

Appendix B – System Check Plots

Date: 2025/3/8

System Performance Check at 2450 MHz

DUT: D2450V2_SN712

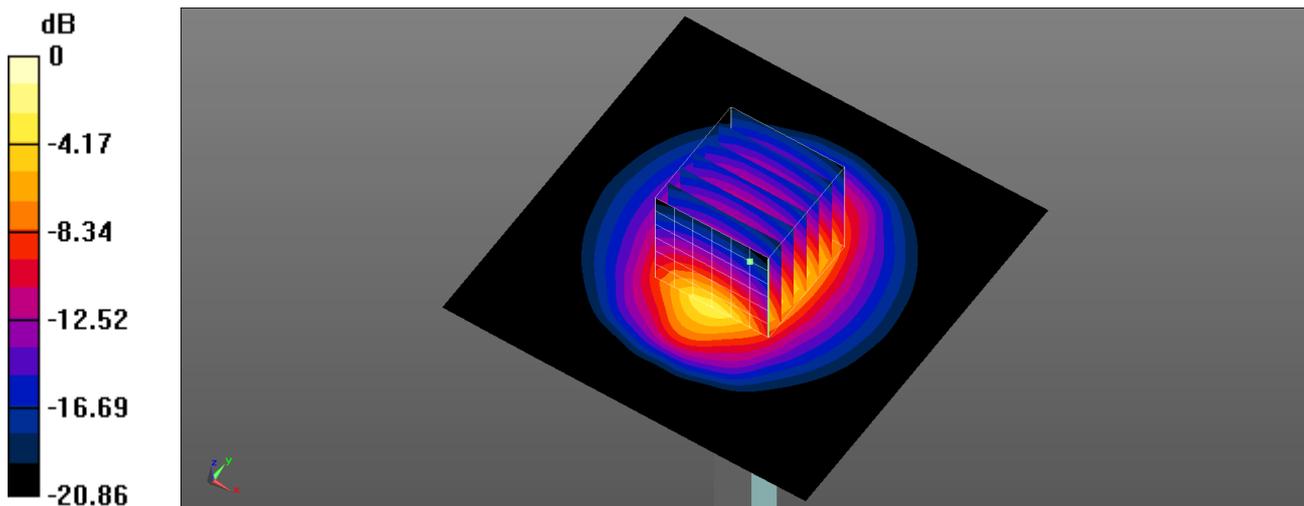
Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.871$ S/m; $\epsilon_r = 41.757$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(7.01, 6.75, 6.74) @ 2450 MHz; Calibrated: 2025/2/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2024/6/5
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 2450MHz/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
 Maximum value of SAR (interpolated) = 4.25 W/kg

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 50.79 V/m; Power Drift = -0.11 dB
 Peak SAR (extrapolated) = 4.89 W/kg
SAR(1 g) = 2.61 W/kg; SAR(10 g) = 1.26 W/kg (SAR corrected for target medium)
 Smallest distance from peaks to all points 3 dB below = 9 mm
 Ratio of SAR at M2 to SAR at M1 = 53.3%
 Maximum value of SAR (measured) = 4.15 W/kg



0 dB = 4.15 W/kg = 6.18 dBW/kg

Date: 2025/3/9

System Performance Check at 5250 MHz

DUT: D5GHzV2_SN1021

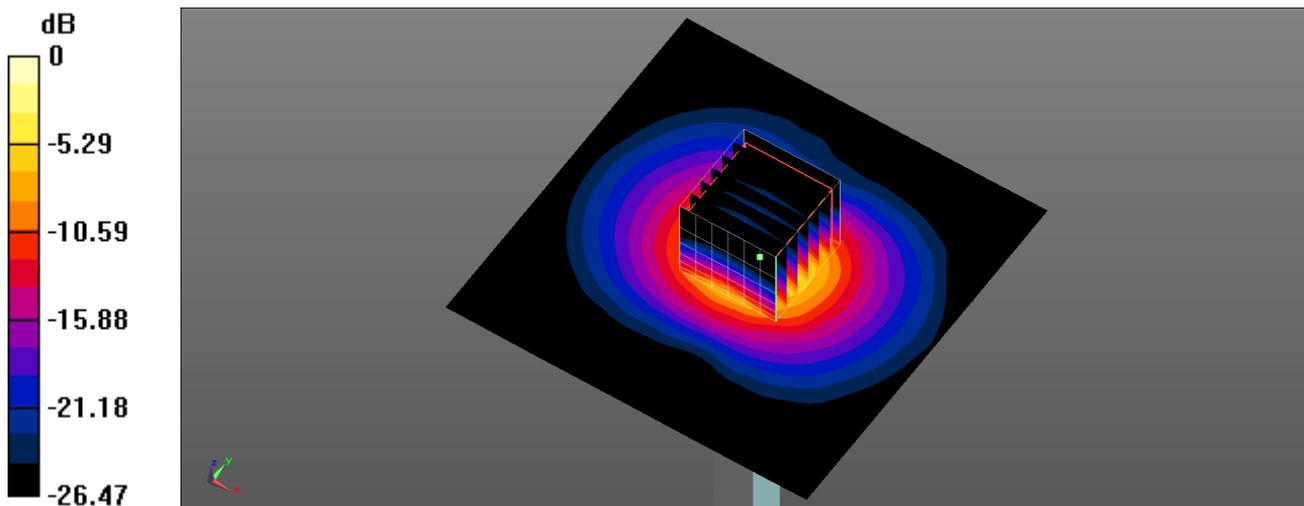
Communication System: UID 0, CW (0); Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: $f = 5250$ MHz; $\sigma = 4.52$ S/m; $\epsilon_r = 34.218$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(5.47, 5.26, 5.25) @ 5250 MHz; Calibrated: 2025/2/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2024/6/5
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 5250MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 9.42 W/kg

System Performance Check at 5250MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 48.09 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 17.0 W/kg
SAR(1 g) = 4.01 W/kg; SAR(10 g) = 1.15 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 63.5%
Maximum value of SAR (measured) = 10.2 W/kg



0 dB = 10.2 W/kg = 10.09 dBW/kg

Date: 2025/3/10

System Performance Check at 5600 MHz

DUT: D5GHzV2_SN1021

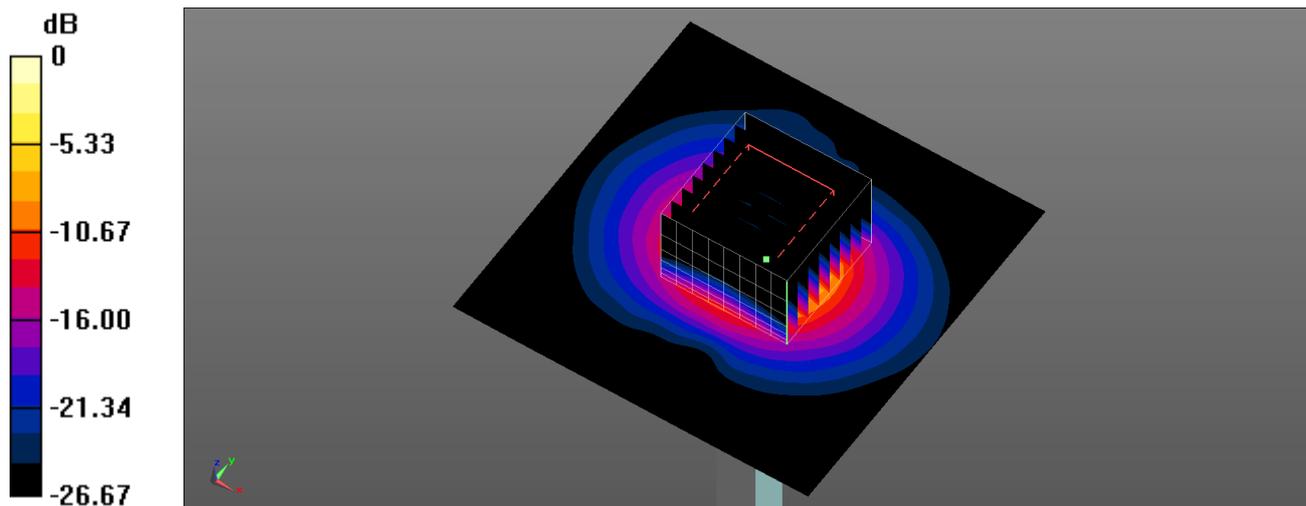
Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5600$ MHz; $\sigma = 4.861$ S/m; $\epsilon_r = 33.829$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(5.19, 5, 4.99) @ 5600 MHz; Calibrated: 2025/2/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2024/6/5
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 5600MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
 Maximum value of SAR (interpolated) = 10.2 W/kg

System Performance Check at 5600MHz/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
 Reference Value = 47.33 V/m; Power Drift = -0.17 dB
 Peak SAR (extrapolated) = 19.3 W/kg
SAR(1 g) = 4.1 W/kg; SAR(10 g) = 1.16 W/kg (SAR corrected for target medium)
 Smallest distance from peaks to all points 3 dB below = 7.4 mm
 Ratio of SAR at M2 to SAR at M1 = 60.1%
 Maximum value of SAR (measured) = 10.6 W/kg



0 dB = 10.6 W/kg = 10.25 dBW/kg

Date: 2025/3/11

System Performance Check at 5800 MHz

DUT: D5GHzV2_SN1021

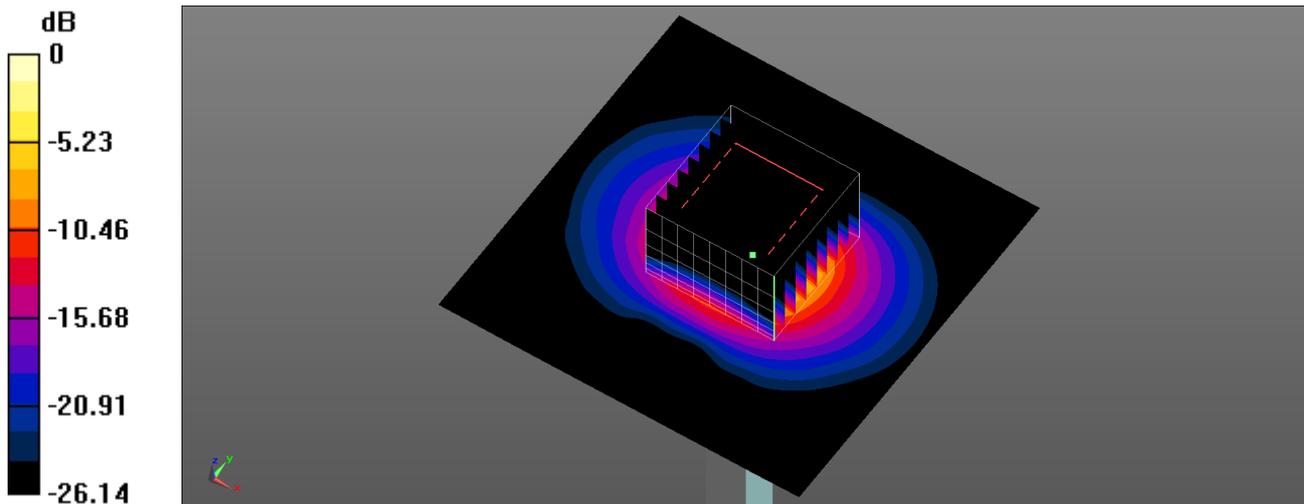
Communication System: UID 0, CW (0); Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; $\sigma = 5.063$ S/m; $\epsilon_r = 33.549$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3847; ConvF(5.03, 4.84, 4.83) @ 5800 MHz; Calibrated: 2025/2/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2024/6/5
- Phantom: ELI; Type: QD OVA 001 BB; Serial: 1036
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Check at 5800MHz/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 10.0 W/kg

System Performance Check at 5800MHz/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 45.85 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 19.8 W/kg
SAR(1 g) = 3.96 W/kg; SAR(10 g) = 1.12 W/kg (SAR corrected for target medium)
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 58.4%
Maximum value of SAR (measured) = 10.6 W/kg



0 dB = 10.6 W/kg = 10.25 dBW/kg

Test Date : 2025-03-05 | Ambient Temp : 22.3 °C | Tissue Temp : 21.9 °C

System Performance Check

System Performance Check at 6500 MHz

Verification Source Properties

Manufacturer	Model No.	Serial No.	Input Power [dBm]
SPEAG	D6.5GHz	1016	20.0

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat	CW	6500.000	5.2	5.93	31.9

Hardware Setup

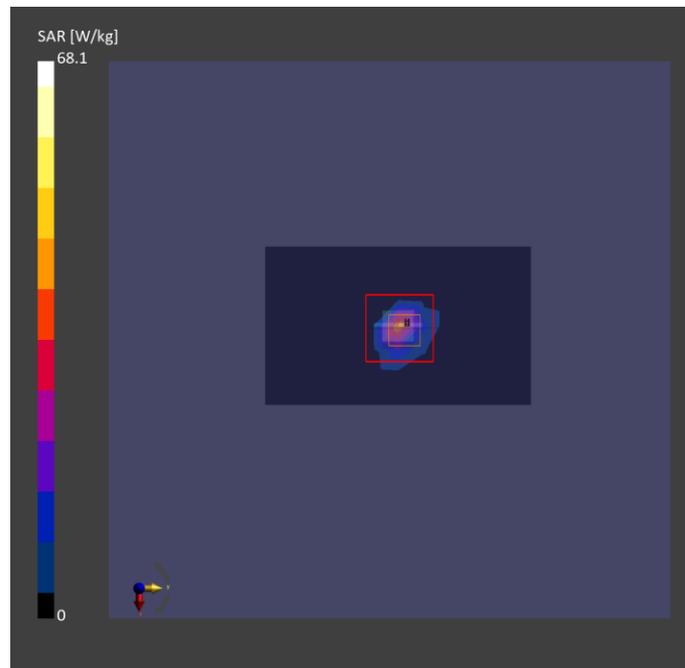
Phantom	Tissue Simulating Liquid	Probe Calibration Date	DAE Calibration Date
ELI V5.0 (20deg probe tilt) - 1175	HBBL-600-10000V6	EX3DV4 - SN7647 / 2024-04-24	DAE4 Sn1253 / 2024-04-22
Measurement Software Version		16.4.0.5005	

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
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4

Measurement Results

	Area Scan	Zoom Scan
psSAR-1g [W/kg]	22.9	28.3
psSAR-8g [W/kg]	5.77	6.36
psSAR-10g [W/kg]	4.82	5.19
psAPD (1.0 cm ² , sq) [W/m ²]		283
psAPD (4.0 cm ² , sq) [W/m ²]		129
Power Drift [dB]		0.11
TSL Correction	Positive only	Positive only



Test Date : 2025-03-07 | Ambient Temp : 22.2 °C

System Performance Check

System Performance Check at 10GHz

Verification Source Properties

Manufacturer	Model No.	Serial No.
SPEAG	5G Verification Source	1060

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor
5G	CW	10000.0	1.0

Hardware Setup

Phantom	Medium	Probe Calibration Date	DAE Calibration Date
mmWave - 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz / 2024-11-15	DAE4 Sn1253 / 2024-04-22

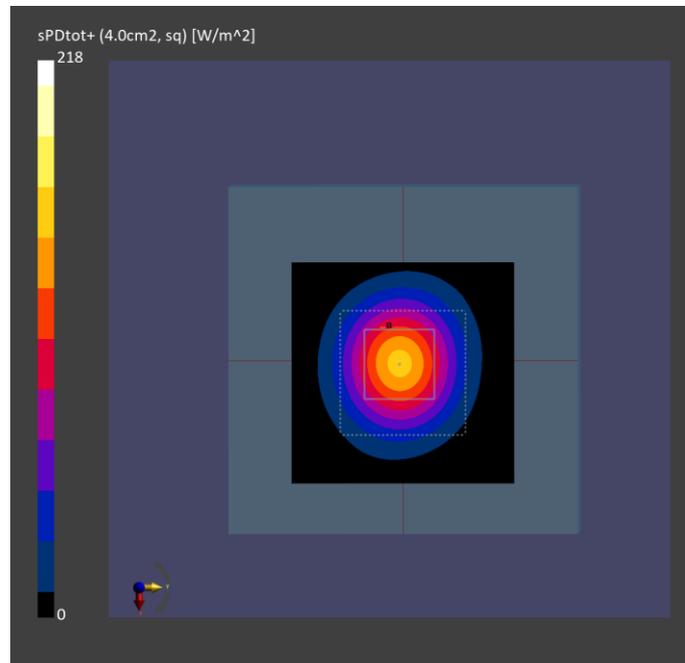
Measurement Software Version

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [mm]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

	5G Scan
Avg. Area [cm ²]	4.00
psPD n+ [W/m ²]	51
psPD tot+ [W/m ²]	52
psPD mod+ [W/m ²]	52
E max [V/m]	92
Power Drift [dB]	0.01



Test Date : 2025-03-08 | Ambient Temp : 22.1 °C

System Performance Check

System Performance Check at 10GHz

Verification Source Properties

Manufacturer	Model No.	Serial No.
SPEAG	5G Verification Source	1060

Exposure Conditions

Phantom Section	Group	Frequency [MHz]	Conversion Factor
5G	CW	10000.0	1.0

Hardware Setup

Phantom	Medium	Probe Calibration Date	DAE Calibration Date
mmWave - 5G Phantom	Air	EUmmWV3 - SN9403_F1-55GHz / 2024-11-15	DAE4 Sn1253 / 2024-04-22

Measurement Software Version

Scan Setup

	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [mm]	0.125 x 0.125
Sensor Surface [mm]	10.0

Measurement Results

	5G Scan
Avg. Area [cm ²]	4.00
psPD n+ [W/m ²]	55
psPD tot+ [W/m ²]	56
psPD mod+ [W/m ²]	56
E max [V/m]	99
Power Drift [dB]	0.05

