

Annex A. Plots of SAR and Power Density System Verification

The plots for system verification are shown as follows.

Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/29

S01 System Check_H2450_220629

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0629 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.805$ S/m; $\epsilon_r = 38.071$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.98, 7.98, 7.98) @ 2450 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 4.27 W/kg

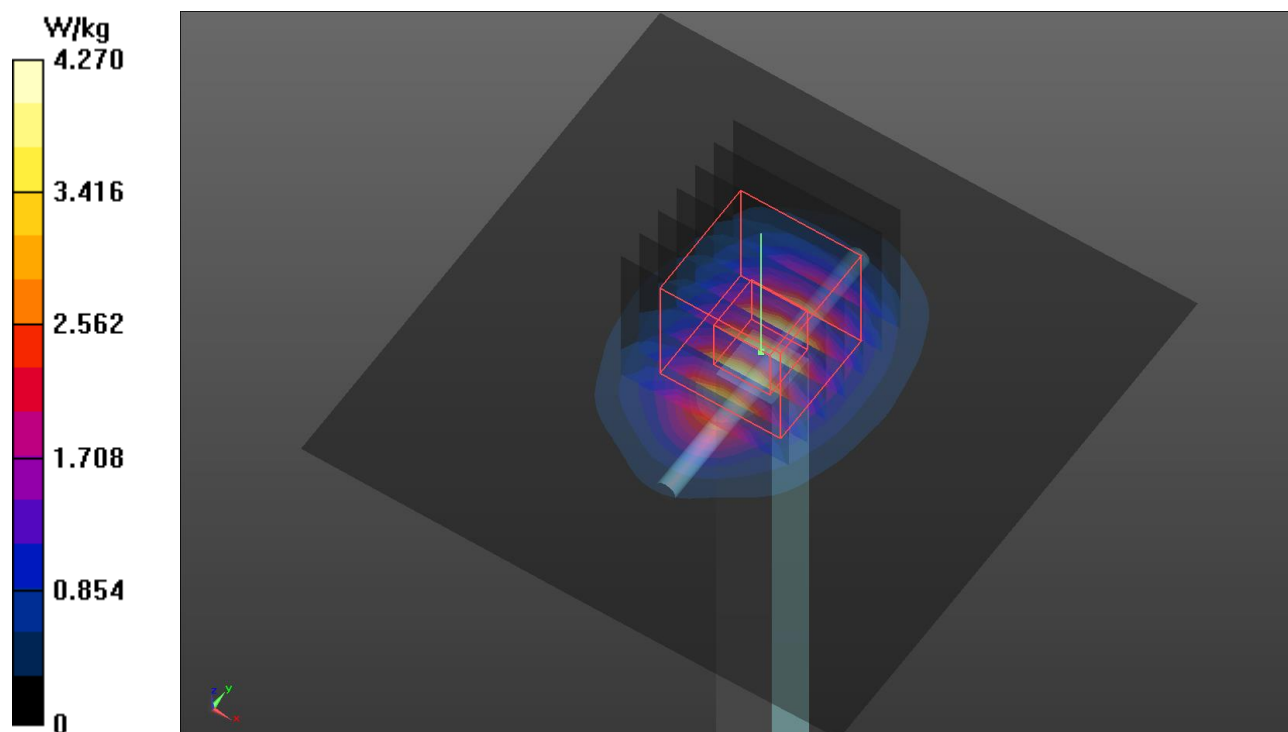
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 47.80 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 5.34 W/kg

SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.14 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.20 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/28

S02 System Check_H5250_220628

DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0628 Medium parameters used: $f = 5250$ MHz; $\sigma = 4.833$ S/m; $\epsilon_r = 35.815$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(5.1, 5.1, 5.1) @ 5250 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.95 W/kg

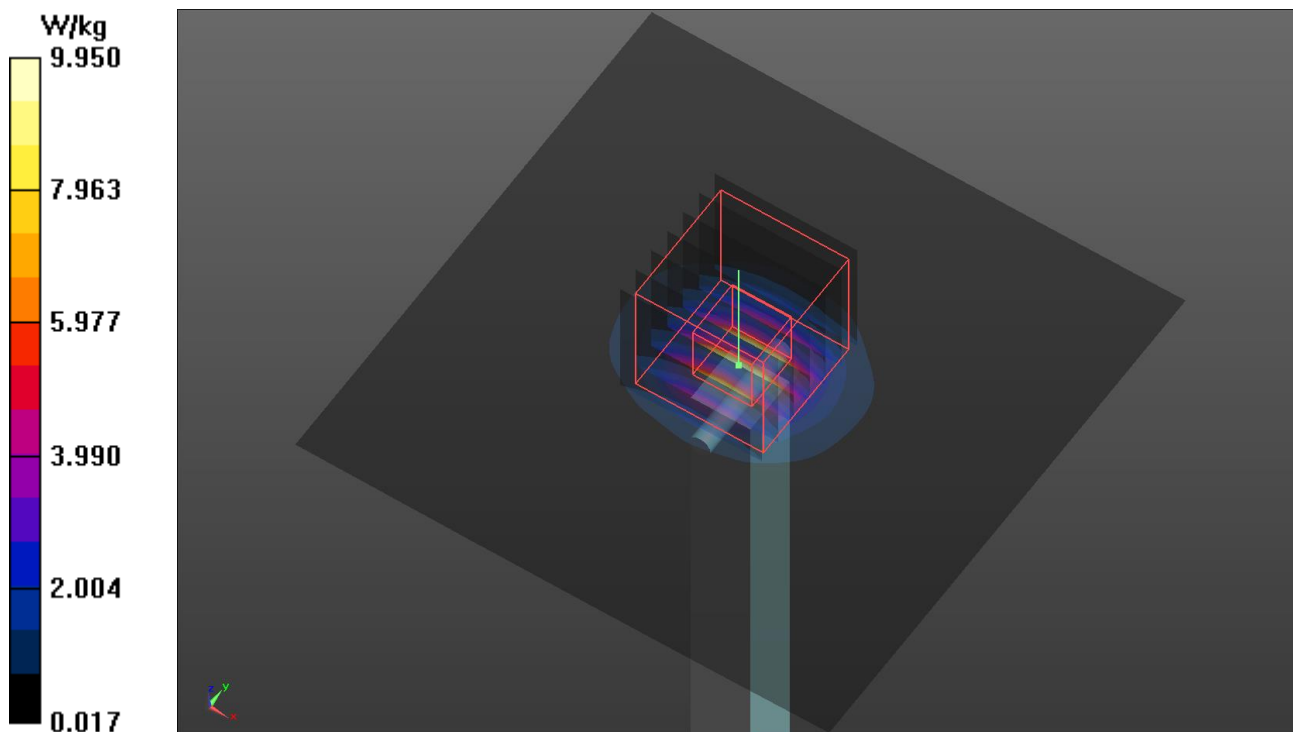
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 51.07 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 16.6 W/kg

SAR(1 g) = 4.23 W/kg; SAR(10 g) = 1.23 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 10.4 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/28

S03 System Check_H5600_220628

DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0628 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.217$ S/m; $\epsilon_r = 35.199$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(4.8, 4.8, 4.8) @ 5600 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 10.8 W/kg

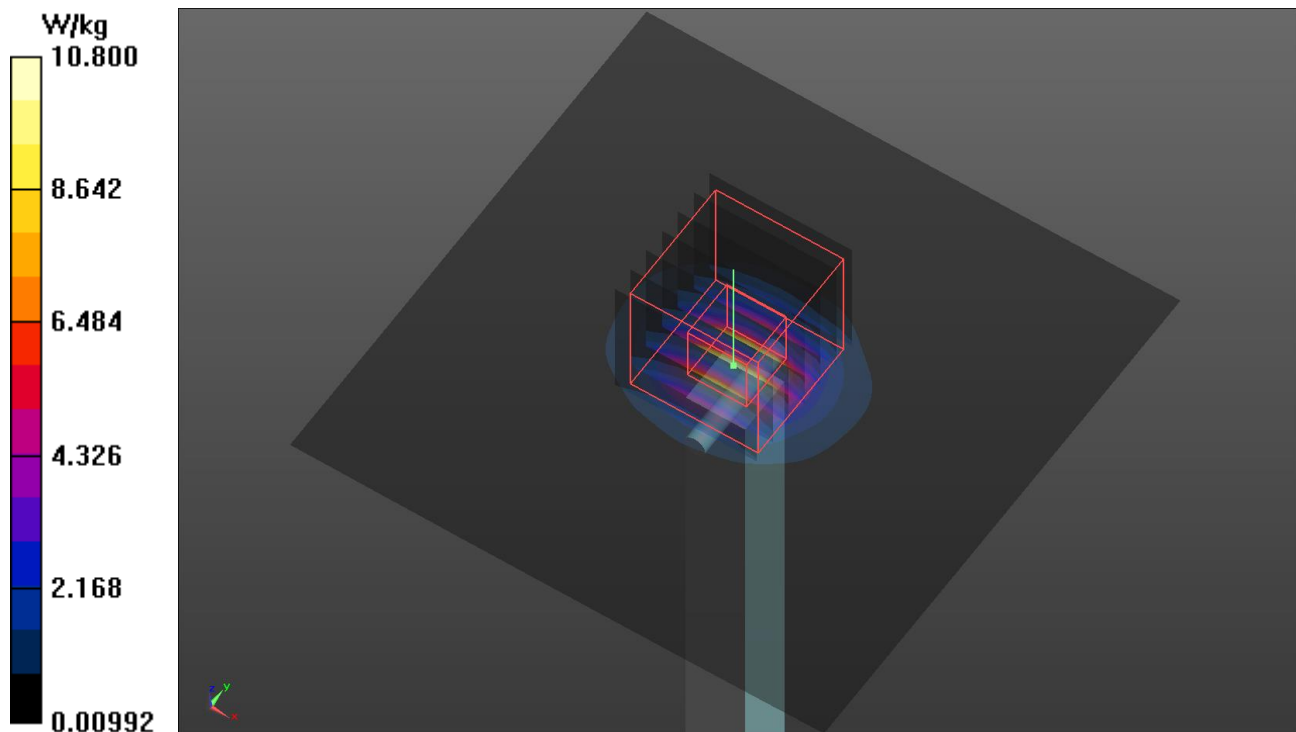
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 50.48 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 19.0 W/kg

SAR(1 g) = 4.4 W/kg; SAR(10 g) = 1.26 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 11.3 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/28

S05 System Check_H5750_220628

DUT: Dipole 5 GHz; Type: D5GHzV2; SN: 1019

Communication System: UID 0, CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0628 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.381$ S/m; $\epsilon_r = 34.848$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(4.85, 4.85, 4.85) @ 5750 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (91x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 9.81 W/kg

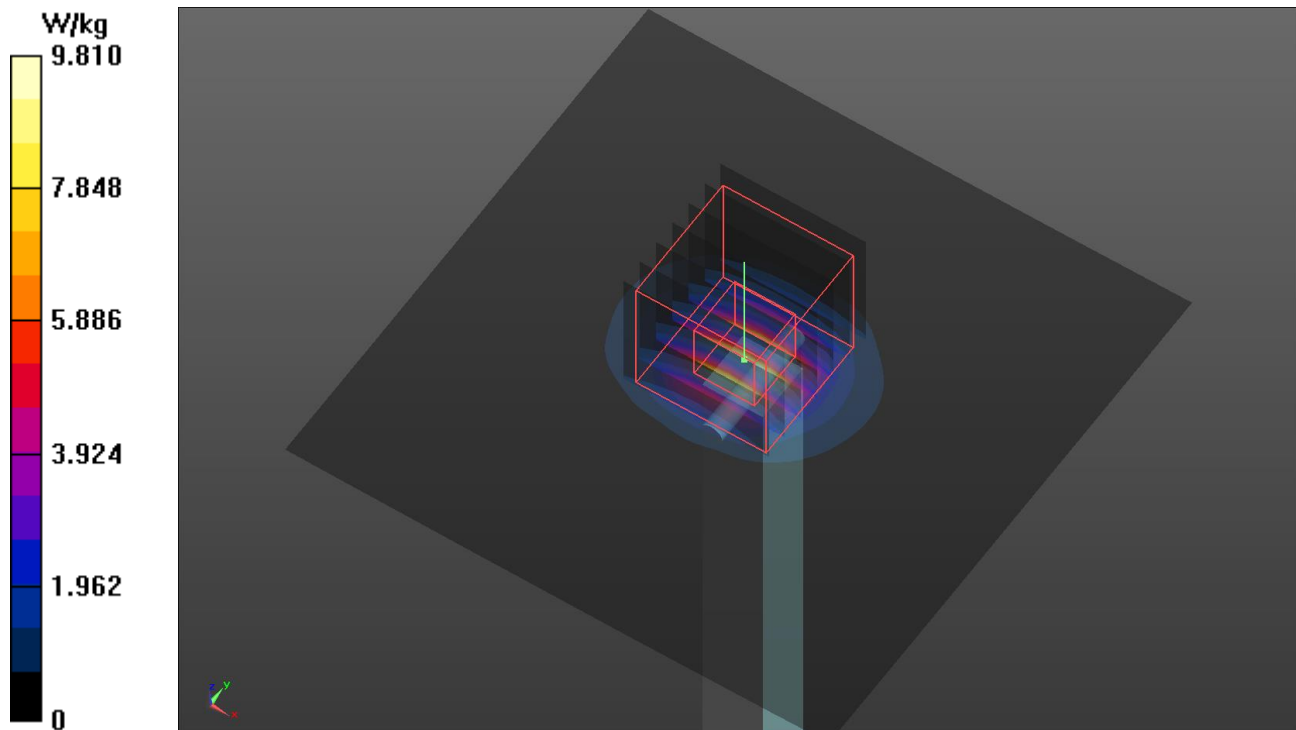
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 46.36 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 18.3 W/kg

SAR(1 g) = 4.04 W/kg; SAR(10 g) = 1.15 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 10.6 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/29

S06 System Check_H2450_220629

DUT: Dipole 2450 MHz; Type: D2450V2; SN: 737

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0629 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.805$ S/m; $\epsilon_r = 38.071$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.98, 7.98, 7.98) @ 2450 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Pin=50mW/Area Scan (81x81x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 4.27 W/kg

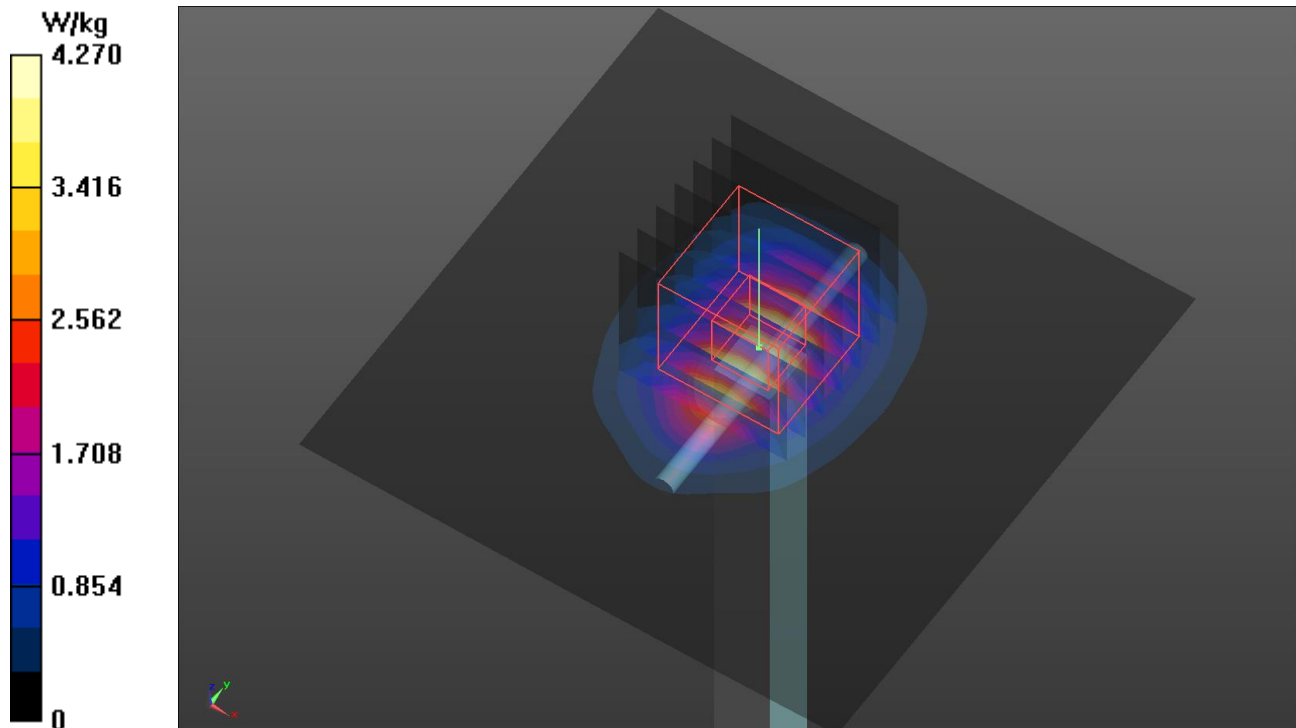
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 47.80 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 5.34 W/kg

SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.14 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 4.20 W/kg



Plots of System Verification

Measurement Report S07 SAR-System Check_H6500_220627 Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Dipole,	50.0 x 10.0 x 8.0		6500

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, HSL	,			6500.0,	5.45	6.08	34.9

Hardware Setup

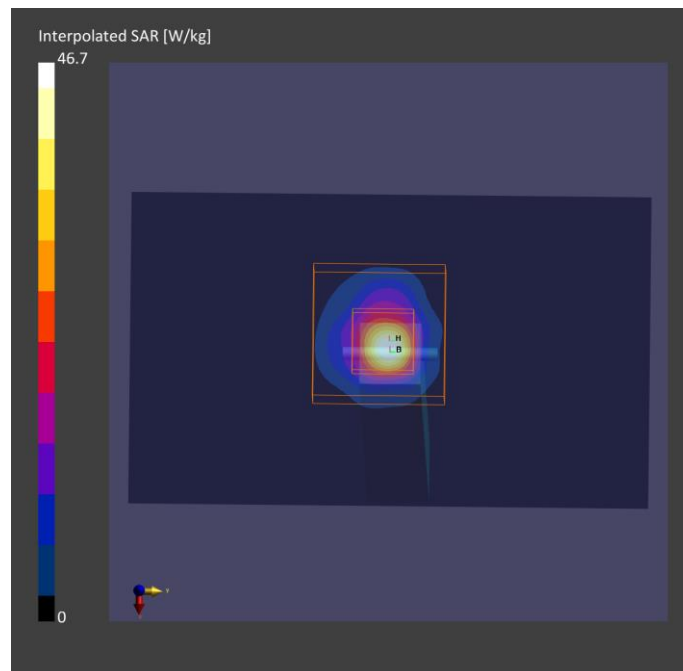
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1204	H50T72N1, 2022-Jun-27	EX3DV4 - SN3971, 2022-01-25	DAE4 Sn1590, 2021-09-20

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.0 x 90.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.5 x 7.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-06-27	2022-06-27
psSAR1g [W/kg]	24.3	28.4
psSAR10g [W/kg]	4.79	5.20
psPDab (1.0cm2, sq) [W/m2]		284
psPDab (4.0cm2, sq) [W/m2]		127
Power Drift [dB]	0.00	-0.02



Plots of System Verification

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

Power Density Plot No.:

S07 Power Density-System Check_10 GHz_220629

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
SPEAG, 5G Verification Source 10 GHz	100.0 x 100.0 x 170.0	SN: 1025	Module

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5GAir	FRONT 10	Validation band	CW	10000.0	1.0

Hardware Setup

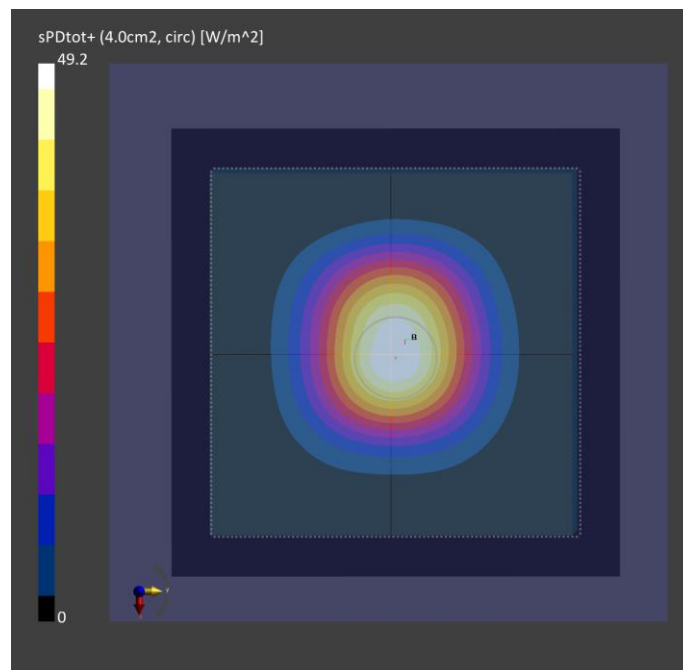
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	--Air--	EUmmWV4 - SN9438_F1-55GHz, 2021-07-26	DAE4 Sn1590, 2021-09-20

Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	10

Measurement Results

	5G Scan
Date	2022-06-29
Avg. Area [cm ²]	4.00
pStotavg [W/m ²]	49.2
pSnavg [W/m ²]	49.1
E _{peak} [V/m]	142
Power Drift [dB]	-0.03



Plots of System Verification

Measurement Report S08 SAR-System Check_H6500_220808 Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Dipole,	50.0 x 10.0 x 8.0		6500

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, HSL	,			6500.0,	5.45	6.18	33.7

Hardware Setup

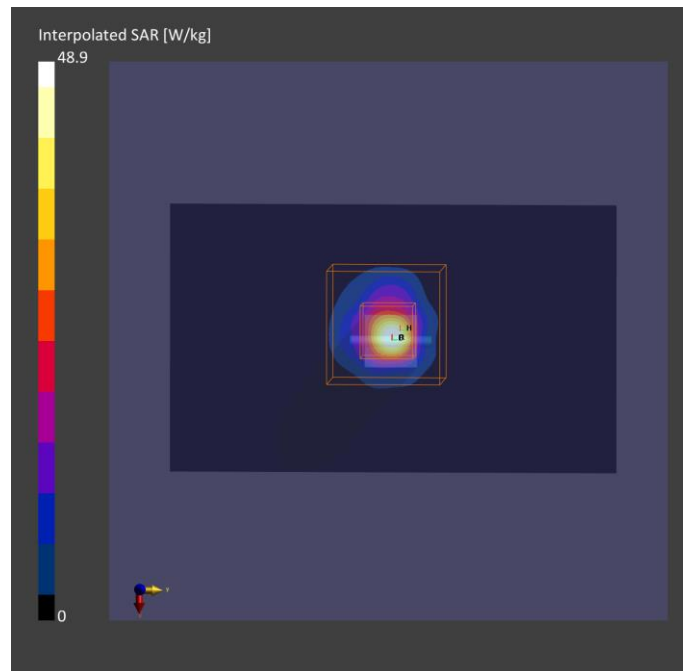
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1204	H50T72N1, 2022-Aug-08	EX3DV4 - SN7736, 2022-05-30	DAE3 Sn579, 2022-06-01

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	45.0 x 90.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.5 x 7.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-08-08	2022-08-08
psSAR1g [W/kg]	24.3	29.4
psSAR10g [W/kg]	4.79	5.40
psPDab (1.0cm ² , sq) [W/m ²]		287
psPDab (4.0cm ² , sq) [W/m ²]		129
Power Drift [dB]	0.00	-0.02



Plots of System Verification

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

Power Density Plot No.:

S08 Power Density-System Check_10 GHz_220808

Device under Test Properties

Name, Manufacturer	Dimensions [mm]	IMEI	DUT Type
SPEAG, 5G Verification Source 10 GHz	100.0 x 100.0 x 170.0	SN: 1025	Module

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5GAir	FRONT 10	Validation band	CW	10000.0	1.0

Hardware Setup

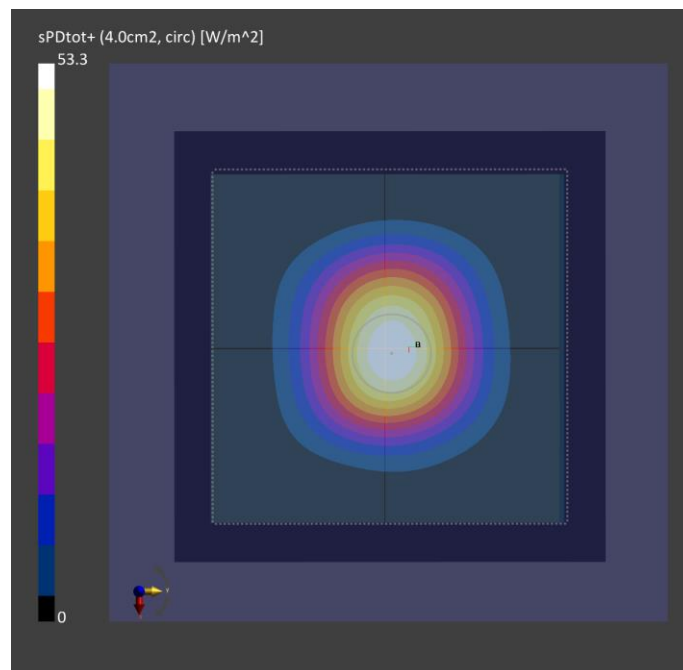
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	--Air--	EUmmWV3 - SN9361_F1-55GHz, 2021-08-25	DAE3 Sn579, 2022-06-01

Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.55

Measurement Results

	5G Scan
Date	2022-08-08
Avg. Area [cm ²]	4.00
pStotavg[W/m ²]	53.3
pSnavg [W/m ²]	53.2
E _{peak} [V/m]	148
Power Drift [dB]	0.03



Annex B. Plots of SAR and Power Density Measurement

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

Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/29

P01 WLAN2.4G_802.11b_Bottom Side_5mm_Ch1_Ant 0+1

DUT: BARR-WTW-P22060042

Communication System: UID 10012 - CAB, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: H19T27N1_0629 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.777$ S/m; $\epsilon_r = 38.138$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.98, 7.98, 7.98) @ 2412 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.741 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.01 V/m; Power Drift = -0.07 dB

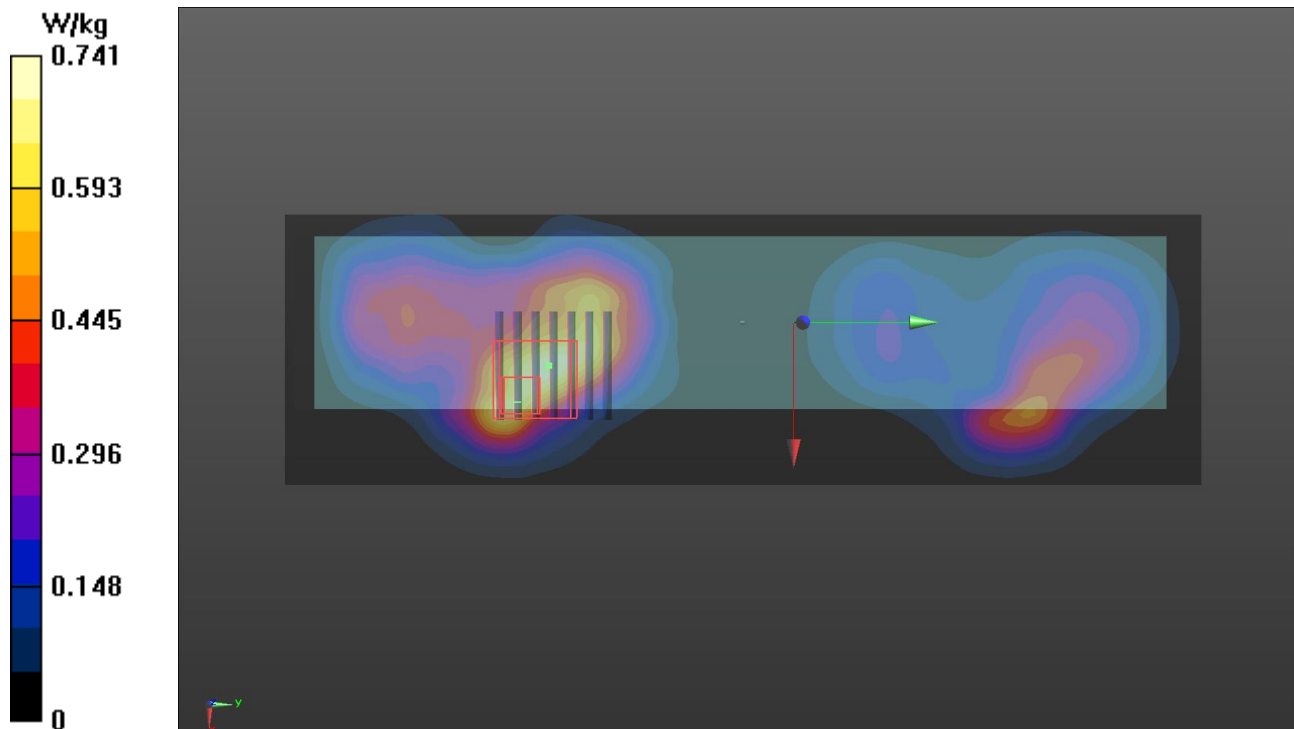
Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.531 W/kg; SAR(10 g) = 0.251 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.5 mm

Ratio of SAR at M2 to SAR at M1 = 40.1%

Maximum value of SAR (measured) = 0.988 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/28

P02 WLAN5.3G_802.11ac_VHT160_Bottom Side_5mm_Ch50_Ant 0+1

DUT: BARR-WTW-P22060042

Communication System: UID 10554 - AAD, IEEE 802.11ac WiFi (160MHz, MCS0); Frequency: 5250 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0628 Medium parameters used: $f = 5250$ MHz; $\sigma = 4.833$ S/m; $\epsilon_r = 35.815$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(5.1, 5.1, 5.1) @ 5250 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x261x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.02 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 15.44 V/m; Power Drift = -0.01 dB

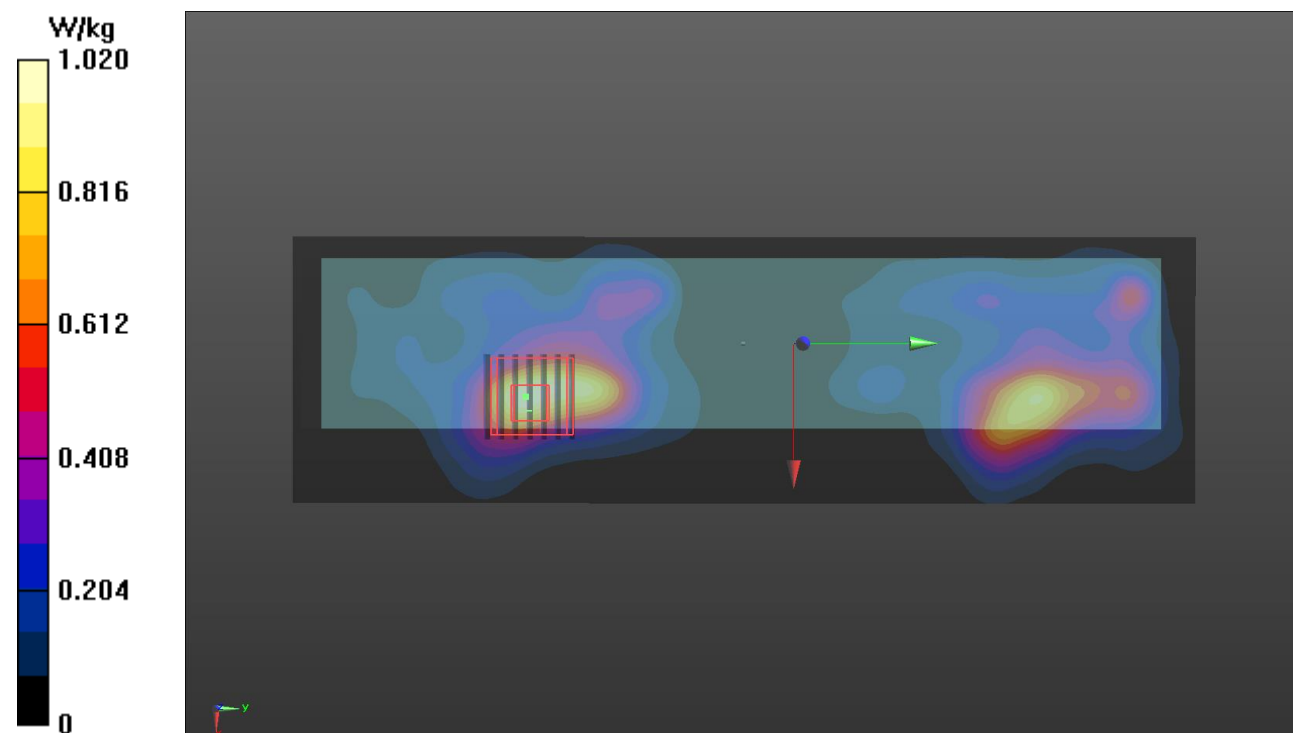
Peak SAR (extrapolated) = 2.04 W/kg

SAR(1 g) = 0.640 W/kg; SAR(10 g) = 0.209 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 64.7%

Maximum value of SAR (measured) = 1.21 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/28

P03 WLAN5.6G_802.11ac VHT160_Bottom Side_5mm_Ch114_Ant 0+1

DUT: BARR-WTW-P22060042

Communication System: UID 10554 - AAD, IEEE 802.11ac WiFi (160MHz, MCS0); Frequency: 5570 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0628 Medium parameters used: $f = 5570$ MHz; $\sigma = 5.192$ S/m; $\epsilon_r = 35.233$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(4.8, 4.8, 4.8) @ 5570 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x261x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.998 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 14.44 V/m; Power Drift = 0.01 dB

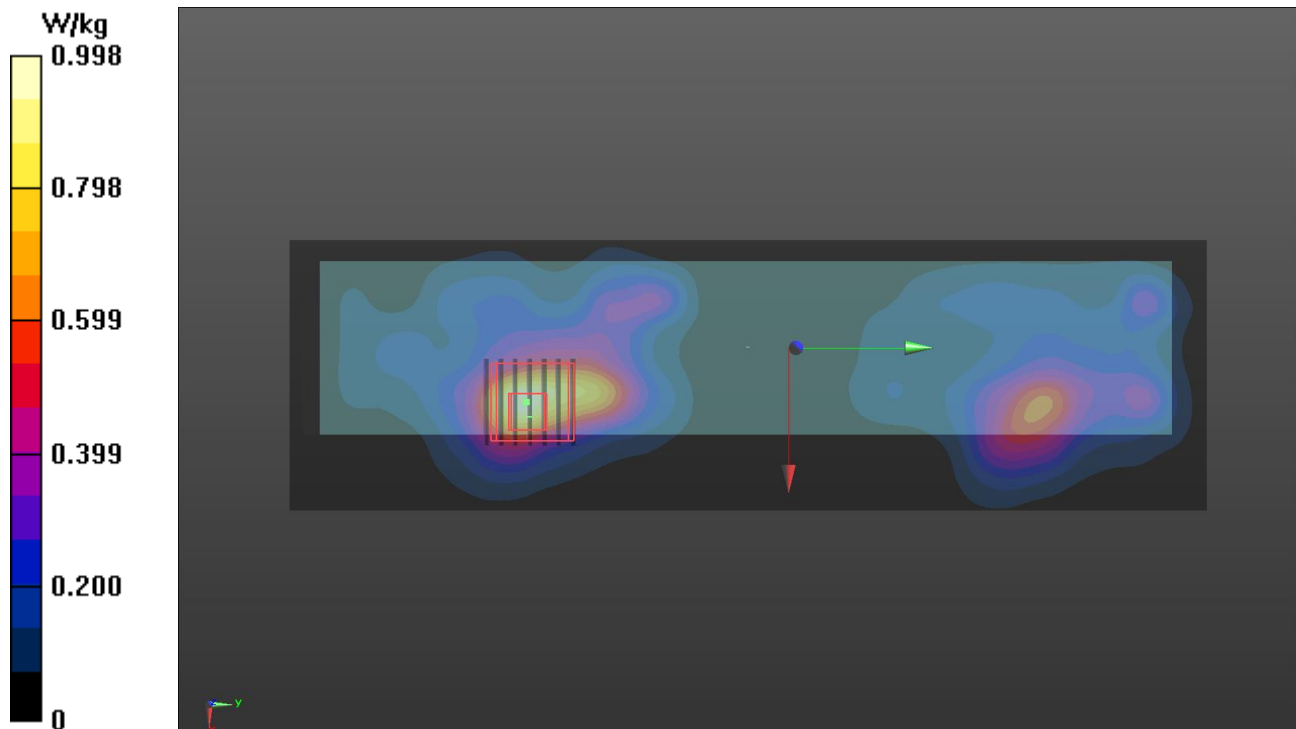
Peak SAR (extrapolated) = 1.95 W/kg

SAR(1 g) = 0.568 W/kg; SAR(10 g) = 0.162 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 60.8%

Maximum value of SAR (measured) = 1.31 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/28

P05 WLAN5.8G_802.11ac VHT80_Bottom Side_5mm_Ch155_Ant 0+1

DUT: BARR-WTW-P22060042

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5775 MHz; Duty Cycle: 1:1

Medium: H34T60N1_0628 Medium parameters used: $f = 5775$ MHz; $\sigma = 5.425$ S/m; $\epsilon_r = 34.829$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(4.85, 4.85, 4.85) @ 5775 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x261x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.37 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 16.93 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.43 W/kg

SAR(1 g) = 0.731 W/kg; SAR(10 g) = 0.262 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.6 mm

Ratio of SAR at M2 to SAR at M1 = 60.2%

Maximum value of SAR (measured) = 1.90 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 16.93 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.12 W/kg

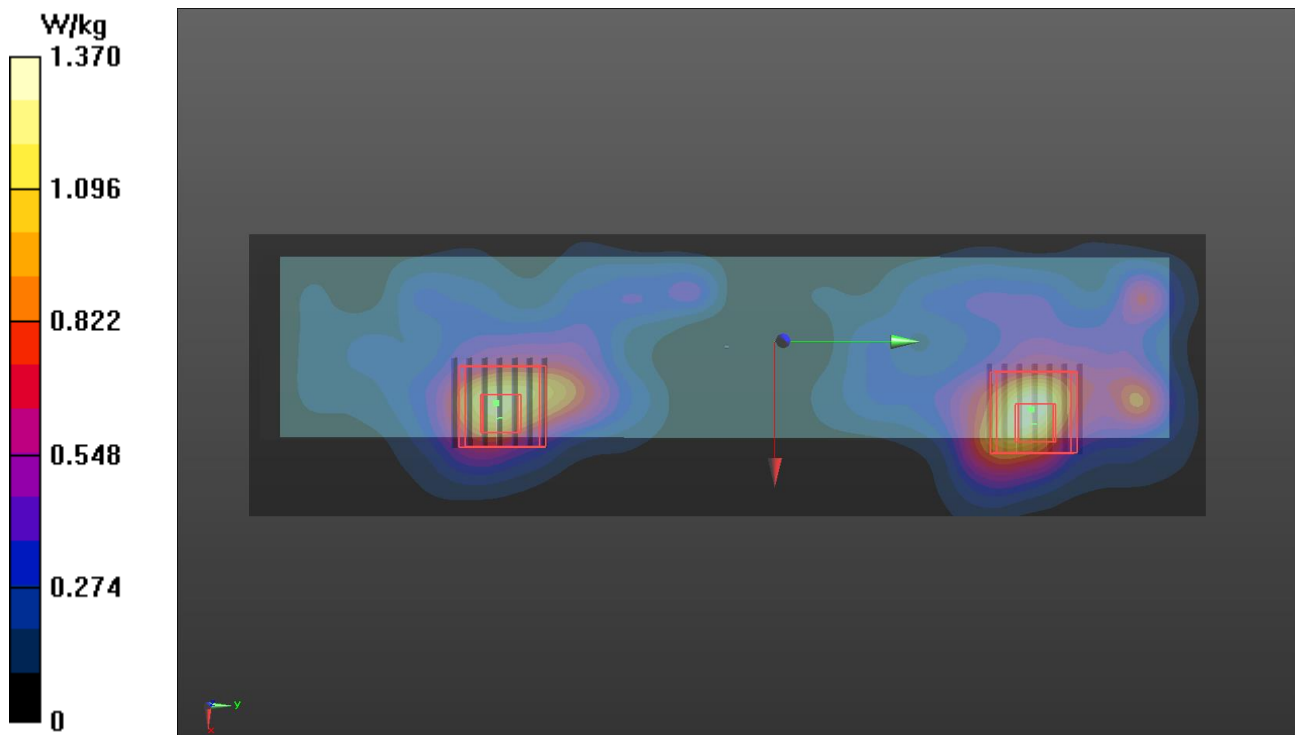
SAR(1 g) = 0.692 W/kg; SAR(10 g) = 0.244 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.4 mm

Ratio of SAR at M2 to SAR at M1 = 59.7%

Maximum value of SAR (measured) = 1.74 W/kg

Plots of Measurement



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/6/29

P06 BT_BDR_Bottom Side_5mm_Ch0_Ant 1

DUT: BARR-WTW-P22060042

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2402 MHz; Duty Cycle: 1:1.3

Medium: H19T27N1_0629 Medium parameters used: $f = 2402$ MHz; $\sigma = 1.769$ S/m; $\epsilon_r = 38.164$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3971; ConvF(7.98, 7.98, 7.98) @ 2402 MHz; Calibrated: 2022/1/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1590; Calibrated: 2021/9/20
- Phantom: ELI Phantom_1204; Type: QD OVA 002 Ax;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x221x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.573 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.91 V/m; Power Drift = 0.01 dB

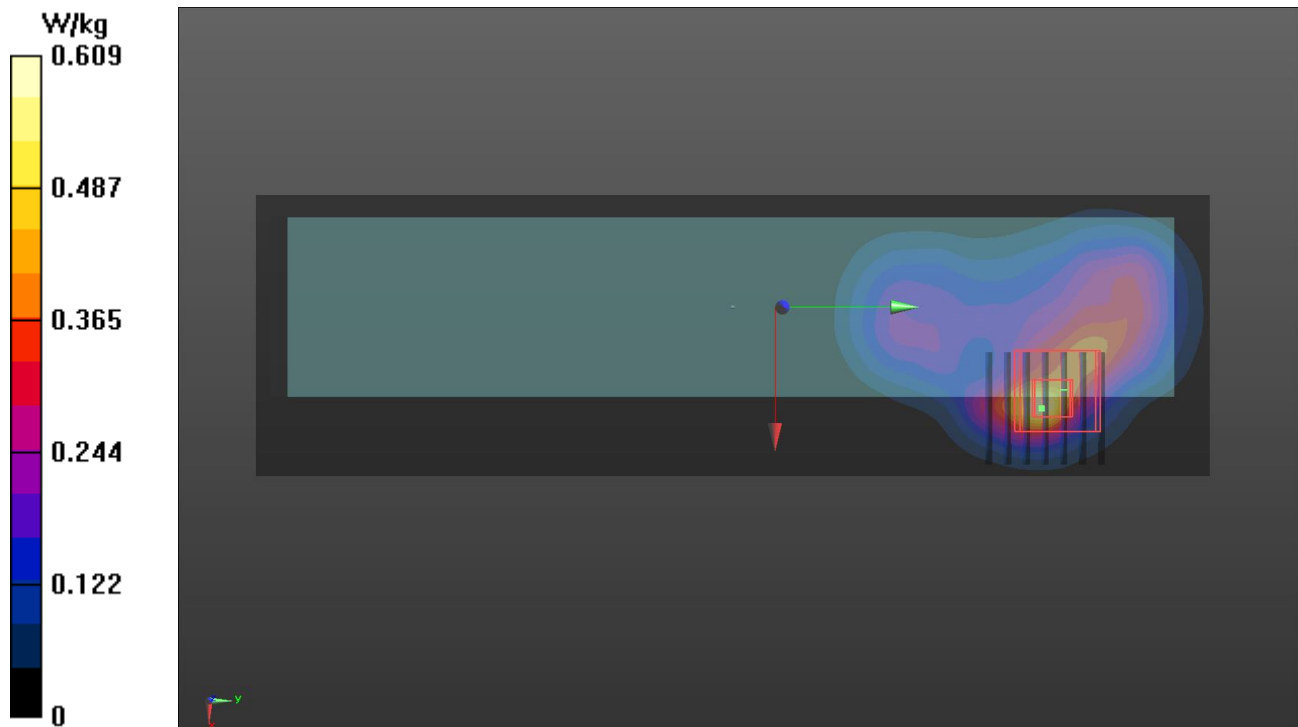
Peak SAR (extrapolated) = 0.790 W/kg

SAR(1 g) = 0.364 W/kg; SAR(10 g) = 0.166 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.5 mm

Ratio of SAR at M2 to SAR at M1 = 41.1%

Maximum value of SAR (measured) = 0.598 W/kg



Plots of Measurement

Measurement Report

P07 SAR-WLAN6G_802.11be EHT320_Bottom Side_5mm_Ch31_Mode_2T2S_Ant 0+1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BARR-WTW-P22060042,	237.0 x 74.0 x 48.0		Module

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, HSL	Bottom Side, 5.00	U-NII-5	WLAN, 10755-AAC	6105.0, 31	5.45	5.53	35.4

Hardware Setup

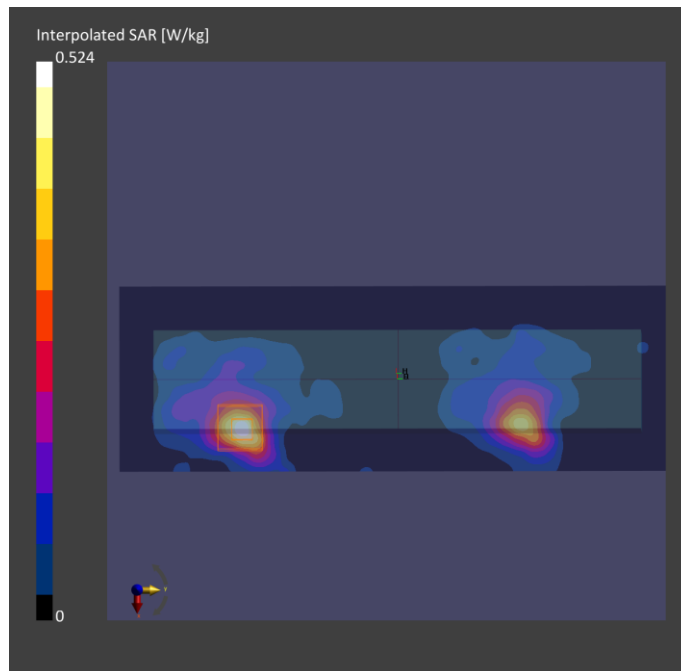
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1204	H50T72N1, 2022-Jun-27	EX3DV4 - SN3971, 2022-01-25	DAE4 Sn1590, 2021-09-20

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 270.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.5 x 7.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-06-27	2022-06-27
psSAR1g [W/kg]	0.384	0.390
psSAR10g [W/kg]	0.137	0.142
psPDab (1.0cm ² , sq) [W/m ²]		3.90
psPDab (4.0cm ² , sq) [W/m ²]		3.19
Power Drift [dB]	0.02	0.11



Plots of Measurement

Measurement Report

P07 Power Density-WLAN6G_802.11be EHT320_Bottom Side_5mm_Ch31_Mode_2T2S_Ant 0+1

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BARR-WTW-P22060042	237.0 x 74.0 x 48.0		Module

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom Side, 5.00	U-NII-5	WLAN, 10755-AAC	6105.0, 31	1.0

Hardware Setup

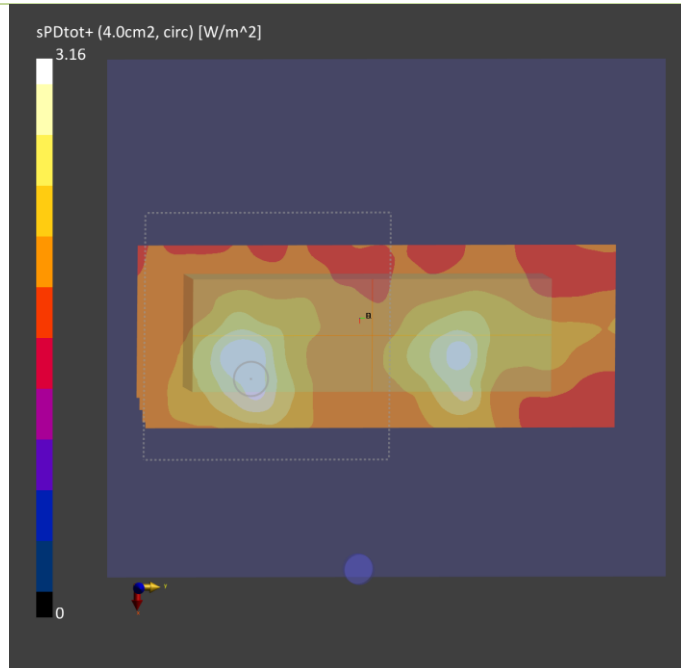
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	--Air--	EUmmWV4 - SN9438_F1-55GHz, 2021-07-26	DAE4 Sn1590, 2021-09-20

Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	5.0

Measurement Results

	5G Scan
Date	2022-06-29
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	3.07
psPDtot+ [W/m ²]	3.16
psPDmod+ [W/m ²]	3.30
E _{max} [V/m]	44.4
Power Drift [dB]	0.03



Plots of Measurement

Measurement Report

P08 SAR-WLAN6G_802.11be EHT320_Bottom Side_5mm_Ch191_Mode_1T1S_Ant 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BARR-WTW-P22060042,	237.0 x 48.0 x 74.0		Module

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, HSL	Bottom Side, 5.00	U-NII-8	WLAN, 10755-AAC	6905.0, 191	5.45	6.54	33.0

Hardware Setup

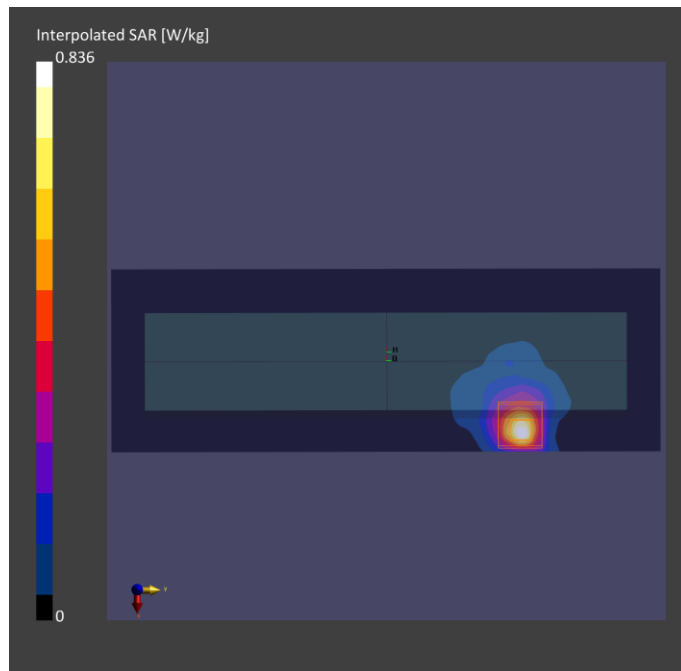
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1204	H50T72N1, 2022-Aug-08	EX3DV4 - SN7736, 2022-05-30	DAE3 Sn579, 2022-06-01

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	90.0 x 270.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	7.5 x 7.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2022-08-08	2022-08-08
psSAR1g [W/kg]	0.633	0.704
psSAR10g [W/kg]	0.209	0.225
psPDab (1.0cm ² , sq) [W/m ²]		7.04
psPDab (4.0cm ² , sq) [W/m ²]		5.11
Power Drift [dB]	-0.11	0.09



Plots of Measurement

Measurement Report

P08 Power Density-WLAN6G_802.11be EHT320_Bottom Side_5mm_Ch191_Mode_1T1S_Ant 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BARR-WTW-P22060042	237.0 x 74.0 x 48.0		Module

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Bottom Side, 5.00	U-NII-8	WLAN, 10755-AAC	6905.0, 191	1.0

Hardware Setup

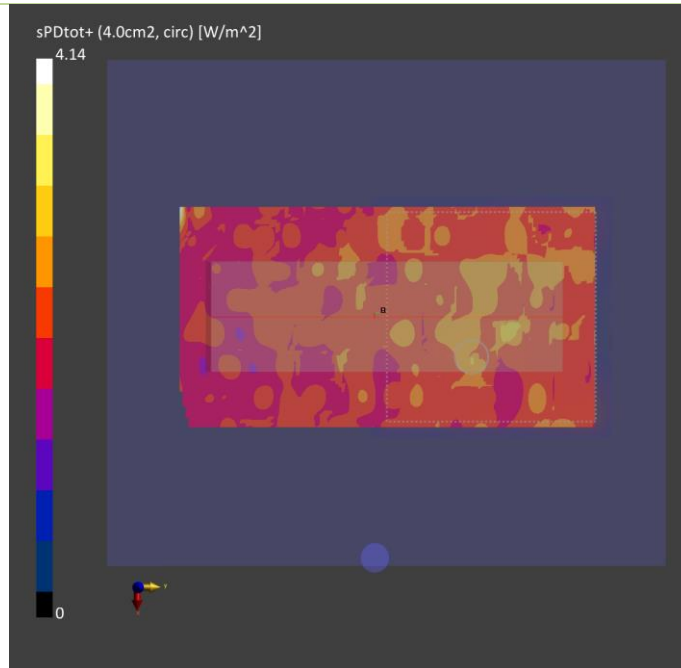
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave-	--Air--	EUmmWV3 - SN9361_F1-55GHz, 2021-08-25	DAE3 Sn579, 2022-06-01

Scan Setup

	5G Scan	
Grid Extents [mm]	120.0 x	120.0
Grid Steps [lambda]	0.25 x	0.25
Sensor Surface [mm]		5.0

Measurement Results

	5G Scan
Date	2022-08-08
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	3.86
psPDtot+ [W/m ²]	4.14
psPDmod+ [W/m ²]	4.39
E _{max} [V/m]	56.3
Power Drift [dB]	-0.05



Annex 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 $\pm 10\%$ of the target values. Liquid temperature during the SAR testing has kept within $\pm 2^\circ\text{C}$.
2. For Section 4.4, The SAR measurement system was validated according to procedures in KDB 865664 D01. 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 Annex A of this report.

Tissue Verification									Validation for CW			Validation for Modulation			System Validation					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 1g SAR (W/kg)	Measured 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Dipole S/N	Probe S/N	DAE S/N	Output Power (dB)
S01	2450	23.4	1.805	38.071	1.8	39.2	0.28	-2.88	Pass	Pass	Pass	OFDM	N/A	Pass	Jun. 29, 2022	2450	52.60	2.45	48.88	-7.06	737	3971	1590	17
S02	5250	23.3	4.833	35.815	4.71	35.9	2.61	-0.24	Pass	Pass	Pass	OFDM	N/A	Pass	Jun. 28, 2022	5250	80.60	4.23	84.40	4.71	1019	3971	1590	17
S03	5600	23.3	5.217	35.199	5.07	35.5	2.90	-0.85	Pass	Pass	Pass	OFDM	N/A	Pass	Jun. 28, 2022	5600	82.40	4.4	87.79	6.54	1019	3971	1590	17
S05	5750	23.3	5.381	34.848	5.22	35.4	3.08	-1.56	Pass	Pass	Pass	OFDM	N/A	Pass	Jun. 28, 2022	5750	79.40	4.04	80.61	1.52	1019	3971	1590	17
S06	2450	23.4	1.805	38.071	1.8	39.2	0.28	-2.88	Pass	Pass	Pass	OFDM	N/A	Pass	Jun. 29, 2022	2450	52.60	2.45	48.88	-7.06	737	3971	1590	17
S07	6500	23.1	6.08	34.9	6.07	34.5	0.16	1.16	Pass	Pass	Pass	OFDM	N/A	Pass	Jun. 27, 2022	6500	289.00	28.4	284.00	-1.73	1008	3971	1590	20
S08	6500	23.2	6.18	33.7	6.07	34.5	1.81	-2.32	Pass	Pass	Pass	OFDM	N/A	Pass	Aug. 08, 2022	6500	289.00	29.4	294.00	1.73	1008	7736	579	20

Plot No.	Test Date	Frequency [GHz]	mmWave Probe S/N	Verification Source S/N	Averaging Area [cm ²]	Distance [mm]	Target Power Density [W/m ²]	Measured Power Density [W/m ²]	Deviation [%]
S07	Jun. 29, 2022	10	9438	1025	4	10.0	51.3	49.2	-4.09%
S08	Aug. 08, 2022	10	9361	1025	4	10.0	51.3	53.3	3.90%

Annex D. Maximum Target Conducted Power

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

WLAN 2.4GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11b	1	2412	15.5	15.5	15.5	15.5	18.5
	6	2437	15.5	15.5	15.5	15.5	18.5
	11	2462	15.5	15.5	15.5	15.5	18.5
	12	2467	15.5	15.5	15.5	15.5	18.5
	13	2472	14.5	14.5	14.5	14.5	17.5
802.11g	1	2412	15.5	15.5	15.5	15.5	18.5
	6	2437	15.5	15.5	15.5	15.5	18.5
	11	2462	15.5	15.5	15.5	15.5	18.5
	12	2467	15.5	15.5	15.5	15.5	18.5
	13	2472	14.5	14.5	14.5	14.5	17.5
802.11ac VHT20	1	2412	15.5	15.5	15.5	15.5	18.5
	6	2437	15.5	15.5	15.5	15.5	18.5
	11	2462	15.5	15.5	15.5	15.5	18.5
	12	2467	15.5	15.5	15.5	15.5	18.5
	13	2472	14.5	14.5	14.5	14.5	17.5
802.11ac VHT40	3	2422	15.5	15.5	15.5	15.5	18.5
	6	2437	15.5	15.5	15.5	15.5	18.5
	9	2452	15.5	15.5	15.5	15.5	18.5
	10	2457	15.5	15.5	15.5	15.5	18.5
	11	2462	14.5	14.5	14.5	14.5	17.5
802.11ax HE20	1	2412	15.5	15.5	15.5	15.5	18.5
	6	2437	15.5	15.5	15.5	15.5	18.5
	11	2462	15.5	15.5	15.5	15.5	18.5
	12	2467	15.5	15.5	15.5	15.5	18.5
	13	2472	14.5	14.5	14.5	14.5	17.5
802.11ax HE40	3	2422	15.5	15.5	15.5	15.5	18.5
	6	2437	15.5	15.5	15.5	15.5	18.5
	9	2452	15.5	15.5	15.5	15.5	18.5
	10	2457	15.5	15.5	15.5	15.5	18.5
	11	2462	14.5	14.5	14.5	14.5	17.5
802.11be EHT20	1	2412	15.5	15.5	15.5	15.5	18.5
	6	2437	15.5	15.5	15.5	15.5	18.5
	11	2462	15.5	15.5	15.5	15.5	18.5
	12	2467	15.5	15.5	15.5	15.5	18.5
	13	2472	14.5	14.5	14.5	14.5	17.5
802.11be EHT40	3	2422	15.5	15.5	15.5	15.5	18.5
	6	2437	15.5	15.5	15.5	15.5	18.5
	9	2452	15.5	15.5	15.5	15.5	18.5
	10	2457	15.5	15.5	15.5	15.5	18.5
	11	2462	14.5	14.5	14.5	14.5	17.5



Tune-up Power in dBm

Bluetooth

Mode	Channel	Frequency	Ant 0 Max Tune-up	Ant 1 Max Tune-up
BR / EDR	0	2402	-	14.0
	39	2441	-	14.0
	78	2480	-	14.0
LE	0	2402	-	14.0
	19	2440	-	14.0
	39	2480	-	14.0

WLAN 5.2GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	36	5180	14.0	14.0	14.0	14.0	17.0
	40	5200	14.0	14.0	14.0	14.0	17.0
	44	5220	14.0	14.0	14.0	14.0	17.0
	48	5240	14.0	14.0	14.0	14.0	17.0
802.11ac VHT20	36	5180	14.0	14.0	14.0	14.0	17.0
	40	5200	14.0	14.0	14.0	14.0	17.0
	44	5220	14.0	14.0	14.0	14.0	17.0
	48	5240	14.0	14.0	14.0	14.0	17.0
802.11ac VHT40	38	5190	14.0	14.0	14.0	14.0	17.0
	46	5230	14.0	14.0	14.0	14.0	17.0
802.11ac VHT80	42	5210	14.0	14.0	14.0	14.0	17.0
802.11ax HE20	36	5180	14.0	14.0	14.0	14.0	17.0
	40	5200	14.0	14.0	14.0	14.0	17.0
	44	5220	14.0	14.0	14.0	14.0	17.0
	48	5240	14.0	14.0	14.0	14.0	17.0
802.11ax HE40	38	5190	14.0	14.0	14.0	14.0	17.0
	46	5230	14.0	14.0	14.0	14.0	17.0
802.11ax HE80	42	5210	14.0	14.0	14.0	14.0	17.0
802.11be EHT20	36	5180	14.0	14.0	14.0	14.0	17.0
	40	5200	14.0	14.0	14.0	14.0	17.0
	44	5220	14.0	14.0	14.0	14.0	17.0
	48	5240	14.0	14.0	14.0	14.0	17.0
802.11be EHT40	38	5190	14.0	14.0	14.0	14.0	17.0
	46	5230	14.0	14.0	14.0	14.0	17.0
802.11be EHT80	42	5210	14.0	14.0	14.0	14.0	17.0

WLAN 5.3GHz

Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	52	5260	14.0	14.0	14.0	14.0	17.0
	56	5280	14.0	14.0	14.0	14.0	17.0
	60	5300	14.0	14.0	14.0	14.0	17.0
	64	5320	14.0	14.0	14.0	14.0	17.0
802.11ac VHT20	52	5260	14.0	14.0	14.0	14.0	17.0
	56	5280	14.0	14.0	14.0	14.0	17.0
	60	5300	14.0	14.0	14.0	14.0	17.0
	64	5320	14.0	14.0	14.0	14.0	17.0
802.11ac VHT40	54	5270	14.0	14.0	14.0	14.0	17.0
	62	5310	14.0	14.0	14.0	14.0	17.0
802.11ac VHT80	58	5290	14.0	14.0	14.0	14.0	17.0
802.11ac VHT160	50	5250	14.0	14.0	14.0	14.0	17.0
802.11ax HE20	52	5260	14.0	14.0	14.0	14.0	17.0
	56	5280	14.0	14.0	14.0	14.0	17.0
	60	5300	14.0	14.0	14.0	14.0	17.0
	64	5320	14.0	14.0	14.0	14.0	17.0
802.11ax HE40	54	5270	14.0	14.0	14.0	14.0	17.0
	62	5310	14.0	14.0	14.0	14.0	17.0
802.11ax HE80	58	5290	14.0	14.0	14.0	14.0	17.0
802.11ax HE160	50	5250	14.0	14.0	14.0	14.0	17.0

WLAN 5.6GHz

Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	100	5500	14.0	14.0	14.0	14.0	17.0
	116	5580	14.0	14.0	14.0	14.0	17.0
	120	5600	14.0	14.0	14.0	14.0	17.0
	124	5620	14.0	14.0	14.0	14.0	17.0
	132	5660	14.0	14.0	14.0	14.0	17.0
	140	5700	14.0	14.0	14.0	14.0	17.0
	144	5720	14.0	14.0	14.0	14.0	17.0
802.11ac VHT20	100	5500	14.0	14.0	14.0	14.0	17.0
	116	5580	14.0	14.0	14.0	14.0	17.0
	120	5600	14.0	14.0	14.0	14.0	17.0
	124	5620	14.0	14.0	14.0	14.0	17.0
	132	5660	14.0	14.0	14.0	14.0	17.0
	140	5700	14.0	14.0	14.0	14.0	17.0
	144	5720	14.0	14.0	14.0	14.0	17.0
802.11ac VHT40	102	5510	14.0	14.0	14.0	14.0	17.0
	110	5550	14.0	14.0	14.0	14.0	17.0
	118	5590	14.0	14.0	14.0	14.0	17.0
	126	5630	14.0	14.0	14.0	14.0	17.0
	134	5670	14.0	14.0	14.0	14.0	17.0
	142	5710	14.0	14.0	14.0	14.0	17.0
802.11ac VHT80	106	5530	14.0	14.0	14.0	14.0	17.0
	122	5610	14.0	14.0	14.0	14.0	17.0
	138	5690	14.0	14.0	14.0	14.0	17.0
802.11ac VHT160	114	5570	14.0	14.0	14.0	14.0	17.0
802.11ax HE20	100	5500	14.0	14.0	14.0	14.0	17.0
	116	5580	14.0	14.0	14.0	14.0	17.0
	120	5600	14.0	14.0	14.0	14.0	17.0
	124	5620	14.0	14.0	14.0	14.0	17.0
	132	5660	14.0	14.0	14.0	14.0	17.0
	140	5700	14.0	14.0	14.0	14.0	17.0
	144	5720	14.0	14.0	14.0	14.0	17.0
802.11ax HE40	102	5510	14.0	14.0	14.0	14.0	17.0
	110	5550	14.0	14.0	14.0	14.0	17.0
	118	5590	14.0	14.0	14.0	14.0	17.0
	126	5630	14.0	14.0	14.0	14.0	17.0
	134	5670	14.0	14.0	14.0	14.0	17.0
	142	5710	14.0	14.0	14.0	14.0	17.0
802.11ax HE80	106	5530	14.0	14.0	14.0	14.0	17.0
	122	5610	14.0	14.0	14.0	14.0	17.0
	138	5690	14.0	14.0	14.0	14.0	17.0
802.11ax HE160	114	5570	14.0	14.0	14.0	14.0	17.0

WLAN 5.8GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	149	5745	14.0	14.0	2.0	2.0	17.0
	153	5765	14.0	14.0	14.0	14.0	17.0
	157	5785	14.0	14.0	14.0	14.0	17.0
	161	5805	14.0	14.0	14.0	14.0	17.0
	165	5825	14.0	14.0	14.0	14.0	17.0
802.11ac VHT20	149	5745	14.0	14.0	14.0	14.0	17.0
	153	5765	14.0	14.0	14.0	14.0	17.0
	157	5785	14.0	14.0	14.0	14.0	17.0
	161	5805	14.0	14.0	14.0	14.0	17.0
	165	5825	14.0	14.0	14.0	14.0	17.0
802.11ac VHT40	151	5755	14.0	14.0	14.0	14.0	17.0
	159	5795	14.0	14.0	14.0	14.0	17.0
802.11ac VHT80	155	5775	14.0	14.0	14.0	14.0	17.0
802.11ax HE20	149	5745	14.0	14.0	14.0	14.0	17.0
	153	5765	14.0	14.0	14.0	14.0	17.0
	157	5785	14.0	14.0	14.0	14.0	17.0
	161	5805	14.0	14.0	14.0	14.0	17.0
	165	5825	14.0	14.0	14.0	14.0	17.0
802.11ax HE40	151	5755	14.0	14.0	14.0	14.0	17.0
	159	5795	14.0	14.0	14.0	14.0	17.0
802.11ax HE80	155	5775	14.0	14.0	14.0	14.0	17.0
802.11be EHT20	149	5745	14.0	14.0	14.0	14.0	17.0
	153	5765	14.0	14.0	14.0	14.0	17.0
	157	5785	14.0	14.0	14.0	14.0	17.0
	161	5805	14.0	14.0	14.0	14.0	17.0
	165	5825	14.0	14.0	14.0	14.0	17.0
802.11be EHT40	151	5755	14.0	14.0	14.0	14.0	17.0
	159	5795	14.0	14.0	14.0	14.0	17.0
802.11be EHT80	155	5775	14.0	14.0	14.0	14.0	17.0

WLAN 6G							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	1	5955	2.0	2.0	2.0	2.0	5.0
	5	5975	2.0	2.0	2.0	2.0	5.0
	9	5995	2.0	2.0	2.0	2.0	5.0
	13	6015	2.0	2.0	2.0	2.0	5.0
	17	6035	2.0	2.0	2.0	2.0	5.0
	21	6055	2.0	2.0	2.0	2.0	5.0
	25	6075	2.0	2.0	2.0	2.0	5.0
	29	6095	2.0	2.0	2.0	2.0	5.0
	33	6115	2.0	2.0	2.0	2.0	5.0
	37	6135	2.0	2.0	2.0	2.0	5.0
	41	6155	2.0	2.0	2.0	2.0	5.0
	45	6175	2.0	2.0	2.0	2.0	5.0
	49	6195	2.0	2.0	2.0	2.0	5.0
	53	6215	2.0	2.0	2.0	2.0	5.0
	57	6235	2.0	2.0	2.0	2.0	5.0
	61	6255	2.0	2.0	2.0	2.0	5.0
	65	6275	2.0	2.0	2.0	2.0	5.0
	69	6295	2.0	2.0	2.0	2.0	5.0
	73	6315	2.0	2.0	2.0	2.0	5.0
	77	6335	2.0	2.0	2.0	2.0	5.0
	81	6355	2.0	2.0	2.0	2.0	5.0
	85	6375	2.0	2.0	2.0	2.0	5.0
	89	6395	2.0	2.0	2.0	2.0	5.0
	93	6415	2.0	2.0	2.0	2.0	5.0
	97	6435	2.0	2.0	2.0	2.0	5.0
	101	6455	2.0	2.0	2.0	2.0	5.0
	105	6475	2.0	2.0	2.0	2.0	5.0
	109	6495	2.0	2.0	2.0	2.0	5.0
	113	6515	2.0	2.0	2.0	2.0	5.0
	117	6535	2.0	2.0	2.0	2.0	5.0
	121	6555	2.0	2.0	2.0	2.0	5.0
	125	6575	2.0	2.0	2.0	2.0	5.0
	129	6595	2.0	2.0	2.0	2.0	5.0
133	6615	2.0	2.0	2.0	2.0	5.0	
137	6635	2.0	2.0	2.0	2.0	5.0	
141	6655	2.0	2.0	2.0	2.0	5.0	
145	6675	2.0	2.0	2.0	2.0	5.0	
149	6695	2.0	2.0	2.0	2.0	5.0	
153	6715	2.0	2.0	2.0	2.0	5.0	
157	6735	2.0	2.0	2.0	2.0	5.0	
161	6755	2.0	2.0	2.0	2.0	5.0	
165	6775	2.0	2.0	2.0	2.0	5.0	
169	6795	2.0	2.0	2.0	2.0	5.0	
173	6815	2.0	2.0	2.0	2.0	5.0	
177	6835	2.0	2.0	2.0	2.0	5.0	
181	6855	2.0	2.0	2.0	2.0	5.0	
185	6875	2.0	2.0	2.0	2.0	5.0	
189	6895	2.0	2.0	2.0	2.0	5.0	
193	6915	2.0	2.0	2.0	2.0	5.0	
197	6935	2.0	2.0	2.0	2.0	5.0	
201	6955	2.0	2.0	2.0	2.0	5.0	
205	6975	2.0	2.0	2.0	2.0	5.0	
209	6995	2.0	2.0	2.0	2.0	5.0	
213	7015	2.0	2.0	2.0	2.0	5.0	
217	7035	2.0	2.0	2.0	2.0	5.0	
221	7055	2.0	2.0	2.0	2.0	5.0	
225	7075	2.0	2.0	2.0	2.0	5.0	
229	7095	2.0	2.0	2.0	2.0	5.0	
233	7115	2.0	2.0	2.0	2.0	5.0	

WLAN 6G

Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE20	1	5955	5.0	5.0	5.0	5.0	8.0
	5	5975	5.0	5.0	5.0	5.0	8.0
	9	5995	5.0	5.0	5.0	5.0	8.0
	13	6015	5.0	5.0	5.0	5.0	8.0
	17	6035	5.0	5.0	5.0	5.0	8.0
	21	6055	5.0	5.0	5.0	5.0	8.0
	25	6075	5.0	5.0	5.0	5.0	8.0
	29	6095	5.0	5.0	5.0	5.0	8.0
	33	6115	5.0	5.0	5.0	5.0	8.0
	37	6135	5.0	5.0	5.0	5.0	8.0
	41	6155	5.0	5.0	5.0	5.0	8.0
	45	6175	5.0	5.0	5.0	5.0	8.0
	49	6195	5.0	5.0	5.0	5.0	8.0
	53	6215	5.0	5.0	5.0	5.0	8.0
	57	6235	5.0	5.0	5.0	5.0	8.0
	61	6255	5.0	5.0	5.0	5.0	8.0
	65	6275	5.0	5.0	5.0	5.0	8.0
	69	6295	5.0	5.0	5.0	5.0	8.0
	73	6315	5.0	5.0	5.0	5.0	8.0
	77	6335	5.0	5.0	5.0	5.0	8.0
	81	6355	5.0	5.0	5.0	5.0	8.0
	85	6375	5.0	5.0	5.0	5.0	8.0
	89	6395	5.0	5.0	5.0	5.0	8.0
	93	6415	5.0	5.0	5.0	5.0	8.0
	97	6435	5.0	5.0	5.0	5.0	8.0
	101	6455	5.0	5.0	5.0	5.0	8.0
	105	6475	5.0	5.0	5.0	5.0	8.0
	109	6495	5.0	5.0	5.0	5.0	8.0
	113	6515	5.0	5.0	5.0	5.0	8.0
	117	6535	5.0	5.0	5.0	5.0	8.0
	121	6555	5.0	5.0	5.0	5.0	8.0
	125	6575	5.0	5.0	5.0	5.0	8.0
	129	6595	5.0	5.0	5.0	5.0	8.0
133	6615	5.0	5.0	5.0	5.0	8.0	
137	6635	5.0	5.0	5.0	5.0	8.0	
141	6655	5.0	5.0	5.0	5.0	8.0	
145	6675	5.0	5.0	5.0	5.0	8.0	
149	6695	5.0	5.0	5.0	5.0	8.0	
153	6715	5.0	5.0	5.0	5.0	8.0	
157	6735	5.0	5.0	5.0	5.0	8.0	
161	6755	5.0	5.0	5.0	5.0	8.0	
165	6775	5.0	5.0	5.0	5.0	8.0	
169	6795	5.0	5.0	5.0	5.0	8.0	
173	6815	5.0	5.0	5.0	5.0	8.0	
177	6835	5.0	5.0	5.0	5.0	8.0	
181	6855	5.0	5.0	5.0	5.0	8.0	
185	6875	5.0	5.0	5.0	5.0	8.0	
189	6895	5.0	5.0	5.0	5.0	8.0	
193	6915	5.0	5.0	5.0	5.0	8.0	
197	6935	5.0	5.0	5.0	5.0	8.0	
201	6955	5.0	5.0	5.0	5.0	8.0	
205	6975	5.0	5.0	5.0	5.0	8.0	
209	6995	5.0	5.0	5.0	5.0	8.0	
213	7015	5.0	5.0	5.0	5.0	8.0	
217	7035	5.0	5.0	5.0	5.0	8.0	
221	7055	5.0	5.0	5.0	5.0	8.0	
225	7075	5.0	5.0	5.0	5.0	8.0	
229	7095	5.0	5.0	5.0	5.0	8.0	
233	7115	5.0	5.0	5.0	5.0	8.0	

WLAN 6G							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11ax HE40	3	5965	8.0	8.0	8.0	8.0	11.0
	11	6005	8.0	8.0	8.0	8.0	11.0
	19	6045	8.0	8.0	8.0	8.0	11.0
	27	6085	8.0	8.0	8.0	8.0	11.0
	35	6125	8.0	8.0	8.0	8.0	11.0
	43	6165	8.0	8.0	8.0	8.0	11.0
	51	6205	8.0	8.0	8.0	8.0	11.0
	59	6245	8.0	8.0	8.0	8.0	11.0
	67	6285	8.0	8.0	8.0	8.0	11.0
	75	6325	8.0	8.0	8.0	8.0	11.0
	83	6365	8.0	8.0	8.0	8.0	11.0
	91	6405	8.0	8.0	8.0	8.0	11.0
	99	6445	8.0	8.0	8.0	8.0	11.0
	107	6485	8.0	8.0	8.0	8.0	11.0
	115	6525	8.0	8.0	8.0	8.0	11.0
	123	6565	8.0	8.0	8.0	8.0	11.0
	131	6605	8.0	8.0	8.0	8.0	11.0
	139	6645	8.0	8.0	8.0	8.0	11.0
	147	6685	8.0	8.0	8.0	8.0	11.0
	155	6725	8.0	8.0	8.0	8.0	11.0
163	6765	8.0	8.0	8.0	8.0	11.0	
171	6805	8.0	8.0	8.0	8.0	11.0	
179	6845	8.0	8.0	8.0	8.0	11.0	
187	6885	8.0	8.0	8.0	8.0	11.0	
195	6925	8.0	8.0	8.0	8.0	11.0	
203	6965	8.0	8.0	8.0	8.0	11.0	
211	7005	8.0	8.0	8.0	8.0	11.0	
219	7045	8.0	8.0	8.0	8.0	11.0	
227	7085	8.0	8.0	8.0	8.0	11.0	
802.11ax HE80	7	5985	11.0	11.0	11.0	11.0	14.0
	23	6065	11.0	11.0	11.0	11.0	14.0
	39	6145	11.0	11.0	11.0	11.0	14.0
	55	6225	11.0	11.0	11.0	11.0	14.0
	71	6305	11.0	11.0	11.0	11.0	14.0
	87	6385	11.0	11.0	11.0	11.0	14.0
	103	6465	11.0	11.0	11.0	11.0	14.0
	119	6545	11.0	11.0	11.0	11.0	14.0
	135	6625	11.0	11.0	11.0	11.0	14.0
	151	6705	11.0	11.0	11.0	11.0	14.0
	167	6785	11.0	11.0	11.0	11.0	14.0
	183	6865	11.0	11.0	11.0	11.0	14.0
199	6945	11.0	11.0	11.0	11.0	14.0	
215	7025	11.0	11.0	11.0	11.0	14.0	
802.11ax HE160	15	6025	13.5	13.5	13.5	13.5	16.5
	47	6185	13.5	13.5	13.5	13.5	16.5
	79	6345	13.5	13.5	13.5	13.5	16.5
	111	6505	13.5	13.5	13.5	13.5	16.5
	143	6665	13.5	13.5	13.5	13.5	16.5
	175	6825	13.5	13.5	13.5	13.5	16.5
	207	6985	13.5	13.5	13.5	13.5	16.5

WLAN 6G

Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11be EHT20	1	5945	5.0	5.0	5.0	5.0	8.0
	5	5965	5.0	5.0	5.0	5.0	8.0
	9	5985	5.0	5.0	5.0	5.0	8.0
	13	6005	5.0	5.0	5.0	5.0	8.0
	17	6025	5.0	5.0	5.0	5.0	8.0
	21	6045	5.0	5.0	5.0	5.0	8.0
	25	6065	5.0	5.0	5.0	5.0	8.0
	29	6085	5.0	5.0	5.0	5.0	8.0
	33	6105	5.0	5.0	5.0	5.0	8.0
	37	6125	5.0	5.0	5.0	5.0	8.0
	41	6145	5.0	5.0	5.0	5.0	8.0
	45	6165	5.0	5.0	5.0	5.0	8.0
	49	6185	5.0	5.0	5.0	5.0	8.0
	53	6205	5.0	5.0	5.0	5.0	8.0
	57	6225	5.0	5.0	5.0	5.0	8.0
	61	6245	5.0	5.0	5.0	5.0	8.0
	65	6265	5.0	5.0	5.0	5.0	8.0
	69	6285	5.0	5.0	5.0	5.0	8.0
	73	6305	5.0	5.0	5.0	5.0	8.0
	77	6325	5.0	5.0	5.0	5.0	8.0
	81	6345	5.0	5.0	5.0	5.0	8.0
	85	6365	5.0	5.0	5.0	5.0	8.0
	89	6385	5.0	5.0	5.0	5.0	8.0
	93	6405	5.0	5.0	5.0	5.0	8.0
	97	6425	5.0	5.0	5.0	5.0	8.0
	101	6445	5.0	5.0	5.0	5.0	8.0
	105	6465	5.0	5.0	5.0	5.0	8.0
	109	6485	5.0	5.0	5.0	5.0	8.0
	113	6505	5.0	5.0	5.0	5.0	8.0
	117	6525	5.0	5.0	5.0	5.0	8.0
	121	6545	5.0	5.0	5.0	5.0	8.0
	125	6565	5.0	5.0	5.0	5.0	8.0
	129	6585	5.0	5.0	5.0	5.0	8.0
133	6605	5.0	5.0	5.0	5.0	8.0	
137	6625	5.0	5.0	5.0	5.0	8.0	
141	6645	5.0	5.0	5.0	5.0	8.0	
145	6665	5.0	5.0	5.0	5.0	8.0	
149	6685	5.0	5.0	5.0	5.0	8.0	
153	6705	5.0	5.0	5.0	5.0	8.0	
157	6725	5.0	5.0	5.0	5.0	8.0	
161	6745	5.0	5.0	5.0	5.0	8.0	
165	6765	5.0	5.0	5.0	5.0	8.0	
169	6785	5.0	5.0	5.0	5.0	8.0	
173	6805	5.0	5.0	5.0	5.0	8.0	
177	6825	5.0	5.0	5.0	5.0	8.0	
181	6845	5.0	5.0	5.0	5.0	8.0	
185	6865	5.0	5.0	5.0	5.0	8.0	
189	6885	5.0	5.0	5.0	5.0	8.0	
193	6905	5.0	5.0	5.0	5.0	8.0	
197	6925	5.0	5.0	5.0	5.0	8.0	
201	6945	5.0	5.0	5.0	5.0	8.0	
205	6965	5.0	5.0	5.0	5.0	8.0	
209	6985	5.0	5.0	5.0	5.0	8.0	
213	7005	5.0	5.0	5.0	5.0	8.0	
217	7025	5.0	5.0	5.0	5.0	8.0	
221	7045	5.0	5.0	5.0	5.0	8.0	
225	7065	5.0	5.0	5.0	5.0	8.0	
229	7085	5.0	5.0	5.0	5.0	8.0	
233	7105	5.0	5.0	5.0	5.0	8.0	

WLAN 6G							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11be EHT40	3	5955	8.0	8.0	8.0	8.0	11.0
	11	5995	8.0	8.0	8.0	8.0	11.0
	19	6035	8.0	8.0	8.0	8.0	11.0
	27	6075	8.0	8.0	8.0	8.0	11.0
	35	6115	8.0	8.0	8.0	8.0	11.0
	43	6155	8.0	8.0	8.0	8.0	11.0
	51	6195	8.0	8.0	8.0	8.0	11.0
	59	6235	8.0	8.0	8.0	8.0	11.0
	67	6275	8.0	8.0	8.0	8.0	11.0
	75	6315	8.0	8.0	8.0	8.0	11.0
	83	6355	8.0	8.0	8.0	8.0	11.0
	91	6395	8.0	8.0	8.0	8.0	11.0
	99	6435	8.0	8.0	8.0	8.0	11.0
	107	6475	8.0	8.0	8.0	8.0	11.0
	115	6515	8.0	8.0	8.0	8.0	11.0
	123	6555	8.0	8.0	8.0	8.0	11.0
	131	6595	8.0	8.0	8.0	8.0	11.0
	139	6635	8.0	8.0	8.0	8.0	11.0
	147	6675	8.0	8.0	8.0	8.0	11.0
	155	6715	8.0	8.0	8.0	8.0	11.0
163	6755	8.0	8.0	8.0	8.0	11.0	
171	6795	8.0	8.0	8.0	8.0	11.0	
179	6835	8.0	8.0	8.0	8.0	11.0	
187	6875	8.0	8.0	8.0	8.0	11.0	
195	6915	8.0	8.0	8.0	8.0	11.0	
203	6955	8.0	8.0	8.0	8.0	11.0	
211	6995	8.0	8.0	8.0	8.0	11.0	
219	7035	8.0	8.0	8.0	8.0	11.0	
227	7075	8.0	8.0	8.0	8.0	11.0	
802.11be EHT80	7	5975	11.0	11.0	11.0	11.0	14.0
	23	6055	11.0	11.0	11.0	11.0	14.0
	39	6135	11.0	11.0	11.0	11.0	14.0
	55	6215	11.0	11.0	11.0	11.0	14.0
	71	6295	11.0	11.0	11.0	11.0	14.0
	87	6375	11.0	11.0	11.0	11.0	14.0
	103	6455	11.0	11.0	11.0	11.0	14.0
	119	6535	11.0	11.0	11.0	11.0	14.0
	135	6615	11.0	11.0	11.0	11.0	14.0
	151	6695	11.0	11.0	11.0	11.0	14.0
	167	6775	11.0	11.0	11.0	11.0	14.0
	183	6855	11.0	11.0	11.0	11.0	14.0
199	6935	11.0	11.0	11.0	11.0	14.0	
215	7015	11.0	11.0	11.0	11.0	14.0	
802.11be EHT160	15	6015	13.5	13.5	13.5	13.5	16.5
	47	6175	13.5	13.5	13.5	13.5	16.5
	79	6335	13.5	13.5	13.5	13.5	16.5
	111	6495	13.5	13.5	13.5	13.5	16.5
	143	6655	13.5	13.5	13.5	13.5	16.5
	175	6815	13.5	13.5	13.5	13.5	16.5
	207	6975	13.5	13.5	13.5	13.5	16.5
802.11be EHT320	31	6105	16.0	16.0	16.0	16.0	19.0
	63	6265	16.0	16.0	16.0	16.0	19.0
	95	6425	16.0	16.0	16.0	16.0	19.0
	127	6585	16.0	16.0	16.0	16.0	19.0
	159	6745	16.0	16.0	16.0	16.0	19.0
	191	6905	16.0	16.0	16.0	16.0	19.0

WLAN 6G - 1T1S

Mode	Channel	Frequency	SISO Ant 0 Max Tune up
802.11a	1	5955	8.0
	5	5975	8.0
	9	5995	8.0
	13	6015	8.0
	17	6035	8.0
	21	6055	8.0
	25	6075	8.0
	29	6095	8.0
	33	6115	8.0
	37	6135	8.0
	41	6155	8.0
	45	6175	8.0
	49	6195	8.0
	53	6215	8.0
	57	6235	8.0
	61	6255	8.0
	65	6275	8.0
	69	6295	8.0
	73	6315	8.0
	77	6335	8.0
	81	6355	8.0
	85	6375	8.0
	89	6395	8.0
	93	6415	8.0
	97	6435	8.0
	101	6455	8.0
	105	6475	8.0
	109	6495	8.0
	113	6515	8.0
	117	6535	8.0
	121	6555	8.0
	125	6575	8.0
	129	6595	8.0
133	6615	8.0	
137	6635	8.0	
141	6655	8.0	
145	6675	8.0	
149	6695	8.0	
153	6715	8.0	
157	6735	8.0	
161	6755	8.0	
165	6775	8.0	
169	6795	8.0	
173	6815	8.0	
177	6835	8.0	
181	6855	8.0	
185	6875	8.0	
189	6895	8.0	
193	6915	8.0	
197	6935	8.0	
201	6955	8.0	
205	6975	8.0	
209	6995	8.0	
213	7015	8.0	
217	7035	8.0	
221	7055	8.0	
225	7075	8.0	
229	7095	8.0	
233	7115	8.0	

WLAN 6G - 1T1S

Mode	Channel	Frequency	SISO Ant 0 Max Tune up
802.11ax HE20	1	5955	8.0
	5	5975	8.0
	9	5995	8.0
	13	6015	8.0
	17	6035	8.0
	21	6055	8.0
	25	6075	8.0
	29	6095	8.0
	33	6115	8.0
	37	6135	8.0
	41	6155	8.0
	45	6175	8.0
	49	6195	8.0
	53	6215	8.0
	57	6235	8.0
	61	6255	8.0
	65	6275	8.0
	69	6295	8.0
	73	6315	8.0
	77	6335	8.0
	81	6355	8.0
	85	6375	8.0
	89	6395	8.0
	93	6415	8.0
	97	6435	8.0
	101	6455	8.0
	105	6475	8.0
	109	6495	8.0
	113	6515	8.0
	117	6535	8.0
	121	6555	8.0
	125	6575	8.0
	129	6595	8.0
133	6615	8.0	
137	6635	8.0	
141	6655	8.0	
145	6675	8.0	
149	6695	8.0	
153	6715	8.0	
157	6735	8.0	
161	6755	8.0	
165	6775	8.0	
169	6795	8.0	
173	6815	8.0	
177	6835	8.0	
181	6855	8.0	
185	6875	8.0	
189	6895	8.0	
193	6915	8.0	
197	6935	8.0	
201	6955	8.0	
205	6975	8.0	
209	6995	8.0	
213	7015	8.0	
217	7035	8.0	
221	7055	8.0	
225	7075	8.0	
229	7095	8.0	
233	7115	8.0	

WLAN 6G - 1T1S			
Mode	Channel	Frequency	SISO Ant 0 Max Tune up
802.11ax HE40	3	5965	11.0
	11	6005	11.0
	19	6045	11.0
	27	6085	11.0
	35	6125	11.0
	43	6165	11.0
	51	6205	11.0
	59	6245	11.0
	67	6285	11.0
	75	6325	11.0
	83	6365	11.0
	91	6405	11.0
	99	6445	11.0
	107	6485	11.0
	115	6525	11.0
	123	6565	11.0
	131	6605	11.0
	139	6645	11.0
	147	6685	11.0
	155	6725	11.0
	163	6765	11.0
	171	6805	11.0
	179	6845	11.0
	187	6885	11.0
195	6925	11.0	
203	6965	11.0	
211	7005	11.0	
219	7045	11.0	
227	7085	11.0	
802.11ax HE80	7	5985	14.0
	23	6065	14.0
	39	6145	14.0
	55	6225	14.0
	71	6305	14.0
	87	6385	14.0
	103	6465	14.0
	119	6545	14.0
	135	6625	14.0
	151	6705	14.0
	167	6785	14.0
	183	6865	14.0
199	6945	14.0	
215	7025	14.0	
802.11ax HE160	15	6025	16.0
	47	6185	16.0
	79	6345	16.0
	111	6505	16.0
	143	6665	16.0
	175	6825	16.0
	207	6985	16.0

WLAN 6G - 1T1S			
Mode	Channel	Frequency	SISO Ant 0 Max Tune up
802.11be EHT20	1	5945	8.0
	5	5965	8.0
	9	5985	8.0
	13	6005	8.0
	17	6025	8.0
	21	6045	8.0
	25	6065	8.0
	29	6085	8.0
	33	6105	8.0
	37	6125	8.0
	41	6145	8.0
	45	6165	8.0
	49	6185	8.0
	53	6205	8.0
	57	6225	8.0
	61	6245	8.0
	65	6265	8.0
	69	6285	8.0
	73	6305	8.0
	77	6325	8.0
	81	6345	8.0
	85	6365	8.0
	89	6385	8.0
	93	6405	8.0
	97	6425	8.0
	101	6445	8.0
	105	6465	8.0
	109	6485	8.0
	113	6505	8.0
	117	6525	8.0
	121	6545	8.0
	125	6565	8.0
	129	6585	8.0
133	6605	8.0	
137	6625	8.0	
141	6645	8.0	
145	6665	8.0	
149	6685	8.0	
153	6705	8.0	
157	6725	8.0	
161	6745	8.0	
165	6765	8.0	
169	6785	8.0	
173	6805	8.0	
177	6825	8.0	
181	6845	8.0	
185	6865	8.0	
189	6885	8.0	
193	6905	8.0	
197	6925	8.0	
201	6945	8.0	
205	6965	8.0	
209	6985	8.0	
213	7005	8.0	
217	7025	8.0	
221	7045	8.0	
225	7065	8.0	
229	7085	8.0	
233	7105	8.0	

WLAN 6G - 1T1S			
Mode	Channel	Frequency	SISO Ant 0 Max Tune up
802.11be EHT40	3	5955	11.0
	11	5995	11.0
	19	6035	11.0
	27	6075	11.0
	35	6115	11.0
	43	6155	11.0
	51	6195	11.0
	59	6235	11.0
	67	6275	11.0
	75	6315	11.0
	83	6355	11.0
	91	6395	11.0
	99	6435	11.0
	107	6475	11.0
	115	6515	11.0
	123	6555	11.0
	131	6595	11.0
	139	6635	11.0
	147	6675	11.0
	155	6715	11.0
	163	6755	11.0
	171	6795	11.0
	179	6835	11.0
	187	6875	11.0
195	6915	11.0	
203	6955	11.0	
211	6995	11.0	
219	7035	11.0	
227	7075	11.0	
802.11be EHT80	7	5975	14.0
	23	6055	14.0
	39	6135	14.0
	55	6215	14.0
	71	6295	14.0
	87	6375	14.0
	103	6455	14.0
	119	6535	14.0
	135	6615	14.0
	151	6695	14.0
	167	6775	14.0
	183	6855	14.0
199	6935	14.0	
215	7015	14.0	
802.11be EHT160	15	6015	16.0
	47	6175	16.0
	79	6335	16.0
	111	6495	16.0
	143	6655	16.0
	175	6815	16.0
	207	6975	16.0
802.11be EHT320	31	6105	18.5
	63	6265	18.5
	95	6425	18.5
	127	6585	18.5
	159	6745	18.5
	191	6905	18.5

Annex E. Measured Conducted Power Result

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

WLAN2.4GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11b	1	2412	15.47
	6	2437	15.43
	11	2462	15.42
	12	2467	15.44
	13	2472	14.34

WLAN2.4GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11b	1	2412	15.48
	6	2437	15.41
	11	2462	15.43
	12	2467	15.42
	13	2472	13.64

WLAN2.4GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11b	1	2412	15.37	15.47	18.43
	6	2437	15.36	15.45	18.42
	11	2462	15.39	15.41	18.41
	12	2467	15.32	15.36	18.35
	13	2472	14.25	13.61	16.95



Bluetooth Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
BR / EDR	0	2402	13.62
	39	2441	13.52
	78	2480	13.51
LE	0	2402	13.76
	19	2440	13.59
	39	2480	13.65

WLAN 5.3GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ac VHT160	50	5250	13.88

WLAN 5.3GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT160	50	5250	13.88

WLAN 5.3GHz Ant 0+1

Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ac VHT160	50	5250	13.92	13.85	16.9

WLAN 5.6GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ac VHT160	114	5570	13.88

WLAN 5.6GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT160	114	5570	13.88

WLAN 5.6GHz Ant 0+1

Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ac VHT160	114	5570	13.91	13.99	16.96

WLAN 5.8GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ac VHT80	155	5775	13.99

WLAN 5.8GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT80	155	5775	13.97

WLAN 5.8GHz Ant 0+1

Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ac VHT80	155	5775	13.96	13.86	16.92

WLAN 6G Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11be EHT320	31	6105	15.73
	63	6265	14.78
	95	6425	15.27
	127	6585	15.49
	159	6745	15.54
	191	6905	14.78

WLAN 6G Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11be EHT320	31	6105	14.51
	63	6265	15.24
	95	6425	14.73
	127	6585	14.74
	159	6745	15.1
	191	6905	15.99

WLAN 6G Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11be EHT320	31	6105	15.73	14.51	18.17
	63	6265	14.78	15.24	18.03
	95	6425	15.27	14.73	17.82
	127	6585	15.49	14.74	18.14
	159	6745	15.54	15.1	18.34
	191	6905	14.78	15.99	18.44

WLAN 6G - 1S1T			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11be EHT320	31	6105	18.08
	63	6265	18.14
	95	6425	18.06
	127	6585	18.2
	159	6745	18.33
	191	6905	18.43

Annex F. SAR and Power Density Test Result.

SAR Results for Body Exposure Condition.

Note:

1. SAR testing for WLAN was performed on the maximum power mode.

Body SAR Test Result

System & Position						DUT & Accessory	SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	WLAN2.4G	802.11b	Front Face	5	1	Ant 0	100.00	1.00	15.50	15.47	1.01	-0.17	0.165	0.17
	WLAN2.4G	802.11b	Rear Face	5	1	Ant 0	100.00	1.00	15.50	15.47	1.01	-0.01	0.14	0.14
	WLAN2.4G	802.11b	Left Side	5	1	Ant 0	100.00	1.00	15.50	15.47	1.01	0.01	0.157	0.16
	WLAN2.4G	802.11b	Right Side	5	1	Ant 0	100.00	1.00	15.50	15.47	1.01	-0.14	0.291	0.29
	WLAN2.4G	802.11b	Top Side	5	1	Ant 0	100.00	1.00	15.50	15.47	1.01	-0.05	0.265	0.27
	WLAN2.4G	802.11b	Bottom Side	5	1	Ant 0	100.00	1.00	15.50	15.47	1.01	0.12	0.522	0.53
	WLAN2.4G	802.11b	Front Face	5	1	Ant 1	100.00	1.00	15.50	15.48	1.00	0.08	0.175	0.18
	WLAN2.4G	802.11b	Rear Face	5	1	Ant 1	100.00	1.00	15.50	15.48	1.00	0.02	0.135	0.14
	WLAN2.4G	802.11b	Left Side	5	1	Ant 1	100.00	1.00	15.50	15.48	1.00	-0.19	0.141	0.14
	WLAN2.4G	802.11b	Right Side	5	1	Ant 1	100.00	1.00	15.50	15.48	1.00	0.16	0.408	0.41
	WLAN2.4G	802.11b	Top Side	5	1	Ant 1	100.00	1.00	15.50	15.48	1.00	0.03	0.354	0.35
	WLAN2.4G	802.11b	Bottom Side	5	1	Ant 1	100.00	1.00	15.50	15.48	1.00	0.02	0.486	0.49
	WLAN2.4G	802.11b	Front Face	5	1	Ant 0+1	100.00	1.00	18.50	18.43	1.02	0.1	0.221	0.23
	WLAN2.4G	802.11b	Rear Face	5	1	Ant 0+1	100.00	1.00	18.50	18.43	1.02	0.14	0.157	0.16
	WLAN2.4G	802.11b	Left Side	5	1	Ant 0+1	100.00	1.00	18.50	18.43	1.02	0.12	0.173	0.18
	WLAN2.4G	802.11b	Right Side	5	1	Ant 0+1	100.00	1.00	18.50	18.43	1.02	-0.04	0.36	0.37
	WLAN2.4G	802.11b	Top Side	5	1	Ant 0+1	100.00	1.00	18.50	18.43	1.02	-0.1	0.328	0.33
1	WLAN2.4G	802.11b	Bottom Side	5	1	Ant 0+1	100.00	1.00	18.50	18.43	1.02	-0.07	0.531	0.54
	WLAN2.4G	802.11b	Bottom Side	5	6	Ant 0+1	100.00	1.00	18.50	18.42	1.02	0.08	0.513	0.52
	WLAN2.4G	802.11b	Bottom Side	5	11	Ant 0+1	100.00	1.00	18.50	18.41	1.02	-0.14	0.474	0.48
	WLAN2.4G	802.11b	Bottom Side	5	12	Ant 0+1	100.00	1.00	18.50	18.35	1.04	-0.04	0.483	0.50
	WLAN2.4G	802.11b	Bottom Side	5	13	Ant 0+1	100.00	1.00	17.50	16.95	1.14	0.02	0.389	0.44
	WLAN5.3G	802.11ac VHT160	Front Face	5	50	Ant 0	100.00	1.00	14.00	13.88	1.03	-0.12	0.194	0.20
	WLAN5.3G	802.11ac VHT160	Rear Face	5	50	Ant 0	100.00	1.00	14.00	13.88	1.03	-0.14	0.052	0.05
	WLAN5.3G	802.11ac VHT160	Left Side	5	50	Ant 0	100.00	1.00	14.00	13.88	1.03	-0.12	0.332	0.34
	WLAN5.3G	802.11ac VHT160	Right Side	5	50	Ant 0	100.00	1.00	14.00	13.88	1.03	0.16	0.035	0.04
	WLAN5.3G	802.11ac VHT160	Top Side	5	50	Ant 0	100.00	1.00	14.00	13.88	1.03	-0.08	0.213	0.22
	WLAN5.3G	802.11ac VHT160	Bottom Side	5	50	Ant 0	100.00	1.00	14.00	13.88	1.03	-0.02	0.52	0.54
	WLAN5.3G	802.11ac VHT160	Front Face	5	50	Ant 1	100.00	1.00	14.00	13.88	1.03	-0.13	0.28	0.29
	WLAN5.3G	802.11ac VHT160	Rear Face	5	50	Ant 1	100.00	1.00	14.00	13.88	1.03	0	0.101	0.10
	WLAN5.3G	802.11ac VHT160	Left Side	5	50	Ant 1	100.00	1.00	14.00	13.88	1.03	-0.07	0.335	0.35
	WLAN5.3G	802.11ac VHT160	Right Side	5	50	Ant 1	100.00	1.00	14.00	13.88	1.03	0.09	0.058	0.06
	WLAN5.3G	802.11ac VHT160	Top Side	5	50	Ant 1	100.00	1.00	14.00	13.88	1.03	-0.12	0.312	0.32
	WLAN5.3G	802.11ac VHT160	Bottom Side	5	50	Ant 1	100.00	1.00	14.00	13.88	1.03	0.01	0.537	0.55
	WLAN5.3G	802.11ac VHT160	Front Face	5	50	Ant 0+1	100.00	1.00	17.00	16.90	1.02	0.05	0.293	0.30
	WLAN5.3G	802.11ac VHT160	Rear Face	5	50	Ant 0+1	100.00	1.00	17.00	16.90	1.02	0	0.115	0.12
	WLAN5.3G	802.11ac VHT160	Left Side	5	50	Ant 0+1	100.00	1.00	17.00	16.90	1.02	0.17	0.538	0.55
	WLAN5.3G	802.11ac VHT160	Right Side	5	50	Ant 0+1	100.00	1.00	17.00	16.90	1.02	0	0.068	0.07
	WLAN5.3G	802.11ac VHT160	Top Side	5	50	Ant 0+1	100.00	1.00	17.00	16.90	1.02	0.03	0.37	0.38
2	WLAN5.3G	802.11ac VHT160	Bottom Side	5	50	Ant 0+1	100.00	1.00	17.00	16.90	1.02	-0.01	0.64	0.65



Body SAR Test Result

Body SAR Test Result															
System & Position						DUT Configuration		SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Power Setting	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
	BT	LE	Front Face	5	0	Ant 1	15	84.34	1.19	14.00	13.76	1.06	-0.08	0.131	0.17
	BT	LE	Rear Face	5	0	Ant 1	15	84.34	1.19	14.00	13.76	1.06	0.11	0.101	0.13
	BT	LE	Left Side	5	0	Ant 1	15	84.34	1.19	14.00	13.76	1.06	-0.04	0.106	0.13
	BT	LE	Right Side	5	0	Ant 1	15	84.34	1.19	14.00	13.76	1.06	0.05	0.305	0.38
	BT	LE	Top Side	5	0	Ant 1	15	84.34	1.19	14.00	13.76	1.06	-0.03	0.265	0.33
6	BT	LE	Bottom Side	5	0	Ant 1	15	84.34	1.19	14.00	13.76	1.06	0.03	0.364	0.46
	BT	LE	Bottom Side	5	19	Ant 1	15	84.34	1.19	14.00	13.59	1.10	-0.1	0.355	0.46
	BT	LE	Bottom Side	5	39	Ant 1	15	84.34	1.19	14.00	13.65	1.08	-0.03	0.352	0.45

Annex G. SAR Measurement Variability

Since all the measured SAR1g are less than 0.8 W/kg, the repeated measurement is not required.

Annex H. Analysis of Simultaneous Transmission

The analysis of simultaneous transmission SAR are shown as below.

<Possibilities of Simultaneous Transmission>

The simultaneous transmission possibilities for this device are listed as below.

Simultaneous TX Combination	Capable Transmit Configurations	Body Exposure Condition
A	WLAN 5G + BT	Yes
B	WLAN 6G + BT	Yes
C	WLAN 2.4G + WLAN 5G	Yes
D	WLAN 2.4G + WLAN 6G	Yes

Notes

1. The WLAN 5G and 6G cannot transmit simultaneously.
2. When 1T1S mode activated above 6 GHz, there is no simultaneous transmission in this device.

Simultaneous Transmission SAR Evaluation

Position	1	2	3	4	A (2 + 4)	B (3 + 4)	C (1 + 2)	D (1 + 3)
	Max WLAN 2.4GHz	Max WLAN 5GHz	Max WLAN 6GHz	Max BT Ant 1	Summimg result 1g SAR W/kg	Summimg result 1g SAR W/kg	Summimg result 1g SAR W/kg	Summimg result 1g SAR W/kg
	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg				
Front Face	0.23	0.34	0.20	0.17	0.51	0.37	0.57	0.43
Rear Face	0.16	0.13	0.08	0.13	0.26	0.21	0.29	0.24
Left Side	0.18	0.63	0.37	0.13	0.76	0.50	0.81	0.55
Right Side	0.41	0.08	0.05	0.38	0.46	0.43	0.49	0.46
Top Side	0.35	0.43	0.26	0.33	0.76	0.59	0.78	0.61
Bottom Side	0.54	0.75	0.47	0.46	1.21	0.93	1.29	1.01



Total Exposure Ratio

Description	1	3	4	B (3 + 4)	D (1 + 3)
	Max WLAN 2.4GHz	Max WLAN 6GHz	Max BT Ant 1	Total Exposure Ratio	Total Exposure Ratio
	1g SAR W/kg	4cm ² W/m ²	1g SAR W/kg		
Reported Value	0.54	4.88	0.46	0.78	0.83

Annex I. SAR to Peak Location Separation Ratio Analysis.

Since sum of simultaneous transmission SAR is less than the SAR limit for Body : SAR_{1g} 1.6 W/kg . There is no requirement for SAR to Peak Location Separation Ratio Analysis.

Annex 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	737	Aug. 26, 2021	1 Year
System Validation Dipole	SPEAG	D5GHzV2	1019	Mar. 19, 2021	2 Years
System Validation Dipole	SPEAG	D6.5GHzV2	1008	Sep. 24, 2021	1 Year
System Verification Source	SPEAG	5G Verification Source 10 GHz	1025	Jan. 17, 2022	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3971	Jan. 25, 2022	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7736	May. 30, 2022	1 Year
E-Field Probe	SPEAG	EUmmWV3	9361	Aug. 25, 2021	1 Year
E-Field Probe	SPEAG	EUmmWV4	9438	Jul. 26, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE3	579	Jun. 01, 2022	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1590	Sep. 20, 2021	1 Year
Spectrum Analyzer	R&S	FSL6	102006	Apr. 12, 2022	1 Year
Analog Signal Generator	R&S	SMA100B	104417	Oct. 22, 2021	1 Year
Mini-Circuits Wideband Amplifier	Mini-Circuits	ZVA-183-S+	434502031A	Aug. 20, 2021	1 Year
Universal Wireless Test Set	Anritsu	MT8870A	6201699387	Sep. 22, 2021	1 Year
Thermometer	YFE	YF-160A	120702365	Aug. 06, 2021	1 Year
Dielectric Assessment Kit	SPEAG	DAKS-3.5	1092	May. 23, 2022	1 Year
Dielectric Assessment Kit	SPEAG	DAKS_VNA R140	0010917	May. 23, 2022	1 Year
Powersource1	SPEAG	SE_UMS_160 BA	4260	Jan. 13, 2022	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-1Mbps 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 Bluetooth transmission signal>



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

$$\text{Duty Factor} = \text{Pulse Width} / \text{Total Period} = (6.195 - 4.095) / (6.585 - 4.095) = 84.34\%$$