



**FCC 47 CFR § 2.1093
IEEE Std 1528-2013**

SAR EVALUATION REPORT

FOR

GSM/WCDMA/LTE/5G NR Tablet + BT/BLE, DTS/UNII a/b/g/n/ac/ax and WPT

MODEL NUMBER: SM-X906B

FCC ID: A3LSMX906B

REPORT NUMBER: 4790101660-S1V3

ISSUE DATE: 12/13/2021

Prepared for
**SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA**

Prepared by
**UL Korea, Ltd.
26th floor, 152, Teheran-ro, Gangnam-gu Seoul, 06236, Korea**

**Suwon Test Site: UL Korea, Ltd. Suwon Laboratory
218 Maeyeong-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16675, Korea
TEL: (031) 337-9902
FAX: (031) 213-5433**



Testing Laboratory

TL-637

Revision History

Rev.	Date	Revisions	Revised By
V1	11/25/2021	Initial Issue	--
V2	12/3/2021	<ol style="list-style-type: none"> 1. Revised Proximity sensor feature for GSM 850/1900 -Sec.6.3., Sec.6.4., Sec.7.,Sec.9.1., Sec.10.1., Sec.10.2., Sec.12.1, Sec.12.2, Sec.12.21. 2. Added note of Antenna designation in Section 6.3. 3. Revised table in Section 6.4. 4. Revised WWAN's table in Section 7. 5. Revised target power in Section 6.3 & 9.6. 6. Added explain in Section 9.5. 7. Revised table in Section 10.15. 8. Added note in Section 10.15 & 10.16. 9. Revised Appendix G. 	Sunghoon.kim
V3	12/13/2021	Revised table in Sec.12.1 – Sec.12.19	Sunghoon.kim

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1. Attestation of Test Results

Applicant Name	SAMSUNG ELECTRONICS CO.,LTD.			
FCC ID	A3LSMX906B			
Model Number	SM-X906B			
Applicable Standards	FCC 47 CFR § 2.1093 IEEE Std 1528-2013 Published RF exposure KDB procedures			
Exposure Category	SAR Limits (W/Kg)			
	Peak spatial-average (1g of tissue)			
General population / Uncontrolled exposure	1.6			
RF Exposure Conditions	Equipment Class - The Highest Reported SAR (W/kg)			
	PCB	DTS	NII	DSS
Standalone	1.17	0.50	0.85	0.49
Simultaneous TX	1.55	1.50	1.55	1.55
Date Tested	10/25/2021 to 11/25/2021			
Test Results	Pass			

UL Korea, Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Korea, Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Korea, Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Korea, Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released By:	Prepared By:
	
Justin Park Operations Leader UL Korea, Ltd. Suwon Laboratory	Sunghoon Kim Test Engineer UL Korea, Ltd. Suwon Laboratory

1.1. The Highest Reported SAR for RF exposure conditions for each bands

Equipment Class	Band	Antenna	The Highest Reported SAR (W/kg)
			1g of tissue
			Standalone exposure condition
PCB	GSM 850	Main 1 Ant.	0.761
	GSM 1900	Main 1 Ant.	0.547
	WCDMA Band II	Main 1 Ant.	0.712
	WCDMA Band IV	Main 1 Ant.	0.684
	WCDMA Band V	Main 1 Ant.	0.799
	LTE Band 2	Main 1 Ant.	N/A
	LTE Band 2	Main 2 Ant.	0.797
	LTE Band 4	Main 1 Ant.	N/A
	LTE Band 5	Main 1 Ant.	N/A
	LTE Band 12	Main 1 Ant.	0.851
	LTE Band 13	Main 1 Ant.	0.775
	LTE Band 17	Main 1 Ant.	N/A
	LTE Band 25	Main 1 Ant.	0.850
	LTE Band 26	Main 1 Ant.	0.996
	LTE Band 41	Main 1 Ant.	1.065
	LTE Band 66	Main 1 Ant.	1.168
	NR Band n5	Main 1 Ant.	0.820
	NR Band n66	Main 1 Ant.	1.063
DTS	2.4GHz WLAN	All	0.502
UNII	5GHz WLAN	All	0.852
DSS	Bluetooth	All	0.491

2. Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE STD 1528-2013, ANSI C63.26-2015 the following FCC Published RF exposure [KDB](#) procedures:

- 248227 D01 802.11 Wi-Fi SAR v02r02
- 447498 D01 General RF Exposure Guidance v06
- 616217 D04 SAR for laptop and tablets v01r02
- 690783 D01 SAR Listings on Grants v01r03
- 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
- 865664 D02 RF Exposure Reporting v01r02
- 941225 D01 3G SAR Procedures v03r01
- 941225 D05 SAR for LTE Devices v02r05
- 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
- 941225 D06 Hotspot Mode v02r01
- 971168 D01 Power Meas License Digital System v03r01

In addition to the above, the following information was used:

- [TCB workshop](#) October, 2014; RF Exposure Procedures Update (Overlapping LTE Bands)
- [TCB workshop](#) October, 2014; RF Exposure Procedures Update (Other LTE Considerations)
- [TCB workshop](#) October, 2016; RF Exposure Procedures (Bluetooth Duty Factor)
- [TCB workshop](#) October, 2016; RF Exposure Procedures (DUT Holder Perturbations)
- [TCB workshop](#) May, 2017; RF Exposure Procedures (LTE Test Conditions)
- [TCB workshop](#) May, 2017; RF Exposure Procedures (LTE Band 41 Power Class 2)
- [TCB workshop](#) November, 2017; RF Exposure Procedures (LTE UL/DL Carrier Aggregation SAR)
- [TCB workshop](#) April, 2018; RF Exposure Procedures (LTE DL CA SAR Test Exclusion Update)
- [TCB workshop](#) April, 2019; RF Exposure Procedures (Tissue Simulating Liquids (TSL))
- [TCB workshop](#) November, 2019 Page 5, RF Exposure Procedures (SPLSR Hotspot Combination)
- [TCB workshop](#) November, 2019 Page 3, RF Exposure Policy Updates (5G NR FR1 NSA EN-DC UE SAR Evaluations)
- [TCB workshop](#) October, 2020; 5G RFX Policies (Intra-band and Inter-band NSA-EN-DC evaluation)

3. Facilities and Accreditation

The test sites and measurement facilities used to collect data are located at

Suwon
SAR 1 Room
SAR 3 Room
SAR 4 Room
SAR 5 Room

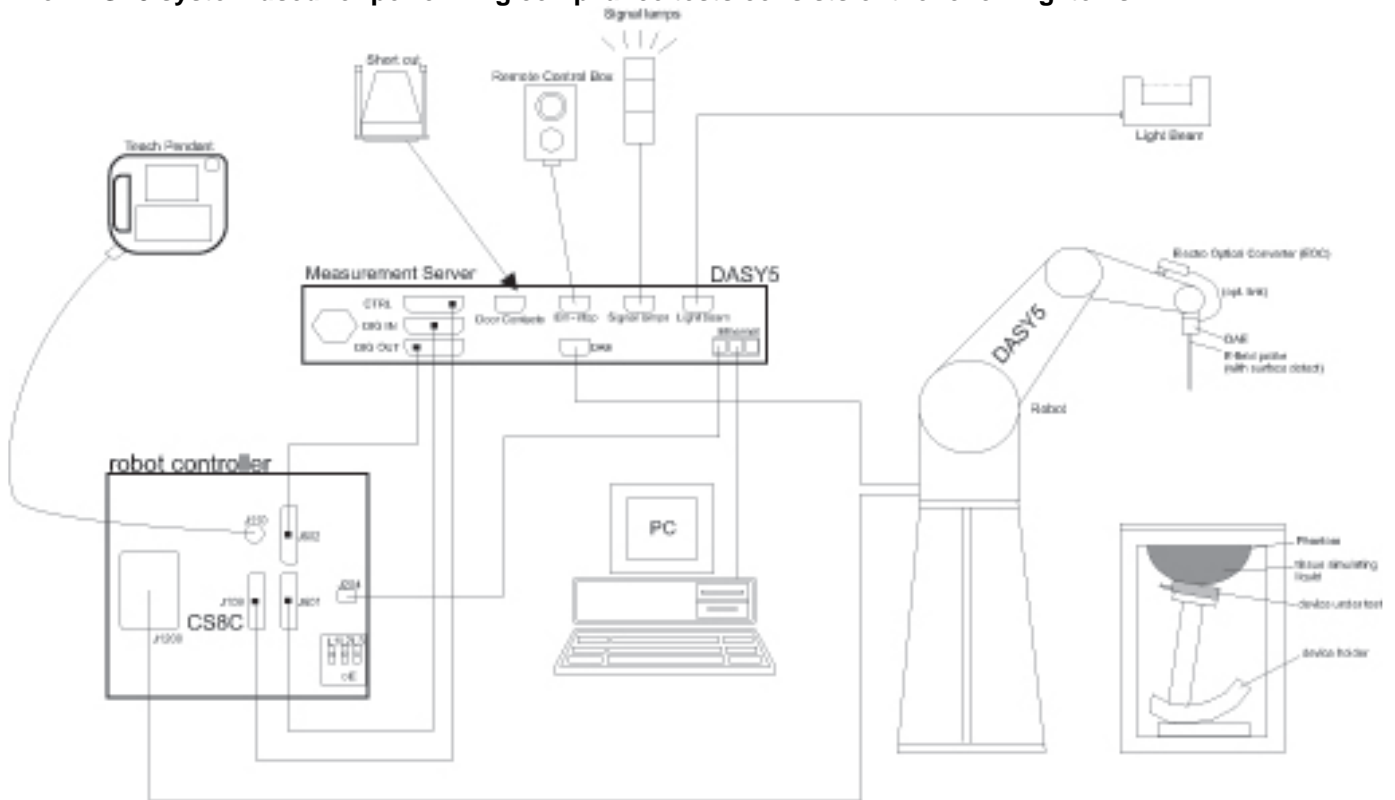
UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637.

The full scope of accreditation can be viewed at <https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf>.

4. SAR Measurement System & Test Equipment

4.1. SAR Measurement System

The DASY5 system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win7 and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

4.2. SAR Scan Procedures

Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. The minimum distance of probe sensors to surface is 2.1 mm. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

Step 2: Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE Standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan). If only one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of Zoom Scans has to be increased accordingly.

Area Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area}	≤ 2 GHz: ≤ 15 mm $2 - 3$ GHz: ≤ 12 mm	$3 - 4$ GHz: ≤ 12 mm $4 - 6$ GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Step 3: Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The Zoom Scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job's label.

Zoom Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\Delta x_{Zoom}, \Delta y_{Zoom}$			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5 · $\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z	≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm	
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. * When zoom scan is required and the <i>reported</i> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

Step 4: Power drift measurement

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1.

Step 5: Z-Scan (FCC only)

The Z Scan measures points along a vertical straight line. The line runs along the Z-axis of a one-dimensional grid. In order to get a reasonable extrapolation the extrapolated distance should not be larger than the step size in Z-direction.

4.3. Test Equipment

The measuring equipment used to perform the tests documented in this report has been calibrated in accordance with the manufacturers' recommendations, and is traceable to recognized national standards.

Dielectric Property Measurements

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Network Analyzer	Agilent	E5071C	MY46522054	8-6-2022
Dielectric Assessment Kit	SPEAG	DAK-3.5	1196	7-21-2022
Shorting block	SPEAG	DAK-3.5 Short	SM DAK 200 BA	N/A
Thermometer	LKM	DTM3000	3851	8-4-2022

System Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
MXG Analog Signal Generator	Agilent	N5181A	MY50145882	8-4-2022
Power Sensor	Agilent	U2000A	MY54260007	8-4-2022
Power Sensor	Agilent	U2000A	MY60180020	8-4-2022
Power Amplifier	EXODUS	1410025-AMP2027-10003	10003	8-4-2022
Directional Coupler	Agilent	772D	MY52180193	8-3-2022
Directional Coupler	Agilent	778D	MY52180432	8-3-2022
Low Pass Filter	MINI-CIRCUITS	NLP-1200	VUU19301915	8-4-2022
Low Pass Filter	MICROLAB	LA-15N	3943	8-3-2022
Low Pass Filter	FILTRON	L14012FL	1410003S	8-3-2022
Low Pass Filter	MICROLAB	LA-60N	3942	8-4-2022
Attenuator	MINI-CIRCUITS	BW-N3W5+	N/A	8-4-2022
Attenuator	Agilent	8491B/003	MY39272275	8-17-2022
Attenuator	Agilent	8491B/010	MY39272011	8-4-2022
Attenuator	Agilent	8491B/020	MY39271973	8-4-2022
E-Field Probe	SPEAG	EX3DV4	7314	5-31-2022
E-Field Probe	SPEAG	EX3DV4	3697	3-22-2022
E-Field Probe	SPEAG	EX3DV4	7645	4-15-2022
E-Field Probe	SPEAG	EX3DV4	7330	9-29-2022
E-Field Probe	SPEAG	EX3DV4	7313	2-23-2022
Data Acquisition Electronics	SPEAG	DAE4	1591	3-26-2022
Data Acquisition Electronics	SPEAG	DAE4	1343	8-23-2022
Data Acquisition Electronics	SPEAG	DAE4	1468	9-27-2022
Data Acquisition Electronics	SPEAG	DAE4	1494	7-27-2022
System Validation Dipole	SPEAG	D750V3	1122	2-24-2022
System Validation Dipole	SPEAG	D835V2	4d194	3-20-2022
System Validation Dipole	SPEAG	D1750V2	1125	2-21-2022
System Validation Dipole	SPEAG	D1900V2	5d199	3-19-2022
System Validation Dipole	SPEAG	D2450V2	960	3-20-2022
System Validation Dipole	SPEAG	D2600V2	1178	4-21-2023
System Validation Dipole	SPEAG	D5GHzV2	1184	12-3-2022
System Validation Dipole	SPEAG	D5GHzV2	1293	7-22-2023
Thermometer	Lutron	MHB-382SD	AH.91463	8-4-2022
Thermometer	Lutron	MHB-382SD	AH.50213	8-4-2022
Thermometer	Lutron	MHB-382SD	AJ.45903	8-3-2022
Thermometer	Lutron	MHB-382SD	AK.12123	8-3-2022

Others

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Base Station Simulator	R & S	CMW500	169801	8-3-2022
Base Station Simulator	R & S	CMW500	169799	8-3-2022
Base Station Simulator	R & S	CMW500	169800	8-3-2022
Base Station Simulator	R & S	CMW500	169798	8-3-2022
Base Station Simulator	R & S	CMW500	169797	8-3-2022
Base Station Simulator	R & S	CMW500	150313	8-3-2022
Base Station Simulator	R & S	CMW500	150314	8-4-2022
Base Station Simulator	R & S	CMW500	162790	8-3-2022
UXM 5G Wireless Test Platform	Keysight	E7515B	MY57510596	8-6-2022

Note(s):

1. For System Validation Dipole, Calibration interval applied every 2 years according to referencing KDB 865664 guidance.
2. Refer to Appendix F that mentioned about justification for Extended SAR Dipole Calibrations. (for blue box items)
3. All equipments were used until Cal.Due data.

5. Measurement Uncertainty

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, 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 ≤ 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.

5.1. DECISION RULE

Decision rule for statement(s) of conformity is based on Procedures 1, Clause 4.4.2 in IEC Guide 115:2007.

6. Device Under Test (DUT) Information

6.1. DUT Description

Device Dimension	Refer to Appendix A.					
Back Cover	<input checked="" type="checkbox"/> The Back Cover is not removable.					
Battery Options	<input checked="" type="checkbox"/> The rechargeable battery is not user accessible					
Wireless Router (Hotspot)	Wi-Fi Hotspot mode permits the device to share its cellular data connection with other Wi-Fi-enabled devices. <input checked="" type="checkbox"/> Mobile Hotspot (Wi-Fi 2.4 GHz) <input checked="" type="checkbox"/> Mobile Hotspot (Wi-Fi 5.8 GHz)					
Wi-Fi Direct	Wi-Fi Direct enabled devices transfer data directly between each other <input checked="" type="checkbox"/> Wi-Fi Direct (Wi-Fi 2.4 GHz) <input checked="" type="checkbox"/> Wi-Fi Direct (Wi-Fi 5.2 GHz_UNII-1, Wi-Fi 5.8 GHz_UNII-3)					
Test Sample Information	No.	S/N	Notes	No.	S/N	Notes
	1	R32R9000HWY	Main Conducted	8	R32RA0037YV	SAR
	2	R32R9000MCM	Main Conducted	9	R32RA00323W	SAR
	3	R32R9000MDR	Main Conducted	10	R32RA0036ZE	SAR
	4	R32RA0033ND	Main Conducted	11	R32RA00382W	SAR
	5	R32RB006TEF	Main Conducted	12	R32RA00376L	SAR
	6	R32RA0033ST	Wi-Fi Conducted	13	R32RA0034FM	SAR
	7	R32R9000P9Y	BT Conducted	14	R32RA0033VP	SAR
				15	R32RA00341F	SAR
				16	R32RB006VHF	SAR
				17	R32RB006W5N	SAR
				18	R32RB006VRD	SAR
				19	R32RB006VTP	SAR

6.2. Wireless Technologies

Wireless technologies	Frequency bands	Operating mode		Duty Cycle used for SAR testing
GSM	850 1900	Voice (GMSK)	GPRS Multi-Slot Class:	GSM Voice: 12.5% (E)GPRS: 1 Slot: 12.5% 2 Slots: 25% 3 Slots: 37.5% 4 Slots: 50%
		GPRS (GMSK)	<input type="checkbox"/> Class 8 - 1 Up, 4 Down <input type="checkbox"/> Class 10 - 2 Up, 4 Down <input type="checkbox"/> Class 12 - 4 Up, 4 Down <input checked="" type="checkbox"/> Class 33 - 4 Up, 5 Down	
Does this device support DTM (Dual Transfer Mode)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
W-CDMA (UMTS)	Band II Band IV Band V	UMTS Rel. 99 (Voice & Data) HSDPA (Category 24) HSUPA (Category 6) DC-HSDPA (Category 24) HSPA+ (DL only)		100%
LTE	FDD Band 2 FDD Band 4 FDD Band 5 FDD Band 12 FDD Band 13 FDD Band 17 FDD Band 25 FDD Band 26 TDD Band 41 ^{Power Class 3} TDD Band 41 ^{Power Class 2} FDD Band 66	QPSK 16QAM 64QAM 256QAM Rel. 16 Carrier Aggregation (1 Uplink and 5 Downlinks)		100% (FDD) 63.3% (TDD) ^{Power Class 3} 43.3% (TDD) ^{Power Class 2}
		Does this device support SV-LTE (1xRTT-LTE)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5G NR (Sub 6)	NR Band n5 NR Band n66	DFT-s-OFDM: ■ $\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: ■ QPSK, 16QAM, 64QAM, 256QAM		100%
Wi-Fi	2.4 GHz	802.11b 802.11g 802.11n (HT20) 802.11ax (HE20)		SISO mode 99.3% (802.11b) MIMO mode 99.3% (802.11b)
	5 GHz	802.11a 802.11n (HT20) & (HT40) 802.11ac (VHT20) & (VHT40) & (VHT80) & (VHT160) 802.11ax (HE20) & (HE40) & (HE80) & (HE160)		MIMO mode 96.1% (802.11n HT40) 94.6% (802.11ac VHT80)
	Does this device support bands 5.60 ~ 5.65 GHz? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Does this device support Band gap channel(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Bluetooth	2.4 GHz	Version 5.0 LE		76.7% (DH5)

Notes:

- The Bluetooth protocol is considered source-based averaging. Bluetooth GFSK (DH5) was verified to have the highest duty cycle of 76.7% and was considered and used for SAR Testing.
- Duty cycle for Wi-Fi is referenced from the DTS and UNII report.
- This device supports Power Class 2(HPUE) and Power Class 3 for LTE Band 41

6.3. Nominal and Maximum Output Power

KDB 447498 sec.4.1. at the maximum rated output power and within the tune-up tolerance range specified for the product, but not more than 2 dB lower than the maximum tune-up tolerance limit

2G & 3G Bands

RF Air interface	Antenna	Mode	Time Slots	Max. RF Output Power (dBm)		Reduced. RF Output Power (Proximity sensor.2 back-off) (dBm)	
				Tune-up Limit	Frame Pwr	Tune-up Limit	Frame Pwr
GSM850	Main 1 Ant.	Voice	1	33.5	24.5	23.5	14.5
		GPRS	1	33.5	24.5	23.5	14.5
		GPRS	2	32.0	26.0	22.5	16.5
		GPRS	3	29.5	25.2	20.5	16.2
		GPRS	4	28.7	25.7	18.5	15.5
		EGPRS	1	27.0	18.0	18.0	9.0
		EGPRS	2	26.0	20.0	16.0	10.0
		EGPRS	3	24.0	19.7	14.0	9.7
GSM1900	Main 1 Ant.	Voice	1	31.0	22.0	21.5	12.5
		GPRS	1	31.0	22.0	21.5	12.5
		GPRS	2	28.5	22.5	20.5	14.5
		GPRS	3	27.0	22.7	18.5	14.2
		GPRS	4	25.5	22.5	16.5	13.5
		EGPRS	1	26.0	17.0	18.0	9.0
		EGPRS	2	24.5	18.5	16.0	10.0
		EGPRS	3	23.5	19.2	14.0	9.7
		EGPRS	4	22.0	19.0	13.0	10.0

RF Air interface	Antenna	Mode	Max. RF Output Power (dBm)	Reduced. RF Output Power (Proximity sensor.2 back-off) (dBm)	Reduced. RF Output Power (Proximity sensor.1 & 3 back-off) (dBm)
W-CDMA Band II	Main 1 Ant.	R99	25.0	14.5	
		HSDPA	24.0	14.5	
		HSUPA	24.0	14.5	
		DC-HSDPA	24.0	14.5	
W-CDMA Band IV	Main 1 Ant.	R99	25.0	14.5	
		HSDPA	24.0	14.5	
		HSUPA	24.0	14.5	
		DC-HSDPA	24.0	14.5	
W-CDMA Band V	Main 1 Ant.	R99	25.0	16.5	21.0
		HSDPA	24.0	16.5	21.0
		HSUPA	24.0	16.5	21.0
		DC-HSDPA	24.0	16.5	21.0

LTE standalone Bands

RF Air interface	Antenna	Mode	Max. RF Output Power (dBm)	Reduced. RF Output Power (Proximity sensor.2 back-off) (dBm)	Reduced. RF Output Power (Proximity sensor.1 & 3 back-off) (dBm)
LTE Band 2	Main 1 Ant.	QPSK	25.0	15.0	
LTE Band 4	Main 1 Ant.	QPSK	25.0	15.0	
LTE Band 5	Main 1 Ant.	QPSK	25.0	17.0	22.0
LTE Band 12	Main 1 Ant.	QPSK	25.5	17.0	
LTE Band 13	Main 1 Ant.	QPSK	25.0	17.0	
LTE Band 17	Main 1 Ant.	QPSK	25.5	17.0	
LTE Band 25	Main 1 Ant.	QPSK	25.0	15.0	
LTE Band 26	Main 1 Ant.	QPSK	25.0	17.0	
LTE Band 66	Main 1 Ant.	QPSK	25.0	15.0	
LTE Band 41(PC3)	Main 1 Ant.	QPSK	25.0	15.0	23.0
LTE Band 41(PC2)	Main 1 Ant.	QPSK	27.5	15.5	23.0
RF Air interface	Antenna	Mode	Max. RF Output Power (dBm)	Reduced. RF Output Power (Proximity sensor.4 back-off) (dBm)	
LTE Band 2	Main 2 Ant.	QPSK	25.0	15.0	

NR(SA) Bands

RF Air interface	Antenna	Mode	Max. RF Output Power (dBm)	Reduced. RF Output Power (Proximity sensor.2 back-off) (dBm)	Reduced. RF Output Power (Proximity sensor.1 & 3 back-off) (dBm)
NR Band n5	Main 1 Ant.	DFT-s-OFDM QPSK	25.0	17.0	21.0
NR Band n66	Main 1 Ant.	DFT-s-OFDM QPSK	25.0	15.0	

Notes:

1. For EN-DC(NSA) configurations in Main 1 Ant, Each LTE anchor bands and NR bands implemented lower target power reduced than each LTE standalone and NR(SA) bands in Proximity sensor 2 back-off scenario. Detail of EN-DC combination are refer to section.6.7 and 9.5.
2. SAR report's Main 2 Ant. equals Sub1 Ant of documentation provide by the manufacturer.

Normal WLAN-Maximum power

Band	Mode	SISO/MIMO Ant.1 & Ant.2 (dBm)				MIMO Ant.1 & Ant.2 (dBm)				MIMO (Ant.1 + Ant.2) (dBm)						
		b	g	n	ax	a	n	ac	ax	b	a	g	n	ac	ax	
2.4GHz	Ch1 - Ch11	18	18 16 (Ch1) 16.5 (Ch11)	18 16 (Ch1) 16.5 (Ch11)	18 15 (Ch1)					21		21 19 (Ch1) 19.5 (Ch11)	21 19 (Ch1) 19.5 (Ch11)		21 18 (Ch1) 18.5 (Ch11)	
2.4GHz	Ch12	9/6	9/6	9/6	9/6					9		9	9		9	
2.4GHz	Ch13	-2/-5	-2/-5	-2/-5	-2/-5					-2		-2	-2		-2	
5GHz (20MHz)	UNII-1					17	17	17	17		20		20	20	20	
	UNII-2A					17	17	17	17		20		20	20	20	
	UNII-2C					17	17	17	17		20		20	20	20	
	UNII-3					17	17	17	17		20		20	20	20	
5GHz (40MHz)	UNII-4					17	17	17	17		20		20	20	20	
	UNII-1						17	17	17				20	20	20	
	UNII-2A						17	17	17				20	20	20	
	UNII-2C						17	17	17				20	20	20	
5GHz (80MHz)	UNII-3						17	17	17				20	20	20	
	UNII-4						17	17	17				20	20	20	
	UNII-1							16	16					19	19	
	UNII-2A							16	16					19	19	
5GHz (160MHz)	UNII-2C							16	16					19	19	
	UNII-3							16	16					19	19	
	UNII-4							16	16					19	19	
	UNII-1 & UNII-2A								15	15					18	18
5GHz (160MHz)	UNII-2C								15	15					18	18
	UNII-3 & UNII-4								15	15					18	18

Normal WLAN-Reduced power – Proximity sensor.1 & 3 back-off

Band	Mode	SISO / MIMO Ant.1 & Ant.2 (dBm)				MIMO Ant.1 & Ant.2 (dBm)				MIMO (Ant.1 + Ant.2) (dBm)						
		b	g	n	ax	a	n	ac	ax	b	a	g	n	ac	ax	
2.4GHz	Ch1 - Ch11	13	13	13	13					16		16	16		16	
2.4GHz	Ch12	9/6	9/6	9/6	9/6					9		9	9		9	
2.4GHz	Ch13	-2/-5	-2/-5	-2/-5	-2/-5					-2		-2	-2		-2	
5GHz (20MHz)	UNII-1					9	9	9	9		12		12	12	12	
	UNII-2A					9	9	9	9		12		12	12	12	
	UNII-2C					9	9	9	9		12		12	12	12	
	UNII-3					9	9	9	9		12		12	12	12	
5GHz (40MHz)	UNII-4					9	9	9	9		12		12	12	12	
	UNII-1						9	9	9				12	12	12	
	UNII-2A						9	9	9				12	12	12	
	UNII-2C						9	9	9				12	12	12	
5GHz (80MHz)	UNII-3						9	9	9				12	12	12	
	UNII-4						9	9	9				12	12	12	
	UNII-1							9	9					12	12	
	UNII-2A							9	9					12	12	
5GHz (160MHz)	UNII-2C							9	9					12	12	
	UNII-3							9	9					12	12	
	UNII-4							9	9					12	12	
5GHz (160MHz)	UNII-1 & UNII-2A								8.5	8.5					11.5	11.5
	UNII-2C								8.5	8.5					11.5	11.5
	UNII-3 & UNII-4								8.5	8.5					11.5	11.5

RSDB WLAN and NR Sub6-Maximum power

Band	Mode	SISO / MIMO Ant.1 & Ant.2 (dBm)				MIMO Ant.1 & Ant.2 (dBm)				MIMO (Ant.1 + Ant.2) (dBm)					
		b	g	n	ax	a	n	ac	ax	b	a	g	n	ac	ax
2.4GHz	Ch1 - Ch11	11	11	11	11					14		14	14		14
2.4GHz	Ch12	9/6	9/6	9/6	9/6					9		9	9		9
2.4GHz	Ch13	-2/-5	-2/-5	-2/-5	-2/-5					-2		-2	-2		-2
5GHz (20MHz)	UNII-1					7	7	7	7		10		10	10	10
	UNII-2A					7	7	7	7		10		10	10	10
	UNII-2C					7	7	7	7		10		10	10	10
	UNII-3					7	7	7	7		10		10	10	10
5GHz (40MHz)	UNII-4					7	7	7	7		10		10	10	10
	UNII-1						7	7	7				10	10	10
	UNII-2A						7	7	7				10	10	10
	UNII-2C						7	7	7				10	10	10
5GHz (80MHz)	UNII-3						7	7	7				10	10	10
	UNII-4						7	7	7				10	10	10
	UNII-1							7	7					10	10
	UNII-2A							7	7					10	10
5GHz (160MHz)	UNII-2C														10
	UNII-3 & UNII-4														10
	UNII-1 & UNII-2A							6.5	6.5					9.5	9.5
								6.5	6.5					9.5	9.5
								6.5	6.5					9.5	9.5

Bluetooth Maximum & Reduced power- Proximity sensor.1 & 3 back-off

Band	Mode	Maximum output power (dBm)		Reduced output power (dBm)	
		BT Ant.1	BT Ant.2	BT Ant.1	BT Ant.2
2.4GHz	Bluetooth_BDR	18	18	13	13
2.4GHz	Bluetooth_EDR	16	16	13	13
2.4GHz	Bluetooth_LE (High power)	16	16	13	13
2.4GHz	Bluetooth_LE (Low power)	11	11	11	11

Note(s):

1. 2.4GHz(DTS) mode are support both SISO and MIMO mode.
2. 5GHz(UNII) mode are support only MIMO mode.
3. Bluetooth mode are support only SISO mode.
4. WLAN has specific target power, when RSDB operation and(or) simultaneous transmission with NR Sub6 bands.
5. WLAN and Bluetooth are support power reduction mode during proximity sensor active.
6. WLAN (including RSDB) and Bluetooth simultaneous transmission scenarios are refer to section.12.
7. SAR report's Wi-Fi Ant.1 and BT Ant.1. equals WIFI1/BT1 Ant. of documentation provide by the manufacturer.
8. SAR report's Wi-Fi Ant.2 and BT Ant.2. equals WIFI2/BT2 Ant. of documentation provide by the manufacturer.

6.4. Power Back-off Operation

This device supports power back-off modes using triggering proximity sensor. For full details on how power back-off mode operates, refer to the Operational Description.

Antenna	Technologies Supported	Proximity sensor	Power Back-off mode	Standalone Exposure Conditions				
				Rear	Edge 1	Edge 2	Edge 3	Edge 4
Main 1 Ant.	2G	Proximity sensor.2	Proximity sensor triggering	0				0
Main 1 Ant.	3G/LTE/5G	Proximity sensor.2	Proximity sensor triggering	0				0
		Proximity sensor.3	Proximity sensor triggering	0	0			0
		Proximity sensor.1	Proximity sensor triggering	0			0	0
Main 2 Ant.	LTE Band 2	Proximity sensor.4	Proximity sensor triggering	0		0		
WiFi/BT Ant.1	Wi-Fi 2.4GHz	Proximity sensor.3	Proximity sensor triggering	0	0			0
	Wi-Fi 5GHz							
	Bluetooth							
WiFi/BT Ant.2	Wi-Fi 2.4GHz	Proximity sensor.1	Proximity sensor triggering	0			0	0
	Wi-Fi 5GHz							
	Bluetooth							

Note(s):

- For Main 1 Ant.'s each positions, Each proximity sensor operates to implement power reduction.
And For Rear and Edge 4, Proximity sensor 2 operates with priority over Proximity sensor 1 & 3.
- Please refer to Section.9 for all power measurements, and Proximity sensor verification is mention at Appendix G.

6.5. General LTE SAR Test and Reporting Considerations

Item	Description						
Frequency range, Channel Bandwidth, Numbers and Frequencies	Band 2	Frequency range: 1850 - 1910 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	18700/ 1860	18675/ 1857.5	18650/ 1855	18625/ 1852.5	18615/ 1851.5	18607/ 1850.7
	Mid	18900/ 1880	18900/ 1880	18900/ 1880	18900/ 1880	18900/ 1880	18900/ 1880
	High	19100/ 1900	19125/ 1902.5	19150/ 1905	19175/ 1907.5	19185/ 1908.5	19193/ 1909.3
	Band 4	Frequency range: 1710 - 1755 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	20050/ 1720	20025/ 1717.5	20000/ 1715	19975/ 1712.5	19965/ 1711.5	19957/ 1710.7
	Mid	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5
	High	20300/ 1745	20325/ 1747.5	20350/ 1750	20375/ 1752.5	20385/ 1753.5	20393/ 1754.3
	Band 5	Frequency range: 824 - 849 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low			20450/ 829	20425/ 826.5	20415/ 825.5	20407/ 824.7
	Mid			20525/ 836.5	20525/ 836.5	20525/ 836.5	20525/ 836.5
	High			20600/ 844	20625/ 846.5	20635/ 847.5	20643/ 848.3
	Band 12	Frequency range: 699 - 716 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low			23060/ 704	23035/ 701.5	23025/ 700.5	23017/ 699.7
	Mid			23095/ 707.5	23095/ 707.5	23095/ 707.5	23095/ 707.5
	High			23130/ 711	23155/ 713.5	23165/ 714.5	23173/ 715.3
	Band 13	Frequency range: 777 - 787 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low				23205/ 779.5		
Mid			23230/ 782	23230/ 782			
High				23255/ 784.5			
Band 17	Frequency range: 704 - 716 MHz						
	Channel Bandwidth						
	20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz	
Low			23780/ 709	23755/ 706.5			
Mid			23790/ 710	23790/ 710			
High			23800/ 711	23825/ 713.5			

General LTE SAR Test and Reporting Considerations (Continued)

Frequency range, Channel Bandwidth, Numbers and Frequencies	Band 25	Frequency range: 1850 - 1915 MHz																																																																		
		Channel Bandwidth																																																																		
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz																																																													
	Low	26140/ 1860	26115/ 1857.5	26090/ 1855	26065/ 1852.5	26055/ 1851.5	26047/ 1850.7																																																													
	Mid	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5																																																													
	High	26590/ 1905	26615/ 1907.5	26640/ 1910	26665/ 1912.5	26675/ 1913.5	26683/ 1914.3																																																													
	Band 26	Frequency range: 814 - 849 MHz																																																																		
		Channel Bandwidth																																																																		
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz																																																													
	Low		26765/ 821.5	26740/ 819	26715/ 816.5	26705/ 815.5	26697/ 814.7																																																													
	Mid		26865/ 831.5	26865/ 831.5	26865/ 831.5	26865/ 831.5	26865/ 831.5																																																													
	High		26965/ 841.5	26990/ 844	27015/ 846.5	27025/ 847.5	27033/ 848.3																																																													
	Band 41	Frequency range: 2496 - 2690 MHz																																																																		
		Channel Bandwidth																																																																		
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz																																																													
	Low	39750 / 2506.0																																																																		
	Low-Mid	40185 / 2549.5																																																																		
	Mid	40620 / 2593.0																																																																		
	Mid-High	41055 / 2636.5																																																																		
	High	41490 / 2680.0																																																																		
Band 66	Frequency range: 1710 - 1780 MHz																																																																			
	Channel Bandwidth																																																																			
	20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz																																																														
Low	132072/ 1720	132047/ 1717.5	132022/ 1715	131997/ 1712.5	131987/ 1711.5	131979/ 1710.7																																																														
Mid	132322/ 1745	132322/ 1745	132322/ 1745	132322/ 1745	132322/ 1745	132322/ 1745																																																														
High	132572/ 1770	132597/ 1772.5	132622/ 1775	132647/ 1777.5	132657/ 1778.5	132665/ 1779.3																																																														
LTE transmitter and antenna implementation	Refer to Appendix A.																																																																			
Maximum power reduction (MPR)	Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3																																																																			
	<table border="1"> <thead> <tr> <th rowspan="2">Modulation</th> <th colspan="6">Channel bandwidth / Transmission bandwidth (N_{RB})</th> <th rowspan="2">MPR (dB)</th> </tr> <tr> <th>1.4 MHz</th> <th>3.0 MHz</th> <th>5 MHz</th> <th>10 MHz</th> <th>15 MHz</th> <th>20 MHz</th> </tr> </thead> <tbody> <tr> <td>QPSK</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 1</td> </tr> <tr> <td>16 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>≤ 5</td> <td>≤ 4</td> <td>≤ 8</td> <td>≤ 12</td> <td>≤ 16</td> <td>≤ 18</td> <td>≤ 2</td> </tr> <tr> <td>64 QAM</td> <td>> 5</td> <td>> 4</td> <td>> 8</td> <td>> 12</td> <td>> 16</td> <td>> 18</td> <td>≤ 3</td> </tr> <tr> <td>256 QAM</td> <td colspan="6">≥ 1</td> <td>≤ 5</td> </tr> </tbody> </table>							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					
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																																																													
MPR Built-in by design The manufacturer MPR values are always within the 3GPP maximum MPR allowance but may not follow the default MPR values. A-MPR (additional MPR) was disabled during SAR testing																																																																				
Power reduction	Yes																																																																			
Spectrum plots for RB configurations	A properly configured base station simulator was used for the SAR and power measurements; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																																																			

Notes:

- Maximum bandwidth does not support at least three non-overlapping channels in certain channel bandwidths. 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 per KDB 941225 D05 SAR for LTE devices.
- LTE Band 41 test channels in accordance with October 2014 TCB workshop for all channels bandwidths.
- SAR Testing for LTE was performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

6.6. LTE (TDD) Considerations

According to KDB 941225 D05 SAR for LTE Devices, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

LTE TDD Bands support 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$		
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-		
9	$13168 \cdot T_s$			-		

Calculated Duty Cycle

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number										Calculated Duty Cycle (%)
		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	U	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33

Calculated Duty Cycle = Extended cyclic prefix in uplink x (T_s) x # of S + # of U

Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:

Calculated Duty Cycle = $5120 \times [1/(15000 \times 2048)] \times 2 + 6 \text{ ms} = 63.33\%$

where

$T_s = 1/(15000 \times 2048)$ seconds

Note(s):

This device supports uplink-downlink configurations 0-6. The configuration with highest duty cycle was used for SAR Testing: configuration 0 at 63.3% duty cycle. Only LTE Band 41 Power Class 2 was used configuration 1 at 43.3% duty cycle for SAR testing.

6.7. NR (Sub 6GHz) SAR Test and Reporting Considerations

Item	Description														
Frequency range, Channel Bandwidth, Numbers and Frequencies	Band n5	Frequency range: 824 - 849 MHz													
		Channel Bandwidth (MHz)													
		100	90	80	70	60	50	40	30	25	20	15	10	5	
	Low										166800 /834	166300 /831.5	165800 /829	165300 /826.5	
	Mid										167300 /836.5	167300 /836.5	167300 /836.5	167300 /836.5	
	High										167800 /839	168300 /841.5	168800 /844	169300 /846.5	
	Band n66	Frequency range: 1710 - 1780 MHz													
		Channel Bandwidth (MHz)													
		100	90	80	70	60	50	40	30	25	20	15	10	5	
	Low											344000 /1720	343500 /1717.5	343000 /1715	342500 /1712.5
	Mid											349000 /1745	349000 /1745	349000 /1745	349000 /1745
	High											354000 /1770	354500 /1772.5	355000 /1775	355500 /1777.5
	SCS	15 kHz													
	Modulations Supported in UL	DFT-s-OFDM: $\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM													
A-MPR (Additional MPR) disabled for SAR Testing?	Yes														
EN-DC Carrier Aggregation Possible Combinations															
LTE Anchor Bands for NR Band n5	Main 1 Ant. : LTE Band 2, 66														
LTE Anchor Bands for NR Band n66	Main 1 Ant. : LTE Band 5, 12, 13 & Main 2 Ant. : LTE Band 2														

Notes:

- SAR test for NR bands and LTE anchor Bands were performed separately due to limitations in SAR probe calibration factors. And, Due to test setup limitations, SAR testing for NR was performed using test mode software to establish the connection.
- NR configurations of SAR test were determined according to Section 5.2 of KDB 941225 D05.
- All NR Bands has supports both SA and NSA.

6.8. Dynamic Antenna tuner testing – For PAG REUSE

This Device applies Qualcomm chipset solution's Dynamic Antenna tuning technology to some 3G / 4G / 5G sub6 bands. (WCDMA BII/BIV/BV, LTE B2/B4/B5/B12/B13/B17/B25/B26/B66 and NR Bn5/n66 in Main Ant.1)
Dynamic Antenna tuning was tested in accordance with the April 2019 FCC TCBC Workshop notes.

Per 2019, April TCBC Workshop document

- SAR is measured according to required procedures with dynamic tuner active allowing device to automatically tune. Auto-tune state determined by device during normal SAR measurement verified and listed alongside the reported SAR results.
- Additional single point SAR (time-sweep) measurements were evaluated for other tuner states to determine that the other configurations would result in equivalent or lower SAR values.
- Single point measurements performed at the peak SAR location of the highest measured SAR configuration for each combination. SAR probe remains stationary throughout the entire series of single point measurements for each combination.
- Total number tuner states divided evenly among each supported band / air interface and exposure condition combination. If any single point SAR measurement result is > 1.2 W/kg for a band / exposure condition combination set, all supported tuner states are evaluated with single point SAR measurements for the combination. Tuner state is established remotely so that the device is not moved for the entire series of single point SAR measurements for the tuner states in each combination.

The following test procedures were followed to demonstrate that the SAR results in Section 10 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuning active to allow the device to automatically to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other impedance matching.

To evaluate all the tuner states, the 152 tuner states were divided among the aggregate band, mode and exposure combinations so that each combination was evaluated for at least 23 tuner states and also so that at least 3 single point SAR measurements were made for every available tuner state. Single point time-sweep measurements were 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 was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was > 1.2 W/kg for a particular band / mode / exposure condition, point SAR measurements were made for all 152 states.

This Device supports LTE & NR capabilities with overlapping transmission frequency ranges.

LTE Band 2 (1850 MHz – 1910 MHz) is covered by LTE Band 25 (1850 MHz – 1915 MHz)

LTE Band 4 (1710 MHz – 1755 MHz) is covered by LTE Band 66 (1710 MHz – 1780 MHz)

LTE Band 5 (824 MHz – 849 MHz) is covered by LTE Band 26 (814 MHz – 849 MHz)

LTE Band 17 (704 MHz – 716 MHz) is covered by LTE Band 12 (699 MHz – 716 MHz)

Each both LTE bands share the same transmission path and signal characteristics. The Evaluation of Dynamic antenna tuner was only evaluated for the band with the larger transmission frequency range. The operational description contains more information about the design and implementation of the dynamic antenna tuning.

Note(s):

All test results are refer to Appendix I “Dynamic Antenna tuner testing”.

7. RF Exposure Conditions (Test Configurations)

Refer to Appendix A for the specific details of the antenna-to-antenna and antenna-to-edge(s) distances.

WWAN Bands

Antenna	Tx Interface	Pwr Back-off	Rear	Edge 1	Edge 2	Edge 3	Edge 4
				(Right Edge)	(Bottom Edge)	(Left Edge)	(Top Edge)
Main 1	GSM 850	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes		No		Yes
Main 1	GSM 1900	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes		No		Yes
Main 1	W-CDMA Band II	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes	Yes	No	Yes	Yes
Main 1	LTE Band 12(17)	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes	Yes	No	Yes	Yes
Main 1	LTE Band 13	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes	Yes	No	Yes	Yes
Main 1	LTE Band 25(2)	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes	Yes	No	Yes	Yes
Main 1	LTE Band 26(5)	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes	Yes	No	Yes	Yes
Main 1	LTE Band 41	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes	Yes	No	Yes	Yes
Main 1	LTE Band 66(4)	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes	Yes	No	Yes	Yes
Main 1	NR Band n5	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes	Yes	No	Yes	Yes
Main 1	NR Band n66	OFF	Yes	Yes	No	Yes	Yes
		ON	Yes	Yes	No	Yes	Yes
Main 2	LTE Band 2	OFF	Yes	Yes	Yes	Yes	Yes
		ON	Yes		Yes		

Note(s):

1. Yes = Testing is required. No = Testing is not required.
2. Estimated SAR (0.4 W/kg) is applied for Main Ant.1's Edge 2 due to Separation distance is over 50 mm. Detail of the Separation distance from antenna to Edge's are refer to Appendix A.

WLAN & Bluetooth Bands

Antenna	Tx Interface	Pwr Back-off	Rear	Edge 1	Edge 2	Edge 3	Edge 4	Corner A	Corner B	
				(Right Edge)	(Bottom Edge)	(Left Edge)	(Top Edge)	Note 3		
WLAN/BT SISO Ant.1	2.4GHz DTS	OFF	Yes	Yes	Yes	No	Yes	Yes		
		ON	Yes	Yes		No	Yes	No		
	Bluetooth	OFF	Yes	Yes	Yes	No	Yes	Yes		
		ON	Yes	Yes		No	Yes	No		
WLAN SISO Ant.2	2.4GHz DTS	OFF	Yes	No	Yes	Yes	Yes		Yes	
		ON	Yes	No		Yes	Yes		No	
	Bluetooth	OFF	Yes	No	Yes	Yes	Yes		Yes	Yes
		ON	Yes	No		Yes	Yes		No	
WLAN MIMO (Ant.1 + Ant.2)	2.4GHz DTS	OFF	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		ON	Yes	Yes		Yes	Yes	No	No	
	5GHz UNII	OFF	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
		ON	Yes	Yes		Yes	Yes	No	No	

Note(s):

1. Yes = Testing is required. No = Testing is not required.
2. Estimated SAR (0.4 W/kg) is applied for WLAN/BT SISO Ant.1's Edge 3 and WLAN/BT SISO Ant.2's Edge 1 due to Separation distance is over 50 mm. Detail of the Separation distance from antenna to Edge's are refer to Appendix A.
3. Corner SAR additionally evaluated using max power with triggering distance. (Corner A = between Edge.1 and Edge.4 / Corner B = between Edge 3 and Edge 4).

8. Dielectric Property Measurements & System Check

8.1. Dielectric Property Measurements

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within $\pm 2^\circ\text{C}$ of the temperature when the tissue parameters are characterized.

The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3 – 4 days of use; or earlier if the dielectric parameters can become out of tolerance; for example, when the parameters are marginal at the beginning of the measurement series.

Tissue dielectric parameters were measured at the low, middle and high frequency of each operating frequency range of the test device.

Tissue Dielectric Parameters

FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

Target Frequency (MHz)	Head		Body	
	ϵ_r	σ (S/m)	ϵ_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5000	36.2	4.45	49.3	5.07
5100	36.1	4.55	49.1	5.18
5200	36.0	4.66	49.0	5.30
5300	35.9	4.76	48.9	5.42
5400	35.8	4.86	48.7	5.53
5500	35.6	4.96	48.6	5.65
5600	35.5	5.07	48.5	5.77
5700	35.4	5.17	48.3	5.88
5800	35.3	5.27	48.2	6.00

SAR test were performed in All RF exposure conditions using Head tissue according to TCB workshop note of April. 2019.

IEEE Std 1528-2013

Refer to Table 3 within the IEEE Std 1528-2013

**Dielectric Property Measurements Results:
SAR 1 Room**

Date	Freq. (MHz)		Liquid Parameters	Measured	Target	Delta (%)	Limit ±(%)	
11-8-2021	Head 5250	e'	35.5400	Relative Permittivity (ϵ_r):	35.54	35.93	-1.09	5
		e"	15.7600	Conductivity (σ):	4.60	4.70	-2.16	5
	Head 5260	e'	35.5300	Relative Permittivity (ϵ_r):	35.53	35.92	-1.09	5
		e"	15.7600	Conductivity (σ):	4.61	4.71	-2.19	5
	Head 5600	e'	34.9800	Relative Permittivity (ϵ_r):	34.98	35.53	-1.56	5
		e"	15.9400	Conductivity (σ):	4.96	5.06	-1.91	5
	Head 5750	e'	34.7500	Relative Permittivity (ϵ_r):	34.75	35.36	-1.73	5
		e"	16.0500	Conductivity (σ):	5.13	5.21	-1.58	5
	Head 5825	e'	34.6400	Relative Permittivity (ϵ_r):	34.64	35.30	-1.87	5
		e"	16.1000	Conductivity (σ):	5.21	5.27	-1.05	5
11-10-2021	Head 5250	e'	36.2700	Relative Permittivity (ϵ_r):	36.27	35.93	0.94	5
		e"	15.9700	Conductivity (σ):	4.66	4.70	-0.86	5
	Head 5260	e'	36.2500	Relative Permittivity (ϵ_r):	36.25	35.92	0.91	5
		e"	15.9700	Conductivity (σ):	4.67	4.71	-0.88	5
	Head 5600	e'	35.7500	Relative Permittivity (ϵ_r):	35.75	35.53	0.61	5
		e"	16.1300	Conductivity (σ):	5.02	5.06	-0.75	5
	Head 5750	e'	35.5100	Relative Permittivity (ϵ_r):	35.51	35.36	0.42	5
		e"	16.2400	Conductivity (σ):	5.19	5.21	-0.41	5
	Head 5800	e'	35.4300	Relative Permittivity (ϵ_r):	35.43	35.30	0.37	5
		e"	16.2600	Conductivity (σ):	5.24	5.27	-0.50	5
Head 5925	e'	35.2100	Relative Permittivity (ϵ_r):	35.21	35.20	0.03	5	
	e"	16.3100	Conductivity (σ):	5.37	5.40	-0.49	5	
11-11-2021	Head 5250	e'	35.6100	Relative Permittivity (ϵ_r):	35.61	35.93	-0.90	5
		e"	16.3700	Conductivity (σ):	4.78	4.70	1.63	5
	Head 5260	e'	35.6000	Relative Permittivity (ϵ_r):	35.60	35.92	-0.90	5
		e"	16.3700	Conductivity (σ):	4.79	4.71	1.60	5
	Head 5600	e'	35.1300	Relative Permittivity (ϵ_r):	35.13	35.53	-1.14	5
		e"	16.5700	Conductivity (σ):	5.16	5.06	1.96	5
	Head 5750	e'	34.9400	Relative Permittivity (ϵ_r):	34.94	35.36	-1.20	5
		e"	16.6700	Conductivity (σ):	5.33	5.21	2.22	5
	Head 5800	e'	34.9000	Relative Permittivity (ϵ_r):	34.90	35.30	-1.13	5
		e"	16.7000	Conductivity (σ):	5.39	5.27	2.20	5
Head 5925	e'	34.7500	Relative Permittivity (ϵ_r):	34.75	35.20	-1.28	5	
	e"	16.7300	Conductivity (σ):	5.51	5.40	2.07	5	
11-12-2021	Head 750	e'	42.0400	Relative Permittivity (ϵ_r):	42.04	41.96	0.19	5
		e"	21.8000	Conductivity (σ):	0.91	0.89	1.80	5
	Head 700	e'	42.2500	Relative Permittivity (ϵ_r):	42.25	42.22	0.08	5
		e"	23.0200	Conductivity (σ):	0.90	0.89	0.76	5
	Head 790	e'	41.9200	Relative Permittivity (ϵ_r):	41.92	41.76	0.39	5
		e"	20.9900	Conductivity (σ):	0.92	0.90	2.89	5
11-12-2021	Head 835	e'	41.8100	Relative Permittivity (ϵ_r):	41.81	41.50	0.75	5
		e"	20.2600	Conductivity (σ):	0.94	0.90	4.52	5
	Head 820	e'	41.8400	Relative Permittivity (ϵ_r):	41.84	41.60	0.57	5
		e"	20.5100	Conductivity (σ):	0.94	0.90	4.08	5
	Head 850	e'	41.7800	Relative Permittivity (ϵ_r):	41.78	41.50	0.67	5
		e"	19.9900	Conductivity (σ):	0.94	0.92	3.25	5
11-15-2021	Head 835	e'	41.6800	Relative Permittivity (ϵ_r):	41.68	41.50	0.43	5
		e"	19.5700	Conductivity (σ):	0.91	0.90	0.96	5
	Head 820	e'	41.7300	Relative Permittivity (ϵ_r):	41.73	41.60	0.31	5
		e"	19.8000	Conductivity (σ):	0.90	0.90	0.48	5
	Head 850	e'	41.6500	Relative Permittivity (ϵ_r):	41.65	41.50	0.36	5
		e"	19.3200	Conductivity (σ):	0.91	0.92	-0.21	5
11-15-2021	Head 2450	e'	38.7200	Relative Permittivity (ϵ_r):	38.72	39.20	-1.22	5
		e"	13.1200	Conductivity (σ):	1.79	1.80	-0.71	5
	Head 2400	e'	38.8000	Relative Permittivity (ϵ_r):	38.80	39.30	-1.26	5
		e"	13.1000	Conductivity (σ):	1.75	1.75	-0.20	5
	Head 2480	e'	38.6700	Relative Permittivity (ϵ_r):	38.67	39.16	-1.26	5
		e"	13.1400	Conductivity (σ):	1.81	1.83	-1.12	5

SAR 1 Room (continued)

Date	Freq. (MHz)		Liquid Parameters	Measured	Target	Delta (%)	Limit ±(%)	
11-15-2021	Head 5250	e'	35.9800	Relative Permittivity (ϵ_r):	35.98	35.93	0.13	5
		e"	16.2400	Conductivity (σ):	4.74	4.70	0.82	5
	Head 5260	e'	35.9600	Relative Permittivity (ϵ_r):	35.96	35.92	0.11	5
		e"	16.2500	Conductivity (σ):	4.75	4.71	0.86	5
	Head 5600	e'	35.3300	Relative Permittivity (ϵ_r):	35.33	35.53	-0.57	5
		e"	16.5100	Conductivity (σ):	5.14	5.06	1.59	5
	Head 5750	e'	35.0600	Relative Permittivity (ϵ_r):	35.06	35.36	-0.86	5
		e"	16.6400	Conductivity (σ):	5.32	5.21	2.04	5
	Head 5825	e'	34.9200	Relative Permittivity (ϵ_r):	34.92	35.30	-1.08	5
		e"	16.6900	Conductivity (σ):	5.41	5.27	2.57	5
11-16-2021	Head 5250	e'	36.8200	Relative Permittivity (ϵ_r):	36.82	35.93	2.47	5
		e"	15.5600	Conductivity (σ):	4.54	4.70	-3.40	5
	Head 5260	e'	36.8000	Relative Permittivity (ϵ_r):	36.80	35.92	2.44	5
		e"	15.5600	Conductivity (σ):	4.55	4.71	-3.43	5
	Head 5600	e'	35.7400	Relative Permittivity (ϵ_r):	35.74	35.53	0.58	5
		e"	16.1200	Conductivity (σ):	5.02	5.06	-0.81	5
	Head 5750	e'	35.4000	Relative Permittivity (ϵ_r):	35.40	35.36	0.11	5
		e"	16.3400	Conductivity (σ):	5.22	5.21	0.20	5
	Head 5825	e'	35.3900	Relative Permittivity (ϵ_r):	35.39	35.30	0.25	5
		e"	16.4600	Conductivity (σ):	5.33	5.27	1.16	5
11-17-2021	Head 2450	e'	38.4200	Relative Permittivity (ϵ_r):	38.42	39.20	-1.99	5
		e"	13.1800	Conductivity (σ):	1.80	1.80	-0.25	5
	Head 2400	e'	38.4500	Relative Permittivity (ϵ_r):	38.45	39.30	-2.15	5
		e"	13.2100	Conductivity (σ):	1.76	1.75	0.64	5
	Head 2480	e'	38.3600	Relative Permittivity (ϵ_r):	38.36	39.16	-2.05	5
		e"	13.1600	Conductivity (σ):	1.81	1.83	-0.97	5
11-17-2021	Head 2600	e'	38.2500	Relative Permittivity (ϵ_r):	38.25	39.01	-1.95	5
		e"	13.2500	Conductivity (σ):	1.92	1.96	-2.38	5
	Head 2500	e'	38.3200	Relative Permittivity (ϵ_r):	38.32	39.14	-2.09	5
		e"	13.1700	Conductivity (σ):	1.83	1.85	-1.26	5
	Head 2700	e'	38.1300	Relative Permittivity (ϵ_r):	38.13	38.88	-1.94	5
		e"	13.3500	Conductivity (σ):	2.00	2.07	-3.19	5
11-18-2021	Head 1750	e'	41.0500	Relative Permittivity (ϵ_r):	41.05	40.08	2.41	5
		e"	13.9700	Conductivity (σ):	1.36	1.37	-0.70	5
	Head 1710	e'	41.1400	Relative Permittivity (ϵ_r):	41.14	40.15	2.48	5
		e"	14.0000	Conductivity (σ):	1.33	1.35	-1.13	5
	Head 1755	e'	41.0300	Relative Permittivity (ϵ_r):	41.03	40.08	2.38	5
		e"	13.9600	Conductivity (σ):	1.36	1.37	-0.69	5
11-18-2021	Head 1900	e'	40.7700	Relative Permittivity (ϵ_r):	40.77	40.00	1.93	5
		e"	13.5500	Conductivity (σ):	1.43	1.40	2.25	5
	Head 1850	e'	40.8300	Relative Permittivity (ϵ_r):	40.83	40.00	2.08	5
		e"	13.7000	Conductivity (σ):	1.41	1.40	0.66	5
	Head 1910	e'	40.7600	Relative Permittivity (ϵ_r):	40.76	40.00	1.90	5
		e"	13.5300	Conductivity (σ):	1.44	1.40	2.64	5
11-22-2021	Head 750	e'	43.2900	Relative Permittivity (ϵ_r):	43.29	41.96	3.17	5
		e"	21.7600	Conductivity (σ):	0.91	0.89	1.61	5
	Head 700	e'	43.5800	Relative Permittivity (ϵ_r):	43.58	42.22	3.23	5
		e"	22.7300	Conductivity (σ):	0.88	0.89	-0.51	5
	Head 790	e'	43.2800	Relative Permittivity (ϵ_r):	43.28	41.76	3.65	5
		e"	20.9200	Conductivity (σ):	0.92	0.90	2.54	5
11-22-2021	Head 835	e'	43.1200	Relative Permittivity (ϵ_r):	43.12	41.50	3.90	5
		e"	20.1100	Conductivity (σ):	0.93	0.90	3.74	5
	Head 820	e'	43.1800	Relative Permittivity (ϵ_r):	43.18	41.60	3.79	5
		e"	20.3700	Conductivity (σ):	0.93	0.90	3.37	5
	Head 850	e'	43.0700	Relative Permittivity (ϵ_r):	43.07	41.50	3.78	5
		e"	19.8600	Conductivity (σ):	0.94	0.92	2.58	5

SAR 3 Room

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
10-25-2021	Head 1750	e'	40.0800	Relative Permittivity (ϵ_r):	40.08	40.07	0.02	5
		e"	13.7200	Conductivity (σ):	1.34	1.37	-2.65	5
	Head 1710	e'	40.3000	Relative Permittivity (ϵ_r):	40.30	40.13	0.43	5
		e"	13.8400	Conductivity (σ):	1.32	1.35	-2.42	5
	Head 1755	e'	40.0500	Relative Permittivity (ϵ_r):	40.05	40.06	-0.04	5
		e"	13.7100	Conductivity (σ):	1.34	1.37	-2.65	5
10-25-2021	Head 1900	e'	39.8200	Relative Permittivity (ϵ_r):	39.82	40.00	-0.45	5
		e"	13.6600	Conductivity (σ):	1.44	1.40	3.08	5
	Head 1850	e'	39.9500	Relative Permittivity (ϵ_r):	39.95	40.00	-0.12	5
		e"	13.6900	Conductivity (σ):	1.41	1.40	0.59	5
	Head 1910	e'	39.8100	Relative Permittivity (ϵ_r):	39.81	40.00	-0.47	5
		e"	13.6700	Conductivity (σ):	1.45	1.40	3.70	5
11-11-2021	Head 2450	e'	39.7400	Relative Permittivity (ϵ_r):	39.74	39.20	1.38	5
		e"	13.5300	Conductivity (σ):	1.84	1.80	2.40	5
	Head 2400	e'	39.8500	Relative Permittivity (ϵ_r):	39.85	39.30	1.41	5
		e"	13.5300	Conductivity (σ):	1.81	1.75	3.08	5
	Head 2480	e'	39.7000	Relative Permittivity (ϵ_r):	39.70	39.16	1.37	5
		e"	13.5600	Conductivity (σ):	1.87	1.83	2.04	5
11-14-2021	Head 1750	e'	41.3200	Relative Permittivity (ϵ_r):	41.32	40.08	3.08	5
		e"	14.2300	Conductivity (σ):	1.38	1.37	1.15	5
	Head 1710	e'	41.4700	Relative Permittivity (ϵ_r):	41.47	40.15	3.30	5
		e"	14.3100	Conductivity (σ):	1.36	1.35	1.05	5
	Head 1755	e'	41.3000	Relative Permittivity (ϵ_r):	41.30	40.08	3.05	5
		e"	14.2100	Conductivity (σ):	1.39	1.37	1.08	5
11-14-2021	Head 1900	e'	41.1400	Relative Permittivity (ϵ_r):	41.14	40.00	2.85	5
		e"	13.7100	Conductivity (σ):	1.45	1.40	3.46	5
	Head 1850	e'	41.1500	Relative Permittivity (ϵ_r):	41.15	40.00	2.88	5
		e"	13.8500	Conductivity (σ):	1.42	1.40	1.76	5
	Head 1910	e'	41.1500	Relative Permittivity (ϵ_r):	41.15	40.00	2.88	5
		e"	13.6900	Conductivity (σ):	1.45	1.40	3.85	5
11-16-2021	Head 2600	e'	38.1500	Relative Permittivity (ϵ_r):	38.15	39.01	-2.21	5
		e"	14.0300	Conductivity (σ):	2.03	1.96	3.37	5
	Head 2500	e'	38.1600	Relative Permittivity (ϵ_r):	38.16	39.14	-2.50	5
		e"	13.9200	Conductivity (σ):	1.93	1.85	4.37	5
	Head 2700	e'	37.8600	Relative Permittivity (ϵ_r):	37.86	38.88	-2.64	5
		e"	14.2100	Conductivity (σ):	2.13	2.07	3.05	5
11-17-2021	Head 5250	e'	35.2900	Relative Permittivity (ϵ_r):	35.29	35.93	-1.79	5
		e"	15.9700	Conductivity (σ):	4.66	4.70	-0.86	5
	Head 5260	e'	35.2700	Relative Permittivity (ϵ_r):	35.27	35.92	-1.81	5
		e"	15.9800	Conductivity (σ):	4.67	4.71	-0.82	5
	Head 5600	e'	34.5900	Relative Permittivity (ϵ_r):	34.59	35.53	-2.66	5
		e"	16.2500	Conductivity (σ):	5.06	5.06	-0.01	5
	Head 5750	e'	34.3000	Relative Permittivity (ϵ_r):	34.30	35.36	-3.01	5
		e"	16.3800	Conductivity (σ):	5.24	5.21	0.45	5
Head 5825	e'	34.1700	Relative Permittivity (ϵ_r):	34.17	35.30	-3.20	5	
	e"	16.4200	Conductivity (σ):	5.32	5.27	0.92	5	
11-20-2021	Head 1750	e'	39.4500	Relative Permittivity (ϵ_r):	39.45	40.08	-1.58	5
		e"	13.9400	Conductivity (σ):	1.36	1.37	-0.92	5
	Head 1710	e'	39.6000	Relative Permittivity (ϵ_r):	39.60	40.15	-1.36	5
		e"	14.0200	Conductivity (σ):	1.33	1.35	-0.99	5
	Head 1755	e'	39.4300	Relative Permittivity (ϵ_r):	39.43	40.08	-1.61	5
		e"	13.9300	Conductivity (σ):	1.36	1.37	-0.91	5
11-20-2021	Head 1900	e'	39.2300	Relative Permittivity (ϵ_r):	39.23	40.00	-1.93	5
		e"	13.4800	Conductivity (σ):	1.42	1.40	1.72	5
	Head 1850	e'	39.2600	Relative Permittivity (ϵ_r):	39.26	40.00	-1.85	5
		e"	13.5700	Conductivity (σ):	1.40	1.40	-0.29	5
	Head 1910	e'	39.2300	Relative Permittivity (ϵ_r):	39.23	40.00	-1.93	5
		e"	13.4700	Conductivity (σ):	1.43	1.40	2.18	5

SAR 3 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
11-22-2021	Head 750	e'	40.5600	Relative Permittivity (ϵ_r):	40.56	41.96	-3.34	5
		e"	20.7500	Conductivity (σ):	0.87	0.89	-3.11	5
	Head 700	e'	40.9700	Relative Permittivity (ϵ_r):	40.97	42.22	-2.96	5
		e"	22.4100	Conductivity (σ):	0.87	0.89	-1.91	5
	Head 790	e'	40.9700	Relative Permittivity (ϵ_r):	40.97	41.76	-1.88	5
		e"	20.2200	Conductivity (σ):	0.89	0.90	-0.89	5
11-22-2021	Head 835	e'	41.3400	Relative Permittivity (ϵ_r):	41.34	41.50	-0.39	5
		e"	19.2900	Conductivity (σ):	0.90	0.90	-0.49	5
	Head 820	e'	41.2800	Relative Permittivity (ϵ_r):	41.28	41.60	-0.78	5
		e"	19.6900	Conductivity (σ):	0.90	0.90	-0.08	5
	Head 850	e'	41.3500	Relative Permittivity (ϵ_r):	41.35	41.50	-0.36	5
		e"	18.8300	Conductivity (σ):	0.89	0.92	-2.74	5
11-23-2021	Head 1750	e'	39.5100	Relative Permittivity (ϵ_r):	39.51	40.08	-1.43	5
		e"	13.6700	Conductivity (σ):	1.33	1.37	-2.83	5
	Head 1710	e'	39.6600	Relative Permittivity (ϵ_r):	39.66	40.15	-1.21	5
		e"	13.7700	Conductivity (σ):	1.31	1.35	-2.76	5
	Head 1755	e'	39.4900	Relative Permittivity (ϵ_r):	39.49	40.08	-1.46	5
		e"	13.6700	Conductivity (σ):	1.33	1.37	-2.76	5
11-23-2021	Head 1900	e'	39.2500	Relative Permittivity (ϵ_r):	39.25	40.00	-1.88	5
		e"	13.3500	Conductivity (σ):	1.41	1.40	0.74	5
	Head 1850	e'	39.3300	Relative Permittivity (ϵ_r):	39.33	40.00	-1.68	5
		e"	13.4300	Conductivity (σ):	1.38	1.40	-1.32	5
	Head 1910	e'	39.2400	Relative Permittivity (ϵ_r):	39.24	40.00	-1.90	5
		e"	13.3400	Conductivity (σ):	1.42	1.40	1.20	5

SAR 4 Room

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
11-3-2021	Head 1750	e'	40.1400	Relative Permittivity (ϵ_r):	40.14	40.07	0.14	5
		e"	14.0300	Conductivity (σ):	1.37	1.37	-0.28	5
	Head 1710	e'	40.3200	Relative Permittivity (ϵ_r):	40.32	40.13	0.43	5
		e"	14.1700	Conductivity (σ):	1.35	1.35	0.07	5
	Head 1755	e'	40.1200	Relative Permittivity (ϵ_r):	40.12	40.06	0.11	5
		e"	14.0200	Conductivity (σ):	1.37	1.37	-0.27	5
11-3-2021	Head 1900	e'	39.9400	Relative Permittivity (ϵ_r):	39.94	40.00	-0.15	5
		e"	13.6000	Conductivity (σ):	1.44	1.40	2.63	5
	Head 1850	e'	40.0000	Relative Permittivity (ϵ_r):	40.00	40.00	0.00	5
		e"	13.7400	Conductivity (σ):	1.41	1.40	0.96	5
	Head 1910	e'	39.9500	Relative Permittivity (ϵ_r):	39.95	40.00	-0.12	5
		e"	13.5900	Conductivity (σ):	1.44	1.40	3.09	5
11-10-2021	Head 2600	e'	39.7600	Relative Permittivity (ϵ_r):	39.76	39.01	1.92	5
		e"	13.8400	Conductivity (σ):	2.00	1.96	1.97	5
	Head 2500	e'	39.9200	Relative Permittivity (ϵ_r):	39.92	39.14	2.00	5
		e"	13.8000	Conductivity (σ):	1.92	1.85	3.47	5
	Head 2700	e'	39.5700	Relative Permittivity (ϵ_r):	39.57	38.88	1.76	5
		e"	13.8500	Conductivity (σ):	2.08	2.07	0.44	5
11-11-2021	Head 1900	e'	38.6800	Relative Permittivity (ϵ_r):	38.68	40.00	-3.30	5
		e"	13.3700	Conductivity (σ):	1.41	1.40	0.89	5
	Head 1850	e'	39.4500	Relative Permittivity (ϵ_r):	39.45	40.00	-1.37	5
		e"	13.6900	Conductivity (σ):	1.41	1.40	0.59	5
	Head 1880	e'	39.0100	Relative Permittivity (ϵ_r):	39.01	40.00	-2.48	5
		e"	13.4800	Conductivity (σ):	1.41	1.40	0.65	5
Head 1910	e'	38.5200	Relative Permittivity (ϵ_r):	38.52	40.00	-3.70	5	
	e"	13.3200	Conductivity (σ):	1.41	1.40	1.04	5	
11-14-2021	Head 835	e'	41.7500	Relative Permittivity (ϵ_r):	41.75	41.50	0.60	5
		e"	20.3000	Conductivity (σ):	0.94	0.90	4.72	5
	Head 820	e'	41.8000	Relative Permittivity (ϵ_r):	41.80	41.60	0.47	5
		e"	20.5400	Conductivity (σ):	0.94	0.90	4.24	5
	Head 850	e'	41.7300	Relative Permittivity (ϵ_r):	41.73	41.50	0.55	5
		e"	20.0400	Conductivity (σ):	0.95	0.92	3.51	5
11-15-2021	Head 750	e'	41.6300	Relative Permittivity (ϵ_r):	41.63	41.96	-0.79	5
		e"	21.8700	Conductivity (σ):	0.91	0.89	2.12	5
	Head 700	e'	41.8600	Relative Permittivity (ϵ_r):	41.86	42.22	-0.85	5
		e"	23.1400	Conductivity (σ):	0.90	0.89	1.29	5
	Head 790	e'	41.5000	Relative Permittivity (ϵ_r):	41.50	41.76	-0.61	5
		e"	21.0900	Conductivity (σ):	0.93	0.90	3.38	5
11-15-2021	Head 1900	e'	39.1800	Relative Permittivity (ϵ_r):	39.18	40.00	-2.05	5
		e"	13.7900	Conductivity (σ):	1.46	1.40	4.06	5
	Head 1850	e'	39.2700	Relative Permittivity (ϵ_r):	39.27	40.00	-1.82	5
		e"	13.8900	Conductivity (σ):	1.43	1.40	2.06	5
	Head 1880	e'	39.2200	Relative Permittivity (ϵ_r):	39.22	40.00	-1.95	5
		e"	13.8200	Conductivity (σ):	1.44	1.40	3.19	5
Head 1910	e'	39.1600	Relative Permittivity (ϵ_r):	39.16	40.00	-2.10	5	
	e"	13.7700	Conductivity (σ):	1.46	1.40	4.46	5	

SAR 5 Room

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
11-3-2021	Head 750	e'	40.9300	Relative Permittivity (ϵ_r):	40.93	41.90	-2.32	5
		e"	21.4300	Conductivity (σ):	0.89	0.89	0.41	5
	Head 700	e'	41.1000	Relative Permittivity (ϵ_r):	41.10	42.17	-2.53	5
		e"	22.5400	Conductivity (σ):	0.88	0.89	-1.06	5
	Head 790	e'	40.8200	Relative Permittivity (ϵ_r):	40.82	41.71	-2.14	5
		e"	20.5900	Conductivity (σ):	0.90	0.89	1.09	5
11-3-2021	Head 835	e'	40.6200	Relative Permittivity (ϵ_r):	40.62	41.50	-2.12	5
		e"	19.7700	Conductivity (σ):	0.92	0.90	1.99	5
	Head 820	e'	40.6800	Relative Permittivity (ϵ_r):	40.68	41.57	-2.14	5
		e"	20.0300	Conductivity (σ):	0.91	0.90	1.67	5
	Head 850	e'	40.5900	Relative Permittivity (ϵ_r):	40.59	41.50	-2.19	5
		e"	19.5100	Conductivity (σ):	0.92	0.92	0.65	5
11-8-2021	Head 835	e'	42.4500	Relative Permittivity (ϵ_r):	42.45	41.50	2.29	5
		e"	19.2700	Conductivity (σ):	0.89	0.90	-0.59	5
	Head 820	e'	42.5200	Relative Permittivity (ϵ_r):	42.52	41.60	2.21	5
		e"	19.5000	Conductivity (σ):	0.89	0.90	-1.04	5
	Head 850	e'	42.4100	Relative Permittivity (ϵ_r):	42.41	41.50	2.19	5
		e"	19.0200	Conductivity (σ):	0.90	0.92	-1.76	5
11-8-2021	Head 2450	e'	39.6300	Relative Permittivity (ϵ_r):	39.63	39.20	1.10	5
		e"	13.0200	Conductivity (σ):	1.77	1.80	-1.46	5
	Head 2400	e'	39.7300	Relative Permittivity (ϵ_r):	39.73	39.30	1.10	5
		e"	13.0300	Conductivity (σ):	1.74	1.75	-0.73	5
	Head 2480	e'	39.5700	Relative Permittivity (ϵ_r):	39.57	39.16	1.04	5
		e"	13.0000	Conductivity (σ):	1.79	1.83	-2.17	5
11-10-2021	Head 835	e'	42.1500	Relative Permittivity (ϵ_r):	42.15	41.50	1.57	5
		e"	19.6600	Conductivity (σ):	0.91	0.90	1.42	5
	Head 820	e'	42.1400	Relative Permittivity (ϵ_r):	42.14	41.60	1.29	5
		e"	19.8600	Conductivity (σ):	0.91	0.90	0.78	5
	Head 850	e'	42.1700	Relative Permittivity (ϵ_r):	42.17	41.50	1.61	5
		e"	19.4300	Conductivity (σ):	0.92	0.92	0.36	5
11-10-2021	Head 1750	e'	40.8100	Relative Permittivity (ϵ_r):	40.81	40.08	1.81	5
		e"	13.6100	Conductivity (σ):	1.32	1.37	-3.26	5
	Head 1710	e'	40.9800	Relative Permittivity (ϵ_r):	40.98	40.15	2.08	5
		e"	13.6600	Conductivity (σ):	1.30	1.35	-3.54	5
	Head 1755	e'	40.7800	Relative Permittivity (ϵ_r):	40.78	40.08	1.75	5
		e"	13.6100	Conductivity (σ):	1.33	1.37	-3.18	5
11-11-2021	Head 2450	e'	39.4300	Relative Permittivity (ϵ_r):	39.43	39.20	0.59	5
		e"	13.3900	Conductivity (σ):	1.82	1.80	1.34	5
	Head 2400	e'	39.5200	Relative Permittivity (ϵ_r):	39.52	39.30	0.57	5
		e"	13.3600	Conductivity (σ):	1.78	1.75	1.78	5
	Head 2480	e'	39.3600	Relative Permittivity (ϵ_r):	39.36	39.16	0.51	5
		e"	13.4000	Conductivity (σ):	1.85	1.83	0.84	5
11-14-2021	Head 1750	e'	39.6500	Relative Permittivity (ϵ_r):	39.65	40.08	-1.08	5
		e"	13.9800	Conductivity (σ):	1.36	1.37	-0.63	5
	Head 1710	e'	39.8200	Relative Permittivity (ϵ_r):	39.82	40.15	-0.81	5
		e"	14.0600	Conductivity (σ):	1.34	1.35	-0.71	5
	Head 1755	e'	39.6200	Relative Permittivity (ϵ_r):	39.62	40.08	-1.14	5
		e"	13.9800	Conductivity (σ):	1.36	1.37	-0.55	5
11-14-2021	Head 2450	e'	38.4900	Relative Permittivity (ϵ_r):	38.49	39.20	-1.81	5
		e"	13.4700	Conductivity (σ):	1.83	1.80	1.94	5
	Head 2400	e'	38.6100	Relative Permittivity (ϵ_r):	38.61	39.30	-1.75	5
		e"	13.4600	Conductivity (σ):	1.80	1.75	2.54	5
	Head 2480	e'	38.4500	Relative Permittivity (ϵ_r):	38.45	39.16	-1.82	5
		e"	13.4600	Conductivity (σ):	1.86	1.83	1.29	5
11-17-2021	Head 1750	e'	40.2300	Relative Permittivity (ϵ_r):	40.23	40.08	0.36	5
		e"	14.4100	Conductivity (σ):	1.40	1.37	2.42	5
	Head 1710	e'	40.3800	Relative Permittivity (ϵ_r):	40.38	40.15	0.58	5
		e"	14.6100	Conductivity (σ):	1.39	1.35	3.17	5
	Head 1755	e'	40.2000	Relative Permittivity (ϵ_r):	40.20	40.08	0.31	5
		e"	14.3900	Conductivity (σ):	1.40	1.37	2.36	5
11-17-2021	Head 2600	e'	38.3300	Relative Permittivity (ϵ_r):	38.33	39.01	-1.75	5
		e"	13.4600	Conductivity (σ):	1.95	1.96	-0.83	5
	Head 2500	e'	38.6200	Relative Permittivity (ϵ_r):	38.62	39.14	-1.32	5
		e"	13.3600	Conductivity (σ):	1.86	1.85	0.17	5
	Head 2700	e'	38.0700	Relative Permittivity (ϵ_r):	38.07	38.88	-2.10	5
		e"	13.4600	Conductivity (σ):	2.02	2.07	-2.39	5

8.2. System Check

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device. The same SAR probe(s) and tissue-equivalent media combinations used with each specific SAR system for system verification must be used for device testing. When multiple probe calibration points are required to cover substantially large transmission bands, independent system verifications are required for each probe calibration point. A system verification must be performed before each series of SAR measurements using the same probe calibration point and tissue-equivalent medium. Additional system verification should be considered according to the conditions of the tissue-equivalent medium and measured tissue dielectric parameters, typically every three to four days when the liquid parameters are re-measured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

System Performance Check Measurement Conditions:

- The measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness: 2.0 ±0.2 mm (bottom plate) filled with Body or Head simulating liquid of the following parameters.
- The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm for measurements > 3 GHz.
- The DASY system with an E-Field Probe was used for the measurements.
- The dipole was mounted on the small tripod so that the dipole feed point was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10 mm (above 1 GHz) and 15 mm (below 1 GHz) from dipole center to the simulating liquid surface.
- The coarse grid with a grid spacing of 15 mm was aligned with the dipole.
For 5 GHz band - The coarse grid with a grid spacing of 10 mm was aligned with the dipole.
- Special 7x7x7 (below 3 GHz) and/or 8x8x7 (above 3 GHz) fine cube was chosen for the cube.
- Distance between probe sensors and phantom surface was set to 2.5 mm.
For 5 GHz band - Distance between probe sensors and phantom surface was set to 1.4 mm
- The dipole input power (forward power) was 100 mW.
- The results are normalized to 1 W input power.

Reference Target SAR Values

The reference SAR values can be obtained from the calibration certificate of system validation dipoles.

System Dipole	Serial No.	Cal. Date	Freq. (MHz)	Target SAR Values (W/kg)	
				1g/10g	Head
D750V3	1122	2-24-2020	750	1g	8.54
				10g	5.59
D835V2	4d194	3-20-2020	835	1g	9.76
				10g	6.42
D1750V2	1125	2-21-2020	1750	1g	36.50
				10g	19.20
D1900V2	5d199	3-19-2020	1900	1g	40.50
				10g	21.00
D2450V2	960	3-20-2020	2450	1g	53.20
				10g	24.80
D2600V2	1178	4-21-2021	2600	1g	56.60
				10g	25.40
D5GHzV2	1184	2-27-2020	5250	1g	79.10
				10g	22.70
			5600	1g	82.40
				10g	23.30
			5750	1g	79.90
				10g	22.60
D5GHzV2	1293	2021-07-22	5800	1g	80.60
				10g	22.90

Note(s):

Refer to Appendix F that mentioned about justification for Extended SAR Dipole Calibrations.

System Check Results

The 1-g and 10-g SAR measured with a reference dipole, using the required tissue-equivalent medium at the test frequency, must be within 10% of the manufacturer calibrated dipole SAR target.

SAR 1 Room

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
11-8-2021	D5GHzV2	1184	Head	1g	7.88	78.8	79.10	-0.38	
				10g	2.23	22.3	22.70	-1.76	
11-8-2021	D5GHzV2	1184	Head	1g	8.31	83.1	82.40	0.85	
				10g	2.34	23.4	23.30	0.43	
11-8-2021	D5GHzV2	1184	Head	1g	7.87	78.7	79.90	-1.50	
				10g	2.23	22.3	22.60	-1.33	
11-10-2021	D5GHzV2	1184	Head	1g	8.10	81.0	79.10	2.40	
				10g	2.30	23.0	22.70	1.32	
11-10-2021	D5GHzV2	1184	Head	1g	8.61	86.1	82.40	4.49	
				10g	2.43	24.3	23.30	4.29	
11-10-2021	D5GHzV2	1184	Head	1g	8.47	84.7	79.90	6.01	1, 2
				10g	2.40	24.0	22.60	6.19	
11-11-2021	D5GHzV2	1293	Head	1g	8.47	84.7	80.60	5.09	3, 4
				10g	2.38	23.8	22.90	3.93	
11-12-2021	D750V3	1122	Head	1g	0.88	8.8	8.54	3.51	
				10g	0.58	5.8	5.59	2.86	
11-12-2021	D835V2	4d194	Head	1g	1.03	10.3	9.76	5.53	
				10g	0.67	6.7	6.42	3.58	
11-15-2021	D835V2	4d194	Head	1g	1.02	10.2	9.76	4.51	
				10g	0.67	6.7	6.42	3.58	
11-15-2021	D2450V2	960	Head	1g	5.13	51.3	53.20	-3.57	
				10g	2.37	23.7	24.80	-4.44	
11-15-2021	D5GHzV2 (5.8GHz)	1184	Head	1g	8.45	84.5	79.90	5.76	
				10g	2.40	24.0	22.60	6.19	
11-16-2021	D5GHzV2 (5.3GHZ)	1184	Head	1g	7.75	77.5	79.10	-2.02	
				10g	2.22	22.2	22.70	-2.20	
11-17-2021	D2450V2	960	Head	1g	5.48	54.8	53.20	3.01	
				10g	2.55	25.5	24.80	2.82	
11-17-2021	D2600V2	1178	Head	1g	5.64	56.40	53.20	6.02	5, 6
				10g	2.52	25.20	24.80	1.61	
11-18-2021	D1750V2	1125	Head	1g	3.84	38.4	36.50	5.21	
				10g	2.05	20.5	19.20	6.77	
11-18-2021	D1900V2	5d199	Head	1g	4.16	41.6	40.50	2.72	
				10g	2.15	21.5	21.00	2.38	
11-22-2021	D750V3	1122	Head	1g	0.91	9.1	8.54	6.91	
				10g	0.60	6.0	5.59	7.51	
11-22-2021	D835V2	4d194	Head	1g	1.05	10.5	9.76	7.58	7, 8
				10g	0.68	6.8	6.42	6.54	

SAR 3 Room

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
10-25-2021	D1750V2	1125	Head	1g	3.48	34.8	36.50	-4.66	
				10g	1.84	18.4	19.20	-4.17	
10-25-2021	D1900V2	5d199	Head	1g	3.69	36.9	40.50	-8.89	9, 10
				10g	1.91	19.1	21.00	-9.05	
11-11-2021	D2450V2	960	Head	1g	5.62	56.2	53.20	5.64	11, 12
				10g	2.60	26.0	24.80	4.84	
11-14-2021	D1750V2	1125	Head	1g	3.45	34.5	36.50	-5.48	
				10g	1.82	18.2	19.20	-5.21	
11-14-2021	D1900V2	5d199	Head	1g	4.08	40.8	40.50	0.74	
				10g	2.10	21.0	21.00	0.00	
11-16-2021	D2600V2	1178	Head	1g	5.70	57.0	56.60	0.71	
				10g	2.55	25.5	25.40	0.39	
11-17-2021	D5GHzV2	1184	Head	1g	8.24	82.4	79.10	4.17	
				10g	2.41	24.1	22.70	6.17	
11-17-2021	D5GHzV2	1184	Head	1g	8.52	85.2	82.40	3.40	
				10g	2.45	24.5	23.30	5.15	
11-17-2021	D5GHzV2	1184	Head	1g	8.10	81.0	79.90	1.38	
				10g	2.33	23.3	22.60	3.10	
11-20-2021	D1750V2	1125	Head	1g	3.57	35.7	36.50	-2.19	
				10g	1.89	18.9	19.20	-1.56	
11-20-2021	D1900V2	5d199	Head	1g	3.96	39.6	40.50	-2.22	
				10g	2.04	20.4	21.00	-2.86	
11-22-2021	D750V3	1122	Head	1g	0.84	8.4	8.54	-1.87	
				10g	0.55	5.5	5.59	-1.97	
11-22-2021	D835V2	4d194	Head	1g	0.98	9.8	9.76	0.10	
				10g	0.64	6.4	6.42	-0.93	
11-23-2021	D1750V2	1125	Head	1g	3.70	37.0	36.50	1.37	
				10g	1.95	19.5	19.20	1.56	
11-23-2021	D1900V2	5d199	Head	1g	4.15	41.5	40.50	2.47	
				10g	2.14	21.4	21.00	1.90	

SAR 4 Room

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
11-3-2021	D1750V2	1125	Head	1g	3.41	34.1	36.50	-6.58	13, 14
				10g	1.80	18.0	19.20	-6.25	
11-3-2021	D1900V2	5d199	Head	1g	3.70	37.0	40.50	-8.64	
				10g	1.92	19.2	21.00	-8.57	
11-10-2021	D2600V2	1178	Head	1g	5.36	53.6	56.60	-5.30	
				10g	2.40	24.0	25.40	-5.51	
11-11-2021	D1900V2	5d199	Head	1g	3.89	38.9	40.50	-3.95	
				10g	2.01	20.1	21.00	-4.29	
11-14-2021	D835V2	4d194	Head	1g	0.91	9.1	9.76	-7.07	
				10g	0.59	5.9	6.42	-7.48	
11-15-2021	D750V3	1122	Head	1g	0.79	7.9	8.54	-7.38	15, 16
				10g	0.52	5.2	5.59	-7.51	
11-15-2021	D1900V2	5d199	Head	1g	3.97	39.7	40.50	-1.98	
				10g	2.05	20.5	21.00	-2.38	

SAR 5 Room

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
11-3-2021	D750V3	1122	Head	1g	0.85	8.5	8.54	-0.70	
				10g	0.56	5.6	5.59	0.36	
11-3-2021	D835V2	4d194	Head	1g	0.96	9.6	9.76	-1.74	
				10g	0.63	6.3	6.42	-1.87	
11-8-2021	D835V2	4d194	Head	1g	0.96	9.6	9.76	-1.74	
				10g	0.64	6.4	6.42	-0.93	
11-8-2021	D2450V2	960	Head	1g	5.23	52.3	53.20	-1.69	
				10g	2.48	24.8	24.80	0.00	
11-10-2021	D835V2	4d194	Head	1g	0.98	9.8	9.76	0.41	
				10g	0.65	6.5	6.42	1.09	
11-10-2021	D1750V2	1125	Head	1g	3.68	36.8	36.50	0.82	
				10g	1.99	19.9	19.20	3.65	
11-11-2021	D2450V2	960	Head	1g	5.51	55.1	53.20	3.57	
				10g	2.62	26.2	24.80	5.65	
11-14-2021	D1750V2	1125	Head	1g	3.81	38.1	36.50	4.38	17, 18
				10g	2.06	20.6	19.20	7.29	
11-14-2021	D2450V2	960	Head	1g	5.39	53.9	53.20	1.32	
				10g	2.57	25.7	24.80	3.63	
11-17-2021	D1750V2	1125	Head	1g	3.60	36.0	36.50	-1.37	
				10g	1.96	19.6	19.20	2.08	
11-17-2021	D2600V2	1178	Head	1g	5.72	57.2	56.60	1.06	
				10g	2.66	26.6	25.40	4.72	

9. Conducted Output Power Measurements

9.1. GSM

Per KDB 941225 D01 3G SAR Procedures:

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data 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.

GSM850 Measured Results

Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)				Reduced Average Power (dBm) Proximity sensor 2 back-off			
				Measured		Tune-up Limit		Measured		Tune-up Limit	
				Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
CS1	1	128	824.2	31.9	22.9	33.5	24.5	22.0	12.9	23.5	14.5
		190	836.6	32.4	23.4			22.6	13.6		
		251	848.8	32.6	23.6			22.6	13.5		
CS1	1	128	824.2	31.8	22.8	33.5	24.5	22.1	13.0	23.5	14.5
		190	836.6	32.7	23.7			22.6	13.6		
		251	848.8	33.1	24.1			22.5	13.5		
	2	128	824.2	30.8	24.7	32.0	26.0	20.9	14.9	22.5	16.5
		190	836.6	31.0	25.0			20.7	14.7		
		251	848.8	31.0	24.9			20.6	14.5		
	3	128	824.2	28.6	24.4	29.5	25.2	19.0	14.7	20.5	16.2
		190	836.6	29.2	24.9			19.3	15.1		
		251	848.8	29.0	24.8			19.9	15.7		
	4	128	824.2	26.4	23.4	28.7	25.7	17.8	14.8	18.5	15.5
		190	836.6	26.8	23.8			17.6	14.6		
		251	848.8	26.7	23.7			18.1	15.1		
MCS5	1	128	824.2	26.3	17.3	27.0	18.0	17.3	8.3	18.0	9.0
		190	836.6	26.8	17.8			17.8	8.8		
		251	848.8	26.8	17.7			18.0	9.0		
	2	128	824.2	24.9	18.8	26.0	20.0	15.1	9.1	16.0	10.0
		190	836.6	25.0	19.0			15.2	9.2		
		251	848.8	25.2	19.2			15.3	9.3		
	3	128	824.2	22.9	18.6	24.0	19.7	12.9	8.6	14.0	9.7
		190	836.6	22.8	18.5			13.2	9.0		
		251	848.8	23.0	18.8			13.4	9.2		
	4	128	824.2	21.4	18.4	23.0	20.0	11.8	8.8	13.0	10.0
		190	836.6	21.5	18.5			11.9	8.9		
		251	848.8	21.6	18.6			12.1	9.0		

Notes:

The worst-case configuration and mode for SAR testing is determined to be as follows:

- GMSK (GPRS) mode with 2 time slots for Max power, based on the Tune-up Procedure. Refer to §6.3.
- SAR is not required for EGPRS (8PSK) mode because the maximum output power and tune-up limit is ≤ 1/4dB higher than GMSK GPRS or the adjusted SAR of the highest reported SAR of GMSK GPRS is ≤ 1.2W/kg.

GSM1900 Measured Results

Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)				Reduced Average Power (dBm) Proximity sensor 2 back-off			
				Measured		Tune-up Limit		Measured		Tune-up Limit	
				Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
CS1	1	512	1850.2	29.2	20.2	31.0	22.0	20.7	11.7	21.5	12.5
		661	1880.0	29.8	20.8			20.9	11.8		
		810	1909.8	29.8	20.8			21.0	12.0		
CS1	1	512	1850.2	29.2	20.2	31.0	22.0	20.7	11.7	21.5	12.5
		661	1880.0	30.1	21.1			20.8	11.8		
		810	1909.8	30.3	21.3			21.0	12.0		
	2	512	1850.2	27.8	21.8	28.5	22.5	19.0	13.0	20.5	14.5
		661	1880.0	28.2	22.1			20.3	14.2		
		810	1909.8	28.2	22.1			19.3	13.3		
	3	512	1850.2	26.6	22.3	27.0	22.7	17.6	13.3	18.5	14.2
		661	1880.0	26.7	22.4			17.7	13.5		
		810	1909.8	26.8	22.5			17.9	13.6		
	4	512	1850.2	24.3	21.3	25.5	22.5	15.4	12.4	16.5	13.5
		661	1880.0	24.7	21.7			15.7	12.7		
		810	1909.8	24.9	21.8			15.8	12.8		
MCS5	1	512	1850.2	25.7	16.6	26.0	17.0	17.3	8.3	18.0	9.0
		661	1880.0	26.0	16.9			17.6	8.6		
		810	1909.8	26.0	16.9			17.7	8.7		
	2	512	1850.2	24.2	18.2	24.5	18.5	15.1	9.1	16.0	10.0
		661	1880.0	24.4	18.4			15.6	9.6		
		810	1909.8	24.5	18.5			15.5	9.5		
	3	512	1850.2	22.2	17.9	23.5	19.2	13.2	8.9	14.0	9.7
		661	1880.0	22.4	18.2			13.6	9.4		
		810	1909.8	22.6	18.3			13.6	9.4		
	4	512	1850.2	21.3	18.2	22.0	19.0	12.2	9.2	13.0	10.0
		661	1880.0	21.6	18.5			12.4	9.4		
		810	1909.8	21.6	18.6			12.5	9.5		

Notes:

The worst-case configuration and mode for SAR testing is determined to be as follows:

- GMSK (GPRS) mode with 3 time slots for Max power, based on the Tune-up Procedure. Refer to §6.3.
- GMSK (GPRS) mode with 2 time slots for Reduced power, based on the Tune-up Procedure. Refer to §6.3.
- SAR is not required for EGPRS (8PSK) mode because the maximum output power and tune-up limit is ≤ 1/4dB higher than GMSK GPRS or the adjusted SAR of the highest reported SAR of GMSK GPRS is ≤ 1.2W/kg.

9.2. W-CDMA

Release 99 Setup Procedures used to establish the test signals

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The DUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7).

Mode	Subtest	Rel99
WCDMA General Settings	Loopback Mode	Test Mode 2
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	β_c/β_d	8/15

HSDPA Setup Procedures used to establish the test signals

The following 4 Sub-tests were completed according to Release 5 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subtest	1	2	3	4
W-CDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set 1			
	Power Control Algorithm	Algorithm 2			
	β_c	2/15	11/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	Bd (SF)	64			
	β_c/β_d	2/15	11/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
MPR (dB)	0	0	0.5	0.5	
HSDPA Specific Settings	D_{ACK}	8			
	D_{NAK}	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback (Table 5.2B.4)	4ms			
	CQI Repetition Factor (Table 5.2B.4)	2			
	$A_{hs}=\beta_{hs}/\beta_c$	30/15			

HSPA (HSDPA & HSUPA) Setup Procedures used to establish the test signals

The following 5 Sub-tests were completed according to Release 6 procedures in table C,11.1.3 of 3GPP TS 34.121-1 v13. A summary of these settings are illustrated below:

Mode	HSPA					
	Subtest	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2 kbps RMC				
	HSDPA FRC	H-Set 1				
	HSUPA Test	HSPA				
	Power Control Algorithm	Algorithm 2				Algorithm 1
	β_c	11/15	6/15	15/15	2/15	15/15
	β_d	15/15	15/15	9/15	15/15	0
	β_{ec}	209/225	12/15	30/15	2/15	5/15
	β_c/β_d	11/15	6/15	15/9	2/15	-
	β_{hs}	22/15	12/15	30/15	4/15	5/15
	β_{ed}	1309/225	94/75	47/15	56/75	47/15
CM (dB)	1	3	2	3	1	
MPR (dB)	0	2	1	2	0	
HSDPA Specific Settings	DACK	8				0
	DNAK	8				0
	DCQI	8				0
	Ack-Nack repetition factor	3				
	CQI Feedback (Table 5.2B.4)	4ms				
	CQI Repetition Factor (Table 5.2B.4)	2				
	A _{hs} = β_{hs}/β_c	30/15				
HSUPA Specific Settings	E-DPDCH	6	8	8	5	0
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	12
	ETFCI (from 34.121 Table C.11.1.3)	75	67	92	71	67
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E-TFCIs	5	5	2	5	1
	Reference E-TFCI	11	11	11	11	67
	Reference E-TFCI PO	4	4	4	4	18
	Reference E-TFCI	67	67	92	67	67
	Reference E-TFCI PO	18	18	18	18	18
	Reference E-TFCI	71	71	71	71	71
	Reference E-TFCI PO	23	23	23	23	23
	Reference E-TFCI	75	75	75	75	75
	Reference E-TFCI PO	26	26	26	26	26
	Reference E-TFCI	81	81	81	81	81
Reference E-TFCI PO	27	27	27	27	27	
Maximum Channelization Codes	2xSF2				SF4	

DC-HSDPA Setup Procedures used to establish the test signals

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS34.108 v9.5.0. A summary of these settings are illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0

Table E.5.0: Levels for HSDPA connection setup

Parameter During Connection setup	Unit	Value
P-CPICH_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH_Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
inter-TTI Distance	TTI's	1
Number of HARQ Processes	Proces ses	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

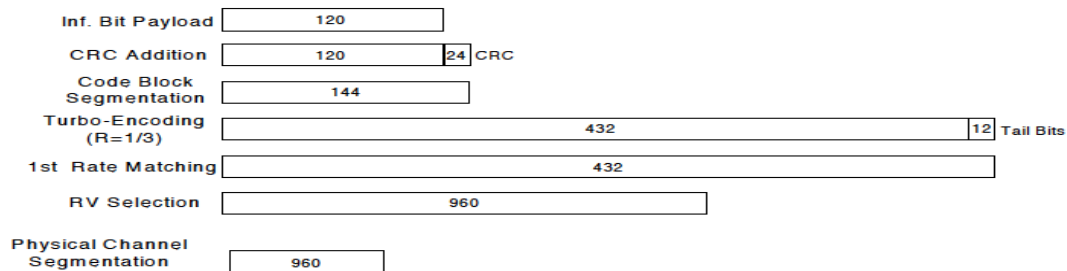


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

The following 4 Sub-tests for HSDPA were completed according to Release 8 procedures in section 5.2 of 3GPP TS34.121. A summary of subtest settings are illustrated below:

Mode	HSDPA	HSDPA	HSDPA	HSDPA	
Subtest	1	2	3	4	
WCDMA General Settings	Loopback Mode				
	Test Mode 1				
	Rel99 RMC				
	12.2kbps RMC				
	HSDPA FRC				
	H-Set 12				
	Power Control Algorithm				
	Algorithm2				
HSDPA Specific Settings	β_c	2/15	11/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	β_d (SF)	64			
	β_c/β_d	2/15	11/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
	MPR (dB)	0	0	0.5	0.5
	DACK	8			
	DNAK	8			
DCQI	8				
Ack-Nack Repetition factor	3				
CQI Feedback	4ms				
CQI Repetition Factor	2				
$A_{hs} = \beta_{hs}/\beta_c$	30/15				

HSPA+

HSPA+ is only supported to down link. Therefore, the RF conducted power is not measured.

W-CDMA Band II Measured Results

Mode	UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			Reduced Average Power (dBm) Proximity sensor 1&2&3 back-off			
			Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit	
Release 99	Rel 99 (RMC, 12.2 kbps)	9262	1852.4	24.2	N/A	25.0	13.4	N/A	14.5
		9400	1880.0	24.4		13.6			
		9538	1907.6	24.5		13.7			
HSDPA	Subtest 1	9262	1852.4	23.1	0	24.0	12.4	0	14.5
		9400	1880.0	23.4		12.5			
		9538	1907.6	23.5		12.7			
	Subtest 2	9262	1852.4	23.2	0	24.0	12.4	0	14.5
		9400	1880.0	23.4		12.5			
		9538	1907.6	23.5		12.7			
	Subtest 3	9262	1852.4	22.6	0.5	23.5	11.9	0.5	14.0
		9400	1880.0	22.8		12.0			
		9538	1907.6	23.0		12.2			
	Subtest 4	9262	1852.4	22.6	0.5	23.5	11.9	0.5	14.0
		9400	1880.0	22.8		12.1			
		9538	1907.6	23.0		12.2			
HSUPA	Subtest 1	9262	1852.4	23.1	0	24.0	12.4	0	14.5
		9400	1880.0	23.3		12.5			
		9538	1907.6	23.4		12.6			
	Subtest 2	9262	1852.4	21.1	2	22.0	10.4	2	12.5
		9400	1880.0	21.3		10.6			
		9538	1907.6	21.4		10.5			
	Subtest 3	9262	1852.4	22.1	1	23.0	11.3	1	13.5
		9400	1880.0	22.3		11.5			
		9538	1907.6	22.5		11.6			
	Subtest 4	9262	1852.4	21.1	2	22.0	10.4	2	12.5
		9400	1880.0	21.3		10.5			
		9538	1907.6	21.4		10.7			
	Subtest 5	9262	1852.4	23.2	0	24.0	12.4	0	14.5
		9400	1880.0	23.4		12.5			
		9538	1907.6	23.5		12.6			
DC-HSDPA	Subtest 1	9262	1852.4	23.2	0	24.0	12.4	0	14.5
		9400	1880.0	23.4		12.6			
		9538	1907.6	23.6		12.7			
	Subtest 2	9262	1852.4	23.2	0	24.0	12.5	0	14.5
		9400	1880.0	23.4		12.6			
		9538	1907.6	23.5		12.7			
	Subtest 3	9262	1852.4	22.7	0.5	23.5	12.0	0.5	14.0
		9400	1880.0	22.9		12.0			
		9538	1907.6	23.0		12.1			
	Subtest 4	9262	1852.4	22.7	0.5	23.5	11.9	0.5	14.0
		9400	1880.0	22.9		12.0			
		9538	1907.6	23.1		12.1			

W-CDMA Band IV Measured Results

Mode	UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			Reduced Average Power (dBm) Proximity sensor 1&2&3 back-off			
			Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit	
Release 99	Rel 99 (RMC, 12.2 kbps)	1312	1712.4	24.5	NA	25.0	14.1	NA	14.5
		1413	1732.6	24.6		14.0			
		1513	1752.6	24.8		14.2			
HSDPA	Subtest 1	1312	1712.4	23.6	0	24.0	13.0	0	14.5
		1413	1732.6	23.6		13.1			
		1513	1752.6	23.8		13.2			
	Subtest 2	1312	1712.4	23.5	0	24.0	13.0	0	14.5
		1413	1732.6	23.6		13.1			
		1513	1752.6	23.8		13.2			
	Subtest 3	1312	1712.4	23.0	0.5	23.5	12.5	0.5	14.0
		1413	1732.6	23.1		12.5			
		1513	1752.6	23.2		12.7			
	Subtest 4	1312	1712.4	23.0	0.5	23.5	12.5	0.5	14.0
		1413	1732.6	23.1		12.5			
		1513	1752.6	23.2		12.6			
HSUPA	Subtest 1	1312	1712.4	23.5	0	24.0	13.0	0	14.5
		1413	1732.6	23.4		13.0			
		1513	1752.6	23.7		13.2			
	Subtest 2	1312	1712.4	21.5	2	22.0	11.0	2	12.5
		1413	1732.6	21.6		11.0			
		1513	1752.6	21.7		11.1			
	Subtest 3	1312	1712.4	22.5	1	23.0	12.0	1	13.5
		1413	1732.6	22.4		12.0			
		1513	1752.6	22.7		12.2			
	Subtest 4	1312	1712.4	21.5	2	22.0	11.0	2	12.5
		1413	1732.6	21.5		11.0			
		1513	1752.6	21.7		11.2			
	Subtest 5	1312	1712.4	23.5	0	24.0	13.0	0	14.5
		1413	1732.6	23.5		13.0			
		1513	1752.6	23.6		13.2			
DC-HSDPA	Subtest 1	1312	1712.4	23.7	0	24.0	13.0	0	14.5
		1413	1732.6	23.7		13.1			
		1513	1752.6	23.8		13.2			
	Subtest 2	1312	1712.4	23.6	0	24.0	13.0	0	14.5
		1413	1732.6	23.6		13.0			
		1513	1752.6	23.8		13.2			
	Subtest 3	1312	1712.4	23.1	0.5	23.5	12.5	0.5	14.0
		1413	1732.6	23.1		12.6			
		1513	1752.6	23.3		12.7			
	Subtest 4	1312	1712.4	23.1	0.5	23.5	12.5	0.5	14.0
		1413	1732.6	23.2		12.5			
		1513	1752.6	23.3		12.7			

W-CDMA Band V Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			Reduced Average Power (dBm) Proximity sensor.2 back-off			Reduced Average Power (dBm) Proximity sensor.1 & 3 back-off		
				Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	4132	826.4	24.2	NA	25.0	15.6	NA	16.5	19.9	NA	21.0
		4183	836.6	24.5			15.7			20.2		
		4233	846.6	24.3			15.5			20.2		
HSDPA	Subtest 1	4132	826.4	23.3	0	24.0	14.6	0	16.5	19.0	0	21.0
		4183	836.6	23.5			14.7			19.2		
		4233	846.6	23.3			14.5			19.2		
	Subtest 2	4132	826.4	23.3	0	24.0	14.6	0	16.5	19.0	0	21.0
		4183	836.6	23.5			14.7			19.2		
		4233	846.6	23.3			14.5			19.2		
	Subtest 3	4132	826.4	22.7	0.5	23.5	14.1	0.5	16.0	18.4	0.5	20.5
		4183	836.6	23.0			14.2			18.6		
		4233	846.6	22.8			14.0			18.7		
	Subtest 4	4132	826.4	22.7	0.5	23.5	14.1	0.5	16.0	18.5	0.5	20.5
		4183	836.6	23.0			14.2			18.7		
		4233	846.6	22.8			14.0			18.7		
HSUPA	Subtest 1	4132	826.4	23.2	0	24.0	14.6	0	16.5	19.0	0	21.0
		4183	836.6	23.4			14.7			19.1		
		4233	846.6	23.2			14.5			19.2		
	Subtest 2	4132	826.4	21.2	2	22.0	12.6	2	14.5	17.0	2	19.0
		4183	836.6	21.5			12.7			17.2		
		4233	846.6	21.2			12.5			17.2		
	Subtest 3	4132	826.4	22.2	1	23.0	13.6	1	15.5	18.0	1	20.0
		4183	836.6	22.4			13.7			18.2		
		4233	846.6	22.2			13.5			18.2		
	Subtest 4	4132	826.4	21.2	2	22.0	12.7	2	14.5	17.9	2	19.0
		4183	836.6	21.5			12.8			17.3		
		4233	846.6	21.2			12.3			17.3		
Subtest 5	4132	826.4	22.8	0	24.0	14.7	0	16.5	19.1	0	21.0	
	4183	836.6	23.1			14.8			19.3			
	4233	846.6	22.8			14.5			19.3			
DC-HSDPA	Subtest 1	4132	826.4	23.2	0	24.0	14.9	0	16.5	19.0	0	21.0
		4183	836.6	23.5			15.0			19.2		
		4233	846.6	23.3			14.8			19.2		
	Subtest 2	4132	826.4	23.3	0	24.0	14.9	0	16.5	19.0	0	21.0
		4183	836.6	23.5			15.0			19.2		
		4233	846.6	23.3			14.7			19.2		
	Subtest 3	4132	826.4	22.8	0.5	23.5	14.4	0.5	16.0	18.5	0.5	20.5
		4183	836.6	23.0			14.5			18.7		
		4233	846.6	22.8			14.2			18.7		
	Subtest 4	4132	826.4	22.7	0.5	23.5	14.4	0.5	16.0	18.5	0.5	20.5
		4183	836.6	23.0			14.5			18.7		
		4233	846.6	22.8			14.2			18.7		

9.3. LTE

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

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

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (subclause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	N/A

Maximum Output Power (Tune-up Limit) for LTE

According to April 2015 TCB workshop, SAR test exclusion can be applied for testing overlapping LTE bands as follows:

- a) The maximum output power, including tolerance, for the smaller band must be ≤ the larger band to qualify for the SAR test exclusion.
- b) The channel bandwidth and other operating parameters for the smaller band must be fully supported by the larger band.
 - LTE Band 2 (1850 – 1910 MHz) is covered by LTE Band 25 (1850 – 1915 MHz) in Main 1 Ant.
 - LTE Band 4 (1710 – 1755 MHz) is covered by LTE Band 66 (1710 – 1780 MHz)
 - LTE Band 5 (824 – 849 MHz) is covered by LTE Band 26 (814 – 849 MHz) in Max & Reduce of Proximity sensor 2.
 - LTE Band 17 (704 – 716 MHz) is covered by LTE Band 12 (699 – 716 MHz)

Maximum bandwidth does not support at least three non-overlapping channels in certain channel bandwidths.

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 per KDB 941225 D05 SAR for LTE Devices.

LTE QPSK configuration has the highest maximum average output power per 3GPP standard.

SAR measurement is not required for Higher order modulations. When the highest maximum output power for Higher order modulations are ≤ 0.5 dB higher than the QPSK or when the reported SAR for QPSK configuration is ≤ 1.45 W/kg.

LTE Band 2 (Main 2 Ant.) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					Reduced Average Power (dBm) Proximity sensor.4 back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				18700	18900	19100			18700	18900	19100		
				1860 MHz	1880 MHz	1900 MHz			1860 MHz	1880 MHz	1900 MHz		
20 MHz	QPSK	1	0	23.4	23.1	23.0	0.0	25.0	14.4	14.4	14.3	0.0	15.0
		1	49	23.5	23.6	23.4	0.0	25.0	14.6	14.6	14.4	0.0	15.0
		1	99	23.0	23.0	23.1	0.0	25.0	14.4	14.3	14.3	0.0	15.0
		50	0	22.4	22.6	22.7	1.0	24.0	14.3	14.5	14.4	0.0	15.0
		50	24	22.6	22.8	22.8	1.0	24.0	14.4	14.5	14.4	0.0	15.0
		50	50	22.7	23.4	22.9	1.0	24.0	14.4	14.6	14.4	0.0	15.0
	100	0	22.6	22.7	22.7	1.0	24.0	14.2	13.7	13.9	0.0	15.0	
	16QAM	1	0	23.0	22.6	22.9	1.0	24.0	14.0	13.9	14.0	0.0	15.0
		1	49	23.1	23.7	22.5	1.0	24.0	14.1	14.6	13.6	0.0	15.0
		1	99	23.1	23.2	23.2	1.0	24.0	14.1	14.6	13.9	0.0	15.0
		50	0	21.5	21.4	21.8	2.0	23.0	13.7	13.6	13.8	0.0	15.0
		50	24	21.7	21.6	21.9	2.0	23.0	13.6	13.7	13.8	0.0	15.0
		50	50	21.7	21.9	21.8	2.0	23.0	13.6	13.5	14.0	0.0	15.0
	100	0	21.6	21.6	21.9	2.0	23.0	13.4	13.7	14.0	0.0	15.0	
	64QAM	1	0	21.4	21.1	22.7	2.0	23.0	13.7	13.7	13.8	0.0	15.0
		1	49	21.7	21.5	22.7	2.0	23.0	13.5	13.9	13.9	0.0	15.0
		1	99	21.3	20.9	22.6	2.0	23.0	13.6	13.8	13.8	0.0	15.0
		50	0	20.4	20.5	20.7	3.0	22.0	13.6	13.5	13.6	0.0	15.0
		50	24	20.7	20.7	20.6	3.0	22.0	13.7	13.8	13.8	0.0	15.0
		50	50	20.6	20.8	20.9	3.0	22.0	13.7	13.8	14.0	0.0	15.0
	100	0	20.7	20.7	20.8	3.0	22.0	13.6	13.7	13.9	0.0	15.0	
	256QAM	1	0	17.7	18.5	18.1	5.0	20.0	13.0	14.2	13.5	0.0	15.0
		1	49	18.5	18.4	18.7	5.0	20.0	13.9	14.4	14.0	0.0	15.0
		1	99	18.3	19.0	18.3	5.0	20.0	13.9	14.1	14.4	0.0	15.0
50		0	18.5	18.7	18.8	5.0	20.0	13.4	13.6	13.6	0.0	15.0	
50		24	18.7	18.6	18.9	5.0	20.0	13.6	13.7	13.9	0.0	15.0	
50		50	18.6	18.8	18.9	5.0	20.0	13.4	13.8	13.8	0.0	15.0	
100	0	18.6	18.7	18.7	5.0	20.0	13.7	13.7	13.9	0.0	15.0		
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				18675	18900	19125			18675	18900	19125		
				1857.5 MHz	1880 MHz	1902.5 MHz	1857.5 MHz	1880 MHz	1902.5 MHz				
15 MHz	QPSK	1	0	22.5	23.1	23.0	0.0	25.0	13.5	14.0	14.1	0.0	15.0
		1	37	22.9	23.1	23.1	0.0	25.0	13.8	14.3	14.2	0.0	15.0
		1	74	22.9	23.1	23.1	0.0	25.0	13.9	13.5	14.2	0.0	15.0
		36	0	22.5	21.5	22.8	1.0	24.0	13.4	13.9	13.8	0.0	15.0
		36	20	22.6	21.5	22.9	1.0	24.0	13.6	13.9	14.0	0.0	15.0
		36	39	22.3	21.5	22.9	1.0	24.0	13.6	13.8	14.0	0.0	15.0
	75	0	22.6	21.6	22.9	1.0	24.0	13.6	13.7	14.0	0.0	15.0	
	16QAM	1	0	21.9	21.7	23.3	1.0	24.0	13.1	13.8	14.3	0.0	15.0
		1	37	22.1	22.0	23.5	1.0	24.0	13.6	13.3	14.3	0.0	15.0
		1	74	22.3	22.0	23.1	1.0	24.0	13.2	13.7	14.4	0.0	15.0
		36	0	21.6	21.7	21.8	2.0	23.0	13.4	13.6	13.9	0.0	15.0
		36	20	21.7	21.8	21.8	2.0	23.0	13.5	13.6	13.9	0.0	15.0
		36	39	21.7	21.7	22.0	2.0	23.0	13.5	13.8	13.9	0.0	15.0
	75	0	21.6	21.6	22.0	2.0	23.0	13.5	13.8	14.0	0.0	15.0	
	64QAM	1	0	21.2	21.3	21.1	2.0	23.0	13.7	14.3	13.2	0.0	15.0
		1	37	21.5	21.4	20.9	2.0	23.0	14.3	14.2	12.5	0.0	15.0
		1	74	21.4	21.8	21.8	2.0	23.0	13.8	14.5	12.8	0.0	15.0
		36	0	20.2	20.5	20.8	3.0	22.0	13.5	13.8	13.7	0.0	15.0
		36	20	20.6	20.8	20.9	3.0	22.0	13.6	13.8	13.9	0.0	15.0
		36	39	20.8	20.8	21.0	3.0	22.0	13.6	13.8	13.9	0.0	15.0
	75	0	20.4	20.6	20.9	3.0	22.0	13.7	13.6	13.8	0.0	15.0	
	256QAM	1	0	18.3	18.9	18.4	5.0	20.0	13.5	13.1	14.6	0.0	15.0
		1	37	18.2	18.8	18.7	5.0	20.0	13.6	13.4	13.9	0.0	15.0
		1	74	18.4	18.6	18.6	5.0	20.0	13.6	13.6	13.6	0.0	15.0
36		0	18.5	18.6	19.0	5.0	20.0	13.5	13.6	13.9	0.0	15.0	
36		20	18.9	18.7	19.2	5.0	20.0	13.6	13.8	14.0	0.0	15.0	
36		39	18.7	18.8	18.9	5.0	20.0	13.6	13.8	14.1	0.0	15.0	
75	0	18.7	18.8	19.0	5.0	20.0	13.7	13.6	14.0	0.0	15.0		

LTE Band 2 (Main 2 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				18650	18900	19150			18650	18900	19150		
				1855 MHz	1880 MHz	1905 MHz			1855 MHz	1880 MHz	1905 MHz		
10 MHz	QPSK	1	0	22.5	23.7	22.6	0.0	25.0	13.6	13.4	13.5	0.0	15.0
		1	25	23.0	23.2	22.7	0.0	25.0	14.1	14.1	14.0	0.0	15.0
		1	49	22.8	22.6	22.8	0.0	25.0	13.8	13.5	13.9	0.0	15.0
		25	0	22.7	22.9	23.1	1.0	24.0	13.7	14.0	13.3	0.0	15.0
		25	12	22.8	23.2	23.3	1.0	24.0	13.7	14.1	13.4	0.0	15.0
		25	25	22.8	23.0	23.2	1.0	24.0	13.6	14.1	13.4	0.0	15.0
	16QAM	50	0	22.7	22.9	23.1	1.0	24.0	13.6	13.9	13.3	0.0	15.0
		1	0	22.2	22.0	22.7	1.0	24.0	13.5	14.3	14.1	0.0	15.0
		1	25	22.9	22.7	23.0	1.0	24.0	14.5	14.3	14.3	0.0	15.0
		1	49	21.9	23.3	22.6	1.0	24.0	13.3	13.2	13.8	0.0	15.0
		25	0	21.8	22.0	22.6	2.0	23.0	13.6	14.0	13.4	0.0	15.0
		25	12	21.7	22.2	22.5	2.0	23.0	13.9	14.2	13.6	0.0	15.0
	64QAM	25	25	21.3	22.1	22.2	2.0	23.0	13.9	14.1	13.8	0.0	15.0
		50	0	21.7	22.0	22.6	2.0	23.0	13.6	13.9	13.6	0.0	15.0
		1	0	20.7	20.9	21.9	2.0	23.0	13.9	13.9	14.0	0.0	15.0
		1	25	22.1	22.9	22.7	2.0	23.0	14.3	14.1	14.9	0.0	15.0
		1	49	21.3	21.4	22.7	2.0	23.0	12.9	13.9	14.0	0.0	15.0
		25	0	20.7	21.1	21.3	3.0	22.0	13.8	14.0	13.9	0.0	15.0
	256QAM	25	12	21.0	21.1	21.5	3.0	22.0	13.9	14.1	14.0	0.0	15.0
		25	25	20.8	21.0	21.1	3.0	22.0	13.5	13.9	14.0	0.0	15.0
		50	0	20.8	20.9	21.0	3.0	22.0	13.8	14.1	13.5	0.0	15.0
		1	0	18.7	18.8	19.0	5.0	20.0	13.7	14.5	14.3	0.0	15.0
		1	25	19.6	19.6	19.6	5.0	20.0	14.0	14.8	14.6	0.0	15.0
		1	49	19.2	17.7	19.1	5.0	20.0	13.2	14.5	13.1	0.0	15.0
10 MHz	256QAM	25	0	18.8	19.0	19.1	5.0	20.0	13.7	13.7	13.8	0.0	15.0
		25	12	18.8	19.1	19.4	5.0	20.0	13.8	14.0	13.5	0.0	15.0
		25	25	18.8	18.8	19.1	5.0	20.0	13.9	14.1	13.6	0.0	15.0
		50	0	18.9	19.1	19.6	5.0	20.0	13.6	14.1	13.9	0.0	15.0
		1	0	23.0	23.1	23.0	0.0	25.0	13.0	13.1	13.1	0.0	15.0
		1	12	23.0	23.1	23.0	0.0	25.0	13.0	13.2	13.2	0.0	15.0
5 MHz	QPSK	1	24	22.9	23.8	22.8	0.0	25.0	13.0	13.2	12.5	0.0	15.0
		12	0	22.1	22.2	23.2	1.0	24.0	13.0	13.1	14.1	0.0	15.0
		12	7	22.1	22.2	23.4	1.0	24.0	13.0	13.2	14.4	0.0	15.0
		12	13	22.1	22.2	23.1	1.0	24.0	13.0	13.2	14.3	0.0	15.0
		25	0	22.0	22.1	23.2	1.0	24.0	13.0	13.2	14.3	0.0	15.0
		1	0	23.1	23.0	22.7	1.0	24.0	13.1	13.3	14.5	0.0	15.0
	16QAM	1	12	23.1	22.0	24.0	1.0	24.0	13.4	13.2	15.0	0.0	15.0
		1	24	23.1	23.0	23.2	1.0	24.0	13.2	13.4	14.9	0.0	15.0
		12	0	21.2	21.3	22.1	2.0	23.0	13.1	13.2	14.2	0.0	15.0
		12	7	21.2	21.0	22.6	2.0	23.0	13.1	13.2	14.4	0.0	15.0
		12	13	21.2	21.1	22.3	2.0	23.0	13.3	13.2	14.3	0.0	15.0
		25	0	21.0	22.3	22.2	2.0	23.0	13.5	13.4	14.1	0.0	15.0
	64QAM	1	0	21.9	22.5	21.1	2.0	23.0	13.2	14.8	14.2	0.0	15.0
		1	12	22.1	22.4	21.1	2.0	23.0	13.1	13.8	14.1	0.0	15.0
		1	24	22.0	22.6	21.1	2.0	23.0	13.4	14.2	14.3	0.0	15.0
		12	0	20.2	20.9	21.0	3.0	22.0	13.1	14.0	14.2	0.0	15.0
		12	7	20.3	20.8	21.3	3.0	22.0	13.1	13.8	14.2	0.0	15.0
		12	13	20.6	21.1	21.5	3.0	22.0	13.3	14.1	14.2	0.0	15.0
	256QAM	25	0	20.2	21.0	21.2	3.0	22.0	13.4	14.0	14.1	0.0	15.0
		1	0	17.6	18.8	19.1	5.0	20.0	13.1	13.9	14.3	0.0	15.0
		1	12	17.6	18.7	18.5	5.0	20.0	13.2	13.8	13.6	0.0	15.0
		1	24	17.6	18.6	18.9	5.0	20.0	13.2	13.8	14.7	0.0	15.0
		12	0	17.8	19.0	19.4	5.0	20.0	13.2	14.1	13.9	0.0	15.0
		12	7	17.6	18.9	19.3	5.0	20.0	13.4	13.7	14.1	0.0	15.0
5 MHz	256QAM	12	13	17.7	19.1	19.2	5.0	20.0	13.2	14.3	13.7	0.0	15.0
		25	0	17.8	18.9	19.1	5.0	20.0	13.1	13.9	14.5	0.0	15.0

LTE Band 2 (Main 2 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	
				18615	18900	19185			18615	18900	19185			
				1851.5 MHz	1880 MHz	1908.5 MHz			1851.5 MHz	1880 MHz	1908.5 MHz			
3 MHz	QPSK	1	0	22.8	23.2	22.9	0.0	25.0	13.8	13.5	13.9	0.0	15.0	
		1	8	22.8	23.3	22.8	0.0	25.0	13.7	13.4	13.9	0.0	15.0	
		1	14	22.7	23.2	22.8	0.0	25.0	13.7	13.3	13.8	0.0	15.0	
		8	0	22.8	23.0	23.3	1.0	24.0	13.8	14.0	14.1	0.0	15.0	
		8	4	22.8	22.9	23.3	1.0	24.0	13.7	13.9	14.3	0.0	15.0	
		8	7	22.8	22.9	23.3	1.0	24.0	13.7	14.0	14.3	0.0	15.0	
	16QAM	15	0	22.8	23.0	23.1	1.0	24.0	13.7	14.0	14.1	0.0	15.0	
		1	0	22.6	23.4	22.8	1.0	24.0	14.2	14.6	14.3	0.0	15.0	
		1	8	22.5	23.6	22.8	1.0	24.0	14.0	14.3	13.6	0.0	15.0	
		1	14	22.3	23.7	23.2	1.0	24.0	13.1	14.1	13.6	0.0	15.0	
		8	0	22.1	21.9	22.2	2.0	23.0	13.8	14.3	14.0	0.0	15.0	
		8	4	21.8	22.1	22.4	2.0	23.0	14.1	13.9	14.1	0.0	15.0	
	64QAM	8	7	20.8	21.8	22.4	2.0	23.0	13.7	14.2	13.9	0.0	15.0	
		15	0	21.7	21.9	22.2	2.0	23.0	13.7	13.9	14.2	0.0	15.0	
		1	0	21.8	22.3	22.1	2.0	23.0	13.8	14.2	14.4	0.0	15.0	
		1	8	21.9	22.1	21.6	2.0	23.0	14.0	14.5	14.0	0.0	15.0	
		1	14	21.3	22.9	22.4	2.0	23.0	13.7	14.2	14.2	0.0	15.0	
		8	0	20.8	21.3	21.2	3.0	22.0	13.9	14.9	14.2	0.0	15.0	
	256QAM	8	4	20.8	21.2	21.1	3.0	22.0	14.0	14.2	14.3	0.0	15.0	
		8	7	20.7	20.8	21.6	3.0	22.0	13.7	13.7	14.4	0.0	15.0	
		15	0	21.0	20.9	21.3	3.0	22.0	13.8	14.1	14.2	0.0	15.0	
		1	0	19.2	19.5	19.2	5.0	20.0	14.2	14.2	13.9	0.0	15.0	
		1	8	19.7	18.7	18.9	5.0	20.0	14.4	14.3	14.2	0.0	15.0	
		1	14	18.6	18.9	18.8	5.0	20.0	13.7	14.0	13.5	0.0	15.0	
	1.4 MHz	QPSK	8	0	19.0	18.8	19.0	5.0	20.0	13.7	13.7	14.2	0.0	15.0
			8	4	18.6	18.9	19.6	5.0	20.0	13.8	13.7	14.3	0.0	15.0
			8	7	18.9	18.9	19.1	5.0	20.0	13.7	13.9	14.3	0.0	15.0
15			0	18.6	19.1	19.1	5.0	20.0	13.7	14.0	14.3	0.0	15.0	
1			0	24.0	24.1	24.2	0.0	25.0	13.9	14.2	14.4	0.0	15.0	
1			3	24.0	24.1	24.2	0.0	25.0	14.0	14.2	14.4	0.0	15.0	
16QAM		1	5	23.9	24.0	24.2	0.0	25.0	13.9	14.2	14.3	0.0	15.0	
		3	0	24.0	24.1	24.1	0.0	25.0	13.9	14.2	14.4	0.0	15.0	
		3	1	23.9	24.1	24.1	0.0	25.0	13.9	14.2	14.4	0.0	15.0	
		3	3	23.9	24.1	24.1	0.0	25.0	14.0	14.2	14.4	0.0	15.0	
		6	0	22.9	23.1	23.2	1.0	24.0	13.9	14.1	14.4	0.0	15.0	
		1	0	23.2	23.4	23.5	1.0	24.0	14.3	14.5	14.6	0.0	15.0	
64QAM		1	3	23.3	23.4	23.4	1.0	24.0	14.3	14.5	14.5	0.0	15.0	
		1	5	23.3	23.4	23.4	1.0	24.0	14.3	14.4	14.6	0.0	15.0	
		3	0	23.1	23.2	23.3	1.0	24.0	14.1	14.3	14.5	0.0	15.0	
	3	1	23.1	23.3	23.4	1.0	24.0	14.1	14.3	14.5	0.0	15.0		
	3	3	23.1	23.3	23.4	1.0	24.0	14.1	14.3	14.6	0.0	15.0		
	6	0	22.0	22.2	22.3	2.0	23.0	14.0	14.2	14.4	0.0	15.0		
256QAM	1	0	22.3	22.3	22.4	2.0	23.0	14.1	14.4	14.7	0.0	15.0		
	1	3	22.2	22.4	22.4	2.0	23.0	14.1	14.3	14.6	0.0	15.0		
	1	5	22.1	22.3	22.3	2.0	23.0	14.0	14.3	14.5	0.0	15.0		
	3	0	22.1	22.2	22.4	2.0	23.0	14.1	14.2	14.4	0.0	15.0		
	3	1	22.0	22.2	22.4	2.0	23.0	14.0	14.2	14.4	0.0	15.0		
	3	3	22.1	22.2	22.4	2.0	23.0	14.1	14.2	14.4	0.0	15.0		
256QAM	6	0	20.9	21.0	21.2	3.0	22.0	13.9	14.2	14.3	0.0	15.0		
	1	0	19.0	19.2	19.4	5.0	20.0	14.1	14.2	14.5	0.0	15.0		
	1	3	19.1	19.2	19.4	5.0	20.0	14.1	14.1	14.4	0.0	15.0		
	1	5	19.0	19.1	19.3	5.0	20.0	14.0	14.1	14.4	0.0	15.0		
	3	0	19.0	19.0	19.2	5.0	20.0	14.0	14.2	14.4	0.0	15.0		
	3	1	19.0	19.0	19.2	5.0	20.0	14.0	14.2	14.4	0.0	15.0		
256QAM	3	3	19.0	19.0	19.2	5.0	20.0	14.0	14.2	14.3	0.0	15.0		
	6	0	19.0	19.0	19.1	5.0	20.0	13.9	14.2	14.4	0.0	15.0		

LTE Band 12 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					Reduced Average Power (dBm) Proximity sensor 1&2&3 back-off					
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	
				23069 704 MHz	23095 707.5 MHz	23136 711 MHz			23069 704 MHz	23095 707.5 MHz	23136 711 MHz			
10 MHz	QPSK	1	0		24.9		0.0	25.5		16.8		0.0	17.0	
		1	25		24.9		0.0	25.5		16.8		0.0	17.0	
		1	49		24.7		0.0	25.5		16.6		0.0	17.0	
		25	0		23.8		1.0	24.5		16.7		0.0	17.0	
		25	12		23.9		1.0	24.5		16.7		0.0	17.0	
		25	25		23.8		1.0	24.5		16.6		0.0	17.0	
	16QAM	50	0		23.8		1.0	24.5		16.6		0.0	17.0	
		1	0		24.0		1.0	24.5		16.9		0.0	17.0	
		1	25		24.0		1.0	24.5		16.9		0.0	17.0	
		1	49		24.0		1.0	24.5		16.7		0.0	17.0	
		25	0		22.8		2.0	23.5		16.7		0.0	17.0	
		25	12		22.9		2.0	23.5		16.8		0.0	17.0	
	64QAM	25	25		22.8		2.0	23.5		16.7		0.0	17.0	
		50	0		22.8		2.0	23.5		16.7		0.0	17.0	
		1	0		23.1		2.0	23.5		17.0		0.0	17.0	
		1	25		23.2		2.0	23.5		17.0		0.0	17.0	
		1	49		23.1		2.0	23.5		16.8		0.0	17.0	
		25	0		21.8		3.0	22.5		16.7		0.0	17.0	
	256QAM	25	12		21.8		3.0	22.5		16.8		0.0	17.0	
		25	25		21.8		3.0	22.5		16.7		0.0	17.0	
		50	0		21.8		3.0	22.5		16.7		0.0	17.0	
1		0		19.7		5.0	20.5		16.6		0.0	17.0		
1		25		20.1		5.0	20.5		17.0		0.0	17.0		
1		49		19.6		5.0	20.5		16.6		0.0	17.0		
5 MHz	QPSK	25	0		19.8		5.0	20.5		16.7		0.0	17.0	
		25	12		19.8		5.0	20.5		16.8		0.0	17.0	
		25	25		19.7		5.0	20.5		16.7		0.0	17.0	
		50	0		19.7		5.0	20.5		16.7		0.0	17.0	
		1	0		24.9	24.9	24.7	0.0	25.5	16.7	16.8	16.6	0.0	17.0
		1	12		24.9	24.9	24.7	0.0	25.5	16.8	16.8	16.6	0.0	17.0
16QAM	1	24		24.8	24.7	24.6	0.0	25.5	16.7	16.6	16.4	0.0	17.0	
	12	0		23.9	23.9	23.7	1.0	24.5	16.7	16.7	16.6	0.0	17.0	
	12	7		24.0	23.9	23.7	1.0	24.5	16.8	16.7	16.6	0.0	17.0	
	12	13		23.9	23.8	23.6	1.0	24.5	16.8	16.7	16.5	0.0	17.0	
	25	0		23.9	23.8	23.7	1.0	24.5	16.8	16.7	16.6	0.0	17.0	
	1	0		24.4	23.9	24.1	1.0	24.5	16.9	16.8	17.0	0.0	17.0	
64QAM	1	12		24.3	24.0	24.1	1.0	24.5	16.9	17.0	16.8	0.0	17.0	
	1	24		24.2	23.8	23.9	1.0	24.5	17.0	16.7	16.9	0.0	17.0	
	12	0		23.0	22.9	22.8	2.0	23.5	16.8	16.9	16.8	0.0	17.0	
	12	7		23.0	22.9	22.8	2.0	23.5	16.8	16.9	16.8	0.0	17.0	
	12	13		23.0	22.8	22.7	2.0	23.5	16.8	16.8	16.6	0.0	17.0	
	25	0		22.9	22.8	22.7	2.0	23.5	16.8	16.7	16.6	0.0	17.0	
256QAM	1	0		23.1	23.0	23.0	2.0	23.5	16.9	17.0	16.9	0.0	17.0	
	1	12		23.1	23.2	22.9	2.0	23.5	16.9	16.9	16.9	0.0	17.0	
	1	24		23.1	23.1	22.8	2.0	23.5	17.0	16.9	16.8	0.0	17.0	
	12	0		22.0	21.9	21.7	3.0	22.5	16.8	16.8	16.6	0.0	17.0	
	12	7		22.1	21.9	21.7	3.0	22.5	16.9	16.8	16.6	0.0	17.0	
	12	13		22.0	21.8	21.6	3.0	22.5	16.8	16.8	16.5	0.0	17.0	
256QAM	25	0		22.0	21.8	21.7	3.0	22.5	16.8	16.7	16.6	0.0	17.0	
	1	0		20.0	19.9	19.8	5.0	20.5	16.8	16.8	16.8	0.0	17.0	
	1	12		20.0	20.0	19.8	5.0	20.5	16.9	16.9	16.8	0.0	17.0	
	1	24		19.9	19.8	19.6	5.0	20.5	16.8	16.7	16.6	0.0	17.0	
	12	0		19.9	19.8	19.7	5.0	20.5	16.8	16.8	16.6	0.0	17.0	
	12	7		20.0	19.8	19.7	5.0	20.5	16.9	16.8	16.6	0.0	17.0	
256QAM	12	13		19.9	19.8	19.6	5.0	20.5	16.8	16.7	16.5	0.0	17.0	
	25	0		19.9	19.8	19.7	5.0	20.5	16.8	16.7	16.6	0.0	17.0	

LTE Band 12 Measured Results(Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				23025	23095	23165			23025	23095	23165		
				700.5 MHz	707.5 MHz	714.5 MHz			700.5 MHz	707.5 MHz	714.5 MHz		
3 MHz	QPSK	1	0	24.9	24.9	24.6	0.0	25.5	16.8	16.7	16.5	0.0	17.0
		1	8	24.9	24.9	24.7	0.0	25.5	16.8	16.8	16.5	0.0	17.0
		1	14	24.9	24.8	24.5	0.0	25.5	16.7	16.6	16.4	0.0	17.0
		8	0	23.9	23.8	23.7	1.0	24.5	16.8	16.7	16.6	0.0	17.0
		8	4	24.0	23.8	23.7	1.0	24.5	16.8	16.7	16.6	0.0	17.0
		8	7	24.0	23.8	23.7	1.0	24.5	16.8	16.7	16.6	0.0	17.0
	16QAM	15	0	23.9	23.8	23.7	1.0	24.5	16.8	16.7	16.5	0.0	17.0
		1	0	24.1	24.0	24.1	1.0	24.5	17.0	16.9	16.9	0.0	17.0
		1	8	24.2	24.1	24.1	1.0	24.5	17.0	17.0	16.9	0.0	17.0
		1	14	23.9	24.0	23.9	1.0	24.5	16.9	16.9	16.8	0.0	17.0
		8	0	23.1	22.9	22.7	2.0	23.5	16.9	16.8	16.7	0.0	17.0
		8	4	23.1	22.9	22.7	2.0	23.5	16.9	16.8	16.7	0.0	17.0
	64QAM	8	7	23.0	22.9	22.7	2.0	23.5	16.9	16.8	16.7	0.0	17.0
		15	0	23.0	22.8	22.7	2.0	23.5	16.8	16.7	16.6	0.0	17.0
		1	0	23.1	23.1	22.9	2.0	23.5	16.9	17.0	16.7	0.0	17.0
		1	8	23.2	23.2	22.9	2.0	23.5	17.0	16.8	16.7	0.0	17.0
		1	14	23.0	23.1	22.8	2.0	23.5	16.8	16.9	16.5	0.0	17.0
		8	0	22.0	21.9	21.8	3.0	22.5	16.9	16.8	16.6	0.0	17.0
	256QAM	8	4	22.0	21.9	21.8	3.0	22.5	16.9	16.8	16.6	0.0	17.0
		8	7	22.0	21.9	21.8	3.0	22.5	16.9	16.8	16.6	0.0	17.0
		15	0	22.0	21.8	21.7	3.0	22.5	16.8	16.7	16.6	0.0	17.0
		1	0	20.0	19.9	19.8	5.0	20.5	16.9	16.8	16.7	0.0	17.0
		1	8	20.1	20.0	19.8	5.0	20.5	17.0	17.0	16.7	0.0	17.0
		1	14	20.0	19.8	19.6	5.0	20.5	16.9	16.7	16.5	0.0	17.0
3 MHz	8	0	19.9	19.8	19.7	5.0	20.5	16.9	16.7	16.6	0.0	17.0	
	8	4	19.9	19.8	19.7	5.0	20.5	16.9	16.7	16.6	0.0	17.0	
	8	7	19.9	19.8	19.7	5.0	20.5	16.9	16.7	16.6	0.0	17.0	
	15	0	19.9	19.8	19.6	5.0	20.5	16.8	16.7	16.6	0.0	17.0	
	1	0	24.8	24.8	24.6	0.0	25.5	16.8	16.7	16.5	0.0	17.0	
	1	3	24.8	24.8	24.6	0.0	25.5	16.8	16.7	16.5	0.0	17.0	
1.4 MHz	QPSK	1	5	24.8	24.8	24.6	0.0	25.5	16.8	16.7	16.5	0.0	17.0
		3	0	24.9	24.8	24.6	0.0	25.5	16.8	16.7	16.5	0.0	17.0
		3	1	24.8	24.9	24.6	0.0	25.5	16.8	16.7	16.5	0.0	17.0
		3	3	24.8	24.9	24.6	0.0	25.5	16.8	16.8	16.5	0.0	17.0
		6	0	23.9	23.8	23.6	1.0	24.5	16.7	16.7	16.5	0.0	17.0
		1	0	24.3	24.0	23.9	1.0	24.5	16.9	16.9	16.8	0.0	17.0
	16QAM	1	3	24.3	24.1	23.9	1.0	24.5	16.8	16.9	16.8	0.0	17.0
		1	5	24.3	24.0	23.9	1.0	24.5	16.8	16.9	16.8	0.0	17.0
		3	0	24.1	24.0	23.8	1.0	24.5	16.9	16.9	16.7	0.0	17.0
		3	1	24.1	24.0	23.8	1.0	24.5	17.0	16.9	16.7	0.0	17.0
		3	3	24.1	24.0	23.8	1.0	24.5	17.0	16.9	16.7	0.0	17.0
		6	0	23.0	22.8	22.6	2.0	23.5	16.9	16.7	16.5	0.0	17.0
	64QAM	1	0	23.2	22.9	22.9	2.0	23.5	16.9	16.8	16.7	0.0	17.0
		1	3	23.2	23.1	22.9	2.0	23.5	16.9	16.9	16.8	0.0	17.0
		1	5	23.2	22.9	22.8	2.0	23.5	16.8	16.9	16.7	0.0	17.0
		3	0	23.0	23.0	22.7	2.0	23.5	16.9	16.8	16.6	0.0	17.0
		3	1	23.0	23.0	22.7	2.0	23.5	16.9	16.9	16.6	0.0	17.0
		3	3	23.0	23.0	22.7	2.0	23.5	16.9	16.9	16.6	0.0	17.0
	256QAM	6	0	21.9	21.8	21.6	3.0	22.5	16.9	16.6	16.5	0.0	17.0
		1	0	20.0	19.9	19.7	5.0	20.5	16.9	16.7	16.6	0.0	17.0
		1	3	20.0	20.0	19.7	5.0	20.5	16.9	16.8	16.6	0.0	17.0
		1	5	19.9	19.9	19.6	5.0	20.5	16.9	16.7	16.6	0.0	17.0
		3	0	19.8	19.8	19.6	5.0	20.5	16.7	16.7	16.5	0.0	17.0
		3	1	19.8	19.9	19.6	5.0	20.5	16.7	16.8	16.5	0.0	17.0
1.4 MHz	3	3	19.8	19.9	19.6	5.0	20.5	16.7	16.8	16.6	0.0	17.0	
	3	3	19.8	19.9	19.6	5.0	20.5	16.7	16.8	16.6	0.0	17.0	
	6	0	20.0	19.8	19.5	5.0	20.5	16.8	16.7	16.5	0.0	17.0	

LTE Band 13 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				Reduced Average Power (dBm) Proximity sensor 1&2&3 back-off					
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				23205	23230	23255			23205	23230	23255		
				782 MHz				782 MHz					
10 MHz	QPSK	1	0		23.9		0.0	25.0		15.7		0.0	17.0
		1	25		23.9		0.0	25.0		15.8		0.0	17.0
		1	49		23.9		0.0	25.0		15.8		0.0	17.0
		25	0		22.8		1.0	24.0		15.8		0.0	17.0
		25	12		22.9		1.0	24.0		15.9		0.0	17.0
		25	25		22.8		1.0	24.0		15.9		0.0	17.0
	16QAM	50	0		22.8		1.0	24.0		15.8		0.0	17.0
		1	0		23.2		1.0	24.0		16.0		0.0	17.0
		1	25		23.2		1.0	24.0		16.1		0.0	17.0
		1	49		23.2		1.0	24.0		16.1		0.0	17.0
		25	0		21.8		2.0	23.0		15.8		0.0	17.0
		25	12		21.9		2.0	23.0		15.8		0.0	17.0
	64QAM	25	25		21.8		2.0	23.0		15.9		0.0	17.0
		50	0		21.8		2.0	23.0		15.7		0.0	17.0
		1	0		22.0		2.0	23.0		15.9		0.0	17.0
		1	25		22.0		2.0	23.0		15.9		0.0	17.0
		1	49		22.0		2.0	23.0		15.9		0.0	17.0
		25	0		20.8		3.0	22.0		15.8		0.0	17.0
	256QAM	25	12		20.9		3.0	22.0		15.8		0.0	17.0
		25	25		20.8		3.0	22.0		15.8		0.0	17.0
50		0		20.8		3.0	22.0		15.7		0.0	17.0	
1		0		18.6		5.0	20.0		15.5		1.0	16.0	
1		25		19.0		5.0	20.0		15.9		1.0	16.0	
1		49		18.8		5.0	20.0		15.7		1.0	16.0	
5 MHz	QPSK	25	0		18.7		5.0	20.0		15.6		1.0	16.0
		25	12		18.8		5.0	20.0		15.8		1.0	16.0
		25	25		18.8		5.0	20.0		15.7		1.0	16.0
		50	0		18.8		5.0	20.0		15.7		1.0	16.0
		1	0		23.8		0.0	25.0		15.7		0.0	17.0
		1	12		23.9		0.0	25.0		15.8		0.0	17.0
5 MHz	16QAM	1	24		23.8		0.0	25.0		15.7		0.0	17.0
		12	0		22.7		1.0	24.0		15.7		0.0	17.0
		12	7		22.8		1.0	24.0		15.7		0.0	17.0
		12	13		22.8		1.0	24.0		15.8		0.0	17.0
		25	0		22.8		1.0	24.0		15.8		0.0	17.0
		1	0		23.2		1.0	24.0		16.1		0.0	17.0
	64QAM	1	12		23.3		1.0	24.0		16.2		0.0	17.0
		1	24		23.2		1.0	24.0		16.1		0.0	17.0
		12	0		21.8		2.0	23.0		15.7		0.0	17.0
		12	7		21.9		2.0	23.0		15.7		0.0	17.0
		12	13		21.9		2.0	23.0		15.8		0.0	17.0
		25	0		21.8		2.0	23.0		15.8		0.0	17.0
256QAM	1	0		22.1		2.0	23.0		16.1		0.0	17.0	
	1	12		22.2		2.0	23.0		16.1		0.0	17.0	
	1	24		22.1		2.0	23.0		16.1		0.0	17.0	
	12	0		20.7		3.0	22.0		15.7		0.0	17.0	
	12	7		20.9		3.0	22.0		15.8		0.0	17.0	
	12	13		20.9		3.0	22.0		15.8		0.0	17.0	
5 MHz	256QAM	25	0		20.8		3.0	22.0		15.7		0.0	17.0
		1	0		18.8		5.0	20.0		15.8		1.0	16.0
		1	12		19.0		5.0	20.0		15.9		1.0	16.0
		1	24		18.9		5.0	20.0		16.0		1.0	16.0
		12	0		18.7		5.0	20.0		15.7		1.0	16.0
		12	7		18.8		5.0	20.0		15.8		1.0	16.0
5 MHz	256QAM	12	13		18.8		5.0	20.0		15.8		1.0	16.0
		25	0		18.8		5.0	20.0		15.7		1.0	16.0

LTE Band 25 (Main 1 Ant.) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					Reduced Average Power (dBm) Proximity sensor 1&2&3 back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26140	26365	26590			26140	26365	26590		
				1860 MHz	1882.5 MHz	1905 MHz			1860 MHz	1882.5 MHz	1905 MHz		
20 MHz	QPSK	1	0	23.9	24.0	24.1	0.0	25.0	14.0	14.1	14.2	0.0	15.0
		1	49	24.0	24.1	24.2	0.0	25.0	14.0	14.1	14.2	0.0	15.0
		1	99	23.9	24.0	24.2	0.0	25.0	14.0	14.1	14.2	0.0	15.0
		50	0	22.9	23.0	23.0	1.0	24.0	13.9	14.1	14.1	0.0	15.0
		50	24	23.0	23.1	23.2	1.0	24.0	14.0	14.1	14.3	0.0	15.0
		50	50	22.9	23.1	23.1	1.0	24.0	14.1	14.2	14.2	0.0	15.0
	16QAM	100	0	22.9	22.9	23.1	1.0	24.0	13.9	14.0	14.1	0.0	15.0
		1	0	23.2	23.4	23.4	1.0	24.0	14.3	14.5	14.5	0.0	15.0
		1	49	23.3	23.7	23.4	1.0	24.0	14.3	14.7	14.7	0.0	15.0
		1	99	23.3	23.5	23.3	1.0	24.0	14.3	14.5	14.6	0.0	15.0
		50	0	21.9	22.1	22.1	2.0	23.0	14.0	14.1	14.2	0.0	15.0
		50	24	22.0	22.1	22.2	2.0	23.0	14.1	14.1	14.2	0.0	15.0
	64QAM	50	50	22.0	22.1	22.1	2.0	23.0	14.1	14.2	14.3	0.0	15.0
		100	0	21.9	21.9	22.1	2.0	23.0	13.9	14.0	14.1	0.0	15.0
		1	0	22.2	22.4	22.3	2.0	23.0	14.1	14.4	14.4	0.0	15.0
		1	49	22.2	22.5	22.4	2.0	23.0	14.2	14.5	14.5	0.0	15.0
		1	99	22.2	22.4	22.3	2.0	23.0	14.2	14.5	14.4	0.0	15.0
		50	0	20.8	21.0	21.0	3.0	22.0	13.9	14.1	14.1	0.0	15.0
	256QAM	50	24	21.0	21.0	21.1	3.0	22.0	14.0	14.0	14.1	0.0	15.0
		50	50	20.9	21.1	21.1	3.0	22.0	14.0	14.1	14.1	0.0	15.0
		100	0	20.9	20.9	21.0	3.0	22.0	13.9	13.9	14.0	0.0	15.0
		1	0	18.7	18.8	18.7	5.0	20.0	13.5	14.1	14.1	0.0	15.0
		1	49	19.2	19.4	19.3	5.0	20.0	14.1	14.3	14.3	0.0	15.0
		1	99	18.9	19.1	19.0	5.0	20.0	13.8	13.9	14.1	0.0	15.0
15 MHz	QPSK	50	0	18.8	18.9	18.9	5.0	20.0	13.7	13.8	13.9	0.0	15.0
		50	24	19.0	19.0	19.1	5.0	20.0	13.9	14.0	14.2	0.0	15.0
		50	50	19.0	19.0	19.1	5.0	20.0	13.9	14.0	14.2	0.0	15.0
		100	0	18.9	18.9	19.1	5.0	20.0	13.9	13.9	14.0	0.0	15.0
		1	0	23.6	24.1	24.1	0.0	25.0	13.7	14.1	14.1	0.0	15.0
		1	37	24.0	24.1	24.2	0.0	25.0	14.0	14.2	14.2	0.0	15.0
	16QAM	1	74	23.8	24.1	24.1	0.0	25.0	13.9	14.1	14.2	0.0	15.0
		36	0	22.7	22.9	22.9	1.0	24.0	13.8	14.0	14.0	0.0	15.0
		36	20	22.9	23.0	23.1	1.0	24.0	14.0	14.1	14.2	0.0	15.0
		36	39	22.9	23.1	23.1	1.0	24.0	14.0	14.2	14.2	0.0	15.0
		75	0	22.9	23.0	23.1	1.0	24.0	13.9	14.0	14.1	0.0	15.0
		1	0	22.9	23.3	23.4	1.0	24.0	14.0	14.4	14.5	0.0	15.0
	64QAM	1	37	23.3	23.4	23.5	1.0	24.0	14.3	14.5	14.5	0.0	15.0
		1	74	23.1	23.4	23.4	1.0	24.0	14.2	14.5	14.5	0.0	15.0
		36	0	21.8	21.9	22.0	2.0	23.0	13.9	14.0	14.0	0.0	15.0
		36	20	21.9	22.0	22.1	2.0	23.0	14.0	14.1	14.2	0.0	15.0
		36	39	21.9	22.1	22.2	2.0	23.0	14.1	14.2	14.2	0.0	15.0
		75	0	21.9	22.0	22.1	2.0	23.0	14.0	14.1	14.2	0.0	15.0
	256QAM	1	0	22.0	22.3	22.3	2.0	23.0	13.9	14.3	14.3	0.0	15.0
		1	37	22.3	22.4	22.3	2.0	23.0	14.2	14.3	14.3	0.0	15.0
		1	74	22.2	22.3	22.3	2.0	23.0	14.1	14.3	14.3	0.0	15.0
		36	0	20.8	20.9	20.9	3.0	22.0	13.8	13.9	13.9	0.0	15.0
		36	20	21.0	21.0	21.1	3.0	22.0	14.0	14.1	14.1	0.0	15.0
		36	39	20.9	21.1	21.1	3.0	22.0	14.0	14.1	14.1	0.0	15.0
256QAM	75	0	20.9	21.0	21.1	3.0	22.0	13.9	14.0	14.1	0.0	15.0	
	1	0	18.8	18.8	18.9	5.0	20.0	13.7	13.9	14.1	0.0	15.0	
	1	37	19.2	19.2	19.3	5.0	20.0	14.1	14.2	14.2	0.0	15.0	
	1	74	19.0	19.1	19.2	5.0	20.0	14.0	14.1	14.0	0.0	15.0	
	36	0	18.8	18.9	19.0	5.0	20.0	13.8	13.9	13.9	0.0	15.0	
	36	20	19.0	19.0	19.2	5.0	20.0	14.0	14.0	14.1	0.0	15.0	
256QAM	36	39	19.0	19.1	19.1	5.0	20.0	14.0	14.1	14.1	0.0	15.0	
	75	0	18.9	19.0	19.1	5.0	20.0	13.9	13.9	14.1	0.0	15.0	

LTE Band 25 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26090	26365	26640			26090	26365	26640		
				1855 MHz	1882.5 MHz	1910 MHz			1855 MHz	1882.5 MHz	1910 MHz		
10 MHz	QPSK	1	0	23.7	23.8	24.1	0.0	25.0	13.8	13.9	14.2	0.0	15.0
		1	25	24.0	24.2	24.2	0.0	25.0	14.1	14.3	14.3	0.0	15.0
		1	49	23.7	23.9	24.2	0.0	25.0	13.8	14.0	14.3	0.0	15.0
		25	0	22.8	23.0	23.0	1.0	24.0	13.9	14.1	14.1	0.0	15.0
		25	12	23.0	23.1	23.1	1.0	24.0	14.1	14.2	14.2	0.0	15.0
		25	25	23.0	23.1	23.2	1.0	24.0	14.0	14.2	14.3	0.0	15.0
	50	0	22.9	23.0	23.1	1.0	24.0	14.0	14.1	14.2	0.0	15.0	
	16QAM	1	0	23.0	23.3	23.5	1.0	24.0	14.0	14.3	14.5	0.0	15.0
		1	25	23.3	23.5	23.5	1.0	24.0	14.3	14.6	14.6	0.0	15.0
		1	49	23.0	23.3	23.5	1.0	24.0	14.1	14.3	14.5	0.0	15.0
		25	0	21.9	22.0	22.0	2.0	23.0	13.9	14.1	14.1	0.0	15.0
		25	12	22.1	22.1	22.1	2.0	23.0	14.1	14.2	14.2	0.0	15.0
		25	25	22.0	22.1	22.2	2.0	23.0	14.1	14.2	14.3	0.0	15.0
	50	0	22.0	22.0	22.0	2.0	23.0	14.0	14.1	14.1	0.0	15.0	
	64QAM	1	0	21.9	22.1	22.3	2.0	23.0	14.0	14.1	14.3	0.0	15.0
		1	25	22.2	22.4	22.4	2.0	23.0	14.3	14.4	14.3	0.0	15.0
		1	49	22.0	22.1	22.3	2.0	23.0	14.1	14.1	14.3	0.0	15.0
		25	0	20.8	21.0	21.1	3.0	22.0	13.8	14.0	14.1	0.0	15.0
		25	12	21.0	21.1	21.2	3.0	22.0	14.1	14.2	14.2	0.0	15.0
		25	25	21.0	21.1	21.2	3.0	22.0	14.0	14.2	14.2	0.0	15.0
	50	0	20.9	21.0	21.1	3.0	22.0	14.0	14.0	14.1	0.0	15.0	
	256QAM	1	0	18.8	18.9	18.9	5.0	20.0	13.7	13.8	14.2	0.0	15.0
		1	25	19.1	19.3	19.3	5.0	20.0	14.1	14.3	14.4	0.0	15.0
		1	49	18.8	19.0	19.1	5.0	20.0	13.8	14.0	14.1	0.0	15.0
		25	0	18.9	19.0	19.0	5.0	20.0	13.9	13.9	14.0	0.0	15.0
25		12	19.1	19.1	19.2	5.0	20.0	14.1	14.0	14.1	0.0	15.0	
25		25	19.1	19.2	19.2	5.0	20.0	14.0	14.0	14.2	0.0	15.0	
50	0	19.0	19.0	19.1	5.0	20.0	13.9	13.9	14.0	0.0	15.0		
5 MHz	QPSK	1	0	23.9	24.0	24.1	0.0	25.0	13.9	14.1	14.2	0.0	15.0
		1	12	24.0	24.2	24.2	0.0	25.0	14.0	14.3	14.3	0.0	15.0
		1	24	24.0	24.1	24.1	0.0	25.0	14.0	14.2	14.3	0.0	15.0
		12	0	22.9	23.0	23.1	1.0	24.0	13.9	14.1	14.2	0.0	15.0
		12	7	23.0	23.1	23.2	1.0	24.0	14.1	14.2	14.3	0.0	15.0
		12	13	23.0	23.2	23.2	1.0	24.0	14.1	14.3	14.3	0.0	15.0
	25	0	23.0	23.0	23.2	1.0	24.0	14.1	14.2	14.3	0.0	15.0	
	16QAM	1	0	23.2	23.4	23.6	1.0	24.0	14.3	14.4	14.6	0.0	15.0
		1	12	23.4	23.6	23.7	1.0	24.0	14.4	14.6	14.7	0.0	15.0
		1	24	23.4	23.5	23.6	1.0	24.0	14.4	14.6	14.7	0.0	15.0
		12	0	21.9	22.1	22.3	2.0	23.0	14.0	14.2	14.2	0.0	15.0
		12	7	22.0	22.1	22.4	2.0	23.0	14.1	14.2	14.4	0.0	15.0
		12	13	22.0	22.2	22.4	2.0	23.0	14.1	14.3	14.4	0.0	15.0
	25	0	22.0	22.1	22.2	2.0	23.0	14.1	14.1	14.3	0.0	15.0	
	64QAM	1	0	22.1	22.4	22.5	2.0	23.0	14.2	14.3	14.5	0.0	15.0
		1	12	22.3	22.4	22.6	2.0	23.0	14.3	14.5	14.7	0.0	15.0
		1	24	22.2	22.4	22.5	2.0	23.0	14.3	14.5	14.5	0.0	15.0
		12	0	20.9	21.1	21.2	3.0	22.0	13.9	14.2	14.0	0.0	15.0
		12	7	21.1	21.1	21.4	3.0	22.0	14.1	14.3	14.1	0.0	15.0
		12	13	21.0	21.2	21.4	3.0	22.0	14.0	14.3	14.1	0.0	15.0
	25	0	21.0	21.1	21.2	3.0	22.0	14.0	14.1	14.2	0.0	15.0	
	256QAM	1	0	19.1	19.2	19.2	5.0	20.0	14.0	14.1	14.3	0.0	15.0
		1	12	19.3	19.4	19.4	5.0	20.0	14.2	14.3	14.5	0.0	15.0
		1	24	19.3	19.3	19.4	5.0	20.0	14.2	14.3	14.4	0.0	15.0
		12	0	19.0	19.1	19.1	5.0	20.0	13.9	14.0	14.1	0.0	15.0
12		7	19.1	19.1	19.2	5.0	20.0	14.0	14.1	14.3	0.0	15.0	
12		13	19.1	19.2	19.2	5.0	20.0	14.0	14.2	14.2	0.0	15.0	
25	0	19.1	19.1	19.2	5.0	20.0	14.0	14.1	14.2	0.0	15.0		

LTE Band 25 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	
				26055	26365	26675			26055	26365	26675			
				1851.5 MHz	1882.5 MHz	1913.5 MHz			1851.5 MHz	1882.5 MHz	1913.5 MHz			
3 MHz	QPSK	1	0	23.9	24.0	24.1	0.0	25.0	13.9	14.1	14.2	0.0	15.0	
		1	8	24.0	24.2	24.2	0.0	25.0	14.1	14.2	14.3	0.0	15.0	
		1	14	24.0	24.1	24.1	0.0	25.0	14.0	14.2	14.3	0.0	15.0	
		8	0	22.9	23.0	23.1	1.0	24.0	14.0	14.1	14.2	0.0	15.0	
		8	4	23.0	23.1	23.1	1.0	24.0	14.1	14.2	14.2	0.0	15.0	
		8	7	23.0	23.1	23.2	1.0	24.0	14.1	14.2	14.3	0.0	15.0	
	16QAM	15	0	23.0	23.0	23.1	1.0	24.0	14.0	14.2	14.2	0.0	15.0	
		1	0	23.2	23.4	23.5	1.0	24.0	14.2	14.5	14.5	0.0	15.0	
		1	8	23.3	23.6	23.6	1.0	24.0	14.4	14.5	14.6	0.0	15.0	
		1	14	23.3	23.5	23.6	1.0	24.0	14.3	14.6	14.6	0.0	15.0	
		8	0	22.0	22.1	22.2	2.0	23.0	14.1	14.2	14.3	0.0	15.0	
		8	4	22.0	22.1	22.2	2.0	23.0	14.1	14.3	14.3	0.0	15.0	
	64QAM	8	7	22.1	22.3	22.3	2.0	23.0	14.1	14.3	14.4	0.0	15.0	
		15	0	22.0	22.1	22.1	2.0	23.0	14.0	14.2	14.3	0.0	15.0	
		1	0	22.2	22.3	22.3	2.0	23.0	14.1	14.3	14.3	0.0	15.0	
		1	8	22.3	22.5	22.5	2.0	23.0	14.3	14.4	14.4	0.0	15.0	
		1	14	22.3	22.4	22.4	2.0	23.0	14.2	14.3	14.3	0.0	15.0	
		8	0	20.9	21.1	21.2	3.0	22.0	14.0	14.1	14.2	0.0	15.0	
	256QAM	8	4	21.0	21.2	21.2	3.0	22.0	14.1	14.1	14.2	0.0	15.0	
		8	7	21.0	21.3	21.3	3.0	22.0	14.1	14.2	14.3	0.0	15.0	
		15	0	21.0	21.1	21.2	3.0	22.0	14.0	14.1	14.1	0.0	15.0	
		1	0	19.1	19.2	19.2	5.0	20.0	13.9	14.0	13.9	0.0	15.0	
		1	8	19.2	19.4	19.4	5.0	20.0	14.1	13.9	13.8	0.0	15.0	
		1	14	19.2	19.3	19.3	5.0	20.0	14.0	13.9	13.9	0.0	15.0	
3 MHz	QPSK	8	0	19.1	19.1	19.1	5.0	20.0	14.0	13.7	13.6	0.0	15.0	
		8	4	19.1	19.1	19.2	5.0	20.0	14.0	13.7	13.6	0.0	15.0	
		8	7	19.1	19.2	19.2	5.0	20.0	14.1	13.7	13.7	0.0	15.0	
		15	0	19.0	19.1	19.1	5.0	20.0	14.0	13.7	13.6	0.0	15.0	
		16QAM	1	0	24.0	24.0	24.2	0.0	25.0	13.9	14.1	14.2	0.0	15.0
			1	3	24.0	24.1	24.2	0.0	25.0	14.0	14.2	14.3	0.0	15.0
1	5		24.0	24.1	24.2	0.0	25.0	14.0	14.2	14.2	0.0	15.0		
3	0		23.9	24.1	24.2	0.0	25.0	13.9	14.2	14.2	0.0	15.0		
3	1		23.9	24.1	24.2	0.0	25.0	14.0	14.2	14.2	0.0	15.0		
3	3		23.9	24.1	24.2	0.0	25.0	14.0	14.2	14.3	0.0	15.0		
64QAM	6	0	22.9	23.1	23.2	1.0	24.0	14.0	14.2	14.2	0.0	15.0		
	1	0	23.2	23.3	23.5	1.0	24.0	14.3	14.3	14.5	0.0	15.0		
	1	3	23.3	23.3	23.6	1.0	24.0	14.3	14.4	14.6	0.0	15.0		
	1	5	23.3	23.3	23.5	1.0	24.0	14.3	14.3	14.6	0.0	15.0		
	3	0	23.1	23.3	23.4	1.0	24.0	14.2	14.3	14.4	0.0	15.0		
	3	1	23.1	23.3	23.4	1.0	24.0	14.1	14.2	14.4	0.0	15.0		
256QAM	3	3	23.2	23.3	23.4	1.0	24.0	14.2	14.3	14.4	0.0	15.0		
	6	0	22.0	22.1	22.2	2.0	23.0	14.1	14.2	14.3	0.0	15.0		
	1	0	22.1	22.4	22.5	2.0	23.0	14.1	14.4	14.4	0.0	15.0		
	1	3	22.1	22.5	22.5	2.0	23.0	14.1	14.5	14.5	0.0	15.0		
	1	5	22.1	22.5	22.5	2.0	23.0	14.1	14.4	14.4	0.0	15.0		
	3	0	22.1	22.2	22.3	2.0	23.0	14.1	14.2	14.3	0.0	15.0		
1.4 MHz	QPSK	3	1	22.1	22.2	22.3	2.0	23.0	14.1	14.2	14.3	0.0	15.0	
		3	3	22.1	22.2	22.3	2.0	23.0	14.1	14.2	14.3	0.0	15.0	
		6	0	20.9	21.2	21.2	3.0	22.0	14.0	14.1	14.3	0.0	15.0	
		1	0	19.0	19.2	19.3	5.0	20.0	14.1	14.1	14.2	0.0	15.0	
		1	3	19.1	19.3	19.3	5.0	20.0	14.1	14.2	14.2	0.0	15.0	
		1	5	19.1	18.2	19.3	5.0	20.0	14.0	14.2	14.2	0.0	15.0	
16QAM	3	0	19.0	19.2	19.2	5.0	20.0	14.0	14.2	14.2	0.0	15.0		
	3	1	19.0	19.2	19.2	5.0	20.0	14.0	14.2	14.2	0.0	15.0		
	3	3	19.0	19.2	19.2	5.0	20.0	14.0	14.2	14.2	0.0	15.0		
	3	3	19.0	19.2	19.2	5.0	20.0	14.0	14.2	14.2	0.0	15.0		
	6	0	19.1	19.1	19.1	5.0	20.0	14.0	14.1	14.1	0.0	15.0		
	64QAM	6	0	19.1	19.1	19.1	5.0	20.0	14.0	14.1	14.1	0.0	15.0	

LTE Band 26 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					Reduced Average Power (dBm) Proximity sensor 1&2&3 back-off					
				Measured Pwr (dBm)				MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26765	26790	26865	26965			26765	26865	26965		
				821.5 MHz	824.0 MHz	831.5 MHz	841.5 MHz			821.5 MHz	831.5 MHz	841.5 MHz		
15 MHz	QPSK	1	0	24.0	23.9	24.0		0.0	25.0		16.0		0.0	17.0
		1	37	24.0	23.9	24.3		0.0	25.0		16.1		0.0	17.0
		1	74	23.8	23.8	24.1		0.0	25.0		15.9		0.0	17.0
		36	0	22.8	22.7	23.1		1.0	24.0		15.9		0.0	17.0
		36	20	23.0	22.9	23.2		1.0	24.0		16.0		0.0	17.0
		36	39	22.9	22.8	23.1		1.0	24.0		16.0		0.0	17.0
		75	0	22.9	22.8	23.1		1.0	24.0		15.9		0.0	17.0
	16QAM	1	0	23.3	23.2	23.5		1.0	24.0		16.2		0.0	17.0
		1	37	23.3	23.2	23.5		1.0	24.0		16.2		0.0	17.0
		1	74	23.2	23.1	23.5		1.0	24.0		16.1		0.0	17.0
		36	0	21.8	21.7	22.1		2.0	23.0		15.8		0.0	17.0
		36	20	21.9	21.9	22.2		2.0	23.0		15.9		0.0	17.0
		36	39	21.9	21.8	22.1		2.0	23.0		15.9		0.0	17.0
		75	0	21.9	21.8	22.1		2.0	23.0		15.8		0.0	17.0
	64QAM	1	0	22.1	22.1	22.2		2.0	23.0		16.2		0.0	17.0
		1	37	22.1	22.0	22.3		2.0	23.0		16.3		0.0	17.0
		1	74	22.0	22.1	22.2		2.0	23.0		16.1		0.0	17.0
		36	0	20.8	20.7	21.1		3.0	22.0		15.8		0.0	17.0
		36	20	20.9	20.9	21.2		3.0	22.0		15.9		0.0	17.0
		36	39	20.8	20.8	21.1		3.0	22.0		15.9		0.0	17.0
		75	0	20.8	20.8	21.1		3.0	22.0		15.8		0.0	17.0
	256QAM	1	0	18.7	18.6	18.9		5.0	20.0		15.6		0.0	17.0
		1	37	19.1	19.0	19.3		5.0	20.0		16.0		0.0	17.0
		1	74	18.9	18.7	19.1		5.0	20.0		15.8		0.0	17.0
		36	0	18.7	18.7	19.0		5.0	20.0		15.8		0.0	17.0
		36	20	18.9	18.9	19.1		5.0	20.0		15.8		0.0	17.0
		36	39	18.8	18.8	19.1		5.0	20.0		15.9		0.0	17.0
		75	0	18.8	18.8	19.0		5.0	20.0		15.8		0.0	17.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)				MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26740	26790	26865	26990			26740	26865	26990		
				819 MHz	824.0 MHz	831.5 MHz	844 MHz			819 MHz	831.5 MHz	844 MHz		
				10 MHz	QPSK	1	0	24.3	24.1	24.2	24.2	0.0	25.0	16.1
1	25	24.3	24.1			24.4	24.2	0.0	25.0	16.2	16.1	16.0	0.0	17.0
1	49	24.2	24.0			24.2	24.1	0.0	25.0	16.1	16.0	15.8	0.0	17.0
25	0	23.0	22.9			23.1	23.0	1.0	24.0	16.0	15.9	15.8	0.0	17.0
25	12	23.2	23.1			23.2	23.2	1.0	24.0	16.2	16.0	15.9	0.0	17.0
25	25	23.2	23.0			23.2	23.1	1.0	24.0	16.1	16.0	15.9	0.0	17.0
50	0	23.2	23.0			23.1	23.1	1.0	24.0	16.1	15.9	15.8	0.0	17.0
16QAM	1	0	23.6		23.3	23.8	23.5	1.0	24.0	16.4	16.4	16.3	0.0	17.0
	1	25	23.6		23.3	23.7	23.5	1.0	24.0	16.3	16.4	16.2	0.0	17.0
	1	49	23.5		23.3	23.6	23.4	1.0	24.0	16.2	16.3	16.1	0.0	17.0
	25	0	22.1		22.0	22.1	22.0	2.0	23.0	16.0	15.9	15.8	0.0	17.0
	25	12	22.3		22.1	22.2	22.2	2.0	23.0	16.2	16.0	15.9	0.0	17.0
	25	25	22.2		22.0	22.2	22.2	2.0	23.0	16.1	16.0	15.9	0.0	17.0
	50	0	22.2		22.0	22.1	22.1	2.0	23.0	16.1	15.9	15.8	0.0	17.0
64QAM	1	0	22.6		22.2	22.5	22.4	2.0	23.0	16.4	16.3	16.1	0.0	17.0
	1	25	22.6		22.2	22.6	22.4	2.0	23.0	16.4	16.4	16.2	0.0	17.0
	1	49	22.5		22.1	22.5	22.3	2.0	23.0	16.4	16.2	16.1	0.0	17.0
	25	0	21.1		20.9	21.1	21.0	3.0	22.0	15.9	15.9	15.9	0.0	17.0
	25	12	21.3		21.1	21.2	21.2	3.0	22.0	16.1	16.0	16.0	0.0	17.0
	25	25	21.2		21.0	21.2	21.1	3.0	22.0	16.1	16.0	16.0	0.0	17.0
	50	0	21.2		21.0	21.1	21.1	3.0	22.0	16.0	15.9	15.9	0.0	17.0
256QAM	1	0	19.0		18.7	19.0	18.8	5.0	20.0	15.8	15.8	15.7	0.0	17.0
	1	25	19.5		19.2	19.5	19.3	5.0	20.0	16.2	16.2	16.1	0.0	17.0
	1	49	19.2		18.9	19.1	19.0	5.0	20.0	15.9	15.9	15.8	0.0	17.0
	25	0	19.1		18.9	19.1	19.0	5.0	20.0	15.9	15.9	15.9	0.0	17.0
	25	12	19.3		19.1	19.2	19.2	5.0	20.0	16.1	16.0	16.0	0.0	17.0
	25	25	19.2		19.0	19.2	19.1	5.0	20.0	16.0	16.0	16.0	0.0	17.0
	50	0	19.2		19.0	19.1	19.1	5.0	20.0	16.0	15.9	15.9	0.0	17.0

Notes:

For Orange box's output power results, There are measured for the test of Part.90.

LTE Band 26 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)				MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26715	26790	26865	27015			26715	26865	27015		
				816.5 MHz	824.0 MHz	831.5 MHz	846.5 MHz			816.5 MHz	831.5 MHz	846.5 MHz		
5 MHz	QPSK	1	0	24.1	24.0	24.3	24.1	0.0	25.0	16.1	16.1	15.9	0.0	17.0
		1	12	24.3	24.1	24.4	24.2	0.0	25.0	16.2	16.1	15.9	0.0	17.0
		1	24	24.2	24.0	24.3	24.1	0.0	25.0	16.1	16.1	15.8	0.0	17.0
		12	0	23.2	22.9	23.2	23.0	1.0	24.0	16.0	16.0	15.8	0.0	17.0
		12	7	23.3	23.1	23.2	23.2	1.0	24.0	16.2	16.0	15.9	0.0	17.0
		12	13	23.3	23.0	23.3	23.2	1.0	24.0	16.1	16.1	15.9	0.0	17.0
	25	0	23.2	23.0	23.2	23.2	1.0	24.0	16.1	16.0	15.9	0.0	17.0	
	16QAM	1	0	23.5	23.3	23.7	23.6	1.0	24.0	16.4	16.3	16.3	0.0	17.0
		1	12	23.7	23.4	23.8	23.7	1.0	24.0	16.5	16.4	16.4	0.0	17.0
		1	24	23.5	23.3	23.6	23.5	1.0	24.0	16.4	16.4	16.2	0.0	17.0
		12	0	22.0	22.0	22.4	22.0	2.0	23.0	16.0	16.0	16.0	0.0	17.0
		12	7	22.2	22.1	22.4	22.2	2.0	23.0	16.2	16.1	16.1	0.0	17.0
		12	13	22.2	22.1	22.4	22.2	2.0	23.0	16.1	16.1	16.1	0.0	17.0
	25	0	22.3	22.1	22.2	22.2	2.0	23.0	16.1	16.0	15.9	0.0	17.0	
	64QAM	1	0	22.4	22.2	22.5	22.5	2.0	23.0	16.2	16.5	16.3	0.0	17.0
		1	12	22.6	22.2	22.6	22.5	2.0	23.0	16.3	16.4	16.3	0.0	17.0
		1	24	22.4	22.2	22.5	22.4	2.0	23.0	16.2	16.4	16.2	0.0	17.0
		12	0	21.1	21.0	21.2	21.2	3.0	22.0	16.0	16.2	15.9	0.0	17.0
		12	7	21.3	21.1	21.2	21.3	3.0	22.0	16.1	16.2	16.1	0.0	17.0
		12	13	21.2	21.1	21.3	21.3	3.0	22.0	16.1	16.3	16.0	0.0	17.0
	25	0	21.2	21.0	21.2	21.2	3.0	22.0	16.1	16.0	16.0	0.0	17.0	
	256QAM	1	0	19.2	19.0	19.2	19.2	5.0	20.0	16.0	16.1	15.9	0.0	17.0
		1	12	19.4	19.2	19.3	19.4	5.0	20.0	16.3	16.4	16.1	0.0	17.0
		1	24	19.2	19.0	19.2	19.2	5.0	20.0	16.2	16.2	16.0	0.0	17.0
		12	0	19.1	18.9	19.2	19.1	5.0	20.0	15.9	16.0	15.9	0.0	17.0
12		7	19.2	19.1	19.2	19.2	5.0	20.0	16.1	16.1	16.0	0.0	17.0	
12		13	19.2	19.0	19.2	19.2	5.0	20.0	16.0	16.1	16.0	0.0	17.0	
25	0	19.2	19.0	19.2	19.1	5.0	20.0	16.0	16.0	15.9	0.0	17.0		
3 MHz	QPSK	1	0	24.1	24.0	24.2	24.1	0.0	25.0	16.0	16.0	15.8	0.0	17.0
		1	8	24.3	24.1	24.3	24.2	0.0	25.0	16.2	16.1	15.9	0.0	17.0
		1	14	24.2	24.0	24.2	24.2	0.0	25.0	16.0	16.0	15.8	0.0	17.0
		8	0	23.2	23.0	23.2	23.1	1.0	24.0	16.1	16.0	15.8	0.0	17.0
		8	4	23.2	23.1	23.2	23.2	1.0	24.0	16.2	16.1	15.8	0.0	17.0
		8	7	23.3	23.1	23.3	23.2	1.0	24.0	16.1	16.1	15.8	0.0	17.0
	15	0	23.2	23.0	23.2	23.1	1.0	24.0	16.1	16.0	15.8	0.0	17.0	
	16QAM	1	0	23.5	23.3	23.7	23.4	1.0	24.0	16.3	16.4	16.2	0.0	17.0
		1	8	23.6	23.4	23.7	23.5	1.0	24.0	16.4	16.5	16.2	0.0	17.0
		1	14	23.5	23.3	23.7	23.4	1.0	24.0	16.4	16.4	16.1	0.0	17.0
		8	0	22.3	22.0	22.3	22.1	2.0	23.0	16.2	16.1	15.9	0.0	17.0
		8	4	22.3	22.1	22.3	22.3	2.0	23.0	16.2	16.1	15.9	0.0	17.0
		8	7	22.3	22.1	22.4	22.3	2.0	23.0	16.2	16.2	15.9	0.0	17.0
	15	0	22.2	22.1	22.2	22.2	2.0	23.0	16.2	16.1	15.8	0.0	17.0	
	64QAM	1	0	22.5	22.1	22.6	22.2	2.0	23.0	16.2	16.3	16.3	0.0	17.0
		1	8	22.6	22.1	22.5	22.3	2.0	23.0	16.4	16.3	16.3	0.0	17.0
		1	14	22.5	22.1	22.5	22.2	2.0	23.0	16.2	16.3	16.3	0.0	17.0
		8	0	21.3	21.1	21.2	21.1	3.0	22.0	16.1	16.1	15.9	0.0	17.0
		8	4	21.3	21.1	21.2	21.2	3.0	22.0	16.1	16.1	16.1	0.0	17.0
		8	7	21.3	21.0	21.3	21.2	3.0	22.0	16.1	16.2	16.1	0.0	17.0
	15	0	21.3	21.1	21.2	21.2	3.0	22.0	16.1	16.0	16.0	0.0	17.0	
	256QAM	1	0	19.1	19.0	19.3	19.2	5.0	20.0	16.1	16.1	15.9	0.0	17.0
		1	8	19.3	19.2	19.4	19.3	5.0	20.0	16.3	16.3	16.1	0.0	17.0
		1	14	19.3	19.1	19.4	19.2	5.0	20.0	16.2	16.2	16.0	0.0	17.0
		8	0	19.2	19.0	19.2	19.1	5.0	20.0	16.1	16.0	15.9	0.0	17.0
8		4	19.3	19.1	19.2	19.2	5.0	20.0	16.1	16.1	16.1	0.0	17.0	
8		7	19.2	19.1	19.3	19.2	5.0	20.0	16.1	16.2	16.0	0.0	17.0	
15	0	19.2	19.0	19.2	19.2	5.0	20.0	16.1	16.0	15.9	0.0	17.0		

Notes:

For Orange box's output power results, There are measured for the test of Part.90.

LTE Band 26 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)				MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26697	26790	26865	27033			26697	26865	27033		
				814.7 MHz	824.0 MHz	831.5 MHz	848.3 MHz			814.7 MHz	831.5 MHz	848.3 MHz		
1.4 MHz	QPSK	1	0	24.2	23.9	24.2	24.1	0.0	25.0	16.1	16.0	15.8	0.0	17.0
		1	3	24.3	24.0	24.3	24.2	0.0	25.0	16.1	16.1	15.9	0.0	17.0
		1	5	24.2	24.0	24.3	24.2	0.0	25.0	16.1	16.0	15.8	0.0	17.0
		3	0	24.2	24.0	24.3	24.1	0.0	25.0	16.1	16.0	15.8	0.0	17.0
		3	1	24.2	24.0	24.3	24.2	0.0	25.0	16.1	16.0	15.8	0.0	17.0
		3	3	24.2	24.0	24.3	24.2	0.0	25.0	16.1	16.1	15.8	0.0	17.0
	16QAM	6	0	23.2	23.0	23.2	23.1	1.0	24.0	16.1	16.0	15.8	0.0	17.0
		1	0	23.5	23.0	23.5	23.4	1.0	24.0	16.3	16.3	16.2	0.0	17.0
		1	3	23.6	23.2	23.5	23.5	1.0	24.0	16.3	16.4	16.2	0.0	17.0
		1	5	23.6	23.2	23.5	23.5	1.0	24.0	16.3	16.4	16.2	0.0	17.0
		3	0	23.4	23.1	23.4	23.3	1.0	24.0	16.3	16.2	16.0	0.0	17.0
		3	1	23.4	23.1	23.4	23.3	1.0	24.0	16.2	16.2	16.0	0.0	17.0
	64QAM	3	3	23.4	23.1	23.5	23.3	1.0	24.0	16.2	16.2	16.0	0.0	17.0
		6	0	22.3	22.0	22.2	22.1	2.0	23.0	16.1	16.0	16.0	0.0	17.0
		1	0	22.5	22.1	22.5	22.2	2.0	23.0	16.3	16.2	16.2	0.0	17.0
		1	3	22.5	22.3	22.6	22.3	2.0	23.0	16.3	16.3	16.3	0.0	17.0
		1	5	22.6	22.2	22.6	22.2	2.0	23.0	16.3	16.3	16.2	0.0	17.0
		3	0	22.3	22.1	22.4	22.2	2.0	23.0	16.1	16.2	16.1	0.0	17.0
	256QAM	3	1	22.3	22.1	22.4	22.2	2.0	23.0	16.1	16.2	16.1	0.0	17.0
		3	3	22.3	22.2	22.4	22.2	2.0	23.0	16.1	16.2	16.1	0.0	17.0
		6	0	21.3	21.0	21.2	21.2	3.0	22.0	16.1	16.1	16.0	0.0	17.0
		1	0	19.3	19.0	19.2	19.3	5.0	20.0	16.1	16.1	16.1	0.0	17.0
		1	3	19.4	19.1	19.4	19.3	5.0	20.0	16.1	16.2	16.0	0.0	17.0
		1	5	19.3	19.2	19.3	19.2	5.0	20.0	16.2	16.2	16.0	0.0	17.0
	256QAM	3	0	19.3	19.0	19.2	19.2	5.0	20.0	16.0	16.0	16.0	0.0	17.0
		3	1	19.3	19.0	19.2	19.2	5.0	20.0	16.0	16.1	16.0	0.0	17.0
		3	3	19.2	19.0	19.3	19.2	5.0	20.0	16.0	16.1	16.1	0.0	17.0
		6	0	19.2	18.8	19.3	18.9	5.0	20.0	16.1	16.0	16.0	0.0	17.0

Notes:

For Orange box's output power results, There are measured for the test of Part.90.

LTE Band 66 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					Reduced Average Power (dBm) Proximity sensor 1&2&3 back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				132072	132322	132572			132072	132322	132572		
				1720 MHz	1745 MHz	1770 MHz			1720 MHz	1745 MHz	1770 MHz		
20 MHz	QPSK	1	0	23.1	24.2	24.3	0.0	25.0	13.9	14.1	14.3	0.0	15.0
		1	49	23.4	24.4	24.3	0.0	25.0	14.3	14.7	14.7	0.0	15.0
		1	99	23.2	24.1	24.1	0.0	25.0	14.0	14.1	14.1	0.0	15.0
		50	0	23.4	23.5	23.3	1.0	24.0	14.2	14.3	14.2	0.0	15.0
		50	24	23.5	23.5	23.3	1.0	24.0	14.3	14.8	14.8	0.0	15.0
		50	50	23.4	23.3	23.1	1.0	24.0	14.2	14.3	14.1	0.0	15.0
	16QAM	100	0	23.4	23.4	23.2	1.0	24.0	14.2	14.6	14.2	0.0	15.0
		1	0	23.2	23.4	23.7	1.0	24.0	14.2	14.3	14.7	0.0	15.0
		1	49	23.8	23.8	23.7	1.0	24.0	14.7	14.7	14.7	0.0	15.0
		1	99	23.5	23.4	23.5	1.0	24.0	14.4	14.4	14.5	0.0	15.0
		50	0	22.4	22.5	22.3	2.0	23.0	14.2	14.3	14.2	0.0	15.0
		50	24	22.5	22.4	22.3	2.0	23.0	14.3	14.4	14.3	0.0	15.0
	64QAM	50	50	22.4	22.3	22.1	2.0	23.0	14.2	14.2	14.1	0.0	15.0
		100	0	22.4	22.3	22.2	2.0	23.0	14.2	14.3	14.2	0.0	15.0
		1	0	22.1	22.5	22.5	2.0	23.0	14.1	14.3	14.5	0.0	15.0
		1	49	22.5	22.7	22.5	2.0	23.0	14.5	14.7	14.4	0.0	15.0
		1	99	22.3	22.4	22.3	2.0	23.0	14.3	14.3	14.2	0.0	15.0
		50	0	21.3	21.3	21.2	3.0	22.0	14.2	14.3	14.2	0.0	15.0
	256QAM	50	24	21.4	21.3	21.2	3.0	22.0	14.4	14.3	14.2	0.0	15.0
		50	50	21.3	21.2	21.0	3.0	22.0	14.3	14.2	14.0	0.0	15.0
		100	0	21.3	21.2	21.1	3.0	22.0	14.2	14.3	14.2	0.0	15.0
		1	0	19.2	19.2	18.9	5.0	20.0	14.1	14.3	14.0	0.0	15.0
		1	49	19.5	19.5	19.3	5.0	20.0	14.5	14.6	14.3	0.0	15.0
		1	99	19.3	19.3	18.9	5.0	20.0	14.3	14.3	13.9	0.0	15.0
15 MHz	QPSK	50	0	19.2	19.3	19.2	5.0	20.0	14.2	14.3	14.2	0.0	15.0
		50	24	19.3	19.3	19.2	5.0	20.0	14.3	14.3	14.2	0.0	15.0
		50	50	19.2	19.2	19.0	5.0	20.0	14.3	14.2	14.0	0.0	15.0
		100	0	19.2	19.2	19.1	5.0	20.0	14.2	14.2	14.1	0.0	15.0
		1	0	23.5	23.8	24.0	0.0	25.0	14.1	14.2	14.3	0.0	15.0
		1	37	23.8	24.0	24.0	0.0	25.0	14.3	14.4	14.2	0.0	15.0
16QAM	1	74	23.7	23.8	23.9	0.0	25.0	14.1	14.2	14.1	0.0	15.0	
	36	0	22.7	23.0	22.9	1.0	24.0	14.3	14.3	14.3	0.0	15.0	
	36	20	22.8	23.0	22.9	1.0	24.0	14.3	14.3	14.2	0.0	15.0	
	36	39	22.8	23.0	22.9	1.0	24.0	14.3	14.3	14.1	0.0	15.0	
	75	0	22.8	22.9	22.9	1.0	24.0	14.2	14.3	14.2	0.0	15.0	
	1	0	22.8	23.1	23.3	1.0	24.0	14.4	14.4	14.6	0.0	15.0	
64QAM	1	37	23.0	23.3	23.3	1.0	24.0	14.6	14.6	14.7	0.0	15.0	
	1	74	22.9	23.1	23.2	1.0	24.0	14.4	14.4	14.5	0.0	15.0	
	36	0	21.7	22.0	21.9	2.0	23.0	14.3	14.3	14.3	0.0	15.0	
	36	20	21.8	22.0	21.9	2.0	23.0	14.3	14.3	14.3	0.0	15.0	
	36	39	21.8	22.0	22.0	2.0	23.0	14.3	14.3	14.1	0.0	15.0	
	75	0	21.8	21.9	21.9	2.0	23.0	14.3	14.3	14.2	0.0	15.0	
256QAM	1	0	22.5	22.5	22.4	2.0	23.0	14.4	14.5	14.4	0.0	15.0	
	1	37	22.6	22.5	22.3	2.0	23.0	14.6	14.6	14.4	0.0	15.0	
	1	74	22.5	22.3	22.2	2.0	23.0	14.5	14.4	14.2	0.0	15.0	
	36	0	21.3	21.4	21.2	3.0	22.0	14.3	14.4	14.2	0.0	15.0	
	36	20	21.3	21.3	21.2	3.0	22.0	14.3	14.3	14.2	0.0	15.0	
	36	39	21.3	21.3	21.1	3.0	22.0	14.3	14.2	14.1	0.0	15.0	
15 MHz	256QAM	75	0	21.3	21.3	21.2	3.0	22.0	14.3	14.2	14.2	0.0	15.0
		1	0	19.2	19.4	19.2	5.0	20.0	14.2	14.3	14.2	0.0	15.0
		1	37	19.4	19.6	19.4	5.0	20.0	14.4	14.5	14.2	0.0	15.0
		1	74	19.3	19.2	19.1	5.0	20.0	14.2	14.2	14.1	0.0	15.0
		36	0	19.3	19.4	19.2	5.0	20.0	14.3	14.4	14.2	0.0	15.0
		36	20	19.3	19.3	19.2	5.0	20.0	14.3	14.3	14.2	0.0	15.0
15 MHz	256QAM	36	39	19.3	19.2	19.1	5.0	20.0	14.3	14.2	14.1	0.0	15.0
		75	0	19.3	19.3	19.2	5.0	20.0	14.3	14.3	14.2	0.0	15.0

LTE Band 66 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	
				132022	132322	132622			132022	132322	132622			
				1715 MHz	1745 MHz	1775 MHz			1715 MHz	1745 MHz	1775 MHz			
10 MHz	QPSK	1	0	23.5	23.8	23.8	0.0	25.0	14.0	14.2	14.0	0.0	15.0	
		1	25	23.9	24.1	24.2	0.0	25.0	14.4	14.6	14.4	0.0	15.0	
		1	49	23.6	23.9	23.9	0.0	25.0	14.1	14.2	14.0	0.0	15.0	
		25	0	22.7	23.0	23.0	1.0	24.0	14.3	14.4	14.3	0.0	15.0	
		25	12	22.9	23.0	23.1	1.0	24.0	14.4	14.5	14.4	0.0	15.0	
		25	25	22.8	23.0	23.0	1.0	24.0	14.3	14.4	14.2	0.0	15.0	
			50	0	22.8	23.0	23.0	1.0	24.0	14.3	14.4	14.3	0.0	15.0
	16QAM	1	0	22.8	23.2	23.1	1.0	24.0	14.3	14.5	14.4	0.0	15.0	
		1	25	23.2	23.5	23.4	1.0	24.0	14.7	14.8	14.7	0.0	15.0	
		1	49	22.9	23.3	23.3	1.0	24.0	14.5	14.5	14.4	0.0	15.0	
		25	0	21.7	22.0	22.0	2.0	23.0	14.3	14.4	14.3	0.0	15.0	
		25	12	21.9	22.1	22.1	2.0	23.0	14.4	14.5	14.3	0.0	15.0	
		25	25	21.7	22.1	22.0	2.0	23.0	14.3	14.4	14.2	0.0	15.0	
			50	0	21.8	22.0	22.0	2.0	23.0	14.3	14.4	14.2	0.0	15.0
	64QAM	1	0	22.4	22.5	22.2	2.0	23.0	14.3	14.4	14.2	0.0	15.0	
		1	25	22.8	22.8	22.5	2.0	23.0	14.7	14.7	14.5	0.0	15.0	
		1	49	22.5	22.5	22.2	2.0	23.0	14.4	14.4	14.2	0.0	15.0	
		25	0	21.4	21.4	21.2	3.0	22.0	14.3	14.4	14.2	0.0	15.0	
		25	12	21.5	21.4	21.3	3.0	22.0	14.4	14.4	14.3	0.0	15.0	
		25	25	21.4	21.4	21.2	3.0	22.0	14.3	14.3	14.2	0.0	15.0	
			50	0	21.4	21.4	21.2	3.0	22.0	14.3	14.3	14.2	0.0	15.0
	256QAM	1	0	19.2	19.4	19.1	5.0	20.0	14.3	14.3	14.2	0.0	15.0	
		1	25	19.6	19.7	19.4	5.0	20.0	14.6	14.6	14.5	0.0	15.0	
		1	49	19.3	19.3	19.0	5.0	20.0	14.3	14.3	14.1	0.0	15.0	
		25	0	19.4	19.4	19.2	5.0	20.0	14.3	14.4	14.2	0.0	15.0	
25		12	19.5	19.5	19.3	5.0	20.0	14.4	14.4	14.3	0.0	15.0		
25		25	19.4	19.4	19.2	5.0	20.0	14.3	14.3	14.2	0.0	15.0		
		50	0	19.3	19.3	19.2	5.0	20.0	14.3	14.3	14.2	0.0	15.0	
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	
				131997	132322	132647			131997	132322	132647			
				1712.5 MHz	1745 MHz	1777.5 MHz			1712.5 MHz	1745 MHz	1777.5 MHz			
5 MHz	QPSK	1	0	23.7	24.0	24.0	0.0	25.0	14.3	14.5	14.3	0.0	15.0	
		1	12	23.9	24.2	24.1	0.0	25.0	14.4	14.5	14.3	0.0	15.0	
		1	24	23.7	24.0	24.0	0.0	25.0	14.3	14.4	14.1	0.0	15.0	
		12	0	22.8	23.1	23.0	1.0	24.0	14.4	14.5	14.3	0.0	15.0	
		12	7	22.9	23.1	23.1	1.0	24.0	14.4	14.5	14.3	0.0	15.0	
		12	13	22.8	23.1	23.1	1.0	24.0	14.3	14.4	14.3	0.0	15.0	
			25	0	22.8	23.0	23.0	1.0	24.0	14.3	14.4	14.2	0.0	15.0
	16QAM	1	0	23.2	23.4	23.5	1.0	24.0	14.3	14.5	14.3	0.0	15.0	
		1	12	23.2	23.6	23.6	1.0	24.0	14.4	14.6	14.4	0.0	15.0	
		1	24	23.2	23.4	23.5	1.0	24.0	14.4	14.4	14.2	0.0	15.0	
		12	0	21.8	22.0	22.1	2.0	23.0	14.4	14.6	14.3	0.0	15.0	
		12	7	21.9	22.0	22.1	2.0	23.0	14.4	14.6	14.3	0.0	15.0	
		12	13	21.9	22.0	22.1	2.0	23.0	14.4	14.5	14.3	0.0	15.0	
			25	0	21.8	22.0	22.0	2.0	23.0	14.4	14.5	14.3	0.0	15.0
	64QAM	1	0	22.6	22.8	22.5	2.0	23.0	14.6	14.8	14.6	0.0	15.0	
		1	12	22.8	22.9	22.6	2.0	23.0	14.7	14.7	14.6	0.0	15.0	
		1	24	22.6	22.6	22.4	2.0	23.0	14.5	14.7	14.5	0.0	15.0	
		12	0	21.4	21.5	21.2	3.0	22.0	14.5	14.4	14.3	0.0	15.0	
		12	7	21.4	21.5	21.2	3.0	22.0	14.5	14.3	14.3	0.0	15.0	
		12	13	21.4	21.4	21.1	3.0	22.0	14.4	14.3	14.2	0.0	15.0	
			25	0	21.4	21.4	21.2	3.0	22.0	14.4	14.4	14.2	0.0	15.0
	256QAM	1	0	19.5	19.5	19.3	5.0	20.0	14.5	14.5	14.4	0.0	15.0	
		1	12	19.6	19.6	19.4	5.0	20.0	14.5	14.6	14.4	0.0	15.0	
		1	24	19.4	19.3	19.1	5.0	20.0	14.4	14.4	14.2	0.0	15.0	
		12	0	19.5	19.5	19.3	5.0	20.0	14.4	14.5	14.3	0.0	15.0	
12		7	19.4	19.5	19.3	5.0	20.0	14.4	14.4	14.3	0.0	15.0		
12		13	19.4	19.4	19.2	5.0	20.0	14.3	14.4	14.2	0.0	15.0		
		25	0	19.4	19.4	19.2	5.0	20.0	14.3	14.4	14.2	0.0	15.0	

LTE Band 66 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	
				131987	132322	132657			131987	132322	132657			
				1711.5 MHz	1745 MHz	1778.5 MHz			1711.5 MHz	1745 MHz	1778.5 MHz			
3 MHz	QPSK	1	0	23.7	24.1	24.1	0.0	25.0	14.3	14.5	14.2	0.0	15.0	
		1	8	23.8	24.1	24.1	0.0	25.0	14.4	14.6	14.3	0.0	15.0	
		1	14	23.7	24.0	24.0	0.0	25.0	14.2	14.4	14.1	0.0	15.0	
		8	0	22.8	23.0	23.1	1.0	24.0	14.4	14.5	14.3	0.0	15.0	
		8	4	22.8	23.1	23.1	1.0	24.0	14.4	14.6	14.3	0.0	15.0	
		8	7	22.8	23.1	23.1	1.0	24.0	14.3	14.4	14.3	0.0	15.0	
	16QAM	15	0	22.8	23.0	23.1	1.0	24.0	14.3	14.5	14.3	0.0	15.0	
		1	0	23.1	23.5	23.5	1.0	24.0	14.6	14.8	14.7	0.0	15.0	
		1	8	23.2	23.6	23.4	1.0	24.0	14.6	14.8	14.7	0.0	15.0	
		1	14	23.0	23.5	23.3	1.0	24.0	14.5	14.7	14.5	0.0	15.0	
		8	0	21.8	22.1	22.2	2.0	23.0	14.4	14.6	14.4	0.0	15.0	
		8	4	21.9	22.1	22.2	2.0	23.0	14.4	14.6	14.4	0.0	15.0	
	64QAM	8	7	21.8	22.2	22.2	2.0	23.0	14.4	14.5	14.4	0.0	15.0	
		15	0	21.8	22.1	22.1	2.0	23.0	14.4	14.5	14.3	0.0	15.0	
		1	0	22.8	22.8	22.4	2.0	23.0	14.5	14.5	14.5	0.0	15.0	
		1	8	22.8	22.8	22.4	2.0	23.0	14.7	14.7	14.6	0.0	15.0	
		1	14	22.7	22.6	22.2	2.0	23.0	14.5	14.5	14.4	0.0	15.0	
		8	0	21.4	21.5	21.3	3.0	22.0	14.5	14.5	14.3	0.0	15.0	
	256QAM	8	4	21.4	21.6	21.3	3.0	22.0	14.5	14.5	14.3	0.0	15.0	
		8	7	21.5	21.5	21.3	3.0	22.0	14.5	14.4	14.3	0.0	15.0	
		15	0	21.4	21.5	21.3	3.0	22.0	14.4	14.4	14.3	0.0	15.0	
		1	0	19.5	19.7	19.3	5.0	20.0	14.5	14.6	14.3	0.0	15.0	
		1	8	19.5	19.7	19.3	5.0	20.0	14.5	14.6	14.4	0.0	15.0	
		1	14	19.4	19.5	19.2	5.0	20.0	14.4	14.4	14.2	0.0	15.0	
3 MHz	QPSK	8	0	19.5	19.6	19.2	5.0	20.0	14.4	14.5	14.3	0.0	15.0	
		8	4	19.5	19.5	19.3	5.0	20.0	14.4	14.5	14.3	0.0	15.0	
		8	7	19.5	19.4	19.3	5.0	20.0	14.4	14.4	14.3	0.0	15.0	
		15	0	19.4	19.4	19.2	5.0	20.0	14.3	14.4	14.3	0.0	15.0	
		16QAM	1	0	23.8	24.1	24.1	0.0	25.0	14.3	14.5	14.2	0.0	15.0
			1	3	23.8	24.1	24.1	0.0	25.0	14.4	14.5	14.2	0.0	15.0
1	5		23.8	24.0	24.0	0.0	25.0	14.3	14.5	14.2	0.0	15.0		
3	0		23.8	24.1	24.1	0.0	25.0	14.3	14.5	14.3	0.0	15.0		
3	1		23.8	24.1	24.1	0.0	25.0	14.3	14.5	14.2	0.0	15.0		
3	3		23.8	24.1	24.0	0.0	25.0	14.3	14.5	14.2	0.0	15.0		
64QAM	6	0	22.8	23.1	23.0	1.0	24.0	14.3	14.5	14.2	0.0	15.0		
	1	0	23.1	23.3	23.4	1.0	24.0	14.6	14.8	14.5	0.0	15.0		
	1	3	23.1	23.3	23.4	1.0	24.0	14.6	14.8	14.5	0.0	15.0		
	1	5	23.1	23.3	23.5	1.0	24.0	14.6	14.7	14.4	0.0	15.0		
	3	0	22.9	23.3	23.3	1.0	24.0	14.5	14.6	14.4	0.0	15.0		
	3	1	23.0	23.3	23.2	1.0	24.0	14.5	14.6	14.4	0.0	15.0		
256QAM	3	3	23.0	23.2	23.2	1.0	24.0	14.5	14.6	14.4	0.0	15.0		
	6	0	21.7	22.2	22.2	2.0	23.0	14.3	14.5	14.3	0.0	15.0		
	1	0	22.7	22.8	22.4	2.0	23.0	14.6	14.8	14.4	0.0	15.0		
	1	3	22.8	22.8	22.4	2.0	23.0	14.6	14.8	14.4	0.0	15.0		
	1	5	22.7	22.8	22.3	2.0	23.0	14.6	14.7	14.3	0.0	15.0		
	3	0	22.6	22.6	22.3	2.0	23.0	14.4	14.5	14.3	0.0	15.0		
1.4 MHz	QPSK	3	1	22.6	22.6	22.3	2.0	23.0	14.4	14.6	14.3	0.0	15.0	
		3	3	22.6	22.6	22.3	2.0	23.0	14.4	14.5	14.3	0.0	15.0	
		6	0	21.5	21.5	21.2	3.0	22.0	14.3	14.5	14.3	0.0	15.0	
		1	0	19.5	19.5	19.3	5.0	20.0	14.4	14.5	14.4	0.0	15.0	
		1	3	19.5	19.6	19.3	5.0	20.0	14.4	14.6	14.4	0.0	15.0	
		1	5	19.4	19.5	19.3	5.0	20.0	14.4	14.5	14.3	0.0	15.0	
16QAM	3	0	19.4	19.5	19.2	5.0	20.0	14.3	14.5	14.2	0.0	15.0		
	3	1	19.5	19.5	19.2	5.0	20.0	14.3	14.5	14.3	0.0	15.0		
	3	3	19.4	19.5	19.2	5.0	20.0	14.3	14.5	14.3	0.0	15.0		
	3	3	19.4	19.5	19.2	5.0	20.0	14.3	14.5	14.3	0.0	15.0		
	6	0	19.4	19.5	19.1	5.0	20.0	14.2	14.3	14.2	0.0	15.0		
	64QAM	6	0	19.4	19.5	19.1	5.0	20.0	14.2	14.3	14.2	0.0	15.0	

LTE Band 41-Power Class 3 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)							Reduced Average Power (dBm) Proximity sensor.2 back-off						
				Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490			39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
20 MHz	QPSK	1	0	23.4	23.0	23.0	23.3	22.9	0.0	25.0	13.5	13.2	13.3	13.4	13.1	0.0	15.0
		1	49	23.3	23.0	23.5	23.5	23.4	0.0	25.0	13.5	13.1	13.7	13.6	13.5	0.0	15.0
		1	99	23.2	23.0	23.2	23.0	23.2	0.0	25.0	13.4	13.1	13.4	13.2	13.4	0.0	15.0
		50	0	22.3	21.9	22.3	22.5	22.2	1.0	24.0	13.6	13.1	13.5	13.6	13.4	0.0	15.0
		50	24	22.3	22.0	22.6	22.5	22.4	1.0	24.0	13.5	13.1	13.7	13.7	13.5	0.0	15.0
		50	50	22.2	21.9	22.4	22.4	22.4	1.0	24.0	13.5	13.1	13.6	13.5	13.5	0.0	15.0
	16QAM	1	0	22.2	21.9	22.4	22.4	22.3	1.0	24.0	13.4	13.0	13.6	13.6	13.5	0.0	15.0
		1	49	22.5	22.2	22.1	22.3	22.1	1.0	24.0	13.6	13.3	13.4	13.5	13.3	0.0	15.0
		1	99	22.4	22.2	22.6	22.7	22.6	1.0	24.0	13.6	13.3	13.8	13.8	13.7	0.0	15.0
		50	0	21.3	20.9	21.4	21.5	21.2	2.0	23.0	13.6	13.2	13.5	13.7	13.4	0.0	15.0
		50	24	21.3	21.0	21.5	21.5	21.4	2.0	23.0	13.5	13.2	13.7	13.7	13.5	0.0	15.0
		50	50	21.2	20.9	21.5	21.4	21.3	2.0	23.0	13.5	13.1	13.7	13.5	13.6	0.0	15.0
	64QAM	100	0	21.2	20.9	21.4	21.4	21.3	2.0	23.0	13.4	13.0	13.6	13.6	13.5	0.0	15.0
		1	0	21.4	21.1	21.1	21.2	21.0	2.0	23.0	13.5	13.2	13.1	13.3	13.0	0.0	15.0
		1	49	21.4	21.1	21.5	21.5	21.5	2.0	23.0	13.4	13.1	13.5	13.6	13.4	0.0	15.0
		1	99	21.2	21.1	21.2	21.0	21.4	2.0	23.0	13.4	13.0	13.2	13.1	13.3	0.0	15.0
		50	0	20.2	20.0	20.4	20.4	20.2	3.0	22.0	13.4	13.0	13.4	13.5	13.2	0.0	15.0
		50	24	20.3	20.0	20.6	20.5	20.4	3.0	22.0	13.5	13.0	13.6	13.5	13.4	0.0	15.0
	256QAM	50	50	20.1	19.9	20.5	20.3	20.4	3.0	22.0	13.4	13.0	13.5	13.4	13.4	0.0	15.0
		100	0	20.2	19.9	20.5	20.4	20.3	3.0	22.0	13.3	12.9	13.5	13.4	13.3	0.0	15.0
		1	0	17.9	17.7	18.2	18.2	17.9	5.0	20.0	13.1	12.7	13.2	13.3	12.9	0.0	15.0
		1	49	18.3	18.0	18.6	18.5	18.3	5.0	20.0	13.4	13.0	13.6	13.6	13.3	0.0	15.0
		1	99	18.0	17.5	18.3	18.0	18.2	5.0	20.0	13.1	12.5	13.3	13.1	13.2	0.0	15.0
		50	0	18.2	17.9	18.4	18.4	18.2	5.0	20.0	13.3	12.9	13.4	13.5	13.2	0.0	15.0
15 MHz	QPSK	50	24	18.3	18.0	18.6	18.5	18.4	5.0	20.0	13.4	13.0	13.6	13.5	13.4	0.0	15.0
		50	50	18.2	17.9	18.5	18.3	18.4	5.0	20.0	13.4	12.9	13.5	13.4	13.4	0.0	15.0
		100	0	18.2	17.9	18.5	18.3	18.3	5.0	20.0	13.3	12.9	13.5	13.4	13.3	0.0	15.0
		1	0	23.4	22.8	23.2	23.4	23.1	0.0	25.0	13.5	12.9	13.4	13.5	13.2	0.0	15.0
		1	37	23.3	23.0	23.5	23.5	23.4	0.0	25.0	13.5	13.1	13.7	13.7	13.5	0.0	15.0
		1	74	23.2	22.8	23.3	23.2	23.3	0.0	25.0	13.4	12.9	13.5	13.4	13.4	0.0	15.0
	16QAM	36	0	22.3	21.9	22.4	22.5	22.3	1.0	24.0	13.5	13.1	13.6	13.7	13.4	0.0	15.0
		36	20	22.2	22.0	22.5	22.5	22.3	1.0	24.0	13.5	13.1	13.7	13.7	13.5	0.0	15.0
		36	39	22.2	21.9	22.5	22.4	22.4	1.0	24.0	13.5	13.1	13.7	13.6	13.6	0.0	15.0
		75	0	22.2	21.9	22.4	22.4	22.3	1.0	24.0	13.4	13.1	13.6	13.6	13.5	0.0	15.0
		1	0	22.3	21.8	22.2	22.2	22.1	1.0	24.0	13.4	12.9	13.4	13.5	13.3	0.0	15.0
		1	37	22.2	22.0	22.5	22.4	22.4	1.0	24.0	13.4	13.2	13.7	13.6	13.6	0.0	15.0
	64QAM	1	74	22.1	21.8	22.4	22.1	22.3	1.0	24.0	13.4	12.9	13.5	13.3	13.5	0.0	15.0
		36	0	21.2	20.9	21.4	21.5	21.3	2.0	23.0	13.6	13.1	13.6	13.7	13.5	0.0	15.0
		36	20	21.3	21.0	21.5	21.5	21.4	2.0	23.0	13.6	13.1	13.7	13.7	13.6	0.0	15.0
		36	39	21.2	20.9	21.5	21.4	21.4	2.0	23.0	13.5	13.1	13.7	13.6	13.6	0.0	15.0
		75	0	21.3	20.9	21.4	21.5	21.3	2.0	23.0	13.5	13.1	13.6	13.7	13.5	0.0	15.0
		1	0	21.3	21.0	21.3	21.3	21.1	2.0	23.0	13.4	12.9	13.3	13.4	13.2	0.0	15.0
	256QAM	1	37	21.3	21.2	21.6	21.4	21.4	2.0	23.0	13.4	13.0	13.6	13.6	13.4	0.0	15.0
		1	74	21.2	20.9	21.4	21.2	21.4	2.0	23.0	13.4	12.8	13.4	13.3	13.4	0.0	15.0
		36	0	20.2	20.0	20.5	20.4	20.3	3.0	22.0	13.4	13.0	13.5	13.5	13.3	0.0	15.0
		36	20	20.2	20.0	20.6	20.5	20.4	3.0	22.0	13.4	13.0	13.6	13.6	13.4	0.0	15.0
		36	39	20.2	20.0	20.5	20.4	20.4	3.0	22.0	13.4	13.0	13.6	13.5	13.4	0.0	15.0
		75	0	20.3	20.0	20.5	20.4	20.3	3.0	22.0	13.4	13.0	13.5	13.5	13.3	0.0	15.0
256QAM	1	0	18.1	17.8	18.3	18.4	18.1	5.0	20.0	13.2	12.8	13.2	13.3	13.1	0.0	15.0	
	1	37	18.3	18.2	18.6	18.5	18.3	5.0	20.0	13.4	13.0	13.5	13.5	13.4	0.0	15.0	
	1	74	18.1	17.8	18.4	18.2	18.2	5.0	20.0	13.3	12.8	13.4	13.2	13.3	0.0	15.0	
	36	0	18.2	18.0	18.5	18.4	18.3	5.0	20.0	13.3	13.0	13.5	13.5	13.3	0.0	15.0	
	36	20	18.3	18.0	18.6	18.5	18.4	5.0	20.0	13.4	13.0	13.6	13.6	13.4	0.0	15.0	
	36	39	18.3	18.0	18.6	18.4	18.4	5.0	20.0	13.4	13.0	13.6	13.5	13.4	0.0	15.0	
75	0	18.2	18.0	18.5	18.4	18.3	5.0	20.0	13.4	13.0	13.5	13.5	13.3	0.0	15.0		

LTE Band 41-Power Class 3 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	
				39750	40185	40620	41055	41490			39750	40185	40620	41055	41490			
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			
10 MHz	QPSK	1	0	23.5	22.9	23.3	23.4	23.2	0.0	25.0	13.6	13.0	13.5	13.5	13.4	0.0	15.0	
		1	25	23.5	23.1	23.6	23.6	23.5	0.0	25.0	13.6	13.3	13.8	13.8	13.7	0.0	15.0	
		1	49	23.4	22.8	23.3	23.3	23.2	0.0	25.0	13.6	13.0	13.5	13.5	13.3	0.0	15.0	
		25	0	22.4	22.1	22.5	22.5	22.4	1.0	24.0	13.7	13.3	13.7	13.8	13.6	0.0	15.0	
		25	12	22.4	22.1	22.6	22.6	22.5	1.0	24.0	13.7	13.3	13.8	13.8	13.7	0.0	15.0	
		25	25	22.4	22.1	22.5	22.5	22.4	1.0	24.0	13.6	13.2	13.8	13.8	13.6	0.0	15.0	
	16QAM	50	0	22.3	22.1	22.5	22.5	22.4	1.0	24.0	13.6	13.2	13.8	13.8	13.6	0.0	15.0	
		1	0	22.3	21.9	22.4	22.3	22.3	1.0	24.0	13.7	12.9	13.5	13.6	13.3	0.0	15.0	
		1	25	22.3	22.1	22.7	22.6	22.5	1.0	24.0	13.7	13.2	13.8	13.9	13.6	0.0	15.0	
		1	49	22.3	21.9	22.4	22.3	22.2	1.0	24.0	13.6	12.9	13.6	13.6	13.3	0.0	15.0	
		25	0	21.3	21.0	21.5	21.6	21.4	2.0	23.0	13.7	13.3	13.7	13.8	13.6	0.0	15.0	
		25	12	21.3	21.1	21.6	21.7	21.5	2.0	23.0	13.7	13.3	13.9	13.9	13.7	0.0	15.0	
	64QAM	25	25	21.3	21.0	21.5	21.6	21.4	2.0	23.0	13.6	13.2	13.8	13.8	13.6	0.0	15.0	
		50	0	21.4	21.1	21.5	21.6	21.4	2.0	23.0	13.5	13.2	13.8	13.8	13.6	0.0	15.0	
		1	0	21.5	20.9	21.5	21.4	21.2	2.0	23.0	13.5	12.9	13.4	13.4	13.2	0.0	15.0	
		1	25	21.4	21.2	21.8	21.7	21.4	2.0	23.0	13.5	13.2	13.7	13.7	13.5	0.0	15.0	
		1	49	21.4	20.9	21.4	21.3	21.1	2.0	23.0	13.5	12.8	13.4	13.4	13.2	0.0	15.0	
		25	0	20.4	20.2	20.6	20.6	20.4	3.0	22.0	13.6	13.1	13.7	13.6	13.5	0.0	15.0	
	256QAM	25	12	20.4	20.2	20.7	20.6	20.5	3.0	22.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0	
		25	25	20.4	20.1	20.6	20.5	20.4	3.0	22.0	13.6	13.1	13.7	13.6	13.5	0.0	15.0	
		50	0	20.3	20.2	20.6	20.5	20.4	3.0	22.0	13.5	13.1	13.7	13.6	13.5	0.0	15.0	
		1	0	18.0	17.9	18.4	18.1	18.2	5.0	20.0	13.3	12.9	13.3	13.4	13.2	0.0	15.0	
		1	25	18.3	18.2	18.7	18.6	18.5	5.0	20.0	13.5	13.2	13.6	13.7	13.5	0.0	15.0	
		1	49	18.0	17.9	18.4	18.3	18.1	5.0	20.0	13.2	12.8	13.3	13.4	13.2	0.0	15.0	
	5 MHz	QPSK	25	0	18.4	18.1	18.6	18.5	18.4	5.0	20.0	13.5	13.1	13.6	13.6	13.5	0.0	15.0
			25	12	18.5	18.2	18.7	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.6	0.0	15.0
			25	25	18.4	18.1	18.6	18.5	18.4	5.0	20.0	13.5	13.1	13.6	13.6	13.5	0.0	15.0
			50	0	18.4	18.1	18.6	18.5	18.4	5.0	20.0	13.5	13.1	13.7	13.6	13.4	0.0	15.0
			1	0	23.4	23.0	23.5	23.5	23.4	0.0	25.0	13.6	13.2	13.7	13.8	13.6	0.0	15.0
			1	12	23.4	23.1	23.6	23.6	23.5	0.0	25.0	13.6	13.3	13.8	13.8	13.7	0.0	15.0
16QAM		1	24	23.4	23.0	23.5	23.5	23.4	0.0	25.0	13.6	13.2	13.7	13.7	13.6	0.0	15.0	
		12	0	22.3	22.1	22.6	22.6	22.5	1.0	24.0	13.7	13.3	13.8	13.8	13.6	0.0	15.0	
		12	7	22.4	22.1	22.6	22.6	22.4	1.0	24.0	13.6	13.3	13.8	13.9	13.7	0.0	15.0	
		12	13	22.4	22.1	22.6	22.6	22.4	1.0	24.0	13.6	13.3	13.8	13.8	13.7	0.0	15.0	
		25	0	22.4	22.1	22.6	22.6	22.4	1.0	24.0	13.6	13.3	13.8	13.8	13.6	0.0	15.0	
		1	0	22.5	22.2	22.5	22.6	22.6	1.0	24.0	13.6	13.4	13.7	13.8	13.8	0.0	15.0	
64QAM		1	12	22.4	22.3	22.6	22.7	22.6	1.0	24.0	13.7	13.4	13.9	13.9	13.9	0.0	15.0	
		1	24	22.4	22.2	22.6	22.5	22.6	1.0	24.0	13.6	13.3	13.8	13.8	13.7	0.0	15.0	
		12	0	21.2	21.2	21.6	21.7	21.4	2.0	23.0	13.7	13.3	13.8	13.8	13.7	0.0	15.0	
		12	7	21.3	21.2	21.6	21.7	21.4	2.0	23.0	13.7	13.4	13.8	13.8	13.8	0.0	15.0	
		12	13	21.3	21.1	21.6	21.7	21.4	2.0	23.0	13.7	13.3	13.8	13.8	13.7	0.0	15.0	
		25	0	21.4	21.1	21.6	21.6	21.5	2.0	23.0	13.6	13.2	13.8	13.8	13.7	0.0	15.0	
256QAM		1	0	21.5	21.1	21.6	21.7	21.4	2.0	23.0	13.7	13.2	13.7	13.7	13.5	0.0	15.0	
		1	12	21.5	21.2	21.6	21.8	21.5	2.0	23.0	13.7	13.2	13.7	13.7	13.6	0.0	15.0	
		1	24	21.5	21.1	21.5	21.6	21.4	2.0	23.0	13.6	13.1	13.6	13.6	13.4	0.0	15.0	
		12	0	20.4	20.1	20.6	20.6	20.6	3.0	22.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0	
		12	7	20.4	20.2	20.6	20.6	20.6	3.0	22.0	13.6	13.2	13.8	13.7	13.5	0.0	15.0	
		12	13	20.4	20.1	20.6	20.6	20.6	3.0	22.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0	
QPSK		25	0	20.5	20.1	20.6	20.7	20.5	3.0	22.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0	
		1	0	18.4	18.1	18.5	18.6	18.4	5.0	20.0	13.5	13.2	13.7	13.5	13.5	0.0	15.0	
		1	12	18.5	18.1	18.6	18.7	18.4	5.0	20.0	13.5	13.2	13.7	13.6	13.5	0.0	15.0	
		1	24	18.4	18.1	18.6	18.6	18.3	5.0	20.0	13.4	13.1	13.7	13.5	13.5	0.0	15.0	
		12	0	18.4	18.1	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0	
		12	7	18.5	18.2	18.7	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0	
16QAM	12	13	18.5	18.2	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	12	13	18.5	18.2	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	25	0	18.5	18.2	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	1	0	18.4	18.1	18.5	18.6	18.4	5.0	20.0	13.5	13.2	13.7	13.5	13.5	0.0	15.0		
	1	12	18.5	18.1	18.6	18.7	18.4	5.0	20.0	13.5	13.2	13.7	13.6	13.5	0.0	15.0		
	1	24	18.4	18.1	18.6	18.6	18.3	5.0	20.0	13.4	13.1	13.7	13.5	13.5	0.0	15.0		
64QAM	12	0	18.4	18.1	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	12	7	18.5	18.2	18.7	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	12	13	18.5	18.2	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	25	0	18.5	18.2	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	1	0	18.4	18.1	18.5	18.6	18.4	5.0	20.0	13.5	13.2	13.7	13.5	13.5	0.0	15.0		
	1	12	18.5	18.1	18.6	18.7	18.4	5.0	20.0	13.5	13.2	13.7	13.6	13.5	0.0	15.0		
256QAM	1	24	18.4	18.1	18.6	18.6	18.3	5.0	20.0	13.4	13.1	13.7	13.5	13.5	0.0	15.0		
	12	0	18.4	18.1	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	12	7	18.5	18.2	18.7	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	12	13	18.5	18.2	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	25	0	18.5	18.2	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		
	1	0	18.5	18.2	18.6	18.6	18.5	5.0	20.0	13.6	13.2	13.7	13.7	13.5	0.0	15.0		

LTE Band 41-Power Class 2 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)						Reduced Average Power (dBm) Proximity sensor.2 back-off											
				Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit				
				39750	40185	40620	41055	41490			39750	40185	40620	41055	41490						
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz						
20 MHz	QPSK	1	0	26.1	25.8	25.8	25.8	25.5	0.0	27.5	13.5	13.4	13.4	13.2	13.0	0.0	15.5				
		1	49	26.0	25.8	26.2	26.0	25.9	0.0	27.5	13.5	13.3	13.8	13.4	13.3	0.0	15.5				
		1	99	26.0	25.8	25.9	25.6	25.9	0.0	27.5	13.5	13.3	13.4	13.1	13.3	0.0	15.5				
		50	0	25.0	24.8	25.1	25.0	24.8	1.0	26.5	13.5	13.3	13.6	13.4	13.2	0.0	15.5				
		50	24	25.0	24.8	25.2	25.0	25.0	1.0	26.5	13.5	13.3	13.8	13.5	13.4	0.0	15.5				
		50	50	25.0	24.7	25.2	24.9	25.0	1.0	26.5	13.5	13.3	13.7	13.3	13.4	0.0	15.5				
	100	0	24.9	24.7	25.1	24.9	24.8	1.0	26.5	13.4	13.2	13.7	13.4	13.3	0.0	15.5					
	16QAM	1	0	25.5	25.2	25.2	25.1	24.8	1.0	26.5	14.0	13.7	13.7	13.6	13.3	0.0	15.5				
		1	49	25.6	25.2	25.7	25.6	25.4	1.0	26.5	14.1	13.9	14.1	13.9	13.9	0.0	15.5				
		1	99	25.4	25.1	25.4	25.0	25.3	1.0	26.5	13.9	13.7	13.8	13.4	13.7	0.0	15.5				
		50	0	24.0	23.8	24.1	24.0	23.8	2.0	25.5	13.5	13.3	13.7	13.4	13.2	0.0	15.5				
		50	24	24.0	23.8	24.2	24.0	24.0	2.0	25.5	13.6	13.3	13.8	13.5	13.4	0.0	15.5				
		50	50	24.0	23.7	24.2	23.9	24.0	2.0	25.5	13.5	13.3	13.7	13.3	13.4	0.0	15.5				
	100	0	23.9	23.7	24.1	23.9	23.9	2.0	25.5	13.4	13.2	13.7	13.4	13.3	0.0	15.5					
	64QAM	1	0	23.7	23.6	23.4	23.3	23.1	2.0	25.5	13.7	13.5	13.4	13.4	13.0	0.0	15.5				
		1	49	23.7	23.6	23.8	23.7	23.5	2.0	25.5	13.7	13.5	13.8	13.7	13.4	0.0	15.5				
		1	99	23.7	23.5	23.5	23.1	23.5	2.0	25.5	13.6	13.4	13.5	13.1	13.3	0.0	15.5				
		50	0	22.3	22.1	22.5	22.3	22.1	3.0	24.5	13.4	13.2	13.5	13.2	13.1	0.0	15.5				
		50	24	22.4	22.2	22.6	22.4	22.3	3.0	24.5	13.4	13.2	13.6	13.3	13.3	0.0	15.5				
		50	50	22.3	22.1	22.5	22.3	22.3	3.0	24.5	13.4	13.2	13.5	13.2	13.3	0.0	15.5				
	100	0	22.3	22.1	22.5	22.3	22.2	3.0	24.5	13.4	13.1	13.6	13.2	13.2	0.0	15.5					
	256QAM	1	0	20.2	20.1	20.3	20.3	20.1	5.0	22.5	13.2	13.0	13.4	13.2	13.1	0.0	15.5				
		1	49	20.6	20.3	20.7	20.5	20.3	5.0	22.5	13.5	13.4	13.8	13.4	13.4	0.0	15.5				
		1	99	20.4	20.1	20.4	20.0	20.3	5.0	22.5	13.3	13.0	13.5	13.1	13.3	0.0	15.5				
50		0	20.3	20.1	20.4	20.4	20.1	5.0	22.5	13.3	13.2	13.5	13.3	13.1	0.0	15.5					
50		24	20.4	20.2	20.6	20.4	20.3	5.0	22.5	13.4	13.2	13.6	13.3	13.2	0.0	15.5					
50		50	20.3	20.1	20.5	20.2	20.3	5.0	22.5	13.4	13.1	13.5	13.2	13.3	0.0	15.5					
100	0	20.3	20.1	20.5	20.2	20.2	5.0	22.5	13.3	13.1	13.5	13.2	13.2	0.0	15.5						
15 MHz	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit				
15 MHz	QPSK	1	0	26.0	25.6	26.0	25.9	25.6			0.0	27.5	13.4	13.1	13.5			13.3	13.0	0.0	15.5
		1	37	26.0	25.8	26.3	26.1	25.9			0.0	27.5	13.5	13.4	13.8			13.4	13.3	0.0	15.5
		1	74	26.0	25.5	26.1	25.7	25.8	0.0	27.5	13.4	13.1	13.6	13.1	13.3	0.0	15.5				
		36	0	25.0	24.7	25.1	25.0	24.7	1.0	26.5	13.5	13.3	13.7	13.4	13.2	0.0	15.5				
		36	20	25.0	24.8	25.2	25.0	24.9	1.0	26.5	13.5	13.3	13.8	13.5	13.4	0.0	15.5				
		36	39	24.9	24.7	25.2	25.0	24.9	1.0	26.5	13.5	13.3	13.7	13.4	13.4	0.0	15.5				
	75	0	24.9	24.7	25.2	25.0	24.8	1.0	26.5	13.4	13.3	13.7	13.4	13.3	0.0	15.5					
	16QAM	1	0	25.3	24.9	25.3	25.2	24.9	1.0	26.5	13.8	13.4	13.9	13.6	13.4	0.0	15.5				
		1	37	25.3	25.1	25.6	25.4	25.2	1.0	26.5	13.8	13.7	14.1	13.7	13.7	0.0	15.5				
		1	74	25.3	24.8	25.4	25.1	25.2	1.0	26.5	13.8	13.4	13.9	13.4	13.7	0.0	15.5				
		36	0	24.0	23.7	24.2	24.0	23.8	2.0	25.5	13.5	13.3	13.7	13.5	13.2	0.0	15.5				
		36	20	24.0	23.8	24.3	24.0	23.9	2.0	25.5	13.5	13.3	13.8	13.5	13.4	0.0	15.5				
		36	39	23.9	23.7	24.3	24.0	23.9	2.0	25.5	13.5	13.3	13.8	13.4	13.4	0.0	15.5				
	75	0	24.0	23.7	24.2	24.0	23.9	2.0	25.5	13.5	13.3	13.7	13.4	13.3	0.0	15.5					
	64QAM	1	0	23.7	23.3	23.7	23.4	23.2	2.0	25.5	13.6	13.3	13.6	13.5	13.1	0.0	15.5				
		1	37	23.7	23.6	24.0	23.6	23.5	2.0	25.5	13.6	13.5	13.9	13.6	13.5	0.0	15.5				
		1	74	23.6	23.3	23.7	23.3	23.5	2.0	25.5	13.5	13.3	13.7	13.3	13.5	0.0	15.5				
		36	0	22.3	22.2	22.5	22.3	22.1	3.0	24.5	13.4	13.2	13.6	13.3	13.1	0.0	15.5				
		36	20	22.3	22.2	22.7	22.3	22.2	3.0	24.5	13.4	13.2	13.6	13.3	13.2	0.0	15.5				
		36	39	22.3	22.2	22.6	22.3	22.3	3.0	24.5	13.4	13.2	13.6	13.3	13.3	0.0	15.5				
	75	0	22.3	22.2	22.6	22.2	22.2	3.0	24.5	13.3	13.2	13.6	13.3	13.2	0.0	15.5					
	256QAM	1	0	20.3	20.1	20.5	20.3	20.0	5.0	22.5	13.4	13.1	13.6	13.3	13.1	0.0	15.5				
		1	37	20.5	20.3	20.7	20.4	20.4	5.0	22.5	13.6	13.3	13.9	13.5	13.2	0.0	15.5				
		1	74	20.3	20.0	20.5	20.1	20.4	5.0	22.5	13.4	13.1	13.7	13.1	13.2	0.0	15.5				
36		0	20.3	20.2	20.5	20.3	20.1	5.0	22.5	13.3	13.2	13.5	13.3	13.1	0.0	15.5					
36		20	20.4	20.2	20.6	20.3	20.2	5.0	22.5	13.4	13.3	13.7	13.3	13.2	0.0	15.5					
36		39	20.4	20.2	20.6	20.2	20.3	5.0	22.5	13.4	13.2	13.6	13.2	13.3	0.0	15.5					
75	0	20.3	20.1	20.6	20.3	20.2	5.0	22.5	13.4	13.2	13.6	13.2	13.2	0.0	15.5						

LTE Band 41-Power Class 2 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	
				39750	40185	40620	41055	41490			39750	40185	40620	41055	41490			
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			
10 MHz	QPSK	1	0	26.1	25.6	26.0	25.8	25.7	0.0	27.5	13.6	13.2	13.6	13.3	13.1	0.0	15.5	
		1	25	26.1	26.0	26.3	26.1	26.0	0.0	27.5	13.6	13.5	13.9	13.5	13.4	0.0	15.5	
		1	49	26.1	25.7	26.0	25.8	25.7	0.0	27.5	13.6	13.2	13.6	13.2	13.1	0.0	15.5	
		25	0	25.1	24.9	25.3	25.1	24.9	1.0	26.5	13.6	13.4	13.9	13.5	13.4	0.0	15.5	
		25	12	25.1	24.9	25.4	25.2	25.1	1.0	26.5	13.7	13.6	13.9	13.6	13.5	0.0	15.5	
		25	25	25.1	24.9	25.3	25.1	25.0	1.0	26.5	13.7	13.4	13.9	13.5	13.4	0.0	15.5	
	16QAM	50	0	25.0	24.9	25.3	25.1	25.0	1.0	26.5	13.6	13.4	13.8	13.5	13.4	0.0	15.5	
		1	0	25.4	25.0	25.4	25.2	25.1	1.0	26.5	13.9	13.5	14.0	13.6	13.5	0.0	15.5	
		1	25	25.5	25.3	25.6	25.4	25.4	1.0	26.5	13.9	13.8	14.0	13.8	13.8	0.0	15.5	
		1	49	25.4	25.0	25.3	25.2	25.1	1.0	26.5	13.9	13.5	14.0	13.6	13.5	0.0	15.5	
		25	0	24.1	23.9	24.3	24.1	24.0	2.0	25.5	13.6	13.5	13.9	13.6	13.5	0.0	15.5	
		25	12	24.1	24.0	24.4	24.2	24.0	2.0	25.5	13.6	13.5	14.0	13.7	13.5	0.0	15.5	
	64QAM	25	25	24.1	23.9	24.3	24.1	24.0	2.0	25.5	13.6	13.5	13.8	13.5	13.4	0.0	15.5	
		50	0	24.0	23.9	24.3	24.1	24.0	2.0	25.5	13.5	13.5	13.9	13.5	13.4	0.0	15.5	
		1	0	23.8	23.4	23.6	23.5	23.3	2.0	25.5	13.8	13.4	13.6	13.4	13.3	0.0	15.5	
		1	25	23.8	23.7	24.0	23.8	23.6	2.0	25.5	13.8	13.7	13.9	13.7	13.6	0.0	15.5	
		1	49	23.8	23.3	23.7	23.4	23.4	2.0	25.5	13.8	13.4	13.7	13.3	13.4	0.0	15.5	
		25	0	22.5	22.3	22.7	22.4	22.3	3.0	24.5	13.6	13.3	13.7	13.4	13.3	0.0	15.5	
	256QAM	25	12	22.5	22.4	22.8	22.5	22.4	3.0	24.5	13.6	13.5	13.8	13.5	13.4	0.0	15.5	
		25	25	22.4	22.3	22.7	22.4	22.3	3.0	24.5	13.6	13.3	13.7	13.4	13.3	0.0	15.5	
		50	0	22.4	22.3	22.7	22.4	22.3	3.0	24.5	13.5	13.3	13.6	13.4	13.3	0.0	15.5	
		1	0	20.4	20.1	20.4	20.2	20.1	5.0	22.5	13.4	13.3	13.5	13.2	13.1	0.0	15.5	
		1	25	20.6	20.5	20.8	20.5	20.3	5.0	22.5	13.6	13.6	13.8	13.6	13.5	0.0	15.5	
		1	49	20.2	20.1	20.6	20.3	20.0	5.0	22.5	13.3	13.3	13.5	13.3	13.2	0.0	15.5	
	5 MHz	QPSK	25	0	20.5	20.3	20.7	20.4	20.3	5.0	22.5	13.5	13.4	13.7	13.4	13.3	0.0	15.5
			25	12	20.6	20.4	20.8	20.5	20.4	5.0	22.5	13.6	13.4	13.8	13.5	13.4	0.0	15.5
			25	25	20.5	20.3	20.7	20.4	20.3	5.0	22.5	13.5	13.3	13.7	13.3	13.3	0.0	15.5
			50	0	20.4	20.3	20.7	20.4	20.3	5.0	22.5	13.5	13.4	13.7	13.4	13.3	0.0	15.5
			1	0	26.1	25.8	25.6	26.1	25.9	0.0	27.5	13.6	13.4	13.8	13.5	13.4	0.0	15.5
			1	12	26.1	25.9	25.7	26.2	26.0	0.0	27.5	13.6	13.5	13.9	13.6	13.5	0.0	15.5
16QAM		1	24	26.0	25.8	25.6	26.1	25.9	0.0	27.5	13.6	13.4	13.8	13.5	13.4	0.0	15.5	
		12	0	25.1	24.9	25.4	25.2	25.0	1.0	26.5	13.6	13.5	13.9	13.6	13.5	0.0	15.5	
		12	7	25.1	24.9	25.4	25.2	25.1	1.0	26.5	13.7	13.6	14.0	13.6	13.5	0.0	15.5	
		12	13	25.0	24.9	25.4	25.2	25.0	1.0	26.5	13.7	13.5	13.9	13.6	13.5	0.0	15.5	
		25	0	25.1	24.9	25.4	25.2	25.0	1.0	26.5	13.6	13.5	13.9	13.6	13.4	0.0	15.5	
		1	0	25.5	25.2	25.8	25.5	25.3	1.0	26.5	13.9	13.9	14.0	13.8	13.8	0.0	15.5	
64QAM		1	12	25.6	25.3	25.8	25.5	25.4	1.0	26.5	13.9	14.0	14.1	14.0	13.9	0.0	15.5	
		1	24	25.4	25.2	25.7	25.4	25.3	1.0	26.5	13.8	13.8	14.0	13.8	13.8	0.0	15.5	
		12	0	24.1	23.9	24.4	24.2	24.1	2.0	25.5	13.7	13.6	14.0	13.5	13.5	0.0	15.5	
		12	7	24.1	24.0	24.5	24.2	24.2	2.0	25.5	13.8	13.6	14.1	13.6	13.6	0.0	15.5	
		12	13	24.1	23.9	24.4	24.2	24.2	2.0	25.5	13.7	13.5	14.0	13.6	13.5	0.0	15.5	
		25	0	24.1	24.0	24.4	24.1	24.1	2.0	25.5	13.6	13.5	14.0	13.6	13.5	0.0	15.5	
256QAM		1	0	23.7	23.5	23.9	23.7	23.7	2.0	25.5	13.8	13.6	13.9	13.7	13.6	0.0	15.5	
		1	12	23.8	23.6	24.0	23.8	23.8	2.0	25.5	13.8	13.7	14.0	13.7	13.7	0.0	15.5	
		1	24	23.8	23.6	23.9	23.6	23.7	2.0	25.5	13.8	13.6	13.8	13.6	13.6	0.0	15.5	
		12	0	22.5	22.4	22.7	22.6	22.5	3.0	24.5	13.4	13.4	13.8	13.4	13.5	0.0	15.5	
		12	7	22.5	22.5	22.8	22.6	22.5	3.0	24.5	13.4	13.4	13.8	13.5	13.5	0.0	15.5	
		12	13	22.5	22.5	22.7	22.5	22.5	3.0	24.5	13.4	13.4	13.8	13.4	13.5	0.0	15.5	
QPSK		25	0	22.5	22.4	22.7	22.4	22.4	3.0	24.5	13.6	13.4	13.7	13.4	13.4	0.0	15.5	
		1	0	20.7	20.5	20.8	20.6	20.4	5.0	22.5	13.6	13.6	13.8	13.5	13.4	0.0	15.5	
		1	12	20.7	20.6	20.9	20.7	20.5	5.0	22.5	13.7	13.7	13.9	13.6	13.5	0.0	15.5	
		1	24	20.7	20.5	20.8	20.5	20.4	5.0	22.5	13.6	13.6	13.7	13.5	13.4	0.0	15.5	
		12	0	20.5	20.4	20.7	20.4	20.3	5.0	22.5	13.5	13.4	13.7	13.4	13.4	0.0	15.5	
		12	7	20.6	20.5	20.8	20.4	20.4	5.0	22.5	13.6	13.5	13.7	13.4	13.5	0.0	15.5	
16QAM	12	13	20.5	20.4	20.8	20.4	20.4	5.0	22.5	13.6	13.4	13.7	13.4	13.4	0.0	15.5		
	25	0	20.5	20.4	20.7	20.4	20.4	5.0	22.5	13.6	13.4	13.7	13.5	13.4	0.0	15.5		

Proximity sensor 1 & 3's Reduced power results

LTE Band 5 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor 1 & 3 back-off					
				Measured Pwr (dBm)			MPR	Tune-up Limit	
				20450 829 MHz	20525 836.5 MHz	20600 844 MHz			
10 MHz	QPSK	1	0		20.9		0.0	22.0	
		1	25		21.0		0.0	22.0	
		1	49		20.9		0.0	22.0	
		25	0		20.9		0.0	22.0	
		25	12		20.9		0.0	22.0	
		25	25		20.9		0.0	22.0	
	16QAM	50	0		20.8		0.0	22.0	
		1	0		21.2		0.0	22.0	
		1	25		21.2		0.0	22.0	
		1	49		21.2		0.0	22.0	
		25	0		20.9		0.0	22.0	
		25	12		21.0		0.0	22.0	
	64QAM	25	25		20.9		0.0	22.0	
		50	0		20.8		0.0	22.0	
		1	0		21.2		0.0	22.0	
		1	25		21.3		0.0	22.0	
		1	49		21.3		0.0	22.0	
		25	0		21.3		0.0	22.0	
	256QAM	25	12		21.3		0.0	22.0	
		25	25		21.3		0.0	22.0	
50		0		21.3		0.0	22.0		
1		0		19.2		2.0	20.0		
1		25		19.6		2.0	20.0		
1		49		19.3		2.0	20.0		
5 MHz	QPSK	25	0		19.3		2.0	20.0	
		25	12		19.4		2.0	20.0	
		25	25		19.4		2.0	20.0	
		50	0		19.3		2.0	20.0	
		1	0		20.7	20.9	20.9	0.0	22.0
		1	12		20.9	21.0	20.9	0.0	22.0
	16QAM	1	24		20.8	20.9	20.9	0.0	22.0
		12	0		20.7	20.8	20.8	0.0	22.0
		12	7		20.9	20.9	20.9	0.0	22.0
		12	13		20.8	21.0	20.9	0.0	22.0
25		0		20.8	20.9	20.8	0.0	22.0	
1		0		21.1	21.2	21.3	0.0	22.0	
64QAM	1	12		21.2	21.3	21.4	0.0	22.0	
	1	24		21.1	21.2	21.2	0.0	22.0	
	12	0		20.9	20.9	20.9	0.0	22.0	
	12	7		21.0	21.0	20.9	0.0	22.0	
	12	13		21.0	21.0	21.0	0.0	22.0	
	25	0		20.8	20.9	20.8	0.0	22.0	
256QAM	1	0		21.2	21.2	21.3	0.0	22.0	
	1	12		21.3	21.2	21.3	0.0	22.0	
	1	24		21.2	21.2	21.3	0.0	22.0	
	12	0		21.0	21.2	21.3	0.0	22.0	
	12	7		21.1	21.2	21.3	0.0	22.0	
	12	13		21.1	21.2	21.3	0.0	22.0	
5 MHz	256QAM	25	0		21.0	21.2	21.3	0.0	22.0
		1	0		19.4	19.4	19.5	2.0	20.0
		1	12		19.6	19.6	19.6	2.0	20.0
		1	24		19.4	19.4	19.5	2.0	20.0
	256QAM	12	0		19.2	19.4	19.3	2.0	20.0
		12	7		19.3	19.4	19.4	2.0	20.0
		12	13		19.3	19.5	19.4	2.0	20.0
		25	0		19.3	19.4	19.3	2.0	20.0

LTE Band 5 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20415	20525	20635		
				825.5 MHz	836.5 MHz	847.5 MHz		
3 MHz	QPSK	1	0	20.7	20.8	20.8	0.0	22.0
		1	8	20.9	21.0	20.9	0.0	22.0
		1	14	20.7	20.9	20.8	0.0	22.0
		8	0	20.7	20.9	20.8	0.0	22.0
		8	4	20.8	20.9	20.9	0.0	22.0
		8	7	20.8	21.0	20.9	0.0	22.0
	16QAM	15	0	20.8	20.9	20.8	0.0	22.0
		1	0	21.0	21.2	21.1	0.0	22.0
		1	8	21.1	21.3	21.3	0.0	22.0
		1	14	21.0	21.2	21.2	0.0	22.0
		8	0	20.8	20.9	20.9	0.0	22.0
		8	4	20.9	21.0	20.9	0.0	22.0
	64QAM	8	7	21.0	21.0	20.9	0.0	22.0
		15	0	20.8	20.9	20.9	0.0	22.0
		1	0	21.2	21.3	21.2	0.0	22.0
		1	8	21.3	21.2	21.2	0.0	22.0
		1	14	21.2	21.3	21.2	0.0	22.0
		8	0	21.0	21.3	21.2	0.0	22.0
	256QAM	8	4	21.1	21.2	21.2	0.0	22.0
		8	7	21.1	21.3	21.2	0.0	22.0
		15	0	21.1	21.2	21.2	0.0	22.0
		1	0	19.3	19.6	19.4	2.0	20.0
		1	8	19.5	19.7	19.6	2.0	20.0
		1	14	19.5	19.5	19.5	2.0	20.0
1.4 MHz	QPSK	8	0	19.3	19.4	19.3	2.0	20.0
		8	4	19.4	19.4	19.4	2.0	20.0
		8	7	19.4	19.5	19.4	2.0	20.0
		15	0	19.3	19.4	19.3	2.0	20.0
		1	0	20.7	20.9	20.9	0.0	22.0
		1	3	20.7	21.0	20.9	0.0	22.0
	16QAM	1	5	20.7	20.9	20.9	0.0	22.0
		3	0	20.7	20.9	20.8	0.0	22.0
		3	1	20.7	20.9	20.9	0.0	22.0
		3	3	20.7	20.9	20.8	0.0	22.0
		6	0	20.7	20.8	20.8	0.0	22.0
		1	0	20.9	21.2	21.2	0.0	22.0
64QAM	1	3	20.9	21.2	21.2	0.0	22.0	
	1	5	21.0	21.2	21.1	0.0	22.0	
	3	0	20.9	21.0	21.0	0.0	22.0	
	3	1	20.9	21.0	21.0	0.0	22.0	
	3	3	20.9	21.1	21.0	0.0	22.0	
	6	0	20.8	20.9	21.0	0.0	22.0	
256QAM	1	0	21.1	21.2	21.2	0.0	22.0	
	1	3	21.1	21.3	21.2	0.0	22.0	
	1	5	21.0	21.2	21.2	0.0	22.0	
	3	0	21.1	21.2	21.2	0.0	22.0	
	3	1	21.1	21.2	21.2	0.0	22.0	
	3	3	21.1	21.3	21.2	0.0	22.0	
1.4 MHz	256QAM	6	0	21.1	21.3	21.2	0.0	22.0
		1	0	19.4	19.4	19.4	2.0	20.0
		1	3	19.4	19.5	19.4	2.0	20.0
		1	5	19.4	19.6	19.5	2.0	20.0
		3	0	19.4	19.4	19.4	2.0	20.0
		3	1	19.4	19.4	19.4	2.0	20.0
1.4 MHz	256QAM	3	3	19.4	19.5	19.4	2.0	20.0
		6	0	19.3	19.5	19.4	2.0	20.0

LTE Band 41-Power Class 3 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor 1 & 3 back-off							MPR	Tune-up Limit
				Measured Pwr (dBm)								
				39750 2506 MHz	40185 2549.5 MHz	40620 2593 MHz	41055 2636.5 MHz	41490 2680 MHz				
20 MHz	QPSK	1	0	21.4	21.0	21.4	21.4	21.4	0.0	23.0		
		1	49	21.4	21.0	22.0	21.8	21.9	0.0	23.0		
		1	99	21.3	20.9	21.7	21.2	21.8	0.0	23.0		
		50	0	21.4	21.0	21.7	21.6	21.6	0.0	23.0		
		50	24	21.3	21.0	22.0	21.7	21.8	0.0	23.0		
		50	50	21.3	21.0	21.9	21.6	21.9	0.0	23.0		
	16QAM	100	0	21.2	20.9	21.8	21.6	21.7	0.0	23.0		
		1	0	21.4	21.2	21.4	21.5	21.5	0.0	23.0		
		1	49	21.5	21.4	22.0	21.9	22.1	0.0	23.0		
		1	99	21.4	21.1	21.7	21.3	21.9	0.0	23.0		
		50	0	21.4	21.0	21.7	21.6	21.6	0.0	23.0		
		50	24	21.3	21.0	21.9	21.7	21.8	0.0	23.0		
	64QAM	50	50	21.3	21.0	21.9	21.6	21.9	0.0	23.0		
		100	0	21.2	20.9	21.8	21.5	21.7	0.0	23.0		
		1	0	21.4	21.2	20.9	21.4	21.5	0.0	23.0		
		1	49	21.4	21.1	21.0	21.5	21.5	0.0	23.0		
		1	99	21.3	21.2	20.9	21.4	21.5	0.0	23.0		
		50	0	20.4	21.2	21.0	21.5	21.5	0.0	23.0		
	256QAM	50	24	20.4	21.2	21.0	21.5	21.4	0.0	23.0		
		50	50	20.3	21.2	21.0	21.4	21.5	0.0	23.0		
		100	0	20.3	21.1	21.0	21.4	21.4	0.0	23.0		
		1	0	18.1	17.7	18.0	18.5	18.3	2.0	21.0		
		1	49	18.6	18.1	18.5	18.9	18.9	2.0	21.0		
		1	99	18.2	17.5	18.4	18.3	18.9	2.0	21.0		
15 MHz	QPSK	50	0	18.3	18.0	18.2	18.6	18.7	2.0	21.0		
		50	24	18.4	18.1	18.5	18.7	18.9	2.0	21.0		
		50	50	18.3	17.9	18.4	18.6	19.0	2.0	21.0		
		100	0	18.3	18.0	18.4	18.6	18.8	2.0	21.0		
		1	0	21.4	20.8	21.1	21.6	21.5	0.0	23.0		
		1	37	21.4	21.0	21.4	21.7	21.9	0.0	23.0		
	16QAM	1	74	21.3	20.7	21.3	21.5	21.8	0.0	23.0		
		36	0	21.4	21.0	21.3	21.6	21.7	0.0	23.0		
		36	20	21.3	21.0	21.4	21.7	21.8	0.0	23.0		
		36	39	21.3	20.9	21.4	21.7	21.9	0.0	23.0		
		75	0	21.3	20.9	21.4	21.6	21.8	0.0	23.0		
		1	0	21.4	20.7	21.1	21.6	21.4	0.0	23.0		
	64QAM	1	37	21.4	21.0	21.5	21.7	21.8	0.0	23.0		
		1	74	21.3	20.6	21.3	21.5	21.7	0.0	23.0		
		36	0	21.4	21.0	21.2	21.6	21.7	0.0	23.0		
		36	20	21.3	21.0	21.4	21.7	21.8	0.0	23.0		
		36	39	21.3	21.0	21.4	21.6	21.9	0.0	23.0		
		75	0	21.3	21.0	21.4	21.6	21.8	0.0	23.0		
	256QAM	1	0	21.5	20.9	21.2	21.5	21.7	0.0	23.0		
		1	37	21.5	21.0	21.2	21.6	21.6	0.0	23.0		
		1	74	21.4	20.9	21.2	21.6	21.5	0.0	23.0		
		36	0	20.5	21.0	21.2	21.6	21.5	0.0	23.0		
		36	20	20.4	20.9	21.2	21.6	21.6	0.0	23.0		
		36	39	20.3	20.9	21.2	21.6	21.6	0.0	23.0		
256QAM	75	0	20.3	21.0	21.2	21.6	21.7	0.0	23.0			
	1	0	18.2	17.9	18.1	18.6	18.6	2.0	21.0			
	1	37	18.5	18.1	18.5	18.8	19.0	2.0	21.0			
	1	74	18.2	17.8	18.4	18.4	19.0	2.0	21.0			
	36	0	18.4	18.0	18.3	18.7	18.8	2.0	21.0			
	36	20	18.4	18.1	18.5	18.7	18.9	2.0	21.0			
256QAM	36	39	18.4	18.0	18.5	18.7	19.0	2.0	21.0			
	75	0	18.3	18.0	18.4	18.6	18.8	2.0	21.0			

LTE Band 41-Power Class 3 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
10 MHz	QPSK	1	0	21.5	20.9	21.2	21.5	21.7	0.0	23.0
		1	25	21.5	21.2	21.5	21.8	22.0	0.0	23.0
		1	49	21.4	20.8	21.3	21.5	21.7	0.0	23.0
		25	0	21.5	21.1	21.4	21.7	21.8	0.0	23.0
		25	12	21.5	21.2	21.6	21.8	22.0	0.0	23.0
		25	25	21.4	21.1	21.5	21.8	21.9	0.0	23.0
	16QAM	50	0	21.4	21.1	21.5	21.7	21.9	0.0	23.0
		1	0	21.6	20.9	21.2	21.6	21.6	0.0	23.0
		1	25	21.5	21.1	21.6	21.9	22.0	0.0	23.0
		1	49	21.5	20.7	21.3	21.6	21.6	0.0	23.0
		25	0	21.5	21.1	21.4	21.8	21.9	0.0	23.0
		25	12	21.4	21.2	21.6	21.8	22.0	0.0	23.0
	64QAM	25	25	21.4	21.1	21.5	21.8	22.0	0.0	23.0
		50	0	21.3	21.1	21.5	21.7	21.9	0.0	23.0
		1	0	21.6	21.0	21.3	21.6	21.8	0.0	23.0
		1	25	21.6	21.0	21.3	21.6	21.8	0.0	23.0
		1	49	21.5	21.1	21.4	21.6	21.8	0.0	23.0
		25	0	20.6	21.1	21.3	21.6	21.8	0.0	23.0
	256QAM	25	12	20.5	21.0	21.3	21.6	21.8	0.0	23.0
		25	25	20.5	21.1	21.2	21.6	21.9	0.0	23.0
		50	0	20.4	21.0	21.3	21.6	21.9	0.0	23.0
		1	0	18.2	18.1	18.1	18.5	18.7	2.0	21.0
		1	25	18.5	18.3	18.5	18.9	19.1	2.0	21.0
		1	49	18.1	17.9	18.2	18.5	18.8	2.0	21.0
	5 MHz	QPSK	25	0	18.5	18.3	18.4	18.7	19.0	2.0
25			12	18.5	18.3	18.6	18.8	19.1	2.0	21.0
25			25	18.5	18.2	18.5	18.8	19.1	2.0	21.0
50			0	18.4	18.2	18.5	18.7	19.0	2.0	21.0
50			0	18.4	18.2	18.5	18.7	19.0	2.0	21.0
5 MHz	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
5 MHz	QPSK	1	0	21.5	21.1	21.5	21.8	21.9	0.0	23.0
		1	12	21.5	21.2	21.6	21.9	22.1	0.0	23.0
		1	24	21.5	21.1	21.5	21.7	21.9	0.0	23.0
		12	0	21.5	21.2	21.5	21.8	21.9	0.0	23.0
		12	7	21.5	21.2	21.6	21.8	22.0	0.0	23.0
		12	13	21.4	21.2	21.6	21.8	21.9	0.0	23.0
	16QAM	25	0	21.4	21.2	21.5	21.8	21.9	0.0	23.0
		1	0	21.4	21.3	21.5	21.8	22.1	0.0	23.0
		1	12	21.5	21.3	21.6	21.9	22.2	0.0	23.0
		1	24	21.5	21.3	21.5	21.8	22.1	0.0	23.0
		12	0	21.5	21.1	21.5	21.9	21.9	0.0	23.0
		12	7	21.4	21.1	21.7	21.9	22.0	0.0	23.0
	64QAM	12	13	21.4	21.1	21.7	21.9	21.9	0.0	23.0
		25	0	21.4	21.2	21.5	21.8	21.9	0.0	23.0
		1	0	21.6	21.3	21.5	21.8	22.1	0.0	23.0
		1	12	21.6	21.3	21.5	21.8	22.1	0.0	23.0
		1	24	21.6	21.2	21.5	21.8	22.1	0.0	23.0
		12	0	20.6	21.3	21.4	21.8	22.1	0.0	23.0
	256QAM	12	7	20.5	21.2	21.5	21.8	22.1	0.0	23.0
		12	13	20.5	21.3	21.4	21.8	22.1	0.0	23.0
		25	0	20.5	21.3	21.5	21.8	22.1	0.0	23.0
		1	0	18.5	18.2	18.4	18.7	18.9	2.0	21.0
		1	12	18.5	18.3	18.6	18.8	19.1	2.0	21.0
		1	24	18.3	18.2	18.5	18.7	19.0	2.0	21.0
	5 MHz	256QAM	12	0	18.6	18.3	18.5	18.8	19.0	2.0
12			7	18.5	18.3	18.6	18.8	19.0	2.0	21.0
12			13	18.5	18.3	18.6	18.8	19.0	2.0	21.0
12			13	18.5	18.3	18.6	18.8	19.0	2.0	21.0
25			0	18.5	18.3	18.6	18.8	19.0	2.0	21.0

LTE Band 41-Power Class 2 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor 1 & 3back-off							MPR	Tune-up Limit
				Measured Pwr (dBm)								
				39750	40185	40620	41055	41490				
20 MHz	QPSK	1	0	21.4	21.1	21.3	21.3	21.4	0.0	23.0		
		1	49	21.4	21.0	21.8	21.7	21.8	0.0	23.0		
		1	99	21.3	20.9	21.6	21.2	21.8	0.0	23.0		
		50	0	21.4	21.0	21.6	21.5	21.6	0.0	23.0		
		50	24	21.4	21.0	21.9	21.6	21.8	0.0	23.0		
		50	50	21.3	20.9	21.8	21.5	21.8	0.0	23.0		
	16QAM	100	0	21.3	20.9	21.7	21.5	21.7	0.0	23.0		
		1	0	21.8	21.4	21.7	21.7	21.8	0.0	23.0		
		1	49	21.9	21.6	21.9	22.1	22.1	0.0	23.0		
		1	99	21.7	21.3	22.0	21.5	22.2	0.0	23.0		
		50	0	21.4	21.0	21.6	21.5	21.7	0.0	23.0		
		50	24	21.3	21.0	21.9	21.6	21.9	0.0	23.0		
	64QAM	50	50	21.3	20.9	21.8	21.5	21.9	0.0	23.0		
		100	0	21.2	20.9	21.7	21.5	21.7	0.0	23.0		
		1	0	21.7	21.4	21.1	21.7	21.6	0.0	23.0		
		1	49	21.8	21.4	21.1	21.7	21.6	0.0	23.0		
		1	99	21.7	21.4	21.2	21.6	21.7	0.0	23.0		
		50	0	21.5	21.4	21.1	21.6	21.7	0.0	23.0		
	256QAM	50	24	21.4	21.3	21.1	21.6	21.7	0.0	23.0		
		50	50	21.3	21.3	21.1	21.7	21.7	0.0	23.0		
		100	0	21.3	21.4	21.1	21.7	21.7	0.0	23.0		
		1	0	20.3	19.8	20.0	20.6	20.5	2.0	21.0		
		1	49	20.8	20.2	20.6	21.0	21.1	2.0	21.0		
		1	99	20.3	19.6	20.3	20.6	21.0	2.0	21.0		
15 MHz	QPSK	50	0	20.3	20.0	20.2	20.6	20.7	2.0	21.0		
		50	24	20.4	20.1	20.5	20.7	20.9	2.0	21.0		
		50	50	20.3	19.9	20.4	20.6	21.0	2.0	21.0		
		100	0	20.3	20.0	20.4	20.6	20.8	2.0	21.0		
		1	0	21.5	20.8	21.0	21.5	21.5	0.0	23.0		
		1	37	21.5	21.0	21.4	21.7	21.9	0.0	23.0		
	16QAM	1	74	21.4	20.7	21.2	21.4	21.8	0.0	23.0		
		36	0	21.5	20.9	21.1	21.5	21.7	0.0	23.0		
		36	20	21.4	21.0	21.3	21.6	21.8	0.0	23.0		
		36	39	21.3	20.9	21.3	21.6	21.9	0.0	23.0		
		75	0	21.3	20.9	21.3	21.5	21.7	0.0	23.0		
		1	0	21.8	21.1	21.4	21.8	21.9	0.0	23.0		
	64QAM	1	37	21.8	21.3	21.7	22.0	22.2	0.0	23.0		
		1	74	21.7	20.9	21.5	21.7	22.1	0.0	23.0		
		36	0	21.5	20.9	21.1	21.5	21.7	0.0	23.0		
		36	20	21.4	21.0	21.3	21.6	21.8	0.0	23.0		
		36	39	21.3	20.9	21.3	21.6	21.9	0.0	23.0		
		75	0	21.3	20.9	21.3	21.5	21.8	0.0	23.0		
	256QAM	1	0	21.8	21.2	21.5	21.8	21.9	0.0	23.0		
		1	37	21.8	21.2	21.4	21.9	21.9	0.0	23.0		
		1	74	21.7	21.2	21.5	21.8	21.9	0.0	23.0		
		36	0	21.5	21.2	21.4	21.9	21.9	0.0	23.0		
		36	20	21.4	21.2	21.5	21.8	21.9	0.0	23.0		
		36	39	21.4	21.2	21.5	21.9	21.9	0.0	23.0		
256QAM	75	0	21.3	21.2	21.4	21.9	21.9	0.0	23.0			
	1	0	20.4	20.2	20.3	20.7	20.8	2.0	21.0			
	1	37	20.7	20.3	20.6	20.9	21.2	2.0	21.0			
	1	74	20.4	20.0	20.4	20.6	21.1	2.0	21.0			
	36	0	20.4	20.1	20.3	20.6	20.8	2.0	21.0			
	36	20	20.4	20.1	20.5	20.7	20.9	2.0	21.0			
256QAM	36	39	20.4	20.0	20.5	20.7	21.0	2.0	21.0			
	75	0	20.3	20.0	20.4	20.6	20.8	2.0	21.0			

LTE Band 41-Power Class 2 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
10 MHz	QPSK	1	0	21.5	20.8	21.1	21.5	21.7	0.0	23.0
		1	25	21.5	21.1	21.5	21.8	22.0	0.0	23.0
		1	49	21.5	20.8	21.1	21.5	21.7	0.0	23.0
		25	0	21.5	21.1	21.3	21.6	21.9	0.0	23.0
		25	12	21.5	21.2	21.5	21.7	22.0	0.0	23.0
		25	25	21.4	21.0	21.4	21.7	22.0	0.0	23.0
	16QAM	50	0	21.4	21.1	21.4	21.6	21.9	0.0	23.0
		1	0	21.8	21.1	21.5	21.8	21.9	0.0	23.0
		1	25	21.9	21.4	21.8	22.1	22.3	0.0	23.0
		1	49	21.8	21.0	21.6	21.8	22.0	0.0	23.0
		25	0	21.6	21.1	21.3	21.7	21.9	0.0	23.0
		25	12	21.5	21.2	21.4	21.8	22.0	0.0	23.0
	64QAM	25	25	21.5	21.1	21.4	21.7	22.0	0.0	23.0
		50	0	21.4	21.1	21.4	21.6	21.9	0.0	23.0
		1	0	21.8	21.3	21.5	21.8	22.0	0.0	23.0
		1	25	21.9	21.3	21.5	21.9	22.0	0.0	23.0
		1	49	21.8	21.2	21.5	21.8	22.0	0.0	23.0
		25	0	21.6	21.3	21.5	21.8	22.0	0.0	23.0
	256QAM	25	12	21.5	21.3	21.5	21.8	22.0	0.0	23.0
		25	25	21.5	21.3	21.5	21.8	22.0	0.0	23.0
		50	0	21.4	21.2	21.5	21.8	22.0	0.0	23.0
		1	0	20.4	20.1	20.4	20.6	20.8	2.0	21.0
		1	25	20.7	20.4	20.8	21.0	21.2	2.0	21.0
		1	49	20.3	20.0	20.5	20.7	21.0	2.0	21.0
	5 MHz	QPSK	25	0	20.5	20.2	20.4	20.7	21.0	2.0
25			12	20.5	20.3	20.6	20.8	21.1	2.0	21.0
25			25	20.4	20.2	20.6	20.8	21.1	2.0	21.0
50			0	20.4	20.2	20.5	20.7	21.0	2.0	21.0
1			0	21.5	21.0	21.3	21.6	21.9	0.0	23.0
1			12	21.5	21.1	21.4	21.7	22.0	0.0	23.0
16QAM		1	24	21.5	21.0	21.3	21.7	21.9	0.0	23.0
		12	0	21.5	21.1	21.4	21.7	21.9	0.0	23.0
		12	7	21.5	21.2	21.5	21.7	22.0	0.0	23.0
		12	13	21.5	21.1	21.4	21.7	21.9	0.0	23.0
		25	0	21.4	21.1	21.4	21.7	21.9	0.0	23.0
		1	0	21.8	21.5	21.7	22.0	22.0	0.0	23.0
64QAM		1	12	21.9	21.6	21.8	22.1	22.1	0.0	23.0
		1	24	21.8	21.5	21.8	22.0	22.0	0.0	23.0
		12	0	21.5	21.1	21.3	21.9	22.0	0.0	23.0
		12	7	21.5	21.1	21.4	21.9	22.0	0.0	23.0
		12	13	21.4	21.1	21.4	21.9	22.0	0.0	23.0
		25	0	21.4	21.1	21.4	21.7	22.0	0.0	23.0
256QAM		1	0	22.0	21.4	21.7	22.0	22.3	0.0	23.0
		1	12	22.0	21.4	21.7	22.0	22.3	0.0	23.0
		1	24	21.9	21.4	21.7	22.0	22.3	0.0	23.0
		12	0	21.6	21.4	21.7	22.0	22.2	0.0	23.0
		12	7	21.5	21.4	21.8	22.0	22.3	0.0	23.0
		12	13	21.5	21.4	21.8	22.0	22.3	0.0	23.0
256QAM		25	0	21.5	21.4	21.8	22.0	22.3	0.0	23.0
	1	0	20.8	20.2	20.6	20.9	21.0	2.0	21.0	
	1	12	20.8	20.4	20.7	21.0	21.2	2.0	21.0	
	1	24	20.7	20.3	20.6	20.9	21.1	2.0	21.0	
	12	0	20.6	20.3	20.5	20.9	21.1	2.0	21.0	
	12	7	20.5	20.3	20.6	20.9	21.1	2.0	21.0	
256QAM	12	13	20.5	20.3	20.6	20.8	21.1	2.0	21.0	
	25	0	20.5	20.3	20.6	20.8	21.1	2.0	21.0	
	25	0	20.5	20.3	20.6	20.8	21.1	2.0	21.0	

9.4. NR (Sub 6GHz)

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS 138.521-1 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS138.521-1.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power 3

Modulation	MPR (dB)		
	Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM Pi/2 BPSK	≤ 3.5 ¹	≤ 1.2 ¹	≤ 0.2 ¹
DFT-s-OFDM QPSK	≤ 1	≤ 0.5 ²	0 ²
DFT-s-OFDM 16 QAM	≤ 2	≤ 2.5	≤ 1
DFT-s-OFDM 64 QAM		≤ 4.5	
DFT-s-OFDM 256 QAM		≤ 3	≤ 1.5
CP-OFDM QPSK	≤ 3	≤ 3	≤ 2
CP-OFDM 16 QAM		≤ 3.5	
CP-OFDM 64 QAM		≤ 6.5	
CP-OFDM 256 QAM			

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0dB MPR is 26dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40% of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

The allowed A-MPR values specified below in Table 6.2.3.3.1-1 of 3GPP TS138.521-1 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of “NS_01”

Table 6.2.3.3.1-1: Additional maximum power reduction (A-MPR)

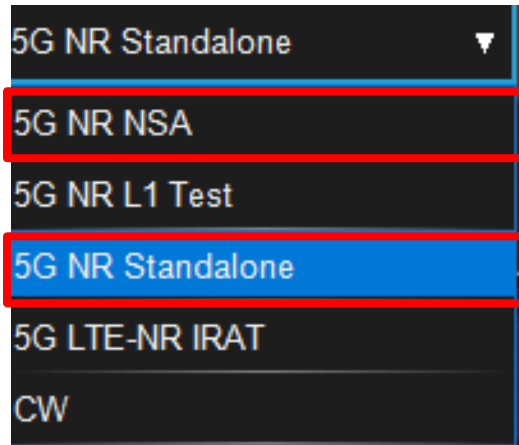
Network Signalling label	Requirements (subclause)	NR Band	Channel bandwidth (MHz)	Resources Blocks (N _{RB})	A-MPR (dB)
NS_01		Table 5.2-1	5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100	Table 5.3.2-1	N/A

Uplink RB allocations were used to Table 6.1-1 of the 3GPP TS 138.521-1.

Channel Bandwidth	SCS(kHz)	OFDM	RB allocation							
			Edge_Full_Left	Edge_Full_Right	Edge_1RB_Left	Edge_1RB_Right	Outer_Full	Inner_Full	Inner_1RB_Left	Inner_1RB_Right
5MHz	15	DFT-s	2@0	2@23	1@0	1@24	25@0	12@6	1@1	1@23
		CP	2@0	2@23	1@0	1@24	25@0	13@6	1@1	1@23
	30	DFT-s	2@0	2@9	1@0	1@10	10@0	5@2 ¹	1@1	1@9
		CP	2@0	2@9	1@0	1@10	11@0	5@2 ¹	1@1	1@9
	60	DFT-s	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		CP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10MHz	15	DFT-s	2@0	2@50	1@0	1@51	50@0	25@12	1@1	1@50
		CP	2@0	2@50	1@0	1@51	52@0	26@13	1@1	1@50
	30	DFT-s	2@0	2@22	1@0	1@23	24@0	12@6	1@1	1@22
		CP	2@0	2@22	1@0	1@23	24@0	12@6	1@1	1@22
	60	DFT-s	2@0	2@9	1@0	1@10	10@0	5@2 ¹	1@1	1@9
		CP	2@0	2@9	1@0	1@10	11@0	5@2 ¹	1@1	1@9
15MHz	15	DFT-s	2@0	2@77	1@0	1@78	75@0	38@18	1@1	1@77
		CP	2@0	2@77	1@0	1@78	79@0	39@19 ¹	1@1	1@77
	30	DFT-s	2@0	2@36	1@0	1@37	38@0	19@9	1@1	1@36
		CP	2@0	2@36	1@0	1@37	38@0	19@9	1@1	1@36
	60	DFT-s	2@0	2@16	1@0	1@17	18@0	9@4	1@1	1@16
		CP	2@0	2@16	1@0	1@17	18@0	9@4	1@1	1@16
20MHz	15	DFT-s	2@0	2@104	1@0	1@105	106@0	53@26	1@1	1@104
		CP	2@0	2@104	1@0	1@105	106@0	53@26	1@1	1@104
	30	DFT-s	2@0	2@49	1@0	1@50	50@0	25@12	1@1	1@49
		CP	2@0	2@49	1@0	1@50	51@0	25@12 ¹	1@1	1@49
	60	DFT-s	2@0	2@22	1@0	1@23	24@0	12@6	1@1	1@22
		CP	2@0	2@22	1@0	1@23	24@0	12@6	1@1	1@22

Procedure used to establish power measurement for NR Bands

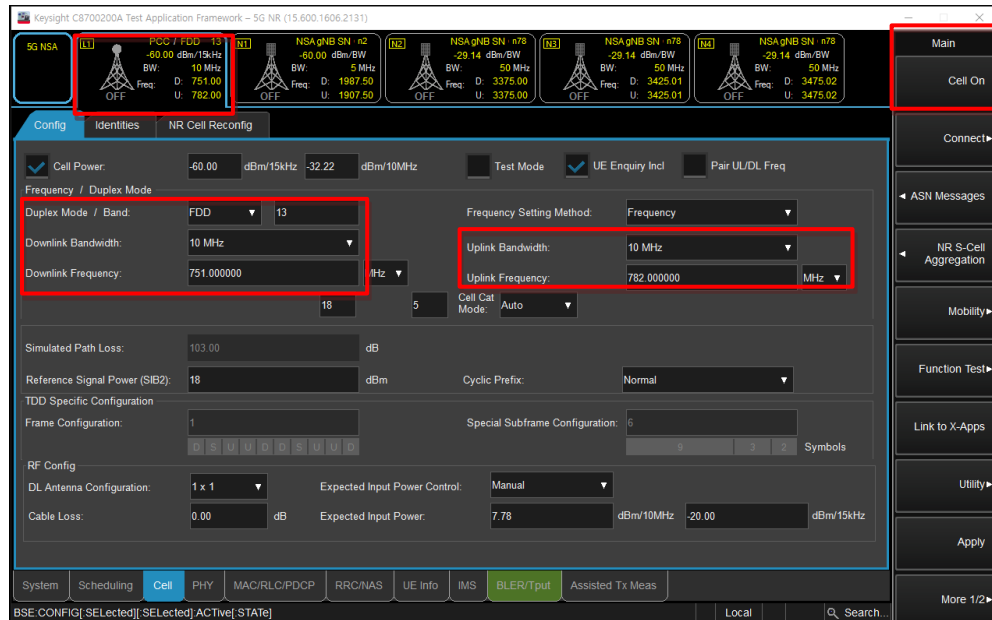
- **SA mode** : Select 5G NR Standalone in Test application Mode, then select Switch TA mode.
- **NSA mode** : Select 5G NR NSA in Test application Mode, then select Switch TA mode.



(Figure-1)

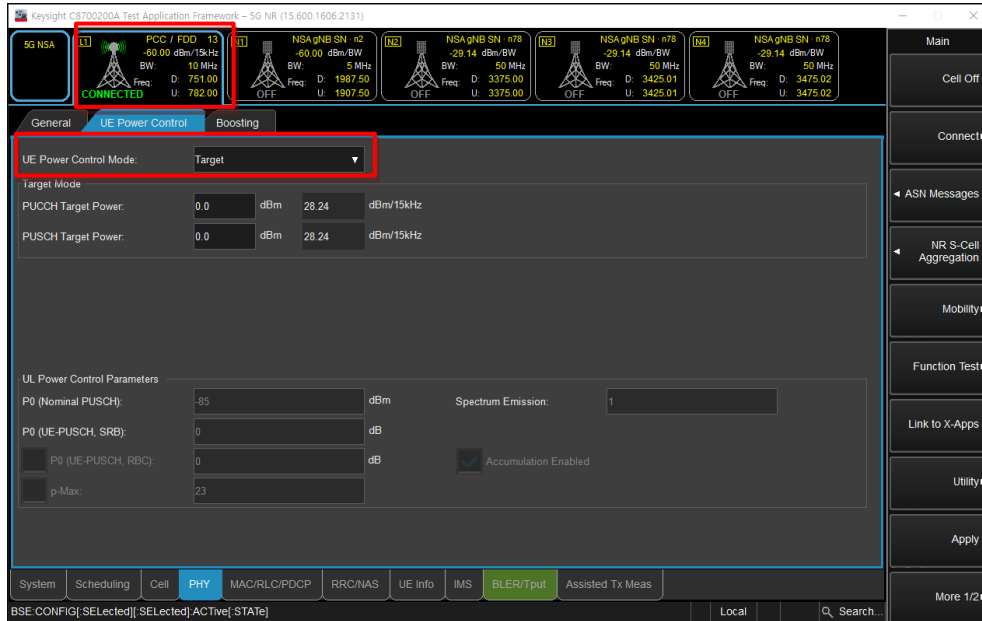
Setup for LTE Band (Apply to Only NSA mode)

- Select operating band, BW and Channel.
- Click Cell on button in the right of Test application screen.
- Turn the LTE Cell On using “ON | OFF” Key.



(Figure-2)

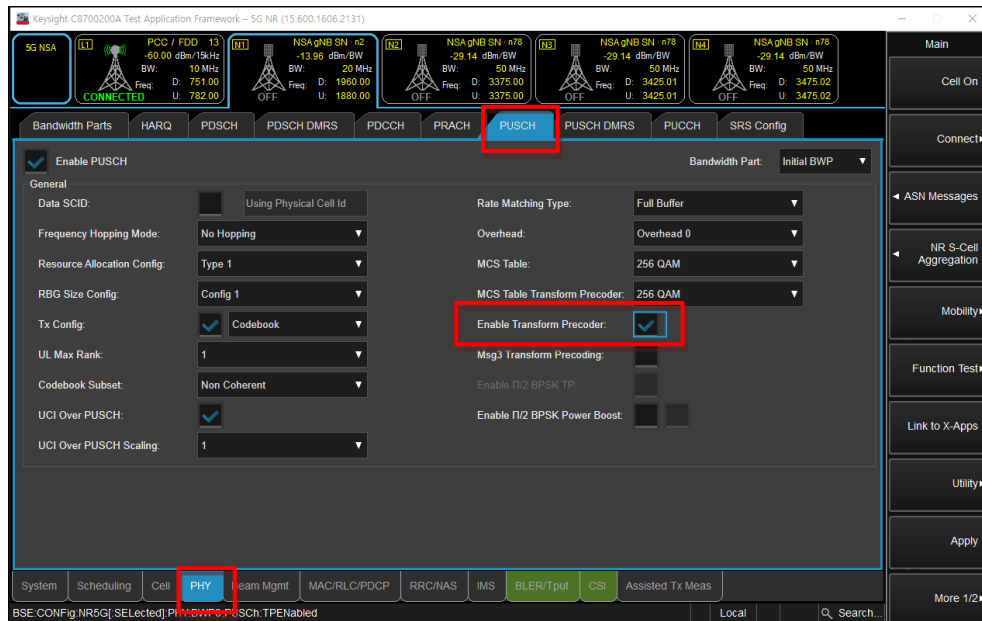
- Turn the Airplane Mode On and then turn the Airplane mode off.
- Select All down bits for UL Power control Mode in LTE.



(Figure-3)

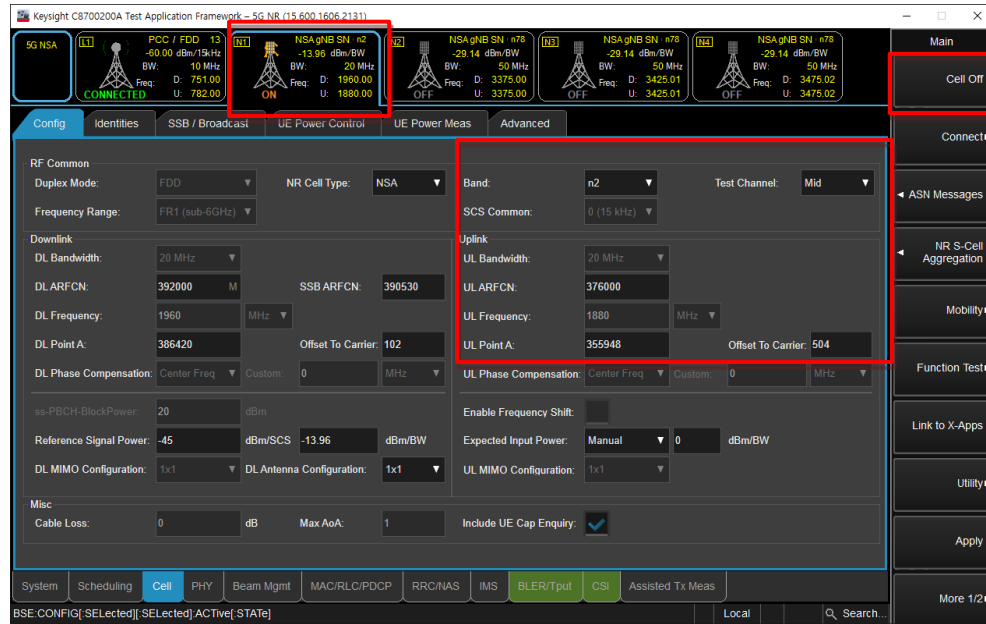
Setup for NR Band (Apply to Both SA / NSA mode)

- Select waveform for Setting NR Band (PHY -> PUSCH -> Enable Transform Precoder).
- Enable : DFT-s-OFDM, Disable : CP-OFDM



(Figure-4)

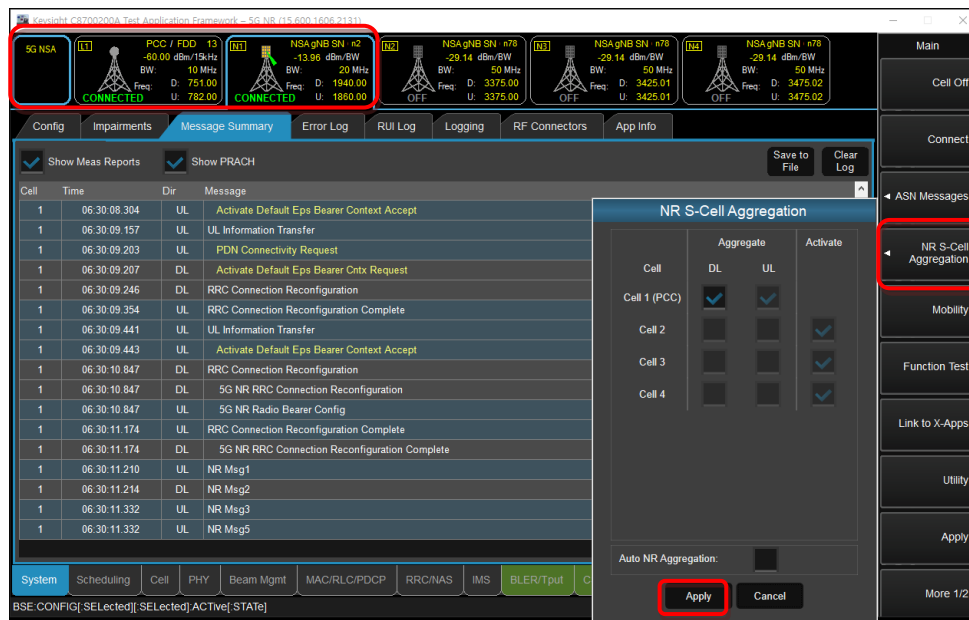
- Select operating band, BW, SCS and Channel.
- Turn the NR Cell On using “ON | OFF” Key.



(Figure-5)

Connect NR S-Cell Aggregation

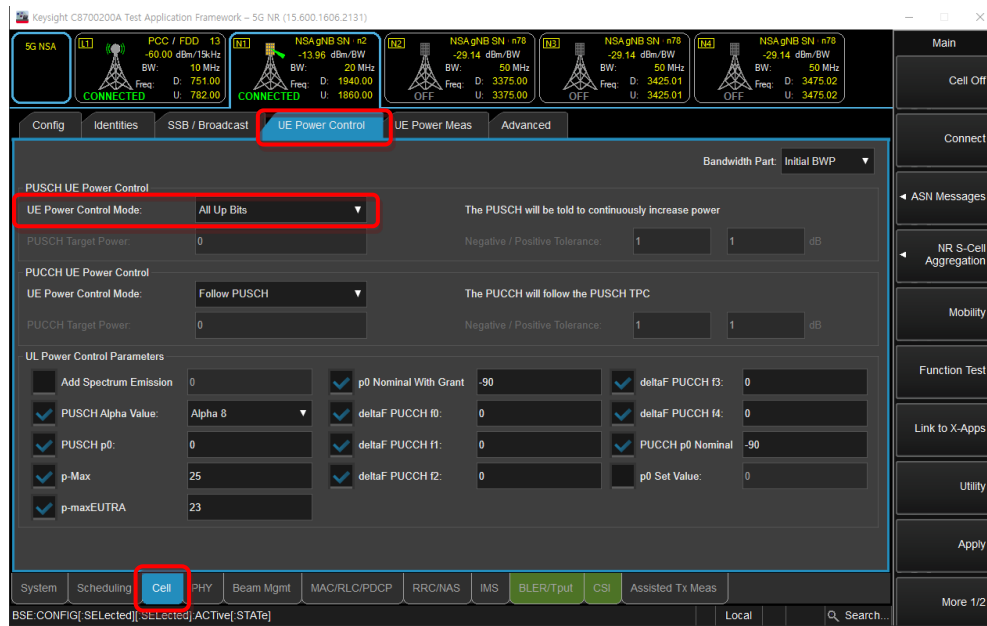
- Click NR S-Cell Aggregation.
- Check the Cell 1’s DL and UL box (PCC) and then Click Apply.
- Check the message summary If message shows NR Msg 5, It is connected.



(Figure-6)

Max power setting

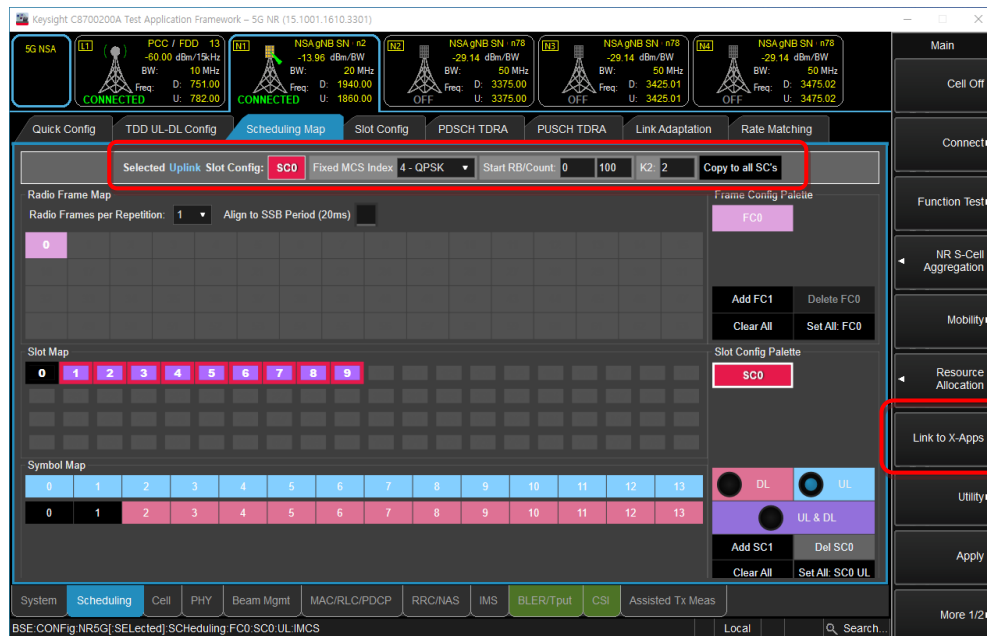
- Click “Cell” in the bottom of screen.
- Click “UE Power control” than change UE Power control mode to All Up bits.



(Figure-7)

Selecting Start RB/Count/MCS

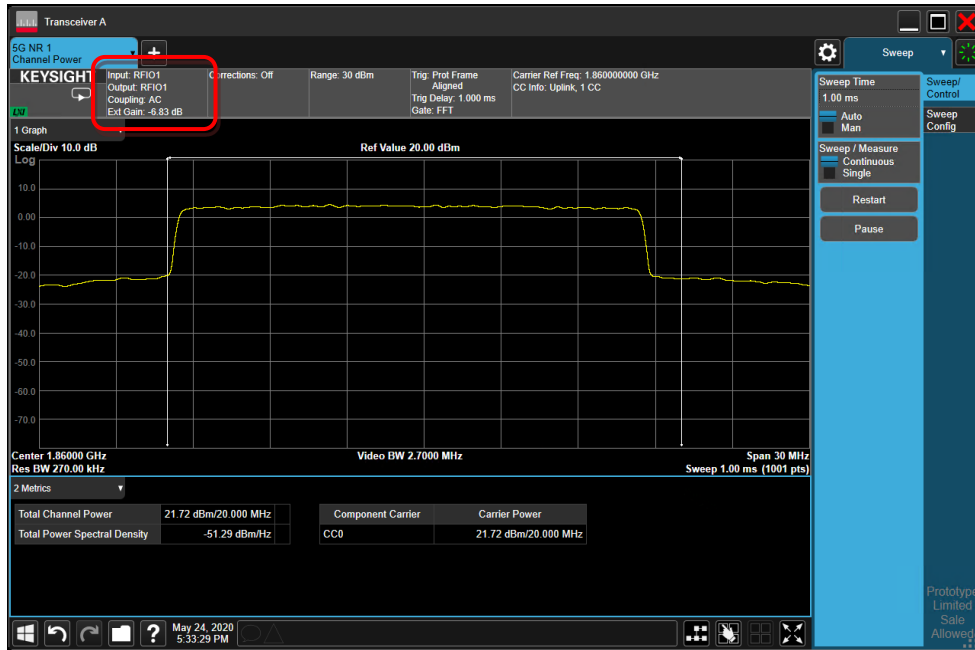
- Select the each test configuration (Start RB, Count, MCS).



(Figure-8)

View Tx Power

- Click “Link to X-Apps”. (Please refer to Figure-7)
- Select “ Channel Power”.



(Figure-9)

NR Band n5 Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					Reduced Average Power (dBm) Proximity sensor.2 back-off				
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					166800	167300	167800			166800	167300	167800		
					834 MHz	836.5 MHz	839 MHz			834 MHz	836.5 MHz	839 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1		24.3		0.0	25.0		16.3		0.0	17.0
			1	53		24.0		0.0	25.0		16.3		0.0	17.0
			1	104		23.9		0.0	25.0		16.2		0.0	17.0
			50	0		24.1		0.5	24.5		16.4		0.0	17.0
			50	25		24.2		0.0	25.0		16.5		0.0	17.0
			50	54		24.0		0.5	24.5		16.4		0.0	17.0
			100	0		24.2		0.5	24.5		16.5		0.0	17.0
		QPSK	1	1		24.1		0.0	25.0		16.3		0.0	17.0
			1	53		24.1		0.0	25.0		16.3		0.0	17.0
			1	104		24.0		0.0	25.0		16.2		0.0	17.0
			50	0		22.5		1.0	24.0		16.5		0.0	17.0
			50	25		24.2		0.0	25.0		16.5		0.0	17.0
			50	54		22.4		1.0	24.0		16.4		0.0	17.0
			100	0		22.5		1.0	24.0		16.5		0.0	17.0
		16QAM	1	1		23.8		1.0	24.0		16.5		0.0	17.0
		64QAM	1	1		22.3		2.5	22.5		16.5		0.0	17.0
256QAM	1	1		19.4		4.5	20.5		16.5		0.0	17.0		
CP-OFDM	QPSK	1	1		23.0		1.5	23.5		16.4		0.0	17.0	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					Measured Pwr (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					166300	167300	168300			166300	167300	168300		
					831.5 MHz	836.5 MHz	841.5 MHz			831.5 MHz	836.5 MHz	841.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1		24.0		0.0	25.0		16.3		0.0	17.0
			1	40		24.1		0.0	25.0		16.4		0.0	17.0
			1	77		24.0		0.0	25.0		16.3		0.0	17.0
			36	0		24.2		0.5	24.5		16.4		0.0	17.0
			36	18		24.3		0.0	25.0		16.5		0.0	17.0
			36	43		24.1		0.5	24.5		16.4		0.0	17.0
			75	0		24.2		0.5	24.5		16.4		0.0	17.0
		QPSK	1	1		24.1		0.0	25.0		16.3		0.0	17.0
			1	40		24.1		0.0	25.0		16.4		0.0	17.0
			1	77		24.0		0.0	25.0		16.3		0.0	17.0
			36	0		22.6		1.0	24.0		16.5		0.0	17.0
			36	18		24.3		0.0	25.0		16.4		0.0	17.0
			36	43		22.5		1.0	24.0		16.4		0.0	17.0
			75	0		22.6		1.0	24.0		16.5		0.0	17.0
		16QAM	1	1		22.6		1.0	24.0		16.6		0.0	17.0
		64QAM	1	1		22.2		2.5	22.5		16.7		0.0	17.0
256QAM	1	1		19.4		4.5	20.5		16.5		0.0	17.0		
CP-OFDM	QPSK	1	1		21.4		1.5	23.5		16.4		0.0	17.0	

NR Band n5 Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					165800	167300	168800			165800	167300	168800		
					829 MHz	836.5 MHz	844 MHz			829 MHz	836.5 MHz	844 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1		23.8		0.0	25.0		15.8		0.0	17.0
			1	26		23.6		0.0	25.0		15.9		0.0	17.0
			1	50		23.5		0.0	25.0		15.8		0.0	17.0
			25	0		23.6		0.5	24.5		15.9		0.0	17.0
			25	12		23.6		0.0	25.0		15.9		0.0	17.0
			25	27		23.6		0.5	24.5		15.9		0.0	17.0
		QPSK	50	0		23.6		0.5	24.5		15.9		0.0	17.0
			1	1		23.6		0.0	25.0		15.8		0.0	17.0
			1	26		23.7		0.0	25.0		15.9		0.0	17.0
			1	50		23.5		0.0	25.0		15.8		0.0	17.0
			25	0		23.6		1.0	24.0		15.9		0.0	17.0
			25	12		23.7		0.0	25.0		15.9		0.0	17.0
		16QAM	25	27		23.6		1.0	24.0		15.8		0.0	17.0
			50	0		23.6		1.0	24.0		15.9		0.0	17.0
			16QAM	1	1		23.6		1.0	24.0		15.5		0.0
		64QAM	1	1		21.8		2.5	22.5		15.9		0.0	17.0
256QAM	1		1		19.5		4.5	20.5		16.0		0.0	17.0	
CP-OFDM	QPSK	1	1		22.6		1.5	23.5		15.8		0.0	17.0	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					165300	167300	169300			165300	167300	169300		
					826.5 MHz	836.5 MHz	846.5 MHz			826.5 MHz	836.5 MHz	846.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.6	23.6	23.7	0.0	25.0	15.8	15.8	15.8	0.0	17.0
			1	13	23.5	23.6	23.4	0.0	25.0	15.8	15.9	15.7	0.0	17.0
			1	23	23.6	23.7	23.4	0.0	25.0	15.9	15.9	15.8	0.0	17.0
			12	0	23.6	23.6	23.4	0.5	24.5	15.9	15.9	15.7	0.0	17.0
			12	6	23.5	23.7	23.4	0.0	25.0	15.8	15.9	15.7	0.0	17.0
			12	13	23.6	23.7	23.5	0.5	24.5	15.8	15.9	15.7	0.0	17.0
		QPSK	25	0	23.6	23.7	23.5	0.5	24.5	15.8	15.9	15.7	0.0	17.0
			1	1	23.7	23.7	23.6	0.0	25.0	15.9	15.9	15.8	0.0	17.0
			1	13	23.6	23.7	23.5	0.0	25.0	15.9	15.9	15.8	0.0	17.0
			1	23	23.6	23.7	23.5	0.0	25.0	15.8	15.9	15.7	0.0	17.0
			12	0	23.6	23.6	23.6	1.0	24.0	15.9	15.8	15.7	0.0	17.0
			12	6	23.6	23.7	23.5	0.0	25.0	15.8	15.9	15.7	0.0	17.0
		16QAM	12	13	23.6	23.7	23.5	1.0	24.0	15.8	15.9	15.7	0.0	17.0
			25	0	23.6	23.7	23.5	1.0	24.0	15.8	15.9	15.7	0.0	17.0
			16QAM	1	1	23.9	23.7	23.7	1.0	24.0	15.9	15.8	15.8	0.0
		64QAM	1	1	21.8	21.8	21.6	2.5	22.5	16.0	16.3	15.8	0.0	17.0
256QAM	1		1	19.4	19.5	19.4	4.5	20.5	16.1	16.1	15.9	0.0	17.0	
CP-OFDM	QPSK	1	1	22.6	22.6	22.5	1.5	23.5	15.9	16.0	15.8	0.0	17.0	

NR Band n66 Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					Reduced Average Power (dBm) Proximity sensor back-off				
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000			344000	349000	354000		
					1720 MHz	1745 MHz	1770 MHz			1720 MHz	1745 MHz	1770 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.9	24.2	24.1	0.0	25.0	14.1	14.3	14.1	0.0	15.0
			1	53	24.0	24.1	24.0	0.0	25.0	14.1	14.2	14.0	0.0	15.0
			1	104	24.2	24.2	24.0	0.0	25.0	14.2	14.3	14.1	0.0	15.0
			50	0	22.2	22.4	22.4	0.5	24.5	14.0	14.2	14.1	0.0	15.0
			50	25	24.2	24.2	24.1	0.0	25.0	14.2	14.2	14.1	0.0	15.0
			50	54	22.4	22.5	22.3	0.5	24.5	14.2	14.2	14.1	0.0	15.0
			100	0	22.4	22.5	22.3	0.5	24.5	14.1	14.3	14.1	0.0	15.0
		QPSK	1	1	23.9	24.2	24.1	0.0	25.0	13.9	14.3	14.1	0.0	15.0
			1	53	24.0	24.1	24.0	0.0	25.0	14.0	14.2	14.0	0.0	15.0
			1	104	24.2	24.2	24.1	0.0	25.0	14.2	14.2	14.1	0.0	15.0
			50	0	22.2	22.4	22.3	1.0	24.0	14.0	14.2	14.1	0.0	15.0
			50	25	24.2	24.2	24.1	0.0	25.0	14.2	14.2	14.1	0.0	15.0
			50	54	22.4	22.4	22.3	1.0	24.0	14.2	14.2	14.1	0.0	15.0
		16QAM	1	1	23.4	23.7	23.4	1.0	24.0	14.3	14.5	14.3	0.0	15.0
64QAM	1		1	22.5	21.9	22.0	2.5	22.5	14.0	14.6	14.3	0.0	15.0	
256QAM	1		1	19.9	20.2	20.2	4.5	20.5	14.2	14.6	14.5	0.0	15.0	
CP-OFDM	QPSK	1	1	22.7	23.0	22.8	1.5	23.5	14.0	14.3	14.2	0.0	15.0	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					343500	349000	354500			343500	349000	354500		
					1717.5 MHz	1745 MHz	1772.5 MHz			1717.5 MHz	1745 MHz	1772.5 MHz		
					15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.9	24.1	24.0	0.0	25.0
1	40	24.0	24.1	23.9				0.0	25.0	14.0	14.1	14.0	0.0	15.0
1	77	24.1	24.2	24.0				0.0	25.0	14.2	14.2	14.1	0.0	15.0
36	0	22.2	22.4	22.3				0.5	24.5	14.0	14.2	14.1	0.0	15.0
36	18	24.1	24.2	24.0				0.0	25.0	14.0	14.2	14.1	0.0	15.0
36	43	22.4	22.4	22.3				0.5	24.5	14.2	14.2	14.1	0.0	15.0
75	0	22.4	22.4	22.2				0.5	24.5	14.0	14.2	14.0	0.0	15.0
QPSK	1	1	23.9	24.2			24.0	0.0	25.0	13.9	14.2	14.0	0.0	15.0
	1	40	24.0	24.1			23.9	0.0	25.0	13.9	14.1	14.0	0.0	15.0
	1	77	24.2	24.2			24.0	0.0	25.0	14.1	14.2	14.1	0.0	15.0
	36	0	22.3	22.4			22.3	1.0	24.0	14.0	14.2	14.1	0.0	15.0
	36	18	24.2	24.2			24.0	0.0	25.0	14.0	14.2	14.1	0.0	15.0
	36	43	22.4	22.4			22.3	1.0	24.0	14.2	14.2	14.1	0.0	15.0
16QAM	1	1	23.0	23.5			23.4	1.0	24.0	14.4	14.4	14.5	0.0	15.0
	64QAM	1	1	22.0	22.3	21.9	2.5	22.5	14.2	14.4	14.3	0.0	15.0	
	256QAM	1	1	20.0	20.1	19.8	4.5	20.5	14.1	14.2	14.1	0.0	15.0	
CP-OFDM	QPSK	1	1	22.6	22.9	22.7	1.5	23.5	14.0	14.3	14.1	0.0	15.0	

NR Band n66 Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					343000	349000	355000			343000	349000	355000		
					1715 MHz	1745 MHz	1775 MHz			1715 MHz	1745 MHz	1775 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.7	24.0	23.9	0.0	25.0	13.8	14.0	14.0	0.0	15.0
			1	26	23.9	24.1	23.9	0.0	25.0	13.9	14.2	14.0	0.0	15.0
			1	50	23.9	24.1	23.9	0.0	25.0	14.0	14.1	14.0	0.0	15.0
			25	0	22.0	22.3	22.1	0.5	24.5	13.8	14.1	14.0	0.0	15.0
			25	12	23.9	24.1	23.9	0.0	25.0	13.9	14.2	14.0	0.0	15.0
			25	27	22.1	22.3	22.1	0.5	24.5	14.0	14.1	14.0	0.0	15.0
			50	0	22.1	22.3	22.1	0.5	24.5	13.8	14.2	14.0	0.0	15.0
		QPSK	1	1	23.7	24.1	23.9	0.0	25.0	13.8	14.0	14.0	0.0	15.0
			1	26	23.9	24.1	24.0	0.0	25.0	13.9	14.2	14.1	0.0	15.0
			1	50	23.9	24.1	23.9	0.0	25.0	14.0	14.1	14.0	0.0	15.0
			25	0	22.1	22.3	22.1	1.0	24.0	13.8	14.1	13.9	0.0	15.0
			25	12	23.9	24.1	23.9	0.0	25.0	13.8	14.1	14.0	0.0	15.0
			25	27	22.1	22.3	22.1	1.0	24.0	13.9	14.1	14.0	0.0	15.0
			50	0	22.1	22.3	22.1	1.0	24.0	13.8	14.1	14.0	0.0	15.0
		16QAM	1	1	23.0	23.3	23.1	1.0	24.0	14.0	14.2	14.1	0.0	15.0
		64QAM	1	1	21.7	22.1	21.9	2.5	22.5	14.1	14.3	14.2	0.0	15.0
		256QAM	1	1	19.4	19.9	19.7	4.5	20.5	14.1	14.4	14.2	0.0	15.0
		CP-OFDM	QPSK	1	1	22.5	22.8	22.6	1.5	23.5	13.8	14.1	14.0	0.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					342500	349000	355500			342500	349000	355500		
					1712.5 MHz	1745 MHz	1777.5 MHz			1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.7	24.1	23.9	0.0	25.0	13.8	14.2	14.0	0.0	15.0
			1	13	23.9	24.1	23.9	0.0	25.0	13.9	14.2	14.0	0.0	15.0
			1	23	23.9	24.1	23.9	0.0	25.0	13.9	14.2	14.0	0.0	15.0
			12	0	22.1	22.3	22.1	0.5	24.5	13.8	14.2	13.9	0.0	15.0
			12	6	23.9	24.1	23.9	0.0	25.0	13.9	14.2	14.0	0.0	15.0
			12	13	22.1	22.3	22.2	0.5	24.5	13.8	14.1	14.0	0.0	15.0
			25	0	22.1	22.3	22.1	0.5	24.5	13.8	14.2	14.0	0.0	15.0
		QPSK	1	1	23.8	24.1	23.9	0.0	25.0	13.9	14.2	14.0	0.0	15.0
			1	13	23.9	24.1	24.0	0.0	25.0	13.9	14.2	14.1	0.0	15.0
			1	23	23.9	24.1	23.9	0.0	25.0	13.9	14.2	13.9	0.0	15.0
			12	0	22.0	22.3	22.1	1.0	24.0	13.8	14.2	14.0	0.0	15.0
			12	6	23.8	24.0	23.9	0.0	25.0	13.9	14.1	13.9	0.0	15.0
			12	13	22.1	22.3	22.3	1.0	24.0	13.9	14.2	14.0	0.0	15.0
			25	0	22.2	22.3	22.1	1.0	24.0	13.9	14.1	14.0	0.0	15.0
		16QAM	1	1	23.2	23.6	23.2	1.0	24.0	14.2	14.5	14.1	0.0	15.0
		64QAM	1	1	21.9	22.0	21.7	2.5	22.5	14.0	14.3	14.4	0.0	15.0
		256QAM	1	1	19.7	19.9	19.8	4.5	20.5	13.8	14.3	14.1	0.0	15.0
		CP-OFDM	QPSK	1	1	22.5	22.8	22.7	1.5	23.5	13.9	14.2	14.0	0.0

Proximity sensor 1 & 3's Reduced power results

NR Band n5 Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor 1 & 3 back-off				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					166800 834 MHz	167300 836.5 MHz	167800 839 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	[REDACTED]	19.9	[REDACTED]	0.0	21.0
			1	53		20.1		0.0	21.0
			1	104		20.0		0.0	21.0
			50	0		20.1		0.0	21.0
			50	25		20.2		0.0	21.0
			50	54		20.1		0.0	21.0
			100	0		20.1		0.0	21.0
		QPSK	1	1		19.9		0.0	21.0
			1	53		20.0		0.0	21.0
			1	104		20.0		0.0	21.0
			50	0		20.1		0.0	21.0
			50	25		20.2		0.0	21.0
			50	54		20.1		0.0	21.0
			100	0		20.2		0.0	21.0
	16QAM	1	1	20.1		0.0		21.0	
64QAM	1	1	20.1	0.0	21.0				
256QAM	1	1	19.5	0.0	21.0				
CP-OFDM	QPSK	1	1	20.1	0.0	21.0			
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					166300 831.5 MHz	167300 836.5 MHz	168300 841.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	[REDACTED]	20.0	[REDACTED]	0.0	21.0
			1	40		20.1		0.0	21.0
			1	77		20.1		0.0	21.0
			36	0		19.8		0.0	21.0
			36	18		19.9		0.0	21.0
			36	43		19.8		0.0	21.0
			75	0		19.9		0.0	21.0
		QPSK	1	1		19.7		0.0	21.0
			1	40		19.8		0.0	21.0
			1	77		19.7		0.0	21.0
			36	0		19.8		0.0	21.0
			36	18		19.9		0.0	21.0
			36	43		19.8		0.0	21.0
			75	0		19.9		0.0	21.0
		16QAM	1	1		19.8		0.0	21.0
		64QAM	1	1		19.7		0.0	21.0
		256QAM	1	1		19.8		0.0	21.0
	CP-OFDM	QPSK	1	1		19.8		0.0	21.0

NR Band n5 Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165800	167300	168800		
					829 MHz	836.5 MHz	844 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	[REDACTED]	19.9	[REDACTED]	0.0	21.0
			1	26		20.0		0.0	21.0
			1	50		20.1		0.0	21.0
			25	0		20.1		0.0	21.0
			25	12		20.2		0.0	21.0
			25	27		20.1		0.0	21.0
			50	0		20.1		0.0	21.0
		QPSK	1	1		20.0		0.0	21.0
			1	26		20.1		0.0	21.0
			1	50		20.1		0.0	21.0
			25	0		20.2		0.0	21.0
			25	12		20.1		0.0	21.0
			25	27		19.8		0.0	21.0
		50	0	20.1		0.0		21.0	
16QAM	1	1	20.0	0.0	21.0				
64QAM	1	1	20.0	0.0	21.0				
256QAM	1	1	19.7	0.0	21.0				
CP-OFDM	QPSK	1	1	19.7	0.0	21.0			
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165300	167300	169300		
					826.5 MHz	836.5 MHz	846.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	19.9	19.8	19.9	0.0	21.0
			1	13	19.8	19.7	19.7	0.0	21.0
			1	23	19.9	19.8	19.8	0.0	21.0
			12	0	19.9	19.8	19.9	0.0	21.0
			12	6	19.9	19.8	19.8	0.0	21.0
			12	13	19.9	19.9	19.9	0.0	21.0
			25	0	19.9	19.9	19.8	0.0	21.0
		QPSK	1	1	19.9	19.8	19.9	0.0	21.0
			1	13	19.8	19.8	19.8	0.0	21.0
			1	23	19.9	19.9	19.8	0.0	21.0
			12	0	19.9	19.8	19.9	0.0	21.0
			12	6	19.9	19.8	19.8	0.0	21.0
			12	13	19.9	19.8	20.0	0.0	21.0
		25	0	20.0	19.9	19.9	0.0	21.0	
		16QAM	1	1	20.2	20.0	20.1	0.0	21.0
		64QAM	1	1	20.2	20.1	20.1	0.0	21.0
		256QAM	1	1	19.6	19.4	19.7	0.0	21.0
CP-OFDM	QPSK	1	1	20.2	20.1	20.3	0.0	21.0	

9.5. EN-DC (LTE anchor + NR)

For EN-DC configurations of Main 1 Ant., LTE anchor and NR(NSA) Bands are operate 3 dB lower than LTE standalone and NR(SA) bands during triggering proximity sensor.

But EN-DC configuration of Main 2 Ant, There operate same target power for both SA and NSA. So the configuration is not consider at this section. Output power result are refer to Sec.9.3 and 9.4.

EN-DC combinations	Band	Antenna	Back-off	Standalone LTE & NR SAR Tune-up Limit (dBm)		EN-DC Tune-up Limit (dBm)	
				Proximity Sensor.2	Proximity Sensor.1&3	Proximity Sensor.2	Proximity Sensor.1&3
LTE B2 - NR Bn5	LTE Band 2	Main 1 Ant.	On	15.0		12.0	15.0
	NR Band n5	Main 1 Ant.	On	17.0	21.0	14.0	21.0
LTE B66 - NR Bn5	LTE Band 66	Main 1 Ant.	On	15.0		12.0	15.0
	NR Band n5	Main 1 Ant.	On	17.0	21.0	14.0	21.0
LTE B5 - NR Bn66	LTE Band 5	Main 1 Ant.	On	17.0	22.0	14.0	22.0
	NR Band n66	Main 1 Ant.	On	15.0		12.0	15.0
LTE B12 - NR Bn66	LTE Band 12	Main 1 Ant.	On	17.0		14.0	17.0
	NR Band n66	Main 1 Ant.	On	15.0		12.0	15.0
LTE B13 - NR Bn66	LTE Band 13	Main 1 Ant.	On	17.0		14.0	17.0
	NR Band n66	Main 1 Ant.	On	15.0		12.0	15.0

According to November.2019 TCB Workshop, 5G NR FR1 NSA EN-DC UE SAR test Guidance as follows;

When the maximum output for EN-DC is less than the standalone test configuration

- NR is configured according to the highest standalone SAR configuration tested.
- LTE anchor is configured according to procedures used for power measurement and parameters (BW, RB, etc.) similar to that used for NR.
- When the reported SAR for and EN-DC configuration is greater than 1.2 W/kg, EN-DC SAR is also required for other NR-based test channels
- EN-DC SAR is also required for standalone NR configurations greater that 1.2 W/kg when scaled to the EN-DC power level.

● LTE anchor & NR (NSA) output power results;

NR(NSA) Band n5 Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor.2 back-off				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					166800 834 MHz	167300 836.5 MHz	167800 839 MHz		
20 MHz	DFT-s-OFDM	QPSK	1	1		13.8		0.0	14.0
			1	53		13.8		0.0	14.0
			1	104		13.6		0.0	14.0
			50	0		13.5		0.0	14.0
			50	25		13.4		0.0	14.0
			50	54		13.7		0.0	14.0
			100	0		13.5		0.0	14.0

NR(NSA) Band n66 Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor.2 back-off				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					344000 1720 MHz	349000 1745 MHz	354000 1770 MHz		
20 MHz	DFT-s-OFDM	QPSK	1	1	11.4	11.6	11.5	0.0	12.0
			1	53	11.5	11.5	11.4	0.0	12.0
			1	104	11.4	11.5	11.5	0.0	12.0
			50	0	11.4	11.5	11.3	0.0	12.0
			50	25	11.4	11.5	11.4	0.0	12.0
			50	54	11.4	11.5	11.4	0.0	12.0
			100	0	11.5	11.6	11.6	0.0	12.0

LTE anchor Band 2 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor.2 back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				18700 1860 MHz	18900 1880 MHz	19100 1900 MHz		
20 MHz	QPSK	1	0	11.0	11.2	11.4	0.0	12.0
		1	49	11.2	11.3	11.5	0.0	12.0
		1	99	11.2	11.3	11.4	0.0	12.0
		50	0	11.0	11.1	11.3	0.0	12.0
		50	24	11.2	11.3	11.6	0.0	12.0
		50	50	11.2	11.3	11.5	0.0	12.0
		100	0	11.1	11.2	11.4	0.0	12.0

LTE anchor Band 5 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor.2 back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				20450 829 MHz	20525 836.5 MHz	20600 844 MHz		
10 MHz	QPSK	1	0		12.3		0.0	14.0
		1	49		12.4		0.0	14.0
		1	99		12.3		0.0	14.0
		50	0		12.4		0.0	14.0
		50	24		12.4		0.0	14.0
		50	50		12.5		0.0	14.0
		100	0		12.4		0.0	14.0

LTE anchor Band 12 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor.2 back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				23060 704 MHz	23095 707.5 MHz	23130 711 MHz		
10 MHz	QPSK	1	0		12.2		0.0	14.0
		1	49		13.2		0.0	14.0
		1	99		12.4		0.0	14.0
		50	0		12.9		0.0	14.0
		50	24		13.3		0.0	14.0
		50	50		13.2		0.0	14.0
		100	0		13.1		0.0	14.0

LTE anchor Band 13 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor.2 back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit
					23230 782 MHz			
10 MHz	QPSK	1	0		12.4		0.0	14.0
		1	49		12.4		0.0	14.0
		1	99		12.5		0.0	14.0
		50	0		12.3		0.0	14.0
		50	24		12.4		0.0	14.0
		50	50		12.5		0.0	14.0
		100	0		12.3		0.0	14.0

LTE anchor Band 66 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Proximity sensor.2 back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				132072 1720 MHz	132322 1745 MHz	132572 1770 MHz		
20 MHz	QPSK	1	0	11.0	11.0	11.1	0.0	12.0
		1	49	11.1	11.5	11.5	0.0	12.0
		1	99	11.0	11.2	11.2	0.0	12.0
		50	0	11.0	11.1	11.1	0.0	12.0
		50	24	11.1	11.4	11.3	0.0	12.0
		50	50	11.0	11.1	10.9	0.0	12.0
		100	0	11.0	11.2	11.0	0.0	12.0

Note(s):

LTE anchor and NR(NSA) bands's SAR test results are listed in Section.10.

9.6. Wi-Fi 2.4 GHz (DTS Band)

Normal WLAN SISO output power results

Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	WLAN mode power					
					Max. Average Power			Reduced Average Power		
					Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
WiFi 2.4G Ant.1	802.11b	1 Mbps	1	2412.0	16.6	18.0	Yes	12.1	13.0	Yes
			6	2437.0	17.0			12.0		
			11	2462.0	16.5			12.0		
			12	2467.0	Not Required	9.0	No	Not Required	9.0	No
			13	2472.0	Not Required	-2.0	No	Not Required	-2.0	No
WiFi 2.4G Ant.2	802.11b	1 Mbps	1	2412.0	17.5	18.0	Yes	12.3	13.0	Yes
			6	2437.0	17.1			11.5		
			11	2462.0	17.0			12.0		
			12	2467.0	Not Required	9.0	No	Not Required	9.0	No
			13	2472.0	Not Required	-2.0	No	Not Required	-2.0	No

Normal WLAN MIMO output power results

Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	WLAN mode power					
					Max. Average Power			Reduced Average Power		
					Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
WiFi 2.4G Ant.1	802.11b	1 Mbps	1	2412.0	16.5	18.0	Yes	12.2	13.0	Yes
			6	2437.0	16.8			11.9		
			11	2462.0	16.4			12.0		
			12	2467.0	Not Required	6.0	No	Not Required	6.0	No
			13	2472.0	Not Required	-5.0	No	Not Required	-5.0	No
	802.11g	6 Mbps	1	2412.0	Not Required	18.0	Yes	Not Required	13.0	Yes
			6	2437.0						
			11	2462.0		6.0	No		6.0	No
			12	2467.0						
	13	2472.0	-5.0	No	-5.0	No				
	802.11n	6.5 Mbps	1	2412.0	Not Required	18.0	Yes	Not Required	13.0	Yes
			6	2437.0						
			11	2462.0		6.0	No		6.0	No
			12	2467.0						
	13	2472.0	-5.0	No	-5.0	No				
	802.11ax	7.3 Mbps	1	2412.0	Not Required	18.0	Yes	Not Required	13.0	Yes
6			2437.0							
11			2462.0	6.0		No	6.0		No	
12			2467.0							
13	2472.0	-5.0	No	-5.0	No					
WiFi 2.4G Ant.2	802.11b	1 Mbps	1	2412.0	16.9	18.0	Yes	12.6	13.0	Yes
			6	2437.0	16.4			11.9		
			11	2462.0	16.3			12.1		
			12	2467.0	Not Required	6.0	No	Not Required	6.0	No
			13	2472.0	Not Required	-5.0	No	Not Required	-5.0	No
	802.11g	6 Mbps	1	2412.0	Not Required	18.0	Yes	Not Required	13.0	Yes
			6	2437.0						
			11	2462.0		6.0	No		6.0	No
			12	2467.0						
	13	2472.0	-5.0	No	-5.0	No				
	802.11n	6.5 Mbps	1	2412.0	Not Required	18.0	Yes	Not Required	13.0	Yes
			6	2437.0						
			11	2462.0		6.0	No		6.0	No
			12	2467.0						
	13	2472.0	-5.0	No	-5.0	No				
	802.11ax	7.3 Mbps	1	2412.0	Not Required	18.0	Yes	Not Required	13.0	Yes
6			2437.0							
11			2462.0	6.0		No	6.0		No	
12			2467.0							
13	2472.0	-5.0	No	-5.0	No					

Note(s):

- SAR is not required for 802.11g/n modes when the adjusted SAR for 802.11b is < 1.2 W/kg.
- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) 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 802.11n/g/ax mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.
- Additionally, SAR is not required for Channels 12 and 13 because the tune-up limit and the measured output power for these two channels are no greater than those for the default test channels. Refer to §6.3.
- Normal WLAN MIMO SAR additionally were evaluated for satisfy to simultaneous transmission analysis.

RSDB WLAN SISO output power results

Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	WLAN mode power		
					Max.Average Power		
					Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
WiFi 2.4G Ant.1	802.11b	1 Mbps	1	2412.0	9.9	11.0	Yes
			6	2437.0	9.9		
			11	2462.0	9.8		
			12	2467.0	Not Required	9.0	No
			13	2472.0	Not Required		
WiFi 2.4G Ant.2	802.11b	1 Mbps	1	2412.0	9.9	11.0	Yes
			6	2437.0	10.0		
			11	2462.0	9.9		
			12	2467.0	Not Required	9.0	No
			13	2472.0	Not Required		

RSDB WLAN MIMO output power results

Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	WLAN mode power		
					Max.Average Power		
					Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
WiFi 2.4G Ant.1	802.11b	1 Mbps	1	2412.0	9.9	11.0	Yes
			6	2437.0	9.7		
			11	2462.0	9.8		
			12	2467.0	Not Required	6.0	No
			13	2472.0	Not Required		
	802.11g	6 Mbps	1	2412.0	Not Required	11.0	Yes
			6	2437.0			
			11	2462.0			
			12	2467.0		6.0	No
			13	2472.0			
	802.11n	6.5 Mbps	1	2412.0	Not Required	11.0	Yes
			6	2437.0			
			11	2462.0			
			12	2467.0		6.0	No
			13	2472.0			
	802.11ax	7.3 Mbps	1	2412.0	Not Required	11.0	Yes
			6	2437.0			
			11	2462.0			
			12	2467.0		6.0	No
			13	2472.0			
WiFi 2.4G Ant.2	802.11b	1 Mbps	1	2412.0	10.5	11.0	Yes
			6	2437.0	9.3		
			11	2462.0	9.2		
			12	2467.0	Not Required	6.0	No
			13	2472.0	Not Required		
	802.11g	6 Mbps	1	2412.0	Not Required	11.0	Yes
			6	2437.0			
			11	2462.0			
			12	2467.0		6.0	No
			13	2472.0			
	802.11n	6.5 Mbps	1	2412.0	Not Required	11.0	Yes
			6	2437.0			
			11	2462.0			
			12	2467.0		6.0	No
			13	2472.0			
	802.11ax	7.3 Mbps	1	2412.0	Not Required	11.0	Yes
			6	2437.0			
			11	2462.0			
			12	2467.0		6.0	No
			13	2472.0			

Note(s):

- SAR is not required for 802.11g/n modes when the adjusted SAR for 802.11b is < 1.2 W/kg.
- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) 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 802.11n/g/ax mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.
- Additionally, SAR is not required for Channels 12 and 13 because the tune-up limit and the measured output power for these two channels are no greater than those for the default test channels. Refer to §6.3.
- RSDB WLAN SISO & MIMO SAR additionally were evaluated for satisfy to simultaneous transmission analysis.

9.7. Wi-Fi 5GHz (U-NII Bands)

Normal WLAN MIMO Ant.1 output power Results

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	WLAN mode power					
						Max. Average Power			Reduced Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.1	5.3 (UNII 2A)	802.11a	6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT40)	13.5 Mbps	54	5270.0	16.0	17.0	Yes	Not Required	9.0	No
				62	5310.0	16.3					
		802.11ac (VHT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT80)	29.3 Mbps	58	5290.0	Not Required	16.0	No	8.2	9.0	Yes
		802.11ac (VHT160)	58.5 Mbps	Not Required		15.0	No	Not Required	8.5	No	
		802.11ax (HE20)	7.3 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE80)	36.0 Mbps	Not Required		16.0	No	Not Required	9.0	No	
	802.11ax (HE160)	72.0 Mbps	Not Required		15.0	No	Not Required	8.5	No		
	5.5 (UNII 2C)	802.11a	6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT40)	13.5 Mbps	102	5510.0	16.4	17.0	Yes	Not Required	9.0	No
				118	5590.0	16.1					
				126	5630.0	15.3					
				142	5710.0	15.6					
		802.11ac (VHT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required		17.0	Yes	Not Required	9.0	No	
		802.11ac (VHT80)	29.3 Mbps	106	5530.0	Not Required	16.0	No	8.7	9.0	Yes
				122	5610.0				8.2		
138				5690.0	8.0						
802.11ac (VHT160)	58.5 Mbps	Not Required		15.0	No	14.2	8.5	No			
802.11ax (HE20)	7.3 Mbps	Not Required		17.0	No	Not Required	9.0	No			
802.11ax (HE40)	14.6 Mbps	Not Required		17.0	No	Not Required	9.0	No			
802.11ax (HE80)	36.0 Mbps	Not Required		16.0	No	Not Required	9.0	No			
802.11ax (HE160)	72.0 Mbps	Not Required		15.0	No	Not Required	8.5	No			

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) 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 in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band 1 and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest *reported* SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band 1
 - > 1.2 W/kg, both bands should be tested independently for SAR.

Normal WLAN MIMO Ant.1 output power Results (continued)

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	WLAN mode power					
						Max. Average Power			Reduced Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.1	5.8 (UNII 3)	802.11a	6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT40)	13.5 Mbps	151	5755.0	15.7	17.0	Yes	Not Required	9.0	No
				159	5795.0	15.7					
		802.11ac (VHT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT80)	29.3 Mbps	155	5775.0	Not Required	16.0	No	8.0	9.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE80)	36.0 Mbps	Not Required		16.0	No	Not Required	9.0	No	
	5.9 (UNII 4)	802.11a	6 Mbps	Not Required		17.0	Yes	Not Required	9.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT40)	13.5 Mbps	167	5835.0	15.7	17.0	Yes	Not Required	9.0	No
				175	5875.0	15.6					
		802.11ac (VHT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT80)	29.3 Mbps	171	5855.0	Not Required	16.0	No	7.9	9.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE80)	30.6 Mbps	Not Required		16.0	No	Not Required	9.0	No	
UNII 3 & UNII 4	802.11ac (VHT160)	58.5 Mbps	Not Required		15.0	No	Not Required	8.5	No		
	802.11ax (HE160)	72.0 Mbps	Not Required		15.0	No	Not Required	8.5	No		

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) 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 in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.

Normal WLAN MIMO Ant.2 output power Results

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	WLAN mode power					
						Max. Average Power			Reduced Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.2	5.3 (UNII 2A)	802.11a	6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT40)	13.5 Mbps	54	5270.0	16.0	17.0	Yes	Not Required	9.0	No
				62	5310.0	15.6					
		802.11ac (VHT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT80)	29.3 Mbps	Not Required		16.0	No	8.4	9.0	Yes	
		802.11ac (VHT160)	58.5 Mbps	Not Required		15.0	No	Not Required	8.5	No	
		802.11ax (HE20)	7.3 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE80)	30.6 Mbps	Not Required		16.0	No	Not Required	9.0	No	
	802.11ax (HE160)	72.0 Mbps	Not Required		15.0	No	Not Required	8.5	No		
	5.5 (U-NII 2C)	802.11a	6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT40)	13.5 Mbps	102	5510.0	15.9	17.0	Yes	Not Required	9.0	No
				118	5590.0	15.7					
				126	5630.0	15.8					
				142	5710.0	15.9					
		802.11ac (VHT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT80)	29.3 Mbps	106	5530.0	Not Required	16.0	No	8.2	9.0	Yes
				122	5610.0				8.1		
138				5690.0	8.3						
802.11ac (VHT160)	58.5 Mbps	Not Required		15.0	No	Not Required	8.5	No			
802.11ax (HE20)	7.3 Mbps	Not Required		17.0	No	Not Required	9.0	No			
802.11ax (HE40)	14.6 Mbps	Not Required		17.0	No	Not Required	9.0	No			
802.11ax (HE80)	36.0 Mbps	Not Required		16.0	No	Not Required	9.0	No			
802.11ax (HE160)	72.0 Mbps	Not Required		15.0	No	Not Required	8.5	No			

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) 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 in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.

Normal WLAN MIMO Ant.2 output power Results (continued)

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	WLAN mode power					
						Max. Average Power			Reduced Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.2	5.8 (UNII 3)	802.11a	6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT40)	13.5 Mbps	151	5755.0	16.1	17.0	Yes	Not Required	9.0	No
				159	5795.0	16.1					
		802.11ac (VHT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT80)	29.3 Mbps	155	5775.0	Not Required	16.0	No	8.5	9.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE80)	36.0 Mbps	Not Required		16.0	No	Not Required	9.0	No	
	5.9 (UNII 4)	802.11a	6 Mbps	Not Required		17.0	Yes	Not Required	9.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11n (HT40)	13.5 Mbps	167	5835.0	15.6	17.0	Yes	Not Required	9.0	No
				175	5875.0	15.7					
		802.11ac (VHT20)	6.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ac (VHT80)	29.3 Mbps	171	5855.0	Not Required	16.0	No	8.0	9.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required		17.0	No	Not Required	9.0	No	
		802.11ax (HE80)	30.6 Mbps	Not Required		16.0	No	Not Required	9.0	No	
UNII 3 & UNII 4	802.11ac (VHT160)	58.5 Mbps	Not Required		15.0	No	Not Required	8.5	No		
	802.11ax (HE160)	72.0 Mbps	Not Required		15.0	No	Not Required	8.5	No		

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) 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 in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.

RSDB WLAN MIMO Ant 1 & 2 output power Results

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB WLAN mode power		
						Max Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.1	5.3 (UNII2A)	802.11a	6 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT80)	29.3 Mbps	58	5290.0	6.4	7.0	Yes
		802.11ac (VHT160)	58.5 Mbps	Not Required	Not Required	6.5	No	
		802.11ax (HE20)	7.3 Mbps	Not Required	Not Required	7.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required	Not Required	7.0	No	
		802.11ax (HE80)	36.0 Mbps	Not Required	Not Required	7.0	No	
	802.11ax (HE160)	72.0 Mbps	Not Required	Not Required	6.5	No		
	5.5 (UNII2C)	802.11a	6 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT80)	29.3 Mbps	106	5530.0	6.9	7.0	Yes
				122	5610.0	6.4		
				138	5690.0	6.1		
		802.11ac (VHT160)	58.5 Mbps	Not Required	Not Required	6.5	No	
802.11ax (HE20)		7.3 Mbps	Not Required	Not Required	7.0	No		
802.11ax (HE40)	14.6 Mbps	Not Required	Not Required	7.0	No			
802.11ax (HE80)	36.0 Mbps	Not Required	Not Required	7.0	No			
802.11ax (HE160)	72.0 Mbps	Not Required	Not Required	6.5	No			

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB WLAN mode power		
						Max Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.2	5.3 (UNII2A)	802.11a	6 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT80)	29.3 Mbps	Not Required	Not Required	6.5	7.0	Yes
		802.11ac (VHT160)	58.5 Mbps	Not Required	Not Required	6.5	No	
		802.11ax (HE20)	7.3 Mbps	Not Required	Not Required	7.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required	Not Required	7.0	No	
		802.11ax (HE80)	36.0 Mbps	Not Required	Not Required	7.0	No	
	802.11ax (HE160)	72.0 Mbps	Not Required	Not Required	6.5	No		
	5.5 (UNII2C)	802.11a	6 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT80)	29.3 Mbps	106	5530.0	6.4	7.0	Yes
				122	5610.0	6.2		
				138	5690.0	6.5		
		802.11ac (VHT160)	58.5 Mbps	Not Required	Not Required	6.5	No	
802.11ax (HE20)		7.3 Mbps	Not Required	Not Required	7.0	No		
802.11ax (HE40)	14.6 Mbps	Not Required	Not Required	7.0	No			
802.11ax (HE80)	36.0 Mbps	Not Required	Not Required	7.0	No			
802.11ax (HE160)	72.0 Mbps	Not Required	Not Required	6.5	No			

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) 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 in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.
- RSDB WLAN MIMO SAR additionally were evaluated for satisfy to simultaneous transmission analysis.

RSDB WLAN MIMO Ant 1 & 2 output power Results (Continued)

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB WLAN mode power		
						Max Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.1	5.8 (UNII 3)	802.11a	6 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT80)	29.3 Mbps	155	5775.0	6.2	7.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required	Not Required	7.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required	Not Required	7.0	NO	
		802.11ax (HE80)	30.6 Mbps	Not Required	Not Required	7.0	No	
	5.9 (UNII 4)	802.11a	6 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT40)	13.5 Mbps	Not Required	Not Required	7.0	No	
		802.11ac (VHT80)	29.3 Mbps	171	5855.0	6.0	7.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required	Not Required	7.0	No	
		802.11ax (HE40)	14.6 Mbps	Not Required	Not Required	7.0	No	
		802.11ax (HE80)	30.6 Mbps	Not Required	Not Required	7.0	No	
	UNII 3 & UNII 4	802.11ac (VHT160)	14.6 Mbps	Not Required	Not Required	6.5	No	
		802.11ax (HE160)	30.6 Mbps	Not Required	Not Required	6.5	No	

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB WLAN mode power		
						Max Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5.8 (UNII 3)	802.11a	6 Mbps	Not Required	Not Required	7.0	No		
	802.11n (HT20)	6.5 Mbps	Not Required	Not Required	7.0	No		
	802.11n (HT40)	13.5 Mbps	Not Required	Not Required	7.0	No		
	802.11ac (VHT20)	6.5 Mbps	Not Required	Not Required	7.0	No		
	802.11ac (VHT40)	13.5 Mbps	Not Required	Not Required	7.0	No		
	802.11ac (VHT80)	29.3 Mbps	155	5775.0	12.2	6.7	7.0	Yes
	802.11ax (HE20)	7.3 Mbps	Not Required	Not Required	7.0	No		
	802.11ax (HE40)	14.6 Mbps	Not Required	Not Required	7.0	No		
	802.11ax (HE80)	30.6 Mbps	Not Required	Not Required	7.0	No		
	5.9 (UNII 4)	802.11a	6 Mbps	Not Required	Not Required	7.0	No	
		802.11n (HT20)	6.5 Mbps	Not Required	Not Required	7.0	No	
802.11n (HT40)		13.5 Mbps	Not Required	Not Required	7.0	No		
802.11ac (VHT20)		6.5 Mbps	Not Required	Not Required	7.0	No		
802.11ac (VHT40)		13.5 Mbps	Not Required	Not Required	7.0	No		
802.11ac (VHT80)		29.3 Mbps	171	5855.0	6.1	7.0	Yes	
802.11ax (HE20)		7.3 Mbps	Not Required	Not Required	7.0	No		
802.11ax (HE40)		14.6 Mbps	Not Required	Not Required	7.0	No		
802.11ax (HE80)		30.6 Mbps	Not Required	Not Required	7.0	No		
UNII 3 & UNII 4	802.11ac (VHT160)	14.6 Mbps	Not Required	Not Required	6.5	No		
	802.11ax (HE160)	30.6 Mbps	Not Required	Not Required	6.5	No		

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) 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 in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.
- RSDB WLAN MIMO SAR additionally were evaluated for satisfy to simultaneous transmission analysis.

9.8. Bluetooth

Bluetooth SISO Measured Results

Band (GHz)	Antenna	Mode	Ch #	Freq. (MHz)	Maximum Average Power (dBm)		Reduced Average Power (dBm)	
					Meas Pwr	Tune-up Limit	Meas Pwr	Tune-up Limit
2.4	BT SISO Ant.1	GFSK	0	2402	17.0	18.0	10.6	13.0
			39	2441	17.8		11.8	
			78	2480	16.2		10.2	
		EDR	0	2402	Not required	16.0	Not required	13.0
			39	2441				
			78	2480				
		LE	0	2402	Not required	16.0	Not required	13.0
			19	2440				
			39	2480				
		2.4	BT SISO Ant.2	GFSK	0	2402	16.9	18.0
39	2441				17.9	11.9		
78	2480				17.2	11.0		
EDR	0			2402	Not required	16.0	Not required	13.0
	39			2441				
	78			2480				
LE	0			2402	Not required	16.0	Not required	13.0
	19			2440				
	39			2480				

Note(s):

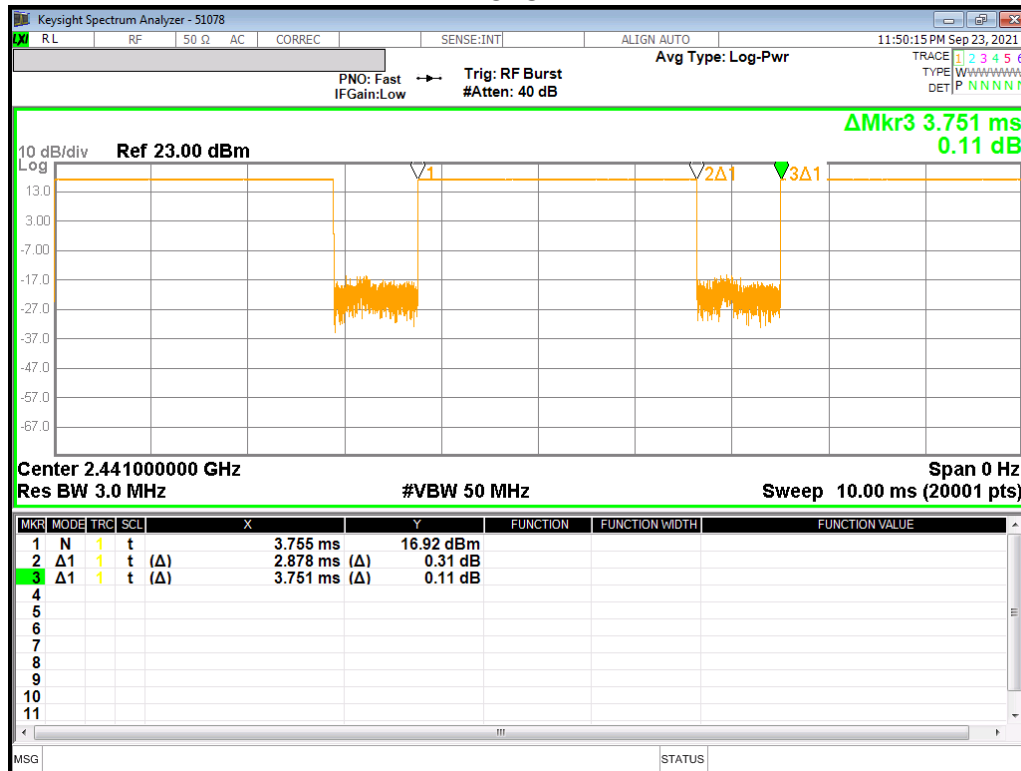
For All exposure conditions, SAR test is evaluated at GFSK mode in Bluetooth using maximum power condition.

Duty Factor Measured Results

Mode	Type	T on (ms)	Period (ms)	Duty Cycle	Crest Factor (1/duty cycle)
GFSK	DH5	2.878	3.751	76.7%	1.30

Duty Cycle plots

GFSK



10. Measured and Reported (Scaled) SAR Results

SAR Test Reduction criteria are as follows:

- Reported SAR(W/kg) for WWAN= Measured SAR *Tune-up Scaling Factor
- Reported SAR(W/kg) for Wi-Fi and Bluetooth= Measured SAR * Tune-up scaling factor * Duty Cycle scaling factor
- Duty Cycle scaling factor = 1 / Duty cycle (%)

KDB 447498 D01 General RF Exposure Guidance:

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

KDB 941225 D01 SAR test for 3G devices:

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 or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

KDB 941225 D05 SAR for LTE Devices:

SAR test reduction is applied using the following criteria:

- Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel.
- When the reported SAR is > 0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.
- Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are > 0.8 W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation < 1.45 W/kg.
- Testing for 16-QAM modulation is not required because the reported SAR for QPSK is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of QPSK.
- Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.
- For LTE bands that do not support at least three non-overlapping channels in certain channel bandwidths, test the available non-overlapping channels instead. 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; therefore, the requirement for H, M and L channels may not fully apply.

KDB 248227 D01 SAR meas for 802.11:

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the initial test position(s) by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The initial test position(s) is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the reported SAR for 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 wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- > 0.4 W/kg, SAR is repeated using the same wireless mode test 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 reported SAR is ≤ 0.8 W/kg or all required test positions are tested.
 - For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
 - When it is unclear, all equivalent conditions must be tested.
- For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required test channels are considered.
 - The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.
- When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.
- When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

To determine the initial test position, Area Scans were performed to determine the position with the *Maximum Value of SAR (measured)*. The position that produced the highest *Maximum Value of SAR* is considered the worst case position; thus used as the initial test position.

10.1. GSM 850

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	GPRS 2 Slots	Off	19	Rear	190	836.6	32.0	31.0	0.611	0.761	1
				0	Edge 1	190	836.6	32.0	31.0	0.223	0.278	
				0	Edge 3	190	836.6	32.0	31.0	0.182	0.227	
				25	Edge 4	190	836.6	32.0	31.0	0.483	0.602	
		GPRS 2 Slots	On	0	Rear	190	836.6	22.5	20.7	0.471	0.706	
				0	Edge 4	190	836.6	22.5	20.7	0.351	0.526	

10.2. GSM 1900

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	GPRS 3 Slots	Off	19	Rear	661	1880.0	27.0	26.7	0.097	0.104	
				0	Edge 1	661	1880.0	27.0	26.7	0.165	0.178	
				0	Edge 3	661	1880.0	27.0	26.7	0.140	0.151	
				25	Edge 4	661	1880.0	27.0	26.7	0.073	0.079	
		GPRS 2 Slots	On	0	Rear	661	1880.0	20.5	20.3	0.519	0.547	2
				0	Edge 4	661	1880.0	20.5	20.3	0.501	0.528	

10.3. WCDMA Band II

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	Rel 99 RMC	Off	19	Rear	9400	1880.0	25.0	24.4	0.259	0.299	
				7	Edge 1	9400	1880.0	25.0	24.4	0.108	0.125	
				9	Edge 3	9400	1880.0	25.0	24.4	0.033	0.038	
				25	Edge 4	9400	1880.0	25.0	24.4	0.212	0.245	
		Rel 99 RMC	On	0	Rear	9400	1880.0	14.5	13.6	0.573	0.712	3
				0	Edge 1	9400	1880.0	14.5	13.6	0.037	0.046	
				0	Edge 3	9400	1880.0	14.5	13.6	0.016	0.020	
				0	Edge 4	9400	1880.0	14.5	13.6	0.515	0.640	

10.4. WCDMA Band IV

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	Rel 99 RMC	Off	19	Rear	1413	1732.6	25.0	24.6	0.332	0.363	
				7	Edge 1	1413	1732.6	25.0	24.6	0.228	0.249	
				9	Edge 3	1413	1732.6	25.0	24.6	0.035	0.039	
				25	Edge 4	1413	1732.6	25.0	24.6	0.282	0.308	
		Rel 99 RMC	On	0	Rear	1413	1732.6	14.5	14.0	0.599	0.666	
				0	Edge 1	1413	1732.6	14.5	14.0	0.044	0.048	
				0	Edge 3	1413	1732.6	14.5	14.0	0.009	0.010	
				0	Edge 4	1413	1732.6	14.5	14.0	0.615	0.684	4

10.5. WCDMA Band V

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	Rel 99 RMC	Off	19	Rear	4183	836.6	25.0	24.5	0.598	0.672	
				7	Edge 1	4183	836.6	25.0	24.5	0.124	0.139	
				9	Edge 3	4183	836.6	25.0	24.5	0.087	0.097	
				25	Edge 4	4183	836.6	25.0	24.5	0.416	0.468	
		Rel 99 RMC	On	0	Rear	4183	836.6	16.5	15.7	0.670	0.799	5
				0	Edge 1	4183	836.6	21.0	20.2	0.113	0.137	
				0	Edge 3	4183	836.6	21.0	20.2	0.132	0.160	
				0	Edge 4	4183	836.6	16.5	15.7	0.458	0.546	

10.6. LTE Band 2 (20MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 2 Ant.	Standalone	QPSK	Off	19	Rear	18900	1880.0	1	49	25.0	23.6	0.239	0.333	
								50	50	24.0	23.4	0.224	0.255	
				0	Edge 1	18900	1880.0	1	49	25.0	23.6	0.155	0.216	
								50	50	24.0	23.4	0.153	0.174	
				26	Edge 2	18900	1880.0	1	49	25.0	23.6	0.188	0.262	
								50	50	24.0	23.4	0.170	0.194	
				0	Edge 3	18900	1880.0	1	49	25.0	23.6	0.288	0.401	
								50	50	24.0	23.4	0.270	0.308	
		0	Edge 4	18900	1880.0	1	49	25.0	23.6	0.013	0.018			
						50	50	24.0	23.4	0.007	0.009			
		QPSK	On	0	Rear	18900	1880.0	1	49	15.0	14.6	0.720	0.784	
								50	50	15.0	14.6	0.729	0.797	6
1	49							15.0	14.6	0.532	0.579			
50	50							15.0	14.6	0.524	0.573			

Note(s):

Main 2 Ant.'s LTE Band 2 only operate LTE anchor mode during EN-DC configurations.

10.7. LTE Band 12 (10MHz Bandwidth)**LTE standalone mode**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	Off	19	Rear	23095	707.5	1	0	25.5	24.9	0.544	0.619	
								25	12	24.5	23.9	0.470	0.539	
				7	Edge 1	23095	707.5	1	0	25.5	24.9	0.053	0.060	
								25	12	24.5	23.9	0.043	0.050	
				9	Edge 3	23095	707.5	1	0	25.5	24.9	0.037	0.043	
								25	12	24.5	23.9	0.034	0.039	
				25	Edge 4	23095	707.5	1	0	25.5	24.9	0.327	0.372	
								25	12	24.5	23.9	0.296	0.340	
		QPSK	On	0	Rear	23095	707.5	1	0	17.0	16.8	0.632	0.663	
								25	12	17.0	16.7	0.672	0.714	
				0	Edge 1	23095	707.5	1	0	17.0	16.8	0.121	0.127	
								25	12	17.0	16.7	0.105	0.112	
				0	Edge 3	23095	707.5	1	0	17.0	16.8	0.096	0.101	
								25	12	17.0	16.7	0.087	0.092	
0	Edge 4	23095	707.5	1	0	17.0	16.8	0.738	0.775					
				25	12	17.0	16.7	0.801	0.851					

LTE Band 12 anchor mode

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	On	0	Rear	23095	707.5	25	12	14.0	13.3	0.303	0.355	
				0	Edge 4	23095	707.5	25	12	14.0	13.3	0.330	0.387	

10.8. LTE Band 13 (10MHz Bandwidth)**LTE standalone mode**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	Off	19	Rear	23230	782.0	1	25	25.0	23.9	0.603	0.775	8
								25	12	24.0	22.9	0.490	0.633	
				7	Edge 1	23230	782.0	1	25	25.0	23.9	0.075	0.096	
								25	12	24.0	22.9	0.058	0.075	
				9	Edge 3	23230	782.0	1	25	25.0	23.9	0.059	0.075	
								25	12	24.0	22.9	0.046	0.059	
				25	Edge 4	23230	782.0	1	25	25.0	23.9	0.409	0.526	
								25	12	24.0	22.9	0.325	0.420	
		QPSK	On	0	Rear	23230	782.0	1	25	17.0	15.8	0.539	0.705	
								25	12	17.0	15.9	0.552	0.714	
				0	Edge 1	23230	782.0	1	25	17.0	15.8	0.029	0.038	
								25	12	17.0	15.9	0.029	0.037	
				0	Edge 3	23230	782.0	1	25	17.0	15.8	0.019	0.024	
								25	12	17.0	15.9	0.019	0.025	
0	Edge 4	23230	782.0	1	25	17.0	15.8	0.421	0.551					
				25	12	17.0	15.9	0.394	0.510					

LTE Band 13 anchor mode

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	On	0	Rear	23230	782.0	25	12	14.0	12.4	0.304	0.442	
				0	Edge 4	23230	782.0	1	25	14.0	12.4	0.213	0.309	

10.9. LTE Band 25 (20MHz Bandwidth)

LTE standalone mode

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	Off	19	Rear	26590	1905.0	1	49	25.0	24.2	0.288	0.349	
								50	24	24.0	23.2	0.225	0.272	
				7	Edge 1	26590	1905.0	1	49	25.0	24.2	0.082	0.099	
								50	24	24.0	23.2	0.062	0.075	
				9	Edge 3	26590	1905.0	1	49	25.0	24.2	0.036	0.044	
								50	24	24.0	23.2	0.027	0.033	
				25	Edge 4	26590	1905.0	1	49	25.0	24.2	0.213	0.258	
								50	24	24.0	23.2	0.165	0.200	
		QPSK	On	0	Rear	26140	1860.0	1	49	15.0	14.0	0.669	0.843	
								50	24	15.0	14.0	0.679	0.850	9
						26365	1882.5	1	49	15.0	14.1	0.668	0.816	
								50	24	15.0	14.1	0.679	0.841	
						26590	1905.0	1	49	15.0	14.2	0.710	0.849	
								50	24	15.0	14.3	0.709	0.834	
				0	Edge 1	26590	1905.0	1	49	15.0	14.2	0.056	0.066	
								50	24	15.0	14.3	0.060	0.071	
					Edge 3	26590	1905.0	1	49	15.0	14.2	0.013	0.016	
								50	24	15.0	14.3	0.017	0.020	
					Edge 4	26590	1905.0	1	49	15.0	14.2	0.599	0.716	
								50	24	15.0	14.3	0.603	0.709	

LTE Band 2 anchor mode

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	On	0	Rear	18700	1860.0	50	24	12.0	11.2	0.347	0.416	
				0	Edge 4	18700	1860.0	50	24	12.0	11.2	0.362	0.434	

10.10. LTE Band 26 (15MHz Bandwidth)

LTE standalone mode

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	Off	19	Rear	26865	831.5	1	37	25.0	24.3	0.587	0.698	
								36	20	24.0	23.2	0.481	0.585	
				7	Edge 1	26865	831.5	1	37	25.0	24.3	0.053	0.063	
								36	20	24.0	23.2	0.044	0.054	
				9	Edge 3	26865	831.5	1	37	25.0	24.3	0.037	0.044	
								36	20	24.0	23.2	0.030	0.036	
				25	Edge 4	26865	831.5	1	37	25.0	24.3	0.542	0.644	
								36	20	24.0	23.2	0.433	0.527	
		QPSK	On	0	Rear	26865	831.5	1	37	17.0	16.1	0.800	0.996	10
								36	20	17.0	16.0	0.745	0.940	
				0	Edge 1	26865	831.5	75	0	17.0	15.9	0.752	0.969	
								1	37	17.0	16.1	0.019	0.023	
				0	Edge 3	26865	831.5	36	20	17.0	16.0	0.020	0.025	
								1	37	17.0	16.1	0.014	0.017	
0	Edge 4	26865	831.5	36	20	17.0	16.0	0.013	0.016					
				1	37	17.0	16.1	0.466	0.580					
						36	20	17.0	16.0	0.447	0.564			

LTE band 5 standalone mode

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	On	0	Edge 1	20525	836.5	1	25	22.0	21.0	0.095	0.120	
								25	12	22.0	20.9	0.084	0.106	
				0	Edge 3	20525	836.5	1	25	22.0	21.0	0.070	0.088	
								25	12	22.0	20.9	0.048	0.061	

LTE Band 5 anchor mode

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	On	0	Rear	20525	836.5	1	25	14.0	12.4	0.279	0.404	
				0	Edge 4	20525	836.5	1	25	14.0	12.4	0.241	0.349	

Note(s):

For Edge.1 and Edge3, LTE band 5 has higher target power than LTE band 26. Therefore, LTE Band 5 was additionally tested at the locations.

10.11. LTE Band 41 (20MHz Bandwidth)

LTE Band 41 Power Class 3

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	Off	19	Rear	40620	2593.0	1	49	25.0	23.5	0.014	0.019	
								50	24	24.0	22.6	0.014	0.019	
				7	Edge 1	40620	2593.0	1	49	25.0	23.5	0.005	0.008	
								50	24	24.0	22.6	0.006	0.008	
				9	Edge 3	40620	2593.0	1	49	25.0	23.5	0.023	0.032	
								50	24	24.0	22.6	0.016	0.022	
				25	Edge 4	40620	2593.0	1	49	25.0	23.5	0.152	0.215	
								50	24	24.0	22.6	0.122	0.170	
		QPSK	On	0	Rear	39750	2506.0	1	49	15.0	13.5	0.615	0.865	
								50	24	15.0	13.5	0.618	0.869	
						40185	2549.5	1	49	15.0	13.1	0.655	1.007	
								50	24	15.0	13.1	0.646	0.992	
						40620	2593.0	1	49	15.0	13.7	0.783	1.065	11
								50	24	15.0	13.7	0.781	1.053	
						41055	2636.5	100	0	15.0	13.6	0.768	1.061	
								1	49	15.0	13.6	0.732	1.002	
				41490	2680.0	50	24	15.0	13.7	0.725	0.985			
						1	49	15.0	13.5	0.714	1.001			
				0	Edge 1	40620	2593.0	50	24	15.0	13.5	0.610	0.854	
								1	49	23.0	22.0	0.300	0.374	
				0	Edge 3	40620	2593.0	50	24	23.0	22.0	0.299	0.380	
								1	49	23.0	22.0	0.057	0.070	
				0	Edge 4	39750	2506.0	1	49	15.0	13.5	0.714	1.004	
								50	24	15.0	13.5	0.718	1.009	
40185	2549.5	1	49			15.0	13.1	0.607	0.933					
		50	24			15.0	13.1	0.605	0.929					
40620	2593.0	1	49			15.0	13.7	0.615	0.837					
		50	24			15.0	13.7	0.620	0.836					
41055	2636.5	100	0			15.0	13.6	0.667	0.922					
		1	49			15.0	13.6	0.705	0.965					
41490	2680.0	50	24	15.0	13.7	0.709	0.963							
		1	49	15.0	13.5	0.621	0.870							
50	24	15.0	13.5	0.625	0.875									

LTE Band 41 Power Class 2

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	Off	25	Edge 4	40620	2593.0	1	49	27.5	26.2	0.010	0.013	
		QPSK	On	0	Rear	40620	2593.0	1	49	15.5	13.8	0.488	0.728	

From May 2017 TCB workshop, Additional 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 SAR are < 1.4 or 3.5 W/kg (1-g or 10-g respectively)

Reported SAR vs. Output power linearly scaled

Antenna	RF Exposure Conditions	Power Class 2				Power Class 3				PC2 linearly scaled Reported SAR (W/kg)	Linearly scaled (<10%)
		Duty Cycle (%)	Tune-up Power (dBm)	Fram Avg. Power (dBm)	Reported SAR (W/kg)	Duty Cycle	Tune-up Power (dBm)	Fram Avg. Power (dBm)	Reported SAR (W/kg)		
Main 1 Ant.	Standalone	43.3	27.5	243.5	0.013	63.3	25.0	200.2	0.215	0.262	-95.0
		43.3	15.5	15.4	0.728	63.3	15.0	20.0	1.065	0.817	-10.9

Note(s):

SAR test for Power Class 2 is not required base on the reported SAR < 1.4 or 3.5 W/kg (1-g or 10-g respectively) and reported SAR vs. output power linearly scaled < 10%.

10.12. LTE Band 66 (20MHz Bandwidth)

LTE standalone mode

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	Off	19	Rear	132322	1745.0	1	49	25.0	24.4	0.383	0.435	
								50	24	24.0	23.5	0.298	0.335	
				7	Edge 1	132322	1745.0	1	49	25.0	24.4	0.151	0.172	
								50	24	24.0	23.5	0.113	0.127	
				9	Edge 3	132322	1745.0	1	49	25.0	24.4	0.028	0.031	
								50	24	24.0	23.5	0.021	0.024	
				25	Edge 4	132322	1745.0	1	49	25.0	24.4	0.267	0.304	
								50	24	24.0	23.5	0.206	0.231	
		QPSK	On	0	Rear	132322	1745.0	1	49	15.0	14.7	0.663	0.707	
								50	24	15.0	14.8	0.657	0.690	
				0	Edge 1	132322	1745.0	1	49	15.0	14.7	0.043	0.046	
								50	24	15.0	14.8	0.041	0.043	
				0	Edge 3	132322	1745.0	1	49	15.0	14.7	0.014	0.015	
								50	24	15.0	14.8	0.012	0.013	
				0	Edge 4	132072	1720.0	1	49	15.0	14.3	0.999	1.168	
								50	24	15.0	14.3	0.993	1.167	
						132322	1745.0	1	49	15.0	14.7	1.040	1.109	
								50	24	15.0	14.8	1.040	1.092	
						100	0	15.0	14.6	1.060	1.168			
												1	49	15.0
50	24	15.0	14.8	1.110	1.168	12								

LTE Band 66 anchor mode

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	QPSK	On	0	Rear	132322	1745.0	1	49	12.0	11.5	0.246	0.278	
					Edge 4	132322	1745.0	1	49	12.0	11.1	0.523	0.649	

10.13. NR Band n5 (20MHz Bandwidth)

SA mode

Antenna	RF Exposure Conditions	Modulation	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.			
											Tune-up limit	Meas.	Meas.	Scaled				
Main 1 Ant.	Standalone	DFT-s-OFDM	QPSK	Off	19	Rear	167300	836.5	1	53	25.0	24.1	0.669	0.820	13			
									50	25	25.0	24.2	0.658	0.788				
					7	Edge 1	167300	836.5	1	53	25.0	24.1	0.061	0.075				
									50	25	25.0	24.2	0.061	0.073				
					9	Edge 3	167300	836.5	1	53	25.0	24.1	0.095	0.117				
									50	25	25.0	24.2	0.097	0.116				
					25	Edge 4	167300	836.5	1	53	25.0	24.1	0.370	0.453				
									50	25	25.0	24.2	0.374	0.448				
		DFT-s-OFDM	QPSK	On	0	Rear	167300	836.5	1	53	17.0	16.3	0.634	0.738				
									50	25	17.0	16.5	0.614	0.692				
					0	Edge 1	167300	836.5	1	53	21.0	20.0	0.109	0.138				
									50	25	21.0	20.2	0.100	0.121				
					0	Edge 3	167300	836.5	1	53	21.0	20.0	0.109	0.138				
									50	25	21.0	20.2	0.114	0.137				
					0	Edge 4	167300	836.5	1	53	17.0	16.3	0.550	0.640				
									50	25	17.0	16.5	0.552	0.622				
					CP-OFDM	QPSK	Off	19	Rear	167300	836.5	1	1	23.5	23.0	0.379	0.422	

NSA(EN-DC) mode

Antenna	RF Exposure Conditions	Modulation	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	DFT-s-OFDM	QPSK	On	0	Rear	167300	836.5	1	53	14.0	13.8	0.331	0.347	
						Edge 4	167300	836.5	1	53	14.0	13.8	0.383	0.401	

Note(s):

CP-OFDM mode were evaluated at worst configuration of DFT-s-OFDM.

10.14. NR Band n66 (20MHz Bandwidth)

SA mode

Antenna	RF Exposure Conditions	Modulation	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	DFT-s-OFDM	QPSK	Off	19	Rear	349000	1745.0	1	1	25.0	24.2	0.294	0.356	
									50	25	25.0	24.2	0.353	0.421	
					7	Edge 1	349000	1745.0	1	1	25.0	24.2	0.133	0.161	
									50	25	25.0	24.2	0.170	0.203	
					9	Edge 3	349000	1745.0	1	1	25.0	24.2	0.032	0.039	
									50	25	25.0	24.2	0.038	0.045	
					25	Edge 4	349000	1745.0	1	1	25.0	24.2	0.303	0.366	
									50	25	25.0	24.2	0.377	0.450	
		DFT-s-OFDM	QPSK	On	0	Rear	349000	1745.0	1	1	15.0	14.3	0.593	0.702	
									50	25	15.0	14.2	0.473	0.562	
					0	Edge 1	349000	1745.0	1	1	15.0	14.3	0.050	0.059	
									50	25	15.0	14.2	0.048	0.058	
					0	Edge 3	349000	1745.0	1	1	15.0	14.3	0.016	0.019	
									50	25	15.0	14.2	0.012	0.014	
					0	Edge 4	344000	1720.0	1	1	15.0	13.9	0.828	1.058	
									50	25	15.0	14.2	0.853	1.023	
							349000	1745.0	1	1	15.0	14.3	0.881	1.043	
									50	25	15.0	14.2	0.788	0.937	
354000	1770.0	1	1	15.0	14.1	0.847	1.042								
		50	25	15.0	14.1	0.871	1.063	14							
CP-OFDM	QPSK	Off	0	Edge 4	354000	1770.0	1	1	15.0	14.3	0.867	1.022			

NSA(EN-DC) mode

Antenna	RF Exposure Conditions	Modulation	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Standalone	DFT-s-OFDM	QPSK	On	0	Rear	349000	1745.0	1	1	12.0	11.6	0.236	0.259	
					0	Edge 4	354000	1770.0	50	25	12.0	11.4	0.449	0.519	

Note(s):

CP-OFDM mode were evaluated at worst configuration of DFT-s-OFDM.

10.15. Wi-Fi (DTS Band)

Normal WLAN SISO SAR results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
2.4GHz	WLAN SISO Ant.1	802.11b 1 Mbps	Standanloe	Off	16	Rear	6	2437.0	99.3%	18.0	17.0	0.081	0.103		
					7	Edge 1	6	2437.0	99.3%	18.0	17.0	0.211	0.269		
					0	Edge 2	6	2437.0	99.3%	18.0	17.0	0.008	0.010		
					20	Edge 4	6	2437.0	99.3%	18.0	17.0	0.027	0.035		
					9	Corner A	6	2437.0	99.3%	18.0	17.0	0.072	0.092		
				On	0	Rear	1	2412.0	99.3%	13.0	12.1	0.267	0.330		
					0	Edge 1	1	2412.0	99.3%	13.0	12.1	0.406	0.502		15
					0	Edge 4	1	2412.0	99.3%	13.0	12.1	0.216	0.267		
	WLAN SISO Ant.2	802.11b 1 Mbps	Standanloe	Off	14	Rear	1	2412.0	99.3%	18.0	17.5	0.073	0.082		
					0	Edge 2	1	2412.0	99.3%	18.0	17.5	0.016	0.018		
					9	Edge 3	1	2412.0	99.3%	18.0	17.5	0.137	0.155		
					17	Edge 4	1	2412.0	99.3%	18.0	17.5	0.037	0.041		
					11	Corner B	1	2412.0	99.3%	18.0	17.5	0.061	0.069		
On				0	Rear	1	2412.0	99.3%	13.0	12.3	0.244	0.287			
				0	Edge 3	1	2412.0	99.3%	13.0	12.3	0.390	0.458		16	
				0	Edge 4	1	2412.0	99.3%	13.0	12.3	0.172	0.202			

Normal WLAN MIMO SAR results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
2.4GHz	WLAN MIMO Ant.1	802.11b 1 Mbps	Standanloe	Off	14	Rear	1	2412.0	99.3%	18.0	16.5	0.118	0.168		
					7	Edge 1	1	2412.0	99.3%	18.0	16.5	0.242	0.344		
					0	Edge 2	1	2412.0	99.3%	18.0	16.5	0.016	0.023		
					9	Edge 3	1	2412.0	99.3%	18.0	16.5				
					17	Edge 4	1	2412.0	99.3%	18.0	16.5	0.045	0.064		
					9	Corner A	1	2412.0	99.3%	18.0	16.5	0.061	0.087		
				On	11	Corner B	1	2412.0	99.3%	18.0	16.5				
					0	Rear	1	2412.0	99.3%	13.0	12.2	0.250	0.304		
					0	Edge 1	1	2412.0	99.3%	13.0	12.2	0.367	0.446		17
					0	Edge 3	1	2412.0	99.3%	13.0	12.2				
					0	Edge 4	1	2412.0	99.3%	13.0	12.2	0.199	0.242		
	WLAN MIMO Ant.2	802.11b 1 Mbps	Standanloe	Off	14	Rear	1	2412.0	99.3%	18.0	16.9	0.102	0.131		
					7	Edge 1	1	2412.0	99.3%	18.0	16.9				
					0	Edge 2	1	2412.0	99.3%	18.0	16.9				
					9	Edge 3	1	2412.0	99.3%	18.0	16.9	0.284	0.365		
					17	Edge 4	1	2412.0	99.3%	18.0	16.9	0.047	0.061		
					9	Corner A	1	2412.0	99.3%	18.0	16.9				
				On	11	Corner B	1	2412.0	99.3%	18.0	16.9	0.049	0.063		
					0	Rear	1	2412.0	99.3%	13.0	12.6	0.227	0.249		
					0	Edge 1	1	2412.0	99.3%	13.0	12.6				
	0	Edge 3	1	2412.0	99.3%	13.0	12.6	0.359	0.394						
	0	Edge 4	1	2412.0	99.3%	13.0	12.6	0.198	0.218						

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
5. SAR testing is not required for OFDM mode(s) 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.
6. Normal WLAN MIMO SAR additionally evaluated due to satisfy simultaneous transmission criteria.
7. For MIMO SAR test distance of Rear & Edge.4 side in Power back-off mode "Off" condition, It tested using Max power at the shorter distance among the triggering distance of each antennas.

Wi-Fi (DTS Band) (Continued)

RSDB WLAN SISO SAR results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
2.4GHz	WLAN SISO Ant.1	802.11b 1 Mbps	Standanloe	NA	0	Rear	6	2437.0	99.3%	11.0	9.9	0.158	0.206		
					0	Edge 1	6	2437.0	99.3%	11.0	9.9	0.191	0.249		
					0	Edge 2	6	2437.0	99.3%	11.0	9.9	<0.001	<0.001		
					0	Edge 4	6	2437.0	99.3%	11.0	9.9	0.148	0.193		
	WLAN SISO Ant.2	802.11b 1 Mbps	Standanloe	NA	0	Rear	6	2437.0	99.3%	11.0	10.0	0.094	0.120		
					0	Edge 2	6	2437.0	99.3%	11.0	10.0	0.001	0.001		
					0	Edge 3	6	2437.0	99.3%	11.0	10.0	0.199	0.253		
					0	Edge 4	6	2437.0	99.3%	11.0	10.0	0.067	0.085		

RSDB WLAN MIMO SAR results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
2.4GHz	WLAN MIMO Ant.1	802.11b 1 Mbps	Standanloe	NA	0	Rear	1	2412.0	99.3%	11.0	9.8	0.110	0.148		
					0	Edge 1	1	2412.0	99.3%	11.0	9.8	0.138	0.185		
					0	Edge 2	1	2412.0	99.3%	11.0	9.8	0.002	0.003		
					0	Edge 3	1	2412.0	99.3%	11.0	9.8				
					0	Edge 4	1	2412.0	99.3%	11.0	9.8	0.132	0.177		
	WLAN MIMO Ant.2	802.11b 1 Mbps	Standanloe	NA	0	Rear	1	2412.0	99.3%	11.0	10.5	0.129	0.145		
					0	Edge 1	1	2412.0	99.3%	11.0	10.5				
					0	Edge 2	1	2412.0	99.3%	11.0	10.5				
					0	Edge 3	1	2412.0	99.3%	11.0	10.5	0.217	0.245		
					0	Edge 4	1	2412.0	99.3%	11.0	10.5				

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
5. SAR testing is not required for OFDM mode(s) 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.
6. RSDB WLAN SISO & MIMO SAR additionally evaluated due to satisfy simultaneous transmission criteria.

10.16. Wi-Fi (U-NII Bands)

Normal U-NII 2A Results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #	Freq. (MHz)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
5.3 GHz U-NII 2A	WLAN MIMO Ant.1	802.11n HT40 13.5 Mbps	Standalone	Off	14	Rear	62	5310.0	96.1%	17.0	16.3				
					7	Edge 1	62	5310.0	96.1%	17.0	16.3	0.108	0.132		
					0	Edge 2	62	5310.0	96.1%	17.0	16.3	0.005	0.007		
					9	Edge 3	62	5310.0	96.1%	17.0	16.3				
					17	Edge 4	62	5310.0	96.1%	17.0	16.3				
					9	Corner A	62	5310.0	96.1%	17.0	16.3	0.033	0.040		
		11	Corner B	62	5310.0	96.1%	17.0	16.3							
		802.11ac VHT80 29.3 Mbps	Standalone	On	0	Rear	58	5290.0	94.6%	9.0	8.2				
					0	Edge 1	58	5290.0	94.6%	9.0	8.2	0.112	0.141		
					0	Edge 3	58	5290.0	94.6%	9.0	8.2				
	0				Edge 4	58	5290.0	94.6%	9.0	8.2					
	WLAN MIMO Ant.2	802.11n HT40 13.5 Mbps	Standalone	Off	14	Rear	62	5310.0	96.1%	17.0	15.6	0.035	0.051		
					7	Edge 1	62	5310.0	96.1%	17.0	15.6				
					0	Edge 2	62	5310.0	96.1%	17.0	15.6				
					9	Edge 3	62	5310.0	96.1%	17.0	15.6	0.296	0.429		
					17	Edge 4	62	5310.0	96.1%	17.0	15.6	0.050	0.072		
					9	Corner A	62	5310.0	96.1%	17.0	15.6				
		11	Corner B	62	5310.0	96.1%	17.0	15.6	0.086	0.125					
		802.11ac VHT80 29.3 Mbps	Standalone	On	0	Rear	58	5290.0	94.6%	9.0	8.4	0.660	0.797		
					0	Edge 1	58	5290.0	94.6%	9.0	8.4				
0					Edge 3	58	5290.0	94.6%	9.0	8.4	0.665	0.803		18	
0	Edge 4				58	5290.0	94.6%	9.0	8.4	0.066	0.080				

RSDB U-NII 2A Results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #	Freq. (MHz)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
5.3 GHz U-NII 2A	WLAN MIMO Ant.1	802.11ac VHT80 29.3 Mbps	Standalone	N/A	0	Rear	58	5290.0	94.6%	7.0	6.4				
					0	Edge 1	58	5290.0	94.6%	7.0	6.4	0.069	0.084		
					0	Edge 2	58	5290.0	94.6%	7.0	6.4	0.001	0.001		
					0	Edge 3	58	5290.0	94.6%	7.0	6.4				
					0	Edge 4	58	5290.0	94.6%	7.0	6.4				
	WLAN MIMO Ant.2	802.11ac VHT80 29.3 Mbps	Standalone	N/A	0	Rear	58	5290.0	94.6%	7.0	6.5	0.172	0.203		
					0	Edge 1	58	5290.0	94.6%	7.0	6.5				
					0	Edge 2	58	5290.0	94.6%	7.0	6.5				
					0	Edge 3	58	5290.0	94.6%	7.0	6.5	0.314	0.370		
					0	Edge 4	58	5290.0	94.6%	7.0	6.5	0.037	0.044		

Note(s):

- When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
- Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
- Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
- Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
- RSDB WLAN SAR additionally evaluated due to satisfy simultaneous transmission criteria.
- For MIMO SAR test distance of Rear & Edge.4 side in Power back-off mode "Off" condition, It tested using Max power at the shorter distance among the triggering distance of each antennas.

Normal U-NII 2C Results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
5.5 GHz U-NII 2C	WLAN MIMO Ant.1	802.11n HT40 13.5 Mbps	Standalone	Off	14	Rear	102	5510.0	96.1%	17.0	16.4				
					7	Edge 1	102	5510.0	96.1%	17.0	16.4	0.130	0.157		
					0	Edge 2	102	5510.0	96.1%	17.0	16.4				
					9	Edge 3	102	5510.0	96.1%	17.0	16.4				
					17	Edge 4	102	5510.0	96.1%	17.0	16.4	0.007	0.009		
					9	Corner A	102	5510.0	96.1%	17.0	16.4	0.044	0.053		
	0	Corner B	102	5510.0	96.1%	17.0	16.4								
	802.11ac VHT80 29.3 Mbps	Standalone	On	0	Rear	106	5530.0	94.6%	9.0	8.7					
				0	Edge 1	106	5530.0	94.6%	9.0	8.7	0.166	0.188			
				0	Edge 3	106	5530.0	94.6%	9.0	8.7					
				0	Edge 4	106	5530.0	94.6%	9.0	8.7					
	WLAN MIMO Ant.2	802.11n HT40 13.5 Mbps	Standalone	Off	14	Rear	102	5510.0	96.1%	17.0	15.9	0.047	0.063		
					7	Edge 1	102	5510.0	96.1%	17.0	15.9				
					0	Edge 2	102	5510.0	96.1%	17.0	15.9	0.010	0.013		
					9	Edge 3	102	5510.0	96.1%	17.0	15.9	0.388	0.521		
					17	Edge 4	102	5510.0	96.1%	17.0	15.9	0.017	0.022		
9					Corner A	102	5510.0	96.1%	17.0	15.9					
11		Corner B	102	5510.0	96.1%	17.0	15.9	0.134	0.180						
802.11ac VHT80 29.3 Mbps		Standalone	On	0	Rear	106	5530.0	94.6%	9.0	8.2	0.480	0.606		19	
				0	Edge 1	106	5530.0	94.6%	9.0	8.2					
				0	Edge 3	106	5530.0	94.6%	9.0	8.2	0.461	0.582			
	0			Edge 4	106	5530.0	94.6%	9.0	8.2	0.074	0.094				

RSDB U-NII 2C Results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
5.5 GHz U-NII 2C	WLAN MIMO Ant.1	802.11ac VHT80 29.3 Mbps	Standalone	N/A	0	Rear	106	5530.0	94.6%	7.0	6.9				
					0	Edge 1	106	5530.0	94.6%	7.0	6.9	0.102	0.111		
					0	Edge 2	106	5530.0	94.6%	7.0	6.9	0.001	0.001		
					0	Edge 3	106	5530.0	94.6%	7.0	6.9				
					0	Edge 4	106	5530.0	94.6%	7.0	6.9				
	WLAN MIMO Ant.2	802.11ac VHT80 29.3 Mbps	Standalone	N/A	0	Rear	106	5530.0	94.6%	7.0	6.4	0.234	0.285		
					0	Edge 1	106	5530.0	94.6%	7.0	6.4				
					0	Edge 2	106	5530.0	94.6%	7.0	6.4				
					0	Edge 3	106	5530.0	94.6%	7.0	6.4	0.294	0.359		
					0	Edge 4	106	5530.0	94.6%	7.0	6.4	0.055	0.067		

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
5. RSDB WLAN SAR additionally evaluated due to satisfy simultaneous transmission criteria.
6. For MIMO SAR test distance of Rear & Edge.4 side in Power back-off mode "Off" condition, It tested using Max power at the shorter distance among the triggering distance of each antennas.

Normal U-NII 3 Results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
5.8 GHz U-NII 3	WLAN MIMO Ant.1	802.11n HT40 13.5 Mbps	Standalone	Off	14	Rear	159	5795.0	96.1%	17.0	15.7				
					7	Edge 1	159	5795.0	96.1%	17.0	15.7	0.280	0.393		
					0	Edge 2	159	5795.0	96.1%	17.0	15.7	0.015	0.020		
					9	Edge 3	151	5755.0	96.1%	17.0	15.7				
							159	5795.0	96.1%	17.0	15.7				
					17	Edge 4	159	5795.0	96.1%	17.0	15.7				
		9	Corner A	159	5795.0	96.1%	17.0	15.7	0.159	0.223					
		11	Corner B	159	5795.0	96.1%	17.0	15.7							
		802.11ac VHT80 29.3 Mbps	Standalone	On	0	Rear	155	5775.0	94.6%	9.0	8.0				
					0	Edge 1	155	5775.0	94.6%	9.0	8.0	0.284	0.382		
	0				Edge 3	155	5775.0	94.6%	9.0	8.0					
	0				Edge 4	155	5775.0	94.6%	9.0	8.0					
	WLAN MIMO Ant.2	802.11n HT40 13.5 Mbps	Standalone	Off	14	Rear	159	5795.0	96.1%	17.0	16.1	0.074	0.095		
					7	Edge 1	159	5795.0	96.1%	17.0	16.1				
					0	Edge 2	159	5795.0	96.1%	17.0	16.1	0.024	0.031		
					9	Edge 3	151	5755.0	96.1%	17.0	16.1	0.658	0.852		20
							159	5795.0	96.1%	17.0	16.1	0.632	0.815		
					17	Edge 4	159	5795.0	96.1%	17.0	16.1	0.062	0.080		
		9	Corner A	159	5795.0	96.1%	17.0	16.1							
		11	Corner B	159	5795.0	96.1%	17.0	16.1	0.214	0.276					
802.11ac VHT80 29.3 Mbps		Standalone	On	0	Rear	155	5775.0	94.6%	9.0	8.5	0.612	0.719			
				0	Edge 1	155	5775.0	94.6%	9.0	8.5					
	0			Edge 3	155	5775.0	94.6%	9.0	8.5	0.568	0.668				
	0			Edge 4	155	5775.0	94.6%	9.0	8.5	0.132	0.155				

RSDB U-NII 3 Results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
5.8 GHz U-NII 3	WLAN MIMO Ant.1	802.11ac VHT80 29.3 Mbps	Standalone	N/A	0	Rear	155	5775.0	94.6%	7.0	6.2				
					0	Edge 1	155	5775.0	94.6%	7.0	6.2	0.192	0.246		
					0	Edge 2	155	5775.0	94.6%	7.0	6.2	0.001	0.001		
					0	Edge 3	155	5775.0	94.6%	7.0	6.2				
					0	Edge 4	155	5775.0	94.6%	7.0	6.2				
	WLAN MIMO Ant.2	802.11ac VHT80 29.3 Mbps	Standalone	N/A	0	Rear	155	5775.0	94.6%	7.0	6.7	0.382	0.437		
					0	Edge 1	155	5775.0	94.6%	7.0	6.7				
					0	Edge 2	155	5775.0	94.6%	7.0	6.7				
					0	Edge 3	155	5775.0	94.6%	7.0	6.7	0.308	0.352		
					0	Edge 4	155	5775.0	94.6%	7.0	6.7	0.089	0.102		

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
5. RSDB WLAN SAR additionally evaluated due to satisfy simultaneous transmission criteria.
6. For MIMO SAR test distance of Rear & Edge.4 side in Power back-off mode "Off" condition, It tested using Max power at the shorter distance among the triggering distance of each antennas.

Normal U-NII 4 Results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
5.9 GHz U-NII 4	WLAN MIMO Ant.1	802.11n HT40 13.5 Mbps	Standalone	Off	14	Rear	175	5875.0	96.1%	17.0	15.6	0.027	0.038		
					7	Edge 1	175	5875.0	96.1%	17.0	15.6	0.228	0.329		
					0	Edge 2	175	5875.0	96.1%	17.0	15.6	0.005	0.007		
					9	Edge 3	175	5875.0	96.1%	17.0	15.6				
					17	Edge 4	175	5875.0	96.1%	17.0	15.6				
					9	Corner A	175	5875.0	96.1%	17.0	15.6	0.154	0.222		
	11	Corner B	175	5875.0	96.1%	17.0	15.6								
	0	Rear	171	5855.0	94.6%	9.0	7.9								
	0	Edge 1	171	5855.0	94.6%	9.0	7.9	0.259	0.350						
	0	Edge 3	171	5855.0	94.6%	9.0	7.9								
	0	Edge 4	171	5855.0	94.6%	9.0	7.9								
	14	Rear	175	5875.0	96.1%	17.0	15.7	0.067	0.094						
	7	Edge 1	175	5875.0	96.1%	17.0	15.7								
	0	Edge 2	175	5875.0	96.1%	17.0	15.7	0.013	0.018						
	9	Edge 3	175	5875.0	96.1%	17.0	15.7	0.439	0.623		21				
	17	Edge 4	175	5875.0	96.1%	17.0	15.7	0.045	0.064						
	9	Corner A	175	5875.0	96.1%	17.0	15.7								
	11	Corner B	175	5875.0	96.1%	17.0	15.7	0.177	0.251						
0	Rear	171	5855.0	94.6%	9.0	8.0	0.429	0.578							
0	Edge 1	171	5855.0	94.6%	9.0	8.0									
0	Edge 3	171	5855.0	94.6%	9.0	8.0	0.387	0.521							
0	Edge 4	171	5855.0	94.6%	9.0	8.0	0.081	0.109							

RSDB U-NII 4 Results

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
										Tune-up limit	Meas.	Meas.	Scaled		
5.9 GHz U-NII 4	WLAN MIMO Ant.1	802.11ac VHT80 29.3 Mbps	Standalone	N/A	0	Rear	171	5855.0	94.6%	7.0	6.0				
					0	Edge 1	171	5855.0	94.6%	7.0	6.0	0.132	0.176		
					0	Edge 2	171	5855.0	94.6%	7.0	6.0	<0.001	<0.001		
					0	Edge 3	171	5855.0	94.6%	7.0	6.0				
					0	Edge 4	171	5855.0	94.6%	7.0	6.0				
	0	Rear	171	5855.0	94.6%	7.0	6.1	0.271	0.352						
	0	Edge 1	171	5855.0	94.6%	7.0	6.1								
	0	Edge 2	171	5855.0	94.6%	7.0	6.1								
	0	Edge 3	171	5855.0	94.6%	7.0	6.1	0.152	0.197						
	0	Edge 4	171	5855.0	94.6%	7.0	6.1	0.055	0.072						

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
5. RSDB WLAN SAR additionally evaluated due to satisfy simultaneous transmission criteria.
6. For MIMO SAR test distance of Rear & Edge.4 side in Power back-off mode "Off" condition, It tested using Max power at the shorter distance among the triggering distance of each antennas.

10.17. Bluetooth

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
2.4 GHz	BT SISO Ant.1	GFSK	Standalone	Off	16	Rear	39	2441.0	76.7%	18.0	17.8	0.054	0.073	
					7	Edge 1	39	2441.0	76.7%	18.0	17.8	0.163	0.222	
					0	Edge 2	39	2441.0	76.7%	18.0	17.8	<0.001	<0.001	
					20	Edge 4	39	2441.0	76.7%	18.0	17.8	0.018	0.024	
					9	Corner A	39	2441.0	76.7%	18.0	17.8	0.070	0.096	
				On	0	Rear	39	2441.0	76.7%	13.0	11.8	0.109	0.187	
					0	Edge 1	39	2441.0	76.7%	13.0	11.8	0.135	0.232	
					0	Edge 4	39	2441.0	76.7%	13.0	11.8	0.082	0.141	
				2.4 GHz	BT SISO Ant.2	GFSK	Standalone	Off	16	Rear	39	2441.0	76.7%	18.0
0	Edge 2	39	2441.0						76.7%	18.0	17.9	0.002	0.003	
9	Edge 3	39	2441.0						76.7%	18.0	17.9	0.312	0.420	
17	Edge 4	39	2441.0						76.7%	18.0	17.9	0.060	0.080	
11	Corner B	39	2441.0						76.7%	18.0	17.9	0.097	0.130	
On	0	Rear	39					2441.0	76.7%	13.0	11.9	0.295	0.491	22
	0	Edge 3	39					2441.0	76.7%	13.0	11.9	0.291	0.484	
	0	Edge 4	39					2441.0	76.7%	13.0	11.9	0.138	0.230	

11. SAR Measurement Variability

In accordance with published RF Exposure KDB 865664 D01 SAR measurement 100 MHz to 6 GHz. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

- 1) Repeated measurement is not required when the original highest measured SAR is <0.8 or 2 W/kg (1-g or 10-g respectively); steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.8 or 2 W/kg (1-g or 10-g respectively), repeat that measurement once.
- 3) Perform a second repeated measurement only if the **ratio of largest to smallest SAR** for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 or 3.6 W/kg ($\sim 10\%$ from the 1-g or 10-g respective SAR limit).
- 4) Perform a third repeated measurement only if the original, first, or second repeated measurement is ≥ 1.5 or 3.75 W/kg (1-g or 10-g respectively) and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

Peak spatial-average (1g of tissue)

Frequency Band (MHz)	Air Interface	RF Exposure Conditions	Test Position	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Repeated Measured SAR (W/kg)	Largest to Smallest SAR Ratio
700	LTE Band 12	Standalone	Edge 4	Yes	0.801	0.8	1.00
	LTE Band 13	Standalone	Rear	No	0.603	N/A	N/A
835	GSM 850	Standalone	Rear	No	0.611	N/A	N/A
	WCDMA Band V	Standalone	Rear	No	0.670	N/A	N/A
	LTE Band 26	Standalone	Rear	Yes	0.800	0.789	N/A
	NR Band n5	Standalone	Rear	No	0.669	N/A	N/A
1750	WCDMA Band IV	Standalone	Edge 4	No	0.615	N/A	N/A
	LTE Band 66	Standalone	Edge 4	Yes	1.110	1.110	N/A
	NR Band n66	Standalone	Edge 4	No	0.881	N/A	N/A
1900	GSM 1900	Standalone	Rear	No	0.519	N/A	N/A
	WCDMA Band II	Standalone	Rear	No	0.573	N/A	N/A
	LTE Band 2	Standalone	Rear	No	0.729	N/A	N/A
	LTE Band 25	Standalone	Rear	No	0.710	N/A	N/A
2400	Wi-Fi 802.11b/g/n	Standalone	Edge 1	No	0.406	N/A	N/A
	Bluetooth	Standalone	Edge 3	No	0.312	N/A	N/A
2600	LTE Band 41	Standalone	Rear	No	0.783	N/A	N/A
5300	Wi-Fi 802.11a/n	Standalone	Edge 3	No	0.665	N/A	N/A
5500	Wi-Fi 802.11a/n	Standalone	Rear	No	0.480	N/A	N/A
5800	Wi-Fi 802.11a/n	Standalone	Edge 3	No	0.658	N/A	N/A
5900	Wi-Fi 802.11a/n	Standalone	Edge 3	No	0.439	N/A	N/A

Note(s):

Second Repeated Measurement is not required since the ratio of the largest to smallest SAR for the original and first repeated measurement is not > 1.20 .

12. Simultaneous Transmission SAR Analysis

Simultaneous Transmission Condition

RF Exposure Condition	Item	Capable Transmit Configurations	
Standalone	1	WWAN (2G/3G/LTE/NR_SA) + DTS MIMO	Non-RSDB Scenarios
	2	WWAN (2G/3G/LTE/NR_SA) + DTS Ant.2 + BT Ant.1	
	3, 4	WWAN (2G/3G/LTE/NR_SA) + BT Ant.1 or BT Ant.2	
	5	WWAN (2G/3G/LTE/NR_SA) + UNII MIMO	
	6, 7	WWAN (2G/3G/LTE/NR_SA) + UNII MIMO + BT Ant.1 or BT Ant.2	
	8	WWAN (2G/3G/LTE/NR_SA) + DTS Ant.1 + UNII MIMO	RSDB Scenarios
	9	WWAN (2G/3G/LTE/NR_SA) + DTS MIMO + UNII MIMO	
	10	WWAN (2G/3G/LTE/NR_SA) + DTS Ant.2 + UNII MIMO + BT Ant.1	
	11	ENDC(LTE anchor + NR) + DTS MIMO	Non-RSDB Scenarios
	12	ENDC(LTE anchor + NR) + DTS Ant.2 + BT Ant.1	
	13, 14	ENDC(LTE anchor + NR) + BT Ant.1 or BT Ant.2	
	15	ENDC(LTE anchor + NR) + UNII MIMO	
	16, 17	ENDC(LTE anchor + NR) + UNII MIMO + BT Ant.1 or BT Ant.2	
	18	ENDC(LTE anchor + NR) + DTS Ant.1 + UNII MIMO	RSDB Scenarios
	19	ENDC(LTE anchor + NR) + DTS MIMO + UNII MIMO	
	20	ENDC(LTE anchor + NR) + DTS Ant.2 + UNII MIMO + BT Ant.1	

Notes:

1. DTS supports Wi-Fi Direct, Hotspot and VoIP.
2. U-NII supports Wi-Fi Direct, Hotspot and VoIP.
3. DTS supports SISO (Only Ant.2) and MIMO mode, U-NII only supports MIMO mode.
4. GPRS, W-CDMA, LTE, NR supports Hotspot and VoIP
5. U-NII Radio can transmit simultaneously with Bluetooth Radio.
6. DTS Radio can transmit simultaneously with Bluetooth Radio in only RSDB Scenarios
7. DTS Radio can transmit simultaneously with U-NII Radio in only RSDB Scenarios
8. NR Radio support to both SA and NSA(ENDC) Radio.
9. BT supports only SISO mode.

Simultaneous transmission SAR test exclusion considerations

KDB 447498 D01 General RF Exposure Guidance provides two procedures for determining simultaneous transmission SAR test exclusion: Sum of SAR and SAR to Peak Location Ratio (SPLSR)

Sum of SAR

To qualify for simultaneous transmission SAR test exclusion based upon Sum of SAR the sum of the reported standalone SARs for all simultaneously transmitting antennas shall be below the applicable standalone SAR limit. If the sum of the SARs is above the applicable limit then simultaneous transmission SAR test exclusion may still apply if the requirements of the SAR to Peak Location Ratio (SPLSR) evaluation are met.

SAR to Peak Location Ratio (SPLSR)

KDB 447498 D01 General RF Exposure Guidance explains how to calculate the SAR to Peak Location Ratio (SPLSR) between pairs of simultaneously transmitting antennas:

$$SPLSR = (SAR_1 + SAR_2)^{1.5} / Ri$$

Where:

SAR₁ is the highest reported or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition

SAR₂ is the highest reported or estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first

Ri is the separation distance between the pair of simultaneous transmitting antennas. When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of

$$[(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2]$$

In order for a pair of simultaneous transmitting antennas with the sum of 1-g SAR > 1.6 W/kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:

$$(SAR_1 + SAR_2)^{1.5} / Ri \leq 0.04$$

When an individual antenna transmits at on two bands simultaneously, the sum of the highest *reported* SAR for the frequency bands should be used to determine **SAR₁** or **SAR₂**. When SPLSR is necessary, the smallest distance between the peak SAR locations for the antenna pair with respect to the peaks from each antenna should be used.

The antennas in all antenna pairs that do not qualify for simultaneous transmission SAR test exclusion must be tested for SAR compliance, according to the enlarged zoom scan and volume scan post-processing procedures in KDB Publication 865664 D01

The antennas for the unlicensed transmitters are closely situated. As a result, the associated SAR hotspots are also closely situated. Some of the sum of SAR calculations yielded results over 1.6 W/kg. The SPLSR calculations for these situations were performed by treating the unlicensed SAR values as a single transmitter. The most conservative distance between all the unlicensed hotspots to the licensed hotspot was used for the value of *d* in the SPLSR calculation.

Simultaneous transmission SAR measurement

When simultaneous transmission SAR measurements are required in different frequency bands not covered by a single probe calibration point then separate tests for each frequency band are performed. The tests are performed using enlarged zoom scans which are processed, by means of superposition, using the DASY5 volume scan postprocessing procedures to determine the 1-g SAR for the aggregate SAR distribution.

The spatial resolution used for all enlarged zoom scans is the same as used for the most stringent zoom scans. I.E. the scan parameters required for the highest frequency assessed are used for all enlarged zoom scans. The scans cover the complete area of the device to ensure all transmitting antennas and radiating structures are assessed.

DASY5 provides the ability to perform Multiband Evaluations according to the latest standards using the Volume Scan job as well as appropriate routines for the Post-processing.

In order to extract and process measurements within different frequency bands, the SEMCAD X Post-processor performs the combination and subsequent superposition of these measurement data via DASY5= Combined MultiBand Averaged SAR.

Combined Multi Band Averaged SAR allows - in addition to the data extraction - an evaluation of the 1 g, 10 g and/or arbitrary averaged mass SAR.

Power Scaling Factor is used to allow the volume scans to be scaled by a value other than "1", this is important when the results need to be scaled to different maximum power levels. The Power Scaling Factor is applied to each individual point of the scan. When power scaling is used in multi-band combinations the scaling factor is applied to each individual point of the first scan, the second factor is then applied to each individual point of the second scan and so on. The scans are then combined.

SPLSR Hotspot Combination

Per November 2019 TCB Workshop Notes, SPLSR Hotspot Combination procedure can be applied to evaluate to simultaneous transmission SAR analysis.

Hybrid SPLSR and enlarged zoom scan (Volume scan) can be applied when Simultaneous transmission SAR is over 1.6 or 4.0 W/kg (1-g or 10-g respectively), it does not meet SPLSR criteria, and antenna pair is co-located. Antenna co-location means that SAR distributions overlap because the antennas are not significantly spatially separated.

Test procedure

Step.1 Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR.

Step.2 Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair.

12.1. Sum of the SAR for GSM850 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)										
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	0.761	0.287	0.304	0.187	0.491	0.797	0.614	1.065	1.235	0.948	1.252	1.558	1.745	2.049	1.375	1.562	1.866
	Edge 1	0.278	0.400	0.446	0.222	0.400	0.393	0.040	0.724	0.900	0.500	0.678	0.671	0.893	1.071	0.318	0.540	0.718
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.227	0.458	0.394	0.400	0.420	0.852	0.178	0.621	1.085	0.627	0.647	1.079	1.479	1.499	0.405	0.805	0.825
	Edge 4	0.602	0.202	0.242	0.141	0.230	0.155	0.045	0.844	0.945	0.743	0.832	0.757	0.898	0.987	0.647	0.788	0.877

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (<=0.04) or 10-g SPPLSR (<=0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.1	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
		1	2	3	4	5	6	7						
Standalone	Rear	0.761					0.797	1 + 6	1.558	114.1	0.02	No	1	
Standalone	Rear	0.761			0.187		0.797	1 + 4 + 6	1.745				2	
		0.623						0.797	(1+4) + 6	1.420	113.6	0.01		No
		0.623							(1+4)					
Standalone	Rear	0.761				0.491	0.797	1 + 5 + 6	2.049				3	
		0.761				1.230		1 + (5+6)	1.991	106.4	0.03	No		
		1.230							(5+6)					
Standalone	Rear	0.761					0.614	1 + 7	1.375	109.8	0.01	No	4	
Standalone	Rear	0.761			0.187		0.614	1 + 4 + 7	1.562				5	
		0.623						0.614	(1+4) + 7	1.237	109.3	0.01		No
		0.623							(1+4)					
Standalone	Rear	0.761				0.491	0.614	1 + 5 + 7	1.866				6	
		0.761				1.160		1 + (5+7)	1.921	109.6	0.02	No		
		1.160							(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.761	0.206	0.120	0.148	0.187	0.437	0.586	1.404	1.346	1.505	1.553	1.495	1.654	0.585	0.734
	Edge 1	0.278	0.249	0.400	0.185	0.222	0.246	0.031	0.773	0.709	1.146	0.558	0.494	0.931	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.227	0.400	0.253	0.245	0.400	0.370	0.090	0.997	0.842	1.250	0.717	0.562	0.970	0.615	0.335
	Edge 4	0.602	0.193	0.085	0.177	0.141	0.102	0.025	0.897	0.881	0.930	0.820	0.804	0.853	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPSSLR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN	RSDB scenarios										
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1	2	3	4	5	6	7							
Standalone	Rear	0.761	0.206				0.437	1+2+6	1.404				7
		0.623					0.437	(1+2)+6	1.060	113.6	0.01	No	
Volume scan Note.2		0.623						(1+2)					
Standalone	Rear	0.761		0.148			0.437	1+4+6	1.346			8	
		0.623					0.437	(1+4)+6	1.060	113.6	0.01		No
Volume scan Note.2		0.623						(1+4)					
Standalone	Rear	0.761		0.120		0.187	0.437	1+3+5+6	1.505			9	
		0.623						(1+5)+(3+6)	1.442	113.8	0.02		No
Volume scan Note.2		0.623			0.819			(1+5)					
				0.819				(3+6)					
Standalone	Rear	0.761	0.206				0.586	1+2+7	1.553			10	
		0.623					0.586	(1+2)+7	1.209	108.7	0.01		No
Volume scan Note.2		0.623						(1+2)					
Standalone	Rear	0.761		0.148			0.586	1+4+7	1.495			11	
		0.623					0.586	(1+4)+7	1.209	108.7	0.01		No
Volume scan Note.2		0.623						(1+4)					
Standalone	Rear	0.761		0.120		0.187	0.586	1+3+5+7	1.654			12	
		0.623						(1+5)+(3+7)	1.558	108.7	0.02		No
Volume scan Note.2		0.623			0.935			(1+5)					
				0.935				(3+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.2. Sum of the SAR for GSM1900 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)						Sum of SAR (W/kg)										
		WWAN	Non-RSDB scenarios					WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2		
			DTS Ant.1	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)										UNII MIMO (6GHz)	
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	0.547	0.287	0.304	0.187	0.491	0.797	0.614	0.851	1.021	0.734	1.038	1.344	1.531	1.835	1.161	1.348	1.652
	Edge 1	0.178	0.400	0.446	0.222	0.400	0.393	0.040	0.624	0.800	0.400	0.578	0.571	0.793	0.971	0.218	0.440	0.618
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.151	0.458	0.394	0.400	0.420	0.852	0.178	0.545	1.009	0.551	0.571	1.003	1.403	1.423	0.329	0.729	0.749
	Edge 4	0.528	0.202	0.242	0.141	0.230	0.155	0.045	0.770	0.871	0.669	0.758	0.683	0.824	0.913	0.573	0.714	0.803

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)						Sum of SAR (W/kg) (1-g or 10-g)		Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) <i>Note.3</i>	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.1	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
		1	2	3	4	5	6	7						
Standalone	Rear	0.547					0.797		1 + 6	1.344	134.0	0.01	No	13
Standalone	Rear	0.547			0.187		0.797		1 + 4 + 6	1.531				14
		0.456					0.797		(1+4) + 6	1.253	108.6	0.01	No	
		Volume scan <i>Note.2</i>			0.456				(1+4)					
Standalone	Rear	0.547				0.491	0.797		1 + 5 + 6	1.835				15
		0.547				1.230			1 + (5+6)	1.777	126.1	0.02	No	
		Volume scan <i>Note.2</i>			1.230				(5+6)					
Standalone	Rear	0.547			0.187			0.614	1 + 4 + 7	1.348				16
		0.456					0.614	(1+4) + 7	1.070	104.2	0.01	No		
		Volume scan <i>Note.2</i>			0.456				(1+4)					
Standalone	Rear	0.547				0.491		0.614	1 + 5 + 7	1.652				17
		0.547				1.160			1 + (5+7)	1.707	129.1	0.02	No	
		Volume scan <i>Note.2</i>			1.160				(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)											
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)				
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)									1	2	3	4
Standalone	Rear	0.547	0.206	0.120	0.148	0.187	0.437	0.586	1.190	1.132	1.291	1.339	1.281	1.440	0.585	0.734				
	Edge 1	0.178	0.249	0.400	0.185	0.222	0.246	0.031	0.673	0.609	1.046	0.458	0.394	0.831	0.431	0.216				
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403				
	Edge 3	0.151	0.400	0.253	0.245	0.400	0.370	0.090	0.921	0.766	1.174	0.641	0.486	0.894	0.615	0.335				
	Edge 4	0.528	0.193	0.085	0.177	0.141	0.102	0.025	0.823	0.807	0.856	0.746	0.730	0.779	0.279	0.202				

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN	RSDB scenarios										
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1	2	3	4	5	6	7							
Standalone	Rear	0.547	0.206				0.586	1+2+7	1.339				18
		0.547	0.206					1+2	0.753	67.4	0.01	No	
		0.547					0.586	1+7	1.133	129.0	0.01	No	
Standalone	Rear	0.547		0.120		0.187		0.586	1+3+5+7	1.440			19
				0.456				(1+5) + (3+7)	1.391	103.6	0.02	No	
					0.935			(1+5)					
Volume scan Note.2				0.623				(1+5)					
					0.935			(3+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.3. Sum of the SAR for WCDMA Band II & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)										
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	0.712	0.287	0.304	0.187	0.491	0.797	0.614	1.016	1.186	0.899	1.203	1.509	1.696	2.000	1.326	1.513	1.817
	Edge 1	0.125	0.400	0.446	0.222	0.400	0.393	0.040	0.571	0.747	0.347	0.525	0.518	0.740	0.918	0.165	0.387	0.565
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.038	0.458	0.394	0.400	0.420	0.852	0.178	0.432	0.896	0.438	0.458	0.890	1.290	1.310	0.216	0.616	0.636
	Edge 4	0.640	0.202	0.242	0.141	0.230	0.155	0.045	0.882	0.983	0.781	0.870	0.795	0.936	1.025	0.685	0.826	0.915

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN	DTS Ant.1	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
		1	2	3	4	5	6	7					
Standalone	Rear	0.712					0.797	1 + 6	1.509	132.5	0.01	No	20
Standalone	Rear	0.712			0.187		0.797	1 + 4 + 6	1.696				21
		0.645					0.797	(1+4) + 6	1.442	140.2	0.01	No	
Volume scan Note.2		0.645						(1+4)					
Standalone	Rear	0.712				0.491	0.797	1 + 5 + 6	2.000				22
		0.712				1.230		1 + (5+6)	1.942	124.5	0.02	No	
Volume scan Note.2					1.230			(5+6)					
Standalone	Rear	0.712			0.187		0.614	1 + 4 + 7	1.513				23
		0.645					0.614	(1+4) + 7	1.259	135.8	0.01	No	
Volume scan Note.2		0.645						(1+4)					
Standalone	Rear	0.712				0.491	0.614	1 + 5 + 7	1.817				24
		0.712				1.160		1 + (5+7)	1.872	127.6	0.02	No	
Volume scan Note.2						1.160		(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.712	0.206	0.120	0.148	0.187	0.437	0.586	1.355	1.297	1.456	1.504	1.446	1.605	0.585	0.734
	Edge 1	0.125	0.249	0.400	0.185	0.222	0.246	0.031	0.620	0.556	0.993	0.405	0.341	0.778	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.038	0.400	0.253	0.245	0.400	0.370	0.090	0.808	0.653	1.061	0.528	0.373	0.781	0.615	0.335
	Edge 4	0.640	0.193	0.085	0.177	0.141	0.102	0.025	0.935	0.919	0.968	0.858	0.842	0.891	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure			
		WWAN	RSDB scenarios													
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+2	1+6	2+6	1+3+5+6	(1+5) + (3+6)	(1+5)	(3+6)		
Standalone	Rear	0.712	0.206				0.437		1+2+6	1.355						25
		0.712	0.206						1+2	0.918	68.8	0.01	No			
		0.712					0.437		1+6	1.149	132.5	0.01	No			
Standalone	Rear	0.712		0.120		0.187	0.437		1+3+5+6	1.456					26	
				0.645					(1+5) + (3+6)	1.464	140.2	0.01	No			
					0.819				(1+5)							
Volume scan Note.2				0.645				(3+6)								
Standalone	Rear	0.712	0.206				0.586		1+2+7	1.504					27	
		0.712	0.206						1+2	0.918	68.8	0.01	No			
		0.712					0.586		1+7	1.298	127.5	0.01	No			
			0.206				0.586		2+7	0.792	196.2	0.00	No			
Standalone	Rear	0.712			0.148		0.586		1+4+7	1.446				28		
				0.657					(1+4) + 7	1.243	135.2	0.01	No			
				0.657					(1+4)							
Volume scan Note.2				0.657												
Standalone	Rear	0.712		0.120		0.187	0.586		1+3+5+7	1.605				29		
				0.645					(1+5) + (3+7)	1.580	135.2	0.01	No			
					0.935				(1+5)							
Volume scan Note.2				0.645				(3+7)								
				0.935												

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.4. Sum of the SAR for WCDMA Band IV & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)						Sum of SAR (W/kg)										
		Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2		
		1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7
Standalone	Rear	0.666	0.287	0.304	0.187	0.491	0.797	0.614	0.970	1.140	0.853	1.157	1.463	1.650	1.954	1.280	1.467	1.771
	Edge 1	0.249	0.400	0.446	0.222	0.400	0.393	0.040	0.695	0.871	0.471	0.649	0.642	0.864	1.042	0.289	0.511	0.689
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.039	0.458	0.394	0.400	0.420	0.852	0.178	0.433	0.897	0.439	0.459	0.891	1.291	1.311	0.217	0.617	0.637
	Edge 4	0.684	0.202	0.242	0.141	0.230	0.155	0.045	0.926	1.027	0.825	0.914	0.839	0.980	1.069	0.729	0.870	0.959

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)						Sum of SAR (W/kg)		Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPPLR (=0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.1	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)	(1-g or 10-g)					
		1	2	3	4	5	6	7						
Standalone	Rear	0.666					0.797		1 + 6	1.463	132.5	0.01	No	30
Standalone	Rear	0.666			0.187		0.797		1 + 4 + 6	1.650				31
		0.573					0.797		(1+4) + 6	1.370	140.2	0.01	No	
Volume scan Note.2		0.573						(1+4)						
Standalone	Rear	0.666				0.491	0.797		1 + 5 + 6	1.954				32
		0.666				1.230			1 + (5+6)	1.896	124.6	0.02	No	
Volume scan Note.2					1.230			(5+6)						
Standalone	Rear	0.666			0.187			0.614	1 + 4 + 7	1.467				33
		0.573						0.614	(1+4) + 7	1.187	135.8	0.01	No	
Volume scan Note.2		0.573						(1+4)						
Standalone	Rear	0.666				0.491		0.614	1 + 5 + 7	1.771				34
		0.666				1.160			1 + (5+7)	1.826	127.6	0.02	No	
Volume scan Note.2					1.160			(5+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.666	0.206	0.120	0.148	0.187	0.437	0.586	1.309	1.251	1.410	1.458	1.400	1.559	0.585	0.734
	Edge 1	0.249	0.249	0.400	0.185	0.222	0.246	0.031	0.744	0.680	1.117	0.529	0.465	0.902	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.039	0.400	0.253	0.245	0.400	0.370	0.090	0.809	0.654	1.062	0.529	0.374	0.782	0.615	0.335
	Edge 4	0.684	0.193	0.085	0.177	0.141	0.102	0.025	0.979	0.963	1.012	0.902	0.886	0.935	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN	RSDB scenarios										
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1	2	3	4	5	6	7							
Standalone	Rear	0.666		0.120		0.187	0.437	1+3+5+6	1.410			35	
				0.573				(1+5) + (3+6)	1.392	140.2	0.01		No
				0.573		0.819			(1+5) (3+6)				
Standalone	Rear	0.666	0.206				0.586	1+2+7	1.458			36	
		0.666	0.206					1+2	0.872	68.9	0.01		No
		0.666					0.586	1+7	1.252	127.5	0.01		No
			0.206				0.586	2+7	0.792	196.2	0.00		No
Standalone	Rear	0.666			0.148		0.586	1+4+7	1.400			37	
				0.583			0.586	(1+4)+7	1.169	103.2	0.01		No
				0.583				(1+4)					
Standalone	Rear	0.666		0.120		0.187	0.586	1+3+5+7	1.559			38	
				0.456				(1+5) + (3+7)	1.391	135.2	0.01		No
				0.623				(1+5) (3+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.5. Sum of the SAR for WCDMA Band V & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)										
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	0.799	0.287	0.304	0.187	0.491	0.797	0.614	1.103	1.273	0.986	1.290	1.596	1.783	2.087	1.413	1.600	1.904
	Edge 1	0.139	0.400	0.446	0.222	0.400	0.393	0.040	0.585	0.761	0.361	0.539	0.532	0.754	0.932	0.179	0.401	0.579
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.160	0.458	0.394	0.400	0.420	0.852	0.178	0.554	1.018	0.560	0.580	1.012	1.412	1.432	0.338	0.738	0.758
	Edge 4	0.546	0.202	0.242	0.141	0.230	0.155	0.045	0.788	0.889	0.687	0.776	0.701	0.842	0.931	0.591	0.732	0.821

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (<=0.04) or 10-g SPLSR (<=0.10) <i>Note.3</i>	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.1	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
		1	2	3	4	5	6	7						
Standalone	Rear	0.799					0.797		1 + 6	1.596	107.7	0.02	No	39
Standalone	Rear	0.799			0.187		0.797		1 + 4 + 6	1.783				40
		0.845					0.797		(1+4) + 6	1.642	108.2	0.02	No	
		Volume scan <i>Note.2</i>			0.845				(1+4)					
Standalone	Rear	0.799				0.491	0.797		1 + 5 + 6	2.087				41
		0.799				1.230			1 + (5+6)	2.029	99.8	0.03	No	
		Volume scan <i>Note.2</i>			1.230				(5+6)					
Standalone	Rear	0.799						0.614	1 + 7	1.413	103.3	0.02	No	42
Standalone	Rear	0.799			0.187			0.614	1 + 4 + 7	1.600				43
		0.845						0.614	(1+4) + 7	1.459	103.9	0.02	No	
		Volume scan <i>Note.2</i>			0.845				(1+4)					
Standalone	Rear	0.799				0.491		0.614	1 + 5 + 7	1.904				44
		0.799				1.160			1 + (5+7)	1.959	103.0	0.03	No	
		Volume scan <i>Note.2</i>			1.160				(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.799	0.206	0.120	0.148	0.187	0.437	0.586	1.442	1.384	1.543	1.591	1.533	1.692	0.585	0.734
	Edge 1	0.139	0.249	0.400	0.185	0.222	0.246	0.031	0.634	0.570	1.007	0.419	0.355	0.792	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.160	0.400	0.253	0.245	0.400	0.370	0.090	0.930	0.775	1.183	0.650	0.495	0.903	0.615	0.335
	Edge 4	0.546	0.193	0.085	0.177	0.141	0.102	0.025	0.841	0.825	0.874	0.764	0.748	0.797	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN	RSDB scenarios										
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1	2	3	4	5	6	7							
Standalone	Rear	0.799	0.206				0.437	1+2+6	1.442				45
		0.845					0.437	(1+2)+6	1.282	108.2	0.01	No	
Volume scan Note.2		0.845						(1+2)					
Standalone	Rear	0.799		0.148			0.437	1+4+6	1.384			46	
		0.856				0.437		(1+4)+6	1.293	108.2	0.01		No
Volume scan Note.2		0.856						(1+4)					
Standalone	Rear	0.799		0.120		0.187	0.437	1+3+5+6	1.543			47	
		0.845						(1+5)+(3+6)	1.664	108.3	0.02		No
Volume scan Note.2		0.845			0.819			(1+5)					
				0.819				(3+6)					
Standalone	Rear	0.799	0.206				0.586	1+2+7	1.591			48	
		0.845					0.586	(1+2)+7	1.431	103.2	0.02		No
Volume scan Note.2		0.845						(1+2)					
Standalone	Rear	0.799		0.148			0.586	1+4+7	1.533			49	
		0.856				0.586		(1+4)+7	1.442	103.2	0.02		No
Volume scan Note.2		0.856						(1+4)					
Standalone	Rear	0.799		0.120		0.187	0.586	1+3+5+7	1.692			50	
		0.845						(1+5)+(3+7)	1.780	103.2	0.02		No
Volume scan Note.2		0.845			0.935			(1+5)					
				0.935				(3+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.6. Sum of the SAR for LTE Band 12 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)										
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)											
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7			
Standalone	Rear	0.714	0.287	0.304	0.187	0.491	0.797	0.614	1.018	1.188	0.901	1.205	1.511	1.698	2.002	1.328	1.515	1.819	
	Edge 1	0.127	0.400	0.446	0.222	0.400	0.393	0.040	0.573	0.749	0.349	0.527	0.520	0.742	0.920	0.167	0.389	0.567	
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803	
	Edge 3	0.101	0.458	0.394	0.400	0.420	0.852	0.178	0.495	0.959	0.501	0.521	0.953	1.353	1.373	0.279	0.679	0.699	
	Edge 4	0.851	0.202	0.242	0.141	0.230	0.155	0.045	1.093	1.194	0.992	1.081	1.006	1.147	1.236	0.896	1.037	1.126	

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.1	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
		1	2	3	4	5	6	7						
Standalone	Rear	0.714					0.797		1 + 6	1.511	108.3	0.02	No	51
Standalone	Rear	0.714			0.187		0.797		1 + 4 + 6	1.698				52
		0.522				0.797		(1+4) + 6	1.319	100.6	0.02	No		
		0.522						(1+4)						
Standalone	Rear	0.714				0.491	0.797		1 + 5 + 6	2.002				53
		0.714				1.230		1 + (5+6)	1.944	100.4	0.03	No		
		0.522				1.230		(5+6)						
Standalone	Rear	0.714			0.187			0.614	1 + 4 + 7	1.515				54
		0.522					0.614	(1+4) + 7	1.136	96.3	0.01	No		
		0.522						(1+4)						
Standalone	Rear	0.714				0.491		0.614	1 + 5 + 7	1.819				55
		0.714				1.160		1 + (5+7)	1.874	103.5	0.02	No		
		0.522				1.160		(5+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
Standalone	Rear	0.714	0.206	0.120	0.148	0.187	0.437	0.586	1.357	1.299	1.458	1.506	1.448	1.607	0.585	0.734
	Edge 1	0.127	0.249	0.400	0.185	0.222	0.246	0.031	0.622	0.558	0.995	0.407	0.343	0.780	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.101	0.400	0.253	0.245	0.400	0.370	0.090	0.871	0.716	1.124	0.591	0.436	0.844	0.615	0.335
	Edge 4	0.851	0.193	0.085	0.177	0.141	0.102	0.025	1.146	1.130	1.179	1.069	1.053	1.102	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN	RSDB scenarios										
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
Standalone	Rear	0.714	0.206				0.437	0.586	1+2+6	1.357			56
		0.522					0.437		(1+2)+6	0.959	100.6	0.01	
Volume scan Note.2		0.522						(1+2)					
Standalone	Rear	0.714		0.120		0.187	0.437	0.586	1+3+5+6	1.458			57
		0.522				0.819			(1+5)+(3+6)	1.341	100.7	0.02	
Volume scan Note.2		0.522				0.819		(1+5)					
Standalone	Rear	0.714	0.206					0.586	1+2+7	1.506			58
		0.522						0.586	(1+2)+7	1.108	95.6	0.01	
Volume scan Note.2		0.522						(1+2)					
Standalone	Rear	0.714			0.148			0.586	1+4+7	1.448			59
		0.528					0.586		(1+4)+7	1.114	103.6	0.01	
Volume scan Note.2		0.528						(1+4)					
Standalone	Rear	0.714		0.120		0.187		0.586	1+3+5+7	1.607			60
		0.522				0.935			(1+5)+(3+7)	1.457	95.6	0.02	
Volume scan Note.2		0.522				0.935		(1+5)					
Volume scan Note.2						0.935		(3+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.7. Sum of the SAR for LTE Band 13 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)										
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	0.775	0.287	0.304	0.187	0.491	0.797	0.614	1.079	1.249	0.962	1.266	1.572	1.759	2.063	1.389	1.576	1.880
	Edge 1	0.096	0.400	0.446	0.222	0.400	0.393	0.040	0.542	0.718	0.318	0.496	0.489	0.711	0.889	0.136	0.358	0.536
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.075	0.458	0.394	0.400	0.420	0.852	0.178	0.469	0.933	0.475	0.495	0.927	1.327	1.347	0.253	0.653	0.673
	Edge 4	0.551	0.202	0.242	0.141	0.230	0.155	0.045	0.793	0.894	0.692	0.781	0.706	0.847	0.936	0.596	0.737	0.826

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (<=0.04) or 10-g SPLSR (<=0.10) <i>Note.3</i>	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.1	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
		1	2	3	4	5	6	7						
Standalone	Rear	0.775					0.797		1+6	1.572	109.1	0.02	No	61
Standalone	Rear	0.775			0.187		0.797		1+4+6	1.759				62
		0.673						0.797	(1+4)+6	1.470	113.0	0.02	No	
		Volume scan <i>Note.2</i>						0.673	(1+4)					
Standalone	Rear	0.775				0.491	0.797		1+5+6	2.063				63
		0.775				1.230		1+(5+6)	2.005	101.2	0.03	No		
		Volume scan <i>Note.2</i>						1.230	(5+6)					
Standalone	Rear	0.775					0.614	1+7	1.389	104.7	0.02	No	64	
Standalone	Rear	0.775			0.187		0.614	1+4+7	1.576				65	
		0.673						0.614	(1+4)+7	1.287	108.7	0.01		No
		Volume scan <i>Note.2</i>						0.673	(1+4)					
Standalone	Rear	0.775				0.491	0.614	1+5+7	1.880				66	
		0.775				1.160		1+(5+7)	1.935	104.4	0.03	No		
		Volume scan <i>Note.2</i>						1.160	(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.775	0.206	0.120	0.148	0.187	0.437	0.586	1.418	1.360	1.519	1.567	1.509	1.668	0.585	0.734
	Edge 1	0.096	0.249	0.400	0.185	0.222	0.246	0.031	0.591	0.527	0.964	0.376	0.312	0.749	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.075	0.400	0.253	0.245	0.400	0.370	0.090	0.845	0.690	1.098	0.565	0.410	0.818	0.615	0.335
	Edge 4	0.551	0.193	0.085	0.177	0.141	0.102	0.025	0.846	0.830	0.879	0.769	0.753	0.802	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SP5LR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN	RSDB scenarios										
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1	2	3	4	5	6	7							
Standalone	Rear	0.775	0.206				0.437	1 + 2 + 6	1.418				67
		0.673					0.437	(1+2) + 6	1.110	113.0	0.01	No	
Volume scan Note.2		0.673						(1+2)					
Standalone	Rear	0.775			0.148		0.437	1 + 4 + 6	1.360				68
		0.681					0.437	(1+4) + 6	1.118	112.5	0.01	No	
Volume scan Note.2		0.681						(1+4)					
Standalone	Rear	0.775		0.120		0.187	0.437	1 + 3 + 5 + 6	1.519				69
		0.673						(1+5) + (3+6)	1.492	113.1	0.02	No	
Volume scan Note.2		0.673				0.819		(1+5)					
		0.819						(3+6)					
Standalone	Rear	0.775	0.206				0.586	1 + 2 + 7	1.567				70
		0.673					0.586	(1+2) + 7	1.259	108.0	0.01	No	
Volume scan Note.2		0.673						(1+2)					
Standalone	Rear	0.775			0.148		0.586	1 + 4 + 7	1.509				71
		0.681					0.586	(1+4) + 7	1.267	107.6	0.01	No	
Volume scan Note.2		0.681						(1+4)					
Standalone	Rear	0.775		0.120		0.187	0.586	1 + 3 + 5 + 7	1.668				72
		0.673						(1+5) + (3+7)	1.608	108.0	0.02	No	
Volume scan Note.2		0.673				0.935		(1+5)					
		0.935						(3+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.8. Sum of the SAR for LTE Band 25 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		Non-RSDB scenarios							WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2
		WWAN	DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)										
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	0.850	0.287	0.304	0.187	0.491	0.797	0.614	1.154	1.324	1.037	1.341	1.647	1.834	2.138	1.464	1.651	1.955
	Edge 1	0.099	0.400	0.446	0.222	0.400	0.393	0.040	0.545	0.721	0.321	0.499	0.492	0.714	0.892	0.139	0.361	0.539
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.044	0.458	0.394	0.400	0.420	0.852	0.178	0.438	0.902	0.444	0.464	0.896	1.296	1.316	0.222	0.622	0.642
	Edge 4	0.716	0.202	0.242	0.141	0.230	0.155	0.045	0.958	1.059	0.857	0.946	0.871	1.012	1.101	0.761	0.902	0.991

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (<=0.04) or 10-g SPLSR (<=0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.1	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
		1	2	3	4	5	6	7						
Standalone	Rear	0.850				0.491			1 + 5	1.341	132.5	0.01	No	73
Standalone	Rear	0.850					0.797		1 + 6	1.647	135.5	0.02	No	74
Standalone	Rear	0.850			0.187		0.797		1 + 4 + 6	1.834				75
		0.982					0.797		(1+4) + 6	1.779	140.0	0.02	No	
Volume scan Note.2		0.982						(1+4)						
Standalone	Rear	0.850				0.491	0.797		1 + 5 + 6	2.138				76
		0.850					1.230		1 + (5+6)	2.080	127.5	0.02	No	
Volume scan Note.2						1.230		(5+6)						
Standalone	Rear	0.850						0.614	1 + 7	1.464	131.1	0.01	No	77
Standalone	Rear	0.850			0.187			0.614	1 + 4 + 7	1.651				78
		0.982						0.614	(1+4) + 7	1.596	135.6	0.01	No	
Volume scan Note.2		0.982						(1+4)						
Standalone	Rear	0.850				0.491		0.614	1 + 5 + 7	1.955				79
		0.850					1.160		1 + (5+7)	2.010	130.6	0.02	No	
Volume scan Note.2						1.160		(5+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.850	0.206	0.120	0.148	0.187	0.437	0.586	1.493	1.435	1.594	1.642	1.584	1.743	0.585	0.734
	Edge 1	0.099	0.249	0.400	0.185	0.222	0.246	0.031	0.594	0.530	0.967	0.379	0.315	0.752	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.044	0.400	0.253	0.245	0.400	0.370	0.090	0.814	0.659	1.067	0.534	0.379	0.787	0.615	0.335
	Edge 4	0.716	0.193	0.085	0.177	0.141	0.102	0.025	1.011	0.995	1.044	0.934	0.918	0.967	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN	RSDB scenarios										
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1	2	3	4	5	6	7							
Standalone	Rear	0.850	0.206				0.437	1+2+6	1.493				80
		0.850	0.206					1+2	1.056	65.8	0.02	No	
		0.850					0.437	1+6	1.287	135.5	0.01	No	
			0.206				0.437	2+6	0.643	201.2	0.00	No	
Standalone	Rear	0.850			0.148		0.437	1+4+6	1.435			81	
				0.992			0.437	(1+4)+6	1.429	140	0.01		No
Volume scan Note.2				0.992				(1+4)					
Standalone	Rear	0.850		0.120		0.187	0.437	1+3+5+6	1.594			82	
				0.982				(1+5)+	1.801	140.1	0.02		No
					0.819			(3+6)					
		Volume scan Note.2				0.982			(1+5)				
					0.819			(3+6)					
Standalone	Rear	0.850	0.206				0.586	1+2+7	1.642			83	
		0.850	0.206					1+2	1.056	65.8	0.02		No
		0.850					0.586	1+7	1.436	130.5	0.01		No
			0.206				0.586	2+7	0.792	196.2	0.00		No
Standalone	Rear	0.850			0.148		0.586	1+4+7	1.584			84	
				0.992			0.586	(1+4)+7	1.578	135.0	0.01		No
Volume scan Note.2				0.992				(1+4)					
Standalone	Rear	0.850		0.120		0.187	0.586	1+3+5+7	1.743			85	
				0.982				(1+5)+	1.917	135.0	0.02		No
					0.935			(3+7)					
		Volume scan Note.2				0.982			(1+5)				
					0.935			(3+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.9. Sum of the SAR for LTE Band 26 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNI MIMO	WWAN + UNI MIMO + BT Ant.1	WWAN + UNI MIMO + BT Ant.2	WWAN + UNI MIMO	WWAN + UNI MIMO + BT Ant.1	WWAN + UNI MIMO + BT Ant.2
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)										
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	0.996	0.287	0.304	0.187	0.491	0.797	0.614	1.300	1.470	1.183	1.487	1.793	1.980	2.284	1.610	1.797	2.101
	Edge 1	0.120	0.400	0.446	0.222	0.400	0.393	0.040	0.566	0.742	0.342	0.520	0.513	0.735	0.913	0.160	0.382	0.560
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.088	0.458	0.394	0.400	0.420	0.852	0.178	0.482	0.946	0.488	0.508	0.940	1.340	1.360	0.266	0.666	0.686
	Edge 4	0.644	0.202	0.242	0.141	0.230	0.155	0.045	0.886	0.987	0.785	0.874	0.799	0.940	1.029	0.689	0.830	0.919

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (<=0.04) or 10-g SPLSR (<=0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
		1	2	3	4	5	6	7						
Standalone	Rear	0.996	0.287		0.187				1 + 2 + 4	1.470			86	
		0.859							(1+4) + 2	1.146	97.5	0.01		No
			0.287						(1+4)					
Volume scan Note.2		0.859							(1+4)					
Standalone	Rear	0.996				0.491			1 + 5	1.487	101.3	0.02	No	87
Standalone	Rear	0.996					0.797		1 + 6	1.793	106.4	0.02	No	88
Standalone	Rear	0.996			0.187		0.797		1 + 4 + 6	1.980			89	
		0.859							(1+4) + 6	1.656	104.6	0.02		No
		0.859							(1+4)					
Volume scan Note.2		0.859							(1+4)					
Standalone	Rear	0.996				0.491	0.797		1 + 5 + 6	2.284			90	
		0.996					1.230		1 + (5+6)	2.226	98.6	0.03		No
Volume scan Note.2		1.230							(5+6)					
Standalone	Rear	0.996						0.614	1 + 7	1.610	102.1	0.02	No	91
Standalone	Rear	0.996			0.187			0.614	1 + 4 + 7	1.797			92	
		0.859							(1+4) + 7	1.473	100.2	0.02		No
		0.859							(1+4)					
Volume scan Note.2		0.859							(1+4)					
Standalone	Rear	0.996				0.491		0.614	1 + 5 + 7	2.101			93	
		0.996					1.160		1 + (5+7)	2.156	101.9	0.03		No
Volume scan Note.2		1.160							(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.996	0.206	0.120	0.148	0.187	0.437	0.586	1.639	1.581	1.740	1.788	1.730	1.889	0.585	0.734
	Edge 1	0.120	0.249	0.400	0.185	0.222	0.246	0.031	0.615	0.551	0.988	0.400	0.336	0.773	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.088	0.400	0.253	0.245	0.400	0.370	0.090	0.858	0.703	1.111	0.578	0.423	0.831	0.615	0.335
	Edge 4	0.644	0.193	0.085	0.177	0.141	0.102	0.025	0.939	0.923	0.972	0.862	0.846	0.895	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN	RSDB scenarios										
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1	2	3	4	5	6	7							
Standalone	Rear	0.996	0.206				0.437	1+2+6	1.639				94
		0.859					0.437	(1+2)+6	1.296	104.6	0.01	No	
Volume scan Note.2		0.859						(1+2)					
Standalone	Rear	0.996			0.148		0.437	1+4+6	1.581				95
		0.871					0.437	(1+4)+6	1.308	108.6	0.01	No	
Volume scan Note.2		0.871						(1+4)					
Standalone	Rear	0.996		0.120		0.187	0.437	1+3+5+6	1.740				96
		0.859						(1+5)+(3+6)	1.678	104.7	0.02	No	
Volume scan Note.2		0.859			0.819			(1+5)					
				0.819				(3+6)					
Standalone	Rear	0.996	0.206				0.586	1+2+7	1.788				97
		0.859					0.586	(1+2)+7	1.445	99.6	0.02	No	
Volume scan Note.2		0.859						(1+2)					
Standalone	Rear	0.996			0.148		0.586	1+4+7	1.730				98
		0.871					0.586	(1+4)+7	1.457	103.6	0.02	No	
Volume scan Note.2		0.871						(1+4)					
Standalone	Rear	0.996		0.120		0.187	0.586	1+3+5+7	1.889				99
		0.859						(1+5)+(3+7)	1.794	99.6	0.02	No	
Volume scan Note.2		0.859						(1+5)					
				0.935				(3+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.10. Sum of the SAR for LTE Band 41 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)										
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	1.065	0.287	0.304	0.187	0.491	0.797	0.614	1.369	1.539	1.252	1.556	1.862	2.049	2.353	1.679	1.866	2.170
	Edge 1	0.380	0.400	0.446	0.222	0.400	0.393	0.040	0.826	1.002	0.602	0.780	0.773	0.995	1.173	0.420	0.642	0.820
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.074	0.458	0.394	0.400	0.420	0.852	0.178	0.468	0.932	0.474	0.494	0.926	1.326	1.346	0.252	0.652	0.672
	Edge 4	1.009	0.202	0.242	0.141	0.230	0.155	0.045	1.251	1.352	1.150	1.239	1.164	1.305	1.394	1.054	1.195	1.284

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (<=0.04) or 10-g SPLSR (<=0.10) Note.3	Volume Scan (Yes/No)	Figure		
		WWAN	DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)							
		1	2	3	4	5	6	7							
Standalone	Rear	1.065		0.304					1 + 3	1.369	66.6	0.02	No	100	
Standalone	Rear	1.065	0.287		0.187				1 + 2 + 4	1.539				101	
		1.060							(1+4) + 2	1.347	129.3	0.01	No		
			0.287						(1+4)						
Volume scan Note.2		1.060													
Standalone	Rear	1.065				0.491			1 + 5	1.556	134.6	0.01	No	102	
Standalone	Rear	1.065					0.797		1 + 6	1.862	137.7	0.02	No	103	
Standalone	Rear	1.065			0.187		0.797		1 + 4 + 6	2.049				104	
		1.060							(1+4) + 6	1.857	136.2	0.02	No		
		1.060							(1+4)						
Volume scan Note.2		1.060													
Standalone	Rear	1.065				0.491	0.797		1 + 5 + 6	2.353				105	
Volume scan Note.2		1.065				1.230			1 + (5+6)	2.295	129.8	0.03	No		
1.230							(5+6)								
Standalone	Rear	1.065						0.614	1 + 7	1.679	133.4	0.02	No	106	
Standalone	Rear	1.065			0.187			0.614	1 + 4 + 7	1.866				107	
		1.060							(1+4) + 7	1.674	131.8	0.02	No		
		1.060							(1+4)						
Volume scan Note.2		1.060													
Standalone	Rear	1.065				0.491		0.614	1 + 5 + 7	2.170				108	
		Volume scan Note.2		1.065				1.160		1 + (5+7)	2.225	132.9	0.02		No
		1.160							(5+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	1.065	0.206	0.120	0.148	0.187	0.437	0.586	1.708	1.650	1.809	1.857	1.799	1.958	0.585	0.734
	Edge 1	0.380	0.249	0.400	0.185	0.222	0.246	0.031	0.875	0.811	1.248	0.660	0.596	1.033	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.074	0.400	0.253	0.245	0.400	0.370	0.090	0.844	0.689	1.097	0.564	0.409	0.817	0.615	0.335
	Edge 4	1.009	0.193	0.085	0.177	0.141	0.102	0.025	1.304	1.288	1.337	1.227	1.211	1.260	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPSSLR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN	RSDB scenarios											
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
1	2	3	4	5	6	7								
Standalone	Rear	1.065	0.206				0.437	1+2+6	1.708				109	
		1.050					0.437	(1+2)+6	1.487	136.2	0.01	No		
Volume scan Note.2		1.050						(1+2)						
Standalone	Rear	1.065		0.148			0.437	1+4+6	1.650			110		
		1.070					0.437	(1+4)+6	1.507	136.2	0.01		No	
Volume scan Note.2		1.070						(1+4)						
Standalone	Rear	1.065		0.120		0.187	0.437	1+3+5+6	1.809			111		
		1.060						(1+5)+(3+6)	1.879	136.2	0.02		No	
		1.060			0.819				(1+5)					
		1.060			0.819				(3+6)					
Standalone	Rear	1.065	0.206				0.586	1+2+7	1.857			112		
		1.050					0.586	(1+2)+7	1.636	131.2	0.02		No	
Volume scan Note.2		1.050						(1+2)						
Standalone	Rear	1.065		0.148			0.586	1+4+7	1.799			113		
		1.070					0.586	(1+4)+7	1.656	131.2	0.02		No	
Volume scan Note.2		1.070						(1+4)						
Standalone	Rear	1.065		0.120		0.187	0.586	1+3+5+7	1.958			114		
		0.859						(1+5)+(3+7)	1.794	131.2	0.02		No	
		0.859			0.935				(1+5)					
		0.859			0.935				(3+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.11. Sum of the SAR for LTE Band 66 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)										
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	0.707	0.287	0.304	0.187	0.491	0.797	0.614	1.011	1.181	0.894	1.198	1.504	1.691	1.995	1.321	1.508	1.812
	Edge 1	0.172	0.400	0.446	0.222	0.400	0.393	0.040	0.618	0.794	0.394	0.572	0.565	0.787	0.965	0.212	0.434	0.612
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.031	0.458	0.394	0.400	0.420	0.852	0.178	0.425	0.889	0.431	0.451	0.883	1.283	1.303	0.209	0.609	0.629
	Edge 4	1.168	0.202	0.242	0.141	0.230	0.155	0.045	1.410	1.511	1.309	1.398	1.323	1.464	1.553	1.213	1.354	1.443

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (<=0.04) or 10-g SPLSR (<=0.10) <i>Note.3</i>	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
		1	2	3	4	5	6	7						
Standalone	Rear	0.707					0.797		1+6	1.504	129.5	0.01	No	115
Standalone	Rear	0.707			0.187		0.797		1+4+6	1.691				116
		0.843					0.797		(1+4)+6	1.640	140.2	0.01	No	
		Volume scan <i>Note.2</i>			0.843				(1+4)					
Standalone	Rear	0.707				0.491	0.797		1+5+6	1.995				117
		0.707				1.230			1+(5+6)	1.937	121.6	0.02	No	
		Volume scan <i>Note.2</i>			1.230				(5+6)					
Standalone	Rear	0.707					0.614		1+7	1.321	125.1	0.01	No	118
Standalone	Rear	0.707			0.187		0.614		1+4+7	1.508				119
		0.843					0.614		(1+4)+7	1.457	135.8	0.01	No	
		Volume scan <i>Note.2</i>			0.843				(1+4)					
Standalone	Rear	0.707				0.491	0.614		1+5+7	1.812				120
		0.707				1.160			1+(5+7)	1.867	124.6	0.02	No	
		Volume scan <i>Note.2</i>			1.160				(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.707	0.206	0.120	0.148	0.187	0.437	0.586	1.350	1.292	1.451	1.499	1.441	1.600	0.585	0.734
	Edge 1	0.172	0.249	0.400	0.185	0.222	0.246	0.031	0.667	0.603	1.040	0.452	0.388	0.825	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.031	0.400	0.253	0.245	0.400	0.370	0.090	0.801	0.646	1.054	0.521	0.366	0.774	0.615	0.335
	Edge 4	1.168	0.193	0.085	0.177	0.141	0.102	0.025	1.463	1.447	1.496	1.386	1.370	1.419	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN	RSDB scenarios											
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
1	2	3	4	5	6	7								
Standalone	Rear	0.707	0.206				0.437		1 + 2 + 6	1.350			121	
		0.707	0.206						1 + 2	0.913	71.9	0.01		No
		0.707					0.437		1 + 6	1.144	129.5	0.01		No
			0.206				0.437		2 + 6	0.643	201.2	0.00		No
Standalone	Rear	0.707		0.120		0.187	0.437		1+3+5+6	1.451			122	
				0.843					(1+5) + (3+6)	1.662	140.2	0.02		No
		Volume scan Note.2		0.843					(1+5)					
Standalone	Rear		0.819						(3+6)					
		0.707	0.206				0.586		1 + 2 + 7	1.499			123	
		0.707	0.206						1 + 2	0.913	71.9	0.01		No
		0.707					0.586		1 + 7	1.293	124.5	0.01		No
	0.206				0.586		2 + 7	0.792	196.2	0.00	No			
Standalone	Rear	0.707			0.148		0.586		1 + 4 + 7	1.441			124	
		Volume scan Note.2		0.854					(1+4) + 7	1.440	135.2	0.01		No
		0.854							(1+4)					
Standalone	Rear	0.707		0.120		0.187	0.586		1+3+5+7	1.600			125	
		Volume scan Note.2		0.843					(1+5) + (3+7)	1.778	135.2	0.02		No
				0.935					(1+5)					
		0.843							(3+7)					
Volume scan Note.2		0.935												

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.12. Sum of the SAR for NR Band n5 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)										
1	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7		
Standalone	Rear	0.820	0.287	0.304	0.187	0.491	0.797	0.614	1.124	1.294	1.007	1.311	1.617	1.804	2.108	1.434	1.621	1.925
	Edge 1	0.138	0.400	0.446	0.222	0.400	0.393	0.040	0.584	0.760	0.360	0.538	0.531	0.753	0.931	0.178	0.400	0.578
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803
	Edge 3	0.138	0.458	0.394	0.400	0.420	0.852	0.178	0.532	0.996	0.538	0.558	0.990	1.390	1.410	0.316	0.716	0.736
	Edge 4	0.622	0.202	0.242	0.141	0.230	0.155	0.045	0.864	0.965	0.763	0.852	0.777	0.918	1.007	0.667	0.808	0.897

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10) <i>Note.3</i>	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
														1
Standalone	Rear	0.820					0.797		1 + 6	1.617	113.9	0.02	No	126
Standalone	Rear	0.820			0.187		0.797		1 + 4 + 6	1.804				127
		0.907					0.797		(1+4) + 6	1.704	104.2	0.02	No	
		Volume scan <i>Note.2</i>			0.907				(1+4)					
Standalone	Rear	0.820				0.491	0.797		1 + 5 + 6	2.108				128
		0.820					1.230		1 + (5+6)	2.050	106.1	0.03	No	
		Volume scan <i>Note.2</i>			1.230				(5+6)					
Standalone	Rear	0.820					0.614		1 + 7	1.434	109.5	0.02	No	129
Standalone	Rear	0.820			0.187		0.614		1 + 4 + 7	1.621				130
		0.907					0.614		(1+4) + 7	1.521	99.9	0.02	No	
		Volume scan <i>Note.2</i>			0.907				(1+4)					
Standalone	Rear	0.820				0.491	0.614		1 + 5 + 7	1.925				131
		0.820					1.160		1 + (5+7)	1.980	109.3	0.03	No	
		Volume scan <i>Note.2</i>			1.160				(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.820	0.206	0.120	0.148	0.187	0.437	0.586	1.463	1.405	1.564	1.612	1.554	1.713	0.585	0.734
	Edge 1	0.138	0.249	0.400	0.185	0.222	0.246	0.031	0.633	0.569	1.006	0.418	0.354	0.791	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.138	0.400	0.253	0.245	0.400	0.370	0.090	0.908	0.753	1.161	0.628	0.473	0.881	0.615	0.335
	Edge 4	0.622	0.193	0.085	0.177	0.141	0.102	0.025	0.917	0.901	0.950	0.840	0.824	0.873	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN	RSDB scenarios											
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
1	2	3	4	5	6	7								
Standalone	Rear	0.820	0.206				0.437		1 + 2 + 6	1.463			132	
		0.907					0.437		(1+2) + 6	1.344	104.2	0.01		No
Volume scan Note.2		0.907						(1+2)						
Standalone	Rear	0.820			0.148		0.437		1 + 4 + 6	1.405			133	
		0.916					0.437		(1+4) + 6	1.353	108.2	0.01		No
Volume scan Note.2		0.916						(1+4)						
Standalone	Rear	0.820		0.120		0.187	0.437		1 + 3 + 5 + 6	1.564			134	
		0.907							(1+5) + (3+6)	1.726	104.3	0.02		No
		0.907			0.819				(1+5)					
		0.907			0.819				(3+6)					
Standalone	Rear	0.820	0.206					0.586	1 + 2 + 7	1.406			135	
		0.907						0.586	(1+2) + 7	1.493	99.2	0.02		No
Volume scan Note.2		0.907						(1+2)						
Standalone	Rear	0.820			0.148			0.586	1 + 4 + 7	1.554			136	
		0.916					0.586		(1+4) + 7	1.502	103.2	0.02		No
Volume scan Note.2		0.916						(1+4)						
Standalone	Rear	0.820		0.120		0.187		0.586	1 + 3 + 5 + 7	1.713			137	
		0.907							(1+5) + (3+7)	1.842	99.2	0.03		No
		0.907			0.935				(1+5)					
Volume scan Note.2		0.907			0.935			(3+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.13. Sum of the SAR for NR Band n66 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)															
		WWAN	Non-RSDB scenarios						WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2						
			DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)											1+3	1+2+4	1+4	1+5	1+6	1+4+6
1	2	3	4	5	6	7																		
Standalone	Rear	0.702	0.287	0.304	0.187	0.491	0.797	0.614	1.006	1.176	0.889	1.193	1.499	1.686	1.990	1.316	1.503	1.807						
	Edge 1	0.203	0.400	0.446	0.222	0.400	0.393	0.040	0.649	0.825	0.425	0.603	0.596	0.818	0.996	0.243	0.465	0.643						
	Edge 2	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.423	0.419	0.401	0.403	0.431	0.432	0.434	0.800	0.801	0.803						
	Edge 3	0.045	0.458	0.394	0.400	0.420	0.852	0.178	0.439	0.903	0.445	0.465	0.897	1.297	1.317	0.223	0.623	0.643						
	Edge 4	1.063	0.202	0.242	0.141	0.230	0.155	0.045	1.305	1.406	1.204	1.293	1.218	1.359	1.448	1.108	1.249	1.338						

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10) <i>Note.3</i>	Volume Scan (Yes/No)	Figure	
		WWAN	DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
														1
Standalone	Rear	0.702					0.797		1+6	1.499	135.6	0.01	No	138
Standalone	Rear	0.702			0.187		0.797		1+4+6	1.686				139
		0.733					0.797		(1+4)+6	1.530	136.2	0.01	No	
		Volume scan <i>Note.2</i>			0.733				(1+4)					
Standalone	Rear	0.702				0.491	0.797		1+5+6	1.990				140
		0.702					1.230		1+(5+6)	1.932	127.6	0.02	No	
		Volume scan <i>Note.2</i>			1.230				(5+6)					
Standalone	Rear	0.702					0.614		1+7	1.316	131.2	0.01	No	141
Standalone	Rear	0.702			0.187		0.614		1+4+7	1.503				142
		0.733					0.614		(1+4)+7	1.347	131.8	0.01	No	
		Volume scan <i>Note.2</i>			0.733				(1+4)					
Standalone	Rear	0.702				0.491	0.614		1+5+7	1.807				143
		0.702					1.160		1+(5+7)	1.862	130.7	0.02	No	
		Volume scan <i>Note.2</i>			1.160				(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)							
		WWAN	RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear	0.702	0.206	0.120	0.148	0.187	0.437	0.586	1.345	1.287	1.446	1.494	1.436	1.595	0.585	0.734
	Edge 1	0.203	0.249	0.400	0.185	0.222	0.246	0.031	0.698	0.634	1.071	0.483	0.419	0.856	0.431	0.216
	Edge 2	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.402	0.404	0.403	0.801	0.803	0.802	0.004	0.403
	Edge 3	0.045	0.400	0.253	0.245	0.400	0.370	0.090	0.815	0.660	1.068	0.535	0.380	0.788	0.615	0.335
	Edge 4	1.063	0.193	0.085	0.177	0.141	0.102	0.025	1.358	1.342	1.391	1.281	1.265	1.314	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPPLR (=0.10 Note.3)	Volume Scan (Yes/No)	Figure
		WWAN	RSDB scenarios										
			DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1	2	3	4	5	6	7							
Standalone	Rear	0.702	0.206				0.437	1+2+6	1.345				144
		0.702	0.206					1+2	0.908	66.1	0.01	No	
		0.702					0.437	1+6	1.139	135.6	0.01	No	
Standalone	Rear	0.702		0.120		0.187	0.437	1+3+5+6	1.446			145	
				0.733				(1+5) + (3+6)	1.552	136.2	0.01		No
					0.819			(1+5)					
Volume scan Note.2				0.733			(1+5)						
Volume scan Note.2					0.819		(3+6)						
Standalone	Rear	0.702	0.206				0.586	1+2+7	1.494			146	
		0.702	0.206					1+2	0.908	66.1	0.01		No
		0.702					0.586	1+7	1.288	130.6	0.01		No
Volume scan Note.2			0.206				0.586	2+7	0.792	196.2	0.00	No	
Standalone	Rear	0.702			0.148		0.586	1+4+7	1.436			147	
				0.743			0.586	(1+4)+7	1.329	131.2	0.01		No
		Volume scan Note.2			0.743			(1+4)					
Standalone	Rear	0.702		0.120		0.187	0.586	1+3+5+7	1.595			148	
				0.907				(1+5) + (3+7)	1.842	131.2	0.02		No
		Volume scan Note.2			0.907			(1+5)					
Volume scan Note.2					0.935		(3+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.14. Sum of the SAR for ENDC(LTE B2(Main 1 Ant.)+NR Bn5) & Wi-Fi & BT Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)										
		WWAN		Non-RSDB scenarios					WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	
		1-a	1-b	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7
Standalone	Rear-19mm	0.349	0.820	0.287	0.304	0.187	0.491	0.797	0.614	1.473	1.643	1.356	1.660	1.966	2.153	2.457	1.783	1.970	2.274
	Rear-0mm	0.416	0.347	0.287	0.304	0.187	0.491	0.797	0.614	1.067	1.237	0.950	1.254	1.560	1.747	2.051	1.377	1.564	1.868
	Edge 1	0.099	0.138	0.400	0.446	0.222	0.400	0.393	0.040	0.683	0.859	0.459	0.637	0.630	0.852	1.030	0.277	0.499	0.677
	Edge 2	0.400	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.823	0.819	0.801	0.803	0.831	0.832	0.834	1.200	1.201	1.203
	Edge 3	0.044	0.138	0.458	0.394	0.400	0.420	0.852	0.178	0.576	1.040	0.582	0.602	1.034	1.434	1.454	0.360	0.760	0.780
	Edge 4	0.434	0.453	0.202	0.242	0.141	0.230	0.155	0.045	1.129	1.230	1.028	1.117	1.042	1.183	1.272	0.932	1.073	1.162

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure		
		WWAN		DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)						UNII MIMO (6GHz)	
		1-a	1-b	2	3	4	5	6						7	
Standalone	Rear-19mm	0.349	0.820		0.304				1a+1b+3	1.473			149		
		0.984			0.304				(1a+1b)+3	1.288	85.3	0.02		No	
		0.984							(1a+1b)						
Standalone	Rear-19mm	0.349	0.820	0.287		0.187			1a+1b+2+4	1.643			150		
		0.984		0.287					(1a+1b)+2	1.271	112.3	0.01		No	
		0.984				0.187				(1a+1b)+4	1.171	86.1		0.01	No
				0.287		0.187				2+4	0.474	198.2		0.00	No
0.984								(1a+1b)							
Standalone	Rear-19mm	0.349	0.820					0.797	1a+1b+6	1.966			151		
		0.984						0.797	(1a+1b)+6	1.781	119.3	0.02		No	
		0.984							(1a+1b)						
Standalone	Rear-19mm	0.349	0.820			0.187		0.797	1a+1b+4+6	2.153			152		
		0.984				0.187			(1a+1b)+4	1.171	86.1	0.01		No	
		0.984						0.797		(1a+1b)+6	1.781	119.3		0.02	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
0.984								(1a+1b)							
Standalone	Rear-19mm	0.349	0.820				0.491	0.797	1a+1b+5+6	2.457			153		
		0.984						1.230	(1a+1b)+(5+6)	2.214	111.4	0.03		No	
		0.984						1.23		(1a+1b) (5+6)					
Standalone	Rear-0mm	0.416	0.347					0.797	1a+1b+6	1.560			154		
		0.600						0.797	(1a+1b)+6	1.397	134.0	0.01		No	
		0.600							(1a+1b)						
Standalone	Rear-0mm	0.416	0.347			0.187		0.797	1a+1b+4+6	1.747			155		
		0.600				0.187			(1a+1b)+4	0.787	71.0	0.01		No	
		0.600						0.797		(1a+1b)+6	1.397	134.0		0.01	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
0.600								(1a+1b)							
Standalone	Rear-0mm	0.416	0.347				0.491	0.797	1a+1b+5+6	2.051			156		
		0.600						1.230	(1a+1b)+(5+6)	1.830	126.1	0.02		No	
		0.600						1.230		(1a+1b) (5+6)					

Non-RSDB scenarios (Continued)

Standalone	Rear-19mm	0.349	0.820					0.614	1a+1b+7	1.783				157
		0.984						0.614	(1a+1b)+7	1.598	114.9	0.02	No	
Volume scan Note.2		0.984							(1a+1b)					
Standalone	Rear-19mm	0.349	0.820			0.187		0.614	1a+1b+4+7	1.970				158
		0.984				0.187			(1a+1b)+4	1.171	86.1	0.01	No	
		0.984						0.614	(1a+1b)+7	1.598	114.9	0.02	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		0.984							(1a+1b)					
Standalone	Rear-19mm	0.349	0.820				0.491	0.614	1a+1b+5+7	2.274				159
		0.984					1.160		(1a+1b)+(5+7)	2.144	114.5	0.03	No	
Volume scan Note.2		0.984							(1a+1b)					
							1.160		(5+7)					
Standalone	Rear-0mm	0.416	0.347					0.614	1a+1b+7	1.377				160
		0.600						0.614	(1a+1b)+7	1.214	129.6	0.01	No	
Volume scan Note.2		0.600							(1a+1b)					
Standalone	Rear-0mm	0.416	0.347			0.187		0.614	1a+1b+4+7	1.564				161
		0.600				0.187			(1a+1b)+4	0.787	71.0	0.01	No	
		0.600						0.614	(1a+1b)+7	1.214	129.6	0.01	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		0.600							(1a+1b)					
Standalone	Rear-0mm	0.416	0.347				0.491	0.614	1a+1b+5+7	1.868				162
		0.600					1.160		(1a+1b)+(5+7)	1.760	129.1	0.02	No	
Volume scan Note.2		0.600							(1a+1b)					
							1.160		(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- LTE Band 2 is subset of LTE Band 25, So LTE Band 25 was used to do Simultaneous transmission analysis.
- Simultaneous transmission scenarios (1+4 & 1+5) are subset of (1+4+6 & 1+5+6) scenarios.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg)							
		WWAN		RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1-a	1-b	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear-19mm	0.349	0.820	0.206	0.120	0.148	0.187	0.437	0.586	1.812	1.754	1.913	1.961	1.903	2.062	0.585	0.734
	Rear-0mm	0.416	0.347	0.206	0.120	0.148	0.187	0.437	0.586	1.406	1.348	1.507	1.555	1.497	1.656	0.585	0.734
	Edge 1	0.099	0.138	0.249	0.400	0.185	0.222	0.246	0.031	0.732	0.668	1.105	0.517	0.453	0.890	0.431	0.216
	Edge 2	0.400	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.802	0.804	0.803	1.201	1.203	1.202	0.004	0.403
	Edge 3	0.044	0.138	0.400	0.253	0.245	0.400	0.370	0.090	0.952	0.797	1.205	0.672	0.517	0.925	0.615	0.335
	Edge 4	0.434	0.453	0.193	0.085	0.177	0.141	0.102	0.025	1.182	1.166	1.215	1.105	1.089	1.138	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN		RSDB scenarios											
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
1-a	1-b	2	3	4	5	6	7								
Standalone	Rear-19mm	0.349	0.820	0.206				0.437		1a+1b+2+6	1.812			163	
		0.984		0.206						(1a+1b)+2	1.190	82.8	0.02		No
		0.984						0.437		(1a+1b)+6	1.421	119.3	0.01		No
				0.206				0.437		2 + 6	0.643	201.2	0.00		No
Volume scan Note.2		0.984							(1a+1b)						
Standalone	Rear-19mm	0.349	0.820			0.148		0.437		1a+1b+4+6	1.754			164	
		0.984				0.148				(1a+1b)+4	1.132	82.8	0.01		No
		0.984						0.437		(1a+1b)+6	1.421	119.3	0.01		No
						0.148		0.437		4+6	0.585	201.2	0.00		No
Volume scan Note.2		0.984							(1a+1b)						
Standalone	Rear-19mm	0.349	0.820		0.120		0.187	0.437		1a+1b+3+5+6	1.913			165	
		0.984					0.187			(1a+1b)+5+(3+6)	1.990				
		0.984				0.819				(1a+1b)+5	1.171	119.3	0.01		No
		0.984				0.819		0.187		(1a+1b)+(3+6)	1.803	86.1	0.03		No
				0.187		0.819				5+(3+6)	1.006	205.1	0.00		No
Volume scan Note.2		0.984				0.819			(1a+1b) (3+6)						
Standalone	Rear-0mm	0.416	0.347	0.206				0.437		1a+1b+2+6	1.406			166	
		0.600		0.206						(1a+1b)+2	0.806	67.4	0.01		No
		0.600						0.437		(1a+1b)+6	1.037	134.0	0.01		No
				0.206				0.437		2 + 6	0.643	201.2	0.00		No
Volume scan Note.2		0.600							(1a+1b)						
Standalone	Rear-0mm	0.416	0.347			0.148		0.437		1a+1b+4+6	1.348			167	
		0.600				0.148				(1a+1b)+4	0.748	67.4	0.01		No
		0.600						0.437		(1a+1b)+6	1.037	134.0	0.01		No
						0.148		0.437		4+6	0.585	201.2	0.00		No
Volume scan Note.2		0.600							(1a+1b)						
Standalone	Rear-0mm	0.416	0.347		0.120		0.187	0.437		1a+1b+3+5+6	1.507			168	
		0.600					0.187			(1a+1b)+5+(3+6)	1.606				
		0.600				0.819				(1a+1b)+5	0.787	134.1	0.01		No
		0.600				0.819		0.187		(1a+1b)+(3+6)	1.419	71.0	0.02		No
				0.187		0.819				5+(3+6)	1.006	205.1	0.00		No
Volume scan Note.2		0.600				0.819			(1a+1b) (3+6)						

RSDB scenarios (Continued)

Standalone	Rear-19mm	0.349	0.820	0.206				0.586	1a+1b+2+7	1.961				169
		0.984		0.206					(1a+1b)+2	1.190	82.8	0.02	No	
		0.984						0.586	(1a+1b)+7	1.570	114.3	0.02	No	
				0.206				0.586	2 + 7	0.792	196.2	0.00	No	
Volume scan Note.2		0.984						(1a+1b)						
Standalone	Rear-19mm	0.349	0.820			0.148		0.586	1a+1b+4+7	1.903				170
		0.984				0.148			(1a+1b)+4	1.132	82.8	0.01	No	
		0.984						0.586	(1a+1b)+7	1.570	114.3	0.02	No	
						0.148		0.586	4+7	0.734	196.2	0.00	No	
Volume scan Note.2		0.984						(1a+1b)						
Standalone	Rear-19mm	0.349	0.820		0.120	0.187		0.586	1a+1b+3+5+7	2.062				171
		0.984				0.187			(1a+1b)+5+(3+7)	2.106				
						0.935								
		0.984				0.187			(1a+1b)+5	1.171	114.3	0.01	No	
		0.984				0.935			(1a+1b)+(3+7)	1.919	86.1	0.03	No	
				0.187		0.935			5+(3+7)	1.122	200.0	0.01	No	
Volume scan Note.2		0.984						(1a+1b)						
					0.935			(3+7)						
Standalone	Rear-0mm	0.416	0.347	0.206				0.586	1a+1b+2+7	1.555				172
		0.600		0.206					(1a+1b)+2	0.806	67.4	0.01	No	
		0.600						0.586	(1a+1b)+7	1.186	129.0	0.01	No	
				0.206				0.586	2 + 7	0.792	196.2	0.00	No	
Volume scan Note.2		0.600						(1a+1b)						
Standalone	Rear-0mm	0.416	0.347			0.148		0.586	1a+1b+4+7	1.497				173
		0.600				0.148			(1a+1b)+4	0.748	67.4	0.01	No	
		0.600						0.586	(1a+1b)+7	1.186	129.0	0.01	No	
						0.148		0.586	4+7	0.734	196.2	0.00	No	
Volume scan Note.2		0.600						(1a+1b)						
Standalone	Rear-0mm	0.416	0.347		0.120	0.187		0.586	1a+1b+3+5+7	1.656				174
		0.600				0.187			(1a+1b)+5+(3+7)	1.722				
						0.935								
		0.600				0.187			(1a+1b)+5	0.787	129.0	0.01	No	
		0.600				0.935			(1a+1b)+(3+7)	1.535	71.0	0.03	No	
				0.187		0.935			5+(3+7)	1.122	200.0	0.01	No	
Volume scan Note.2		0.600						(1a+1b)						
					0.935			(3+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- LTE Band 2 is subset of LTE Band 25, So LTE Band 25 was used to do Simultaneous transmission analysis.

12.15. Sum of the SAR for ENDC(LTE B66+NR Bn5) & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)										
		WWAN		Non-RSDB scenarios					WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	
		1-a	1-b	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7
Standalone	Rear-19mm	0.435	0.820	0.287	0.304	0.187	0.491	0.797	0.614	1.559	1.729	1.442	1.746	2.052	2.239	2.543	1.869	2.056	2.360
	Rear-0mm	0.278	0.347	0.287	0.304	0.187	0.491	0.797	0.614	0.929	1.099	0.812	1.116	1.422	1.609	1.913	1.239	1.426	1.730
	Edge 1	0.172	0.138	0.400	0.446	0.222	0.400	0.393	0.040	0.756	0.932	0.532	0.710	0.703	0.925	1.103	0.350	0.572	0.750
	Edge 2	0.400	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.823	0.819	0.801	0.803	0.831	0.832	0.834	1.200	1.201	1.203
	Edge 3	0.031	0.138	0.458	0.394	0.400	0.420	0.852	0.178	0.563	1.027	0.569	0.589	1.021	1.421	1.441	0.347	0.747	0.767
	Edge 4	0.649	0.453	0.202	0.242	0.141	0.230	0.155	0.045	1.344	1.445	1.243	1.332	1.257	1.398	1.487	1.147	1.288	1.377

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure		
		WWAN		DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)						UNII MIMO (6GHz)	
		1-a	1-b	2	3	4	5	6						7	
Standalone	Rear-19mm	0.435	0.820		0.304				1a+1b+3	1.559			175		
		1.030			0.304				(1a+1b)+3	1.334	80.3	0.02		No	
		1.030							(1a+1b)						
Standalone	Rear-19mm	0.435	0.820	0.287		0.187			1a+1b+2+4	1.729			176		
		1.030		0.287					(1a+1b)+2	1.317	117.3	0.01		No	
		1.030				0.187				(1a+1b)+4	1.217	81.1		0.02	No
				0.287		0.187				2+4	0.474	198.2		0.00	No
1.030															
Standalone	Rear-19mm	0.435	0.820					0.797	1a+1b+6	2.052			177		
		1.030						0.797	(1a+1b)+6	1.827	124.3	0.02		No	
		1.030													
Standalone	Rear-19mm	0.435	0.820			0.187		0.797	1a+1b+4+6	2.239			178		
		1.030				0.187			(1a+1b)+4	1.217	81.1	0.02		No	
		1.030						0.797		(1a+1b)+6	1.827	124.3		0.02	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
1.030															
Standalone	Rear-19mm	0.435	0.820				0.491	0.797	1a+1b+5+6	2.543			179		
		1.030					1.230		(1a+1b)+(5+6)	2.260	116.3	0.03		No	
		1.030								(1a+1b) (5+6)					
Standalone	Rear-0mm	0.278	0.347					0.797	1a+1b+6	1.422			180		
		0.460						0.797	(1a+1b)+6	1.257	134.2	0.01		No	
		0.460													
Standalone	Rear-0mm	0.278	0.347			0.187		0.797	1a+1b+4+6	1.609			181		
		0.460				0.187			(1a+1b)+4	0.647	71.1	0.01		No	
		0.460						0.797		(1a+1b)+6	1.257	134.2		0.01	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
0.460															
Standalone	Rear-0mm	0.278	0.347				0.491	0.797	1a+1b+5+6	1.913			182		
		0.460					1.230		(1a+1b)+(5+6)	1.690	126.3	0.02		No	
		0.460								(1a+1b) (5+6)					
0.460						1.23									

Non-RSDB scenarios (continued)

Standalone	Rear-19mm	0.435	0.820					0.614	1a+1b+7	1.869				183
		1.030						0.614	(1a+1b)+7	1.644	119.9	0.02	No	
Volume scan Note.2		1.030												
Standalone	Rear-19mm	0.435	0.820			0.187		0.614	1a+1b+4+7	2.056				184
		1.030				0.187			(1a+1b)+4	1.217	81.1	0.02	No	
		1.030						0.614	(1a+1b)+7	1.644	119.9	0.02	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		1.030												
Standalone	Rear-19mm	0.435	0.820				0.491	0.614	1a+1b+5+7	2.360				185
		1.030					1.160		(1a+1b)+(5+7)	2.190	119.5	0.03	No	
Volume scan Note.2		1.030							(1a+1b)					
							1.160		(5+7)					
Standalone	Rear-0mm	0.278	0.347			0.187		0.614	1a+1b+4+7	1.426				186
		0.460				0.187			(1a+1b)+4	0.647	71.1	0.01	No	
		0.460						0.614	(1a+1b)+7	1.074	129.9	0.01	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		0.460												
Standalone	Rear-0mm	0.278	0.347				0.491	0.614	1a+1b+5+7	1.730				187
		0.460					1.160		(1a+1b)+(5+7)	1.620	129.4	0.02	No	
Volume scan Note.2									(1a+1b)					
									(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- Simultaneous transmission scenarios (1+4 & 1+5) are subset of (1+4+6 & 1+5+6) scenarios

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg)							
		WWAN		RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1-a	1-b	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear-19mm	0.435	0.820	0.206	0.120	0.148	0.187	0.437	0.586	1.898	1.840	1.999	2.047	1.989	2.148	0.585	0.734
	Rear-0mm	0.278	0.347	0.206	0.120	0.148	0.187	0.437	0.586	1.268	1.210	1.369	1.417	1.359	1.518	0.585	0.734
	Edge 1	0.172	0.138	0.249	0.400	0.185	0.222	0.246	0.031	0.805	0.741	1.178	0.590	0.526	0.963	0.431	0.216
	Edge 2	0.400	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.802	0.804	0.803	1.201	1.203	1.202	0.004	0.403
	Edge 3	0.031	0.138	0.400	0.253	0.245	0.400	0.370	0.090	0.939	0.784	1.192	0.659	0.504	0.912	0.615	0.335
	Edge 4	0.649	0.453	0.193	0.085	0.177	0.141	0.102	0.025	1.397	1.381	1.430	1.320	1.304	1.353	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN		RSDB scenarios										
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1-a	1-b	2	3	4	5	6	7							
Standalone	Rear-19mm	0.435	0.820	0.206				0.437	1a+1b+2+6	1.898				188
		1.030		0.206					(1a+1b)+2	1.236	77.8	0.02	No	
		1.030						0.437	(1a+1b)+6	1.467	124.3	0.01	No	
				0.206				0.437	2 + 6	0.643	201.2	0.00	No	
		Volume scan Note.2		1.030						(1a+1b)				
Standalone	Rear-19mm	0.435	0.820			0.148		0.437	1a+1b+4+6	1.840			189	
		1.030				0.148			(1a+1b)+4	1.178	77.8	0.02		No
		1.030						0.437	(1a+1b)+6	1.467	124.3	0.01		No
						0.148		0.437	4+6	0.585	201.2	0.00		No
		Volume scan Note.2		1.030						(1a+1b)				
Standalone	Rear-19mm	0.435	0.820		0.120		0.187	0.437	1a+1b+3+5+6	1.999			190	
		1.030					0.187		(1a+1b)+5+ (3+6)	2.036				
						0.819			(1a+1b)+5	1.217	124.3	0.01		No
		1.030				0.819			(1a+1b)+(3+6)	1.849	81.1	0.03		No
				0.187		0.819			5+(3+6)	1.006	205.1	0.00		No
		Volume scan Note.2		1.030						(1a+1b) (3+6)				
Standalone	Rear-0mm	0.278	0.347		0.120		0.187	0.437	1a+1b+3+5+6	1.369			191	
		0.460					0.187		(1a+1b)+5+ (3+6)	1.466				
						0.819			(1a+1b)+5	0.647	134.3	0.00		No
		0.460				0.819			(1a+1b)+(3+6)	1.279	71.1	0.02		No
				0.187		0.819			5+(3+6)	1.006	205.1	0.00		No
		Volume scan Note.2		0.460						(1a+1b) (3+6)				

RSDB scenarios (Continued)

Standalone	Rear-19mm	0.435	0.820	0.206				0.586	1a+1b+2+7	2.047				192
		1.030		0.206					(1a+1b)+2	1.236	77.8	0.02	No	
		1.030						0.586	(1a+1b)+7	1.616	119.3	0.02	No	
				0.206				0.586	2 + 7	0.792	196.2	0.00	No	
Volume scan Note.2		1.030						(1a+1b)						
Standalone	Rear-19mm	0.435	0.820			0.148		0.586	1a+1b+4+7	1.989				193
		1.030				0.148			(1a+1b)+4	1.178	77.8	0.02	No	
		1.030						0.586	(1a+1b)+7	1.616	119.3	0.02	No	
						0.148		0.586	4+7	0.734	196.2	0.00	No	
Volume scan Note.2		1.030						(1a+1b)						
Standalone	Rear-19mm	0.435	0.820		0.120		0.187		1a+1b+3+5+7	2.148				194
		1.030				0.187			(1a+1b)+5+(3+7)	2.152				
						0.935								
		1.030				0.187			(1a+1b)+5	1.217	119.3	0.01	No	
		1.030				0.935			(1a+1b)+(3+7)	1.965	81.1	0.03	No	
				0.187		0.935			5+(3+7)	1.122	200.0	0.01	No	
Volume scan Note.2		1.030						(1a+1b)						
						0.935		(3+7)						
Standalone	Rear-0mm	0.278	0.347	0.206				0.586	1a+1b+2+7	1.417				195
		0.460		0.206					(1a+1b)+2	0.666	67.9	0.01	No	
		0.460						0.586	(1a+1b)+7	1.046	129.2	0.01	No	
				0.206				0.586	2 + 7	0.792	196.2	0.00	No	
Volume scan Note.2		0.460						(1a+1b)						
Standalone	Rear-0mm	0.278	0.347			0.148		0.586	1a+1b+4+7	1.359				196
		0.460				0.148			(1a+1b)+4	0.608	67.9	0.01	No	
		0.460						0.586	(1a+1b)+7	1.046	129.2	0.01	No	
						0.148		0.586	4+7	0.734	196.2	0.00	No	
Volume scan Note.2		0.460						(1a+1b)						
Standalone	Rear-0mm	0.278	0.347		0.120		0.187		1a+1b+3+5+7	1.518				197
		0.460				0.187			(1a+1b)+5+(3+7)	1.582				
						0.935								
		0.460				0.187			(1a+1b)+5	0.647	129.2	0.00	No	
		0.460				0.935			(1a+1b)+(3+7)	1.395	71.1	0.02	No	
				0.187		0.935			5+(3+7)	1.122	200.0	0.01	No	
Volume scan Note.2		0.460						(1a+1b)						
						0.935		(3+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.16. Sum of the SAR for ENDC(LTE B5+NR Bn66) & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)										
		WWAN		Non-RSDB scenarios					WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	
		1-a	1-b	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7
Standalone	Rear-19mm	0.698	0.421	0.287	0.304	0.187	0.491	0.797	0.614	1.423	1.593	1.306	1.610	1.916	2.103	2.407	1.733	1.920	2.224
	Rear-0mm	0.404	0.259	0.287	0.304	0.187	0.491	0.797	0.614	0.967	1.137	0.850	1.154	1.460	1.647	1.951	1.277	1.464	1.768
	Edge 1	0.120	0.203	0.400	0.446	0.222	0.400	0.393	0.040	0.769	0.945	0.545	0.723	0.716	0.938	1.116	0.363	0.585	0.763
	Edge 2	0.400	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.823	0.819	0.801	0.803	0.831	0.832	0.834	1.200	1.201	1.203
	Edge 3	0.088	0.045	0.458	0.394	0.400	0.420	0.852	0.178	0.527	0.991	0.533	0.553	0.985	1.385	1.405	0.311	0.711	0.731
	Edge 4	0.644	0.519	0.202	0.242	0.141	0.230	0.155	0.045	1.405	1.506	1.304	1.393	1.318	1.459	1.548	1.208	1.349	1.438

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure		
		WWAN		DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)						UNII MIMO (6GHz)	
		1-a	1-b	2	3	4	5	6						7	
Standalone	Rear-19mm	0.698	0.421		0.304				1a+1b+3	1.423			198		
		1.110			0.304				(1a+1b)+3	1.414	80.3	0.02		No	
		1.110								(1a+1b)					
Standalone	Rear-19mm	0.698	0.421	0.287		0.187			1a+1b+2+4	1.593			199		
		1.110		0.287					(1a+1b)+2	1.397	117.3	0.01		No	
		1.110				0.187				(1a+1b)+4	1.297	81.1		0.02	No
				0.287		0.187				2+4	0.474	198.2		0.00	No
1.110															
Standalone	Rear-19mm	0.698	0.421					0.797	1a+1b+6	1.916			200		
		1.110						0.797	(1a+1b)+6	1.907	124.3	0.02		No	
		1.110													
Standalone	Rear-19mm	0.698	0.421			0.187		0.797	1a+1b+4+6	2.103			201		
		1.110				0.187			(1a+1b)+4	1.297	81.1	0.02		No	
		1.110						0.797		(1a+1b)+6	1.907	124.3		0.02	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
1.110															
Standalone	Rear-19mm	0.698	0.421				0.491	0.797	1a+1b+5+6	2.407			202		
		1.110					1.230		(1a+1b)+(5+6)	2.340	116.3	0.03		No	
		1.110								(1a+1b)					
1.110						1.23		(5+6)							
Standalone	Rear-0mm	0.404	0.259					0.797	1a+1b+6	1.460			203		
		0.486						0.797	(1a+1b)+6	1.283	134	0.01		No	
		0.486													
Standalone	Rear-0mm	0.404	0.259			0.187		0.797	1a+1b+4+6	1.647			204		
		0.486				0.187			(1a+1b)+4	0.673	71.0	0.01		No	
		0.486						0.797		(1a+1b)+6	1.283	134.0		0.01	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
0.486															
Standalone	Rear-0mm	0.404	0.259				0.491	0.797	1a+1b+5+6	1.951			205		
		0.486					1.230		(1a+1b)+(5+6)	1.716	126.1	0.02		No	
		0.486								(1a+1b)					
1.110						1.230		(5+6)							

Non-RSDB scenarios (Continued)

Standalone	Rear-19mm	0.698	0.421					0.614	1a+1b+7	1.733				206
		1.110						0.614	(1a+1b)+7	1.724	119.9	0.02	No	
Volume scan Note.2		1.110												
Standalone	Rear-19mm	0.698	0.421			0.187		0.614	1a+1b+4+7	1.920				207
		1.110				0.187			(1a+1b)+4	1.297	81.1	0.02	No	
		1.110						0.614	(1a+1b)+7	1.724	119.9	0.02	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		1.110												
Standalone	Rear-19mm	0.698	0.421				0.491	0.614	1a+1b+5+7	2.224				208
		1.110					1.160		(1a+1b)+(5+7)	2.270	119.5	0.03	No	
Volume scan Note.2		1.110							(1a+1b)					
							1.16		(5+7)					
Standalone	Rear-0mm	0.404	0.259			0.187		0.614	1a+1b+4+7	1.464				209
		0.486				0.187			(1a+1b)+4	0.673	71.0	0.01	No	
		0.486						0.614	(1a+1b)+7	1.100	129.6	0.01	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		0.486												
Standalone	Rear-0mm	0.404	0.259				0.491	0.614	1a+1b+5+7	1.768				210
		0.486					1.160		(1a+1b)+(5+7)	1.646	129.1	0.02	No	
Volume scan Note.2		0.486							(1a+1b)					
							1.160		(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- LTE Band 5 is subset of LTE Band 26, So LTE Band 26 was used to do Simultaneous transmission analysis.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg)							
		WWAN		RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1-a	1-b	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear-19mm	0.698	0.421	0.206	0.120	0.148	0.187	0.437	0.586	1.762	1.704	1.863	1.911	1.853	2.012	0.585	0.734
	Rear-0mm	0.404	0.259	0.206	0.120	0.148	0.187	0.437	0.586	1.306	1.248	1.407	1.455	1.397	1.556	0.585	0.734
	Edge 1	0.120	0.203	0.249	0.400	0.185	0.222	0.437	0.031	0.818	0.754	1.191	0.603	0.539	0.976	0.431	0.216
	Edge 2	0.400	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.802	0.804	0.803	1.201	1.203	1.202	0.004	0.403
	Edge 3	0.088	0.045	0.400	0.253	0.245	0.400	0.370	0.090	0.903	0.748	1.156	0.623	0.468	0.876	0.615	0.335
	Edge 4	0.644	0.519	0.193	0.085	0.177	0.141	0.102	0.025	1.458	1.442	1.491	1.381	1.365	1.414	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN		RSDB scenarios											
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
1-a	1-b	2	3	4	5	6	7								
Standalone	Rear-19mm	0.698	0.421	0.206				0.437		1a+1b+2+6	1.762			211	
		1.110		0.206						(1a+1b)+2	1.316	77.8	0.02		No
		1.110						0.437		(1a+1b)+6	1.547	124.3	0.02		No
				0.206				0.437		2 + 6	0.643	201.2	0.00		No
		Volume scan Note.2		1.110							(1a+1b)				
Standalone	Rear-19mm	0.698	0.421			0.148		0.437		1a+1b+4+6	1.704			212	
		1.110				0.148				(1a+1b)+4	1.258	77.8	0.02		No
		1.110						0.437		(1a+1b)+6	1.547	124.3	0.02		No
						0.148		0.437		4+6	0.585	201.2	0.00		No
		Volume scan Note.2		1.110							(1a+1b)				
Standalone	Rear-19mm	0.698	0.421		0.120		0.187	0.437		1a+1b+3+5+6	1.863			213	
		1.110					0.187			(1a+1b)+5+(3+6)	2.116				
							0.187			(1a+1b)+5	1.297	124.3	0.01		No
		1.110				0.819				(1a+1b)+(3+6)	1.929	81.1	0.03		No
				0.187		0.819				5+(3+6)	1.006	205.1	0.00		No
		Volume scan Note.2		1.110							(1a+1b)				
Standalone	Rear-0mm	0.404	0.259		0.120		0.187	0.437		1a+1b+3+5+6	1.407			214	
		0.486					0.187			(1a+1b)+5+(3+6)	1.492				
							0.187			(1a+1b)+5	0.673	134.1	0.00		No
		0.486				0.819				(1a+1b)+(3+6)	1.305	71.0	0.02		No
				0.187		0.819				5+(3+6)	1.006	205.1	0.00		No
		Volume scan Note.2		0.486							(1a+1b)				
					0.819				(3+6)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- LTE Band 5 is subset of LTE Band 26, So LTE Band 26 was used to do Simultaneous transmission analysis.

RSDB scenarios (Continued)

Standalone	Rear-19mm	0.698	0.421	0.206				0.586	1a+1b+2+7	1.911				215
		1.110		0.206					(1a+1b)+2	1.316	77.8	0.02	No	
		1.110						0.586	(1a+1b)+7	1.696	119.3	0.02	No	
				0.206				0.586	2 + 7	0.792	196.2	0.00	No	
Volume scan Note.2		1.110						(1a+1b)						
Standalone	Rear-19mm	0.698	0.421			0.148		0.586	1a+1b+4+7	1.853				216
		1.110				0.148			(1a+1b)+4	1.258	77.8	0.02	No	
		1.110						0.586	(1a+1b)+7	1.696	119.3	0.02	No	
						0.148		0.586	4+7	0.734	196.2	0.00	No	
Volume scan Note.2		1.110						(1a+1b)						
Standalone	Rear-19mm	0.698	0.421		0.120		0.187		1a+1b+3+5+7	2.012				217
		1.110					0.187		(1a+1b)+5+(3+7)	2.232				
							0.935							
		1.110					0.187		(1a+1b)+5	1.297	119.3	0.01	No	
		1.110					0.935		(1a+1b)+(3+7)	2.045	81.1	0.04	No	
Volume scan Note.2		1.110						5+(3+7)	1.122	200.0	0.01	No		
Volume scan Note.2								(1a+1b)						
Volume scan Note.2								(3+7)						
Standalone	Rear-0mm	0.404	0.259	0.206				0.586	1a+1b+2+7	1.455				218
		0.486		0.206					(1a+1b)+2	0.692	67.4	0.01	No	
		0.486						0.586	(1a+1b)+7	1.072	129.0	0.01	No	
				0.206				0.586	2 + 7	0.792	196.2	0.00	No	
Volume scan Note.2		0.486						(1a+1b)						
Standalone	Rear-0mm	0.404	0.259			0.148		0.586	1a+1b+4+7	1.397				219
		0.486				0.148			(1a+1b)+4	0.634	67.4	0.01	No	
		0.486						0.586	(1a+1b)+7	1.072	129.0	0.01	No	
						0.148		0.586	4+7	0.734	196.2	0.00	No	
Volume scan Note.2		0.486						(1a+1b)						
Standalone	Rear-0mm	0.404	0.259		0.120		0.187		1a+1b+3+5+7	1.556				220
		0.486					0.187		(1a+1b)+5+(3+7)	1.608				
							0.935							
		0.486					0.187		(1a+1b)+5	0.673	129.0	0.00	No	
		0.486					0.935		(1a+1b)+(3+7)	1.421	71.0	0.02	No	
Volume scan Note.2		0.486			0.187		0.935	5+(3+7)	1.122	200.0	0.01	No		
Volume scan Note.2								(1a+1b)						
Volume scan Note.2						0.935		(3+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- LTE Band 5 is subset of LTE Band 26, So LTE Band 26 was used to do Simultaneous transmission analysis.

12.17. Sum of the SAR for ENDC(LTE B12+NR Bn66) & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)										
		WWAN		Non-RSDB scenarios					WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	
		1-a	1-b	2	3	4	5	6											7
Standalone	Rear-19mm	0.619	0.421	0.287	0.304	0.187	0.491	0.797	0.614	1.344	1.514	1.227	1.531	1.837	2.024	2.328	1.654	1.841	2.145
	Rear-0mm	0.355	0.259	0.287	0.304	0.187	0.491	0.797	0.614	0.918	1.088	0.801	1.105	1.411	1.598	1.902	1.228	1.415	1.719
	Edge 1	0.127	0.203	0.400	0.446	0.222	0.400	0.393	0.040	0.776	0.952	0.552	0.730	0.723	0.945	1.123	0.370	0.592	0.770
	Edge 2	0.400	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.823	0.819	0.801	0.803	0.831	0.832	0.834	1.200	1.201	1.203
	Edge 3	0.101	0.045	0.458	0.394	0.400	0.420	0.852	0.178	0.540	1.004	0.546	0.566	0.998	1.398	1.418	0.324	0.724	0.744
	Edge 4	0.387	0.519	0.202	0.242	0.141	0.230	0.155	0.045	1.148	1.249	1.047	1.136	1.061	1.202	1.291	0.951	1.092	1.181

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure		
		WWAN		DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)						UNII MIMO (6GHz)	
		1-a	1-b	2	3	4	5	6						7	
Standalone	Rear-19mm	0.619	0.421		0.304				1a+1b+3	1.344			221		
		0.917			0.304				(1a+1b)+3	1.221	80.3	0.02		No	
		0.917							(1a+1b)						
Standalone	Rear-19mm	0.619	0.421	0.287		0.187			1a+1b+2+4	1.514			222		
		0.917		0.287					(1a+1b)+2	1.204	117.3	0.01		No	
		0.917				0.187				(1a+1b)+4	1.104	81.1		0.01	No
				0.287		0.187				2+4	0.474	198.2		0.00	No
0.917															
Standalone	Rear-19mm	0.619	0.421					0.797	1a+1b+6	1.837			223		
		0.917						0.797	(1a+1b)+6	1.714	124.3	0.02		No	
		0.917													
Standalone	Rear-19mm	0.619	0.421			0.187		0.797	1a+1b+4+6	2.024			224		
		0.917				0.187			(1a+1b)+4	1.104	81.1	0.01		No	
		0.917						0.797		(1a+1b)+6	1.714	124.3		0.02	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
0.917															
Standalone	Rear-19mm	0.619	0.421				0.491	0.797	1a+1b+5+6	2.328			225		
		0.917					1.230		(1a+1b)+(5+6)	2.147	116.3	0.03		No	
		0.917								(1a+1b) (5+6)					
0.917						1.230									
Standalone	Rear-0mm	0.355	0.259					0.797	1a+1b+6	1.411			226		
		0.449						0.797	(1a+1b)+6	1.246	134	0.01		No	
		0.449													
Standalone	Rear-0mm	0.355	0.259			0.187		0.797	1a+1b+4+6	1.598			227		
		0.449				0.187			(1a+1b)+4	0.636	71.0	0.01		No	
		0.449						0.797		(1a+1b)+6	1.246	134.0		0.01	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
0.449															
Standalone	Rear-0mm	0.355	0.259				0.491	0.797	1a+1b+5+6	1.902			228		
		0.449					1.230		(1a+1b)+(5+6)	1.679	126.1	0.02		No	
		0.449								(1a+1b) (5+6)					
0.449						1.230									

Non-RSDB scenarios (Continued)

Standalone	Rear-19mm	0.619	0.421					0.614	1a+1b+7	1.654				229
		0.917						0.614	(1a+1b)+7	1.531	119.9	0.02	No	
Volume scan Note.2		0.917												
Standalone	Rear-19mm	0.619	0.421			0.187		0.614	1a+1b+4+7	1.841				230
		0.917				0.187			(1a+1b)+4	1.104	81.1	0.01	No	
		0.917						0.614	(1a+1b)+7	1.531	119.9	0.02	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		0.917												
Standalone	Rear-19mm	0.619	0.421				0.491	0.614	1a+1b+5+7	2.145				231
		0.917					1.160		(1a+1b)+(5+7)	2.077	119.5	0.03	No	
Volume scan Note.2		0.917							(1a+1b)					
									(5+7)					
Standalone	Rear-0mm	0.355	0.259			0.187		0.614	1a+1b+4+7	1.415				232
		0.449				0.187			(1a+1b)+4	0.636	71.0	0.01	No	
		0.449						0.614	(1a+1b)+7	1.063	129.6	0.01	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		0.449												
Standalone	Rear-0mm	0.355	0.259				0.491	0.614	1a+1b+5+7	1.719				233
		0.449					1.160		(1a+1b)+(5+7)	1.609	129.1	0.02	No	
Volume scan Note.2		0.449							(1a+1b)					
							1.160		(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg)							
		WWAN		RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1-a	1-b	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear-19mm	0.619	0.421	0.206	0.120	0.148	0.187	0.437	0.586	1.683	1.625	1.784	1.832	1.774	1.933	0.585	0.734
	Rear-0mm	0.355	0.259	0.206	0.120	0.148	0.187	0.437	0.586	1.257	1.199	1.358	1.406	1.348	1.507	0.585	0.734
	Edge 1	0.127	0.203	0.249	0.400	0.185	0.222	0.246	0.031	0.825	0.761	1.198	0.610	0.546	0.983	0.431	0.216
	Edge 2	0.400	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.802	0.804	0.803	1.201	1.203	1.202	0.004	0.403
	Edge 3	0.101	0.045	0.400	0.253	0.245	0.400	0.370	0.090	0.916	0.761	1.169	0.636	0.481	0.889	0.615	0.335
	Edge 4	0.387	0.519	0.193	0.085	0.177	0.141	0.102	0.025	1.201	1.185	1.234	1.124	1.108	1.157	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure
		WWAN		RSDB scenarios										
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1-a	1-b	2	3	4	5	6	7							
Standalone	Rear-19mm	0.619	0.421	0.206				0.437	1a+1b+2+6	1.683				234
		0.917		0.206					(1a+1b)+2	1.123	77.8	0.02	No	
		0.917						0.437	(1a+1b)+6	1.354	124.3	0.01	No	
				0.206				0.437	2+6	0.643	201.2	0.00	No	
Volume scan Note.2		0.917						(1a+1b)						
Standalone	Rear-19mm	0.619	0.421			0.148		0.437	1a+1b+4+6	1.625				235
		0.917				0.148			(1a+1b)+4	1.065	77.8	0.01	No	
		0.917						0.437	(1a+1b)+6	1.354	124.3	0.01	No	
						0.148		0.437	4+6	0.585	201.2	0.00	No	
Volume scan Note.2		0.917						(1a+1b)						
Standalone	Rear-19mm	0.619	0.421		0.120		0.187	0.437	1a+1b+3+5+6	1.784				236
		0.917					0.187		(1a+1b)+5+	1.923				
						0.819			(3+6)					
		0.917					0.187		(1a+1b)+5	1.104	124.3	0.01	No	
		0.917				0.819			(1a+1b)+(3+6)	1.736	81.1	0.03	No	
Volume scan Note.2		0.917			0.187		0.819	5+(3+6)	1.006	205.1	0.00	No		
Volume scan Note.2								(1a+1b)						
Volume scan Note.2								(3+6)						
Standalone	Rear-0mm	0.355	0.259		0.120		0.187	0.437	1a+1b+3+5+6	1.358				237
		0.449					0.187		(1a+1b)+5+	1.455				
						0.819			(3+6)					
		0.449					0.187		(1a+1b)+5	0.636	134.1	0.00	No	
		0.449				0.819			(1a+1b)+(3+6)	1.268	71.0	0.02	No	
Volume scan Note.2		0.449				0.819		5+(3+6)	1.006	205.1	0.00	No		
Volume scan Note.2								(1a+1b)						
Volume scan Note.2						0.819		(3+6)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios (Continued)

Standalone	Rear-19mm	0.619	0.421	0.206				0.586	1a+1b+2+7	1.832					238
		0.917	0.206						(1a+1b)+2	1.123	77.8	0.02	No		
		0.917						0.586	(1a+1b)+7	1.503	119.3	0.02	No		
			0.206					0.586	2 + 7	0.792	196.2	0.00	No		
Volume scan Note.2		0.917						(1a+1b)							
Standalone	Rear-19mm	0.619	0.421			0.148		0.586	1a+1b+4+7	1.774				239	
		0.917				0.148			(1a+1b)+4	1.065	77.8	0.01	No		
		0.917						0.586	(1a+1b)+7	1.503	119.3	0.02	No		
						0.148		0.586	4+7	0.734	196.2	0.00	No		
Volume scan Note.2		0.917						(1a+1b)							
Standalone	Rear-19mm	0.619	0.421		0.120		0.187		0.586	1a+1b+3+5+7	1.933			240	
		0.917					0.187			(1a+1b)+5+	2.039				
							0.935			(3+7)					
		0.917					0.187			(1a+1b)+5	1.104	119.3	0.01		No
		0.917					0.935			(1a+1b)+(3+7)	1.852	81.1	0.03		No
			0.187				0.935			5+(3+7)	1.122	200.0	0.01		No
Volume scan Note.2		0.917							(1a+1b)						
						0.935			(3+7)						
Standalone	Rear-0mm	0.355	0.259	0.206				0.586	1a+1b+2+7	1.406				241	
		0.449	0.206						(1a+1b)+2	0.655	67.4	0.01	No		
		0.449						0.586	(1a+1b)+7	1.035	129.0	0.01	No		
			0.206					0.586	2 + 7	0.792	196.2	0.00	No		
Volume scan Note.2		0.449						(1a+1b)							
Standalone	Rear-0mm	0.355	0.259			0.148		0.586	1a+1b+4+7	1.348				242	
		0.449				0.148			(1a+1b)+4	0.597	67.4	0.01	No		
		0.449						0.586	(1a+1b)+7	1.035	129.0	0.01	No		
						0.148		0.586	4+7	0.734	196.2	0.00	No		
Volume scan Note.2		0.449						(1a+1b)							
Standalone	Rear-0mm	0.355	0.259		0.120		0.187		0.586	1a+1b+3+5+7	1.507			243	
		0.449					0.187			(1a+1b)+5+	1.571				
							0.935			(3+7)					
		0.449					0.187			(1a+1b)+5	0.636	129.0	0.00		No
		0.449					0.935			(1a+1b)+(3+7)	1.384	71.0	0.02		No
			0.187				0.935			5+(3+7)	1.122	200.0	0.01		No
Volume scan Note.2		0.449							(1a+1b)						
						0.935			(3+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.18. Sum of the SAR for ENDC(LTE B13+NR Bn66) & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)										
		WWAN		Non-RSDB scenarios					WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	
		1-a	1-b	2	3	4	5	6	7	1+3	1+2+4	1+4	1+5	1+6	1+4+6	1+5+6	1+7	1+4+7	1+5+7
Standalone	Rear-19mm	0.775	0.421	0.287	0.304	0.187	0.491	0.797	0.614	1.500	1.670	1.383	1.687	1.993	2.180	2.484	1.810	1.997	2.301
	Rear-0mm	0.442	0.259	0.287	0.304	0.187	0.491	0.797	0.614	1.005	1.175	0.888	1.192	1.498	1.685	1.989	1.315	1.502	1.806
	Edge 1	0.096	0.203	0.400	0.446	0.222	0.400	0.393	0.040	0.745	0.921	0.521	0.699	0.692	0.914	1.092	0.339	0.561	0.739
	Edge 2	0.400	0.400	0.018	0.023	0.001	0.003	0.031	0.400	0.823	0.819	0.801	0.803	0.831	0.832	0.834	1.200	1.201	1.203
	Edge 3	0.075	0.045	0.458	0.394	0.400	0.420	0.852	0.178	0.514	0.978	0.520	0.540	0.972	1.372	1.392	0.298	0.698	0.718
	Edge 4	0.526	0.519	0.202	0.242	0.141	0.230	0.155	0.045	1.287	1.388	1.186	1.275	1.200	1.341	1.430	1.090	1.231	1.320

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note.3	Volume Scan (Yes/No)	Figure		
		WWAN		DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)						UNII MIMO (6GHz)	
		1-a	1-b	2	3	4	5	6						7	
Standalone	Rear-19mm	0.775	0.421		0.304				1a+1b+3	1.500			244		
		1.100			0.304				(1a+1b)+3	1.404	80.3	0.02		No	
		1.100							(1a+1b)						
Standalone	Rear-19mm	0.775	0.421	0.287		0.187			1a+1b+2+4	1.670			245		
		1.100		0.287					(1a+1b)+2	1.387	117.3	0.01		No	
		1.100				0.187				(1a+1b)+4	1.287	81.1		0.02	No
				0.287		0.187				2+4	0.474	198.2		0.00	No
Volume scan Note.2		1.100													
Standalone	Rear-19mm	0.775	0.421					0.797	1a+1b+6	1.993			246		
		1.100						0.797	(1a+1b)+6	1.897	124.3	0.02		No	
		1.100													
Volume scan Note.2		1.100													
Standalone	Rear-19mm	0.775	0.421			0.187		0.797	1a+1b+4+6	2.180			247		
		1.100				0.187			(1a+1b)+4	1.287	81.1	0.02		No	
		1.100						0.797		(1a+1b)+6	1.897	124.3		0.02	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
Volume scan Note.2		1.100													
Standalone	Rear-19mm	0.775	0.421				0.491	0.797	1a+1b+5+6	2.484			248		
		1.100					1.230		(1a+1b)+(5+6)	2.330	116.3	0.03		No	
		1.100								(1a+1b) (5+6)					
Volume scan Note.2		1.100					1.230								
Standalone	Rear-0mm	0.442	0.259					0.797	1a+1b+6	1.498			249		
		0.490						0.797	(1a+1b)+6	1.287	134	0.01		No	
		0.490													
Volume scan Note.2		0.490													
Standalone	Rear-0mm	0.442	0.259			0.187		0.797	1a+1b+4+6	1.685			250		
		0.490				0.187			(1a+1b)+4	0.677	71.0	0.01		No	
		0.490						0.797		(1a+1b)+6	1.287	134.0		0.01	No
						0.187		0.797		4+6	0.984	205.0		0.00	No
Volume scan Note.2		0.490													
Standalone	Rear-0mm	0.442	0.259				0.491	0.797	1a+1b+5+6	1.989			251		
		0.490					1.230		(1a+1b)+(5+6)	1.720	126.1	0.02		No	
		0.490								(1a+1b) (5+6)					
Volume scan Note.2		0.490					1.230								

Non-RSDB scenarios (Continued)

Standalone	Rear-19mm	0.775	0.421					0.614	1a+1b+7	1.810				252
		1.100						0.614	(1a+1b)+7	1.714	119.9	0.02	No	
Volume scan Note.2		1.100												
Standalone	Rear-19mm	0.775	0.421			0.187		0.614	1a+1b+4+7	1.997				253
		1.100				0.187			(1a+1b)+4	1.287	81.1	0.02	No	
		1.100						0.614	(1a+1b)+7	1.714	119.9	0.02	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		1.100												
Standalone	Rear-19mm	0.775	0.421				0.491	0.614	1a+1b+5+7	2.301				254
		1.100					1.160		(1a+1b)+(5+7)	2.260	119.5	0.03	No	
Volume scan Note.2		1.100							(1a+1b)					
							1.160		(5+7)					
Standalone	Rear-0mm	0.442	0.259			0.187		0.614	1a+1b+4+7	1.502				255
		0.490				0.187			(1a+1b)+4	0.677	71.0	0.01	No	
		0.490						0.614	(1a+1b)+7	1.104	129.6	0.01	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Volume scan Note.2		0.490												
Standalone	Rear-0mm	0.442	0.259				0.491	0.614	1a+1b+5+7	1.806				256
		0.490					1.160		(1a+1b)+(5+7)	1.650	129.1	0.02	No	
Volume scan Note.2		0.490							(1a+1b)					
							1.160		(5+7)					

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg)							
		WWAN		RSDB scenarios						WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
1-a	1-b	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7		
Standalone	Rear-19mm	0.775	0.421	0.206	0.120	0.148	0.187	0.437	0.586	1.839	1.781	1.940	1.988	1.930	2.089	0.585	0.734
	Rear-0mm	0.442	0.259	0.206	0.120	0.148	0.187	0.437	0.586	1.344	1.286	1.445	1.493	1.435	1.594	0.585	0.734
	Edge 1	0.096	0.203	0.249	0.400	0.185	0.222	0.246	0.031	0.794	0.730	1.167	0.579	0.515	0.952	0.431	0.216
	Edge 2	0.400	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.802	0.804	0.803	1.201	1.203	1.202	0.004	0.403
	Edge 3	0.075	0.045	0.400	0.253	0.245	0.400	0.370	0.090	0.890	0.735	1.143	0.610	0.455	0.863	0.615	0.335
	Edge 4	0.526	0.519	0.193	0.085	0.177	0.141	0.102	0.025	1.340	1.324	1.373	1.263	1.247	1.296	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN		RSDB scenarios											
				DTS Ant.1	DTS Ant.2	DTS MIMO	BT Ant.1	UNII MIMO (5GHz)	UNII MIMO (6GHz)						
1-a	1-b	2	3	4	5	6	7								
Standalone	Rear-19mm	0.775	0.421	0.206				0.437		1a+1b+2+6	1.839			257	
		1.100	0.206							(1a+1b)+2	1.306	77.8	0.02		No
		1.100						0.437		(1a+1b)+6	1.537	124.3	0.02		No
				0.206					0.437	2 + 6	0.643	201.2	0.00		No
Volume scan Note.2		1.100							(1a+1b)						
Standalone	Rear-19mm	0.775	0.421			0.148		0.437		1a+1b+4+6	1.781			258	
		1.100				0.148				(1a+1b)+4	1.248	77.8	0.02		No
		1.100						0.437		(1a+1b)+6	1.537	124.3	0.02		No
						0.148		0.437		4+6	0.585	201.2	0.00		No
Volume scan Note.2		1.100							(1a+1b)						
Standalone	Rear-19mm	0.775	0.421		0.120		0.187	0.437		1a+1b+3+5+6	1.940			259	
		1.100					0.187			(1a+1b)+5+(3+6)	2.106				
		1.100					0.187			(1a+1b)+5	1.287	124.3	0.01		No
		1.100					0.187			(1a+1b)+(3+6)	1.919	81.1	0.03		No
				0.187			0.187			5+(3+6)	1.006	205.1	0.00		No
Volume scan Note.2		1.100				0.187			(1a+1b)						
Standalone	Rear-0mm	0.442	0.259	0.206				0.437		1a+1b+2+6	1.344			260	
		0.490	0.206							(1a+1b)+2	0.696	67.4	0.01		No
		0.490						0.437		(1a+1b)+6	0.927	134.0	0.01		No
				0.206				0.437		2 + 6	0.643	201.2	0.00		No
Volume scan Note.2		0.490							(1a+1b)						
Standalone	Rear-0mm	0.442	0.259		0.120		0.187	0.437		1a+1b+3+5+6	1.445			261	
		0.490					0.187			(1a+1b)+5+(3+6)	1.496				
		0.490					0.187			(1a+1b)+5	0.677	134.1	0.00		No
		0.490					0.187			(1a+1b)+(3+6)	1.309	71.0	0.02		No
				0.187			0.187			5+(3+6)	1.006	205.1	0.00		No
Volume scan Note.2		0.490							(1a+1b)						
						0.187			(3+6)						

RSDB scenarios (Continued)

Standalone	Rear-19mm	0.775	0.421	0.206				0.586	1a+1b+2+7	1.988				262	
		1.100	0.206					0.586	(1a+1b)+2	1.306	77.8	0.02	No		
		1.100						0.586	(1a+1b)+7	1.686	119.3	0.02	No		
			0.206					0.586	2 + 7	0.792	196.2	0.00	No		
Volume scan Note.2		1.100						(1a+1b)							
Standalone	Rear-19mm	0.775	0.421			0.148		0.586	1a+1b+4+7	1.930				263	
		1.100				0.148		0.586	(1a+1b)+4	1.248	77.8	0.02	No		
		1.100						0.586	(1a+1b)+7	1.686	119.3	0.02	No		
						0.148		0.586	4+7	0.734	196.2	0.00	No		
Volume scan Note.2		1.100						(1a+1b)							
Standalone	Rear-19mm	0.775	0.421		0.120		0.187		0.586	1a+1b+3+5+7	2.089			264	
		1.100					0.187			(1a+1b)+5+(3+7)	2.222				
							0.935								
		1.100					0.187			(1a+1b)+5	1.287	119.3	0.01		No
		1.100					0.935			(1a+1b)+(3+7)	2.035	81.1	0.04		No
			0.187				0.935			5+(3+7)	1.122	200.0	0.01		No
Volume scan Note.2		1.100							(1a+1b)						
					0.935				(3+7)						
Standalone	Rear-0mm	0.442	0.259	0.206				0.586	1a+1b+2+7	1.493				265	
		0.490	0.206						(1a+1b)+2	0.696	67.4	0.01	No		
		0.490						0.586	(1a+1b)+7	1.076	129.0	0.01	No		
			0.206					0.586	2 + 7	0.792	196.2	0.00	No		
Volume scan Note.2		0.490							(1a+1b)						
Standalone	Rear-0mm	0.442	0.259			0.148		0.586	1a+1b+4+7	1.435				266	
		0.490				0.148			(1a+1b)+4	0.638	67.4	0.01	No		
		0.490						0.586	(1a+1b)+7	1.076	129.0	0.01	No		
						0.148		0.586	4+7	0.734	196.2	0.00	No		
Volume scan Note.2		0.490							(1a+1b)						
Standalone	Rear-0mm	0.442	0.259		0.120		0.187		0.586	1a+1b+3+5+7	1.594			267	
		0.490					0.187			(1a+1b)+5+(3+7)	1.612				
							0.935								
		0.490					0.187			(1a+1b)+5	0.677	129.0	0.00		No
		0.490					0.935			(1a+1b)+(3+7)	1.425	71.0	0.02		No
			0.187				0.935			5+(3+7)	1.122	200.0	0.01		No
Volume scan Note.2		0.490							(1a+1b)						
					0.935				(3+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.19. Sum of the SAR for ENDC(LTE B2(Main 2 Ant.)+NR Bn66) & Wi-Fi & BT Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)										
		WWAN		Non-RSDB scenarios					WWAN + DTS MIMO	WWAN + DTS Ant.2 + BT Ant.1	WWAN + BT Ant.1	WWAN + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	WWAN + UNII MIMO	WWAN + UNII MIMO + BT Ant.1	WWAN + UNII MIMO + BT Ant.2	
		1-a	1-b	2	3	4	5	6											7
Standalone	Rear	0.797	0.702	0.287	0.304	0.187	0.491	0.437	0.614	1.803	1.973	1.686	1.990	1.936	2.123	2.427	2.113	2.300	2.604
	Edge 1	0.216	0.203	0.400	0.446	0.222	0.400	0.246	0.040	0.865	1.041	0.641	0.819	0.665	0.887	1.065	0.459	0.681	0.859
	Edge 2	0.579	0.400	0.018	0.023	0.001	0.003	0.001	0.400	1.002	0.998	0.980	0.982	0.980	0.981	0.983	1.379	1.380	1.382
	Edge 3	0.401	0.045	0.458	0.394	0.400	0.420	0.370	0.178	0.840	1.304	0.846	0.866	0.816	1.216	1.236	0.624	1.024	1.044
	Edge 4	0.018	1.063	0.202	0.242	0.141	0.230	0.102	0.045	1.323	1.424	1.222	1.311	1.183	1.324	1.413	1.126	1.267	1.356

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.10) Note 3	Volume Scan (Yes/No)	Figure	
		WWAN		DTS Ant.2	DTS MIMO	BT Ant.1	BT Ant.2	UNII MIMO (5GHz)						UNII MIMO (6GHz)
		1-a	1-b	2	3	4	5	6						7
Standalone	Rear	0.797	0.702		0.304				1a+1b+3	1.803			268	
		0.797	0.702						1a+1b	1.499	329.7	0.01		No
		0.797			0.304				1a+3	1.101	343.3	0.00		No
			0.702		0.304				1b+3	1.006	68.6	0.01		No
Standalone	Rear	0.797	0.702	0.287		0.187			1a+1b+2+4	1.973			269	
		0.797	0.702						1a+1b	1.499	329.7	0.01		No
		0.797		0.287					1a+2	1.084	329.0	0.00		No
		0.797				0.187			1a+4	0.984	348.4	0.00		No
			0.702	0.287					1b+2	0.989	128.7	0.01		No
			0.702			0.187			1b+4	0.889	69.5	0.01		No
Standalone	Rear			0.287		0.187			2+4	0.474	198.2	0.00	No	
		0.797	0.702					0.437	1a+1b+6	1.936			270	
		0.797	0.702						1a+1b	1.499	329.7	0.01		No
		0.797					0.437		1a+6	1.234	327.6	0.00		No
	0.702				0.437		1b+6	1.139	135.6	0.01	No			
Standalone	Rear	0.797	0.702			0.187		0.437	1a+1b+4+6	2.123			271	
		0.797	0.702						1a+1b	1.499	329.7	0.01		No
		0.797				0.187			1a+4	0.984	348.4	0.00		No
		0.797					0.437		1a+6	1.234	327.6	0.00		No
			0.702			0.187			1b+4	0.889	69.5	0.01		No
			0.702				0.437	0.437	1b+6	1.139	135.6	0.01		No
Standalone	Rear					0.187	0.437		4+6	0.624	205.0	0.00	No	
		0.797	0.702				0.491	0.437	1a+1b+5+6	2.427			272	
		0.797					1.260		1a+(5+6)	2.057	329.7	0.01		No
			0.702				1.260		1b+(5+6)	1.962	127.6	0.02		No
0.797	0.702						1a+1b	1.499	324.9	0.01	No			
Volume scan Note 2						1.260								

Non-RSDB scenarios (Continued)

Standalone	Rear	0.797	0.702					0.614	1a+1b+7	2.113				273
		0.797	0.702						1a+1b	1.499	329.7	0.01	No	
		0.797						0.614	1a+7	1.411	326.2	0.01	No	
			0.702					0.614	1b+7	1.316	131.2	0.01	No	
Standalone	Rear	0.797	0.702			0.187		0.614	1a+1b+4+7	2.300				274
		0.797	0.702						1a+1b	1.499	329.7	0.01	No	
		0.797				0.187			1a+4	0.984	348.4	0.00	No	
		0.797						0.614	1a+7	1.411	326.2	0.01	No	
			0.702			0.187			1b+4	0.889	69.5	0.01	No	
			0.702					0.614	1b+7	1.316	131.2	0.01	No	
						0.187		0.614	4+7	0.801	200.6	0.00	No	
Standalone	Rear	0.797	0.702				0.491	0.614	1a+1b+5+7	2.604				275
		0.797					1.160		1a+(5+7)	1.957	329.7	0.01	No	
			0.702				1.160		1b+(5+7)	1.862	130.7	0.02	No	
		0.797	0.702						1a+1b	1.499	323.9	0.01	No	
Volume scan Note.2						1.160								

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b).2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- For 5GHz MIMO test results, RSDB SAR results used for simultaneous transmission analysis. Because, When WLAN operate with NR Sub.6 band at the same time, WLAN operate to RSDB output power.

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)								
		WWAN		RSDB scenarios					WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN + BT Ant.1 + DTS Ant.2 + UNII MIMO	WWAN + DTS Ant.1 + UNII MIMO	WWAN + DTS MIMO + UNII MIMO	WWAN+BT Ant.1 + DTS Ant.2 + UNII MIMO	RSDB SUM (DTS MIMO + UNII MIMO)	RSDB SUM (DTS MIMO + UNII MIMO)	
		1	1-b	2	3	4	5	6	7	1+2+6	1+4+6	1+3+5+6	1+2+7	1+4+7	1+3+5+7	4+6	4+7
Standalone	Rear	0.797	0.702	0.206	0.120	0.148	0.187	0.437	0.586	2.142	2.084	2.243	2.291	2.233	2.392	0.585	0.734
	Edge 1	0.216	0.203	0.249	0.400	0.185	0.222	0.246	0.031	0.914	0.850	1.287	0.699	0.635	1.072	0.431	0.216
	Edge 2	0.579	0.400	0.001	0.001	0.003	0.001	0.001	0.400	0.981	0.983	0.982	1.380	1.382	1.381	0.004	0.403
	Edge 3	0.401	0.045	0.400	0.253	0.245	0.400	0.370	0.090	1.216	1.061	1.469	0.936	0.781	1.189	0.615	0.335
	Edge 4	0.018	1.063	0.193	0.085	0.177	0.141	0.102	0.025	1.376	1.360	1.409	1.299	1.283	1.332	0.279	0.202

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=≤0.04) or 10-g SPLSR (=≤0.10) Note.3	Volume Scan (Yes/No)	Figure	
		WWAN		RSDB scenarios										
		1	1-b	2	3	4	5	6						7
Standalone	Rear	0.797	0.702	0.206				0.437	1a+1b+2+6	2.142				276
		0.797	0.702						1a+1b	1.499	329.7	0.01	No	
		0.797		0.206					1a+2	1.003	341.4	0.00	No	
		0.797						0.437	1a+6	1.234	326.2	0.00	No	
			0.702	0.206					1b+2	0.908	66.1	0.01	No	
			0.702					0.437	1b+6	1.139	131.2	0.01	No	
				0.206				0.437	2+6	0.643	196.8	0.00	No	
Standalone	Rear	0.797	0.702			0.148		0.437	1a+1b+4+6	2.084				277
		0.797	0.702						1a+1b	1.499	329.7	0.01	No	
		0.797				0.148			1a+4	0.945	343.3	0.00	No	
		0.797						0.437	1a+6	1.234	326.2	0.00	No	
			0.702			0.148			1b+4	0.850	68.6	0.01	No	
			0.702					0.437	1b+6	1.139	131.2	0.01	No	
						0.148		0.437	4+6	0.585	199.4	0.00	No	
Standalone	Rear	0.797	0.702		0.120		0.187	0.437	1a+1b+3+5+6	2.243				278
							0.819		(3+6)					
		0.797	0.702						1a+1b	1.499	329.7	0.01	No	
		0.797				0.819			1a+(3+6)	1.616	326.6	0.01	No	
		0.797					0.187		1a+5	0.984	348.4	0.00	No	
			0.702			0.819			1b+(3+6)	1.521	135.6	0.01	No	
			0.702				0.187		1b+5	0.889	69.5	0.01	No	
Volume scan Note.2					0.819			5+(3+6)	1.006	205.1	0.00	No		
								(3+6)						
Standalone	Rear	0.797	0.702	0.206				0.586	1a+1b+2+7	2.291				279
		0.797	0.702						1a+1b	1.499	329.7	0.01	No	
		0.797		0.206					1a+2	1.003	341.4	0.00	No	
		0.797						0.586	1a+7	1.383	326.5	0.00	No	
			0.702	0.206					1b+2	0.908	66.1	0.01	No	
			0.702					0.586	1b+7	1.288	130.6	0.01	No	
				0.206				0.586	2+7	0.792	196.2	0.00	No	
Standalone	Rear	0.797	0.702			0.148		0.586	1a+1b+4+7	2.233				280
		0.797	0.702						1a+1b	1.499	329.7	0.01	No	
		0.797				0.148			1a+4	0.945	343.3	0.00	No	
		0.797						0.586	1a+7	1.383	326.5	0.00	No	
			0.702			0.148			1b+4	0.850	68.6	0.01	No	
			0.702					0.586	1b+7	1.288	130.6	0.01	No	
						0.148		0.586	4+7	0.734	198.8	0.00	No	
Standalone	Rear	0.797	0.702		0.120		0.187	0.586	1a+1b+3+5+7	2.392				281
							0.935		(3+7)					
		0.797	0.702						1a+1b	1.499	329.7	0.01	No	
		0.797				0.935			1a+(3+7)	1.732	326.5	0.01	No	
		0.797					0.187		1a+5	0.984	348.4	0.00	No	
			0.702			0.935			1b+(3+7)	1.637	130.6	0.02	No	
			0.702				0.187		1b+5	0.889	69.5	0.01	No	
Volume scan Note.2					0.935			5+(3+7)	1.122	200.0	0.01	No		
								(3+7)						

Note(s):

- Green value is estimated SAR value according to Sec.4.3.2.b.2) in KDB 447498 D01.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.20 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.20. Volume Scan Results

RF Exposure	Test Position	Configuration	Band	Original Measured SAR (W/kg)	Volume Scan Result	Plot No.	Multi-Band Combined factor	Multi-Band Combined Result	Plot No.
Standalone	Rear (All)	GSM 850 + BT Ant.1	GSM 850	0.611	0.500	1	1.246	0.623	36
			BT Ant.1	0.109	0.131	2	1.717		
		UNII MIMO + BT Ant.2	UNII MIMO	0.660	0.643	3	1.208	1.230	37
			BT Ant.2	0.295	0.292	4	1.663		
		GSM 850 + DTS Ant.1	GSM 850	0.611	0.500		1.246	0.623	38
			DTS Ant.1	0.158	0.168	5	1.306		
		GSM 850 + DTS MIMO	GSM 850	0.611	0.500		1.246	0.623	39
			DTS MIMO	0.250	0.231	6	1.216		
		DTS Ant.2 + UNII MIMO	DTS Ant.2	0.244	0.218	7	1.175	0.819	40
			UNII MIMO	0.382	0.438	8	1.143		
		GSM 1900 + BT Ant.1	GSM 1900	0.519	0.433	9	1.054	0.456	41
			BT Ant.1	0.109	0.131		1.717		
		WCDMA Band II + BT Ant.1	WCDMA Band II	0.573	0.518	10	1.243	0.645	42
			BT Ant.1	0.109	0.131		1.717		
		WCDMA Band II + DTS MIMO	WCDMA Band II	0.573	0.518		1.243	0.657	43
			DTS MIMO	0.250	0.231		1.216		
		WCDMA Band IV + BT Ant.1	WCDMA Band IV	0.599	0.513	11	1.112	0.573	44
			BT Ant.1	0.109	0.131		1.717		
		WCDMA Band IV + DTS MIMO	WCDMA Band IV	0.599	0.513		1.112	0.583	45
			DTS MIMO	0.250	0.231		1.216		
		WCDMA Band V + BT Ant.1	WCDMA Band V	0.670	0.713	12	1.193	0.845	46
			BT Ant.1	0.109	0.131		1.717		
		WCDMA Band V + DTS Ant.1	WCDMA Band V	0.670	0.713		1.193	0.845	47
			DTS Ant.1	0.158	0.168		1.306		
		WCDMA Band V + DTS MIMO	WCDMA Band V	0.670	0.713		1.193	0.856	48
			DTS MIMO	0.250	0.231		1.216		
		LTE Band 12 + BT Ant.1	LTE Band 12	0.672	0.494	13	1.063	0.522	49
			BT Ant.1	0.109	0.131		1.717		
		LTE Band 12 + DTS Ant.1	LTE Band 12	0.672	0.494		1.063	0.522	50
			DTS Ant.1	0.158	0.168		1.306		
		LTE Band 12 + DTS MIMO	LTE Band 12	0.672	0.494		1.063	0.528	51
			DTS MIMO	0.250	0.231		1.216		
		LTE Band 13 + BT Ant.1	LTE Band 13	0.603	0.524	14	1.285	0.673	52
			BT Ant.1	0.109	0.131		1.717		
		LTE Band 13 + DTS Ant.1	LTE Band 13	0.603	0.524		1.285	0.673	53
			DTS Ant.1	0.158	0.168		1.306		
		LTE Band 13 + DTS MIMO	LTE Band 13	0.603	0.524		1.285	0.681	54
			DTS MIMO	0.250	0.231		1.216		
		LTE Band 25 + BT Ant.1	LTE Band 25	0.679	0.783	15	1.251	0.982	55
			BT Ant.1	0.109	0.131		1.717		
		LTE Band 25 + DTS MIMO	LTE Band 25	0.679	0.783		1.251	0.992	56
			DTS MIMO	0.250	0.231		1.216		
		LTE Band 26 + BT Ant.1	LTE Band 26	0.800	0.691	16	1.245	0.859	57
			BT Ant.1	0.109	0.131		1.717		
		LTE Band 26 + DTS Ant.1	LTE Band 26	0.800	0.691		1.245	0.859	58
			DTS Ant.1	0.158	0.168		1.306		
		LTE Band 26 + DTS MIMO	LTE Band 26	0.800	0.691		1.245	0.871	59
			DTS MIMO	0.250	0.231		1.216		
		LTE Band 41 + BT Ant.1	LTE Band 41	0.783	0.770	17	1.360	1.060	60
BT Ant.1	0.109		0.131		1.717				
LTE Band 41 + DTS Ant.1	LTE Band 41	0.783	0.770		1.360	1.050	61		
	DTS Ant.1	0.158	0.168		1.306				
LTE Band 41 + DTS MIMO	LTE Band 41	0.783	0.770		1.360	1.070	62		
	DTS MIMO	0.250	0.231		1.216				
LTE Band 66 + BT Ant.1	LTE Band 66	0.657	0.732	18	1.151	0.843	63		
	BT Ant.1	0.109	0.131		1.717				
LTE Band 66 + DTS MIMO	LTE Band 66	0.657	0.732		1.151	0.854	64		
	DTS MIMO	0.250	0.231		1.216				
NR Band n5 + BT Ant.1	NR Band n5	0.669	0.744	19	1.226	0.907	65		
	BT Ant.1	0.109	0.131		1.717				
NR Band n5 + DTS Ant.1	NR Band n5	0.669	0.744		1.226	0.907	66		
	DTS Ant.1	0.158	0.168		1.306				
NR Band n5 + DTS MIMO	NR Band n5	0.669	0.744		1.226	0.916	67		
	DTS MIMO	0.250	0.231		1.216				
NR Band n66 + BT Ant.1	NR Band n66	0.593	0.619	20	1.183	0.733	68		
	BT Ant.1	0.109	0.131		1.717				
NR Band n66 + DTS MIMO	NR Band n66	0.593	0.619		1.183	0.743	69		
	DTS MIMO	0.250	0.231		1.216				

Volume Scan Results (Continued)

RF Exposure	Test Position	Configuration	Band	Original Measured SAR (W/kg)	Volume Scan Result	Plot No.	Multi-Band Combined factor	Multi-Band Combined Result	Plot No.
Standalone	Rear 0mm	LTE Band 2(Main Ant.1) + NR Band n5	LTE Band 2	0.347	0.350	21	1.199	0.600	70
			NR Band n5	0.331	0.287	22	1.047		
		LTE Band 66 + NR Band n5	LTE Band 66	0.246	0.258	23	1.130	0.460	71
			NR Band n5	0.331	0.287		1.047		
		LTE Band 5 + NR Band n66	LTE Band 5	0.279	0.271	24	1.449	0.486	72
			NR Band n66	0.236	0.223	25	1.096		
		LTE Band 12 + NR Band n66	LTE Band 12	0.303	0.273	26	1.172	0.449	73
			NR Band n66	0.236	0.223		1.096		
		LTE Band 13 + NR Band n66	LTE Band 13	0.304	0.243	27	1.455	0.490	74
			NR Band n66	0.236	0.223		1.096		
	Rear 19mm	LTE Band 2(Main Ant.1) + NR Band n5	LTE Band 25	0.288	0.268	28	1.211	0.984	75
			NR Band n5	0.669	0.614	29	1.226		
		LTE Band 66 + NR Band n5	LTE Band 66	0.383	0.333	30	1.137	1.030	76
			NR Band n5	0.669	0.614		1.226		
		LTE Band 5 + NR Band n66	LTE Band 26	0.587	0.631	31	1.189	1.110	77
			NR Band n66	0.353	0.365	32	1.194		
		LTE Band 12 + NR Band n66	LTE Band 12	0.544	0.510	33	1.138	0.917	78
			NR Band n66	0.353	0.365		1.194		
		LTE Band 13 + NR Band n66	LTE Band 13	0.603	0.577	34	1.285	1.100	79
			NR Band n66	0.353	0.365		1.194		
Rear (All)	UNII MIMO + BT Ant.2	UNII MIMO	0.382	0.438	35	1.143	1.260	80	
		BT Ant.2	0.295	0.292		1.663			

Note(s):

1. Multi-band Combined factor is the compensation value of power and duty.
2. For Volume Scan plot number in this section, please refer to the Appendix k.

12.21. Highest SUM SAR level in each positions of Sec.12.1 – Sec.12.20.

RF Exposure	Test Position	Highest SUM SAR (W/kg)	Worst Section.
Standalone	Rear	1.328	Section.12.6
	Edge 1	1.287	Section.12.19
	Edge 2	1.382	Section.12.19
	Edge 3	1.499	Section.12.1
	Edge 4	1.553	Section.12.11

Note(s):

Each test position's Highest SUM SAR is consider to TER analysis with MPE evaluation of S-pen WPT function.

Conclusion:

Simultaneous Transmission SAR analysis results is satisfied the FCC Limit requirement according to follow procedures with "Sum of SAR" or "SPLSR" or "SPLSR Hotspot combination(including Volume Scan)".

Appendixes

Refer to separated files for the following appendixes.

4790101660-S1 FCC Report SAR_App A_Photos & Ant. Locations

4790101660-S1 FCC Report SAR_App B_Highest SAR Test Plots

4790101660-S1 FCC Report SAR_App C_System Check Plots

4790101660-S1 FCC Report SAR_App D_SAR Tissue Ingredients

4790101660-S1 FCC Report SAR_App E_Probe Cal. Certificates

4790101660-S1 FCC Report SAR_App F_Dipole Cal. Certificates

4790101660-S1 FCC Report SAR_App G_Proximity Sensor feature

4790101660-S1 FCC Report SAR_App H_LTE Carrier Aggregation

4790101660-S1 FCC Report SAR_App I_Dynamic Antenna tuner testing

4790101660-S1 FCC Report SAR_App J_SPLSR criteria plots

4790101660-S1 FCC Report SAR_App K_Volume Scan Results

END OF REPORT