

Appendix A-1 WIFI6E and PD Test Plots of System Verification

The plots for system verification with largest deviation for each WIFI6E system combination are shown as follows.

Measurement Report for Device

System Check_H6.5GHz_210409

Device under Test Properties

| Model, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|------------------------------------|-------------------|---------|-------------------------|
| Speag 6.5GHz System Valisation Kit | 50.0 x 10.0 x 8.0 | SN:1008 | 6.5GHzV2 Valisation Kit |

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, | - | - | UID 0 | 6500.0, | 5.65 | 6.19 | 33.7 |

Hardware Setup

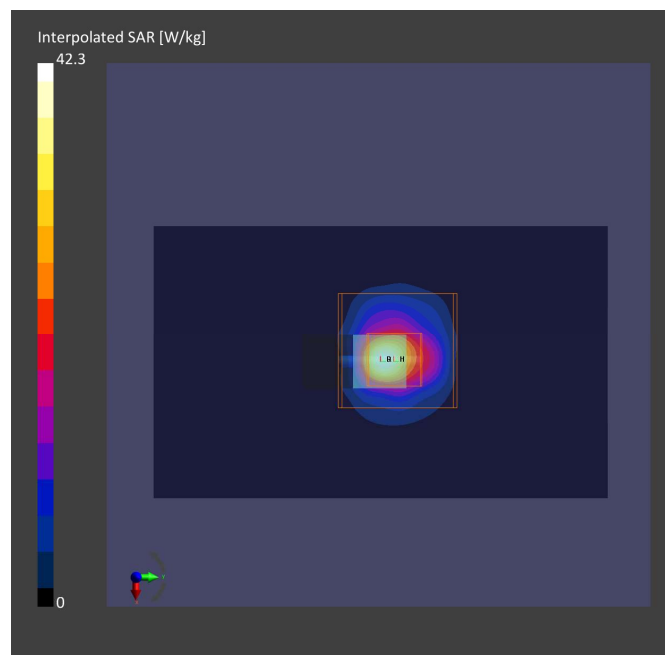
| Phantom | TSL, Measured Date | Probe, Calibration Date | DAE, Calibration Date |
|------------------------------------|------------------------|-----------------------------|-------------------------|
| ELI V5.0 (20deg probe tilt) - 1204 | H50T72N1 , 2021-Apr-09 | EX3DV4 - SN7555, 2020-09-28 | DAE4 Sn1589, 2020-09-15 |

Scan Setup

| | Area Scan | Zoom Scan |
|---------------------|-------------|--------------------|
| Grid Extents [mm] | 51.0 x 85.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm] | 8.5 x 8.5 | 3.4 x 3.4 x 1.4 |
| Sensor Surface [mm] | 3.0 | 1.4 |

Measurement Results

| | Area Scan | Zoom Scan |
|--------------------|------------|------------|
| Date | 2021-04-09 | 2021-04-09 |
| psSAR1g [W/Kg] | 24.2 | 30.7 |
| psSAR10g [W/Kg] | 5.08 | 5.65 |
| Power Drift [dB] | 0.02 | 0.03 |
| M2/M1 [%] | | 52.0 |
| Dist 3dB Peak [mm] | | 4.8 |



Test Lab: Bureau Veritas ADT SAR/HAC/PD Testing Lab

Power Density Plot No.:

PD_System Check_30 GHz_2021.04.09

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|--------------------|-----------------------|----------|------------------------------|
| SPEAG | 100.0 x 100.0 x 100.0 | SN: 1016 | 5G Verification Source 30GHz |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|-----------------|------------|---------------------------------|-------------------|
| 5GAir | FRONT, 5.55 | Validation band | CW, | 30000.0, | 1.0 |

Hardware Setup

| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|---------|---------|---------------------------------------|-------------------------|
| mmWave | --Air-- | EUmmWV4 - SN9454_F1-78GHz, 2020-09-24 | DAE4 Sn1590, 2020-09-15 |

Scan Setup

| | 5G Scan |
|---------------------|-------------|
| Grid Extents [mm] | 60.0 x 60.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 5.55 |

Measurement Results

| | 5G Scan |
|--|------------|
| Date | 2021-04-09 |
| Avg. Area [cm ²] | 4.00 |
| p _{Stot} avg[W/m ²] | 36.7 |
| p _{S_n} avg [W/m ²] | 35.6 |
| E _{peak} [V/m] | 134 |

