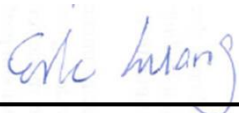


FCC SAR Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT1929-6
MARKETING NAME : Moto Z3 Play
FCC ID : IHDT56XE4
STANDARD : FCC 47 CFR Part 2 (2.1093)
ANSI/IEEE C95.1-1992
IEEE 1528-2013

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and had been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.



Reviewed by: Eric Huang / Manager



Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.)



Table of Contents

1. Statement of Compliance	4
2. Administration Data	5
3. Guidance Applied.....	5
4. Equipment Under Test (EUT) Information.....	6
4.1 General Information	6
4.2 General LTE SAR Test and Reporting Considerations.....	8
5. Antenna Location	10
6. Spot Check Verification Data	11
7. Simultaneous Transmission Analysis.....	13
7.1 Head Exposure Conditions	14
7.2 Hotspot Exposure Conditions.....	15
7.3 Body-Worn Accessory Exposure Conditions.....	17
7.4 Product Specific Conditions	18
7.5 SPLSR Evaluation and Analysis	19
8. References.....	26

Appendix A. Reference Report 1

Appendix B. Reference Report 2

[illegible]

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for Motorola Mobility LLC, Mobile Cellular Phone , XT1929-6, are as follows.

Equipment Class	Frequency Band	Highest SAR Summary			Product Specific (Separation 0mm)	Highest Simultaneous Transmission 1g SAR (W/kg)
		Head (Separation 0mm)	Body-worn (Separation 5mm)	Hotspot (Separation 5mm)		
		1g SAR (W/kg)			10g SAR (W/kg)	
Licensed	GSM850	0.18	0.68	0.68		1.59
	GSM1900	0.13	1.15	1.14	1.38	
	WCDMA II	0.28	1.18	1.12	3.02	
	WCDMA IV	0.31	0.99	1.18	3.15	
	WCDMA V	0.41	0.90	0.90		
	LTE Band 2	0.26	1.08	1.15	2.63	
	LTE Band 5	0.36	0.92	0.92		
	LTE Band 7	0.80	1.10	1.10	3.19	
	LTE Band 12 / 17	0.32	1.16	1.16		
	LTE Band 66	0.25	0.71	1.06	3.14	
DTS	2.4GHz WLAN	1.12	0.80	0.84		1.55
NII	5GHz WLAN	1.14	0.74	0.94	0.97	1.59
DSS	Bluetooth	0.26	0.12	0.16		1.28

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications.

2. Administration Data

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.

Testing Laboratory	
Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978

Applicant	
Company Name	Motorola Mobility LLC
Address	222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

Manufacturer	
Company Name	Motorola Mobility LLC
Address	222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

3. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards:

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02
- FCC KDB 941225 D01 3G SAR Procedures v03r01
- FCC KDB 941225 D05 SAR for LTE Devices v02r05
- FCC KDB 941225 D05A Rel.10 LTE SAR Test Guidance v01r02
- FCC KDB 941225 D06 Hotspot Mode SAR v02r01

4. Equipment Under Test (EUT) Information

4.1 General Information

Product Feature & Specification	
Equipment Name	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT1929-6
Marketing Name	Moto Z3 Play
FCC ID	IHDT56XE4
IMEI Code	351886090018877
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz WCDMA Band IV: 1712.4 MHz ~ 1752.6 MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5720 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz
Mode	GSM/GPRS/EGPRS RMC/AMR 12.2Kbps HSDPA HSUPA DC-HSDPA LTE: QPSK, 16QAM, 64QAM WLAN 2.4GHz : 802.11b/g/n HT20 WLAN 5GHz : 802.11a/n/ac HT20/HT40/VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE NFC:ASK

Product Feature & Specification	
HW Version	DVT2
SW Version	OPW28.22
GSM / (E)GPRS Transfer mode	Class B – EUT cannot support Packet Switched and Circuit Switched Network simultaneously but can automatically switch between Packet and Circuit Switched Network.
EUT Stage	Identical Prototype
Remark:	
- The IHDT56XE4 has the identical design as IHDT56XE1 on GSM850 / 1900, WCDMA B2 / B4 / B5 and LTE B2 / B4 / B5 / B7 / B12 / B17 / B66. Therefore, these transmitters test result is used in this report to be performed simultaneous transmission analysis and spot checks these transmitters were performed on FCC ID: IHDT56XE4 to ensure that the SAR measurements for both devices are the same, the spot check result refer to section 6 - The IHDT56XE4 has the identical design as IHDT56XE2 on 2.4GHz WLAN / Bluetooth and 5GHz WLAN. Therefore, these transmitters test result is used in this report to be performed simultaneous transmission analysis and spot checks these transmitters were performed on FCC ID: IHDT56XE4 to ensure that the SAR measurements for both devices are the same, the spot check result refer to section 6 - This device implements antenna tuning techniques for several WWAN (cellular) operating modes and frequencies for the purpose of improving antenna efficiency over a broad range of frequencies. Specifically, this technique is employed in the GSM, WCDMA and LTE modes but not supports LTE B7. The detail descriptions of the antenna tuner are included in the operational description and supplemental data refer to FCC ID: IHDT56XE1, Report No.: FA811821 section16. - This device 2.4GHz / 5.8GHz WLAN supports Hotspot operation. - When operating in a call in talk position at the head, the device utilizes the At-Head power table. When operating in a body-worn condition, with proximity of the user's body at the front or back of the device, the device operates in the Body-Worn power table. If neither the At-Head or Body-Worn condition is detected, but the device is operating in WiFi Hotspot mode, the device utilizes the Hotspot power table. When operating in any other radiated condition, the device uses the Default power table. - The device employs proximity sensors that detect the presence of the user's body at the front or back faces of the device. The control logic is such that, when this front or back body-worn condition is detected and the device is operating in a mode where on-body operation may be expected, the conducted power is applied in the Body-Worn power table. In this condition (user's body detected at front or back face of the device), the Body-Worn power table is applied regardless whether or not the Wi-Fi hotspot mode is active. - Note that the Body-Worn Reduced power tables and detection schemes described above are sufficient to assure that body-worn SAR limits are met, regardless whether the Wi-Fi hotspot feature is active or not. However, because FCC has an additional specific test definition and limit for Wi-Fi hotspot mode operation, the additional Hotspot power table is applied if hand-held operation is indicated (i.e., not At-Head or Body-Worn) when the Wi-Fi hotspot feature is active. This ensures the 4 edges of the device comply with the letter of the Wi-Fi Hotspot requirement. - The device additionally employs proximity sensors that detect the presence of tissue near the currently active transmit antenna (if that antenna may require reduced power relative the Default power table in order to meet extremity SAR limits). The control logic is such that, if the Body-Worn, At-Head or WiFi Hotspot conditions are not detected, but tissue (as a finger or hand, for example) is detected near the transmitting antenna, the Handheld Reduced power table will be applied - Reduced power for different RF exposure conditions: Head: If audio is present at the earpiece, the device will reduce output powers on the WLAN transmitter for held-to-ear and detail descriptions of the power reduction mechanism are included in the operational description. Body worn: The device employs proximity sensors that detect the presence of the user's body at the front or back faces of the device, when operating in near-body condition by end user, the device will reduced maximum output powers on the GSM1900, WCDMA B2 / B4 / B5 and LTE B2 / B4 / B5 / B7 / B66 transmitter and detail descriptions of the power reduction mechanism are included in the operational description. Hotspot: When the mobile hotspot session is turn on by end user, the device will reduced output powers on the GSM1900, WCDMA B2 / B4 / B5 and LTE B2 / B4 / B5 / B7 / B66 transmitter and detail descriptions of the power reduction mechanism are included in the operational description. Handheld: The device additionally employs proximity sensors that detect the presence of tissue near the currently active transmit antenna, the device will reduced output powers on the WCDMA B2 / B4 and LTE B2 / B4 / B5 / B7 / B66 transmitter and detail descriptions of the power reduction mechanism are included in the operational description. - For the sensor trigger test is refer to original report, FCC ID: IHDT56XE1, Report No.: FA811821 section4.3	

4.2 General LTE SAR Test and Reporting Considerations

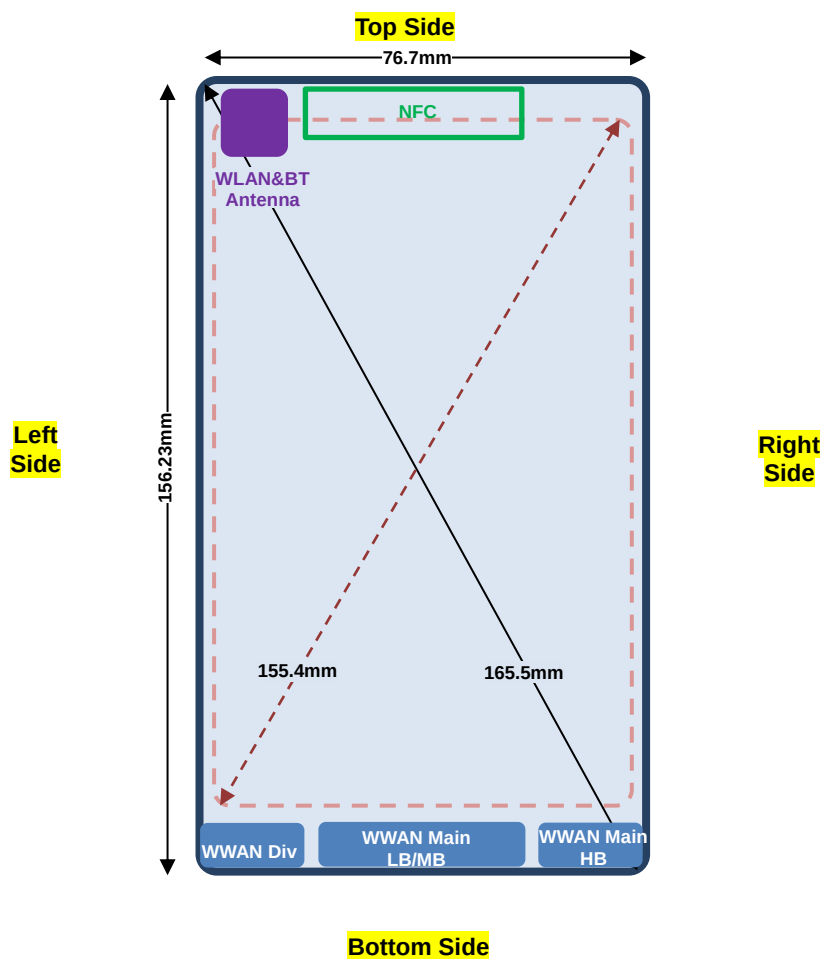
Summarized necessary items addressed in KDB 941225 D05 v02r05								
FCC ID	IHDT56XE4							
Equipment Name	Mobile Cellular Phone							
Operating Frequency Range of each LTE transmission band	LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz							
Channel Bandwidth	LTE Band 02:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 04:1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz LTE Band 05:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 07: 5MHz, 10MHz, 15MHz, 20MHz LTE Band 12:1.4MHz, 3MHz, 5MHz, 10MHz LTE Band 17: 5MHz, 10MHz LTE Band 66: 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz							
uplink modulations used	QPSK / 16QAM / 64QAM							
LTE Voice / Data requirements	Voice and Data							
LTE MPR permanently built-in by design	Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3							
	Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)
		1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
	256 QAM	≥ 1						≤ 5
LTE A-MPR	In the base station simulator configuration, Network Setting value is set to NS_01 to disable A-MPR during SAR testing and the LTE SAR tests was transmitting on all TTI frames (Maximum TTI)							
Spectrum plots for RB configuration	A properly configured base station simulator was used for the SAR and power measurement; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.							
Power reduction applied to satisfy SAR compliance	Yes, when operating in hotspot mode or Near-body or Product Specific that LTE B2 / B4 / B5 / B7 / B66 power reduction applied to satisfy SAR compliance.							
LTE Carrier Aggregation Combinations	Inter-Band and Intra-Band possible combinations please refer to FCC ID: IHDT56XE1, Report No.: FA811821, section12.							
LTE Carrier Aggregation Additional Information	This device supports maximum of 2 carriers in the downlink. Additional following LTE Release features are not supported: Relay, HetNet, Enhanced MIMO, eICI, WiFi Offloading, MDH, eMBMA, Cross-Carrier Scheduling, Enhanced SC-FDMA.							



Transmission (H, M, L) channel numbers and frequencies in each LTE band												
LTE Band 2												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	18607	1850.7	18615	1851.5	18625	1852.5	18650	1855	18675	1857.5	18700	1860
M	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880	18900	1880
H	19193	1909.3	19185	1908.5	19175	1907.5	19150	1905	19125	1902.5	19100	1900
LTE Band 4												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	19957	1710.7	19965	1711.5	19975	1712.5	20000	1715	20025	1717.5	20050	1720
M	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5	20175	1732.5
H	20393	1754.3	20385	1753.5	20375	1752.5	20350	1750	20325	1747.5	20300	1745
LTE Band 5												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20407	824.7	20415	825.5	20425	826.5	20450	829	20450	829	20450	829
M	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5	20525	836.5
H	20643	848.3	20635	847.5	20625	846.5	20600	844	20600	844	20600	844
LTE Band 7												
	Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz		Bandwidth 20 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	20775	2502.5	20800	2505	20825	2507.5	20850	2510	20850	2510	20850	2510
M	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535	21100	2535
H	21425	2567.5	21400	2565	21375	2562.5	21350	2560	21350	2560	21350	2560
LTE Band 12												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	23017	699.7	23025	700.5	23035	701.5	23060	704	23060	704	23060	704
M	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5	23095	707.5
H	23173	715.3	23165	714.5	23155	713.5	23130	711	23130	711	23130	711
LTE Band 17												
	Bandwidth 5 MHz				Bandwidth 10 MHz				Bandwidth 15 MHz			
	Channel #		Freq.(MHz)		Channel #		Freq. (MHz)		Channel #		Freq. (MHz)	
L	23755		706.5		23780		709		23780		709	
M	23790		710		23790		710		23790		710	
H	23825		713.5		23800		711		23800		711	
LTE Band 66												
	Bandwidth 1.4 MHz		Bandwidth 3 MHz		Bandwidth 5 MHz		Bandwidth 10 MHz		Bandwidth 15 MHz		Bandwidth 20 MHz	
	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)	Ch. #	Freq. (MHz)
L	131979	1710.7	131987	1711.5	131997	1712.5	132022	1715	132047	1717.5	132072	1720
M	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745	132322	1745
H	132665	1779.3	132657	1778.5	132647	1777.5	132622	1775	132597	1772.5	132572	1770

5. Antenna Location

<Mobile Phone>



Front View

**6. Spot Check Verification Data****<Head Exposure Condition>**

Band	Mode	Test Position	Ch.	Freq. (MHz)	Original Model					Spot Check Mode					Deviation
					Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
GSM850	GPRS (2 Tx slots)	Left Cheek	128	824.2	30.31	32.00	1.476	0.123	0.182	30.30	32.00	1.479	0.108	0.160	-12.0%
GSM1900	GPRS (3 Tx slots)	Right Cheek	810	1909.8	26.87	28.00	1.297	0.091	0.118	26.65	28.00	1.365	0.098	0.134	13.3%
WCDMA II	RMC 12.2Kbps	Right Cheek	9538	1907.6	22.73	23.50	1.194	0.233	0.278	22.61	23.50	1.227	0.206	0.253	-9.1%
WCDMA IV	RMC 12.2Kbps	Right Cheek	1312	1712.4	22.62	23.50	1.225	0.251	0.307	22.17	23.50	1.358	0.252	0.342	11.4%
WCDMA V	RMC 12.2Kbps	Left Cheek	4132	826.4	22.64	24.00	1.368	0.298	0.408	22.63	24.00	1.371	0.239	0.328	-19.6%
LTE Band 2/25	20M_QPSK_1_0	Right Cheek	26140	1860	23.26	23.50	1.057	0.245	0.259						-6.0%
LTE Band 2	20M_QPSK_1_0	Right Cheek	18700	1860						22.86	23.50	1.159	0.210	0.243	
LTE Band 5/26	15M_QPSK_1_37	Left Cheek	26865	831.5	22.73	24.00	1.340	0.269	0.360						-17.4%
LTE Band 5	10M_QPSK_1_0	Left Cheek	20525	836.5						22.42	24.00	1.439	0.207	0.298	
LTE Band 7_Main	20M_QPSK_1_99	Right Cheek	21350	2560	22.83	24.00	1.309	0.61	0.799	22.02	24.00	1.578	0.586	0.924	15.8%
LTE Band 7_Aux	20M_QPSK_1_99	Left Cheek	21350	2560	22.83	24.00	1.309	0.491	0.643	22.02	24.00	1.578	0.327	0.516	-19.7%
LTE Band 12	10M_QPSK_1_49	Left Cheek	23095	707.5	22.77	24.00	1.327	0.239	0.317	22.36	24.00	1.459	0.198	0.289	-9.0%
LTE Band 66	20M_QPSK_1_0	Right Cheek	132072	1720	22.83	23.50	1.167	0.213	0.249	22.68	23.50	1.208	0.245	0.296	19.1%

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Original Model					Spot Check Mode					Deviation
						Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
WLAN2.4GHz	802.11b 1Mbps	Right Cheek	0mm	11	2462	16.94	18.00	95.05	0.836	1.123	16.97	18.00	98.70	0.930	1.194	6.4%
WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	60	5300	16.43	16.50	94.98	0.855	0.914	16.34	16.50	94.88	0.982	1.074	17.5%
WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	100	5500	16.48	16.50	94.98	1.080	1.142	16.38	16.50	94.88	0.910	0.986	-13.6%
WLAN5GHz	802.11a 6Mbps	Right Cheek	0mm	165	5825	16.49	16.50	94.98	0.911	0.961	16.39	16.50	94.88	0.737	0.797	-17.0%
Bluetooth	1Mbps	Right Cheek	0mm	0	2402	12.26	13.00		0.220	0.261	11.94	13.00		0.175	0.223	-14.4%

<Hotspot Exposure Condition>

Band	Mode	Test Position	Ch.	Freq. (MHz)	Original Model					Spot Check Mode					Deviation
					Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
GSM850	GPRS (2 Tx slots)	Back	128	824.2	30.31	32.00	1.476	0.460	0.679	30.30	32.00	1.479	0.387	0.572	-15.7%
GSM1900	GPRS (3 Tx slots)	Bottom Side	810	1909.80	19.68	20.50	1.208	0.944	1.140	19.45	20.50	1.274	0.821	1.046	-8.3%
WCDMA II	RMC 12.2Kbps	Bottom Side	9262	1852.4	13.95	15.50	1.429	0.786	1.123	13.61	15.50	1.545	0.673	1.040	-7.4%
WCDMA IV	RMC 12.2Kbps	Bottom Side	1513	1752.6	15.53	16.50	1.250	0.940	1.175	14.94	16.50	1.432	0.901	1.290	9.8%
WCDMA V	RMC 12.2Kbps	Back	4233	846.6	22.15	23.50	1.365	0.658	0.898	21.55	23.50	1.567	0.562	0.881	-1.9%
LTE Band 2/25	20M_QPSK_50_0	Bottom Side	26590	1905	15.60	16.50	1.230	0.934	1.149						-5.5%
LTE Band 2	20M_QPSK_1_0	Bottom Side	18700	1860						14.52	16.50	1.578	0.688	1.085	
LTE Band 5/26	15M_QPSK_36_0	Back	26865	831.5	21.98	23.50	1.419	0.646	0.917						-13.5%
LTE Band 5	10M_QPSK_1_0	Back	20525	836.5						21.74	23.50	1.500	0.529	0.793	
LTE Band 7_Main	20M_QPSK_50_50	Back	20850	2510	16.66	18.00	1.361	0.804	1.095	16.85	18.00	1.303	0.772	1.006	-8.1%
LTE Band 7_Aux	20M_QPSK_1_49	Back	21350	2560	16.85	18.00	1.303	0.663	0.864	16.71	18.00	1.346	0.549	0.739	-14.5%
LTE Band 12	10M_QPSK_1_49	Back	23095	707.5	22.77	24.00	1.327	0.872	1.157	22.36	24.00	1.459	0.871	1.271	9.8%
LTE Band 66	20M_QPSK_100_0	Bottom Side	132572	1770	15.37	16.50	1.297	0.819	1.062	14.78	16.50	1.486	0.587	0.872	-17.9%

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Original Model					Spot Check Mode					Deviation
						Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
WLAN2.4GHz	802.11b 1Mbps	Left Side	5mm	6	2437	18.97	19.00	98.89	0.829	0.844	18.98	19.00	98.71	0.958	0.975	15.5%
WLAN5GHz	802.11a 6Mbps	Left Side	5mm	36	5180	16.95	17.00	94.98	0.621	0.661	16.83	17.00	94.88	0.700	0.767	16.1%
WLAN5GHz	802.11a 6Mbps	Left Side	5mm	149	5745	16.94	17.00	94.98	0.882	0.941	16.99	17.00	94.88	0.764	0.807	-14.2%
Bluetooth	1Mbps	Left Side	5mm	0	2402	12.26	13.00		0.135	0.160	11.94	13.00		0.139	0.177	10.8%



<Body-worn Exposure Condition>

Band	Mode	Test Position	Ch.	Freq. (MHz)	Original Model					Spot Check Mode					Deviation
					Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
GSM850	GPRS (2 Tx slots)	Back	128	824.2	30.31	32.00	1.476	0.460	0.679	30.30	32.00	1.479	0.387	0.572	-15.7%
GSM1900	GPRS (3 Tx slots)	Back	810	1909.8	21.05	21.50	1.109	1.04	1.154	20.91	21.50	1.146	0.892	1.022	-11.4%
WCDMA II	RMC 12.2Kbps	Front	9400	1880	16.33	17.50	1.309	0.899	1.177	15.98	17.50	1.419	0.837	1.188	0.9%
WCDMA IV	RMC 12.2Kbps	Front	1513	1752.6	15.53	17.00	1.403	0.704	0.988	15.04	17.00	1.570	0.744	1.168	18.3%
WCDMA V	RMC 12.2Kbps	Back	4233	846.6	22.15	23.50	1.365	0.658	0.898	21.55	23.50	1.567	0.562	0.881	-1.9%
LTE Band 2/25	20M_QPSK_50_0	Front	26590	1905	15.60	16.50	1.230	0.879	1.081						-5.0%
LTE Band 2	20M_QPSK_1_0	Front	19100	1900						14.51	16.50	1.581	0.650	1.028	
LTE Band 5/26	15M_QPSK_36_0	Back	26865	831.5	21.98	23.50	1.419	0.646	0.917						-13.5%
LTE Band 5	10M_QPSK_1_0	Back	20525	836.5						21.74	23.50	1.500	0.529	0.793	
LTE Band 7_Main	20M_QPSK_50_50	Back	20850	2510	16.66	18.00	1.361	0.804	1.095	16.85	18.00	1.303	0.772	1.006	-8.1%
LTE Band 7_Aux	20M_QPSK_1_49	Back	21350	2560	16.85	18.00	1.303	0.663	0.864	16.71	18.00	1.346	0.549	0.739	-14.5%
LTE Band 12	10M_QPSK_1_49	Back	23095	707.5	22.77	24.00	1.327	0.872	1.157	22.36	24.00	1.459	0.871	1.271	9.8%
LTE Band 66	20M_QPSK_1_0	Back	132572	1770	15.70	17.00	1.349	0.523	0.706	15.92	17.00	1.282	0.653	0.837	18.7%

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Original Model					Spot Check Mode					Deviation
						Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	
WLAN2.4GHz	802.11b 1Mbps	Back	5mm	6	2437	18.97	19.00	98.89	0.784	0.798	18.98	19.00	98.71	0.779	0.793	-0.7%
WLAN5GHz	802.11a 6Mbps	Back	5mm	52	5260	16.88	17.00	94.98	0.502	0.543	16.83	17.00	94.88	0.552	0.605	11.3%
WLAN5GHz	802.11a 6Mbps	Back	5mm	100	5500	16.71	17.00	94.98	0.657	0.739	16.99	17.00	94.88	0.730	0.770	4.3%
WLAN5GHz	802.11a 6Mbps	Back	5mm	149	5745	16.96	17.00	94.98	0.648	0.688	16.99	17.00	94.88	0.728	0.769	11.8%
Bluetooth	1Mbps	Back	5mm	0	2402	12.26	13.00		0.103	0.122	11.94	13.00		0.087	0.111	-9.1%

<Product Specific Exposure Condition>

Band	Mode	Test Position	Ch.	Freq. (MHz)	Original Model					Spot Check Mode					Deviation
					Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	
GSM1900	GPRS (3 Tx slots)	Bottom Side	810	1909.8	26.87	28.00	1.297	1.060	1.375	26.65	28.00	1.365	0.861	1.175	-14.6%
WCDMA II	RMC 12.2Kbps	Bottom Side	9262	1852.40	22.23	23.00	1.194	2.53	3.021	22.04	23.00	1.247	2.280	2.844	-5.9%
WCDMA IV	RMC 12.2Kbps	Bottom Side	1312	1712.4	21.87	22.00	1.030	3.060	3.153	21.65	22.00	1.084	2.650	2.872	-8.9%
LTE Band 2/25	20M_QPSK_50_0	Bottom Side	26340	1880	20.66	22.50	1.528	1.720	2.627						-12.0%
LTE Band 2	20M_QPSK_1_0	Bottom Side	18700	1860						20.62	22.50	1.542	1.500	2.313	
LTE Band 7_Main	20M_QPSK_1_49	Right Side	21100	2535	20.84	21.50	1.164	2.740	3.190	20.68	21.50	1.208	2.730	3.297	3.4%
LTE Band 7_Aux	20M_QPSK_1_49	Left Side	21350	2560	20.99	21.50	1.125	2.420	2.722	20.68	21.50	1.208	2.140	2.585	-5.0%
LTE Band 66	20M_QPSK_1_0	Bottom Side	132572	1770	22.28	23.00	1.180	2.660	3.140	22.00	23.00	1.259	2.710	3.412	8.7%

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Original Model					Spot Check Mode					Deviation
						Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	Average Power (dBm)	Tune-Up Limit (dBm)	Duty Cycle %	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)	
WLAN5GHz	802.11a 6Mbps	Left Side	0mm	52	5260	16.88	17.00	94.98	0.781	0.845	16.80	17.00	94.88	0.785	0.866	2.5%
WLAN5GHz	802.11a 6Mbps	Left Side	0mm	100	5500	16.71	17.00	94.98	0.860	0.968	16.99	17.00	94.88	0.844	0.892	-7.9%

7. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Portable Handset			
		Head	Body-worn	Hotspot	Product Specific
1.	GSM Voice + WLAN2.4GHz	Yes	Yes		Yes
2.	GPRS/EDGE + WLAN2.4GHz	Yes	Yes	Yes	Yes
3.	WCDMA + WLAN2.4GHz	Yes	Yes	Yes	Yes
4.	LTE + WLAN2.4GHz	Yes	Yes	Yes	Yes
5.	GSM Voice + Bluetooth	Yes	Yes		Yes
6.	GPRS/EDGE + Bluetooth	Yes	Yes	Yes	Yes
7.	WCDMA+ Bluetooth	Yes	Yes	Yes	Yes
8.	LTE + Bluetooth	Yes	Yes	Yes	Yes
9.	GSM Voice + WLAN5GHz	Yes	Yes		Yes
10.	GPRS/EDGE + WLAN5GHz	Yes	Yes	Yes	Yes
11.	WCDMA + WLAN5GHz	Yes	Yes	Yes	Yes
12.	LTE + WLAN5GHz	Yes	Yes	Yes	Yes

General Note:

1. This device WLAN 2.4GHz / 5.2GHz / 5.8GHz supports Hotspot operation and Bluetooth support tethering applications.
2. WLAN and Bluetooth share the same antenna, and cannot transmit simultaneously.
3. 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.
4. The Scaled SAR summation is calculated based on the same configuration and test position.
5. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
 - i) Scalar SAR summation < 1.6W/kg.
 - ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - iii) If $SPLSR \leq 0.04$ for 1g SAR, if $SPLSR < 0.1$ for 10g SAR, simultaneously transmission SAR measurement is not necessary.
 - iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
 - v) The SPLSR calculated results please refer to section 7.5.

7.1 Head Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)	1+2 SPLSR	1+2 Case No	1+3 SPLSR	1+3 Case No
			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	0.083	1.123	1.142	0.261	1.206	1.225	0.344				
		Right Tilted	0.037	0.627	0.734	0.157	0.664	0.771	0.194				
		Left Cheek	0.182	0.317	0.361	0.077	0.499	0.543	0.259				
		Left Tilted	0.043	0.326	0.203	0.077	0.369	0.246	0.120				
	GSM1900	Right Cheek	0.128	1.123	1.142	0.261	1.251	1.270	0.389				
		Right Tilted	0.032	0.627	0.734	0.157	0.659	0.766	0.189				
		Left Cheek	0.065	0.317	0.361	0.077	0.382	0.426	0.142				
		Left Tilted	0.051	0.326	0.203	0.077	0.377	0.254	0.128				
WCDMA	WCDMA II	Right Cheek	0.278	1.123	1.142	0.261	1.401	1.420	0.539				
		Right Tilted	0.088	0.627	0.734	0.157	0.715	0.822	0.245				
		Left Cheek	0.113	0.317	0.361	0.077	0.430	0.474	0.190				
		Left Tilted	0.121	0.326	0.203	0.077	0.447	0.324	0.198				
	WCDMA IV	Right Cheek	0.307	1.123	1.142	0.261	1.430	1.449	0.568				
		Right Tilted	0.092	0.627	0.734	0.157	0.719	0.826	0.249				
		Left Cheek	0.143	0.317	0.361	0.077	0.460	0.504	0.220				
		Left Tilted	0.091	0.326	0.203	0.077	0.417	0.294	0.168				
	WCDMA V	Right Cheek	0.309	1.123	1.142	0.261	1.432	1.451	0.570				
		Right Tilted	0.137	0.627	0.734	0.157	0.764	0.871	0.294				
		Left Cheek	0.408	0.317	0.361	0.077	0.725	0.769	0.485				
		Left Tilted	0.146	0.326	0.203	0.077	0.472	0.349	0.223				
LTE	LTE Band 7_Main	Right Cheek	0.799	1.123	1.142	0.261	1.922	1.941	1.060	0.03	Case 1	0.02	Case 1
		Right Tilted	0.389	0.627	0.734	0.157	1.016	1.123	0.546				
		Left Cheek	0.348	0.317	0.361	0.077	0.665	0.709	0.425				
		Left Tilted	0.423	0.326	0.203	0.077	0.749	0.626	0.500				
	LTE Band 7_Aux	Right Cheek	0.359	1.123	1.142	0.261	1.482	1.501	0.620				
		Right Tilted	0.264	0.627	0.734	0.157	0.891	0.998	0.421				
		Left Cheek	0.643	0.317	0.361	0.077	0.960	1.004	0.720				
		Left Tilted	0.196	0.326	0.203	0.077	0.522	0.399	0.273				
	LTE Band 12	Right Cheek	0.250	1.123	1.142	0.261	1.373	1.392	0.511				
		Right Tilted	0.115	0.627	0.734	0.157	0.742	0.849	0.272				
		Left Cheek	0.317	0.317	0.361	0.077	0.634	0.678	0.394				
		Left Tilted	0.142	0.326	0.203	0.077	0.468	0.345	0.219				
	LTE Band 25	Right Cheek	0.259	1.123	1.142	0.261	1.382	1.401	0.520				
		Right Tilted	0.070	0.627	0.734	0.157	0.697	0.804	0.227				
		Left Cheek	0.135	0.317	0.361	0.077	0.452	0.496	0.212				
		Left Tilted	0.092	0.326	0.203	0.077	0.418	0.295	0.169				
	LTE Band 26	Right Cheek	0.289	1.123	1.142	0.261	1.412	1.431	0.550				
		Right Tilted	0.122	0.627	0.734	0.157	0.749	0.856	0.279				
		Left Cheek	0.360	0.317	0.361	0.077	0.677	0.721	0.437				
		Left Tilted	0.162	0.326	0.203	0.077	0.488	0.365	0.239				
	LTE Band 66	Right Cheek	0.125	1.123	1.142	0.261	1.248	1.267	0.386				
		Right Tilted	0.076	0.627	0.734	0.157	0.703	0.810	0.233				
		Left Cheek	0.249	0.317	0.361	0.077	0.566	0.610	0.326				
		Left Tilted	0.065	0.326	0.203	0.077	0.391	0.268	0.142				

7.2 Hotspot Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	1+2	1+3	1+4	1+2	1+2	1+3	1+3
			WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	SPLSR	Case No	SPLSR	Case No
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)							
GSM	GSM850	Front	0.359	0.441	0.670	0.090	0.800	1.029	0.449				
		Back	0.679	0.798	0.688	0.122	1.477	1.367	0.801				
		Left side	0.244	0.844	0.941	0.160	1.088	1.185	0.404				
		Right side	0.145				0.145	0.145	0.145				
		Top side		0.155	0.097	0.034	0.155	0.097	0.034				
		Bottom side	0.203				0.203	0.203	0.203				
	GSM1900	Front	0.773	0.441	0.670	0.090	1.214	1.443	0.863				
		Back	0.750	0.798	0.688	0.122	1.548	1.438	0.872				
		Left side	0.027	0.844	0.941	0.160	0.871	0.968	0.187				
		Right side	0.075				0.075	0.075	0.075				
		Top side		0.155	0.097	0.034	0.155	0.097	0.034				
		Bottom side	1.140				1.140	1.140	1.140				
WCDMA	WCDMA II	Front	0.794	0.441	0.670	0.090	1.235	1.464	0.884				
		Back	0.667	0.798	0.688	0.122	1.465	1.355	0.789				
		Left side	0.024	0.844	0.941	0.160	0.868	0.965	0.184				
		Right side	0.073				0.073	0.073	0.073				
		Top side		0.155	0.097	0.034	0.155	0.097	0.034				
		Bottom side	1.123				1.123	1.123	1.123				
	WCDMA IV	Front	0.880	0.441	0.670	0.090	1.321	1.550	0.970				
		Back	0.816	0.798	0.688	0.122	1.614	1.504	0.938	0.01	Case 2		
		Left side	0.048	0.844	0.941	0.160	0.892	0.989	0.208				
		Right side	0.088				0.088	0.088	0.088				
		Top side		0.155	0.097	0.034	0.155	0.097	0.034				
		Bottom side	1.175				1.175	1.175	1.175				
	WCDMA V	Front	0.701	0.441	0.670	0.090	1.142	1.371	0.791				
		Back	0.898	0.798	0.688	0.122	1.696	1.586	1.020	0.02	Case 3		
		Left side	0.440	0.844	0.941	0.160	1.284	1.381	0.600				
		Right side	0.286				0.286	0.286	0.286				
		Top side		0.155	0.097	0.034	0.155	0.097	0.034				
		Bottom side	0.386				0.386	0.386	0.386				

WWAN Band	Exposure Position	1	2	3	4	1+2	1+3	1+4	1+2 SPLSR	1+2 Case No	1+3 SPLSR	1+3 Case No
		WWAN 1g SAR (W/kg)	2.4GHz WLAN 1g SAR (W/kg)	5GHz WLAN 1g SAR (W/kg)	Bluetooth 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)				
LTE	LTE Band 7_Main	Front	0.642	0.441	0.670	0.090	1.083	1.312	0.732			
		Back	1.095	0.798	0.688	0.122	1.893	1.783	1.217	0.02	Case 4	0.02 Case 4
		Left side		0.844	0.941	0.160	0.844	0.941	0.160			
		Right side	0.907				0.907	0.907	0.907			
		Top side		0.155	0.097	0.034	0.155	0.097	0.034			
		Bottom side	0.265				0.265	0.265	0.265			
	LTE Band 7_Aux	Front	0.512	0.441	0.670	0.090	0.953	1.182	0.602			
		Back	0.864	0.798	0.688	0.122	1.662	1.552	0.986	0.02	Case 5	
		Left side	0.569	0.844	0.941	0.160	1.413	1.510	0.729			
		Right side					0.000	0.000	0.000			
		Top side		0.155	0.097	0.034	0.155	0.097	0.034			
		Bottom side	0.098				0.098	0.098	0.098			
	LTE Band 12	Front	0.884	0.441	0.670	0.090	1.325	1.554	0.974			
		Back	1.157	0.798	0.688	0.122	1.955	1.845	1.279	0.02	Case 6	0.01 Case 6
		Left side	0.571	0.844	0.941	0.160	1.415	1.512	0.731			
		Right side	0.488				0.488	0.488	0.488			
		Top side		0.155	0.097	0.034	0.155	0.097	0.034			
		Bottom side	0.422				0.422	0.422	0.422			
	LTE Band 25	Front	1.081	0.441	0.670	0.090	1.522	1.751	1.171			0.01 Case 7
		Back	0.740	0.798	0.688	0.122	1.538	1.428	0.862			
		Left side	0.023	0.844	0.941	0.160	0.867	0.964	0.183			
		Right side	0.045				0.045	0.045	0.045			
		Top side		0.155	0.097	0.034	0.155	0.097	0.034			
		Bottom side	1.149				1.149	1.149	1.149			
	LTE Band 26	Front	0.768	0.441	0.670	0.090	1.209	1.438	0.858			
		Back	0.917	0.798	0.688	0.122	1.715	1.605	1.039	0.02	Case 8	0.01 Case 8
		Left side	0.447	0.844	0.941	0.160	1.291	1.388	0.607			
		Right side	0.310				0.310	0.310	0.310			
		Top side		0.155	0.097	0.034	0.155	0.097	0.034			
		Bottom side	0.424				0.424	0.424	0.424			
	LTE Band 66	Front	0.622	0.441	0.670	0.090	1.063	1.292	0.712			
		Back	0.588	0.798	0.688	0.122	1.386	1.276	0.710			
		Left side	0.045	0.844	0.941	0.160	0.889	0.986	0.205			
		Right side	0.111				0.111	0.111	0.111			
		Top side		0.155	0.097	0.034	0.155	0.097	0.034			
		Bottom side	1.062				1.062	1.062	1.062			



7.3 Body-Worn Accessory Exposure Conditions

WWAN Band		Exposure Position	1	2	3	4	1+2	1+3	1+4	1+2	1+2	1+3	1+3
			WWAN 1g SAR (W/kg)	2.4GHz WLAN 1g SAR (W/kg)	5GHz WLAN 1g SAR (W/kg)	Bluetooth 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	Summed 1g SAR (W/kg)	SPLSR	Case No	SPLSR	Case No
GSM	GSM850	Front	0.359	0.441	0.670	0.090	0.800	1.029	0.449				
		Back	0.679	0.798	0.739	0.122	1.477	1.418	0.801				
	GSM1900	Front	1.068	0.441	0.670	0.090	1.509	1.738	1.158			0.01	Case 9
		Back	1.154	0.798	0.739	0.122	1.952	1.893	1.276	0.02	Case 10	0.02	Case 10
WCDMA	WCDMA II	Front	1.177	0.441	0.670	0.090	1.618	1.847	1.267	0.01	Case 11	0.02	Case 11
		Back	1.007	0.798	0.739	0.122	1.805	1.746	1.129	0.02	Case 12	0.02	Case 12
	WCDMA IV	Front	0.988	0.441	0.670	0.090	1.429	1.658	1.078			0.01	Case 13
		Back	0.916	0.798	0.739	0.122	1.714	1.655	1.038	0.02	Case 14	0.01	Case 14
	WCDMA V	Front	0.701	0.441	0.670	0.090	1.142	1.371	0.791				
		Back	0.898	0.798	0.739	0.122	1.696	1.637	1.020	0.02	Case 15	0.01	Case 15
LTE	LTE Band 7_Main	Front	0.642	0.441	0.670	0.090	1.083	1.312	0.732				
		Back	1.095	0.798	0.739	0.122	1.893	1.834	1.217	0.02	Case 16	0.02	Case 16
	LTE Band 7_Aux	Front	0.512	0.441	0.670	0.090	0.953	1.182	0.602				
		Back	0.864	0.798	0.739	0.122	1.662	1.603	0.986	0.02	Case 17	0.02	Case 17
	LTE Band 12	Front	0.884	0.441	0.670	0.090	1.325	1.554	0.974				
		Back	1.157	0.798	0.739	0.122	1.955	1.896	1.279	0.02	Case 18	0.02	Case 18
	LTE Band 25	Front	1.081	0.441	0.670	0.090	1.522	1.751	1.171			0.01	Case 19
		Back	0.740	0.798	0.739	0.122	1.538	1.479	0.862				
	LTE Band 26	Front	0.768	0.441	0.670	0.090	1.209	1.438	0.858				
		Back	0.917	0.798	0.739	0.122	1.715	1.656	1.039	0.02	Case 20	0.01	Case 20
	LTE Band 66	Front	0.706	0.441	0.670	0.090	1.147	1.376	0.796				
		Back	0.660	0.798	0.739	0.122	1.458	1.399	0.782				

7.4 Product Specific Conditions

Remark:

1. According to KDB 941225 D06 v02r01 and KDB 648474 D04v01r03, for WWAN / 2.4GHz WLAN / Bluetooth and 5GHz WLAN SAR ("–") was excluded, due to transmitting antenna located larger 25mm from that surface or edge and Hotspot SAR was < 1.2W/Kg.

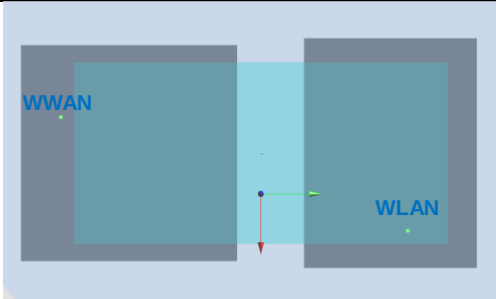
WWAN Band		Exposure Position	1	2	3	4	1+2 Summed 1g SAR (W/kg)	1+3 Summed 1g SAR (W/kg)	1+4 Summed 1g SAR (W/kg)
			WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth			
			10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)			
GSM	GSM1900	Front			0.408			0.408	
		Back			0.317			0.317	
		Left side			0.967			0.967	
		Right side							
		Top side			0.141			0.141	
		Bottom side	1.375				1.375	1.375	1.375
WCDMA	WCDMA II	Front			0.408			0.408	
		Back			0.317			0.317	
		Left side			0.967			0.967	
		Right side							
		Top side			0.141			0.141	
		Bottom side	3.021				3.021	3.021	3.021
	WCDMA IV	Front			0.408			0.408	
		Back			0.317			0.317	
		Left side			0.967			0.967	
		Right side							
		Top side			0.141			0.141	
		Bottom side	3.153				3.153	3.153	3.153
LTE	LTE Band 7_Main	Front			0.408			0.408	
		Back			0.317			0.317	
		Left side			0.967			0.967	
		Right side	3.190				3.190	3.190	3.190
		Top side			0.141			0.141	
		Bottom side							
	LTE Band 7_Aux	Front			0.408			0.408	
		Back			0.317			0.317	
		Left side	2.722		0.967		2.722	3.689	2.722
		Right side							
		Top side			0.141			0.141	
		Bottom side							
	LTE 25	Front			0.408			0.408	
		Back			0.317			0.317	
		Left side			0.967			0.967	
		Right side							
		Top side			0.141			0.141	
		Bottom side	2.627				2.627	2.627	2.627
	LTE Band 66	Front			0.408			0.408	
		Back			0.317			0.317	
		Left side			0.967			0.967	
		Right side							
		Top side			0.141			0.141	
		Bottom side	3.140				3.140	3.140	3.140

7.5 SPLSR Evaluation and Analysis

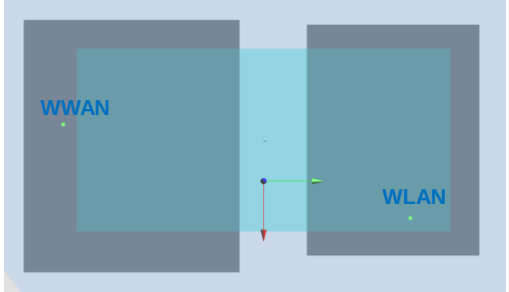
General Note:

1. $SPLSR = (SAR_1 + SAR_2)^{1.5} / (min. \text{ separation distance, mm})$. If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary

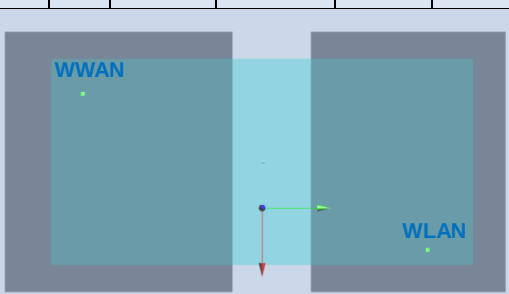
Case 1	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 7	Right Cheek	0.799	0	49.01	70.41	0.35	102.9	1.92	0.03	Not required
	WLAN2.4GHz		1.123	0	19.49	-28.2	-0.78				
	LTE Band 7	Right Cheek	0.799	0	49.01	70.41	0.35	108.7	1.94	0.02	Not required
WLAN5GHz	1.142		5	15.84	-33.09	-0.26					
											

Case 2	Band	Position	SAR (W/kg)	Gap	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
				(mm)	X	Y	Z				
	WCDMA IV	Back	0.816	5	0.3	-81	-1.13	144.2	1.61	0.01	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
											

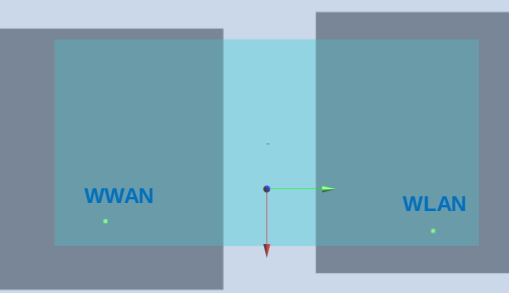
Case 3	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA V	Back	0.898	5	-14	-77.7	-1.32	144.9	1.70	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				



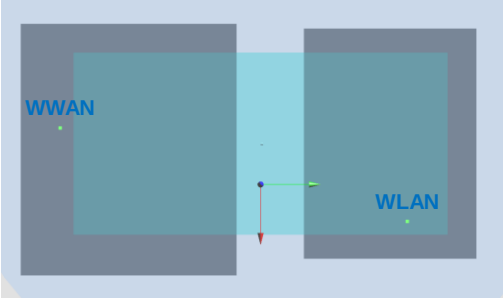
Case 4	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 7_Main	Back	1.095	5	-28.2	-66.2	-6.03	139.7	1.89	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	LTE Band 7_Main	Back	1.095	5	-28.2	-66.2	-6.03	147.5	1.78	0.02	Not required
	WLAN5GHz		0.688	5	39.8	64.6	-0.08				



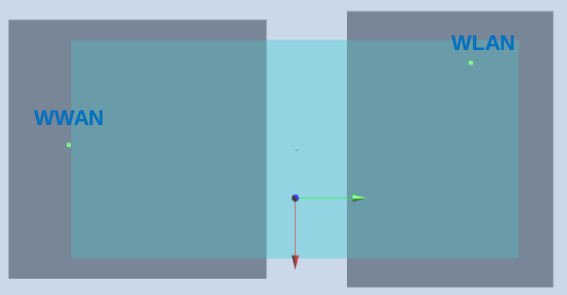
Case 5	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 7_Aux	Back	0.864	5	26.8	-60.2	0.09	119.9	1.66	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				



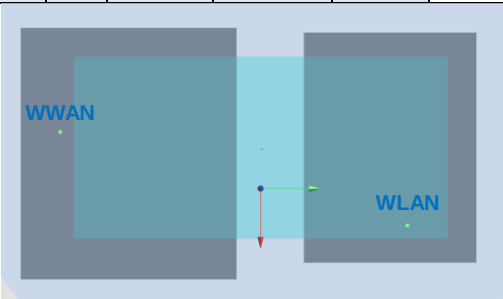
Case 6	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 12	Back	1.155	5	-12.9	-80.4	-2.25	147.2	1.95	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	LTE Band 12	Back	0.349	5	-12.9	-80.4	-2.25	154.3	1.04	0.01	Not required
	WLAN5GHz		0.688	5	39.8	64.6	-0.08				



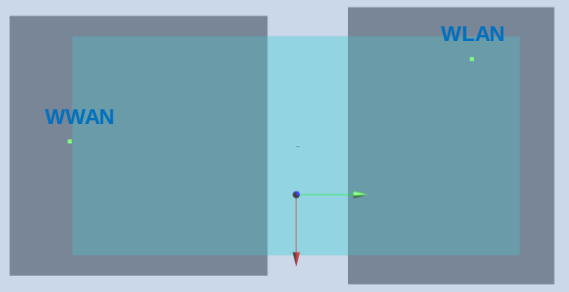
Case 7	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 25	Front	1.081	5	2.3	-79.5	-2.6	156.2	1.75	0.01	Not required
	WLAN5GHz		0.67	5	-33.4	72.6	-0.45				



Case 8	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 26	Back	0.917	5	-13.9	-79.4	-1.36	146.5	1.72	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	LTE Band 26	Back	0.917	5	-13.9	-79.4	-1.36	153.7	1.61	0.01	Not required
	WLAN5GHz		0.688	5	39.8	64.6	-0.08				

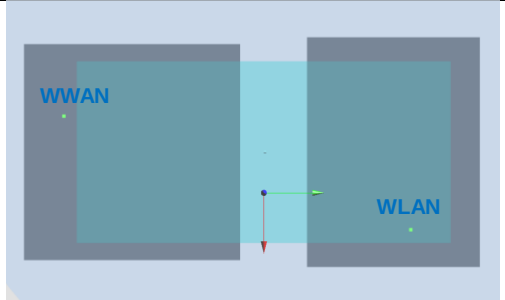


Case 9	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	GSM1900	Front	1.068	5	0.8	-81.5	-1.39	157.9	1.74	0.01	Not required
	WLAN5GHz		0.67	5	-33.4	72.6	-0.45				



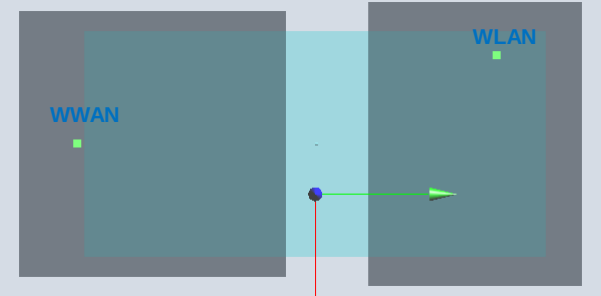
The diagram shows a top-down view of a device with two rectangular regions highlighted in light blue. The left region is labeled 'WWAN' and the right region is labeled 'WLAN'. A green dot is located in the WWAN region, and a red dot is located in the WLAN region. A green arrow points from the WWAN region towards the WLAN region, and a red arrow points from the WLAN region towards the WWAN region, indicating the direction of the SAR peak location.

Case 10	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	GSM1900	Back	1.154	5	-13.4	-81.6	-1.43	148.4	1.95	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	GSM1900	Back	1.154	5	-13.4	-81.6	-1.43	155.8	1.89	0.02	Not required
	WLAN5GHz		0.739	5	37	65.8	-0.2				



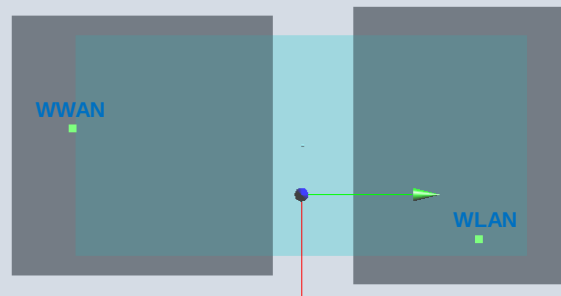
The diagram shows a top-down view of a device with two rectangular regions highlighted in light blue. The left region is labeled 'WWAN' and the right region is labeled 'WLAN'. A green dot is located in the WWAN region, and a red dot is located in the WLAN region. A green arrow points from the WWAN region towards the WLAN region, and a red arrow points from the WLAN region towards the WWAN region, indicating the direction of the SAR peak location.

Case 11	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA II	Front	1.177	5	2.2	-77.9	-1.72	144.5	1.62	0.01	Not required
	WLAN2.4GHz		0.441	5	-34.8	61.8	-1.61				
	WCDMA II	Front	1.177	5	2.2	-77.9	-1.72	154.7	1.85	0.02	Not required
	WLAN5GHz		0.67	5	-33.4	72.6	-0.45				



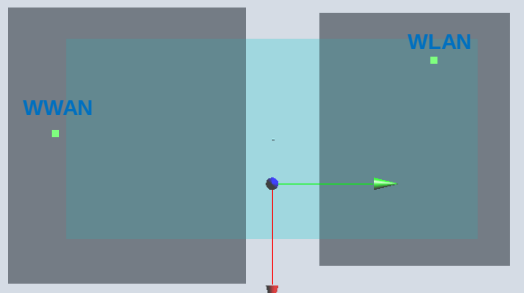
The diagram shows a top-down view of a device with two rectangular regions highlighted in light blue. The left region is labeled 'WWAN' and the right region is labeled 'WLAN'. A green dot is located in the WWAN region, and a red dot is located in the WLAN region. A green arrow points from the WWAN region towards the WLAN region, and a red arrow points from the WLAN region towards the WWAN region, indicating the direction of the SAR peak location.

Case 12	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA II	Back	1.007	5	-13.4	-78	-1.78	145.0	1.81	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	WCDMA II	Back	1.007	5	-13.4	-78	-1.78	152.4	1.75	0.02	Not required
	WLAN5GHz		0.739	5	37	65.8	-0.2				



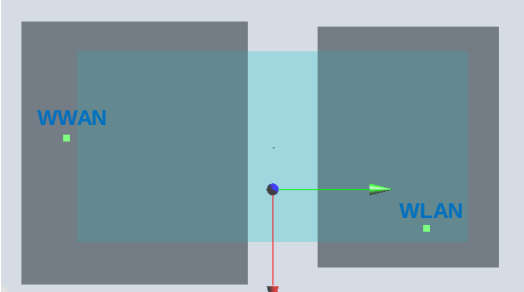
The diagram shows a top-down view of a device with two shaded regions representing SAR measurement areas. The left region is labeled 'WWAN' and the right region is labeled 'WLAN'. A green arrow points from the center of the WWAN region to the center of the WLAN region. A red vertical line with a downward arrow is positioned between the two regions, indicating the gap between them.

Case 13	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA IV	Front	0.988	5	0.2	-79.4	-1.14	155.7	1.66	0.01	Not required
	WLAN5GHz		0.67	5	-33.4	72.6	-0.45				



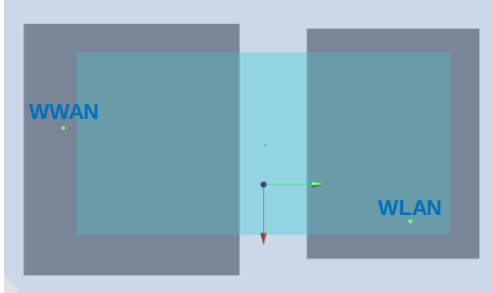
The diagram shows a top-down view of a device with two shaded regions representing SAR measurement areas. The left region is labeled 'WWAN' and the right region is labeled 'WLAN'. A green arrow points from the center of the WWAN region to the center of the WLAN region. A red vertical line with a downward arrow is positioned between the two regions, indicating the gap between them.

Case 14	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	WCDMA IV	Back	0.916	5	0.3	-81	-1.13	144.2	1.71	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	WCDMA IV	Back	0.916	5	0.3	-81	-1.13	151.3	1.66	0.01	Not required
	WLAN5GHz		0.739	5	37	65.8	-0.2				

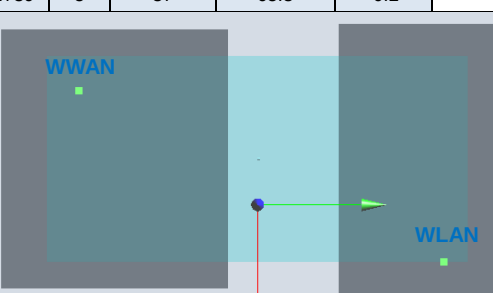


The diagram shows a top-down view of a device with two shaded regions representing SAR measurement areas. The left region is labeled 'WWAN' and the right region is labeled 'WLAN'. A green arrow points from the center of the WWAN region to the center of the WLAN region. A red vertical line with a downward arrow is positioned between the two regions, indicating the gap between them.

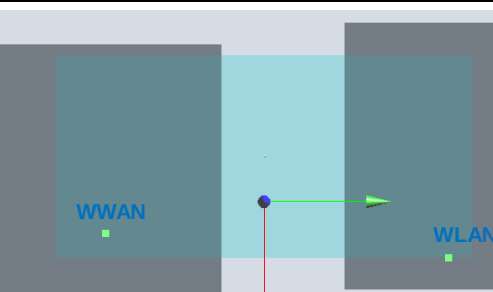
Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 15	WCDMA V	Back	0.898	5	-14	-77.7	-1.32	144.9	1.70	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	WCDMA V	Back	0.898	5	-14	-77.7	-1.32	152.3	1.64	0.01	Not required
	WLAN5GHz		0.739	5	37	65.8	-0.2				



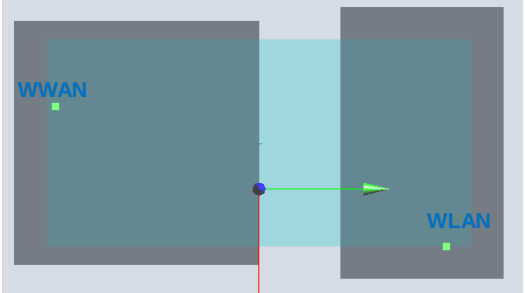
Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 16	LTE Band 7_Main	Back	1.095	5	-28.2	-66.2	-6.03	139.7	1.89	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	LTE Band 7_Main	Back	1.095	5	-28.2	-66.2	-6.03	147.3	1.83	0.02	Not required
	WLAN5GHz		0.739	5	37	65.8	-0.2				



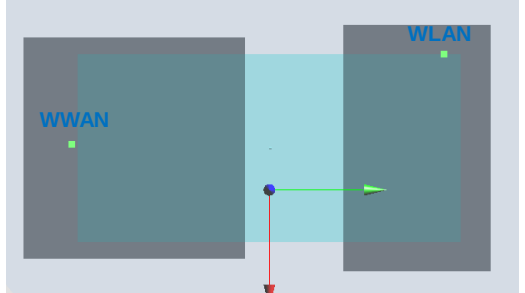
Case	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
Case 17	LTE Band 7_Aux	Back	0.864	5	26.8	-60.2	0.09	119.9	1.66	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	LTE Band 7	Back	0.864	5	26.8	-60.2	0.09	126.4	1.60	0.02	Not required
	WLAN5GHz		0.739	5	37	65.8	-0.2				



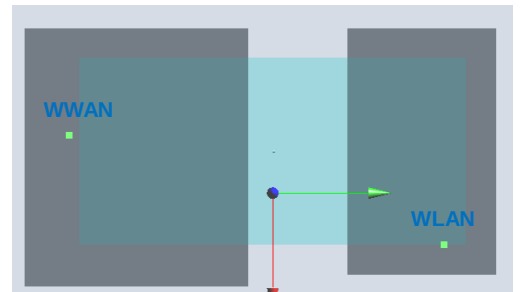
Case 18	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 12	Back	1.155	5	-12.9	-80.4	-2.25	147.2	1.95	0.02	LTE Band 12 WLAN2.4GHz
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	LTE Band 12	Back	1.155	5	-12.9	-80.4	-2.25	154.5	1.89	0.02	LTE Band 12 WLAN5GHz
	WLAN5GHz		0.739	5	37	65.8	-0.2				



Case 19	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 25	Front	1.081	5	2.3	-79.5	-2.6	156.2	1.75	0.01	Not required
	WLAN5GHz		0.67	5	-33.4	72.6	-0.45				



Case 20	Band	Position	SAR (W/kg)	Gap (mm)	SAR peak location (mm)			3D distance (mm)	Summed SAR (W/kg)	SPLSR Results	Simultaneous SAR
					X	Y	Z				
	LTE Band 26	Back	0.917	5	-13.9	-79.4	-1.36	146.5	1.72	0.02	Not required
	WLAN2.4GHz		0.798	5	32.4	59.6	-1.23				
	LTE Band 26	Back	0.917	5	-13.9	-79.4	-1.36	153.9	1.66	0.01	Not required
	WLAN5GHz		0.739	5	37	65.8	-0.2				



8. 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 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [6] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [7] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [8] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [9] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [10] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [11] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.
- [12] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [13] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.