor On	9538	1907.6	17.62	18.50	1.225	0.01	1.090	1.335
	WCDMA Band II	RMC 12.2Kbps	Front	5	Headset	P-Sensor On	9262	1852.4	17.79	18.50	1.178	0.02	1.190	1.401
	WCDMA Band II	RMC 12.2Kbps	Front	5	Headset	P-Sensor On	9400	1880	17.74	18.50	1.191	0.03	1.180	1.406
	WCDMA Band II	RMC 12.2Kbps	Front	5	Headset	P-Sensor On	9538	1907.6	17.62	18.50	1.225	-0.05	1.100	1.347
	WCDMA Band II	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	9262	1852.4	17.79	18.50	1.178	0.02	1.210	1.425
	WCDMA Band II	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	9400	1880	17.74	18.50	1.191	0.02	1.130	1.346
	WCDMA Band II	RMC 12.2Kbps	Back	5	Headset	P-Sensor On	9538	1907.6	17.62	18.50	1.225	0.02	1.140	1.396



<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	-	Full	580	820.5	24.65	25.00	1.084	-0.08	1.050	1.138
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Front	5	-	Full	476	817.9	24.47	25.00	1.130	-0.14	1.060	1.198
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Front	5	-	Full	684	823.1	24.54	25.00	1.112	-0.13	0.969	1.077
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	-	Full	580	820.5	24.65	25.00	1.084	-0.01	1.050	1.138
51	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	-	Full	476	817.9	24.47	25.00	1.130	-0.08	1.100	1.243
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	-	Full	684	823.1	24.54	25.00	1.112	-0.17	0.966	1.074
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	Headset	Full	476	817.9	24.47	25.00	1.130	-0.02	1.090	1.231
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	Headset	Full	580	820.5	24.65	25.00	1.084	-0.19	1.050	1.138
	CDMA2000 BC10	RC3 SO32 (F+SCH)	Back	5	Headset	Full	684	823.1	24.54	25.00	1.112	-0.03	0.944	1.049
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	5	-	Full	1013	824.7	24.56	25.00	1.107	-0.14	1.190	1.317
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	5	-	Full	384	836.52	24.43	25.00	1.140	-0.14	1.140	1.300
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	5	-	Full	777	848.31	24.50	25.00	1.122	-0.18	1.260	1.414
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	-	Full	1013	824.7	24.56	25.00	1.107	-0.18	1.060	1.173
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	-	Full	384	836.52	24.43	25.00	1.140	-0.04	1.060	1.209
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	-	Full	777	848.31	24.50	25.00	1.122	-0.03	1.190	1.335
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	5	Headset	Full	1013	824.7	24.56	25.00	1.107	-0.1	1.150	1.273
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	5	Headset	Full	384	836.52	24.43	25.00	1.140	0.02	1.030	1.174
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Front	5	Headset	Full	777	848.31	24.50	25.00	1.122	-0.13	1.240	1.391
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	Headset	Full	1013	824.7	24.56	25.00	1.107	-0.18	1.060	1.173
	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	Headset	Full	384	836.52	24.43	25.00	1.140	-0.04	1.030	1.174
52	CDMA2000 BC0	RC3 SO32 (F+SCH)	Back	5	Headset	Full	777	848.31	24.50	25.00	1.122	-0.03	1.270	1.425
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	25	1851.25	18.69	19.00	1.074	-0.19	1.040	1.117
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	600	1880	18.52	19.00	1.117	-0.04	0.994	1.110
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Front	5	-	P-Sensor On	1175	1908.75	18.53	19.00	1.114	-0.03	0.879	0.979
53	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	25	1851.25	18.69	19.00	1.074	-0.1	1.060	1.138
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	600	1880	18.52	19.00	1.117	-0.08	1.010	1.128
	CDMA2000 BC1	RC3 SO32 (F+SCH)	Back	5	-	P-Sensor On	1175	1908.75	18.53	19.00	1.114	-0.06	0.888	0.989



<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 12	10M	QPSK	1	49	Front	5	-	Full	23095	707.5	22.88	24.00	1.294	-0.07	0.799	1.034
	LTE Band 12	10M	QPSK	25	12	Front	5	-	Full	23095	707.5	21.92	23.00	1.282	-0.19	0.453	0.581
	LTE Band 12	10M	QPSK	50	0	Front	5	-	Full	23095	707.5	21.75	23.00	1.334	-0.19	0.436	0.581
54	LTE Band 12	10M	QPSK	1	49	Back	5	-	Full	23095	707.5	22.88	24.00	1.294	-0.01	0.851	1.101
	LTE Band 12	10M	QPSK	25	12	Back	5	-	Full	23095	707.5	21.92	23.00	1.282	-0.09	0.469	0.601
	LTE Band 12	10M	QPSK	50	0	Back	5	-	Full	23095	707.5	21.75	23.00	1.334	-0.02	0.458	0.611
	LTE Band 13	10M	QPSK	1	49	Front	5	-	Full	23230	782	22.73	24.00	1.340	-0.04	0.956	1.281
	LTE Band 13	10M	QPSK	25	0	Front	5	-	Full	23230	782	22.13	23.00	1.222	-0.01	0.573	0.700
	LTE Band 13	10M	QPSK	50	0	Front	5	-	Full	23230	782	22.06	23.00	1.242	-0.02	0.564	0.700
55	LTE Band 13	10M	QPSK	1	49	Back	5	-	Full	23230	782	22.73	24.00	1.340	-0.07	1.010	1.353
	LTE Band 13	10M	QPSK	25	0	Back	5	-	Full	23230	782	22.13	23.00	1.222	-0.03	0.602	0.736
	LTE Band 13	10M	QPSK	50	0	Back	5	-	Full	23230	782	22.06	23.00	1.242	-0.06	0.597	0.741
	LTE Band 13	10M	QPSK	1	49	Front	5	Headset	Full	23230	782	22.73	24.00	1.340	0.02	0.934	1.251
	LTE Band 13	10M	QPSK	1	49	Back	5	Headset	Full	23230	782	22.73	24.00	1.340	-0.03	0.996	1.334
	LTE Band 14	10M	QPSK	1	0	Front	5	-	Full	23330	793	22.94	24.00	1.276	-0.18	1.010	1.289
	LTE Band 14	10M	QPSK	25	0	Front	5	-	Full	23330	793	21.75	23.00	1.334	-0.18	0.563	0.751
	LTE Band 14	10M	QPSK	50	0	Front	5	-	Full	23330	793	21.67	23.00	1.358	-0.07	0.514	0.698
56	LTE Band 14	10M	QPSK	1	0	Back	5	-	Full	23330	793	22.94	24.00	1.276	-0.01	1.090	1.391
	LTE Band 14	10M	QPSK	25	0	Back	5	-	Full	23330	793	21.75	23.00	1.334	-0.09	0.585	0.780
	LTE Band 14	10M	QPSK	50	0	Back	5	-	Full	23330	793	21.67	23.00	1.358	-0.04	0.515	0.700
	LTE Band 14	10M	QPSK	1	0	Front	5	Headset	Full	23330	793	22.94	24.00	1.276	0.02	1.000	1.276
	LTE Band 14	10M	QPSK	1	0	Back	5	Headset	Full	23330	793	22.94	24.00	1.276	-0.09	1.070	1.366



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 26	15M	QPSK	1	0	Front	5	-	Full	26865	831.5	23.13	24.00	1.222	-0.04	0.914	1.117
	LTE Band 26	15M	QPSK	36	0	Front	5	-	Full	26865	831.5	22.11	23.00	1.227	-0.18	0.742	0.911
	LTE Band 26	15M	QPSK	75	0	Front	5	-	Full	26865	831.5	22.05	23.00	1.245	-0.01	0.728	0.906
57	LTE Band 26	15M	QPSK	1	0	Back	5	-	Full	26865	831.5	23.13	24.00	1.222	-0.18	1.030	1.258
	LTE Band 26	15M	QPSK	36	0	Back	5	-	Full	26865	831.5	22.11	23.00	1.227	-0.01	0.732	0.898
	LTE Band 26	15M	QPSK	75	0	Back	5	-	Full	26865	831.5	22.05	23.00	1.245	-0.02	0.714	0.889
	LTE Band 26	15M	QPSK	1	0	Back	5	Headset	Full	26865	831.5	23.13	24.00	1.222	0.02	0.905	1.106
	LTE Band 71	20M	QPSK	1	0	Front	5	-	Full	133322	683	23.10	24.00	1.230	-0.16	0.435	0.535
	LTE Band 71	20M	QPSK	50	0	Front	5	-	Full	133322	683	21.69	23.00	1.352	-0.17	0.307	0.415
58	LTE Band 71	20M	QPSK	1	0	Back	5	-	Full	133322	683	23.10	24.00	1.230	-0.02	0.471	0.579
	LTE Band 71	20M	QPSK	50	0	Back	5	-	Full	133322	683	21.69	23.00	1.352	-0.07	0.326	0.441
	LTE Band 66	20M	QPSK	1	99	Front	5	-	P-Sensor On	132572	1770	17.90	18.50	1.148	-0.02	1.180	1.355
	LTE Band 66	20M	QPSK	1	99	Front	5	-	P-Sensor On	132072	1720	17.56	18.50	1.242	0.01	0.920	1.142
	LTE Band 66	20M	QPSK	1	99	Front	5	-	P-Sensor On	132322	1745	17.82	18.50	1.169	-0.02	1.040	1.216
	LTE Band 66	20M	QPSK	50	24	Front	5	-	P-Sensor On	132572	1770	17.56	18.50	1.242	0.03	0.993	1.233
	LTE Band 66	20M	QPSK	50	24	Front	5	-	P-Sensor On	132072	1720	17.52	18.50	1.253	0.02	0.765	0.959
	LTE Band 66	20M	QPSK	50	24	Front	5	-	P-Sensor On	132322	1745	17.54	18.50	1.247	-0.01	0.913	1.139
	LTE Band 66	20M	QPSK	100	0	Front	5	-	P-Sensor On	132572	1770	17.51	18.50	1.256	0.02	1.000	1.256
	LTE Band 66	20M	QPSK	1	99	Back	5	-	P-Sensor On	132572	1770	17.90	18.50	1.148	-0.15	1.160	1.332
	LTE Band 66	20M	QPSK	1	99	Back	5	-	P-Sensor On	132072	1720	17.56	18.50	1.242	0.02	0.931	1.156
	LTE Band 66	20M	QPSK	1	99	Back	5	-	P-Sensor On	132322	1745	17.82	18.50	1.169	-0.01	1.060	1.240
	LTE Band 66	20M	QPSK	50	24	Back	5	-	P-Sensor On	132572	1770	17.56	18.50	1.242	0.02	1.020	1.266
	LTE Band 66	20M	QPSK	50	24	Back	5	-	P-Sensor On	132072	1720	17.52	18.50	1.253	-0.03	0.789	0.989
	LTE Band 66	20M	QPSK	50	24	Back	5	-	P-Sensor On	132322	1745	17.54	18.50	1.247	0.02	0.929	1.159
	LTE Band 66	20M	QPSK	100	0	Back	5	-	P-Sensor On	132572	1770	17.51	18.50	1.256	-0.06	1.040	1.306
	LTE Band 66	20M	QPSK	1	99	Front	5	Headset	P-Sensor On	132572	1770	17.90	18.50	1.148	-0.09	1.240	1.424
	LTE Band 66	20M	QPSK	1	99	Front	5	Headset	P-Sensor On	132072	1720	17.56	18.50	1.242	-0.09	1.020	1.266
	LTE Band 66	20M	QPSK	1	99	Front	5	Headset	P-Sensor On	132322	1745	17.82	18.50	1.169	-0.16	1.160	1.357
59	LTE Band 66	20M	QPSK	1	99	Back	5	Headset	P-Sensor On	132572	1770	17.90	18.50	1.148	-0.07	1.250	1.435
	LTE Band 66	20M	QPSK	1	99	Back	5	Headset	P-Sensor On	132072	1720	17.56	18.50	1.242	-0.01	1.010	1.254
	LTE Band 66	20M	QPSK	1	99	Back	5	Headset	P-Sensor On	132322	1745	17.82	18.50	1.169	-0.1	1.170	1.368



FCC SAR Test Report

Report No. : FA892801

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	49	Front	5	-	P-Sensor On	26140	1860	18.00	18.50	1.122	-0.16	1.080	1.212
	LTE Band 25	20M	QPSK	1	49	Front	5	-	P-Sensor On	26340	1880	17.82	18.50	1.169	0	1.010	1.181
	LTE Band 25	20M	QPSK	1	49	Front	5	-	P-Sensor On	26590	1905	17.75	18.50	1.189	0.02	0.877	1.042
	LTE Band 25	20M	QPSK	50	24	Front	5	-	P-Sensor On	26140	1860	17.97	18.50	1.130	-0.06	0.995	1.124
	LTE Band 25	20M	QPSK	50	24	Front	5	-	P-Sensor On	26340	1880	17.83	18.50	1.167	0.02	0.987	1.152
	LTE Band 25	20M	QPSK	50	24	Front	5	-	P-Sensor On	26590	1905	17.94	18.50	1.138	-0.13	0.853	0.970
	LTE Band 25	20M	QPSK	100	0	Front	5	-	P-Sensor On	26140	1860	17.82	18.50	1.169	-0.18	0.992	1.160
	LTE Band 25	20M	QPSK	1	49	Back	5	-	P-Sensor On	26140	1860	18.00	18.50	1.122	-0.17	1.000	1.122
	LTE Band 25	20M	QPSK	1	49	Back	5	-	P-Sensor On	26340	1880	17.82	18.50	1.169	0.04	1.030	1.205
	LTE Band 25	20M	QPSK	1	49	Back	5	-	P-Sensor On	26590	1905	17.75	18.50	1.189	0.02	0.895	1.064
	LTE Band 25	20M	QPSK	50	24	Back	5	-	P-Sensor On	26140	1860	17.97	18.50	1.130	0.01	1.050	1.186
	LTE Band 25	20M	QPSK	50	24	Back	5	-	P-Sensor On	26340	1880	17.83	18.50	1.167	0.03	1.050	1.225
	LTE Band 25	20M	QPSK	50	24	Back	5	-	P-Sensor On	26590	1905	17.94	18.50	1.138	0.06	0.922	1.049
	LTE Band 25	20M	QPSK	100	0	Back	5	-	P-Sensor On	26140	1860	17.82	18.50	1.169	-0.02	1.080	1.263
	LTE Band 25	20M	QPSK	1	49	Front	5	Headset	P-Sensor On	26140	1860	18.00	18.50	1.122	-0.09	1.17	1.313
	LTE Band 25	20M	QPSK	1	49	Front	5	Headset	P-Sensor On	26340	1880	17.82	18.50	1.169	-0.09	1.140	1.333
	LTE Band 25	20M	QPSK	1	49	Front	5	Headset	P-Sensor On	26590	1905	17.75	18.50	1.189	-0.06	0.992	1.179
	LTE Band 25	20M	QPSK	100	0	Back	5	Headset	P-Sensor On	26140	1860	17.82	18.50	1.169	-0.01	1.17	1.368
60	LTE Band 25	20M	QPSK	100	0	Back	5	Headset	P-Sensor On	26340	1880	17.77	18.50	1.183	0.02	1.190	1.408
	LTE Band 25	20M	QPSK	100	0	Back	5	Headset	P-Sensor On	26590	1905	17.76	18.50	1.186	0.04	1.080	1.281
	LTE Band 30	10M	QPSK	1	49	Front	5	-	P-Sensor On	27710	2310	21.75	22.50	1.189	-0.06	0.859	1.021
	LTE Band 30	10M	QPSK	25	12	Front	5	-	P-Sensor On	27710	2310	21.64	22.50	1.219	0.03	0.653	0.796
	LTE Band 30	10M	QPSK	50	0	Front	5	-	P-Sensor On	27710	2310	21.64	22.50	1.219	-0.03	0.673	0.820
61	LTE Band 30	10M	QPSK	1	49	Back	5	-	P-Sensor On	27710	2310	21.75	22.50	1.189	-0.08	1.080	1.284
	LTE Band 30	10M	QPSK	25	12	Back	5	-	P-Sensor On	27710	2310	21.64	22.50	1.219	-0.05	0.775	0.945
	LTE Band 30	10M	QPSK	50	0	Back	5	-	P-Sensor On	27710	2310	21.64	22.50	1.219	-0.01	0.853	1.040
	LTE Band 30	10M	QPSK	1	49	Back	5	Headset	P-Sensor On	27710	2310	21.75	22.50	1.189	-0.03	1.070	1.272
	LTE Band 7	20M	QPSK	1	49	Front	5	-	P-Sensor On	21350	2560	20.26	21.00	1.186	-0.08	0.934	1.108
	LTE Band 7	20M	QPSK	1	49	Front	5	-	P-Sensor On	20850	2510	20.11	21.00	1.227	-0.08	0.963	1.182
	LTE Band 7	20M	QPSK	1	49	Front	5	-	P-Sensor On	21100	2535	20.18	21.00	1.208	-0.04	0.886	1.070
	LTE Band 7	20M	QPSK	50	24	Front	5	-	P-Sensor On	21350	2560	20.25	21.00	1.189	-0.08	0.966	1.148
	LTE Band 7	20M	QPSK	50	24	Front	5	-	P-Sensor On	20850	2510	20.23	21.00	1.194	-0.04	0.949	1.133
	LTE Band 7	20M	QPSK	50	24	Front	5	-	P-Sensor On	21100	2535	20.07	21.00	1.239	-0.05	0.913	1.131
	LTE Band 7	20M	QPSK	100	0	Front	5	-	P-Sensor On	21350	2560	20.20	21.00	1.202	-0.09	0.954	1.147
	LTE Band 7	20M	QPSK	1	49	Back	5	-	P-Sensor On	21350	2560	20.26	21.00	1.186	-0.05	1.010	1.198
	LTE Band 7	20M	QPSK	1	49	Back	5	-	P-Sensor On	20850	2510	20.11	21.00	1.227	-0.01	0.975	1.197
	LTE Band 7	20M	QPSK	1	49	Back	5	-	P-Sensor On	21100	2535	20.18	21.00	1.208	-0.07	1.020	1.232
62	LTE Band 7	20M	QPSK	50	24	Back	5	-	P-Sensor On	21350	2560	20.25	21.00	1.189	-0.05	1.090	1.295
	LTE Band 7	20M	QPSK	50	24	Back	5	-	P-Sensor On	20850	2510	20.23	21.00	1.194	-0.02	1.010	1.206
	LTE Band 7	20M	QPSK	50	24	Back	5	-	P-Sensor On	21100	2535	20.07	21.00	1.239	-0.03	0.995	1.233
	LTE Band 7	20M	QPSK	100	0	Back	5	-	P-Sensor On	21350	2560	20.20	21.00	1.202	-0.02	0.980	1.178
	LTE Band 7	20M	QPSK	50	24	Back	5	Headset	P-Sensor On	21350	2560	20.25	21.00	1.189	-0.01	1.060	1.260
	LTE Band 7	20M	QPSK	50	24	Back	5	Headset	P-Sensor On	20850	2510	20.23	21.00	1.194	-0.08	1.040	1.242
	LTE Band 7	20M	QPSK	50	24	Back	5	Headset	P-Sensor On	21100	2535	20.07	21.00	1.239	-0.03	1.010	1.251



<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	40620	2593	23.06	24.00	1.242	62.9	1.006	-0.02	0.757	0.946
	LTE Band 41	20M	QPSK	1	0	Front	5	-	P-Sensor On	3	39750	2506	22.79	24.00	1.321	62.9	1.006	0.02	0.606	0.806
	LTE Band 41	20M	QPSK	1	0	Front	5	-	P-Sensor On	3	40185	2549.5	22.91	24.00	1.285	62.9	1.006	0.02	0.631	0.816
	LTE Band 41	20M	QPSK	1	0	Front	5	-	P-Sensor On	3	41055	2636.5	22.61	24.00	1.377	62.9	1.006	0.02	0.641	0.888
	LTE Band 41	20M	QPSK	1	0	Front	5	-	P-Sensor On	3	41490	2680	22.77	24.00	1.327	62.9	1.006	-0.08	0.532	0.710
	LTE Band 41	20M	QPSK	50	0	Front	5	-	P-Sensor On	3	40620	2593	21.74	23.00	1.337	62.9	1.006	-0.02	0.445	0.598
	LTE Band 41	20M	QPSK	100	0	Front	5	-	P-Sensor On	3	40620	2593	21.70	23.00	1.349	62.9	1.006	0.02	0.473	0.642
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	40620	2593	23.06	24.00	1.242	62.9	1.006	-0.03	0.966	1.207
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	39750	2506	22.79	24.00	1.321	62.9	1.006	-0.02	0.960	1.276
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	40185	2549.5	22.91	24.00	1.285	62.9	1.006	-0.03	1.030	1.332
63	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	41055	2636.5	22.61	24.00	1.377	62.9	1.006	-0.04	1.010	1.399
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	23.63	24.00	1.089	62.9	1.006	-0.09	1.190	1.304
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	39750(PCC) + 39948(SCC)	2506(PCC) + 2525.8(SCC)	23.44	24.00	1.138	62.9	1.006	0.03	0.990	1.133
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	40185(PCC) + 40383(SCC)	2549.5(PCC) + 2569.3(SCC)	23.60	24.00	1.096	62.9	1.006	0.12	1.250	1.379
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	40620(PCC) + 40422(SCC)	2593(PCC) + 2573.2(SCC)	23.88	24.00	1.028	62.9	1.006	0.04	1.280	1.324
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	41490(PCC) + 41292(SCC)	2680(PCC) + 2660.2(SCC)	23.68	24.00	1.076	62.9	1.006	-0.01	1.100	1.191
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	3	41490	2680	22.77	24.00	1.327	62.9	1.006	-0.03	0.828	1.106
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	40620	2593	21.74	23.00	1.337	62.9	1.006	-0.07	0.729	0.980
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	39750	2506	21.47	23.00	1.422	62.9	1.006	0.02	0.646	0.924
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	40185	2549.5	21.52	23.00	1.406	62.9	1.006	0.02	0.697	0.986
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	41055	2636.5	21.26	23.00	1.493	62.9	1.006	0.02	0.670	1.006
	LTE Band 41	20M	QPSK	50	0	Back	5	-	P-Sensor On	3	41490	2680	21.50	23.00	1.413	62.9	1.006	0.02	0.559	0.794
	LTE Band 41	20M	QPSK	100	0	Back	5	-	P-Sensor On	3	40620	2593	21.70	23.00	1.349	62.9	1.006	-0.03	0.671	0.911
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	41055	2636.5	22.61	24.00	1.377	62.9	1.006	0.01	0.943	1.307
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	40620	2593	23.06	24.00	1.242	62.9	1.006	0.02	0.937	1.170
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	39750	2506	22.79	24.00	1.321	62.9	1.006	-0.03	0.919	1.222
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	40185	2549.5	22.91	24.00	1.285	62.9	1.006	-0.03	0.972	1.257
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	41490	2680	22.77	24.00	1.327	62.9	1.006	-0.01	0.773	1.032
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	41055(PCC) + 40857(SCC)	2636.5(PCC) + 2616.7(SCC)	23.63	24.00	1.089	62.9	1.006	-0.05	1.100	1.205
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	39750(PCC) + 39948(SCC)	2506(PCC) + 2525.8(SCC)	23.44	24.00	1.138	62.9	1.006	0.08	0.902	1.032
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	40185(PCC) + 40383(SCC)	2549.5(PCC) + 2569.3(SCC)	23.60	24.00	1.096	62.9	1.006	-0.03	1.170	1.291
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	40620(PCC) + 40422(SCC)	2593(PCC) + 2573.2(SCC)	23.88	24.00	1.028	62.9	1.006	0.09	1.190	1.231
	LTE Band 41	20M	QPSK	1	0	Back	5	Headset	P-Sensor On	3	41490(PCC) + 41292(SCC)	2680(PCC) + 2660.2(SCC)	23.68	24.00	1.076	62.9	1.006	-0.01	1.030	1.115
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	40620	2593	23.81	24.00	1.045	42.9	1.009	-0.03	0.990	1.044
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	39750	2506	23.80	24.00	1.047	42.9	1.009	0.05	0.958	1.012
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	40185	2549.5	23.78	24.00	1.052	42.9	1.009	-0.02	0.990	1.051
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	41055	2636.5	23.79	24.00	1.050	42.9	1.009	0.04	0.987	1.045
	LTE Band 41	20M	QPSK	1	0	Back	5	-	P-Sensor On	2	41490	2680	23.70	24.00	1.072	42.9	1.009	-0.06	0.805	0.870



<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	1	2412	18.04	19.00	1.249	97.6	1.025	0.01	0.363	0.239	0.306
	WLAN2.4GHz	802.11b 1Mbps	Back	5	-	Full	1	2412	18.04	19.00	1.249	97.6	1.025	-0.02	0.550	0.355	0.454
64	WLAN2.4GHz	802.11b 1Mbps	Back	5	-	Full	6	2437	17.89	19.00	1.293	97.6	1.025	0.04		0.348	0.461
	WLAN2.4GHz	802.11b 1Mbps	Back	5	-	Full	11	2462	17.96	19.00	1.272	97.6	1.025	0.02		0.248	0.323

<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)
	WLAN5.2GHz	802.11a 6Mbps	Front	5	-	P-Sensor On	40	5200	13.48	13.50	1.005	87.44	1.144	0.02	0.108	0.045	0.052
	WLAN5.2GHz	802.11a 6Mbps	Back	5	-	P-Sensor On	40	5200	13.48	13.50	1.005	87.44	1.144	-0.01	2.075	0.945	1.086
	WLAN5.2GHz	802.11a 6Mbps	Back	5	-	P-Sensor On	36	5180	13.46	13.50	1.009	87.44	1.144	-0.02		0.955	1.103
65	WLAN5.2GHz	802.11a 6Mbps	Back	5	-	P-Sensor On	48	5240	13.40	13.50	1.023	87.44	1.144	-0.04		0.997	1.167
	WLAN5.5GHz	802.11a 6Mbps	Front	5	-	P-Sensor On	100	5500	13.49	13.50	1.002	87.44	1.144	0.02	0.068	0.022	0.026
	WLAN5.5GHz	802.11a 6Mbps	Back	5	-	P-Sensor On	100	5500	13.49	13.50	1.002	87.44	1.144	-0.08	1.582	0.800	0.917
66	WLAN5.5GHz	802.11a 6Mbps	Back	5	-	P-Sensor On	116	5580	12.70	13.50	1.202	87.44	1.144	-0.03		0.840	1.155
	WLAN5.5GHz	802.11a 6Mbps	Back	5	-	P-Sensor On	140	5700	13.47	13.50	1.007	87.44	1.144	-0.03		0.830	0.956
	WLAN 5.8GHz	802.11a MCS0	Front	5	-	P-Sensor On	165	5825	12.98	13.00	1.005	87.44	1.144		0.080		
	WLAN 5.8GHz	802.11a MCS0	Back	5	-	P-Sensor On	165	5825	12.98	13.00	1.005	87.44	1.144	-0.08	2.139	0.843	0.969
	WLAN 5.8GHz	802.11a MCS0	Back	5	-	P-Sensor On	149	5745	12.91	13.00	1.021	87.44	1.144	-0.16		0.897	1.048
67	WLAN 5.8GHz	802.11a MCS0	Back	5	-	P-Sensor On	157	5785	12.47	13.00	1.130	87.44	1.144	-0.05		0.849	1.097

<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	39	2441	10.40	11.00	1.149	76.78	1.085	-0.09	0.014	0.017
	Bluetooth	1Mbps	Back	5	Full	39	2441	10.40	11.00	1.149	76.78	1.085	-0.03	0.022	0.027
68	Bluetooth	1Mbps	Back	5	Full	0	2402	10.00	11.00	1.260	76.78	1.085	-0.07	0.028	0.039
	Bluetooth	1Mbps	Back	5	Full	78	2480	9.97	11.00	1.268	76.78	1.085	-0.01	0.007	0.010



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)
69	GSM850	GPRS 4 Tx slots	Back	0	Full	128	824.2	26.12	27.50	1.374	-0.07	1.210	1.663
70	GSM1900	GPRS 4 Tx slots	Front	0	Handheld On	512	1850.2	22.88	23.50	1.153	-0.02	2.840	3.276
	GSM1900	GPRS 4 Tx slots	Front	0	Handheld On	661	1880	22.71	23.50	1.199	-0.07	2.450	2.939
	GSM1900	GPRS 4 Tx slots	Front	0	Handheld On	810	1909.8	22.57	23.50	1.239	-0.06	2.320	2.874
	GSM1900	GPRS 4 Tx slots	Back	0	Handheld On	512	1850.2	22.88	23.50	1.153	-0.07	2.110	2.434
	GSM1900	GPRS 4 Tx slots	Back	0	Handheld On	661	1880	22.71	23.50	1.199	-0.13	1.900	2.279
	GSM1900	GPRS 4 Tx slots	Back	0	Handheld On	810	1909.8	22.57	23.50	1.239	-0.08	1.700	2.106
	GSM1900	GPRS 4 Tx slots	Bottom Side	0	Handheld On	512	1850.2	22.88	23.50	1.153	-0.09	2.130	2.457
	GSM1900	GPRS 4 Tx slots	Bottom Side	0	Handheld On	661	1880	22.71	23.50	1.199	0.07	1.930	2.315
	GSM1900	GPRS 4 Tx slots	Bottom Side	0	Handheld On	810	1909.8	22.57	23.50	1.239	0.09	1.840	2.279

<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	4233	846.6	23.26	24.00	1.186	-0.1	1.890	2.241
	WCDMA Band V	RMC 12.2Kbps	Front	0	Full	4132	826.4	23.21	24.00	1.199	0.02	1.950	2.339
71	WCDMA Band V	RMC 12.2Kbps	Front	0	Full	4182	836.4	23.08	24.00	1.236	0.03	1.920	2.373
	WCDMA Band V	RMC 12.2Kbps	Back	0	Full	4233	846.6	23.26	24.00	1.186	0.02	1.950	2.312
	WCDMA Band V	RMC 12.2Kbps	Back	0	Full	4132	826.4	23.21	24.00	1.199	0.06	1.870	2.243
	WCDMA Band V	RMC 12.2Kbps	Back	0	Full	4182	836.4	23.08	24.00	1.236	0.05	1.760	2.175
	WCDMA Band V	RMC 12.2Kbps	Bottom Side	0	Full	4233	846.6	23.26	24.00	1.186	0.02	1.160	1.375
	WCDMA Band IV	RMC 12.2Kbps	Front	0	Handheld On	1513	1752.6	18.54	19.50	1.247	0.06	2.370	2.956
	WCDMA Band IV	RMC 12.2Kbps	Front	0	Handheld On	1312	1712.4	18.35	19.50	1.303	0.12	2.180	2.841
	WCDMA Band IV	RMC 12.2Kbps	Front	0	Handheld On	1413	1732.6	18.38	19.50	1.294	0.02	1.990	2.575
	WCDMA Band IV	RMC 12.2Kbps	Back	0	Handheld On	1513	1752.6	18.54	19.50	1.247	0.01	2.340	2.919
	WCDMA Band IV	RMC 12.2Kbps	Back	0	Handheld On	1312	1712.4	18.35	19.50	1.303	0.1	2.110	2.750
	WCDMA Band IV	RMC 12.2Kbps	Back	0	Handheld On	1413	1732.6	18.38	19.50	1.294	0.19	2.080	2.692
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Handheld On	1513	1752.6	18.54	19.50	1.247	0.16	2.810	3.505
72	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Handheld On	1312	1712.4	18.35	19.50	1.303	0.06	2.700	3.519
	WCDMA Band IV	RMC 12.2Kbps	Bottom Side	0	Handheld On	1413	1732.6	18.38	19.50	1.294	0.08	2.630	3.404
	WCDMA Band II	RMC 12.2Kbps	Front	0	Handheld On	9262	1852.4	20.28	20.50	1.052	0.02	2.900	3.051
	WCDMA Band II	RMC 12.2Kbps	Front	0	Handheld On	9400	1880	20.23	20.50	1.064	0.03	2.870	3.054
	WCDMA Band II	RMC 12.2Kbps	Front	0	Handheld On	9538	1907.6	19.92	20.50	1.143	0.03	2.740	3.131
	WCDMA Band II	RMC 12.2Kbps	Back	0	Handheld On	9262	1852.4	20.28	20.50	1.052	0.02	2.740	2.882
	WCDMA Band II	RMC 12.2Kbps	Back	0	Handheld On	9400	1880	20.23	20.50	1.064	0.02	2.700	2.873
	WCDMA Band II	RMC 12.2Kbps	Back	0	Handheld On	9538	1907.6	19.92	20.50	1.143	0.02	2.580	2.949
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Handheld On	9262	1852.4	20.28	20.50	1.052	-0.03	3.160	3.324
73	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Handheld On	9400	1880	20.23	20.50	1.064	0.13	3.360	3.576
	WCDMA Band II	RMC 12.2Kbps	Bottom Side	0	Handheld On	9538	1907.6	19.92	20.50	1.143	-0.15	3.110	3.554



<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)
74	CDMA2000 BC10	RTAP 153.6Kbps	Back	0	Full	580	820.5	24.65	25.00	1.084	-0.12	1.810	1.962
	CDMA2000 BC0	RTAP 153.6Kbps	Front	0	Full	1013	824.7	24.48	25.00	1.127	-0.16	1.870	2.108
75	CDMA2000 BC0	RTAP 153.6Kbps	Front	0	Full	384	836.52	24.44	25.00	1.138	-0.13	1.900	2.161
	CDMA2000 BC0	RTAP 153.6Kbps	Front	0	Full	777	848.31	24.42	25.00	1.143	-0.17	1.510	1.726
	CDMA2000 BC0	RTAP 153.6Kbps	Back	0	Full	1013	824.7	24.48	25.00	1.127	-0.19	1.800	2.029
	CDMA2000 BC0	RTAP 153.6Kbps	Back	0	Full	384	836.52	24.44	25.00	1.138	-0.17	1.830	2.082
	CDMA2000 BC0	RTAP 153.6Kbps	Back	0	Full	777	848.31	24.42	25.00	1.143	-0.19	1.520	1.737
	CDMA2000 BC1	RTAP 153.6Kbps	Front	0	Handheld On	25	1851.25	21.73	22.00	1.064	-0.03	2.780	2.958
	CDMA2000 BC1	RTAP 153.6Kbps	Front	0	Handheld On	600	1880	21.54	22.00	1.112	-0.04	2.380	2.646
	CDMA2000 BC1	RTAP 153.6Kbps	Front	0	Handheld On	1175	1908.75	21.51	22.00	1.119	-0.14	2.480	2.776
	CDMA2000 BC1	RTAP 153.6Kbps	Back	0	Handheld On	25	1851.25	21.73	22.00	1.064	-0.16	2.630	2.799
	CDMA2000 BC1	RTAP 153.6Kbps	Back	0	Handheld On	600	1880	21.54	22.00	1.112	-0.18	2.210	2.457
	CDMA2000 BC1	RTAP 153.6Kbps	Back	0	Handheld On	1175	1908.75	21.51	22.00	1.119	-0.15	2.270	2.541
76	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	0	Handheld On	25	1851.25	21.73	22.00	1.064	0.06	3.410	3.629
	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	0	Handheld On	600	1880	21.54	22.00	1.112	0.1	3.180	3.535
	CDMA2000 BC1	RTAP 153.6Kbps	Bottom Side	0	Handheld On	1175	1908.75	21.51	22.00	1.119	0.05	3.110	3.481



<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)
77	LTE Band 13	10M	QPSK	1	49	Front	0	Full	23230	782	22.73	24.00	1.340	-0.01	1.120	1.500
	LTE Band 13	10M	QPSK	25	0	Front	0	Full	23230	782	22.13	23.00	1.222	-0.09	0.889	1.086
	LTE Band 13	10M	QPSK	1	49	Back	0	Full	23230	782	22.73	24.00	1.340	-0.04	1.040	1.393
	LTE Band 13	10M	QPSK	25	0	Back	0	Full	23230	782	22.13	23.00	1.222	-0.03	0.789	0.964
78	LTE Band 14	10M	QPSK	1	0	Front	0	Full	23330	793	22.94	24.00	1.276	-0.07	1.790	2.285
	LTE Band 14	10M	QPSK	25	0	Front	0	Full	23330	793	21.75	23.00	1.334	-0.07	1.030	1.374
	LTE Band 14	10M	QPSK	50	0	Front	0	Full	23330	793	21.67	23.00	1.358	-0.05	0.902	1.225
	LTE Band 14	10M	QPSK	1	0	Back	0	Full	23330	793	22.94	24.00	1.276	-0.12	1.570	2.004
	LTE Band 14	10M	QPSK	25	0	Back	0	Full	23330	793	21.75	23.00	1.334	-0.02	0.879	1.172
	LTE Band 14	10M	QPSK	50	0	Back	0	Full	23330	793	21.67	23.00	1.358	-0.01	0.798	1.084
79	LTE Band 26	15M	QPSK	1	0	Back	0	Full	26865	831.5	23.13	24.00	1.222	-0.17	1.340	1.637
	LTE Band 26	15M	QPSK	36	0	Back	0	Full	26865	831.5	22.11	23.00	1.227	-0.02	1.010	1.240
	LTE Band 66	20M	QPSK	1	99	Front	0	Handheld On	132572	1770	20.33	20.50	1.040	0.05	2.530	2.631
	LTE Band 66	20M	QPSK	1	99	Front	0	Handheld On	132072	1720	20.07	20.50	1.104	-0.15	2.420	2.672
	LTE Band 66	20M	QPSK	1	99	Front	0	Handheld On	132322	1745	20.32	20.50	1.042	-0.14	2.520	2.627
	LTE Band 66	20M	QPSK	50	24	Front	0	Handheld On	132572	1770	20.03	20.50	1.114	-0.01	2.270	2.529
	LTE Band 66	20M	QPSK	50	24	Front	0	Handheld On	132072	1720	19.98	20.50	1.127	-0.18	2.300	2.593
	LTE Band 66	20M	QPSK	50	24	Front	0	Handheld On	132322	1745	19.95	20.50	1.135	-0.13	2.330	2.645
	LTE Band 66	20M	QPSK	100	0	Front	0	Handheld On	132572	1770	19.98	20.50	1.127	-0.06	2.440	2.750
	LTE Band 66	20M	QPSK	1	99	Back	0	Handheld On	132572	1770	20.33	20.50	1.040	-0.02	2.400	2.496
	LTE Band 66	20M	QPSK	1	99	Back	0	Handheld On	132072	1720	20.07	20.50	1.104	0.06	2.310	2.550
	LTE Band 66	20M	QPSK	1	99	Back	0	Handheld On	132322	1745	20.32	20.50	1.042	0.12	2.450	2.554
	LTE Band 66	20M	QPSK	50	24	Back	0	Handheld On	132572	1770	20.03	20.50	1.114	0.07	2.240	2.496
	LTE Band 66	20M	QPSK	50	24	Back	0	Handheld On	132072	1720	19.98	20.50	1.127	0.12	2.250	2.536
	LTE Band 66	20M	QPSK	50	24	Back	0	Handheld On	132322	1745	19.95	20.50	1.135	0.12	2.210	2.508
	LTE Band 66	20M	QPSK	100	0	Back	0	Handheld On	132572	1770	19.98	20.50	1.127	-0.12	2.200	2.480
	LTE Band 66	20M	QPSK	1	99	Bottom Side	0	Handheld On	132572	1770	20.33	20.50	1.040	0.06	3.170	3.297
	LTE Band 66	20M	QPSK	1	99	Bottom Side	0	Handheld On	132072	1720	20.07	20.50	1.104	0.02	2.940	3.246
	LTE Band 66	20M	QPSK	1	99	Bottom Side	0	Handheld On	132322	1745	20.32	20.50	1.042	-0.03	3.100	3.231
	LTE Band 66	20M	QPSK	50	24	Bottom Side	0	Handheld On	132572	1770	20.03	20.50	1.114	0.07	2.910	3.243
	LTE Band 66	20M	QPSK	50	24	Bottom Side	0	Handheld On	132072	1720	19.98	20.50	1.127	0.02	2.870	3.235
	LTE Band 66	20M	QPSK	50	24	Bottom Side	0	Handheld On	132322	1745	19.95	20.50	1.135	0.02	2.800	3.178
80	LTE Band 66	20M	QPSK	100	0	Bottom Side	0	Handheld On	132572	1770	19.98	20.50	1.127	0.1	2.990	3.370



FCC SAR Test Report

Report No. : FA892801

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	49	Front	0	Handheld On	26140	1860	20.05	21.00	1.245	-0.06	2.250	2.800
	LTE Band 25	20M	QPSK	1	49	Front	0	Handheld On	26340	1880	19.88	21.00	1.294	-0.04	2.190	2.834
	LTE Band 25	20M	QPSK	1	49	Front	0	Handheld On	26590	1905	19.89	21.00	1.291	-0.02	2.200	2.841
	LTE Band 25	20M	QPSK	50	24	Front	0	Handheld On	26590	1905	20.01	21.00	1.256	-0.09	2.290	2.876
	LTE Band 25	20M	QPSK	50	24	Front	0	Handheld On	26140	1860	20.00	21.00	1.259	-0.07	2.400	3.021
	LTE Band 25	20M	QPSK	50	24	Front	0	Handheld On	26340	1880	19.95	21.00	1.274	-0.06	2.280	2.904
	LTE Band 25	20M	QPSK	100	0	Front	0	Handheld On	26590	1905	20.05	21.00	1.245	-0.01	2.280	2.837
	LTE Band 25	20M	QPSK	1	49	Back	0	Handheld On	26140	1860	20.05	21.00	1.245	-0.01	2.010	2.501
	LTE Band 25	20M	QPSK	1	49	Back	0	Handheld On	26340	1880	19.88	21.00	1.294	-0.02	2.030	2.627
	LTE Band 25	20M	QPSK	1	49	Back	0	Handheld On	26590	1905	19.89	21.00	1.291	-0.07	2.010	2.595
	LTE Band 25	20M	QPSK	50	24	Back	0	Handheld On	26590	1905	20.01	21.00	1.256	0.02	2.100	2.638
	LTE Band 25	20M	QPSK	50	24	Back	0	Handheld On	26140	1860	20.00	21.00	1.259	0.1	2.160	2.719
	LTE Band 25	20M	QPSK	50	24	Back	0	Handheld On	26340	1880	19.95	21.00	1.274	0.02	2.110	2.687
	LTE Band 25	20M	QPSK	100	0	Back	0	Handheld On	26590	1905	20.05	21.00	1.245	-0.03	2.120	2.638
	LTE Band 25	20M	QPSK	1	49	Bottom Side	0	Handheld On	26140	1860	20.05	21.00	1.245	0.04	2.610	3.248
	LTE Band 25	20M	QPSK	1	49	Bottom Side	0	Handheld On	26340	1880	19.88	21.00	1.294	0.06	2.560	3.313
	LTE Band 25	20M	QPSK	1	49	Bottom Side	0	Handheld On	26590	1905	19.89	21.00	1.291	-0.03	2.580	3.331
	LTE Band 25	20M	QPSK	50	24	Bottom Side	0	Handheld On	26590	1905	20.01	21.00	1.256	-0.08	2.700	3.391
81	LTE Band 25	20M	QPSK	50	24	Bottom Side	0	Handheld On	26140	1860	20.00	21.00	1.259	0.09	2.830	3.563
	LTE Band 25	20M	QPSK	50	24	Bottom Side	0	Handheld On	26340	1880	19.95	21.00	1.274	0.09	2.720	3.464
	LTE Band 25	20M	QPSK	100	0	Bottom Side	0	Handheld On	26590	1905	20.05	21.00	1.245	0.14	2.780	3.460
	LTE Band 30	10M	QPSK	1	49	Front	0	Handheld On	27710	2310	21.80	22.50	1.175	0.02	2.160	2.538
	LTE Band 30	10M	QPSK	25	12	Front	0	Handheld On	27710	2310	21.71	22.50	1.199	-0.07	1.540	1.847
	LTE Band 30	10M	QPSK	50	0	Front	0	Handheld On	27710	2310	21.68	22.50	1.208	-0.09	1.550	1.872
82	LTE Band 30	10M	QPSK	1	49	Back	0	Handheld On	27710	2310	21.80	22.50	1.175	-0.05	2.760	3.243
	LTE Band 30	10M	QPSK	25	12	Back	0	Handheld On	27710	2310	21.71	22.50	1.199	0.1	1.930	2.315
	LTE Band 30	10M	QPSK	50	0	Back	0	Handheld On	27710	2310	21.68	22.50	1.208	0.16	1.970	2.379
	LTE Band 30	10M	QPSK	1	49	Left Side	0	Full	27710	2310	23.29	24.00	1.178	0.02	0.951	1.120
	LTE Band 30	10M	QPSK	25	12	Left Side	0	Full	27710	2310	21.85	23.00	1.303	0.02	0.680	0.886
	LTE Band 30	10M	QPSK	1	49	Bottom Side	0	Handheld On	27710	2310	21.80	22.50	1.175	-0.04	1.650	1.939
	LTE Band 30	10M	QPSK	25	12	Bottom Side	0	Handheld On	27710	2310	21.71	22.50	1.199	0.03	1.180	1.415
	LTE Band 7	20M	QPSK	1	49	Front	0	Handheld On	21350	2560	21.95	22.00	1.012	-0.07	2.210	2.236
	LTE Band 7	20M	QPSK	1	49	Front	0	Handheld On	20850	2510	21.92	22.00	1.019	-0.03	2.480	2.526
	LTE Band 7	20M	QPSK	1	49	Front	0	Handheld On	21100	2535	21.75	22.00	1.059	-0.04	2.320	2.457
	LTE Band 7	20M	QPSK	50	24	Front	0	Handheld On	21350	2560	21.77	22.00	1.054	-0.02	2.150	2.267
	LTE Band 7	20M	QPSK	50	24	Front	0	Handheld On	20850	2510	21.75	22.00	1.059	-0.07	2.420	2.563
	LTE Band 7	20M	QPSK	50	24	Front	0	Handheld On	21100	2535	21.71	22.00	1.069	-0.06	2.260	2.416
	LTE Band 7	20M	QPSK	100	0	Front	0	Handheld On	21350	2560	21.73	22.00	1.064	-0.07	2.160	2.299
	LTE Band 7	20M	QPSK	1	49	Back	0	Handheld On	21350	2560	21.95	22.00	1.012	-0.05	2.750	2.782
	LTE Band 7	20M	QPSK	1	49	Back	0	Handheld On	20850	2510	21.92	22.00	1.019	-0.09	2.890	2.944
83	LTE Band 7	20M	QPSK	1	49	Back	0	Handheld On	21100	2535	21.75	22.00	1.059	-0.03	2.860	3.029
	LTE Band 7	20M	QPSK	50	24	Back	0	Handheld On	21350	2560	21.77	22.00	1.054	-0.03	2.680	2.826
	LTE Band 7	20M	QPSK	50	24	Back	0	Handheld On	20850	2510	21.75	22.00	1.059	-0.09	2.790	2.955
	LTE Band 7	20M	QPSK	50	24	Back	0	Handheld On	21100	2535	21.71	22.00	1.069	-0.02	2.630	2.812
	LTE Band 7	20M	QPSK	100	0	Back	0	Handheld On	21350	2560	21.73	22.00	1.064	-0.04	2.690	2.863
	LTE Band 7	20M	QPSK	1	49	Bottom Side	0	Handheld On	21350	2560	21.95	22.00	1.012	-0.06	1.130	1.143
	LTE Band 7	20M	QPSK	50	24	Bottom Side	0	Handheld On	21350	2560	21.77	22.00	1.054	-0.07	1.080	1.139



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	40620	2593	23.06	24.50	1.393	62.9	1.006	-0.07	1.540	2.158
	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	39750	2506	22.79	24.50	1.483	62.9	1.006	-0.02	1.750	2.610
	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	40185	2549.5	22.91	24.50	1.442	62.9	1.006	-0.09	1.670	2.423
	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	41055	2636.5	22.61	24.50	1.545	62.9	1.006	-0.17	1.610	2.503
	LTE Band 41	20M	QPSK	1	0	Back	0	3	Full	41490	2680	22.77	24.50	1.489	62.9	1.006	-0.13	1.430	2.143
	LTE Band 41	20M	QPSK	50	0	Back	0	3	Full	40620	2593	21.74	23.50	1.500	62.9	1.006	-0.14	1.110	1.675
	LTE Band 41	20M	QPSK	50	0	Back	0	3	Full	39750	2506	21.47	23.50	1.596	62.9	1.006	-0.02	1.150	1.846
	LTE Band 41	20M	QPSK	50	0	Back	0	3	Full	40185	2549.5	21.52	23.50	1.578	62.9	1.006	-0.09	1.060	1.682
	LTE Band 41	20M	QPSK	50	0	Back	0	3	Full	41055	2636.5	21.26	23.50	1.675	62.9	1.006	-0.17	1.030	1.736
	LTE Band 41	20M	QPSK	50	0	Back	0	3	Full	41490	2680	21.50	23.50	1.585	62.9	1.006	-0.13	0.968	1.543
	LTE Band 41	20M	QPSK	100	0	Back	0	3	Full	40620	2593	21.70	23.50	1.514	62.9	1.006	0.02	1.130	1.721
	LTE Band 41	20M	QPSK	1	0	Bottom Side	0	3	Full	40620	2593	23.06	24.50	1.393	62.9	1.006	-0.07	0.864	1.211
	LTE Band 41	20M	QPSK	50	0	Bottom Side	0	3	Full	40620	2593	21.74	23.50	1.500	62.9	1.006	-0.03	0.594	0.896
	LTE Band 41	20M	QPSK	1	0	Back	0	2	Full	40620	2593	26.60	27.00	1.096	42.9	1.009	0.06	2.910	3.219
84	LTE Band 41	20M	QPSK	1	0	Back	0	2	Full	39750	2506	26.51	27.00	1.119	42.9	1.009	0.02	3.060	3.456
	LTE Band 41	20M	QPSK	1	0	Back	0	2	Full	40185	2549.5	26.34	27.00	1.164	42.9	1.009	0.06	2.880	3.383
	LTE Band 41	20M	QPSK	1	0	Back	0	2	Full	41055	2636.5	26.57	27.00	1.104	42.9	1.009	0.04	3.050	3.398
	LTE Band 41	20M	QPSK	1	0	Back	0	2	Full	41490	2680	26.45	27.00	1.135	42.9	1.009	0.02	2.730	3.126

**<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)
	WLAN5.3GHz	802.11a 6Mbps	Front	0	Handheld On	56	5280	12.48	12.50	1.005	87.44	1.144		0.315		
	WLAN5.3GHz	802.11a 6Mbps	Back	0	Handheld On	56	5280	12.48	12.50	1.005	87.44	1.144	0.01	7.568	0.712	0.818
	WLAN5.3GHz	802.11a 6Mbps	Right Side	0	Full	56	5280	17.26	18.00	1.185	87.44	1.144		0.173		
	WLAN5.3GHz	802.11a 6Mbps	Top Side	0	Full	56	5280	17.26	18.00	1.185	87.44	1.144		1.679		
	WLAN5.3GHz	802.11a 6Mbps	Back	0	Handheld On	52	5260	12.46	12.50	1.009	87.44	1.144	0.09		0.702	0.811
85	WLAN5.3GHz	802.11a 6Mbps	Back	0	Handheld On	64	5320	11.67	12.50	1.211	87.44	1.144	-0.01		0.597	0.827
	WLAN 5.5GHz	802.11a 6Mbps	Front	0	Handheld On	100	5500	13.49	13.50	1.002	87.44	1.144		0.198		
	WLAN 5.5GHz	802.11a 6Mbps	Back	0	Handheld On	100	5500	13.49	13.50	1.002	87.44	1.144	0.08	9.552	0.728	0.835
	WLAN 5.5GHz	802.11a 6Mbps	Right Side	0	Full	100	5500	17.23	18.00	1.193	87.44	1.144		0.208		
	WLAN 5.5GHz	802.11a 6Mbps	Top Side	0	Full	100	5500	17.23	18.00	1.193	87.44	1.144		1.288		
86	WLAN 5.5GHz	802.11a 6Mbps	Back	0	Handheld On	116	5580	12.70	13.50	1.202	87.44	1.144	-0.05		0.752	1.034
	WLAN 5.5GHz	802.11a 6Mbps	Back	0	Handheld On	140	5700	13.47	13.50	1.007	87.44	1.144	0.04		0.828	0.954

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)	24.50	27.00
Reported 1g SAR (W/kg)	0.160	0.203
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	178.40	217.01
Linearity SAR (W/kg)	0.195	
% deviation from expected linearity		7.90%

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)	24.00	24.00
Reported 1g SAR (W/kg)	1.399	1.051
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	108.76
Linearity SAR (W/kg)	0.957	
% deviation from expected linearity		9.82%

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)	24.00	24.00
Reported 1g SAR (W/kg)	1.399	1.051
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	159.00	108.76
Linearity SAR (W/kg)	0.957	
% deviation from expected linearity		9.82%

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)	24.50	27.00
Reported 1g SAR (W/kg)	2.610	3.456
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	178.40	217.01
Linearity SAR (W/kg)	3.175	
% deviation from expected linearity		8.86%

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)	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	WCDMA Band II	RMC 12.2Kbps	-	-	-	-	Front	5	-	Hotspot On / P-Sensor On	9262	1852.4	17.79	18.50	1.178	-	-	-0.03	1.220	1	1.437
2nd	WCDMA Band II	RMC 12.2Kbps	-	-	-	-	Front	5	-	Hotspot On / P-Sensor On	9262	1852.4	17.79	18.50	1.178	-	-	0.01	1.210	1.008	1.425
1st	CDMA2000 BC0	RC3 SO32 (F+SCH)	-	-	-	-	Back	5	Headset	Full	777	848.31	24.50	25.00	1.122	-	-	-0.03	1.270	1	1.425
2nd	CDMA2000 BC0	RC3 SO32 (F+SCH)	-	-	-	-	Back	5	Headset	Full	777	848.31	24.50	25.00	1.122	-	-	0.05	1.260	1.008	1.414
1st	LTE Band 14	-	10M	QPSK	1	0	Back	5	-	Full	23330	793	22.94	24.00	1.276	-	-	-0.01	1.090	1	1.391
2nd	LTE Band 14	-	10M	QPSK	1	0	Back	5	-	Full	23330	793	22.94	24.00	1.276	-	-	0.06	1.070	1.019	1.366
1st	LTE Band 30	-	10M	QPSK	1	49	Bottom Side	5	-	Hotspot On	27710	2310	21.75	22.50	1.189	-	-	-0.06	1.170	1	1.391
2nd	LTE Band 30	-	10M	QPSK	1	49	Bottom Side	5	-	Hotspot On	27710	2310	21.75	22.50	1.189	-	-	0.02	1.150	1.017	1.367
1st	LTE Band 41	-	20M	QPSK	1	0	Bottom Side	5	-	Hotspot On	39750	2506	22.34	23.00	1.164	62.9	1.006	-0.13	1.150	1	1.347
2nd	LTE Band 41	-	20M	QPSK	1	0	Bottom Side	5	-	Hotspot On	39750	2506	22.34	23.00	1.164	62.9	1.006	0.02	1.130	1.018	1.323
1st	LTE Band 66	-	20M	QPSK	1	99	Back	5	Headset	P-Sensor On	132572	1770	17.90	18.50	1.148	-	-	-0.07	1.250	1	1.435
2nd	LTE Band 66	-	20M	QPSK	1	99	Back	5	Headset	P-Sensor On	132572	1770	17.90	18.50	1.148	-	-	0.09	1.240	1.008	1.424
1st	WLAN5.2GHz	802.11a 6Mbps	-	-	-	-	Back	5	-	Hotspot On / P-Sensor On	48	5240	13.40	13.50	1.023	87.44	1.144	-0.04	0.997	1	1.167
2nd	WLAN5.2GHz	802.11a 6Mbps	-	-	-	-	Back	5	-	Hotspot On / P-Sensor On	48	5240	13.40	13.50	1.023	87.44	1.144	0.01	0.986	1.011	1.154
1st	WLAN5.5GHz	802.11a 6Mbps	-	-	-	-	Back	5	-	P-Sensor On	144	5720	13.23	13.50	1.064	87.44	1.144	-0.03	0.958	1	1.166
2nd	WLAN5.5GHz	802.11a 6Mbps	-	-	-	-	Back	5	-	P-Sensor On	144	5720	13.23	13.50	1.064	87.44	1.144	0.02	0.942	1.017	1.147
1st	WLAN 5.8GHz	802.11a 6Mbps	-	-	-	-	Back	5	-	Hotspot On / P-Sensor On	149	5745	12.91	13.00	1.021	87.44	1.144	-0.16	0.897	1	1.048
2nd	WLAN 5.8GHz	802.11a 6Mbps	-	-	-	-	Back	5	-	Hotspot On / P-Sensor On	149	5745	12.91	13.00	1.021	87.44	1.144	-0.01	0.889	1.009	1.038

<10g SAR>

No.	Band	Mode	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	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	CDMA2000 BC1	RTAP 153.6Kbps	-	-	-	-	Bottom Side	0	Handheld On	25	1851.25	21.73	22.00	1.064	-	-	0.06	3.410	1	3.629
2nd	CDMA2000 BC1	RTAP 153.6Kbps	-	-	-	-	Bottom Side	0	Handheld On	25	1851.25	21.73	22.00	1.064	-	-	-0.01	3.400	1.003	3.618
1st	LTE Band 30	-	10M	QPSK	1	49	Back	0	Handheld On	27710	2310	21.80	22.50	1.175	-	-	-0.05	2.760	1	3.243
2nd	LTE Band 30	-	10M	QPSK	1	49	Back	0	Handheld On	27710	2310	21.80	22.50	1.175	-	-	0.01	2.730	1.011	3.207
1st	LTE Band 41	-	20M	QPSK	1	0	Back	0	Full	39750	2506	26.51	27.00	1.119	42.9	1.009	0.02	3.060	1	3.456
2nd	LTE Band 41	-	20M	QPSK	1	0	Back	0	Full	39750	2506	26.51	27.00	1.119	42.9	1.009	-0.01	3.050	1.003	3.445
1st	LTE Band 66	-	20M	QPSK	1	99	Bottom Side	0	Handheld On	132572	1770	20.33	20.50	1.040	-	-	0.06	3.170	1	3.297
2nd	LTE Band 66	-	20M	QPSK	1	99	Bottom Side	0	Handheld On	132572	1770	20.33	20.50	1.040	-	-	0.06	3.150	1.006	3.276

General Note:

- Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/kg}$.
- 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.
- 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.
- The ratio is the difference in percentage between original and repeated *measured* SAR.
- 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
21.	Bluetooth + WLAN5.3/5.5GHz	Yes	Yes	
22.	Bluetooth + WLAN5.2/5.8GHz	Yes	Yes	Yes
23.	GSM Voice + Bluetooth + WLAN5.3/5.5GHz	Yes	Yes	
24.	GPRS/EDGE + Bluetooth + WLAN5.3/5.5GHz	Yes	Yes	
25.	WCDMA + Bluetooth + WLAN5.3/5.5GHz	Yes	Yes	
26.	CDMA + Bluetooth + WLAN5.3/5.5GHz	Yes	Yes	
27.	LTE + Bluetooth + WLAN5.3/5.5GHz	Yes	Yes	
28.	GSM Voice + Bluetooth + WLAN5.2/5.8GHz	Yes	Yes	
29.	GPRS/EDGE + Bluetooth + WLAN5.2/5.8GHz	Yes	Yes	Yes
30.	WCDMA + Bluetooth + WLAN5.2/5.8GHz	Yes	Yes	Yes
31.	CDMA + Bluetooth + WLAN5.2/5.8GHz	Yes	Yes	Yes
32.	LTE + Bluetooth + WLAN5.2/5.8GHz	Yes	Yes	Yes

General Note:

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- EUT will choose each GSM, WCDMA and LTE according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- This device 2.4GHz WLAN support hotspot operation and Bluetooth support tethering applications.
- This device 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).
- 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.
- WLAN 2.4GHz and Bluetooth share the same antenna so can't transmit simultaneously.
- For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in this section did not additional to evaluate 2TX combination of simultaneously transmission.
- Chose the worst zoom scan SAR of WLAN correspondingly for co-located with WWAN analysis.
- The reported SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
 - $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $SPLSR \leq 0.04$ for 1g SAR, $SPLSR \leq 0.10$ for 10g SAR simultaneously transmission SAR measurement is not necessary.
 - Simultaneously transmission SAR measurement, and the reported multi-band 1g SAR < 1.6W/kg and 10g SAR < 4.0W/kg.
 - The SPLSR calculated results please refer to section 16.4.

16.1 Head Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3+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	0.335	0.864	0.199	0.043	1.20	0.58
		Right Tilted	0.115	0.864	0.357	0.047	0.98	0.52
		Left Cheek	0.176	0.864	0.357	0.104	1.04	0.64
		Left Tilted	0.117	0.634	0.357	0.076	0.75	0.55
	GSM1900	Right Cheek	0.041	0.864	0.199	0.043	0.91	0.28
		Right Tilted	0.030	0.864	0.357	0.047	0.89	0.43
		Left Cheek	0.052	0.864	0.357	0.104	0.92	0.51
		Left Tilted	0.033	0.634	0.357	0.076	0.67	0.47
WCDMA	Band V	Right Cheek	0.419	0.864	0.199	0.043	1.28	0.66
		Right Tilted	0.092	0.864	0.357	0.047	0.96	0.50
		Left Cheek	0.112	0.864	0.357	0.104	0.98	0.57
		Left Tilted	0.066	0.634	0.357	0.076	0.70	0.50
	Band IV	Right Cheek	0.079	0.864	0.199	0.043	0.94	0.32
		Right Tilted	0.165	0.864	0.357	0.047	1.03	0.57
		Left Cheek	0.036	0.864	0.357	0.104	0.90	0.50
		Left Tilted	0.020	0.634	0.357	0.076	0.65	0.45
	Band II	Right Cheek	0.087	0.864	0.199	0.043	0.95	0.33
		Right Tilted	0.062	0.864	0.357	0.047	0.93	0.47
		Left Cheek	0.035	0.864	0.357	0.104	0.90	0.50
		Left Tilted	0.027	0.634	0.357	0.076	0.66	0.46
CDMA2000	BC10	Right Cheek	0.298	0.864	0.199	0.043	1.16	0.54
		Right Tilted	0.137	0.864	0.357	0.047	1.00	0.54
		Left Cheek	0.225	0.864	0.357	0.104	1.09	0.69
		Left Tilted	0.156	0.634	0.357	0.076	0.79	0.59
	BC0	Right Cheek	0.397	0.864	0.199	0.043	1.26	0.64
		Right Tilted	0.145	0.864	0.357	0.047	1.01	0.55
		Left Cheek	0.249	0.864	0.357	0.104	1.11	0.71
		Left Tilted	0.162	0.634	0.357	0.076	0.80	0.60
	BC1	Right Cheek	0.071	0.864	0.199	0.043	0.94	0.31
		Right Tilted	0.060	0.864	0.357	0.047	0.92	0.46
		Left Cheek	0.101	0.864	0.357	0.104	0.97	0.56
		Left Tilted	0.065	0.634	0.357	0.076	0.70	0.50



WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3+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 12	Right Cheek	0.317	0.864	0.199	0.043	1.18	0.56
		Right Tilted	0.166	0.864	0.357	0.047	1.03	0.57
		Left Cheek	0.272	0.864	0.357	0.104	1.14	0.73
		Left Tilted	0.159	0.634	0.357	0.076	0.79	0.59
	Band 13	Right Cheek	0.330	0.864	0.199	0.043	1.19	0.57
		Right Tilted	0.185	0.864	0.357	0.047	1.05	0.59
		Left Cheek	0.248	0.864	0.357	0.104	1.11	0.71
		Left Tilted	0.124	0.634	0.357	0.076	0.76	0.56
	Band 14	Right Cheek	0.333	0.864	0.199	0.043	1.20	0.58
		Right Tilted	0.180	0.864	0.357	0.047	1.04	0.58
		Left Cheek	0.300	0.864	0.357	0.104	1.16	0.76
		Left Tilted	0.225	0.634	0.357	0.076	0.86	0.66
	Band 26	Right Cheek	0.347	0.864	0.199	0.043	1.21	0.59
		Right Tilted	0.155	0.864	0.357	0.047	1.02	0.56
		Left Cheek	0.222	0.864	0.357	0.104	1.09	0.68
		Left Tilted	0.147	0.634	0.357	0.076	0.78	0.58
	Band 71	Right Cheek	0.149	0.864	0.199	0.043	1.01	0.39
		Right Tilted	0.059	0.864	0.357	0.047	0.92	0.46
		Left Cheek	0.114	0.864	0.357	0.104	0.98	0.58
		Left Tilted	0.058	0.634	0.357	0.076	0.69	0.49
	Band 66	Right Cheek	0.081	0.864	0.199	0.043	0.95	0.32
		Right Tilted	0.058	0.864	0.357	0.047	0.92	0.46
		Left Cheek	0.139	0.864	0.357	0.104	1.00	0.60
		Left Tilted	0.070	0.634	0.357	0.076	0.70	0.50
	Band 25	Right Cheek	0.049	0.864	0.199	0.043	0.91	0.29
		Right Tilted	0.030	0.864	0.357	0.047	0.89	0.43
		Left Cheek	0.078	0.864	0.357	0.104	0.94	0.54
		Left Tilted	0.039	0.634	0.357	0.076	0.67	0.47
	Band 30	Right Cheek	0.145	0.864	0.199	0.043	1.01	0.39
		Right Tilted	0.152	0.864	0.357	0.047	1.02	0.56
		Left Cheek	0.134	0.864	0.357	0.104	1.00	0.60
		Left Tilted	0.100	0.634	0.357	0.076	0.73	0.53
	Band 7	Right Cheek	0.140	0.864	0.199	0.043	1.00	0.38
		Right Tilted	0.278	0.864	0.357	0.047	1.14	0.68
		Left Cheek	0.224	0.864	0.357	0.104	1.09	0.69
		Left Tilted	0.094	0.634	0.357	0.076	0.73	0.53
	Band 41	Right Cheek	0.113	0.864	0.199	0.043	0.98	0.36
		Right Tilted	0.203	0.864	0.357	0.047	1.07	0.61
		Left Cheek	0.146	0.864	0.357	0.104	1.01	0.61
		Left Tilted	0.062	0.634	0.357	0.076	0.70	0.50

16.2 Hotspot Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	1+2			1+3+4		
			WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	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)						
GSM	GSM850	Front	1.146	0.306	0.052	0.017	1.45			1.22		
		Back	1.316	0.461	1.167	0.039	1.78	0.01	#1	2.52	0.03	#2
		Left Side	0.438				0.44			0.44		
		Right Side	0.082	0.292	0.057	0.003	0.37			0.14		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	0.996				1.00			1.00		
	GSM1900	Front	1.200	0.306	0.052	0.017	1.51			1.27		
		Back	1.122	0.461	1.167	0.039	1.58			2.33	0.02	#3
		Left Side	0.038				0.04			0.04		
		Right Side	0.062	0.292	0.057	0.003	0.35			0.12		
		Top Side		0.461	0.300	0.017	0.46			0.32		
WCDMA	Band V	Front	1.230	0.306	0.052	0.017	1.54			1.30		
		Back	1.301	0.461	1.167	0.039	1.76	0.02	#4	2.51	0.03	#5
		Left Side	0.163				0.16			0.16		
		Right Side	0.557	0.292	0.057	0.003	0.85			0.62		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.010				1.01			1.01		
	Band IV	Front	1.433	0.306	0.052	0.017	1.74	0.01	#6	1.50		
		Back	1.433	0.461	1.167	0.039	1.89	0.02	#7	2.64	0.03	#8
		Left Side	0.047				0.05			0.05		
		Right Side	0.094	0.292	0.057	0.003	0.39			0.15		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.409				1.41			1.41		
	Band II	Front	1.441	0.306	0.052	0.017	1.75	0.02	#9	1.51		
		Back	1.425	0.461	1.167	0.039	1.89	0.02	#10	2.63	0.03	#11
		Left Side	0.050				0.05			0.05		
		Right Side	0.092	0.292	0.057	0.003	0.38			0.15		
		Top Side		0.461	0.300	0.017	0.46			0.32		
CDMA2000	BC10	Front	1.189	0.306	0.052	0.017	1.50			1.26		
		Back	1.223	0.461	1.167	0.039	1.68	0.01	#12	2.43	0.02	#13
		Left Side	0.222				0.22			0.22		
		Right Side	0.563	0.292	0.057	0.003	0.86			0.62		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.018				1.02			1.02		
	BC0	Front	1.394	0.306	0.052	0.017	1.70	0.01	#14	1.46		
		Back	1.383	0.461	1.167	0.039	1.84	0.02	#15	2.59	0.03	#16
		Left Side	0.193				0.19			0.19		
		Right Side	0.499	0.292	0.057	0.003	0.79			0.56		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.114				1.11			1.11		
	BC1	Front	0.795	0.306	0.052	0.017	1.10			0.86		
		Back	0.789	0.461	1.167	0.039	1.25			2.00	0.02	#17
		Left Side	0.052				0.05			0.05		
		Right Side	0.087	0.292	0.057	0.003	0.38			0.15		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.338				1.34			1.34		



FCC SAR Test Report

Report No. : FA892801

WWAN Band		Exposure Position	1	2	3	4	1+2			1+3+4		
			WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	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)						
LTE	Band 71	Front	0.535	0.306	0.052	0.017	0.84			0.60		
		Back	0.579	0.461	1.167	0.039	1.04			1.79	0.02	#18
		Left Side	0.154				0.15			0.15		
		Right Side	0.331	0.292	0.057	0.003	0.62			0.39		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	0.385				0.39			0.39		
	Band 12	Front	1.034	0.306	0.052	0.017	1.34			1.10		
		Back	1.101	0.461	1.167	0.039	1.56			2.31	0.02	#19
		Left Side	0.343				0.34			0.34		
		Right Side	0.665	0.292	0.057	0.003	0.96			0.73		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	0.764				0.76			0.76		
	Band 13	Front	1.281	0.306	0.052	0.017	1.59			1.35		
		Back	1.353	0.461	1.167	0.039	1.81	0.02	#20	2.56	0.03	#21
		Left Side	0.359				0.36			0.36		
		Right Side	0.789	0.292	0.057	0.003	1.08			0.85		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	0.906				0.91			0.91		
	Band 14	Front	1.289	0.306	0.052	0.017	1.60	0.01	#22	1.36		
		Back	1.391	0.461	1.167	0.039	1.85	0.02	#23	2.60	0.03	#24
		Left Side	0.351				0.35			0.35		
		Right Side	0.819	0.292	0.057	0.003	1.11			0.88		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	0.916				0.92			0.92		
	Band 26	Front	1.117	0.306	0.052	0.017	1.42			1.19		
		Back	1.258	0.461	1.167	0.039	1.72	0.01	#25	2.46	0.03	#26
		Left Side	0.189				0.19			0.19		
		Right Side	0.528	0.292	0.057	0.003	0.82			0.59		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	0.886				0.89			0.89		
	Band 66	Front	1.355	0.306	0.052	0.017	1.66	0.01	#27	1.42		
		Back	1.332	0.461	1.167	0.039	1.79	0.02	#28	2.54	0.03	#29
		Left Side	0.050				0.05			0.05		
		Right Side	0.098	0.292	0.057	0.003	0.39			0.16		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.419				1.42			1.42		
	Band 25	Front	1.212	0.306	0.052	0.017	1.52			1.28		
		Back	1.263	0.461	1.167	0.039	1.72	0.02	#30	2.47	0.03	#31
		Left Side	0.036				0.04			0.04		
		Right Side	0.077	0.292	0.057	0.003	0.37			0.14		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.362				1.36			1.36		
	Band 30	Front	1.021	0.306	0.052	0.017	1.33			1.09		
		Back	1.284	0.461	1.167	0.039	1.75	0.02	#32	2.49	0.03	#33
		Left Side	0.953				0.95			0.95		
		Right Side		0.292	0.057	0.003	0.29			0.06		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.391				1.39			1.39		
	Band 7	Front	1.182	0.306	0.052	0.017	1.49			1.25		
		Back	1.295	0.461	1.167	0.039	1.76	0.02	#34	2.50	0.03	#35
		Left Side	0.476				0.48			0.48		
		Right Side		0.292	0.057	0.003	0.29			0.06		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.414				1.41			1.41		
	Band 41	Front	0.946	0.306	0.052	0.017	1.25			1.02		
		Back	1.399	0.461	1.167	0.039	1.86	0.02	#36	2.61	0.03	#37
		Left Side	0.514				0.51			0.51		
		Right Side		0.292	0.057	0.003	0.29			0.06		
		Top Side		0.461	0.300	0.017	0.46			0.32		
		Bottom Side	1.347				1.35			1.35		

16.3 Body-Worn Accessory Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	1+2			1+3+4		
			WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	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)						
GSM	GSM850	Front	1.146	0.306	0.052	0.017	1.45			1.22		
		Back	1.316	0.461	1.167	0.039	1.78	0.01	#1	2.52	0.03	#2
		Back with Headset	1.245				1.25			1.25		
	GSM1900	Front	1.200	0.306	0.052	0.017	1.51			1.27		
		Back	1.122	0.461	1.167	0.039	1.58			2.33	0.02	#3
		Front with Headset	0.842				0.84			0.84		
WCDMA	Band V	Front	1.230	0.306	0.052	0.017	1.54			1.30		
		Back	1.301	0.461	1.167	0.039	1.76	0.02	#4	2.51	0.03	#5
		Front with Headset	1.289				1.29			1.29		
		Back with Headset	1.347				1.35			1.35		
	Band IV	Front	1.433	0.306	0.052	0.017	1.74	0.01	#6	1.50		
		Back	1.433	0.461	1.167	0.039	1.89	0.02	#7	2.64	0.03	#8
		Front with Headset	1.388				1.39			1.39		
		Back with Headset	1.392				1.39			1.39		
	Band II	Front	1.441	0.306	0.052	0.017	1.75	0.02	#9	1.51		
		Back	1.425	0.461	1.167	0.039	1.89	0.02	#10	2.63	0.03	#11
		Front with Headset	1.406				1.41			1.41		
		Back with Headset	1.425				1.43			1.43		
CDMA2000	BC10	Front	1.198	0.306	0.052	0.017	1.50			1.27		
		Back	1.243	0.461	1.167	0.039	1.70	0.01	#38	2.45	0.03	#39
		Back with Headset	1.231				1.23			1.23		
	BC0	Front	1.414	0.306	0.052	0.017	1.72	0.01	#40	1.48		
		Back	1.335	0.461	1.167	0.039	1.80	0.02	#41	2.54	0.03	#42
		Front with Headset	1.391				1.39			1.39		
		Back with Headset	1.425				1.43			1.43		
	BC1	Front	1.117	0.306	0.052	0.017	1.42			1.19		
		Back	1.138	0.461	1.167	0.039	1.60	0.01	#43	2.34	0.02	#44
LTE	Band 71	Front	0.535	0.306	0.052	0.017	0.84			0.60		
		Back	0.579	0.461	1.167	0.039	1.04			1.79	0.02	#18
	Band 12	Front	1.034	0.306	0.052	0.017	1.34			1.10		
		Back	1.101	0.461	1.167	0.039	1.56			2.31	0.02	#19
	Band 13	Front	1.281	0.306	0.052	0.017	1.59			1.35		
		Back	1.353	0.461	1.167	0.039	1.81	0.02	#20	2.56	0.03	#21
		Front with Headset	1.251				1.25			1.25		
		Back with Headset	1.334				1.33			1.33		
	Band 14	Front	1.289	0.306	0.052	0.017	1.60	0.01	#22	1.36		
		Back	1.391	0.461	1.167	0.039	1.85	0.02	#23	2.60	0.03	#24
		Front with Headset	1.276				1.28			1.28		
		Back with Headset	1.366				1.37			1.37		
	Band 26	Front	1.117	0.306	0.052	0.017	1.42			1.19		
		Back	1.258	0.461	1.167	0.039	1.72	0.01	#25	2.46	0.03	#26
		Back with Headset	1.106				1.11			1.11		
	Band 66	Front	1.355	0.306	0.052	0.017	1.66	0.01	#27	1.42		
		Back	1.332	0.461	1.167	0.039	1.79	0.02	#28	2.54	0.03	#29
		Front with Headset	1.424				1.42			1.42		
		Back with Headset	1.435				1.44			1.44		
	Band 25	Front	1.212	0.306	0.052	0.017	1.52			1.28		
		Back	1.263	0.461	1.167	0.039	1.72	0.02	#30	2.47	0.03	#31
		Front with Headset	1.333				1.33			1.33		
		Back with Headset	1.408				1.41			1.41		
	Band 30	Front	1.021	0.306	0.052	0.017	1.33			1.09		
		Back	1.284	0.461	1.167	0.039	1.75	0.02	#32	2.49	0.03	#33
		Back with Headset	1.272				1.27			1.27		
	Band 7	Front	1.182	0.306	0.052	0.017	1.49			1.25		
		Back	1.295	0.461	1.167	0.039	1.76	0.02	#34	2.50	0.03	#35
		Back with Headset	1.260				1.26			1.26		
	Band 41	Front	0.946	0.306	0.052	0.017	1.25			1.02		
		Back	1.399	0.461	1.167	0.039	1.86	0.02	#36	2.61	0.03	#37
		Back with Headset	1.307				1.31			1.31		

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	Back	1.663	1.034	2.70		
	GSM1900	Front	3.276		3.28		
		Back	2.434	1.034	3.47		
		Bottom Side	2.457		2.46		
WCDMA	Band V	Front	2.373		2.37		
		Back	2.312	1.034	3.35		
		Bottom Side	1.375		1.38		
	Band IV	Front	2.956		2.96		
		Back	2.919	1.034	3.95		
		Bottom Side	3.519		3.52		
	Band II	Front	3.131		3.13		
		Back	2.949	1.034	3.98		
		Bottom Side	3.576		3.58		
CDMA2000	BC10	Front	1.962		1.96		
	BC0	Front	2.161		2.16		
		Back	2.082	1.034	3.12		
	BC1	Front	2.958		2.96		
		Back	2.799	1.034	3.83		
		Bottom Side	3.629		3.63		
LTE	Band 13	Front	1.500		1.50		
		Back	1.393	1.034	2.43		
	Band 14	Front	2.285		2.29		
		Back	2.004	1.034	3.04		
	Band 26	Back	1.637	1.034	2.67		
		Front	2.750		2.75		
		Back	2.554	1.034	3.59		
	Band 66	Bottom Side	3.370		3.37		
		Front	3.021		3.02		
		Back	2.719	1.034	3.75		
	Band 25	Bottom Side	3.563		3.56		
		Front	2.538		2.54		
		Back	3.243	1.034	4.28	0.06	#45
		Left Side	1.120		1.12		
	Band 30	Bottom Side	1.939		1.94		
		Front	2.563		2.56		
		Back	3.029	1.034	4.06	0.06	#46
		Bottom Side	1.143		1.14		
	Band 7	Back	3.456	1.034	4.49	0.06	#47
		Bottom Side	1.211		1.21		

Remark:

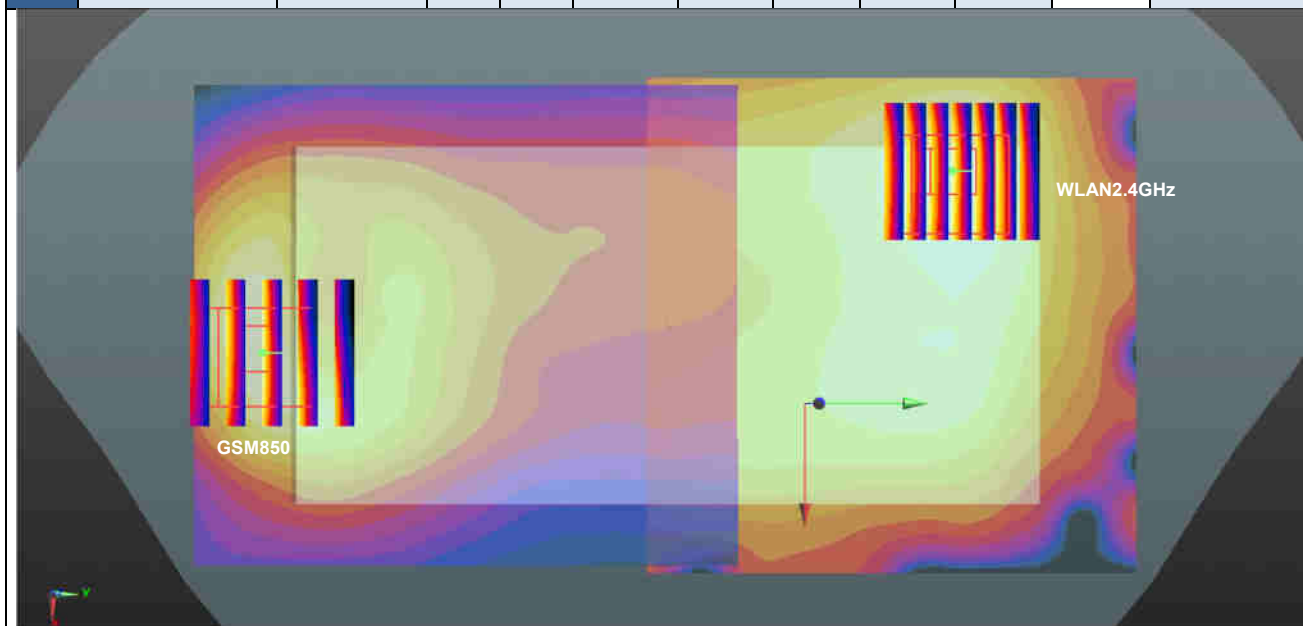
- For Bluetooth Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.
- If SPLSR ≤ 0.10 for 10g SAR, simultaneously transmission SAR measurement is not necessary.

16.5 SPLSR Evaluation and Analysis

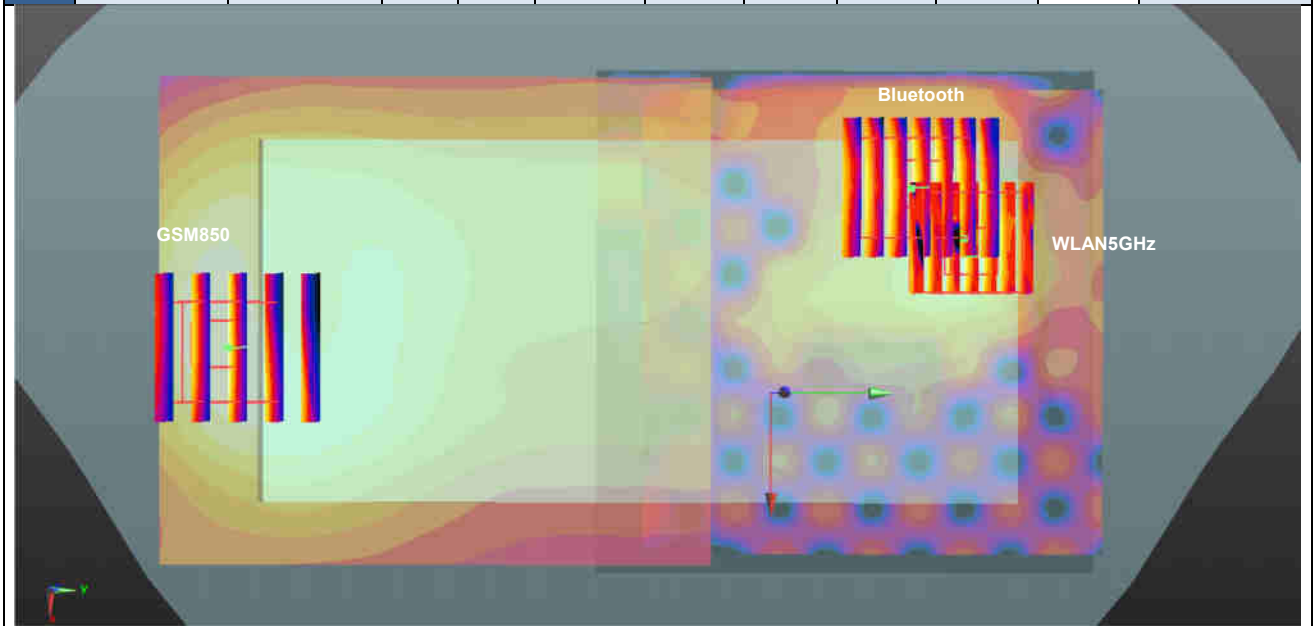
General Note:

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.

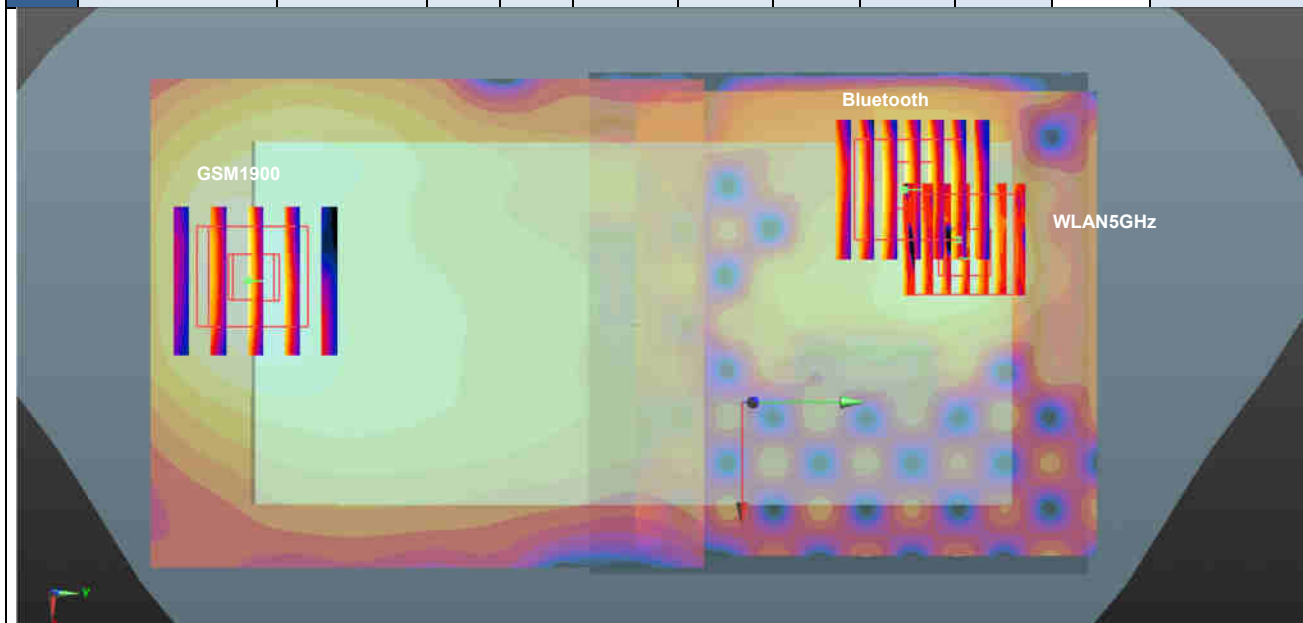
Case #1	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	GSM850	Back	1.316	5	6	-91.6	-0.7	158.8	1.78	0.01	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



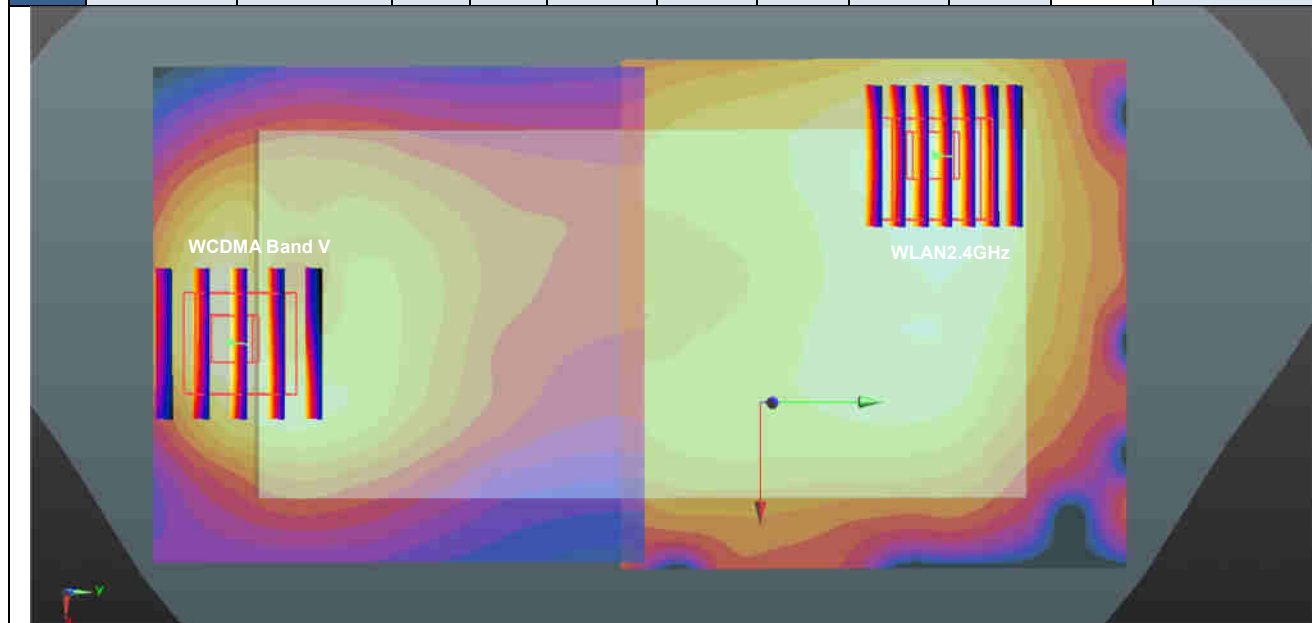
Case #2	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	GSM850	Back	1.316	5	6	-91.6	-0.7	157.1	2.52	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	GSM850	Back	1.316	5	6	-91.6	-0.7	163.9	2.52	0.02	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



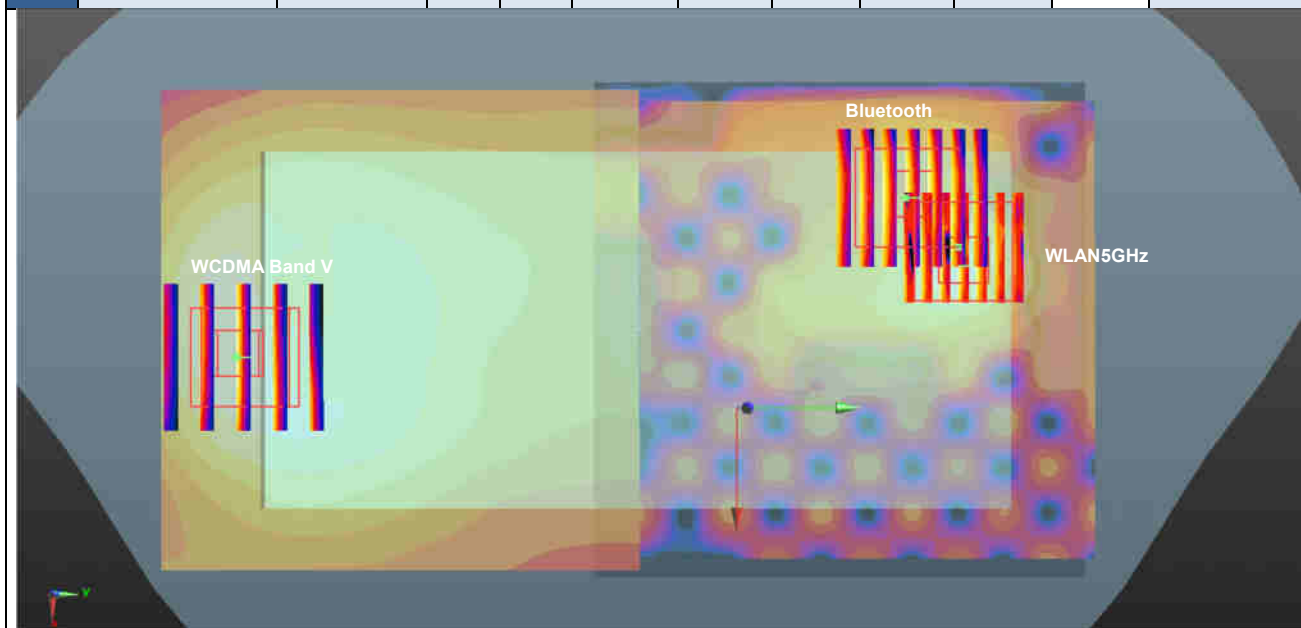
Case #3	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	GSM1900	Back	1.122	5	-10.6	-82.4	-0.58	145.1	2.33	0.02	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	GSM1900	Back	1.122	5	-10.6	-82.4	-0.58	153.3	2.33	0.02	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



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				
	WCDMA Band V	Back	1.301	5	6	-86.9	-0.61	154.3	1.76	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



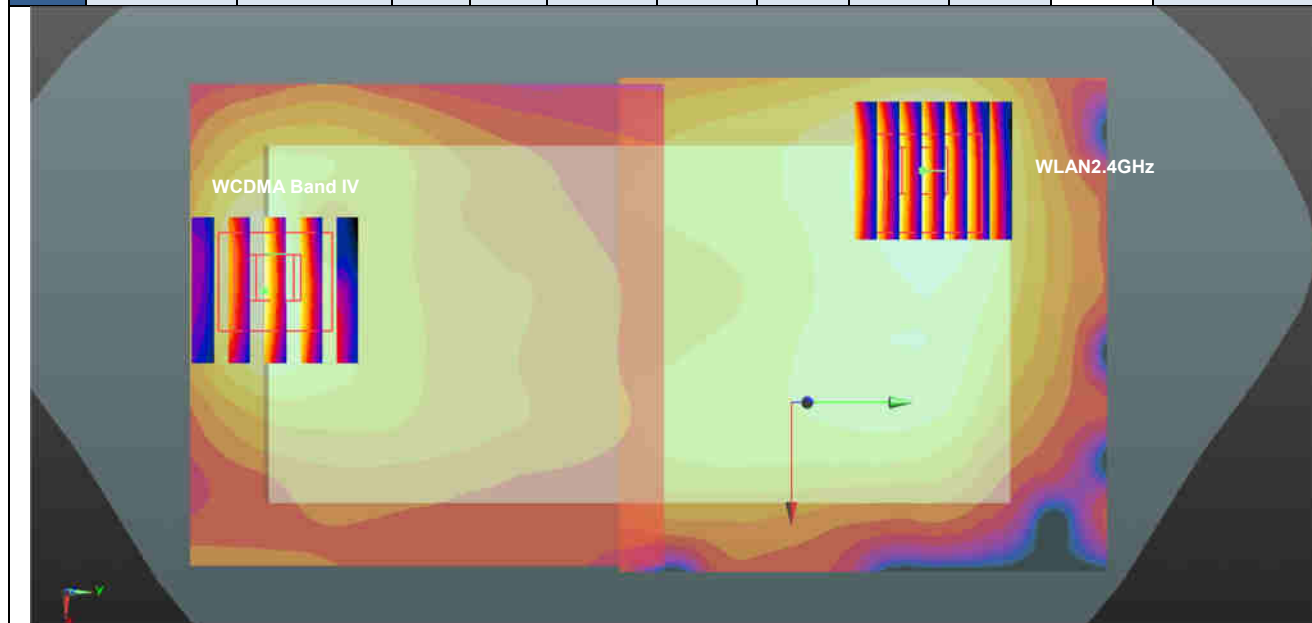
Case #5	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA Band V	Back	1.301	5	6	-86.9	-0.61	152.6	2.51	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WCDMA Band V	Back	1.301	5	6	-86.9	-0.61	159.3	2.51	0.02	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



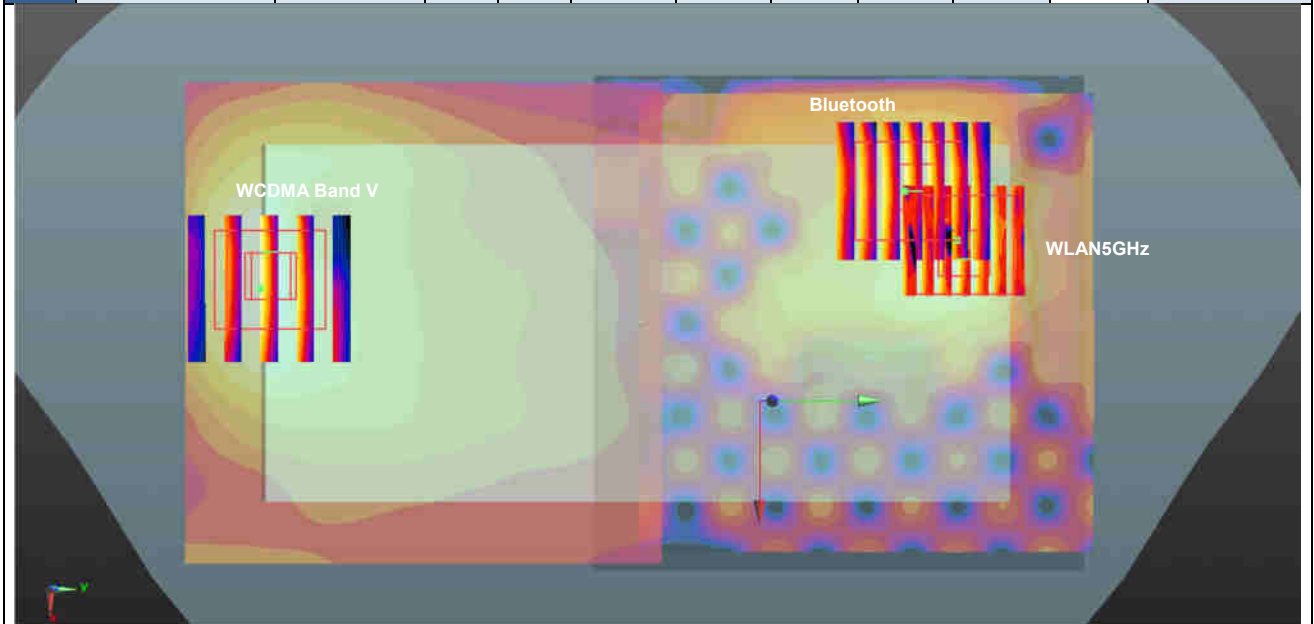
Case #6	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA Band IV		1.433	5	-4.4	-83.3	-0.44	153.6	1.74	0.01	Not required
	WLAN2.4GHz		0.306	5	28.4	66.8	-1.08				



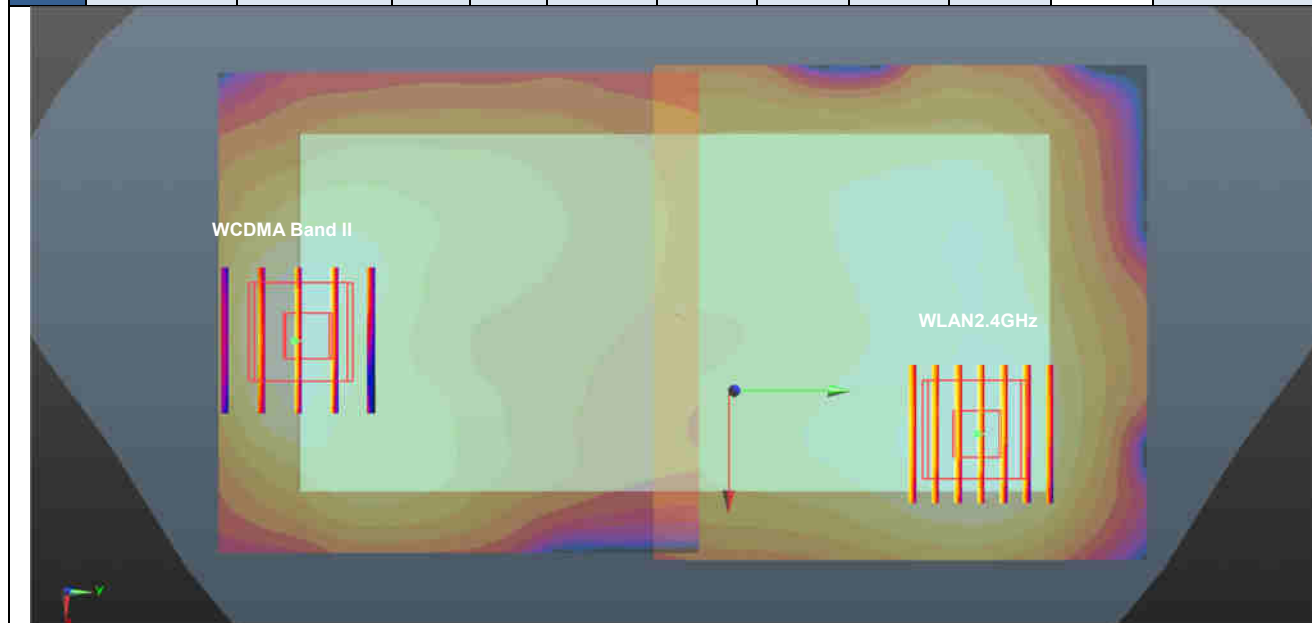
Case #7	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA Band IV	Back	1.433	5	X	Y	Z	160.3	1.89	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



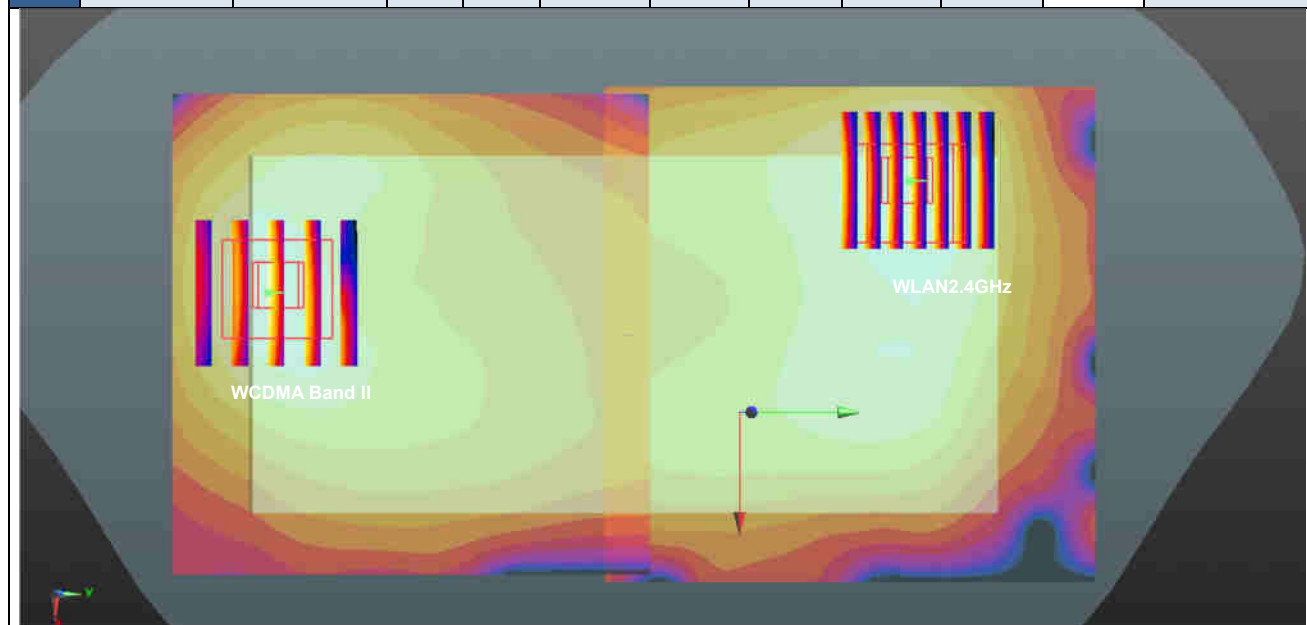
Case #8	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA Band IV	Back	1.433	5	-107	-80.3	-0.53	161.4	2.64	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WCDMA Band IV	Back	1.433	5	-107	-80.3	-0.53	176.2	2.64	0.02	Not required
	WLAN5GHz		0.039	5	-29.8	61.4	-0.62				
	Bluetooth		1.167	5	-16.4	70.8	-0.93				



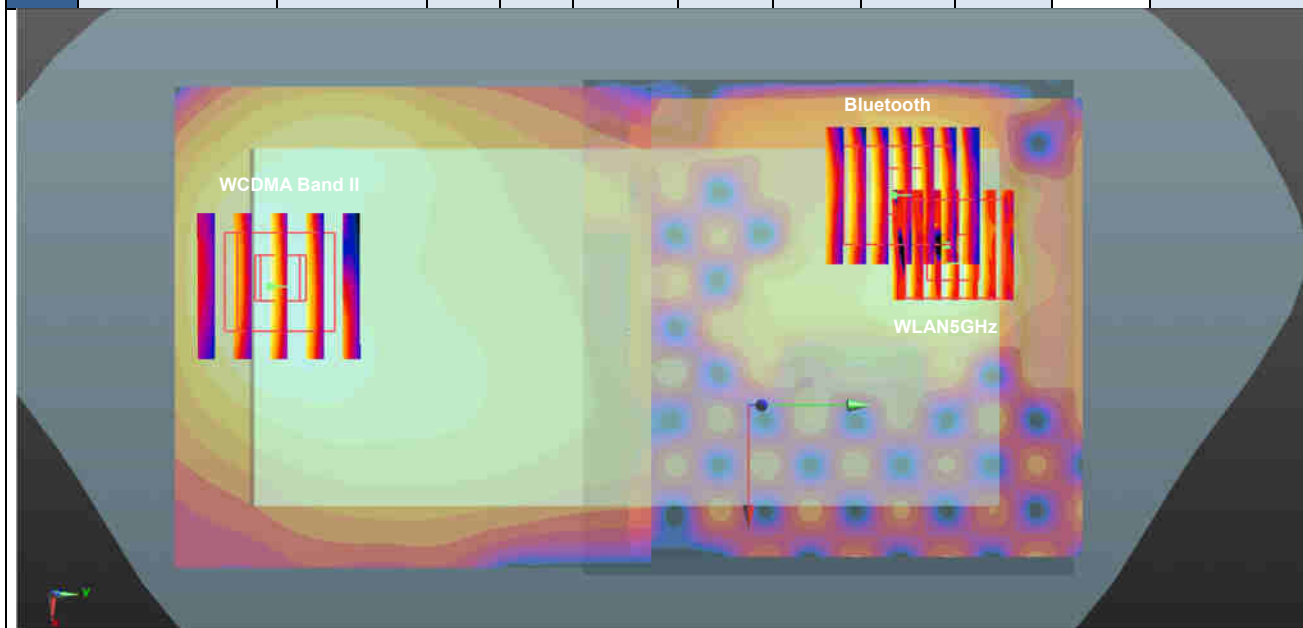
Case #9	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA Band II	Front	1.441	5	X	Y	Z	147.2	1.75	0.02	Not required
	WLAN2.4GHz		0.306	5	28.4	66.8	-1.08				



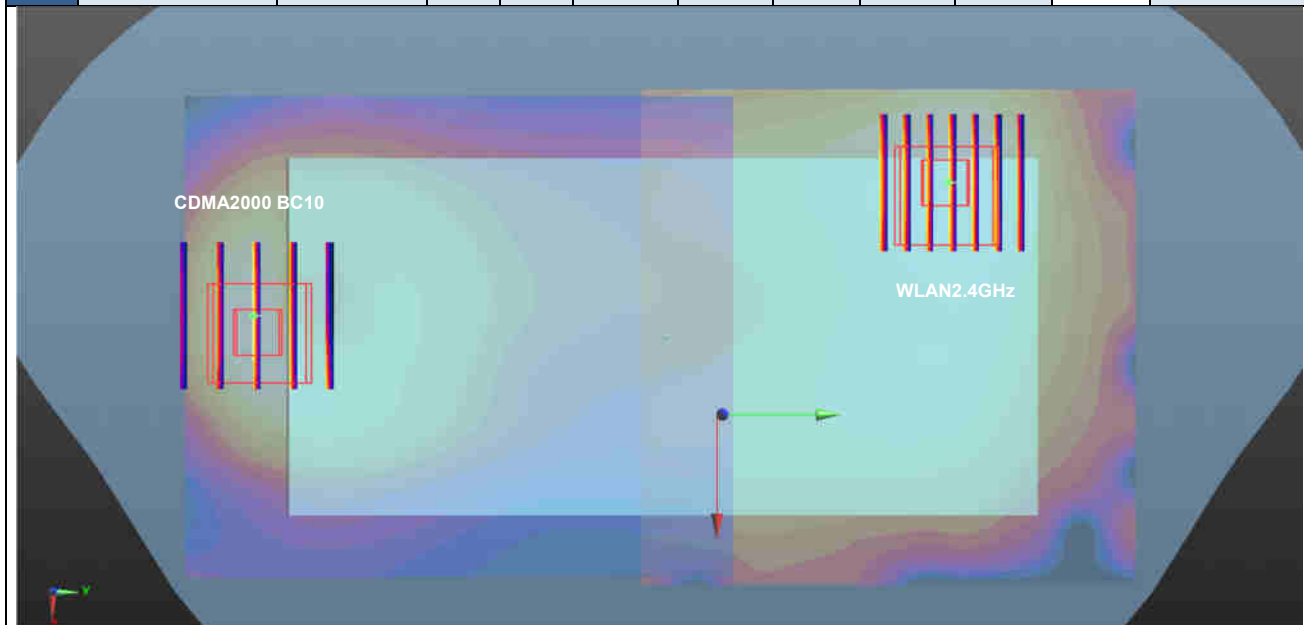
Case #10	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	WCDMA Band II	Back	1.425	5	X	Y	Z	155.8	1.89	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



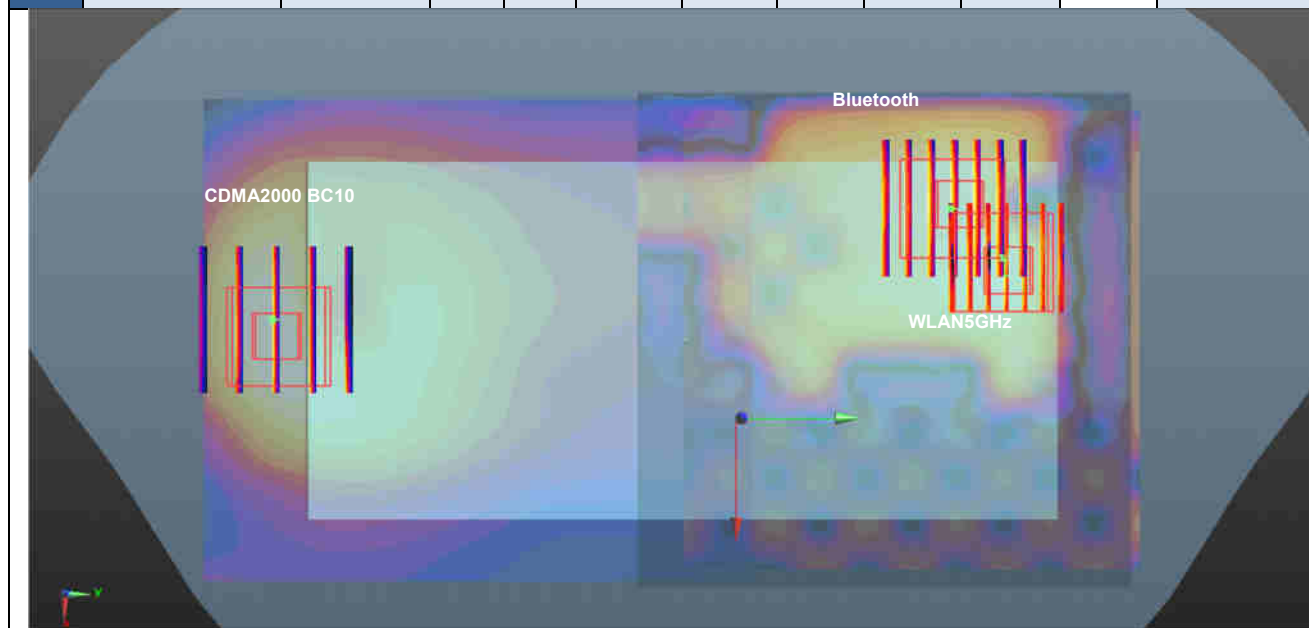
Case #11	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case #11	WCDMA Band II	Back	1.425	5	-106	-75.8	-0.71	156.9	2.63	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WCDMA Band II	Back	1.425	5	-106	-75.8	-0.71	171.8	2.63	0.02	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



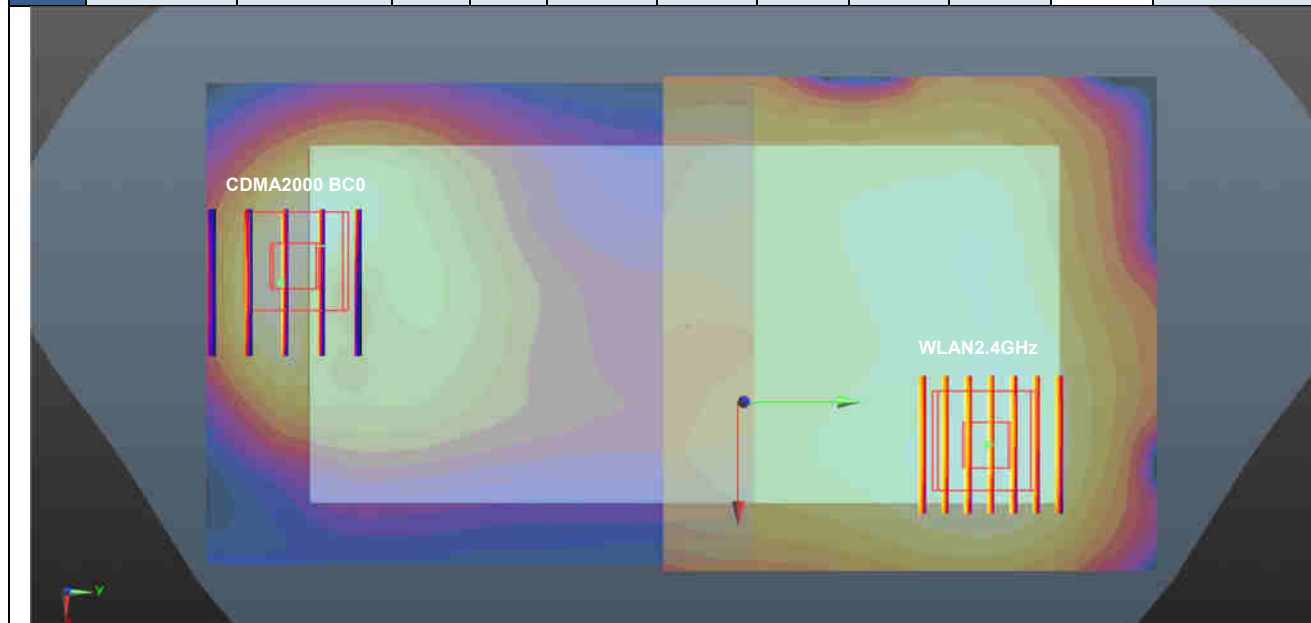
Case #12	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC10	Back	1.223	5	0.3	-88.4	-0.87	154.4	1.68	0.01	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



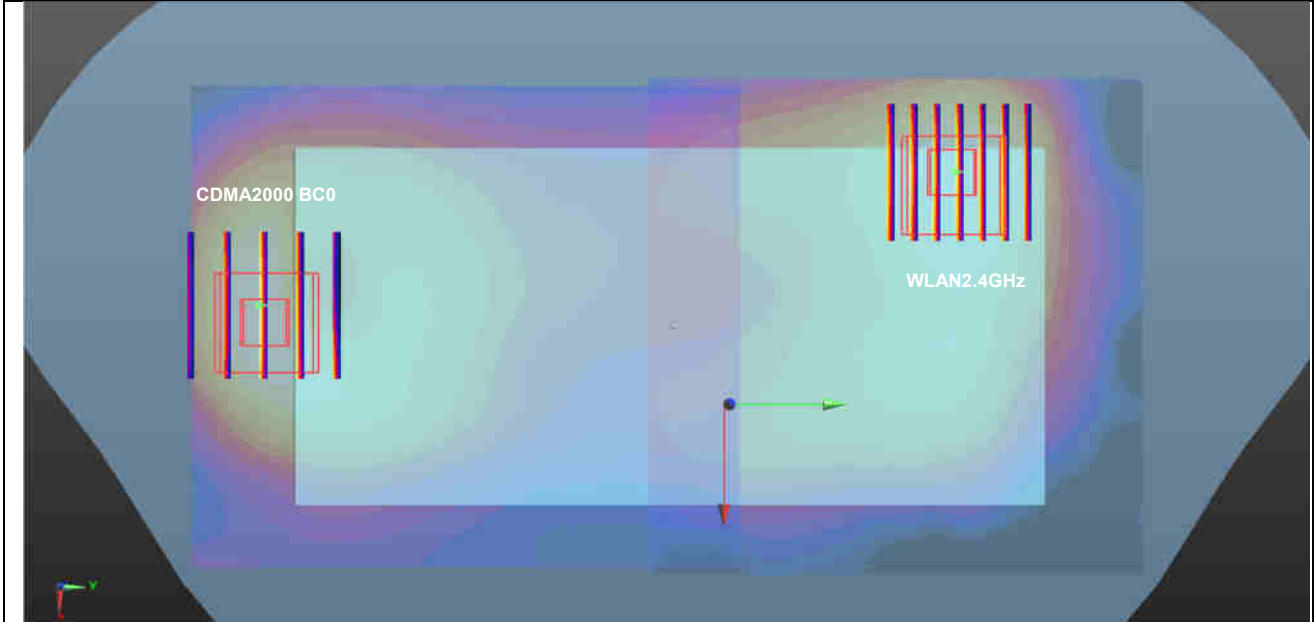
Case #13	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC10	Back	1.223	5	0.3	-88.4	-0.87	152.8	2.43	0.02	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	CDMA2000 BC10	Back	1.223	5	0.3	-88.4	-0.87	160.1	2.43	0.02	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



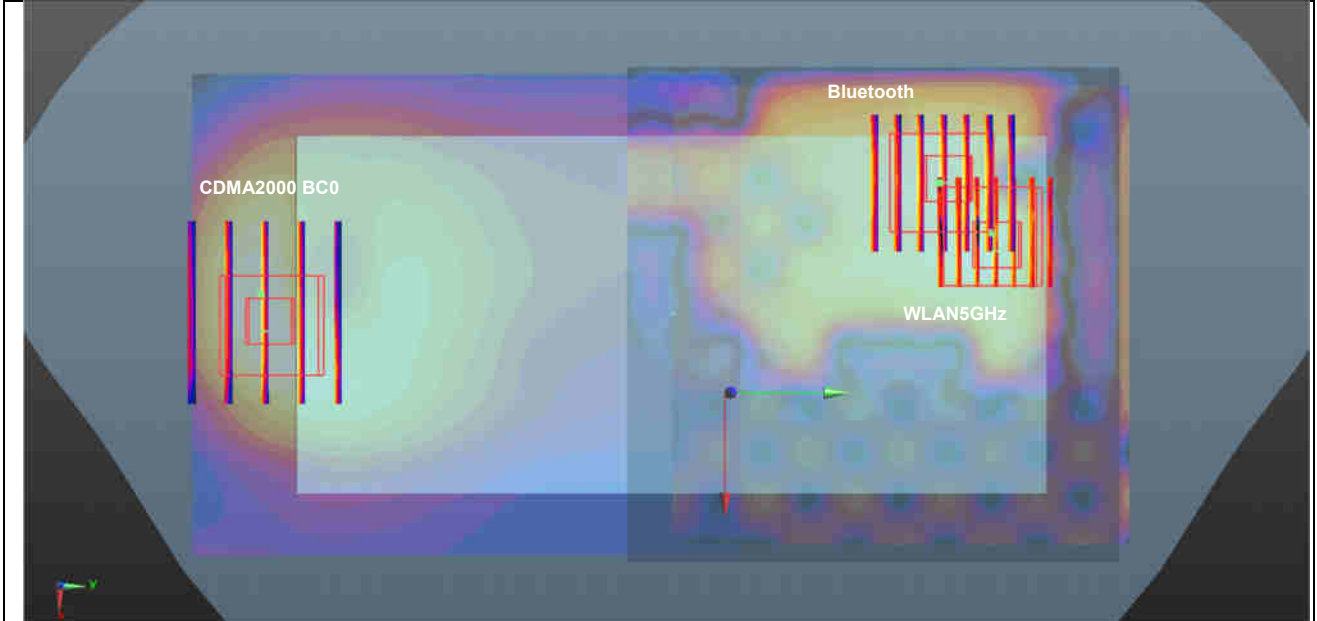
Case #14	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Front	1.394	5	-12.2	-83.7	-0.96	155.9	1.70	0.01	Not required
	WLAN2.4GHz		0.306	5	28.4	66.8	-1.08				



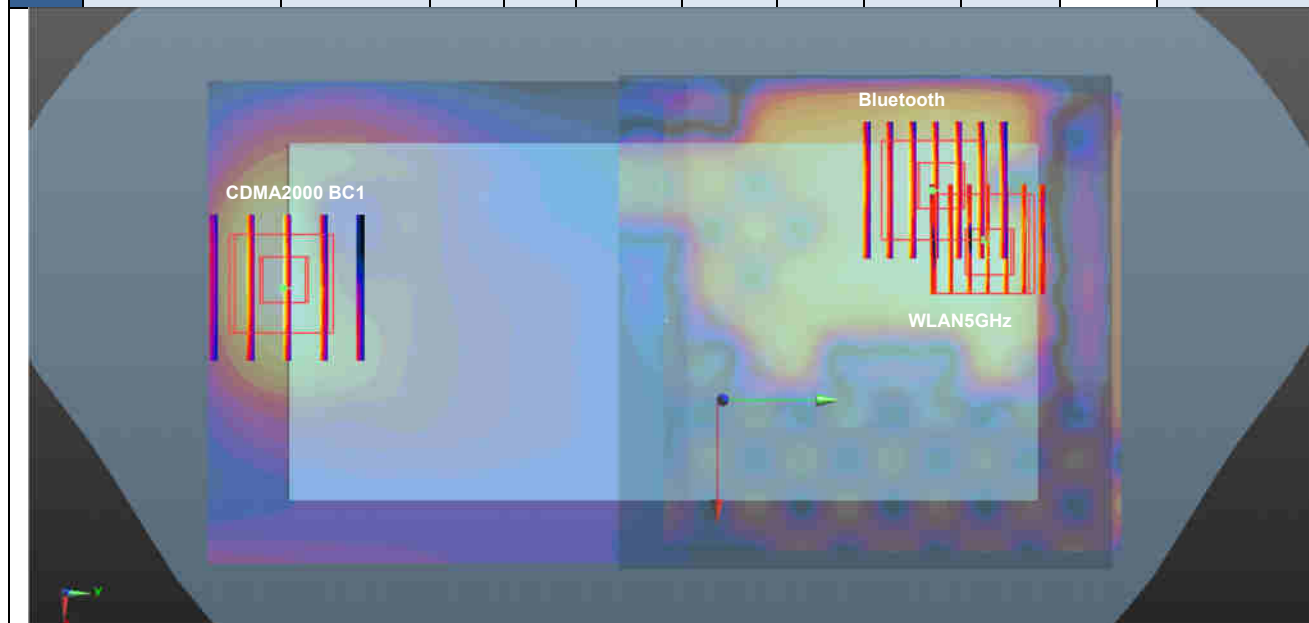
Case #15	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Back	1.383	5	1.9	-86.8	-0.92	153.2	1.84	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



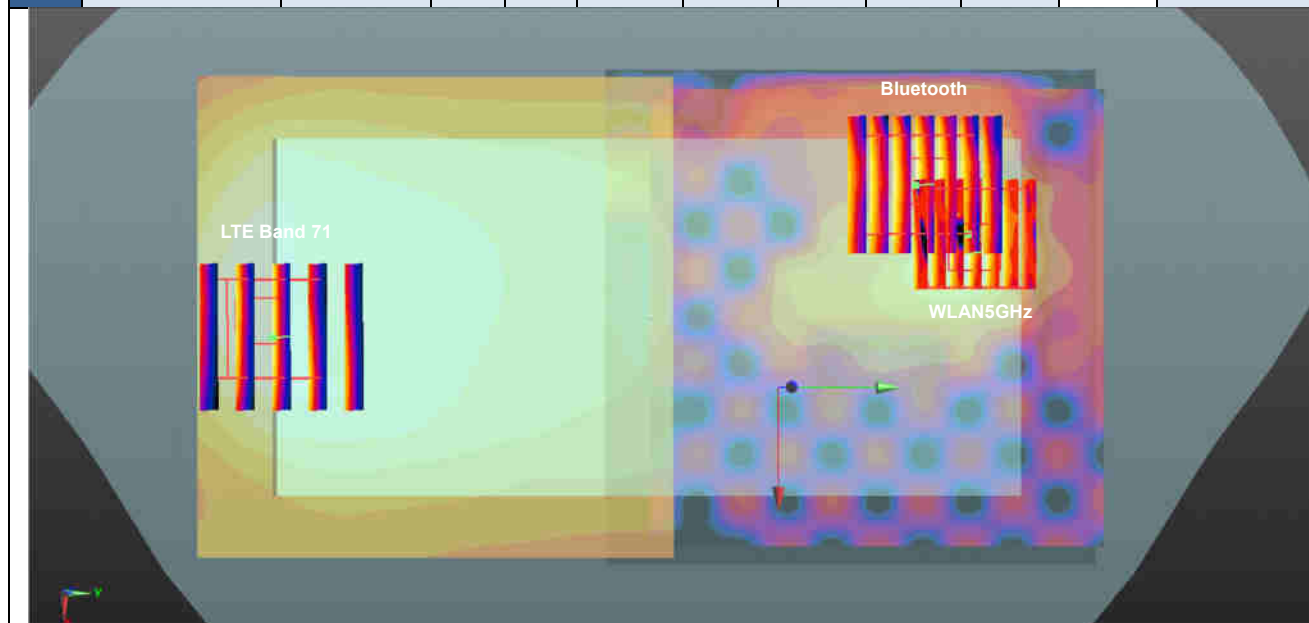
Case #16	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Back	1.383	5	1.9	-86.8	-0.92	151.6	2.59	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	CDMA2000 BC0	Back	1.383	5	1.9	-86.8	-0.92	158.7	2.59	0.03	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



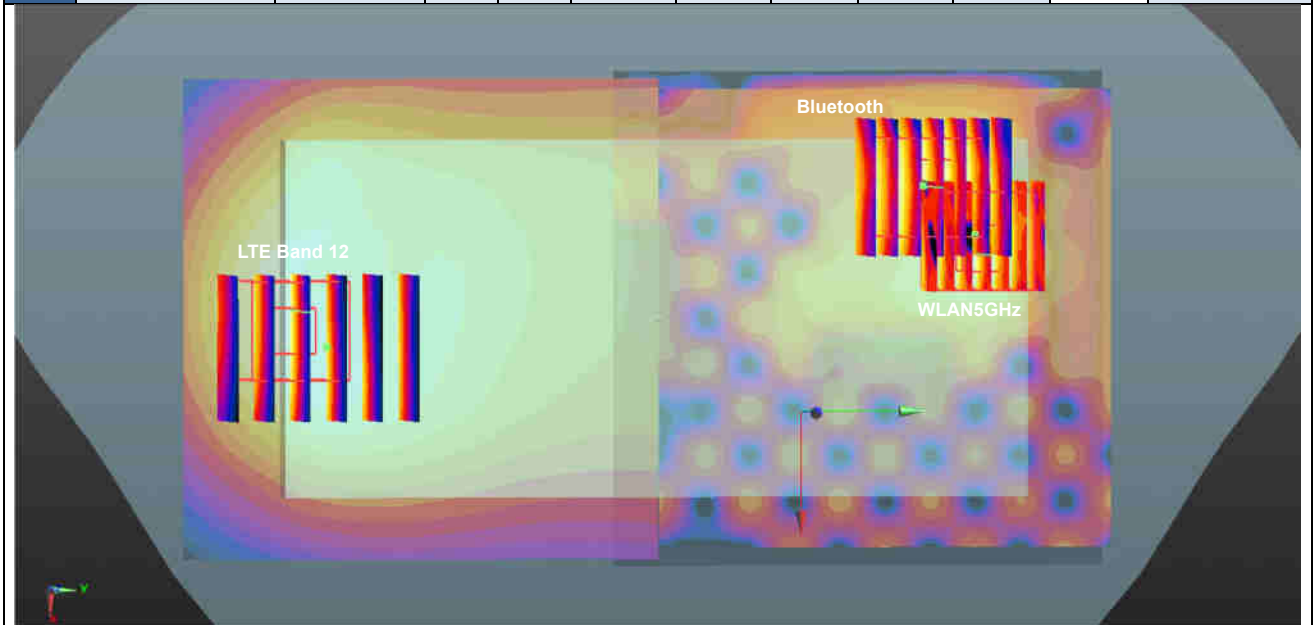
Case #17	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC1	Back	0.789	5	-10.7	-83.5	-0.47	146.2	2.00	0.02	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	CDMA2000 BC1	Back	0.789	5	-10.7	-83.5	-0.47	154.4	2.00	0.02	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



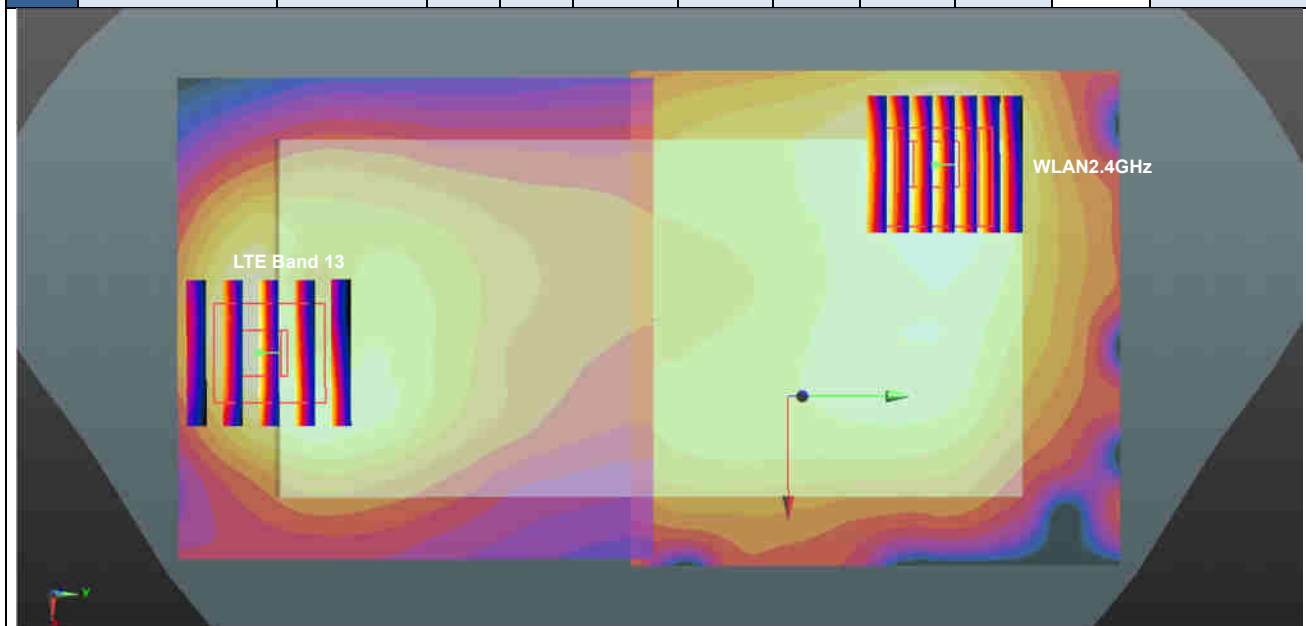
Case #18	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 71	Back	0.579	5	2.9	-85.1	-0.78	150.1	1.79	0.02	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 71	Back	0.579	5	2.9	-85.1	-0.78	157.1	1.79	0.02	Not required
	WLAN5GHz		0.039	5	-29.8	61.4	-0.62				
	Bluetooth		1.167	5	-16.4	70.8	-0.93				



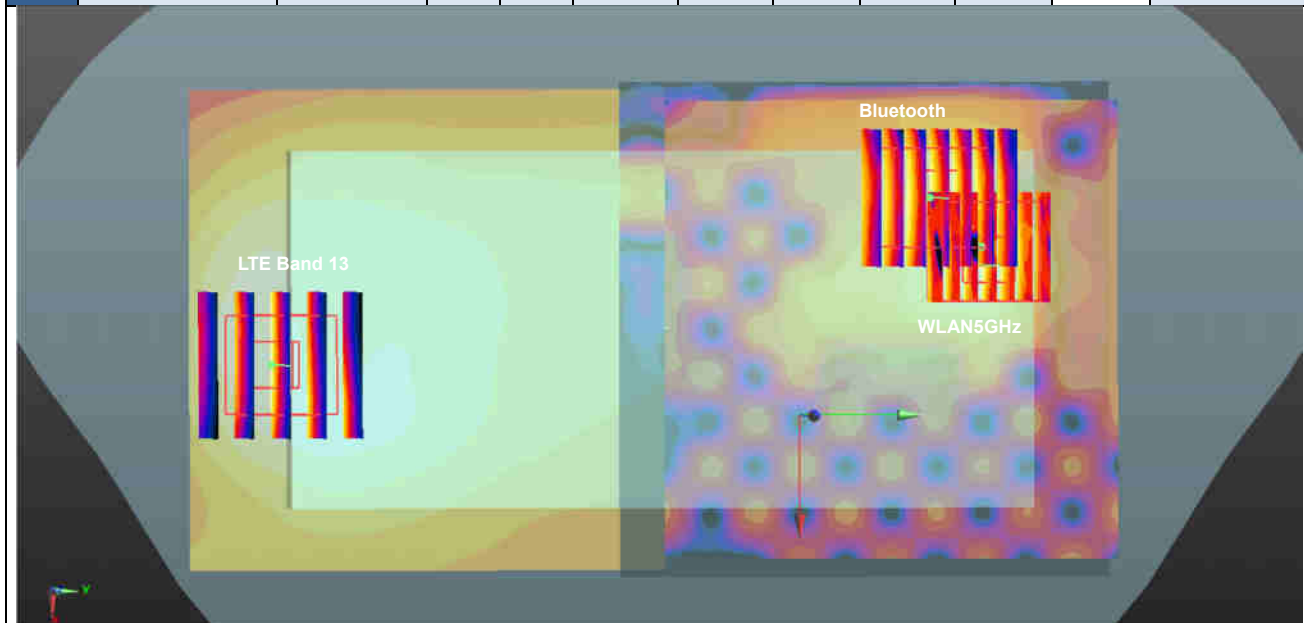
Case #19	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 12	Back	1.101	5	-0.4	-81.5	-0.65	145.9	2.31	0.02	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 12	Back	1.101	5	-0.4	-81.5	-0.65	153.1	2.31	0.02	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



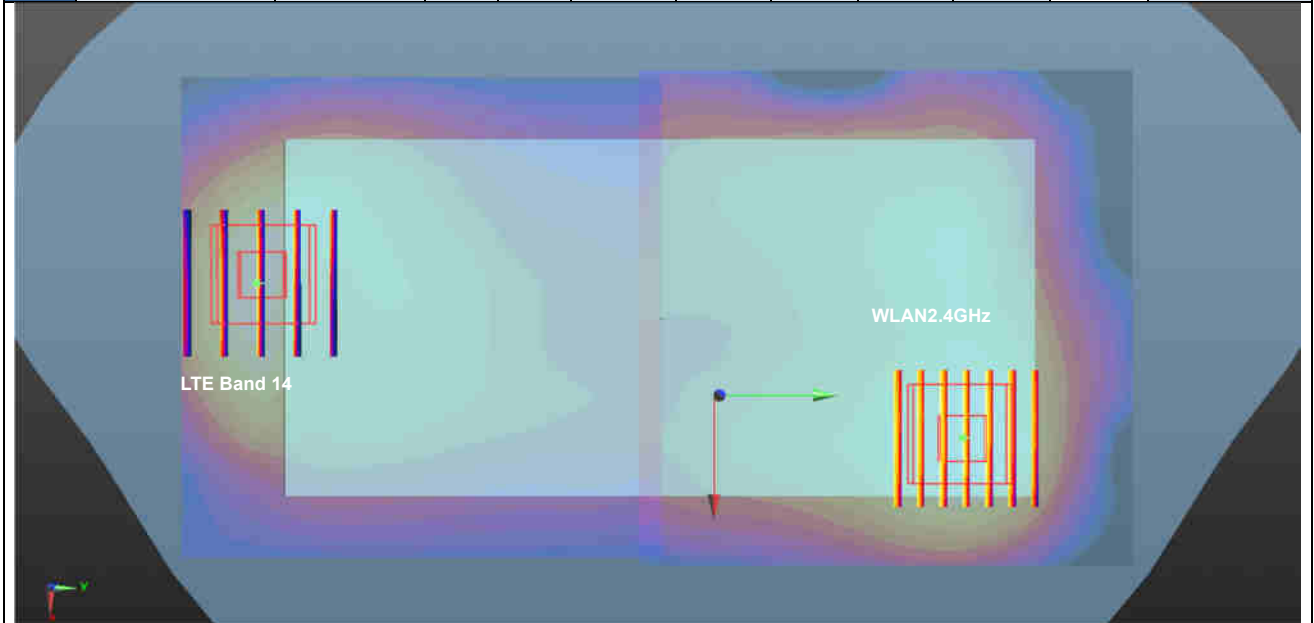
Case #20	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 13	Back	1.353	5	7.5	-87	-0.62	154.8	1.81	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



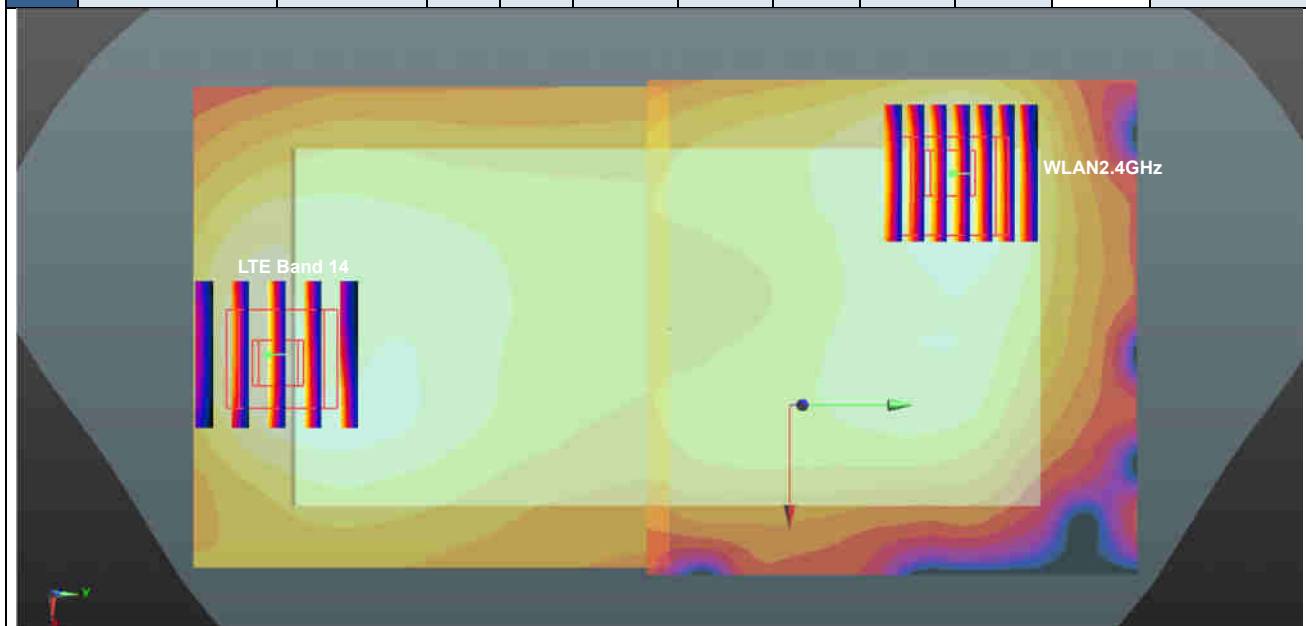
Case #21	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 13	Back	1.353	5	7.5	-87	-0.62	153.0	2.56	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 13	Back	1.353	5	7.5	-87	-0.62	159.6	2.56	0.03	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



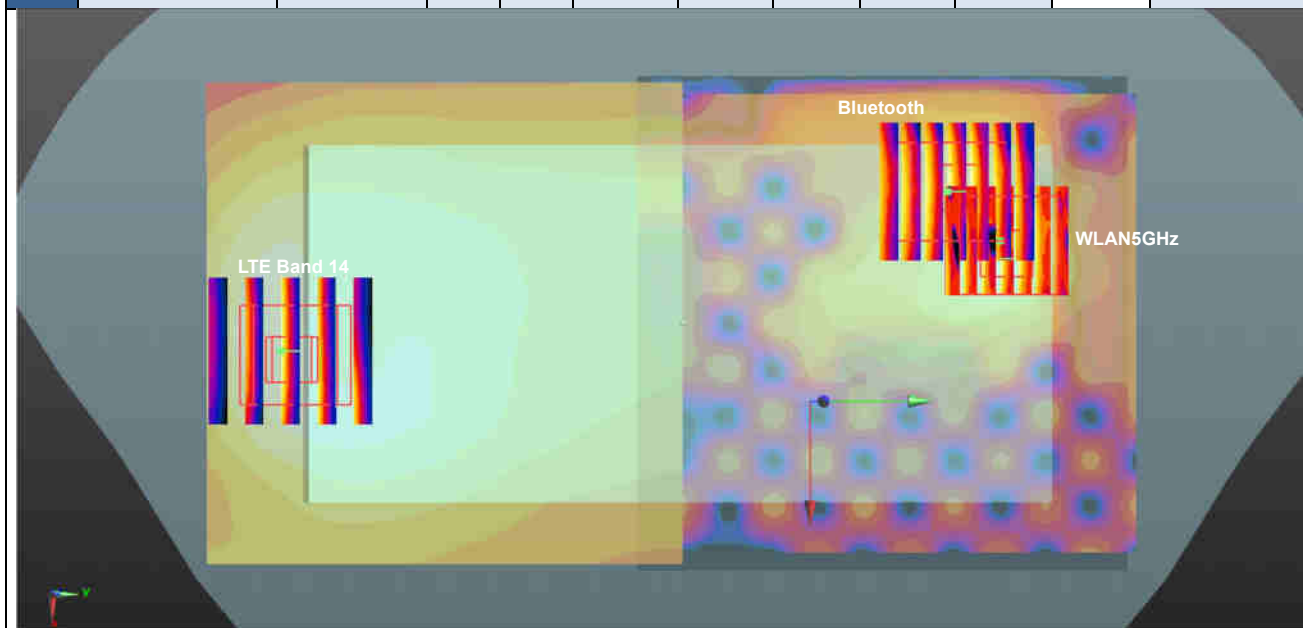
Case #22	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 14	Front	1.289	5	-7.5	-86.9	-0.8	157.8	1.60	0.01	157.8
	WLAN2.4GHz		0.306	5	28.4	66.8	-1.08				



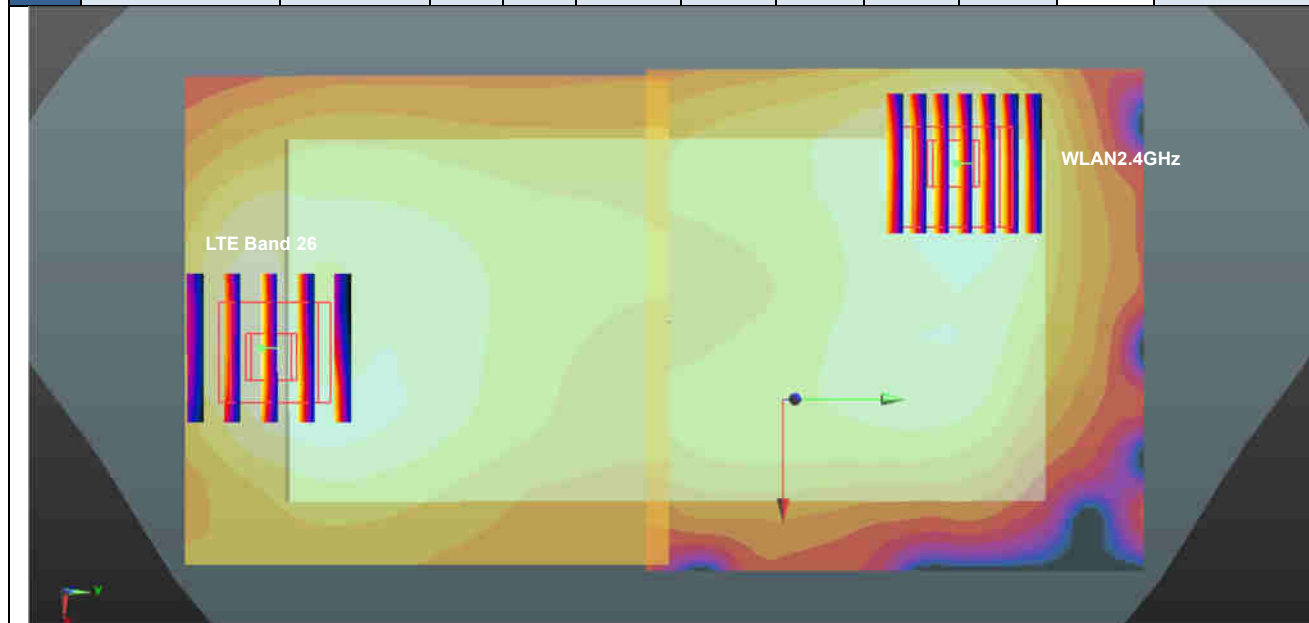
Case #23	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 14	Back	1.391	5	7.6	-86.9	-0.62	154.7	1.85	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



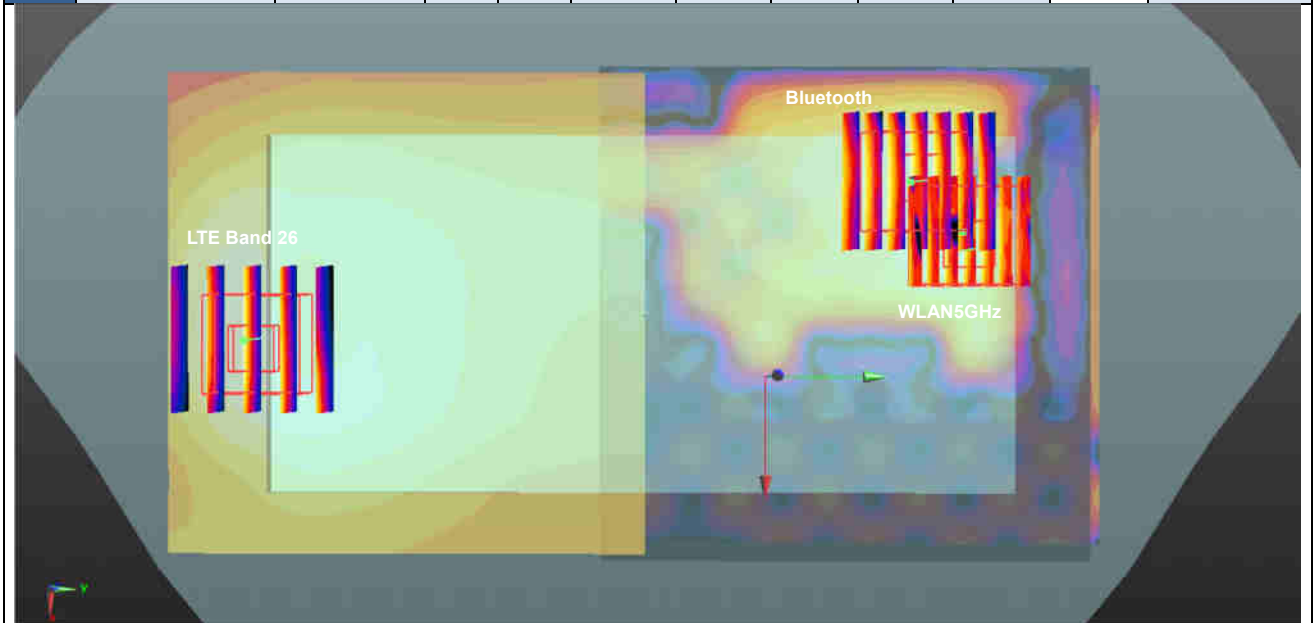
Case #24	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case #24	LTE Band 14	Back	1.391	5	7.6	-86.9	-0.62	152.9	2.60	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 14	Back	1.391	5	7.6	-86.9	-0.62	159.5	2.60	0.03	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



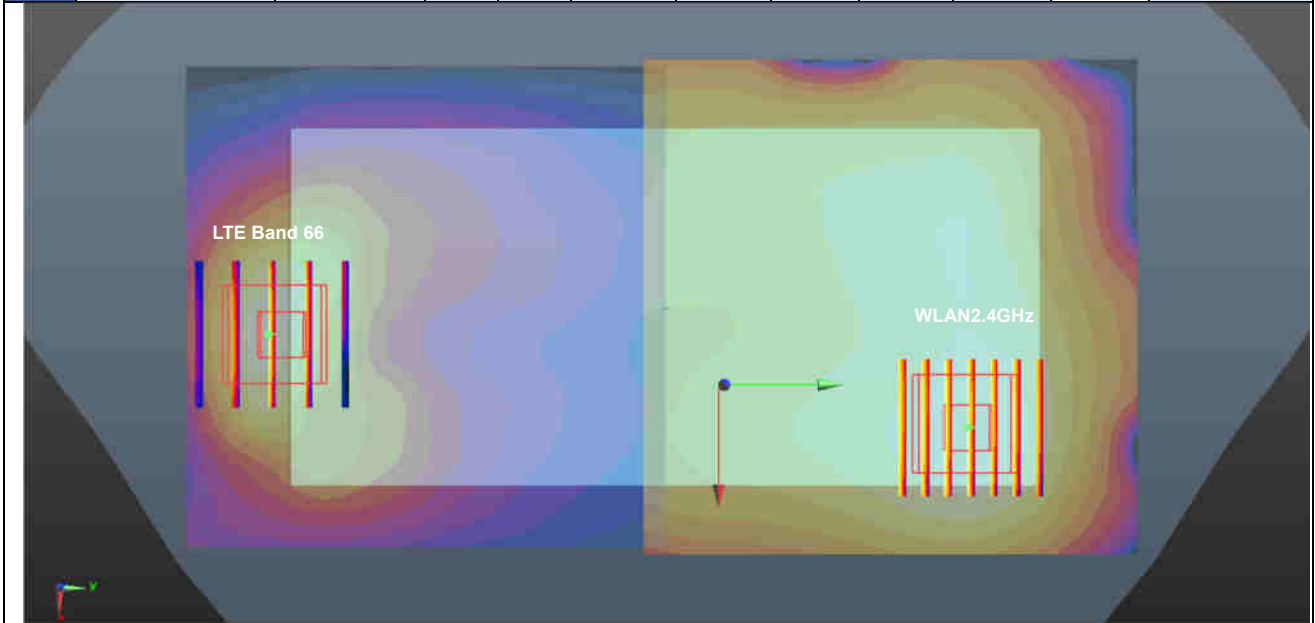
Case #25	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 26	Back	1.258	5	X	Y	Z	153.6	1.72	0.01	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



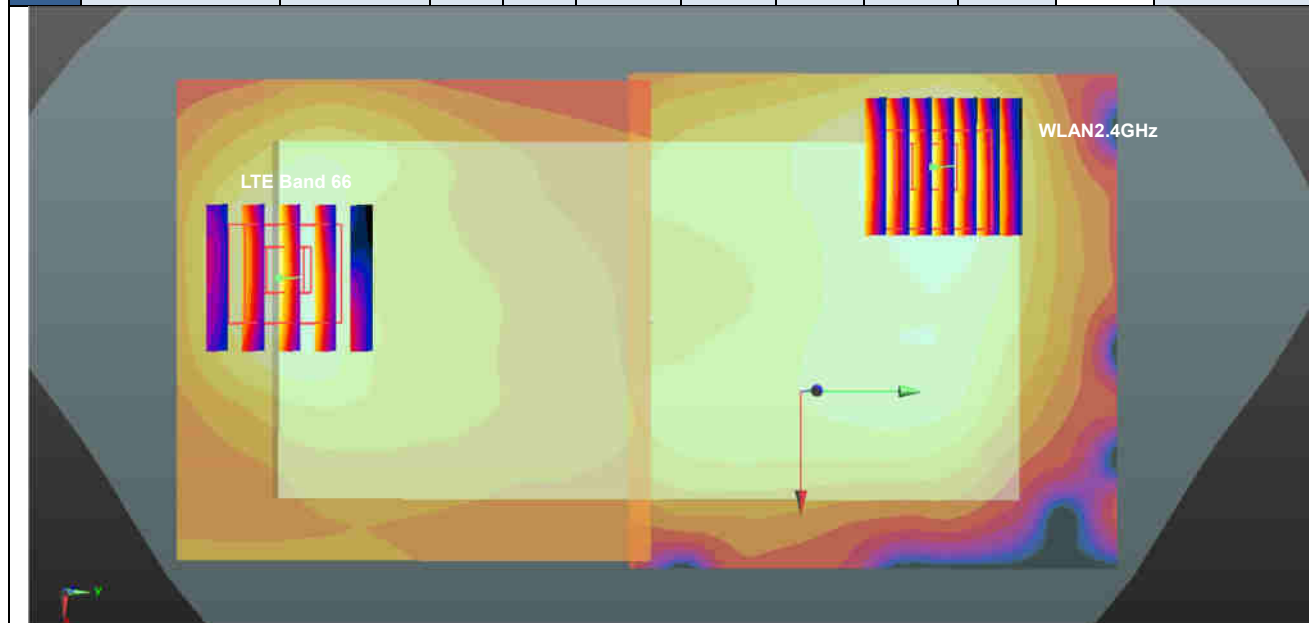
Case #26	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 26	Back	1.258	5	9.2	-85.3	-0.61	151.8	2.46	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 26	Back	1.258	5	9.2	-85.3	-0.61	158.2	2.46	0.02	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



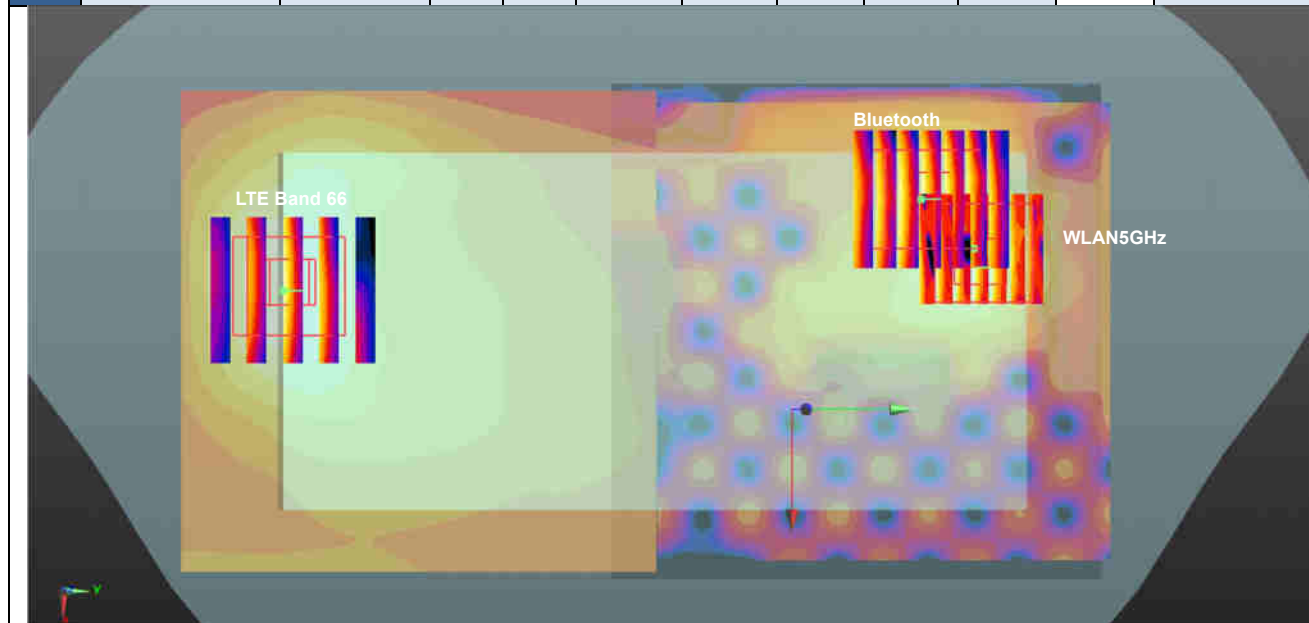
Case #27	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 66	Front	1.355	5	6	-82.2	0.4	150.7	1.66	0.01	Not required
	WLAN2.4GHz		0.306	5	28.4	66.8	-1.08				



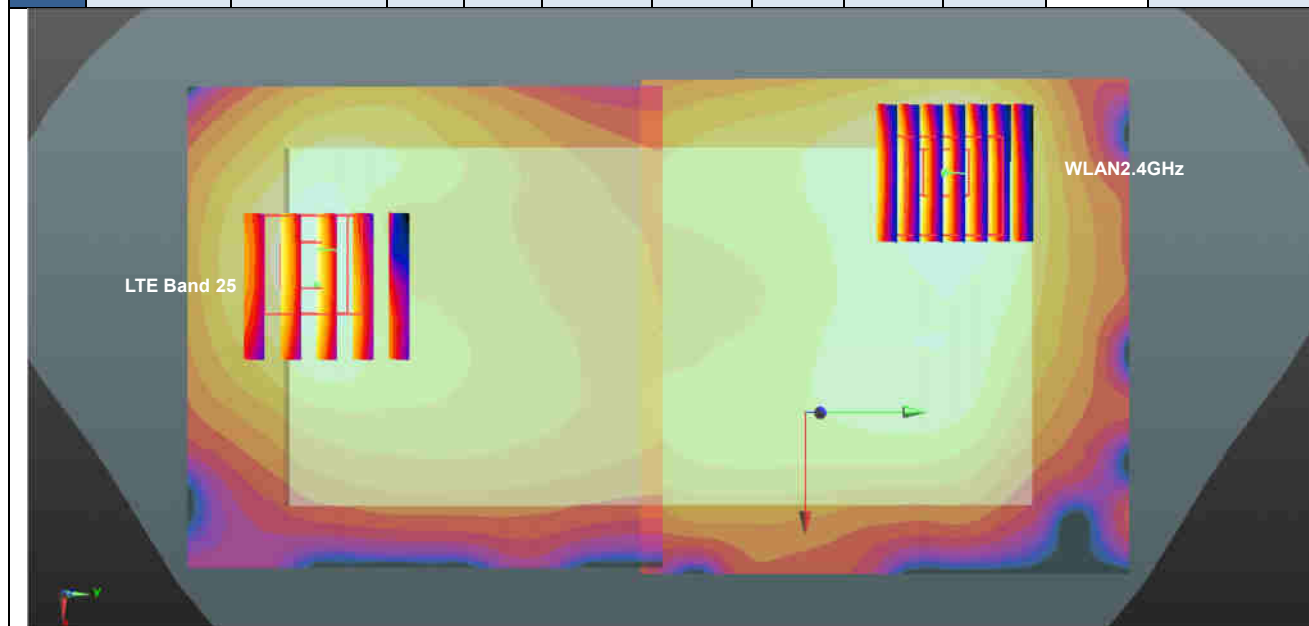
Case #28	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 66	Back	1.332	5	X	Y	Z	144.7	1.79	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



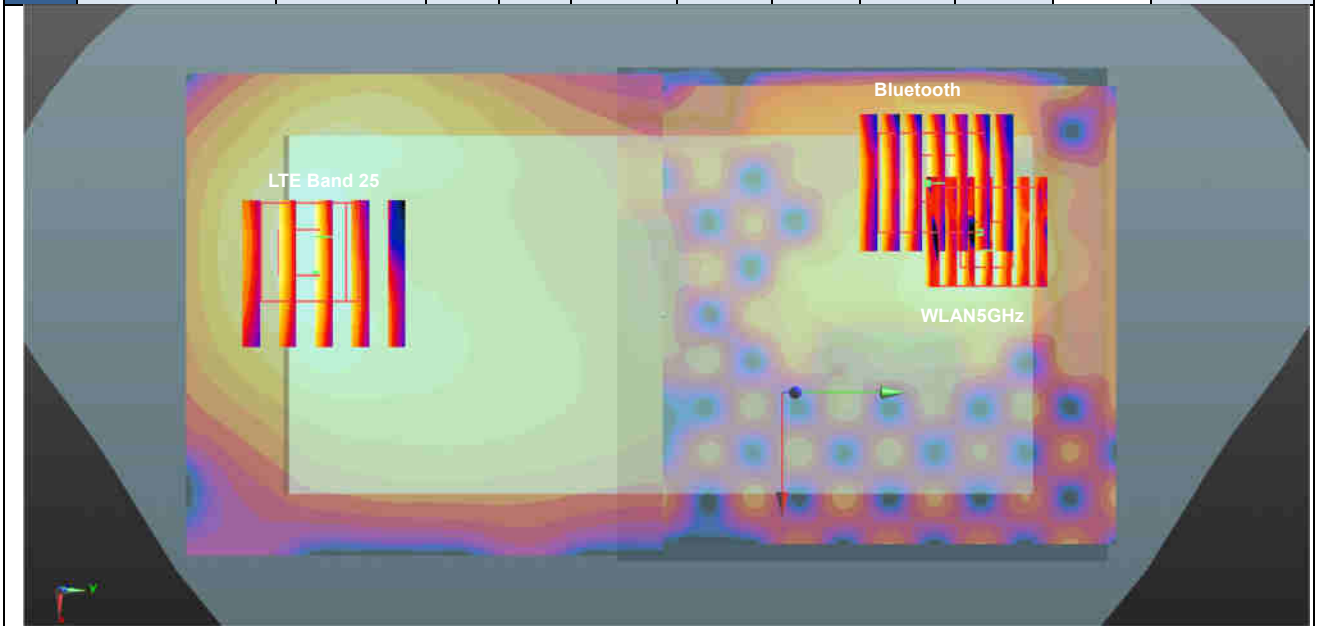
	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case #29	LTE Band 66	Back	1.332	5	-12.2	-80.9	-0.54	143.4	2.54	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 66	Back	1.332	5	-12.2	-80.9	-0.54	151.8	2.54	0.03	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



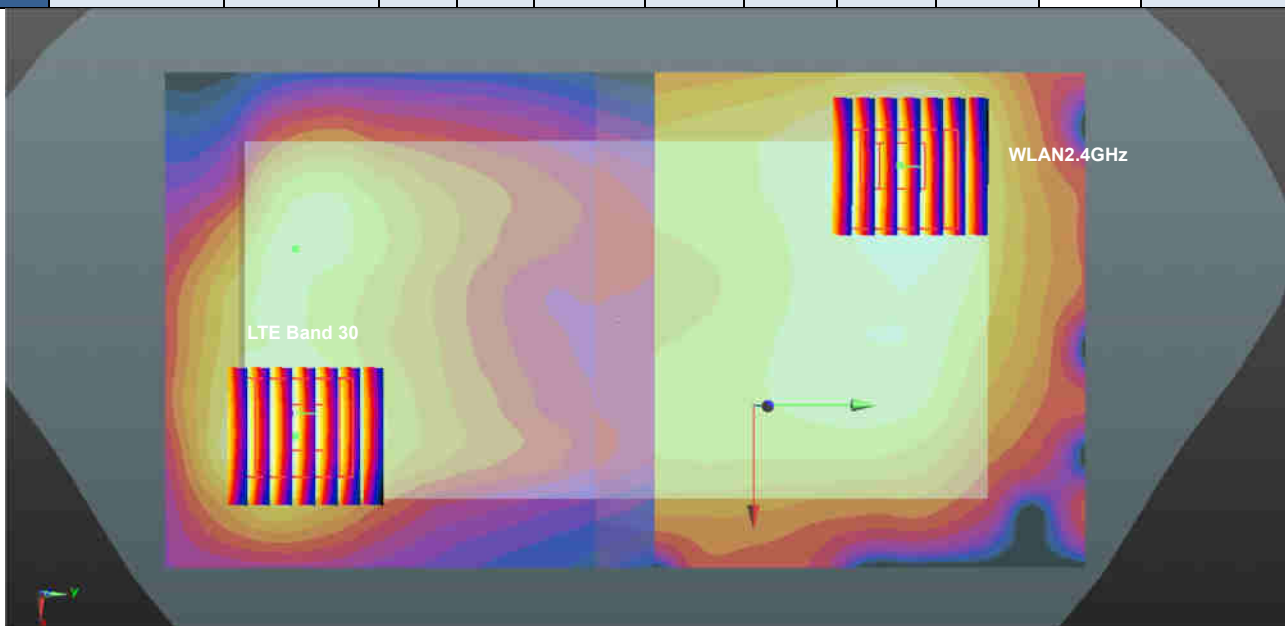
Case #30	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 25	Back	1.263	5	-15.4	-78.1	-0.68	141.5	1.72	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



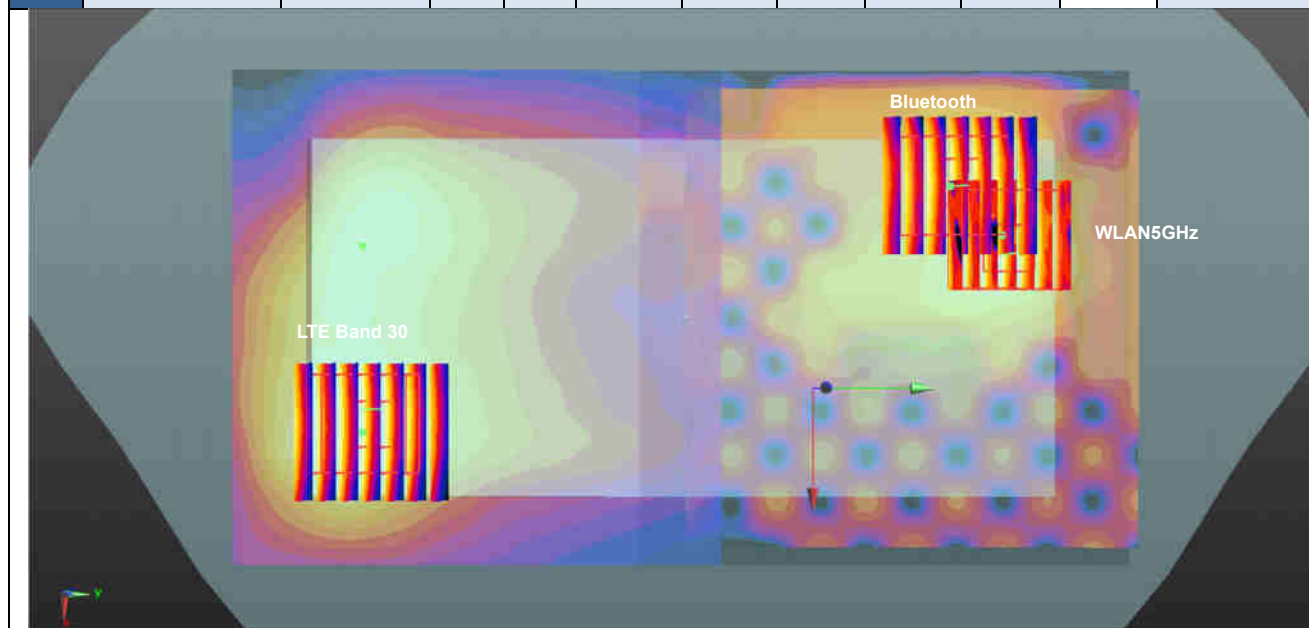
Case #31	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case #31	LTE Band 25	Back	1.263	5	-15.4	-78.1	-0.68	140.2	2.47	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 25	Back	1.263	5	-15.4	-78.1	-0.68	148.9	2.47	0.03	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



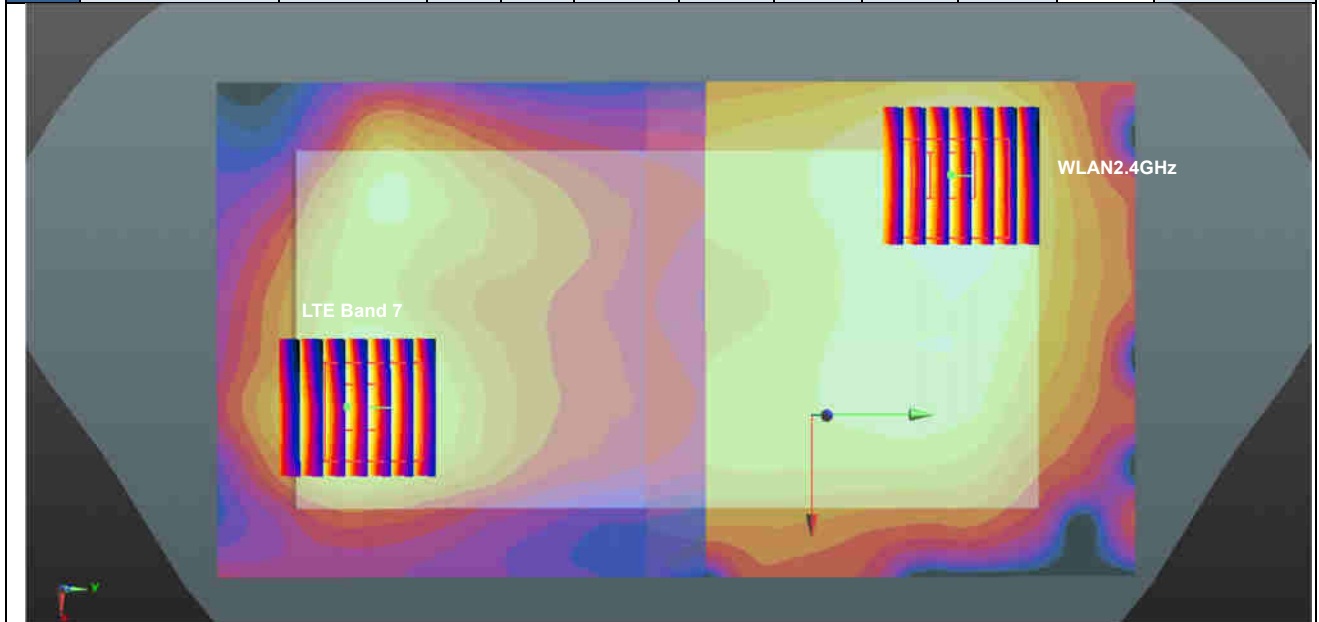
Case #32	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 30	Back	1.284	5	22.2	-68.2	-0.48	141.8	1.75	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



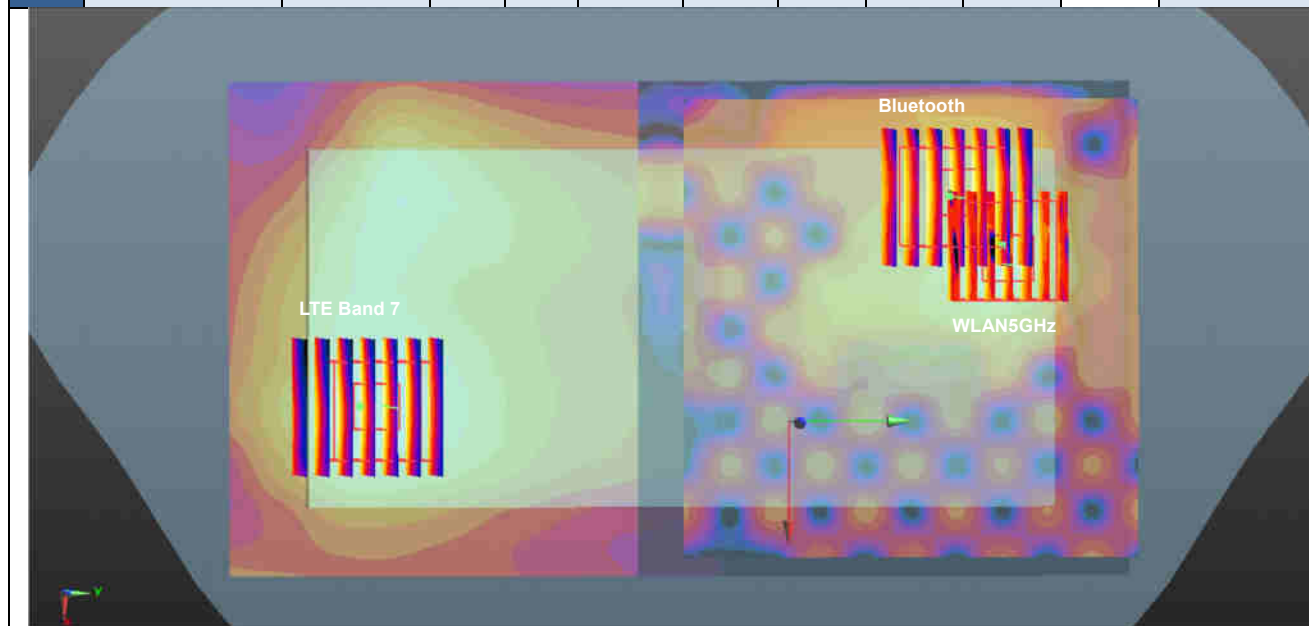
Case #33	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 30	Back	1.284	5	22.2	-68.2	-0.48	139.6	2.49	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 30	Back	1.284	5	22.2	-68.2	-0.48	144.3	2.49	0.03	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



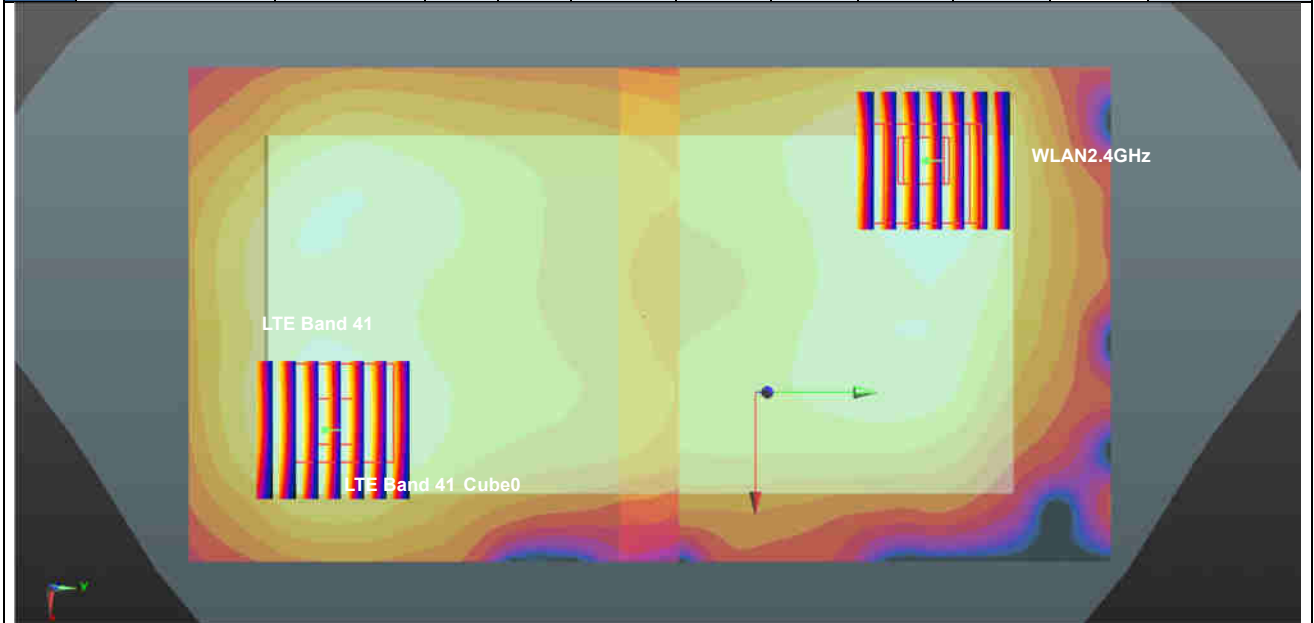
Case #34	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 7	Back	1.295	5	15.8	-68.2	-0.54	139.4	1.76	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



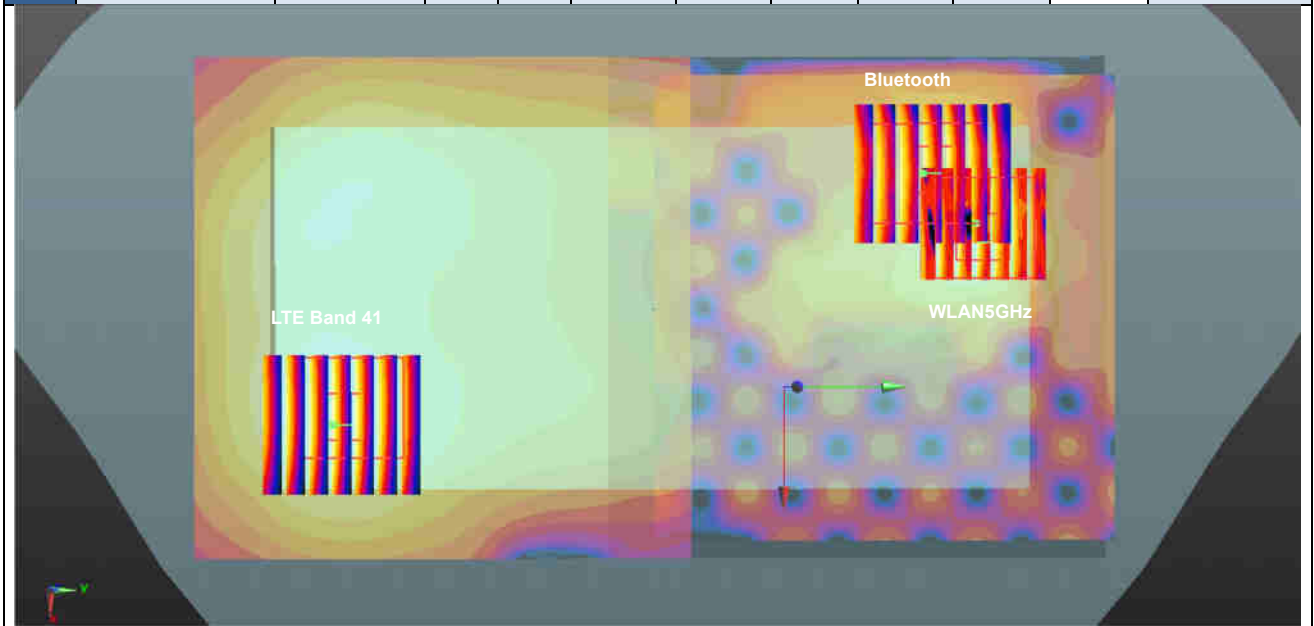
Case #35	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 7	Back	1.295	5	15.8	-68.2	-0.54	137.4	2.50	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 7	Back	1.295	5	15.8	-68.2	-0.54	142.7	2.50	0.03	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



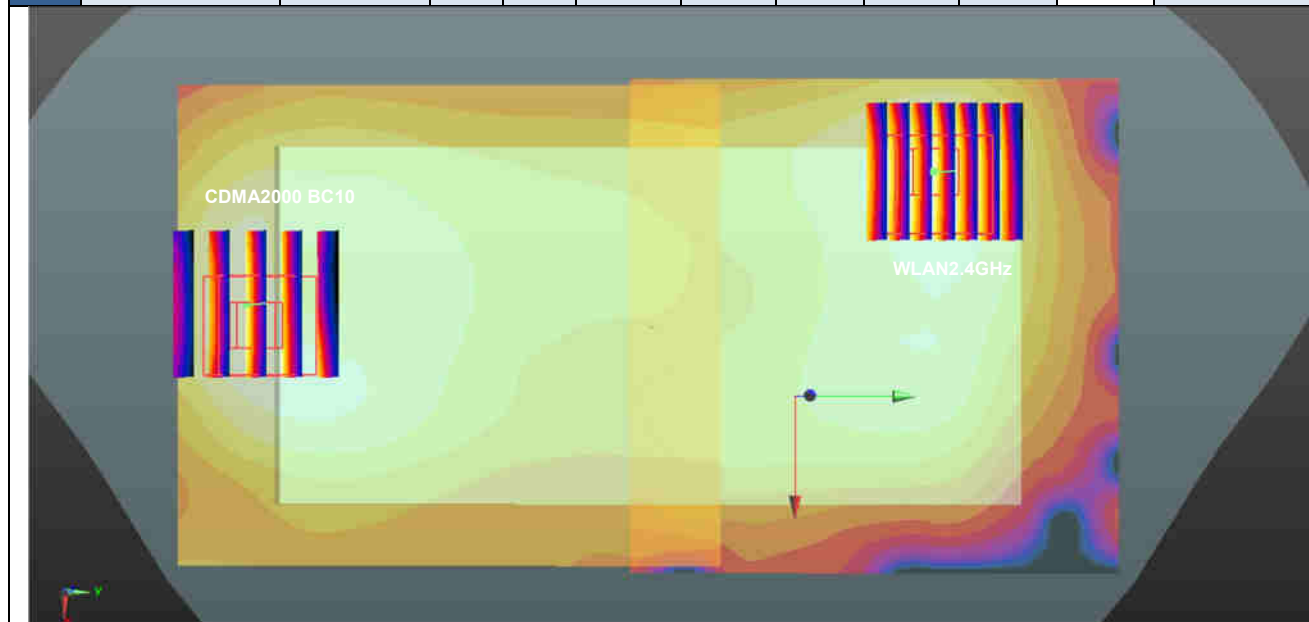
Case #36	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 41	Back	1.399	5	24.2	-68	-0.52	142.5	1.86	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



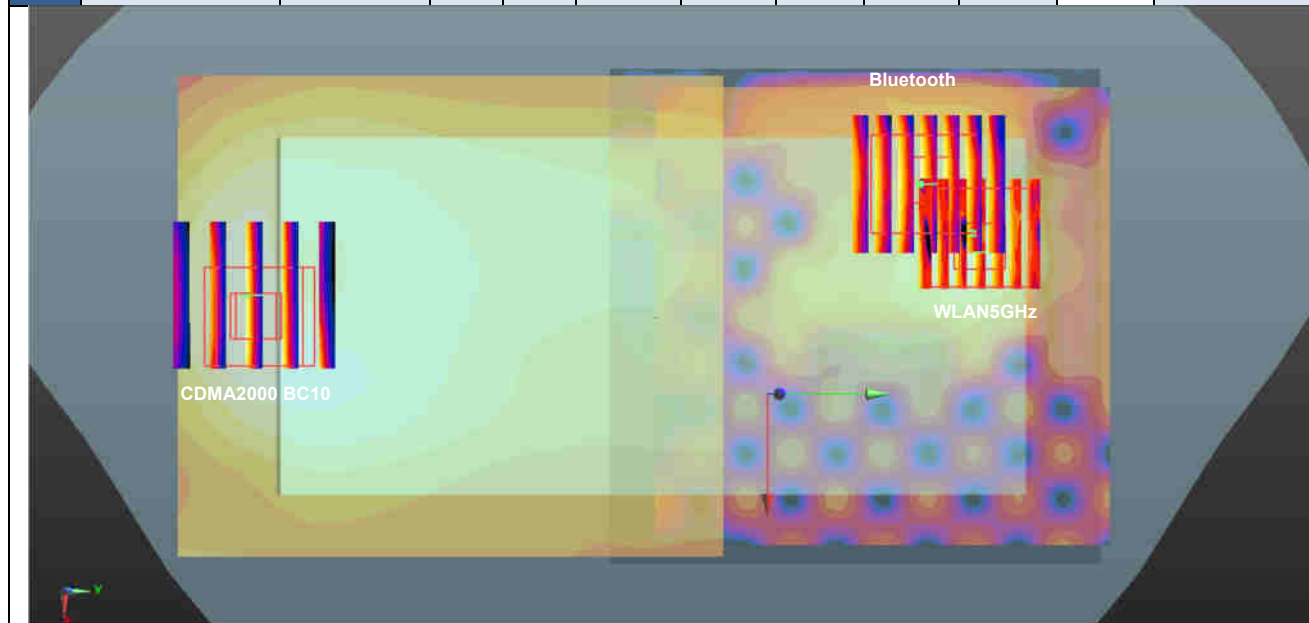
Case #37	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case #37	LTE Band 41	Back	1.399	5	24.2	-68	-0.52	140.2	2.61	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	LTE Band 41	Back	1.399	5	24.2	-68	-0.52	144.6	2.61	0.03	Not required
	WLAN5GHz		0.039	5	-29.8	61.4	-0.62				
	Bluetooth		1.167	5	-16.4	70.8	-0.93				



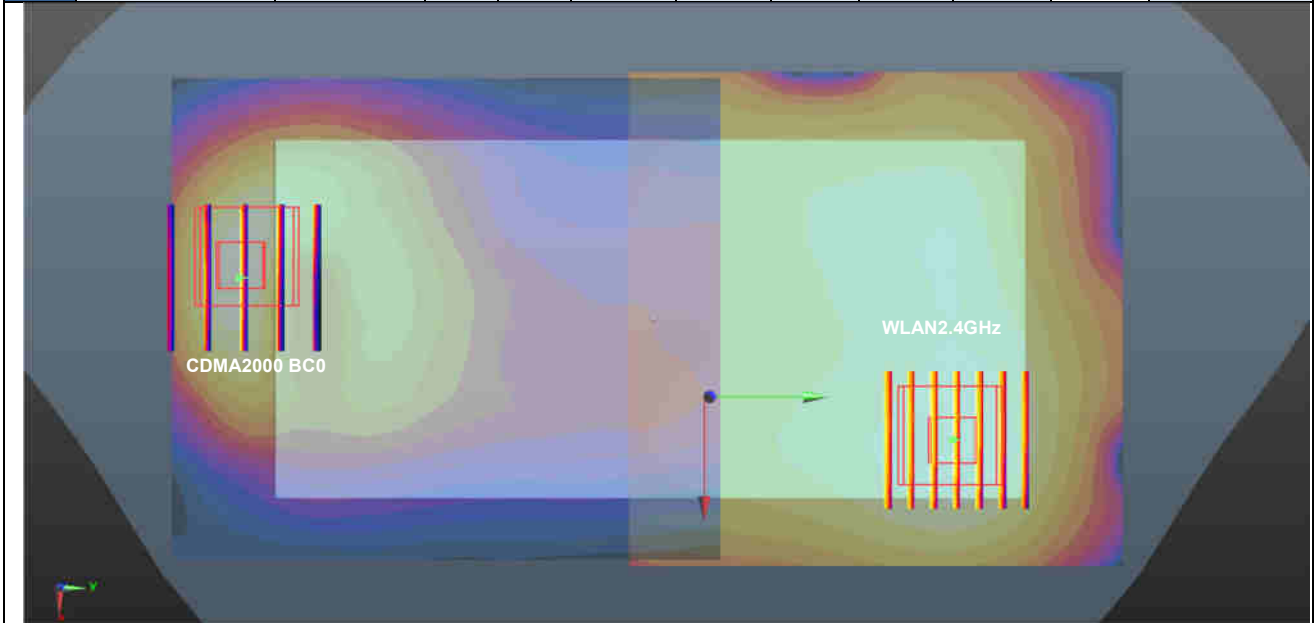
Case #38	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC10	Back	1.243	5	0.3	-86.8	-0.94	152.8	1.70	0.01	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



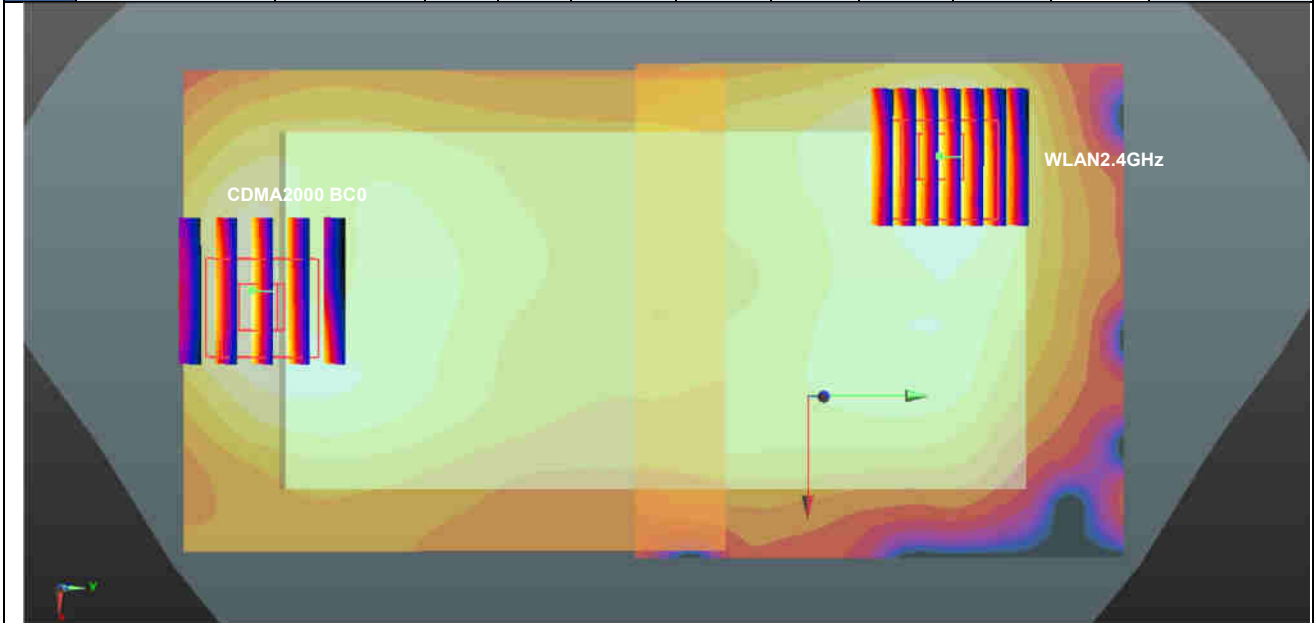
Case #39	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC10	Back	1.243	5	0.3	-86.8	-0.94	151.2	2.45	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	CDMA2000 BC10	Back	1.243	5	0.3	-86.8	-0.94	158.5	2.45	0.02	Not required
	WLAN5GHz		0.039	5	-29.8	61.4	-0.62				
	Bluetooth		1.167	5	-16.4	70.8	-0.93				



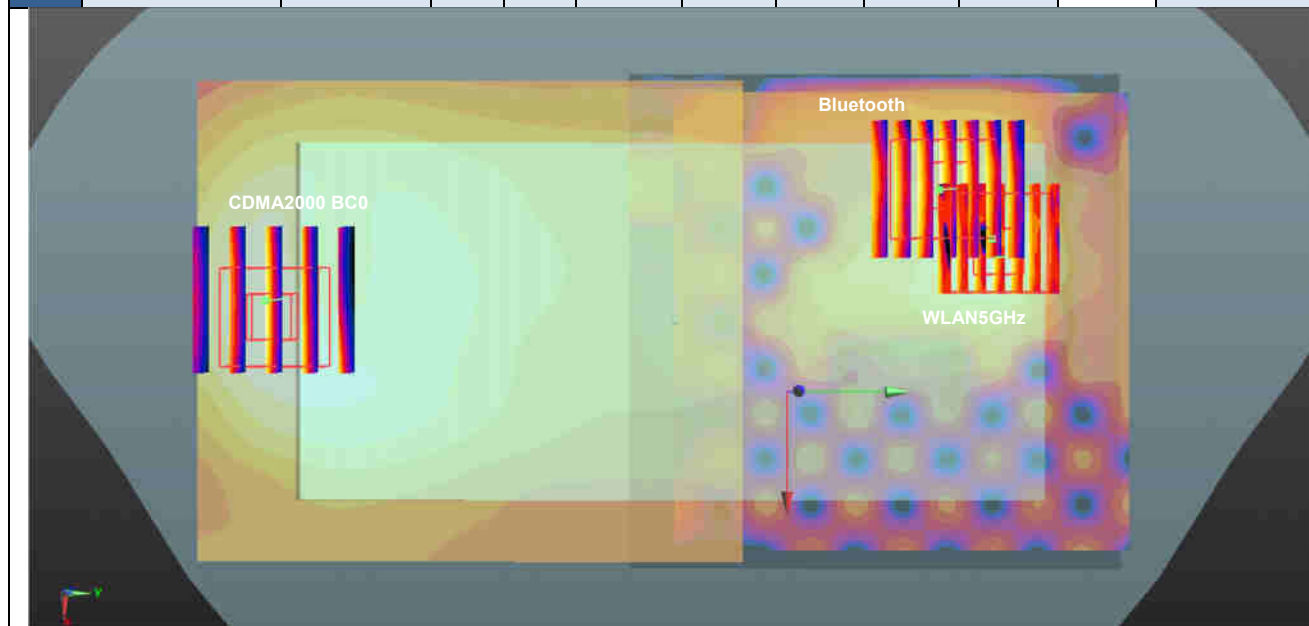
Case #40	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Front	1.414	5	-10.6	-88.4	-0.97	160.0	1.72	0.01	Not required
	WLAN2.4GHz		0.306	5	28.4	66.8	-1.08				



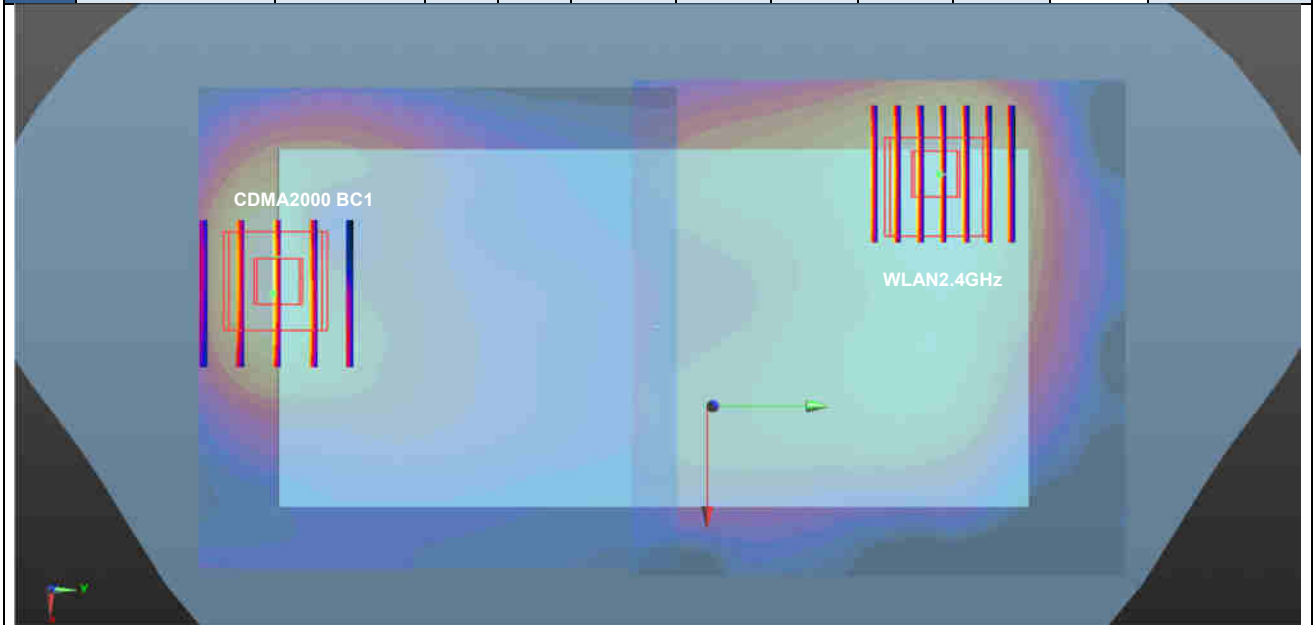
Case #41	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Back	1.335	5	0.3	-88.4	-0.89	154.4	1.80	0.02	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



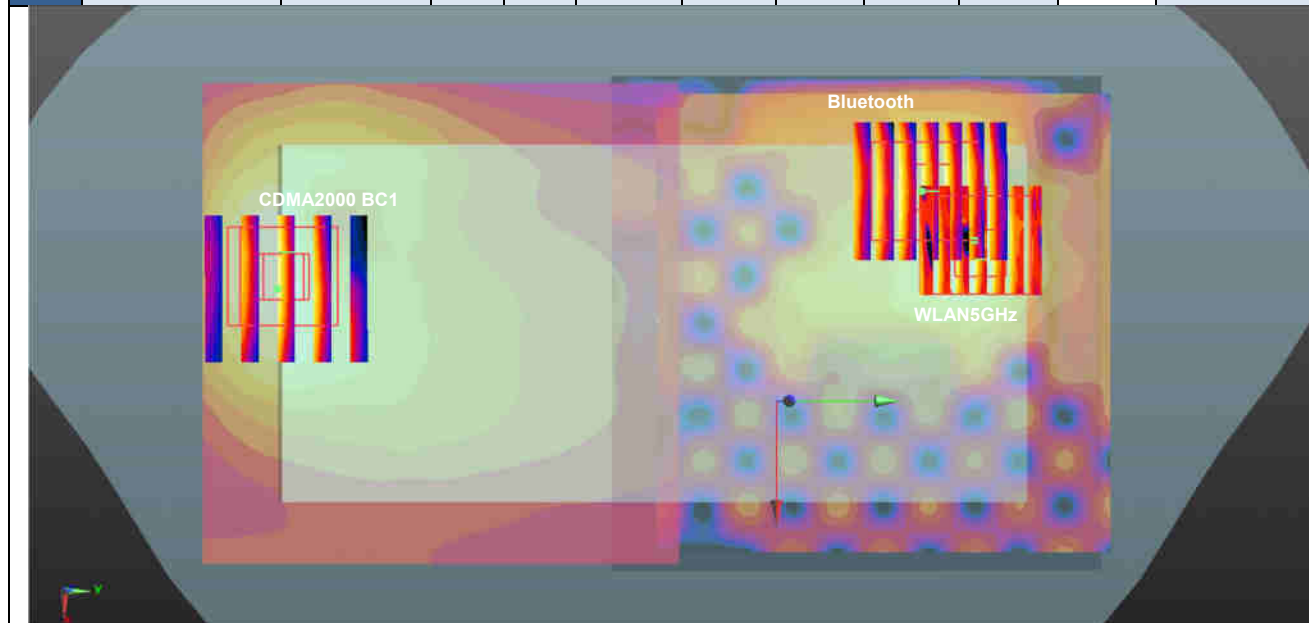
Case #42	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC0	Back	1.335	5	0.3	-88.4	-0.89	152.8	2.54	0.03	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	CDMA2000 BC0	Back	1.335	5	0.3	-88.4	-0.89	160.1	2.54	0.03	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



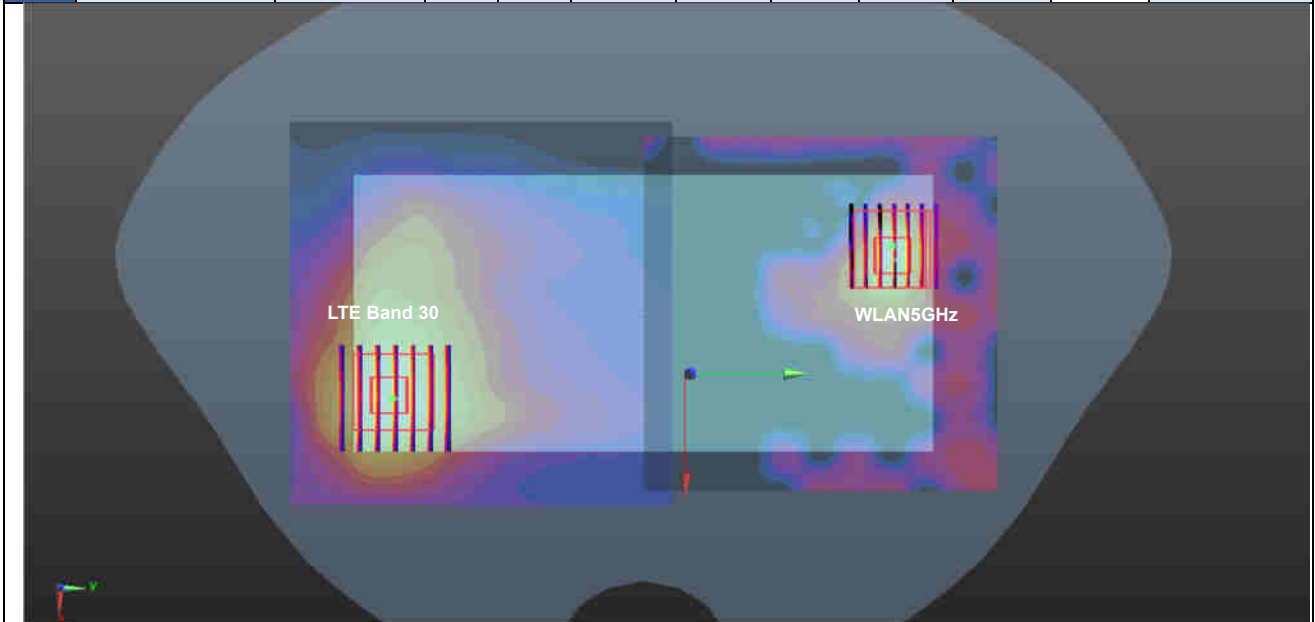
Case #43	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	CDMA2000 BC1	Back	1.138	5	-10.7	-81.9	-0.51	145.9	1.60	0.01	Not required
	WLAN2.4GHz		0.461	5	-33.6	62.2	-0.92				



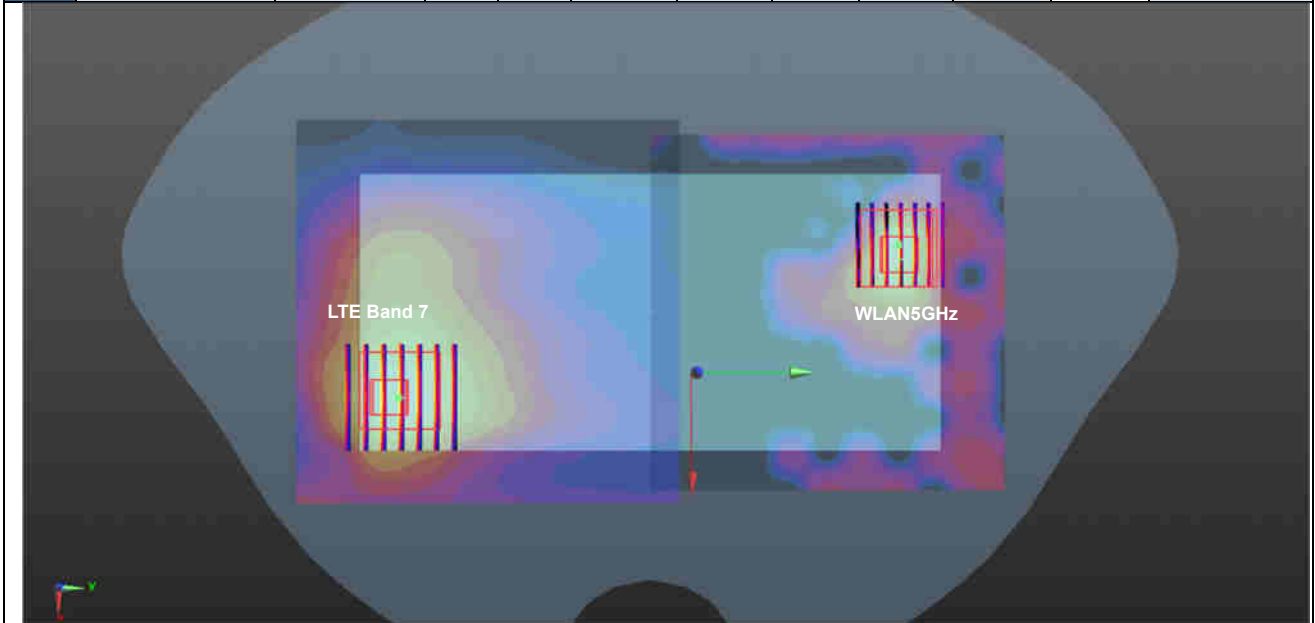
Case #44	Band	Position	1g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	CDMA2000 BC1	Back	1.138	5	-10.7	-81.9	-0.51	144.6	2.34	0.02	Not required
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	CDMA2000 BC1	Back	1.138	5	-10.7	-81.9	-0.51	152.8	2.34	0.02	Not required
	Bluetooth		0.039	5	-29.8	61.4	-0.62				
	WLAN5GHz		1.167	5	-16.4	70.8	-0.93				



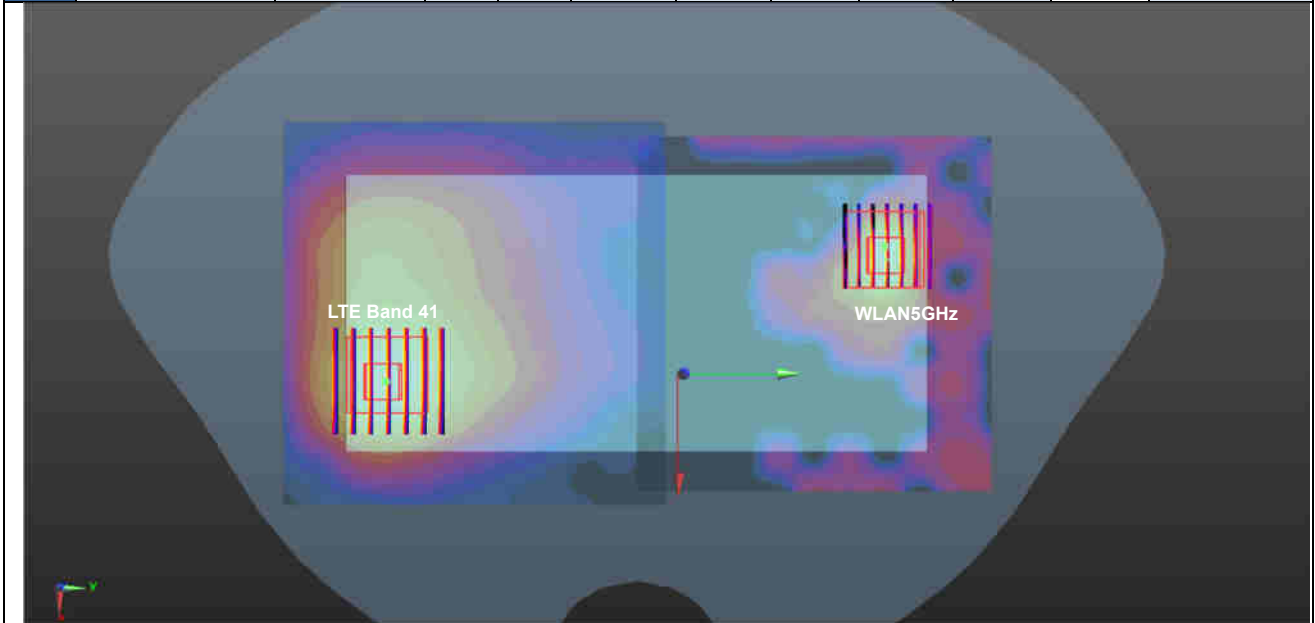
Case #45	Band	Position	10g SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
	LTE Band 30	Back	3.243	0	X	Y	Z	155.4	4.28	0.06	Not required
	WLAN5GHz		1.034	0	-16.6	70.8	-0.52				



Case #46	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	3.029	0	24	-72.2	-0.14	148.7	4.06	0.06	Not required
	WLAN5GHz		1.034	0	-16.6	70.8	-0.52				



Case #47	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	3.456	0	20.2	-75.2	0	150.6	4.49	0.06	Not required
	WLAN5GHz		1.034	0	-16.6	70.8	-0.52				



17. Supplemental Tuner Tests Results

General Note:

3. 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.
4. 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.
5. 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 - SN:1065**

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 : 23.5 °C ; Liquid Temperature : 22.8 °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 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7372)

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

Maximum value of SAR (interpolated) = 5.09 W/kg

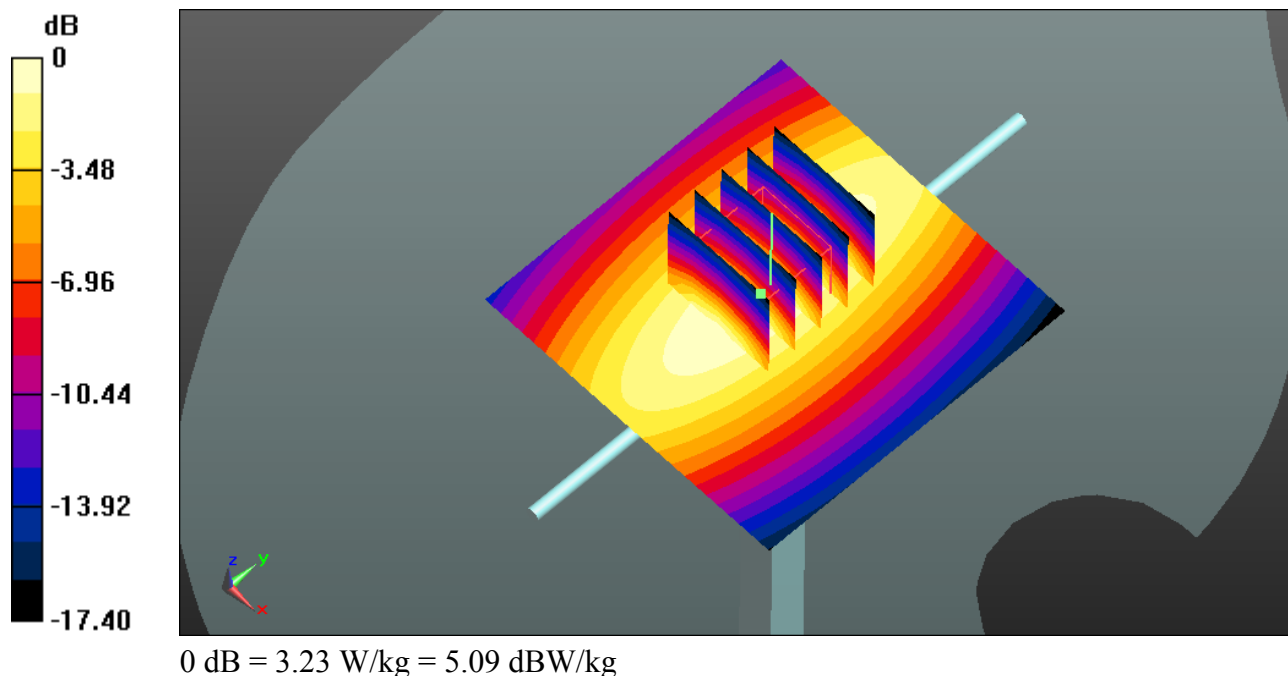
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 41.06 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 4.1 W/kg

SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.45 W/kg

Maximum value of SAR (measured) = 3.23 W/kg



System Check_Head_835MHz**DUT: D835V3-SN:4d091**

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

Medium: HSL_850 Medium parameters used: $f = 835$ MHz; $\sigma = 0.908$ S/m; $\epsilon_r = 42.255$; $\rho = 1000$ 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 Sn1358; Calibrated: 2018.4.19
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- Measurement SW: DASY52, Version 52.8 (8); 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) = 3.70 W/kg

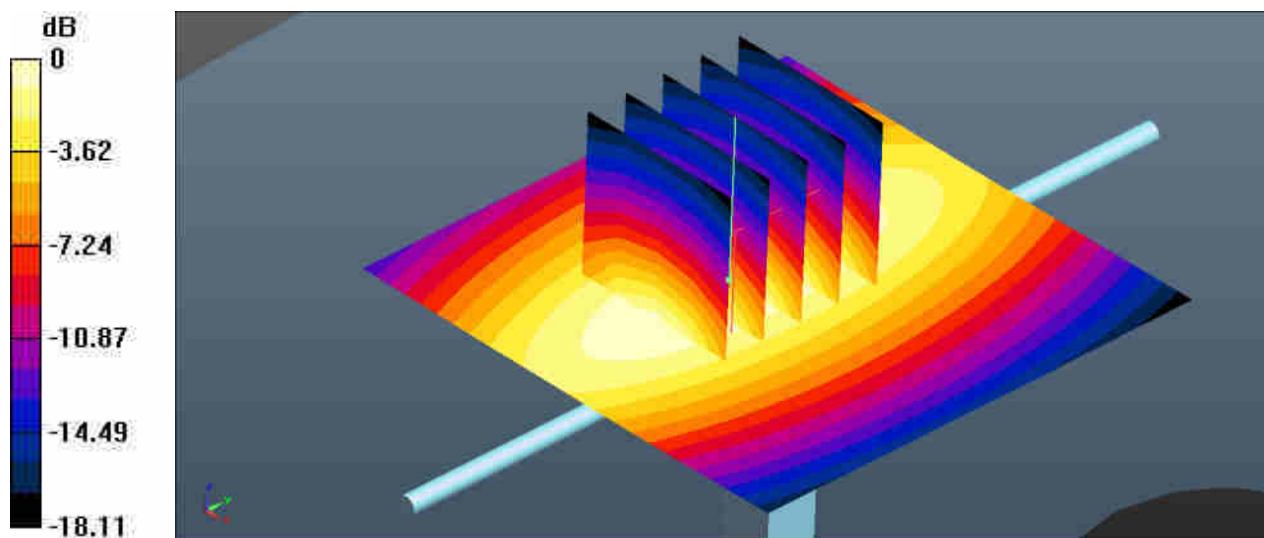
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.03 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 3.40 W/kg

SAR(1 g) = 2.29 W/kg; SAR(10 g) = 1.49 W/kg

Maximum value of SAR (measured) = 3.26 W/kg



0 dB = 3.26 W/kg = 5.13 dBW/kg

System Check_Head_1750MHz**DUT: D1750V2 - SN:1069**

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

Medium: HSL_1750 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.346$ S/m; $\epsilon_r = 40.243$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(8.65, 8.65, 8.65); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- 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) = 14.4 W/kg

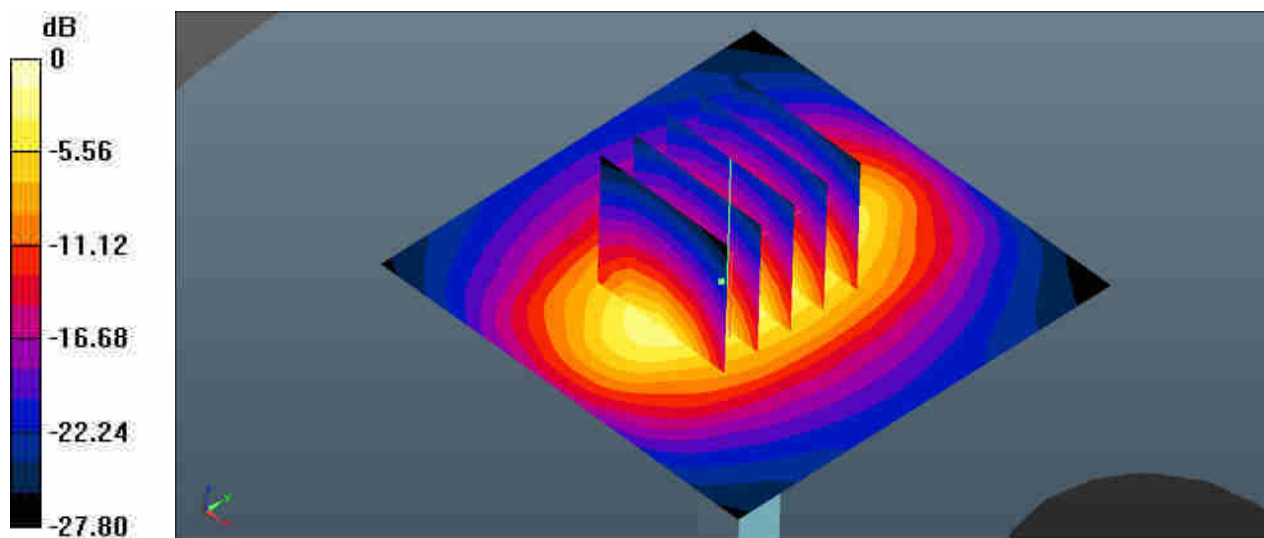
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 89.39 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 9.79 W/kg; SAR(10 g) = 5.19 W/kg

Maximum value of SAR (measured) = 13.9 W/kg



0 dB = 13.9 W/kg = 11.43 dBW/kg

System Check_Head_1900MHz**DUT: D1900V2 - SN:5d118**

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

Medium: HSL_1900 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.373$ S/m; $\epsilon_r = 39.73$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(8.41, 8.41, 8.41); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- 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) = 15.5 W/kg

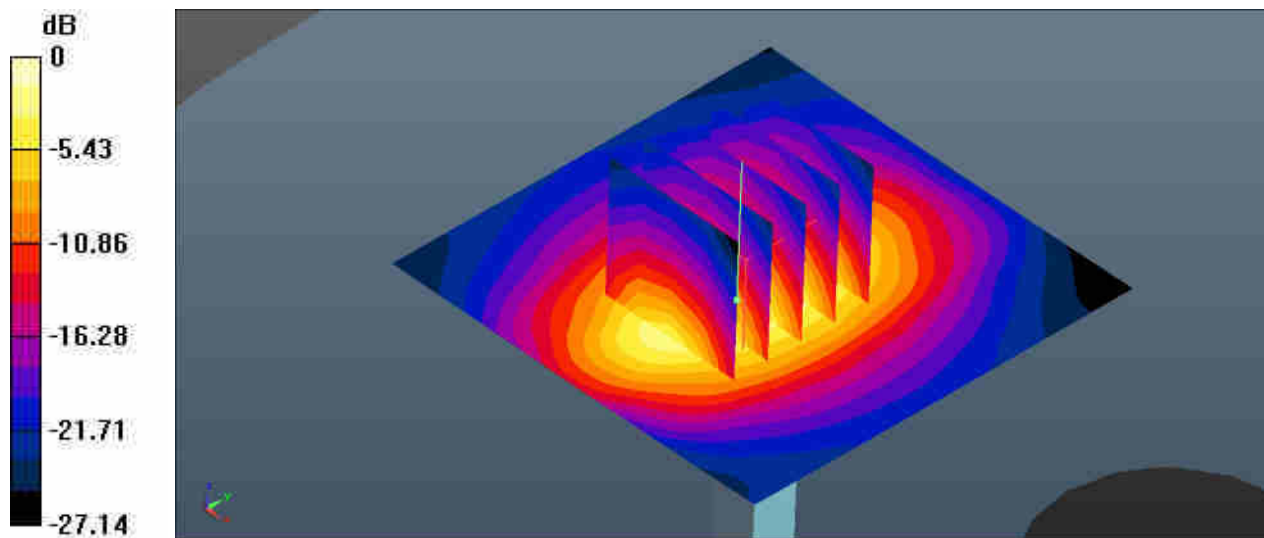
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 91.87 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 20.9 W/kg

SAR(1 g) = 10.6 W/kg; SAR(10 g) = 5.42 W/kg

Maximum value of SAR (measured) = 15.5 W/kg



0 dB = 15.5 W/kg = 11.9 dBW/kg

System Check_Head_2300MHz**DUT: D2300V2 - SN:1055**

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

Medium: HSL_2300 Medium parameters used: $f = 2300$ MHz; $\sigma = 1.691$ S/m; $\epsilon_r = 39.267$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(7.89, 7.89, 7.89); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- 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) = 17.4 W/kg

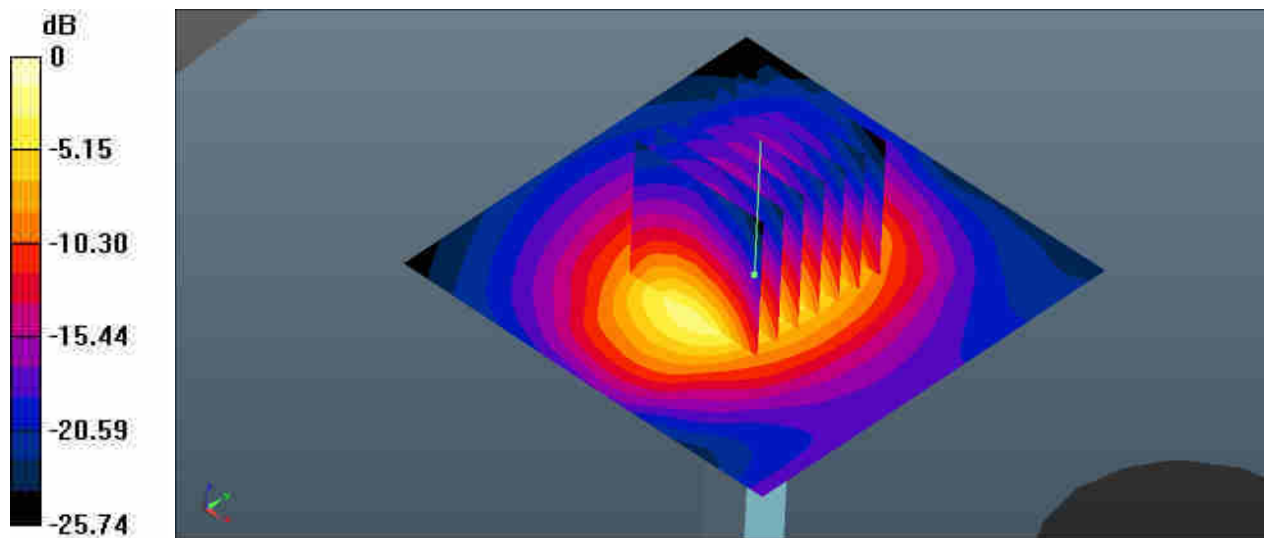
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.47 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 22.1 W/kg

SAR(1 g) = 11.6 W/kg; SAR(10 g) = 5.7 W/kg

Maximum value of SAR (measured) = 17.1 W/kg



0 dB = 17.4 W/kg = 12.41 dBW/kg

System Check_Head_2450MHz**DUT: D2450V2 - SN:840**

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

Medium: HSL_2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.864$ S/m; $\epsilon_r = 39.568$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3843; ConvF(7.08, 7.08, 7.08); Calibrated: 2018.9.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- 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) = 18.3 W/kg

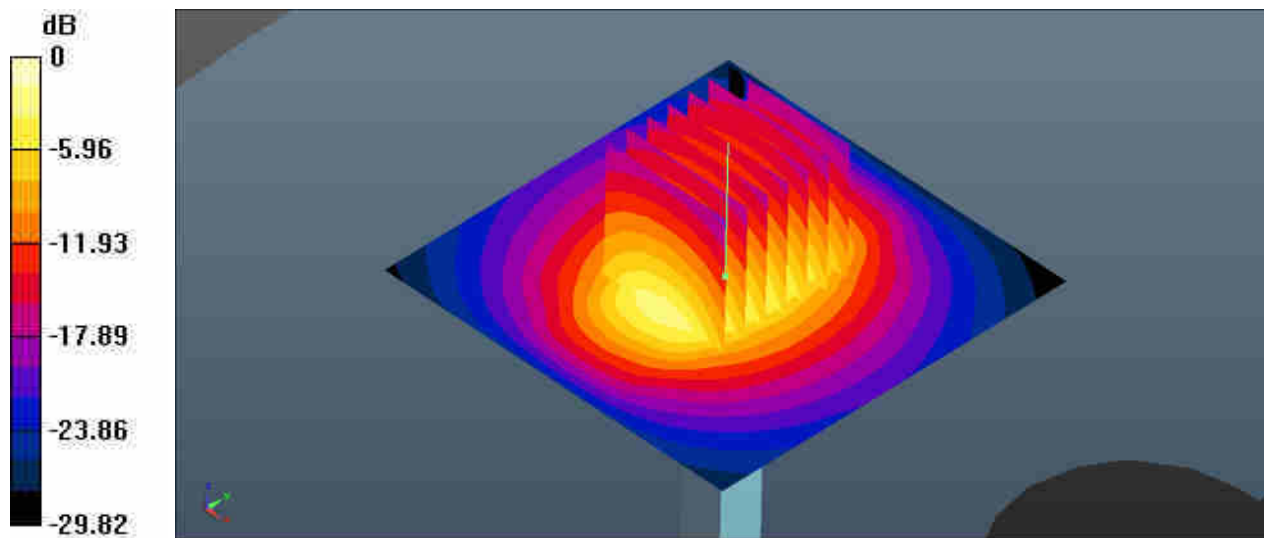
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.51 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 25.3 W/kg

SAR(1 g) = 12.1 W/kg; SAR(10 g) = 5.88 W/kg

Maximum value of SAR (measured) = 18.2 W/kg



0 dB = 18.2 W/kg = 12.6 dBW/kg

System Check_Head_2600MHz**DUT: D2600V2 - SN:1061**

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

Medium: HSL_2600 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.037$ S/m; $\epsilon_r = 38.062$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(7.31, 7.31, 7.31); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- 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) = 23.7 W/kg

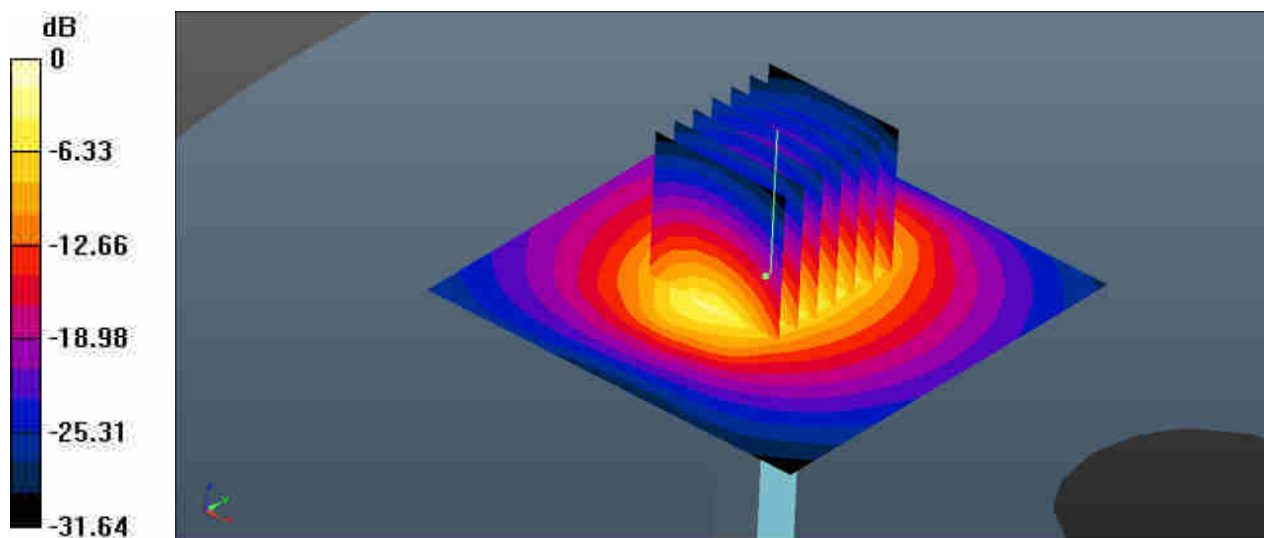
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 99.39 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 33.6 W/kg

SAR(1 g) = 14.2 W/kg; SAR(10 g) = 6.78 W/kg

Maximum value of SAR (measured) = 23.9 W/kg



0 dB = 23.9 W/kg = 13.78 dBW/kg

System Check_Head_5250MHz**DUT: D5GHzV2-SN:1203**

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: HSL_5000 Medium parameters used: $f = 5250$ MHz; $\sigma = 4.678$ S/m; $\epsilon_r = 36.999$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(5.2, 5.2, 5.2); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.10.22
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Pin=100mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 20.2 W/kg

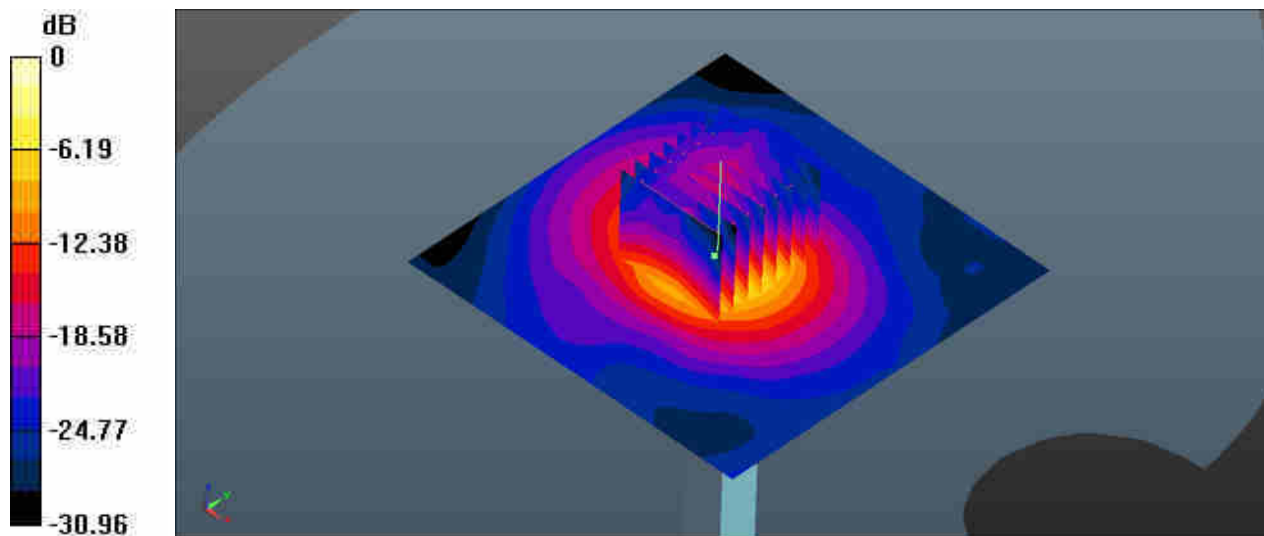
Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 44.58 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 32.2 W/kg

SAR(1 g) = 8.19 W/kg; SAR(10 g) = 2.34 W/kg

Maximum value of SAR (measured) = 18.8 W/kg



0 dB = 18.8 W/kg = 12.74 dBW/kg

System Check_Head_5600MHz

DUT: D5GHzV2-SN:1203

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: HSL_5000 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.037$ S/m; $\epsilon_r = 36.493$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(4.94, 4.94, 4.94); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.10.22
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Pin=100mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 19.5 W/kg

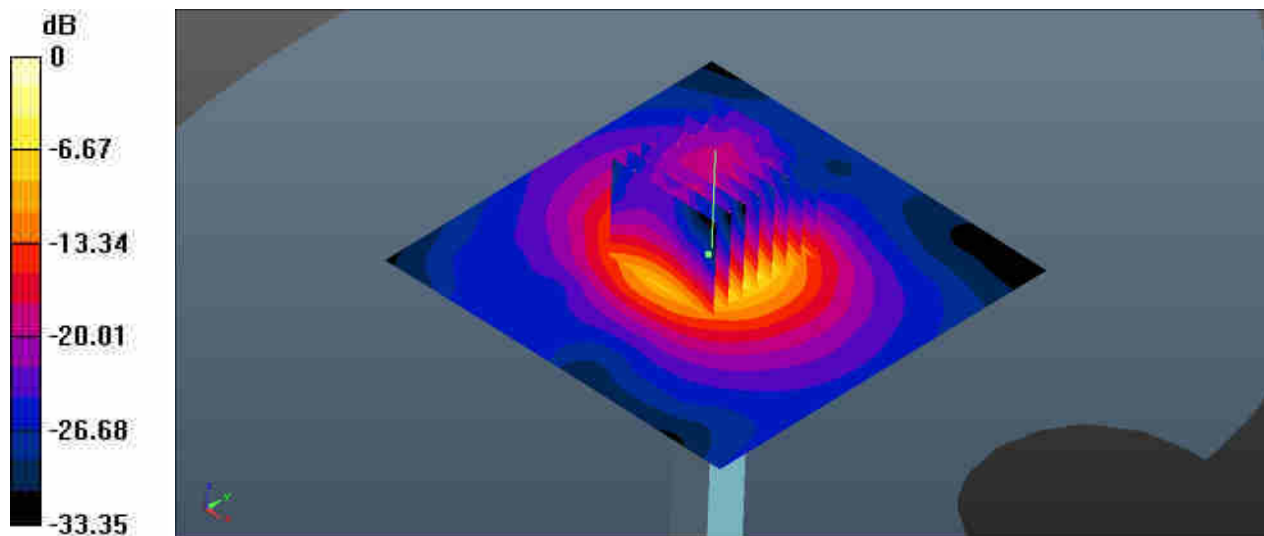
Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 41.94 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 33.1 W/kg

SAR(1 g) = 8.02 W/kg; SAR(10 g) = 2.33 W/kg

Maximum value of SAR (measured) = 19.1 W/kg



0 dB = 19.1 W/kg = 12.81 dBW/kg

System Check_Head_5750MHz**DUT: D5GHzV2-SN:1203**

Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: HSL_5000 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.2$ S/m; $\epsilon_r = 36.307$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(5.23, 5.23, 5.23); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.10.22
- Phantom: SAM2; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 17.0 W/kg

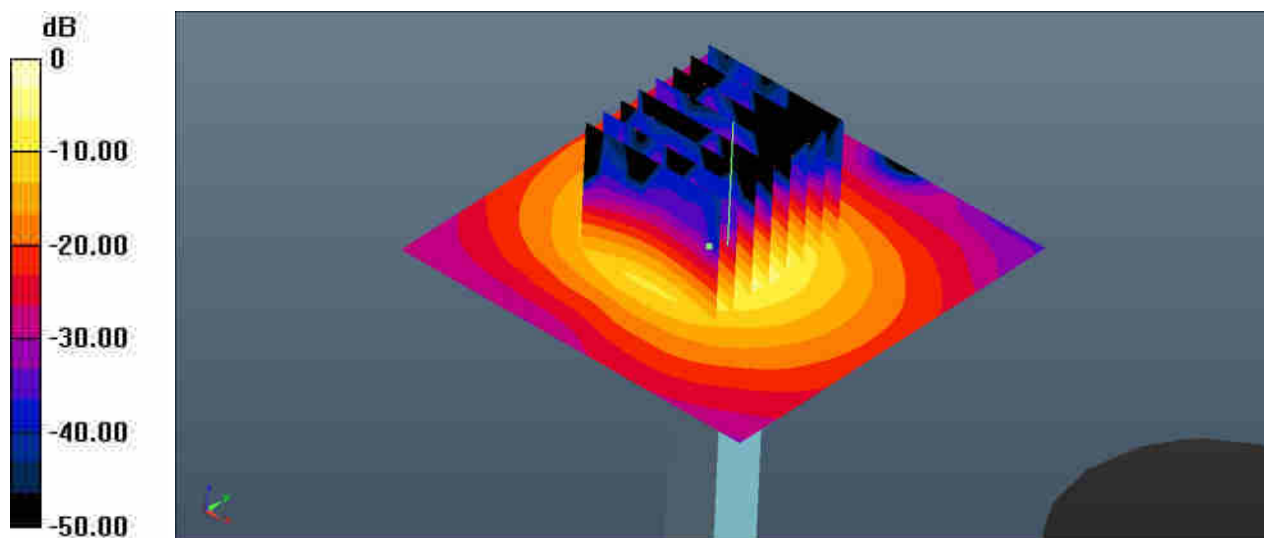
Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 37.78 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 31.7 W/kg

SAR(1 g) = 8.2 W/kg; SAR(10 g) = 2.36 W/kg

Maximum value of SAR (measured) = 19.2 W/kg



0 dB = 19.2 W/kg = 12.83 dBW/kg

System Check_Body_750MHz**DUT: D750V3 - SN:1065**

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

Medium: MSL_750 Medium parameters used: $f = 750$ MHz; $\sigma = 0.987$ S/m; $\epsilon_r = 56.991$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.8 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(10.21, 10.21, 10.21); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- 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) = 3.30 W/kg

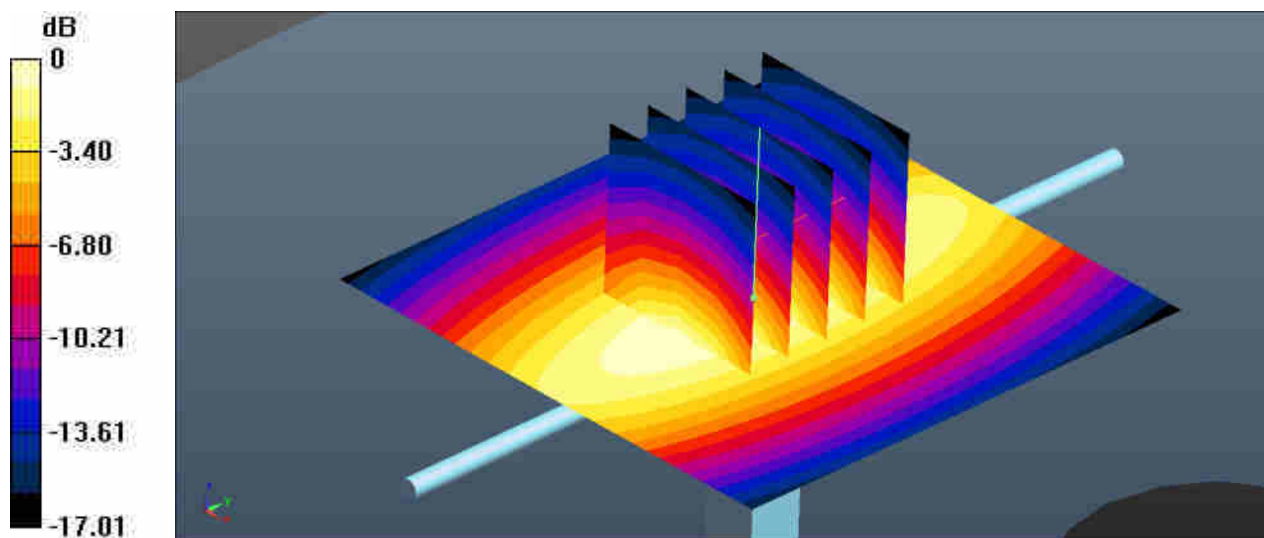
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 50.96 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 3.56 W/kg

SAR(1 g) = 2.25 W/kg; SAR(10 g) = 1.50 W/kg

Maximum value of SAR (measured) = 3.03 W/kg



0 dB = 3.03 W/kg = 4.81 dBW/kg

System Check_Body_835MHz**DUT: D835V2 - SN:4d091**

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

Medium: MSL_850 Medium parameters used: $f = 835$ MHz; $\sigma = 0.995$ S/m; $\epsilon_r = 55.432$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(10.02, 10.02, 10.02); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- 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) = 3.35 W/kg

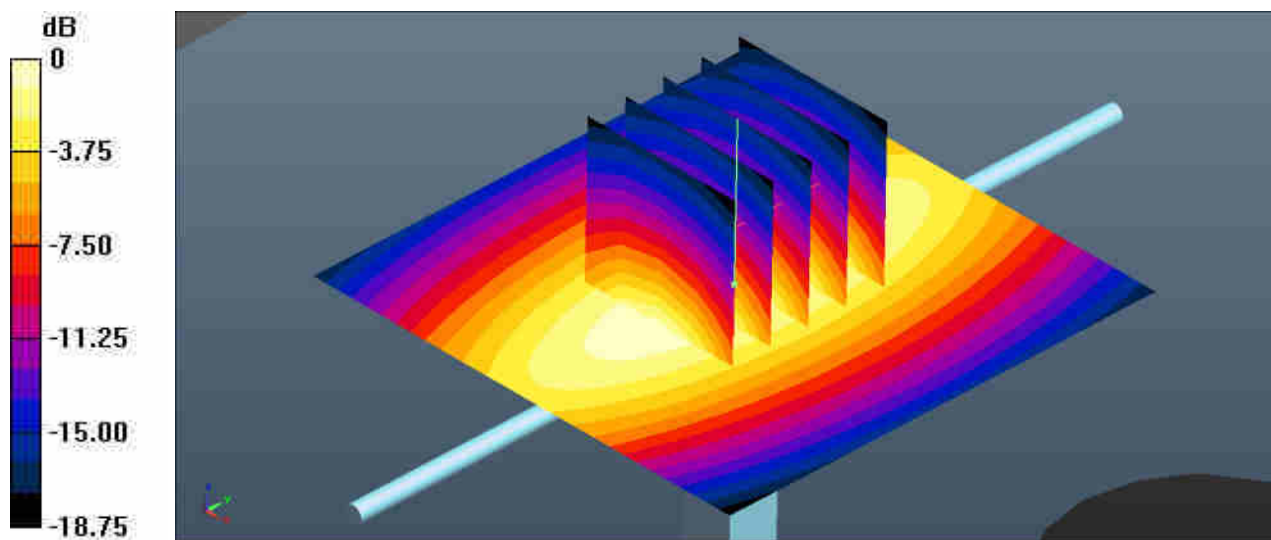
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 43.65 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.85 W/kg

SAR(1 g) = 2.33 W/kg; SAR(10 g) = 1.49 W/kg

Maximum value of SAR (measured) = 3.01 W/kg



0 dB = 3.01 W/kg = 4.79 dBW/kg

System Check_Body_1750MHz**DUT: D1750V2 - SN:1069**

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

Medium: MSL_1750 Medium parameters used: $f = 1750$ MHz; $\sigma = 1.444$ S/m; $\epsilon_r = 54.472$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(8.31, 8.31, 8.31); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- 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) = 12.3 W/kg

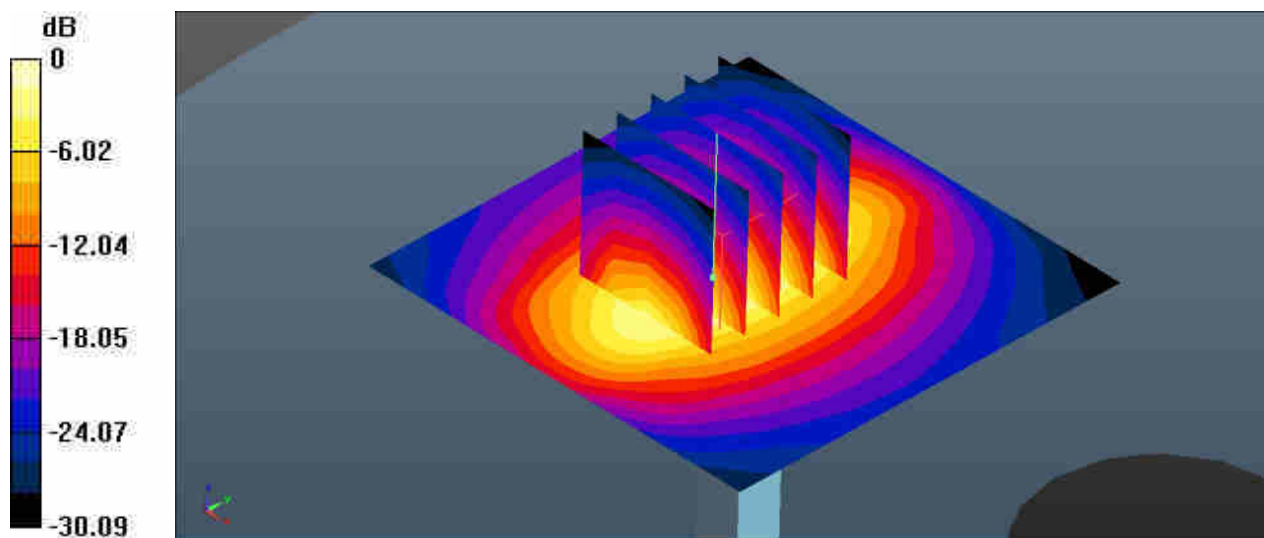
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 75.33 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 13.5 W/kg

SAR(1 g) = 9.01 W/kg; SAR(10 g) = 4.99 W/kg

Maximum value of SAR (measured) = 12.9 W/kg



0 dB = 12.9 W/kg = 11.1 dBW/kg

System Check_Body_1900MHz**DUT: D1900V2 -SN:5d118**

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

Medium: MSL_1900 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.534$ S/m; $\epsilon_r = 51.65$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(8.03, 8.03, 8.03); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- Phantom: SAM2; Type: SAM; Serial: TP-1503
- 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) = 12.8 W/kg

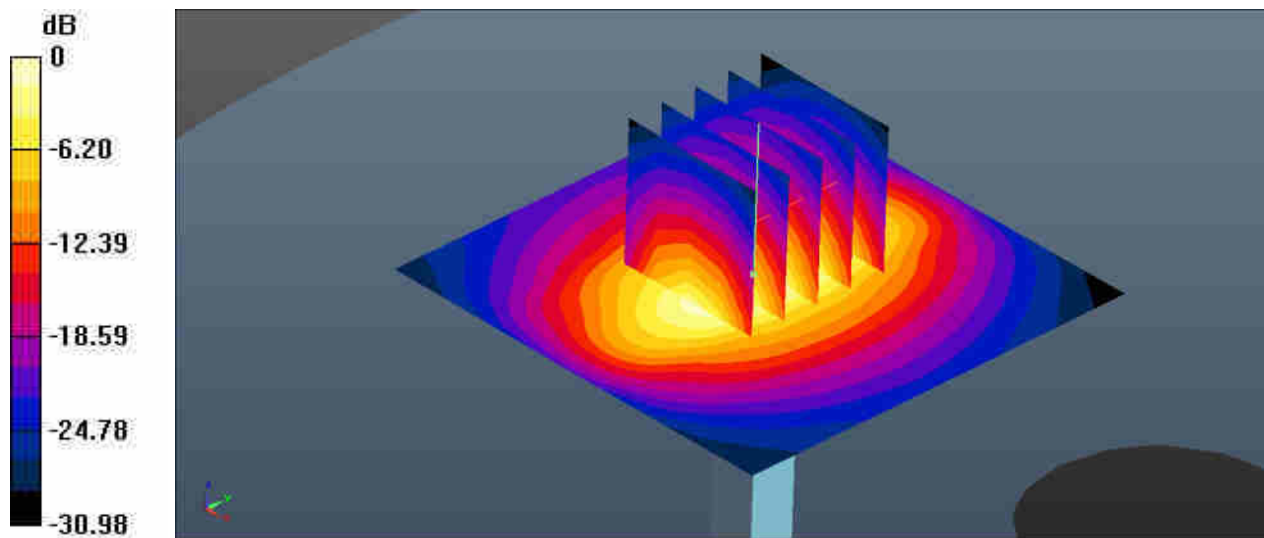
Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 109.8 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 21.8 W/kg

SAR(1 g) = 9.6 W/kg; SAR(10 g) = 5.20 W/kg

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



0 dB = 13.1 W/kg = 11.17 dBW/kg

System Check_Body_2300MHz**DUT: D2300V2 - SN:1055**

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

Medium: MSL_2300 Medium parameters used: $f = 2300$ MHz; $\sigma = 1.791$ S/m; $\epsilon_r = 54.74$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.9 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(7.74, 7.74, 7.74); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- 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 (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.5 W/kg

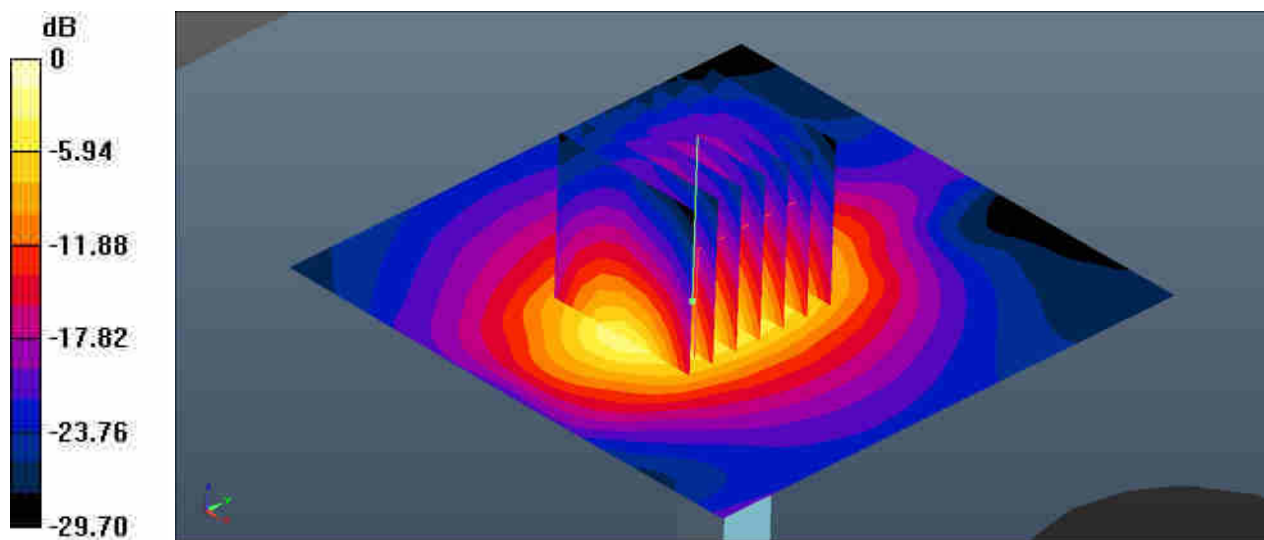
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 81.07 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 21.7 W/kg

SAR(1 g) = 11.9 W/kg; SAR(10 g) = 6 W/kg

Maximum value of SAR (measured) = 17.2 W/kg



0 dB = 17.5 W/kg = 12.43 dBW/kg

System Check_Body_2450MHz**DUT: D2450V2 - SN:840**

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

Medium: MSL_2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.959$ S/m; $\epsilon_r = 53.66$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3843; ConvF(7.02, 7.02, 7.02); Calibrated: 2018.9.27
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1305; Calibrated: 2018.5.11
- 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 (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 20.5 W/kg

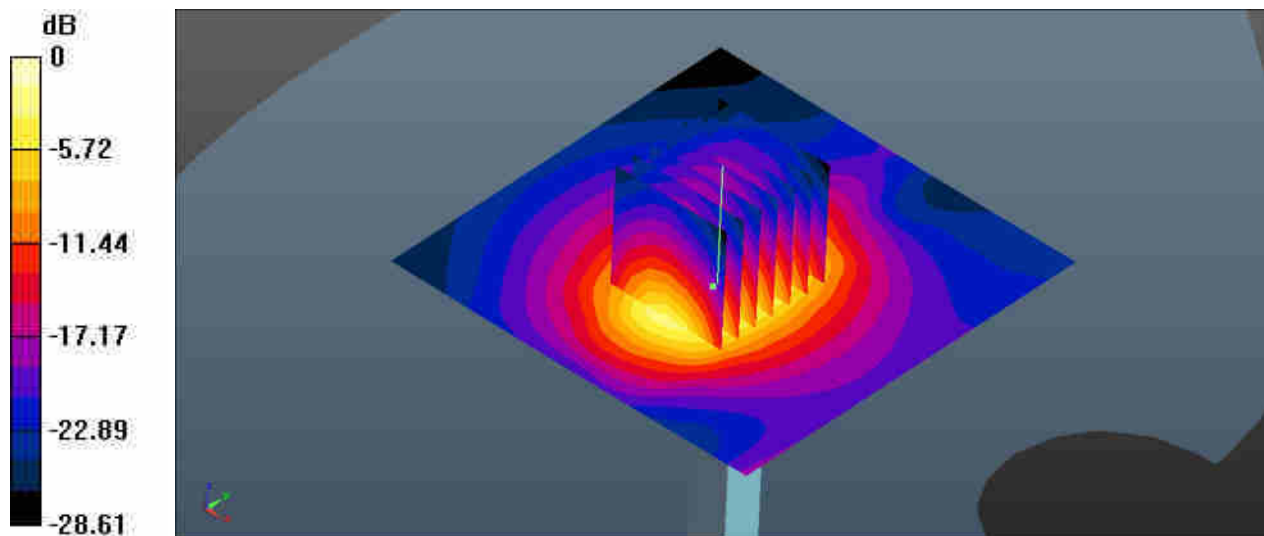
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 107.0 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 26.9 W/kg

SAR(1 g) = 12.9 W/kg; SAR(10 g) = 5.99 W/kg

Maximum value of SAR (measured) = 19.8 W/kg



0 dB = 19.8 W/kg = 12.97 dBW/kg

System Check_Body_2600MHz**DUT: D2600V2-SN:1061**

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

Medium: MSL_2600 Medium parameters used: $f = 2600$ MHz; $\sigma = 2.179$ S/m; $\epsilon_r = 51.029$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3954; ConvF(6.92, 6.92, 6.92); Calibrated: 2018.1.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2018.5.28
- 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=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 20.1 W/kg

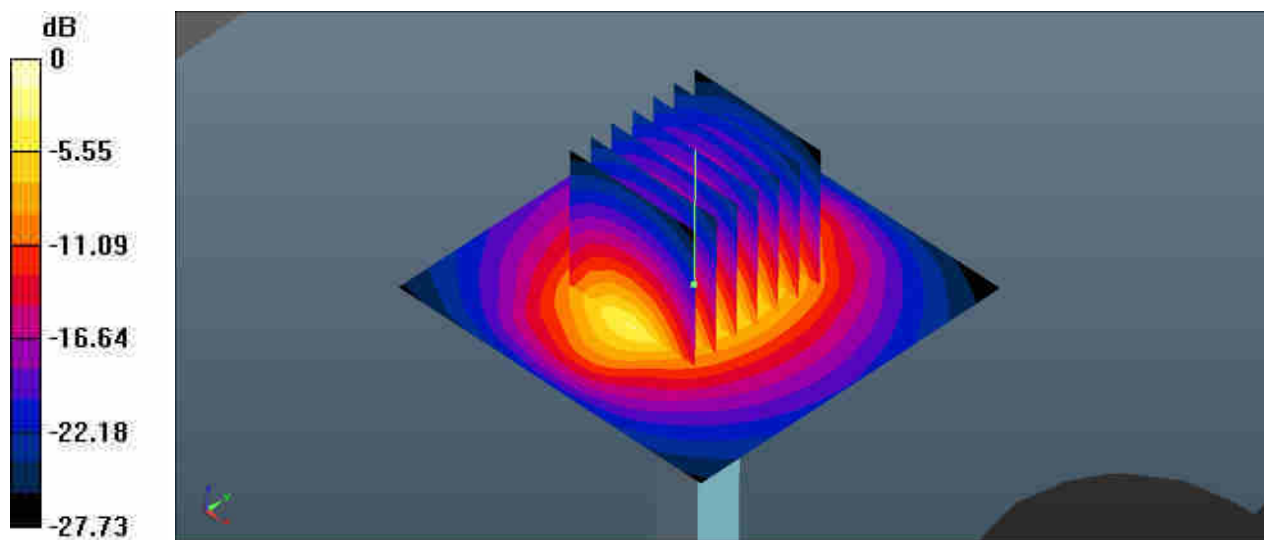
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.84 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 27.9 W/kg

SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.06 W/kg

Maximum value of SAR (measured) = 22.8 W/kg



0 dB = 22.8 W/kg = 13.57 dBW/kg

System Check_Body_5250MHz**DUT: D5GHzV2-SN:1203**

Communication System: UID 0, CW (0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: MSL_5000 Medium parameters used: $f = 5250$ MHz; $\sigma = 5.519$ S/m; $\epsilon_r = 47.829$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(4.4, 4.4, 4.4); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.10.22
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 17.1 W/kg

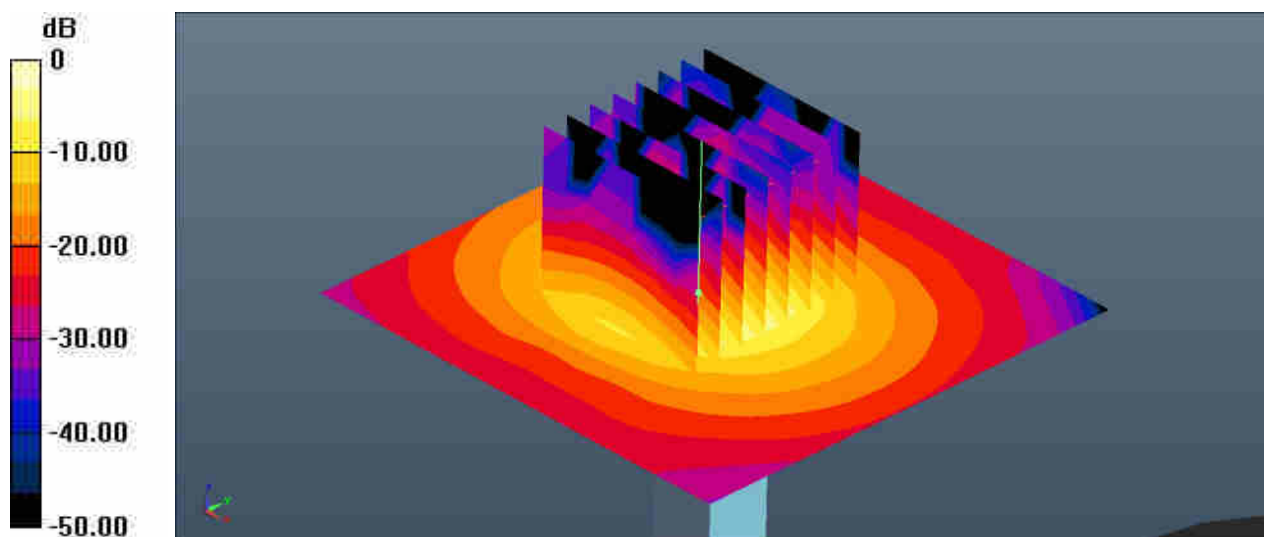
Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 38.33 V/m; Power Drift = 0.21 dB

Peak SAR (extrapolated) = 28.8 W/kg

SAR(1 g) = 7.15 W/kg; SAR(10 g) = 1.99 W/kg

Maximum value of SAR (measured) = 16.8 W/kg



0 dB = 17.1 W/kg = 12.33 dBW/kg

System Check_Body_5600MHz**DUT: D5GHzV2-SN:1203**

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: MSL_5000 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.978$ S/m; $\epsilon_r = 47.24$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(3.98, 3.98, 3.98); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.10.22
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 19 W/kg

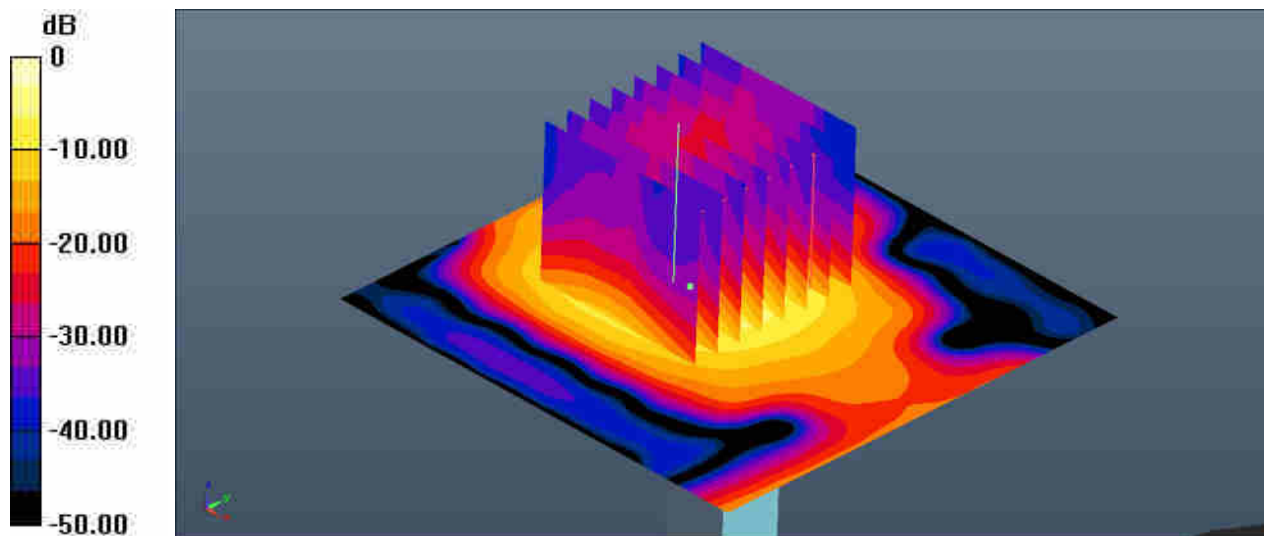
Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 36.33 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 34.0 W/kg

SAR(1 g) = 7.8 W/kg; SAR(10 g) = 2.15W/kg

Maximum value of SAR (measured) = 18.9 W/kg



0 dB = 18.9 W/kg = 12.76 dBW/kg

System Check_Body_5750MHz**DUT: D5GHzV2-SN:1203**

Communication System: UID 0, CW (0); Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: MSL_5000 Medium parameters used: $f = 5750$ MHz; $\sigma = 6.188$ S/m; $\epsilon_r = 46.946$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3857; ConvF(4.31, 4.31, 4.31); Calibrated: 2018.5.31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1279; Calibrated: 2018.10.22
- Phantom: SAM1; Type: SAM; Serial: TP-1842
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 17.2 W/kg

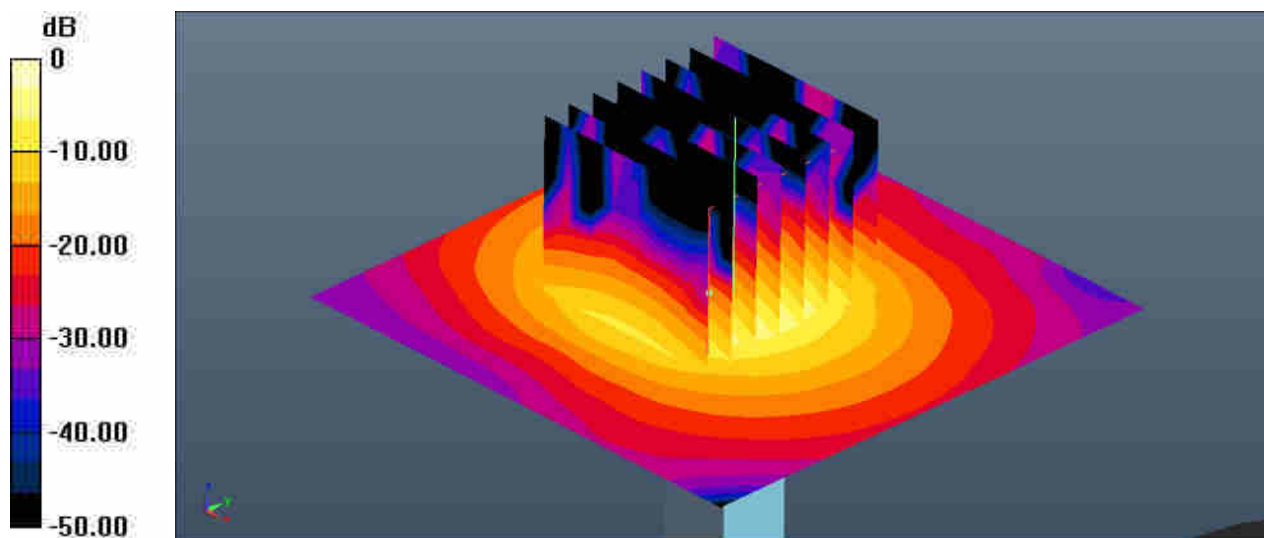
Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 34.77 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 31.6 W/kg

SAR(1 g) = 7.88 W/kg; SAR(10 g) = 2.01 W/kg

Maximum value of SAR (measured) = 18.1 W/kg



0 dB = 18.1 W/kg = 12.58 dBW/kg



Appendix B. Plots of High SAR Measurement

The plots are shown as follows.