



Solutions

SAR EVALUATION REPORT

IEEE Std 1528-2013

For
CORE 2 Console RFID Handpiece

FCC ID: Q9R-5400052000
Model Name: 5400-052-000

Report Number: R15041981-S1
Issue Date: 2024-11-15

Prepared for
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Revision History

Rev.	Date	Revisions	Revised By
V1	2024-06-14	Initial Issue	--
V2	2024-06-26	Updated §6.2 RFID operating mode.	Lindsay Ryan
V3	2024-11-15	Addition of RFID Console measurements/info in §1, 4.3, 6.1, 7, 8, and 10.4 and Appendix A, B, and C.	Lindsay Ryan

Table of Contents

1. Attestation of Test Results.....	4
2. Test Specification, Methods and Procedures.....	5
3. Facilities and Accreditation.....	6
4. SAR Measurement System & Test Equipment	7
4.1. <i>SAR Measurement System</i>	7
4.2. <i>SAR Scan Procedures.....</i>	8
4.3. <i>Test Equipment</i>	10
5. Measurement Uncertainty	11
6. Device Under Test (DUT) Information	12
6.1. <i>DUT Description</i>	12
6.2. <i>Wireless Technologies</i>	12
7. RF Exposure Conditions (Test Configurations).....	13
8. Dielectric Property Measurements & System Check	14
8.1. <i>Dielectric Property Measurements.....</i>	14
8.2. <i>System Check.....</i>	15
9. Conducted Output Power Measurements.....	16
10. Measured and Reported (Scaled) SAR Results.....	17
10.1. <i>RFID (Shaver Handpiece: 375-701-500)</i>	17
10.2. <i>RFID (Shaver Handpiece: 375-704-500)</i>	17
10.3. <i>RFID (Shaver Handpiece: 375-708-500)</i>	17
10.4. <i>RFID (Console: 5400-052-000).....</i>	17
11. SAR Measurement Variability	18
Appendices.....	19
Appendix A: <i>SAR Setup Photos</i>	19
Appendix B: <i>SAR System Check Plots.....</i>	19
Appendix C: <i>SAR Highest Test Plots</i>	19
Appendix D: <i>SAR Tissue Ingredients</i>	19
Appendix E: <i>SAR Probe Certificates</i>	19
Appendix F: <i>SAR Dipole Certificates.....</i>	19

1. Attestation of Test Results

Applicant Name	Stryker Instruments	
FCC ID	Q9R-5400052000	
Model Name	5400-052-000	
Applicable Standards	Published RF exposure KDB procedures IEEE Std 1528-2013	
	SAR Limits (W/Kg)	
Exposure Category	Peak spatial-average (1g of tissue)	Extremities (hands, wrists, ankles, etc.) (10g of tissue)
General population / Uncontrolled exposure	1.6	4.0
RF Exposure Conditions	Equipment Class - Highest Reported SAR (W/kg)	
	DXX	
Extremity (Shaver Handpiece: 375-701-500)	0.000	
Extremity (Shaver Handpiece: 375-704-500)	0.000	
Extremity (Shaver Handpiece: 375-708-500)	0.000	
Body (Console: 5400-052-000)	0.000	
Date Tested	2024-05-01 to 2024-11-13	
Test Results	Pass	

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

This report contains data provided by the customer which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer.

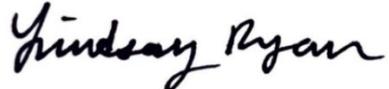
The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the U.S. Government, or any agency of the U.S. government.

Approved & Released By:



Prepared By:



Richard Jankovics
Operations Leader
UL LLC

Lindsay Ryan
Engineer
UL LLC

2. Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEC/IEEE 62209-1528, the following FCC Published RF exposure [KDB](#) procedures:

- 447498 D01 General RF Exposure Guidance v06
- 447498 D03 Supplement C Cross-Reference v01
- 865664 D02 RF Exposure Reporting v01r02

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

- [TCB Workshop](#) October 2016; RF Exposure Procedures (DUT Holder Perturbations)
- [TCB Workshop](#) April 2019; RF Exposure Procedures (Tissue Simulating Liquids (TSL))
- [TCB Workshop](#): April 2021; Use of 62209-1528 for 13MHz

3. Facilities and Accreditation

UL LLC is accredited by A2LA, cert. # 0751.06 for all testing performed within the scope of this report. Testing was performed at the locations noted below.

The test sites and measurement facilities used to collect data are located at 2800 Perimeter Park Dr, Morrisville, NC, USA.

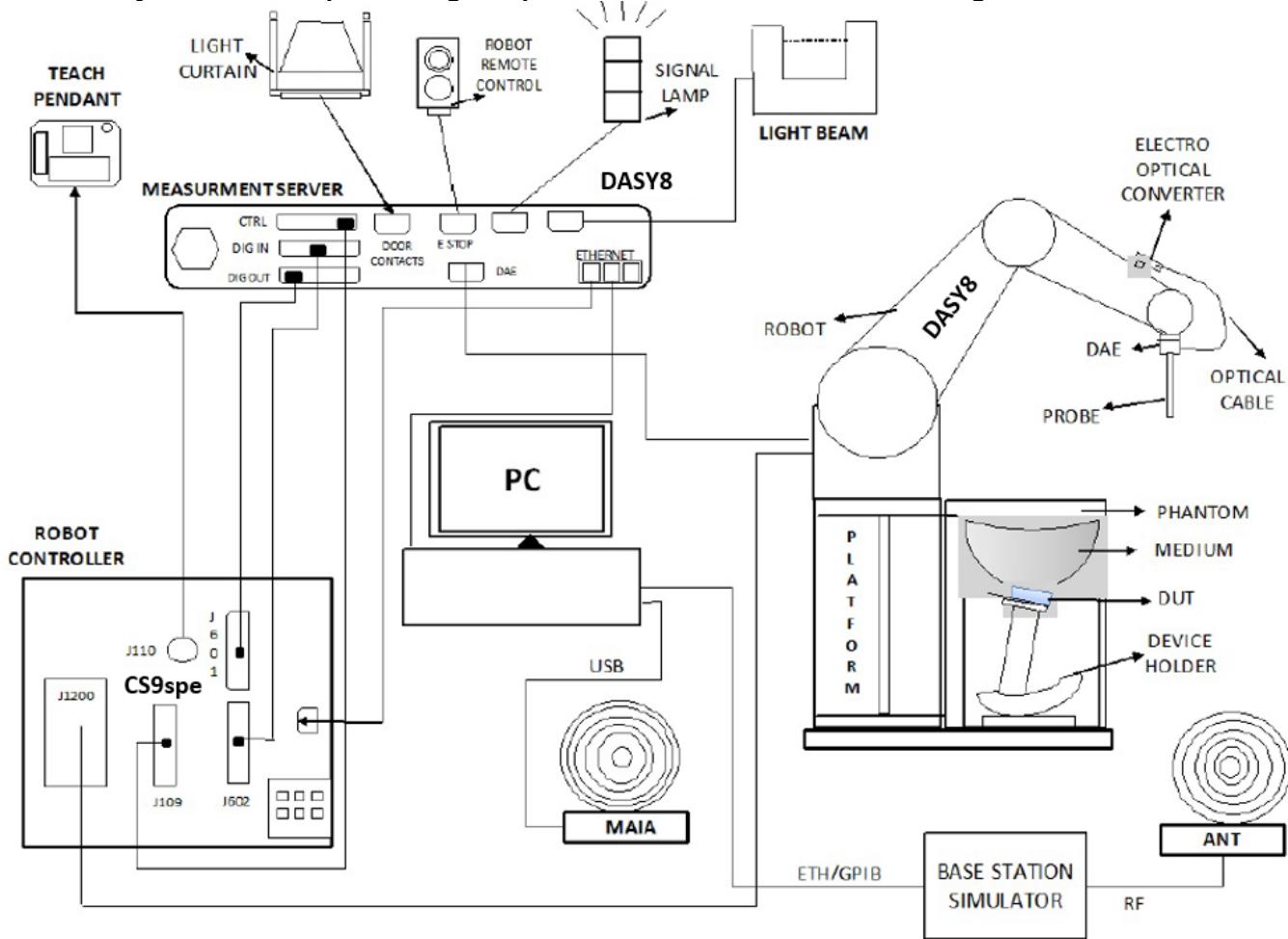
- SAR Lab 1A

	Address	ISED CABID	ISED Company Number	FCC Registration
<input type="checkbox"/>	Building: 12 Laboratory Dr RTP, NC 27709, U.S.A	US0067	2180C	825374
<input checked="" type="checkbox"/>	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A	US0067	27265	825374

4. SAR Measurement System & Test Equipment

4.1. SAR Measurement System

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



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win10 and the DASY8¹ 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.

¹ DASY8 software used: DASY16.2.4.2524 and older generations.

4.2. SAR Scan Procedures

Step 1: Power Reference Measurement

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

Step 2: Area Scan

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

Area Scan Parameters extracted from IEC/IEEE 62209-1528

Parameter	DUT transmit frequency being tested	
	$f \leq 3 \text{ GHz}$	$3 \text{ GHz} < f \leq 10 \text{ GHz}$
Maximum distance between the measured points (geometric centre of the sensors) and the inner phantom surface (z_{M1} in Figure 20 in mm)	5 ± 1	$\delta \ln(2)/2 \pm 0,5$ ^a
Maximum spacing between adjacent measured points in mm (see O.8.3.1) ^b	20, or half of the corresponding zoom scan length, whichever is smaller	60/f, or half of the corresponding zoom scan length, whichever is smaller
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20) ^c	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Tolerance in the probe angle	1°	1°

^a δ is the penetration depth for a plane-wave incident normally on a planar half-space.
^b See Clause O.8 on how Δx and Δy may be selected for individual area scan requirements.
^c The probe angle relative to the phantom surface normal is restricted due to the degradation in the measurement accuracy in fields with steep spatial gradients. The measurement accuracy decreases with increasing probe angle and increasing frequency. This is the reason for the tighter probe angle restriction at frequencies above 3 GHz.

Step 3: Zoom Scan

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

Zoom Scan Parameters extracted from IEC/IEEE 62209-1528

Parameter	DUT transmit frequency being tested	
	$f \leq 3 \text{ GHz}$	$3 \text{ GHz} < f \leq 10 \text{ GHz}$
Maximum distance between the closest measured points and the phantom surface (z_{M1} in Figure 20 and Table 3, in mm)	5	$\delta \ln(2)/2$ ^a
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20)	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Maximum spacing between measured points in the x - and y -directions (Δ_x and Δ_y , in mm)	8	$24/f$ ^b
For uniform grids: Maximum spacing between measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	5	$10/(f - 1)$
For graded grids: Maximum spacing between the two closest measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	4	$12/f$
For graded grids: Maximum incremental increase in the spacing between measured points in the direction normal to the phantom shell ($R_z = \Delta z_2 / \Delta z_1$ in Figure 20)	1.5	1.5
Minimum edge length of the zoom scan volume in the x - and y -directions (L_z in O.8.3.2, in mm)	30	22
Minimum edge length of the zoom scan volume in the direction normal to the phantom shell (L_h in O.8.3.2 in mm)	30	22
Tolerance in the probe angle	1°	1°

^a δ is the penetration depth for a plane-wave incident normally on a planar half-space.

^b This is the maximum spacing allowed, which might not work for all circumstances.

Step 4: Power drift measurement

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

4.3. Test Equipment

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

Dielectric Property Measurements

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Date	Cal. Due Date
Network Analyzer ¹	Keysight	E5063A	MY54100681	2023-08-04	2024-08-04
Network Analyzer ¹	Keysight	E5063A	MY54100681	2024-07-31	2025-07-31
Dielectric Probe	SPEAG	DAKS-12	1037	2024-03-11	2025-03-11
Shorting Block	SPEAG	DAK-12 Short	2044	2024-03-11	2025-03-11
Thermometer	Fisher Scientific	15-078-181	1817705017	2024-03-29	2025-03-30

System Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Date	Cal. Due Date
Signal Generator ¹	Keysight	N5181A	MY50140788	2023-08-03	2024-08-03
Signal Generator1	Keysight	N5181A	MY50140788	2024-08-01	2025-08-01
3-Path Diode Power Sensor ¹	Rohde & Schwarz	NRP8S	112236	2023-06-03	2024-06-30
3-Path Diode Power Sensor ¹	Rohde & Schwarz	NRP8S	112237	2023-06-03	2024-06-30
3-Path Diode Power Sensor ¹	Rohde & Schwarz	NRP8S	112236	2024-07-12	2025-07-12
3-Path Diode Power Sensor ¹	Rohde & Schwarz	NRP8S	112237	2024-07-12	2025-07-12
Dual Directional Coupler	Werlatone	C5100-10	92249	N/A	N/A

Lab Equipment

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Date	Cal. Due Date
E-Field Probe	SPEAG	EX3DV4	7710	2024-01-16	2025-01-16
Data Acquisition Electronics	SPEAG	DAE4	1715	2024-02-12	2025-02-12
System Validation Dipole	SPEAG	CLA13	1017	2024-03-07	2025-03-07
Environmental Indicator	Fisher Scientific	Traceable	240072452	2024-01-24	2026-01-24
Environmental Indicator	Fisher Scientific	Traceable	240072459	2024-01-24	2026-01-24

Note(s):

1. Equipment was calibrated during the timeframe of testing.

5. Measurement Uncertainty

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

Therefore, the measurement uncertainty is not required.

6. Device Under Test (DUT) Information

6.1. DUT Description

Device Dimension (Model: 375-701-500)	Overall (Length x Width x Depth): 300 mm x 28 mm x 35 mm This is a Handheld device including tip 0375-562-000.										
Device Dimension (Model: 375-704-500)	Overall (Length x Width x Depth): 300 mm x 32 mm x 35 mm This is a Handheld device including tip 0375-562-000.										
Device Dimension (Model: 375-708-500)	Overall (Length x Width x Depth): 300 mm x 28 mm x 35 mm This is a Handheld device including tip 0375-562-000.										
Console Dimension (Model: 5400-052-000)	Overall (Length x Width x Depth): 426 mm x 330 mm x 138 mm This is a table-top/cart device.										
Battery Options	N/A										
Accessory	<ul style="list-style-type: none"> P/N 375-701-500 Formula® Shaver handpiece P/N 375-704-500 Formula® Hand-Controlled Shaver handpiece P/N 375-708-500 Formula® 180 Shaver handpiece 										
Test sample information	<table> <thead> <tr> <th>S/N</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td>16I001574</td> <td>Radiated Handpiece Sample #1 (375-701-500)</td> </tr> <tr> <td>16L002314</td> <td>Radiated Handpiece Sample #2 (375-704-500)</td> </tr> <tr> <td>06JPP0194</td> <td>Radiated Handpiece Sample #3 (375-708-500)</td> </tr> <tr> <td>2321400049</td> <td>Radiated Sample Console (5400-052-000)</td> </tr> </tbody> </table>	S/N	Notes	16I001574	Radiated Handpiece Sample #1 (375-701-500)	16L002314	Radiated Handpiece Sample #2 (375-704-500)	06JPP0194	Radiated Handpiece Sample #3 (375-708-500)	2321400049	Radiated Sample Console (5400-052-000)
S/N	Notes										
16I001574	Radiated Handpiece Sample #1 (375-701-500)										
16L002314	Radiated Handpiece Sample #2 (375-704-500)										
06JPP0194	Radiated Handpiece Sample #3 (375-708-500)										
2321400049	Radiated Sample Console (5400-052-000)										
Hardware Version	N/A										
Software Version	Software P/N 0590-090-929 version 3.0.8										

6.2. Wireless Technologies

Wireless technologies	Frequency bands	Operating mode	Duty Cycle used for SAR testing
RFID	13.56 MHz	Tag On	N/A

Note(s):

1. There is one RFID radio module that switches between two different RFID antennas – one in the handpiece and one by the cassette housing. Both the handpiece and the console RFID antennas were evaluated within this report.

7. RF Exposure Conditions (Test Configurations)

Refer to “SAR Photos and Ant locations” Appendix for the specific details of the antenna-to-antenna and antenna-to-edge(s) distances.

Wireless technologies	RF Exposure Conditions	DUT-to-User Separation	Test Position	Antenna-to-edge/surface	SAR Required	Note
Handpiece RFID	Extremity (Hand/Wrist/Ankle)	0	Top	N/A	Yes	
			Bottom	N/A	Yes	
			Left	N/A	Yes	
			Right	N/A	Yes	
Console RFID	Body	0	Front	62 mm	Yes	
			Back	315 mm	No	
			Top	N/A	No	1
			Bottom	N/A	No	1
			Left	287 mm	No	
			Right	17 mm	Yes	

Note(s):

1. Not applicable use-case for body exposure condition.

8. Dielectric Property Measurements & System Check

8.1. Dielectric Property Measurements

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

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

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

The dielectric constant (ϵ_r) and conductivity (σ) of typical tissue-equivalent media recipes are expected to be within $\pm 5\%$ of the required target values; but for SAR measurement systems that have implemented the SAR error compensation algorithms documented in IEC/IEEE 62209-1528, to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, the tolerance for ϵ_r and σ may be relaxed to $\pm 10\%$. This is limited to frequencies $\leq 3\text{ GHz}$.

Tissue Dielectric Parameters

IEC/IEEE 62209-1528

Table 2 – Dielectric properties of the tissue-equivalent medium

Frequency MHz	Real part of the complex relative permittivity, ϵ_r	Conductivity, σ S/m	Penetration depth (E-field), δ mm
4	55,0	0,75	293,0
13	55,0	0,75	165,5
30	55,0	0,75	112,8
150	52,3	0,76	62,0
300	45,3	0,87	46,1
450	43,5	0,87	43,0
750	41,9	0,89	39,8
835	41,5	0,90	39,0
900	41,5	0,97	36,2
1 450	40,5	1,20	28,6
1 800	40,0	1,40	24,3
1 900	40,0	1,40	24,3
1 950	40,0	1,40	24,3
2 000	40,0	1,40	24,3
2 100	39,8	1,49	22,8
2 450	39,2	1,80	18,7
2 600	39,0	1,96	17,2
3 000	38,5	2,40	14,0
3 500	37,9	2,91	11,4
4 000	37,4	3,43	10,0
4 500	36,8	3,94	9,7

Dielectric Property Measurements Results:

SAR Lab	Date	Band (MHz)	Tissue Type	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)		
					Measured	Target	Delta (%)	Measured	Target	Delta (%)
1A	2024-05-01	13	Head	13	53,5	55,0	-2,71	0,74	0,75	-1,64
				12	53,5	55,0	-2,67	0,74	0,75	-1,65
				14	53,5	55,0	-2,76	0,74	0,75	-1,63
1A	2024-06-04	13	Head	13	53,0	55,0	-3,71	0,74	0,75	-1,83
				12	53,0	55,0	-3,64	0,74	0,75	-1,84
				14	52,9	55,0	-3,80	0,74	0,75	-1,83
1A	2024-11-14	13	Head	13	53,4	55,0	-2,85	0,73	0,75	-2,85
				12	53,4	55,0	-2,93	0,73	0,75	-2,87
				14	53,4	55,0	-0,03	0,73	0,75	-2,84

8.2. System Check

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

System Performance Check Measurement Conditions:

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

System Check Results

The 1-g and 10-g SAR measured with a reference dipole, using the required tissue-equivalent medium at the test frequency, must be within \pm 10% of the manufacturer calibrated dipole SAR target. Refer to Appendix B for the SAR System Check Plots.

SAR Lab	Date	Tissue Type	Dipole Type_Serial #	Dipole Cal. Due Data	Dipole Power (dBm)	Measured Results for 1g SAR				Measured Results for 10g SAR				Plot No.
						Zoom Scan	Normalize to 1 W	Target (Ref. Value)	Delta \pm 10 %	Zoom Scan	Normalize to 1 W	Target (Ref. Value)	Delta \pm 10 %	
1A	2024-05-01	Head	CLA13 SN: 1017	2025-03-07	16.00	0.021	0.530	0.550	-3.74	0.013	0.330	0.340	-4.52	
1A	2024-06-04	Head	CLA13 SN: 1017	2025-03-07	16.00	0.021	0.530	0.550	-3.74	0.013	0.330	0.340	-4.52	
1A	2024-11-12	Head	CLA13 SN: 1017	2025-03-07	16.00	0.021	0.527	0.551	-4.27	0.013	0.327	0.344	-5.07	1

9. Conducted Output Power Measurements

Conducted output power cannot be measured for RFID, so a 2dB scaling factor shall be used to account for potential variations between devices.

10. Measured and Reported (Scaled) SAR Results

SAR Test Reduction criteria are as follows:

- Reported SAR(W/kg) for RFID = Measured SAR * Power Scaling Factor

KDB 447498 D01 General RF Exposure Guidance:

Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

- ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz

10.1. RFID (Shaver Handpiece: 375-701-500)

RF Exposure Conditions	Dist. (mm)	Test Position	Freq. (MHz)	Power Scaling Factor (dB)	10-g SAR (W/kg)		Plot No.
					Meas.	Scaled	
Extremity	0	Top	13.56	2.0	0.000	0.000	1
		Bottom			0.000	0.000	
		Left			0.000	0.000	
		Right			0.000	0.000	

Note(s):

Conducted output power cannot be measured for RFID, so a 2dB scaling factor shall be used to account for potential variations between devices.

10.2. RFID (Shaver Handpiece: 375-704-500)

RF Exposure Conditions	Dist. (mm)	Test Position	Freq. (MHz)	Power Scaling Factor (dB)	10-g SAR (W/kg)		Plot No.
					Meas.	Scaled	
Extremity	0	Top	13.56	2.0	0.000	0.000	2
		Bottom			0.000	0.000	
		Left			0.000	0.000	
		Right			0.000	0.000	

Note(s):

Conducted output power cannot be measured for RFID, so a 2dB scaling factor shall be used to account for potential variations between devices.

10.3. RFID (Shaver Handpiece: 375-708-500)

RF Exposure Conditions	Dist. (mm)	Test Position	Freq. (MHz)	Power Scaling Factor (dB)	10-g SAR (W/kg)		Plot No.
					Meas.	Scaled	
Extremity	0	Top	13.56	2.0	0.000	0.000	3
		Bottom			0.000	0.000	
		Left			0.000	0.000	
		Right			0.000	0.000	

Note(s):

Conducted output power cannot be measured for RFID, so a 2dB scaling factor shall be used to account for potential variations between devices.

10.4. RFID (Console: 5400-052-000)

RF Exposure Conditions	Dist. (mm)	Test Position	Freq. (MHz)	Power Scaling Factor (dB)	1-g SAR (W/kg)		Plot No.
					Meas.	Scaled	
Body	0	Front	13.56	2.0	0.000	0.000	
		Right			0.000	0.000	4

Note(s):

Conducted output power cannot be measured for RFID, so a 2dB scaling factor shall be used to account for potential variations between devices.

11. SAR Measurement Variability

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

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

Note(s):

Repeated measurement is not required since the original highest measured SAR is $< 0.8 \text{ W/kg}$ (1-g) or 2 W/kg (10-g) .

Appendices

Refer to separated files for the following appendixes.

Appendix A: SAR Setup Photos

Appendix B: SAR System Check Plots

Appendix C: SAR Highest Test Plots

Appendix D: SAR Tissue Ingredients

Appendix E: SAR Probe Certificates

Appendix F: SAR Dipole Certificates

END OF REPORT