

TEST REPORT

Test Report No.: 1-8481-24-01-17_TR1-R01



Deutsche
Akkreditierungsstelle
D-PL-12047-01-00

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The testing laboratory (area of testing) is accredited according to DIN EN ISO/IEC 17025 (2018-03) by the Deutsche Akkreditierungsstelle GmbH (DAkkS).

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ISED Testing Laboratory Recognized Listing Number: DE0001

FCC designation number: DE0002

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Test Standards

IEC/IEEE
62209-1528-2020

Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)

RSS-102 Issue 6

Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)

For further applied test standards please refer to section 3 of this test report.

Test Item

Kind of test item:

Infrared Camera

Device type:

portable device

Model name:

FLIR-i1845

S/N serial number:

3:4 LTE, 3:3 WLAN/BT, 3:6 Conducted

FCC-ID:

ZLV-FLIRI1845

ISED Number:

5306A-FLIRI1845

Product Marketing Name (PMN):

FLIR i34, FLIR i35, FLIR i64, FLIR i65

Hardware Version Identification No. (HVIN):

FLIR-i1845

IMEI-Number:

864081069801996

Hardware status:

T300960-A

Software status:

14-0.5.0-167

Frequency:

see technical details

Antenna:

integrated antenna

Power supply:

3.65 V DC by rechargeable battery

Test sample status:

identical prototype

Exposure category:

general population / uncontrolled environment

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Test Report authorised:



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Test performed:



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2 General information

2.1 Notes and disclaimer

The test results of this test report relate exclusively to the test item specified in this test report. cetecom advanced GmbH does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of cetecom advanced GmbH.

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2.2 Application details

Date of receipt of order:	2025-07-08
Date of receipt of test item:	2025-08-25
Start of test:	2025-08-27
End of test:	2025-09-05

2.3 Statement of compliance

The SAR values found for the FLIR-I1845 Infrared Camera are below the maximum recommended levels of 4 W/Kg as averaged over any 10 g tissue according to the FCC rule §2.1093, the Health Canada's Safety Code 6 and the Industry Canada Radio Standards Specification RSS-102 for General Population/Uncontrolled exposure.

2.4 Technical details

Band tested for this test report	Technology	Lowest transmit frequency/MHz	Highest transmit frequency/MHz	Lowest receive Frequency/MHz	Highest receive Frequency/MHz	Kind of modulation	Power Class	Tested power control level	Test channel low	Test channel middle	Test channel high	Maximum P_{avg} /dBm
☐	LTE FDD 1	1920	1980	2110	2170	QPSK	3	max	18100	18300	18500	23.73
☒	LTE FDD 2	1850	1910	1930	1990	QPSK	3	max	18700	18900	19100	23.58
☐	LTE FDD 3	1710	1785	1805	1880	QPSK	3	max	19300	19575	19850	23.05
☒	LTE FDD 4	1710	1755	2110	2155	QPSK	3	max	20050	20175	20300	23.73
☒	LTE FDD 5	824	849	869	894	QPSK	3	max	20450	20525	20600	23.61
☒	LTE FDD 7	2500	2570	2620	2690	QPSK	3	max	20850	21100	21350	23.14
☐	LTE FDD 8	880	915	925	960	QPSK	3	max	21500	21625	21750	23.51
☒	LTE FDD 12	704	711	734	741	QPSK	3	max	23060	23095	23130	23.66
☒	LTE FDD 13	777	787	746	756	QPSK	3	max	23205	23230	23255	23.87
☐	LTE FDD 18	815	830	860	875	QPSK	3	max	23900	23925	23950	-/-
☐	LTE FDD 19	830	845	875	890	QPSK	3	max	24050	24075	24100	-/-
☐	LTE FDD 20	832	862	791	821	QPSK	3	max	24250	24300	24350	23.64
☒	LTE FDD 25	1850	1915	1930	1995	QPSK	3	max	26140	26340	26590	23.76
☒	LTE FDD 26	814	849	859	894	QPSK	3	max	26765	26865	26965	23.62
☐	LTE FDD 28	703	748	758	803	QPSK	3	max	27310	27435	27560	23.70
☒	LTE TDD 38	2570	2620	2570	2620	QPSK	3	max	37850	38000	38150	23.31
☐	LTE TDD 40	2300	2400	2300	2400	QPSK	3	max	38750	39150	39550	22.93
☒	LTE TDD 41	2496	2690	2496	2690	QPSK	3	max	39750	40620	41490	23.50
☒	WLAN	2412	2462	2412	2462	CCK OFDM	--	max	1	6	11	13.9
☒	WLAN	5180	5240	5180	5240	OFDM	--	max	36	40/44	48	10.4
☒	BT EDR	2402	2480	2402	2480	GFSK	3	max	0	39	78	8.3
☐	BT LE	2402	2480	2402	2480	GFSK	3	max	0	19	39	< - 8.0

2.5 Transmitter and Antenna Operating Configurations

Simultaneous transmission conditions			
LTE	+	BT/BLE ¹	
LTE	+	WLAN 2.4GHz	
LTE	+	WLAN 5GHz	
LTE	+	WLAN 5GHz	+ BT/BT LE ¹

Table 1: Simultaneous transmission conditions

BT LE¹ - Bluetooth low energy

3 Test standards/ procedures references

Test Standard	Version	Test Standard Description
RSS-102 Issue 6	2023-12	Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)
RSS-102 Supplementary Procedures SPR-002	2022-10	SPR-002 — Supplementary Procedure for Assessing Compliance of Equipment Operating from 3 kHz to 10 MHz with RSS-102
Canada's Safety Code No. 6	2015-06	Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz
IEEE Std. C95-3	2002	IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave
IEC/IEEE 62209-1528-2020	2020-10-19	Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)

FCC KDBs:

KDB 865664D01v01	August 7, 2015	FCC OET SAR measurement requirements 100 MHz to 6 GHz
KDB 865664D02v01	October 23, 2015	RF Exposure Compliance Reporting and Documentation Considerations
KDB 447498D01v06	October 23, 2015	Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies
KDB 648474D04v01	October 23, 2015	SAR Evaluation Considerations for Wireless Handsets
KDB 941225D05v02	October 23, 2015	SAR for LTE Devices
KDB 941225D05Av01	October 23, 2015	LTE Rel. 10 KDB Inquiry Sheet
KDB 248227D01v02	October 23, 2015	SAR Measurement Procedures for 802.11 a/b/g Transmitters

3.1 RF exposure limits

RF Exposure levels according CFR 47 – Part 1, §1.1310 / RSS 102 Issue 06 / safety Code 6:

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR* (Brain and Trunk)	1.60 W/kg	8.00 W/kg
Spatial Average SAR** (Whole Body)	0.08 W/kg	0.40 W/kg
Spatial Peak SAR*** (Hands/Feet/Ankle/Wrist)	4.00 W/kg	20.00 W/kg

Table 2: RF exposure limits (100 kHz to 6 GHz)

The limit applied in this test report is shown in bold letters

Notes:

- * The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time
- ** The Spatial Average value of the SAR averaged over the whole body.
- *** The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

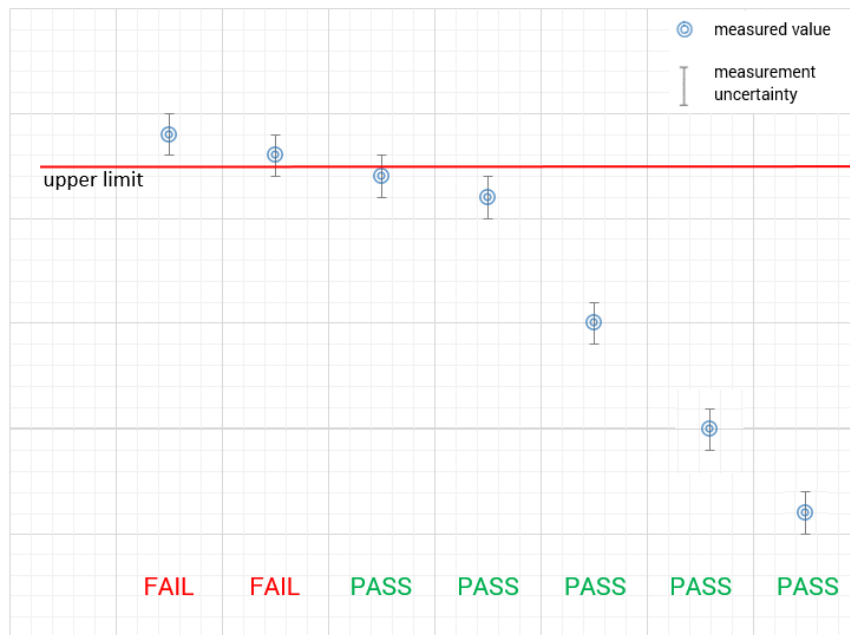
Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

4 Reporting statements of conformity – decision rule

Only the measured values related to their corresponding limits will be used to decide whether the equipment under test meets the requirements of the test standards listed in chapter 3.

The measurement uncertainty is mentioned in this test report, see chapter 9, but is not taken into account - neither to the limits nor to the measurement results. Measurement results with a smaller margin to the corresponding limits than the measurement uncertainty have a potential risk of more than 20% that the decision might be wrong."

measured value, measurement uncertainty, verdict



5 Summary of Measurement Results

☒	No deviations from the technical specifications ascertained			
☐	Deviations from the technical specifications ascertained			
Maximum SAR value reported for 10g (W/kg)				
		PCB	DTS	UNII
limb worn 0 mm distance		1.041	0.273	1.705
collocated situations	ΣSAR evaluation	2.575		

6 Test Environment

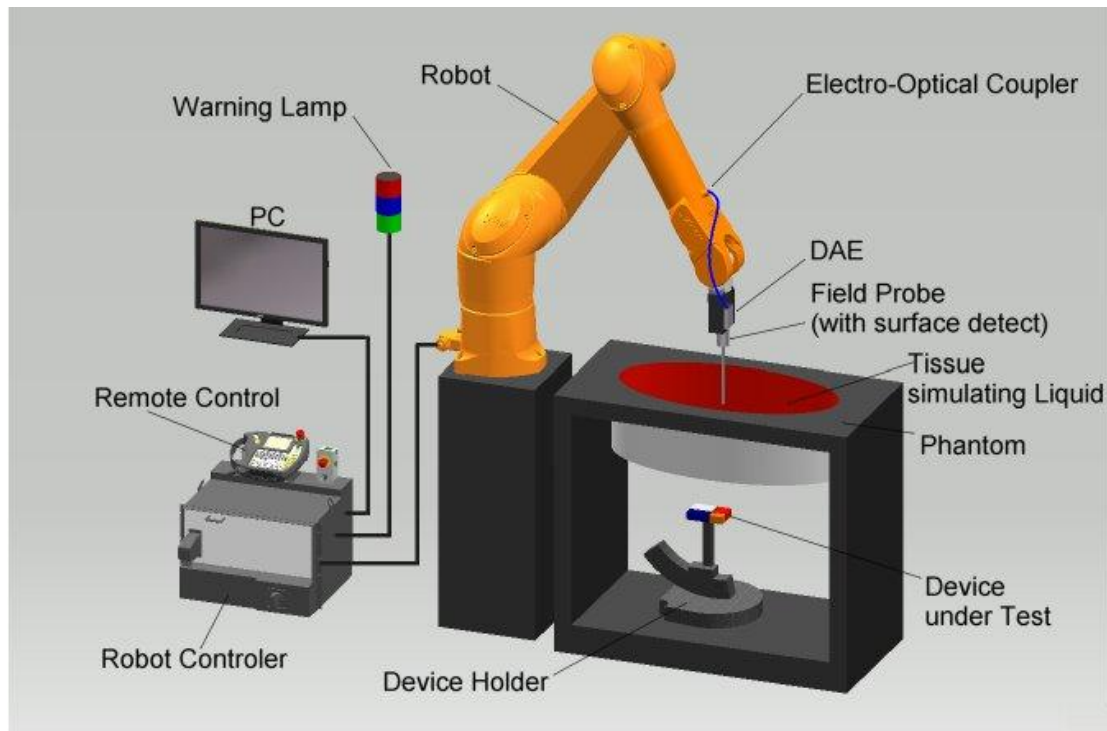
Ambient temperature:	20 – 24 °C
Tissue Simulating liquid:	20 – 24 °C
Relative humidity content:	40 – 50 %
Air pressure:	not relevant for this kind of testing
Power supply:	230 V / 50 Hz

NOTE: For the SAR measurements the exact temperature values for each test are shown in the SAR result tables and are also at the bottom of each measurement plot.

7 Test Set-up

7.1 Measurement system

7.1.1 System Description



- The DASY system for performing compliance tests consists of the following items:
- A standard high precision 6-axis robot (Stäubli RX/TX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid.
- A data acquisition electronic (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 Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY measurement server.
- The DASY measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows.
- DASY software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The triple flat and eli phantom for the testing of handheld and body-mounted wireless devices.
- The device holder for handheld mobile phones and mounting device adaptor for laptops
- Tissue simulating liquid mixed according to the given recipes.
- System check dipoles allowing to validate the proper functioning of the system.

7.1.2 Test environment

The DASY measurement system is placed in a laboratory room within an environment which avoids influence on SAR measurements by ambient electromagnetic fields and any reflection from the environment. The pictures at the beginning of the photo documentation show a complete view of the test environment. The system allows the measurement of SAR values larger than 0.005 W/kg.

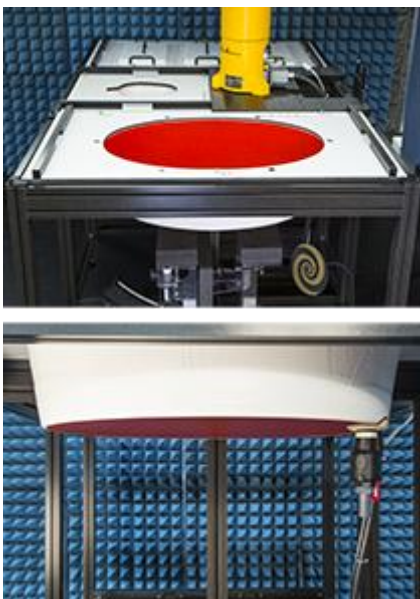
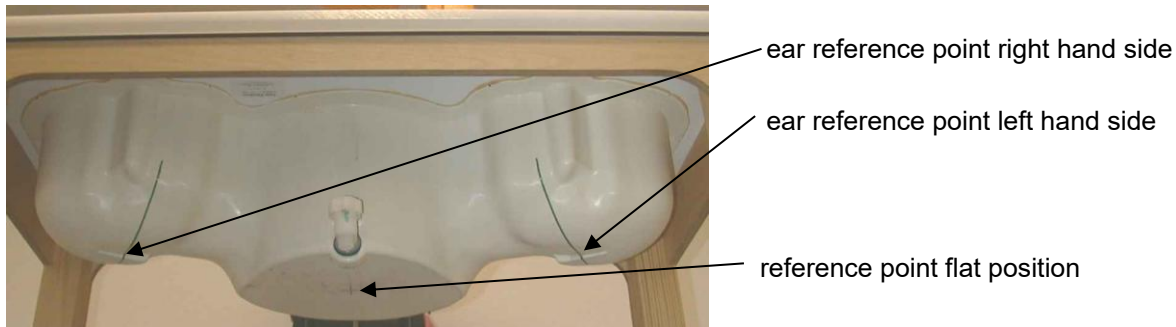
7.1.3 Probe description

Isotropic E-Field Probe EX3DV4 for Dosimetric Measurements	
Technical data according to manufacturer information	
Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available.
Frequency	10 MHz to >6 GHz (dosimetry); Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic range	10 μ W/g to > 100 W/kg; Linearity: ± 0.2 dB (noise: typically <1 μ W/g)
Dimensions	Overall length: 337 mm (Tip: 20mm) Tip length: 2.5 mm (Body: 12mm) Typical distance from probe tip to dipole centers: 1mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

7.1.4 Phantom description

The used SAM Phantom meets the requirements specified in FCC KDB865664 D01 for Specific Absorption Rate (SAR) measurements.

The phantom consists of a fibreglass shell integrated in a wooden table. It allows left-hand and right-hand head as well as body-worn measurements with a maximum liquid depth of 18 cm in head position and 22 cm in planar position (body measurements). The thickness of the Phantom shell is 2 mm +/- 0.1 mm.



The used ELI Phantom is fully compatible with the IEC/IEEE 62209-1528 and all known tissue stimulating liquids. It meets the requirements specified in KDB865664 D01 for Specific Absorption Rate (SAR) measurements and is fully compatible with the standard IEC 62209-2. The phantom consists of a fibreglass shell integrated in a wooden table. The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 4MHz to 10 GHz.

7.1.5 Device holder description

The DASY device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA's only. If necessary an additional support of polystyrene material is used.



Larger DUT's (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values.

Therefore those devices are normally only tested at the flat part of the SAM.

7.1.6 Scanning procedure

- The DASY installation includes predefined files with recommended procedures for measurements and system check. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.
- The „reference“ and „drift“ measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT's output power and should vary max. +/- 5 %.
- The highest integrated SAR value is the main concern in compliance test applications. These values can mostly be found at the inner surface of the phantom and cannot be measured directly due to the sensor offset in the probe. To extrapolate the surface values, the measurement distances to the surface must be known accurately. A distance error of 0.5mm could produce SAR errors of 6% at 1800 MHz. Measurements can be performed in a fixed plane or by following an arbitrary surface.
- For an automatic and accurate detection of the phantom surface, the DASY system uses Mechanical Surface Detection:

Mechanical Surface Detection

Mechanical surface detection uses the probe collision detector built into the DAE. It is extremely accurate if the probe is normal to the surface (0.05 mm). For angled probes, the distance increases, because the detection is at the edge of the probe tip. It can be used in any liquid with any kind of probe. If the surface is strongly angled with respect to the probe, the probe slides along the surface and is deflected sideways. The second switch system in the DAE will detect this situation and the probe will move backward until the touch condition is cleared. However, there will be some remaining uncertainty in the final probe position. In the job description, the desired distance from the probe sensors to the phantom surface can be entered. The detection is always at touch, but the probe will move backward from the surface the indicated distance before starting the measurement.

Mother Scan in cDASY6/DASY8 Module SAR

The cDASY6/DASY8 Module SAR provides the possibility to do a Mother Scan in which a high resolution Area Scan is done in the phantom filled with liquid to a fixed level using a special teaching probe. This mother scan data is used to recreate the phantom inner surface in software, and all future area and/or zoom scans, and a surface detection check is no longer required.

- The „area scan“ measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The scan uses different grid spacings for different frequency measurements. Standard grid spacing for head measurements in frequency ranges ≤ 2 GHz is 15 mm in x- and y- dimension. For higher frequencies a finer resolution is needed, thus for the grid spacing is reduced according the following table:

Area scan grid spacing for different frequency ranges	
Frequency range	Grid spacing
≤ 2 GHz	≤ 15 mm
2 – 4 GHz	≤ 12 mm
4 – 6 GHz	≤ 10 mm

Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation. Results of this coarse scan are shown in annex B.

- A „zoom scan“ measures the field in a volume around the 2D peak SAR value acquired in the previous „coarse“ scan. It uses a fine meshed grid where the robot moves the probe in steps along all the 3 axis (x, y and z-axis) starting at the bottom of the Phantom. The grid spacing for the cube measurement is varied according to the measured frequency range, the dimensions are given in the following table:

Zoom scan grid spacing and volume for different frequency ranges			
Frequency range	Grid spacing for x, y axis	Grid spacing for z axis	Minimum zoom scan volume
≤ 2 GHz	≤ 8 mm	≤ 5 mm	≥ 30 mm
2 – 3 GHz	≤ 5 mm*	≤ 5 mm	≥ 28 mm
3 – 4 GHz	≤ 5 mm*	≤ 4 mm	≥ 28 mm
4 – 5 GHz	≤ 4 mm*	≤ 3 mm	≥ 25 mm
5 – 6 GHz	≤ 4 mm*	≤ 2 mm	≥ 22 mm

* When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB Publication 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.

- DASY provides an auto-extending feature to expand the size of the measurement area of the zoom scan as long as the maximum is found too close to the edge of the measured range, which eliminates the need to re-measure cubes whose maximum is found on the boundary of the defined measurement cube.
- To meet the requirements of **IEC 62209-2 AMD1 from 2019** it is necessary to perform graded grid measurements to avoid measurement mistakes.

Below 3 GHz it defines:

Horizontal grid step ≤ 8 mm

Vertical grid step ≤ 5 mm for uniform spacing

For variable spacing in vertical direction the maximum distance between the two closest measured points to the phantom shell (M1 and M2) shall be ≤ 4 mm and the spacing between farther points shall increase by a factor ≤ 1.5 . Zoom Scan size ≤ 30 mm by 30 mm by 30 mm.

Above 3 GHz it defines:

Horizontal grid step $\leq (24/f [\text{GHz}])$ mm

Vertical grid step $\leq (10/(f [\text{GHz}] - 1))$ mm for uniform spacing

For variable spacing in vertical direction the maximum distance between the two closest measured points to the phantom shell (M1 and M2) shall be $\leq (12/f [\text{GHz}])$ mm and the spacing between farther points shall increase by a factor ≤ 1.5 . Zoom Scan size ≤ 22 mm by 22 mm by 22 mm.

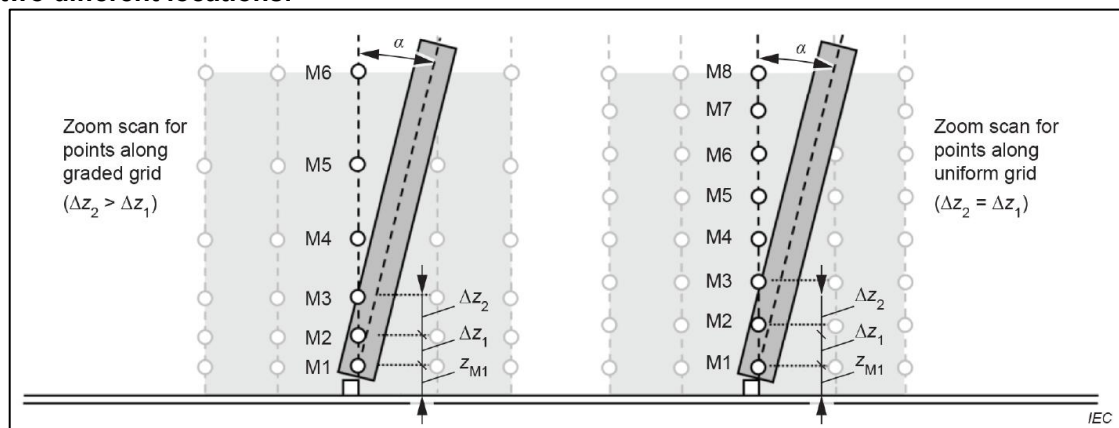
If the zoom scan measured as defined above complies with both of the following criteria, or if the peak spatial-average SAR is below 0.1 W/kg, no additional measurements are needed:

- the smallest horizontal distance from the local SAR peaks to all points 3 dB below the SAR peak shall be larger than the horizontal grid steps in both x and y directions (Δx , Δy). This shall be checked for the measured zoom scan plane conformal to the phantom at the distance z_{M1} . The minimum distance shall be recorded in the SAR test report;
- the ratio of the SAR at the second measured point (M2) to the SAR at the closest measured point (M1) at the x-y location of the measured maximum SAR value shall be at least 30 %. This ratio (in %) shall be recorded in the SAR test report.

If one or both of the above criteria are not met, the zoom scan measurement shall be repeated using a finer resolution while keeping the other zoom scan parameters compatible with the basic requirements for zoom scans.

New horizontal and vertical grid steps shall be determined from the measured SAR distribution so that the above criteria are met. Compliance with the above two criteria shall be demonstrated for the new measured zoom scan. The size of the higher resolution zoom scan and all other parameters shall apply. The closest point to the phantom shell shall be 2 mm or less for graded grids and the grading factor shall be 1.5 or less. Uncertainties due to field distortion between the media boundary and the dielectric enclosure of the probe should also be minimized, which is achieved if the distance between the phantom surface and physical tip of the probe is larger than the probe tip diameter. Other methods may utilize correction procedures to compensate for boundary effects that enable high precision measurements closer than half the probe tip diameter. For all measurement points, the angle of the probe normal to the flat phantom surface shall be less than 5° . If this cannot be achieved, an additional uncertainty evaluation is required.

Orientation of the probe with respect to the line normal to the phantom surface, shown at two different locations:



NOTE M1 to M8 are example measurement points used for extrapolation to the surface. The maximum of the angle α between the evaluation axis and the surface normal line is called the probe angle. The distance z_{M1} is from the phantom shell to the first measurement point M1, and its maximum value is 1.4mm fixed for the DASY system equipped with an EX-Probe. The distances Δz_i ($i = 1, 2, 3, \dots$) are the distances from measurement points M_i to M_{i-1} . For uniform grids, Δz_i are equal. For graded grids, $\Delta z_{i+1} > \Delta z_i$. $R_z = \Delta z_{i+1}/\Delta z_i$ is a ratio with a maximum value (defined in the table below). The z direction corresponds to the vertical direction, the x direction is horizontal and the y direction is horizontal into the page.

NOTE 1: The evaluation of the zoom scan is typically done by the post-processor by interpolation and extrapolation and without reconstruction of the field. More focused induced SAR distributions (e.g., for more localized sources such as capacitively coupled sources) require a more dense grid such that the same integration and extrapolation algorithms can be used for the same assessment uncertainty.

NOTE 2: The minimum ratio of 30 % is derived from the plane wave penetration depth at 6 GHz.

Detailed parameters can be seen in the following table:

Zoom scan parameters

Parameter	DUT transmit frequency being tested	
	$f \leq 3 \text{ GHz}$	$3 \text{ GHz} < f \leq 6 \text{ GHz}$ (f in GHz)
Maximum distance between the closest measured points and the phantom surface (z_{M1} in Figure 18 and Table 1, in mm)	5	$\delta \ln(2)/2^a$
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20)	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Maximum spacing between measured points in the x- and y-directions (Δx and Δy , in mm)	8	$24 / f^b$
For uniform grids: Maximum spacing between measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	5	$10 / (f - 1)$
For graded grids: Maximum spacing between the two closest measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	4	$12/f$
For graded grids: Maximum incremental increase in the spacing between measured points in the direction normal to the phantom shell ($R_z = \Delta z_2/\Delta z_1$ in Figure 20)	1.5	1.5
Minimum edge length of the zoom scan volume in the x- and y-directions (L_z in O.8.3.2, in mm)	30	22
Minimum edge length of the zoom scan volume in the direction normal to the phantom shell (L_h in O.8.3.2 in mm)	30	22
Tolerance in the probe angle	1°	1°
^a δ is the penetration depth for a plane-wave incident normally on a planar half-space.		
^b This is the maximum spacing allowed, which might not work for all circumstances.		

Minimum probe requirements as a function of frequency and parameters of the tissue equivalent liquid

1	2	3	4	5	6	7	8
Frequency MHz	Relative permittivity	Conductivity S/m	Wavelength in the medium (λ) mm	Plane wave Skin Depth (δ) mm	Maximum Diameter mm	50% Distance for M1 ($z_{50\%} = \delta \ln(2)/2$) mm	Min. distance for M1 (z_{M1}) mm
300	45.3	0.87	148.6	46.1	8.0	16.0	5.0
450	43.5	0.87	101.1	42.9	8.0	14.9	5.0
750	41.9	0.89	61.8	39.8	8.0	13.8	5.0
835	41.5	0.90	55.8	38.9	8.0	13.5	5.0
900	41.5	0.97	51.7	36.1	8.0	12.5	5.0
1450	40.5	1.20	32.5	28.6	8.0	9.9	5.0
1800	40.0	1.40	26.4	24.3	8.0	8.4	5.0
2000	40.0	1.40	23.7	24.2	8.0	8.4	5.0
2450	39.2	1.80	19.6	18.7	6.5	6.5	5.0
2600	39.0	1.96	18.5	17.2	6.2	5.9	5.0
3000	38.5	2.40	16.1	13.9	5.4	4.8	5.0
4000	37.4	3.43	12.3	9.6	4.1	3.3	3.3
5000	36.2	4.45	10.0	7.3	3.3	2.5	2.5
5200	36.0	4.66	9.6	7.0	3.2	2.4	2.4
5400	35.8	4.86	9.3	6.7	3.1	2.3	2.3
5600	35.5	5.07	9.0	6.4	3.0	2.2	2.2
5800	35.3	5.27	8.7	6.1	2.9	2.1	2.1
6000	35.1	5.48	8.4	5.9	2.8	2.0	2.0

Further probe parameters can be seen in Annex M of IEC 62209-2.

7.1.7 Spatial Peak SAR Evaluation

The cDASY6/DASY8 Module SAR software includes all numerical procedures necessary to evaluate the spatial peak SAR values. Based on the IEEE 1528 standard, a new algorithm has been implemented. The spatial-peak SAR can be computed over any required mass.

The base for the evaluation is a "cube" measurement in a volume of 30mm³ below 3GHz or 22mm³ above 3GHz. The measured volume must include the 1 g and 10 g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan. If the 10g cube or both cubes are not entirely inside the measured volumes, the system issues a warning regarding the evaluated spatial peak values within the post-processing engine. This means that if the measured volume is shifted, higher values might be possible. To get the correct values a finer measurement grid for the area scan is used. In complicated field distributions, a large grid spacing for the area scan might miss some details and give an incorrectly interpolated peak location. The cDASY6/DASY8 Module SAR allows to automatically extend the grid to make sure that both cubes are inside the measured volume.

The entire evaluation of the spatial peak values is performed within the application in case of cDASY6/DASY8 Module SAR software. The system always gives the maximum values for the 1 g and 10 g cubes. The cDASY6/DASY8 software allows to automatically extend the grid to make sure that both cubes are inside the measured volume. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

1. extraction of the measured data (grid and values) from the Zoom Scan
2. calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
3. generation of a high-resolution mesh within the measured volume
4. interpolation of all measured values from the measurement grid to the high-resolution grid
5. extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
6. calculation of the averaged SAR within masses of 1 g and 10 g The significant parts are outlined in more detail within the following sections.

Interpolation, Extrapolation and Detection of Maxima

The probe is calibrated at the center of the dipole sensors which is located 1 to 2.7mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated.

The choice of the coordinate system defining the location of the measurement points has no influence on the uncertainty of the interpolation, Maxima Search and extrapolation routines. The interpolation, extrapolation and maximum search routines are all based on the modified Quadratic Shepard's method [Robert J. Renka, "Multivariate Interpolation Of Large Sets Of Scattered Data", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988, pp. 139-148.].

Thereby, the interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation. The cDASY6/DASY8 routines construct a once-continuously differentiable function that interpolates the measurement values as follows:

- For each measurement point a trivariate (3-D) / bivariate (2-D) quadratic is computed. It interpolates the measurement values at the data point and forms a least-square fit to neighbouring measurement values.
- the spatial location of the quadratic with respect to the measurement values is attenuated by an inverse distance weighting. This is performed since the calculated quadratic will fit measurement values at nearby points more accurate than at points located further away.
- After the quadratics are calculated at all measurement points, the interpolating function is calculated as a weighted average of the quadratics.

There are two control parameters that govern the behavior of the interpolation method.

One specifies the number of measurement points to be used in computing the least-square fits for the local quadratics. These measurement points are the ones nearest the input point for which the quadratic is being computed.

The second parameter specifies the number of measurement points that will be used in calculating the weights for the quadratics to produce the final function. The input data points used there are the ones nearest the point at which the interpolation is desired. Appropriate defaults are chosen for each of the control parameters.

The trivariate quadratics that have been previously computed for the 3-D interpolation and whose input data are at the closest distance from the phantom surface, are used in order to extrapolate the fields to the surface of the phantom.

In order to determine all the field maxima in 2-D (Area Scan) and 3-D (Zoom Scan), the measurement grid is refined by a default factor of 10 (area) and 5 (zoom), respectively, and the interpolation function is used to evaluate all field values between corresponding measurement points. Subsequently, a linear search is applied to find all the candidate maxima. In a last step, non physical maxima are removed and only those maxima which are within 2 dB of the global maximum value are retained.

Important: To be processable by the interpolation/extrapolation scheme, the Area Scan requires at least 6 measurement points. The Zoom Scan requires at least 10 measurement points to allow the application of these algorithms.

In the Area Scan, the gradient of the interpolation function is evaluated to find all the extrema of the SAR distribution. The uncertainty on the locations of the extrema is less than 1/20 of the grid size. Only local maxima within 2 dB of the global maximum are searched and passed for the Zoom Scan measurement.

In the Zoom Scan, the interpolation function is used to extrapolate the Peak SAR from the lowest measurement points to the inner phantom surface (the extrapolation distance). The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5 mm.

Averaging and Determination of spatial Peak SAR

Within cDASY6/DASY8 Module SAR software, the measured grid is interpolated to a high resolution grid, where the resolution is around 1mm and chosen such that the cube volume is a multiple of the resolution. Points which are outside of the measured grid are masked out and set to zero. Then, the antiderivative of the interpolated grid is computed by using a Gaussian quadrature consecutively for all spatial dimensions.

The antiderivative is used to compute all cube averages of the volume with the same resolution as the interpolated grid. The maximum of these SAR averages is reported. If the cube containing the maximum averaged SAR touches the surface of the measured volume, an appropriate warning is issued within the Post-processing engine.

7.1.8 Data Storage and Evaluation

Data Storage

The DASY software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension ".DA4", ".DA5x". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [W/kg], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	- Sensitivity	Norm _i , a _{i0} , a _{i1} , a _{i2}
	- Conversion factor	ConvF _i
	- Diode compression point	Dcpi
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	σ
	- Density	ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot cf/dcp_i$$

with V_i = compensated signal of channel i (i = x, y, z)
 U_i = input signal of channel i (i = x, y, z)
 cf = crest factor of exciting field (DASY parameter)
 dcp_i = diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes: $E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$

H-field probes: $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1}f + a_{i2}f^2)/f$

with V_i = compensated signal of channel i (i = x, y, z)
 $Norm_i$ = sensor sensitivity of channel i (i = x, y, z)
[mV/(V/m)²] for E-field Probes
 $ConvF$ = sensitivity enhancement in solution
 a_{ij} = sensor sensitivity factors for H-field probes
 f = carrier frequency [GHz]
 E_i = electric field strength of channel i in V/m
 H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (E_{tot}^2 \cdot \sigma) / (\rho \cdot 1000)$$

with SAR = local specific absorption rate in W/kg
 E_{tot} = total field strength in V/m
 σ = conductivity in [mho/m] or [Siemens/m]
 ρ = equivalent tissue density in g/cm³

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^2 / 3770 \quad \text{or} \quad P_{pwe} = H_{tot}^2 \cdot 37.7$$

with P_{pwe} = equivalent power density of a plane wave in mW/cm²
 E_{tot} = total electric field strength in V/m
 H_{tot} = total magnetic field strength in A/m

Data Evaluation in cDASY6/DASY8

cDASY6/DASY8 features basic evaluation capabilities comparable to the above described SEMCAD evaluation.

7.1.9 Tissue simulating liquids: dielectric properties

The following materials are used for producing the tissue-equivalent materials.

HBBL600-10000MHz Simulating Head Liquid, Manufactured by SPEAG:

Ingredients	(% by weight)
Water	50-65%
Mineral oil	10-30%
Emulsifiers	8-25%
Sodium salt	0-1.5%

Table 3: Head tissue dielectric properties

7.1.10 Tissue simulating liquids: parameters

Freq. (MHz)	Target head tissue		Measurement head tissue					Measurement date
	Permittivity	Conductivity [S/m]	Permittivity	Dev. %	Conductivity		Dev. %	
					ϵ''	[S/m]		
704	42.15	0.89	41.2	-2.2	23.00	0.90	1.6	2025-09-02
707	42.13	0.89	41.2	-2.2	22.94	0.90	1.7	
711	42.11	0.89	41.2	-2.2	22.85	0.90	1.8	
750	41.90	0.89	41.0	-2.0	21.97	0.92	3.0	
779	41.76	0.89	41.0	-1.9	21.42	0.93	3.9	
782	41.75	0.89	40.9	-1.9	21.37	0.93	4.0	
784	41.74	0.89	40.9	-1.9	21.33	0.93	4.1	
835	41.50	0.90	42.2	1.7	20.58	0.96	6.2	2025-08-29
837	41.50	0.90	42.2	1.6	20.55	0.96	6.0	
842	41.50	0.91	42.2	1.6	20.46	0.96	5.6	
844	41.50	0.91	42.2	1.6	20.43	0.96	5.4	
1720	40.11	1.35	39.1	-2.5	13.99	1.34	-1.1	2025-09-02
1732	40.10	1.36	39.1	-2.5	13.97	1.35	-1.1	
1747	40.08	1.37	39.1	-2.5	13.93	1.35	-1.1	
1750	40.07	1.37	39.1	-2.5	13.93	1.36	-1.1	
1860	40.00	1.40	40.2	0.6	13.91	1.44	2.8	2025-08-28
1880	40.00	1.40	40.2	0.5	13.88	1.45	3.7	
1900	40.00	1.40	40.1	0.3	13.84	1.46	4.5	
1908	40.00	1.40	40.1	0.3	13.83	1.47	4.9	
1957	40.00	1.40	40.0	0.1	13.77	1.50	7.1	
1982	40.00	1.40	40.0	0.0	13.74	1.52	8.2	
2402	39.28	1.76	39.5	0.7	13.50	1.80	2.7	2025-08-27
2412	39.27	1.77	39.5	0.7	13.50	1.81	2.6	
2437	39.22	1.79	39.5	0.7	13.50	1.83	2.4	
2441	39.22	1.79	39.5	0.7	13.51	1.83	2.3	
2450	39.20	1.80	39.5	0.7	13.51	1.84	2.3	
2507	39.12	1.86	39.4	0.7	13.52	1.89	1.3	
2510	39.12	1.86	39.4	0.7	13.52	1.89	1.3	
2535	39.09	1.89	39.3	0.7	13.53	1.91	0.9	
2562	39.05	1.92	39.3	0.7	13.54	1.93	0.5	
2580	39.03	1.94	39.3	0.7	13.54	1.94	0.3	
2595	39.01	1.95	39.3	0.6	13.55	1.96	0.1	
2600	39.00	1.96	39.3	0.6	13.55	1.96	0.0	
2610	38.99	1.97	39.2	0.6	13.56	1.97	-0.1	

2402	39.28	1.76	38.1	-3.0	13.28	1.77	0.9	2025-09-01
2450	39.20	1.80	38.1	-2.9	13.27	1.81	0.5	
2441	39.22	1.79	38.1	-2.9	13.27	1.80	0.6	
2480	39.16	1.83	38.0	-2.9	13.28	1.83	0.0	
2506	39.13	1.86	38.0	-2.9	13.29	1.85	-0.4	2025-09-03
2580	39.03	1.94	37.9	-2.8	13.31	1.91	-1.4	
2593	39.01	1.95	37.9	-2.8	13.32	1.92	-1.6	
2595	39.01	1.95	37.9	-2.8	13.32	1.92	-1.6	
2600	39.00	1.96	37.9	-2.8	13.32	1.93	-1.7	
2610	38.99	1.97	37.9	-2.8	13.33	1.94	-1.8	
2680	38.90	2.05	37.8	-2.8	13.36	1.99	-2.8	
5180	36.02	4.64	35.1	-2.5	15.08	4.35	-6.3	2025-08-27
5200	36.00	4.66	35.1	-2.5	15.08	4.36	-6.4	
5220	35.98	4.68	35.1	-2.5	15.10	4.38	-6.3	
5240	35.96	4.70	35.0	-2.5	15.11	4.40	-6.3	
5180	36.02	4.64	35.2	-2.3	15.50	4.47	-3.7	2025-08-29
5200	36.00	4.66	35.2	-2.3	15.51	4.49	-3.7	
5220	35.98	4.68	35.1	-2.3	15.53	4.51	-3.6	
5240	35.96	4.70	35.1	-2.3	15.55	4.53	-3.6	

Table 4: Parameter of the head tissue simulating liquid (HSL)

Note: The dielectric properties have been measured using the contact probe method at 22°C.

*) as the liquid parameters deviation is $\geq \pm 5\%$ an extrapolation according IEC / IEEE 62209-1528 chapter 7.8.2 approach 3 is necessary. The DASY software is capable to perform the necessary corrections directly from the tissue and measurement data. The uncertainties in this document have been adjusted accordingly.

For detailed information see chapter 8.2.4 SAR correction for deviations of complex permittivity from targetson page 119.

7.1.11 Measurement uncertainty evaluation for SAR test

DASY6/8 Uncertainty Budget According to IEC/IEEE 62209-1528 (Frequency band: 300 MHz - 3 GHz range)									
Symbol	Error Description	Uncertainty Value		Probability Distribution	Divisor	c_i (1g)	c_i (10g)	Standard Uncertainty	
								$\pm \%$, (1g)	$\pm \%$, (10g)
Measurement System Errors									
CF	Probe Calibration Repeat.	$\pm$	12.0 %	Normal	2	1	1	$\pm$ 6.0 %	$\pm$ 6.0 %
CFdrift	Probe Calibration Drift	$\pm$	1.7 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 1.0 %	$\pm$ 1.0 %
LIN	Probe linearity	$\pm$	4.7 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 2.7 %	$\pm$ 2.7 %
BBS	Broadband Signal	$\pm$	3.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 1.7 %	$\pm$ 1.7 %
ISO	Probe Isotropy (axial)	$\pm$	7.6 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 4.4 %	$\pm$ 4.4 %
DAE	Data Acquisition	$\pm$	0.3 %	Normal	1	1	1	$\pm$ 0.3 %	$\pm$ 0.3 %
AMB	RF Ambient	$\pm$	1.8 %	Normal	1	1	1	$\pm$ 1.8 %	$\pm$ 1.8 %
Δ_{sys}	Probe Positioning	$\pm$	0.006 mm	Normal	1	0.14	0.14	$\pm$ 0.1 %	$\pm$ 0.1 %
DAT	Data Processing	$\pm$	1.2 %	Normal	1	1	1	$\pm$ 1.2 %	$\pm$ 1.2 %
Phantom and Device Errors									
LIQ(σ)	Conductivity (meas.) ^{DAK}	$\pm$	2.5 %	Normal	1	0.78	0.71	$\pm$ 2.0 %	$\pm$ 1.8 %
LIQ($T\sigma$)	Conductivity (temp.) ^{BB}	$\pm$	3.3 %	Rectangular	$\sqrt{3}$	0.78	0.71	$\pm$ 1.5 %	$\pm$ 1.4 %
EPS	Phantom Permittivity	$\pm$	14.0 %	Rectangular	$\sqrt{3}$	0	0	$\pm$ 0.0 %	$\pm$ 0.0 %
DIS	Distance DUT - TSL	$\pm$	2.0 %	Normal	1	2	2	$\pm$ 4.0 %	$\pm$ 4.0 %
D_{xyz}	Device Positioning	$\pm$	1.0 %	Normal	1	1	1	$\pm$ 1.0 %	$\pm$ 1.0 %
H	Device Holder	$\pm$	3.6 %	Normal	1	1	1	$\pm$ 3.6 %	$\pm$ 3.6 %
MOD	DUT Modulation ^m	$\pm$	2.4 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 1.4 %	$\pm$ 1.4 %
TAS	Time-average SAR	$\pm$	1.7 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 1.0 %	$\pm$ 1.0 %
RF _{drift}	DUT drift	$\pm$	2.5 %	Normal	1	1	1	$\pm$ 2.5 %	$\pm$ 2.5 %
VAL	Val Antenna Unc. ^{val}	$\pm$	0.0 %	Normal	1	1	1	$\pm$ 0.0 %	$\pm$ 0.0 %
RF _{in}	Unc. Input Power ^{val}	$\pm$	0.0 %	Normal	1	1	1	$\pm$ 0.0 %	$\pm$ 0.0 %
Correction to the SAR results									
C(ϵ , σ)	Deviation to Target	$\pm$	1.9 %	Normal	1	1	0.84	$\pm$ 1.9 %	$\pm$ 1.6 %
C(R)	SAR scaling ^p	$\pm$	0.0 %	Rectangular	$\sqrt{3}$	1	1	$\pm$ 0.0 %	$\pm$ 0.0 %
u(ΔSAR)	Combined Uncertainty							$\pm$ 11.0 %	$\pm$ 10.9 %
U	Expanded Uncertainty							$\pm$ 21.9 %	$\pm$ 21.7 %

Table 5: Measurement uncertainties

Worst-Case uncertainty budget for DASY6/8 assessed according to IEC/IEEE 62209-1528 [4]. The budget is valid for the frequency range 300MHz - 3 GHz and represents a worst-case analysis. For specific tests and configurations, the uncertainty could be considerable smaller. All listed error components have ν_{eff} equal to ∞ .

Footnote details:

^m SMC calibration is a new method for determining the total deviation from linearity. The uncertainty is $\leq 2.4\%$ for $psSAR \leq 2 \text{ W/kg}$, $\leq 4.8\%$ for $psSAR_{1g/10g} \leq 4 \text{ W/kg}$ and $\leq 9.6\%$ for $psSAR_{1g/10g} \leq 10 \text{ W/kg}$ (see modulation calibration parameter uncertainty in the probe calibration certificate);

^{BB} if SPEAG's broad-band liquids (BBL) are used that have low temperature coefficients;

^{DAK} if SPEAG's high precision dielectric probe kit (DAK) is applied;

^p if power scaling is used, error item "SAR Scaling" must be adjusted accordingly;

^{val} only applies in case of validation measurements.

DASY8 Uncertainty Budget									
According to IEC/IEEE 62209-1528 (Frequency band: 3 GHz - 6 GHz range)									
Symbol	Error Description	Uncertainty Value		Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty	
						(1g)	(10g)	± %, (1g)	± %, (10g)
Measurement System Errors									
CF	Probe Calibration Repeat.	± 13.1	%	Normal	2	1	1	± 6.6	% ± 6.6
CFdrift	Probe Calibration Drift	± 1.7	%	Rectangular	√ 3	1	1	± 1.0	% ± 1.0
LIN	Probe linearity	± 4.7	%	Rectangular	√ 3	1	1	± 2.7	% ± 2.7
BBS	Broadband Signal	± 2.6	%	Rectangular	√ 3	1	1	± 1.5	% ± 1.5
ISO	Probe Isotropy (axial)	± 7.6	%	Rectangular	√ 3	1	1	± 4.4	% ± 4.4
DAE	Data Acquisition	± 0.3	%	Normal	1	1	1	± 0.3	% ± 0.3
AMB	RF Ambient	± 1.8	%	Normal	1	1	1	± 1.8	% ± 1.8
Δ _{sys}	Probe Positioning	± 0.005	mm	Normal	1	0.29	0.29	± 0.2	% ± 0.2
DAT	Data Processing	± 2.3	%	Normal	1	1	1	± 2.3	% ± 2.3
Phantom and Device Errors									
LIQ(σ)	Conductivity (meas.) ^{DAK}	± 2.5	%	Normal	1	0.78	0.71	± 2.0	% ± 1.8
LIQ(Tσ)	Conductivity (temp.) ^{BB}	± 3.4	%	Rectangular	√ 3	0.78	0.71	± 1.5	% ± 1.4
EPS	Phantom Permittivity	± 14.0	%	Rectangular	√ 3	0.25	0.25	± 2.0	% ± 2.0
DIS	Distance DUT - TSL	± 2.0	%	Normal	1	2	2	± 4.0	% ± 4.0
D _{xyz}	Device Positioning	± 1.0	%	Normal	1	1	1	± 1.0	% ± 1.0
H	Device Holder	± 3.6	%	Normal	1	1	1	± 3.6	% ± 3.6
MOD	DUT Modulation ^m	± 2.4	%	Rectangular	√ 3	1	1	± 1.4	% ± 1.4
TAS	Time-average SAR	± 1.7	%	Rectangular	√ 3	1	1	± 1.0	% ± 1.0
RF _{drift}	DUT drift	± 2.5	%	Normal	1	1	1	± 2.5	% ± 2.5
VAL	Val Antenna Unc. ^{val}	± 0.0	%	Normal	1	1	1	± 0.0	% ± 0.0
RF _{in}	Unc. Input Power ^{val}	± 0.0	%	Normal	1	1	1	± 0.0	% ± 0.0
Correction to the SAR results									
C(ε, σ)	Deviation to Target	± 1.9	%	Normal	1	1	0.84	± 1.9	% ± 1.6
C(R)	SAR scaling ^p	± 0.0	%	Rectangular	√ 3	1	1	± 0.0	% ± 0.0
u(ΔSAR)	Combined Uncertainty							± 11.6	% ± 11.5
U	Expanded Uncertainty							± 23.2	% ± 23.0

Table

6: Measurement uncertainties

Worst-Case uncertainty budget for DASY8 assessed according to IEC/IEEE 62209-1528 [4]. The budget is valid for the frequency range 3 GHz – 6 GHz and represents a worst-case analysis. For specific tests and configurations, the uncertainty could be considerable smaller. All listed error components have *veff* equal to ∞.

Footnote details:

^m SMC calibration is a new method for determining the total deviation from linearity. The uncertainty is ≤ 2.4% for psSAR ≤ 2 W/kg, ≤ 4.8% for psSAR1g/10g ≤ 4 W/kg and ≤ 9.6% for psSAR1g/10g ≤ 10 W/kg (see modulation calibration parameter uncertainty in the probe calibration certificate);

^{BB} if SPEAG's broad-band liquids (BBL) are used that have low temperature coefficients;

^{DAK} if SPEAG's high precision dielectric probe kit (DAK) is applied;

^p if power scaling is used, error item "SAR Scaling" must be adjusted accordingly;

^{val} only applies in case of validation measurements.

7.1.12 Measurement uncertainty evaluation for System Check

Repeatability Budget for System Check (Frequency band: 300MHz - 6GHz range) with DASY6/8 System											
Symbol	Error Description	Uncertainty Value		Probability Distribution	Divisor	c _i	c _i	Standard Uncertainty			
						(1g)	(10g)	± %, (1g)	± %, (10g)		
Measurement System Errors											
CF	Probe Calibration Repeat.	± 3.6	%	Normal	2	2	1	± 5.1	%	± 2.5	%
CFdrift	Probe Calibration Drift	± 1.7	%	Rectangular	√ 3	1	1	± 1.0	%	± 1.0	%
LIN	Probe linearity	± 4.7	%	Rectangular	√ 3	0	0	± 0.0	%	± 0.0	%
BBS	Broadband Signal	± 0.0	%	Rectangular	√ 3	0	0	± 0.0	%	± 0.0	%
ISO	Probe Isotropy (axial)	± 4.7	%	Rectangular	√ 3	0	0	± 0.0	%	± 0.0	%
DAE	Data Acquisition	± 0.3	%	Normal	1	0	0	± 0.0	%	± 0.0	%
AMB	RF Ambient	± 0.6	%	Normal	1	0	0	± 0.0	%	± 0.0	%
Δ _{sys}	Probe Positioning	± 0.2	%	Normal	1	0.33	0.33	± 0.1	%	± 0.1	%
DAT	Data Processing	± 0.0	%	Normal	1	1	1	± 0.0	%	± 0.0	%
Phantom and Device Errors											
LIQ(σ)	Conductivity (meas.) ^{DAK}	± 2.5	%	Normal	1	0.78	0.71	± 2.0	%	± 1.8	%
LIQ(Tσ)	Conductivity (temp.) ^{BB}	± 3.4	%	Rectangular	√ 3	0.78	0.71	± 1.5	%	± 1.4	%
EPS	Phantom Permittivity	± 14.0	%	Rectangular	√ 3	0	0	± 0.0	%	± 0.0	%
DIS	Distance Phantom - DUT	± 1.0	%	Normal	1	2	2	± 2.0	%	± 2.0	%
MOD	DUT Modulation ^m	± 0.0	%	Rectangular	√ 3	1	1	± 0.0	%	± 0.0	%
TAS	Time-average SAR	± 0.0	%	Rectangular	√ 3	1	1	± 0.0	%	± 0.0	%
VAL	Validation antenna	± 0.0	%	Normal	1	1	1	± 0.0	%	± 0.0	%
P _{in}	Accepted power	± 1.2	%	Normal	1	1	1	± 1.2	%	± 1.2	%
Correction to the SAR results											
C(ε, σ)	Deviation to Target	± 1.9	%	Normal	1	1	0.84	± 1.9	%	± 1.6	%
u(ΔSAR)	Combined Uncertainty							± 6.5	%	± 4.5	%
U	Expanded Uncertainty							± 13.0	%	± 9.1	%

Table 7: Repeatability of the system check (300MHz - 6 GHz).

All listed error components have v_{eff} equal to ∞ .

Footnote details:

^{BB} if SPEAG's broad-band liquids (BBL) are used that have low temperature coefficients;

^{DAK} if SPEAG's high precision dielectric probe kit (DAK) is applied.

Note: Worst case probe calibration uncertainty has been applied for all probes used during the measurements.

7.1.13 System check

The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The following table shows system check results for all frequency bands and tissue liquids used during the tests (plot(s) see annex A).

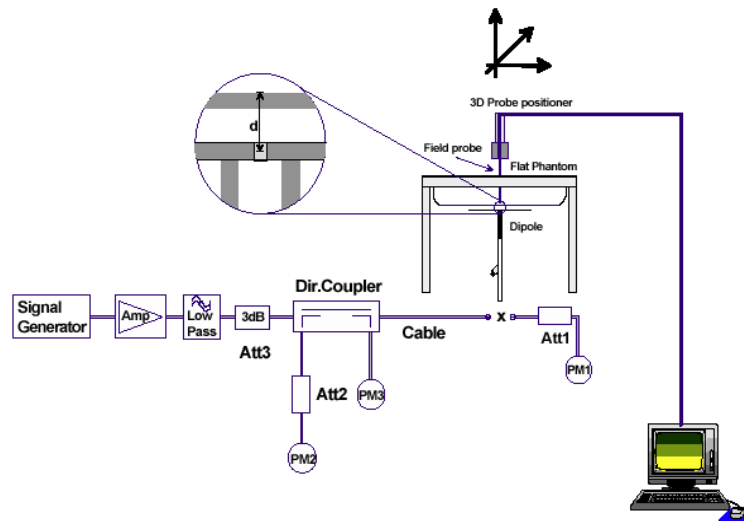
System performance check (1000 mW)								
System validation Kit	Frequency	Target SAR _{1g} /mW/g (+/- 10%)	Target SAR _{10g} /mW/g (+/- 10%)	Measured SAR _{1g} / mW/g	SAR _{1g} dev.	Measured SAR _{10g} / mW/g	SAR _{10g} dev.	Measured date
D750V3 S/N: 1041	750 MHz head	8.52	5.56	8.22	-3.5%	5.42	-2.5%	2025-09-02
D835V2 S/N: 4d153	835 MHz head	9.58	6.21	9.94	3.8%	6.50	4.7%	2025-08-29
D1750V2 S/N: 1093	1750 MHz head	36.10	19.30	33.20	-8.0%	17.70	-8.3%	2025-09-02
D1900V2 S/N: 5d009	1900 MHz head	40.10	21.00	39.00	-2.7%	20.40	-2.9%	2025-08-28
D2450V2 S/N: 710	2450 MHz head	52.10	24.00	52.50	0.8%	24.70	2.9%	2025-08-27
D2450V2 S/N: 710	2450 MHz head	52.10	24.00	48.90	-6.1%	23.00	-4.2%	2025-09-01
D2600V2 S/N: 1040	2600 MHz head	56.20	25.40	53.50	-4.8%	24.30	-4.3%	2025-08-27
D2600V2 S/N: 1040	2600 MHz head	56.20	25.40	52.50	-6.6%	23.70	-6.7%	2025-09-03
D5GHzV2 S/N: 1055	5200 MHz head	80.40	23.00	79.40	-1.2%	23.30	1.3%	2025-08-27
D5GHzV2 S/N: 1055	5200 MHz head	80.40	23.00	76.80	-4.5%	22.20	-3.5%	2025-08-29

Table 8: Results system check

7.1.14 System check procedure

The system check is performed by using a validation dipole which is positioned parallel to the planar part of the SAM phantom at the reference point. The distance of the dipole to the SAM phantom is determined by a plexiglass spacer. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. It is fed with a power of 100 mW or 50 mW if used Powersource1. To adjust this power a power meter is used. The power sensor is connected to the cable before the system check to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the validation to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test (result on plot).

System check results have to be equal or near the values determined during dipole calibration (target SAR in table above) with the relevant liquids and test system.



7.1.15 System validation

The system validation is performed in a similar way as a system check. It needs to be performed once a SAR measurement system has been established and allows an evaluation of the system accuracy with all components used together with the specified system. It has to be repeated at least once a year or when new system components are used (DAE, probe, phantom, dipole, liquid type).

In addition to the procedure used during system check a system validation also includes checks of probe isotropy, probe modulation factor and RF signal.

Frequency (MHz)	DASY SW	Dipole Type /SN	Probe Type / SN	Calibrated signal type(s)	DAE unit Type / SN	head validation
750	cDASY6 V16.4.0.5005	D750V2 / 1041	EX3DV4 / 3944	CW	DAE4 / 477	2025-07-29
835	cDASY6 V16.4.0.5005	D835V2 / 4d153	EX3DV4 / 3944	CW	DAE4 / 477	2025-07-30
1750	cDASY6 V16.4.0.5005	D1750V2 / 1093	EX3DV4 / 3944	CW	DAE4 / 477	2025-07-29
1900	cDASY6 V16.4.0.5005	D1900V2 / 5d009	EX3DV4 / 3944	CW	DAE4 / 477	2025-07-29
2450	cDASY6 V16.4.0.5005	D2450V2 / 710	EX3DV4 / 3944	CW	DAE4 / 477	2025-07-28
2600	cDASY6 V16.4.0.5005	D2600V2 / 1040	EX3DV4 / 3944	CW	DAE4 / 477	2025-09-05
5200	cDASY6 V16.4.0.5005	D5GHzV2 / 1055	EX3DV4 / 3944	CW	DAE4 / 477	2025-09-05

8 Detailed Test Results

8.1 Conducted power measurements

8.1.1 Conducted power measurements LTE FDD 2 1900 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
low	1850.7	18607	1.4	RB 1 low	QPSK	22.94
low	1850.7	18607	1.4	RB 1 low	16QAM	21.78
low	1850.7	18607	1.4	RB 1 low	64QAM	22.16
low	1850.7	18607	1.4	RB 1 mid	QPSK	23.24
low	1850.7	18607	1.4	RB 1 mid	16QAM	21.79
low	1850.7	18607	1.4	RB 1 mid	64QAM	22.18
low	1850.7	18607	1.4	RB 1 high	QPSK	23.03
low	1850.7	18607	1.4	RB 1 high	16QAM	21.84
low	1850.7	18607	1.4	RB 1 high	64QAM	22.24
low	1850.7	18607	1.4	RB 50% low	QPSK	22.99
low	1850.7	18607	1.4	RB 50% low	16QAM	22.35
low	1850.7	18607	1.4	RB 50% low	64QAM	22.05
low	1850.7	18607	1.4	RB 50% mid	QPSK	22.93
low	1850.7	18607	1.4	RB 50% mid	16QAM	22.24
low	1850.7	18607	1.4	RB 50% mid	64QAM	22.01
low	1850.7	18607	1.4	RB 50% high	QPSK	22.89
low	1850.7	18607	1.4	RB 50% high	16QAM	22.30
low	1850.7	18607	1.4	RB 50% high	64QAM	22.02
low	1850.7	18607	1.4	RB 100%	QPSK	21.93
low	1850.7	18607	1.4	RB 100%	16QAM	20.79
low	1850.7	18607	1.4	RB 100%	64QAM	21.04
mid	1880.0	18900	1.4	RB 1 low	QPSK	22.80
mid	1880.0	18900	1.4	RB 1 mid	QPSK	22.99
mid	1880.0	18900	1.4	RB 1 high	QPSK	22.90
mid	1880.0	18900	1.4	RB 1 low	16QAM	21.57
mid	1880.0	18900	1.4	RB 1 low	64QAM	21.31
mid	1880.0	18900	1.4	RB 1 mid	16QAM	21.31
mid	1880.0	18900	1.4	RB 1 mid	64QAM	21.98
mid	1880.0	18900	1.4	RB 1 high	16QAM	21.91
mid	1880.0	18900	1.4	RB 1 high	64QAM	21.79
mid	1880.0	18900	1.4	RB 50% low	QPSK	22.74
mid	1880.0	18900	1.4	RB 50% low	16QAM	22.07
mid	1880.0	18900	1.4	RB 50% low	64QAM	21.49
mid	1880.0	18900	1.4	RB 50% mid	QPSK	22.71
mid	1880.0	18900	1.4	RB 50% mid	16QAM	22.14
mid	1880.0	18900	1.4	RB 50% mid	64QAM	21.72
mid	1880.0	18900	1.4	RB 50% high	QPSK	22.60
mid	1880.0	18900	1.4	RB 50% high	16QAM	21.99
mid	1880.0	18900	1.4	RB 50% high	64QAM	21.85
mid	1880.0	18900	1.4	RB 100%	QPSK	21.66
mid	1880.0	18900	1.4	RB 100%	16QAM	20.77
mid	1880.0	18900	1.4	RB 100%	64QAM	20.63

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
high	1909.3	19193	1.4	RB_1_low	QPSK	23.48
high	1909.3	19193	1.4	RB_1_mid	QPSK	23.42
high	1909.3	19193	1.4	RB_1_high	QPSK	23.18
high	1909.3	19193	1.4	RB_1_low	16QAM	22.33
high	1909.3	19193	1.4	RB_1_low	64QAM	21.72
high	1909.3	19193	1.4	RB_1_mid	16QAM	22.54
high	1909.3	19193	1.4	RB_1_mid	64QAM	21.91
high	1909.3	19193	1.4	RB_1_high	16QAM	22.43
high	1909.3	19193	1.4	RB_1_high	64QAM	22.03
high	1909.3	19193	1.4	RB_50%_low	QPSK	23.24
high	1909.3	19193	1.4	RB_50%_low	16QAM	22.66
high	1909.3	19193	1.4	RB_50%_low	64QAM	22.56
high	1909.3	19193	1.4	RB_50%_mid	QPSK	23.41
high	1909.3	19193	1.4	RB_50%_mid	16QAM	22.76
high	1909.3	19193	1.4	RB_50%_mid	64QAM	22.43
high	1909.3	19193	1.4	RB_50%_high	QPSK	23.16
high	1909.3	19193	1.4	RB_50%_high	16QAM	22.44
high	1909.3	19193	1.4	RB_50%_high	64QAM	22.28
high	1909.3	19193	1.4	RB_100%	QPSK	22.29
high	1909.3	19193	1.4	RB_100%	16QAM	21.22
high	1909.3	19193	1.4	RB_100%	64QAM	20.87
low	1851.5	18615	3	RB_1_low	16QAM	21.82
low	1851.5	18615	3	RB_1_low	64QAM	21.53
low	1851.5	18615	3	RB_1_mid	16QAM	22.18
low	1851.5	18615	3	RB_1_mid	64QAM	21.62
low	1851.5	18615	3	RB_1_high	16QAM	21.73
low	1851.5	18615	3	RB_1_high	64QAM	21.71
low	1851.5	18615	3	RB_50%_low	QPSK	21.91
low	1851.5	18615	3	RB_50%_low	16QAM	20.93
low	1851.5	18615	3	RB_50%_low	64QAM	21.15
low	1851.5	18615	3	RB_50%_mid	QPSK	22.08
low	1851.5	18615	3	RB_50%_mid	16QAM	20.87
low	1851.5	18615	3	RB_50%_mid	64QAM	21.25
low	1851.5	18615	3	RB_50%_high	QPSK	22.03
low	1851.5	18615	3	RB_50%_high	16QAM	20.82
low	1851.5	18615	3	RB_50%_high	64QAM	20.96
low	1851.5	18615	3	RB_100%	QPSK	21.97
low	1851.5	18615	3	RB_100%	16QAM	21.00
low	1851.5	18615	3	RB_100%	64QAM	20.90
low	1851.5	18615	3	RB_1_low	QPSK	22.86
low	1851.5	18615	3	RB_1_mid	QPSK	23.24
low	1851.5	18615	3	RB_1_high	QPSK	23.03

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
mid	1880.0	18900	3	RB_1_low	QPSK	22.96
mid	1880.0	18900	3	RB_1_mid	QPSK	22.81
mid	1880.0	18900	3	RB_1_high	QPSK	22.92
mid	1880.0	18900	3	RB_1_low	16QAM	21.46
mid	1880.0	18900	3	RB_1_low	64QAM	21.99
mid	1880.0	18900	3	RB_1_mid	16QAM	21.47
mid	1880.0	18900	3	RB_1_mid	64QAM	22.21
mid	1880.0	18900	3	RB_1_high	16QAM	21.92
mid	1880.0	18900	3	RB_1_high	64QAM	22.55
mid	1880.0	18900	3	RB_50%_low	QPSK	21.73
mid	1880.0	18900	3	RB_50%_low	16QAM	20.87
mid	1880.0	18900	3	RB_50%_low	64QAM	20.77
mid	1880.0	18900	3	RB_50%_mid	QPSK	21.72
mid	1880.0	18900	3	RB_50%_mid	16QAM	20.86
mid	1880.0	18900	3	RB_50%_mid	64QAM	20.71
mid	1880.0	18900	3	RB_50%_high	QPSK	21.73
mid	1880.0	18900	3	RB_50%_high	16QAM	20.60
mid	1880.0	18900	3	RB_50%_high	64QAM	20.74
mid	1880.0	18900	3	RB_100%	QPSK	21.72
mid	1880.0	18900	3	RB_100%	16QAM	20.82
mid	1880.0	18900	3	RB_100%	64QAM	20.75
high	1908.5	19185	3	RB_1_low	QPSK	23.06
high	1908.5	19185	3	RB_1_mid	QPSK	23.58
high	1908.5	19185	3	RB_1_high	QPSK	23.43
high	1908.5	19185	3	RB_1_low	16QAM	22.04
high	1908.5	19185	3	RB_1_low	64QAM	21.82
high	1908.5	19185	3	RB_1_mid	16QAM	22.16
high	1908.5	19185	3	RB_1_mid	64QAM	21.88
high	1908.5	19185	3	RB_1_high	16QAM	22.62
high	1908.5	19185	3	RB_1_high	64QAM	21.69
high	1908.5	19185	3	RB_50%_low	QPSK	22.10
high	1908.5	19185	3	RB_50%_low	16QAM	21.15
high	1908.5	19185	3	RB_50%_low	64QAM	21.19
high	1908.5	19185	3	RB_50%_mid	QPSK	22.33
high	1908.5	19185	3	RB_50%_mid	16QAM	21.27
high	1908.5	19185	3	RB_50%_mid	64QAM	21.21
high	1908.5	19185	3	RB_50%_high	QPSK	22.26
high	1908.5	19185	3	RB_50%_high	16QAM	21.25
high	1908.5	19185	3	RB_50%_high	64QAM	21.23
high	1908.5	19185	3	RB_100%	QPSK	22.28
high	1908.5	19185	3	RB_100%	16QAM	21.27
high	1908.5	19185	3	RB_100%	64QAM	21.13

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	1852.5	18625	5	RB 1 low	16QAM	21.46
low	1852.5	18625	5	RB 1 low	64QAM	21.41
low	1852.5	18625	5	RB 1 mid	16QAM	21.63
low	1852.5	18625	5	RB 1 mid	64QAM	21.67
low	1852.5	18625	5	RB 1 high	16QAM	21.70
low	1852.5	18625	5	RB 1 high	64QAM	22.27
low	1852.5	18625	5	RB 50% low	QPSK	21.92
low	1852.5	18625	5	RB 50% low	16QAM	21.02
low	1852.5	18625	5	RB 50% low	64QAM	20.82
low	1852.5	18625	5	RB 50% mid	QPSK	22.01
low	1852.5	18625	5	RB 50% mid	16QAM	20.98
low	1852.5	18625	5	RB 50% mid	64QAM	20.91
low	1852.5	18625	5	RB 50% high	QPSK	21.92
low	1852.5	18625	5	RB 50% high	16QAM	21.08
low	1852.5	18625	5	RB 50% high	64QAM	21.11
low	1852.5	18625	5	RB 100%	QPSK	21.95
low	1852.5	18625	5	RB 100%	16QAM	20.91
low	1852.5	18625	5	RB 100%	64QAM	20.78
low	1852.5	18625	5	RB 1 low	QPSK	22.75
low	1852.5	18625	5	RB 1 mid	QPSK	22.82
low	1852.5	18625	5	RB 1 high	QPSK	22.77
mid	1880.0	18900	5	RB 1 low	QPSK	22.88
mid	1880.0	18900	5	RB 1 mid	QPSK	22.53
mid	1880.0	18900	5	RB 1 high	QPSK	22.74
mid	1880.0	18900	5	RB 1 low	16QAM	21.48
mid	1880.0	18900	5	RB 1 low	64QAM	20.92
mid	1880.0	18900	5	RB 1 mid	16QAM	21.39
mid	1880.0	18900	5	RB 1 mid	64QAM	20.96
mid	1880.0	18900	5	RB 1 high	16QAM	21.89
mid	1880.0	18900	5	RB 1 high	64QAM	21.16
mid	1880.0	18900	5	RB 50% low	QPSK	21.75
mid	1880.0	18900	5	RB 50% low	16QAM	20.78
mid	1880.0	18900	5	RB 50% low	64QAM	20.65
mid	1880.0	18900	5	RB 50% mid	QPSK	21.81
mid	1880.0	18900	5	RB 50% mid	16QAM	20.75
mid	1880.0	18900	5	RB 50% mid	64QAM	20.62
mid	1880.0	18900	5	RB 50% high	QPSK	21.74
mid	1880.0	18900	5	RB 50% high	16QAM	20.81
mid	1880.0	18900	5	RB 50% high	64QAM	20.69
mid	1880.0	18900	5	RB 100%	QPSK	21.67
mid	1880.0	18900	5	RB 100%	16QAM	20.51
mid	1880.0	18900	5	RB 100%	64QAM	20.59

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	1907.5	19175	5	RB 1 low	QPSK	22.96
high	1907.5	19175	5	RB 1 mid	QPSK	23.06
high	1907.5	19175	5	RB 1 high	QPSK	23.11
high	1907.5	19175	5	RB 1 low	16QAM	21.91
high	1907.5	19175	5	RB 1 low	64QAM	21.84
high	1907.5	19175	5	RB 1 mid	16QAM	22.07
high	1907.5	19175	5	RB 1 mid	64QAM	22.19
high	1907.5	19175	5	RB 1 high	16QAM	22.23
high	1907.5	19175	5	RB 1 high	64QAM	22.30
high	1907.5	19175	5	RB 50% low	QPSK	22.12
high	1907.5	19175	5	RB 50% low	16QAM	21.36
high	1907.5	19175	5	RB 50% low	64QAM	21.11
high	1907.5	19175	5	RB 50% mid	QPSK	22.22
high	1907.5	19175	5	RB 50% mid	16QAM	21.17
high	1907.5	19175	5	RB 50% mid	64QAM	21.10
high	1907.5	19175	5	RB 50% high	QPSK	22.23
high	1907.5	19175	5	RB 50% high	16QAM	21.35
high	1907.5	19175	5	RB 50% high	64QAM	21.18
high	1907.5	19175	5	RB 100%	QPSK	22.23
high	1907.5	19175	5	RB 100%	16QAM	21.14
high	1907.5	19175	5	RB 100%	64QAM	21.14
low	1855.0	18650	10	RB 1 low	16QAM	21.68
low	1855.0	18650	10	RB 1 low	64QAM	21.28
low	1855.0	18650	10	RB 1 mid	16QAM	22.23
low	1855.0	18650	10	RB 1 mid	64QAM	21.60
low	1855.0	18650	10	RB 1 high	16QAM	21.77
low	1855.0	18650	10	RB 1 high	64QAM	21.63
low	1855.0	18650	10	RB 50% low	QPSK	22.01
low	1855.0	18650	10	RB 50% low	16QAM	21.00
low	1855.0	18650	10	RB 50% low	64QAM	20.91
low	1855.0	18650	10	RB 50% mid	QPSK	21.98
low	1855.0	18650	10	RB 50% mid	16QAM	20.97
low	1855.0	18650	10	RB 50% mid	64QAM	20.97
low	1855.0	18650	10	RB 50% high	QPSK	21.92
low	1855.0	18650	10	RB 50% high	16QAM	21.08
low	1855.0	18650	10	RB 50% high	64QAM	21.00
low	1855.0	18650	10	RB 100%	QPSK	21.86
low	1855.0	18650	10	RB 100%	16QAM	20.91
low	1855.0	18650	10	RB 100%	64QAM	20.75
low	1855.0	18650	10	RB 1 low	QPSK	22.67
low	1855.0	18650	10	RB 1 mid	QPSK	23.00
low	1855.0	18650	10	RB 1 high	QPSK	23.05

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	1880.0	18900	10	RB 1 low	16QAM	21.69
mid	1880.0	18900	10	RB 1 low	64QAM	22.04
mid	1880.0	18900	10	RB 1 mid	16QAM	21.85
mid	1880.0	18900	10	RB 1 mid	64QAM	22.29
mid	1880.0	18900	10	RB 1 high	16QAM	21.60
mid	1880.0	18900	10	RB 1 high	64QAM	21.93
mid	1880.0	18900	10	RB 50% low	QPSK	21.80
mid	1880.0	18900	10	RB 50% low	16QAM	20.93
mid	1880.0	18900	10	RB 50% low	64QAM	21.07
mid	1880.0	18900	10	RB 50% mid	QPSK	21.88
mid	1880.0	18900	10	RB 50% mid	16QAM	20.72
mid	1880.0	18900	10	RB 50% mid	64QAM	20.83
mid	1880.0	18900	10	RB 50% high	QPSK	21.75
mid	1880.0	18900	10	RB 50% high	16QAM	20.66
mid	1880.0	18900	10	RB 50% high	64QAM	20.69
mid	1880.0	18900	10	RB 100%	QPSK	21.77
mid	1880.0	18900	10	RB 100%	16QAM	20.95
mid	1880.0	18900	10	RB 100%	64QAM	20.91
mid	1880.0	18900	10	RB 1 low	QPSK	22.91
mid	1880.0	18900	10	RB 1 mid	QPSK	23.08
mid	1880.0	18900	10	RB 1 high	QPSK	22.87
high	1905.0	19150	10	RB 1 low	QPSK	22.95
high	1905.0	19150	10	RB 1 mid	QPSK	23.38
high	1905.0	19150	10	RB 1 high	QPSK	23.19
high	1905.0	19150	10	RB 1 low	16QAM	22.07
high	1905.0	19150	10	RB 1 low	64QAM	21.79
high	1905.0	19150	10	RB 1 mid	16QAM	22.19
high	1905.0	19150	10	RB 1 mid	64QAM	21.56
high	1905.0	19150	10	RB 1 high	16QAM	21.96
high	1905.0	19150	10	RB 1 high	64QAM	21.52
high	1905.0	19150	10	RB 50% low	QPSK	22.15
high	1905.0	19150	10	RB 50% low	16QAM	21.20
high	1905.0	19150	10	RB 50% low	64QAM	21.21
high	1905.0	19150	10	RB 50% mid	QPSK	22.22
high	1905.0	19150	10	RB 50% mid	16QAM	21.11
high	1905.0	19150	10	RB 50% mid	64QAM	21.23
high	1905.0	19150	10	RB 50% high	QPSK	22.20
high	1905.0	19150	10	RB 50% high	16QAM	21.14
high	1905.0	19150	10	RB 50% high	64QAM	21.14
high	1905.0	19150	10	RB 100%	QPSK	22.19
high	1905.0	19150	10	RB 100%	16QAM	21.17
high	1905.0	19150	10	RB 100%	64QAM	20.99

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	1857.5	18675	15	RB 1 low	16QAM	21.82
low	1857.5	18675	15	RB 1 low	64QAM	21.64
low	1857.5	18675	15	RB 1 mid	16QAM	21.91
low	1857.5	18675	15	RB 1 mid	64QAM	21.86
low	1857.5	18675	15	RB 1 high	16QAM	21.86
low	1857.5	18675	15	RB 1 high	64QAM	21.79
low	1857.5	18675	15	RB 50% low	QPSK	22.01
low	1857.5	18675	15	RB 50% low	16QAM	20.79
low	1857.5	18675	15	RB 50% low	64QAM	21.01
low	1857.5	18675	15	RB 50% mid	QPSK	22.01
low	1857.5	18675	15	RB 50% mid	16QAM	20.98
low	1857.5	18675	15	RB 50% mid	64QAM	20.91
low	1857.5	18675	15	RB 50% high	QPSK	21.98
low	1857.5	18675	15	RB 50% high	16QAM	20.95
low	1857.5	18675	15	RB 50% high	64QAM	20.88
low	1857.5	18675	15	RB 100%	QPSK	21.96
low	1857.5	18675	15	RB 100%	16QAM	21.01
low	1857.5	18675	15	RB 100%	64QAM	20.91
low	1857.5	18675	15	RB 1 low	QPSK	22.81
low	1857.5	18675	15	RB 1 mid	QPSK	23.14
low	1857.5	18675	15	RB 1 high	QPSK	22.86
mid	1880.0	18900	15	RB 1 low	16QAM	21.86
mid	1880.0	18900	15	RB 1 low	64QAM	22.14
mid	1880.0	18900	15	RB 1 mid	16QAM	22.18
mid	1880.0	18900	15	RB 1 mid	64QAM	22.91
mid	1880.0	18900	15	RB 1 high	16QAM	21.63
mid	1880.0	18900	15	RB 1 high	64QAM	21.96
mid	1880.0	18900	15	RB 50% low	QPSK	21.81
mid	1880.0	18900	15	RB 50% low	16QAM	20.77
mid	1880.0	18900	15	RB 50% low	64QAM	20.84
mid	1880.0	18900	15	RB 50% mid	QPSK	21.84
mid	1880.0	18900	15	RB 50% mid	16QAM	20.74
mid	1880.0	18900	15	RB 50% mid	64QAM	20.80
mid	1880.0	18900	15	RB 50% high	QPSK	21.77
mid	1880.0	18900	15	RB 50% high	16QAM	20.60
mid	1880.0	18900	15	RB 50% high	64QAM	20.77
mid	1880.0	18900	15	RB 100%	QPSK	21.68
mid	1880.0	18900	15	RB 100%	16QAM	20.78
mid	1880.0	18900	15	RB 100%	64QAM	20.91
mid	1880.0	18900	15	RB 1 low	QPSK	23.13
mid	1880.0	18900	15	RB 1 mid	QPSK	23.28
mid	1880.0	18900	15	RB 1 high	QPSK	23.05

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	1902.5	19125	15	RB 1 low	QPSK	22.93
high	1902.5	19125	15	RB 1 mid	QPSK	23.44
high	1902.5	19125	15	RB 1 high	QPSK	23.21
high	1902.5	19125	15	RB 1 low	16QAM	21.87
high	1902.5	19125	15	RB 1 low	64QAM	21.78
high	1902.5	19125	15	RB 1 mid	16QAM	22.14
high	1902.5	19125	15	RB 1 mid	64QAM	22.11
high	1902.5	19125	15	RB 1 high	16QAM	22.00
high	1902.5	19125	15	RB 1 high	64QAM	21.86
high	1902.5	19125	15	RB 50% low	QPSK	22.15
high	1902.5	19125	15	RB 50% low	16QAM	21.05
high	1902.5	19125	15	RB 50% low	64QAM	21.09
high	1902.5	19125	15	RB 50% mid	QPSK	22.17
high	1902.5	19125	15	RB 50% mid	16QAM	21.17
high	1902.5	19125	15	RB 50% mid	64QAM	21.11
high	1902.5	19125	15	RB 50% high	QPSK	22.18
high	1902.5	19125	15	RB 50% high	16QAM	21.20
high	1902.5	19125	15	RB 50% high	64QAM	21.24
high	1902.5	19125	15	RB 100%	QPSK	22.23
high	1902.5	19125	15	RB 100%	16QAM	21.12
high	1902.5	19125	15	RB 100%	64QAM	21.14
low	1860.0	18700	20	RB 1 low	16QAM	22.00
low	1860.0	18700	20	RB 1 low	64QAM	22.64
low	1860.0	18700	20	RB 1 mid	16QAM	22.29
low	1860.0	18700	20	RB 1 mid	64QAM	22.92
low	1860.0	18700	20	RB 1 high	16QAM	22.32
low	1860.0	18700	20	RB 1 high	64QAM	22.89
low	1860.0	18700	20	RB 50% low	QPSK	22.14
low	1860.0	18700	20	RB 50% low	16QAM	21.09
low	1860.0	18700	20	RB 50% low	64QAM	20.98
low	1860.0	18700	20	RB 50% mid	QPSK	21.95
low	1860.0	18700	20	RB 50% mid	16QAM	20.89
low	1860.0	18700	20	RB 50% mid	64QAM	20.88
low	1860.0	18700	20	RB 50% high	QPSK	22.00
low	1860.0	18700	20	RB 50% high	16QAM	21.14
low	1860.0	18700	20	RB 50% high	64QAM	20.93
low	1860.0	18700	20	RB 100%	QPSK	22.02
low	1860.0	18700	20	RB 100%	16QAM	20.97
low	1860.0	18700	20	RB 100%	64QAM	20.95
low	1860.0	18700	20	RB 1 low	QPSK	22.73
low	1860.0	18700	20	RB 1 mid	QPSK	23.28
low	1860.0	18700	20	RB 1 high	QPSK	22.98

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	1880.0	18900	20	RB 1 low	16QAM	22.09
mid	1880.0	18900	20	RB 1 low	64QAM	22.49
mid	1880.0	18900	20	RB 1 mid	16QAM	22.00
mid	1880.0	18900	20	RB 1 mid	64QAM	22.56
mid	1880.0	18900	20	RB 1 high	16QAM	21.87
mid	1880.0	18900	20	RB 1 high	64QAM	21.77
mid	1880.0	18900	20	RB 50% low	QPSK	21.75
mid	1880.0	18900	20	RB 50% low	16QAM	20.86
mid	1880.0	18900	20	RB 50% low	64QAM	20.84
mid	1880.0	18900	20	RB 50% mid	QPSK	21.84
mid	1880.0	18900	20	RB 50% mid	16QAM	20.79
mid	1880.0	18900	20	RB 50% mid	64QAM	20.77
mid	1880.0	18900	20	RB 50% high	QPSK	21.83
mid	1880.0	18900	20	RB 50% high	16QAM	20.88
mid	1880.0	18900	20	RB 50% high	64QAM	20.86
mid	1880.0	18900	20	RB 100%	QPSK	21.79
mid	1880.0	18900	20	RB 100%	16QAM	20.83
mid	1880.0	18900	20	RB 100%	64QAM	20.81
mid	1880.0	18900	20	RB 1 low	QPSK	22.68
mid	1880.0	18900	20	RB 1 mid	QPSK	22.74
mid	1880.0	18900	20	RB 1 high	QPSK	22.58
high	1900.0	19100	20	RB 1 low	QPSK	22.74
high	1900.0	19100	20	RB 1 low	16QAM	22.11
high	1900.0	19100	20	RB 1 low	64QAM	22.19
high	1900.0	19100	20	RB 1 mid	QPSK	23.35
high	1900.0	19100	20	RB 1 mid	16QAM	22.45
high	1900.0	19100	20	RB 1 mid	64QAM	23.02
high	1900.0	19100	20	RB 1 high	QPSK	23.13
high	1900.0	19100	20	RB 1 high	16QAM	22.38
high	1900.0	19100	20	RB 1 high	64QAM	23.03
high	1900.0	19100	20	RB 50% low	QPSK	22.09
high	1900.0	19100	20	RB 50% low	16QAM	21.14
high	1900.0	19100	20	RB 50% low	64QAM	20.94
high	1900.0	19100	20	RB 50% mid	QPSK	22.15
high	1900.0	19100	20	RB 50% mid	16QAM	21.31
high	1900.0	19100	20	RB 50% mid	64QAM	21.11
high	1900.0	19100	20	RB 50% high	QPSK	22.17
high	1900.0	19100	20	RB 50% high	16QAM	21.22
high	1900.0	19100	20	RB 50% high	64QAM	21.08
high	1900.0	19100	20	RB 100%	QPSK	22.09
high	1900.0	19100	20	RB 100%	16QAM	21.16
high	1900.0	19100	20	RB 100%	64QAM	21.04

Table 9: Test results conducted power measurement LTE FDD 2 1900 MHz.

8.1.2 Conducted power measurements LTE FDD 4 1700 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
low	1710.7	19957	1.4	RB_1_low	QPSK	22.77
low	1710.7	19957	1.4	RB_1_low	16QAM	21.69
low	1710.7	19957	1.4	RB_1_low	64QAM	21.30
low	1710.7	19957	1.4	RB_1_mid	QPSK	22.91
low	1710.7	19957	1.4	RB_1_mid	16QAM	21.62
low	1710.7	19957	1.4	RB_1_mid	64QAM	21.21
low	1710.7	19957	1.4	RB_1_high	QPSK	22.77
low	1710.7	19957	1.4	RB_1_high	16QAM	21.55
low	1710.7	19957	1.4	RB_1_high	64QAM	21.43
low	1710.7	19957	1.4	RB_50%_low	QPSK	22.80
low	1710.7	19957	1.4	RB_50%_low	16QAM	22.10
low	1710.7	19957	1.4	RB_50%_low	64QAM	21.89
low	1710.7	19957	1.4	RB_50%_mid	QPSK	22.85
low	1710.7	19957	1.4	RB_50%_mid	16QAM	22.06
low	1710.7	19957	1.4	RB_50%_mid	64QAM	21.53
low	1710.7	19957	1.4	RB_50%_high	QPSK	22.78
low	1710.7	19957	1.4	RB_50%_high	16QAM	22.06
low	1710.7	19957	1.4	RB_50%_high	64QAM	21.90
low	1710.7	19957	1.4	RB_100%	QPSK	21.86
low	1710.7	19957	1.4	RB_100%	16QAM	21.06
low	1710.7	19957	1.4	RB_100%	64QAM	21.02
mid	1732.5	20175	1.4	RB_1_low	QPSK	23.20
mid	1732.5	20175	1.4	RB_1_mid	QPSK	23.46
mid	1732.5	20175	1.4	RB_1_high	QPSK	23.18
mid	1732.5	20175	1.4	RB_1_low	16QAM	21.98
mid	1732.5	20175	1.4	RB_1_low	64QAM	21.98
mid	1732.5	20175	1.4	RB_1_mid	16QAM	21.97
mid	1732.5	20175	1.4	RB_1_mid	64QAM	22.03
mid	1732.5	20175	1.4	RB_1_high	16QAM	22.09
mid	1732.5	20175	1.4	RB_1_high	64QAM	21.86
mid	1732.5	20175	1.4	RB_50%_low	QPSK	23.09
mid	1732.5	20175	1.4	RB_50%_low	16QAM	22.38
mid	1732.5	20175	1.4	RB_50%_low	64QAM	22.12
mid	1732.5	20175	1.4	RB_50%_mid	QPSK	23.15
mid	1732.5	20175	1.4	RB_50%_mid	16QAM	22.48
mid	1732.5	20175	1.4	RB_50%_mid	64QAM	22.14
mid	1732.5	20175	1.4	RB_50%_high	QPSK	23.25
mid	1732.5	20175	1.4	RB_50%_high	16QAM	22.62
mid	1732.5	20175	1.4	RB_50%_high	64QAM	22.20
mid	1732.5	20175	1.4	RB_100%	QPSK	22.19
mid	1732.5	20175	1.4	RB_100%	16QAM	21.17
mid	1732.5	20175	1.4	RB_100%	64QAM	21.01

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
high	1754.3	20393	1.4	RB_1_low	QPSK	22.28
high	1754.3	20393	1.4	RB_1_mid	QPSK	22.53
high	1754.3	20393	1.4	RB_1_high	QPSK	22.47
high	1754.3	20393	1.4	RB_1_low	16QAM	21.14
high	1754.3	20393	1.4	RB_1_low	64QAM	20.67
high	1754.3	20393	1.4	RB_1_mid	16QAM	21.29
high	1754.3	20393	1.4	RB_1_mid	64QAM	21.18
high	1754.3	20393	1.4	RB_1_high	16QAM	21.32
high	1754.3	20393	1.4	RB_1_high	64QAM	20.86
high	1754.3	20393	1.4	RB_50%_low	QPSK	22.38
high	1754.3	20393	1.4	RB_50%_low	16QAM	21.70
high	1754.3	20393	1.4	RB_50%_low	64QAM	21.00
high	1754.3	20393	1.4	RB_50%_mid	QPSK	22.57
high	1754.3	20393	1.4	RB_50%_mid	16QAM	21.93
high	1754.3	20393	1.4	RB_50%_mid	64QAM	21.1
high	1754.3	20393	1.4	RB_50%_high	QPSK	22.47
high	1754.3	20393	1.4	RB_50%_high	16QAM	21.80
high	1754.3	20393	1.4	RB_50%_high	64QAM	20.84
high	1754.3	20393	1.4	RB_100%	QPSK	21.69
high	1754.3	20393	1.4	RB_100%	16QAM	20.73
high	1754.3	20393	1.4	RB_100%	64QAM	20.27
low	1711.5	19965	3	RB_1_low	16QAM	21.79
low	1711.5	19965	3	RB_1_low	64QAM	21.47
low	1711.5	19965	3	RB_1_mid	16QAM	22.07
low	1711.5	19965	3	RB_1_mid	64QAM	21.41
low	1711.5	19965	3	RB_1_high	16QAM	21.75
low	1711.5	19965	3	RB_1_high	64QAM	21.22
low	1711.5	19965	3	RB_50%_low	QPSK	21.87
low	1711.5	19965	3	RB_50%_low	16QAM	20.91
low	1711.5	19965	3	RB_50%_low	64QAM	20.96
low	1711.5	19965	3	RB_50%_mid	QPSK	21.92
low	1711.5	19965	3	RB_50%_mid	16QAM	20.91
low	1711.5	19965	3	RB_50%_mid	64QAM	20.98
low	1711.5	19965	3	RB_50%_high	QPSK	21.80
low	1711.5	19965	3	RB_50%_high	16QAM	20.91
low	1711.5	19965	3	RB_50%_high	64QAM	20.94
low	1711.5	19965	3	RB_100%	QPSK	21.78
low	1711.5	19965	3	RB_100%	16QAM	20.89
low	1711.5	19965	3	RB_100%	64QAM	20.93
low	1711.5	19965	3	RB_1_low	QPSK	22.74
low	1711.5	19965	3	RB_1_mid	QPSK	23.12
low	1711.5	19965	3	RB_1_high	QPSK	22.85

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	1732.5	20175	3	RB 1 low	QPSK	23.04
mid	1732.5	20175	3	RB 1 mid	QPSK	23.48
mid	1732.5	20175	3	RB 1 high	QPSK	23.49
mid	1732.5	20175	3	RB 1 low	16QAM	21.79
mid	1732.5	20175	3	RB 1 low	64QAM	22.41
mid	1732.5	20175	3	RB 1 mid	16QAM	22.02
mid	1732.5	20175	3	RB 1 mid	64QAM	22.56
mid	1732.5	20175	3	RB 1 high	16QAM	22.03
mid	1732.5	20175	3	RB 1 high	64QAM	22.35
mid	1732.5	20175	3	RB 50% low	QPSK	22.20
mid	1732.5	20175	3	RB 50% low	16QAM	21.24
mid	1732.5	20175	3	RB 50% low	64QAM	21.14
mid	1732.5	20175	3	RB 50% mid	QPSK	22.16
mid	1732.5	20175	3	RB 50% mid	16QAM	21.18
mid	1732.5	20175	3	RB 50% mid	64QAM	21.11
mid	1732.5	20175	3	RB 50% high	QPSK	22.30
mid	1732.5	20175	3	RB 50% high	16QAM	21.31
mid	1732.5	20175	3	RB 50% high	64QAM	21.22
mid	1732.5	20175	3	RB 100%	QPSK	22.17
mid	1732.5	20175	3	RB 100%	16QAM	21.14
mid	1732.5	20175	3	RB 100%	64QAM	21.16
high	1753.5	20385	3	RB 1 low	QPSK	22.38
high	1753.5	20385	3	RB 1 mid	QPSK	22.46
high	1753.5	20385	3	RB 1 high	QPSK	22.57
high	1753.5	20385	3	RB 1 low	16QAM	21.35
high	1753.5	20385	3	RB 1 low	64QAM	20.83
high	1753.5	20385	3	RB 1 mid	16QAM	21.34
high	1753.5	20385	3	RB 1 mid	64QAM	20.94
high	1753.5	20385	3	RB 1 high	16QAM	21.49
high	1753.5	20385	3	RB 1 high	64QAM	20.88
high	1753.5	20385	3	RB 50% low	QPSK	21.43
high	1753.5	20385	3	RB 50% low	16QAM	20.42
high	1753.5	20385	3	RB 50% low	64QAM	20.40
high	1753.5	20385	3	RB 50% mid	QPSK	21.57
high	1753.5	20385	3	RB 50% mid	16QAM	20.53
high	1753.5	20385	3	RB 50% mid	64QAM	20.57
high	1753.5	20385	3	RB 50% high	QPSK	21.49
high	1753.5	20385	3	RB 50% high	16QAM	20.54
high	1753.5	20385	3	RB 50% high	64QAM	20.48
high	1753.5	20385	3	RB 100%	QPSK	21.52
high	1753.5	20385	3	RB 100%	16QAM	20.52
high	1753.5	20385	3	RB 100%	64QAM	20.52

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	1712.5	19975	5	RB 1 low	16QAM	21.79
low	1712.5	19975	5	RB 1 low	64QAM	21.75
low	1712.5	19975	5	RB 1 mid	16QAM	21.62
low	1712.5	19975	5	RB 1 mid	64QAM	21.87
low	1712.5	19975	5	RB 1 high	16QAM	21.58
low	1712.5	19975	5	RB 1 high	64QAM	21.50
low	1712.5	19975	5	RB 50% low	QPSK	21.86
low	1712.5	19975	5	RB 50% low	16QAM	20.98
low	1712.5	19975	5	RB 50% low	64QAM	20.91
low	1712.5	19975	5	RB 50% mid	QPSK	21.88
low	1712.5	19975	5	RB 50% mid	16QAM	21.08
low	1712.5	19975	5	RB 50% mid	64QAM	20.89
low	1712.5	19975	5	RB 50% high	QPSK	21.78
low	1712.5	19975	5	RB 50% high	16QAM	21.08
low	1712.5	19975	5	RB 50% high	64QAM	20.79
low	1712.5	19975	5	RB 100%	QPSK	21.83
low	1712.5	19975	5	RB 100%	16QAM	20.81
low	1712.5	19975	5	RB 100%	64QAM	20.79
low	1712.5	19975	5	RB 1 low	QPSK	22.75
low	1712.5	19975	5	RB 1 mid	QPSK	22.65
low	1712.5	19975	5	RB 1 high	QPSK	22.49
mid	1732.5	20175	5	RB 1 low	QPSK	23.04
mid	1732.5	20175	5	RB 1 mid	QPSK	23.06
mid	1732.5	20175	5	RB 1 high	QPSK	23.22
mid	1732.5	20175	5	RB 1 low	16QAM	21.77
mid	1732.5	20175	5	RB 1 low	64QAM	21.51
mid	1732.5	20175	5	RB 1 mid	16QAM	21.86
mid	1732.5	20175	5	RB 1 mid	64QAM	21.35
mid	1732.5	20175	5	RB 1 high	16QAM	22.02
mid	1732.5	20175	5	RB 1 high	64QAM	21.44
mid	1732.5	20175	5	RB 50% low	QPSK	22.18
mid	1732.5	20175	5	RB 50% low	16QAM	21.19
mid	1732.5	20175	5	RB 50% low	64QAM	21.06
mid	1732.5	20175	5	RB 50% mid	QPSK	22.13
mid	1732.5	20175	5	RB 50% mid	16QAM	21.23
mid	1732.5	20175	5	RB 50% mid	64QAM	21.01
mid	1732.5	20175	5	RB 50% high	QPSK	22.20
mid	1732.5	20175	5	RB 50% high	16QAM	21.40
mid	1732.5	20175	5	RB 50% high	64QAM	21.18
mid	1732.5	20175	5	RB 100%	QPSK	22.07
mid	1732.5	20175	5	RB 100%	16QAM	21.07
mid	1732.5	20175	5	RB 100%	64QAM	21.15

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	1752.5	20375	5	RB_1_low	QPSK	22.32
high	1752.5	20375	5	RB_1_mid	QPSK	22.29
high	1752.5	20375	5	RB_1_high	QPSK	22.37
high	1752.5	20375	5	RB_1_low	16QAM	21.12
high	1752.5	20375	5	RB_1_low	64QAM	21.15
high	1752.5	20375	5	RB_1_mid	16QAM	21.21
high	1752.5	20375	5	RB_1_mid	64QAM	20.96
high	1752.5	20375	5	RB_1_high	16QAM	21.36
high	1752.5	20375	5	RB_1_high	64QAM	20.99
high	1752.5	20375	5	RB_50%_low	QPSK	21.64
high	1752.5	20375	5	RB_50%_low	16QAM	20.68
high	1752.5	20375	5	RB_50%_low	64QAM	20.51
high	1752.5	20375	5	RB_50%_mid	QPSK	21.54
high	1752.5	20375	5	RB_50%_mid	16QAM	20.64
high	1752.5	20375	5	RB_50%_mid	64QAM	20.40
high	1752.5	20375	5	RB_50%_high	QPSK	21.71
high	1752.5	20375	5	RB_50%_high	16QAM	20.94
high	1752.5	20375	5	RB_50%_high	64QAM	20.55
high	1752.5	20375	5	RB_100%	QPSK	21.53
high	1752.5	20375	5	RB_100%	16QAM	20.53
high	1752.5	20375	5	RB_100%	64QAM	20.47
low	1715	20000	10	RB_1_low	16QAM	21.75
low	1715	20000	10	RB_1_low	64QAM	21.30
low	1715	20000	10	RB_1_mid	16QAM	21.68
low	1715	20000	10	RB_1_mid	64QAM	21.50
low	1715	20000	10	RB_1_high	16QAM	21.50
low	1715	20000	10	RB_1_high	64QAM	20.96
low	1715	20000	10	RB_50%_low	QPSK	22.01
low	1715	20000	10	RB_50%_low	16QAM	20.83
low	1715	20000	10	RB_50%_low	64QAM	20.94
low	1715	20000	10	RB_50%_mid	QPSK	21.76
low	1715	20000	10	RB_50%_mid	16QAM	20.87
low	1715	20000	10	RB_50%_mid	64QAM	20.88
low	1715	20000	10	RB_50%_high	QPSK	21.76
low	1715	20000	10	RB_50%_high	16QAM	20.87
low	1715	20000	10	RB_50%_high	64QAM	20.68
low	1715	20000	10	RB_100%	QPSK	21.77
low	1715	20000	10	RB_100%	16QAM	20.86
low	1715	20000	10	RB_100%	64QAM	20.82
low	1715	20000	10	RB_1_low	QPSK	22.69
low	1715	20000	10	RB_1_mid	QPSK	22.88
low	1715	20000	10	RB_1_high	QPSK	22.53

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulatio	Pavg [dBm]
mid	1732.5	20175	10	RB_1_low	16QAM	21.72
mid	1732.5	20175	10	RB_1_low	64QAM	22.08
mid	1732.5	20175	10	RB_1_mid	16QAM	22.56
mid	1732.5	20175	10	RB_1_mid	64QAM	23.08
mid	1732.5	20175	10	RB_1_high	16QAM	21.87
mid	1732.5	20175	10	RB_1_high	64QAM	22.47
mid	1732.5	20175	10	RB_50%_low	QPSK	22.04
mid	1732.5	20175	10	RB_50%_low	16QAM	21.07
mid	1732.5	20175	10	RB_50%_low	64QAM	21.08
mid	1732.5	20175	10	RB_50%_mid	QPSK	22.12
mid	1732.5	20175	10	RB_50%_mid	16QAM	21.23
mid	1732.5	20175	10	RB_50%_mid	64QAM	21.15
mid	1732.5	20175	10	RB_50%_high	QPSK	22.24
mid	1732.5	20175	10	RB_50%_high	16QAM	21.12
mid	1732.5	20175	10	RB_50%_high	64QAM	21.25
mid	1732.5	20175	10	RB_100%	QPSK	22.02
mid	1732.5	20175	10	RB_100%	16QAM	21.09
mid	1732.5	20175	10	RB_100%	64QAM	21.15
mid	1732.5	20175	10	RB_1_low	QPSK	22.90
mid	1732.5	20175	10	RB_1_mid	QPSK	23.60
mid	1732.5	20175	10	RB_1_high	QPSK	23.26
high	1750	20350	10	RB_1_low	QPSK	22.81
high	1750	20350	10	RB_1_mid	QPSK	22.81
high	1750	20350	10	RB_1_high	QPSK	22.57
high	1750	20350	10	RB_1_low	16QAM	21.69
high	1750	20350	10	RB_1_low	64QAM	21.51
high	1750	20350	10	RB_1_mid	16QAM	21.56
high	1750	20350	10	RB_1_mid	64QAM	21.12
high	1750	20350	10	RB_1_high	16QAM	21.47
high	1750	20350	10	RB_1_high	64QAM	21.36
high	1750	20350	10	RB_50%_low	QPSK	21.89
high	1750	20350	10	RB_50%_low	16QAM	20.83
high	1750	20350	10	RB_50%_low	64QAM	20.84
high	1750	20350	10	RB_50%_mid	QPSK	21.66
high	1750	20350	10	RB_50%_mid	16QAM	20.77
high	1750	20350	10	RB_50%_mid	64QAM	20.78
high	1750	20350	10	RB_50%_high	QPSK	21.53
high	1750	20350	10	RB_50%_high	16QAM	20.64
high	1750	20350	10	RB_50%_high	64QAM	20.66
high	1750	20350	10	RB_100%	QPSK	21.63
high	1750	20350	10	RB_100%	16QAM	20.62
high	1750	20350	10	RB_100%	64QAM	20.57

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	1717.5	20025	15	RB 1 low	16QAM	21.87
low	1717.5	20025	15	RB 1 low	64QAM	21.83
low	1717.5	20025	15	RB 1 mid	16QAM	21.77
low	1717.5	20025	15	RB 1 mid	64QAM	21.63
low	1717.5	20025	15	RB 1 high	16QAM	21.81
low	1717.5	20025	15	RB 1 high	64QAM	21.85
low	1717.5	20025	15	RB 50% low	QPSK	21.97
low	1717.5	20025	15	RB 50% low	16QAM	20.77
low	1717.5	20025	15	RB 50% low	64QAM	20.91
low	1717.5	20025	15	RB 50% mid	QPSK	21.78
low	1717.5	20025	15	RB 50% mid	16QAM	20.89
low	1717.5	20025	15	RB 50% mid	64QAM	20.80
low	1717.5	20025	15	RB 50% high	QPSK	21.74
low	1717.5	20025	15	RB 50% high	16QAM	20.77
low	1717.5	20025	15	RB 50% high	64QAM	20.70
low	1717.5	20025	15	RB 100%	QPSK	21.81
low	1717.5	20025	15	RB 100%	16QAM	20.90
low	1717.5	20025	15	RB 100%	64QAM	20.82
low	1717.5	20025	15	RB 1 low	QPSK	22.86
low	1717.5	20025	15	RB 1 mid	QPSK	22.98
low	1717.5	20025	15	RB 1 high	QPSK	22.70
mid	1732.5	20175	15	RB 1 low	16QAM	21.93
mid	1732.5	20175	15	RB 1 low	64QAM	22.19
mid	1732.5	20175	15	RB 1 mid	16QAM	22.67
mid	1732.5	20175	15	RB 1 mid	64QAM	22.59
mid	1732.5	20175	15	RB 1 high	16QAM	21.95
mid	1732.5	20175	15	RB 1 high	64QAM	22.46
mid	1732.5	20175	15	RB 50% low	QPSK	22.03
mid	1732.5	20175	15	RB 50% low	16QAM	21.10
mid	1732.5	20175	15	RB 50% low	64QAM	21.07
mid	1732.5	20175	15	RB 50% mid	QPSK	22.16
mid	1732.5	20175	15	RB 50% mid	16QAM	21.24
mid	1732.5	20175	15	RB 50% mid	64QAM	21.10
mid	1732.5	20175	15	RB 50% high	QPSK	22.19
mid	1732.5	20175	15	RB 50% high	16QAM	21.27
mid	1732.5	20175	15	RB 50% high	64QAM	21.31
mid	1732.5	20175	15	RB 100%	QPSK	22.04
mid	1732.5	20175	15	RB 100%	16QAM	21.00
mid	1732.5	20175	15	RB 100%	64QAM	21.15
mid	1732.5	20175	15	RB 1 low	QPSK	23.11
mid	1732.5	20175	15	RB 1 mid	QPSK	23.73
mid	1732.5	20175	15	RB 1 high	QPSK	23.38

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	1747.5	20325	15	RB 1 low	QPSK	23.16
high	1747.5	20325	15	RB 1 mid	QPSK	23.26
high	1747.5	20325	15	RB 1 high	QPSK	22.55
high	1747.5	20325	15	RB 1 low	16QAM	22.08
high	1747.5	20325	15	RB 1 low	64QAM	22.01
high	1747.5	20325	15	RB 1 mid	16QAM	21.64
high	1747.5	20325	15	RB 1 mid	64QAM	21.78
high	1747.5	20325	15	RB 1 high	16QAM	21.48
high	1747.5	20325	15	RB 1 high	64QAM	21.32
high	1747.5	20325	15	RB 50% low	QPSK	21.95
high	1747.5	20325	15	RB 50% low	16QAM	21.03
high	1747.5	20325	15	RB 50% low	64QAM	20.81
high	1747.5	20325	15	RB 50% mid	QPSK	21.78
high	1747.5	20325	15	RB 50% mid	16QAM	20.77
high	1747.5	20325	15	RB 50% mid	64QAM	20.71
high	1747.5	20325	15	RB 50% high	QPSK	21.69
high	1747.5	20325	15	RB 50% high	16QAM	20.79
high	1747.5	20325	15	RB 50% high	64QAM	20.57
high	1747.5	20325	15	RB 100%	QPSK	21.80
high	1747.5	20325	15	RB 100%	16QAM	20.78
high	1747.5	20325	15	RB 100%	64QAM	20.80
low	1720	20050	20	RB 1 low	16QAM	22.02
low	1720	20050	20	RB 1 low	64QAM	22.61
low	1720	20050	20	RB 1 mid	16QAM	22.01
low	1720	20050	20	RB 1 mid	64QAM	22.62
low	1720	20050	20	RB 1 high	16QAM	22.12
low	1720	20050	20	RB 1 high	64QAM	22.82
low	1720	20050	20	RB 50% low	QPSK	21.75
low	1720	20050	20	RB 50% low	16QAM	20.89
low	1720	20050	20	RB 50% low	64QAM	20.79
low	1720	20050	20	RB 50% mid	QPSK	21.70
low	1720	20050	20	RB 50% mid	16QAM	20.86
low	1720	20050	20	RB 50% mid	64QAM	20.65
low	1720	20050	20	RB 50% high	QPSK	21.95
low	1720	20050	20	RB 50% high	16QAM	21.10
low	1720	20050	20	RB 50% high	64QAM	20.89
low	1720	20050	20	RB 100%	QPSK	21.89
low	1720	20050	20	RB 100%	16QAM	20.97
low	1720	20050	20	RB 100%	64QAM	20.96
low	1720	20050	20	RB 1 low	QPSK	22.61
low	1720	20050	20	RB 1 mid	QPSK	22.88
low	1720	20050	20	RB 1 high	QPSK	22.80

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	1732.5	20175	20	RB 1 low	16QAM	22.27
mid	1732.5	20175	20	RB 1 low	64QAM	22.61
mid	1732.5	20175	20	RB 1 mid	16QAM	22.58
mid	1732.5	20175	20	RB 1 mid	64QAM	22.49
mid	1732.5	20175	20	RB 1 high	16QAM	22.34
mid	1732.5	20175	20	RB 1 high	64QAM	22.44
mid	1732.5	20175	20	RB 50% low	QPSK	22.08
mid	1732.5	20175	20	RB 50% low	16QAM	21.21
mid	1732.5	20175	20	RB 50% low	64QAM	21.20
mid	1732.5	20175	20	RB 50% mid	QPSK	22.20
mid	1732.5	20175	20	RB 50% mid	16QAM	21.15
mid	1732.5	20175	20	RB 50% mid	64QAM	21.14
mid	1732.5	20175	20	RB 50% high	QPSK	22.21
mid	1732.5	20175	20	RB 50% high	16QAM	21.14
mid	1732.5	20175	20	RB 50% high	64QAM	21.12
mid	1732.5	20175	20	RB 100%	QPSK	22.11
mid	1732.5	20175	20	RB 100%	16QAM	21.16
mid	1732.5	20175	20	RB 100%	64QAM	21.04
mid	1732.5	20175	20	RB 1 low	QPSK	22.47
mid	1732.5	20175	20	RB 1 mid	QPSK	23.17
mid	1732.5	20175	20	RB 1 high	QPSK	22.64
high	1745	20300	20	RB 1 low	QPSK	23.20
high	1745	20300	20	RB 1 low	16QAM	22.63
high	1745	20300	20	RB 1 low	64QAM	23.20
high	1745	20300	20	RB 1 mid	QPSK	22.92
high	1745	20300	20	RB 1 mid	16QAM	22.06
high	1745	20300	20	RB 1 mid	64QAM	22.66
high	1745	20300	20	RB 1 high	QPSK	22.50
high	1745	20300	20	RB 1 high	16QAM	21.83
high	1745	20300	20	RB 1 high	64QAM	22.43
high	1745	20300	20	RB 50% low	QPSK	22.34
high	1745	20300	20	RB 50% low	16QAM	21.27
high	1745	20300	20	RB 50% low	64QAM	21.08
high	1745	20300	20	RB 50% mid	QPSK	21.90
high	1745	20300	20	RB 50% mid	16QAM	20.94
high	1745	20300	20	RB 50% mid	64QAM	20.80
high	1745	20300	20	RB 50% high	QPSK	21.71
high	1745	20300	20	RB 50% high	16QAM	20.72
high	1745	20300	20	RB 50% high	64QAM	20.63
high	1745	20300	20	RB 100%	QPSK	21.92
high	1745	20300	20	RB 100%	16QAM	20.99
high	1745	20300	20	RB 100%	64QAM	20.97

Table 10: Test results conducted power measurement LTE FDD 4 1700 MHz.

8.1.3 Conducted power measurements LTE FDD 5 850 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
low	824.7	20407	1.4	RB_1_low	QPSK	23.11
low	824.7	20407	1.4	RB_1_low	16QAM	22.00
low	824.7	20407	1.4	RB_1_low	64QAM	22.02
low	824.7	20407	1.4	RB_1_mid	QPSK	23.26
low	824.7	20407	1.4	RB_1_mid	16QAM	22.22
low	824.7	20407	1.4	RB_1_mid	64QAM	22.00
low	824.7	20407	1.4	RB_1_high	QPSK	23.13
low	824.7	20407	1.4	RB_1_high	16QAM	21.89
low	824.7	20407	1.4	RB_1_high	64QAM	22.00
low	824.7	20407	1.4	RB_50%_low	QPSK	23.20
low	824.7	20407	1.4	RB_50%_low	16QAM	22.34
low	824.7	20407	1.4	RB_50%_low	64QAM	22.58
low	824.7	20407	1.4	RB_50%_mid	QPSK	23.12
low	824.7	20407	1.4	RB_50%_mid	16QAM	22.41
low	824.7	20407	1.4	RB_50%_mid	64QAM	22.51
low	824.7	20407	1.4	RB_50%_high	QPSK	23.06
low	824.7	20407	1.4	RB_50%_high	16QAM	22.55
low	824.7	20407	1.4	RB_50%_high	64QAM	22.24
low	824.7	20407	1.4	RB_100%	QPSK	22.19
low	824.7	20407	1.4	RB_100%	16QAM	21.57
low	824.7	20407	1.4	RB_100%	64QAM	21.43
mid	836.5	20525	1.4	RB_1_low	QPSK	23.47
mid	836.5	20525	1.4	RB_1_mid	QPSK	23.26
mid	836.5	20525	1.4	RB_1_high	QPSK	23.30
mid	836.5	20525	1.4	RB_1_low	16QAM	21.97
mid	836.5	20525	1.4	RB_1_low	64QAM	21.89
mid	836.5	20525	1.4	RB_1_mid	16QAM	22.10
mid	836.5	20525	1.4	RB_1_mid	64QAM	22.17
mid	836.5	20525	1.4	RB_1_high	16QAM	22.04
mid	836.5	20525	1.4	RB_1_high	64QAM	21.92
mid	836.5	20525	1.4	RB_50%_low	QPSK	23.20
mid	836.5	20525	1.4	RB_50%_low	16QAM	22.55
mid	836.5	20525	1.4	RB_50%_low	64QAM	22.29
mid	836.5	20525	1.4	RB_50%_mid	QPSK	23.34
mid	836.5	20525	1.4	RB_50%_mid	16QAM	22.70
mid	836.5	20525	1.4	RB_50%_mid	64QAM	22.38
mid	836.5	20525	1.4	RB_50%_high	QPSK	23.21
mid	836.5	20525	1.4	RB_50%_high	16QAM	22.43
mid	836.5	20525	1.4	RB_50%_high	64QAM	22.29
mid	836.5	20525	1.4	RB_100%	QPSK	22.38
mid	836.5	20525	1.4	RB_100%	16QAM	21.50
mid	836.5	20525	1.4	RB_100%	64QAM	21.52

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
high	848.3	20643	1.4	RB_1_low	QPSK	23.24
high	848.3	20643	1.4	RB_1_mid	QPSK	23.40
high	848.3	20643	1.4	RB_1_high	QPSK	23.23
high	848.3	20643	1.4	RB_1_low	16QAM	22.04
high	848.3	20643	1.4	RB_1_low	64QAM	22.65
high	848.3	20643	1.4	RB_1_mid	16QAM	22.15
high	848.3	20643	1.4	RB_1_mid	64QAM	21.77
high	848.3	20643	1.4	RB_1_high	16QAM	22.15
high	848.3	20643	1.4	RB_1_high	64QAM	22.57
high	848.3	20643	1.4	RB_50%_low	QPSK	23.29
high	848.3	20643	1.4	RB_50%_low	16QAM	22.28
high	848.3	20643	1.4	RB_50%_low	64QAM	22.27
high	848.3	20643	1.4	RB_50%_mid	QPSK	23.27
high	848.3	20643	1.4	RB_50%_mid	16QAM	22.85
high	848.3	20643	1.4	RB_50%_mid	64QAM	22.16
high	848.3	20643	1.4	RB_50%_high	QPSK	23.14
high	848.3	20643	1.4	RB_50%_high	16QAM	22.58
high	848.3	20643	1.4	RB_50%_high	64QAM	22.31
high	848.3	20643	1.4	RB_100%	QPSK	22.30
high	848.3	20643	1.4	RB_100%	16QAM	21.30
high	848.3	20643	1.4	RB_100%	64QAM	21.07
low	825.5	20415	3	RB_1_low	16QAM	22.15
low	825.5	20415	3	RB_1_low	64QAM	21.90
low	825.5	20415	3	RB_1_mid	16QAM	21.99
low	825.5	20415	3	RB_1_mid	64QAM	21.88
low	825.5	20415	3	RB_1_high	16QAM	21.86
low	825.5	20415	3	RB_1_high	64QAM	21.46
low	825.5	20415	3	RB_50%_low	QPSK	22.30
low	825.5	20415	3	RB_50%_low	16QAM	21.09
low	825.5	20415	3	RB_50%_low	64QAM	21.14
low	825.5	20415	3	RB_50%_mid	QPSK	22.30
low	825.5	20415	3	RB_50%_mid	16QAM	21.06
low	825.5	20415	3	RB_50%_mid	64QAM	21.36
low	825.5	20415	3	RB_50%_high	QPSK	22.23
low	825.5	20415	3	RB_50%_high	16QAM	21.27
low	825.5	20415	3	RB_50%_high	64QAM	21.22
low	825.5	20415	3	RB_100%	QPSK	22.20
low	825.5	20415	3	RB_100%	16QAM	21.32
low	825.5	20415	3	RB_100%	64QAM	20.93
low	825.5	20415	3	RB_1_low	QPSK	23.13
low	825.5	20415	3	RB_1_mid	QPSK	23.41
low	825.5	20415	3	RB_1_high	QPSK	23.18

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
mid	836.5	20525	3	RB_1_low	QPSK	23.21
mid	836.5	20525	3	RB_1_mid	QPSK	23.35
mid	836.5	20525	3	RB_1_high	QPSK	23.40
mid	836.5	20525	3	RB_1_low	16QAM	22.12
mid	836.5	20525	3	RB_1_low	64QAM	22.46
mid	836.5	20525	3	RB_1_mid	16QAM	21.93
mid	836.5	20525	3	RB_1_mid	64QAM	22.77
mid	836.5	20525	3	RB_1_high	16QAM	22.14
mid	836.5	20525	3	RB_1_high	64QAM	22.28
mid	836.5	20525	3	RB_50%_low	QPSK	22.23
mid	836.5	20525	3	RB_50%_low	16QAM	20.98
mid	836.5	20525	3	RB_50%_low	64QAM	21.07
mid	836.5	20525	3	RB_50%_mid	QPSK	22.15
mid	836.5	20525	3	RB_50%_mid	16QAM	21.20
mid	836.5	20525	3	RB_50%_mid	64QAM	21.11
mid	836.5	20525	3	RB_50%_high	QPSK	22.38
mid	836.5	20525	3	RB_50%_high	16QAM	21.35
mid	836.5	20525	3	RB_50%_high	64QAM	21.23
mid	836.5	20525	3	RB_100%	QPSK	22.23
mid	836.5	20525	3	RB_100%	16QAM	21.09
mid	836.5	20525	3	RB_100%	64QAM	21.02
high	847.5	20635	3	RB_1_low	QPSK	23.19
high	847.5	20635	3	RB_1_mid	QPSK	23.54
high	847.5	20635	3	RB_1_high	QPSK	23.23
high	847.5	20635	3	RB_1_low	16QAM	22.02
high	847.5	20635	3	RB_1_low	64QAM	21.82
high	847.5	20635	3	RB_1_mid	16QAM	22.25
high	847.5	20635	3	RB_1_mid	64QAM	21.72
high	847.5	20635	3	RB_1_high	16QAM	22.12
high	847.5	20635	3	RB_1_high	64QAM	21.49
high	847.5	20635	3	RB_50%_low	QPSK	22.33
high	847.5	20635	3	RB_50%_low	16QAM	21.31
high	847.5	20635	3	RB_50%_low	64QAM	21.07
high	847.5	20635	3	RB_50%_mid	QPSK	22.28
high	847.5	20635	3	RB_50%_mid	16QAM	21.35
high	847.5	20635	3	RB_50%_mid	64QAM	21.32
high	847.5	20635	3	RB_50%_high	QPSK	22.33
high	847.5	20635	3	RB_50%_high	16QAM	21.09
high	847.5	20635	3	RB_50%_high	64QAM	21.17
high	847.5	20635	3	RB_100%	QPSK	22.38
high	847.5	20635	3	RB_100%	16QAM	21.40
high	847.5	20635	3	RB_100%	64QAM	21.21

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	826.5	20425	5	RB 1 low	16QAM	22.08
low	826.5	20425	5	RB 1 low	64QAM	21.89
low	826.5	20425	5	RB 1 mid	16QAM	22.12
low	826.5	20425	5	RB 1 mid	64QAM	22.02
low	826.5	20425	5	RB 1 high	16QAM	22.09
low	826.5	20425	5	RB 1 high	64QAM	22.32
low	826.5	20425	5	RB 50% low	QPSK	22.18
low	826.5	20425	5	RB 50% low	16QAM	21.28
low	826.5	20425	5	RB 50% low	64QAM	21.08
low	826.5	20425	5	RB 50% mid	QPSK	22.36
low	826.5	20425	5	RB 50% mid	16QAM	21.27
low	826.5	20425	5	RB 50% mid	64QAM	21.31
low	826.5	20425	5	RB 50% high	QPSK	22.44
low	826.5	20425	5	RB 50% high	16QAM	21.29
low	826.5	20425	5	RB 50% high	64QAM	21.03
low	826.5	20425	5	RB 100%	QPSK	22.30
low	826.5	20425	5	RB 100%	16QAM	21.23
low	826.5	20425	5	RB 100%	64QAM	21.16
low	826.5	20425	5	RB 1 low	QPSK	22.86
low	826.5	20425	5	RB 1 mid	QPSK	22.85
low	826.5	20425	5	RB 1 high	QPSK	23.15
mid	836.5	20525	5	RB 1 low	16QAM	22.22
mid	836.5	20525	5	RB 1 low	64QAM	21.69
mid	836.5	20525	5	RB 1 mid	16QAM	22.26
mid	836.5	20525	5	RB 1 mid	64QAM	21.44
mid	836.5	20525	5	RB 1 high	16QAM	22.32
mid	836.5	20525	5	RB 1 high	64QAM	21.57
mid	836.5	20525	5	RB 50% low	QPSK	22.15
mid	836.5	20525	5	RB 50% low	16QAM	21.30
mid	836.5	20525	5	RB 50% low	64QAM	20.95
mid	836.5	20525	5	RB 50% mid	QPSK	22.15
mid	836.5	20525	5	RB 50% mid	16QAM	21.15
mid	836.5	20525	5	RB 50% mid	64QAM	21.03
mid	836.5	20525	5	RB 50% high	QPSK	22.35
mid	836.5	20525	5	RB 50% high	16QAM	21.28
mid	836.5	20525	5	RB 50% high	64QAM	21.16
mid	836.5	20525	5	RB 100%	QPSK	22.24
mid	836.5	20525	5	RB 100%	16QAM	21.18
mid	836.5	20525	5	RB 100%	64QAM	21.27
mid	836.5	20525	5	RB 1 low	QPSK	23.13
mid	836.5	20525	5	RB 1 mid	QPSK	23.24
mid	836.5	20525	5	RB 1 high	QPSK	23.30

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	846.5	20625	5	RB_1_low	QPSK	22.96
high	846.5	20625	5	RB_1_mid	QPSK	23.17
high	846.5	20625	5	RB_1_high	QPSK	23.34
high	846.5	20625	5	RB_1_low	16QAM	21.99
high	846.5	20625	5	RB_1_low	64QAM	22.23
high	846.5	20625	5	RB_1_mid	16QAM	22.29
high	846.5	20625	5	RB_1_mid	64QAM	21.87
high	846.5	20625	5	RB_1_high	16QAM	22.01
high	846.5	20625	5	RB_1_high	64QAM	22.05
high	846.5	20625	5	RB_50%_low	QPSK	22.25
high	846.5	20625	5	RB_50%_low	16QAM	21.33
high	846.5	20625	5	RB_50%_low	64QAM	21.26
high	846.5	20625	5	RB_50%_mid	QPSK	22.38
high	846.5	20625	5	RB_50%_mid	16QAM	21.32
high	846.5	20625	5	RB_50%_mid	64QAM	21.27
high	846.5	20625	5	RB_50%_high	QPSK	22.32
high	846.5	20625	5	RB_50%_high	16QAM	21.37
high	846.5	20625	5	RB_50%_high	64QAM	21.18
high	846.5	20625	5	RB_100%	QPSK	22.31
high	846.5	20625	5	RB_100%	16QAM	21.23
high	846.5	20625	5	RB_100%	64QAM	21.22
low	829	20450	10	RB_1_low	16QAM	21.99
low	829	20450	10	RB_1_low	64QAM	21.70
low	829	20450	10	RB_1_mid	16QAM	22.39
low	829	20450	10	RB_1_mid	64QAM	21.91
low	829	20450	10	RB_1_high	16QAM	22.02
low	829	20450	10	RB_1_high	64QAM	21.55
low	829	20450	10	RB_50%_low	QPSK	22.36
low	829	20450	10	RB_50%_low	16QAM	21.29
low	829	20450	10	RB_50%_low	64QAM	21.28
low	829	20450	10	RB_50%_mid	QPSK	22.30
low	829	20450	10	RB_50%_mid	16QAM	21.34
low	829	20450	10	RB_50%_mid	64QAM	21.24
low	829	20450	10	RB_50%_high	QPSK	22.19
low	829	20450	10	RB_50%_high	16QAM	21.11
low	829	20450	10	RB_50%_high	64QAM	21.11
low	829	20450	10	RB_100%	QPSK	22.30
low	829	20450	10	RB_100%	16QAM	20.99
low	829	20450	10	RB_100%	64QAM	21.13
low	829	20450	10	RB_1_low	QPSK	23.06
low	829	20450	10	RB_1_mid	QPSK	23.48
low	829	20450	10	RB_1_high	QPSK	23.24

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	836.5	20525	10	RB_1_low	16QAM	21.94
mid	836.5	20525	10	RB_1_low	64QAM	22.58
mid	836.5	20525	10	RB_1_mid	16QAM	22.49
mid	836.5	20525	10	RB_1_mid	64QAM	22.81
mid	836.5	20525	10	RB_1_high	16QAM	22.02
mid	836.5	20525	10	RB_1_high	64QAM	22.44
mid	836.5	20525	10	RB_50%_low	QPSK	22.31
mid	836.5	20525	10	RB_50%_low	16QAM	21.36
mid	836.5	20525	10	RB_50%_low	64QAM	21.39
mid	836.5	20525	10	RB_50%_mid	QPSK	22.31
mid	836.5	20525	10	RB_50%_mid	16QAM	21.34
mid	836.5	20525	10	RB_50%_mid	64QAM	21.47
mid	836.5	20525	10	RB_50%_high	QPSK	22.28
mid	836.5	20525	10	RB_50%_high	16QAM	21.29
mid	836.5	20525	10	RB_50%_high	64QAM	21.44
mid	836.5	20525	10	RB_100%	QPSK	22.25
mid	836.5	20525	10	RB_100%	16QAM	21.15
mid	836.5	20525	10	RB_100%	64QAM	21.21
mid	836.5	20525	10	RB_1_low	QPSK	23.15
mid	836.5	20525	10	RB_1_mid	QPSK	23.61
mid	836.5	20525	10	RB_1_high	QPSK	23.47
high	844	20600	10	RB_1_low	QPSK	22.89
high	844	20600	10	RB_1_low	16QAM	22.00
high	844	20600	10	RB_1_low	64QAM	21.92
high	844	20600	10	RB_1_mid	QPSK	23.61
high	844	20600	10	RB_1_mid	16QAM	22.22
high	844	20600	10	RB_1_mid	64QAM	22.06
high	844	20600	10	RB_1_high	QPSK	23.23
high	844	20600	10	RB_1_high	16QAM	22.15
high	844	20600	10	RB_1_high	64QAM	21.73
high	844	20600	10	RB_50%_low	QPSK	22.26
high	844	20600	10	RB_50%_low	16QAM	21.09
high	844	20600	10	RB_50%_low	64QAM	21.21
high	844	20600	10	RB_50%_mid	QPSK	22.38
high	844	20600	10	RB_50%_mid	16QAM	21.31
high	844	20600	10	RB_50%_mid	64QAM	21.44
high	844	20600	10	RB_50%_high	QPSK	22.32
high	844	20600	10	RB_50%_high	16QAM	21.26
high	844	20600	10	RB_50%_high	64QAM	21.47
high	844	20600	10	RB_100%	QPSK	22.24
high	844	20600	10	RB_100%	16QAM	21.26
high	844	20600	10	RB_100%	64QAM	21.09

Table 11: Test results conducted power measurement LTE FDD 5 850 MHz.

8.1.4 Conducted power measurements LTE FDD 7 2600 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
low	2502.5	20775	5	RB 1 low	QPSK	22.56
low	2502.5	20775	5	RB 1 low	16QAM	21.65
low	2502.5	20775	5	RB 1 low	64QAM	21.18
low	2502.5	20775	5	RB 1 mid	QPSK	22.45
low	2502.5	20775	5	RB 1 mid	16QAM	21.84
low	2502.5	20775	5	RB 1 mid	64QAM	21.76
low	2502.5	20775	5	RB 1 high	QPSK	22.62
low	2502.5	20775	5	RB 1 high	16QAM	21.64
low	2502.5	20775	5	RB 1 high	64QAM	21.59
low	2502.5	20775	5	RB 50% low	QPSK	21.67
low	2502.5	20775	5	RB 50% low	16QAM	20.75
low	2502.5	20775	5	RB 50% low	64QAM	20.58
low	2502.5	20775	5	RB 50% mid	QPSK	21.66
low	2502.5	20775	5	RB 50% mid	16QAM	20.83
low	2502.5	20775	5	RB 50% mid	64QAM	20.65
low	2502.5	20775	5	RB 50% high	QPSK	21.71
low	2502.5	20775	5	RB 50% high	16QAM	20.89
low	2502.5	20775	5	RB 50% high	64QAM	20.81
low	2502.5	20775	5	RB 100%	QPSK	21.69
low	2502.5	20775	5	RB 100%	16QAM	20.43
low	2502.5	20775	5	RB 100%	64QAM	20.67
mid	2535	21100	5	RB 1 low	QPSK	22.66
mid	2535	21100	5	RB 1 mid	QPSK	22.73
mid	2535	21100	5	RB 1 high	QPSK	22.69
mid	2535	21100	5	RB 1 low	16QAM	21.36
mid	2535	21100	5	RB 1 low	64QAM	20.84
mid	2535	21100	5	RB 1 mid	16QAM	21.78
mid	2535	21100	5	RB 1 mid	64QAM	21.26
mid	2535	21100	5	RB 1 high	16QAM	21.82
mid	2535	21100	5	RB 1 high	64QAM	21.20
mid	2535	21100	5	RB 50% low	QPSK	21.74
mid	2535	21100	5	RB 50% low	16QAM	20.91
mid	2535	21100	5	RB 50% low	64QAM	20.59
mid	2535	21100	5	RB 50% mid	QPSK	21.76
mid	2535	21100	5	RB 50% mid	16QAM	20.75
mid	2535	21100	5	RB 50% mid	64QAM	20.63
mid	2535	21100	5	RB 50% high	QPSK	21.76
mid	2535	21100	5	RB 50% high	16QAM	20.84
mid	2535	21100	5	RB 50% high	64QAM	20.64
mid	2535	21100	5	RB 100%	QPSK	21.78
mid	2535	21100	5	RB 100%	16QAM	20.65
mid	2535	21100	5	RB 100%	64QAM	20.74

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
high	2567.5	21425	5	RB_1_low	QPSK	22.75
high	2567.5	21425	5	RB_1_mid	QPSK	22.69
high	2567.5	21425	5	RB_1_high	QPSK	22.80
high	2567.5	21425	5	RB_1_low	16QAM	21.28
high	2567.5	21425	5	RB_1_low	64QAM	21.14
high	2567.5	21425	5	RB_1_mid	16QAM	21.51
high	2567.5	21425	5	RB_1_mid	64QAM	21.44
high	2567.5	21425	5	RB_1_high	16QAM	21.54
high	2567.5	21425	5	RB_1_high	64QAM	21.78
high	2567.5	21425	5	RB_50%_low	QPSK	21.84
high	2567.5	21425	5	RB_50%_low	16QAM	20.77
high	2567.5	21425	5	RB_50%_low	64QAM	20.59
high	2567.5	21425	5	RB_50%_mid	QPSK	21.80
high	2567.5	21425	5	RB_50%_mid	16QAM	20.94
high	2567.5	21425	5	RB_50%_mid	64QAM	20.66
high	2567.5	21425	5	RB_50%_high	QPSK	21.87
high	2567.5	21425	5	RB_50%_high	16QAM	20.83
high	2567.5	21425	5	RB_50%_high	64QAM	20.84
high	2567.5	21425	5	RB_100%	QPSK	21.86
high	2567.5	21425	5	RB_100%	16QAM	20.58
high	2567.5	21425	5	RB_100%	64QAM	20.69
low	2505	20800	10	RB_1_low	16QAM	21.48
low	2505	20800	10	RB_1_low	64QAM	21.11
low	2505	20800	10	RB_1_mid	16QAM	21.77
low	2505	20800	10	RB_1_mid	64QAM	21.58
low	2505	20800	10	RB_1_high	16QAM	21.71
low	2505	20800	10	RB_1_high	64QAM	21.16
low	2505	20800	10	RB_50%_low	QPSK	21.71
low	2505	20800	10	RB_50%_low	16QAM	20.68
low	2505	20800	10	RB_50%_low	64QAM	20.78
low	2505	20800	10	RB_50%_mid	QPSK	21.80
low	2505	20800	10	RB_50%_mid	16QAM	20.88
low	2505	20800	10	RB_50%_mid	64QAM	20.97
low	2505	20800	10	RB_50%_high	QPSK	21.83
low	2505	20800	10	RB_50%_high	16QAM	20.81
low	2505	20800	10	RB_50%_high	64QAM	20.70
low	2505	20800	10	RB_100%	QPSK	21.87
low	2505	20800	10	RB_100%	16QAM	20.62
low	2505	20800	10	RB_100%	64QAM	20.84
low	2505	20800	10	RB_1_low	QPSK	22.45
low	2505	20800	10	RB_1_mid	QPSK	23.11
low	2505	20800	10	RB_1_high	QPSK	22.80

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
mid	2535	21100	10	RB_1_low	QPSK	22.95
mid	2535	21100	10	RB_1_mid	QPSK	23.10
mid	2535	21100	10	RB_1_high	QPSK	22.63
mid	2535	21100	10	RB_1_low	16QAM	21.60
mid	2535	21100	10	RB_1_low	64QAM	21.94
mid	2535	21100	10	RB_1_mid	16QAM	22.01
mid	2535	21100	10	RB_1_mid	64QAM	22.63
mid	2535	21100	10	RB_1_high	16QAM	21.43
mid	2535	21100	10	RB_1_high	64QAM	21.55
mid	2535	21100	10	RB_50%_low	QPSK	21.75
mid	2535	21100	10	RB_50%_low	16QAM	20.62
mid	2535	21100	10	RB_50%_low	64QAM	20.64
mid	2535	21100	10	RB_50%_mid	QPSK	21.71
mid	2535	21100	10	RB_50%_mid	16QAM	20.60
mid	2535	21100	10	RB_50%_mid	64QAM	20.70
mid	2535	21100	10	RB_50%_high	QPSK	21.71
mid	2535	21100	10	RB_50%_high	16QAM	20.75
mid	2535	21100	10	RB_50%_high	64QAM	20.89
mid	2535	21100	10	RB_100%	QPSK	21.67
mid	2535	21100	10	RB_100%	16QAM	20.80
mid	2535	21100	10	RB_100%	64QAM	20.75
high	2565	21400	10	RB_1_low	QPSK	22.43
high	2565	21400	10	RB_1_mid	QPSK	23.01
high	2565	21400	10	RB_1_high	QPSK	22.90
high	2565	21400	10	RB_1_low	16QAM	21.39
high	2565	21400	10	RB_1_low	64QAM	21.33
high	2565	21400	10	RB_1_mid	16QAM	21.66
high	2565	21400	10	RB_1_mid	64QAM	21.10
high	2565	21400	10	RB_1_high	16QAM	21.69
high	2565	21400	10	RB_1_high	64QAM	21.31
high	2565	21400	10	RB_50%_low	QPSK	21.70
high	2565	21400	10	RB_50%_low	16QAM	20.62
high	2565	21400	10	RB_50%_low	64QAM	20.62
high	2565	21400	10	RB_50%_mid	QPSK	21.78
high	2565	21400	10	RB_50%_mid	16QAM	20.85
high	2565	21400	10	RB_50%_mid	64QAM	20.77
high	2565	21400	10	RB_50%_high	QPSK	21.79
high	2565	21400	10	RB_50%_high	16QAM	20.84
high	2565	21400	10	RB_50%_high	64QAM	20.84
high	2565	21400	10	RB_100%	QPSK	21.83
high	2565	21400	10	RB_100%	16QAM	20.76
high	2565	21400	10	RB_100%	64QAM	20.72

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	2507.5	20825	15	RB 1 low	16QAM	21.43
low	2507.5	20825	15	RB 1 low	64QAM	21.58
low	2507.5	20825	15	RB 1 mid	16QAM	21.60
low	2507.5	20825	15	RB 1 mid	64QAM	21.76
low	2507.5	20825	15	RB 1 high	16QAM	21.84
low	2507.5	20825	15	RB 1 high	64QAM	21.76
low	2507.5	20825	15	RB 50% low	QPSK	21.84
low	2507.5	20825	15	RB 50% low	16QAM	20.68
low	2507.5	20825	15	RB 50% low	64QAM	20.82
low	2507.5	20825	15	RB 50% mid	QPSK	21.92
low	2507.5	20825	15	RB 50% mid	16QAM	20.87
low	2507.5	20825	15	RB 50% mid	64QAM	21.00
low	2507.5	20825	15	RB 50% high	QPSK	21.90
low	2507.5	20825	15	RB 50% high	16QAM	20.84
low	2507.5	20825	15	RB 50% high	64QAM	20.81
low	2507.5	20825	15	RB 100%	QPSK	21.87
low	2507.5	20825	15	RB 100%	16QAM	20.74
low	2507.5	20825	15	RB 100%	64QAM	20.76
low	2507.5	20825	15	RB 1 low	QPSK	22.57
low	2507.5	20825	15	RB 1 mid	QPSK	22.93
low	2507.5	20825	15	RB 1 high	QPSK	22.75
mid	2535	21100	15	RB 1 low	16QAM	21.84
mid	2535	21100	15	RB 1 low	64QAM	22.08
mid	2535	21100	15	RB 1 mid	16QAM	21.62
mid	2535	21100	15	RB 1 mid	64QAM	22.06
mid	2535	21100	15	RB 1 high	16QAM	21.28
mid	2535	21100	15	RB 1 high	64QAM	21.89
mid	2535	21100	15	RB 50% low	QPSK	21.72
mid	2535	21100	15	RB 50% low	16QAM	20.67
mid	2535	21100	15	RB 50% low	64QAM	20.73
mid	2535	21100	15	RB 50% mid	QPSK	21.74
mid	2535	21100	15	RB 50% mid	16QAM	20.61
mid	2535	21100	15	RB 50% mid	64QAM	20.66
mid	2535	21100	15	RB 50% high	QPSK	21.59
mid	2535	21100	15	RB 50% high	16QAM	20.64
mid	2535	21100	15	RB 50% high	64QAM	20.51
mid	2535	21100	15	RB 100%	QPSK	21.54
mid	2535	21100	15	RB 100%	16QAM	20.59
mid	2535	21100	15	RB 100%	64QAM	20.72
mid	2535	21100	15	RB 1 low	QPSK	23.04
mid	2535	21100	15	RB 1 mid	QPSK	23.14
mid	2535	21100	15	RB 1 high	QPSK	22.73

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	2562.5	21375	15	RB_1_low	QPSK	22.31
high	2562.5	21375	15	RB_1_mid	QPSK	22.85
high	2562.5	21375	15	RB_1_high	QPSK	22.82
high	2562.5	21375	15	RB_1_low	16QAM	21.22
high	2562.5	21375	15	RB_1_low	64QAM	21.16
high	2562.5	21375	15	RB_1_mid	16QAM	21.53
high	2562.5	21375	15	RB_1_mid	64QAM	21.47
high	2562.5	21375	15	RB_1_high	16QAM	21.75
high	2562.5	21375	15	RB_1_high	64QAM	21.55
high	2562.5	21375	15	RB_50%_low	QPSK	21.64
high	2562.5	21375	15	RB_50%_low	16QAM	20.53
high	2562.5	21375	15	RB_50%_low	64QAM	20.37
high	2562.5	21375	15	RB_50%_mid	QPSK	21.64
high	2562.5	21375	15	RB_50%_mid	16QAM	20.60
high	2562.5	21375	15	RB_50%_mid	64QAM	20.54
high	2562.5	21375	15	RB_50%_high	QPSK	21.85
high	2562.5	21375	15	RB_50%_high	16QAM	20.78
high	2562.5	21375	15	RB_50%_high	64QAM	20.62
high	2562.5	21375	15	RB_100%	QPSK	21.68
high	2562.5	21375	15	RB_100%	16QAM	20.55
high	2562.5	21375	15	RB_100%	64QAM	20.66
low	2510	20850	20	RB_1_low	16QAM	21.91
low	2510	20850	20	RB_1_low	64QAM	22.36
low	2510	20850	20	RB_1_mid	16QAM	22.25
low	2510	20850	20	RB_1_mid	64QAM	22.61
low	2510	20850	20	RB_1_high	16QAM	21.92
low	2510	20850	20	RB_1_high	64QAM	22.52
low	2510	20850	20	RB_50%_low	QPSK	21.85
low	2510	20850	20	RB_50%_low	16QAM	20.75
low	2510	20850	20	RB_50%_low	64QAM	20.72
low	2510	20850	20	RB_50%_mid	QPSK	21.95
low	2510	20850	20	RB_50%_mid	16QAM	21.04
low	2510	20850	20	RB_50%_mid	64QAM	20.72
low	2510	20850	20	RB_50%_high	QPSK	21.89
low	2510	20850	20	RB_50%_high	16QAM	20.92
low	2510	20850	20	RB_50%_high	64QAM	20.71
low	2510	20850	20	RB_100%	QPSK	21.83
low	2510	20850	20	RB_100%	16QAM	20.68
low	2510	20850	20	RB_100%	64QAM	20.86
low	2510	20850	20	RB_1_low	QPSK	22.49
low	2510	20850	20	RB_1_mid	QPSK	22.90
low	2510	20850	20	RB_1_high	QPSK	22.66

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulatio	Pavg [dBm]
mid	2535	21100	20	RB 1 low	16QAM	21.86
mid	2535	21100	20	RB 1 low	64QAM	22.41
mid	2535	21100	20	RB 1 mid	16QAM	21.95
mid	2535	21100	20	RB 1 mid	64QAM	21.86
mid	2535	21100	20	RB 1 high	16QAM	21.63
mid	2535	21100	20	RB 1 high	64QAM	22.01
mid	2535	21100	20	RB 50% low	QPSK	21.93
mid	2535	21100	20	RB 50% low	16QAM	20.85
mid	2535	21100	20	RB 50% low	64QAM	20.73
mid	2535	21100	20	RB 50% mid	QPSK	21.79
mid	2535	21100	20	RB 50% mid	16QAM	20.62
mid	2535	21100	20	RB 50% mid	64QAM	20.67
mid	2535	21100	20	RB 50% high	QPSK	21.55
mid	2535	21100	20	RB 50% high	16QAM	20.65
mid	2535	21100	20	RB 50% high	64QAM	20.63
mid	2535	21100	20	RB 100%	QPSK	21.65
mid	2535	21100	20	RB 100%	16QAM	20.76
mid	2535	21100	20	RB 100%	64QAM	20.63
mid	2535	21100	20	RB 1 low	QPSK	22.56
mid	2535	21100	20	RB 1 mid	QPSK	22.67
mid	2535	21100	20	RB 1 high	QPSK	22.05
high	2560	21350	20	RB 1 low	QPSK	22.16
high	2560	21350	20	RB 1 low	16QAM	21.43
high	2560	21350	20	RB 1 low	64QAM	22.20
high	2560	21350	20	RB 1 mid	QPSK	22.60
high	2560	21350	20	RB 1 mid	16QAM	21.83
high	2560	21350	20	RB 1 mid	64QAM	21.80
high	2560	21350	20	RB 1 high	QPSK	22.66
high	2560	21350	20	RB 1 high	16QAM	22.12
high	2560	21350	20	RB 1 high	64QAM	22.70
high	2560	21350	20	RB 50% low	QPSK	21.46
high	2560	21350	20	RB 50% low	16QAM	20.47
high	2560	21350	20	RB 50% low	64QAM	20.17
high	2560	21350	20	RB 50% mid	QPSK	21.54
high	2560	21350	20	RB 50% mid	16QAM	20.55
high	2560	21350	20	RB 50% mid	64QAM	20.35
high	2560	21350	20	RB 50% high	QPSK	21.79
high	2560	21350	20	RB 50% high	16QAM	20.77
high	2560	21350	20	RB 50% high	64QAM	20.58
high	2560	21350	20	RB 100%	QPSK	21.47
high	2560	21350	20	RB 100%	16QAM	20.53
high	2560	21350	20	RB 100%	64QAM	20.42

Table 12: Test results conducted power measurement LTE FDD 7 2600 MHz.

8.1.5 Conducted power measurements LTE FDD 12 700 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
low	699.7	23017	1.4	RB_1_low	QPSK	23.24
low	699.7	23017	1.4	RB_1_low	16QAM	22.07
low	699.7	23017	1.4	RB_1_low	64QAM	21.74
low	699.7	23017	1.4	RB_1_mid	QPSK	23.47
low	699.7	23017	1.4	RB_1_mid	16QAM	22.40
low	699.7	23017	1.4	RB_1_mid	64QAM	22.82
low	699.7	23017	1.4	RB_1_high	QPSK	23.40
low	699.7	23017	1.4	RB_1_high	16QAM	22.12
low	699.7	23017	1.4	RB_1_high	64QAM	22.56
low	699.7	23017	1.4	RB_50%_low	QPSK	23.23
low	699.7	23017	1.4	RB_50%_low	16QAM	22.56
low	699.7	23017	1.4	RB_50%_low	64QAM	22.15
low	699.7	23017	1.4	RB_50%_mid	QPSK	23.38
low	699.7	23017	1.4	RB_50%_mid	16QAM	22.74
low	699.7	23017	1.4	RB_50%_mid	64QAM	22.25
low	699.7	23017	1.4	RB_50%_high	QPSK	23.23
low	699.7	23017	1.4	RB_50%_high	16QAM	22.60
low	699.7	23017	1.4	RB_50%_high	64QAM	22.22
low	699.7	23017	1.4	RB_100%	QPSK	22.40
low	699.7	23017	1.4	RB_100%	16QAM	21.34
low	699.7	23017	1.4	RB_100%	64QAM	21.29
mid	707.5	23095	1.4	RB_1_low	QPSK	23.11
mid	707.5	23095	1.4	RB_1_mid	QPSK	23.37
mid	707.5	23095	1.4	RB_1_high	QPSK	23.50
mid	707.5	23095	1.4	RB_50%_high	QPSK	23.17
mid	707.5	23095	1.4	RB_1_low	16QAM	21.87
mid	707.5	23095	1.4	RB_1_low	64QAM	21.70
mid	707.5	23095	1.4	RB_1_mid	16QAM	22.10
mid	707.5	23095	1.4	RB_1_mid	64QAM	22.11
mid	707.5	23095	1.4	RB_1_high	16QAM	22.13
mid	707.5	23095	1.4	RB_1_high	64QAM	22.06
mid	707.5	23095	1.4	RB_50%_low	QPSK	23.29
mid	707.5	23095	1.4	RB_50%_low	16QAM	22.36
mid	707.5	23095	1.4	RB_50%_low	64QAM	22.29
mid	707.5	23095	1.4	RB_50%_mid	QPSK	23.39
mid	707.5	23095	1.4	RB_50%_mid	16QAM	22.84
mid	707.5	23095	1.4	RB_50%_mid	64QAM	22.39
mid	707.5	23095	1.4	RB_50%_high	16QAM	22.63
mid	707.5	23095	1.4	RB_50%_high	64QAM	22.30
mid	707.5	23095	1.4	RB_100%	QPSK	22.26
mid	707.5	23095	1.4	RB_100%	16QAM	21.40
mid	707.5	23095	1.4	RB_100%	64QAM	21.32

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
high	715.3	23173	1.4	RB_1_low	QPSK	23.23
high	715.3	23173	1.4	RB_1_mid	QPSK	23.57
high	715.3	23173	1.4	RB_1_high	QPSK	23.50
high	715.3	23173	1.4	RB_50%_high	QPSK	23.19
high	715.3	23173	1.4	RB_1_low	16QAM	22.13
high	715.3	23173	1.4	RB_1_low	64QAM	21.88
high	715.3	23173	1.4	RB_1_mid	16QAM	22.05
high	715.3	23173	1.4	RB_1_mid	64QAM	22.18
high	715.3	23173	1.4	RB_1_high	16QAM	22.37
high	715.3	23173	1.4	RB_1_high	64QAM	22.05
high	715.3	23173	1.4	RB_50%_low	QPSK	23.27
high	715.3	23173	1.4	RB_50%_low	16QAM	22.40
high	715.3	23173	1.4	RB_50%_low	64QAM	22.43
high	715.3	23173	1.4	RB_50%_mid	QPSK	23.28
high	715.3	23173	1.4	RB_50%_mid	16QAM	22.55
high	715.3	23173	1.4	RB_50%_mid	64QAM	22.63
high	715.3	23173	1.4	RB_50%_high	16QAM	22.82
high	715.3	23173	1.4	RB_50%_high	64QAM	22.58
high	715.3	23173	1.4	RB_100%	QPSK	22.39
high	715.3	23173	1.4	RB_100%	16QAM	21.54
high	715.3	23173	1.4	RB_100%	64QAM	21.50
low	700.5	23025	3	RB_1_low	16QAM	22.18
low	700.5	23025	3	RB_1_low	64QAM	21.93
low	700.5	23025	3	RB_1_mid	16QAM	22.19
low	700.5	23025	3	RB_1_mid	64QAM	22.10
low	700.5	23025	3	RB_1_high	16QAM	22.00
low	700.5	23025	3	RB_1_high	64QAM	21.88
low	700.5	23025	3	RB_50%_low	QPSK	22.40
low	700.5	23025	3	RB_50%_low	16QAM	21.47
low	700.5	23025	3	RB_50%_low	64QAM	21.32
low	700.5	23025	3	RB_50%_mid	QPSK	22.36
low	700.5	23025	3	RB_50%_mid	16QAM	21.33
low	700.5	23025	3	RB_50%_mid	64QAM	21.27
low	700.5	23025	3	RB_50%_high	16QAM	21.51
low	700.5	23025	3	RB_50%_high	64QAM	21.47
low	700.5	23025	3	RB_100%	QPSK	22.32
low	700.5	23025	3	RB_100%	16QAM	21.41
low	700.5	23025	3	RB_100%	64QAM	21.10
low	700.5	23025	3	RB_1_low	QPSK	23.42
low	700.5	23025	3	RB_1_mid	QPSK	23.49
low	700.5	23025	3	RB_1_high	QPSK	23.27
low	700.5	23025	3	RB_50%_high	QPSK	22.44

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
mid	707.5	23095	3	RB_1_low	QPSK	23.29
mid	707.5	23095	3	RB_1_mid	QPSK	23.23
mid	707.5	23095	3	RB_1_high	QPSK	23.55
mid	707.5	23095	3	RB_50%_high	QPSK	22.36
mid	707.5	23095	3	RB_1_low	16QAM	22.20
mid	707.5	23095	3	RB_1_low	64QAM	22.30
mid	707.5	23095	3	RB_1_mid	16QAM	22.17
mid	707.5	23095	3	RB_1_mid	64QAM	22.57
mid	707.5	23095	3	RB_1_high	16QAM	21.97
mid	707.5	23095	3	RB_1_high	64QAM	22.49
mid	707.5	23095	3	RB_50%_low	QPSK	22.25
mid	707.5	23095	3	RB_50%_low	16QAM	21.11
mid	707.5	23095	3	RB_50%_low	64QAM	21.13
mid	707.5	23095	3	RB_50%_mid	QPSK	22.27
mid	707.5	23095	3	RB_50%_mid	16QAM	21.04
mid	707.5	23095	3	RB_50%_mid	64QAM	21.17
mid	707.5	23095	3	RB_50%_high	16QAM	21.32
mid	707.5	23095	3	RB_50%_high	64QAM	21.24
mid	707.5	23095	3	RB_100%	QPSK	22.22
mid	707.5	23095	3	RB_100%	16QAM	21.23
mid	707.5	23095	3	RB_100%	64QAM	21.15
high	714.5	23165	3	RB_1_low	QPSK	23.25
high	714.5	23165	3	RB_1_mid	QPSK	23.66
high	714.5	23165	3	RB_1_high	QPSK	23.29
high	714.5	23165	3	RB_50%_high	QPSK	22.51
high	714.5	23165	3	RB_1_low	16QAM	22.24
high	714.5	23165	3	RB_1_low	64QAM	22.03
high	714.5	23165	3	RB_1_mid	16QAM	22.19
high	714.5	23165	3	RB_1_mid	64QAM	22.11
high	714.5	23165	3	RB_1_high	16QAM	22.25
high	714.5	23165	3	RB_1_high	64QAM	22.06
high	714.5	23165	3	RB_50%_low	QPSK	22.35
high	714.5	23165	3	RB_50%_low	16QAM	21.33
high	714.5	23165	3	RB_50%_low	64QAM	21.16
high	714.5	23165	3	RB_50%_mid	QPSK	22.56
high	714.5	23165	3	RB_50%_mid	16QAM	21.43
high	714.5	23165	3	RB_50%_mid	64QAM	21.40
high	714.5	23165	3	RB_50%_high	16QAM	21.28
high	714.5	23165	3	RB_50%_high	64QAM	21.44
high	714.5	23165	3	RB_100%	QPSK	22.37
high	714.5	23165	3	RB_100%	16QAM	21.46
high	714.5	23165	3	RB_100%	64QAM	21.56

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	701.5	23035	5	RB 1 low	16QAM	22.22
low	701.5	23035	5	RB 1 low	64QAM	22.16
low	701.5	23035	5	RB 1 mid	16QAM	22.14
low	701.5	23035	5	RB 1 mid	64QAM	22.58
low	701.5	23035	5	RB 1 high	16QAM	21.70
low	701.5	23035	5	RB 1 high	64QAM	21.85
low	701.5	23035	5	RB 50% low	QPSK	22.36
low	701.5	23035	5	RB 50% low	16QAM	21.33
low	701.5	23035	5	RB 50% low	64QAM	21.37
low	701.5	23035	5	RB 50% mid	QPSK	22.35
low	701.5	23035	5	RB 50% mid	16QAM	21.41
low	701.5	23035	5	RB 50% mid	64QAM	21.44
low	701.5	23035	5	RB 50% high	16QAM	21.35
low	701.5	23035	5	RB 50% high	64QAM	20.96
low	701.5	23035	5	RB 100%	QPSK	22.23
low	701.5	23035	5	RB 100%	16QAM	21.16
low	701.5	23035	5	RB 100%	64QAM	21.28
low	701.5	23035	5	RB 1 low	QPSK	23.13
low	701.5	23035	5	RB 1 mid	QPSK	23.11
low	701.5	23035	5	RB 1 high	QPSK	22.79
low	701.5	23035	5	RB 50% high	QPSK	22.19
mid	707.5	23095	5	RB 1 low	16QAM	21.93
mid	707.5	23095	5	RB 1 low	64QAM	21.17
mid	707.5	23095	5	RB 1 mid	16QAM	22.08
mid	707.5	23095	5	RB 1 mid	64QAM	21.97
mid	707.5	23095	5	RB 1 high	16QAM	22.35
mid	707.5	23095	5	RB 1 high	64QAM	22.21
mid	707.5	23095	5	RB 50% low	QPSK	22.26
mid	707.5	23095	5	RB 50% low	16QAM	21.23
mid	707.5	23095	5	RB 50% low	64QAM	20.99
mid	707.5	23095	5	RB 50% mid	QPSK	22.29
mid	707.5	23095	5	RB 50% mid	16QAM	21.22
mid	707.5	23095	5	RB 50% mid	64QAM	21.11
mid	707.5	23095	5	RB 50% high	16QAM	21.31
mid	707.5	23095	5	RB 50% high	64QAM	21.10
mid	707.5	23095	5	RB 100%	QPSK	22.26
mid	707.5	23095	5	RB 100%	16QAM	21.29
mid	707.5	23095	5	RB 100%	64QAM	21.18
mid	707.5	23095	5	RB 1 low	QPSK	22.93
mid	707.5	23095	5	RB 1 mid	QPSK	23.19
mid	707.5	23095	5	RB 1 high	QPSK	23.24
mid	707.5	23095	5	RB 50% high	QPSK	22.27

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	713.5	23155	5	RB_1_low	QPSK	23.01
high	713.5	23155	5	RB_1_mid	QPSK	23.20
high	713.5	23155	5	RB_1_high	QPSK	23.12
high	713.5	23155	5	RB_50%_high	QPSK	22.32
high	713.5	23155	5	RB_1_low	16QAM	22.20
high	713.5	23155	5	RB_1_low	64QAM	22.16
high	713.5	23155	5	RB_1_mid	16QAM	22.06
high	713.5	23155	5	RB_1_mid	64QAM	22.16
high	713.5	23155	5	RB_1_high	16QAM	21.88
high	713.5	23155	5	RB_1_high	64QAM	22.12
high	713.5	23155	5	RB_50%_low	QPSK	22.29
high	713.5	23155	5	RB_50%_low	16QAM	21.44
high	713.5	23155	5	RB_50%_low	64QAM	21.27
high	713.5	23155	5	RB_50%_mid	QPSK	22.40
high	713.5	23155	5	RB_50%_mid	16QAM	21.43
high	713.5	23155	5	RB_50%_mid	64QAM	21.48
high	713.5	23155	5	RB_50%_high	16QAM	21.47
high	713.5	23155	5	RB_50%_high	64QAM	21.30
high	713.5	23155	5	RB_100%	QPSK	22.32
high	713.5	23155	5	RB_100%	16QAM	21.13
high	713.5	23155	5	RB_100%	64QAM	21.45
low	704	23060	10	RB_1_low	16QAM	22.10
low	704	23060	10	RB_1_low	64QAM	21.41
low	704	23060	10	RB_1_mid	16QAM	21.99
low	704	23060	10	RB_1_mid	64QAM	21.69
low	704	23060	10	RB_1_high	16QAM	21.92
low	704	23060	10	RB_1_high	64QAM	21.44
low	704	23060	10	RB_50%_low	QPSK	22.19
low	704	23060	10	RB_50%_low	16QAM	21.06
low	704	23060	10	RB_50%_low	64QAM	21.06
low	704	23060	10	RB_50%_mid	QPSK	22.24
low	704	23060	10	RB_50%_mid	16QAM	21.19
low	704	23060	10	RB_50%_mid	64QAM	21.30
low	704	23060	10	RB_50%_high	16QAM	21.23
low	704	23060	10	RB_50%_high	64QAM	21.34
low	704	23060	10	RB_100%	QPSK	22.19
low	704	23060	10	RB_100%	16QAM	21.11
low	704	23060	10	RB_100%	64QAM	21.15
low	704	23060	10	RB_1_low	QPSK	23.11
low	704	23060	10	RB_1_mid	QPSK	23.39
low	704	23060	10	RB_1_high	QPSK	23.26
low	704	23060	10	RB_50%_high	QPSK	22.29

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulatio	Pavg [dBm]
mid	707.5	23095	10	RB_1_low	16QAM	21.91
mid	707.5	23095	10	RB_1_low	64QAM	22.45
mid	707.5	23095	10	RB_1_mid	16QAM	21.95
mid	707.5	23095	10	RB_1_mid	64QAM	22.81
mid	707.5	23095	10	RB_1_high	16QAM	21.87
mid	707.5	23095	10	RB_1_high	64QAM	22.29
mid	707.5	23095	10	RB_50%_low	QPSK	22.18
mid	707.5	23095	10	RB_50%_low	16QAM	21.14
mid	707.5	23095	10	RB_50%_low	64QAM	21.27
mid	707.5	23095	10	RB_50%_mid	QPSK	22.24
mid	707.5	23095	10	RB_50%_mid	16QAM	21.10
mid	707.5	23095	10	RB_50%_mid	64QAM	21.21
mid	707.5	23095	10	RB_50%_high	16QAM	21.12
mid	707.5	23095	10	RB_50%_high	64QAM	21.14
mid	707.5	23095	10	RB_100%	QPSK	22.25
mid	707.5	23095	10	RB_100%	16QAM	21.26
mid	707.5	23095	10	RB_100%	64QAM	21.32
mid	707.5	23095	10	RB_1_low	QPSK	23.11
mid	707.5	23095	10	RB_1_mid	QPSK	23.39
mid	707.5	23095	10	RB_1_high	QPSK	23.41
mid	707.5	23095	10	RB_50%_high	QPSK	22.21
high	711	23130	10	RB_1_low	QPSK	23.13
high	711	23130	10	RB_1_low	16QAM	22.05
high	711	23130	10	RB_1_low	64QAM	21.78
high	711	23130	10	RB_1_mid	QPSK	23.27
high	711	23130	10	RB_1_mid	16QAM	22.08
high	711	23130	10	RB_1_mid	64QAM	21.99
high	711	23130	10	RB_1_high	QPSK	23.33
high	711	23130	10	RB_1_high	16QAM	21.96
high	711	23130	10	RB_1_high	64QAM	21.63
high	711	23130	10	RB_50%_low	QPSK	22.33
high	711	23130	10	RB_50%_low	16QAM	21.28
high	711	23130	10	RB_50%_low	64QAM	21.36
high	711	23130	10	RB_50%_mid	QPSK	22.47
high	711	23130	10	RB_50%_mid	16QAM	21.51
high	711	23130	10	RB_50%_mid	64QAM	21.37
high	711	23130	10	RB_50%_high	QPSK	22.35
high	711	23130	10	RB_50%_high	16QAM	21.28
high	711	23130	10	RB_50%_high	64QAM	21.30
high	711	23130	10	RB_100%	QPSK	22.29
high	711	23130	10	RB_100%	16QAM	21.29
high	711	23130	10	RB_100%	64QAM	21.28

Table 13: Test results conducted power measurement LTE FDD12 700 MHz.

8.1.6 Conducted power measurements LTE FDD 13 750 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
low	779.5	23205	5	RB 1 low	QPSK	22.96
low	779.5	23205	5	RB 1 low	16QAM	22.16
low	779.5	23205	5	RB 1 low	64QAM	22.09
low	779.5	23205	5	RB 1 mid	QPSK	23.16
low	779.5	23205	5	RB 1 mid	16QAM	22.48
low	779.5	23205	5	RB 1 mid	64QAM	22.11
low	779.5	23205	5	RB 1 high	QPSK	23.35
low	779.5	23205	5	RB 1 high	16QAM	22.47
low	779.5	23205	5	RB 1 high	64QAM	22.31
low	779.5	23205	5	RB 50% low	QPSK	22.56
low	779.5	23205	5	RB 50% low	16QAM	21.55
low	779.5	23205	5	RB 50% low	64QAM	21.48
low	779.5	23205	5	RB 50% mid	QPSK	22.58
low	779.5	23205	5	RB 50% mid	16QAM	21.64
low	779.5	23205	5	RB 50% mid	64QAM	21.48
low	779.5	23205	5	RB 50% high	QPSK	22.52
low	779.5	23205	5	RB 50% high	16QAM	21.58
low	779.5	23205	5	RB 50% high	64QAM	21.51
low	779.5	23205	5	RB 100%	QPSK	22.55
low	779.5	23205	5	RB 100%	16QAM	21.47
low	779.5	23205	5	RB 100%	64QAM	21.50
mid	782	23230	5	RB 1 low	QPSK	23.32
mid	782	23230	5	RB 1 mid	QPSK	23.32
mid	782	23230	5	RB 1 high	QPSK	23.49
mid	782	23230	5	RB 1 low	16QAM	22.10
mid	782	23230	5	RB 1 low	64QAM	21.52
mid	782	23230	5	RB 1 mid	16QAM	22.15
mid	782	23230	5	RB 1 mid	64QAM	21.61
mid	782	23230	5	RB 1 high	16QAM	22.22
mid	782	23230	5	RB 1 high	64QAM	21.67
mid	782	23230	5	RB 50% low	QPSK	22.60
mid	782	23230	5	RB 50% low	16QAM	21.65
mid	782	23230	5	RB 50% low	64QAM	21.51
mid	782	23230	5	RB 50% mid	QPSK	22.63
mid	782	23230	5	RB 50% mid	16QAM	21.69
mid	782	23230	5	RB 50% mid	64QAM	21.47
mid	782	23230	5	RB 50% high	QPSK	22.68
mid	782	23230	5	RB 50% high	16QAM	21.85
mid	782	23230	5	RB 50% high	64QAM	21.60
mid	782	23230	5	RB 100%	QPSK	22.54
mid	782	23230	5	RB 100%	16QAM	21.59
mid	782	23230	5	RB 100%	64QAM	21.68

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulatio	P _{avg} [dBm]
high	784.5	23255	5	RB_1_low	QPSK	23.26
high	784.5	23255	5	RB_1_mid	QPSK	23.14
high	784.5	23255	5	RB_1_high	QPSK	23.29
high	784.5	23255	5	RB_1_low	16QAM	21.91
high	784.5	23255	5	RB_1_low	64QAM	22.24
high	784.5	23255	5	RB_1_mid	16QAM	22.4
high	784.5	23255	5	RB_1_mid	64QAM	22.11
high	784.5	23255	5	RB_1_high	16QAM	22.23
high	784.5	23255	5	RB_1_high	64QAM	22.10
high	784.5	23255	5	RB_50%_low	QPSK	22.63
high	784.5	23255	5	RB_50%_low	16QAM	21.66
high	784.5	23255	5	RB_50%_low	64QAM	21.59
high	784.5	23255	5	RB_50%_mid	QPSK	22.63
high	784.5	23255	5	RB_50%_mid	16QAM	21.78
high	784.5	23255	5	RB_50%_mid	64QAM	21.29
high	784.5	23255	5	RB_50%_high	QPSK	22.57
high	784.5	23255	5	RB_50%_high	16QAM	21.54
high	784.5	23255	5	RB_50%_high	64QAM	21.57
high	784.5	23255	5	RB_100%	QPSK	22.54
high	784.5	23255	5	RB_100%	16QAM	21.37
high	784.5	23255	5	RB_100%	64QAM	21.49
low	782	23230	10	RB_1_low	16QAM	22.41
low	782	23230	10	RB_1_low	64QAM	22.87
low	782	23230	10	RB_1_mid	16QAM	22.45
low	782	23230	10	RB_1_mid	64QAM	22.97
low	782	23230	10	RB_1_high	16QAM	22.23
low	782	23230	10	RB_1_high	64QAM	22.85
low	782	23230	10	RB_50%_low	QPSK	22.48
low	782	23230	10	RB_50%_low	16QAM	21.56
low	782	23230	10	RB_50%_low	64QAM	21.50
low	782	23230	10	RB_50%_mid	QPSK	22.54
low	782	23230	10	RB_50%_mid	16QAM	21.69
low	782	23230	10	RB_50%_mid	64QAM	21.71
low	782	23230	10	RB_50%_high	QPSK	22.61
low	782	23230	10	RB_50%_high	16QAM	21.63
low	782	23230	10	RB_50%_high	64QAM	21.68
low	782	23230	10	RB_100%	QPSK	22.61
low	782	23230	10	RB_100%	16QAM	21.71
low	782	23230	10	RB_100%	64QAM	21.77

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
mid	782	23230	10	RB_1_low	16QAM	22.54
mid	782	23230	10	RB_1_low	64QAM	22.67
mid	782	23230	10	RB_1_mid	16QAM	22.39
mid	782	23230	10	RB_1_mid	64QAM	22.91
mid	782	23230	10	RB_1_high	16QAM	22.16
mid	782	23230	10	RB_1_high	64QAM	22.77
mid	782	23230	10	RB_50%_low	QPSK	22.53
mid	782	23230	10	RB_50%_low	16QAM	21.50
mid	782	23230	10	RB_50%_low	64QAM	21.63
mid	782	23230	10	RB_50%_mid	QPSK	22.57
mid	782	23230	10	RB_50%_mid	16QAM	21.63
mid	782	23230	10	RB_50%_mid	64QAM	21.65
mid	782	23230	10	RB_50%_high	QPSK	22.55
mid	782	23230	10	RB_50%_high	16QAM	21.47
mid	782	23230	10	RB_50%_high	64QAM	21.62
mid	782	23230	10	RB_100%	QPSK	22.56
mid	782	23230	10	RB_100%	16QAM	21.57
mid	782	23230	10	RB_100%	64QAM	21.72
mid	782	23230	10	RB_1_low	QPSK	23.63
mid	782	23230	10	RB_1_mid	QPSK	23.66
mid	782	23230	10	RB_1_high	QPSK	23.87
high	782	23230	10	RB_1_low	16QAM	22.53
high	782	23230	10	RB_1_low	64QAM	22.67
high	782	23230	10	RB_1_mid	16QAM	22.39
high	782	23230	10	RB_1_mid	64QAM	23.02
high	782	23230	10	RB_1_high	16QAM	22.15
high	782	23230	10	RB_1_high	64QAM	22.78
high	782	23230	10	RB_50%_low	QPSK	22.53
high	782	23230	10	RB_50%_low	16QAM	21.50
high	782	23230	10	RB_50%_low	64QAM	21.53
high	782	23230	10	RB_50%_mid	QPSK	22.58
high	782	23230	10	RB_50%_mid	16QAM	21.54
high	782	23230	10	RB_50%_mid	64QAM	21.66
high	782	23230	10	RB_50%_high	QPSK	22.67
high	782	23230	10	RB_50%_high	16QAM	21.68
high	782	23230	10	RB_50%_high	64QAM	21.72
high	782	23230	10	RB_100%	QPSK	22.64
high	782	23230	10	RB_100%	16QAM	21.65
high	782	23230	10	RB_100%	64QAM	21.81

Table 14: Test results conducted power measurement LTE FDD13 750 MHz

8.1.7 Conducted power measurements LTE FDD 25 1900 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
low	1850.7	26047	1.4	RB 1 low	QPSK	23.04
low	1850.7	26047	1.4	RB 1 low	16QAM	21.70
low	1850.7	26047	1.4	RB 1 low	64QAM	21.55
low	1850.7	26047	1.4	RB 1 mid	QPSK	23.03
low	1850.7	26047	1.4	RB 1 mid	16QAM	22.02
low	1850.7	26047	1.4	RB 1 mid	64QAM	21.92
low	1850.7	26047	1.4	RB 1 high	QPSK	22.99
low	1850.7	26047	1.4	RB 1 high	16QAM	21.80
low	1850.7	26047	1.4	RB 1 high	64QAM	21.56
low	1850.7	26047	1.4	RB 50% low	QPSK	23.08
low	1850.7	26047	1.4	RB 50% low	16QAM	22.56
low	1850.7	26047	1.4	RB 50% low	64QAM	22.09
low	1850.7	26047	1.4	RB 50% mid	QPSK	23.03
low	1850.7	26047	1.4	RB 50% mid	16QAM	22.63
low	1850.7	26047	1.4	RB 50% mid	64QAM	22.33
low	1850.7	26047	1.4	RB 50% high	QPSK	23.16
low	1850.7	26047	1.4	RB 50% high	16QAM	22.37
low	1850.7	26047	1.4	RB 50% high	64QAM	22.13
low	1850.7	26047	1.4	RB 100%	QPSK	22.04
low	1850.7	26047	1.4	RB 100%	16QAM	21.24
low	1850.7	26047	1.4	RB 100%	64QAM	21.18
mid	1882.5	26365	1.4	RB 1 low	QPSK	22.99
mid	1882.5	26365	1.4	RB 1 mid	QPSK	23.03
mid	1882.5	26365	1.4	RB 1 high	QPSK	23.13
mid	1882.5	26365	1.4	RB 1 low	16QAM	21.76
mid	1882.5	26365	1.4	RB 1 low	64QAM	21.59
mid	1882.5	26365	1.4	RB 1 mid	16QAM	21.78
mid	1882.5	26365	1.4	RB 1 mid	64QAM	22.11
mid	1882.5	26365	1.4	RB 1 high	16QAM	21.77
mid	1882.5	26365	1.4	RB 1 high	64QAM	21.56
mid	1882.5	26365	1.4	RB 50% low	QPSK	23.01
mid	1882.5	26365	1.4	RB 50% low	16QAM	22.31
mid	1882.5	26365	1.4	RB 50% low	64QAM	22.06
mid	1882.5	26365	1.4	RB 50% mid	QPSK	23.04
mid	1882.5	26365	1.4	RB 50% mid	16QAM	22.39
mid	1882.5	26365	1.4	RB 50% mid	64QAM	21.97
mid	1882.5	26365	1.4	RB 50% high	QPSK	23.02
mid	1882.5	26365	1.4	RB 50% high	16QAM	22.51
mid	1882.5	26365	1.4	RB 50% high	64QAM	22.08
mid	1882.5	26365	1.4	RB 100%	QPSK	22.09
mid	1882.5	26365	1.4	RB 100%	16QAM	21.20
mid	1882.5	26365	1.4	RB 100%	64QAM	21.02

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulatio	P _{avg} [dBm]
high	1914.3	26683	1.4	RB_1_low	QPSK	23.37
high	1914.3	26683	1.4	RB_1_mid	QPSK	23.33
high	1914.3	26683	1.4	RB_1_high	QPSK	23.41
high	1914.3	26683	1.4	RB_1_low	16QAM	22.23
high	1914.3	26683	1.4	RB_1_low	64QAM	22.18
high	1914.3	26683	1.4	RB_1_mid	16QAM	22.30
high	1914.3	26683	1.4	RB_1_mid	64QAM	22.35
high	1914.3	26683	1.4	RB_1_high	16QAM	22.50
high	1914.3	26683	1.4	RB_1_high	64QAM	22.32
high	1914.3	26683	1.4	RB_50%_low	QPSK	23.48
high	1914.3	26683	1.4	RB_50%_low	16QAM	22.82
high	1914.3	26683	1.4	RB_50%_low	64QAM	22.59
high	1914.3	26683	1.4	RB_50%_mid	QPSK	23.58
high	1914.3	26683	1.4	RB_50%_mid	16QAM	22.89
high	1914.3	26683	1.4	RB_50%_mid	64QAM	22.01
high	1914.3	26683	1.4	RB_50%_high	QPSK	23.55
high	1914.3	26683	1.4	RB_50%_high	16QAM	22.69
high	1914.3	26683	1.4	RB_50%_high	64QAM	22.72
high	1914.3	26683	1.4	RB_100%	QPSK	22.53
high	1914.3	26683	1.4	RB_100%	16QAM	21.69
high	1914.3	26683	1.4	RB_100%	64QAM	21.57
low	1851.5	26055	3	RB_1_low	16QAM	22.12
low	1851.5	26055	3	RB_1_low	64QAM	21.73
low	1851.5	26055	3	RB_1_mid	16QAM	22.13
low	1851.5	26055	3	RB_1_mid	64QAM	21.89
low	1851.5	26055	3	RB_1_high	16QAM	22.07
low	1851.5	26055	3	RB_1_high	64QAM	22.07
low	1851.5	26055	3	RB_50%_low	QPSK	22.07
low	1851.5	26055	3	RB_50%_low	16QAM	21.17
low	1851.5	26055	3	RB_50%_low	64QAM	21.32
low	1851.5	26055	3	RB_50%_mid	QPSK	22.14
low	1851.5	26055	3	RB_50%_mid	16QAM	20.97
low	1851.5	26055	3	RB_50%_mid	64QAM	21.22
low	1851.5	26055	3	RB_50%_high	QPSK	22.17
low	1851.5	26055	3	RB_50%_high	16QAM	21.26
low	1851.5	26055	3	RB_50%_high	64QAM	21.23
low	1851.5	26055	3	RB_100%	QPSK	22.12
low	1851.5	26055	3	RB_100%	16QAM	21.26
low	1851.5	26055	3	RB_100%	64QAM	21.06
low	1851.5	26055	3	RB_1_low	QPSK	23.08
low	1851.5	26055	3	RB_1_mid	QPSK	23.36
low	1851.5	26055	3	RB_1_high	QPSK	23.29

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
mid	1882.5	26365	3	RB_1_low	QPSK	23.05
mid	1882.5	26365	3	RB_1_mid	QPSK	23.05
mid	1882.5	26365	3	RB_1_high	QPSK	23.05
mid	1882.5	26365	3	RB_1_low	16QAM	22.11
mid	1882.5	26365	3	RB_1_low	64QAM	22.27
mid	1882.5	26365	3	RB_1_mid	16QAM	21.82
mid	1882.5	26365	3	RB_1_mid	64QAM	22.28
mid	1882.5	26365	3	RB_1_high	16QAM	21.76
mid	1882.5	26365	3	RB_1_high	64QAM	22.06
mid	1882.5	26365	3	RB_50%_low	QPSK	22.04
mid	1882.5	26365	3	RB_50%_low	16QAM	21.09
mid	1882.5	26365	3	RB_50%_low	64QAM	20.91
mid	1882.5	26365	3	RB_50%_mid	QPSK	22.01
mid	1882.5	26365	3	RB_50%_mid	16QAM	21.05
mid	1882.5	26365	3	RB_50%_mid	64QAM	20.99
mid	1882.5	26365	3	RB_50%_high	QPSK	22.08
mid	1882.5	26365	3	RB_50%_high	16QAM	21.02
mid	1882.5	26365	3	RB_50%_high	64QAM	20.78
mid	1882.5	26365	3	RB_100%	QPSK	22.02
mid	1882.5	26365	3	RB_100%	16QAM	21.02
mid	1882.5	26365	3	RB_100%	64QAM	21.02
high	1913.5	26675	3	RB_1_low	QPSK	23.44
high	1913.5	26675	3	RB_1_mid	QPSK	23.76
high	1913.5	26675	3	RB_1_high	QPSK	23.54
high	1913.5	26675	3	RB_1_low	16QAM	22.43
high	1913.5	26675	3	RB_1_low	64QAM	21.99
high	1913.5	26675	3	RB_1_mid	16QAM	22.54
high	1913.5	26675	3	RB_1_mid	64QAM	22.10
high	1913.5	26675	3	RB_1_high	16QAM	22.54
high	1913.5	26675	3	RB_1_high	64QAM	21.90
high	1913.5	26675	3	RB_50%_low	QPSK	22.64
high	1913.5	26675	3	RB_50%_low	16QAM	21.52
high	1913.5	26675	3	RB_50%_low	64QAM	21.41
high	1913.5	26675	3	RB_50%_mid	QPSK	22.52
high	1913.5	26675	3	RB_50%_mid	16QAM	21.67
high	1913.5	26675	3	RB_50%_mid	64QAM	21.60
high	1913.5	26675	3	RB_50%_high	QPSK	22.57
high	1913.5	26675	3	RB_50%_high	16QAM	21.56
high	1913.5	26675	3	RB_50%_high	64QAM	21.49
high	1913.5	26675	3	RB_100%	QPSK	22.49
high	1913.5	26675	3	RB_100%	16QAM	21.83
high	1913.5	26675	3	RB_100%	64QAM	21.36

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	1852.5	26065	5	RB 1 low	16QAM	22.05
low	1852.5	26065	5	RB 1 low	64QAM	22.19
low	1852.5	26065	5	RB 1 mid	16QAM	22.23
low	1852.5	26065	5	RB 1 mid	64QAM	21.98
low	1852.5	26065	5	RB 1 high	16QAM	21.93
low	1852.5	26065	5	RB 1 high	64QAM	21.97
low	1852.5	26065	5	RB 50% low	QPSK	22.15
low	1852.5	26065	5	RB 50% low	16QAM	21.15
low	1852.5	26065	5	RB 50% low	64QAM	21.29
low	1852.5	26065	5	RB 50% mid	QPSK	22.17
low	1852.5	26065	5	RB 50% mid	16QAM	21.36
low	1852.5	26065	5	RB 50% mid	64QAM	21.30
low	1852.5	26065	5	RB 50% high	QPSK	22.26
low	1852.5	26065	5	RB 50% high	16QAM	21.45
low	1852.5	26065	5	RB 50% high	64QAM	21.11
low	1852.5	26065	5	RB 100%	QPSK	22.14
low	1852.5	26065	5	RB 100%	16QAM	21.00
low	1852.5	26065	5	RB 100%	64QAM	21.19
low	1852.5	26065	5	RB 1 low	QPSK	22.90
low	1852.5	26065	5	RB 1 mid	QPSK	23.16
low	1852.5	26065	5	RB 1 high	QPSK	23.16
mid	1882.5	26365	5	RB 1 low	QPSK	22.93
mid	1882.5	26365	5	RB 1 mid	QPSK	22.91
mid	1882.5	26365	5	RB 1 high	QPSK	22.87
mid	1882.5	26365	5	RB 1 low	16QAM	21.79
mid	1882.5	26365	5	RB 1 low	64QAM	21.02
mid	1882.5	26365	5	RB 1 mid	16QAM	21.73
mid	1882.5	26365	5	RB 1 mid	64QAM	21.17
mid	1882.5	26365	5	RB 1 high	16QAM	21.73
mid	1882.5	26365	5	RB 1 high	64QAM	21.19
mid	1882.5	26365	5	RB 50% low	QPSK	22.01
mid	1882.5	26365	5	RB 50% low	16QAM	21.13
mid	1882.5	26365	5	RB 50% low	64QAM	20.81
mid	1882.5	26365	5	RB 50% mid	QPSK	22.01
mid	1882.5	26365	5	RB 50% mid	16QAM	21.23
mid	1882.5	26365	5	RB 50% mid	64QAM	20.65
mid	1882.5	26365	5	RB 50% high	QPSK	22.00
mid	1882.5	26365	5	RB 50% high	16QAM	21.13
mid	1882.5	26365	5	RB 50% high	64QAM	20.75
mid	1882.5	26365	5	RB 100%	QPSK	21.97
mid	1882.5	26365	5	RB 100%	16QAM	20.88
mid	1882.5	26365	5	RB 100%	64QAM	20.97

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	1912.5	26665	5	RB 1 low	QPSK	23.09
high	1912.5	26665	5	RB 1 mid	QPSK	23.15
high	1912.5	26665	5	RB 1 high	QPSK	23.26
high	1912.5	26665	5	RB 1 low	16QAM	22.37
high	1912.5	26665	5	RB 1 low	64QAM	22.32
high	1912.5	26665	5	RB 1 mid	16QAM	22.18
high	1912.5	26665	5	RB 1 mid	64QAM	22.22
high	1912.5	26665	5	RB 1 high	16QAM	22.06
high	1912.5	26665	5	RB 1 high	64QAM	21.49
high	1912.5	26665	5	RB 50% low	QPSK	22.49
high	1912.5	26665	5	RB 50% low	16QAM	21.35
high	1912.5	26665	5	RB 50% low	64QAM	21.26
high	1912.5	26665	5	RB 50% mid	QPSK	22.49
high	1912.5	26665	5	RB 50% mid	16QAM	21.55
high	1912.5	26665	5	RB 50% mid	64QAM	21.40
high	1912.5	26665	5	RB 50% high	QPSK	22.47
high	1912.5	26665	5	RB 50% high	16QAM	21.62
high	1912.5	26665	5	RB 50% high	64QAM	21.43
high	1912.5	26665	5	RB 100%	QPSK	22.41
high	1912.5	26665	5	RB 100%	16QAM	20.95
high	1912.5	26665	5	RB 100%	64QAM	21.14
low	1855	26090	10	RB 1 low	16QAM	22.04
low	1855	26090	10	RB 1 low	64QAM	21.45
low	1855	26090	10	RB 1 mid	16QAM	22.11
low	1855	26090	10	RB 1 mid	64QAM	21.88
low	1855	26090	10	RB 1 high	16QAM	22.17
low	1855	26090	10	RB 1 high	64QAM	21.84
low	1855	26090	10	RB 50% low	QPSK	22.27
low	1855	26090	10	RB 50% low	16QAM	21.27
low	1855	26090	10	RB 50% low	64QAM	21.17
low	1855	26090	10	RB 50% mid	QPSK	22.17
low	1855	26090	10	RB 50% mid	16QAM	21.26
low	1855	26090	10	RB 50% mid	64QAM	21.16
low	1855	26090	10	RB 50% high	QPSK	22.05
low	1855	26090	10	RB 50% high	16QAM	21.14
low	1855	26090	10	RB 50% high	64QAM	21.06
low	1855	26090	10	RB 100%	QPSK	22.02
low	1855	26090	10	RB 100%	16QAM	20.98
low	1855	26090	10	RB 100%	64QAM	20.92
low	1855	26090	10	RB 1 low	QPSK	22.91
low	1855	26090	10	RB 1 mid	QPSK	23.42
low	1855	26090	10	RB 1 high	QPSK	23.05

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	1882.5	26365	10	RB 1 low	16QAM	22.02
mid	1882.5	26365	10	RB 1 low	64QAM	22.27
mid	1882.5	26365	10	RB 1 mid	16QAM	22.10
mid	1882.5	26365	10	RB 1 mid	64QAM	22.64
mid	1882.5	26365	10	RB 1 high	16QAM	21.84
mid	1882.5	26365	10	RB 1 high	64QAM	22.45
mid	1882.5	26365	10	RB 50% low	QPSK	22.01
mid	1882.5	26365	10	RB 50% low	16QAM	20.96
mid	1882.5	26365	10	RB 50% low	64QAM	20.98
mid	1882.5	26365	10	RB 50% mid	QPSK	22.08
mid	1882.5	26365	10	RB 50% mid	16QAM	21.10
mid	1882.5	26365	10	RB 50% mid	64QAM	21.13
mid	1882.5	26365	10	RB 50% high	QPSK	22.03
mid	1882.5	26365	10	RB 50% high	16QAM	21.11
mid	1882.5	26365	10	RB 50% high	64QAM	20.82
mid	1882.5	26365	10	RB 100%	QPSK	22.03
mid	1882.5	26365	10	RB 100%	16QAM	21.00
mid	1882.5	26365	10	RB 100%	64QAM	21.06
mid	1882.5	26365	10	RB 1 low	QPSK	23.25
mid	1882.5	26365	10	RB 1 mid	QPSK	23.23
mid	1882.5	26365	10	RB 1 high	QPSK	23.30
high	1910	26640	10	RB 1 low	QPSK	23.17
high	1910	26640	10	RB 1 mid	QPSK	23.65
high	1910	26640	10	RB 1 high	QPSK	23.26
high	1910	26640	10	RB 1 low	16QAM	22.31
high	1910	26640	10	RB 1 low	64QAM	21.91
high	1910	26640	10	RB 1 mid	16QAM	22.26
high	1910	26640	10	RB 1 mid	64QAM	22.08
high	1910	26640	10	RB 1 high	16QAM	22.20
high	1910	26640	10	RB 1 high	64QAM	21.91
high	1910	26640	10	RB 50% low	QPSK	22.47
high	1910	26640	10	RB 50% low	16QAM	21.41
high	1910	26640	10	RB 50% low	64QAM	21.32
high	1910	26640	10	RB 50% mid	QPSK	22.51
high	1910	26640	10	RB 50% mid	16QAM	21.36
high	1910	26640	10	RB 50% mid	64QAM	21.37
high	1910	26640	10	RB 50% high	QPSK	22.32
high	1910	26640	10	RB 50% high	16QAM	21.35
high	1910	26640	10	RB 50% high	64QAM	21.47
high	1910	26640	10	RB 100%	QPSK	22.41
high	1910	26640	10	RB 100%	16QAM	21.25
high	1910	26640	10	RB 100%	64QAM	21.26

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	1857.5	26115	15	RB 1 low	16QAM	22.06
low	1857.5	26115	15	RB 1 low	64QAM	21.89
low	1857.5	26115	15	RB 1 mid	16QAM	21.94
low	1857.5	26115	15	RB 1 mid	64QAM	21.94
low	1857.5	26115	15	RB 1 high	16QAM	22.22
low	1857.5	26115	15	RB 1 high	64QAM	22.17
low	1857.5	26115	15	RB 50% low	QPSK	22.30
low	1857.5	26115	15	RB 50% low	16QAM	21.06
low	1857.5	26115	15	RB 50% low	64QAM	21.19
low	1857.5	26115	15	RB 50% mid	QPSK	22.12
low	1857.5	26115	15	RB 50% mid	16QAM	20.99
low	1857.5	26115	15	RB 50% mid	64QAM	20.93
low	1857.5	26115	15	RB 50% high	QPSK	22.11
low	1857.5	26115	15	RB 50% high	16QAM	21.09
low	1857.5	26115	15	RB 50% high	64QAM	21.11
low	1857.5	26115	15	RB 100%	QPSK	22.04
low	1857.5	26115	15	RB 100%	16QAM	21.08
low	1857.5	26115	15	RB 100%	64QAM	20.98
low	1857.5	26115	15	RB 1 low	QPSK	23.15
low	1857.5	26115	15	RB 1 mid	QPSK	23.37
low	1857.5	26115	15	RB 1 high	QPSK	23.03
mid	1882.5	26365	15	RB 1 low	16QAM	21.99
mid	1882.5	26365	15	RB 1 low	64QAM	22.62
mid	1882.5	26365	15	RB 1 mid	16QAM	22.33
mid	1882.5	26365	15	RB 1 mid	64QAM	22.49
mid	1882.5	26365	15	RB 1 high	16QAM	22.10
mid	1882.5	26365	15	RB 1 high	64QAM	22.47
mid	1882.5	26365	15	RB 50% low	QPSK	22.11
mid	1882.5	26365	15	RB 50% low	16QAM	20.96
mid	1882.5	26365	15	RB 50% low	64QAM	20.94
mid	1882.5	26365	15	RB 50% mid	QPSK	22.08
mid	1882.5	26365	15	RB 50% mid	16QAM	20.98
mid	1882.5	26365	15	RB 50% mid	64QAM	21.04
mid	1882.5	26365	15	RB 50% high	QPSK	22.08
mid	1882.5	26365	15	RB 50% high	16QAM	21.08
mid	1882.5	26365	15	RB 50% high	64QAM	20.98
mid	1882.5	26365	15	RB 100%	QPSK	22.05
mid	1882.5	26365	15	RB 100%	16QAM	21.04
mid	1882.5	26365	15	RB 100%	64QAM	21.07
mid	1882.5	26365	15	RB 1 low	QPSK	23.27
mid	1882.5	26365	15	RB 1 mid	QPSK	23.48
mid	1882.5	26365	15	RB 1 high	QPSK	23.31

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	1907.5	26615	15	RB 1 low	QPSK	23.24
high	1907.5	26615	15	RB 1 mid	QPSK	23.59
high	1907.5	26615	15	RB 1 high	QPSK	23.41
high	1907.5	26615	15	RB 1 low	16QAM	22.31
high	1907.5	26615	15	RB 1 low	64QAM	22.17
high	1907.5	26615	15	RB 1 mid	16QAM	22.27
high	1907.5	26615	15	RB 1 mid	64QAM	22.24
high	1907.5	26615	15	RB 1 high	16QAM	22.41
high	1907.5	26615	15	RB 1 high	64QAM	22.40
high	1907.5	26615	15	RB 50% low	QPSK	22.47
high	1907.5	26615	15	RB 50% low	16QAM	21.39
high	1907.5	26615	15	RB 50% low	64QAM	21.44
high	1907.5	26615	15	RB 50% mid	QPSK	22.42
high	1907.5	26615	15	RB 50% mid	16QAM	21.35
high	1907.5	26615	15	RB 50% mid	64QAM	21.30
high	1907.5	26615	15	RB 50% high	QPSK	22.44
high	1907.5	26615	15	RB 50% high	16QAM	21.36
high	1907.5	26615	15	RB 50% high	64QAM	21.19
high	1907.5	26615	15	RB 100%	QPSK	22.40
high	1907.5	26615	15	RB 100%	16QAM	21.31
high	1907.5	26615	15	RB 100%	64QAM	21.22
low	1860	26140	20	RB 1 low	16QAM	22.22
low	1860	26140	20	RB 1 low	64QAM	22.30
low	1860	26140	20	RB 1 mid	16QAM	22.52
low	1860	26140	20	RB 1 mid	64QAM	22.89
low	1860	26140	20	RB 1 high	16QAM	22.34
low	1860	26140	20	RB 1 high	64QAM	23.11
low	1860	26140	20	RB 50% low	QPSK	22.17
low	1860	26140	20	RB 50% low	16QAM	21.20
low	1860	26140	20	RB 50% low	64QAM	20.96
low	1860	26140	20	RB 50% mid	QPSK	22.22
low	1860	26140	20	RB 50% mid	16QAM	21.25
low	1860	26140	20	RB 50% mid	64QAM	21.05
low	1860	26140	20	RB 50% high	QPSK	22.38
low	1860	26140	20	RB 50% high	16QAM	21.23
low	1860	26140	20	RB 50% high	64QAM	21.11
low	1860	26140	20	RB 100%	QPSK	22.27
low	1860	26140	20	RB 100%	16QAM	21.23
low	1860	26140	20	RB 100%	64QAM	21.12
low	1860	26140	20	RB 1 low	QPSK	22.98
low	1860	26140	20	RB 1 mid	QPSK	23.36
low	1860	26140	20	RB 1 high	QPSK	23.08

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	1882.5	26365	20	RB 1 low	16QAM	22.53
mid	1882.5	26365	20	RB 1 low	64QAM	22.82
mid	1882.5	26365	20	RB 1 mid	16QAM	22.37
mid	1882.5	26365	20	RB 1 mid	64QAM	22.29
mid	1882.5	26365	20	RB 1 high	16QAM	22.24
mid	1882.5	26365	20	RB 1 high	64QAM	22.14
mid	1882.5	26365	20	RB 50% low	QPSK	22.08
mid	1882.5	26365	20	RB 50% low	16QAM	21.02
mid	1882.5	26365	20	RB 50% low	64QAM	21.10
mid	1882.5	26365	20	RB 50% mid	QPSK	22.18
mid	1882.5	26365	20	RB 50% mid	16QAM	21.14
mid	1882.5	26365	20	RB 50% mid	64QAM	21.13
mid	1882.5	26365	20	RB 50% high	QPSK	22.08
mid	1882.5	26365	20	RB 50% high	16QAM	21.03
mid	1882.5	26365	20	RB 50% high	64QAM	21.10
mid	1882.5	26365	20	RB 100%	QPSK	22.10
mid	1882.5	26365	20	RB 100%	16QAM	21.04
mid	1882.5	26365	20	RB 100%	64QAM	21.01
mid	1882.5	26365	20	RB 1 low	QPSK	22.82
mid	1882.5	26365	20	RB 1 mid	QPSK	23.04
mid	1882.5	26365	20	RB 1 high	QPSK	23.13
high	1905	26590	20	RB 1 low	QPSK	23.03
high	1905	26590	20	RB 1 low	16QAM	22.50
high	1905	26590	20	RB 1 low	64QAM	23.07
high	1905	26590	20	RB 1 mid	QPSK	23.41
high	1905	26590	20	RB 1 mid	16QAM	22.23
high	1905	26590	20	RB 1 mid	64QAM	23.20
high	1905	26590	20	RB 1 high	QPSK	23.28
high	1905	26590	20	RB 1 high	16QAM	22.88
high	1905	26590	20	RB 1 high	64QAM	23.24
high	1905	26590	20	RB 50% low	QPSK	22.32
high	1905	26590	20	RB 50% low	16QAM	21.40
high	1905	26590	20	RB 50% low	64QAM	21.18
high	1905	26590	20	RB 50% mid	QPSK	22.44
high	1905	26590	20	RB 50% mid	16QAM	21.40
high	1905	26590	20	RB 50% mid	64QAM	21.22
high	1905	26590	20	RB 50% high	QPSK	22.44
high	1905	26590	20	RB 50% high	16QAM	21.50
high	1905	26590	20	RB 50% high	64QAM	21.22
high	1905	26590	20	RB 100%	QPSK	22.39
high	1905	26590	20	RB 100%	16QAM	21.38
high	1905	26590	20	RB 100%	64QAM	21.24

Table 15: Test results conducted power measurement LTE FDD 25 1900 MHz.

8.1.8 Conducted power measurements LTE FDD 26 850 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
low	814.7	26697	1.4	RB 1 low	QPSK	22.94
low	814.7	26697	1.4	RB 1 low	16QAM	21.68
low	814.7	26697	1.4	RB 1 low	64QAM	21.28
low	814.7	26697	1.4	RB 1 mid	QPSK	22.94
low	814.7	26697	1.4	RB 1 mid	16QAM	21.78
low	814.7	26697	1.4	RB 1 mid	64QAM	21.57
low	814.7	26697	1.4	RB 1 high	QPSK	23.06
low	814.7	26697	1.4	RB 1 high	16QAM	21.93
low	814.7	26697	1.4	RB 1 high	64QAM	21.67
low	814.7	26697	1.4	RB 50% low	QPSK	22.86
low	814.7	26697	1.4	RB 50% low	16QAM	22.20
low	814.7	26697	1.4	RB 50% low	64QAM	21.99
low	814.7	26697	1.4	RB 50% mid	QPSK	23.02
low	814.7	26697	1.4	RB 50% mid	16QAM	22.19
low	814.7	26697	1.4	RB 50% mid	64QAM	21.64
low	814.7	26697	1.4	RB 50% high	QPSK	22.96
low	814.7	26697	1.4	RB 50% high	16QAM	22.30
low	814.7	26697	1.4	RB 50% high	64QAM	22.13
low	814.7	26697	1.4	RB 100%	QPSK	22.08
low	814.7	26697	1.4	RB 100%	16QAM	21.14
low	814.7	26697	1.4	RB 100%	64QAM	21.01
mid	831.5	26865	1.4	RB 1 low	QPSK	23.30
mid	831.5	26865	1.4	RB 1 mid	QPSK	23.29
mid	831.5	26865	1.4	RB 1 high	QPSK	23.32
mid	831.5	26865	1.4	RB 1 low	16QAM	22.18
mid	831.5	26865	1.4	RB 1 low	64QAM	22.09
mid	831.5	26865	1.4	RB 1 mid	16QAM	21.89
mid	831.5	26865	1.4	RB 1 mid	64QAM	21.66
mid	831.5	26865	1.4	RB 1 high	16QAM	21.95
mid	831.5	26865	1.4	RB 1 high	64QAM	21.73
mid	831.5	26865	1.4	RB 50% low	QPSK	23.13
mid	831.5	26865	1.4	RB 50% low	16QAM	22.37
mid	831.5	26865	1.4	RB 50% low	64QAM	22.01
mid	831.5	26865	1.4	RB 50% mid	QPSK	23.13
mid	831.5	26865	1.4	RB 50% mid	16QAM	22.5
mid	831.5	26865	1.4	RB 50% mid	64QAM	22.16
mid	831.5	26865	1.4	RB 50% high	QPSK	23.00
mid	831.5	26865	1.4	RB 50% high	16QAM	22.51
mid	831.5	26865	1.4	RB 50% high	64QAM	22.16
mid	831.5	26865	1.4	RB 100%	QPSK	22.29
mid	831.5	26865	1.4	RB 100%	16QAM	21.40
mid	831.5	26865	1.4	RB 100%	64QAM	21.12

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
high	848.3	27033	1.4	RB_1_low	QPSK	22.99
high	848.3	27033	1.4	RB_1_mid	QPSK	23.23
high	848.3	27033	1.4	RB_1_high	QPSK	22.82
high	848.3	27033	1.4	RB_1_low	16QAM	21.79
high	848.3	27033	1.4	RB_1_low	64QAM	21.35
high	848.3	27033	1.4	RB_1_mid	16QAM	21.82
high	848.3	27033	1.4	RB_1_mid	64QAM	21.24
high	848.3	27033	1.4	RB_1_high	16QAM	21.80
high	848.3	27033	1.4	RB_1_high	64QAM	21.47
high	848.3	27033	1.4	RB_50%_low	QPSK	23.05
high	848.3	27033	1.4	RB_50%_low	16QAM	22.22
high	848.3	27033	1.4	RB_50%_low	64QAM	22.14
high	848.3	27033	1.4	RB_50%_mid	QPSK	23.13
high	848.3	27033	1.4	RB_50%_mid	16QAM	22.24
high	848.3	27033	1.4	RB_50%_mid	64QAM	22.30
high	848.3	27033	1.4	RB_50%_high	QPSK	22.99
high	848.3	27033	1.4	RB_50%_high	16QAM	22.18
high	848.3	27033	1.4	RB_50%_high	64QAM	22.11
high	848.3	27033	1.4	RB_100%	QPSK	22.05
high	848.3	27033	1.4	RB_100%	16QAM	21.21
high	848.3	27033	1.4	RB_100%	64QAM	20.79
low	815.5	26705	3	RB_1_low	16QAM	22.12
low	815.5	26705	3	RB_1_low	64QAM	21.37
low	815.5	26705	3	RB_1_mid	16QAM	21.80
low	815.5	26705	3	RB_1_mid	64QAM	21.62
low	815.5	26705	3	RB_1_high	16QAM	22.07
low	815.5	26705	3	RB_1_high	64QAM	21.45
low	815.5	26705	3	RB_50%_low	QPSK	21.96
low	815.5	26705	3	RB_50%_low	16QAM	21.05
low	815.5	26705	3	RB_50%_low	64QAM	20.78
low	815.5	26705	3	RB_50%_mid	QPSK	22.14
low	815.5	26705	3	RB_50%_mid	16QAM	21.29
low	815.5	26705	3	RB_50%_mid	64QAM	21.18
low	815.5	26705	3	RB_50%_high	QPSK	22.17
low	815.5	26705	3	RB_50%_high	16QAM	21.05
low	815.5	26705	3	RB_50%_high	64QAM	21.11
low	815.5	26705	3	RB_100%	QPSK	22.00
low	815.5	26705	3	RB_100%	16QAM	21.09
low	815.5	26705	3	RB_100%	64QAM	20.81
low	815.5	26705	3	RB_1_low	QPSK	22.96
low	815.5	26705	3	RB_1_mid	QPSK	23.36
low	815.5	26705	3	RB_1_high	QPSK	23.14

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
mid	831.5	26865	3	RB_1_low	QPSK	23.16
mid	831.5	26865	3	RB_1_mid	QPSK	23.17
mid	831.5	26865	3	RB_1_high	QPSK	23.07
mid	831.5	26865	3	RB_1_low	16QAM	22.07
mid	831.5	26865	3	RB_1_low	64QAM	22.40
mid	831.5	26865	3	RB_1_mid	16QAM	21.90
mid	831.5	26865	3	RB_1_mid	64QAM	22.61
mid	831.5	26865	3	RB_1_high	16QAM	21.81
mid	831.5	26865	3	RB_1_high	64QAM	22.43
mid	831.5	26865	3	RB_50%_low	QPSK	22.10
mid	831.5	26865	3	RB_50%_low	16QAM	21.15
mid	831.5	26865	3	RB_50%_low	64QAM	21.04
mid	831.5	26865	3	RB_50%_mid	QPSK	22.29
mid	831.5	26865	3	RB_50%_mid	16QAM	21.03
mid	831.5	26865	3	RB_50%_mid	64QAM	21.06
mid	831.5	26865	3	RB_50%_high	QPSK	22.19
mid	831.5	26865	3	RB_50%_high	16QAM	20.89
mid	831.5	26865	3	RB_50%_high	64QAM	21.12
mid	831.5	26865	3	RB_100%	QPSK	22.12
mid	831.5	26865	3	RB_100%	16QAM	21.10
mid	831.5	26865	3	RB_100%	64QAM	21.14
high	847.5	27025	3	RB_1_low	QPSK	23.31
high	847.5	27025	3	RB_1_mid	QPSK	23.33
high	847.5	27025	3	RB_1_high	QPSK	22.96
high	847.5	27025	3	RB_1_low	16QAM	22.00
high	847.5	27025	3	RB_1_low	64QAM	21.79
high	847.5	27025	3	RB_1_mid	16QAM	21.99
high	847.5	27025	3	RB_1_mid	64QAM	21.51
high	847.5	27025	3	RB_1_high	16QAM	21.73
high	847.5	27025	3	RB_1_high	64QAM	21.25
high	847.5	27025	3	RB_50%_low	QPSK	22.12
high	847.5	27025	3	RB_50%_low	16QAM	20.90
high	847.5	27025	3	RB_50%_low	64QAM	20.81
high	847.5	27025	3	RB_50%_mid	QPSK	22.07
high	847.5	27025	3	RB_50%_mid	16QAM	20.83
high	847.5	27025	3	RB_50%_mid	64QAM	21.11
high	847.5	27025	3	RB_50%_high	QPSK	22.02
high	847.5	27025	3	RB_50%_high	16QAM	20.80
high	847.5	27025	3	RB_50%_high	64QAM	20.75
high	847.5	27025	3	RB_100%	QPSK	21.97
high	847.5	27025	3	RB_100%	16QAM	20.98
high	847.5	27025	3	RB_100%	64QAM	20.79

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	816.5	26715	5	RB 1 low	16QAM	21.46
low	816.5	26715	5	RB 1 low	64QAM	21.60
low	816.5	26715	5	RB 1 mid	16QAM	21.90
low	816.5	26715	5	RB 1 mid	64QAM	21.66
low	816.5	26715	5	RB 1 high	16QAM	21.97
low	816.5	26715	5	RB 1 high	64QAM	21.79
low	816.5	26715	5	RB 50% low	QPSK	22.05
low	816.5	26715	5	RB 50% low	16QAM	21.12
low	816.5	26715	5	RB 50% low	64QAM	20.93
low	816.5	26715	5	RB 50% mid	QPSK	22.15
low	816.5	26715	5	RB 50% mid	16QAM	21.20
low	816.5	26715	5	RB 50% mid	64QAM	21.23
low	816.5	26715	5	RB 50% high	QPSK	22.13
low	816.5	26715	5	RB 50% high	16QAM	21.28
low	816.5	26715	5	RB 50% high	64QAM	21.21
low	816.5	26715	5	RB 100%	QPSK	22.10
low	816.5	26715	5	RB 100%	16QAM	20.83
low	816.5	26715	5	RB 100%	64QAM	21.04
low	816.5	26715	5	RB 1 low	QPSK	22.67
low	816.5	26715	5	RB 1 mid	QPSK	22.73
low	816.5	26715	5	RB 1 high	QPSK	22.92
mid	831.5	26865	5	RB 1 low	QPSK	22.91
mid	831.5	26865	5	RB 1 low	16QAM	22.11
mid	831.5	26865	5	RB 1 low	64QAM	21.57
mid	831.5	26865	5	RB 1 mid	QPSK	23.03
mid	831.5	26865	5	RB 1 mid	16QAM	22.25
mid	831.5	26865	5	RB 1 mid	64QAM	22.04
mid	831.5	26865	5	RB 1 high	QPSK	23.08
mid	831.5	26865	5	RB 1 high	16QAM	22.19
mid	831.5	26865	5	RB 1 high	64QAM	21.85
mid	831.5	26865	5	RB 50% low	QPSK	22.10
mid	831.5	26865	5	RB 50% low	16QAM	21.04
mid	831.5	26865	5	RB 50% low	64QAM	20.91
mid	831.5	26865	5	RB 50% mid	QPSK	22.17
mid	831.5	26865	5	RB 50% mid	16QAM	21.17
mid	831.5	26865	5	RB 50% mid	64QAM	21.05
mid	831.5	26865	5	RB 50% high	QPSK	22.18
mid	831.5	26865	5	RB 50% high	16QAM	21.19
mid	831.5	26865	5	RB 50% high	64QAM	20.97
mid	831.5	26865	5	RB 100%	QPSK	22.12
mid	831.5	26865	5	RB 100%	16QAM	20.95
mid	831.5	26865	5	RB 100%	64QAM	21.04

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	846.5	27015	5	RB 1 low	QPSK	22.87
high	846.5	27015	5	RB 1 mid	QPSK	22.92
high	846.5	27015	5	RB 1 high	QPSK	22.88
high	846.5	27015	5	RB 1 low	16QAM	21.77
high	846.5	27015	5	RB 1 low	64QAM	22.03
high	846.5	27015	5	RB 1 mid	16QAM	21.86
high	846.5	27015	5	RB 1 mid	64QAM	22.19
high	846.5	27015	5	RB 1 high	16QAM	21.82
high	846.5	27015	5	RB 1 high	64QAM	21.96
high	846.5	27015	5	RB 50% low	QPSK	22.10
high	846.5	27015	5	RB 50% low	16QAM	21.36
high	846.5	27015	5	RB 50% low	64QAM	21.06
high	846.5	27015	5	RB 50% mid	QPSK	22.11
high	846.5	27015	5	RB 50% mid	16QAM	21.06
high	846.5	27015	5	RB 50% mid	64QAM	21.09
high	846.5	27015	5	RB 50% high	QPSK	22.04
high	846.5	27015	5	RB 50% high	16QAM	21.20
high	846.5	27015	5	RB 50% high	64QAM	21.23
high	846.5	27015	5	RB 100%	QPSK	22.15
high	846.5	27015	5	RB 100%	16QAM	20.96
high	846.5	27015	5	RB 100%	64QAM	20.97
low	819	26740	10	RB 1 low	16QAM	21.78
low	819	26740	10	RB 1 low	64QAM	21.59
low	819	26740	10	RB 1 mid	16QAM	22.13
low	819	26740	10	RB 1 mid	64QAM	21.74
low	819	26740	10	RB 1 high	16QAM	21.86
low	819	26740	10	RB 1 high	64QAM	21.43
low	819	26740	10	RB 50% low	QPSK	22.18
low	819	26740	10	RB 50% low	16QAM	21.28
low	819	26740	10	RB 50% low	64QAM	21.05
low	819	26740	10	RB 50% mid	QPSK	22.23
low	819	26740	10	RB 50% mid	16QAM	21.18
low	819	26740	10	RB 50% mid	64QAM	21.28
low	819	26740	10	RB 50% high	QPSK	22.19
low	819	26740	10	RB 50% high	16QAM	21.13
low	819	26740	10	RB 50% high	64QAM	21.13
low	819	26740	10	RB 100%	QPSK	22.04
low	819	26740	10	RB 100%	16QAM	20.96
low	819	26740	10	RB 100%	64QAM	21.00
low	819	26740	10	RB 1 low	QPSK	22.95
low	819	26740	10	RB 1 mid	QPSK	23.32
low	819	26740	10	RB 1 high	QPSK	23.07

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	831.5	26865	10	RB 1 low	16QAM	21.78
mid	831.5	26865	10	RB 1 low	64QAM	22.31
mid	831.5	26865	10	RB 1 mid	16QAM	22.49
mid	831.5	26865	10	RB 1 mid	64QAM	23.03
mid	831.5	26865	10	RB 1 high	16QAM	22.08
mid	831.5	26865	10	RB 1 high	64QAM	22.18
mid	831.5	26865	10	RB 50% low	QPSK	22.21
mid	831.5	26865	10	RB 50% low	16QAM	21.26
mid	831.5	26865	10	RB 50% low	64QAM	21.17
mid	831.5	26865	10	RB 50% mid	QPSK	22.16
mid	831.5	26865	10	RB 50% mid	16QAM	21.09
mid	831.5	26865	10	RB 50% mid	64QAM	21.32
mid	831.5	26865	10	RB 50% high	QPSK	22.08
mid	831.5	26865	10	RB 50% high	16QAM	21.08
mid	831.5	26865	10	RB 50% high	64QAM	21.12
mid	831.5	26865	10	RB 100%	QPSK	22.06
mid	831.5	26865	10	RB 100%	16QAM	21.04
mid	831.5	26865	10	RB 100%	64QAM	21.09
mid	831.5	26865	10	RB 1 low	QPSK	23.26
mid	831.5	26865	10	RB 1 mid	QPSK	23.52
mid	831.5	26865	10	RB 1 high	QPSK	23.21
high	844	26990	10	RB 1 low	QPSK	23.10
high	844	26990	10	RB 1 mid	QPSK	23.42
high	844	26990	10	RB 1 high	QPSK	22.85
high	844	26990	10	RB 1 low	16QAM	22.02
high	844	26990	10	RB 1 low	64QAM	21.52
high	844	26990	10	RB 1 mid	16QAM	21.92
high	844	26990	10	RB 1 mid	64QAM	21.85
high	844	26990	10	RB 1 high	16QAM	22.08
high	844	26990	10	RB 1 high	64QAM	21.72
high	844	26990	10	RB 50% low	QPSK	22.13
high	844	26990	10	RB 50% low	16QAM	20.87
high	844	26990	10	RB 50% low	64QAM	21.07
high	844	26990	10	RB 50% mid	QPSK	22.18
high	844	26990	10	RB 50% mid	16QAM	21.22
high	844	26990	10	RB 50% mid	64QAM	21.11
high	844	26990	10	RB 50% high	QPSK	22.07
high	844	26990	10	RB 50% high	16QAM	21.02
high	844	26990	10	RB 50% high	64QAM	21.03
high	844	26990	10	RB 100%	QPSK	22.11
high	844	26990	10	RB 100%	16QAM	20.82
high	844	26990	10	RB 100%	64QAM	21.06

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	821.5	26765	15	RB 1 low	16QAM	21.90
low	821.5	26765	15	RB 1 low	64QAM	21.65
low	821.5	26765	15	RB 1 mid	16QAM	21.58
low	821.5	26765	15	RB 1 mid	64QAM	21.92
low	821.5	26765	15	RB 1 high	16QAM	21.77
low	821.5	26765	15	RB 1 high	64QAM	21.77
low	821.5	26765	15	RB 50% low	QPSK	22.14
low	821.5	26765	15	RB 50% low	16QAM	20.98
low	821.5	26765	15	RB 50% low	64QAM	21.24
low	821.5	26765	15	RB 50% mid	QPSK	22.15
low	821.5	26765	15	RB 50% mid	16QAM	21.18
low	821.5	26765	15	RB 50% mid	64QAM	21.23
low	821.5	26765	15	RB 50% high	QPSK	22.08
low	821.5	26765	15	RB 50% high	16QAM	21.04
low	821.5	26765	15	RB 50% high	64QAM	20.97
low	821.5	26765	15	RB 100%	QPSK	22.17
low	821.5	26765	15	RB 100%	16QAM	21.21
low	821.5	26765	15	RB 100%	64QAM	21.02
low	821.5	26765	15	RB 1 low	QPSK	22.84
low	821.5	26765	15	RB 1 mid	QPSK	23.39
low	821.5	26765	15	RB 1 high	QPSK	22.98
mid	831.5	26865	15	RB 1 low	16QAM	22.09
mid	831.5	26865	15	RB 1 low	64QAM	22.43
mid	831.5	26865	15	RB 1 mid	16QAM	21.93
mid	831.5	26865	15	RB 1 mid	64QAM	22.55
mid	831.5	26865	15	RB 1 high	16QAM	22.15
mid	831.5	26865	15	RB 1 high	64QAM	22.45
mid	831.5	26865	15	RB 50% low	QPSK	22.07
mid	831.5	26865	15	RB 50% low	16QAM	21.06
mid	831.5	26865	15	RB 50% low	64QAM	21.05
mid	831.5	26865	15	RB 50% mid	QPSK	22.16
mid	831.5	26865	15	RB 50% mid	16QAM	21.08
mid	831.5	26865	15	RB 50% mid	64QAM	21.04
mid	831.5	26865	15	RB 50% high	QPSK	22.15
mid	831.5	26865	15	RB 50% high	16QAM	21.06
mid	831.5	26865	15	RB 50% high	64QAM	21.10
mid	831.5	26865	15	RB 100%	QPSK	22.09
mid	831.5	26865	15	RB 100%	16QAM	21.11
mid	831.5	26865	15	RB 100%	64QAM	21.14
mid	831.5	26865	15	RB 1 low	QPSK	23.35
mid	831.5	26865	15	RB 1 mid	QPSK	23.62
mid	831.5	26865	15	RB 1 high	QPSK	23.36

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	841.5	26965	15	RB 1 low	QPSK	22.90
high	841.5	26965	15	RB 1 low	16QAM	21.85
high	841.5	26965	15	RB 1 low	64QAM	21.69
high	841.5	26965	15	RB 1 mid	QPSK	23.23
high	841.5	26965	15	RB 1 mid	16QAM	21.84
high	841.5	26965	15	RB 1 mid	64QAM	21.85
high	841.5	26965	15	RB 1 high	QPSK	22.91
high	841.5	26965	15	RB 1 high	16QAM	21.85
high	841.5	26965	15	RB 1 high	64QAM	21.71
high	841.5	26965	15	RB 50% low	QPSK	22.08
high	841.5	26965	15	RB 50% low	16QAM	20.87
high	841.5	26965	15	RB 50% low	64QAM	20.92
high	841.5	26965	15	RB 50% mid	QPSK	22.13
high	841.5	26965	15	RB 50% mid	16QAM	21.14
high	841.5	26965	15	RB 50% mid	64QAM	21.07
high	841.5	26965	15	RB 50% high	QPSK	22.14
high	841.5	26965	15	RB 50% high	16QAM	21.06
high	841.5	26965	15	RB 50% high	64QAM	20.99
high	841.5	26965	15	RB 100%	QPSK	22.04
high	841.5	26965	15	RB 100%	16QAM	21.05
high	841.5	26965	15	RB 100%	64QAM	21.07
high	841.5	26965	15	RB 1 low	QPSK	22.90
high	841.5	26965	15	RB 1 low	16QAM	21.85
high	841.5	26965	15	RB 1 low	64QAM	21.69
high	841.5	26965	15	RB 1 mid	QPSK	23.23
high	841.5	26965	15	RB 1 mid	16QAM	21.84
high	841.5	26965	15	RB 1 mid	64QAM	21.85
high	841.5	26965	15	RB 1 high	QPSK	22.91
high	841.5	26965	15	RB 1 high	16QAM	21.85
high	841.5	26965	15	RB 1 high	64QAM	21.71
high	841.5	26965	15	RB 50% low	QPSK	22.08
high	841.5	26965	15	RB 50% low	16QAM	20.87
high	841.5	26965	15	RB 50% low	64QAM	20.92
high	841.5	26965	15	RB 50% mid	QPSK	22.13
high	841.5	26965	15	RB 50% mid	16QAM	21.14
high	841.5	26965	15	RB 50% mid	64QAM	21.07
high	841.5	26965	15	RB 50% high	QPSK	22.14
high	841.5	26965	15	RB 50% high	16QAM	21.06
high	841.5	26965	15	RB 50% high	64QAM	20.99
high	841.5	26965	15	RB 100%	QPSK	22.04
high	841.5	26965	15	RB 100%	16QAM	21.05
high	841.5	26965	15	RB 100%	64QAM	21.07

Table 16: Test results conducted power measurement LTE FDD 26 850 MHz.

8.1.9 Conducted power measurements LTE TDD 38 2600 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulatio	P _{avg} [dBm]
low	2572.5	37775	5	RB 1 low	QPSK	22.43
low	2572.5	37775	5	RB 1 low	16QAM	20.82
low	2572.5	37775	5	RB 1 low	64QAM	21.82
low	2572.5	37775	5	RB 1 mid	QPSK	22.62
low	2572.5	37775	5	RB 1 mid	16QAM	20.89
low	2572.5	37775	5	RB 1 mid	64QAM	21.95
low	2572.5	37775	5	RB 1 high	QPSK	22.73
low	2572.5	37775	5	RB 1 high	16QAM	21.01
low	2572.5	37775	5	RB 1 high	64QAM	22.04
low	2572.5	37775	5	RB 50% low	QPSK	21.78
low	2572.5	37775	5	RB 50% low	16QAM	20.78
low	2572.5	37775	5	RB 50% low	64QAM	20.53
low	2572.5	37775	5	RB 50% mid	QPSK	21.93
low	2572.5	37775	5	RB 50% mid	16QAM	20.94
low	2572.5	37775	5	RB 50% mid	64QAM	20.69
low	2572.5	37775	5	RB 50% high	QPSK	21.88
low	2572.5	37775	5	RB 50% high	16QAM	20.89
low	2572.5	37775	5	RB 50% high	64QAM	20.73
low	2572.5	37775	5	RB 100%	QPSK	21.86
low	2572.5	37775	5	RB 100%	16QAM	20.61
low	2572.5	37775	5	RB 100%	64QAM	20.71
mid	2595	38000	5	RB 1 low	QPSK	22.57
mid	2595	38000	5	RB 1 mid	QPSK	22.72
mid	2595	38000	5	RB 1 high	QPSK	22.68
mid	2595	38000	5	RB 1 low	16QAM	20.76
mid	2595	38000	5	RB 1 low	64QAM	20.98
mid	2595	38000	5	RB 1 mid	16QAM	20.76
mid	2595	38000	5	RB 1 mid	64QAM	21.03
mid	2595	38000	5	RB 1 high	16QAM	20.84
mid	2595	38000	5	RB 1 high	64QAM	21.18
mid	2595	38000	5	RB 50% low	QPSK	21.69
mid	2595	38000	5	RB 50% low	16QAM	20.58
mid	2595	38000	5	RB 50% low	64QAM	20.53
mid	2595	38000	5	RB 50% mid	QPSK	21.68
mid	2595	38000	5	RB 50% mid	16QAM	20.59
mid	2595	38000	5	RB 50% mid	64QAM	20.55
mid	2595	38000	5	RB 50% high	QPSK	21.69
mid	2595	38000	5	RB 50% high	16QAM	20.61
mid	2595	38000	5	RB 50% high	64QAM	20.56
mid	2595	38000	5	RB 100%	QPSK	21.75
mid	2595	38000	5	RB 100%	16QAM	20.47
mid	2595	38000	5	RB 100%	64QAM	20.58

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
high	2617.5	38225	5	RB_1_low	QPSK	22.53
high	2617.5	38225	5	RB_1_mid	QPSK	22.64
high	2617.5	38225	5	RB_1_high	QPSK	22.81
high	2617.5	38225	5	RB_1_low	16QAM	20.83
high	2617.5	38225	5	RB_1_low	64QAM	21.82
high	2617.5	38225	5	RB_1_mid	16QAM	20.86
high	2617.5	38225	5	RB_1_mid	64QAM	21.87
high	2617.5	38225	5	RB_1_high	16QAM	21.11
high	2617.5	38225	5	RB_1_high	64QAM	22.04
high	2617.5	38225	5	RB_50%_low	QPSK	21.89
high	2617.5	38225	5	RB_50%_low	16QAM	20.90
high	2617.5	38225	5	RB_50%_low	64QAM	20.53
high	2617.5	38225	5	RB_50%_mid	QPSK	21.79
high	2617.5	38225	5	RB_50%_mid	16QAM	20.82
high	2617.5	38225	5	RB_50%_mid	64QAM	20.66
high	2617.5	38225	5	RB_50%_high	QPSK	21.91
high	2617.5	38225	5	RB_50%_high	16QAM	20.94
high	2617.5	38225	5	RB_50%_high	64QAM	20.87
high	2617.5	38225	5	RB_100%	QPSK	21.83
high	2617.5	38225	5	RB_100%	16QAM	20.68
high	2617.5	38225	5	RB_100%	64QAM	20.68
low	2575	37800	10	RB_1_low	16QAM	22.07
low	2575	37800	10	RB_1_low	64QAM	21.83
low	2575	37800	10	RB_1_mid	16QAM	22.38
low	2575	37800	10	RB_1_mid	64QAM	22.21
low	2575	37800	10	RB_1_high	16QAM	22.07
low	2575	37800	10	RB_1_high	64QAM	21.83
low	2575	37800	10	RB_50%_low	QPSK	21.90
low	2575	37800	10	RB_50%_low	16QAM	20.90
low	2575	37800	10	RB_50%_low	64QAM	20.97
low	2575	37800	10	RB_50%_mid	QPSK	21.94
low	2575	37800	10	RB_50%_mid	16QAM	20.95
low	2575	37800	10	RB_50%_mid	64QAM	21.02
low	2575	37800	10	RB_50%_high	QPSK	21.87
low	2575	37800	10	RB_50%_high	16QAM	20.99
low	2575	37800	10	RB_50%_high	64QAM	20.85
low	2575	37800	10	RB_100%	QPSK	21.87
low	2575	37800	10	RB_100%	16QAM	20.69
low	2575	37800	10	RB_100%	64QAM	20.83
low	2575	37800	10	RB_1_low	QPSK	22.63
low	2575	37800	10	RB_1_mid	QPSK	22.99
low	2575	37800	10	RB_1_high	QPSK	22.93

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
mid	2595	38000	10	RB_1_low	QPSK	22.67
mid	2595	38000	10	RB_1_mid	QPSK	22.88
mid	2595	38000	10	RB_1_high	QPSK	22.61
mid	2595	38000	10	RB_1_low	16QAM	22.04
mid	2595	38000	10	RB_1_low	64QAM	21.78
mid	2595	38000	10	RB_1_mid	16QAM	22.26
mid	2595	38000	10	RB_1_mid	64QAM	21.80
mid	2595	38000	10	RB_1_high	16QAM	21.86
mid	2595	38000	10	RB_1_high	64QAM	21.69
mid	2595	38000	10	RB_50%_low	QPSK	21.74
mid	2595	38000	10	RB_50%_low	16QAM	20.85
mid	2595	38000	10	RB_50%_low	64QAM	20.83
mid	2595	38000	10	RB_50%_mid	QPSK	21.83
mid	2595	38000	10	RB_50%_mid	16QAM	20.73
mid	2595	38000	10	RB_50%_mid	64QAM	20.74
mid	2595	38000	10	RB_50%_high	QPSK	21.64
mid	2595	38000	10	RB_50%_high	16QAM	20.76
mid	2595	38000	10	RB_50%_high	64QAM	20.87
mid	2595	38000	10	RB_100%	QPSK	21.69
mid	2595	38000	10	RB_100%	16QAM	20.47
mid	2595	38000	10	RB_100%	64QAM	20.60
high	2615	38200	10	RB_1_low	QPSK	22.78
high	2615	38200	10	RB_1_mid	QPSK	23.01
high	2615	38200	10	RB_1_high	QPSK	22.99
high	2615	38200	10	RB_1_low	16QAM	22.04
high	2615	38200	10	RB_1_low	64QAM	21.77
high	2615	38200	10	RB_1_mid	16QAM	22.48
high	2615	38200	10	RB_1_mid	64QAM	22.21
high	2615	38200	10	RB_1_high	16QAM	22.04
high	2615	38200	10	RB_1_high	64QAM	21.90
high	2615	38200	10	RB_50%_low	QPSK	21.87
high	2615	38200	10	RB_50%_low	16QAM	20.99
high	2615	38200	10	RB_50%_low	64QAM	20.98
high	2615	38200	10	RB_50%_mid	QPSK	21.98
high	2615	38200	10	RB_50%_mid	16QAM	20.99
high	2615	38200	10	RB_50%_mid	64QAM	21.06
high	2615	38200	10	RB_50%_high	QPSK	21.88
high	2615	38200	10	RB_50%_high	16QAM	21.03
high	2615	38200	10	RB_50%_high	64QAM	20.96
high	2615	38200	10	RB_100%	QPSK	21.94
high	2615	38200	10	RB_100%	16QAM	20.92
high	2615	38200	10	RB_100%	64QAM	20.88

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	2577.5	37825	15	RB 1 low	16QAM	22.11
low	2577.5	37825	15	RB 1 low	64QAM	21.74
low	2577.5	37825	15	RB 1 mid	16QAM	22.34
low	2577.5	37825	15	RB 1 mid	64QAM	22.05
low	2577.5	37825	15	RB 1 high	16QAM	22.13
low	2577.5	37825	15	RB 1 high	64QAM	21.71
low	2577.5	37825	15	RB 50% low	QPSK	21.90
low	2577.5	37825	15	RB 50% low	16QAM	20.77
low	2577.5	37825	15	RB 50% low	64QAM	20.88
low	2577.5	37825	15	RB 50% mid	QPSK	21.94
low	2577.5	37825	15	RB 50% mid	16QAM	20.73
low	2577.5	37825	15	RB 50% mid	64QAM	20.85
low	2577.5	37825	15	RB 50% high	QPSK	21.78
low	2577.5	37825	15	RB 50% high	16QAM	20.65
low	2577.5	37825	15	RB 50% high	64QAM	20.77
low	2577.5	37825	15	RB 100%	QPSK	21.83
low	2577.5	37825	15	RB 100%	16QAM	20.87
low	2577.5	37825	15	RB 100%	64QAM	20.85
low	2577.5	37825	15	RB 1 low	QPSK	22.73
low	2577.5	37825	15	RB 1 mid	QPSK	23.05
low	2577.5	37825	15	RB 1 high	QPSK	22.94
mid	2595	38000	15	RB 1 low	16QAM	22.06
mid	2595	38000	15	RB 1 low	64QAM	21.66
mid	2595	38000	15	RB 1 mid	16QAM	22.21
mid	2595	38000	15	RB 1 mid	64QAM	22.24
mid	2595	38000	15	RB 1 high	16QAM	22.11
mid	2595	38000	15	RB 1 high	64QAM	21.63
mid	2595	38000	15	RB 50% low	QPSK	21.75
mid	2595	38000	15	RB 50% low	16QAM	20.51
mid	2595	38000	15	RB 50% low	64QAM	20.58
mid	2595	38000	15	RB 50% mid	QPSK	21.73
mid	2595	38000	15	RB 50% mid	16QAM	20.62
mid	2595	38000	15	RB 50% mid	64QAM	20.57
mid	2595	38000	15	RB 50% high	QPSK	21.67
mid	2595	38000	15	RB 50% high	16QAM	20.53
mid	2595	38000	15	RB 50% high	64QAM	20.49
mid	2595	38000	15	RB 100%	QPSK	21.66
mid	2595	38000	15	RB 100%	16QAM	20.69
mid	2595	38000	15	RB 100%	64QAM	20.67
mid	2595	38000	15	RB 1 low	QPSK	22.71
mid	2595	38000	15	RB 1 mid	QPSK	23.14
mid	2595	38000	15	RB 1 high	QPSK	22.81

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	2612.5	38175	15	RB 1 low	QPSK	22.65
high	2612.5	38175	15	RB 1 mid	QPSK	23.09
high	2612.5	38175	15	RB 1 high	QPSK	22.98
high	2612.5	38175	15	RB 1 low	16QAM	22.04
high	2612.5	38175	15	RB 1 low	64QAM	21.63
high	2612.5	38175	15	RB 1 mid	16QAM	22.38
high	2612.5	38175	15	RB 1 mid	64QAM	21.90
high	2612.5	38175	15	RB 1 high	16QAM	22.18
high	2612.5	38175	15	RB 1 high	64QAM	21.87
high	2612.5	38175	15	RB 50% low	QPSK	21.81
high	2612.5	38175	15	RB 50% low	16QAM	20.79
high	2612.5	38175	15	RB 50% low	64QAM	20.78
high	2612.5	38175	15	RB 50% mid	QPSK	21.88
high	2612.5	38175	15	RB 50% mid	16QAM	20.97
high	2612.5	38175	15	RB 50% mid	64QAM	20.76
high	2612.5	38175	15	RB 50% high	QPSK	21.90
high	2612.5	38175	15	RB 50% high	16QAM	20.77
high	2612.5	38175	15	RB 50% high	64QAM	20.88
high	2612.5	38175	15	RB 100%	QPSK	21.76
high	2612.5	38175	15	RB 100%	16QAM	20.91
high	2612.5	38175	15	RB 100%	64QAM	20.78
low	2580	37850	20	RB 1 low	16QAM	21.64
low	2580	37850	20	RB 1 low	64QAM	22.18
low	2580	37850	20	RB 1 mid	16QAM	21.67
low	2580	37850	20	RB 1 mid	64QAM	22.67
low	2580	37850	20	RB 1 high	16QAM	21.44
low	2580	37850	20	RB 1 high	64QAM	22.12
low	2580	37850	20	RB 50% low	QPSK	21.88
low	2580	37850	20	RB 50% low	16QAM	20.88
low	2580	37850	20	RB 50% low	64QAM	20.90
low	2580	37850	20	RB 50% mid	QPSK	21.81
low	2580	37850	20	RB 50% mid	16QAM	20.81
low	2580	37850	20	RB 50% mid	64QAM	20.84
low	2580	37850	20	RB 50% high	QPSK	21.64
low	2580	37850	20	RB 50% high	16QAM	20.75
low	2580	37850	20	RB 50% high	64QAM	20.57
low	2580	37850	20	RB 100%	QPSK	21.80
low	2580	37850	20	RB 100%	16QAM	20.74
low	2580	37850	20	RB 100%	64QAM	20.70
low	2580	37850	20	RB 1 low	QPSK	22.63
low	2580	37850	20	RB 1 mid	QPSK	23.21
low	2580	37850	20	RB 1 high	QPSK	22.63

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	2595	38000	20	RB 1 low	16QAM	21.57
mid	2595	38000	20	RB 1 low	64QAM	22.10
mid	2595	38000	20	RB 1 mid	16QAM	21.58
mid	2595	38000	20	RB 1 mid	64QAM	22.72
mid	2595	38000	20	RB 1 high	16QAM	21.51
mid	2595	38000	20	RB 1 high	64QAM	22.02
mid	2595	38000	20	RB 50% low	QPSK	21.73
mid	2595	38000	20	RB 50% low	16QAM	20.73
mid	2595	38000	20	RB 50% low	64QAM	20.83
mid	2595	38000	20	RB 50% mid	QPSK	21.71
mid	2595	38000	20	RB 50% mid	16QAM	20.71
mid	2595	38000	20	RB 50% mid	64QAM	20.82
mid	2595	38000	20	RB 50% high	QPSK	21.64
mid	2595	38000	20	RB 50% high	16QAM	20.65
mid	2595	38000	20	RB 50% high	64QAM	20.66
mid	2595	38000	20	RB 100%	QPSK	21.64
mid	2595	38000	20	RB 100%	16QAM	20.66
mid	2595	38000	20	RB 100%	64QAM	20.67
mid	2595	38000	20	RB 1 low	QPSK	22.38
mid	2595	38000	20	RB 1 mid	QPSK	22.78
mid	2595	38000	20	RB 1 high	QPSK	22.33
high	2610	38150	20	RB 1 low	QPSK	22.49
high	2610	38150	20	RB 1 low	16QAM	21.45
high	2610	38150	20	RB 1 low	64QAM	22.11
high	2610	38150	20	RB 1 mid	QPSK	23.31
high	2610	38150	20	RB 1 mid	16QAM	21.70
high	2610	38150	20	RB 1 mid	64QAM	22.66
high	2610	38150	20	RB 1 high	QPSK	22.78
high	2610	38150	20	RB 1 high	16QAM	21.46
high	2610	38150	20	RB 1 high	64QAM	22.33
high	2610	38150	20	RB 50% low	QPSK	21.77
high	2610	38150	20	RB 50% low	16QAM	20.78
high	2610	38150	20	RB 50% low	64QAM	20.68
high	2610	38150	20	RB 50% mid	QPSK	21.84
high	2610	38150	20	RB 50% mid	16QAM	20.85
high	2610	38150	20	RB 50% mid	64QAM	20.77
high	2610	38150	20	RB 50% high	QPSK	21.90
high	2610	38150	20	RB 50% high	16QAM	20.89
high	2610	38150	20	RB 50% high	64QAM	20.94
high	2610	38150	20	RB 100%	QPSK	21.88
high	2610	38150	20	RB 100%	16QAM	20.80
high	2610	38150	20	RB 100%	64QAM	20.78

Table 17: Test results conducted power measurement LTE TDD 38 2600 MHz.

8.1.10 Conducted power measurements LTE TDD 41 2600 MHz

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
low	2498.5	39675	5	RB 1 low	QPSK	22.43
low	2498.5	39675	5	RB 1 low	16QAM	20.89
low	2498.5	39675	5	RB 1 low	64QAM	21.71
low	2498.5	39675	5	RB 1 mid	QPSK	22.50
low	2498.5	39675	5	RB 1 mid	16QAM	20.90
low	2498.5	39675	5	RB 1 mid	64QAM	22.11
low	2498.5	39675	5	RB 1 high	QPSK	22.63
low	2498.5	39675	5	RB 1 high	16QAM	21.03
low	2498.5	39675	5	RB 1 high	64QAM	22.16
low	2498.5	39675	5	RB 50% low	QPSK	21.70
low	2498.5	39675	5	RB 50% low	16QAM	20.69
low	2498.5	39675	5	RB 50% low	64QAM	20.64
low	2498.5	39675	5	RB 50% mid	QPSK	21.82
low	2498.5	39675	5	RB 50% mid	16QAM	20.72
low	2498.5	39675	5	RB 50% mid	64QAM	20.65
low	2498.5	39675	5	RB 50% high	QPSK	21.86
low	2498.5	39675	5	RB 50% high	16QAM	20.97
low	2498.5	39675	5	RB 50% high	64QAM	20.71
low	2498.5	39675	5	RB 100%	QPSK	21.83
low	2498.5	39675	5	RB 100%	16QAM	20.69
low	2498.5	39675	5	RB 100%	64QAM	20.97
mid	2593	40620	5	RB 1 low	QPSK	22.80
mid	2593	40620	5	RB 1 mid	QPSK	22.84
mid	2593	40620	5	RB 1 high	QPSK	22.82
mid	2593	40620	5	RB 1 low	16QAM	20.97
mid	2593	40620	5	RB 1 low	64QAM	21.31
mid	2593	40620	5	RB 1 mid	16QAM	20.99
mid	2593	40620	5	RB 1 mid	64QAM	21.36
mid	2593	40620	5	RB 1 high	16QAM	21.08
mid	2593	40620	5	RB 1 high	64QAM	21.22
mid	2593	40620	5	RB 50% low	QPSK	21.93
mid	2593	40620	5	RB 50% low	16QAM	21.04
mid	2593	40620	5	RB 50% low	64QAM	20.78
mid	2593	40620	5	RB 50% mid	QPSK	21.91
mid	2593	40620	5	RB 50% mid	16QAM	20.94
mid	2593	40620	5	RB 50% mid	64QAM	20.69
mid	2593	40620	5	RB 50% high	QPSK	21.93
mid	2593	40620	5	RB 50% high	16QAM	21.04
mid	2593	40620	5	RB 50% high	64QAM	20.80
mid	2593	40620	5	RB 100%	QPSK	21.96
mid	2593	40620	5	RB 100%	16QAM	20.68
mid	2593	40620	5	RB 100%	64QAM	20.81

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
high	2687.5	41565	5	RB_1_low	QPSK	22.45
high	2687.5	41565	5	RB_1_mid	QPSK	22.58
high	2687.5	41565	5	RB_1_high	QPSK	22.53
high	2687.5	41565	5	RB_1_low	16QAM	20.92
high	2687.5	41565	5	RB_1_low	64QAM	21.86
high	2687.5	41565	5	RB_1_mid	16QAM	20.91
high	2687.5	41565	5	RB_1_mid	64QAM	22.06
high	2687.5	41565	5	RB_1_high	16QAM	20.98
high	2687.5	41565	5	RB_1_high	64QAM	21.91
high	2687.5	41565	5	RB_50%_low	QPSK	21.82
high	2687.5	41565	5	RB_50%_low	16QAM	20.77
high	2687.5	41565	5	RB_50%_low	64QAM	20.54
high	2687.5	41565	5	RB_50%_mid	QPSK	21.83
high	2687.5	41565	5	RB_50%_mid	16QAM	20.78
high	2687.5	41565	5	RB_50%_mid	64QAM	20.54
high	2687.5	41565	5	RB_50%_high	QPSK	21.84
high	2687.5	41565	5	RB_50%_high	16QAM	20.78
high	2687.5	41565	5	RB_50%_high	64QAM	20.66
high	2687.5	41565	5	RB_100%	QPSK	21.76
high	2687.5	41565	5	RB_100%	16QAM	20.65
high	2687.5	41565	5	RB_100%	64QAM	20.94
low	2501	39700	10	RB_1_low	16QAM	22.14
low	2501	39700	10	RB_1_low	64QAM	21.87
low	2501	39700	10	RB_1_mid	16QAM	22.57
low	2501	39700	10	RB_1_mid	64QAM	22.27
low	2501	39700	10	RB_1_high	16QAM	22.56
low	2501	39700	10	RB_1_high	64QAM	22.18
low	2501	39700	10	RB_50%_low	QPSK	21.85
low	2501	39700	10	RB_50%_low	16QAM	20.95
low	2501	39700	10	RB_50%_low	64QAM	21.02
low	2501	39700	10	RB_50%_mid	QPSK	22.01
low	2501	39700	10	RB_50%_mid	16QAM	21.01
low	2501	39700	10	RB_50%_mid	64QAM	21.08
low	2501	39700	10	RB_50%_high	QPSK	21.99
low	2501	39700	10	RB_50%_high	16QAM	21.10
low	2501	39700	10	RB_50%_high	64QAM	21.16
low	2501	39700	10	RB_100%	QPSK	21.91
low	2501	39700	10	RB_100%	16QAM	20.91
low	2501	39700	10	RB_100%	64QAM	20.87
low	2501	39700	10	RB_1_low	QPSK	22.80
low	2501	39700	10	RB_1_mid	QPSK	22.98
low	2501	39700	10	RB_1_high	QPSK	23.20

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	P _{avg} [dBm]
mid	2593	40620	10	RB_1_low	QPSK	23.1
mid	2593	40620	10	RB_1_mid	QPSK	23.11
mid	2593	40620	10	RB_1_high	QPSK	23.00
mid	2593	40620	10	RB_1_low	16QAM	22.46
mid	2593	40620	10	RB_1_low	64QAM	22.60
mid	2593	40620	10	RB_1_mid	16QAM	22.49
mid	2593	40620	10	RB_1_mid	64QAM	22.03
mid	2593	40620	10	RB_1_high	16QAM	22.24
mid	2593	40620	10	RB_1_high	64QAM	21.89
mid	2593	40620	10	RB_50%_low	QPSK	22.01
mid	2593	40620	10	RB_50%_low	16QAM	20.93
mid	2593	40620	10	RB_50%_low	64QAM	21.02
mid	2593	40620	10	RB_50%_mid	QPSK	21.95
mid	2593	40620	10	RB_50%_mid	16QAM	20.97
mid	2593	40620	10	RB_50%_mid	64QAM	20.97
mid	2593	40620	10	RB_50%_high	QPSK	21.90
mid	2593	40620	10	RB_50%_high	16QAM	20.93
mid	2593	40620	10	RB_50%_high	64QAM	20.94
mid	2593	40620	10	RB_100%	QPSK	21.96
mid	2593	40620	10	RB_100%	16QAM	20.76
mid	2593	40620	10	RB_100%	64QAM	20.97
high	2685	41540	10	RB_1_low	QPSK	22.77
high	2685	41540	10	RB_1_mid	QPSK	22.97
high	2685	41540	10	RB_1_high	QPSK	22.83
high	2685	41540	10	RB_1_low	16QAM	22.26
high	2685	41540	10	RB_1_low	64QAM	22.00
high	2685	41540	10	RB_1_mid	16QAM	22.47
high	2685	41540	10	RB_1_mid	64QAM	22.11
high	2685	41540	10	RB_1_high	16QAM	22.14
high	2685	41540	10	RB_1_high	64QAM	21.77
high	2685	41540	10	RB_50%_low	QPSK	21.95
high	2685	41540	10	RB_50%_low	16QAM	20.89
high	2685	41540	10	RB_50%_low	64QAM	20.87
high	2685	41540	10	RB_50%_mid	QPSK	21.83
high	2685	41540	10	RB_50%_mid	16QAM	20.88
high	2685	41540	10	RB_50%_mid	64QAM	20.87
high	2685	41540	10	RB_50%_high	QPSK	21.82
high	2685	41540	10	RB_50%_high	16QAM	20.88
high	2685	41540	10	RB_50%_high	64QAM	20.94
high	2685	41540	10	RB_100%	QPSK	21.82
high	2685	41540	10	RB_100%	16QAM	20.87
high	2685	41540	10	RB_100%	64QAM	20.84

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
low	2503.5	39725	15	RB 1 low	16QAM	22.06
low	2503.5	39725	15	RB 1 low	64QAM	21.64
low	2503.5	39725	15	RB 1 mid	16QAM	22.49
low	2503.5	39725	15	RB 1 mid	64QAM	21.98
low	2503.5	39725	15	RB 1 high	16QAM	22.41
low	2503.5	39725	15	RB 1 high	64QAM	21.99
low	2503.5	39725	15	RB 50% low	QPSK	21.80
low	2503.5	39725	15	RB 50% low	16QAM	20.77
low	2503.5	39725	15	RB 50% low	64QAM	20.79
low	2503.5	39725	15	RB 50% mid	QPSK	21.97
low	2503.5	39725	15	RB 50% mid	16QAM	20.74
low	2503.5	39725	15	RB 50% mid	64QAM	20.85
low	2503.5	39725	15	RB 50% high	QPSK	22.04
low	2503.5	39725	15	RB 50% high	16QAM	20.99
low	2503.5	39725	15	RB 50% high	64QAM	21.00
low	2503.5	39725	15	RB 100%	QPSK	21.98
low	2503.5	39725	15	RB 100%	16QAM	20.92
low	2503.5	39725	15	RB 100%	64QAM	20.99
low	2503.5	39725	15	RB 1 low	QPSK	22.58
low	2503.5	39725	15	RB 1 mid	QPSK	23.00
low	2503.5	39725	15	RB 1 high	QPSK	23.13
mid	2593	40620	15	RB 1 low	16QAM	22.36
mid	2593	40620	15	RB 1 low	64QAM	21.97
mid	2593	40620	15	RB 1 mid	16QAM	22.42
mid	2593	40620	15	RB 1 mid	64QAM	22.47
mid	2593	40620	15	RB 1 high	16QAM	22.2
mid	2593	40620	15	RB 1 high	64QAM	21.74
mid	2593	40620	15	RB 50% low	QPSK	21.97
mid	2593	40620	15	RB 50% low	16QAM	20.96
mid	2593	40620	15	RB 50% low	64QAM	20.81
mid	2593	40620	15	RB 50% mid	QPSK	21.95
mid	2593	40620	15	RB 50% mid	16QAM	20.93
mid	2593	40620	15	RB 50% mid	64QAM	20.78
mid	2593	40620	15	RB 50% high	QPSK	21.89
mid	2593	40620	15	RB 50% high	16QAM	20.75
mid	2593	40620	15	RB 50% high	64QAM	20.72
mid	2593	40620	15	RB 100%	QPSK	21.98
mid	2593	40620	15	RB 100%	16QAM	20.92
mid	2593	40620	15	RB 100%	64QAM	20.89
mid	2593	40620	15	RB 1 low	QPSK	23.12
mid	2593	40620	15	RB 1 mid	QPSK	23.34
mid	2593	40620	15	RB 1 high	QPSK	22.72

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
high	2682.5	41515	15	RB 1 low	QPSK	23.08
high	2682.5	41515	15	RB 1 mid	QPSK	22.89
high	2682.5	41515	15	RB 1 high	QPSK	22.72
high	2682.5	41515	15	RB 1 low	16QAM	22.37
high	2682.5	41515	15	RB 1 low	64QAM	21.96
high	2682.5	41515	15	RB 1 mid	16QAM	22.39
high	2682.5	41515	15	RB 1 mid	64QAM	21.95
high	2682.5	41515	15	RB 1 high	16QAM	22.16
high	2682.5	41515	15	RB 1 high	64QAM	21.64
high	2682.5	41515	15	RB 50% low	QPSK	22.03
high	2682.5	41515	15	RB 50% low	16QAM	21.13
high	2682.5	41515	15	RB 50% low	64QAM	21.06
high	2682.5	41515	15	RB 50% mid	QPSK	21.84
high	2682.5	41515	15	RB 50% mid	16QAM	20.95
high	2682.5	41515	15	RB 50% mid	64QAM	20.87
high	2682.5	41515	15	RB 50% high	QPSK	21.94
high	2682.5	41515	15	RB 50% high	16QAM	20.75
high	2682.5	41515	15	RB 50% high	64QAM	20.87
high	2682.5	41515	15	RB 100%	QPSK	21.82
high	2682.5	41515	15	RB 100%	16QAM	20.90
high	2682.5	41515	15	RB 100%	64QAM	20.87
low	2506	39750	20	RB 1 low	16QAM	21.51
low	2506	39750	20	RB 1 low	64QAM	22.18
low	2506	39750	20	RB 1 mid	16QAM	21.90
low	2506	39750	20	RB 1 mid	64QAM	22.85
low	2506	39750	20	RB 1 high	16QAM	21.81
low	2506	39750	20	RB 1 high	64QAM	22.30
low	2506	39750	20	RB 50% low	QPSK	21.83
low	2506	39750	20	RB 50% low	16QAM	20.82
low	2506	39750	20	RB 50% low	64QAM	20.63
low	2506	39750	20	RB 50% mid	QPSK	22.16
low	2506	39750	20	RB 50% mid	16QAM	21.06
low	2506	39750	20	RB 50% mid	64QAM	20.88
low	2506	39750	20	RB 50% high	QPSK	22.05
low	2506	39750	20	RB 50% high	16QAM	21.05
low	2506	39750	20	RB 50% high	64QAM	20.96
low	2506	39750	20	RB 100%	QPSK	21.94
low	2506	39750	20	RB 100%	16QAM	20.99
low	2506	39750	20	RB 100%	64QAM	20.96
low	2506	39750	20	RB 1 low	QPSK	22.54
low	2506	39750	20	RB 1 mid	QPSK	23.50
low	2506	39750	20	RB 1 high	QPSK	22.83

Channel	Frequency [MHz]	Channel	Bandwidth [MHz]	Resource block allocation	Modulation	Pavg [dBm]
mid	2593	40620	20	RB 1 low	16QAM	21.82
mid	2593	40620	20	RB 1 low	64QAM	22.37
mid	2593	40620	20	RB 1 mid	16QAM	22.13
mid	2593	40620	20	RB 1 mid	64QAM	22.53
mid	2593	40620	20	RB 1 high	16QAM	21.77
mid	2593	40620	20	RB 1 high	64QAM	22.39
mid	2593	40620	20	RB 50% low	QPSK	21.98
mid	2593	40620	20	RB 50% low	16QAM	20.99
mid	2593	40620	20	RB 50% low	64QAM	20.98
mid	2593	40620	20	RB 50% mid	QPSK	21.94
mid	2593	40620	20	RB 50% mid	16QAM	20.95
mid	2593	40620	20	RB 50% mid	64QAM	20.94
mid	2593	40620	20	RB 50% high	QPSK	21.90
mid	2593	40620	20	RB 50% high	16QAM	20.91
mid	2593	40620	20	RB 50% high	64QAM	20.91
mid	2593	40620	20	RB 100%	QPSK	21.89
mid	2593	40620	20	RB 100%	16QAM	20.93
mid	2593	40620	20	RB 100%	64QAM	20.93
mid	2593	40620	20	RB 1 low	QPSK	22.55
mid	2593	40620	20	RB 1 mid	QPSK	22.93
mid	2593	40620	20	RB 1 high	QPSK	22.58
high	2680	41490	20	RB 1 low	QPSK	22.99
high	2680	41490	20	RB 1 low	16QAM	21.89
high	2680	41490	20	RB 1 low	64QAM	22.54
high	2680	41490	20	RB 1 mid	QPSK	23.21
high	2680	41490	20	RB 1 mid	16QAM	21.79
high	2680	41490	20	RB 1 mid	64QAM	22.59
high	2680	41490	20	RB 1 high	QPSK	22.93
high	2680	41490	20	RB 1 high	16QAM	21.48
high	2680	41490	20	RB 1 high	64QAM	22.26
high	2680	41490	20	RB 50% low	QPSK	22.01
high	2680	41490	20	RB 50% low	16QAM	20.95
high	2680	41490	20	RB 50% low	64QAM	20.87
high	2680	41490	20	RB 50% mid	QPSK	22.02
high	2680	41490	20	RB 50% mid	16QAM	20.95
high	2680	41490	20	RB 50% mid	64QAM	20.98
high	2680	41490	20	RB 50% high	QPSK	21.82
high	2680	41490	20	RB 50% high	16QAM	20.86
high	2680	41490	20	RB 50% high	64QAM	20.89
high	2680	41490	20	RB 100%	QPSK	21.94
high	2680	41490	20	RB 100%	16QAM	20.90
high	2680	41490	20	RB 100%	64QAM	20.87

Table 18: Test results conducted power measurement LTE TDD 41 2600 MHz.

8.1.11 Justification of SAR measurements in LTE mode

According to Chapter 5 'SAR test procedures for LTE devices of FCC KDB Publication 941225 D05 the following test configurations for standalone measurements of the largest channel bandwidth (chapter 5.2) had to be taken into consideration:

5.2.1. QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and *required test channel* combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each *required test channel*. When the *reported SAR* is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and *required test channels* is not required for 1 RB allocation; otherwise, SAR is required for the remaining *required test channels* and only for the RB offset configuration with the highest output power for that channel.⁶ When the *reported SAR* of a *required test channel* is > 1.45 W/kg, SAR is required for all three RB offset configurations for that *required test channel*.

5.2.2. QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.

5.2.3. QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest *reported SAR* for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the *reported SAR* is > 1.45 W/kg, the remaining *required test channels* must also be tested.

5.2.4. Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in sections 5.2.1, 5.2.2 and 5.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the *reported SAR* for the QPSK configuration is > 1.45 W/kg.

Testing of other channel bandwidths was not necessary because the output power of equivalent channel configurations was less than $\frac{1}{2}$ dB larger compared to the largest channel bandwidth and reported SAR was < 1.45 W/kg.

Conducted and radiated measurements were performed with the maximum number of bundled TTIs supported by the DUT (see section 2.4 for details).

8.1.12 MPR information in LTE mode

There is a permanently applied MPR implemented by the manufacturer.
MPR is enabled for this device according to 3GPP TS36.101.

Modulation	Channel bandwidth / resource block configuration						Target MPR	3 GPP MPR
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz		
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1	≤ 1
16QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	1	≤ 1
16QAM	> 5	> 4	> 8	> 12	> 16	> 18	2	≤ 2

Therefore there is no power reduction at 1.4 MHz bandwidth with 50% RB allocation (3 RBs).

Additional differences in conducted power are not caused by implemented MPR but depend on measurement uncertainty and allowable tolerances per 3GPP or tune-up.

A-MPR was disabled for all SAR tests.

8.1.13 Conducted power measurements WLAN 2.4 GHz

802.11b		maximum average conducted output power [dBm]			
Band	Ch	1Mbps	2Mbps	5.5Mbps	11Mbps
2450MHz	1	13.5	13.4	13.3	13.0
	6	13.9	13.9	13.8	13.5
	11	13.0	12.9	12.8	12.5

Table 19: Test results conducted power measurement 802.11b

802.11g		maximum average conducted output power [dBm]							
Band	Ch	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
2450MHz	1	12.5	12.3	12.1	12.0	11.5	11.1	10.8	10.5
	6	13.6	13.4	13.2	13.1	12.6	12.2	11.9	11.6
	11	11.8	11.6	11.4	11.3	10.8	10.4	10.1	9.8

Table 20: Test results conducted power measurement 802.11g

802.11n HT-20		maximum average conducted output power [dBm]							
Band	Ch	MCS-0 6.5Mbps	MCS-1 13Mbps	MCS-2 19.5Mbps	MCS-3 26Mbps	MCS-4 39Mbps	MCS-5 52Mbps	MCS-6 58.5Mbps	MCS-7 65Mbps
2450MHz	1	1	12.2	11.7	11.7	11.5	11.1	10.8	10.6
	6	6	13.3	12.8	12.8	12.6	12.2	11.9	11.7
	11	11	11.5	11.0	11.0	10.8	10.4	10.1	9.9

Table 21: Test results conducted power measurement 802.11n HT-20

8.1.14 Conducted power measurements WLAN 5 GHz

802.11a		maximum average conducted output power [dBm]							
Band	Ch	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
5200	36	36	10.3	10.1	10.0	10.0	9.3	8.9	8.6
	40	40	10.4	10.2	10.1	10.1	9.4	9.0	8.7
	44	44	10.2	10.0	9.9	9.8	9.1	8.7	8.4
	48	48	9.9	9.7	9.6	9.5	8.8	8.4	8.1

Table 22: Test results conducted power measurement 802.11a

802.11n HT-20 / 802.11ac VHT-20 maximum average conducted output power [dBm]										
Band [MHz]	Ch	MCS-0 6.5Mbps	MCS-1 13Mbps	MCS-2 19.5Mbps	MCS-3 26Mbps	MCS-4 39Mbps	MCS-5 52Mbps	MCS-6 58.5Mbps	MCS-7 65Mbps	MCS-8 78Mbps
5200	36	10.2	9.8	9.7	9.4	9.1	8.7	8.6	8.5	10.2
	40	10.2	9.8	9.7	9.4	9.1	8.7	8.6	8.5	10.2
	44	10.1	9.7	9.6	9.3	9.0	8.6	8.5	8.4	10.1
	48	9.7	9.3	9.2	8.9	8.6	8.2	8.1	8.0	9.7

Table 23: Test results conducted power measurement 802.11n HT-20 / 802.11ac VHT-20

8.1.15 Conducted average power measurements Bluetooth Classic 2.4 GHz

Channel	Frequency (MHz)	Average power (dBm)		
		GFSK	$\pi/4$ DQPSK	8-DPSK
0	2402	8.3	4.7	4.9
39	2441	8.2	4.7	4.8
78	2480	7.3	3.7	3.9

Table 24: Test results conducted average power measurement BLUETOOTH CLASSIC 2.4 GHz

8.1.16 Conducted average power measurements Bluetooth LE 2.4 GHz

Channel	Frequency (MHz)	Average power (dBm)
		GFSK
0	2402	-10.3
19	2440	-9.1
39	2480	-8.7

Table 25: Test results conducted average power measurement Bluetooth LE 2.4 GHz

8.1.17 Test reduction based on technologies sharing the same frequency range

As BT LE and Bluetooth Classic are transmitting in the 2.4 GHz frequency range, only the technology that delivers the larger output power is measured for SAR, representing the worst case scenario of all technologies in the device capabilities.

8.2 SAR test results

8.2.1 General description of test procedures

- The DUT is tested using a test software to control test channels and maximum output power of the DUT.
- The DUT is tested using an and CMW 500 communications testers as controller unit to set test channels and maximum output power to the DUT, as well as for measuring the conducted peak power.
- Test positions as described in the tables below are in accordance with the specified test standard.
- Tests in body position were performed in that configuration, which generates the highest time based averaged output power (see conducted power results).
- WLAN was tested in 802.11a/b mode with 1 MBit/s and 6 MBit/s.
- Required WLAN test channels were selected according to KDB 248227
- The DUT was tested using a CMW 270 communication tester in BT-test mode to adjust maximum output power, test channels and operating mode.
(GFSK - DH5 - STATIC PBRs - 76% duty cycle)
- According to IEC/IEEE 62209-1528 the SAR test shall be performed at the channel producing the highest rated output power.

- When the width of the transmit frequency band ($\Delta f = f_{\text{high}} - f_{\text{low}}$) exceeds 1 % of its centre frequency f_c , the channels at the lowest and highest frequencies of the transmit band shall also be tested.
- When the width of the transmit frequency band exceeds 10 % of its centre frequency. The following formula shall be used to determine the number of channels, N_c , to be tested:

$$N_c = 2 \times \text{roundup} \left[\frac{10 * (f_{\text{high}} - f_{\text{low}})}{f_c} \right] + 1$$

where

f_c is the centre frequency channel of the transmission band in Hz;

f_{high} is the highest frequency channel of the transmission band in Hz;

f_{low} is the lowest frequency channel of the transmission band in Hz;

N_c is the number of channels

- According to KDB 447498 D01 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

8.2.2 Results overview

measured / extrapolated SAR numbers - LTE FDD 2 1900 MHz 0 mm distance											
Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
20MHz BW/1RB/QPSK											
19100	1900	mid	front	24.0	23.4	0.492	0.565	0.281	0.323	0.03	21.5
19100	1900	mid	back	24.0	23.4	0.502	0.576	0.303	0.348	0.06	21.5
19100	1900	mid	left	24.0	23.4	1.270	1.458	0.621	0.713	0.04	21.5
19100	1900	mid	right	24.0	23.4	0.034	0.039	0.020	0.023	0.05	21.5
19100	1900	mid	top	24.0	23.4	0.775	0.890	0.409	0.470	-0.01	21.5
19100	1900	mid	bottom	24.0	23.4	0.007	0.008	0.004	0.005	-0.17	21.5
18700	1860	mid	left	24.0	23.3	1.250	1.469	0.620	0.728	0.14	21.5
18900	1880	mid	left	24.0	22.7	1.290	1.740	0.638	0.861	-0.02	21.5
18700	1860	mid	top	24.0	23.3	0.784	0.921	0.426	0.501	0.03	21.5
18900	1880	mid	top	24.0	22.7	0.870	1.174	0.468	0.631	0.00	21.5
20MHz BW/50%RB/QPSK											
19100	1900	high	front	23.0	22.2	0.384	0.465	0.216	0.261	-0.14	21.5
19100	1900	high	back	23.0	22.2	0.383	0.464	0.230	0.278	0.05	21.5
19100	1900	high	left	23.0	22.2	0.977	1.183	0.477	0.577	0.01	21.5
19100	1900	high	right	23.0	22.2	0.025	0.030	0.014	0.017	0.08	21.5
19100	1900	high	top	23.0	22.2	0.620	0.751	0.327	0.396	-0.06	21.5
19100	1900	high	bottom	23.0	22.2	0.007	0.008	0.004	0.005	-0.16	21.5
20MHz BW/100%RB/QPSK											
19100	1900	low	front	23.0	22.1	0.394	0.486	0.225	0.277	-0.01	21.5
19100	1900	low	back	23.0	22.1	0.394	0.486	0.237	0.292	0.08	21.5
19100	1900	low	left	23.0	22.1	1.010	1.245	0.496	0.612	0.03	21.5
19100	1900	low	right	23.0	22.1	0.028	0.035	0.016	0.020	0.04	21.5
19100	1900	low	top	23.0	22.1	0.640	0.789	0.339	0.418	0.00	21.5
19100	1900	low	bottom	23.0	22.1	0.007	0.009	0.004	0.005	-0.09	21.5

Table 26: Test results limb worn SAR LTE FDD 2 1900 MHz (see max. SAR Test results for LTE plot on page 131.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - LTE FDD 4 1750 MHz 0 mm distance											
Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
15MHz BW/1RB/QPSK											
20175	1732.5	mid	front	24.0	23.7	0.232	0.247	0.139	0.148	0.04	21.8
20175	1732.5	mid	back	24.0	23.7	0.927	0.986	0.495	0.527	0.05	21.8
20175	1732.5	mid	left	24.0	23.7	0.772	0.822	0.381	0.405	-0.12	21.8
20175	1732.5	mid	right	24.0	23.7	0.026	0.028	0.014	0.015	0.08	21.8
20175	1732.5	mid	top	24.0	23.7	0.886	0.943	0.500	0.532	0.10	21.8
20175	1732.5	mid	bottom	24.0	23.7	0.021	0.022	0.013	0.014	0.04	21.8
20025	1717.5	mid	top	24.0	23.0	0.927	1.172	0.536	0.678	0.14	21.8
20325	1747.5	mid	top	24.0	23.3	0.779	0.924	0.426	0.505	0.02	21.8
20MHz BW/50%RB/QPSK											
20175	1732.5	high	front	23.0	22.2	0.151	0.181	0.092	0.110	0.04	21.8
20175	1732.5	high	back	23.0	22.2	0.753	0.903	0.438	0.525	-0.02	21.8
20175	1732.5	high	left	23.0	22.2	0.491	0.589	0.281	0.337	0.01	21.8
20175	1732.5	high	right	23.0	22.2	0.013	0.016	0.006	0.007	0.03	21.8
20175	1732.5	high	top	23.0	22.2	0.709	0.850	0.410	0.492	0.07	21.8
20175	1732.5	high	bottom	23.0	22.2	0.015	0.018	0.009	0.011	0.06	21.8

Table 27: Test results limb worn SAR LTE FDD 4 1750 MHz (see max. SAR Test results for LTE plot on page 132.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - LTE FDD 5 850 MHz 0 mm distance											
Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
10MHz BW/1RB/QPSK											
20525	836.5	mid	front	24.0	23.6	0.133	0.146	0.088	0.096	0.00	22.5
20525	836.5	mid	back	24.0	23.6	0.157	0.172	0.104	0.114	-0.02	22.5
20525	836.5	mid	left	24.0	23.6	0.137	0.150	0.072	0.079	0.11	22.5
20525	836.5	mid	right	24.0	23.6	0.030	0.033	0.021	0.023	0.05	22.5
20525	836.5	mid	top	24.0	23.6	0.663	0.727	0.386	0.423	-0.06	22.5
20525	836.5	mid	bottom	24.0	23.6	0.003	0.003	0.002	0.002	-0.01	22.5
20450	829.0	mid	top	24.0	23.5	0.583	0.654	0.341	0.383	0.07	22.5
20600	844.0	mid	top	24.0	23.6	0.643	0.705	0.378	0.414	0.06	22.5
10MHz BW/50%RB/QPSK											
20525	836.5	low	front	23.0	22.3	0.101	0.118	0.070	0.082	0.03	22.5
20525	836.5	low	back	23.0	22.3	0.129	0.151	0.085	0.100	0.01	22.5
20525	836.5	low	left	23.0	22.3	0.112	0.131	0.059	0.069	0.02	22.5
20525	836.5	low	right	23.0	22.3	0.024	0.028	0.016	0.019	-0.03	22.5
20525	836.5	low	top	23.0	22.3	0.515	0.604	0.300	0.352	0.03	22.5
20525	836.5	low	bottom	23.0	22.3	0.002	0.002	0.001	0.001	0.05	22.5

Table 28: Test results limb worn SAR LTE FDD 5 850 MHz (see max. SAR Test results for LTE plot on page 133.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - LTE FDD 7 2600 MHz 0 mm distance

Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
15MHz BW/1RB/QPSK											
21100	2535.0	mid	front	24.0	23.1	0.251	0.306	0.129	0.157	0.07	20.7
21100	2535.0	mid	back	24.0	23.1	0.187	0.228	0.096	0.117	0.14	20.7
20825	2507.5	mid	left	24.0	22.9	0.667	0.853	0.316	0.404	-0.10	20.7
21100	2535.0	mid	left	24.0	23.1	0.592	0.722	0.272	0.332	-0.12	20.7
21375	2562.5	mid	left	24.0	22.9	0.469	0.611	0.218	0.284	0.02	20.7
21100	2535.0	mid	right	24.0	23.1	0.031	0.038	0.014	0.017	-0.18	20.7
20825	2507.5	mid	top	24.0	22.9	0.697	0.892	0.347	0.444	0.07	20.7
21100	2535.0	mid	top	24.0	23.1	0.584	0.712	0.288	0.351	0.06	20.7
21375	2562.5	mid	top	24.0	22.9	0.370	0.482	0.192	0.250	-0.11	20.7
21100	2535.0	mid	bottom	24.0	23.1	0.002	0.002	0.001	0.001	-0.06	20.7
20MHz BW/50%RB/QPSK											
21100	2535.0	low	front	23.0	21.9	0.235	0.301	0.120	0.154	0.04	20.7
21100	2535.0	low	back	23.0	21.9	0.226	0.289	0.110	0.141	0.12	20.7
21100	2535.0	low	left	23.0	21.9	0.414	0.530	0.196	0.251	0.01	20.7
21100	2535.0	low	right	23.0	21.9	0.023	0.029	0.010	0.013	0.05	20.7
21100	2535.0	low	top	23.0	21.9	0.481	0.615	0.239	0.306	-0.02	20.7
21100	2535.0	low	bottom	23.0	21.9	0.003	0.004	0.001	0.001	-0.16	20.7
20MHz BW/100%RB/QPSK											
20850	2510.0	low	front	23.0	21.8	0.291	0.381	0.150	0.196	0.08	20.7
20850	2510.0	low	back	23.0	21.8	0.198	0.259	0.099	0.130	-0.02	20.7
20850	2510.0	low	left	23.0	21.8	0.430	0.563	0.201	0.263	0.02	20.7
20850	2510.0	low	right	23.0	21.8	0.033	0.043	0.015	0.020	0.15	20.7
20850	2510.0	low	top	23.0	21.8	0.568	0.744	0.278	0.364	0.00	20.7
20850	2510.0	low	bottom	23.0	21.8	0.004	0.005	0.002	0.003	-0.19	20.7

Table 29: Test results limb worn SAR LTE FDD 7 2600 MHz (see max. SAR Test results for LTE plot on page 134.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - LTE FDD 12 700 MHz 0 mm distance											
Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
10MHz BW/1RB/QPSK											
23095	707.5	high	front	24.0	23.4	0.216	0.247	0.150	0.172	-0.07	21.9
23095	707.5	high	back	24.0	23.4	0.359	0.411	0.239	0.274	0.15	21.9
23095	707.5	high	left	24.0	23.4	0.214	0.245	0.136	0.156	-0.03	21.9
23095	707.5	high	right	24.0	23.4	0.027	0.031	0.016	0.018	-0.02	21.9
23095	707.5	high	top	24.0	23.4	0.933	1.069	0.597	0.684	0.05	21.9
23095	707.5	high	bottom	24.0	23.4	0.000	0.000	0.000	0.000	-0.01	21.9
23060	704.0	mid	top	24.0	23.4	0.945	1.088	0.607	0.699	0.19	21.9
23130	711.0	high	top	24.0	23.3	0.912	1.064	0.583	0.680	0.03	21.9
10MHz BW/50%RB/QPSK											
23130	711.0	mid	front	23.0	22.5	0.159	0.180	0.112	0.127	0.07	21.9
23130	711.0	mid	back	23.0	22.5	0.272	0.307	0.182	0.206	-0.02	21.9
23130	711.0	mid	left	23.0	22.5	0.166	0.188	0.105	0.119	0.10	21.9
23130	711.0	mid	right	23.0	22.5	0.027	0.031	0.019	0.021	-0.06	21.9
23130	711.0	mid	top	23.0	22.5	0.710	0.802	0.455	0.514	0.04	21.9
23130	711.0	mid	bottom	23.0	22.5	0.001	0.001	0.000	0.000	0.01	21.9

Table 30: Test results limb worn SAR LTE FDD 12 700 MHz (see max. SAR Test results for LTE plot on page 135.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - LTE FDD 13 750 MHz 0 mm distance											
Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
10MHz BW/1RB/QPSK											
23230	782	high	front	24.0	23.9	0.179	0.184	0.125	0.129	0.02	21.9
23230	782	high	back	24.0	23.9	0.296	0.305	0.199	0.205	-0.01	21.9
23230	782	high	left	24.0	23.9	0.196	0.202	0.124	0.128	0.08	21.9
23230	782	high	right	24.0	23.9	0.018	0.019	0.012	0.012	0.13	21.9
23230	782	high	top	24.0	23.9	0.624	0.643	0.373	0.384	0.09	21.9
23230	782	high	bottom	24.0	23.9	0.004	0.004	0.003	0.003	-0.12	21.9
5MHz BW/1RB/QPSK											
23205	779.5	high	top	24.0	23.4	0.625	0.726	0.376	0.437	-0.11	21.9
23255	784.5	high	top	24.0	23.3	0.633	0.745	0.378	0.445	0.04	21.9
5MHz BW/50%RB/QPSK											
23230	782	high	front	23.0	22.7	0.143	0.154	0.099	0.107	0.05	21.9
23230	782	high	back	23.0	22.7	0.244	0.263	0.162	0.174	0.03	21.9
23230	782	high	left	23.0	22.7	0.150	0.161	0.096	0.103	-0.11	21.9
23230	782	high	right	23.0	22.7	0.015	0.016	0.010	0.011	-0.02	21.9
23230	782	high	top	23.0	22.7	0.507	0.546	0.304	0.327	0.04	21.9
23230	782	high	bottom	23.0	22.7	0.004	0.004	0.002	0.002	0.01	21.9

Table 31: Test results limb worn SAR LTE FDD 13 750 MHz (see max. SAR Test results for LTE plot on page 136.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - LTE FDD 25 1900 MHz 0 mm distance

Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
15MHz BW/1RB/QPSK											
26615	1907.5	mid	front	24.0	23.6	0.563	0.617	0.321	0.352	-0.02	21.5
26615	1907.5	mid	back	24.0	23.6	1.410	1.546	0.735	0.806	0.06	21.5
26615	1907.5	mid	left	24.0	23.6	1.350	1.480	0.653	0.716	-0.08	21.5
26615	1907.5	mid	right	24.0	23.6	0.048	0.053	0.026	0.029	0.01	21.5
26615	1907.5	mid	top	24.0	23.6	0.665	0.729	0.368	0.404	0.15	21.5
26615	1907.5	mid	bottom	24.0	23.6	0.015	0.016	0.009	0.010	-0.07	21.5
26115	1857.5	mid	left	24.0	23.4	1.270	1.458	0.629	0.722	-0.15	21.5
26365	1882.5	mid	left	24.0	23.5	1.420	1.593	0.700	0.785	-0.04	21.5
26115	1857.5	mid	back	24.0	23.4	1.760	2.021	0.907	1.041	0.03	21.5
26365	1882.5	mid	back	24.0	23.5	1.720	1.930	0.894	1.003	0.11	21.5
15MHz BW/50%RB/QPSK											
26615	1907.5	low	front	23.0	22.5	0.445	0.503	0.256	0.289	-0.11	21.5
26615	1907.5	low	back	23.0	22.5	1.230	1.390	0.635	0.717	0.05	21.5
26615	1907.5	low	left	23.0	22.5	1.160	1.311	0.559	0.632	0.00	21.5
26615	1907.5	low	right	23.0	22.5	0.040	0.045	0.022	0.025	-0.13	21.5
26615	1907.5	low	top	23.0	22.5	0.545	0.616	0.301	0.340	-0.01	21.5
26615	1907.5	low	bottom	23.0	22.5	0.013	0.015	0.007	0.008	0.05	21.5
20MHz BW/100%RB/QPSK											
26590	1905	low	front	23.0	22.4	0.465	0.535	0.260	0.299	0.01	21.5
26590	1905	low	back	23.0	22.4	1.150	1.323	0.606	0.697	0.06	21.5
26590	1905	low	left	23.0	22.4	1.080	1.243	0.523	0.602	-0.03	21.5
26590	1905	low	right	23.0	22.4	0.036	0.041	0.019	0.022	0.18	21.5
26590	1905	low	top	23.0	22.4	0.521	0.600	0.290	0.334	-0.02	21.5
26590	1905	low	bottom	23.0	22.4	0.009	0.010	0.005	0.006	0.08	21.5

Table 32: Test results limb worn SAR LTE FDD 25 1900 MHz (see max. SAR Test results for LTE plot on page 137.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - LTE FDD 26 850 MHz 0 mm distance											
Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
15MHz BW/1RB/QPSK											
26865	831.5	mid	front	24.0	23.6	0.152	0.166	0.101	0.110	0.09	22.5
26865	831.5	mid	back	24.0	23.6	0.303	0.331	0.159	0.174	0.19	22.5
26865	831.5	mid	left	24.0	23.6	0.153	0.167	0.081	0.088	0.00	22.5
26865	831.5	mid	right	24.0	23.6	0.024	0.026	0.016	0.017	-0.05	22.5
26865	831.5	mid	top	24.0	23.6	0.620	0.677	0.361	0.394	0.11	22.5
26865	831.5	mid	bottom	24.0	23.6	0.003	0.003	0.002	0.002	-0.03	22.5
26765	821.5	mid	top	24.0	23.4	0.610	0.702	0.354	0.407	-0.01	22.5
26965	841.5	mid	top	24.0	23.2	0.541	0.646	0.313	0.374	0.02	22.5
15MHz BW/50%RB/QPSK											
26865	831.5	mid	front	23.0	22.2	0.114	0.138	0.080	0.097	0.15	22.5
26865	831.5	mid	back	23.0	22.2	0.214	0.260	0.133	0.161	0.04	22.5
26865	831.5	mid	left	23.0	22.2	0.107	0.130	0.066	0.080	-0.09	22.5
26865	831.5	mid	right	23.0	22.2	0.019	0.023	0.013	0.016	0.08	22.5
26865	831.5	mid	top	23.0	22.2	0.493	0.598	0.286	0.347	0.01	22.5
26865	831.5	mid	bottom	23.0	22.2	0.002	0.002	0.001	0.001	-0.13	22.5

Table 33: Test results limb worn SAR LTE FDD 26 850 MHz (see max. SAR Test results for LTE plot on page 138.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - LTE TDD 38 2600 MHz 0 mm distance											
Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
20MHz BW/1RB/QPSK											
38150	2610	mid	front	24.0	23.3	0.226	0.265	0.112	0.131	-0.10	21.6
38150	2610	mid	back	24.0	23.3	0.588	0.689	0.241	0.282	0.10	21.6
38150	2610	mid	left	24.0	23.3	0.357	0.418	0.162	0.190	0.00	21.6
38150	2610	mid	right	24.0	23.3	0.026	0.030	0.012	0.014	0.04	21.6
38150	2610	mid	top	24.0	23.3	0.521	0.611	0.248	0.291	-0.03	21.6
38150	2610	mid	bottom	24.0	23.3	0.003	0.004	0.000	0.000	0.08	21.6
37850	2580	mid	top	24.0	23.2	0.619	0.742	0.299	0.359	0.01	21.6
38000	2595	mid	top	24.0	22.8	0.613	0.812	0.298	0.395	-0.01	21.6
20MHz BW/50%RB/QPSK											
38150	2610	high	front	23.0	21.9	0.167	0.215	0.084	0.108	-0.04	21.6
38150	2610	high	back	23.0	21.9	0.393	0.506	0.180	0.232	0.02	21.6
38150	2610	high	left	23.0	21.9	0.286	0.368	0.133	0.171	-0.01	21.6
38150	2610	high	right	23.0	21.9	0.019	0.024	0.009	0.012	0.00	21.6
38150	2610	high	top	23.0	21.9	0.405	0.522	0.205	0.264	0.05	21.6
38150	2610	high	bottom	23.0	21.9	0.002	0.003	0.000	0.000	0.02	21.6

Table 34: Test results limb worn SAR LTE TDD 38 2600 MHz (see max. SAR Test results for LTE plot on page 140.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - LTE TDD 41 2600 MHz 0 mm distance											
Ch.	Freq. (MHz)	RB offset	Position	cond. P _{max} (dBm)		SAR _{1g} results(W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	meas.	extrap.		
20MHz BW/1RB/QPSK											
39750	2506	mid	front	24.0	23.5	0.322	0.361	0.171	0.192	-0.03	21.6
39750	2506	mid	back	24.0	23.5	1.210	1.358	0.470	0.527	0.04	21.6
39750	2506	mid	left	24.0	23.5	0.441	0.495	0.201	0.226	0.10	21.6
39750	2506	mid	right	24.0	23.5	0.036	0.040	0.016	0.018	-0.13	21.6
39750	2506	mid	top	24.0	23.5	0.563	0.632	0.284	0.319	0.08	21.6
39750	2506	mid	bottom	24.0	23.5	0.002	0.002	0.000	0.000	0.01	21.6
40620	2593	mid	back	24.0	22.9	1.170	1.497	0.456	0.583	0.02	21.6
41490	2680	mid	back	24.0	23.2	1.330	1.595	0.522	0.626	-0.05	21.6
20MHz BW/50%RB/QPSK											
39750	2506	mid	front	23.0	22.2	0.258	0.313	0.137	0.166	0.12	21.6
39750	2506	mid	back	23.0	22.2	0.796	0.966	0.332	0.403	0.08	21.6
39750	2506	mid	left	23.0	22.2	0.329	0.399	0.158	0.192	-0.17	21.6
39750	2506	mid	right	23.0	22.2	0.030	0.036	0.013	0.016	-0.01	21.6
39750	2506	mid	top	23.0	22.2	0.429	0.521	0.219	0.266	0.11	21.6
39750	2506	mid	bottom	23.0	22.2	0.002	0.002	0.000	0.000	-0.01	21.6

Table 35: Test results limb worn SAR LTE TDD 41 2600 MHz (see max. SAR Test results for LTE plot on page 142.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - Bluetooth 2450 MHz										
Ch.	Freq. (MHz)	Position	cond. P _{max} (dBm)		SAR _{1g} results (W/kg)		SAR _{10g} (W/kg)		P _{drift} (dB)	liquid (°C)
			decl.*	meas.	meas.	extrap.	meas.	extrap.		
0	2402	front	9.00	8.30	0.023	0.027	0.012	0.014	-0.04	21.5
0	2402	back	9.00	8.30	0.021	0.025	0.010	0.012	0.02	21.5
0	2402	left	9.00	8.30	0.020	0.023	0.008	0.009	0.03	21.5
39	2441	right	9.00	8.30	0.020	0.023	0.000	0.000	0.01	21.5
39	2441	top	9.00	8.30	0.004	0.005	0.002	0.002	-0.02	21.5
39	2441	bottom	9.00	8.30	0.000	0.000	0.000	0.000	0.04	21.5
39	2441	front	9.00	8.20	0.020	0.024	0.010	0.012	0.03	21.5
78	2480	front	9.00	7.30	0.012	0.018	0.006	0.009	-0.02	21.5

Table 36: Test results limb worn SAR Bluetooth 2450 MHz (see max. SAR Test Results for BT plot on page 143.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - WLAN 2.4 GHz - 0mm													
Ch.	Freq. (MHz)	Test condition	Position	cond. P _{max} (dBm)		SAR _{1g} (W/kg)			SAR _{10g} (W/kg)			P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	100% DF	meas.	extrap.	100% DF		
6	2437	6Mbit/s	front	14.0	13.9	0.509	0.521	0.531	0.261	0.267	0.273	0.00	20.1
6	2437	6Mbit/s	back	14.0	13.9	0.296	0.303	0.309	0.150	0.153	0.157	0.02	20.1
6	2437	6Mbit/s	left	14.0	13.9	0.291	0.298	0.304	0.150	0.153	0.157	-0.13	20.1
6	2437	6Mbit/s	right	14.0	13.9	0.009	0.009	0.009	0.004	0.004	0.004	0.05	20.1
6	2437	6Mbit/s	top	14.0	13.9	0.044	0.045	0.046	0.024	0.025	0.025	0.18	20.1
6	2437	6Mbit/s	bottom	14.0	13.9	0.005	0.005	0.005	0.002	0.002	0.002	-0.03	20.1
1	2412	6Mbit/s	front	14.0	13.5	0.317	0.356	0.363	0.172	0.193	0.197	-0.05	20.1
11	2462	6Mbit/s	front	14.0	13.0	0.208	0.262	0.267	0.112	0.141	0.144	0.10	20.1

Table 37: Test results limb worn SAR WLAN 2450 MHz (see max. SAR Test Results for WLAN 2.4 GHz plot on page 145.)

* - maximum possible output power declared by manufacturer

measured / extrapolated SAR numbers - WLAN 5.2 GHz - 0 mm distance

Ch.	Freq. (MHz)	Test condition	Position	cond. P _{max} (dBm)		SAR _{1g} (W/kg)			SAR _{10g} (W/kg)			P _{drift} (dB)	liquid (°C)
				decl.*	meas.	meas.	extrap.	100% DF	meas.	extrap.	100% DF		
40	5200	6Mbit/s	front	11.0	10.4	2.360	2.710	2.765	0.637	0.731	0.746	0.02	20.1
40	5200	6Mbit/s	back	11.0	10.4	0.258	0.296	0.302	0.106	0.122	0.124	-0.01	20.1
40	5200	6Mbit/s	left	11.0	10.4	5.380	6.177	6.303	1.440	1.653	1.687	-0.10	20.1
40	5200	6Mbit/s	right	11.0	10.4	0.010	0.011	0.012	0.003	0.003	0.004	0.05	20.1
40	5200	6Mbit/s	top	11.0	10.4	0.057	0.065	0.067	0.024	0.028	0.028	0.13	20.1
40	5200	6Mbit/s	bottom	11.0	10.4	0.007	0.008	0.008	0.000	0.000	0.000	0.02	20.1
36	5180	6Mbit/s	left	11.0	10.3	4.880	5.734	5.851	1.300	1.527	1.559	-0.02	20.1
44	5220	6Mbit/s	left	11.0	10.2	5.170	6.216	6.343	1.390	1.671	1.705	0.05	20.1
48	5240	6Mbit/s	left	11.0	9.9	4.490	5.784	5.902	1.220	1.572	1.604	0.01	20.1

Table 38: Test results limb worn SAR WLAN 5.2 GHz (see max. SAR Test Results for WLAN 5.2 GHz plot on page 146.)

* - maximum possible output power declared by manufacturer

8.2.3 Multiple Transmitter Information

The following tables list information which is relevant for the decision if a simultaneous transmit evaluation is necessary according to FCC KDB 447498D01 General RF Exposure Guidance v05.

reported SAR WWAN and WLAN 2.4GHz , ΣSAR evaluation				
Frequency band	Position	SAR _{max} /W/kg		ΣSAR _{10g} <4W/kg
		WWAN	WLAN	
LTE FDD 2	front	0.323	0.273	0.595
	back	0.348	0.157	0.505
	left	0.861	0.157	1.017
	right	0.023	0.004	0.027
	top	0.470	0.025	0.495
	bottom	0.005	0.002	0.007
LTE FDD 4	front	0.148	0.273	0.420
	back	0.527	0.157	0.683
	left	0.405	0.157	0.562
	right	0.015	0.004	0.019
	top	0.678	0.025	0.703
	bottom	0.014	0.002	0.016
LTE FDD 5	front	0.096	0.273	0.369
	back	0.114	0.157	0.271
	left	0.079	0.157	0.236
	right	0.023	0.004	0.027
	top	0.423	0.025	0.448
	bottom	0.002	0.002	0.004
LTE FDD 7	front	0.196	0.273	0.469
	back	0.141	0.157	0.298
	left	0.404	0.157	0.561
	right	0.020	0.004	0.024
	top	0.444	0.025	0.469
	bottom	0.003	0.002	0.005
LTE FDD 12	front	0.172	0.273	0.444
	back	0.274	0.157	0.430
	left	0.156	0.157	0.312
	right	0.021	0.004	0.025
	top	0.699	0.025	0.724
	bottom	0.000	0.002	0.002
LTE FDD 13	front	0.129	0.273	0.401
	back	0.205	0.157	0.362
	left	0.128	0.157	0.284
	right	0.012	0.004	0.017
	top	0.445	0.025	0.470
	bottom	0.003	0.002	0.005
LTE FDD 25	front	0.352	0.273	0.624
	back	1.041	0.157	1.198
	left	0.785	0.157	0.942
	right	0.029	0.004	0.033
	top	0.404	0.025	0.429
	bottom	0.010	0.002	0.012

reported SAR WWAN and WLAN 2.4GHz , ΣSAR evaluation				
Frequency band	Position	SAR _{max} /W/kg		ΣSAR _{10g} <4W/kg
		WWAN	WLAN	
LTE FDD 26	front	0.110	0.273	0.383
	back	0.174	0.157	0.330
	left	0.088	0.157	0.245
	right	0.017	0.004	0.022
	top	0.407	0.025	0.432
	bottom	0.002	0.002	0.004
LTE TDD 38	front	0.131	0.273	0.404
	back	0.282	0.157	0.439
	left	0.190	0.157	0.347
	right	0.014	0.004	0.018
	top	0.395	0.025	0.420
	bottom	0.000	0.002	0.002
LTE TDD 41	front	0.192	0.273	0.464
	back	0.626	0.157	0.783
	left	0.226	0.157	0.382
	right	0.018	0.004	0.022
	top	0.319	0.025	0.344
	bottom	0.000	0.002	0.002

Table 39: SAR_{max} WWAN and **WLAN 2.4GHz**, ΣSAR evaluation

reported SAR WWAN and WLAN 5GHz , Σ SAR evaluation				
Frequency band	Position	SAR _{max} /W/kg		Σ SAR _{10g} <4W/kg
		WWAN	WLAN	
LTE FDD 2	front	0.323	0.746	1.069
	back	0.348	0.124	0.472
	left	0.861	1.705	2.566
	right	0.023	0.004	0.026
	top	0.470	0.028	0.498
	bottom	0.005	0.000	0.005
LTE FDD 4	front	0.148	0.746	0.894
	back	0.527	0.124	0.651
	left	0.405	1.705	2.111
	right	0.015	0.004	0.018
	top	0.678	0.028	0.706
	bottom	0.014	0.000	0.014
LTE FDD 5	front	0.096	0.746	0.843
	back	0.114	0.124	0.238
	left	0.079	1.705	1.784
	right	0.023	0.004	0.027
	top	0.423	0.028	0.451
	bottom	0.002	0.000	0.002
LTE FDD 7	front	0.196	0.746	0.943
	back	0.141	0.124	0.265
	left	0.404	1.705	2.109
	right	0.020	0.004	0.024
	top	0.444	0.028	0.472
	bottom	0.003	0.000	0.003
LTE FDD 12	front	0.172	0.746	0.918
	back	0.274	0.124	0.398
	left	0.156	1.705	1.861
	right	0.021	0.004	0.025
	top	0.699	0.028	0.727
	bottom	0.000	0.000	0.000
LTE FDD 13	front	0.129	0.746	0.875
	back	0.205	0.124	0.329
	left	0.128	1.705	1.833
	right	0.012	0.004	0.016
	top	0.445	0.028	0.473
	bottom	0.003	0.000	0.003
LTE FDD 25	front	0.352	0.746	1.098
	back	1.041	0.124	1.166
	left	0.785	1.705	2.490
	right	0.029	0.004	0.032
	top	0.404	0.028	0.432
	bottom	0.010	0.000	0.010
LTE FDD 26	front	0.110	0.746	0.857
	back	0.174	0.124	0.298
	left	0.088	1.705	1.794
	right	0.017	0.004	0.021
	top	0.407	0.028	0.435
	bottom	0.002	0.000	0.002
LTE TDD 38	front	0.131	0.746	0.878
	back	0.282	0.124	0.407
	left	0.190	1.705	1.895
	right	0.014	0.004	0.018
	top	0.395	0.028	0.423
	bottom	0.000	0.000	0.000
LTE TDD 41	front	0.192	0.746	0.938
	back	0.626	0.124	0.750
	left	0.226	1.705	1.931
	right	0.018	0.004	0.021
	top	0.319	0.028	0.347
	bottom	0.000	0.000	0.000

Table 40: SAR_{max} WWAN and **WLAN 5GHz**, Σ SAR evaluation

reported SAR WWAN and Bluetooth 2.4GH , ΣSAR evaluation				
Frequency band	Position	SAR _{max} /W/kg		ΣSAR _{10g} <4W/kg
		WWAN	BT	
LTE FDD 2	front	0.323	0.014	0.337
	back	0.348	0.012	0.360
	left	0.861	0.009	0.870
	right	0.023	0.000	0.023
	top	0.470	0.002	0.472
	bottom	0.005	0.000	0.005
LTE FDD 4	front	0.148	0.014	0.162
	back	0.527	0.012	0.538
	left	0.405	0.009	0.415
	right	0.015	0.000	0.015
	top	0.678	0.002	0.680
	bottom	0.014	0.000	0.014
LTE FDD 5	front	0.096	0.014	0.111
	back	0.114	0.012	0.126
	left	0.079	0.009	0.088
	right	0.023	0.000	0.023
	top	0.423	0.002	0.426
	bottom	0.002	0.000	0.002
LTE FDD 7	front	0.196	0.014	0.210
	back	0.141	0.012	0.153
	left	0.404	0.009	0.413
	right	0.020	0.000	0.020
	top	0.444	0.002	0.446
	bottom	0.003	0.000	0.003
LTE FDD 12	front	0.172	0.014	0.186
	back	0.274	0.012	0.286
	left	0.156	0.009	0.165
	right	0.021	0.000	0.021
	top	0.699	0.002	0.701
	bottom	0.000	0.000	0.000
LTE FDD 13	front	0.129	0.014	0.143
	back	0.205	0.012	0.217
	left	0.128	0.009	0.137
	right	0.012	0.000	0.012
	top	0.445	0.002	0.447
	bottom	0.003	0.000	0.003
LTE FDD 25	front	0.352	0.014	0.366
	back	1.041	0.012	1.053
	left	0.785	0.009	0.794
	right	0.029	0.000	0.029
	top	0.404	0.002	0.406
	bottom	0.010	0.000	0.010
LTE FDD 26	front	0.110	0.014	0.124
	back	0.174	0.012	0.185
	left	0.088	0.009	0.098
	right	0.017	0.000	0.017
	top	0.407	0.002	0.409
	bottom	0.002	0.000	0.002
LTE TDD 38	front	0.131	0.014	0.145
	back	0.282	0.012	0.294
	left	0.190	0.009	0.199
	right	0.014	0.000	0.014
	top	0.395	0.002	0.397
	bottom	0.000	0.000	0.000
LTE TDD 41	front	0.192	0.014	0.206
	back	0.626	0.012	0.638
	left	0.226	0.009	0.235
	right	0.018	0.000	0.018
	top	0.319	0.002	0.321
	bottom	0.000	0.000	0.000

Table 41: SAR_{max} WWAN and **Bluetooth 2.4GHz**, ΣSAR evaluation

reported SAR WWAN, BT and WLAN 5GHz, Σ SAR evaluation, SPLSRi					
Frequency band	Position	SAR _{max} /W/kg			Σ SAR _{10g} <4W/kg
		WWAN	BT	WLAN	
LTE FDD 2	front	0.323	0.014	0.746	1.083
	back	0.348	0.012	0.124	0.484
	left	0.861	0.009	1.705	2.575
	right	0.023	0.000	0.004	0.026
	top	0.470	0.002	0.028	0.500
	bottom	0.005	0.000	0.000	0.005
LTE FDD 4	front	0.148	0.014	0.746	0.908
	back	0.527	0.012	0.124	0.663
	left	0.405	0.009	1.705	2.120
	right	0.015	0.000	0.004	0.018
	top	0.678	0.002	0.028	0.708
	bottom	0.014	0.000	0.000	0.014
LTE FDD 5	front	0.096	0.014	0.746	0.857
	back	0.114	0.012	0.124	0.250
	left	0.079	0.009	1.705	1.794
	right	0.023	0.000	0.004	0.027
	top	0.423	0.002	0.028	0.454
	bottom	0.002	0.000	0.000	0.002
LTE FDD 7	front	0.196	0.014	0.746	0.957
	back	0.141	0.012	0.124	0.277
	left	0.404	0.009	1.705	2.119
	right	0.020	0.000	0.004	0.024
	top	0.444	0.002	0.028	0.474
	bottom	0.003	0.000	0.000	0.003
LTE FDD 12	front	0.172	0.014	0.746	0.932
	back	0.274	0.012	0.124	0.410
	left	0.156	0.009	1.705	1.870
	right	0.021	0.000	0.004	0.025
	top	0.699	0.002	0.028	0.729
	bottom	0.000	0.000	0.000	0.000
LTE FDD 13	front	0.129	0.014	0.746	0.889
	back	0.205	0.012	0.124	0.341
	left	0.128	0.009	1.705	1.842
	right	0.012	0.000	0.004	0.016
	top	0.445	0.002	0.028	0.475
	bottom	0.003	0.000	0.000	0.003
LTE FDD 25	front	0.352	0.014	0.746	1.112
	back	1.041	0.012	0.124	1.177
	left	0.785	0.009	1.705	2.500
	right	0.029	0.000	0.004	0.032
	top	0.404	0.002	0.028	0.434
	bottom	0.010	0.000	0.000	0.010
LTE FDD 26	front	0.110	0.014	0.746	0.871
	back	0.174	0.012	0.124	0.309
	left	0.088	0.009	1.705	1.803
	right	0.017	0.000	0.004	0.021
	top	0.407	0.002	0.028	0.437
	bottom	0.002	0.000	0.000	0.002
LTE TDD 38	front	0.131	0.014	0.746	0.892
	back	0.282	0.012	0.124	0.418
	left	0.190	0.009	1.705	1.905
	right	0.014	0.000	0.004	0.018
	top	0.395	0.002	0.028	0.425
	bottom	0.000	0.000	0.000	0.000
LTE TDD 41	front	0.192	0.014	0.746	0.952
	back	0.626	0.012	0.124	0.762
	left	0.226	0.009	1.705	1.940
	right	0.018	0.000	0.004	0.021
	top	0.319	0.002	0.028	0.349
	bottom	0.000	0.000	0.000	0.000

Table 42: SAR_{max} WWAN, BT and WLAN 5GHz, Σ SAR evaluation

Conclusion:

$\Sigma\text{SAR} < 4 \text{ W/kg}$, therefore simultaneous transmissions SAR measurement with the enlarged zoom scan measurement and volume scan post-processing procedures is **not** required.

8.2.4 SAR correction for deviations of complex permittivity from targets

The max reported SAR values are once more corrected wherever the deviation of the liquid parameters is larger than $\pm 5\%$.

According IEC / IEEE 62209-1528 chapter 7.8.2 SAR correction formula

there is a linear relationship between the percentage change in SAR (denoted ΔSAR) and the percentage change in the permittivity and conductivity from the target values (denoted $\Delta\epsilon$ and $\Delta\sigma$, respectively).

The relationship is given by:

$$\Delta\text{SAR} = c_{\epsilon}\Delta\epsilon + c_{\sigma}\Delta\sigma$$

where

$c_{\epsilon} = \partial (\Delta\text{SAR}) / \partial (\Delta\epsilon)$ is the coefficient representing the sensitivity of SAR to permittivity where SAR is normalized to output power;

$c_{\sigma} = \partial (\Delta\text{SAR}) / \partial (\Delta\sigma)$ is the coefficient representing the sensitivity of SAR to conductivity, where SAR is normalized to output power.

The values of c_{ϵ} and c_{σ} have a simple relationship with frequency that can be described using polynomial equations. For dipole antennas at frequencies from 4 MHz to 6 GHz, the **1 g averaged SAR** c_{ϵ} and c_{σ} are given by

$$\begin{aligned} c_{\epsilon} &= -7.854 \times 10^{-4} \times f^3 + 9.402 \times 10^{-3} \times f^2 - 2.742 \times 10^{-2} \times f - 0.2026 \\ c_{\sigma} &= 9.804 \times 10^{-3} \times f^3 - 8.661 \times 10^{-2} \times f^2 + 2.981 \times 10^{-2} \times f + 0.7829 \end{aligned}$$

where f is the frequency in GHz. Above 6 GHz, the sensitivity is non-varying with frequency due to the small penetration depth; the values of $c_{\epsilon} = -0,198$ and $c_{\sigma} = 0$ shall be used.

For frequencies from 4 MHz to 6 GHz, the **10 g averaged SAR** c_{ϵ} and c_{σ} are given by:

$$\begin{aligned} c_{\epsilon} &= 3.456 \times 10^{-3} \times f^3 - 3.531 \times 10^{-2} \times f^2 + 7.675 \times 10^{-2} \times f - 0.1860 \\ c_{\sigma} &= 4.479 \times 10^{-3} \times f^3 - 1.586 \times 10^{-2} \times f^2 - 0.1972 \times f + 0.7717 \end{aligned}$$

where f is the frequency in GHz. Above 6 GHz, the sensitivity is non-varying with frequency due to the small penetration depth; the values of $c_{\epsilon} = -0,250$ and $c_{\sigma} = 0$ shall be used.

NOTE:

The Tables in the uncertainties of this report are updated accordingly with the values from table 6 – Root-mean-squared error SAR correction formula as a function of the maximum change in permittivity or conductivity:

Max. change in ϵ or σ	RMS uncertainty for SAR _{1g} %	RMS uncertainty for SAR _{10g} %
$\pm 5 \%$	1.2	0.97
$\pm 10 \%$	1.9	1.6

NOTE:

The DASY software is capable of directly correcting the measured values according to the above-described procedure, fully compliant to IEC / IEEE 62209-1528, so that no further evaluation is necessary.

9 Test equipment and ancillaries used for tests

To simplify the identification of the test equipment and/or ancillaries which were used, the reporting of the relevant test cases only refer to the test item number as specified in the table below.

Equipment	Type	Manufacturer	Serial No.	Last Calibration	Frequency (months)
Dosimetric E-Field Probe	EX3DV4	Schmid & Partner Engineering AG	3944	May 16, 2025	12
750 MHz System Validation Dipole	D750V3	Schmid & Partner Engineering AG	1041	May 11, 2023	36
835 MHz System Validation Dipole	D835V2	Schmid & Partner Engineering AG	4d153	May 11, 2023	36
1750 MHz System Validation Dipole	D1750V2	Schmid & Partner Engineering AG	1093	August 15, 2024	36
1900 MHz System Validation Dipole	D1900V2	Schmid & Partner Engineering AG	5d009	May 12, 2023	36
2450 MHz System Validation Dipole	D2450V2	Schmid & Partner Engineering AG	710	May 07, 2025	36
2600 MHz System Validation Dipole	D2600V2	Schmid & Partner Engineering AG	1040	May 11, 2023	36
5 GHz System Validation Dipole	D5GHzV2	Schmid & Partner Engineering AG	1055	May 16, 2024	36
Data acquisition electronics	DAE4	Schmid & Partner Engineering AG	477	May 12, 2025	12
Software	V16.4.0.5005	Schmid & Partner Engineering AG	---	N/A	--
Phantom ELI 8.0	QD OVA 004 AA	Schmid & Partner Engineering AG	2101	N/A	--
Universal Radio Communication Tester	CMW500	Rohde & Schwarz	166977	December 13, 2023	24
Bluetooth Tester	CMW270	Rohde & Schwarz	102550	December 6, 2023	24
Network Analyser 300 kHz to 6 GHz	8753ES	Agilent Technologies)*	US39174 436	December 14, 2023	24
Dielectric Assessment Kit (DAK)	DAK 200MHz – 20GHz Package	Schmid & Partner Engineering AG	1127	N/A	--
Powersource1	SE UMS 160 CC	Schmid & Partner Engineering AG	4342	May 15, 2024	24
Signal Generator	8671B	Hewlett Packard	2823A006 56	December 10, 2024	24
Signal Generator	SML03	Rohde & Schwarz	102519	December 05, 2023	24
RF Power Amplifier	ZHL-42	Mini circuits	N/A	N/A	--
Power Meter	NRP	Rohde & Schwarz	101367	December 05, 2024	12
Power Meter Sensor	NRP Z22	Rohde & Schwarz	100227	December 03, 2024	12
Power Meter Sensor	NRP Z22	Rohde & Schwarz	100234	December 03, 2024	12
Directional Coupler	778D	Hewlett Packard	19171	December 05, 2024	12

)* : Network analyzer probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.

10 Observations

No observations exceeding those reported with the single test cases have been made.

Annex A: System performance check

Date/Time: 2025-09-02, 15:08 2025-09-02, 15:13

SystemPerformanceCheck-D750**DUT: Dipole; Type: D750V3; Serial: SN1041**

Communication System: CW; Communication System Frequency: 750.0 MHz

Medium parameters used: $f = 750.0$ MHz, $\sigma = 0.917$ S/m; $\epsilon_r = 41.0$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(9.46, 9.79, 9.67); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/750.0MHz/Area Scan (10.0 x 15.0 x 1.0) :

Grid Extents [mm]: 40.0 x 90.0

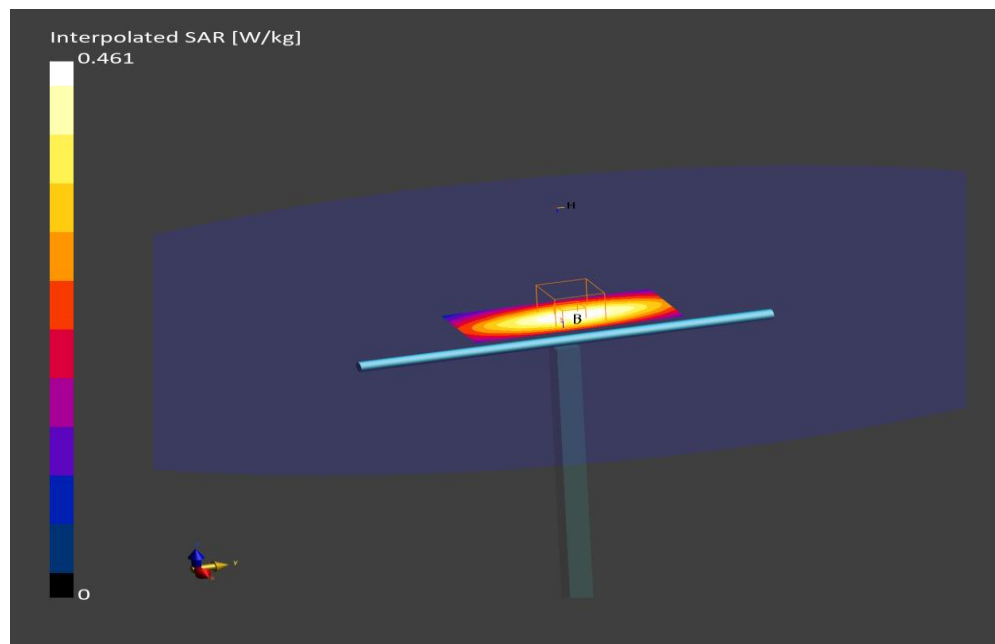
Maximum value of SAR (interpolated) - SAR(1 g) = 0.401 W/kg; SAR(10 g) = 0.267 W/kg

HBBL-600-10000/750.0MHz/Zoom Scan (6.0 x 6.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

SPCPower = 17.0 dBm

Power Drift = 0.16 dB

SAR(1 g) = 0.411 W/kg; SAR(10 g) = 0.271 W/kg**Additional information:**

ambient temperature: 22.7°C; liquid temperature: 21.9°C;

SystemPerformanceCheck-D835**DUT: Dipole; Type: D835V2; Serial: SN4d153**

Communication System: CW; Communication System Frequency: 835.0 MHz

Medium parameters used: $f = 835.0$ MHz, $\sigma = 0.955$ S/m; $\epsilon_r = 42.2$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(8.97, 9.29, 9.17); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/835.0MHz/Area Scan (10.0 x 15.0 x 1.0) :

Grid Extents [mm]: 40.0 x 90.0

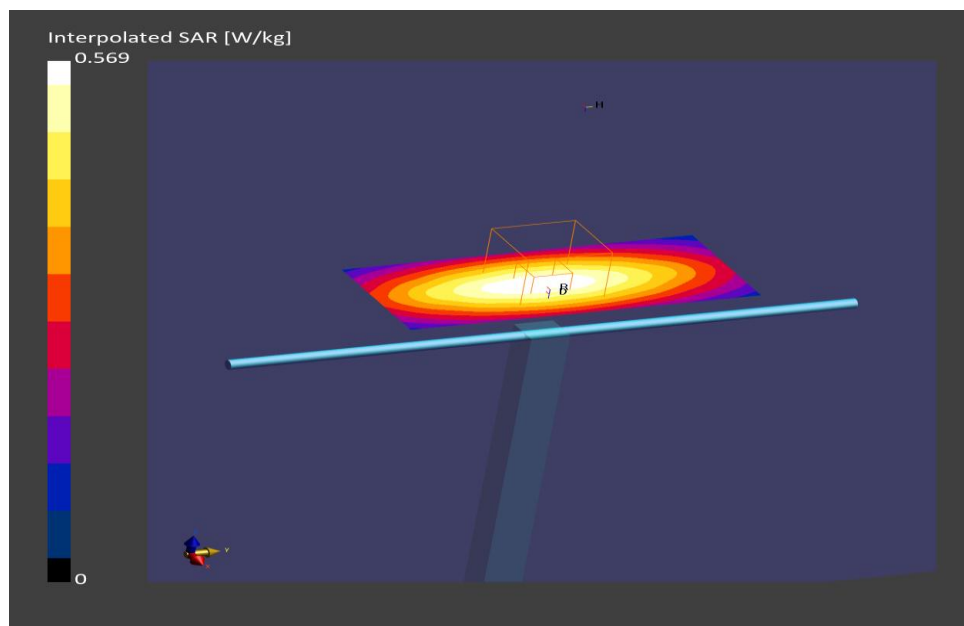
Maximum value of SAR (interpolated) - SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.324 W/kg

HBBL-600-10000/835.0MHz/Zoom Scan (6.0 x 6.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

SPC Power = 17.0 dBm

Power Drift = 0.03 dB

SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.325 W/kg**Additional information:**

ambient temperature: 23.2°C; liquid temperature: 22.5°C;

SystemPerformanceCheck-D1750**DUT: Dipole; Type: D1750V2; Serial: SN1093**

Communication System: CW; Communication System Frequency: 1750.0 MHz

Medium parameters used: $f = 1750.0$ MHz, $\sigma = 1.36$ S/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(8.0, 8.29, 8.19); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/1750.0MHz/Area Scan (10.0 x 15.0 x 1.0) :

Grid Extents [mm]: 40.0 x 90.0

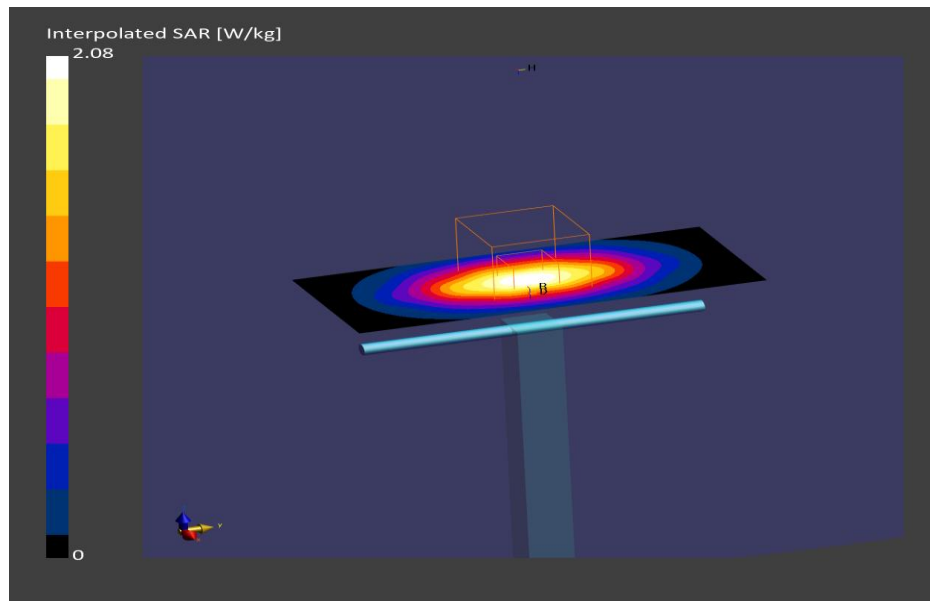
Maximum value of SAR (interpolated) - SAR(1 g) = 1.67 W/kg; SAR(10 g) = 0.893 W/kg

HBBL-600-10000/1750.0MHz/Zoom Scan (6.0 x 6.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

SPCPower = 17.0 dBm

Power Drift = -0.04 dB

SAR(1 g) = 1.66 W/kg; SAR(10 g) = 0.885 W/kg**Additional information:**

ambient temperature: 22.5°C; liquid temperature: 21.8°C;

SystemPerformanceCheck-D1900

DUT: Dipole; Type: D1900V2; Serial: SN5d009

Communication System: CW; Communication System Frequency: 1900.0 MHz

Medium parameters used: $f = 1900.0$ MHz, $\sigma = 1.46$ S/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.67, 7.94, 7.85); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/1900.0MHz/Area Scan (10.0 x 15.0 x 1.0) :

Grid Extents [mm]: 40.0 x 90.0

Maximum value of SAR (interpolated) - SAR(1 g) = 1.98 W/kg; SAR(10 g) = 1.03 W/kg

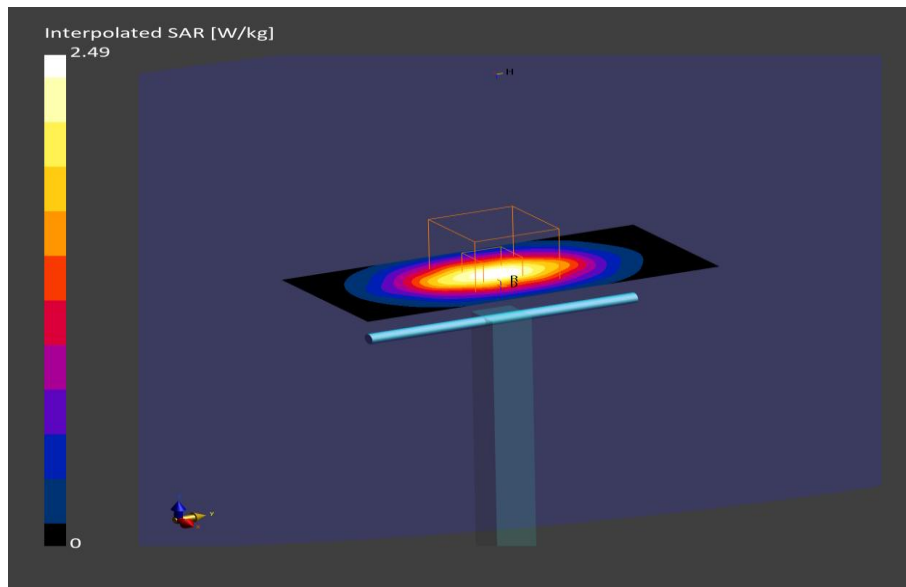
HBBL-600-10000/1900.0MHz/Zoom Scan (6.0 x 6.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

SPC Power = 17.0 dBm

Power Drift = -0.01 dB

SAR(1 g) = 1.95 W/kg; SAR(10 g) = 1.02 W/kg



Additional information:

ambient temperature: 21.9°C; liquid temperature: 21.5°C;

SystemPerformanceCheck-D2450

DUT: Dipole; Type: D2450V2; Serial: SN710

Communication System: CW; Communication System Frequency: 2450.0 MHz

Medium parameters used: $f = 2450.0$ MHz, $\sigma = 1.84$ S/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.53, 7.8, 7.71); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/2450.0MHz/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 40.0 x 80.0

Maximum value of SAR (interpolated) - SAR(1 g) = 5.26 W/kg; SAR(10 g) = 2.45 W/kg

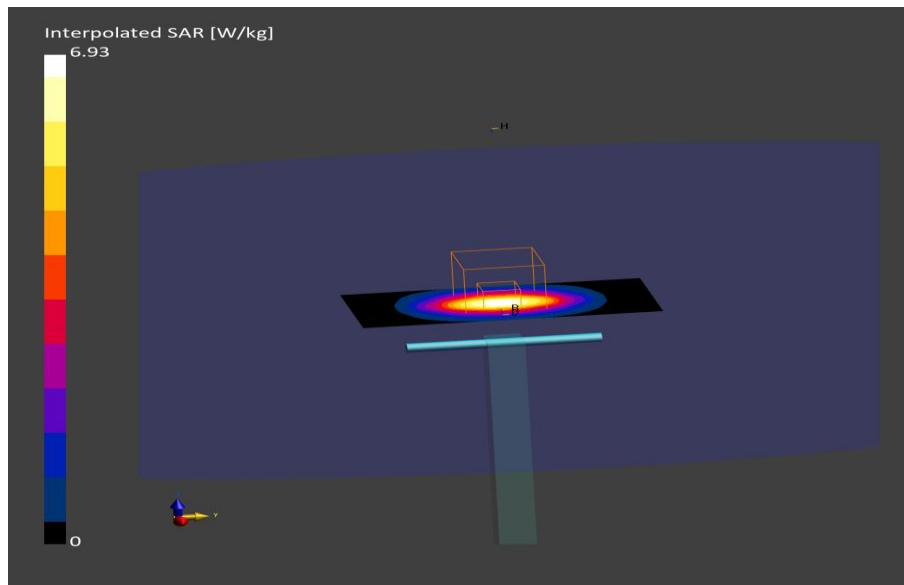
HBBL-600-10000/2450.0MHz/Zoom Scan (5.0 x 5.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

SPCPower = 20.0 dBm

Power Drift = 0.02 dB

SAR(1 g) = 5.25 W/kg; SAR(10 g) = 2.47 W/kg



Additional information:

ambient temperature: 20.8°C; liquid temperature: 20.1°C;

SystemPerformanceCheck-D2450**DUT: Dipole; Type: D2450V2; Serial: SN710**

Communication System: CW; Communication System Frequency: 2450.0 MHz

Medium parameters used: $f = 2450.0$ MHz, $\sigma = 1.81$ S/m; $\epsilon_r = 38.1$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.53, 7.8, 7.71); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/2450.0MHz/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 40.0 x 80.0

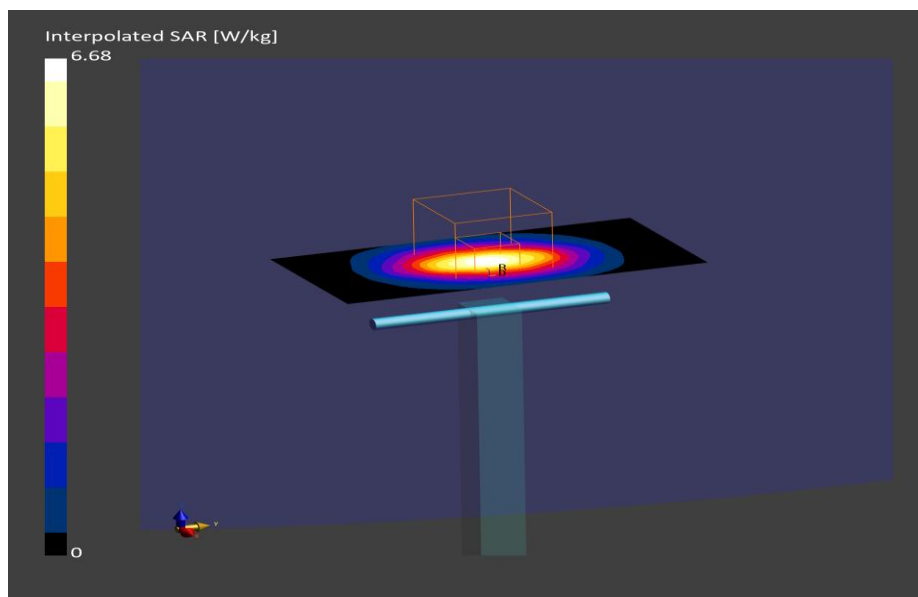
Maximum value of SAR (interpolated) - SAR(1 g) = 5.06 W/kg; SAR(10 g) = 2.37 W/kg

HBBL-600-10000/2450.0MHz/Zoom Scan (5.0 x 5.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

SPCPower = 20.0 dBm

Power Drift = -0.12 dB

SAR(1 g) = 4.89 W/kg; SAR(10 g) = 2.30 W/kg**Additional information:**

ambient temperature: 22.1°C; liquid temperature: 21.5°C;

SystemPerformanceCheck-D2600

DUT: Dipole; Type: D2600V2; Serial: SN1040

Communication System: CW; Communication System Frequency: 2600.0 MHz

Medium parameters used: $f = 2600.0$ MHz, $\sigma = 1.96$ S/m; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.31, 7.57, 7.48); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/2600.0MHz/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 40.0 x 80.0

Maximum value of SAR (interpolated) - SAR(1 g) = 5.30 W/kg; SAR(10 g) = 2.39 W/kg

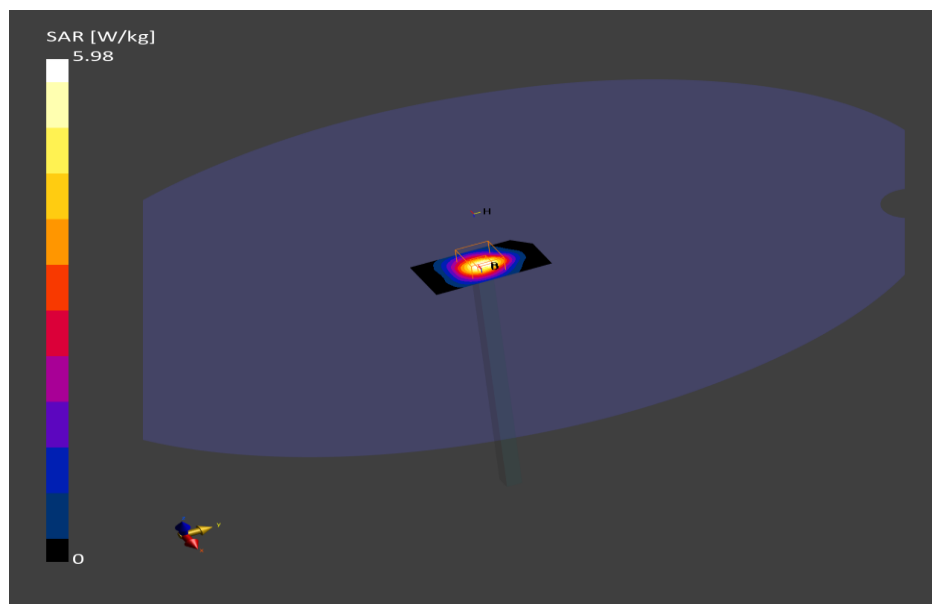
HBBL-600-10000/2600.0MHz/Zoom Scan (5.0 x 5.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

SPC Power = 20.0 dBm

Power Drift = 0.03 dB

SAR(1 g) = 5.35 W/kg; SAR(10 g) = 2.43 W/kg



Additional information:

ambient temperature: 21.9°C; liquid temperature: 20.7°C;

SystemPerformanceCheck-D2600

DUT: Dipole; Type: D2600V2; Serial: SN1040

Communication System: CW; Communication System Frequency: 2600.0 MHz

Medium parameters used: $f = 2600.0$ MHz, $\sigma = 1.93$ S/m; $\epsilon_r = 37.9$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.31, 7.57, 7.48); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/2600.0MHz/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 40.0 x 80.0

Maximum value of SAR (interpolated) - SAR(1 g) = 5.52 W/kg; SAR(10 g) = 2.48 W/kg

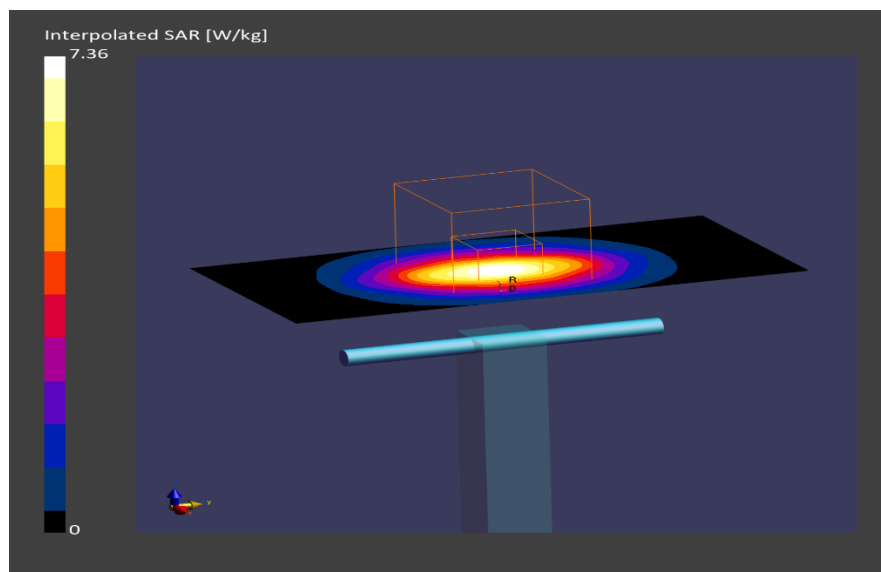
HBBL-600-10000/2600.0MHz/Zoom Scan (5.0 x 5.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

SPCPower = 20.0 dBm

Power Drift = -0.16 dB

SAR(1 g) = 5.25 W/kg; SAR(10 g) = 2.37 W/kg



Additional information:

ambient temperature: 22.4°C; liquid temperature: 21.6°C;

SystemPerformanceCheck-D5.2GHz

DUT: Dipole; Type: D5GHzV2; Serial: SN1055

Communication System: CW; Communication System Frequency: 5200.0 MHz

Medium parameters used: $f = 5200.0$ MHz, $\sigma = 4.36$ S/m; $\epsilon_r = 35.1$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(5.48, 5.68, 5.61); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/5200.0MHz/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 40.0 x 80.0

Maximum value of SAR (interpolated) - SAR(1 g) = 7.21 W/kg; SAR(10 g) = 2.09 W/kg

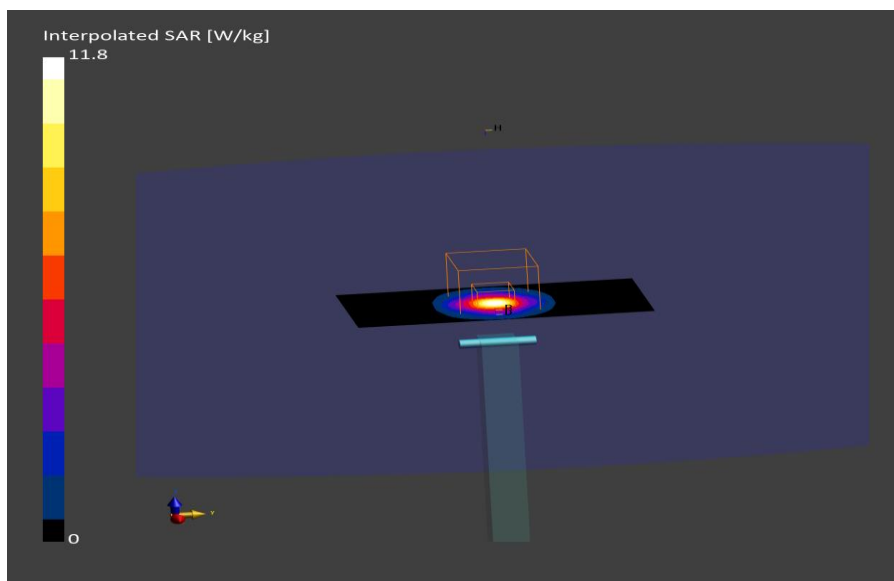
HBBL-600-10000/5200.0MHz/Zoom Scan (4.0 x 4.0 x 1.4) :

Grid Extents [mm]: 22.0 x 22.0 x 22.0

SPC Power = 20.0 dBm

Power Drift = -0.07 dB

SAR(1 g) = 7.94 W/kg; SAR(10 g) = 2.33 W/kg



Additional information:

ambient temperature: 20.8°C; liquid temperature: 20.1°C;

SystemPerformanceCheck-D5GHz

DUT: Dipole; Type: D5GHzV2; Serial: SN1055

Communication System: CW; Communication System Frequency: 5200.0 MHz

Medium parameters used: $f = 5200.0$ MHz, $\sigma = 4.49$ S/m; $\epsilon_r = 35.2$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(5.48, 5.68, 5.61); Calibrated: 2025-05-16
- Sensor-Surface: 1.4 mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/5200.0MHz/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 40.0 x 80.0

Maximum value of SAR (interpolated) - SAR(1 g) = 3.66 W/kg; SAR(10 g) = 1.06 W/kg

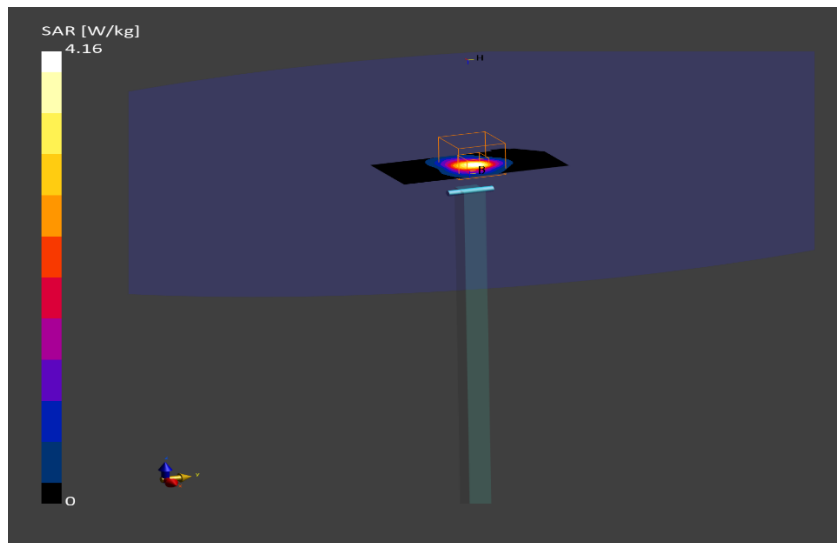
HBBL-600-10000/5200.0MHz/Zoom Scan (4.0 x 4.0 x 1.4) :

Grid Extents [mm]: 22.0 x 22.0 x 22.0

SPC Power = 17.0 dBm

Power Drift = -0.00 dB

SAR(1 g) = 3.84 W/kg; SAR(10 g) = 1.11 W/kg



Additional information:

ambient temperature: 21.9°C; liquid temperature: 20.5°C;

Annex B: DASY measurement results

SAR plots for **the highest measured SAR** in each exposure configuration, wireless mode and frequency band combination according to FCC KDB 865664 D02

Annex B.1: SAR Test results for LTE

Date/Time: 2025-08-28, 13:45 2025-08-28, 13:50

IEEE/IEC_1528/62209 LTE FDD 2**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO;

Communication System Band: Band 2; Communication System Frequency: 1880.0 MHz

Medium parameters used: $f = 1880.0$ MHz, $\sigma = 1.45$ S/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.67, 7.94, 7.85); Calibrated: 2025-05-16

- Sensor-Surface: 1.4mm

- DAE: DAE4 Sn477; Calibrated: 2025-05-12

- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;

- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE LEFT, 0 mm - Channel 18900/Area Scan (15.0 x 15.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.590 W/kg

HBBL-600-10000/EDGE LEFT, 0 mm - Channel 18900/Zoom Scan (6.0 x 6.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

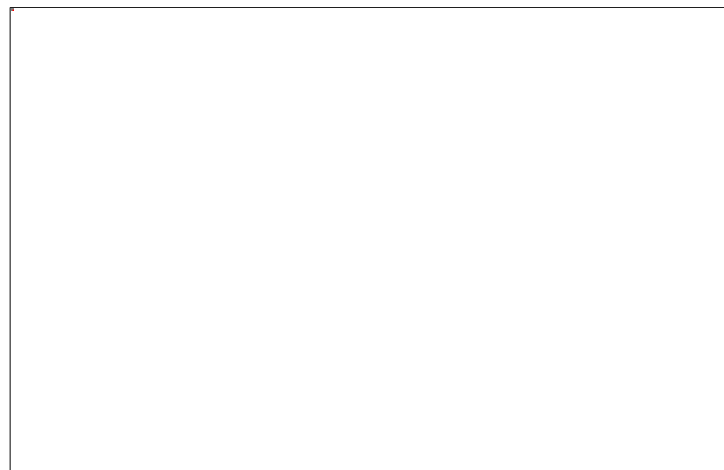
Power Drift = -0.02 dB

SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.638 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 9.7

M2/M1 [%]: 80.6

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 23.3°C; liquid temperature: 21.5°C;

IEEE/IEC_1528/62209 LTE FDD 4**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO;

Communication System Band: Band 4; Communication System Frequency: 1717.5 MHz

Medium parameters used: $f = 1717.5$ MHz, $\sigma = 1.34$ S/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(8.0, 8.29, 8.19); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/BACK, 0 mm - Channel 20025/Area Scan (15.0 x 15.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.956 W/kg; SAR(10 g) = 0.565 W/kg

HBBL-600-10000/BACK, 0 mm - Channel 20025/Zoom Scan (6.0 x 6.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

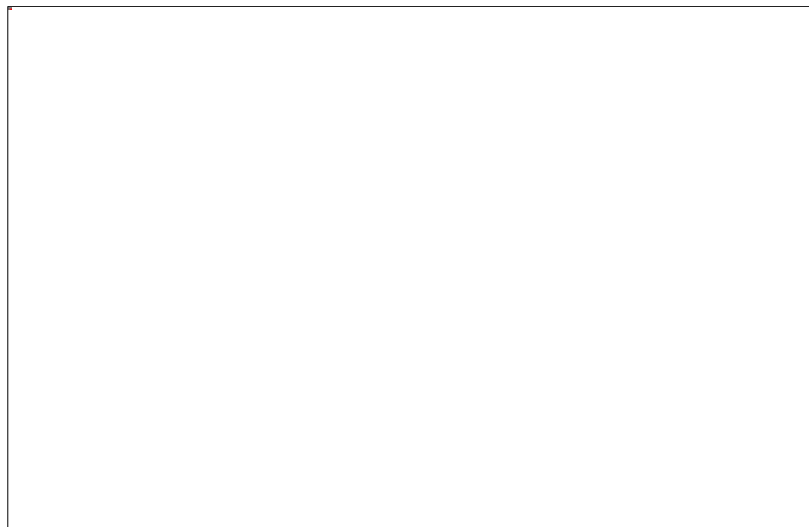
Power Drift = 0.14 dB

SAR(1 g) = 0.927 W/kg; SAR(10 g) = 0.536 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 9.9

M2/M1 [%]: 78.6

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 22.5°C; liquid temperature: 21.8°C;

IEEE/IEC_1528/62209 LTE FDD 5**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO;

Communication System Band: Band 5; Communication System Frequency: 836.5 MHz

Medium parameters used: $f = 836.5$ MHz, $\sigma = 0.956$ S/m; $\epsilon_r = 42.2$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(8.97, 9.29, 9.17); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE TOP, 0 mm - Channel 20525/Area Scan (15.0 x 15.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.606 W/kg; SAR(10 g) = 0.384 W/kg

HBBL-600-10000/EDGE TOP, 0 mm - Channel 20525/Zoom Scan (6.0 x 6.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

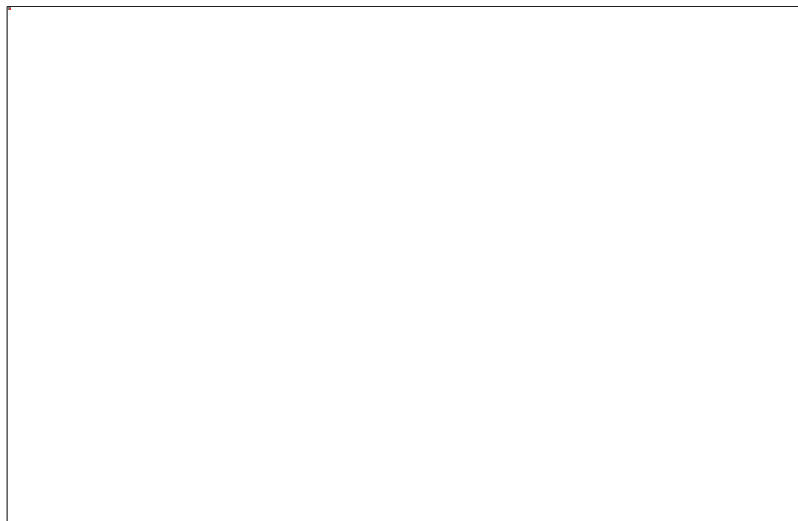
Power Drift = -0.06 dB

SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.386 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 10.8

M2/M1 [%]: 81.3

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 23.2°C; liquid temperature: 22.5°C;

IEEE/IEC_1528/62209 LTE FDD 7**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO;

Communication System Band: Band 7; Communication System Frequency: 2507.5 MHz

Medium parameters used: $f = 2507.5$ MHz, $\sigma = 1.89$ S/m; $\epsilon_r = 39.4$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.31, 7.57, 7.48); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE TOP, 0 mm - Channel 20825/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.687 W/kg; SAR(10 g) = 0.339 W/kg

HBBL-600-10000/EDGE TOP, 0 mm - Channel 20825/Zoom Scan (3.75 x 3.75 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

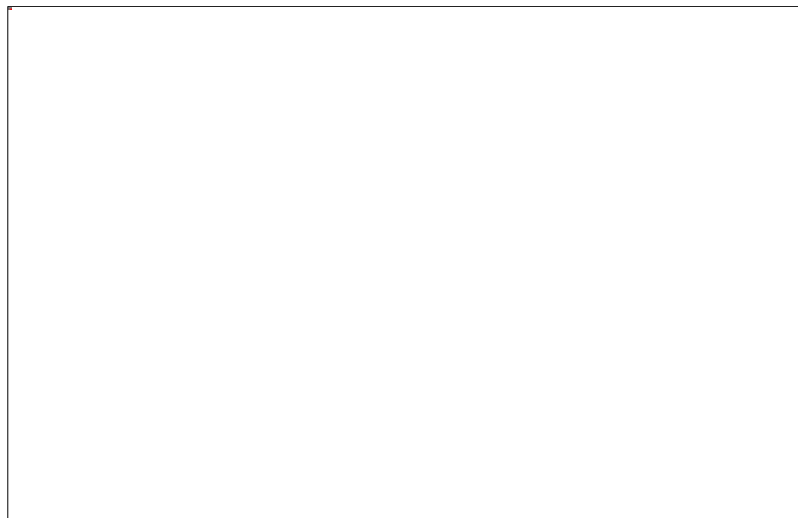
Power Drift = 0.07 dB

SAR(1 g) = 0.697 W/kg; SAR(10 g) = 0.347 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 10.5

M2/M1 [%]: 79.0

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 22.3°C; liquid temperature: 20.7°C;

IEEE/IEC_1528/62209 LTE FDD 12**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO;

Communication System Band: Band 12; Communication System Frequency: 704.0 MHz

Medium parameters used: $f = 704.0$ MHz, $\sigma = 0.901$ S/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(9.46, 9.79, 9.67); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE TOP, 0 mm - Channel 23060/Area Scan (15.0 x 15.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.902 W/kg; SAR(10 g) = 0.605 W/kg

HBBL-600-10000/EDGE TOP, 0 mm - Channel 23060/Zoom Scan (3.75 x 3.75 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

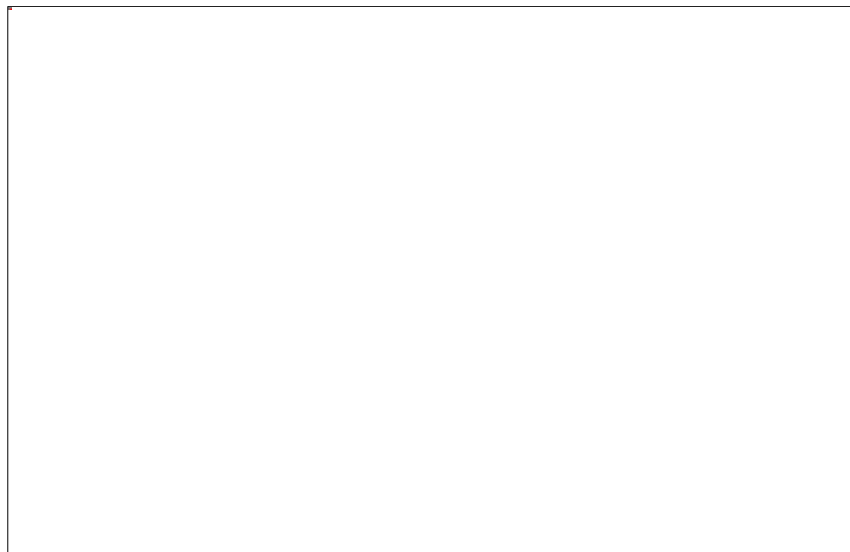
Power Drift = 0.19 dB

SAR(1 g) = 0.945 W/kg; SAR(10 g) = 0.607 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 12.0

M2/M1 [%]: 83.4

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 22.7°C; liquid temperature: 21.9°C;

IEEE/IEC_1528/62209 LTE FDD 13**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK) RBPosition:High AntennaCfg:SISO;

Communication System Band: Band 13; Communication System Frequency: 784.5 MHz

Medium parameters used: $f = 784.5$ MHz, $\sigma = 0.930$ S/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(9.46, 9.79, 9.67); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE TOP, 0 mm - Channel 23255/Area Scan (15.0 x 15.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.612 W/kg; SAR(10 g) = 0.378 W/kg

HBBL-600-10000/EDGE TOP, 0 mm - Channel 23255/Zoom Scan (3.75 x 3.75 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

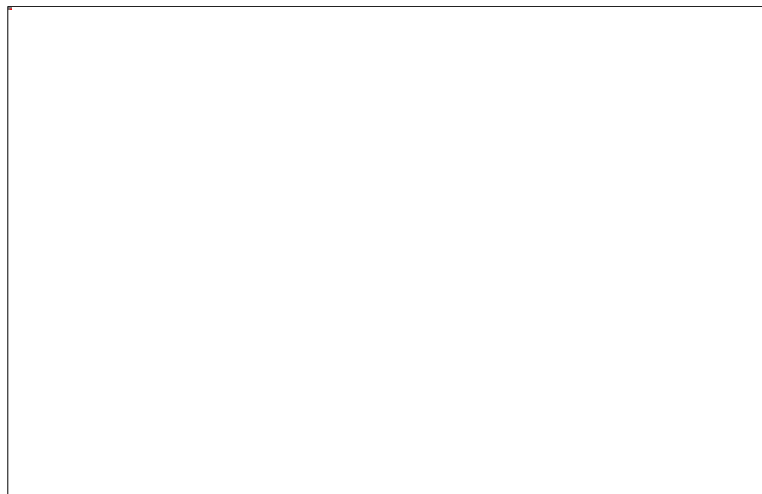
Power Drift = 0.04 dB

SAR(1 g) = 0.633 W/kg; SAR(10 g) = 0.378 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 11.3

M2/M1 [%]: 81.4

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 22.7°C; liquid temperature: 21.9°C;

IEEE/IEC_1528/62209 LTE FDD 25**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO;

Communication System Band: Band 25; Communication System Frequency: 1857.5 MHz

Medium parameters used: $f = 1857.5$ MHz, $\sigma = 1.44$ S/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.67, 7.94, 7.85); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/BACK, 0 mm - Channel 26115/Area Scan (15.0 x 15.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 1.51 W/kg; SAR(10 g) = 0.859 W/kg

HBBL-600-10000/BACK, 0 mm - Channel 26115/Zoom Scan (3.75 x 3.75 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

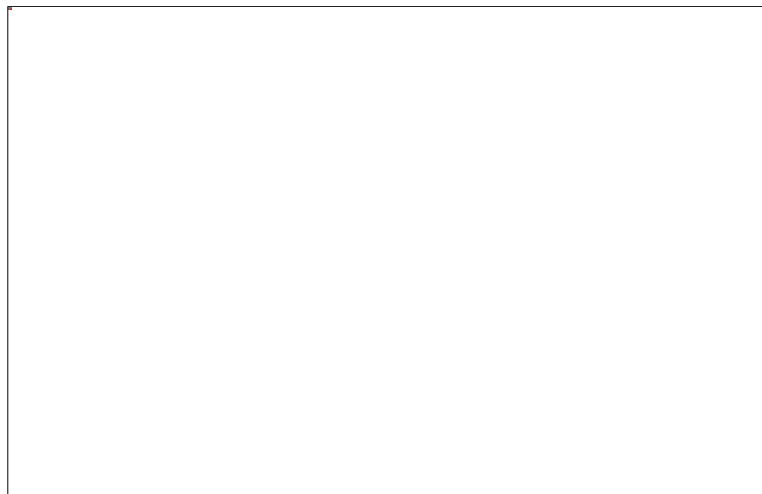
Power Drift = 0.03 dB

SAR(1 g) = 1.76 W/kg; SAR(10 g) = 0.907 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 9.5

M2/M1 [%]: 79.0

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 23.3°C; liquid temperature: 21.5°C;

IEEE/IEC_1528/62209 LTE FDD 26**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO;

Communication System Band: Band 26; Communication System Frequency: 831.5 MHz

Medium parameters used: $f = 831.5$ MHz, $\sigma = 0.954$ S/m; $\epsilon_r = 42.2$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(8.97, 9.29, 9.17); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE TOP, 0 mm - Channel 26865/Area Scan (15.0 x 15.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.561 W/kg; SAR(10 g) = 0.359 W/kg

HBBL-600-10000/EDGE TOP, 0 mm - Channel 26865/Zoom Scan (3.75 x 3.75 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

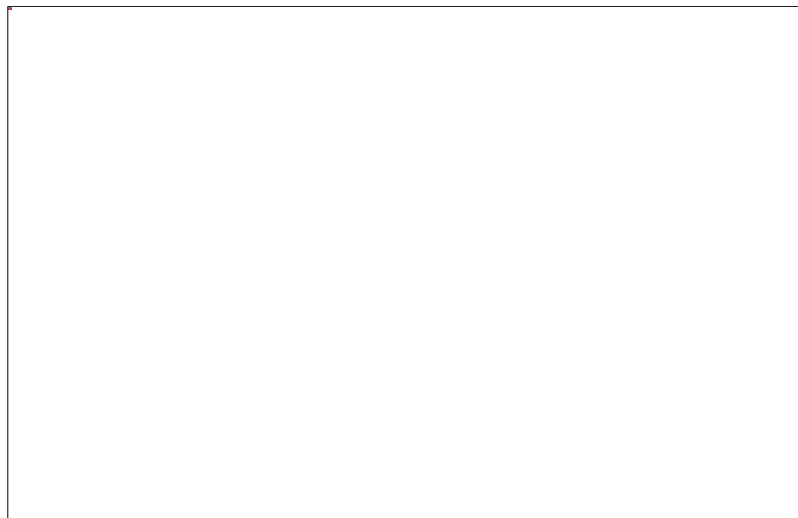
Power Drift = 0.11 dB

SAR(1 g) = 0.620 W/kg; SAR(10 g) = 0.361 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 9.8

M2/M1 [%]: 81.6

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 23.2°C; liquid temperature: 22.5°C;

IEEE/IEC_1528/62209 LTE FDD 26**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) RBPosition:Mid AntennaCfg:SISO;

Communication System Band: Band 26; Communication System Frequency: 821.5 MHz

Medium parameters used: $f = 821.5$ MHz, $\sigma = 0.950$ S/m; $\epsilon_r = 42.2$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(8.97, 9.29, 9.17); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE TOP, 0 mm - Channel 26765/Area Scan (15.0 x 15.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.598 W/kg; SAR(10 g) = 0.364 W/kg

HBBL-600-10000/EDGE TOP, 0 mm - Channel 26765/Zoom Scan (6.0 x 6.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

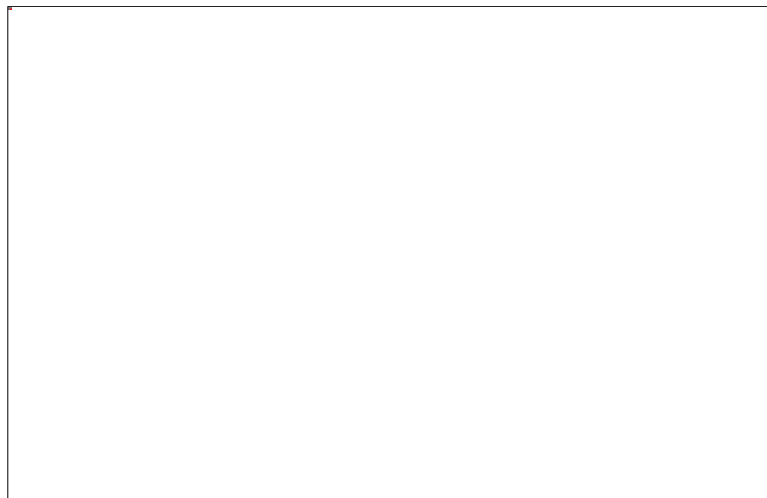
Power Drift = -0.01 dB

SAR(1 g) = 0.610 W/kg; SAR(10 g) = 0.354 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 9.9

M2/M1 [%]: 82.7

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 23.2°C; liquid temperature: 22.5°C;

IEEE/IEC_1528/62209 LTE TDD 38**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)

RBPosition:Mid AntennaCfg:SISO; Communication System Band: Band 38; Communication System Frequency: 2580.0 MHz

Medium parameters used: $f = 2580.0$ MHz, $\sigma = 1.91$ S/m; $\epsilon_r = 37.9$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.31, 7.57, 7.48); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE TOP, 0 mm - Channel 37850/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 100.0 x 160.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.603 W/kg; SAR(10 g) = 0.301 W/kg

HBBL-600-10000/EDGE TOP, 0 mm - Channel 37850/Zoom Scan (5.0 x 5.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

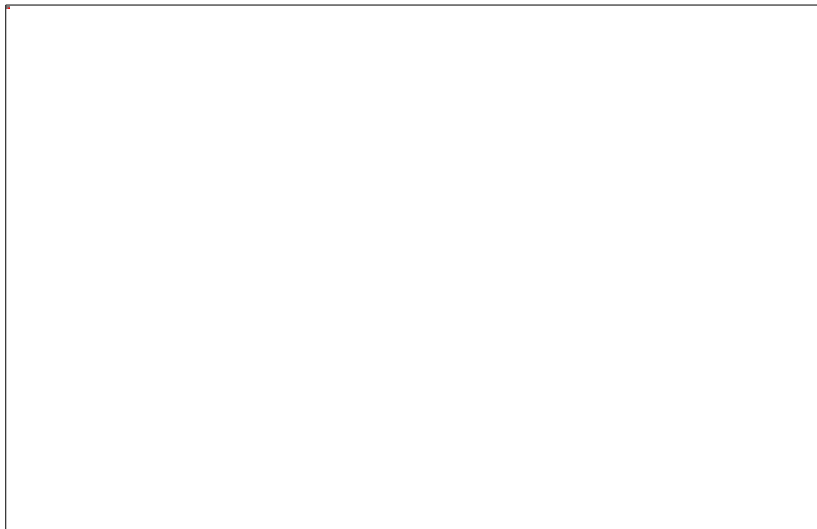
Power Drift = 0.01 dB

SAR(1 g) = 0.619 W/kg; SAR(10 g) = 0.299 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 11.2

M2/M1 [%]: 81.5

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 22.4°C; liquid temperature: 21.6°C;

IEEE/IEC_1528/62209 LTE TDD 38**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)

RBPosition:Mid AntennaCfg:SISO; Communication System Band: Band 38; Communication System Frequency: 2595.0 MHz

Medium parameters used: $f = 2595.0$ MHz, $\sigma = 1.92$ S/m; $\epsilon_r = 37.9$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.31, 7.57, 7.48); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE TOP, 0 mm - Channel 38000/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 100.0 x 160.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.302 W/kg

HBBL-600-10000/EDGE TOP, 0 mm - Channel 38000/Zoom Scan (5.0 x 5.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

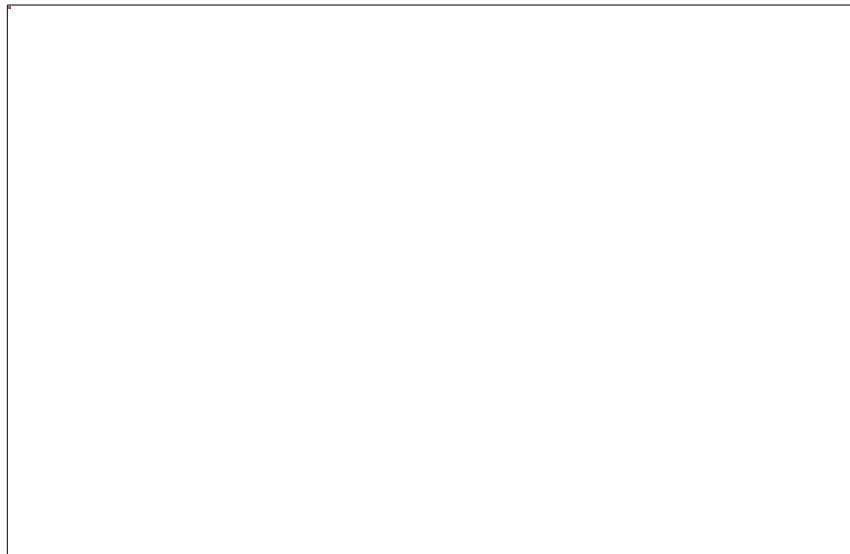
Power Drift = -0.01 dB

SAR(1 g) = 0.613 W/kg; SAR(10 g) = 0.298 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 11.2

M2/M1 [%]: 82.0

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 22.4°C; liquid temperature: 21.6°C;

IEEE/IEC_1528/62209 LTE TDD 41**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:4**

Communication System: LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)

RBPosition:Mid AntennaCfg:SISO; Communication System Band: Band 41; Communication System Frequency: 2680.0 MHz

Medium parameters used: $f = 2680.0$ MHz, $\sigma = 1.99$ S/m; $\epsilon_r = 37.8$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.31, 7.57, 7.48); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/BACK, 0 mm - Channel 41490/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 1.32 W/kg; SAR(10 g) = 0.526 W/kg

HBBL-600-10000/BACK, 0 mm - Channel 41490/Zoom Scan (5.0 x 5.0 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

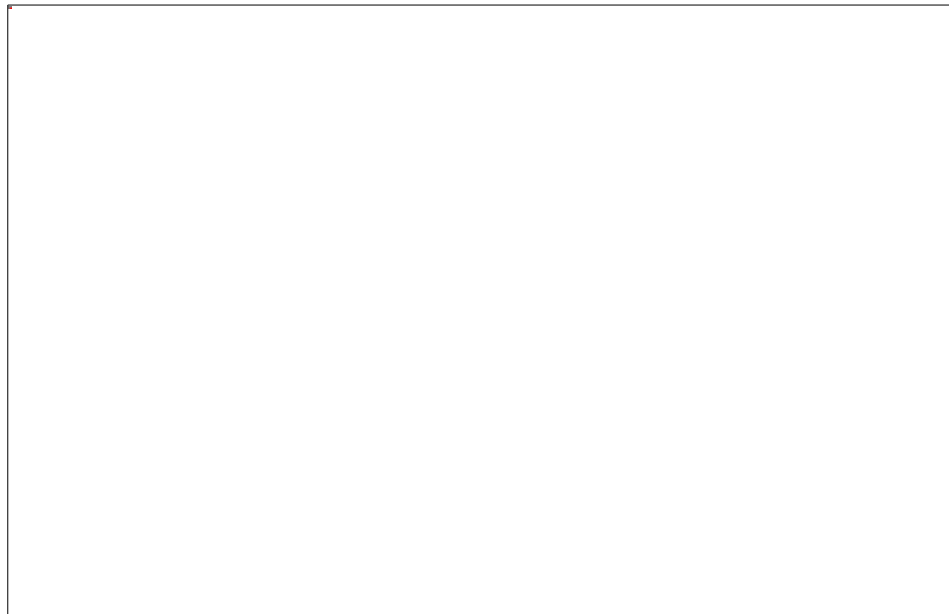
Power Drift = -0.05 dB

SAR(1 g) = 1.33 W/kg; SAR(10 g) = 0.522 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 7.7

M2/M1 [%]: 77.6

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 22.4°C; liquid temperature: 21.6°C;

Annex B.2: SAR Test Results for BT

Date/Time: 2025-09-01, 16:53 2025-09-01, 17:03

IEEE/IEC_1528/62209 BT 2.4 GHz**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3:3**

Communication System: IEEE 802.15.1 Bluetooth (GFSK, DH5); Communication System Band: ISM 2.4 GHz

Band; Communication System Frequency: 2402.0 MHz

Medium parameters used: $f = 2402.0$ MHz, $\sigma = 1.77$ S/m; $\epsilon_r = 38.1$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.53, 7.8, 7.71); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/FRONT, 0 mm - Channel 0/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.025 W/kg; SAR(10 g) = 0.014 W/kg

HBBL-600-10000/FRONT, 0 mm - Channel 0/Zoom Scan (3.75 x 3.75 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

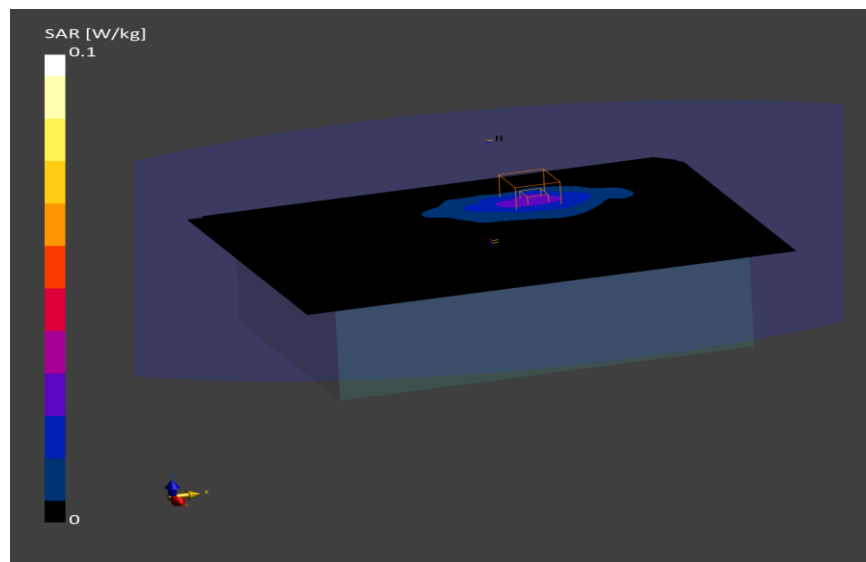
Power Drift = -0.04 dB

SAR(1 g) = 0.023 W/kg; SAR(10 g) = 0.012 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 9.8

M2/M1 [%]: 82.2

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 22.1°C; liquid temperature: 21.5°C;

Annex B.3: SAR Test Results for WLAN 2.4 GHz

Date/Time: 2025-08-27, 13:14 2025-08-27, 13:24

IEEE/IEC_1528/62209 WLAN 2.4GHz**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3.3**

Communication System: IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle); Communication System

Band: WLAN 2.4GHz; Communication System Frequency: 2437.0 MHz

Medium parameters used: $f = 2437.0$ MHz, $\sigma = 1.83$ S/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(7.53, 7.8, 7.71); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/FRONT, 0 mm - Channel 6/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.264 W/kg

HBBL-600-10000/FRONT, 0 mm - Channel 6/Zoom Scan (3.75 x 3.75 x 1.5) :

Grid Extents [mm]: 30.0 x 30.0 x 30.0

Graded Grid: Ratio 1.5 - Distance Sensor to Surface 1.4 mm

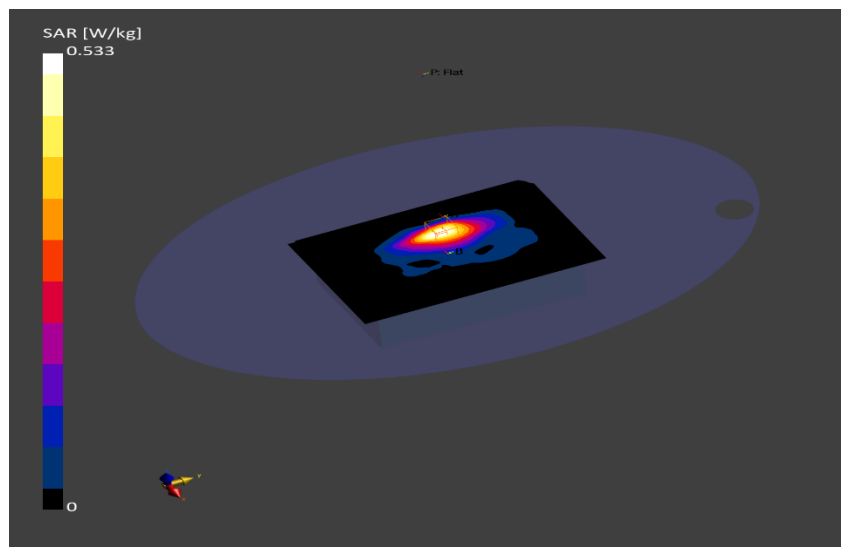
Power Drift = 0.00 dB

SAR(1 g) = 0.509 W/kg; SAR(10 g) = 0.261 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 5.5

M2/M1 [%]: 75.3

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 20.8°C; liquid temperature: 20.1°C;

Annex B.4: SAR Test Results for WLAN 5.2 GHz

Date/Time: 2025-08-29, 16:01 2025-08-29, 16:14

IEEE/IEC_1528/62209 WLAN 5.2 GHz**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3.3**

Communication System: IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle); Communication

System Band: U-NII-1, U-NII-2A; Communication System Frequency: 5200.0 MHz

Medium parameters used: $f = 5200.0$ MHz, $\sigma = 4.49$ S/m; $\epsilon_r = 35.2$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(5.48, 5.68, 5.61); Calibrated: 2025-05-16

- Sensor-Surface: 1.4mm

- DAE: DAE4 Sn477; Calibrated: 2025-05-12

- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;

- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE LEFT, 0 mm - Channel 40/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 4.38 W/kg; SAR(10 g) = 1.29 W/kg

HBBL-600-10000/EDGE LEFT, 0 mm - Channel 40/Zoom Scan (3.75 x 3.75 x 1.4) :

Grid Extents [mm]: 22.0 x 22.0 x 22.0

Graded Grid: Ratio 1.4 - Distance Sensor to Surface 1.4 mm

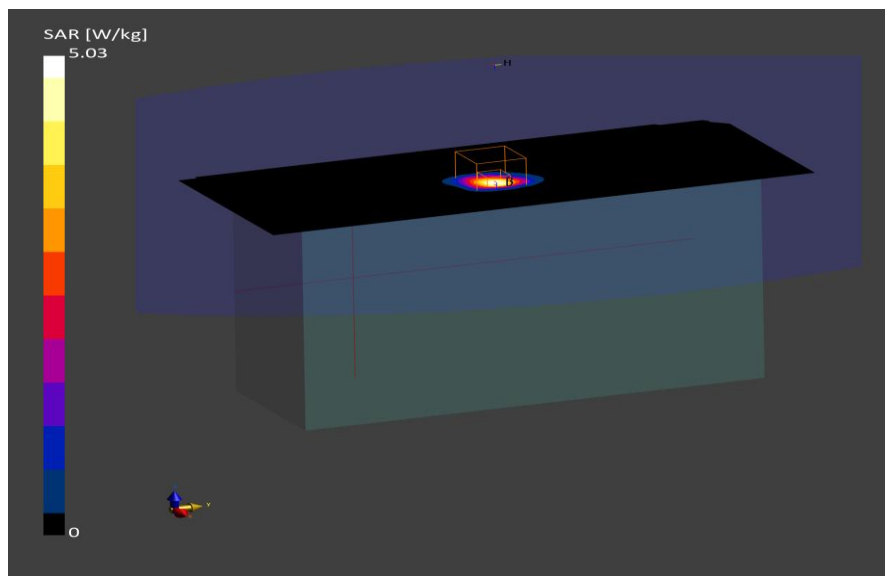
Power Drift = -0.10 dB

SAR(1 g) = 5.38 W/kg; SAR(10 g) = 1.44 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 6.0

M2/M1 [%]: 63.9

**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 20.8°C; liquid temperature: 20.1°C;

IEEE/IEC_1528/62209 WLAN 5.2 GHz**DUT: Infrared Camera; Type: FLIR-i1845; Serial: 3.3**

Communication System: IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle); Communication System Band: U-NII-1, U-NII-2A; Communication System Frequency: 5220.0 MHz

Medium parameters used: $f = 5220.0$ MHz, $\sigma = 4.51$ S/m; $\epsilon_r = 35.1$; $\rho = 1000$ kg/m³

Phantom Section: Flat

Measurement Standard: DASY 8

DASY Configuration:

- Probe: EX3DV4 - SN3944; ConvF(5.48, 5.68, 5.61); Calibrated: 2025-05-16
- Sensor-Surface: 1.4mm
- DAE: DAE4 Sn477; Calibrated: 2025-05-12
- Phantom: ELI V8.0 (20deg probe tilt); Serial: 2101;
- Software: DASY8 Module SAR V16.4.0.5005

HBBL-600-10000/EDGE LEFT, 0 mm - Channel 44/Area Scan (10.0 x 10.0 x 1.0) :

Grid Extents [mm]: 60.0 x 60.0

Maximum value of SAR (interpolated) - SAR(1 g) = 4.31 W/kg; SAR(10 g) = 1.24 W/kg

HBBL-600-10000/EDGE LEFT, 0 mm - Channel 44/Zoom Scan (3.75 x 3.75 x 1.4) :

Grid Extents [mm]: 22.0 x 22.0 x 22.0

Graded Grid: Ratio 1.4 - Distance Sensor to Surface 1.4 mm

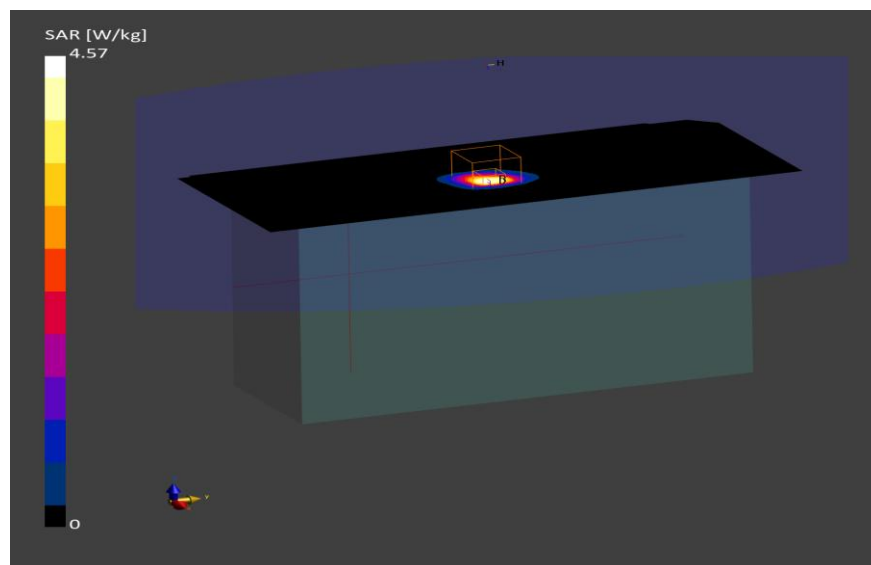
Power Drift = 0.05 dB

SAR(1 g) = 5.17 W/kg; SAR(10 g) = 1.39 W/kg

Additional Info for IEC 62209-2 AMD1:

TDist 3dB Peak [mm]: 6.5

M2/M1 [%]: 63.7

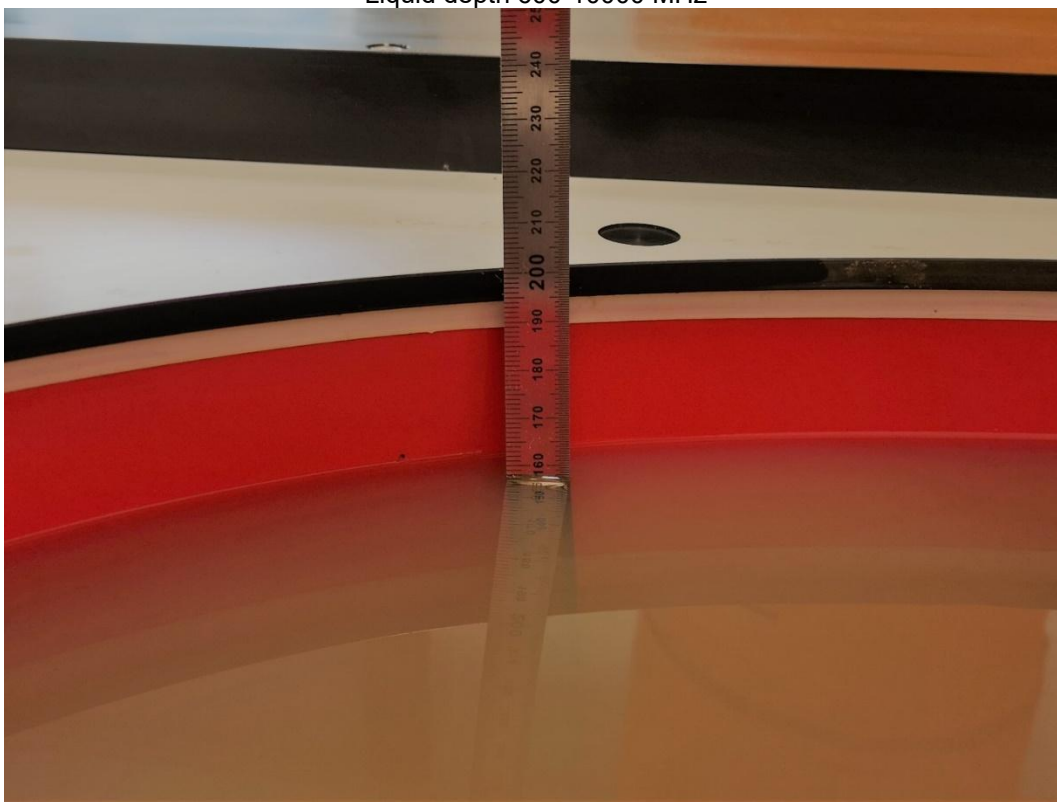
**Additional information:**

position or distance of DUT to SAM: 0 mm

ambient temperature: 20.8°C; liquid temperature: 20.1°C;

Annex B.5: Liquid depth

Liquid depth 600-10000 MHz



Annex C: Photo documentation

Photo documentation is described in the additional document:
1-8481-24-01-17_TR1-A101-R01_Photos

Annex D: Calibration parameters

Calibration parameters are described in the additional document:
1-8481-24-01-17_TR1-A201-R01_Caldata

Annex E: RSS-102 Annex A

ISED RF documents are described in the additional document:
1-8481-24-01-17_TR1-A301-R01_ISED - RSS-102 Annex A

Annex F: Document History

Version	Applied Changes	Date of Release
	Initial Release	2025-09-09

Annex G: Further Information**Glossary**

BW	-	Bandwidth
DTS	-	Distributed Transmission System
DUT	-	Device under Test
EUT	-	Equipment under Test
FCC	-	Federal Communication Commission
FCC ID	-	Company Identifier at FCC
HW	-	Hardware
Inv. No.	-	Inventory number
ISED	-	Innovation, Science and Economic Development Canada
LTE	-	Long Term Evolution
N/A	-	not applicable
RB	-	resource block(s)
SAR	-	Specific Absorption Rate
S/N	-	Serial Number
SW	-	Software
UNII	-	Unlicensed National Information Infrastructure