Element Washington DC LLC
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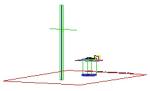

WPT RF EXPOSURE EVALUATION TEST REPORT

Applicant Name:
Samsung Electronics Co., Ltd.
129, Samsung-ro,
Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Date of Testing:
10/14/2024 – 11/4/2024
Test Site/Location:
Element Washington DC LLC,
Columbia, MD, USA
Test Report Serial No.:
1M2408260066-28.A3L
Date of Issue:
11/14/2024

FCC ID: **A3LSMS936B**

APPLICANT: **SAMSUNG ELECTRONICS CO., LTD.**

Apparatus/Device:	Portable Handset
Application Type:	Certification
Model:	SM-S936B/DS
Additional Model(s):	SM-S936B
Device Serial No.:	Pre-production Sample [SN: 1510M]
FCC Specification(s):	FCC 47 CFR Part 2.1093 KDB 680106 D01 v03r01

Mode	Thermal Basic Restriction Peak Spatial SAR (W/kg)
WPT	0.00112
FCC Limit	1.6
Tested Distance	0mm
VERDICT	**Pass**

The device bearing the identifier specified above has been shown to comply with the applicable technical standards as indicated in the measurement report and has been tested in accordance with the measurement procedures specified in FCC 47 CFR Part 2.1093 and KDB 680106 D01 v03r01. These measurements were performed with no deviation from the standards. Test results reported herein relate only to the item(s) tested.

I authorize and attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

RJ Ortanez
Executive Vice President

ACCREDITED
CERT #2041.01

TABLE OF CONTENTS

1 DEVICE UNDER TEST

1.1 Device Overview

Table 1-1
Operation Summary

Mode	Operating Mode	Tx Frequency
WPT	Device to Device (Inline)	110-145kHz
	Device to Device (Offset)	
	Device to Watch	
	Device to Earbuds	
	Ping Signal	

1.2 WPT System Specifications

Table 1-2
WPT System Specifications

Item	Description
Operating Frequency	110-145kHz
Max Tx Power	9W
Modulation/Protocol	FSK/ASK
Tx Coil Diameter	12.5mm (Inner) / 42mm (Outer)

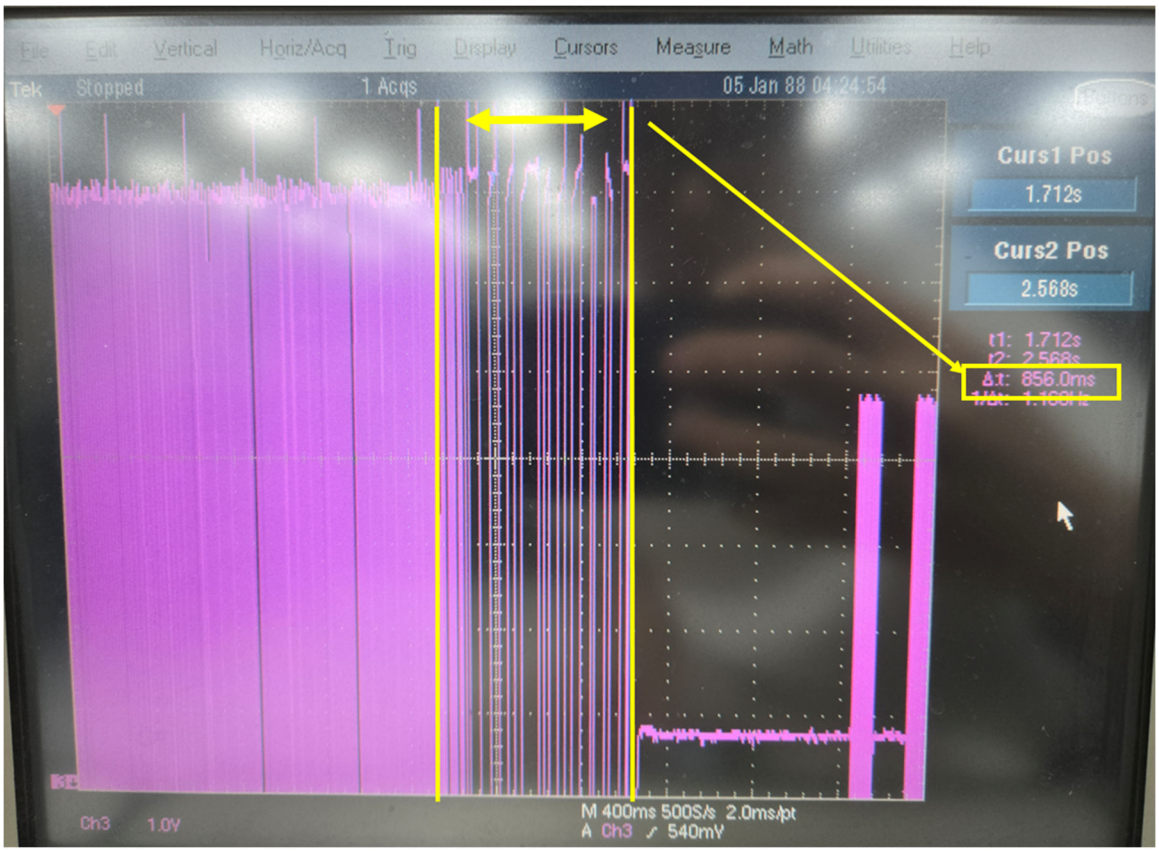

Figure 1-1 WPT Load Removal Power Down

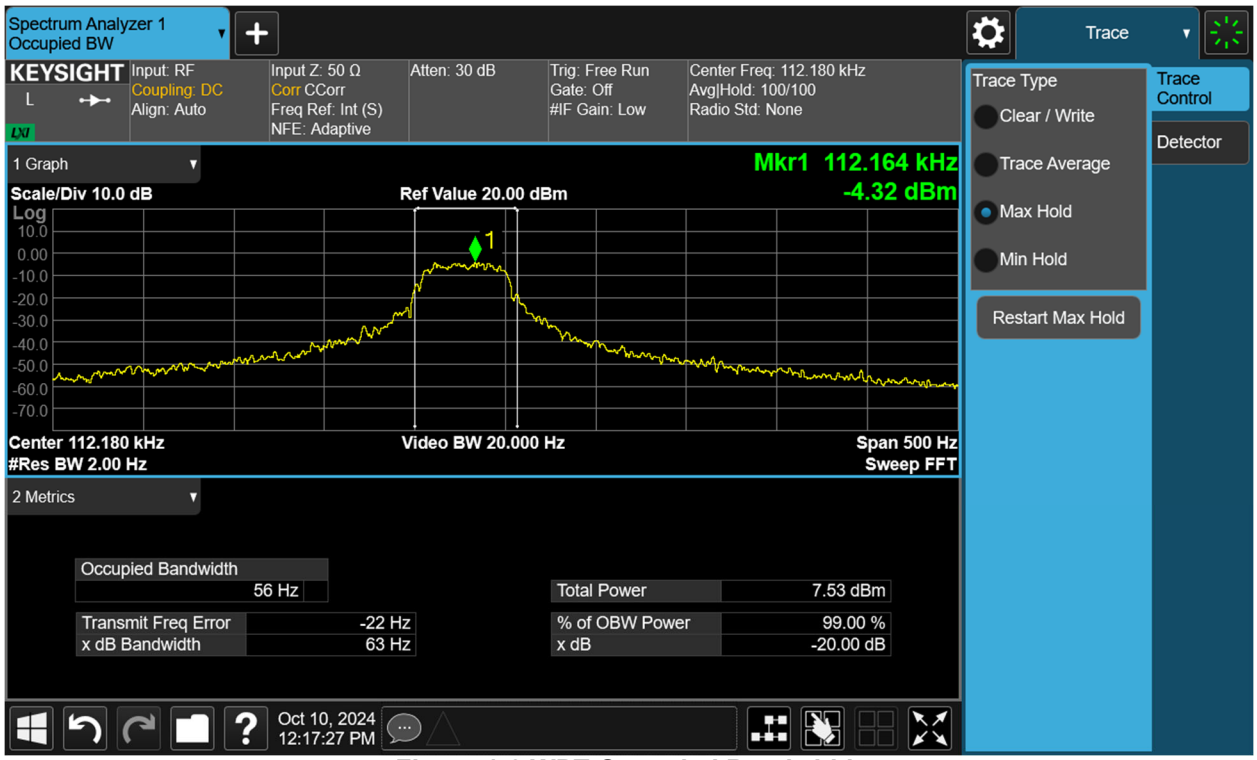

Figure 1-2 WPT Occupied Bandwidth

2 MEASUREMENT SYSTEM

2.1 Measurement Probe

Model:	Speag MAGPy-8H3D+E3 V2
S/N:	3060/2051
Frequency:	3 kHz – 10 MHz
Sensitivity:	H-Field: 0.1 A/m, E-Field: 0.08 V/m
Amplitude Flatness:	<0.2 dB (typ)
Linearity:	H-Field: <0.2 dB (typ.), E-Field: <0.5 dB (typ.) @ 1MHz
Linear range:	H-Field: 0.1 to 3200 A/m, E-Field: 0.1 to 2000 V/m
Sensor Size:	H-Field: 10mm, E-Field: 50mm
Isotropy:	<0.5 (typ.)
Dimensions:	110mm x 635mm x 35mm

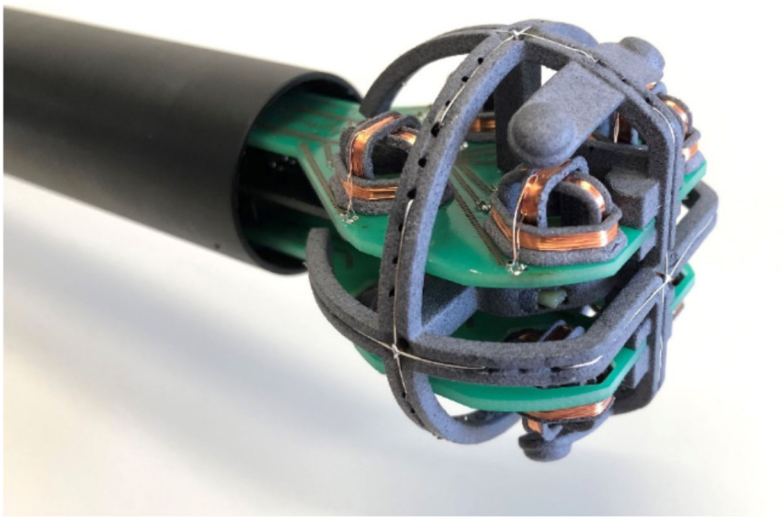

Figure 2-1
MAGPy-8H3D+E3 V2 Measurement Probe

3 MEASUREMENT PROCEDURE

3.1 Measurement Procedure

Direct measurement (per FCC 47 CFR Part 2.1093 and KDB 680106 D01 v03r01) is employed in this report.

The measurement distance (spacing) is the manufacturer's declared separation distance obtained via information in the user manual. This shall be measured as the distance from the edge of the device to the edge of the measurement probe.

3.2 Test Distance

The DUT is evaluated as a portable device that is expected to be used in close proximity to the user's hands and body. The logical separation distance of the DUT to the user's hands and body is 0 mm. All measurements were conducted with a 0mm separation distance between the probe tip and DUT.

3.3 Measurement Personnel

All measurements in this report were performed by the following personnel:

Test Engineer: Justin DeVos

4 RF EXPOSURE LIMITS

4.1 Limits for Maximum Permissible Exposure

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*($900/f^2$)	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*($180/f^2$)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

*f = frequency in MHz. * = Plane-wave equivalent power density.*

(1) Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. The phrase fully aware in the context of applying these exposure limits means that an exposed person has received written and/or verbal information fully explaining the potential for RF exposure resulting from his or her employment. With the exception of transient persons, this phrase also means that an exposed person has received appropriate training regarding work practices relating to controlling or mitigating his or her exposure. In situations when an untrained person is transient through a location where occupational/controlled limits apply, he or she must be made aware of the potential for exposure and be supervised by trained personnel pursuant to § 1.1307(b)(2) of this part where use of time averaging is required to ensure compliance with the general population exposure limit. The phrase exercise control means that an exposed person is allowed and also knows how to reduce or avoid exposure by administrative or engineering work practices, such as use of personal protective equipment or time averaging of exposure.
(2) General population/uncontrolled exposure limits apply in situations in which the general public may be exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure. For example, RF sources intended for consumer use shall be subject to the limits for general population/uncontrolled exposure in this section.

4.2 Limits for Peak Spatial SAR

The SAR limits for general population/uncontrolled exposure are 0.08 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 1.6 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 30 minutes to determine compliance with general population/uncontrolled SAR limits.

**An evaluation again the limits for peak spatial SAR shall be performed when the DUT exceeds the limits for maximum permissible exposure.

5 SYSTEM CHECK

Prior to testing, a system check was performed to verify that the test system operates as expected and measures RF exposure accurately. A known E-field/H-field source was used to verify readings of the measurement probe to ± 1.24dB of the known fields. A virtual half-space phantom with tissue properties ε_r = 55, σ = 0.75S/m, ρ = 1000kg/m^3.

5.1 System Check

Table 5-1
System Check – 85kHz

Frequency	Distance	Value	Incident H-Field (A/m)	Induced Peak Current Density (A/m^2, RMS)	Induced Peak E-field (V/m)			Peak Spacial SAR (mW/kg)	
					Cube Avg.	Local	Line Avg.	1g Avg.	10g Avg.
85kHz	0	Measurement	**201**	**2.25**	**3.22**	**3.25**	**3.26**	**5.91**	**4.35**
		Deviation (dB)	*0.17*	*-0.15*	*-0.11*	*-0.11*	*-0.11*	*-0.40*	*-0.49*
	2	Measurement	**184**	**2.12**	**3.02**	**3.25**	**3.26**	**5.27**	**3.93**
		Deviation (dB)	*0.19*	*-0.16*	*-0.14*	*0.41*	*0.41*	*-0.42*	*-0.51*

Table 5-2
System Check – 400kHz

Frequency	Distance	Value	Incident H-Field (A/m)	Induced Peak Current Density (A/m^2, RMS)	Induced Peak E-field (V/m)			Peak Spacial SAR (mW/kg)	
					Cube Avg.	Local	Line Avg.	1g Avg.	10g Avg.
400kHz	0	Measurement	**272**	**2.78**	**4.35**	**4.45**	**4.46**	**7.58**	**3.71**
		Deviation (dB)	*0.23*	*0.32*	*0.24*	*0.20*	*0.24*	*0.62*	*0.51*
	2	Measurement	**239**	**2.36**	**3.74**	**3.84**	**3.85**	**5.53**	**2.76**
		Deviation (dB)	*0.26*	*0.26*	*0.19*	*0.14*	*0.18*	*0.58*	*0.52*

* A virtual half-space phantom with tissue properties ε_r = 55, σ = 0.75S/m, ρ = 1000kg/m^3 was used to calculate the results in Table 5-1 and Table 5-2.

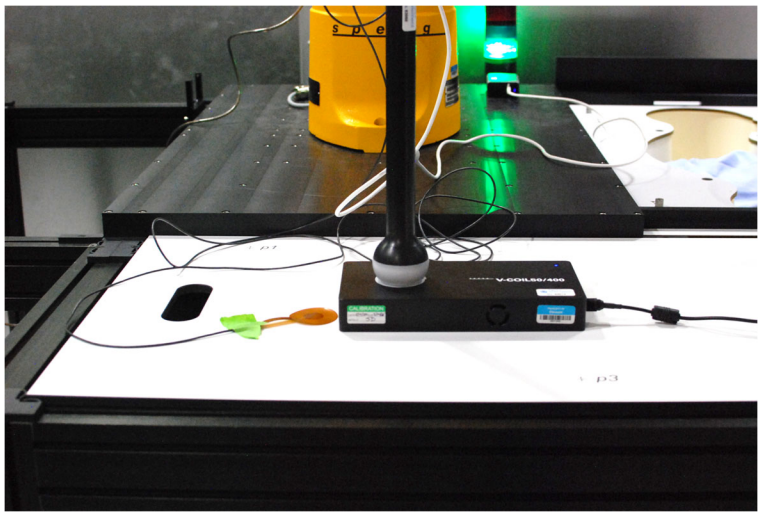

Figure 6-1
System Check Setup Photo

5.2 Equipment

Table 5-3
Equipment List

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
SPEAG	V-COIL350/85	85kHz MAGPy System Validation Source	3/14/2024	Annual	3/14/2025	1011
SPEAG	V-COIL50/400	400kHz MAGPy System Validation Source	3/14/2024	Annual	3/14/2025	1012
SPEAG	MAGPy-H3D / MAGPy-DAS	Magnetic Amplitude and Gradient Probe and Data Acquisition System	6/28/2024	Annual	6/28/2025	2051

6 DATA SUMMARY

Frequency (MHz)	Distance (mm)	H-field (A/m)						Limit (A/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.112	0	1.030	0.118	7.810	7.700	2.730	2.860	1.63
0.112	2	0.914	0.099	6.780	6.680	2.390	2.530	1.63

Table 1. Device to Device (Inline) Incident H-Field

Frequency (MHz)	Distance (mm)	E-field (V/m)						Limit (V/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.112	0	12.400	16.200	15.200	13.300	60.600	60.800	614
0.112	2	11.500	14.800	14.100	12.400	54.600	54.800	614

Table 2. Device to Device (Inline) Incident E-Field

Frequency (MHz)	Distance (mm)	SAR (mW/kg)						Limit (W/kg)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.112	0	0.000033	0.000001	0.000308	0.000336	0.000216	0.000221	1.6
0.112	2	0.000027	0.000001	0.000232	0.000252	0.000184	0.000188	1.6

Table 3. Device to Device (Inline) SAR

Frequency (MHz)	Distance (mm)	H-field (A/m)						Limit (A/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.112	0	3.080	2.200	0.824	1.230	15.700	15.000	1.63
0.112	2	2.760	1.980	0.728	1.120	13.700	13.200	1.63

Table 4. Device to Device (Offset) Incident H-Field

Frequency (MHz)	Distance (mm)	E-field (V/m)						Limit (V/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.112	0	21.800	16.000	13.900	21.300	85.500	76.300	614
0.112	2	20.000	14.900	13.000	19.700	76.900	69.100	614

Table 5. Device to Device (Offset) Incident E-Field

Frequency (MHz)	Distance (mm)	SAR (mW/kg)						Limit (W/kg)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.112	0	0.000216	0.000210	0.000074	0.000122	0.003320	0.003020	1.6
0.112	2	0.000183	0.000187	0.000068	0.000113	0.002790	0.002500	1.6

Table 6. Device to Device (Offset) SAR

Frequency (MHz)	Distance (mm)	H-field (A/m)						Limit (A/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.125	0	1.980	1.440	11.400	5.270	3.230	59.200	1.63
0.125	2	1.640	1.130	9.590	4.440	2.700	51.500	1.63

Table 7. Device to Watch Incident H-Field

Frequency (MHz)	Distance (mm)	E-field (V/m)						Limit (V/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.125	0	41.100	38.300	24.500	28.000	62.100	158.000	614
0.125	2	37.000	35.500	22.600	25.500	56.400	145.000	614

Table 8. Device to Watch Incident E-Field

Frequency (MHz)	Distance (mm)	SAR (mW/kg)						Limit (W/kg)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.125	0	0.000109	0.000063	0.000996	0.000559	0.000179	0.023800	1.6
0.125	2	0.000093	0.000065	0.000760	0.000451	0.000147	0.016800	1.6

Table 9. Device to Watch SAR

Frequency (MHz)	Distance (mm)	H-field (A/m)						Limit (A/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.114	0	1.530	0.301	1.080	8.820	2.490	25.100	1.63
0.114	2	1.400	0.269	0.948	7.600	2.180	22.000	1.63

Table 10. Device to Earbuds Incident H-Field

Frequency (MHz)	Distance (mm)	E-field (V/m)						Limit (V/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.114	0	49.600	15.600	9.630	19.000	58.100	103.000	614
0.114	2	45.600	14.200	8.340	18.300	53.100	96.500	614

Table 11. Device to Earbuds Incident E-Field

Frequency (MHz)	Distance (mm)	SAR (mW/kg)						Limit (W/kg)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.114	0	0.000149	0.000004	0.000111	0.000746	0.000109	0.005390	1.6
0.114	2	0.000144	0.000003	0.000086	0.000566	0.000092	0.004130	1.6

Table 12. Device to Earbuds SAR

Frequency (MHz)	Distance (mm)	H-field (A/m)						Limit (A/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.146	0	2.860	1.180	13.200	4.930	4.320	**500.000**	1.63
0.146	2	2.450	0.900	10.900	4.260	3.830	**440.000**	1.63

Table 13. Ping Signal Incident H-Field

Frequency (MHz)	Distance (mm)	E-field (V/m)						Limit (V/m)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.146	0	10.100	9.270	17.600	13.900	12.600	**66.200**	614
0.146	2	9.440	8.570	16.000	12.800	11.500	**60.700**	614

Table 14. Ping Signal Incident E-Field

Frequency (MHz)	Distance (mm)	SAR (mW/kg)						Limit (W/kg)
		EUT Sides						
		Top	Bottom	Left	Right	Front	Back	
0.146	0	0.000576	0.000027	0.002110	0.000602	0.000520	**1.120000**	1.6
0.146	2	0.000507	0.000026	0.001710	0.000476	0.000462	**0.790000**	1.6

Table 15. Ping Signal SAR

7 INFORMATIVE MEASUREMENT UNCERTAINTY

7.1 Uncertainty Budge of Peak Incident H-Field

DASY6 Uncertainty Budget for Peak Incident H-field
according to IEC/IEEE 63184

Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.35	N	1	1	0.35
2	Probe anisotropy	0.6	R	$\sqrt{3}$	1	0.35
3	Probe dynamic linearity	0.2	R	$\sqrt{3}$	1	0.12
4	Probe frequency domain response	0.3	R	$\sqrt{3}$	1	0.17
5	Probe frequency linear interp. fit	0.15	R	$\sqrt{3}$	1	0.09
6	Spatial averaging	0.1	R	$\sqrt{3}$	1	0.06
7	Parasitic E-field sensitivity	0.1	R	$\sqrt{3}$	1	0.06
8	Detection limit	0.15	R	$\sqrt{3}$	1	0.09
9	Readout electronics	0	N	1	1	0
10	Probe positioning	0.19	N	1	1	0.19
11	Repeatability	0.1	N	1	1	0.10
12	Surface field reconstruction	0.3	N	1	1	0.3
Combined uncertainty ($k = 1$)						0.67
Expanded uncertainty ($k = 2$)						**1.33 (16.6%)**

7.2 Uncertainty Budge of Peak Incident E-Field

DASY6 Uncertainty Budget for Incident E-field
according to IEC/IEEE 63184

Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.53	N	1	1	0.53
2	Probe anisotropy	0.8	R	$\sqrt{3}$	1	0.46
3	Probe dynamic linearity	1	R	$\sqrt{3}$	1	0.58
4	Probe frequency domain response	0.3	R	$\sqrt{3}$	1	0.17
5	Probe frequency linear interp. fit	0.15	R	$\sqrt{3}$	1	0.09
6	Parasitic H-field sensitivity	0.2	R	$\sqrt{3}$	1	0.12
7	Detection limit	0.15	R	$\sqrt{3}$	1	0.09
8	Readout electronics	0	N	1	1	0
9	Repeatability	0.1	N	1	1	0.10
Combined uncertainty ($k = 1$)						0.95
Expanded uncertainty ($k = 2$)						**1.89 (24.4%)**

7.3 Uncertainty Budget of Cube Average E_{ind}

DASY6 Uncertainty Budget for Peak 2×2×2 mm³ Cube-Average E_{ind}
according to IEC/IEEE 63184

Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.35	N	1	1	0.35
2	Probe anisotropy	0.6	R	$\sqrt{3}$	1	0.35
3	Probe dynamic linearity	0.2	R	$\sqrt{3}$	1	0.12
4	Probe frequency domain response	0.3	R	$\sqrt{3}$	1	0.17
5	Probe frequency linear interp. fit	0.15	R	$\sqrt{3}$	1	0.09
6	Spatial averaging	0.1	R	$\sqrt{3}$	1	0.06
7	Parasitic E-field sensitivity	0.1	R	$\sqrt{3}$	1	0.06
8	Detection limit	0.15	R	$\sqrt{3}$	1	0.09
9	Readout electronics	0	N	1	1	0
10	Probe positioning	0.19	N	1	1	0.19
11	Repeatability	0.1	N	1	1	0.1
12	Surface field reconstruction	0.3	N	1	1	0.3
Numerical simulations						
13	Grid resolution	0.18	R	$\sqrt{3}$	1	0.10
14	Tissue parameters	0	R	$\sqrt{3}$	1	0
15	Exposure position	0	R	$\sqrt{3}$	1	0
16	Source representation	0.24	N	1	1	0.24
17	Convergence and power budget	0	R	$\sqrt{3}$	1	0
18	Boundary conditions	0.1	R	$\sqrt{3}$	1	0.06
19	Phantom loading/backscattering	0.1	R	$\sqrt{3}$	1	0.06
Combined uncertainty ($k = 1$)						0.72
Expanded uncertainty ($k = 2$)						**1.44 (18.0%)**

7.4 Uncertainty Budge of Line Average E_{ind}

DASY6 Uncertainty Budget for Peak 5 mm Line-Average E_{ind}
according to IEC/IEEE 63184

Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.35	N	1	1	0.35
2	Probe anisotropy	0.6	R	$\sqrt{3}$	1	0.35
3	Probe dynamic linearity	0.2	R	$\sqrt{3}$	1	0.12
4	Probe frequency domain response	0.3	R	$\sqrt{3}$	1	0.17
5	Probe frequency linear interp. fit	0.15	R	$\sqrt{3}$	1	0.09
6	Spatial averaging	0.1	R	$\sqrt{3}$	1	0.06
7	Parasitic E-field sensitivity	0.1	R	$\sqrt{3}$	1	0.06
8	Detection limit	0.15	R	$\sqrt{3}$	1	0.09
9	Readout electronics	0	N	1	1	0
10	Probe positioning	0.19	N	1	1	0.19
11	Repeatability	0.1	N	1	1	0.1
12	Surface field reconstruction	0.3	N	1	1	0.3
Numerical simulations						
13	Grid resolution	0.25	R	$\sqrt{3}$	1	0.14
14	Tissue parameters	0	R	$\sqrt{3}$	1	0
15	Exposure position	0	R	$\sqrt{3}$	1	0
16	Source representation	0.27	N	1	1	0.27
17	Convergence and power budget	0	R	$\sqrt{3}$	1	0
18	Boundary conditions	0.1	R	$\sqrt{3}$	1	0.06
19	Phantom loading/backscattering	0.1	R	$\sqrt{3}$	1	0.06
Combined uncertainty ($k = 1$)						0.74
Expanded uncertainty ($k = 2$)						**1.48 (18.5%)**

7.5 Uncertainty Budge of Local E_{ind}

DASY6 Uncertainty Budget for Peak Local E_{ind}
according to IEC/IEEE 63184

Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.35	N	1	1	0.35
2	Probe anisotropy	0.6	R	$\sqrt{3}$	1	0.35
3	Probe dynamic linearity	0.2	R	$\sqrt{3}$	1	0.12
4	Probe frequency domain response	0.3	R	$\sqrt{3}$	1	0.17
5	Probe frequency linear interp. fit	0.15	R	$\sqrt{3}$	1	0.09
6	Spatial averaging	0.1	R	$\sqrt{3}$	1	0.06
7	Parasitic E-field sensitivity	0.1	R	$\sqrt{3}$	1	0.06
8	Detection limit	0.15	R	$\sqrt{3}$	1	0.09
9	Readout electronics	0	N	1	1	0
10	Probe positioning	0.19	N	1	1	0.19
11	Repeatability	0.1	N	1	1	0.1
12	Surface field reconstruction	0.3	N	1	1	0.3
Numerical simulations						
13	Grid resolution	0.09	R	$\sqrt{3}$	1	0.05
14	Tissue parameters	0	R	$\sqrt{3}$	1	0
15	Exposure position	0	R	$\sqrt{3}$	1	0
16	Source representation	0.27	N	1	1	0.27
17	Convergence and power budget	0	R	$\sqrt{3}$	1	0
18	Boundary conditions	0.1	R	$\sqrt{3}$	1	0.06
19	Phantom loading/backscattering	0.1	R	$\sqrt{3}$	1	0.06
Combined uncertainty ($k = 1$)						0.73
Expanded uncertainty ($k = 2$)						**1.45 (18.2%)**

7.6 Uncertainty Budge of Peak 1 cm^2 Area Average J_{ind}

DASY6 Uncertainty Budget for Peak 1 cm^2 Area-Average J_{ind}
according to IEC/IEEE 63184

Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.35	N	1	1	0.35
2	Probe anisotropy	0.6	R	$\sqrt{3}$	1	0.35
3	Probe dynamic linearity	0.2	R	$\sqrt{3}$	1	0.12
4	Probe frequency domain response	0.3	R	$\sqrt{3}$	1	0.17
5	Probe frequency linear interp. fit	0.15	R	$\sqrt{3}$	1	0.09
6	Spatial averaging	0.1	R	$\sqrt{3}$	1	0.06
7	Parasitic E-field sensitivity	0.1	R	$\sqrt{3}$	1	0.06
8	Detection limit	0.15	R	$\sqrt{3}$	1	0.09
9	Readout electronics	0	N	1	1	0
10	Probe positioning	0.19	N	1	1	0.19
11	Repeatability	0.1	N	1	1	0.1
12	Surface field reconstruction	0.3	N	1	1	0.3
Numerical simulations						
13	Grid resolution	0.12	R	$\sqrt{3}$	1	0.07
14	Tissue parameters	0	R	$\sqrt{3}$	1	0
15	Exposure position	0	R	$\sqrt{3}$	1	0
16	Source representation	0.1	N	1	1	0.1
17	Convergence and power budget	0	R	$\sqrt{3}$	1	0
18	Boundary conditions	0.1	R	$\sqrt{3}$	1	0.06
19	Phantom loading/backscattering	0.1	R	$\sqrt{3}$	1	0.06
Combined uncertainty ($k = 1$)						0.68
Expanded uncertainty ($k = 2$)						**1.36 (17.0%)**

7.7 Uncertainty Budge of psSAR 1g

DASY6 Uncertainty Budget for psSAR1 g
according to IEC/IEEE 63184

Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.35	N	1	1	0.35
2	Probe anisotropy	0.6	R	$\sqrt{3}$	1	0.35
3	Probe dynamic linearity	0.2	R	$\sqrt{3}$	1	0.12
4	Probe frequency domain response	0.3	R	$\sqrt{3}$	1	0.17
5	Probe frequency linear interp. fit	0.15	R	$\sqrt{3}$	1	0.09
6	Spatial averaging	0.1	R	$\sqrt{3}$	1	0.06
7	Parasitic E-field sensitivity	0.1	R	$\sqrt{3}$	1	0.06
8	Detection limit	0.15	R	$\sqrt{3}$	1	0.09
9	Readout electronics	0	N	1	1	0
10	Probe positioning	0.19	N	1	1	0.19
11	Repeatability	0.1	N	1	1	0.1
12	Surface field reconstruction	0.2	N	1	1	0.2
Numerical simulations						
13	Grid resolution	0.02	R	$\sqrt{3}$	1	0.01
14	Tissue parameters	0	R	$\sqrt{3}$	1	0
15	Exposure position	0	R	$\sqrt{3}$	1	0
16	Source representation	0.09	N	1	1	0.09
17	Convergence and power budget	0	R	$\sqrt{3}$	1	0
18	Boundary conditions	0.1	R	$\sqrt{3}$	1	0.06
19	Phantom loading/backscattering	0.1	R	$\sqrt{3}$	1	0.06
Combined uncertainty ($k = 1$)						0.63
Expanded uncertainty ($k = 2$)						**1.27 (33.9%)**

7.8 Uncertainty Budge of psSAR 10g

DASY6 Uncertainty Budget for psSAR10 g according to IEC/IEEE 63184						
Item	Error Description	Unc. Value (±dB)	Probab. Distr.	Div.	(c_i)	Std. Unc. (±dB)
Measurement system						
1	Amplitude calibration uncertainty	0.35	N	1	1	0.35
2	Probe anisotropy	0.6	R	$\sqrt{3}$	1	0.35
3	Probe dynamic linearity	0.2	R	$\sqrt{3}$	1	0.12
4	Probe frequency domain response	0.3	R	$\sqrt{3}$	1	0.17
5	Probe frequency linear interp. fit	0.15	R	$\sqrt{3}$	1	0.09
6	Spatial averaging	0.1	R	$\sqrt{3}$	1	0.06
7	Parasitic E-field sensitivity	0.1	R	$\sqrt{3}$	1	0.06
8	Detection limit	0.15	R	$\sqrt{3}$	1	0.09
9	Readout electronics	0	N	1	1	0
10	Probe positioning	0.19	N	1	1	0.19
11	Repeatability	0.1	N	1	1	0.1
12	Surface field reconstruction	0.2	N	1	1	0.2
Numerical simulations						
13	Grid resolution	0	R	$\sqrt{3}$	1	0
14	Tissue parameters	0	R	$\sqrt{3}$	1	0
15	Exposure position	0	R	$\sqrt{3}$	1	0
16	Source representation	0.04	N	1	1	0.04
17	Convergence and power budget	0	R	$\sqrt{3}$	1	0
18	Boundary conditions	0.1	R	$\sqrt{3}$	1	0.06
19	Phantom loading/backscattering	0.1	R	$\sqrt{3}$	1	0.06
Combined uncertainty ($k = 1$)						0.63
Expanded uncertainty ($k = 2$)						**1.25 (33.4%)**

8 CONCLUSION

8.1 Measurement Conclusion

The RF exposure evaluation indicates that the DUT complies with the exposure limits presented in FCC 47 CFR Part 2.1093 and KDB 680106 D01 v03r01 with respect to all parameters subject to this test. The worst-case configuration was evaluated against and satisfies the requirement of peak special SAR < 1.6 W/kg. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

9 REFERENCES

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