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TESTING
CNAS L5313



SAR Test Report

Product Name : AC450 Wireless Nano USB Adapter

Model No. : Archer T1U

FCC ID : TE7T1U

Applicant : TP-LINK TECHNOLOGIES CO., LTD.

Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4)
Central Science and Technology Park,Shennan Rd,
Nanshan, Shenzhen, China

Date of Receipt : Jun. 01, 2016

Test Date : Jun. 01, 2016~ Jul. 31, 2016

Issued Date : Aug. 16, 2016

Report No. : 1662136R-HP-US-P03V01

Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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Test Report Certification

Issued Date: Aug. 16, 2016

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Product Name : AC450 Wireless Nano USB Adapter
Applicant : TP-LINK TECHNOLOGIES CO., LTD.
Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Manufacturer : TP-LINK TECHNOLOGIES CO., LTD.
Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
FCC ID : TE7T1U
Model No. : Archer T1U
Brand Name : TP-LINK
EUT Voltage : DC 5V
Applicable Standard : FCC KDB Publication 248227 D01v02r02
FCC KDB Publication 447498 D01v06
FCC KDB Publication 447498 D02v02r01
FCC KDB Publication 865664 D01v01r04
IEEE Std. 1528-2013
IEC 62209-2: 2010
FCC 47CFR §2.1093
ANSI C95.1-2005
Test Result : Max. SAR Measurement (1g)
802.11ac(80MHz): **1.192** W/kg
Performed Location : Suzhou EMC Laboratory
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,215006,
Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
FCC Registration Number: 800392; IC Lab Code: 4075B

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We, **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	:	BSMI, NCC, TAF
USA	:	FCC
Japan	:	VCCI
China	:	CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site :<http://www.quietek.com/tw/ctg/cts/accreditations.htm>
The address and introduction of Quietek Corporation's laboratories can be founded in our Web site :
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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1662136R-HP-US-P03V01	V1.0	Initial Issued Report	Aug. 16, 2016

1. General Information

1.1. EUT Description

Product Name	AC450 Wireless Nano USB Adapter
Brand Name	TP-LINK
Model No.	Archer T1U
EUT Voltage	DC 5V
Frequency Range	For 5GHz Band 802.11a/n/ac(20MHz): 5180~5320MHz, 5500~5580MHz, 5660~5700MHz, 5745~5825MHz 802.11n/ac(40MHz): 5190~5310MHz, 5510~5550MHz, 5670MHz, 5755~5795MHz 802.11ac(80MHz):5210MHz,5290MHz,5530MHz,5775MHz
Channel Number	For 5GHz Band 802.11a/n/ac(20MHz): 21 802.11n/ac(40MHz): 9 802.11ac(80MHz): 4
Type of Modulation	802.11a/n/ac: OFDM
Data Rate	802.11a: 6/9/12/18/24/36/48/54 Mbps 802.11n: up to 150 Mbps 802.11ac: up to 433.3 Mbps
Channel Control	Auto
Antenna Delivery	1*Tx + 1*Rx
Antenna Type	Reference to Antenna List
Peak Antenna Gain	Reference to Antenna List

For 5.0GHz Band

802.11a/n(20MHz)/ac(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
52	5260MHz	56	5280 MHz	60	5300 MHz	64	5320 MHz
100	5500MHz	104	5520 MHz	108	5540 MHz	112	5550 MHz
116	5580MHz	132	5660 MHz	136	5680 MHz	140	5700 MHz
149	5745 MHz	153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825MHz	N/A	N/A	N/A	N/A	N/A	N/A

802.11n(40MHz)/ac(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270 MHz	62	5310 MHz
102	5510 MHz	110	5550 MHz	134	5670 MHz	151	5755 MHz
159	5795 MHz	N/A	N/A	N/A	N/A	N/A	N/A

802.11ac(80MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530MHz	155	5775 MHz

Antenna List

Antenna	Manufacturer	Model No.	Peak Gain
PIFA Antenna	N/A	I2101-AD000 1.0	5GHz Band: 2 dBi

Power Parameter Value of the test software

Test Mode	Test Channel	Power Setting
802.11a	5180	1B
	5200	1A
	5240	1B
	5260	19
	5300	19
	5320	19
	5500	2A
	5580	1E
	5660	23
	5700	3F
	5745	1F
	5785	3F
	5825	1E
	802.11n(20MHz)	5180
5200		20
5240		1D
5260		1D
5300		1D
5320		1B
5500		2C
5580		3F
5660		3F
5700		3F
5745		1F
5785		3F
5825		20

802.11ac(20MHz)	5180	12
	5200	1E
	5240	1E
	5260	18
	5300	1C
	5320	1C
	5500	22
	5580	1A
	5660	22
	5700	15
	5745	24
	5785	3F
	5825	3F
	802.11n(40MHz)	5190
5230		1E
5270		1D
5310		1D
5510		22
5550		24
5670		1E
5755		1B
5795		23
802.11ac(40MHz)	5190	11
	5230	1D
	5270	1B
	5310	1B
	5510	22
	5550	23
	5670	23
	5755	1C
	5795	24
802.11ac(80MHz)	5210	11
	5290	1C
	5530	22
	5775	29

The test mode of the test software can support.

Test Mode	Ant 0
802.11a	✓
802.11n(20MHz)	✓
802.11n(40MHz)	✓
802.11ac(20MHz)	✓
802.11ac(40MHz)	✓
802.11ac(80MHz)	✓

1.2. Test Environment

Ambient conditions in the laboratory:

Items	Required	Actual
Temperature (°C)	18-25	21.5± 2
Humidity (%RH)	30-70	52

1.3. Power Reduction for SAR

There is no power reduction used for any band/mode implemented in this device for SAR purposes.

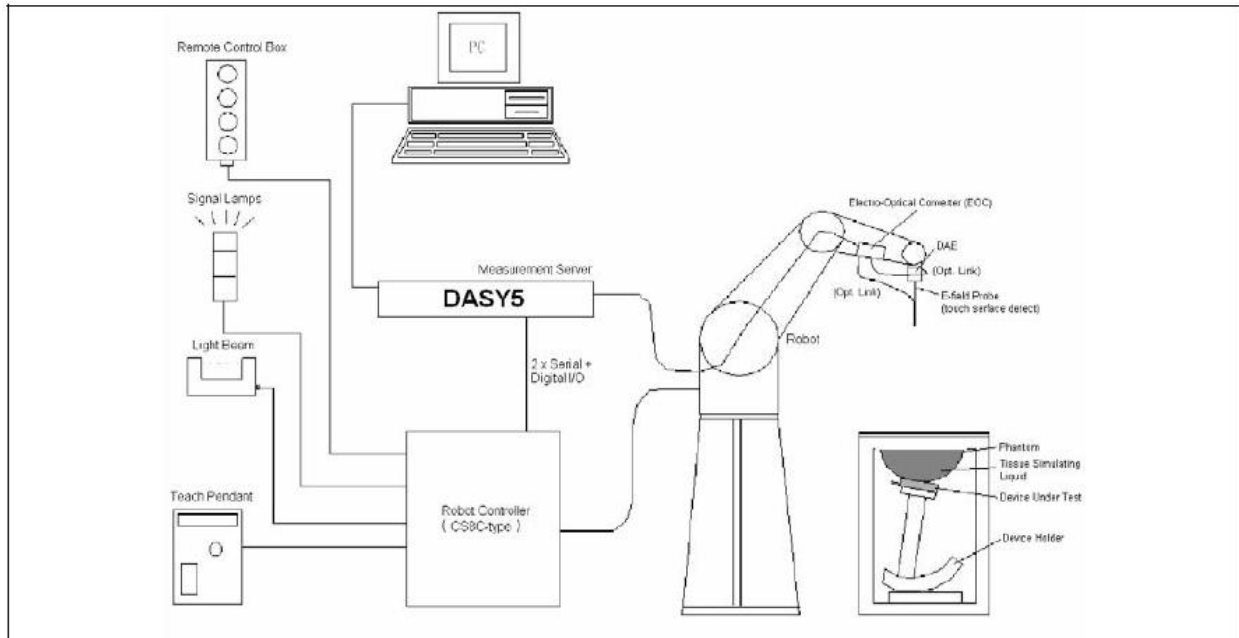
1.4. Guidance Documents

- 1) FCC KDB Publication 447498 D01v06 (General SAR Guidance)
- 2) FCC KDB Publication 447498 D02v02r01 (SAR Measurement Procedures for USB Dongle Transmitters)
- 3) FCC KDB Publication 865664 D01v01r04(SAR measurement 100 MHz to 6 GHz)
- 4) FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- 5) IEEE Std. 1528-2013 (IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques)
- 6) IEC 62209-2: 2010 (Human exposure to radio frequency fields from hand- held and bodymounted wireless communication devices — Human models, instrumentation, and procedures)

- 7) FCC 47CFR §2.1093 Radiofrequency radiation exposure evaluation: portable devices
- 8) ANSI C95.1-2005 - IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz

2. SAR Measurement System

2.1. DASY5 System Description



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

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

2.1.1. Applications

Predefined procedures and evaluations for automated compliance testing with all worldwide standards, e.g., IEEE 1528, OET 65, IEC 62209-1, IEC 62209-2, EN 50360, EN 50383 and others.

2.1.2. Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 10mm^2 step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments.

When an Area Scan has measured all reachable points, it computes the field maxima found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE 1528-2003, EN 50361 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan).

2.1.3. Zoom Scan (Cube Scan Averaging)

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. A density of 1000 kg/m^3 is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm, with the side length of the 10 g cube 21,5mm.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications utilize a physical step of $7\times 7\times 7$ (5mmx5mmx5mm) providing a volume of 30mm in the X & Y axis, and 30mm in the Z axis.

2.1.4. Uncertainty of Inter-/Extrapolation and Averaging

In order to evaluate the uncertainty of the interpolation, extrapolation and averaged SAR calculation algorithms of the Postprocessor, DASY5 allows the generation of measurement grids which are artificially predefined by analytically based test functions. Therefore, the grids of area scans and zoom scans can be filled with uncertainty test data, according to the SAR benchmark functions of IEEE 1528. The three analytical functions shown in equations as below are used to describe the possible range of the expected SAR distributions for the tested handsets. The field gradients are covered by the spatially flat distribution f1, the spatially steep distribution f3 and f2 accounts for H-field cancellation on the phantom/tissue surface.

$$f_1(x, y, z) = Ae^{-\frac{z}{2a}} \cos^2 \left(\frac{\pi \sqrt{x'^2 + y'^2}}{2 \cdot 5a} \right)$$

$$f_2(x, y, z) = Ae^{-\frac{z}{a}} \frac{a^2}{a^2 + x'^2} \left(3 - e^{-\frac{2z}{a}} \right) \cos^2 \left(\frac{\pi y'}{2 \cdot 3a} \right)$$


$$f_3(x, y, z) = A \frac{a^2}{\frac{a^2}{4} + x'^2 + y'^2} \left(e^{-\frac{2z}{a}} + \frac{a^2}{2(a + 2z)^2} \right)$$

2.2. DASYS E-Field Probe

The SAR measurement is conducted with the dosimetric probe manufactured by SPEAG. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency.

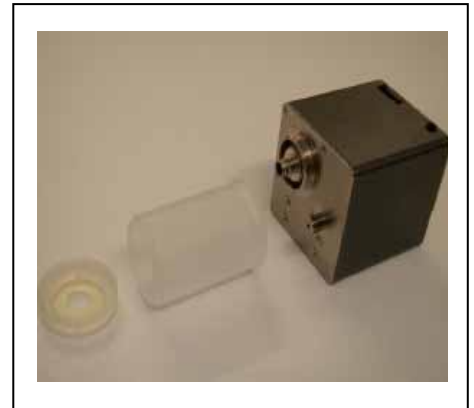
SPEAG conducts the probe calibration in compliance with international and national standards (e.g. IEEE 1528, EN 62209-1, IEC 62209, etc.) under ISO 17025. The calibration data are in Appendix D.

2.2.1. Isotropic E-Field Probe Specification

Model	EX3DV4	
Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz to 6 GHz 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 µW/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)	
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	
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%.	

2.3. Boundary Detection Unit and Probe Mounting Device

The DASY probes use a precise connector and an additional holder for the probe, consisting of a plastic tube and a flexible silicon ring to center the probe. The connector at the DAE is flexibly mounted and held in the default position with magnets and springs. Two switching systems in the connector mount detect frontal and lateral probe collisions and trigger the necessary software response.



2.4. DATA Acquisition Electronics (DAE) and Measurement Server

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit.

Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

The input impedance of the DAE4 is 200M Ohm; the inputs are symmetrical and floating. Common mode rejection is above 80dB.



The DASY5 measurement server is based on a PC/104 CPU board with a 400MHz intel ULV Celeron, 128MB chipdisk and 128MB RAM. The necessary circuits for communication with the DAE electronics box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY5 I/O board, which is directly connected to the PC/104 bus of the CPU board.



2.5. Robot

The DASY5 system uses the high precision robots TX90 XL type out of the newer series from Stäubli SA (France). For the 6-axis controller DASY5 system, the CS8C robot controller version from Stäubli is used.

The XL robot series have many features that are important for our application:

- High precision (repeatability 0.02 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)
- 6-axis controller



2.6. Light Beam Unit

The light beam switch allows automatic "tooling" of the probe. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip.

The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.



2.7. Device Holder

The DASY5 device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles.

The DASY5 device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon_r = 3$ and loss tangent $\delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



2.8. SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region where shell thickness increases to 6mm). It has three measurement areas:

- Left head
- Right head
- Flat phantom



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. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom tip, three reference markers are provided to identify the phantom position with respect to the robot.

3. Tissue Simulating Liquid

3.1. The composition of the tissue simulating liquid

INGREDIENT (% Weight)	5250MHz Body	5600MHz Body	5750MHz Body
Water	75.68	75.68	75.68
Salt	0.43	0.43	0.43
Sugar	0.00	0.00	0.00
HEC	0.00	0.00	0.00
Preventol	0.00	0.00	0.00
DGBE	4.42	4.42	4.42
Triton X-100	19.47	19.47	19.47

3.2. Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using DASY5 Dielectric Probe Kit and Agilent Vector Network Analyzer E5071C

Body Tissue Simulant Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ϵ_r	σ [s/m]	
5250MHz	Reference result ± 5% window	49.0 46.55 to 51.45	5.36 5.09 to 5.63	N/A
	06-06-2016	47.42	5.32	21.0
5600MHz	Reference result ± 5% window	48.5 46.10 to 50.90	5.77 5.48 to 6.06	N/A
	06-06-2016	48.47	5.80	21.0
5750MHz	Reference result ± 5% window	48.3 45.86 to 50.69	5.94 5.65 to 6.24	N/A
	06-06-2016	48.63	6.05	21.0

3.3. Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

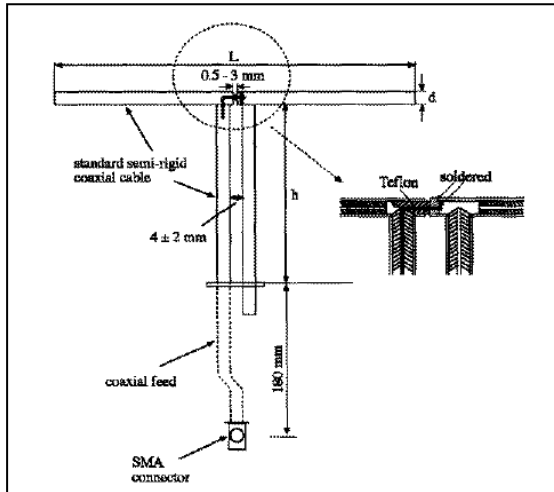
Target Frequency (MHz)	Head		Body	
	ϵ_r	σ (S/m)	ϵ_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

(ϵ_r = relative permittivity, σ = conductivity and $\rho = 1000 \text{ kg/m}^3$)

4. SAR Measurement Procedure

4.1. SAR System Validation

4.1.1. Validation Dipoles



The dipoles used is based on the IEEE-1528 standard, and is complied with mechanical and electrical specifications in line with the requirements of both IEEE and FCC Supplement C. the table below provides details for the mechanical and electrical specifications for the dipoles.

Frequency	L (mm)	h (mm)	d (mm)
5250MHz	20.6	14.2	3.6
5600MHz	20.6	14.2	3.6
5750MHz	20.6	14.2	3.6

4.1.2. Validation Result

System Performance Check at 5200MHz, 5300 MHz, 5500MHz, 5600 MHz and 5800MHz for Body				
Validation Dipole: D5GHzV2, SN: 1203				
5250 MHz	Reference result ± 10% window	73.7 66.33 to 81.07	20.8 18.72 to 22.88	N/A
	06-06-2016	78.7	20.4	21.0
Validation Dipole: D5GHzV2, SN: 1203				
5600 MHz	Reference result ± 10% window	78.8 70.92 to 86.68	22.3 20.07 to 24.53	N/A
	06-06-2016	81.1	21.5	21.0
Validation Dipole: D5GHzV2, SN: 1203				
5750 MHz	Reference result ± 10% window	75.2 67.68 to 82.72	21.1 18.99 to 23.21	N/A
	06-06-2016	75.7	20.9	21.0
Note: All SAR values are normalized to 1W forward power.				

4.2. SAR Measurement Procedure

The DASYS 5 calculates SAR using the following equation,

$$SAR = \frac{\sigma |E|^2}{\rho}$$

σ : represents the simulated tissue conductivity

ρ : represents the tissue density

The EUT is set to transmit at the required power in line with product specification, at each frequency relating to the LOW, MID, and HIGH channel settings.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the Universal Phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR location (interpolated resolution set at 1mm²) which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at 1mm³).

4.3. SAR Measurement Conditions for 802.11 Device

4.3.1. Duty Factor Control

Unless it is permitted by specific KDB procedures or continuous transmission is specifically restricted by the device, the reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

4.3.2. Initial Test Position SAR Test Reduction Procedure

DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.¹⁶ The initial test position procedure is described in the following:

When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other (remaining) test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band. SAR is also not required for that exposure configuration in the subsequent test configuration(s).

a) When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.

b) For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

Additional power measurements may be required for this step, which should be limited to those necessary for identifying the subsequent highest output power channels.

5. SAR Exposure Limits

SAR assessments have been made in line with the requirements of IEEE-1528, FCC Supplement C, and comply with ANSI/IEEE C95.1-1992 “Uncontrolled Environments” limits. These limits apply to a location which is deemed as “Uncontrolled Environment” which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

Limits for General Population/Uncontrolled Exposure (W/kg)

Type Exposure	Uncontrolled Environment Limit
Spatial Peak SAR (1g cube tissue for brain or body)	1.60 W/kg
Spatial Average SAR (whole body)	0.08 W/kg
Spatial Peak SAR (10g for hands, feet, ankles and wrist)	4.00 W/kg

6. Test Equipment List

Instrument	Manufacturer	Model No.	Serial No.	Cali. Due Date
Stäubli Robot TX60L	Stäubli	TX60L	F10/5C90A1/A/01	N/A
Controller	Stäubli	SP1	S-0034	N/A
Dipole Validation Kits	Speag	D5GHzV2	1078	2018.02.09
SAM Twin Phantom	Speag	SAM	TP-1561/1562	N/A
Device Holder	Speag	SD 000 H01 HA	N/A	N/A
Data Acquisition Electronic	Speag	DAE4	1220	2017.02.08
E-Field Probe	Speag	EX3DV4	3710	2017.02.18
SAR Software	Speag	DASY5	V5.2 Build 162	N/A
Power Amplifier	Mini-Circuit	ZVA-183-S+	N657400950	N/A
Directional Coupler	Agilent	778D	20160	N/A
Universal Radio Communication Tester	R&S	CMU 200	117088	2017.03.10
Vector Network	Agilent	E5071C	MY48367267	2017.03.10
Signal Generator	Agilent	E4438C	MY49070163	2017.03.10
Power Meter	Anritsu	ML2495A	0905006	2016.10.29
Wide Bandwidth Sensor	Anritsu	MA2411B	0846014	2016.10.29

7. Measurement Uncertainty

DASY5 Uncertainty according to IEEE std. 1528-2013								
Measurement uncertainty for 300 MHz to 3 GHz averaged over 1 gram / 10 gram.								
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) V _{eff}
Measurement System								
Probe Calibration	±6.0%	N	1	1	1	±6.0%	±6.0%	∞
Axial Isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.4%	R	$\sqrt{3}$	1	1	±0.2%	±0.2%	∞
Probe Positioning	±2.9%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Max. SAR Eval.	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (target)	±5.0%	R	$\sqrt{3}$	0.64	0.43	±1.8%	±1.2%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.64	0.43	±1.6%	±1.1%	∞
Liquid Permittivity (target)	±5.0%	R	$\sqrt{3}$	0.6	0.49	±1.7%	±1.4%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.6	0.49	±1.5%	±1.2%	∞
Combined Std. Uncertainty						±11.0%	±10.8%	387
Expanded STD Uncertainty						±22.0%	±21.5%	

DASY5 Uncertainty according to IEEE std. 1528-2013 Measurement uncertainty for 3 GHz to 6 GHz averaged over 1 gram / 10 gram.								
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) V _{eff}
Measurement System								
Probe Calibration	±6.55%	N	1	1	1	±6.55%	±6.55%	∞
Axial Isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±2.0%	R	$\sqrt{3}$	1	1	±1.2%	±1.2%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Probe Positioning	±9.9%	R	$\sqrt{3}$	1	1	±5.7%	±5.7%	∞
Max. SAR Eval.	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (target)	±5.0%	R	$\sqrt{3}$	0.64	0.43	±1.8%	±1.2%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.64	0.43	±1.6%	±1.1%	∞
Liquid Permittivity (target)	±5.0%	R	$\sqrt{3}$	0.6	0.49	±1.7%	±1.4%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.6	0.49	±1.5%	±1.2%	∞
Combined Std. Uncertainty						±12.8%	±12.6%	330
Expanded STD Uncertainty						±25.6%	±25.2%	

DASY5 Uncertainty according to IEC 62209-2/2010								
Measurement uncertainty for 30 MHz to 6 GHz averaged over 1 gram / 10 gram.								
Error Description	Uncert. Value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) v_{eff}
Measurement System								
Probe Calibration	±6.5%	N	1	1	1	±6.5%	±6.5%	∞
Axial Isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±2.0%	R	$\sqrt{3}$	1	1	±1.2%	±1.2%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
Modulation Response	±2.4%	R	$\sqrt{3}$	1	1	±1.4%	±1.4%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Probe Positioning	±6.7%	R	$\sqrt{3}$	1	1	±3.9%	±3.9%	∞
Post-processing	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Test Sample Related								
Test Sample Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±0.0%	R	$\sqrt{3}$	1	1	±0.0%	±0.0%	∞
Power Scaling	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±7.9%	R	$\sqrt{3}$	1	1	±4.6%	±4.6%	∞
SAR correction	±1.9%	R	$\sqrt{3}$	1	1	±1.1%	±0.9%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.26	0.26	±0.6%	±0.7%	∞
Temp. unc. - Conductivity	±5.2%	R	$\sqrt{3}$	0.78	0.71	±2.3%	±2.1%	∞
Temp. unc. - Permittivity	±0.8%	R	$\sqrt{3}$	0.23	0.26	±0.1%	±0.1%	∞
Combined Std. Uncertainty						±12.8%	±12.7%	748
Expanded STD Uncertainty						±25.6%	±25.4%	

8. Conducted Power Measurement

Test Mode	Frequency (MHz)	Avg. Burst Power (dBm)	Max. Power (dBm)	Scaling Factor
802.11a	5180	12.23	12.3	1.016
	5200	11.72	12.0	1.067
	5240	12.03	12.3	1.064
	5260	11.61	12.3	1.172
	5300	11.60	12.3	1.175
	5320	11.59	12.3	1.178
	5500	20.72	21.0	1.067
	5580	13.62	14.0	1.091
	5660	15.98	16.0	1.005
	5700	21.38	21.5	1.028
	5745	15.24	16.0	1.191
	5785	21.00	21.0	1.000
	5825	14.92	15.0	1.019
802.11n(20MHz)	5180	11.02	11.5	1.117
	5200	14.73	15.0	1.064
	5240	13.24	14.0	1.191
	5260	13.79	14.0	1.050
	5300	13.92	14.0	1.019
	5320	13.20	14.0	1.202
	5500	20.68	21.0	1.076
	5580	20.93	21.0	1.016
	5660	20.54	21.0	1.112
	5700	20.34	21.0	1.164
	5745	13.59	14.0	1.099
	5785	20.22	21.0	1.197
	5825	13.36	14.0	1.159

802.11ac(20MHz)	5180	11.89	12.0	1.026
	5200	13.56	14.0	1.107
	5240	13.68	14.0	1.076
	5260	12.75	13.0	1.059
	5300	13.18	14.0	1.208
	5320	13.23	14.0	1.194
	5500	15.70	16.0	1.072

	5580	12.36	13.0	1.159
	5660	14.88	15.0	1.028
	5700	12.16	13.0	1.213
	5745	13.56	14.0	1.107
	5785	20.16	20.5	1.081
	5825	14.93	15.0	1.016
802.11n(40MHz)	5190	13.12	13.5	1.091
	5230	13.39	14.0	1.151
	5270	13.03	14.0	1.250
	5310	11.59	12.0	1.099
	5510	15.04	15.5	1.112
	5550	16.16	16.5	1.081
	5670	13.23	13.5	1.064
	5755	13.04	14.0	1.247
	5795	15.63	16.0	1.089
802.11ac(40MHz)	5190	12.69	13.0	1.074
	5230	13.08	13.5	1.102
	5270	12.26	12.5	1.057
	5310	12.32	12.5	1.042
	5510	14.53	15.0	1.114
	5550	15.98	16.0	1.005
	5670	16.03	16.5	1.114
	5755	12.79	13.0	1.050
	5795	15.99	16.0	1.002
802.11ac(80MHz)	5210	12.13	12.5	1.089
	5290	12.24	12.5	1.062
	5530	14.07	14.5	1.104
	5775	15.24	16.0	1.191

9. Test Procedures

9.1. SAR Test Results Summary

SAR MEASUREMENT									
Ambient Temperature (°C) : 21.5 ± 2					Relative Humidity (%): 52				
Liquid Temperature (°C) : 21.0 ± 2					Depth of Liquid (cm):>15				
Product: AC450 Wireless Nano USB Adapter									
Frequency: 5180 ~ 5240MHz									
Test Mode:802.11a									
Test Position Body (5mm gap)	Antenna Position	Frequency		Frame Power (dBm)	Power Drift (<±0.2)	SAR 1g (W/kg)	Scaling Factor	Scaled SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz						
Horizontal Up	Fixed	36	5180	12.23	0.11	0.701	1.016	0.712	1.6
Horizontal Down	Fixed	36	5180	12.23	0.13	0.434	1.016	0.441	1.6
Vertical Back	Fixed	36	5180	12.23	0.04	0.100	1.016	0.102	1.6
Vertical Front	Fixed	36	5180	12.23	-0.13	0.910	1.016	0.925	1.6
Vertical Front*	Fixed	36	5180	12.23	0.11	0.902	1.016	0.916	1.6
Tip	Fixed	36	5180	12.23	0.13	0.086	1.016	0.087	1.6
Vertical Front	Fixed	48	5240	12.03	-0.11	0.903	1.064	0.961	1.6
Horizontal Up	Fixed	48	5240	12.03	-0.14	0.634	1.064	0.675	1.6
Test Mode: 802.11n(20MHz)									
Horizontal Up	Fixed	40	5200	14.73	-0.04	0.480	1.064	0.511	1.6
Horizontal Down	Fixed	40	5200	14.73	-0.17	0.400	1.064	0.426	1.6
Vertical Back	Fixed	40	5200	14.73	-0.16	0.190	1.064	0.202	1.6
Vertical Front	Fixed	40	5200	14.73	0.12	0.928	1.064	0.987	1.6
Vertical Front*	Fixed	40	5200	14.73	0.01	0.920	1.064	0.979	1.6
Tip	Fixed	40	5200	14.73	0.03	0.091	1.064	0.097	1.6
Vertical Front	Fixed	48	5240	13.24	0.05	0.370	1.191	0.441	1.6
Test Mode: 802.11n(40MHz)									
Horizontal Up	Fixed	46	5230	13.39	0.12	0.461	1.151	0.531	1.6
Horizontal Down	Fixed	46	5230	13.39	-0.16	0.413	1.151	0.475	1.6
Vertical Back	Fixed	46	5230	13.39	-0.09	0.350	1.151	0.403	1.6
Vertical Front	Fixed	46	5230	13.39	0.03	0.744	1.151	0.856	1.6
Vertical Front*	Fixed	46	5230	13.39	-0.08	0.706	1.151	0.813	1.6

Tip	Fixed	46	5230	13.39	-0.11	0.069	1.151	0.079	1.6
Vertical Front	Fixed	38	5190	13.12	0.02	0.747	1.091	0.815	1.6
Horizontal Up	Fixed	38	5190	13.12	0.15	0.262	1.091	0.286	1.6
Test Mode: 802.11ac(20MHz)									
Horizontal Up	Fixed	48	5240	13.68	0.10	0.271	1.076	0.292	1.6
Horizontal Down	Fixed	48	5240	13.68	-0.13	0.215	1.076	0.231	1.6
Vertical Back	Fixed	48	5240	13.68	0.09	0.100	1.076	0.108	1.6
Vertical Front	Fixed	48	5240	13.68	0.07	0.454	1.076	0.489	1.6
Tip	Fixed	48	5240	13.68	0.11	0.058	1.076	0.062	1.6
Test Mode: 802.11ac(40MHz)									
Horizontal Up	Fixed	46	5230	13.08	0.03	0.272	1.102	0.300	1.6
Horizontal Down	Fixed	46	5230	13.08	0.16	0.228	1.102	0.251	1.6
Vertical Back	Fixed	46	5230	13.08	0.14	0.066	1.102	0.073	1.6
Vertical Front	Fixed	46	5230	13.08	-0.02	0.304	1.102	0.335	1.6
Tip	Fixed	46	5230	13.08	-0.05	0.055	1.102	0.061	1.6
Test Mode: 802.11ac(80MHz)									
Horizontal Up	Fixed	42	5210	12.13	0.11	0.214	1.089	0.233	1.6
Horizontal Down	Fixed	42	5210	12.13	-0.03	0.365	1.089	0.397	1.6
Vertical Back	Fixed	42	5210	12.13	-0.07	0.183	1.089	0.199	1.6
Vertical Front	Fixed	42	5210	12.13	-0.08	0.613	1.089	0.667	1.6
Tip	Fixed	42	5210	12.13	0.02	0.048	1.089	0.052	1.6

Note 1: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional, refer to KDB 447498.

2: * - repeated at the highest measured SAR according to the FCC KDB 865664

3: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.

4: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

5: Reported SAR were scaled to the maximum duty factor to demonstrate compliance per FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21.5 ± 2					Relative Humidity (%): 52				
Liquid Temperature (°C) : 21.0 ± 2					Depth of Liquid (cm):>15				
Product: AC450 Wireless Nano USB Adapter									
Frequency: 5180 ~ 5240MHz									
Test Mode:802.11a									
Test Position Body (5mm gap)	Antenna Position	Frequency		Frame Power (dBm)	Scaled SAR 1g (W/kg)	Duty cycle (%)	Duty factor	Duty Cycle Scaled SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz						
Horizontal Up	Fixed	36	5180	12.23	0.712	86.06	1.16	0.826	1.6
Horizontal Down	Fixed	36	5180	12.23	0.441	86.06	1.16	0.511	1.6
Vertical Back	Fixed	36	5180	12.23	0.102	86.06	1.16	0.118	1.6
Vertical Front	Fixed	36	5180	12.23	0.925	86.06	1.16	1.072	1.6
Vertical Front*	Fixed	36	5180	12.23	0.916	86.06	1.16	1.063	1.6
Tip	Fixed	36	5180	12.23	0.087	86.06	1.16	0.101	1.6
Vertical Front	Fixed	48	5240	12.03	0.961	86.06	1.16	1.115	1.6
Horizontal Up	Fixed	48	5240	12.03	0.675	86.06	1.16	0.783	1.6
Test Mode: 802.11n(20MHz)									
Horizontal Up	Fixed	40	5200	14.73	0.511	85.30	1.17	0.598	1.6
Horizontal Down	Fixed	40	5200	14.73	0.426	85.30	1.17	0.498	1.6
Vertical Back	Fixed	40	5200	14.73	0.202	85.30	1.17	0.237	1.6
Vertical Front	Fixed	40	5200	14.73	0.987	85.30	1.17	1.155	1.6
Vertical Front*	Fixed	40	5200	14.73	0.979	85.30	1.17	1.145	1.6
Tip	Fixed	40	5200	14.73	0.097	85.30	1.17	0.113	1.6
Vertical Front	Fixed	48	5240	13.24	0.441	85.30	1.17	0.516	1.6
Test Mode: 802.11n(40MHz)									
Horizontal Up	Fixed	46	5230	13.39	0.531	72.60	1.38	0.732	1.6
Horizontal Down	Fixed	46	5230	13.39	0.475	72.60	1.38	0.656	1.6
Vertical Back	Fixed	46	5230	13.39	0.403	72.60	1.38	0.556	1.6
Vertical Front	Fixed	46	5230	13.39	0.856	72.60	1.38	1.181	1.6
Vertical Front*	Fixed	46	5230	13.39	0.813	72.60	1.38	1.121	1.6
Tip	Fixed	46	5230	13.39	0.079	72.60	1.38	0.110	1.6
Vertical Front	Fixed	38	5190	13.12	0.815	72.60	1.38	1.125	1.6

Horizontal Up	Fixed	38	5190	13.12	0.286	72.60	1.38	0.394	1.6
Test Mode: 802.11ac(20MHz)									
Horizontal Up	Fixed	48	5240	13.68	0.292	84.76	1.18	0.344	1.6
Horizontal Down	Fixed	48	5240	13.68	0.231	84.76	1.18	0.273	1.6
Vertical Back	Fixed	48	5240	13.68	0.108	84.76	1.18	0.127	1.6
Vertical Front	Fixed	48	5240	13.68	0.489	84.76	1.18	0.576	1.6
Tip	Fixed	48	5240	13.68	0.062	84.76	1.18	0.074	1.6
Test Mode: 802.11ac(40MHz)									
Horizontal Up	Fixed	46	5230	13.08	0.300	74.74	1.34	0.402	1.6
Horizontal Down	Fixed	46	5230	13.08	0.251	74.74	1.34	0.337	1.6
Vertical Back	Fixed	46	5230	13.08	0.073	74.74	1.34	0.097	1.6
Vertical Front	Fixed	46	5230	13.08	0.335	74.74	1.34	0.449	1.6
Tip	Fixed	46	5230	13.08	0.061	74.74	1.34	0.081	1.6
Test Mode: 802.11ac(80MHz)									
Horizontal Up	Fixed	42	5210	12.13	0.233	55.97	1.79	0.417	1.6
Horizontal Down	Fixed	42	5210	12.13	0.397	55.97	1.79	0.711	1.6
Vertical Back	Fixed	42	5210	12.13	0.199	55.97	1.79	0.357	1.6
Vertical Front	Fixed	42	5210	12.13	0.667	55.97	1.79	1.192	1.6
Tip	Fixed	42	5210	12.13	0.052	55.97	1.79	0.094	1.6

Note 1: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional, refer to KDB 447498.

2: * - repeated at the highest measured SAR according to the FCC KDB 865664

3: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.

4: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

5: Reported SAR were scaled to the maximum duty factor to demonstrate compliance per FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21.5 ± 2					Relative Humidity (%): 52				
Liquid Temperature (°C) : 21.0 ± 2					Depth of Liquid (cm):>15				
Product: AC450 Wireless Nano USB Adapter									
Frequency: 5260 ~ 5320MHz									
Test Mode:802.11a									
Test Position Body (5mm gap)	Antenna Position	Frequency		Frame Power (dBm)	Power Drift (<±0.2)	SAR 1g (W/kg)	Scaling Factor	Scaled SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz						
Horizontal Up	Fixed	52	5260	11.61	0.11	0.513	1.172	0.601	1.6
Horizontal Down	Fixed	52	5260	11.61	0.12	0.539	1.172	0.632	1.6
Vertical Back	Fixed	52	5260	11.61	0.11	0.184	1.172	0.216	1.6
Vertical Front	Fixed	52	5260	11.61	0.16	0.876	1.172	1.027	1.6
Vertical Front*	Fixed	52	5260	11.61	-0.10	0.842	1.172	0.987	1.6
Tip	Fixed	52	5260	11.61	0.18	0.106	1.172	0.124	1.6
Vertical Front	Fixed	60	5300	11.60	-0.01	0.821	1.175	0.965	1.6
Horizontal Down	Fixed	60	5300	11.60	0.16	0.520	1.175	0.611	1.6
Test Mode:802.11n(20MHz)									
Horizontal Up	Fixed	60	5300	13.92	0.09	0.452	1.019	0.461	1.6
Horizontal Down	Fixed	60	5300	13.92	0.13	0.328	1.019	0.334	1.6
Vertical Back	Fixed	60	5300	13.92	0.18	0.296	1.019	0.302	1.6
Vertical Front	Fixed	60	5300	13.92	-0.01	0.618	1.019	0.630	1.6
Tip	Fixed	60	5300	13.92	-0.06	0.098	1.019	0.100	1.6
Test Mode:802.11n(40MHz)									
Horizontal Up	Fixed	54	5270	13.03	0.15	0.599	1.250	0.749	1.6
Horizontal Down	Fixed	54	5270	13.03	0.11	0.606	1.250	0.758	1.6
Vertical Back	Fixed	54	5270	13.03	-0.12	0.227	1.250	0.284	1.6
Vertical Front	Fixed	54	5270	13.03	0.10	0.681	1.250	0.851	1.6
Vertical Front*	Fixed	54	5270	13.03	-0.08	0.658	1.250	0.823	1.6
Tip	Fixed	54	5270	13.03	-0.03	0.079	1.250	0.099	1.6
Vertical Front	Fixed	62	5310	11.59	0.01	0.568	1.099	0.624	1.6
Horizontal Down	Fixed	62	5310	11.59	0.05	0.401	1.099	0.441	1.6
Test Mode:802.11ac(20MHz)									
Horizontal Up	Fixed	64	5320	13.23	-0.09	0.467	1.194	0.558	1.6

Horizontal Down	Fixed	64	5320	13.23	0.10	0.511	1.194	0.610	1.6
Vertical Back	Fixed	64	5320	13.23	0.01	0.198	1.194	0.236	1.6
Vertical Front	Fixed	64	5320	13.23	-0.05	0.772	1.194	0.922	1.6
Vertical Front*	Fixed	64	5320	13.23	0.02	0.749	1.194	0.894	1.6
Tip	Fixed	64	5320	13.23	0.06	0.088	1.194	0.105	1.6
Vertical Front	Fixed	60	5300	13.18	-0.13	0.713	1.208	0.861	1.6
Horizontal Down	Fixed	60	5300	13.18	-0.20	0.429	1.208	0.518	1.6
Test Mode:802.11ac(40MHz)									
Horizontal Up	Fixed	62	5310	12.32	0.03	0.461	1.042	0.480	1.6
Horizontal Down	Fixed	62	5310	12.32	0.07	0.572	1.042	0.596	1.6
Vertical Back	Fixed	62	5310	12.32	-0.06	0.365	1.042	0.380	1.6
Vertical Front	Fixed	62	5310	12.32	-0.04	0.778	1.042	0.811	1.6
Vertical Front*	Fixed	62	5310	12.32	0.11	0.726	1.042	0.756	1.6
Tip	Fixed	62	5310	12.32	-0.12	0.057	1.042	0.059	1.6
Vertical Front	Fixed	54	5270	12.26	-0.18	0.703	1.057	0.743	1.6
Horizontal Down	Fixed	54	5270	12.26	0.03	0.423	1.057	0.447	1.6
Test Mode:802.11ac(80MHz)									
Horizontal Up	Fixed	58	5290	12.24	0.13	0.544	1.062	0.578	1.6
Horizontal Down	Fixed	58	5290	12.24	0.10	0.618	1.062	0.656	1.6
Vertical Back	Fixed	58	5290	12.24	-0.11	0.481	1.062	0.511	1.6
Vertical Front	Fixed	58	5290	12.24	-0.13	0.621	1.062	0.660	1.6
Tip	Fixed	58	5290	12.24	0.05	0.065	1.062	0.069	1.6

Note 1: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional, refer to KDB 447498.

2: * - repeated at the highest measured SAR according to the FCC KDB 865664

3: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.

4: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

5: Reported SAR were scaled to the maximum duty factor to demonstrate compliance per FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21.5 ± 2					Relative Humidity (%): 52				
Liquid Temperature (°C) : 21.0 ± 2					Depth of Liquid (cm):>15				
Product: AC450 Wireless Nano USB Adapter									
Frequency: 5260 ~ 5320MHz									
Test Mode:802.11a									
Test Position Body (5mm gap)	Antenna Position	Frequency		Frame Power (dBm)	Scaled SAR 1g (W/kg)	Duty cycle (%)	Duty factor	Duty Cycle Scaled SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz						
Horizontal Up	Fixed	52	5260	11.61	0.601	86.06	1.16	0.697	1.6
Horizontal Down	Fixed	52	5260	11.61	0.632	86.06	1.16	0.733	1.6
Vertical Back	Fixed	52	5260	11.61	0.216	86.06	1.16	0.251	1.6
Vertical Front	Fixed	52	5260	11.61	1.027	86.06	1.16	1.191	1.6
Vertical Front*	Fixed	52	5260	11.61	0.987	86.06	1.16	1.145	1.6
Tip	Fixed	52	5260	11.61	0.124	86.06	1.16	0.144	1.6
Vertical Front	Fixed	60	5300	11.60	0.965	86.06	1.16	1.119	1.6
Horizontal Down	Fixed	60	5300	11.60	0.611	86.06	1.16	0.709	1.6
Test Mode:802.11n(20MHz)									
Horizontal Up	Fixed	60	5300	13.92	0.461	85.30	1.17	0.539	1.6
Horizontal Down	Fixed	60	5300	13.92	0.334	85.30	1.17	0.391	1.6
Vertical Back	Fixed	60	5300	13.92	0.302	85.30	1.17	0.353	1.6
Vertical Front	Fixed	60	5300	13.92	0.630	85.30	1.17	0.737	1.6
Tip	Fixed	60	5300	13.92	0.100	85.30	1.17	0.117	1.6
Test Mode:802.11n(40MHz)									
Horizontal Up	Fixed	54	5270	13.03	0.749	72.60	1.38	1.034	1.6
Horizontal Down	Fixed	54	5270	13.03	0.758	72.60	1.38	1.046	1.6
Vertical Back	Fixed	54	5270	13.03	0.284	72.60	1.38	0.392	1.6
Vertical Front	Fixed	54	5270	13.03	0.851	72.60	1.38	1.174	1.6
Vertical Front*	Fixed	54	5270	13.03	0.823	72.60	1.38	1.136	1.6
Tip	Fixed	54	5270	13.03	0.099	72.60	1.38	0.137	1.6
Vertical Front	Fixed	62	5310	11.59	0.624	72.60	1.38	0.861	1.6
Horizontal Down	Fixed	62	5310	11.59	0.441	72.60	1.38	0.608	1.6
Test Mode:802.11ac(20MHz)									

Horizontal Up	Fixed	64	5320	13.23	0.558	84.76	1.18	0.658	1.6
Horizontal Down	Fixed	64	5320	13.23	0.610	84.76	1.18	0.720	1.6
Vertical Back	Fixed	64	5320	13.23	0.236	84.76	1.18	0.278	1.6
Vertical Front	Fixed	64	5320	13.23	0.922	84.76	1.18	1.088	1.6
Vertical Front*	Fixed	64	5320	13.23	0.894	84.76	1.18	1.055	1.6
Tip	Fixed	64	5320	13.23	0.105	84.76	1.18	0.124	1.6
Vertical Front	Fixed	60	5300	13.18	0.861	84.76	1.18	1.016	1.6
Horizontal Down	Fixed	60	5300	13.18	0.518	84.76	1.18	0.611	1.6
Test Mode:802.11ac(40MHz)									
Horizontal Up	Fixed	62	5310	12.32	0.480	74.74	1.34	0.643	1.6
Horizontal Down	Fixed	62	5310	12.32	0.596	74.74	1.34	0.799	1.6
Vertical Back	Fixed	62	5310	12.32	0.380	74.74	1.34	0.509	1.6
Vertical Front	Fixed	62	5310	12.32	0.811	74.74	1.34	1.087	1.6
Vertical Front*	Fixed	62	5310	12.32	0.756	74.74	1.34	1.013	1.6
Tip	Fixed	62	5310	12.32	0.059	74.74	1.34	0.079	1.6
Vertical Front	Fixed	54	5270	12.26	0.743	74.74	1.34	0.996	1.6
Horizontal Down	Fixed	54	5270	12.26	0.447	74.74	1.34	0.599	1.6
Test Mode:802.11ac(80MHz)									
Horizontal Up	Fixed	58	5290	12.24	0.578	55.97	1.79	1.035	1.6
Horizontal Down	Fixed	58	5290	12.24	0.656	55.97	1.79	1.175	1.6
Vertical Back	Fixed	58	5290	12.24	0.511	55.97	1.79	0.915	1.6
Vertical Front	Fixed	58	5290	12.24	0.660	55.97	1.79	1.181	1.6
Tip	Fixed	58	5290	12.24	0.069	55.97	1.79	0.124	1.6

Note 1: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional, refer to KDB 447498.

2: * - repeated at the highest measured SAR according to the FCC KDB 865664

3: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.

4: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

5: Reported SAR were scaled to the maximum duty factor to demonstrate compliance per FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21.5 ± 2					Relative Humidity (%): 52				
Liquid Temperature (°C) : 21.0 ± 2					Depth of Liquid (cm):>15				
Product: AC450 Wireless Nano USB Adapter									
Frequency: 5500 ~ 5700MHz									
Test Mode:802.11a									
Test Position Body (5mm gap)	Antenna Position	Frequency		Frame Power (dBm)	Power Drift (<±0.2)	SAR 1g (W/kg)	Scaling Factor	Scaled SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz						
Horizontal Up	Fixed	140	5700	21.38	0.14	0.529	1.028	0.544	1.6
Horizontal Down	Fixed	140	5700	21.38	0.12	0.462	1.028	0.475	1.6
Vertical Back	Fixed	140	5700	21.38	-0.12	0.215	1.028	0.221	1.6
Vertical Front	Fixed	140	5700	21.38	-0.12	0.822	1.028	0.845	1.6
Vertical Front*	Fixed	140	5700	21.38	0.09	0.806	1.028	0.829	1.6
Tip	Fixed	140	5700	21.38	-0.06	0.162	1.028	0.167	1.6
Vertical Front	Fixed	100	5500	20.72	0.13	0.676	1.067	0.721	1.6
Horizontal Up	Fixed	100	5500	20.72	0.06	0.455	1.067	0.485	1.6
Test Mode:802.11n(20MHz)									
Horizontal Up	Fixed	116	5580	20.93	-0.03	0.701	1.016	0.712	1.6
Horizontal Down	Fixed	116	5580	20.93	-0.13	0.623	1.016	0.633	1.6
Vertical Back	Fixed	116	5580	20.93	0.02	0.188	1.016	0.191	1.6
Vertical Front	Fixed	116	5580	20.93	-0.07	0.991	1.016	1.007	1.6
Vertical Front*	Fixed	116	5580	20.93	0.05	0.956	1.016	0.971	1.6
Tip	Fixed	116	5580	20.93	-0.04	0.043	1.016	0.044	1.6
Vertical Front	Fixed	100	5500	20.68	-0.16	0.922	1.076	0.992	1.6
Horizontal Up	Fixed	100	5500	20.68	0.10	0.585	1.076	0.629	1.6
Test Mode:802.11n(40MHz)									
Horizontal Up	Fixed	110	5550	16.16	0.08	0.374	1.081	0.404	1.6
Horizontal Down	Fixed	110	5550	16.16	0.10	0.350	1.081	0.378	1.6
Vertical Back	Fixed	110	5550	16.16	-0.12	0.174	1.081	0.188	1.6
Vertical Front	Fixed	110	5550	16.16	-0.18	0.398	1.081	0.430	1.6
Tip	Fixed	110	5550	16.16	0.02	0.039	1.081	0.042	1.6
Test Mode:802.11ac(20MHz)									
Horizontal Up	Fixed	100	5500	15.70	-0.11	0.599	1.072	0.642	1.6

Horizontal Down	Fixed	100	5500	15.70	0.05	0.563	1.072	0.604	1.6
Vertical Back	Fixed	100	5500	15.70	0.09	0.152	1.072	0.163	1.6
Vertical Front	Fixed	100	5500	15.70	-0.10	0.669	1.072	0.717	1.6
Tip	Fixed	100	5500	15.70	-0.16	0.056	1.072	0.060	1.6
Vertical Front	Fixed	132	5660	14.88	0.11	0.620	1.028	0.637	1.6
Test Mode:802.11ac(40MHz)									
Horizontal Up	Fixed	134	5670	16.03	0.02	0.358	1.114	0.399	1.6
Horizontal Down	Fixed	134	5670	16.03	0.09	0.294	1.114	0.328	1.6
Vertical Back	Fixed	134	5670	16.03	-0.15	0.176	1.114	0.196	1.6
Vertical Front	Fixed	134	5670	16.03	-0.12	0.387	1.114	0.431	1.6
Tip	Fixed	134	5670	16.03	-0.06	0.062	1.114	0.069	1.6
Test Mode:802.11ac(80MHz)									
Horizontal Up	Fixed	106	5530	14.07	0.05	0.357	1.104	0.394	1.6
Horizontal Down	Fixed	106	5530	14.07	0.09	0.329	1.104	0.363	1.6
Vertical Back	Fixed	106	5530	14.07	-0.01	0.128	1.104	0.141	1.6
Vertical Front	Fixed	106	5530	14.07	-0.04	0.509	1.104	0.562	1.6
Tip	Fixed	106	5530	14.07	0.15	0.039	1.104	0.043	1.6

Note 1: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional, refer to KDB 447498.

2: * - repeated at the highest measured SAR according to the FCC KDB 865664

3: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.

4: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

5: Reported SAR were scaled to the maximum duty factor to demonstrate compliance per FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21.5 ± 2					Relative Humidity (%): 52				
Liquid Temperature (°C) : 21.0 ± 2					Depth of Liquid (cm):>15				
Product: AC450 Wireless Nano USB Adapter									
Frequency: 5500 ~ 5700MHz									
Test Mode:802.11a									
Test Position Body (5mm gap)	Antenna Position	Frequency		Frame Power (dBm)	Scaled SAR 1g (W/kg)	Duty cycle (%)	Duty factor	Duty Cycle Scaled SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz						
Horizontal Up	Fixed	140	5700	21.38	0.544	86.06	1.16	0.631	1.6
Horizontal Down	Fixed	140	5700	21.38	0.475	86.06	1.16	0.551	1.6
Vertical Back	Fixed	140	5700	21.38	0.221	86.06	1.16	0.256	1.6
Vertical Front	Fixed	140	5700	21.38	0.845	86.06	1.16	0.980	1.6
Vertical Front*	Fixed	140	5700	21.38	0.829	86.06	1.16	0.962	1.6
Tip	Fixed	140	5700	21.38	0.167	86.06	1.16	0.194	1.6
Vertical Front	Fixed	100	5500	20.72	0.721	86.06	1.16	0.836	1.6
Horizontal Up	Fixed	100	5500	20.72	0.485	86.06	1.16	0.563	1.6
Test Mode:802.11n(20MHz)									
Horizontal Up	Fixed	116	5580	20.93	0.712	85.30	1.17	0.833	1.6
Horizontal Down	Fixed	116	5580	20.93	0.633	85.30	1.17	0.741	1.6
Vertical Back	Fixed	116	5580	20.93	0.191	85.30	1.17	0.223	1.6
Vertical Front	Fixed	116	5580	20.93	1.007	85.30	1.17	1.178	1.6
Vertical Front*	Fixed	116	5580	20.93	0.971	85.30	1.17	1.136	1.6
Tip	Fixed	116	5580	20.93	0.044	85.30	1.17	0.051	1.6
Vertical Front	Fixed	100	5500	20.68	0.992	85.30	1.17	1.161	1.6
Horizontal Up	Fixed	100	5500	20.68	0.629	85.30	1.17	0.736	1.6
Test Mode:802.11n(40MHz)									
Horizontal Up	Fixed	110	5550	16.16	0.404	72.60	1.38	0.558	1.6
Horizontal Down	Fixed	110	5550	16.16	0.378	72.60	1.38	0.522	1.6
Vertical Back	Fixed	110	5550	16.16	0.188	72.60	1.38	0.260	1.6
Vertical Front	Fixed	110	5550	16.16	0.430	72.60	1.38	0.594	1.6
Tip	Fixed	110	5550	16.16	0.042	72.60	1.38	0.058	1.6
Test Mode:802.11ac(20MHz)									

Horizontal Up	Fixed	100	5500	15.70	0.642	84.76	1.18	0.758	1.6
Horizontal Down	Fixed	100	5500	15.70	0.604	84.76	1.18	0.712	1.6
Vertical Back	Fixed	100	5500	15.70	0.163	84.76	1.18	0.192	1.6
Vertical Front	Fixed	100	5500	15.70	0.717	84.76	1.18	0.846	1.6
Tip	Fixed	100	5500	15.70	0.060	84.76	1.18	0.071	1.6
Vertical Front	Fixed	132	5660	14.88	0.637	84.76	1.18	0.752	1.6
Test Mode:802.11ac(40MHz)									
Horizontal Up	Fixed	134	5670	16.03	0.399	74.74	1.34	0.534	1.6
Horizontal Down	Fixed	134	5670	16.03	0.328	74.74	1.34	0.439	1.6
Vertical Back	Fixed	134	5670	16.03	0.196	74.74	1.34	0.263	1.6
Vertical Front	Fixed	134	5670	16.03	0.431	74.74	1.34	0.578	1.6
Tip	Fixed	134	5670	16.03	0.069	74.74	1.34	0.093	1.6
Test Mode:802.11ac(80MHz)									
Horizontal Up	Fixed	106	5530	14.07	0.394	55.97	1.79	0.705	1.6
Horizontal Down	Fixed	106	5530	14.07	0.363	55.97	1.79	0.650	1.6
Vertical Back	Fixed	106	5530	14.07	0.141	55.97	1.79	0.253	1.6
Vertical Front	Fixed	106	5530	14.07	0.562	55.97	1.79	1.006	1.6
Tip	Fixed	106	5530	14.07	0.043	55.97	1.79	0.077	1.6

Note 1: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional, refer to KDB 447498.

2: * - repeated at the highest measured SAR according to the FCC KDB 865664

3: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.

4: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

5: Reported SAR were scaled to the maximum duty factor to demonstrate compliance per FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21.5 ± 2					Relative Humidity (%): 52				
Liquid Temperature (°C) : 21.0 ± 2					Depth of Liquid (cm):>15				
Product: AC450 Wireless Nano USB Adapter									
Frequency: 5745 ~ 5825MHz									
Test Mode:802.11a									
Test Position Body (5mm gap)	Antenna Position	Frequency		Frame Power (dBm)	Power Drift (<±0.2)	SAR 1g (W/kg)	Scaling Factor	Scaled SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz						
Horizontal Up	Fixed	157	5785	21.00	0.06	0.399	1.000	0.399	1.6
Horizontal Down	Fixed	157	5785	21.00	-0.17	0.693	1.000	0.693	1.6
Vertical Back	Fixed	157	5785	21.00	0.08	0.654	1.000	0.654	1.6
Vertical Front	Fixed	157	5785	21.00	0.11	0.757	1.000	0.757	1.6
Tip	Fixed	157	5785	21.00	-0.02	0.367	1.000	0.367	1.6
Vertical Front	Fixed	149	5745	15.24	-0.06	0.592	1.191	0.705	1.6
Horizontal Down	Fixed	149	5745	15.24	0.09	0.542	1.191	0.646	1.6
Test Mode:802.11n(20MHz)									
Horizontal Up	Fixed	157	5785	20.22	0.12	0.286	1.197	0.342	1.6
Horizontal Down	Fixed	157	5785	20.22	0.18	0.425	1.197	0.509	1.6
Vertical Back	Fixed	157	5785	20.22	-0.05	0.398	1.197	0.476	1.6
Vertical Front	Fixed	157	5785	20.22	0.04	0.593	1.197	0.710	1.6
Tip	Fixed	157	5785	20.22	0.02	0.231	1.197	0.277	1.6
Vertical Front	Fixed	149	5745	13.59	-0.19	0.503	1.099	0.553	1.6
Test Mode:802.11n(40MHz)									
Horizontal Up	Fixed	159	5795	15.63	0.06	0.265	1.089	0.289	1.6
Horizontal Down	Fixed	159	5795	15.63	0.09	0.389	1.089	0.424	1.6
Vertical Back	Fixed	159	5795	15.63	-0.12	0.201	1.089	0.219	1.6
Vertical Front	Fixed	159	5795	15.63	-0.11	0.594	1.089	0.647	1.6
Tip	Fixed	159	5795	15.63	0.18	0.189	1.089	0.206	1.6
Vertical Front	Fixed	151	5755	13.04	0.16	0.497	1.247	0.620	1.6
Horizontal Down	Fixed	151	5755	13.04	-0.03	0.321	1.247	0.400	1.6
Test Mode:802.11ac(20MHz)									
Horizontal Up	Fixed	157	5785	20.16	0.07	0.245	1.081	0.265	1.6
Horizontal Down	Fixed	157	5785	20.16	0.12	0.362	1.081	0.391	1.6

Vertical Back	Fixed	157	5785	20.16	-0.15	0.198	1.081	0.214	1.6
Vertical Front	Fixed	157	5785	20.16	-0.02	0.603	1.081	0.652	1.6
Tip	Fixed	157	5785	20.16	-0.10	0.125	1.081	0.135	1.6
Vertical Front	Fixed	165	5825	14.93	0.14	0.484	1.016	0.492	1.6
Test Mode:802.11ac(40MHz)									
Horizontal Up	Fixed	159	5795	15.99	0.01	0.238	1.002	0.238	1.6
Horizontal Down	Fixed	159	5795	15.99	0.15	0.296	1.002	0.297	1.6
Vertical Back	Fixed	159	5795	15.99	-0.16	0.153	1.002	0.153	1.6
Vertical Front	Fixed	159	5795	15.99	-0.12	0.522	1.002	0.523	1.6
Tip	Fixed	159	5795	15.99	0.08	0.102	1.002	0.102	1.6
Test Mode:802.11ac(80MHz)									
Horizontal Up	Fixed	155	5775	15.24	0.05	0.195	1.191	0.232	1.6
Horizontal Down	Fixed	155	5775	15.24	0.12	0.203	1.191	0.242	1.6
Vertical Back	Fixed	155	5775	15.24	0.17	0.114	1.191	0.136	1.6
Vertical Front	Fixed	155	5775	15.24	-0.14	0.358	1.191	0.426	1.6
Tip	Fixed	155	5775	15.24	-0.11	0.088	1.191	0.105	1.6

Note 1: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional, refer to KDB 447498.

2: * - repeated at the highest measured SAR according to the FCC KDB 865664

3: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.

4: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

5: Reported SAR were scaled to the maximum duty factor to demonstrate compliance per FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21.5 ± 2					Relative Humidity (%): 52				
Liquid Temperature (°C) : 21.0 ± 2					Depth of Liquid (cm):>15				
Product: AC450 Wireless Nano USB Adapter									
Frequency: 5745 ~ 5825MHz									
Test Mode:802.11a									
Test Position Body (5mm gap)	Antenna Position	Frequency		Frame Power (dBm)	Scaled SAR 1g (W/kg)	Duty cycle (%)	Duty factor	Duty Cycle Scaled SAR 1g (W/kg)	Limit (W/kg)
		Channel	MHz						
Horizontal Up	Fixed	157	5785	21.00	0.399	86.06	1.16	0.463	1.6
Horizontal Down	Fixed	157	5785	21.00	0.693	86.06	1.16	0.804	1.6
Vertical Back	Fixed	157	5785	21.00	0.654	86.06	1.16	0.759	1.6
Vertical Front	Fixed	157	5785	21.00	0.757	86.06	1.16	0.878	1.6
Tip	Fixed	157	5785	21.00	0.367	86.06	1.16	0.426	1.6
Vertical Front	Fixed	165	5745	15.24	0.705	86.06	1.16	0.818	1.6
Horizontal Down	Fixed	165	5745	15.24	0.646	86.06	1.16	0.749	1.6
Test Mode:802.11n(20MHz)									
Horizontal Up	Fixed	157	5785	20.22	0.342	85.30	1.17	0.401	1.6
Horizontal Down	Fixed	157	5785	20.22	0.509	85.30	1.17	0.595	1.6
Vertical Back	Fixed	157	5785	20.22	0.476	85.30	1.17	0.557	1.6
Vertical Front	Fixed	157	5785	20.22	0.710	85.30	1.17	0.830	1.6
Tip	Fixed	157	5785	20.22	0.277	85.30	1.17	0.324	1.6
Vertical Front	Fixed	149	5745	13.59	0.553	85.30	1.17	0.647	1.6
Test Mode:802.11n(40MHz)									
Horizontal Up	Fixed	159	5795	15.63	0.289	72.60	1.38	0.398	1.6
Horizontal Down	Fixed	159	5795	15.63	0.424	72.60	1.38	0.585	1.6
Vertical Back	Fixed	159	5795	15.63	0.219	72.60	1.38	0.302	1.6
Vertical Front	Fixed	159	5795	15.63	0.647	72.60	1.38	0.893	1.6
Tip	Fixed	159	5795	15.63	0.206	72.60	1.38	0.284	1.6
Vertical Front	Fixed	151	5755	13.04	0.620	72.60	1.38	0.855	1.6
Horizontal Down	Fixed	151	5755	13.04	0.400	72.60	1.38	0.552	1.6
Test Mode:802.11ac(20MHz)									
Horizontal Up	Fixed	157	5785	20.16	0.265	84.76	1.18	0.313	1.6

Horizontal Down	Fixed	157	5785	20.16	0.391	84.76	1.18	0.462	1.6
Vertical Back	Fixed	157	5785	20.16	0.214	84.76	1.18	0.253	1.6
Vertical Front	Fixed	157	5785	20.16	0.652	84.76	1.18	0.769	1.6
Tip	Fixed	157	5785	20.16	0.135	84.76	1.18	0.159	1.6
Vertical Front	Fixed	165	5825	14.93	0.492	84.76	1.18	0.580	1.6
Test Mode:802.11ac(40MHz)									
Horizontal Up	Fixed	159	5795	15.99	0.238	74.74	1.34	0.320	1.6
Horizontal Down	Fixed	159	5795	15.99	0.297	74.74	1.34	0.397	1.6
Vertical Back	Fixed	159	5795	15.99	0.153	74.74	1.34	0.205	1.6
Vertical Front	Fixed	159	5795	15.99	0.523	74.74	1.34	0.701	1.6
Tip	Fixed	159	5795	15.99	0.102	74.74	1.34	0.137	1.6
Test Mode:802.11ac(80MHz)									
Horizontal Up	Fixed	155	5775	15.24	0.232	55.97	1.79	0.416	1.6
Horizontal Down	Fixed	155	5775	15.24	0.242	55.97	1.79	0.433	1.6
Vertical Back	Fixed	155	5775	15.24	0.136	55.97	1.79	0.243	1.6
Vertical Front	Fixed	155	5775	15.24	0.426	55.97	1.79	0.763	1.6
Tip	Fixed	155	5775	15.24	0.105	55.97	1.79	0.188	1.6

Note 1: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional, refer to KDB 447498.

2: * - repeated at the highest measured SAR according to the FCC KDB 865664

3: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.

4: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

5: Reported SAR were scaled to the maximum duty factor to demonstrate compliance per FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02.

9.2. Test position and configuration

1. Liquid tissue depth was at least 15.0 cm for all frequencies.
2. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
3. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v06.
4. Reported SAR were scaled to the maximum duty factor to demonstrate compliance per FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02.
5. SAR was performed with the device configured in the positions according to KDB 447498 D02 SAR Procedures for Dongle Xmtr v02r01, body SAR was performed with the device to phantom separation distance of 5mm. All USB orientations (A: Horizontal-Up, B: Horizontal-Down, C: Vertical-Front, D: Vertical-Back, and E: Tip) were evaluated with 15cm USB cable for extension. Please check the SAR test photos.

WLAN Notes:

When the maximum extrapolated peak SAR of the zoom scan for the maximum output channel is <1.6 W/kg and the reported 1g averaged SAR is <0.8 W/kg, SAR testing on other default channels is not required.

Appendix A. SAR System Validation Data

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

System Check Body 5250MHz

DUT: Dipole D5GHzV2; Type: D5GHzV2

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1; Frequency: 5250 MHz; Medium parameters used: $f = 5250$ MHz; $\sigma = 5.32$ S/m; $\epsilon_r = 49.42$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section ; Input Power=100mW

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

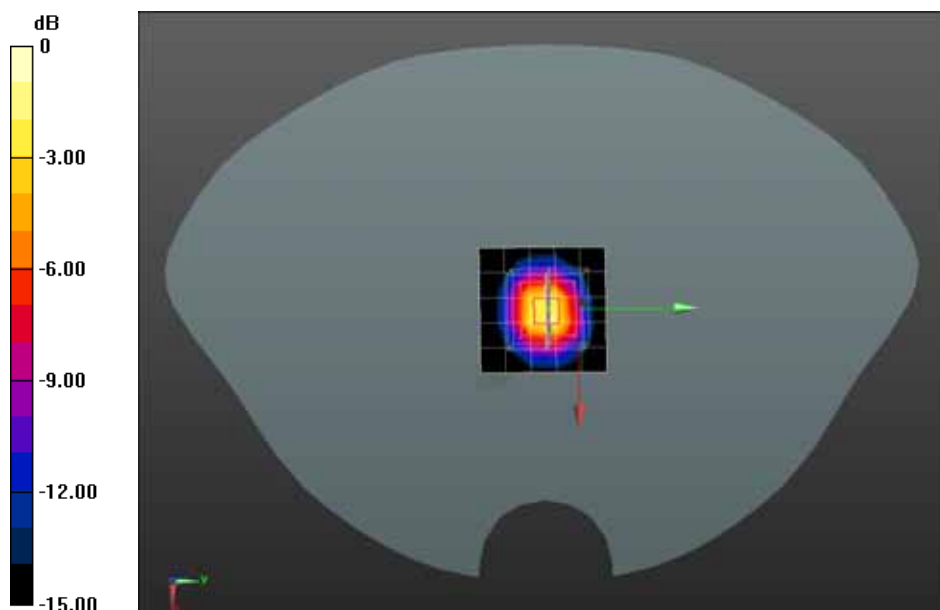
Configuration/Body 5250MHz/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 6.67 W/kg

Configuration/Body 5250MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 44.33 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 46.0 W/kg

SAR(1 g) = 7.87 W/kg; SAR(10 g) = 2.04 W/kg Maximum value of SAR (measured) = 8.83 W/kg



0 dB = 8.83 W/kg = 9.03 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

System Check Body 5600MHz

DUT: Dipole D5GHzV2; Type: D5GHzV2

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1; Frequency: 5600 MHz; Medium parameters used: $f = 5600$ MHz; $\sigma = 5.8$ S/m; $\epsilon_r = 48.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section ; Input Power=100mW

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(3.67, 3.67, 3.67); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

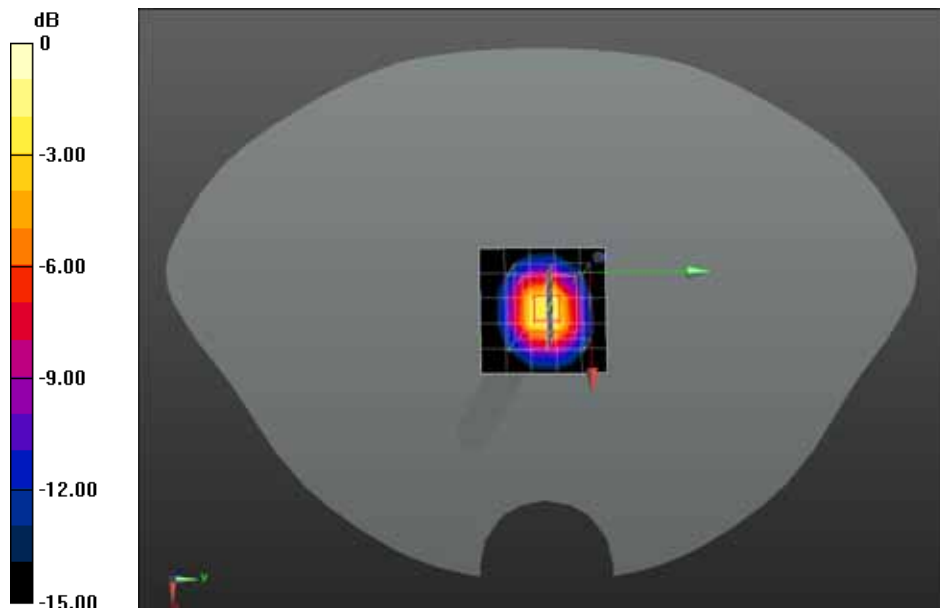
Configuration/Body 5600MHz/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 7.15 W/kg

Configuration/Body 5600MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 44.69 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 62.6 W/kg

SAR(1 g) = 8.11 W/kg; SAR(10 g) = 2.15 W/kg Maximum value of SAR (measured) = 8.6 W/kg



0 dB = 8.6 W/kg = 8.25 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

System Check Body 5750MHz

DUT: Dipole D5GHzV2; Type: D5GHzV2

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1; Frequency: 5750 MHz; Medium parameters used: $f = 5750$ MHz; $\sigma = 6.05$ S/m; $\epsilon_r = 48.03$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section ; Input Power=100mW

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(3.8, 3.8, 3.8); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

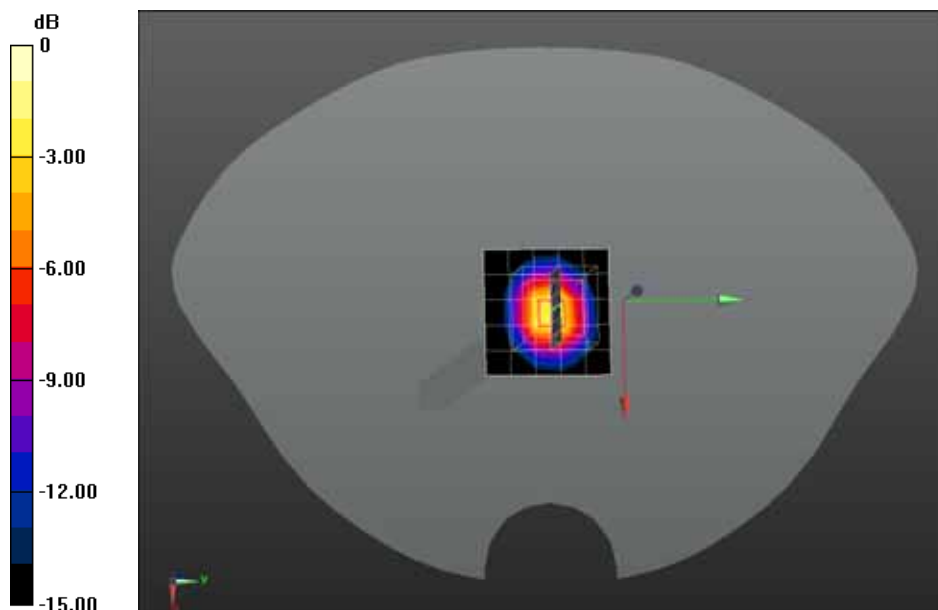
Configuration/Body 5750MHz/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 8.08 W/kg

Configuration/Body 5750MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm; Reference Value = 46.02 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 31.9 W/kg

SAR(1 g) = 7.57 W/kg; SAR(10 g) = 2.09 W/kg Maximum value of SAR (measured) = 10.2 W/kg



0 dB = 10.2 W/kg = 9.86 dBW/kg

Appendix B. SAR measurement Data

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5180MHz Body-Horizontal-Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5180 MHz; Medium parameters used: $f = 5180$ MHz; $\sigma = 5.22$ S/m; $\epsilon_r = 49.62$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

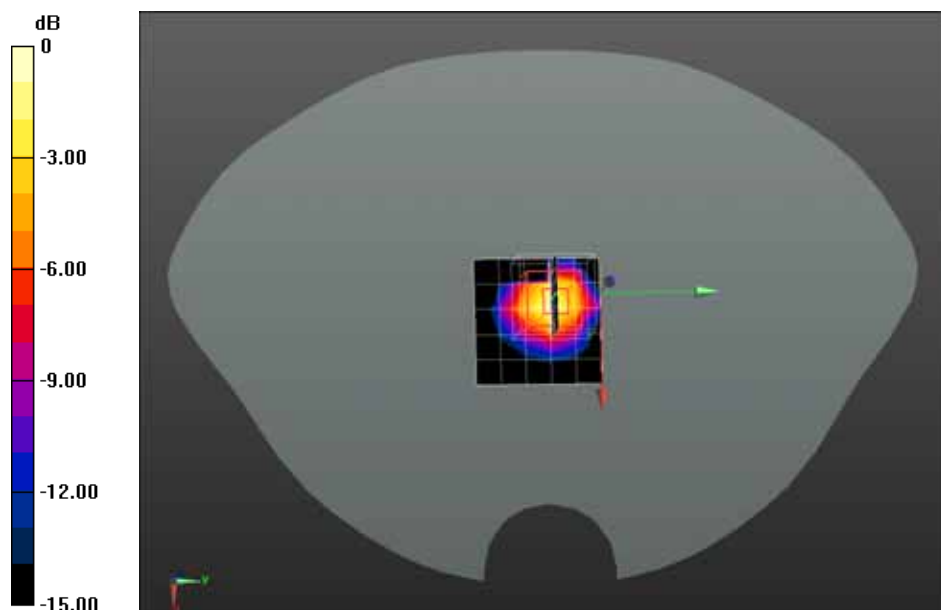
- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM2; Type: SAM; Serial: TP1562
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5180MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (measured) = 0.774 W/kg

Configuration/802.11a 5180MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 11.40 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 2.24 W/kg

SAR(1 g) = 0.701 W/kg; SAR(10 g) = 0.204 W/kg Maximum value of SAR (measured) = 0.843 W/kg



0 dB = 0.843 W/kg = -0.74 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5180MHz Body-Horizontal-Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5180 MHz; Medium parameters used: $f = 5180$ MHz; $\sigma = 5.22$ S/m; $\epsilon_r = 49.62$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM2; Type: SAM; Serial: TP1562
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5180MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

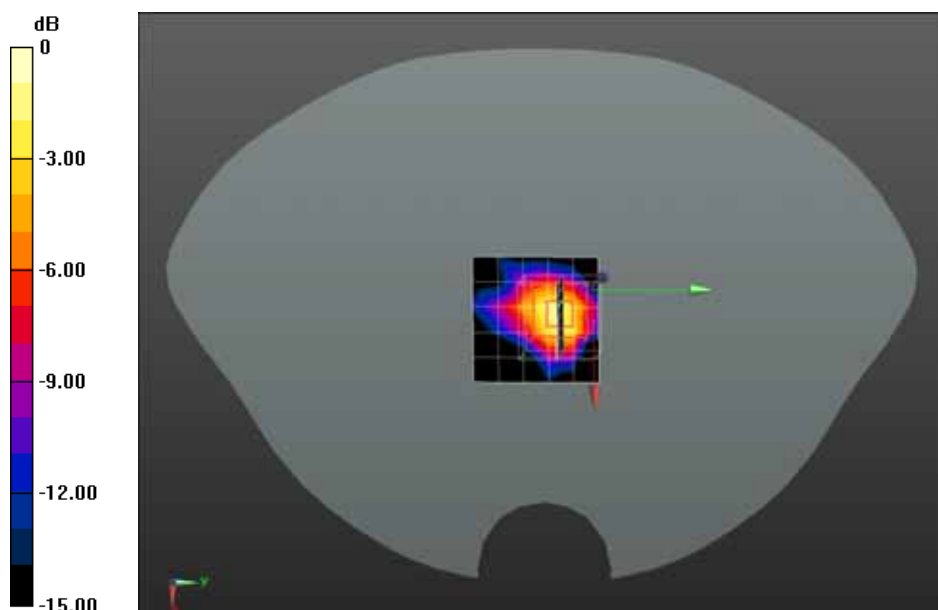
Maximum value of SAR (measured) = 0.391 W/kg

Configuration/802.11a 5180MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

$dx=5$ mm, $dy=5$ mm, $dz=2$ mm; Reference Value = 9.145 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.434 W/kg; SAR(10 g) = 0.132 W/kg Maximum value of SAR (measured) = 0.504 W/kg



0 dB = 0.504 W/kg = -2.98 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5180MHz Body-Vertical-Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5180 MHz; Medium parameters used: $f = 5180$ MHz; $\sigma = 5.22$ S/m; $\epsilon_r = 49.62$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM2; Type: SAM; Serial: TP1562
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5180MHz Body-Vertical Back/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

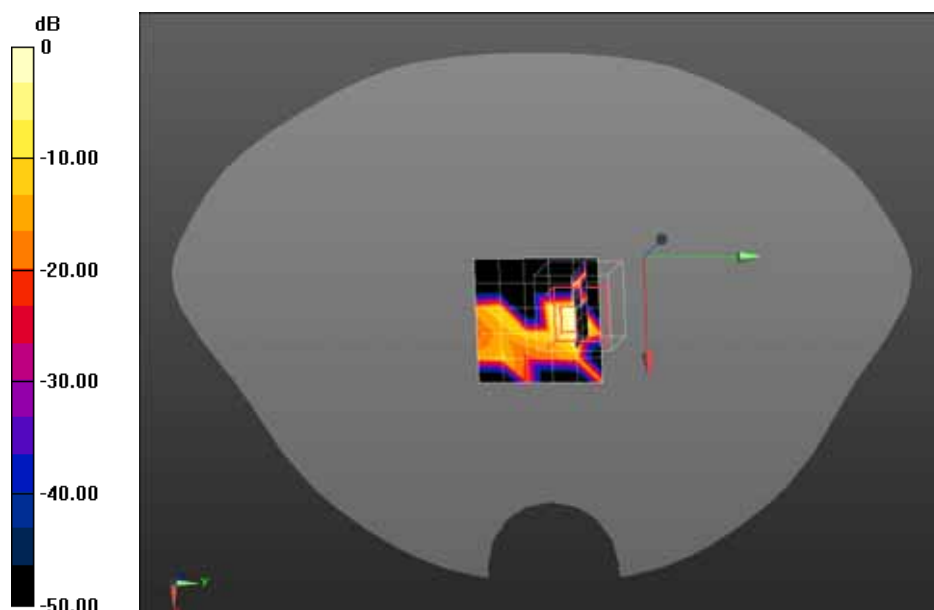
Maximum value of SAR (measured) = 0.0517 W/kg

Configuration/802.11a 5180MHz Body-Vertical Back/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 1.232 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.724 W/kg

SAR(1 g) = 0.100 W/kg; SAR(10 g) = 0.019 W/kg Maximum value of SAR (measured) = 0.0775 W/kg



0 dB = 0.0775 W/kg = -11.11 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5180MHz Body-Vertical-Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5180 MHz; Medium parameters used: $f = 5180$ MHz; $\sigma = 5.22$ S/m; $\epsilon_r = 49.62$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5180MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.19 W/kg

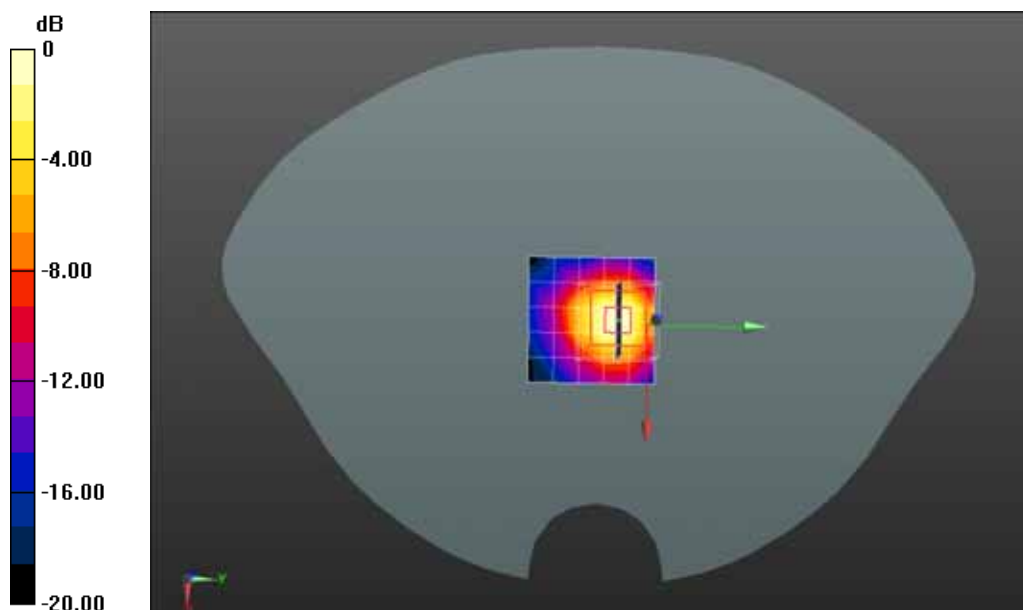
Configuration/802.11a 5180MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 17.48 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 3.51 W/kg

SAR(1 g) = 0.91 W/kg; SAR(10 g) = 0.345 W/kg

Maximum value of SAR (measured) = 1.39 W/kg



0 dB = 1.39 W/kg = 1.43 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5180MHz Body-Vertical Front*

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5180 MHz; Medium parameters used: $f = 5180$ MHz; $\sigma = 5.22$ S/m; $\epsilon_r = 49.62$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5180MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

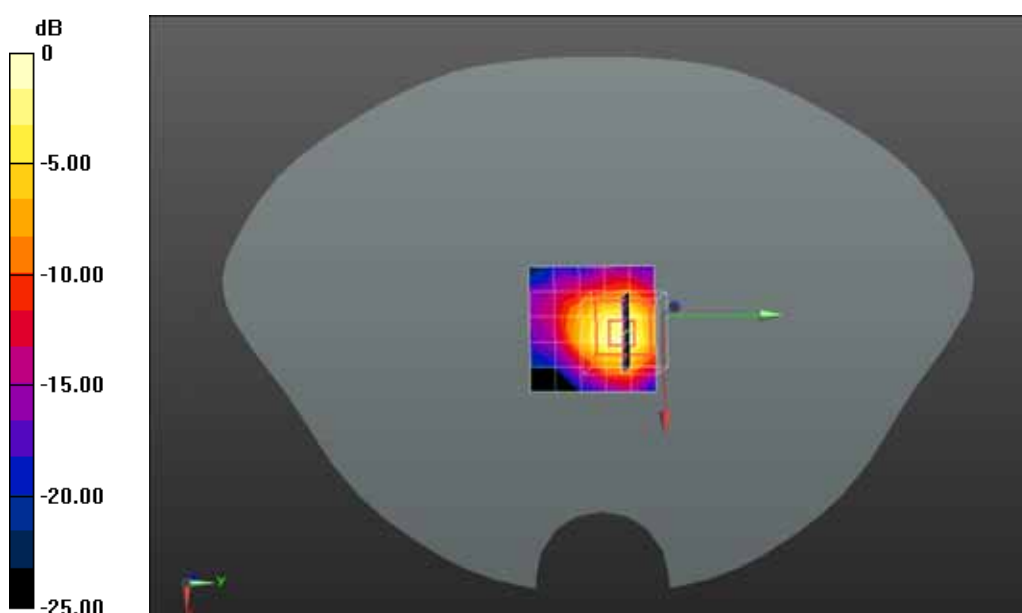
Maximum value of SAR (measured) = 1.13 W/kg

Configuration/802.11a 5180MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 12.32 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 3.12 W/kg

SAR(1 g) = 0.902 W/kg; SAR(10 g) = 0.314 W/kg Maximum value of SAR (measured) = 1.41 W/kg



0 dB = 1.41 W/kg = 1.70 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5180MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5180 MHz; Medium parameters used: $f = 5180$ MHz; $\sigma = 5.22$ S/m; $\epsilon_r = 49.62$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM2; Type: SAM; Serial: TP1562
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

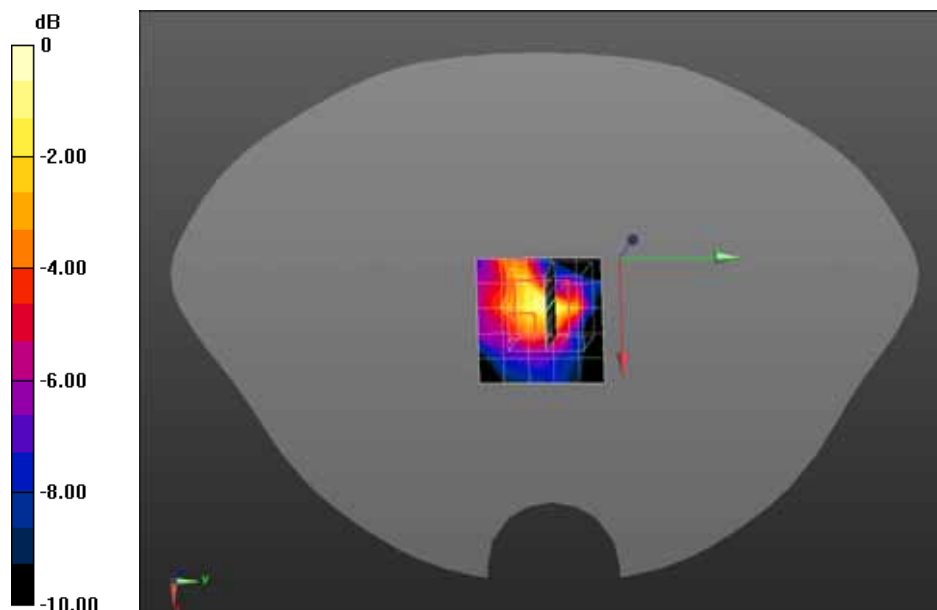
Configuration/802.11a 5180MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.0936 W/kg

Configuration/802.11a 5180MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 4.501 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.622 W/kg

SAR(1 g) = 0.086 W/kg; SAR(10 g) = 0.033 W/kg Maximum value of SAR (measured) = 0.100 W/kg



0 dB = 0.100 W/kg = -10.00 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5240MHz Body-Vertical-Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5240 MHz; Medium parameters used: $f = 5240$ MHz; $\sigma = 5.31$ S/m; $\epsilon_r = 49.44$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5240MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.08 W/kg

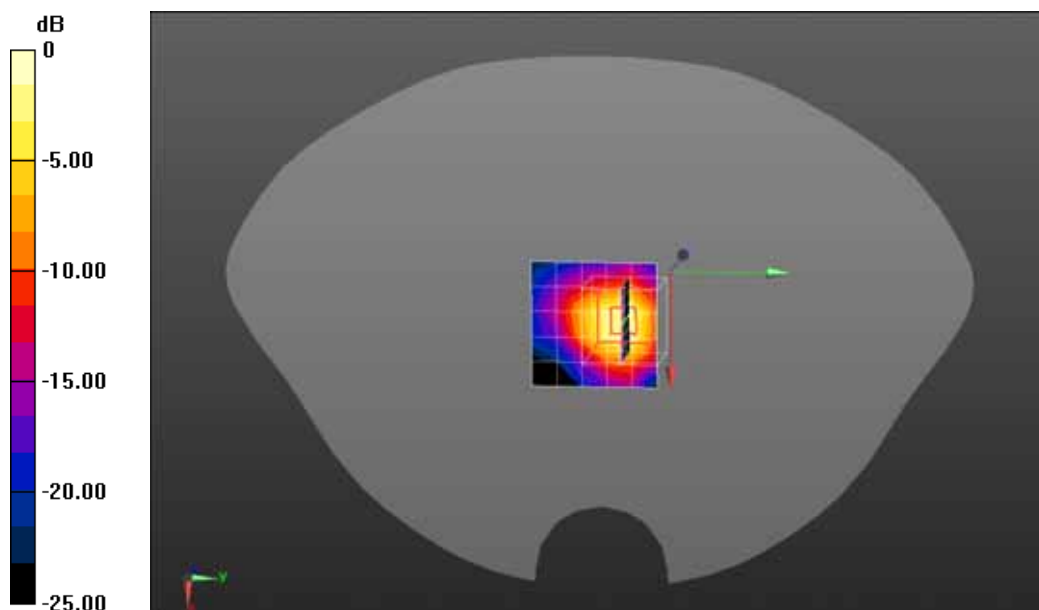
Configuration/802.11a 5240MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 13.79 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 3.98 W/kg

SAR(1 g) = 0.903 W/kg; SAR(10 g) = 0.368 W/kg

Maximum value of SAR (measured) = 1.54 W/kg



0 dB = 1.54 W/kg = 1.88 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5240MHz Body-Horizontal-Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5240 MHz; Medium parameters used: $f = 5240$ MHz; $\sigma = 5.31$ S/m; $\epsilon_r = 49.44$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM2; Type: SAM; Serial: TP1562
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5240MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

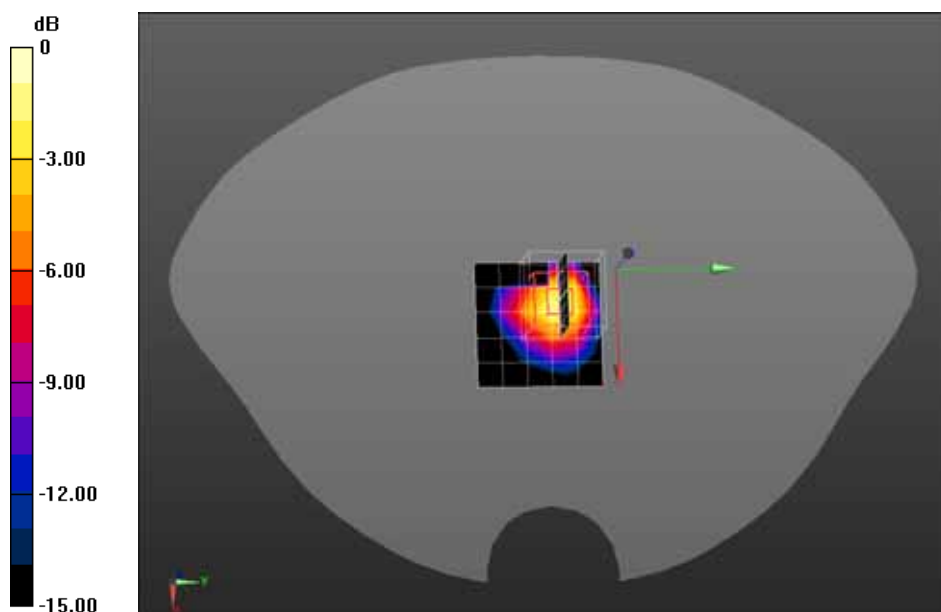
Maximum value of SAR (measured) = 0.662 W/kg

Configuration/802.11a 5240MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.62 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 2.13 W/kg

SAR(1 g) = 0.634 W/kg; SAR(10 g) = 0.190 W/kg Maximum value of SAR (measured) = 0.802 W/kg



0 dB = 0.802 W/kg = -0.96 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5200MHz Body-Horizontal Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5200 MHz; Medium parameters used: $f = 5200$ MHz; $\sigma = 5.25$ S/m; $\epsilon_r = 49.54$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5200MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.713 W/kg

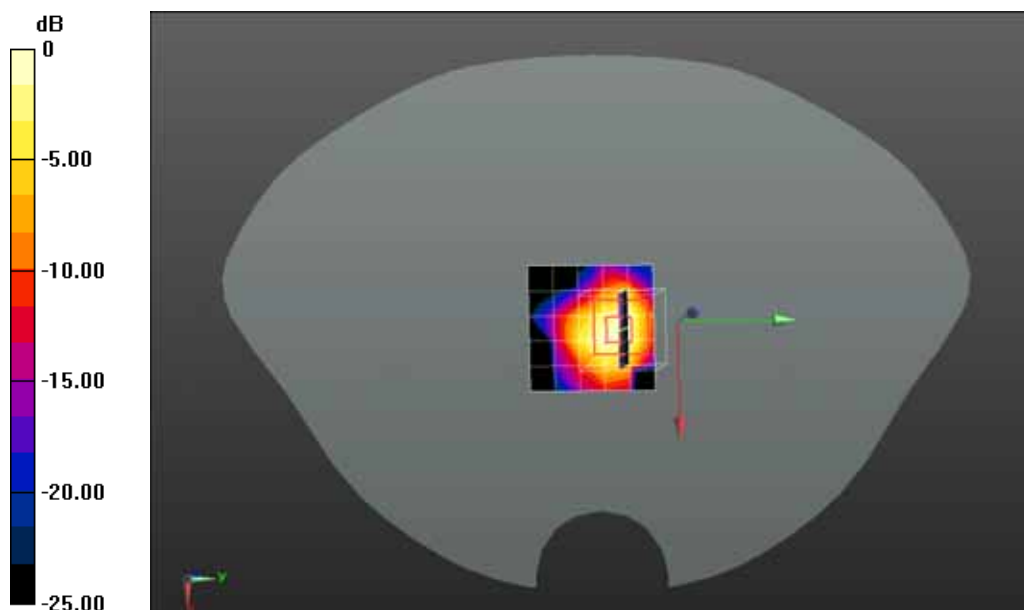
Configuration/802.11n20 5200MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.66 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 0.48 W/kg; SAR(10 g) = 0.181 W/kg

Maximum value of SAR (measured) = 0.741 W/kg



0 dB = 0.741 W/kg = -1.30 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5200MHz Body-Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5200 MHz; Medium parameters used: $f = 5200$ MHz; $\sigma = 5.25$ S/m; $\epsilon_r = 49.54$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5200MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.572 W/kg

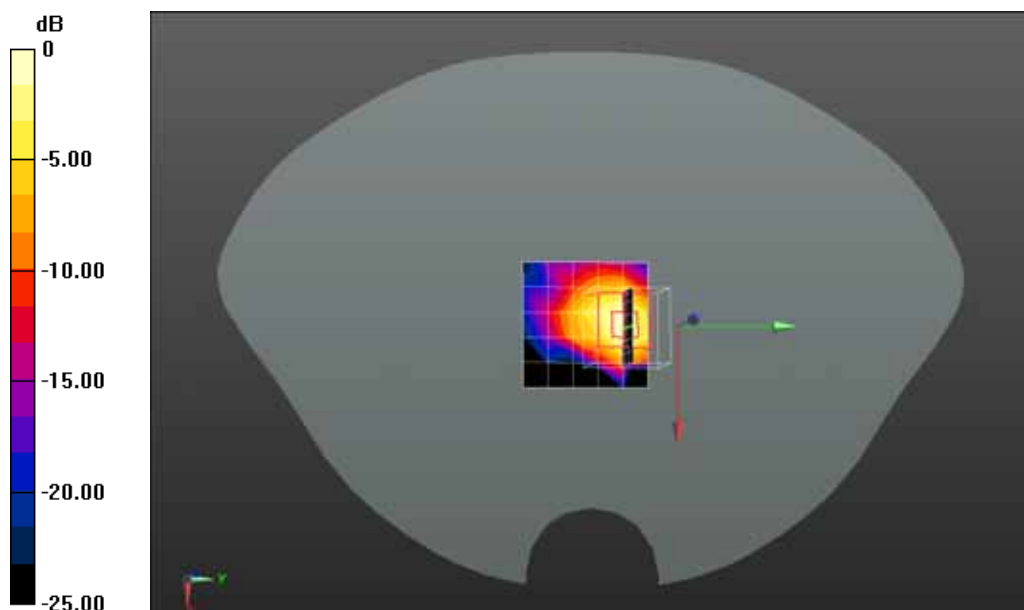
Configuration/802.11n20 5200MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 8.264 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.40 W/kg; SAR(10 g) = 0.153 W/kg

Maximum value of SAR (measured) = 0.607 W/kg



0 dB = 0.607 W/kg = -2.17 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5200MHz Body-Vertical Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5200 MHz; Medium parameters used: $f = 5200$ MHz; $\sigma = 5.25$ S/m; $\epsilon_r = 49.54$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5200MHz Body-Vertical Back/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.343 W/kg

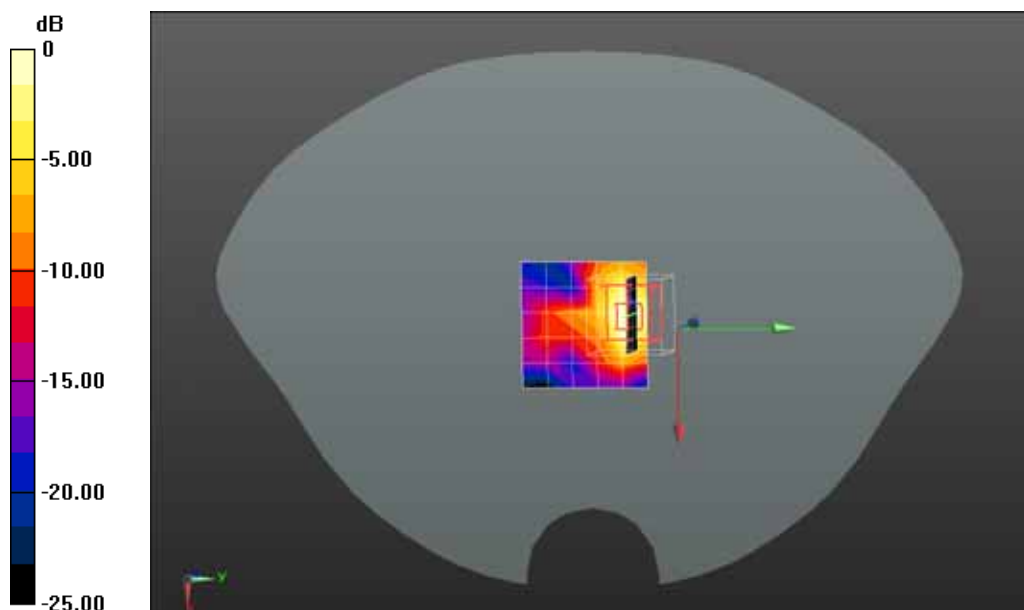
Configuration/802.11n20 5200MHz Body-Vertical Back/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 3.720 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.779 W/kg

SAR(1 g) = 0.19 W/kg; SAR(10 g) = 0.070 W/kg

Maximum value of SAR (measured) = 0.293 W/kg



0 dB = 0.293 W/kg = -5.33 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5200MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5200 MHz; Medium parameters used: $f = 5200$ MHz; $\sigma = 5.25$ S/m; $\epsilon_r = 49.54$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5200MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.05 W/kg

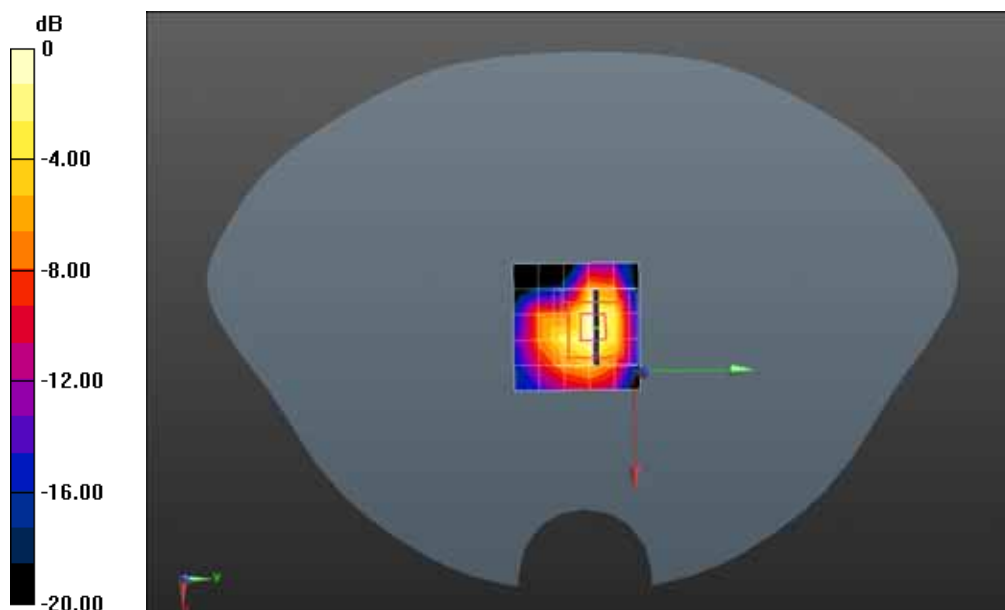
Configuration/802.11n20 5200MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 9.06 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 3.31 W/kg

SAR(1 g) = 0.928 W/kg; SAR(10 g) = 0.316 W/kg

Maximum value of SAR (measured) = 1.25 W/kg



0 dB = 1.25 W/kg = 1.30 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5200MHz Body-Vertical Front*

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5200 MHz; Medium parameters used: $f = 5200$ MHz; $\sigma = 5.25$ S/m; $\epsilon_r = 49.54$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5200MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.51 W/kg

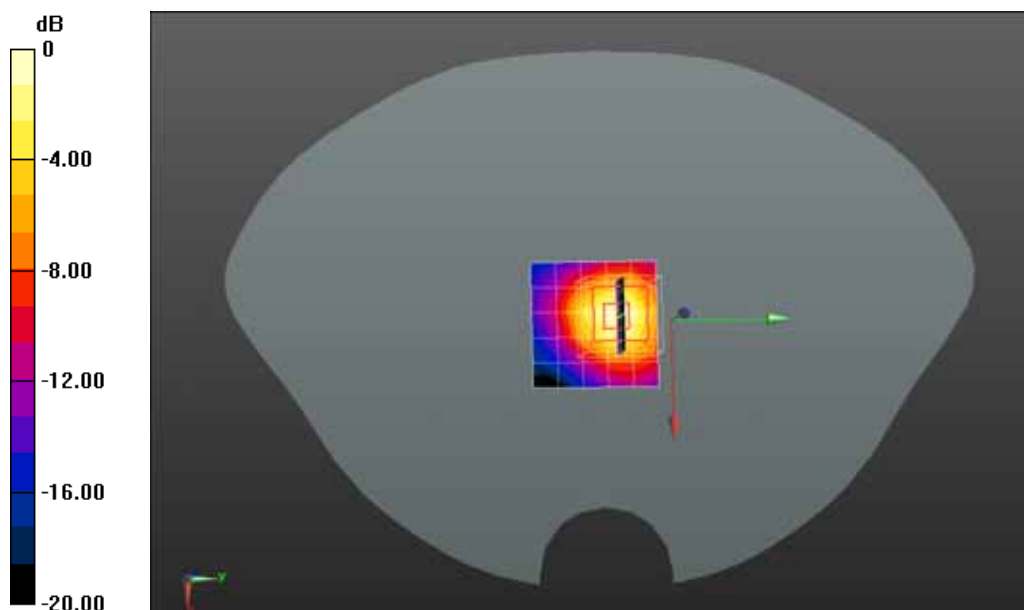
Configuration/802.11n20 5200MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 17.42 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 4.04 W/kg

SAR(1 g) = 0.92 W/kg; SAR(10 g) = 0.487 W/kg

Maximum value of SAR (measured) = 1.60 W/kg



0 dB = 1.60 W/kg = 2.04 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5200MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5200 MHz; Medium parameters used: $f = 5200$ MHz; $\sigma = 5.25$ S/m; $\epsilon_r = 49.54$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5200MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

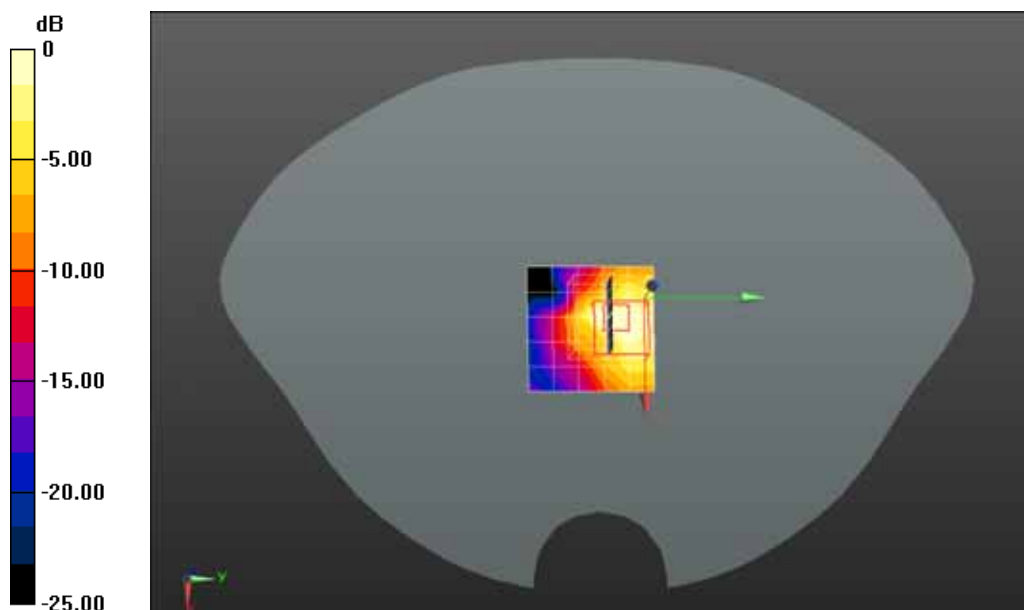
Maximum value of SAR (measured) = 0.430 W/kg

Configuration/802.11n20 5200MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 9.631 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.978 W/kg

SAR(1 g) = 0.091 W/kg; SAR(10 g) = 0.061 W/kg

Maximum value of SAR (measured) = 0.244 W/kg



0 dB = 0.244 W/kg = -6.13 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5240MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5240 MHz; Medium parameters used: $f = 5240$ MHz; $\sigma = 5.31$ S/m; $\epsilon_r = 49.44$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5240MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.68 W/kg

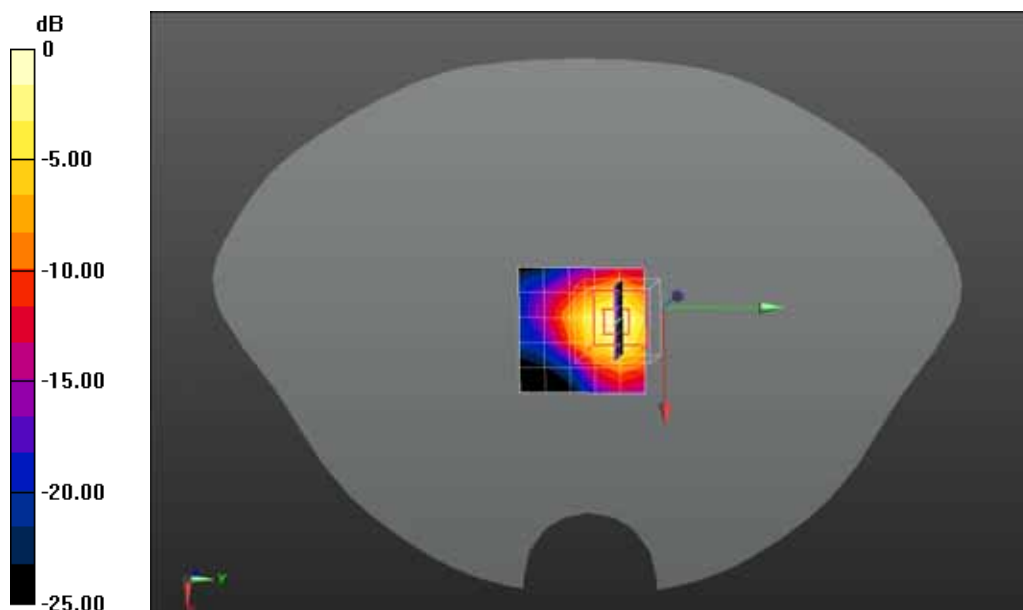
Configuration/802.11n20 5240MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 3.82 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.37 W/kg; SAR(10 g) = 0.09 W/kg

Maximum value of SAR (measured) = 0.71 W/kg



0 dB = 0.71 W/kg = 1.36 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5230MHz Body-Horizontal Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230 \text{ MHz}$; $\sigma = 5.3 \text{ S/m}$; $\epsilon_r = 49.47$; $\rho = 1000 \text{ kg/m}^3$; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5230MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 1.12 W/kg

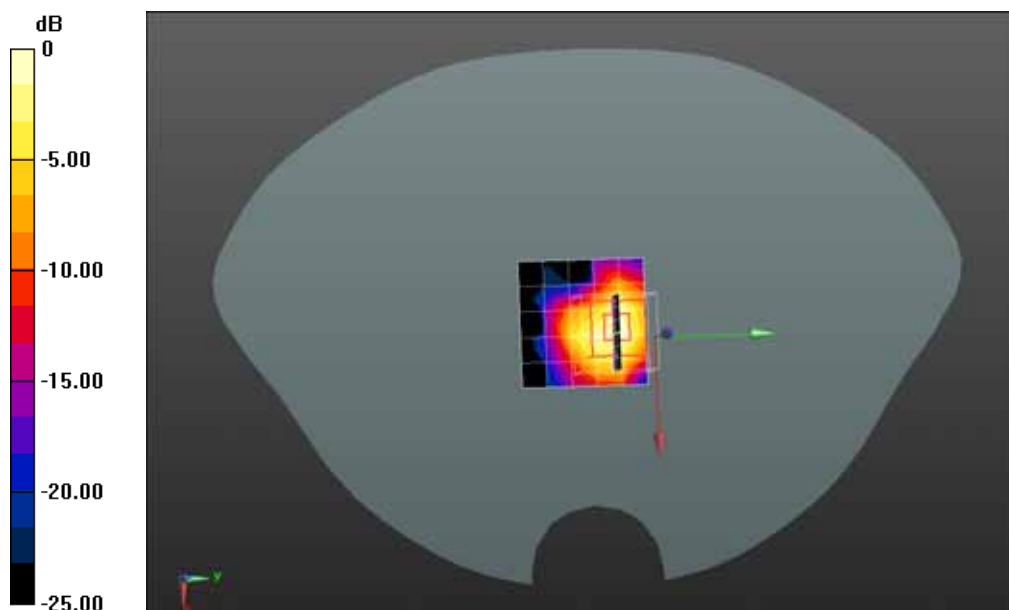
Configuration/802.11n40 5230MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

$dx=5\text{mm}$, $dy=5\text{mm}$, $dz=2\text{mm}$; Reference Value = 7.372 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 2.25 W/kg

SAR(1 g) = 0.461 W/kg; SAR(10 g) = 0.254 W/kg

Maximum value of SAR (measured) = 0.993 W/kg



0 dB = 0.993 W/kg = -0.03 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5230MHz Body-Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5230MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.03 W/kg

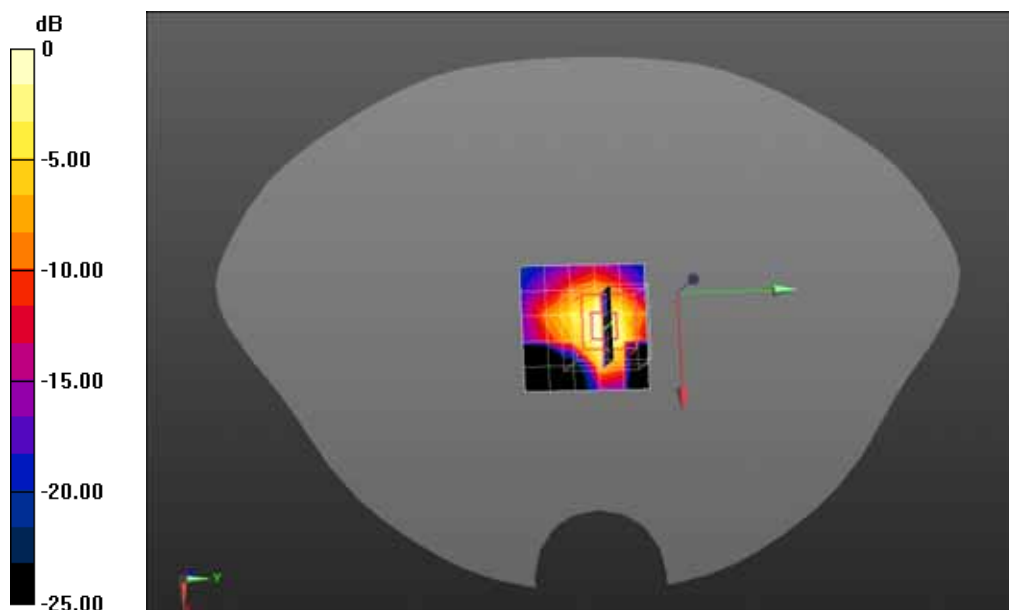
Configuration/802.11n40 5230MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 15.22 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 2.49 W/kg

SAR(1 g) = 0.413 W/kg; SAR(10 g) = 0.281 W/kg

Maximum value of SAR (measured) = 1.13 W/kg



0 dB = 1.13 W/kg = 0.53 dBW/kg

Date/Time: 06-06-2016

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5230MHz Body-Vertical Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5230MHz Body-Vertical Back/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.656 W/kg

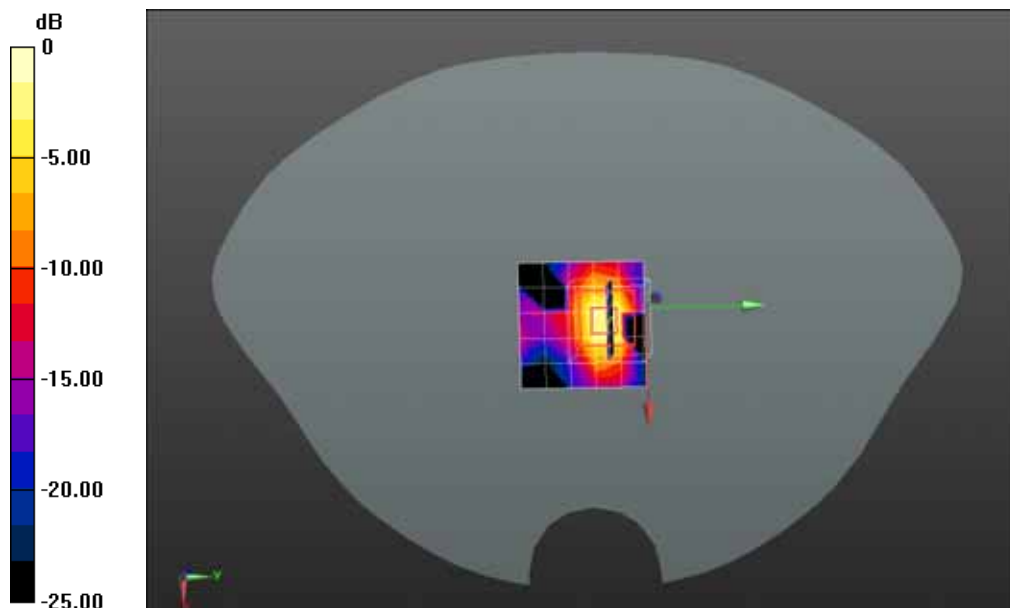
Configuration/802.11n40 5230MHz Body-Vertical Back/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.87 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 2.11 W/kg

SAR(1 g) = 0.350 W/kg; SAR(10 g) = 0.199 W/kg

Maximum value of SAR (measured) = 0.898 W/kg



0 dB = 0.898 W/kg = -0.47 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5230MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5230MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.61 W/kg

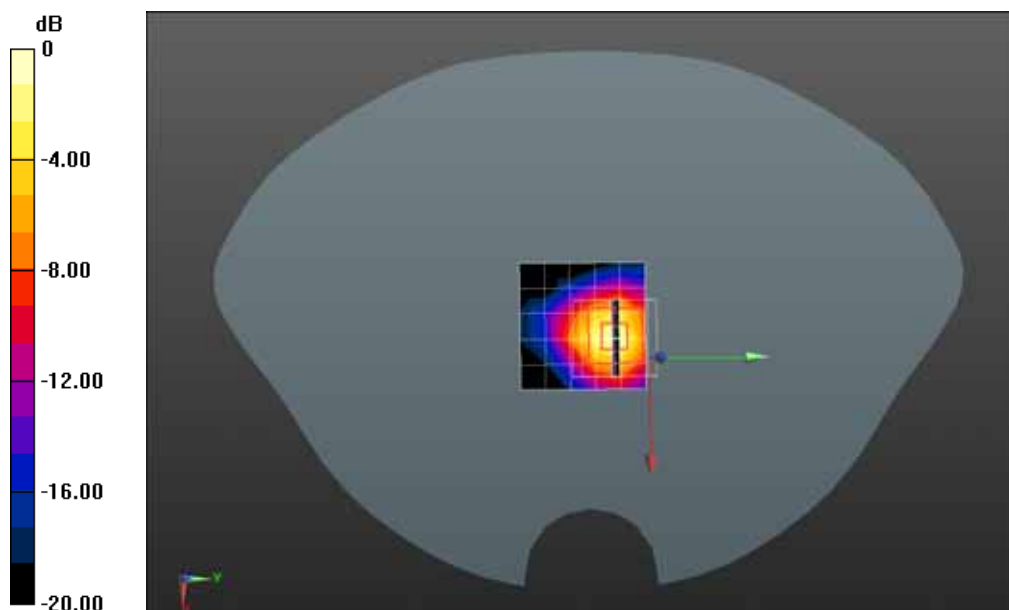
Configuration/802.11n40 5230MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 11.90 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 4.63 W/kg

SAR(1 g) = 0.744 W/kg; SAR(10 g) = 0.464 W/kg

Maximum value of SAR (measured) = 1.78 W/kg



0 dB = 1.78 W/kg = 2.50 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5230MHz Body-Vertical Front*

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5230MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.19 W/kg

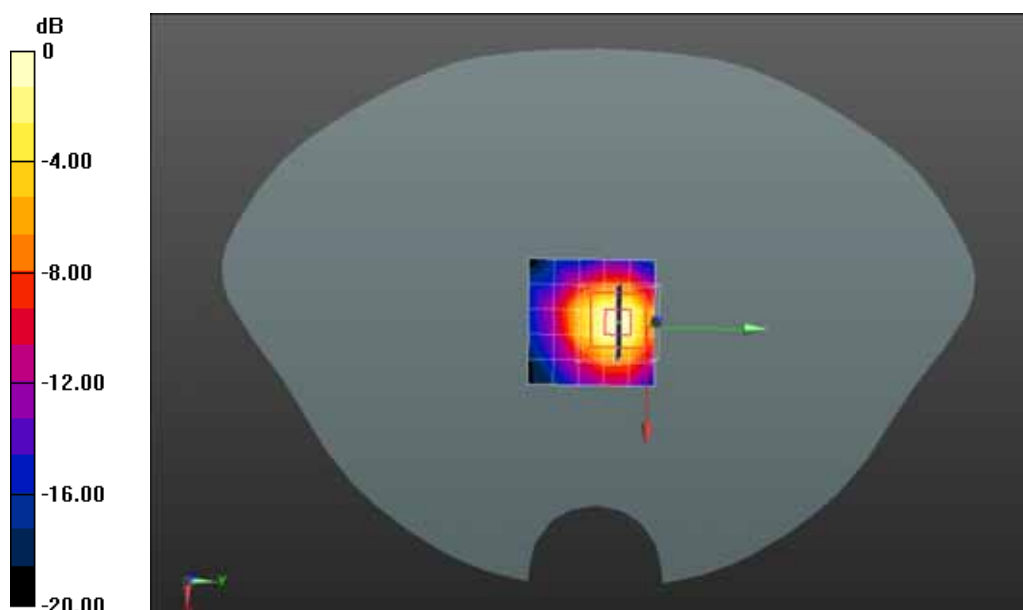
Configuration/802.11n40 5230MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 17.48 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.51 W/kg

SAR(1 g) = 0.706 W/kg; SAR(10 g) = 0.345 W/kg

Maximum value of SAR (measured) = 1.09 W/kg



0 dB = 1.09 W/kg = 1.43 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5230MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5230MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

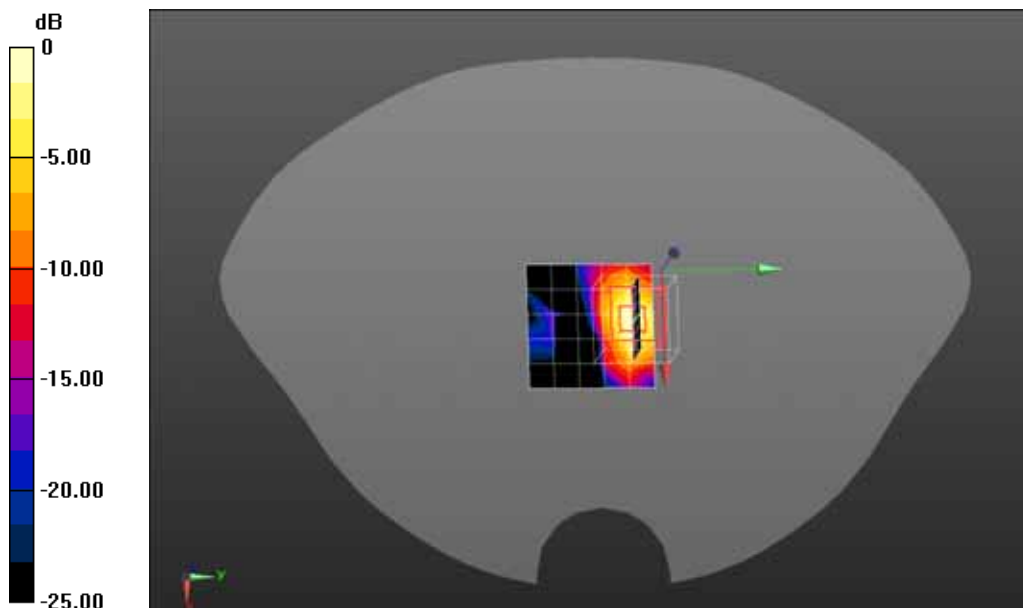
Maximum value of SAR (measured) = 0.520 W/kg

Configuration/802.11n40 5230MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 2.802 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.54 W/kg

SAR(1 g) = 0.069 W/kg; SAR(10 g) = 0.021 W/kg

Maximum value of SAR (measured) = 0.142 W/kg



0 dB = 0.142 W/kg = -12.66 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5190MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5190 MHz; Medium parameters used: $f = 5190$ MHz; $\sigma = 5.24$ S/m; $\epsilon_r = 49.58$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5190MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.76 W/kg

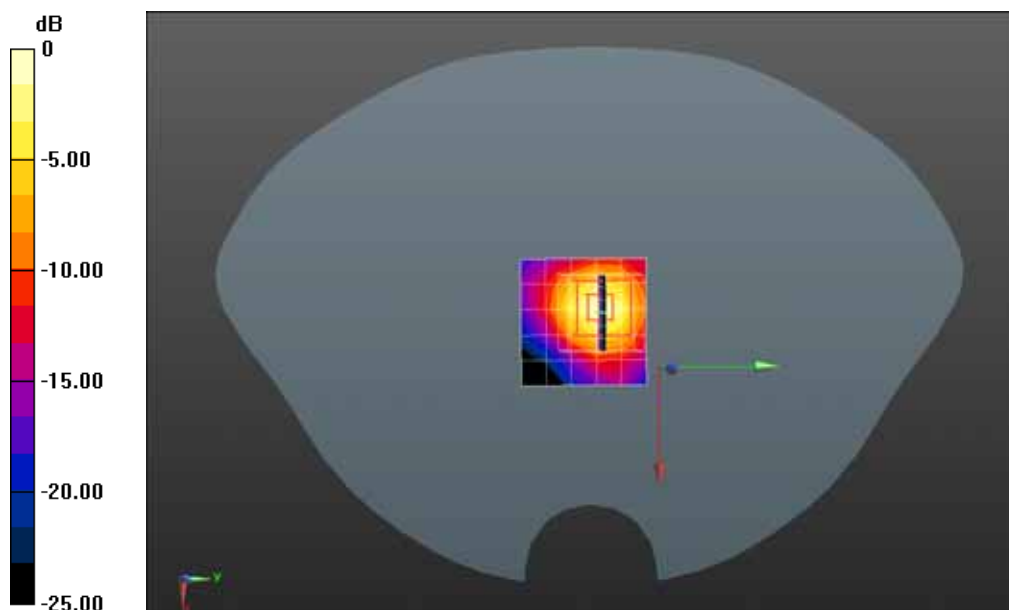
Configuration/802.11n40 5190MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 17.77 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 4.45 W/kg

SAR(1 g) = 0.747 W/kg; SAR(10 g) = 0.472 W/kg

Maximum value of SAR (measured) = 1.71 W/kg



0 dB = 1.71 W/kg = 2.33 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5190MHz Body-Horizontal Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5190 MHz; Medium parameters used: $f = 5190$ MHz; $\sigma = 5.24$ S/m; $\epsilon_r = 49.58$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5190MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.944 W/kg

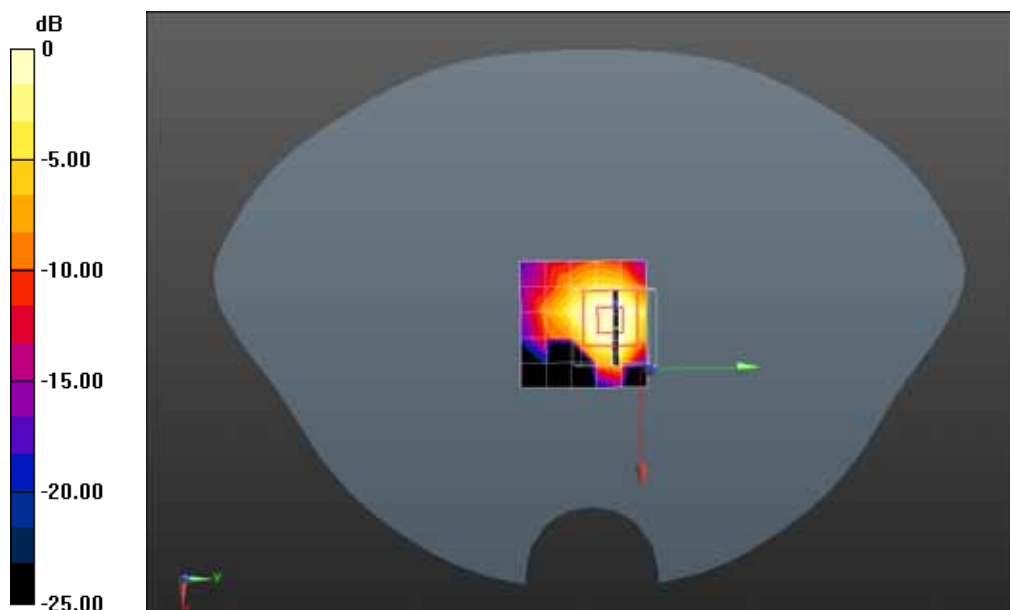
Configuration/802.11n40 5190MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 15.34 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.262 W/kg; SAR(10 g) = 0.163 W/kg

Maximum value of SAR (measured) = 0.630 W/kg



0 dB = 0.630 W/kg = -2.01 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5240MHz Body-Horizontal-Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5240 MHz; Medium parameters used: $f = 5240$ MHz; $\sigma = 5.31$ S/m; $\epsilon_r = 49.44$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5240MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.15 W/kg

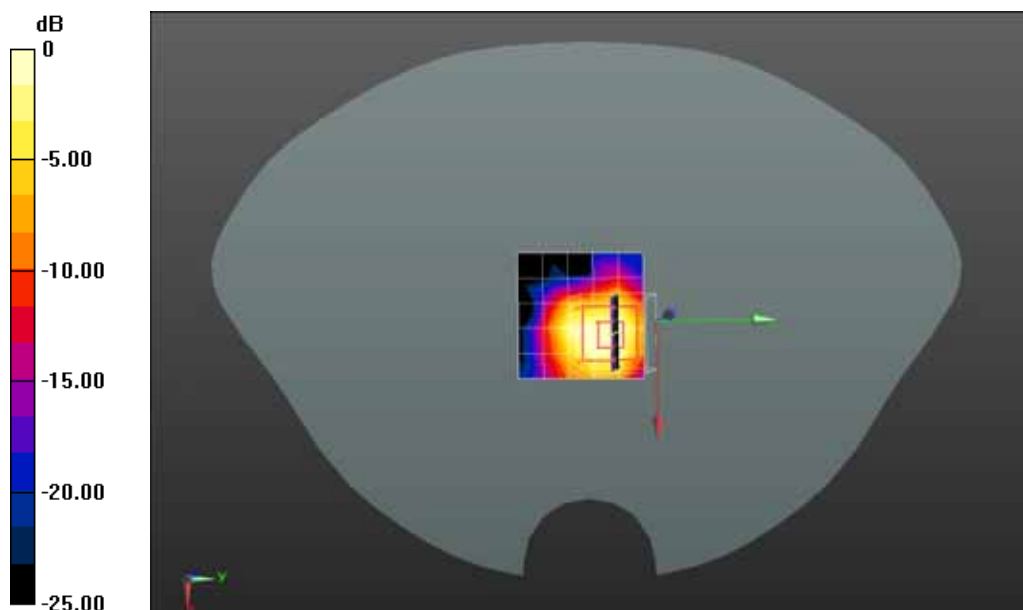
Configuration/802.11ac20 5240MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 8.077 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 0.271 W/kg; SAR(10 g) = 0.214 W/kg

Maximum value of SAR (measured) = 0.963 W/kg



0 dB = 0.963 W/kg = -0.16 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5240MHz Body-Horizontal-Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5240 MHz; Medium parameters used: $f = 5240$ MHz; $\sigma = 5.31$ S/m; $\epsilon_r = 49.44$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5240MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.968 W/kg

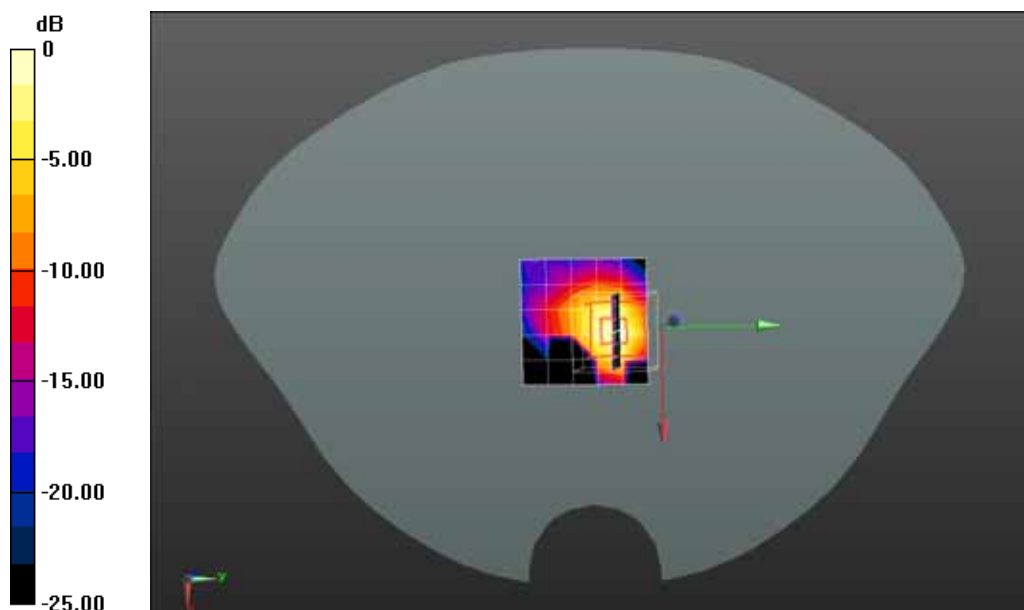
Configuration/802.11ac20 5240MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 5.46 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.092 W/kg

Maximum value of SAR (measured) = 0.73 W/kg



0 dB = 0.73 W/kg = 0.03 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5180MHz Body-Horizontal-Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5180 MHz; Medium parameters used: $f = 5180$ MHz; $\sigma = 5.22$ S/m; $\epsilon_r = 49.62$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5180MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.671 W/kg

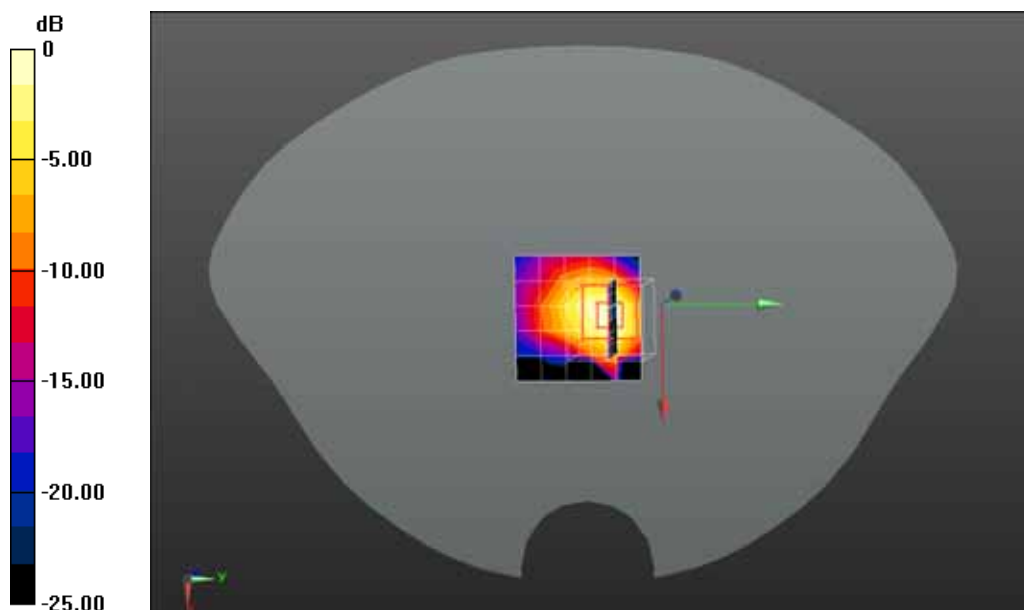
Configuration/802.11ac20 5180MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.81 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.73 W/kg

SAR(1 g) = 0.48 W/kg; SAR(10 g) = 0.189 W/kg

Maximum value of SAR (measured) = 0.703 W/kg



0 dB = 0.703 W/kg = -1.53 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5240MHz Body-Vertical-Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5240 MHz; Medium parameters used: $f = 5240$ MHz; $\sigma = 5.31$ S/m; $\epsilon_r = 49.44$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5240MHz Body-Vertical Back/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.402 W/kg

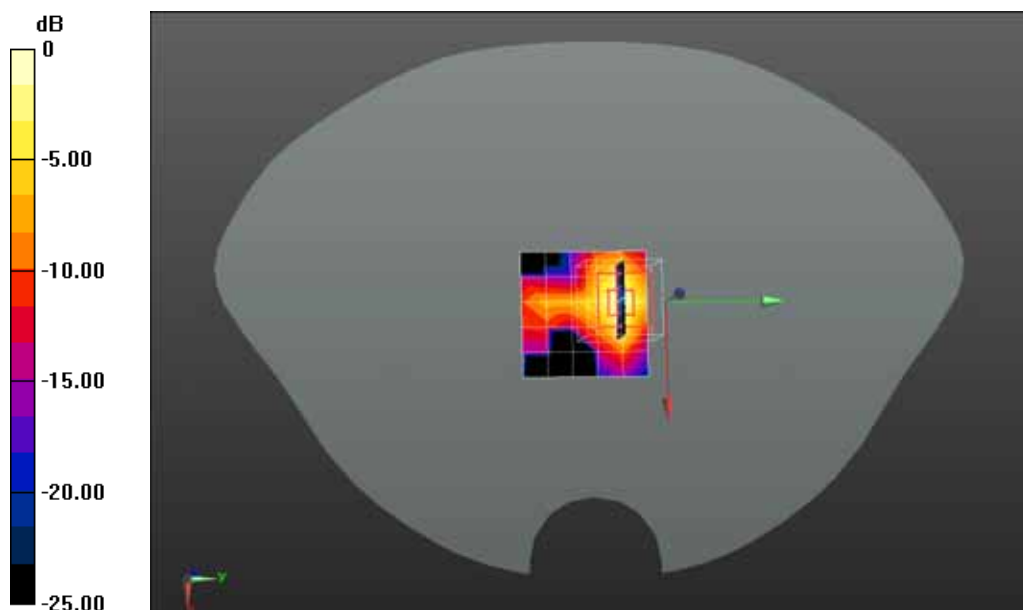
Configuration/802.11ac20 5240MHz Body-Vertical Back/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 4.736 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.928 W/kg

SAR(1 g) = 0.100 W/kg; SAR(10 g) = 0.089 W/kg

Maximum value of SAR (measured) = 0.381 W/kg



0 dB = 0.381 W/kg = -4.19 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5240MHz Body-Vertical-Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5240 MHz; Medium parameters used: $f = 5240$ MHz; $\sigma = 5.31$ S/m; $\epsilon_r = 49.44$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5240MHz Body- Vertical-Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.16 W/kg

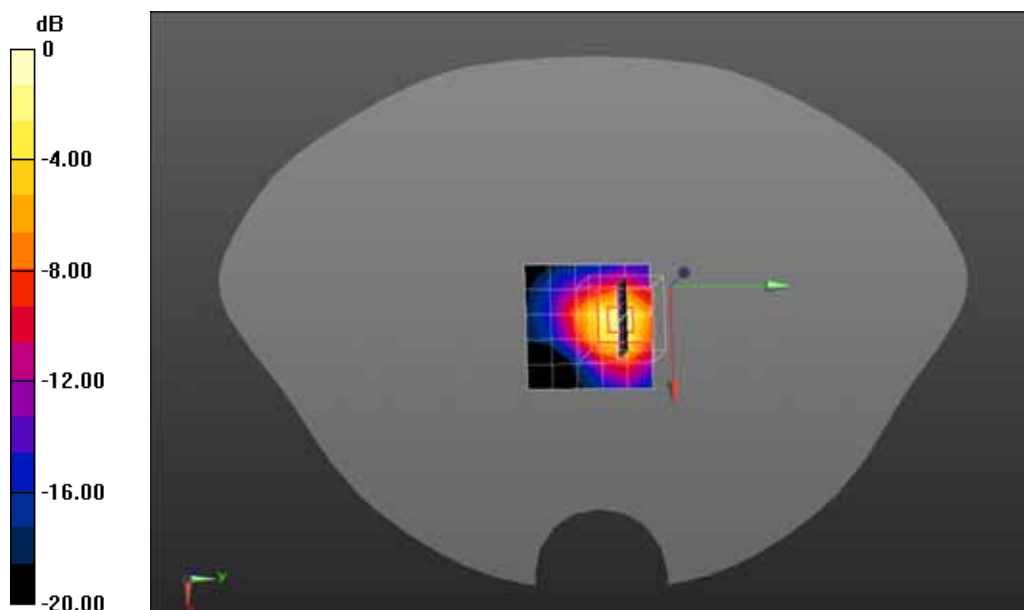
Configuration/802.11ac20 5240MHz Body- Vertical-Front/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 14.50 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 2.37 W/kg

SAR(1 g) = 0.454 W/kg; SAR(10 g) = 0.249 W/kg

Maximum value of SAR (measured) = 0.997 W/kg



0 dB = 0.997 W/kg = 0.83 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5240MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5240 MHz; Medium parameters used: $f = 5240$ MHz; $\sigma = 5.31$ S/m; $\epsilon_r = 49.44$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5240MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

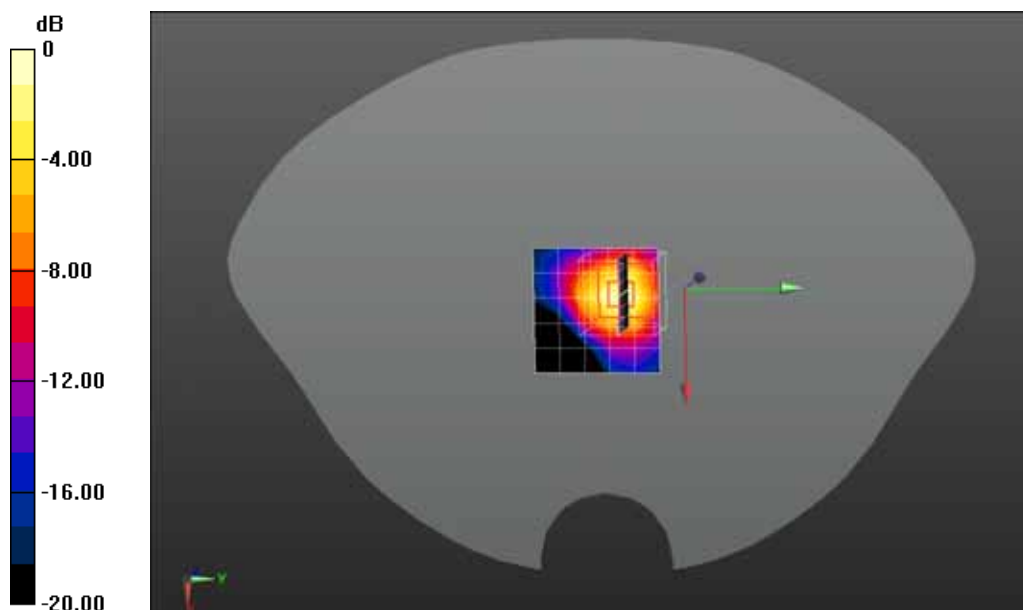
Maximum value of SAR (measured) = 0.93 W/kg

Configuration/802.11ac20 5240MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 1.29 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.16 W/kg

SAR(1 g) = 0.058 W/kg; SAR(10 g) = 0.008 W/kg

Maximum value of SAR (measured) = 0.13 W/kg



0 dB = 0.13 W/kg = -22.12 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac40 5230MHz Body-Horizontal Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac40 5230MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.39 W/kg

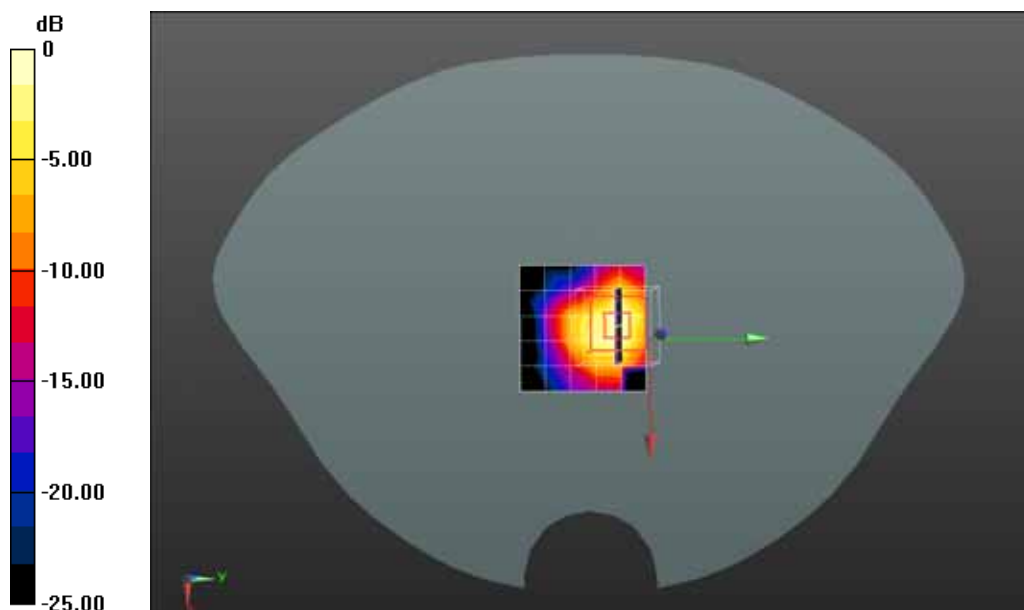
Configuration/802.11ac40 5230MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 6.05 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.91 W/kg

SAR(1 g) = 0.272 W/kg; SAR(10 g) = 0.110 W/kg

Maximum value of SAR (measured) = 0.42 W/kg



0 dB = 0.42 W/kg = 0.21 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac40 5230MHz Body-Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac40 5230MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

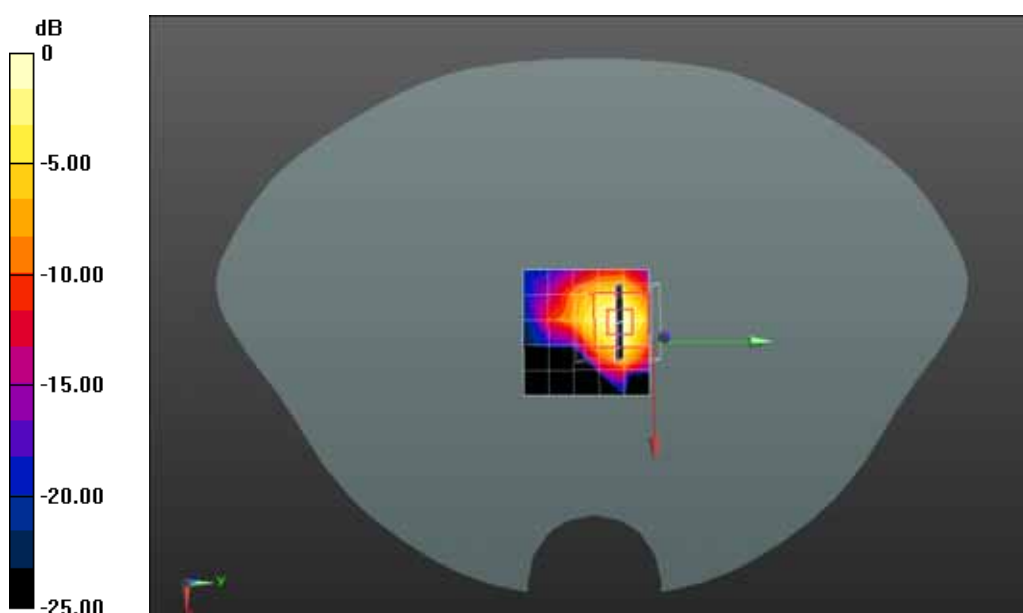
Maximum value of SAR (measured) = 0.46 W/kg

Configuration/802.11ac40 5230MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.18 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.89 W/kg

SAR(1 g) = 0.228 W/kg; SAR(10 g) = 0.093 W/kg



0 dB = 1.10 W/kg = 0.41 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac40 5230MHz Body-Vertical-Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac40 5230MHz Body-Vertical Back/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.115 W/kg

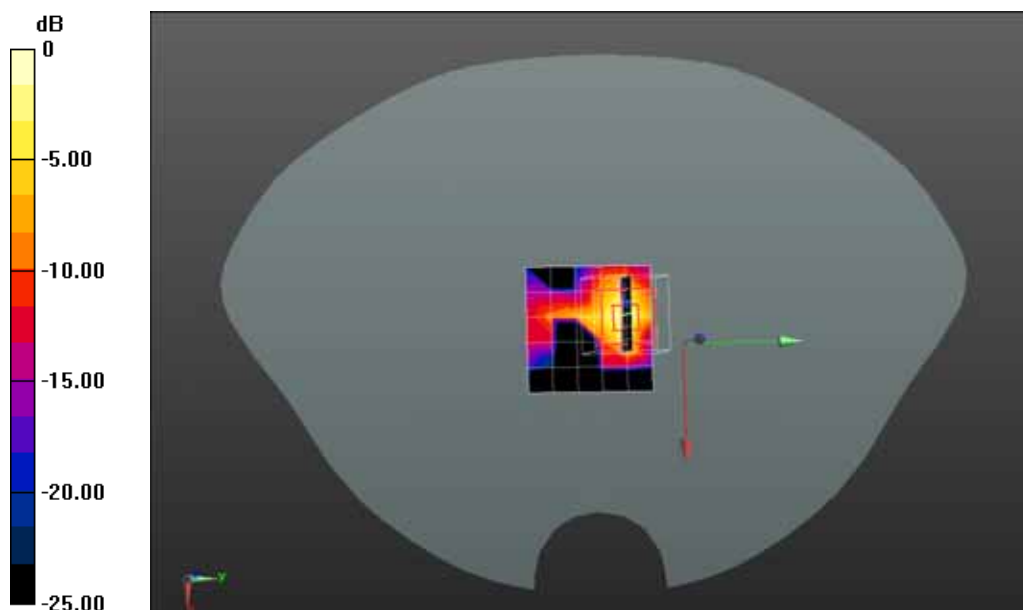
Configuration/802.11ac40 5230MHz Body-Vertical Back/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 1.849 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.276 W/kg

SAR(1 g) = 0.066 W/kg; SAR(10 g) = 0.016 W/kg

Maximum value of SAR (measured) = 0.109 W/kg



0 dB = 0.109 W/kg = -9.83 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac40 5230MHz Body-Vertical-Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac40 5230MHz Body- Vertical-Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.672 W/kg

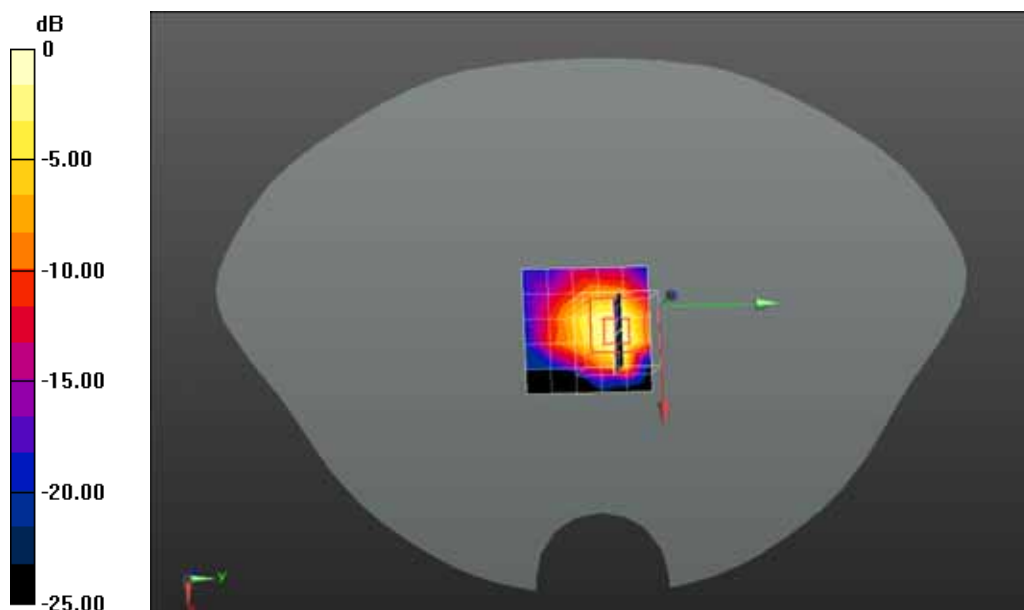
Configuration/802.11ac40 5230MHz Body- Vertical-Front/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 6.71 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 2.00 W/kg

SAR(1 g) = 0.304 W/kg; SAR(10 g) = 0.157 W/kg

Maximum value of SAR (measured) = 0.627 W/kg



0 dB = 0.627 W/kg = -0.82 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac40 5230MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5230 MHz; Medium parameters used: $f = 5230$ MHz; $\sigma = 5.3$ S/m; $\epsilon_r = 49.47$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac40 5230MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

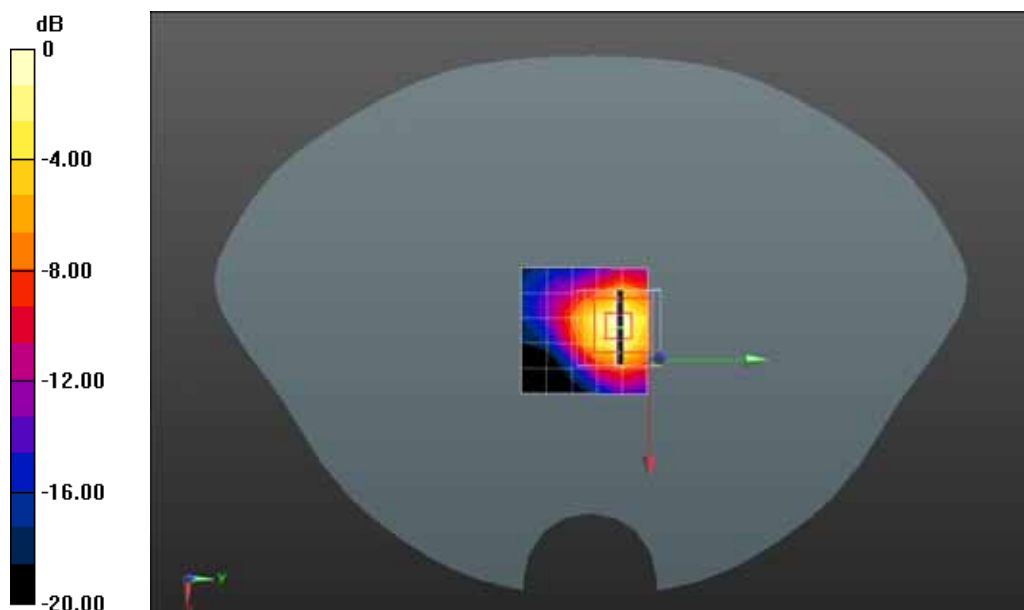
Maximum value of SAR (measured) = 0.096 W/kg

Configuration/802.11ac40 5230MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 2.78 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.13 W/kg

SAR(1 g) = 0.055 W/kg; SAR(10 g) = 0.012 W/kg

Maximum value of SAR (measured) = 0.11 W/kg



0 dB = 0.11 W/kg = -11.46 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac80 5210MHz Body-Horizontal Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5210 MHz; Medium parameters used: $f = 5210$ MHz; $\sigma = 5.26$ S/m; $\epsilon_r = 49.52$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac80 5210MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.885 W/kg

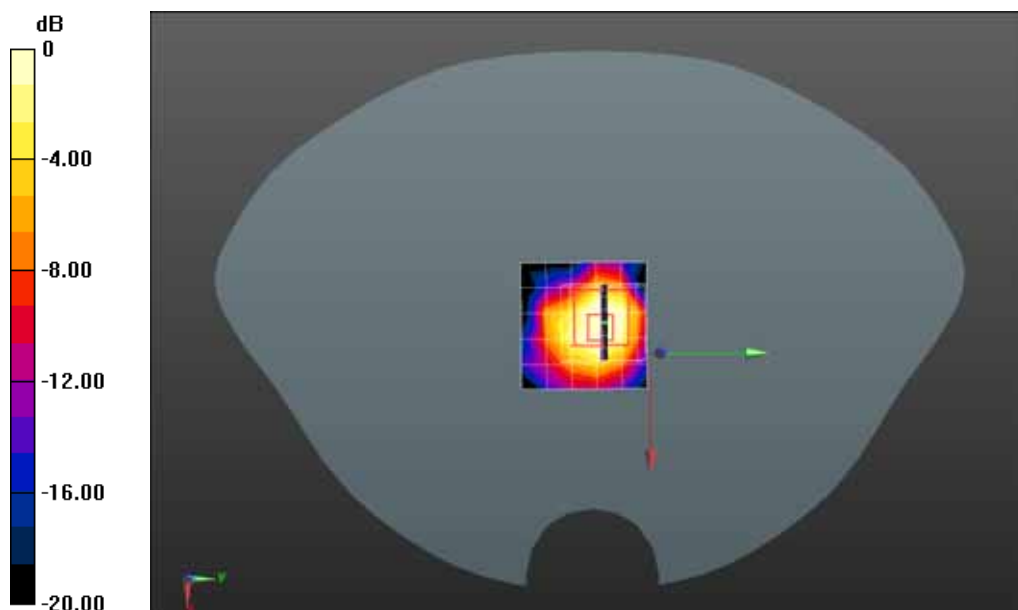
Configuration/802.11ac80 5210MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 15.05 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.214 W/kg; SAR(10 g) = 0.144 W/kg

Maximum value of SAR (measured) = 0.543 W/kg



0 dB = 0.543 W/kg = -2.65 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac80 5210MHz Body-Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5210 MHz; Medium parameters used: $f = 5210$ MHz; $\sigma = 5.26$ S/m; $\epsilon_r = 49.52$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac80 5210MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.863 W/kg

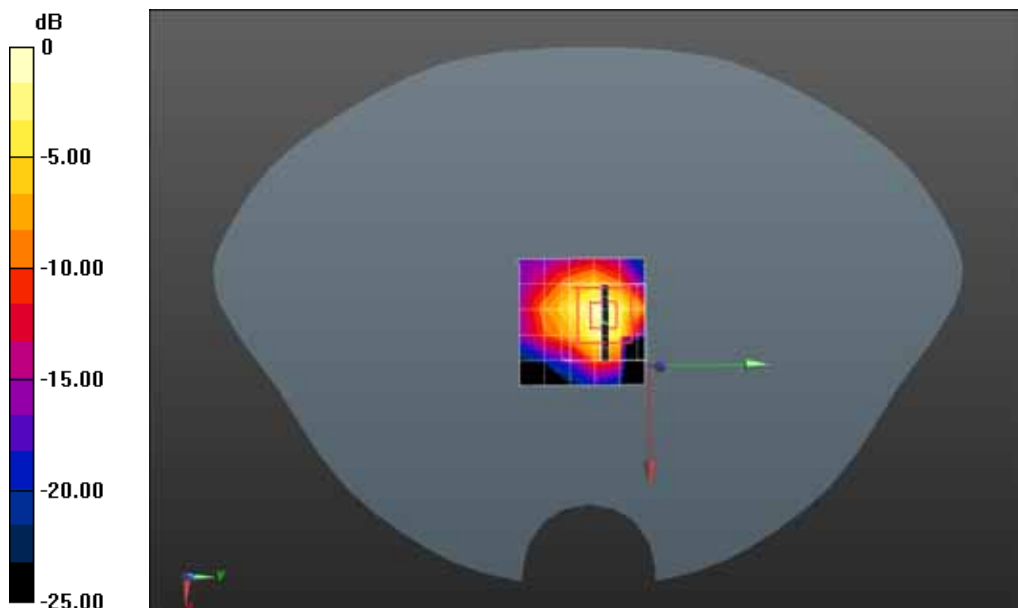
Configuration/802.11ac80 5210MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 15.94 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.13 W/kg

SAR(1 g) = 0.365 W/kg; SAR(10 g) = 0.193 W/kg

Maximum value of SAR (measured) = 1.04 W/kg



0 dB = 1.04 W/kg = 0.17 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac80 5210MHz Body-Vertical Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5210 MHz; Medium parameters used: $f = 5210$ MHz; $\sigma = 5.26$ S/m; $\epsilon_r = 49.52$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac80 5210MHz Body-Vertical Back/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.324 W/kg

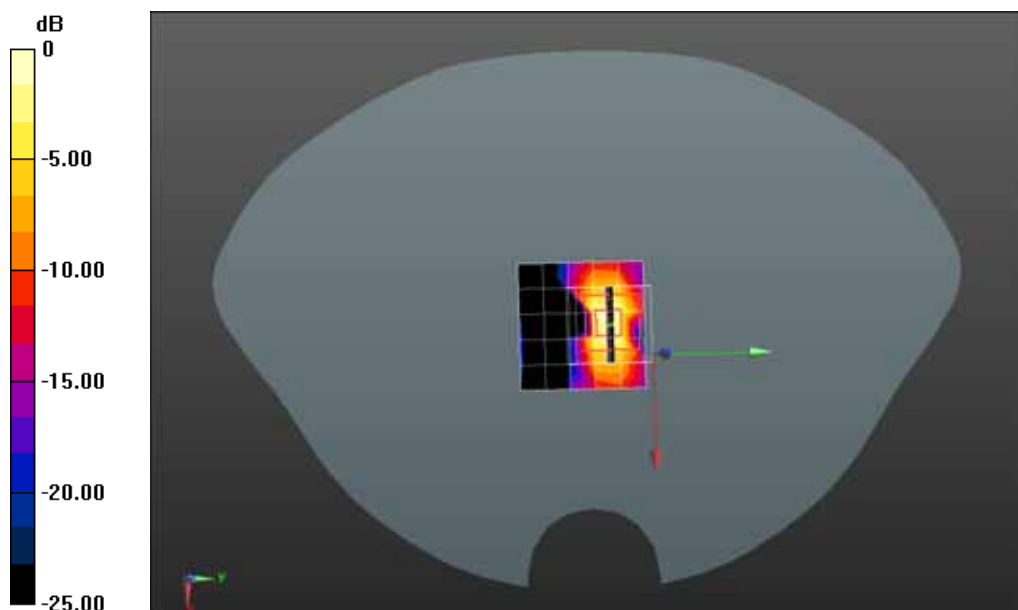
Configuration/802.11ac80 5210MHz Body-Vertical Back/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 7.430 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.183 W/kg; SAR(10 g) = 0.108 W/kg

Maximum value of SAR (measured) = 0.456 W/kg



0 dB = 0.456 W/kg = -3.41 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac80 5210MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5210 MHz; Medium parameters used: $f = 5210$ MHz; $\sigma = 5.26$ S/m; $\epsilon_r = 49.52$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac80 5210MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.14 W/kg

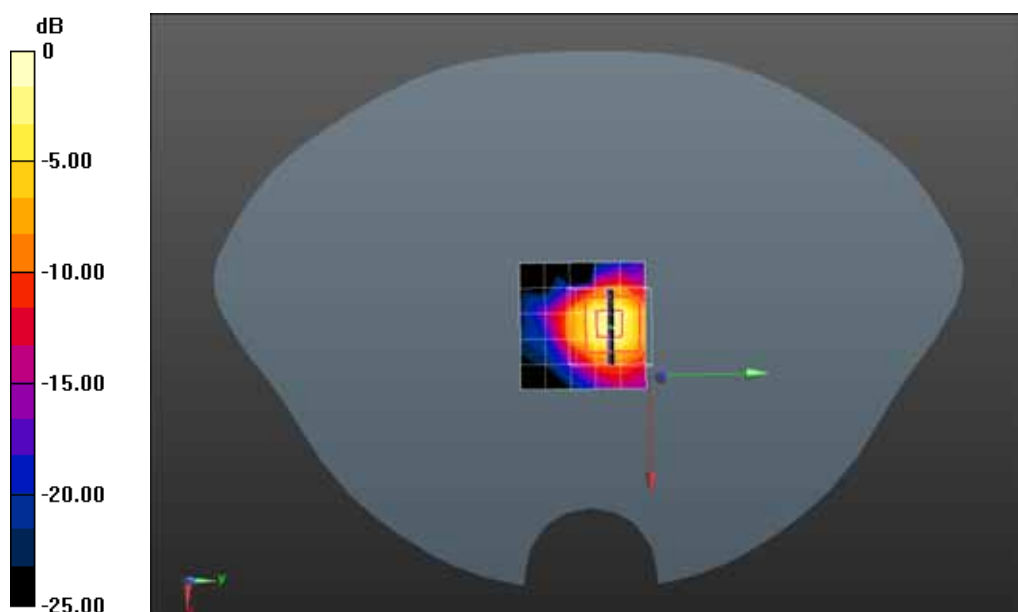
Configuration/802.11ac80 5210MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 15.41 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.85 W/kg

SAR(1 g) = 0.613 W/kg; SAR(10 g) = 0.366 W/kg

Maximum value of SAR (measured) = 1.63 W/kg



0 dB = 1.63 W/kg = 2.12 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac80 5210MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5210 MHz; Medium parameters used: $f = 5210$ MHz; $\sigma = 5.26$ S/m; $\epsilon_r = 49.52$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac80 5210MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

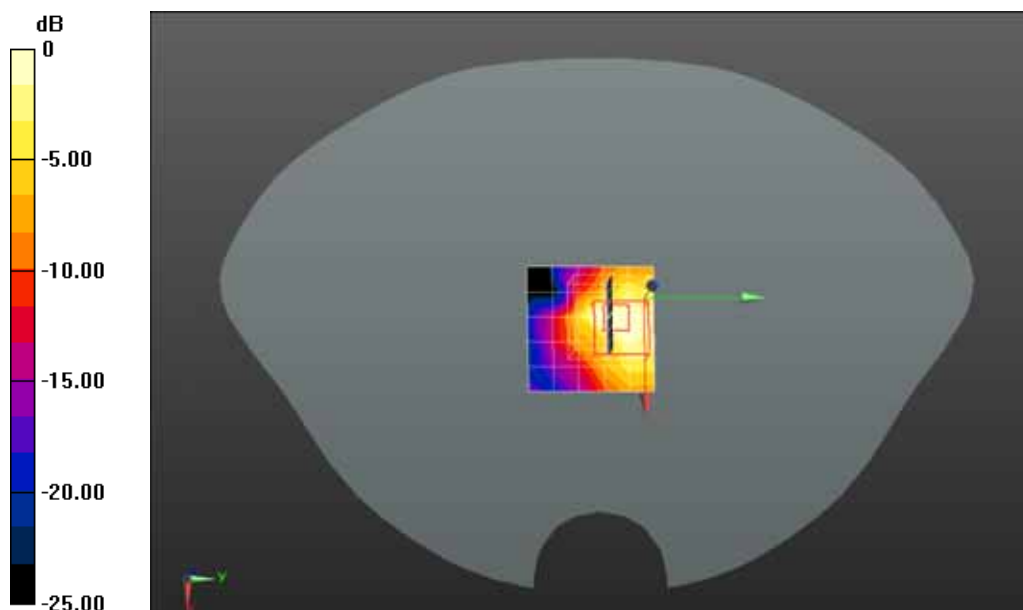
Maximum value of SAR (measured) = 0.430 W/kg

Configuration/802.11ac80 5210MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 9.631 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.978 W/kg

SAR(1 g) = 0.048 W/kg; SAR(10 g) = 0.015 W/kg

Maximum value of SAR (measured) = 0.104 W/kg



0 dB = 0.104 W/kg = -6.13 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5260MHz Body-Horizontal Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5260 MHz; Medium parameters used: $f = 5260$ MHz; $\sigma = 5.34$ S/m; $\epsilon_r = 49.39$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM2; Type: SAM; Serial: TP1562
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5260MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

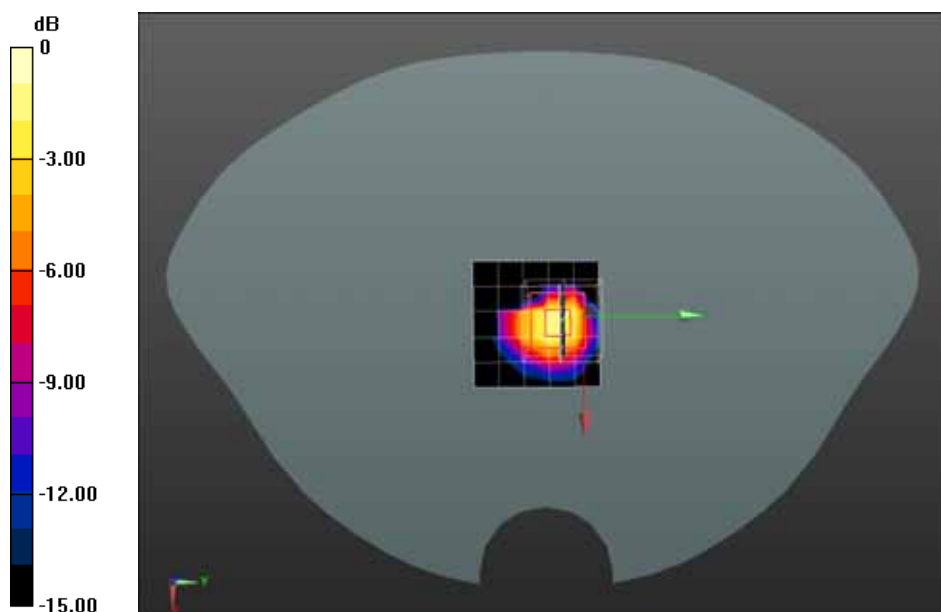
Maximum value of SAR (measured) = 0.486 W/kg

Configuration/802.11a 5260MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 9.401 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.513 W/kg; SAR(10 g) = 0.157 W/kg Maximum value of SAR (measured) = 0.625 W/kg



0 dB = 0.625 W/kg = -2.04 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5260MHz Body-Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5260 MHz; Medium parameters used: $f = 5260$ MHz; $\sigma = 5.34$ S/m; $\epsilon_r = 49.39$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM2; Type: SAM; Serial: TP1562
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5260MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

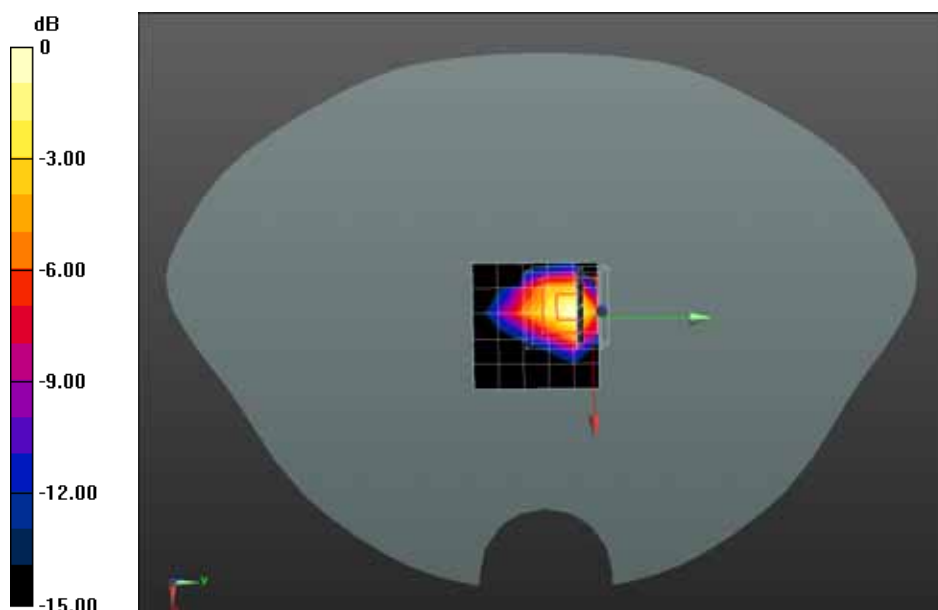
Maximum value of SAR (measured) = 0.659 W/kg

Configuration/802.11a 5260MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 7.150 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 0.539 W/kg; SAR(10 g) = 0.166 W/kg Maximum value of SAR (measured) = 0.648 W/kg



0 dB = 0.648 W/kg = -1.88 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5260MHz Body-Vertical Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5260 MHz; Medium parameters used: $f = 5260$ MHz; $\sigma = 5.34$ S/m; $\epsilon_r = 49.39$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM2; Type: SAM; Serial: TP1562
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5260MHz Body-Vertical Back/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

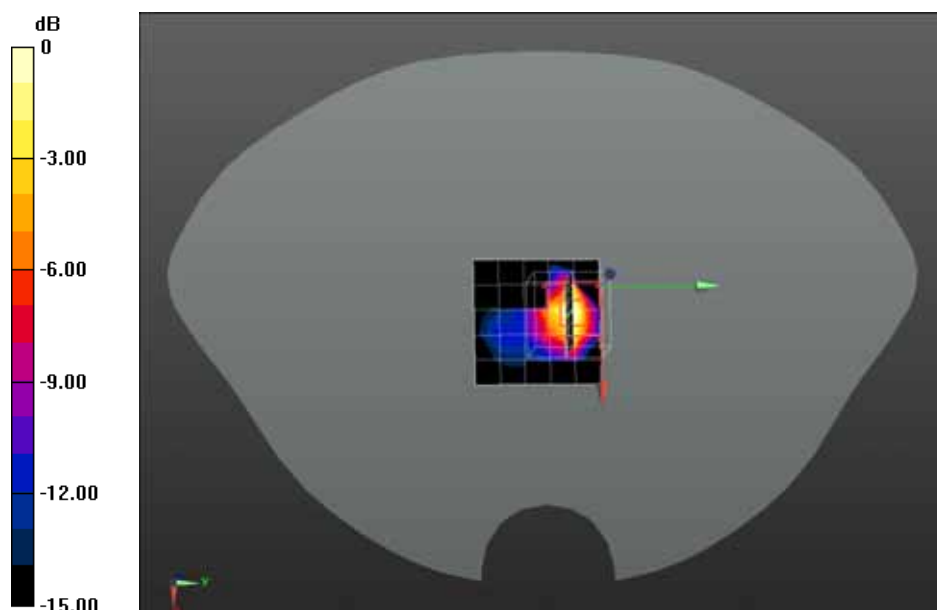
Maximum value of SAR (measured) = 0.226 W/kg

Configuration/802.11a 5260MHz Body-Vertical Back/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 3.249 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.658 W/kg

SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.047 W/kg Maximum value of SAR (measured) = 0.207 W/kg



0 dB = 0.207 W/kg = -6.84 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5260MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5260 MHz; Medium parameters used: $f = 5260$ MHz; $\sigma = 5.34$ S/m; $\epsilon_r = 49.39$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5260MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

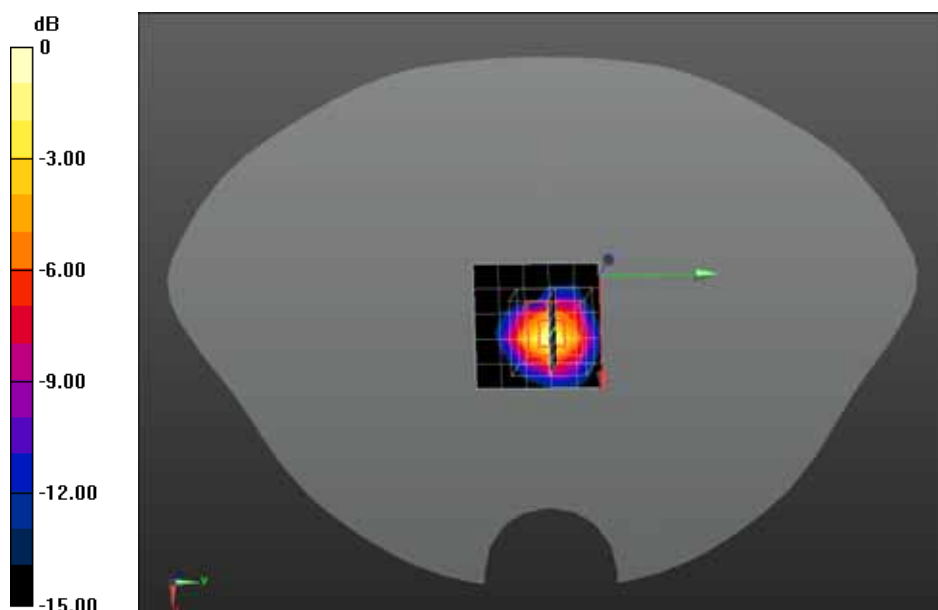
Maximum value of SAR (measured) = 1.06 W/kg

Configuration/802.11a 5260MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.17 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 3.17 W/kg

SAR(1 g) = 0.876 W/kg; SAR(10 g) = 0.260 W/kg Maximum value of SAR (measured) = 1.10 W/kg



0 dB = 1.10 W/kg = 0.41 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5260MHz Body-Vertical Front*

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5260 MHz; Medium parameters used: $f = 5260$ MHz; $\sigma = 5.34$ S/m; $\epsilon_r = 49.39$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5260MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.35 W/kg

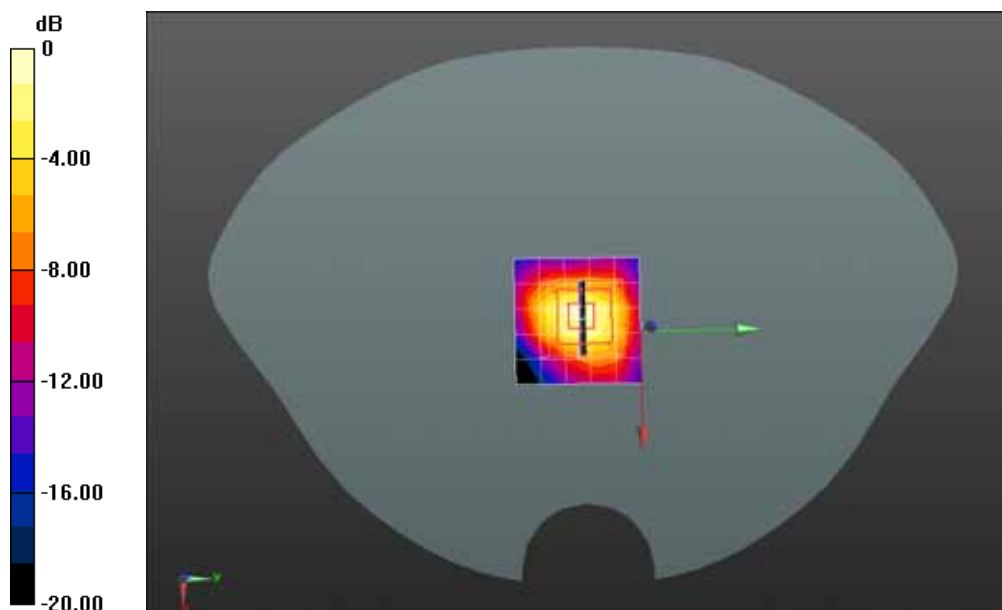
Configuration/802.11a 5260MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 18.78 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 3.93 W/kg

SAR(1 g) = 0.842 W/kg; SAR(10 g) = 0.485 W/kg

Maximum value of SAR (measured) = 1.54 W/kg



0 dB = 1.54 W/kg = 1.81 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5260MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5260 MHz; Medium parameters used: $f = 5260$ MHz; $\sigma = 5.34$ S/m; $\epsilon_r = 49.39$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM2; Type: SAM; Serial: TP1562
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

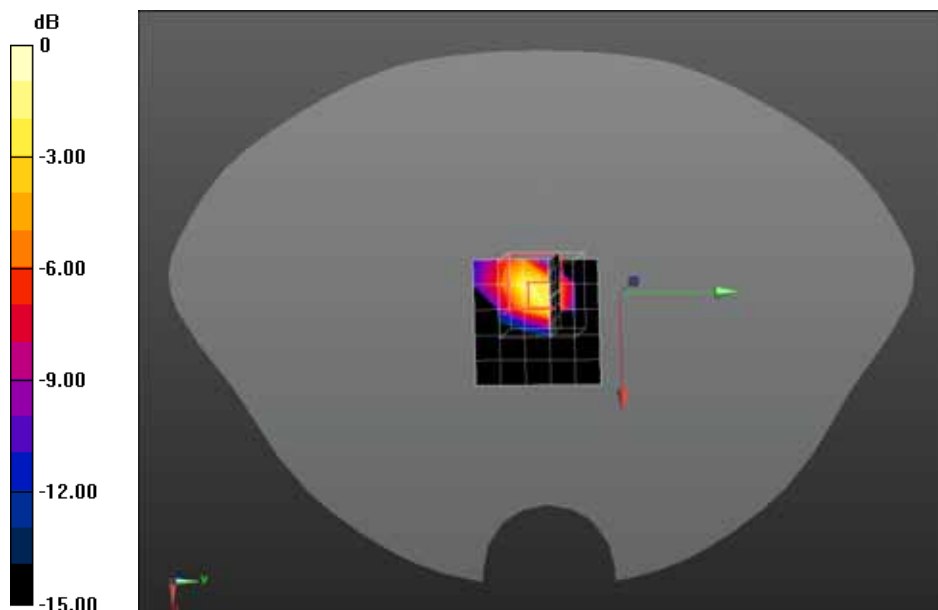
Configuration/802.11a 5260MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.0927 W/kg

Configuration/802.11a 5260MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 3.312 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.723 W/kg

SAR(1 g) = 0.106 W/kg; SAR(10 g) = 0.035 W/kg Maximum value of SAR (measured) = 0.132 W/kg



0 dB = 0.132 W/kg = -8.79 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5300MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5300 MHz; Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 5.4 \text{ S/m}$; $\epsilon_r = 49.29$; $\rho = 1000 \text{ kg/m}^3$; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5300MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

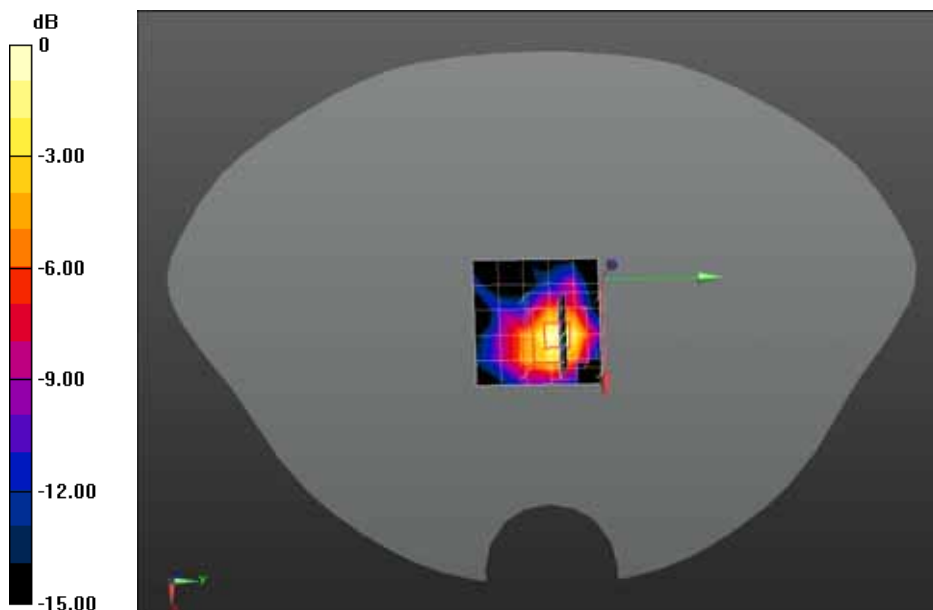
Maximum value of SAR (measured) = 0.781 W/kg

Configuration/802.11a 5300MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 7.196 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 4.56 W/kg

SAR(1 g) = 0.821 W/kg; SAR(10 g) = 0.267 W/kg Maximum value of SAR (measured) = 0.810 W/kg



0 dB = 0.810 W/kg = -0.92 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11a 5300MHz Body-Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5300 MHz; Medium parameters used: $f = 5300$ MHz; $\sigma = 5.40$ S/m; $\epsilon_r = 49.29$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11a 5300MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.12 W/kg

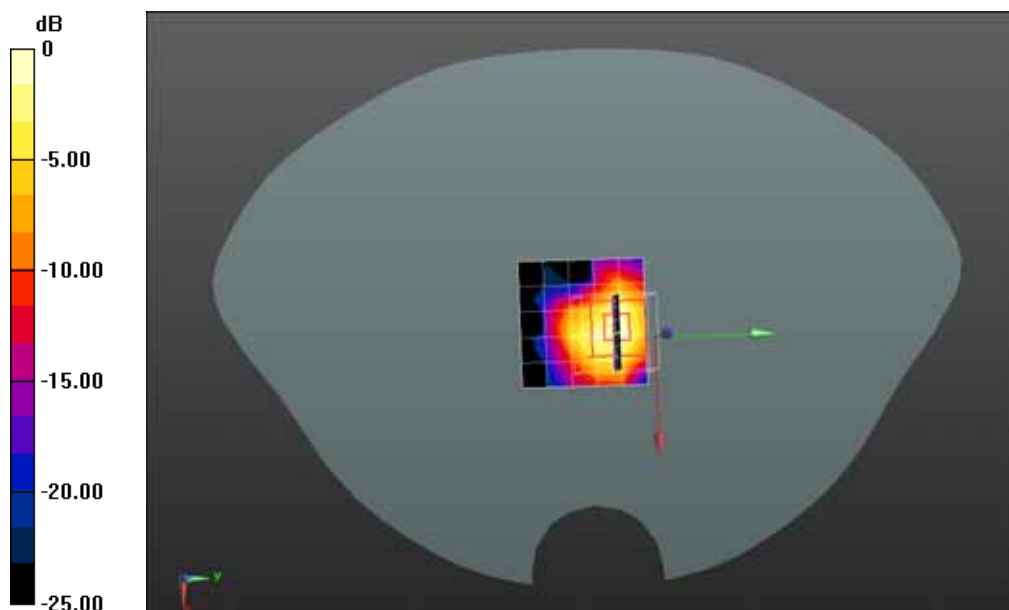
Configuration/802.11a 5300MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 7.372 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 2.25 W/kg

SAR(1 g) = 0.52 W/kg; SAR(10 g) = 0.254 W/kg

Maximum value of SAR (measured) = 0.993 W/kg



0 dB = 0.993 W/kg = -0.03 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5300MHz Body-Horizontal Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5300 MHz; Medium parameters used: $f = 5300$ MHz; $\sigma = 5.40$ S/m; $\epsilon_r = 49.29$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5300MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.86 W/kg

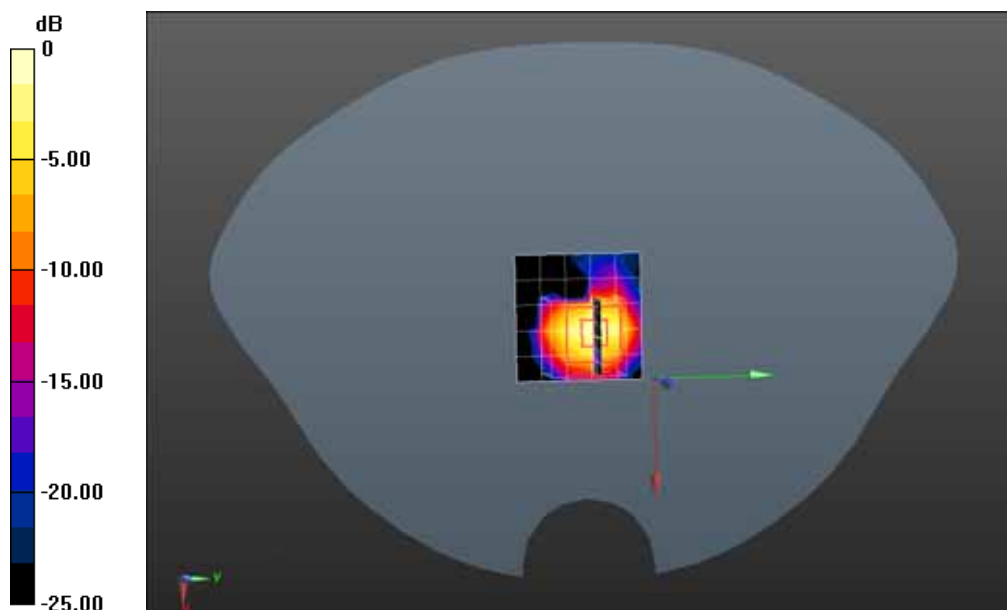
Configuration/802.11n20 5300MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 4.290 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.82 W/kg

SAR(1 g) = 0.452 W/kg; SAR(10 g) = 0.139 W/kg

Maximum value of SAR (measured) = 0.82 W/kg



0 dB = 0.82 W/kg = -3.86 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5300MHz Body-Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5300 MHz; Medium parameters used: $f = 5300$ MHz; $\sigma = 5.40$ S/m; $\epsilon_r = 49.29$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5300MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.716 W/kg

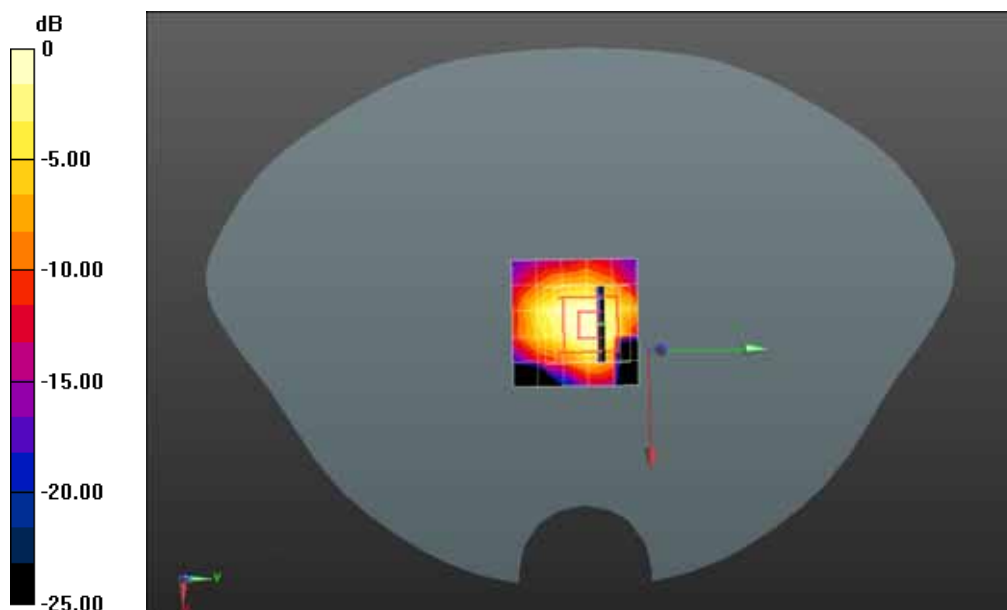
Configuration/802.11n20 5300MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 15.56 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.328 W/kg; SAR(10 g) = 0.167 W/kg

Maximum value of SAR (measured) = 0.653 W/kg



0 dB = 0.653 W/kg = -1.85 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5300MHz Body-Vertical Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5300 MHz; Medium parameters used: $f = 5300$ MHz; $\sigma = 5.40$ S/m; $\epsilon_r = 49.29$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5300MHz Body-Vertical Back/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.436 W/kg

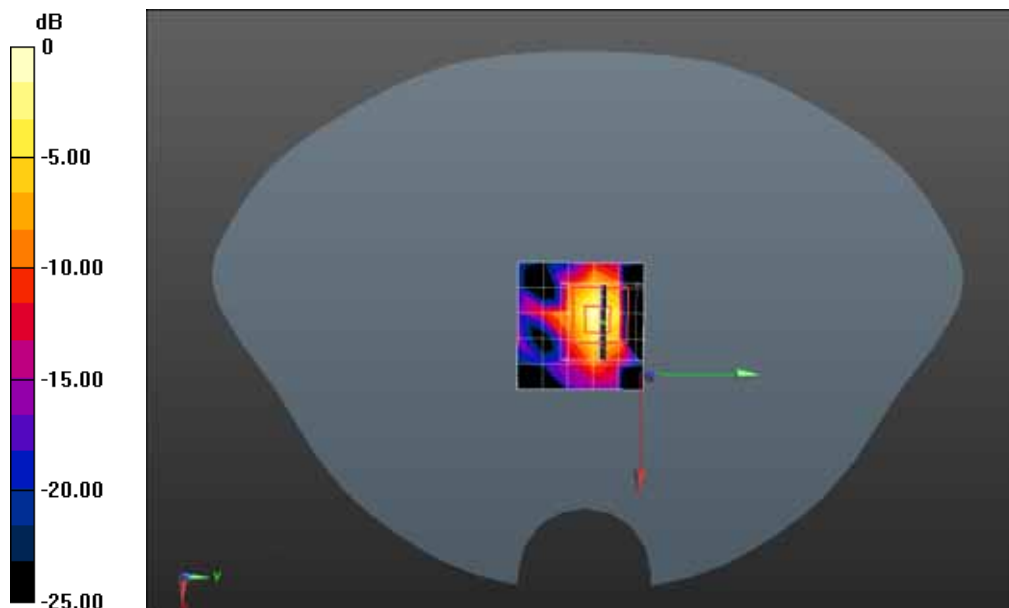
Configuration/802.11n20 5300MHz Body-Vertical Back/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.40 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.296 W/kg; SAR(10 g) = 0.120 W/kg

Maximum value of SAR (measured) = 0.517 W/kg



0 dB = 0.517 W/kg = -2.87 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5300MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5300 MHz; Medium parameters used: $f = 5300$ MHz; $\sigma = 5.40$ S/m; $\epsilon_r = 49.29$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5300MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

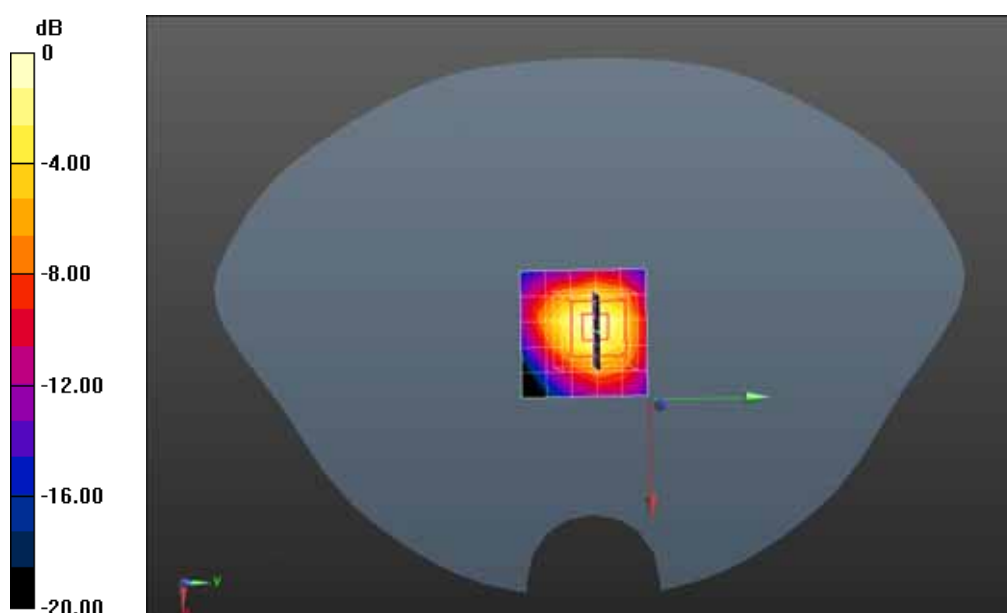
Maximum value of SAR (measured) = 1.38 W/kg

Configuration/802.11n20 5300MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 16.48 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.65 W/kg

SAR(1 g) = 0.618 W/kg; SAR(10 g) = 0.285 W/kg



0 dB = 1.38 W/kg = 1.40 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n20 5300MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5300 MHz; Medium parameters used: $f = 5300$ MHz; $\sigma = 5.40$ S/m; $\epsilon_r = 49.29$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n20 5300MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

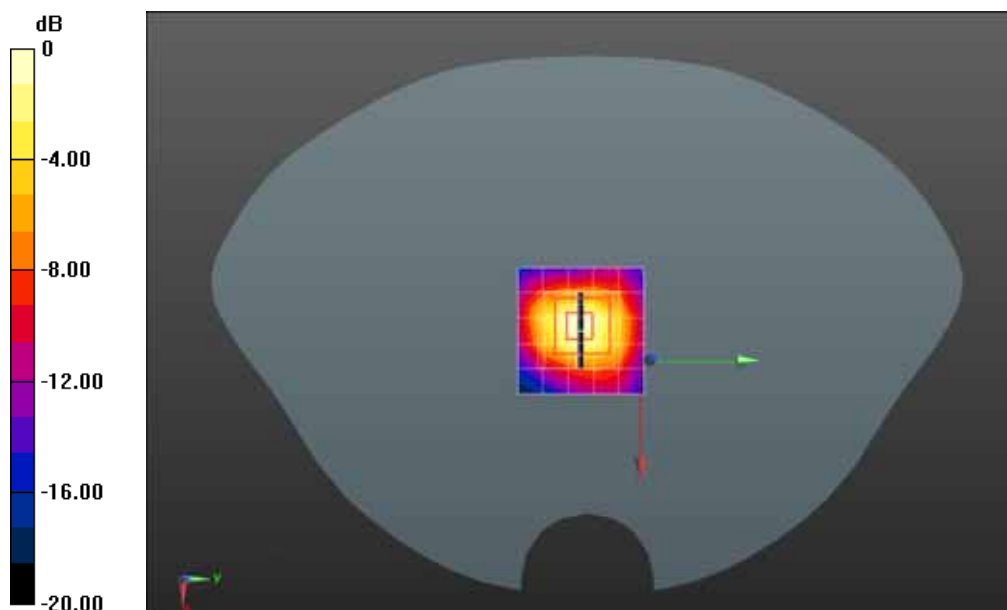
Maximum value of SAR (measured) = 0.17 W/kg

Configuration/802.11n20 5300MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value =2.83 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.38 W/kg

SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.032 W/kg

Maximum value of SAR (measured) = 0.14 W/kg



0 dB = 0.14 W/kg = -11.88 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5270MHz Body-Horizontal Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5270 MHz; Medium parameters used: $f = 5270$ MHz; $\sigma = 5.36$ S/m; $\epsilon_r = 49.36$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5270MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.43 W/kg

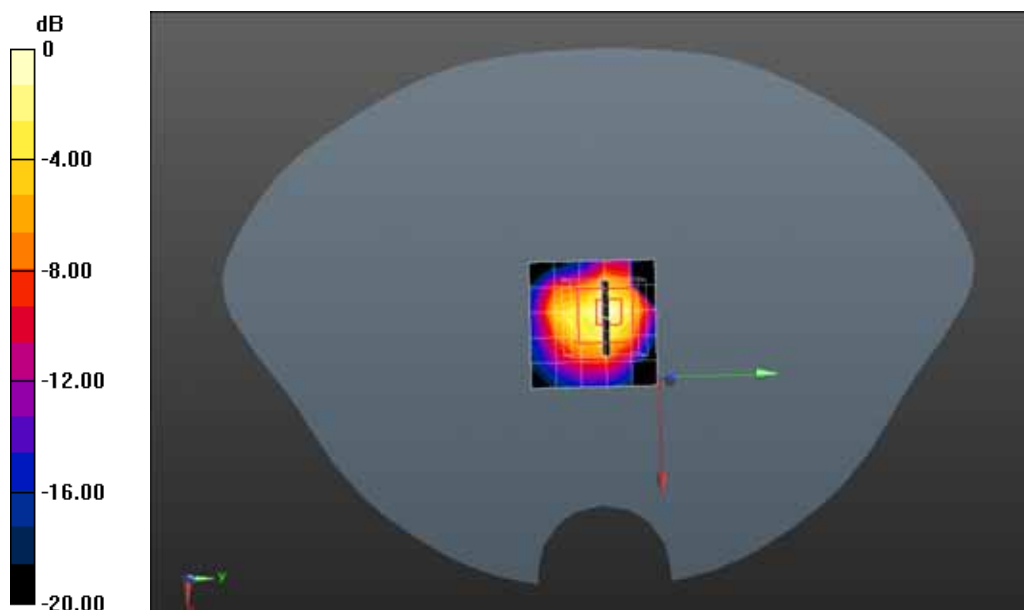
Configuration/802.11n40 5270MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 17.08 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 2.59 W/kg

SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.281 W/kg

Maximum value of SAR (measured) = 1.37 W/kg



0 dB = 1.37 W/kg = 1.37 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5270MHz Body-Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5270 MHz; Medium parameters used: $f = 5270$ MHz; $\sigma = 5.36$ S/m; $\epsilon_r = 49.36$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5270MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.53 W/kg

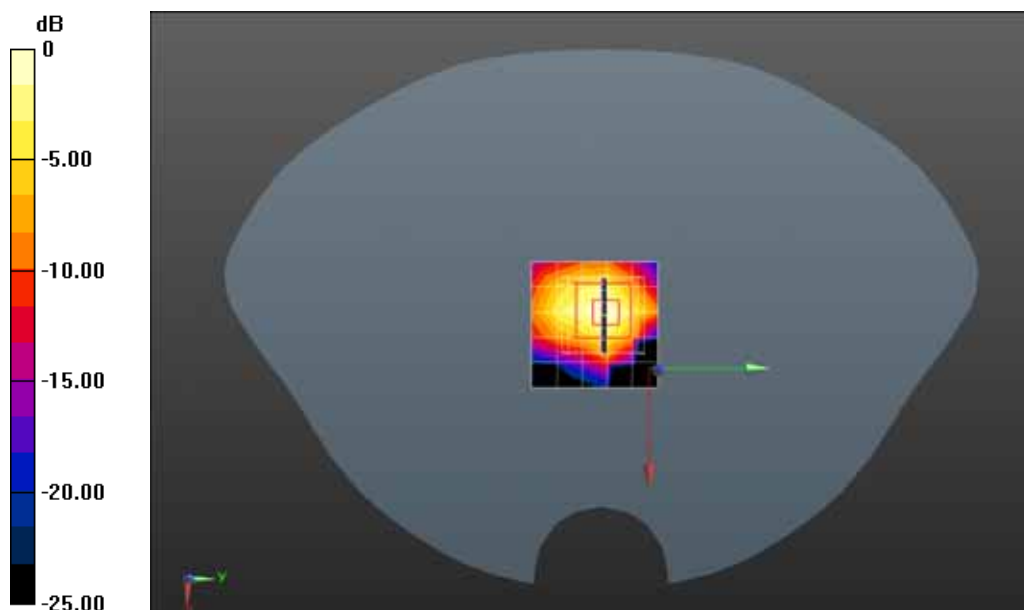
Configuration/802.11n40 5270MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 17.45 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 3.60 W/kg

SAR(1 g) = 0.606 W/kg; SAR(10 g) = 0.403 W/kg

Maximum value of SAR (measured) = 1.38 W/kg



0 dB = 1.38 W/kg = 1.40 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5270MHz Body-Vertical Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5270 MHz; Medium parameters used: $f = 5270$ MHz; $\sigma = 5.36$ S/m; $\epsilon_r = 49.36$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5270MHz Body-Vertical back/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.544 W/kg

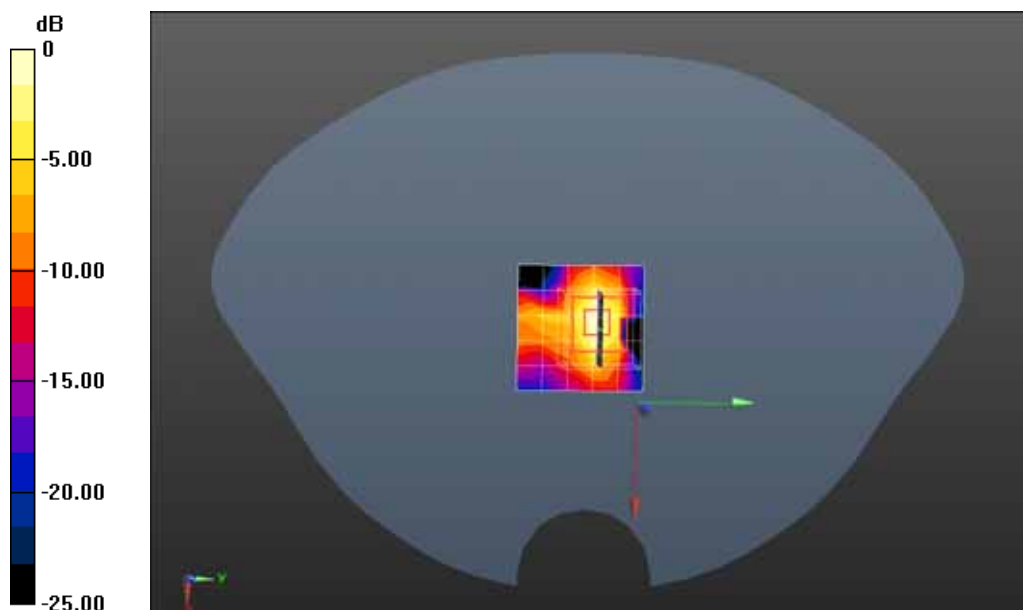
Configuration/802.11n40 5270MHz Body-Vertical back/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.28 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.227 W/kg; SAR(10 g) = 0.133 W/kg

Maximum value of SAR (measured) = 0.555 W/kg



0 dB = 0.555 W/kg = -2.56 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5270MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5270 MHz; Medium parameters used: $f = 5270$ MHz; $\sigma = 5.36$ S/m; $\epsilon_r = 49.36$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5270MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.58 W/kg

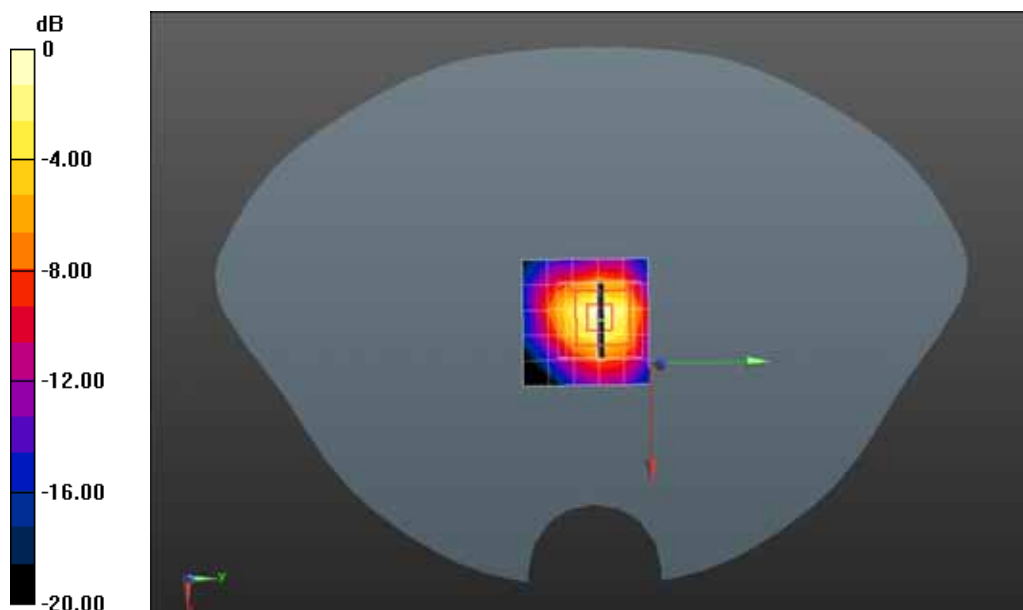
Configuration/802.11n40 5270MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 18.48 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 4.60 W/kg

SAR(1 g) = 0.681 W/kg; SAR(10 g) = 0.470 W/kg

Maximum value of SAR (measured) = 1.65 W/kg



0 dB = 1.65 W/kg = 2.17 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5270MHz Body-Vertical Front*

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5270 MHz; Medium parameters used: $f = 5270$ MHz; $\sigma = 5.36$ S/m; $\epsilon_r = 49.36$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5270MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.16 W/kg

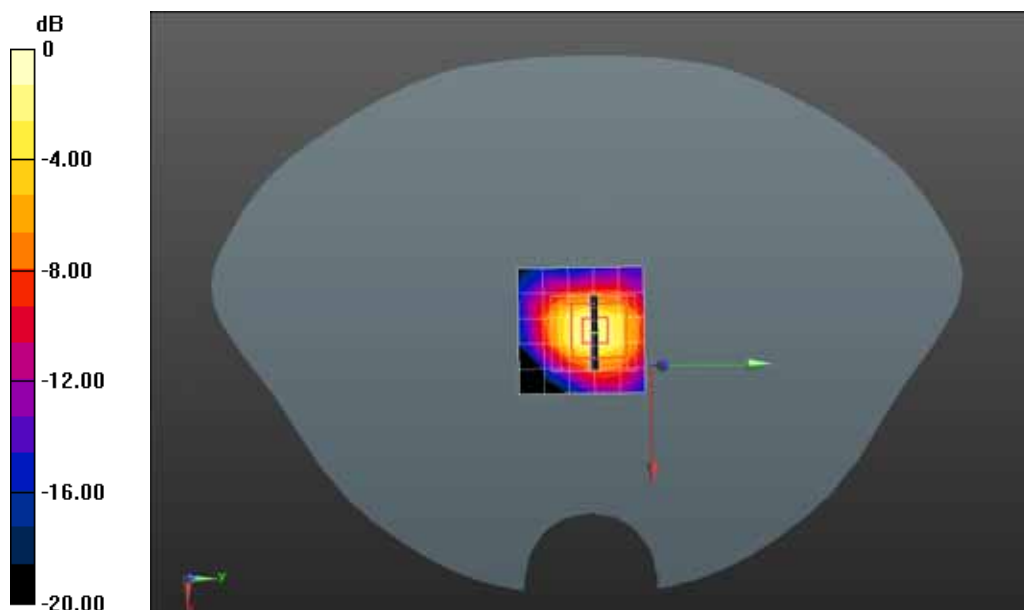
Configuration/802.11n40 5270MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 15.92 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 4.00 W/kg

SAR(1 g) = 0.658 W/kg; SAR(10 g) = 0.419 W/kg

Maximum value of SAR (measured) = 1.43 W/kg



0 dB = 1.43 W/kg = 1.55 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5270MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5270 MHz; Medium parameters used: $f = 5270$ MHz; $\sigma = 5.36$ S/m; $\epsilon_r = 49.36$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5270MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

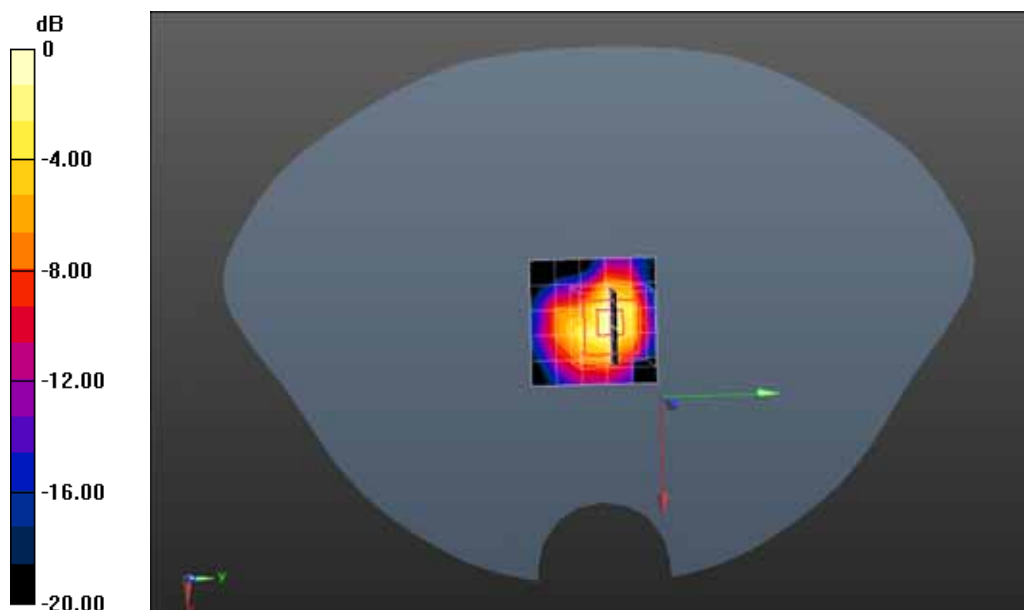
Maximum value of SAR (measured) = 0.12 W/kg

Configuration/802.11n40 5270MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 4.88 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.23 W/kg

SAR(1 g) = 0.079 W/kg; SAR(10 g) = 0.026 W/kg

Maximum value of SAR (measured) = 0.14 W/kg



0 dB = 0.14 W/kg = -21.11 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5310MHz Body- Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5310 MHz; Medium parameters used: $f = 5310$ MHz; $\sigma = 5.41$ S/m; $\epsilon_r = 49.27$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5310MHz Body- Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.98 W/kg

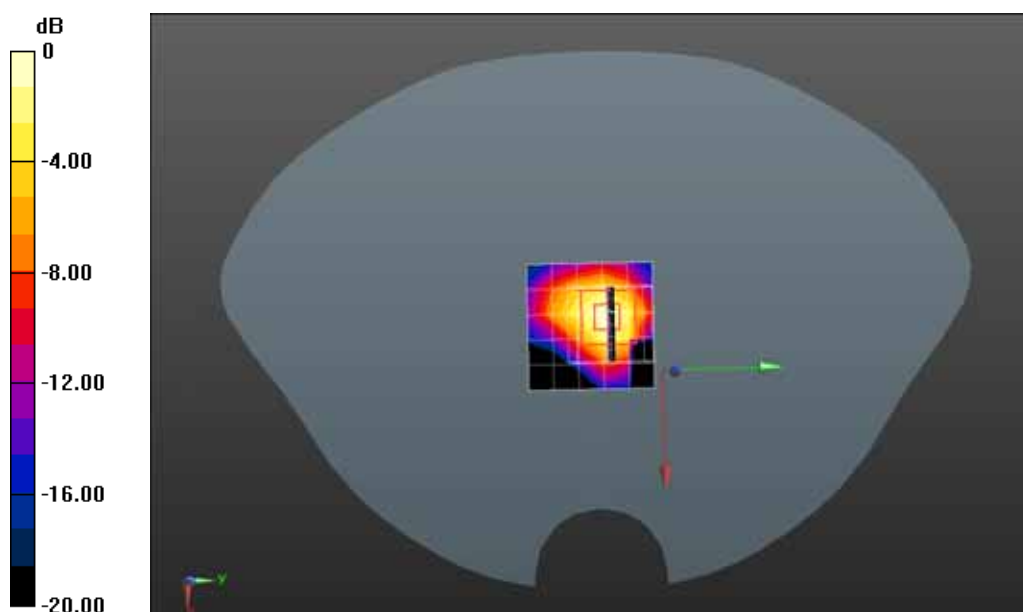
Configuration/802.11n40 5310MHz Body- Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.13 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.96 W/kg

SAR(1 g) = 0.568 W/kg; SAR(10 g) = 0.193 W/kg

Maximum value of SAR (measured) = 0.91 W/kg



0 dB = 0.91 W/kg = -1.17 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11n40 5310MHz Body- Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5310 MHz; Medium parameters used: $f = 5310$ MHz; $\sigma = 5.41$ S/m; $\epsilon_r = 49.27$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11n40 5310MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.97 W/kg

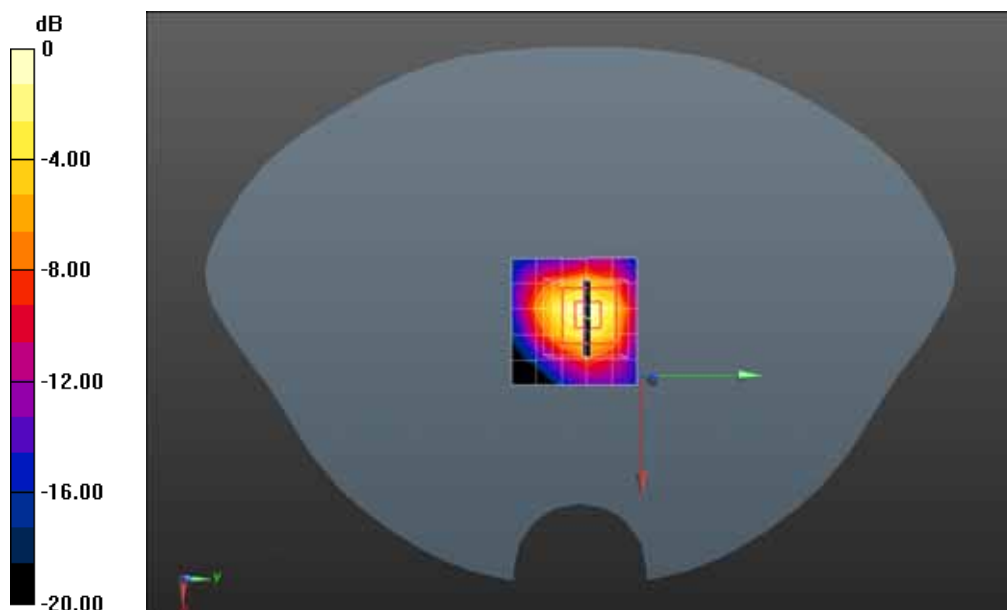
Configuration/802.11n40 5310MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.58 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 2.76 W/kg

SAR(1 g) = 0.401 W/kg; SAR(10 g) = 0.109 W/kg

Maximum value of SAR (measured) = 0.86 W/kg



0 dB = 0.86 W/kg = -1.64 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5320MHz Body-Horizontal Up

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5320 MHz; Medium parameters used: $f = 5320$ MHz; $\sigma = 5.43$ S/m; $\epsilon_r = 49.24$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5320MHz Body-Horizontal Up/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

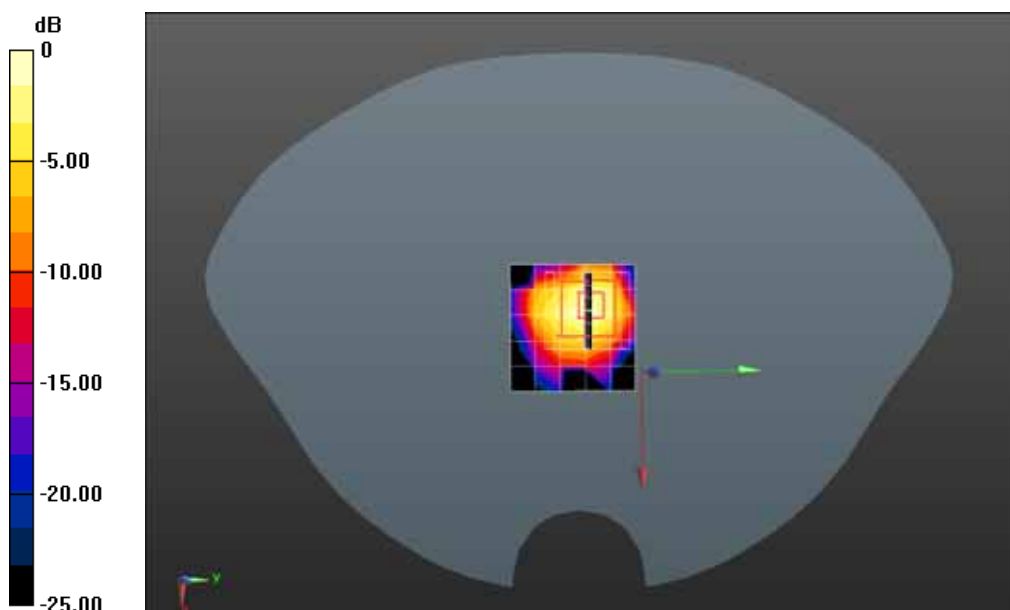
Maximum value of SAR (measured) = 0.992 W/kg

Configuration/802.11ac20 5320MHz Body-Horizontal Up/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 13.26 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 2.32 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.271 W/kg



0 dB = 0.992 W/kg = -0.03 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5320MHz Body-Horizontal Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5320 MHz; Medium parameters used: $f = 5320$ MHz; $\sigma = 5.43$ S/m; $\epsilon_r = 49.24$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5320MHz Body-Horizontal Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.94 W/kg

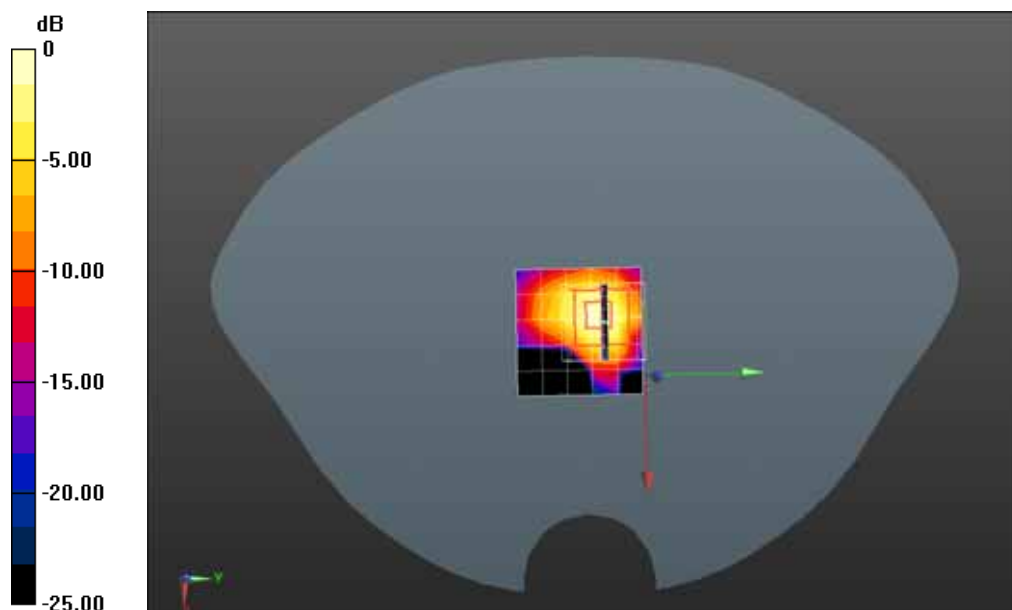
Configuration/802.11ac20 5320MHz Body-Horizontal Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 4.72 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 3.62 W/kg

SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.184 W/kg

Maximum value of SAR (measured) = 0.82 W/kg



0 dB = 0.82 W/kg = 1.14 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5320MHz Body-Vertical Back

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5320 MHz; Medium parameters used: $f = 5320$ MHz; $\sigma = 5.43$ S/m; $\epsilon_r = 49.24$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5320MHz Body-Vertical Back/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.370 W/kg

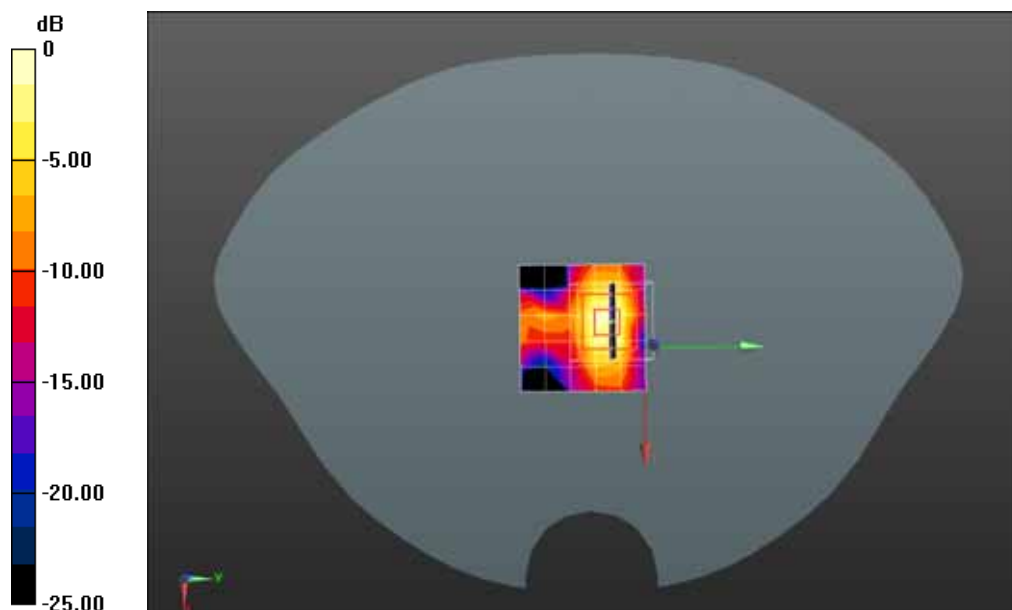
Configuration/802.11ac20 5320MHz Body-Vertical Back/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 7.846 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.081 W/kg

Maximum value of SAR (measured) = 0.470 W/kg



0 dB = 0.470 W/kg = -3.28 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5320MHz Body-Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5320 MHz; Medium parameters used: $f = 5320$ MHz; $\sigma = 5.43$ S/m; $\epsilon_r = 49.24$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5320MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.25 W/kg

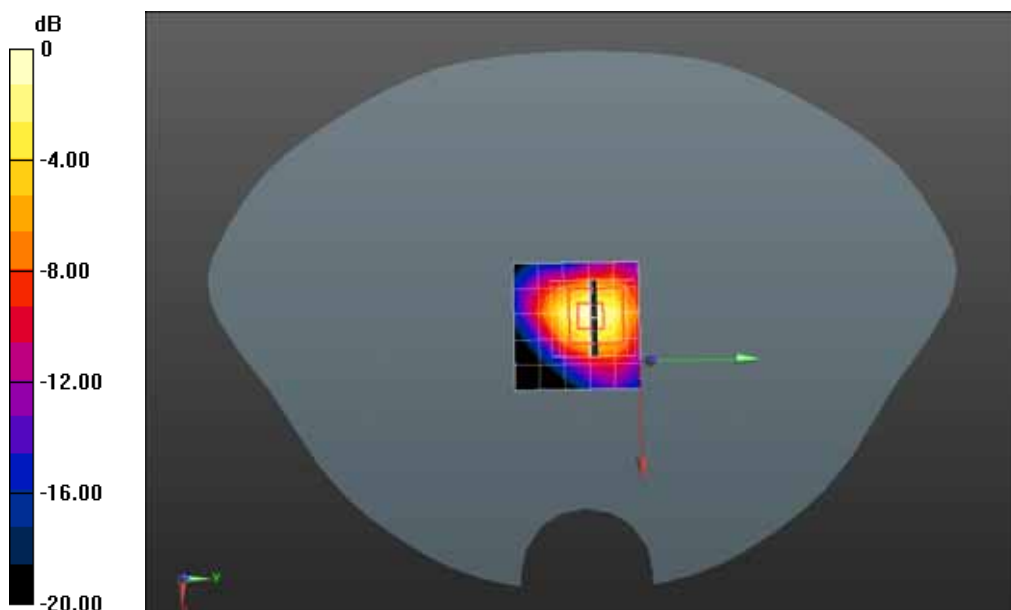
Configuration/802.11ac20 5320MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 10.97 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.96 W/kg

SAR(1 g) = 0.772 W/kg; SAR(10 g) = 0.241 W/kg

Maximum value of SAR (measured) = 1.16 W/kg



0 dB = 1.16 W/kg = -1.93 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5320MHz Body-Vertical Front*

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5320 MHz; Medium parameters used: $f = 5320$ MHz; $\sigma = 5.43$ S/m; $\epsilon_r = 49.24$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5320MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.07 W/kg

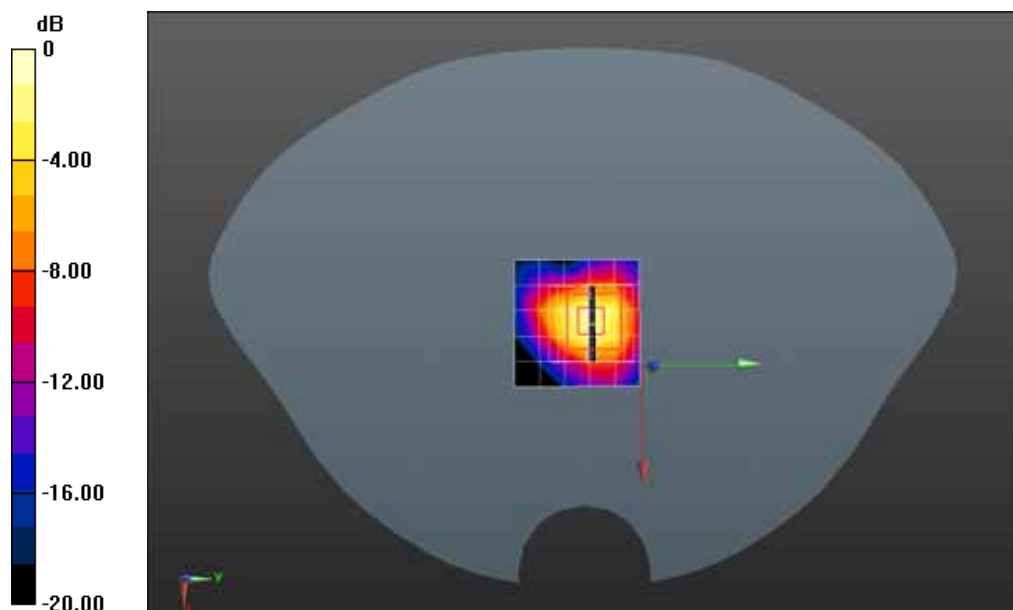
Configuration/802.11ac20 5320MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 11.32 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.72 W/kg

SAR(1 g) = 0.749 W/kg; SAR(10 g) = 0.263 W/kg

Maximum value of SAR (measured) = 1.09 W/kg



0 dB = 1.09 W/kg = 1.01 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5320MHz Body-Tip

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5320 MHz; Medium parameters used: $f = 5320$ MHz; $\sigma = 5.43$ S/m; $\epsilon_r = 49.24$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5320MHz Body-Tip/Area Scan (6x6x1): Measurement grid: dx=10mm, dy=10mm

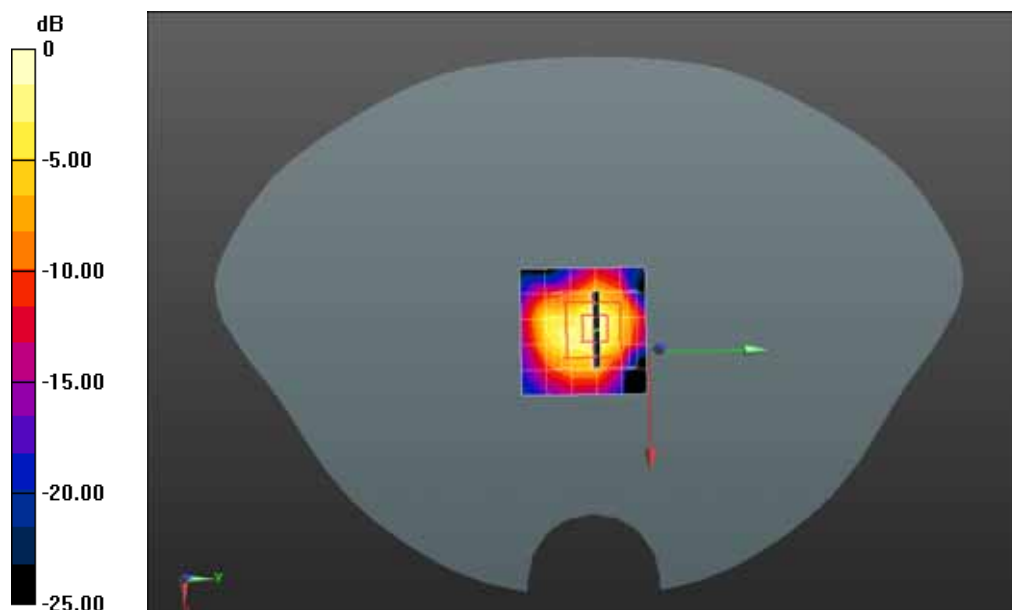
Maximum value of SAR (measured) = 0.12 W/kg

Configuration/802.11ac20 5320MHz Body-Tip/Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 6.31 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.88 W/kg

SAR(1 g) = 0.088 W/kg; SAR(10 g) = 0.033 W/kg

Maximum value of SAR (measured) = 0.127 W/kg



0 dB = 0.127 W/kg = -11.04 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5300MHz Body- Vertical Front

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5300 MHz; Medium parameters used: $f = 5300$ MHz; $\sigma = 5.40$ S/m; $\epsilon_r = 49.29$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5300MHz Body-Vertical Front/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.07 W/kg

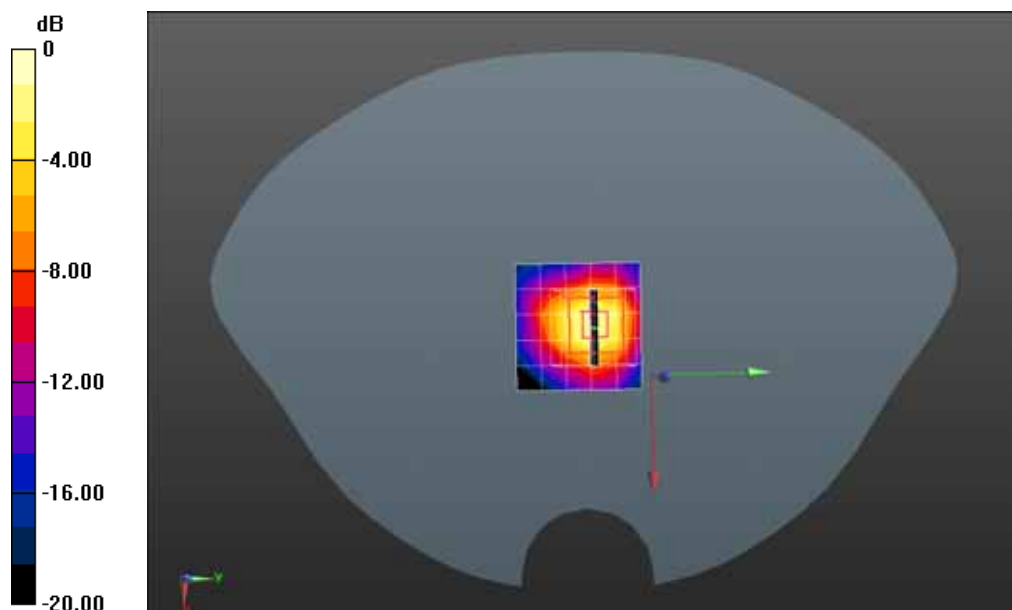
Configuration/802.11ac20 5300MHz Body-Vertical Front/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 16.85 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 2.81 W/kg

SAR(1 g) = 0.713 W/kg; SAR(10 g) = 0.262 W/kg

Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg = -1.90 dBW/kg

Date/Time: 06-06-2016

Test Laboratory: QuieTek Lab

802.11ac20 5300MHz Body-Hertical Down

DUT: AC450 Wireless Nano USB Adapter; Type: Archer T1U

Communication System: UID 0, CW (0); Communication System Band: 5GHz(5000.0-6000.0MHz); Duty Cycle: 1:1.0; Frequency: 5300 MHz; Medium parameters used: $f = 5300$ MHz; $\sigma = 5.40$ S/m; $\epsilon_r = 49.29$; $\rho = 1000$ kg/m³ ; Phantom section: Flat Section

Ambient temperature (°C): 21.5, Liquid temperature (°C): 21.0

DASY5 Configuration:

- Probe: EX3DV4 - SN3710; ConvF(4.35, 4.35, 4.35); Calibrated: 19/02/2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 09/02/2016
- Phantom: SAM1; Type: SAM; Serial: TP1561
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11ac20 5300MHz Body-Hertical Down/Area Scan (6x6x1): Measurement grid:

dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.43 W/kg

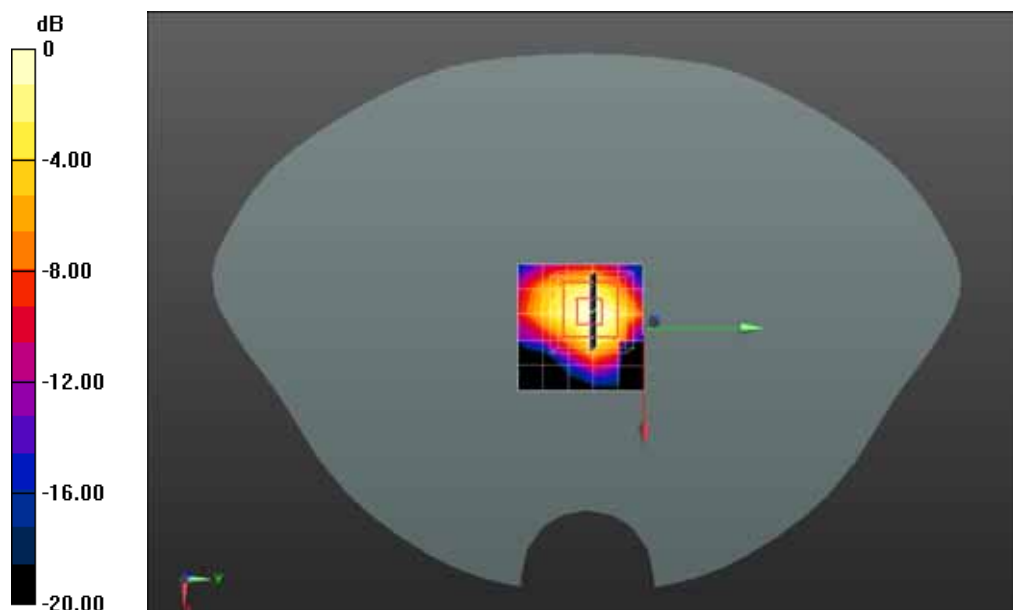
Configuration/802.11ac20 5300MHz Body-Hertical Down/Zoom Scan (7x7x6)/Cube 0: Measurement

grid: dx=5mm, dy=5mm, dz=2mm; Reference Value = 16.40 V/m; Power Drift = -0.20 dB

Peak SAR (extrapolated) = 2.71 W/kg

SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.159 W/kg

Maximum value of SAR (measured) = 1.07 W/kg



0 dB = 1.07 W/kg = 0.29 dBW/kg