

Plots of System Verification

Appendix A. Plots of System Verification

The plots for system verification are shown as follows.

Plots of System Verification

Measurement Report
S01 System Check_H2450_250227
Device under Test Properties

| Model, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|---------------------|---------------------|------|----------|
| D2450V2 – SN:735 | 10.0 x 10.0 x 290.0 | | Dipole |

Exposure Conditions

| Phantom Section, TSL | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|-------------------------|---------------------------------|------|---------------|---------------------------------------|----------------------|---------------------------|------------------|
| Flat, | , | | CW, 0-- | 2450.000, 0 | 6.66 | 1.79 | 39.4 |

Hardware Setup

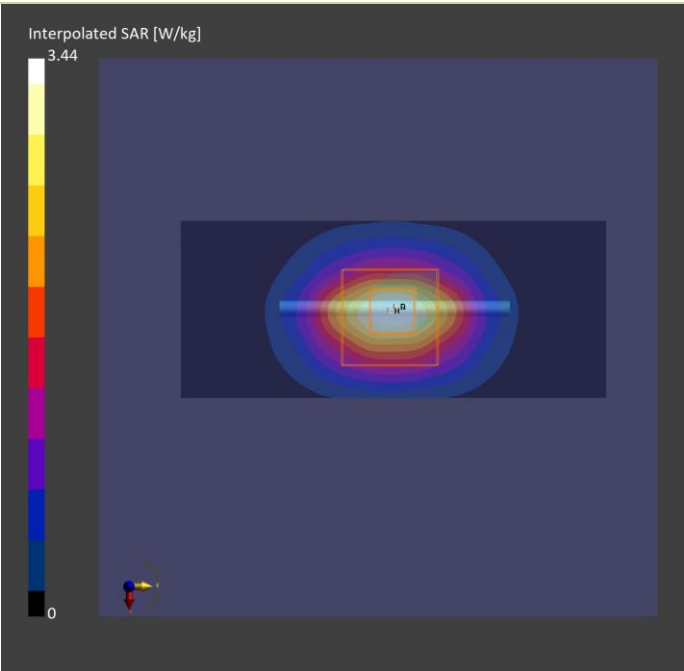
| Phantom | TSL, Measured Date | Probe, Calibration Date | DAE, Calibration Date |
|--|-----------------------|-----------------------------|-------------------------|
| Twin-SAM V8.0 (30deg probe tilt) - 2122 | H19T27N9 , 2025-02-27 | EX3DV4 - SN7537, 2024-11-20 | DAE4 Sn1431, 2024-07-16 |

Scan Setup

| | Area Scan | Zoom Scan |
|------------------------|-------------|--------------------|
| Grid Extents [mm] | 48.0 x 96.0 | 35.0 x 35.0 x 30.0 |
| Grid Steps [mm] | 12.0 x 12.0 | 5.0 x 5.0 x 1.5 |
| Sensor Surface [mm] | 3.0 | 1.4 |

Measurement Results

| | Area Scan | Zoom Scan |
|------------------|------------|------------|
| Date | 2025-02-27 | 2025-02-27 |
| psSAR1g [W/kg] | 2.59 | 2.55 |
| psSAR10g [W/kg] | 1.19 | 1.16 |
| Power Drift [dB] | 0.01 | -0.03 |



Plots of System Verification

Measurement Report S02 System Check_H2450_250320 Device under Test Properties

| Model, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|---------------------|---------------------|------|----------|
| D2450V2 – SN:735 | 10.0 x 10.0 x 290.0 | | Dipole |

Exposure Conditions

| Phantom Section, TSL | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|-------------------------|---------------------------------|------|---------------|---------------------------------------|----------------------|---------------------------|------------------|
| Flat, | , | | CW, 0-- | 2450.0, 0 | 7.33 | 1.79 | 37.9 |

Hardware Setup

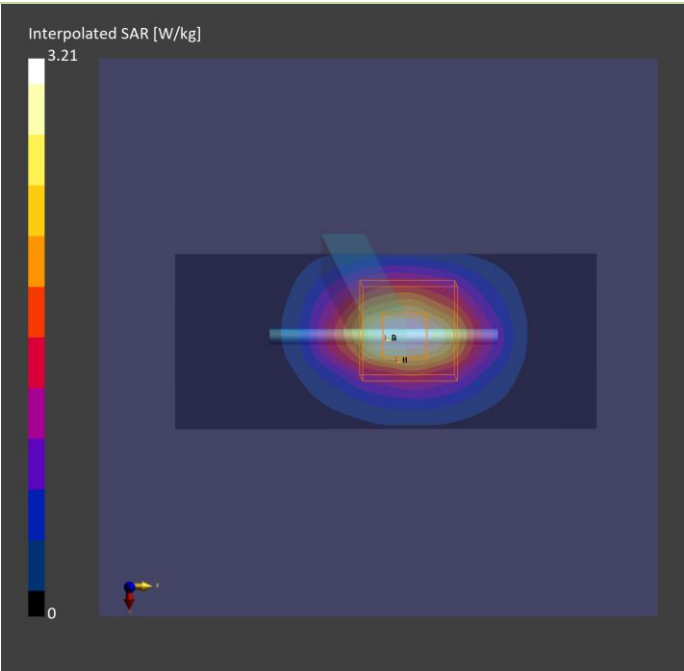
| Phantom | TSL, Measured Date | Probe, Calibration Date | DAE, Calibration Date |
|--|------------------------|-----------------------------|-------------------------|
| Twin-SAM V8.0 (30deg probe tilt) - 1988 | H19T27N5 , 2025-Mar-20 | EX3DV4 - SN7555, 2024-04-24 | DAE4 Sn1698, 2024-11-20 |

Scan Setup

| | Area Scan | Zoom Scan |
|------------------------|-------------|--------------------|
| Grid Extents [mm] | 48.0 x 96.0 | 35.0 x 35.0 x 30.0 |
| Grid Steps [mm] | 12.0 x 12.0 | 5.0 x 5.0 x 1.5 |
| Sensor Surface [mm] | 3.0 | 1.4 |

Measurement Results

| | Area Scan | Zoom Scan |
|------------------|------------|------------|
| Date | 2025-03-20 | 2025-03-20 |
| psSAR1g [W/kg] | 2.49 | 2.50 |
| psSAR10g [W/kg] | 1.17 | 1.20 |
| Power Drift [dB] | -0.01 | -0.01 |



Appendix B. Plots of Measurement

The SAR plots for highest measured SAR in each exposure configuration, wireless mode and frequency band combination are shown as follows.

Plots of Measurement

Measurement Report

P01 BT_LE-2M_Rear Face_0mm_Ch1_Sample Logi BOLT_Ant Status_Ant 0

Device under Test Properties

| Model, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|---------------------|----------------------|------|----------------|
| TR0006 | 134.0 x 100.0 x 48.0 | | Wireless Mouse |

Exposure Conditions

| Phantom Section, TSL | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|----------------------|------------------------------|------------------|----------------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, | Rear Face, 0.00 | ISM 2.4 GHz Band | Bluetooth, 10670-AAA | 2404.000, 1 | 6.66 | 1.76 | 38.5 |

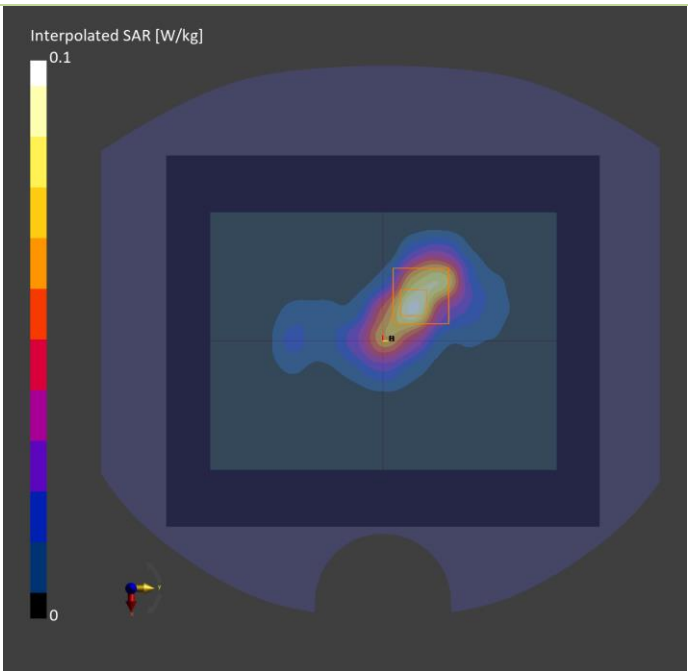
Hardware Setup

| Phantom | TSL, Measured Date | Probe, Calibration Date | DAE, Calibration Date |
|---|-----------------------|-----------------------------|-------------------------|
| Twin-SAM V8.0 (30deg probe tilt) - 2122 | H19T27N9 , 2025-02-27 | EX3DV4 - SN7537, 2024-11-20 | DAE4 Sn1431, 2024-07-16 |

Scan Setup

| | Area Scan | Zoom Scan | | Area Scan | Zoom Scan |
|---------------------|---------------|--------------------|--------------------|------------|------------|
| Grid Extents [mm] | 144.0 x 168.0 | 30.0 x 30.0 x 30.0 | Date | 2025-02-27 | 2025-02-27 |
| Grid Steps [mm] | 12.0 x 12.0 | 5.0 x 5.0 x 5.0 | psSAR1g [W/kg] | 0.072 | 0.083 |
| Sensor Surface [mm] | 3.0 | 1.4 | psSAR10g [W/kg] | 0.036 | 0.039 |
| | | | Power Drift [dB] | -0.12 | -0.06 |
| | | | M2/M1 [%] | | 53.8 |
| | | | Dist 3dB Peak [mm] | | 7.9 |

Measurement Results



Plots of Measurement

Measurement Report

P02 BT_LE-1M_Rear Face_0mm_CH0_Sample UFY_Ant 0

Device under Test Properties

| Model, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|---------------------|----------------------|------|----------------|
| TR006, | 134.0 x 100.0 x 48.0 | | Wireless Mouse |

Exposure Conditions

| Phantom Section, TSL | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|----------------------|------------------------------|------------------|----------------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, | Rear Face, 0.00 | ISM 2.4 GHz Band | Bluetooth, 10670-AAA | 2402.000, 0 | 7.33 | 1.75 | 38.0 |

Hardware Setup

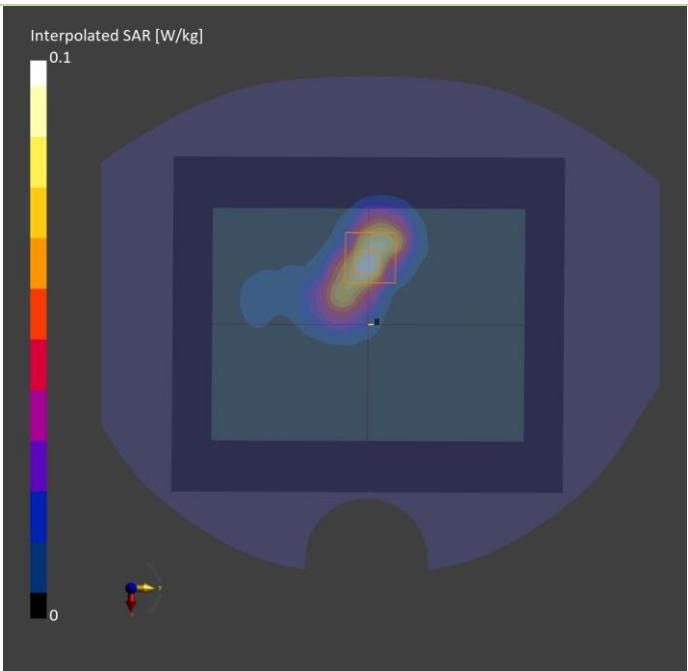
| Phantom | TSL, Measured Date | Probe, Calibration Date | DAE, Calibration Date |
|---|------------------------|-----------------------------|-------------------------|
| Twin-SAM V8.0 (30deg probe tilt) - 1988 | H19T27N5 , 2025-Mar-20 | EX3DV4 - SN7555, 2024-04-24 | DAE4 Sn1698, 2024-11-20 |

Scan Setup

| | Area Scan | Zoom Scan |
|---------------------|---------------|--------------------|
| Grid Extents [mm] | 144.0 x 168.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm] | 12.0 x 12.0 | 5.0 x 5.0 x 5.0 |
| Sensor Surface [mm] | 3.0 | 1.4 |

Measurement Results

| | Area Scan | Zoom Scan |
|--------------------|------------|------------|
| Date | 2025-03-20 | 2025-03-20 |
| psSAR1g [W/kg] | 0.076 | 0.087 |
| psSAR10g [W/kg] | 0.037 | 0.040 |
| Power Drift [dB] | 0.05 | 0.03 |
| M2/M1 [%] | | 52.1 |
| Dist 3dB Peak [mm] | | 8.5 |



Appendix C. Tissue & System Verification

The measuring results for tissue simulating liquid and system check are shown as below.

Note:

1. For Section 4.3, the dielectric properties of the tissue simulating liquid have been measured within 24 hours before the SAR testing and within ± 10 % of the target values. Liquid temperature during the SAR testing has kept within ± 2 °C.
2. For Section 4.4, The SAR measurement system was validated according to procedures in FCC KDB 865664 D0. The validation status in tabulated summary is as below.
3. For Section 4.5, Comparing to the reference SAR value provided by SPEAG in dipole calibration certificate, the deviation of system check results is within its specification of 10 %. The result indicates the system check can meet the variation criterion and the plots please refer to Appendix A of this report.

| Tissue Verification | | | | | | | | | Validation for CW | | | Validation for Modulation | | | | System Check | | | | | Note | | | |
|---------------------|-----------------|-------------------|------------------|--------------------------------|---------------------------|---|----------------------------|--|-------------------|-----------------|----------------|---------------------------|-------------|------|---------------|-----------------|-------------------------|-------------------------|---------------------------|---------------|------------|-----------|---------|--------------------|
| Plot No. | Frequency (MHz) | Liquid Temp. (°C) | Conductivity (σ) | Permittivity (ε _r) | Targeted Conductivity (σ) | Targeted Permittivity (ε _r) | Deviation Conductivity (σ) | Deviation Permittivity (ε _r) | Sensitivity Range | Probe Linearity | Probe Isotropy | Modulation Type | Duty Factor | PAR | Date | Frequency (MHz) | Targeted 10g SAR (W/kg) | Measured 10g SAR (W/kg) | Normalized 10g SAR (W/kg) | Deviation (%) | Dipole S/N | Probe S/N | DAE S/N | Output Power (dBm) |
| S01 | 2450 | 22.3 | 1.79 | 39.4 | 1.8 | 39.2 | -0.56 | 0.51 | Pass | Pass | Pass | OFDM | N/A | Pass | Feb. 27, 2025 | 2450 | 24.90 | 1.16 | 23.15 | -7.05 | 735 | 7537 | 1431 | 17 |
| S02 | 2450 | 21.9 | 1.79 | 37.9 | 1.8 | 39.2 | -0.56 | -3.32 | Pass | Pass | Pass | OFDM | N/A | Pass | Mar. 20, 2025 | 2450 | 24.90 | 1.2 | 23.94 | -3.84 | 735 | 7555 | 1698 | 17 |

Appendix D. Maximum Target Conducted Power

The maximum conducted average power (Unit: dBm) including tune-up tolerance is shown as below.

| Tune-up Power (Full) | | | |
|-------------------------|---------|-----------|----------------------|
| Logibolt Ant 0_sample 1 | | | |
| Mode | Channel | Frequency | Ant 0 Max Tune-up |
| LE-1M | 0 | 2402 | 5.0 |
| | 19 | 2440 | 5.0 |
| | 39 | 2480 | 5.0 |
| LE-2M | 1 | 2404 | 5.0 |
| | 19 | 2440 | 5.0 |
| | 38 | 2478 | 5.0 |
| BT LE Ant 0_sample 1 | | | |
| Mode | Channel | Frequency | Max Tune-up |
| LE-1M | 0 | 2402 | 5.0 |
| | 19 | 2440 | 5.0 |
| | 39 | 2480 | 5.0 |
| LE-2M | 1 | 2404 | 5.0 |
| | 19 | 2440 | 5.0 |
| | 38 | 2478 | 5.0 |

| Tune-up Power (Full) | | | |
|----------------------|---------|-----------|----------------------|
| UFY Ant 0_sample 2 | | | |
| Mode | Channel | Frequency | Ant 0 Max Tune-up |
| GFSK | 1 | 2403 | 5.0 |
| | 42 | 2444 | 5.0 |
| | 79 | 2481 | 5.0 |
| BT LE Ant 0_sample 2 | | | |
| Mode | Channel | Frequency | Ant 0 Max Tune-up |
| LE-1M | 0 | 2402 | 5.0 |
| | 19 | 2440 | 5.0 |
| | 39 | 2480 | 5.0 |
| LE-2M | 1 | 2404 | 5.0 |
| | 19 | 2440 | 5.0 |
| | 38 | 2478 | 5.0 |

Appendix E. Measured Conducted Power Result

The measuring conducted power (Unit: dBm) are shown as below.

| Conducted Power (Full) | | | |
|-------------------------|---------|-----------|--------------------------|
| Logibolt Ant 0_sample 1 | | | |
| Mode | Channel | Frequency | SISO Ant 0 Avg. Power |
| LE-1M | 0 | 2402 | 4.35 |
| | 19 | 2440 | 4.19 |
| | 39 | 2480 | 4.12 |
| LE-2M | 1 | 2404 | 4.35 |
| | 19 | 2440 | 4.22 |
| | 38 | 2478 | 4.15 |
| BT LE Ant 0_sample 1 | | | |
| Mode | Channel | Frequency | SISO Ant 0 Avg. Power |
| LE-1M | 0 | 2402 | 4.5 |
| | 19 | 2440 | 4.37 |
| | 39 | 2480 | 4.23 |
| LE-2M | 1 | 2404 | 4.51 |
| | 19 | 2440 | 4.39 |
| | 38 | 2478 | 4.25 |

| Conducted Power (Full) | | | |
|------------------------|---------|-----------|--------------------------|
| UFY Ant 0_sample 2 | | | |
| Mode | Channel | Frequency | SISO Ant 0 Avg. Power |
| GFSK | 1 | 2403 | 4.59 |
| | 42 | 2444 | 4.39 |
| | 79 | 2481 | 4.07 |
| BT LE Ant 0_sample 2 | | | |
| Mode | Channel | Frequency | SISO Ant 0 Avg. Power |
| LE-1M | 0 | 2402 | 4.62 |
| | 19 | 2440 | 4.48 |
| | 39 | 2480 | 4.33 |
| LE-2M | 1 | 2404 | 4.59 |
| | 19 | 2440 | 4.47 |
| | 38 | 2478 | 4.35 |

Appendix F. SAR Test Result

SAR Results for Extremity Exposure Condition.

Note:

1. SAR testing for BT was performed on the maximum power mode.
2. The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

| Extremity SAR Test Result | | | | | | | | | | | | | | |
|---------------------------|------|-------|---------------|--------------------------|---------|-----------|------------|--------------|--------------------------|--------------------------------|----------------|------------------|-------------------------|-----------------------|
| System & Position | | | | | | DUT | SAR | | | | | | | |
| Plot No. | Band | Mode | Test Position | Separation Distance (mm) | Channel | Sample | Duty Cycle | Crest Factor | Max. Tune-up Power (dBm) | Measured Conducted Power (dBm) | Scaling Factor | Power Drift (dB) | Measured SAR-10g (W/kg) | Scaled SAR-10g (W/kg) |
| 1 | BT | LE-2M | Front Curve | 0 | 1 | Logi BOLT | 84.80 | 1.18 | 5.00 | 4.51 | 1.12 | 0 | <0.001 | 0.00 |
| | BT | LE-2M | Rear Face | 0 | 1 | Logi BOLT | 84.80 | 1.18 | 5.00 | 4.51 | 1.12 | -0.06 | 0.039 | 0.05 |
| | BT | LE-2M | Left Side | 0 | 1 | Logi BOLT | 84.80 | 1.18 | 5.00 | 4.51 | 1.12 | 0 | <0.001 | 0.00 |
| | BT | LE-2M | Right Side | 0 | 1 | Logi BOLT | 84.80 | 1.18 | 5.00 | 4.51 | 1.12 | 0 | <0.001 | 0.00 |
| | BT | LE-2M | Top Side | 0 | 1 | Logi BOLT | 84.80 | 1.18 | 5.00 | 4.51 | 1.12 | 0 | <0.001 | 0.00 |
| | BT | LE-2M | Bottom Side | 0 | 1 | Logi BOLT | 84.80 | 1.18 | 5.00 | 4.51 | 1.12 | 0 | <0.001 | 0.00 |
| | BT | LE-2M | Rear Face | 0 | 19 | Logi BOLT | 84.80 | 1.18 | 5.00 | 4.39 | 1.15 | 0.03 | 0.037 | 0.05 |
| | BT | LE-2M | Rear Face | 0 | 38 | Logi BOLT | 84.80 | 1.18 | 5.00 | 4.25 | 1.19 | 0.12 | 0.035 | 0.05 |
| | | | | | | | | | | | | | | |
| 2 | BT | LE-1M | Front Curve | 0 | 0 | UFY | 92.14 | 1.09 | 5.00 | 4.62 | 1.09 | 0 | <0.001 | 0.00 |
| | BT | LE-1M | Rear Face | 0 | 0 | UFY | 92.14 | 1.09 | 5.00 | 4.62 | 1.09 | 0.03 | 0.04 | 0.05 |
| | BT | LE-1M | Left Side | 0 | 0 | UFY | 92.14 | 1.09 | 5.00 | 4.62 | 1.09 | 0 | <0.001 | 0.00 |
| | BT | LE-1M | Right Side | 0 | 0 | UFY | 92.14 | 1.09 | 5.00 | 4.62 | 1.09 | 0 | <0.001 | 0.00 |
| | BT | LE-1M | Top Side | 0 | 0 | UFY | 92.14 | 1.09 | 5.00 | 4.62 | 1.09 | 0 | <0.001 | 0.00 |
| | BT | LE-1M | Bottom Side | 0 | 0 | UFY | 92.14 | 1.09 | 5.00 | 4.62 | 1.09 | 0 | <0.001 | 0.00 |
| | BT | LE-1M | Rear Face | 0 | 19 | UFY | 92.14 | 1.09 | 5.00 | 4.48 | 1.13 | 0.12 | 0.039 | 0.05 |
| | BT | LE-1M | Rear Face | 0 | 39 | UFY | 92.14 | 1.09 | 5.00 | 4.33 | 1.17 | -0.07 | 0.036 | 0.05 |
| | | | | | | | | | | | | | | |

Appendix J. Calibration of Test Equipment List

Calibration of Test Equipment List are shown as below.

Equipment for SAR Test

| Equipment | Manufacturer | Model | SN | Cal. Date | Cal. Interval |
|------------------------------|--------------|---------------|-----------|---------------|---------------|
| System Validation Dipole | SPEAG | D2450V2 | 735 | Dec. 13, 2024 | 1 Year |
| Dosimetric E-Field Probe | SPEAG | EX3DV4 | 7537 | Nov. 20, 2024 | 1 Year |
| Dosimetric E-Field Probe | SPEAG | EX3DV4 | 7555 | Apr. 24, 2024 | 1 Year |
| Data Acquisition Electronics | SPEAG | DAE4 | 1431 | Jul. 16, 2024 | 1 Year |
| Data Acquisition Electronics | SPEAG | DAE4 | 1698 | Nov. 20, 2024 | 1 Year |
| Power Meter | Anritsu | ML2495A | 1218009 | Nov. 22, 2024 | 1 Year |
| Power Sensor | Anritsu | MA2411B | 1207252 | Nov. 22, 2024 | 1 Year |
| Thermometer | YFE | YF-160A | 120702365 | Sep. 12, 2024 | 1 Year |
| Dielectric Assessment Kit | SPEAG | DAK-3.5 | 1151 | Jul. 15, 2024 | 1 Year |
| Powersource1 | SPEAG | SE_UMS_160 BA | 4260 | Nov. 11, 2024 | 1 Year |

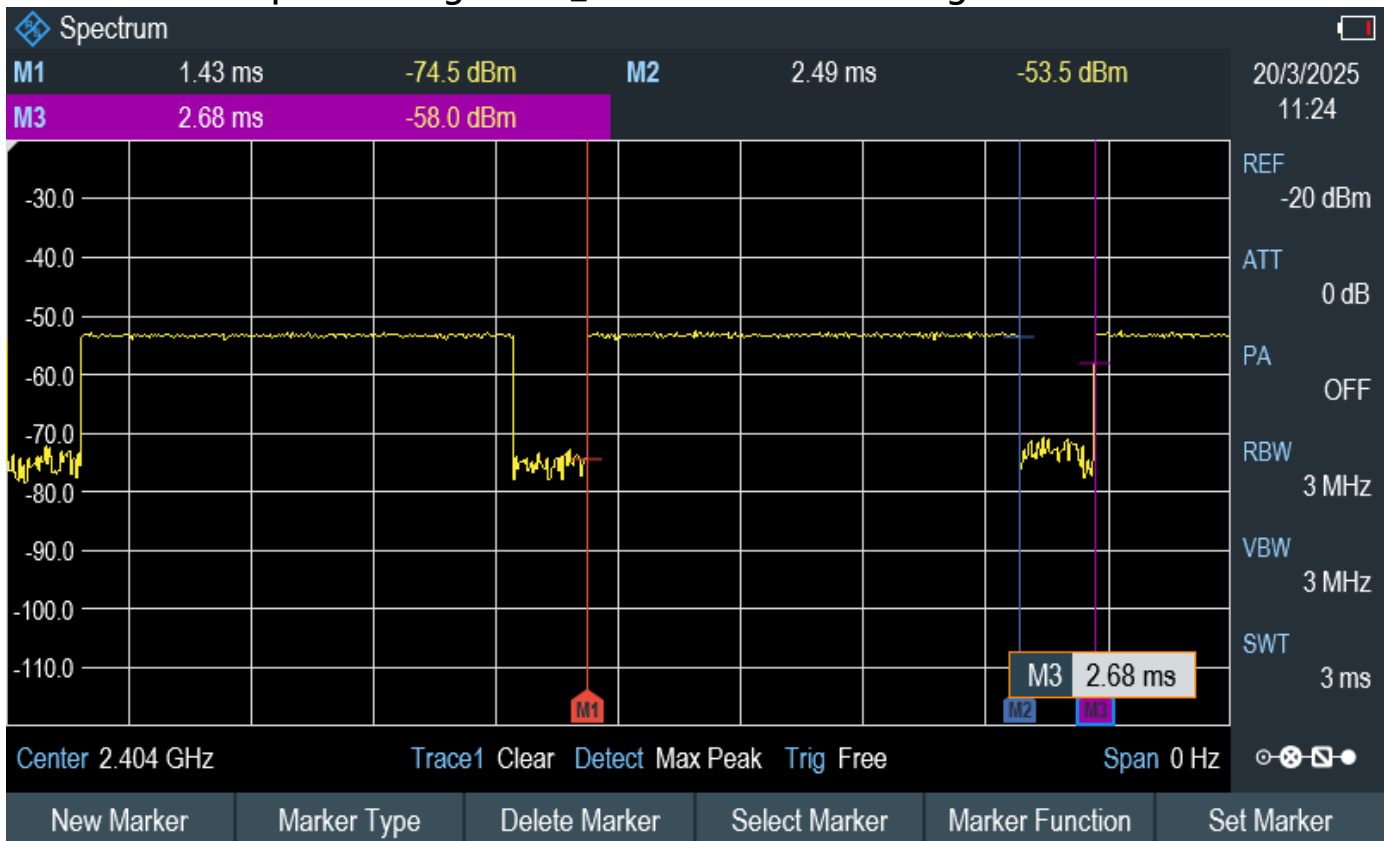
Appendix K. Considerations Related to Bluetooth for Setup and Testing

This device has installed Bluetooth engineering testing software which can provide continuous transmitting RF signal. During Bluetooth SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.

The Bluetooth call box has been used during SAR measurement and the EUT was set to LE mode at the maximum output power. Its duty factor was calculated as below and the measured SAR for Bluetooth would be scaled to the 100% transmission duty factor to determine compliance.

The duty factor of Bluetooth signal are shown as below.

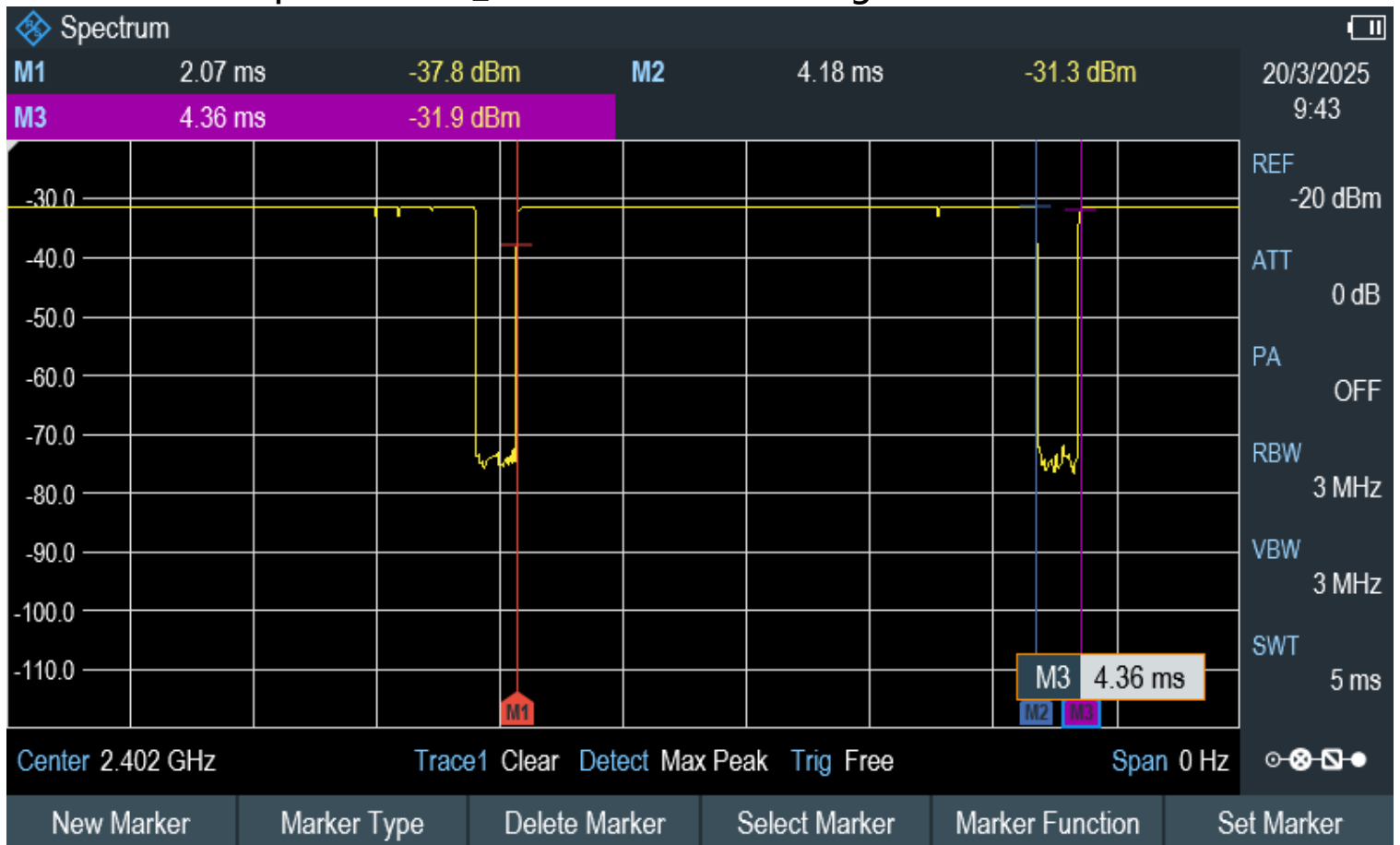
<Time-domain plot for Logi BOLT_LE-2M transmission signal>



The duty factor of Bluetooth signal has been calculated as following.

$$\text{Duty Factor} = \text{Pulse Width} / \text{Total Period} = (2.49 - 1.43) / (2.68 - 1.43) = 84.80\%$$

<Time-domain plot for UFY_LE-1M transmission signal>



The duty factor of Bluetooth signal has been calculated as following.

$$\text{Duty Factor} = \text{Pulse Width} / \text{Total Period} = (4.18 - 2.07) / (4.36 - 2.07) = 92.14\%$$