

Annex A. Plots of 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: 2022/02/18

S01 System Check_H2450_220218

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

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

Medium: H19T27N1_0218 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.758$ S/m; $\epsilon_r = 38.541$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(7.89, 7.89, 7.89) @ 2450 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- 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) = 3.96 W/kg

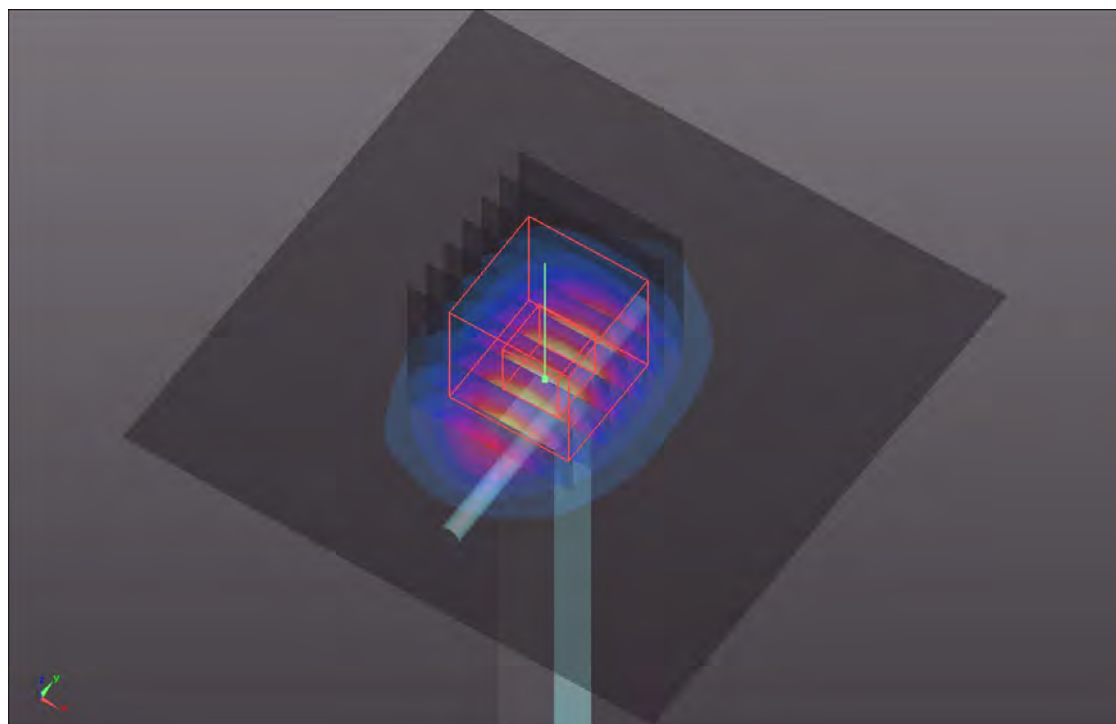
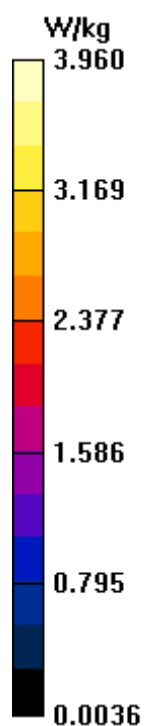
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 48.30 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 4.84 W/kg

SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.17 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.96 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/18

S02 System Check_H5250_220218

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

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

Medium: H34T60N1_0218 Medium parameters used: $f = 5250$ MHz; $\sigma = 4.704$ S/m; $\epsilon_r = 36.205$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(5.78, 5.78, 5.78) @ 5250 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- 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) = 8.19 W/kg

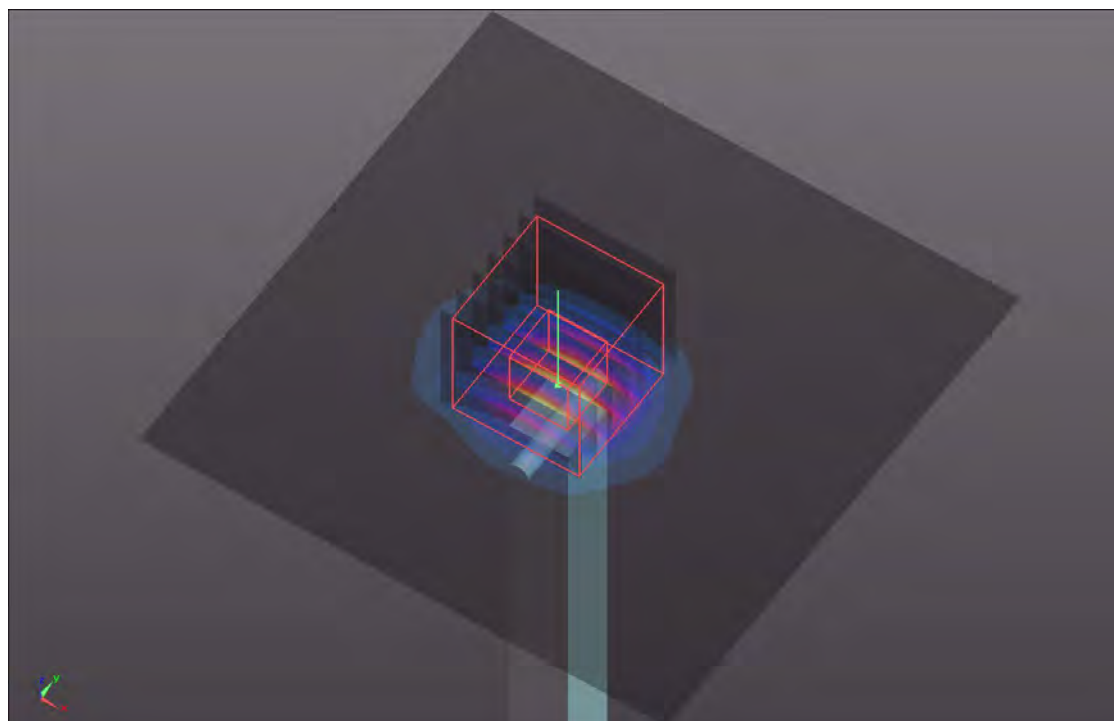
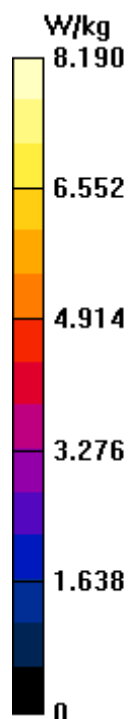
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 45.18 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 14.6 W/kg

SAR(1 g) = 3.8 W/kg; SAR(10 g) = 1.11 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.37 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/18

S03 System Check_H5600_220218

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

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

Medium: H34T60N1_0218 Medium parameters used: $f = 5600$ MHz; $\sigma = 4.997$ S/m; $\epsilon_r = 35.803$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(4.95, 4.95, 4.95) @ 5600 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- 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) = 8.65 W/kg

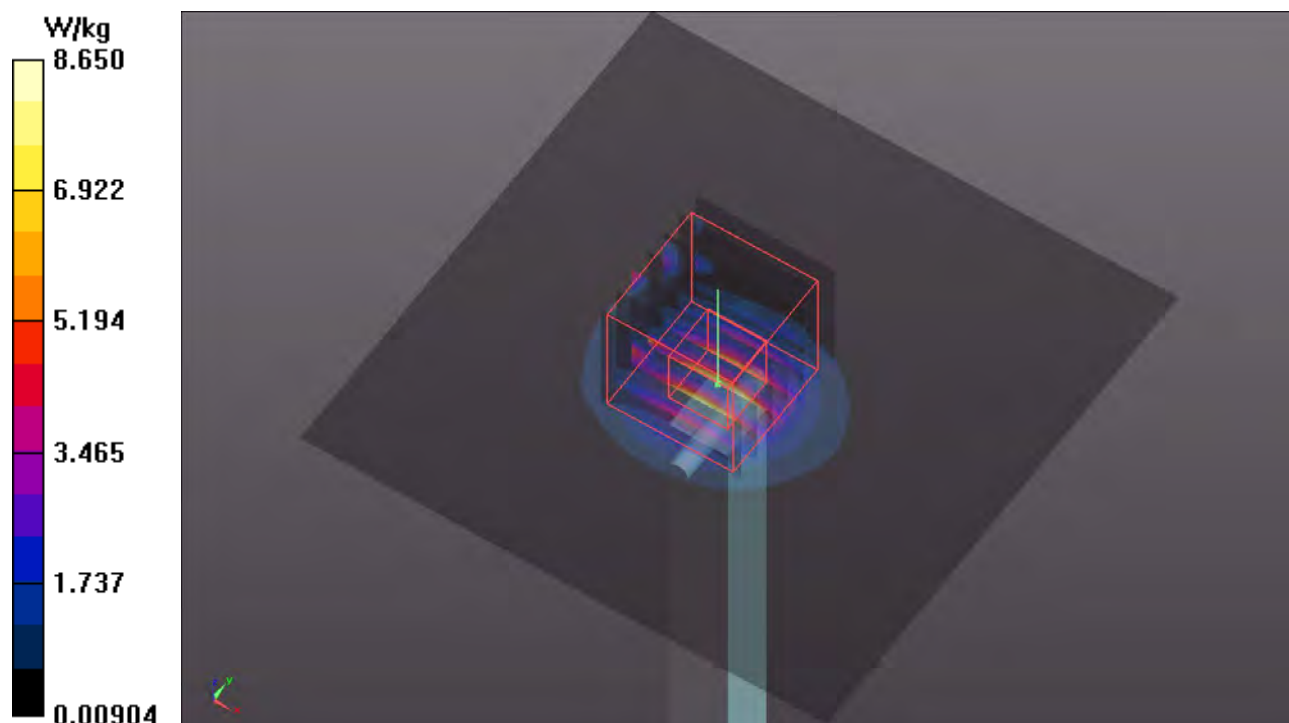
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 43.52 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 3.84 W/kg; SAR(10 g) = 1.08 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.83 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/18

S04 System Check_H5750_220218

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

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

Medium: H34T60N1_0218 Medium parameters used: $f = 5750$ MHz; $\sigma = 5.255$ S/m; $\epsilon_r = 35.49$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(5.25, 5.25, 5.25) @ 5750 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- 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) = 8.83 W/kg

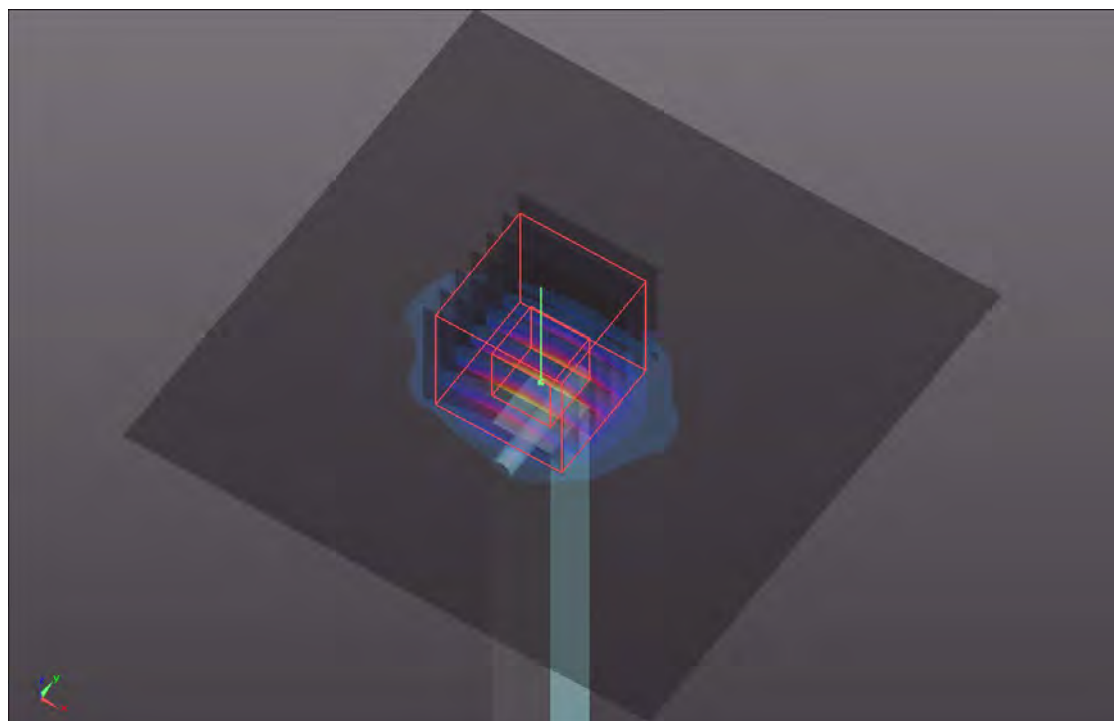
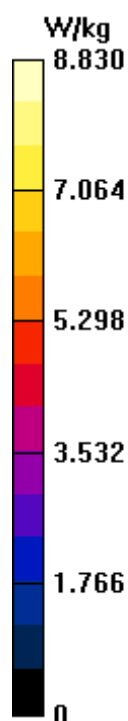
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 41.39 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 15.9 W/kg

SAR(1 g) = 3.66 W/kg; SAR(10 g) = 1.04 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 9.34 W/kg



Plots of System Verification

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/18

S05 System Check_H2450_220218

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

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

Medium: H19T27N1_0218 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.758$ S/m; $\epsilon_r = 38.541$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 – SN7472; ConvF(7.89, 7.89, 7.89) @ 2450 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- 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) = 3.96 W/kg

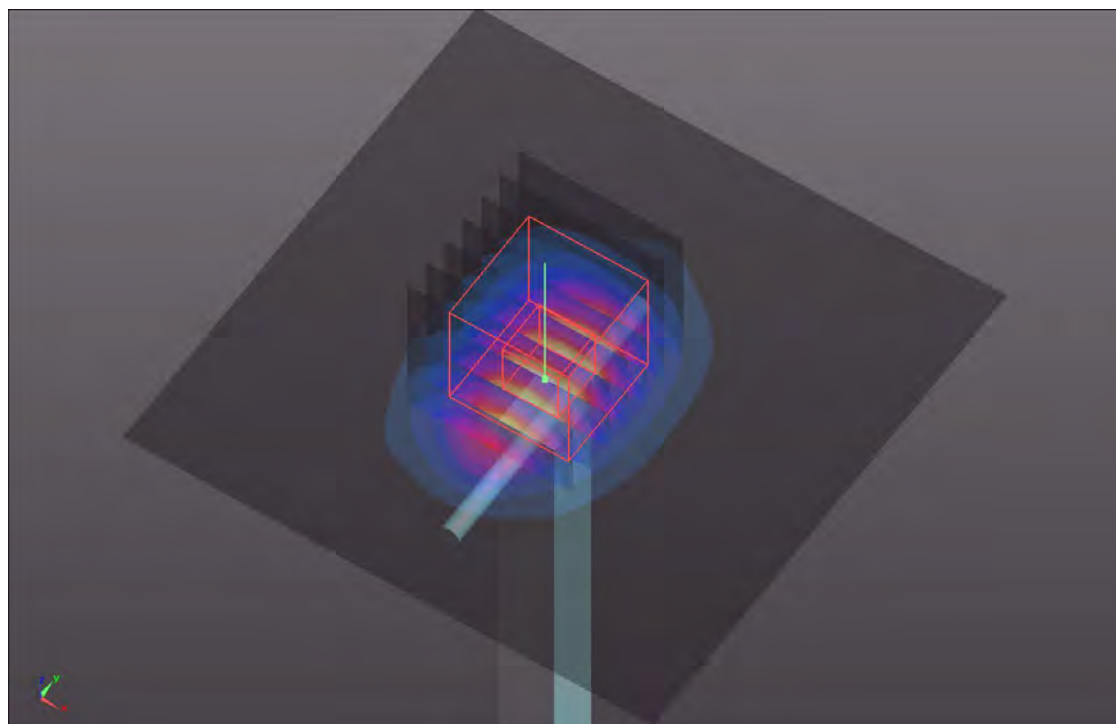
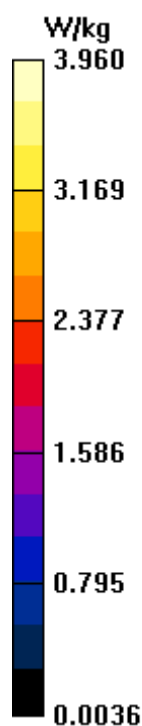
Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 48.30 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 4.84 W/kg

SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.17 W/kg (SAR corrected for target medium)

Maximum value of SAR (measured) = 3.96 W/kg



Plots of System Verification

Measurement Report

S06 System Check_H6500_220223

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	5.7	6.19	33.7

Hardware Setup

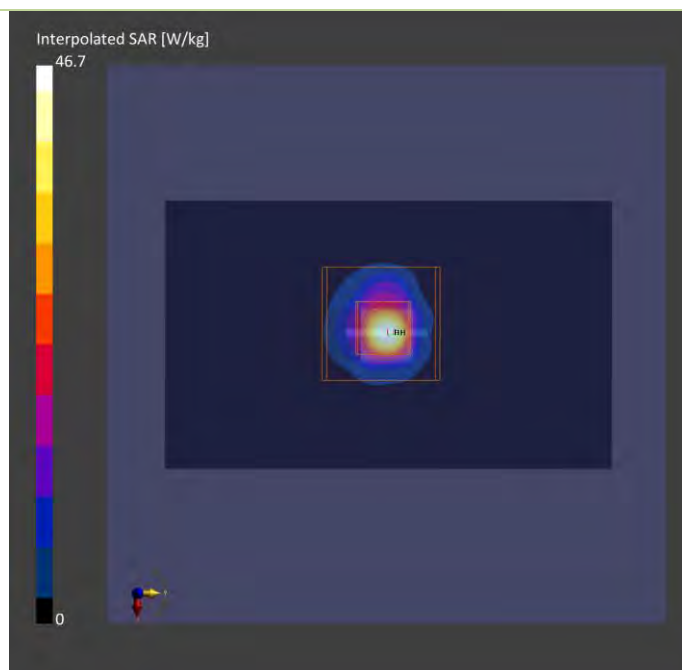
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1204	HBBL-600-10000, 2022-Feb-23	EX3DV4 - SN3650, 2021-03-26	DAE4 Sn861, 2021-04-14

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	2022-02-23	2022-02-23
psSAR1g [W/kg]	24.3	28.4
psSAR10g [W/kg]	4.79	5.20
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.:

S06 PD_System Check_10 GHz_2022.02.23

Device under Test Properties

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

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5GAir	FRONT	Validation band	CW	10000.0	1.0
	5.55		0	10000	

Hardware Setup

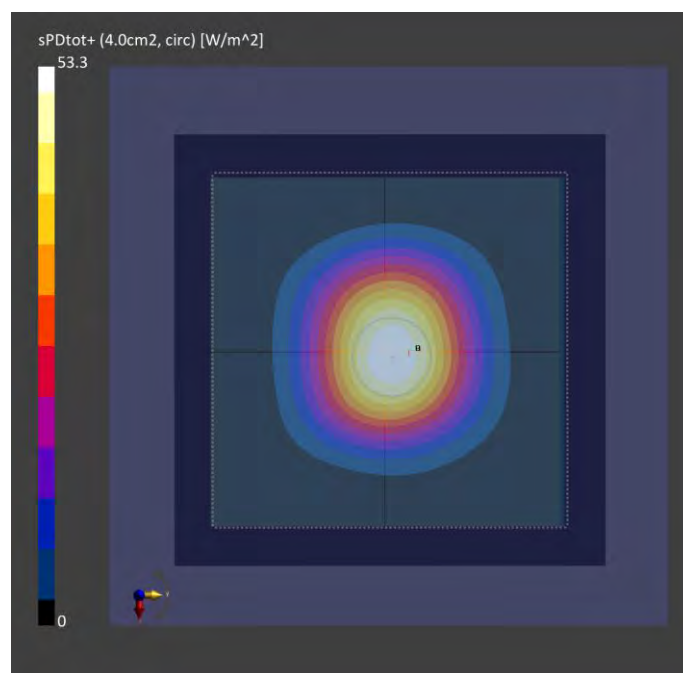
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air---	EUmmWV4 - SN9438_F1-55GHz, 2021-07-26	DAE4 Sn861, 2021-04-14

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	2022-02-23
Avg. Area [cm ²]	4.00
pS _{tot} avg[W/m ²]	53.3
pS _n avg[W/m ²]	53.2
E _{peak} [V/m]	148
Power Drift [dB]	0.03



Plots of Measurement

Annex 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

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/18

P01 WLAN2.4G_802.11n HT20_Lid Closed Mode_0mm_Ch6_Ant 0+1

DUT: BFLF-WTW-P22010013

Communication System: UID 10591 - AAC, IEEE 802.11n (HT Mixed, 20MHz, MCS0); Frequency: 2437 MHz; Duty Cycle: 1:1.02

Medium: H19T27N1_0218 Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.744$ S/m; $\epsilon_r = 38.579$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(7.89, 7.89, 7.89) @ 2437 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (71x301x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.201 W/kg

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

Reference Value = 10.49 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.265 W/kg

SAR(1 g) = 0.140 W/kg; SAR(10 g) = 0.068 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 51.8%

Maximum value of SAR (measured) = 0.214 W/kg

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.49 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.175 W/kg

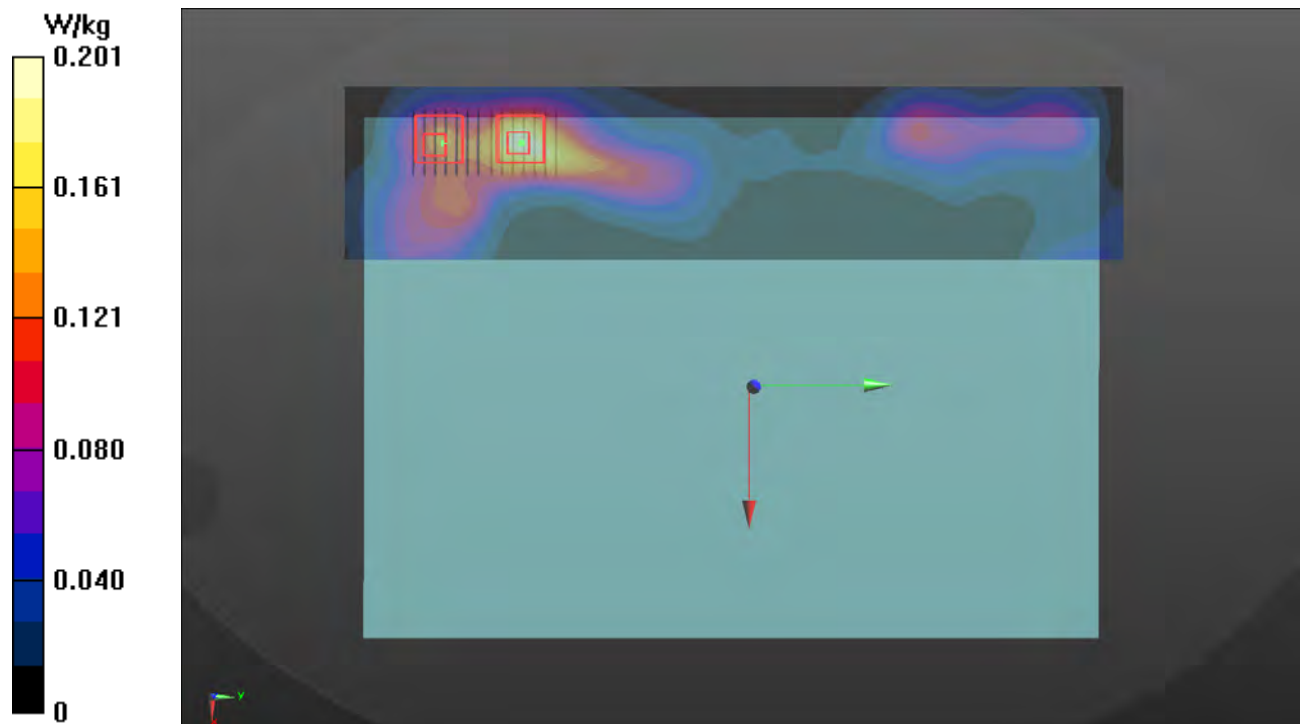
SAR(1 g) = 0.094 W/kg; SAR(10 g) = 0.047 W/kg (SAR corrected for target medium)

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

Ratio of SAR at M2 to SAR at M1 = 54.7%

Maximum value of SAR (measured) = 0.142 W/kg

Plots of Measurement



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/18

P02 WLAN5.3G_802.11n HT40_Lid Closed Mode_0mm_Ch54_Ant 0+1

DUT: BFLF-WTW-P22010013

Communication System: UID 10599 - AAC, IEEE 802.11n (HT Mixed, 40MHz, MCS0); Frequency: 5270 MHz; Duty Cycle: 1:1.02

Medium: H34T60N1_0218 Medium parameters used: $f = 5270$ MHz; $\sigma = 4.706$ S/m; $\epsilon_r = 35.937$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.4 °C ; Liquid Temperature : 23.1 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(5.78, 5.78, 5.78) @ 5270 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x361x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 13.61 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.05 W/kg

SAR(1 g) = 0.629 W/kg; SAR(10 g) = 0.249 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 8.6 mm

Ratio of SAR at M2 to SAR at M1 = 66.2%

Maximum value of SAR (measured) = 1.30 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/18

P03 WLAN5.6G_802.11ac VHT80_Lid Closed Mode_0mm_Ch138_Ant 1

DUT: BFLF-WTW-P22010013

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5690 MHz; Duty Cycle: 1:1.03

Medium: H34T60N1_0218 Medium parameters used: $f = 5690$ MHz; $\sigma = 5.164$ S/m; $\epsilon_r = 35.498$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(5.25, 5.25, 5.25) @ 5690 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x361x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.785 W/kg

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

Reference Value = 12.81 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 0.440 W/kg; SAR(10 g) = 0.170 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 = 63.9%

Maximum value of SAR (measured) = 1.06 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/18

P04 WLAN5.8G_802.11ac VHT80_Lid Closed Mode_0mm_Ch155_Ant 0

DUT: BFLF-WTW-P22010013

Communication System: UID 10544 - AAC, IEEE 802.11ac WiFi (80MHz, MCS0); Frequency: 5775 MHz; Duty Cycle: 1:1.03

Medium: H34T60N1_0218 Medium parameters used: $f = 5775$ MHz; $\sigma = 5.227$ S/m; $\epsilon_r = 35.434$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(5.25, 5.25, 5.25) @ 5775 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (101x361x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

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

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

Reference Value = 19.88 V/m; Power Drift = 0.04 dB

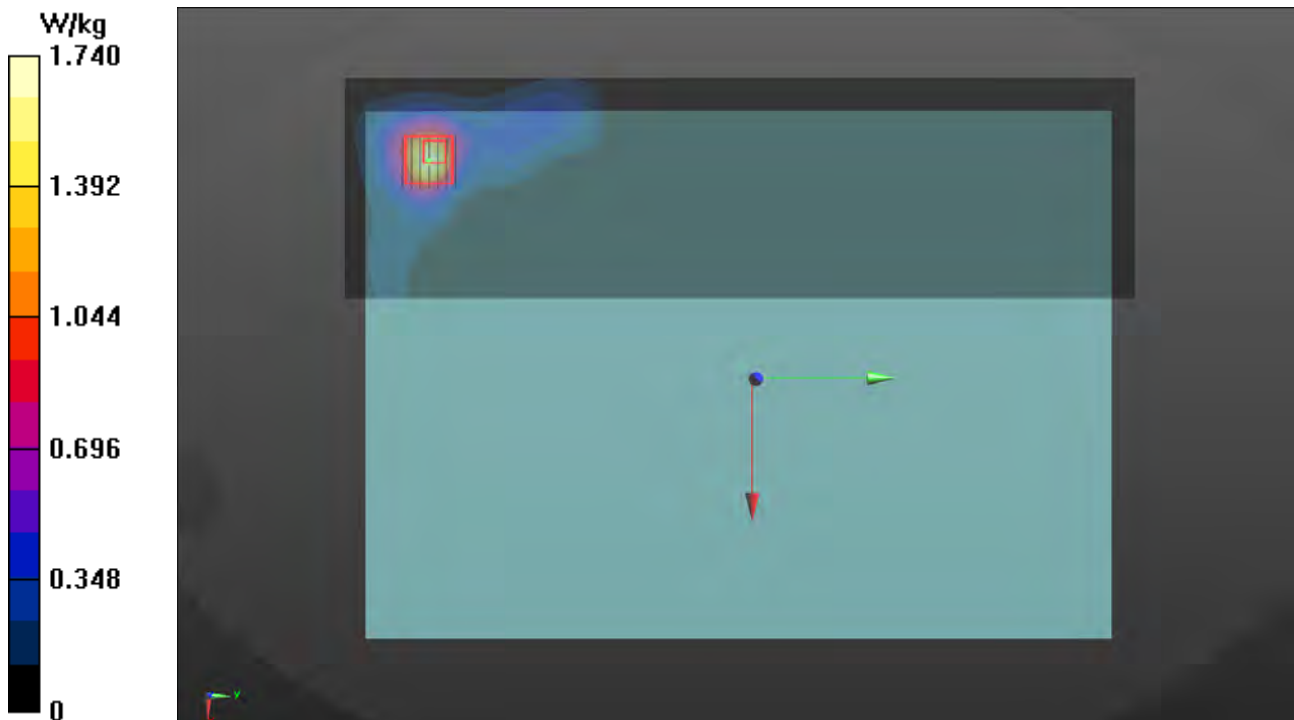
Peak SAR (extrapolated) = 4.11 W/kg

SAR(1 g) = 0.779 W/kg; SAR(10 g) = 0.233 W/kg (SAR corrected for target medium)

Smallest distance from peaks to all points 3 dB below = 7.9 mm

Ratio of SAR at M2 to SAR at M1 = 63.7%

Maximum value of SAR (measured) = 2.53 W/kg



Plots of Measurement

Test Laboratory: Bureau Veritas ADT SAR/HAC Testing Lab

Date: 2022/02/18

P05 BT_BDR_Lid Close Mode_0mm_Ch78_Ant 1

DUT: BFLF-WTW-P21123601

Communication System: UID 10032 - CAA, IEEE 802.15.1 Bluetooth (GFSK, DH5); Frequency: 2480 MHz; Duty Cycle: 1:1.03

Medium: H19T27N1_0221 Medium parameters used: $f = 2480$ MHz; $\sigma = 1.85$ S/m; $\epsilon_r = 37.397$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C ; Liquid Temperature : 23.2 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN7472; ConvF(7.89, 7.89, 7.89) @ 2480 MHz; Calibrated: 2021/06/03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1698; Calibrated: 2021/11/09
- Phantom: ELI Phantom_1245; Type: QDOVA002AA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (261x361x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0 W/kg



Plots of Measurement

Measurement Report

P06 UNII-5_802.11ax HE160_Lid Closed Mode_0mm_Ch47_Ant 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BFLF-WTW-P22010013	340.0 x 240.0 x 15.0		Laptop

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	Lid Closed Mode 0.00	U-NII-5	WLAN, 10755-AAC	6185 47	5.7	5.69	34.4

Hardware Setup

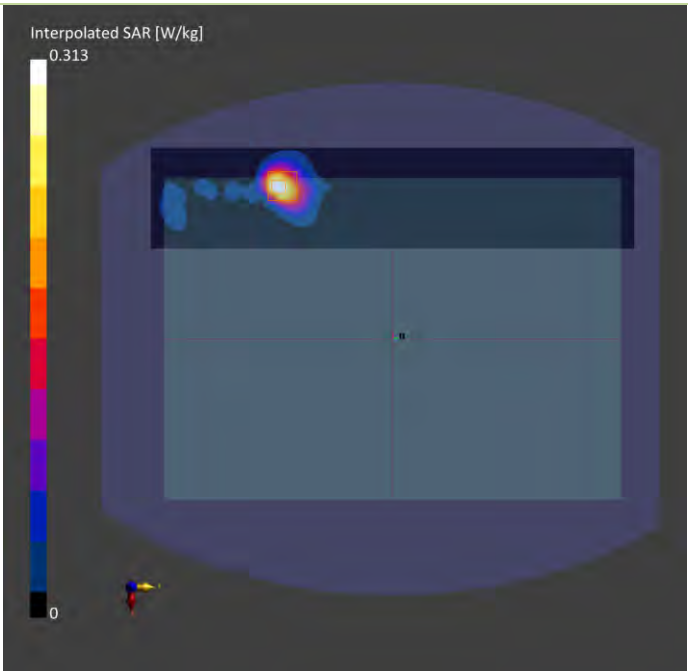
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V5.0 (20deg probe tilt) - 1204	HBBL-600-10000, 2022-Feb-23	EX3DV4 - SN3650, 2021-03-26	DAE4 Sn861, 2021-04-14

Scan Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	75.0 x 360.0	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	2022-02-23	2022-02-23
psSAR1g [W/kg]	0.237	0.247
psSAR10g [W/kg]	0.085	0.089
Power Drift [dB]	0.08	0.03



Plots of Measurement

Measurement Report P06 UNII-5_802.11ax HE160_Lid Close Mode_0mm_C47_Ant 0

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
BFLF-WTW-P22010013	340.0 x 240.0 x 10.0		Laptop

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G Air	Lid Close Mode, 2.00	U-NII-5	WLAN, 10755-AAC	6185.0, 47	1.0

Hardware Setup

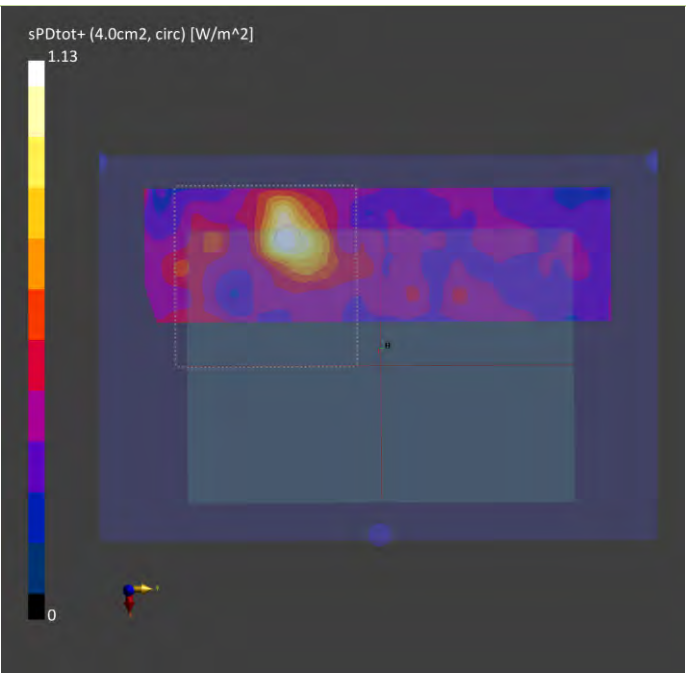
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave- 1035	Air---	EUmmWV4 - SN9438_F1-55GHz, 2021-07-26	DAE4 Sn861, 2021-04-14

Scan Setup

	5G Scan
Grid Extents [mm]	120.0 x 120.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0
MAIA	N/A

Measurement Results

	5G Scan
Date	2022-02-23
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	1.05
psPDtot+ [W/m ²]	1.13
psPDmod+ [W/m ²]	1.16
E _{max} [V/m]	26.0
Power Drift [dB]	0.06



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	Outpu Power (dB)
S01	2450	23.4	1.758	38.541	1.8	39.2	-2.33	-1.68	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 18, 2022	2450	52.60	2.44	48.68	-7.44	737	7472	1698	17
S02	5250	23.3	4.704	36.205	4.71	35.9	-0.13	0.85	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 18, 2022	5250	80.60	3.8	75.82	-5.93	1019	7472	1698	17
S03	5600	23.3	4.997	35.803	5.07	35.5	-1.44	0.85	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 18, 2022	5600	82.40	3.84	76.62	-7.02	1019	7472	1698	17
S04	5750	23.3	5.255	35.49	5.22	35.4	0.67	0.25	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 18, 2022	5750	79.40	3.66	73.03	-8.03	1019	7472	1698	17
S05	2450	23.4	1.758	38.541	1.8	39.2	-2.33	-1.68	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 18, 2022	2450	52.60	2.44	48.68	-7.44	737	7472	1698	17
S06	6500	23.2	6.19	33.7	6.07	34.5	1.98	-2.32	Pass	Pass	Pass	OFDM	N/A	Pass	Feb. 23, 2022	6500	289.00	28.4	284.00	-1.73	1008	3650	861	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 [%]
S06	Feb. 23, 2022	10	9438	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 Tune-up Power (Full)_Laptop							
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	20.000	20.000			
	6	2437	20.000	20.000			
	11	2462	20.000	20.000			
	12	2467	18.750	19.250			
	13	2472	15.750	16.750			
802.11g	1	2412	20.000	20.000			
	6	2437	20.000	20.000			
	11	2462	18.000	18.250			
	12	2467	15.000	14.750			
	13	2472	11.750	12.000			
802.11n HT20	1	2412	19.500	19.250	16.500	16.500	19.500
	6	2437	20.000	20.000	20.000	20.000	23.000
	11	2462	18.000	18.250	16.500	16.500	19.500
	12	2467	15.000	14.750	8.250	8.250	11.250
	13	2472	11.750	12.000	8.500	8.500	11.500
802.11n HT40	3	2422	15.500	15.750	15.250	15.250	18.250
	6	2437	17.500	17.750	16.000	16.000	19.000
	9	2452	15.500	17.000	15.500	15.500	18.500
	10	2457	12.250	12.500	11.250	11.250	14.250
	11	2462	9.750	10.750	8.250	8.250	11.250
802.11ax HE20	1	2412	19.500	19.250	14.500	14.500	17.500
	6	2437	20.000	20.000	17.875	17.875	20.875
	11	2462	18.000	18.250	14.500	14.500	17.500
	12	2467	15.000	14.750	11.250	11.250	14.250
	13	2472	11.750	12.000	8.500	8.500	11.500
802.11ax HE40	3	2422	15.500	15.750	13.500	13.500	16.500
	6	2437	17.500	17.750	13.750	13.750	16.750
	9	2452	15.500	17.000	12.750	12.750	15.750
	10	2457	12.250	12.500	11.250	11.250	14.250
	11	2462	9.750	10.750	8.250	8.250	11.250

WLAN Tune-up Power_Laptop					
Bluetooth					
Mode	Channel	Frequency		Ant 1 Max Tune-up	
BR / EDR	0	2402		10.5/9.5	
	39	2441		10.5/9.5	
	78	2480		10.5/9.5	
LE	0	2402		7.0	
	19	2440		7.0	
	39	2480		7.0	

WLAN Tune-up Power (Laptop)							
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	19.500	19.500			
	40	5200	20.000	20.000			
	44	5220	20.000	20.000			
	48	5240	19.875	20.000			
802.11n HT20	36	5180	19.500	19.500	18.000	18.000	21.000
	40	5200	20.000	20.000	18.500	18.500	21.500
	44	5220	20.000	20.000	18.500	18.500	21.500
	48	5240	19.500	20.000	18.500	18.500	21.500
802.11n HT40	38	5190	17.750	18.750	15.500	15.500	18.500
	46	5230	20.000	20.000	20.000	20.000	23.000
802.11ac VHT80	42	5210	18.500	18.250	15.000	15.000	18.000
802.11ax HE20	36	5180	19.500	19.500	15.500	15.500	18.500
	40	5200	20.000	20.000	18.375	18.375	21.375
	44	5220	20.000	20.000	18.375	18.375	21.375
	48	5240	19.750	20.000	18.375	18.375	21.375
802.11ax HE40	38	5190	17.750	18.750	14.500	14.500	17.500
	46	5230	20.000	20.000	18.875	18.875	21.875
802.11ax HE80	42	5210	18.500	18.250	14.500	14.500	17.500

WLAN Tune-up Power (Laptop)							
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	19.875	20.000			
	56	5280	20.000	20.000			
	60	5300	20.000	20.000			
	64	5320	20.000	20.000			
802.11n HT20	52	5260	19.750	20.000	18.000	18.000	21.000
	56	5280	20.000	20.000	18.000	18.000	21.000
	60	5300	20.000	20.000	18.000	18.000	21.000
	64	5320	20.000	20.000	18.000	18.000	21.000
802.11n HT40	54	5270	19.875	20.000	20.000	20.000	23.000
	62	5310	17.500	17.500	16.500	16.500	19.500
802.11ac VHT80	58	5290	17.500	17.500	14.250	14.250	17.250
802.11ac VHT160	50	5250	14.500	14.000	12.500	12.500	15.500
802.11ax HE20	52	5260	19.875	20.000	18.250	18.250	21.250
	56	5280	20.000	20.000	18.000	18.000	21.000
	60	5300	20.000	20.000	18.375	18.375	21.375
	64	5320	20.000	20.000	15.750	15.750	18.750
802.11ax HE40	54	5270	19.750	20.000	18.750	18.750	21.750
	62	5310	17.500	17.500	14.250	14.250	17.250
802.11ax HE80	58	5290	17.500	17.500	14.250	14.250	17.250
802.11ax HE160	50	5250	14.500	14.000	12.500	12.500	15.500

WLAN Tune-up Power (Laptop)							
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	20.000	20.000			
	116	5580	20.000	20.000			
	120	5600	20.000	20.000			
	124	5620	20.000	20.000			
	132	5660	20.000	20.000			
	140	5700	20.000	20.000			
	144	5720	20.000	20.000			
802.11n HT20	100	5500	20.000	20.000	18.500	18.500	21.500
	116	5580	20.000	20.000	18.500	18.500	21.500
	120	5600	20.000	20.000	18.500	18.500	21.500
	124	5620	20.000	20.000	18.500	18.500	21.500
	132	5660	20.000	20.000	18.500	18.500	21.500
	140	5700	20.000	20.000	18.500	18.500	21.500
	144	5720	20.000	20.000	17.000	17.000	20.000
802.11n HT40	102	5510	19.750	20.000	18.000	18.000	21.000
	110	5550	20.000	20.000	18.000	18.000	21.000
	118	5590	20.000	20.000	18.000	18.000	21.000
	126	5630	20.000	20.000	18.000	18.000	21.000
	134	5670	20.000	20.000	19.500	19.500	22.500
	142	5710	20.000	20.000	17.000	17.000	20.000
802.11ac VHT80	106	5530	18.500	18.750	14.750	14.750	17.750
	122	5610	20.000	20.000	18.000	18.000	21.000
	138	5690	20.000	20.000	17.500	17.500	20.500
802.11ac VHT160	114	5570	15.500	15.500	14.000	14.000	17.000
802.11ax HE20	100	5500	20.000	20.000	18.500	18.500	21.500
	116	5580	20.000	20.000	18.500	18.500	21.500
	120	5600	20.000	20.000	18.500	18.500	21.500
	124	5620	20.000	20.000	18.500	18.500	21.500
	132	5660	20.000	20.000	18.500	18.500	21.500
	140	5700	20.000	20.000	18.500	18.500	21.500
	144	5720	20.000	20.000	17.000	17.000	20.000
802.11ax HE40	102	5510	19.750	20.000	18.000	18.000	21.000
	110	5550	20.000	20.000	18.000	18.000	21.000
	118	5590	20.000	20.000	18.000	18.000	21.000
	126	5630	20.000	20.000	18.000	18.000	21.000
	134	5670	20.000	20.000	19.500	19.500	22.500
	142	5710	20.000	20.000	17.000	17.000	20.000
802.11ax HE80	106	5530	18.500	18.750	14.750	14.750	17.750
	122	5610	20.000	20.000	18.000	18.000	21.000
	138	5690	20.000	20.000	17.500	17.500	20.500
802.11ax HE160	114	5570	15.500	15.500	14.000	14.000	17.000

WLAN Tune-up Power (Full)_Laptop							
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	20.000	20.000			
	153	5765	20.000	20.000			
	157	5785	20.000	20.000			
	161	5805	20.000	20.000			
	165	5825	20.000	20.000			
802.11n HT20	149	5745	20.000	20.000	20.000	20.000	23.000
	153	5765	20.000	20.000	20.000	20.000	23.000
	157	5785	20.000	20.000	20.000	20.000	23.000
	161	5805	20.000	20.000	20.000	20.000	23.000
	165	5825	20.000	20.000	20.000	20.000	23.000
802.11n HT40	151	5755	20.000	20.000	20.000	20.000	23.000
	159	5795	20.000	20.000	20.000	20.000	23.000
802.11ac VHT80	155	5775	20.000	20.000	15.750	15.750	18.750
802.11ax HE20	149	5745	20.000	20.000	18.125	18.125	21.125
	153	5765	20.000	20.000	18.125	18.125	21.125
	157	5785	20.000	20.000	18.125	18.125	21.125
	161	5805	20.000	20.000	18.125	18.125	21.125
	165	5825	20.000	20.000	18.250	18.250	21.250
802.11ax HE40	151	5755	20.000	20.000	18.625	18.625	21.625
	159	5795	20.000	20.000	18.625	18.625	21.625
802.11ax HE80	155	5775	20.000	20.000	15.750	15.750	18.750

WLAN Tune-up Power (Laptop)							
UNII-5							
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	5945	5.00	5.00	2.00	2.00	5.00
	5	5965	5.00	5.00	2.00	2.00	5.00
	9	5985	5.00	5.00	2.00	2.00	5.00
	13	6005	5.00	5.00	2.00	2.00	5.00
	17	6025	5.00	5.00	2.00	2.00	5.00
	21	6045	5.00	5.00	2.00	2.00	5.00
	25	6065	5.00	5.00	2.00	2.00	5.00
	29	6085	5.00	5.00	2.00	2.00	5.00
	33	6105	5.00	5.00	2.00	2.00	5.00
	37	6125	5.00	5.00	2.00	2.00	5.00
	41	6145	5.00	5.00	2.00	2.00	5.00
	45	6165	5.00	5.00	2.00	2.00	5.00
	49	6185	5.00	5.00	2.00	2.00	5.00
	53	6205	5.00	5.00	2.00	2.00	5.00
	57	6225	5.00	5.00	2.00	2.00	5.00
	61	6245	5.00	5.00	2.00	2.00	5.00
	65	6265	5.00	5.00	2.00	2.00	5.00
	69	6285	5.00	5.00	2.00	2.00	5.00
	73	6305	5.00	5.00	2.00	2.00	5.00
	77	6325	5.00	5.00	2.00	2.00	5.00
	81	6345	5.00	5.00	2.00	2.00	5.00
	85	6365	5.00	5.00	2.00	2.00	5.00
	89	6385	5.00	5.00	2.00	2.00	5.00
	93	6405	5.00	5.00	2.00	2.00	5.00
802.11ax HE40	3	5955	8.25	8.25	5.25	5.25	8.25
	11	5995	8.25	8.25	5.25	5.25	8.25
	19	6035	8.25	8.25	5.25	5.25	8.25
	27	6075	8.25	8.25	5.25	5.25	8.25
	35	6115	8.25	8.25	5.25	5.25	8.25
	43	6155	8.25	8.25	5.25	5.25	8.25
	51	6195	8.25	8.25	5.25	5.25	8.25
	59	6235	8.25	8.25	5.25	5.25	8.25
	67	6275	8.25	8.25	5.25	5.25	8.25
	75	6315	8.25	8.25	5.25	5.25	8.25
	83	6355	8.25	8.25	5.25	5.25	8.25
	91	6395	8.25	8.25	5.25	5.25	8.25
802.11ax HE80	7	5975	10.75	10.75	7.75	7.75	10.75
	23	6055	10.75	10.75	7.75	7.75	10.75
	39	6135	10.75	10.75	7.75	7.75	10.75
	55	6215	10.75	10.75	7.75	7.75	10.75
	71	6295	10.75	10.75	7.75	7.75	10.75
	87	6375	10.75	10.75	7.75	7.75	10.75
802.11ax HE160	15	6015	13.00	13.00	10.50	10.50	13.50
	47	6175	13.00	13.00	10.50	10.50	13.50
	79	6335	13.00	13.00	10.50	10.50	13.50

WLAN Tune-up Power (Laptop)							
UNII-6							
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	97	6425	5.00	5.00	2.00	2.00	5.00
	101	6445	5.00	5.00	2.00	2.00	5.00
	105	6465	5.00	5.00	2.00	2.00	5.00
	109	6485	5.00	5.00	2.00	2.00	5.00
	113	6505	5.00	5.00	2.00	2.00	5.00
	117	6525	4.25	4.25	1.25	1.25	4.25
802.11ax HE40	99	6435	8.25	8.25	5.25	5.25	8.25
	107	6475	8.25	8.25	5.25	5.25	8.25
	115	6515	8.25	8.25	5.25	5.25	8.25
802.11ax HE80	103	6455	10.75	10.75	7.75	7.75	10.75
	119	6535	10.75	10.75	7.75	7.75	10.75
802.11ax HE160	111	6495	13.00	13.00	10.50	10.50	13.50

WLAN Tune-up Power (Laptop)							
UNII-7							
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	121	6545	4.25	4.25	1.25	1.25	4.25
	125	6565	4.25	4.25	1.25	1.25	4.25
	129	6585	4.25	4.25	1.25	1.25	4.25
	133	6605	4.25	4.25	1.25	1.25	4.25
	137	6625	4.25	4.25	1.25	1.25	4.25
	141	6645	4.25	4.25	1.25	1.25	4.25
	145	6665	4.25	4.25	1.25	1.25	4.25
	149	6685	4.25	4.25	1.25	1.25	4.25
	153	6705	4.25	4.25	1.25	1.25	4.25
	157	6725	4.25	4.25	1.25	1.25	4.25
	161	6745	4.25	4.25	1.25	1.25	4.25
	165	6765	4.25	4.25	1.25	1.25	4.25
	169	6785	4.25	4.25	1.25	1.25	4.25
	173	6805	4.25	4.25	1.25	1.25	4.25
	177	6825	4.25	4.25	1.25	1.25	4.25
	181	6845	4.25	4.25	1.25	1.25	4.25
	185	6865	4.25	4.25	1.25	1.25	4.25
802.11ax HE40	123	6555	7.50	7.50	4.50	4.50	7.50
	131	6595	7.50	7.50	4.50	4.50	7.50
	139	6635	7.50	7.50	4.50	4.50	7.50
	147	6675	7.50	7.50	4.50	4.50	7.50
	155	6715	7.50	7.50	4.50	4.50	7.50
	163	6755	7.50	7.50	4.50	4.50	7.50
	171	6795	7.50	7.50	4.50	4.50	7.50
	179	6835	7.50	7.50	4.50	4.50	7.50
	187	6875	7.50	7.50	4.50	4.50	7.50
802.11ax HE80	135	6615	10.00	10.00	7.00	7.00	10.00
	151	6695	10.00	10.00	7.00	7.00	10.00
	167	6775	10.00	10.00	7.00	7.00	10.00
	183	6855	10.00	10.00	7.00	7.00	10.00
802.11ax HE160	143	6655	12.75	12.75	9.75	9.75	12.75
	175	6815	12.75	12.75	9.75	9.75	12.75

WLAN Tune-up Power (Laptop)							
UNII-8							
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	189	6885	4.25	4.25	1.25	1.25	4.25
	193	6905	4.25	4.25	1.25	1.25	4.25
	197	6925	4.25	4.25	1.25	1.25	4.25
	201	6945	4.25	4.25	1.25	1.25	4.25
	205	6965	4.25	4.25	1.25	1.25	4.25
	209	6985	4.25	4.25	1.25	1.25	4.25
	213	7005	4.25	4.25	1.25	1.25	4.25
	217	7025	4.25	4.25	1.25	1.25	4.25
	221	7045	4.25	4.25	1.25	1.25	4.25
	225	7065	4.25	4.25	1.25	1.25	4.25
	229	7085	4.25	4.25	1.25	1.25	4.25
	233	7105	-1.00	-1.00	-4.00	-4.00	-1.00
802.11ax HE40	195	6915	7.50	7.50	4.50	4.50	7.50
	203	6955	7.50	7.50	4.50	4.50	7.50
	211	6995	7.50	7.50	4.50	4.50	7.50
	219	7035	7.50	7.50	4.50	4.50	7.50
	227	7075	7.50	7.50	4.50	4.50	7.50
802.11ax HE80	199	6935	10.00	10.00	7.00	7.00	10.00
	215	7015	10.00	10.00	7.00	7.00	10.00
802.11ax HE160	207	6975	12.75	12.75	9.75	9.75	12.75

Annex E. Measured Conducted Power Result

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

WLAN Conducted Power (Laptop)			
WLAN2.4GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11b	1	2412	19.95
	6	2437	19.97
	11	2462	19.96
	12	2467	18.73
	13	2472	15.72
802.11g	1	2412	19.43
	6	2437	19.92
	11	2462	17.98
	12	2467	14.97
	13	2472	11.71
802.11n HT20	1	2412	19.42
	6	2437	19.92
	11	2462	17.93
	12	2467	14.93
	13	2472	11.72
802.11n HT40	3	2422	15.43
	6	2437	17.48
	9	2452	15.47
	10	2457	12.22
	11	2462	9.72
802.11ax HE20	1	2412	19.43
	6	2437	19.92
	11	2462	17.98
	12	2467	14.97
	13	2472	11.73
802.11ax HE40	3	2422	15.43
	6	2437	17.42
	9	2452	15.45
	10	2457	12.22
	11	2462	9.72

WLAN Conducted Power (Laptop)			
WLAN2.4GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11b	1	2412	19.98
	6	2437	19.99
	11	2462	19.92
	12	2467	19.23
	13	2472	16.72
802.11g	1	2412	19.22
	6	2437	19.92
	11	2462	18.23
	12	2467	14.73
	13	2472	11.97
802.11n HT20	1	2412	19.22
	6	2437	19.96
	11	2462	18.22
	12	2467	14.73
	13	2472	11.99
802.11n HT40	3	2422	15.72
	6	2437	17.73
	9	2452	16.98
	10	2457	12.45
	11	2462	10.72
802.11ax HE20	1	2412	19.23
	6	2437	19.95
	11	2462	18.22
	12	2467	14.73
	13	2472	11.99
802.11ax HE40	3	2422	15.73
	6	2437	17.73
	9	2452	16.98
	10	2457	12.43
	11	2462	10.72

WLAN Conducted Power (Laptop)					
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			
	6	2437			
	11	2462			
	12	2467			
	13	2472			
802.11g	1	2412			
	6	2437			
	11	2462			
	12	2467			
	13	2472			
802.11n HT20	1	2412	16.45	16.47	19.47
	6	2437	19.97	19.98	22.99
	11	2462	16.43	16.48	19.47
	12	2467	11.21	11.22	14.23
	13	2472	8.41	8.46	11.45
802.11n HT40	3	2422	15.23	15.22	18.24
	6	2437	15.98	15.95	18.98
	9	2452	15.45	15.43	18.45
	10	2457	11.22	11.23	14.24
	11	2462	8.23	8.23	11.24
802.11ax HE20	1	2412	14.43	14.46	17.46
	6	2437	14.78	14.77	17.79
	11	2462	14.43	14.43	17.44
	12	2467	11.22	11.21	14.23
	13	2472	8.45	8.41	11.44
802.11ax HE40	3	2422	13.46	13.47	16.48
	6	2437	14.73	14.72	17.74
	9	2452	12.72	12.73	15.74
	10	2457	11.22	11.23	14.24
	11	2462	8.21	8.22	11.23

WLAN Conducted Power (Laptop)			
Bluetooth Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
BR / EDR	0	2402	9.01
	39	2441	9.12
	78	2480	9.91
LE	0	2402	6.89
	19	2440	6.95
	39	2480	6.98

WLAN Conducted Power (Laptop)			
WLAN 5.3GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11a	52	5260	19.78
	56	5280	19.98
	60	5300	19.97
	64	5320	19.96
802.11n HT20	52	5260	19.71
	56	5280	19.95
	60	5300	19.92
	64	5320	19.93
802.11n HT40	54	5270	19.82
	62	5310	17.43
802.11ac VHT80	58	5290	17.41
802.11ac VHT160	50	5250	14.43
802.11ax HE20	52	5260	19.81
	56	5280	19.92
	60	5300	19.89
	64	5320	19.91
802.11ax HE40	54	5270	19.42
	62	5310	17.42
802.11ax HE80	58	5290	17.43
802.11ax HE160	50	5250	14.42

WLAN Conducted Power (Laptop)			
WLAN 5.3GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11a	52	5260	19.95
	56	5280	19.92
	60	5300	19.91
	64	5320	19.89
802.11n HT20	52	5260	19.88
	56	5280	19.95
	60	5300	19.96
	64	5320	19.97
802.11n HT40	54	5270	19.99
	62	5310	17.43
802.11ac VHT80	58	5290	17.46
802.11ac VHT160	50	5250	13.98
802.11ax HE20	52	5260	19.92
	56	5280	19.93
	60	5300	19.89
	64	5320	19.91
802.11ax HE40	54	5270	19.95
	62	5310	17.43
802.11ax HE80	58	5290	17.45
802.11ax HE160	50	5250	13.99

WLAN Conducted Power (Laptop)					
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
802.11a	52	5260			
	56	5280			
	60	5300			
	64	5320			
802.11n HT20	52	5260	19.91	19.92	22.93
	56	5280	19.93	19.89	22.92
	60	5300	19.95	19.91	22.94
	64	5320	19.47	19.42	22.46
802.11n HT40	54	5270	19.95	19.98	22.98
	62	5310	16.47	16.48	19.49
802.11ac VHT80	58	5290	14.22	14.21	17.23
802.11ac VHT160	50	5250	12.43	12.42	15.44
802.11ax HE20	52	5260	18.21	18.21	21.22
	56	5280	17.99	17.98	21.00
	60	5300	18.33	18.32	21.34
	64	5320	15.72	15.71	18.73
802.11ax HE40	54	5270	18.71	18.72	21.73
	62	5310	14.22	14.21	17.23
802.11ax HE80	58	5290	14.21	14.23	17.23
802.11ax HE160	50	5250	12.43	12.47	15.46

WLAN Conducted Power (Laptop)			
WLAN 5.6GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11a	100	5500	19.95
	116	5580	19.96
	120	5600	19.89
	124	5620	19.92
	132	5660	19.88
	140	5700	19.93
	144	5720	19.95
802.11n HT20	100	5500	19.97
	116	5580	19.93
	120	5600	19.92
	124	5620	19.95
	132	5660	19.96
	140	5700	19.88
	144	5720	19.87
802.11n HT40	102	5510	19.73
	110	5550	19.95
	118	5590	19.96
	126	5630	19.88
	134	5670	19.92
	142	5710	19.93
802.11ac VHT80	106	5530	18.42
	122	5610	19.93
	138	5690	19.98
802.11ac VHT160	114	5570	15.43
802.11ax HE20	100	5500	19.92
	116	5580	19.95
	120	5600	19.93
	124	5620	19.88
	132	5660	19.87
	140	5700	19.91
	144	5720	19.96
802.11ax HE40	102	5510	19.71
	110	5550	19.92
	118	5590	19.88
	126	5630	19.85
	134	5670	19.96
	142	5710	19.86
802.11ax HE80	106	5530	18.43
	122	5610	19.92
	138	5690	19.93
802.11ax HE160	114	5570	15.43

WLAN Conducted Power (Laptop)			
WLAN 5.6GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11a	100	5500	19.92
	116	5580	19.93
	120	5600	19.88
	124	5620	19.89
	132	5660	19.91
	140	5700	19.93
	144	5720	19.92
802.11n HT20	100	5500	19.96
	116	5580	19.97
	120	5600	19.85
	124	5620	19.87
	132	5660	19.88
	140	5700	19.91
	144	5720	19.93
802.11n HT40	102	5510	19.95
	110	5550	19.89
	118	5590	19.88
	126	5630	19.95
	134	5670	19.92
	142	5710	19.93
802.11ac VHT80	106	5530	18.73
	122	5610	19.95
	138	5690	19.98
802.11ac VHT160	114	5570	15.43
802.11ax HE20	100	5500	19.92
	116	5580	19.93
	120	5600	19.95
	124	5620	19.89
	132	5660	19.88
	140	5700	19.91
	144	5720	19.92
802.11ax HE40	102	5510	19.87
	110	5550	19.88
	118	5590	19.91
	126	5630	19.93
	134	5670	19.92
	142	5710	19.93
802.11ax HE80	106	5530	18.72
	122	5610	19.93
	138	5690	19.95
802.11ax HE160	114	5570	15.41

WLAN Conducted Power (Laptop)					
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
802.11a	100	5500			
	116	5580			
	120	5600			
	124	5620			
	132	5660			
	140	5700			
	144	5720			
802.11n HT20	100	5500	18.42	18.41	21.43
	116	5580	18.39	18.39	21.4
	120	5600	18.37	18.35	21.37
	124	5620	18.38	18.38	21.39
	132	5660	18.43	18.41	21.43
	140	5700	18.45	18.43	21.45
	144	5720	16.91	16.88	19.91
802.11n HT40	102	5510	17.22	17.23	20.24
	110	5550	17.93	17.95	20.95
	118	5590	17.95	17.96	20.97
	126	5630	17.95	17.97	20.97
	134	5670	19.47	19.48	22.49
	142	5710	16.96	16.97	19.98
802.11ac VHT80	106	5530	14.72	14.71	17.73
	122	5610	17.85	17.82	20.85
	138	5690	17.39	17.31	20.36
802.11ac VHT160	114	5570	13.98	13.97	16.99
802.11ax HE20	100	5500	16.73	16.71	19.73
	116	5580	18.22	18.22	21.23
	120	5600	18.23	18.23	21.24
	124	5620	18.18	18.18	21.19
	132	5660	18.17	18.23	21.21
	140	5700	16.71	16.72	19.73
	144	5720	16.72	16.72	19.73
802.11ax HE40	102	5510	17.23	17.23	20.24
	110	5550	17.85	17.85	20.86
	118	5590	17.81	17.82	20.83
	126	5630	17.83	17.81	20.83
	134	5670	19.39	19.45	22.43
	142	5710	16.81	16.82	19.83
802.11ax HE80	106	5530	14.72	14.73	17.74
	122	5610	17.32	17.32	20.33
	138	5690	17.22	17.21	20.23
802.11ax HE160	114	5570	13.99	13.95	16.98

WLAN Conducted Power (Laptop)			
WLAN 5.8GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11a	149	5745	19.89
	153	5765	19.94
	157	5785	19.89
	161	5805	19.96
	165	5825	19.95
802.11n HT20	149	5745	19.93
	153	5765	19.91
	157	5785	19.88
	161	5805	19.96
	165	5825	19.88
802.11n HT40	151	5755	19.89
	159	5795	19.95
802.11ac VHT80	155	5775	19.98
802.11ax HE20	149	5745	19.93
	153	5765	19.95
	157	5785	19.91
	161	5805	19.92
	165	5825	19.92
802.11ax HE40	151	5755	19.93
	159	5795	19.97
802.11ax HE80	155	5775	19.95

WLAN Conducted Power (Laptop)			
WLAN 5.8GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11a	149	5745	19.95
	153	5765	19.92
	157	5785	19.95
	161	5805	19.93
	165	5825	19.88
802.11n HT20	149	5745	19.95
	153	5765	19.96
	157	5785	19.92
	161	5805	19.89
	165	5825	19.91
802.11n HT40	151	5755	19.89
	159	5795	19.91
802.11ac VHT80	155	5775	19.99
802.11ax HE20	149	5745	19.88
	153	5765	19.86
	157	5785	19.93
	161	5805	19.92
	165	5825	19.91
802.11ax HE40	151	5755	19.89
	159	5795	19.91
802.11ax HE80	155	5775	19.92

WLAN Conducted Power (Laptop)					
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
802.11a	149	5745			
	153	5765			
	157	5785			
	161	5805			
	165	5825			
802.11n HT20	149	5745	19.95	19.89	22.93
	153	5765	19.93	19.88	22.92
	157	5785	19.91	19.82	22.88
	161	5805	19.86	19.79	22.84
	165	5825	19.95	19.93	22.95
802.11n HT40	151	5755	19.98	19.98	22.99
	159	5795	19.95	19.97	22.97
802.11ac VHT80	155	5775	15.71	15.73	18.73
802.11ax HE20	149	5745	18.08	18.06	21.08
	153	5765	18.07	18.03	21.06
	157	5785	18.11	18.07	21.10
	161	5805	18.06	18.06	21.07
	165	5825	18.22	18.19	21.22
802.11ax HE40	151	5755	16.58	16.58	19.59
	159	5795	16.57	16.55	19.57
802.11ax HE80	155	5775	15.72	15.68	18.71

WLAN Conducted Power (Laptop)			
UNII-5 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	15	6025	12.96
	47	6185	12.98
	79	6345	12.97

UNII-6 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	111	6505	12.96

UNII-7 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	143	6665	12.72
	175	6825	12.73

UNII-8 Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ax HE160	207	6985	12.72

WLAN Conducted Power (Laptop)			
UNII-5 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	15	6025	12.97
	47	6185	12.98
	79	6345	12.95

UNII-6 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	111	6505	12.95

UNII-7 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	143	6665	12.71
	175	6825	12.73

UNII-8 Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ax HE160	207	6985	12.71

WLAN Conducted Power (Laptop)					
UNII-5 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	15	6025	9.96	9.96	12.97
	47	6185	10.45	10.29	13.38
	79	6345	9.95	9.96	12.97

UNII-6 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	111	6505	9.97	10.32	13.16

UNII-7 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	143	6665	9.72	9.69	12.72
	175	6825	9.73	9.71	12.73

UNII-8 Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ax HE160	207	6985	9.72	9.72	12.73

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.
2. The "< 0.001" means there is no SAR value or the SAR is too low to be measured.

Laptop 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	Bottom	0	6	Ant 0	99.30	1.01	20.00	19.97	1.01	0	<0.001	0.00
	WLAN2.4G	802.11b	Bottom	0	6	Ant 1	99.30	1.01	20.00	19.99	1.00	0	<0.001	0.00
	WLAN2.4G	802.11n HT20	Bottom	0	6	Ant 0+1	98.50	1.02	23.00	22.99	1.00	0	<0.001	0.00
	WLAN2.4G	802.11n HT20	Bottom	0	1	Ant 0+1	98.50	1.02	19.50	19.47	1.01	0	<0.001	0.00
	WLAN2.4G	802.11n HT20	Bottom	0	11	Ant 0+1	98.50	1.02	19.50	19.47	1.01	0	<0.001	0.00
	WLAN2.4G	802.11n HT20	Bottom	0	12	Ant 0+1	98.50	1.02	14.25	14.23	1.00	0	<0.001	0.00
	WLAN2.4G	802.11n HT20	Bottom	0	13	Ant 0+1	98.50	1.02	11.50	11.45	1.01	0	<0.001	0.00
1	WLAN2.4G	802.11n HT20	Lid Close Mode	0	6	Ant 0+1	98.50	1.02	23.00	22.99	1.00	-0.01	0.14	0.14
	WLAN5.3G	802.11a	Bottom	0	56	Ant 0	96.70	1.03	20.00	19.98	1.00	0	<0.001	0.00
	WLAN5.3G	802.11n HT40	Bottom	0	54	Ant 1	97.00	1.03	20.00	19.99	1.00	0	<0.001	0.00
	WLAN5.3G	802.11n HT40	Bottom	0	54	Ant 0+1	98.50	1.02	23.00	22.98	1.00	0	<0.001	0.00
	WLAN5.3G	802.11n HT40	Bottom	0	62	Ant 0+1	98.50	1.02	19.50	19.49	1.00	0	<0.001	0.00
2	WLAN5.3G	802.11n HT40	Lid Close Mode	0	54	Ant 0+1	98.50	1.02	23.00	22.98	1.00	0.01	0.629	0.64
	WLAN5.6G	802.11ac VHT80	Bottom	0	138	Ant 0	97.30	1.03	20.00	19.98	1.00	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT80	Bottom	0	138	Ant 1	97.30	1.03	20.00	19.98	1.00	0	<0.001	0.00
	WLAN5.6G	802.11n HT40	Bottom	0	134	Ant 0+1	98.50	1.02	22.50	22.49	1.00	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT80	Bottom	0	106	Ant 1	97.30	1.03	18.75	18.73	1.00	0	<0.001	0.00
	WLAN5.6G	802.11ac VHT80	Bottom	0	122	Ant 1	97.30	1.03	20.00	19.95	1.01	0	<0.001	0.00
3	WLAN5.6G	802.11ac VHT80	Lid Close Mode	0	138	Ant 1	97.30	1.03	20.00	19.98	1.00	-0.07	0.44	0.45
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	Ant 0	97.30	1.03	20.00	19.98	1.00	0	<0.001	0.00
	WLAN5.8G	802.11ac VHT80	Bottom	0	155	Ant 1	97.30	1.03	20.00	19.99	1.00	0	<0.001	0.00
	WLAN5.8G	802.11n HT40	Bottom	0	151	Ant 0+1	98.50	1.02	23.00	22.99	1.00	0	<0.001	0.00
4	WLAN5.8G	802.11ac VHT80	Lid Close Mode	0	155	Ant 0	97.30	1.03	20.00	19.98	1.00	0.04	0.779	0.80
5	BT	BDR	Bottom	0	78	Ant 1	76.58	1.31	10.50	9.91	1.15	0	<0.001	0.00
	BT	BDR	Bottom	0	0	Ant 1	76.58	1.31	10.50	9.01	1.41	0	<0.001	0.00
	BT	BDR	Bottom	0	39	Ant 1	76.58	1.31	10.50	9.12	1.37	0	<0.001	0.00
	BT	BDR	Lid Close Mode	0	78	Ant 1	76.58	1.31	10.50	9.91	1.15	0	<0.001	0.00

SAR and Power Density Test Result																								
System & Position						DUT & Accessory	SAR								Power Density									
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)	Measured APD W/m ² (4cm ²)	Grid Step [λ]	iPD [W/m2]	Scaling Factor for Measurement Uncertainty	Averaging Area [cm2]	Power Drift [dB]	Normal psPD [W/m2]	Scaled Normal psPD [W/m2]	Total psPD [W/m2]	Scaled Total psPD [W/m2]
	UNII-5	802.11ax HE160	Bottom	0	47	Ant 0	98.50	1.02	13.00	12.98	1.00	0	<0.001	0.00	0			-			-		-	
	UNII-5	802.11ax HE160	Bottom	0	47	Ant 1	99.00	1.01	13.00	12.98	1.00	0	<0.001	0.00	0			-			-		-	
	UNII-6	802.11ax HE160	Bottom	0	111	Ant 0+1	98.30	1.02	13.50	13.47	1.01	0	<0.001	0.00	0			-			-		-	
	UNII-5	802.11ax HE160	Bottom	0	15	Ant 0	98.50	1.02	13.00	12.96	1.01	0	<0.001	0.00	0			-			-		-	
	UNII-5	802.11ax HE160	Bottom	0	79	Ant 0	98.50	1.02	13.00	12.97	1.01	0	<0.001	0.00	0			-			-		-	
	UNII-5	802.11ax HE160	Bottom	0	111	Ant 0	98.50	1.02	13.00	12.96	1.01	0	<0.001	0.00	0			-			-		-	
	UNII-7	802.11ax HE160	Bottom	0	143	Ant 0	98.50	1.02	12.75	12.72	1.01	0	<0.001	0.00	0			-			-		-	
	UNII-7	802.11ax HE160	Bottom	0	175	Ant 0	98.50	1.02	12.75	12.73	1.00	0	<0.001	0.00	0			-			-		-	
	UNII-8	802.11ax HE160	Bottom	0	207	Ant 0	98.50	1.02	12.75	12.72	1.01	0	<0.001	0.00	0			-			-		-	
6	UNII-5	802.11ax HE160	Lid Close Mode	0	47	Ant 0	98.50	1.02	13.00	12.98	1.00	0.03	0.247	0.25	2	0.25	2.36	1.545	4.00	0.06	1.05	1.65	1.13	1.78
																		-			-		-	

Annex G. SAR Measurement Variability

Since all the measured SAR_{1g} are less than 0.8 W/kg, the repeated measurement is not required

Annex H. Analysis of Simultaneous Transmission SAR and Total Exposure Ratio

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	WLAN2.4G_Ant 0 + BT_Ant 1	Yes
B	WLAN5G_Ant 0 + BT_Ant 1	Yes
C	WLAN5G_Ant 0+1 + BT_Ant 1	Yes
D	WLAN6E_Ant 0 + BT_Ant 1	Yes
E	WLAN6E_Ant 0+1 + BT_Ant 1	Yes

Notes

1. The WLAN 2.4G and WLAN 5G cannot transmit simultaneously.

Simultaneous Transmission SAR Evaluation (Body)											
Position	1	2	3	4	5	6	A(1+6)	B(2+6)	C(3+6)	D(4+6)	E(5+6)
	WLAN 2.4GHz Ant 0	WLAN 5GHz Ant 0	WLAN 5GHz Ant 0+1	WLAN 6E Ant 0	WLAN 6E Ant 0+1	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	Summimg result 1g SAR W/kg
	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg	1g SAR W/kg					
Bottom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lid Close Mode	0.00	0.80	0.64	0.25	0.00	0.00	0.00	0.80	0.64	0.25	0.00

Annex I. SAR to Peak Location Separation Ratio Analysis.

Since sum of simultaneous transmission SAR is less than the SAR limit for Body / Head : SAR_{1g} 1.6 W/kg ;
Extremity SAR_{10g} 4.0 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	1 Year
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	7472	Jun. 03, 2021	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3650	Mar. 26, 2021	1 Year
E-Field Probe	SPEAG	EUmmWV4	9438	Jul. 26, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	861	Apr. 14, 2021	1 Year
Data Acquisition Electronics	SPEAG	DAE4	1698	Nov. 09, 2021	1 Year
Spectrum Analyzer	R&S	FSL6	102006	Apr. 06, 2021	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/MU887000A	6201699387	Sep. 22, 2021	1 Year
Thermometer	YFE	YF-160A	191100743	Apr. 12, 2021	1 Year
Dielectric Assessment Kit	SPEAG	DAKS-3.5	1151	Jul. 14, 2021	1 Year
Powersource1	SPEAG	SE_UMS_160 BA	4010	Jul. 13, 2021	1 Year

Annex 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 DH5 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>



Time-domain plot for Bluetooth transmission signal

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

$$\text{Duty Factor} = \text{Pulse Width} / \text{Total Period} = (6.012 - 3.145) / (6.889 - 3.145) = 76.58\%$$