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PART 0 SAR CHAR REPORT

Applicant Name:

Samsung Electronics Co., Ltd. 129, Samsung-ro, Maetan dong, Yeongtong-gu, Suwon-si Gyeonggi-do, 16677, Korea Date of Testing: 06/06/22 - 07/28/22 Test Site/Location: Element, Columbia, MD, USA Document Serial No.: 1M2206010070-19.A3L

FCC ID: A3LSMF936JPN

APPLICANT: SAMSUNG ELECTRONICS CO., LTD

Report Type: Part 0 SAR Characterization

DUT Type: Portable Handset **Model(s):** SC-55C, SCG16

I 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.

Test results reported herein relate only to the item(s) tested.

RJ Ortanez
Executive Vice President





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1 DEVICE UNDER TEST

1.1 Device Overview

This device uses the Qualcomm® Gen2 Smart Transmit feature to control and manage transmitting power in real time and to ensure the time-averaged RF exposure is in compliance with the FCC requirement at all times for 2G/3G/4G WWAN operations. Additionally, this device supports WLAN/BT/NFC/UWB technologies, but the output

power of these modems is not controlled by the Smart Transmit algorithm.

Band & Mode	Operating Modes	Tx Frequency
GSM/GPRS/EDGE 850	Voice/Data	824.20 - 848.80 MHz
GSM/GPRS/EDGE 1900	Voice/Data	1850.20 - 1909.80 MHz
UMTS 850	Voice/Data	826.40 - 846.60 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 5 (Cell)	Voice/Data	824.7 - 848.3 MHz
LTE Band 4 (AWS)	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
2.4 GHz WLAN	Data	2412 - 2472 MHz
U-NII-1	Data	5180 - 5240 MHz
U-NII-2A	Data	5260 - 5320 MHz
U-NII-2C	Data	5500 - 5720 MHz
U-NII-3	Data	5745 - 5825 MHz
U-NII-4	Data	5845 - 5885 MHz
U-NII-5	Data	5935 - 6415 MHz
U-NII-6	Data	6435 - 6515 MHz
U-NII-7	Data	6535 - 6875 MHz
U-NII-8	Data	6895 - 7115 MHz
Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
UWB	Data	6489.6 - 7987.2 MHz

1.2 Time-Averaging for SAR and Power Density

This device is enabled with Qualcomm® Gen2 Smart Transmit algorithm to control and manage transmitting power in real time and to ensure that the time-averaged RF exposure from 2G/3G/4G WWAN is in compliance with FCC requirements. This Part 0 report shows SAR characterization of WWAN radios for 2G/3G/4G. Characterization is achieved by determining P_{Limit} for 2G/3G/4G that corresponds to the exposure design targets after accounting for all device design related uncertainties, i.e., SAR_design_target (< FCC SAR limit) for sub-6 radio. The SAR characterization is denoted as SAR Char in this report. Section 1.3 includes a nomenclature of the specific terms used in this report.

The compliance test under the static transmission scenario and simultaneous transmission analysis are reported in Part 1 report.

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1.3 **Nomenclature for Part 0 Report**

Technology	Term	Description
	Plimit	Power level that corresponds to the exposure design target (SAR_design_target) after accounting for all device design related uncertainties
2G/3G/4G	P_{max}	Maximum tune up output power
	SAR_design_target	Target SAR level < FCC SAR limit after accounting for all
		device design related uncertainties
	SAR Char	Table containing <i>Plimit</i> for all technologies and bands

1.4 **Bibliography**

Report Type	Report Serial Number
FCC SAR Evaluation Report (Part 1)	1M2206010070-01.A3L

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2 SAR AND POWER DENSITY MEASUREMENTS

2.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 2-1).

Equation 2-1 SAR Mathematical Equation

$$SAR = \frac{d}{dt} \left(\frac{dU}{dm} \right) = \frac{d}{dt} \left(\frac{dU}{\rho dv} \right)$$

SAR is expressed in units of Watts per Kilogram (W/kg).

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

where:

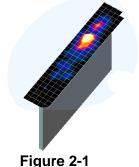
 σ = conductivity of the tissue-simulating material (S/m) ρ = mass density of the tissue-simulating material (kg/m³) E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

2.2 SAR Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

- 1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 2-1) and IEEE 1528-2013.
- 2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.



Sample SAR Area Scan

3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 2-1) and IEEE 1528-2013. On the

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basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):

- a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 2-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).
- b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot" condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.
- c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
- 4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

Table 2-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

	Maximum Area Scan	Maximum Zoom Scan	Maximum Zoom Scan Spatial Resolution (mm)		Minimum Zoom Scan	
Frequency	Resolution (mm) (Δx _{area} , Δy _{area})	Resolution (mm) (Δx _{200m} , Δy _{200m})	Uniform Grid	G	raded Grid	Volume (mm) (x,y,z)
			Δz _{zoom} (n)	Δz _{zoom} (1)*	Δz _{zoom} (n>1)*	
≤ 2 GHz	≤ 15	≤8	≤5	≤4	≤ 1.5*Δz _{zoom} (n-1)	≥ 30
2-3 GHz	≤ 12	≤5	≤5	≤4	$\leq 1.5*\Delta z_{zoom}(n-1)$	≥ 30
3-4 GHz	≤ 12	≤5	≤ 4	≤3	$\leq 1.5*\Delta z_{zoom}(n-1)$	≥ 28
4-5 GHz	≤ 10	≤4	≤3	≤2.5	$\leq 1.5*\Delta z_{zoom}(n-1)$	≥ 25
5-6 GHz	≤ 10	≤ 4	≤2	≤2	$\leq 1.5*\Delta z_{zoom}(n-1)$	≥ 22

*Also compliant to IEEE 1528-2013 Table 6

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3 SAR CHARACTERIZATION

3.1 DSI and SAR Determination

This device uses different Device State Index (DSI) to configure different time averaged power levels based on certain exposure scenarios. Depending on the detection scheme implemented in the smartphone, the worst-case SAR was determined by measurements for the relevant exposure conditions for that DSI. Detailed descriptions of the detection mechanisms are included in the operational description.

When 1g SAR and 10g SAR exposure comparison is needed, the worst-case was determined from SAR normalized to 1g or 10g SAR limit.

The device state index (DSI) conditions used in Table 3-1 represent different exposure scenarios.

Table 3-1
DSI and Corresponding Exposure Scenarios

Scenario	Description	SAR Test Cases
Head – Folder Open (DSI = 3)	Device positioned next to headReceiver ActiveFolder Open	Head SAR per KDB Publication 648474 D04
Head – Folder Closed (DSI = 4)	Device positioned next to headReceiver ActiveFolder Closed	Head SAR per KDB Publication 648474 D04
Hotspot mode – Folder Open (DSI = 5)	 Device transmits in hotspot mode near body Hotspot Mode Active Folder Open 	UMPC Mini-Tablet SAR per KDB 941225 D07v01r02
Hotspot mode – Folder Closed (DSI = 6)	 Device transmits in hotspot mode near body Hotspot Mode Active Folder Closed 	Hotspot SAR per KDB Publication 941225 D06
Extremity Grip – Folder Open (DSI= 1/7)	 Device is held with hand and grip sensor is triggered Grip sensor triggered or earjack is active Folder Open 	Phablet SAR per KDB Publication 648474 D04 & KDB Publication 616217 D04
Phablet Grip – Folder Closed (DSI= 2/8)	 Device is held with hand and grip sensor is triggered Grip sensor triggered or earjack is active Folder Closed 	Phablet SAR per KDB Publication 648474 D04 & KDB Publication 616217 D04
Extremity – Folder Open (DSI = 0)	 Device is held with hand and grip sensor is not triggered Distance grip sensor not triggered Folder Open 	UMPC Mini-Tablet SAR per KDB 941225 D07v01r02
Phablet – Folder Closed (DSI = 0)	 Device is held with hand and grip sensor is not triggered Distance grip sensor not triggered Folder Closed 	Phablet SAR per KDB Publication 648474 D04 & KDB Publication 616217 D04
Body-worn – Folder Open (DSI = 0)	Device being used with a body-worn accessoryFolder Open	UMPC Mini-Tablet SAR per KDB 941225 D07v01r02
Body-worn – Folder Closed (DSI = 0)	Device being used with a body-worn accessoryFolder Closed	Body-worn SAR per KDB Publication 648474 D04

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3.2 SAR Design Target

SAR_design_target is determined by ensuring that it is less than FCC SAR limit after accounting for total device designed related uncertainties specified by the manufacturer (see Table 3-2).

Table 3-2 SAR_design_target Calculations

SAK_uesigii_targer Calculations							
SAR_design_target							
$SAR_design_target < SAR_regulatory_limit imes 10^{rac{-Total\ Uncertainty}{10}}$							
1g SAR (W/kg)		10g SAI (W/kg)	र				
Total Uncertainty	1.0 dB	Total Uncertainty	1.0 dB				
SAR_regulatory_limit	1.6 W/kg	SAR_regulatory_limit	4.0 W/kg				

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3.3 **SAR Char**

SAR test results corresponding to Pmax for each antenna/technology/band/DSI can be found in Appendix A.

Plimit is calculated by linearly scaling with the measured SAR at the Ppart0 to correspond to the SAR_design_target. When Plimit < Pmax, Ppart0 was used as Plimit in the Smart Transmit EFS. When Plimit > Pmax and Ppart0=Pmax, calculated Plimit was used in the Smart Transmit EFS. All reported SAR obtained from the Ppart0 SAR tests was less than SAR_Design_target+ 1 dB Uncertainty. The final Plimit determination for each exposure scenario corresponding to SAR design target are shown in Table 3-3.

Table 3-3 **PLimit Determination**

PLIMIT Determination							
Device State Index (DSI)	PLimit Determination Scenarios						
0	The worst-case SAR exposure is determined as maximum SAR normalized to the limit (i.e. lowest plimit) among: 1. UMPC 1g SAR folder open a. Measured SAR at 14, 12 and 18 mm for back, front, and bottom surfaces respectively and measured SAR at 10 mm for right surface. 2. Body Worn SAR folder closed. 3. UMPC 10g SAR folder open. a. For AG0: Measured SAR at 14, 12 and 18 mm for back, front, and bottom surfaces respectively and measured SAR at 0 mm for right surface. b. For AG1: Measured SAR at 0 mm for back, front, top, and right surfaces. 4. Extremity SAR folder closed. a. Measured SAR at 12 and 14 mm spacing for back and bottom respectively, and measured SAR at 0mm for front, left, and right surfaces						
1 or 7	<i>Plimit</i> is calculated based on 1g Body SAR at 10 mm for back, front, bottom, and right surfaces and 10g Extremity SAR at 0 mm for back, front, bottom, and right surfaces with folder open						
2 or 8	Plimit is calculated based on: 1. For AG0: 10g Extremity SAR at 0 mm for back, front, bottom, left, and right surfaces with folder closed 2. For AG1: 10g Extremity SAR at 0 mm for back, front, top, left, and right surfaces with folder closed						
3 or 4	Plimit is calculated based on 1g Head SAR						
5 or 6	Plimit is calculated based on 1g Hotspot SAR at 10 mm						

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Table 3-4 SAR Characterizations

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Exposure Senario			Folder Closed - Body-Worn	Folder Closed - Phablet Max	Folder Open - Body	Folder Open - Extremity	Folder Closed - Head	Folder Open - Head	Folder Closed - Grip Sensor Active	Folder Open - Grip Sensor Active	Folder Open - Grip Sensor Active	Folder Closed - Hotspot	Folder Open - Hotspot	Folder Closed - Earjack	Folder Open - Earjack	Maximum
Averaging Volume			1g	10g	1g	10g	1g	1g	10g	1g	10g	lg	lg	10g	10g	Tune-Up
Spacing			15 mm	14, 12, 0 mm	18, 14, 12, 10 mm	18, 14, 12, 0 mm	0 mm	0 mm	0 mm	10 mm	0 mm	10 mm	10 mm	0 mm	0 mm	Output Power*
Configuration			Folder Closed	Folder Closed	Folder Open	Folder Open	Folder Closed	Folder Open	Folder Closed	Folder Open	Folder Open	Folder Closed	Folder Open	Folder Closed	Folder Open	
DSI			0	0	0	0	4	3	2	1	1	6	5	8	7	
Technology/Band	Antenna	Antenna Group														Pmax
GSM 850	A, A+B	AG0		28	3.3		34	k.1	29.4	2	7.1	31.6	31.7	29.4	27.1	25.3
GSM 1900	В	AG0		26	5.4		34	1.8	17.8	1	7.8	17.8	17.8	17.8	17.8	22.1
UMTS 850	A, A+B	AG0		27	7.2		33	1.6	27.2	2	7.8	29.9	29.0	27.2	27.8	23.0
LTE Band 12	A, A+B	AG0		25	5.4		34	l.0	24.9	2	6.8	29.8	29.2	24.9	26.8	23.0
LTE Band 13	A, A+B	AG0		25	5.8		32	2.1	27.0	2	7.4	29.6	28.6	27.0	27.4	23.0
LTE Band 5 (Cell)	A, A+B	AG0		25	5.8		34	1.3	26.8	2	7.2	28.9	28.7	26.8	27.2	23.0
LTE Band 4 (AWS)	В	AG0		25	5.9		33	1.4	19.0	19	9.0	19.0	19.0	19.0	19.0	22.5
LTE Band 41 (PC3)	В	AG0		25	5.0		37	7.1	16.0	10	6.0	16.0	16.0	16.0	16.0	21.0
LTE Band 41 (PC3)	F	AGI	18	8.0	N.	/A	26.8	N/A	18.0	N	/A	18.0	N/A	18.0	N/A	21.0

Notes:

- 1. For all modes/bands, when Hotspot Mode (DSI=5/6) and Extremity sensor (DSI=1/2) are triggered at the same time, DSI=1/2 takes priority, thus the *P_{limit}* for DSI=1/2 is set to be less or equal to *P_{limit}* for DSI=5/6
- 2. When $P_{max} < P_{limit}$, the DUT will operate at a power level up to P_{max} .
- 3. P_{limit} for DSI=1/7 and DSI =2/8 are the same.
- 4. For all bands when RCV is active, DSI=3/4 takes priority over all levels.

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4 EQUIPMENT LIST

For SAR measurements

Manufacturer						
	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4404B	Spectrum Analyzer	N/A	N/A	N/A	MY45113242
Agilent	E4438C	ESG Vector Signal Generator	5/10/2022	Annual	5/10/2023	MY42082659
Agilent	E4438C	ESG Vector Signal Generator	2/14/2022	Annual	2/14/2023	MY42082385
Agilent	N5182A	MXG Vector Signal Generator	6/21/2022	Annual	6/21/2023	MY47420651
Agilent	N5182A	MXG Vector Signal Generator	7/6/2021	Annual	7/6/2022	MY48180366
Agilent	8753ES	S-Parameter Vector Network Analyzer	2/11/2022	Annual	2/11/2023	MY40003841
Agilent	8753ES	S-Parameter Vector Network Analyzer	12/17/2021	Annual	12/17/2022	MY40000670
Agilent	MS2028C	Vector Network Analyzer	3/23/2022	Annual	3/23/2023	1128008
Agilent	E5515C	Wireless Communications Test Set	5/12/2022	Annual	5/12/2023	GB43304278
Agilent	E5515C	Wireless Communications Test Set	1/14/2020	Triennial	1/14/2023	GB43304447
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433974
Amplifier Research	15S1G6	Amplifier	9/15/2021	Annual	9/15/2022	433971
Anritsu	ML2496A	Power Meter	3/31/2022	Annual	3/31/2023	1138001
Anritsu	ML2496A	Power Meter	3/29/2022	Annual	3/29/2023	1306009
Anritsu	MA2411B	Pulse Power Sensor	4/29/2022	Annual	4/29/2023	1207470
	PWR-4GHS				5/3/2023	12108190029
Mini-Circuits		Power Sensor	5/3/2022	Annual		
Anritsu	MA2411B	Pulse Power Sensor	9/21/2021	Annual	9/21/2022	1339008
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	6/27/2022	Annual	6/27/2023	6261895213
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	5/24/2022	Annual	5/24/2023	6201144418
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	3/31/2022	Annual	3/31/2023	6201664756
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	9/26/2021	Annual	9/26/2022	6201524637
Anritsu	MA24106A	USB Power Sensor	6/1/2022	Annual	6/1/2023	1349514
Anritsu	MA24106A	USB Power Sensor	7/7/2021	Annual	7/7/2022	1244512
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670623
	4353					
Control Company		Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670633
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670635
Control Company	4040	Therm./ Clock/ Humidity Monitor	1/21/2021	Biennial	1/21/2023	160574418
Control Company	4040	Therm./ Clock/ Humidity Monitor	3/12/2021	Biennial	3/12/2023	210202100
Mitutoyo	500-196-30	CD-6"ASX 6Inch Digital Caliper	2/16/2022	Triennial	2/16/2025	A20238413
						1 B/F 200 40F0
Keysight Technologies	N6705B	DC Power Analyzer	5/5/2021	Triennial	5/5/2024	MY53004059
Keysight Technologies	N9020A	MXA Signal Analyzer	4/14/2022	Annual	4/14/2023	MY48010233
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	7/6/2021	Annual	7/6/2022	31634
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
	NLP-2950+					
Mini-Circuits		Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	CBT	N/A	CBT	2050
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	9/15/2021	Annual	9/15/2022	2111
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Seekonk	NC-100	Torque Wrench (8" lb)	8/5/2020	Biennial	8/5/2022	N/A
Rohde & Schwarz	CA BAILTON	Wideband Radio Communication Tester				
	CMW500		4/18/2022	Annual	4/18/2023	128633
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	3/29/2022	Annual	3/29/2023	171075
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/8/2022	Annual	4/8/2023	162125
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/7/2022	Annual	4/7/2023	167283
SPEAG	DAK-3 5		1/6/2022	Annual	1/6/2023	
SPEAG	DAK-3.5	Dielectric Assessment Kit	1/6/2022	Annual	1/6/2023	1278
SPEAG SPEAG	DAK-3.5 DAK-3.5	Dielectric Assessment Kit Dielectric Assessment Kit	1/6/2022 10/20/2021	Annual Annual	1/6/2023 10/20/2022	
SPEAG	DAK-3.5	Dielectric Assessment Kit	10/20/2021	Annual	10/20/2022	1278 1091
SPEAG SPEAG	DAK-3.5 DAKS-3.5	Dielectric Assessment Kit Portable Dielectric Assessment Kit	10/20/2021 8/18/2021	Annual Annual	10/20/2022 8/18/2022	1278 1091 1041
SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit	10/20/2021 8/18/2021 7/5/2022	Annual Annual Annual	10/20/2022 8/18/2022 7/5/2023	1278 1091 1041 1039
SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit	10/20/2021 8/18/2021 7/5/2022	Annual Annual Annual	10/20/2022 8/18/2022 7/5/2023	1278 1091 1041
SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz)	10/20/2021 8/18/2021 7/5/2022 3/21/2022	Annual Annual Annual Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023	1278 1091 1041 1039 1102
SPEAG SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz) Modulation and Audio Interference Analyzer	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A	Annual Annual Annual Annual N/A	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A	1278 1091 1041 1039 1102 1379
SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz)	10/20/2021 8/18/2021 7/5/2022 3/21/2022	Annual Annual Annual Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023	1278 1091 1041 1039 1102
SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022	Annual Annual Annual Annual N/A Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023	1278 1091 1041 1039 1102 1379
SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022	Annual Annual Annual Annual N/A Annual Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023	1278 1091 1041 1039 1102 1379 1003
SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole 835 MHz SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/14/2022	Annual Annual Annual Annual Annual N/A Annual Annual Annual Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023	1278 1091 1041 1039 1102 1379 1003 1046 4d119
SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022	Annual Annual Annual Annual N/A Annual Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023	1278 1091 1041 1039 1102 1379 1003
SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2 D1750V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole 835 MHz SAR Dipole 1750 MHz SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/20/2022	Annual Annual Annual Annual Annual N/A Annual Annual Annual Annual Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/20/2023	1278 1091 1041 1039 1102 1379 1003 1046 4d119
SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2 D1750V2 D1750V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (100Met - 36Hz) Modulation and Audio Interference Analyzer 750Met 5AR Dipole 750Met 5AR Dipole 835 Met 5AR Dipole 1750 Met 5AR Dipole 1750 Met 5AR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/14/2022 4/20/2022 5/10/2022	Annual Annual Annual Annual N/A Annual Annual Annual Annual Annual Annual Annual Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/20/2023 5/10/2023	1278 1091 1041 1039 1102 1379 1003 1046 4d119 1051
SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2 D1750V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/14/2022 4/20/2022 5/10/2022 4/14/2022	Annual Annual Annual Annual N/A Annual Annual Annual Annual Annual Annual Annual Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/20/2023 5/10/2023 4/14/2023	1278 1091 1041 1039 1102 1379 1003 1046 4d119
SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2 D1750V2 D1750V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (100Met - 36Hz) Modulation and Audio Interference Analyzer 750Met 5AR Dipole 750Met 5AR Dipole 835 Met 5AR Dipole 1750 Met 5AR Dipole 1750 Met 5AR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/14/2022 4/20/2022 5/10/2022	Annual Annual Annual Annual N/A Annual Annual Annual Annual Annual Annual Annual Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/20/2023 5/10/2023	1278 1091 1041 1039 1102 1379 1003 1046 4d119 1051
SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2 D1750V2 D1750V2 D1900V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1000 MHz 5AR Dipole 2450 MHz 5AR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/14/2022 4/20/2022 4/14/2022 4/14/2022 9/20/2020	Annual Annual Annual Annual N/A Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/20/2023 4/14/2023 4/14/2023 9/20/2022	1278 1091 1041 1039 1102 1379 1003 1046 4d119 1051 1092 551411 797
SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D835V2 D1750V2 D1750V2 D1750V2 D1900V2 D2450V2 D2450V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 361tz) Modulation and Audio Interference Analyzer 750 MHz 5 AR Dipole 835 MHz 5 AR Dipole 1750 MHz 5 AR Dipole 1750 MHz 5 AR Dipole 1750 MHz 5 AR Dipole 1500 MHz 5 AR Dipole 1450 MHz 5 AR Dipole 2450 MHz 5 AR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/20/2022 4/20/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022	Annual Annual Annual Annual Annual N/A Annual Biennial	10/20/2022 8/18/2022 3/15/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/20/2023 5/10/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023	1278 1091 1041 1039 1102 1379 1003 1004 40119 1051 1092 5d141 797 981
SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2 D1750V2 D1750V2 D1900V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1000 MHz 5AR Dipole 2450 MHz 5AR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/14/2022 4/20/2022 4/14/2022 4/14/2022 9/20/2020	Annual Annual Annual Annual N/A Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/20/2023 4/14/2023 4/14/2023 9/20/2022	1278 1091 1041 1039 1102 1379 1003 1046 4d119 1051 1092 551411 797
SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2 D1750V2 D1750V2 D1750V2 D2450V2 D2450V2 D2450V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz) Modulation and Audio interference Analyzer 750 MHz 5AR Dipole 750 MHz 5AR Dipole 835 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 2450 MHz 5AR Dipole 2450 MHz 5AR Dipole 2450 MHz 5AR Dipole 2450 MHz 5AR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/20/2022 4/20/2022 4/14/2022 9/20/2020 11/25/2021 2/22/2022	Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/20/2023 4/14/2023 9/20/2022 11/25/2022 2/22/2023	1278 1091 1041 1039 1102 1379 1003 1046 4d119 1051 1092 5d141 797 981 882
SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2 D1750V2 D1750V2 D1900V2 D2450V2 D2450V2 D2450V2 D2450V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (100Met - 36Hz) Modulation and Audio Interference Analyzer 750 Met - SAR Dipole 750 Met - SAR Dipole 835 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1950 Met - SAR Dipole 2450 Met - SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/12/2022 4/12/2022 4/12/2022 4/12/2022 4/12/2022 4/12/2022 8/18/2021	Annual Annual Annual Annual Annual N/A Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/12/2023 4/12/2023 4/12/2023 4/12/2023 4/12/2023 8/18/2022	1278 1091 1041 1039 1102 1379 1003 1046 44119 1051 1092 551414 797 981 882 719
SPEAG	DAK-3.5 DAKS-3.5 DAKS-3.5 DAKS-3.5 DAKS-3.5 DAKS-12 MAIA D750V3 D750V3 D835V2 D1750V2 D1750V2 D1750V2 D2450V2 D2450V2 D2450V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 26/14) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1000 MHz SAR Dipole 2450 MHz SAR Dipole 2450 MHz SAR Dipole 2450 MHz SAR Dipole 2450 MHz SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/20/2022 4/20/2022 4/14/2022 9/20/2020 11/25/2021 2/22/2022	Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/20/2023 4/14/2023 9/20/2022 11/25/2022 2/22/2023	1278 1091 1041 1039 1102 1379 1003 1046 4d119 1051 1092 5d141 797 981 882
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.2 MAIA D750/3 D750/3 D750/3 D750/2 D1750/2 D1900/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 26/14) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1000 MHz SAR Dipole 2450 MHz SAR Dipole 2450 MHz SAR Dipole 2450 MHz SAR Dipole 2450 MHz SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/14/2022 4/14/2022 5/10/2022 4/14/2022 5/10/2022 4/14/2022 11/25/2021 2/22/2022 8/18/2021 11/15/2021	Annual	10/20/2022 8/18/2022 8/18/2023 1/5/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/14/2023 5/10/2023 4/14/2023 4/14/2023 11/25/2022 2/22/2023 8/18/2022 11/25/2022 11/25/2022	1278 1091 1041 1039 1102 1379 1003 1046 44119 1051 1092 551414 797 981 882 719
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D835/2 D1750/2 D1750/2 D1950/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2500/2 D2500/2 D2500/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (100Met - 36/12) Modulation and Audio Interference Analyzer 750 Met - SAR Dipole 750 Met - SAR Dipole 833 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1500 Met - SAR Dipole 2450 Met - SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 1/4/2022 2/14/2022 4/20/2022 4/20/2022 4/20/2022 4/20/2022 4/20/2022 4/20/2020 11/25/2021 8/18/2021 11/12/2019 8/18/2021	Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 3/21/2023 2/14/2023 4/20/2023 5/10/2023 4/20/2023 5/10/2023 4/14/2023 5/20/2022 11/25/2022 8/18/2022 8/18/2022	1278 1091 1041 1039 1102 1379 1003 1046 4d119 1051 1051 1092 5d141 797 981 882 719 1071 1126
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D750/3 D859/2 D1750/2 D1750/2 D1900/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2500/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3614z) Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 835 MHz 5AR Dipole 835 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1950 MHz 5AR Dipole 2450 MHz 5AR Dipole 5600 MHz 5AR Dipole	10/20/2021 18/18/2021 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/25/2021 2/22/2022 11/25/2021 11/12/2019 8/18/2021 1/10/2022	Annual	10/20/2022 8/18/2022 8/18/2022 3/21/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/20/2023 4/20/2023 4/20/2023 4/20/2022 11/25/2022 2/22/2023 8/18/2022 11/12/2022 8/18/2022 1/10/2023	1278 1091 1041 1039 1102 1379 1003 1046 4d119 1051 1092 5d141 882 719 1071 1126
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D835/2 D1750/2 D1750/2 D1950/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2450/2 D2500/2 D2500/2 D2500/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (100Met - 36/12) Modulation and Audio Interference Analyzer 750 Met - SAR Dipole 750 Met - SAR Dipole 833 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1500 Met - SAR Dipole 2450 Met - SAR Dipole	10/20/2021 8/18/2021 7/5/2022 3/21/2022 1/4/2022 2/14/2022 4/20/2022 4/20/2022 4/20/2022 4/20/2022 4/20/2022 4/20/2020 11/25/2021 8/18/2021 11/12/2019 8/18/2021	Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 3/21/2023 2/14/2023 4/20/2023 5/10/2023 4/20/2023 5/10/2023 4/14/2023 5/20/2022 11/25/2022 8/18/2022 8/18/2022	1278 1091 1041 1039 1102 1379 1003 1046 4d119 1051 1051 1092 5d141 797 981 882 719 1071 1126
SPEAG SPEA	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750V3 D835V2 D1750V2 D1750V2 D1750V2 D2450V2 D250V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 750 MHz 5AR Dipole 835 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 2450 MHz 5AR Dipole 2500 MHz 5AR Dipole 560 MHz 5AR Dipole 560 MHz 5AR Dipole	10/20/2021 18/18/2021 17/5/2022 3/21/2022 3/21/2022 2/14/2022 4/14/2022 4/12/2022 4/12/2022 5/10/2022 11/25/2021 2/22/2022 8/18/2021 11/12/2019 8/18/2021 1/10/2022	Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 3/21/2023 2/14/2023 4/14/2023	1278 1091 1091 1004 1039 1102 1379 1003 1006 4d119 1051 1092 5d141 797 981 882 719 1071 1126 1057
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 MAIA D750/3 D835V2 D1750V2 D1750V2 D1950V2 D2450V2 D2560V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (100Met - 36Hz) Modulation and Audio Interference Analyzer 750 Met - SAR Dipole 750 Met - SAR Dipole 835 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1950 Met - SAR Dipole 2450 Met - SAR Dipole 1350 Met - SAR Dipole 2450 Met - SAR Dipole 2450 Met - SAR Dipole 135 Met - SAR Dipole 135 Met - SAR Dipole 130 Met - SAR Dipole	10/20/2021 16/20/2021 18/18/2021 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/25/2021 11/25/2021 11/12/2002 11/12/2002 9/16/2021 1/10/2022 9/16/2021	Annual	10/20/2022 16/20/2022 18/18/2022 17/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2022 11/12/2023 9/16/2022 1/10/2023	1278 1091 1091 1003 1102 1379 1003 1004 40119 1051 1092 50141 797 981 882 719 1071 1126 1057 1002
SPEAG SPEA	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750V3 D835V2 D1750V2 D1750V2 D1750V2 D2450V2 D250V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 750 MHz 5AR Dipole 835 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 2450 MHz 5AR Dipole 2500 MHz 5AR Dipole 560 MHz 5AR Dipole 560 MHz 5AR Dipole	10/20/2021 18/18/2021 17/5/2022 3/21/2022 3/21/2022 2/14/2022 4/14/2022 4/12/2022 4/12/2022 5/10/2022 11/25/2021 2/22/2022 8/18/2021 11/12/2019 8/18/2021 1/10/2022	Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 3/21/2023 2/14/2023 4/14/2023	1278 1091 1091 1094 1039 1102 1379 1003 1006 4d119 1051 1092 5d141 797 981 882 719 1071 1126 1072
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D835/2 D1750/2 D1750/2 D1750/2 D2450/2 D2500/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 750 MHz 5AR Dipole 835 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 2450 MHz 5AR Dipole 2500 MHz 5AR Dipole 1500 MHz 5AR Dipole 1600 MHz 5AR Dipole 1700 MHz 5AR Dipole	10/20/201 18/18/2021 7/5/2022 3/21/2022 3/21/2022 3/21/2022 N/A 5/9/2022 2/14/3022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022 8/18/2021 11/12/2022 8/18/2021 1/10/2022 1/13/2021 1/10/2022 1/13/2021	Annual	10/20/2022 18/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2023 8/18/2022 1/12/2023 9/16/2022 2/21/2023	1278 1091 1091 1091 1091 1102 1379 1103 1006 40119 1051 1092 50141 797 1013 882 719 1071 1126 1007 1107 1107 1107 1107 1107 1107 110
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D835/2 D1750/2 D1750/2 D1750/2 D1950/2 D2450/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer FSO MHz SAR Dipole FSS MHz SAR Dipole BSS MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1500 MHz SAR Dipole 2450 MHz SAR Dipole 5600 MHz SAR Dipole 1850 MHz SAR Dipole 1850 MHz SAR Dipole 1850 MHz SAR Dipole 1950 MHz SAR Dipole	10/20/2021 16/20/2021 17/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2019 11/12	Annual	10/20/2022 16/20/2023 8/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 8/18/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 1/10/2023 7/13/2022 2/21/2023 7/13/2022	1278 1091 1091 1003 1102 1379 1004 4d119 1051 1052 5d141 797 981 882 719 1071 1075 1075 1075 1075 1075 1075 1075
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D835/2 D1750/2 D1750/2 D1750/2 D2450/2 D2500/2 D2500/2 D2500/2 D2500/2 D2500/2 D2500/2 D2500/2 D2500/2 D2500/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 750 MHz 5AR Dipole 835 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 2450 MHz 5AR Dipole 2500 MHz 5AR Dipole 1500 MHz 5AR Dipole 1600 MHz 5AR Dipole 1700 MHz 5AR Dipole	10/20/2021 18/18/2021 18/18/2021 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/25/2021 11/22/2022 8/18/2021 11/12/2019 8/18/2021 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022	Annual	10/20/2022 18/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 2/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2023 8/18/2022 1/12/2023 9/16/2022 2/21/2023	1278 1091 1091 1091 1091 1102 1379 1103 1006 40119 1051 1092 50141 797 1013 882 719 1071 1126 1007 1107 1107 1107 1107 1107 1107 110
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 MAIA D750/3 D750/3 D750/3 D750/2 D1750/2 D1750/2 D1900/2 D2450/2 D250/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 835 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1900 MHz 5AR Dipole 2450 MHz 5AR Dipole 500 MHz 5AR Dipole 133 MHz 5AR Dipole 5 GHz 5AR Dipole 13 MHz 5AR Dipole 13 MHz 5AR Dipole Day Data Acquisition Electronics	10/20/2021 16/20/2021 17/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2019 11/12	Annual	10/20/2022 10/20/2022 18/18/2022 17/5/2023 3/21/2023 3/21/2023 18/18/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2022 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023	1278 1091 1091 1091 1102 1379 1102 1379 1003 1006 4d119 1051 1092 1510 1092 1510 1092 1102 1103 1106 1107 1107 1107 1107 1107 1107 1107
SPEAG SPEA	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750V3 D835V2 D1750V2 D1750V2 D1750V2 D1950V2 D2450V2 D3450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole 833 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 2450 MHz SAR Dipole 2500 MHz SAR Dipole 1850 MHz SAR Dipole 1950 MHz SAR Dipole	10/20/201 16/120/201 18/18/201 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 8/18/2021 11/12/2012 8/18/2021 11/12/2012 1/10/2022 1/10/2022 1/10/2022 1/11/2019 6/14/2022 2/22/2022 11/11/2021	Annual	10/20/2022 16/12/0/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2022 11/12/2023 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022	1278 1278 1041 1039 1102 1379 1046 44119 1051 1052 55141 797 981 882 719 1126 1057 1052 1645 1583 1334 6656
SPEAG SPEA	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 MAIA D750/3 D835V2 D1750V2 D1750V2 D1750V2 D1950V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10Metz - 36Hz) Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer 750 Metz SAR Dipole 835 Metz SAR Dipole 1750 Metz SAR Dipole 1750 Metz SAR Dipole 1750 Metz SAR Dipole 1950 Metz SAR Dipole 2450 Metz SAR Dipole 2500 Metz SAR Dipole 2600 Metz SAR Dipole 13 Metz SAR Dipole 5 GHz SAR Dipole 13 Metz SAR Dipole Day Data Acquisition Electronics	10/20/2021 18/18/2021 18/18/2021 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022	Annual	10/20/2022 18/18/2022 18/18/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2022 11/12/2022 11/12/2023	1278 1091 1091 1091 1091 1102 1379 1102 1379 1003 1046 4d119 1051 1092 1514 797 1981 1882 719 1071 1126 1052 1645 1583 1584 6665 1466 1466
SPEAG SPEA	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750V3 D835V2 D1750V2 D1750V2 D1750V2 D1950V2 D2450V2 D3450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 36Hz) Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole 833 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 2450 MHz SAR Dipole 2500 MHz SAR Dipole 1850 MHz SAR Dipole 1950 MHz SAR Dipole	10/20/201 16/120/201 18/18/201 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 2/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 8/18/2021 11/12/2012 8/18/2021 11/12/2012 1/10/2022 1/10/2022 1/10/2022 1/11/2019 6/14/2022 2/22/2022 11/11/2021	Annual	10/20/2022 16/12/0/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2022 11/12/2023 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022 1/13/2022	1278 1278 1041 1039 1102 1379 1046 44119 1051 1052 55141 797 981 882 719 1126 1057 1052 1645 1583 1334 6656
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-1.2 MAIA D750V3 D835V2 D1750V2 D1750V2 D1750V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer 750 Mit; SAR Dipole 835 Mit; SAR Dipole 1750 Mit; SAR Dipole 1750 Mit; SAR Dipole 1750 Mit; SAR Dipole 1750 Mit; SAR Dipole 2450 Mit; SAR Dipole 2500 Mit; SAR Dipole 130 Mit; SAR Dipole 140 Mit; SAR Dipole 150 Mit; SAR Dipole 160 Mit; SAR Dipole 170 Mit; SAR Dipole	10/20/201 18/18/2021 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022 8/18/2021 1/10/2022 11/12/2022 8/18/2021 1/10/2022 11/12/2022	Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 8/18/2022 1/10/2023 1/12/2023 8/18/2022 1/10/2023 1/12/2023 1/13/2022 1/13/2022 1/13/2023 1/13/2022 1/13/2023 1/13/2022 8/18/2022 1/13/2023 1/13/2022 8/18/2022 1/13/2023 1/13/2022 8/18/2022 1/13/2023 1/13/2022 8/18/2022	1278 1091 1091 1091 1091 1102 1379 1103 1046 40119 1051 1092 504141 797 981 882 719 1071 1126 1092 1645 1583 1334 1655 1466 1364
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 MAIA D750/3 D835V2 D1750V2 D1750V2 D1750V2 D150V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10Met - 36Hz) Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer 750 Met - SAR Dipole 750 Met - SAR Dipole 835 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 2450 Met - SAR Dipole 1850 Met - SAR Dipole 2600 Met - SAR Dipole 2600 Met - SAR Dipole 19 Met - SAR Dip	10/20/2021 16/20/2021 17/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2002	Annual	10/20/2022 10/20/2022 17/5/2023 3/21/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 2/22/2023 11/11/2022 2/21/2023 7/13/2022 2/21/2023 7/13/2022 8/4/2023 11/11/2022 8/4/2023 11/11/2022 8/4/2023	1278 1091 1091 1091 1102 1379 1102 1379 1003 1046 44119 1051 1092 56141 797 981 882 719 1071 11057 1002 1645 1583 1334 665 1466 1364 1660 1364
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-1.2 MAIA D750V3 D835V2 D1750V2 D1750V2 D1750V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer 750 Mit; SAR Dipole 835 Mit; SAR Dipole 1750 Mit; SAR Dipole 1750 Mit; SAR Dipole 1750 Mit; SAR Dipole 1750 Mit; SAR Dipole 2450 Mit; SAR Dipole 2500 Mit; SAR Dipole 130 Mit; SAR Dipole 140 Mit; SAR Dipole 150 Mit; SAR Dipole 160 Mit; SAR Dipole 170 Mit; SAR Dipole	10/20/201 18/18/2021 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022 8/18/2021 1/10/2022 11/12/2022 8/18/2021 1/10/2022 1/13/2021 1/10/2022 1/13/2021 1/11/2021 9/13/2021 1/11/2021 9/13/2021	Annual	10/20/2022 8/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 8/18/2022 1/10/2023 1/12/2023 8/18/2022 1/10/2023 1/12/2023 1/13/2022 1/13/2022 1/13/2023 1/13/2022 1/13/2023 1/13/2022 8/18/2022 1/13/2023 1/13/2022 8/18/2022 1/13/2023 1/13/2022 8/18/2022 1/13/2023 1/13/2022 8/18/2022	1278 1091 1091 1091 1091 1102 1379 1103 1046 40119 1051 1092 50141 797 981 882 719 1071 1126 1092 1645 1583 1334 665 1466 1364
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D75903 D839V2 D175902 D175902 D175902 D175902 D245902 D259002	Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz) Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 750 MHz 5AR Dipole 835 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 2450 MHz 5AR Dipole 1250 MHz 5AR Dipole 1260 MHz 5AR Dipole 13MHz 5AR Dipole	10/20/201 18/18/2021 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 2/14/3022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022 8/18/2021 11/12/2022 8/18/2021 11/12/2022 9/16/2021 2/21/2022 11/11/2019 6/14/2022 11/11/2021 6/14/2022 11/11/2021 8/4/2021 11/11/2021	Annual	10/20/2022 18/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2023 11/12/2022 11/12/2023 11/12/2023 11/12/2022 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2022 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2022	1278 1091 1091 1091 1091 1102 1379 1103 1006 4d119 1051 1092 1379 1091 1051 1092 1112 1112 1112 1112 1112 1112 111
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D835/2 D1750/2 D1750/2 D1750/2 D1950/2 D2450/2 D250/2 D250/2 D250/2 D25	Dielectric Assessment Kit Portable Dielectric Assessment Kit Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole 833 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 2450 MHz SAR Dipole 1000 MHz SAR Di	10/20/2021 18/18/2021 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/20/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022 8/18/2021 11/12/2022 11/12/2022 11/12/2022 12/22/2022 11/12/2022 12/22/2022 11/11/2021 13/14/2021 11/12/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021 13/14/2021	Annual	10/20/2022 10/20/2022 18/18/2022 7/5/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/20/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2023 11/12/2022 11/12/2023 1/22/2023	1278 1021 1039 1041 1039 1102 1379 1046 44119 1051 1052 1051 1051 1052 1051 1051 1051
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D75903 D839V2 D175902 D175902 D175902 D175902 D245902 D259002	Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit Dielectric Assessment Kit (10MHz - 3GHz) Modulation and Audio Interference Analyzer 750 MHz 5AR Dipole 750 MHz 5AR Dipole 835 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 1750 MHz 5AR Dipole 2450 MHz 5AR Dipole 1250 MHz 5AR Dipole 1260 MHz 5AR Dipole 13MHz 5AR Dipole	10/20/201 18/18/2021 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 2/14/3022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022 8/18/2021 11/12/2022 8/18/2021 11/12/2022 9/16/2021 2/21/2022 11/11/2019 6/14/2022 11/11/2021 6/14/2022 11/11/2021 8/4/2021 11/11/2021	Annual	10/20/2022 18/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2023 11/12/2022 11/12/2023 11/12/2023 11/12/2022 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2022 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2023 11/12/2022	1278 1091 1091 1091 1091 1102 1379 1103 1006 4d119 1051 1092 1514 797 1981 882 719 1071 1126 1092 1071 1126 1093 1094 1095 1097 1097 1126 1097 1097 1098 1334 1466 1466 1466 1480 1480 1482 1482
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 MAIA D750/3 M30 D835/2 D1750/2 D1750/2 D1750/2 D1950/2 D2450/2 D2450/2 D4450/2 D4450/2 D4450/2 D4450/2 D450/2 D450	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10Met - 36Hz) Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer 750 Met - SAR Dipole 835 Met - SAR Dipole 835 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1950 Met - SAR Dipole 2450 Met - SAR Dipole 2500 Met - SAR Dipole 2600 Met - SAR Dipole 3600 Met - SAR Dipole 5 GH - SAR Dipole 13 Met - SAR Dipole 5 GH - SAR Dipole 13 Met - SAR Dipole Day Data Acquisition Electronics	10/20/2021 16/20/2021 18/18/2021 17/5/2022 3/21/2022 18/18/2021 18/18/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022	Annual	10/20/2022 18/18/2022 7/5/2023 3/21/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/25/2022 2/22/2023 11/12/2022 11/12/2022 11/12/2023 9/16/2022 11/12/2023 9/16/2022 11/11/2023 9/16/2023 11/11/2022 11/11/2023 11/11/2022 11/10/2023 11/11/2022 11/10/2023 11/11/2022 11/10/2023 11/11/2022 11/10/2023 11/10/2023 11/10/2023 11/10/2023 11/10/2023 11/10/2022 11/10/2023	1278 1091 1091 1091 1091 1102 1379 1102 1379 1003 1046 4d119 1051 1052 5d141 797 1981 882 1971 1126 1057 1002 1645 1583 1334 1666 1466 1364 1680 1323 1272 7410
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750V3 D835V2 D1750V2 D1750V2 D1750V2 D1750V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Modulation and Audio Interference Analyzer 750 MHz SAR Dipole 750 MHz SAR Dipole 833 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 1750 MHz SAR Dipole 2450 MHz SAR Dipole 2450 MHz SAR Dipole 2450 MHz SAR Dipole 2450 MHz SAR Dipole 2500 MHz SAR Dipole 2600 MHz SAR Dipole 1830 MHz SAR Dipole 2600 MHz SAR Dipole 1840 MHz SAR Dipole 1950 MHz SAR Di	10/20/201 16/120/201 18/18/201 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 1/12/2022 8/18/201 11/12/2019 6/14/2022 1/22/2022 1/11/2022 1/11/2021 5/10/2022 1/11/2021 5/10/2022 1/11/2022 1/11/2021 5/10/2022 1/11/2021 5/10/2022 1/11/2022 1/11/2021 5/16/2022 1/16/2022 1/16/2022 1/16/2022 1/16/2022 1/16/2022	Annual	10/20/2022 16/20/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2023 11/12/2023 11/11/2022	1278 1278 1279 1041 1039 1102 1379 1003 1046 40119 1051 1092 50141 797 981 882 719 1071 1126 1057 1002 1445 1334 1334 1334 1365 1466 1364 1364 1364 1364 1364 1364 1364
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 MAIA D750/3 M30 D835/2 D1750/2 D1750/2 D1750/2 D1950/2 D2450/2 D2450/2 D4450/2 D4450/2 D4450/2 D4450/2 D450/2 D450	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10Met - 36Hz) Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer 750 Met - SAR Dipole 835 Met - SAR Dipole 835 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1950 Met - SAR Dipole 2450 Met - SAR Dipole 2500 Met - SAR Dipole 2600 Met - SAR Dipole 3600 Met - SAR Dipole 5 GH - SAR Dipole 13 Met - SAR Dipole 5 GH - SAR Dipole 13 Met - SAR Dipole Day Data Acquisition Electronics	10/20/2021 16/20/2021 18/18/2021 17/5/2022 3/21/2022 18/18/2021 18/18/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022	Annual	10/20/2022 18/18/2022 7/5/2023 3/21/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/25/2022 2/22/2023 11/12/2022 11/12/2022 11/12/2023 9/16/2022 11/12/2023 9/16/2022 11/11/2023 9/16/2023 11/11/2022 11/11/2023 11/11/2022 11/10/2023 11/11/2022 11/10/2023 11/11/2022 11/10/2023 11/11/2022 11/10/2023 11/10/2023 11/10/2023 11/10/2023 11/10/2023 11/10/2022 11/10/2023	1278 1091 1091 1091 1091 1102 1379 1102 1379 1003 1046 4d119 1051 1052 5d141 797 1981 882 1971 1126 1057 1002 1645 1583 1334 1666 1466 1364 1680 1323 1272 7410
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D859/2 D1750/2 D1750/2 D1750/2 D1750/2 D2450/2 D2500/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10Met - 36Hz) Modulation and Audio Interference Analyzer 750Met SAR Dipole 750Met SAR Dipole 835 Met SAR Dipole 1750Met SAR Dipole 1750Met SAR Dipole 1750Met SAR Dipole 1750Met SAR Dipole 2450Met SAR Dipole 135Met SAR Dipole 2650Met SAR Dipole 1650Met SAR Dipole 175Met SAR Dipole 185Met SAR Dipole 185Met SAR Dipole 190Met Acquisition Electronics 190Met SAR Dipole 190Met SAR Dipole 190Met SAR Probe	10/20/2021 16/20/2021 18/18/2021 17/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/25/2021 11/25/2021 11/25/2021 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/12/2002 11/16/2022 11/16/2022 11/16/2022 11/16/2022 11/16/2022	Annual	10/20/2022 16/20/2023 18/18/2022 17/5/2023 3/21/2023 3/21/2023 18/18/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/25/2022 1/22/2023 11/12/2022 11/12/2022 11/12/2023 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/12/2023 11/12/2023 11/12/2022 11/12/2023 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022	1278 1091 1091 1091 1091 1102 1379 1102 1379 1003 1046 4d119 1051 1092 1379 1071 1125 1081 882 719 1071 1126 11081 1126 1126 1126 1127 1127 1127 1127 112
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750V3 D825V2 D1750V2 D1750V2 D1750V2 D1750V2 D2450V2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Modulation and Audio Interference Analyzer 750 Mit; SAR Dipole 750 Mit; SAR Dipole 835 Mit; SAR Dipole 1750 Mit; SAR Dipole 1750 Mit; SAR Dipole 1750 Mit; SAR Dipole 2450 Mit; SAR Dipole 1350 Mit; SAR Dipole 1260 Mit; SAR Dipole 1360 Mit; SAR Dipole 13 Mit; SAR Dipole 139 Mit; SAR Dipole 149 Mit; SAR Dipole 159 Mit; SAR Dipole 159 Mit; SAR Dipole 160 Mit; SAR Dipole 170 Mit; SAR Dipole 180 Mit; SAR Di	10/20/201 16/20/201 18/18/201 7/5/2022 3/21/2022 3/21/2022 1/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2019 8/18/2021 11/12/2019 8/18/2021 11/12/2019 8/18/2021 11/12/2019 8/18/2021 11/11/2019 8/18/2021 11/11/2019 11/11/2019 11/11/2019 11/11/2019 11/11/2019 11/11/2019 11/11/2019 11/11/2019 11/11/2019 11/11/2019 11/11/2019 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021 11/11/2021	Annual	10/20/2022 18/18/2022 7/5/2023 3/21/2023 3/21/2023 1/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/11/2022 11/12/2023 11/12/2023 11/12/2022 11/12/2023 11/12/2023 11/12/2022 11/12/2023 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022 11/12/2022	1278 1091 1091 1091 1091 1102 1379 1103 1046 40119 1051 1092 1514 1797 1051 1882 719 1071 1126 1071 1071 1126 11334 1134 1146 1156 1166 11564 11583 11334 1134 1156 11564 11569 1157 1177 117 117 117 117 117 117 117 1
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D835V2 D1750/2 D1750/2 D1750/2 D1950/2 D2450/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10Met - 36Hz) Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer FSO Met - SAR Dipole TSO Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1350 Met - SAR Dipole 2450 Met - SAR Dipole 160 Met - SAR Dipole 1750 Met - SAR Dipole	10/20/2021 18/18/2021 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 8/18/2021 11/12/2019 3/18/2021 11/12/2019 5/16/2021 2/21/2022 11/11/2019 5/16/2021 8/4/2021 11/10/2021 8/4/2021 11/10/2021 11/10/2021 11/10/2021 11/10/2021 11/10/2021 11/10/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021	Annual	10/20/2022 16/20/2023 8/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/15/2022 2/22/2023 11/11/2022 2/21/2023 7/13/2022 8/42/2023 11/11/2022 8/42/2023 11/11/2022 3/16/2023 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/	1278 1091 1091 1091 1091 1102 1379 1102 1379 1003 1046 44119 1051 1092 56141 797 101 1126 1051 1052 1071 1126 1051 1052 1071 1126 1053 1064 1680 1364 1680 1364 1680 1323 1272 7410 7409 7558 7417 7565
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D835V2 D1750/2 D1750/2 D1750/2 D1950/2 D2450/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10Met - 36Hz) Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer FSO Met - SAR Dipole TSO Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1350 Met - SAR Dipole 2450 Met - SAR Dipole 160 Met - SAR Dipole 1750 Met - SAR Dipole	10/20/2021 18/18/2021 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 8/18/2021 11/12/2019 3/18/2021 11/12/2019 5/16/2021 2/21/2022 11/11/2019 5/16/2021 8/4/2021 11/10/2021 8/4/2021 11/10/2021 11/10/2021 11/10/2021 11/10/2021 11/10/2021 11/10/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021	Annual	10/20/2022 16/20/2023 8/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/15/2022 2/22/2023 11/11/2022 2/21/2023 7/13/2022 8/42/2023 11/11/2022 8/42/2023 11/11/2022 3/16/2023 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/	1278 1091 1091 1091 1091 1102 1379 1102 1379 1003 1046 44119 1051 1092 56141 797 101 1126 1051 1052 1071 1126 1051 1052 1071 1126 1053 1064 1680 1364 1680 1364 1680 1323 1272 7410 7409 7558 7417 7565
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D75903 D83902 D175902 D175902 D175902 D175902 D175902 D245902 D245902 D245902 D245902 D245902 D445902 D445902 D445902 D445902 D445902 D45902 D56002 D5600	Dielectric Assessment Kit Portable Dielectric Assessment Kit Modulation and Audio Interference Analyzer 750 Met; SAR Dipole 750 Met; SAR Dipole 835 Met; SAR Dipole 1750 Met; SAR Dipole 1750 Met; SAR Dipole 1750 Met; SAR Dipole 2450 Met; SAR Dipole 2500 Met; SAR Dipole 133 Met; SAR Dipole 133 Met; SAR Dipole 133 Met; SAR Dipole 2500 Met; SAR Dipole 133 Met; SAR Dipole 134 Acquisition Electronics Dasy Data Acquisition Electronics	10/20/201 18/18/201 7/5/2022 3/21/2022 3/21/2022 3/21/2022 1/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 11/12/2022 8/18/2021 11/12/2022 8/18/2021 11/12/2022 11/12/2022 11/12/2022 11/11/2021	Annual	10/20/2022 18/18/2022 7/5/2023 3/21/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/15/2022 11/12/2023 8/18/2022 11/12/2023 11/11/2022 8/18/2022 11/11/2022 11/11/2022 8/18/2022 11/11/2023 11/11/2022	1278 1091 1091 1091 1091 1102 1379 1103 1003 1003 1003 1005 40119 1051 1092 50141 797 1013 882 719 1071 1126 11071 1126 11071 1126 11071 1126 11071 1126 11071 1126 11071 1127 1128 1128 1128 1128 1128 1128 11
SPEAG	DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-3.5 DAK-12 MAIA D750/3 D835V2 D1750/2 D1750/2 D1750/2 D1950/2 D2450/2	Dielectric Assessment Kit Portable Dielectric Assessment Kit Portable Dielectric Assessment Kit Dielectric Assessment Kit (10Met - 36Hz) Modulation and Audio Interference Analyzer Modulation and Audio Interference Analyzer FSO Met - SAR Dipole TSO Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1750 Met - SAR Dipole 1350 Met - SAR Dipole 2450 Met - SAR Dipole 160 Met - SAR Dipole 1750 Met - SAR Dipole	10/20/2021 18/18/2021 7/5/2022 3/21/2022 3/21/2022 N/A 5/9/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 4/14/2022 8/18/2021 11/12/2019 3/18/2021 11/12/2019 5/16/2021 2/21/2022 11/11/2019 5/16/2021 8/4/2021 11/10/2021 8/4/2021 11/10/2021 11/10/2021 11/10/2021 11/10/2021 11/10/2021 11/10/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021 11/16/2021	Annual	10/20/2022 16/20/2023 8/18/2022 7/5/2023 3/21/2023 3/21/2023 N/A 5/9/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 4/14/2023 11/15/2022 2/22/2023 11/11/2022 2/21/2023 7/13/2022 8/42/2023 11/11/2022 8/42/2023 11/11/2022 3/16/2023 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/16/2024 3/	1278 1091 1091 1091 1091 1102 1379 1103 1103 1003 1003 1003 1005 1092 1091 1091 1091 1091 1091 1091 1091

Note:

- CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter
 were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter
 offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter
 before measurements are made. This calibration verification procedure applies to the system verification and output power
 measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final
 power measurements.
- Each equipment item was used solely within its respective calibration period.

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MEASUREMENT UNCERTAINTIES

For SAR Measurements

Rivieasurements									
a	b	С	d	e=	f	8	h =	i =	k
				f(d , k)			cx f/e	c x g/e	
	IEEE	Tol.	Prob.		c _i	c _i	1gm	10gms	
Uncertainty Component	1528 Sec.	(± %)	Dist.	Div.	1gm	10 gms	u:	u;	v;
	Sec.						(±%)	(± %)	Ι΄.
Measurement System									
Probe Calibration	E.2.1	7	N	1	1	1	7.0	7.0	00
Axial Isotropy	E.2.2	0.25	N	1	0.7	0.7	0.2	0.2	00
Hemishperical Isotropy	E.2.2	1.3	N	1	0.7	0.7	0.9	0.9	00
Boundary Effect	E.2.3	2	R	1.732	1	1	1.2	1.2	00
Line arity	E.2.4	0.3	N	1	1	1	0.3	0.3	00
System Detection Limits	E.2.4	0.25	R	1.732	1	1	0.1	0.1	00
Modulation Response	E.2.5	4.8	R	1.732	1	1	2.8	2.8	00
Readout Electronics	E.2.6	0.3	N	-1	1	- 1	0.3	0.3	00
Response Time	E.2.7	8.0	R	1.732	1	1	0.5	0.5	00
Integration Time	E.2.8	2.6	R	1.732	1	1	1.5	1.5	00
RF Ambient Conditions - Noise	E.6.1	3	R	1.732	1	1	1.7	1.7	00
RF Ambient Conditions - Reflections	E.6.1	3	R	1.732	1	1	1.7	1.7	00
Probe Positioner Mechanical Tolerance	E.6.2	8.0	R	1.732	1	1	0.5	0.5	00
Probe Positioning w/respect to Phantom	E.6.3	6.7	R	1.732	1	1	3.9	3.9	00
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.732	1	1	2.3	2.3	00
Test Sample Related									
Test Sample Positioning	E.4.2	3.12	N	1	1	1	3.1	3.1	35
Device Holder Uncertainty	E.4.1	1.67	N	1	1	1	1.7	1.7	5
Output Power Variation - SAR drift measurement	E.2.9	5	R	1.732	1	1	2.9	2.9	00
SAR Scaling	E.6.5	0	R	1.732	1	1	0.0	0.0	00
Phantom & Tissue Parameters									
Phantom Uncertainty (Shape & Thickness tolerances)	E.3.1	7.6	R	1.73	1.0	1.0	4.4	4.4	00
Liquid Conductivity - measurement uncertainty	E.3.3	4.3	N	1	0.78	0.71	3.3	3.0	76
Liquid Permittivity - measurement uncertainty	E.3.3	4.2	N	1	0.23	0.26	1.0	1.1	75
Liquid Conductivity - Temperature Uncertainty	E.3.4	3.4	R	1.732	0.78	0.71	1.5	1.4	00
Liquid Permittivity - Temperature Unceritainty	E.3.4	0.6	R	1.732	0.23	0.26	0.1	0.1	00
Liquid Conductivity - deviation from target values	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	00
Liquid Permittivity - deviation from target values	E.3.2	5.0	R	1.73	0.60	0.49	1.7	1.4	00
Combined Standard Uncertainty (k=1)			RSS		•	•	12.2	12.0	191
Expanded Uncertainty			k=2				24.4	24.0	
(95% CONFIDENCE LEVEL)								1	

The above measurement uncertainties are according to IEEE Std. 1528-2013

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