ANNEX H DIPOLE CALIBRATION CERTIFICATE

750 MHz Dipole Calibration Certificate

chmid & Partne ngineering AG eughausstrasse 43,	er		C Service Servizio	erischer Kalibrierdie sulsse d'étalonnage svizzero di taratura alibration Service
he Swiss Accredita	riss Accreditation Service (ation Service is one of the ent for the recognition of	e signatories	to the EA	n No.: SCS 0108
lient CTTL Beijing			Certificate No. D750V3-	1017_Jul24
CALIBRATI		E		
Object	D750V3	- SN: 1017		269
Calibration procedu			re for SAR Validation Sources betwee	n 0.7 - 3 GHz
Calibration date	h.h.o. 0			
This calibration cer		eability to nation	hal standards, which realize the physical units of m	
This calibration cer The measurements All calibrations have	tificate documents the trac s and the uncertainties with	eability to nation confidence pro osed laboratory	hal standards, which realize the physical units of m bability are given on the following pages and are p facility: environment temperature (22±3)°C and h	part of the certificate.
This calibration cer The measurements All calibrations have Calibration Equipm	tificate documents the trac s and the uncertainties with e been conducted in the clo	eability to nation confidence pro osed laboratory calibration)	bability are given on the following pages and are p facility: environment temperature (22±3)°C and h	part of the certificate. numidity < 70%.
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards	tificate documents the trac s and the uncertainties with e been conducted in the cle nent used (M&TE critical for	eability to nation confidence pro osed laboratory calibration)	bability are given on the following pages and are p facility: environment temperature (22±3)°C and h Cal Date (Certificate No.)	bart of the certificate. numidity < 70%.
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S	tificate documents the trac s and the uncertainties with e been conducted in the cle nent used (M&TE critical for NRP-33T	eability to nation confidence pro osed laboratory calibration)	bability are given on the following pages and are p facility: environment temperature (22±3)°C and h Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038)	bart of the certificate. numidity < 70%. Scheduled Cal Mar-25
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S	tificate documents the trac s and the uncertainties with e been conducted in the cle ent used (M&TE critical for NRP-33T NRP18A	eability to nation confidence pro osed laboratory calibration) ID SN: 100967 SN: 101859	bability are given on the following pages and are p facility: environment temperature (22±3)°C and h Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A315007801)	Scheduled Cal Mar-25 Mar-25
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer	tificate documents the trac s and the uncertainties with e been conducted in the ck ent used (M&TE critical for NRP-33T NRP18A R&S FSV40	eability to nation confidence pro- osed laboratory calibration) ID SN: 100967 SN: 101859 SN: 101832	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 4030-315007551)	bart of the certificate. numidity < 70%. Scheduled Cal Mar-25 Jan-25
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer	tificate documents the trac s and the uncertainties with e been conducted in the cle ent used (M&TE critical for NRP-33T NRP18A	eability to nation confidence pro osed laboratory calibration) ID SN: 100967 SN: 101859	bability are given on the following pages and are p facility: environment temperature (22±3)°C and h Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A315007801) 25-Jan-24 (No. 4030-315007551) 28-Mar-24 (No. 217-04050)	Scheduled Cal Mar-25 Mar-25
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S4	tificate documents the trac s and the uncertainties with e been conducted in the ck ent used (M&TE critical for NRP-33T NRP18A R&S FSV40	eability to nation confidence pro osed laboratory calibration) ID SN: 100967 SN: 101859 SN: 101832 SN: 1152	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 4030-315007551)	Scheduled Cal Mar-25 Jan-25 Mar-25 Mar-25
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S- OCP DAK-12	tificate documents the trac s and the uncertainties with e been conducted in the cle ent used (M&TE critical for NRP-33T NRP18A R&S FSV40 4188] Attenuator [S4423]	ID ID SN: 100967 SN: 101859 SN: 101859 SN: 101832 SN: 101832 SN: 101832	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030-315007801) 25-Jan-24 (No. 4030-315007551) 28-Mar-24 (No. 217-04050)	Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S- OCP DAK-12 OCP DAK-3.5	tificate documents the trac s and the uncertainties with e been conducted in the cle ent used (M&TE critical for NRP-33T NRP18A R&S FSV40 4188] Attenuator [S4423]	ID ID SN: 100967 SN: 101859 SN: 101852 SN: 101832 SN: 1016 SN: 1249	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 315007801) 28-Mar-24 (No. 4030A315007551) 28-Mar-24 (No. 4030-315007551) 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23)	Scheduled Cal Mar-25 Mar-25 Mar-25 Mar-25 Oct-24 Oct-24
This calibration cerr The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S4 OCP DAK-12 OCP DAK-3.5 Reference Probe E2 DAE4ip	tificate documents the trac s and the uncertainties with e been conducted in the ck ent used (M&TE critical for NRP-33T NRP18A R&S FSV40 4188] Attenuator [S4423] X3DV4	Approximation of the second se	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 4030A315007801) 25-Jan-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) 03-Jun-24 (No. EX3-7349_Jun24) 10-Jan-24 (No. DAE4lp-1836_Jan24)	Scheduled Cal Mar-25 Mar-25 Mar-25 Oct-24 Oct-24 Jun-25 Jan-25 Jan-25
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S- OCP DAK-12 OCP DAK-12 OCP DAK-3.5 Reference Probe E2 DAE4ip Secondary Standard	tificate documents the trac s and the uncertainties with e been conducted in the ck ent used (M&TE critical for NRP-33T NRP18A R&S FSV40 4188] Attenuator [S4423] X3DV4	Approximation of the second se	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 303-315007801) 25-Jan-24 (No. 4030-315007851) 28-Mar-24 (No. 4030-315007551) 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) 03-Jun-24 (No. EX3-7349_Jun24) 10-Jan-24 (No. DAE4ip-1836_Jan24) Check Date (in house)	Scheduled Cal Mar-25 Mar-25 Oct-24 Oct-24 Jun-25 Jan-25 Scheduled Chee
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S- OCP DAK-12 OCP DAK-12 OCP DAK-3.5 Reference Probe E2 DAE4ip Secondary Standard ACAD Source Box	tificate documents the trac s and the uncertainties with e been conducted in the cle ent used (M&TE critical for NRP-33T NRP18A R&S FSV40 4188] Attenuator [S4423] X3DV4	ID ID SN: 100967 SN: 100967 SN: 101832 SN: 11152 SN: 1018 SN: 1152 SN: 1152 SN: 1016 SN: 7349 SN: 1836 ID	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 315007801) 25-Jan-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) 03-Jun-24 (No. EX3-7349_Jun24) 10-Jan-24 (No. DAE4ip-1836_Jan24) Check Date (in house) 28-May-24 (No. 675-ACAD_Source_Box-24052	Scheduled Cal Mar-25 Mar-25 Jan-25 Oct-24 Oct-24 Jun-25 Jan-25 Scheduled Chece 8) May-25
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S- OCP DAK-12 OCP DAK-12 OCP DAK-3.5 Reference Probe E2 DAE4ip Secondary Standard	tificate documents the trac s and the uncertainties with e been conducted in the cle ent used (M&TE critical for NRP-33T NRP18A R&S FSV40 4188] Attenuator [S4423] X3DV4	ID ID SN: 100967 SN: 101859 SN: 101859 SN: 101859 SN: 101832 SN: 101832 SN: 1152 SN: 1016 SN: 1249 SN: 7349 SN: 1836 ID SN: 1000	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 303-315007801) 25-Jan-24 (No. 4030-315007851) 28-Mar-24 (No. 4030-315007551) 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) 03-Jun-24 (No. EX3-7349_Jun24) 10-Jan-24 (No. DAE4ip-1836_Jan24) Check Date (in house)	Scheduled Cal Mar-25 Mar-25 Oct-24 Oct-24 Jun-25 Jan-25 Scheduled Chee
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S- OCP DAK-12 OCP DAK-3.5 Reference Probe E2 DAE4ip Secondary Standard ACAD Source Box Signal Generator R	tificate documents the trac s and the uncertainties with e been conducted in the ck ent used (M&TE critical for NRP-33T NRP18A R&S FSV40 4188] Attenuator [S4423] X3DV4 ds &S SMB100A	ability to nation confidence pro- psed laboratory calibration) ID SN: 100967 SN: 101859 SN: 101859 SN: 101832 SN: 1152 SN: 1152 S	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 217-04038) 25-Jan-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) 03-Jun-24 (No. CP-DAK3.5-1249_Oct23) 02-Jun-24 (No. CP-DAK3.5-1249_Oct23) 03-Jun-24 (No. CP-DAK3.5-1249_Oct23) 02-Jun-24 (No. CP-DAK3.5-1249_Oct23) 28-May-24 (No. 675-ACAD_Source_Box-24052 28-May-24 (No. 675-Mismatch_SMA-240522) 28-May-24 (No. 675-Mismatch_SMA-240522)	Scheduled Cal Mar-25 Mar-25 Mar-25 Oct-24 Oct-24 Jun-25 Jan-25 Scheduled Cheo 8) May-25 May-25 May-25 May-25 May-25
This calibration cert The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S- OCP DAK-12 OCP DAK-3.5 Reference Probe E) DAE4ip Secondary Standard ACAD Source Box Signal Generator Rid Mismatch; SMA	tificate documents the trac s and the uncertainties with e been conducted in the cle ent used (M&TE critical for NRP-33T NRP18A R&S FSV40 4188] Attenuator [S4423] X3DV4	ability to nation confidence pro- psed laboratory calibration) ID SN: 100967 SN: 101859 SN: 101859 SN: 101832 SN: 1152 SN: 1152 S	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 4030-315007801) 25-Jan-24 (No. 203-315007551) 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) 03-Jun-24 (No. EX3-7349_Jun24) 10-Jan-24 (No. DAE4ip-1836_Jan24) Check Date (in house) 28-May-24 (No. 675-ACAD_Source_Box-24052 28-May-24 (No. 675-Mismatch_SMA-240522) Function Signatu	A manual control of the certificate. A munidity < 70%. Scheduled Cal Mar-25 Mar-25 Jan-25 Oct-24 Oct-24 Jun-25 Jan-25 Scheduled Chece 8) May-25 May-25 May-25 May-25
This calibration cer The measurements All calibrations have Calibration Equipm Primary Standards Power Sensor R&S Power Sensor R&S Spectrum Analyzer Mismatch; Short [S- OCP DAK-12 OCP DAK-3.5 Reference Probe E2 DAE4ip Secondary Standard ACAD Source Box Signal Generator R	tificate documents the trac s and the uncertainties with e been conducted in the ok nent used (M&TE critical for NRP-33T NRP18A R&S FSV40 4188] Attenuator [S4423] X3DV4 ds &S SMB100A Name	ability to nation confidence pro- psed laboratory calibration) ID SN: 100967 SN: 101859 SN: 101859 SN: 101832 SN: 1152 SN: 1152 S	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 4030-315007801) 25-Jan-24 (No. 203-315007551) 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK12-1016_Oct23) 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) 03-Jun-24 (No. EX3-7349_Jun24) 10-Jan-24 (No. DAE4ip-1836_Jan24) Check Date (in house) 28-May-24 (No. 675-ACAD_Source_Box-24052 28-May-24 (No. 675-Mismatch_SMA-240522) Function Signatu	Scheduled Cal Mar-25 Mar-25 Jan-25 Oct-24 Oct-24 Jun-25 Jan-25 Scheduled Chee 8) May-25 May-25 May-25 May-25 May-25

Issued: July 9, 2024 This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D750V3-1017_Jul24

Page 1 of 6

Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



Schweizerischer Kalibrierdienst Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service

Accreditation No.: SCS 0108

S

C

S

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossary

 TSL
 tissue simulating liquid

 ConvF
 sensitivity in TSL / NORM x,y,z

 N/A
 not applicable or not measured

Calibration is Performed According to the Following Standards

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- · KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation

DASY System Handbook

Methods Applied and Interpretation of Parameters

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures
 stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- · Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- · SAR measured: SAR measured at the stated antenna input power.
- · SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- · SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certificate No: D750V3-1017_Jul24

Page 2 of 6

DASY system configuration, as far as not given on page 1.

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with spacer
Zoom Scan Resolution	dx, dy = 6mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	750MHz ±1MHz	

Head TSL parameters at 750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.9	0.890 mho/m
Measured Head TSL parameters	(22.0 ±0.2)°C	42.5 ±6%	0.910 mho/m ±6%
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 750 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR for nominal Head TSL parameters	24 dBm input power	2.14 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	8.52 W/kg ±17.0% (k = 2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR for nominal Head TSL parameters	24 dBm input power	1.39 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	5.53 W/kg ±16.5% (k = 2)

Certificate No: D750V3-1017_Jul24

Page 3 of 6

D750V3 - SN: 1017

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 750 MHz

Impedance	53.2 Ω – 0.7 jΩ
Return Loss	-30.1 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.034 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------

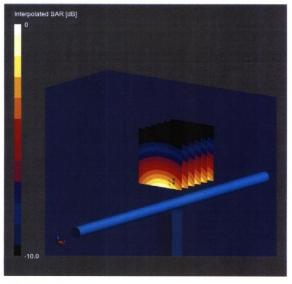
Certificate No: D750V3-1017_Jul24

Page 4 of 6

D750V3 - SN: 1017

System Performance Check Report

Dipole		Fre	equency [MHz]		TSL	Power [dBm]		
D750V3 - SN1017		750		HSL	24			
Exposure Condition	s							
Phantom Section, TSL	Test Distance [mm]	Band	Group, UID	Frequency [MHz]	, Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	15		CW, 0	750, 0		9.9	0.91	42.5
Hardware Setup								
Phantom	TSL, Measured Date	e	Pro	be, Calibration Dat	e	DAE,	Calibration Date	
Flat V4.9 mod	HSL, 2024-07-09		EX3	DV4 - SN7349, 20	24-06-03	DAE4	ip Sn1836, 2024-01-10	
Scans Setup					Measuremer	nt Results		
				Zoom Scan				Zoom Scar
Grid Extents [mm]			1	30 x 30 x 30	Date			2024-07-09
Grid Steps [mm]			6.	0 x 6.0 x 1.5	psSAR1g [W/Kg]		2.14	
Sensor Surface (mm)				1.4	psSAR10g [W/	Kg]		1.39
Graded Grid				Yes	Power Drift [dB]		0.00	
Grading Ratio				1.5	Power Scaling			Disabled
MAIA				N/A	Scaling Factor	[dB]		
Surface Detection				VMS + 6p	TSL Correction	1		Positive / Negative
Scan Method				Measured				



0 dB = 3.48 W/Kg

Certificate No: D750V3-1017_Jul24

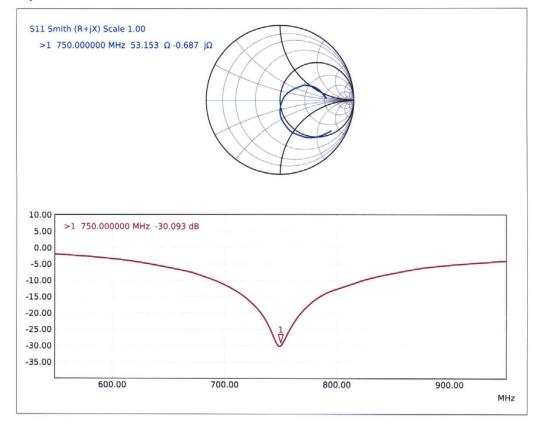
Page 5 of 6

July 9, 2024

D750V3 - SN: 1017

July 9, 2024

Impedance Measurement Plot for Head TSL



Certificate No: D750V3-1017_Jul24

Page 6 of 6

835 MHz Dipole Calibration Certificate

	ation Laboratory				C Service sui	scher Kalibrierdier isse d'étalonnage rizzero di taratura
•	ering AG				-	bration Service
eughaus	sstrasse 43, 8004 Zurio	ch, Switzerland	3	Mahaladalatin so		
he Swis	ed by the Swiss Accred ss Accreditation Serv ral Agreement for the	vice is one of th	e signatories t		Accreditation N	lo.: SCS 0108
lient	CTTL Beijing			Certificate No.	D835V2-4d	069_Jul24
CAL	IBRATION CE	ERTIFICAT	TE			
Object		D835V2	- SN: 4d06	9		
Calibra	ation procedure(s)	QA CAL Calibrati		re for SAR Validation Sour	rces between (0.7 - 3 GHz
Calibra	ation date	July 9, 2	024			
The me	easurements and the u	uncertainties with	confidence pro	hal standards, which realize the phy bability are given on the following p	pages and are part	of the certificate.
The me All cali	easurements and the u	uncertainties with nducted in the clo	confidence pro		pages and are part	of the certificate.
The me All cali	easurements and the u brations have been cor	uncertainties with nducted in the clo	confidence pro	bability are given on the following p	pages and are part	of the certificate.
The me All calil Calibra Primary	easurements and the u brations have been cor ation Equipment used (y Standards	uncertainties with nducted in the clo (M&TE critical for	confidence pro osed laboratory calibration)	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.)	pages and are part	of the certificate. hidity < 70%.
The me All calibra Calibra Primary Power 3	easurements and the u brations have been cor ation Equipment used (y Standards Sensor R&S NRP-33T	uncertainties with nducted in the clo (M&TE critical for	ICONFIDENCE Pro- posed laboratory calibration) ID SN: 100967	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038)	pages and are part 22±3)°C and hum	of the certificate. hidity < 70%.
The me All calibra Calibra Primary Power S Power S	easurements and the u brations have been cor ation Equipment used (I y Standards Sensor R&S NRP-33T Sensor R&S NRP18A	uncertainties with nducted in the clo (M&TE critical for	ID SN: 100967 SN: 101859	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A31500780	pages and are part (22±3)°C and hum (22±3)°C and hum (22±3)°C and hum (22±3)°C and hum (22±3)°C and hum	of the certificate. idity < 70%. Scheduled Cal Mar-25 Mar-25
The me All calibra Calibra Primary Power S Power S Spectru	easurements and the u brations have been cor ation Equipment used (y Standards Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV-	uncertainties with nducted in the clo (M&TE critical for	ID SN: 100967 SN: 101859 SN: 101832	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A31500780 25-Jan-24 (No. 4030-315007551	pages and are part (22±3)°C and hum (22±3)°C and hum (22±3)°C and hum (22±3)°C and hum (22±3)°C and hum	s of the certificate. hidity < 70%. Scheduled Cal Mar-25 Mar-25 Jan-25
The me All calibra Calibra Primary Power S Power S Spectru Mismat	easurements and the u brations have been cor ation Equipment used (y Standards Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV- tch; Short [S4188] Attel	uncertainties with nducted in the clo (M&TE critical for	ID ID SN: 100967 SN: 101859 SN: 101832 SN: 1152	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A31500780 25-Jan-24 (No. 4030-315007551 28-Mar-24 (No. 217-04050)	pages and are part (22±3)°C and hum (22±3)°C and hum (22±	s of the certificate. idity < 70%. Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25
The me All calibra Calibra Primary Power S Spectru Mismat OCP D	easurements and the u brations have been cor ation Equipment used (i y Standards Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV tch; Short [S4188] Atter AK-12	uncertainties with nducted in the clo (M&TE critical for	ID SN: 100967 SN: 100967 SN: 101859 SN: 101832 SN: 1152 SN: 1016	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030-315007851 25-Jan-24 (No. 4030-315007551 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-101	pages and are part (22 ± 3)°C and hum (21) (1) (1) (16_Oct23)	Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24
The ma All calibra Calibra Power 3 Power 3 Spectru Mismat OCP D	easurements and the u brations have been cor ation Equipment used (y Standards Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV- tch; Short [S4188] Atter AK-12 AK-3.5	uncertainties with nducted in the clo (M&TE critical for	ID SN: 100967 SN: 101859 SN: 101852 SN: 1152 SN: 1016 SN: 1249	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A31500780 25-Jan-24 (No. 4030A31500780 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK3.5-12	pages and are part 22±3)°C and hum (1) 16_Oct23) 49_Oct23)	Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24 Oct-24
The ma All calibra Calibra Power 3 Power 3 Spectru Mismat OCP D	easurements and the u brations have been cor ation Equipment used (i y Standards Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV- tch; Short [S4188] Atte JAK-12 JAK-3.5 nce Probe EX3DV4	uncertainties with nducted in the clo (M&TE critical for	ID SN: 100967 SN: 100967 SN: 101859 SN: 101832 SN: 1152 SN: 1016	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030-315007851 25-Jan-24 (No. 4030-315007551 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-101	pages and are part 22 ± 3)°C and hum (1) 16_Oct23) 49_Oct23) 49	Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24
The me All calibra Calibra Power S Power S Spectru Mismat OCP D OCP D Referen	easurements and the u brations have been cor ation Equipment used (i y Standards Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV- tch; Short [S4188] Atte JAK-12 JAK-3.5 nce Probe EX3DV4	uncertainties with nducted in the clo (M&TE critical for	ID SN: 100967 SN: 101859 SN: 101859 SN: 10182 SN: 1152 SN: 1016 SN: 1249 SN: 7349	Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A31500780 25-Jan-24 (No. 4030A31500780 25-Jan-24 (No. 4030A31500780 25-Jan-24 (No. 4030A31500750 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK3-5-12 03-Jun-24 (No. EX3-7349_Jun-24	pages and are part 22 ± 3)°C and hum (1) 16_Oct23) 49_Oct23) 49	s of the certificate. idity < 70%. Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24 Oct-24 Jun-25
The me All calii Calibra Power S Power S Spectru Mismat OCP D OCP D Referen DAE4ip	easurements and the u brations have been cor ation Equipment used (i y Standards Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV- tch; Short [S4188] Atte JAK-12 JAK-3.5 nce Probe EX3DV4	uncertainties with nducted in the clo (M&TE critical for	ID SN: 100967 SN: 101859 SN: 101859 SN: 10182 SN: 1152 SN: 1016 SN: 1249 SN: 7349	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 4030-315007551 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK3.5-12 03-Jun-24 (No. EX3-7349_Jun24 10-Jan-24 (No. DAE4ip-1836_Ja Check Date (in house)	pages and are part (22 ± 3)°C and hum (1) (1) (1) (16_Oct23) (49_Oct23) (4) (49_Oct23) (4) (4) (4) (4) (4) (4) (4) (4	s of the certificate. idity < 70%. Scheduled Cal Mar-25 Jan-25 Mar-25 Oct-24 Oct-24 Oct-24 Jun-25 Jan-25 Scheduled Check
The me All califi Calibra Power 3 Power 3 Spectru Mismati OCP D Referen DAE4ip Second ACAD 3	easurements and the u brations have been cor ation Equipment used (i y Standards Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV- um Analyzer R&S FSV- tch; Short [S4188] Atter AK-12 VAK-3.5 nce Probe EX3DV4 o dary Standards Source Box	uncertainties with nducted in the clo (M&TE critical for 40 nuator [S4423]	ID SN: 100967 SN: 101859 SN: 101852 SN: 1016 SN: 1249 SN: 1386 ID SN: 1000	bability are given on the following p facility: environment temperature (28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 4030-315007551 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK3.5-12 03-Jun-24 (No. EX3-7349_Jun24 10-Jan-24 (No. DAE4ip-1836_Ja Check Date (in house) 28-May-24 (No. 675-ACAD_Sou	pages and are part (22 ± 3)°C and hum (22 ± 3)°C and hum (21) (21) (21) (22) (22) (22) (23) (23) (23) (23) (23	s of the certificate. idity < 70%. Scheduled Cal Mar-25 Mar-25 Mar-25 Mar-25 Oct-24 Oct-24 Jun-25 Jan-25 Scheduled Check May-25
The me All califi Calibra Primary Power S Power S Spectru Mismat OCP D OCP D Referen DAE4ip Second ACAD Signal	easurements and the u brations have been cor ation Equipment used (y Standards Sensor R&S NRP-33T Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV tch; Short [S4188] Atter JAK-12 AK-3.5 nce Probe EX3DV4 D dary Standards Source Box Generator R&S SMB10	uncertainties with nducted in the clo (M&TE critical for 40 nuator [S4423]	ID SN: 100967 SN: 101859 SN: 101852 SN: 1016 SN: 1249 SN: 1386 ID SN: 1836 ID	bability are given on the following p facility: environment temperature (28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030-31500750) 25-Jan-24 (No. 4030-31500750) 05-Oct-23 (No. OCP-DAK12-101) 05-Oct-23 (No. OCP-DAK12-101) 05-Oct-23 (No. OCP-DAK12-101) 05-Oct-23 (No. OCP-DAK12-101) 05-Oct-23 (No. OCP-DAK3.5-12) 03-Jun-24 (No. OCP-DAK3.5-12) 03-Jun-24 (No. DAE4ip-1836_Ja Check Date (in house) 28-May-24 (No. 675-ACAD_Sou 28-May-24 (No. 0001-30071940)	pages and are part 22±3)°C and hum 22±3)°C and hum 21) 11) 16_Oct23) 49_Oct23) 49_Oct23) 4) an24) an24) ance_Box-240528) 4)	sof the certificate. idity < 70%. Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24 Jun-25 Jan-25 Scheduled Check May-25 May-25 May-25
The me All califi Calibra Primary Power S Power S Spectru Mismat OCP D OCP D Referen DAE4ip Second ACAD Signal	easurements and the u brations have been cor ation Equipment used (i y Standards Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV- um Analyzer R&S FSV- tch; Short [S4188] Atter AK-12 VAK-3.5 nce Probe EX3DV4 o dary Standards Source Box	uncertainties with nducted in the clo (M&TE critical for 40 nuator [S4423]	ID SN: 100967 SN: 101859 SN: 101852 SN: 1016 SN: 1249 SN: 1386 ID SN: 1000	bability are given on the following p facility: environment temperature (28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 25-Jan-24 (No. 4030-315007551 28-Mar-24 (No. 217-04050) 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK3.5-12 03-Jun-24 (No. EX3-7349_Jun24 10-Jan-24 (No. DAE4ip-1836_Ja Check Date (in house) 28-May-24 (No. 675-ACAD_Sou	pages and are part 22±3)°C and hum 22±3)°C and hum 21) 11) 16_Oct23) 49_Oct23) 49_Oct23) 4) an24) an24) ance_Box-240528) 4)	s of the certificate. hidity < 70%. Scheduled Cal Mar-25 Mar-25 Mar-25 Mar-25 Oct-24 Oct-24 Jun-25 Jan-25 Scheduled Check May-25
The me All califi Calibra Primary Power S Power S Spectru Mismat OCP D OCP D Referen DAE4ip Second ACAD Signal	easurements and the u brations have been cor ation Equipment used (y Standards Sensor R&S NRP-33T Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV tch; Short [S4188] Atter JAK-12 AK-3.5 nce Probe EX3DV4 D dary Standards Source Box Generator R&S SMB10	uncertainties with nducted in the clo (M&TE critical for 40 nuator [S4423]	ID SN: 100967 SN: 101859 SN: 101852 SN: 1016 SN: 1249 SN: 1386 ID SN: 1836 ID	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A31500780 25-Jan-24 (No. 4030A31500780) 05-Oct-23 (No. 0CP-DAK12-101 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK3.5-12 03-Jun-24 (No. EX3-7349_Jun2-10-Jan-24 (No. DAE4ip-1836_Ja Check Date (in house) 28-May-24 (No. 675-ACAD_Sou 28-May-24 (No. 675-Mismatch_3	pages and are part 22±3)°C and hum 22±3)°C and hum 101) 110 16_Oct23) 49_Oct23) 49_Oct23) 40 an24)	sof the certificate. idity < 70%. Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24 Jun-25 Jan-25 Scheduled Check May-25 May-25 May-25
The ma All calibra Calibra Power S Power S Spectro Mismat OCP D OCP D Referen DAE4ip Second ACAD Signal Mismat	easurements and the u brations have been cor ation Equipment used (i y Standards Sensor R&S NRP-33T Sensor R&S NRP-33T Sensor R&S NRP-33T teth; Short [S4188] Atter AK-12 AK-35 nce Probe EX3DV4 D dary Standards Source Box Generator R&S SMB10 tch; SMA	Incertainties with inducted in the cle (M&TE critical for (MaTE critical for (MaTE critical for (MaTE critical for (MaTE critic	ID SN: 100967 SN: 101859 SN: 101852 SN: 1016 SN: 1249 SN: 132 SN: 1836 ID SN: 1000 SN: 1836 SN: 1000 SN: 1152	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A31500780) 25-Jan-24 (No. 4030A31500780) 25-Jan-24 (No. 4030A31500780) 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK3.5-12 03-Jun-24 (No. EX3-7349_Jun24 10-Jan-24 (No. DAE4ip-1836_Ja Check Date (in house) 28-May-24 (No. 675-ACAD_Sou 28-May-24 (No. 675-Mismatch_Sou 28-May-24 (No. 675-Mismatch_Sou 28-May-24 (No. 675-Mismatch_Sou 28-May-24 (No. 675-Mismatch_Sou	pages and are part 22±3)°C and hum 22±3)°C and hum 21) 11) 16_Oct23) 49_Oct23) 49_Oct23) 4) an24) an24) ance_Box-240528) 4)	sof the certificate. idity < 70%. Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24 Jun-25 Jan-25 Scheduled Check May-25 May-25 May-25
The ma All calibra Calibra Power S Power S Spectro Mismat OCP D OCP D Referen DAE4ip Second ACAD Signal Mismat	easurements and the u brations have been cor ation Equipment used (y Standards Sensor R&S NRP-33T Sensor R&S NRP-33T Sensor R&S NRP18A um Analyzer R&S FSV tch; Short [S4188] Atter JAK-12 AK-3.5 nce Probe EX3DV4 D dary Standards Source Box Generator R&S SMB10	uncertainties with inducted in the clo (M&TE critical for (M&TE critical for (M)) (M&TE critical for (M)) (M)) (M) (M) (M) (M) (M)) (M) (M) (M) (M) (M)) (M) (M) (M) (M) (M)) (M) (M) (M) (M) (M) (M) (M) (M)) (M) (M) (M) (M) (M) (M) (M) (M) (M)) (M) (M) (M) (M) (M) (M) (M) (M) (M) (M)	ID SN: 100967 SN: 101859 SN: 101852 SN: 1016 SN: 1249 SN: 132 SN: 1836 ID SN: 1000 SN: 1836 SN: 1000 SN: 1152	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A31500780 25-Jan-24 (No. 4030A31500780) 05-Oct-23 (No. 0CP-DAK12-101 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK3.5-12 03-Jun-24 (No. EX3-7349_Jun2-10-Jan-24 (No. DAE4ip-1836_Ja Check Date (in house) 28-May-24 (No. 675-ACAD_Sou 28-May-24 (No. 675-Mismatch_3	pages and are part 22±3)°C and hum 22±3)°C and hum 101) 110 16_Oct23) 49_Oct23) 49_Oct23) 40 an24)	sof the certificate. idity < 70%. Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24 Jun-25 Jan-25 Scheduled Check May-25 May-25 May-25
The ma All calibra Calibra Power S Power S Spectru Mismat OCP D OCP D OCP D OCP D OCP D Second ACAD Signal Mismat	easurements and the u brations have been cor ation Equipment used (i y Standards Sensor R&S NRP-33T Sensor R&S NRP-33T Sensor R&S NRP-33T teth; Short [S4188] Atter AK-12 AK-35 nce Probe EX3DV4 D dary Standards Source Box Generator R&S SMB10 tch; SMA	Incertainties with inducted in the cle (M&TE critical for (MaTE critical for (MaTE critical for (MaTE critical for (MaTE critic	inconfidence processed laboratory calibration) ID SN: 100967 SN: 101859 SN: 101859 SN: 101832 SN: 1152 SN: 1016 SN: 1249 SN: 7349 SN: 1836 ID SN: 1000 SN: 182081 SN: 1102	bability are given on the following p facility: environment temperature (Cal Date (Certificate No.) 28-Mar-24 (No. 217-04038) 21-Mar-24 (No. 4030A31500780) 25-Jan-24 (No. 4030A31500780) 25-Jan-24 (No. 4030A31500780) 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK12-101 05-Oct-23 (No. OCP-DAK3.5-12 03-Jun-24 (No. EX3-7349_Jun24 10-Jan-24 (No. DAE4ip-1836_Ja Check Date (in house) 28-May-24 (No. 675-ACAD_Sou 28-May-24 (No. 675-Mismatch_Sou 28-May-24 (No. 675-Mismatch_Sou 28-May-24 (No. 675-Mismatch_Sou 28-May-24 (No. 675-Mismatch_Sou	pages and are part 22±3)°C and hum 22±3)°C and hum 101) 110 16_Oct23) 49_Oct23) 49_Oct23) 40 an24)	sof the certificate. idity < 70%. Scheduled Cal Mar-25 Mar-25 Jan-25 Mar-25 Oct-24 Jun-25 Jan-25 Scheduled Check May-25 May-25 May-25

Certificate No: D835V2-4d069_Jul24

Page 1 of 6

Calibration Laboratory of

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland Ilac-MRA

Schweizerischer Kalibrierdienst Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service

Accreditation No.: SCS 0108

S

С

S

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossary

TSL tissue simulating liquid ConvF sensitivity in TSL / NORM x,y,z N/A not applicable or not measured

Calibration is Performed According to the Following Standards

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- · KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation

DASY System Handbook

Methods Applied and Interpretation of Parameters

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures
 stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- · Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- · SAR measured: SAR measured at the stated antenna input power.
- · SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- · SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Certificate No: D835V2-4d069_Jul24

Page 2 of 6

D835V2 - SN: 4d069

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY8 Module SAR	16.4.0
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with spacer
Zoom Scan Resolution	dx, dy = 6mm, dz = 1.5mm	Graded Ratio = 1.5 mm (Z direction)
Frequency	835MHz ±1MHz	

Head TSL parameters at 835 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.900 mho/m
Measured Head TSL parameters	(22.0 ±0.2)°C	42.3 ±6%	0.930 mho/m ±6%
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL at 835 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR for nominal Head TSL parameters	24 dBm input power	2.38 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	9.47 W/kg ±17.0% (k = 2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR for nominal Head TSL parameters	24 dBm input power	1.53 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	6.09 W/kg ±16.5% (k = 2)

Certificate No: D835V2-4d069_Jul24

Page 3 of 6

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 835 MHz

Impedance	51.1 Ω−4.5 jΩ
Return Loss	-26.8 dB

General Antenna Parameters and Design

1.393 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG	

Certificate No: D835V2-4d069_Jul24

Page 4 of 6